

**FREEMAN**

---



# **Parts Manual**

**Model 280/285  
Automatic Hay Baler**



## **WARNING**

### **California Proposition 65 Warning**

**Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.**

**Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm. Wash hands after handling.**

**Other chemicals in this vehicle are also known to the State of California to cause cancer, birth defects, and other reproductive harm.**

# Section 0

## General Information

|                              |     |
|------------------------------|-----|
| Table of Contents.....       | 0-2 |
| Alphabetical Index .....     | 0-4 |
| Introduction.....            | 0-6 |
| Serial Number Location ..... | 0-7 |
| Safety.....                  | 0-8 |

# Table of Contents

## Section 0

### General Information

Table of Contents.....0-2  
 Alphabetical Index .....0-4  
 Introduction.....0-6  
 Serial Number Location .....0-7  
 Safety .....0-8

## Section 1

### Front End

Drawbar Installation .....1-2  
 Drawbar Assembly, Engine.....1-3  
 . Swing Drawbar Installation .....1-6  
 Drawbar Installation, Hydro LH.....1-7  
 Drawbar Assembly, Hydro LH.....1-8  
 Drawbar Installation, Hydro RH .....1-9  
 Drawbar Assembly, Hydro RH .....1-10  
 Swing Drawbar Installation, Hydro LH.....1-11  
 Front End Installation 2 -Tie 14" Chamber .....1-12  
 Front End Assembly 2 -Tie 14" Chamber .....1-13  
 Front End Installation 2 -Tie 16" Chamber .....1-14  
 Front End Assembly 2 -Tie 16" Chamber .....1-15  
 Hydraulic Tank Installation, 280/285.....1-16  
 Hydraulic Tank Assembly, 280/285 .....1-19  
 PTO Pump/Gearbox Assembly.....1-21  
 Hose Diagram, Hydro .....1-22

## Section 2

### Frame and Tension System

Chamber Installation / Frame, 14" 270/275 Baler .....2-2  
 Chamber Installation / Frame, 16" 270/275 Baler .....2-5  
 Haydog Installation, Conventional 2-Tie .....2-8  
 Haydog Installation, Tailless 2-Tie .....2-9  
 Tensioning/Rear Mounts Installation, 14" Chamber.....2-10  
 Tensioning/Rear Mounts Installation, 16" Chamber.....2-13  
 Tensioning Hoses Installation, Hydro .....2-17  
 Tension Control Reservoir Installation, Hydro .....2-19  
 Tension Control Tank Assembly.....2-20  
 Frame & Axle Installation, 14" 2 Tie, Bullgear.....2-21  
 Frame & Axle Installation, 16" 2 Tie, Bullgear.....2-22  
 Single 8-Hole Flotation RH 2 & 3 Tie.....2-21  
 8-Hole Flotation LH 2 Tie.....2-24  
 Tandem 8-Hole Flotation LH 2 Tie .....2-25  
 Pickup Depth Wheel .....2-26  
 Tandem 8-Hole Flotation RH 2 & 3 Tie .....2-27  
 Single 8-Hole Highway RH 2 & 3 Tie.....2-28  
 Tandem 8-Hole Highway RH .....2-29  
 Tandem 8-Hole Highway LH 2 Tie .....2-30  
 Tire & Wheel 8-Hole Highway LH 2 Tie .....2-31  
 Tires and Wheels Walking Beam LH .....2-32

## Section 3

### Shielding

Shielding Installation, Pickup.....3-2  
 Shielding Installation, LH, 14" Chamber .....3-3  
 Shielding Installation, Feed Arm / Connecting Rod, 16".....3-9  
 Shielding Installation, Feed Arm / Connecting Rod, 14".....3-8  
 Shielding Installation, Knotter / Drive Arm .....3-10  
 Shielding Installation, Feed House, 280 .....3-11

## Section 3

### Shielding (Continued)

Shielding Installation, Feed House, 285 .....3-13  
 Shielding Installation, Belt (Engine).....3-15  
 .Shield Assembly, Belt (Engine).....3-16  
 Shielding Installation, Belt (Hydro) .....3-19  
 .Shield Assembly, Belt (Hydro) .....3-20  
 Shielding Installation, Meter Wheel .....3-22  
 Shielding, SP Baler Feed House .....3-20  
 Shielding Installation, SP Baler Over Pickup .....3-21  
 Bullgear Shield Installation, Hydro/Driveling/SP Balers.....3-23  
 Shield Installation, SP Baler, Lower Bullgear .....3-23

## Section 4

### Power Unit

Engine Installation .....4-2  
 Engine Assembly .....4-3  
 Manifold Assembly.....4-8  
 Clutch .....4-9  
 Control Box Assembly .....4-11  
 Module Assembly .....4-15  
 Air Cleaner Assembly .....4-16  
 Snorkel Installation .....4-17  
 Snorkel Assembly with Door.....4-18  
 Side Support Bracket Assembly .....4-19  
 Fuel Tank Installation, 30 Gallon .....4-20  
 Fuel Tank Subassembly, 30 Gallon.....4-21  
 Driveline PTO Installation, 2-Tie Bullgear.....4-22  
 Driveline Assembly .....4-27

## Section 5

### Drive System

Pinion Shaft Installation, 280/285.....5-2  
 Pinion Shaft Assembly, 280/285 .....5-3  
 Pinion Shaft Installation, 280/285.....5-2  
 Pinion Shaft Assembly, 280/285 .....5-3  
 Bullgear/Plunger Installation, RH Drawbar, 14" 2 Tie .....5-4  
 Bullgear/Plunger Installation, LH Drawbar, 14" 2 Tie .....5-6  
 Plunger/Connector Rod Assembly, 14" 2 Tie.....5-8  
 Connector Rod Assembly, 2 Tie .....5-11  
 Side Plate Assembly, LH, 14" Chamber.....5-12  
 Side Plate Assembly, RH, 14" Chamber .....5-13  
 Bullgear/Plunger Installatin, RH Drawbar, 16" 2 Tie .....5-14  
 Bullgear/Plunger Installatin, LH Drawbar, 16" 2 Tie .....5-16  
 Plunger/Connector Rod Assembly, 16" 2 Tie .....5-18  
 Connector Rod Assembly, 16" 2- Tie.....5-21  
 Side Plate Assembly, LH, 16" Chamber.....5-22  
 Side Plate Assembly, RH, 16" Chamber .....5-23  
 Flywheel Installation .....5-24  
 Flywheel Assembly .....5-25  
 Tank Installation, Bullgear Luber .....5-26  
 Tank and Pump Assembly, Luber .....5-27  
 Bullgear/Luber Installation, 2 Tie .....5-28  
 Bullgear Shield/Luber Assembly, 2 Tie .....5-29  
 Manifold Assembly, Bullgear Luber.....5-30  
 Manifold Assembly, Bullgear Luber (Hydro).....5-33  
 Bullgear Shield/Oil Cooler Shroud Assembly .....5-34

# Table of Contents

|  |   |
|--|---|
| <p><b>Section 6</b></p> <p>Pickup Installation, 14" 2 Tie.....6-2</p> <p>Pick up Installation, 16" 2 Tie.....6-5</p> <p>Pickup Clutch Assembly, Bullgear Baler.....6-8</p> <p>Pickup Clutch Assembly, Gearbox Baler .....6-9</p> <p>Pickup Clutch Assembly, Bondioli Gearbox Baler.....6-10</p> <p>Pickup Sprocket Assembly .....6-9</p> <p>Pickup, Super Sweep, 14" to 16" .....0-2</p> <p>Pickup Assembly, Super Sweep 15/16" Frame.....6-10</p> <p>Pickup Assembly, Super Sweep, SP Baler, 15" .....6-20</p> <p>Cam Lever Assembly.....6-14</p> <p>Pickup Lift Installation, 280/285, Engine, 14".....6-15</p> <p>Pickup Lift Installation, 280/285, Engine, 16".....6-17</p> <p>Spring Assembly, Pickup Lift, Engine .....6-19</p> <p>Pickup Lift Installation, 280/285, Hydro, 14" .....6-20</p> <p>Pickup Lift Installation, 280/285, Hydro, 16" .....6-22</p> <p>.Spring Assembly, Pickup Lift, Hydro/Driveline .....6-24</p> <p><b>Section 7</b></p> <p><b>Feeder &amp; Feed Fork</b></p> <p>Feed Arm/Fork Installation- 14" 2-Tie .....7-2</p> <p>Feed Arm/Fork Installation- 16" 2-Tie .....7-4</p> <p>Feedfork Assembly, 14" 2 Tie .....7-6</p> <p>Feedfork Assembly, 16" 2 Tie .....7-8</p> <p>Connecting Rod Assembly .....7-10</p> <p>Pivot Shaft Assembly, Feed Arm .....7-11</p> <p>Feed House Installation, 14" Chamber .....7-15</p> <p>Feeder House Assembly, 14" Chamber.....7-20</p> <p>Feed House Installation, 16" Chamber .....7-21</p> <p>Feeder House Assembly, 16" Chamber.....7-26</p> <p><b>Section 8</b></p> <p><b>Knotter</b></p> <p>Knotter Installation, Conventional 2 Tie .....8-2</p> <p>Tank/Pump Assembly, Conventional Knotter .....8-5</p> <p>Knotter Assembly, Conventional 2 Tie .....8-7</p> <p>Housing Assembly, Knotter Clutch .....8-12</p> <p>Disc &amp; Bearing Assembly .....8-13</p> <p>Conventional Knotter Head Assembly .....8-14</p> <p>Meter Wheel Assembly, 2 Tie .....8-16</p> <p>Trip Mount Assembly, Conventional (280) .....8-17</p> <p>Knotter Installation, Tailless 2 Tie .....8-18</p> <p>Knotter Assembly, Tailless 2 Tie .....8-22</p> <p>Tailless Knotter .....8-27</p> <p>Trip Mount Assembly, Tailless (285).....8-30</p> <p>Knotter Drive Installation .....8-31</p> <p>Knotter Fan Installation, 2 Tie.....8-33</p> <p>Knotter Fan Assembly .....8-34</p> <p>Top Plate Installation, Conventional 2 Tie.....8-35</p> <p>Top Plate Installation, Tailless 2 Tie .....8-36</p> <p>Twine Box Installation, 12 Compartment .....8-37</p> <p>Twine Box Assembly, 12 Compartment .....8-39</p> <p>Twine Tension Frame Sub-Assembly.....8-40</p> | <p><b>Pickup</b></p> <p><b>Section 9</b></p> <p><b>Needle Yoke and Needles</b></p> <p>Needles and Yoke Installation, 270/280, 14" Chamber .....9-2</p> <p>Needles and Yoke Installation, 270/280, 16" Chamber .....9-6</p> <p>Needles and Yoke Installation, 285, 14" Chamber .....9-10</p> <p>Needles and Yoke Installation, 285, 16" Chamber .....9-13</p> <p><b>Section 10</b></p> <p><b>Hydraulic System</b></p> <p>Drawbar Installation, Hydro LH..... See Page 1-7</p> <p>Drawbar Assembly, Hydro LH..... See Page 1-8</p> <p>Drawbar Installation, Hydro RH ..... See Page 1-9</p> <p>Drawbar Assembly, Hydro RH ..... See Page 1-10</p> <p>Swing Drawbar Installation, Hydro LH..... See Page 1-11</p> <p>Hydraulic Tank Installation, 280/285 ..... See Page 1-16</p> <p>Hydraulic Tank Assembly, 280/285 ..... See Page 1-19</p> <p>Hose Diagram, Hydro ..... See Page 1-22</p> <p>Tensioning/Rear Mounts Installation, 14" ..... See Page 2-10</p> <p>Tensioning/Rear Mounts Installation, 16" ..... See Page 2-13</p> <p>Tensioning Hoses Installation, Hydro ..... See Page 2-17</p> <p>Tension Control Reservoir Installation, Hydro .... See Page 2-19</p> <p>Tension Control Tank Assembly..... See Page 2-20</p> <p>Oil Cooler/Shroud Assembly, Bullgear, Hydro .... See Page 5-31</p> <p>Manifold Assembly, Bullgear Luber, Hydro ..... See Page 5-33</p> <p>Pickup Lift Installation, 280/285, Hydro, 14" ..... See Page 6-20</p> <p>Pickup Lift Installation, 280/285, Hydro, 16" ..... See Page 6-22</p> <p>Spring Assembly, Pickup Lift, Hydro/Driveline.... See Page 6-24</p> <p><b>Section 11</b></p> <p><b>Electrical System</b></p> <p>Electrical Installation, 280/285 W/Engine ..... 11-2</p> <p>Remote Assembly, MD3 (Side Feed)..... 11-3</p> <p>Wire Harness, IQAN ..... 11-4</p> <p>Electrical Installation, SP Baler..... 11-6</p> <p>Wire Harness, SP Baler..... 11-7</p> <p>Wiring Diagram And Schematic..... 11-8</p> <p>Lights Installation, Sidefeed Balers, 2 Tie..... 11-11</p> <p>Light Assembly, LH ..... 11-13</p> <p>Light Assembly, RH ..... 11-14</p> <p>Work Light Sub-Assembly, RH ..... 11-15</p> <p>Work Light Sub-Assembly, Front ..... 11-16</p> <p><b>Section 12</b></p> <p><b>Misc Parts</b></p> <p>Hay Saver Wheel Installation..... 12-2</p> <p>Hay Saver Wheel Assembly ..... 12-3</p> <p>Bale Chute Installation, 2-Tie ..... 12-4</p> <p>Bale Weight Indicator Installation ..... 12-6</p> <p>Bale Weight Indicator Assembly ..... 12-8</p> <p>Misc Parts, 280 ..... 12-9</p> <p>Misc Parts, 285..... 12-10</p> <p>Tool Box Installation..... 12-14</p> <p>Misc Parts, SP Baler..... 12-12</p> <p>Manifold Installation, SP Baler..... 12-13</p> <p>Manifold Assembly, SP Baler..... 12-14</p> <p>Slow Moving Vehicle Sign Installation..... 12-15</p> |
|--|---|

# Alphabetical Index

|  |      |   |       |
|--|------|---|-------|
| 8-Hole Flotation LH 2 Tie.....                               | 2-24 | Feeder House Assembly, 14" Chamber.....             | 7-20  |
| Air Cleaner Assembly.....                                    | 4-16 | Feeder House Assembly, 16" Chamber.....             | 7-26  |
| Bale Chute Installation, 2-Tie.....                          | 12-4 | Feed House Installation, 14" Chamber.....           | 7-15  |
| Bale Weight Indicator Installation.....                      | 12-6 | Feed House Installation, 16" Chamber.....           | 7-21  |
| Bale Weight Indicator Assembly.....                          | 12-8 | Flywheel Assembly.....                              | 5-25  |
| Bullgear/Luber Installation, 2 Tie.....                      | 5-28 | Flywheel Installation.....                          | 5-24  |
| Bullgear/Plunger Installation, LH Drawbar, 14" 2 Tie.....    | 5-6  | Frame & Axle Installation, 14" 2 Tie, Bullgear..... | 2-21  |
| Bullgear/Plunger Installation, RH Drawbar, 14" 2 Tie.....    | 5-4  | Frame & Axle Installation, 16" 2 Tie, Bullgear..... | 2-22  |
| Bullgear/Plunger Installation, LH Drawbar, 16" 2 Tie.....    | 5-16 | Front End Assembly 2 -Tie 14" Chamber.....          | 1-13  |
| Bullgear/Plunger Installation, RH Drawbar, 16" 2 Tie.....    | 5-14 | Front End Assembly 2 -Tie 16" Chamber.....          | 1-15  |
| Bullgear Shield/Luber Assembly, 2 Tie.....                   | 5-29 | Front End Installation 2 -Tie 14" Chamber.....      | 1-12  |
| Bullgear Shield/Oil Cooler Shroud Assembly.....              | 5-34 | Front End Installation 2 -Tie 16" Chamber.....      | 1-14  |
| Bullgear Shield Installation, Hydro/Driveling/SP Balers..... | 3-23 | Fuel Tank Installation, 30 Gallon.....              | 4-20  |
| Cam Lever Assembly.....                                      | 6-14 | Fuel Tank Subassembly, 30 Gallon.....               | 4-21  |
| Chamber Installation / Frame, 14" 270/275 Baler.....         | 2-2  | Haydog Installation, Conventional 2-Tie.....        | 2-8   |
| Chamber Installation / Frame, 14" 280/285 Baler.....         | 2-2  | Haydog Installation, Tailless 2-Tie.....            | 2-9   |
| Chamber Installation / Frame, 16" 270/275 Baler.....         | 2-5  | Hay Saver Wheel Assembly.....                       | 12-3  |
| Chamber Installation / Frame, 16" 280/285 Baler.....         | 2-5  | Hay Saver Wheel Installation.....                   | 12-2  |
| Clutch.....  | 4-9  | Hose Diagram.....                                   | 10-2  |
| Connecting Rod Assembly.....                                 | 7-10 | Housing Assembly, Knotter Clutch.....               | 8-12  |
| Connector Rod Assembly, 16" 2- Tie.....                      | 5-21 | Hose Diagram, Hydro.....                            | 1-22  |
| Connector Rod Assembly, 2 Tie.....                           | 5-11 | Hydraulic Tank Assembly, 280/285.....               | 1-19  |
| Control Box Assembly.....                                    | 4-11 | Hydraulic Tank Installation, 280/285.....           | 1-16  |
| Conventional Knotter Head Assembly.....                      | 8-14 | Knotter Assembly, Conventional 2 Tie.....           | 8-7   |
| Disc & Bearing Assembly.....                                 | 8-13 | Knotter Assembly, Tailless 2 Tie.....               | 8-22  |
| Drawbar Assembly, Engine.....                                | 1-3  | Knotter Drive Installation.....                     | 8-31  |
| Drawbar Assembly, Hydro LH.....                              | 1-8  | Knotter Fan Assembly.....                           | 8-34  |
| Drawbar Assembly, Hydro RH.....                              | 1-10 | Knotter Fan Installation, 2 Tie.....                | 8-33  |
| Drawbar Installation.....                                    | 1-2  | Knotter Installation, Conventional 2 Tie.....       | 8-2   |
| Drawbar Installation, Hydro LH.....                          | 1-7  | Knotter Installation, Tailless 2 Tie.....           | 8-18  |
| Drawbar Installation, Hydro RH.....                          | 1-9  | Light Assembly, LH.....                             | 11-13 |
| Driveline Assembly.....                                      | 4-27 | Light Assembly, RH.....                             | 11-14 |
| Driveline PTO Installation, 2-Tie Bullgear.....              | 4-22 | Lights Installation, Sidefeed Balers, 2 Tie.....    | 11-11 |
| Electrical Installation, 280/285 W/Engine.....               | 11-2 | Manifold Assembly.....                              | 4-8   |
| Electrical Installation, SP Baler.....                       | 11-6 | Manifold Assembly, Bullgear Luber.....              | 5-30  |
| Engine Assembly.....   | 4-3  | Manifold Assembly, Bullgear Luber (Hydro).....      | 5-33  |
| Engine Installation.....                                     | 4-2  | Manifold Assembly, SP Baler.....                    | 12-14 |
| Feed Arm/Fork Installation- 14" 2-Tie.....                   | 7-2  | Manifold Installation, SP Baler.....                | 12-13 |
| Feed Arm/Fork Installation- 16" 2-Tie.....                   | 7-4  | Meter Wheel Assembly, 2 Tie.....                    | 8-16  |
| Feedfork Assembly, 14" 2 Tie.....                            | 7-6  | Misc Parts, 280.....                                | 12-9  |
| Feedfork Assembly, 16" 2 Tie.....                            | 7-8  | Misc Parts, 285.....                                | 12-10 |

## Alphabetical Index

|   |       |   |       |
|---|-------|---|-------|
| Misc Parts, SP Baler.....                                   | 12-12 | Shield Installation, SP Baler, Lower Bullgear .....   | 3-23  |
| Module Assembly .....                                       | 4-15  | Shielding Installation, SP Baler Over Pickup .....    | 3-21  |
| Needles and Yoke Installation, 270/280, 14" Chamber .....   | 9-2   | Side Plate Assembly, LH, 14" Chamber.....             | 5-12  |
| Needles and Yoke Installation, 270/280, 16" Chamber .....   | 9-6   | Side Plate Assembly, LH, 16" Chamber.....             | 5-22  |
| Needles and Yoke Installation, 285, 14" Chamber .....       | 9-10  | Side Plate Assembly, RH, 14" Chamber .....            | 5-13  |
| Needles and Yoke Installation, 285, 16" Chamber .....       | 9-13  | Side Plate Assembly, RH, 16" Chamber .....            | 5-23  |
| Pickup, Super Sweep, 14" to 16" .....                       | 0-2   | Side Support Bracket Assembly .....                   | 4-19  |
| Pickup Assembly, Super Sweep, SP Baler, 15" .....           | 6-20  | Single 8-Hole Flotation RH 2 & 3 Tie.....             | 2-21  |
| Pickup Assembly, Super Sweep 15/16" Frame.....              | 6-10  | Single 8-Hole Highway RH 2 & 3 Tie.....               | 2-28  |
| Pickup Clutch Assembly, Bondioli Gearbox Baler.....         | 6-10  | Slow Moving Vehicle Sign Installation.....            | 12-15 |
| Pickup Clutch Assembly, Bullgear Baler .....                | 6-8   | Snorkel Assembly with Door.....                       | 4-18  |
| Pickup Clutch Assembly, Gearbox Baler .....                 | 6-9   | Snorkel Installation .....                            | 4-17  |
| Pickup Depth Wheel .....                                    | 2-26  | Spring Assembly, Pickup Lift, Engine .....            | 6-19  |
| Pickup Installation, 14" 2 Tie.....                         | 6-2   | Spring Assembly, Pickup Lift, Hydro/Driveline .....   | 6-24  |
| Pick up Installation, 16" 2 Tie.....                        | 6-5   | Swing Drawbar Installation .....                      | 1-6   |
| Pickup Lift Installation, 280/285, Engine, 14".....         | 6-15  | Swing Drawbar Installation, Hydro LH.....             | 1-11  |
| Pickup Lift Installation, 280/285, Engine, 16".....         | 6-17  | Tailless Knotter .....                                | 8-27  |
| Pickup Lift Installation, 280/285, Hydro, 14" .....         | 6-20  | Tandem 8-Hole Flotation LH 2 Tie.....                 | 2-25  |
| Pickup Lift Installation, 280/285, Hydro, 16" .....         | 6-22  | Tandem 8-Hole Flotation RH 2 & 3 Tie .....            | 2-27  |
| Pickup Sprocket Assembly .....                              | 6-9   | Tandem 8-Hole Highway LH 2 Tie .....                  | 2-30  |
| Pinion Shaft Assembly, 280/285 .....                        | 5-3   | Tandem 8-Hole Highway RH .....                        | 2-29  |
| Pinion Shaft Assembly, 280/285 .....                        | 5-3   | Tank/Pump Assembly, Conventional Knotter .....        | 8-5   |
| Pinion Shaft Installation, 280/285.....                     | 5-2   | Tank and Pump Assembly, Luber .....                   | 5-27  |
| Pinion Shaft Installation, 280/285.....                     | 5-2   | Tank Installation, Bullgear Luber .....               | 5-26  |
| Pivot Shaft Assembly, Feed Arm .....                        | 7-11  | Tension Control Reservoir Installation, Hydro .....   | 2-19  |
| Plunger/Connector Rod Assembly, 14" 2 Tie .....             | 5-8   | Tension Control Tank Assembly.....                    | 2-20  |
| Plunger/Connector Rod Assembly, 16" 2 Tie.....              | 5-18  | Tensioning/Rear Mounts Installation, 14" Chamber..... | 2-10  |
| PTO Pump/Gearbox Assembly .....                             | 1-21  | Tensioning/Rear Mounts Installation, 16" Chamber..... | 2-13  |
| Relief Valve Assembly, SP .....                             | 10-7  | Tensioning Hoses Installation, Hydro .....            | 2-17  |
| Remote Assembly, MD3 (Side Feed).....                       | 11-3  | Tire & Wheel 8-Hole Highway LH 2 Tie .....            | 2-31  |
| Shield Assembly, Belt (Engine).....                         | 3-16  | Tires and Wheels Walking Beam LH .....                | 2-32  |
| Shield Assembly, Belt (Hydro) .....                         | 3-20  | Tool Box Installation.....                            | 12-14 |
| Shielding Installation, Belt (Engine).....                  | 3-15  | Top Plate Installation, Conventional 2 Tie.....       | 8-35  |
| Shielding Installation, Belt (Hydro) .....                  | 3-19  | Top Plate Installation, Tailless 2 Tie .....          | 8-36  |
| Shielding Installation, Feed Arm / Connecting Rod, 14"..... | 3-8   | Trip Mount Assembly, Conventional (280) .....         | 8-17  |
| Shielding Installation, Feed Arm / Connecting Rod, 16"..... | 3-9   | Trip Mount Assembly, Tailless (285).....              | 8-30  |
| Shielding Installation, Feed House, 280 .....               | 3-11  | Twine Box Assembly, 12 Compartment .....              | 8-39  |
| Shielding Installation, Feed House, 285 .....               | 3-13  | Twine Box Installation, 12 Compartment .....          | 8-37  |
| Shielding Installation, Knotter / Drive Arm .....           | 3-10  | Twine Tension Frame Sub-Assembly.....                 | 8-40  |
| Shielding Installation, LH, 14" Chamber .....               | 3-3   | Valve Assembly, SP .....                              | 10-6  |
| Shielding Installation, Meter Wheel .....                   | 3-22  | Wire Harness, IQAN.....                               | 11-4  |
| Shielding Installation, Pickup.....                         | 3-2   | Wire Harness, SP Baler.....                           | 11-7  |
| Shielding, SP Baler Feed House .....                        | 3-20  | Wiring Diagram And Schematic.....                     | 11-8  |
|   |       | Work Light Sub-Assembly, Front .....                  | 11-16 |
|   |       | Work Light Sub-Assembly, RH .....                     | 11-15 |

# Introduction

This manual contains all components of the baler that can be separately identified as well as parts necessary for equipment support. The parts pages are divided into 12 sections. You can find the parts page relevant to your project in either the Table of Contents (Page 0-2) or in the Alphabetical Index (Page 0-4).

## Illustrations

Illustrations are provided whenever possible to represent component parts and the mounting location of those parts. The numbered labels correspond to the item numbers in the parts list.

## Parts Lists

Component parts lists are presented in a 5-column format:

**Item:** Index numbers found in this column correspond to the numbers found on the respective parts location illustration. Some items are shown for reference purposes only to illustrate their relationship to other systems.

**Notes:** This column identifies footnotes applicable to specified items.

**Part Number:** This column lists the Allied Systems Company Part Number.

**Quantity:** This column lists the total number of a specific item required per assembly or subassembly. This number may not necessarily be the number of items used in the end item or system. Only one set of components is listed whenever the components of two assemblies are the same.

“A/R” (as required) identifies bulk items whose length or other dimension must be specified when requisitioning.

“Ref” identifies items shown for reference purposes only to illustrate their relationship to other systems.

“NSS” (not sold separately) identifies items such as valve housings and spools, ring gears and pinions, etc., which must be ordered as a set because they are closely mated at manufacture.

**Description:** This column lists the item nomenclature along with those modifiers necessary to identify the item. Additionally, cross references for repairable subassemblies are listed in this column. One dot preceding the description indicates that the item is a component part of the previously listed item or assembly with no dot. Two dots indicate that the item is part of the previously listed item with one dot.

Example:

Engine Installation  
. Engine Assembly  
. . Manifold Assembly  
. . Control Box Assembly  
. . . Module Assembly

The Engine Assembly is a first level subassembly of the Engine Installation as indicated with one dot. The Manifold Assembly and the Control Box Assembly are second level components of the Engine Assembly as indicated by the two dots. The Module Assembly is a third level component of the Control Box Assembly which is indicated with three dots.



## Serial Number Location

Each Freeman Baler is identified by means of a baler model number and baler serial number. As a further identification, all power units are provided with a serial number. The serial number is an important piece of information about the machine and it may be necessary to know it before obtaining the correct replacement part. The serial number is located on the top chamber rail on the rear left-hand side, above the tool box. To ensure prompt, efficient service when ordering parts or requesting repairs from your authorized Freeman dealer, record the serial numbers in the spaces provided.

### Baler Serial Number

Rear, left side of baler on upper frame.

### Power Unit Serial Number

Deutz Diesel - forward side of engine on block.

Driveline P.T.O. 540 RPM - top of gearbox.

**NOTE:** Reference to left-hand and right-hand used throughout the manual are understood to mean from a position facing in the direction of travel.

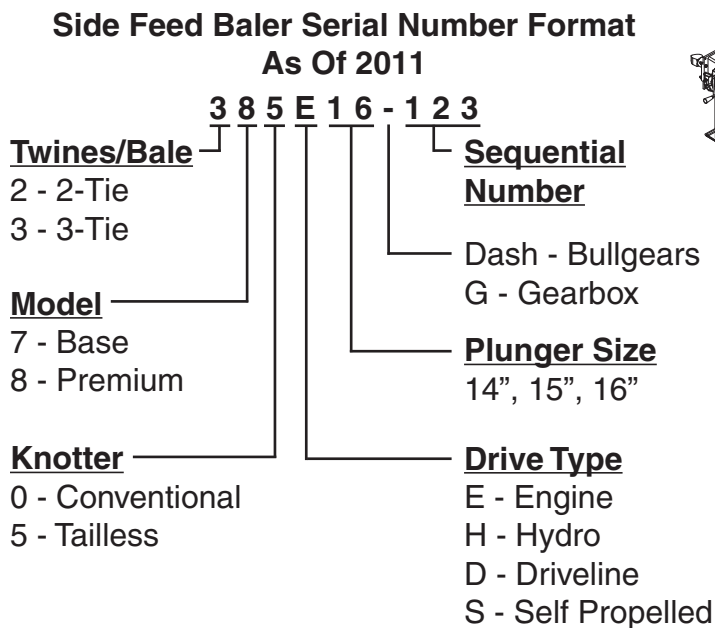


Figure 0-1. Baler Serial Number Location

# Safety

## General

The following pages contain general safety warnings which supplement specific warnings and cautions appearing elsewhere in this manual. All electrical and hydraulic equipment is potentially hazardous. You must thoroughly review and understand this Safety Section before attempting to operate, troubleshoot, maintain or service this baler.

Time, money and effort have been invested in making your Baler a safe product. The dividend from this investment is **YOUR PERSONAL SAFETY**.

However, it must be realized that no power-driven equipment can be any safer than the person behind the controls. If you don't operate and maintain your Freeman Baler safely, our efforts will have been in vain.

The safety instructions and warnings, as documented in this manual and shipped with the machine, provide the most reliable procedures for the safe operation and maintenance of your Baler. It's your responsibility to see that they are carried out.

Allied Systems Company cannot anticipate all worksite conditions, local regulations, etc. It is the responsibility of the end user to be aware of and obey any specific worksite, local, state, or national regulations or procedures that are applicable to operating this baler.

NOTE: All possible safety hazards cannot be anticipated so as to be included in this manual. Therefore, you must always be alert to potential hazards that could endanger personnel and/or damage the equipment.

### Intended Use Statement:

*This baler is intended to gather and compress loose, fibrous material (i.e., hay) and form it into rectangular bales. Use in any other way is considered to be contrary to the intended use. If you are unsure of the material you intend to bale, consult the factory.*

## Safety Symbols

The following symbols/terms are used to emphasize safety precautions and notices in this manual:



**DANGER**

The “DANGER” symbol indicates a hazardous situation which, if not avoided, will result in death or serious injury. Carefully read the message that follows to prevent serious injury or death.



**WARNING**

The “WARNING” symbol indicates a hazardous situation which, if not avoided, could result in death or serious injury. Carefully read the message that follows to prevent serious injury or death.



**CAUTION**

The “CAUTION” symbol indicates a hazardous situation which, if not avoided, could result in minor or moderate injury, or equipment damage. Carefully read the message that follows to prevent minor or moderate injury.

**NOTICE**

The “NOTICE” symbol alerts to a situation that is not related to personal injury but may cause equipment damage.

NOTE: ...

The term “NOTE” highlights operating procedures or practices that may improve equipment reliability and/or personnel performance, or to emphasize a concept.

## Safety

### Operation Warnings



**Warning: Failure to observe the following safety rules may result in extreme personal injury, dismemberment or death. It is the operator's responsibility to understand the proper and safe use of this baler.**

- Make sure that you read, understand, and obey all of the safety precautions and operating instructions in this Operator's Manual.
- Keep this Operator's Manual and the Safety Card (Allied form #89-028) with the baler at all times.
- Do not operate the baler unless you are authorized and trained to do so. If it has been some time since you last operated the baler, re-familiarize yourself with the baler before starting, then proceed slowly.
- Do not operate the baler if you are aware of any malfunctions, needed maintenance or repairs.
- Stop the baler immediately if any problems arise.
- Never allow others to ride on the baler.
- Never allow anyone within 10 ft of the baler while the baler is in operation.
- Never operate the baler without all safety shielding in place.
- Keep hands, feet, hair, jewelry and clothing away from moving parts, including but not limited to the pickup, knotter, and PTO shaft.
- Avoid wearing loose clothing which can easily be caught in moving parts.
- Use appropriate signs (i.e., Slow Moving Vehicle sign), signals or warning lights when transporting on highways.



- Always use lights when working at night or in low light conditions.
- Know your job-site rules. Some have site specific directions and procedures. The methods outlined in this manual provide a basis for safe operation of the baler. Because of special conditions, your company's baling procedures may be somewhat different from those shown in this manual.
- Do not start the tractor if the key had been marked with a "DO NOT START" or "RED" tag.
- Never operate any of the tractor's controls from anywhere other than the operator's seat.
- Alert personnel in the area before starting the engine, and make sure everyone is clear. Be sure that all controls are in neutral and the baler is disengaged before starting the engine.
- Each country has its own safety legislation. It is in the operator's own interest to be conversant with these regulations and to comply with them in full. This also applies to local bylaws and regulations in force on a particular worksite.
- Should the recommendations in this manual deviate from those in the user's country, the national regulations should be followed.
- Never attempt to disconnect any of the safety devices built into the baler or tractor.
- Maintain proper clearance from energized equipment, energized power lines or other power sources. High voltage electricity can discharge to ground without direct contact with the baler's or tractor's structure. If the baler or tractor contacts energized equipment, or if electrical energy does discharge through the machine—stay clear, and prevent anyone else from coming in contact with the baler or tractor. If you are on the tractor, stand fast, avoid contact with metal surfaces, and do not permit anyone to come into contact with the tractor or baler. Finally, **Do not jump off.**

## General Information

### Hydraulic Hazards

Be aware of the hazards of pressurized hydraulics:

- Wear personal protective equipment, such as gloves and safety glasses, whenever servicing or checking a hydraulic system.
- Assume that all hydraulic hoses and components are pressurized. Relieve all hydraulic pressure before disconnecting any hydraulic line.
- Never try to stop or check for a hydraulic leak with any part of your body; use a piece of cardboard to check for hydraulic leaks.
- Small hydraulic hose leaks are extremely dangerous, and can inject hydraulic oil under the skin, even through gloves.
- Infection and gangrene are possible when hydraulic oil penetrates the skin. See a doctor immediately to prevent loss of limb or death.



### Maintenance Safety

- Perform all routine maintenance outlined in this Operator's Manual in the time intervals indicated.
- Maintenance, lubrication and repair of this machine can be dangerous unless performed properly. In order to ensure safety, each person working on this baler must have the necessary skills, information, tools and equipment, and satisfy himself that his work method is safe, correct, and meets his own company's requirements.
- Do not attempt to make adjustments, or perform repairs unless you are authorized and qualified to do so.
- Never attempt to service energized equipment.
- Do not rely on the hydraulic system to support any part of the baler during maintenance or lubrication. Never stand under a baler component that is supported only by the hydraulic system. Ensure components are resting on their mechanical stops or supported with appropriate safety stands during maintenance or lubrication.
- Never attempt servicing while the baler is moving. Shut off the tractor and secure power.
- Shut off tractor and baler engine, engage the parking brake, disengage the baler, and wait for all movement to stop before adjusting, lubricating, cleaning, or servicing the baler.
- Tag the key switch with a "DO NOT START" sign and/or remove the key.
- Always perform all maintenance and lubrication procedures with the baler on level ground, parked in a safe area.
- Block the tires to keep the machine from rolling.
- Any unauthorized modifications made to the baler by the customer or parties other than Allied Systems will relieve Allied Systems Company and your Freeman dealer of any liability for damage or injury.
- Replace any worn parts only with genuine Freeman parts. Call your dealer for assistance.
- Unless specified in service procedures, never attempt maintenance or lubrication procedures while the baler is moving or the engine is running.
- Engine exhaust fumes can cause death. If it is necessary to run the engine in an enclosed space, remove the exhaust fumes from the area with an exhaust pipe extension. Use ventilation fans and open shop doors to provide adequate ventilation.
- DO NOT remove the radiator cap when the engine is hot. The coolant will be under pressure and can flash to steam with explosive force, causing severe burns. To prevent burns, remove the radiator cap only when the engine is cool.
- Batteries contain sulfuric acid which can cause severe burns. Avoid contact with skin, eyes or clothing.



- Batteries produce explosive gases. Keep sparks, flame and cigarettes away. Ventilate when charging or servicing in an enclosed space. Always shield your eyes when working near batteries. When removing battery cables, disconnect the negative (-) cable first. When installing a battery, always connect the positive (+) cable first. This procedure will help to prevent a spark which could cause an explosion.



- Before making adjustments to the engine or chassis electrical system, disconnect the battery. An electrical spark could cause a fire, explosion or severe burns.

### Safety Equipment

- Ensure test equipment is in good condition.
- If an instrument must be held while taking measurements, ground the case of the instrument before energizing equipment.
- Do not touch live equipment or personnel working on live equipment while holding a multimeter. Some types of measuring devices should not be grounded—do not hold such devices while taking measurements.
- Prevent personal injury or equipment damage by using a lifting device with a lifting capacity greater than twice the weight of any equipment to be lifted.
- Always use personal protective equipment (PPE) appropriate to the situation. This may include the use of hearing protection, eye protection, a respirator, a hard hat, leather gloves, steel toed boots, etc.



### Electrical Hazards

- An electric shock could be fatal. Ensure power to the baler is "OFF" before opening electrical panels.
- All electrical cables and connectors must be in good condition (free of corrosion, damage, etc). Use caution in wet weather to avoid danger from electrical shock. Never attempt electrical testing or repair while standing in water.
- Do not wear electrically conductive jewelry, clothing, or other items while working on the electrical system.



### Welding

Before conducting any welding on the baler:

- Thoroughly clean the baler.
- Disconnect both the positive (+) and negative (-) battery cables from the baler's battery.
- Disconnect the highway light cord (7 Pole Connector), the ICM (In Cab Monitor), and the XA2 module, located behind the baler control panel (as applicable).
- Connect the welding ground cable directly to the part to be welded, as close as possible to the weld location to reduce the possibility of welding current damage to other parts.
- Welding on the engine or engine mounted components is not recommended as damage to the engine or components may result.

### Hot Oil Hazards

- Burns from hot oil can be severe—Always allow lubricating and hydraulic oil to cool before draining.

### Compressed Air Hazards

- When using compressed air to dry parts, pressure should not exceed 30 psi (200 kPa).
- Air pressure penetrating your skin can be fatal. Never direct compressed air at anyone.

### Fire Safety



## WARNING

**WARNING: Diesel fuel and hydraulic oil are flammable. Never smoke while handling fuel or working on the fuel system. The fumes in an empty fuel container are explosive. Never cut or weld on or near fuel lines, tanks, or containers. Keep open flames and sparks away from the machine.**

### Reduce the Risk of Fire

- Keep the baler free of oil, grease, hay, and trash accumulations. Regular cleaning is recommended for fire prevention and general safety. Use an approved solvent to clean machine parts. Never use gasoline or diesel fuel.
- Shut off the engine and electrical equipment while filling the fuel tank. Use extra caution when fueling a hot engine. Always ground the fuel nozzle against the filler neck to avoid sparks.
- Never overfill the fuel or hydraulic tanks. Any overflow could cause a fire. Immediately repair any hydraulic or fuel leaks and clean up any spills.
- Handle all solvents and dry chemicals according to procedures identified on manufacturer's containers. Work in a well-ventilated area. Make sure you know where fire extinguishers are kept and how to use them.
- Avoid spilling fuel or other hazardous liquids. If a spill occurs, follow local or state regulations for clean-up. Contact your state's OSHA office for details.
- Always ensure that excess grease and oil accumulation, including spillage, is cleaned up immediately.
- Inspect the baler daily for potential fire hazards and make any necessary repairs immediately.
- Check all the electrical wiring and connections for defects, and repair or replace as necessary. Keep battery terminals clean and tight.
- Never perform welding operations until the entire machine has undergone a thorough cleaning. In addition, cover rubber hoses, disconnect the battery, and have at least a fire extinguisher at hand.



- Hydraulic fluid is flammable. Do not weld on or near pipes, tubes, or hoses that are filled with fluid. Do not smoke when checking or filling the tank. Keep open flames and sparks away from the baler.
- Hay dust is combustible. Do not have an open flame or weld in dusty environments.
- Maintain the engine cooling system to avoid overheating.
- Remember, there is always a risk of fire.

### Fire Fighting Equipment

- It is recommended to carry an "ABC" fire extinguisher on the baler or in the pull vehicle at all times. Install it within easy reach of the operator in a position that protects it from damage. Use only a "quick release" type of mount. It is also recommended to carry a four gallon water container with a pump, or as required by local and state law.
- Keep your fire extinguisher(s) fully charged and in good working order. Know how to use them.
- Read and understand the instructions printed on the canisters and learn how to operate them. Learn how to remove the canisters from their mounting brackets in the shortest amount of time.
- Service the extinguisher according to the manufacturer's specifications. Service after every use, no matter how short a time.

### Fire Suppression

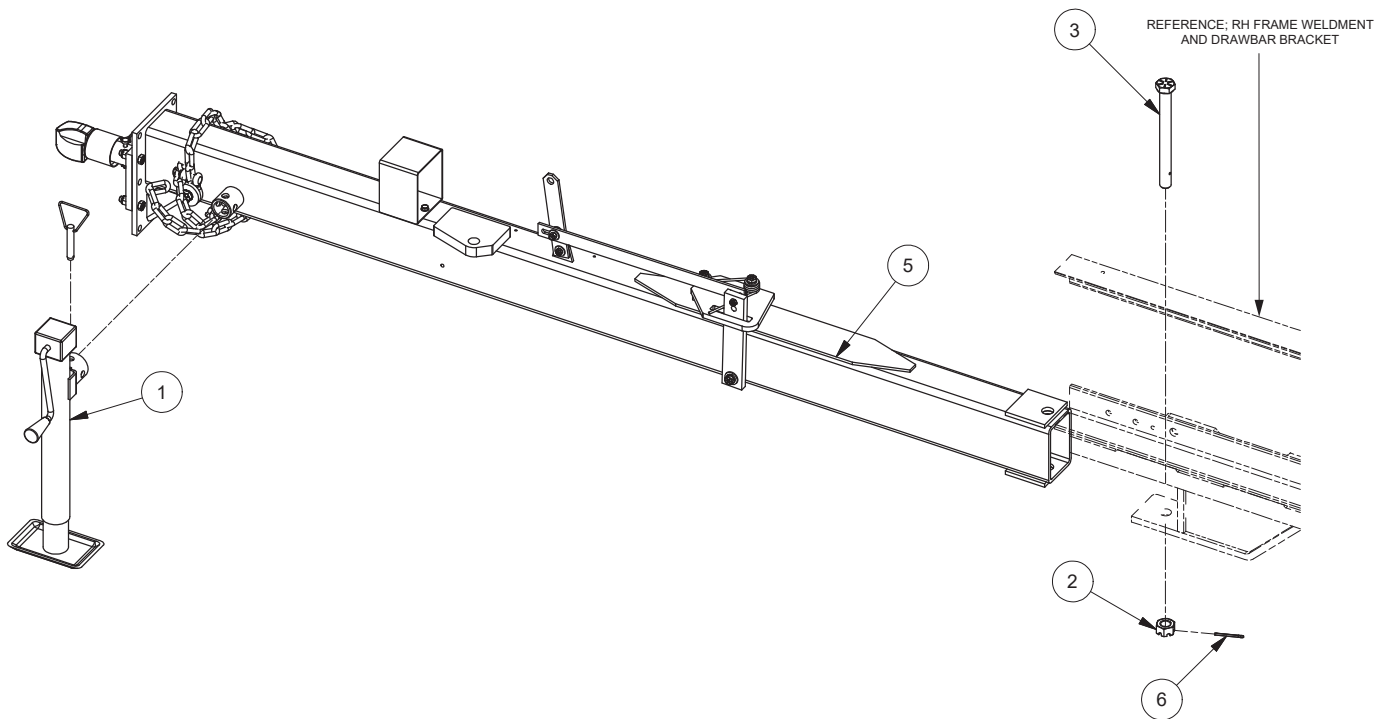
- Do not panic. At the first sign of trouble (burning smell, smoke, visible flame, etc), stop the tractor and turn off the engine in the clearest area available, with the tractor upwind from the baler if possible.
- If the fire cannot be extinguished safely, immediately evacuate the area. DO NOT attempt to extinguish it. DO NOT risk personal injury. Contact your local fire department.
- If you have determined that the fire may be safely extinguished, use the fire extinguisher according to the manufacturer's instructions, or use the water pump, aiming water at the base of the fire.
- When the baler has fully cooled, thoroughly inspect, and make all necessary repairs to return the baler to normal operation.
- Recharge or replace the extinguishers before returning to work.

# Section 1

## Front End

|  |      |
|--|------|
| Drawbar Installation .....                     | 1-2  |
| . Drawbar Assembly, Engine .....               | 1-3  |
| . Swing Drawbar Installation .....             | 1-6  |
| <br>   |      |
| Drawbar Installation, Hydro LH.....            | 1-7  |
| . Drawbar Assembly, Hydro LH .....             | 1-8  |
| Drawbar Installation, Hydro RH .....           | 1-9  |
| . Drawbar Assembly, Hydro RH.....              | 1-10 |
| Swing Drawbar Installation, Hydro LH.....      | 1-11 |
| <br>   |      |
| Front End Installation 2 -Tie 14" Chamber..... | 1-12 |
| . Front End Assembly 2 -Tie 14" Chamber.....   | 1-13 |
| Front End Installation 2 -Tie 16" Chamber..... | 1-14 |
| . Front End Assembly 2 -Tie 16" Chamber.....   | 1-15 |
| <br>   |      |
| Hydraulic Tank Installation, 280/285 .....     | 1-16 |
| . Hydraulic Tank Assembly, 280/285.....        | 1-19 |
| . PTO Pump/Gearbox Assembly .....              | 1-21 |
| <br>   |      |
| Hose Diagram, Hydro .....                      | 1-22 |

# Drawbar Installation



| Item                                  | Part No.   | Qty | Description        | Item | Part No.   | Qty | Description             |
|---------------------------------------|------------|-----|--------------------|------|------------|-----|-------------------------|
| <b>903507 Drawbar Installation RH</b> |            |     |                    |      |            |     |                         |
| 1                                     | JCK0178203 | 1   | . Jack, 5000Lb     | 4    | ROP0000012 | 1   | . Rope, Drawbar Release |
| 2                                     | NSL0001000 | 1   | . Hex Nut, Slotted | 5    | *a 903505  | 1   | . Drawbar Assembly      |
| 3                                     | PIN0018909 | 1   | . Pin              | 6    | 212255     | 1   | . Cotter Pin            |

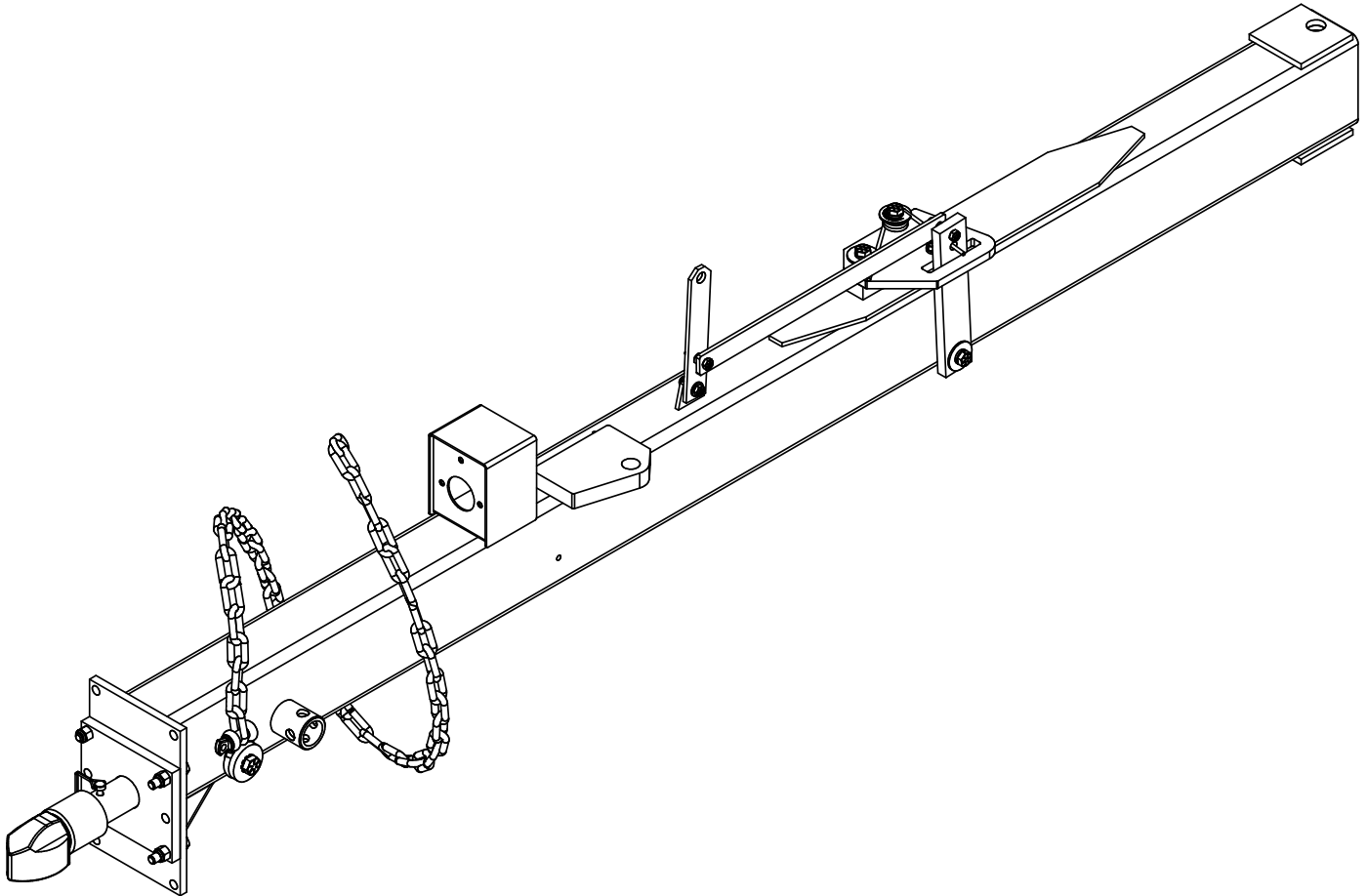
\*a See Separate Coverage (Page 1-3)

Rev B



## Drawbar Assembly, Engine

Page 1 of 3

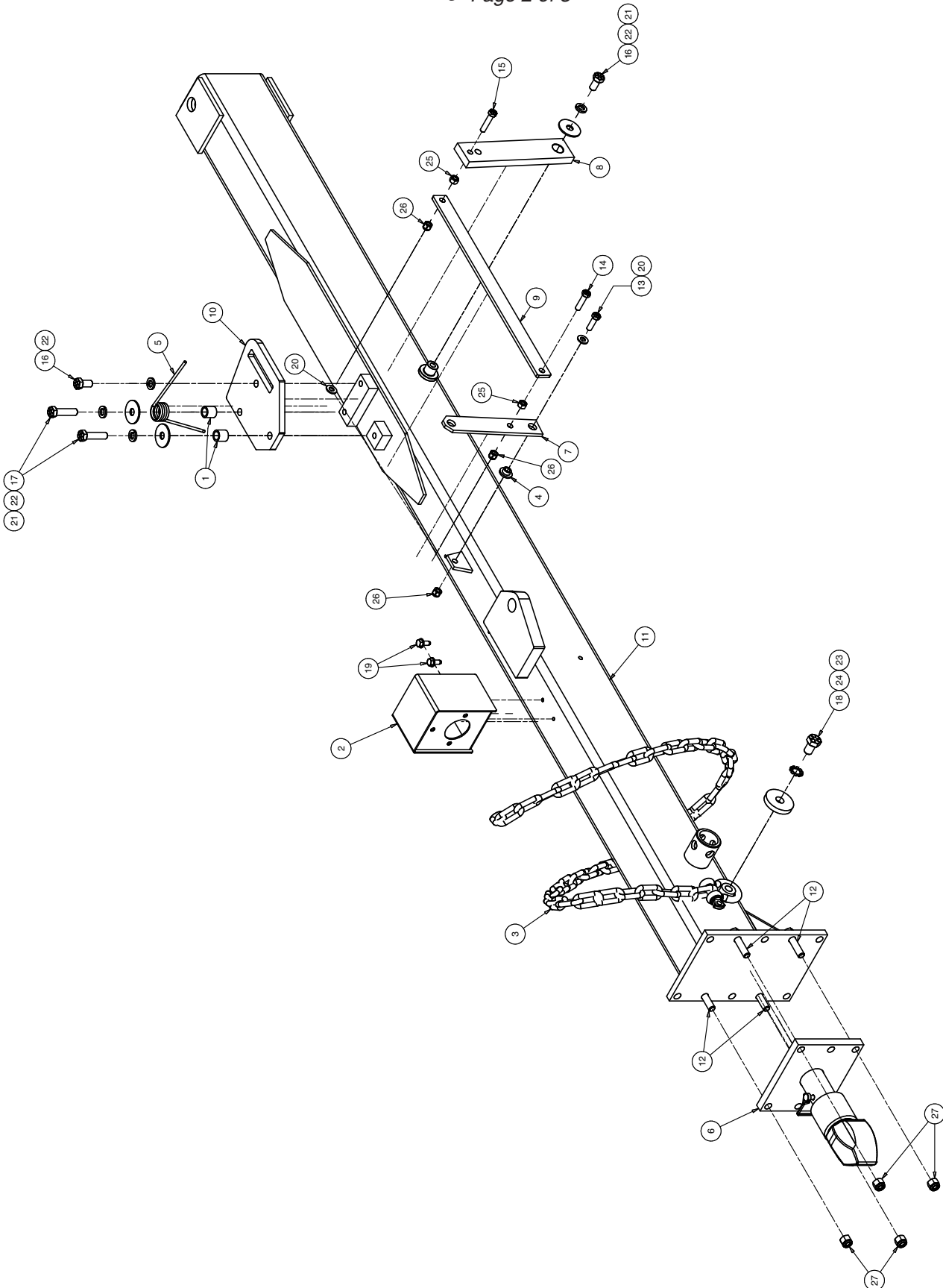


| Item                                   | Part No.   | Qty | Description             | Item | Part No.   | Qty | Description            |
|--|------------|-----|-------------------------|------|------------|-----|------------------------|
| <b>903505 Drawbar Assembly, Engine</b> |            |     |                         |      |            |     |                        |
| 1                                      | BSH0011985 | 2   | . Bushing               | 16   | 221560W    | 2   | . Capscrew             |
| 2                                      | BKT037159B | 1   | . Bracket               | 17   | R13811077  | 2   | . Capscrew             |
| 3                                      | CHN0000370 | 1   | . Chain, Ag Safety      | 18   | Y18C-1016  | 1   | . Capscrew             |
| 4                                      | F000000440 | 1   | . Ferrule               | 19   | SMS0000184 | 2   | . Screw, Ser Flg       |
| 5                                      | F000001891 | 1   | . Spring, Torsion Latch | 20   | 221767W    | 2   | . Washer               |
| 6                                      | HTH0021097 | 1   | . Hitch                 | 21   | 15178W     | 3   | . Washer               |
| 7                                      | LEV0013885 | 1   | . Bar, Lever            | 22   | 234665     | 4   | . Lockwasher           |
| 8                                      | LTH0011229 | 1   | . Tongue Latch          | 23   | WAS037158A | 1   | . Washer, Safety Chain |
| 9                                      | 904696     | 1   | . Bar, Link             | 24   | WES0006250 | 1   | . Washer               |
| 10                                     | PLT0011228 | 1   | . Plate, Tongue Latch   | 25   | 221707W    | 2   | . Hex Nut              |
| 11                                     | 903506     | 1   | . RH Drawbar            | 26   | 237567     | 3   | . Locknut              |
| 12                                     | 221574W    | 4   | . Capscrew              | 27   | 223587     | 4   | . Locknut              |
| 13                                     | 221499W    | 1   | . Capscrew              |      |            |     |                        |
| 14                                     | Y17C-0624  | 1   | . Capscrew              |      |            |     |                        |
| 15                                     | R13801813  | 1   | . Capscrew              |      |            |     |                        |

Rev G

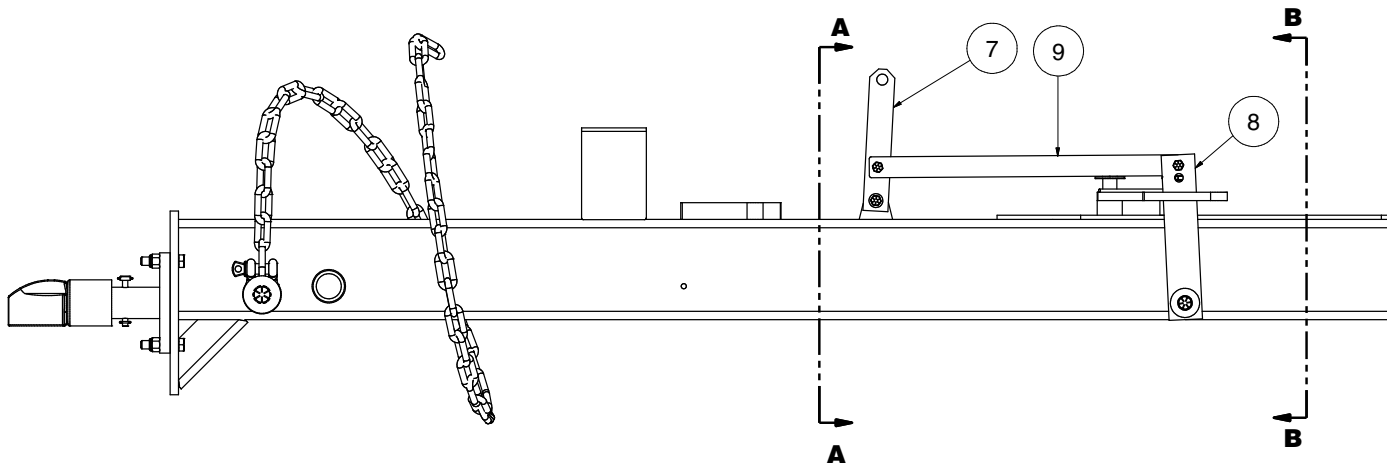
# Drawbar Assembly, Engine

~ Page 2 of 3



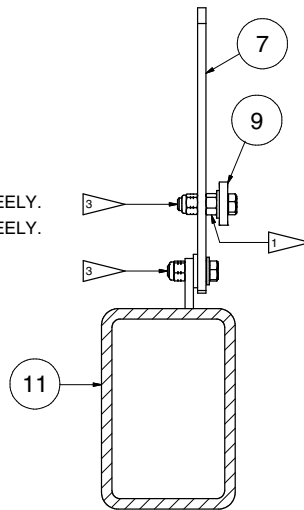
# Drawbar Assembly, Engine

Page 3 of 3

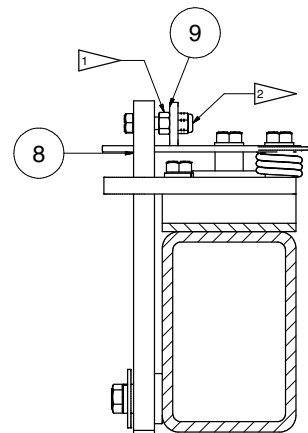


**NOTES:**

- 1 TIGHTEN NUT TO CLAMP ITEM 9.
- 2 DO NOT OVERTIGHTEN, ITEM 8 MUST ROTATE FREELY.
- 3 DO NOT OVERTIGHTEN, ITEM 7 MUST ROTATE FREELY.



**SECTION A-A**



**SECTION B-B**

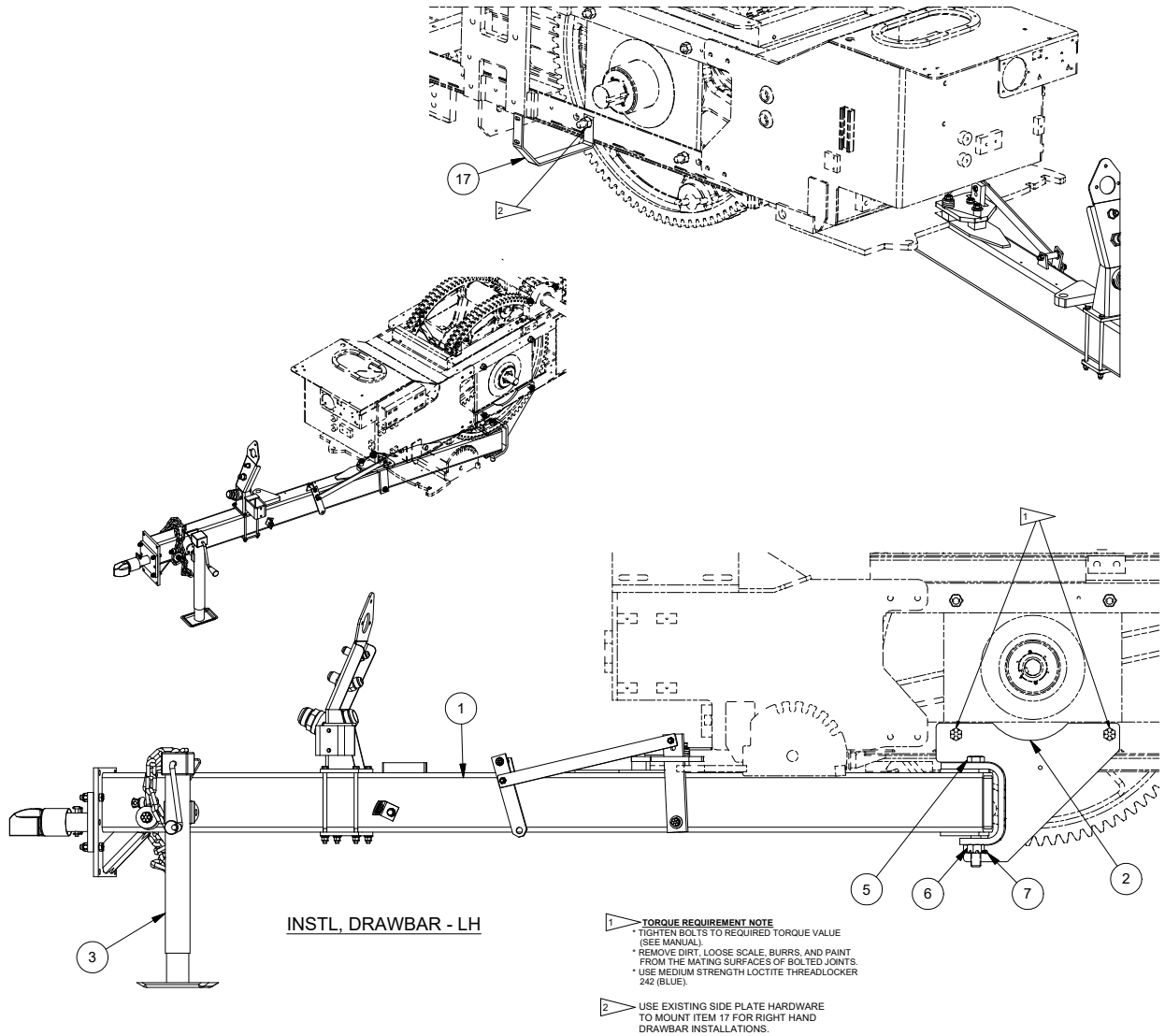
# Swing Drawbar Installation

*No illustration available at this time.*

| Item | Part No.      | Qty | Description                       | Item | Part No. | Qty | Description |
|------|---------------|-----|-----------------------------------|------|----------|-----|-------------|
|      | <b>902822</b> |     | <b>Swing Drawbar Installation</b> |      |          |     |             |
| 1    | F000006519    | 1   | . 2" X 8" Hydraulic Cylinder      | 3    | 23945    | 2   | . Fitting   |
| 2    | R12565833     | 2   | . Hose Assembly                   |      |          |     |             |

Rev -

## Drawbar Installation LH, Hydro

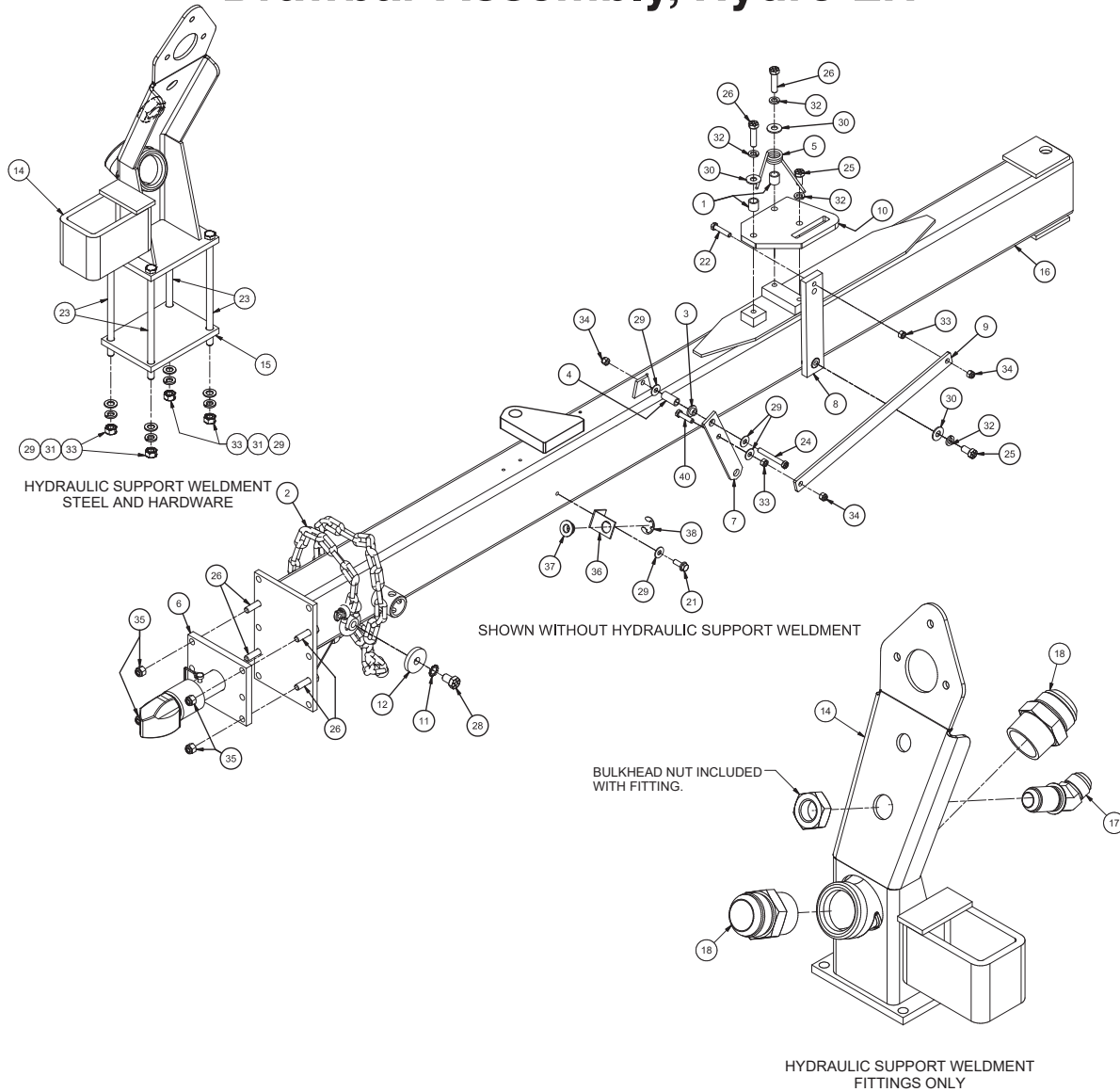


| Item                                  | Part No.   | Qty | Description        | Item | Part No.  | Qty | Description                    |
|---------------------------------------|------------|-----|--------------------|------|-----------|-----|--------------------------------|
| <b>910146 Drawbar Installation LH</b> |            |     |                    |      |           |     |                                |
| 1                                     | *a 906884  | 1   | . Drawbar Assembly | 9    | R13811196 | 0   | . Nut Lock                     |
| 2                                     | BKT0016306 | 1   | . Drawbar Bracket  | 10   | Y17C-1236 | 0   | . Capscrew                     |
| 3                                     | JCK0178203 | 1   | . Jack, Sidewind   | 11   | 221657W   | 0   | . Capscrew                     |
| 4                                     | ROP0000012 | 1   | . Rope             | 17   | 910483    | 1   | . Brace Crank Arm Shield Plate |
| 5                                     | PIN0018909 | 1   | . Pin, Pivot       | 18   | 180189W   | 1   | . Capscrew                     |
| 6                                     | NSL0001000 | 1   | . Hex Nut Slotted  | 19   | 200608    | 1   | . Washer                       |
| 7                                     | 212255     | 1   | . Cotter Pin       | 20   | 221716W   | 1   | . Hex Nut                      |
| 8                                     | 221777W    | 0   | . Washer           |      |           |     |                                |

\*a See Separate Coverage (Page 1-8)

Rev -

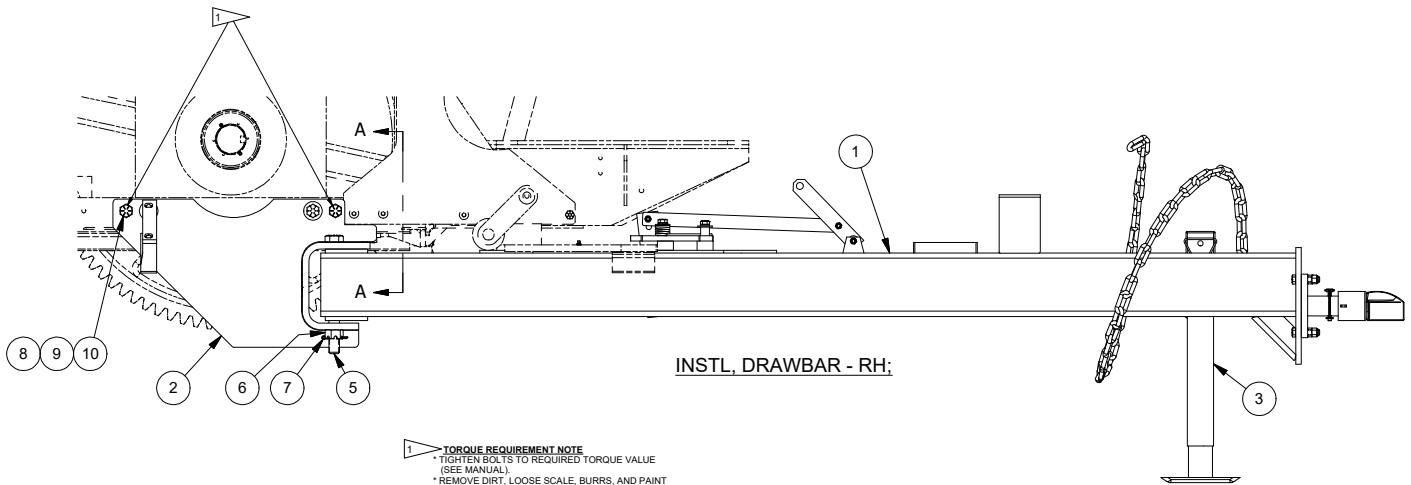
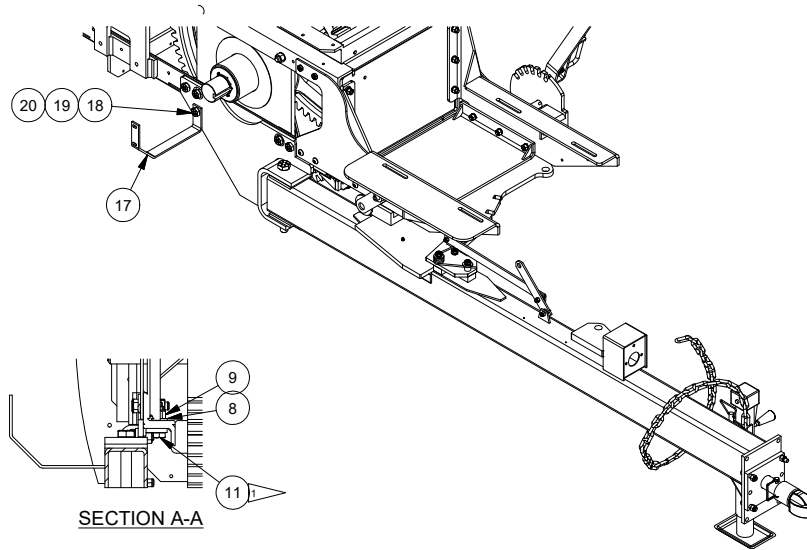
# Drawbar Assembly, Hydro LH



| Item                                  | Part No.   | Qty | Description                | Item | Part No.   | Qty | Description                  |
|---------------------------------------|------------|-----|----------------------------|------|------------|-----|------------------------------|
| <b>906884 Drawbar Assembly, Hydro</b> |            |     |                            |      |            |     |                              |
| 1                                     | BSH0011985 | 2   | . Bushing                  | 21   | 134803W    | 1   | . Screw, Ser Flg             |
| 2                                     | CHN0000370 | 1   | . Chain, Ag Safety         | 22   | R13811043  | 1   | . Capscrew                   |
| 3                                     | F00000440  | 1   | . Ferrule                  | 23   | 221560W    | 2   | . Capscrew                   |
| 4                                     | F000000993 | 1   | . Bushing, Bale Weight Ind | 24   | R13811077  | 6   | . Capscrew                   |
| 5                                     | F000001891 | 1   | . Spring, Torsion Latch    | 25   | Y18C-1016  | 1   | . Capscrew                   |
| 6                                     | HTH0021097 | 1   | . Hitch                    | 26   | 221767W    | 8   | . Washer                     |
| 7                                     | LEV0013885 | 1   | . Bar, Lever               | 27   | 239519     | 3   | . Washer                     |
| 8                                     | LTH0011229 | 1   | . Tongue Latch             | 28   | R13812514  | 4   | . Lockwasher                 |
| 9                                     | 904696     | 1   | . Bar, Link                | 29   | 234665     | 4   | . Lockwasher                 |
| 10                                    | PLT0011228 | 1   | . Plate, Tongue Latch      | 30   | 221707W    | 6   | . Hex Nut                    |
| 11                                    | WES0006250 | 1   | . Washer                   | 31   | 237567     | 3   | . Locknut                    |
| 12                                    | WAS037158A | 1   | . Washer, Safety Chain     | 32   | 223587     | 4   | . Locknut                    |
| 13                                    | 905193     | 1   | . Support                  | 33   | F000007973 | 1   | . Holder, Needle Twine Guide |
| 14                                    | 901760     | 1   | . Plate, Mounting          | 34   | F000000856 | 1   | . Bushing                    |
| 15                                    | 906883     | 1   | . Weldment, LH Drawbar     | 35   | F000000857 | 1   | . Ring, Snap                 |
| 16                                    | 17707      | 1   | . Fitting                  | 36   | Y17C-0624  | 1   | . Capscrew                   |
| 17                                    | 209763     | 2   | . Fitting                  | 37   | 14763W     | 1   | . Nut, Bulkhead              |
| 18                                    | 059-0042   | 1   | . Fitting                  | 38   | 14761W     | 1   | . Nut                        |
| 19                                    | 234697     | 4   | . Capscrew                 |      |            |     |                              |
| 20                                    | R13801813  | 1   | . Capscrew                 |      |            |     |                              |

Rev A

### Drawbar Installation RH, Hydro



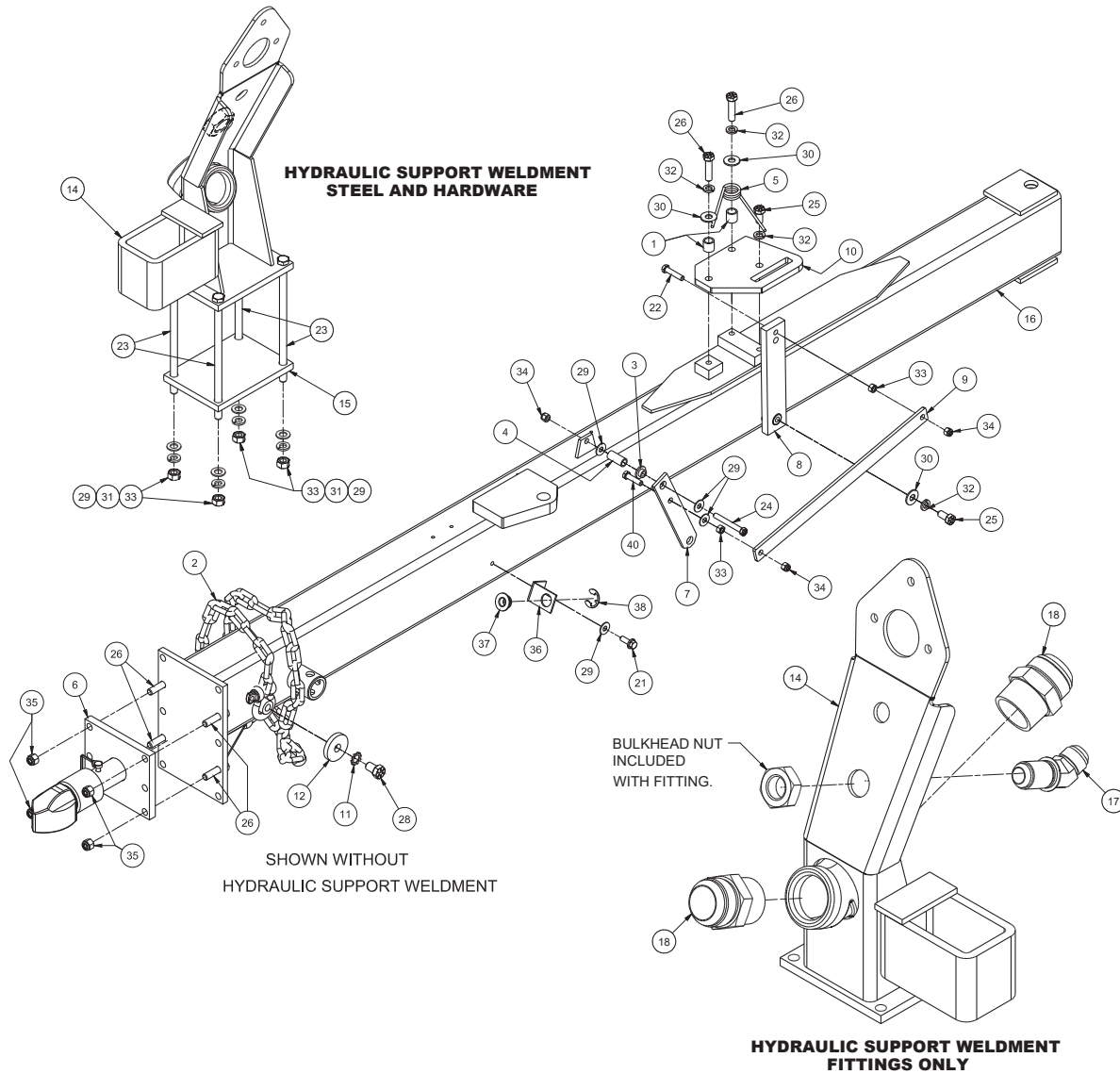
**TORQUE REQUIREMENT NOTE**  
 \* TIGHTEN BOLTS TO REQUIRED TORQUE VALUE (SEE MANUAL).  
 \* REMOVE DIRT, LOOSE SCALE, BURRS, AND PAINT FROM THE MATING SURFACES OF BOLTED JOINTS.  
 \* USE MEDIUM STRENGTH LOCTITE THREADLOCKER 242 (BLUE).

| Item                                  | Part No.   | Qty | Description        | Item | Part No.  | Qty | Description                    |
|---------------------------------------|------------|-----|--------------------|------|-----------|-----|--------------------------------|
| <b>910143 Drawbar Installation RH</b> |            |     |                    |      |           |     |                                |
| 1                                     | *a 905872  | 1   | . Drawbar Assembly | 9    | R13811196 | 3   | . Nut Lock                     |
| 2                                     | 910465     | 1   | . Drawbar Bracket  | 10   | Y17C-1236 | 2   | . Capscrew                     |
| 3                                     | JCK0178203 | 1   | . Jack, Sidewind   | 11   | 221657W   | 1   | . Capscrew                     |
| 4                                     | ROP0000012 | 1   | . Rope             | 17   | 910483    | 1   | . Brace Crank Arm Shield Plate |
| 5                                     | PIN0018909 | 1   | . Pin, Pivot       | 18   | 180189W   | 1   | . Capscrew                     |
| 6                                     | NSL0001000 | 1   | . Hex Nut Slotted  | 19   | 200608    | 1   | . Washer                       |
| 7                                     | 212255     | 1   | . Cotter Pin       | 20   | 221716W   | 1   | . Hex Nut                      |
| 8                                     | 221777W    | 3   | . Washer           |      |           |     |                                |

\*a See Separate Coverage (Page 1-10)

Rev A

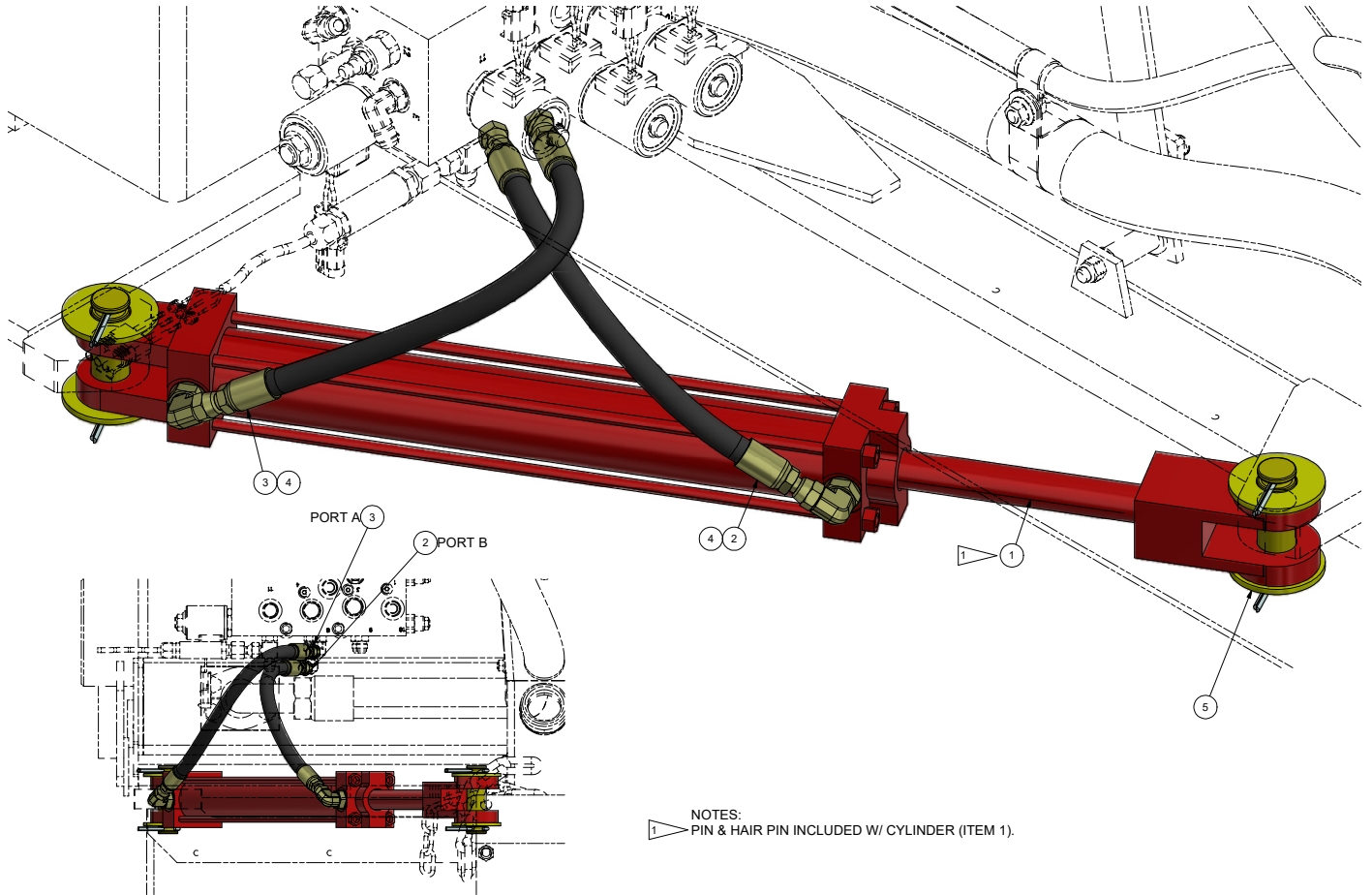
# Drawbar Assembly, Hydro RH



| Item                                   | Part No.   | Qty | Description                | Item | Part No.   | Qty | Description                  |
|--|------------|-----|----------------------------|------|------------|-----|------------------------------|
| <b>905872 Drawbar Assembly, Hydro,</b> |            |     |                            |      |            |     |                              |
| 1                                      | BSH0011985 | 2   | . Bushing                  | 20   | R13801813  | 1   | . Capscrew                   |
| 2                                      | CHN0000370 | 1   | . Chain, Ag Safety         | 21   | 134803W    | 1   | . Screw, Ser Flg             |
| 3                                      | F000000440 | 1   | . Ferrule                  | 22   | R13811043  | 1   | . Capscrew                   |
| 4                                      | F000000993 | 1   | . Bushing, Bale Weight Ind | 23   | 221560W    | 2   | . Capscrew                   |
| 5                                      | F000001891 | 1   | . Spring, Torsion Latch    | 24   | R13811077  | 6   | . Capscrew                   |
| 6                                      | HTH0021097 | 1   | . Hitch                    | 25   | Y18C-1016  | 1   | . Capscrew                   |
| 7                                      | LEV0013885 | 1   | . Bar, Lever               | 26   | 221767W    | 8   | . Washer                     |
| 8                                      | LTH0011229 | 1   | . Tongue Latch             | 27   | 239519     | 3   | . Washer                     |
| 9                                      | 904696     | 1   | . Bar,Link                 | 28   | R13812514  | 4   | . Lockwasher                 |
| 10                                     | PLT0011228 | 1   | . Plate, Tongue Latch      | 29   | 234665     | 4   | . Lockwasher                 |
| 11                                     | WES0006250 | 1   | . Washer                   | 30   | 221707W    | 6   | . Hex Nut                    |
| 12                                     | WAS037158A | 1   | . Washer, Safety Chain     | 31   | 237567     | 3   | . Locknut                    |
| 13                                     | 905193     | 1   | . Support                  | 32   | 223587     | 4   | . Locknut                    |
| 14                                     | 901760     | 1   | . Plate,Mounting           | 33   | F000007973 | 1   | . Holder, Needle Twine Guide |
| 15                                     | 903506     | 1   | . Weldment, RH Drawbar     | 34   | F000000856 | 1   | . Bushing                    |
| 16                                     | 17707      | 1   | . Fitting                  | 35   | F000000857 | 1   | . Ring, Snap                 |
| 17                                     | 209763     | 2   | . Fitting                  | 36   | Y17C-0624  | 1   | . Capscrew                   |
| 18                                     | 059-0042   | 1   | . Fitting                  | 37   | 14763W     | 1   | . Nut, Bulkhead              |
| 19                                     | 234697     | 4   | . Capscrew                 | 38   | 14761W     | 1   | . Nut                        |

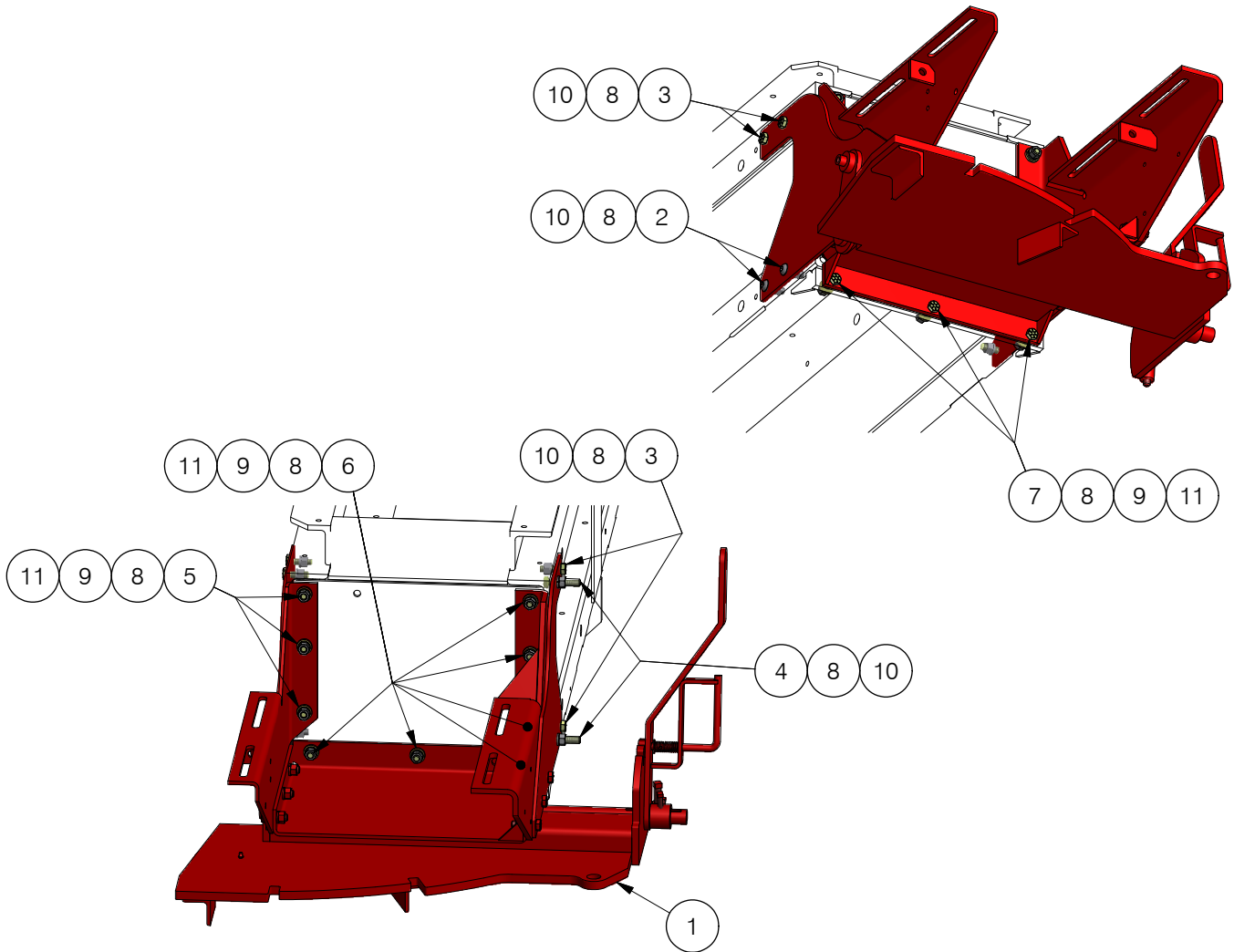


## Swing Drawbar Installation, Hydro LH



| Item  | Part No.   | Qty | Description     | Item | Part No.  | Qty | Description     |
|---|------------|-----|-----------------|------|-----------|-----|-----------------|
| <b>910235 Installation, Hydro Swing Db - LH</b> |            |     |                 |      |           |     |                 |
| 1   | CYL0009014 | 1   | . Cylinder      | 3    | 252050    | 1   | . Hose Assembly |
|   | 258627     | 1   | . . Seal Kit    | 4    | 23945     | 2   | . Fitting       |
| 2   | 252050     | 1   | . Hose Assembly | 5    | R13806990 | 8   | . Washer        |

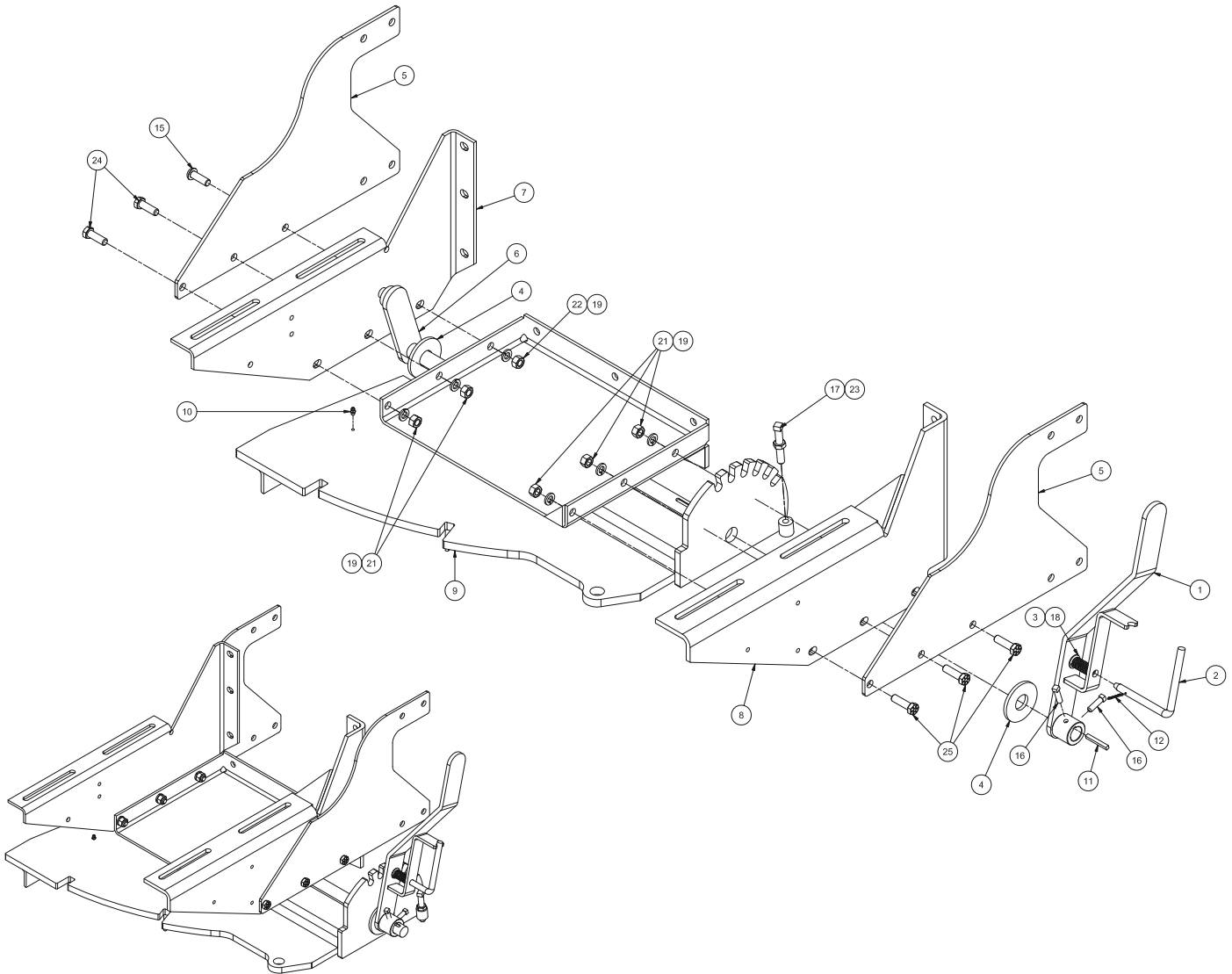
# Front End Installation 2 -Tie 14" Chamber



| Item | Part No.      | Qty | Description                   | Item | Part No.  | Qty | Description  |
|------|---------------|-----|-------------------------------|------|-----------|-----|--------------|
|      | <b>904043</b> |     | <b>Front End Installation</b> |      |           |     |              |
| 1    | *a 903583     | 1   | . Front End Assembly          | 8    | R13812516 | 20  | . Lockwasher |
| 2    | Y25G-0824     | 2   | . Capscrew                    | 9    | 221771W   | 12  | . Washer     |
| 3    | 200454W       | 4   | . Capscrew                    | 10   | 221711W   | 8   | . Hex Nut    |
| 4    | 221574W       | 2   | . Capscrew                    | 11   | 221712W   | 12  | . Hex Nut    |
| 5    | Y18C-0820     | 3   | . Capscrew                    |      |           |     |              |
| 6    | 234176        | 6   | . Capscrew                    |      |           |     |              |
| 7    | R13806345     | 3   | . Capscrew                    |      |           |     |              |

\*a See Separate Coverage (Page 1-13)

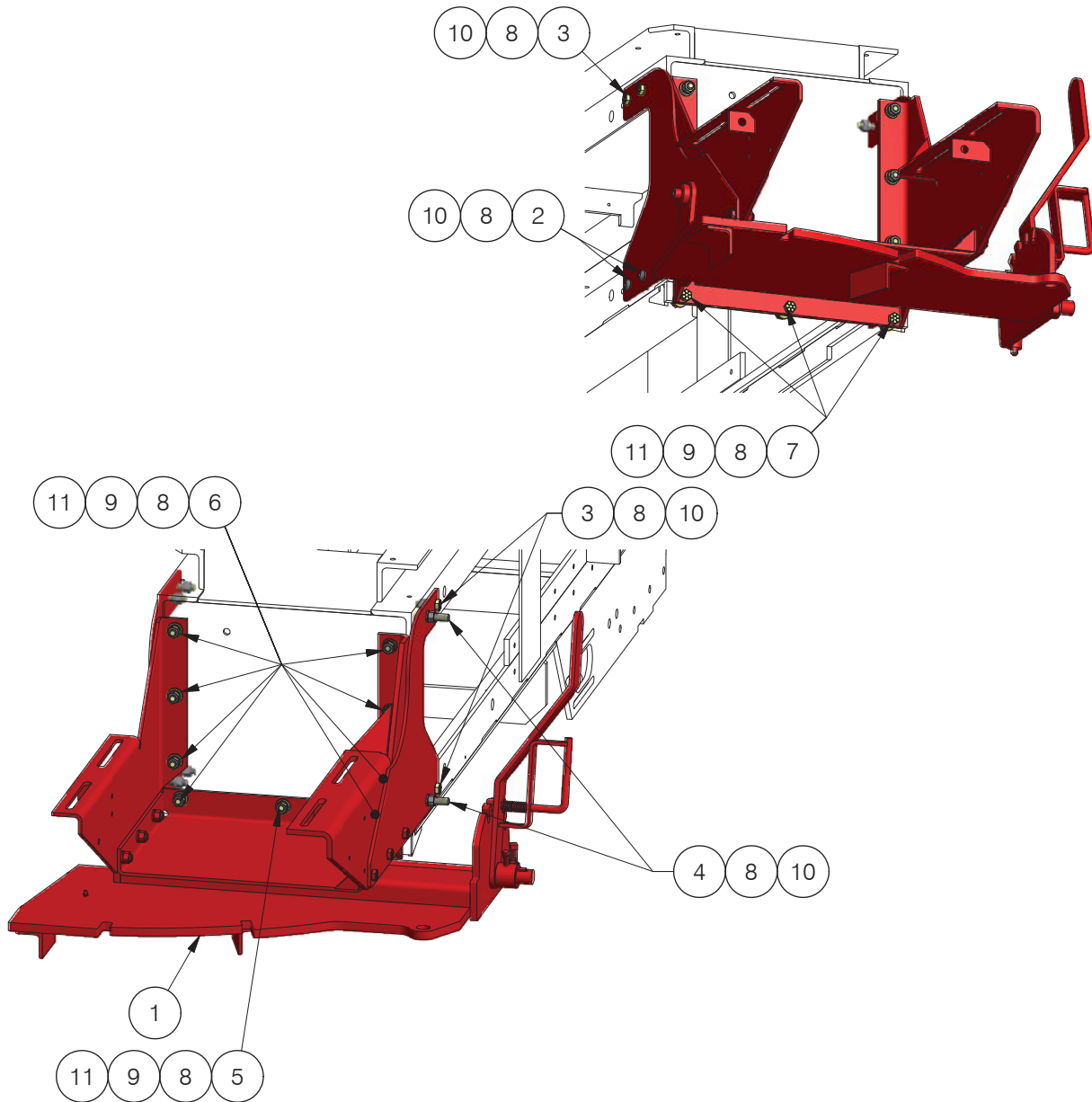
### Front End Assembly 2 -Tie 14" Chamber



| Item                                | Part No.   | Qty | Description         | Item | Part No.   | Qty | Description  |
|-------------------------------------|------------|-----|---------------------|------|------------|-----|--------------|
| <b>903583 Front End Subassembly</b> |            |     |                     |      |            |     |              |
| 1                                   | F000007539 | 1   | .Lever              | 15   | Y25G-0824  | 1   | .Capscrew    |
| 2                                   | F000007540 | 1   | .Pin                | 16   | SQS3751250 | 2   | .Set Screw   |
| 3                                   | F000007541 | 1   | .Compression Spring | 17   | SQS5003000 | 1   | .Set Screw   |
| 4                                   | F000008247 | 2   | .Washer             | 18   | 222615     | 1   | .Flat Washer |
| 5                                   | GUS0024470 | 2   | .Plate, Support     | 19   | R13812516  | 6   | .Lockwasher  |
| 6                                   | PLF0024476 | 1   | .Lever              | 21   | 221712W    | 5   | .Hex Nut     |
| 7                                   | 903306     | 1   | .Engine Mount, RH   | 22   | 221711W    | 1   | .Hex Nut     |
| 8                                   | 903307     | 1   | .Engine Mount, LH   | 23   | 234218     | 1   | .Jam Nut     |
| 9                                   | 903555     | 1   | .Hitch              | 24   | 234176     | 2   | .Capscrew    |
| 10                                  | 11079      | 1   | .Fitting, Lube      | 25   | R13806345  | 3   | .Capscrew    |
| 11                                  | 48688      | 1   | .Key                |      |            |     |              |
| 12                                  | 00103385   | 1   | .Cotter Pin         |      |            |     |              |

Rev E

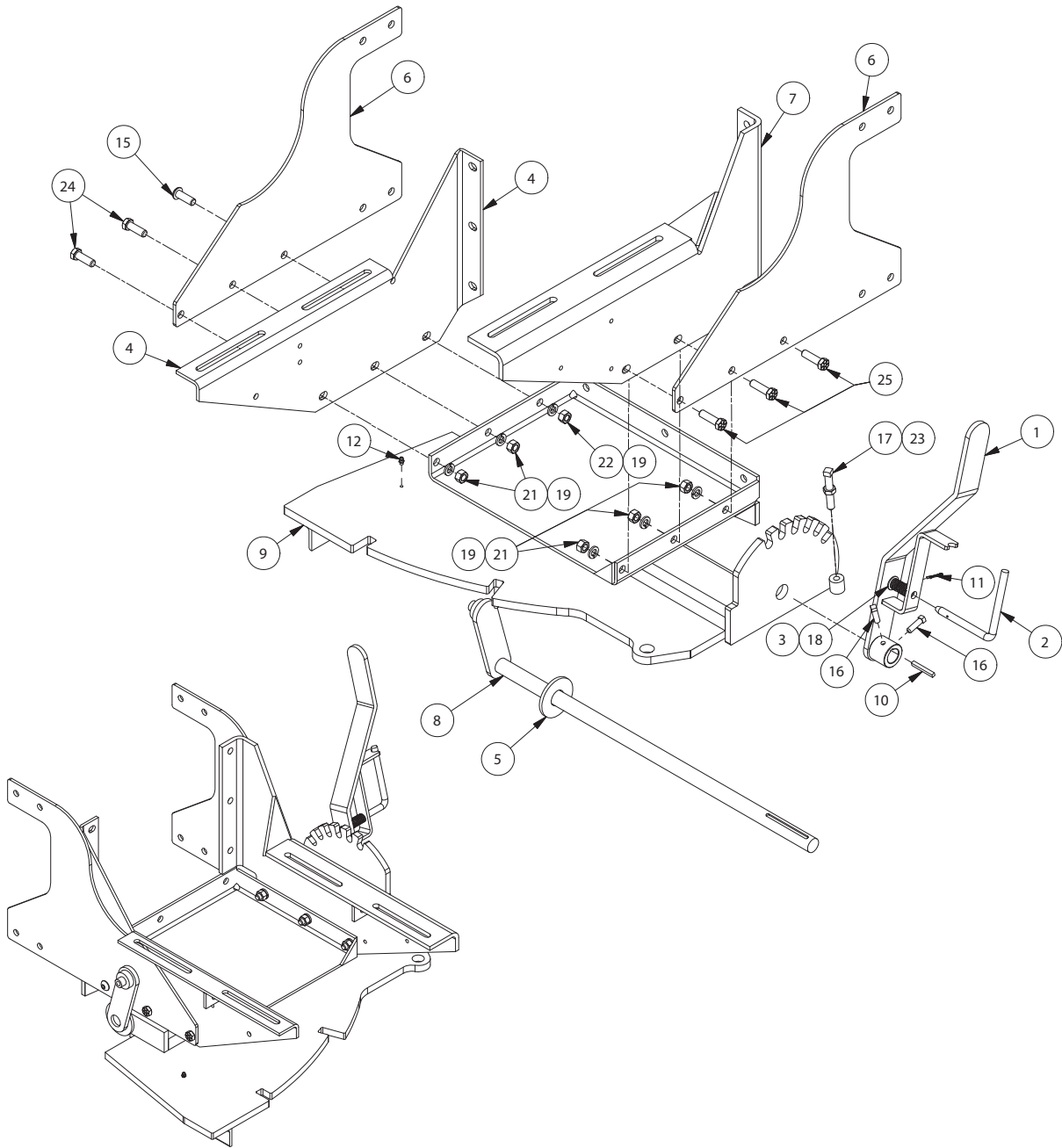
# Front End Installation 2 -Tie 16" Chamber



| Item | Part No.      | Qty | Description                   | Item | Part No.  | Qty | Description  |
|------|---------------|-----|-------------------------------|------|-----------|-----|--------------|
|      | <b>904045</b> |     | <b>Front End Installation</b> |      |           |     |              |
| 1    | *a 903554     | 1   | . Front End Assembly          | 8    | R13812516 | 20  | . Lockwasher |
| 2    | Y25G-0824     | 2   | . Capscrew                    | 9    | 221771W   | 12  | . Washer     |
| 3    | 200454W       | 4   | . Capscrew                    | 10   | 221711W   | 8   | . Hex Nut    |
| 4    | 221574W       | 2   | . Capscrew                    | 11   | 221712W   | 12  | . Hex Nut    |
| 5    | Y18C-0820     | 1   | . Capscrew                    |      |           |     |              |
| 6    | 234176        | 8   | . Capscrew                    |      |           |     |              |
| 7    | R13806345     | 3   | . Capscrew                    |      |           |     |              |

\*a See Separate Coverage (Page 1-15)

### Front End Assembly 2-Tie, 16" Chamber



| Item                                | Part No.   | Qty | Description             | Item | Part No.   | Qty | Description   |
|-------------------------------------|------------|-----|-------------------------|------|------------|-----|---------------|
| <b>903554 Front End Subassembly</b> |            |     |                         |      |            |     |               |
| 1                                   | F000007539 | 1   | . Lever                 | 15   | Y25G-0824  | 1   | . Capscrew    |
| 2                                   | F000007540 | 1   | . Pin                   | 16   | SQS3751250 | 2   | . Set Screw   |
| 3                                   | F000007541 | 1   | . Compression Spring    | 17   | SQS5003000 | 1   | . Set Screw   |
| 4                                   | F000007799 | 1   | . Mounting, RH          | 18   | 222615     | 1   | . Flat Washer |
| 5                                   | F000008247 | 1   | . Washer                | 19   | R13812516  | 6   | . Lockwasher  |
| 6                                   | GUS0024467 | 2   | . Plate, Support Gusset | 21   | 221712W    | 5   | . Hex Nut     |
| 7                                   | MNT0023153 | 1   | . Engine Mount, LH      | 22   | 221711W    | 1   | . Hex Nut     |
| 8                                   | PLF0024476 | 1   | . Lever                 | 23   | 234218     | 1   | . Jam Nut     |
| 9                                   | 903555     | 1   | . Hitch                 | 24   | 234176     | 2   | . Capscrew    |
| 10                                  | 48688      | 1   | . Key                   | 25   | R13806345  | 3   | . Capscrew    |
| 11                                  | 00103385   | 1   | . Cotter Pin            |      |            |     |               |
| 12                                  | 11079      | 1   | . Fitting, Lube         |      |            |     |               |

Rev D

# Hydraulic Tank Installation, 280/285

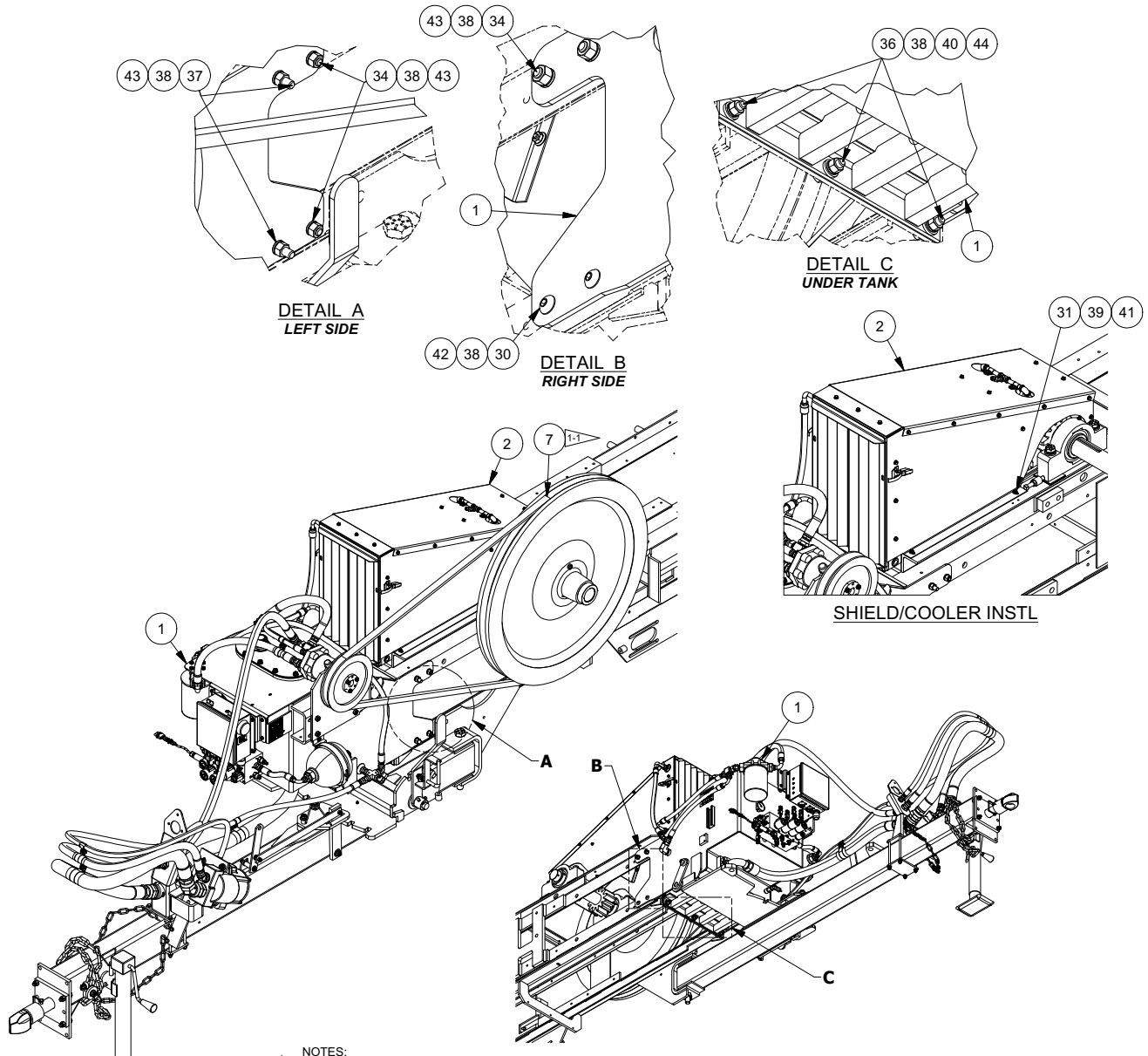
Page 1 of 3

| Item   | Part No.   | Qty | Description                      | Item | Part No.                          | Qty  | Description      |
|--|------------|-----|----------------------------------|------|-----------------------------------|------|------------------|
| <b>910231 Hydraulic Tank Installation, 280/285</b> |            |     |                                  |      |                                   |      |                  |
| 1  | *a 910232  | 1   | . Hydraulic Tank Assembly        | 25   | 224298                            | 1    | . Fitting        |
| 2  | *b 910233  | 1   | . Bullgear Shd/Oil Cooler Shroud | 27   | 14701                             | 1    | . Fitting        |
| 3  | *c 910253  | 1   | . Assembly, Pump/Gearbox         | 28   | 209485                            | 1    | . Fitting        |
| 4  | ARM0007155 | 1   | . Bar, Arm                       | 29   | 223003                            | 1    | . Fitting        |
| 5  | BKT0006715 | 1   | . Bracket                        | 30   | Y25G-0824                         | 2    | . Capscrew       |
| 6  | 910342     | 1   | . V-Belt                         | 31   | R13810993                         | 4    | . Capscrew       |
| 7  | F000007659 | 1   | . Chain, Bale Chute              | 32   | 162572W                           | 4    | . Capscrew       |
| 8  | CLV0007721 | 2   | . Shackle, Screw Pin             | 33   | 221563W                           | 2    | . Capscrew       |
| 9  | 910446     | 1   | . Hose Assembly                  | 34   | 200454W                           | 4    | . Capscrew       |
| 10   | 237745     | 1   | . Hose Assembly                  | 35   | 221569W                           | 2    | . Capscrew       |
| 11   | 243150     | 1   | . Hose Assembly                  | 36   | R13806345                         | 3    | . Capscrew       |
| 12   | 245958     | 2   | . Hose Assembly                  | 37   | R13811077                         | 2    | . Capscrew       |
| 13   | 910447     | 1   | . Hose Assembly                  | 38   | R13812516                         | 13   | . Lockwasher     |
| 14   | 253618     | 1   | . Hose Assembly                  | 39   | 15127W                            | 4    | . Washer         |
| 15   | 910448     | 1   | . Hose Assembly                  | 40   | 221771W                           | 7    | . Washer         |
| 16   | 253622     | 1   | . Hose Assembly                  | 41   | 15113W                            | 4    | . Locknut        |
| 17   | 910449     | 1   | . Hose Assembly                  | 42   | 156133W                           | 4    | . Locknut        |
| 18   | HOS0007722 | 1   | . Hose Assembly                  | 43   | 221711W                           | 10   | . Hex Nut        |
| 19   | 910450     | 1   | . Hose Assembly                  | 44   | 221712W                           | 3    | . Hex Nut        |
| 20   | 910451     | 1   | . Hose Assembly                  | 45   | FD00000045                        | 1    | . Decal          |
| 21   | R13803047  | 3   | . Clip, Insul                    | 46   | FD00034169                        | 1    | . Decal          |
| 22   | 209698     | 3   | . Clamp                          | 99   | 238206                            | 30GL | . Oil, Hydraulic |
| 23   | 209703     | 2   | . Clamp                          |      |                                   |      |                  |
| 24   | 11767      | 1   | . Kit, Split Flange              |      |                                   |      |                  |
|  | 203516     | 1   | . O-Ring                         |      |                                   |      |                  |
|  |            |     |                                  | *a   | See Separate Coverage (Page 1-19) |      |                  |
|  |            |     |                                  | *b   | See Separate Coverage (Page 5-31) |      |                  |
|  |            |     |                                  | *c   | See Separate Coverage (Page 1-21) |      |                  |

Rev A

## Hydraulic Tank Installation, 280/285

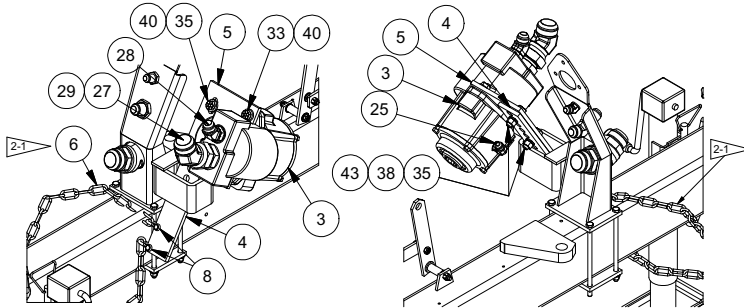
Page 2 of 3



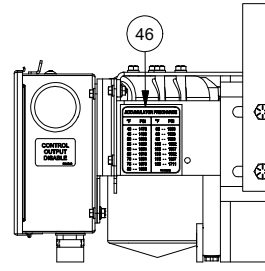
NOTES:  
 1-1 BELT DEFLECTION SHOULD NOT EXCEED .75 WITH 16 LBS OF DOWNWARD FORCE AT THE CENTER OF BELT SPAN

# Hydraulic Tank Installation, 280/285

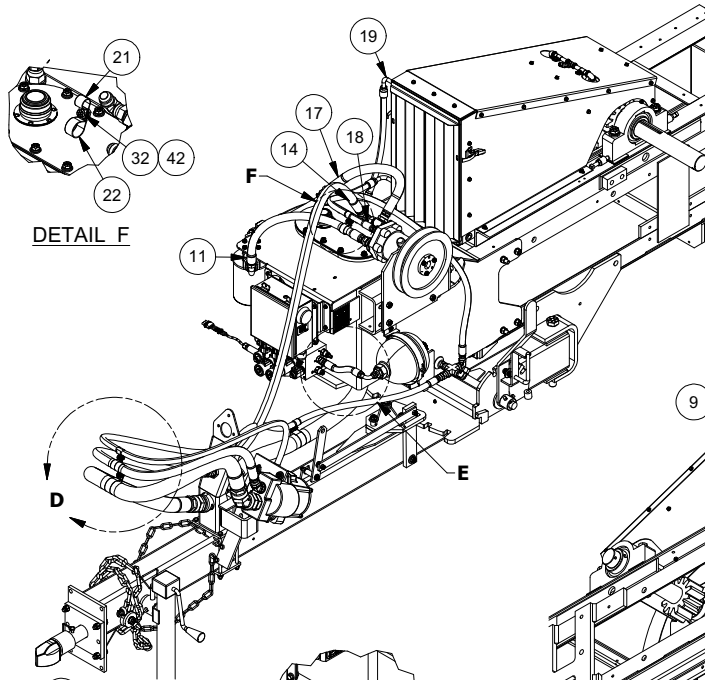
Page 3 of 3



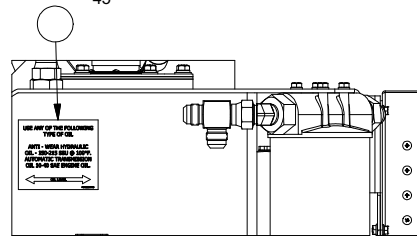
**PUMP MOUNTING**  
HOSES NOT SHOWN FOR CLARITY



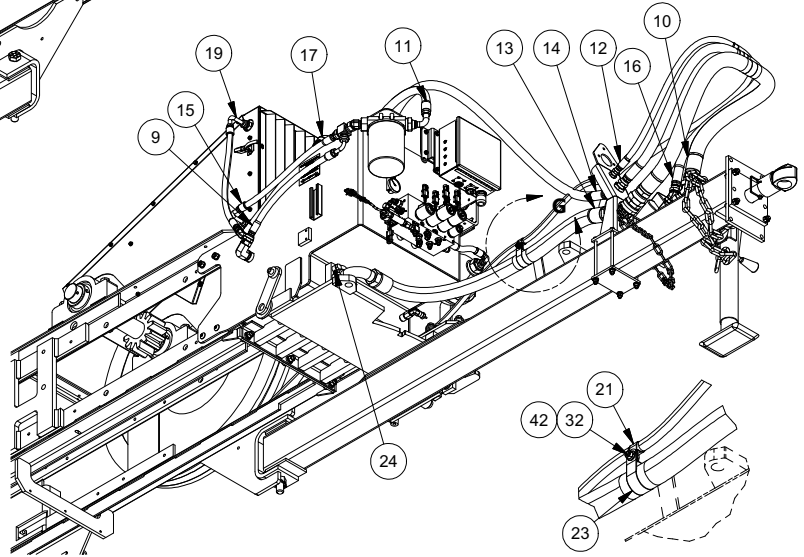
**PRE-CHARGE LABEL PLACEMENT**



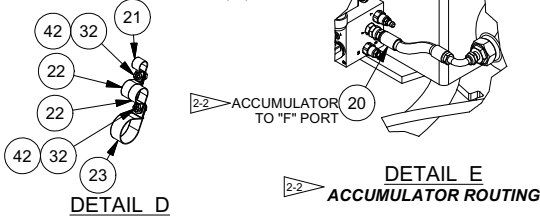
**DETAIL F**



**OIL LABEL PLACEMENT**



**DETAIL G**



**DETAIL D**

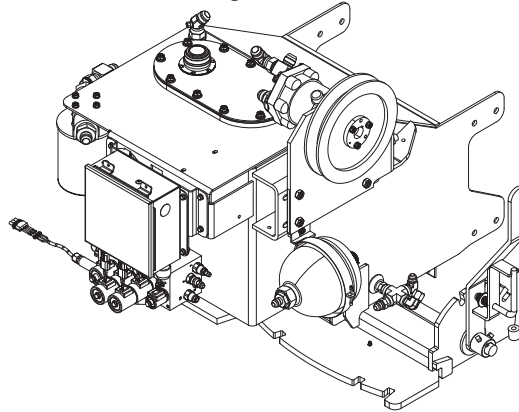
**DETAIL E**  
**ACCUMULATOR ROUTING**

NOTES:  
2-1. ITEM 7 ATTACHES TO ITEMS 8 (2 EA) AND IS WRAPPED AROUND THE DRAWBAR PRIOR TO SHIPPING (AS SHOWN)  
2-2. ACCUMULATOR NOT USED ON 37X HYDRO BALERS.



## Hydraulic Tank Assembly, 280/285

Page 1 of 2



| Item                                       | Part No.   | Qty | Description                  | Item | Part No.   | Qty | Description         |
|--|------------|-----|------------------------------|------|------------|-----|---------------------|
| <b>910232 Hydro Tank Assembly, 280/285</b> |            |     |                              |      |            |     |                     |
| 1  | BSH1001125 | 1   | . Bushing                    | 47   | 215515     | 1   | . Fitting           |
| 2  | CLP2110692 | 1   | . Clamp                      | 48   | 21205      | 1   | . Fitting           |
| 3  | ELC0000334 | 1   | . Temp Sending Unit-1500     | 49   | 250818     | 1   | . Fitting           |
| 4  | F000007539 | 1   | . Lever                      | 50   | 209901     | 2   | . Fitting           |
| 5  | F000007540 | 1   | . Pin, Lift Lever Adjustment | 51   | 209161     | 1   | . Fitting           |
| 6  | F000007541 | 1   | . Compression Spring         | 52   | 211550     | 2   | . Fitting           |
| 7  | FIL0023018 | 1   | . Filter Element             | 53   | 209215     | 1   | . Fitting           |
| 8  | FIL0010003 | 1   | . Filter Assembly            | 54   | 236824     | 1   | . Fitting           |
| 9  | FIL0120000 | 1   | . Filter Head                | 55   | 211560     | 4   | . Fitting           |
| 10   | GAG0064051 | 1   | . Gauge                      | 56   | 214179     | 1   | . Fitting           |
| 11   | HYD0025371 | 1   | . Fitting                    | 57   | 4193359    | 1   | . Fitting           |
| 12   | a* 256852  | 1   | . Manifold Assembly          | 58   | 209087     | 1   | . Fitting           |
| 13   | 258306     | 1   | . Motor, Hydraulic Piston    | 59   | 206322     | 1   | . Fitting           |
| 14   | 910135     | 1   | . Pickup Lift Lever          | 60   | 223436     | 1   | . Fitting           |
| 15   | PPE1000500 | 1   | . Nipple, Pipe               | 61   | 209166     | 1   | . Fitting           |
| 16   | PPE0075900 | 1   | . Elbow                      | 62   | 211561     | 1   | . Fitting           |
| 17   | PPE7500600 | 1   | . Nipple, Pipe               | 63   | 19071      | 1   | . Fitting           |
| 18   | PUL0006630 | 1   | . Sheave: Side Feed          | 64   | 209757     | 1   | . Fitting           |
| 19   | R14337     | 1   | . Strainer, Suction          | 65   | SQS3750750 | 2   | . Square Head Screw |
| 20   | R525293    | 2   | . Magnet, Ceramic            | 66   | Y09G-0828  | 2   | . Capscrew          |
| 21   | VLV0000001 | 1   | . Relief Valve               | 67   | R13811014  | 4   | . Capscrew          |
|  | 251170     | 1   | . Seal Kit                   | 68   | 162572W    | 10  | . Capscrew          |
| 22   | 2310015    | 1   | . Check Valve                | 69   | 221574W    | 4   | . Capscrew          |
| 23   | 48688      | 1   | . Key                        | 70   | SMS0000300 | 4   | . Screw             |
| 24   | 231044     | 1   | . Ring, Seal                 | 71   | SMS0000173 | 4   | . Screw             |
| 25   | 15223W     | 1   | . Cotter Pin                 | 72   | 221767W    | 10  | . Washer            |
| 26   | 901445     | 1   | . Plate, Mounting            | 73   | 239519     | 7   | . Washer            |
| 27   | 901673     | 2   | . Plate, Spacer              | 74   | 15125W     | 2   | . Washer            |
| 28   | 901681     | 1   | . Rod                        | 75   | F000008247 | 2   | . Washer            |
| 29   | 901697     | 1   | . Gasket                     | 76   | R13812513  | 7   | . Lockwasher        |
| 30   | 901747     | 1   | . Plate, Cover               | 77   | R13812514  | 10  | . Lockwasher        |
| 31   | 902474     | 1   | . Accumulator                | 78   | R13812516  | 6   | . Lockwasher        |
| 32   | 903477     | 1   | . Valve                      | 79   | 00103325   | 2   | . Lockwasher        |
| 33   | 910351     | 1   | . Hydraulic Tank             | 80   | 221763W    | 2   | . Washer            |
| 34   | 904055     | 1   | . Plate, Mounting            | 81   | 221711W    | 6   | . Hex Nut           |
| 35   | 910444     | 1   | . IQAN Relay Box Assembly    | 82   | 229952     | 2   | . Hex Nut           |
| 36   | b* 584026  | 1   | . Transducer Assembly        | 83   | Y17D-10    | 1   | . Locknut           |
| 37   | 11079      | 1   | . Fitting, Lube              | 84   | 264150W    | 8   | . Nut               |
| 38   | 209498     | 1   | . Fitting, Cr                | 85   | R13810990  | 2   | . Capscrew          |
| 39   | 2307740W   | 1   | . Fitting                    | 86   | Y73G-0664  | 3   | . Capscrew          |
| 40   | R13807508  | 1   | . Fitting                    | 87   | 223871     | 2   | . Lockwasher        |
| 41   | 209413     | 2   | . Fitting                    | 88   | R13811016  | 3   | . Capscrew          |
| 42   | 28516      | 1   | . Fitting                    | 89   | 209509     | 1   | . Fitting           |
| 43   | 209069     | 1   | . Fitting                    | 90   | 209799     | 1   | . Fitting           |
| 44   | R13801972  | 3   | . Fitting                    |      |            |     |                     |
| 45   | R13804188  | 1   | . Fitting                    |      |            |     |                     |
| 46   | 200628     | 2   | . Fitting                    |      |            |     |                     |

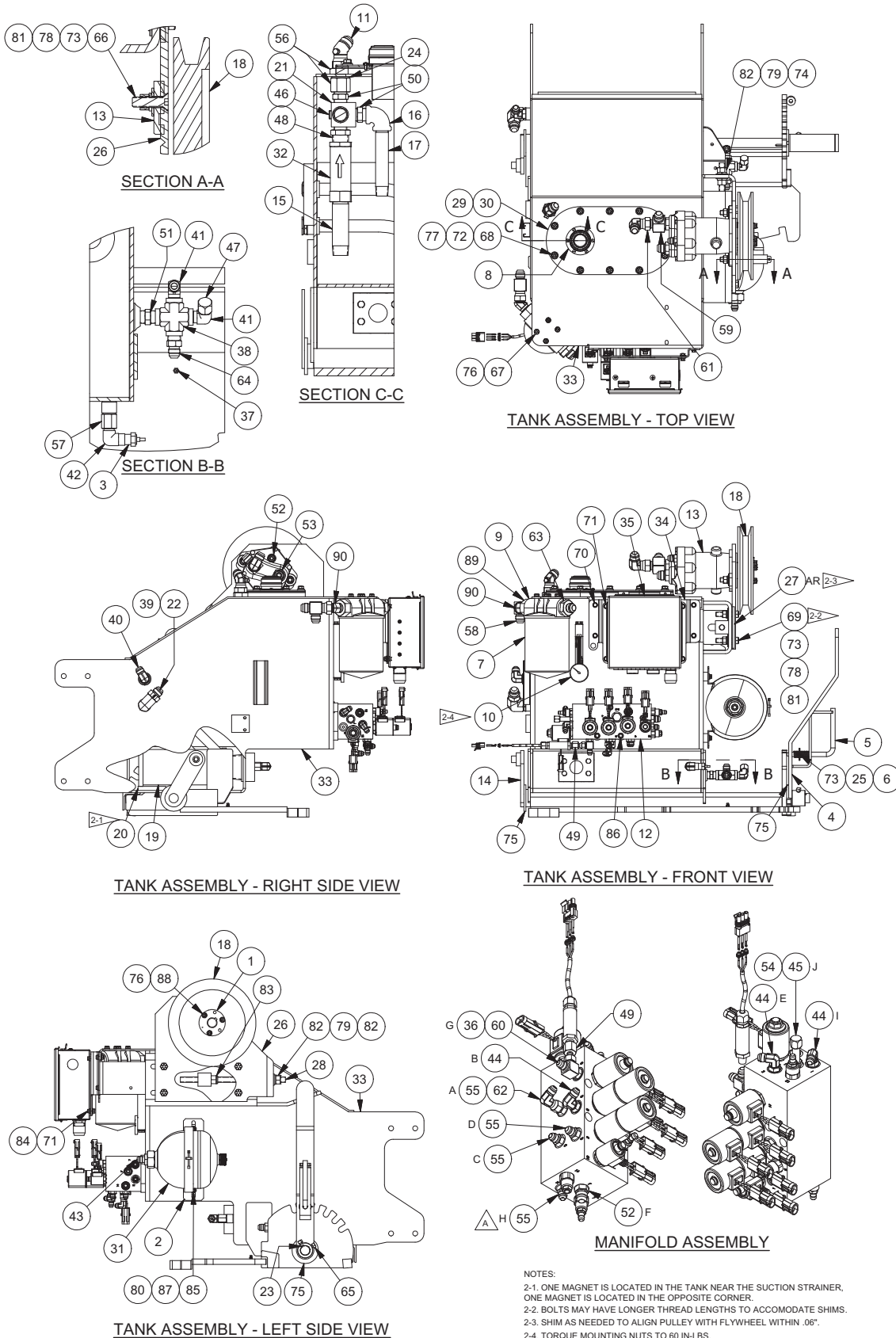
a\* See Separate Coverage (Page 4-8)

b\* Freeman Service Use Only

Rev A

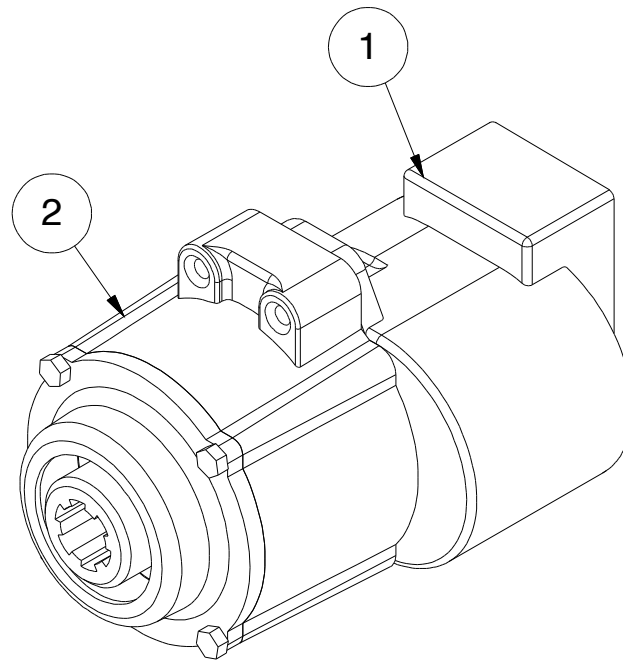
# Hydraulic Tank Assembly, 280/285

Page 2 of 2



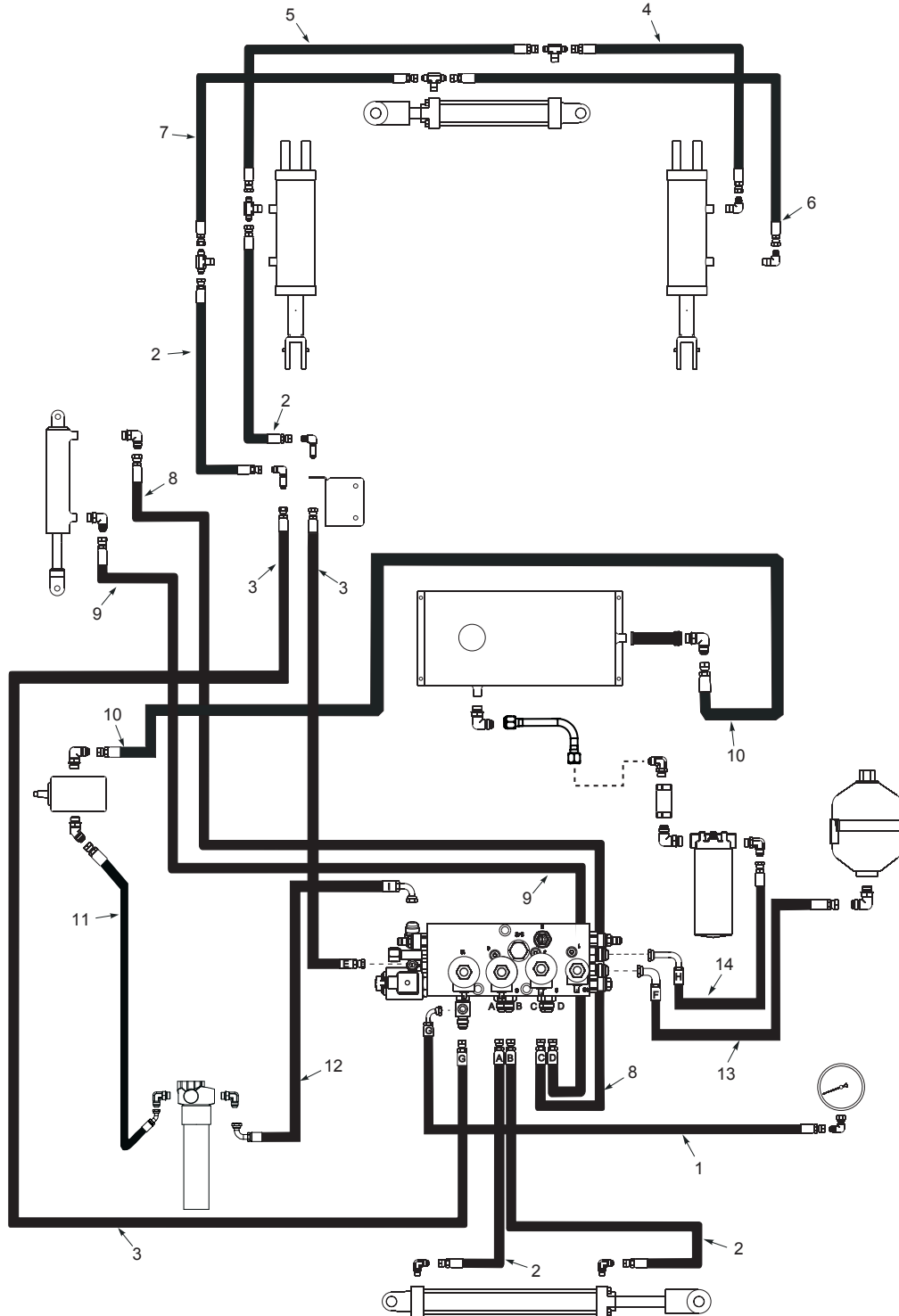
- NOTES:
- 2-1. ONE MAGNET IS LOCATED IN THE TANK NEAR THE SUCTION STRAINER. ONE MAGNET IS LOCATED IN THE OPPOSITE CORNER.
  - 2-2. BOLTS MAY HAVE LONGER THREAD LENGTHS TO ACCOMMODATE SHIMS.
  - 2-3. SHIM AS NEEDED TO ALIGN PULLEY WITH FLYWHEEL WITHIN .06".
  - 2-4. TORQUE MOUNTING NUTS TO 60 IN-LBS.
  - 2-5. USE LOCTITE #567 ON ALL NPT THREADS.

# PTO Pump/Gearbox Assembly



| Item | Part No.       | Qty | Description                      |
|------|----------------|-----|----------------------------------|
|      | <b>9102353</b> |     | <b>PTO Pump/Gearbox Assembly</b> |
| 1    | 910254         | 1   | . Gear Pump                      |
| 2    | CE077020AA     | 1   | . PTO Gearbox                    |
| 3    | * 910256       | 1   | . Mounting Kit                   |
|      | * Not Shown    |     |                                  |

# Hose Diagram, Hydro



| Item                       | Part No.   | Qty | Description     | Item | Part No.  | Qty | Description     |
|----------------------------|------------|-----|-----------------|------|-----------|-----|-----------------|
| <b>Hose Diagram, Hydro</b> |            |     |                 |      |           |     |                 |
| 1                          | 254198     | 1   | . Hose Assembly | 8    | 251612    | 1   | . Hose Assembly |
| 2                          | R12565833  | 4   | . Hose Assembly | 9    | 251611    | 1   | . Hose Assembly |
| 3                          | HOS036659A | 2   | . Hose Assembly | 10   | 248075    | 1   | . Hose Assembly |
| 4                          | 23955      | 1   | . Hose Assembly | 11   | 252867    | 1   | . Hose Assembly |
| 5                          | 245285     | 1   | . Hose Assembly | 12   | 27626     | 1   | . Hose Assembly |
| 6                          | 25363      | 1   | . Hose Assembly | 13   | 233464    | 1   | . Hose Assembly |
| 7                          | 245873     | 1   | . Hose Assembly | 14   | R12579545 | 1   | . Hose Assembly |

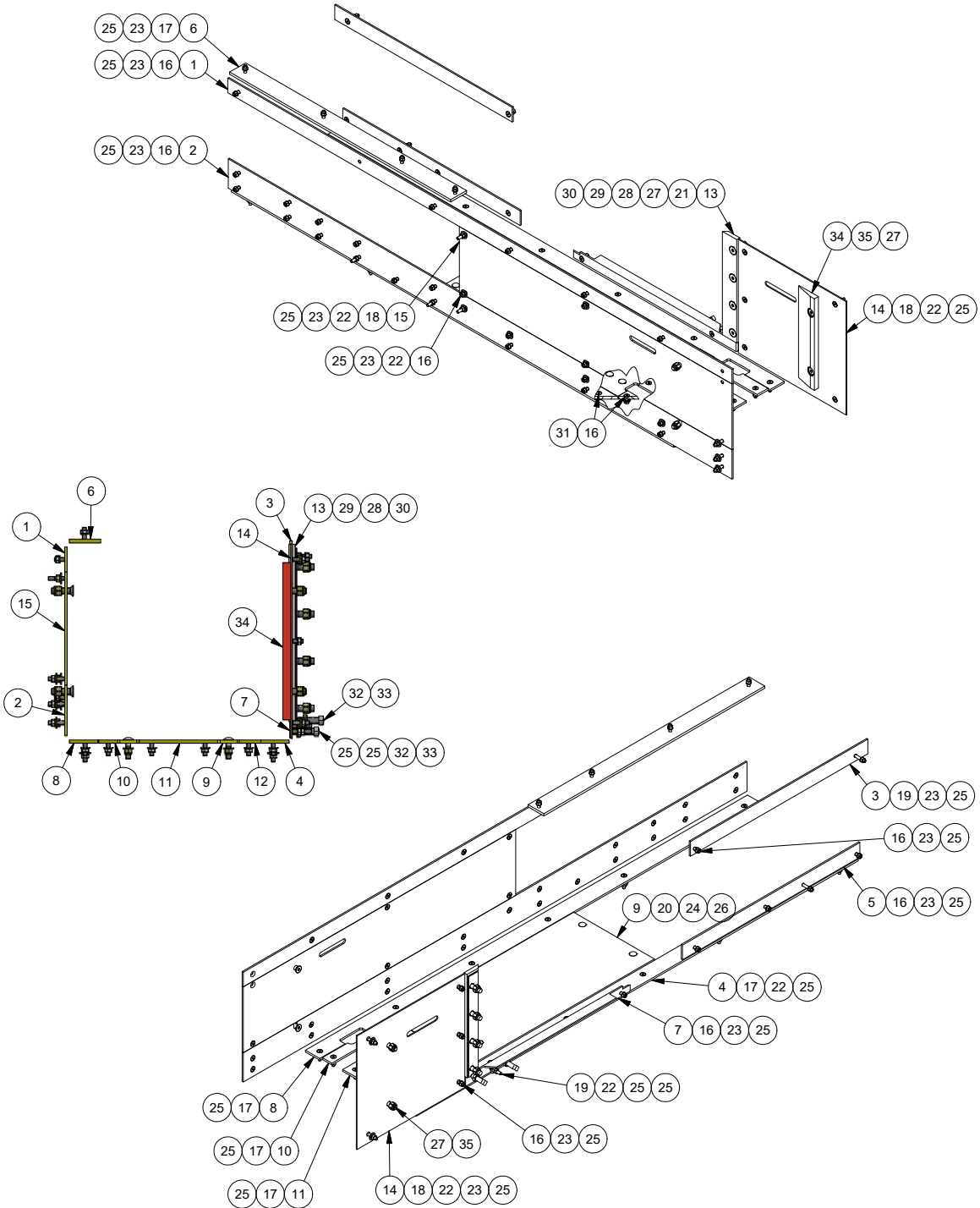
## Section 2

# Frame and Tension System

|  |      |
|--|------|
| Chamber Installation / Frame, 14" 2-Tie Baler .....    | 2-2  |
| Chamber Installation / Frame, 16" 2-Tie Baler .....    | 2-5  |
| Haydog Installation, Conventional 2-Tie .....          | 2-8  |
| Haydog Installation, Tailless 2-Tie .....              | 2-9  |
| Tensioning/Rear Mounts Installation, 14" Chamber ..... | 2-10 |
| Tensioning/Rear Mounts Installation, 16" Chamber ..... | 2-13 |
| Tensioning Hoses Installation, Hydro.....              | 2-17 |
| Tension Control Reservoir Installation, Hydro.....     | 2-19 |
| . Tension Control Tank Assembly .....                  | 2-20 |
| Frame & Axle Installation, 14" 2 Tie, Bullgear.....    | 2-21 |
| Frame & Axle Installation, 16" 2 Tie, Bullgear.....    | 2-22 |
| Single 8-Hole Flotation RH 2 & 3 Tie .....             | 2-21 |
| 8-Hole Flotation LH 2 Tie .....                        | 2-24 |
| Tandem 8-Hole Flotation LH 2 Tie .....                 | 2-25 |
| Pickup Depth Wheel .....                               | 2-26 |
| Tandem 8-Hole Flotation RH 2 & 3 Tie .....             | 2-27 |
| Single 8-Hole Highway RH 2 & 3 Tie .....               | 2-28 |
| Tandem 8-Hole Highway RH.....                          | 2-29 |
| Tandem 8-Hole Highway LH 2 Tie .....                   | 2-30 |
| Tire & Wheel 8-Hole Highway LH 2 Tie .....             | 2-31 |
| Tires and Wheels Walking Beam LH .....                 | 2-32 |

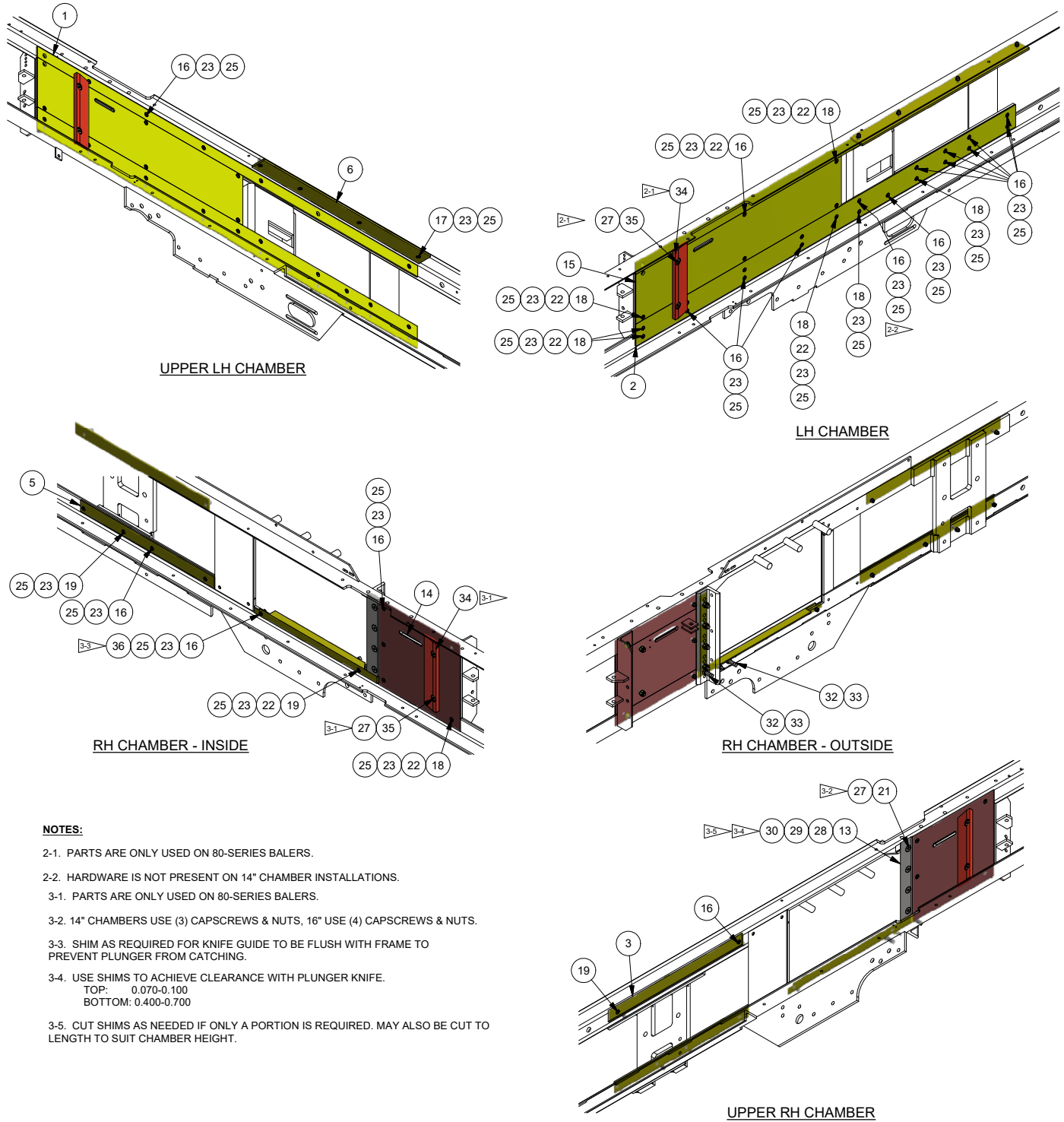
# Chamber Installation / Frame, 14" 2-Tie Baler

Page 1 of 3



### Chamber Installation / Frame, 14" 2-Tie Baler

Page 2 of 3

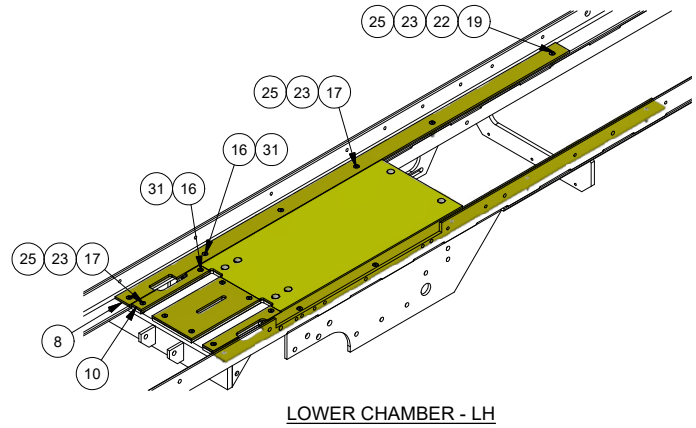
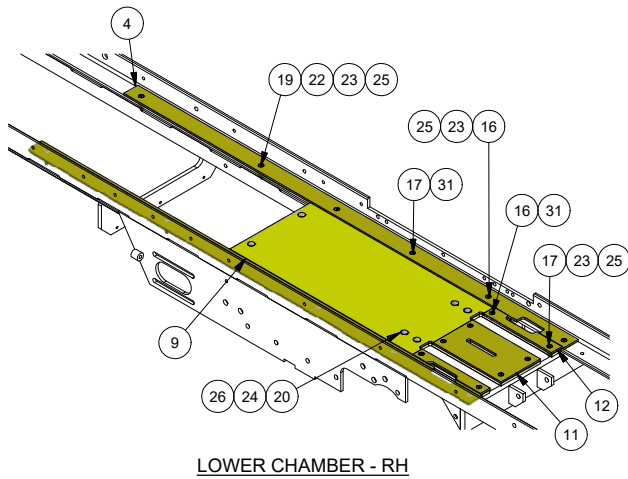


**NOTES:**

- 2-1. PARTS ARE ONLY USED ON 80-SERIES BALERS.
- 2-2. HARDWARE IS NOT PRESENT ON 14" CHAMBER INSTALLATIONS.
- 3-1. PARTS ARE ONLY USED ON 80-SERIES BALERS.
- 3-2. 14" CHAMBERS USE (3) CAPSCREWS & NUTS, 16" USE (4) CAPSCREWS & NUTS.
- 3-3. SHIM AS REQUIRED FOR KNIFE GUIDE TO BE FLUSH WITH FRAME TO PREVENT PLUNGER FROM CATCHING.
- 3-4. USE SHIMS TO ACHIEVE CLEARANCE WITH PLUNGER KNIFE.  
 TOP: 0.070-0.100  
 BOTTOM: 0.400-0.700
- 3-5. CUT SHIMS AS NEEDED IF ONLY A PORTION IS REQUIRED. MAY ALSO BE CUT TO LENGTH TO SUIT CHAMBER HEIGHT.

# Chamber Installation / Frame, 14" 2-Tie Baler

Page 3 of 3



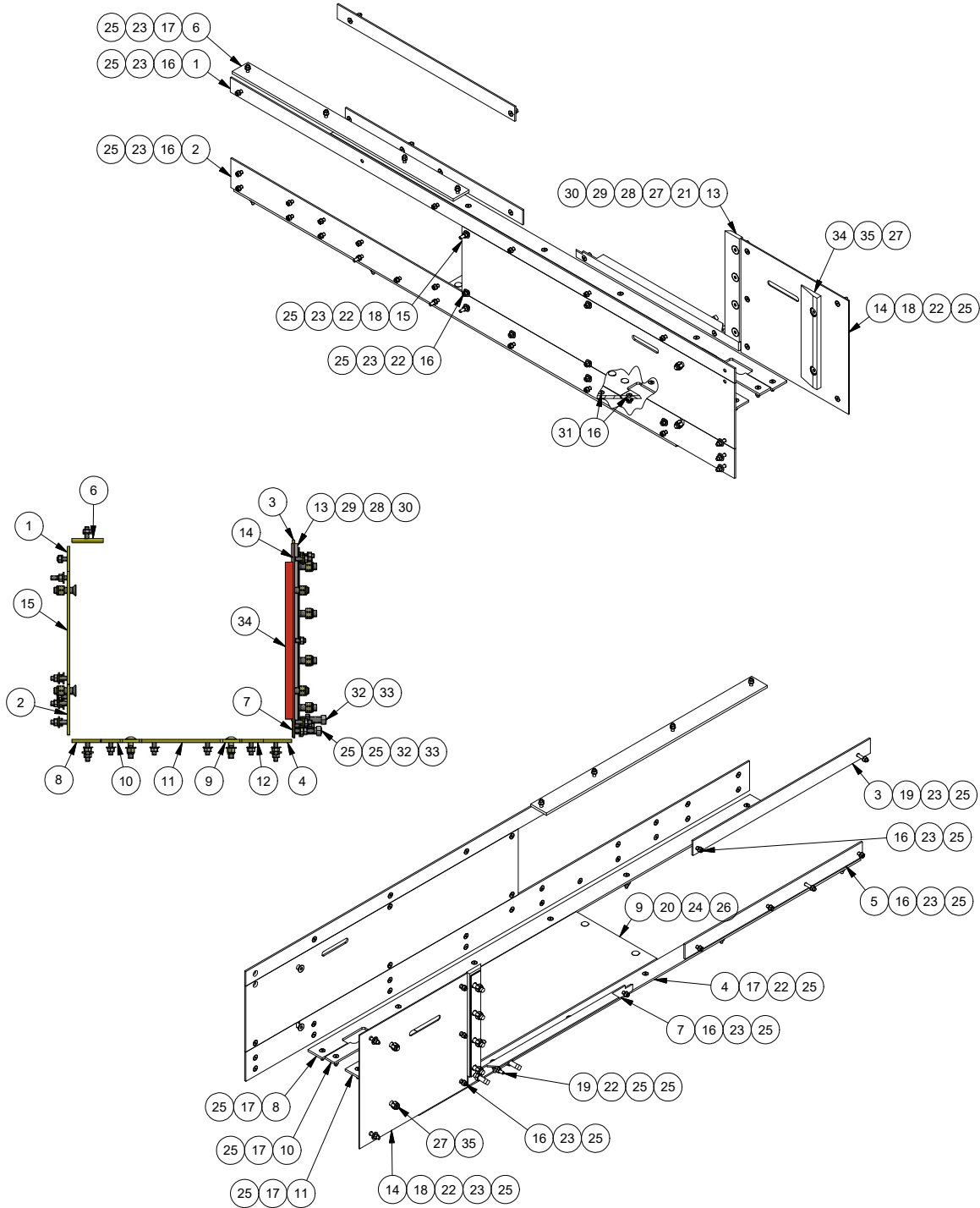
| Item                               | Part No.   | Qty | Description               | Item | Part No.   | Qty | Description   |
|------------------------------------|------------|-----|---------------------------|------|------------|-----|---------------|
| <b>910239 Chamber Installation</b> |            |     |                           |      |            |     |               |
| 1                                  | F000007763 | 1   | . Bar, Side               | 21   | PWB5002000 | 3   | . Bolt, Plow  |
| 2                                  | 910245     | 1   | . Bar, LH Bottom          | 22   | 223428     | 18  | . Flat Washer |
| 3                                  | F000000299 | 1   | . Bar, Upper RH           | 23   | R13812513  | 60  | . Lockwasher  |
| 4                                  | F000007767 | 1   | . Plunger Rail, RH Bottom | 24   | Y27E-06    | 6   | . Lockwasher  |
| 5                                  | PLG0026593 | 1   | . Bar, RH Bottom          | 25   | R13811512  | 62  | . Hex Nut     |
| 6                                  | PLG035987D | 1   | . Bar, LH Upper Rail      | 26   | R13811191  | 6   | . Hex Nut     |
| 7                                  | F000007439 | 1   | . Knife Guide             | 27   | 223587     | 7   | . Nut, Esna   |
| 8                                  | F000007762 | 1   | . Plunger Rail, LH Bottom | 28   | F000001512 | AR  | . Shim        |
| 9                                  | 903163     | 1   | . Plate, Bottom Liner     | 29   | SHM0000738 | AR  | . Shim        |
| 10                                 | F000007811 | 1   | . Plate, LH Bottom        | 30   | F000000751 | AR  | . Shim        |
| 11                                 | F000007810 | 1   | . Plate, Bottom           | 31   | 191534W    | 6   | . Nut         |
| 12                                 | F000007809 | 1   | . Plate, RH Bottom        | 32   | SQS5001750 | 2   | . Set Screw   |
| 13                                 | F000007744 | 1   | . Holes , Knife           | 33   | 234218     | 2   | . Jam Nut     |
| 14                                 | 910241     | 1   | . Plate, RH Chamber Liner | 34   | 902729     | 1   | . Bar         |
| 15                                 | 910243     | 1   | . Plate, LH Chamber Liner | 35   | Y09G-0828  | 4   | . Capscrew    |
| 16                                 | Y09G-0516  | 36  | . Capscrew                | 36   | 901737     | AR  | . Shim        |
| 17                                 | Y09G-0520  | 14  | . Capscrew                |      |            |     |               |
| 18                                 | Y09G-0524  | 9   | . Capscrew                |      |            |     |               |
| 19                                 | Y09G-0528  | 7   | . Capscrew                |      |            |     |               |
| 20                                 | CRB3750150 | 6   | . Bolt                    |      |            |     |               |

Rev -



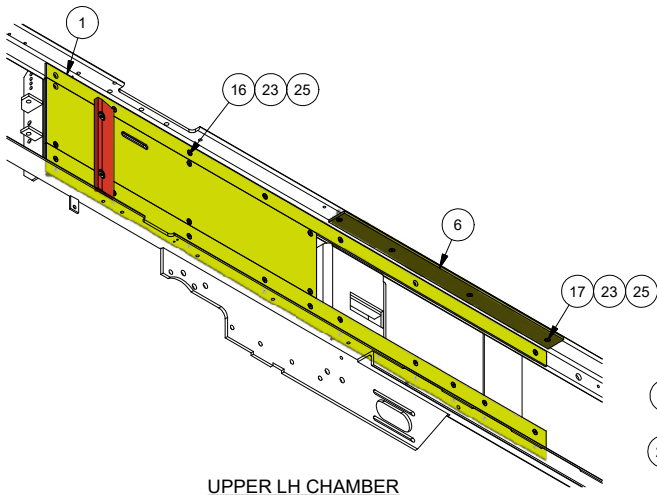
# Chamber Installation / Frame, 16" 2-Tie Baler

Page 1 of 3

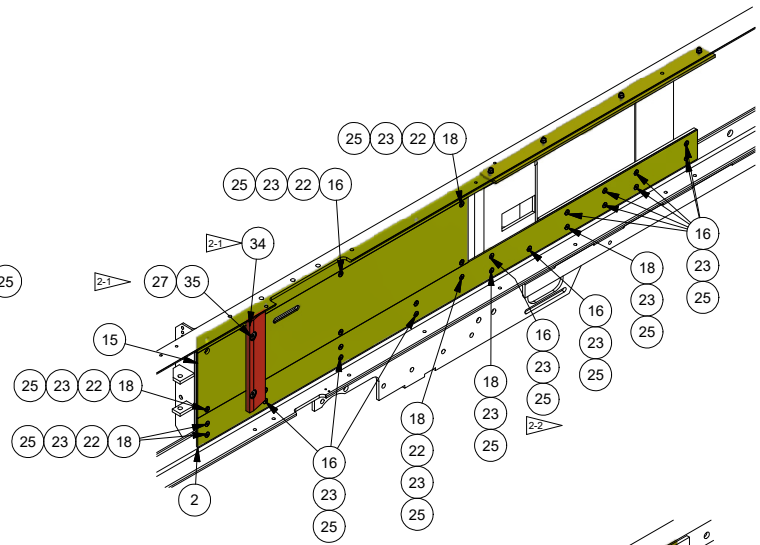


# Chamber Installation / Frame, 16" 2-Tie Baler

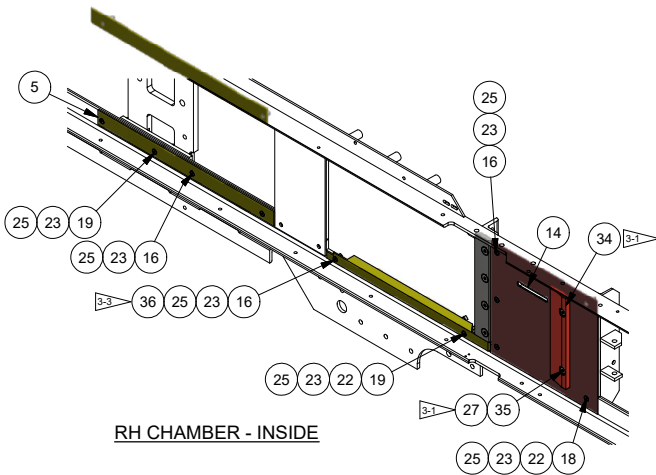
Page 2 of 3



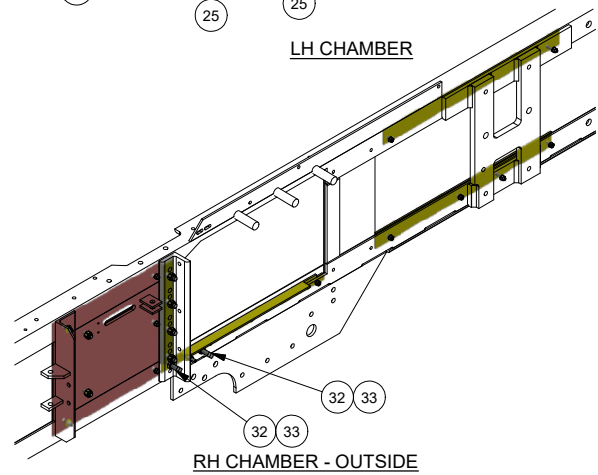
UPPER LH CHAMBER



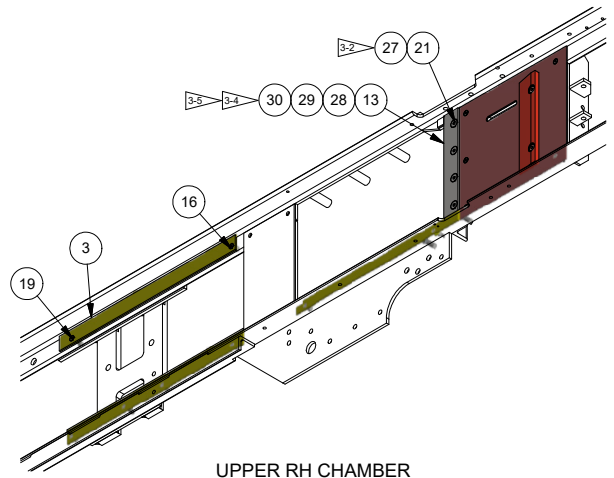
LH CHAMBER



RH CHAMBER - INSIDE



RH CHAMBER - OUTSIDE



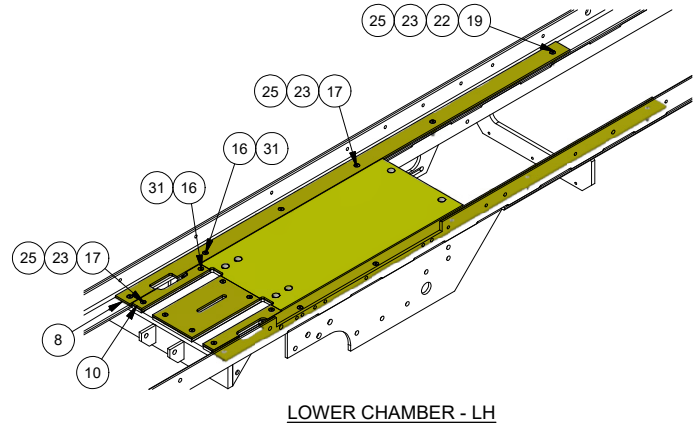
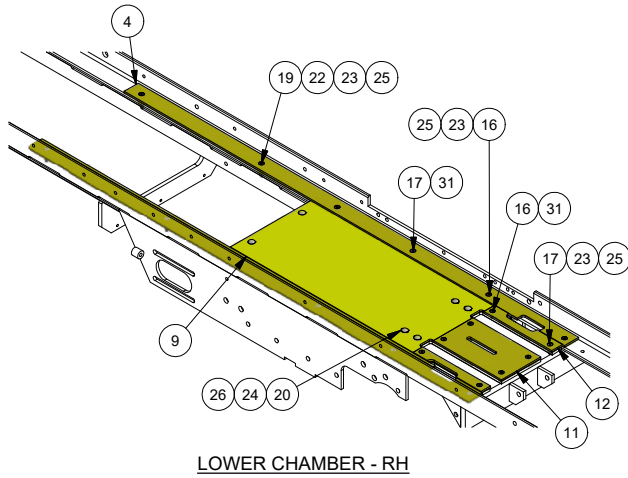
UPPER RH CHAMBER

**NOTES:**

- 2-1. PARTS ARE ONLY USED ON 80-SERIES BALERS.
- 2-2. HARDWARE IS NOT PRESENT ON 14" CHAMBER INSTALLATIONS.
- 3-1. PARTS ARE ONLY USED ON 80-SERIES BALERS.
- 3-2. 14" CHAMBERS USE (3) CAPSCREWS & NUTS, 16" USE (4) CAPSCREWS & NUTS.
- 3-3. SHIM AS REQUIRED FOR KNIFE GUIDE TO BE FLUSH WITH FRAME TO PREVENT PLUNGER FROM CATCHING.
- 3-4. USE SHIMS TO ACHIEVE CLEARANCE WITH PLUNGER KNIFE.  
TOP: 0.070-0.100  
BOTTOM: 0.400-0.700
- 3-5. CUT SHIMS AS NEEDED IF ONLY A PORTION IS REQUIRED. MAY ALSO BE CUT TO LENGTH TO SUIT CHAMBER HEIGHT.

# Chamber Installation / Frame, 16" 2-Tie Baler

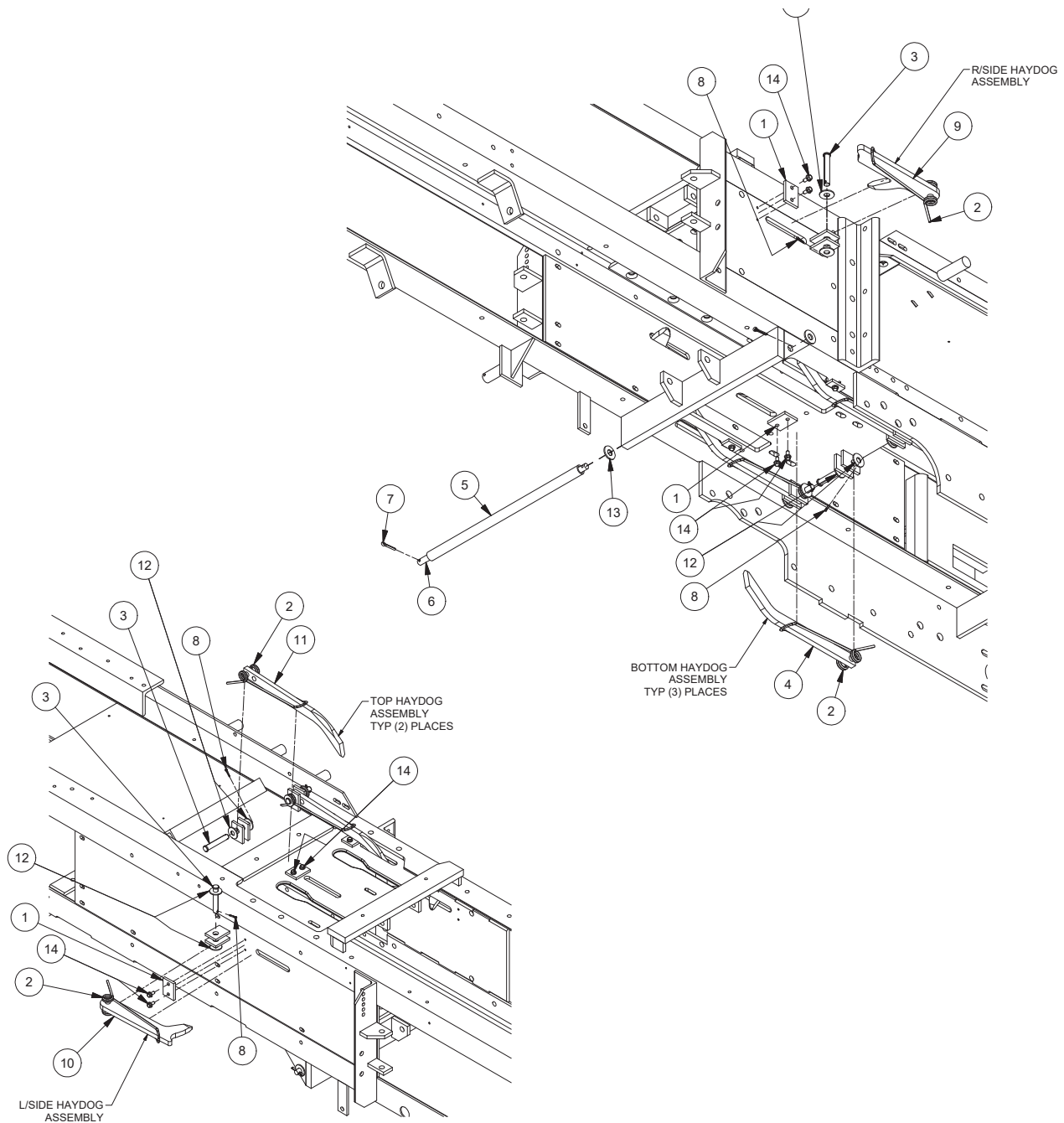
Page 3 of 3



| Item                               | Part No.   | Qty | Description               | Item | Part No.   | Qty | Description   |
|------------------------------------|------------|-----|---------------------------|------|------------|-----|---------------|
| <b>910240 Chamber Installation</b> |            |     |                           |      |            |     |               |
| 1                                  | F000007763 | 1   | . Bar, Side               | 21   | PWB5002000 | 4   | . Bolt, Plow  |
| 2                                  | 910246     | 1   | . Bar, LH Bottom          | 22   | 223428     | 18  | . Flat Washer |
| 3                                  | F000000299 | 1   | . Bar, Upper RH           | 23   | R13812513  | 61  | . Lockwasher  |
| 4                                  | F000007767 | 1   | . Plunger Rail, RH Bottom | 24   | Y27E-06    | 6   | . Lockwasher  |
| 5                                  | PLG0026593 | 1   | . Bar, RH Bottom          | 25   | R13811512  | 63  | . Hex Nut     |
| 6                                  | PLG035987D | 1   | . Bar, LH Upper Rail      | 26   | R13811191  | 6   | . Hex Nut     |
| 7                                  | F000007439 | 1   | . Knife Guide             | 27   | 223587     | 8   | . Nut, Esna   |
| 8                                  | F000007762 | 1   | . Plunger Rail, LH Bottom | 28   | F000001512 | AR  | .Shim         |
| 9                                  | 903163     | 1   | . Plate, Bottom Liner     | 29   | SHM0000738 | AR  | .Shim         |
| 10                                 | F000007811 | 1   | . Plate, LH Bottom        | 30   | F000000751 | AR  | .Shim         |
| 11                                 | F000007810 | 1   | . Plate, Bottom           | 31   | 191534W    | 6   | .Nut          |
| 12                                 | F000007809 | 1   | . Plate, RH Bottom        | 32   | SQS5001750 | 2   | . Set Screw   |
| 13                                 | F000001609 | 1   | . Holes , Knife           | 33   | 234218     | 2   | . Jam Nut     |
| 14                                 | 910242     | 1   | . Plate, RH Chamber Liner | 34   | 902729     | 1   | .Bar          |
| 15                                 | 910244     | 1   | . Plate, LH Chamber Liner | 35   | Y09G-0828  | 4   | .Capscrew     |
| 16                                 | Y09G-0516  | 37  | . Capscrew                | 36   | 901737     | AR  | . Shim        |
| 17                                 | Y09G-0520  | 14  | . Capscrew                |      |            |     |               |
| 18                                 | Y09G-0524  | 9   | . Capscrew                |      |            |     |               |
| 19                                 | Y09G-0528  | 7   | . Capscrew                |      |            |     |               |
| 20                                 | CRB3750150 | 6   | . Bolt                    |      |            |     |               |

Rev -

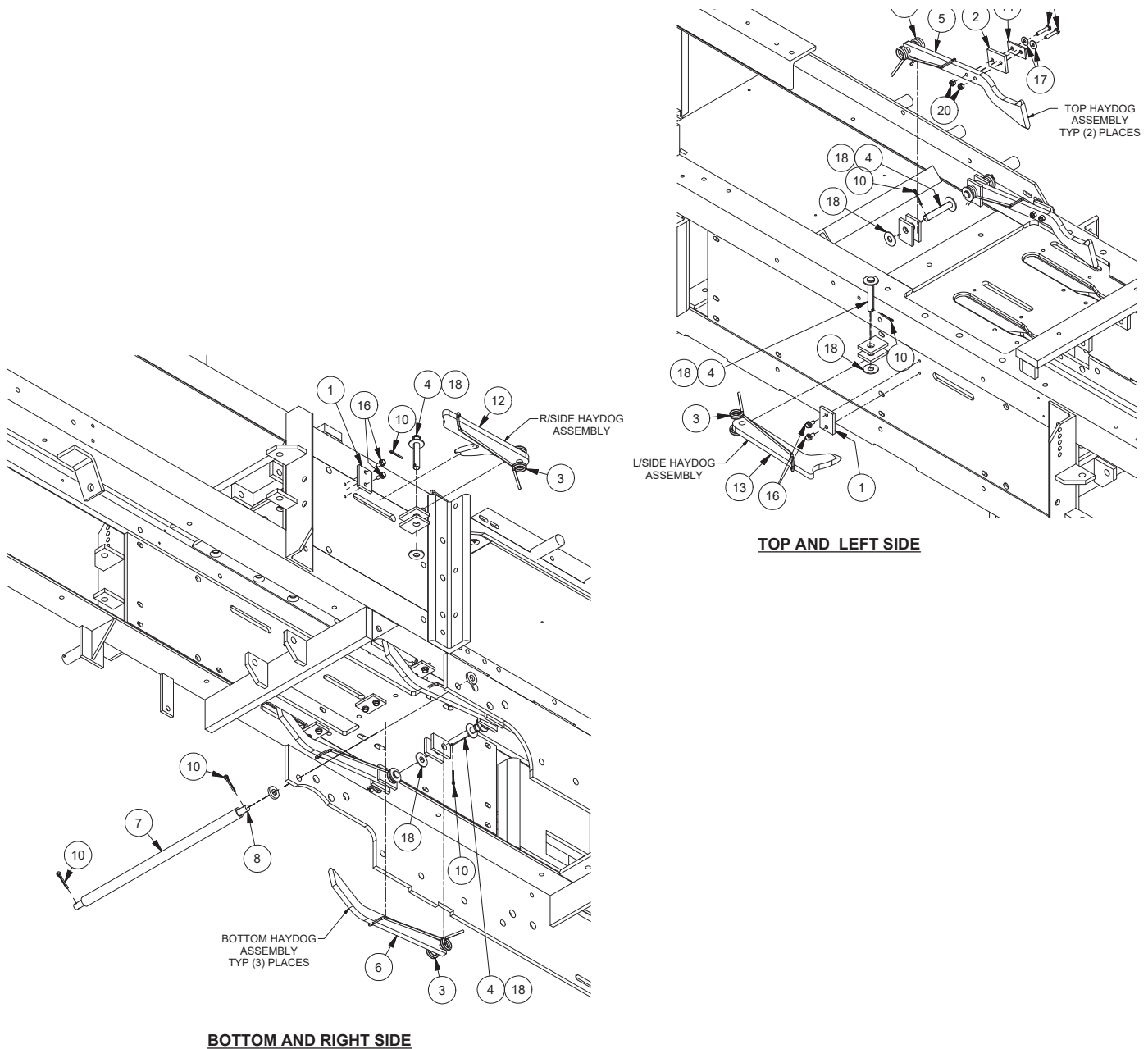
# Haydog Installation, Conventional 2-Tie



| Item | Part No.      | Qty | Description                | Item | Part No.   | Qty | Description   |
|------|---------------|-----|----------------------------|------|------------|-----|---------------|
|      | <b>902667</b> |     | <b>Haydog Installation</b> |      |            |     |               |
| 1    | PAD0025218    | 7   | . Pad W/ Holes             | 9    | F000007563 | 1   | . Hay Dog, RH |
| 2    | F000000188    | 7   | . Spring, Hay Dog          | 10   | F000007562 | 1   | . Hay Dog, LH |
| 3    | F000000220    | 7   | . Pin, Hay Dog             | 11   | F000007911 | 2   | . Hay Dog     |
| 4    | F000000837    | 3   | . Hay Dog, Bottom          | 12   | 15177W     | 14  | . Washer      |
| 5    | F000008110    | 1   | . Pipe, Bottom Guide       | 13   | *a 223634  | 2   | . Washer      |
| 6    | F000008109    | 1   | . Rod, Guide               | 14   | 221872     | 13  | . Capscrew    |
| 7    | COT0000801    | 2   | . Cotter Pin               |      |            |     |               |
| 8    | 00103385      | 7   | . Use 15223W               |      |            |     |               |
|      |               |     |                            | *a   | Use 15135W |     |               |

Rev D

## Haydog Installation, Tailless 2-Tie



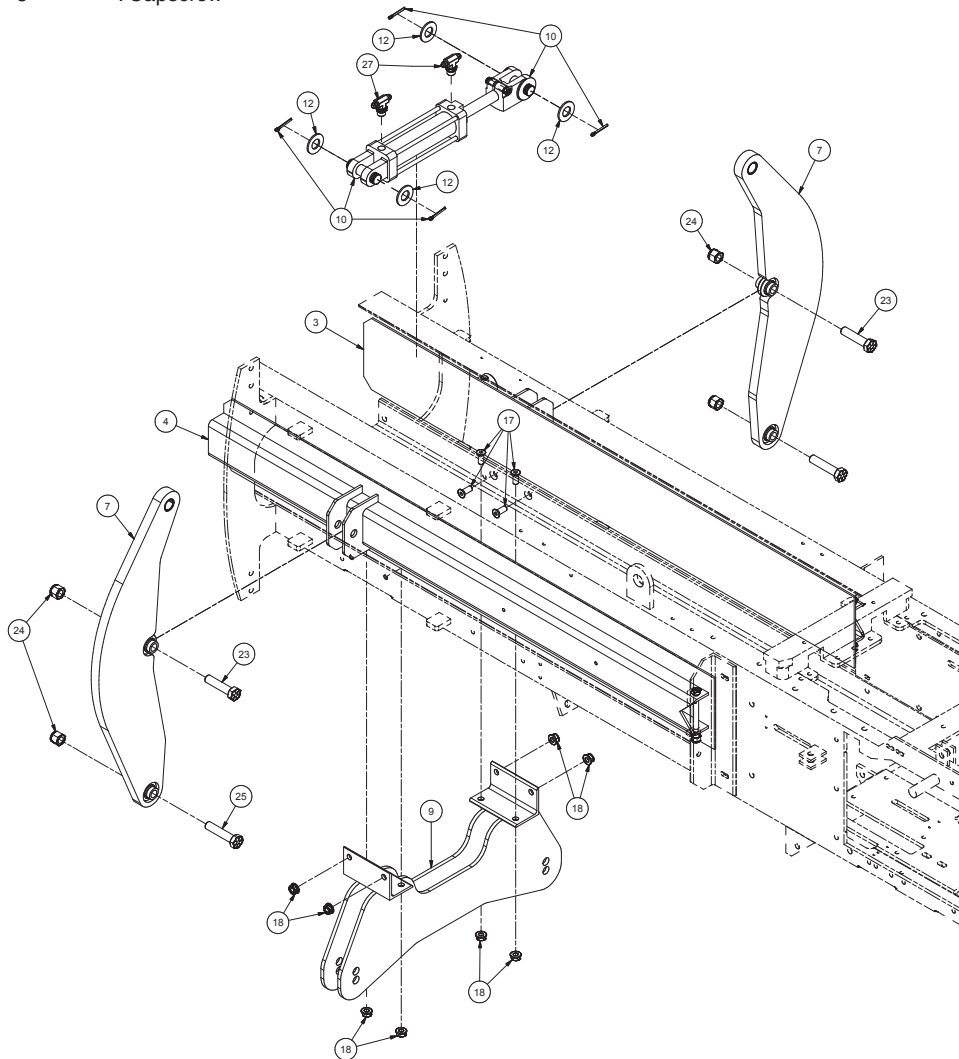
| Item                              | Part No.   | Qty | Description              | Item | Part No.     | Qty | Description    |
|-----------------------------------|------------|-----|--------------------------|------|--------------|-----|----------------|
| <b>902668 Haydog Installation</b> |            |     |                          |      |              |     |                |
| 1                                 | PAD0025218 | 5   | . Pad W/ Holes           | 13   | F000007562   | 1   | . Hay Dog, LH  |
| 2                                 | CUS0032524 | 2   | . Cushion, Black Hay Dog | 14   | CLP0032525   | 2   | . Plate, Clamp |
| 3                                 | F000000188 | 5   | . Spring, Hay Dog        | 15   | R13801782    | 4   | . Capscrew     |
| 4                                 | F000000220 | 7   | . Pin, Hay Dog           | 16   | 221872       | 10  | . Capscrew     |
| 5                                 | DOG0035704 | 2   | . Hay Dog, Top           | 17   | R13811443    | 4   | . Washer       |
| 6                                 | F000000837 | 3   | . Hay Dog, Bottom        | 18   | 15177W       | 14  | . Washer       |
| 7                                 | F000008110 | 1   | . Pipe, Bottom Guide     | 19   | *a 223634    | 2   | . Washer       |
| 8                                 | F000008109 | 1   | . Rod, Guide             | 20   | *b R13811189 | 4   | . Nut          |
| 9                                 | COT0000801 | 2   | . Cotter Pin             |      |              |     |                |
| 10                                | 00103385   | 7   | . Use 15223W             |      |              |     |                |
| 11                                | SPG0023160 | 2   | . Spring, Hay Dog        |      |              |     |                |
| 12                                | F000007563 | 1   | . Hay Dog, RH            |      |              |     |                |
|                                   |            |     |                          | *a   | Use 15135W   |     |                |
|                                   |            |     |                          | *b   | Use 15113W   |     |                |

# Tensioning/Rear Mounts Installation, 14" Chamber

Page 1 of 3

| Item  | Part No.   | Qty | Description                    | Item | Part No.  | Qty | Description   |
|---|------------|-----|--------------------------------|------|-----------|-----|---------------|
| <b>902664 Tensioning/Rear Mnts Install.</b> |            |     |                                |      |           |     |               |
| 1   | PLT0035098 | 2   | . Plate, Upper                 | 18   | R13804125 | 16  | . Locknut     |
| 2   | TNS0009809 | 1   | . Tension Rail, Bottom         | 19   | R13802623 | 6   | . Flat Washer |
| 3   | TNS037290D | 1   | . Rail, LH                     | 20   | R13801813 | 2   | . Capscrew    |
| 4   | TNS037291D | 1   | . Rail, RH                     | 21   | 237567    | 4   | . Nut, Esna   |
| 5   | TNS0009808 | 1   | . Tension Rail, Top            | 22   | R13811040 | 2   | . Capscrew    |
| 6   | TNS037278E | 2   | . Beam                         | 23   | 221662W   | 2   | . Capscrew    |
| 7   | TNS035803B | 2   | . Horiz. Tension Rail Assembly | 24   | R13811196 | 4   | . Locknut     |
|   | BSH00VG400 | 1   | . . Bushing                    | 25   | 221664W   | 2   | . Capscrew    |
| 8   | CYL0033749 | 2   | . Vertical Tension Cylinder    | 26   | 200454W   | 8   | . Capscrew    |
|   | SEL000KT25 | 1   | . . Seal Kit                   | 27   | R14293    | 2   | . Fitting     |
| 9   | YOK037282D | 1   | . Yoke, Rear Bottom            | 28   | R13812514 | 2   | . Lockwasher  |
| 10  | CYL0000206 | 1   | . Hydraulic Tie Rod Cylinder   | 29   | R13811032 | 2   | . Capscrew    |
| 11  | BKT037356B | 1   | . Bracket                      | 30   | 23581     | 2   | . Fitting     |
| 12  | ZZ00000218 | 8   | . Bushing                      | 31   | 209410    | 2   | . Fitting     |
| 13  | DRW0033589 | 1   | . Plate, Mounting              | 32   | 24229     | 2   | . Fitting     |
| 15  | R13801857  | 4   | . Capscrew                     |      |           |     |               |
| 16  | 223587     | 4   | . Nut, Esna                    |      |           |     |               |
| 17  | Y09G-0820  | 8   | . Capscrew                     |      |           |     |               |

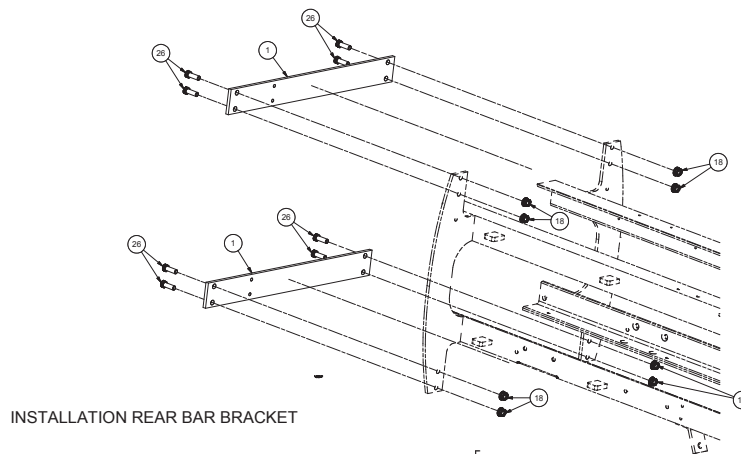
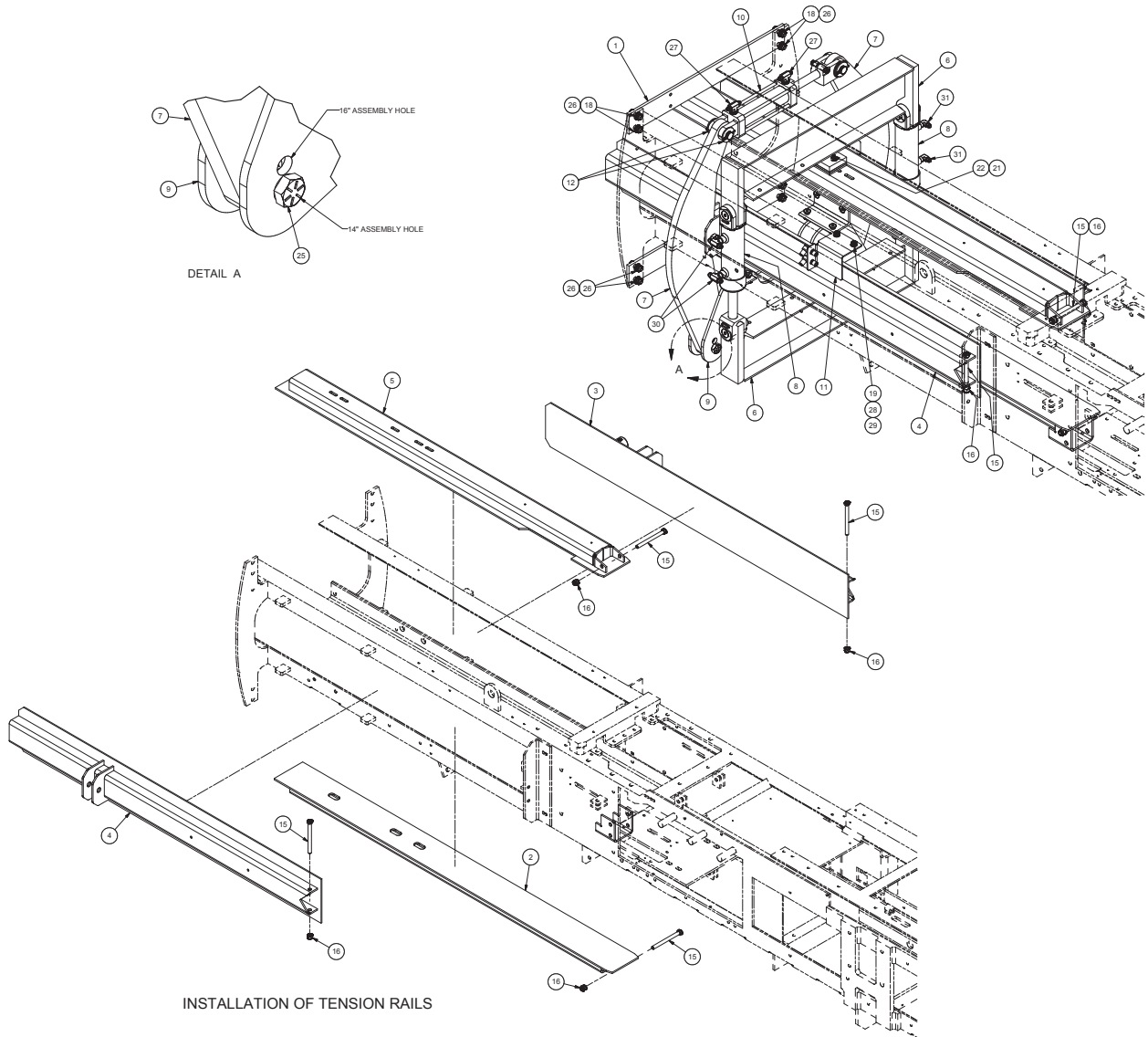
Rev B



INSTALLATION OF HORIZONTAL CYLINDER W/MOUNTS

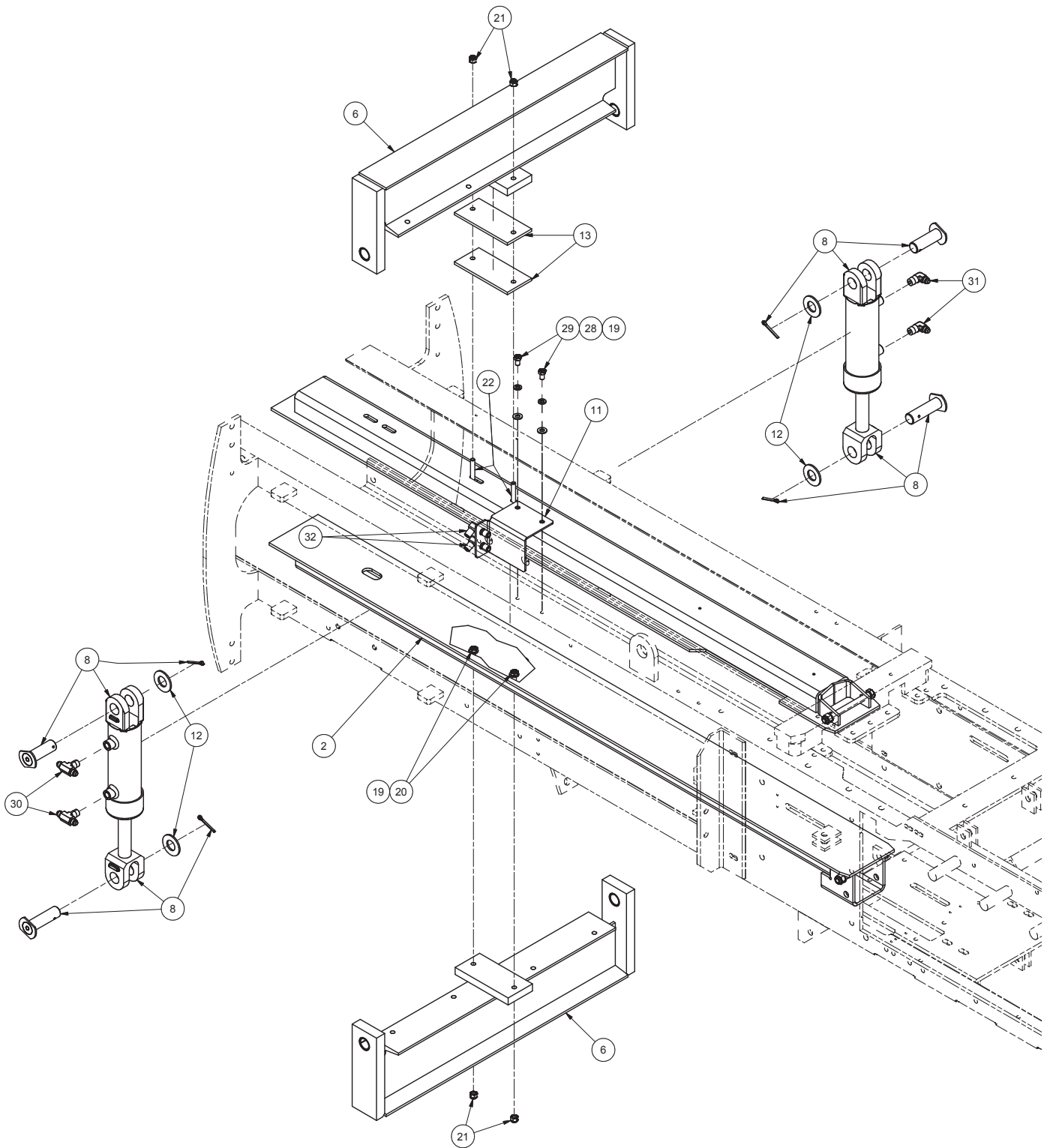
# Tensioning/Rear Mounts Installation, 14" Chamber

Page 2 of 3



# Tensioning/Rear Mounts Installation, 14" Chamber

Page 3 of 3



INSTALLATION OF VERTICAL CYLINDER W/MOUNTS

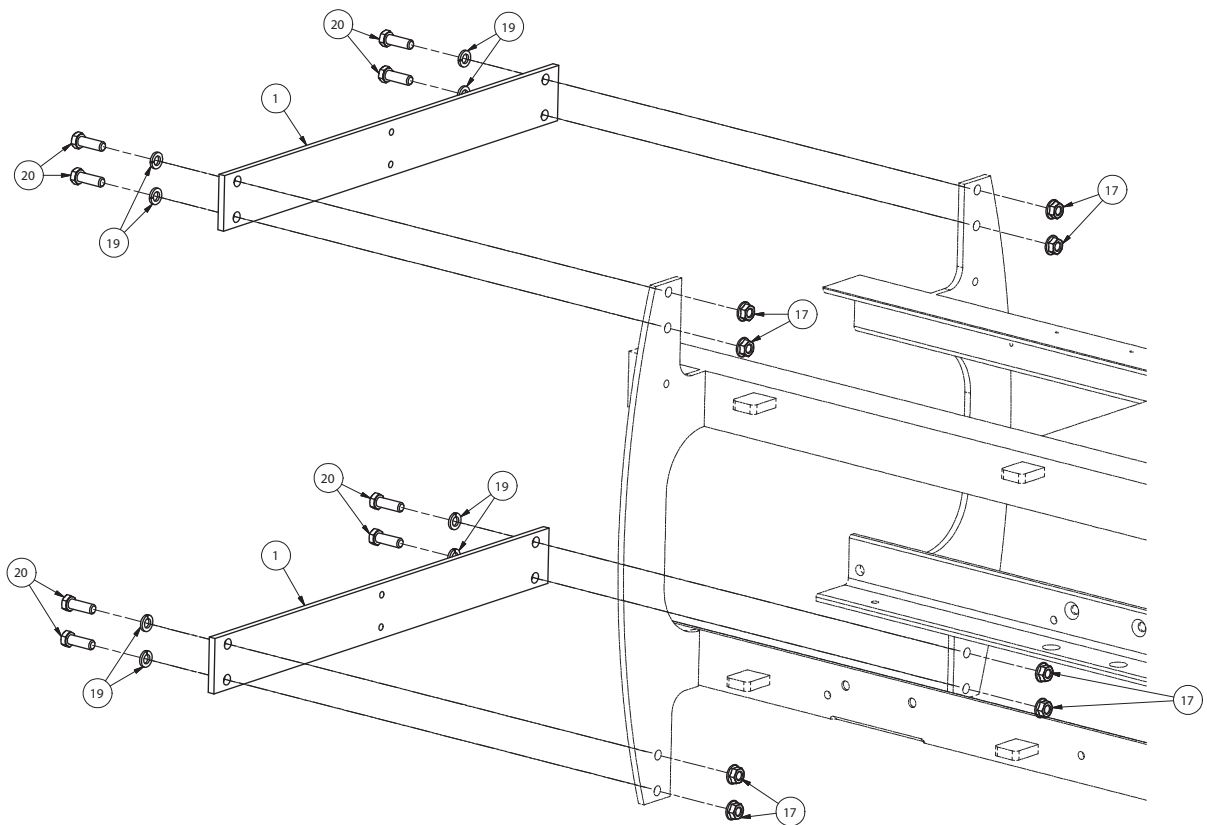


# Tensioning/Rear Mounts Installation, 16" Chamber

Page 1 of 4

| Item  | Part No.   | Qty | Description                   | Item | Part No.  | Qty | Description |
|---|------------|-----|-------------------------------|------|-----------|-----|-------------|
| <b>902663 Tensioning/Rear Mnts Install.</b> |            |     |                               |      |           |     |             |
| 1   | PLT0035098 | 2   | . Plate, Upper                | 18   | Y09G-0820 | 8   | . Capscrew  |
| 2   | TNS0009809 | 1   | . Tension Rail, Bottom        | 19   | R13812516 | 8   | . Washer    |
| 3   | TNS036528D | 1   | . Tension Rail, LH            | 20   | 200454W   | 8   | . Capscrew  |
| 4   | TNS036527D | 1   | . Tension Rail, RH            | 21   | R13812514 | 2   | . Washer    |
| 5   | TNS0009808 | 1   | . Tension Rail, Top           | 22   | R13802623 | 7   | . Washer    |
| 6   | TNS037278E | 2   | . Beam                        | 23   | R13811032 | 2   | . Capscrew  |
| 7   | TNS035803B | 2   | . Horiz.Tension Rail Assembly | 24   | 237567    | 4   | . Nut       |
|   | BSH00VG400 | 1   | . Bushing                     | 25   | R13801813 | 4   | . Capscrew  |
| 8   | CYL0033749 | 2   | . Cylinder Assembly           | 26   | R13801857 | 3   | . Capscrew  |
|   | SEL000KT25 | 1   | . Seal Kit                    | 27   | 223587    | 4   | . Nut       |
| 9   | YOK037282D | 1   | . Yoke, Rear Bottom           | 28   | R13811089 | 1   | . Capscrew  |
| 10  | CYL0000206 | 1   | . Hydraulic Tie Rod Cylinder  | 29   | R14293    | 2   | . Fitting   |
| 11  | BKT037356B | 1   | . Bracket                     | 30   | 23581     | 2   | . Fitting   |
| 12  | ZZ00000218 | 8   | . Bushing                     | 31   | 209410    | 2   | . Fitting   |
| 14  | 221662W    | 2   | . Capscrew                    | 32   | 24229     | 2   | . Fitting   |
| 15  | 221664W    | 2   | . Capscrew                    |      |           |     |             |
| 16  | R13811196  | 4   | . Nut                         |      |           |     |             |
| 17  | R13804125  | 16  | . Nut                         |      |           |     |             |

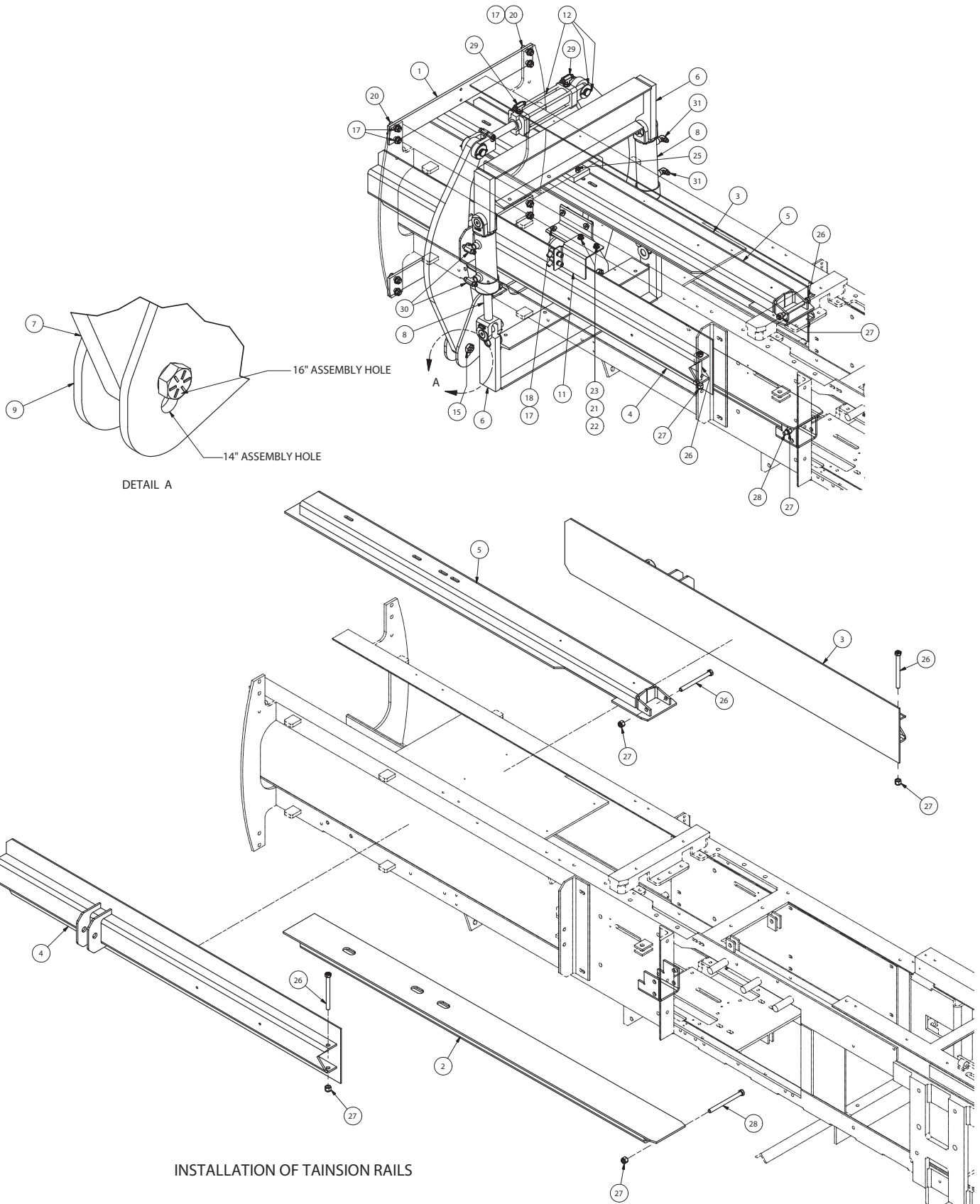
Rev B



INSTALLATION REAR BAR BRACKETS

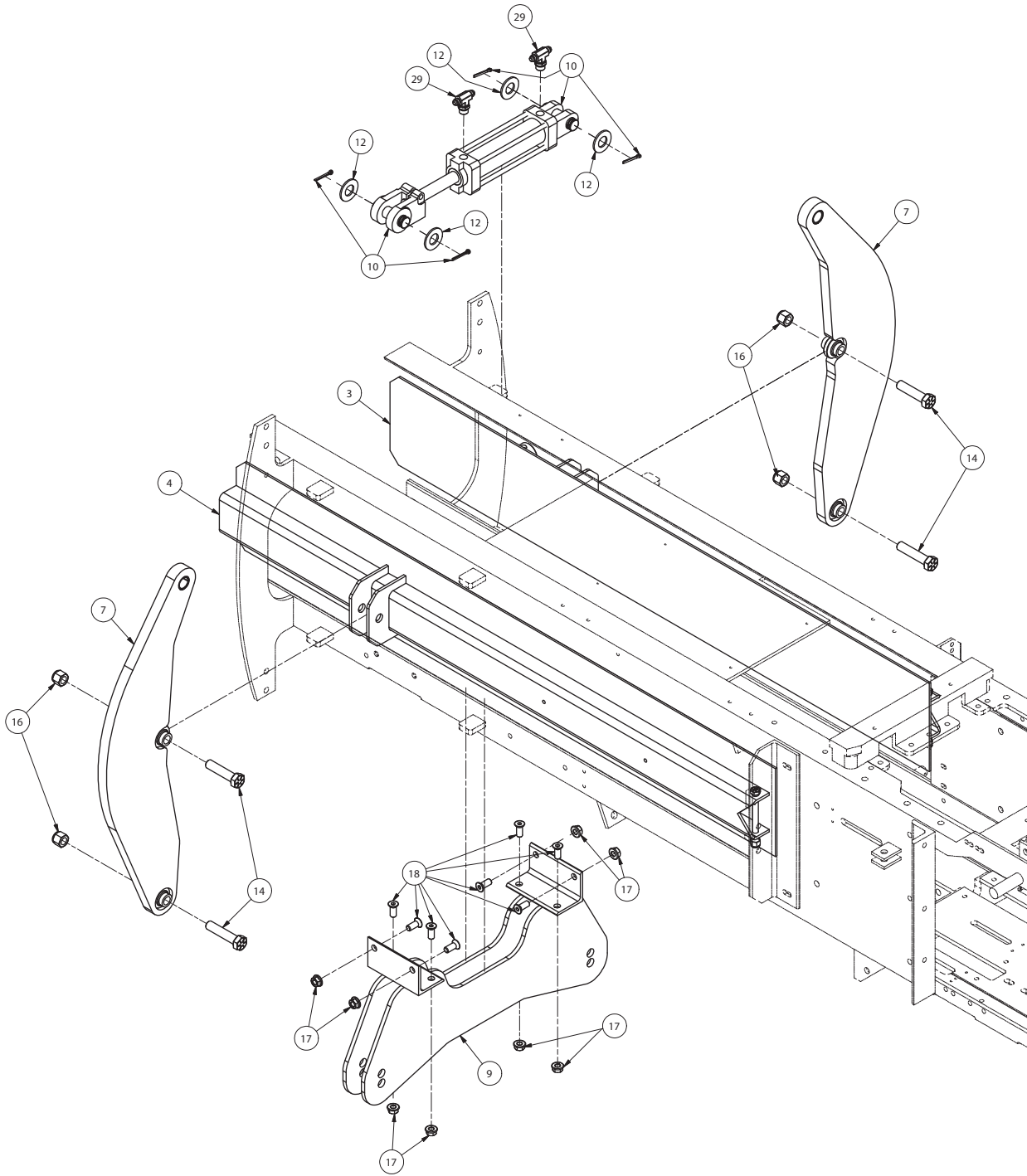
# Tensioning/Rear Mounts Installation, 16" Chamber

Page 2 of 4



# Tensioning/Rear Mounts Installation, 16" Chamber

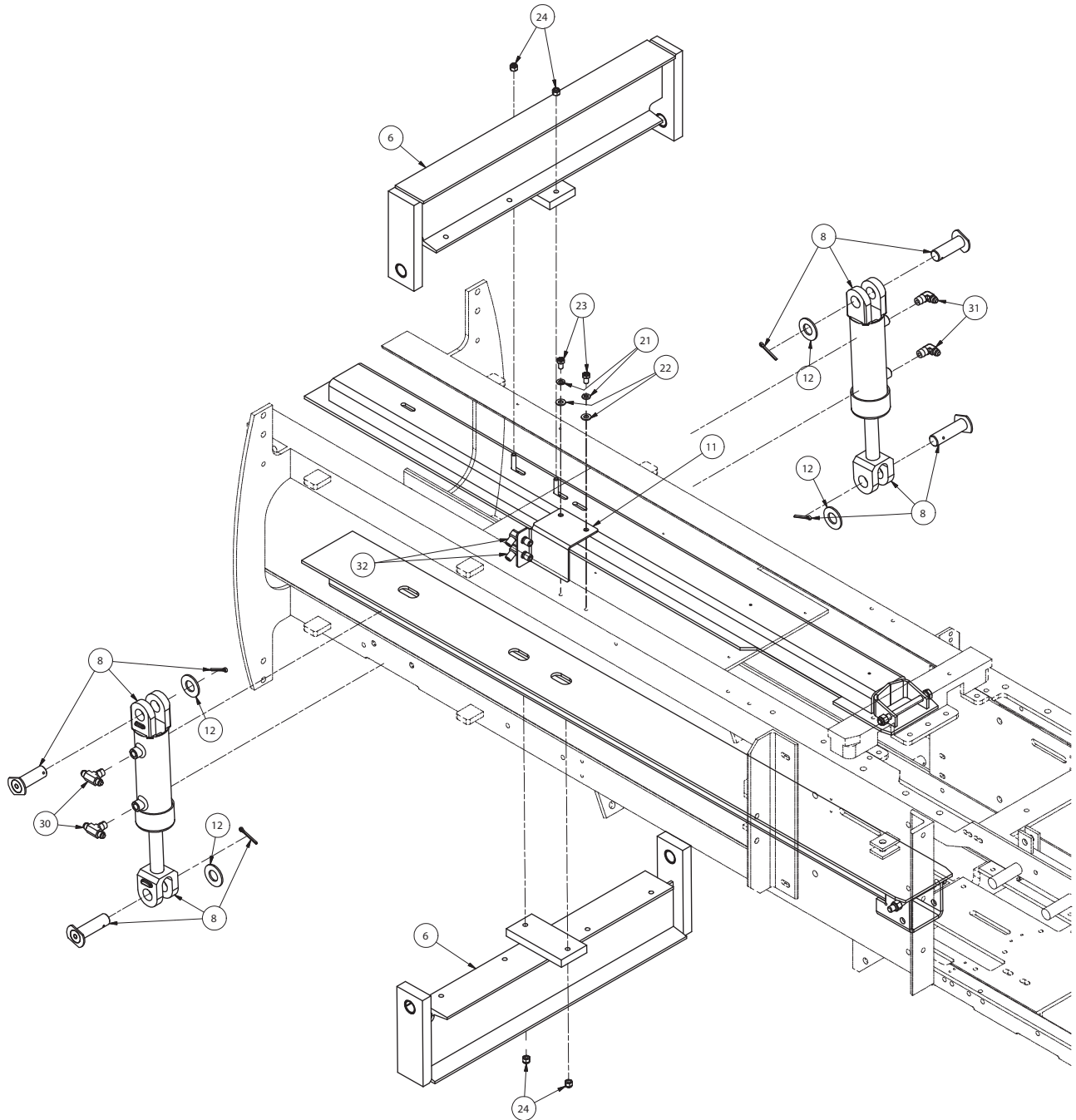
Page 3 of 4



INSTALLATION OF HORIZONTAL CYLINDER W/MOUNTS

# Tensioning/Rear Mounts Installation, 16" Chamber

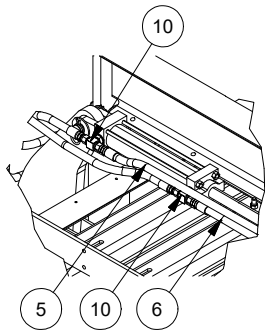
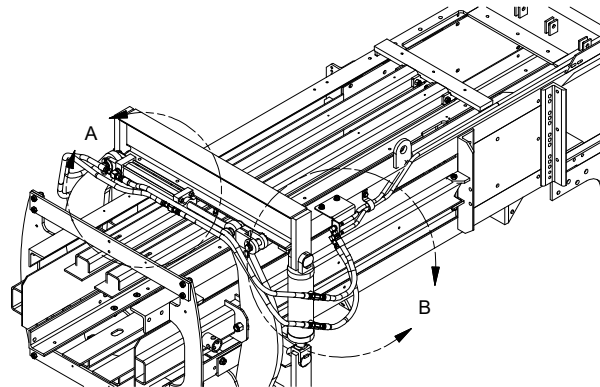
Page 4 of 4



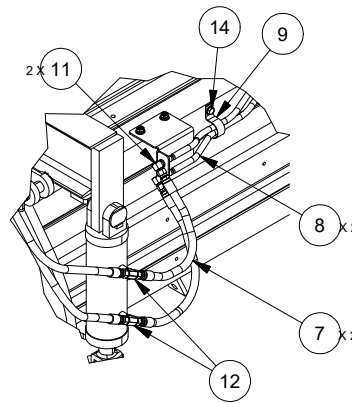
INSTALLATION OF VERTICAL CYLINDER W/MOUNTS

# Tensioning Hoses Installation, Hydro

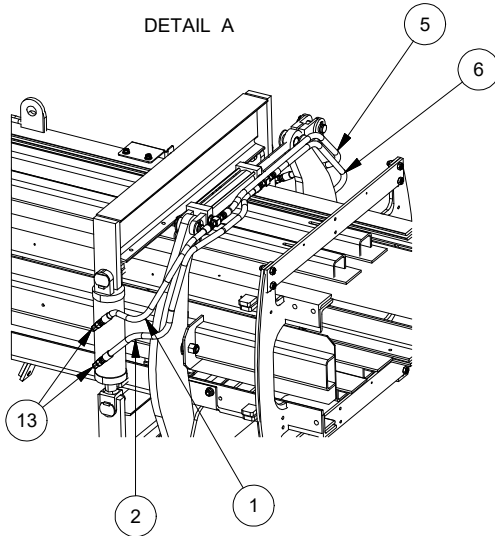
Page 1 of 2



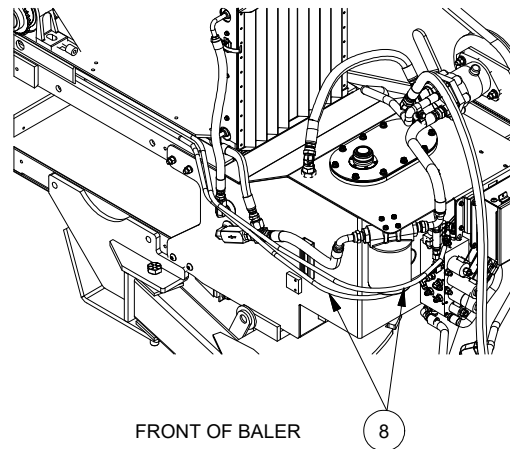
DETAIL A



DETAIL B



REAR OF BALER



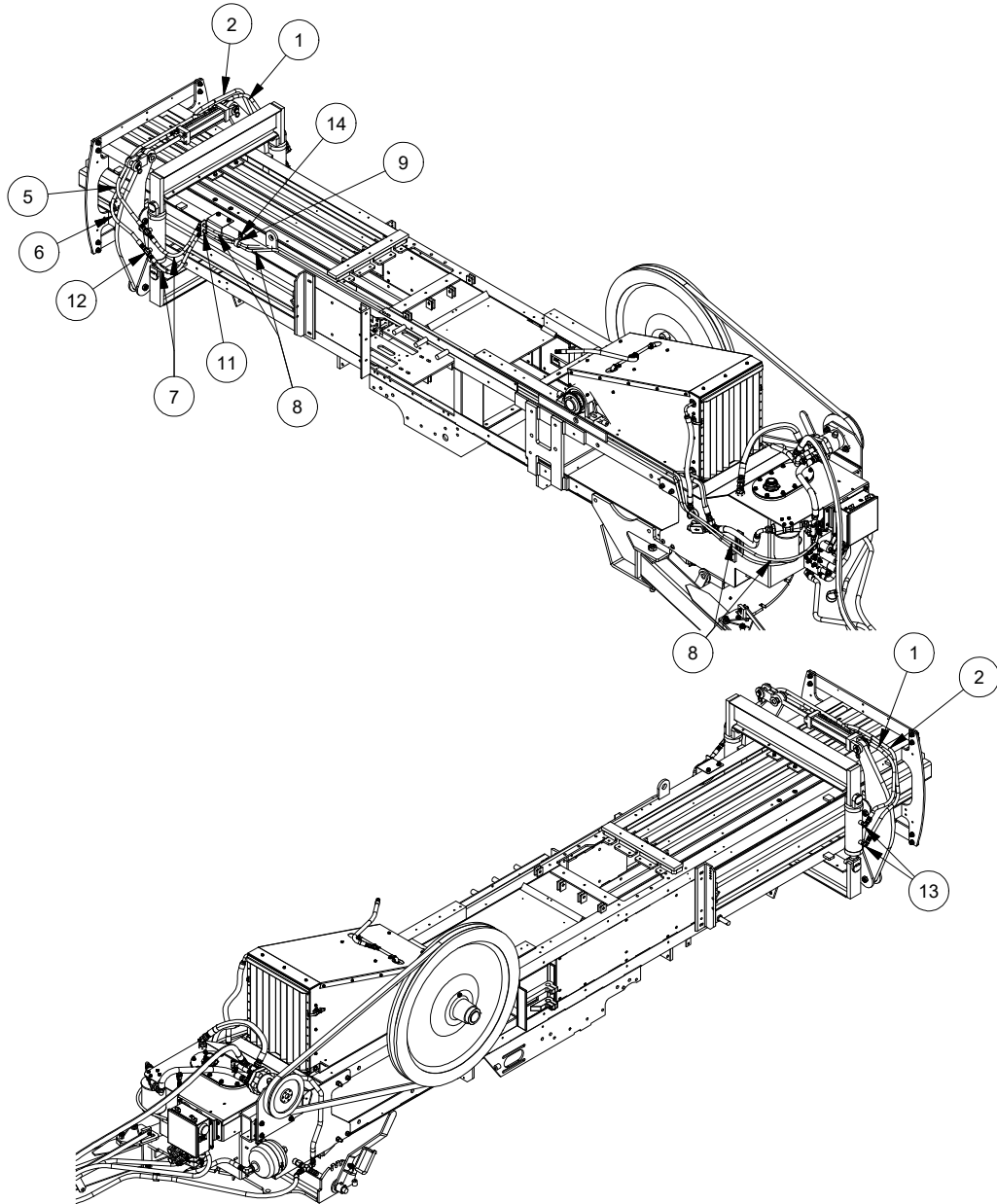
FRONT OF BALER

| Item   | Part No.      | Qty | Description      | Item                                      | Part No.      | Qty | Description |
|--|---------------|-----|------------------|---|---------------|-----|-------------|
| <b>902823 Tensioning Hoses Installation, Hydro</b> |               |     |                  |   |               |     |             |
| 1  | 23955         | 1   | . Hose Assembly  | 10  | *a R14293     | 2   | . Fitting   |
| 2  | 25363         | 1   | . Hose Assembly  | 11  | *a HYD5525030 | 2   | . Fitting   |
| 4  | HSP0000004    | 3   | . Hose Protector | 12  | *a 23581      | 2   | . Fitting   |
| 5  | 245285        | 1   | . Hose Assembly  | 13  | *a 209410     | 2   | . Fitting   |
| 6  | 245873        | 1   | . Hose Assembly  | 14  | *a 174413W    | 1   | . Screw     |
| 7  | R12565833     | 2   | . Hose Assembly  | *a These items are not used on SP balers. |               |     |             |
| 8  | *a HOS036659A | 2   | . Hose Assembly  |   |               |     |             |
| 9  | CLP0000165    | 1   | . Strap          |   |               |     |             |

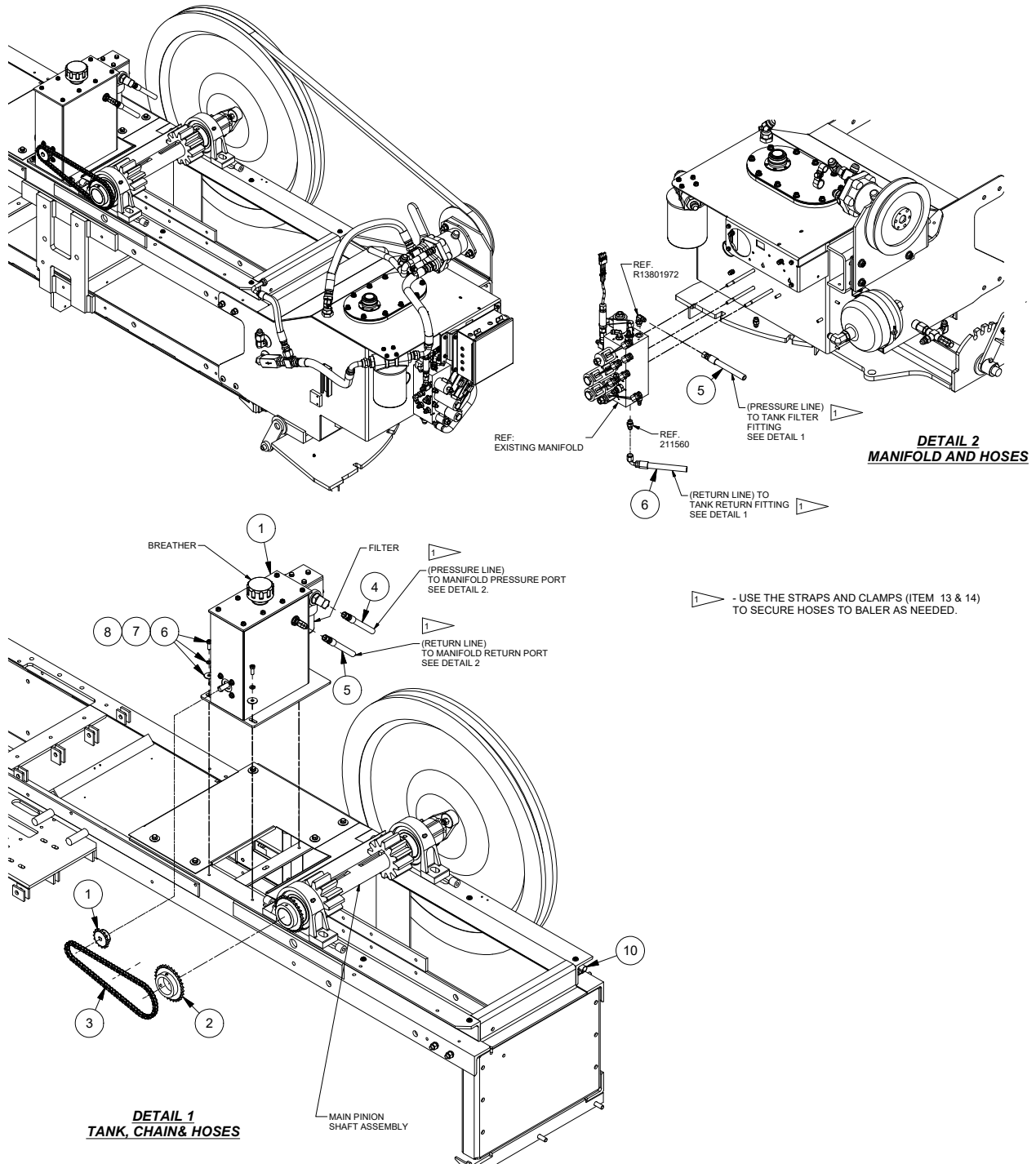
Rev F

# Tensioning Hoses Installation, Hydro

Page 2 of 2

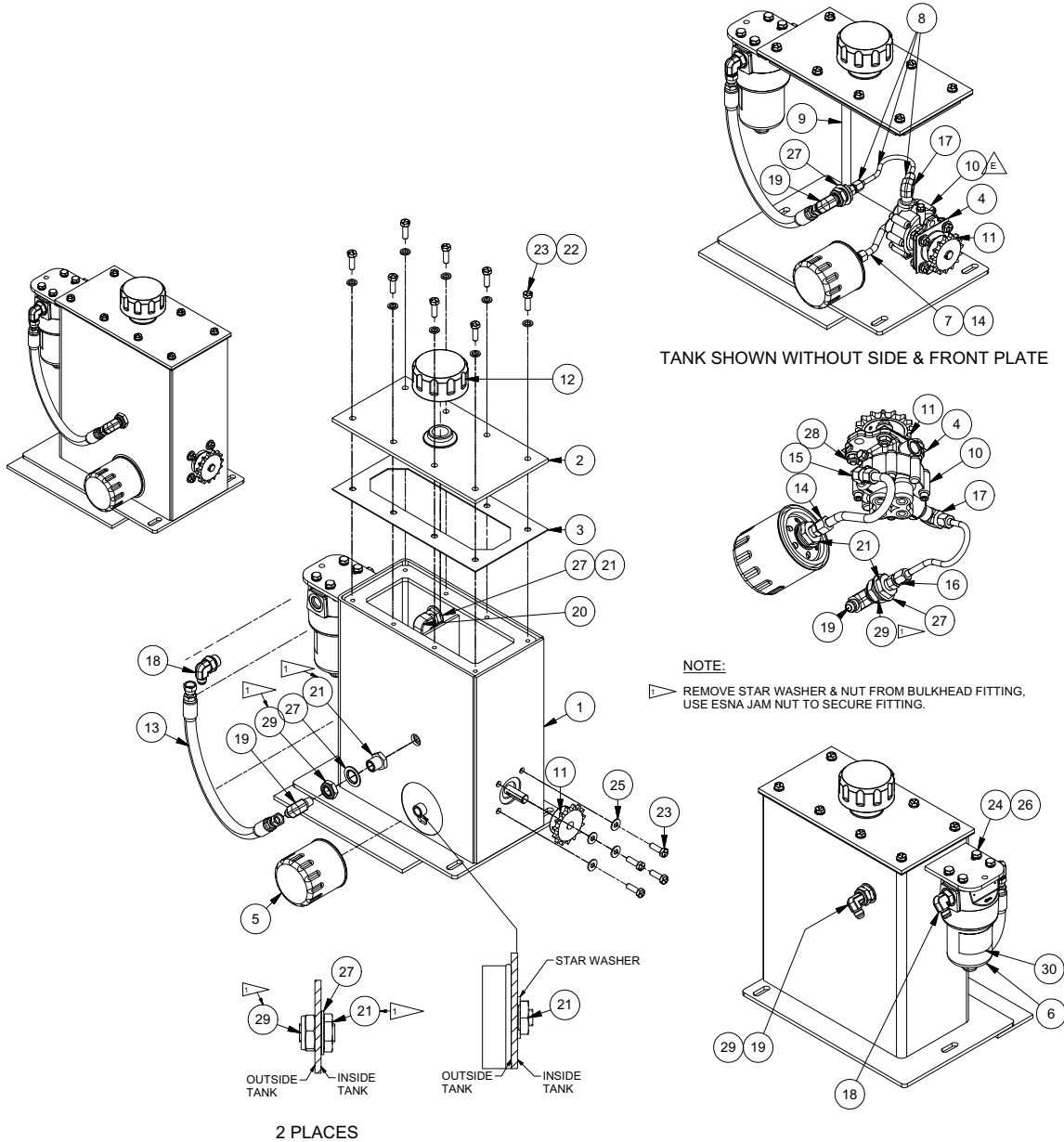


## Tension Control Reservoir Installation, Hydro



| Item | Part No.      | Qty | Description                                | Item | Part No.                          | Qty | Description   |
|------|---------------|-----|--|------|-----------------------------------|-----|---------------|
|      | <b>906426</b> |     | <b>Reservoir Installation, Ten Control</b> |      |                                   |     |               |
| 1    | *a 904840     | 1   | . Ten Control Tank Assembly                | 8    | R13802623                         | 3   | . Use 15134W  |
| 2    | SPK0004030    | 1   | . Sprocket                                 | 9    | 223872                            | 12  | . Cable Tie   |
| 3    | FT00000556    | 1   | . Assembly, Chain                          | 10   | 209588                            | 6   | . Clip, Insul |
| 4    | 238879        | 1   | . Hose Assembly                            |      |                                   |     |               |
| 5    | 245287        | 1   | . Hose Assembly                            |      |                                   |     |               |
| 6    | 16805W        | 3   | . Capscrew                                 |      |                                   |     |               |
| 7    | R13812514     | 3   | . Lockwasher                               |      |                                   |     |               |
|      |               |     |  | *a   | See Separate Coverage (Page 2-20) |     |               |

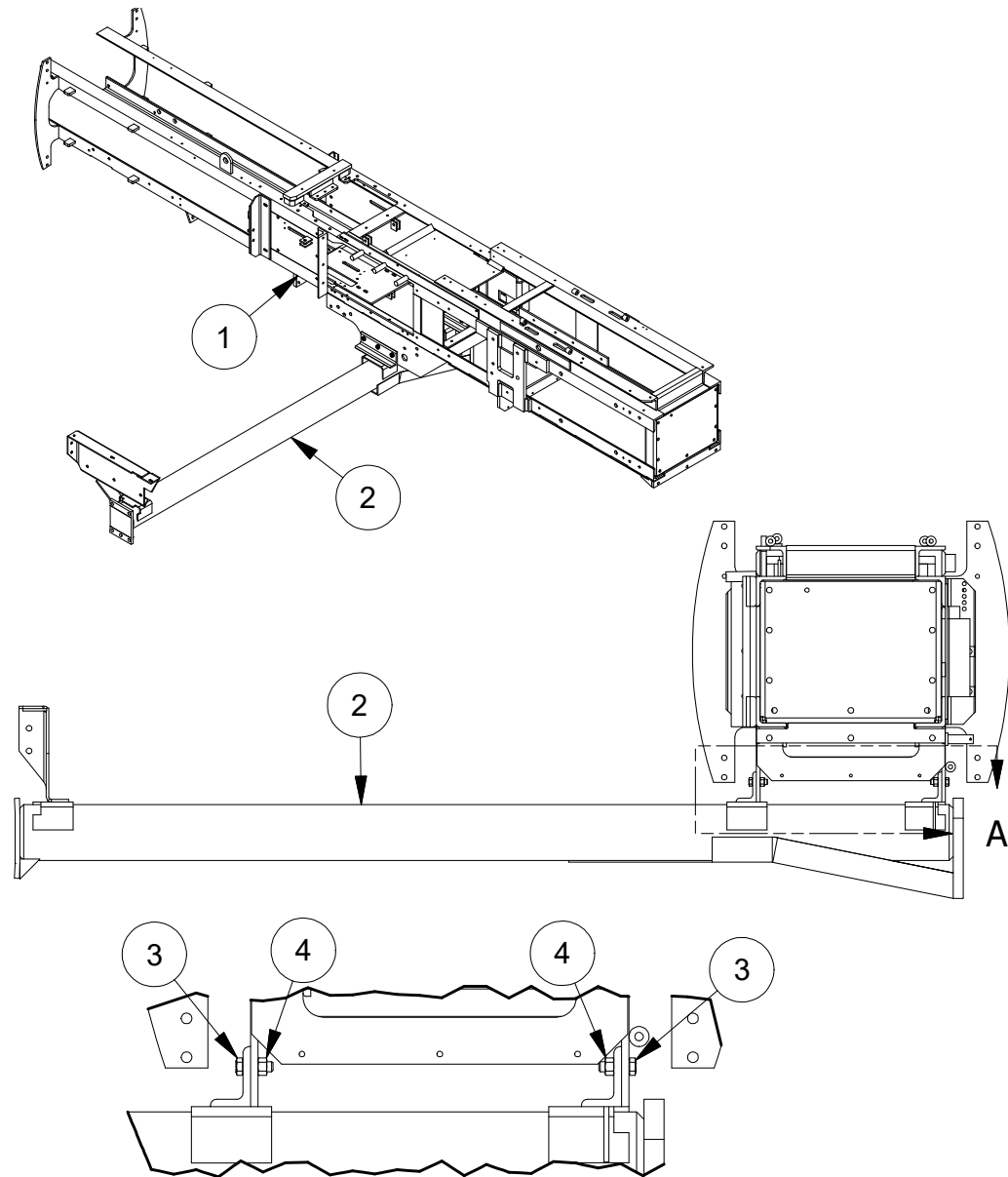
# Tension Control Tank Assembly



| Item | Part No.      | Qty | Description           | Item | Part No.   | Qty | Description          |
|------|---------------|-----|-----------------------|------|------------|-----|----------------------|
|      | <b>904840</b> |     | <b>Assembly, Tank</b> |      |            |     |                      |
| 1    | 904841        | 1   | .Weldment, Tank       | 17   | 15280      | 1   | . Fitting            |
| 2    | 904847        | 1   | . Lid Weldment        | 18   | 23945      | 2   | . Fitting            |
| 3    | 904850        | 1   | . Gasket, Tank        | 19   | 209409     | 2   | . Fitting            |
| 4    | FT00000548    | 1   | . Gasket              | 20   | 223638     | 1   | . Fitting            |
| 5    | FT00000546    | 1   | . Filter              | 21   | FT00000549 | 3   | . Fitting            |
| 6    | 910395        | 1   | . Pressure Filter     | 22   | 214479     | 8   | . Seal               |
| 7    | 903652        | 1   | . Tube, Filter Line   | 23   | 18497W     | 12  | . Capscrew           |
| 8    | 903653        | 1   | . Tube Assembly       | 24   | Y09C-M0820 | 4   | . Capscrew           |
| 9    | 904851        | 1   | . Pipe, Return        | 25   | WAS0725002 | 4   | . Washer, Copper     |
| 10   | FT00000547    | 1   | . Pump, Control       | 26   | 92681W     | 4   | . Hce-1033 Washer M8 |
| 11   | FT00000555    | 1   | . Sprocket            | 27   | 12434      | 2   | . Seal, Stato        |
| 12   | FT00000530    | 1   | . Breather            | 28   | 191534W    | 4   | . Nut                |
| 13   | 237824        | 1   | . Hose Assembly       | 29   | 906920     | 2   | . Jam Nut            |
| 14   | HYD0068030    | 1   | . Fitting             | 30   | 910397     | 1   | . Decal              |
| 15   | 258728        | 1   | . Fitting             |      |            |     |                      |
| 16   | 209752        | 1   | . Fitting             |      |            |     |                      |



# Frame & Axle Installation, 14" 2 Tie, Bullgear



**DETAIL A**

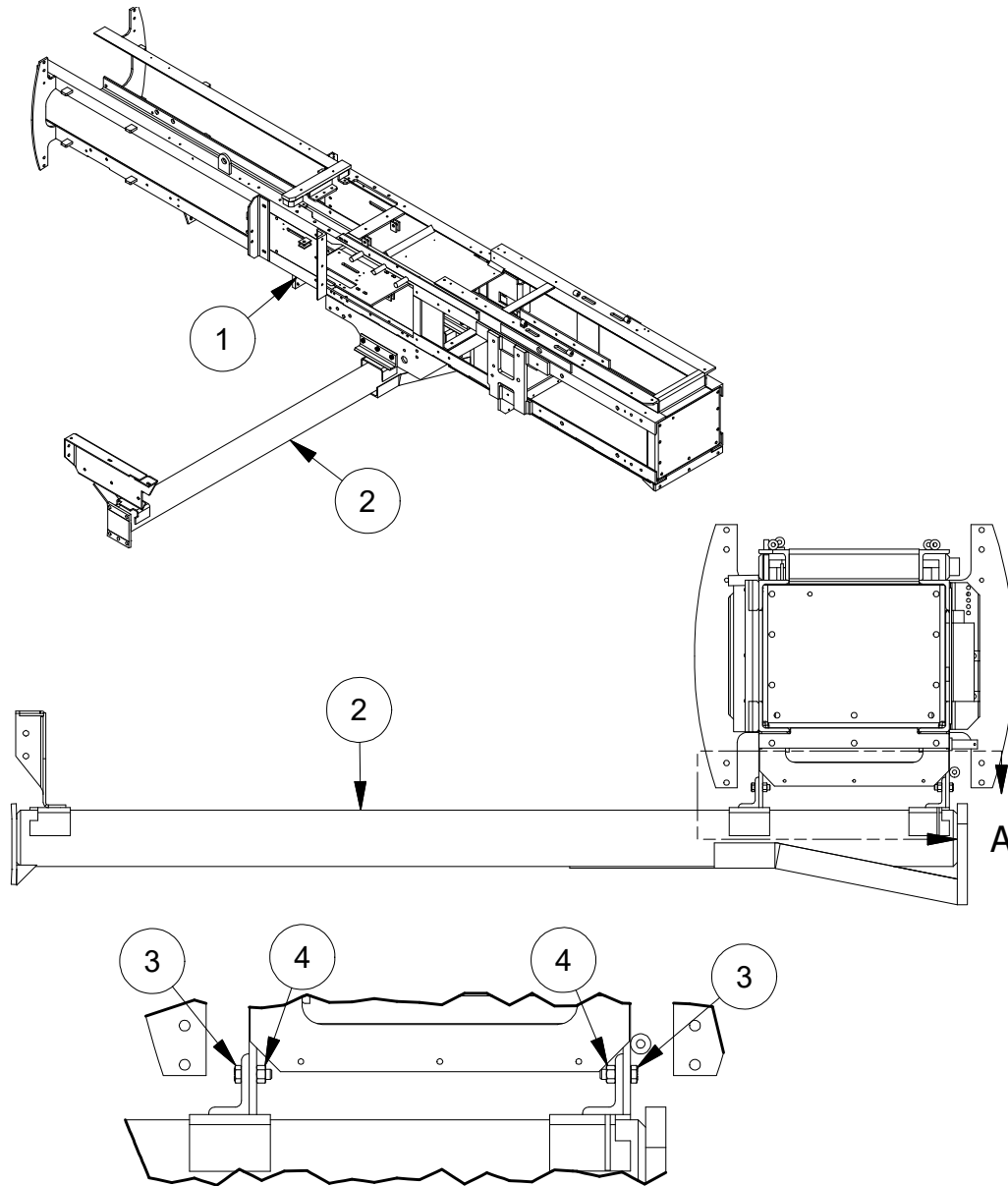
**NOTES:**

1. VIEWS ARE OF 16" 3-TIE BULLGEAR FRAME.

| Item | Part No.      | Qty | Description   | Item | Part No. | Qty | Description |
|------|---------------|-----|---|------|----------|-----|-------------|
|      | <b>905852</b> |     | <b>Frame &amp; Axle Installation, 14" 2 Tie, Bullgear</b> |      |          |     |             |
|      | 909321        | 1   | . Frame & Axle Assy.                                      |      |          |     |             |
| 1    | 922233        | 1   | . . Frame   |      |          |     |             |
| 2    | AXL0022390    | 1   | . . Axle  |      |          |     |             |
| 3    | 200454W       | 6   | .Capscrew   |      |          |     |             |
| 4    | 223587        | 6   | .Nut  |      |          |     |             |

Rev:B

# Frame & Axle Installation, 16" 2 Tie, Bullgear



**DETAIL A**

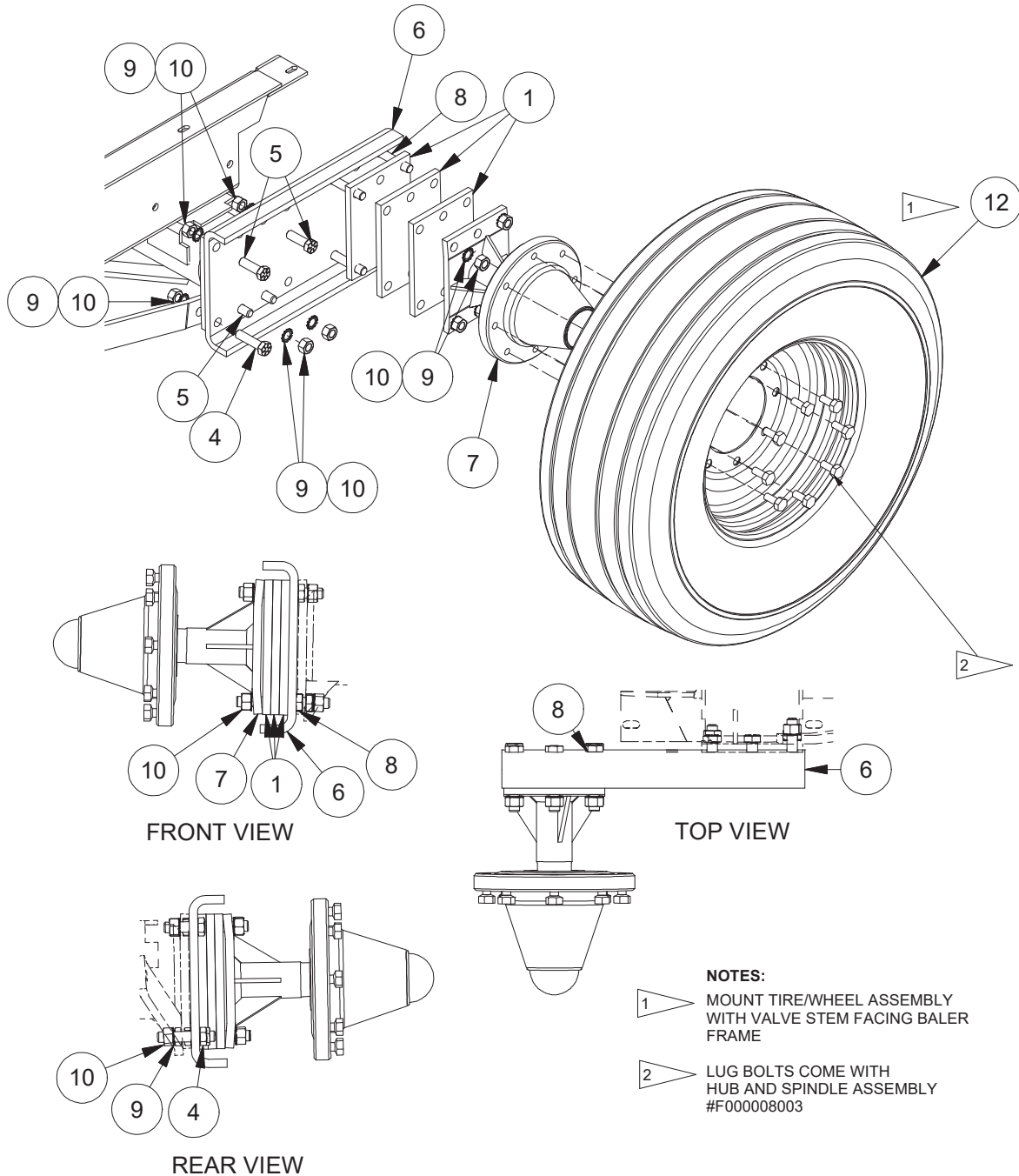
**NOTES:**

1. VIEWS ARE OF 16" 3-TIE BULLGEAR FRAME.

| Item | Part No.      | Qty | Description   | Item | Part No. | Qty | Description |
|------|---------------|-----|---|------|----------|-----|-------------|
|      | <b>909331</b> |     | <b>Frame &amp; Axle Installation, 16" 2 Tie, Bullgear</b> |      |          |     |             |
|      | 909322        | 1   | . Frame & Axle Assy.                                      |      |          |     |             |
| 1    | 901466        | 1   | . . Frame   |      |          |     |             |
| 2    | AXL0022390    | 1   | . . Axle  |      |          |     |             |
| 3    | 200454W       | 6   | .Capscrew   |      |          |     |             |
| 4    | 223587        | 6   | .Nut  |      |          |     |             |

Rev:

### Single 8-Hole Flotation RH 2 & 3 Tie FOP0000103

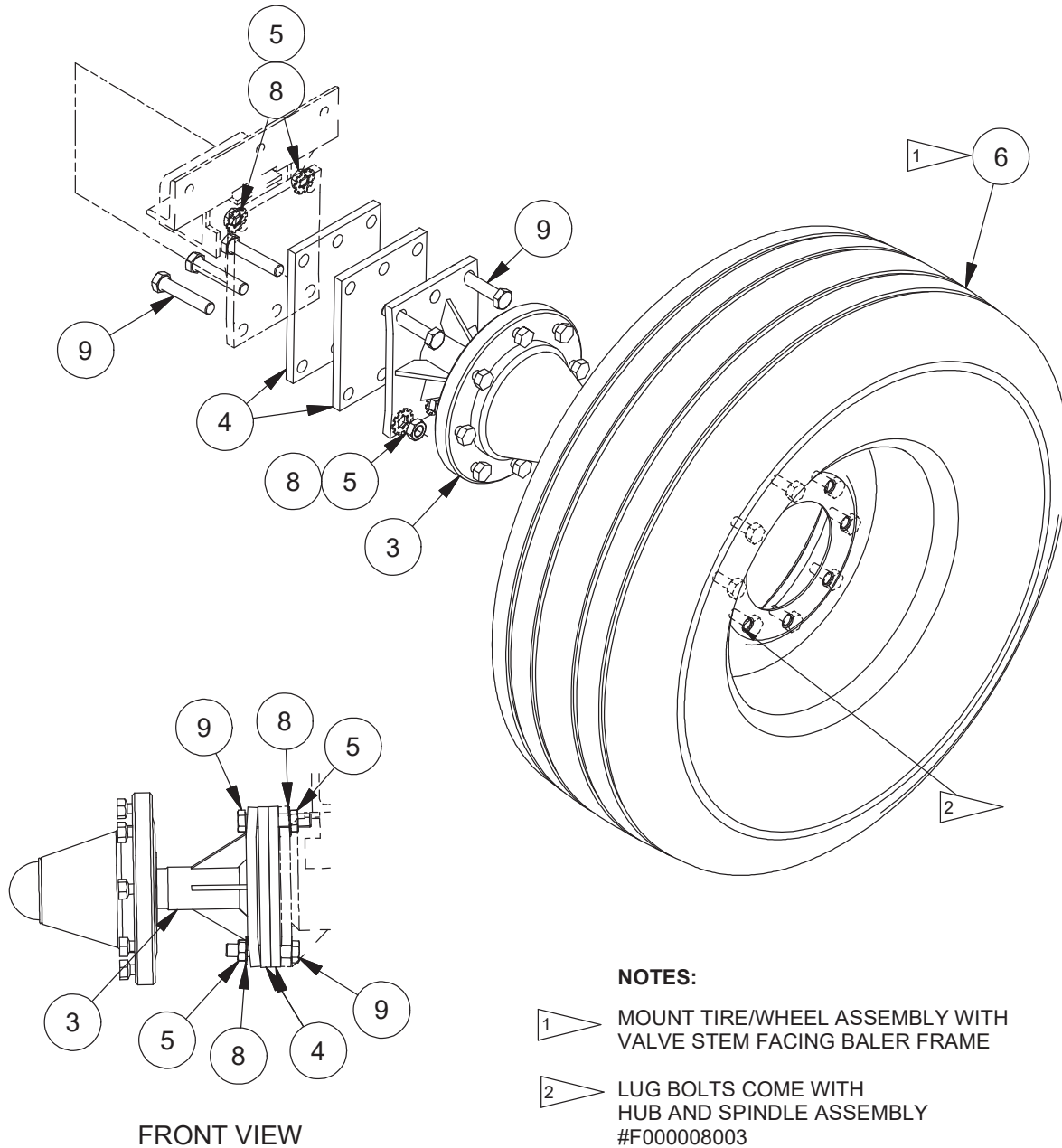


| Item | Part No.          | Qty | Description                       | Item | Part No.   | Qty | Description                     |
|------|-------------------|-----|-----------------------------------|------|------------|-----|---------------------------------|
|      | <b>FOP0000103</b> |     | <b>Single 8-Hole Flotation RH</b> |      |            |     |                                 |
| 01   | F000007636        | 3   | . Plate, Spacer                   | 09   | WES0006250 | 10  | . Washer                        |
| 04   | R13807958         | 1   | . Capscrew                        | 10   | 199594W    | 10  | . Hex Nut                       |
| 05   | Y18C-1032         | 4   | . Capscrew                        | 12   | 901467     | 1   | . Tire & Wheel Assy (Flotation) |
| 06   | F000007756        | 1   | . Mounting Channel                |      | F000008184 | 1   | .. Wheel F/Flotation Tire       |
| 07   | F000008003        | 1   | . Hub & Spindle Assy              |      | F000008028 | 1   | .. Tire 15" 8-PLY Flotation     |
| 08   | 219530            | 5   | . Capscrew                        |      |            |     |                                 |

Rev H

# 8-Hole Flotation LH 2 Tie

## FOP0000104



**NOTES:**

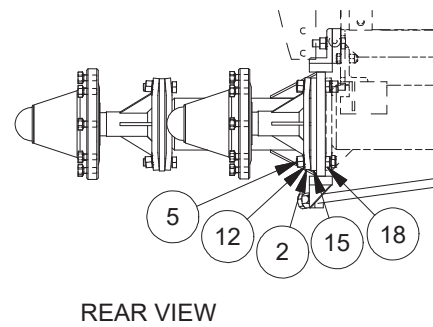
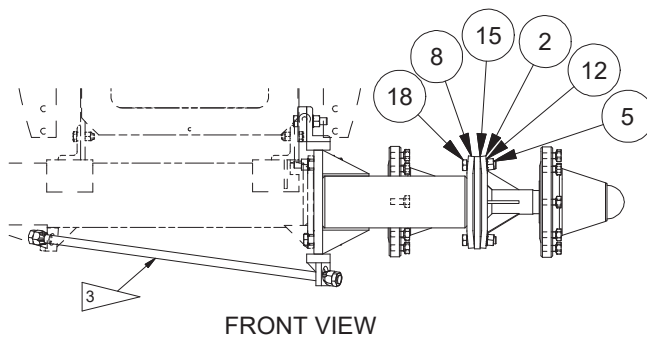
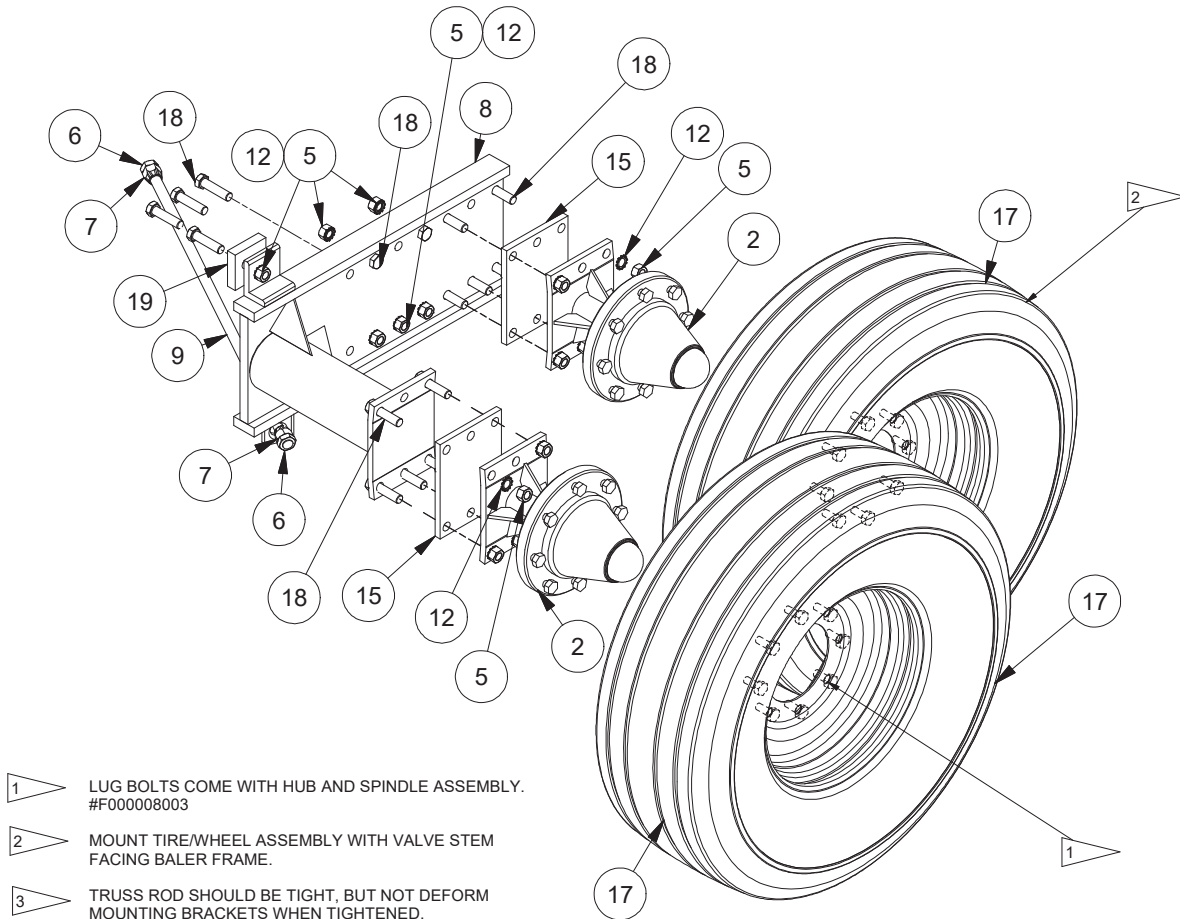
- 1 MOUNT TIRE/WHEEL ASSEMBLY WITH VALVE STEM FACING BALER FRAME
- 2 LUG BOLTS COME WITH HUB AND SPINDLE ASSEMBLY #F000008003

| Item | Part No.          | Qty | Description                      | Item | Part No.   | Qty | Description                     |
|------|-------------------|-----|----------------------------------|------|------------|-----|---------------------------------|
|      | <b>FOP0000104</b> |     | <b>8-Hole Flotation LH 2 Tie</b> |      |            |     |                                 |
| 3    | F000008003        | 1   | . Hub & Spindle Assy             | 6    | 901467     | 1   | . Tire & Wheel Assy (Flotation) |
| 4    | F000007636        | 2   | . Plate, Spacer                  |      | F000008184 | 1   | . . Wheel F/Flotation Tire      |
| 5    | 199594W           | 5   | . Hex Nut                        |      | F000008028 | 1   | . . Tire 15 8-PLY Flotation     |
|      |                   |     |                                  | 8    | WES0006250 | 5   | . Washer                        |
|      |                   |     |                                  | 9    | 221637W    | 5   | . Capscrew                      |

Rev D

# Tandem 8-Hole Flotation LH 2 Tie

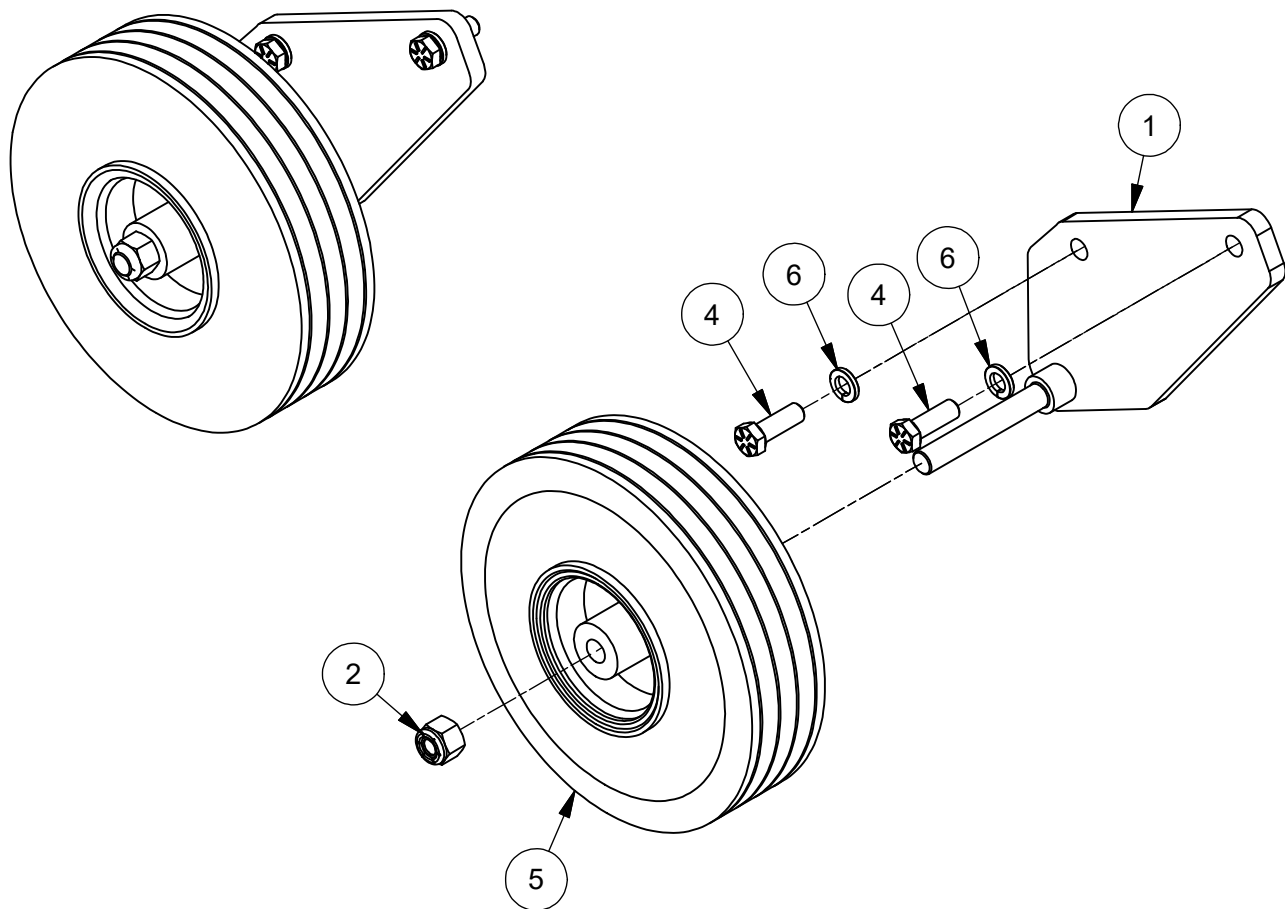
## FOP0000108



| Item   | Part No.   | Qty | Description          | Item | Part No.   | Qty | Description                 |
|--|------------|-----|----------------------|------|------------|-----|-----------------------------|
| <b>FOP0000108 Tandem 8-Hole Flotation LH 2 Tie</b> |            |     |                      |      |            |     |                             |
| 2  | F00008003  | 2   | . Hub & Spindle Assy | 15   | F000007636 | 2   | . Plate, Spacer             |
| 5  | 199594W    | 16  | . Hex Nut            | 17   | 901467     | 2   | . Tire & Wheel Assy.        |
| 6  | R13809570  | 2   | . Jam Nut            |      | F000008184 | 1   | . . Wheel F/Flotation Tire  |
| 7  | NMS0007125 | 2   | . Nut, Truss Rod     |      | F000008028 | 1   | . . Tire 15 8-PLY Flotation |
| 8  | 901620     | 1   | . Wheel Mount        | 18   | R13807958  | 16  | . Capscrew                  |
| 9  | RD00708601 | 1   | . Rod, Truss         | 19   | 901675     | 1   | . Bar, Spacer               |
| 12   | WES0006250 | 24  | . Washer             |      |            |     |                             |

Rev C

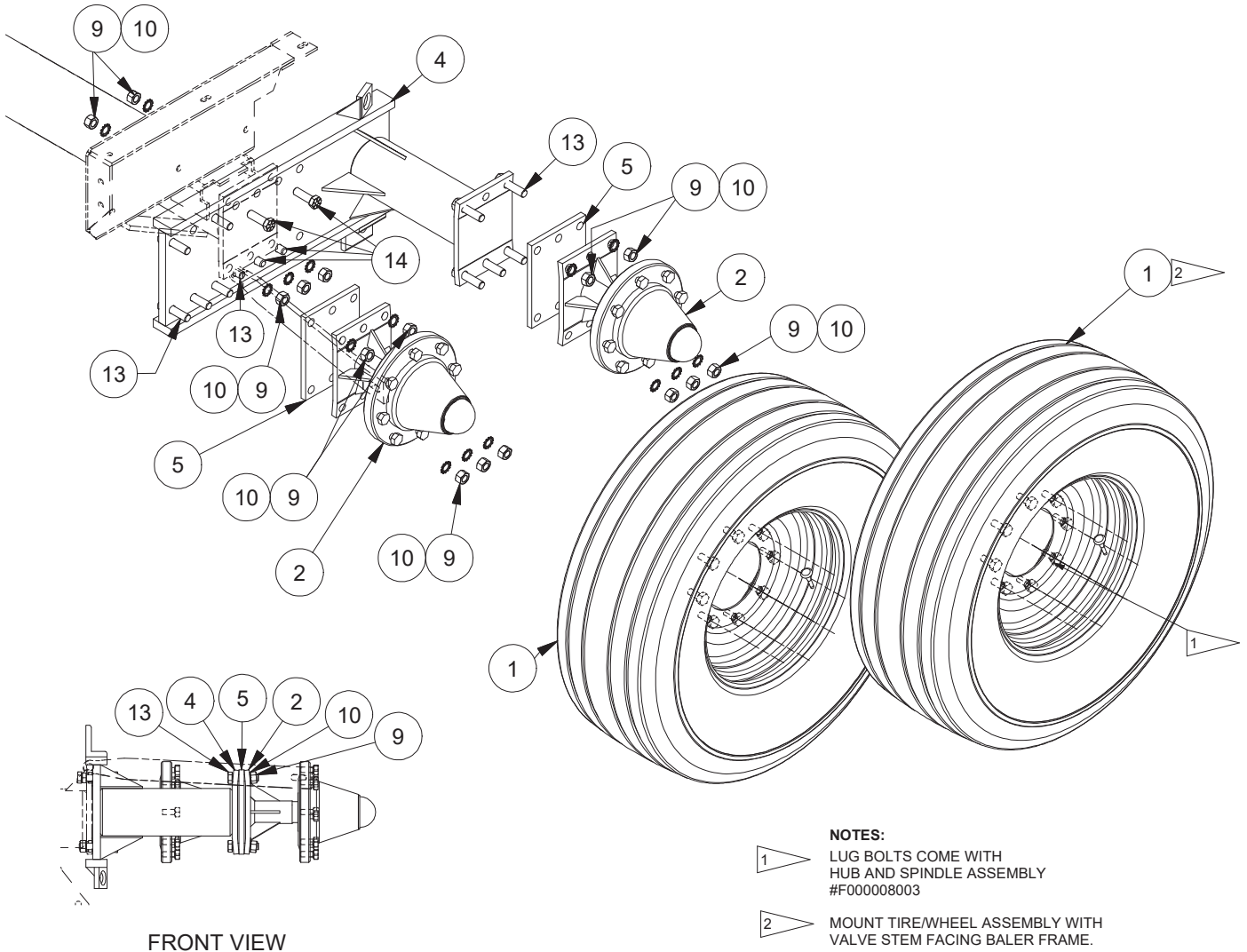
# Pickup Depth Wheel FOP0000162



| Item | Part No.         | Qty | Description               |
|------|------------------|-----|---------------------------|
|      | <b>FOP000016</b> |     | <b>Pickup Depth Wheel</b> |
| 1    | BKT0021956       | 1   | . Bracket                 |
| 2    | 224121           | 1   | . Nut                     |
| 4    | 200454W          | 2   | . Capscrew                |
| 5    | 909202           | 1   | . Wheel, Rubber           |
| 6    | 234665           | 2   | . Lockwasher              |

Rev C

## Tandem 8-Hole Flotation RH 2 & 3 Tie FOP0000222

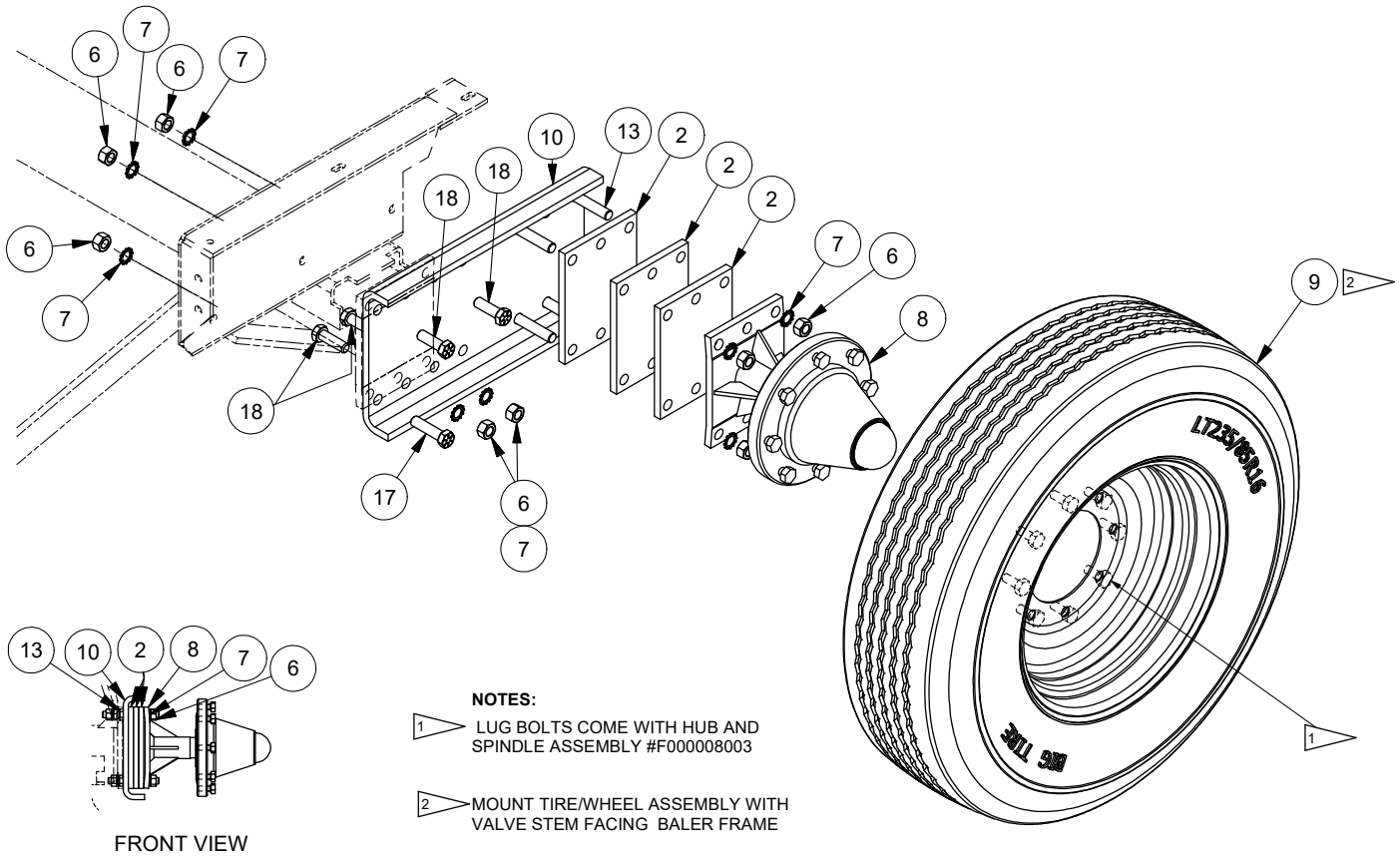


| Item | Part No.          | Qty | Description                                     | Item | Part No.   | Qty | Description     |
|------|-------------------|-----|---|------|------------|-----|-----------------|
|      | <b>FOP0000222</b> |     | <b>Tandem 8-Hole Flotation RH 2 &amp; 3 Tie</b> |      |            |     |                 |
| 1    | 901467            | 2   | . Tire & Wheel Assy.                            | 5    | F000007636 | 2   | . Plate, Spacer |
|      | F000008184        | 1   | . . Wheel F/Flotation Tire                      | 9    | 199594W    | 15  | . Hex Nut       |
|      | F000008028        | 1   | . . Tire 15 8-PLY Flotation                     | 10   | WES0006250 | 15  | . Washer        |
| 2    | F000008003        | 2   | . Hub & Spindle Assy.                           | 13   | R13807958  | 11  | . Capscrew      |
| 4    | 901620            | 1   | . Wheel Mount                                   | 14   | Y18C-1032  | 4   | . Capscrew      |

Rev E

# Single 8-Hole Highway RH 2 & 3 Tie

## FOP0000249

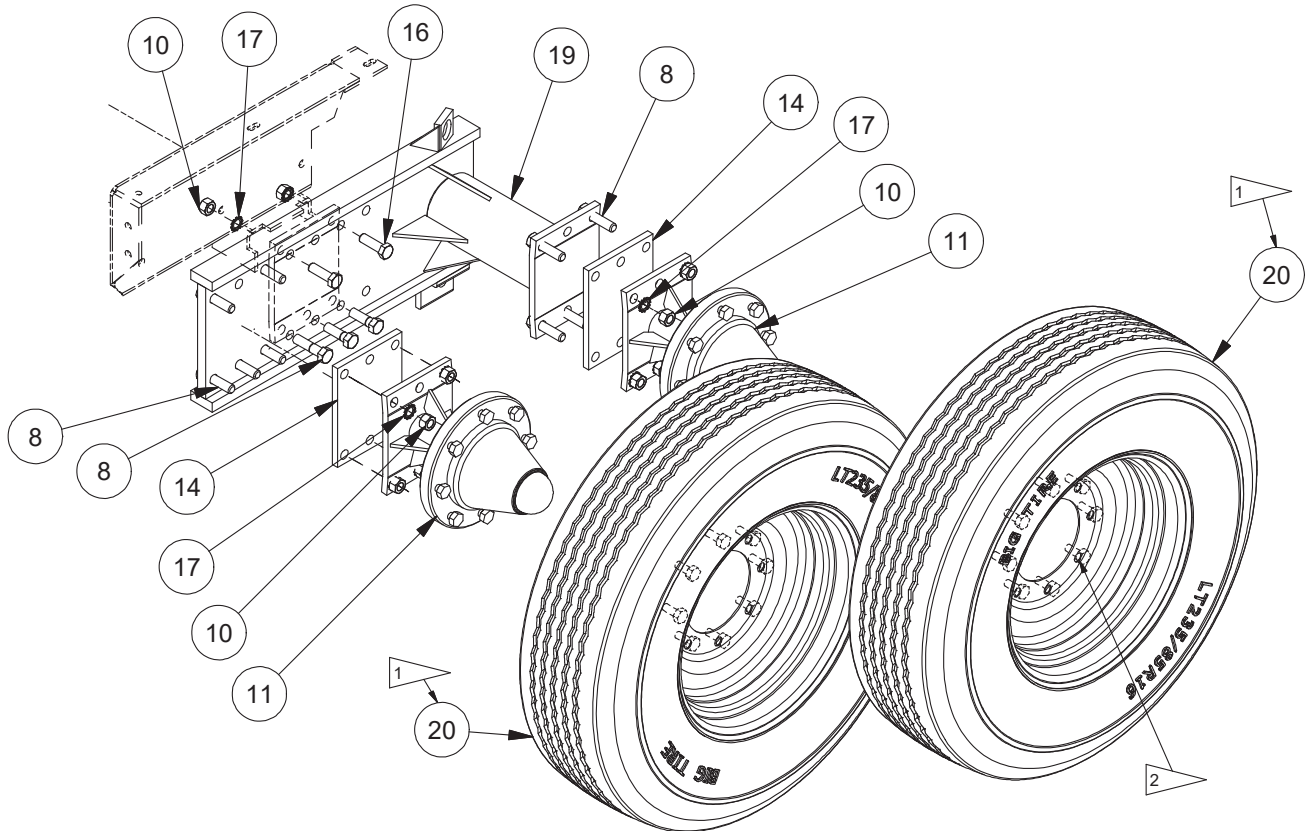


| Item | Part No.          | Qty | Description                                   | Item | Part No.   | Qty | Description                 |
|------|-------------------|-----|---|------|------------|-----|-----------------------------|
|      | <b>FOP0000249</b> |     | <b>Single 8-Hole Highway RH 2 &amp; 3 Tie</b> |      |            |     |                             |
| 2    | F000007636        | 3   | . Plate, Spacer                               | 10   | F000007756 | 1   | . Mounting Channel          |
| 6    | 199594W           | 10  | . Hex Nut                                     | 13   | 219530     | 5   | . Capscrew                  |
| 7    | WES0006250        | 10  | . Washer                                      | 17   | R13807958  | 1   | . Capscrew                  |
| 8    | F000008003        | 1   | . Hub & Spindle Assy.                         | 18   | Y18C-1032  | 4   | . Capscrew                  |
| 9    | TIR0000002        | 1   | . Tire & Wheel                                | 19   | TIR0000002 | 1   | . Highway Tire & Wheel Assy |
|      | WHL0106897        | 1   | . Wheel F/Highway Tire                        |      |            |     |                             |
|      | TIR7501608        | 1   | . Highway Tire                                |      |            |     |                             |

Rev F

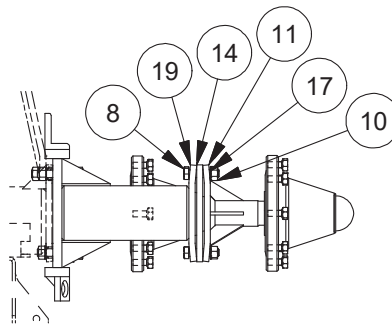


## Tandem 8-Hole Highway RH FOP0000250

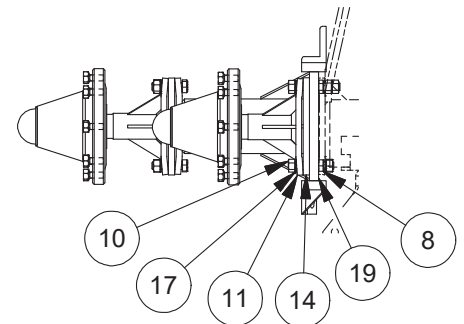


**NOTES:**

- 1 MOUNT TIRE/WHEEL ASSEMBLY WITH VALVE STEM FACING BALER FRAME
- 2 LUG BOLTS COME WITH THE HUB AND SPINDLE ASSEMBLY #F000008003



FRONT VIEW



REAR VIEW

| Item | Part No.          | Qty | Description                     | Item | Part No.   | Qty | Description             |
|------|-------------------|-----|---------------------------------|------|------------|-----|-------------------------|
|      | <b>FOP0000250</b> |     | <b>Tandem 8-Hole Highway RH</b> |      |            |     |                         |
| 8    | R13807958         | 11  | . Capscrew                      | 17   | WES0006250 | 15  | . Washer                |
| 10   | 199594W           | 15  | . Hex Nut                       | 19   | 901626     | 1   | . Wheel Mount           |
| 11   | F000008003        | 2   | . Hub & Spindle Assy.           | 20   | TIR0000002 | 2   | . Tire & Wheel          |
| 14   | F000007636        | 2   | . Plate, Spacer                 |      | WHL0106897 | 1   | .. Wheel F/Highway Tire |
| 16   | Y18C-1032         | 4   | . Capscrew                      |      | TIR7501608 | 1   | .. Highway Tire         |

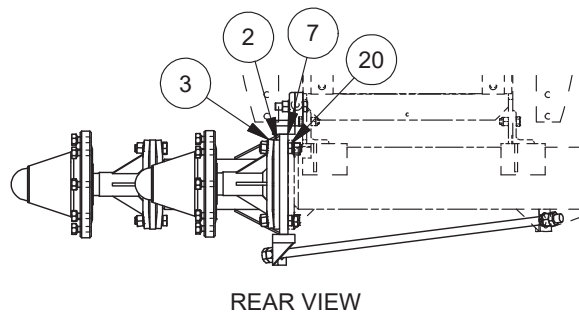
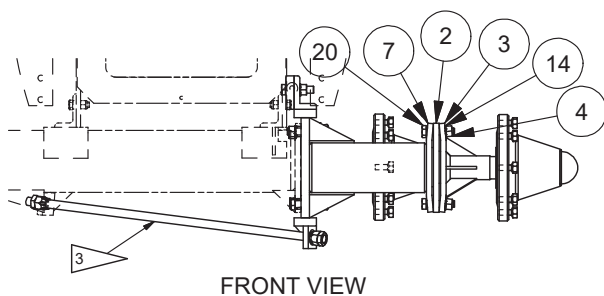
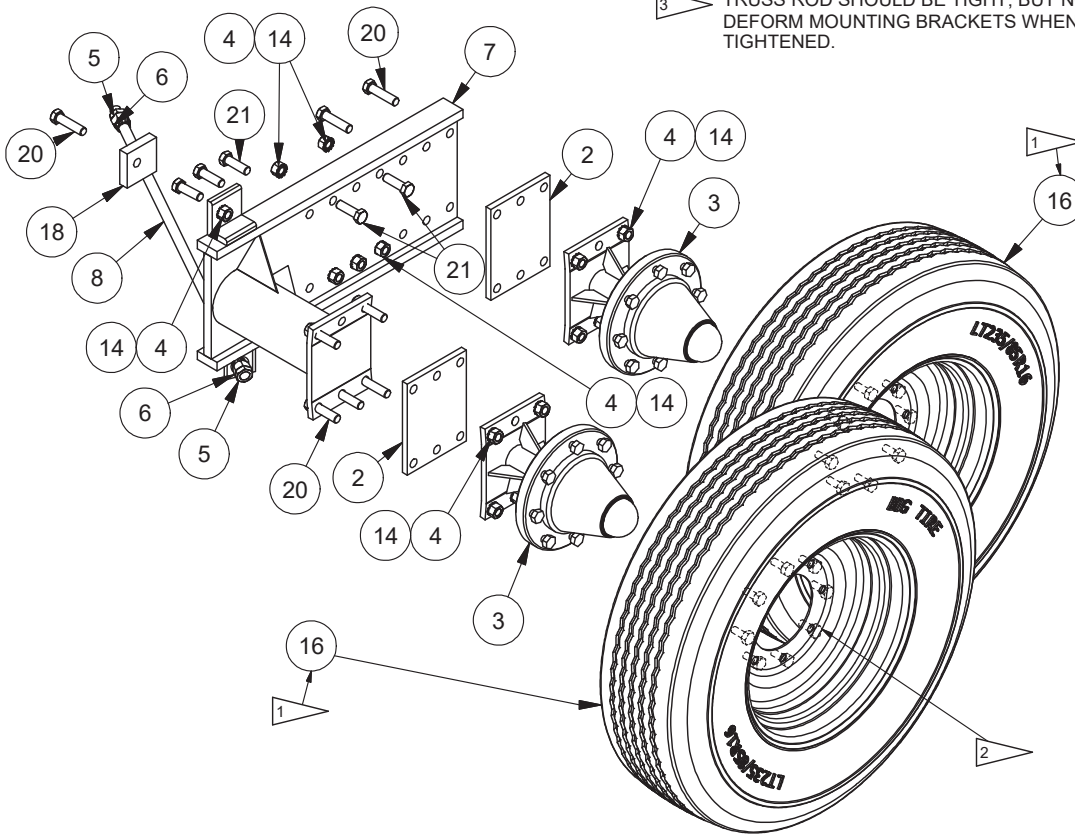
Rev F

# Tandem 8-Hole Highway LH 2 Tie

## FOP0000252

**NOTES:**

- 1 MOUNT TIRE/WHEEL ASSEMBLY WITH VALVE STEM FACING BALER FRAME
- 2 LUG BOLTS COME WITH HUB AND SPINDLE ASSEMBLY #F000008003
- 3 TRUSS ROD SHOULD BE TIGHT, BUT NOT DEFORM MOUNTING BRACKETS WHEN TIGHTENED.

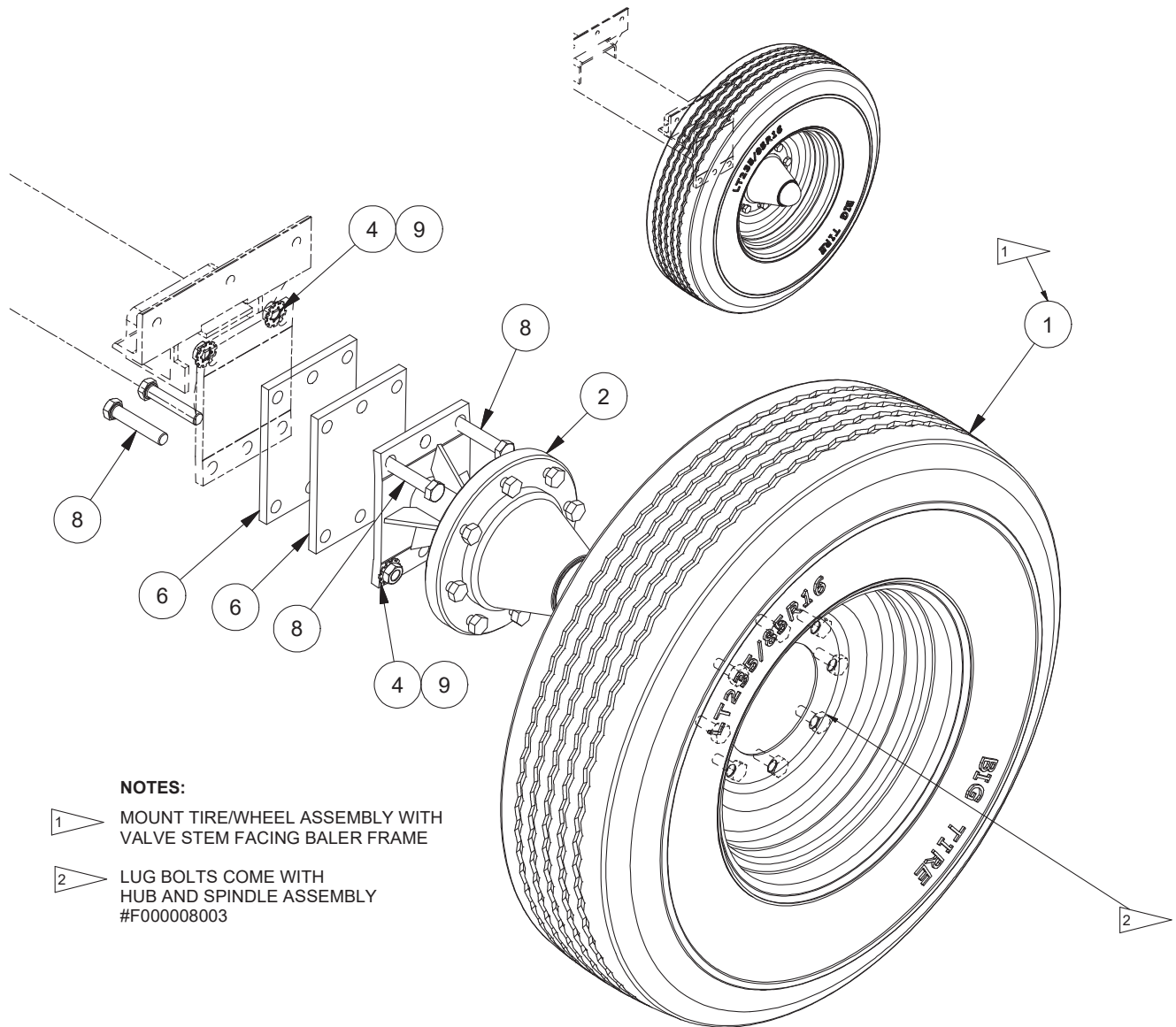


| Item | Part No.          | Qty | Description                           | Item | Part No.   | Qty | Description            |
|------|-------------------|-----|---------------------------------------|------|------------|-----|------------------------|
|      | <b>FOP0000252</b> |     | <b>Tandem 8-Hole Highway LH 2 Tie</b> |      |            |     |                        |
| 2    | F000007636        | 2   | . Plate, Spacer                       | 14   | WES0006250 | 16  | . Washer               |
| 3    | F000008003        | 2   | . Hub & Spindle Assy.                 | 16   | TIR0000002 | 2   | . Tire & Wheel         |
| 4    | 199594W           | 16  | . Hex Nut                             |      | WHL0106897 | 1   | . Wheel F/Highway Tire |
| 5    | R13809570         | 2   | . Jam Nut                             |      | TIR7501608 | 1   | . Highway Tire         |
| 6    | NMS0007125        | 2   | . Nut, Truss Rod                      | 18   | 901675     | 1   | . Bar, Spacer          |
| 7    | 901626            | 1   | . Wheel Mount                         | 20   | R13807958  | 11  | . Capscrew             |
| 8    | RD00708601        | 1   | . Rod, Truss                          | 21   | Y18C-1032  | 5   | . Capscrew             |

Rev D

# Tire & Wheel 8-Hole Highway LH 2 Tie

## FOP0000253

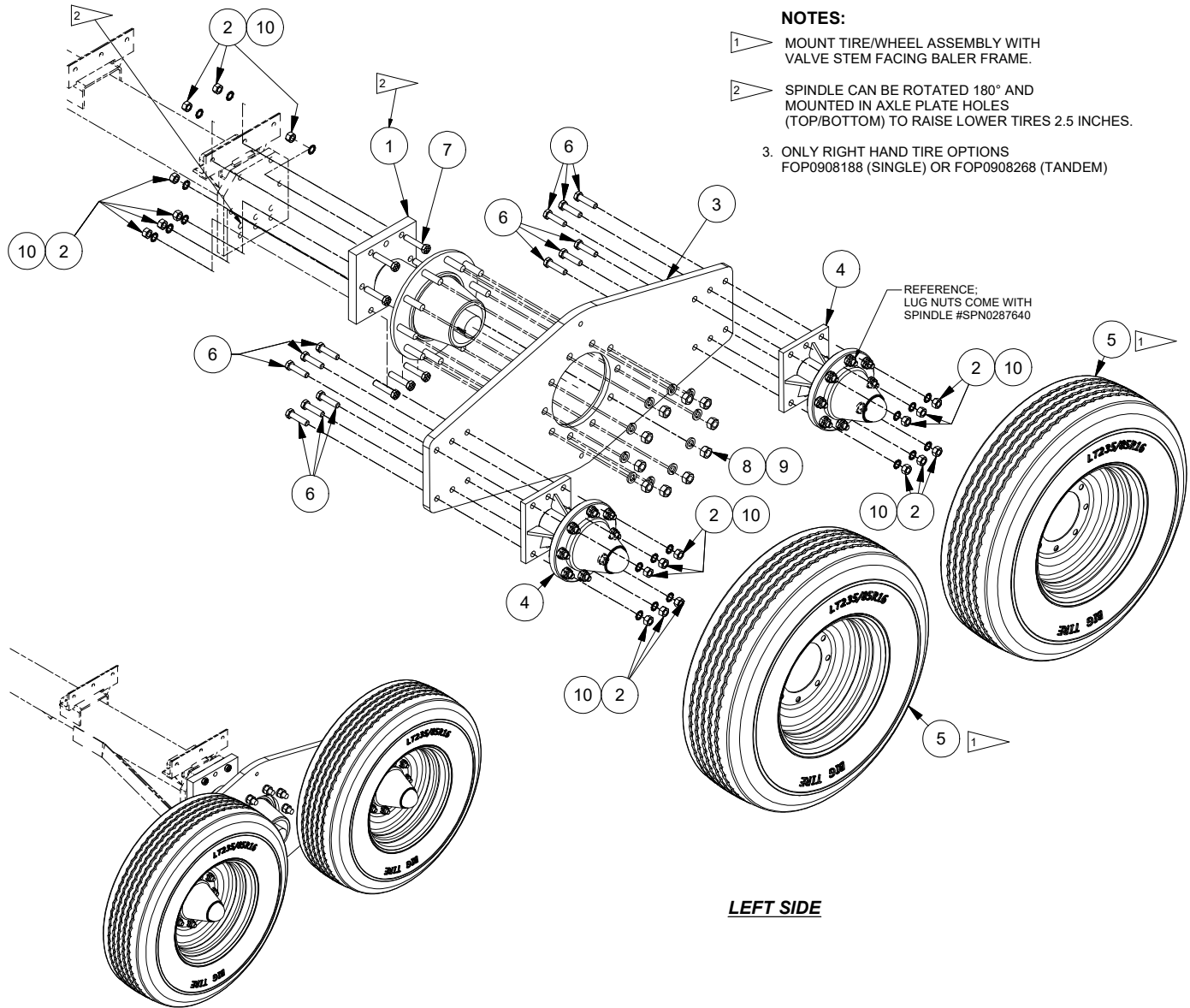

**NOTES:**

- 1 MOUNT TIRE/WHEEL ASSEMBLY WITH VALVE STEM FACING BALER FRAME
- 2 LUG BOLTS COME WITH HUB AND SPINDLE ASSEMBLY #F00008003

| Item   | Part No.   | Qty | Description              | Item | Part No.   | Qty | Description     |
|--|------------|-----|--------------------------|------|------------|-----|-----------------|
| <b>FOP0000253 Tire &amp; Wheel 8-Hole Highway LH 2 Tie</b> |            |     |                          |      |            |     |                 |
| 1  | TIR0000002 | 1   | . Tire & Wheel           | 4    | WES0006250 | 5   | . Washer        |
|  | WHL0106897 | 1   | . . Wheel F/Highway Tire | 6    | F000007636 | 2   | . Plate, Spacer |
|  | TIR7501608 | 1   | . . Highway Tire         | 8    | 221637W    | 5   | . Capscrew      |
| 2  | F000008003 | 1   | . Hub & Spindle Assy.    | 9    | 199594W    | 5   | . Hex Nut       |

# Tires and Wheels Walking Beam LH

## FOP0000259



| Item | Part No.          | Qty | Description                             | Item | Part No.   | Qty | Description  |
|------|-------------------|-----|---|------|------------|-----|--------------|
|      | <b>FOP0000259</b> |     | <b>Tires and Wheels Walking Beam LH</b> |      |            |     |              |
| 1    | SPN1024150        | 1   | . Hub & Spindle Assy                    | 6    | R13807958  | 12  | . Capscrew   |
| 2    | 199594W           | 19  | . Hex Nut                               | 7    | R13806355  | 7   | . Capscrew   |
| 3    | PLT0029905        | 1   | . Plate                                 | 8    | 221717W    | 10  | . Hex Nut    |
| 4    | SPN0287640        | 2   | . Spindle & Hub Assy                    | 9    | 200608     | 10  | . Lockwasher |
| 5    | TIR0000002        | 2   | . Tire & Wheel                          | 10   | WES0006250 | 19  | . Washer     |
|      | WHL0106897        | 1   | .. Wheel F/Highway Tire                 |      |            |     |              |
|      | TIR7501608        | 1   | .. Highway Tire                         |      |            |     |              |

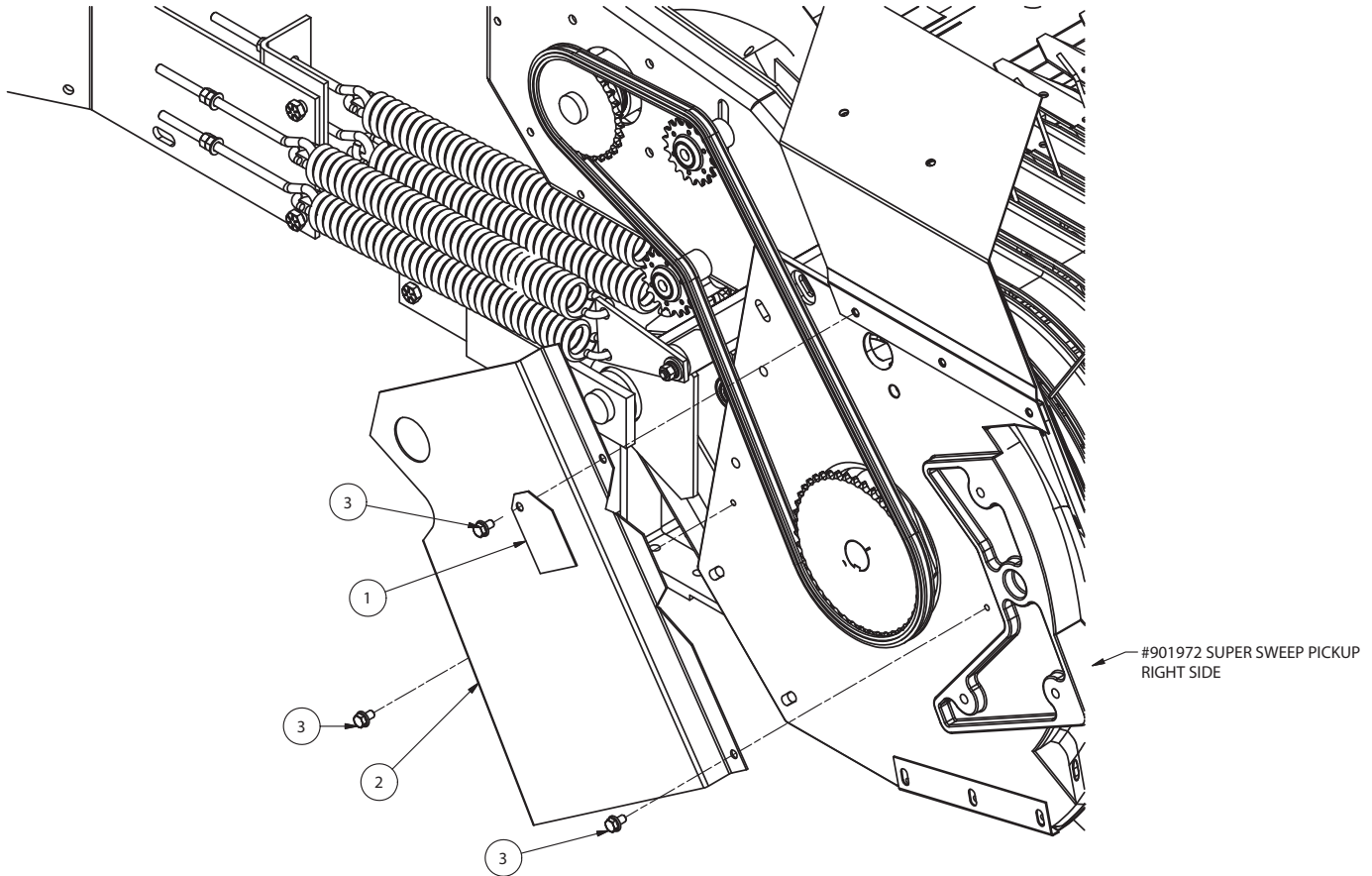
Rev N

## Section 3

### Shielding

|   |      |
|---|------|
| Shielding Installation, Pickup .....                          | 3-2  |
| Shielding Installation, LH 14" Chamber .....                  | 3-3  |
| Shielding Installation LH, Hydro & Engine, 16" .....          | 3-4  |
| Shielding Assembly, Pick Up Drive .....                       | 3-7  |
| Shielding Installation, Feed Arm / Connecting Rod, 14" .....  | 3-8  |
| Shielding Installation, Feed Arm / Connecting Rod, 16" .....  | 3-9  |
| Shielding Installation, Knotter / Drive Arm .....             | 3-10 |
| Shielding Installation, Feed House, W/Decals, 280 .....       | 3-11 |
| Shielding Installation, Feed House, W/Decals, 285 .....       | 3-13 |
| Shielding Installation, Belt, Engine .....                    | 3-15 |
| .Shield Assembly, Belt, Engine .....                          | 3-16 |
| Shielding Installation, Belt, PTO .....                       | 3-17 |
| .Shielding Assembly, Belt, PTO .....                          | 3-18 |
| Shielding Installation, Belt, Hydro .....                     | 3-19 |
| .Shield Assembly, Belt, Hydro .....                           | 3-20 |
| Shield Installation, Top Chamber, Hydro .....                 | 3-21 |
| Shielding Installation, Meter Wheel .....                     | 3-22 |
| Bullgear Shield Installation, Hydro/Driveling/SP Balers ..... | 3-23 |

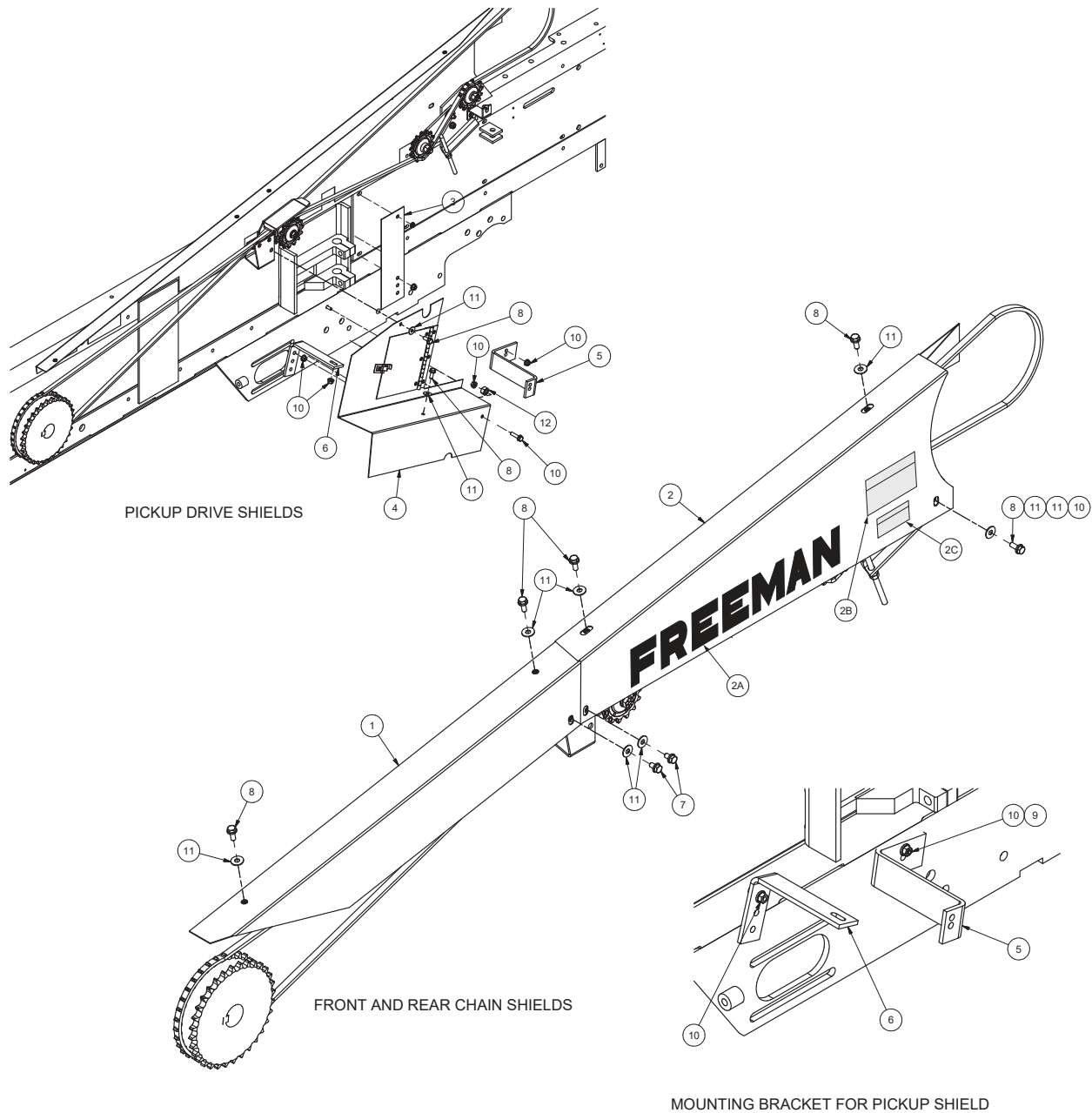
# Shielding Installation, Pickup



| Item | Part No.      | Qty | Description                           | Item | Part No. | Qty | Description |
|------|---------------|-----|---------------------------------------|------|----------|-----|-------------|
|      | <b>902810</b> |     | <b>Shielding Installation, Pickup</b> |      |          |     |             |
| 1    | CVR0022648    | 1   | . Plate, Cover                        |      |          |     |             |
| 2    | SHD0023680    | 1   | . Auger Drive Chain Shield            |      |          |     |             |
| 3    | SMS0000198    | 3   | . Bolt                                |      |          |     |             |

Rev A

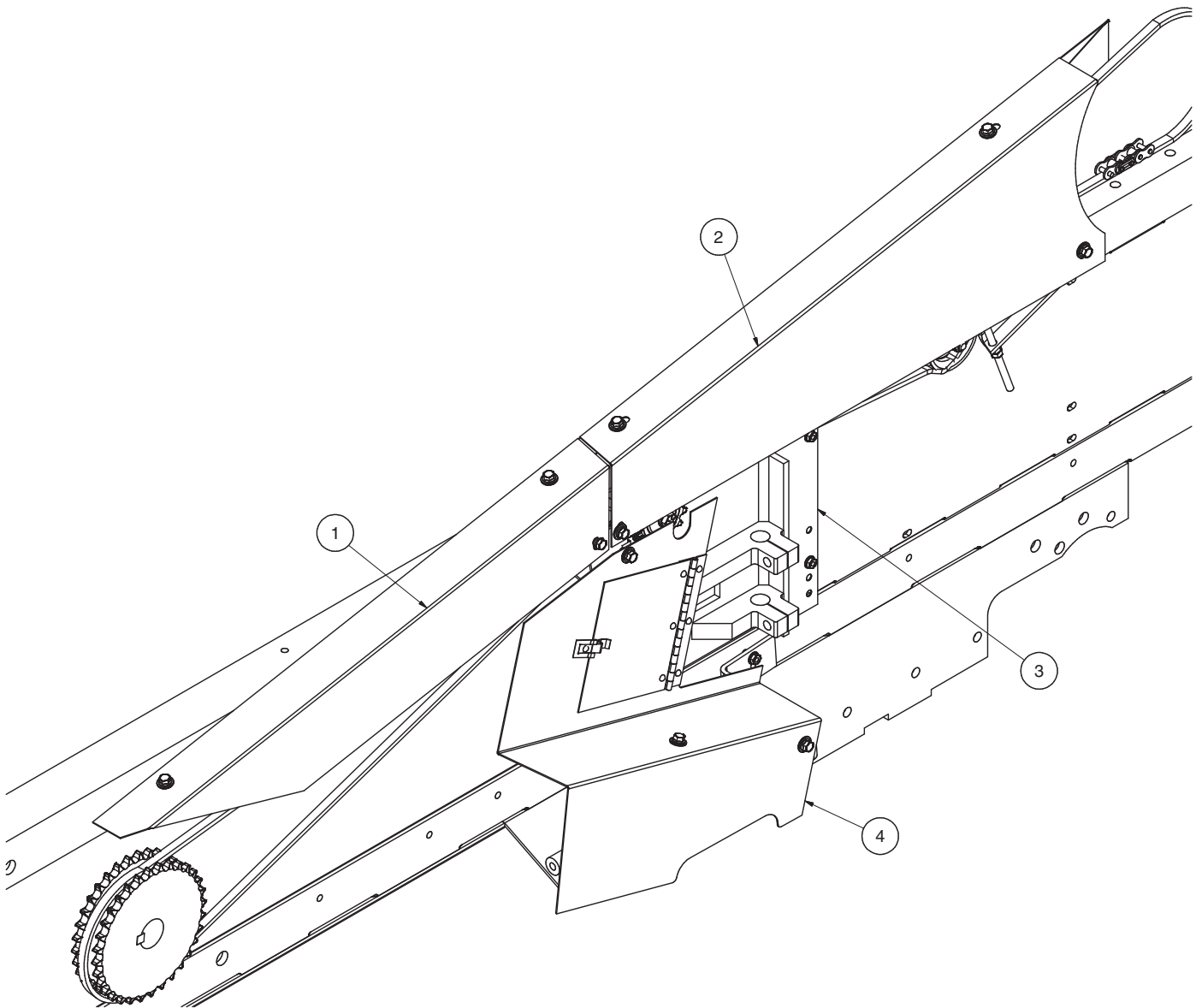
# Shielding Installation, LH, 14" Chamber



| Item  | Part No.   | Qty | Description                        | Item | Part No.   | Qty | Description    |
|---|------------|-----|------------------------------------|------|------------|-----|----------------|
| <b>905143 Shielding Installation, Lh, 14" Chamber</b> |            |     |                                    |      |            |     |                |
| 1   | F000008152 | 1   | . Plate, Shield                    | 6    | BKT0008037 | 1   | . Bracket, Fnt |
| 2   | 903181     | 1   | . Plate, Shield                    | 7    | SMS0000198 | 2   | . Bolt         |
| 2A  | FD00007112 | 1   | .. Decal "FREEMAN", Red            | 8    | SMS0000184 | 7   | . Bolt         |
| 2B  | FD00023581 | 1   | .. Decal "Caution: Shut Off..."    | 9    | SMS0000177 | 1   | . Bolt         |
| 2C  | FD00023572 | 1   | .. Decal "Shields Are For Your..." | 10   | SMS0000815 | 1   | . Bolt         |
| 3   | COV0008038 | 1   | . Plate, Cover                     | 11   | 223428     | 16  | . Washer       |
| 4   | 905164     | 1   | . Shield Assembly, 14" Chm         | 12   | 221711     | 1   | . Flange       |
| 5   | BKT0008024 | 1   | . Bracket, Rear                    | 13   | 00273802   | 13  | . Nut          |

# Shielding Installation LH, Hydro & Engine, 16"

Page 1 of 3



| Item   | Part No.     | Qty | Description                        | Item | Part No.   | Qty | Description      |
|--|--------------|-----|------------------------------------|------|------------|-----|------------------|
| <b>902809 Shielding Installation, LH, Bullgear</b> |              |     |                                    |      |            |     |                  |
| 1  | F000008152   | 1   | . Plate, Shield                    | 8    | BKT0008037 | 1   | . Bracket, Front |
| 2  | 903181       | 1   | . Plate, Shield w/Decals           | 9    | SMS0000198 | 2   | . Screw          |
| 2a   | FD00007112   | 1   | .. Decal, Freeman                  | 10   | SMS0000184 | 8   | . Screw          |
| 2b   | FD00023581   | 1   | .. Decal, Caution - Shut Off Motor | 11   | 223428     | 12  | . Washer         |
| 2c   | FD00023572   | 1   | .. Decal, Caution- Keep Shields... | 12   | 00273802   | 7   | . Nut, Serrated  |
| 3  | COV0008038   | 1   | . Plate, Cover                     | 13   | NCC0003125 | 7   | . Nut, Cage      |
| 4  | * SHD0008040 | 1   | . Shield, Pickup Drive Belt        |      |            |     |                  |
| 7  | BKT0008024   | 1   | . Bracket, Rear                    |      |            |     |                  |

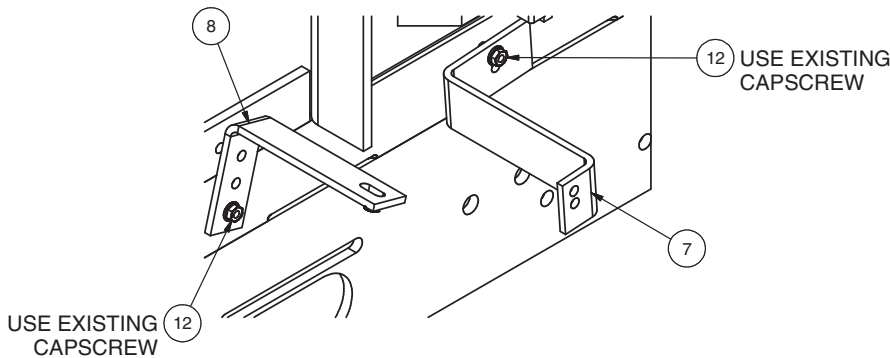
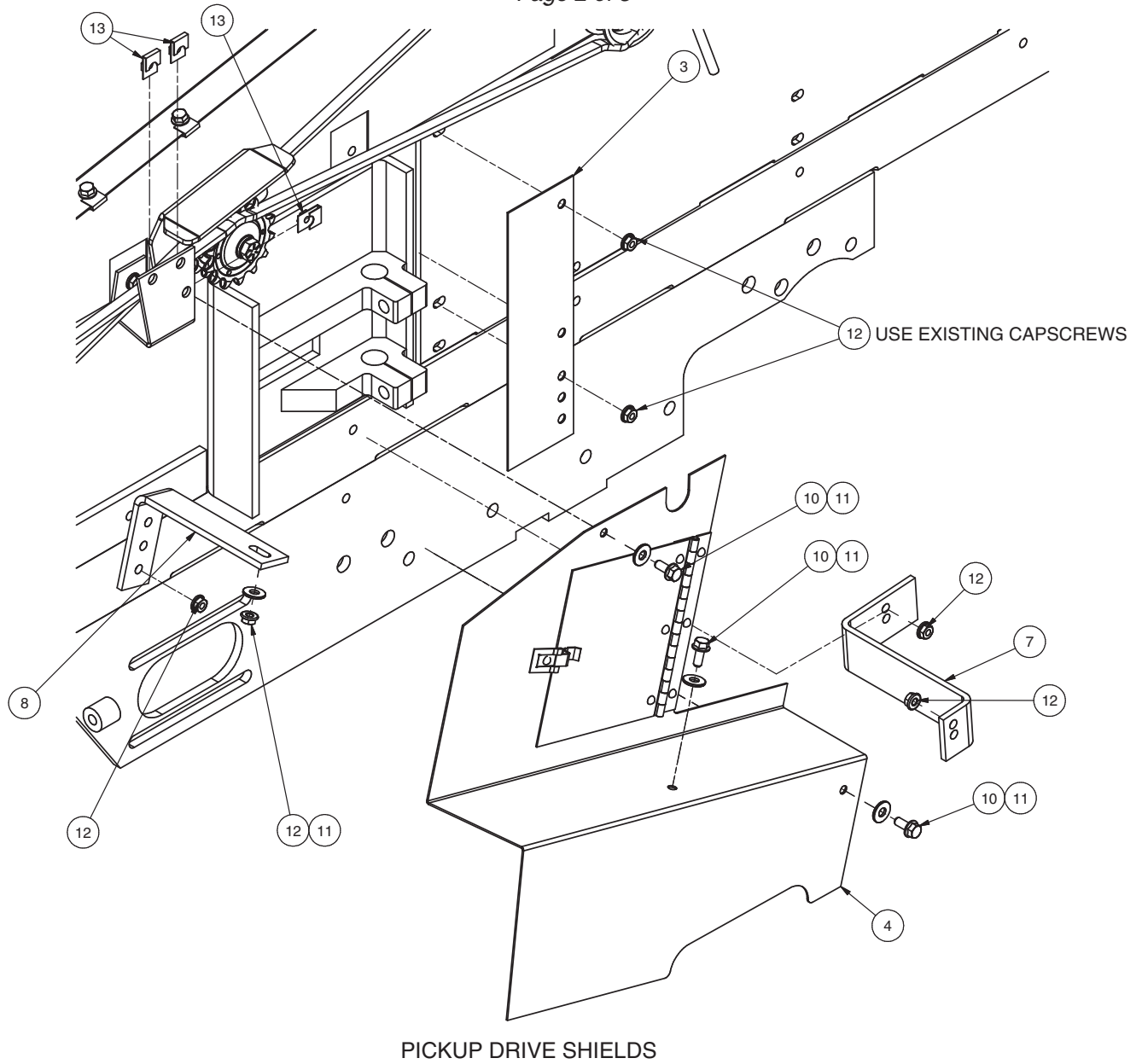
\* See Separate Coverage (Page 3-7)

Rev D



# Shielding Installation LH, Hydro & Engine, 16"

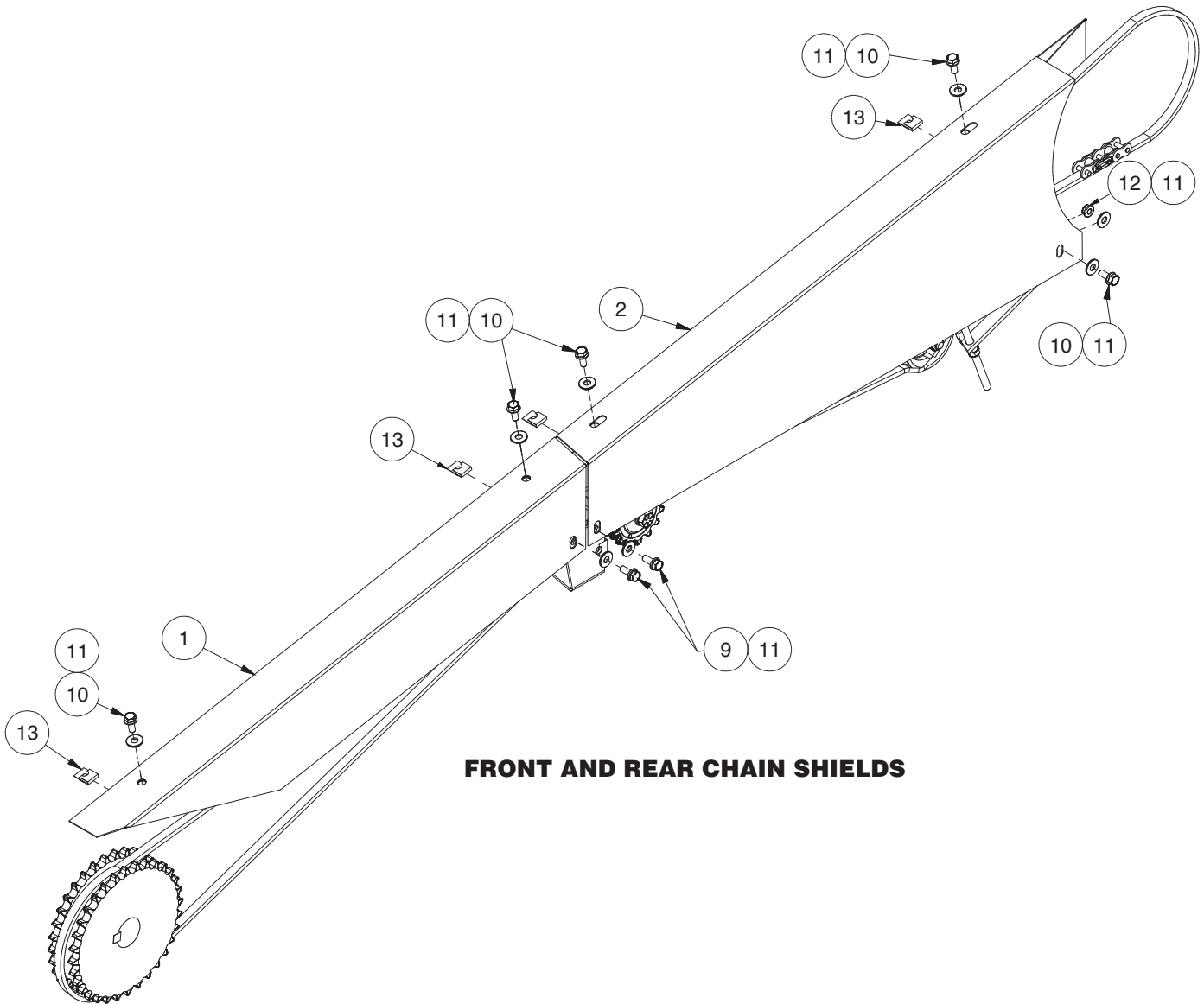
Page 2 of 3



## MOUNTING BRACKETS FOR PICKUP SHIELD

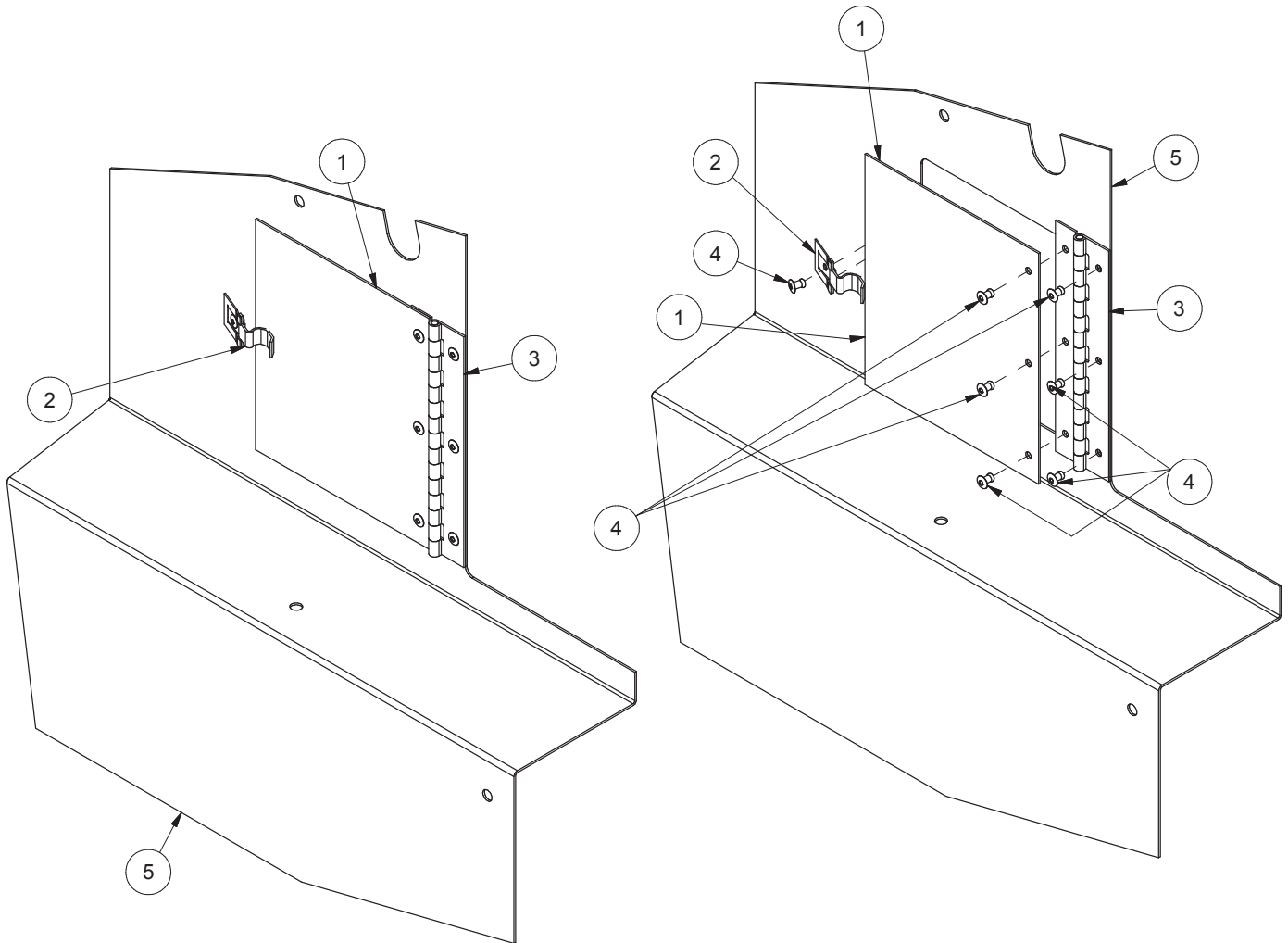
# Shielding Installation LH, Hydro & Engine, 16"

Page 3 of 3



**FRONT AND REAR CHAIN SHIELDS**

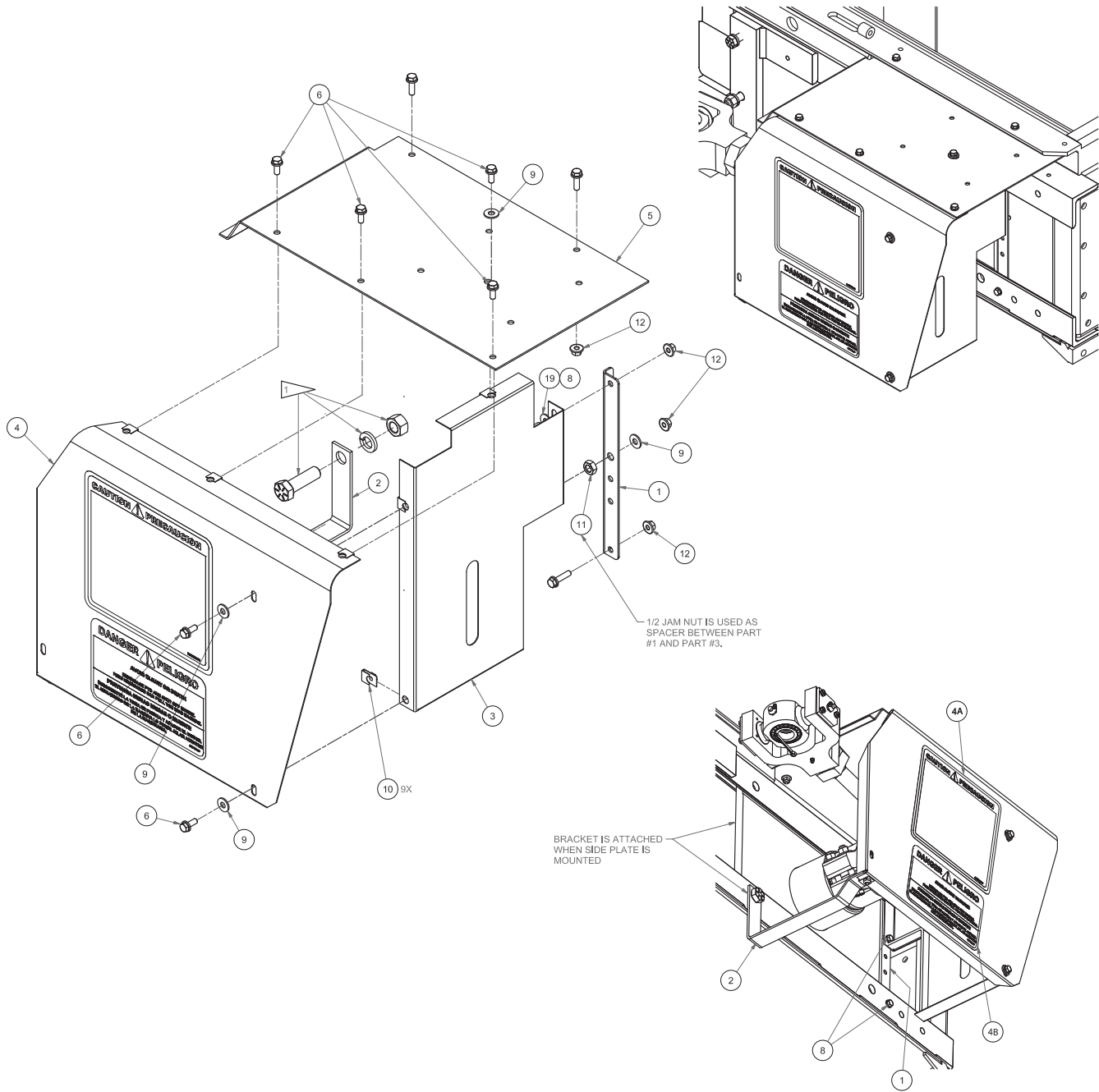
## Shielding Assembly, Pick Up Drive



| Item              | Part No.   | Qty | Description               | Item                   | Part No. | Qty | Description |
|-------------------|------------|-----|---------------------------|------------------------|----------|-----|-------------|
| <b>SHD0008040</b> |            |     |                           | <b>Shield Assembly</b> |          |     |             |
| 1                 | DRW0008025 | 1   | . Cover Plate             |                        |          |     |             |
| 2                 | F000006108 | 1   | . Catch, Inspection Cover |                        |          |     |             |
| 3                 | HNG0007094 | 1   | . Hinge                   |                        |          |     |             |
| 4                 | RIV0000604 | 7   | . Rivet                   |                        |          |     |             |
| 5                 | SHD0008026 | 1   | . Plate, Shield           |                        |          |     |             |

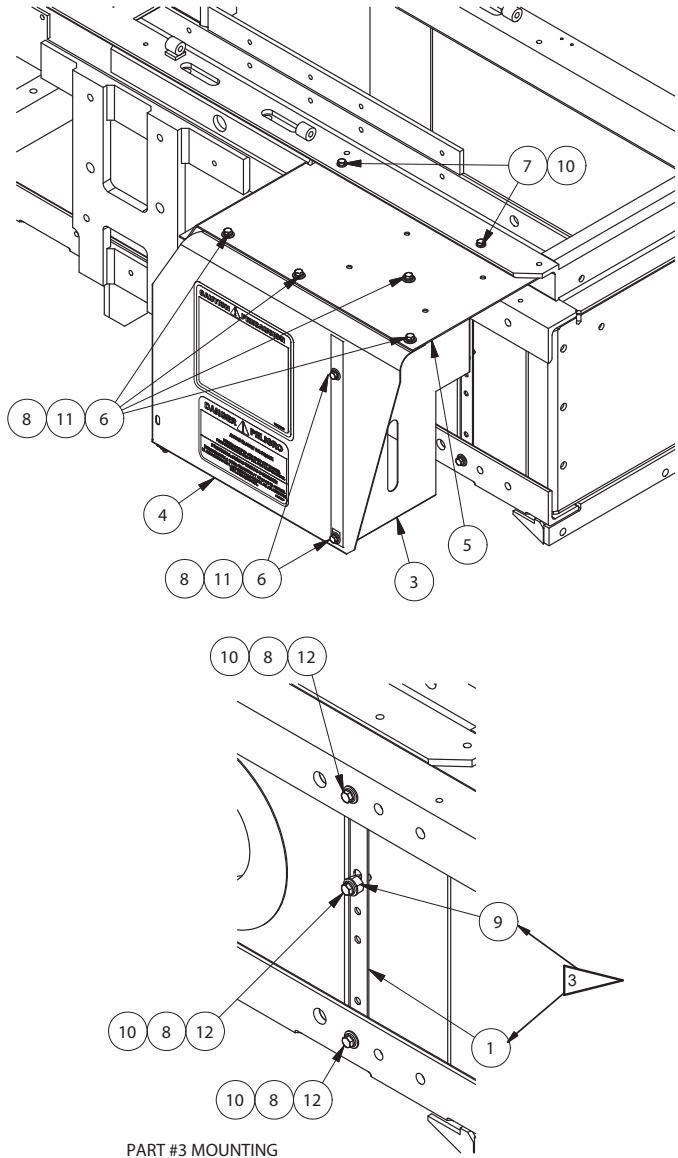
Rev B

# Shielding Installation, Feed Arm / Connecting Rod, 14"



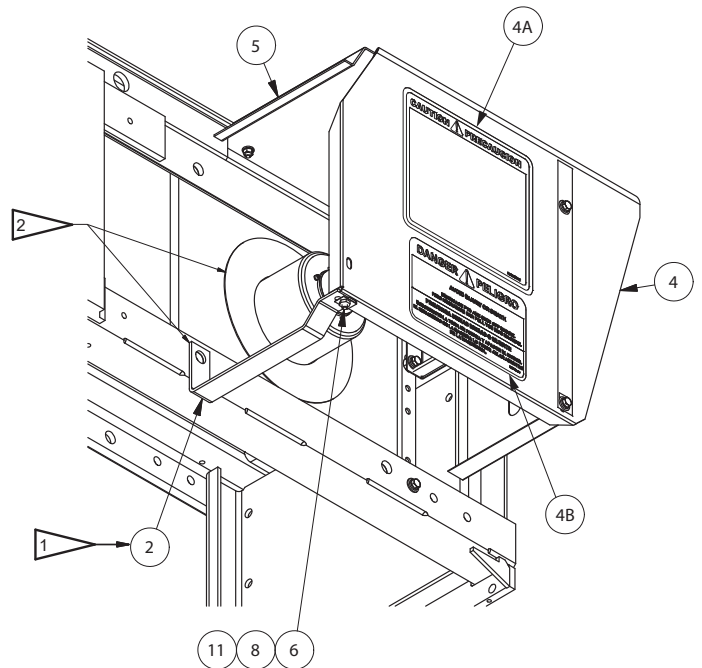
| Item  | Part No.   | Qty | Description                       | Item | Part No.   | Qty | Description |
|---|------------|-----|-----------------------------------|------|------------|-----|-------------|
| <b>905201 Shielding Installation, Feed Arm/Con Rod (14" Engine)</b> |            |     |                                   |      |            |     |             |
| 1   | 905200     | 1   | . Plate, Fnt                      | 6    | SMS0000184 | 7   | . Bolt      |
| 2   | SHD037328B | 1   | . Bar, Brace                      | 7    | SMS0000177 | 2   | . Bolt      |
| 3   | 903984     | 1   | . Shield, Crank Arm               | 8    | SMS0000815 | 3   | . Bolt      |
| 4   | 903319     | 1   | . Crank Arm Shield w/Decal        | 9    | 223428     | 6   | . Washer    |
| 4A  | FD00023473 | 1   | .. Decal, "Caution"               | 10   | NCC0003125 | 7   | . Nut       |
| 4B  | FD00025126 | 1   | .. Decal, "Pickup Hazard Warning" | 11   | 221711W    | 1   | . Nut       |
| 5   | SHD0007002 | 1   | . Plate, Shield                   | 12   | 00273802   | 5   | . Nut       |

## Shielding Installation, Feed Arm / Connecting Rod, 16"



NOTES:

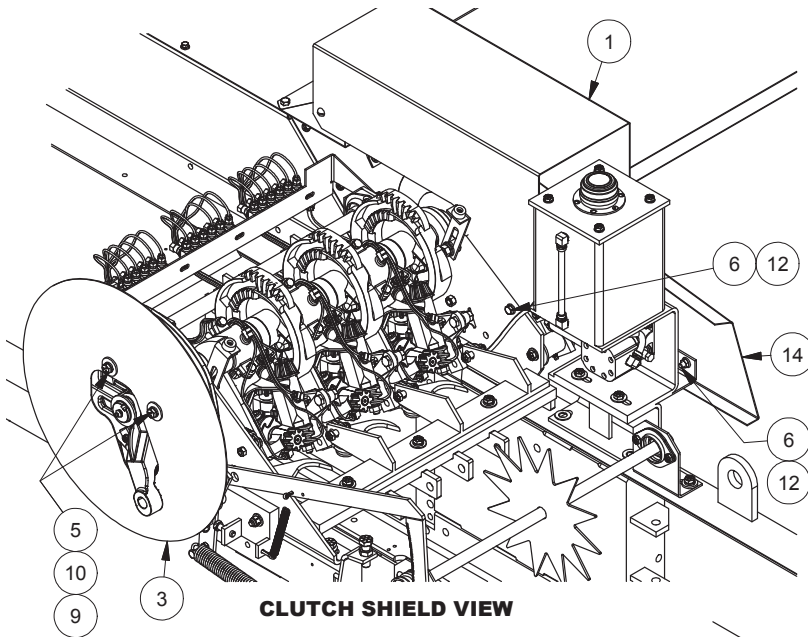
- 1. INSTALL ITEM #2 DURING BULL GEAR INSTALLATION.
- 2. BRACKET IS ATTACHED WHEN SIDE PLATE IS MOUNTED.
- 3. 1/2" NUT IS USED AS SPACER BETWEEN PART #1 AND PART #3.



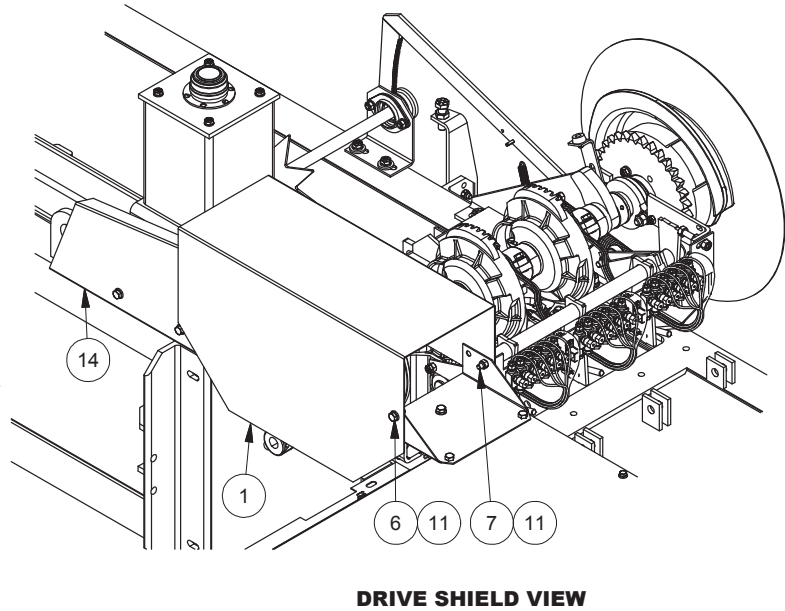
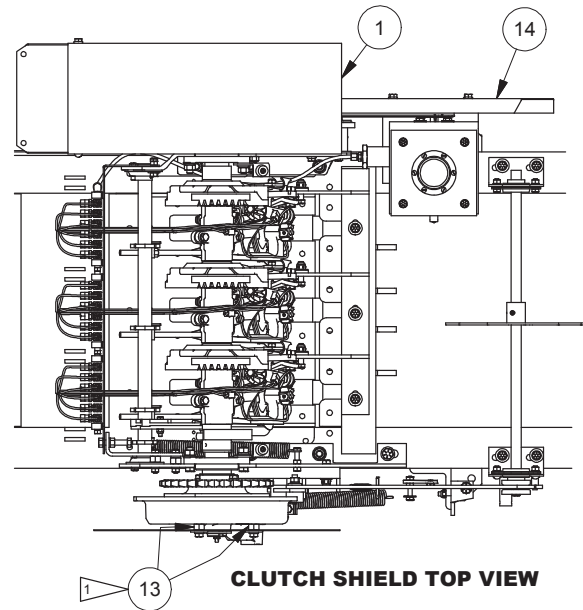
| Item  | Part No.   | Qty | Description                       | Item | Part No.   | Qty | Description |
|---|------------|-----|-----------------------------------|------|------------|-----|-------------|
| <b>902811 Shielding Installation, Feed Arm/Conn Rod, Bullgear</b> |            |     |                                   |      |            |     |             |
| 1   | SHD0006906 | 1   | . Plate, Mounting                 | 7    | SMS0000177 | 2   | . Bolt      |
| 2   | SHD0016332 | 1   | . Plate, Brace                    | 8    | 223428     | 10  | . Washer    |
| 3   | 903984     | 1   | . Shield, Crank Arm               | 9    | 221711W    | 1   | . Nut       |
| 4   | 903319     | 1   | . Crank Arm Shield w/Decal        | 10   | 00273802   | 5   | . Nut       |
| 4A  | FD00023473 | 1   | .. Decal, "Caution"               | 11   | NCC0003125 | 7   | . Nut       |
| 4B  | FD00025126 | 1   | .. Decal, "Pickup Hazard Warning" | 12   | SMS0000815 | 3   | . Bolt      |
| 5   | SHD0007002 | 1   | . Shield                          |      |            |     |             |
| 6   | SMS0000184 | 7   | . Bolt                            |      |            |     |             |

Rev E

# Shielding Installation, Knotter / Drive Arm



**NOTE:**  
 1 1/2" HEX NUT USED BETWEEN SHIELD AND CLUTCH AS SPACER

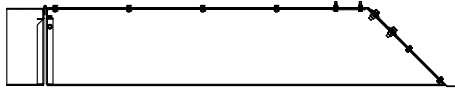


| Item                                 | Part No.   | Qty | Description                        | Item | Part No.   | Qty | Description     |
|--------------------------------------|------------|-----|------------------------------------|------|------------|-----|-----------------|
| <b>902812 Shielding Installation</b> |            |     |                                    |      |            |     |                 |
| 1                                    | 903287     | 1   | . Plate, RH Shield w/Decal         | 10   | R13812514  | 2   | . Lockwasher    |
| 1A                                   | FD00023581 | 1   | . . Decal, Caution, Shut Off Motor | 11   | 232939     | 2   | . Nut, Esna     |
| 3                                    | F000007987 | 1   | . Knotter Clutch Shield            | 12   | 00273802   | 3   | . Nut, Serrated |
| 5                                    | 16805W     | 2   | . Capscrew                         | 13   | 221711W    | 2   | . Hex Nut       |
| 6                                    | SMS0000184 | 4   | . Bolt, Whiz                       | 14   | F000008203 | 1   | . Plate, Shield |
| 7                                    | 235240     | 1   | . Screw, Machine                   |      |            |     |                 |
| 9                                    | 223427     | 2   | . Washer, Hard                     |      |            |     |                 |

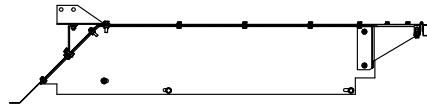
Rev D

## Shielding Installation, Feed House, W/Decals, 280

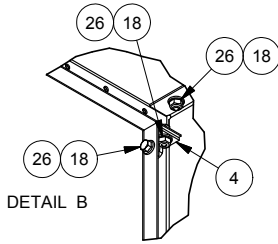
Page 1 of 2



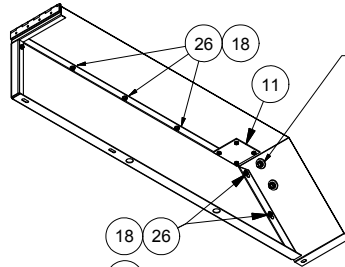
SECTION A-A



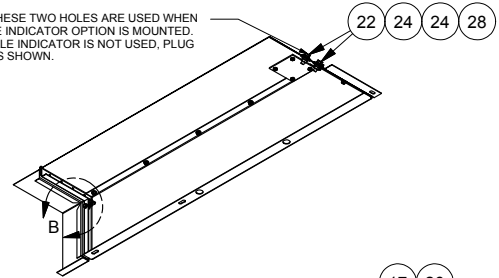
SECTION C-C



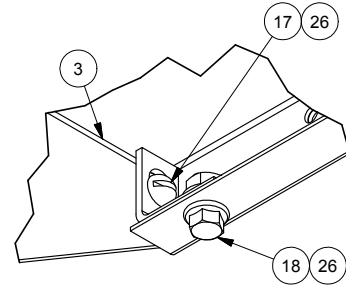
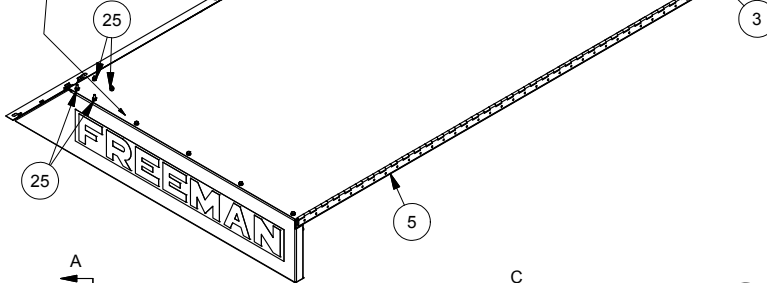
DETAIL B



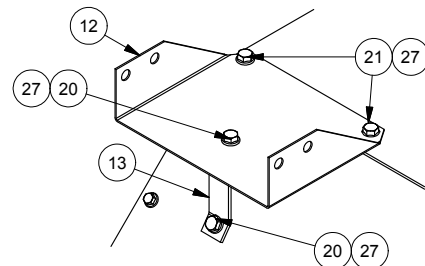
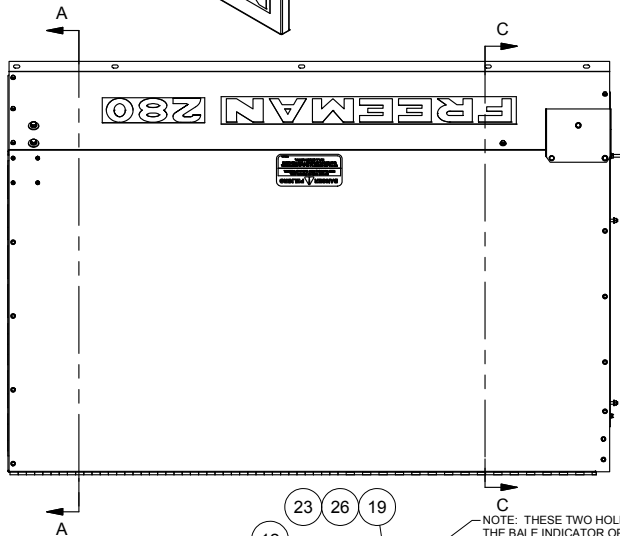
NOTE: THESE TWO HOLES ARE USED WHEN THE BALE INDICATOR OPTION IS MOUNTED. WHEN BALE INDICATOR IS NOT USED, PLUG HOLES AS SHOWN.



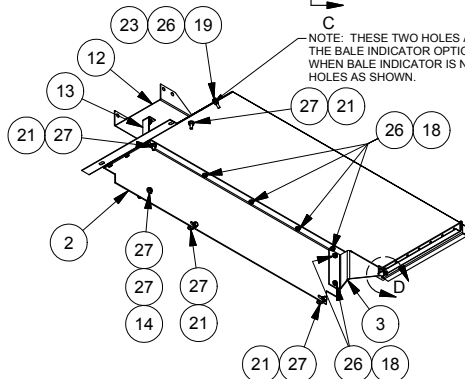
WHEN MOUNTING PART #12 THE LONGER BOLT IS LOCATED HERE.



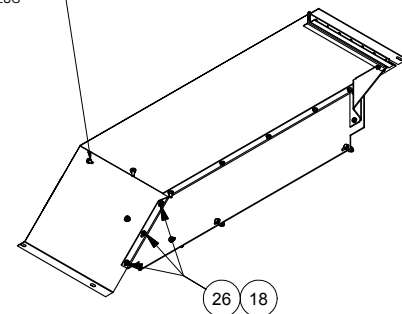
DETAIL D



KNOTTER DRIVE SHIELD BRACKET

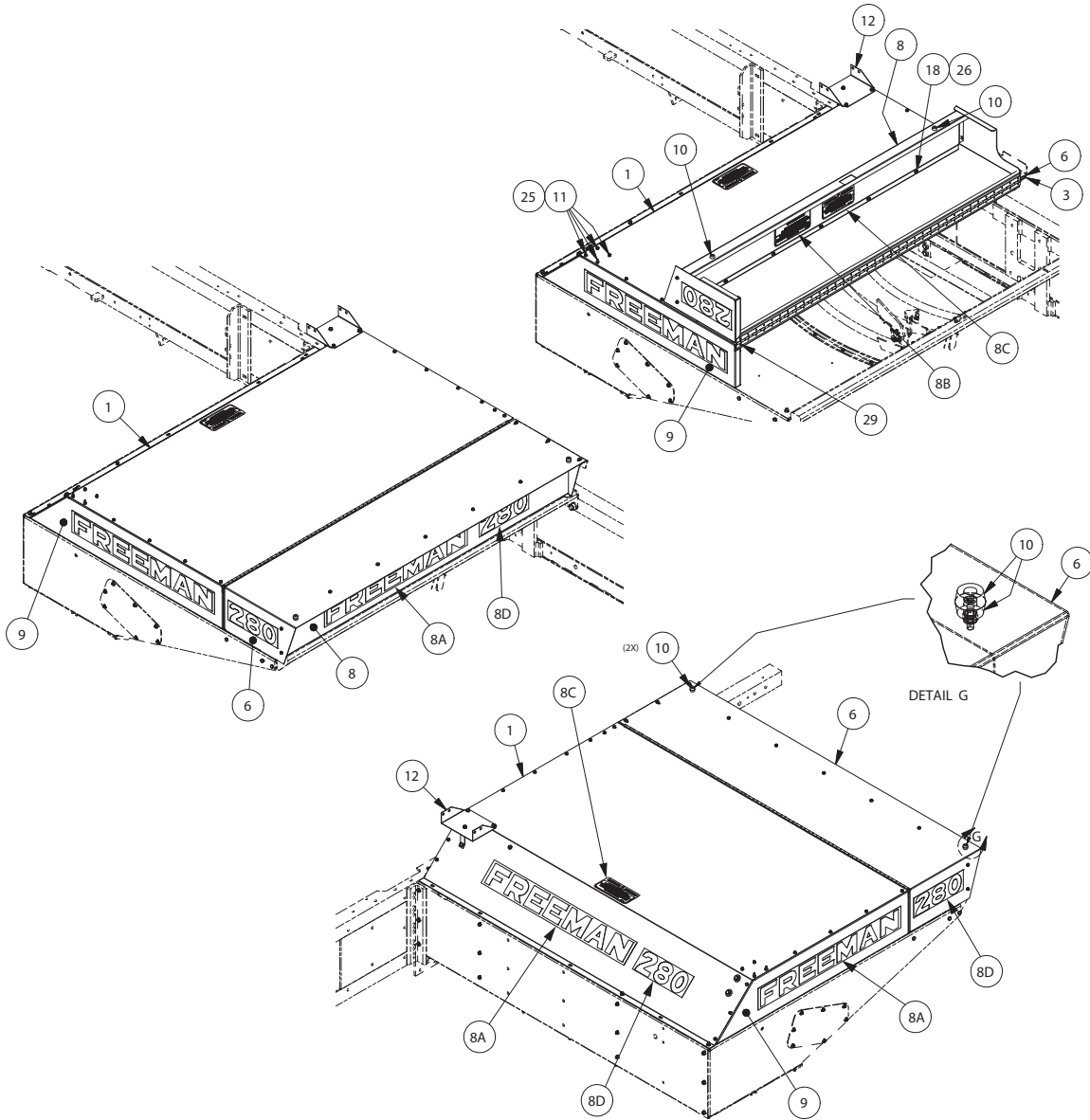


NOTE: THESE TWO HOLES ARE USED WHEN THE BALE INDICATOR OPTION IS MOUNTED. WHEN BALE INDICATOR IS NOT USED, PLUG HOLES AS SHOWN.



# Shielding Installation, Feed House, W/Decals, 280

Page 2 of 2



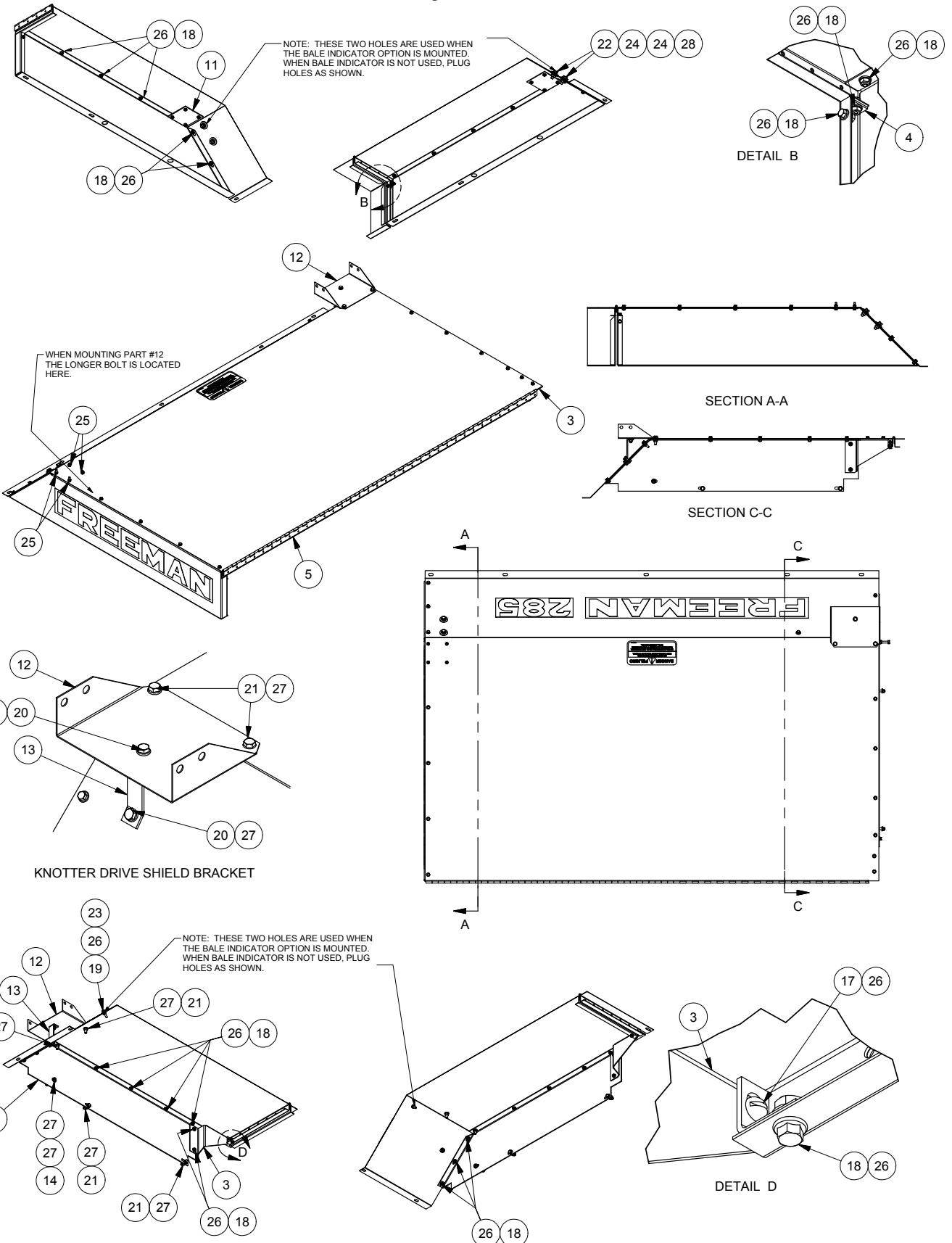
| Item | Part No.      | Qty | Description                           | Item | Part No.     | Qty | Description     |
|------|---------------|-----|---------------------------------------|------|--------------|-----|-----------------|
|      | <b>904087</b> |     | <b>Shielding Inst,Feed House, 280</b> |      |              |     |                 |
| 1    | 903321        | 1   | . Shield & Decal, Rear Pickup         | 14   | R13811017    | 1   | . Capscrew      |
| 2    | SHD0017231    | 1   | . Plate, LH Shield                    | 15   | SMS0000190   | 2   | . Screw         |
| 3    | SUP0017230    | 1   | . Plate, Shield                       | 16   | 00100768     | 2   | . Machine Screw |
| 4    | SUP0017229    | 2   | . Bracket                             | 17   | R13804248    | 1   | . Machine Screw |
| 5    | HNG0020856    | 1   | . Hinge                               | 18   | SMS000017332 |     | . Bolt          |
| 6    | 904172        | 1   | . Shield & Decal, Top Front Section   | 19   | SMS0000305   | 1   | . Bolt          |
| 7    | SHD037321D    | 1   | . Plate, Front Shield                 | 20   | SMS0000184   | 2   | . Bolt          |
| 8    | 903309        | 1   | . Shield & Decal, Face Plate          | 21   | SMS0000177   | 4   | . Bolt          |
| 8A   | FD00007114    | 3   | .. Decal; "FREEMAN"                   | 22   | 174413W      | 2   | . Screw         |
| 8B   | FD00025126    | 1   | .. Decal; "Avoid Injury or Death..."  | 23   | 223428       | 1   | . Flat Washer   |
| 8C   | FD00023575    | 2   | .. Decal; "Danger! Do Not Ride..."    | 24   | 223427       | 4   | . Flat Washer   |
| 8D   | FD00000280    | 3   | .. Decal; "280"                       | 25   | R13811189    | 4   | . Locknut       |
| 9    | 903288        | 1   | . Shield & Decal, Rear Sec Pickup     | 26   | 09416918     | 34  | . Nut           |
| 10   | BMP0004243    | 6   | . Bumper, Rubber                      | 27   | 00273802     | 8   | . Nut           |
| 11   | BKT037150A    | 1   | . Bracket, RH                         | 28   | 09411507     | 2   | . Nut           |
| 12   | F000007579    | 1   | . Bracket-Needle Yoke Drive Arm       | 29   | RIV0000108   | 72  | . Rivet         |
| 13   | F000007654    | 1   | . Bracket                             | 30   | 223799       | 2   | . Nut           |

Rev D



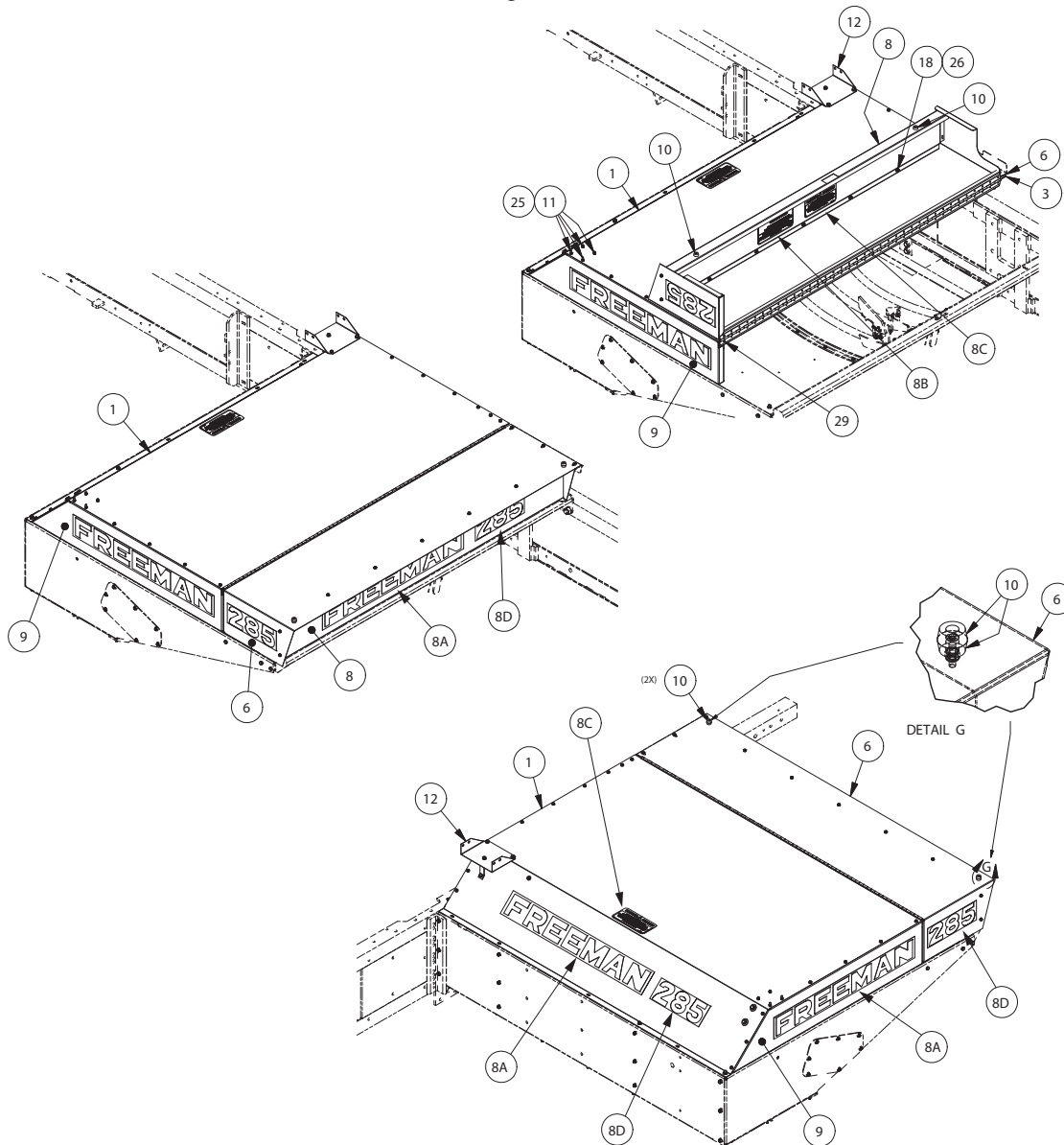
### Shielding Installation, Feed House, W/Decals, 285

Page 1 of 2



# Shielding Installation, Feed House, W/Decals, 285

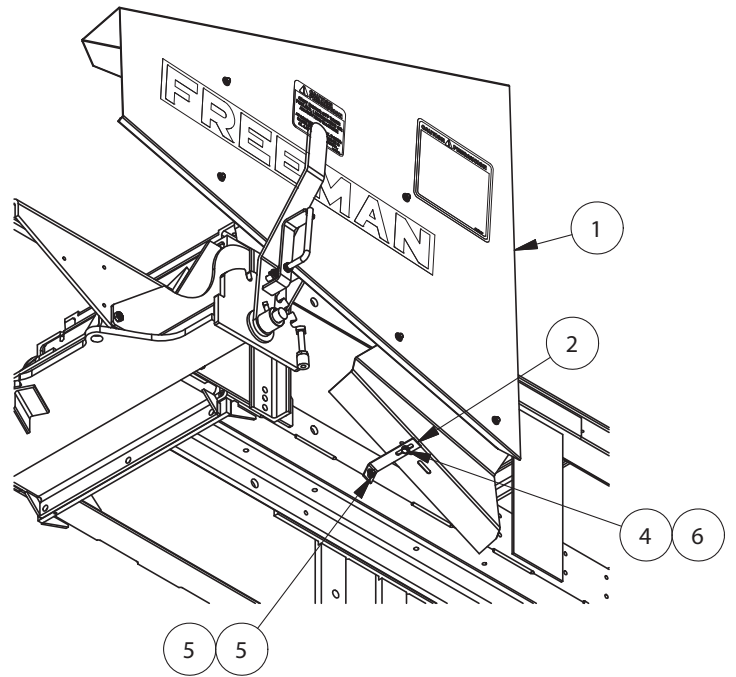
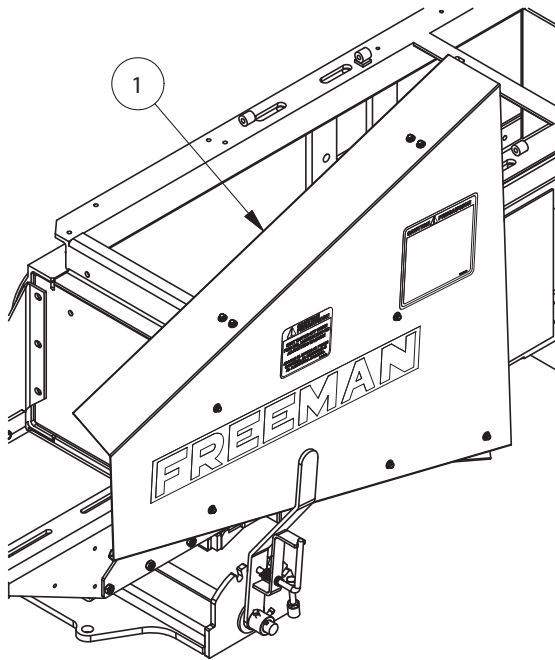
Page 2 of 2



| Item | Part No.      | Qty | Description                            | Item | Part No.     | Qty | Description     |
|------|---------------|-----|--|------|--------------|-----|-----------------|
|      | <b>904088</b> |     | <b>Shielding Inst, Feed House, 285</b> |      |              |     |                 |
| 1    | 903322        | 1   | . Shield & Decal, Rear Pickup          | 14   | R13811017    | 1   | . Capscrew      |
| 2    | SHD0017231    | 1   | . Plate, LH Shield                     | 15   | SMS0000190   | 2   | . Screw         |
| 3    | SUP0017230    | 1   | . Plate, Shield                        | 16   | 00100768     | 2   | . Machine Screw |
| 4    | SUP0017229    | 2   | . Bracket                              | 17   | R13804248    | 1   | . Machine Screw |
| 5    | HNG0020856    | 1   | . Hinge                                | 18   | SMS000017332 | 1   | . Bolt          |
| 6    | 904173        | 1   | . Shield & Decal, Top Front Section    | 19   | SMS0000305   | 1   | . Bolt          |
| 7    | SHD037321D    | 1   | . Plate, Front Shield                  | 20   | SMS0000184   | 2   | . Bolt          |
| 8    | 903310        | 1   | . Shield & Decal, Face Plate           | 21   | SMS0000177   | 4   | . Bolt          |
| 8A   | FD00007114    | 3   | .. Decal; "FREEMAN"                    | 22   | 174413W      | 2   | . Screw         |
| 8B   | FD00025126    | 1   | .. Decal; "Avoid Injury or Death..."   | 23   | 223428       | 1   | . Flat Washer   |
| 8C   | FD00023575    | 2   | .. Decal; "Danger! Do Not Ride..."     | 24   | 223427       | 4   | . Flat Washer   |
| 8D   | FD00000285    | 3   | .. Decal; "285"                        | 25   | R13811189    | 4   | . Locknut       |
| 9    | 903288        | 1   | . Shield & Decal, Rear Sec Pickup      | 26   | 09416918     | 34  | . Nut           |
| 10   | BMP0004243    | 6   | . Bumper, Rubber                       | 27   | 00273802     | 8   | . Nut           |
| 11   | BKT037150A    | 1   | . Bracket, RH                          | 28   | 09411507     | 2   | . Nut           |
| 12   | F000007579    | 1   | . Bracket-Needle Yoke Drive Arm        | 29   | RIV0000108   | 72  | . Rivet         |
| 13   | F000007654    | 1   | . Bracket                              | 30   | 223799       | 2   | . Nut           |

Rev D

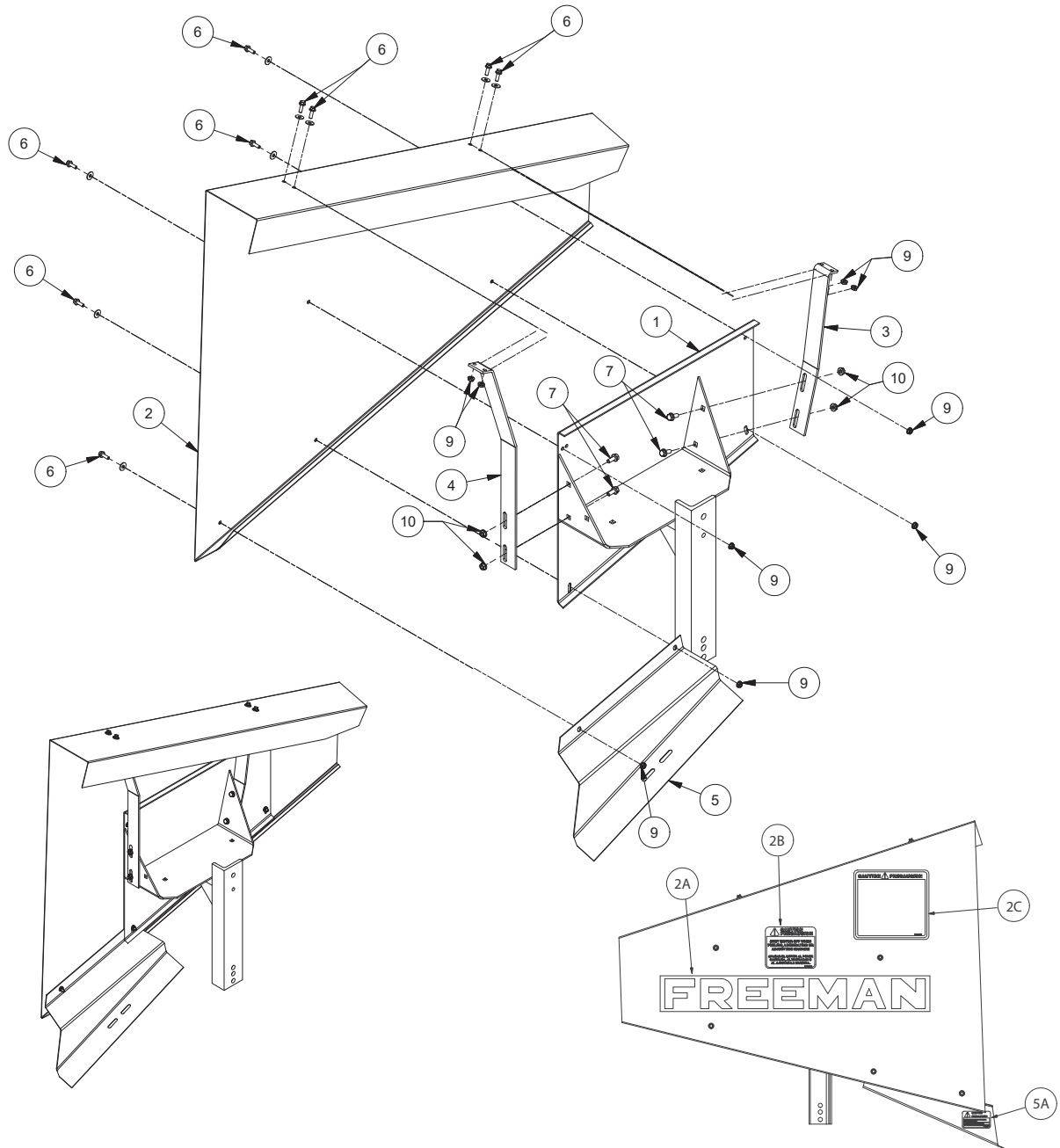
# Shielding Installation, Belt, Engine



| Item                                       | Part No.   | Qty | Description                | Item                               | Part No.  | Qty | Description  |
|--|------------|-----|----------------------------|------------------------------------|-----------|-----|--------------|
| <b>902813 Shielding Installation, Belt</b> |            |     |                            |                                    |           |     |              |
| 1  | *a 902240  | 1   | . Shield Subassembly, Belt | 5                                  | R13812512 | 1   | . Lockwasher |
| 2  | 903790     | 1   | . Bracket, Mounting        | 6                                  | 00273802  | 1   | . Nut        |
| 3  | SMS0000173 | 1   | . Bolt, Whiz               |                                    |           |     |              |
| 4  | SMS0000184 | 1   | . Bolt, Whiz               | *a See Separate Coverage Page 3-16 |           |     |              |

Rev B

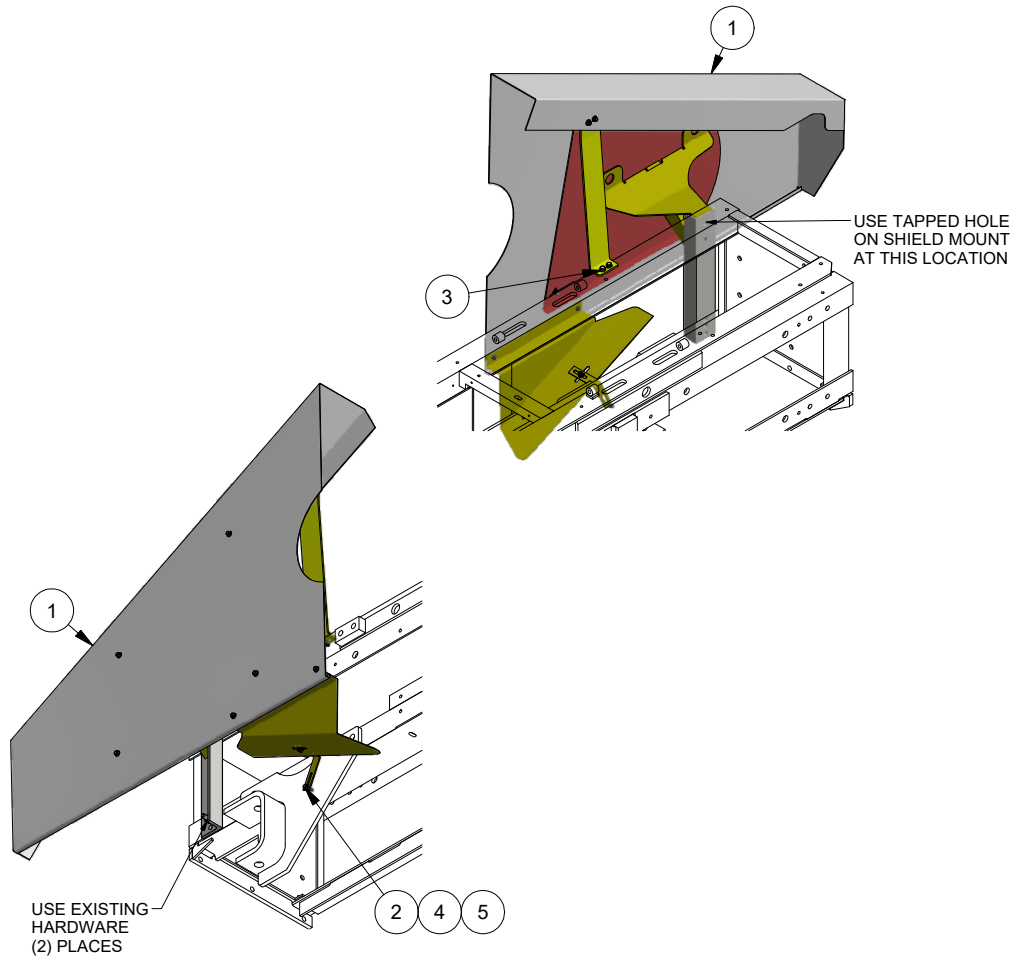
# Shield Assembly, Belt, Engine



| Item                                   | Part No.   | Qty | Description                           | Item | Part No.   | Qty | Description                            |
|--|------------|-----|---------------------------------------|------|------------|-----|--|
| <b>902240 Shield Subassembly, Belt</b> |            |     |                                       |      |            |     |  |
| 1                                      | BKT0017814 | 1   | . Bracket                             | 5    | 903281     | 1   | . Belt Shield Extension w/Decals       |
| 2                                      | 903175     | 1   | . Plate, Shield w/Decals              | 5A   | FD00023572 | 1   | .. Decal; "Caution Shields Are For..." |
| 2A                                     | FD00007114 | 1   | .. Decal; "FREEMAN"                   | 6    | 399741W    | 9   | . Screw                                |
| 2B                                     | FD00023581 | 1   | .. Decal; "Caution Shut Motor Off..." | 7    | SMS0000177 | 4   | . Bolt                                 |
| 2C                                     | FD00023473 | 1   | .. Decal; "Caution Keep Shields..."   | 8    | R13811443  | 9   | . Washer                               |
| 3                                      | BRC0025469 | 1   | . Plate, Front                        | 9    | 09416918   | 9   | . Nut                                  |
| 4                                      | BRC0028437 | 1   | . Plate, Rear                         | 10   | 00273802   | 4   | . Nut                                  |

Rev D

# Shielding Installation, Belt, PTO

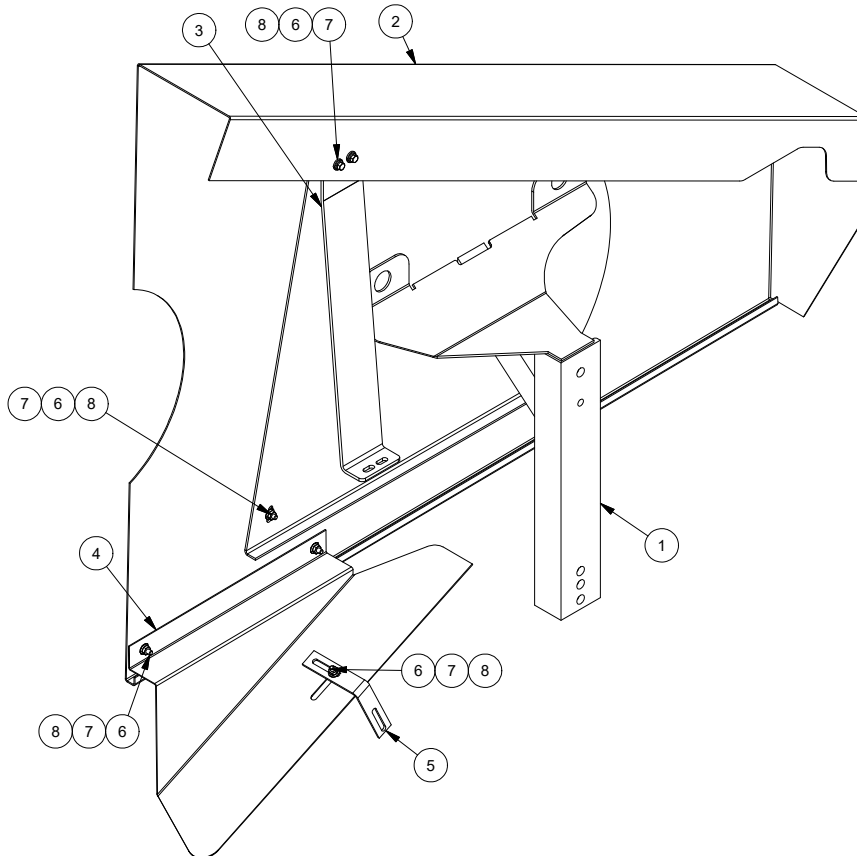


| Item | Part No.      | Qty | Description                              | Item | Part No. | Qty | Description |
|------|---------------|-----|--|------|----------|-----|-------------|
|      | <b>910315</b> |     | <b>Shielding Installation, Belt, PTO</b> |      |          |     |             |
| 1    | *a 910317     | 1   | . Shielding Assembly, Belt, PTO          | 4    | 221763W  | 1   | . Washer    |
| 2    | SMS0000305    | 1   | . Screw, Ser Flg                         | 5    | 264150W  | 1   | . Nut       |
| 3    | 2305631W      | 2   | . Screw, Ser Flg                         |      |          |     |             |

\*a See Separate Coverage

Rev -

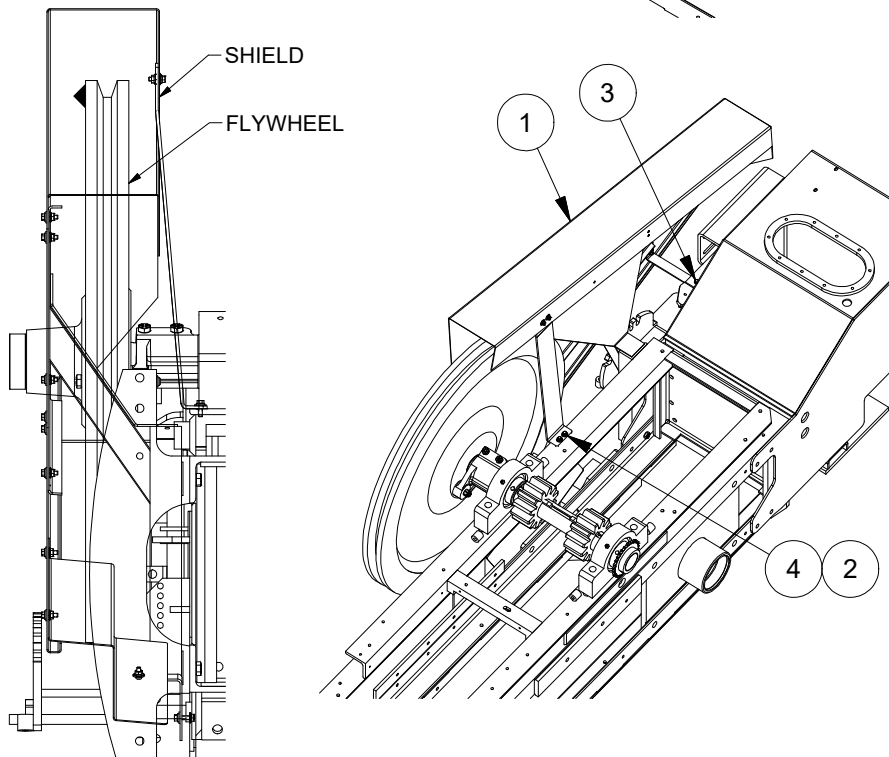
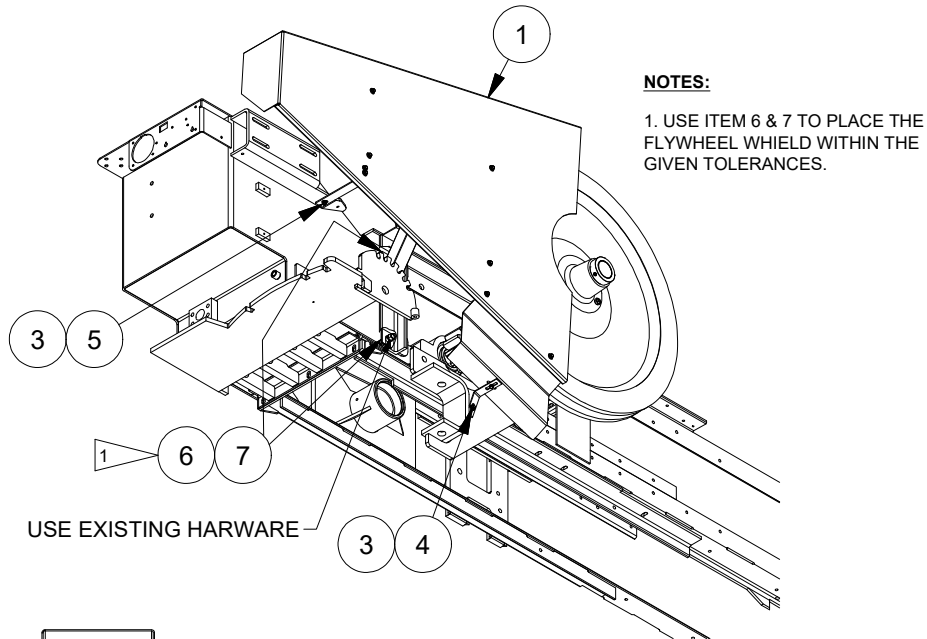
# Shielding Assembly, Belt, PTO



| Item | Part No.      | Qty | Description                          | Item | Part No. | Qty | Description      |
|------|---------------|-----|--------------------------------------|------|----------|-----|------------------|
|      | <b>910317</b> |     | <b>Shielding Assembly, Belt, PTO</b> |      |          |     |                  |
| 1    | 904104        | 1   | . Bracket Weldment                   | 5    | 903790   | 1   | . Bracket        |
| 2    | 904102        | 1   | . Plate, Shield                      | 6    | 399741W  | 9   | . Screw, Ser Flg |
| 3    | 910319        | 1   | . Plate, Support Bkt                 | 7    | 221763W  | 9   | . Washer         |
| 4    | 904108        | 1   | . Plate, Shield Ext                  | 8    | 264150W  | 9   | . Nut            |

Rev -

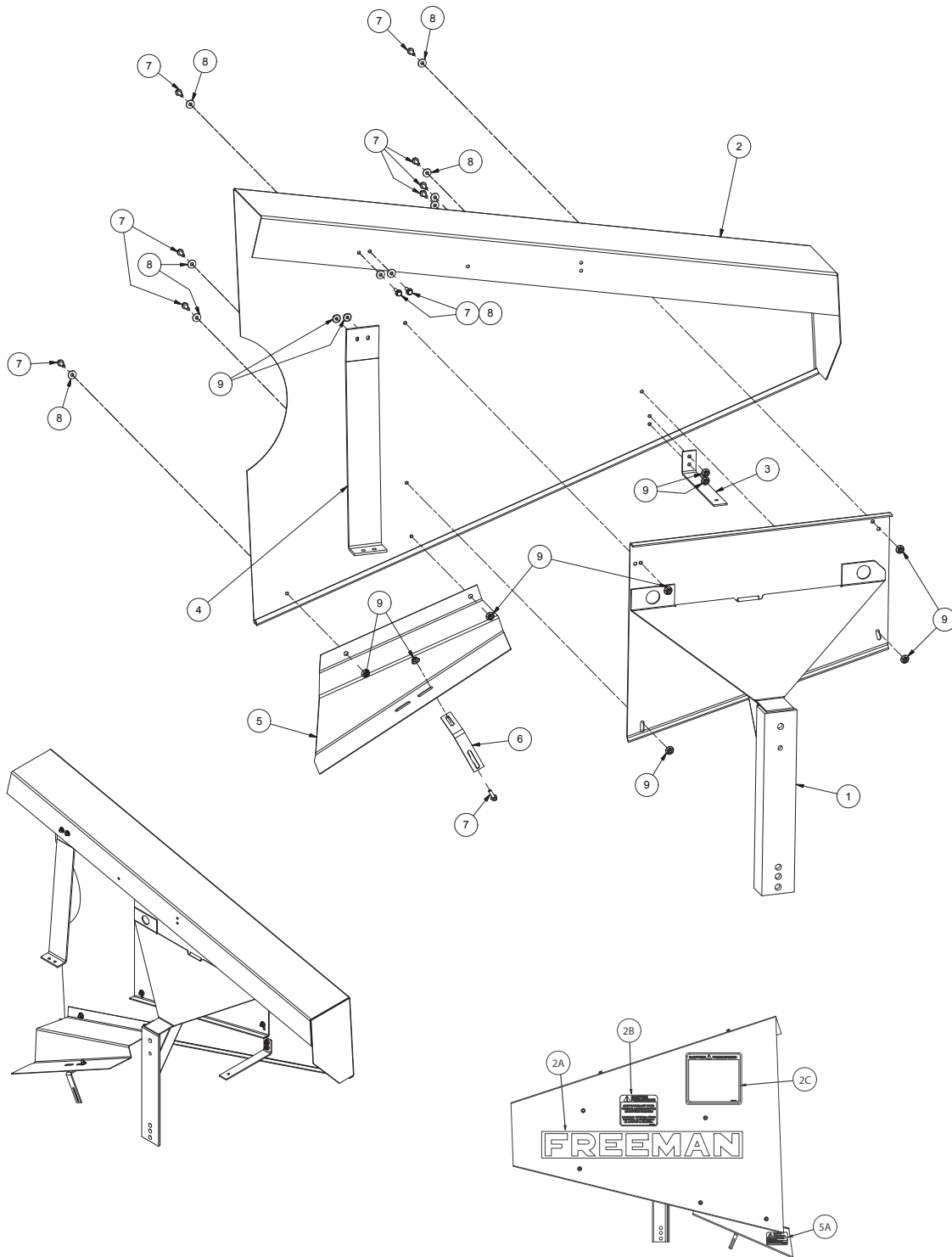
### Shielding Installation, Belt, Hydro



| Item | Part No.      | Qty | Description                           | Item | Part No.   | Qty | Description |
|------|---------------|-----|---------------------------------------|------|------------|-----|-------------|
|      | <b>910314</b> |     | <b>Installation, Shielding - Belt</b> |      |            |     |             |
| 1    | *a 910316     | 1   | . Assembly, Drive Belt Shd            | 6    | SHM0163090 | 2   | . Shim      |
| 2    | 399741W       | 2   | . Screw, Ser Flg                      | 7    | SHM0163092 | 2   | . Shim      |
| 3    | SMS0000305    | 2   | . Screw, Ser Flg                      |      |            |     |             |
| 4    | R13811443     | 3   | . Washer                              |      |            |     |             |
| 5    | 264150W       | 2   | . Nut                                 |      |            |     |             |

\*a See Sperate Coverage Page 3-20

# Shield Assembly, Belt, Hydro

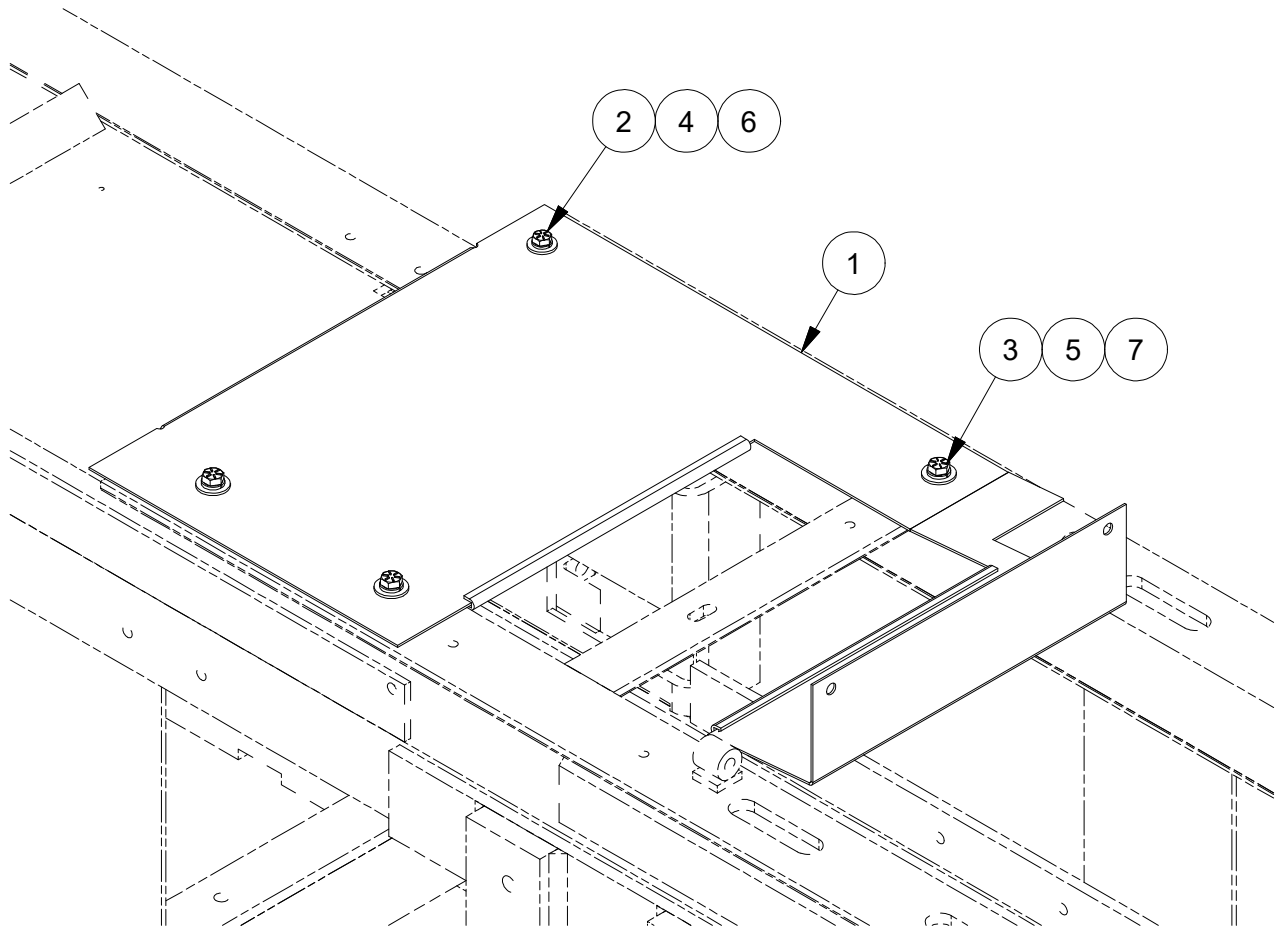


| Item                                   | Part No.   | Qty | Description                           | Item | Part No.   | Qty | Description                            |
|--|------------|-----|---------------------------------------|------|------------|-----|--|
| <b>902815 Shield Sub Assembly,Belt</b> |            |     |                                       |      |            |     |  |
| 1                                      | 901725     | 1   | . Bracket                             | 5    | SHD0011063 | 1   | . Plate, Shield                        |
| 2                                      | 903276     | 1   | . Plate, Shield W/Decals              | 5A   | FD00023572 | 1   | .. Decal; "Caution Shields Are For..." |
| 2A                                     | FD00007114 | 1   | .. Decal; "FREEMAN"                   | 6    | BKT0011131 | 1   | . Bracket                              |
| 2B                                     | FD00023581 | 1   | .. Decal; "Caution Shut Motor Off..." | 7    | 399741W    | 11  | . Screw                                |
| 2C                                     | FD00023473 | 1   | .. Decal; "Caution Keep Shields..."   | 8    | R13811443  | 10  | . Washer                               |
| 3                                      | 902403     | 1   | . Bracket, Support                    | 9    | 09416918   | 11  | . Nut                                  |
| 4                                      | 902440     | 1   | . Bracket                             |      |            |     |  |

Rev A

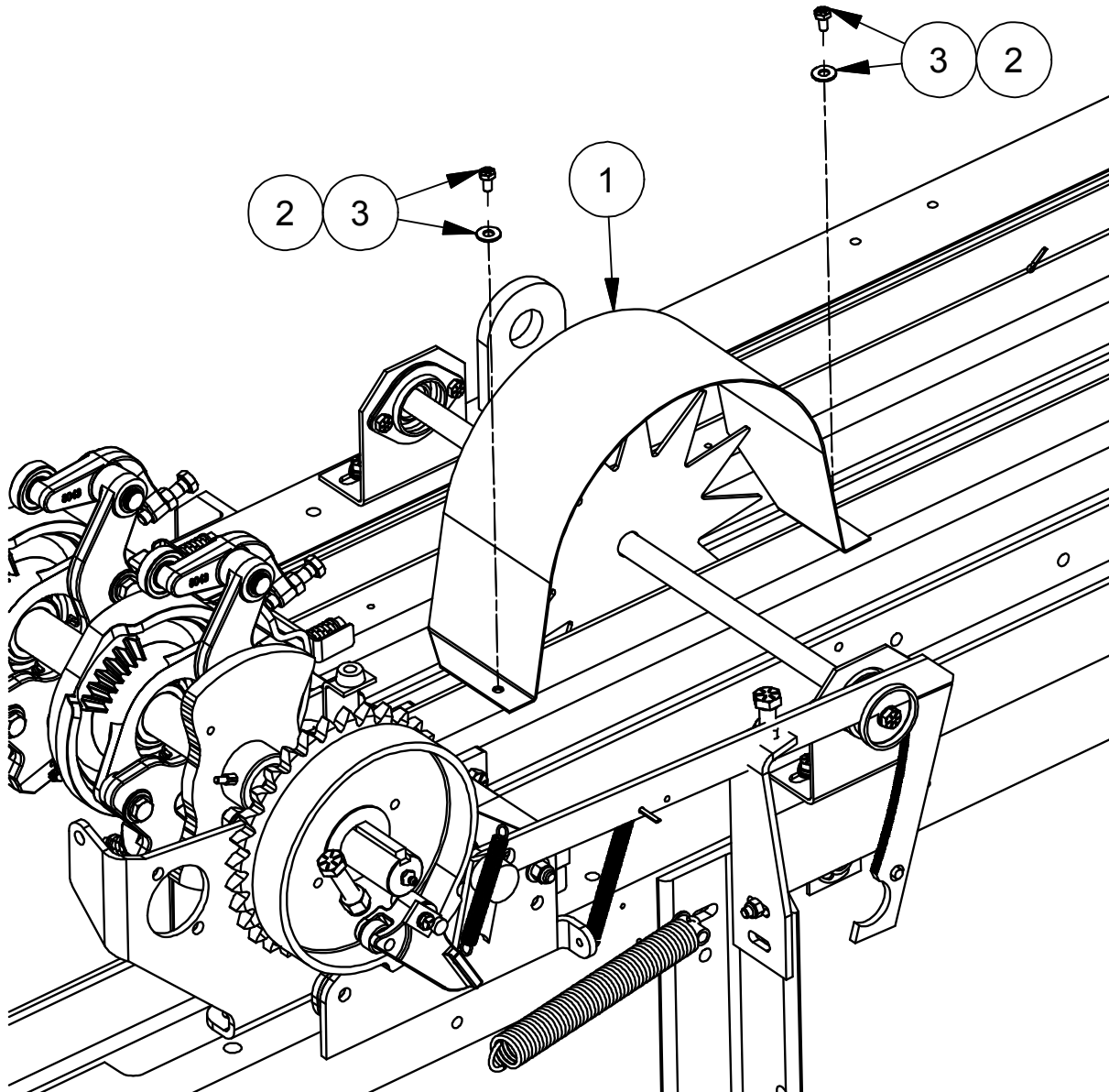


# Shielding Installation, Top Chamber, Hydro



| Item | Part No.      | Qty | Description                             | Item | Part No.  | Qty | Description  |
|------|---------------|-----|---|------|-----------|-----|--------------|
|      | <b>910261</b> |     | <b>Installation, Top Chamber Shield</b> |      |           |     |              |
| 1    | 910262        | 1   | . Assembly, Top Chm Shd                 | 5    | 15176W    | 3   | . Washer     |
| 2    | R13801791     | 1   | . Capscrew                              | 6    | R13812513 | 1   | . Lockwasher |
| 3    | 162572W       | 3   | . Capscrew                              | 7    | R13812514 | 3   | . Lockwasher |
| 4    | 223428        | 1   | . Washer                                |      |           |     |              |

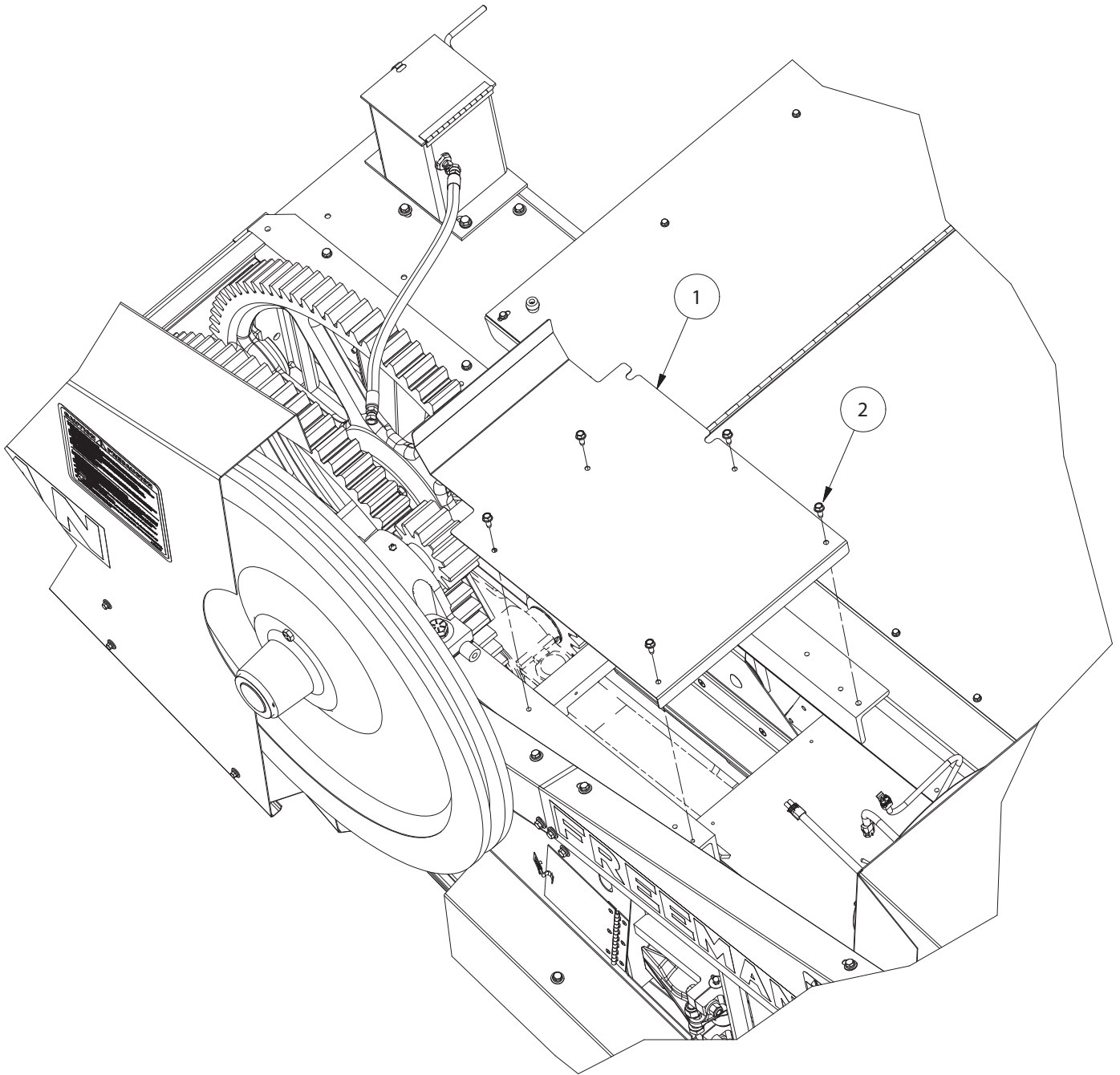
# Shielding Installation, Meter Wheel



| Item | Part No.      | Qty | Description                                | Item | Part No. | Qty | Description |
|------|---------------|-----|--|------|----------|-----|-------------|
|      | <b>906531</b> |     | <b>Shielding Installation, Meter Wheel</b> |      |          |     |             |
| 1    | F000001608    | 1   | . Shield, Meter Wheel                      |      |          |     |             |
| 2    | R13811443     | 1   | . Washer, Flat                             |      |          |     |             |
| 3    | R13810989     | 1   | . Capscrew                                 |      |          |     |             |

Rev A

# Bullgear Shield Installation, Hydro/Driveline/SP Balers



| Item                                | Part No.   | Qty | Description     | Item | Part No. | Qty | Description |
|-------------------------------------|------------|-----|-----------------|------|----------|-----|-------------|
| <b>Bullgear Shield Installation</b> |            |     |                 |      |          |     |             |
| 1                                   | SHD037388E | 1   | Bullgear Shield |      |          |     |             |
| 2                                   | SMS0000198 | 5   | Whiz Bolt       |      |          |     |             |

This page is intentionally left blank.

## Section 4

# Power Unit

|  |      |
|--|------|
| Engine Installation .....                        | 4-2  |
| . Engine Assembly .....                          | 4-3  |
| .. Manifold Assembly .....                       | 4-8  |
| .. Clutch.....                                   | 4-9  |
| .. Control Box Assembly.....                     | 4-11 |
| ... Module Assembly.....                         | 4-15 |
| . Air Cleaner Assembly.....                      | 4-16 |
| <br>   |      |
| Snorkel Installation .....                       | 4-17 |
| . Snorkel Assembly with Door .....               | 4-18 |
| . Side Support Bracket Assembly .....            | 4-19 |
| <br>   |      |
| Fuel Tank Installation, 30 Gallon .....          | 4-20 |
| . Fuel Tank Subassembly, 30 Gallon .....         | 4-21 |
| <br>   |      |
| Driveline PTO Installation, 2-Tie Bullgear ..... | 4-22 |
| . Driveline Assembly.....                        | 4-27 |

# Engine Installation

No illustration available at this time.

| Item | Part No.      | Qty | Description                | Item | Part No.   | Qty | Description          |
|------|---------------|-----|----------------------------|------|------------|-----|----------------------|
|      | <b>902475</b> |     | <b>Engine Installation</b> |      |            |     |                      |
| 1    | 252293        | 1   | . Muffler                  | 13   | 255118     | 1   | . Reducer, Insert    |
| 2    | CLP0035751    | 1   | . Exhaust Clamp            | 14   | 255120     | 1   | . Reducer, Hump Hose |
| 3    | EXH0011007    | 1   | . Exhaust Cap              | 15   | 00273802   | 4   | . Nut, Serrated      |
| 4    | F000007742    | 1   | . Battery Ground Strap     | 16   | SMS0000184 | 4   | . Bolt, Whiz         |
| 5    | *a 901104     | 1   | . Engine Assembly          | 17   | 902789     | 1   | . Plate, Mounting    |
| 6    | *b 254896     | 1   | . Air Cleaner Assembly     | 19   | 252742     | 1   | . Precleaner         |
| 7    | ACL0004307    | 2   | . Band, Mounting           | 20   | ACL0000004 | 1   | . Indicator          |
| 8    | 207146        | 2   | . T-Bolt Clamp             | 22   | 902904     | 1   | . Tube, Spacer       |
| 9    | 207147        | 1   | . T-Bolt Clamp             | 23   | 902909     | 1   | . Elbow              |
| 10   | 225370        | 1   | . T-Bolt Clamp             | 24   | 902913     | 1   | . Tube               |
| 11   | ACL0000005    | 1   | . Insert, Rubber           |      |            |     |                      |
| 12   | 4200115       | 1   | . Elbow, Rubber            |      |            |     |                      |

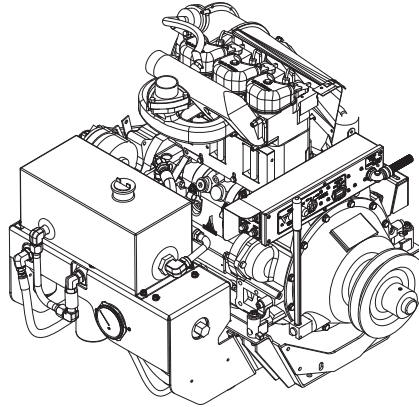
\*a See Separate Coverage (Page 4-3)

\*b See Separate Coverage (Page 4-16)

Rev G

### Engine Assembly

Page 1 of 5



| Item                          | Part No.      | Qty | Description                         | Item | Part No.   | Qty | Description      |
|-------------------------------|---------------|-----|-------------------------------------|------|------------|-----|------------------|
| <b>901104 Engine Assembly</b> |               |     |                                     |      |            |     |                  |
| 1                             | DTZ0011287    | 1   | . Belly Pan                         | 74   | 207653     | 1   | . Fitting        |
| 2                             | 902265        | 1   | . Plate, Tank Mount                 | 75   | R13805118  | 2   | . Locknut        |
| 3                             | 252565        | 1   | . Engine                            | 76   | 233464     | 1   | . Hose Assembly  |
| 4                             | 293613W       | 7   | . Capscrew                          | 78   | 223428     | 13  | . Flat Washer    |
| 5                             | *a 256852     | 1   | . Manifold Assembly                 | 80   | 900277     | 1   | . Plate, Support |
| 6                             | 252319        | 1   | . Check Valve                       | 81   | 900275     | 1   | . Bracket        |
| 7                             | TNK004Z980    | 1   | . Hydraulic Reservoir W/Filler Neck | 83   | 901187     | 1   | . Bracket        |
| 8                             | 209417        | 2   | . Fitting                           | 84   | 901667     | 1   | . Actuator       |
| 9                             | 12663         | 1   | . Fitting                           | 85   | F000000169 | 1   | . Spring, Ext    |
| 10                            | 902474        | 1   | . Accumulator                       | 86   | LEV0032159 | 1   | . Adapter, Lever |
| 10A                           | FD00034169    | 1   | . Decal, "Accumulator Pressure..."  | 87   | LNK0035654 | 1   | . Link, Accel    |
| 11                            | 254142        | 1   | . Bracket, Accumulator              | 88   | MNT0035653 | 1   | . Bar, Mounting  |
| 12                            | 19920         | 4   | . Fitting                           | 89   | ROD0035655 | 1   | . Rod, Accel     |
| 14                            | 252800        | 1   | . Filter Assembly                   | 90   | SHD0028273 | 1   | . Plate, Shield  |
| 15                            | FIL0HH6935    | 1   | . Hydraulic Filter Head             | 91   | 224120W    | 2   | . Capscrew       |
| 16                            | 211550        | 2   | . Fitting                           | 92   | R13801783  | 1   | . Capscrew       |
| 17                            | 211560        | 4   | . Fitting                           | 93   | R13801791  | 3   | . Capscrew       |
| 18                            | 223436        | 1   | . Fitting                           | 94   | R13811014  | 4   | . Capscrew       |
| 19                            | 236824        | 1   | . Fitting                           | 95   | 162572W    | 4   | . Capscrew       |
| 20                            | 224298        | 1   | . Fitting                           | 96   | Y17C-0616  | 14  | . Capscrew       |
| 21                            | R13801972     | 1   | . Fitting                           | 97   | R13811085  | 4   | . Capscrew       |
| 22                            | 254734        | 1   | . Hose Assembly                     | 98   | Y09C-M1030 | 16  | . Capscrew       |
| 23                            | 256629        | 1   | . Pump, Gear                        | 99   | 293644W    | 1   | . Capscrew       |
| 24                            | 4195646       | 1   | . Fitting                           | 100  | 293645W    | 1   | . Capscrew       |
| 25                            | 232209        | 1   | . Hose Assembly                     | 101  | 237545     | 3   | . Capscrew       |
| 26                            | 253117        | 1   | . Hose Assembly                     | 102  | 231486     | 2   | . Set Screw      |
| 27                            | 234149        | 1   | . Hose Assembly                     | 103  | 223427     | 13  | . Washer         |
| 28                            | 209215        | 1   | . Fitting                           | 104  | 239519     | 5   | . Washer         |
| 29                            | 237921        | 1   | . Hose Assembly                     | 105  | 221763W    | 4   | . Washer         |
| 30                            | GAG0000001    | 1   | . Gauge, Tension Controlled         | 106  | 221771W    | 13  | . Washer         |
| 33                            | F000007699    | 1   | . Motor Pulley                      | 107  | 296418W    | 7   | . Washer         |
| 34                            | R13803044     | 1   | . Clip, Insulated                   | 108  | 296420W    | 12  | . Washer         |
| 38                            | 209166        | 1   | . Fitting                           | 109  | 296422W    | 2   | . Washer         |
| 42                            | FIL0HF6613    | 1   | . Filter Element                    | 110  | R13812513  | 13  | . Lockwasher     |
| 44                            | FILS1510V3    | 1   | . Hydraulic Tank Filter             | 111  | 234135     | 4   | . Lockwasher     |
| 47                            | 902222        | 1   | . Tube Assembly                     | 112  | 234589     | 4   | . Lockwasher     |
| 48                            | 209427        | 1   | . Fitting                           | 113  | R13812484  | 7   | . Lockwasher     |
| 49                            | 254198        | 1   | . Hose Assembly                     | 114  | 234589     | 12  | . Lockwasher     |
| 54                            | *b CLH0001084 | 1   | . Clutch                            | 115  | 233477     | 2   | . Lockwasher     |
| 56                            | 22308         | 1   | . Fitting                           | 116  | 232939     | 7   | . Nut, Esna      |
| 57                            | EXH0013806    | 1   | . Tube, Exhaust                     | 117  | 237567     | 12  | . Nut, Esna      |
| 61                            | *c 903908     | 1   | . Control Box Assy                  | 118  | 223587     | 4   | . Nut, Esna      |
| 62                            | 902447        | 4   | . Plate, Shim                       | 119  | R13811189  | 3   | . Locknut        |
| 63                            | 902254        | 1   | . Plate, RH Ext                     | 120  | ZZ00000705 | 1   | . Pin, Roll      |
| 64                            | 902253        | 1   | . Plate, LH Ext                     |      |            |     |                  |
| 65                            | 211563        | 1   | . Fitting                           |      |            |     |                  |
| 66                            | 252601        | 2   | . Fitting                           |      |            |     |                  |

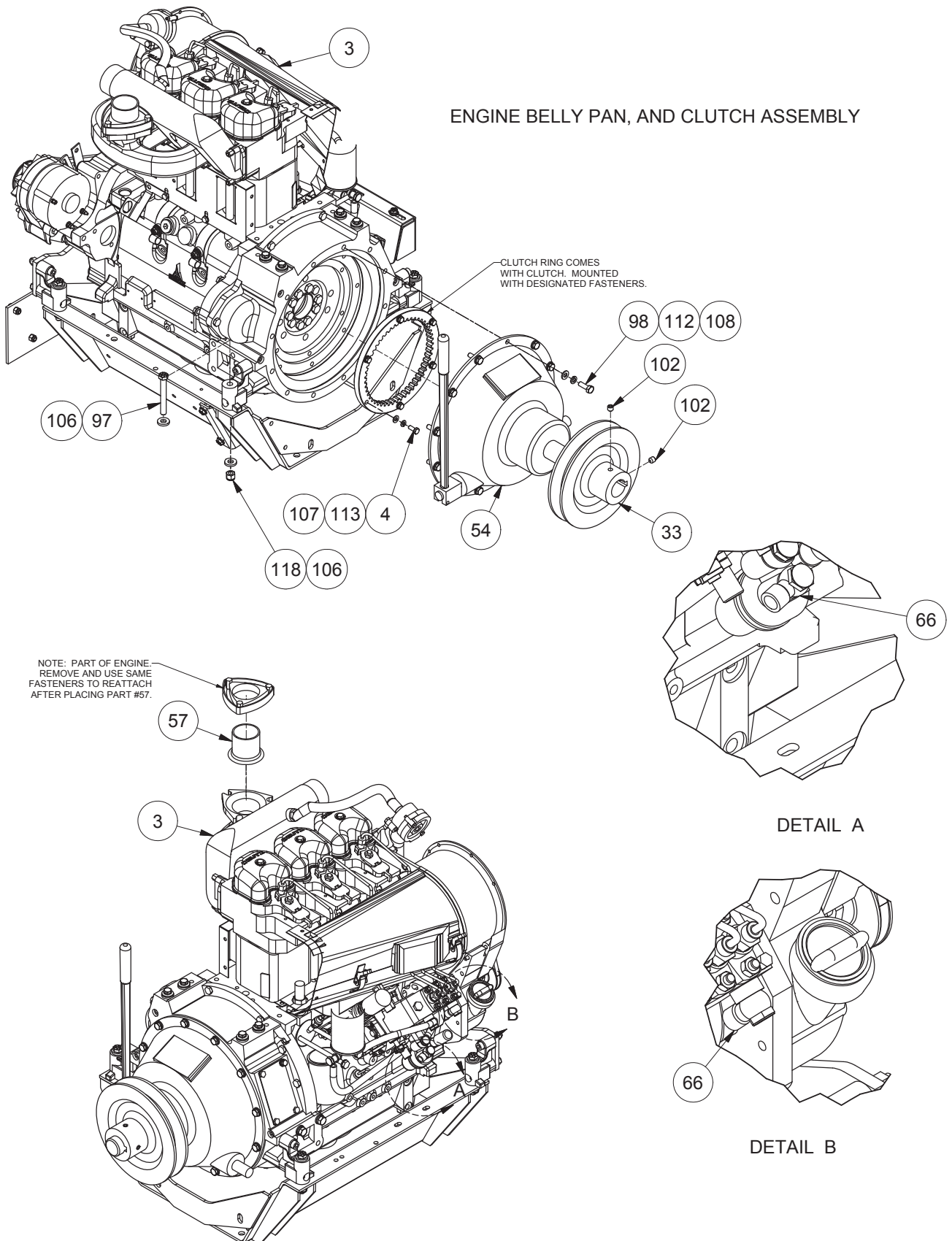
\*a See Separate Coverage (Page 4-8)

\*b See Separate Coverage (Page 4-9)

\*c See Separate Coverage (Page 4-12)

# Engine Assembly

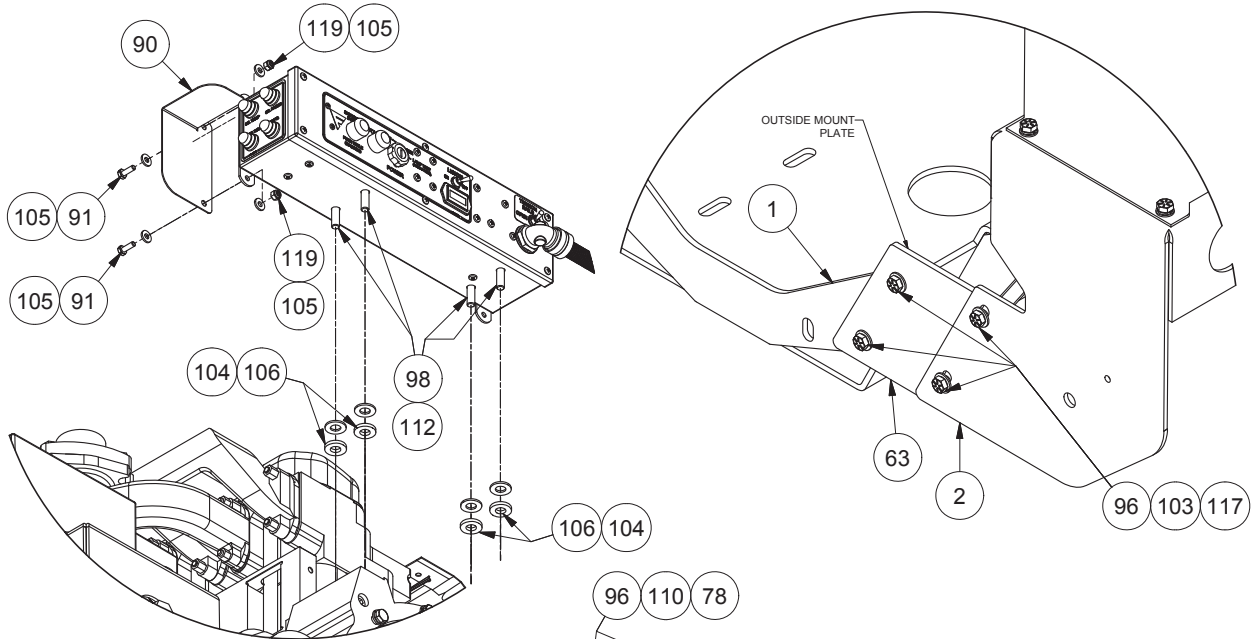
Page 2 of 5



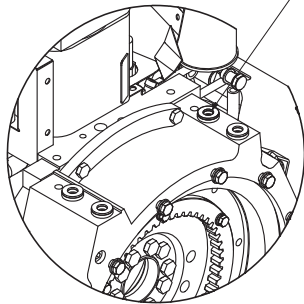


### Engine Assembly

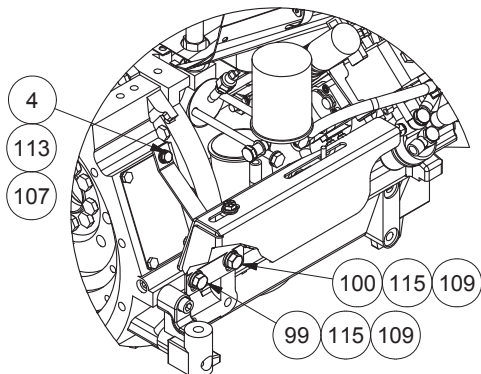
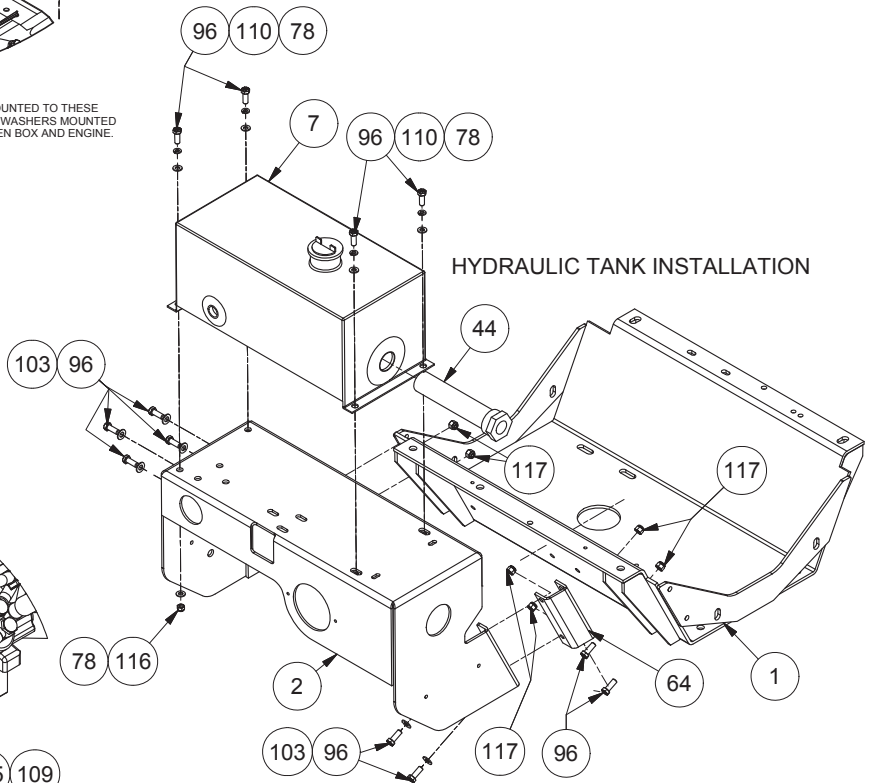
Page 3 of 5



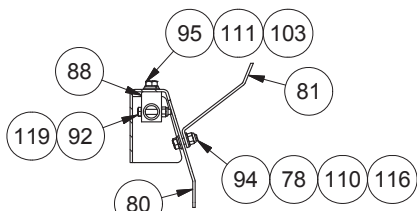
CONTROL BOX INSTALLATION  
 BOX MOUNTED TO THESE HOLES. WASHERS MOUNTED BETWEEN BOX AND ENGINE.



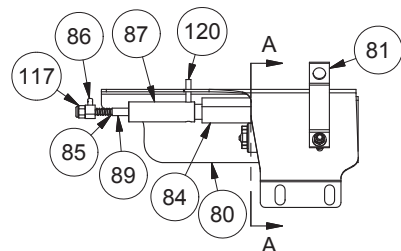
HYDRAULIC TANK INSTALLATION



LINEAR ACTUATOR INSTALLATION

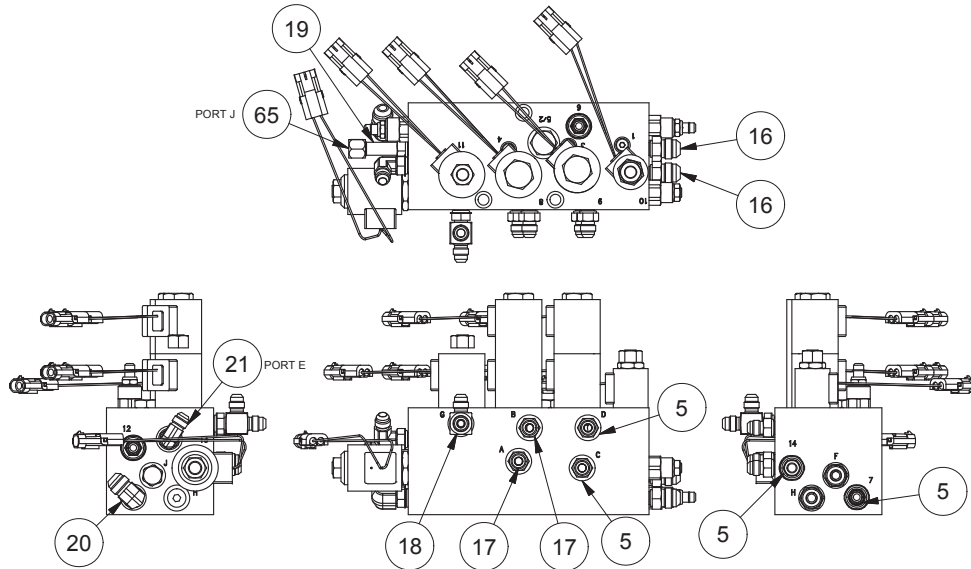


SECTION A-A

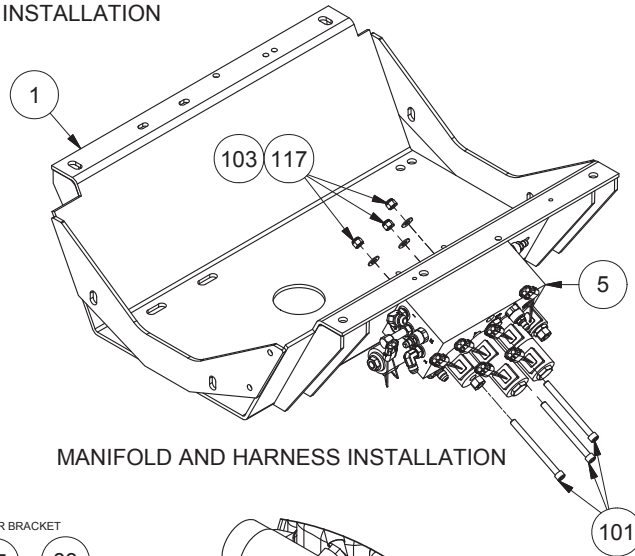


# Engine Assembly

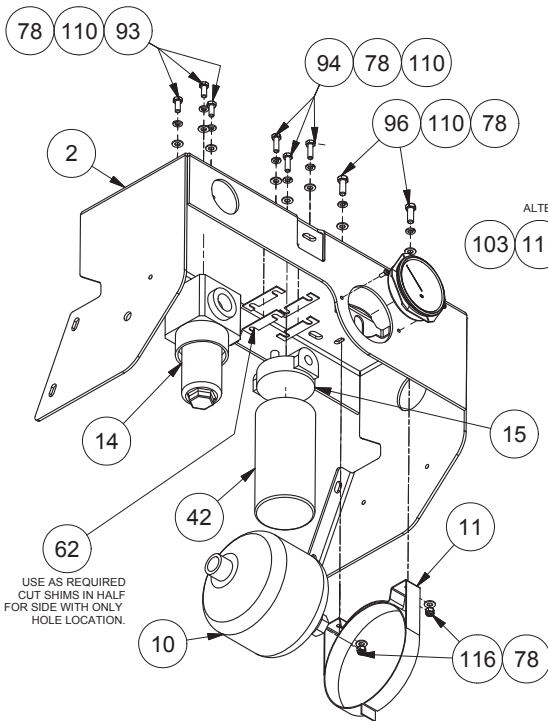
Page 4 of 5



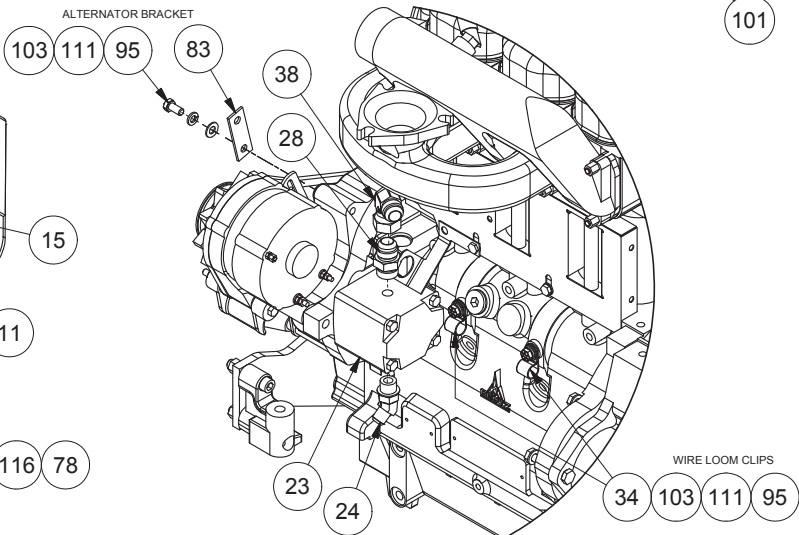
MANIFOLD FITTING INSTALLATION



MANIFOLD AND HARNESS INSTALLATION



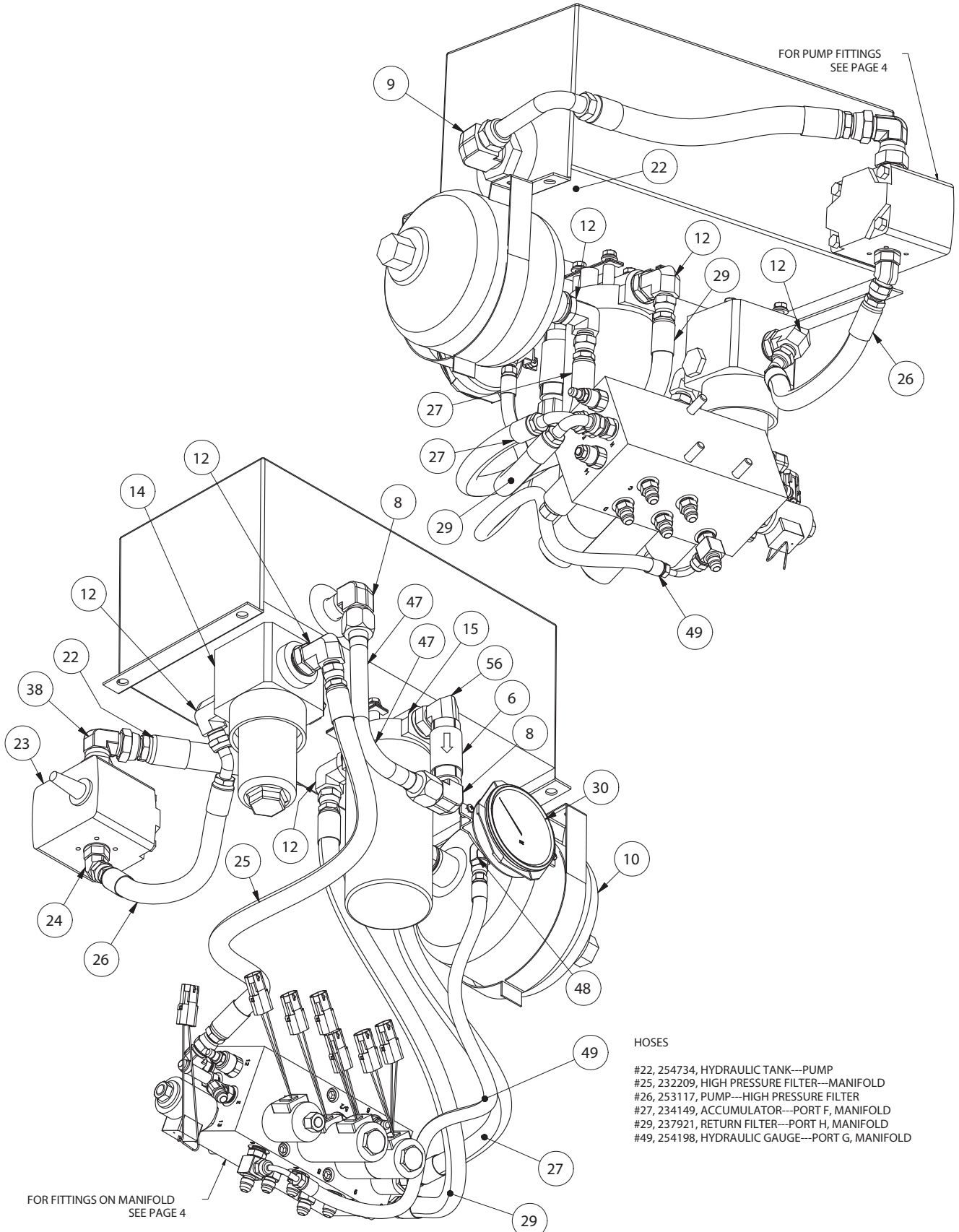
HYDRAULIC COMPONENTS



PUMP AND FITTINGS

# Engine Assembly

Page 5 of 5

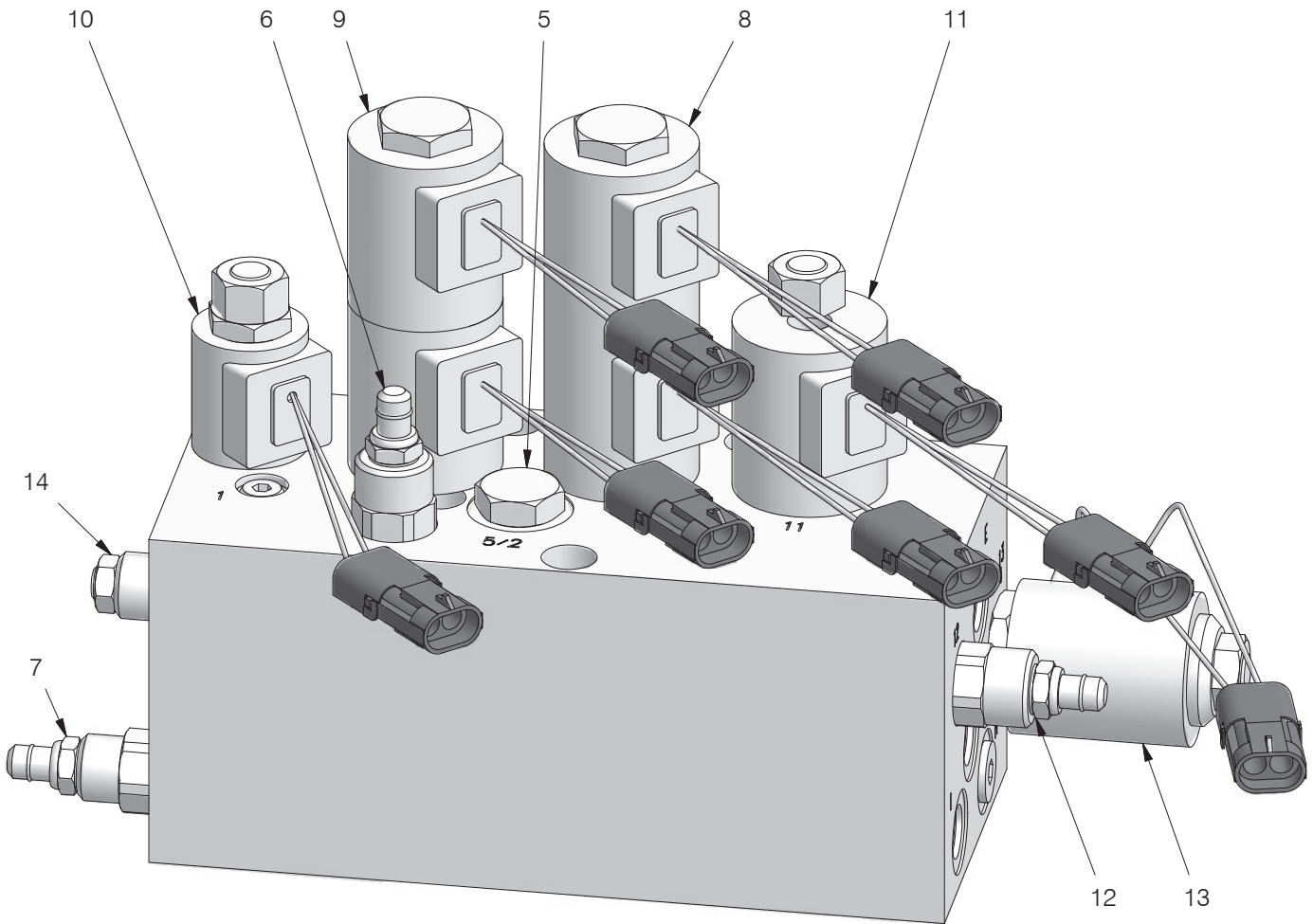


FOR PUMP FITTINGS  
SEE PAGE 4

FOR FITTINGS ON MANIFOLD  
SEE PAGE 4

- HOSES
- #22, 254734, HYDRAULIC TANK---PUMP
  - #25, 232209, HIGH PRESSURE FILTER---MANIFOLD
  - #26, 253117, PUMP---HIGH PRESSURE FILTER
  - #27, 234149, ACCUMULATOR---PORT F, MANIFOLD
  - #29, 237921, RETURN FILTER---PORT H, MANIFOLD
  - #49, 254198, HYDRAULIC GAUGE---PORT G, MANIFOLD

# Manifold Assembly

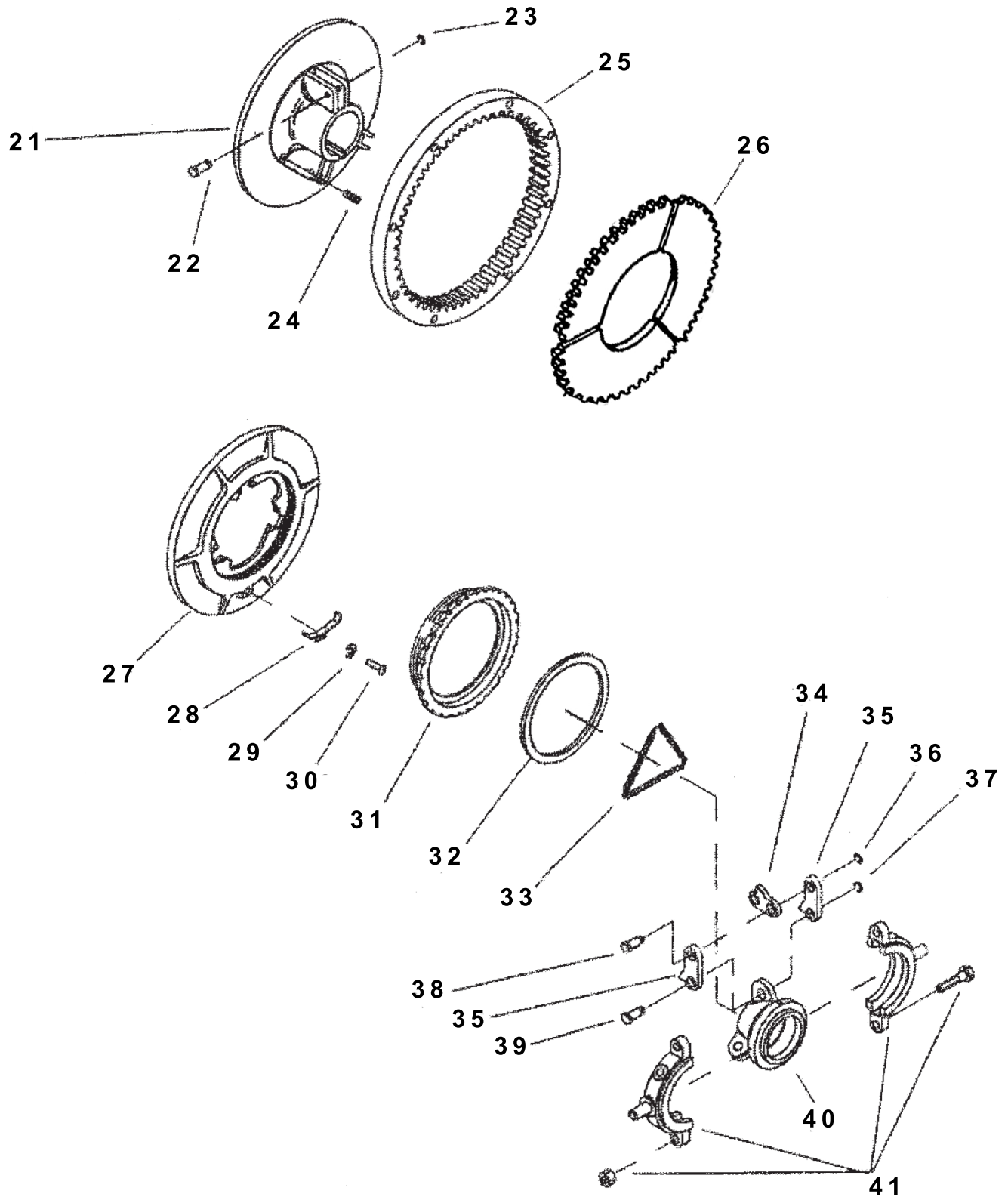


| Item                            | Part No.  | Qty | Description              | Item | Part No. | Qty | Description                 |
|---------------------------------|-----------|-----|--------------------------|------|----------|-----|-----------------------------|
| <b>256852 Manifold Assembly</b> |           |     |                          |      |          |     |                             |
| 5                               | YL-402-C2 | 1   | . Cartridge, Check Valve | 11   | 256865   | 1   | .. Coil, 12 VDC             |
|                                 | 2500282   | 1   | .. Seal Kit              |      | 257473   | 1   | . Valve, Solenoid           |
| 6                               | 257438    | 1   | . Valve, Pilot           |      | 244583   | 1   | .. Seal Kit                 |
|                                 | 252566    | 1   | .. Seal Kit              |      | 256864   | 1   | .. Coil, 12 VDC             |
| 7                               | 257439    | 1   | . Relief Valve           | 12   | 257440   | 1   | . Valve, Press Reducer      |
|                                 | 242101    | 1   | .. Seal Kit              |      | 252566   | 1   | .. Seal Kit                 |
| 8                               | 257469    | 1   | . Valve, Solenoid        | 13   | 257474   | 1   | . Relief Valve              |
|                                 | 256864    | 2   | .. Coil, 12 VDC          |      | 256864   | 1   | .. Coil, 12 VDC             |
|                                 | 905172    | 1   | .. Seal Kit              |      | 905173   | 1   | .. Seal Kit                 |
| 9                               | 257470    | 1   | . Valve, Solenoid        | 14   | 2502101  | 1   | . Cartridge, Counterbalance |
|                                 | 256864    | 2   | .. Coil, 12 VDC          |      | 242101   | 1   | .. Seal Kit                 |
|                                 | 905172    | 1   | .. Seal Kit              |      |          |     |                             |
| 10                              | 257472    | 1   | . Valve, Solenoid        |      |          |     |                             |
|                                 | 251383    | 1   | .. Seal Kit              |      |          |     |                             |

Rev B

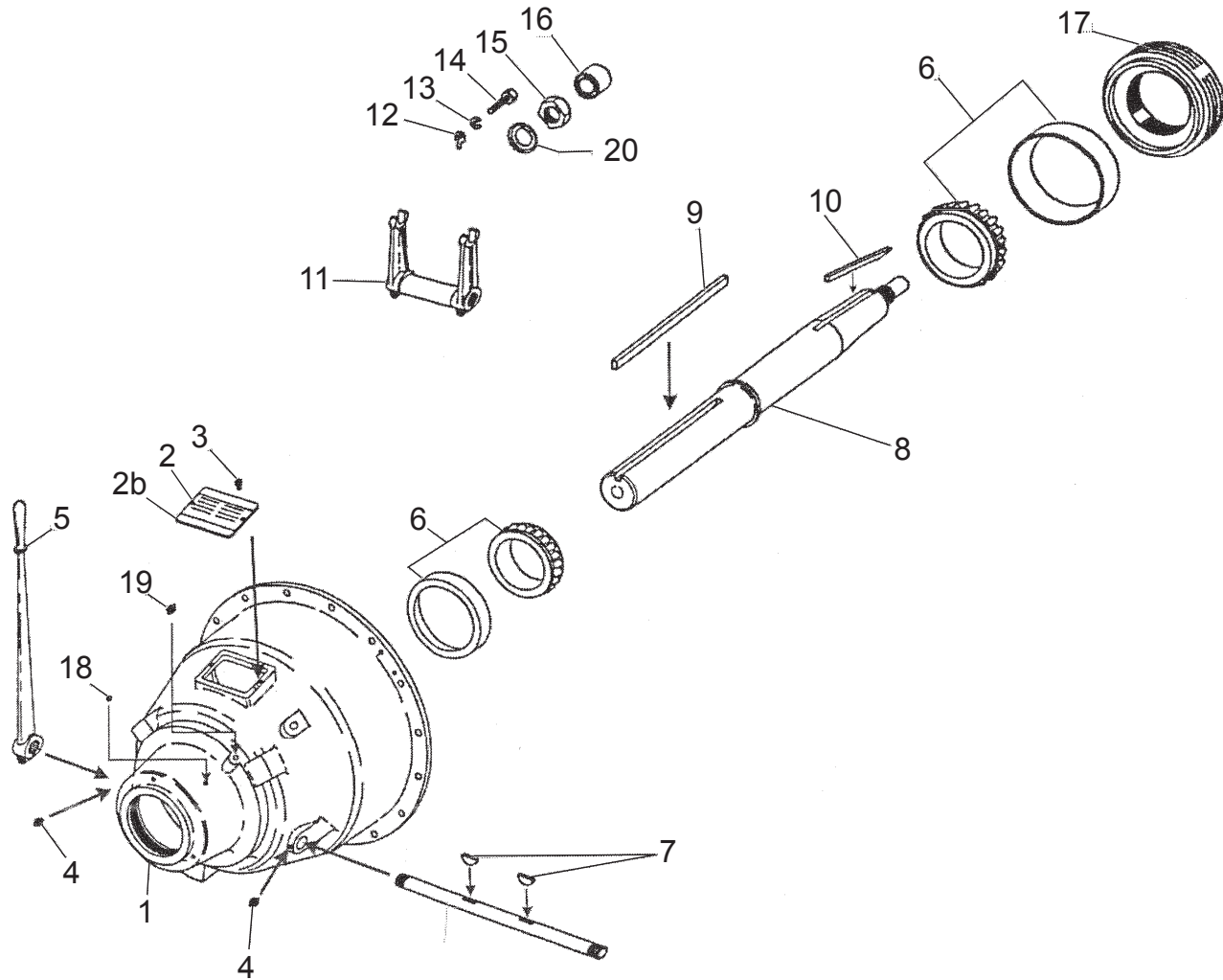
# Clutch/Power Take-Off, Deutz

Page 1 of 2



# Clutch/Power Take-Off, Deutz

Page 2 of 2

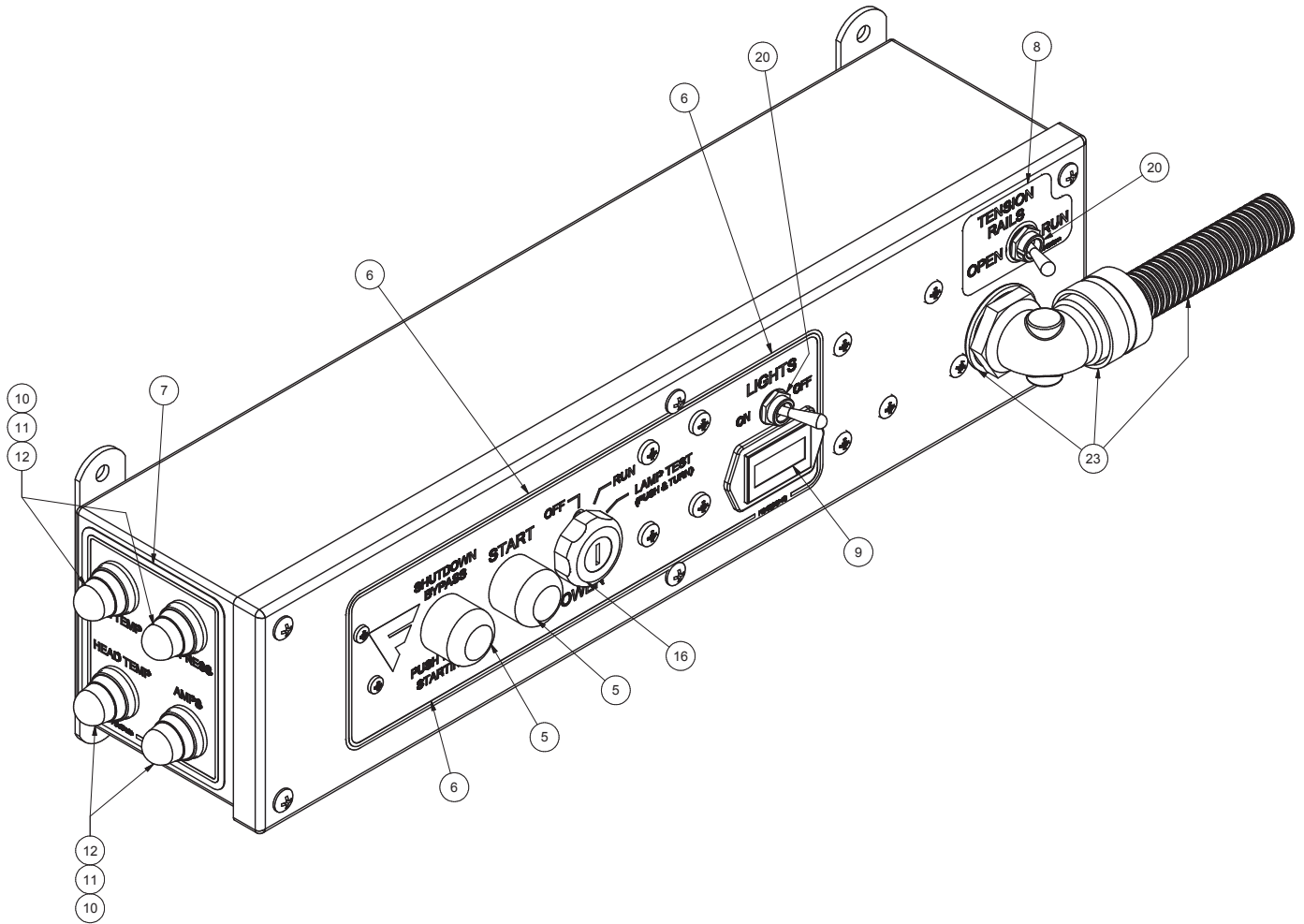


| Item                     | Part No.   | Qty | Description              | Item | Part No.   | Qty | Description            |
|--------------------------|------------|-----|--------------------------|------|------------|-----|------------------------|
| <b>CLH0001084 Clutch</b> |            |     |                          |      |            |     |                        |
| 1                        | CLH0204230 | 1   | . Bell Housing           | 21   | CLH0230819 | 1   | Clutch Body            |
| 2                        | CLH0205358 | 1   | . Name Plate             | 22   | * -----    | 3   | Clevis Pin             |
| 2b                       | 252527     | 1   | . Plate, Cover           | 23   | * -----    | 3   | Retaining Ring         |
| 3                        | CLH0206092 | 2   | . Bolt                   | 24   | * -----    | 3   | Separator Spring       |
| 4                        | CLH0207954 | 2   | . Fitting, Grease        | 25   | CLH0205851 | 1   | Clutch Plate & Release |
| 5                        | CLH0308369 | 1   | . Lever, Shifting        | 26   | CLH0203569 | 1   | Facing Plate           |
| 6                        | CLH0307569 | 2   | . Bearings, Main         | 27   | CLH0216506 | 1   | Compression Sprin      |
| 7                        | CLH0204536 | 2   | . Key, Woodruff          | 28   | * -----    | 1   | Adjustment Lock        |
| 8                        | CLH0230909 | 1   | . Drive Shaft            | 29   | * -----    | 1   | Washer                 |
| 9                        | CLH0204487 | 1   | . Output Key             | 30   | * -----    | 1   | Bolt                   |
| 10                       | CLH0204485 | 1   | . Clutch Key             | 31   | CLH0205823 | 1   | Adjusting Ring         |
| 11                       | CLH0308371 | 1   | . Yoke Sub Assembly      | 32   | CLH0205997 | 1   | Wear Ring              |
| 12                       | CLH0205368 | 1   | . Link, Adjusting        | 33   | * -----    | 1   | Lever Spring           |
| 13                       | CLH0207227 | 1   | . Washer                 | 34   | * -----    | 3   | Lever                  |
| 14                       | CLH0203061 | 1   | . Bolt                   | 35   | * -----    | 6   | Link                   |
| 15                       | CLH0204746 | 1   | . Nut                    | 36   | * -----    | 3   | Retaining Ring         |
| 16                       | CLH0207445 | 1   | . Bearing, Pilot         | 37   | * -----    | 3   | Retaining Ring         |
| 17                       | CLH0205717 | 1   | . Release Sleeve, Clutch | 38   | * -----    | 3   | Clevis Pin             |
| 18                       | CLH0269854 | 1   | . Fitting, Grease        | 39   | * -----    | 3   | Clevis Pin             |
| 19                       | CLH0260843 | 1   | . Fitting, Grease        | 40   | CLH0206563 | 1   | Release Sleeve         |
| 20                       | CLH0207231 | 1   | . Washer                 | 41   | CLH0334051 | 1   | Release Bearing        |

\* Item available only as part of clutch kit CLH0332919

# Control Box Assembly

Page 1 of 4



# Control Box Assembly

Page 2 of 4

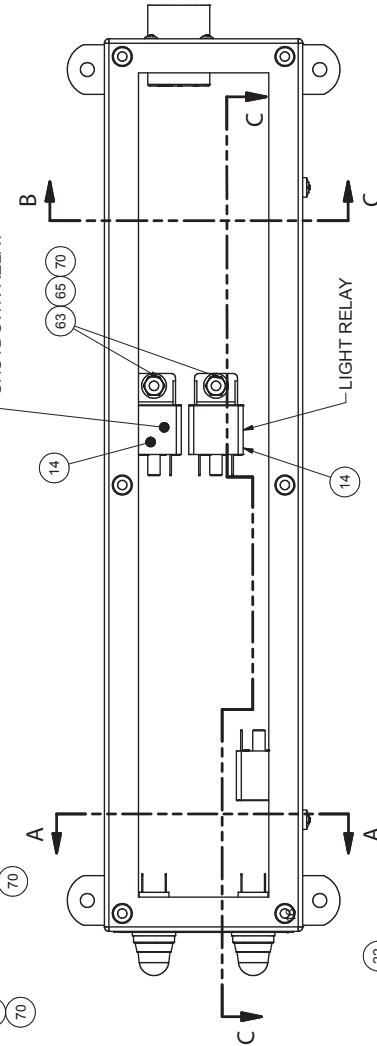
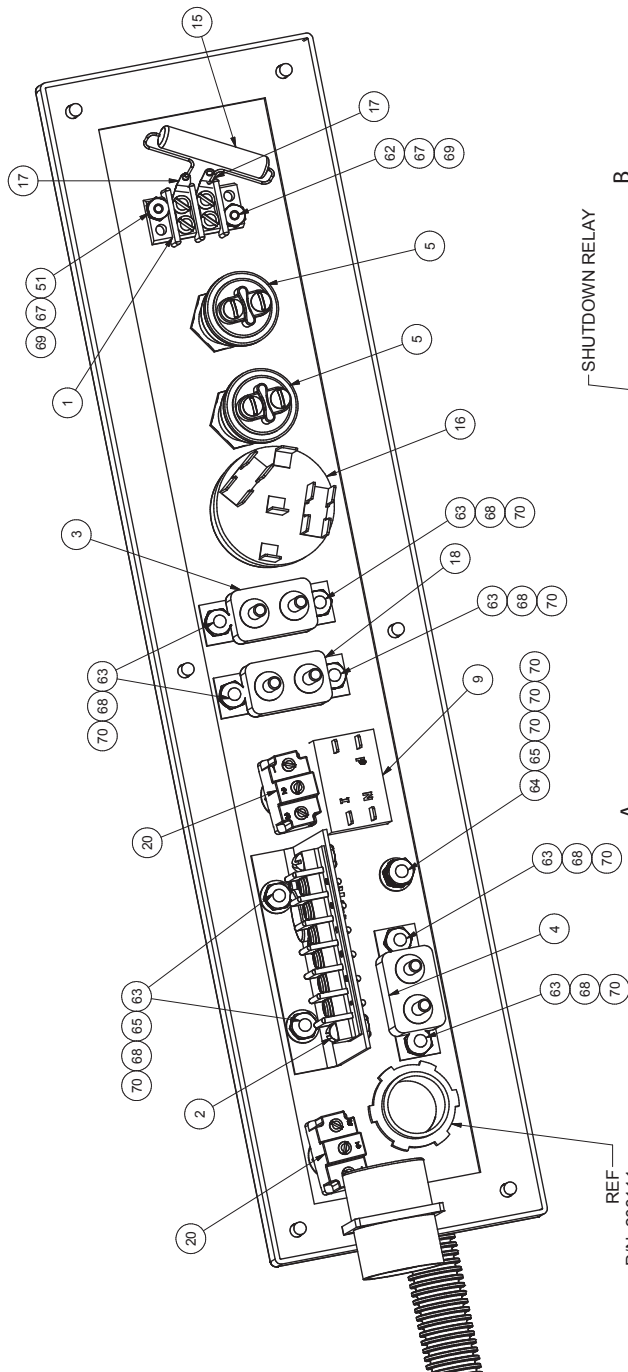
| Item | Part No.      | Qty | Description                 | Item | Part No.   | Qty | Description          |
|------|---------------|-----|-----------------------------|------|------------|-----|----------------------|
|      | <b>903908</b> |     | <b>Control Box Assembly</b> | 38   | 219437     |     | . Wire, Red          |
| 1    | BAB0002140    | 1   | . Terminal Block            | 39   | WIR0016038 |     | . Wire, Red W/White  |
| 2    | * CIR0029071  | 1   | . Module Assembly           | 40   | 219412     |     | . Wire, White        |
| 3    | CBK0005515    | 1   | . Circuit Breaker           | 41   | WIR0016060 |     | . Wire, White W/Red  |
| 4    | CBK0014520    | 1   | . Circuit Breaker           | 42   | 219388     |     | . Wire, Yellow       |
| 5    | DTZ0000626    | 2   | . Button, Starter           | 43   | 219410     |     | . Wire, Black        |
| 6    | FD00028146    | 1   | . Decal                     | 44   | 219405     |     | . Wire, Blue         |
| 7    | FD00029195    | 1   | . Decal                     | 45   | 242404     |     | . Wire, Purple       |
| 8    | FD0037374A    | 1   | . Decal                     | 46   | 219404     |     | . Wire, Red          |
| 9    | GAG0001133    | 1   | . Hour Meter                | 47   | 219468     |     | . Wire, Red W/Black  |
| 10   | LIT0001815    | 4   | . Lamp, Miniature           | 48   | 219527     |     | . Wire, Red W/Yellow |
| 11   | LIT1250410    | 4   | . Base, Lamp                | 49   | 219414     |     | . Wire, White        |
| 12   | LIT1251131    | 4   | . Lens, Red                 | 50   | 219400     |     | . Wire, Gray         |
| 14   | R4510197      | 4   | . Relay                     | 51   | TER0560616 | 10  | . Terminal Ring      |
| 15   | RES0045015    | 1   | . Resistor                  | 52   | TER0560816 | 7   | . Terminal Ring      |
| 16   | SWI0001140    | 1   | . Switch, Ignition          | 53   | TER0561022 | 15  | . Terminal Ring      |
| 17   | TER00000992PK |     | . Lug, Terminal             | 54   | TER0563216 | 25  | . Terminal           |
| 18   | 200274        | 1   | . Circuit Breaker           | 55   | TER5616120 | 3   | . Terminal           |
| 20   | 229289        | 2   | . Switch                    | 56   | TER0563217 | 3   | . Terminal           |
| 22   | 903577        | 1   | . Box                       | 57   | 246143     | 4   | . Relay Socket       |
| 23   | 903497        | 1   | . Wire Harness              | 58   | TER0604142 | 18  | . Terminal           |
| 24   | 238990        |     | . Wire, Blue                | 59   | 241780     | 1   | . Receptacle         |
| 25   | 247637        |     | . Wire, Brown               | 60   | 243237     | 7   | . Pin                |
| 26   | 239002        |     | . Wire, Gray                | 61   | 256811     | 4   | . Machine Screw      |
| 27   | 219436        |     | . Wire, Black               | 62   | SMR6320500 | 2   | . Machine Screw      |
| 28   | 237627        |     | . Wire, Blue                | 63   | 230640     | 12  | . Machine Screw      |
| 29   | WIR0016016    |     | . Wire, Blue W/Black        | 64   | SMP1032750 | 2   | . Machine Screw      |
| 30   | WIR0016032    |     | . Wire, Blue W/White        | 65   | 00103338   | 8   | . Flat Washer        |
| 31   | 219355        |     | . Wire, Brown               | 66   | WIS0000400 | 4   | . Lockwasher         |
| 32   | 231708        |     | . Wire, Gray                | 67   | WIS0000600 | 2   | . Star Washer        |
| 33   | 237628        |     | . Wire, Green               | 68   | WIS0001000 | 8   | . Lockwasher         |
| 34   | WIR0016017    |     | . Wire, Green W/Black       | 69   | R13809520  | 2   | . Hex Nut            |
| 35   | WIR0016035    |     | . Wire, Green W/White       | 70   | 220044     | 17  | . Hex Nut            |
| 36   | 231707        |     | . Wire, Orange              | 71   | 236770     | 4   | . Nut, Esna          |
| 37   | 241795        |     | . Wire, Purple              | 72   | 22635      | 1   | . Diode              |

\*a See Separate Cover (Page 4-15)

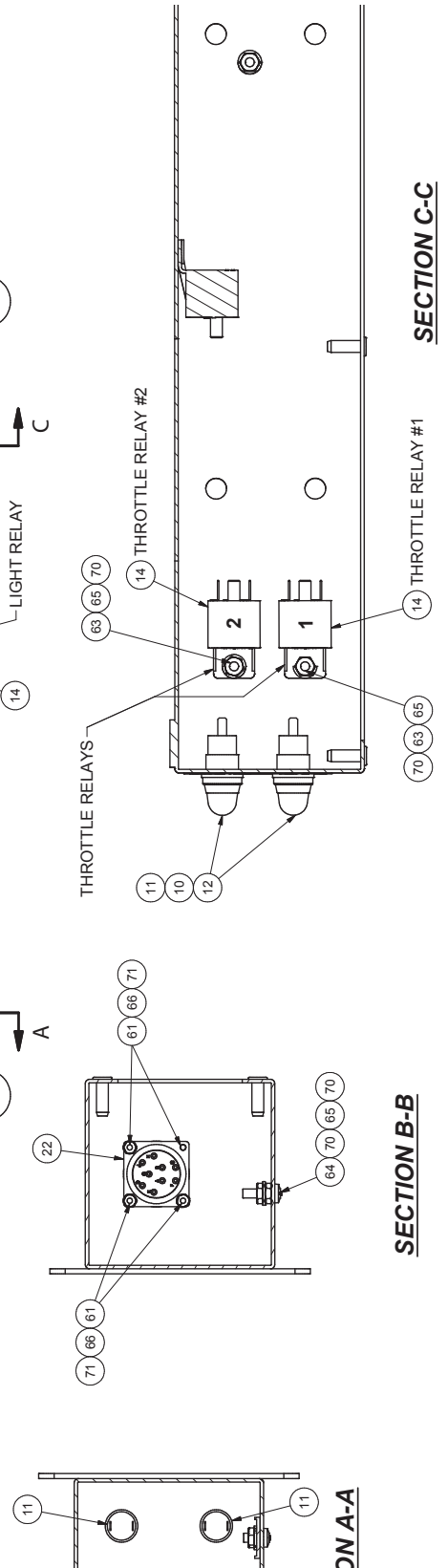


### Control Box Assembly

Page 3 of 4

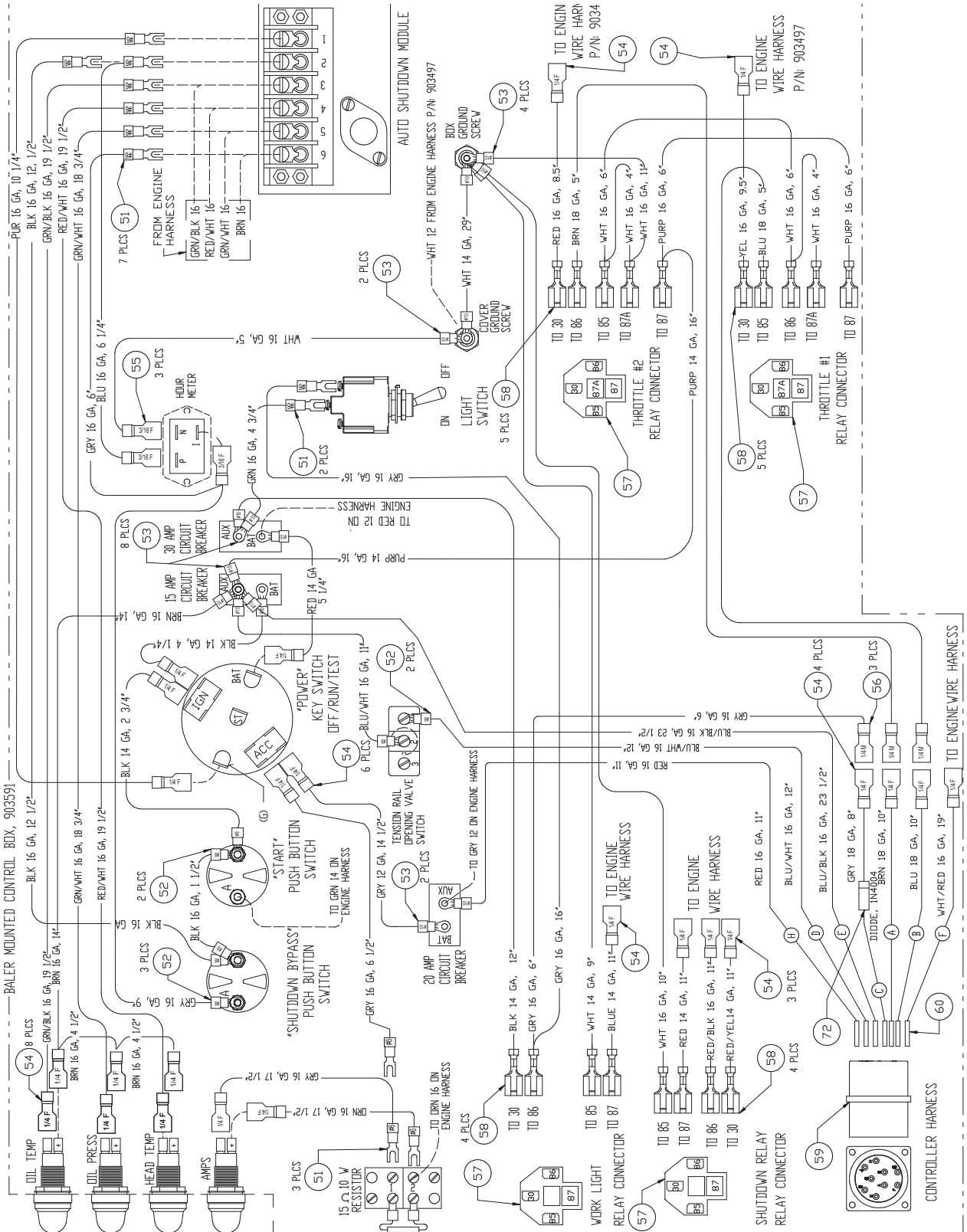


REF:  
P/N: 208111  
231044  
NMS0000109

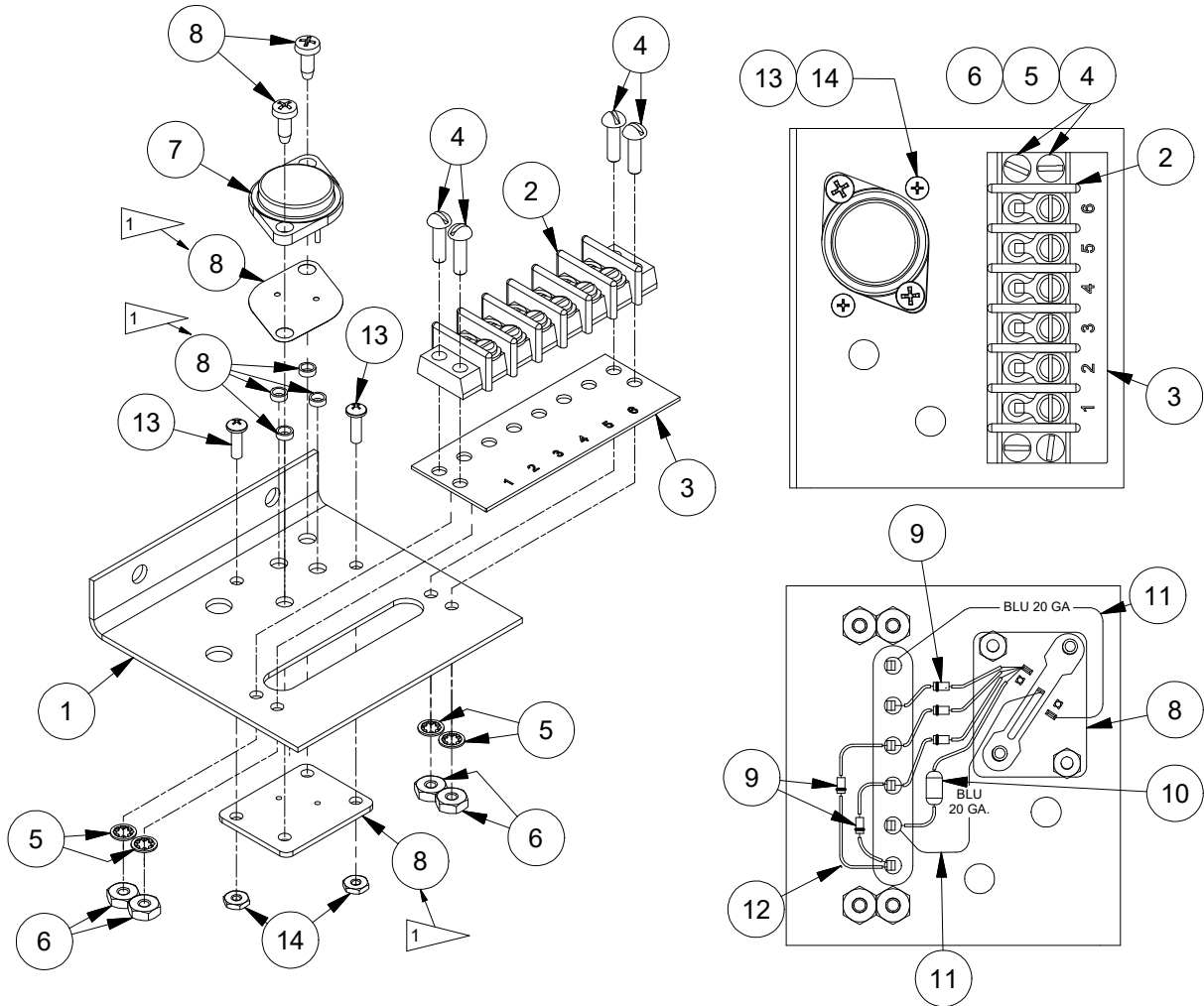


# Control Box Assembly

Page 4 of 4



## Module Assembly

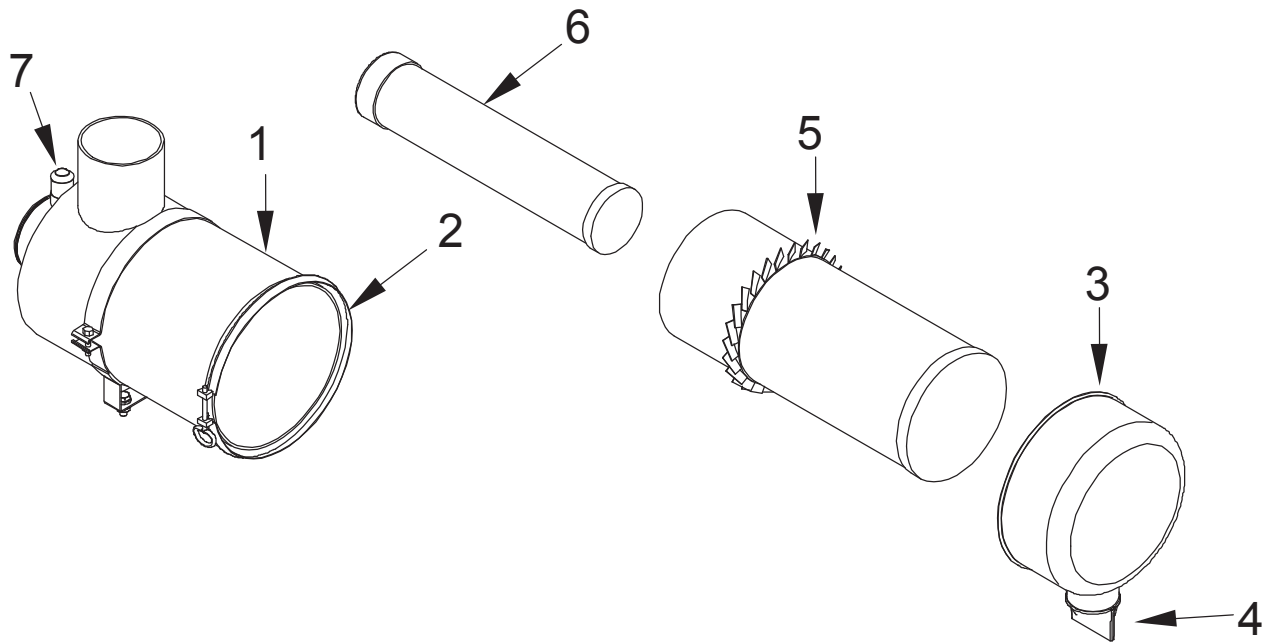


**NOTES**

1. INSTALL ISOLATORS AND PLASTIC SHIELDS AS SHOWN. ISOLATORS AND SHIELD PROVIDED WITH TRANSISTOR SOCKET (SOK5108401). REFER TO PHOTO SHEET FOR ADDITIONAL INFORMATION AND DOCUMENTS FOR SOK5108401.

| Item                                   | Part No.   | Qty | Description                | Item | Part No.   | Qty | Description |
|--|------------|-----|----------------------------|------|------------|-----|-------------|
| <b>CIR0029071      Module Assembly</b> |            |     |                            |      |            |     |             |
| 1                                      | MNT036760B | 1   | . Auto Shutdown Mount      | 9    | 22635      | 5   | . Diode     |
| 2                                      | BAB006140Y | 1   | . Barrier Block            | 10   | RES0832127 | 1   | . Resistor  |
| 3                                      | MSR006140Y | 1   | . Terminal Marker Strip    | 11   | 233701     | 1'  | . Wire      |
| 4                                      | SMR6320500 | 4   | . Machine Screw            | 12   | TUB0001800 | 1'  | . Tubing    |
| 5                                      | WIS0000600 | 4   | . Washer                   | 13   | SMR4400375 | 2   | . Screw     |
| 6                                      | R13809520  | 4   | . Hex Nut                  | 14   | NCH0000440 | 2   | . Hex Nut   |
| 7                                      | TRA0044002 | 1   | . Transistor               |      |            |     |             |
| 8                                      | SOK5108401 | 1   | . Kit, Transistor Mounting |      |            |     |             |

# Air Cleaner Assembly

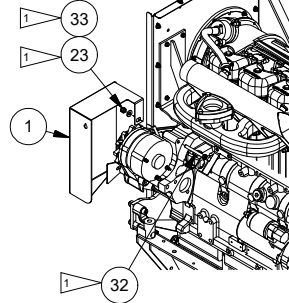
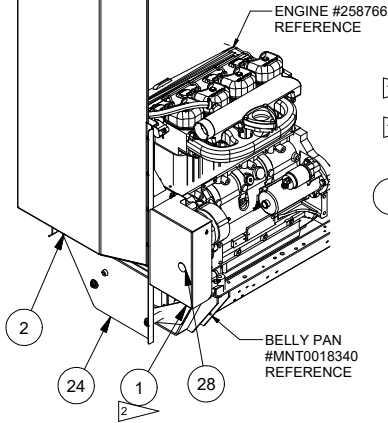


| Item | Part No.      | Qty | Description                 | Item | Part No.   | Qty | Description                  |
|------|---------------|-----|-----------------------------|------|------------|-----|------------------------------|
|      | <b>254896</b> |     | <b>Air Cleaner Assembly</b> |      |            |     |                              |
| 1    | 255496        | 1   | . Body                      | 5    | 255494     | 1   | . Filter                     |
| 2    | 255492        | 1   | . Body Clamp                | 6    | 255495     | 1   | . Filter, Safety             |
| 3    | 255493        | 1   | . Cover                     | 7    | ACL0002251 | 1   | . Mini Restriction Indicator |
| 4    | 255497        | 1   | . Valve, Actuator           |      |            |     |                              |

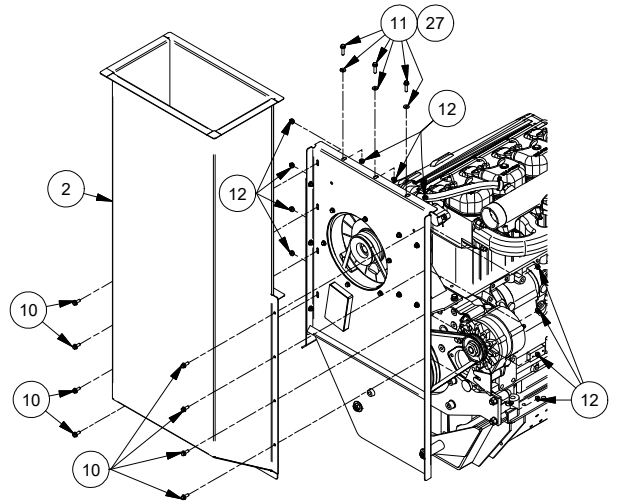
Rev A

## Snorkel Installation

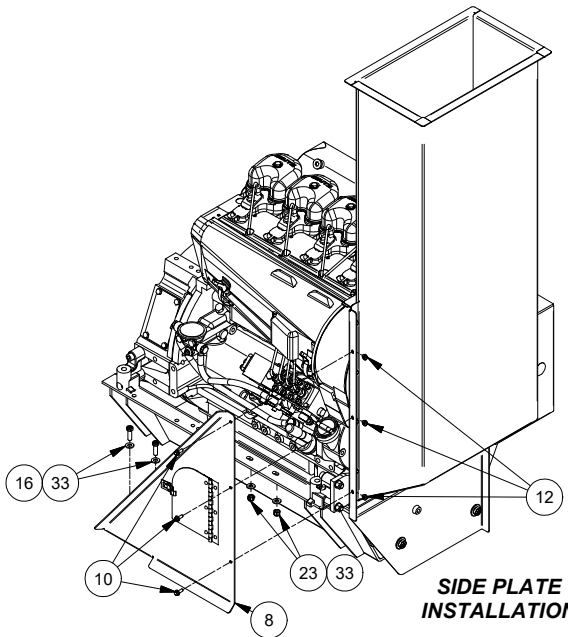
- NOTES:**  
 1 → HARDWARE USED TO ATTACH SHIELD TO ENGINE MOUNT.  
 2 → ATTACH SHIELD USING ENGINE HARDWARE.



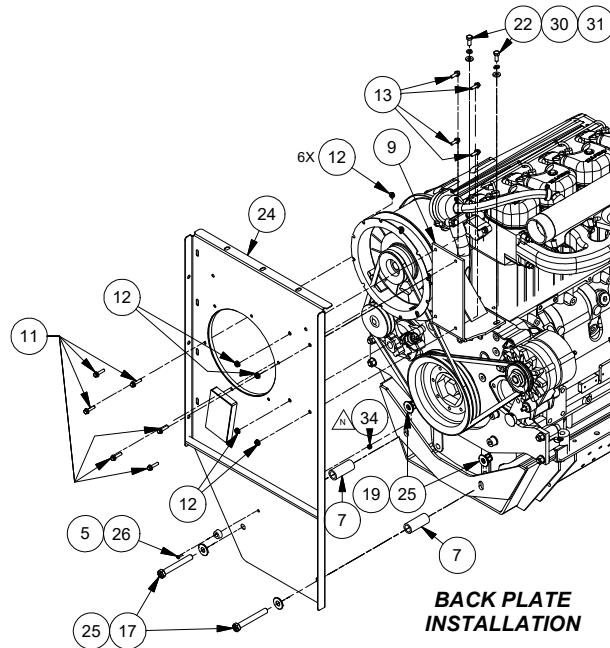
**ALTERNATOR INSTALLATION**



**SNORKEL ASSEMBLY INSTALLATION**



**SIDE PLATE INSTALLATION**



**BACK PLATE INSTALLATION**

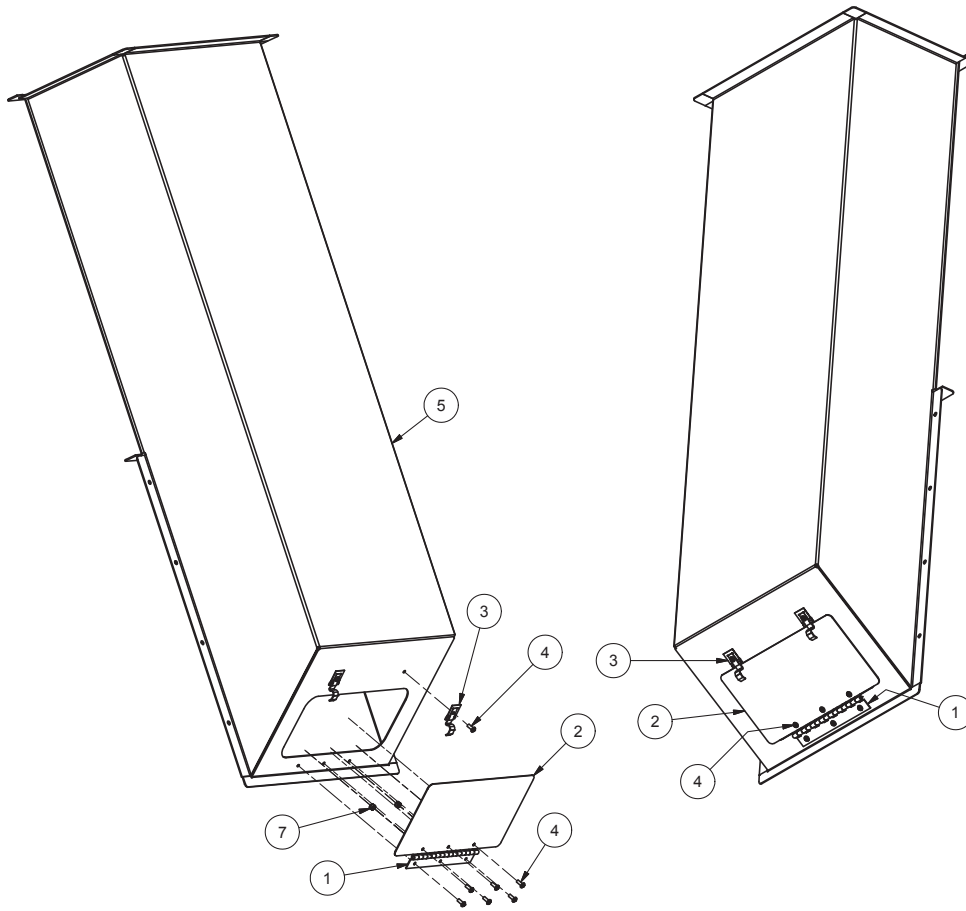
| Item                               | Part No.   | Qty | Description        | Item | Part No.   | Qty | Description          |
|------------------------------------|------------|-----|--------------------|------|------------|-----|----------------------|
| <b>902048 Snorkel Installation</b> |            |     |                    |      |            |     |                      |
| 1                                  | SHD0035692 | 1   | . Shield, Fan Belt | 23   | 237567     | 3   | . Locknut            |
| 2                                  | *a 902050  | 1   | . Snorkel Assembly | 24   | 902045     | 1   | . Plate              |
| 5                                  | BMP0004243 | 1   | . Rubber Bumper    | 25   | 222615     | 4   | . Washer             |
| 7                                  | 902146     | 2   | . Pipe             | 26   | 230640     | 1   | . Machine Screw      |
| 8                                  | *b 902148  | 1   | . Bracket Assembly | 27   | R13812213  | 3   | . Washer(use 15127W) |
| 9                                  | 902145     | 1   | . Support          | 28   | PLU0009292 | 1   | . Plug               |
| 10                                 | SMS0000300 | 11  | . Screw            | 30   | WCTM100080 | 2   | . Washer             |
| 11                                 | SMS0000305 | 9   | . Screw            | 31   | WLKM000080 | 2   | . Lockwasher         |
| 12                                 | 09416918   | 25  | . Nut, Serrated    | 32   | 221518W    | 1   | . Capscrew           |
| 13                                 | 399741W    | 4   | . Screw, Ser Flg   | 33   | 221767W    | 5   | . Washer             |
| 16                                 | 221499W    | 2   | . Capscrew         | 34   | 223799     | 1   | . Nut, Esna          |
| 17                                 | R13811085  | 2   | . Capscrew         |      |            |     |                      |
| 19                                 | 223587     | 2   | . Locknut          |      |            |     |                      |
| 22                                 | 293613W    | 2   | . Capscrew         |      |            |     |                      |

\*a See Separate Coverage (Page 4-18)

\*b See Separate Coverage (Page 4-19)

Rev N

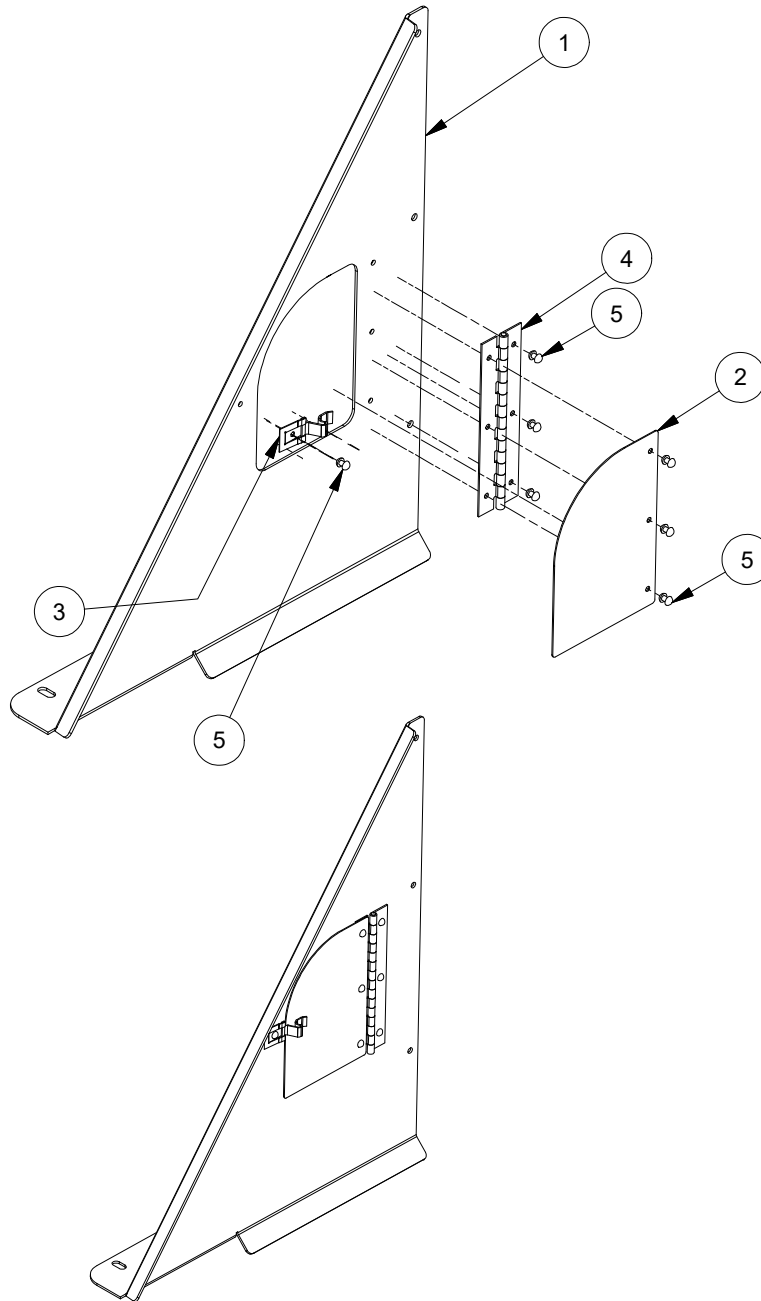
# Snorkel Assembly with Door



| Item | Part No.      | Qty | Description                    | Item | Part No. | Qty | Description        |
|------|---------------|-----|--------------------------------|------|----------|-----|--------------------|
|      | <b>902050</b> |     | <b>Snorkel Assembly,W/Door</b> |      |          |     |                    |
| 1    | HNG0007094    | 1   | . Hinge                        | 5    | 902047   | 1   | . Snorkel Weldment |
| 2    | 902038        | 1   | . Plate, Bottom                | 6    | 239729   | 8   | . Nut              |
| 3    | F000006108    | 2   | . Catch                        | 7    | 239729   | 8   | . Nut              |
| 4    | SMP1032500    | 8   | . Pan                          |      |          |     |                    |

Rev C

# Side Support Bracket Assembly



| Item | Part No.      | Qty | Description                 | Item | Part No.   | Qty | Description |
|------|---------------|-----|-----------------------------|------|------------|-----|-------------|
|      | <b>902148</b> |     | <b>Side Support Bracket</b> |      |            |     |             |
| 1    | 902149        | 1   | . Side Support Bracket      | 4    | HNG0007094 | 1   | . Hinge     |
| 2    | 902147        | 1   | . Engine Oil Access Door    | 5    | RIV0000604 | 7   | . Bolt      |
| 3    | F000006108    | 1   | . Catch                     |      |            |     |             |

Rev J

## Fuel Tank Installation, 30 Gallon

*No illustration available at this time.*

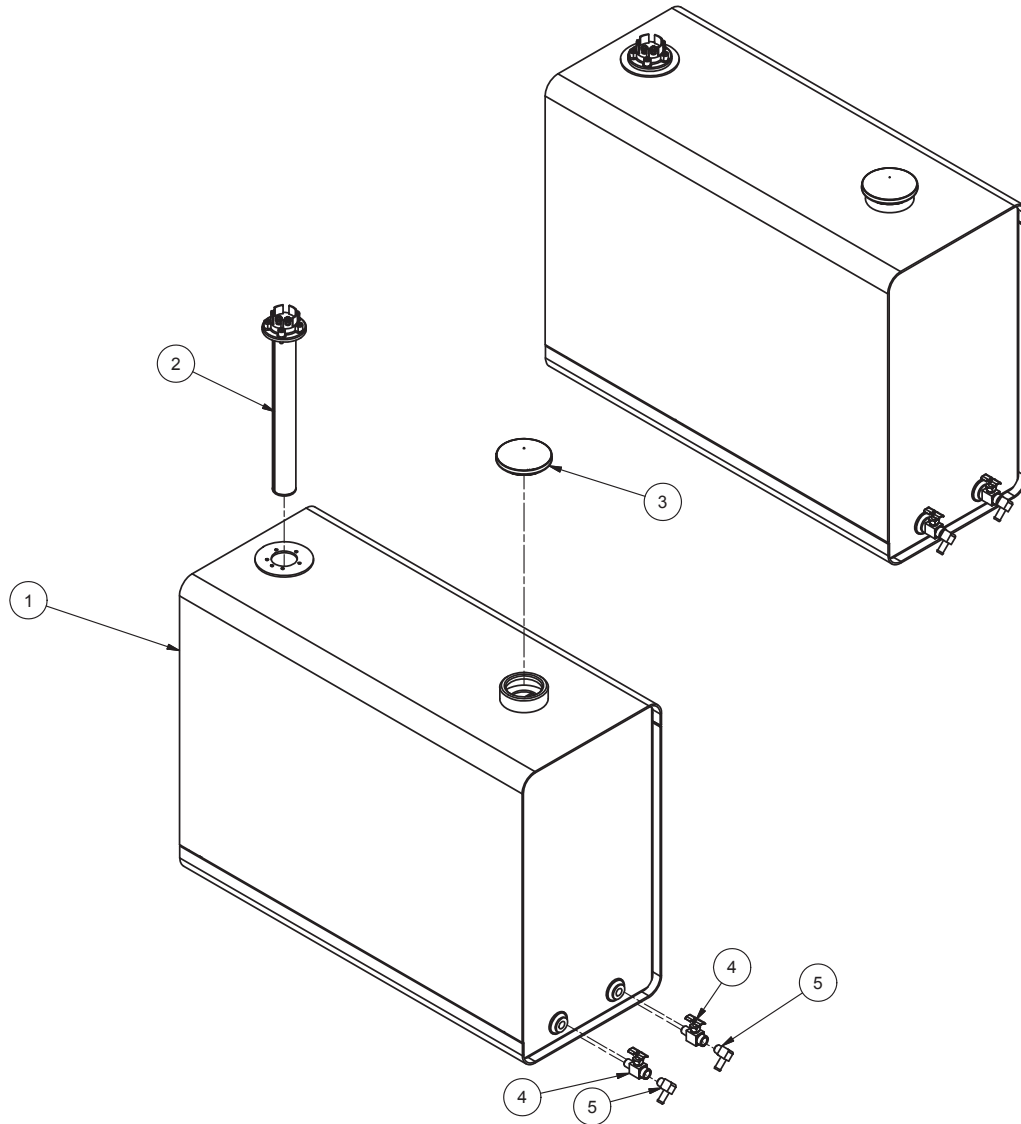
| Item | Part No.      | Qty | Description                              | Item | Part No.   | Qty | Description            |
|------|---------------|-----|--|------|------------|-----|------------------------|
|      | <b>902965</b> |     | <b>Fuel Tank Installation, 30 Gallon</b> |      |            |     |                        |
| 1    | *a 902155     | 1   | . Fuel Tank Subassembly                  | 6    | 902165     | 2   | . Hose, Fuel           |
| 2    | 902918        | 2   | . Strap Sub Assembly, LH                 | 7    | 220949     | 3   | . Mount, Adhesive Back |
| 3    | 902919        | 2   | . Strap Sub Assembly, RH                 | 8    | WEA0005650 | 2'  | . Weatherstrip         |
| 4    | FT00000252    | 4   | . Hose Clamp                             | 9    | 903114     | 1   | . Plate, Lower Shield  |
| 5    | MNT036964B    | 1   | . Fuel Tank Mount Bracket                |      |            |     |                        |

\*a See Separate Coverage (Page 4-21)

Rev -



# Fuel Tank Subassembly, 30 Gallon



| Item | Part No.      | Qty | Description                          | Item | Part No.   | Qty | Description      |
|------|---------------|-----|--------------------------------------|------|------------|-----|------------------|
|      | <b>902155</b> |     | <b>Fuel Tank Subassembly, 30 Gal</b> |      |            |     |                  |
| 1    | TNK0032767    | 1   | . Tank, Fuel                         | 4    | F000008189 | 2   | . Shut-Off Valve |
| 2    | SDR0RA9320    | 1   | . Sender, Fluid Level                | 5    | HYD0001571 | 2   | . Fitting        |
| 3    | F000001689    | 1   | . Fuel Cap Tank                      |      |            |     |                  |

Rev B

# Driveline PTO Installation, 2-Tie Bullgear

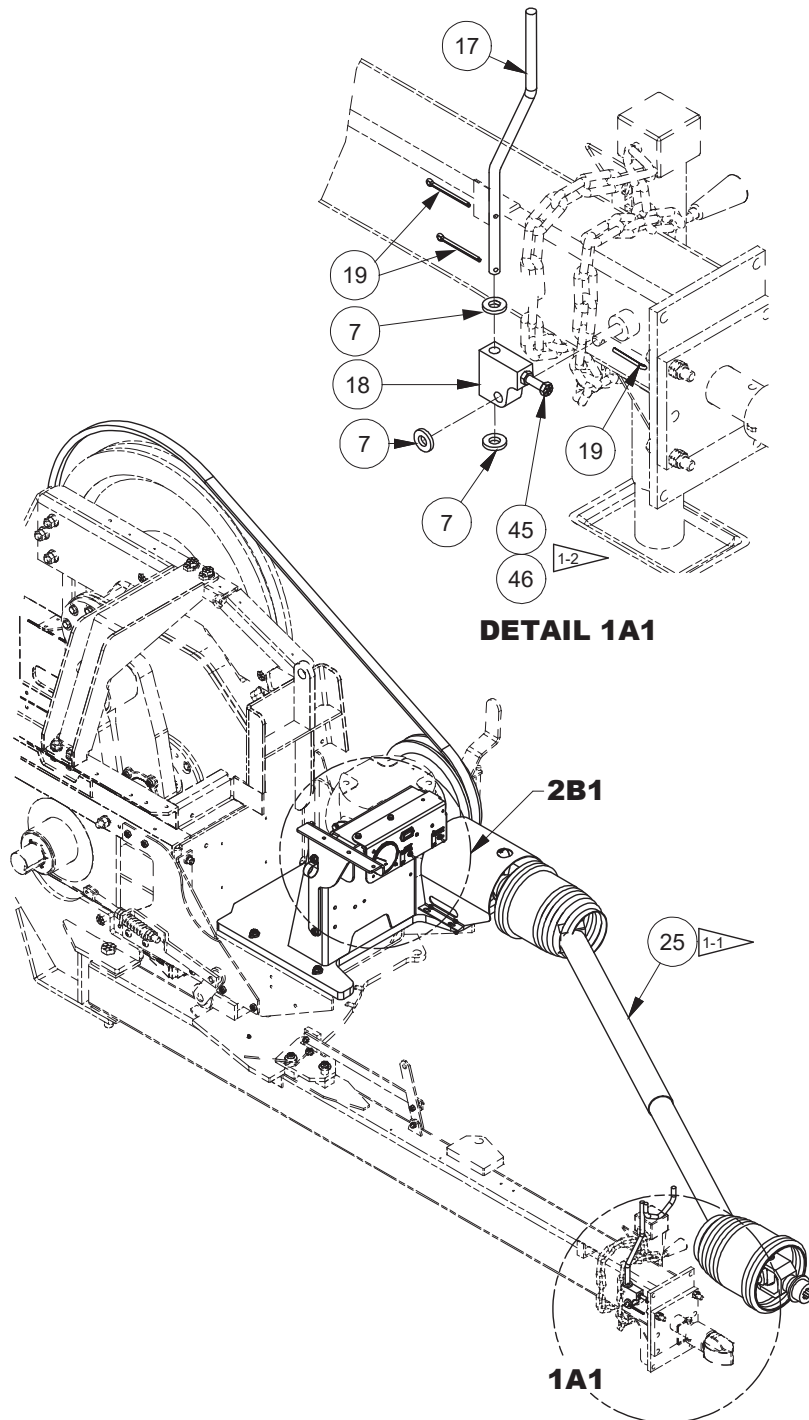
Page 1 of 5

| Item | Part No.      | Qty | Description                       | Item | Part No.                          | Qty | Description               |
|------|---------------|-----|-----------------------------------|------|-----------------------------------|-----|---------------------------|
|      | <b>910116</b> |     | <b>Driveline PTO Installation</b> |      |                                   |     |                           |
| 1    | 910115        | 1   | Mounting Weldment                 | 31   | 223588                            | 4   | Nut, Esna                 |
| 2    | 257532        | 1   | Gearbox                           | 32   | 236805                            | 4   | Capscrew                  |
|      | 908127        | 3   | . Seal                            | 33   | 296420W                           | 4   | Washer                    |
| 3    | 293708W       | 4   | Capscrew                          | 34   | R13802914                         | 4   | Washer                    |
| 4    | 296430W       | 4   | Washer                            | 35   | 229289                            | 2   | Switch, Toggle            |
| 5    | R13811077     | 1   | Capscrew                          | 36   | GAG0001133                        | 1   | Hour Meter                |
| 6    | Y22E-08       | 4   | Washer                            | 37   | 909083                            | 1   | Gauge, Tension Controlled |
| 7    | 221771W       | 9   | Washer                            | 38   | 252619                            | 1   | Relay                     |
| 8    | 200454W       | 2   | Capscrew                          | 39   | 258409                            | 1   | Decal, Work Lights        |
| 9    | 221711W       | 6   | Hex Nut                           | 40   | 258410                            | 1   | Decal, Power              |
| 10   | R13811080     | 1   | Capscrew                          | 41   | 561929                            | 2   | Decal, On-Off             |
| 11   | F000007010    | 2   | Bolt, Adjusting                   | 42   | Y25G-(1024)122                    |     | Capscrew                  |
| 12   | F000007000    | 1   | Belt, Drive                       | 43   | 220044                            | 2   | Nut                       |
| 13   | 910112        | 1   | Plate, Instrument Pane, L         | 44   | WIS0001000                        | 2   | Lockwasher                |
| 14   | 2305631W      | 4   | Screw, Ser Fig                    | 45   | 180959W                           | 1   | Capscrew                  |
| 15   | 191534W       | 4   | Nut                               | 46   | 235708                            | 1   | Jam Nut                   |
| 16   | Y27E-06       | 4   | Washer                            | 47   | 235720                            | 2GL | Lubricant, Gear           |
| 17   | 904133        | 1   | Stand Weldment                    | 48   | 209427                            | 1   | Fitting                   |
| 18   | 904136        | 1   | Plate, Swivel Block               | 49   | 209700                            | 1   | Clip, Insul               |
| 19   | Y01F-0636     | 3   | Cotter Pin                        | 50   | 209695                            | 1   | Clamp                     |
| 20   | 906512        | 1   | Plate, Sheave                     | 51   | R13801782                         | 1   | Capscrew                  |
| 21   | 904129        | 1   | Hub, Sheave                       | 52   | 221703W                           | 2   | Hex Nut                   |
| 22   | R13811082     | 1   | Capscrew                          | 53   | 909396                            | 1   | Bolt, Retaining           |
| 23   | 223587        | 3   | Locknut                           | 54   | 2305986W                          | 4   | Set Screw                 |
| 24   | R13801813     | 4   | Capscrew                          | 55   | 302398W                           | 2   | Locknut                   |
| 25   | *a 258050     | 1   | Driveline                         | 56   | 221569W                           | 1   | Capscrew                  |
| 26   | 904434        | 1   | Cover Weldment, Shaft             |      |                                   |     |                           |
| 27   | *b 904680     | 1   | Clutch                            |      |                                   |     |                           |
|      |               | 1   | . Taper Pin                       | *a   | See Separate Coverage (Page 4-27) |     |                           |
|      |               | 1   | . Washer                          | *b   | Contact Manufacturer              |     |                           |
|      |               | 1   | . Nut                             |      |                                   |     |                           |
| 28   | 904562        | 1   | Plate, Guard                      |      |                                   |     |                           |
| 29   | 904490        | 1   | Plate, Mounting                   |      |                                   |     |                           |
| 30   | R13811017     | 4   | Capscrew                          |      |                                   |     |                           |

Rev CC

# Driveline PTO Installation, 2-Tie Bullgear

Page 2 of 5

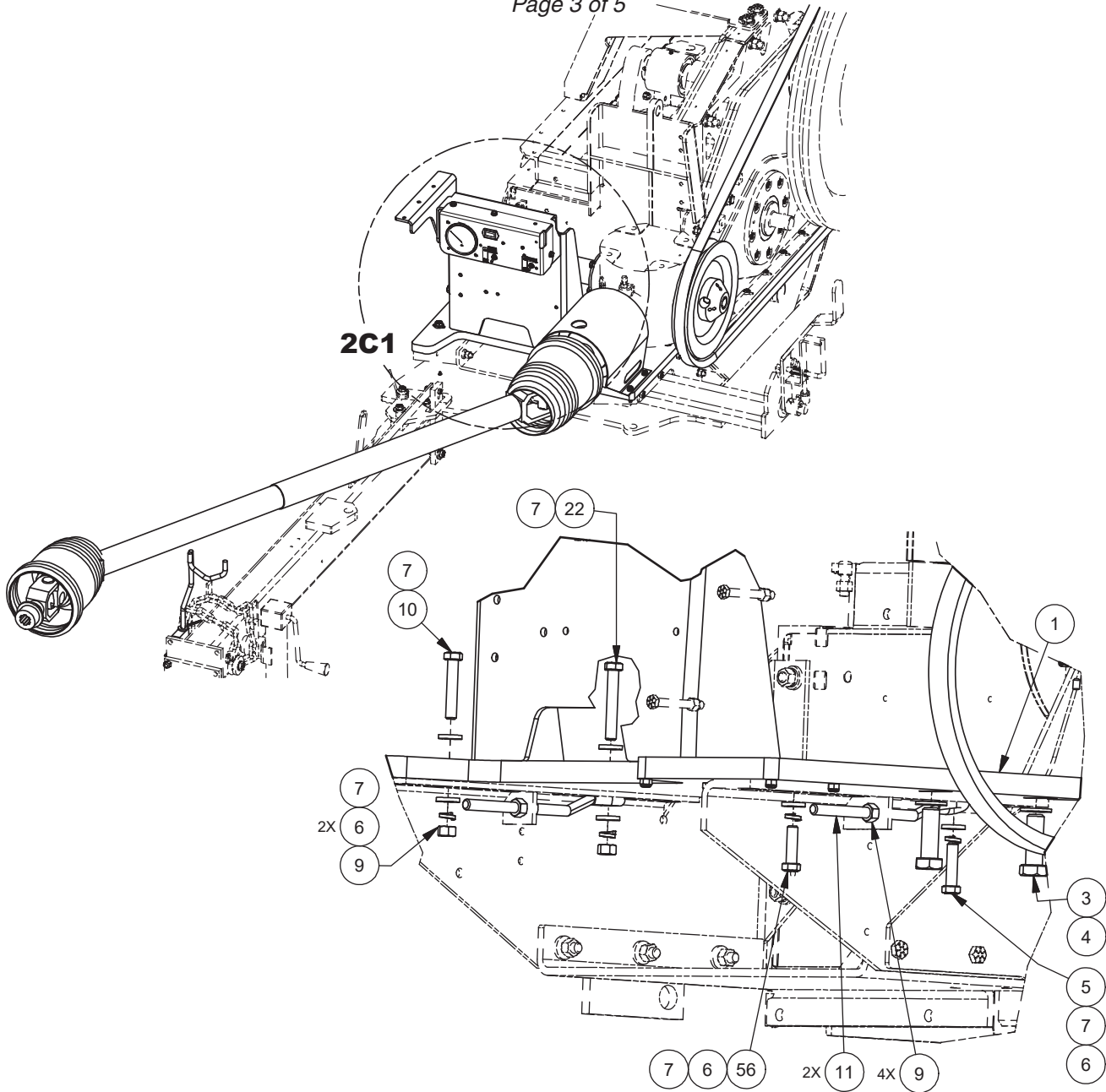


**NOTES:**

- 1-1** TIGHTEN CONNECTION BOLT FROM DRIVELINE TO GEARBOX INPUT SHAFT TO 162 FT-LBS.
- 1-2** ADJUST SCREW LENGTH SO SUPPORT BAR IS IN A VERTICAL POSITION WHEN DRIVELINE IS PLACED IN HOLDER. ENGAGE JAM NUT TO LOCK SCREW IN PLACE.

# Driveline PTO Installation, 2-Tie Bullgear

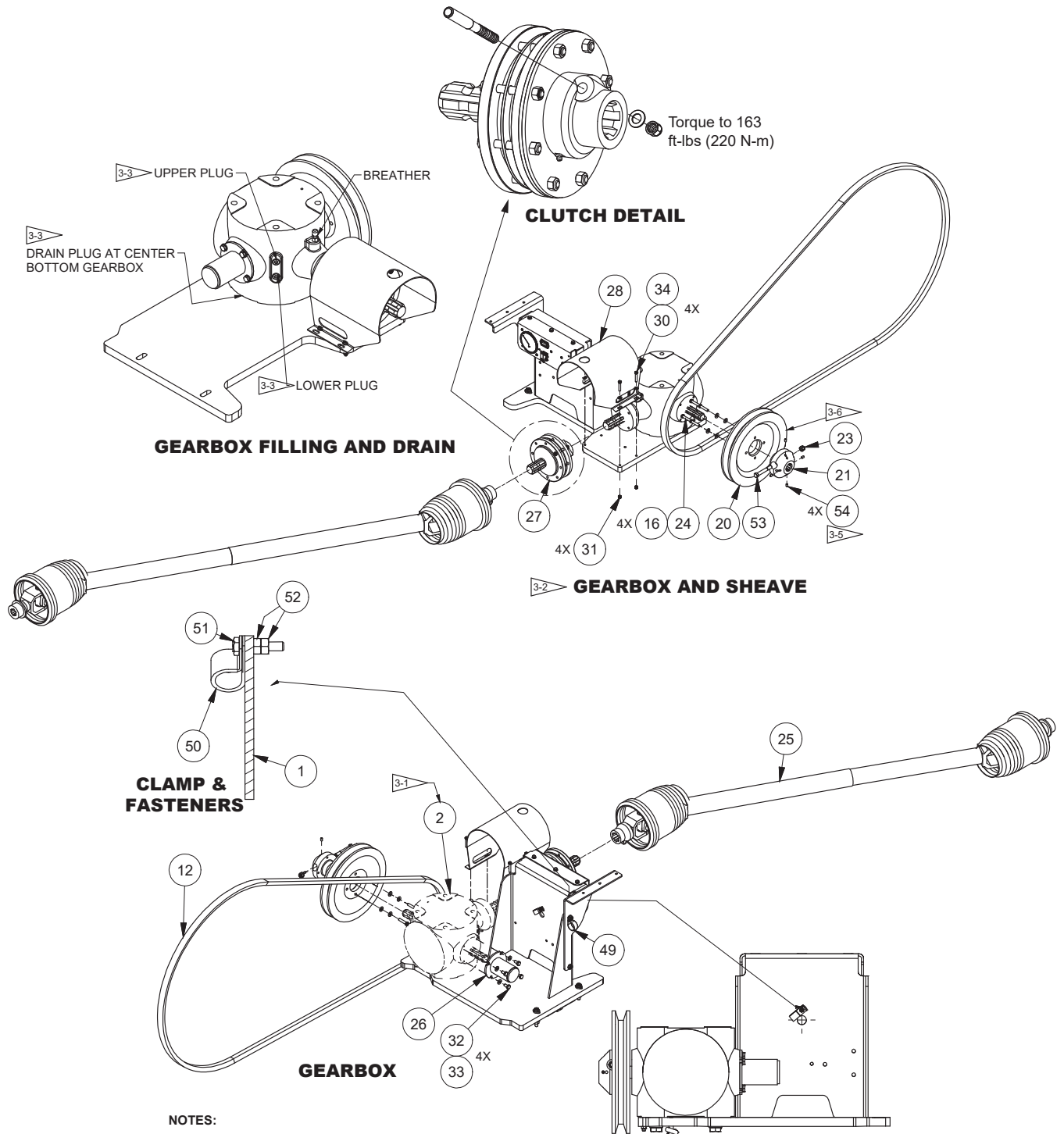
Page 3 of 5



**DETAIL 2C1**  
GEARBOX MOUNTING PLATE

### Driveline PTO Installation, 2-Tie Bullgear

Page 4 of 5

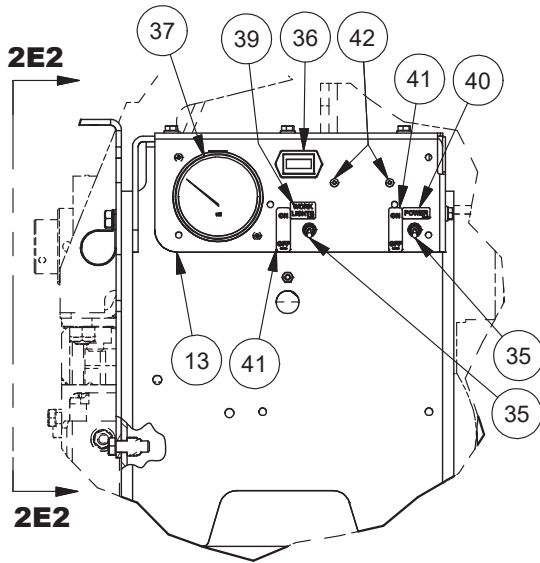
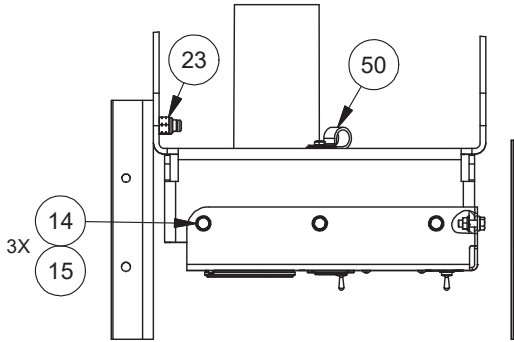


**NOTES:**

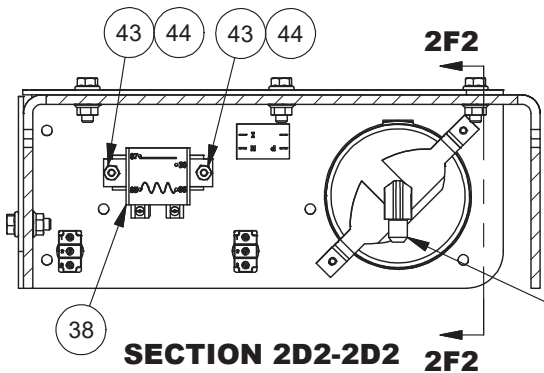
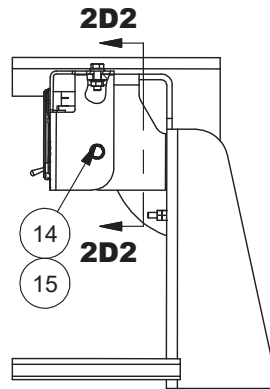
- 3-1 GEARBOX MUST BE INSTALLED SO CCW INPUT OF FRONT SHAFT PRODUCES CCW OUTPUT ON SHAFT W/ SHEAVE.
- 3-2 CHECK BELT TIGHTNESS. APPLY 20 LBS AT THE LOCATION INDICATED ON THE MID-SPAN OF BELT IN DOWNWARD DIRECTION. BELT DEFLECTION SHOULD BE 0.75" +/- 0.13".
- 3-3 USE MOBILUBE HD PLUS 80W-90 GEAR OIL, ALLIED P/N 235720.  
WITH THE BALER SITTING LEVEL, REMOVE THE LOWER PLUG. OIL SHOULD BE LEVEL WITH THE BOTTOM OF THE OPENING (SEE VIEW "GEARBOX FILLING AND DRAIN"). ADD OIL AS NECESSARY THROUGH THE UPPER PLUG OPENING. REPLACE PLUGS AND TIGHTEN SECURELY.  
THE GEARBOX HAS APPROXIMATELY 135 OZ (4 LITERS) CAPACITY.
- 3-5 LOCATE SET SCREWS EVENLY.
- 3-6 TOTAL RUNOUT OF SHEAVE SHOULD NOT EXCEED 0.020".

# Driveline PTO Installation, 2-Tie Bullgear

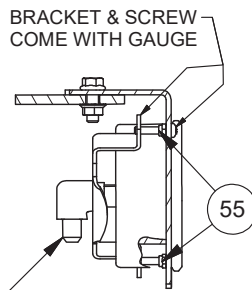
Page 5 of 5



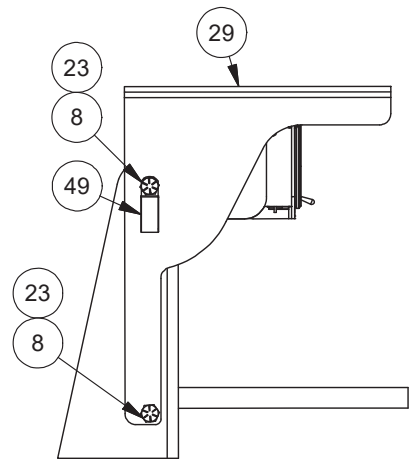
**DETAIL 2B1**  
INSTRUMENT PANEL



**SECTION 2D2-2D2**

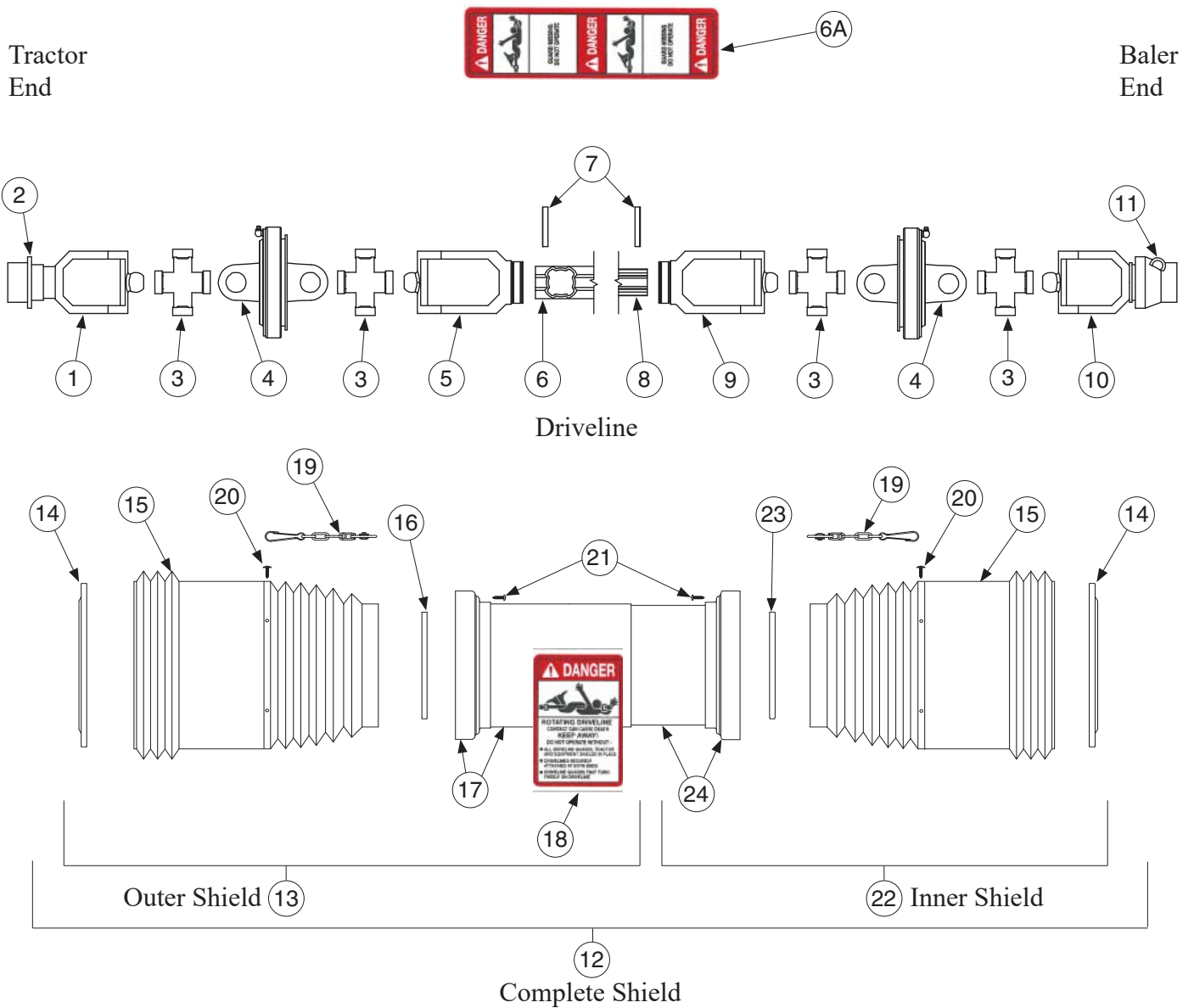


**SECTION 2F2-2F2**



**VIEW 2E2-2E2**

### Driveline Assembly



| Item                             | Part No. | Qty | Description                        | Item | Part No. | Qty | Description                     |
|----------------------------------|----------|-----|------------------------------------|------|----------|-----|---------------------------------|
| <b>258050 Driveline Assembly</b> |          |     |                                    |      |          |     |                                 |
| 1                                | 906277   | 1   | . Yoke, Ball Collar                | 15   | 906290   | 1   | ... CV Shield Cone              |
| 2                                | 906332   | 1   | .. Kit, Ball Collar Slide & Detent | 16   | 906291   | 1   | ... Bearing Ring, Outer Tube    |
| 3                                | 906278   | 4   | .. Cross Journal                   | 17   | 906329   | 1   | ... Shield, Outer Tube          |
| 4                                | 906279   | 2   | . CV Body                          | 18   | 906293   | 1   | .... Outer Safety Decal         |
| 5                                | 906280   | 1   | . Yoke, CV Outer Tube              | 19   | 906331   | 1   | ... Chain, Shield               |
| 6                                | 906281   | 1   | . Cardan Tube, Outer               | 20   | NSS      | 6   | .. Screw                        |
| 6A                               | 906282   | 1   | . Decal, Safety, On Tube           | 21   | NSS      | 3   | .. Screw                        |
| 7                                | 906283   | 2   | .. Roll Pin                        | 22   | 906335   | 1   | ... Shield, Inner 1/2 Shaft     |
| 8                                | 906284   | 1   | . Cardan Tube, Inner               | 14   | 906289   | 1   | ... CV Shield Cone Bearing Ring |
| 9                                | 906286   | 1   | . Yoke, CV Inner Tube              | 15   | 906290   | 1   | ... CV Shield Cone              |
| 10                               | 906287   | 1   | . Yoke, Taper Pin                  | 23   | 906292   | 1   | ... Bearing Ring, Inner Tube    |
| 11                               | 906233   | 1   | .. Kit, Taper Pin, Nut & Washer    | 24   | 906330   | 1   | ... Shield, Inner Tube          |
| 12                               | 906288   | 1   | .. Shield Kit, Complete            | 19   | 906331   | 1   | ... Chain, Shield               |
| 13                               | 906334   | 1   | .. Shield, Outer 1/2 Shaft         | 20   | NSS      | 6   | .. Screw                        |
| 14                               | 906289   | 1   | ... CV Shield Cone Bearing Ring    | 21   | NSS      | 3   | .. Screw                        |

This page is intentionally left blank.

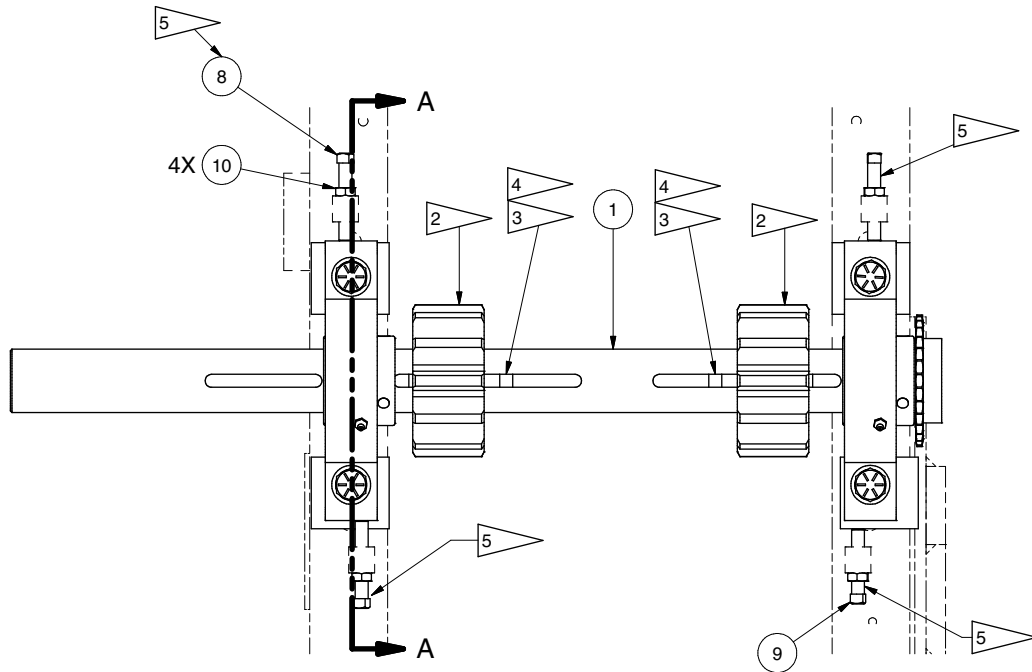
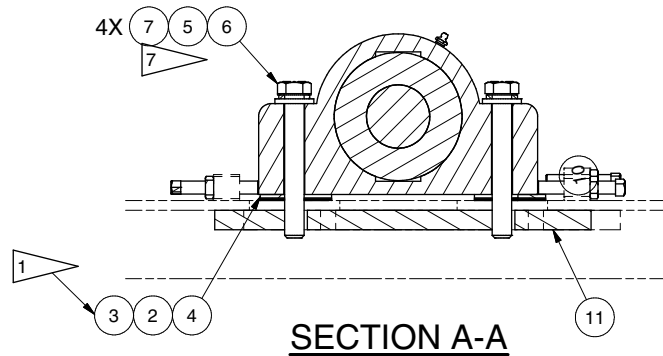
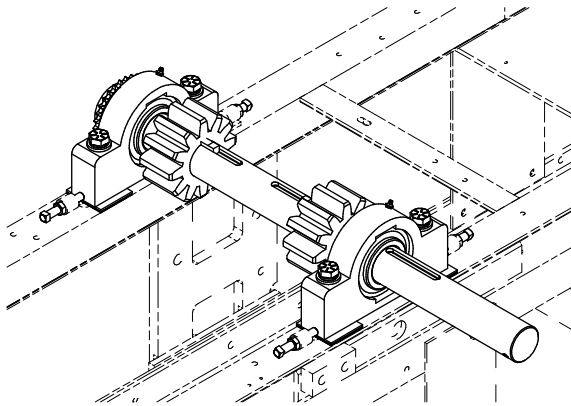


## Section 5

# Drive System

|  |      |
|--|------|
| Pinion Shaft Installation .....                            | 5-2  |
| .Pinion Shaft Assembly.....                                | 5-3  |
| <br>   |      |
| Bullgear/Plunger Installation, RH Drawbar, 14" 2 Tie.....  | 5-4  |
| Bullgear/Plunger Installation, LH Drawbar, 14" 2 Tie ..... | 5-6  |
| .Plunger/Connector Rod Assembly, 14" 2 Tie .....           | 5-8  |
| ..Connector Rod Assembly, 2 Tie.....                       | 5-11 |
| .Side Plate Assembly, LH, 14" Chamber.....                 | 5-12 |
| .Side Plate Assembly, RH, 14" Chamber .....                | 5-13 |
| <br>   |      |
| Bullgear/Plunger Installation, RH Drawbar, 16" 2 Tie.....  | 5-14 |
| Bullgear/Plunger Installation, LH Drawbar, 16" 2 Tie ..... | 5-16 |
| .Plunger/Connector Rod Assembly, 16" 2 Tie .....           | 5-18 |
| ..Connector Rod Assembly, 16" 2- Tie .....                 | 5-21 |
| .Side Plate Assembly, LH, 16" Chamber.....                 | 5-22 |
| .Side Plate Assembly, RH, 16" Chamber .....                | 5-23 |
| <br>   |      |
| Flywheel Installation .....                                | 5-24 |
| Flywheel Assembly .....                                    | 5-25 |
| <br>   |      |
| Tank Installation, Bullgear Luber.....                     | 5-26 |
| .Tank and Pump Assembly, Luber .....                       | 5-27 |
| Bullgear/Luber Installation, 2 Tie .....                   | 5-28 |
| .Bullgear Shield/Luber Assembly, 2 Tie .....               | 5-29 |
| ..Manifold Assembly, Bullgear Luber.....                   | 5-30 |
| Oil Cooler/Shroud Assembly, Bullgear, Hydro .....          | 5-31 |
| ..Manifold Assembly, Bullgear Luber, Hydro .....           | 5-33 |

# Pinion Shaft Installation



1 NOTES:  
A/R USE SHIMS TO ALLOW AT LEAST 0.09" CLEARANCE FROM PINION SHAFT TO HEAD OF PLUNGER CONNECTING ROD HOUSING BOLT

SUGGESTED QTY:  
16" CHAMBER - (0) 10 GA SHIMS (SHM0800402)  
15" KITTED CHAMBER - (4) 10 GA SHIMS (SHM0800402)  
14" KITTED CHAMBER - (8) 10 GA SHIMS (SHM0800402)  
14" CHAMBER - (12) 10 GA SHIMS (SHM0800402)

2 PINION GEAR IS CENTERED TO BULLGEAR.  
3 KEY DOES NOT TOUCH BEARING WHEN SET.

4 USE TOOL X-202481 FOR KEY INSTALLATION.

5 INITIAL PINION GEAR - BULLGEAR BACKLASH IS .015"-.054", CAN NOT VARY MORE THAN .015" BETWEEN GEARSETS (RIGHT/LEFT)

6 VIEWS SHOW INSTALLATION 906873

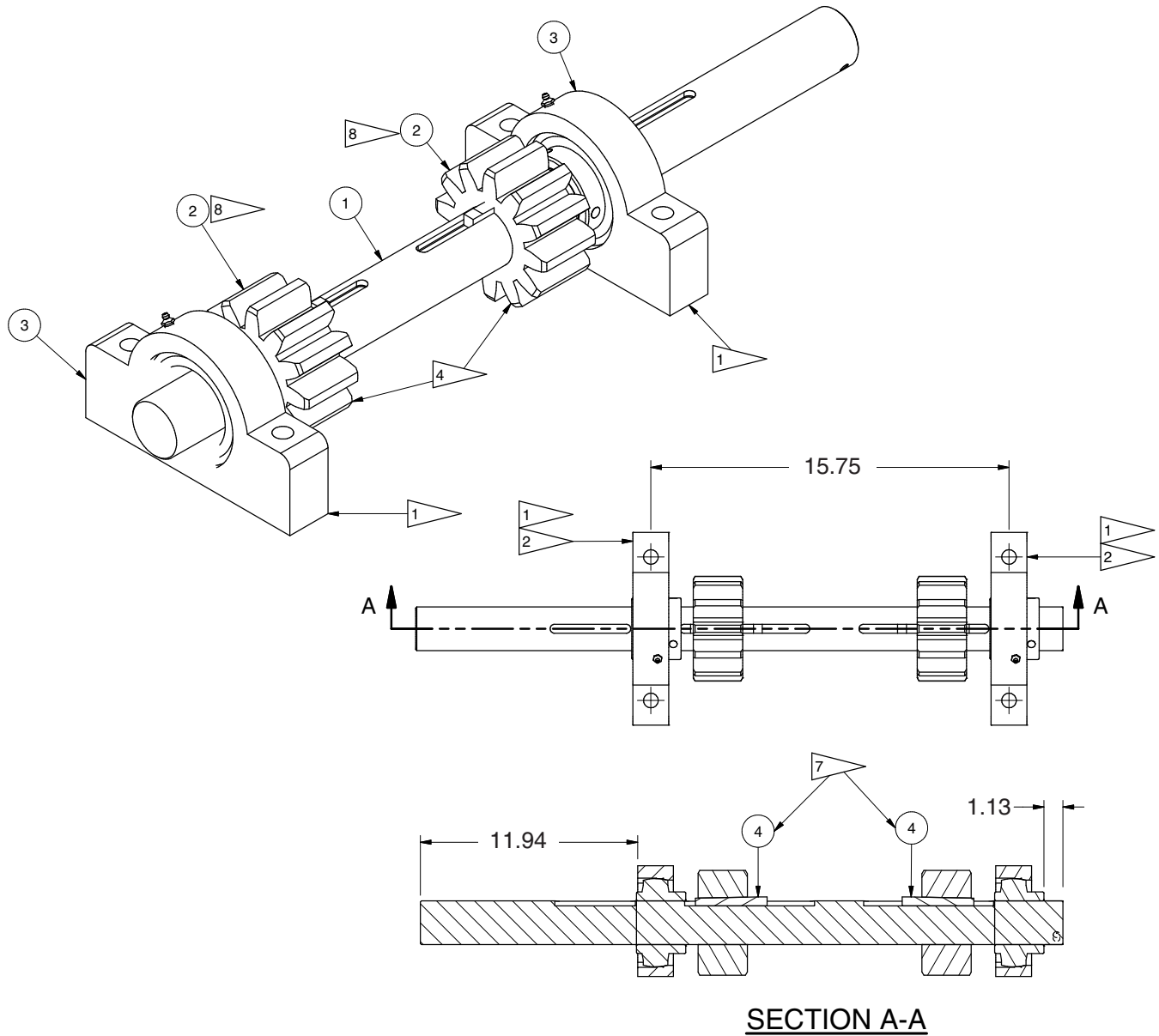
7 USE ANTI-SIEZE ON BOLT THREADS

| Item                                    | Part No.   | Qty | Description                 | Item | Part No.   | Qty | Description   |
|---|------------|-----|-----------------------------|------|------------|-----|---------------|
| <b>906875 Pinion Shaft Installation</b> |            |     |                             |      |            |     |               |
| 1                                       | * 902115   | 1   | . Shaft Subassembly, Pinion | 8    | SQS5003000 | 3   | . Set Screw   |
| 2                                       | SHM0800400 | AR  | . Plate, Shim, 20 GA        | 9    | SQS5002500 | 1   | . Set Screw   |
| 3                                       | SHM0800401 | AR  | . Plate, Shim, 16 GA        | 10   | 234218     | 4   | . Jam Nut     |
| 4                                       | SHM0800402 | AR  | . Plate, Shim, 10 GA        | 11   | BAR0007975 | 2   | . Bar, Anchor |
| 5                                       | R13812518  | 4   | . Lockwasher                |      |            |     |               |
| 6                                       | 230682W    | 4   | . Capscrew                  |      |            |     |               |
| 7                                       | 221777W    | 4   | . Washer                    |      |            |     |               |

\* See Separate Coverage (Page 5-3)

Rev CE

## Pinion Shaft Assembly



**SECTION A-A**

**NOTES:**

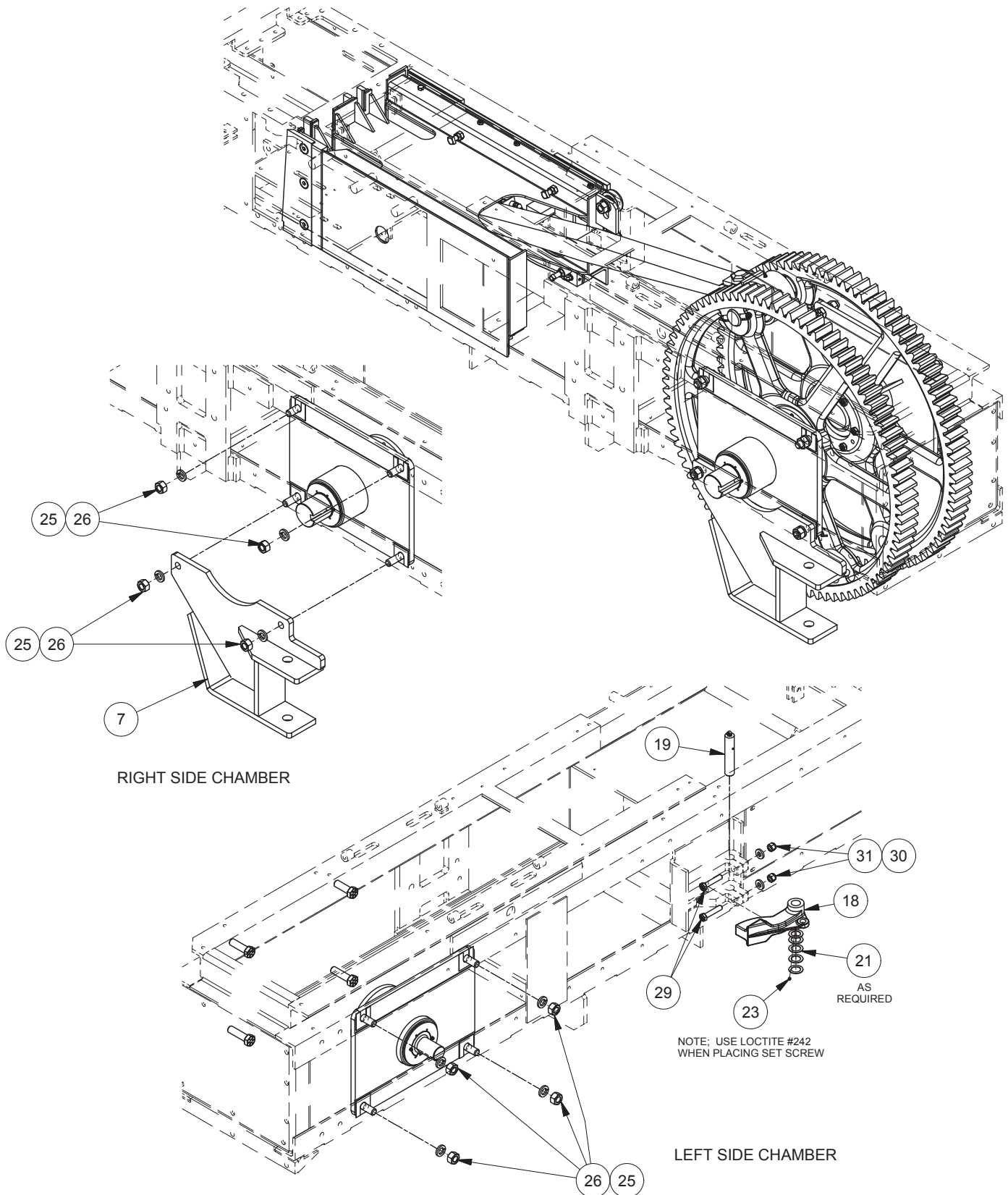
- 1 USE LOCTITE #635 TO SECURE BEARING TO SHAFT.
- 2 REFER TO BEARING INSTALLATION INSTRUCTIONS (904245).
- 3 PINIONS ARE CENTERED WITH BULL GEARS AND KEYS SET WHEN ASSEMBLY IS INSTALLED ON FRAME.
- 4
- 5 SPROCKET IS FLUSH TO END OF SHAFT.
- 7 KEYS ARE PRE-ASSEMBLED SO LEADING EDGE IS FLUSH WITH PINION WHEN LIGHTLY SET. FLAT OF KEY SHOULD NOT DRIVE INTO PINION. LOOSE KEYWAYS MAY USE OVERSIZED KEY (902785).
- 8 .003" TO .005" TOTAL MIS-ALIGNMENT BETWEEN TEETH OF GEARS (RIGHT/LEFT). CHECK PRIOR TO LOCTITE BEARINGS NOTE #1.

| Item                                | Part No.   | Qty | Description        | Item | Part No.   | Qty | Description |
|-------------------------------------|------------|-----|--------------------|------|------------|-----|-------------|
| <b>902115 Pinion Shaft Assembly</b> |            |     |                    |      |            |     |             |
| 1                                   | SHF0013300 | 1   | . Shaft, Pinion    | 4    | F000007488 | 2   | . Key       |
| 2                                   | GER0007128 | 2   | . Gear, Pinion     | 5    | SPK0004030 | 0   | . Sprocket  |
| 3                                   | 908348     | 2   | . Bearing Assembly |      |            |     |             |

Rev FC

# Bullgear/Plunger Installation, RH Drawbar, 14" 2 Tie

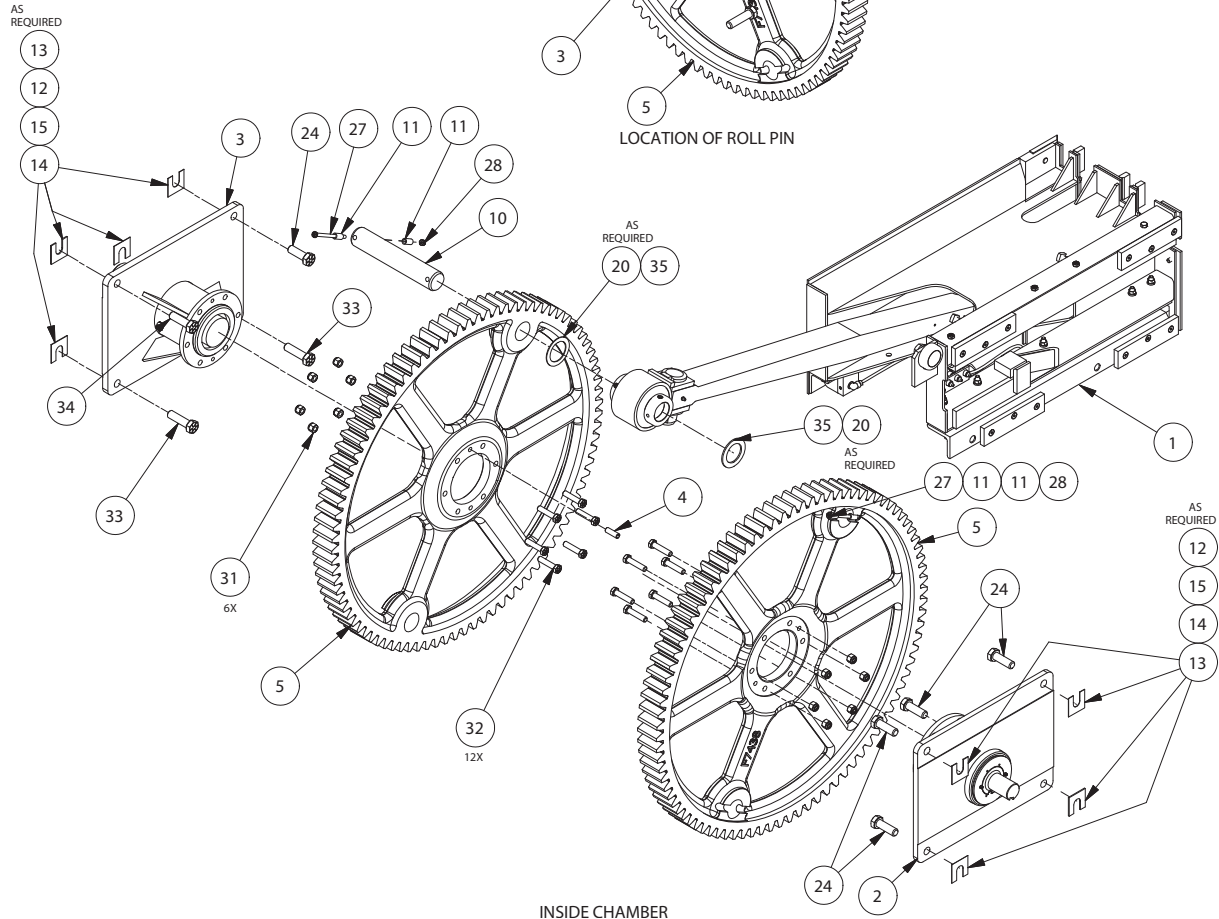
Page 1 of 2



## Bullgear/Plunger Installation, RH Drawbar, 14" 2 Tie

Page 2 of 2

NOTE:  
TO AVOID FEED ARM INTERFERENCE, THE ROLL PIN IS THE RIGHT HAND BULLGEAR IS PLACED SO THAT WHEN THE BULLGEAR IS IN THE UP (12 O'CLOCK) POSITION IN THE CHAMBER THE KEYWAY OF THE SHAFT IN THE BULLGEAR PLATE IS FACED TO THE FRONT (3 O'CLOCK) OF THE CHAMBER.



INSIDE CHAMBER

| Item  | Part No.      | Qty | Description                 | Item | Part No.  | Qty | Description  |
|---|---------------|-----|-----------------------------|------|-----------|-----|--------------|
| <b>902536 Bullgear/Plunger Installation</b> |               |     |                             |      |           |     |              |
| 1   | *a PLG3654800 | 1   | . Plunger/Conn Rod Assembly | 23   | 027-0933  | 1   | . Set Screw  |
| 2   | *b PLT0257720 | 1   | . Side Plate Assembly, LH   | 24   | Y17C-1236 | 5   | . Capscrew   |
| 3   | *c PLT0257730 | 1   | . Side Plate Assembly, RH   | 25   | 200608    | 8   | . Lockwasher |
| 4   | F000007239    | 2   | . Pin, Roll                 | 26   | 221716W   | 8   | . Hex Nut    |
| 5   | F000007438    | 2   | . Bull Gear                 | 27   | R13811027 | 2   | . Capscrew   |
| 7   | 903503        | 1   | . Bracket, Drawbar          | 28   | 232939    | 2   | . Nut        |
| 10  | F000000046    | 1   | . Pin                       | 29   | 221576W   | 2   | . Capscrew   |
| 11  | SPC0033118    | 4   | . Spacer                    | 30   | 221771W   | 2   | . Washer     |
| 12  | SHM0163090    | AR  | . Shim 16 GA                | 31   | 223587    | 14  | . Nut        |
| 13  | SHM0163091    | AR  | . Shim 20 GA                | 32   | 221574W   | 12  | . Capscrew   |
| 14  | SHM0163092    | AR  | . Shim 10 GA                | 33   | R13806363 | 2   | . Capscrew   |
| 15  | SHM0163093    | AR  | . Shim 28 GA                | 34   | 221657W   | 1   | . Capscrew   |
| 18  | F000007547    | 1   | . Dog Stop, Plunger         | 35   | 221706    | AR  | . Bushing    |
| 19  | PIN0035710    | 1   | . Pin Assembly              |      |           |     |              |
|   | 09417892      | 1   | . Fitting, Lube             |      |           |     |              |
| 20  | ZZ00000204    | AR  | . Bushing                   |      |           |     |              |
| 21  | ZZ00000209    | AR  | . Bushing                   |      |           |     |              |

\*a See Separate Coverage (Page 5-9)

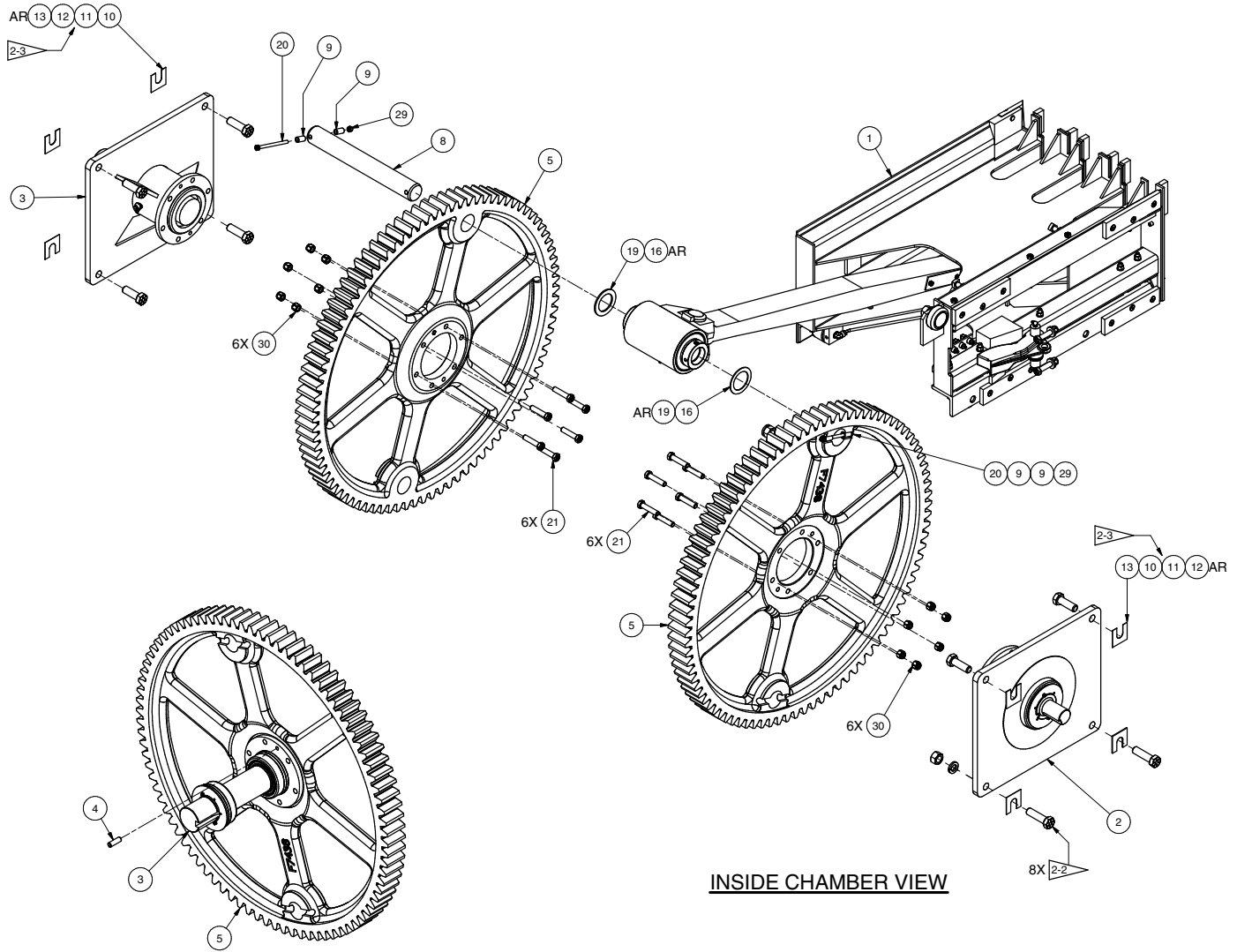
\*b See Separate Coverage (Page 5-12)

\*c See Separate Coverage (Page 5-13)

Rev A

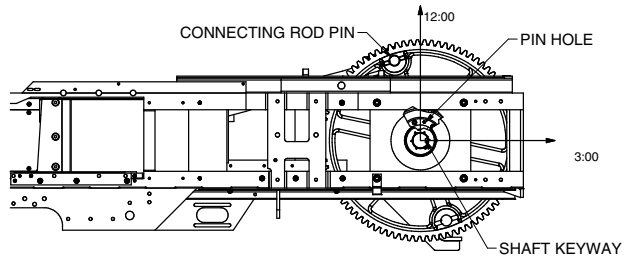
# Bullgear/Plunger Installation, LH Drawbar, 14" 2 Tie

Page 1 of 2



2-1 ROLL PIN LOCATION

INSIDE CHAMBER VIEW



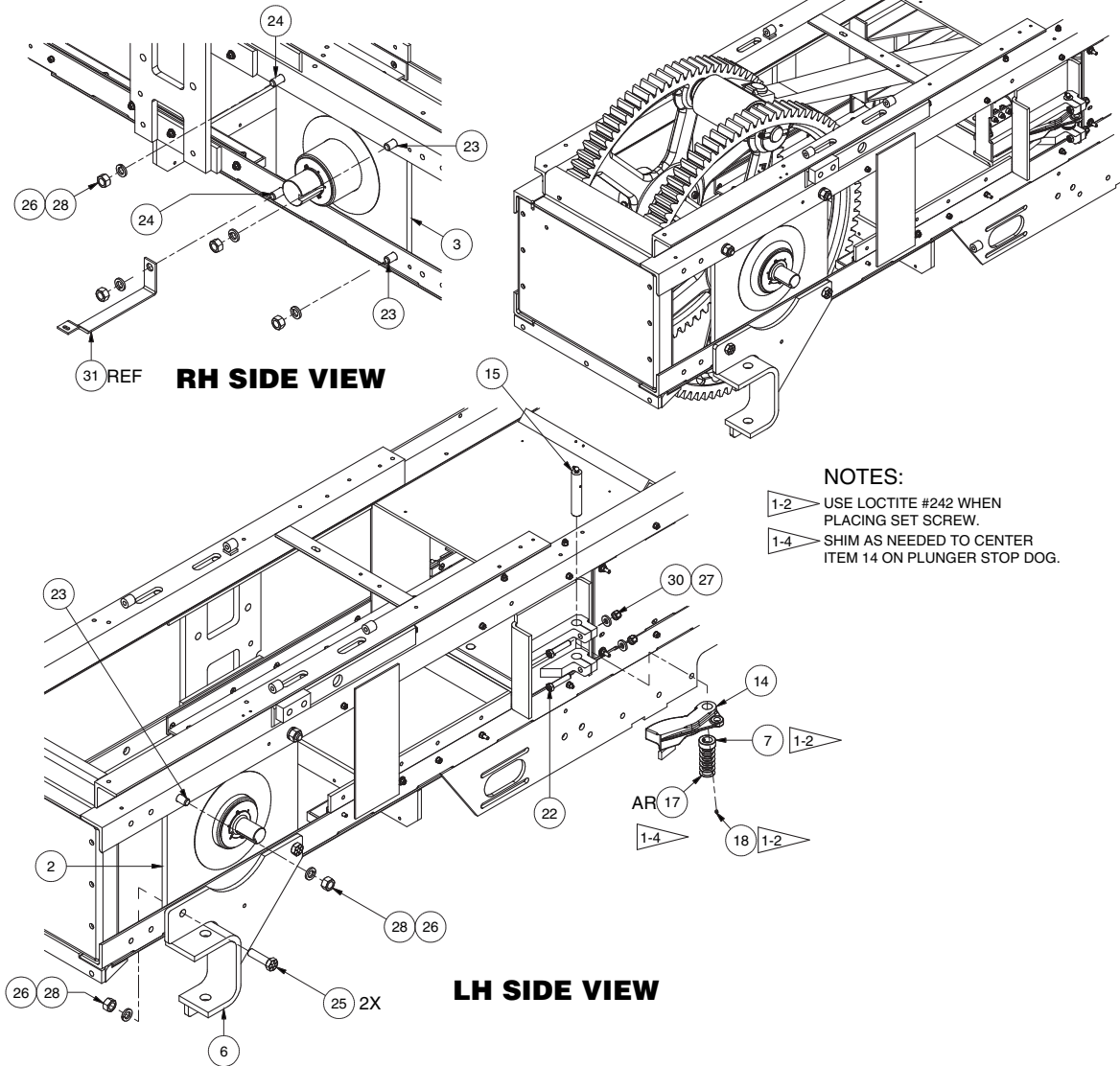
FEED FORK AND PLUNGER TIMING  
ORIENTATION INFORMATION  
IS FOR BULL GEAR INSTALLATION ONLY

NOTES:

- 2-1 TO AVOID FEED ARM INTERFERENCE THE ROLL PIN IN THE RIGHT-HAND BULLGEAR IS PLACED SO THAT WHEN THE CONNECTING ROD IS BETWEEN THE 11:00 TO 12:00 POSITION, THE KEYWAY OF THE SHAFT IN THE RIGHT-HAND BULLGEAR SIDE PLATE IS FACING THE FRONT OF THE BALER IN THE 3:00 POSITION AS REFERENCED WHEN LOOKING AT THE RIGHT-HAND BULLGEAR SIDE PLATE FROM THE RIGHT-HAND SIDE OF THE BALER.
- 2-2 TORQUE SIDE PLATE BOLTS TO 365 FT-LBS.
- 2-3 SHIM AS NEEDED SO THAT THE BULLGEARS (ITEM 5) CAN FREELY ROTATE A FULL 360° WITH THE CRANK PIN (ITEM 8) INSERTED.

## Bullgear/Plunger Installation, LH Drawbar, 14" 2 Tie

Page 2 of 2



**NOTES:**

- 1-2 USE LOCTITE #242 WHEN PLACING SET SCREW.
- 1-4 SHIM AS NEEDED TO CENTER ITEM 14 ON PLUNGER STOP DOG.

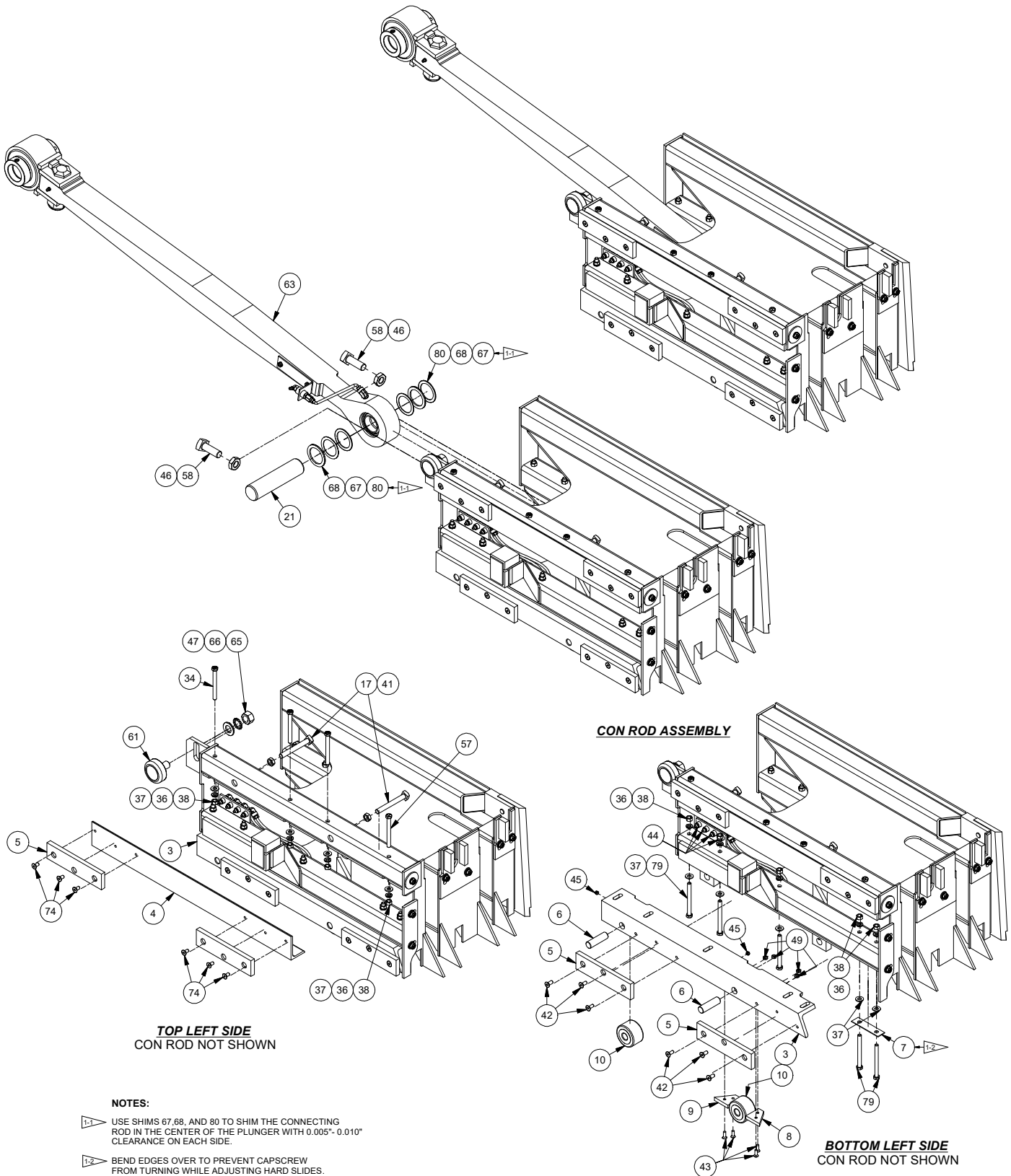
| Item  | Part No.      | Qty | Description                | Item | Part No.   | Qty | Description    |
|---|---------------|-----|----------------------------|------|------------|-----|----------------|
| <b>910101 Bullgear/Plunger Installation, LH 14" 2 - TIE</b> |               |     |                            |      |            |     |                |
| 1   | *a PLG3654800 | 1   | . Plunger Assembly         | 19   | 221706     | 4   | . Mach Bushing |
| 2   | *b PLT0257720 | 1   | . Side Plate Assembly, LH  | 20   | R13811027  | 2   | . Capscrew     |
| 3   | *c PLT0257730 | 1   | . Side Plate Assembly, RH  | 21   | 221574W    | 12  | . Capscrew     |
| 4   | F000007239    | 1   | . Pin, Roll                | 22   | 221576W    | 2   | . Capscrew     |
| 5   | F000007438    | 2   | . Bull Gear                | 23   | 221656W    | 4   | . Capscrew     |
| 6   | BKT0016306    | 1   | . Bracket, Drawbar         | 24   | R13806363  | 2   | . Capscrew     |
| 7   | YEE-2         | 0   | . Collar                   | 25   | 221660W    | 2   | . Capscrew     |
| 8   | F000000046    | 1   | . Pin, Crank               | 26   | 200608     | 8   | . Lockwasher   |
| 9   | SPC0033118    | 4   | . Spacer                   | 27   | 221771W    | 2   | . Washer       |
| 10  | SHM0163090    | AR  | . Shim, 16 GA              | 28   | 221717W    | 8   | . Hex Nut      |
| 11  | SHM0163091    | AR  | . Shim, 20 GA              | 29   | 232939     | 2   | . Nut, Esna    |
| 12  | SHM0163092    | AR  | . Shim, 10 GA              | 30   | 223587     | 14  | . Locknut      |
| 13  | SHM0163093    | AR  | . Shim, 28 GA              | 31   | SHD0016332 |     | . Brace        |
| 14  | F000007547    | 1   | . Stop Dog                 |      |            |     |                |
| 15  | PIN0035710    | 1   | . Plunger Dog Pin Assembly |      |            |     |                |
|   | 09417892      | 1   | . Fitting, Lube            |      |            |     |                |
| 16  | ZZ00000204    | AR  | . Mach Bushing             |      |            |     |                |
| 17  | ZZ00000209    | AR  | . Mach Bushing             |      |            |     |                |
| 18  | 027-0933      | 1   | . Set Screw                |      |            |     |                |

\*a See Separate Coverage (Page 5-9)  
 \*b See Separate Coverage (Page 5-12)  
 \*c See Separate Coverage (Page 5-13)

Rev -B

# Plunger/Connector Rod Assembly, 14" 2 Tie

Page 1 of 3





# Plunger/Connector Rod Assembly, 14" 2 Tie

Page 2 of 3

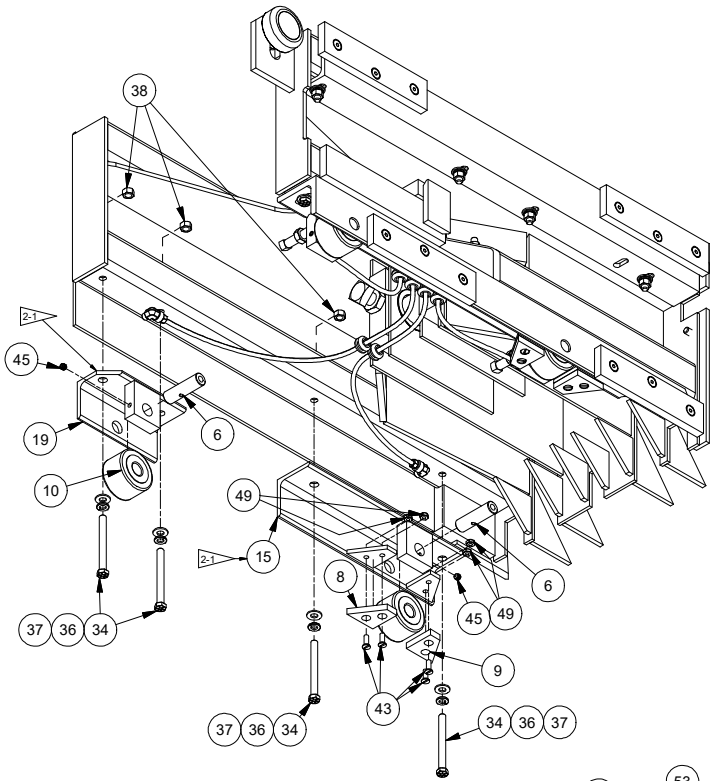
| Item | Part No.          | Qty | Description                      | Item | Part No.   | Qty | Description                     |
|------|-------------------|-----|----------------------------------|------|------------|-----|---------------------------------|
|      | <b>PLG3654800</b> |     | <b>Plunger/Conn Rod Assembly</b> |      |            |     |                                 |
| 1    | SHM0034535        | AR  | . Shim, Knife, Plunger 16 GA     | 47   | R13811457  | 1   | . Washer                        |
| 2    | SHM0034534        | AR  | . Shim, Knife, Plunger .012      | 49   | R13811463  | 8   | . Locknut                       |
| 3    | 903882            | 1   | . Mounting, Left Bottom          | 52   | F000008116 | 1   | . R. H. Adj Pad F/Plunger Face  |
| 4    | F000007766        | 1   | . Angle, Top Right               | 53   | F000008117 | 1   | . Center Adj Pad F/Plunger Face |
| 5    | F000001537        | 4   | . Bar, Slide                     | 54   | F007777-14 | 1   | . Plate, Adj Pad                |
| 6    | PIN0007831        | 4   | . Pin, Roll                      | 55   | KNF0021901 | 1   | . Plate, Knife                  |
| 7    | LOK0005857        | 1   | . Plate, Lock                    | 56   | F000007769 | 1   | . Bar, Adj Pad                  |
| 8    | F000000986        | 2   | . Plate, Rear Wiper              | 57   | PLG036548E | 1   | . Plunger                       |
| 9    | F000000774        | 2   | . Plate, Front Wiper             | 58   | SQS7502250 | 2   | . Set Screw                     |
| 10   | F000000775        | 4   | . Bearing, Roller                | 61   | BRG0001636 | 1   | . Top Roller Bearing            |
| 11   | F000007735        | 6   | . Grommet, Rubber                | 63   | *a 901975  | 1   | . Connecting Rod Assy           |
| 15   | F000007839        | 1   | . Left Bottom Plunger Rail       | 64   | F000001441 | 8   | . Fitting                       |
| 16   | F000000227        | 3   | . Bolt                           | 65   | 221717W    | 1   | . Hex Nut                       |
| 17   | F000000073        | 2   | . Screw                          | 66   | WES0007500 | 1   | . Washer                        |
| 19   | PLG0007840        | 1   | . Angle, Right Front             | 67   | ZZ00000203 | AR  | . Bushing                       |
| 21   | F000007914        | 1   | . Pin                            | 68   | ZZ00000200 | AR  | . Bushing                       |
| 34   | R13811046         | 7   | . Capscrew                       | 69   | F000000246 | 1   | . Washer                        |
| 35   | Y17C-0616         | 7   | . Capscrew                       | 74   | Y09G-0510  | 6   | . Capscrew                      |
| 36   | 234135            | 20  | . Lockwasher                     | 75   | 904564     | 1   | . Tube                          |
| 37   | R13802623         | 19  | . Washer                         | 76   | 904949     | 1   | . Tube                          |
| 38   | R13809551         | 12  | . Nut                            | 77   | 904565     | 1   | . Tube                          |
| 40   | SQS5002500        | 2   | . Set Screw                      | 78   | 904567     | 1   | . Tube                          |
| 41   | 234218            | 4   | . Nut                            | 79   | R13811047  | 5   | . Capscrew                      |
| 42   | R13807736         | 6   | . Capscrew                       | 80   | ZZ00000202 | AR  | . Bushing                       |
| 43   | 00113991          | 8   | . Machine Screw                  |      |            |     |                                 |
| 44   | 00191758          | 4   | . Fitting, Lube                  |      |            |     |                                 |
| 45   | STS3125313        | 4   | . Screw                          |      |            |     |                                 |
| 46   | 247008            | 2   | . Jam Nut                        |      |            |     |                                 |

\*a See Separate Coverage (Page 5-11)

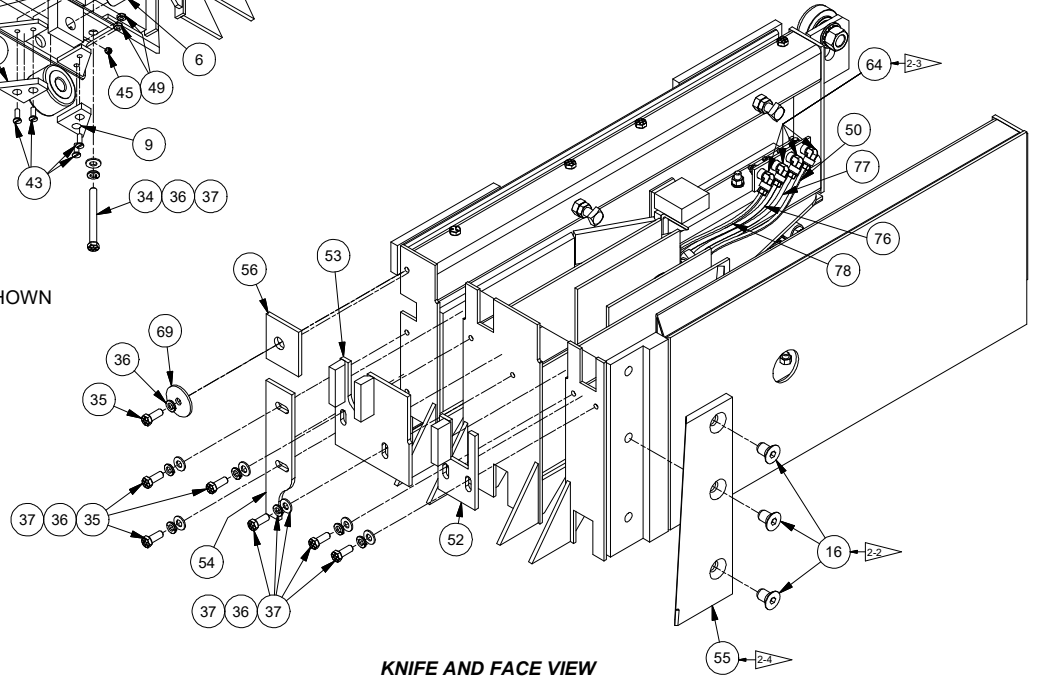
Rev N

# Plunger/ Connector Rod Assembly, 14" 2 Tie

Page 3 of 3



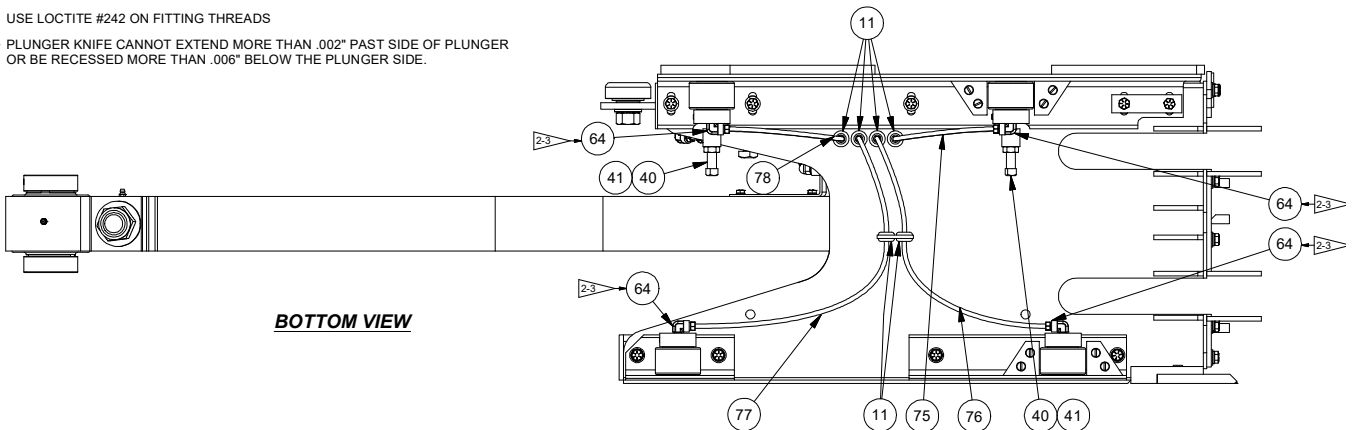
**BOTTOM RIGHT SIDE VIEW**  
CON ROD AND BOTTOM PLATE NOT SHOWN



**KNIFE AND FACE VIEW**  
CON ROD AND TOP PLATE NOT SHOWN

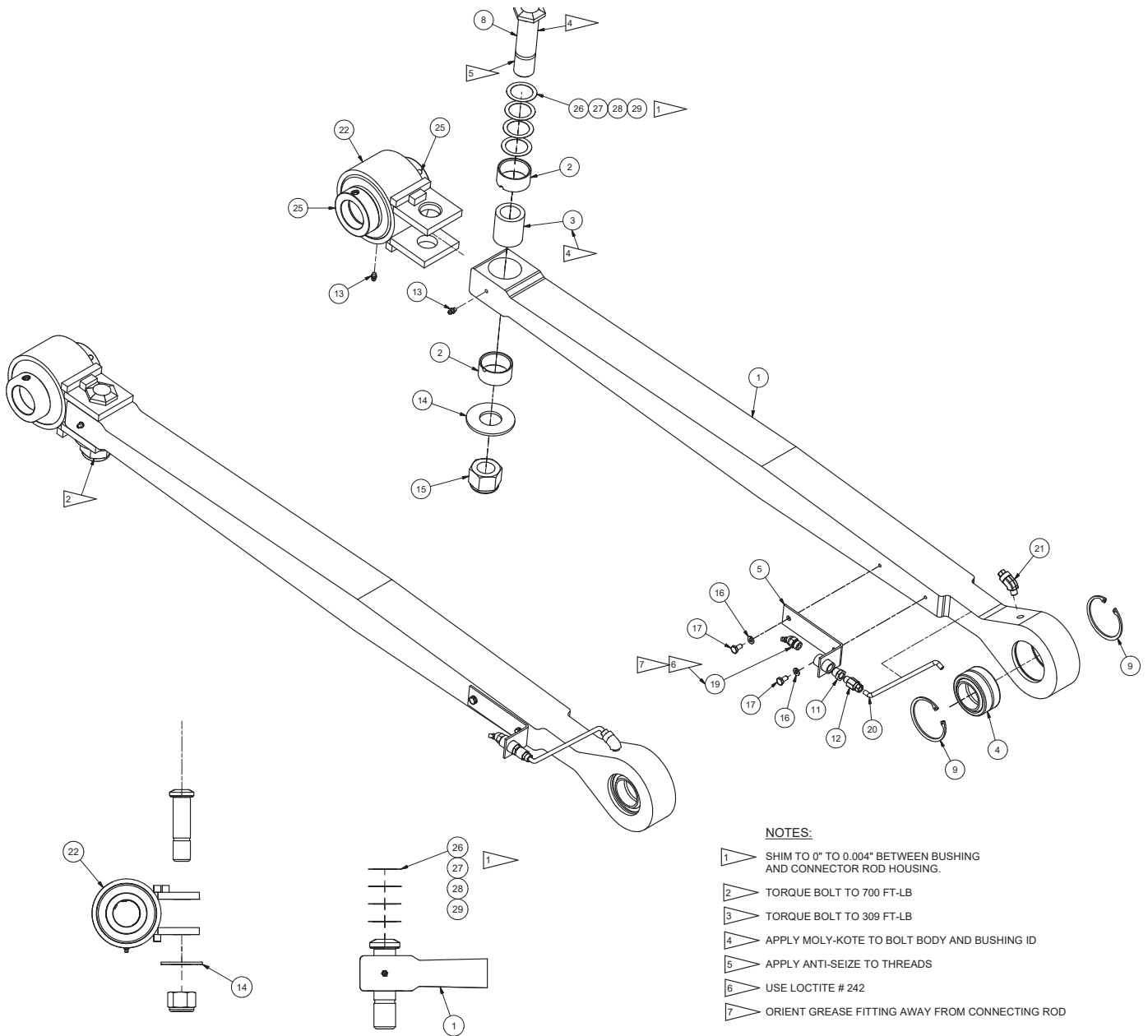
**NOTES:**

- 2-1 USE ITEMS # 4 & 5 A/R TO MAKE ALL ROLLERS CONTACT AND ROLL ON ASSEMBLY STAND.
- 2-2 TORQUE TO 130 FT LBS
- 2-3 USE LOCTITE #242 ON FITTING THREADS
- 2-4 PLUNGER KNIFE CANNOT EXTEND MORE THAN .002" PAST SIDE OF PLUNGER OR BE RECESSED MORE THAN .006" BELOW THE PLUNGER SIDE.



**BOTTOM VIEW**

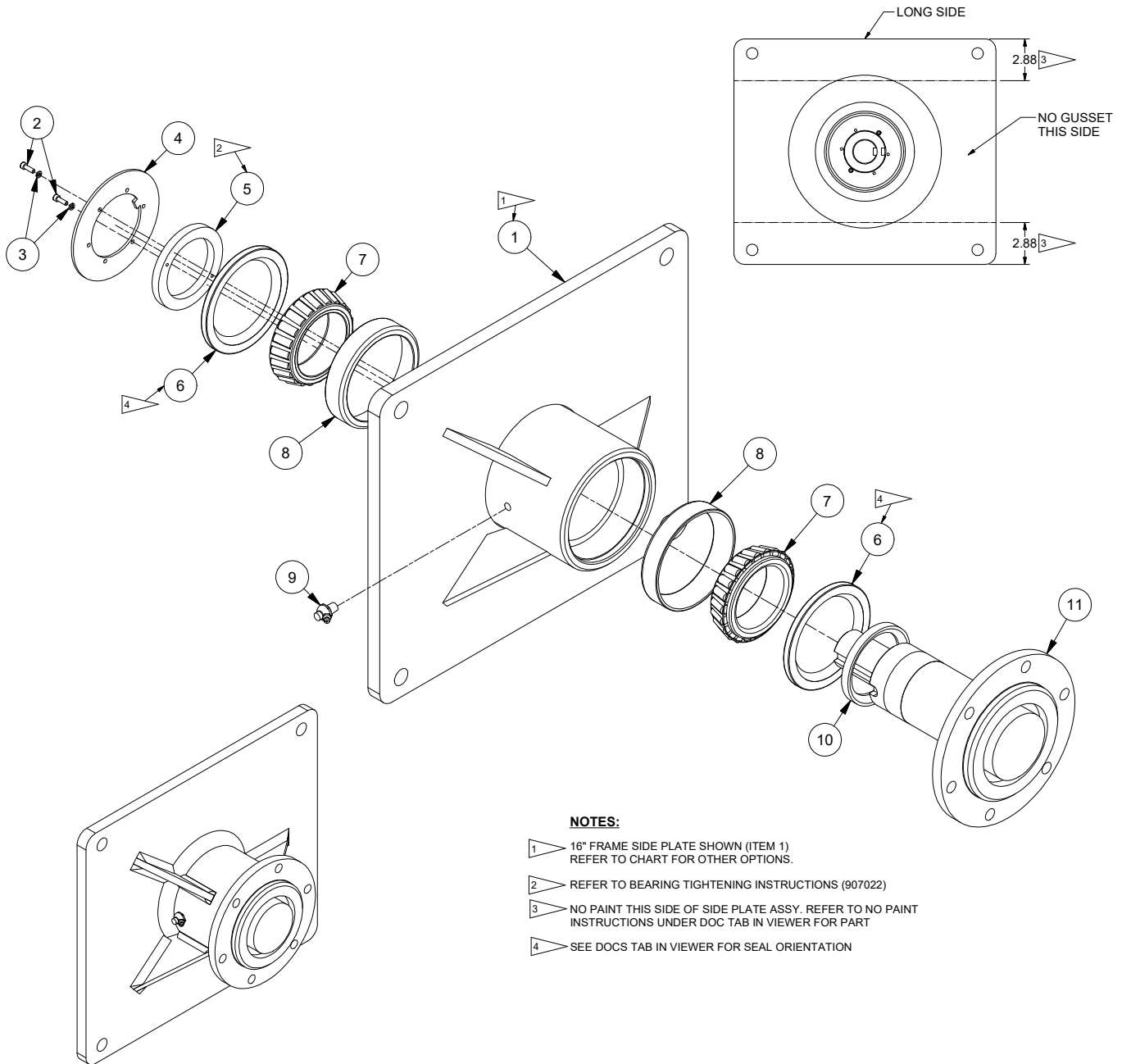
### Connector Rod Assembly, 2 Tie



| Item | Part No.      | Qty | Description                    | Item | Part No.   | Qty | Description              |
|------|---------------|-----|--------------------------------|------|------------|-----|--------------------------|
|      | <b>901975</b> |     | <b>Connecting Rod Assembly</b> |      |            |     |                          |
| 1    | ROD0034342    | 1   | . Connector Rod                | 16   | 228412     | 2   | . Lockwasher             |
| 2    | F000008077    | 2   | . Bearing                      | 17   | 133469W    | 2   | . Capscrew               |
| 3    | F000008078    | 1   | . Connecting Rod Bushing       | 19   | F000007651 | 1   | . Zerk                   |
| 4    | R1574466      | 1   | . Bearing                      | 20   | NYL0000250 | 1'  | . Tube                   |
| 5    | F000008263    | 1   | . Bracket                      | 21   | 253694     | 1   | . Fitting                |
| 8    | PIN0008675    | 1   | . Connecting Rod Pivot Pin     | 22   | F000008114 | 1   | . Connecting Rod Housing |
| 9    | F000007917    | 2   | . Ring, Snap                   | 25   | F000008100 | 2   | . Bearing                |
| 11   | 209500        | 1   | . Fitting                      | 26   | F000007977 | AR  | . Spacer Washer          |
| 12   | F000000778    | 1   | . Tube Connector               | 27   | F000007978 | AR  | . Spacer Washer          |
| 13   | 11079         | 2   | . Fitting, Lube                | 28   | SHM0000105 | AR  | . Shim .020              |
| 14   | 225851        | 1   | . Hard Washer                  | 29   | SHM0000103 | AR  | . Shim .150              |
| 15   | 222465        | 1   | . Locknut                      |      |            |     |                          |

Rev M

# Side Plate Assembly, LH, 14" Chamber

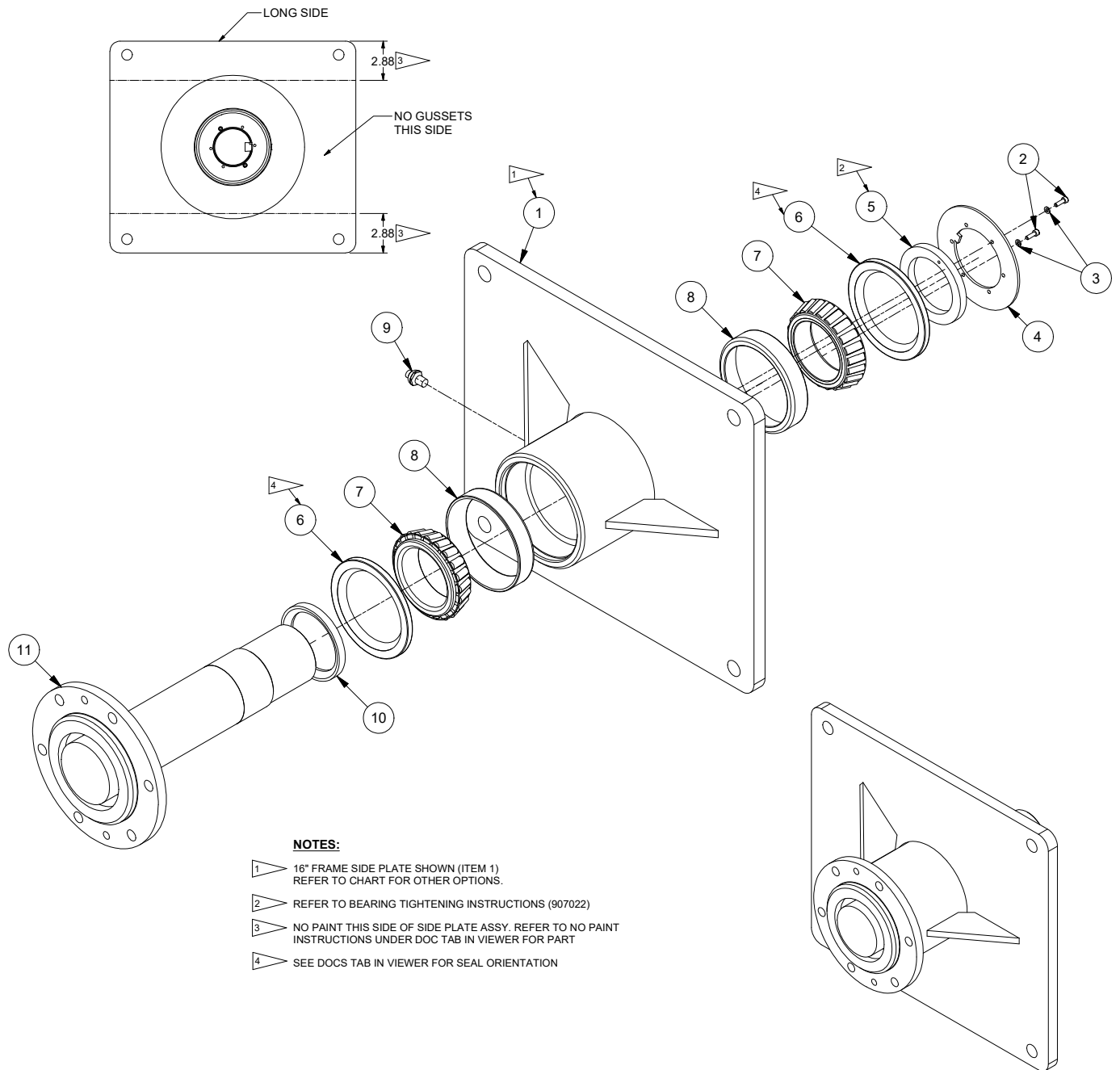


**NOTES:**

- 1 16" FRAME SIDE PLATE SHOWN (ITEM 1)  
REFER TO CHART FOR OTHER OPTIONS.
- 2 REFER TO BEARING TIGHTENING INSTRUCTIONS (907022)
- 3 NO PAINT THIS SIDE OF SIDE PLATE ASSY. REFER TO NO PAINT  
INSTRUCTIONS UNDER DOC TAB IN VIEWER FOR PART
- 4 SEE DOCS TAB IN VIEWER FOR SEAL ORIENTATION

| Item                                      | Part No.      | Qty | Description      | Item | Part No.   | Qty | Description                   |
|---|---------------|-----|------------------|------|------------|-----|-------------------------------|
| <b>PLT0257720 Side Plate Assembly, LH</b> |               |     |                  |      |            |     |                               |
| 1   | PLT0025772    | 1   | . Side Plate, LH | 7    | F000007033 | 2   | . Bearing Cone                |
| 2   | Y73G-(0832)08 | 2   | . Capscrew       | 8    | 204631     | 2   | . Bearing Cup                 |
| 3   | F000007040    | 2   | . Lockwasher     | 9    | F000001661 | 1   | . Fitting                     |
| 4   | F000007038    | 1   | . Lockwasher     | 10   | F000007036 | 1   | . Race, Seal                  |
| 5   | F000007037    | 1   | . Nut, Adjusting | 11   | F000007032 | 1   | . Shaft, LH Bullgear Mounting |
| 6   | F000007035    | 2   | . Seal           |      |            |     |                               |

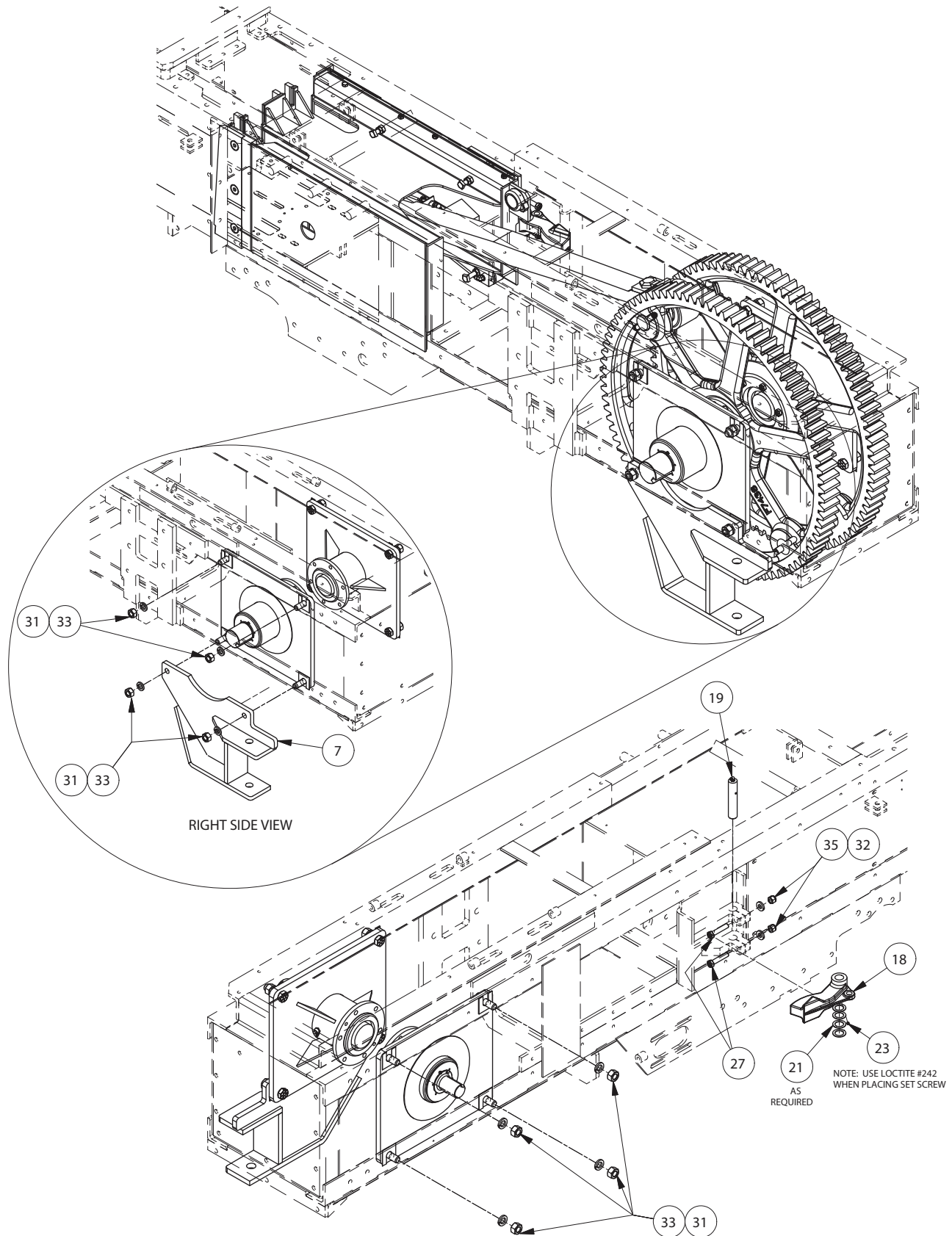
# Side Plate Assembly, RH, 14" Chamber



| Item | Part No.          | Qty | Description                    | Item | Part No.   | Qty | Description                |
|------|-------------------|-----|--------------------------------|------|------------|-----|----------------------------|
|      | <b>PLT0257730</b> |     | <b>Side Plate Assembly, RH</b> |      |            |     |                            |
| 1    | PLT0025773        | 1   | . Plate Weldment, RH           | 7    | F000007033 | 2   | . Bearing Cone             |
| 2    | Y73G-(0832)08     | 2   | . Capscrew                     | 8    | 204631     | 2   | . Bearing Cup              |
| 3    | F000007040        | 2   | . Lockwasher                   | 9    | F000001661 | 1   | . Fitting                  |
| 4    | F000007038        | 1   | . Lockwasher                   | 10   | F000007036 | 1   | . Race, Seal               |
| 5    | F000007037        | 1   | . Nut, Adjusting               | 11   | SHF0007093 | 1   | . Shaft, Bullgear Mounting |
| 6    | F000007035        | 2   | . Seal                         |      |            |     |                            |

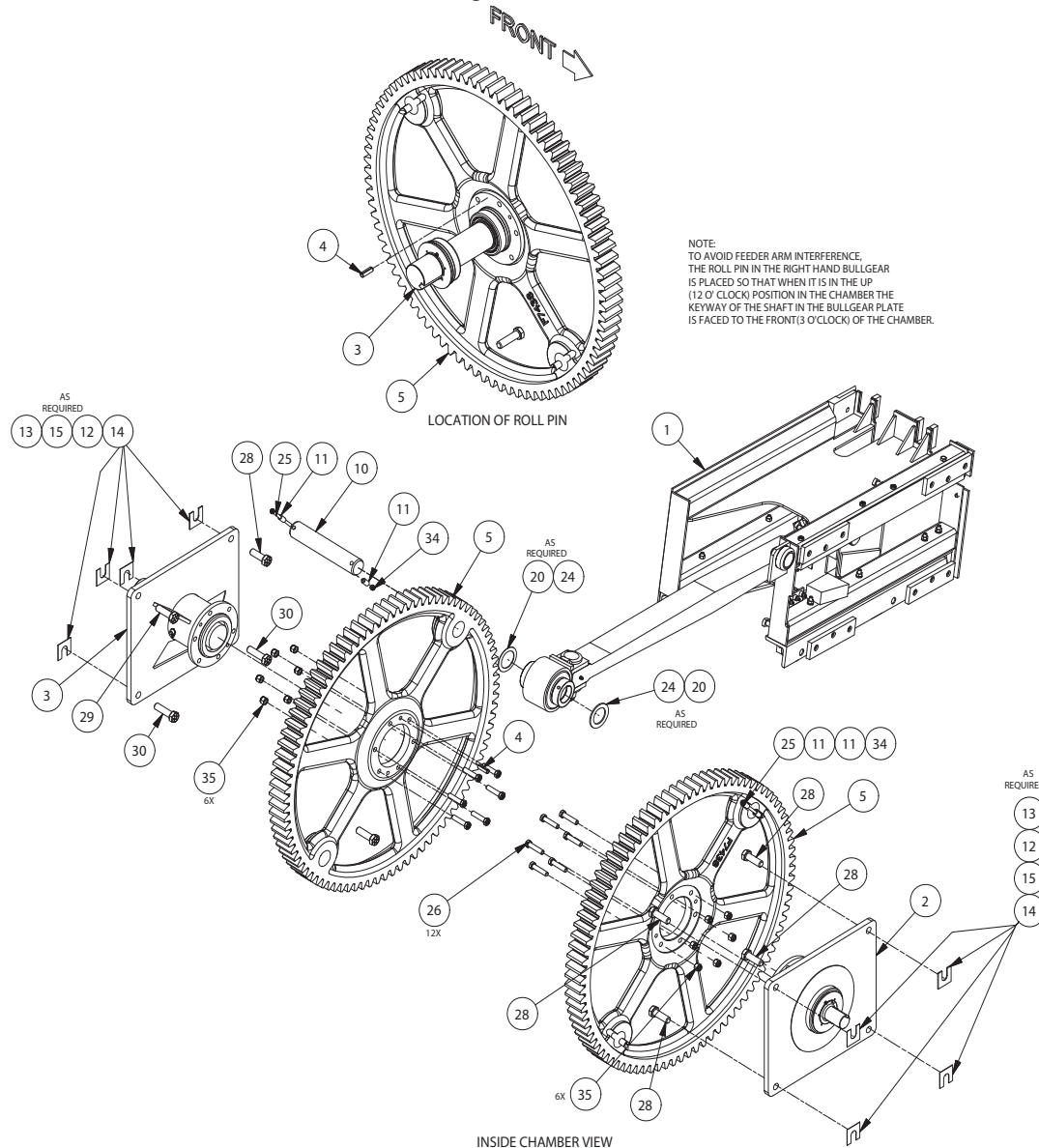
# Bullgear/Plunger Installation, RH Drawbar, 16" 2 Tie

Page 1 of 2



### Bullgear/Plunger Installation, RH Drawbar, 16" 2 Tie

Page 2 of 2



| Item  | Part No.      | Qty | Description             | Item | Part No.  | Qty | Description  |
|---|---------------|-----|-------------------------|------|-----------|-----|--------------|
| <b>902537 Bullgear/Plunger Installation</b> |               |     |                         |      |           |     |              |
| 1   | *a PLG1305700 | 1   | . Plunger/Conn Rod Assy | 23   | 027-0933  | 1   | . Set Screw  |
| 2   | *b PLT0163040 | 1   | . Side Plate Assy, LH   | 24   | 221706    | AR  | . Bushing    |
| 3   | *c PLT0163070 | 1   | . Side Plate Assy, RH   | 25   | R13811027 | 2   | . Capscrew   |
| 4   | F000007239    | 1   | . Pin, Roll             | 26   | 221574W   | 12  | . Capscrew   |
| 5   | F000007438    | 2   | . Bull Gear             | 27   | 221576W   | 2   | . Capscrew   |
| 7   | 903503        | 1   | . Bracket, Drawbar      | 28   | Y17C-1236 | 5   | . Capscrew   |
| 10  | F000000046    | 1   | . Pin                   | 29   | 221657W   | 2   | . Capscrew   |
| 11  | SPC0033118    | 4   | . Spacer                | 30   | 221659W   | 2   | . Capscrew   |
| 12  | SHM0163090    | AR  | . Shim 16 GA            | 31   | 200608    | 8   | . Lockwasher |
| 13  | SHM0163091    | AR  | . Shim 20 GA            | 32   | 221771W   | 2   | . Washer     |
| 14  | SHM0163092    | AR  | . Shim 10 GA            | 33   | 221716W   | 8   | . Hex Nut    |
| 15  | SHM0163093    | AR  | . Shim 28 GA            | 34   | 232939    | 2   | . Nut        |
| 18  | F000007547    | 1   | . Dog Stop, Plunger     | 35   | 223587    | 14  | . Nut        |
| 19  | PIN0035710    | 1   | . Pin Assembly          |      |           |     |              |
|   | 09417892      | 1   | . . Fitting, Lube       |      |           |     |              |
| 20  | ZZ00000204    | AR  | . Bushing               |      |           |     |              |
| 21  | ZZ00000209    | AR  | . Bushing               |      |           |     |              |

\*a See Separate Coverage (Page 5-19)

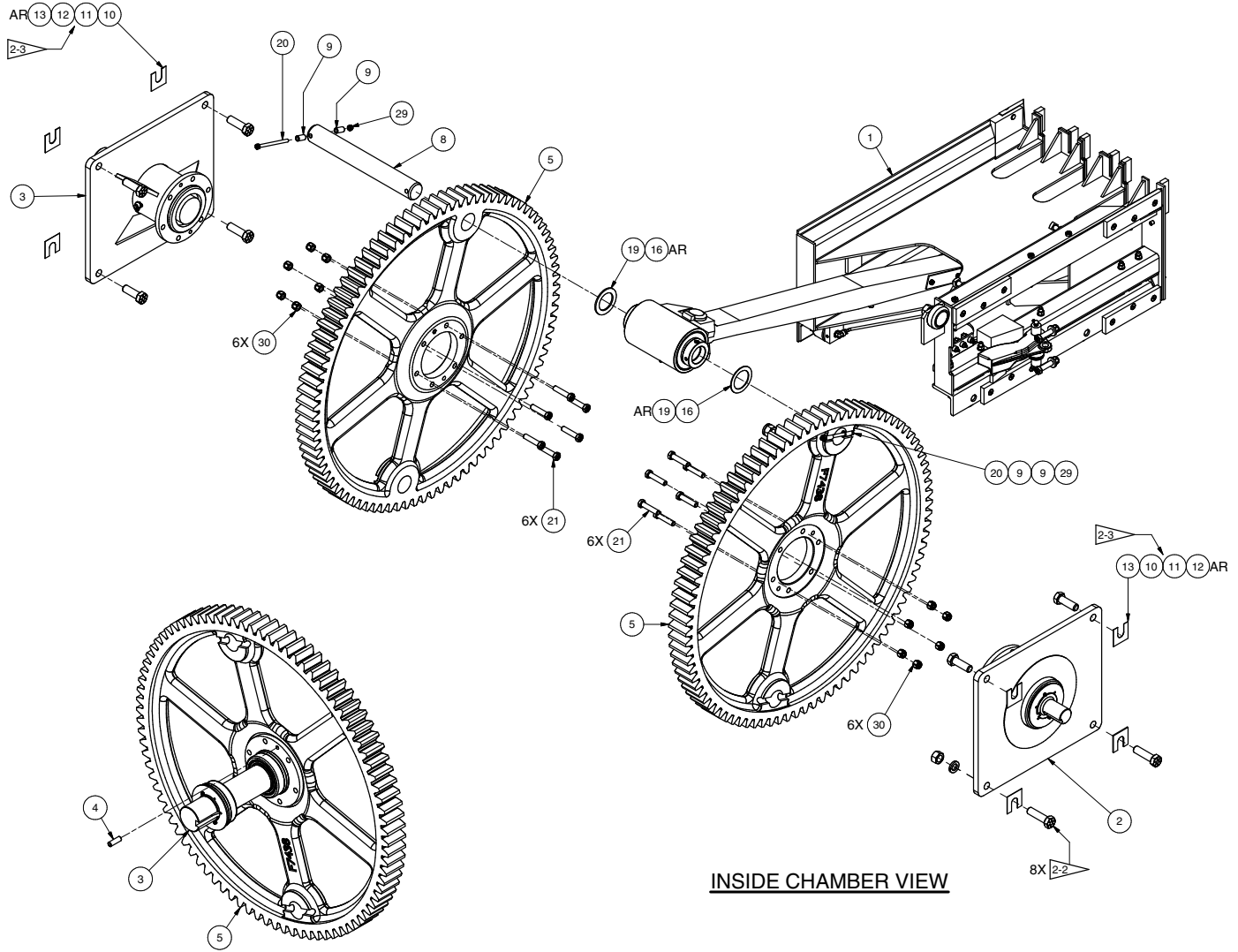
\*b See Separate Coverage (Page 5-22)

\*c See Separate Coverage (Page 5-23)

Rev A

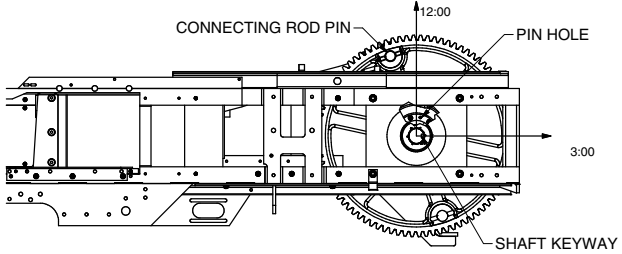
# Bullgear/Plunger Installation, LH Drawbar, 16" 2 Tie

Page 1 of 2



**INSIDE CHAMBER VIEW**

**2-1 ROLL PIN LOCATION**



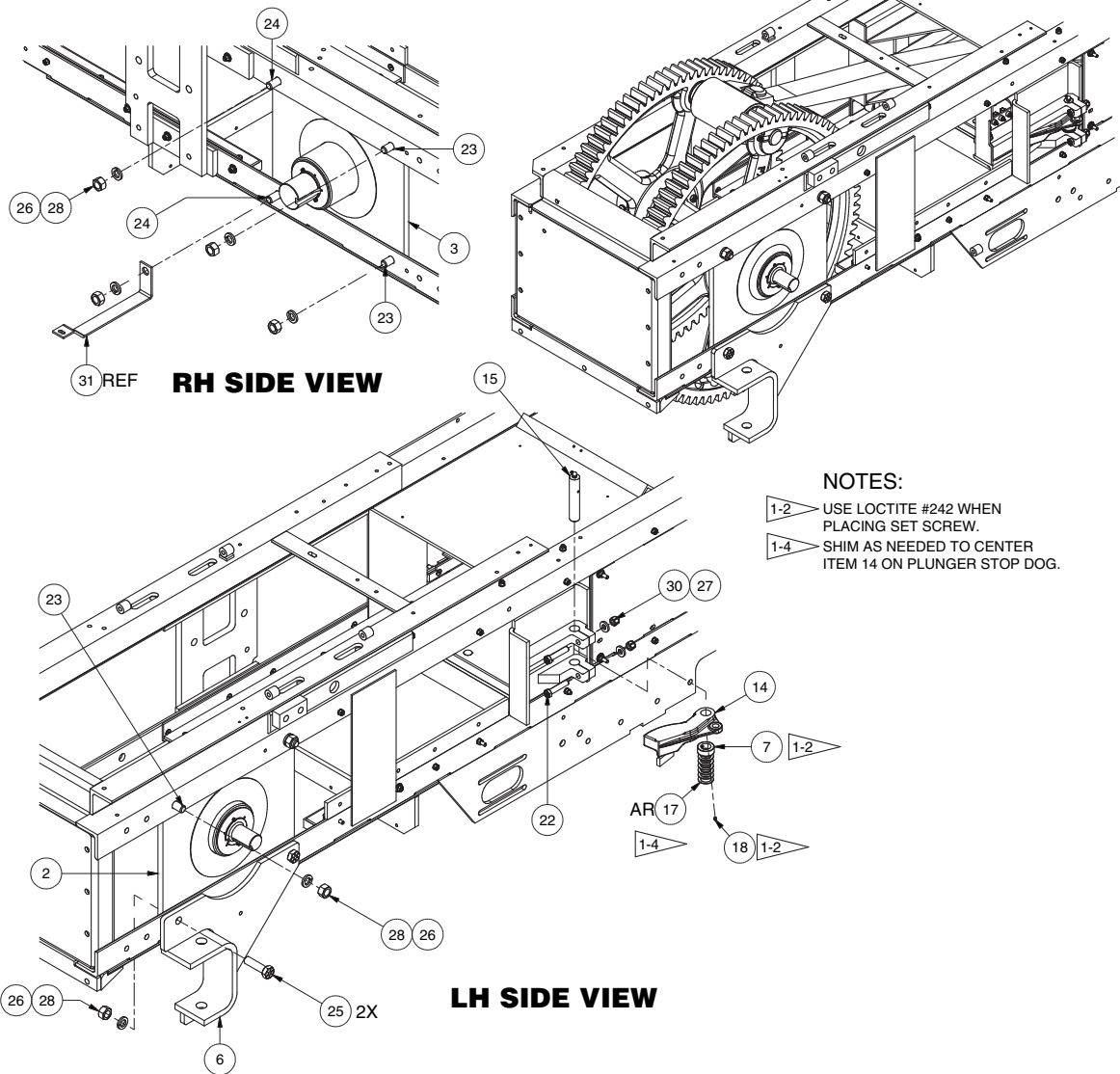
**FEED FORK AND PLUNGER TIMING**  
ORIENTATION INFORMATION  
IS FOR BULL GEAR INSTALLATION ONLY

- NOTES:
- 2-1 TO AVOID FEED ARM INTERFERENCE THE ROLL PIN IN THE RIGHT-HAND BULLGEAR IS PLACED SO THAT WHEN THE CONNECTING ROD IS BETWEEN THE 11:00 TO 12:00 POSITION, THE KEYWAY OF THE SHAFT IN THE RIGHT-HAND BULLGEAR SIDE PLATE IS FACING THE FRONT OF THE BALER IN THE 3:00 POSITION AS REFERENCED WHEN LOOKING AT THE RIGHT-HAND BULLGEAR SIDE PLATE FROM THE RIGHT-HAND SIDE OF THE BALER.
  - 2-2 TORQUE SIDE PLATE BOLTS TO 365 FT-LBS.
  - 2-3 SHIM AS NEEDED SO THAT THE BULLGEARS (ITEM 5) CAN FREELY ROTATE A FULL 360° WITH THE CRANK PIN (ITEM 8) INSERTED.



## Bullgear/Plunger Installation, LH Drawbar, 16" 2 Tie

Page 2 of 2



**NOTES:**

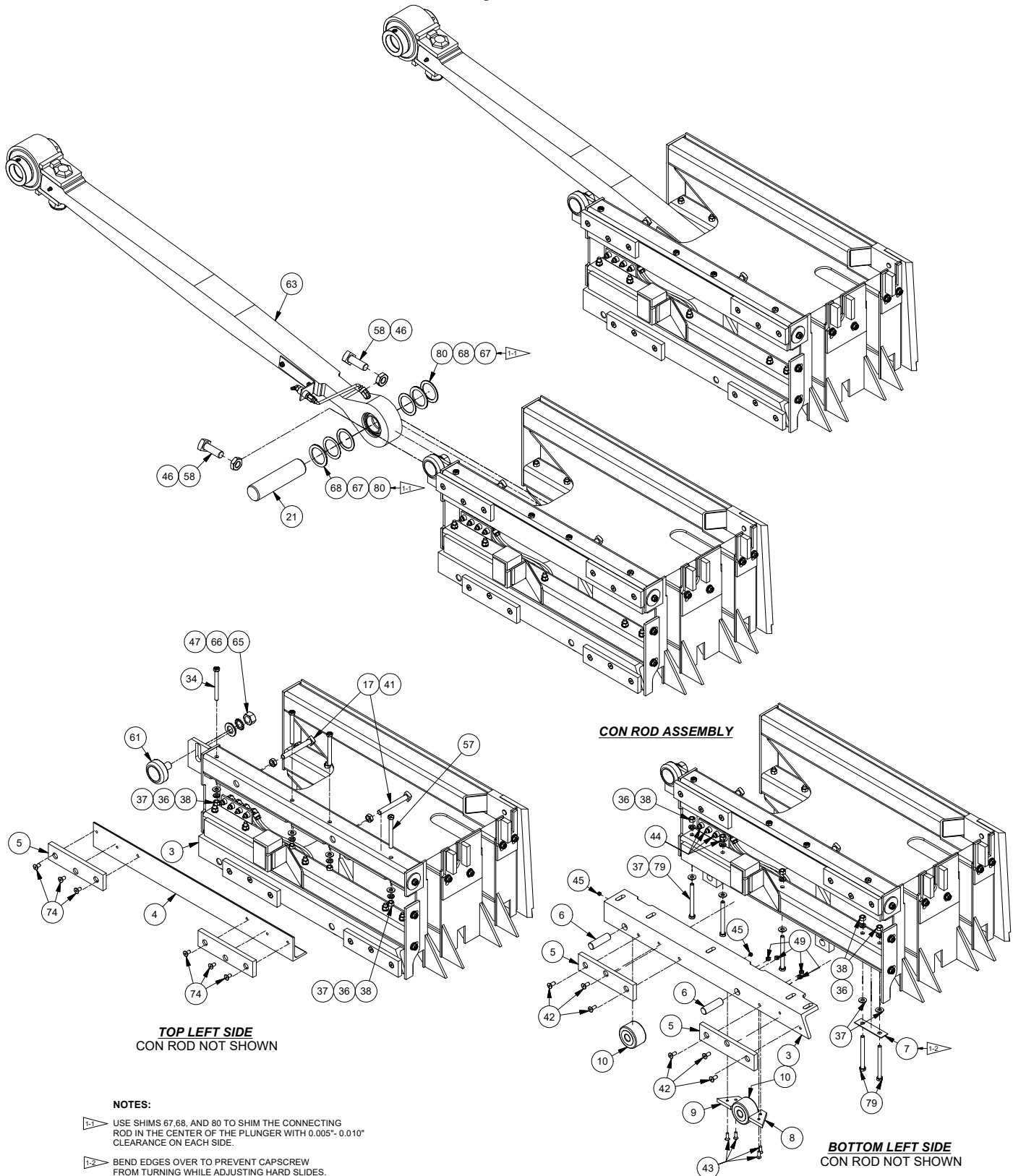
- 1-2 USE LOCTITE #242 WHEN PLACING SET SCREW.
- 1-4 SHIM AS NEEDED TO CENTER ITEM 14 ON PLUNGER STOP DOG.

| Item       | Part No.      | Qty | Description                | Item   | Part No.                          | Qty | Description    |
|------------|---------------|-----|----------------------------|--|-----------------------------------|-----|----------------|
| <b>TBD</b> |               |     |                            | <b>Bullgear/Plunger Installation, LH 16" 2 - TIE</b> |                                   |     |                |
| 1          | *a PLG1305700 | 1   | . Plunger Assembly         | 19   | 221706                            | 4   | . Mach Bushing |
| 2          | *b PLT0163040 | 1   | . Side Plate Assembly, LH  | 20   | R13811027                         | 2   | . Capscrew     |
| 3          | *c PLT0163070 | 1   | . Side Plate Assembly, RH  | 21   | 221574W                           | 12  | . Capscrew     |
| 4          | F000007239    | 1   | . Pin, Roll                | 22   | 221576W                           | 2   | . Capscrew     |
| 5          | F000007438    | 2   | . Bull Gear                | 23   | 221656W                           | 4   | . Capscrew     |
| 6          | BKT0016306    | 1   | . Bracket, Drawbar         | 24   | R13806363                         | 2   | . Capscrew     |
| 7          | YEE-2         | 0   | . Collar                   | 25   | 221660W                           | 2   | . Capscrew     |
| 8          | F000000046    | 1   | . Pin, Crank               | 26   | 200608                            | 8   | . Lockwasher   |
| 9          | SPC0033118    | 4   | . Spacer                   | 27   | 221771W                           | 2   | . Washer       |
| 10         | SHM0163090    | AR  | . Shim, 16 GA              | 28   | 221717W                           | 8   | . Hex Nut      |
| 11         | SHM0163091    | AR  | . Shim, 20 GA              | 29   | 232939                            | 2   | . Nut, Esna    |
| 12         | SHM0163092    | AR  | . Shim, 10 GA              | 30   | 223587                            | 14  | . Locknut      |
| 13         | SHM0163093    | AR  | . Shim, 28 GA              | 31   | SHD0016332                        |     | . Brace        |
| 14         | F000007547    | 1   | . Stop Dog                 |  |                                   |     |                |
| 15         | PIN0035710    | 1   | . Plunger Dog Pin Assembly |  |                                   |     |                |
|            | 09417892      | 1   | . Fitting, Lube            | *a   | See Separate Coverage (Page 5-19) |     |                |
| 16         | ZZ00000204    | AR  | . Mach Bushing             | *b   | See Separate Coverage (Page 5-22) |     |                |
| 17         | ZZ00000209    | AR  | . Mach Bushing             | *c   | See Separate Coverage (Page 5-23) |     |                |
| 18         | 027-0933      | 1   | . Set Screw                |  |                                   |     |                |

Rev -B

# Plunger/Connector Rod Assembly, 16" 2 Tie

Page 1 of 3



# Plunger/Connector Rod Assembly, 16" 2 Tie

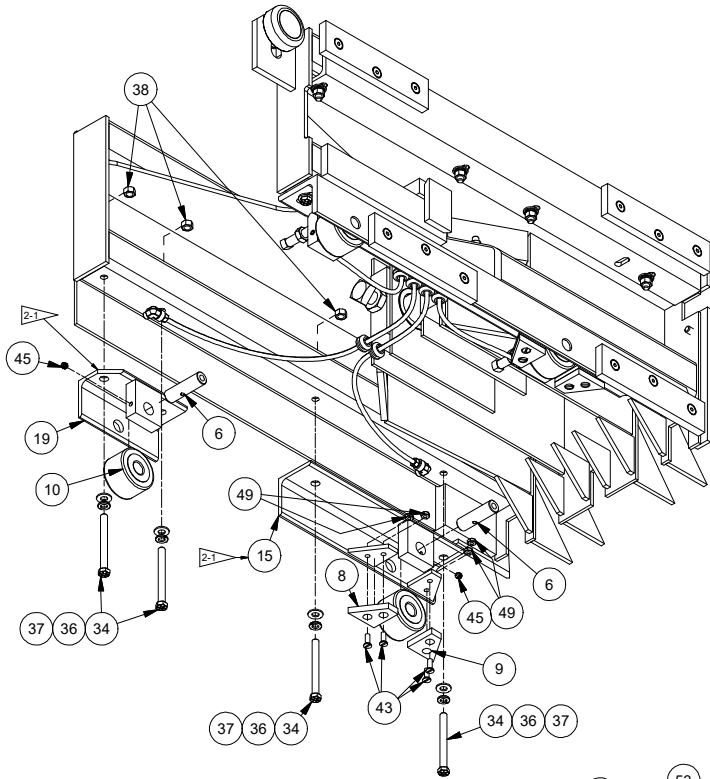
Page 2 of 3

| Item  | Part No.   | Qty | Description                  | Item                                 | Part No.   | Qty | Description                     |
|---|------------|-----|------------------------------|--------------------------------------|------------|-----|---------------------------------|
| <b>PLG1305700 Plunger/Conn Rod Assembly</b> |            |     |                              |                                      |            |     |                                 |
| 1   | SHM0034535 | AR  | . Shim, Knife, Plunger 16 GA | 47                                   | R13811457  | 1   | . Washer                        |
| 2   | SHM0034534 | AR  | . Shim, Knife, Plunger .012  | 49                                   | R13811463  | 8   | . Locknut                       |
| 3   | 903882     | 1   | . Mounting, Left Bottom      | 52                                   | F000008116 | 1   | . R. H. Adj Pad F/Plunger Face  |
| 4   | F000007766 | 1   | . Angle, Top Right           | 53                                   | F000008117 | 1   | . Center Adj Pad F/Plunger Face |
| 5   | F000001537 | 4   | . Bar, Slide                 | 54                                   | F000007777 | 1   | . Plate, Adj Pad                |
| 6   | PIN0007831 | 4   | . Pin, Roll                  | 55                                   | KNF0011157 | 1   | . Plate, Knife                  |
| 7   | LOK0005857 | 1   | . Plate, Lock                | 56                                   | F000007769 | 1   | . Bar, Adj Pad                  |
| 8   | F000000986 | 2   | . Plate, Rear Wiper          | 57                                   | PLG0013057 | 1   | . Plunger                       |
| 9   | F000000774 | 2   | . Plate, Front Wiper         | 58                                   | SQS7502250 | 2   | . Set Screw                     |
| 10  | F000000775 | 4   | . Bearing, Roller            | 61                                   | BRG0001636 | 1   | . Top Roller Bearing            |
| 11  | F000007735 | 6   | . Grommet, Rubber            | 63                                   | *a 904352  | 1   | . Connecting Rod Assy           |
| 15  | F000007839 | 1   | . Left Bottom Plunger Rail   | 64                                   | F000001441 | 8   | . Fitting                       |
| 16  | F000000227 | 3   | . Bolt                       | 65                                   | 221717W    | 1   | . Hex Nut                       |
| 17  | F000000073 | 2   | . Screw                      | 66                                   | WES0007500 | 1   | . Washer                        |
| 19  | PLG0007840 | 1   | . Angle, Right Front         | 67                                   | ZZ00000203 | AR  | . Bushing                       |
| 21  | F000007914 | 1   | . Pin                        | 68                                   | ZZ00000200 | AR  | . Bushing                       |
| 34  | R13811046  | 7   | . Capscrew                   | 69                                   | F000000246 | 1   | . Washer                        |
| 35  | Y17C-0616  | 7   | . Capscrew                   | 74                                   | Y09G-0510  | 6   | . Capscrew                      |
| 36  | 234135     | 20  | . Lockwasher                 | 75                                   | 904564     | 1   | . Tube                          |
| 37  | R13802623  | 19  | . Washer                     | 76                                   | 904949     | 1   | . Tube                          |
| 38  | R13809551  | 12  | . Nut                        | 77                                   | 904565     | 1   | . Tube                          |
| 40  | SQS5002500 | 2   | . Set Screw                  | 78                                   | 904567     | 1   | . Tube                          |
| 41  | 234218     | 4   | . Nut                        | 79                                   | R13811047  | 5   | . Capscrew                      |
| 42  | R13807736  | 6   | . Capscrew                   | 80                                   | ZZ00000202 | AR  | . Bushing                       |
| 43  | 00113991   | 8   | . Machine Screw              |                                      |            |     |                                 |
| 44  | 00191758   | 4   | . Fitting, Lube              |                                      |            |     |                                 |
| 45  | STS3125313 | 4   | . Screw                      | *a See Separate Coverage (Page 5-21) |            |     |                                 |
| 46  | 247008     | 2   | . Jam Nut                    |                                      |            |     |                                 |

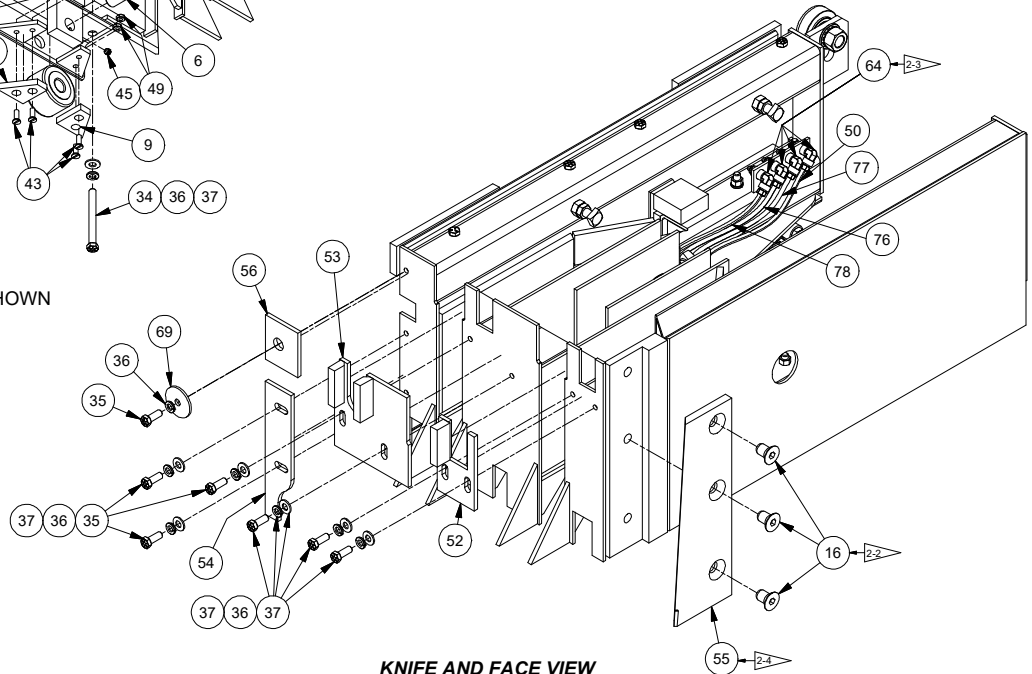
Rev AQ

# Plunger/Connector Rod Assembly, 16" 2 Tie

Page 3 of 3



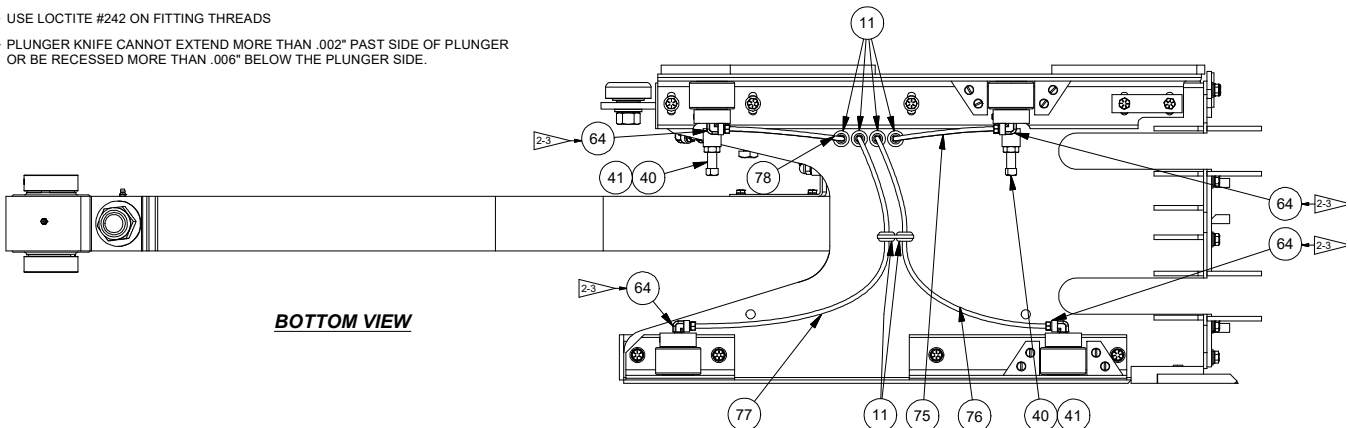
**BOTTOM RIGHT SIDE VIEW**  
CON ROD AND BOTTOM PLATE NOT SHOWN



**KNIFE AND FACE VIEW**  
CON ROD AND TOP PLATE NOT SHOWN

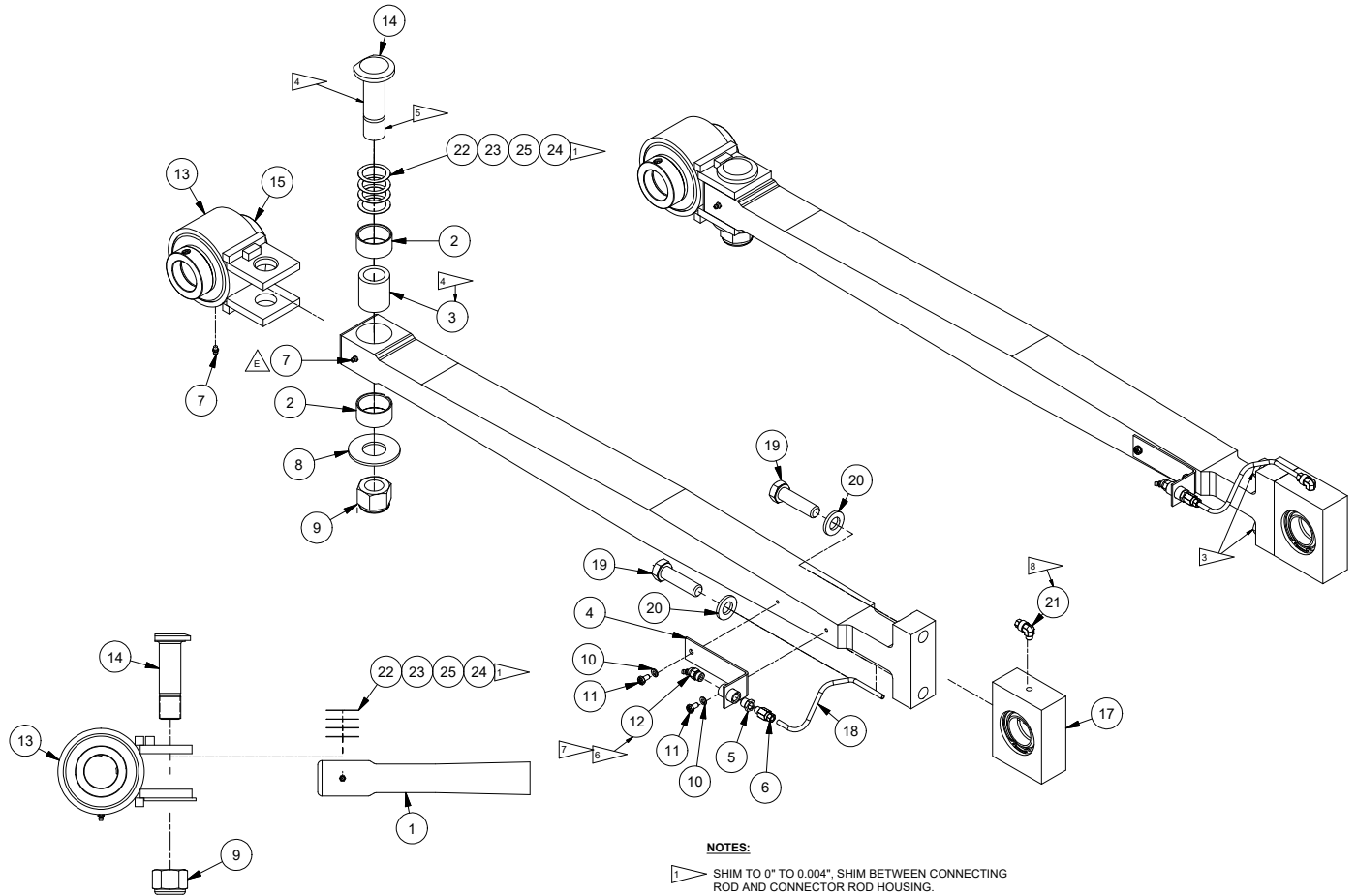
**NOTES:**

- 2-1 USE ITEMS # 4 & 5 A/R TO MAKE ALL ROLLERS CONTACT AND ROLL ON ASSEMBLY STAND.
- 2-2 TORQUE TO 130 FT LBS
- 2-3 USE LOCTITE #242 ON FITTING THREADS
- 2-4 PLUNGER KNIFE CANNOT EXTEND MORE THAN .002" PAST SIDE OF PLUNGER OR BE RECESSED MORE THAN .006" BELOW THE PLUNGER SIDE.



**BOTTOM VIEW**

### Connector Rod Assembly, 16" 2 Tie

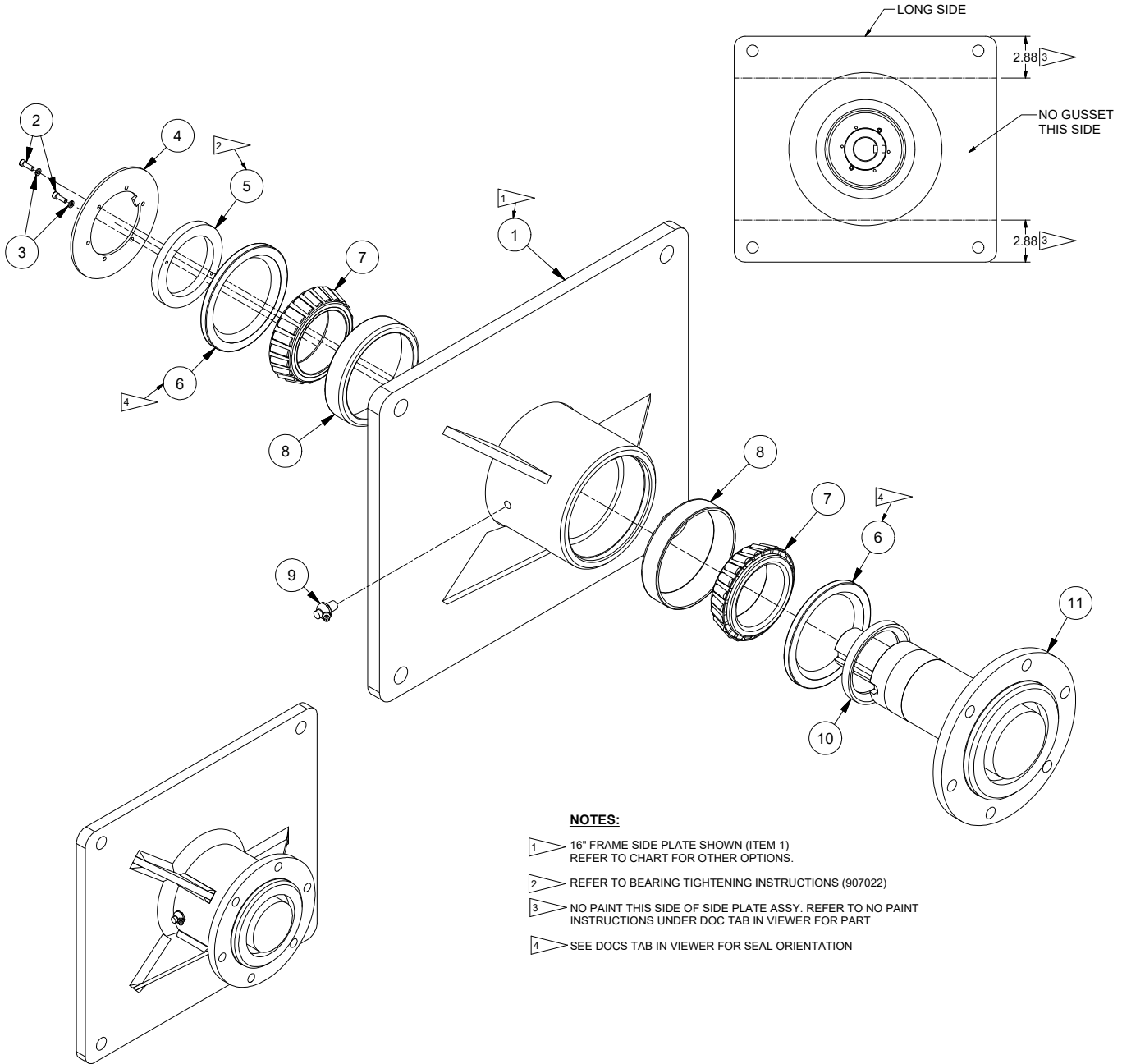


- NOTES:**
- 1 SHIM TO 0" TO 0.004", SHIM BETWEEN CONNECTING ROD AND CONNECTOR ROD HOUSING.
  - 2 TORQUE BOLT TO 700 FT-LB
  - 3 TORQUE BOLT TO 309 FT-LB
  - 4 APPLY MOLY-KOTE TO BOLT BODY AND BUSHING ID
  - 5 APPLY ANTI-SEIZE TO THREADS
  - 6 USE LOCTITE # 242
  - 7 ORIENT GREASE FITTING AWAY FROM CONNECTING ROD
  - 8 ORIENT FITTING PARALLEL TO CONNECTING ROD

| Item | Part No.      | Qty | Description                    | Item | Part No.   | Qty | Description                       |
|------|---------------|-----|--------------------------------|------|------------|-----|-----------------------------------|
|      | <b>904352</b> |     | <b>Connecting Rod Assembly</b> |      |            |     |                                   |
| 1    | 903235        | 1   | . Plate, Conn Rod              | 14   | PIN0008670 | 1   | . Connecting Rod Pivot Pin        |
| 2    | F000008077    | 2   | . Bearing, Inner Race          | 15   | F000008100 | 2   | . Bearing                         |
| 3    | F000008078    | 1   | . Connecting Rod Bushing       | 17   | HSN0238330 | 1   | . Plunger Brg Housing W/ Bearings |
| 4    | F000008263    | 1   | . Bracket                      | 18   | 903268     | 1   | . Tube                            |
| 5    | 209500        | 2   | . Fitting                      | 19   | 221659W    | 2   | . Capscrew                        |
| 6    | F000000778    | 1   | . Tube Connector               | 20   | 221777W    | 2   | . Washer                          |
| 7    | 11079         | 2   | . Fitting, Lube                | 21   | F000001441 | 1   | . Fitting                         |
| 8    | 225851        | 1   | . Hard Washer                  | 22   | F000007977 | AR  | . Washer                          |
| 9    | 222465        | 1   | . Locknut                      | 23   | F000007978 | AR  | . Washer                          |
| 10   | 223871        | 2   | . Lockwasher                   | 24   | SHM0000105 | AR  | . Shim .020                       |
| 11   | R13810989     | 2   | . Capscrew                     | 25   | SHM0000103 | AR  | . Shim .150                       |
| 12   | F000007651    | 1   | . Zerk                         |      |            |     |                                   |
| 13   | F000008114    | 1   | . Housing                      |      |            |     |                                   |

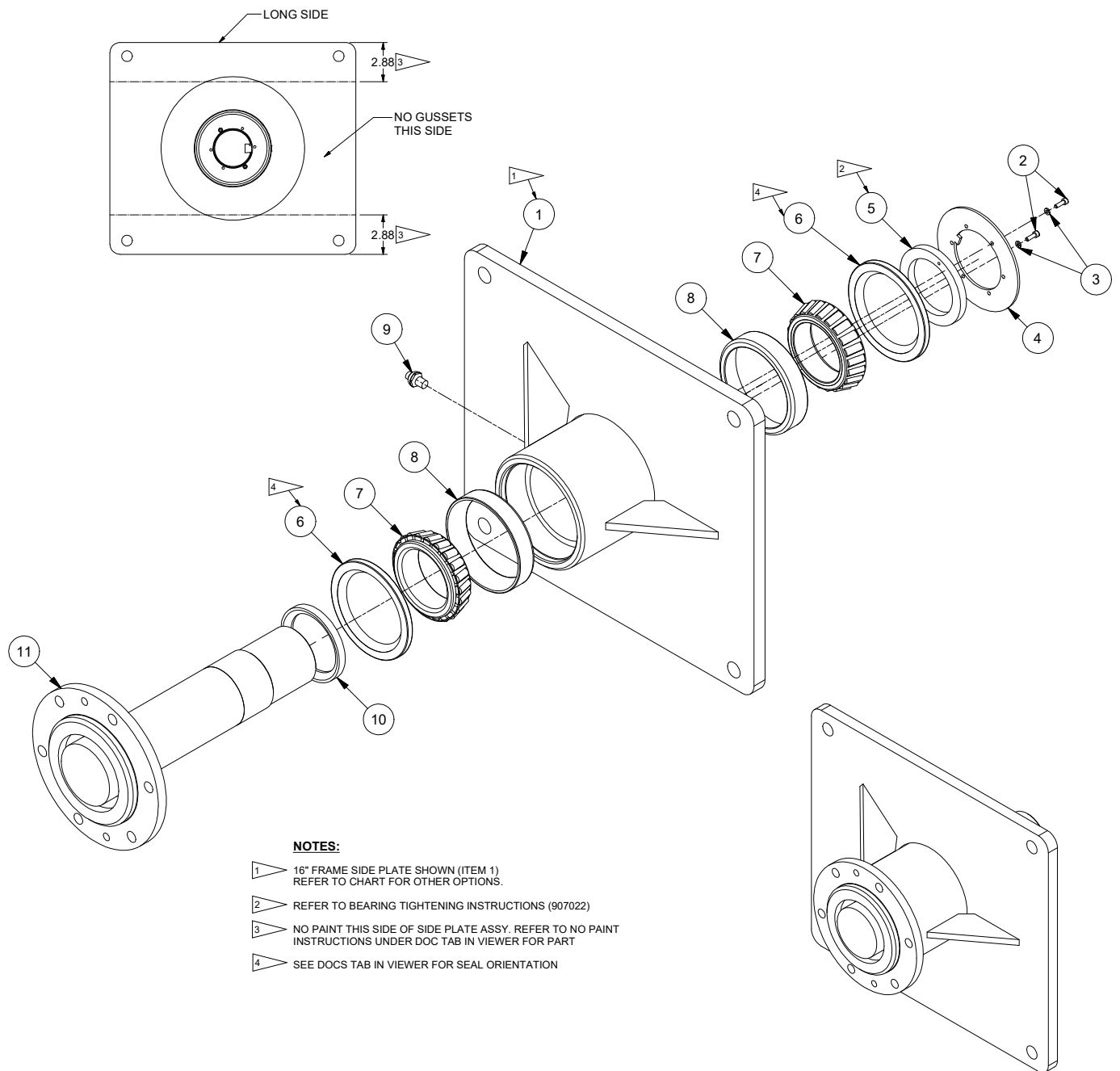
Rev E

# Side Plate Assembly, LH, 16" Chamber



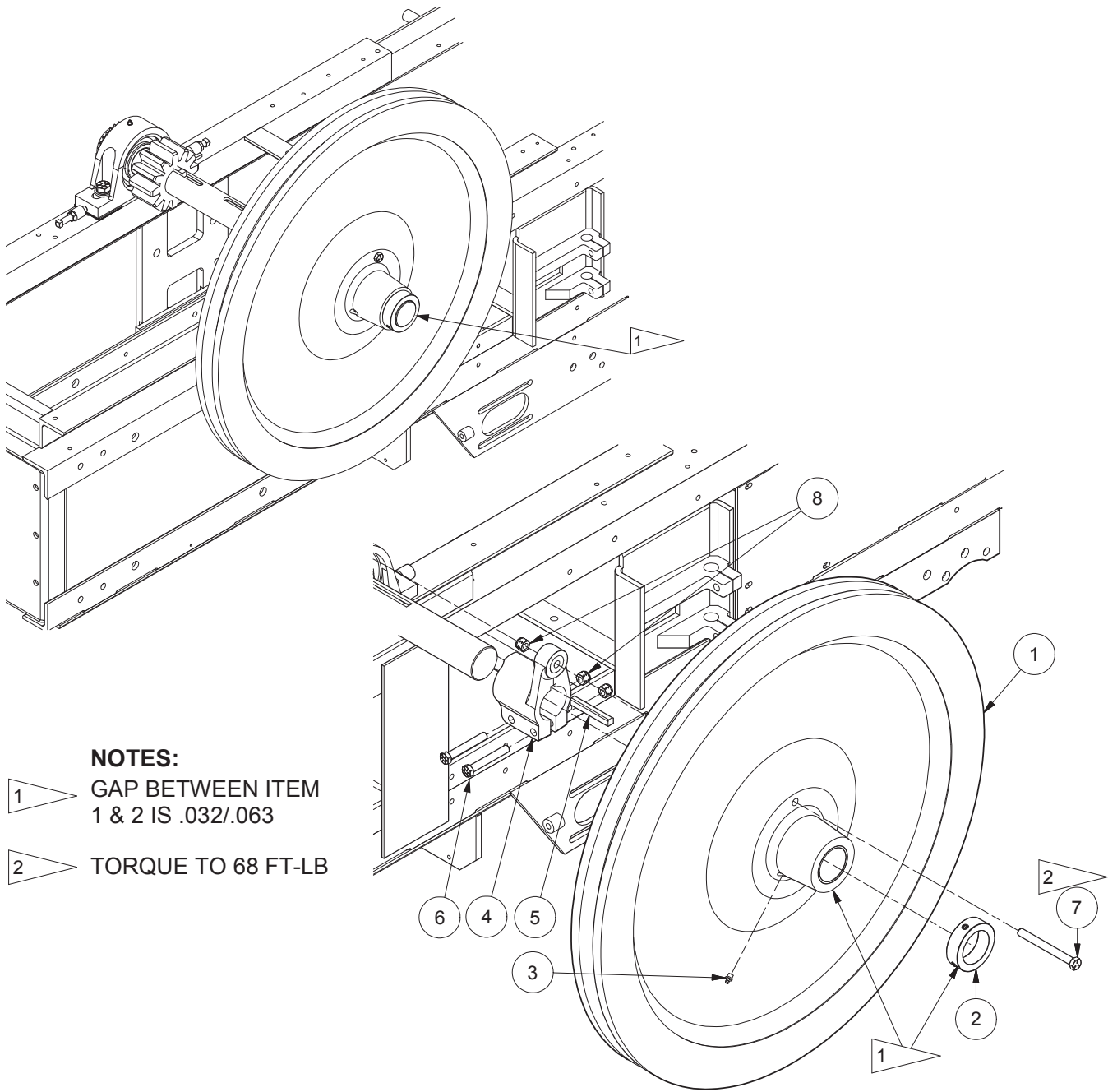
| Item                                      | Part No.      | Qty | Description      | Item | Part No.   | Qty | Description                   |
|---|---------------|-----|------------------|------|------------|-----|-------------------------------|
| <b>PLT0163040 Side Plate Assembly, LH</b> |               |     |                  |      |            |     |                               |
| 1   | PLT0032431    | 1   | . Side Plate, LH | 7    | F000007033 | 2   | . Bearing Cone                |
| 2   | Y73G-(0832)08 | 2   | . Capscrew       | 8    | 204631     | 2   | . Bearing Cup                 |
| 3   | F000007040    | 2   | . Lockwasher     | 9    | F000001661 | 1   | . Fitting                     |
| 4   | F000007038    | 1   | . Lockwasher     | 10   | F000007036 | 1   | . Race, Seal                  |
| 5   | F000007037    | 1   | . Nut, Adjusting | 11   | F000007032 | 1   | . Shaft, LH Bullgear Mounting |
| 6   | F000007035    | 2   | . Seal           |      |            |     |                               |

# Side Plate Assembly, RH, 16" Chamber



| Item | Part No.          | Qty | Description                    | Item | Part No.   | Qty | Description                |
|------|-------------------|-----|--------------------------------|------|------------|-----|----------------------------|
|      | <b>PLT0163070</b> |     | <b>Side Plate Assembly, RH</b> |      |            |     |                            |
| 1    | PLT0032434        | 1   | . Plate Weldment, RH           | 7    | F000007033 | 2   | . Bearing Cone             |
| 2    | Y73G-(0832)08     | 2   | . Capscrew                     | 8    | 204631     | 2   | . Bearing Cup              |
| 3    | F000007040        | 2   | . Lockwasher                   | 9    | F000001661 | 1   | . Fitting                  |
| 4    | F000007038        | 1   | . Lockwasher                   | 10   | F000007036 | 1   | . Race, Seal               |
| 5    | F000007037        | 1   | . Nut, Adjusting               | 11   | SHF0007093 | 1   | . Shaft, Bullgear Mounting |
| 6    | F000007035        | 2   | . Seal                         |      |            |     |                            |

# Flywheel Installation

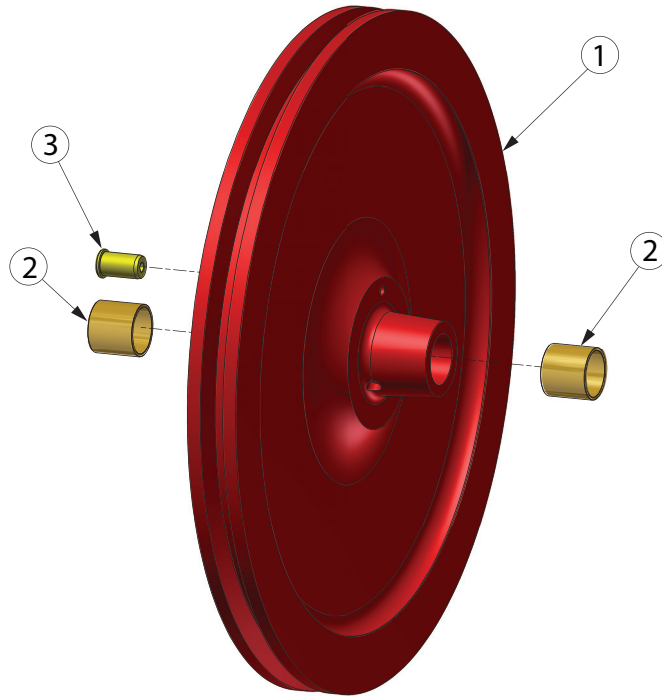


| Item                                | Part No.     | Qty | Description                   | Item                                | Part No.  | Qty | Description |
|-------------------------------------|--------------|-----|-------------------------------|-------------------------------------|-----------|-----|-------------|
| <b>902818 Flywheel Installation</b> |              |     |                               |                                     |           |     |             |
| 1                                   | * FLW0007127 | 1   | . Flywheel Assembly           | 6                                   | R13811083 | 2   | . Capscrew  |
| 2                                   | ZZ00002008   | 1   | . Collar, Shaft               | 7                                   | 18596W    | 1   | . Capscrew  |
| 3                                   | 00191758     | 1   | . Fitting, Lube               | 8                                   | 223587    | 3   | . Nut       |
| 4                                   | HUB0007157   | 1   | . Shear Hub Assembly          | * See Separate Coverage (Page 5-25) |           |     |             |
|                                     | F000001132   | 1   | . Bushing, Flywheel Shear Hub |                                     |           |     |             |
| 5                                   | F000000072   | 1   | . Key, Shear Hub              |                                     |           |     |             |

Rev F



# Flywheel Assembly

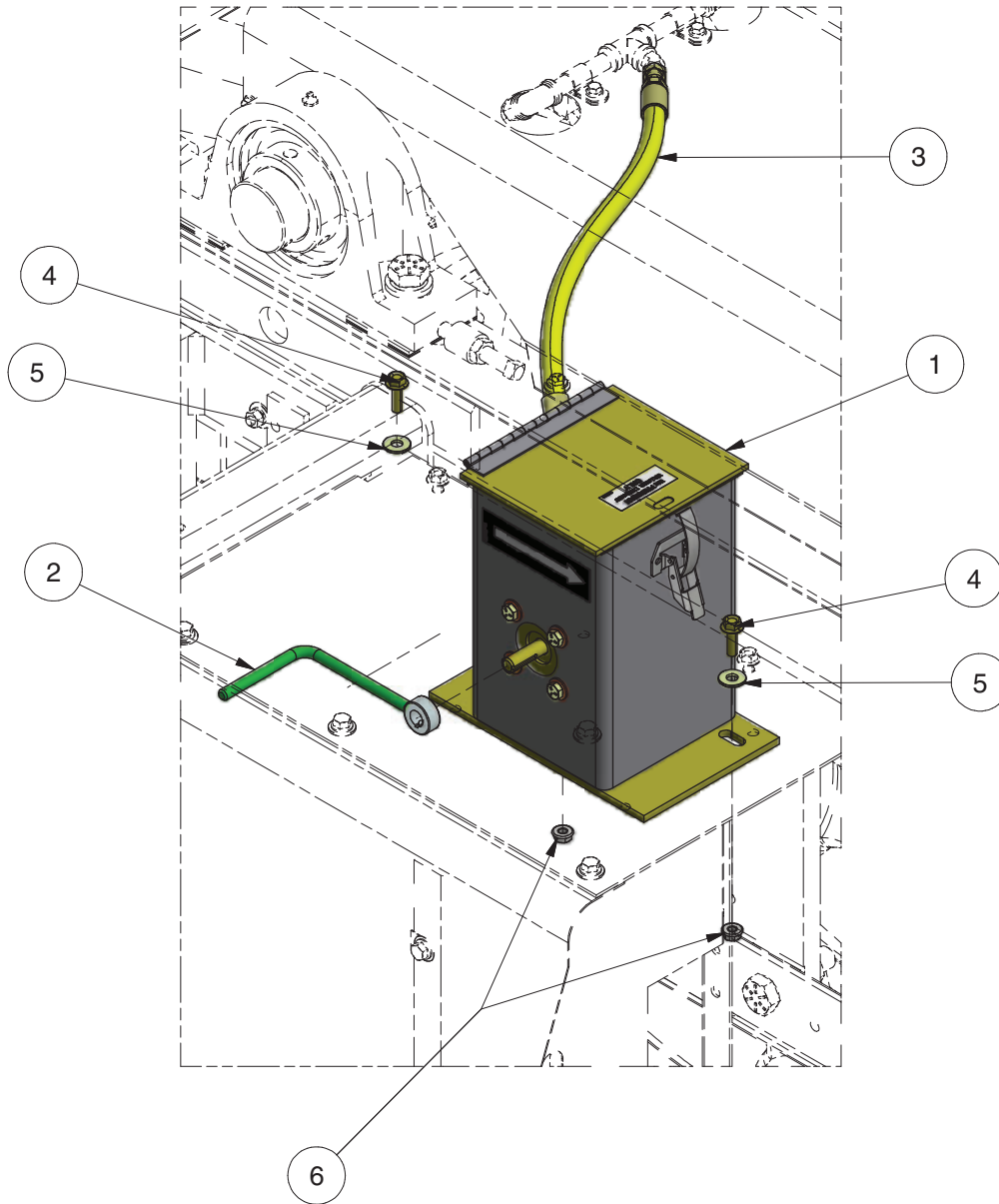


Note:  
 Ream both bushings  
 to 2.438-2.439" ID  
 before installing on  
 pinion shaft.

| Item | Part No.      | Qty | Description                     | Item | Part No. | Qty | Description |
|------|---------------|-----|---------------------------------|------|----------|-----|-------------|
|      | FLW0007127    |     | <b>Flywheel Assembly</b>        |      |          |     |             |
| 1    | 904970        | 1   | . Flywheel w/ Bushings          |      |          |     |             |
| 2    | BSH0007127MP2 | 1   | .. Flywheel Bushings (Set of 2) |      |          |     |             |
| 3    | F000001614    | 1   | . Flywheel Shear Bushing        |      |          |     |             |

Rev F

# Tank Installation, Bullgear Luber

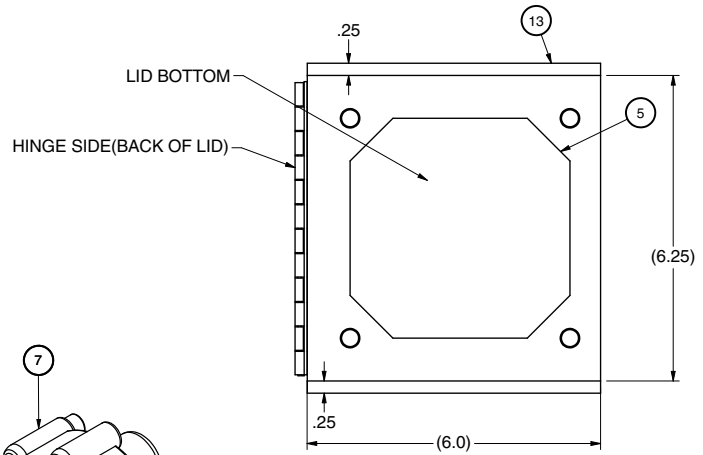
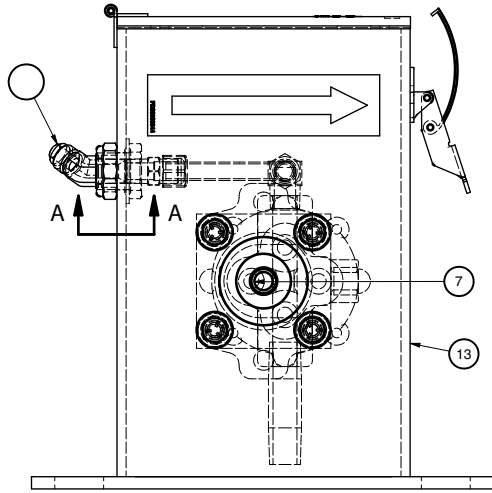


| Item                            | Part No.      | Qty | Description               | Item | Part No.   | Qty | Description     |
|---------------------------------|---------------|-----|---------------------------|------|------------|-----|-----------------|
| <b>902827 Tank Installation</b> |               |     |                           |      |            |     |                 |
| 1                               | *a LUB0007600 | 1   | . Tank & Pump Assy, Luber | 4    | SMS0000177 | 2   | . Screw         |
| 2                               | CRA0013775    | 1   | . Handle                  | 5    | 223428     | 2   | . Washer        |
| 3                               | R12565833     | 1   | . Hose Assembly           | 6    | 00273802   | 2   | . Nut, Serrated |

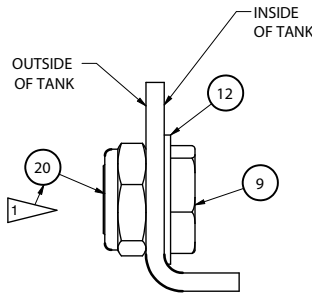
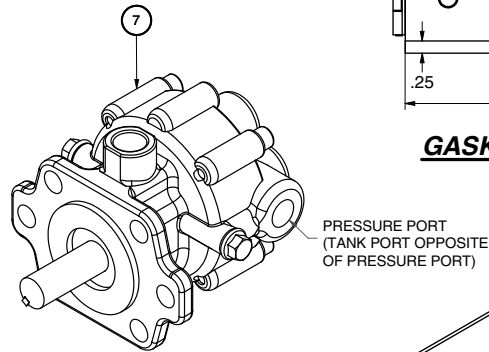
\*a See Separate Coverage (Page 5-27)

Rev F

## Tank and Pump Assembly, Luber

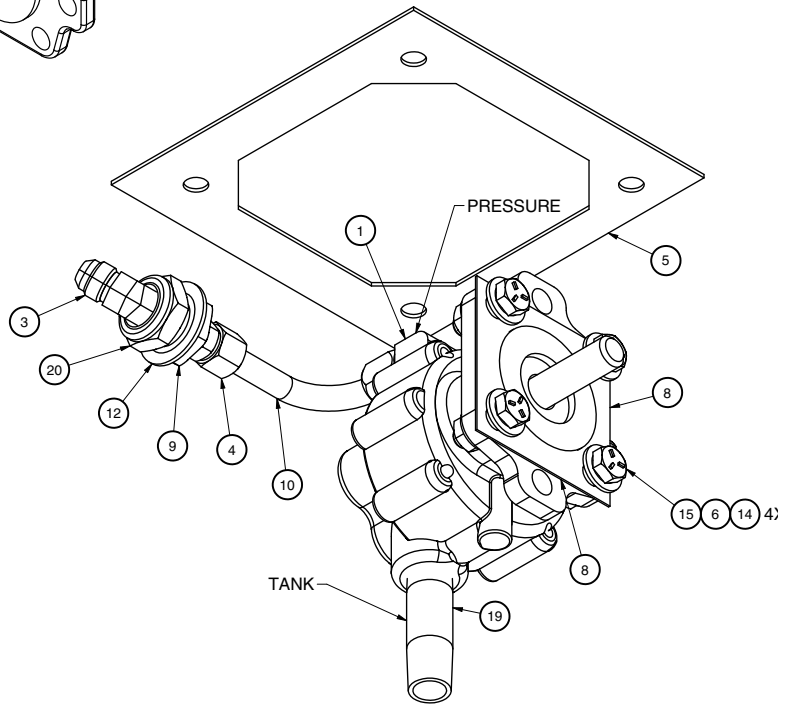
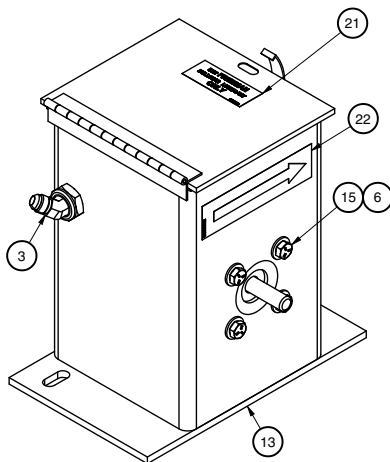


**GASKET LOCATION**



**SECTION A-A**

(not shown)

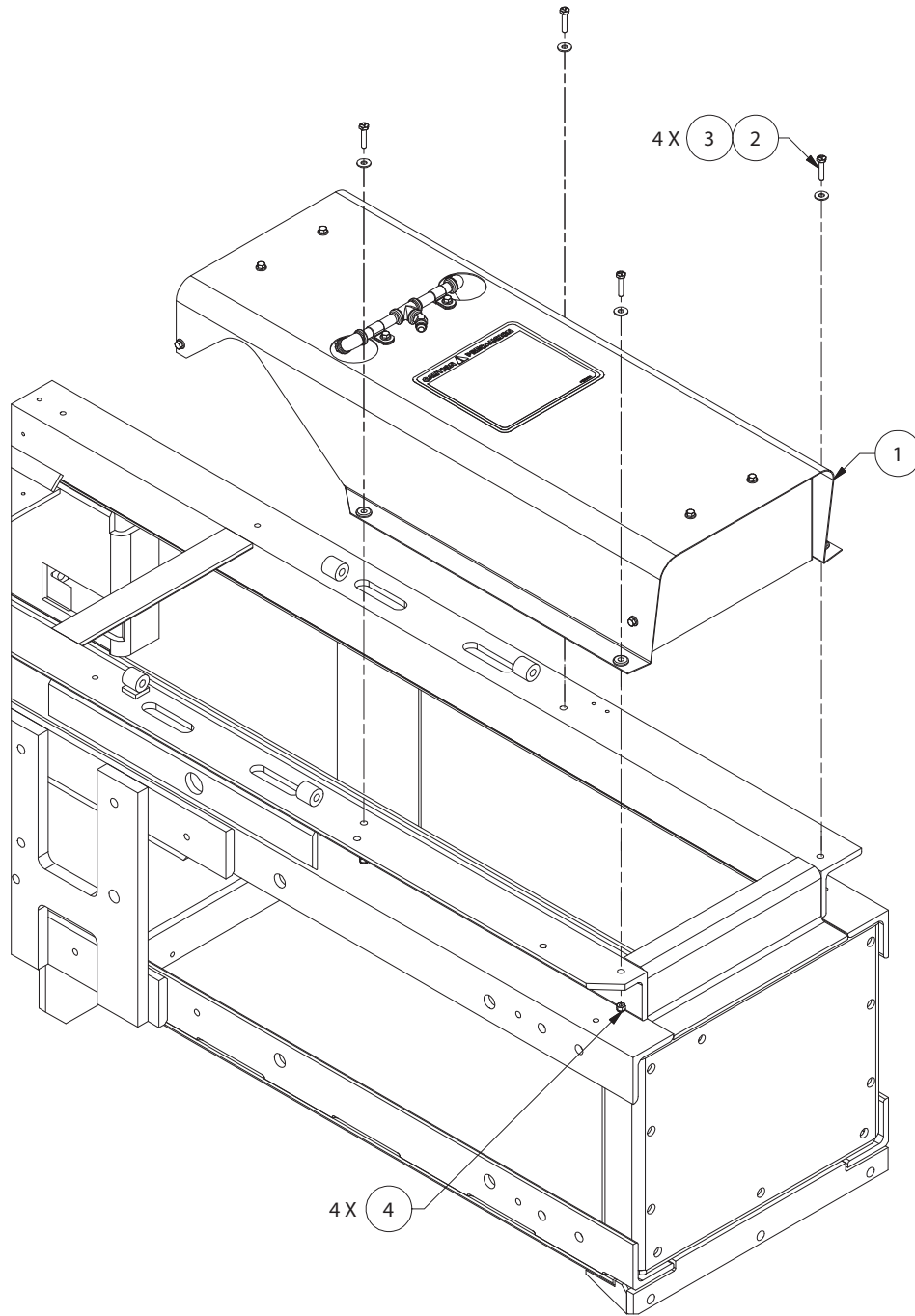


**SHOWN WITHOUT 903650 AND DECALS**

| Item | Part No.          | Qty | Description                            | Item | Part No.   | Qty | Description                      |
|------|-------------------|-----|--|------|------------|-----|----------------------------------|
|      | <b>LUB0007600</b> |     | <b>Tank &amp; Pump Assembly, Luber</b> |      |            |     |                                  |
| 1    | HYD0069033        | 1   | . Fitting                              | 12   | FT00000553 | 1   | . Seal, Stato                    |
| 3    | 209794            | 1   | . Fitting                              | 13   | 903650     | 1   | . Luber                          |
| 4    | HYD0068030        | 1   | . Fitting                              | 14   | 00273802   | 4   | . Nut                            |
| 5    | 903811            | 1   | . Gasket                               | 15   | 18497W     | 4   | . Capscrew                       |
| 6    | WAS0725002        | 4   | . Washer                               | 19   | PPE3752500 | 1   | . Pipe Nipple                    |
| 7    | FT00000547        | 1   | . Control, Pump                        | 20   | 906920     | 1   | . Jam Nut                        |
| 8    | FT00000548        | 1   | . Gasket                               | 21   | FD00000020 | 1   | . Decal, Use Freeman Bullgear... |
| 9    | FT00000549        | 1   | . Fitting                              | 22   | FD00000044 | 1   | . Decal, Direction Arrow         |
| 10   | 12434             | 1   | . Tube                                 |      |            |     |                                  |

Rev K

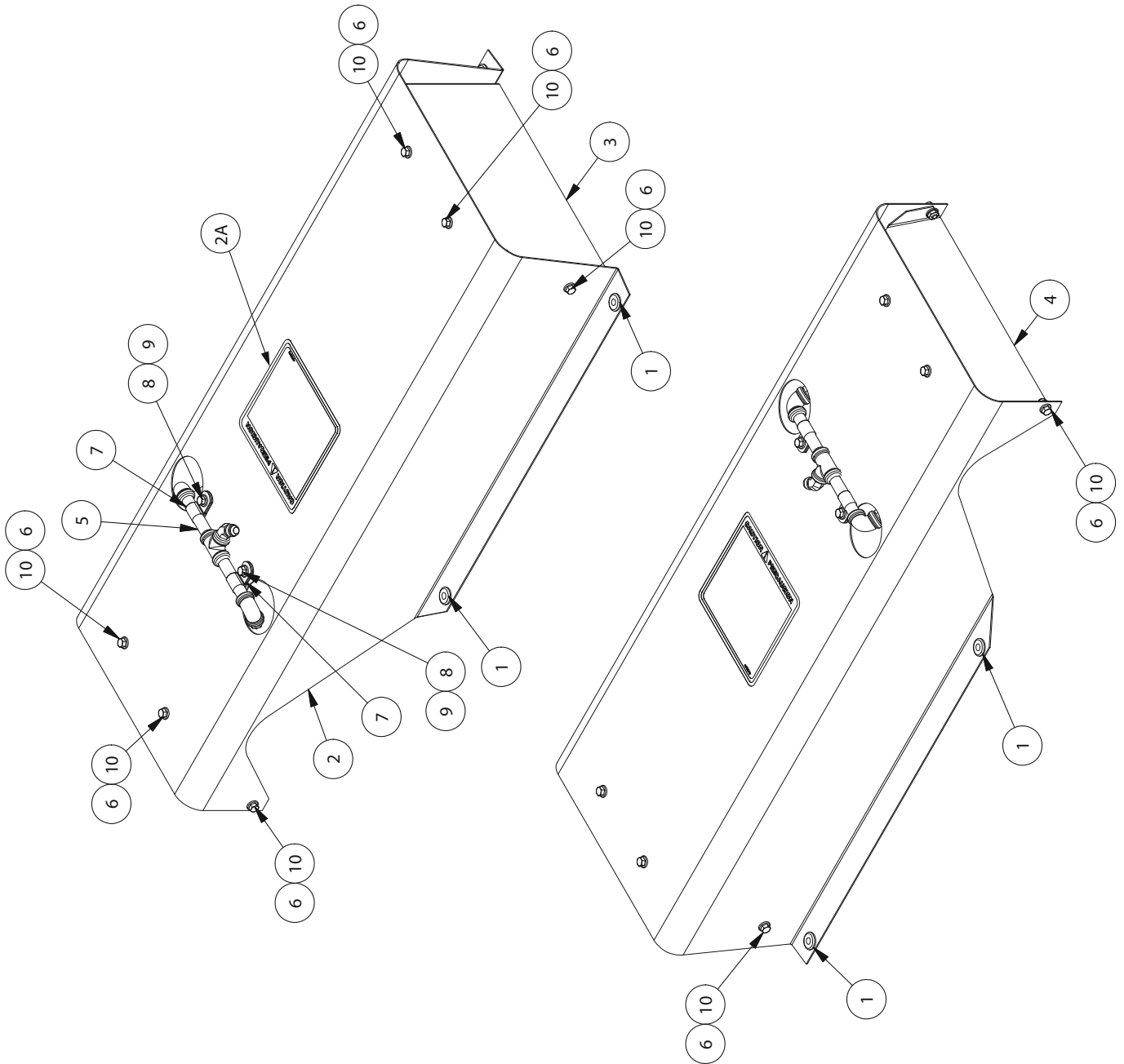
## Bullgear/Luber Installation, 2 Tie



| Item | Part No.      | Qty | Description                        | Item | Part No.  | Qty | Description   |
|------|---------------|-----|------------------------------------|------|-----------|-----|---------------|
|      | <b>904035</b> |     | <b>Bullgear/Luber Installation</b> |      |           |     |               |
| 1    | *a 902660     | 1   | . Bullgear Luber Assy, 2 Tie       | 3    | R13802619 | 4   | . Flat Washer |
| 2    | 18466W        | 4   | . Capscrew                         | 4    | R13811189 | 4   | . Locknut     |

\*a See Separate Coverage (Page 5-29)

## Bullgear Shield/Luber Assembly, 2 Tie

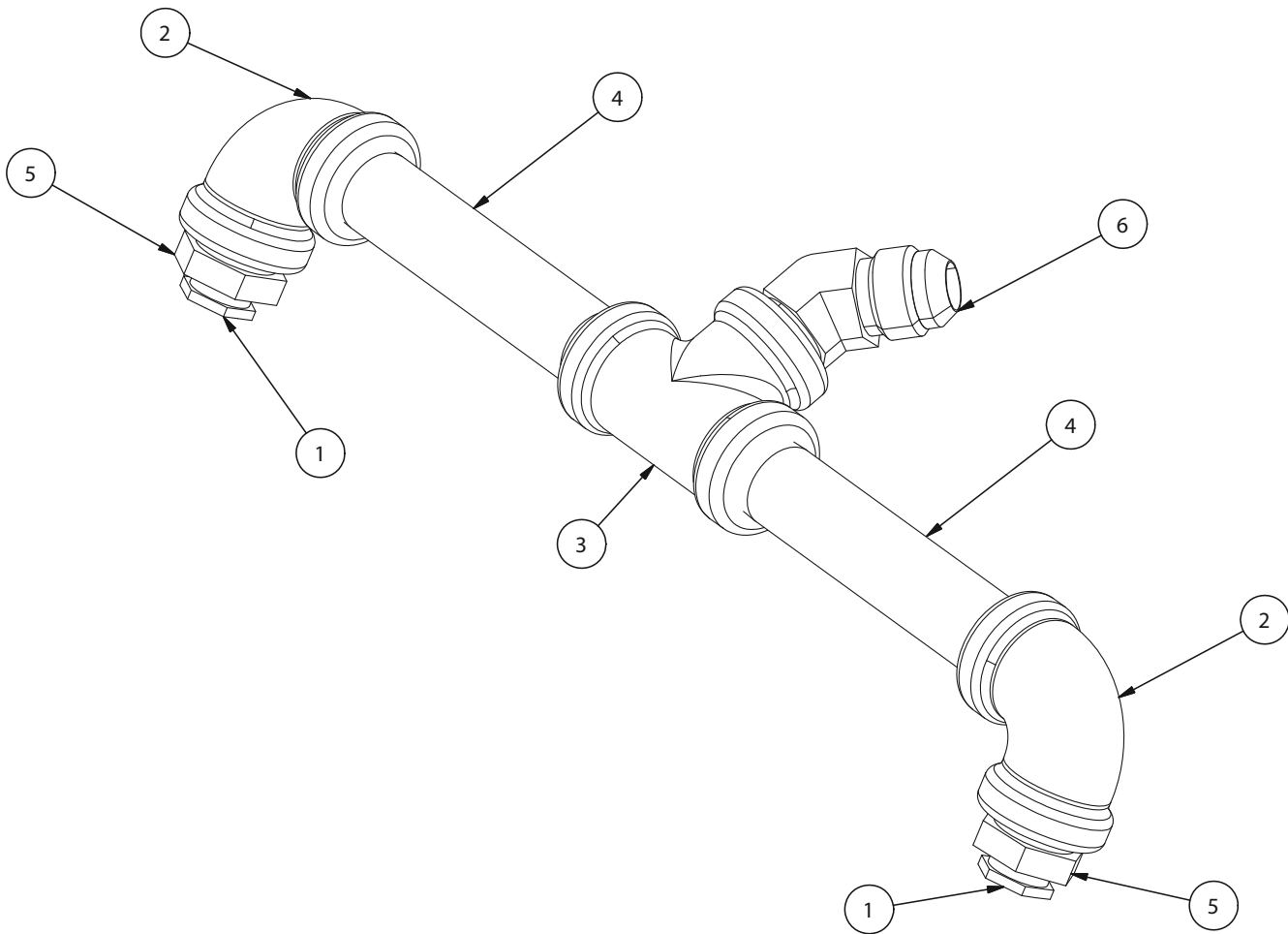


| Item   | Part No.   | Qty | Description                      | Item | Part No.   | Qty | Description |
|--|------------|-----|----------------------------------|------|------------|-----|-------------|
| <b>902660 Bullgear Shield/Luber Assembly</b> |            |     |                                  |      |            |     |             |
| 1  | F000007550 | 4   | . Grommet F/Bull Gear Shield     | 6    | 09416918   | 8   | . Nut       |
| 2  | 903282     | 1   | . Plate, Shield w/Decal          | 7    | 209578     | 2   | . Clamp     |
| 2A   | FD00023473 | 1   | .. Decal; "Caution, Keep All..." | 8    | SMS0000305 | 2   | . Bolt      |
| 3  | SHD036871B | 1   | . Plate, Shield                  | 9    | R13811189  | 2   | . Locknut   |
| 4  | SHD036872B | 1   | . Plate, Rear                    | 10   | SMS0000173 | 8   | . Bolt      |
| 5  | *a 901571  | 1   | . Manifold Assembly              |      |            |     |             |

\*a See Separate Coverage (Page 5-30)

Rev A

# Manifold Assembly, Bullgear Luber

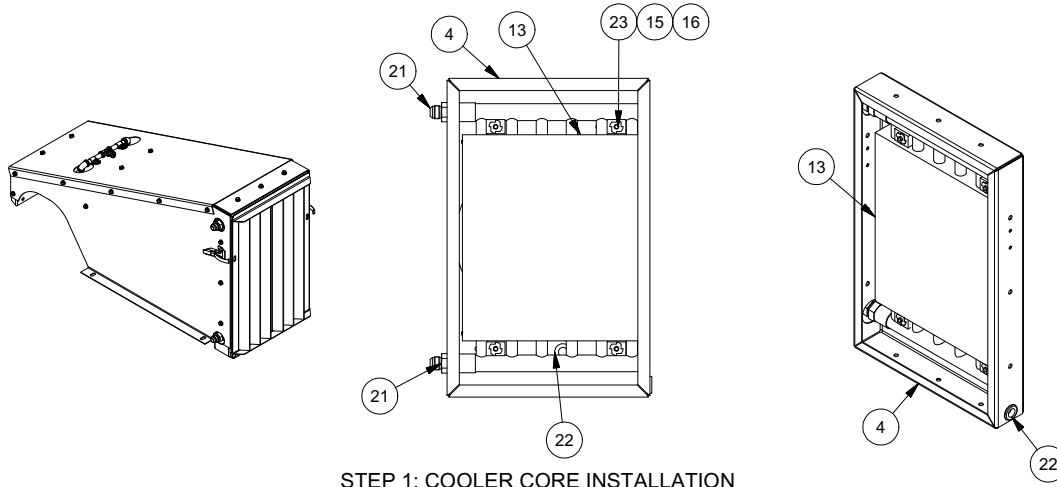


| Item                            | Part No.   | Qty | Description              | Item | Part No. | Qty | Description    |
|---------------------------------|------------|-----|--------------------------|------|----------|-----|----------------|
| <b>901571 Manifold Assembly</b> |            |     |                          |      |          |     |                |
| 1                               | LUB0323060 | 2   | . Pressure Fitting-Valve | 4    | 00121209 | 2   | . Nipple, Pipe |
| 2                               | PPE0014000 | 2   | . Elbow, Pipe            | 5    | 209500   | 2   | . Fitting      |
| 3                               | PPE0040250 | 1   | . Tee, Pipe              | 6    | 209794   | 1   | . Fitting      |

Rev C

### Oil Cooler/Shroud Assembly, Bullgear, Hydro

Page 1 of 2

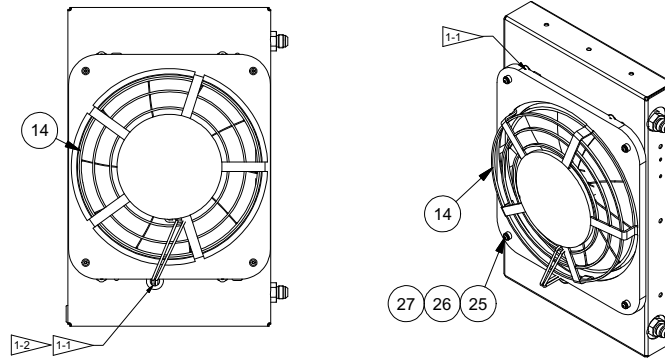


**STEP 1: COOLER CORE INSTALLATION**

**NOTES:**

1-1. REMOVE & DISCARD EDGE TRIM.  
REMOVE MATERIAL ON FAN TO MAKE CLEARANCE FOR FOR SHROUD MOUNTING CAPSCREWS AND GROMMET.

1-2. ROUTE ELECTRICAL HARNESS THROUGH GROMMET AND RECONNECT FUSE THE FUSE HARNESS.



**STEP 2: FAN INSTALLATION**

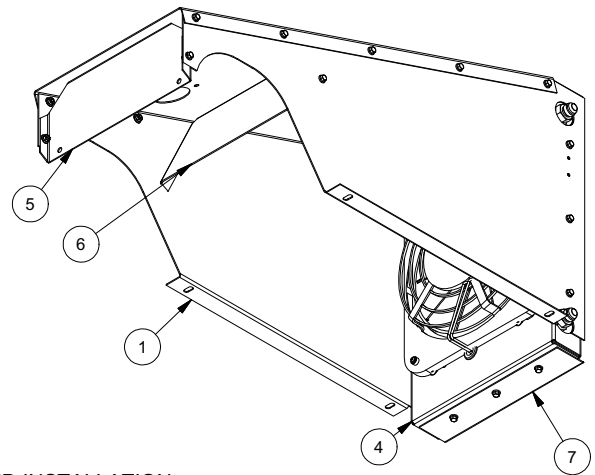
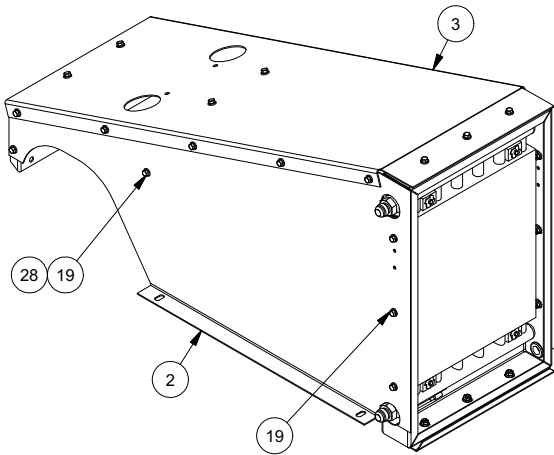
| Item   | Part No.   | Qty | Description                 | Item | Part No.       | Qty | Description         |
|--|------------|-----|-----------------------------|------|----------------|-----|---------------------|
| <b>910233 Oil Cooler/Shroud Assembly, Bullgear</b> |            |     |                             |      |                |     |                     |
| 1  | SHR036954D | 1   | . Shroud - LH               | 16   | CLR0002353     | 4   | . Tee Nut           |
| 2  | SHR036953D | 1   | . Shroud - RH               | 17   | *a 901572      | 1   | . Manifold Assembly |
| 3  | 910434     | 1   | . Top Oil Cooler Shroud     | 18   | 209578         | 2   | . Clamp             |
| 4  | 910360     | 1   | . Weldment, Fnt Shroud      | 19   | SMS0000173     | 30  | . Screw, Ser Flg    |
| 5  | 910303     | 1   | . Oil Cooler Shroud         | 20   | 15113W         | 2   | . Locknut           |
| 6  | 910304     | 1   | . Plate, Baffle             | 21   | 209891         | 2   | . Fitting           |
| 7  | GRL036966B | 1   | . Lower Grill Support       | 22   | 256328         | 1   | . Grommet           |
| 8  | GRL036969E | 1   | . Oil Cooler Grill Assembly | 23   | Y25G-0524      | 4   | . Capscrew          |
| 9  | WEA037323A | 2   | . Weather Strip             | 24   | SMS0000300     | 2   | . Screw, Ser Flg    |
| 10   | WEA037325A | 2   | . Weatherstrip              | 25   | Y25G-(1024)164 | 4   | . Capscrew          |
| 11   | CLP0000130 | 2   | . Fastener                  | 26   | 18423W         | 4   | . Washer            |
| 12   | RIV0000604 | 4   | . Rivet                     | 27   | Y35E-#10       | 4   | . Washer            |
| 13   | F000006263 | 1   | . Heat Exchanger            | 28   | 264150W        | 30  | . Nut               |
| 14   | 909463     | 1   | . Fan                       |      |                |     |                     |
| 15   | CLR0002094 | 4   | . Mounting Block            |      |                |     |                     |

\*a See Separate Coverage (Page 5-33)

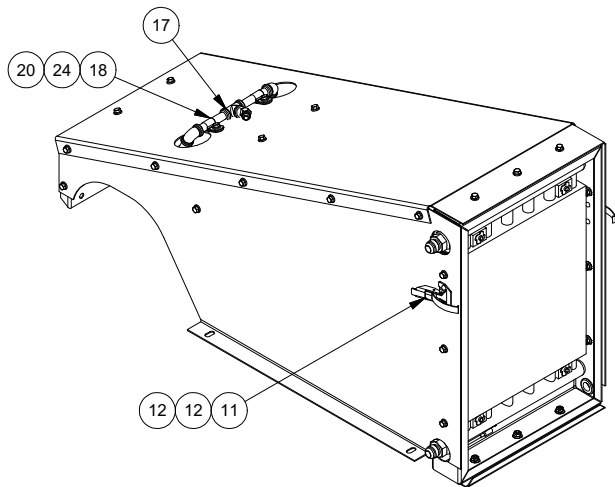
Rev

# Oil Cooler/Shroud Assembly, Bullgear, Hydro

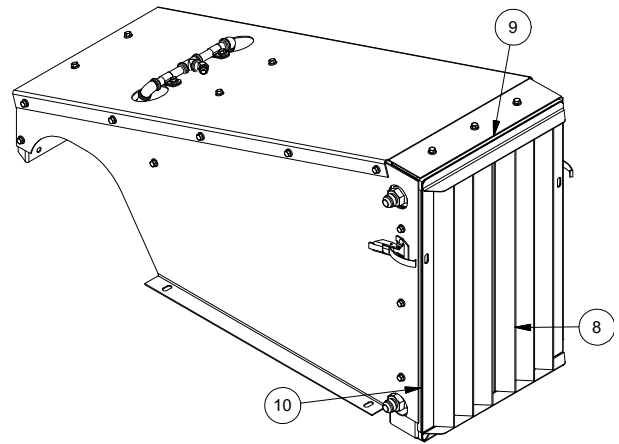
Page 2 of 2



STEP 3: SHROUD INSTALLATION



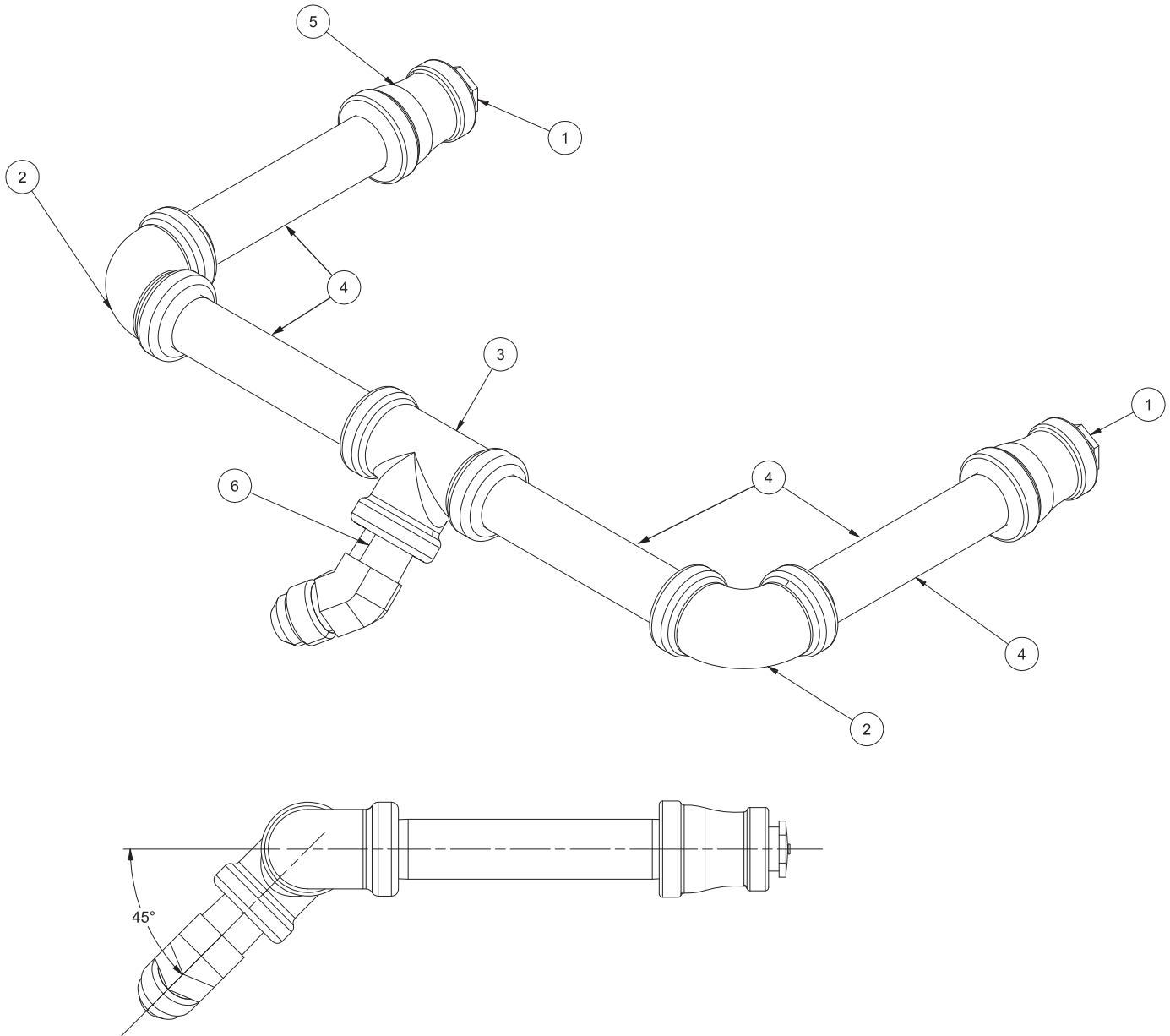
STEP 4: LUBER & LATCH INSTALLATION



STEP 5: FRONT SHROUD INSTALLATION



# Manifold Assembly, Bullgear Luber, Hydro



| Item                            | Part No.   | Qty | Description                   | Item | Part No.   | Qty | Description |
|---------------------------------|------------|-----|-------------------------------|------|------------|-----|-------------|
| <b>901572 Manifold Assembly</b> |            |     |                               |      |            |     |             |
| 1                               | LUB0323060 | 2   | . 1/8" Pressure Fitting-Valve | 5    | PPE0000001 | 2   | . Fitting   |
| 2                               | PPE0014000 | 2   | . Elbow, Pipe                 | 6    | 209794     | 1   | . Fitting   |
| 3                               | PPE0040250 | 1   | . Tee, Pipe                   |      |            |     |             |
| 4                               | 00121209   | 4   | . Nipple, Pipe                |      |            |     |             |

Rev B

This page is intentionally left blank.

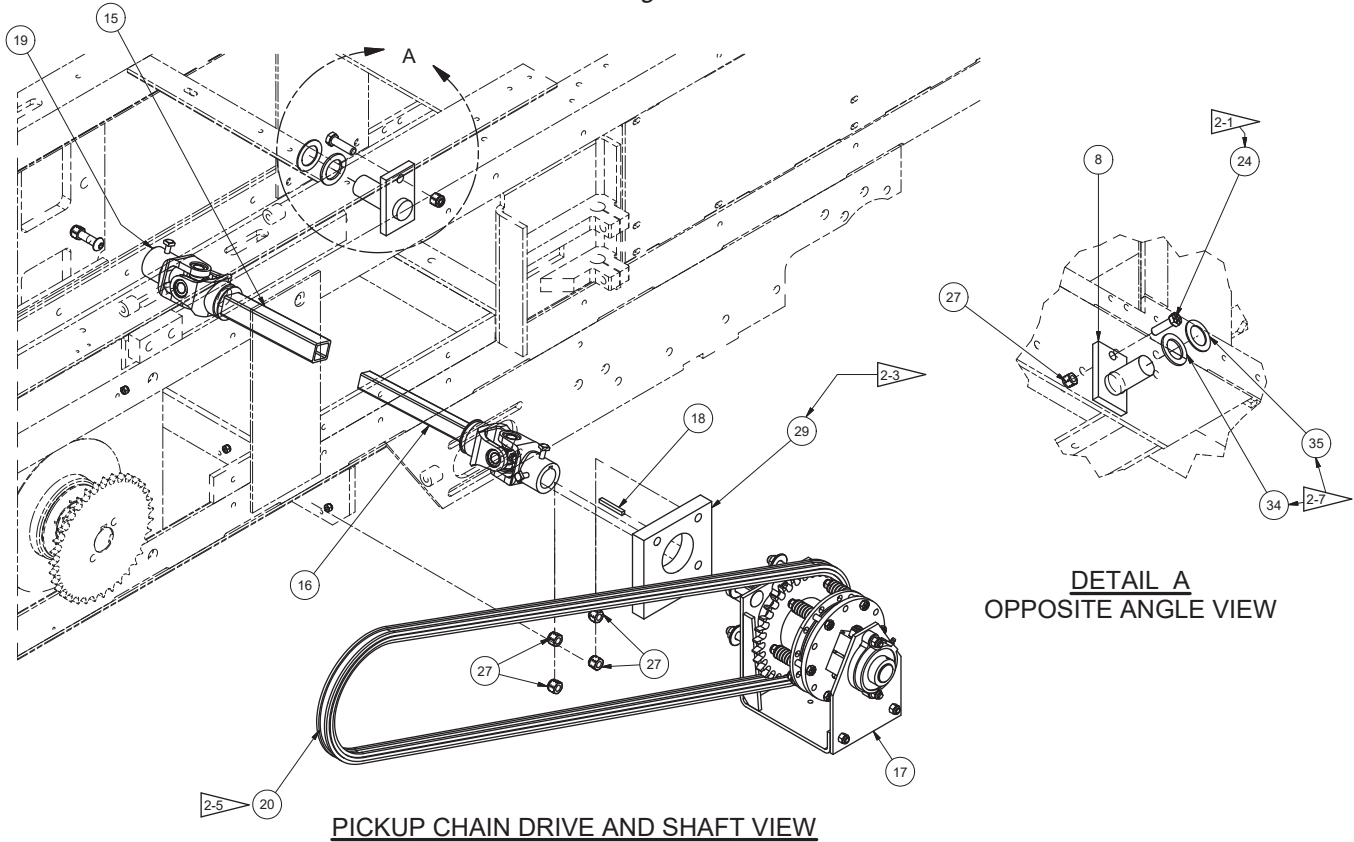
## Section 6

### Pickup

|  |      |
|--|------|
| Pickup Installation, 14" 2 Tie .....                 | 6-2  |
| Pick up Installation, 16" 2 Tie .....                | 6-5  |
| .Pickup Clutch Assembly, Bullgear Baler .....        | 6-8  |
| ..Pickup Sprocket Assembly .....                     | 6-9  |
| .Pickup Assembly, Super Sweep .....                  | 6-10 |
| ..Cam Lever Assembly .....                           | 6-14 |
| <br>   |      |
| Pickup Lift Installation, Engine, 14" .....          | 6-15 |
| Pickup Lift Installation, Engine, 16" .....          | 6-17 |
| .Spring Assembly, Pickup Lift, Engine .....          | 6-19 |
| Pickup Lift Installation, Hydro, 14" .....           | 6-20 |
| Pickup Lift Installation, Hydro, 16" .....           | 6-22 |
| .Spring Assembly, Pickup Lift, Hydro/Driveline ..... | 6-24 |

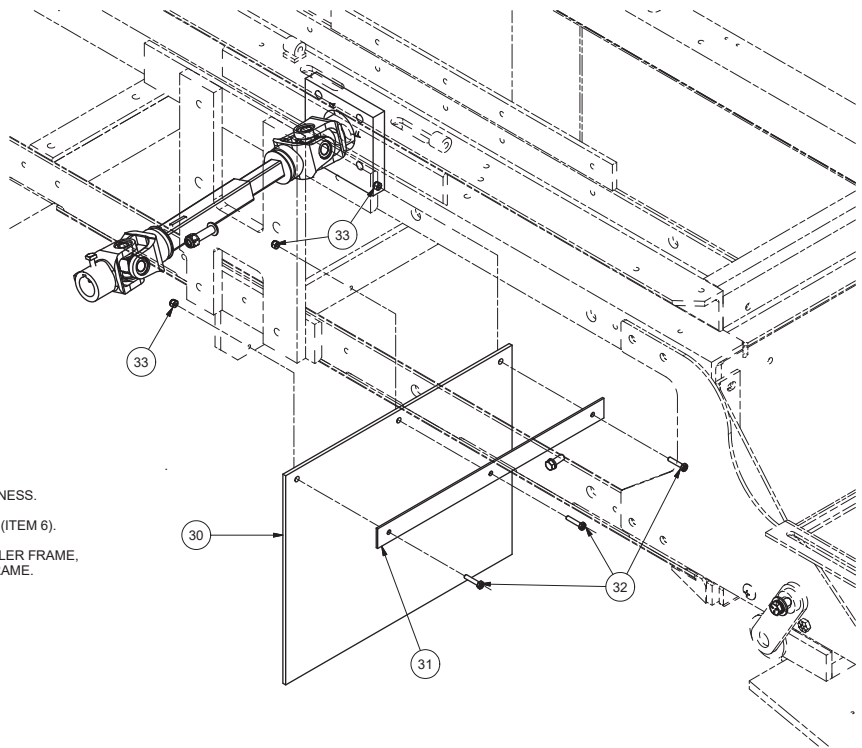
# Pickup Installation, 14" 2 Tie

Page 1 of 3



PICKUP CHAIN DRIVE AND SHAFT VIEW

DETAIL A  
OPPOSITE ANGLE VIEW



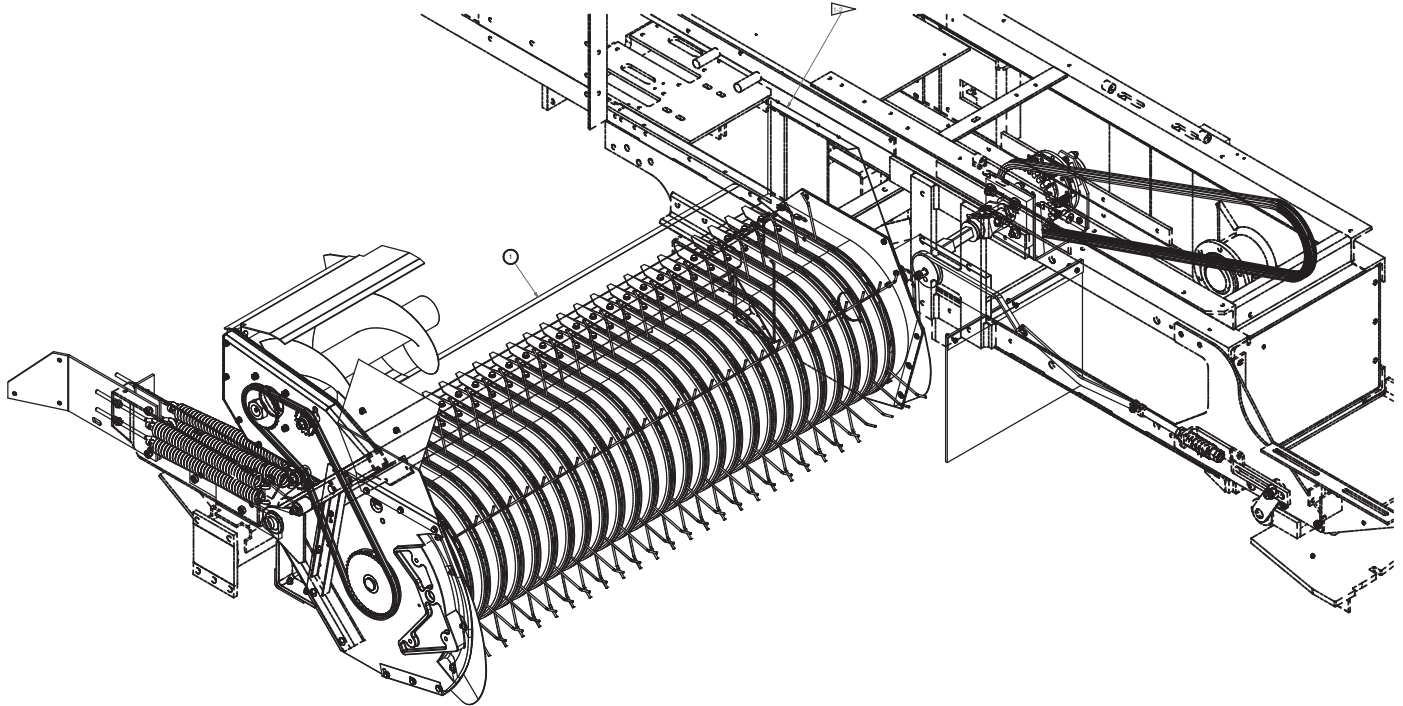
DRIVE SHAFT SHIELD VIEW

**NOTES:**

- 2-1 ONLY COMPONENT ON OUTSIDE OF FRAME.
- 2-3 ONLY USED FOR GEARBOX BALERS.
- 2-5 1/2" DEFLECTION ON CHAIN FOR CORRECT TIGHTNESS.
- 2-6 APPLY ANTI-SEIZE TO THREADS OF SPRING BOLT (ITEM 6).
- 2-7 USED TO ENSURE PICKUP LIFT CHAIN CLEARS BALER FRAME, SPACERS ARE PLACED ON OUTSIDE OF BALER FRAME.
- 2-8 SHIM AS NEEDED TO INSURE 0" - 0.06" MAX. LATERAL MOVEMENT OF PICKUP ASSEMBLY.

### Pickup Installation, 14" 2 Tie

Page 2 of 3



**NOTES:**

1-2 TOP OF SHIELD PARALLEL TO TOP OF BALER FRAME WHEN PICKUP ASSEMBLY IS FULLY RAISED.

1-3 ITEM 38 IS NOT SHOWN, REFER TO 909077 FOR INSTALLATION INSTRUCTIONS OF PICKUP LIFT HEIGHT.

| Item  | Part No.      | Qty | Description              | Item | Part No.   | Qty | Description                |
|---|---------------|-----|--------------------------|------|------------|-----|----------------------------|
| <b>902966 Pickup Installation, 14" Bullgear 2 Tie</b> |               |     |                          |      |            |     |                            |
| 1   | a* PCYSPEC370 | 1   | . Pickup, Super Sweep    | 20   | 906513     | 1   | . Chain, Pickup Drive      |
| 2   | BKT0022481    | 1   | . Bracket, RH            | 21   | F000006410 | 2   | . Spacer                   |
| 3   | F000007154    | 4   | . Spring, Extension      | 22   | 200454W    | 2   | . Capscrew                 |
| 4   | 903818        | 1   | . Plate, Link            | 23   | 221574W    | 1   | . Capscrew                 |
| 5   | MNT0011400    | 1   | . Mounting Plate         | 24   | 221569W    | 2   | . Capscrew                 |
| 6   | F000000096    | 4   | . Eyebolt                | 25   | 221767W    | 6   | . Washer                   |
| 7   | MNT0022379    | 1   | . Mounting, RH           | 26   | 221707W    | 8   | . Hex Nut                  |
| 8   | HGR0022222    | 1   | . Hanger, LH             | 27   | 223587     | 10  | . Locknut                  |
| 9   | SHD0014244    | 1   | . Plate, Shield          | 30   | 908329     | 1   | . Flap, Neoprene           |
| 10  | IDL0016315    | 1   | . Idler, Chain           | 31   | 908328     | 1   | . Bar, Retainer            |
| 11  | LNK0000523    | 2   | . Link, Connecting       | 32   | R13801782  | 3   | . Capscrew                 |
| 12  | CHN0016368    | 1   | . Chain, Pickup Lift     | 33   | 15113W     | 3   | . Nut, Esna                |
| 13  | Y25G-0832     | 1   | . Capscrew               | 34   | R616841    | 2   | . Mach Bushing             |
| 14  | F000007607    | 1   | . Bearing, Inner Race    | 35   | F000004160 | 1   | . Mach Bushing             |
| 15  | 900019        | 1   | . Drive Shaft, Female    | 36   | 909077     | 1   | . Shim Pack, Pickup Height |
| 16  | 900020        | 1   | . Shaft, Drive           |      |            |     |                            |
| 17  | b* SAL0000007 | 1   | . Pickup Clutch Assembly |      |            |     |                            |
| 18  | 48688         | 1   | . Key                    |      |            |     |                            |
| 19  | ZZ00000445    | 1   | . Key                    |      |            |     |                            |

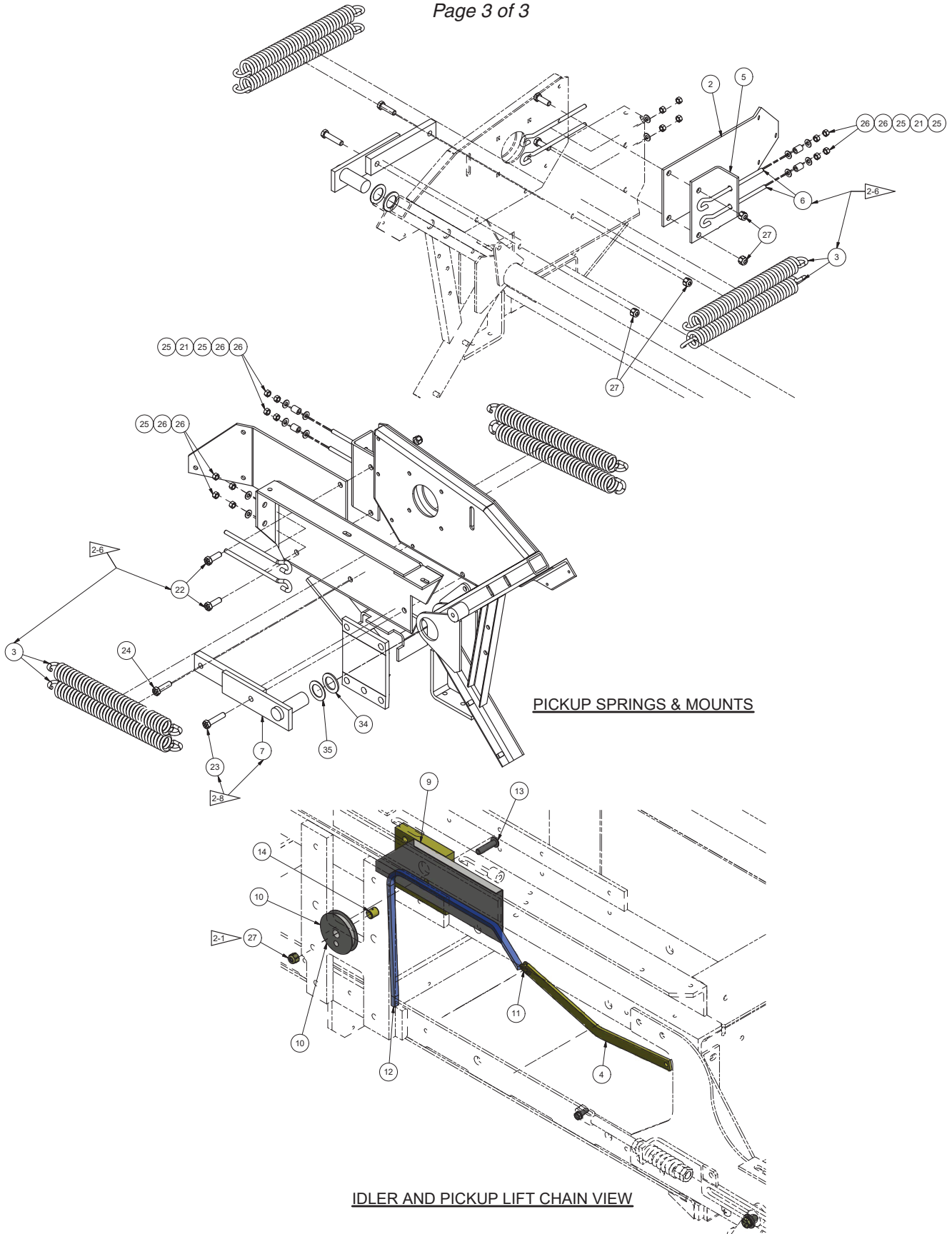
Rev HG

\*a See Separate Coverage (Page 6-11)

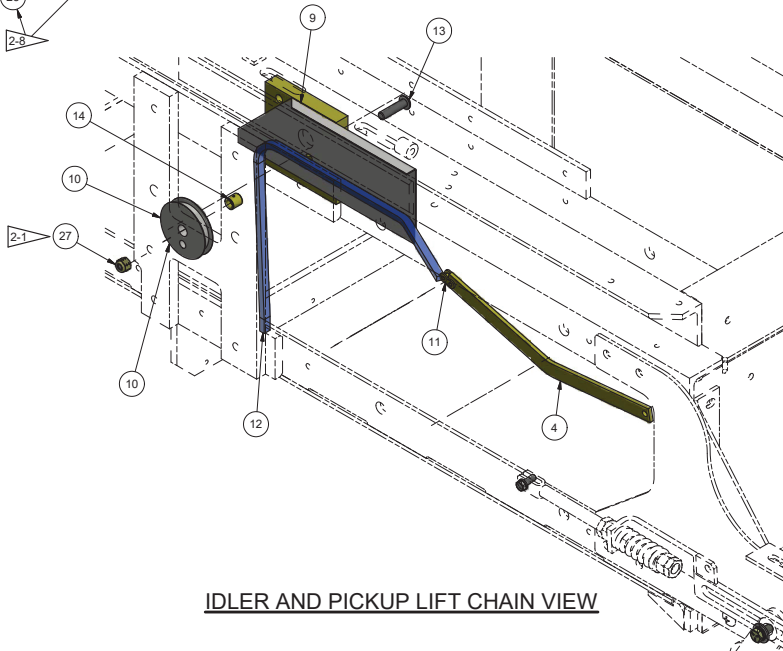
\*b See Separate Coverage (Page 6-8)

# Pickup Installation, 14" 2 Tie

Page 3 of 3



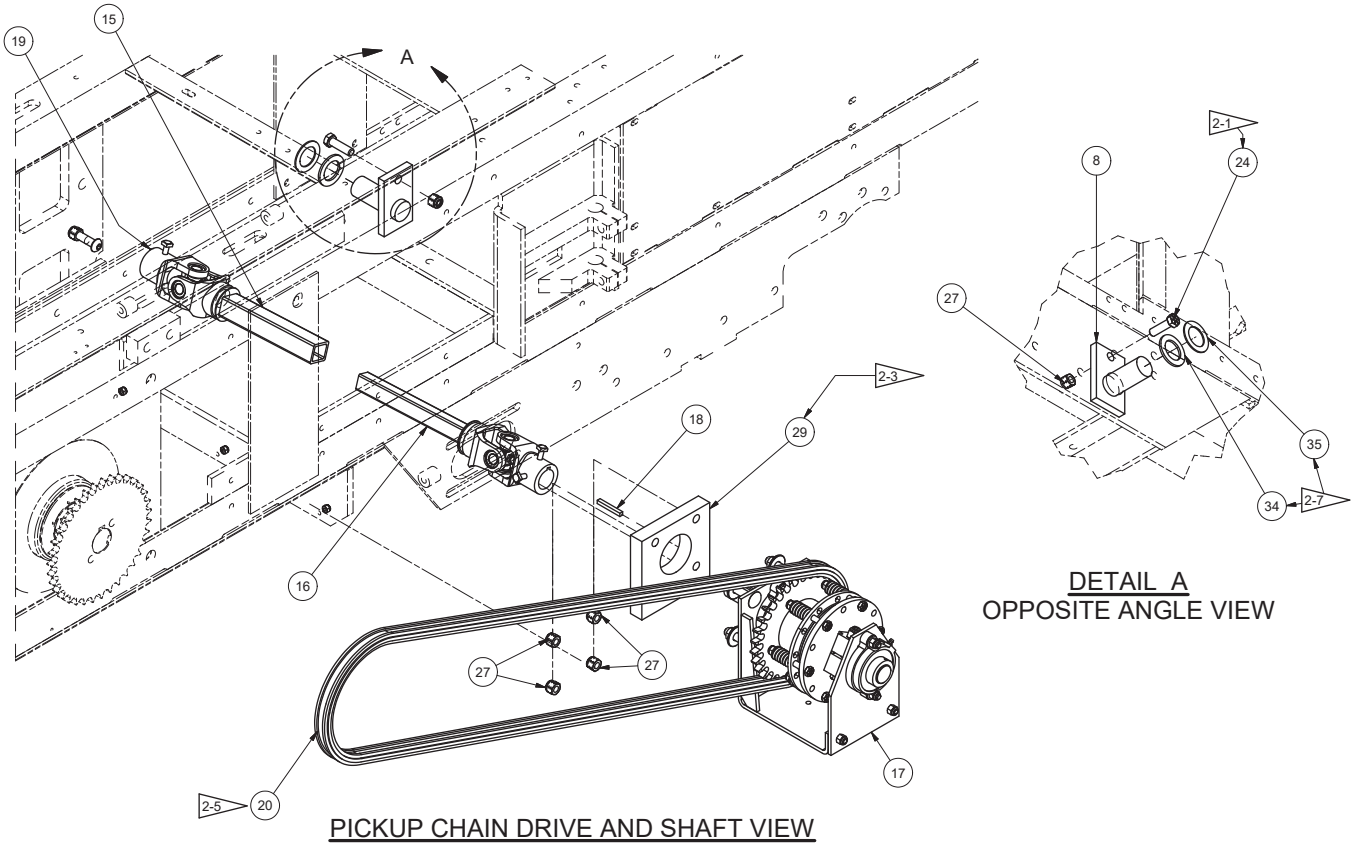
PICKUP SPRINGS & MOUNTS



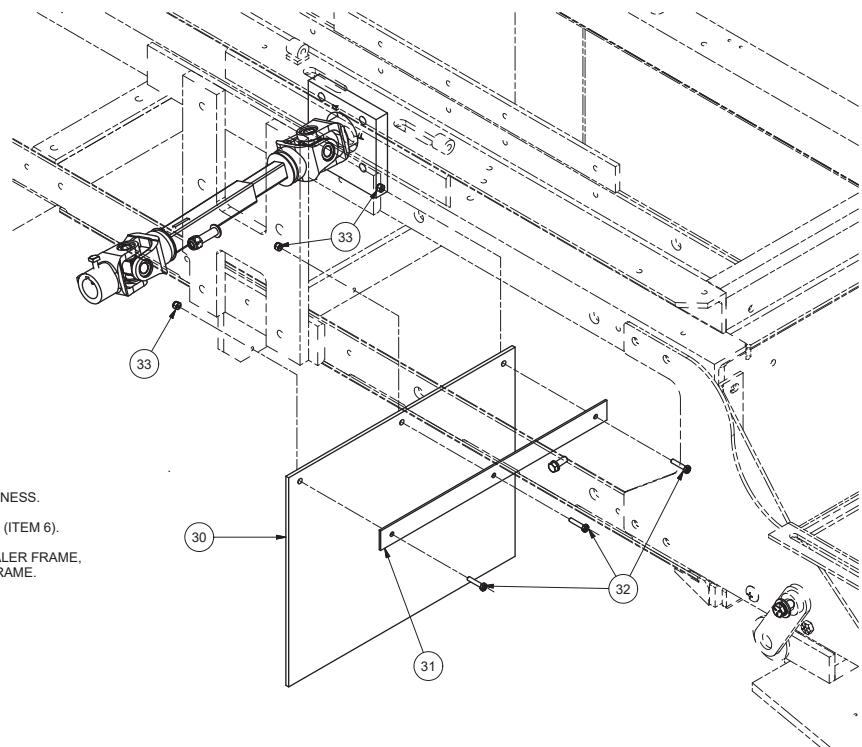
IDLER AND PICKUP LIFT CHAIN VIEW

### Pickup Installation, 16" 2 Tie

Page 1 of 3



**DETAIL A  
OPPOSITE ANGLE VIEW**

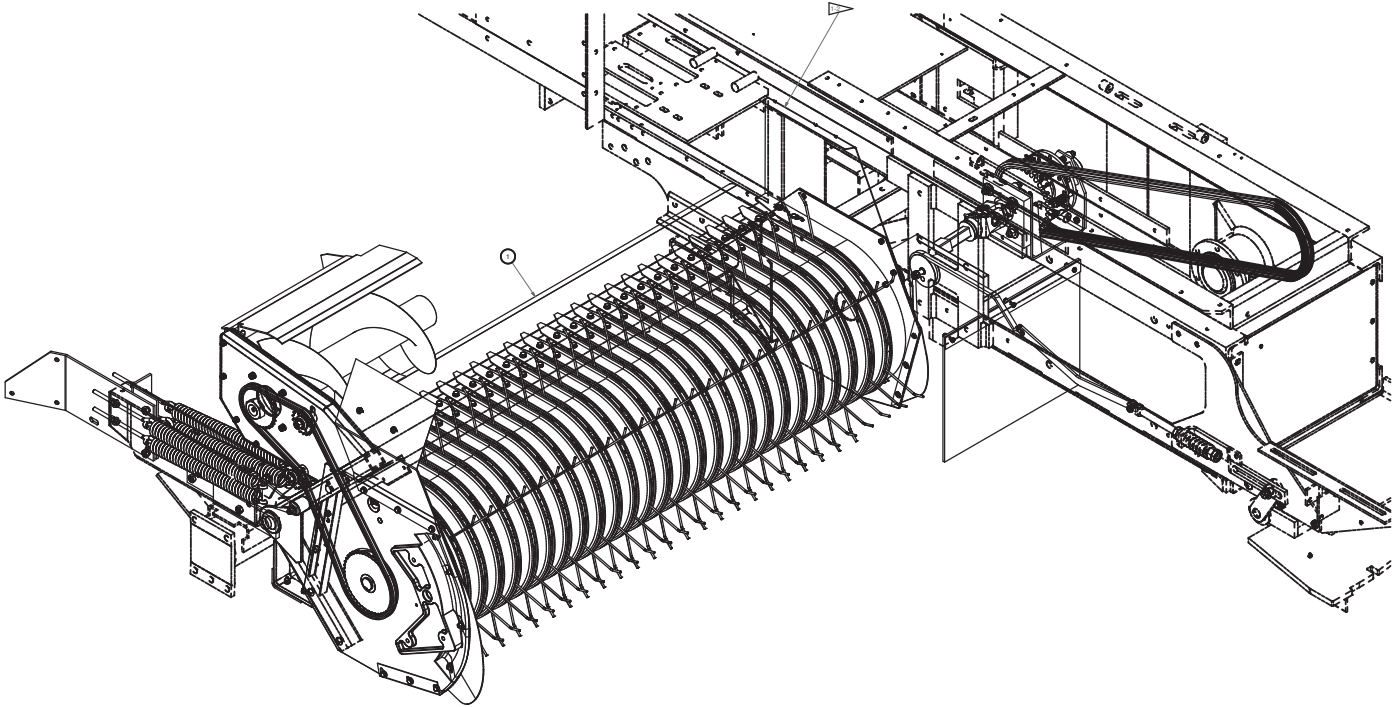


**NOTES:**

- 2-1 ONLY COMPONENT ON OUTSIDE OF FRAME.
- 2-3 ONLY USED FOR GEARBOX BALERS.
- 2-5 1/2" DEFLECTION ON CHAIN FOR CORRECT TIGHTNESS.
- 2-6 APPLY ANTI-SEIZE TO THREADS OF SPRING BOLT (ITEM 6).
- 2-7 USED TO ENSURE PICKUP LIFT CHAIN CLEARS BALER FRAME, SPACERS ARE PLACED ON OUTSIDE OF BALER FRAME.
- 2-8 SHIM AS NEEDED TO INSURE 0° - 0.06° MAX. LATERAL MOVEMENT OF PICKUP ASSEMBLY.

# Pickup Installation, 16" 2 Tie

Page 2 of 3



NOTES:

- 1-2 TOP OF SHIELD PARALLEL TO TOP OF BALER FRAME WHEN PICKUP ASSEMBLY IS FULLY RAISED.
- 1-3 ITEM 36 IS NOT SHOWN, REFER TO 909077 FOR INSTALLATION INSTRUCTIONS OF PICKUP LIFT HEIGHT.

| Item  | Part No.      | Qty | Description              | Item | Part No.   | Qty | Description                |
|---|---------------|-----|--------------------------|------|------------|-----|----------------------------|
| <b>902114 Pickup Installation, 16" Bullgear 2 Tie</b> |               |     |                          |      |            |     |                            |
| 1   | a* PCYSPEC370 | 1   | . Pickup, Super Sweep    | 20   | CHN0060139 | 1   | . Chain, Pickup Drive      |
| 2   | BKT0022481    | 1   | . Bracket, RH            | 21   | F000006410 | 2   | . Spacer                   |
| 3   | F000007154    | 4   | . Spring, Extension      | 22   | 200454W    | 2   | . Capscrew                 |
| 4   | 903818        | 1   | . Plate, Link            | 23   | 221574W    | 1   | . Capscrew                 |
| 5   | MNT0011400    | 1   | . Mounting Plate         | 24   | 221569W    | 2   | . Capscrew                 |
| 6   | F000000096    | 4   | . Eyebolt                | 25   | 221767W    | 6   | . Washer                   |
| 7   | MNT0022379    | 1   | . Mounting, RH           | 26   | 221707W    | 8   | . Hex Nut                  |
| 8   | HGR0022222    | 1   | . Hanger, LH             | 27   | 223587     | 10  | . Locknut                  |
| 9   | SHD0014244    | 1   | . Plate, Shield          | 30   | 908329     | 1   | . Flap, Neoprene           |
| 10  | IDL0016315    | 1   | . Idler, Chain           | 31   | 908328     | 1   | . Bar, Retainer            |
| 11  | LNK0000523    | 2   | . Link, Connecting       | 32   | R13801782  | 3   | . Capscrew                 |
| 12  | CHN0016368    | 1   | . Chain, Pickup Lift     | 33   | 15113W     | 3   | . Nut, Esna                |
| 13  | Y25G-0832     | 1   | . Capscrew               | 34   | R616841    | 2   | . Mach Bushing             |
| 14  | F000007607    | 1   | . Bearing, Inner Race    | 35   | F000004160 | 1   | . Mach Bushing             |
| 15  | 900019        | 1   | . Drive Shaft, Female    | 36   | 909077     | 1   | . Shim Pack, Pickup Height |
| 16  | 900020        | 1   | . Shaft, Drive           |      |            |     |                            |
| 17  | b* SAL0000007 | 1   | . Pickup Clutch Assembly |      |            |     |                            |
| 18  | 48688         | 1   | . Key                    |      |            |     |                            |
| 19  | ZZ00000445    | 1   | . Key                    |      |            |     |                            |

Rev LG

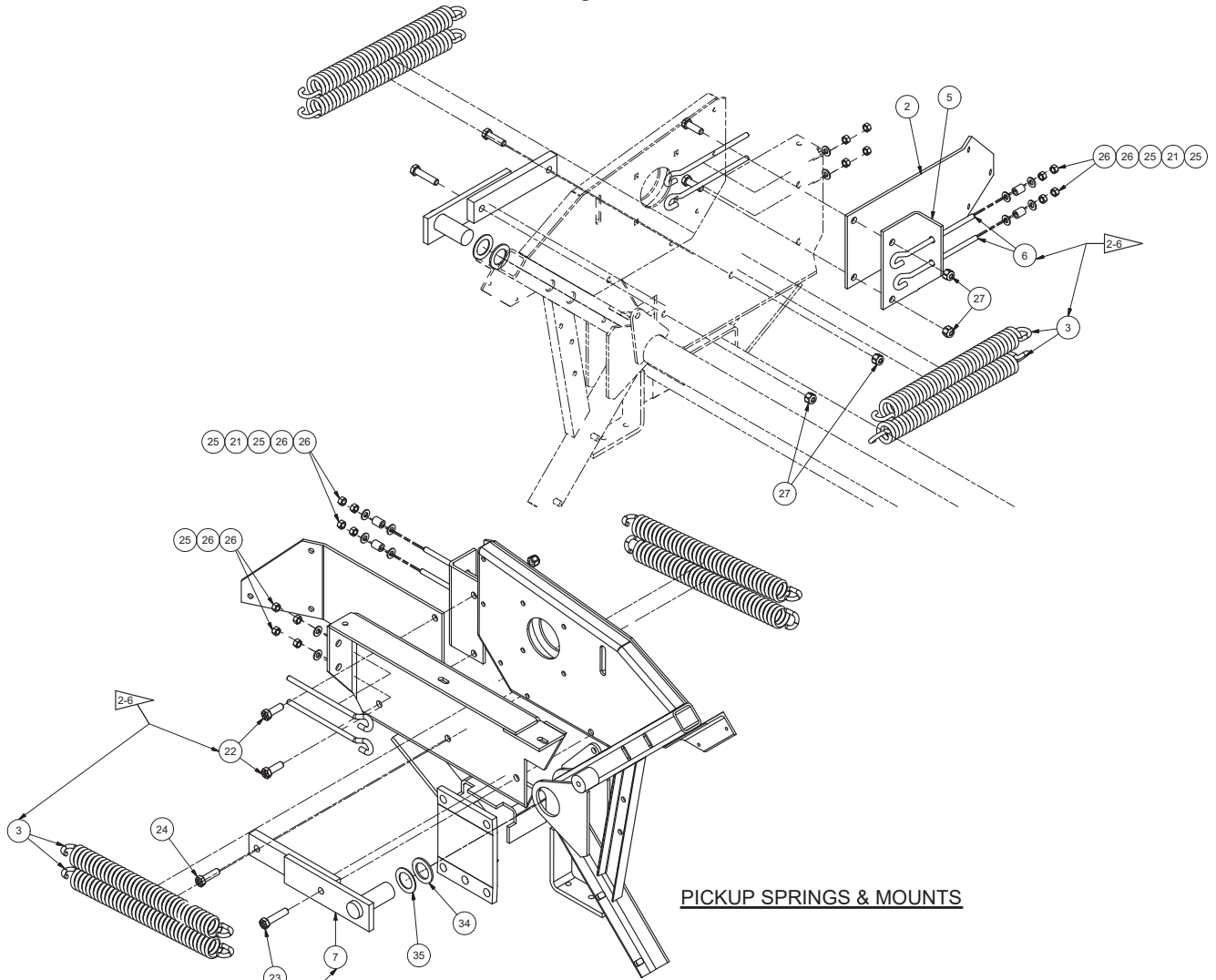
\*a See Separate Coverage (Page 6-11)

\*b See Separate Coverage (Page 6-8)

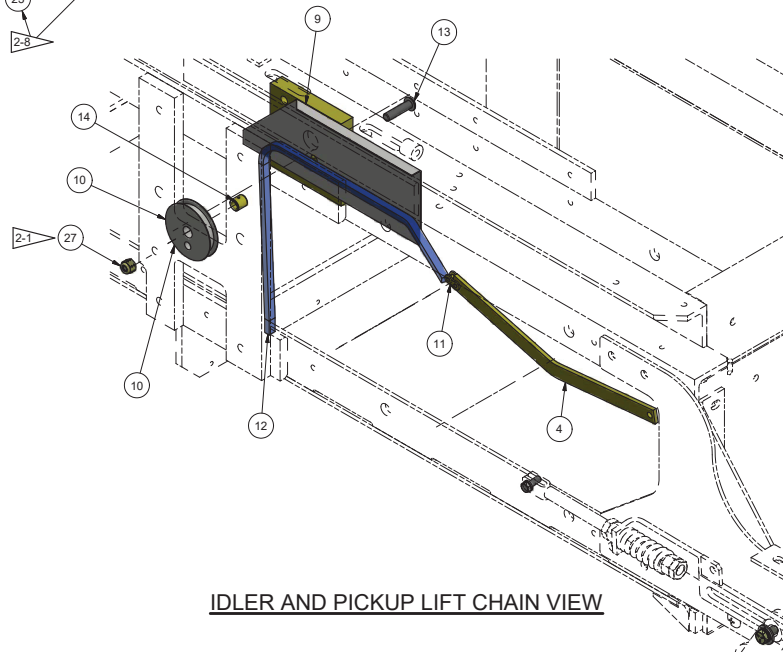


# Pickup Installation, 16" 2 Tie

Page 3 of 3

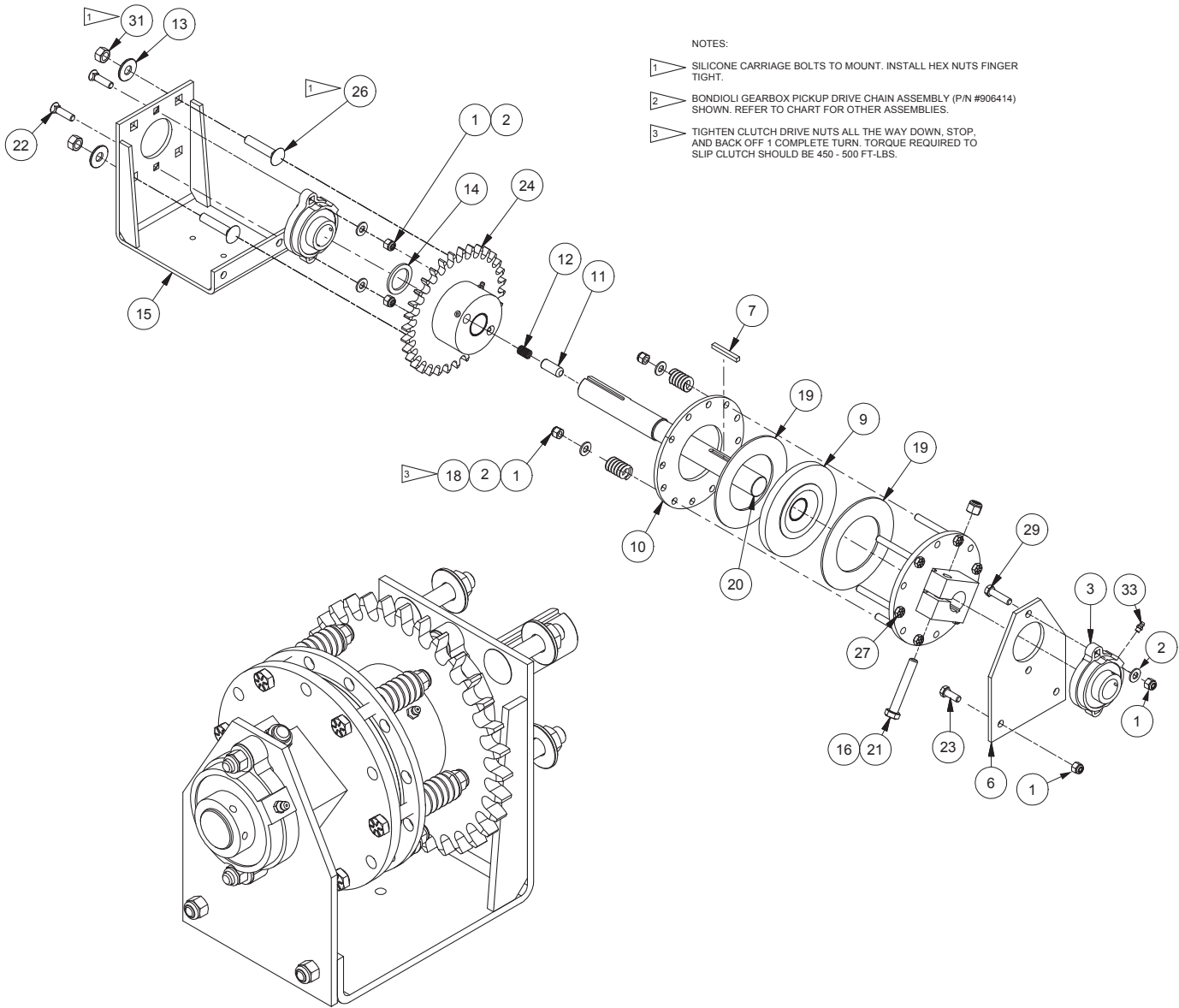


PICKUP SPRINGS & MOUNTS



IDLER AND PICKUP LIFT CHAIN VIEW

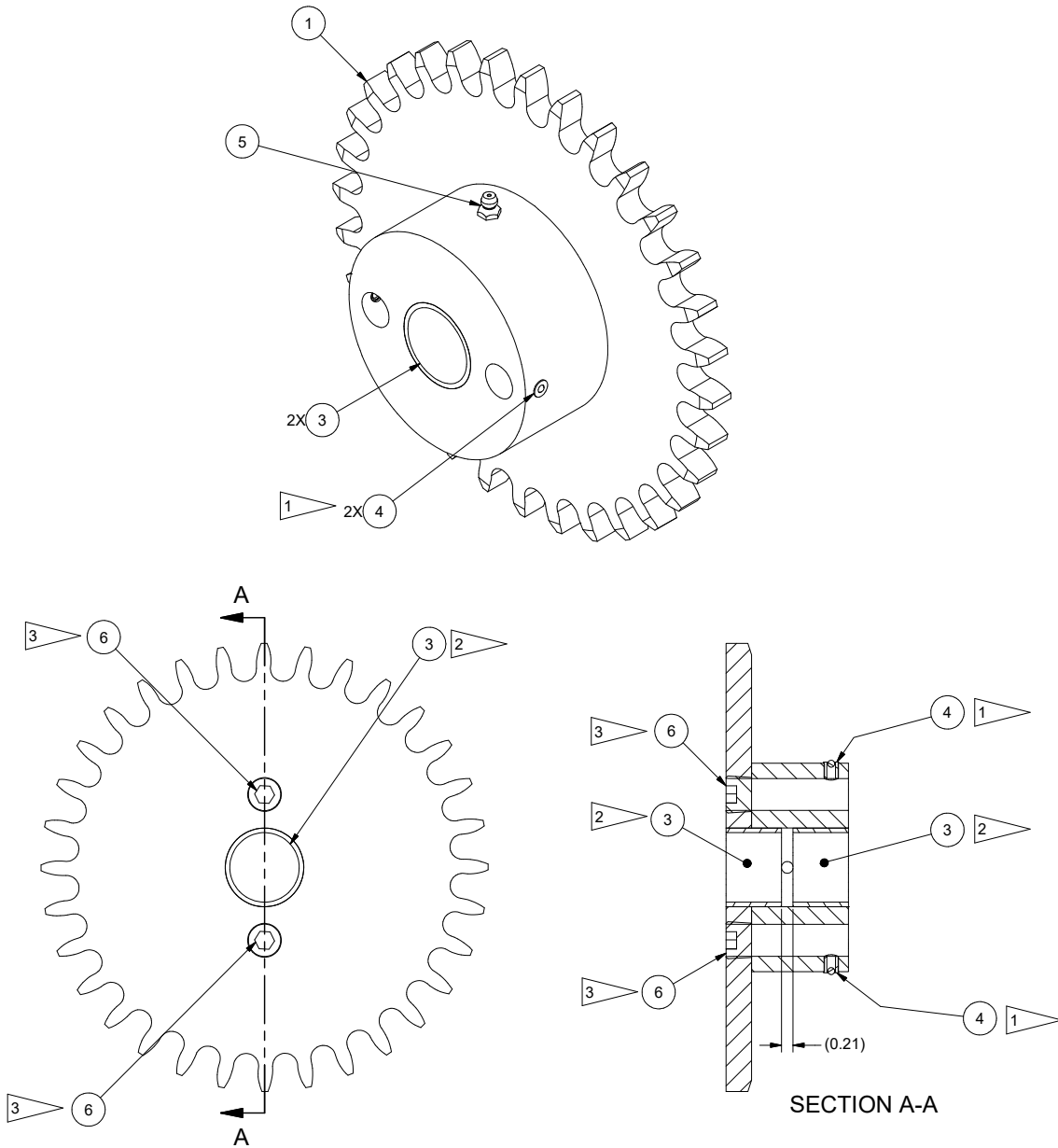
# Pickup Clutch Assembly, Bullgear Baler



| Item                                | Part No.   | Qty | Description                        | Item | Part No.      | Qty | Description              |
|-------------------------------------|------------|-----|------------------------------------|------|---------------|-----|--------------------------|
| <b>SAL000007 Pickup Clutch Assy</b> |            |     |                                    |      |               |     |                          |
| 1                                   | R13811191  | 12  | . Locknut                          | 17   | 906516        | 1   | . Bearing                |
| 2                                   | 221767W    | 10  | . Hard Washer                      | 18   | F000001797    | 6   | . Spring, Clutch Plate   |
| 3                                   | BRG0000202 | 1   | . Bearing                          | 19   | F000001793    | 2   | . Disc, Friction         |
| 6                                   | F000008091 | 1   | . Bearing Mount Plate-Pickup Drive | 20   | SHF0021219    | 1   | . Driveshaft             |
| 7                                   | 48688      | 1   | . Key                              | 21   | R13811082     | 1   | . Capscrew               |
| 8                                   | CLH0017773 | 1   | . Adapter Weldment                 | 22   | PWB3751500    | 2   | . Bolt, Plow             |
| 9                                   | CLH0021222 | 1   | . Assy, Clutch Plate               | 23   | Y17C-0616     | 2   | . Capscrew               |
|                                     | BRG0020016 | 1   | . Bushing                          | 24   | *a SPK0021220 | 1   | . Sprocket, Pickup Drive |
| 10                                  | CLH0017849 | 1   | . Plate, Disc                      | 26   | CRB5000125    | 4   | . Bolt, Carriage         |
| 11                                  | F000001791 | 2   | . Pin, Clutch                      | 27   | 221518W       | 6   | . Capscrew               |
| 12                                  | F000001790 | 2   | . Spring, Compression              | 29   | Y17C-0624     | 2   | . Capscrew               |
| 13                                  | 239519     | 4   | . Flat Washer                      | 31   | 221711W       | 4   | . Hex Nut                |
| 14                                  | ZZ00000228 | 1   | . Mach Bushing                     | 33   | 11079         | 1   | . Fitting, Lube          |
| 15                                  | F000008090 | 1   | . Bracket                          |      |               |     |                          |
| 16                                  | 223587     | 1   | . Nut, Esna                        |      |               |     |                          |

\*a See Separate Coverage (Page 6-9)

# Pickup Sprocket Assembly



**NOTES:**

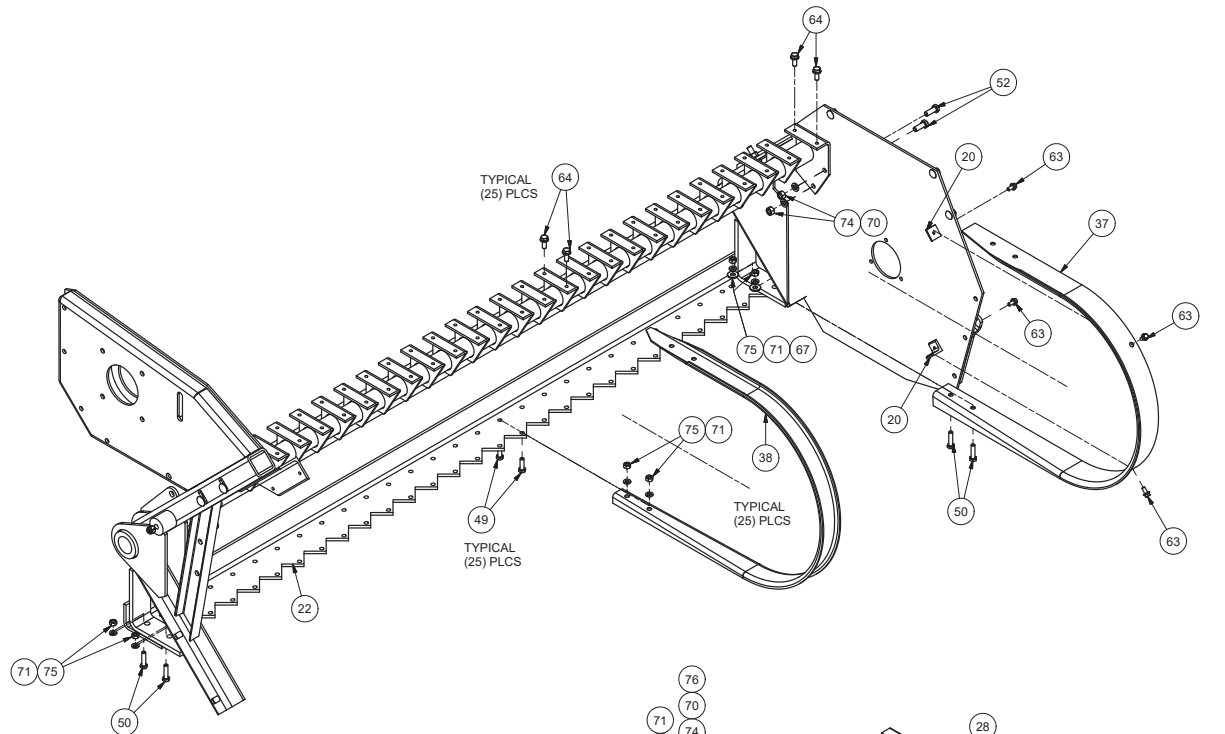
- 1 -DO NOT ALLOW INNER FACE OF BAIL OILERS TO PENETRATE INTO CAVITIES
- 2 -INSTALL BEARINGS TO BE FLUSH WITH OUTSIDE FACES. BEARING I.D. AFTER INSTALLATION: 1.2550/1.2512
- 3 -INSTALL PLUG TO BE FLUSH WITH FACE OF SPROCKET (ITEM #1) TO NO MORE THAN 0.13" PROTRUDING FROM FACE.

| Item                                | Part No.   | Qty | Description  | Item | Part No.  | Qty | Description     |
|-------------------------------------|------------|-----|--------------|------|-----------|-----|-----------------|
| <b>SPK0021220 Sprocket Assembly</b> |            |     |              |      |           |     |                 |
| 1                                   | 253185     | 1   | . Sprocket   | 5    | 11079     | 1   | . Fitting, Lube |
| 3                                   | BRG0020016 | 2   | . Bushing    | 6    | R13801762 | 2   | . Fitting       |
| 4                                   | VLV0000521 | 2   | . Ball Valve |      |           |     |                 |

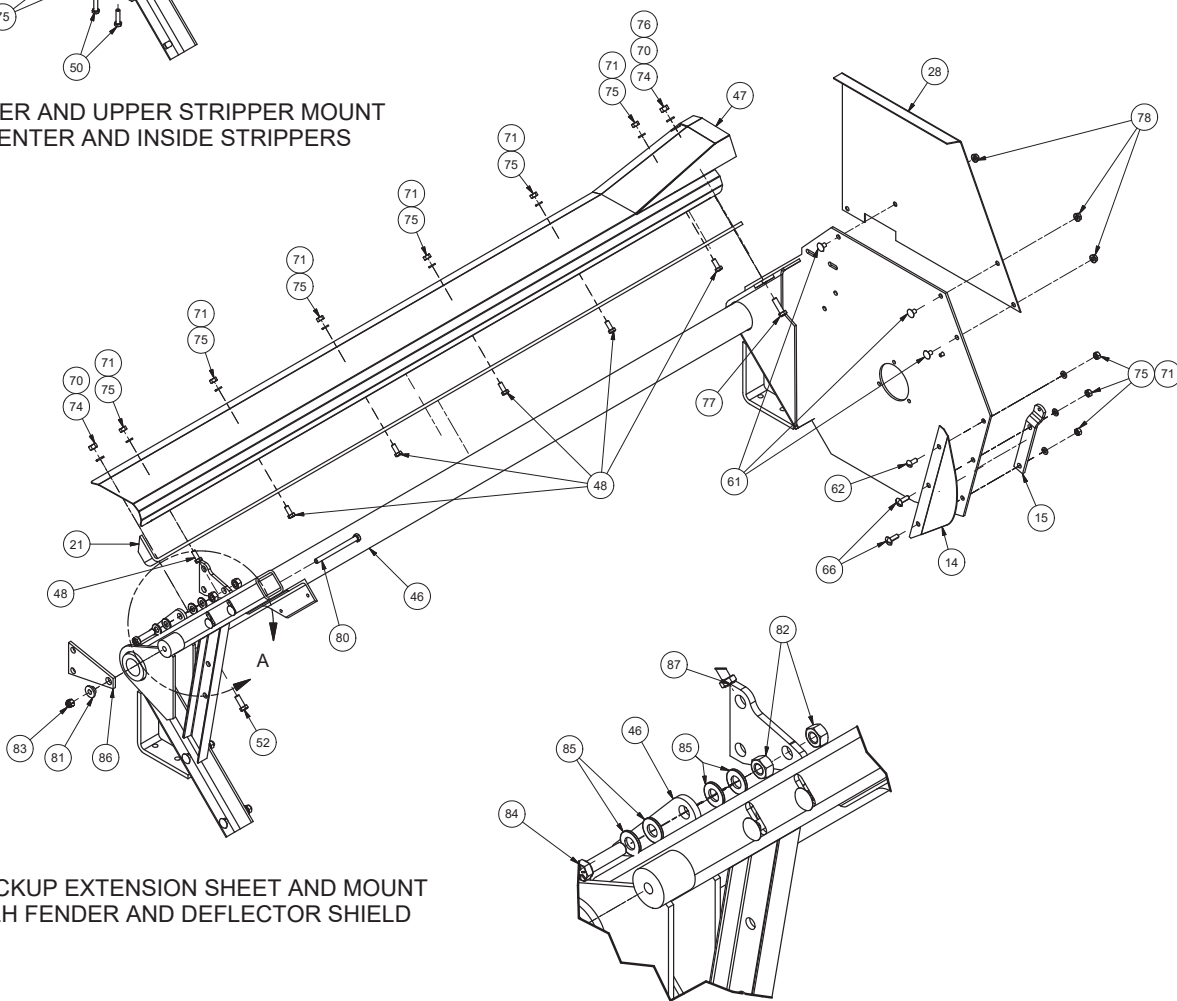
Rev E

# Pickup Assembly, Super Sweep

Page 1 of 4



LOWER AND UPPER STRIPPER MOUNT  
CENTER AND INSIDE STRIPPERS

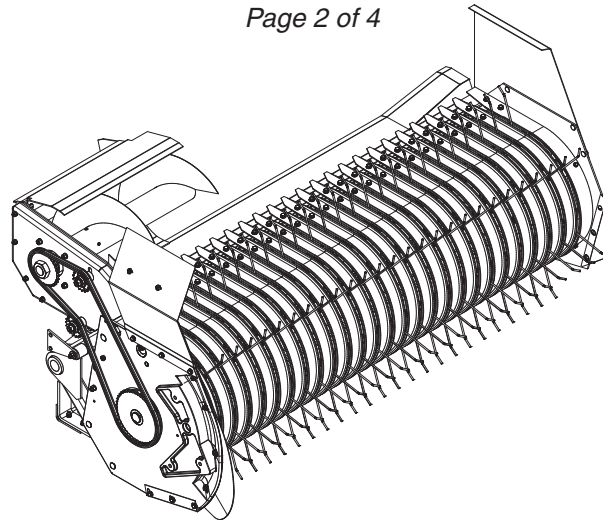


PICKUP EXTENSION SHEET AND MOUNT  
LH FENDER AND DEFLECTOR SHIELD

DETAIL A

# Pickup Assembly, Super Sweep

Page 2 of 4

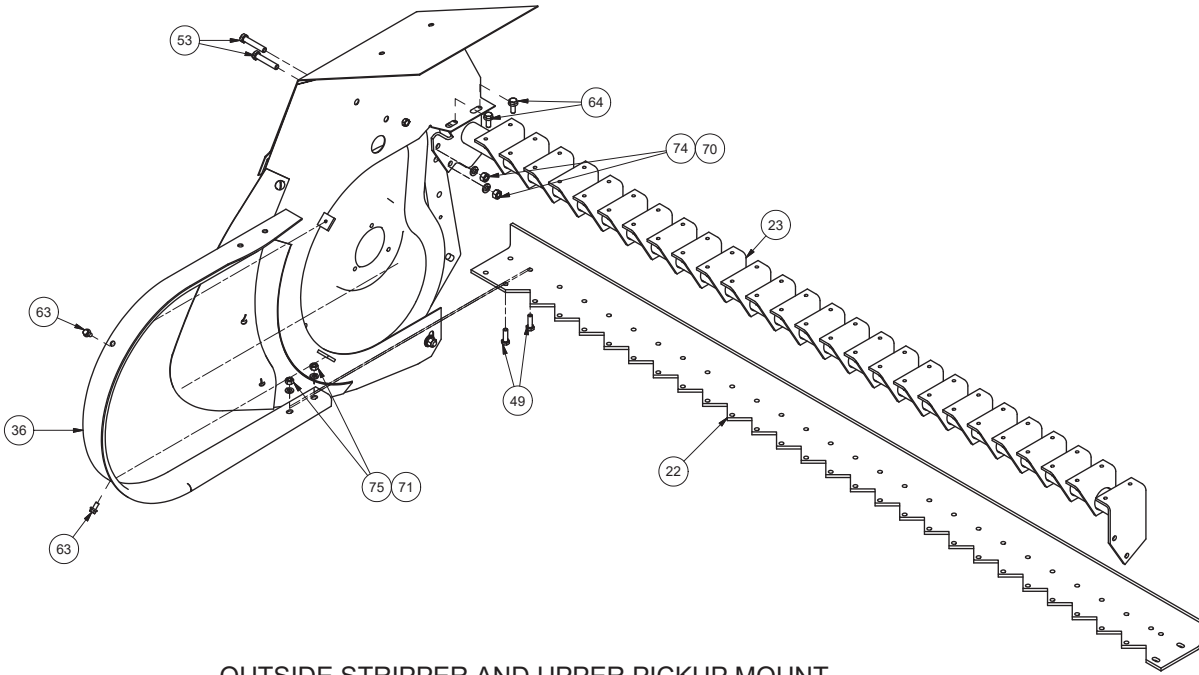


| Item | Part No.          | Qty | Description                       | Item | Part No.   | Qty | Description                |
|------|-------------------|-----|-----------------------------------|------|------------|-----|----------------------------|
|      | <b>PCYSPEC370</b> |     | <b>Pickup, Super Sweep, -----</b> |      |            |     |                            |
| 1    | AUG0020830        | 1   | . Auger Scraper                   | 46   | 901578     | 1   | . Pickup Frame             |
| 2    | AUG0020974        | 1   | . Auger Assembly                  | 47   | SHD0020829 | 1   | . Shield, Pickup Extension |
| 3    | AUG0022358        | 1   | . Auger Trough                    | 48   | R13801791  | 30  | . Capscrew                 |
| 4    | BAR0033189        | 6   | . Angle                           | 49   | R13811014  | 52  | . Capscrew                 |
| 5    | BRG0006219        | 12  | . Bearing Assembly                | 50   | R13811015  | 4   | . Capscrew                 |
| 6    | BRG0067000        | 2   | . Bearing                         | 51   | 221475W    | 96  | . Capscrew                 |
| 7    | BSH0001610        | 1   | . Bushing                         | 52   | Y17C-0616  | 3   | . Capscrew                 |
| 8    | a* CAM0033355     | 6   | . Lever Assembly, Cam             | 53   | R13811039  | 3   | . Capscrew                 |
| 9    | CHN0040125        | 1   | . Chain - Supersweep Pickup       | 54   | R13811085  | 1   | . Capscrew                 |
| 10   | DEF0022860        | 1   | . Plate, Deflector                | 55   | CRB3130225 | 4   | . Bolt, Carriage           |
| 11   | F000000101        | 60  | . Guide                           | 56   | CRB3750100 | 4   | . Bolt, Carriage           |
| 12   | F000004073        | 3   | . Link, Offset                    | 57   | CRB3750013 | 1   | . Bolt                     |
| 13   | F000004160        | 1   | . Mach Bushing                    | 58   | CRB3750225 | 4   | . Bolt, Carriage           |
| 14   | F000007151        | 1   | . Fender, Inside Flare LH         | 59   | CRB3750300 | 2   | . Bolt, Carriage           |
| 15   | 905117            | 1   | . Bracket, Pickup Lift            | 60   | CRB5000400 | 1   | . Bolt, Carriage           |
| 16   | F000008011        | 2   | . Bearing Cup                     | 61   | SMT0002000 | 5   | . Machine Screw            |
| 17   | F000008380        | 2   | . Bearing & Collar                | 62   | 246125     | 1   | . Capscrew                 |
| 18   | F000008383        | 4   | . Flangette                       | 63   | SMS0000173 | 6   | . Screw, Ser Flg           |
| 19   | HSN0027996        | 1   | . Housing, Auger Bearing          | 64   | SMS0000198 | 62  | . Screw, Ser Flg           |
| 20   | MNT0011313        | 2   | . Mount, Stripper Angle           | 65   | SMS0000122 | 2   | . Capscrew                 |
| 21   | MNT0023007        | 1   | . Bar, Mounting                   | 66   | SMT0000202 | 6   | . Screw, Machine           |
| 22   | MNT0033556        | 1   | . Lower Stripper Mount            | 67   | 18515W     | 28  | . Washer                   |
| 23   | MNT0033557        | 1   | . Stripper Mount Supersweep       | 68   | 222615     | 4   | . Washer                   |
| 24   | PCY0020861        | 1   | . RH Fender                       | 69   | 234665     | 2   | . Lockwasher               |
| 25   | PCY0033352        | 78  | . Spacer                          | 70   | R13812514  | 24  | . Lockwasher               |
| 26   | R616841           | 3   | . Mach Bushing                    | 71   | R13812513  | 113 | . Lockwasher               |
| 27   | SHD0006253        | 1   | . Fender Flare, RH                | 72   | 219924     | 1   | . Nut, Esna                |
| 28   | SHD0011309        | 1   | . Plate, LH Deflector             | 73   | 221711W    | 2   | . Hex Nut                  |
| 29   | SHD0020832        | 1   | . Plate, RH Deflector             | 74   | R13809551  | 18  | . Hex Nut                  |
| 30   | SHF0018480        | 1   | . Shaft                           | 75   | R13811512  | 95  | . Hex Nut                  |
| 31   | SHF0033356        | 6   | . Pivot Shaft                     | 76   | 221767W    | 1   | . Washer                   |
| 32   | SPC0017669        | 2   | . Spacer                          | 77   | 221499W    | 1   | . Capscrew                 |
| 33   | SPK0002318        | 2   | . Sprocket, Idler                 | 78   | 00273802   | 7   | . Nut, Serrated            |
| 34   | SPK0040030        | 1   | . Sprocket                        | 79   | NFX0000313 | 96  | . Locknut                  |
| 35   | SPK0040045        | 1   | . Sprocket                        | 80   | R13801824  | 1   | . Capscrew                 |
| 36   | STR0033500        | 1   | . Plate, Stripper                 | 81   | F000000440 | 1   | . Ferrule                  |
| 37   | STR0033501        | 1   | . Stripper, Inside-Supersweep     | 82   | R13806770  | 2   | . Hex Nut                  |
| 38   | STR0033502        | 25  | . Stripper, Center                | 83   | 237567     | 1   | . Locknut                  |
| 39   | 162572W           | 6   | . Capscrew                        | 84   | R13801834  | 1   | . Capscrew                 |
| 40   | TTH0033171        | 78  | . Pickup Tooth                    | 85   | 222677     | 4   | . Washer                   |
| 41   | WAS0011459        | 24  | . Washer                          | 86   | PLT0022382 | 1   | . Plate, Lift Spring       |
| 42   | WAS0015783        | 5   | . Bushing, Machine                | 87   | F000007156 | 1   | . Spring Plate             |
| 43   | ZZ00000418        | 1   | . Key                             |      |            |     |                            |
| 44   | ZZ00000428        | 1   | . Key                             |      |            |     |                            |
| 45   | 900928            | 1   | . Cam, Pickup                     |      |            |     |                            |

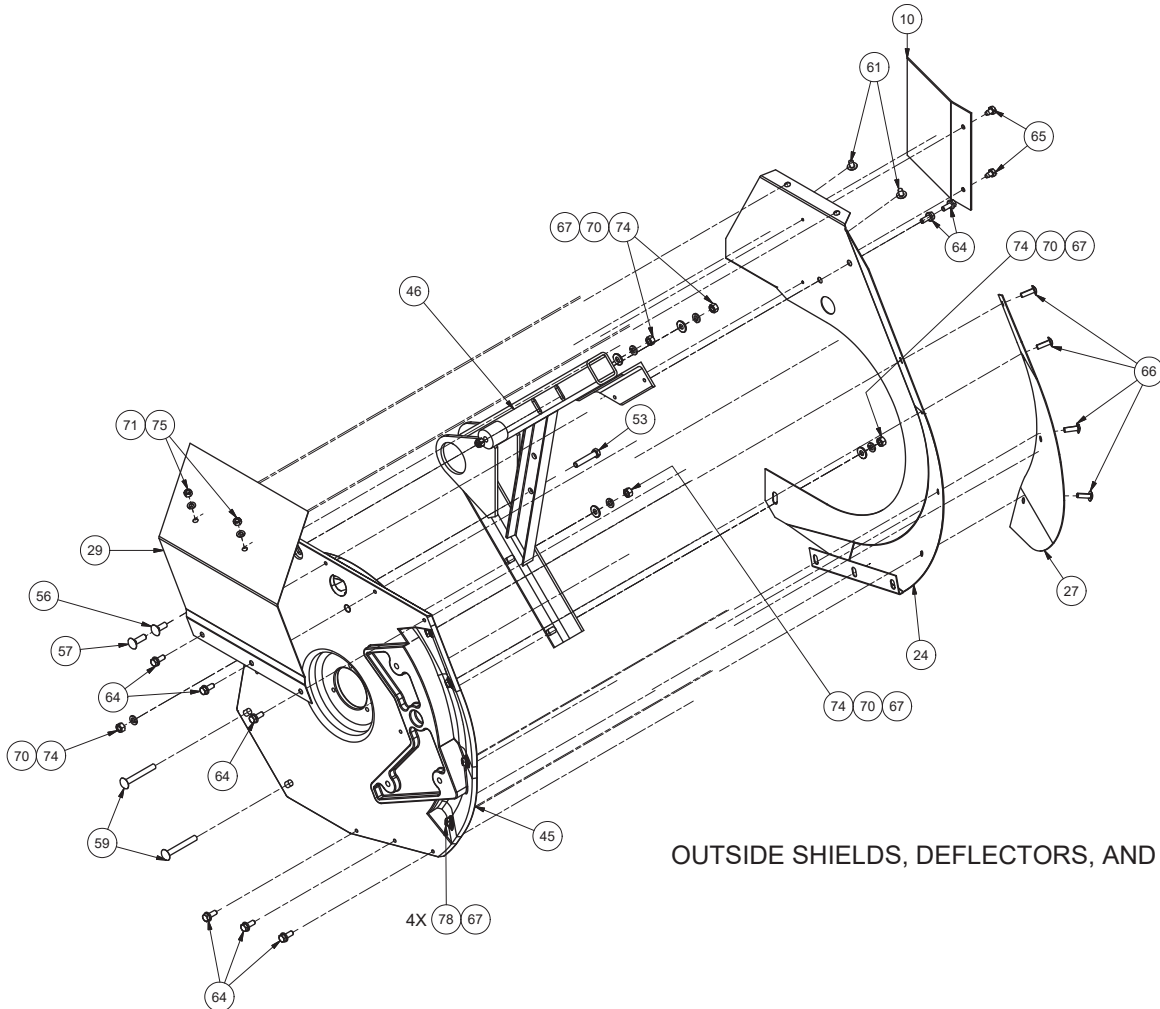
a\* See Separate Coverage (Page 6-14)

# Pickup Assembly, Super Sweep

Page 3 of 4



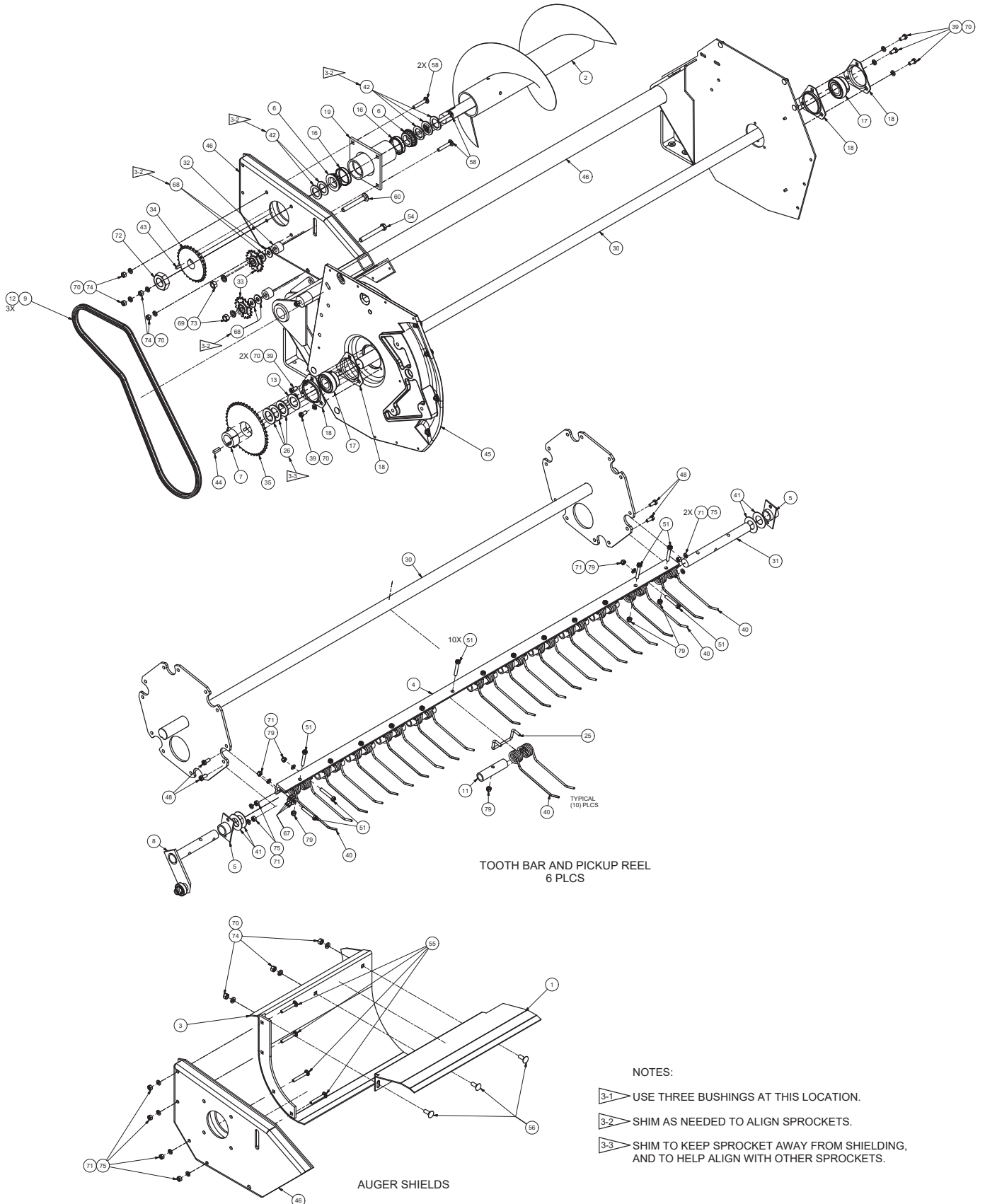
OUTSIDE STRIPPER AND UPPER PICKUP MOUNT



OUTSIDE SHIELDS, DEFLECTORS, AND CAST PIECE

### Pickup Assembly, Super Sweep

Page 4 of 4

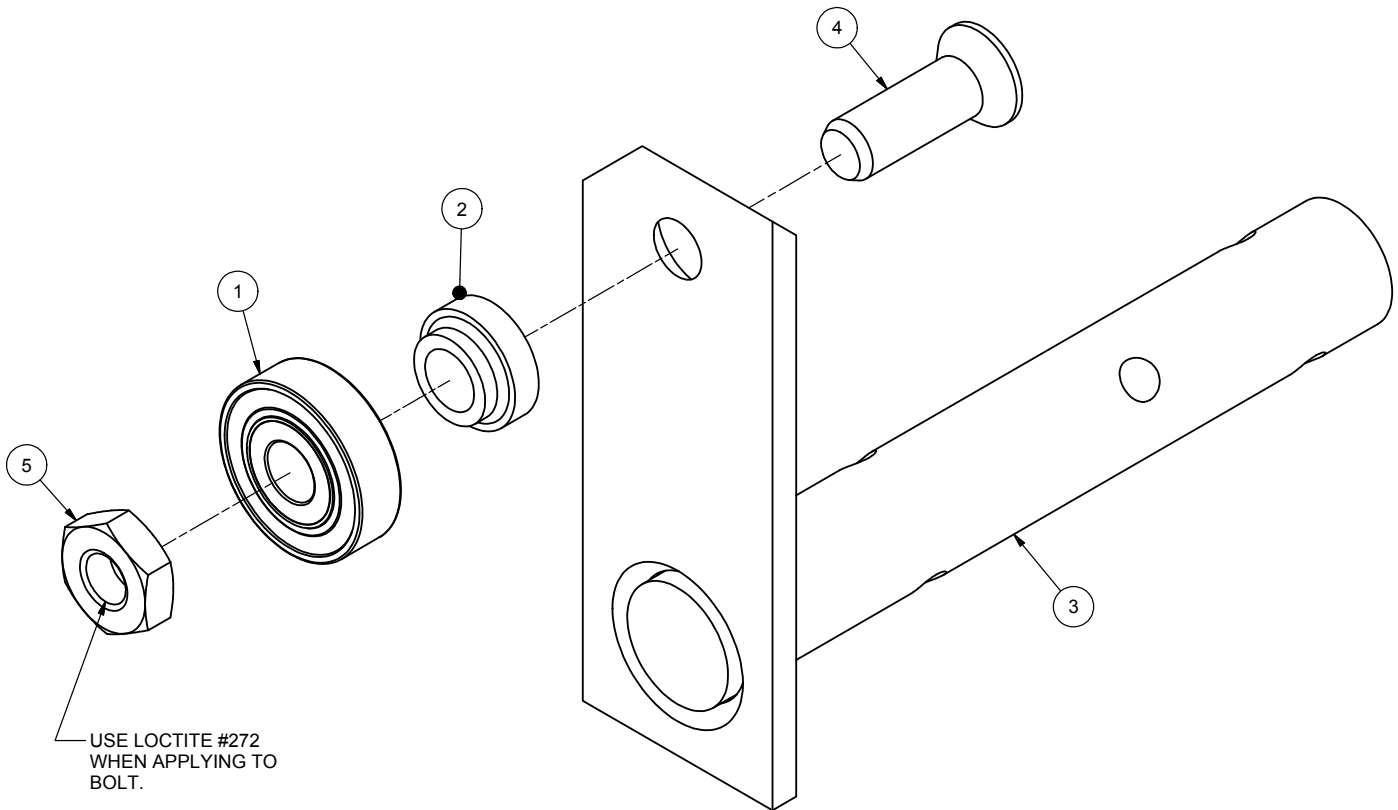


TOOTH BAR AND PICKUP REEL  
6 PLCS

AUGER SHIELDS

- NOTES:
- 3-1 USE THREE BUSHINGS AT THIS LOCATION.
  - 3-2 SHIM AS NEEDED TO ALIGN SPROCKETS.
  - 3-3 SHIM TO KEEP SPROCKET AWAY FROM SHIELDING, AND TO HELP ALIGN WITH OTHER SPROCKETS.

# Cam Lever Assembly



| Item | Part No.          | Qty | Description                | Item | Part No.   | Qty | Description     |
|------|-------------------|-----|----------------------------|------|------------|-----|-----------------|
|      | <b>CAM0033355</b> |     | <b>Lever Assembly, Cam</b> |      |            |     |                 |
| 1    | BRG0002029        | 1   | . Bearing                  | 4    | 222477     | 1   | . Capscrew      |
| 2    | BSH0006231        | 1   | . Bushing                  | 5    | NCX0005000 | 1   | . Nut, Flexlock |
| 3    | LEV0033355        | 1   | . Lever                    |      |            |     |                 |

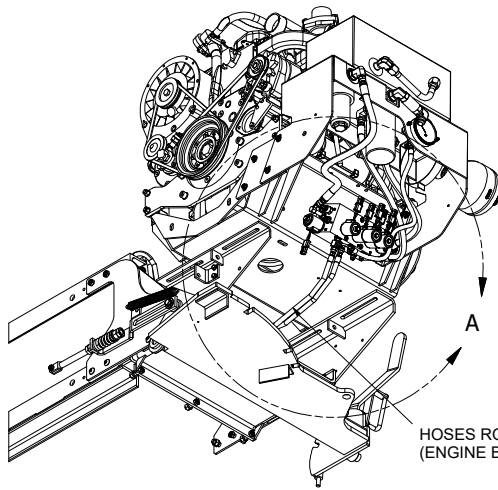
Rev C



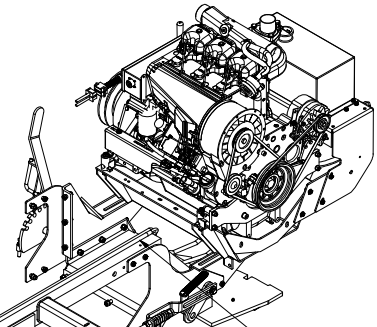
# Pickup Lift Installation, Engine, 14"

Page 1 of 2

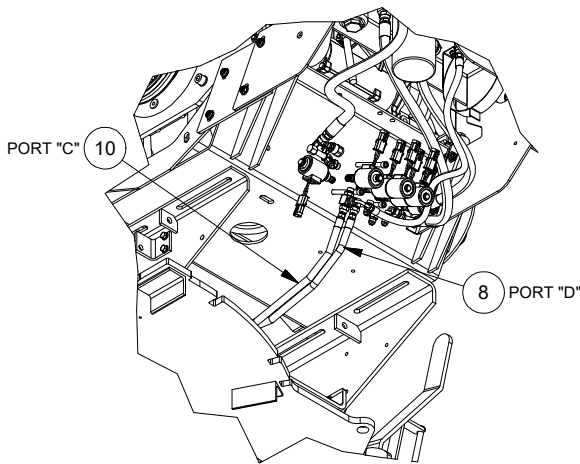
## ENGINE BALERS SETUP



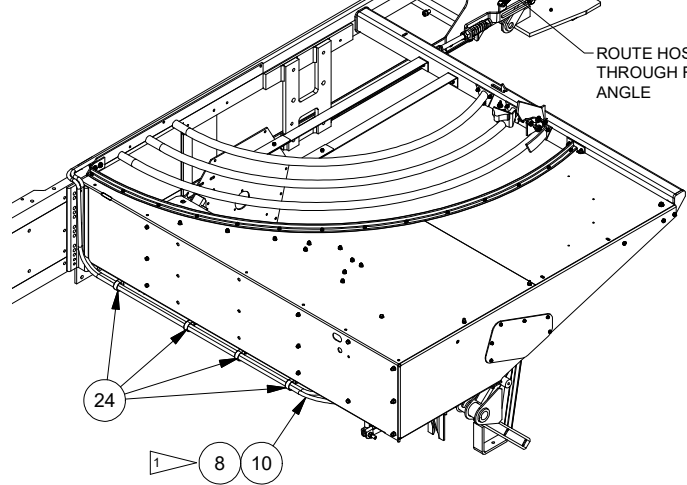
HOSES ROUTED UNDERNEATH BELLY PAN  
(ENGINE BALERS ONLY)



ROUTE HOSES  
THROUGH FRAME  
ANGLE



DETAIL A

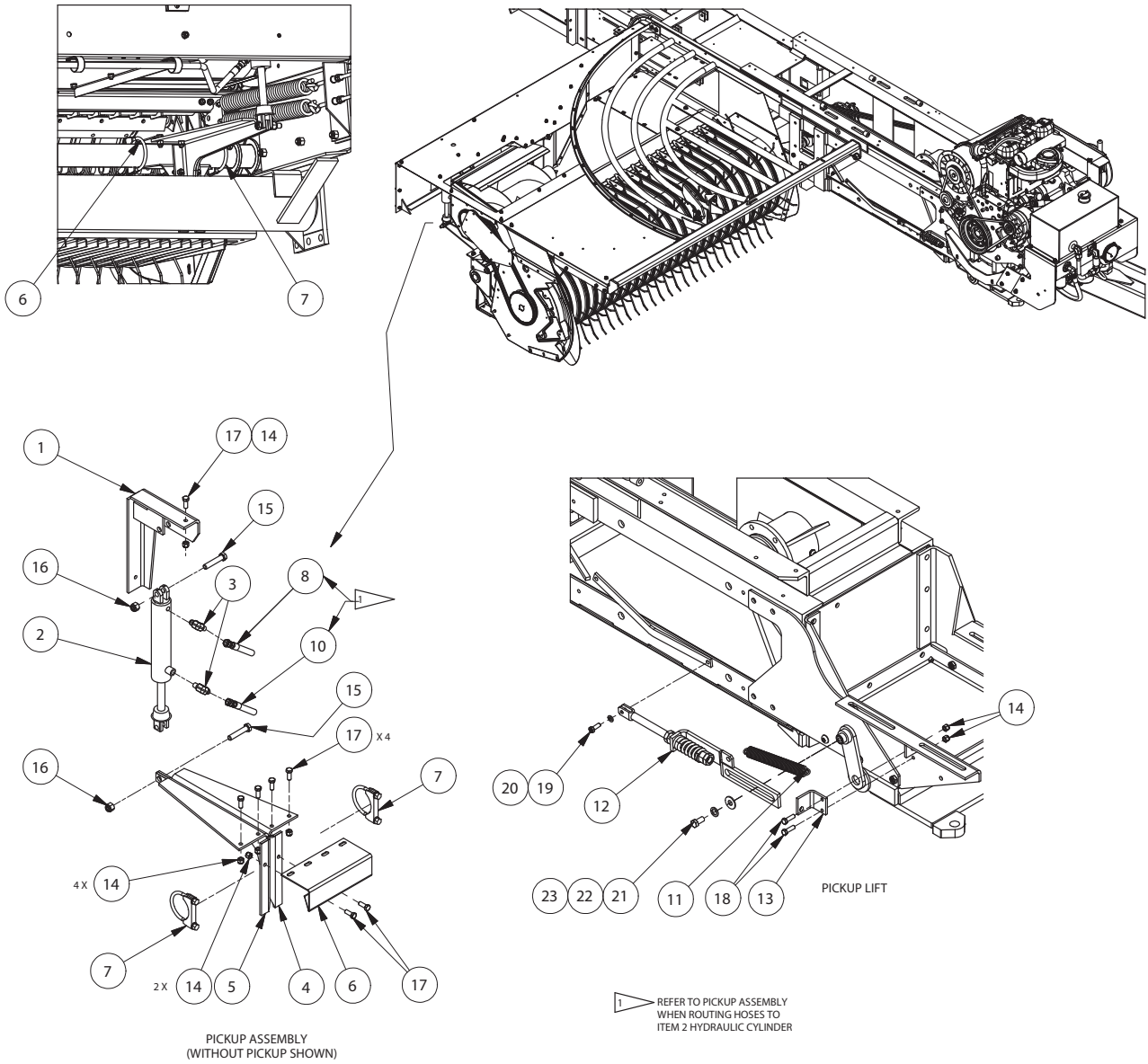


NOTE:

 REFER TO PICKUP ASSEMBLY WHEN ROUTING HOSES TO ITEM 2 HYDRAULIC CYLINDER.

# Pickup Lift Installation, Engine, 14"

Page 2 of 2



| Item   | Part No.   | Qty | Description          | Item | Part No.   | Qty | Description  |
|--|------------|-----|----------------------|------|------------|-----|--------------|
| <b>901968 Pickup Lift Installation, Engine</b> |            |     |                      |      |            |     |              |
| 1  | 900059     | 1   | . Bracket, Anchor    | 16   | 223587     | 2   | . Locknut    |
| 2  | Y12.337    | 1   | . Cylinder           | 17   | SMS0000184 | 9   | . Screw      |
| 3  | R13801972  | 2   | . Fitting            | 19   | Y17C-0616  | 1   | . Capscrew   |
| 4  | PLF0820700 | 1   | . Plate, LH Lift Arm | 20   | R13812514  | 1   | . Lockwasher |
| 5  | PLF0820701 | 1   | . Plate, RH Lift Arm | 21   | 16829W     | 1   | . Capscrew   |
| 6  | PLF0008206 | 1   | . Bracket, Lift Arm  | 22   | R13812516  | 1   | . Lockwasher |
| 7  | F000006804 | 2   | . Clamp              | 23   | 239519     | 1   | . Washer     |
| 8  | 251611     | 1   | . Hose Assembly      | 24   | 209700     | 4   | . Clip       |
| 10   | 251612     | 1   | . Hose Assembly      | 25   | 231537     | 0   | . Clamp      |
| 11   | F000001517 | 1   | . Spring, Trip       |      |            |     |              |
| 12   | *a 902853  | 1   | . Spring Assembly    |      |            |     |              |
| 13   | ANC0009635 | 1   | . Plate, Anchor      |      |            |     |              |
| 14   | 191534W    | 9   | . Nut                |      |            |     |              |
| 15   | 221576W    | 2   | . Capscrew           |      |            |     |              |

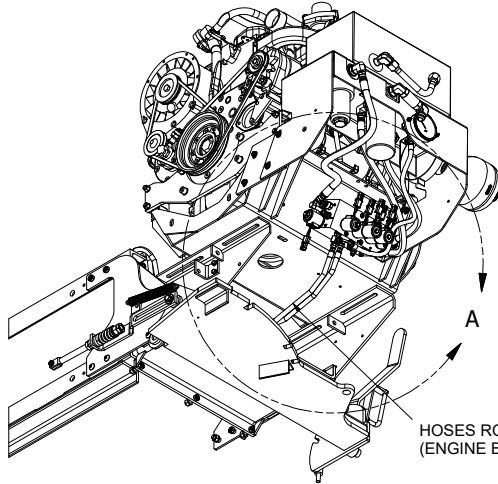
\*a See Separate Coverage (Page 6-19)

Rev H

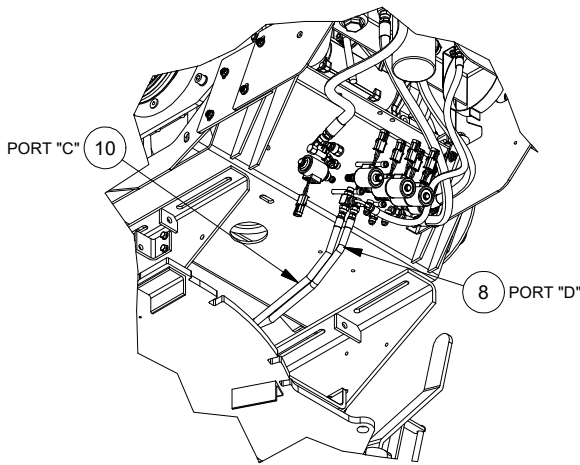
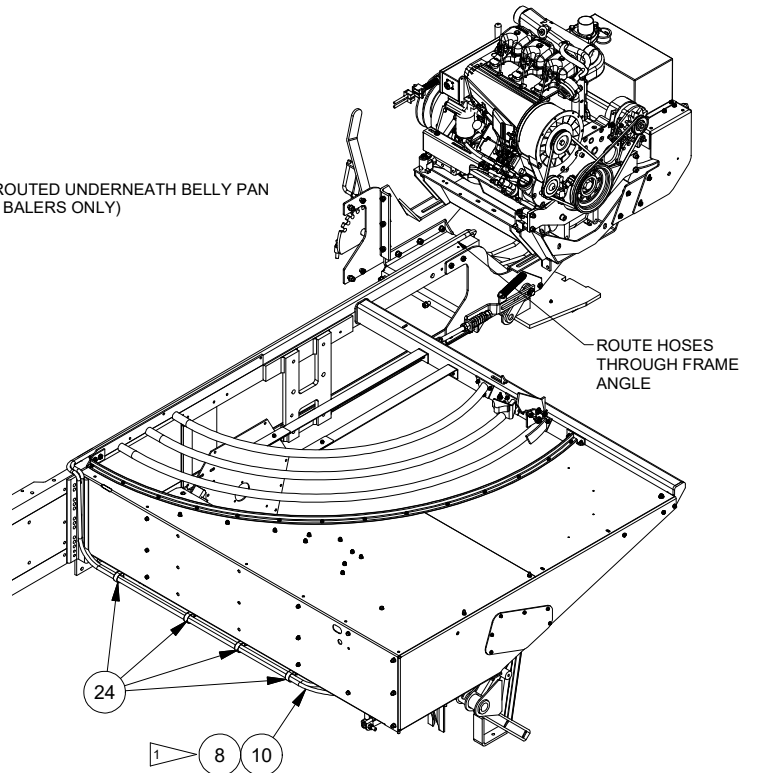
# Pickup Lift Installation, Engine, 16"

Page 1 of 2

## ENGINE BALERS SETUP



HOSES ROUTED UNDERNEATH BELLY PAN  
(ENGINE BALERS ONLY)



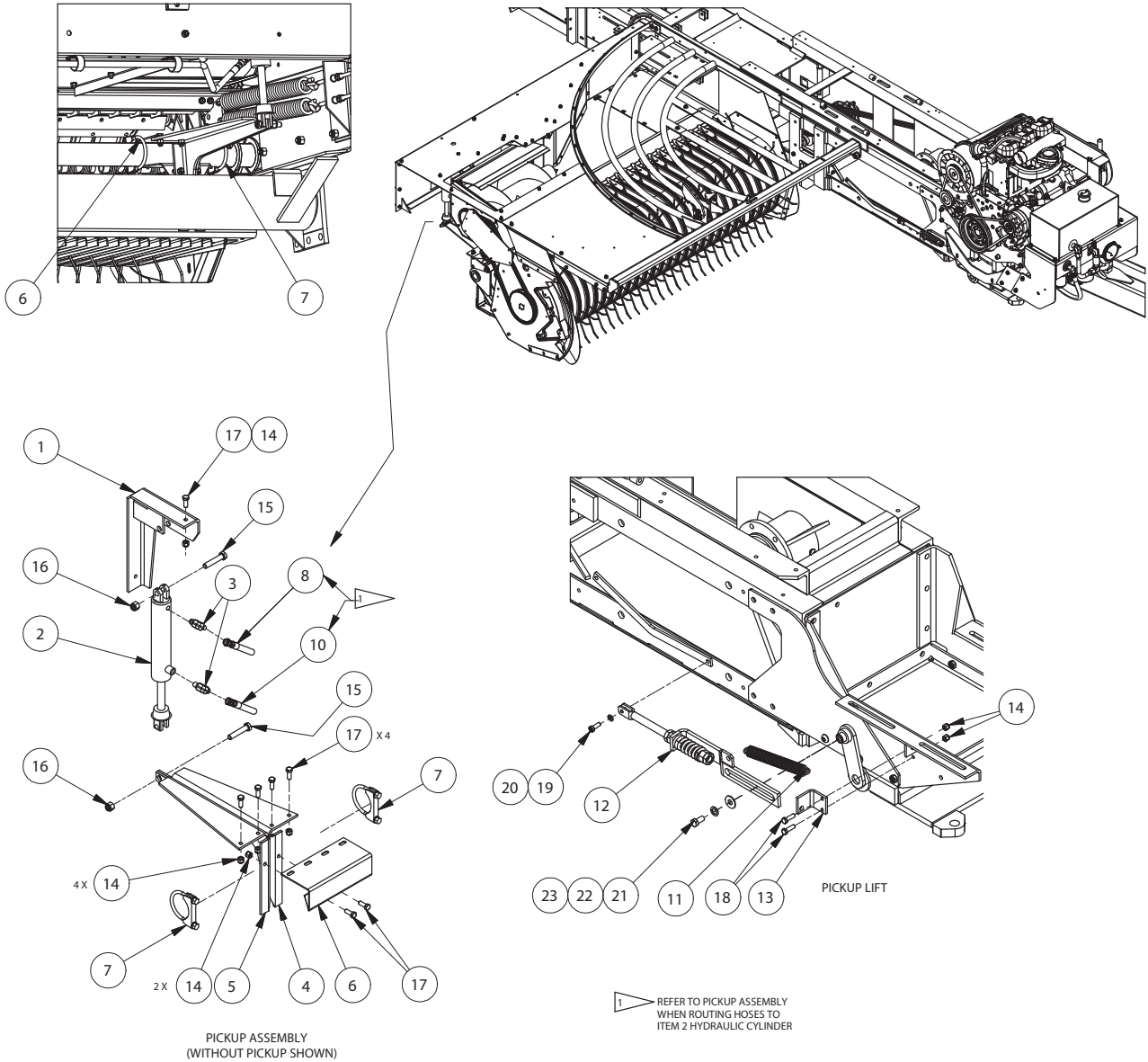
DETAIL A

NOTE:

1 REFER TO PICKUP ASSEMBLY WHEN ROUTING HOSES TO ITEM 2 HYDRAULIC CYLINDER.

# Pickup Lift Installation, Engine, 16”

Page 2 of 2

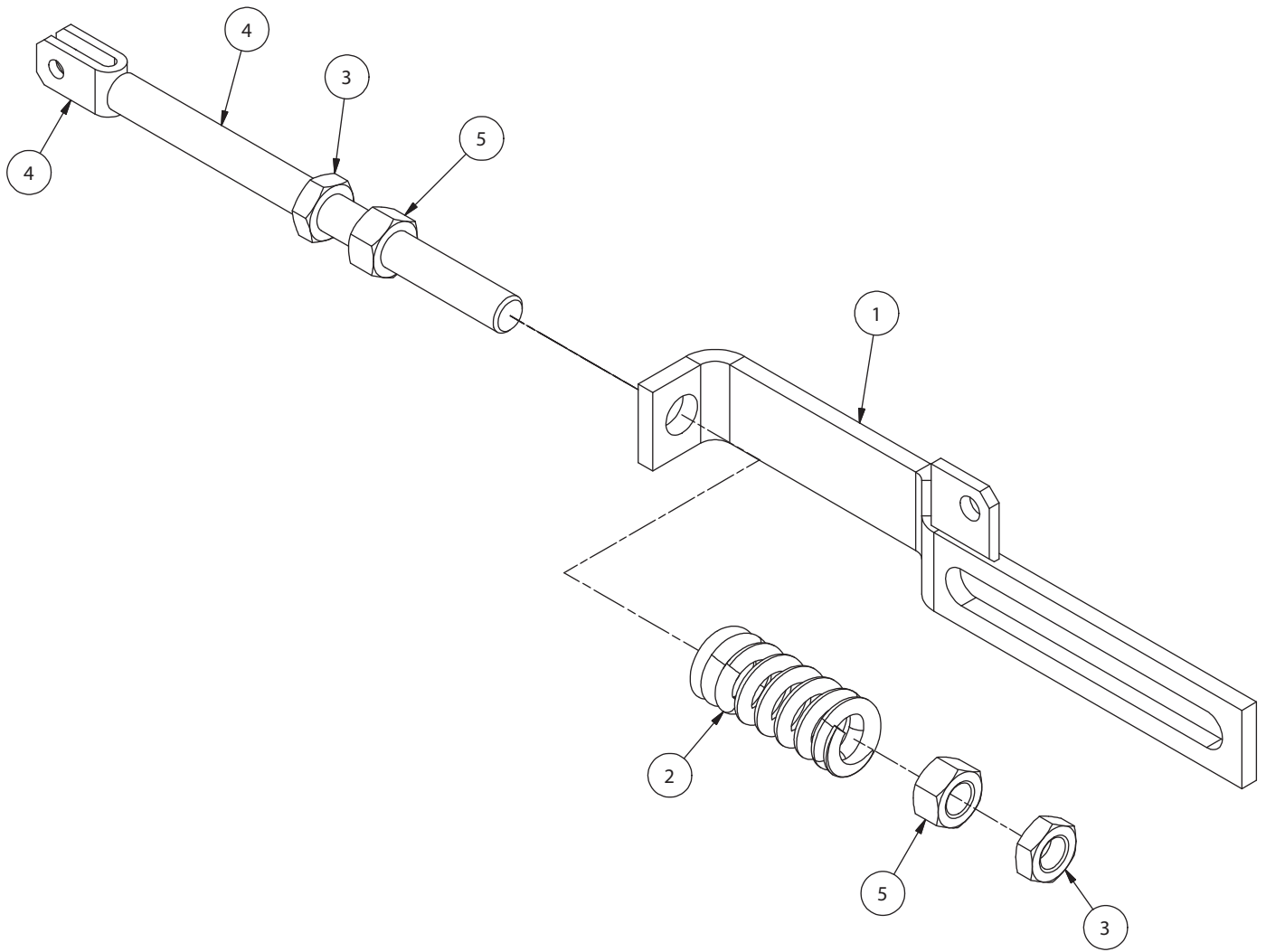


| Item   | Part No.   | Qty | Description          | Item | Part No.   | Qty | Description  |
|--|------------|-----|----------------------|------|------------|-----|--------------|
| <b>901971 Pickup Lift Installation, Engine</b> |            |     |                      |      |            |     |              |
| 1  | PLF0018168 | 1   | . Bracket, Anchor    | 16   | 223587     | 2   | . Locknut    |
| 2  | Y12.337    | 1   | . Cylinder           | 17   | SMS0000184 | 9   | . Screw      |
| 3  | R13801972  | 2   | . Fitting            | 19   | Y17C-0616  | 1   | . Capscrew   |
| 4  | PLF0820700 | 1   | . Plate, LH Lift Arm | 20   | R13812514  | 1   | . Lockwasher |
| 5  | PLF0820701 | 1   | . Plate, RH Lift Arm | 21   | 16829W     | 1   | . Capscrew   |
| 6  | PLF0008206 | 1   | . Bracket, Lift Arm  | 22   | R13812516  | 1   | . Lockwasher |
| 7  | F000006804 | 2   | . Clamp              | 23   | 239519     | 1   | . Washer     |
| 8  | 251611     | 1   | . Hose Assembly      | 24   | 209700     | 4   | . Clip       |
| 10   | 251612     | 1   | . Hose Assembly      | 25   | 231537     | 0   | . Clamp      |
| 11   | F000001517 | 1   | . Spring, Trip       |      |            |     |              |
| 12   | *a 902853  | 1   | . Spring Assembly    |      |            |     |              |
| 13   | ANC0009635 | 1   | . Plate, Anchor      |      |            |     |              |
| 14   | 191534W    | 9   | . Nut                |      |            |     |              |
| 15   | 221576W    | 2   | . Capscrew           |      |            |     |              |

\*a See Separate Coverage (Page 6-19)

Rev H

# Spring Assembly, Pickup Lift, Engine



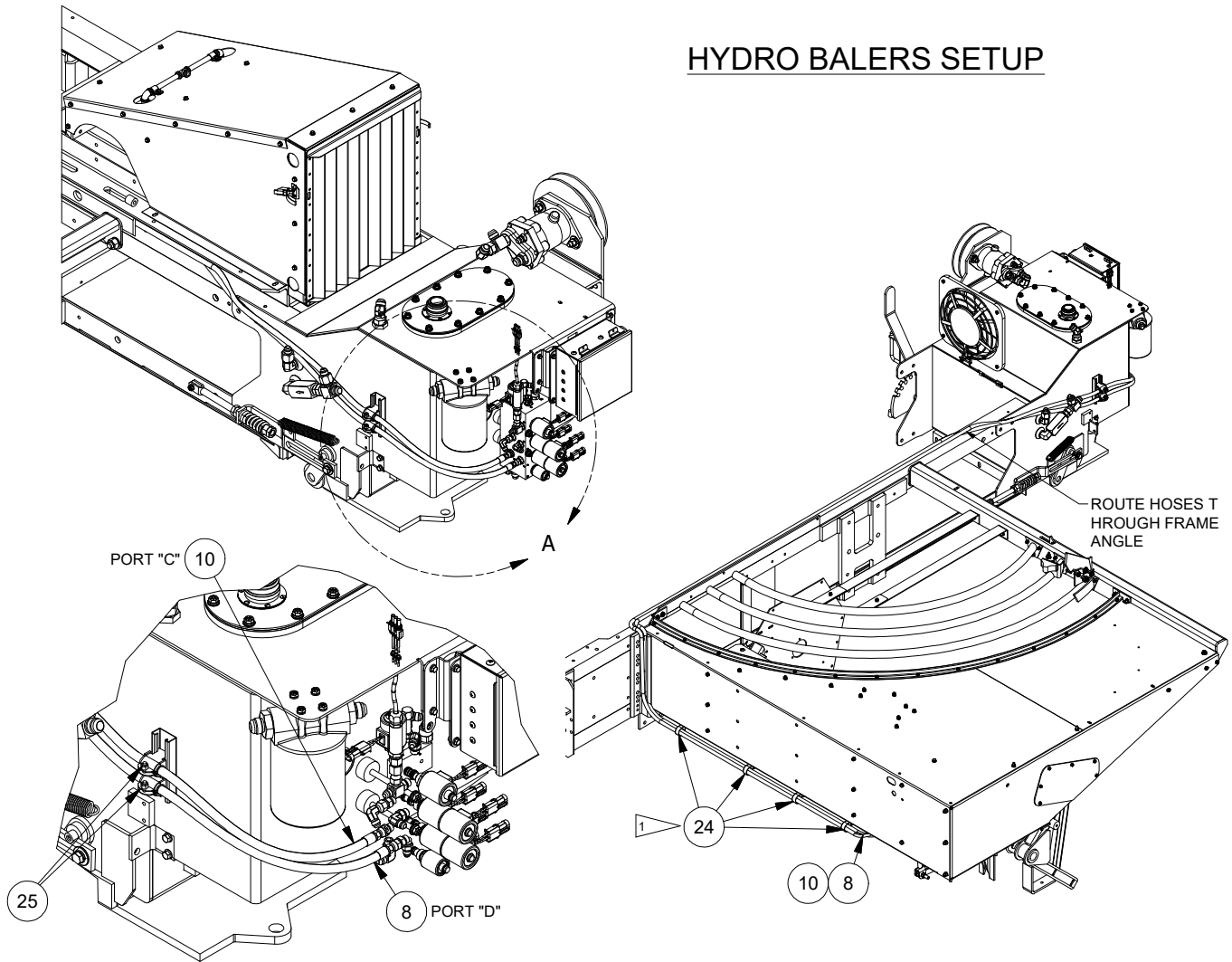
| Item                          | Part No.   | Qty | Description                  | Item | Part No.   | Qty | Description  |
|-------------------------------|------------|-----|------------------------------|------|------------|-----|--------------|
| <b>902853 Spring Assembly</b> |            |     |                              |      |            |     |              |
| 1                             | BKT0008288 | 1   | .Bracket                     | 4    | ROD0016321 | 1   | .Rod, Adjust |
| 2                             | F000007566 | 1   | .Cushion Spring F/Lift Cable | 5    | 00220081   | 2   | .Hex Nut     |
| 3                             | 238381     | 2   | .Jam Nut                     |      |            |     |              |

Rev A

# Pickup Lift Installation, Hydro, 14"

Page 1 of 2

## HYDRO BALERS SETUP



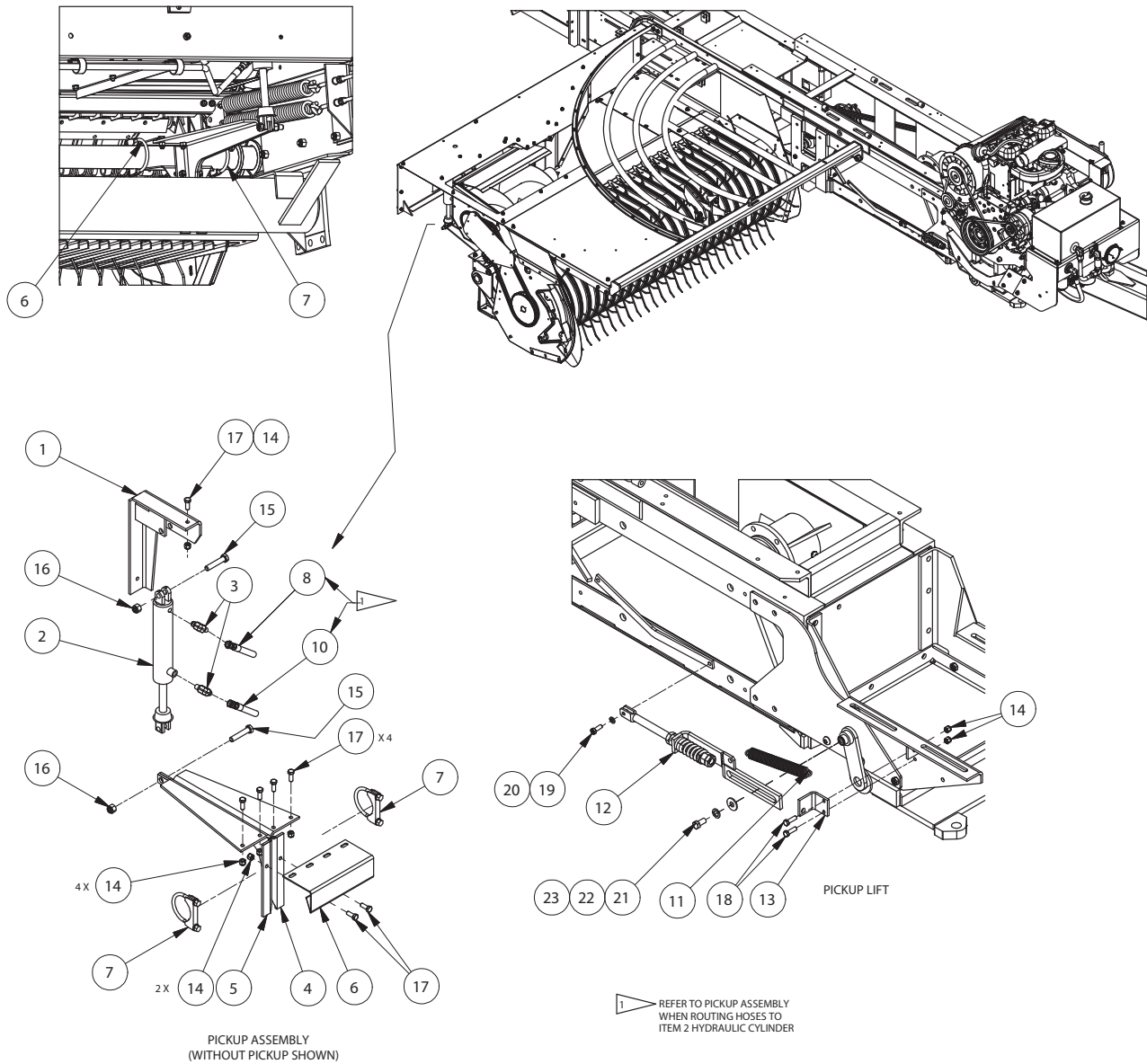
DETAIL A

NOTE:

1 REFER TO PICKUP ASSEMBLY WHEN ROUTING HOSES TO ITEM 2 HYDRAULIC CYLINDER.

### Pickup Lift Installation, Hydro, 14"

Page 2 of 2



PICKUP ASSEMBLY  
(WITHOUT PICKUP SHOWN)

PICKUP LIFT

| Item                                   | Part No.   | Qty | Description          | Item | Part No.   | Qty | Description  |
|--|------------|-----|----------------------|------|------------|-----|--------------|
| <b>Pickup Lift Installation, Hydro</b> |            |     |                      |      |            |     |              |
| 1                                      | 910230     | 1   | . Bracket, Anchor    | 16   | 223587     | 2   | . Locknut    |
| 2                                      | Y12.337    | 1   | . Cylinder           | 17   | SMS0000184 | 9   | . Screw      |
| 3                                      | R13801972  | 2   | . Fitting            | 19   | Y17C-0616  | 1   | . Capscrew   |
| 4                                      | PLF0820700 | 1   | . Plate, LH Lift Arm | 20   | R13812514  | 1   | . Lockwasher |
| 5                                      | PLF0820701 | 1   | . Plate, RH Lift Arm | 21   | 16829W     | 1   | . Capscrew   |
| 6                                      | PLF0008206 | 1   | . Bracket, Lift Arm  | 22   | R13812516  | 1   | . Lockwasher |
| 7                                      | F000006804 | 2   | . Clamp              | 23   | 239519     | 1   | . Washer     |
| 8                                      | 251611     | 1   | . Hose Assembly      | 24   | 209700     | 4   | . Clip       |
| 10                                     | 251612     | 1   | . Hose Assembly      | 25   | 231537     | 2   | . Clamp      |
| 11                                     | F000001517 | 1   | . Spring, Trip       |      |            |     |              |
| 12                                     | *a 902985  | 1   | . Spring Assembly    |      |            |     |              |
| 13                                     | ANC0009635 | 1   | . Plate, Anchor      |      |            |     |              |
| 14                                     | 191534W    | 9   | . Nut                |      |            |     |              |
| 15                                     | 221576W    | 2   | . Capscrew           |      |            |     |              |

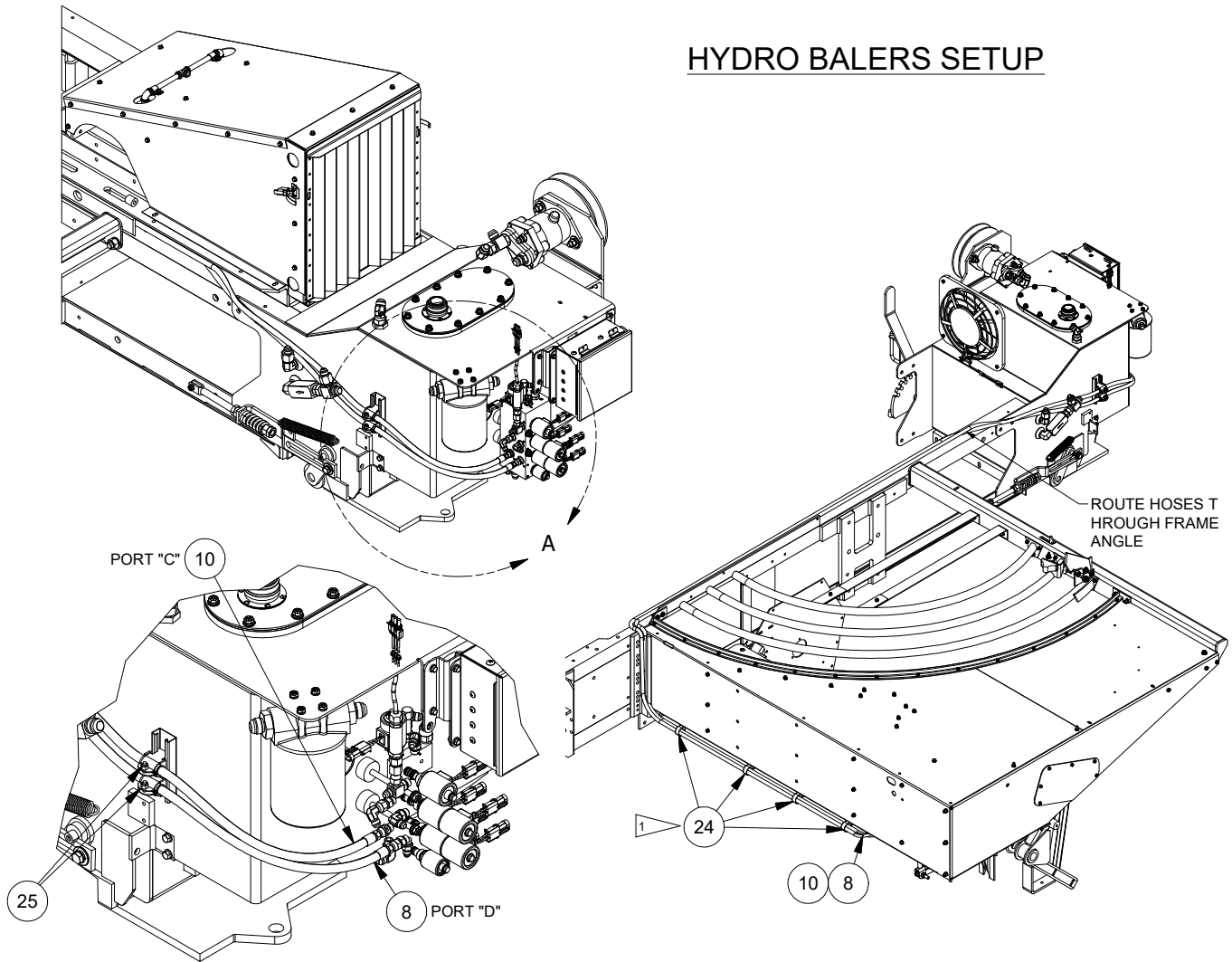
\*a See Separate Coverage (Page 6-24)

Rev A

# Pickup Lift Installation, Hydro, 16"

Page 1 of 2

## HYDRO BALERS SETUP



DETAIL A

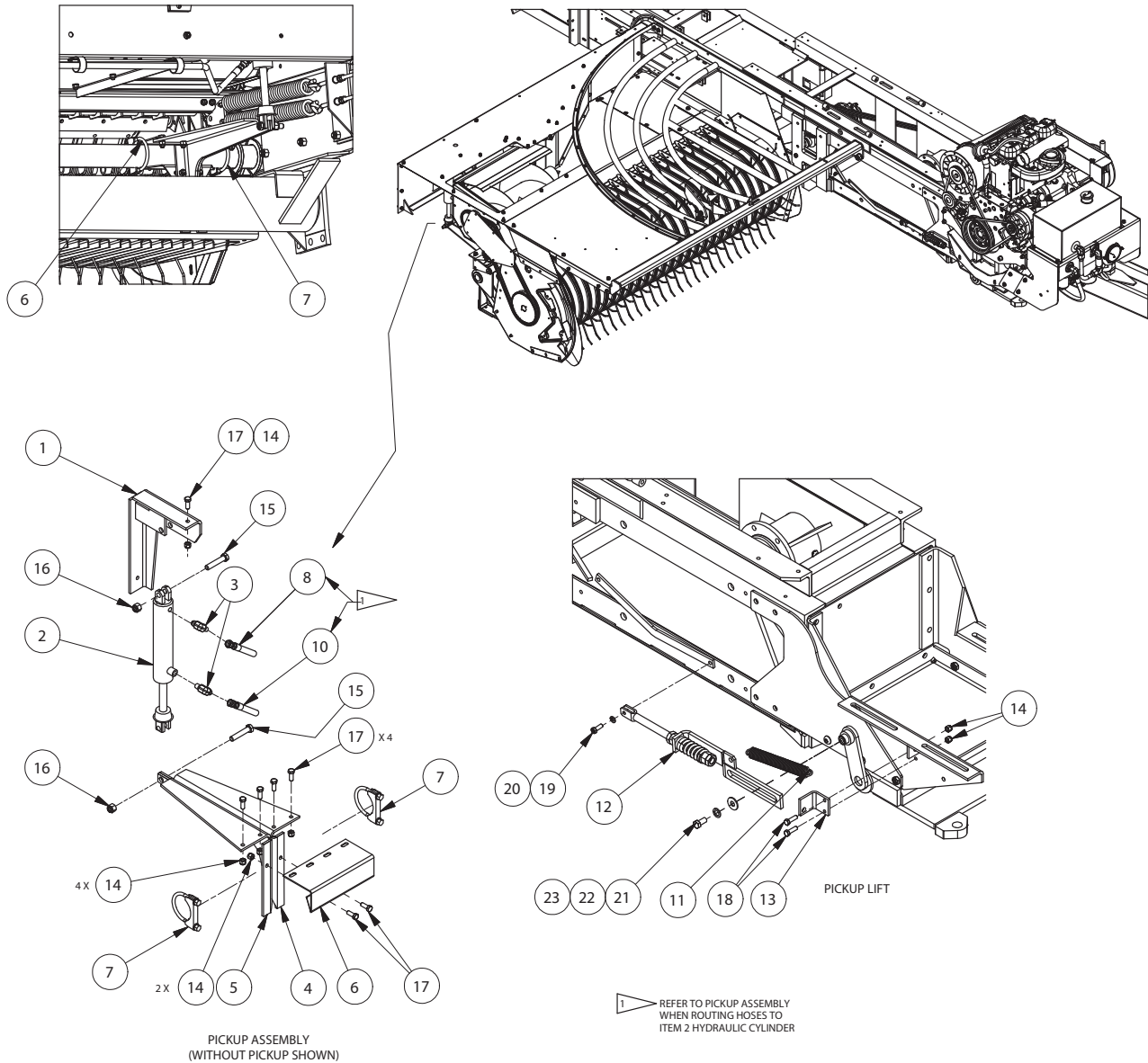
NOTE:

1 REFER TO PICKUP ASSEMBLY WHEN ROUTING HOSES TO ITEM 2 HYDRAULIC CYLINDER.



### Pickup Lift Installation, Hydro, 16"

Page 2 of 2

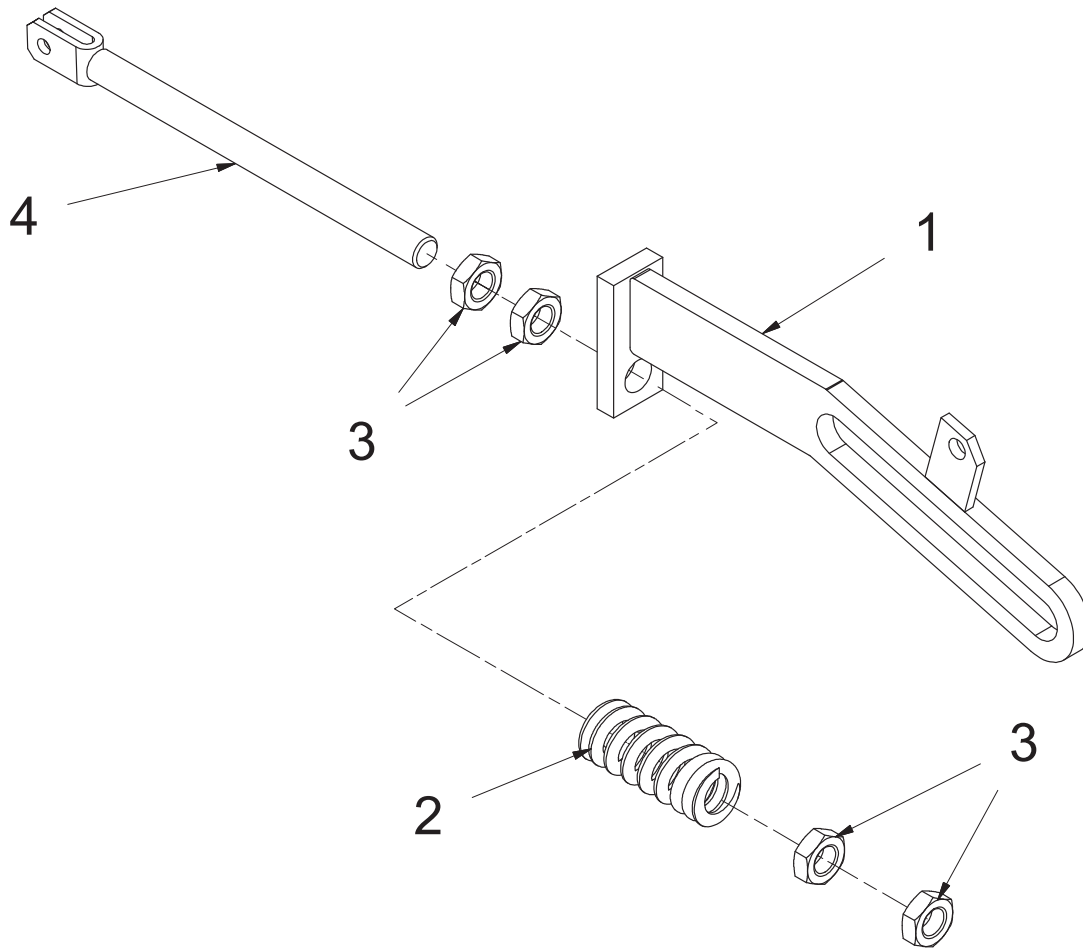


| Item  | Part No.   | Qty | Description          | Item | Part No.   | Qty | Description  |
|---|------------|-----|----------------------|------|------------|-----|--------------|
| <b>902984 Pickup Lift Installation, Hydro</b> |            |     |                      |      |            |     |              |
| 1   | PLF0018168 | 1   | . Bracket, Anchor    | 16   | 223587     | 2   | . Locknut    |
| 2   | Y12.337    | 1   | . Cylinder           | 17   | SMS0000184 | 9   | . Screw      |
| 3   | R13801972  | 2   | . Fitting            | 19   | Y17C-0616  | 1   | . Capscrew   |
| 4   | PLF0820700 | 1   | . Plate, LH Lift Arm | 20   | R13812514  | 1   | . Lockwasher |
| 5   | PLF0820701 | 1   | . Plate, RH Lift Arm | 21   | 16829W     | 1   | . Capscrew   |
| 6   | PLF0008206 | 1   | . Bracket, Lift Arm  | 22   | R13812516  | 1   | . Lockwasher |
| 7   | F000006804 | 2   | . Clamp              | 23   | 239519     | 1   | . Washer     |
| 8   | 251611     | 1   | . Hose Assembly      | 24   | 209700     | 4   | . Clip       |
| 10  | 251612     | 1   | . Hose Assembly      | 25   | 231537     | 2   | . Clamp      |
| 11  | F000001517 | 1   | . Spring, Trip       |      |            |     |              |
| 12  | *a 902985  | 1   | . Spring Assembly    |      |            |     |              |
| 13  | ANC0009635 | 1   | . Plate, Anchor      |      |            |     |              |
| 14  | 191534W    | 9   | . Nut                |      |            |     |              |
| 15  | 221576W    | 2   | . Capscrew           |      |            |     |              |

\*a See Separate Coverage (Page 6-24)

Rev D

# Spring Assembly, Pickup Lift, Hydro/Driveline



| Item | Part No.      | Qty | Description                         | Item | Part No.   | Qty | Description   |
|------|---------------|-----|-------------------------------------|------|------------|-----|---------------|
|      | <b>902985</b> |     | <b>Spring Assembly, Pickup Lift</b> |      |            |     |               |
| 1    | LNK0009636    | 1   | . Cable Link                        | 3    | 238381     | 4   | . Jam Nut     |
| 2    | F000007566    | 1   | . Cushion Spring F/Lift Cable       | 4    | ROD0016321 | 1   | . Rod, Adjust |

Rev -

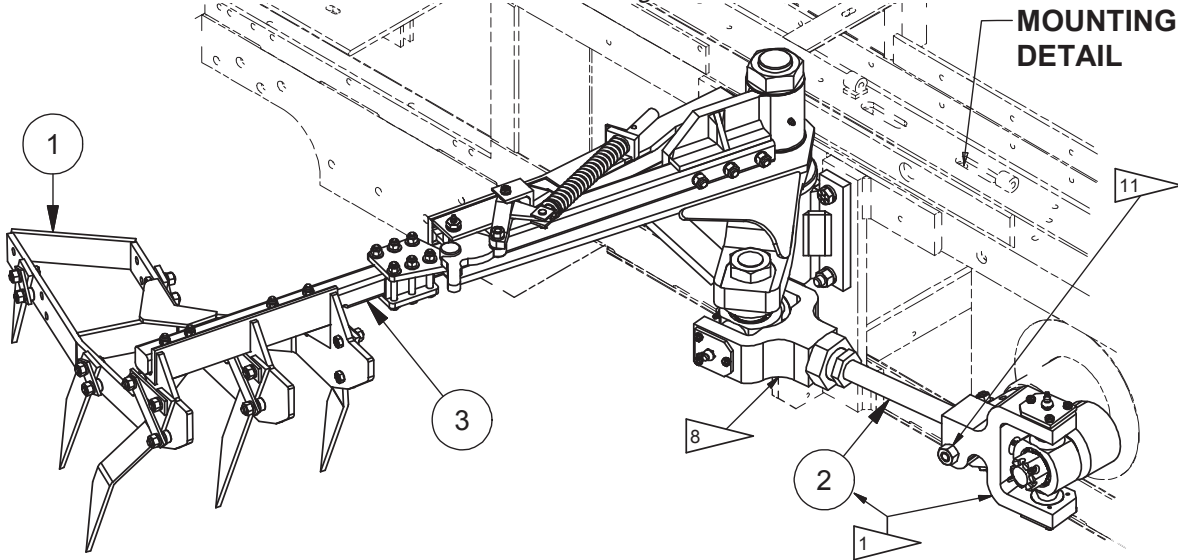
# Section 7

## Feeder & Feed Fork

|  |      |
|--|------|
| Feed Arm/Fork Installation 14" 2-Tie ..... | 7-2  |
| Feed Arm/Fork Installation 16" 2-Tie ..... | 7-4  |
| .Feedfork Assembly, 14" 2 Tie.....         | 7-6  |
| .Feedfork Assembly, 16" 2 Tie.....         | 7-8  |
| .Connecting Rod Assembly .....             | 7-10 |
| .Pivot Shaft Assembly, Feed Arm .....      | 7-11 |
| <br>                                       |      |
| Feed House Installation, 14" Chamber ..... | 7-15 |
| .Feeder House Assembly, 14" Chamber .....  | 7-20 |
| <br>                                       |      |
| Feed House Installation, 16" Chamber ..... | 7-21 |
| .Feeder House Assembly, 16" Chamber .....  | 7-26 |

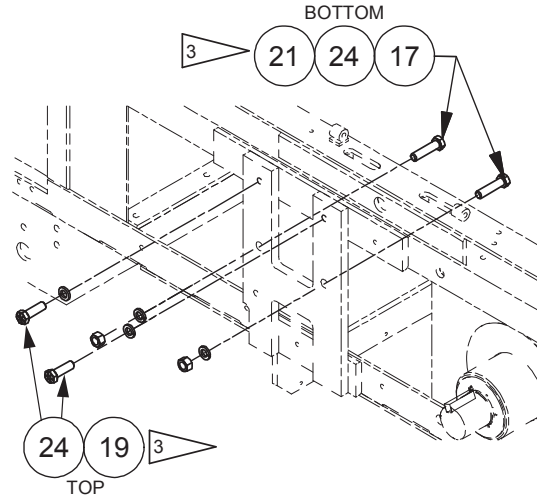
# Feed Arm/Fork Installation- 14" 2-Tie

Page 1 of 2



**NOTES: (NOT AN ASSEMBLY SEQUENCE)**

- 1 - WITH YOKE AT MINIMUM POSITION, ADJUST TO POSITION FEED FOR PARALLEL TO FRAM THEN TIGHTEN HEX NUT TO 205 FT-LBS.
- 2 - TIGHTEN NUT TO 115 - 120 FT-LBS.
- 3 - TIGHTEN FASTENERS TO 170 - 180 FT-LBS.
- 4 - TIGHTEN FASTENERS TO 41 FT-LBS.
- 5 - TIGHTEN ITEM 8 BEFORE TORQUING ITEM 22.
- 6 - POINT LUBRICATION FITTING DOWN.
- 7 - POINT LUBRICATION FITTING FRONT OF BALER.
- 8 - LOCATE LUBRICATION FITTING ON BOTTOM OF ARM.
- 9 - 16" BALER (KITTED 15" & 14") 3-TIE ASSEMBLY, P/N 902102 SHOWN, REFER TO CHART FOR OTHER ASSEMBLIES.
- 10 - INSTALLATION PHOTOS ARE AVAILABLE (SEE 906410)
- 11 - HEAD OF BOLT MUST FACE BALER FRAME

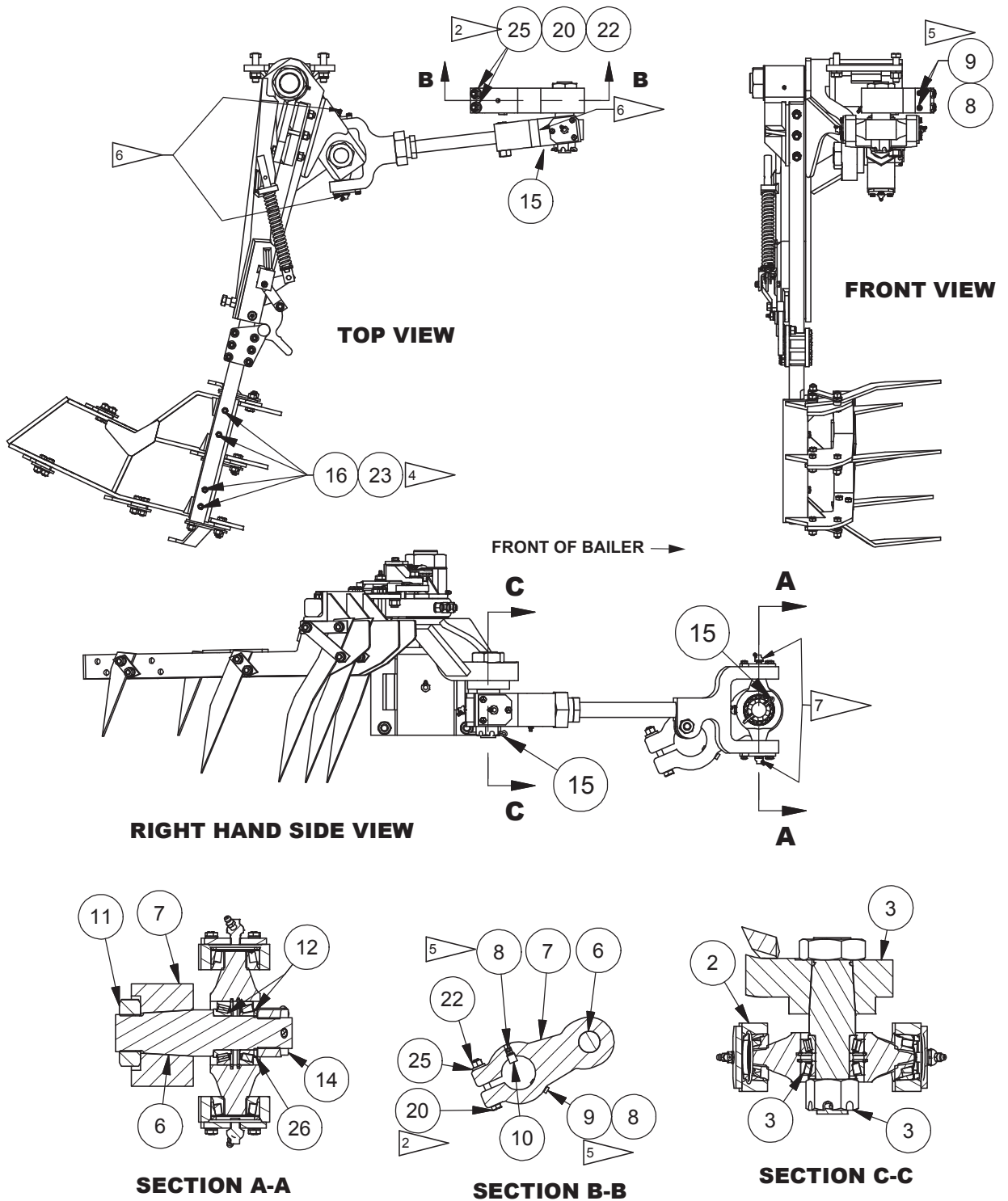


| Item   | Part No.      | Qty | Description            | Item | Part No.   | Qty | Description    |
|--|---------------|-----|------------------------|------|------------|-----|----------------|
| <b>902118 Feed Arm Drive/Fork Installation</b> |               |     |                        |      |            |     |                |
| 1  | *a F007984-14 | 1   | . Feedfork Assembly    | 17   | 221630W    | 2   | . Capscrew     |
| 2  | *b ARM0000027 | 1   | . Rod, Connecting      | 19   | Y17C-1032  | 2   | . Capscrew     |
| 3  | *c FAF2410800 | 1   | . Pivot Shaft Assembly | 20   | R13802054  | 2   | . Capscrew     |
| 6  | PIN0024065    | 1   | . Crank Pin            | 21   | 229952     | 2   | . Hex Nut      |
| 7  | CRA0024058    | 1   | . Plate, Crank Arm     | 22   | NHF0005000 | 2   | . Hex Nut      |
| 8  | STS5000500    | 3   | . Set Screw            | 23   | 224118     | 4   | . Nut, Esna    |
| 9  | STS5000250    | 2   | . Set Screw            | 24   | 00103325   | 4   | . Washer, Lock |
| 10   | ZZ00000456    | 1   | . Key                  | 25   | 221771W    | 2   | . Hard Washer  |
| 11   | NMS0024111    | 1   | . Nut                  | 26   | ZZ00000228 | 1   | . Mach Bushing |
| 12   | BRG0048500    | 3   | . Bearing Assembly     |      |            |     |                |
| 14   | 229933        | 1   | . Nut, Slotted         |      |            |     |                |
| 15   | COT0001006    | 2   | . Cotter Pin           |      |            |     |                |
| 16   | Y18C-0640     | 4   | . Capscrew             |      |            |     |                |

\*a See Separate Coverage (Page 7-7)  
 \*b See Separate Coverage (Page 7-10)  
 \*c See Separate Coverage (Page 7-12)

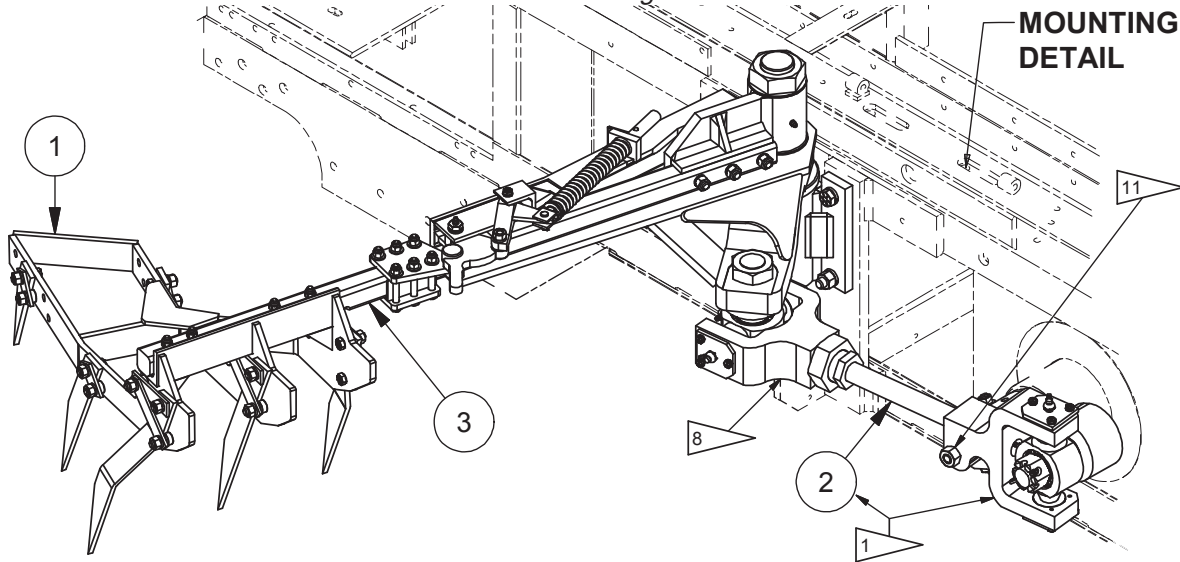
# Feed Arm/Fork Installation- 14" 2-Tie

Page 2 of 2



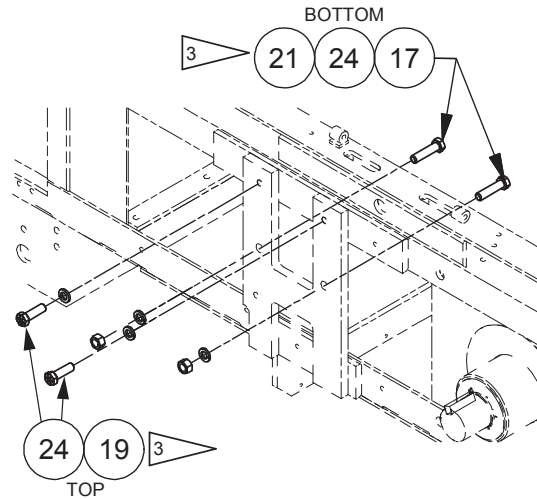
# Feed Arm/Fork Installation- 16" 2-Tie

Page 1 of 2



**NOTES: (NOT AN ASSEMBLY SEQUENCE)**

- 1 - WITH YOKE AT MINIMUM POSITION, ADJUST TO POSITION FEED FOR PARALLEL TO FRAM THEN TIGHTEN HEX NUT TO 205 FT-LBS.
- 2 - TIGHTEN NUT TO 115 - 120 FT-LBS.
- 3 - TIGHTEN FASTENERS TO 170 - 180 FT-LBS.
- 4 - TIGHTEN FASTENERS TO 41 FT-LBS.
- 5 - TIGHTEN ITEM 8 BEFORE TORQUING ITEM 22.
- 6 - POINT LUBRICATION FITTING DOWN.
- 7 - POINT LUBRICATION FITTING FRONT OF BALER.
- 8 - LOCATE LUBRICATION FITTING ON BOTTOM OF ARM.
- 9 - 16" BALER (KITTED 15" & 14") 3-TIE ASSEMBLY, P/N 902102 SHOWN, REFER TO CHART FOR OTHER ASSEMBLIES.
- 10 - INSTALLATION PHOTOS ARE AVAILABLE (SEE 906410)
- 11 - HEAD OF BOLT MUST FACE BALER FRAME

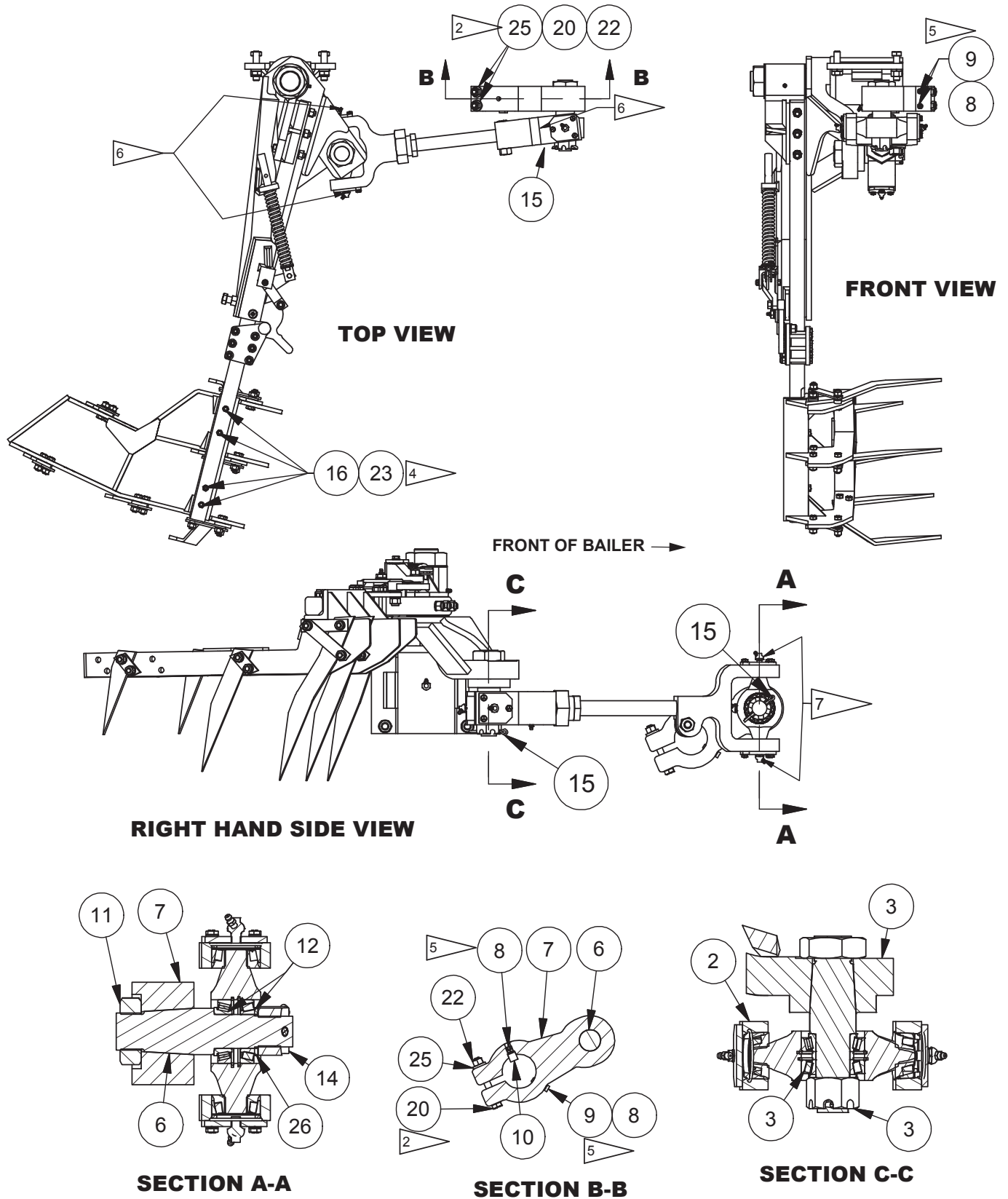


| Item   | Part No.      | Qty | Description            | Item | Part No.   | Qty | Description    |
|--|---------------|-----|------------------------|------|------------|-----|----------------|
| <b>902117 Feed Arm Drive/Fork Installation</b> |               |     |                        |      |            |     |                |
| 1  | *a F000007984 | 1   | . Feedfork Assembly    | 17   | 221630W    | 2   | . Capscrew     |
| 2  | *b ARM0000027 | 1   | . Rod, Connecting      | 19   | Y17C-1032  | 2   | . Capscrew     |
| 3  | *c FAF2410800 | 1   | . Pivot Shaft Assembly | 20   | R13802054  | 2   | . Capscrew     |
| 6  | PIN0024065    | 1   | . Crank Pin            | 21   | 229952     | 2   | . Hex Nut      |
| 7  | CRA0024058    | 1   | . Plate, Crank Arm     | 22   | NHF0005000 | 2   | . Hex Nut      |
| 8  | STS5000500    | 3   | . Set Screw            | 23   | 224118     | 4   | . Nut, Esna    |
| 9  | STS5000250    | 2   | . Set Screw            | 24   | 00103325   | 4   | . Washer, Lock |
| 10   | ZZ00000456    | 1   | . Key                  | 25   | 221771W    | 2   | . Hard Washer  |
| 11   | NMS0024111    | 1   | . Nut                  | 26   | ZZ00000228 | 1   | . Mach Bushing |
| 12   | BRG0048500    | 3   | . Bearing Assembly     |      |            |     |                |
| 14   | 229933        | 1   | . Nut, Slotted         |      |            |     |                |
| 15   | COT0001006    | 2   | . Cotter Pin           |      |            |     |                |
| 16   | Y18C-0640     | 4   | . Capscrew             |      |            |     |                |

\*a See Separate Coverage (Page 7-9)  
 \*b See Separate Coverage (Page 7-10)  
 \*c See Separate Coverage (Page 7-12)

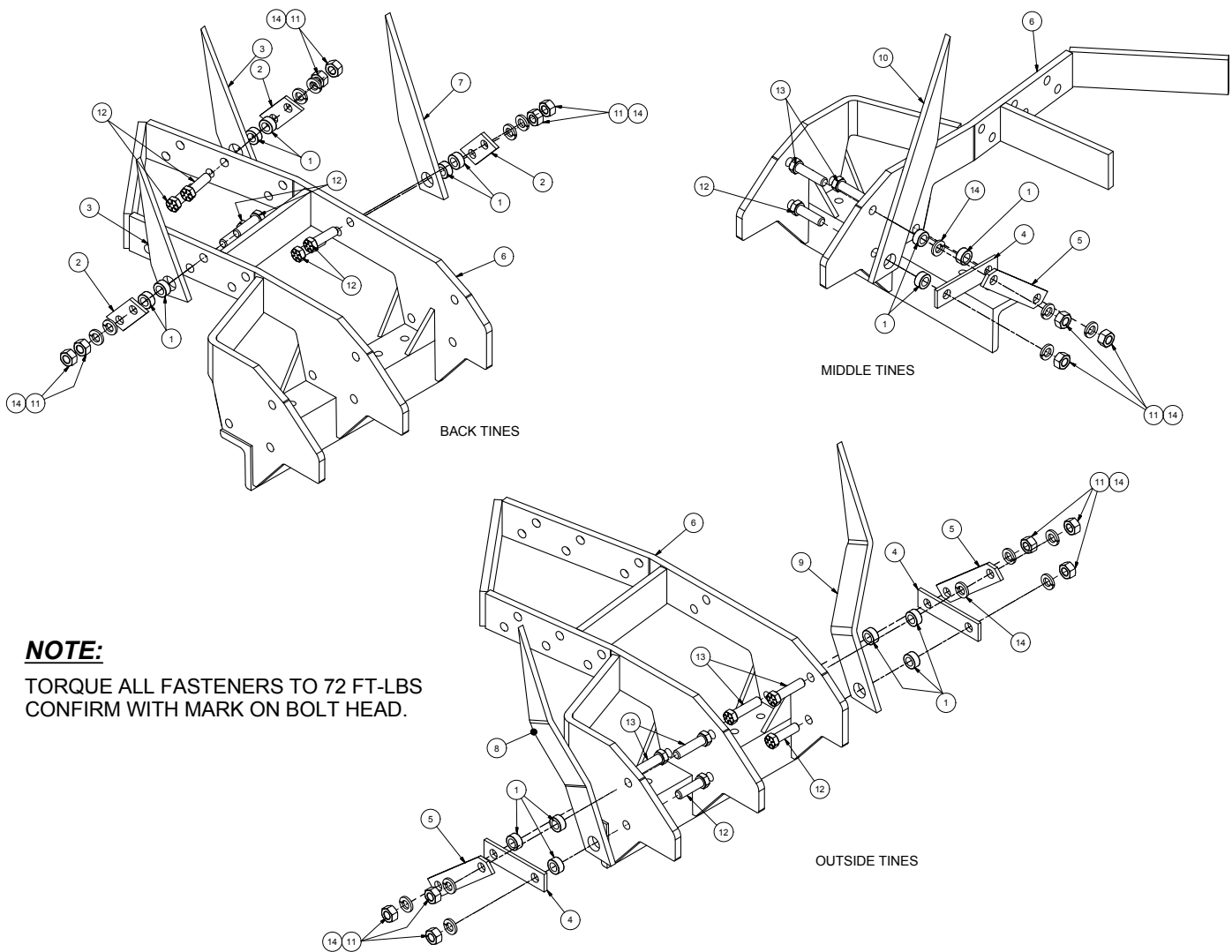
# Feed Arm/Fork Installation- 16" 2-Tie

Page 2 of 2



# Feedfork Assembly, 14" 2 Tie

Page 1 of 2



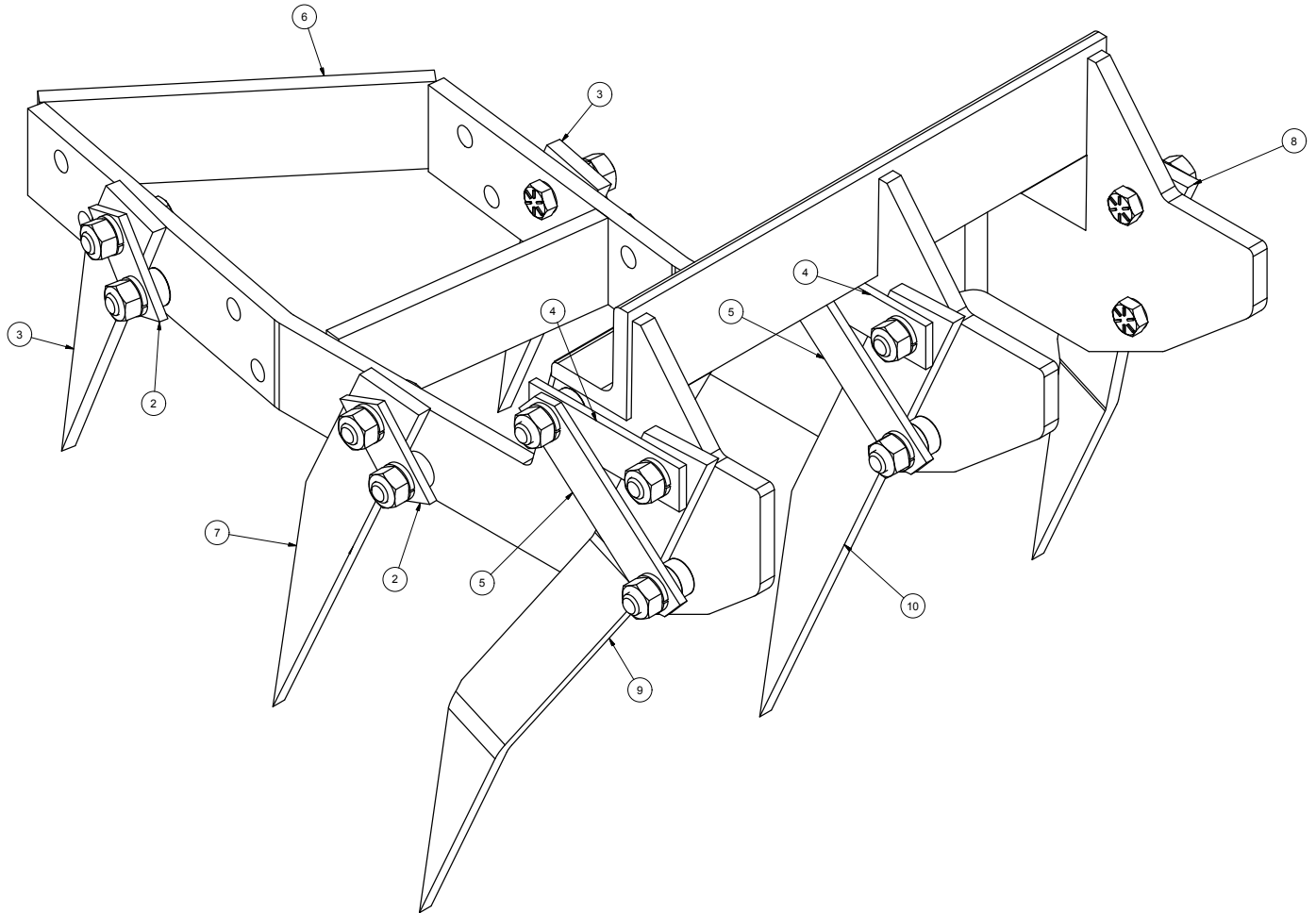
**NOTE:**

TORQUE ALL FASTENERS TO 72 FT-LBS  
CONFIRM WITH MARK ON BOLT HEAD.



# Feedfork Assembly, 14" 2 Tie

Page 2 of 2

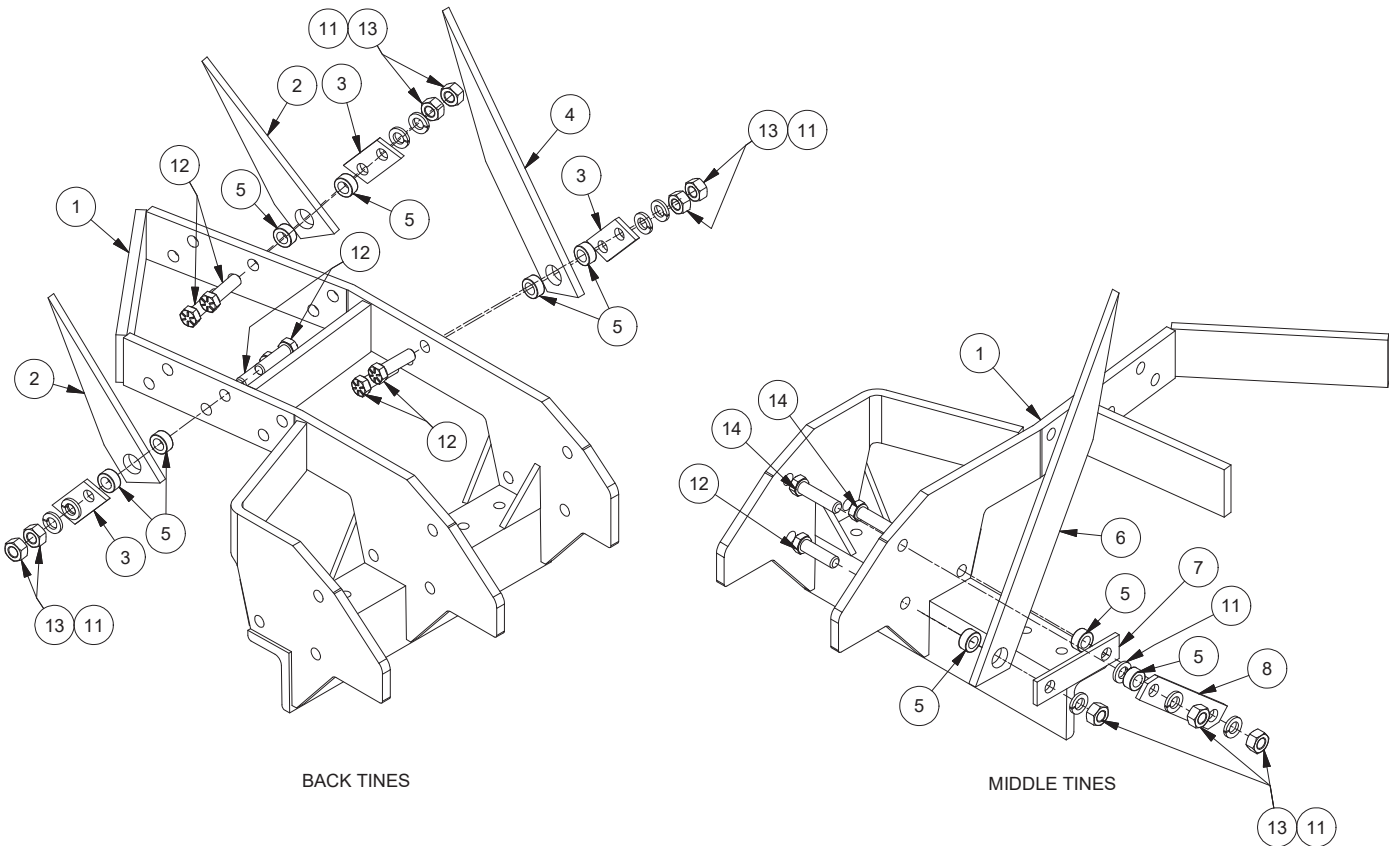


| Item              | Part No.   | Qty | Description              | Item                     | Part No.   | Qty | Description   |
|-------------------|------------|-----|--------------------------|--------------------------|------------|-----|---------------|
| <b>F007984-14</b> |            |     |                          | <b>Feedfork Assembly</b> |            |     |               |
| 1                 | F000001193 | 15  | . Bushing                | 9                        | F007968-14 | 1   | . Bar, Center |
| 2                 | F000001195 | 3   | . Plate, Clip            | 10                       | F007969-14 | 1   | . Bar, Inside |
| 3                 | F000001603 | 2   | . Plate, Leading Tine    | 11                       | 221710W    | 15  | . Hex Nut     |
| 4                 | F000007970 | 3   | . Strap, Inside          | 12                       | R13810879  | 9   | . Capscrew    |
| 5                 | F000007971 | 3   | . Bar, Strap             | 13                       | R13802037  | 6   | . Capscrew    |
| 6                 | F000008232 | 1   | . Frame 2 Tie, Feed Fork | 14                       | 200603     | 18  | . Lockwasher  |
| 7                 | F001189-14 | 1   | . Bar, Tine              |                          |            |     |               |
| 8                 | F007967-14 | 1   | . Plate, Trailing Tine   |                          |            |     |               |

Rev C

# Feedfork Assembly, 16" 2 Tie

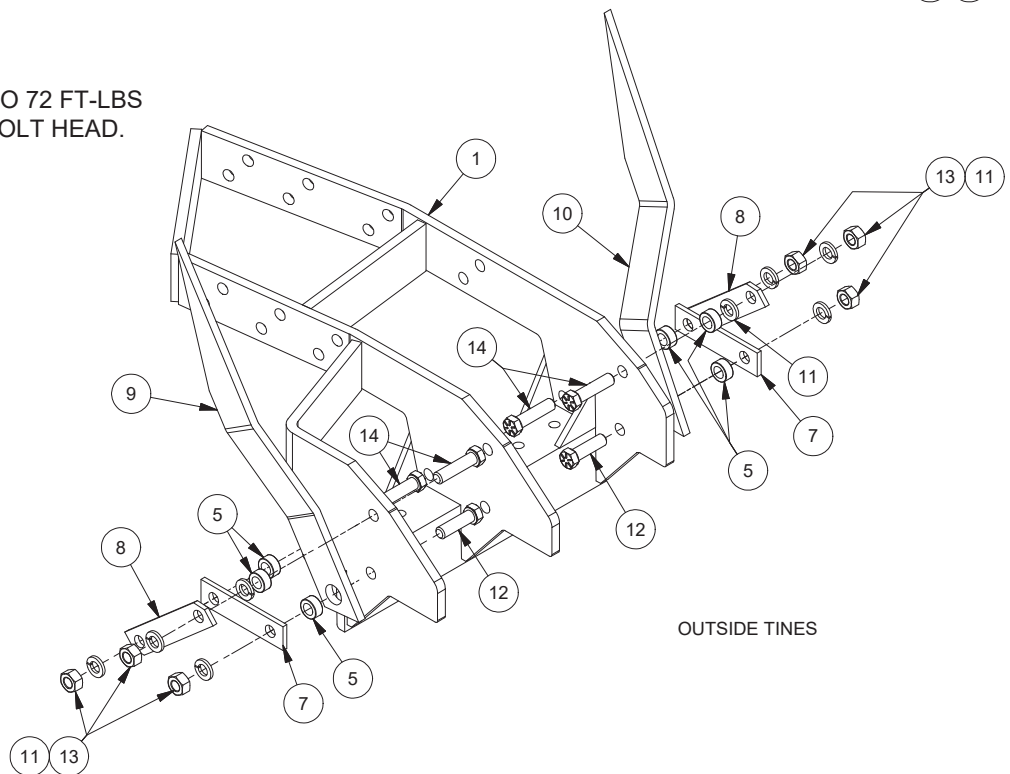
Page 1 of 2



BACK TINES

MIDDLE TINES

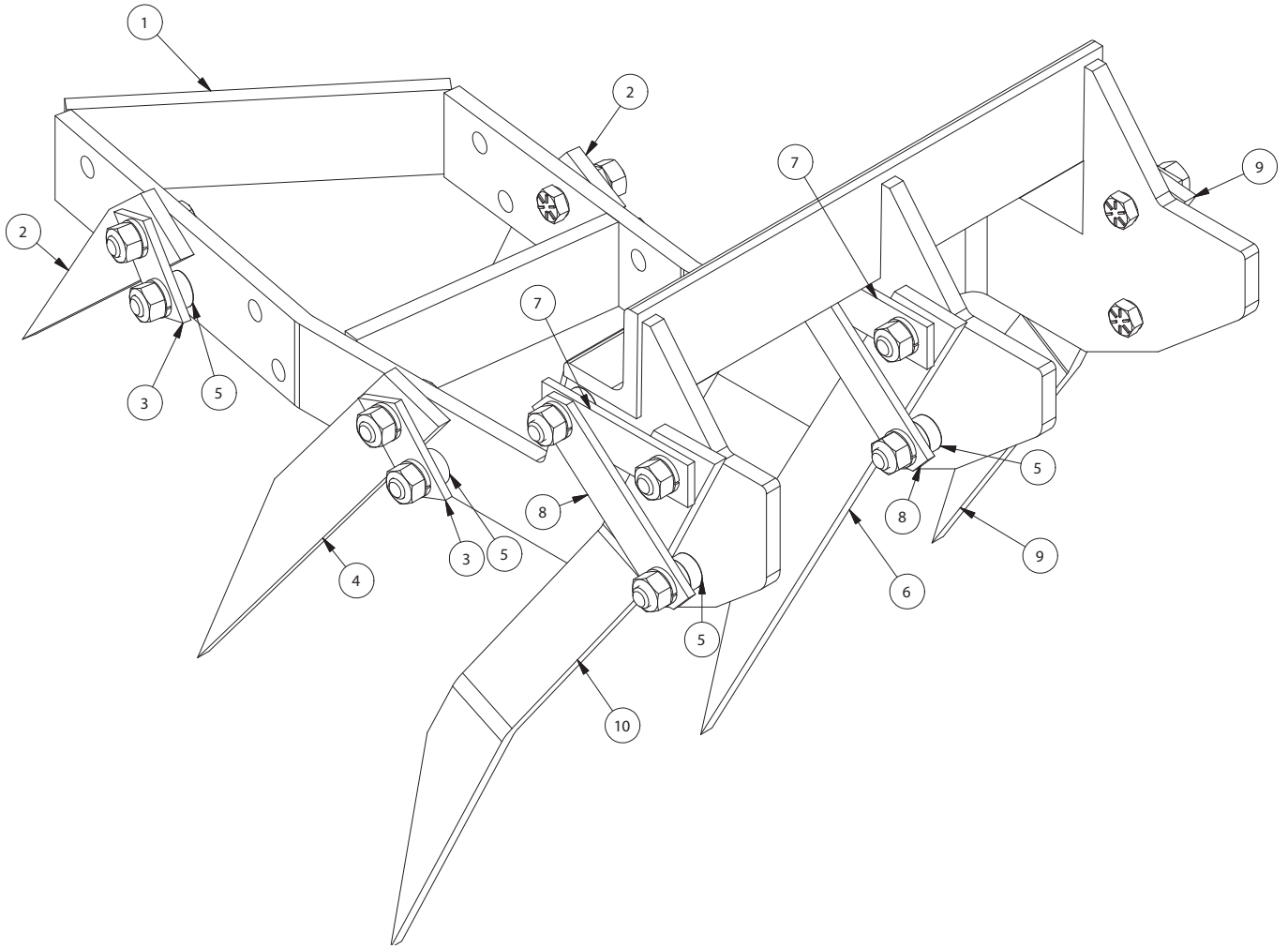
**NOTE:**  
TORQUE ALL FASTENERS TO 72 FT-LBS  
CONFIRM WITH MARK ON BOLT HEAD.



OUTSIDE TINES

## Feedfork Assembly, 16" 2 Tie

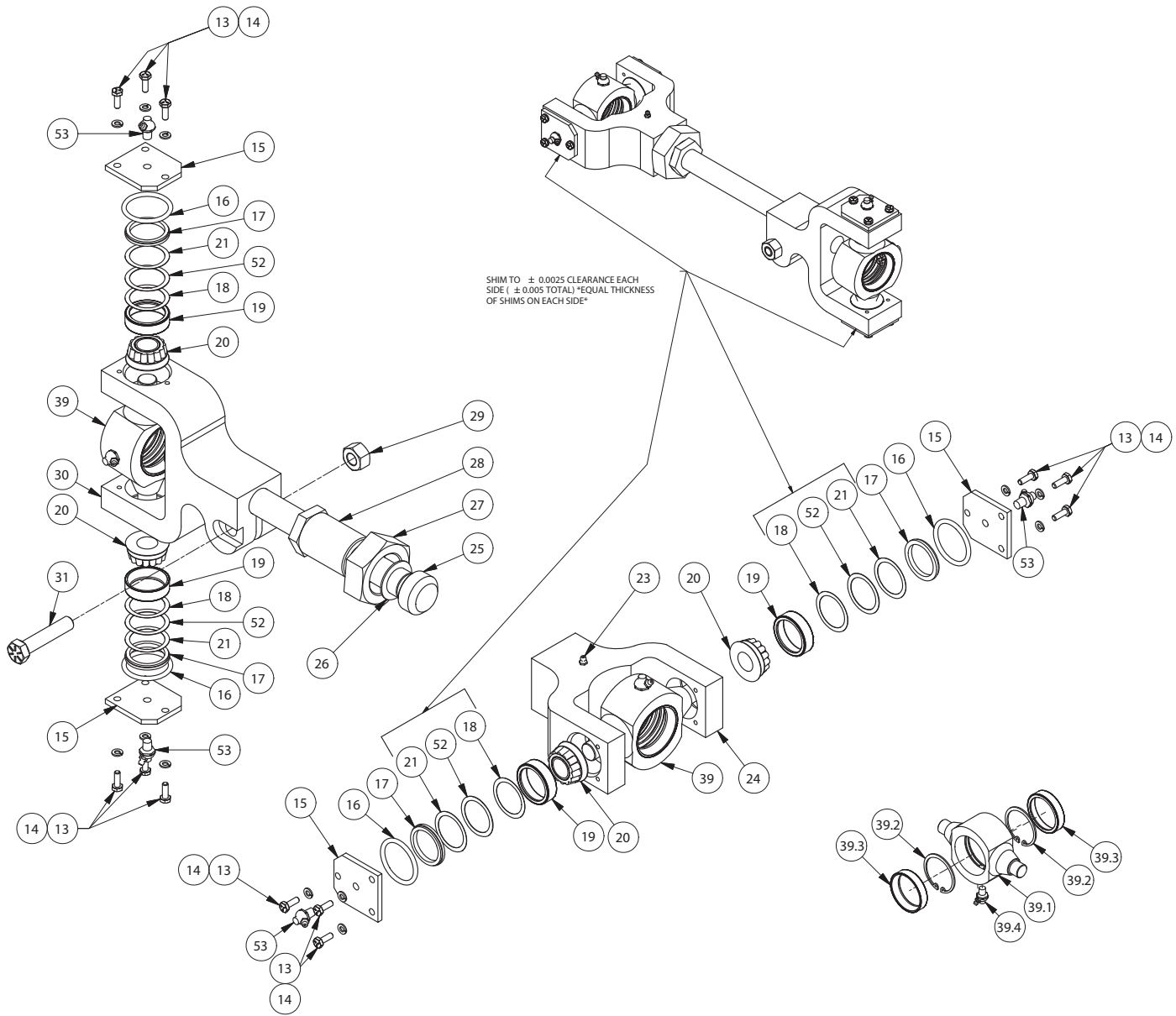
Page 2 of 2



| Item | Part No.          | Qty | Description              | Item | Part No.   | Qty | Description            |
|------|-------------------|-----|--------------------------|------|------------|-----|------------------------|
|      | <b>F000007984</b> |     | <b>Feedfork Assembly</b> |      |            |     |                        |
| 1    | F000008232        | 1   | . Frame 2 Tie, Feed Fork | 9    | F000007967 | 1   | . Plate, Trailing Tine |
| 2    | F000001603        | 2   | . Plate, Leading Tine    | 10   | F000007969 | 1   | . Plate, Tine          |
| 3    | F000001195        | 3   | . Plate, Clip            | 11   | 200603     | 18  | . Lockwasher           |
| 4    | F000001189        | 1   | . Plate, Leading Tine    | 12   | R13810879  | 9   | . Capscrew             |
| 5    | F000001193        | 15  | . Bushing                | 13   | 221710W    | 15  | . Hex Nut              |
| 6    | F000007968        | 1   | . Plate, Center Tine     | 14   | R13802037  | 6   | . Capscrew             |
| 7    | F000007970        | 3   | . Strap, Inside          |      |            |     |                        |
| 8    | F000007971        | 3   | . Bar, Strap             |      |            |     |                        |

Rev C

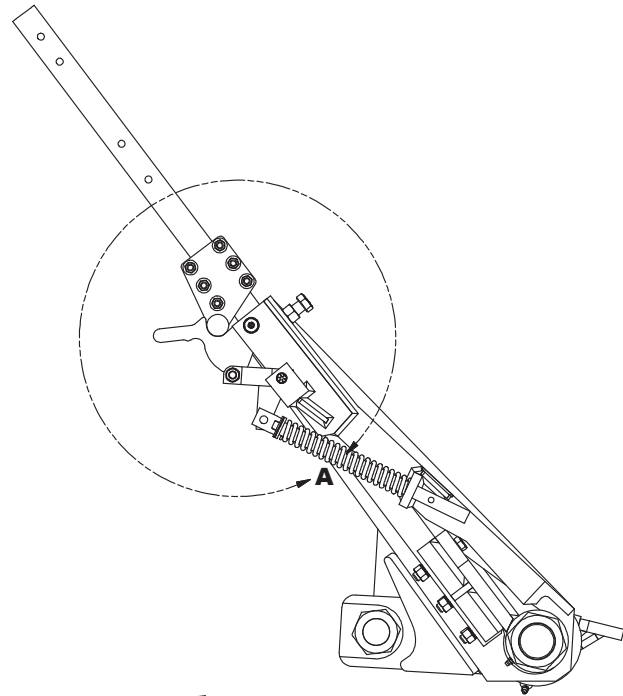
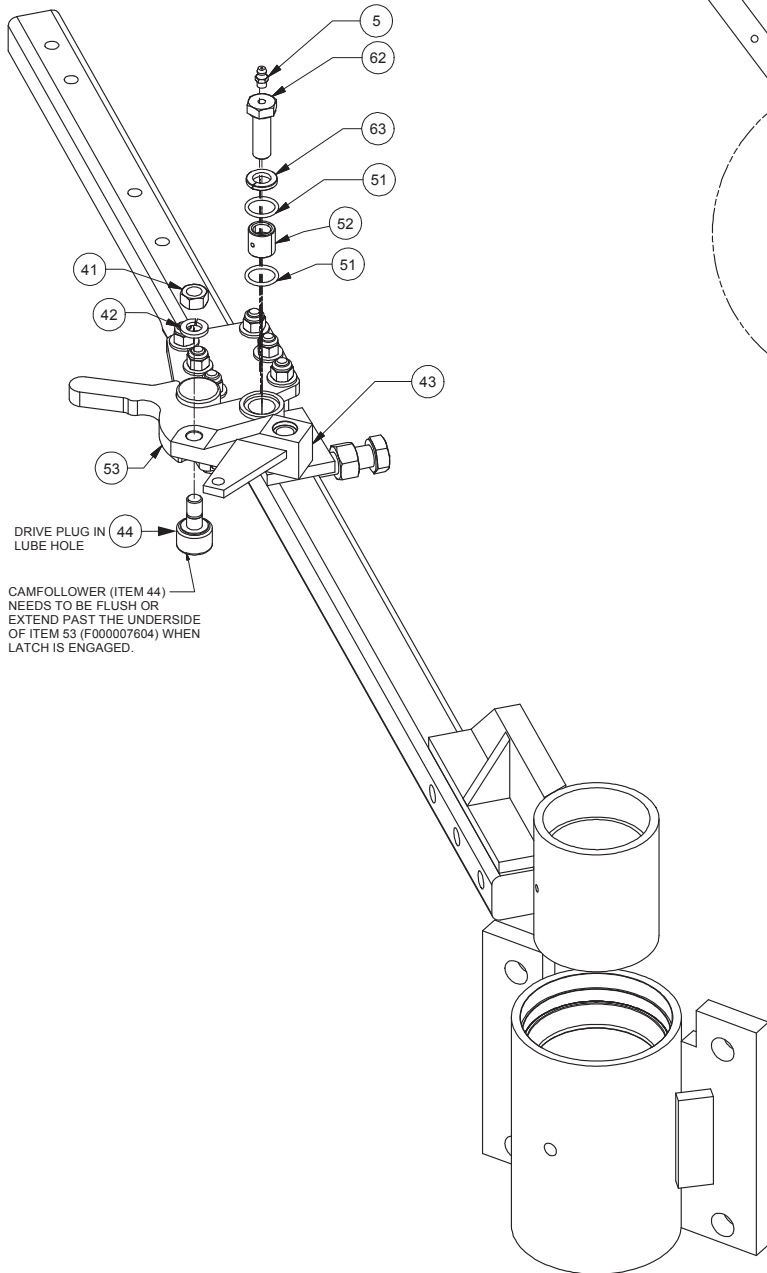
# Connecting Rod Assembly



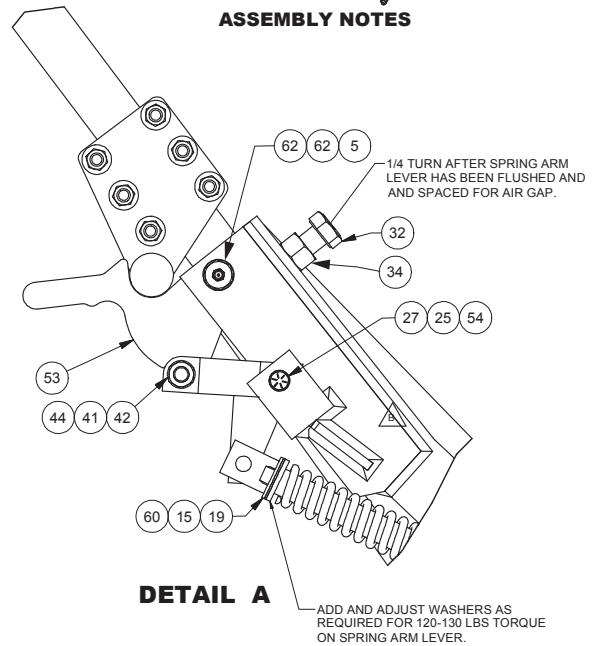
| Item                                      | Part No.   | Qty | Description        | Item | Part No.    | Qty | Description              |
|---|------------|-----|--------------------|------|-------------|-----|--------------------------|
| <b>ARM0000027 Connecting Rod Assembly</b> |            |     |                    |      |             |     |                          |
| 13  | 18460W     | 12  | . Capscrew         | 27   | F000008140  | 1   | . Jam Nut                |
| 14  | 223871     | 12  | . Lockwasher       | 28   | F000008259  | 1   | . Nut, Swivel            |
| 15  | CVR0024052 | 4   | . Plate,Cap        | 29   | NFH0625000  | 1   | . Hex Nut                |
| 16  | 203513     | 4   | . O-Ring           | 30   | YOK0024056  | 1   | . Yoke, Bearing Block    |
| 17  | SPC0024066 | 4   | . Spacer           | 31   | R13806355   | 1   | . Capscrew               |
| 18  | SHM2406702 | AR  | . Shim, .005"      | 39   | BLK0240630  | 2   | . Bearing Block Assembly |
| 19  | BRG0012610 | 4   | . Bearing Cup      | 39.1 | BLK0024063  | 1   | . Bearing Block          |
| 20  | BRG0012600 | 4   | . Bearing Assembly | 39.2 | Y435241.047 | 2   | . Ring Retaining         |
| 21  | SHM2406701 | AR  | . Shim, .007"      | 39.3 | BRG0048510  | 2   | . Bearing Cup            |
| 23  | 11079      | 1   | . Fitting, Lube    | 39.4 | F000001661  | 1   | . Fitting                |
| 24  | YOK0024055 | 1   | . Yoke, Swivel     | 52   | SHM2406700  | AR  | . Shim, Bearing          |
| 25  | F000008258 | 1   | . Rod, Connecting  | 53   | F000001661  | 4   | . Fitting                |
| 26  | ZZ00000207 | 1   | . Bushing          |      |             |     |                          |

# Pivot Shaft Assembly, Feed Arm

Page 1 of 4



**ASSEMBLY NOTES**



# Pivot Shaft Assembly, Feed Arm

Page 2 of 4

| Item | Part No.          | Qty | Description                 | Item | Part No.      | Qty | Description                |
|------|-------------------|-----|-----------------------------|------|---------------|-----|----------------------------|
|      | <b>FAF2410800</b> |     | <b>Pivot Shaft Assembly</b> |      |               |     |                            |
| 1    | F000008187        | AR  | . Plate, Washer             | 43   | F000007606    | 1   | . Trip Arm Assembly        |
| 2    | Y10G-(1032)06     | 2   | . Capscrew                  |      | F000001556    | 1   | .. Bushing                 |
| 4    | F000008132        | 1   | . Lockwasher                | 44   | F000000822    | 1   | . Follower, Cam            |
| 5    | 11079             | 2   | . Fitting, Lube             | 48   | F000008262    | 1   | . Sleeve                   |
| 6    | R13806350         | 3   | . Capscrew                  | 50   | F000008315    | 1   | . Washer                   |
| 8    | F000008131        | 2   | . Nut, Bearing              | 51   | F000007610    | 2   | . Quad-Ring                |
| 9    | F000008135        | 1   | . Seal                      | 52   | F000007607    | 1   | . Bearing, Inner Race      |
| 10   | F000008134        | 2   | . Bearing Cone              | 53   | F000007604    | 1   | . Latch Hook               |
| 13   | F000001661        | 1   | . Fitting                   | 54   | 241691        | 1   | . Capscrew                 |
| 14   | *a 221712W        | 4   | . Hex Nut                   | 59   | F000008296    | 1   | . Spring, Trip Arm         |
| 15   | ZZ00000201        | AR  | . Bushing                   | 60   | 226272        | AR  | . Bushing                  |
| 16   | F000008129        | 1   | . Plate, Housing Cap        | 61   | ROD0013590    | 1   | . Spring Rod               |
| 17   | F000008130        | 1   | . Ring, Retaining           | 62   | F000007605    | 1   | . Hinge Pin, Latch Hook    |
| 18   | F000008126        | 1   | . Shaft, Pivot              | 63   | *a R13812516  | 6   | . Lockwasher               |
| 19   | ZZ00000206        | AR  | . Bushing                   | 64   | 229933        | 1   | . Nut, Slotted             |
| 20   | 60653W            | 2   | . O-Ring                    | 65   | BRG0048500    | 1   | . Bearing Assembly         |
| 21   | F000008136        | 1   | . Plate, Dust Cap           | 66   | NMS0024111    | 1   | . Nut                      |
| 22   | FAF0024108        | 1   | . Feed Arm                  | 67   | PIN0024065    | 1   | . Pin, Feed Arm Crank      |
| 23   | R13802619         | 1   | . Flat Washer               | 69   | *a 221767W    | 6   | . Washer                   |
| 24   | F000008139        | 1   | . Tube, Sleeve              | 70   | *a 237567     | 6   | . Nut, Esna                |
| 25   | R13803725         | 1   | . Hex Nut                   | 71   | *a 903597     | 1   | . Angle                    |
| 26   | F000008127        | 1   | . Housing Assembly          | 72   | *a 903596     | 1   | . Plate, Bottom            |
| 27   | 201566            | 1   | . Lockwasher                | 73   | *a 903595     | 1   | . Plate, Top               |
| 28   | F000008334        | AR  | . Plate, Washer             | 74   | *a R13811043  | 6   | . Capscrew                 |
| 29   | F000008140        | 1   | . Jam Nut                   | 75   | *a F000004050 | 1   | . Follower, Cam            |
| 30   | F000001561        | 1   | . Clevis Pin                | 76   | 903850        | 1   | . Bearing Housing Assembly |
| 31   | 00103384          | 1   | . Cotter Pin                |      | F000008133    | 2   | .. Bearing Cup             |
| 32   | Y17C-1028         | 1   | . Capscrew                  | 77   | ZZ00000228    | 1   | . Bushing                  |
| 33   | F000007529        | 1   | . Bar                       | 78   | 907010        | 3   | . Washer, Wedge Lock       |
| 34   | 229952            | 1   | . Hex Nut                   |      |               |     |                            |
| 41   | 221710W           | 1   | . Hex Nut                   |      |               |     |                            |
| 42   | 200603            | 1   | . Lockwasher                |      |               |     |                            |

\*a Included in Kit 903598 (Latch Roller Assembly)

Rev T

### NOTES:

1-1 - TIGHTEN ITEM #29 USING 3" SOCKET (X-202464) TO 1100 LB-FT

1-2 - SHIM FOR ITEM #24 SO ITEM #22 WILL NOT CONTACT THE SIDE OF ITEM # 26.

1-3 - THIS SIDE OF ITEM # 76 SHOULD BE FACING ITEM #67.

1-4 - THIS NUT NEEDS TO BE TIGHTENED AFTER BOTH BEARING AND CUP (ITEMS 10 & 76-BEARING CUPS ARE ALREADY INSTALLED)ARE LOADED. TIGHTEN TO 220 - 230 LB-FT WITH SOCKET # X-202464 THEN BACK NUT OUT AND TIGHTEN AGAIN. \*BEND LOCK WASHER TAB DOWN TO LOCK NUT IN POSITION\* LOCK FIRST NUT IN POSITION USING THE SECOND NUT

1-5 - DO NOT TIGHTEN PAST THREADS.

1-6 - SET SPRING TENSION TO 120 - 130 LB-FT BEFORE LATCH TRIPS

1-7 - TORQUE TO 1000 LB-FT

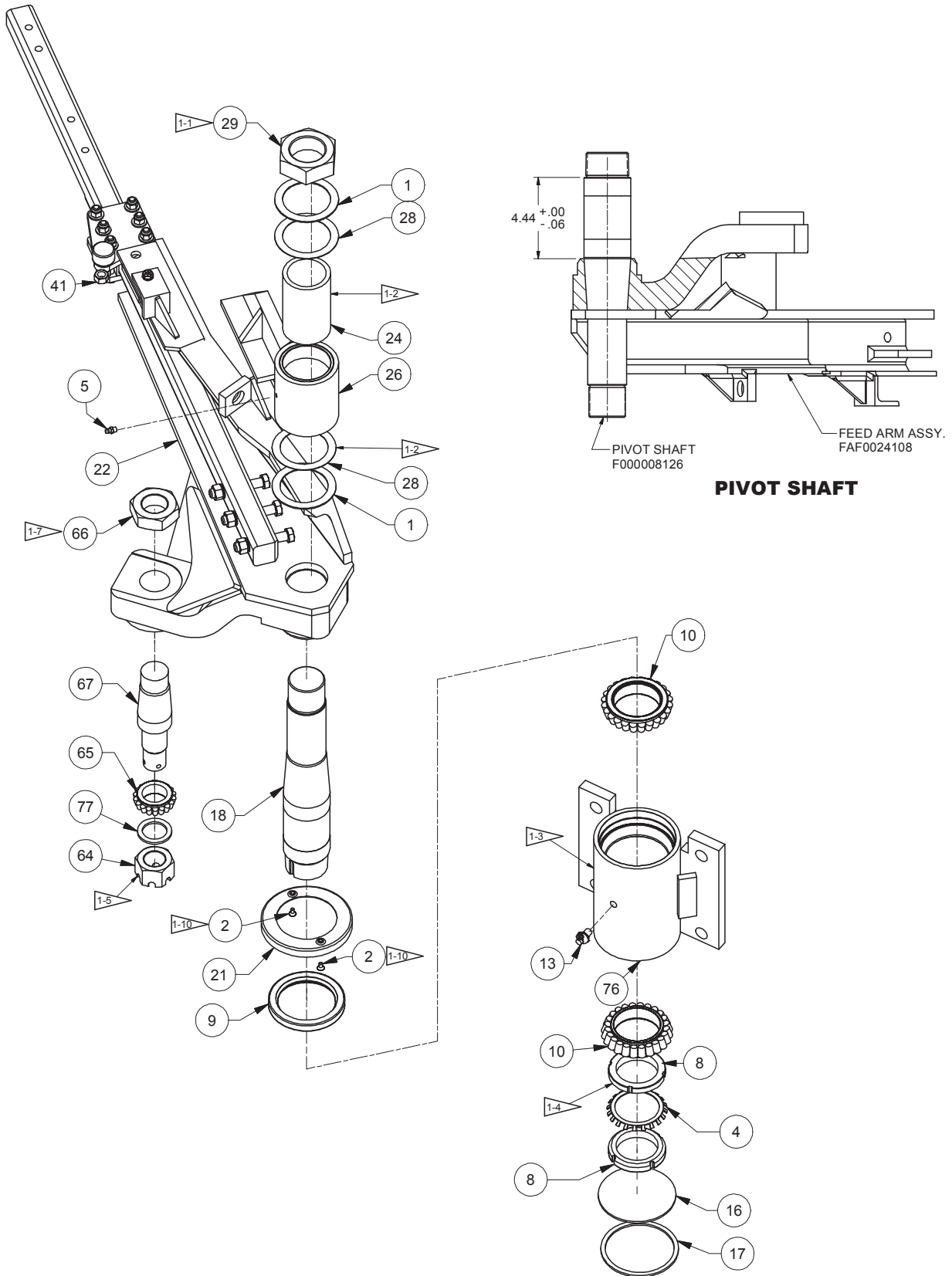
1-8 - TORQUE TO 120 LB-FT

1-9 - TORQUE TO 35 LB-FT

1-10 - USE LOCTITE 242 (P/N: 226201)

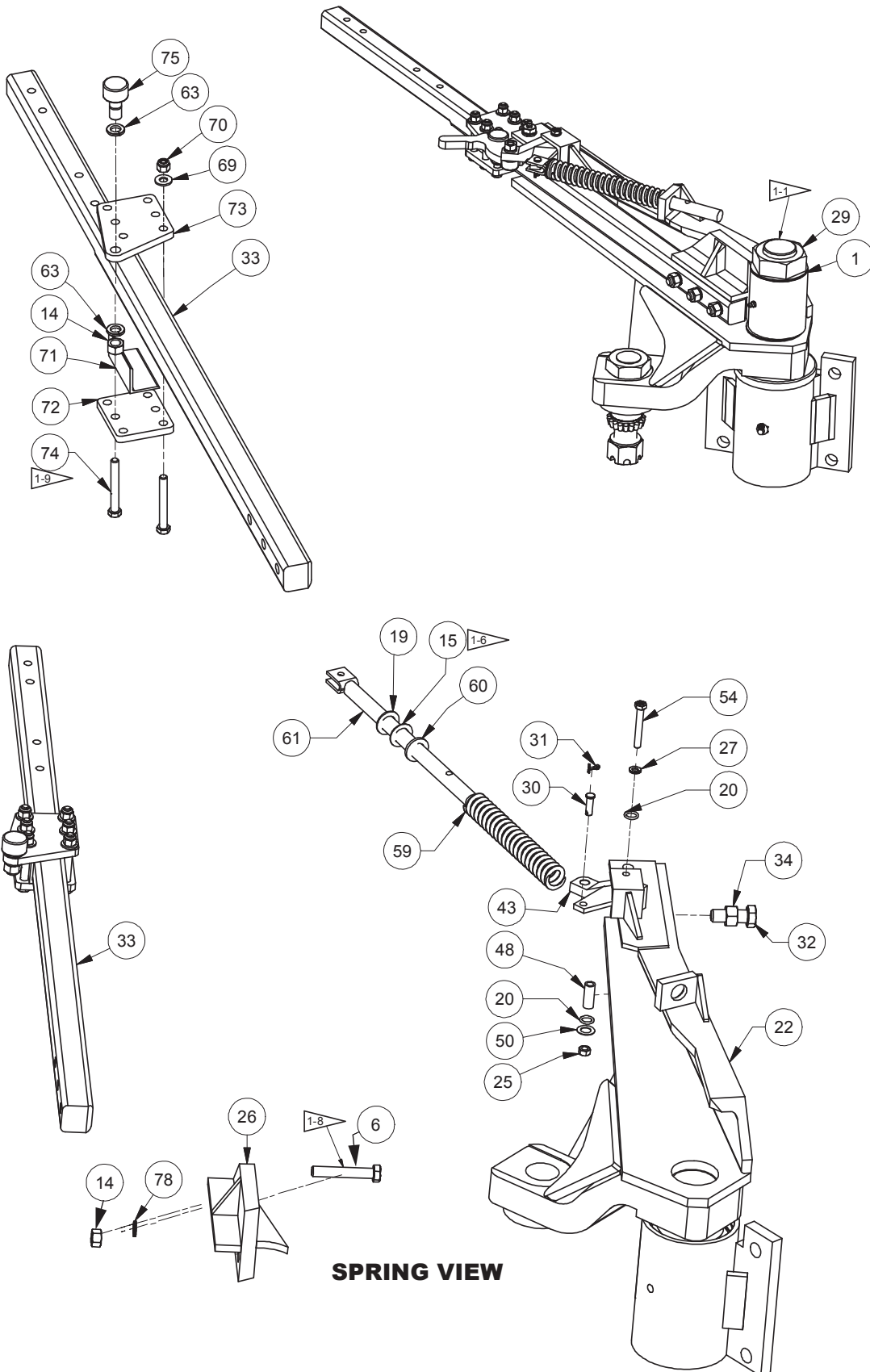
# Pivot Shaft Assembly, Feed Arm

Page 3 of 4



# Pivot Shaft Assembly, Feed Arm

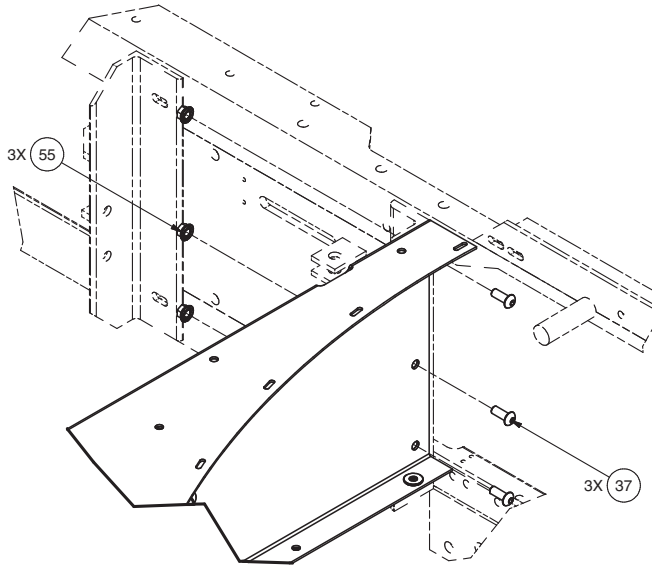
Page 4 of 4



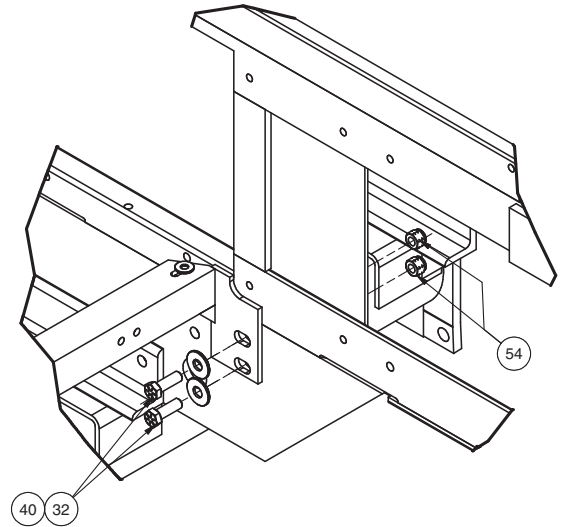


# Feed House Installation, 14" Chamber

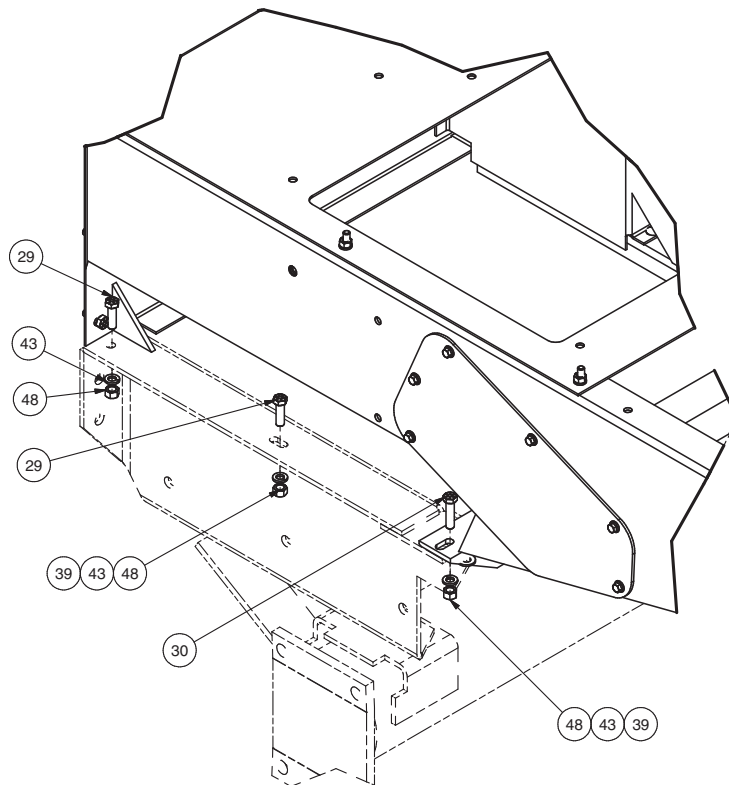
Page 1 of 5



**DETAIL C**



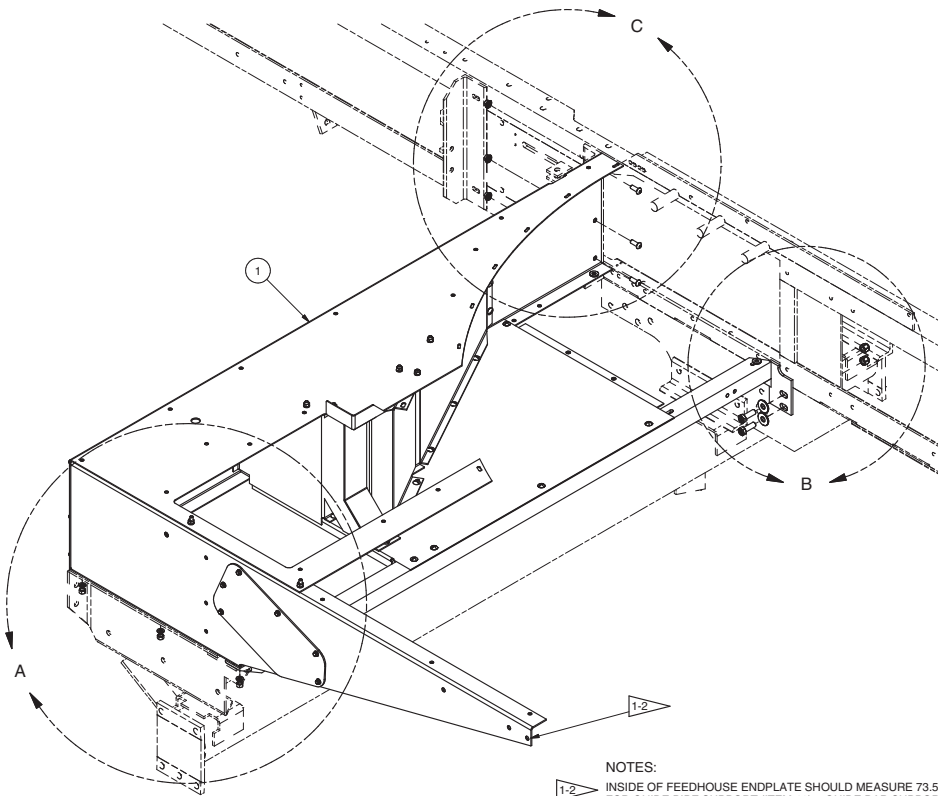
**DETAIL B**



**DETAIL A**

# Feed House Installation, 14" Chamber

Page 2 of 5



NOTES:  
 1-2 INSIDE OF FEEDHOUSE ENDPLATE SHOULD MEASURE 73.5" FROM FRAME TO ALLOW CLEARANCE FOR GUIDE PIPE SUPPORT (ITEM 12) + GUIDE BAR SUPPORT SPACERS (ITEMS 2 & 22). END PLATE MIGHT BE AT FARTHEST EXTENTS FROM FRAME TO ACCOMPLISH THIS. THE AXLE MAY NEED TO BE ADJUSTED.

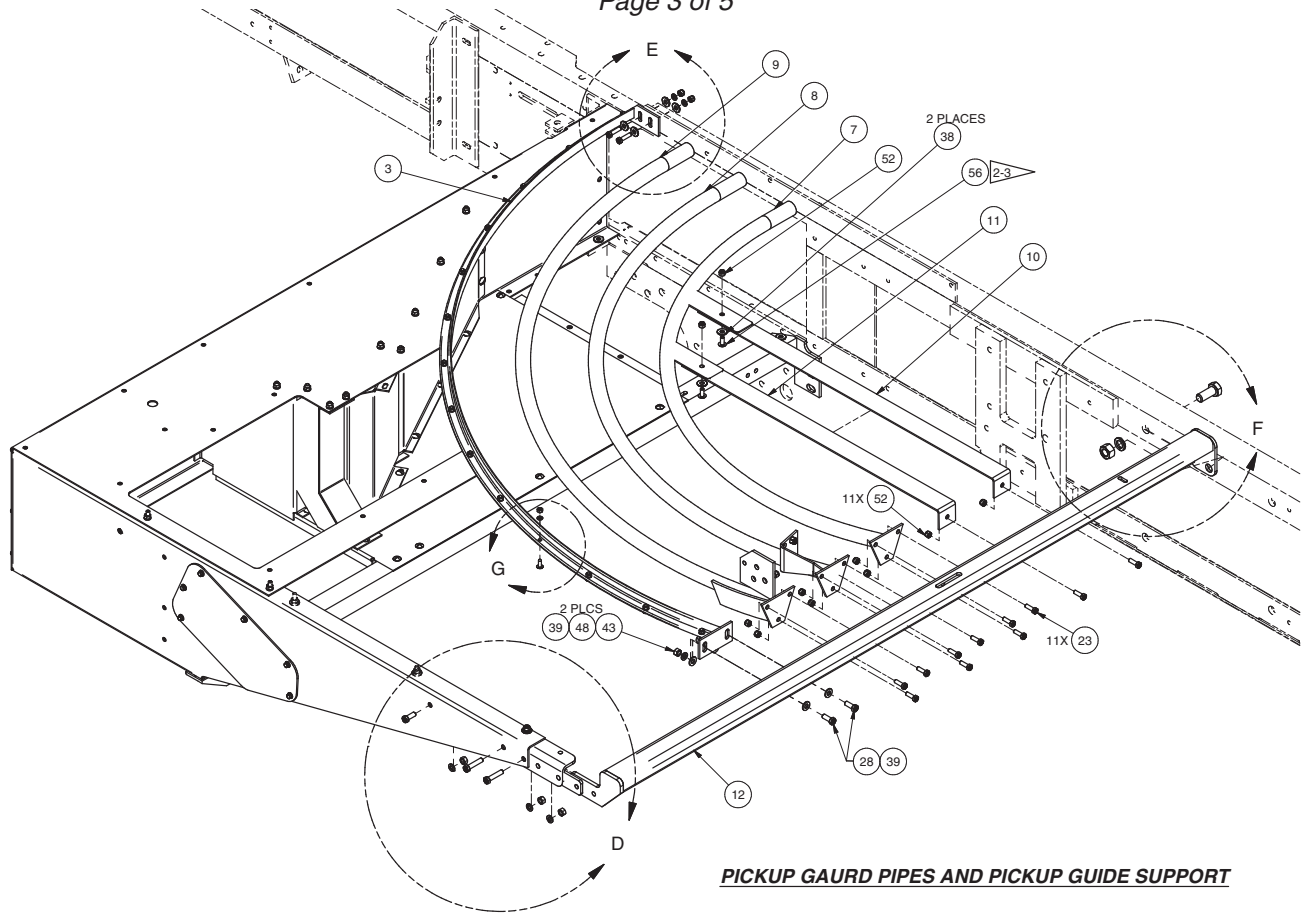
| Item   | Part No.      | Qty | Description                    | Item | Part No.   | Qty | Description      |
|--|---------------|-----|--------------------------------|------|------------|-----|------------------|
| <b>901963 Feed House Installation, 14" Chamber</b> |               |     |                                |      |            |     |                  |
| 1  | a* FH00014370 | 1   | . Assembly, Feed House         | 31   | 134328W    | 1   | . Capscrew       |
| 2  | SPC036500B    | 1   | . Plate, Support               | 32   | 200454W    | 2   | . Capscrew       |
| 3  | GRD035979D    | 1   | . Guard Angle Assembly         | 33   | 180189W    | 1   | . Capscrew       |
| 4  | F000007145    | 1   | . Feed House Bottom Wear Plate | 34   | SMTS001001 | 14  | . Machine Screw  |
| 5  | CVR0020465    | 1   | . Cover                        | 35   | SMT0000202 | 7   | . Screw          |
| 7  | GRD036018E    | 1   | . Pipe Assembly                | 36   |            | 2   | . Screw          |
| 8  | GRD036019E    | 1   | . Pipe Assembly                | 37   | 18738W     | 3   | . Capscrew       |
| 9  | GRD036020E    | 1   | . Guard Assembly               | 38   | 223428     | 19  | . Washer         |
| 10   | F000007160    | 1   | . Holddown, Hay (Inside)       | 39   | 221767W    | 6   | . Washer         |
| 11   | F000007159    | 1   | . Holddown, Center Hay         | 40   | 239519     | 2   | . Washer         |
| 12   | SUP0018768    | 1   | . Weldment, Support            | 41   | R13812512  | 14  | . Lockwasher     |
| 13   | Y02F-1632     | 2   | . Pin, Roll                    | 42   | R13812513  | 17  | . Lockwasher     |
| 14   | F000007276    | 1   | . Ferrule                      | 43   | R13812514  | 8   | . Lockwasher     |
| 15   | F000001563    | 1   | . Catch, Torque Shaft          | 44   | 200603     | 1   | . Lockwasher     |
| 16   | F000000281    | 1   | . Spring                       | 45   | R13812518  | 1   | . Lockwasher     |
| 17   | F000008264    | 1   | . Bumper, Rubber               | 46   | 221703W    | 14  | . Hex Nut        |
| 18   | SHD0007096    | 1   | . Latch, Hood                  | 47   | 221705W    | 15  | . Hex Nut        |
| 19   | SPG0007095    | 1   | . Spring, Hood Latch           | 48   | 221707W    | 8   | . Hex Nut        |
| 20   | 05-130        | 1   | . Spacer                       | 49   | R13806770  | 1   | . Hex Nut        |
| 22   | SPC0031363    | 1   | . Plate, Spacer                | 50   | 221716W    | 1   | . Hex Nut        |
| 23   | R13811014     | 12  | . Capscrew                     | 51   | 224118     | 1   | . Locknut        |
| 24   | R13811015     | 2   | . Capscrew                     | 52   | 223588     | 18  | . Nut, Esna      |
| 25   | 221474W       | 1   | . Capscrew                     | 53   | 237567     | 1   | . Locknut        |
| 26   | R13811021     | 2   | . Capscrew                     | 54   | 223587     | 2   | . Locknut        |
| 27   | 162572W       | 1   | . Capscrew                     | 55   | 156133W    | 3   | . Locknut        |
| 28   | Y17C-0616     | 3   | . Capscrew                     | 56   | SMT0000201 | 9   | . Screw, Machine |
| 29   | 221499W       | 2   | . Capscrew                     | 57   | R13801813  | 2   | . Capscrew       |
| 30   | Y17C-0624     | 1   | . Capscrew                     |      |            |     |                  |

\*a See Separate Coverage (Page 7-20)

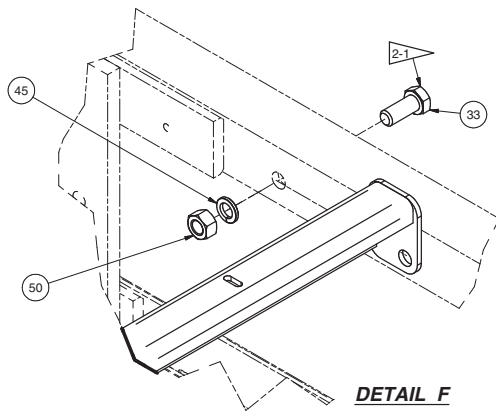
Rev DB

## Feed House Installation, 14" Chamber

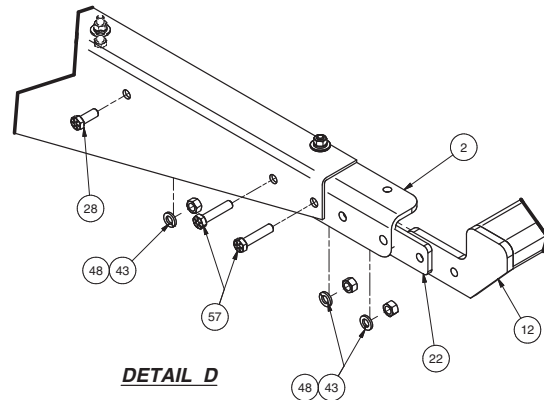
Page 3 of 5



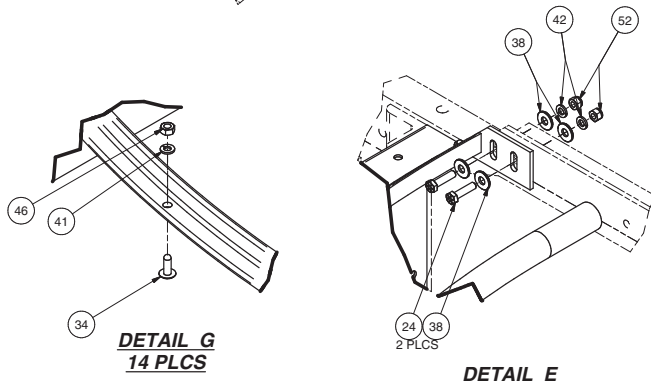
**PICKUP GAURD PIPES AND PICKUP GUIDE SUPPORT**



**DETAIL F**



**DETAIL D**



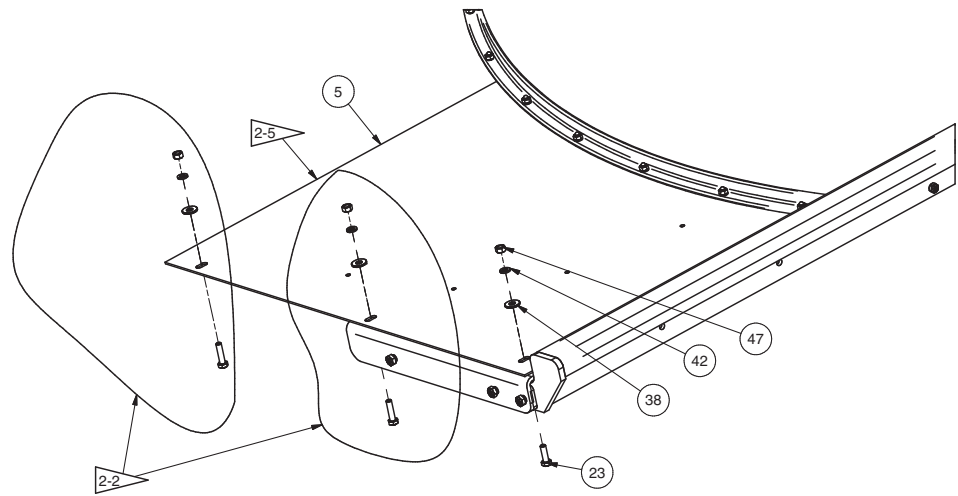
**DETAIL G**  
14 PLCS

**DETAIL E**

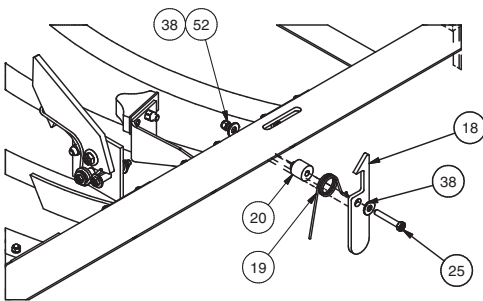
- NOTES:**
- 2-1 REUSE FASTENERS ALREADY PROVIDED ON BULL GEAR INSTALLATION.
  - 2-2 FASTENERS PROVIDED IN SHIELD INSTALLATION.
  - 2-3 FLAT WASHER LOCATED UNDER BOLT HEAD
  - 2-4 73.5" LENGTH FROM INSIDE OF FEED HOUSE TO FRAME
  - 2-5 EDGE OF PLATE (CVR0020465) MUST LINE UP WITH MATING SHIELD
  - 2-6 SPRING FOR FEEDARM LATCH (F00000281) GOES ON TOP OF LATCH (F000001563).

# Feed House Installation, 14" Chamber

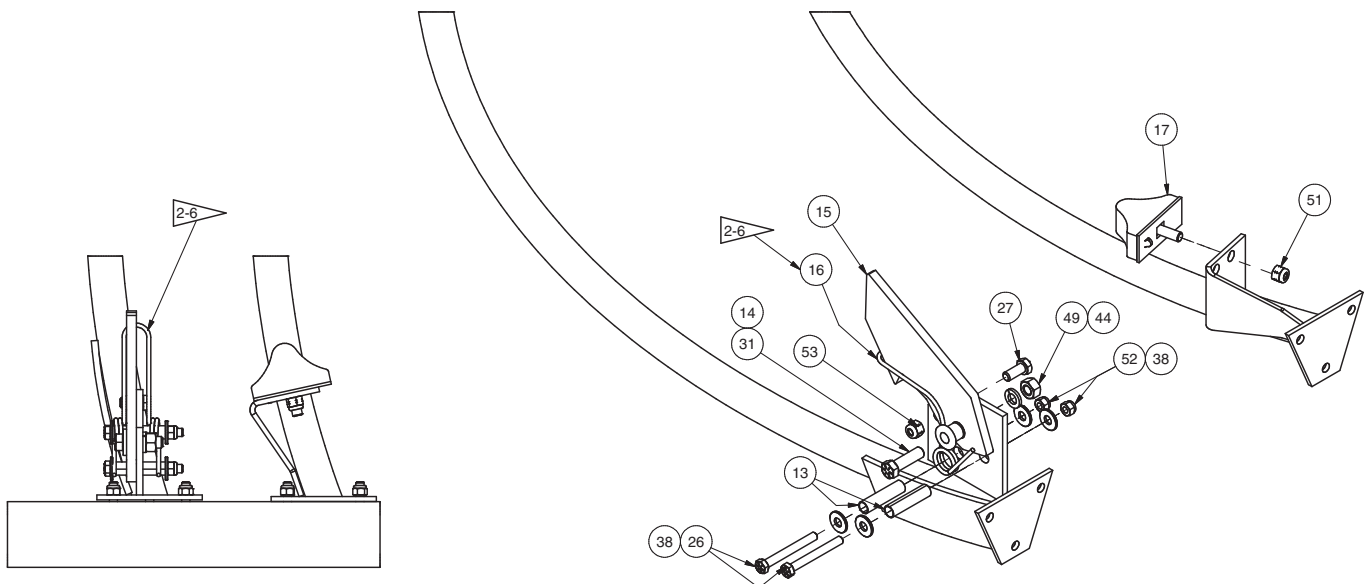
Page 4 of 5



**TOP PLATE INSTALLATION**



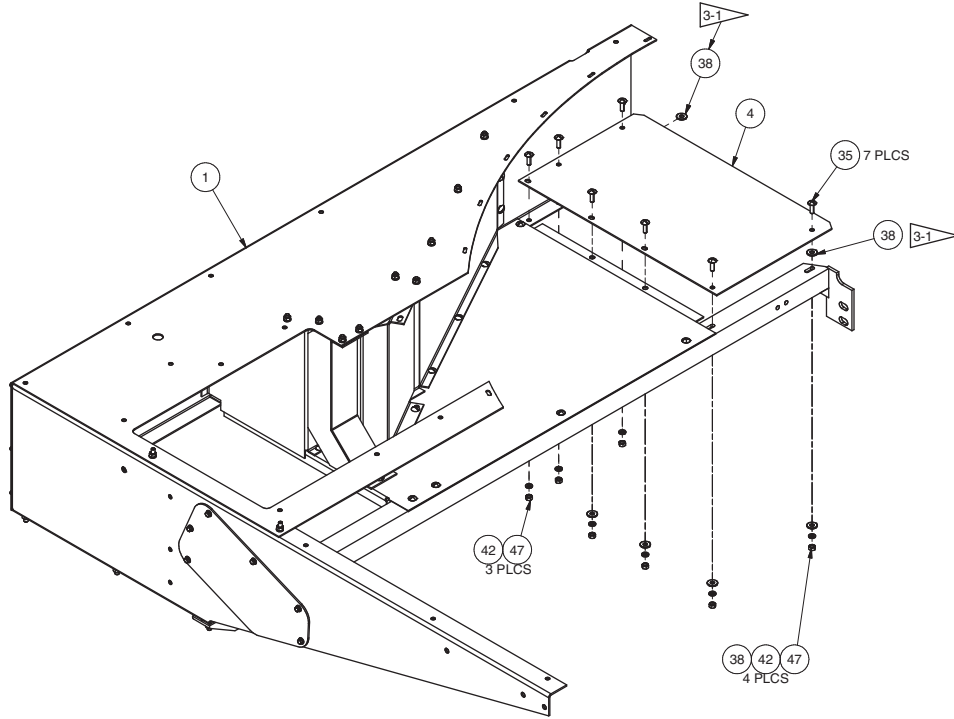
**HOOD LATCH**



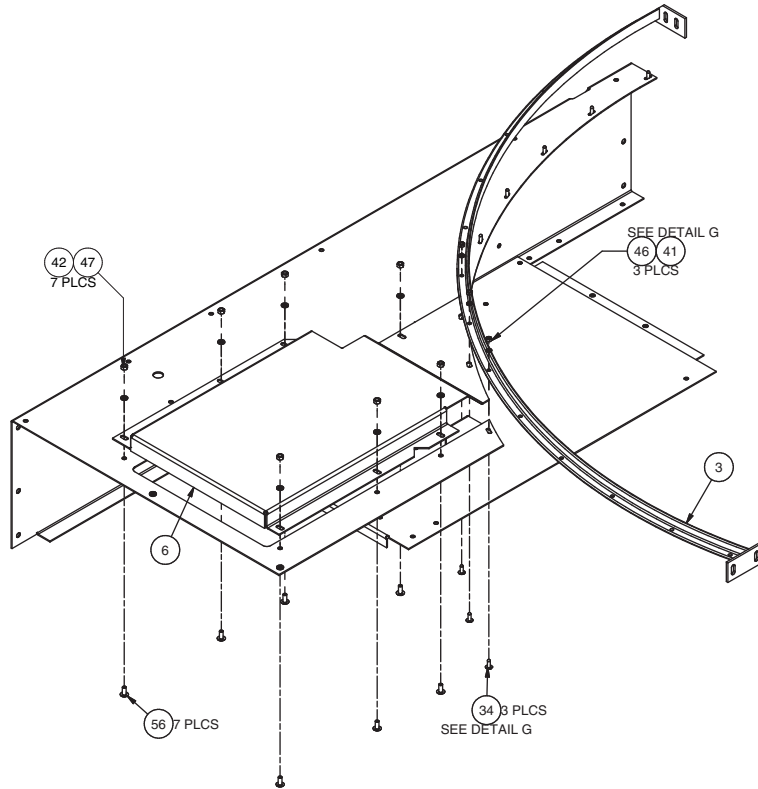
**FASTENERS FOR LATCH, SPRING, AND STOP**

# Feed House Installation, 14" Chamber

Page 5 of 5

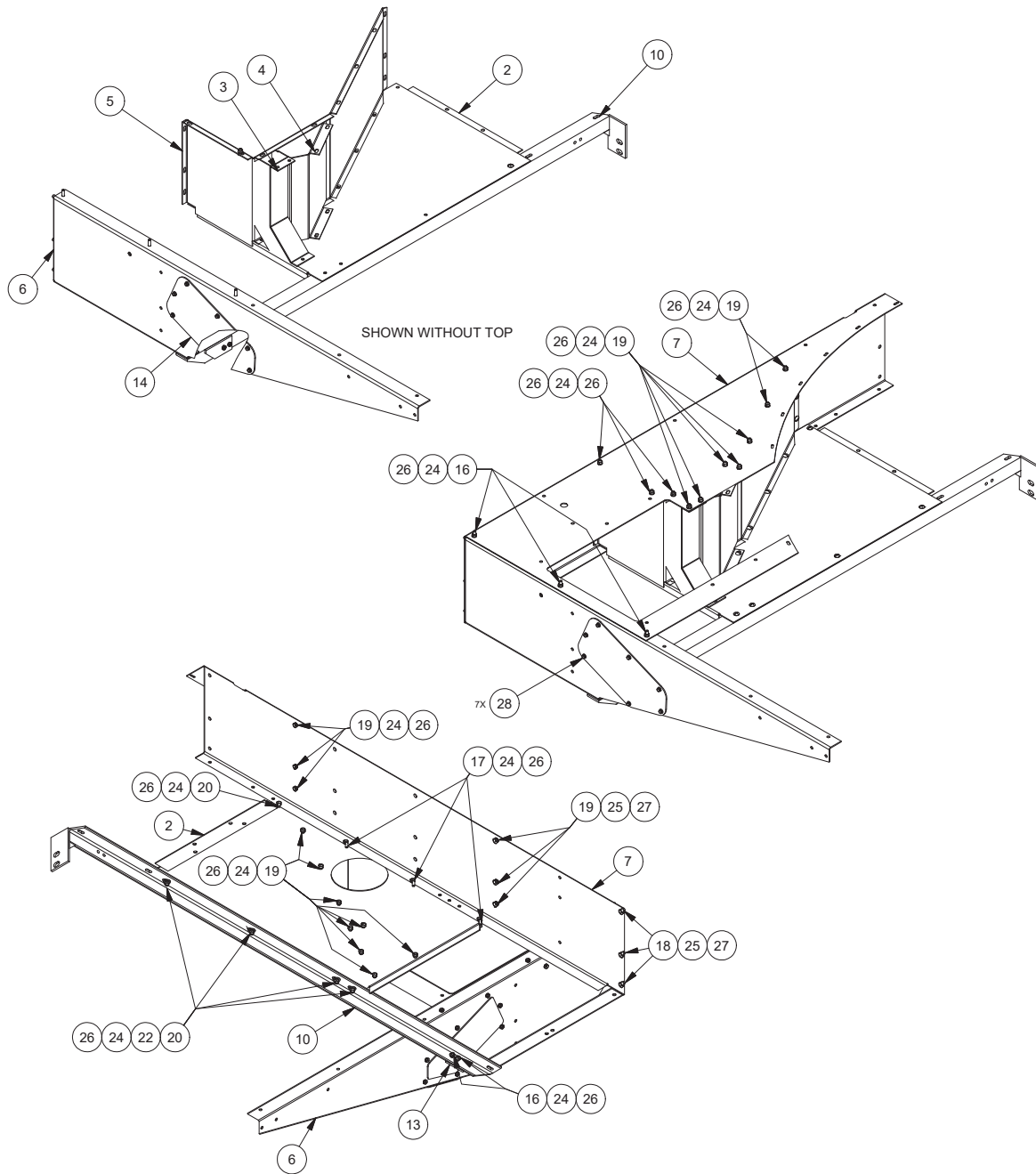


**WEAR PLATE INSTALL**



**AUGER COVER**

# Feeder House Assembly, 14" Chamber

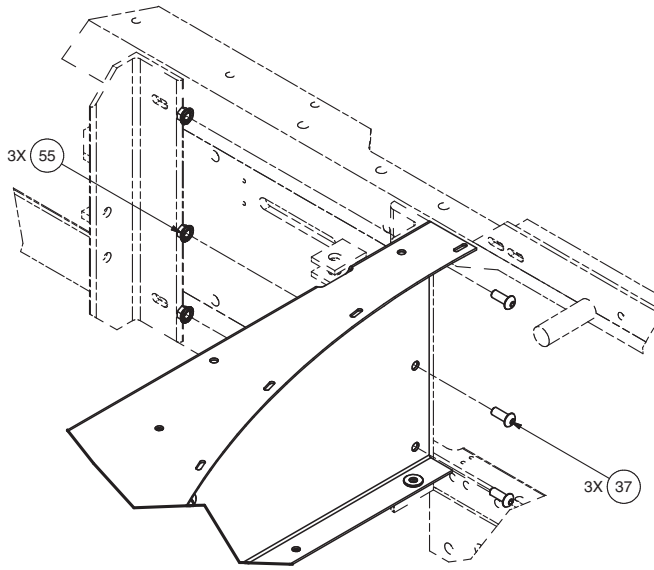


| Item | Part No.          | Qty | Description                  | Item | Part No.      | Qty | Description  |
|------|-------------------|-----|------------------------------|------|---------------|-----|--------------|
|      | <b>FH00014370</b> |     | <b>Feeder House Assembly</b> |      |               |     |              |
| 2    | FH00020198        | 1   | . Plate Weldment, Bottom     | 19   | SMT0000201 23 |     | . Screw      |
| 3    | FH00020989        | 1   | . Extension Weldment         | 20   | SMTS020002 5  |     | . Screw      |
| 4    | FH00021019        | 1   | . Plate, Ext                 | 22   | 223428        | 4   | . Washer     |
| 5    | FH00021410        | 1   | . Plate, Back                | 24   | R13812513     | 35  | . Lockwasher |
| 6    | FH00022427        | 1   | . Plate Weldment, End        | 25   | R13812514     | 3   | . Lockwasher |
| 7    | FH00024402        | 1   | . Plate, Feeder House        | 26   | R13811512     | 35  | . Hex Nut    |
| 10   | SUP0023008        | 1   | . Support                    | 27   | 221707W       | 3   | . Hex Nut    |
| 14   | 902681            | 1   | . Cover                      | 28   | SMS0000300 6  |     | . Screw      |
| 16   | R13811014         | 4   | . Capscrew                   |      |               |     |              |
| 17   | R13811015         | 3   | . Capscrew                   |      |               |     |              |
| 18   | Y17C-0616         | 3   | . Capscrew                   |      |               |     |              |

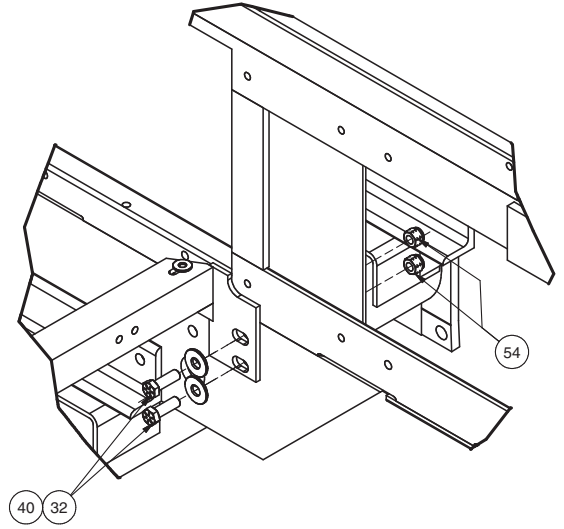
Rev E

# Feed House Installation, 16" Chamber

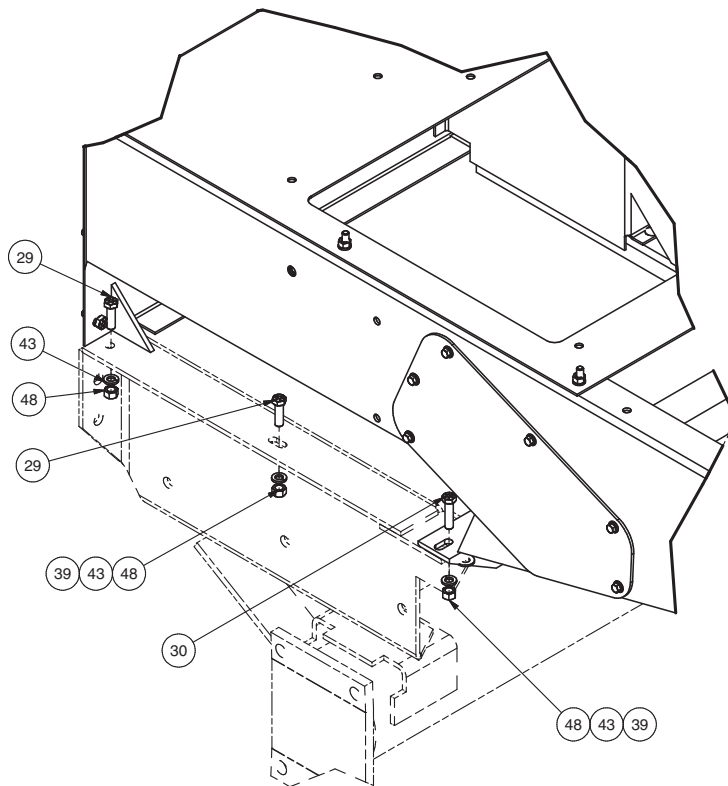
Page 1 of 5



**DETAIL C**



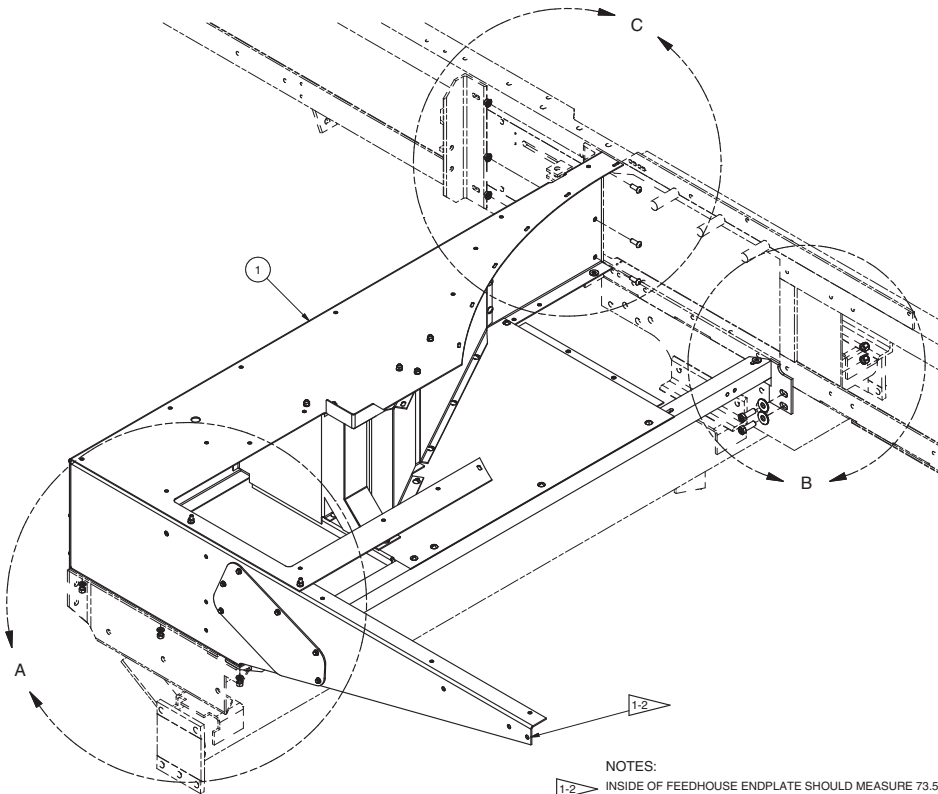
**DETAIL B**



**DETAIL A**

# Feed House Installation, 16" Chamber

Page 2 of 5



NOTES:  
 1-2 INSIDE OF FEEDHOUSE ENDPLATE SHOULD MEASURE 73.5" FROM FRAME TO ALLOW CLEARANCE FOR GUIDE PIPE SUPPORT (ITEM 12) + GUIDE BAR SUPPORT SPACERS (ITEMS 2 & 22). END PLATE MIGHT BE AT FARTHEST EXTENTS FROM FRAME TO ACCOMPLISH THIS. THE AXLE MAY NEED TO BE ADJUSTED.

| Item   | Part No.      | Qty | Description                    | Item | Part No.   | Qty | Description      |
|--|---------------|-----|--------------------------------|------|------------|-----|------------------|
| <b>901970 Feed House Installation, 16" Chamber</b> |               |     |                                |      |            |     |                  |
| 1  | a* FH00016370 | 1   | . Assembly, Feed House         | 31   | 134328W    | 1   | . Capscrew       |
| 2  | SPC036500B    | 1   | . Plate, Support               | 32   | 200454W    | 2   | . Capscrew       |
| 3  | GRD035979D    | 1   | . Guard Angle Assembly         | 33   | 180189W    | 1   | . Capscrew       |
| 4  | F000007145    | 1   | . Feed House Bottom Wear Plate | 34   | SMTS001001 | 14  | . Machine Screw  |
| 5  | CVR0020465    | 1   | . Cover                        | 35   | SMT0000202 | 7   | . Screw          |
| 7  | GRD036018E    | 1   | . Pipe Assembly                | 36   |            | 2   | . Screw          |
| 8  | GRD036019E    | 1   | . Pipe Assembly                | 37   | 18738W     | 3   | . Capscrew       |
| 9  | GRD036020E    | 1   | . Guard Assembly               | 38   | 223428     | 19  | . Washer         |
| 10   | F000007160    | 1   | . Holddown, Hay (Inside)       | 39   | 221767W    | 6   | . Washer         |
| 11   | F000007159    | 1   | . Holddown, Center Hay         | 40   | 239519     | 2   | . Washer         |
| 12   | SUP0018768    | 1   | . Weldment, Support            | 41   | R13812512  | 14  | . Lockwasher     |
| 13   | Y02F-1632     | 2   | . Pin, Roll                    | 42   | R13812513  | 10  | . Lockwasher     |
| 14   | F000007276    | 1   | . Ferrule                      | 43   | R13812514  | 8   | . Lockwasher     |
| 15   | F000001563    | 1   | . Catch, Torque Shaft          | 44   | 200603     | 1   | . Lockwasher     |
| 16   | F000000281    | 1   | . Spring                       | 45   | R13812518  | 1   | . Lockwasher     |
| 17   | F000008264    | 1   | . Bumper, Rubber               | 46   | 221703W    | 14  | . Hex Nut        |
| 18   | SHD0007096    | 1   | . Latch, Hood                  | 47   | 221705W    | 8   | . Hex Nut        |
| 19   | SPG0007095    | 1   | . Spring, Hood Latch           | 48   | 221707W    | 8   | . Hex Nut        |
| 20   | 05-130        | 1   | . Spacer                       | 49   | R13806770  | 1   | . Hex Nut        |
| 22   | SPC0031363    | 1   | . Plate, Spacer                | 50   | 221716W    | 1   | . Hex Nut        |
| 23   | R13811014     | 12  | . Capscrew                     | 51   | 224118     | 1   | . Locknut        |
| 24   | R13811015     | 2   | . Capscrew                     | 52   | 223588     | 18  | . Nut, Esna      |
| 25   | 221474W       | 1   | . Capscrew                     | 53   | 237567     | 1   | . Locknut        |
| 26   | R13811021     | 2   | . Capscrew                     | 54   | 223587     | 2   | . Locknut        |
| 27   | 162572W       | 1   | . Capscrew                     | 55   | 156133W    | 3   | . Locknut        |
| 28   | Y17C-0616     | 3   | . Capscrew                     | 56   | SMT0000201 | 2   | . Screw, Machine |
| 29   | 221499W       | 2   | . Capscrew                     | 57   | R13801813  | 2   | . Capscrew       |
| 30   | Y17C-0624     | 1   | . Capscrew                     |      |            |     |                  |

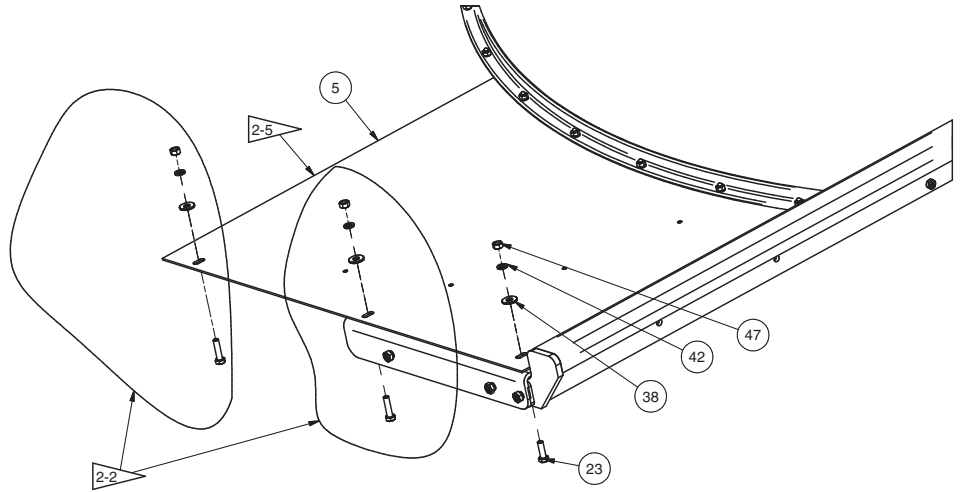
Rev FB

\*a See Separate Coverage (Page 7-26)

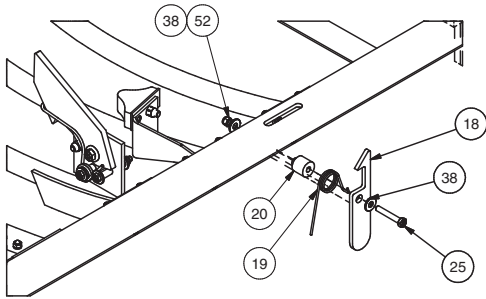


# Feed House Installation, 16" Chamber

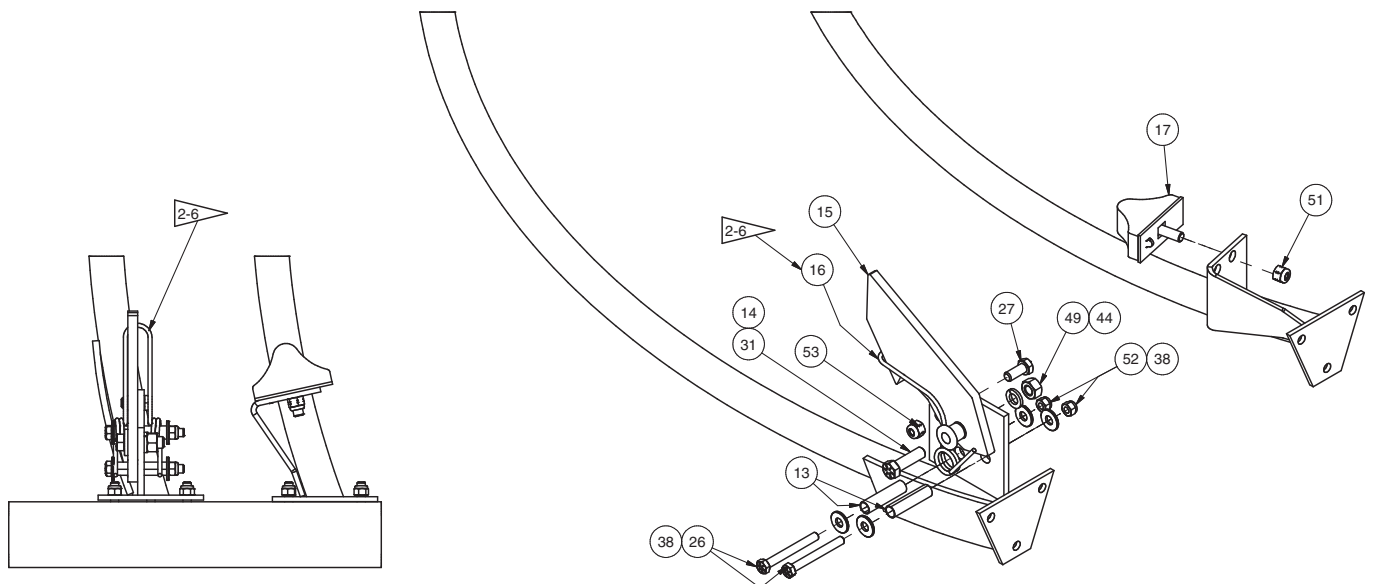
Page 3 of 5



**TOP PLATE INSTALLATION**



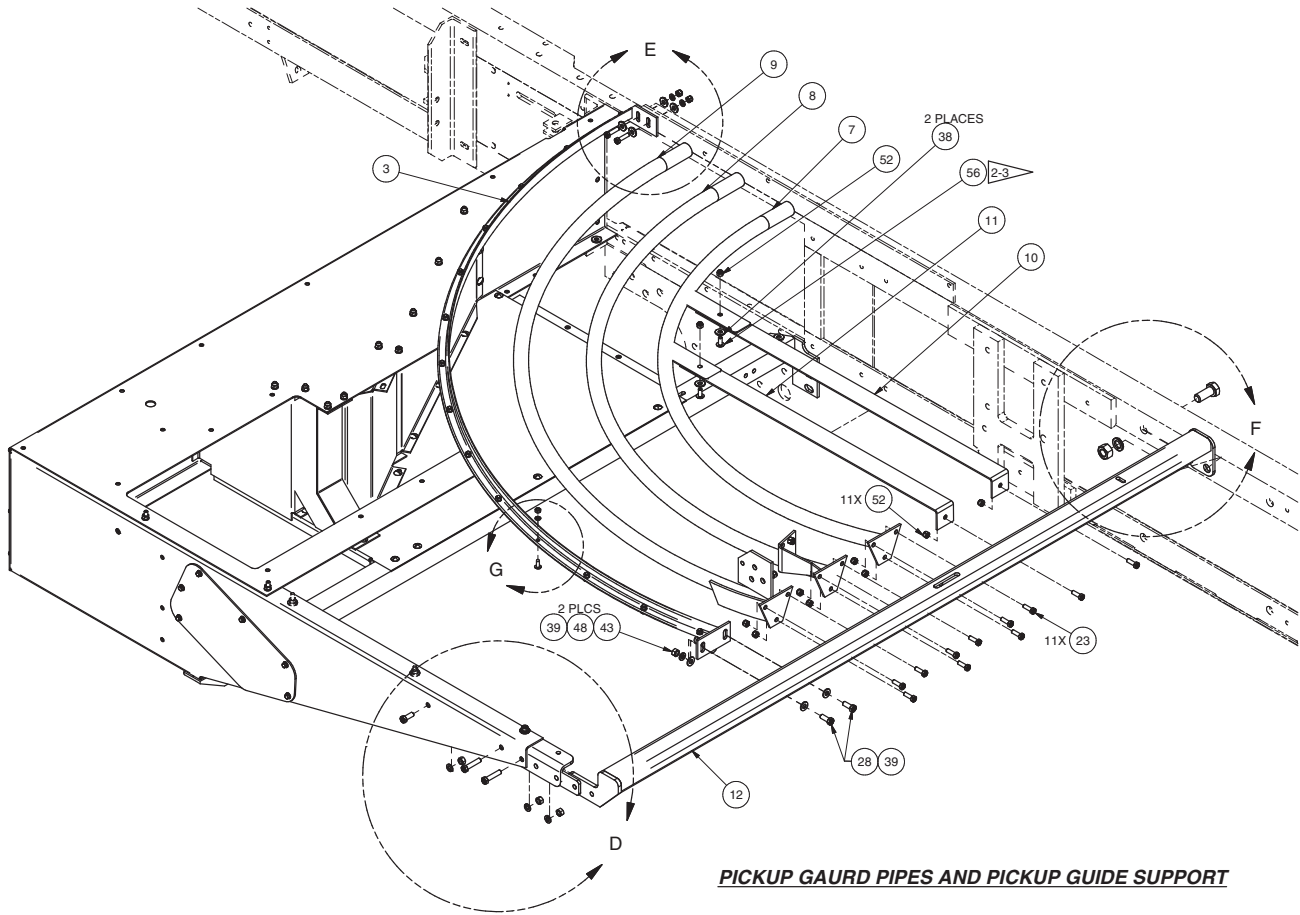
**HOOD LATCH**



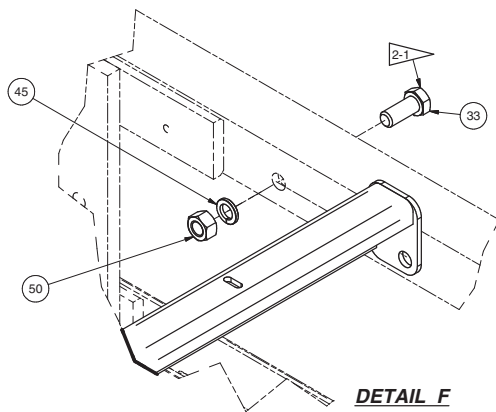
**FASTENERS FOR LATCH, SPRING, AND STOP**

# Feed House Installation, 16" Chamber

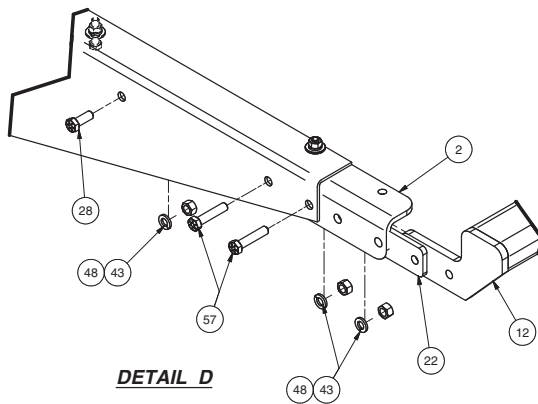
Page 4 of 5



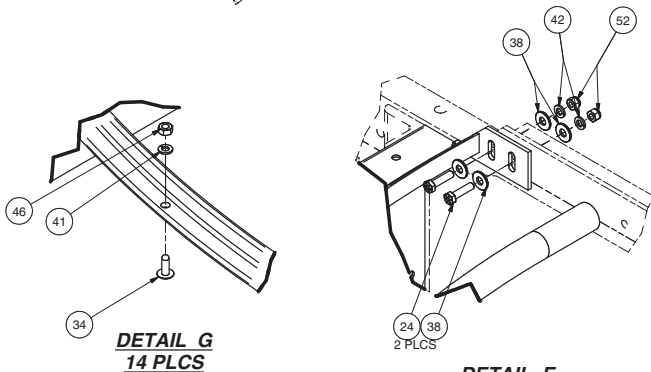
**PICKUP GAURD PIPES AND PICKUP GUIDE SUPPORT**



**DETAIL F**



**DETAIL D**



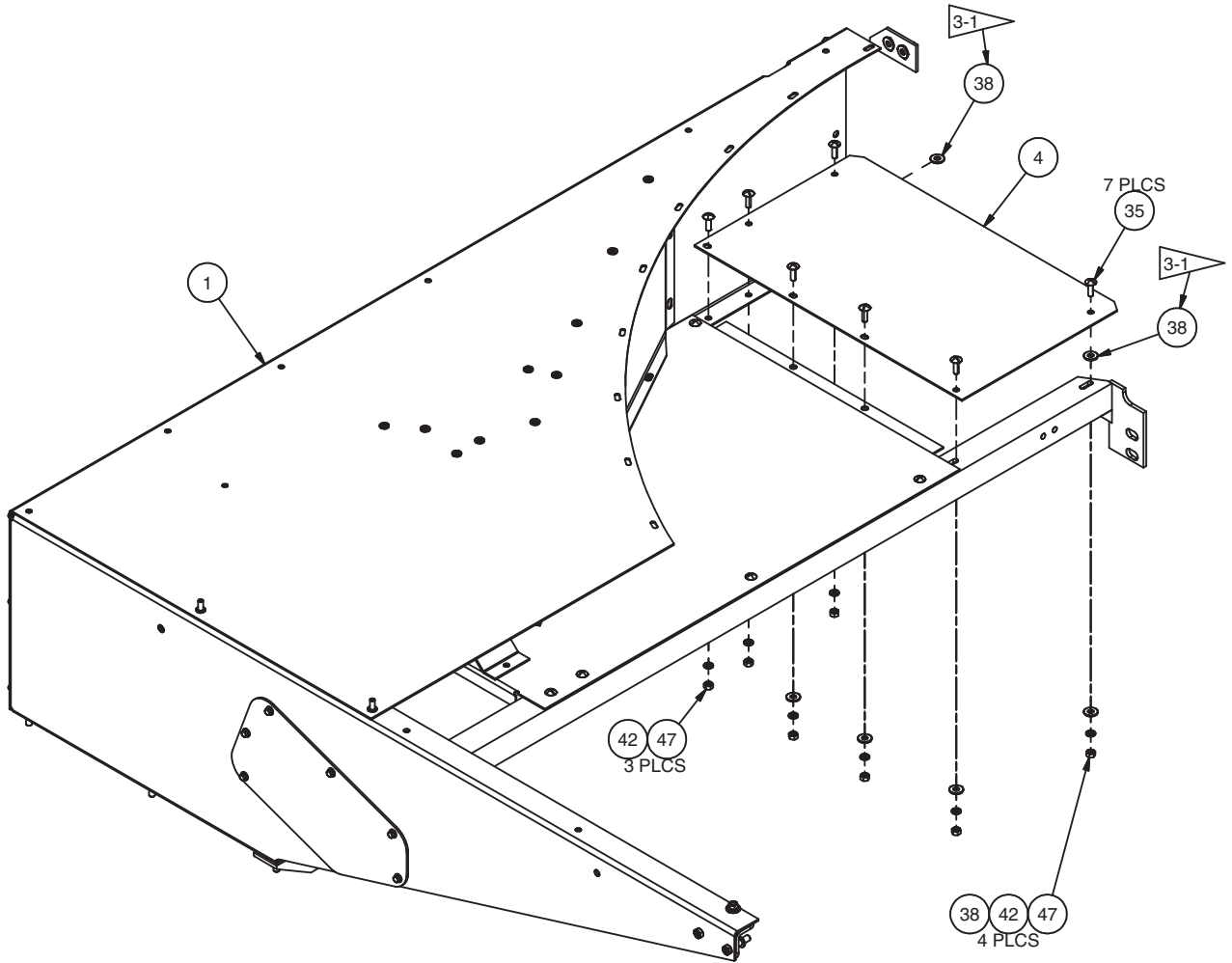
**DETAIL G**  
14 PLCS

**DETAIL E**

- NOTES:**
- 2-1 REUSE FASTENERS ALREADY PROVIDED ON BULL GEAR INSTALLATION.
  - 2-2 FASTENERS PROVIDED IN SHIELD INSTALLATION.
  - 2-3 FLAT WASHER LOCATED UNDER BOLT HEAD
  - 2-4 73.5" LENGTH FROM INSIDE OF FEED HOUSE TO FRAME
  - 2-5 EDGE OF PLATE (CVR0020465) MUST LINE UP WITH MATING SHIELD
  - 2-6 SPRING FOR FEEDARM LATCH (F00000281) GOES ON TOP OF LATCH (F000001563).

# Feed House Installation, 16" Chamber

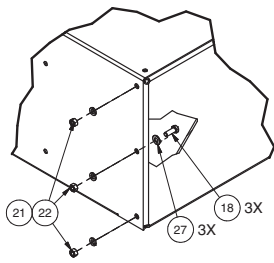
Page 5 of 5



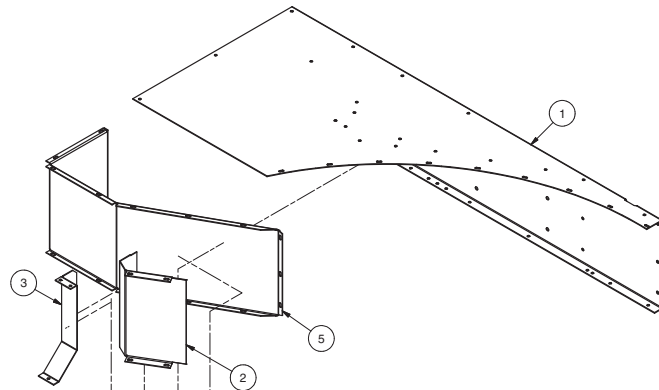
**901970 WEAR PLATE INSTALL**  
**16" 3-TIE**

**3-1** WASHER ADD BETWEEN BOTTOM WEAR PLATE AND FEED HOUSE TO INSURE WEAR PLATE IS ABOVE KNIFE, (AS REQUIRED)

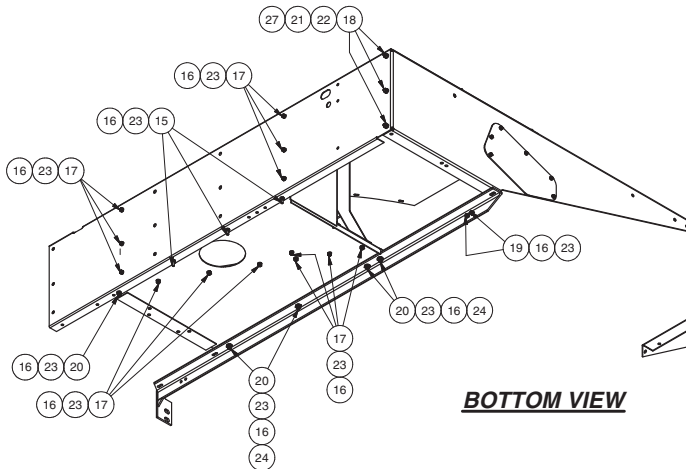
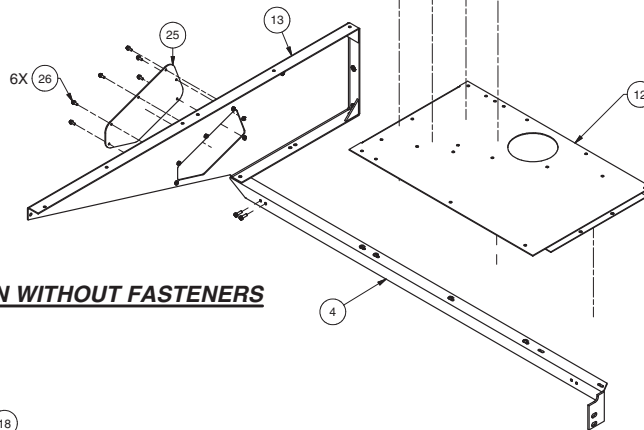
# Feeder House Assembly, 16" Chamber



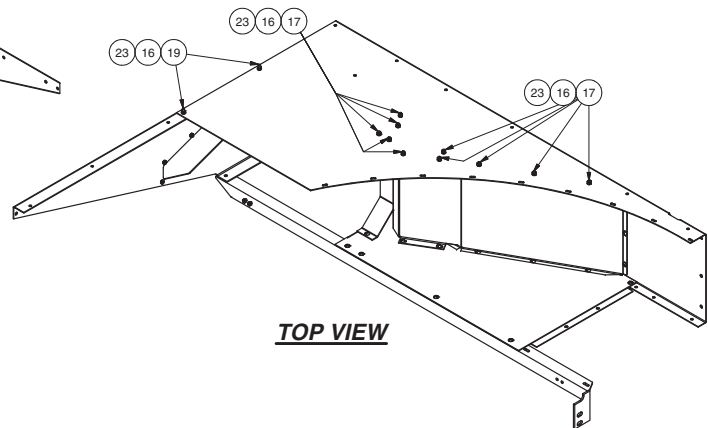
**END PLATE**



**EXPLODED, SHOWN WITHOUT FASTENERS**



**BOTTOM VIEW**



**TOP VIEW**

| Item | Part No.          | Qty | Description                  | Item | Part No.   | Qty | Description      |
|------|-------------------|-----|------------------------------|------|------------|-----|------------------|
|      | <b>FH00016370</b> |     | <b>Feeder House Assembly</b> |      |            |     |                  |
| 1    | FH00020212        | 1   | . Plate, Housing             | 18   | Y17C-0616  | 3   | . Capscrew       |
| 2    | FH00020905        | 1   | . Plate, Ext                 | 19   | R13811014  | 4   | . Capscrew       |
| 3    | FH00020987        | 1   | . Trough Ext, Auger          | 20   | SMTS020002 | 5   | . Machine Screw  |
| 4    | SUP0023008        | 1   | . Feeder House Support       | 21   | R13812514  | 3   | . Lockwasher     |
| 5    | FH00020867        | 1   | . Plate, Back                | 22   | R13809551  | 3   | . Hex Nut        |
| 12   | FH00020198        | 1   | . Plate, Bottom              | 23   | R13811512  | 35  | . Hex Nut        |
| 13   | FH00004907        | 1   | . Plate, Feeder House        | 24   | 223428     | 4   | . Washer         |
| 15   | R13811015         | 3   | . Capscrew                   | 25   | 902681     | 1   | . Cover          |
| 16   | R13812513         | 35  | . Lockwasher                 | 26   | SMS0000300 | 6   | . Screw, Ser Flg |
| 17   | SMT0000201        | 23  | . Screw, Machine             | 27   | 221767W    | 3   | . Flat Washer    |

Rev L

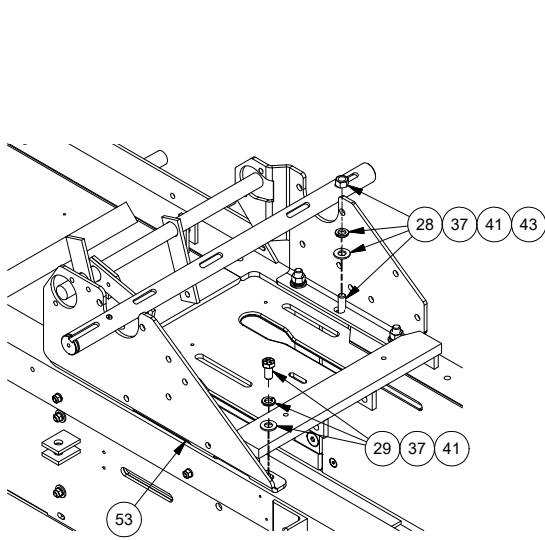
## Section 8

### Knotter

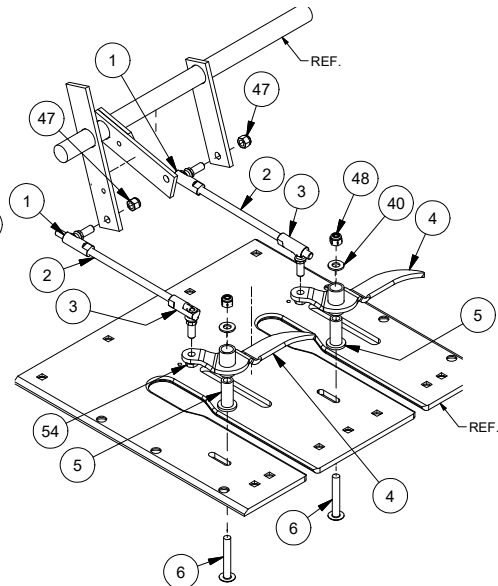
|  |      |
|--|------|
| Knotter Installation, Conventional, 2 Tie .....  | 8-2  |
| . Tank/Pump Assembly, Conventional Knotter ..... | 8-5  |
| . Knotter Assembly, Conventional, 2 Tie.....     | 8-7  |
| .. Housing Assembly, Knotter Clutch.....         | 8-12 |
| .. Disc & Bearing Assembly.....                  | 8-13 |
| .. Conventional Knotter Head Assembly .....      | 8-14 |
| . Meter Wheel Assembly, 2 Tie.....               | 8-16 |
| . Trip Mount Assembly, Conventional.....         | 8-17 |
| <br>   |      |
| Knotter Installation, Tailless, 2 Tie.....       | 8-18 |
| . Knotter Assembly, Tailless, 2 Tie.....         | 8-22 |
| . . Tailless Knotter.....                        | 8-27 |
| . Trip Mount Assembly, Tailless .....            | 8-30 |
| <br>   |      |
| Knotter Drive Installation.....                  | 8-31 |
| Knotter Fan Installation, 2 Tie .....            | 8-33 |
| . Knotter Fan Assembly.....                      | 8-34 |
| <br>   |      |
| Top Plate Installation, Conventional, 2 Tie..... | 8-35 |
| Top Plate Installation, Tailless, 2 Tie .....    | 8-36 |
| <br>   |      |
| Twine Box Installation, 12 Compartment .....     | 8-37 |
| Twine Box Assembly, 12 Compartment .....         | 8-39 |
| Twine Tension Frame Sub-Assembly .....           | 8-40 |

# Knotter Installation, Conventional, 2 Tie

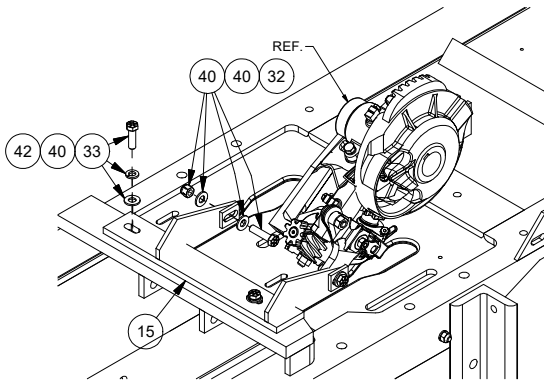
Page 1 of 3



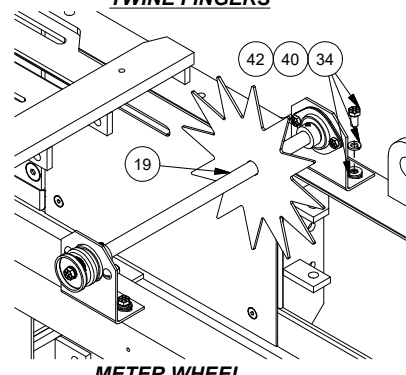
**KNOTTER BRACKET MOUNT**



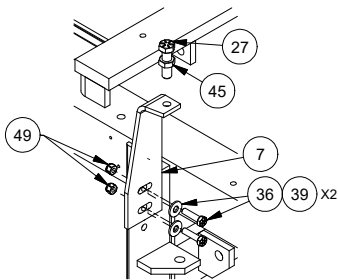
**TWINE FINGERS**



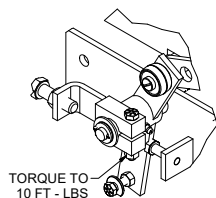
**KNOTTER ANCHOR**



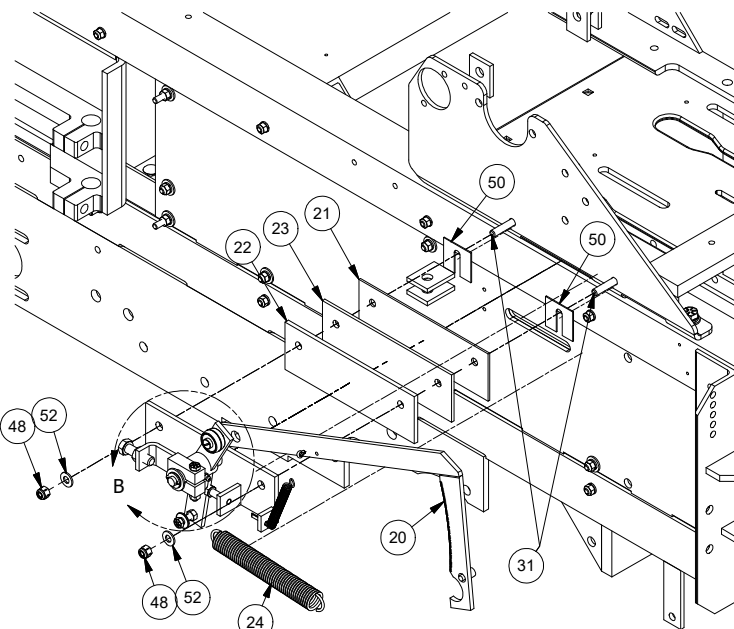
**METER WHEEL**



**TRIP STOP MOUNT**



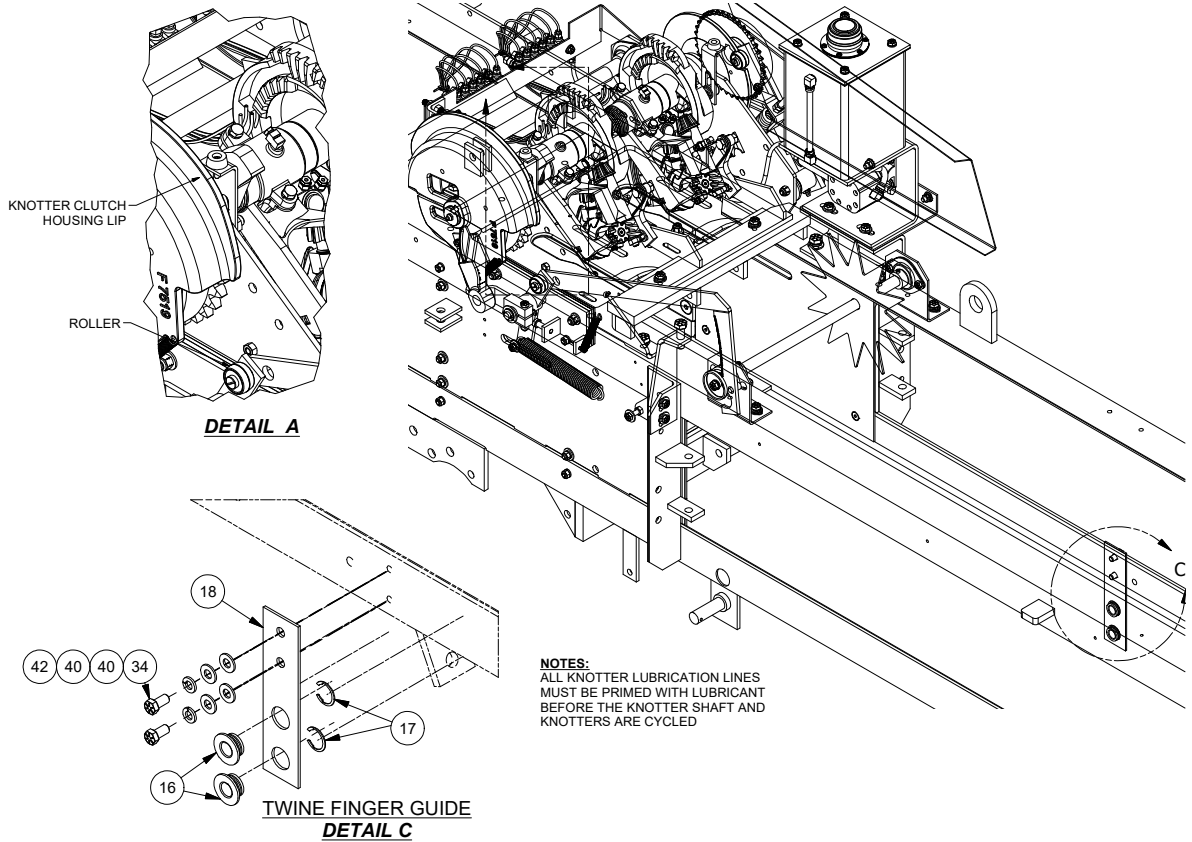
**DETAIL B**



**TRIP MOUNT**

### Knotter Installation, Conventional, 2 Tie

Page 2 of 3



| Item   | Part No.      | Qty | Description                    | Item | Part No.                          | Qty | Description            |
|--|---------------|-----|--------------------------------|------|-----------------------------------|-----|------------------------|
| <b>902596 Knotter Installation, Conventional</b> |               |     |                                |      |                                   |     |                        |
| 1  | F000001294    | 2   | . Ball Joint, RH               | 32   | Y17C-0624                         | 2   | . Capscrew             |
| 2  | F000008391    | 2   | . Rod, Drive                   | 33   | 221499W                           | 4   | . Capscrew             |
| 3  | F000001295    | 2   | . Ball Joint, LH               | 34   | 162572W                           | 6   | . Capscrew             |
| 4  | F000007885    | 2   | . Twine Finger - 2 Tie         | 35   | R13811016                         | 1   | . Capscrew             |
| 5  | F000000181    | 2   | . Bushing, Twine Finger        | 36   | R13811015                         | 2   | . Capscrew             |
| 6  | F000001672    | 2   | . Carriage Bolt                | 37   | 15135W                            | 10  | . Washer               |
| 7  | F000001632    | 1   | . Trip Bar                     | 39   | 223428                            | 13  | . Washer               |
| 8  | F000008205    | 1   | . Bracket                      | 40   | 221767W                           | 22  | . Washer               |
| 9  | F000008206    | 1   | . Mounting Bracket             | 41   | R13812516                         | 8   | . Lockwasher           |
| 10   | *a F000008210 | 1   | . Auto Luber Tank & Pump Assy  | 42   | R13812514                         | 10  | . Lockwasher           |
| 11   | FT00000165    | 1   | . Assembly, Chain              | 43   | 221711W                           | 5   | . Hex Nut              |
| 12   | F000008201    | 1   | . Sprocket                     | 44   | 221705W                           | 2   | . Hex Nut              |
| 13   | MNT037222A    | 1   | . Mounting Plate               | 45   | 234218                            | 1   | . Jam Nut              |
| 14   | *b SAL2700002 | 1   | . Assembly, Conv Knotter       | 46   | 156133W                           | 2   | . Locknut              |
| 15   | F000008388    | 1   | . Anchor Weldment, Knotter HD  | 47   | R13811183                         | 2   | . Use 224118           |
| 16   | F000000856    | 2   | . Bushing                      | 48   | 237567                            | 6   | . Locknut              |
| 17   | F000000857    | 2   | . Ring, Snap                   | 49   | 232939                            | 4   | . Nut, Esna            |
| 18   | F000000524    | 1   | . Holder F/Twine Guide Bushing | 50   | SHM0034535                        | 2   | . Shim, Plunger Roller |
| 19   | *c 901140     | 1   | . Kit, Meter Wheel             | 51   | Y09G-0532                         | 2   | . Capscrew             |
| 20   | *d SAL0000005 | 1   | . Assembly, Trip Mount         | 52   | Y27E-06                           | 2   | . Washer               |
| 21   | SHM0001250    | 1   | . Shim, Knotter Trip           | 53   | SHM037779B                        | 2   | . Shim, Knotter Mount  |
| 22   | SHM0000250    | 1   | . Shim, Knotter Trip           | 54   | NFL0003750                        | 2   | . Nut, LH Jam          |
| 23   | SHM0001875    | 1   | . Shim                         |      |                                   |     |                        |
| 24   | F000001517    | 1   | . Spring, Trip                 |      |                                   |     |                        |
| 25   | NYL0000250    | 3'  | . Tubing, Nylaflow             |      |                                   |     |                        |
| 26   | AO00000255    | 3'  | . Loom, Split                  |      |                                   |     |                        |
| 27   | 221569W       | 1   | . Capscrew                     |      |                                   |     |                        |
| 28   | Y09G-0832     | 5   | . Capscrew                     |      |                                   |     |                        |
| 29   | 221560W       | 3   | . Capscrew                     |      |                                   |     |                        |
| 31   | R13801813     | 2   | . Capscrew                     |      |                                   |     |                        |
|  |               |     |                                | *a   | See Separate Coverage (Page 8-5)  |     |                        |
|  |               |     |                                | *b   | See Separate Coverage (Page 8-7)  |     |                        |
|  |               |     |                                | *c   | See Separate Coverage (Page 8-16) |     |                        |
|  |               |     |                                | *d   | See Separate Coverage (Page 8-17) |     |                        |

Rev B

# Knotter Installation, Conventional, 2 Tie

Page 3 of 3

**NOTES:**

- 3-1 1. PRIME KNOTTER IUBE SYSTEM PRIOR TO INSTALLING PUMP SPROCKET:  
 A. TURN MANIFOLD LUBE VALVES CW ALL THE WAY IN.  
 B. BACK EACH LUBE VALVE OUT 1/2 TURN CCW.  
 C. FILL OIL RESERVOIR WITH ONE QUART OF SAE 30 OIL (LBR00030).  
 D. USING SPROCKET WRENCH, TURN PUMP SHAFT 1 TURN CW.  
 E. WAIT 10 SECONDS.  
 F. REPEAT STEPS D AND E UNTIL OIL BLEEDS FROM EACH LUBE POINT.

LUBER MANIFOLD AND FITTING F000001441

TUBE TRAVELS ON THE INSIDE OF KNOTTER MOUNT AND UNDER THE 2 SHAFTS

PUMP DRIVE SPROCKET PART OF ASSEMBLY# SAL2700002

**LUBER CHAIN SHIELD AND SPROCKET**

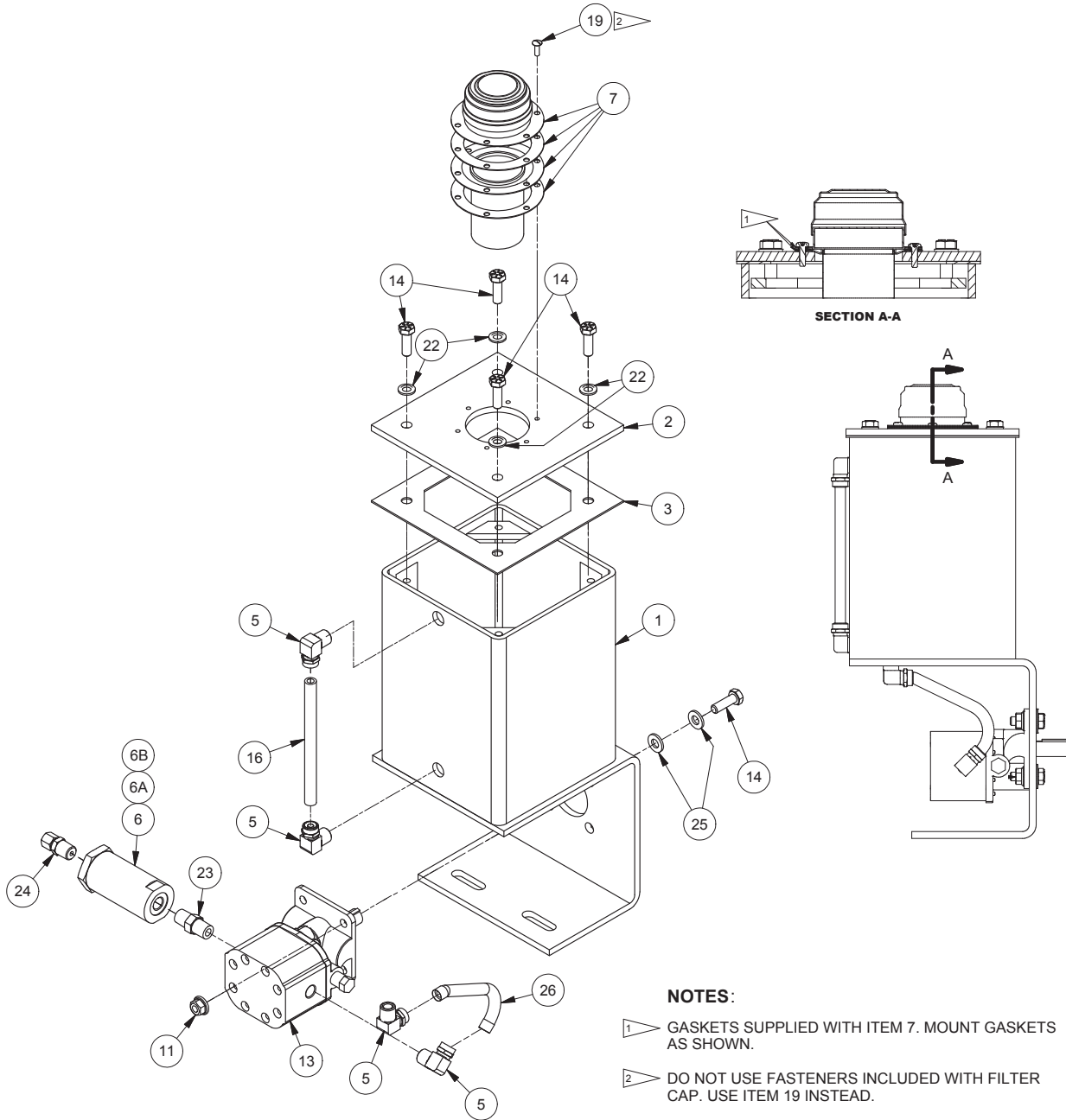
LUBER CHAIN SHIELD P/N: F00008203

**LUBER BRACKET MOUNT**

**TRIP ARM SPRING MOUNT**



# Tank/Pump Assembly, Conventional Knotter



**NOTES:**

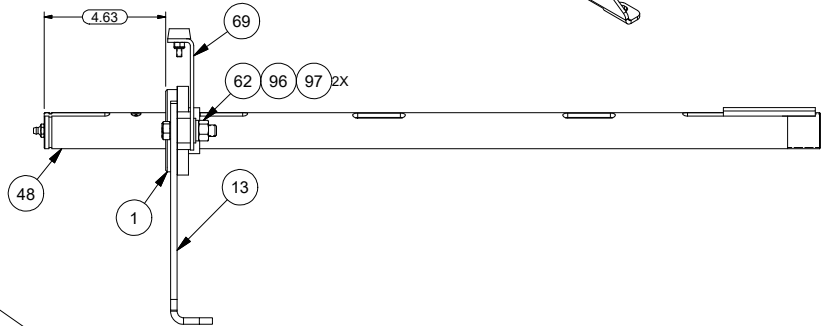
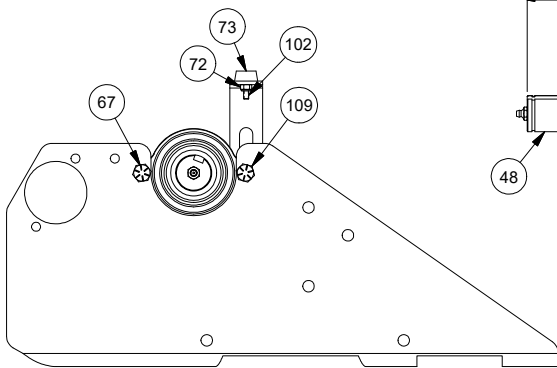
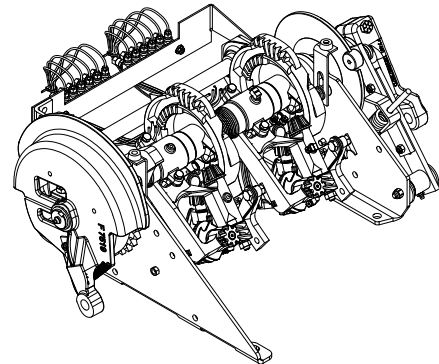
- 1 GASKETS SUPPLIED WITH ITEM 7. MOUNT GASKETS AS SHOWN.
- 2 DO NOT USE FASTENERS INCLUDED WITH FILTER CAP. USE ITEM 19 INSTEAD.

| Item | Part No.         | Qty | Description               | Item | Part No.  | Qty | Description     |
|------|------------------|-----|---------------------------|------|-----------|-----|-----------------|
|      | <b>F00008210</b> |     | <b>Tank/Pump Assembly</b> |      |           |     |                 |
| 1    | F00008196        | 1   | . Tank, Auto Lubber       | 14   | R13811014 | 8   | . Capscrew      |
| 2    | F00008197        | 1   | . Tank Cover              | 16   | F00008199 | 1'  | . Tube, Sight   |
| 3    | F00008198        | 1   | . Gasket                  | 19   | 230640    | 6   | . Machine Screw |
| 5    | F00008209        | 4   | . Fitting                 | 22   | 214479    | 4   | . Seal          |
| 6    | FIL0009052       | 1   | . Filter                  | 23   | 221280    | 1   | . Fitting       |
| 6A   | 259014           | 1   | .. Spring Kit             | 24   | F00008221 | 1   | . Connector     |
| 6B   | 259013           | 1   | .. Element and Seal Kit   |      | IMP26106  | 1   | .. Nut & Sleeve |
| 7    | FIL0010003       | 1   | . Cap, Filter             |      | IMP26006  | 1   | ... Sleeve      |
| 11   | 00273802         | 4   | . Nut                     | 25   | 223428    | 4   | . Flat Washer   |
| 13   | PMP0000003       | 1   | . Pump                    | 26   | 906907    | 1   | . Tube          |

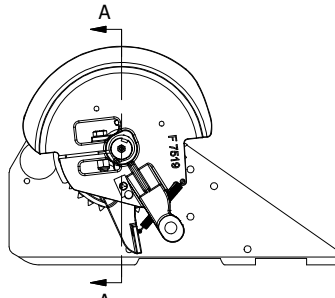
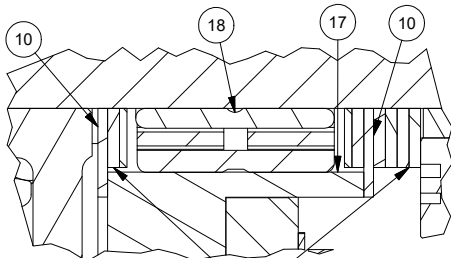
Rev E

# Knotter Assembly, Conventional, 2 Tie

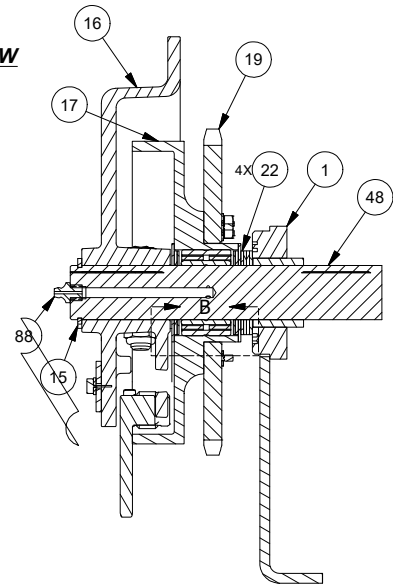
Page 1 of 6



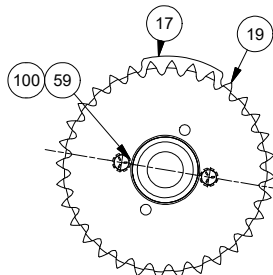
**STEP 1-  
POSITION SHAFT AND SECURE BEARING SET SCREW**



**STEP 2- LH MAIN SHAFT**



**STEP 2- SECTION A-A**



**STEP 2- TIMING**

**STEP 2- DETAIL B**

- 7
- 21
- 22
- 55
- 56
- AR

**NOTES:**

- 2-1. SECURE ITEM 1 TO ITEM 13, MEASURE 4.63" FROM SHAFT END TO BEARING BASE AND TIGHTEN SET SCREW ON ITEM 1 TO 165 IN-LBS.
- 2-2. TIMING FOR ITEM 19: GRADE 5 SHEAR BOLTS SHOULD BE USED IN HOLES THAT ALIGN WITH THE TEETH OF ITEM 19.
- 2-3. USE AN EQUIVALENT AMOUNT OF SHIMS TO CENTER ITEM 18 ON THE RACE OF ITEM 17. THE GAP BETWEEN ITEM 10 AND ITEM 17 SHOULD BE .025". THE HOLE OF ITEM 18 SHOULD ALIGN CLOSELY WITH THE LUBE HOLE ON THE SHAFT (ITEM 48).
- 2-4. SHIM AS REQUIRED (MAY NOT BE NEEDED) BETWEEN ITEMS 16 & 17 TO POSITION THE ROLLER OF ITEM 16 INTO ITEM 17 AS FAR IN AS POSSIBLE BUT STILL ALLOWING FREE MOVEMENT.
- 2-5. SHIM AS REQUIRED (MAY NOT BE NEEDED) TO FILL ANY SPACING BETWEEN ITEM 16 AND SNAP RING (ITEM 15).
- 2-6. USE LOCTITE #635 TO SECURE BUSHING (ITEM 18) TO SHAFT (ITEM 48). DO NOT GET LOCTITE IN LUBER HOLE ON SHAFT.

# Knotter Assembly, Conventional, 2 Tie

Page 2 of 6

| Item              | Part No.      | Qty | Description                    | Item                                 | Part No.      | Qty | Description                |
|-------------------|---------------|-----|--------------------------------|--------------------------------------|---------------|-----|----------------------------|
| <b>SAL2700002</b> |               |     |                                | <b>Knotter Assembly, Conv. 2-Tie</b> |               |     |                            |
| 1                 | F00007063     | 2   | . Bearing                      | 56                                   | SHM0000105    | 2   | . Shim                     |
| 2                 | F00000099     | 3   | . Set Collar                   | 57                                   | 18515W        | 7   | . Washer                   |
| 3                 | CAM0007180    | 1   | . Cam                          | 58                                   | 221771W       | 6   | . Washer                   |
| 4                 | F000004104    | 3   | . Key                          | 59                                   | 236655        | 2   | . Lockwasher               |
| 5                 | F000007904    | 3   | . Key                          | 61                                   | F000008288    | 8   | . Fitting                  |
| 6                 | F000008054    | 1   | . Key                          | 62                                   | 221710W       | 4   | . Hex Nut                  |
| 7                 | R616841       | 11  | . Mach Bushing                 | 63                                   | 18508W        | 3   | . Capscrew                 |
| 8                 | GER0006068    | 2   | . Gear, Modular Cam            | 64                                   | 221767W       | 2   | . Washer                   |
| 9                 | BKT0032984    | 1   | . Bracket,Auto Luber           | 65                                   | R13801850     | 1   | . Capscrew                 |
| 10                | F000004136    | 2   | . Washer                       | 66                                   | 910363        | 2   | . Bearing, Cam Follower    |
| 11                | F000001441    | 1   | . Fittingbow                   | 67                                   | R13810879     | 4   | . Capscrew                 |
| 12                | F000007461    | 1   | . Needle Yoke Drive Arm        | 68                                   | 223572        | 1   | . Fitting                  |
| 13                | F000008369    | 1   | . Plate, LH Mounting           | 69                                   | STO0022419    | 2   | . Bar, Stop                |
| 14                | F000008368    | 1   | . Plate, RH Mounting           | 70                                   | 221703W       | 4   | . Hex Nut                  |
| 15                | 304526W       | 1   | . Ring, Snap- Ext              | 71                                   | 221708W       | 4   | . Hex Nut                  |
| 16                | *a F000007519 | 1   | . Housing Assembly             | 72                                   | 223799        | 2   | . Nut, Esna                |
| 17                | *b 900249     | 1   | . Disc & Bearing Assembly      | 73                                   | BMP0004243    | 2   | . Rubber Bumper F/Hood     |
| 18                | F000004135    | 1   | . Inner Race                   | 74                                   | 910370        | 1   | . Twine Finger Drive Shaft |
| 19                | F000000755    | 1   | . Sprocket, Knotter Clutch     | 75                                   | LUB0833116    | 2   | . Manifold                 |
| 21                | F000004161    | 6   | . Mach Bushing                 | 76                                   | R13811443     | 2   | . Washer                   |
| 22                | F000004160    | 10  | . Mach Bushing                 | 78                                   | *c KNT006006A | 2   | . Head Assembly            |
| 23                | NEJ0013750    | 1   | . Hce-549 Nut 1-3/8 Unf        | 79                                   | 15113W        | 1   | . Locknut                  |
| 24                | F000007528    | 1   | . Weldment, Disc Brake         | 82                                   | 221705W       | 6   | . Hex Nut                  |
| 25                | F000007450    | 1   | . Brake Plate W/Lining         | 83                                   | R13812513     | 5   | . Lockwasher               |
| 26                | F000007451    | 2   | . Brake Plate Stud             | 84                                   | R13806234     | 2   | . Capscrew                 |
| 27                | F000007453    | 2   | . Spring, Brake Plate          | 86                                   | ZZ00000419    | 1   | . Key                      |
| 28                | F000007449    | 1   | . Plate & Lining (Msds Reqd)   | 87                                   | R13811082     | 1   | . Capscrew                 |
| 29                | F000000246    | 1   | . Washer                       | 88                                   | 00191758      | 1   | . Fitting, Lube            |
| 30                | F000007587    | 2   | . Seal                         | 89                                   | 221518W       | 1   | . Capscrew                 |
| 31                | LEV0025133    | 1   | . Lever Assembly               | 90                                   | 237567        | 1   | . Locknut                  |
|                   | F000007586    | 1   | . Bushing                      | 91                                   | R13801813     | 1   | . Capscrew                 |
| 32                | 910372        | 1   | . Weldment, Upper Saddle Lever | 95                                   | R13802914     | 3   | . Washer                   |
| 33                | F000007585    | 1   | . Sleeve, Lever                | 96                                   | R13811432     | 4   | . Washer                   |
| 34                | F000007448    | 1   | . Eyebolt                      | 97                                   | 15157W        | 4   | . Lockwasher               |
| 35                | F000007559    | 1   | . Spring, Saddle Lever         | 100                                  | 16805W        | 2   | . Capscrew                 |
| 37                | F000000802    | 1   | . Washer                       | 101                                  | 221711W       | 1   | . Hex Nut                  |
| 38                | 223587        | 2   | . Locknut                      | 102                                  | Y74G-(1032)12 | 2   | . Capscrew                 |
| 39                | R13811015     | 2   | . Capscrew                     | 104                                  | 242601        | 2   | . Cable Tie (Black)        |
| 40                | R13811190     | 2   | . Locknut                      | 105                                  | 221763W       | 1   | . Washer                   |
| 41                | F000008287    | 4   | . Fitting                      | 106                                  | 235708        | 1   | . Jam Nut                  |
| 43                | F000008202    | 1   | . Sprocket                     | 107                                  | R13810989     | 2   | . Capscrew                 |
| 44                | F000006003    | 2   | . Bearing & Set Collar         | 108                                  | 264150W       | 4   | . Nut                      |
| 45                | F000006004    | 4   | . Flangette                    | 109                                  | R13802037     | 2   | . Capscrew                 |
| 46                | F000007959    | 1   | . Bracket                      | 112                                  | NEJ0005000    | 2   | . Nut, Esna Jam            |
| 47                | 221707W       | 5   | . Hex Nut                      | 113                                  | 191534W       | 1   | . Nut                      |
| 48                | 908339        | 1   | . Shaft, Knotter               | 114                                  | Y02F-0816     | 1   | . Roll Pin                 |
| 49                | HTB0030006    | 1   | . Capscrew                     |                                      |               |     |                            |
| 50                | 18466W        | 2   | . Capscrew                     |                                      |               |     |                            |
| 51                | F000001517    | 1   | . Spring, Trip                 |                                      |               |     |                            |
| 52                | 209511        | 1   | . Fitting                      |                                      |               |     |                            |
| 54                | 18497W        | 3   | . Capscrew                     |                                      |               |     |                            |
| 55                | SHM0000103    | 2   | . Shim                         |                                      |               |     |                            |

\*a See Separate Coverage (Page 8-12)

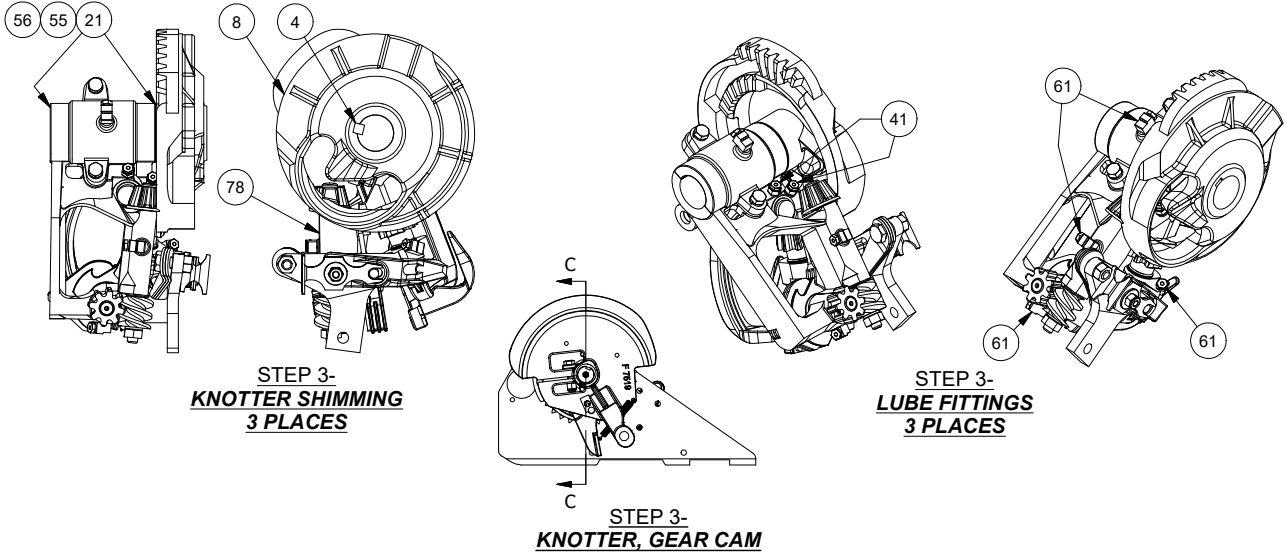
\*b See Separate Coverage (Page 8-13)

\*c See Separate Coverage (Page 8-14)

Rev V

# Knotter Assembly, Conventional, 2 Tie

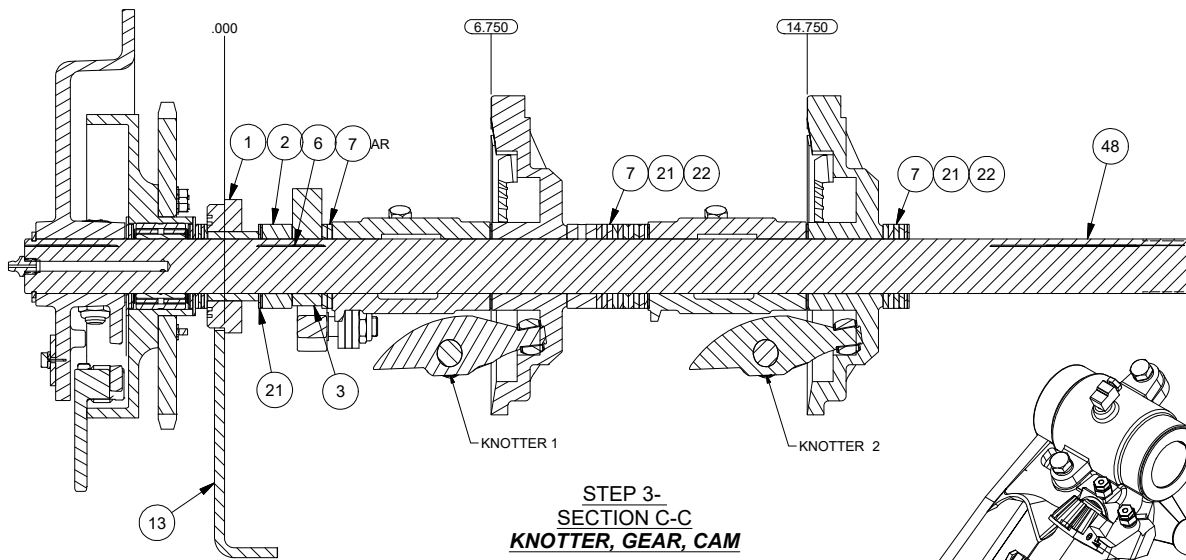
Page 3 of 6



**STEP 3-  
KNOTTER SHIMMING  
3 PLACES**

**STEP 3-  
LUBE FITTINGS  
3 PLACES**

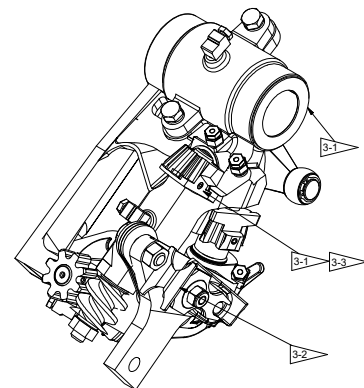
**STEP 3-  
KNOTTER, GEAR CAM**



**STEP 3-  
SECTION C-C  
KNOTTER, GEAR, CAM**

**NOTES:**

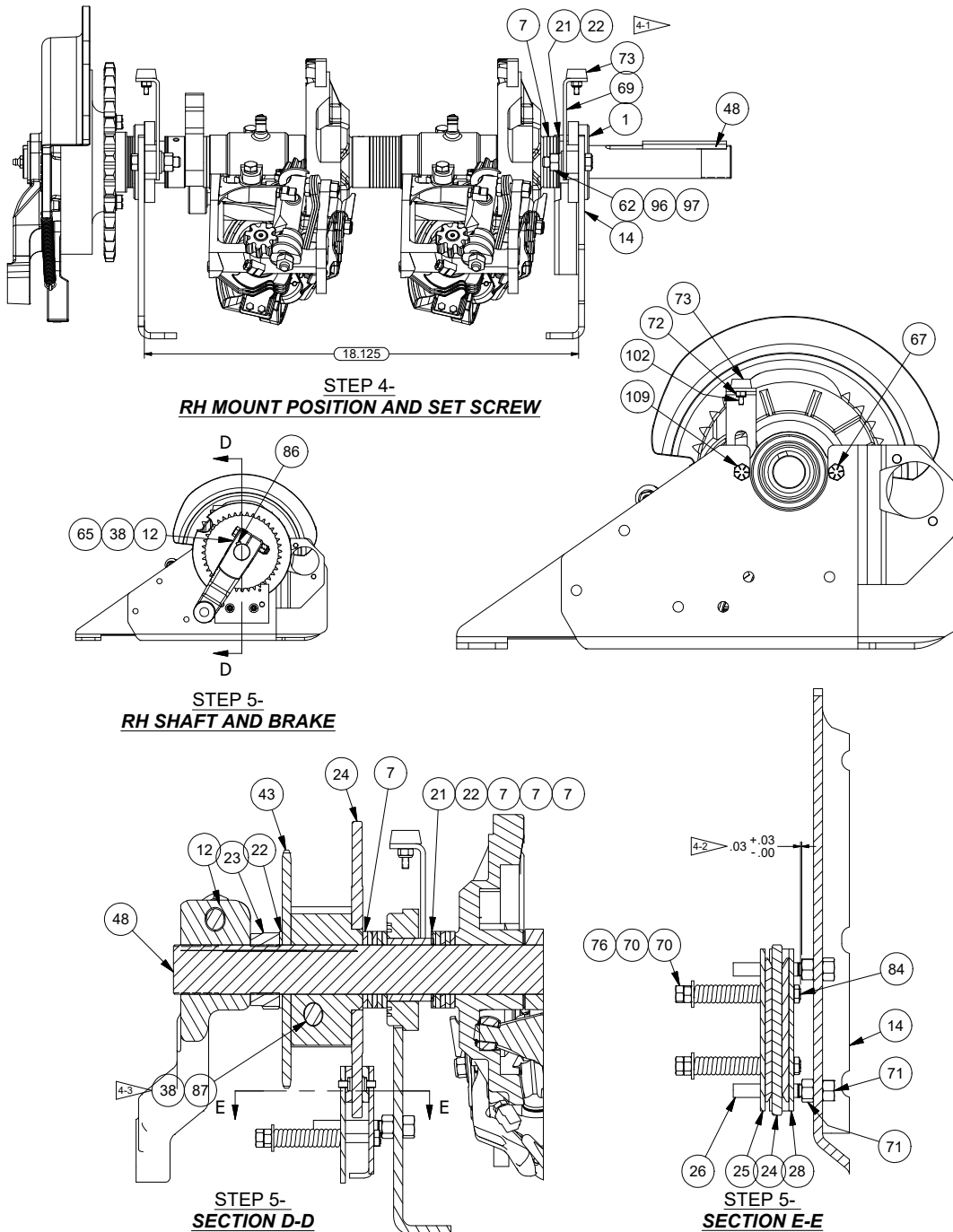
- 3-1. REMOVE PAINT FROM LOCATIONS ON KNOTTER THAT CONTACT SHIMS AND KNOTTER CAM/GEAR.
- 3-2. BREAK OFF SPECIFIED LOCATION OF KNOTTER SPRING ON KNOTTERS 1 & 2 DUE TO AN INTERFERENCE ISSUE.
- 3-3. SHIM AS REQUIRED SO THAT THERE IS .000" TO .005" CLEARANCE BETWEEN THE FLATS OF THE PINIONS ON ITEM 75 AND THE FLAT OF ITEM 8. USE FIXTURE TO CHECK SPACING BETWEEN MODULAR CAM GEAR (ITEM 8) WITH KNOTTER HEAD ASSEMBLY (ITEM 78). REFERENCE ASSEMBLY INSTRUCTIONS.
- 3-4. REFER TO PHOTO SHEET FOR LUBE FITTING ORIENTATION AND NUMBERING.



**STEP 3-  
KNOTTER PREP**

# Knotter Assembly, Conventional, 2 Tie

Page 4 of 6

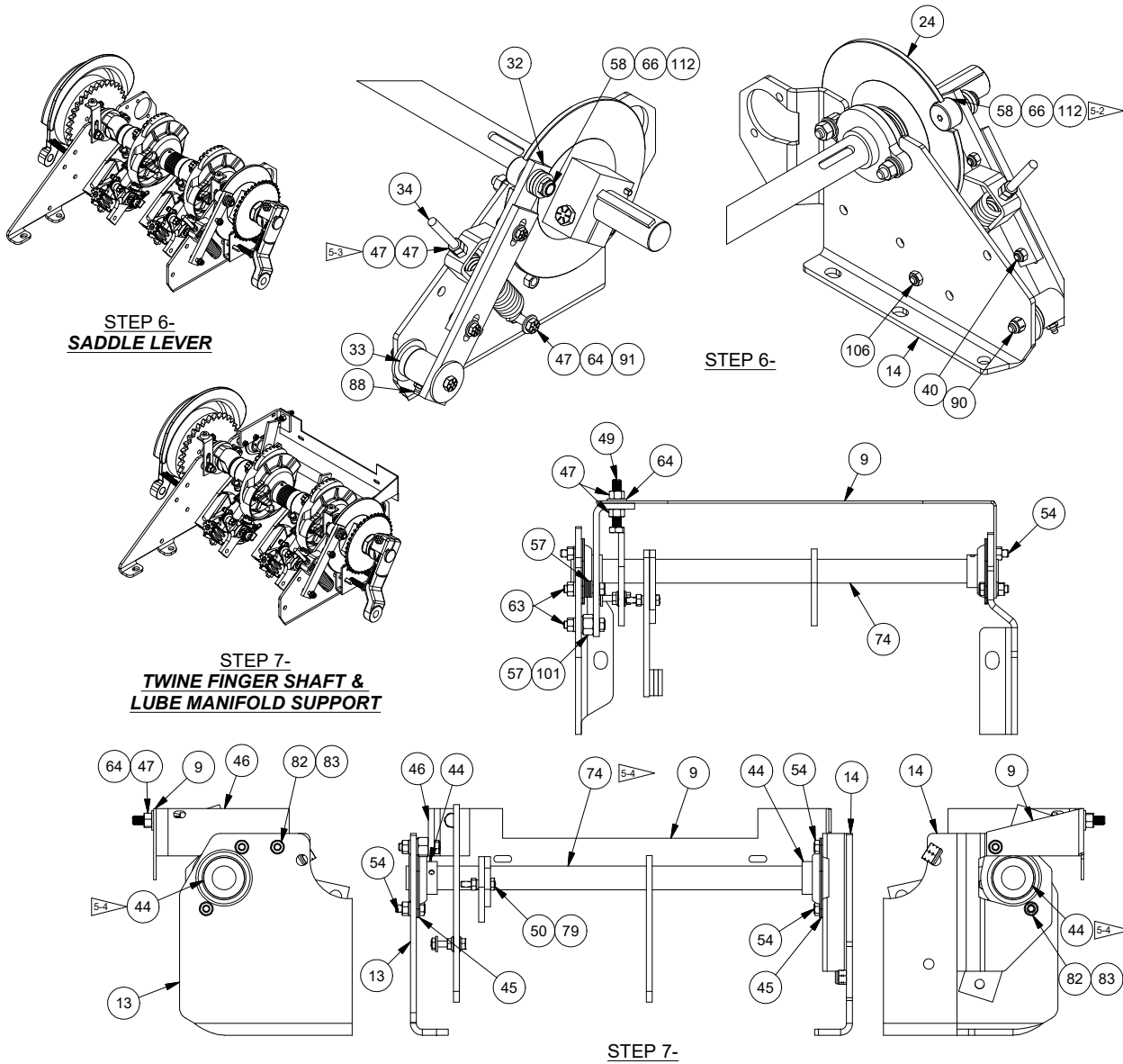


**NOTES:**

- 4-1. SHIM AS REQUIRED TO MEET 18.125" WIDTH REQUIREMENT OF ITEM 13 & ITEM 14. TIGHTEN SET SCREW ON ITEM 1 TO 165 IN-LBS ONCE WIDTH REQUIREMENT IS MET.
- 4-2. SHIM AS REQUIRED SO THAT THE INNER BREAK PAD (ITEM 28) CLEARS THE NUTS (ITEMS 84) BY .03" TO .06".
- 4-3. USE ANTI-SEIZE BETWEEN NUT (ITEM 23) AND THE SHAFT THREADS (ITEM 48).

# Knotter Assembly, Conventional, 2 Tie

Page 5 of 6

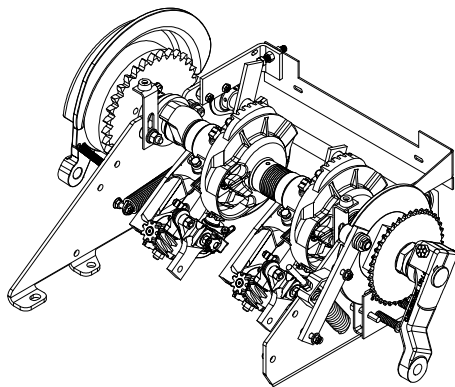


**NOTES:**

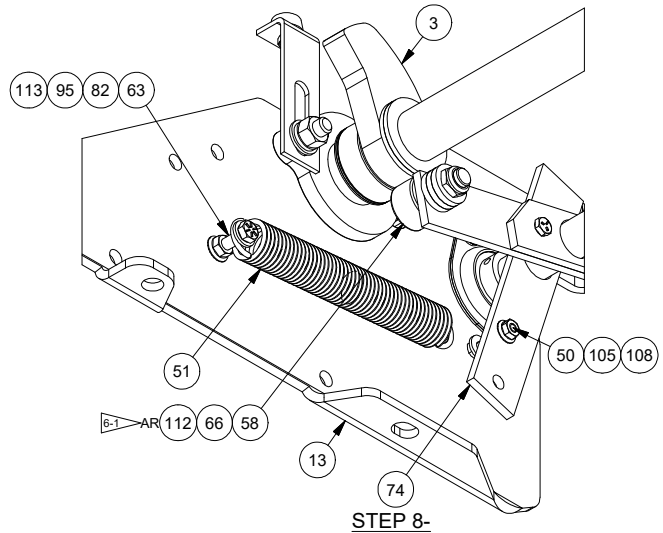
- 5-1. USE ITEM 33 TO PRESS SEALS (ITEM 30, QTY 2) INTO SADDLE LEVER (ITEM 31) ON BOTH SIDES OF INTERNAL BUSHING.
- 5-2. USE WASHER (ITEM 58) AS REQUIRED TO CENTER ROLLER (ITEM 66) INTO BRAKE DISC (ITEM 24).
- 5-3. TIGHTEN NUTS (ITEM 47) 8 FULL TURNS IN PAST SPRING FREE LENGTH (ITEM 35 UNLOADED).
- 5-4. CENTER TWINE FINGER SHAFT (ITEM 74) IN BEARINGS (ITEM 44, QTY 2) BEFORE TIGHTENING THE SET SCREWS ON BEARINGS TO 87 IN-LBS. BAR ON ITEM 74 SHOULD MAKE SOLID CONTACT WITH ADJUSTMENT BOLT (ITEM 49).

# Knotter Assembly, Conventional, 2 Tie

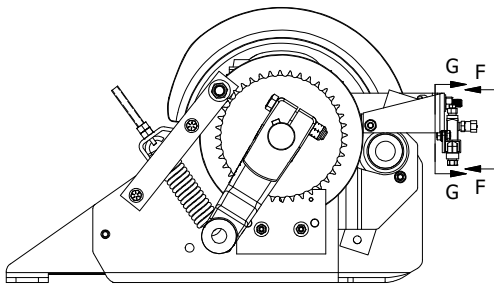
Page 6 of 6



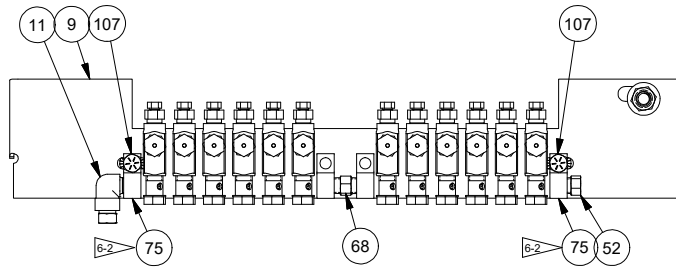
**STEP 8-  
TWINE FINGER SHAFT SPRING & ROLLER**



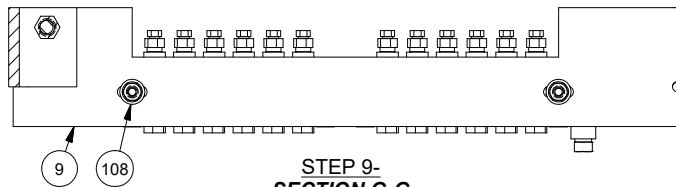
**STEP 8-**



**STEP 9-  
LUBE MANIFOLD MOUNTING**



**STEP 9-  
VIEW F-F**



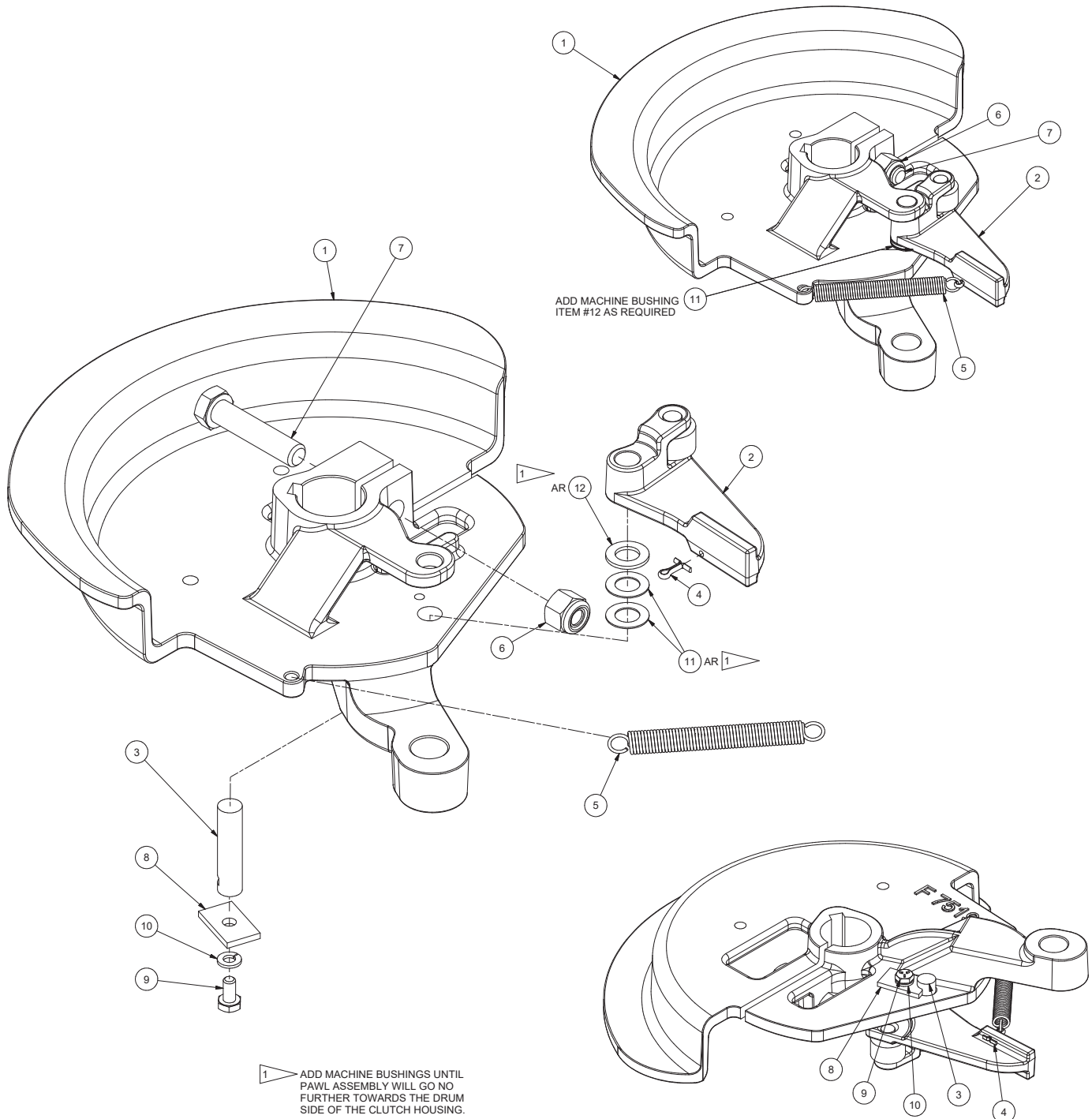
**STEP 9-  
SECTION G-G**

**NOTES:**

6-1. USE WASHER (ITEM 58) AS REQUIRED TO CENTER ROLLER (ITEM 66) ON CAM (ITEM 3)

6-2. REFER TO PHOTO SHEET FOR LUBER LINE (ITEM 53) ROUTING AND ZIP TIE (ITEMS 104 & 111) PLACEMENT. THESE ITEMS ARE NOT SHOWN ON THIS PRINT.

# Housing Assembly, Knotter Clutch

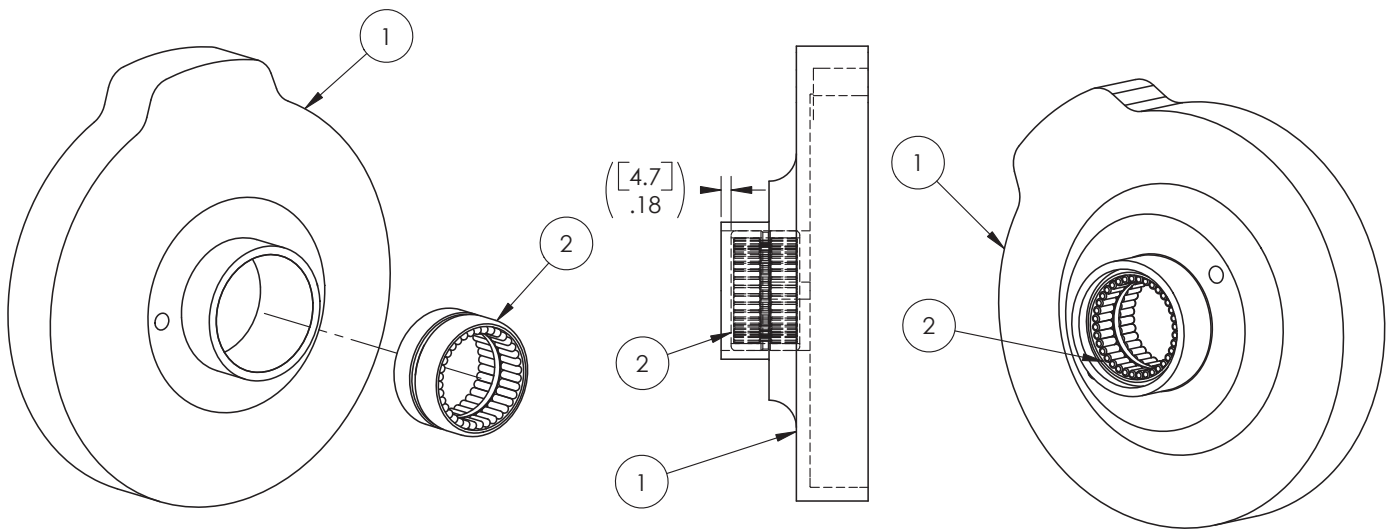


| Item                                      | Part No.   | Qty | Description               | Item | Part No.   | Qty | Description     |
|---|------------|-----|---------------------------|------|------------|-----|-----------------|
| <b>F000007519 Clutch Housing Assembly</b> |            |     |                           |      |            |     |                 |
| 1   | CLH035959D | 1   | . Housing, Knotter Clutch | 8    | KPR0020740 | 1   | . Plate, Keeper |
| 2   | CLH0020799 | 1   | . Pawl, Knotter Clutch    | 9    | 133469W    | 1   | . Capscrew      |
| 3   | PIN0020739 | 1   | . Pin                     | 10   | R13812512  | 1   | . Lockwasher    |
| 4   | 00103384   | 1   | . Cotter Pin              | 11   | F000008315 | 2   | . Washer        |
| 5   | F000004115 | 1   | . Spring, Ext             | 12   | ZZ00000210 | 1   | . Mach Bushing  |
| 6   | 223587     | 1   | . Nut, ESNA               |      |            |     |                 |
| 7   | 221574W    | 1   | . Capscrew                |      |            |     |                 |

Rev C



# Disc & Bearing Assembly

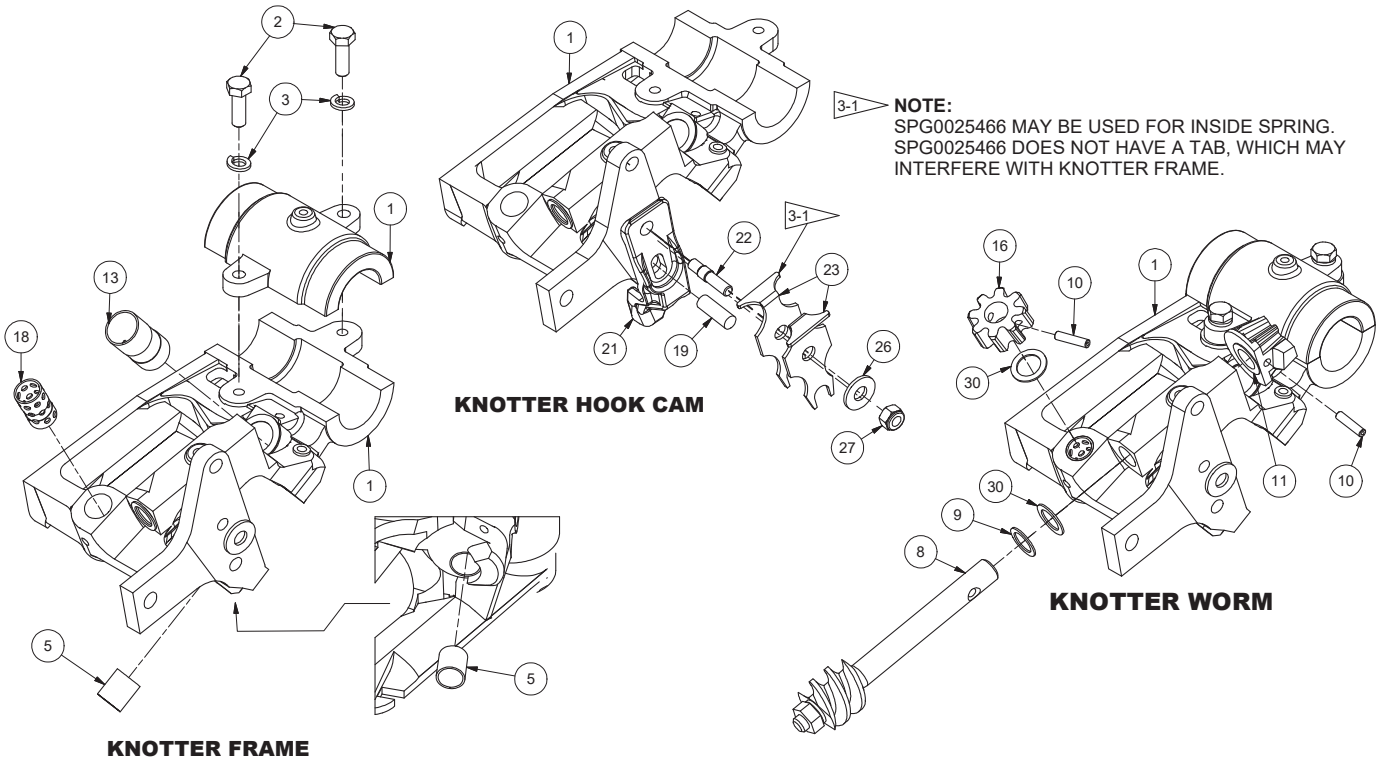


| Item | Part No.               | Qty | Description                        | Item | Part No. | Qty | Description |
|------|------------------------|-----|------------------------------------|------|----------|-----|-------------|
|      | <b>900249</b>          |     | <b>Disc &amp; Bearing Assembly</b> |      |          |     |             |
| 1    | *a -----               |     | . Clutch Disc                      |      |          |     |             |
| 2    | F000004134             | 1   | . Bearing                          |      |          |     |             |
|      |                        |     | Rev -                              |      |          |     |             |
|      | *a Not Sold Separately |     |                                    |      |          |     |             |

# Conventional Knotter Head Assembly

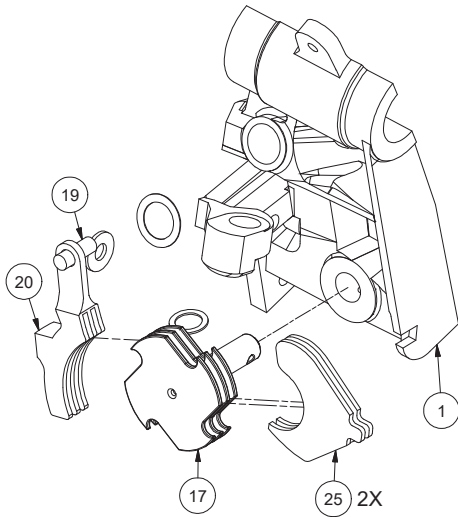
Page 1 of 2

| Item | Part No.          | Qty | Description                  | Item | Part No.   | Qty | Description                        |
|------|-------------------|-----|------------------------------|------|------------|-----|------------------------------------|
|      | <b>KNT006006A</b> |     | <b>Head Assembly</b>         |      |            |     |                                    |
| 1    | KNT0060060        | 1   | . Frame, Knotter             | 18   | RS00006003 | 1   | . Bushing                          |
| 2    | Y09C-M0825        | 2   | . Capscrew                   | 19   | RS03451926 | 0   | . Pin                              |
| 3    | WLKM000080        | 2   | . Lockwasher                 | 20   | F000007868 | 1   | . Twine Holder - Plated            |
| 4    | RS00006015        | 1   | . Bill Hook                  | 21   | F000008051 | 1   | . Cam, Knotter Hook (Plated)       |
| 5    | RS00006002        | 1   | . Bushing                    | 22   | F000007948 | 1   | . Screw, Knot Hook Cam Adjusting   |
| 6    | 253270            | 1   | . Pinion, Bill Hook (Plated) | 23   | F000007947 | 2   | . Spring, Hook Cam Adjust (Plated) |
| 7    | 253271            | 1   | . Pin                        | 24   | F000008052 | 3   | . Spring                           |
| 8    | F000007876        | 1   | . Shaft, Worm                | 25   | F000007870 | 2   | . Cleaner, Twine Disc- Plated      |
| 9    | 257609            | 1   | . Washer                     | 26   | 223428     | 1   | . Washer                           |
| 10   | RS05227344        | 2   | . Pin, Spiral                | 27   | F000007949 | 1   | . Nut, Esna                        |
| 11   | GER0007873        | 1   | . Pinion (Plated)            | 28   | Y09C-M1030 | 1   | . Capscrew                         |
| 12   | F000008050        | 1   | . Arm, Knife (Plated)        | 29   | NCHM010150 | 1   | . Nut                              |
| 13   | RS00602201        | 1   | . Bushing                    | 30   | F000000659 | 2   | . Washer                           |
| 14   | F000007860        | 2   | . Washer                     | 31   | F000008068 | 3   | . Spacer                           |
| 15   | F000007976        | 1   | . Snap Ring                  |      |            |     |                                    |
| 16   | F000007871        | 1   | . Pinion, Worm (Plated)      |      |            |     |                                    |
| 17   | RS00006085        | 1   | . Retainer, Twine Disc       |      |            |     |                                    |

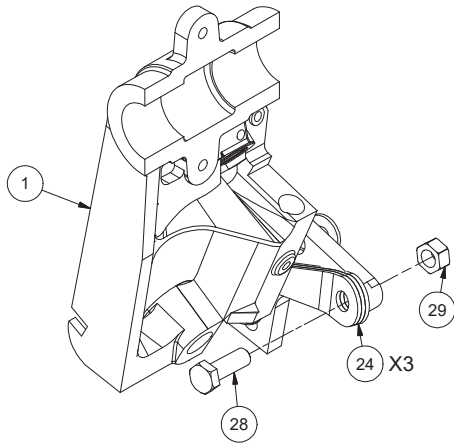


# Conventional Knotter Head Assembly

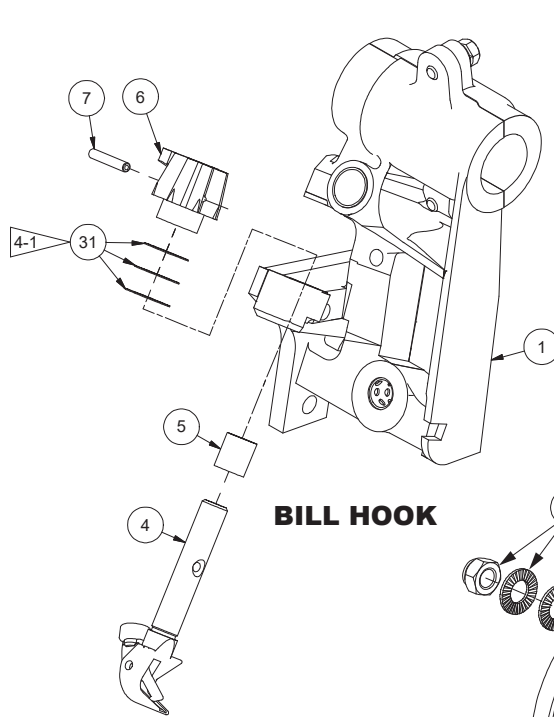
Page 2 of 2



**TWINE HOLDER**

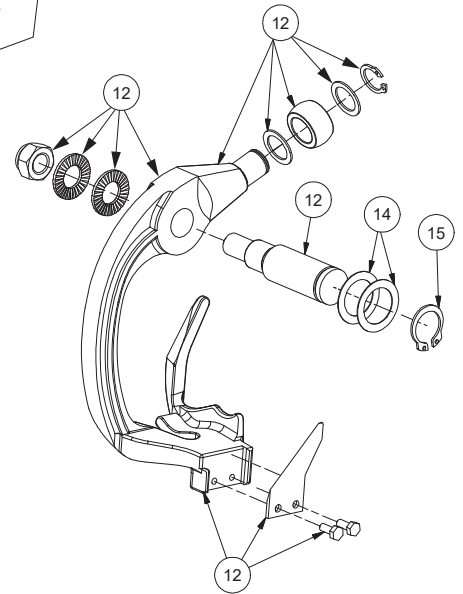


**TWINE HOLDER SPRING**

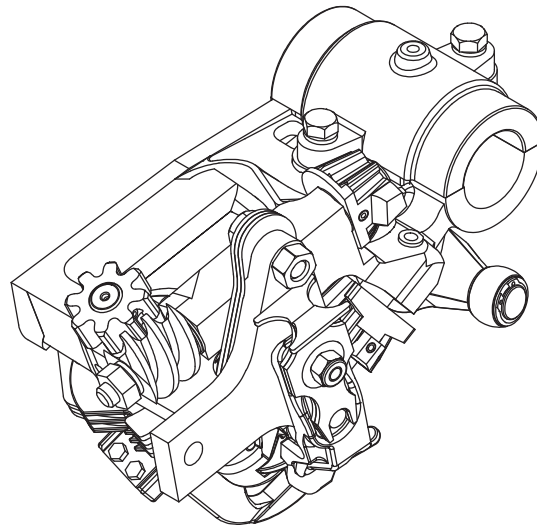


**BILL HOOK**

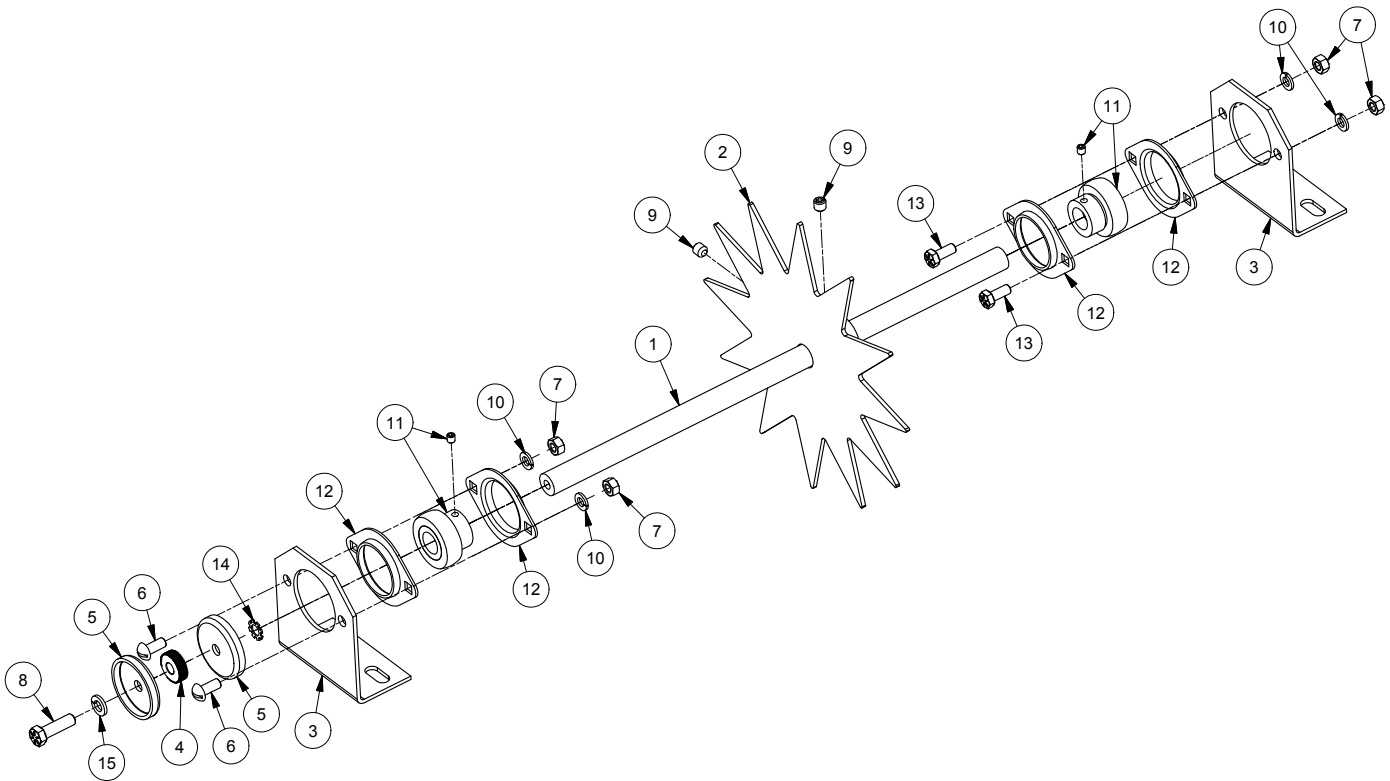
4-1 **NOTE:**  
BILL HOOK PIN SPACER  
(F00008068) IS USED TO  
REMOVE MOVEMENT OF  
THE BILL HOOK.



**KNIFE ARM COMPLETE**



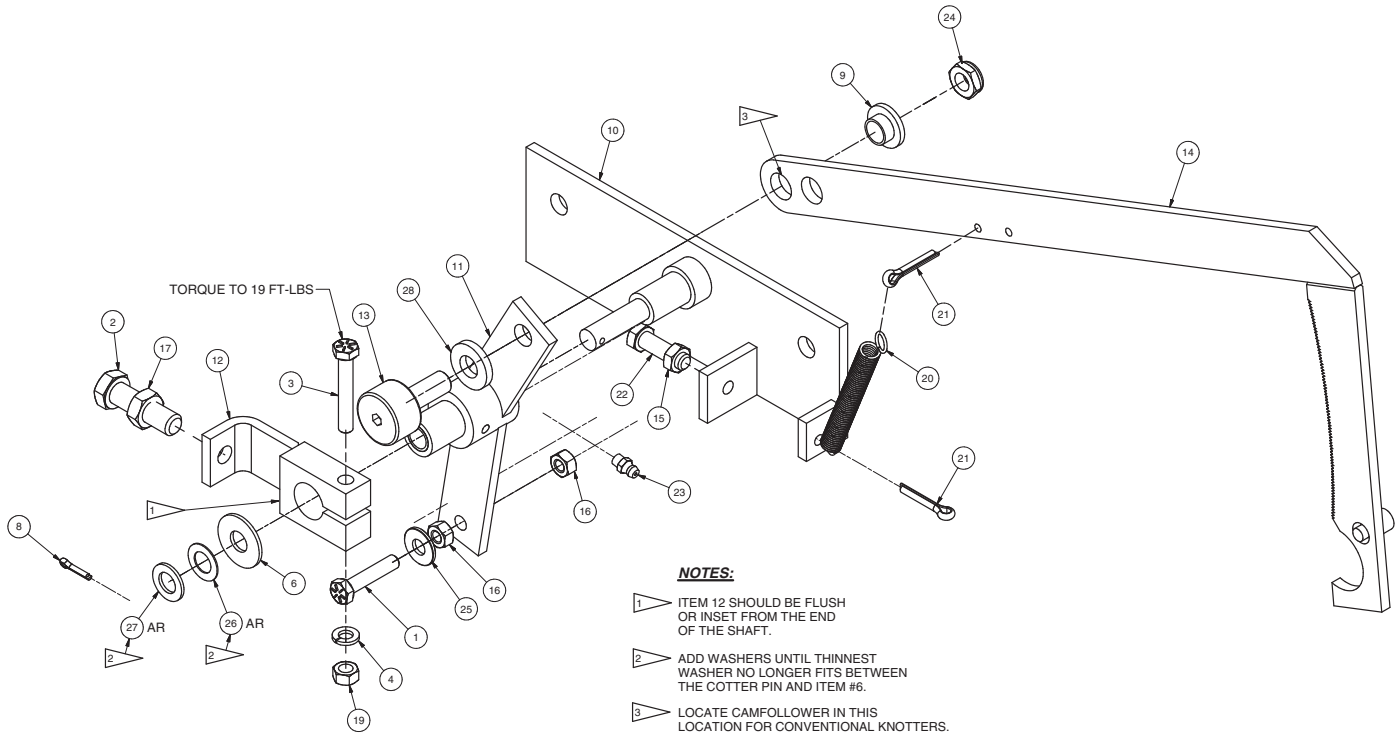
# Meter Wheel Assembly, 2 Tie



| Item                               | Part No.   | Qty | Description                 | Item | Part No.   | Qty | Description              |
|------------------------------------|------------|-----|-----------------------------|------|------------|-----|--------------------------|
| <b>901140 Meter Wheel Assembly</b> |            |     |                             |      |            |     |                          |
| 1                                  | F000008034 | 1   | . Shaft                     | 9    | STS3750375 | 2   | . Socket Set Screw       |
| 2                                  | F000001531 | 1   | . Meter Wheel               | 10   | R13812513  | 4   | . Lockwasher             |
| 3                                  | F000001617 | 2   | . Meter Wheel Shaft Bracket | 11   | F000001619 | 2   | . Shaft-Bearing & Collar |
| 4                                  | F000001687 | 1   | . Disc, Friction            | 12   | F000001889 | 4   | . Flangette Bearing      |
| 5                                  | F000008023 | 2   | . Guide Washer              | 13   | R13801791  | 2   | . Capscrew               |
| 6                                  | 246125     | 2   | . Capscrew                  | 14   | WES0000375 | 1   | . Washer                 |
| 7                                  | R13811512  | 4   | . Hex Nut                   | 15   | R13812514  | 1   | . Lockwasher             |
| 8                                  | 221499W    | 1   | . Capscrew                  |      |            |     |                          |

Rev A

### Trip Mount Assembly, Conventional

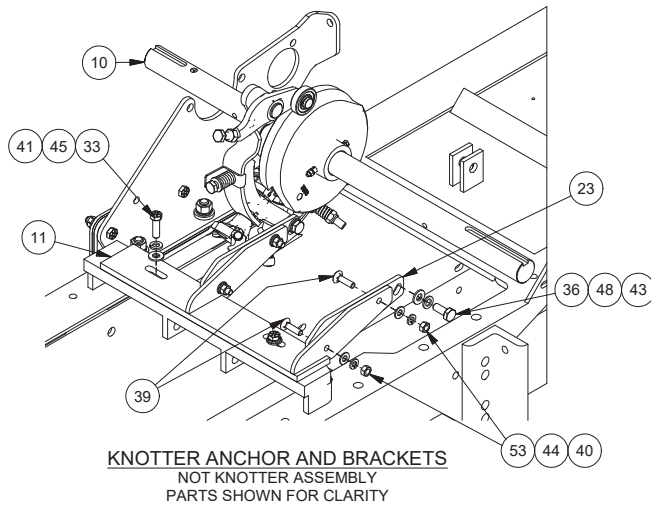
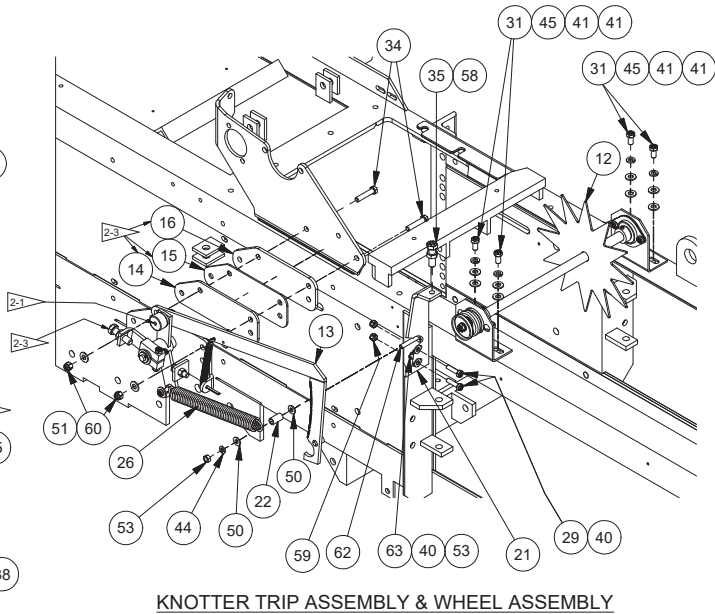
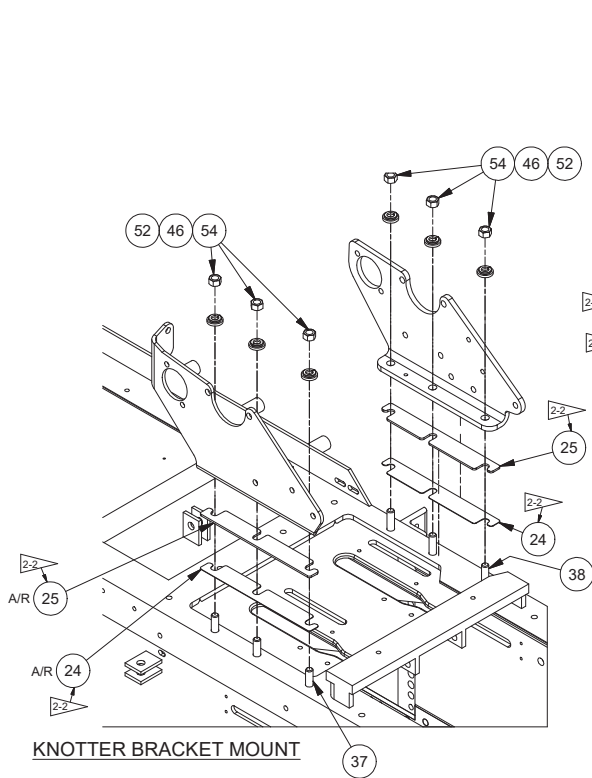


| Item | Part No.          | Qty | Description                | Item | Part No.   | Qty | Description                |
|------|-------------------|-----|----------------------------|------|------------|-----|----------------------------|
|      | <b>SAL0000005</b> |     | <b>Trip Mount Assembly</b> |      |            |     |                            |
| 1    | R13811016         | 1   | . Capscrew                 | 17   | 234218     | 1   | . Jam Nut                  |
| 2    | 221569W           | 1   | . Capscrew                 | 19   | R13803725  | 1   | . Hex Nut                  |
| 3    | 221475W           | 1   | . Capscrew                 | 20   | F000000278 | 1   | . Spring, Knotter Trip Arm |
| 4    | R13812513         | 1   | . Lockwasher               | 21   | COT0000801 | 2   | . Cotter Pin               |
| 6    | 15177W            | 1   | . Washer                   | 22   | 221499W    | 1   | . Capscrew                 |
| 8    | 15223W            | 1   | . Cotter Pin               | 23   | 11079      | 1   | . Fitting, Lube            |
| 9    | 910368            | 1   | . Ferrule                  | 24   | NEJ0005000 | 1   | . Nut, Esna Jam            |
| 10   | F000001513        | 1   | . Knotter Trip Mount       | 25   | 223428     | 1   | . Washer                   |
| 11   | 910366            | 1   | . Reset Lever              | 26   | F000008315 | 1   | . Washer                   |
| 12   | F000001515        | 1   | . Lever                    | 27   | ZZ00000210 | 1   | . Mach Bushing             |
| 13   | 910363            | 1   | . Bearing, Cam Follower    | 28   | 221771W    | 1   | . Washer                   |
| 14   | KNT0032132        | 1   | . Bar Assembly, Trip Meter |      |            |     |                            |
| 15   | 00124829          | 1   | . Jam Nut                  |      |            |     |                            |

Rev S

# Knotter Installation, Tailless, 2 Tie

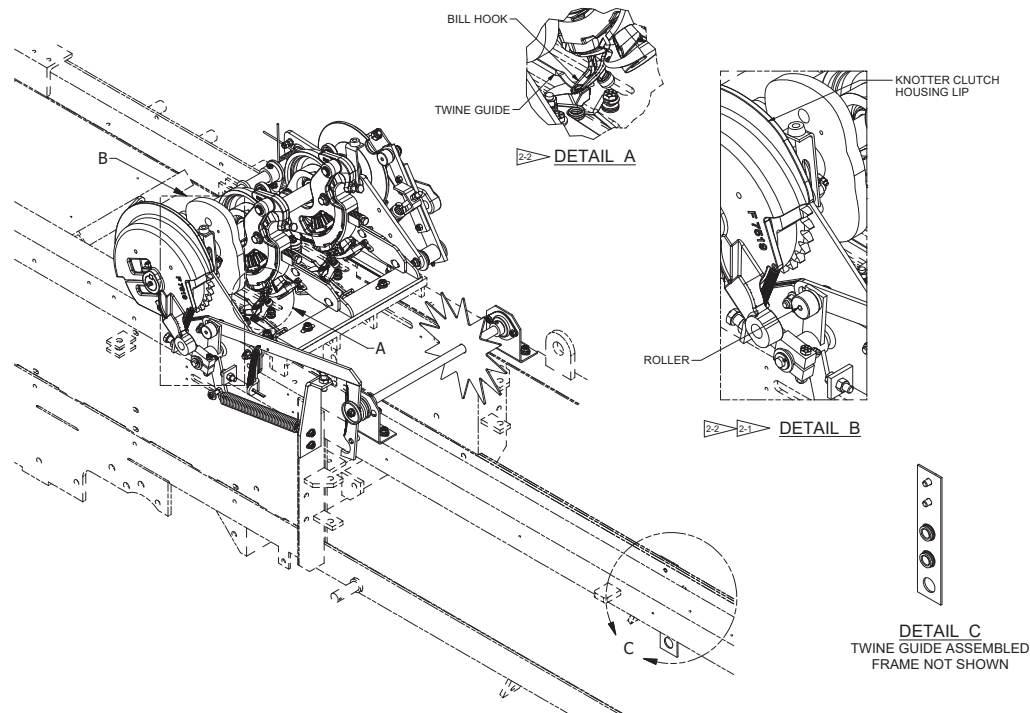
Page 1 of 4



- NOTES:**
- 2-1 METER WHEEL INSTALLATION  
1/8" CLEARANCE BETWEEN METER WHEEL TRIP ARM AND KNURLED DISC. THE CAM-FOLLOWER MUST RIDE ON THE CLUTCH HOUSING LIP.
  - 2-2 SHIM USING 10 & 20 GA SHIMS (ITEM 24 AND ITEM 25) UNTIL KNOTTER SHAFT IS PARALLEL TO BALER FRAME AND THE BILLHOOK TO TWINE GUIDE DISTANCE IS 1/16" BUT NO LESS THAN 1/64". SEE PAGE 1, DETAIL A.
  - 2-3 SHIM WITH ITEMS 14, 15, & 16 UNTIL ROLLER IS CENTERED ON THE LIP OF THE KNOTTER CLUTCH HOUSING. SEE PAGE 1, DETAIL B.

### Knotter Installation, Tailless, 2 Tie

Page 2 of 4



| Item   | Part No.      | Qty | Description                 | Item | Part No.                          | Qty | Description      |
|--|---------------|-----|-----------------------------|------|-----------------------------------|-----|------------------|
| <b>910407 Knotter Installation, Tailless</b> |               |     |                             |      |                                   |     |                  |
| 1  | 904802        | 2   | . Drive Rod, Twine Finger   | 35   | 221569W                           | 1   | . Capscrew       |
| 2  | BRG0001300    | 2   | . Bearing, Rod End          | 36   | Y09C-M1025                        | 2   | . Capscrew       |
| 3  | BRG0001301    | 2   | . Bearing, Rod End          | 37   | Y09G-0832                         | 3   | . Capscrew       |
| 4  | 906848        | 2   | . Twine Finger Weldment     | 38   | Y09G-0836                         | 3   | . Capscrew       |
| 5  | WAS037715A    | 4   | . Washer                    | 39   | 233972                            | 4   | . Bolt, Carriage |
| 6  | WLG0000003    | 2   | . Spring, Stop              | 40   | 18515W                            | 17  | . Washer         |
| 7  | WLG0000001    | 2   | . Plate, Guide              | 41   | 221767W                           | 22  | . Washer         |
| 8  | WLG0000002    | 2   | . Spring, Knotter Stop      | 42   | WCTM100080                        | 4   | . Washer         |
| 9  | WLG0000005    | 2   | . Spring                    | 43   | 296420W                           | 2   | . Washer         |
| 10   | *a 910405     | 1   | . Tailless Knotter Assembly | 44   | R13812513                         | 17  | . Lockwasher     |
| 11   | 900256        | 1   | . Anchor Weldment           | 45   | R13812514                         | 10  | . Lockwasher     |
| 12   | *b 901140     | 1   | . Meter Wheel Assembly      | 46   | R13812516                         | 6   | . Lockwasher     |
| 13   | *c SAL0000580 | 1   | . Trip Mount Assembly       | 47   | 92681W                            | 2   | . Washe          |
| 14   | SHM037349B    | 2   | . Shim                      | 48   | 292682W                           | 2   | . Washer         |
| 15   | SHM037350B    | 2   | . Shim                      | 49   | Y22E-05                           | 10  | . Lockwasher     |
| 16   | SHM037348B    | 2   | . Shim                      | 50   | R13802914                         | 2   | . Washer         |
| 17   | 906846        | 2   | . Bushing                   | 51   | Y27E-06                           | 2   | . Washer         |
| 18   | F000000856    | 2   | . Bushing                   | 52   | 221771W                           | 6   | . Washer         |
| 19   | F000000857    | 2   | . Ring, Snap                | 53   | 221705W                           | 8   | . Hex Nut        |
| 20   | F000000525    | 1   | . Holder                    | 54   | 221712W                           | 6   | . Hex Nut        |
| 21   | F000001632    | 1   | . Trip Bar                  | 55   | R13803725                         | 2   | . Hex Nut        |
| 22   | SPC0033118    | 1   | . Spacer                    | 56   | NCHM008125                        | 2   | . Hex Nut        |
| 23   | BKT0033732    | 2   | . Bracket                   | 57   | NFL0003125                        | 2   | . Jam Nut        |
| 24   | SHM037779B    | 6   | . Shim                      | 58   | 234218                            | 1   | . Jam Nut        |
| 25   | 906854        | 2   | . Plate, Shim               | 59   | 232939                            | 2   | . Nut, Esna      |
| 26   | F000001517    | 1   | . Spring, Trip              | 60   | 237567                            | 2   | . Locknut        |
| 27   | R13810838     | 2   | . Capscrew                  | 61   | WAS3751500                        | 4   | . Washer         |
| 28   | R13811013     | 2   | . Capscrew                  | 62   | Y09G-0540                         | 1   | . Capscrew       |
| 29   | R13811015     | 2   | . Capscrew                  | 63   | Y09G-0524                         | 1   | . Capscrew       |
| 30   | R13811016     | 3   | . Capscrew                  | 64   | R13811017                         | 1   | . Capscrew       |
| 31   | 162572W       | 6   | . Capscrew                  |      |                                   |     |                  |
| 32   | Y17C-0616     | 4   | . Capscrew                  |      |                                   |     |                  |
| 33   | 221499W       | 2   | . Capscrew                  |      |                                   |     |                  |
| 34   | R13801813     | 2   | . Capscrew                  |      |                                   |     |                  |
|  |               |     |                             | *a   | See Separate Coverage (Page 8-23) |     |                  |
|  |               |     |                             | *b   | See Separate Coverage (Page 8-16) |     |                  |
|  |               |     |                             | *c   | See Separate Coverage (Page 8-30) |     |                  |

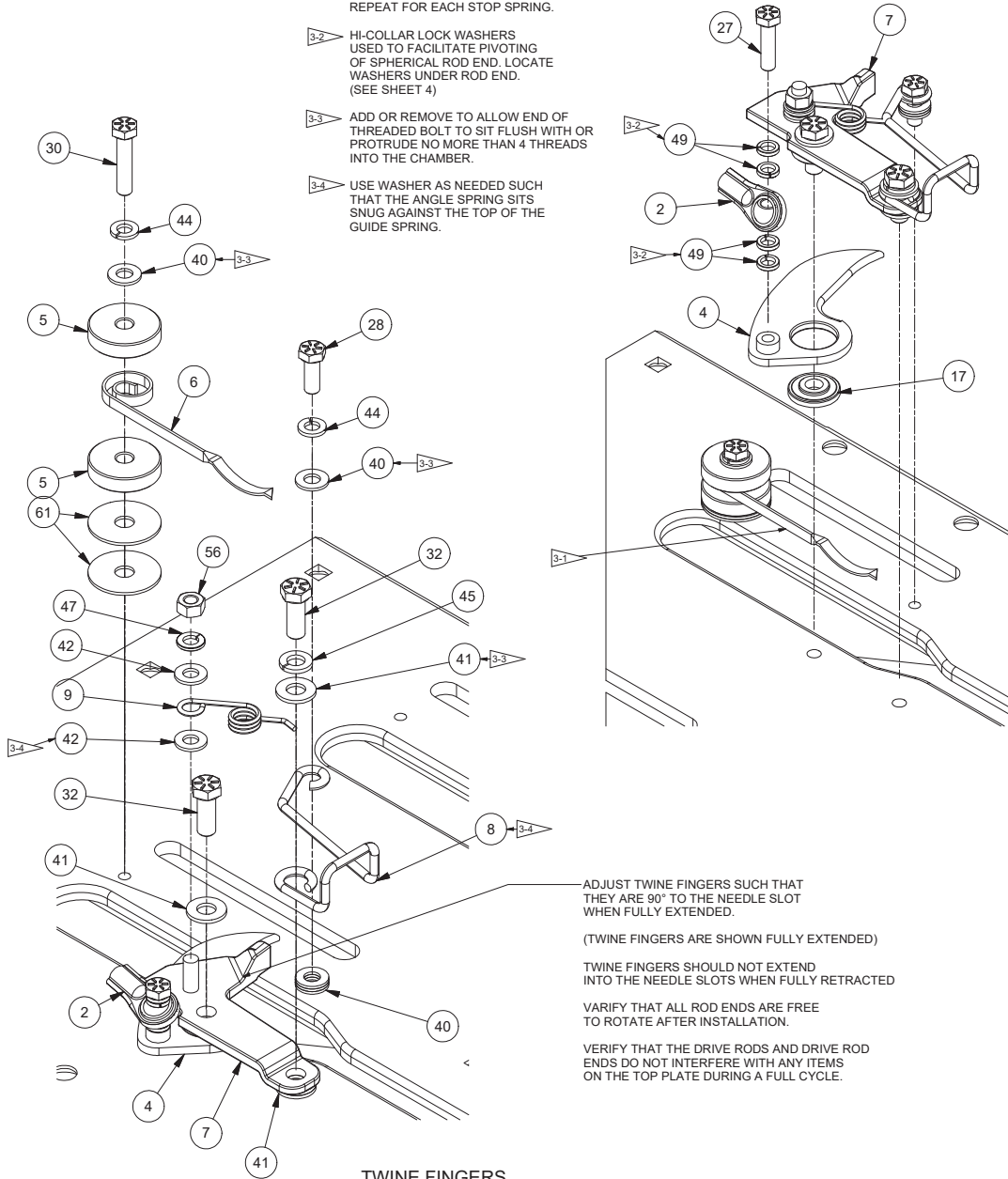
Rev -

# Knotter Installation, Tailless, 2 Tie

Page 3 of 4

**NOTES:**

- 3-1 ▷ ADJUST STOP SPRING TENSION UNTIL 2-3 LBF IS REQUIRED AT THE TIP OF THE STOP SPRING TO DEFLECT THE SPRING FROM THE TWINE GUIDE. REPEAT FOR EACH STOP SPRING.
- 3-2 ▷ HI-COLLAR LOCK WASHERS USED TO FACILITATE PIVOTING OF SPHERICAL ROD END. LOCATE WASHERS UNDER ROD END. (SEE SHEET 4)
- 3-3 ▷ ADD OR REMOVE TO ALLOW END OF THREADED BOLT TO SIT FLUSH WITH OR PROTRUDE NO MORE THAN 4 THREADS INTO THE CHAMBER.
- 3-4 ▷ USE WASHER AS NEEDED SUCH THAT THE ANGLE SPRING SITS SNUG AGAINST THE TOP OF THE GUIDE SPRING.



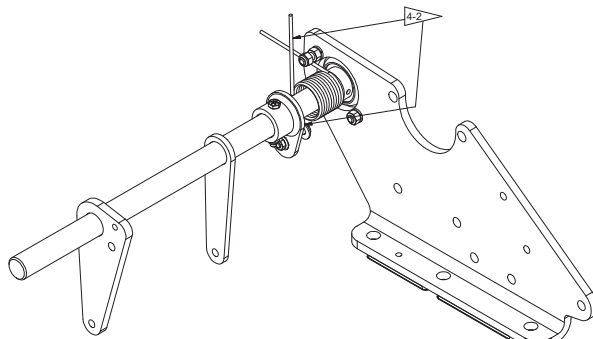
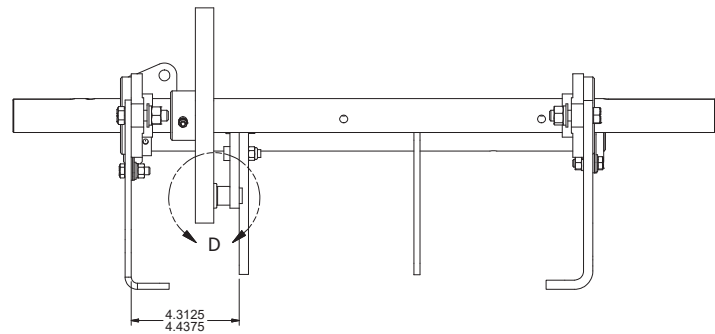
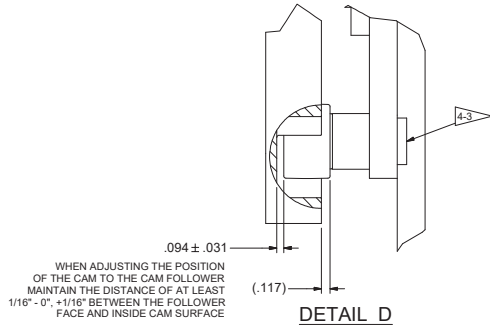
ADJUST TWINE FINGERS SUCH THAT THEY ARE 90° TO THE NEEDLE SLOT WHEN FULLY EXTENDED.  
 (TWINE FINGERS ARE SHOWN FULLY EXTENDED)  
 TWINE FINGERS SHOULD NOT EXTEND INTO THE NEEDLE SLOTS WHEN FULLY RETRACTED  
 VERIFY THAT ALL ROD ENDS ARE FREE TO ROTATE AFTER INSTALLATION.  
 VERIFY THAT THE DRIVE RODS AND DRIVE ROD ENDS DO NOT INTERFERE WITH ANY ITEMS ON THE TOP PLATE DURING A FULL CYCLE.

**TWINE FINGERS  
2 PLACES**



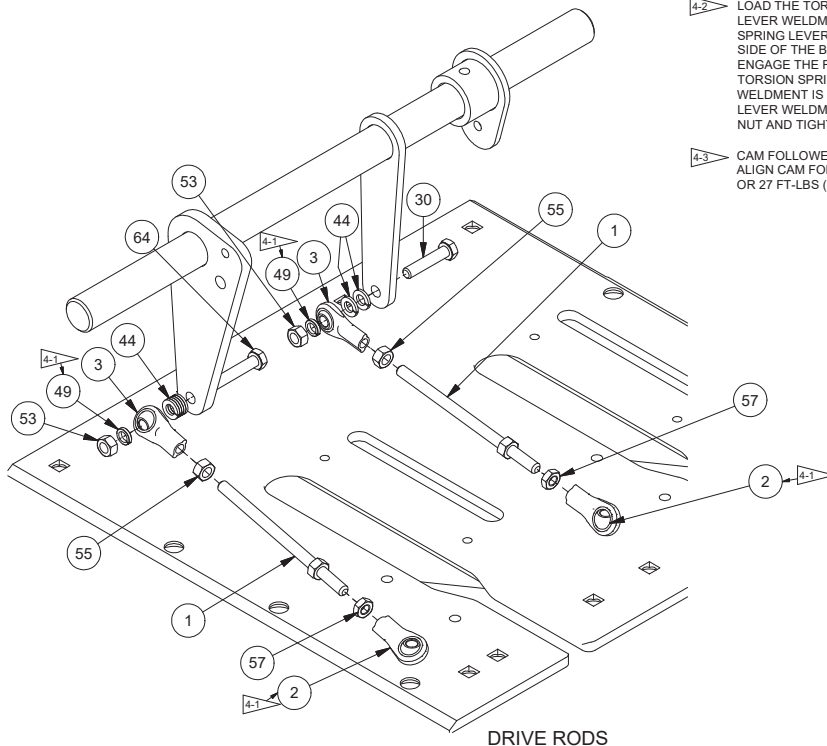
### Knotter Installation, Tailless, 2 Tie

Page 4 of 4



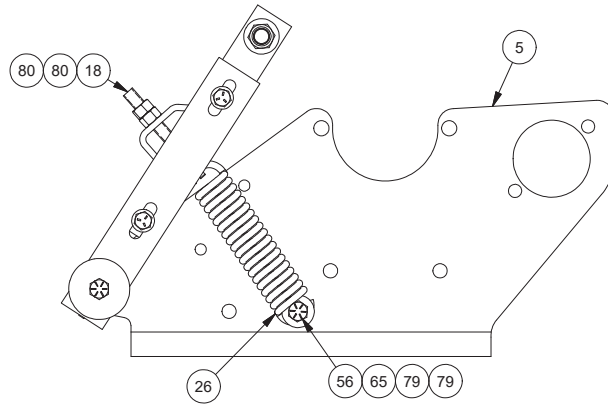
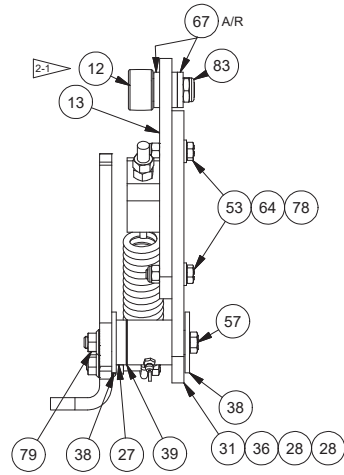
**NOTES:**

- 4-1 HI-COLLAR LOCK WASHERS USE TO FACILITATE PIVOTING OF SPHERICAL ROD END LOCATE WASHERS UNDER ROD END FOR TWINE FINGERS.
- 4-2 LOAD THE TORSION SPRING BY REMOVING THE BOLT HOLDING THE SPRING LEVER WELDMENT TO THE TWINE FINGER DRIVE SHAFT AND ROTATE THE SPRING LEVER WELDMENT CLOCKWISE WHILE FACING THE KNOTTER CLUTCH SIDE OF THE BALER. THE BOLT ON THE SPRING LEVER WELDMENT SHOULD ENGAGE THE FREE END OF THE SHOULD ENGAGE THE FREE END OF THE TORSION SPRING. CONTINUE TO ROTATE THE SPRING UNTIL THE SPRING LEVER WELDMENT IS POINTING DOWN. RE-INSERT THE BOLT THROUGH THE SPRING LEVER WELDMENT AND THE TWINE FINGER DRIVE SHAFT AND ATTACH THE NUT AND TIGHTEN.
- 4-3 CAM FOLLOWER SHOULD BE FULLY TIGHTENED INTO SHEAR LEVER, ALIGN CAM FOLLOWER INSIDE CAM. TORQUE TO 54 FT-LBS (DRY THREAD) OR 27 FT-LBS (LUBRICATED THREAD)

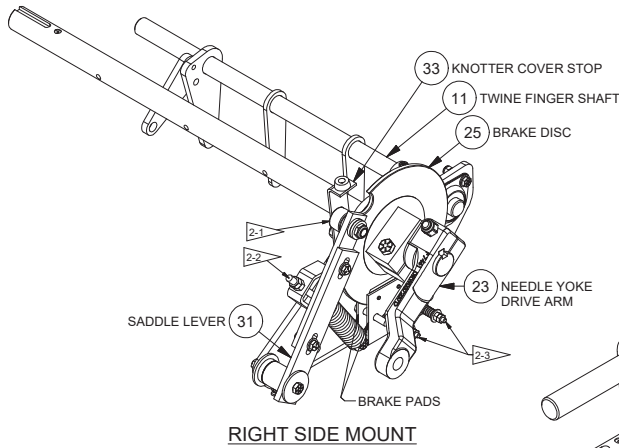


# Knotter Assembly, Tailless, 2 Tie

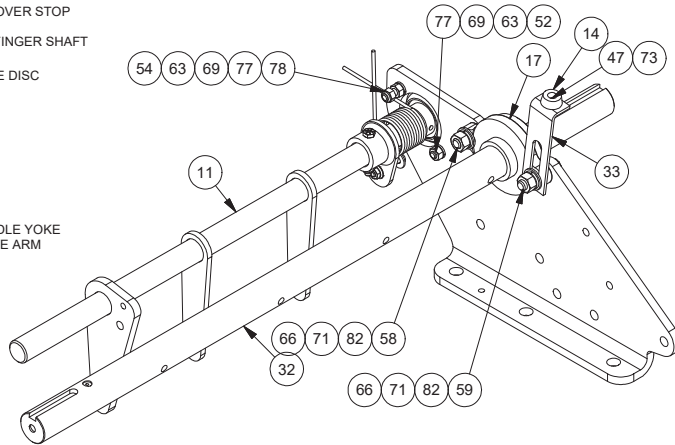
Page 1 of 5



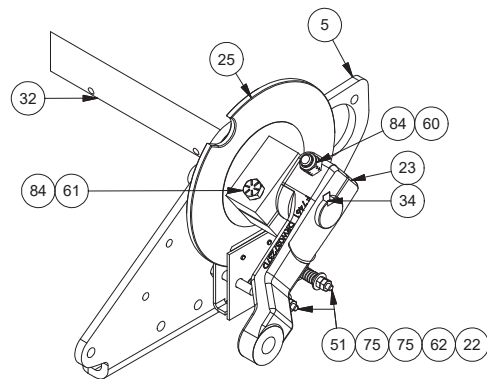
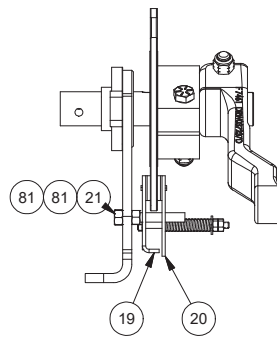
**SADDLE LEVER**



**RIGHT SIDE MOUNT**



**RIGHT MOUNT SHAFT BEARINGS**



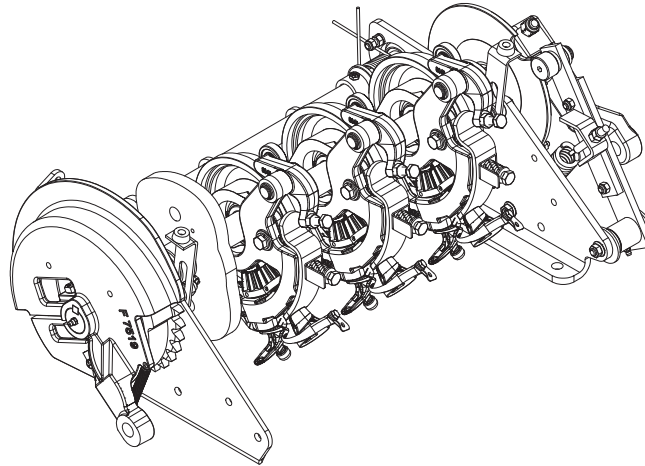
**BRAKE AND NEEDLE YOKE ARM**

**NOTES:**

- 2-1 > CENTER ROLLER ON BRAKE DISC.
- 2-2 > SLACK IS TAKEN UP, THEN SPRING IS TIGHTENED 1/2" (8 TURNS).
- 2-3 > TIGHTEN NUT TO FULLY COLLAPSE SPRING COILS THEN BACK OUT 3/4 FULL TURN

# Knotter Assembly, Tailless, 2 Tie

Page 2 of 5



| Item  | Part No.      | Qty | Description                    | Item | Part No.      | Qty | Description      |
|---|---------------|-----|--------------------------------|------|---------------|-----|------------------|
| <b>910405 Knotter Assembly, 2-TIE, Tailless</b> |               |     |                                |      |               |     |                  |
| 1   | *a 255675     | 2   | . Knotter                      | 45   | 256550        | 1   | . Bolt, Shoulder |
| 2   | 256559        | 1   | . Spring                       | 46   | WLG0001064    | 3   | . Bolt           |
| 3   | 257265        | 1   | . Cam Follower                 | 47   | Y25G-(1024)08 | 2   | . Capscrew       |
| 4   | *b 900249     | 1   | . Disc & Bearing Assembly      | 48   | 18466W        | 1   | . Capscrew       |
| 5   | 903197        | 1   | . Plate, Rh Mounting           | 49   | R13801783     | 1   | . Capscrew       |
| 6   | 903198        | 1   | . Plate, Lh Mounting           | 50   | R13810997     | 1   | . Capscrew       |
| 7   | 903516        | 1   | . Lever                        | 51   | 234867        | 2   | . Capscrew       |
| 8   | 903531        | 1   | . Lever                        | 52   | R13811014     | 3   | . Capscrew       |
| 9   | 904018        | 1   | . Tube Spacer                  | 53   | 18498W        | 2   | . Capscrew       |
| 10  | 904189        | 1   | . Weldment, Cam - Enclosed     | 54   | R13811016     | 1   | . Capscrew       |
| 11  | 904895        | 1   | . Shaft, Drive                 | 55   | Y17C-0616     | 2   | . Capscrew       |
| 12  | 910363        | 1   | . Bearing, Cam Follower        | 56   | R13811039     | 1   | . Capscrew       |
| 13  | 910372        | 1   | . Weldment, Upper Saddle Lever | 57   | 221518W       | 1   | . Capscrew       |
| 14  | BMP0004243    | 2   | . Rubber Bumper F/Hood         | 58   | 134328W       | 2   | . Capscrew       |
| 15  | F00000755     | 1   | . Sprocket, Knotter Clutch     | 59   | R13801834     | 2   | . Capscrew       |
| 16  | F000004135    | 1   | . Inner Race                   | 60   | R13801850     | 1   | . Capscrew       |
| 17  | F000007063    | 2   | . Bearing                      | 61   | R13811082     | 1   | . Capscrew       |
| 18  | F000007448    | 1   | . Eyebolt                      | 62   | R13811443     | 3   | . Washer         |
| 19  | F000007449    | 1   | . Plate & Lining               | 63   | 18515W        | 4   | . Washer         |
| 20  | F000007450    | 1   | . Brake Plate W/Lining         | 64   | R13802914     | 2   | . Washer         |
| 21  | F000007451    | 2   | . Brake Plate Stud             | 65   | 15176W        | 1   | . Washer         |
| 22  | F000007453    | 2   | . Spring, Brake Plate          | 66   | R13811432     | 4   | . Washer         |
| 23  | F000007461    | 1   | . Needle Yoke Drive Arm        | 67   | 221771W       | 6   | . Washer         |
| 24  | *c F000007519 | 1   | . Housing Assembly             | 68   | R13812482     | 3   | . Lockwasher     |
| 25  | F000007528    | 1   | . Weldment, Disc Brake         | 69   | R13812513     | 4   | . Lockwasher     |
| 26  | F000007559    | 1   | . Spring, Saddle Lever         | 70   | 236655        | 2   | . Lockwasher     |
| 27  | F000007585    | 1   | . Sleeve, Lever                | 71   | 15157W        | 4   | . Lockwasher     |
| 28  | F000007587    | 2   | . Seal                         | 72   | WLG0001065    | 3   | . Hex Nut        |
| 29  | F000007904    | 1   | . Key                          | 73   | 224191        | 2   | . Nut, Esna      |
| 30  | F000008095    | 2   | . Kit, Bearing                 | 74   | 264150W       | 2   | . Nut            |
| 31  | LEV0025133    | 1   | . Lever Assembly               | 75   | 221703W       | 4   | . Hex Nut        |
|   | F000007586    | 1   | . Bushing                      | 76   | 15113W        | 2   | . Locknut        |
| 32  | 900237        | 1   | . Shaft                        | 77   | 221705W       | 4   | . Hex Nut        |
| 33  | STO0022419    | 2   | . Bar, Stop                    | 78   | R13811190     | 4   | . Locknut        |
| 34  | ZZ00000419    | 1   | . Key                          | 79   | 156133W       | 3   | . Locknut        |
| 35  | 11079         | 1   | . Fitting, Lube                | 80   | 221707W       | 2   | . Hex Nut        |
| 36  | F000004089    | 1   | . Fitting                      | 81   | 221708W       | 4   | . Hex Nut        |
| 37  | WLG0001063    | 3   | . Pin, Expanding               | 82   | R13806770     | 4   | . Hex Nut        |
| 38  | F000000246    | 2   | . Washer                       | 83   | NEJ0005000    | 1   | . Nut, Esna Jam  |
| 39  | F000000802    | 1   | . Washer                       | 84   | 223587        | 2   | . Locknut        |
| 40  | F000004136    | 2   | . Washer                       |      |               |     |                  |
| 41  | F000004160    | 8   | . Mach Bushing                 |      |               |     |                  |
| 42  | F000004161    | 3   | . Mach Bushing                 |      |               |     |                  |
| 43  | F000007977    | 6   | . Washer, Spacer               |      |               |     |                  |
| 44  | F000007978    | 2   | . Washer, Spacer               |      |               |     |                  |

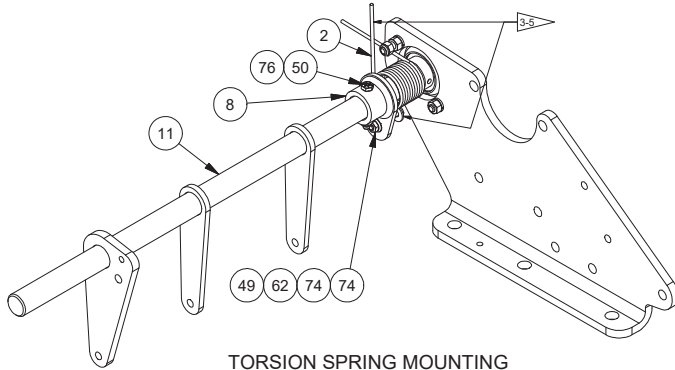
\*a See Separate Coverage (Page 8-27)

\*b See Separate Coverage (Page 8-13)

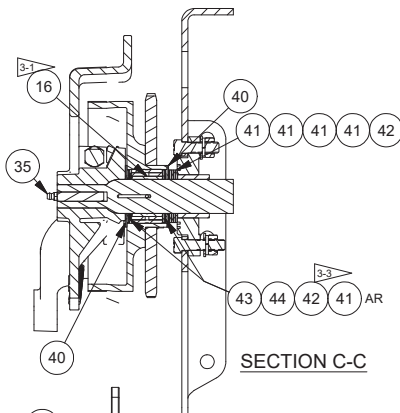
\*c See Separate Coverage (Page 8-12)

# Knotter Assembly, Tailless, 2 Tie

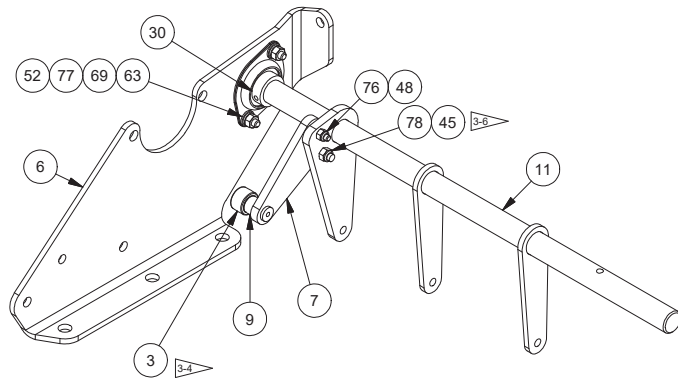
Page 3 of 5



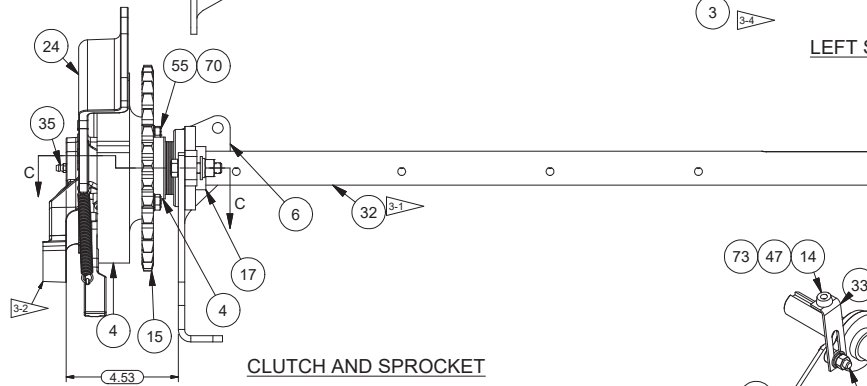
**TORSION SPRING MOUNTING**



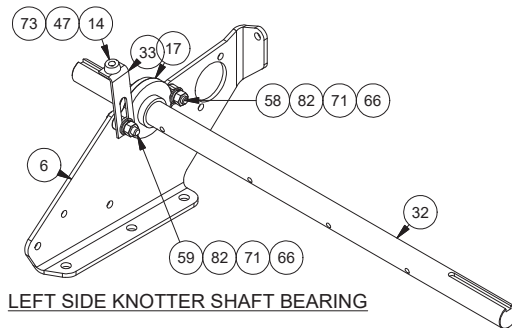
**SECTION C-C**



**LEFT SIDE TWINE SHAFT**



**CLUTCH AND SPROCKET**



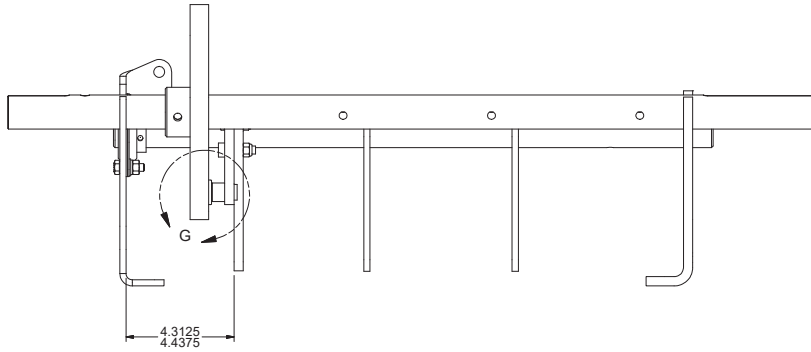
**LEFT SIDE KNOTTER SHAFT BEARING**

**NOTES:**

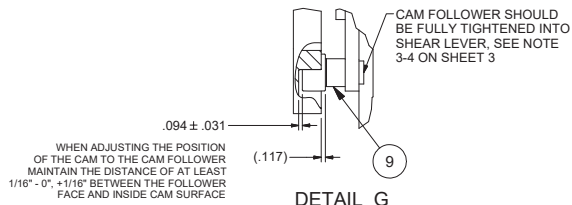
- 3-1 USE LOCTITE TO SECURE BUSHING TO SHAFT. SEE LOCTITE PROCEDURE ON PAGE 5.
- 3-2 VERIFY THAT THE CLUTCH PAWL CASTING PART NUMBER DOES NOT HIT THE CLUTCH DISC.
- 3-3 ADD SPACER AS REQUIRED SO THERE IS A CLEARANCE OF 0.005" BETWEEN THE GREASE WASHER TO GREASE WASHER ITEM #40 ON BOTH SIDES OF CLUTCH.
- 3-4 ALIGN CAM FOLLOWER INSIDE CAM. TORQUE TO 54 FT-LBS (DRY THREAD) OR 27 FT-LBS (LUBRICATED THREAD)
- 3-5 LOAD THE TORSION SPRING BY REMOVING THE BOLT HOLDING THE SPRING LEVER WELDMENT TO THE TWINE FINGER DRIVE SHAFT AND ROTATE THE SPRING LEVER WELDMENT CLOCKWISE WHILE FACING THE KNOTTER CLUTCH SIDE OF THE BALER. THE BOLT ON THE SPRING LEVER WELDMENT SHOULD ENGAGE THE FREE END OF THE TORSION SPRING. CONTINUE TO ROTATE THE SPRING UNTIL THE SPRING LEVER WELDMENT IS POINTING DOWN. RE-INSERT THE BOLT THROUGH THE SPRING LEVER WELDMENT AND THE TWINE FINGER DRIVE SHAFT AND ATTACH THE NUT AND TIGHTEN.
- 3-6 TORQUE BOLT TO 35 FT-LBS.

## Knotter Assembly, Tailless, 2 Tie

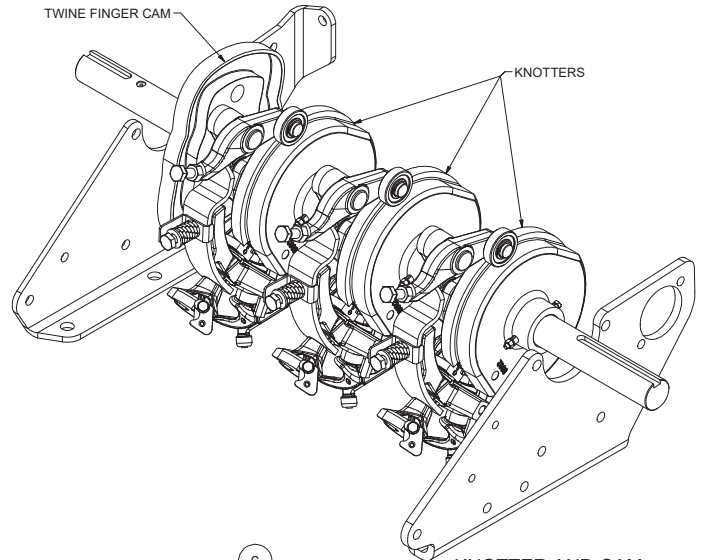
Page 4 of 5



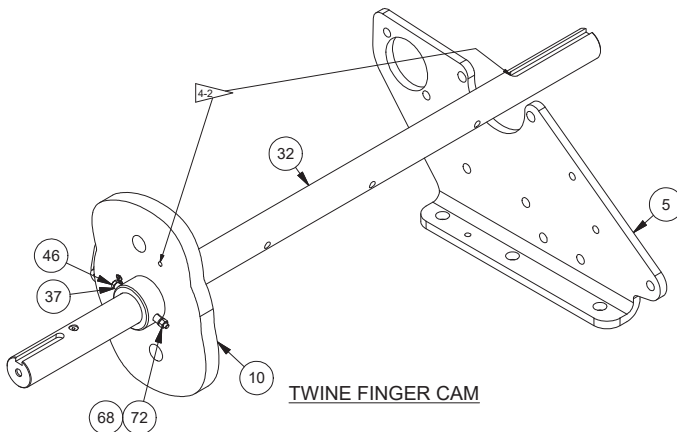
**MOUNTING POSITION OF THE TWINE FINGER DRIVE SHAFT TO THE LH KNOTTER MOUNT**



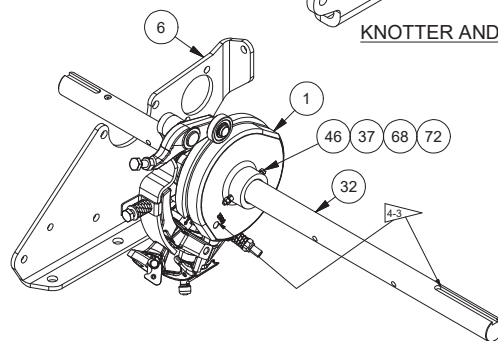
**DETAIL G**



**KNOTTER AND CAM**



**TWINE FINGER CAM**



**TAILLESS KNOTTER FOR 3-TIE: TYP. (3) PLACES FOR 2-TIE: TYP. (2) PLACES**

**NOTES:**

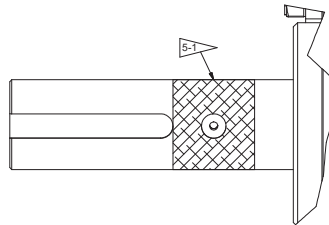
4-1. ADD ANTI-SEIZE TO THE INSIDE SURFACE OF THE MOUNTING COLLAR.

4-2. ORIENT AS SHOWN WITH HOLE IN THE SAME DIRECTION AS THE KEYWAY.

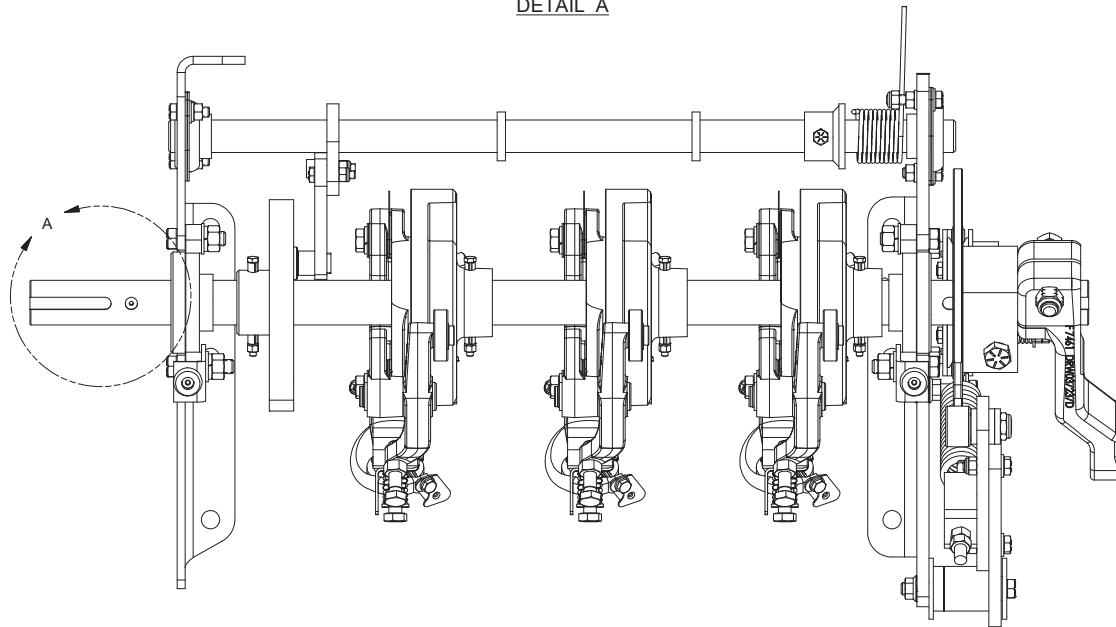
4-3. ORIENT KNOTTER ON SHAFT AS SHOWN.

# Knotter Assembly, Tailless, 2 Tie

Page 5 of 5



DETAIL A



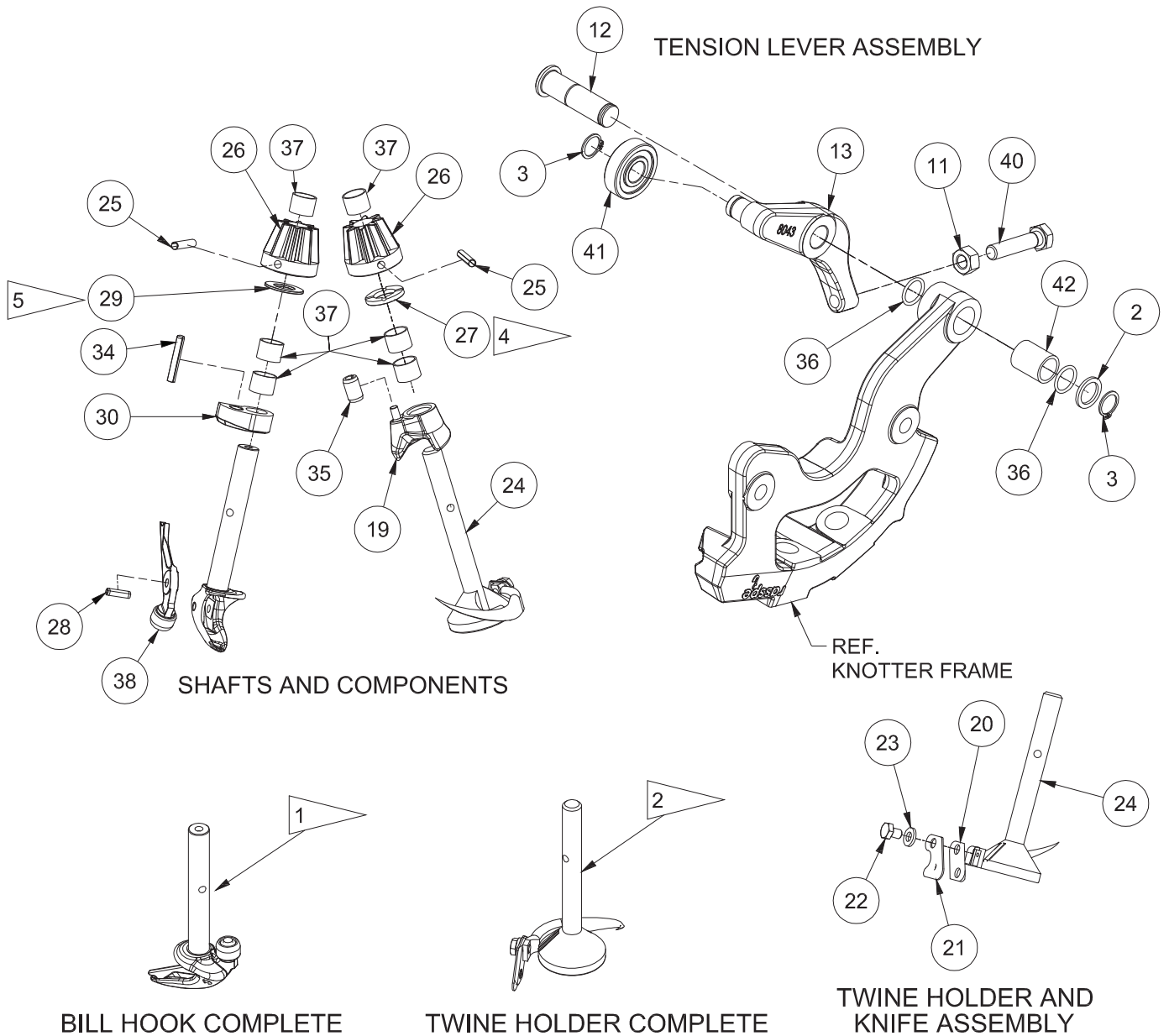
**NOTES:**

**5-1. LOCTITE PROCEDURE**

- REMOVE CLUTCH HOUSING, OUTSIDE SHIMS, & INNER RACE.
- CLEAN AND PREP SURFACE FOR LOCTITE APPLICATION. SEE DETAIL A FOR APPROXIMATE APPLICATION LOCATION.
- APPLY LOCTITE 635 TO KNOTTER SHAFT AS SHOWN IN DETAIL A. LOCTITE SHOULD BE APPLIED IN AN EVEN FILM AROUND THE SHAFT.
- DO NOT ALLOW LOCTITE TO ENTER INNER RACE LUBRICATION GROOVE AND LUBRICATION HOLE, OR RUN OUTSIDE THE FINAL POSITION OF THE INNER RACE.
- VERIFY THAT THE INNER RACE LUBRICATION GROOVE SITS OVER THE LUBRICATION HOLE.
- CAREFULLY REASSEMBLE INNER RACE ALLOWING LOCTITE TO COVER INSIDE OF THE RACE. REASSEMBLE CLUTCH AND CLUTCH HOUSING.

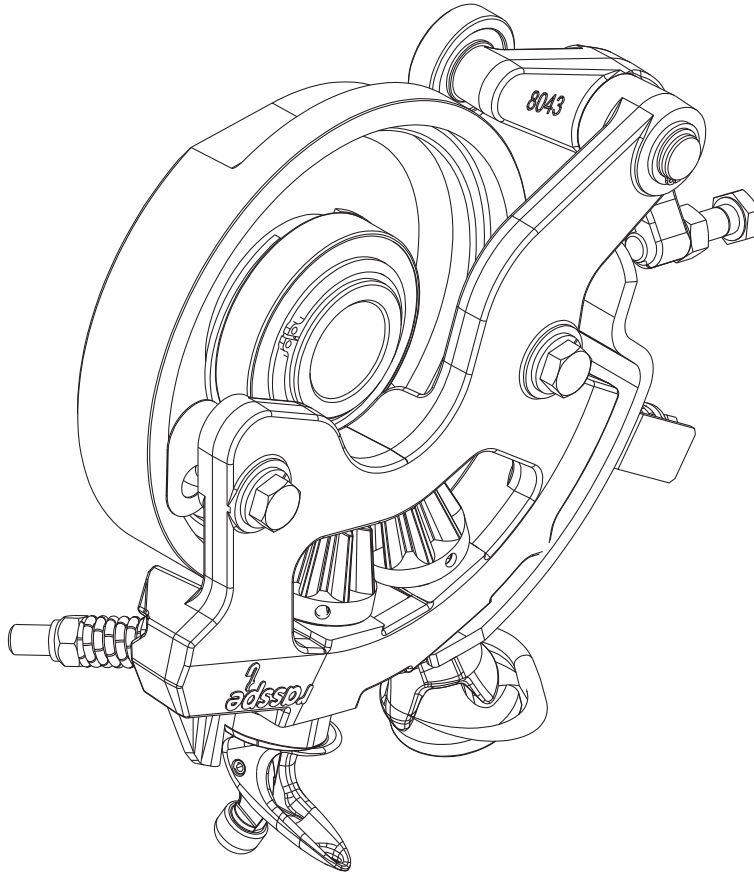
# Tailless Knotter

Page 1 of 3



# Tainless Knotter

Page 2 of 3



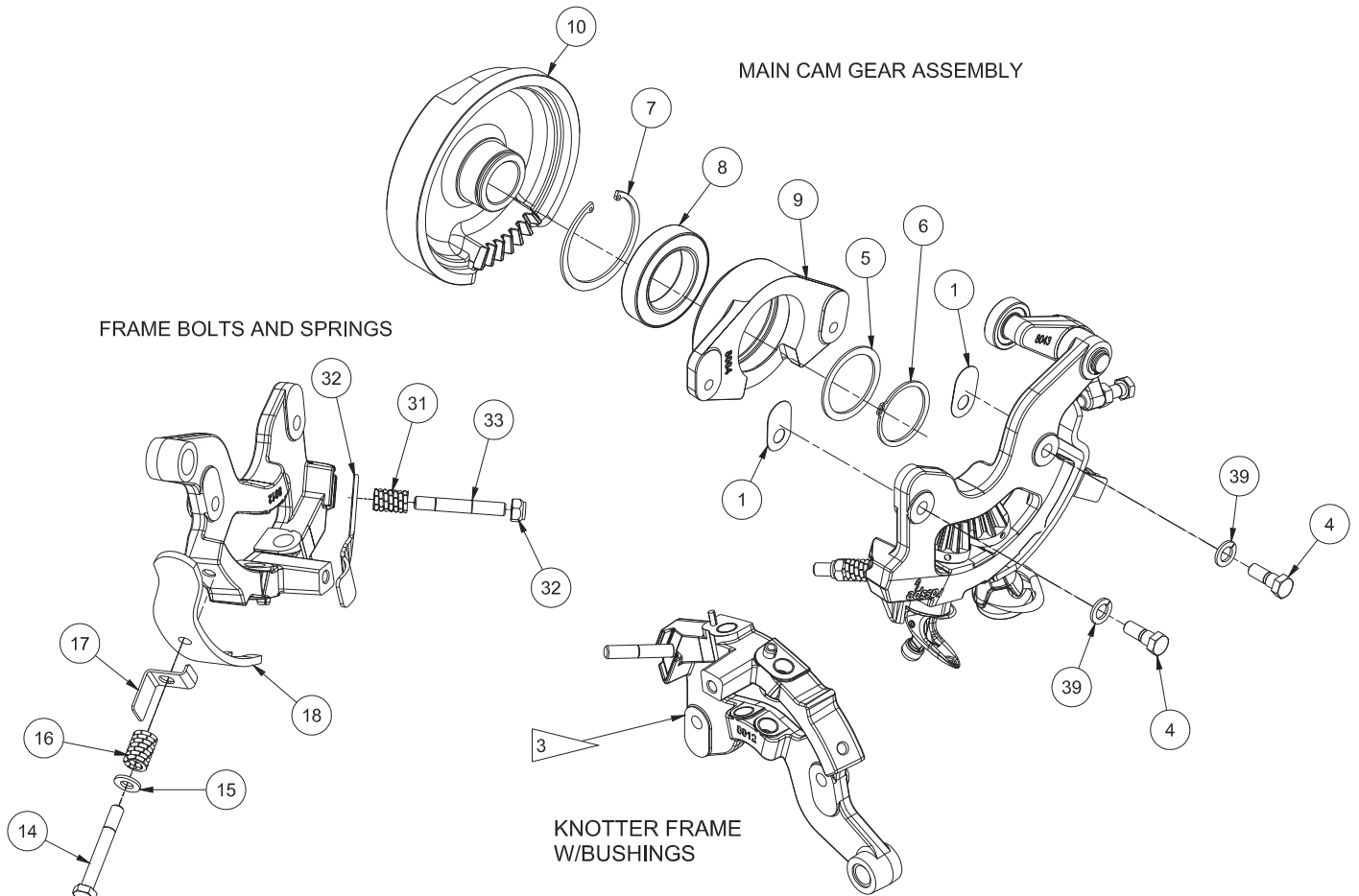
| Item | Part No.      | Qty | Description               | Item | Part No. | Qty | Description                    |
|------|---------------|-----|---------------------------|------|----------|-----|--------------------------------|
|      | <b>255675</b> |     | <b>Knotter</b>            |      |          |     |                                |
| 1    | 255311        | 2   | . Shim                    | 23   | 296417W  | 1   | . Washer                       |
| 2    | 255822        | 1   | . Washer, Knotter Frame   | 24   | 255827   | 1   | . Twine Holder                 |
| 3    | 255841        | 2   | . Ring, Snap              | 25   | 254811   | 2   | . Roll Pin                     |
| 4    | 255823        | 2   | . Bolt                    | 26   | 255849   | 2   | . Gear, Pinion                 |
| 5    | 255838        | 1   | . Shim                    | 27   | 255848   | 1   | . Washer, Thrust               |
| 6    | 255839        | 1   | . Ring, Snap              | 28   | 255864   | 1   | . Roll Pin, Bill Hook Trigger  |
| 7    | 255836        | 1   | . Ring, Snap              | 29   | 255850   | 1   | . Washer, Thrust               |
| 8    | 255835        | 1   | . Bearing                 | 30   | 255845   | 1   | . Cam, Bill Hook Trigger       |
| 9    | 255834        | 1   | . Flange, Bearing         | 31   | 255846   | 1   | . Spring, Trigger Pressure     |
| 10   | 255837        | 1   | . Cam Gear                | 32   | 255858   | 1   | . Plate, Trigger Pressure      |
| 11   | 292655W       | 1   | . Nut                     | 33   | 255852   | 1   | . Bolt, Press Spring           |
| 12   | 255843        | 1   | . Pin, Tension Lever      | 34   | 255853   | 1   | . Pin, Cam Locating            |
| 13   | 255844        | 1   | . Lever, Tension          | 35   | 255854   | 1   | . Pin, Twine Clamp Locating    |
| 14   | 255859        | 1   | . Bolt, Press             | 36   | 255826   | 2   | . O-Ring                       |
| 15   | 296420W       | 1   | . Washer                  | 37   | 255856   | 6   | . Bushing                      |
| 16   | 255851        | 1   | . Spring, Tying Pressure  | 38   | 255865   | 1   | . Trigger, Bill Hook           |
| 17   | 255829        | 1   | . Bracket, Tying Bolt Adj | 39   | 255825   | 2   | . Washer, Split Ring           |
| 18   | 255840        | 1   | . Spring, Leaf            | 40   | 255828   | 1   | . Bolt, Clamp                  |
| 19   | 255847        | 1   | . Clamp, Twine Holder     | 41   | 255842   | 1   | . Roller, Tension Lever        |
| 20   | 255861        | 1   | . Knife, Twine Holder     | 42   | 255855   | 1   | . Bushing, Tension Lever Frame |
| 21   | 255860        | 1   | . Cover                   |      |          |     |                                |
| 22   | 255862        | 1   | . Bolt, Knife             |      |          |     |                                |

Rev C



## Tailless Knotter

Page 3 of 3

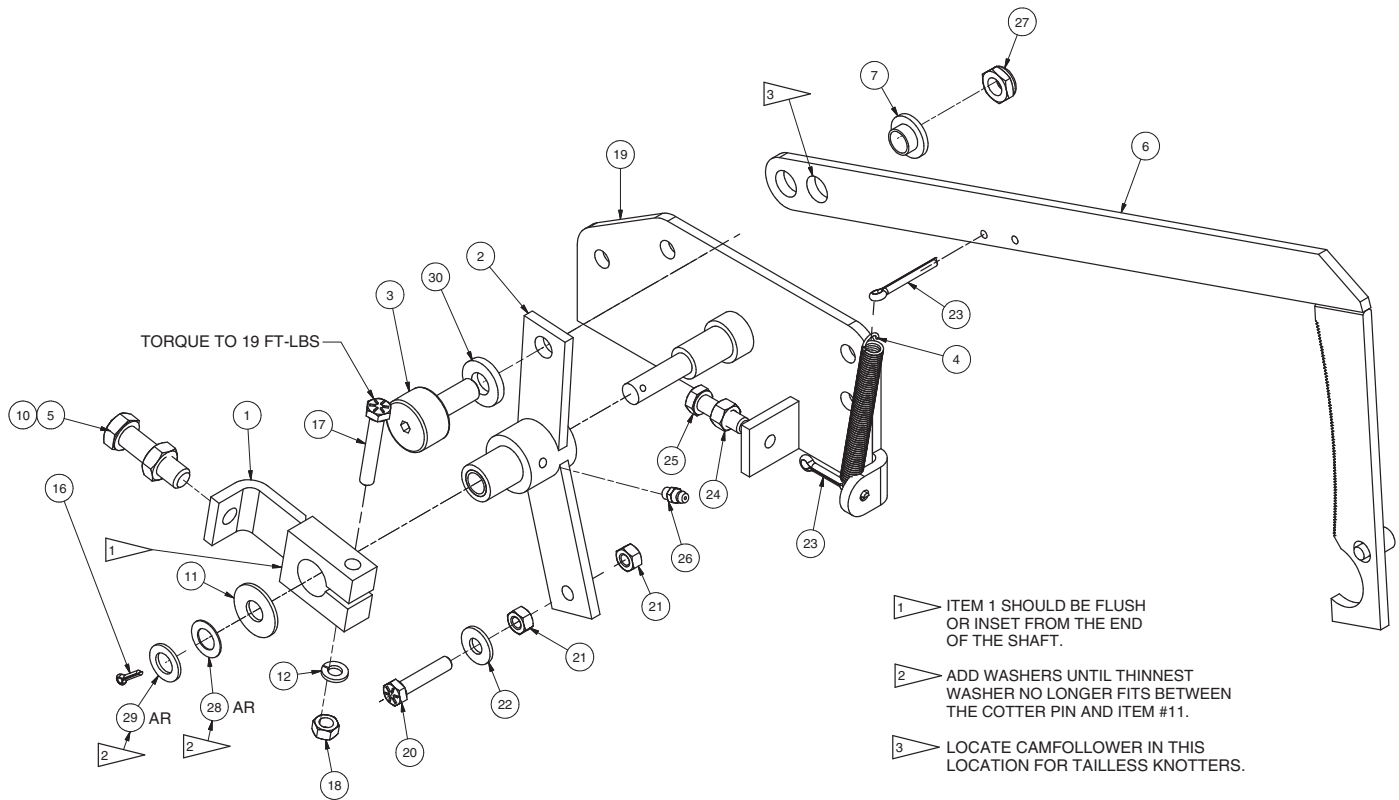


**NOTES:**

THESE ITEMS ARE CONFIGURED AS SERVICE ITEMS AND MUST BE ORDERED SEPERATELY FROM A COMPLETE KNOTTER ASSEMBLY:

- 1 BILL HOOK ASSEMBLY COMPLETE: 255866
- 2 TWINE HOLDER COMPLETE: 255863
- 3 KNOTTER FRAME WITH BUSHINGS: 255857
- 4 ORIENTATION OF THRUST WASHER ON THE TWINE HOLDER IS WITH GROOVES TOWARDS PINION GEAR
- 5 ORIENTATION OF THRUST WASHER ON THE BILL HOOK IS WITH THE LUBRICATING MATERIAL TOWARDS THE PINION GEAR

# Trip Mount Assembly, Tailless

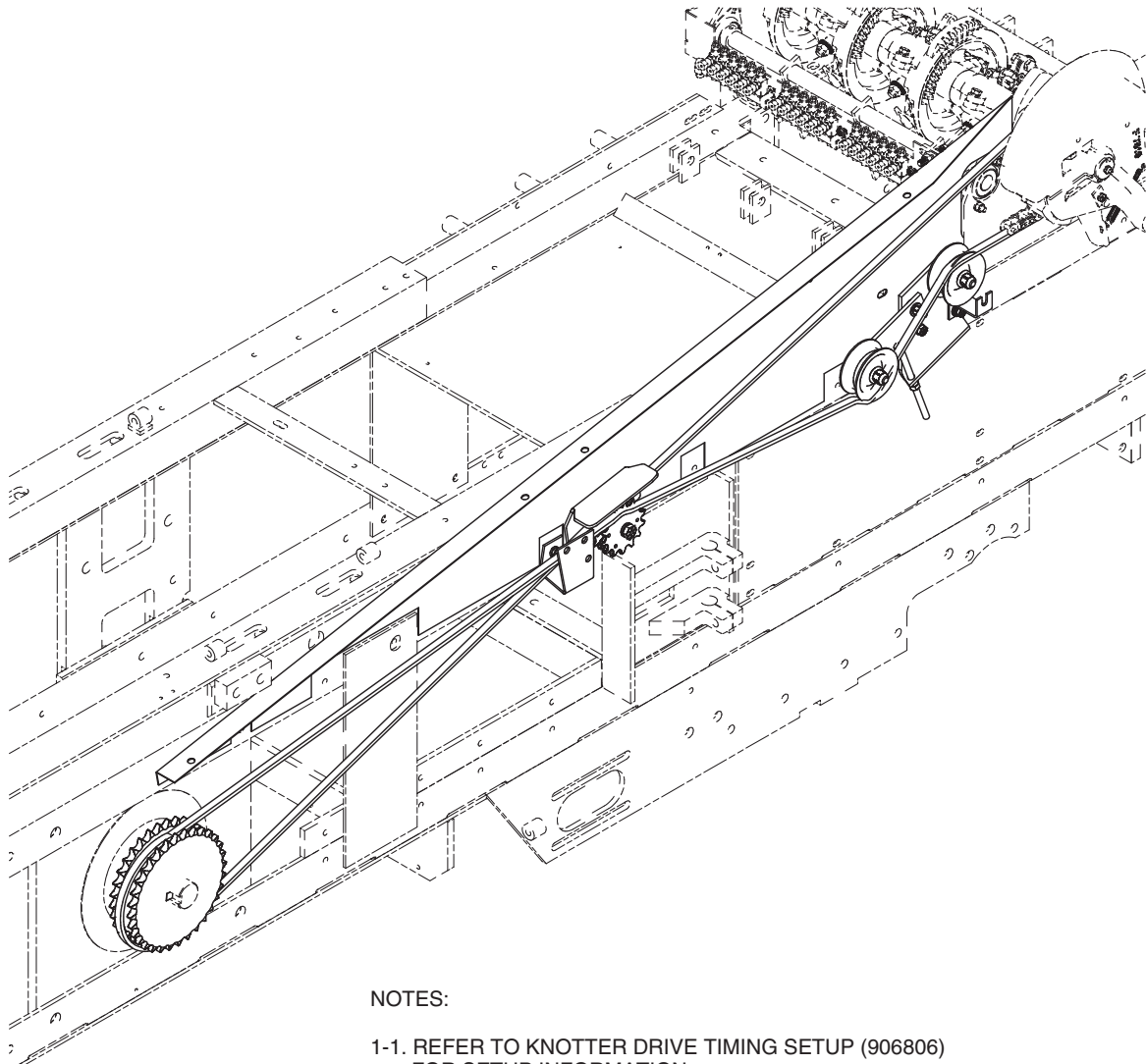


| Item                                  | Part No.   | Qty | Description                | Item | Part No.   | Qty | Description     |
|---------------------------------------|------------|-----|----------------------------|------|------------|-----|-----------------|
| <b>SAL0000580 Trip Mount Assembly</b> |            |     |                            |      |            |     |                 |
| 1                                     | F000001515 | 1   | . Lever                    | 19   | MNT037346D | 1   | . Mount         |
| 2                                     | 910366     | 1   | . Reset Lever              | 20   | R13811016  | 1   | . Capscrew      |
| 3                                     | 910363     | 1   | . Bearing, Cam Follower    | 21   | R13811512  | 2   | . Hex Nut       |
| 4                                     | F000000278 | 1   | . Spring, Knotter Trip Arm | 22   | 223428     | 1   | . Washer        |
| 5                                     | 221569W    | 1   | . Capscrew                 | 23   | 00103409   | 2   | . Cotter Pin    |
| 6                                     | KNT0032132 | 1   | . Bar Assembly, Trip Meter | 24   | 221707W    | 1   | . Hex Nut       |
| 7                                     | 910368     | 1   | . Ferrule                  | 25   | 221499W    | 1   | . Capscrew      |
| 10                                    | 234218     | 1   | . Jam Nut                  | 26   | 11079      | 1   | . Fitting, Lube |
| 11                                    | 15177W     | 1   | . Washer                   | 27   | NEJ0005000 | 1   | . Nut, Esna Jam |
| 12                                    | R13812513  | 1   | . Lockwasher               | 28   | F000008315 | AR  | . Washer        |
| 16                                    | 15223W     | 1   | . Cotter Pin               | 29   | ZZ00000210 | AR  | . Mach Bushing  |
| 17                                    | 221475W    | 1   | . Capscrew                 | 30   | 221771W    | 1   | . Washer        |
| 18                                    | R13803725  | 1   | . Hex Nut                  |      |            |     |                 |

Rev M

# Knotter Drive Installation

Page 1 of 2



NOTES:

1-1. REFER TO KNOTTER DRIVE TIMING SETUP (906806) FOR SETUP INFORMATION

| Item                                     | Part No.   | Qty | Description                   | Item | Part No.   | Qty | Description     |
|--|------------|-----|-------------------------------|------|------------|-----|-----------------|
| <b>902105 Knotter Drive Installation</b> |            |     |                               |      |            |     |                 |
| 1  | 253836     | 1   | . Sprocket                    | 21   | 221707W    | 2   | . Hex Nut       |
| 3  | F000008153 | 1   | . Chain Shield Center Bracket | 22   | 237567     | 1   | . Locknut       |
| 4  | F000008377 | 1   | . Shield                      | 23   | 223587     | 2   | . Locknut       |
| 5  | F000007055 | 1   | . Chain, Knotter Drive        | 24   | R13812514  | 3   | . Lockwasher    |
| 8  | F000008112 | 1   | . Plate, Hold Down            | 26   | 221771W    | 11  | . Washer        |
| 9  | F000008086 | 1   | . Bracket, Chain Idler        | 27   | ZZ00000459 | 1   | . Key           |
| 10                                       | F000008083 | 1   | . Bracket, Chain Tightener    | 28   | 00103384   | 1   | . Cotter Pin    |
| 11                                       | F000008154 | 1   | . Chain Shield Rear Bracket   | 29   | 00273802   | 1   | . Nut, Serrated |
| 12                                       | F000008084 | 1   | . Rod, Chain Tightener        | 30   | 221767W    | 3   | . Washer        |
| 14                                       | F000000440 | 1   | . Ferrule                     | 31   | R13811080  | 1   | . Capscrew      |
| 15                                       | F000007397 | 2   | . Sprocket                    | 32   | Y09G-0528  | 1   | . Capscrew      |
| 16                                       | R13811031  | 1   | . Capscrew                    | 33   | Y17C-0616  | 1   | . Capscrew      |
| 17                                       | 162572W    | 1   | . Capscrew                    | 34   | 234665     | 1   | . Lockwasher    |
| 18                                       | Y17C-0624  | 1   | . Capscrew                    | 35   | 15176W     | 1   | . Washer        |
| 19                                       | 221576W    | 1   | . Capscrew                    | 36   | F000000883 | 2   | . Pulley, Idler |
| 20                                       | R13801850  | 1   | . Capscrew                    |      |            |     |                 |

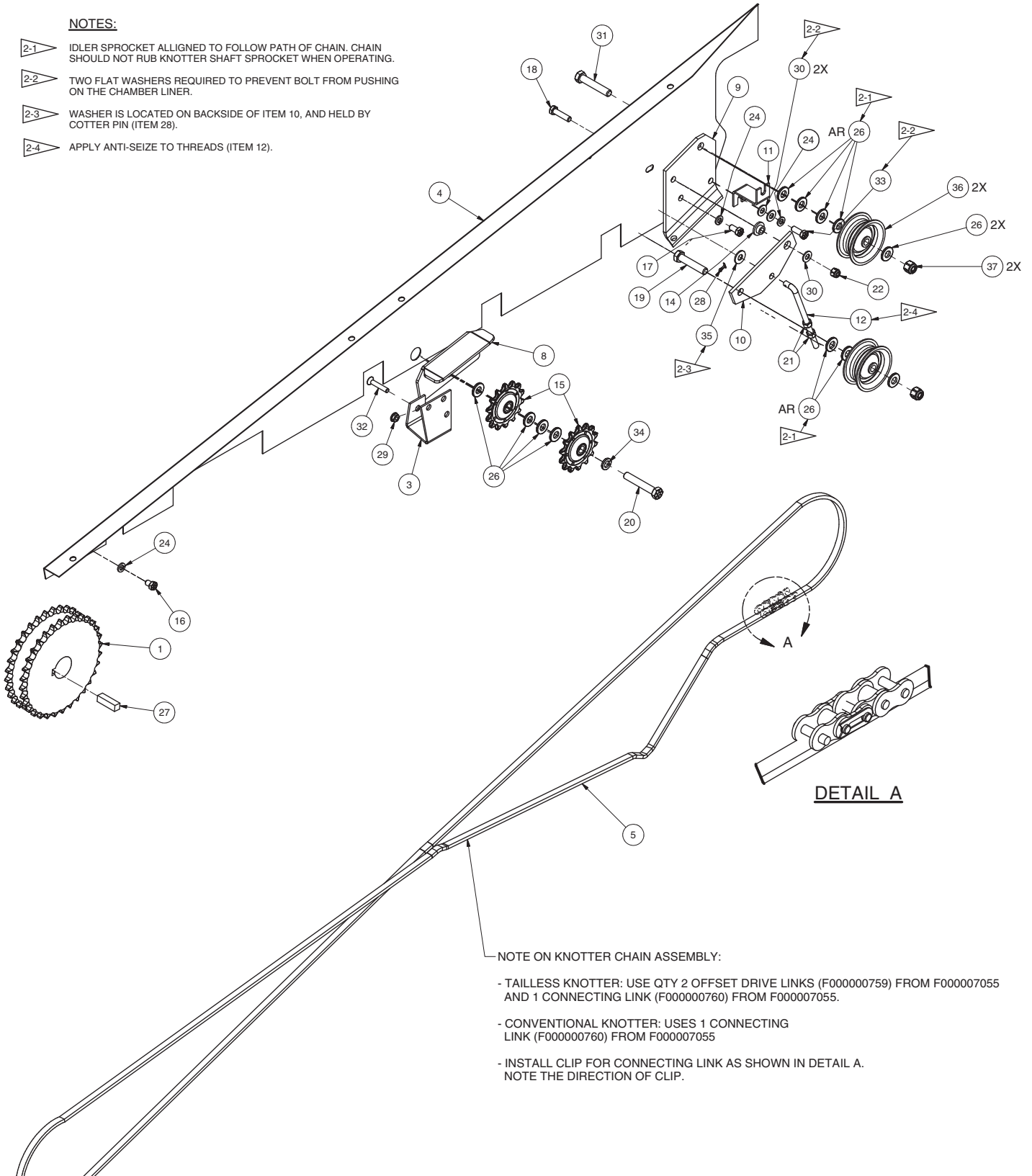
Rev S

# Knotter Drive Installation

Page 2 of 2

**NOTES:**

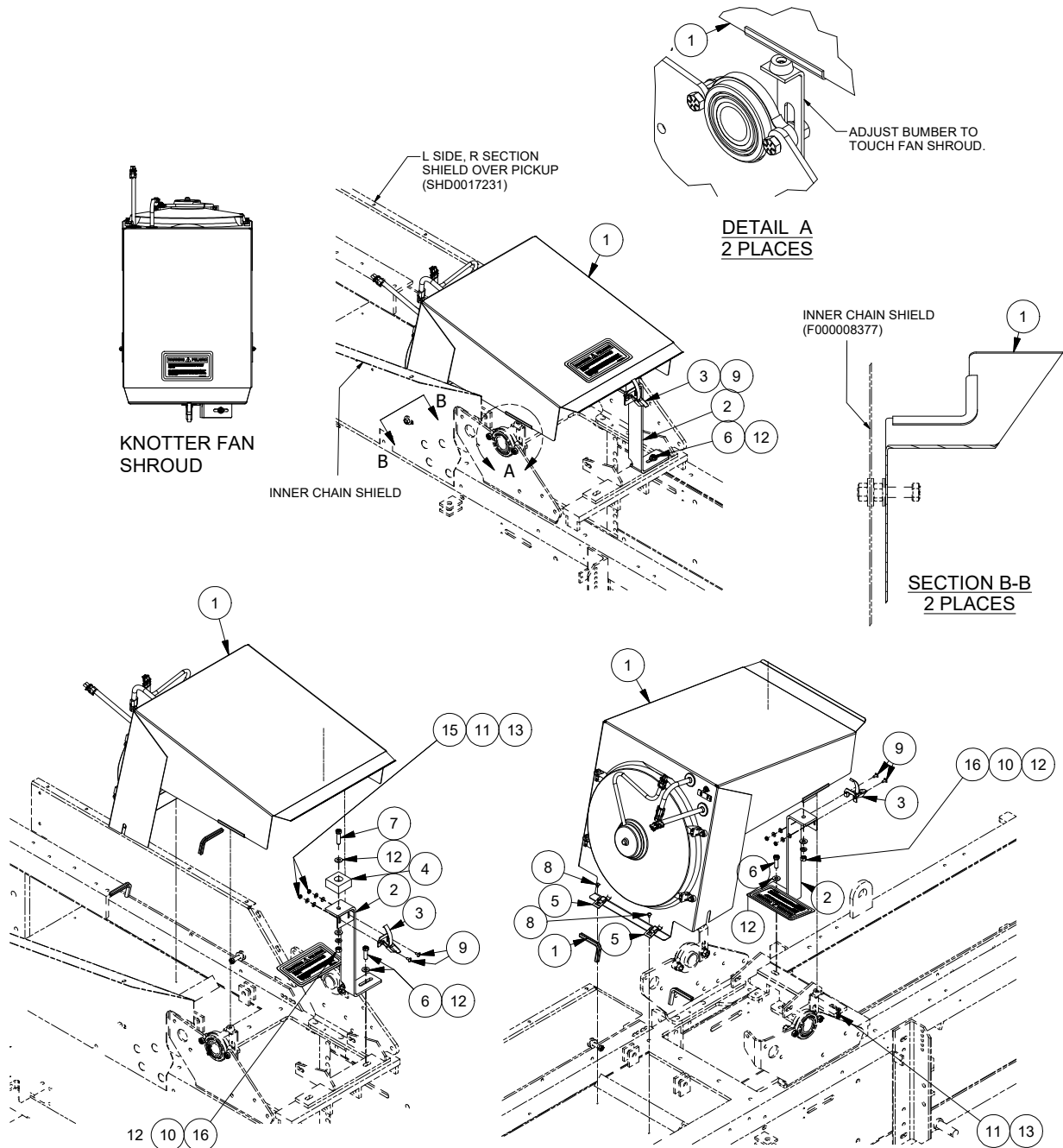
- 2-1 IDLER SPROCKET ALIGNED TO FOLLOW PATH OF CHAIN. CHAIN SHOULD NOT RUB KNOTTER SHAFT SPROCKET WHEN OPERATING.
- 2-2 TWO FLAT WASHERS REQUIRED TO PREVENT BOLT FROM PUSHING ON THE CHAMBER LINER.
- 2-3 WASHER IS LOCATED ON BACKSIDE OF ITEM 10, AND HELD BY COTTER PIN (ITEM 28).
- 2-4 APPLY ANTI-SEIZE TO THREADS (ITEM 12).



**NOTE ON KNOTTER CHAIN ASSEMBLY:**

- TAILLESS KNOTTER: USE QTY 2 OFFSET DRIVE LINKS (F00000759) FROM F000007055 AND 1 CONNECTING LINK (F00000760) FROM F000007055.
- CONVENTIONAL KNOTTER: USES 1 CONNECTING LINK (F00000760) FROM F000007055
- INSTALL CLIP FOR CONNECTING LINK AS SHOWN IN DETAIL A. NOTE THE DIRECTION OF CLIP.

### Knotter Fan Installation, 2 Tie

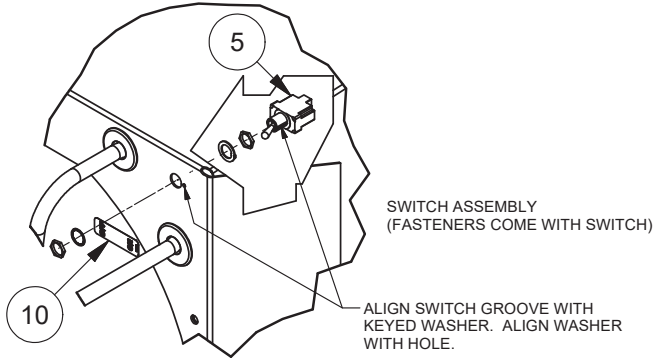


| Item | Part No.      | Qty | Description                     | Item | Part No.  | Qty | Description     |
|------|---------------|-----|---------------------------------|------|-----------|-----|-----------------|
|      | <b>902817</b> |     | <b>Knotter Fan Installation</b> |      |           |     |                 |
| 1    | *a 903594     | 1   | . Fan Assembly, Knotter         | 9    | 230640    | 2   | . Machine Screw |
| 2    | SUP0024161    | 1   | . Support                       | 10   | R13812514 | 1   | . Lockwasher    |
| 3    | CLP0000130    | 2   | . Fastener, Hook Type           | 11   | 18423W    | 4   | . Lockwasher    |
| 4    | PAD0018804    | 1   | . Tens Rail Support Pad         | 12   | 221767W   | 3   | . Flat Washer   |
| 5    | F000006108    | 2   | . Catch                         | 13   | R13122    | 2   | . Flat Washer   |
| 6    | 221499W       | 1   | . Capscrew                      | 15   | R13812544 | 2   | . Hex Nut       |
| 7    | Y17C-0624     | 1   | . Capscrew                      |      |           |     |                 |
| 8    | 238595        | 2   | . Machine Screw                 |      |           |     |                 |

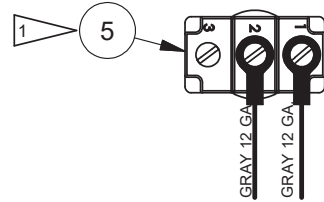
\*a See Separate Coverage (Page 8-34)

Rev G

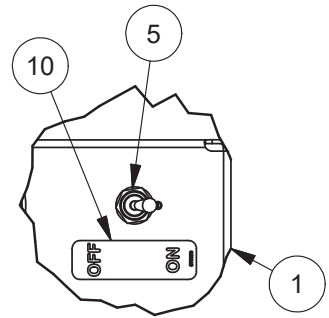
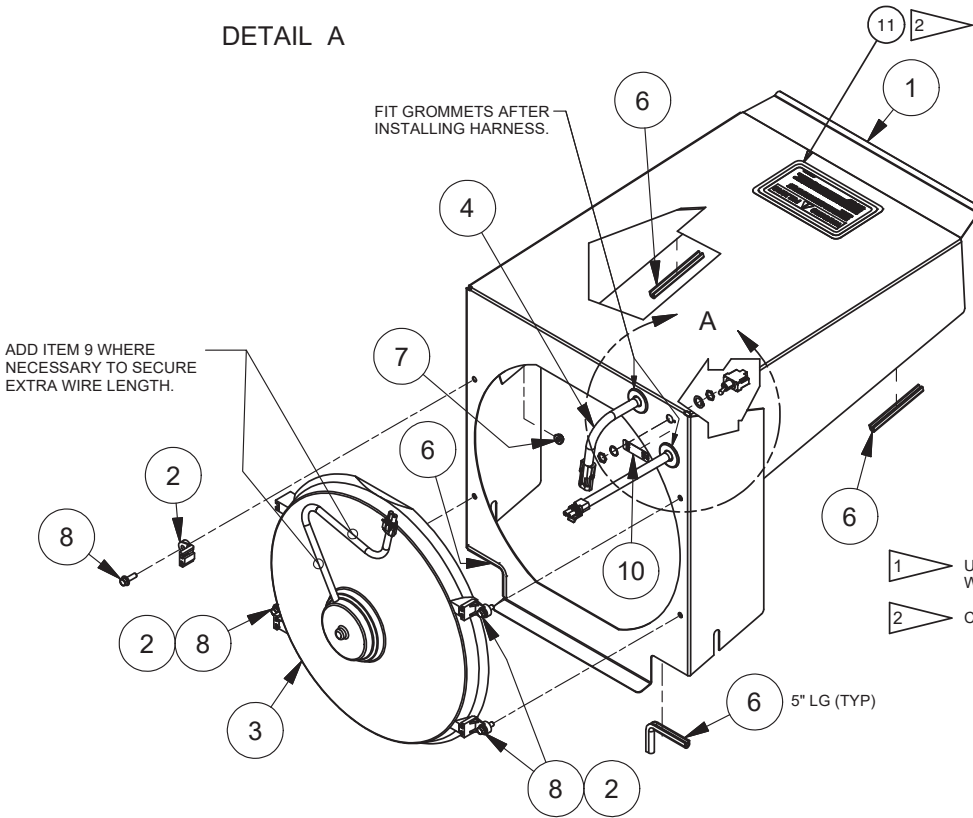
# Knotter Fan Assembly



DETAIL A



VIEW FROM BACK OF SWITCH

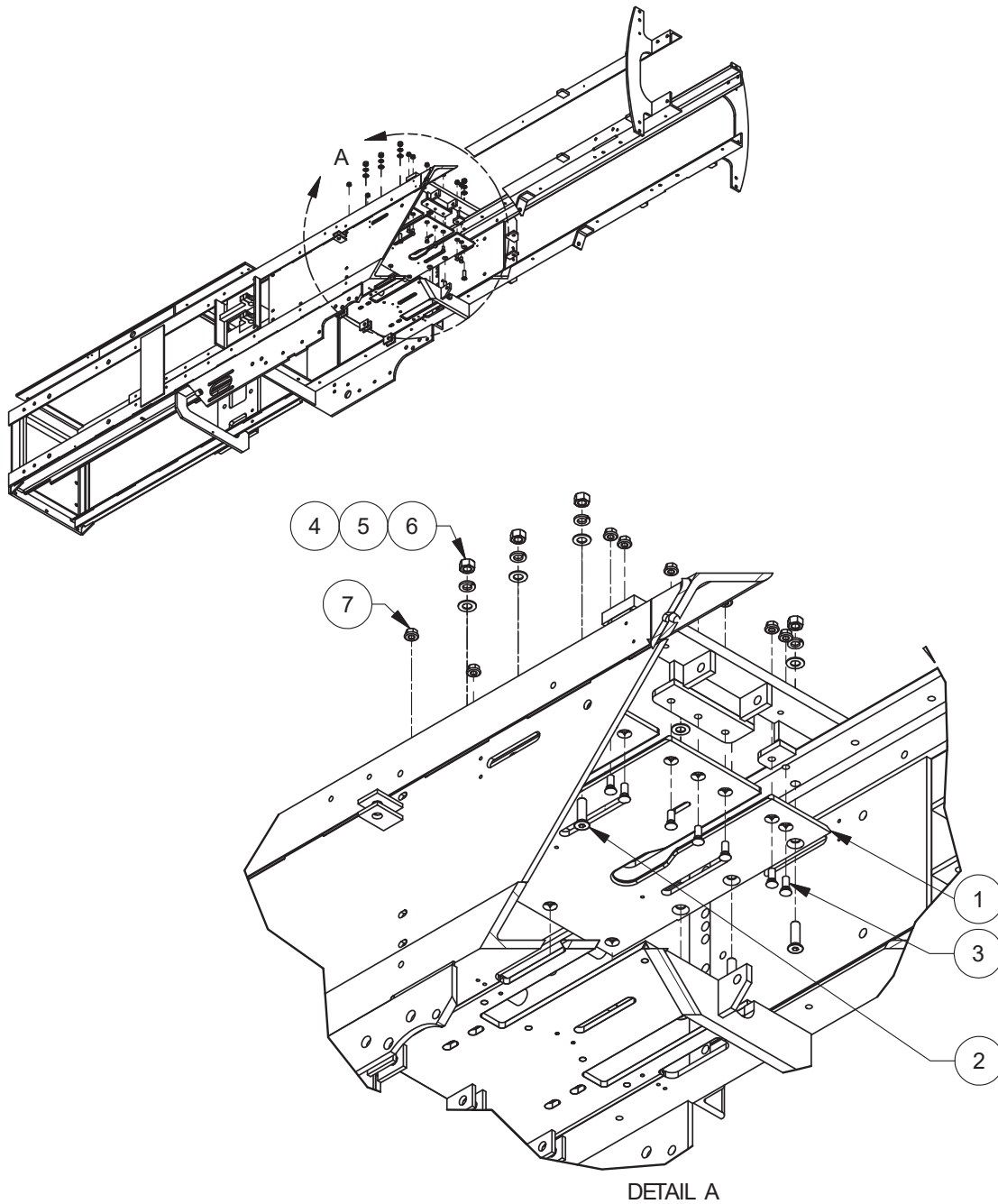


LABEL DETAIL

- 1 USE TERMINAL 1 & 2 FOR TERMINATION WITH WIRE HARNESS, DO NOT USE TERMINAL 3.
- 2 CENTER DECAL ON SHROUD

| Item | Part No.      | Qty | Description                 | Item | Part No.   | Qty | Description             |
|------|---------------|-----|-----------------------------|------|------------|-----|-------------------------|
|      | <b>903594</b> |     | <b>Knotter Fan Assembly</b> |      |            |     |                         |
| 1    | 903112        | 1   | . Plate, Shroud             | 7    | 235620     | 4   | . Nut, Esna             |
| 2    | MNT0050025    | 4   | . Knotter Fan Shroud Mount  | 8    | SMS0000305 | 4   | . Bolt                  |
| 3    | 256678        | 1   | . Shroud, Fan               | 9    | CBT0000148 | 2   | . Nylon Cable Tie-Black |
| 4    | 903592        | 1   | . Wire Harness              | 10   | 576690     | 1   | . Decal                 |
| 5    | 229289        | 1   | . Toggle Switch             | 11   | FD00023583 | 1   | . Warning Decal         |
| 6    | MLD7500317    | 2'  | . Trim, Edge                |      |            |     |                         |

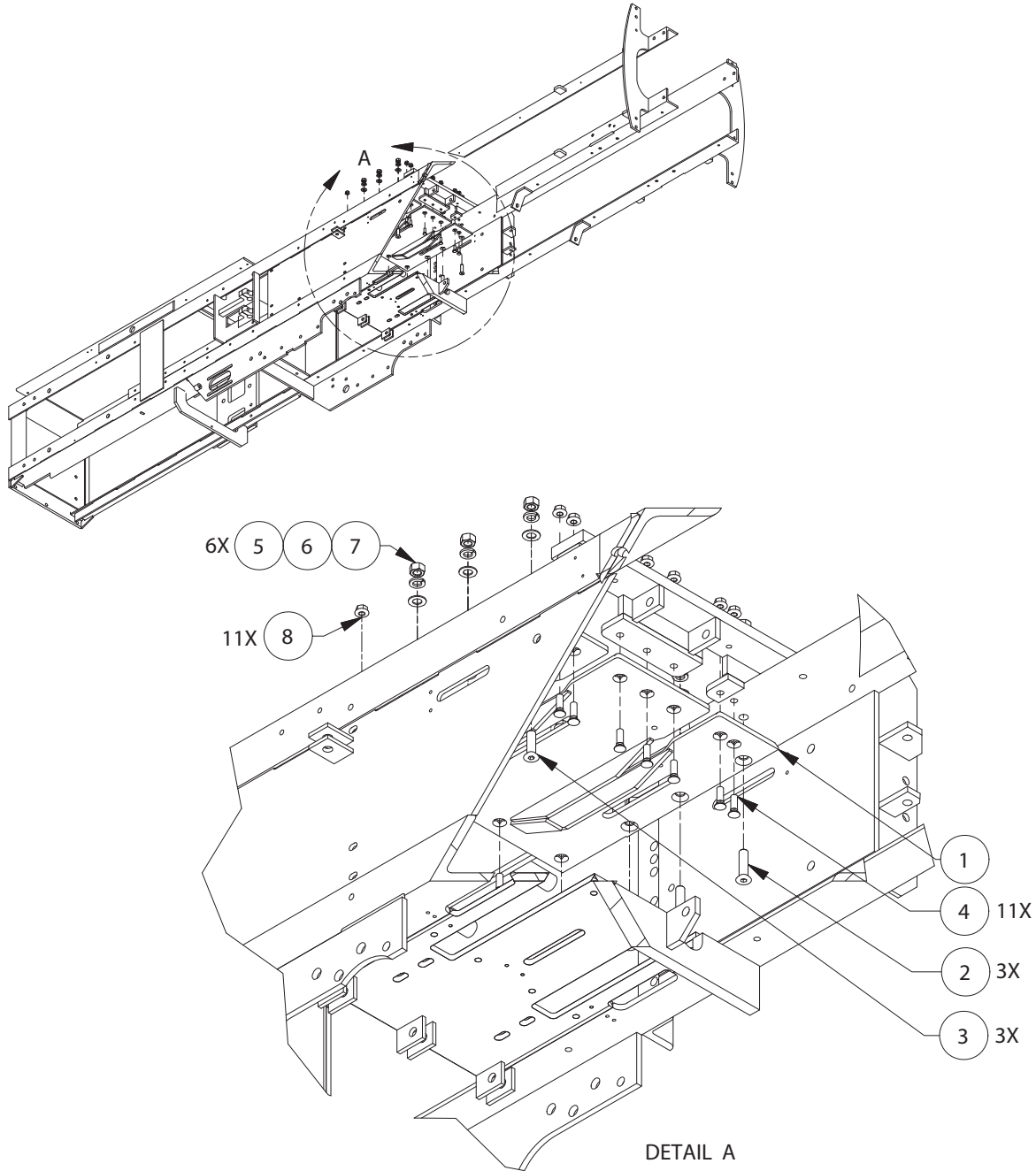
# Top Plate Installation, Conventional, 2 Tie



| Item                                 | Part No.   | Qty | Description   | Item | Part No. | Qty | Description  |
|--------------------------------------|------------|-----|---------------|------|----------|-----|--------------|
| <b>904038 Top Plate Installation</b> |            |     |               |      |          |     |              |
| 1                                    | 902848     | 1   | . Plate, Top  | 5    | 234665   | 6   | . Lockwasher |
| 2                                    | Y09G-0828  | 6   | . Capscrew    | 6    | 221711W  | 6   | . Hex Nut    |
| 3                                    | PWB3751250 | 11  | . Bolt        | 7    | 09411507 | 11  | . Nut        |
| 4                                    | 223634     | 6   | . Flat Washer |      |          |     |              |

Rev A

# Top Plate Installation, Tailless, 2 Tie



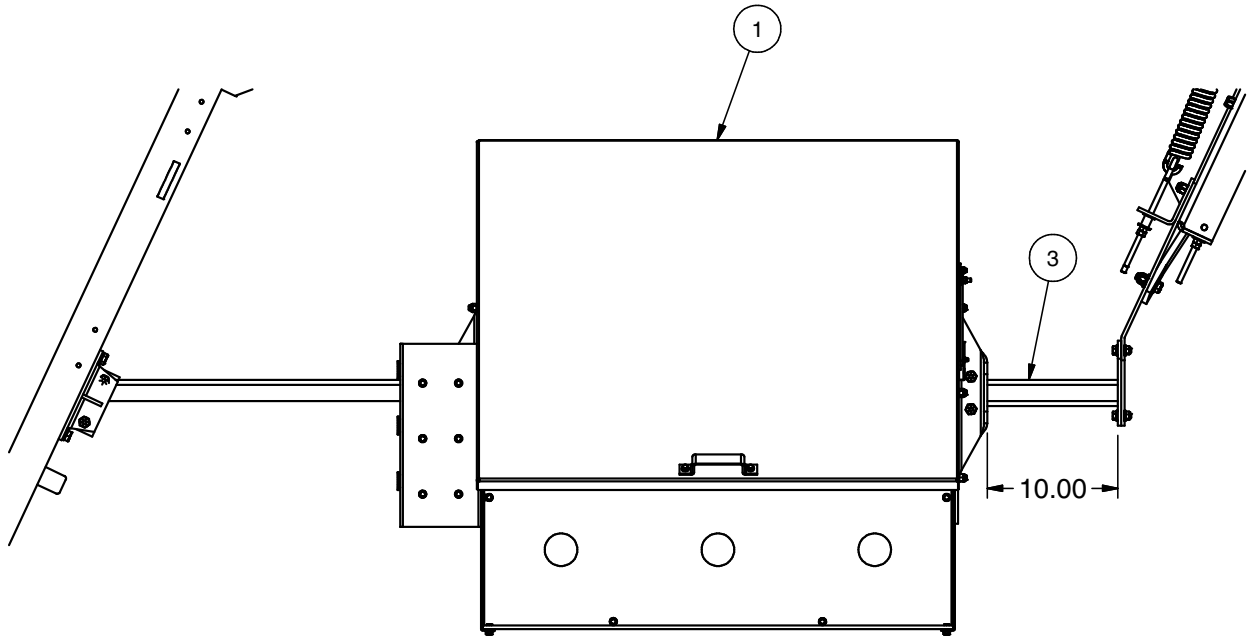
| Item                                 | Part No.   | Qty | Description   | Item | Part No. | Qty | Description  |
|--------------------------------------|------------|-----|---------------|------|----------|-----|--------------|
| <b>904039 Top Plate Installation</b> |            |     |               |      |          |     |              |
| 1                                    | 902852     | 1   | . Plate, Top  | 6    | 234665   | 6   | . Lockwasher |
| 2                                    | Y09G-0832  | 3   | . Capscrew    | 7    | 221711W  | 6   | . Hex Nut    |
| 3                                    | Y09G-0828  | 3   | . Capscrew    | 8    | 09411507 | 11  | . Nut        |
| 4                                    | PWB3751250 | 11  | . Bolt        |      |          |     |              |
| 5                                    | 223634     | 6   | . Flat Washer |      |          |     |              |

Rev A



# Twine Box Installation, 12 Compartment

Page 1 of 2



## TWINE BOX LOCATION

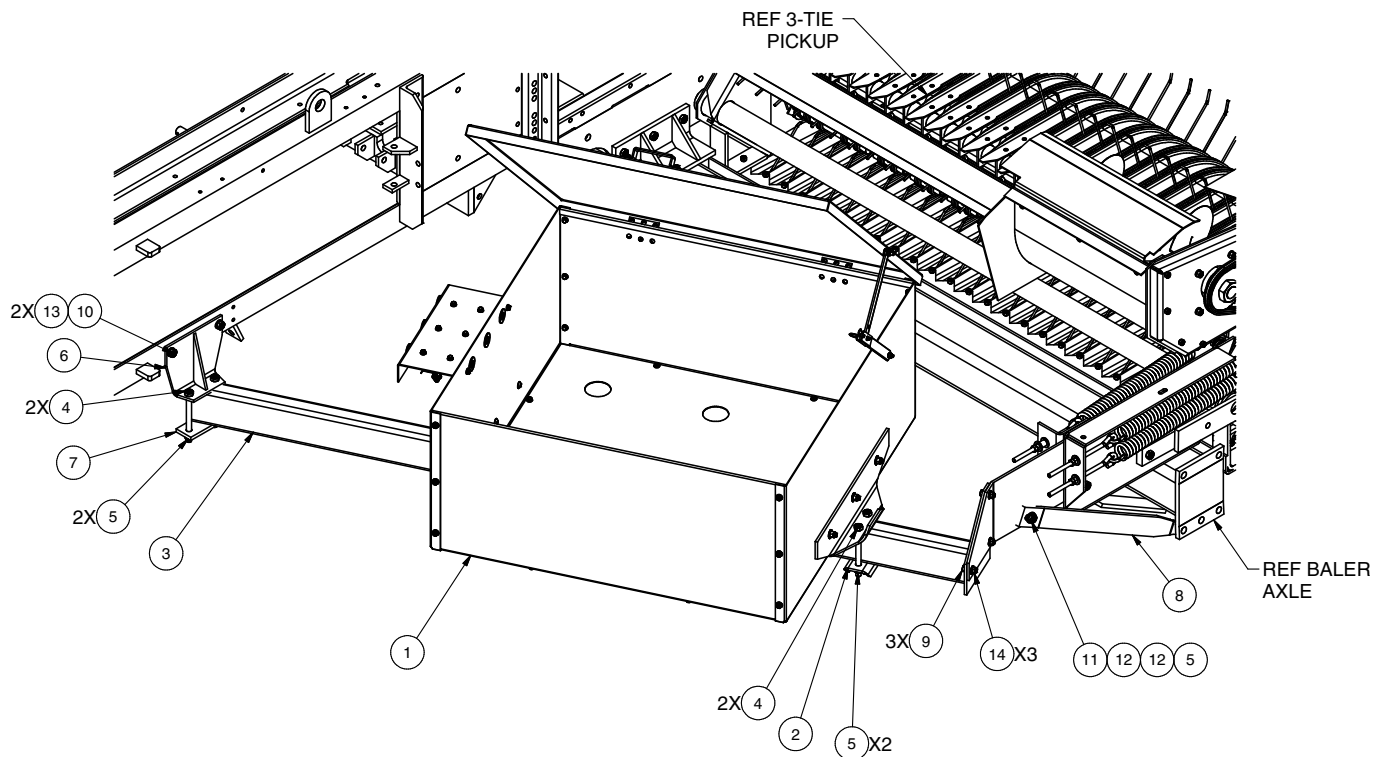
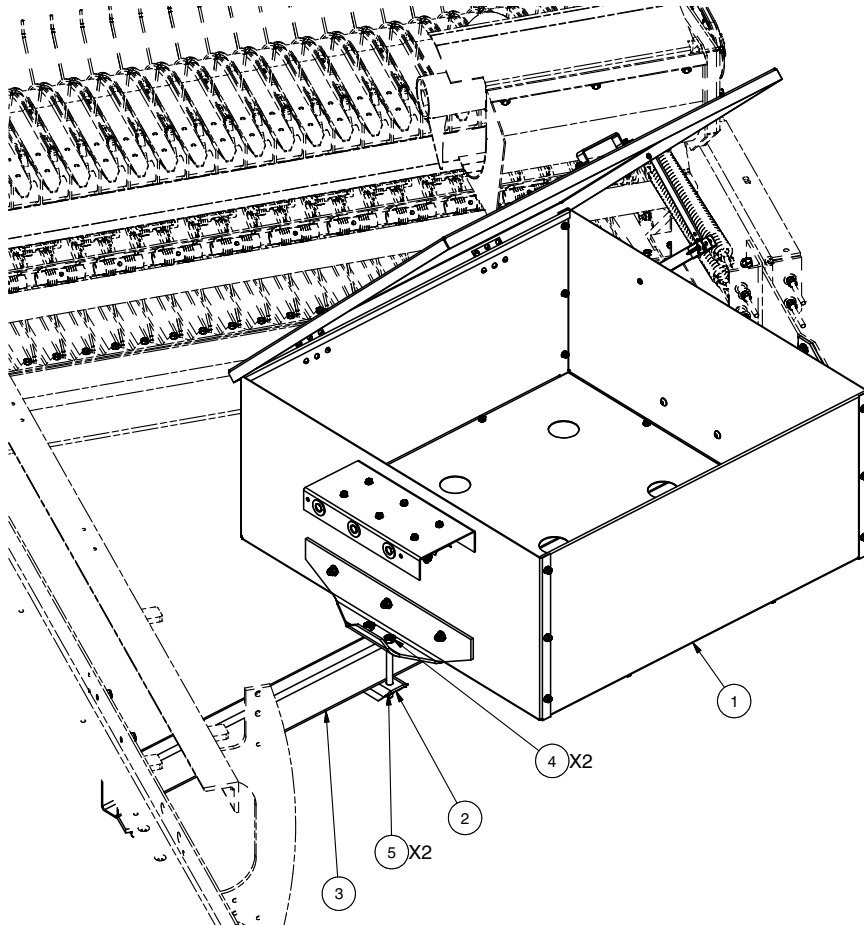
| Item   | Part No.   | Qty | Description                          | Item | Part No.  | Qty | Description      |
|--|------------|-----|--------------------------------------|------|-----------|-----|------------------|
| <b>902166 Twine Box Installation, 12 Compartment</b> |            |     |                                      |      |           |     |                  |
| 1  | *a 902167  | 1   | . Twine Box Sub-Assy, 12 Compartment | 9    | 174413W   | 3   | . Screw, Ser Flg |
| 2  | CLP0017241 | 2   | . Plate, Bracket                     | 10   | R13801840 | 2   | . Capscrew       |
| 3  | TBX0020849 | 1   | . Base Tube                          | 11   | 221569W   | 1   | . Capscrew       |
| 4  | R13801857  | 6   | . Capscrew                           | 12   | 15135W    | 2   | . Washer         |
| 5  | 223587     | 7   | . Locknut                            | 13   | R13812516 | 2   | . Lockwasher     |
| 6  | F000007555 | 1   | . Bracket                            | 14   | 09411507  | 3   | . Nut            |
| 7  | F000007556 | 1   | . Plate                              |      |           |     |                  |
| 8  | F000007705 | 1   | . Brace                              |      |           |     |                  |

\*a See Separate Coverage (Page 8-39)

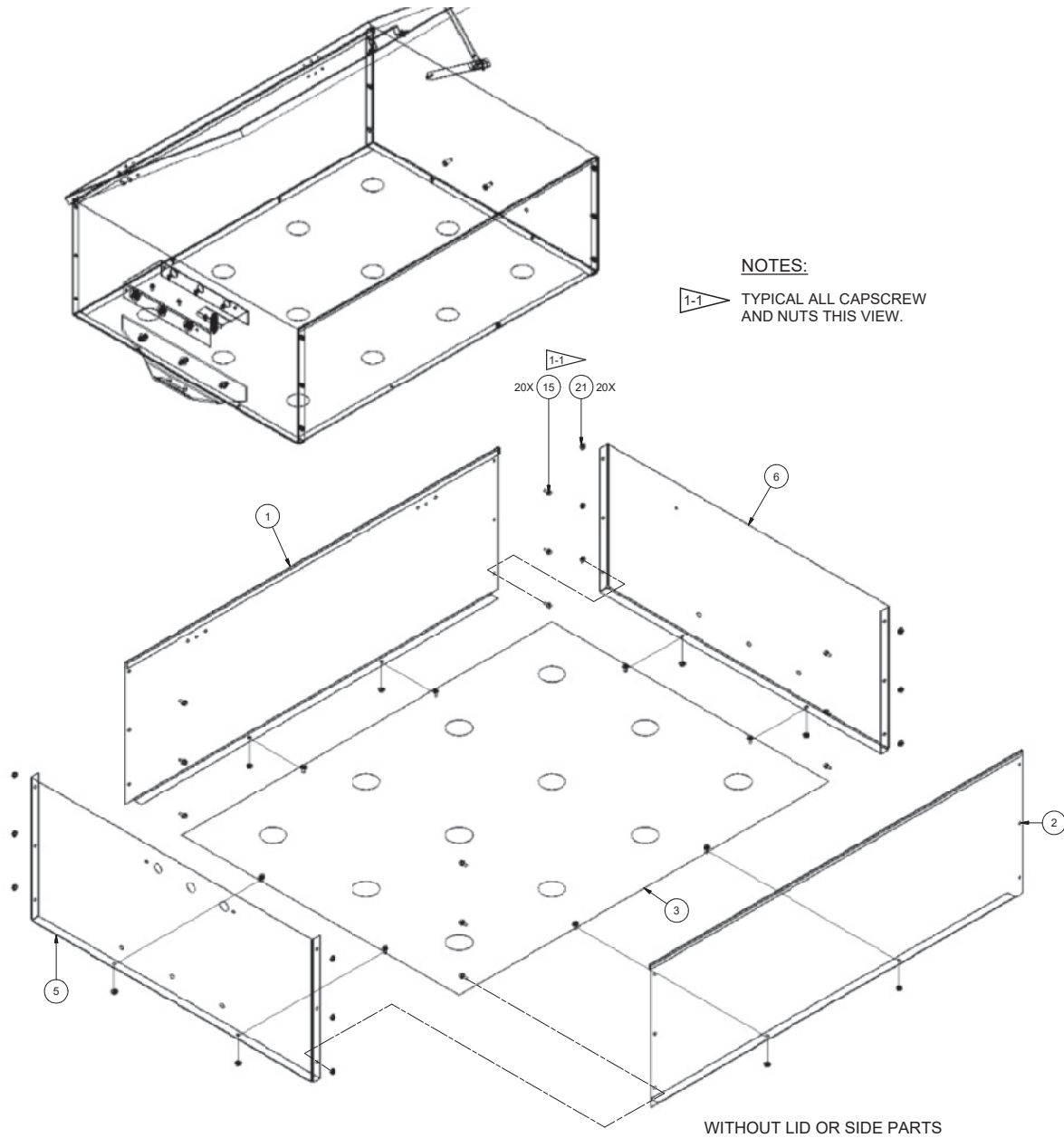
Rev HA

# Twine Box Installation, 12 Compartment

Page 2 of 2



# Twine Box Assembly, 12 Compartment

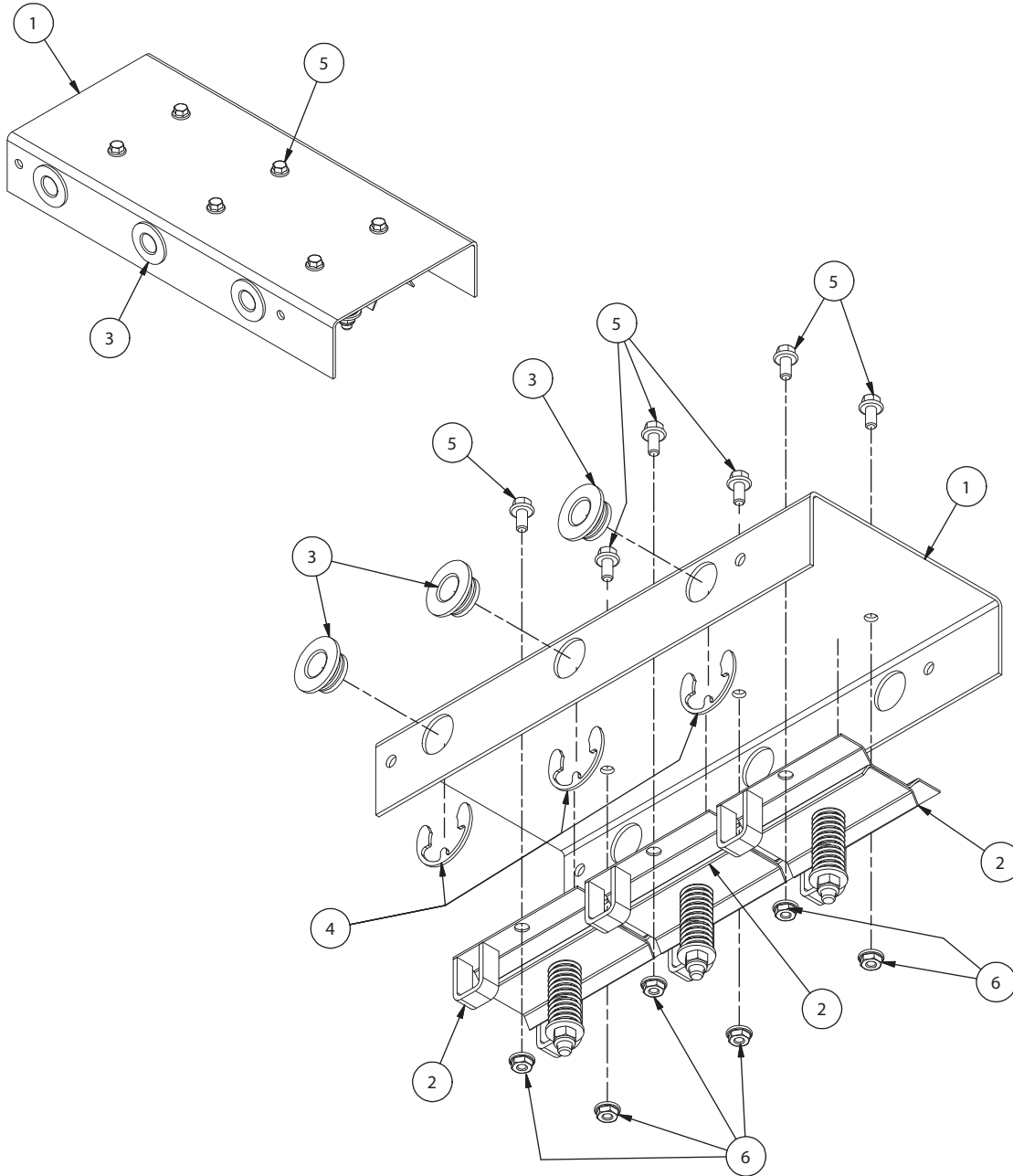


| Item                                      | Part No.   | Qty | Description                 | Item | Part No.     | Qty | Description      |
|---|------------|-----|-----------------------------|------|--------------|-----|------------------|
| <b>902167 Twine Box Sub-Assy, 12 Comp</b> |            |     |                             |      |              |     |                  |
| 1   | BOX0017256 | 1   | . Plate, Box Side           | 15   | SMS000017322 |     | . Screw, Ser Flg |
| 2   | BOX0017257 | 1   | . Plate, Box Front          | 16   | 18738W       | 6   | . Capscrew       |
| 3   | BOX0018358 | 1   | . Plate, Box Bottom         | 19   | 027-1007     | 12  | . Screw, Machine |
| 4   | BOX0018359 | 1   | . Lid, Box                  | 20   | R13811443    | 5   | . Washer         |
| 5   | BOX0017244 | 1   | . Twine Box End             | 21   | 09416918     | 36  | . Nut, Serrated  |
| 6   | BOX0017245 | 1   | . RH Twine Box -9 & 12 Comp | 22   | 237567       | 6   | . Locknut        |
| 7   | * 902891   | 1   | . Frame Sub-Assembly        | 23   | 15113W       | 2   | . Nut, Esna      |
| 9   | HAN0017239 | 1   | . Handle F/Twine Box        | 24   | 221767W      | 6   | . Washer         |
| 10  | HNG0000810 | 2   | . Hinge, Twine Box (Pair)   | 25   | 399741W      | 2   | . Screw, Ser Flg |
| 11  | 257830     | 1   | . Lid, Twine Box Support    | 27   | 258503       | 2   | . Capscrew       |
| 12  | BKT0017240 | 2   | . Bracket                   |      |              |     |                  |
| 13  | F000000856 | 3   | . Bushing                   |      |              |     |                  |
| 14  | F000000857 | 3   | . Ring, Snap                |      |              |     |                  |

\* See Separate Coverage (Page 8-40)

Rev KQ

# Twine Tension Frame Sub-Assembly



| Item          | Part No.   | Qty | Description                  | Item                      | Part No.   | Qty | Description |
|---------------|------------|-----|------------------------------|---------------------------|------------|-----|-------------|
| <b>902891</b> |            |     |                              | <b>Frame Sub Assembly</b> |            |     |             |
| 1             | BKT0017242 | 1   | . Bracket                    | 5                         | SMS0000173 | 6   | . Bolt      |
| 2             | F000007891 | 3   | . Tension Assembly, Twine    | 6                         | 09416918   | 6   | . Nut       |
| 3             | F000000856 | 3   | . Twine & Wire Guide Bushing |                           |            |     |             |
| 4             | F000000857 | 3   | . Snap Ring                  |                           |            |     |             |

Rev B

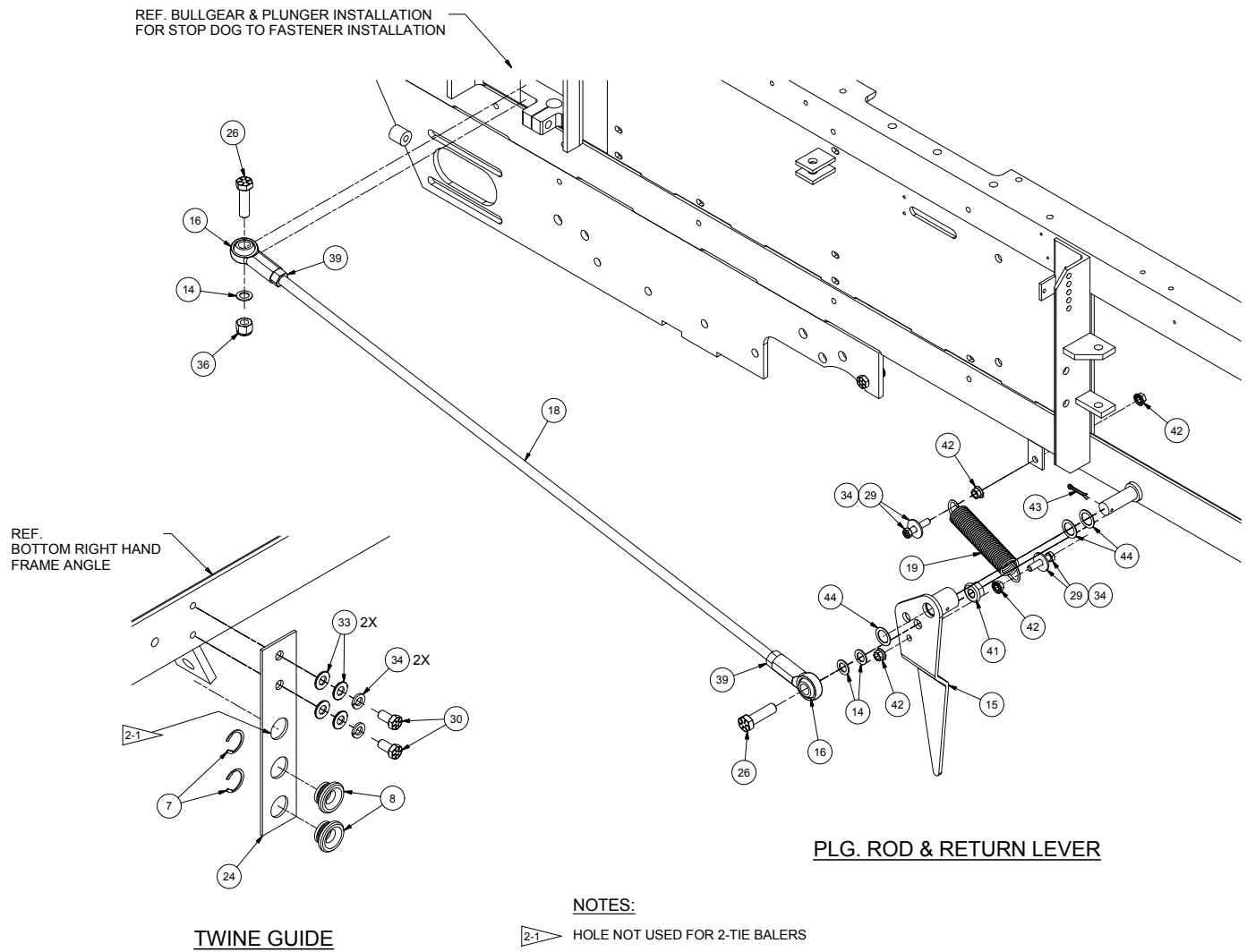
## Section 9

# Needle Yoke and Needles

|  |      |
|--|------|
| Needles and Yoke Installation, Conventional, 14" ..... | 9-2  |
| Needles and Yoke Installation, Conventional, 16" ..... | 9-6  |
| Needles and Yoke Installation, Tailless, 14" .....     | 9-10 |
| Needles and Yoke Installation, Tailless, 16" .....     | 9-13 |

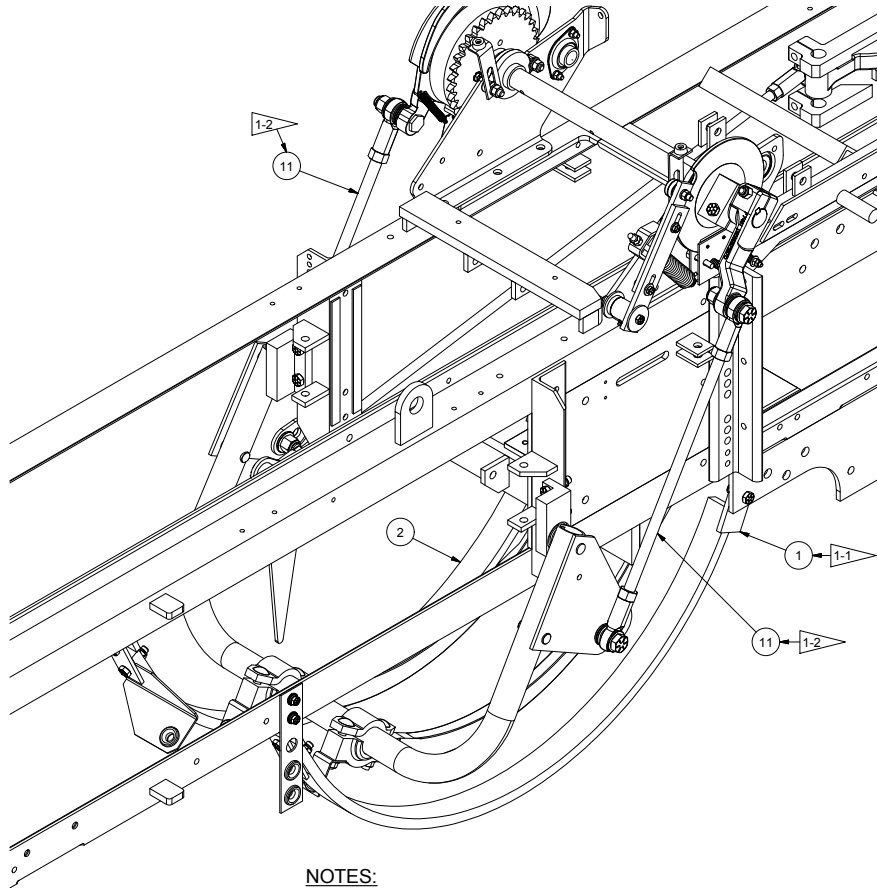
# Needles and Yoke Installation, Conventional, 14"

Page 1 of 4



### Needles and Yoke Conventional Installation, 14''

Page 2 of 4



**NOTES:**

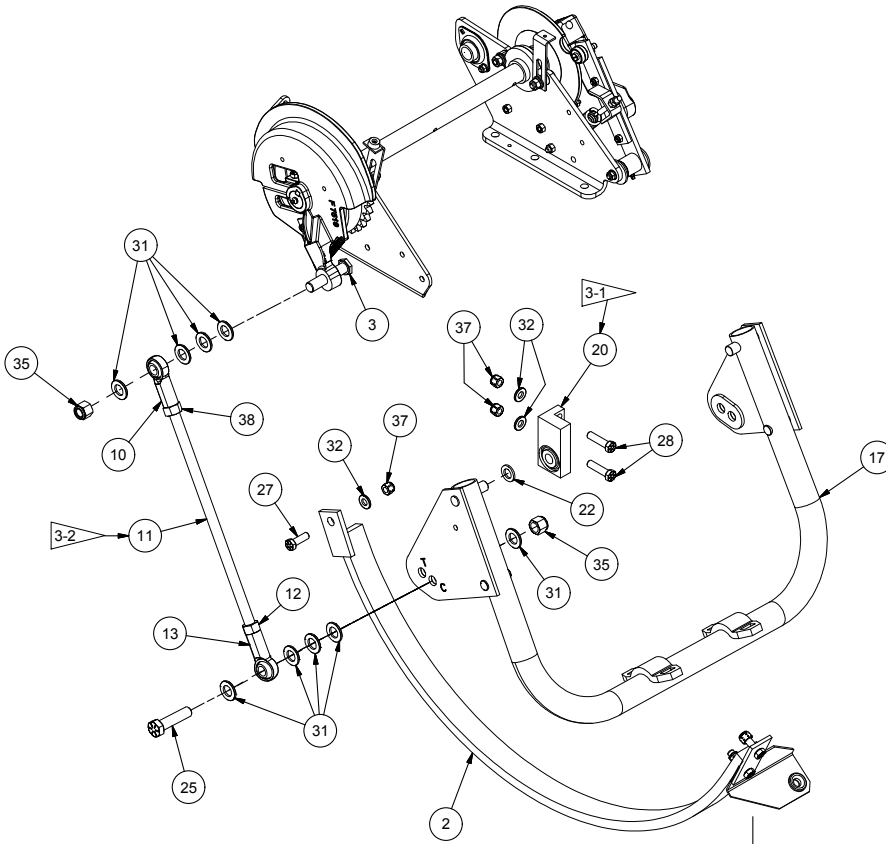
- 1-1 INSTALL ON INSIDE OF FRAME (BOTH SIDES OF BALER)
- 1-2 ROTATE CLOCKWISE TO RAISE NEEDLES. BOTTOM OF NEEDLE EYE SHOULD BE 4.50" PAST TWINE DISC AT TOP OF TRAVEL.

| Item  | Part No.    | Qty | Description                    | Item | Part No.   | Qty | Description    |
|---|-------------|-----|--------------------------------|------|------------|-----|----------------|
| <b>903414 Needles And Yoke Installation</b> |             |     |                                |      |            |     |                |
| 1   | F000007568  | 1   | . Guard Weldment, Rh Needle    | 25   | 232854     | 2   | . Capscrew     |
| 2   | F000007569  | 1   | . Needle Guard, LH             | 26   | Y17C-1036  | 2   | . Capscrew     |
| 3   | SFC036488A  | 1   | . Capscrew                     | 27   | 200454W    | 4   | . Capscrew     |
| 4   | CRB5003250  | 4   | . Bolt, Carriage               | 28   | R13811077  | 6   | . Capscrew     |
| 5   | F000001611  | 2   | . Needle, Twine - Curved       | 29   | R13801813  | 2   | . Capscrew     |
| 6   | F000007973  | 2   | . Holder, Needle Twine Guide   | 30   | 162572W    | 2   | . Capscrew     |
| 7   | F000000857  | 5   | . Ring, Snap                   | 31   | R13811457  | 16  | . Flat Washer  |
| 8   | F000000856  | 5   | . Bushing                      | 32   | 221771W    | 10  | . Washer, Hard |
| 9   | R13810974   | 1   | . Capscrew                     | 33   | 221767W    | 6   | . Washer, Flat |
| 10  | F000001549  | 2   | . Rod End                      | 34   | R13812514  | 2   | . Lockwasher   |
| 11  | F000007554  | 2   | . Rod, Needle Yoke Drive       | 35   | 234836     | 4   | . Nut, Esna    |
| 12  | NFL0007500  | 2   | . Nut, LH Hex                  | 36   | 237552     | 1   | . Nut, Esna    |
| 13  | F000001550  | 2   | . Rod End                      | 37   | 223587     | 10  | . Nut, Esna    |
| 14  | ZZ00000211  | 3   | . Mach Bushing                 | 38   | 221717W    | 2   | . Hex Nut      |
| 15  | LEV0015639  | 1   | . Lever Weldment               | 39   | 199594W    | 2   | . Hex Nut      |
| 16  | ROD00000001 | 2   | . Rod End                      | 40   | 221711W    | 4   | . Hex Nut      |
| 17  | 904347      | 1   | . Needle Yoke Weldment         | 41   | 00273801   | 1   | . Locknut      |
| 18  | ROD035984B  | 1   | . Rod                          | 42   | 09411507   | 4   | . Nut          |
| 19  | SPG0020662  | 1   | . Spring, Plunger Latch        | 43   | 00103409   | 1   | . Cotter Pin   |
| 20  | 904343      | 1   | . Bearing Assembly ,LH         | 44   | ZZ00000208 | 3   | . Mach Bushing |
| 21  | 904344      | 1   | . Bearing Assembly ,RH         | 45   | 903413     | 2   | . Bar          |
| 22  | 226272      | 8   | . Bushing                      |      |            |     |                |
| 23  | GUD0031463  | 1   | . Bracket                      |      | NA         |     | Not Applicable |
| 24  | F000000525  | 1   | . Holder F/Twine Guide Bushing |      |            |     |                |

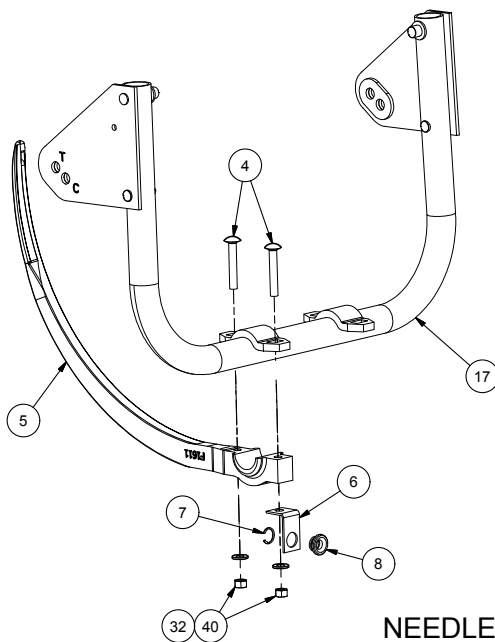
Rev C-

# Needles and Yoke Installation, Conventional, 14"

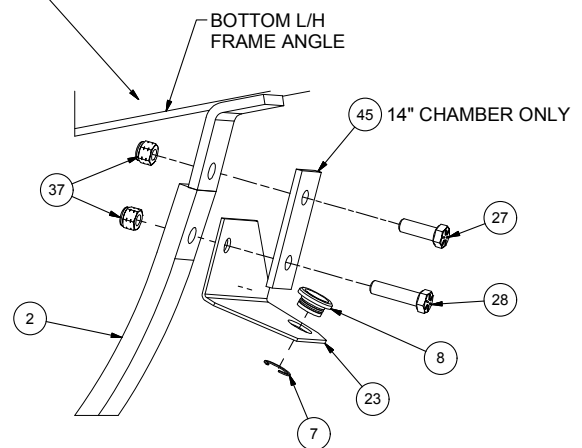
Page 3 of 4



**YOKE BRG, GUARD & DRIVE ROD  
LEFT HAND**



**NEEDLE  
2 PLACES**



**GUARD MOUNT, LH**

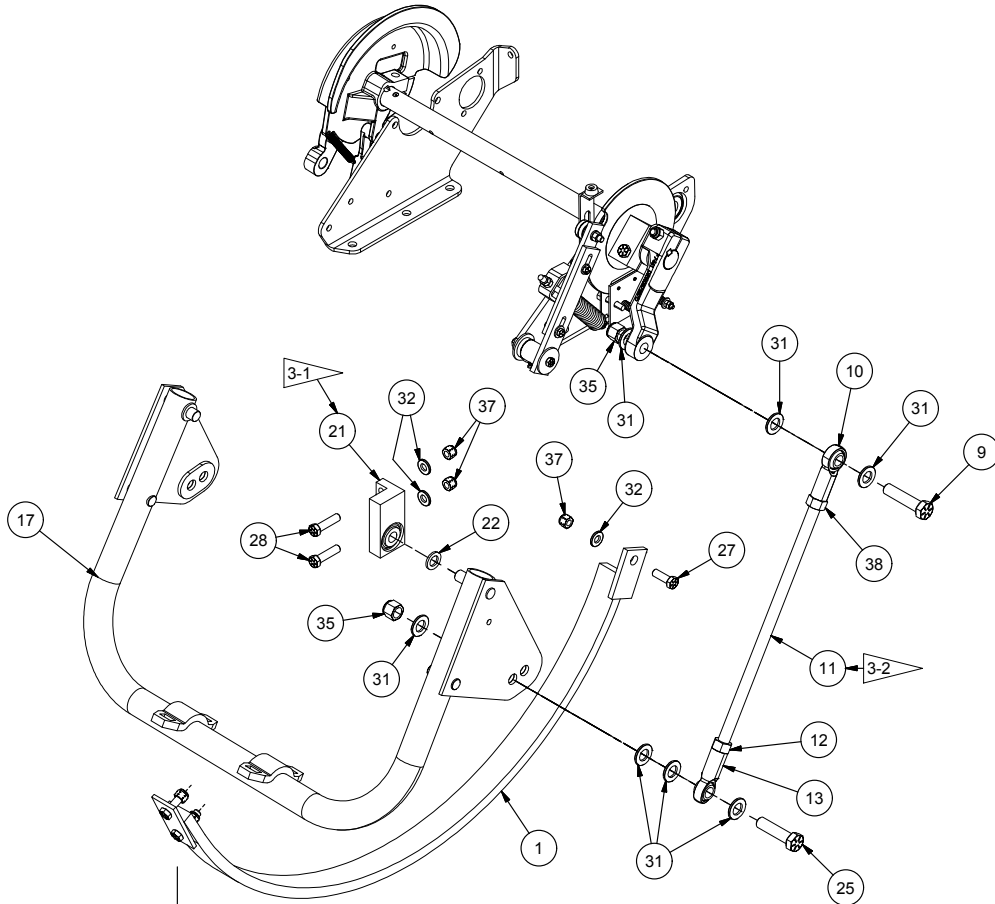
**NOTES:**

- 3-1 USE FIXTURE X-202369 FOR INSTALLATION OF P/N: 904347
- 3-2 DRIVE ROD SHOULD NOT HAVE MORE THAN 5° OF MIS-ALIGNMENT BETWEEN SPHERICAL ROD ENDS

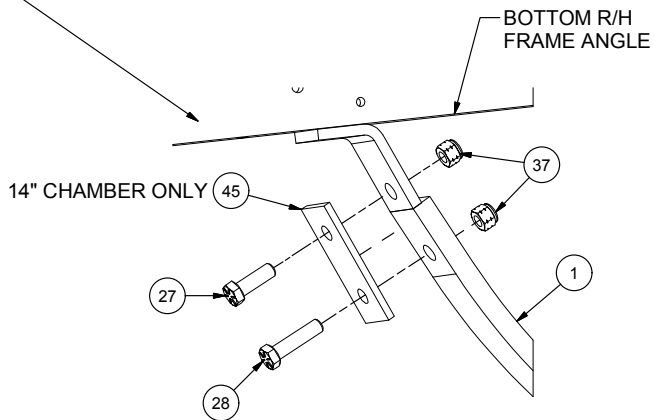


# Needles and Yoke Installation, Conventional, 14"

Page 4 of 4



**YOKE BRG, GUARD & DRIVE ROD  
RIGHT HAND**



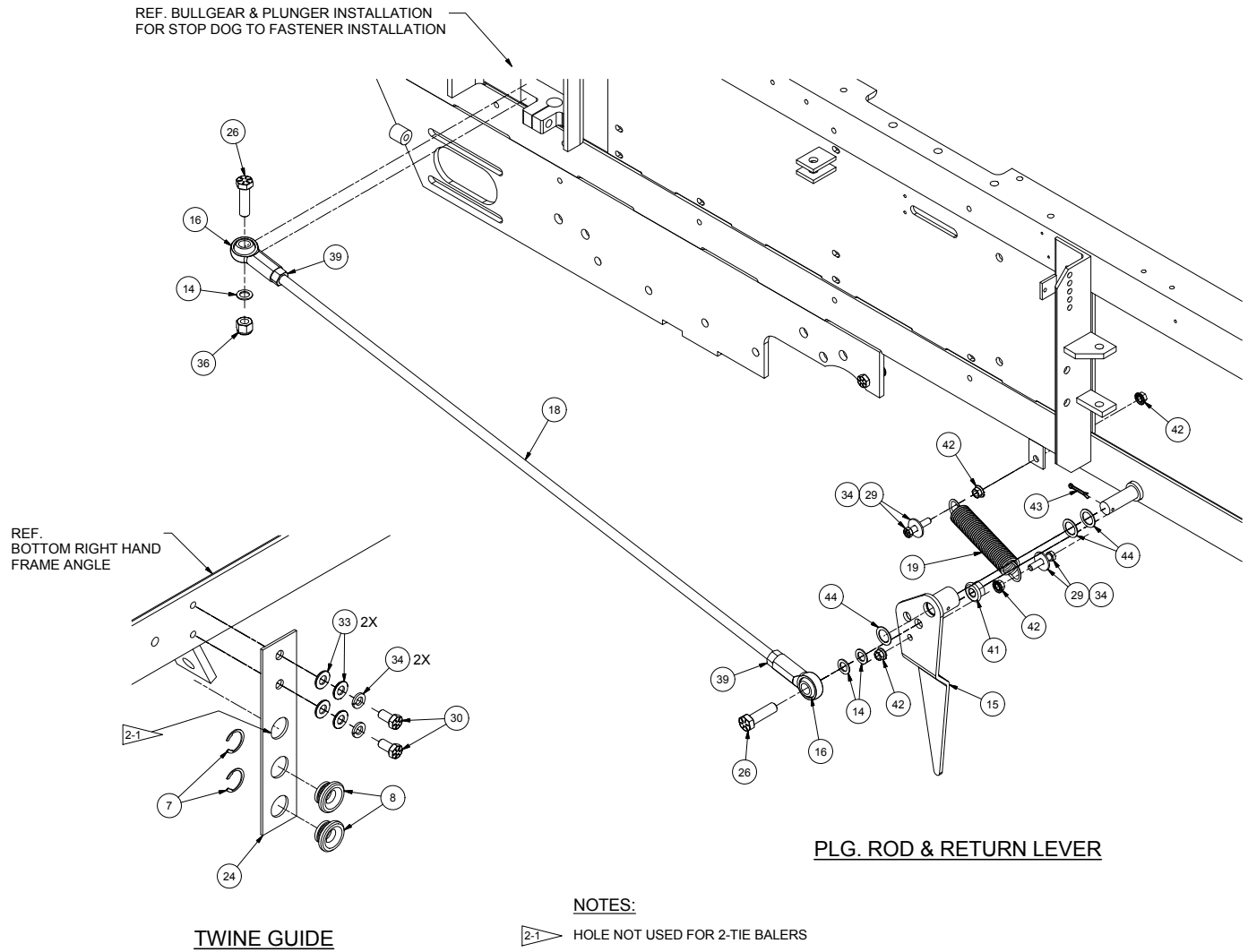
**GUARD MOUNT, RH**

**NOTES:**

- 3-1 USE FIXTURE X-202369 FOR INSTALLATION OF P/N: 904347
- 3-2 DRIVE ROD SHOULD NOT HAVE MORE THAN 5° OF MIS-ALIGNMENT BETWEEN SPHERICAL ROD ENDS

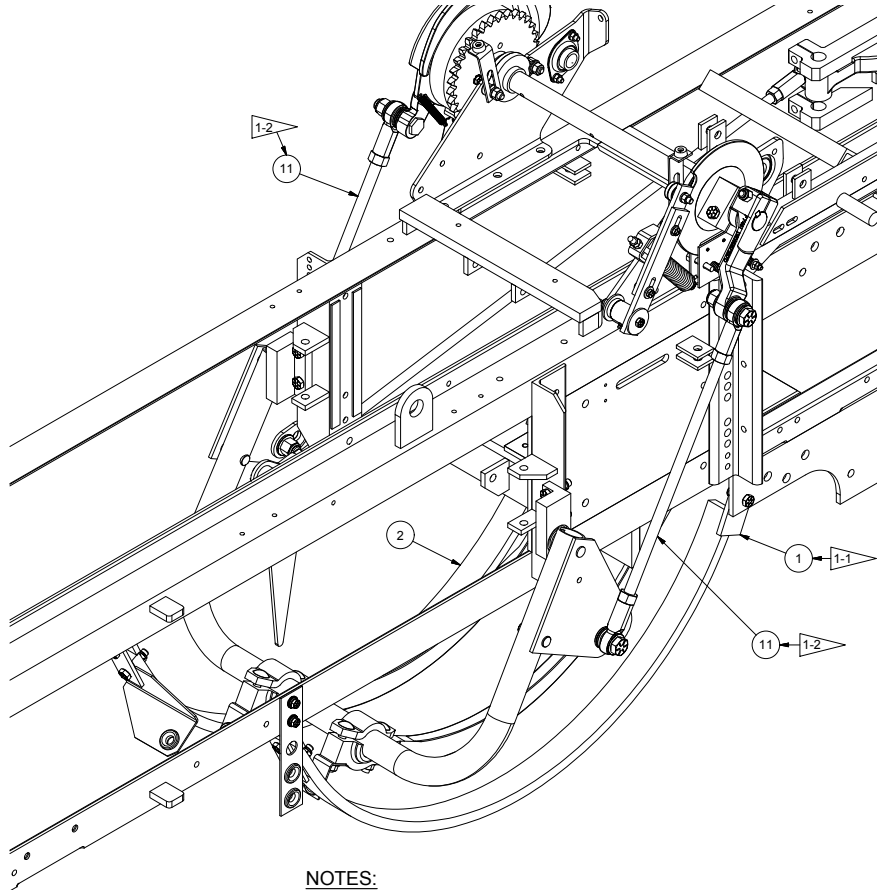
# Needles and Yoke Installation, Conventional, 16"

Page 1 of 4



## Needles and Yoke Installation, Conventional, 16"

Page 2 of 4



**NOTES:**

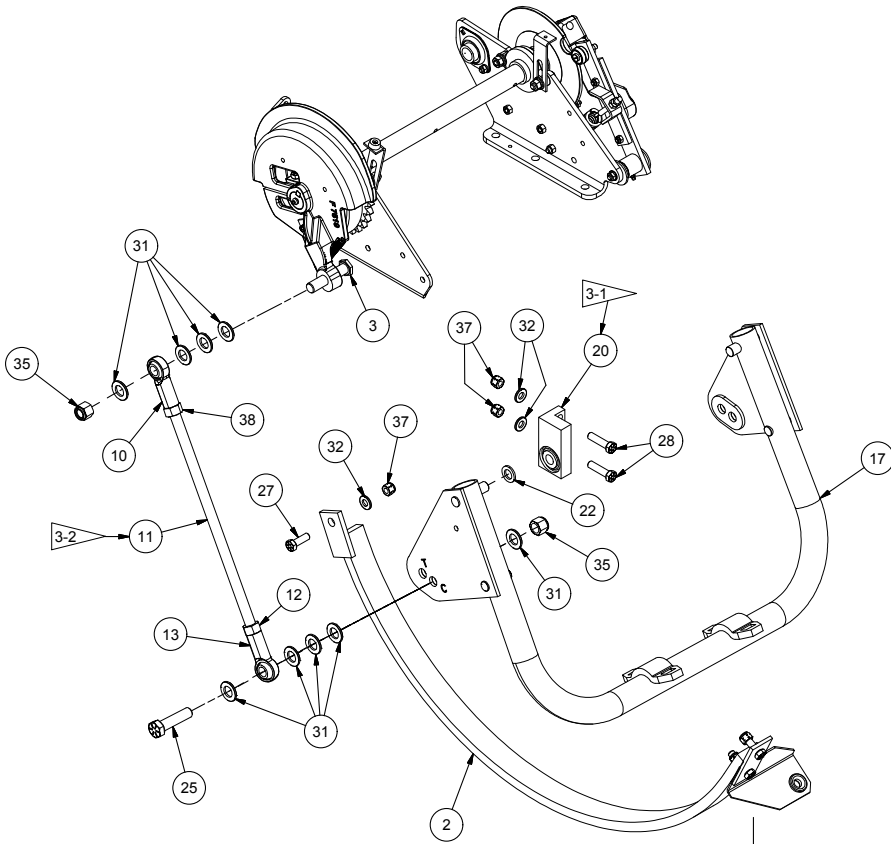
- 1-1 INSTALL ON INSIDE OF FRAME (BOTH SIDES OF BALER)
- 1-2 ROTATE CLOCKWISE TO RAISE NEEDLES. BOTTOM OF NEEDLE EYE SHOULD BE 4.50" PAST TWINE DISC AT TOP OF TRAVEL.

| Item  | Part No.    | Qty | Description                    | Item | Part No.   | Qty | Description    |
|---|-------------|-----|--------------------------------|------|------------|-----|----------------|
| <b>902592 Needles And Yoke Installation</b> |             |     |                                |      |            |     |                |
| 1   | F000007568  | 1   | . Guard Weldment, Rh Needle    | 25   | 232854     | 2   | . Capscrew     |
| 2   | F000007569  | 1   | . Needle Guard, LH             | 26   | Y17C-1036  | 2   | . Capscrew     |
| 3   | SFC036488A  | 1   | . Capscrew                     | 27   | 200454W    | 2   | . Capscrew     |
| 4   | CRB5003250  | 4   | . Bolt, Carriage               | 28   | R13811077  | 6   | . Capscrew     |
| 5   | F000001611  | 2   | . Needle, Twine - Curved       | 29   | R13801813  | 2   | . Capscrew     |
| 6   | F000007973  | 2   | . Holder, Needle Twine Guide   | 30   | 162572W    | 2   | . Capscrew     |
| 7   | F000000857  | 5   | . Ring, Snap                   | 31   | R13811457  | 16  | . Flat Washer  |
| 8   | F000000856  | 5   | . Bushing                      | 32   | 221771W    | 10  | . Washer, Hard |
| 9   | R13810974   | 1   | . Capscrew                     | 33   | 221767W    | 6   | . Washer, Flat |
| 10  | F000001549  | 2   | . Rod End                      | 34   | R13812514  | 2   | . Lockwasher   |
| 11  | F000007554  | 2   | . Rod, Needle Yoke Drive       | 35   | 234836     | 4   | . Nut, Esna    |
| 12  | NFL0007500  | 2   | . Nut, LH Hex                  | 36   | 237552     | 1   | . Nut, Esna    |
| 13  | F000001550  | 2   | . Rod End                      | 37   | 223587     | 8   | . Nut, Esna    |
| 14  | ZZ00000211  | 3   | . Mach Bushing                 | 38   | 221717W    | 2   | . Hex Nut      |
| 15  | LEV0015639  | 1   | . Lever Weldment               | 39   | 199594W    | 2   | . Hex Nut      |
| 16  | ROD00000001 | 2   | . Rod End                      | 40   | 221711W    | 4   | . Hex Nut      |
| 17  | 904347      | 1   | . Needle Yoke Weldment         | 41   | 00273801   | 1   | . Locknut      |
| 18  | ROD035984B  | 1   | . Rod                          | 42   | 09411507   | 4   | . Nut          |
| 19  | SPG0020662  | 1   | . Spring, Plunger Latch        | 43   | 00103409   | 1   | . Cotter Pin   |
| 20  | 904343      | 1   | . Bearing Assembly ,LH         | 44   | ZZ00000208 | 3   | . Mach Bushing |
| 21  | 904344      | 1   | . Bearing Assembly ,RH         | 45   | NA         | 0   | . Bar          |
| 22  | 226272      | 8   | . Bushing                      |      |            |     |                |
| 23  | GUD0031463  | 1   | . Bracket                      |      | NA         |     | Not Applicable |
| 24  | F000000525  | 1   | . Holder F/Twine Guide Bushing |      |            |     |                |

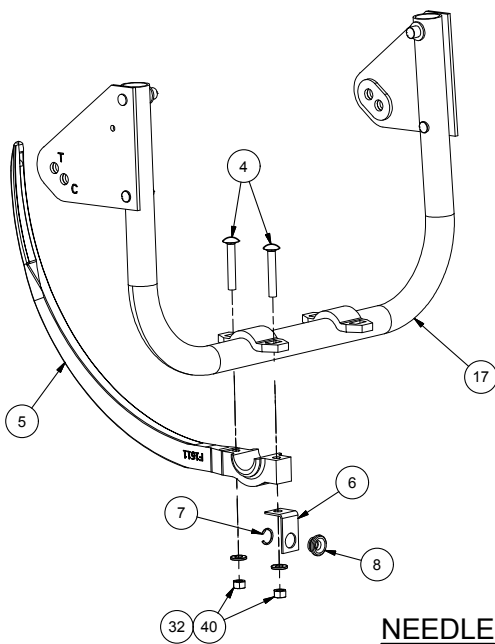
Rev G-

# Needles and Yoke Installation, Conventional, 16"

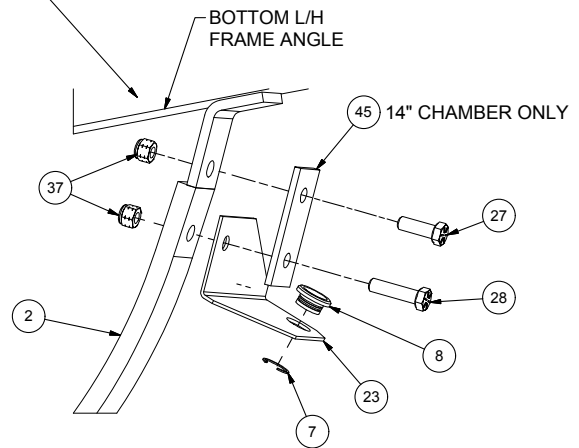
Page 3 of 4



**YOKE BRG, GUARD & DRIVE ROD  
LEFT HAND**



**NEEDLE  
2 PLACES**



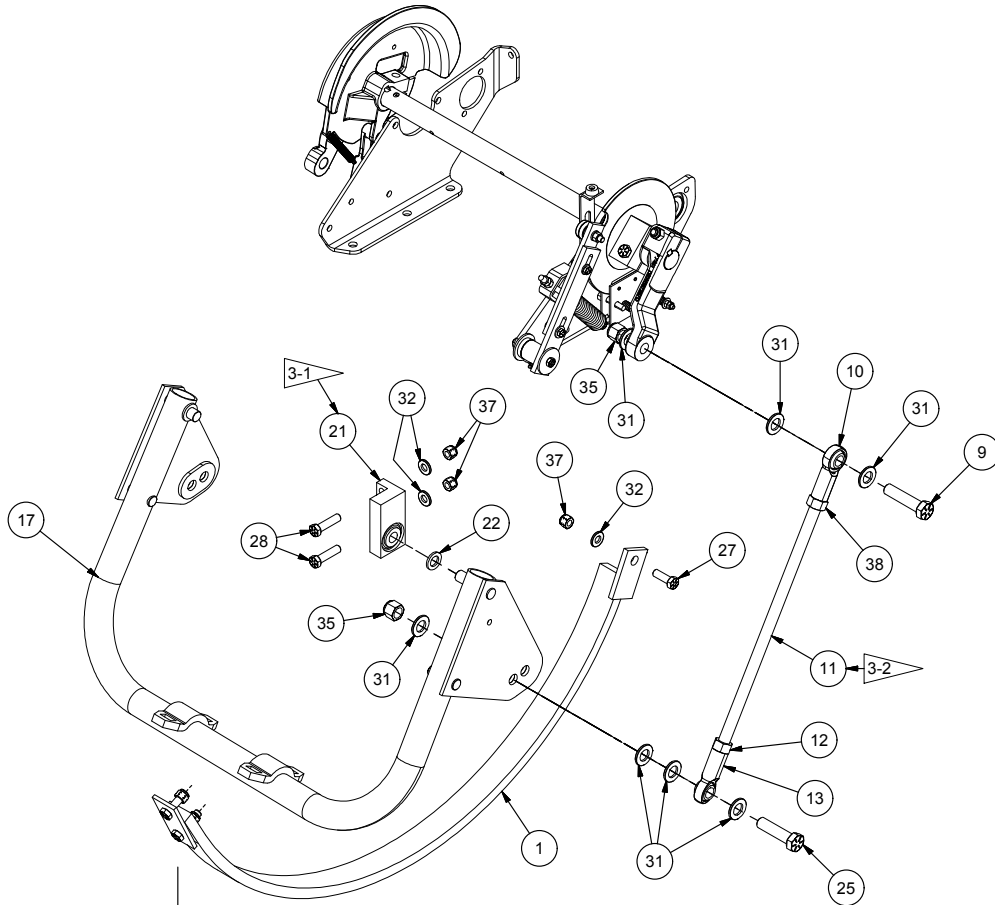
**GUARD MOUNT, LH**

**NOTES:**

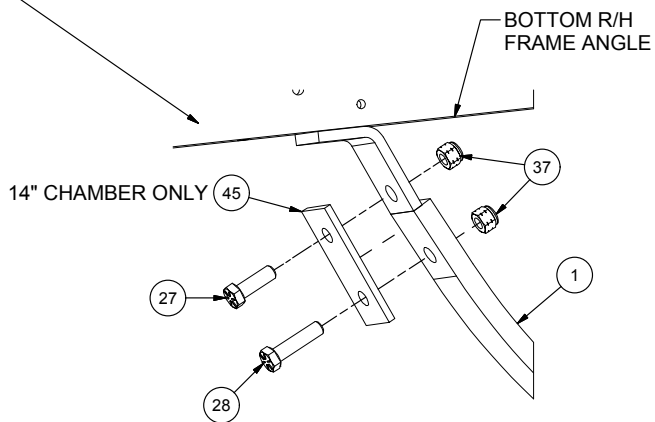
- 3-1 USE FIXTURE X-202369 FOR INSTALLATION OF P/N: 904347
- 3-2 DRIVE ROD SHOULD NOT HAVE MORE THAN 5° OF MIS-ALIGNMENT BETWEEN SPHERICAL ROD ENDS

# Needles and Yoke Installation, Conventional, 16"

Page 4 of 4



**YOKE BRG, GUARD & DRIVE ROD  
RIGHT HAND**



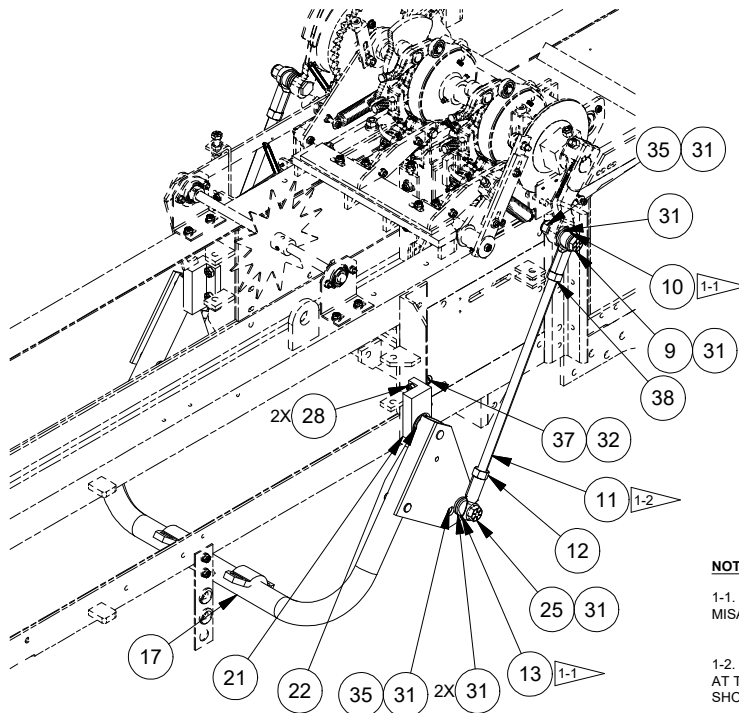
**GUARD MOUNT, RH**

**NOTES:**

- 3-1 USE FIXTURE X-202369 FOR INSTALLATION OF P/N: 904347
- 3-2 DRIVE ROD SHOULD NOT HAVE MORE THAN 5° OF MIS-ALIGNMENT BETWEEN SPHERICAL ROD ENDS

# Needles and Yoke Installation, Tailless, 14"

Page 1 of 3



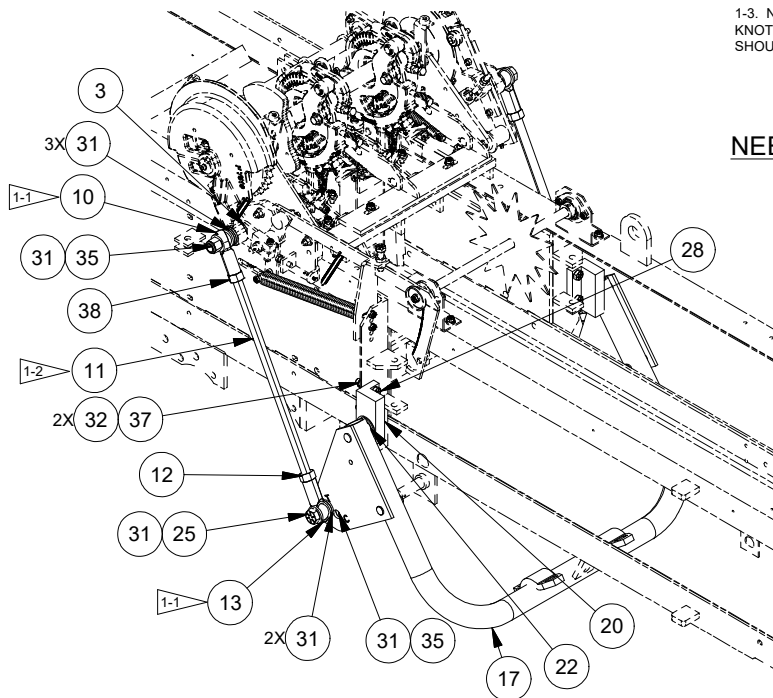
**NOTES:**

1-1. DRIVE ROD SHOULD NOT HAVE MORE THAN 5° MISALIGNMENT BETWEEN SPHERICAL ROD ENDS.

1-2. ROTATE DRIVE ROD CLOCKWISE TO RAISE NEEDLES. AT TOP DEAD CENTER, CENTER OF ROLLER SHOULD BE .575 TO .625 FROM SURFACE OF KNOTTER SHAFT.

1-3. NEEDLES HAVE SLIGHT PRELOAD AGAINST KNOTTER aFRAME. BOTTOM OF NEEDLE ROLLER SHOULD BE .13 TO .25 ABOVE TWINE HOOK.

**NEEDLE DRIVE INSTALLATION**



# Needles and Yoke Installation, Tailless, 14"

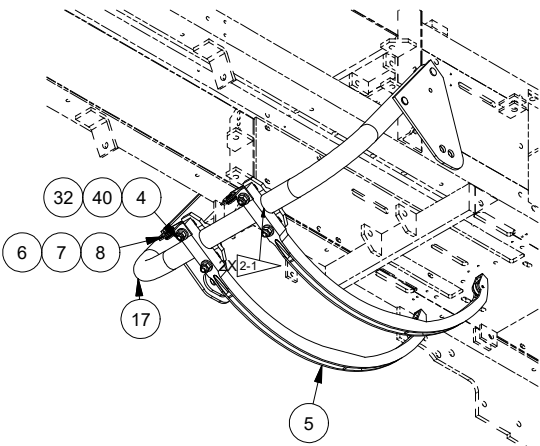
Page 2 of 3

| Item          | Part No.   | Qty | Description               | Item                                 | Part No.   | Qty | Description                    |
|---------------|------------|-----|---------------------------|--------------------------------------|------------|-----|--------------------------------|
| <b>904012</b> |            |     |                           | <b>Needles And Yoke Installation</b> |            |     |                                |
| 1             | F000007568 | 1   | . Needle Guard, RH Needle | 26                                   | Y17C-1036  | 2   | . Capscrew                     |
| 2             | F000007569 | 1   | . Needle Guard, LH        | 27                                   | 200454W    | 4   | . Capscrew                     |
| 3             | SFC036488A | 1   | . Capscrew                | 28                                   | R13811077  | 6   | . Capscrew                     |
| 4             | CRB5003250 | 4   | . Bolt                    | 29                                   | R13801813  | 2   | . Capscrew                     |
| 5             | 902580     | 2   | . Needle, Tailless Cast   | 31                                   | 221777W    | 15  | . Washer                       |
|               | 254784     | 1   | . Pulley Bearing, Sealed  | 32                                   | 221771W    | 10  | . Washer                       |
|               | Y09G-0414  | 1   | . Capscrew                | 33                                   | 221767W    | 4   | . Washer                       |
| 6             | F000007973 | 2   | . Plate, Holder           | 35                                   | 223615     | 4   | . Locknut                      |
| 7             | F000000857 | 2   | . Snap Ring               | 36                                   | Y17D-10    | 1   | . Locknut                      |
| 8             | F000000856 | 2   | . Bushing                 | 37                                   | 223587     | 10  | . Locknut                      |
| 9             | R13810974  | 1   | . Capscrew                | 38                                   | 221717W    | 2   | . Hex Nut                      |
| 10            | F000001549 | 2   | . Rod End                 | 39                                   | 199594W    | 2   | . Hex Nut                      |
| 11            | ROD0035670 | 2   | . Rod                     | 40                                   | 221711W    | 4   | . Hex Nut                      |
| 12            | NFL0007500 | 2   | . Nut                     | 41                                   | 00273801   | 1   | . Locknut                      |
| 13            | F000001550 | 2   | . Rod End                 | 42                                   | 09411507   | 4   | . Nut                          |
| 14            | ZZ00000211 | 3   | . Bushing                 | 43                                   | 00103409   | 1   | . Cotter Pin                   |
| 15            | LEV0015639 | 1   | . Lever                   | 44                                   | ZZ00000208 | 3   | . Mach Bushing                 |
| 16            | ROD0000001 | 2   | . Rod End                 | 45                                   | 903413     | 2   | . Bar                          |
| 17            | 904347     | 1   | . Needle Yok              | 46                                   | 902776     | 1   | . Mounting Plate               |
| 18            | ROD035984B | 1   | . Rod                     | 47                                   | 221499W    | 4   | . Capscrew                     |
| 19            | SPG0020662 | 1   | . Spring, Ext             | 48                                   | WLG0000006 | 2   | . Spring, Knotter Twine Puller |
| 20            | 904343     | 1   | . Bearing Assembly ,LH    | 49                                   | 237567     | 4   | . Locknut                      |
| 21            | 904344     | 1   | . Bearing Assembly        | 50                                   | 11079      | 1   | . Fitting, Lube                |
| 22            | 226272     | 2   | . Bushing                 |                                      |            |     |                                |
| 25            | 232854     | 2   | . Capscrew                |                                      |            |     |                                |

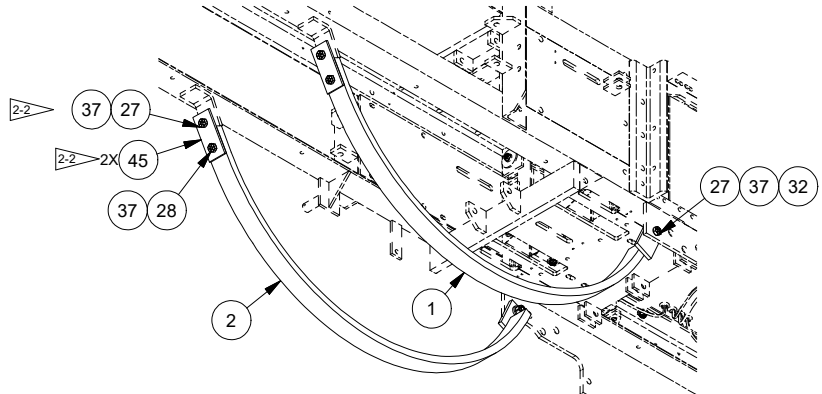
Rev B

# Needles and Yoke Installation, Tailless, 14"

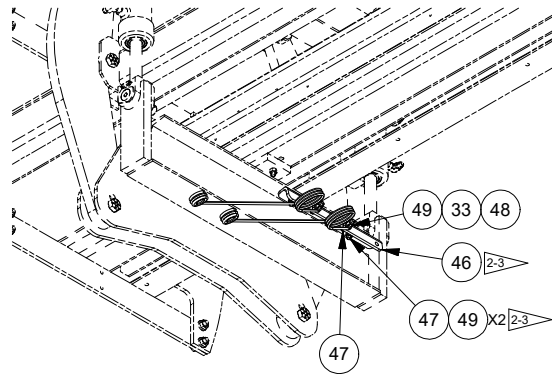
Page 3 of 3



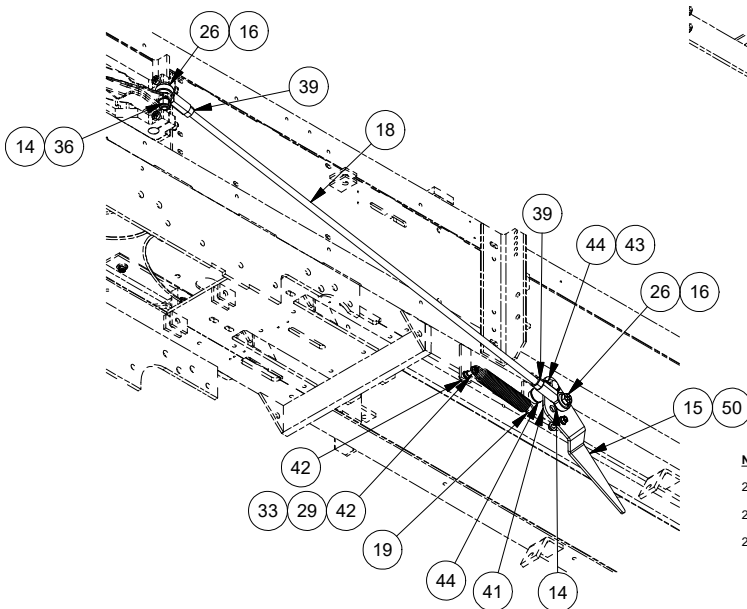
NEEDLES INSTALLATION



NEEDLE GUARD INSTALLATION



TWINE GUIDE INSTALLATION



PLUNGER DOG & STOP INSTALLATION

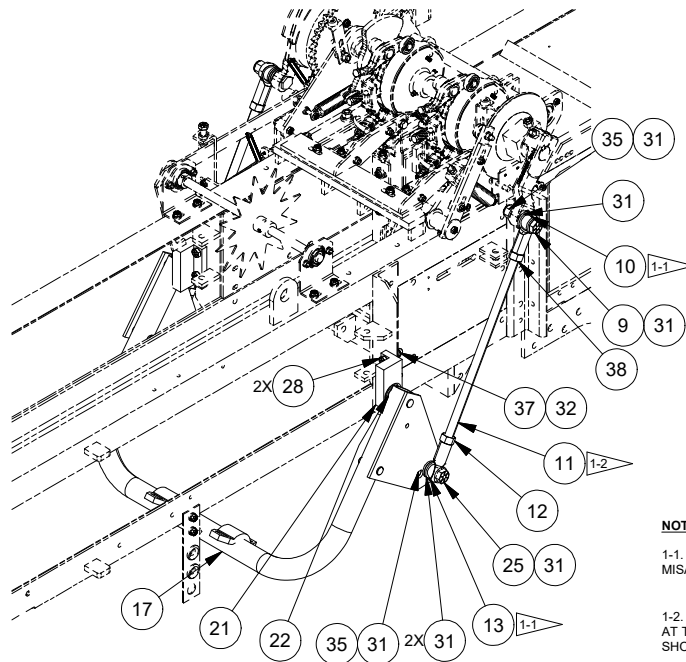
**NOTES:**

- 2-1. DO NOT PAINT ON THE MATING SURFACES OF THE NEEDLE AND THE YOKE.
- 2-2. PARTS ARE ONLY USED ON 14" CHAMBER INSTALLATIONS.
- 2-3. PARTS ARE ONLY USED ON 80-SERIES INSTALLATIONS.



# Needles and Yoke Installation, Tailless, 16''

Page 1 of 3



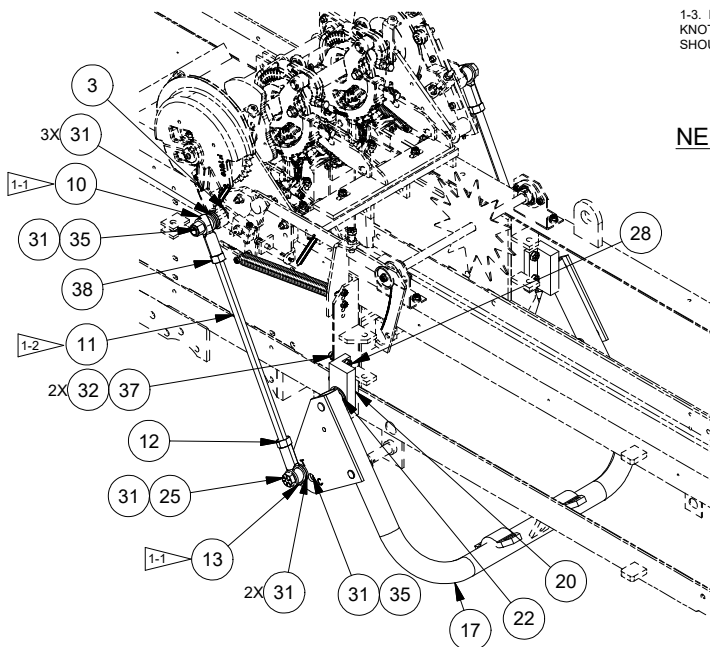
**NOTES:**

1-1. DRIVE ROD SHOULD NOT HAVE MORE THAN 5° MISALIGNMENT BETWEEN SPHERICAL ROD ENDS.

1-2. ROTATE DRIVE ROD CLOCKWISE TO RAISE NEEDLES. AT TOP DEAD CENTER, CENTER OF ROLLER SHOULD BE 5.75 TO 6.25 FROM SURFACE OF KNOTTER SHAFT.

1-3. NEEDLES HAVE SLIGHT PRELOAD AGAINST KNOTTER FRAME. BOTTOM OF NEEDLE ROLLER SHOULD BE .13 TO .25 ABOVE TWINE HOOK.

**NEEDLE DRIVE INSTALLATION**



# Needles and Yoke Installation, Tailless, 16''

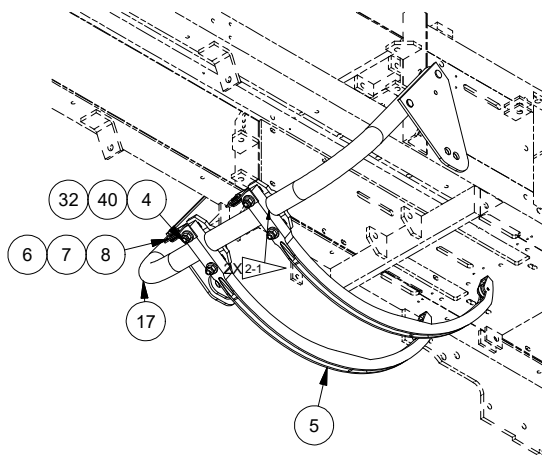
Page 2 of 3

| Item          | Part No.   | Qty | Description                | Item                                 | Part No.   | Qty | Description                    |
|---------------|------------|-----|----------------------------|--------------------------------------|------------|-----|--------------------------------|
| <b>902593</b> |            |     |                            | <b>Needles And Yoke Installation</b> |            |     |                                |
| 1             | F000007568 | 1   | . Needle Guard, RH Needle  | 26                                   | Y17C-1036  | 2   | . Capscrew                     |
| 2             | F000007569 | 1   | . Needle Guard, LH         | 27                                   | 200454W    | 2   | . Capscrew                     |
| 3             | SFC036488A | 1   | . Capscrew                 | 28                                   | R13811077  | 6   | . Capscrew                     |
| 4             | CRB5003250 | 4   | . Bolt                     | 29                                   | R13801813  | 2   | . Capscrew                     |
| 5             | 902580     | 2   | . Needle, Tailless Cast    | 31                                   | 221777W    | 15  | . Washer                       |
|               | 254784     | 1   | . . Pulley Bearing, Sealed | 32                                   | 221771W    | 10  | . Washer                       |
|               | Y09G-0414  | 1   | . . Capscrew               | 33                                   | 221767W    | 4   | . Washer                       |
| 6             | F000007973 | 2   | . Plate, Holder            | 35                                   | 223615     | 4   | . Locknut                      |
| 7             | F000000857 | 2   | . Snap Ring                | 36                                   | Y17D-10    | 1   | . Locknut                      |
| 8             | F000000856 | 2   | . Bushing                  | 37                                   | 223587     | 8   | . Locknut                      |
| 9             | R13810974  | 1   | . Capscrew                 | 38                                   | 221717W    | 2   | . Hex Nut                      |
| 10            | F000001549 | 2   | . Rod End                  | 39                                   | 199594W    | 2   | . Hex Nut                      |
| 11            | ROD0035670 | 2   | . Rod                      | 40                                   | 221711W    | 4   | . Hex Nut                      |
| 12            | NFL0007500 | 2   | . Nut                      | 41                                   | 00273801   | 1   | . Locknut                      |
| 13            | F000001550 | 2   | . Rod End                  | 42                                   | 09411507   | 4   | . Nut                          |
| 14            | ZZ00000211 | 3   | . Bushing                  | 43                                   | 00103409   | 1   | . Cotter Pin                   |
| 15            | LEV0015639 | 1   | . Lever                    | 44                                   | ZZ00000208 | 3   | . Mach Bushing                 |
| 16            | ROD0000001 | 2   | . Rod End                  | 45                                   | 903413     | 0   | . Bar                          |
| 17            | 904347     | 1   | . Needle Yok               | 46                                   | 902776     | 1   | . Mounting Plate               |
| 18            | ROD035984B | 1   | . Rod                      | 47                                   | 221499W    | 4   | . Capscrew                     |
| 19            | SPG0020662 | 1   | . Spring, Ext              | 48                                   | WLG0000006 | 2   | . Spring, Knotter Twine Puller |
| 20            | 904343     | 1   | . Bearing Assembly ,LH     | 49                                   | 237567     | 4   | . Locknut                      |
| 21            | 904344     | 1   | . Bearing Assembly         | 50                                   | 11079      | 1   | . Fitting, Lube                |
| 22            | 226272     | 2   | . Bushing                  |                                      |            |     |                                |
| 25            | 232854     | 2   | . Capscrew                 |                                      |            |     |                                |

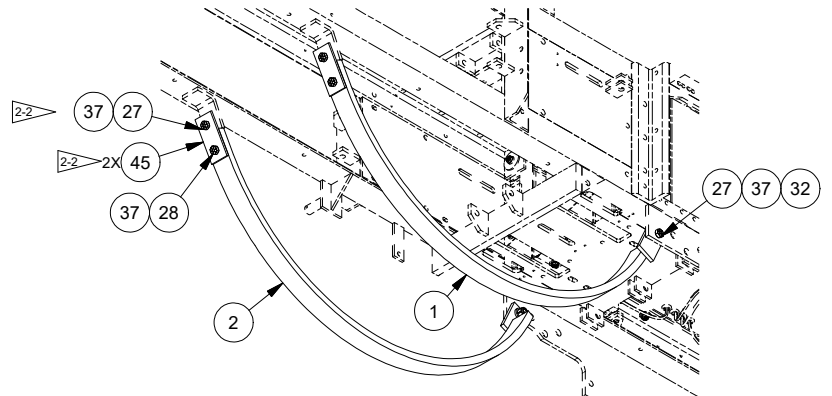
Rev K

# Needles and Yoke Installation, Tailless, 16"

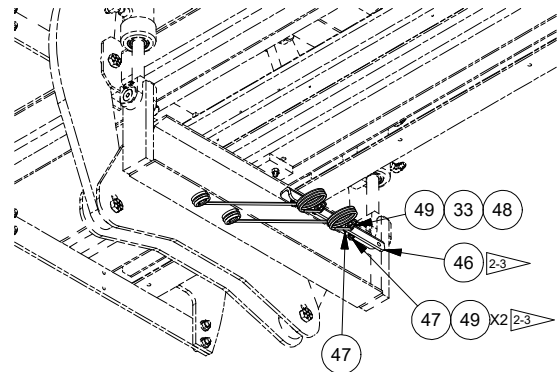
Page 3 of 3



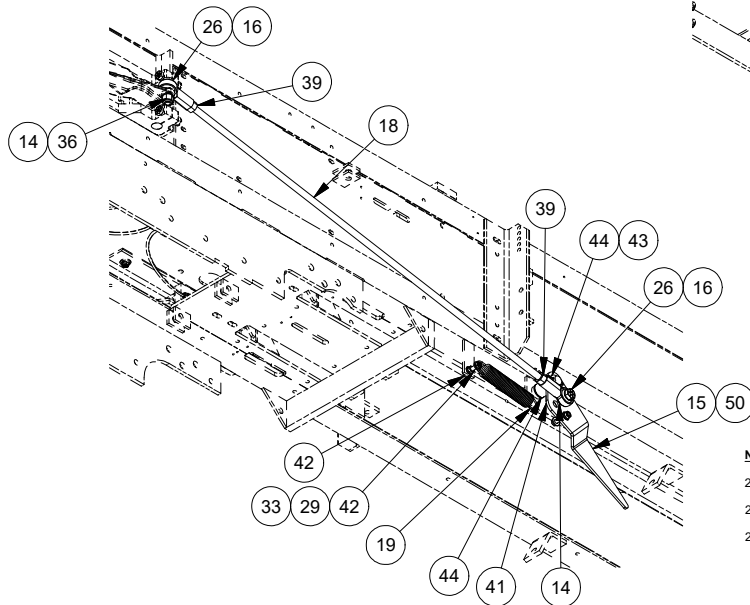
**NEEDLES INSTALLATION**



**NEEDLE GUARD INSTALLATION**



**TWINE GUIDE INSTALLATION**



**PLUNGER DOG & STOP INSTALLATION**

**NOTES:**

- 2-1. DO NOT PAINT ON THE MATING SURFACES OF THE NEEDLE AND THE YOKE.
- 2-2. PARTS ARE ONLY USED ON 14" CHAMBER INSTALLATIONS.
- 2-3. PARTS ARE ONLY USED ON 80-SERIES INSTALLATIONS.

This page is intentionally left blank.

## Section 10

# Hydraulic System

|   |               |
|---|---------------|
| Drawbar Installation, Hydro LH.....                   | See Page 1-7  |
| . Drawbar Assembly, Hydro LH .....                    | See Page 1-8  |
| Drawbar Installation, Hydro RH .....                  | See Page 1-9  |
| . Drawbar Assembly, Hydro RH.....                     | See Page 1-10 |
| Swing Drawbar Installation, Hydro LH .....            | See Page 1-11 |
| Hydraulic Tank Installation, 280/285 .....            | See Page 1-16 |
| . Hydraulic Tank Assembly, 280/285.....               | See Page 1-19 |
| Hose Diagram, Hydro .....                             | See Page 1-21 |
| Tensioning/Rear Mounts Installation, 14" Chamber..... | See Page 2-10 |
| Tensioning/Rear Mounts Installation, 16" Chamber..... | See Page 2-13 |
| Tensioning Hoses Installation, Hydro.....             | See Page 2-17 |
| Tension Control Reservoir Installation, Hydro.....    | See Page 2-19 |
| . Tension Control Tank Assembly .....                 | See Page 2-20 |
| Oil Cooler/Shroud Assembly, Bullgear, Hydro .....     | See Page 5-31 |
| ..Manifold Assembly, Bullgear Luber, Hydro .....      | See Page 5-33 |
| Pickup Lift Installation, 280/285, Hydro, 14" .....   | See Page 6-20 |
| Pickup Lift Installation, 280/285, Hydro, 16" .....   | See Page 6-22 |
| . Spring Assembly, Pickup Lift, Hydro/Driveline ..... | See Page 6-24 |

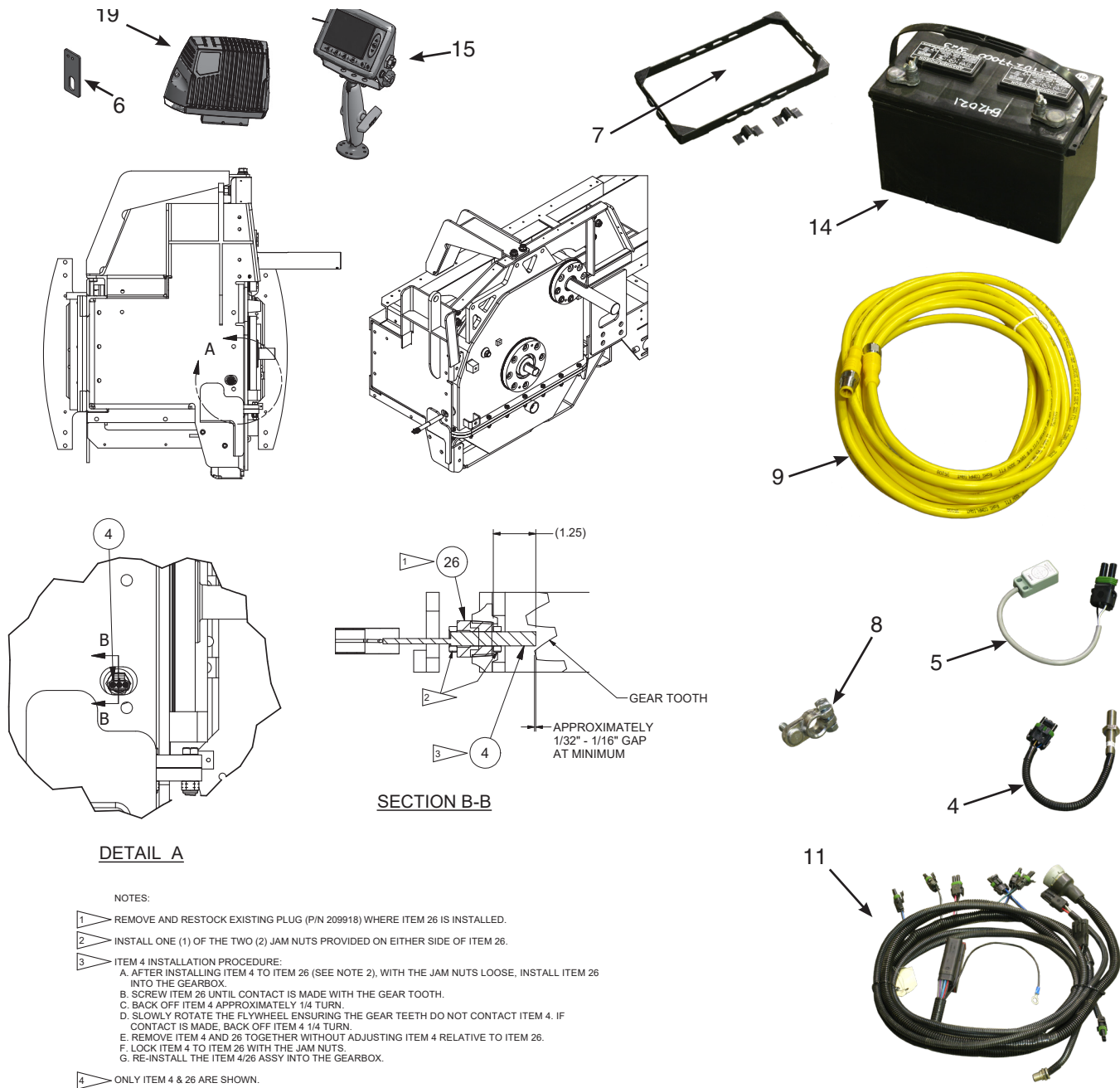
This page is intentionally left blank.

# Section 11

## Electrical System

|   |       |
|---|-------|
| Electrical Installation, Engine.....          | 11-2  |
| .Remote Assembly, MD3 (Side Feed).....        | 11-3  |
| .Wire Harness, IQAN .....                     | 11-4  |
| .Electrical Schematic, Engine .....           | 11-6  |
| Electrical Installation, Hydro .....          | 11-7  |
| .Wire Harness, IQAN, Hydro .....              | 11-8  |
| .Electrical Schematic, Hydro.....             | 11-10 |
| Light Installation, 2 Tie.....                | 11-11 |
| . Light Assembly, LH .....                    | 11-13 |
| . Light Assembly, RH.....                     | 11-14 |
| . Work Light Sub-Assembly, RH.....            | 11-15 |
| .Work Light Sub-Assembly, Front.....          | 11-16 |
| Light Installation, Hydro .....               | 11-17 |
| . Light Assembly, LH, Hydro.....              | 11-19 |
| . Light Assembly, RH, Hydro .....             | 11-20 |
| . Work Light Sub-Assembly, Front, Hydro ..... | 11-21 |

# Electrical Installation, Engine



DETAIL A

SECTION B-B

NOTES:

- 1 REMOVE AND RESTOCK EXISTING PLUG (P/N 209918) WHERE ITEM 26 IS INSTALLED.
- 2 INSTALL ONE (1) OF THE TWO (2) JAM NUTS PROVIDED ON EITHER SIDE OF ITEM 26.
- 3 ITEM 4 INSTALLATION PROCEDURE:  
 A. AFTER INSTALLING ITEM 4 TO ITEM 26 (SEE NOTE 2), WITH THE JAM NUTS LOOSE, INSTALL ITEM 26 INTO THE GEARBOX.  
 B. SCREW ITEM 26 UNTIL CONTACT IS MADE WITH THE GEAR TOOTH.  
 C. BACK OFF ITEM 4 APPROXIMATELY 1/4 TURN.  
 D. SLOWLY ROTATE THE FLYWHEEL ENSURING THE GEAR TEETH DO NOT CONTACT ITEM 4. IF CONTACT IS MADE, BACK OFF ITEM 4 1/4 TURN.  
 E. REMOVE ITEM 4 AND 26 TOGETHER WITHOUT ADJUSTING ITEM 4 RELATIVE TO ITEM 26.  
 F. LOCK ITEM 4 TO ITEM 26 WITH THE JAM NUTS.  
 G. RE-INSTALL THE ITEM 4/26 ASSY INTO THE GEARBOX.
- 4 ONLY ITEM 4 & 26 ARE SHOWN.

| Item | Part No.      | Qty | Description                    | Item | Part No.   | Qty | Description   |
|------|---------------|-----|--------------------------------|------|------------|-----|---------------|
|      | <b>902855</b> |     | <b>Electrical Installation</b> |      |            |     |               |
| 1    | *a 904512     | 1   | .Electrical Schematic          | 21   | 237567     | 2   | . Locknut     |
| 4    | 903158        | 1   | . Sensor Assembly, Bullgear    | 22   | 223427     | 2   | . Use 221767W |
| 5    | 903218        | 1   | . Switch Assembly, Proximity   | 23   | SMR6320625 | 2   | . Bolt        |
| 6    | MNT036623A    | 1   | . Plate, Mounting              | 24   | R13809520  | 2   | . Nut         |
| 7    | CIP6651501    | 1   | . Battery Hold Down            | 25   | R13811437  | 2   | . Washer      |
| 8    | BAT0000038    | 1   | . Terminal, Positive           | 26   | 909553     | 1   | . Ftg         |
| 9    | 252639        | 1   | . Cable, Can Bus               | 27   | 209918     | -1  | . Fitting     |
| 11   | *b 903682     | 1   | . Wire Harness, IQAN           |      |            |     |               |
| 14   | BAT0277000    | 1   | . Battery                      |      |            |     |               |
| 15   | *c - - - - -  | 1   | . Remote Assembly, MD3         |      |            |     |               |
| 19   | 254837        | 1   | . Module, Expansion            |      |            |     |               |
| 20   | CRB3750009    | 2   | . Bolt, Carriage               |      |            |     |               |

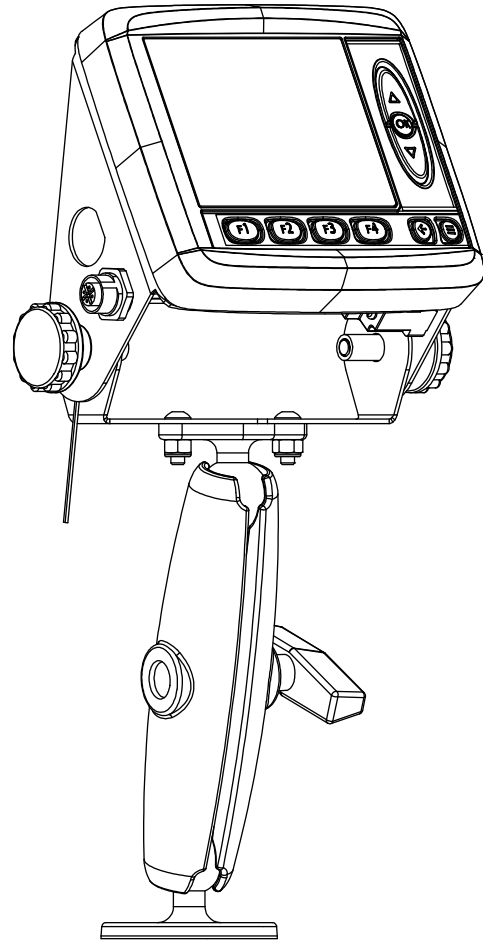
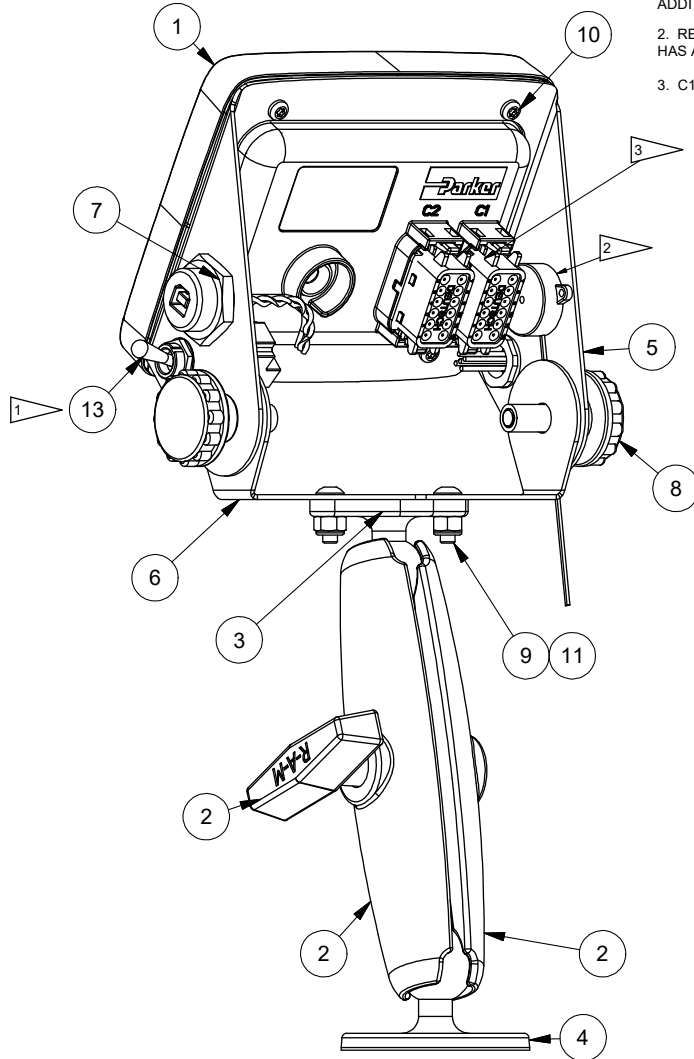
\*a See Separate Coverage (Page 11-6)  
 \*b See Separate Coverage (Page 11-5)  
 \*c See Separate Coverage (Page 11-3)



### Remote Assembly, MD3 (Side Feed)

**NOTES:**

1. REFER TO CHART TO SEE IF TOGGLE SWITCH (ITEM 13) IS INCLUDED. IF SO, INSTALL SWITCH SUCH THAT THE KEYWAY POINTS TO THE USB ADAPTOR. REFER TO WIRE HARNESS DRAWING (ITEM 7) FOR ADDITIONAL INSTALLATION INSTRUCTIONS.
2. REFER TO WIRE HARNESS DRAWING (ITEM 7) TO SEE IF THE HARNESS HAS A BUZZER. IF SO, GLUE BUZZER IN APPROXIMATE POSITION AS SHOWN.
3. C1 = GREY DEUTSCH CONNECTOR; C2 = BLACK DEUTSCH CONNECTOR



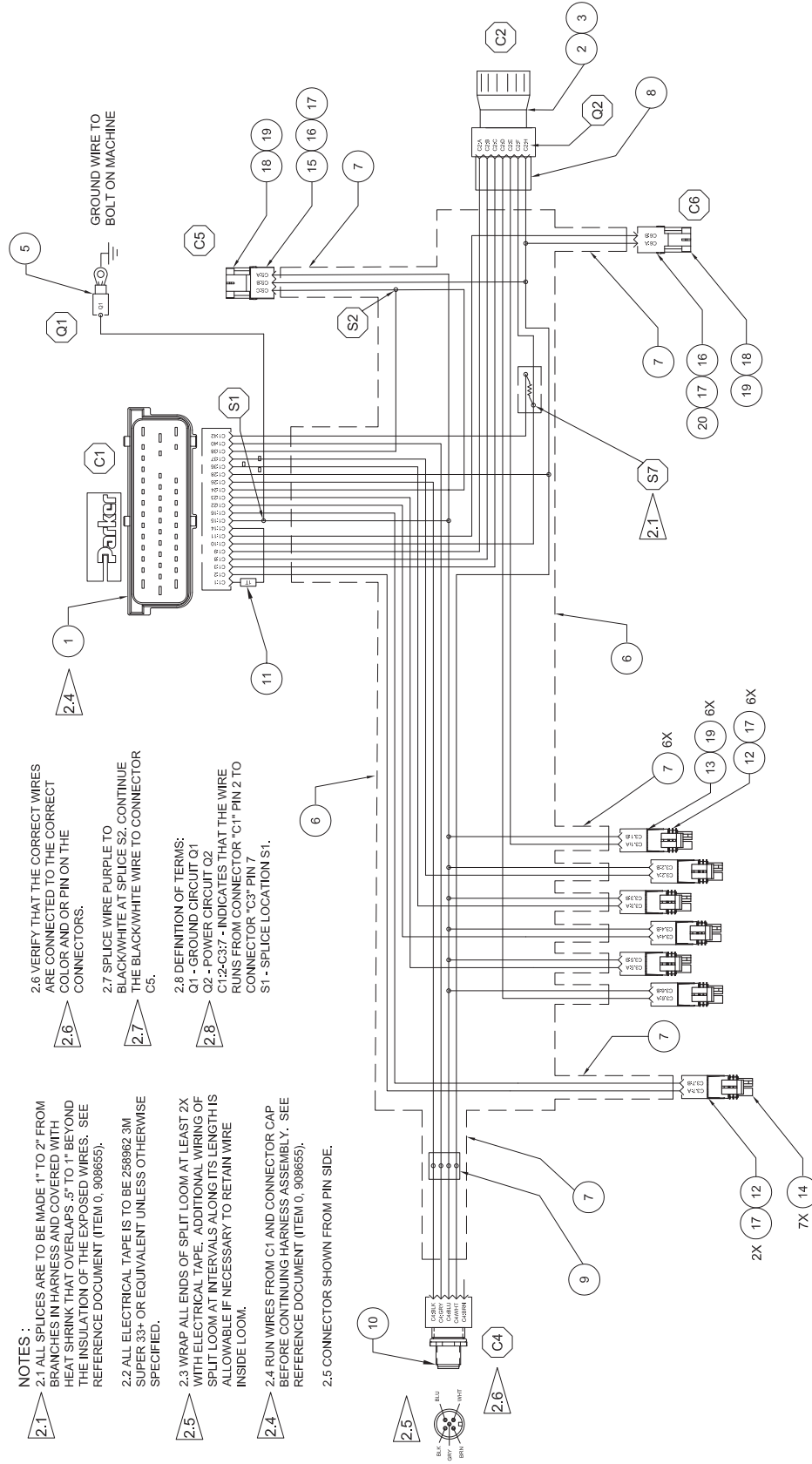
| ASSEMBLY | REV | ITEM 1 | ITEM 7 | ITEM 13 | NOTES                        |
|----------|-----|--------|--------|---------|------------------------------|
| 909592   | -   | 909590 | 903471 | 229289  | 80-SERIES, ENGINE BALERS     |
| 906958   | -   | 906695 | 903471 | 229289  | SUO; 80-SERIES ENGINE BALERS |
| 906962   | -   | 904299 | 903471 | 229289  | SUO; 80-SERIES ENGINE BALERS |
| 906961   | -   | 909590 | 903471 | 229291  | 80-SERIES HYDRO BALERS       |
| 906960   | -   | 906697 | 903471 | 229291  | SUO; 80-SERIES HYDRO BALERS  |
| 905184   | B   | 904300 | 903471 | 229291  | SUO; 80-SERIES HYDRO BALERS  |
| 909138   | A   | 906957 | 906959 | N/A     | SP BALERS                    |
| 905091   | C   | 906129 | 906959 | N/A     | SUO; SP BALERS               |
| 906956   | -   | 904298 | 905913 | 229289  | 1592 BIG BALERS              |

| Item | Part No. | Qty | Description                    | Item | Part No.       | Qty | Description |
|------|----------|-----|--------------------------------|------|----------------|-----|-------------|
|      | -----    |     | <b>Remote Assembly, MD3</b>    | 08   | 909209         | 2   | . Knob      |
| 1    | * -----  | 1   | . MD3 IQAN Display, Programmed | 09   | Y25G-(1024)102 |     | . Capscrew  |
| 2    | 255242   | 1   | . Mount, Ram                   | 10   | 255260         | 4   | . Screw     |
| 3    | 255246   | 1   | . Base, Ram                    | 11   | 224191         | 2   | . Nut, Esna |
| 4    | 255247   | 1   | . Base, Ram                    | 13   | * -----        | 1   | .Switch     |
| 5    | 902894   | 1   | . Mounting Plate               |      |                |     |             |
| 6    | 908449   | 1   | . Plate, Base Assembly         |      |                |     |             |
| 7    | * -----  | 1   | . Wiring Harness, Icm Assembly |      |                |     |             |
|      |          |     |                                |      | * See Chart    |     |             |

Rev C

# Wire Harness, IQAN

Page 1 of 2



## Wire Harness, IQAN

Page 2 of 2

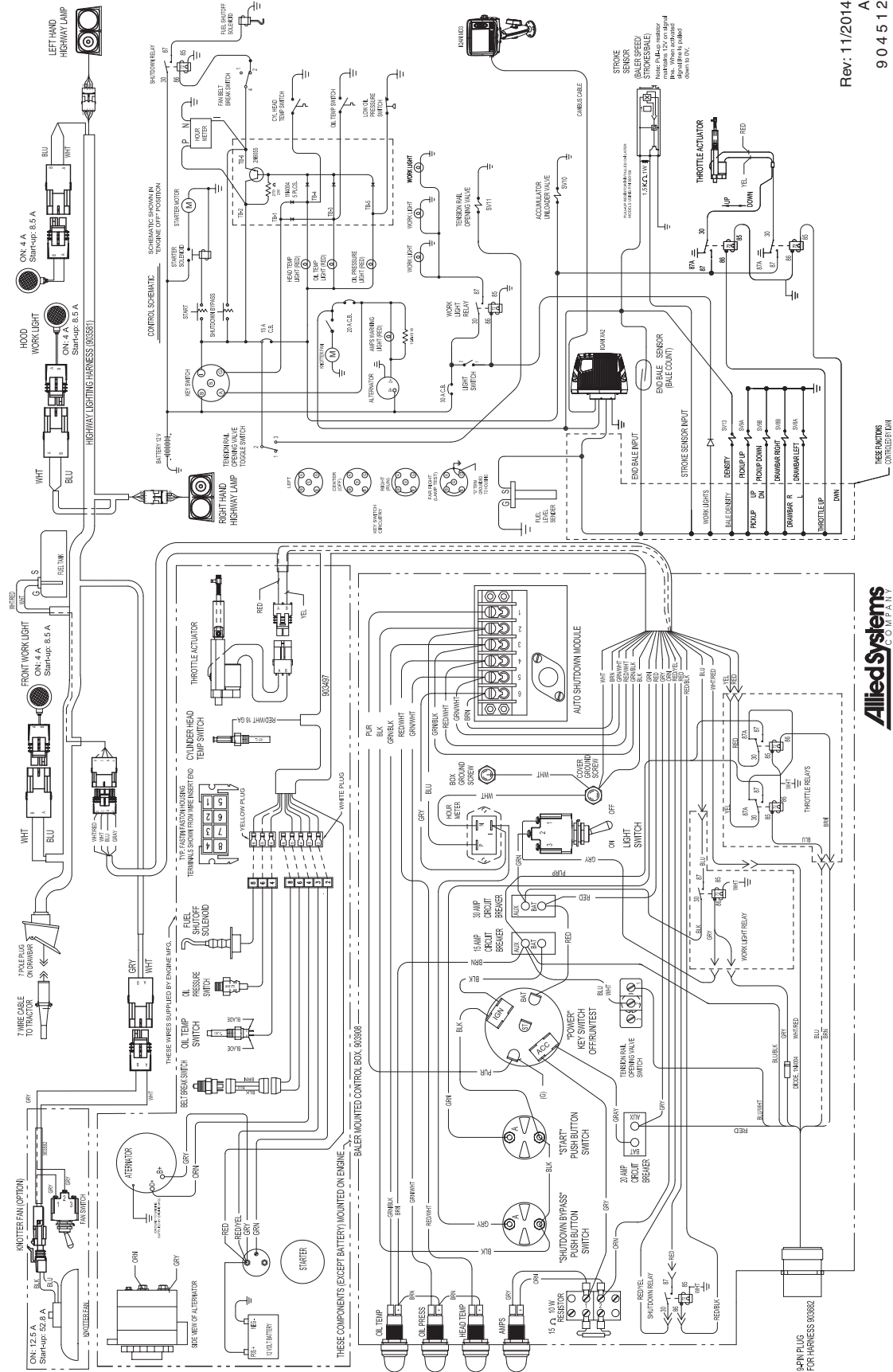
| Item | Part No.      | Qty | Description               | Item | Part No.   | Qty | Description          |
|------|---------------|-----|---------------------------|------|------------|-----|----------------------|
|      | <b>903682</b> |     | <b>Wire Harness, IQAN</b> |      |            |     |                      |
| 1    | 250572        | 1   | . Kit, Connector          | 21   | 237107     |     | . Wire Red           |
| 2    | 238717        | 1   | . Connector, Plug         | 22   | 239002     |     | . Wire Gray          |
| 3    | 243236        | 6   | . Socket                  | 23   | 238990     |     | . Wire Blue          |
| 4    | 237172        | 1   | . Resistor                | 24   | 247637     |     | . Wire Brown         |
| 5    | 228351        | 1   | . Terminal Ring           | 25   | 239011     |     | . Wire Yellow W/Red  |
| 6    | 246109        | 7'  | . Loom, Split             | 26   | 237109     |     | . Wire White         |
| 7    | AO00000256    | 13' | . Loom                    | 27   | 239000     |     | . Wire Black W/Wht   |
| 8    | 232620        | 1'  | . Tube, Heat Shrink       | 28   | 239018     |     | . Wire Green W/Org   |
| 9    | 225222        | 1'  | . Tube, Heat-Shrink       | 29   | 240925     |     | . Wire Green W/Blk   |
| 10   | 258017        | 1   | . Receptacle              | 30   | 219437     |     | . Wire Red           |
| 11   | 250575        | 1   | . Tag, Id                 | 31   | 239017     |     | . Wire Blue W/Yellow |
| 12   | R740881       | 8   | . Pin, Female             | 32   | 237106     |     | . Wire Black         |
| 13   | R740874       | 6   | . Pin, Female             | 33   | 238998     |     | . Wire Pink          |
| 14   | R740886       | 7   | . Connector               | 34   | 238997     |     | . Wire Gray W/Blk    |
| 15   | 238154        | 1   | . Connector, Wire         | 35   | WIR0018009 |     | . Wire Purple        |
| 16   | R740861       | 2   | . Pin                     | 36   | 238996     |     | . Wire Orange        |
| 17   | 238142        | 10  | . Seal, Wire              | 37   | 239007     |     | . Wire Blue W/Blk    |
| 18   | R740866       | 3   | . Pin, Male               | 38   | 239016     |     | . Wire Blue W/Wht    |
| 19   | R740867       | 9   | . Seal, Wire              | 39   | 219436     |     | . Wire Black         |
| 20   | R740885       | 1   | . Connector, Wire         |      |            |     |                      |

Rev F

| POWER & GROUND CIRCUITS                | NAME, COLOR | FUNCTION |
|--|-------------|----------|
| 2.6 Q1 - C1:15, C3:(X6), C4:BLUE, C5:A | Q1, BLK 16  | GROUND - |
| Q2 - C2:H, C1:28, C4:WHITE, C5:B, C6:A | Q2, RED 16  | POWER +  |

| CONNECTIONS           | NAME, COLOR     | FUNCTION                      |
|-----------------------|-----------------|-------------------------------|
| C1:2 - C3:7           | RED 18          | TENSION PRESSURE COUT-A       |
| C1:3 - C2:C           | GRAY 18         | WORK LIGHTS +                 |
| C1:8 - C2:B           | BLUE 18         | THROTTLE UP                   |
| C1:9 - C2:A           | BROWN 18        | THROTTLE DOWN                 |
| C1:10 - C2:F          | YEL/RED 18      | FUEL LEVEL SENDER             |
| C1:11 - C6:B          | WHITE 18        | KNOT SENSOR                   |
| C1:16 - C3:7          | GREEN/ORANGE 18 | TENSION PRESSURE COUT-A RET+  |
| C1:22 - C3:4          | GREEN/BLACK 18  | DRAW BAR LEFT                 |
| C1:23 - C3:5          | BLUE/YELLOW 18  | DRAW BAR RIGHT                |
| 2.7 C1:24 - C5:C      | BLACK/WHITE 18  | GEAR TOOTH COUNT              |
| 2.6 C1:26 - C4:BLACK  | BLACK 18        | CAN H                         |
| C1:36 - C3:3          | PINK 18         | PICKUP UP                     |
| C1:37 - C3:2          | GRAY/BLACK 18   | PICKUP DOWN                   |
| 2.7 C1:38 - C5:C (S2) | PURPLE 18       | GEAR RPM                      |
| C1:40 - C4:GRAY       | GRAY 18         | CAN L                         |
| C1:42 - S7            | ORANGE 18       | +5V FUEL REF THRU 1K RESISTOR |
| C2:E - C3:1           | BLUE/BLACK 18   | ACCUMULATOR UNLOAD            |
| C2:D - C3:6           | BLUE/WHITE 18   | TENSION RAIL OPEN             |

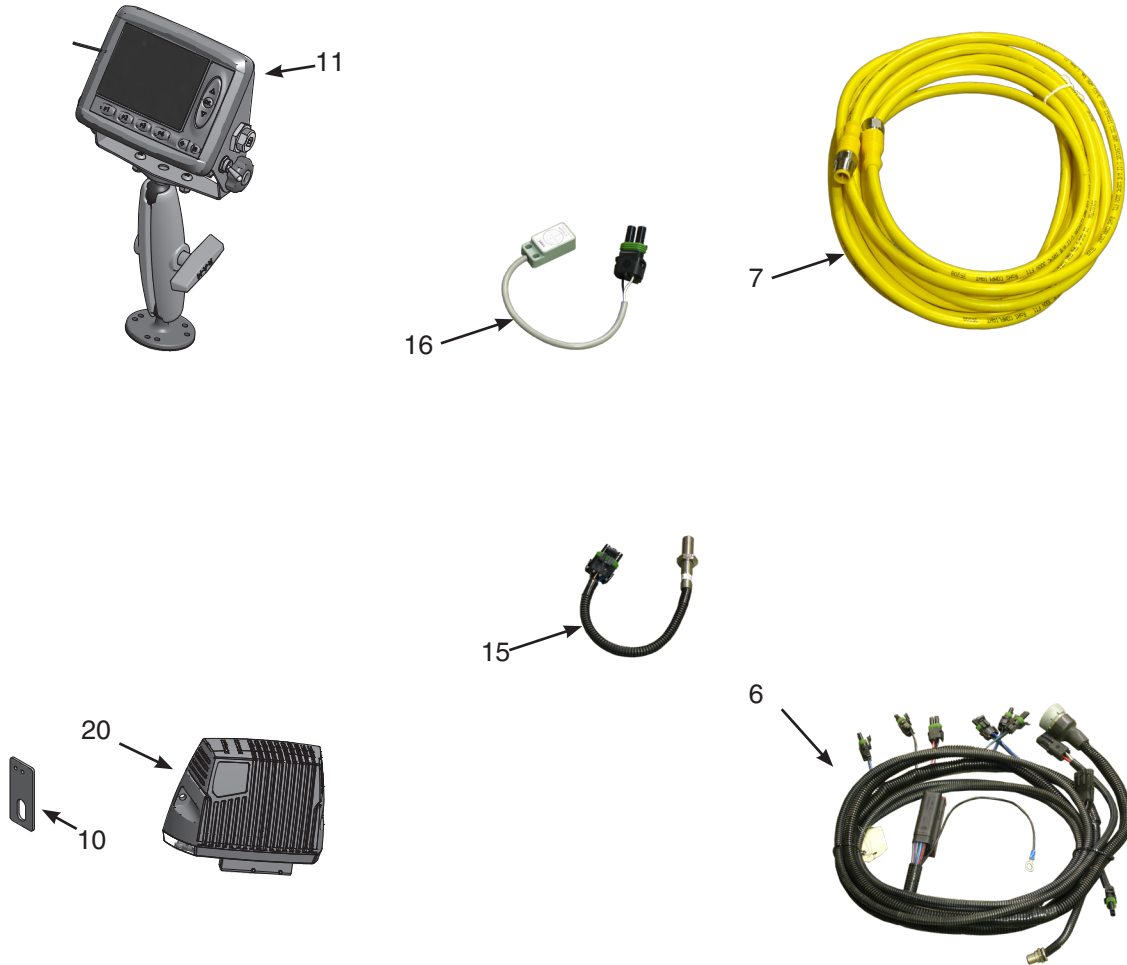
# Electrical Schematic, Engine



Rev: 11/2014  
A  
904512

**Allied Systems**  
CORPORATION

### Electrical Installation, Hydro



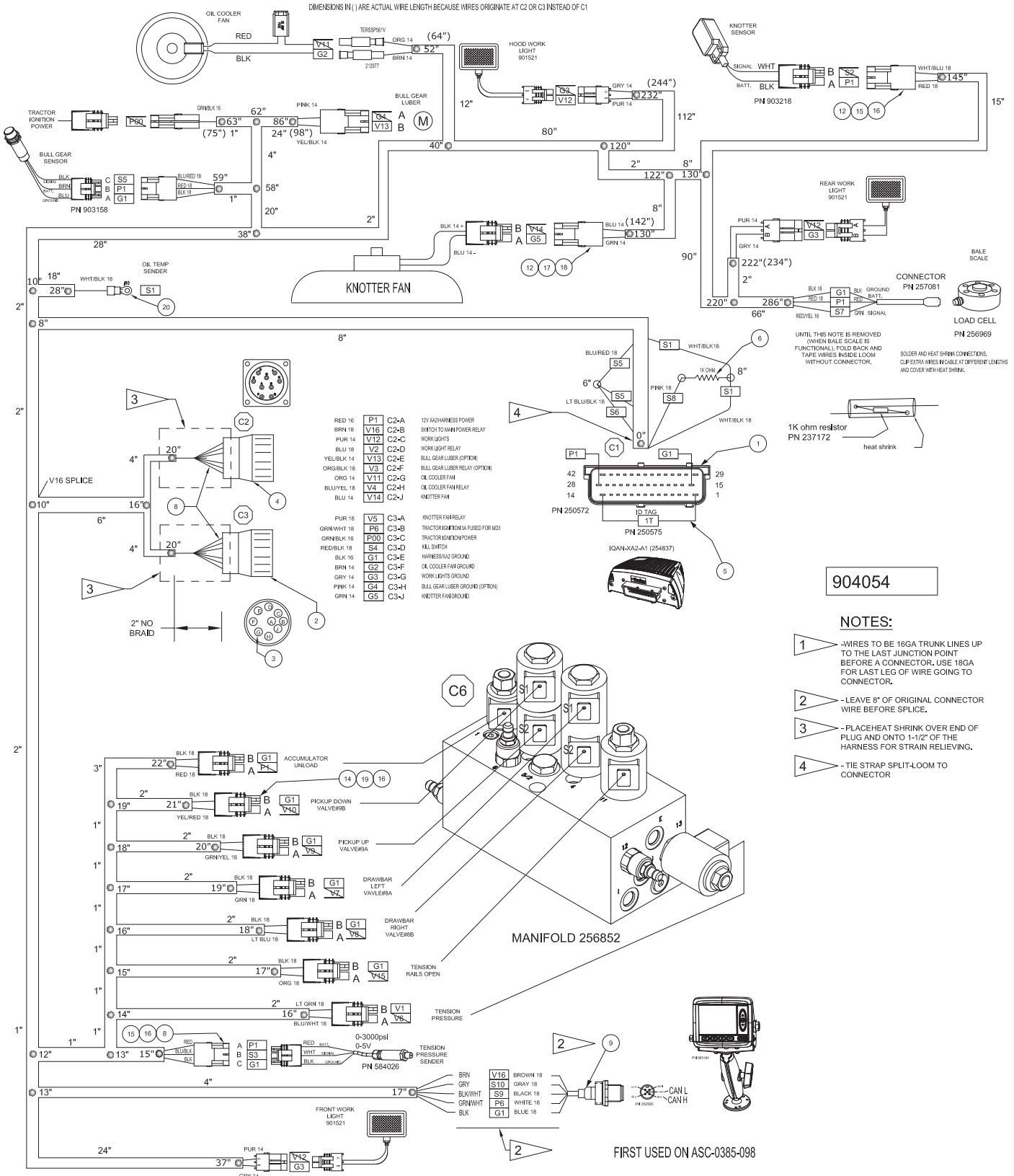
| Item  | Part No.  | Qty | Description                     | Item | Part No.   | Qty | Description                           |
|---|-----------|-----|---------------------------------|------|------------|-----|---------------------------------------|
| <b>901542 Electrical Installation (Hydro)</b> |           |     |                                 |      |            |     |                                       |
| 6   | *a 904054 | 1   | . Wire Harness                  | 22   | *c 904056  | 0   | . Electrical Schem                    |
| 7   | 252639    | 1   | . Cable                         | 23   | SMR6320625 | 2   | . Rnd Hd Ms 6-32 X 5/8-Zinc           |
| 10  | MNT03662A | 1   | . Plate, Mounting               | 24   | R13809520  | 2   | . Hce-535 Nut #6 Unc                  |
| 11  | *b 906961 | 1   | . Assembly, Ctrl Module W/ Prog | 25   | R13811437  | 2   | . Washer                              |
| 15  | 903158    | 1   | . Sensor Assembly               |      |            |     | *a See Separate Coverage (Page 11-8)  |
| 16  | 903218    | 1   | . Switch Assembly               |      |            |     | *b See Separate Coverage (Page 11-3)  |
| 20  | 254837    | 1   | . Module, Expansion             |      |            |     | *c See Separate Coverage (Page 11-10) |
| 21  | 903117    | 1   | . Cable Assembly                |      |            |     |                                       |

Rev-

# Wire Harness, IQAN, Hydro

Page 1 of 2

FIRST USED ON ASC-0385-098



# Wire Harness, IQAN, Hydro

Page 2 of 2

FIRST USED ON ASC-0385-098

| Item                                    | Part No.   | Qty | Description                | Item | Part No.   | Qty | Description            |
|---|------------|-----|----------------------------|------|------------|-----|------------------------|
| <b>904054 Wire Harness, IQAN(Hydro)</b> |            |     |                            |      |            |     |                        |
| 1                                       | 250572     | 2   | . Kit, Connector           | 31   | 238994     | 2'  | . Wire, Light Green    |
| 2                                       | 238979     | 1   | . Plug                     | 32   | 238990     | 2'  | . Wire, Blue           |
| 3                                       | 243236     | 18  | . Socket                   | 33   | WIR0018026 | 2'  | . Wire, Orange W/Black |
| 4                                       | 238717     | 1   | . Connector, Plug          | 34   | 239017     | 2'  | . Wire, Blue W/Yellow  |
| 5                                       | 250575     | 1   | . Tag, Id                  | 35   | WIR0018009 | 2'  | . Wire, Purple         |
| 6                                       | 237172     | 1   | . Resistor                 | 36   | 239016     | 2'  | . Wire, Blue W/White   |
| 7                                       | 230774     | 47' | . Loom, Wire Guard         | 37   | 237108     | 2'  | . Wire, Green          |
| 8                                       | 232619     | 1'  | . Tube, Heat-Shrink        | 41   | 238993     | 2'  | . Wire, Light Blue     |
| 9                                       | 258017     | 1   | . Receptacle               | 42   | 239010     | 2'  | . Wire, Green W/Yellow |
| 10                                      | AO00000255 | 70' | . Loom, Split              | 43   | 239011     | 2'  | . Wire, Yellow W/Red   |
| 11                                      | R740864    | 1   | . Connector, Wire          | 44   | 219435     | 5'  | . Wire, Orange         |
| 12                                      | R740885    | 6   | . Connector, Wire          | 45   | 242404     | 31' | . Wire, Purple         |
| 13                                      | 238154     | 2   | . Connector, Wire          | 46   | 219440     | 8'  | . Wire, Yellow W/Black |
| 14                                      | R740886    | 7   | . Connector                | 47   | 219405     | 12' | . Wire, Blue           |
| 15                                      | R740861    | 9   | . Pin                      | 48   | 238996     | 2'  | . Wire, Orange         |
| 16                                      | 238142     | 23  | . Seal, Wire               | 49   | 247637     | 2'  | . Wire, Brown          |
| 17                                      | R740866    | 10  | . Pin, Male                | 50   | WIR0016017 | 6'  | . Wire, Green W/Black  |
| 18                                      | R740867    | 10  | . Seal, Wire               | 51   | 237107     | 32' | . Wire, Red            |
| 19                                      | R740881    | 14  | . Pin, Female              | 52   | 219437     | 2'  | . Wire, Red            |
| 20                                      | TER0491022 | 1   | . Terminal Ring            | 53   | 238991     | 8'  | . Wire, Green W/White  |
| 21                                      | 238995     | 3'  | . Wire, White W/Black      | 54   | 237106     | 21' | . Wire, Black          |
| 22                                      | 239008     | 12' | . Wire, White W/Blue       | 55   | 219436     | 5'  | . Wire, Black          |
| 23                                      | 239007     | 2'  | . Wire, Blue W/Black       | 56   | 219409     | 6'  | . Wire, Brown          |
| 24                                      | 239019     | 2'  | . Wire, Red W/Black        | 57   | 223279     | 31' | . Wire, Gray           |
| 25                                      | 239015     | 5'  | . Wire, Blue W/Red         | 58   | WIR0001412 | 8'  | . Wire, Pink           |
| 26                                      | 239004     | 1'  | . Wire, Light Blue W/Black | 59   | 219408     | 12' | . Wire, Green          |
| 27                                      | 239009     | 24' | . Wire, Red W/Yellow       | 60   | TERSSP561V | 1   | . Plug, Terminal       |
| 28                                      | 238998     | 1'  | . Wire, Pink               | 61   | 212977     | 1   | . Terminal, Female     |
| 29                                      | 239000     | 2'  | . Wire, Black W/White      |      |            |     |                        |
| 30                                      | 239002     | 2'  | . Wire, Gray               |      |            |     |                        |

Rev E

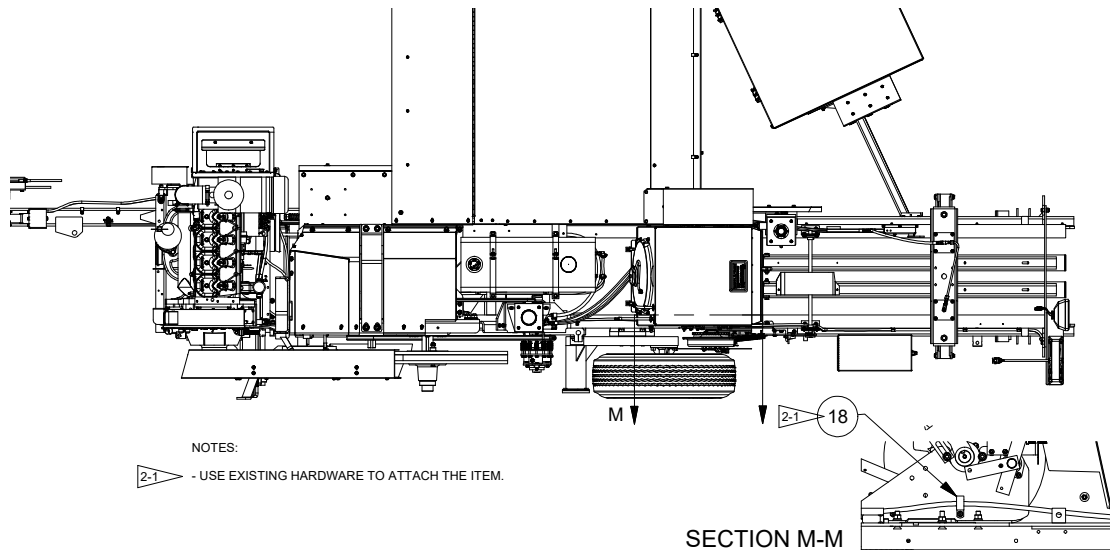
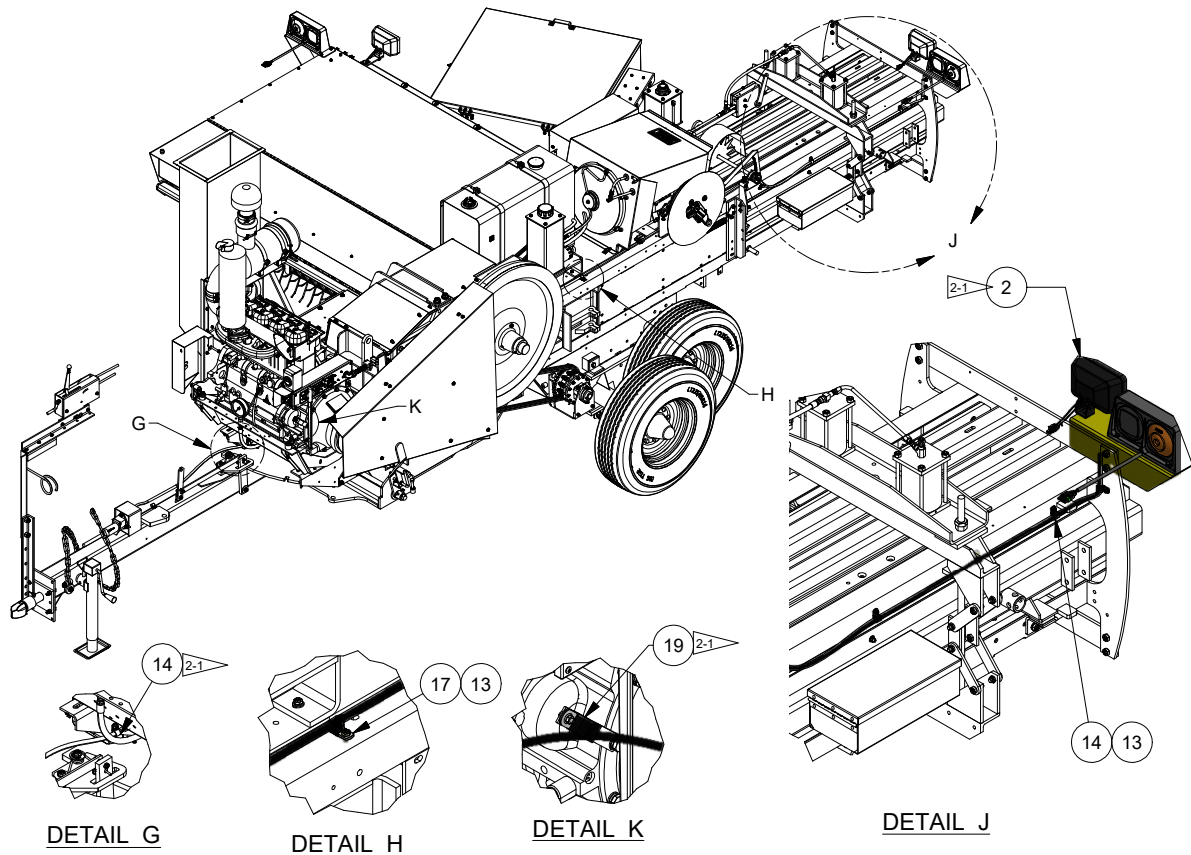
| INPUTS "S" NAME/LOCATION/DESCRIPTION              | NAME, COLOR       | OUTPUTS "V" NAME/LOCATION/DESCRIPTION                    | NAME, COLOR     |
|---|-------------------|--|-----------------|
| S1 / C1:10 - C9 / OIL TEMP SENDER                 | S1, WHT/BLK 18    | V1 / C1:2 - C6 / TENSION PRESSURE -                      | V1, LT GRN 18   |
| S2 / C1:11 - C8 / KNOTTER CYCLE                   | S2, WHT/BLU 18    | V2 / C1:3 - C2:D / WORK LIGHT RELAY                      | V2, BLU 18      |
| S3 / C1:12 - C6 / TENSION PRESSURE SENDER         | S3, BLU/BLK 18    | V3 / C1:4 - C2:F / BULL GEAR LUBER RELAY                 | V3, ORG/BLK 18  |
| S4 / C1:13 - C3:D / KILL SWITCH                   | S4, RED/BLK 18    | V4 / C1:8 - C2:H / OIL COOLER FAN RELAY                  | V4, BLU/YEL18   |
| S5 / C1:24 - C7 / BULL GEAR TOOTH COUNT           | S5, BLU/RED 18    | V5 / C1:9 - C3:A / KNOTTER FAN RELAY                     | V5, PUR 18      |
| S6 / C1:38 - C7 / BULL GEAR RPM                   | S6, LT BLU/BLK 18 | V6 / C1:16 - C6 / TENSION PRESSURE +                     | V6, BLU/WHT 18  |
| S7 / C1:25 - C10 / LOAD CELL (OPTIONAL)           | S7, RED/YEL18     | V7 / C1:22 - C6 / DRAWBAR LEFT                           | V7, GRN 18      |
| S8 / C1:42 - C9 / REFERENCE VOLTAGE +5V MAX 150mA | S8, PINK 18       | V8 / C1:23 - C6 / DRAWBAR RIGHT                          | V8, LT BLU 18   |
| S9 / C1:26 - C5 / CAN-HIGH                        | S9, BLK/WHT 18    | V9 / C1:36 - C6 / PICKUP UP                              | V9, GRN/YEL 18  |
| S10 / C1:40 - C5 / CAN-LOW                        | S10, GRY 18       | V10 / C1:37 - C6 / PICKUP DOWN                           | V10, YEL/RED 18 |
|   |                   | V11 / C2:J / OIL COOLER FAN                              | V11, ORG 14     |
|   |                   | V12 / C2:C / WORK LIGHTS                                 | V12, PUR 14     |
|   |                   | V13 / C2:E / BULL GEAR LUBER (OPTION)                    | V13, YEL/BLK 14 |
|   |                   | V14 / C2:J / KNOTTER FAN                                 | V14, BLU 14     |
|   |                   | V15 / C1:5 - C6 / TENSION RAILS OPEN                     | V15, ORG 18     |
|   |                   | V16 / C5 - C2:B - C1:6 / SWITCH TO POWER RELAY           | V16, BRN 18     |
|   |                   |  |                 |
| G0 / C4:A / BATTERY - FRAME                       | G0, BLK 8         | P00 / C3:C / TRACTOR IGNITION 16                         | P00, GRN/BLK 16 |
| G1 / C3:E / C1:15 / HARNESS GROUND; SEE NOTE 1    | G1, BLK 16/18     | P0 / C4:A / TRACTOR BATTERY TO MAIN RELAY                | P0, RED 8       |
| G2 / C3:F / OIL COOLER FAN GROUND                 | G2, BRN 14        | P1 / C2:A - C1:28 / XA2 POWER 16, HARNESS 18, SEE NOTE 1 | P1, RED 16/18   |
| G3 / C3:G / WORK LIGHT GROUND                     | G3, GRY 14        | P2 / OIL COOLER FAN                                      | P2, ORG 14      |
| G4 / C3:H / BULL GEAR LUBER GROUND (OPTION)       | G4, PINK 14       | P3 / WORK LIGHTS   | P3, PUR 14      |
| G5 / C3:J / KNOTTER FAN GROUND                    | G5, GRN 14        | P4 / BULL GEAR LUBER (OPTION)                            | P4, YEL/BLK 14  |
|   |                   | P5 / KNOTTER FAN   | P5, BLU 14      |
|   |                   | P6 / C3:B - C5 / 3A TRACTOR IGN TO MD3                   | P6, GRN/WHT 18  |





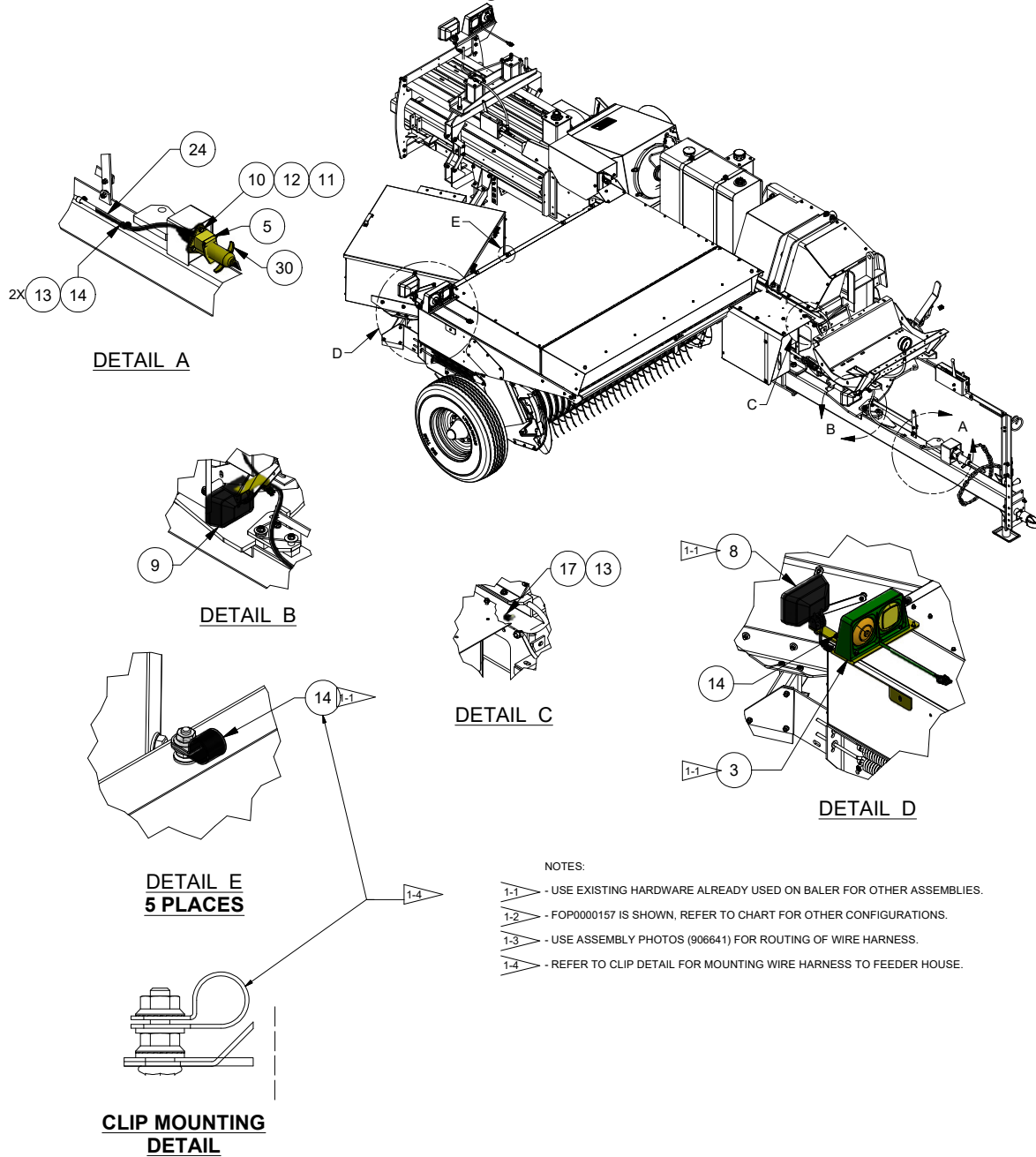
# Light Installation, 2 Tie

Page 1 of 2



# Light Installation, 2-Tie

Page 2 of 2



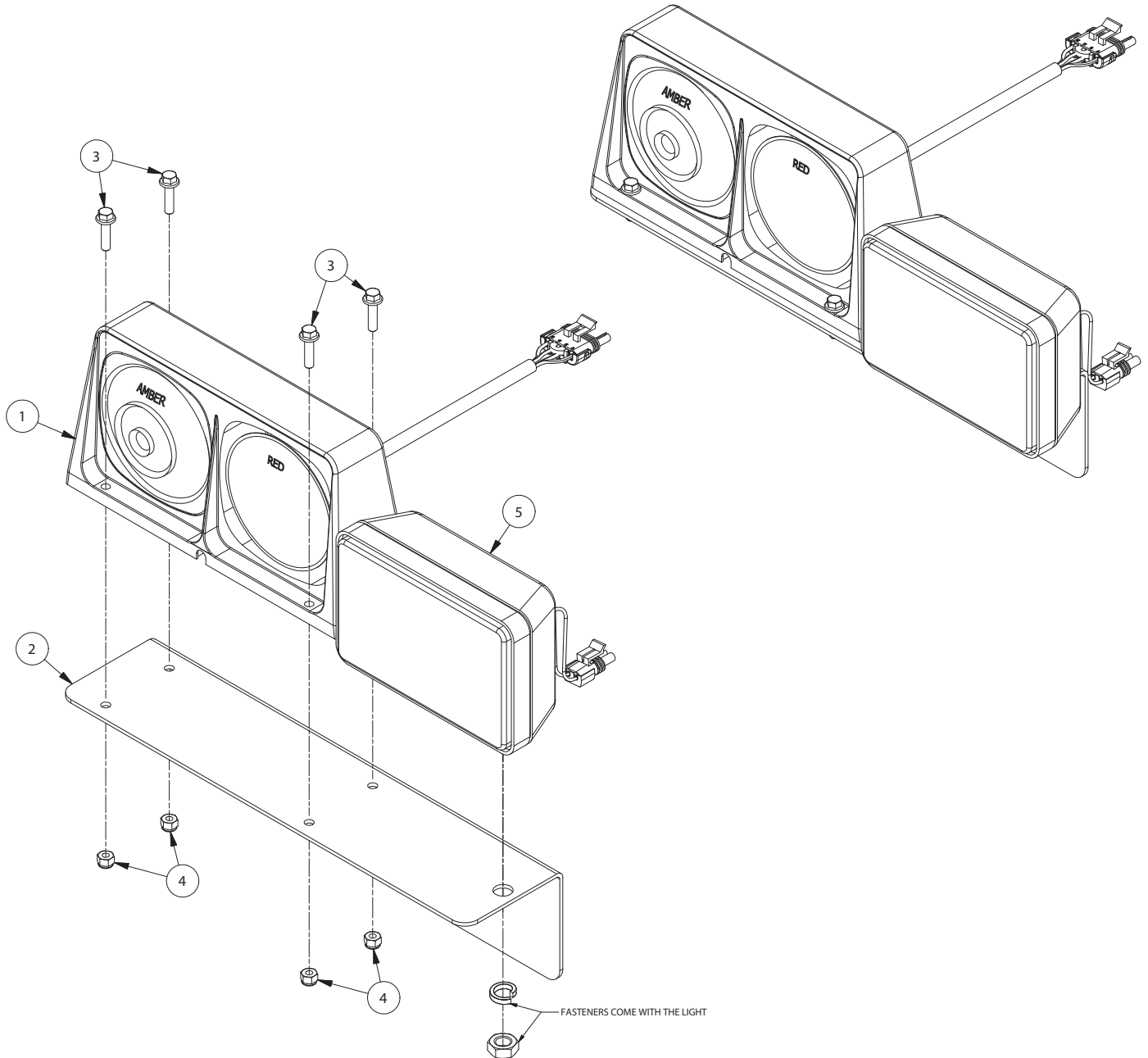
- NOTES:
- 1-1 - USE EXISTING HARDWARE ALREADY USED ON BALER FOR OTHER ASSEMBLIES.
  - 1-2 - FOP0000157 IS SHOWN, REFER TO CHART FOR OTHER CONFIGURATIONS.
  - 1-3 - USE ASSEMBLY PHOTOS (906641) FOR ROUTING OF WIRE HARNESS.
  - 1-4 - REFER TO CLIP DETAIL FOR MOUNTING WIRE HARNESS TO FEEDER HOUSE.

| Item | Part No.          | Qty | Description                | Item | Part No.  | Qty | Description                  |
|------|-------------------|-----|----------------------------|------|-----------|-----|------------------------------|
|      | <b>FOP0000157</b> |     | <b>Lights Installation</b> |      |           |     |                              |
| 1    | *a 902450         | 1   | . Light Assembly, LH       | 20   | *d 902796 | 1   | . Work Light Sub-Assy, Front |
| 2    | *b 902449         | 1   | . Light Assembly, RH       | 21   | 223428    | 3   | . Washer                     |
| 7    | CBL1121702        | 1   | . Cable, Connector         | 22   | R13802619 | 2   | . Washer                     |
| 8    | SOK0012310        | 1   | . Socket                   | 23   | 228412    | 2   | . Lockwasher                 |
| 9    | SOK0000007        | 1   | . Boot                     | 24   | 228413    | 2   | . Hex Nut                    |
| 10   | 903581            | 1   | . Wire Harness             | 25   | 209588    | 14  | . Clip, Insulated            |
| 11   | R13810989         | 9   | . Capscrew                 | 26   | 227398    | 1   | . Clamp                      |
| 13   | SMS0000184        | 3   | . Screw                    | 27   | R13810020 | 1   | . Clamp                      |
| 14   | 232939            | 3   | . Nut                      |      |           |     |                              |
| 16   | CLP0000123        | 2   | . Clamp                    |      |           |     |                              |
| 19   | *c 902795         | 1   | . Work Light Sub-Assy, RH  |      |           |     |                              |

\*a See Separate Coverage (Page 11-13)  
 \*b See Separate Coverage (Page 11-14)  
 \*c See Separate Coverage (Page 11-15)  
 \*d See Separate Coverage (Page 11-16)

Rev A

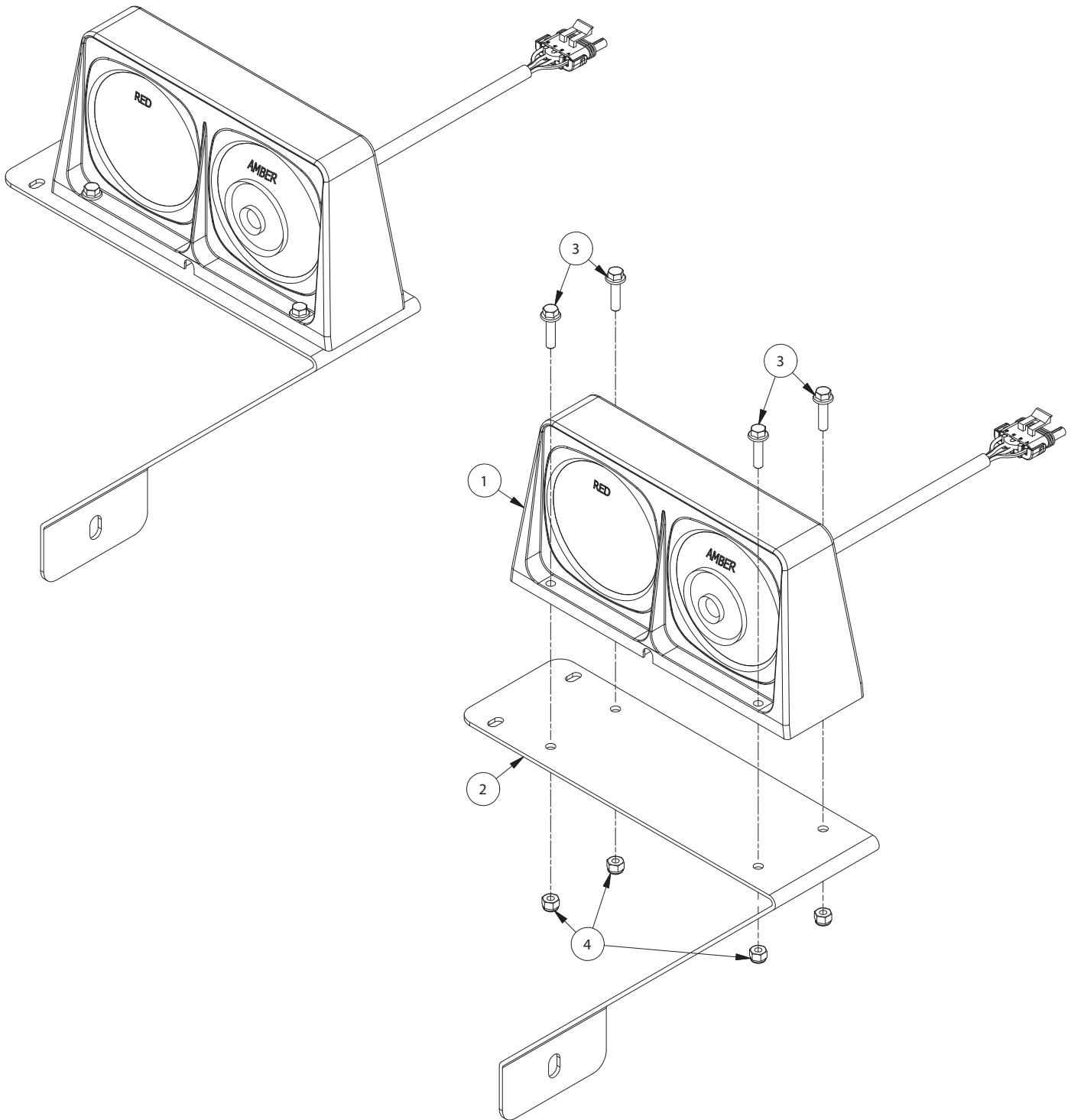
## Light Assembly, LH



| Item | Part No.      | Qty | Description               | Item | Part No. | Qty | Description            |
|------|---------------|-----|---------------------------|------|----------|-----|------------------------|
|      | <b>902450</b> |     | <b>Light Assembly, LH</b> |      |          |     |                        |
| 1    | LIT037163B    | 1   | . Light Assembly, LH      | 4    | 235620   | 4   | . Nut, Esna            |
| 2    | BKT037152B    | 1   | . Bracket, LH             | 5    | 901521   | 1   | . Light Assembly, Work |
| 3    | SMS0000305    | 4   | . Bolt                    |      |          |     |                        |

Rev D

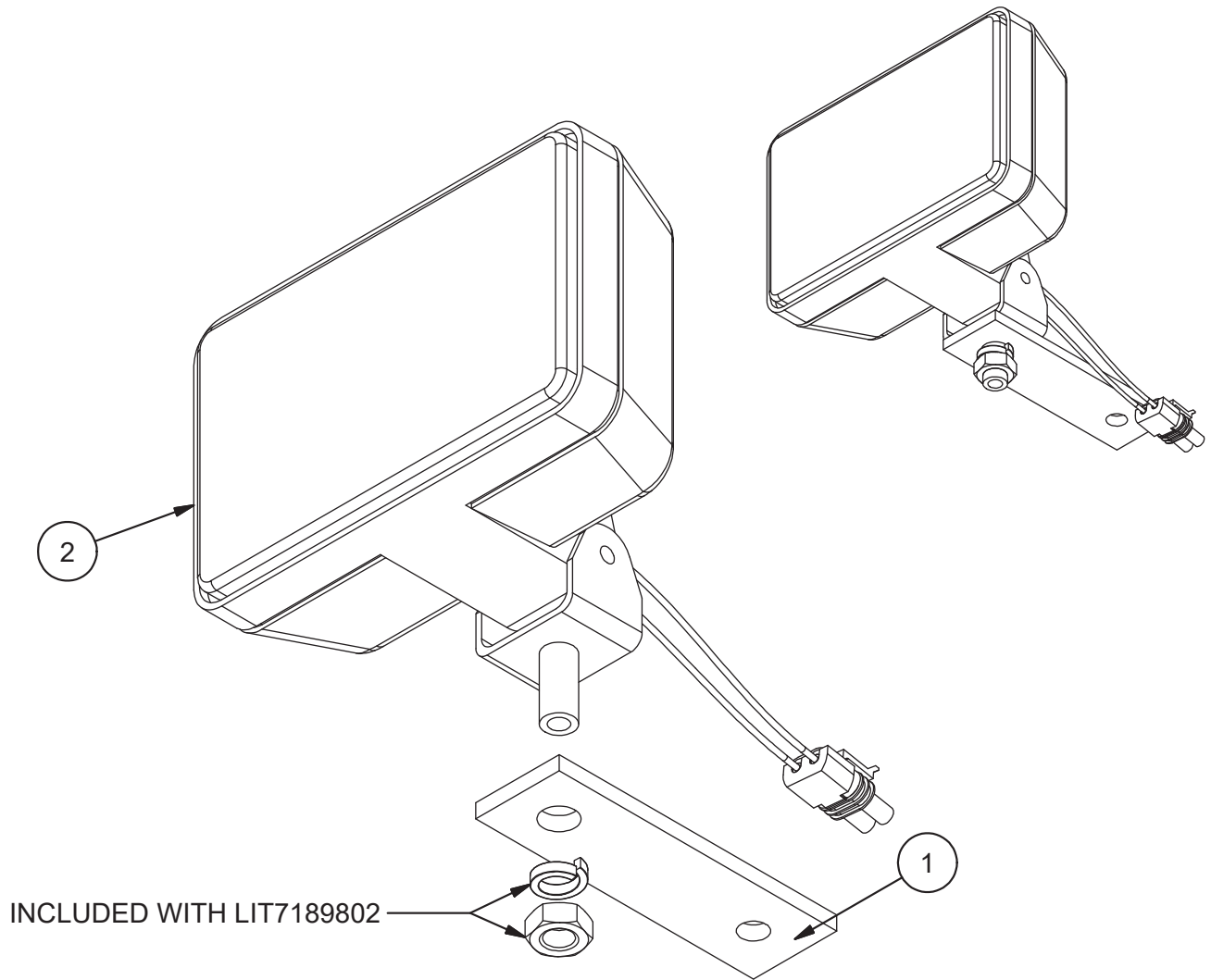
# Light Assembly, RH



| Item | Part No.      | Qty | Description               | Item | Part No.   | Qty | Description |
|------|---------------|-----|---------------------------|------|------------|-----|-------------|
|      | <b>902449</b> |     | <b>Light Assembly, RH</b> |      |            |     |             |
| 1    | LIT037164B    | 1   | . Light Assembly, RH      | 3    | SMS0000305 | 4   | . Bolt      |
| 2    | BKT037149B    | 1   | . Bracket, RH Rear        | 4    | 235620     | 4   | . Nut, Esna |

Rev B

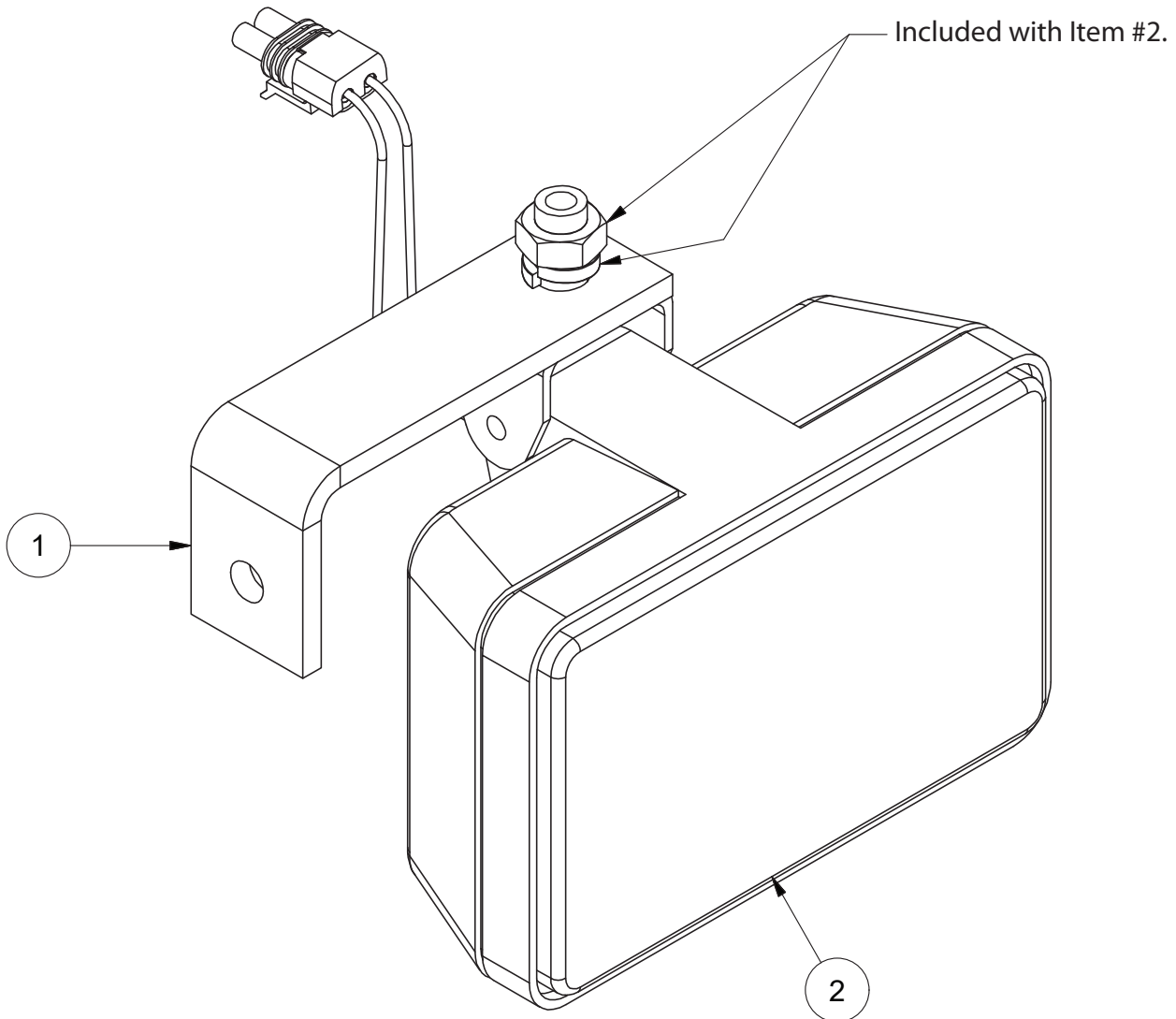
# Work Light Sub-Assembly, RH



| Item | Part No.      | Qty | Description                        | Item | Part No. | Qty | Description |
|------|---------------|-----|------------------------------------|------|----------|-----|-------------|
|      | <b>902795</b> |     | <b>Work Light Sub Assembly, RH</b> |      |          |     |             |
| 1    | F000008062    | 1   | . Bracket                          |      |          |     |             |
| 2    | 901521        | 1   | . Light Assembly, Work             |      |          |     |             |

Rev B

# Work Light Sub-Assembly, Front

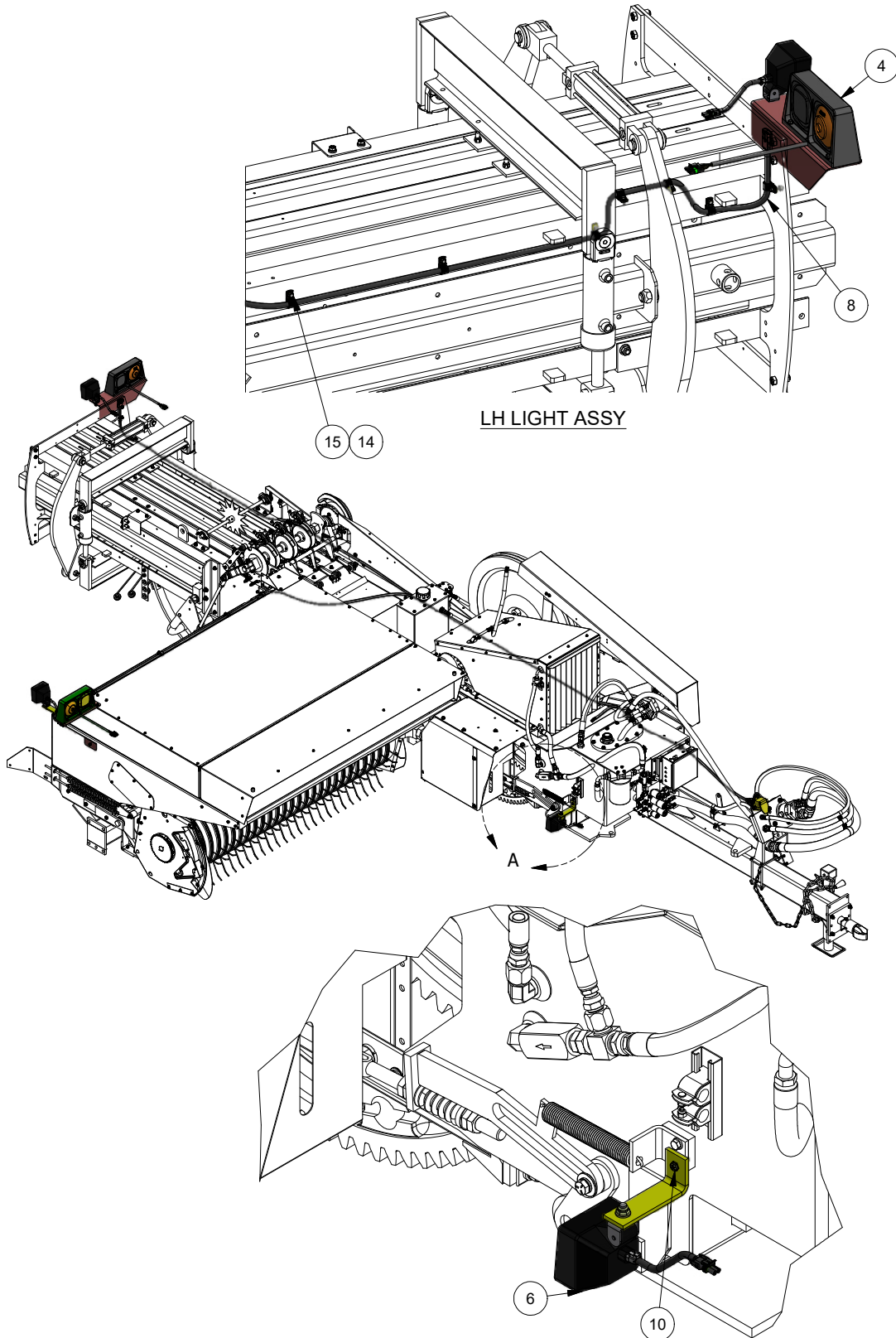


| Item | Part No.      | Qty | Description                           | Item | Part No. | Qty | Description |
|------|---------------|-----|---------------------------------------|------|----------|-----|-------------|
|      | <b>902796</b> |     | <b>Work Light Sub Assembly, Front</b> |      |          |     |             |
| 1    | F000006577    | 1   | . Bracket                             |      |          |     |             |
| 2    | 901521        | 1   | . Light Assembly, Work                |      |          |     |             |

Rev C

# Light Installation, Hydro

Page 1 of 2

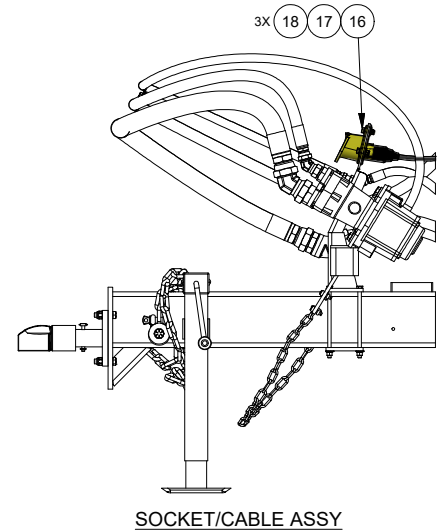
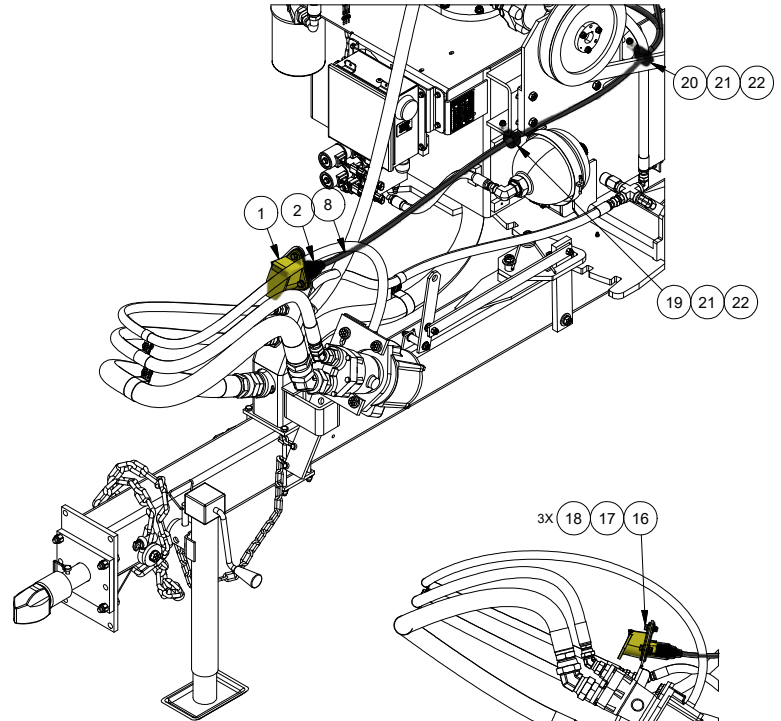
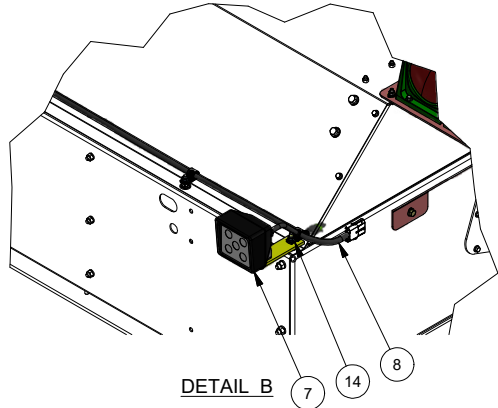
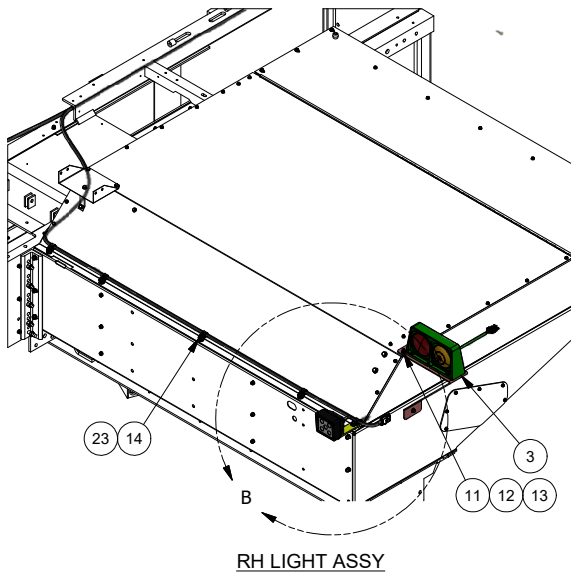


LH LIGHT ASSY

DETAIL A  
WORK LIGHT ASSY

# Light Installation, Hydro

Page 2 of 2

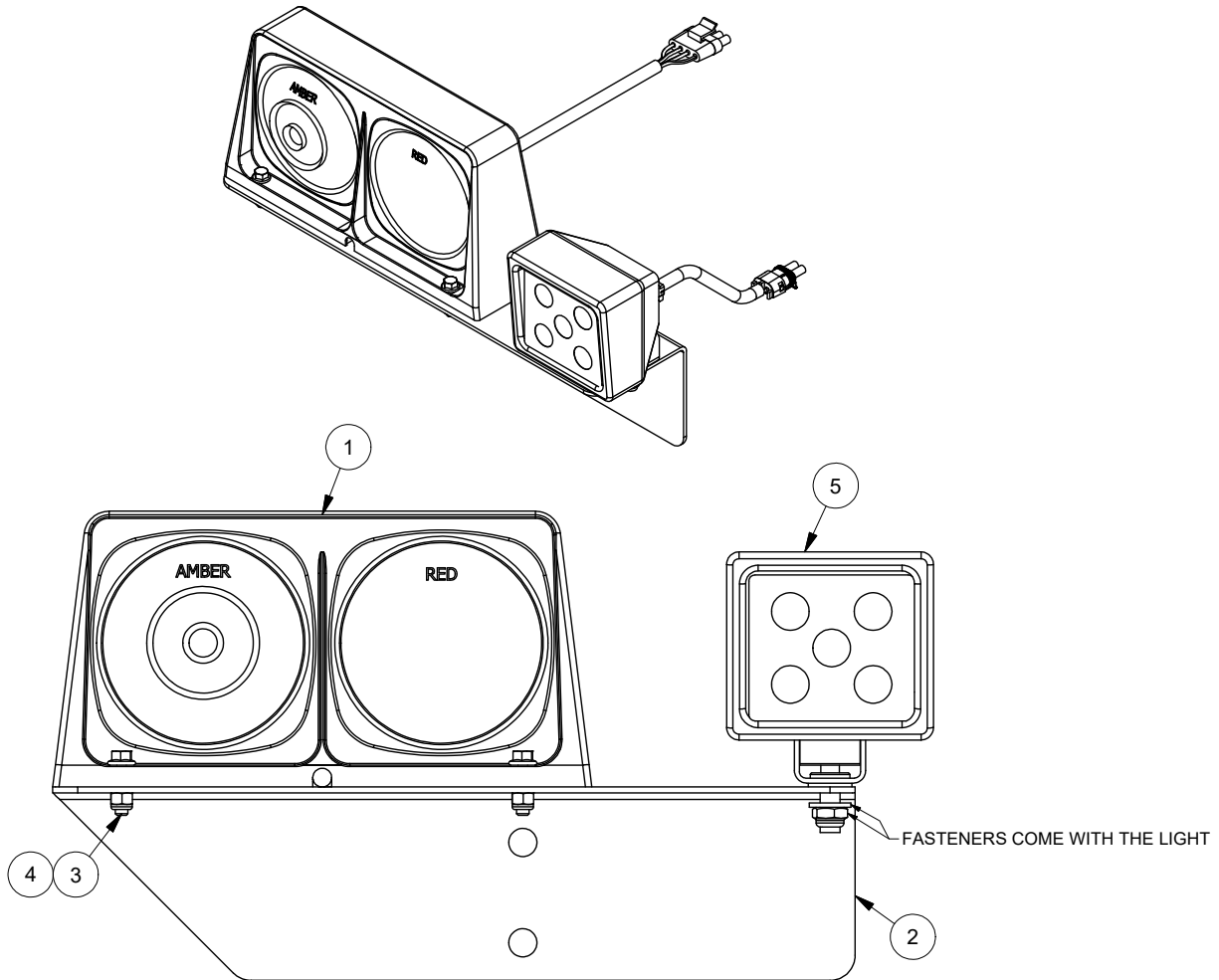


| Item                               | Part No.   | Qty | Description                    | Item | Part No.                           | Qty | Description      |
|------------------------------------|------------|-----|--------------------------------|------|------------------------------------|-----|------------------|
| <b>902990 Installation, Lights</b> |            |     |                                | 15   | SMS0000173                         | 6   | . Screw, Ser Flg |
| 1                                  | SOK0012310 | 1   | . Socket                       | 16   | SMS0000184                         | 4   | . Screw, Ser Flg |
| 2                                  | SOK0000007 | 1   | . Boot                         | 17   | 223428                             | 3   | . Washer         |
| 3                                  | *a 902449  | 1   | . Light Assembly               | 18   | 232939                             | 3   | . Nut, Esna      |
| 4                                  | *b 910438  | 1   | . Assembly, Light - LH         | 19   | R13808107                          | 1   | . Clamp, Insul   |
| 6                                  | *c 910440  | 1   | . Assembly, Work Light - Front | 20   | 209702                             | 1   | . Clamp          |
| 7                                  | *d 910439  | 1   | . Assembly, Work Light - RH    | 21   | SMS0000305                         | 3   | . Screw, Ser Flg |
| 8                                  | 904057     | 1   | . Wire Harness,Hwy Lights      | 22   | 09416918                           | 3   | . Nut, Serrated  |
| 9                                  | CBL1121702 | 1   | . Cable, Connector             | 23   | 191534W                            | 5   | . Nut            |
| 10                                 | R13810993  | 1   | . Capscrew                     |      |                                    |     |                  |
| 11                                 | 15127W     | 11  | . Washer                       |      |                                    |     |                  |
| 12                                 | 228412     | 2   | . Lockwasher                   |      |                                    |     |                  |
| 13                                 | 228413     | 2   | . Hex Nut                      |      |                                    |     |                  |
| 14                                 | CLP0000123 | 12  | . Clamp                        |      |                                    |     |                  |
|                                    |            |     |                                | *a   | See Separate Coverage (Page 11-14) |     |                  |
|                                    |            |     |                                | *b   | See Separate Coverage (Page 11-19) |     |                  |
|                                    |            |     |                                | *c   | See Separate Coverage (Page 11-21) |     |                  |
|                                    |            |     |                                | *d   | See Separate Coverage (Page 11-20) |     |                  |

Rev F



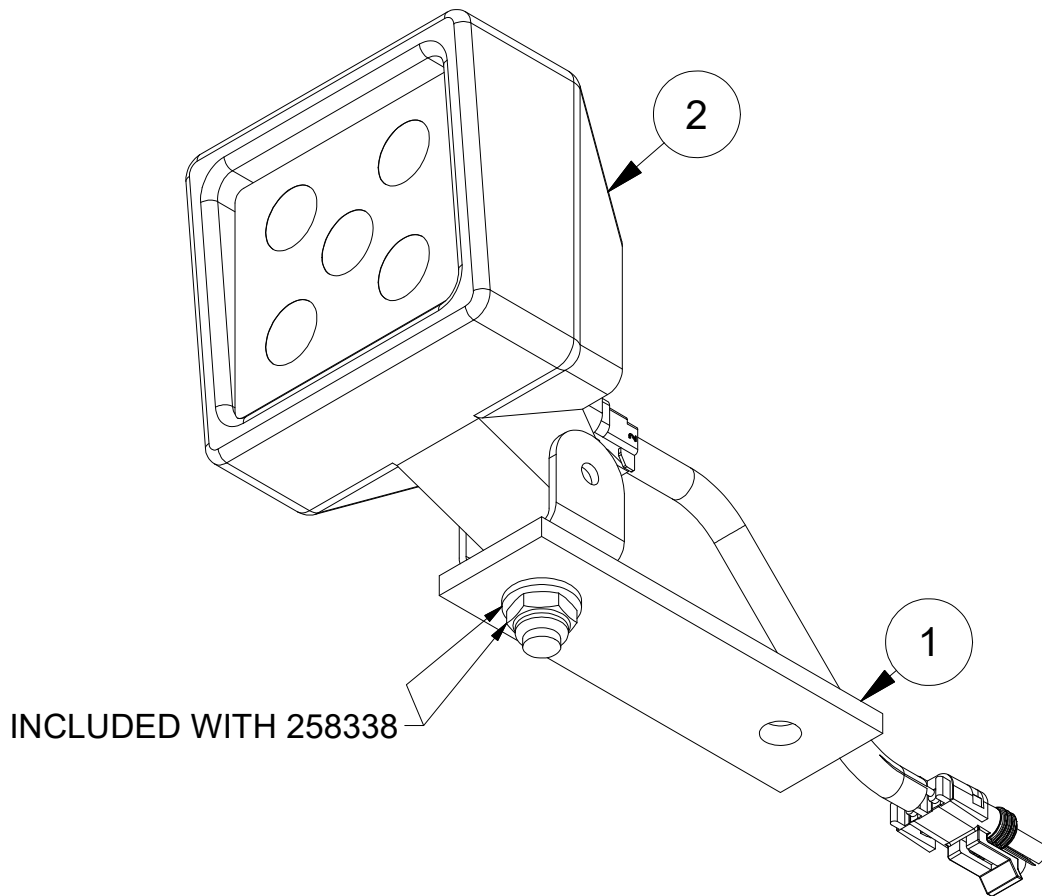
# Light Assembly, LH, Hydro



| Item | Part No.      | Qty | Description               | Item | Part No. | Qty | Description            |
|------|---------------|-----|---------------------------|------|----------|-----|------------------------|
|      | <b>910438</b> |     | <b>Light Assembly, LH</b> |      |          |     |                        |
| 1    | LIT037163B    | 1   | . Light Assembly, Lh      | 4    | 15113W   | 4   | . Locknut              |
| 2    | BKT037152B    | 1   | . Bracket, Lh             | 5    | 910441   | 1   | . Assembly, Work Light |
| 3    | SMS0000305    | 4   | . Screw, Ser Flg          |      |          |     |                        |

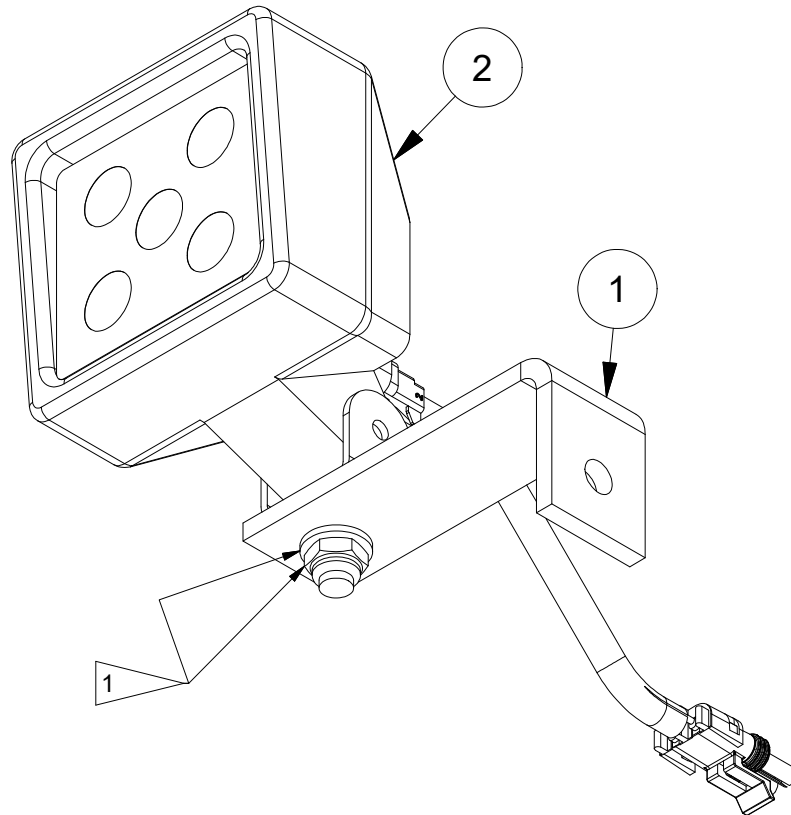
Rev -

# Light Assembly, RH, Hydro



| Item | Part No.      | Qty | Description               | Item | Part No. | Qty | Description |
|------|---------------|-----|---------------------------|------|----------|-----|-------------|
|      | <b>910439</b> |     | <b>Light Assembly, RH</b> |      |          |     |             |
| 1    | F000008062    | 1   | . Bracket                 |      |          |     | Rev -       |
| 2    | 910441        | 1   | . Assembly, Work Light    |      |          |     |             |

# Work Light Assembly, Front, Hydro



**NOTE**

1 LOCKWASHER AND NUT ARE INCLUDED WITH 258338 (REF 910441)

| Item | Part No.      | Qty | Description              | Item | Part No. | Qty | Description |
|------|---------------|-----|--------------------------|------|----------|-----|-------------|
|      | <b>910440</b> |     | <b>Work Light, Front</b> |      |          |     |             |
| 1    | F000006577    | 1   | . Bracket, Light         |      |          |     |             |
| 2    | 910441        | 1   | . Assembly, Work Light   |      |          |     |             |

Rev -

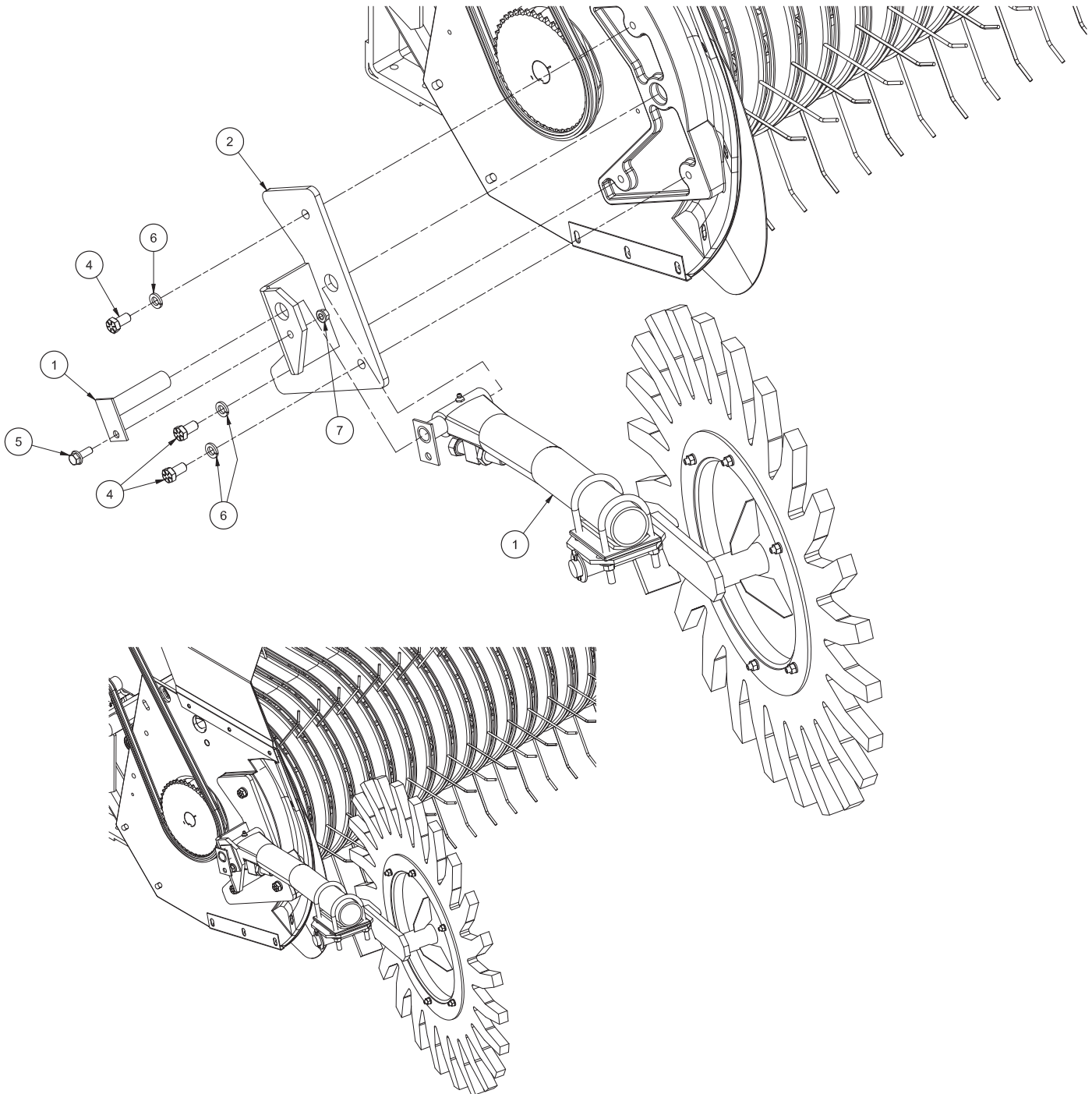
This page is intentionally left blank.

## Section 12

### Misc Parts

|  |       |
|--|-------|
| Hay Saver Wheel Installation .....         | 12-2  |
| . Hay Saver Wheel Assembly .....           | 12-3  |
| Bale Chute Installation.....               | 12-4  |
| Bale Chute Attachment.....                 | 12-5  |
| Bale Weight Indicator Installation.....    | 12-6  |
| .Bale Weight Indicator Assembly .....      | 12-8  |
| Misc Parts.....                            | 12-9  |
| Decal List, 280.....                       | 12-10 |
| Decal List, 285.....                       | 12-12 |
| Tool Box Installation.....                 | 12-14 |
| Slow Moving Vehicle Sign Installation..... | 12-15 |
| Hitch Ball .....                           | 12-16 |

# Hay Saver Wheel Installation

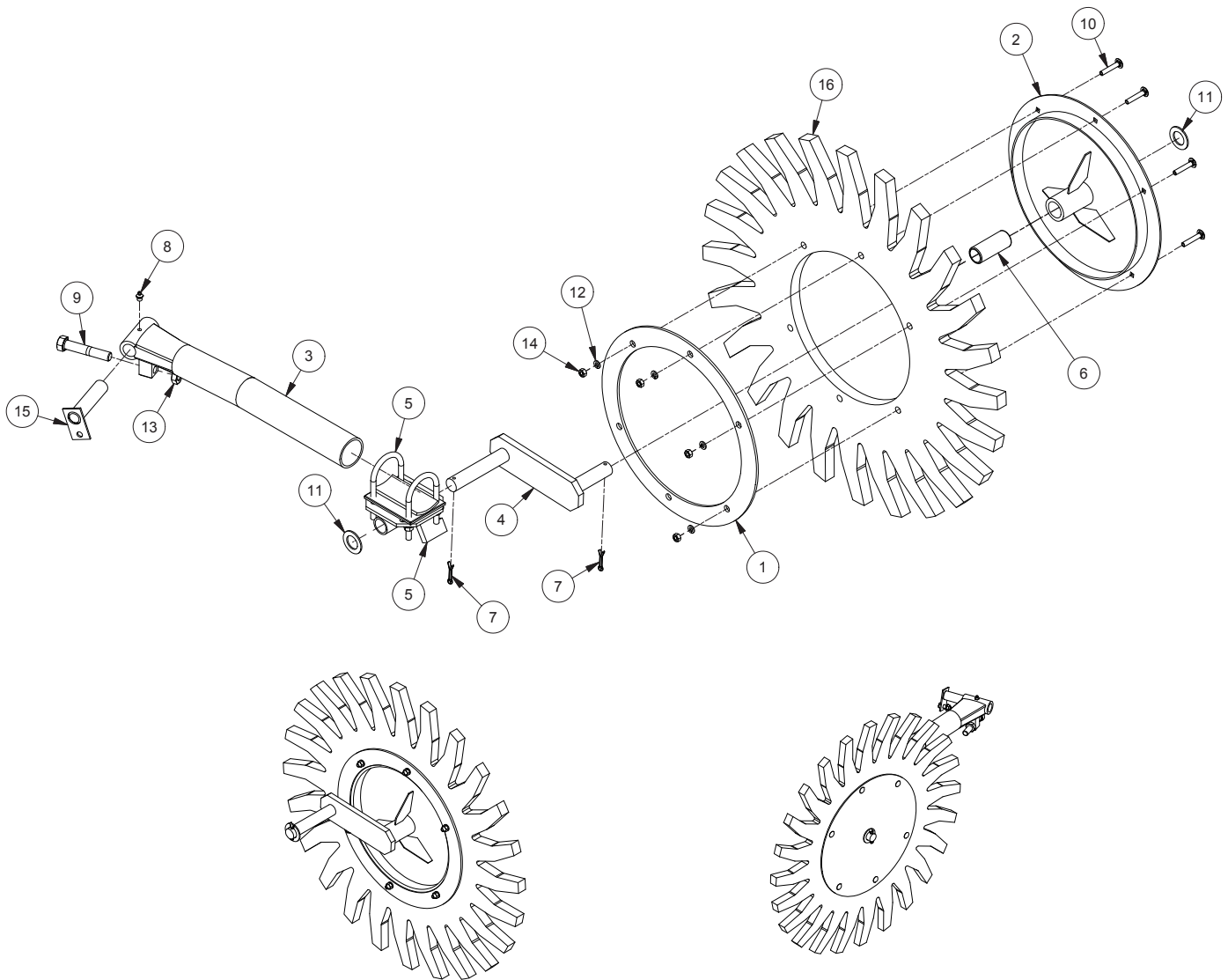


| Item                                       | Part No.      | Qty | Description                | Item | Part No. | Qty | Description     |
|--|---------------|-----|----------------------------|------|----------|-----|-----------------|
| <b>902854 Hay Saver Wheel Installation</b> |               |     |                            |      |          |     |                 |
| 1  | *a F00001893A | 1   | . Hay Saver Wheel Assembly | 6    | 234665   | 3   | . Lockwasher    |
| 2  | MNT0020484    | 1   | . Mounting Weldment        | 7    | 09411507 | 1   | . Nut, Serrated |
| 4  | 221560W       | 3   | . Capscrew                 |      |          |     |                 |
| 5  | 174413W       | 1   | . Screw                    |      |          |     |                 |

\*a See Separate Coverage (Page 12-3)

Rev B

# Hay Saver Wheel Assembly



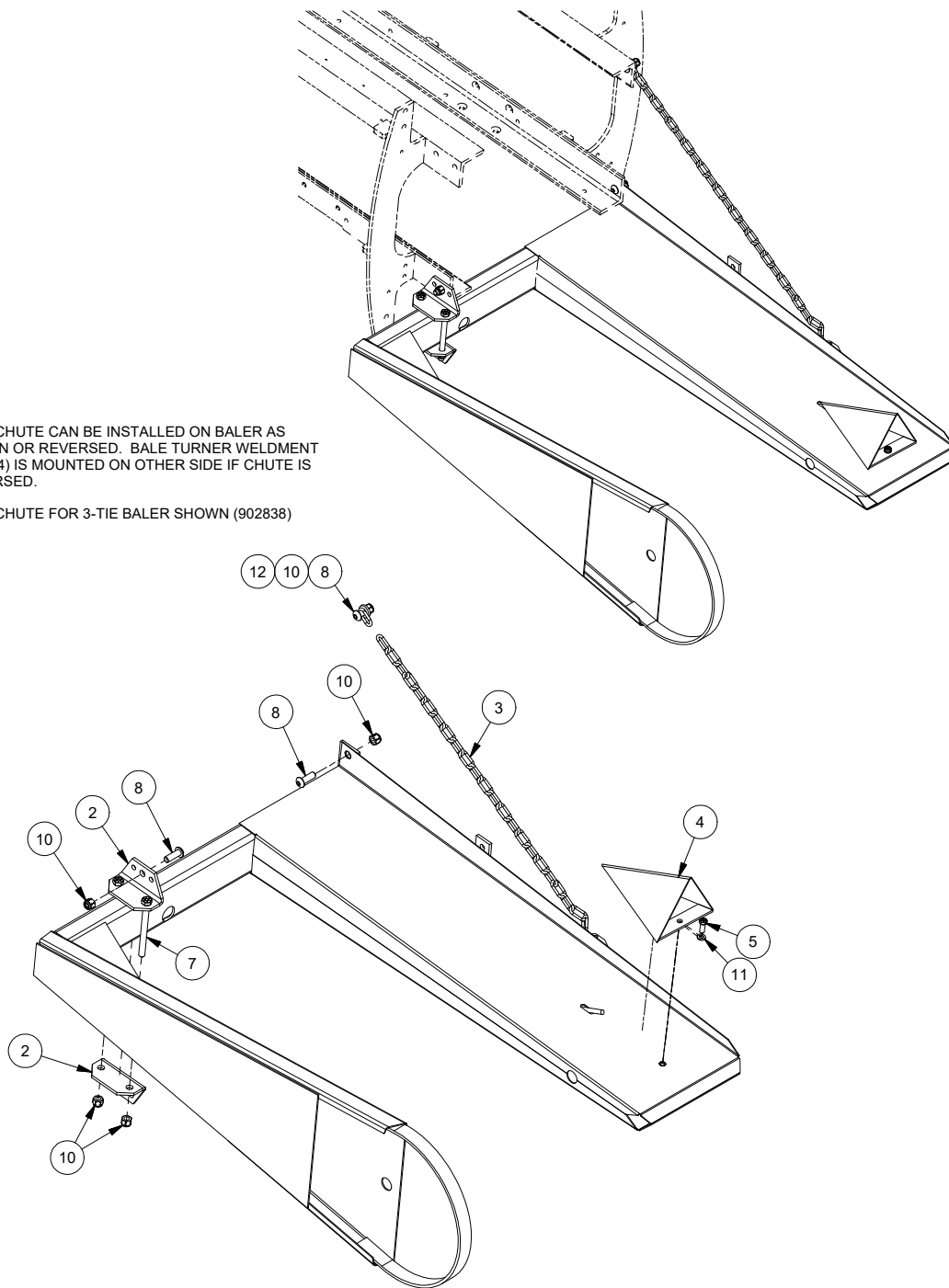
| Item | Part No.          | Qty | Description                     | Item | Part No.      | Qty | Description               |
|------|-------------------|-----|---------------------------------|------|---------------|-----|---------------------------|
|      | <b>F00001893A</b> |     | <b>Hay Saver Wheel Assembly</b> |      |               |     |                           |
| 1    | *a F000001906     | 2   | . Backup Ring F/Hay Saver Disc  | 12   | *a R13812513  | 6   | . Lockwasher              |
| 2    | *a F000001911     | 1   | . Wheel Disc Only F/Hay Saver   | 13   | FT00000055    | 1   | . Jam Nut                 |
| 3    | F000001895        | 1   | . Hay Saver Arm W/Stop Bolt     | 14   | *a R13811512  | 6   | . Hex Nut                 |
| 4    | F00001905A        | 1   | . Wheel Axle Arm - Bushing Type | 15   | F000001897    | 1   | . Pin, Pivot              |
| 5    | F000001900        | 1   | . Hay Saver Rotary Clamp        | 16   | *a F000001907 | 1   | . Rubber Ring F/Hay Saver |
| 6    | *a BSH0162048     | 1   | . Hay Saver Wheel Bushing       |      |               |     |                           |
| 7    | *b 200614         | 2   | . Cotter Pin                    |      |               |     |                           |
| 8    | 11079             | 1   | . Fitting, Lube                 |      |               |     |                           |
| 9    | Y17C-1056         | 1   | . Capscrew                      |      |               |     |                           |
| 10   | *a CRB3131750     | 6   | . Bolt                          |      |               |     |                           |
| 11   | *b R13802637      | 2   | . Flat Washer                   |      |               |     |                           |

\*a Included in Kit F000001904, Hay Saver Disc Assembly  
 \*b Included in F00001905A, Wheel Axle Arm

Rev E

# Bale Chute Installation

NOTE:  
 1. BALE CHUTE CAN BE INSTALLED ON BALER AS SHOWN OR REVERSED. BALE TURNER WELDMENT (ITEM 4) IS MOUNTED ON OTHER SIDE IF CHUTE IS REVERSED.  
 2. BALE CHUTE FOR 3-TIE BALER SHOWN (902838)

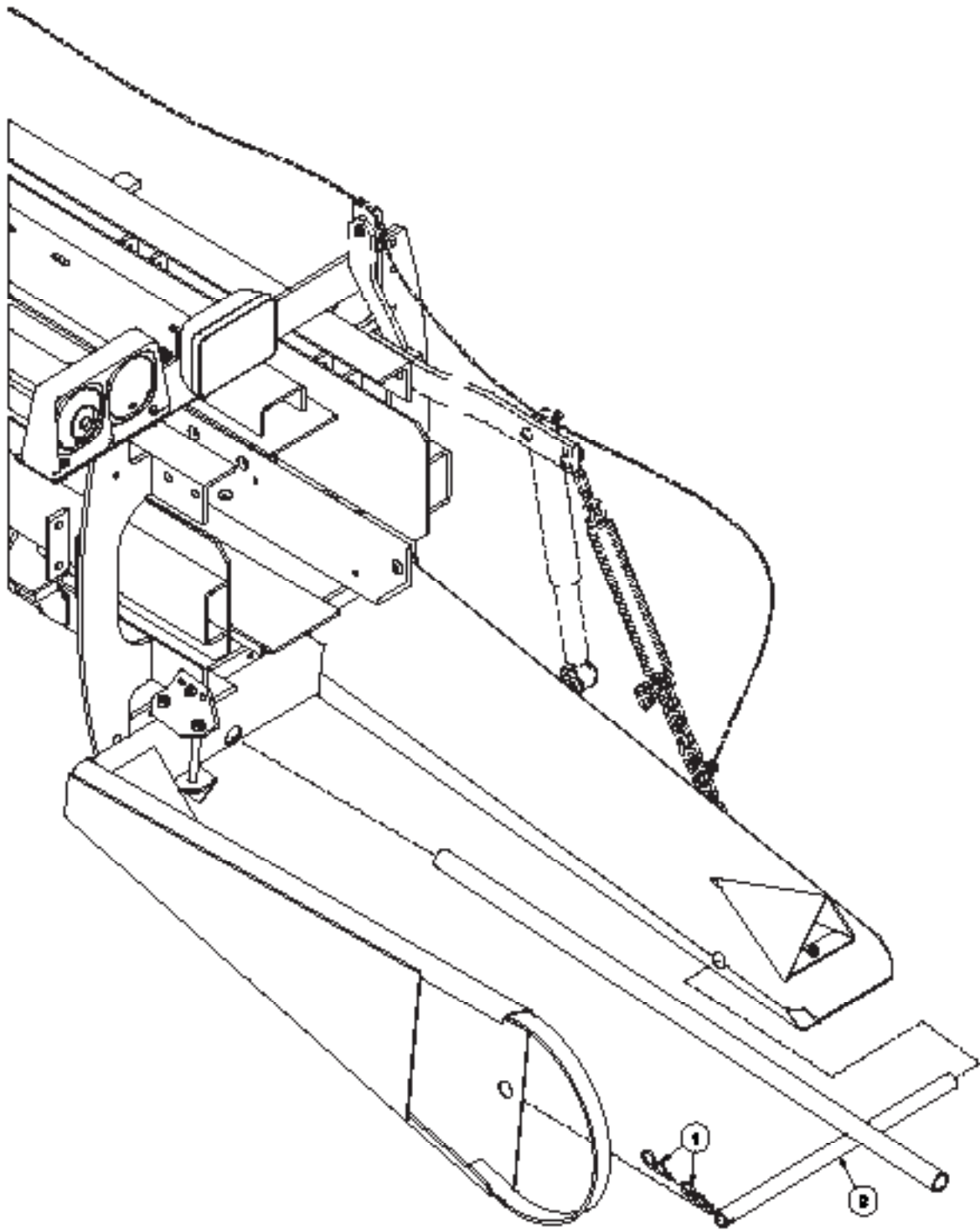


| Item  | Part No.   | Qty | Description                | Item | Part No.  | Qty | Description   |
|---|------------|-----|----------------------------|------|-----------|-----|---------------|
| <b>902839 Bale Chute Installation 2 - Tie</b> |            |     |                            |      |           |     |               |
| 1   | CHU0178761 | 1   | . Chute Assy, Bale (2-Tie) | 7    | R13801857 | 2   | . Capscrew    |
| 2   | F000007657 | 2   | . Bracket                  | 8    | Y25G-0824 | 3   | . Capscrew    |
| 3   | F000007659 | 1   | . Chain, Bale Chute        | 10   | 223587    | 5   | . Nut, Esna   |
| 4   | F000007655 | 1   | . Bale Turner Weldment     | 11   | R13812514 | 1   | . Lockwasher  |
| 5   | Y17C-0616  | 1   | . Capscrew                 | 12   | 221771W   | 1   | . Hard Washer |

Rev D



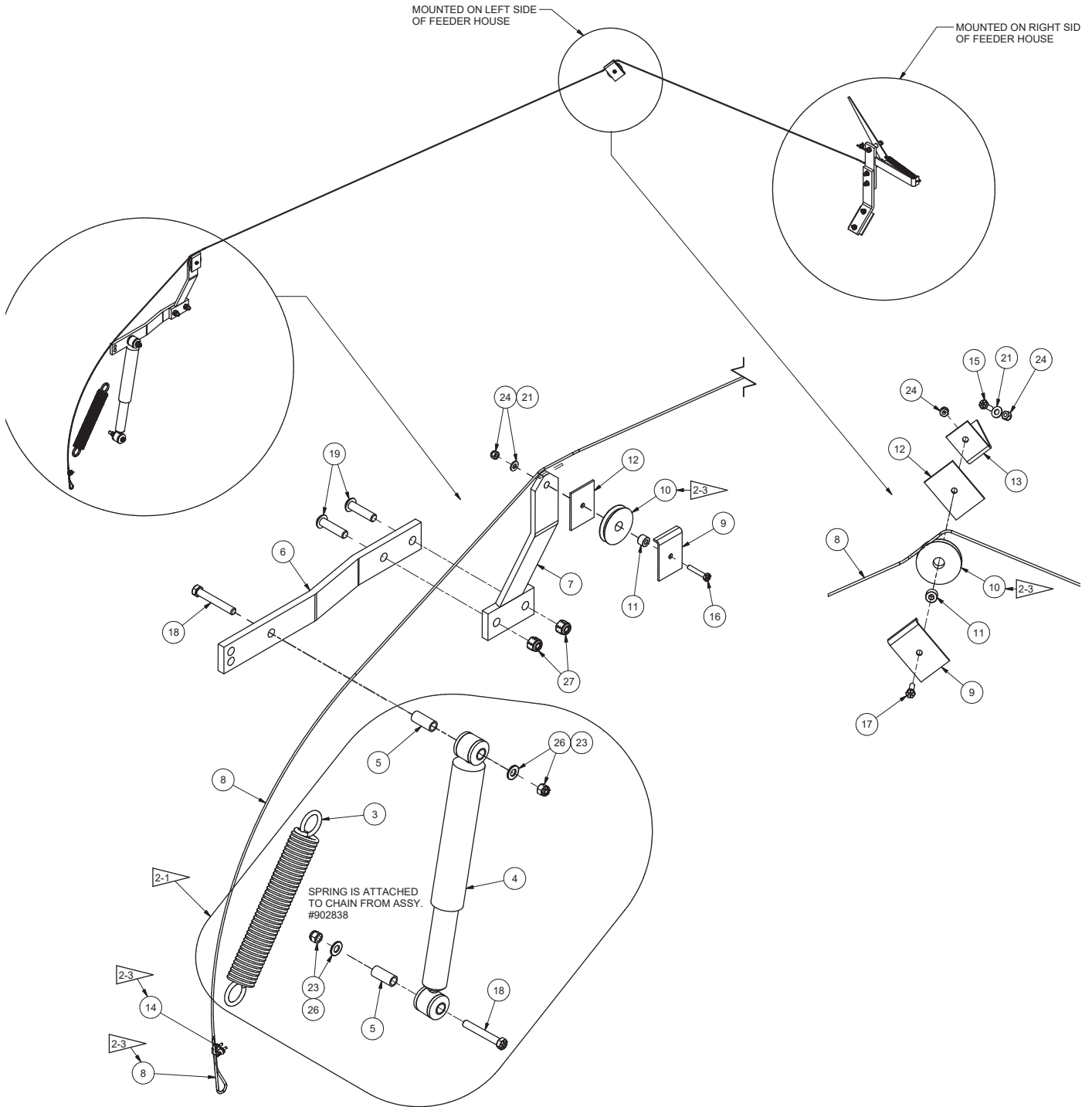
## Bale Chute Attachment



| Item | Part No.    | Qty | Description                 | Item | Part No. | Qty | Description |
|------|-------------|-----|-----------------------------|------|----------|-----|-------------|
|      | FCF0800150  |     | Bale Chute Attachment, Flat |      |          |     |             |
| 1    | FC0001010   | 2   | . Pin, Hairpin Collar       |      |          |     |             |
| 2    | CHL11219501 | 1   | . Attachment                |      |          |     |             |

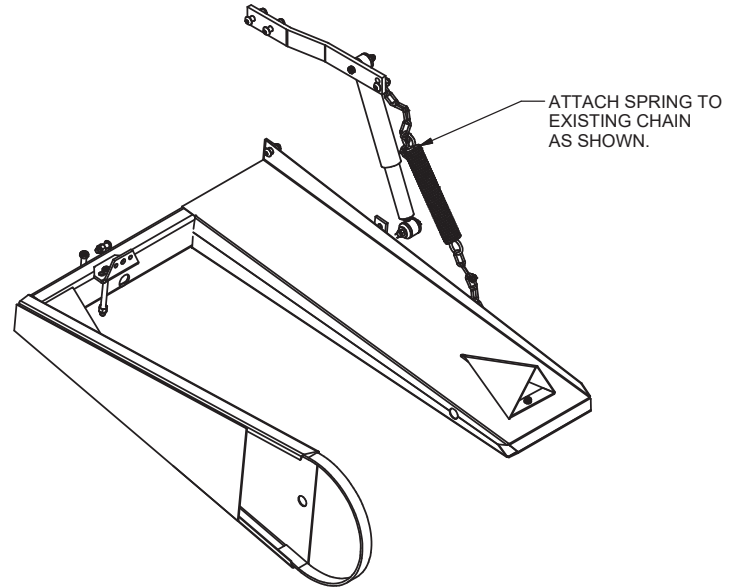
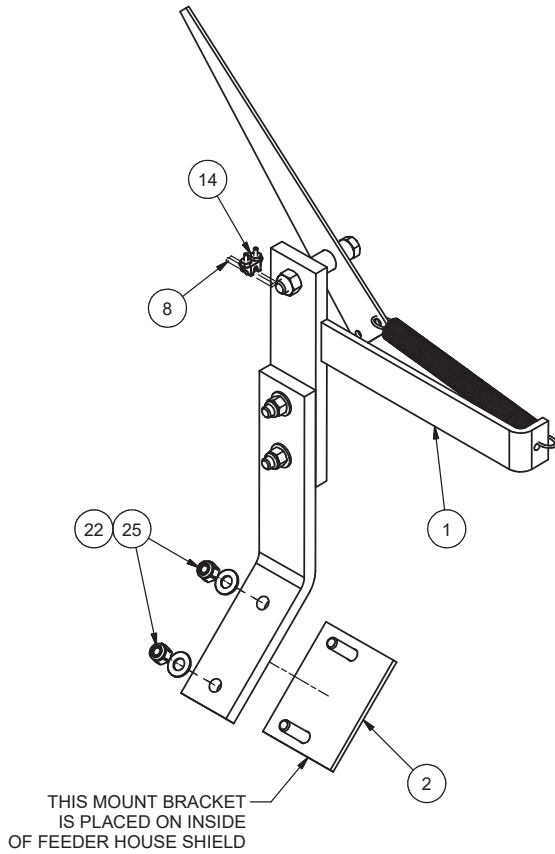
# Bale Weight Indicator Installation

Page 1 of 2



### Bale Weight Indicator Installation

Page 2 of 2



### **BALE CHUTE ASSY** **902838**

**NOTES**

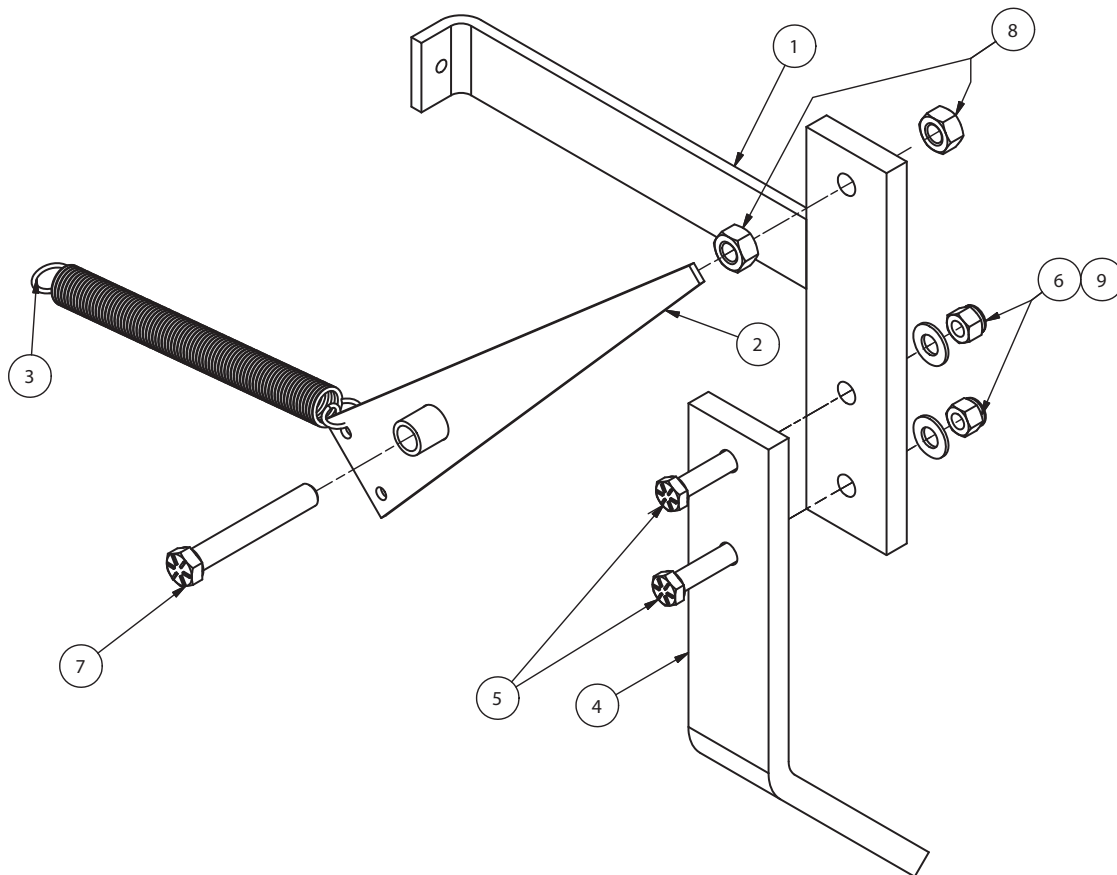
- 2-1 PARTS SHIPPED LOOSE WITH BALER
- 2-2 ASSEMBLY PHOTOS AVAILABLE FOR REFERENCE
- 2-2 CABLE IS LOOPED AROUND ROLLER AND SECURED WITH CLAMP FOR SHIPMENT

| Item   | Part No.   | Qty | Description                          | Item | Part No.  | Qty | Description |
|--|------------|-----|--------------------------------------|------|-----------|-----|-------------|
| <b>902833 Bale Weight Indicator Installation, RH</b> |            |     |                                      |      |           |     |             |
| 1  | * 902752   | 1   | . Bale Weight Indicator Sub-Assembly | 15   | 224120W   | 1   | . Capscrew  |
| 2  | MNT0033273 | 1   | . Indicator Mount                    | 16   | R13801783 | 1   | . Capscrew  |
| 3  | F000000985 | 1   | . Bale Chute Spring                  | 17   | R13801782 | 1   | . Capscrew  |
| 4  | F000000988 | 1   | . Shock Absorber                     | 18   | R13811062 | 2   | . Capscrew  |
| 5  | F000000993 | 2   | . Bushing, Bale Weight Indicator     | 19   | Y25G-0832 | 2   | . Capscrew  |
| 6  | F000001638 | 1   | . Bar, Shock Absorber                | 21   | R13802619 | 2   | . Washer    |
| 7  | F000001639 | 1   | . Bracket                            | 22   | 221767W   | 2   | . Washer    |
| 8  | 902902     | 1   | . Cable, Bale Weight Indicator       | 23   | 222677    | 2   | . Washer    |
| 9  | F000000994 | 2   | . Shield                             | 24   | 15113W    | 3   | . Nut, Esna |
| 10   | F000004067 | 2   | . Roller                             | 25   | 237567    | 2   | . Locknut   |
| 11   | F000004068 | 2   | . Bushing                            | 26   | R13805167 | 2   | . Nut, Esna |
| 12   | F000000995 | 2   | . Plate, Roller                      | 27   | 223587    | 2   | . Locknut   |
| 13   | BKT0008104 | 1   | . Pulley Bracket Weight Indicator    |      |           |     |             |
| 14   | F000000990 | 2   | . Clamp, Cable                       |      |           |     |             |

\* See Separate Coverage (Page 12-8)

Rev BG

# Bale Weight Indicator Assembly



| Item | Part No.      | Qty | Description                           | Item | Part No.  | Qty | Description   |
|------|---------------|-----|---------------------------------------|------|-----------|-----|---------------|
|      | <b>902752</b> |     | <b>Bale Weight Indicator Assembly</b> |      |           |     |               |
| 1    | F000000997    | 1   | . Bracket                             | 6    | 237567    | 2   | . Nut, Esna   |
| 2    | F000000998    | 1   | . Indicator                           | 7    | R13811062 | 1   | . Capscrew    |
| 3    | F000000268    | 1   | . Indicator Return Spring             | 8    | R13806770 | 2   | . Hex Nut     |
| 4    | BKT0014239    | 1   | . Bracket, Support                    | 9    | 223427    | 2   | . Flat Washer |
| 5    | R13801813     | 2   | . Capscrew                            |      |           |     |               |

Rev A

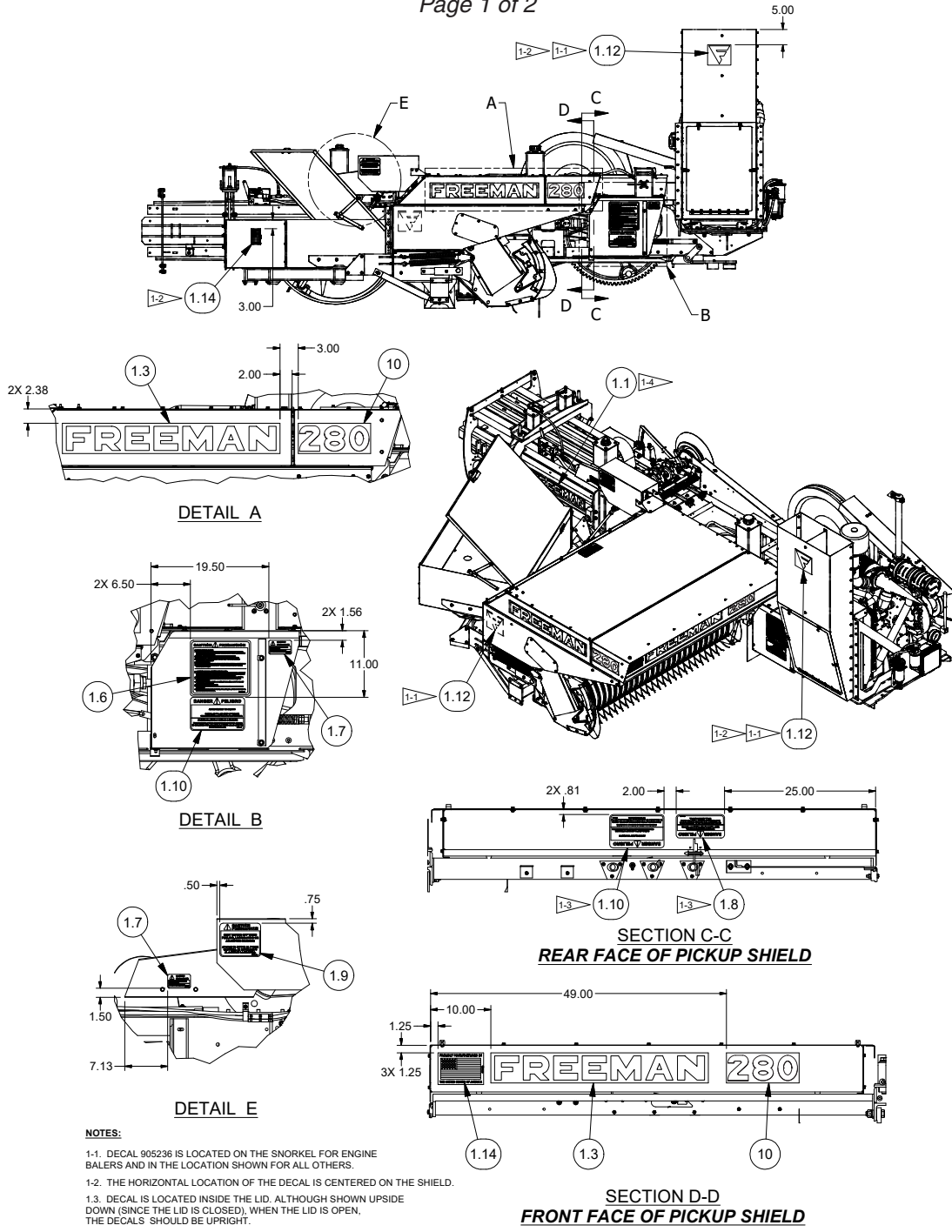
**Misc Parts**



| Item | Part No.          | Qty | Description               | Item       | Part No. | Qty | Description                   |
|------|-------------------|-----|---------------------------|------------|----------|-----|-------------------------------|
|      | <b>ASC00280FA</b> |     | <b>Misc Parts, 280</b>    |            |          |     |                               |
| 1    | F000007626        | 1   | . Bullgear Grease, 1 Gal. | 246087     | 1        | 1   | Paint, Red, 1 Gal             |
|      |                   |     |                           | 246089     | 1        | 1   | Paint, White, 1 Gal           |
|      |                   |     |                           | F000000770 | 1        | 1   | Paint, Red, Spray Can         |
|      |                   |     |                           | F000001677 | 1        | 1   | Paint, White, Spray Can       |
|      |                   |     |                           | WRN036554B | 1        | 1   | Wrench, Bearing Locknut       |
|      |                   |     |                           | WRN035826B | 1        | 1   | Wrench, Feed Fork Pivot Shaft |

# Decal List, 280

Page 1 of 2



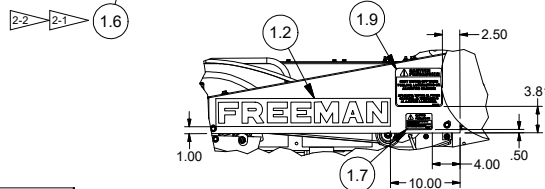
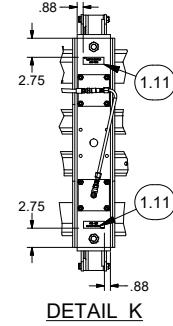
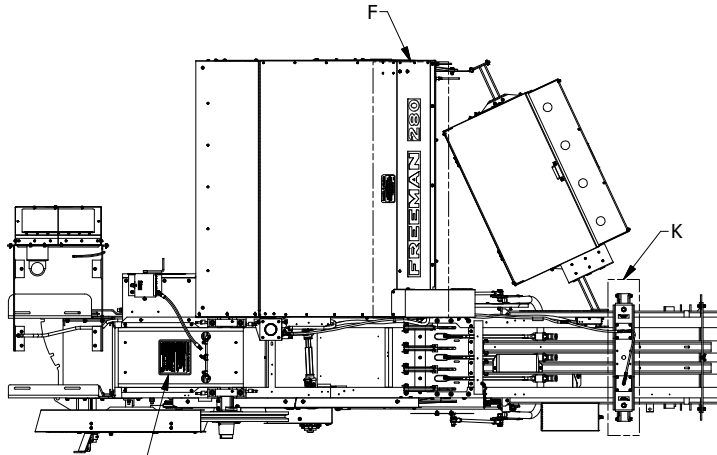
- NOTES:**
- 1-1. DECAL 905236 IS LOCATED ON THE SNORKEL FOR ENGINE BALERS AND IN THE LOCATION SHOWN FOR ALL OTHERS.
  - 1-2. THE HORIZONTAL LOCATION OF THE DECAL IS CENTERED ON THE SHIELD.
  - 1-3. DECAL IS LOCATED INSIDE THE LID. ALTHOUGH SHOWN UPSIDE DOWN (SINCE THE LID IS CLOSED), WHEN THE LID IS OPEN, THE DECALS SHOULD BE UPRIGHT.
  - 1-4. DECAL IS CENTERED ON THE TENSION RAIL AS SHOWN.

| Item                                  | Part No.   | Qty | Description                     | Item | Part No.   | Qty | Description                     |
|---------------------------------------|------------|-----|---------------------------------|------|------------|-----|---------------------------------|
| <b>905016 Decal Installation, 280</b> |            |     |                                 |      |            |     |                                 |
| 1                                     | FD00007111 | 1   | . Decal, White Freeman          | 9    | FD00023581 | 3   | . Decal, Caution Shut Off Motor |
| 2                                     | FD00007112 | 1   | . Decal, Red Freeman            | 10   | FD00025126 | 2   | . Decal, Pickup Hazard Warning  |
| 3                                     | FD00007114 | 4   | . Decal, Red Freeman            | 11   | FD00028004 | 2   | . Decal, Pre-set Do Not Adjust  |
| 4                                     | FD00007126 | 1   | . Decal, NEEDLE ADJUSTMENT      | 12   | 905236     | 1   | . Decal, White Freeman Logo     |
| 5                                     | FD00008193 | 1   | . Decal, Avoid Equipment Damage | 13   | 905235     | 1   | . Decal, Red Freeman Logo       |
| 6                                     | FD00023473 | 3   | . Decal, Caution, General Notes | 14   | FD70000434 | 2   | . Decal, Manufactured In USA    |
| 7                                     | FD00023572 | 4   | . Decal, Keep Shields In Place  | 10   | FD00000280 | 3   | . Decal, 280                    |
| 8                                     | FD00023575 | 2   | . Decal, Danger! Do Not Ride    |      |            |     |                                 |

Rev B

## Decal List, 280

Page 2 of 2

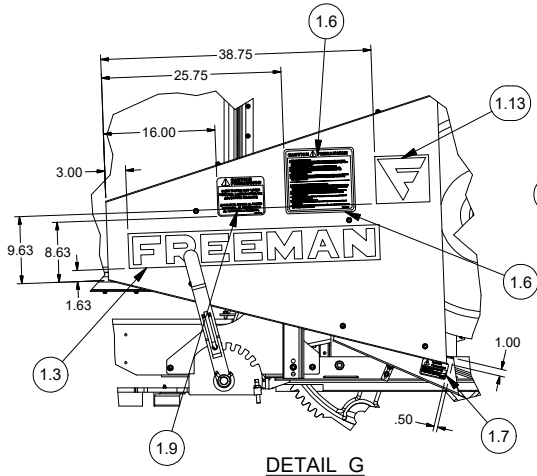
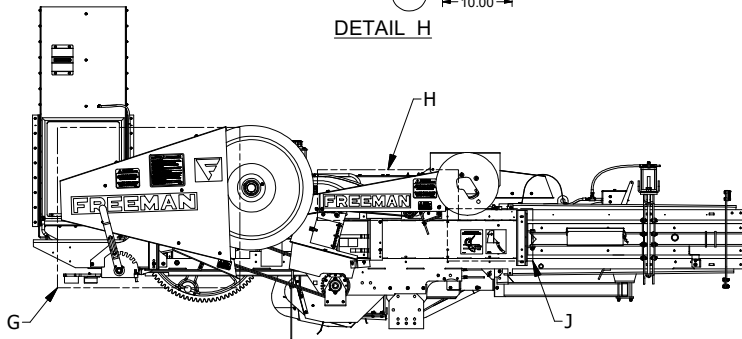


**NOTES:**

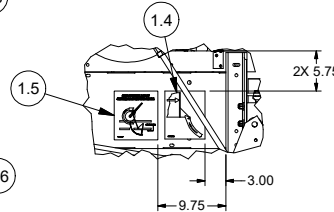
2-1. THE HORIZONTAL LOCATION OF THE DECAL IS CENTERED ON THE SHIELD.

2-2. BULL GEAR (NON-HYDRO) CONFIGURATION IS SHOWN. DECAL SHOULD BE PLACED IN THE APPROXIMATE, COMPARABLE LOCATION ON THE GEARBOX FRONT TOP SHIELD FOR GEARBOX BALERS (NON-HYDRO) OR ON THE SHROUD FOR HYDRO BALERS

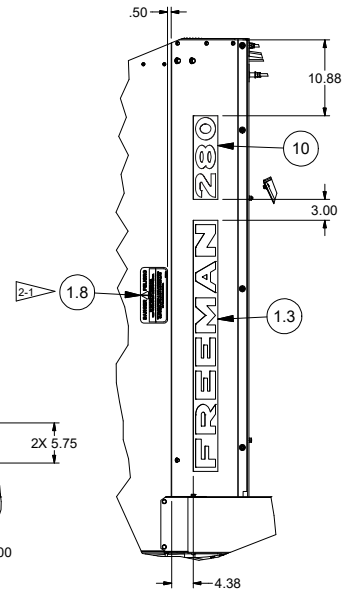
DETAIL H



DETAIL G



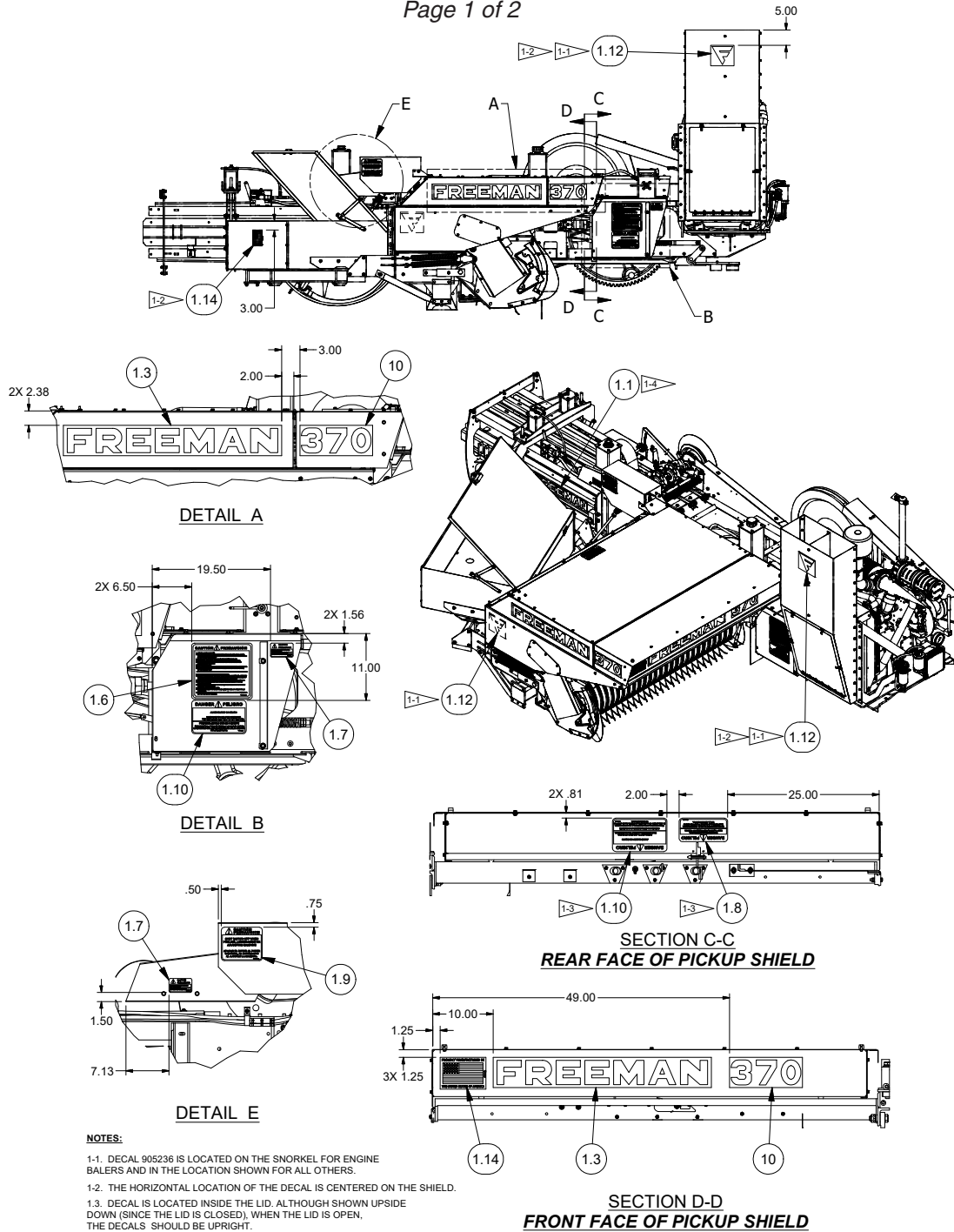
DETAIL J



DETAIL F

# Decal List, 285

Page 1 of 2



- NOTES:**
- 1-1. DECAL 905236 IS LOCATED ON THE SNORKEL FOR ENGINE BALERS AND IN THE LOCATION SHOWN FOR ALL OTHERS.
  - 1-2. THE HORIZONTAL LOCATION OF THE DECAL IS CENTERED ON THE SHIELD.
  - 1-3. DECAL IS LOCATED INSIDE THE LID. ALTHOUGH SHOWN UPSIDE DOWN (SINCE THE LID IS CLOSED), WHEN THE LID IS OPEN, THE DECALS SHOULD BE UPRIGHT.
  - 1-4. DECAL IS CENTERED ON THE TENSION RAIL AS SHOWN.

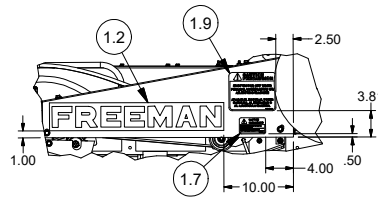
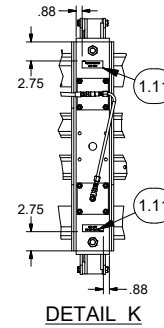
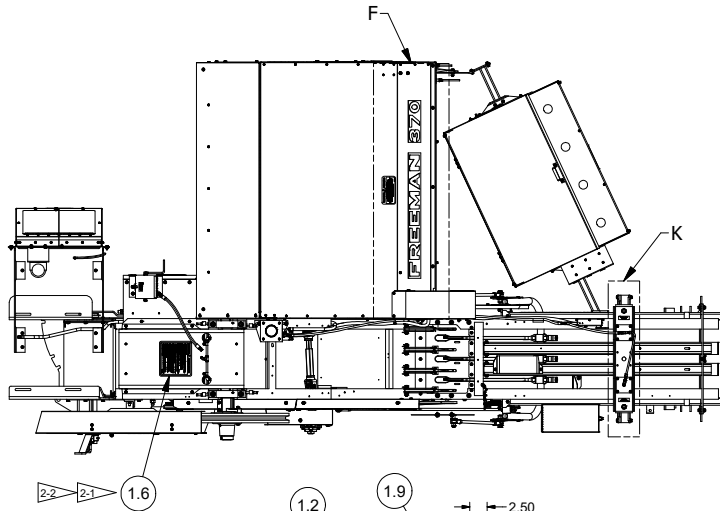
| Item                                  | Part No.   | Qty | Description                     | Item | Part No.   | Qty | Description                     |
|---------------------------------------|------------|-----|---------------------------------|------|------------|-----|---------------------------------|
| <b>905017 Decal Installation, 285</b> |            |     |                                 |      |            |     |                                 |
| 1                                     | FD00007111 | 1   | . Decal, White Freeman          | 9    | FD00023581 | 3   | . Decal, Caution Shut Off Motor |
| 2                                     | FD00007112 | 1   | . Decal, Red Freeman            | 10   | FD00025126 | 2   | . Decal, Pickup Hazard Warning  |
| 3                                     | FD00007114 | 4   | . Decal, Red Freeman            | 11   | FD00028004 | 2   | . Decal, Pre-set Do Not Adjust  |
| 4                                     | FD00007126 | 1   | . Decal, NEEDLE ADJUSTMENT      | 12   | 905236     | 1   | . Decal, White Freeman Logo     |
| 5                                     | FD00008193 | 1   | . Decal, Avoid Equipment Damage | 13   | 905235     | 1   | . Decal, Red Freeman Logo       |
| 6                                     | FD00023473 | 3   | . Decal, Caution, General Notes | 14   | FD70000434 | 2   | . Decal, Manufactured In USA    |
| 7                                     | FD00023572 | 4   | . Decal, Keep Shields In Place  | 10   | FD00000285 | 3   | . Decal, 285                    |
| 8                                     | FD00023575 | 2   | . Decal, Danger! Do Not Ride    |      |            |     |                                 |

Rev B

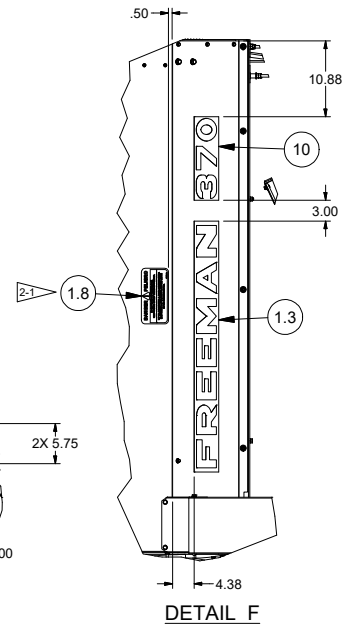
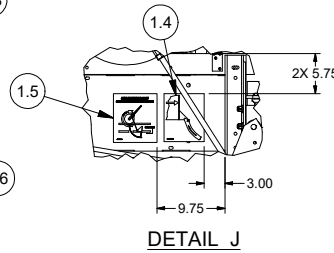
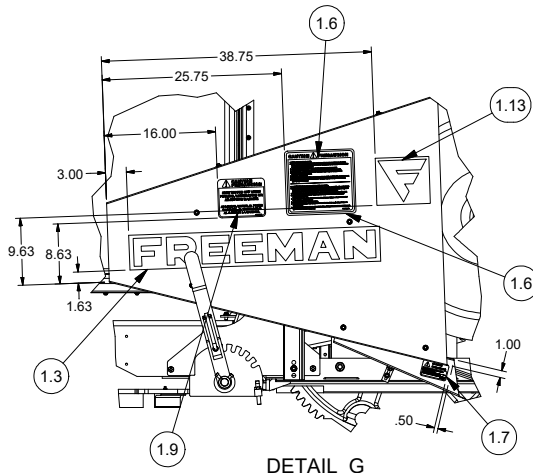
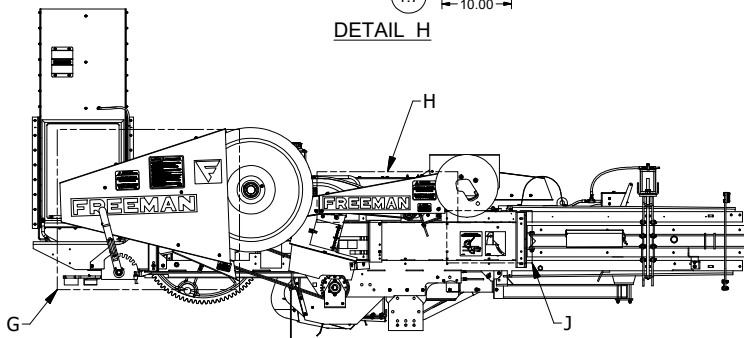


## Decal List, 285

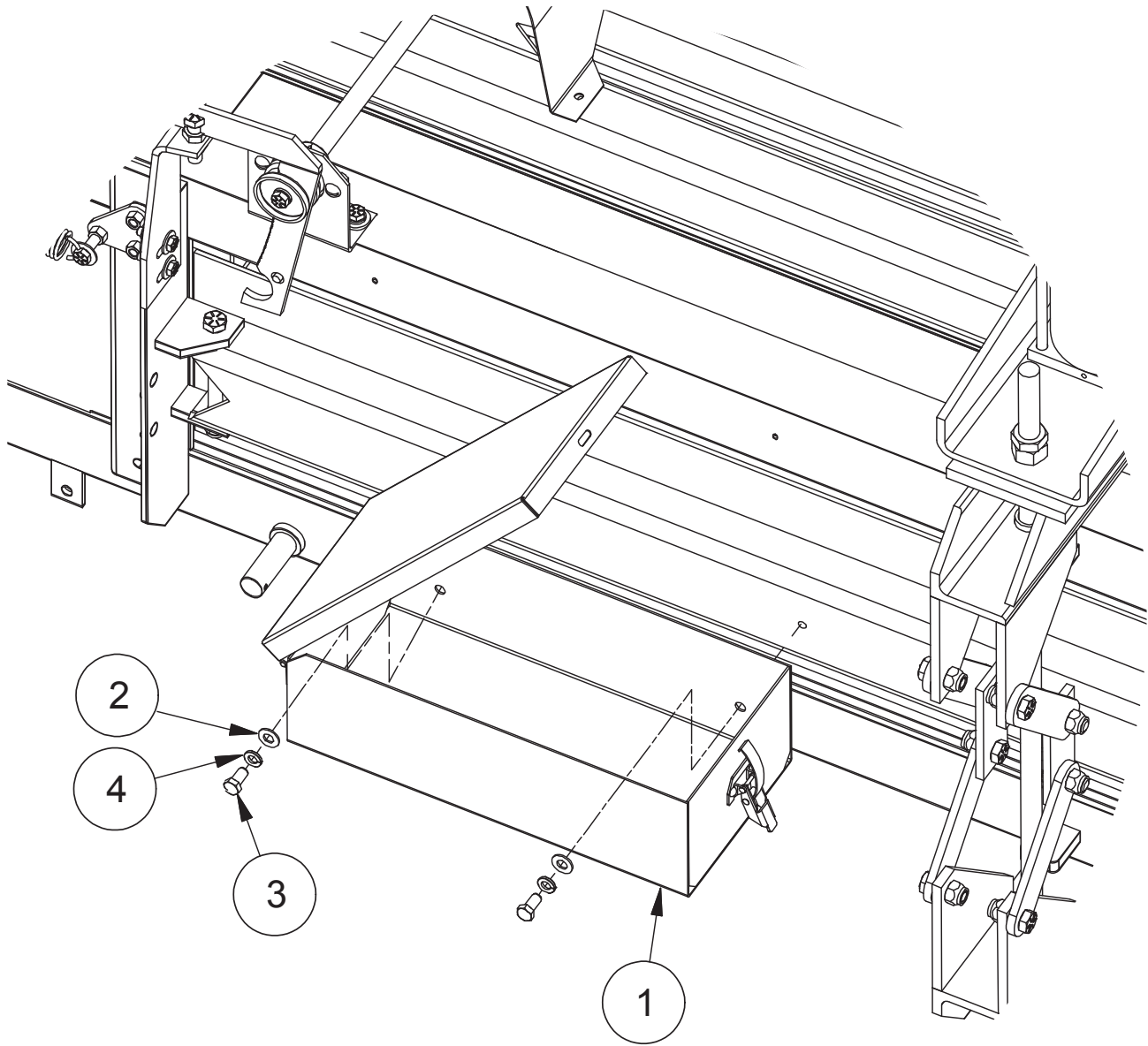
Page 2 of 2



**NOTES:**  
 2-1. THE HORIZONTAL LOCATION OF THE DECAL IS CENTERED ON THE SHIELD.  
 2-2. BULL GEAR (NON-HYDRO) CONFIGURATION IS SHOWN. DECAL SHOULD BE PLACED IN THE APPROXIMATE, COMPARABLE LOCATION ON THE GEARBOX FRONT TOP SHIELD FOR GEARBOX BALERS (NON-HYDRO) OR ON THE SHROUD FOR HYDRO BALERS



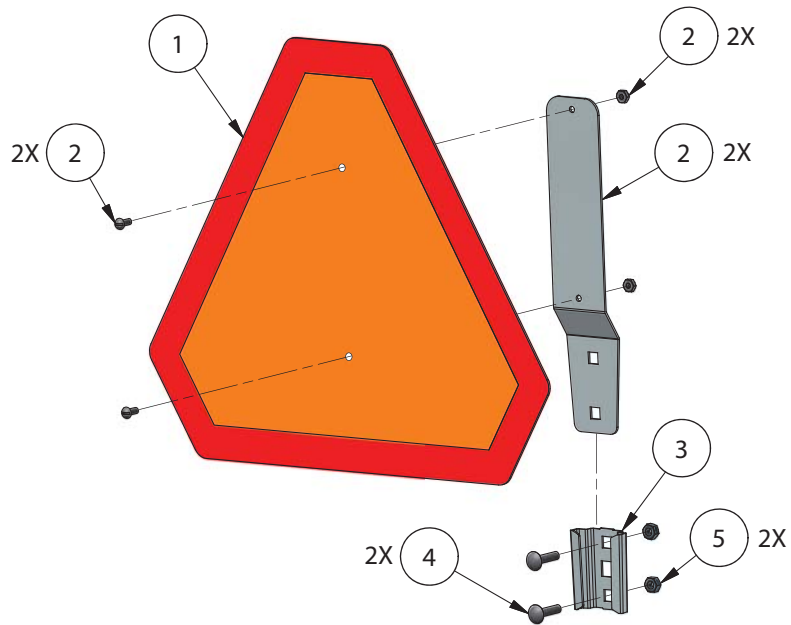
# Tool Box Installation



| Item                                | Part No.   | Qty | Description   | Item | Part No. | Qty | Description   |
|-------------------------------------|------------|-----|---------------|------|----------|-----|---------------|
| <b>905033 Tool Box Installation</b> |            |     |               |      |          |     |               |
| 1                                   | BOX0007161 | 1   | . Toolbox     | 3    | 16597W   | 2   | . Capscrew    |
| 2                                   | 223427     | 2   | . Flat Washer | 4    | 201567   | 2   | . Lock Washer |

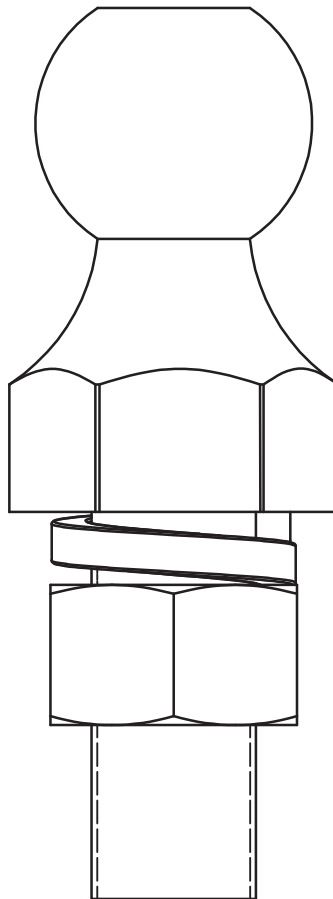
Rev - A

# Slow Moving Vehicle Sign Installation



| Item | Part No.   | Qty | Description              | Item | Part No.   | Qty | Description |
|------|------------|-----|--------------------------|------|------------|-----|-------------|
| 1    | SGN0024006 | 1   | Slow Moving Vehicle Sign | 4    | SMS0000177 | 2   | Capscrew    |
| 2    | BKT0000001 | 1   | Bracket                  | 5    | 273802     | 2   | Nut         |
| 3    | MNT0000001 | 1   | Bracket Mount            |      |            |     |             |

# Hitch Ball



2-5/16" DIAMETER BALL  
1-3/8" DIAMETER SHANK  
3-1/4" SHANK LENGTH  
1" RISE  
THREADS= 1 3/8 - 12 UNF 2A  
INCLUDES LOCKWASHER AND HEX NUT

---

| Item | Part No.   | Qty | Description | Item | Part No. | Qty | Description |
|------|------------|-----|-------------|------|----------|-----|-------------|
|      | HTH0031000 |     | Ball Hitch  |      |          |     |             |

---

This page is intentionally left blank.



To find a dealer in your area,

Call: 503.625.2560

Fax: 503.625.7269

Visit our website: [www.alliedsystems.com](http://www.alliedsystems.com)

**Allied Systems**  
COMPANY

PB0000028X 04/2020

Printed in USA