



Sidefeed Gearbox Baler, 3-Tie


OPERATOR'S AND PARTS ADDENDUM

89-096

A Product of

Allied Systems
COMPANY

Sherwood, Oregon USA

S/N:	STARTING WITH S/N 375E21G032
	Important: Be certain to specify the serial number of your Baler when ordering parts.

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See alliedsystems.com for our most current documents.

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.

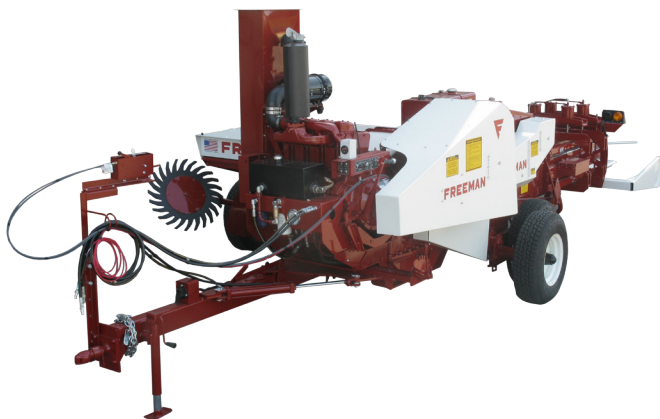
Time, money and effort have been invested in making your Baler a safe product. The dividend from this investment is **YOUR PERSONAL SAFETY**.

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.



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.

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.

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.**

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.

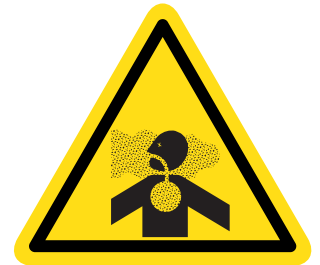


Maintenance Safety

- 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.



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

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.

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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.

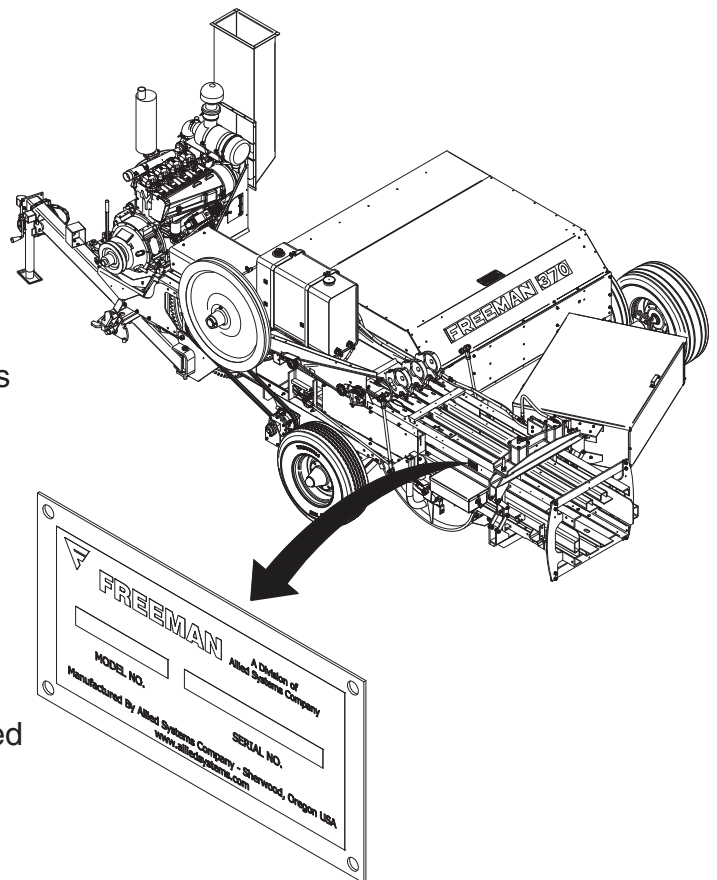
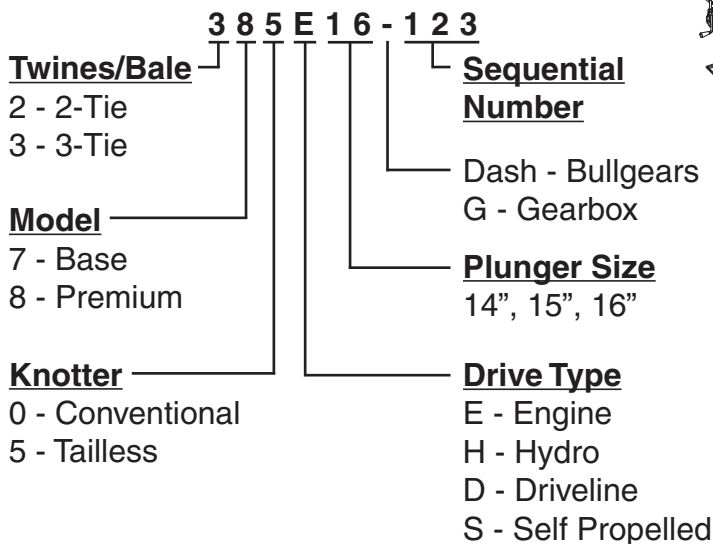
Power Unit Serial Number

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.

Side Feed Baler Serial Number Format As Of 2011



Maintenance



WARNING

Chock baler wheels to prevent baler from moving and make sure baler and tractor are both turned off and all moving parts have come to a complete stop before starting any maintenance. Contact with moving equipment can cause serious injury or death.

Use Mobilube HD Plus 80W-90 Gear Oil, Allied P/N 235720.

Check oil level daily:

With the baler sitting level, remove the fill/check plug. Oil should be level with the bottom of the opening (see Figure 2.) Add oil as necessary through the same opening. Replace plug and tighten securely.

Change oil after first 50 hours, then every 250 hours:

1. Place a catch pan beneath the gearbox, under the drain plug.
2. Remove the drain plug from the bottom of the gearbox (see Figure 2) and let oil drain into catch pan.
3. Replace the drain plug.
4. Add new oil through the fill/check plug opening until the oil is level with the bottom of the opening (see Figure 2.) Replace plug and tighten securely.
5. Dispose of used oil in accordance with local regulations.

Check Bolts on Crank Arm Every 3 months/125 hours/25,000 bales, whichever comes first (see Figure 1).

1. Torque the four (4) retaining cap bolts to 340 ft-lbs.
2. Torque the one (1) clamp bolt to 750-755 ft-lbs.

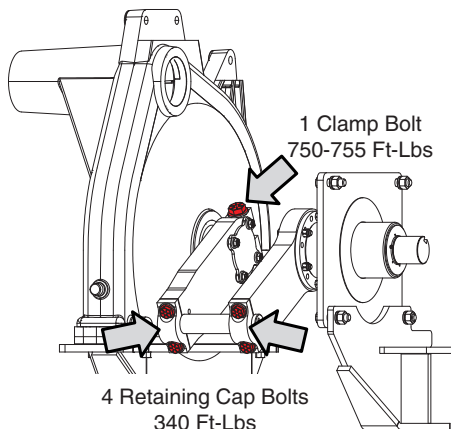


Figure 1 - Crank Arm Torque

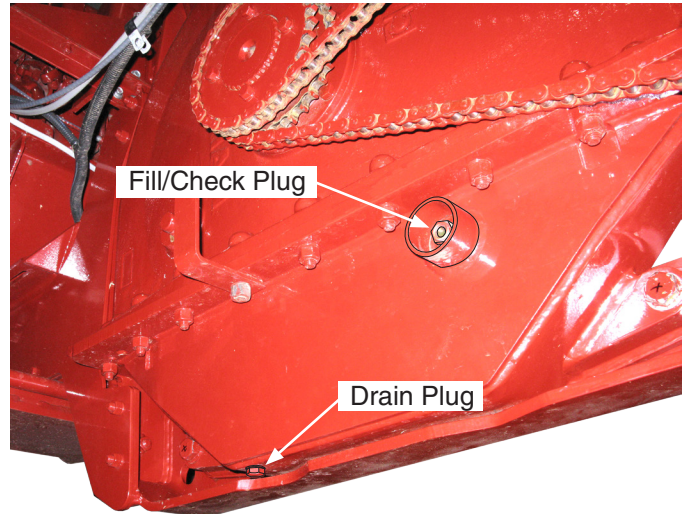


Figure 2 - Gearbox

Connecting Rod/Crank Arm:

Grease the connecting rod bushing daily until you just see grease emerging from around the bushing (see Figure 3).

Grease the gearbox crank arm bearings at the beginning of every season, and then every 50 hours (see Figure 3).

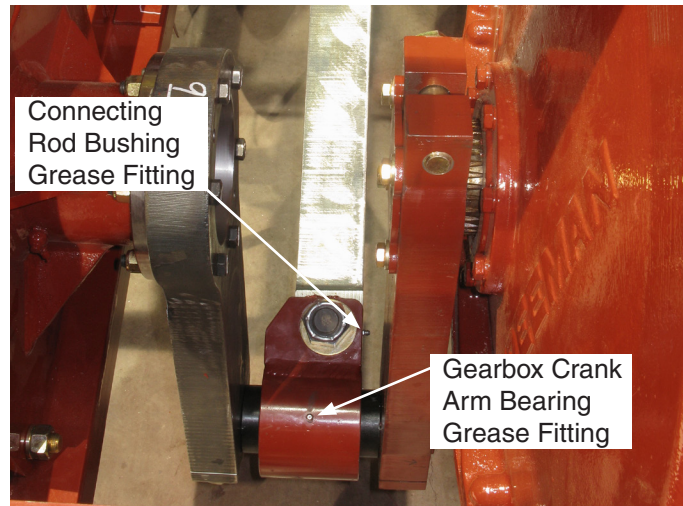


Figure 3 - Gearbox Lubrication (Top View)

Gearbox Baler Parts

This section contains all components of the Gearbox baler that are not included in the standard Engine/Hydro Parts Manual. This includes all parts that can be separately identified as well as parts necessary for equipment support.

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 sub-assemblies 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.

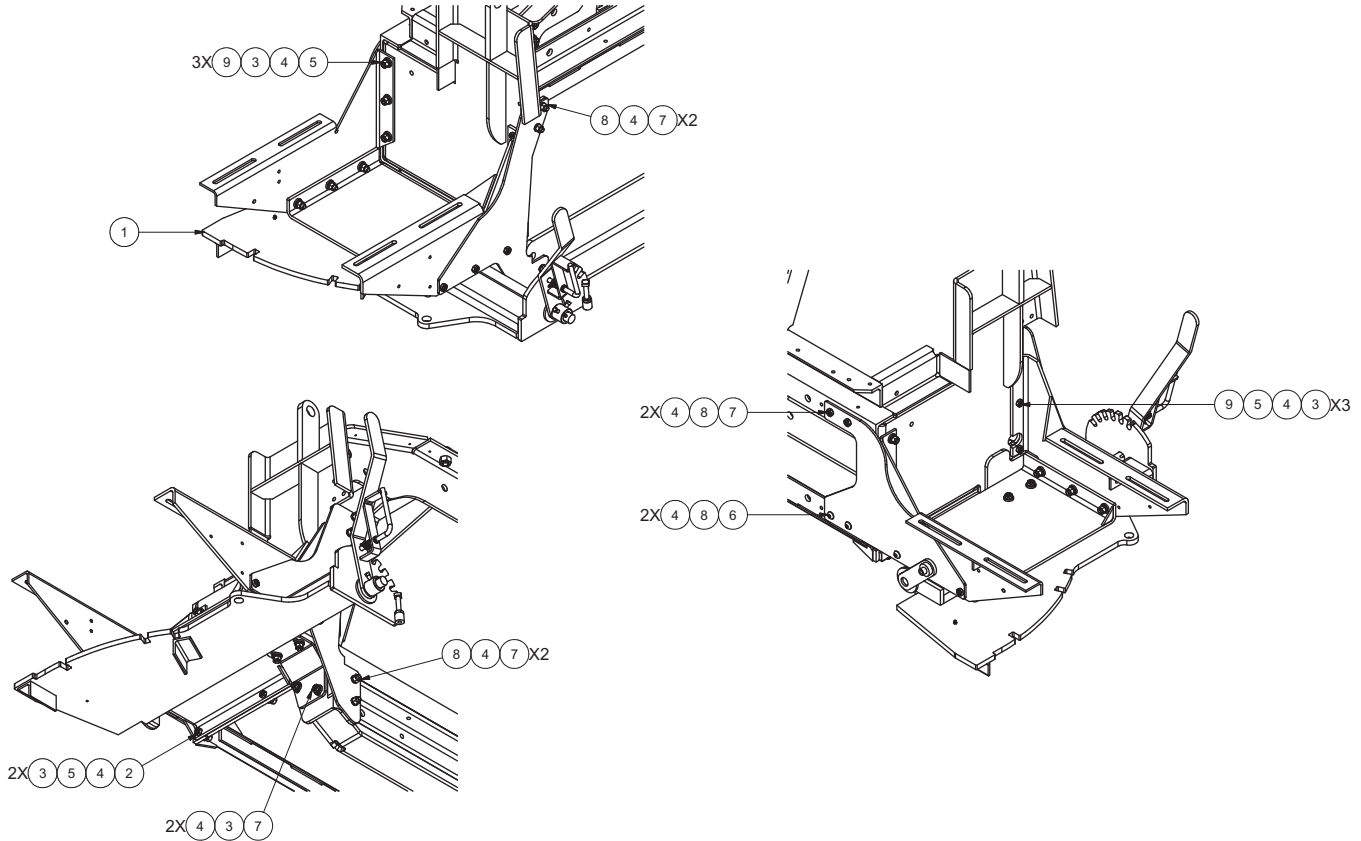
Example:

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.

Front End Installation, Gearbox 37X

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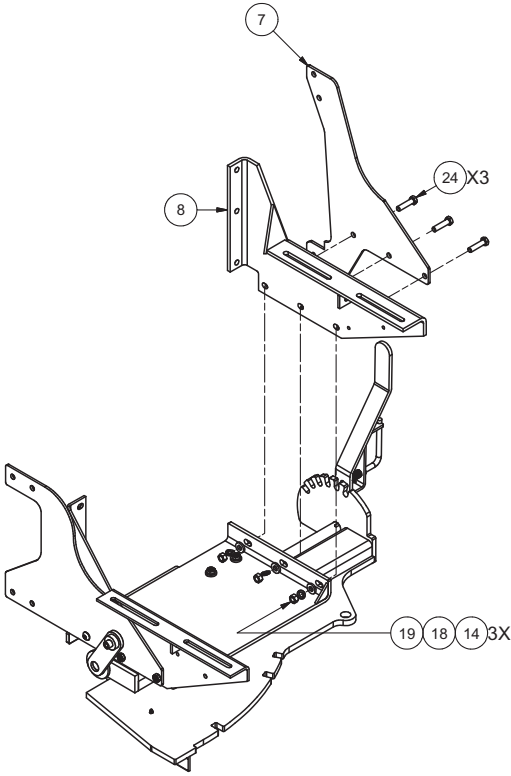


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
906814 Installation, Front End							
1	* 906815	1	. Front End Assembly	7	200454W	8	. Capscrew
2	R13806345	2	. Capscrew	8	221711W	8	. Hex Nut
3	221771W	10	. Hard Washer	9	234176	6	. Capscrew
4	R13812516	18	. Lockwasher				* See Separate Coverage
5	221712W	8	. Hex Nut				Rev B
6	Y25G-0824	2	. Capscrew				

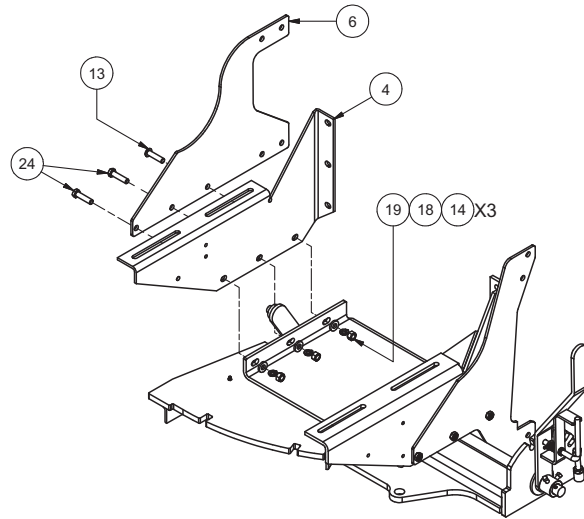
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Front End Assembly, Gearbox 37X

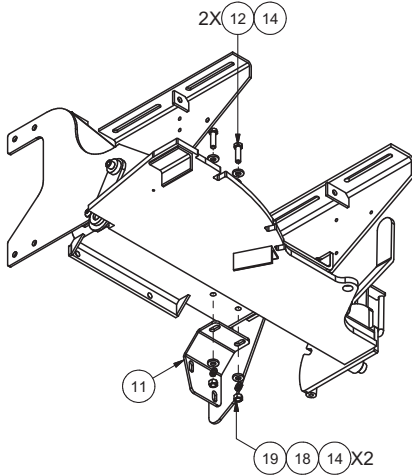
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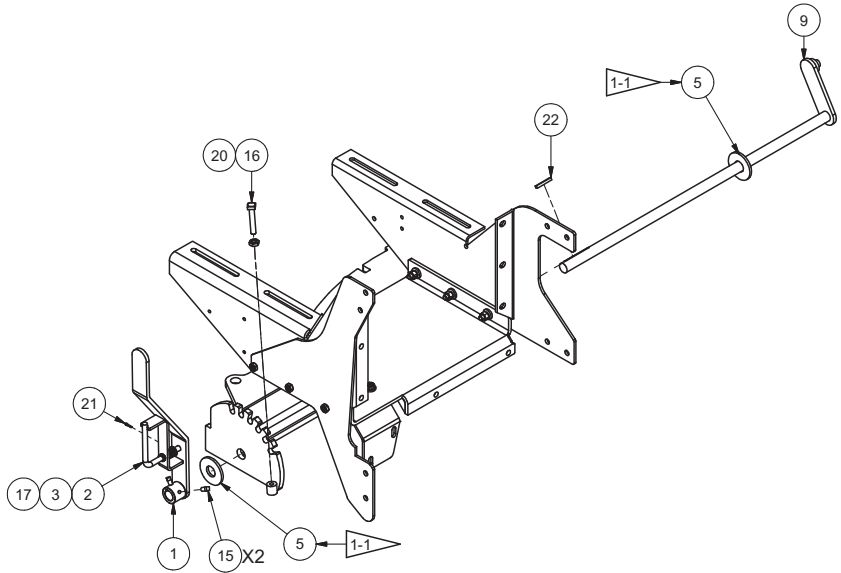
LH MOUNT



RH MOUNT



BRACKET



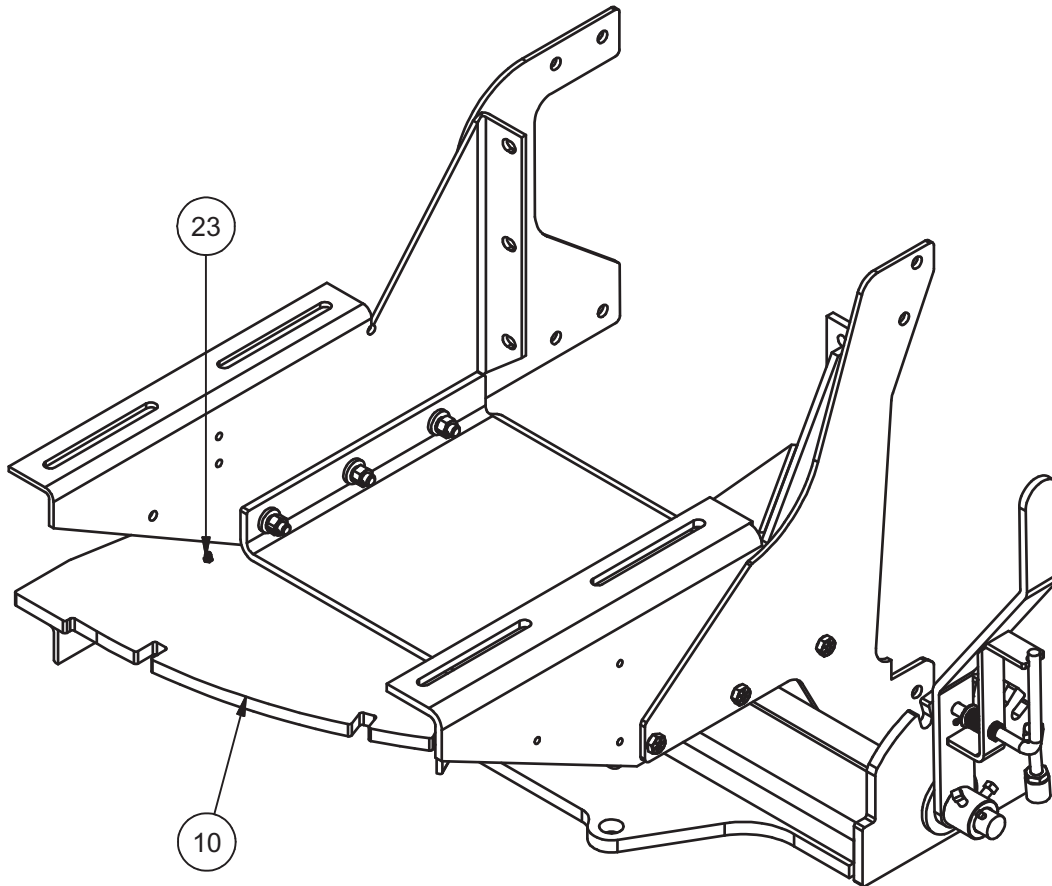
LEVER

NOTES:

1-1 - USE WASHERS (ITEM 5) AS NEEDED TO LIMIT SIDE-TO-SIDE MOVEMENT, BUT STILL ALLOW LEVER TO ROTATE FREELY.

Front End Assembly, Gearbox 37X

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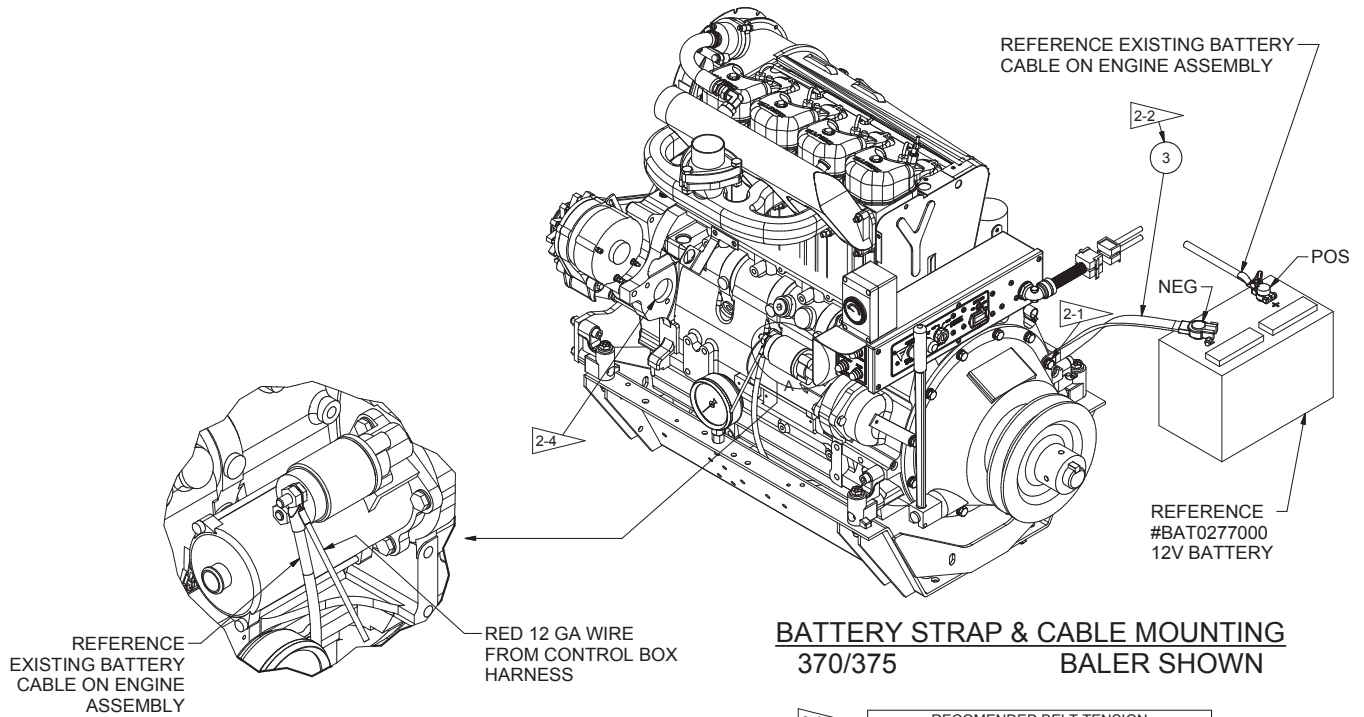


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
906815 Front End Assembly							
1	F000007539	1	. Lever Weldment	14	221771W	10	. Hard Washer
2	F000007540	1	. Pin, Lift Lever Adj	15	SQS3750750	2	. Square Head Screw
3	F000007541	1	. Compression Spring	16	SQS5003000	1	. Screw, Set
4	906822	1	. Engine Mounting Weldment, RH	17	223634	1	. Flat Washer
5	F000008247	2	. Washer	18	R13812516	8	. Lockwasher
6	GUS0024467	1	. Plate,Support Gusset	19	221711W	8	. Hex Nut
7	904463	1	. Plate,Support	20	234218	1	. Jam Nut
8	906824	1	. Engine Mounting Weldment, LH	21	15223W	1	. Pin, Cotter
9	PLF0026952	1	. Lever Weldment	22	48688	1	. Key
10	906825	1	. Hitch Base Weldment	23	11079	1	. Fitting, Lube
11	904477	1	. Plate, Front Gusset	24	R13811077	5	. Capscrew
12	221569W	2	. Capscrew				
13	Y25G-0832	1	. Capscrew				

Rev -

Engine Installation, 37X

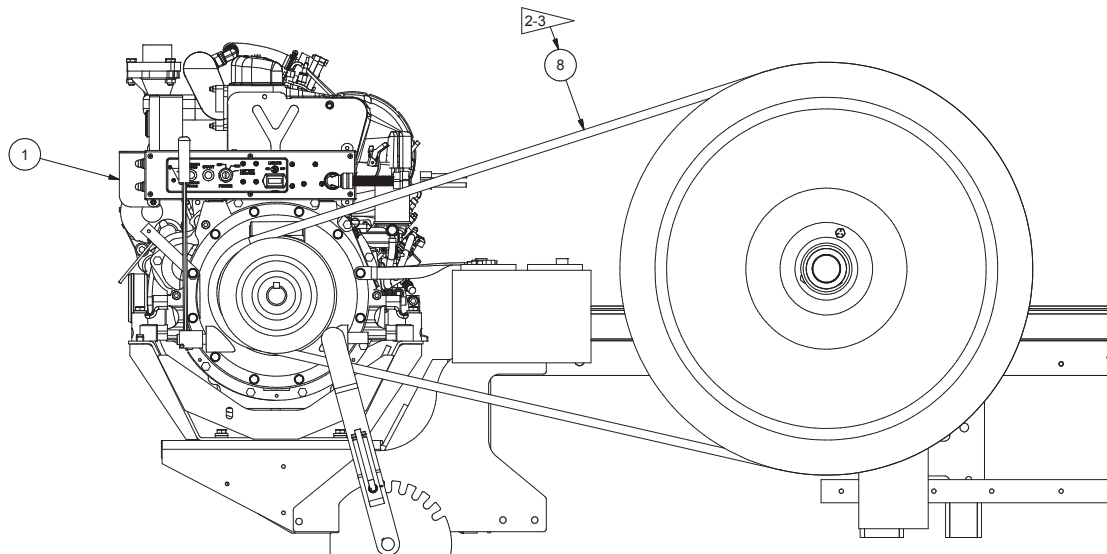
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DETAIL A

BATTERY STRAP & CABLE MOUNTING 370/375 BALER SHOWN

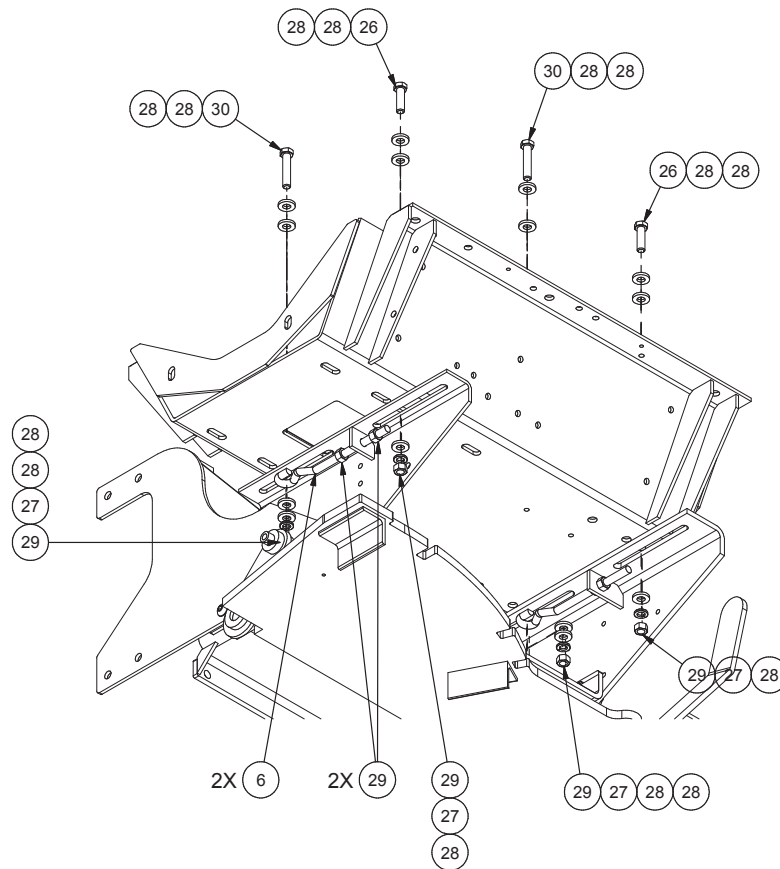
BELT	RECOMENDED BELT TENSION	
	DEFLECTION	FORCE
F000007000	0.75"	16 LB
256812	0.63"	16 LB



FLYWHEEL BELT MOUNTING BELT SHIELD NOT SHOWN 370/375 BALER SHOWN

Engine Installation, 37X

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ENGINE BELLY PAN TO FRONT END ASSY. MOUNTING

NOTES:

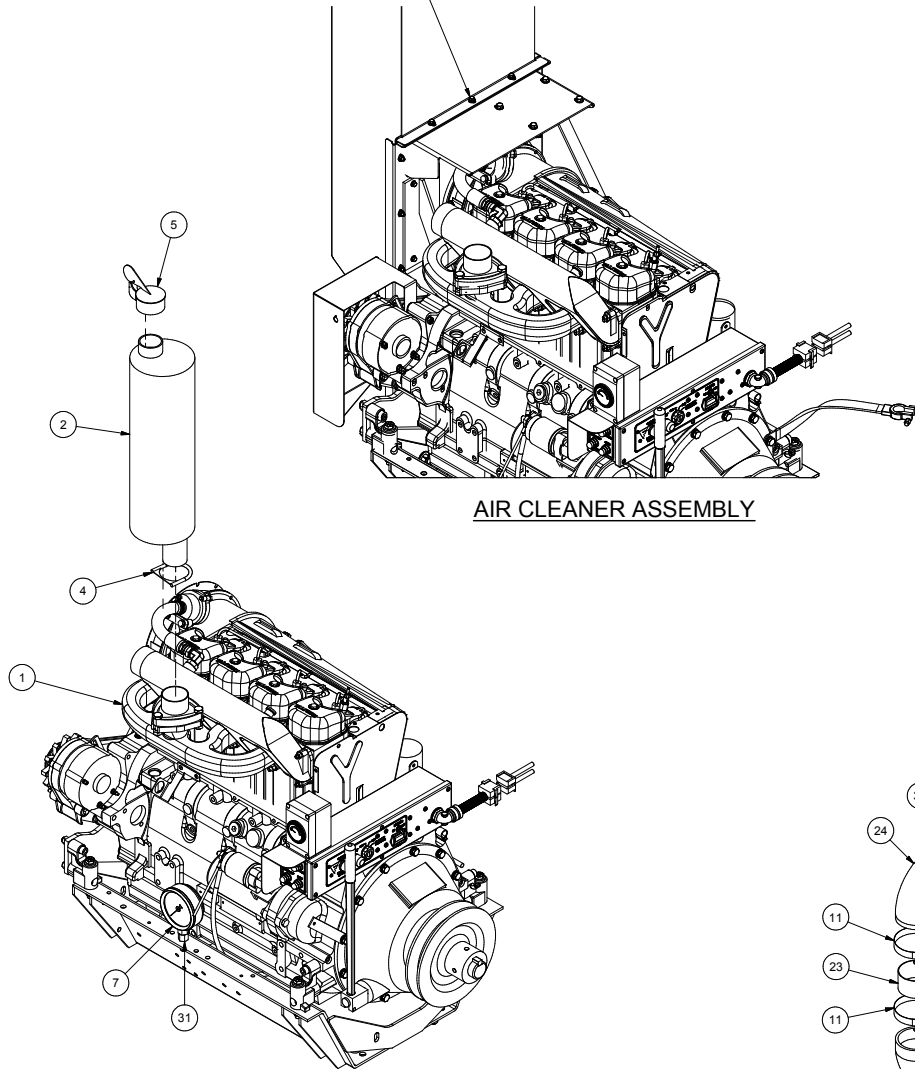
- 2-1 MOUNT BATTERY GROUND CABLE TO THIS FASTENER ON THE ENGINE.
- 2-2 GEARBOX BALER ONLY:
ROUTE GROUND WIRE BEHIND ENGINE TO BATTERY.
- 2-3 SEE TABLE FOR RECOMMENDED BELT DEFLECTION AND DOWNWARD FORCE AT CENTER OF BELT SPAN.
- 2-4 FOR GEARBOX BALER ENSURE ENGINE PUMP IS PRIMED PRIOR TO STARTING ENGINE. CAN FILL HYDRAULIC RESERVOIR AND LET SIT FOR 8 HRS TO PRIME PUMP.
- 2-5 906189 ASSY SHOWN.

Engine Installation, 37X

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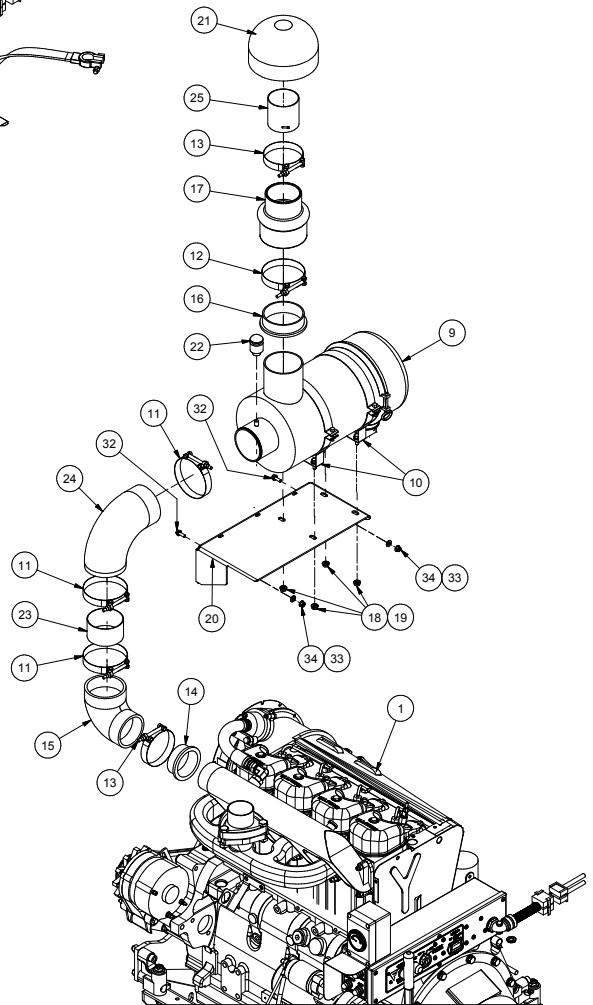
REFER TO 906705 FOR ADDITIONAL
AIR CLEANER ASSEMBLY NOTES

AIR CLEANER MOUNT
LOCATION ON SNORKEL
USE EXISTING HARDWARE



AIR CLEANER ASSEMBLY

MUFFLER AND TENSION CONTROL
370/375 BULLGEAR BALER SHOWN



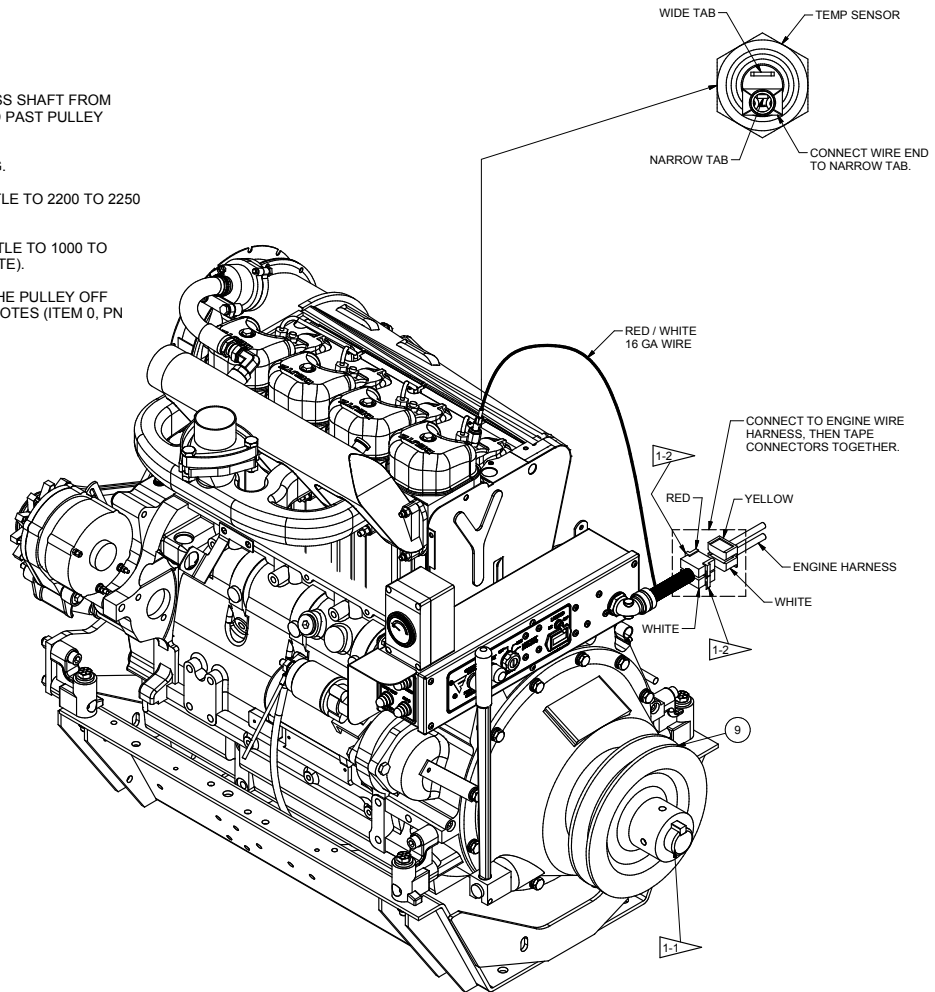
AIR CLEANER ASSEMBLY

Engine Assembly

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NOTES:

- 1-1 AFTER INSTALLING PULLEY CUT AWAY EXCESS SHAFT FROM CLUTCH. REMAINING SHAFT SHOULD EXTEND PAST PULLEY APPROXIMATELY 0.25".
- 1-2 TRIM SIDE CONNECTING TAB BEFORE TAPING.
- 1-3 SET FINAL TOP ENGINE RPM AT FULL THROTTLE TO 2200 TO 2250 (84 TO 86 PLUNGER STROKES PER MINUTE).
- 1-4 SET FINAL LOW ENGINE RPM AT FULL THROTTLE TO 1000 TO 1025 (33 TO 35 PLUNGER STROKES PER MINUTE).
- 1-5 ALL MEASUREMENTS ARE TO BE TAKEN AT THE PULLEY OFF THE ENGINE. REFER TO ENGINE ASSEMBLY NOTES (ITEM 0, PN 906640) FOR MORE DETAILED INSTRUCTIONS.



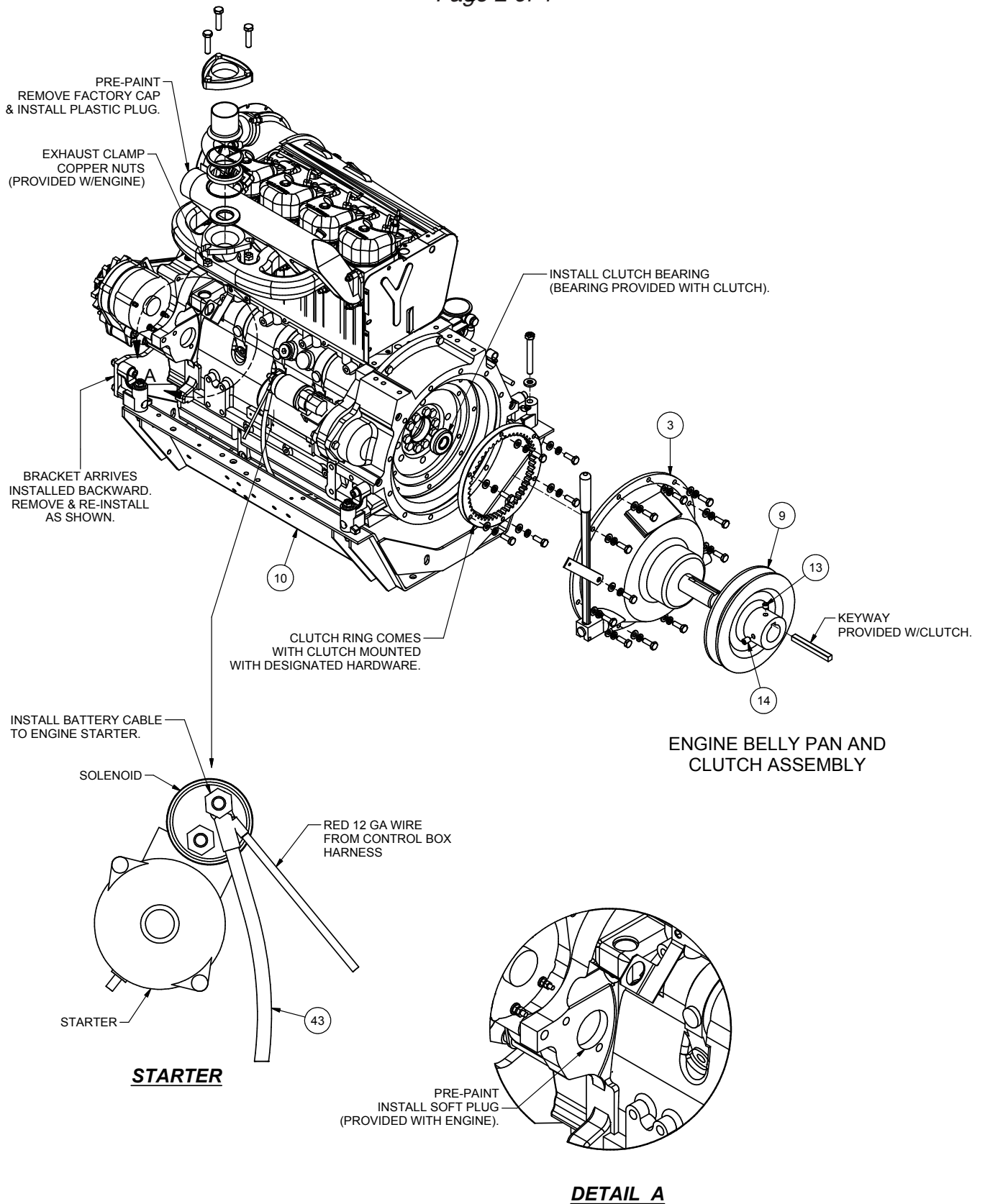
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	906188		Assembly, Engine				
1	* 903907	1	. Control Box Assembly	29	220044	1	. Hex Nut
2	CBL1743180	1	. Cable, Control	32	223587	4	. Nut, Esna
3	CLH0001084	1	. Clutch	33	235620	2	. Nut, Esna
4	CLV1756012	1	. Clevis Assembly	37	R13810989	2	. Capscrew
5	* 258766	1	. Engine, Deutz 4 Cylinder	38	R13811014	2	. Capscrew
6	900537	1	. Arm Extension Weldment	39	232939	2	. Nut, Esna
7	EXH0013806	1	. Tube, Exhaust	40	905246	16	. Washer, Fender
8	900534	1	. Plate, Mounting	41	904697	1	. Restrictor
9	F000007699	1	. Pulley, Motor	42	201431	1	. Hose Clamp
10	MNT0018340	1	. Belly Pan Weldment	43	CBL0000126	1	. Cable Assembly, Battery
11	F000007013	1	. Bracket	44	906659	1	. Fitting
12	252601	2	. Fitting	45	906660	1	. Hose Assembly
13	231486	1	. Set Screw	46	236077	3GL	. Oil, Engine
14	STS5000750	1	. Set Screw	47	293613W	1	. Capscrew
15	SHD0028273	1	. Plate, Shield	48	WLKM000080	1	. Lockwasher
17	R13811085	4	. Capscrew	49	WCTM100080	1	. Washer
18	Y09C-M0616	1	. Capscrew	50	209588	1	. Clip
20	Y09C-M1030	22	. Capscrew				
25	221771W	8	. Washer				
26	234589	22	. Lockwasher				
27	292680W	1	. Washer				
28	296420W	18	. Hard Washer				

* See Separate Coverage In Baler Parts Manual

Rev A

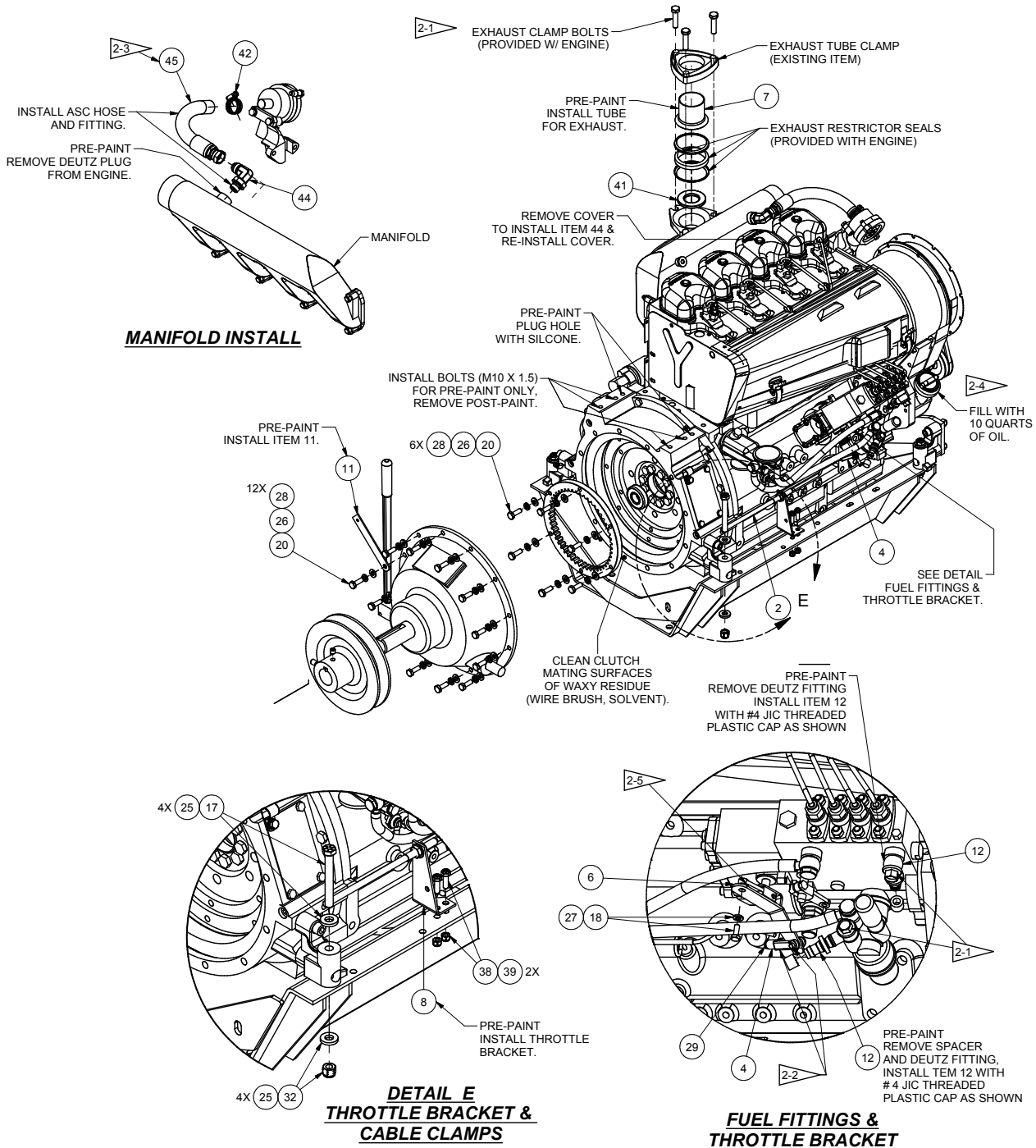
Engine Assembly

Page 2 of 4



Engine Assembly

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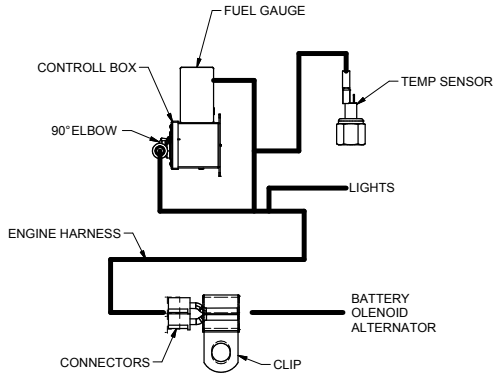


NOTES:

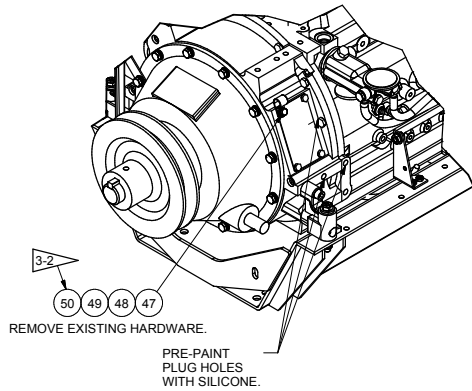
- 2-1 ATTACH USING EXISTING ENGINE HARDWARE.
- 2-2 CLEVIS PIN OF ITEM 4 TO BE INSERTED INTO VACANT HOLE OF ITEM 6. ORIENT ITEM 6 WITHIN CLEVIS ARMS OF ITEM 4.
- 2-3 MUST BE OIL RESISTANT HOSE.
- 2-4 CHECK OIL LEVEL AFTER ADDING 8 QUARTS. ENGINE MAY HAVE SOME OIL ALREADY IN IT. ENSURE OIL RESERVOIR IS NOT OVERFILLED.
- 2-5 ADJUST THROTTLE ARM ABOUT SPLINED SHAFT UNTIL SMOOTH OPERATION ACHIEVED BETWEEN ITEM 6 & ITEM 4 AT THROTTLE MOVED BETWEEN LOW & TOP ENGINE ARM.

Engine Assembly

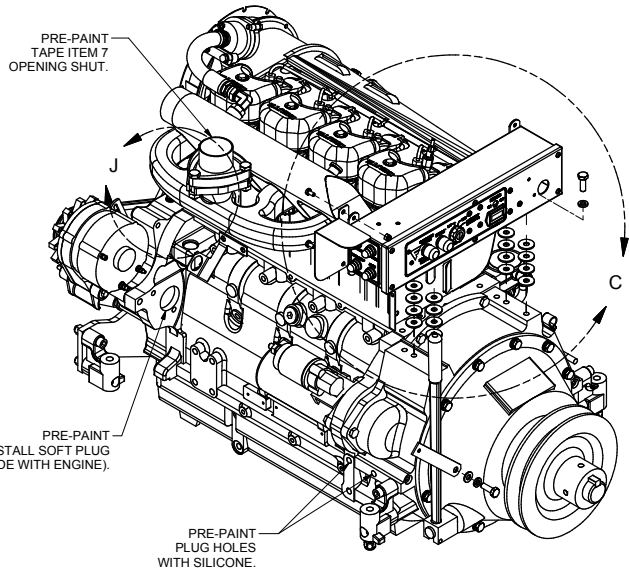
Page 4 of 4



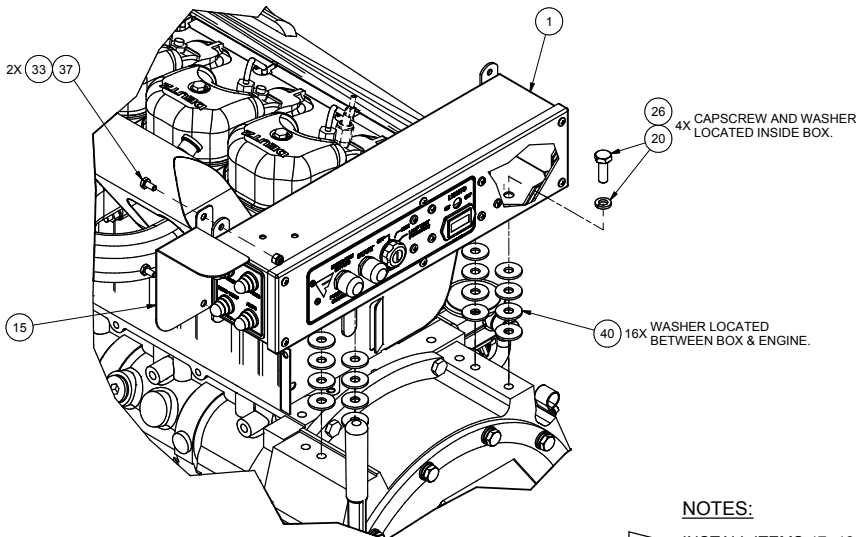
HARNESS INSTALL



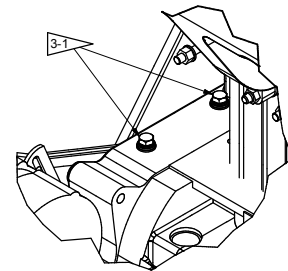
CLIP FOR ENGINE HARNESS



CONTROL BOX ASSEMBLY



**DETAIL C
 CONTROL BOX MOUNTING**



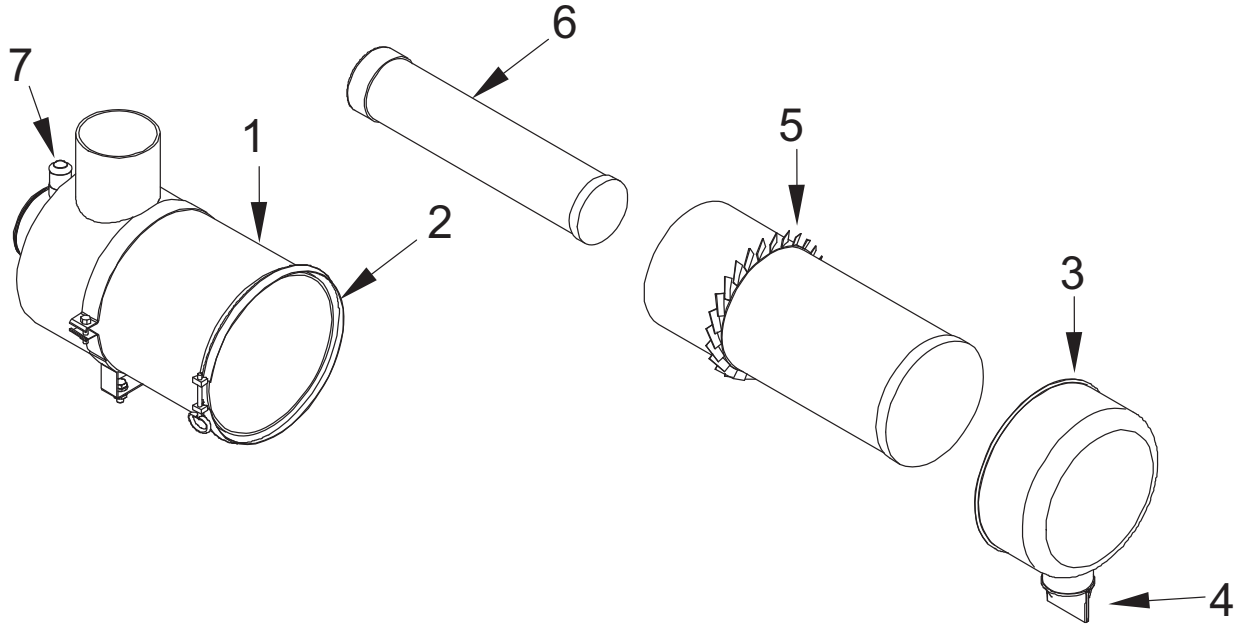
**DETAIL J
 REF. FASTENERS**

NOTES:

- 3-1 INSTALL ITEMS 47, 48, AND 49 AT THIS LEVEL, THEY ARE CALLED OUT ON THE SNORKEL INSTALL.
- 3-2 INSTALL ENGINE HARNESS IN CLIP AS SHOWN.

Air Cleaner Assembly

Page 1 of 1

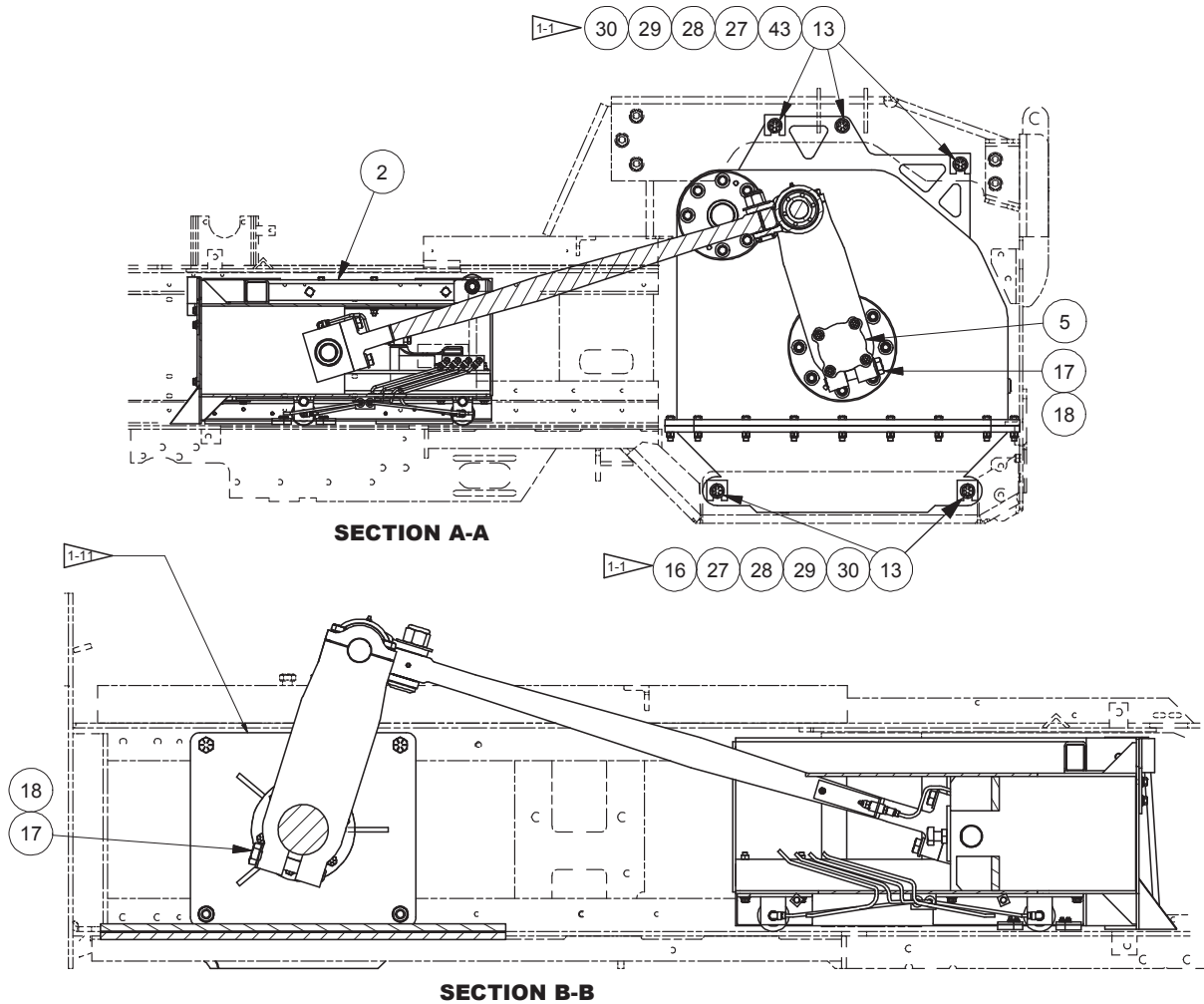


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	254896		Air Cleaner Assembly				
1	255496	1	. Body	5	255494	4	. Filter
2	255492	1	. Body Clamp	6	255495	4	. Filter, Safety
3	255493	1	. Cover	7	ACL0002251	1	. Mini Restriction Indicator
4	255497	4	. Valve, Actuator				

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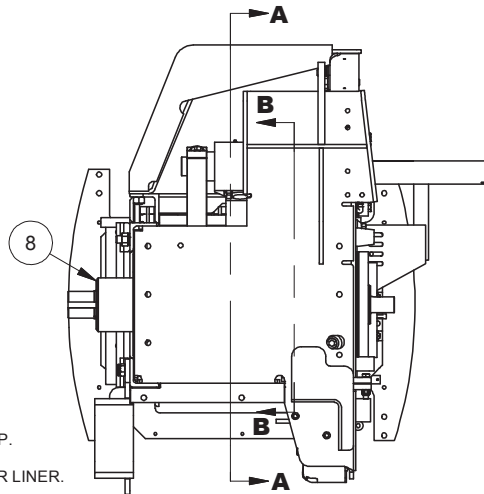
Gearbox Installation (16" Frame)

Page 1 of 5



NOTES:

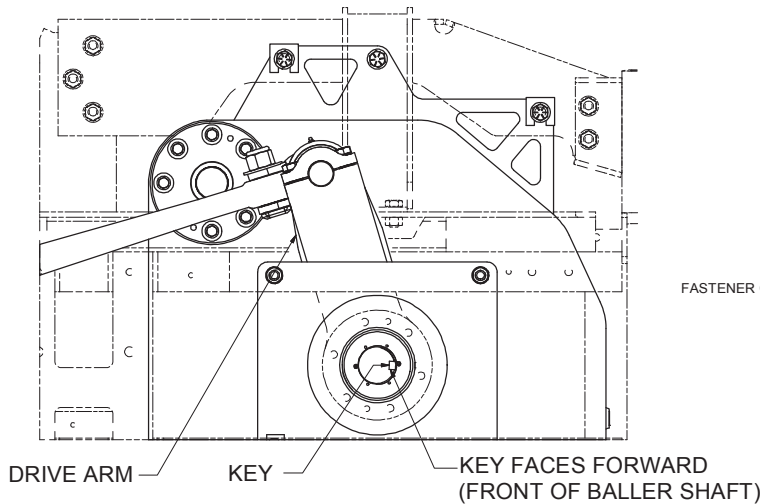
- 1-1 SHIM GEARBOX TO ALIGN CRANK ARM PIN HOLE WITH DRIVE ARM PIN HOLE IN 4 QUADRANTS IN ITS RANGE OF MOTION.
- 1-2 16" CHAMBER & PLUNGER ASSY. SHOWN, REFER TO CHART FOR PLUNGER ASSEMBLIES FOR OTHER CHAMBER SIZES.
- 1-3 SHIM AS NEEDED FOR STOP DOG TO FULLY ENGAGE PLUNGER STOP.
- 1-4 USE LOCTITE #242.
- 1-5 ADD 12.7 LBS (6.62 LITERS) OF LUBRICATING OIL TO GEARBOX. OIL LEVEL SHOULD BE LEVEL WITH THE SIGHT GAUGE IN LOWER SECTION OF GEARBOX ASSY.
- 1-6 TORQUE SIDE PLATE BOLTS TO 365 FT-LBS.
- 1-7 PHOTO SHEET FOR SIDE PLATE BOLT CONFIGURATION IS AVAILABLE FOR REFERENCE UNDER CHART DRAWING (906223).
- 1-8 INSTALL ITEM 33 AT THIS LEVEL, IT IS CALLED OUT IN THE SHIELD GROUP.
- 1-9 CONFIRM STOP DOG (ITEM 9) EXTENDS AT LEAST 1/2" BEYOND CHAMBER LINER.
- 1-10 OIL FILL LOCATION OF GEARBOX
- 1-11 NOTE ORIENTATION OF RIBS ON SIDE PLATE
- 1-12 USE LOCTITE #243 ON SET SCREW



Gearbox Installation (16" Frame)

Page 2 of 5

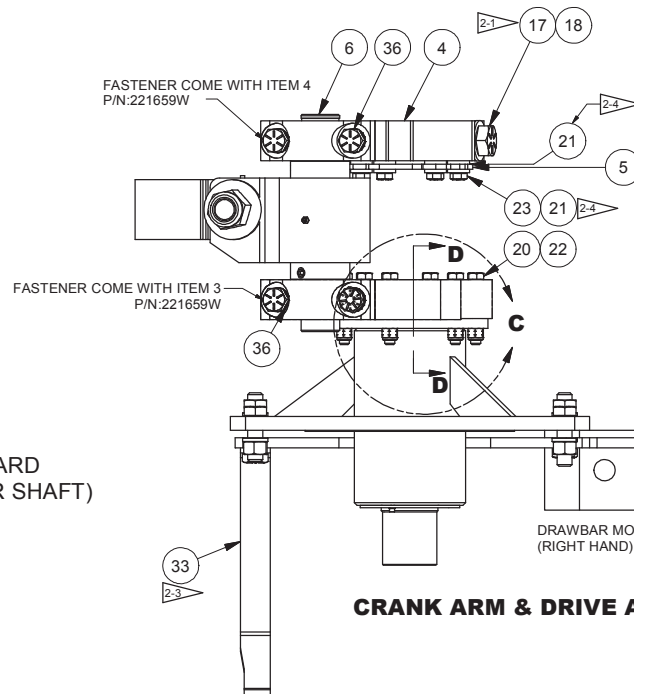
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
909233 Gearbox Installation (16" Frame)							
1	* 906765	1	. Gearbox Assembly	22	223587	8	. Nut, Esna
2	* 904473	1	. Plunger Assembly	23	221560W	4	. Capscrew
3	904466	1	. Drive Arm Assembly	24	221656W	1	. Capscrew
3.1	904479	1	. Drive Arm	25	R13806363	1	. Capscrew
3.2	177192W	2	. Capscrew	26	221660W	2	. Capscrew
4	906841	1	. Crank Arm Assembly	27	SHM0163090	7	. Shim
4.1	906840	1	. Crank Arm	28	SHM0163091	7	. Shim
4.2	177192W	2	. Capscrew	29	SHM0163092	7	. Shim
5	904409	1	. Plate, Keeper	30	SHM0163093	7	. Shim
6	906842	1	. Pin, Crank,	31	232854	1	. Capscrew
7	909766	1	. Bracket Weldment, Drawbar	32	235720	2GL	. Lubricant, Gear
8	* PLT0163070	1	. Side Plate W/Bearings RH	33	904814	0	. Plate, Brace
9	F000007547	1	. Stop Dog	34	221717W	4	. Hex Nut
10	PIN0035710	1	. Pin Assembly	35	F000007239	2	. Pin, Roll
11	ZZ00000209	1	. Mach Bushing	36	907012	4	. Washer, Wedge Lock
12	027-0933	1	. Set Screw	37	908678	2	. Shim
13	221777W	10	. Hard Washer	38	908673	2	. Shim
14	221716W	5	. Hex Nut	39	2302030W	2	. Shim
15	200608	9	. Lockwasher	40	2520704	2	. Shim
16	221666W	5	. Capscrew	41	908674	2	. Shim
17	R13801901	1	. Capscrew	42	2508285	2	. Washer, Thrust
18	221780W	1	. Hard Washer	43	221662W	3	. Capscrew
19	221576W	2	. Capscrew	44	YEE-2	NA	. Set Collar
20	R13811082	6	. Capscrew	* See Separate Coverage			
21	221771W	10	. Hard Washer				



DRIVE ARM/SHAFT TIMING SETUP

NOTES:

- 2-1 TORQUE BOLT TO 750-755 FT LBS.
- 2-2 INSTALL ITEM 33 AT THIS LEVEL, IT IS CALLED OUT IN THE SHIELD GROUP.
- 2-3 DRIVE ARM IS TO BE ASSEMBLED TO THE RIGHT-HAND SIDE PLATE WITH THE CHAMFER ON THE DRIVE ARM FACING THE SIDE PLATE.
- 2-4 ADD 221771W FLAT WASHERS AS NEEDED BETWEEN KEEPER PLATE AND CRANK ARM SO THAT KEEPER PLATE IS BOLTED FLAT TO CRANK ARM AND NOT PUSHING ON END OF GEARBOX OUTPUT SHAFT.

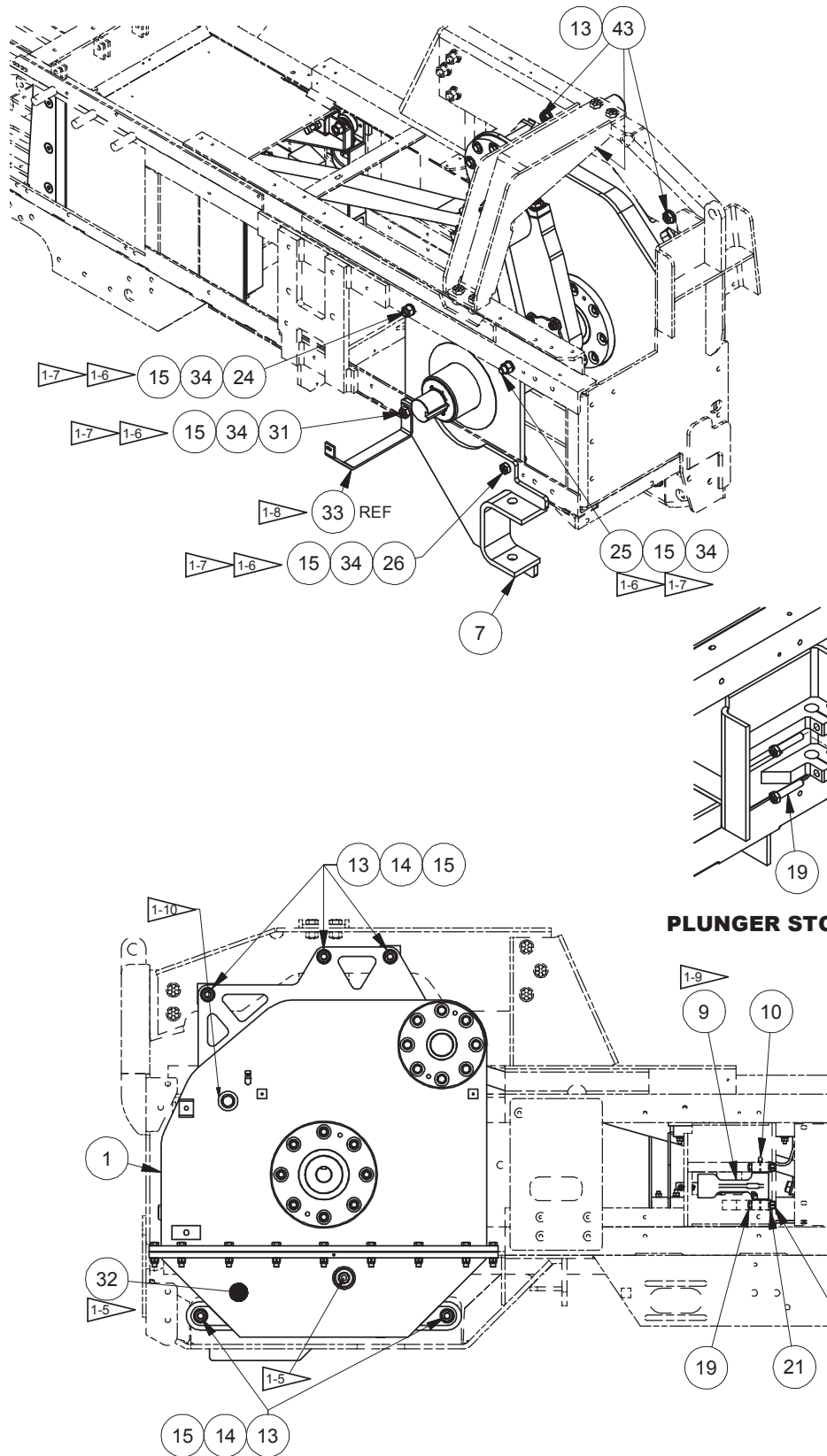


CRANK ARM & DRIVE ARM

- 2-5 REFER TO DRIVE ARM SETUP VIEW FOR ORIENTATION OF SHAFT TO DRIVE ARM
- 2-6 GREASE CONNECTING ROD HOUSING UNTIL GREASE IS SEEN ON BOTH SIDES OF HOUSING WHEN VIEWED FROM ABOVE AND BELOW THE HOUSING.

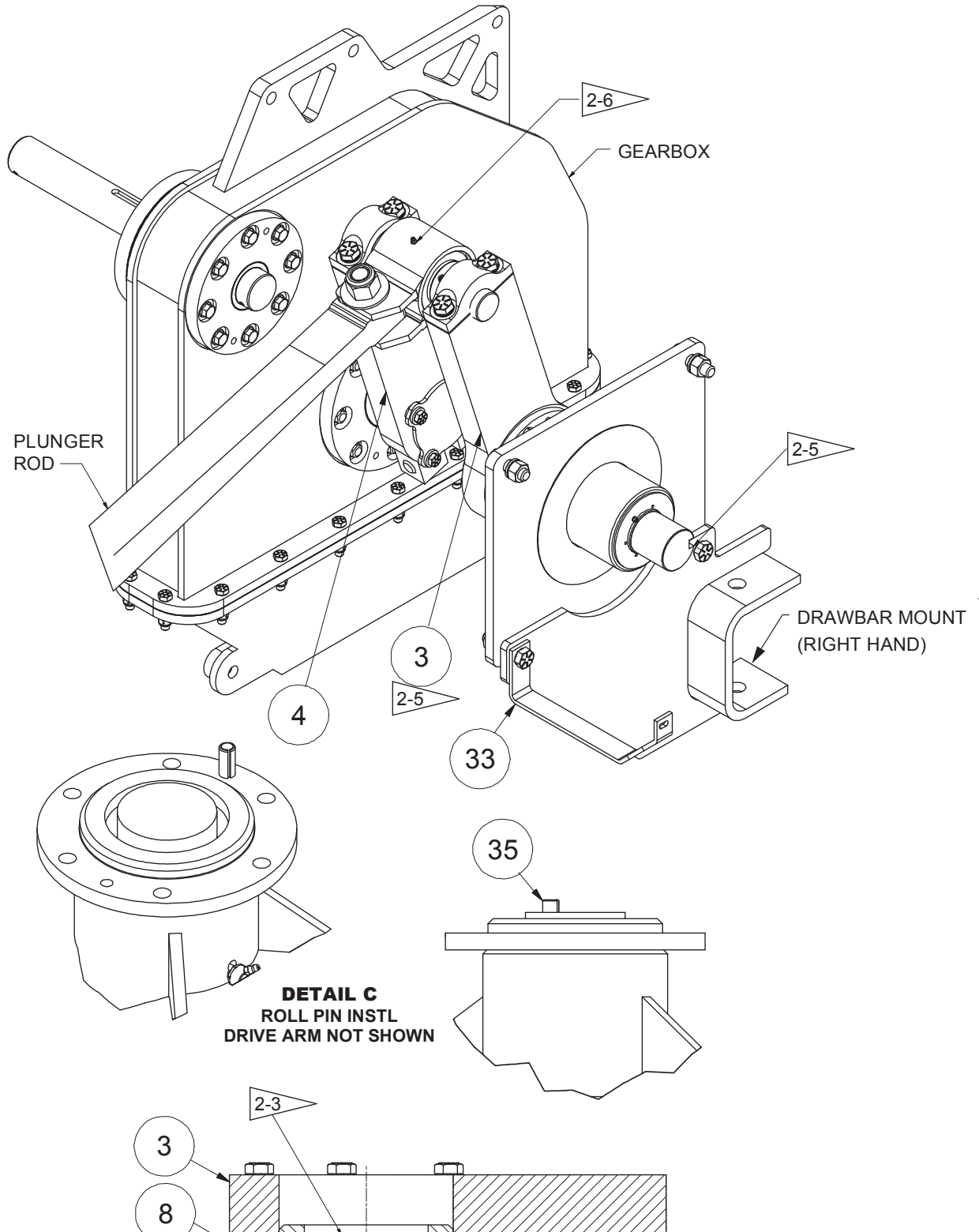
Gearbox Installation (16" Fra

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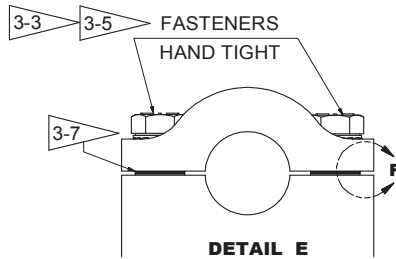
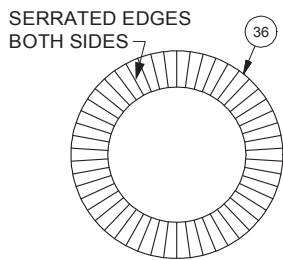
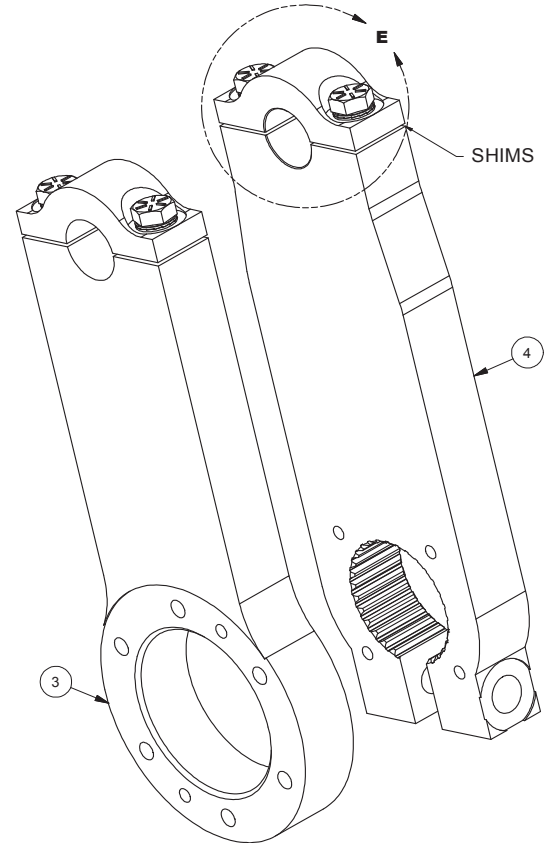
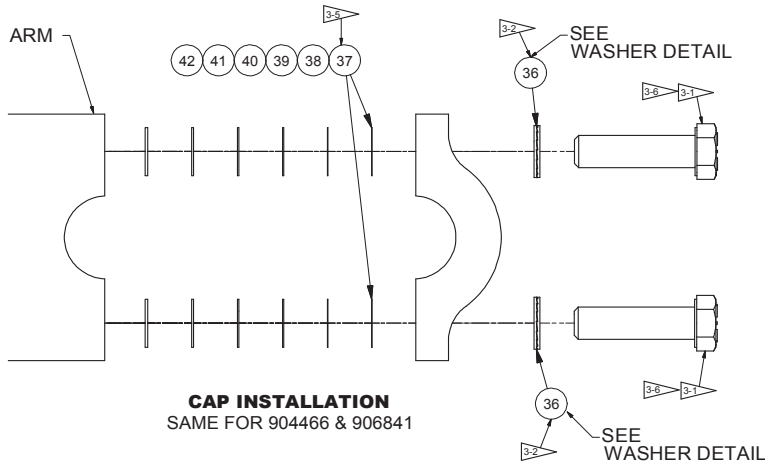
Gearbox Installation (16" Frame)

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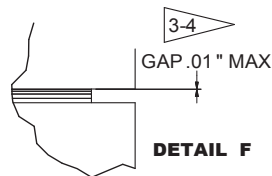


Gearbox Installation (16" Frame)

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WASHER DETAIL

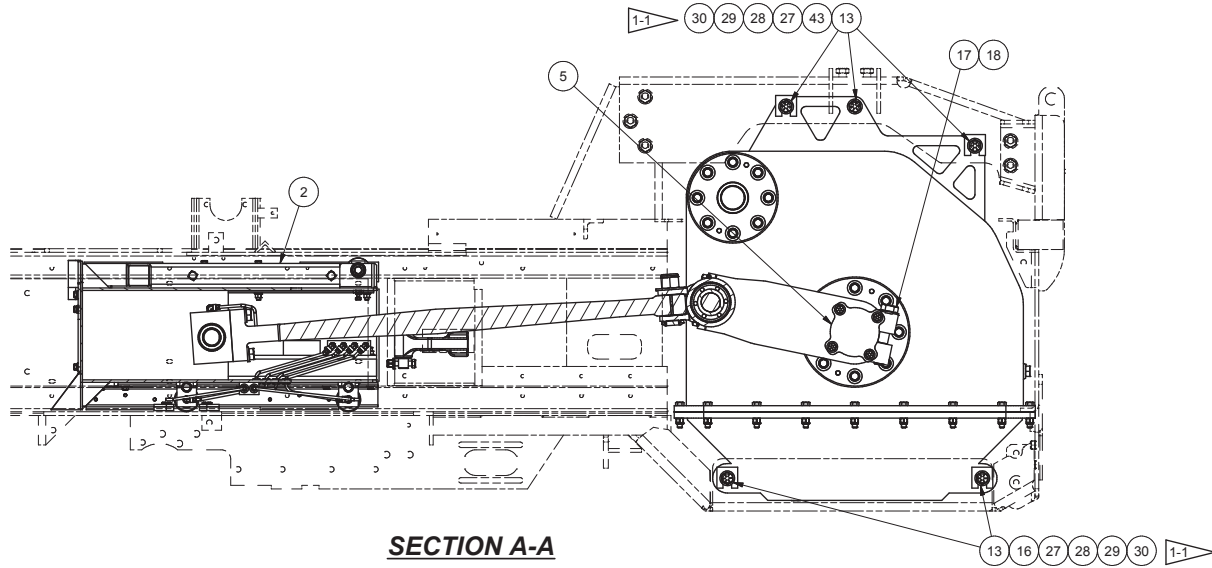


INSTALLATION NOTES:

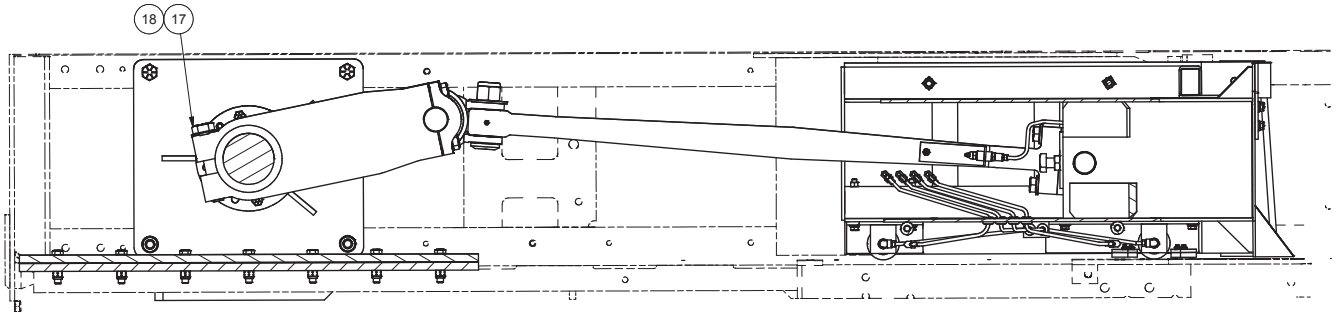
- 3-1 USE THE HARDWARE PROVIDED WITH THE ARM.
- 3-2 INSTALL ITEM 36 SERRATED EDGES FACING OUT AND WEDGE FEATURES MESHED.
- 3-3 PLACE CAP ON SHAFT, HAND TIGHTEN BOLTS, MEASURE GAP (BOTH SIDES) BETWEEN CAP & CRANK/DRIVE ARMS.
- 3-4 SHIM AS REQUIRED TO ACHIEVE A GAP 0.010" OR LESS WHEN BOLT IS HAND TIGHT. GAP DOES NOT NEED TO BE THE SAME ON BOTH SIDES.
- 3-5 RE-ASSEMBLE WITH SHIMS, HAND TIGHTEN BOLTS AND CONFIRM GAP (MAX 0.010") BEFORE TIGHTENING.
- 3-6 TORQUE BOLTS EVENLY TO 340 FT-LB. TORQUE BOTH BOLTS FIRST TO 100 FT-LB, THEN TO 200 FT-LB AND FINALLY TO 340 FT-LB.
- 3-7 INSPECT BOLTED CONNECTION TO CONFIRM GAP IS ELIMINATED (BOTH SIDES).

Gearbox Installation 15"KTD (16" Frame)

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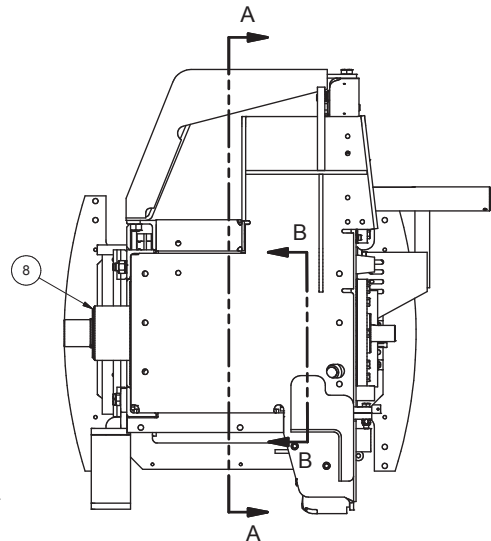
SECTION A-A



SECTION B-B

NOTES:

- 1-1 SHIM GEARBOX TO ALIGN CRANK ARM PIN HOLE WITH DRIVE ARM PIN HOLE IN 4 QUADRANTS IN ITS RANGE OF MOTION.
- 1-2 16" CHAMBER & PLUNGER ASSY. SHOWN, REFER TO CHART FOR PLUNGER ASSEMBLIES FOR OTHER CHAMBER SIZES.
- 1-3 SHIM AS NEEDED FOR STOP DOG TO FULLY ENGAGE PLUNGER STOP.
- 1-4 USE LOCTITE #242.
- 1-5 ADD 12.7 LBS (6.62 LITERS) OF LUBRICATING OIL TO GEARBOX. OIL LEVEL SHOULD BE LEVEL WITH THE BOTTOM OF THE FILL OPENING.
- 1-6 TORQUE SIDE PLATE BOLTS TO 365 FT-LBS.
- 1-7 PHOTO SHEET FOR SIDE PLATE BOLT CONFIGURATION IS AVAILABLE FOR REFERENCE UNDER CHART DRAWING (906223).
- 1-8 INSTALL ITEM 33 AT THIS LEVEL, IT IS CALLED OUT IN THE SHIELD GROUP.
- 1-9 CONFIRM STOP DOG (ITEM 9) EXTENDS AT LEAST 1/2" BEYOND CHAMBER LINER.

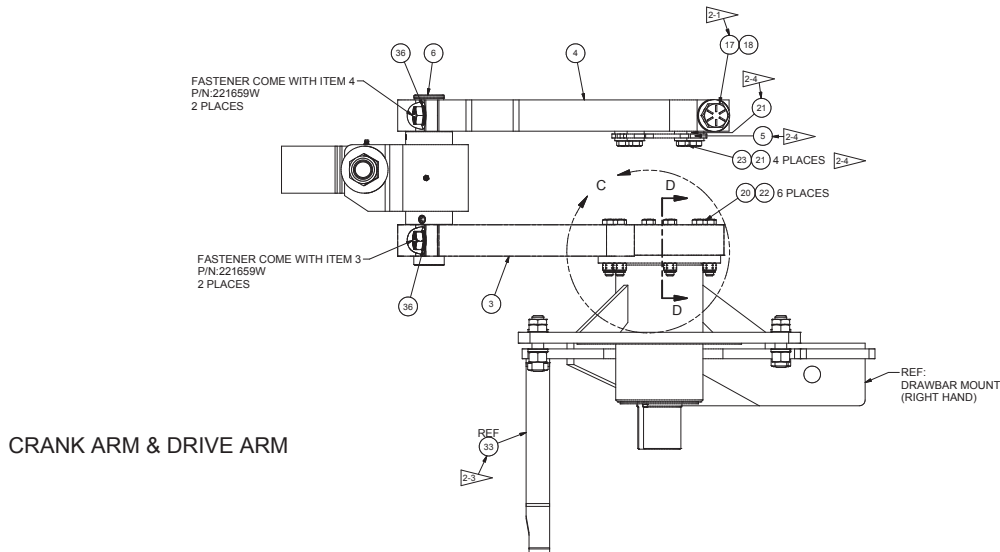


Gearbox Installation 15"KTD (16" Frame)

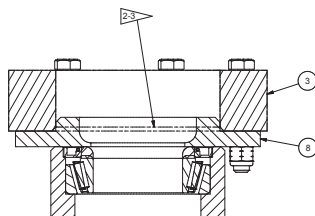
Page 2 of 5

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
909234 Gearbox Installation 15"KTD (16" Frame)							
1	* 906765	1	. Gearbox Assembly	25	R13806363	1	. Capscrew
2	* 906224	1	. Plunger Assembly	26	221660W	2	. Capscrew
3	904466	1	. Drive Arm Assembly	27	SHM0163090	7	. Shim
3.1	904479	1	. Drive Arm	28	SHM0163091	7	. Shim
3.2	177192W	2	. Capscrew	29	SHM0163092	7	. Shim
4	906841	1	. Crank Arm Assembly	30	SHM0163093	7	. Shim
4.1	906840	1	. Crank Arm	31	232854	1	. Capscrew
4.2	177192W	2	. Capscrew	32	235720	2GL	. Lubricant, Gear
5	904409	1	. Plate, Keeper	33	904814	0	. Plate, Brace
6	906842	1	. Pin, Crank,	34	221717W	4	. Hex Nut
7	903503	1	. Bracket Weldment, Drawbar	35	F000007239	2	. Pin, Roll
8	* PLT0163070	1	. Side Plate W/Brgs RH	36	907012	4	. Washer, Wedge Lock
9	DOG0018185	1	. Stop Dog	37	908678	2	. Shim
10	PIN0035710	1	. Pin Assembly	38	908673	2	. Shim
11	ZZ00000209	1	. Mach Bushing	39	2302030W	2	. Shim
12	027-0933	1	. Set Screw	40	2520704	2	. Shim
13	221777W	10	. Hard Washer	41	908674	2	. Shim
14	221716W	5	. Hex Nut	42	2508285	2	. Washer, Thrust
15	200608	9	. Lockwasher	43	221662W	3	. Capscrew
16	221666W	5	. Capscrew				
17	R13801901	1	. Capscrew				
18	221780W	1	. Hard Washer				
19	221576W	2	. Capscrew				
20	R13811082	6	. Capscrew				
21	221771W	10	. Hard Washer				
22	223587	8	. Nut, Esna				
23	221560W	4	. Capscrew				
24	221656W	1	. Capscrew				

* See Separate Coverage
Rev AA



CRANK ARM & DRIVE ARM



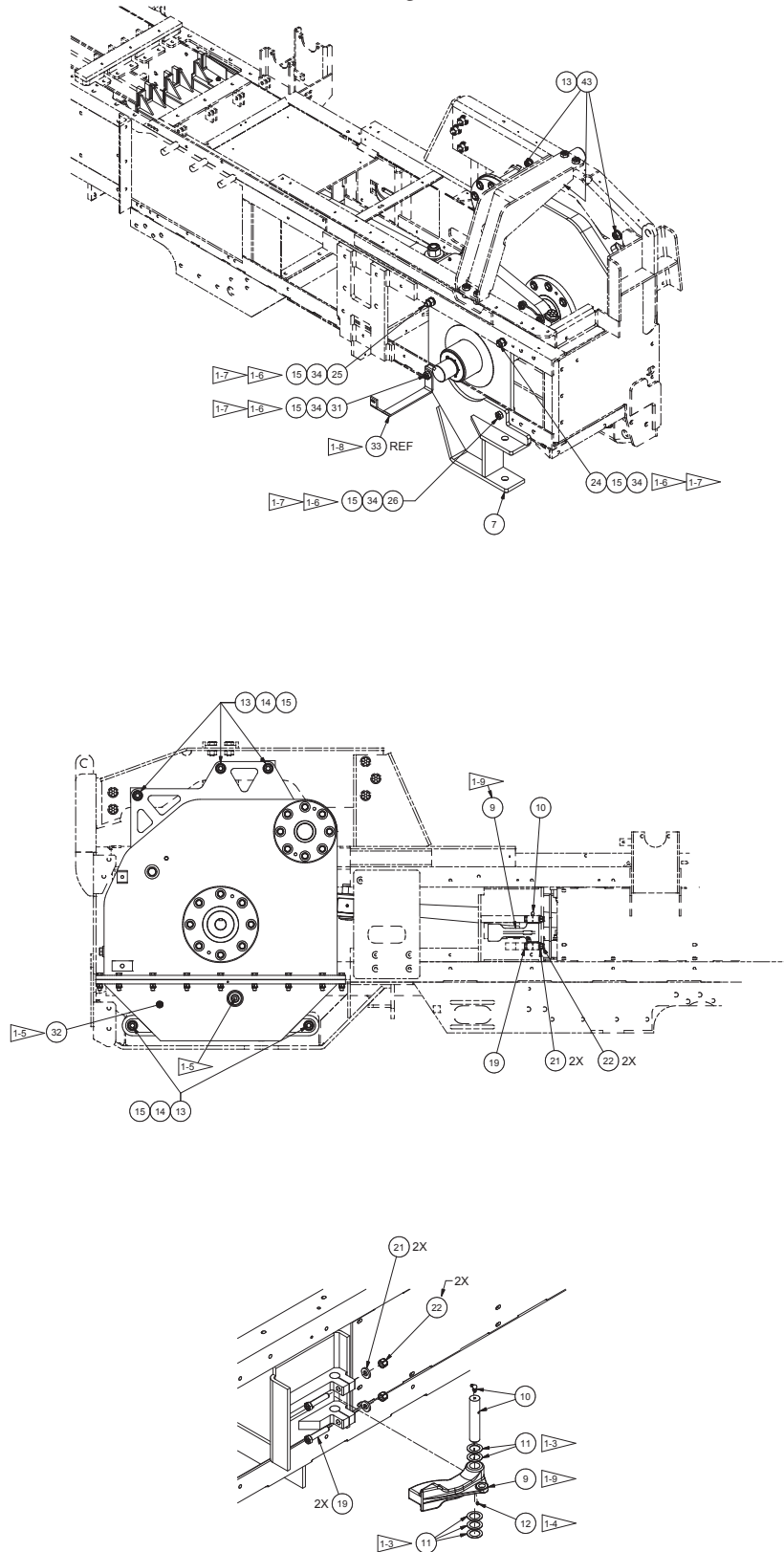
SECTION D-D

NOTES:

- 2-1 TORQUE BOLT TO 750-755 FT LBS.
- 2-2 INSTALL ITEM 33 AT THIS LEVEL, IT IS CALLED OUT IN THE SHIELD GROUP.
- 2-3 DRIVE ARM IS TO BE ASSEMBLED TO THE RIGHT-HAND SIDE PLATE WITH THE CHAMFER ON THE DRIVE ARM FACING THE SIDE PLATE.
- 2-4 ADD 221771W FLAT WASHERS AS NEEDED BETWEEN KEEPER PLATE AND CRANK ARM SO THAT KEEPER PLATE IS BOLTED FLAT TO CRANK ARM AND NOT PUSHING ON END OF GEARBOX OUTPUT SHAFT.

Gearbox Installation 15"KTD (16" Frame)

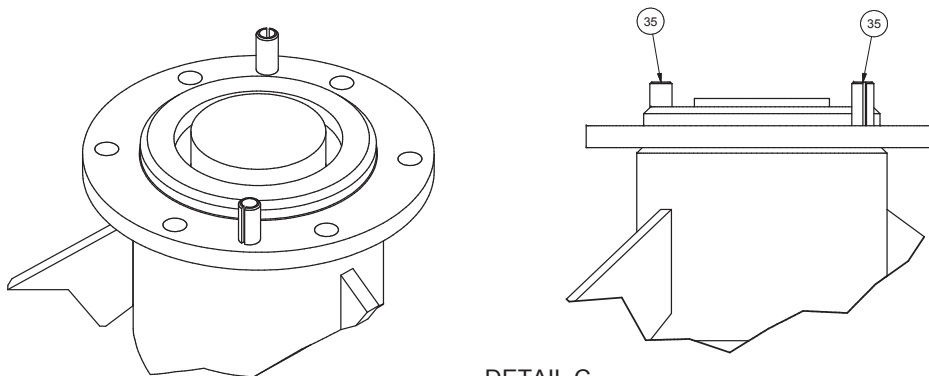
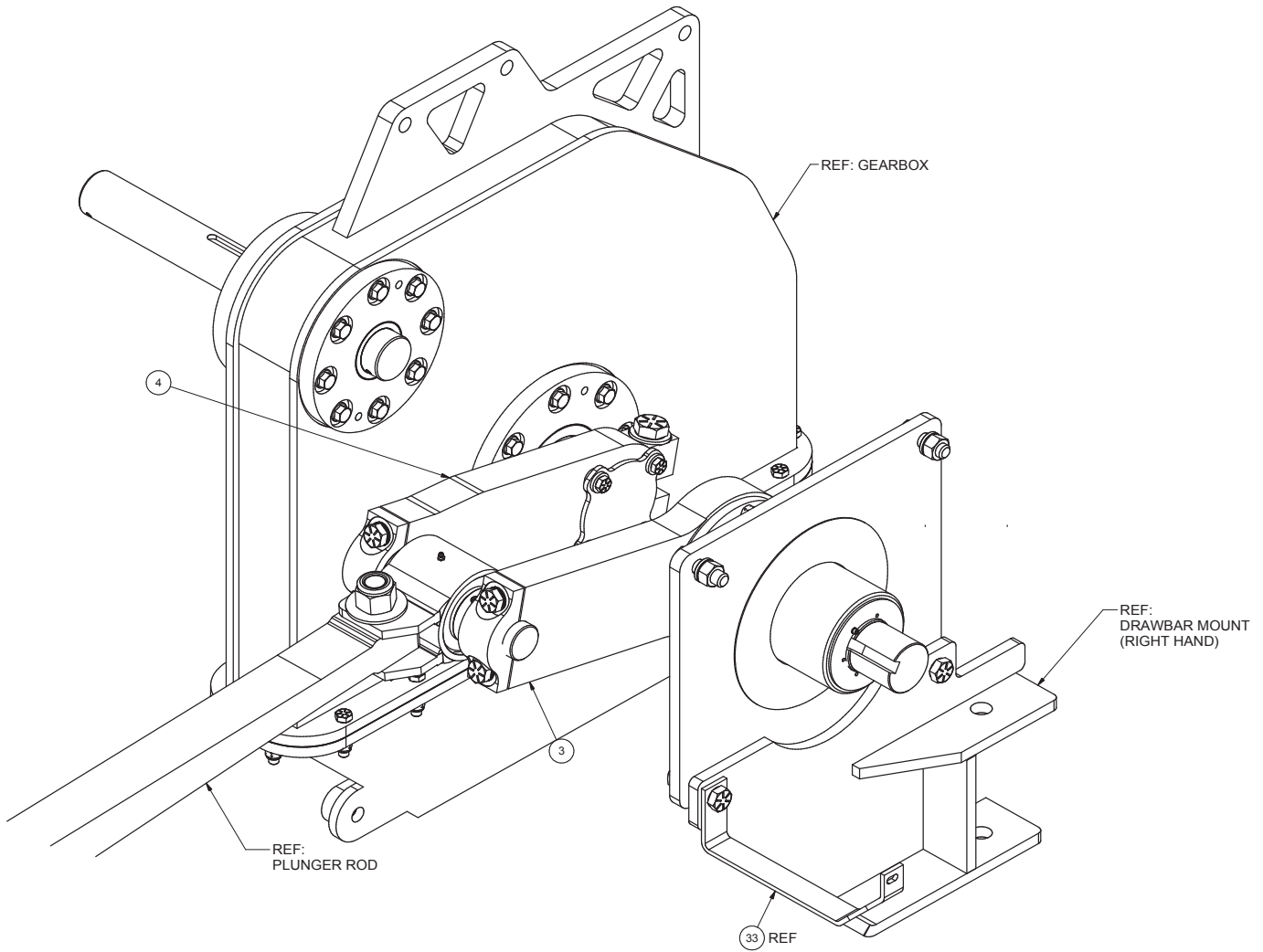
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PLUNGER STOP DOG

Gearbox Installation 15"KTD (16" Frame)

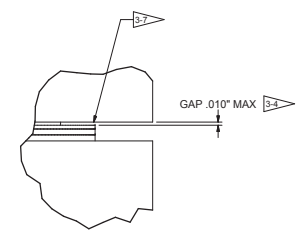
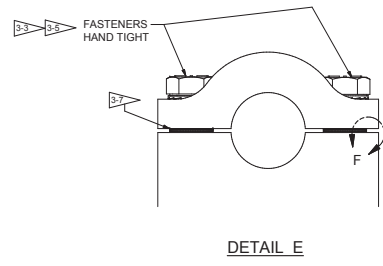
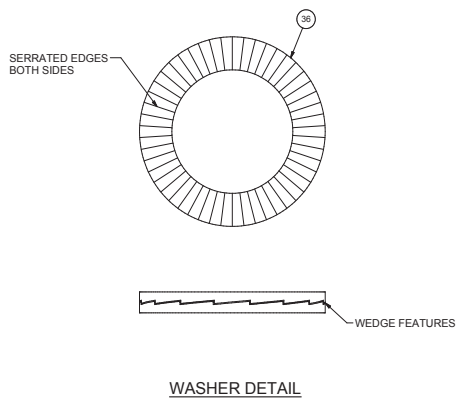
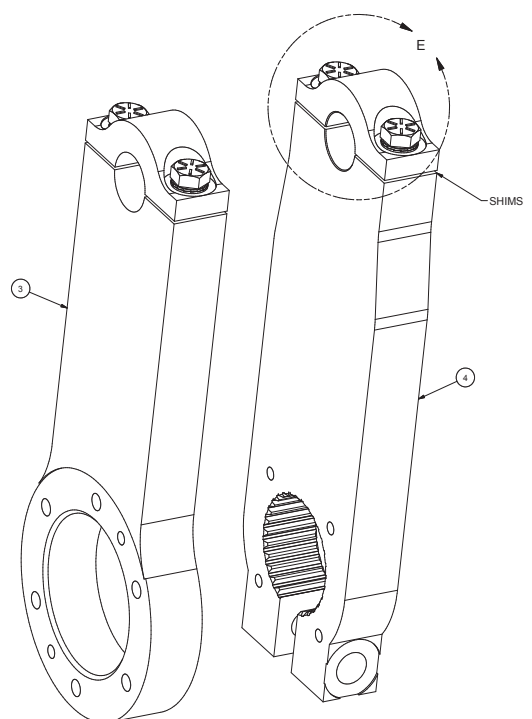
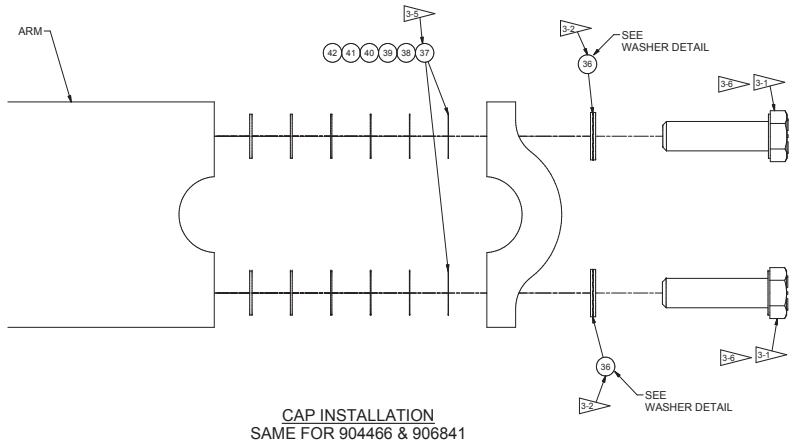
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DETAIL C
ROLL PIN INSTL
DRIVE ARM NOT SHOWN

Gearbox Installation 15"KTD (16" Frame)

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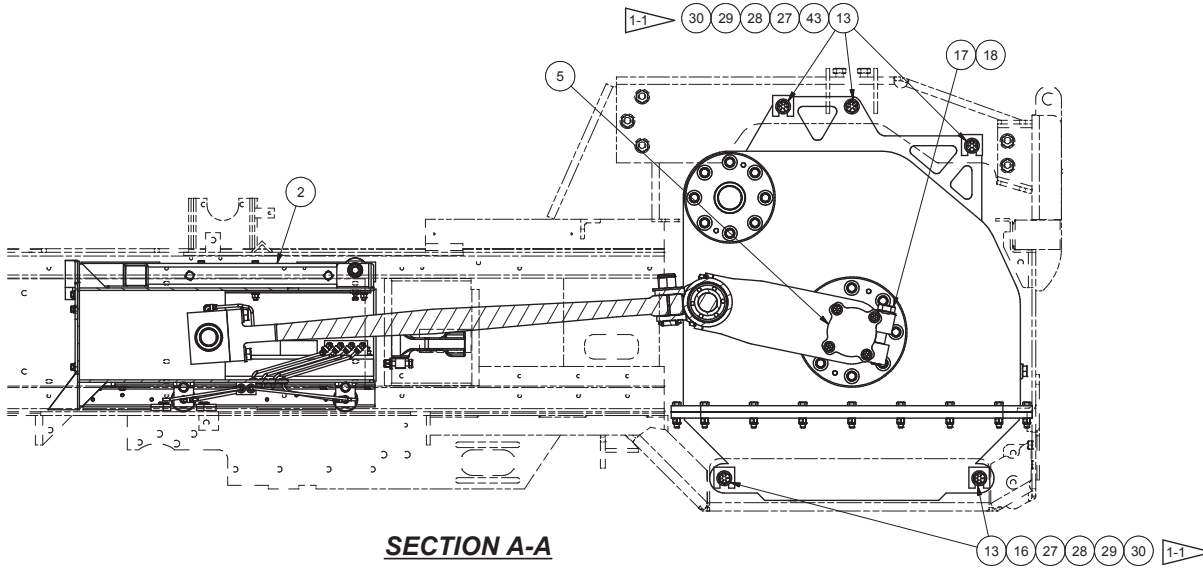


INSTALLATION NOTES:

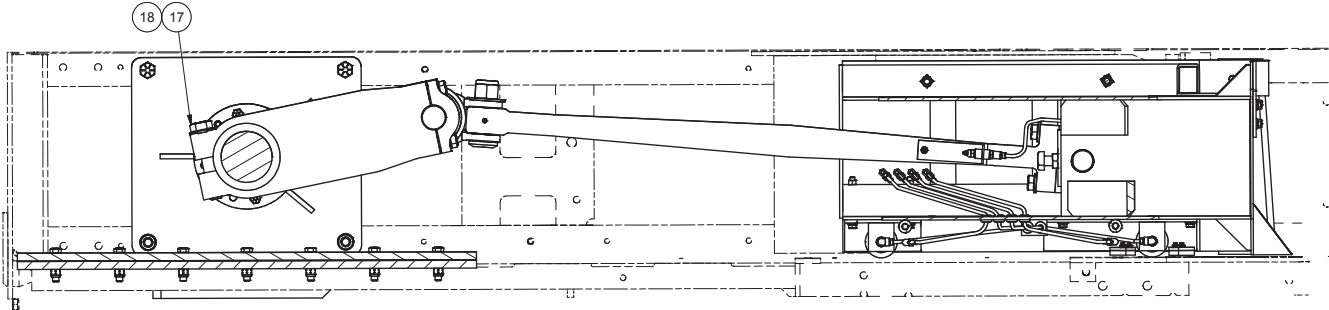
- 3-1 USE THE HARDWARE PROVIDED WITH THE ARM.
- 3-2 INSTALL ITEM 36 SERRATED EDGES FACING OUT AND WEDGE FEATURES MESHED.
- 3-3 PLACE CAP ON SHAFT, HAND TIGHTEN BOLTS, MEASURE GAP (BOTH SIDES) BETWEEN CAP & CRANK/DRIVE ARMS.
- 3-4 SHIM AS REQUIRED TO ACHIEVE A GAP 0.010" OR LESS WHEN BOLT IS HAND TIGHT, GAP DOES NOT NEED TO BE THE SAME ON BOTH SIDES.
- 3-5 RE-ASSEMBLE WITH SHIMS, HAND TIGHTEN BOLTS AND CONFIRM GAP (MAX 0.010") BEFORE TIGHTENING.
- 3-6 TORQUE BOLTS EVENLY TO 340 FT-LB. TORQUE BOTH BOLTS FIRST TO 100 FT-LB, THEN TO 200 FT-LB AND FINALLY TO 340 FT-LB.
- 3-7 INSPECT BOLTED CONNECTION TO CONFIRM GAP IS ELIMINATED (BOTH SIDES).

Gearbox Installation 14"KTD (16" Frame)

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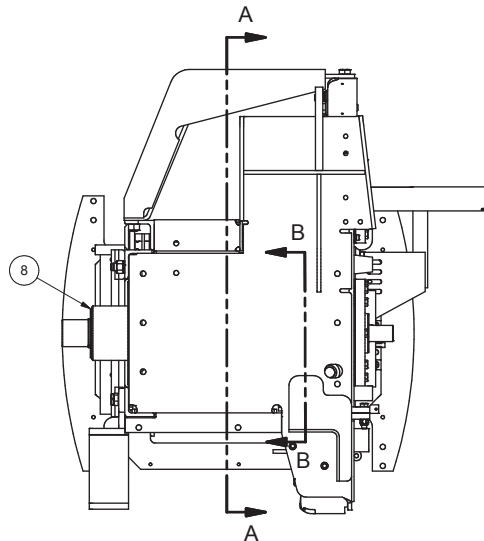
SECTION A-A



SECTION B-B

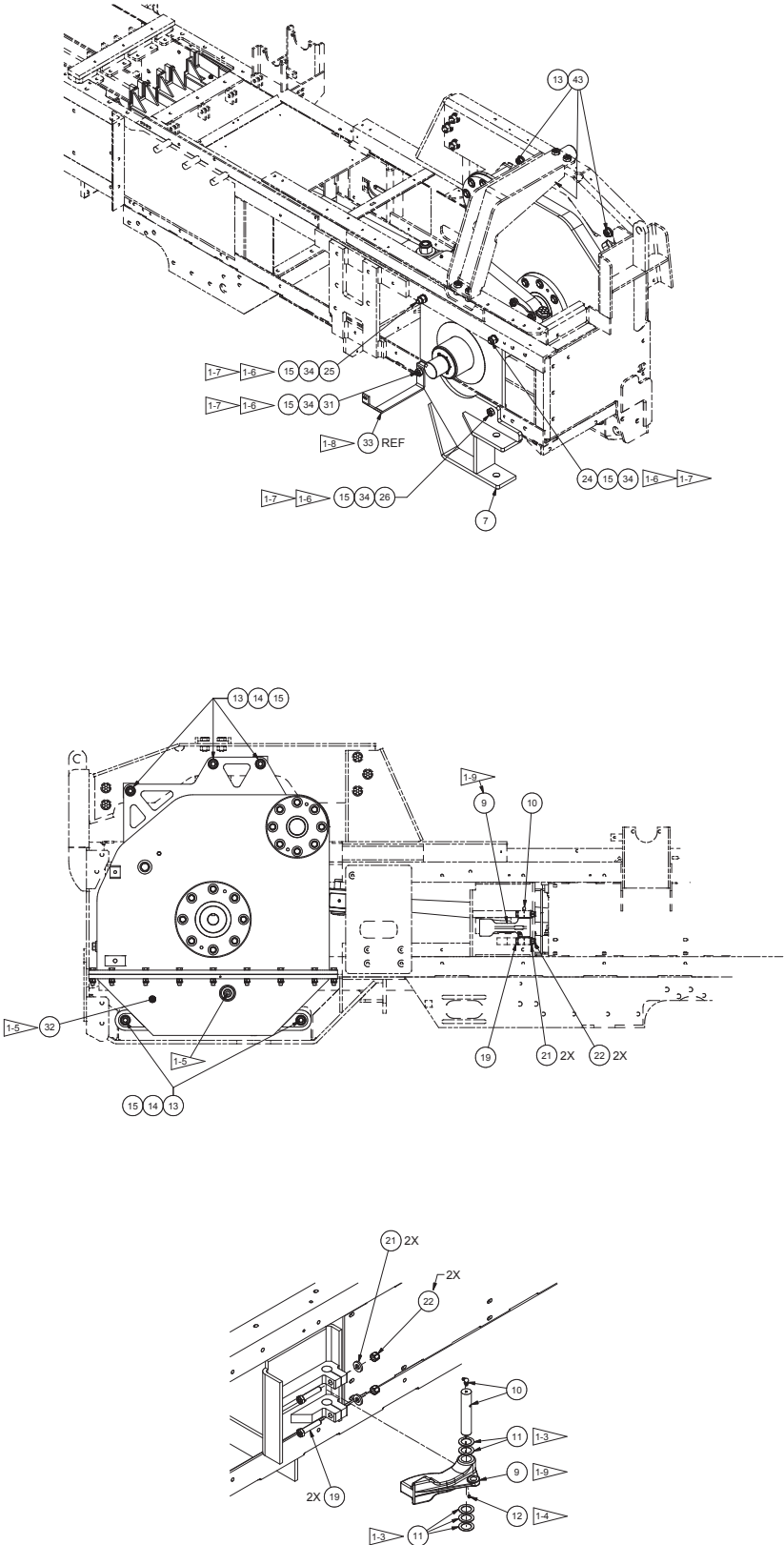
NOTES:

- 1-1 SHIM GEARBOX TO ALIGN CRANK ARM PIN HOLE WITH DRIVE ARM PIN HOLE IN 4 QUADRANTS IN ITS RANGE OF MOTION.
- 1-2 16" CHAMBER & PLUNGER ASSY. SHOWN, REFER TO CHART FOR PLUNGER ASSEMBLIES FOR OTHER CHAMBER SIZES.
- 1-3 SHIM AS NEEDED FOR STOP DOG TO FULLY ENGAGE PLUNGER STOP.
- 1-4 USE LOCTITE #242.
- 1-5 ADD 12.7 LBS (6.62 LITERS) OF LUBRICATING OIL TO GEARBOX. OIL LEVEL SHOULD BE LEVEL WITH THE BOTTOM OF THE FILL OPENING.
- 1-6 TORQUE SIDE PLATE BOLTS TO 365 FT-LBS.
- 1-7 PHOTO SHEET FOR SIDE PLATE BOLT CONFIGURATION IS AVAILABLE FOR REFERENCE UNDER CHART DRAWING (906223).
- 1-8 INSTALL ITEM 33 AT THIS LEVEL, IT IS CALLED OUT IN THE SHIELD GROUP.
- 1-9 CONFIRM STOP DOG (ITEM 9) EXTENDS AT LEAST 1/2" BEYOND CHAMBER LINER.



Gearbox Installation 14"KTD (16" Frame)

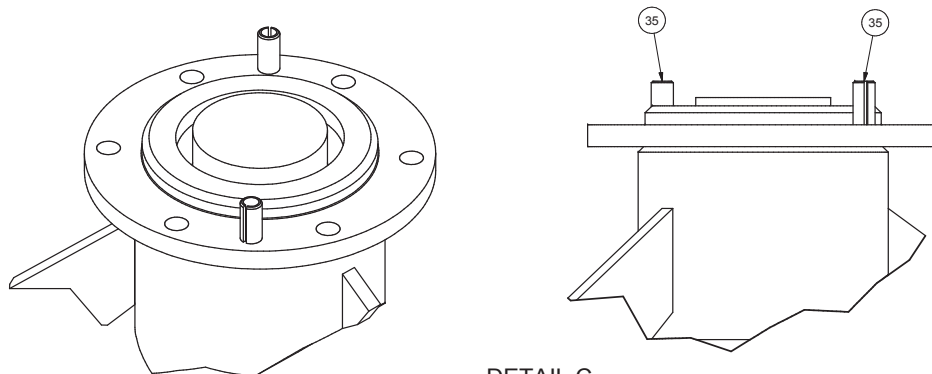
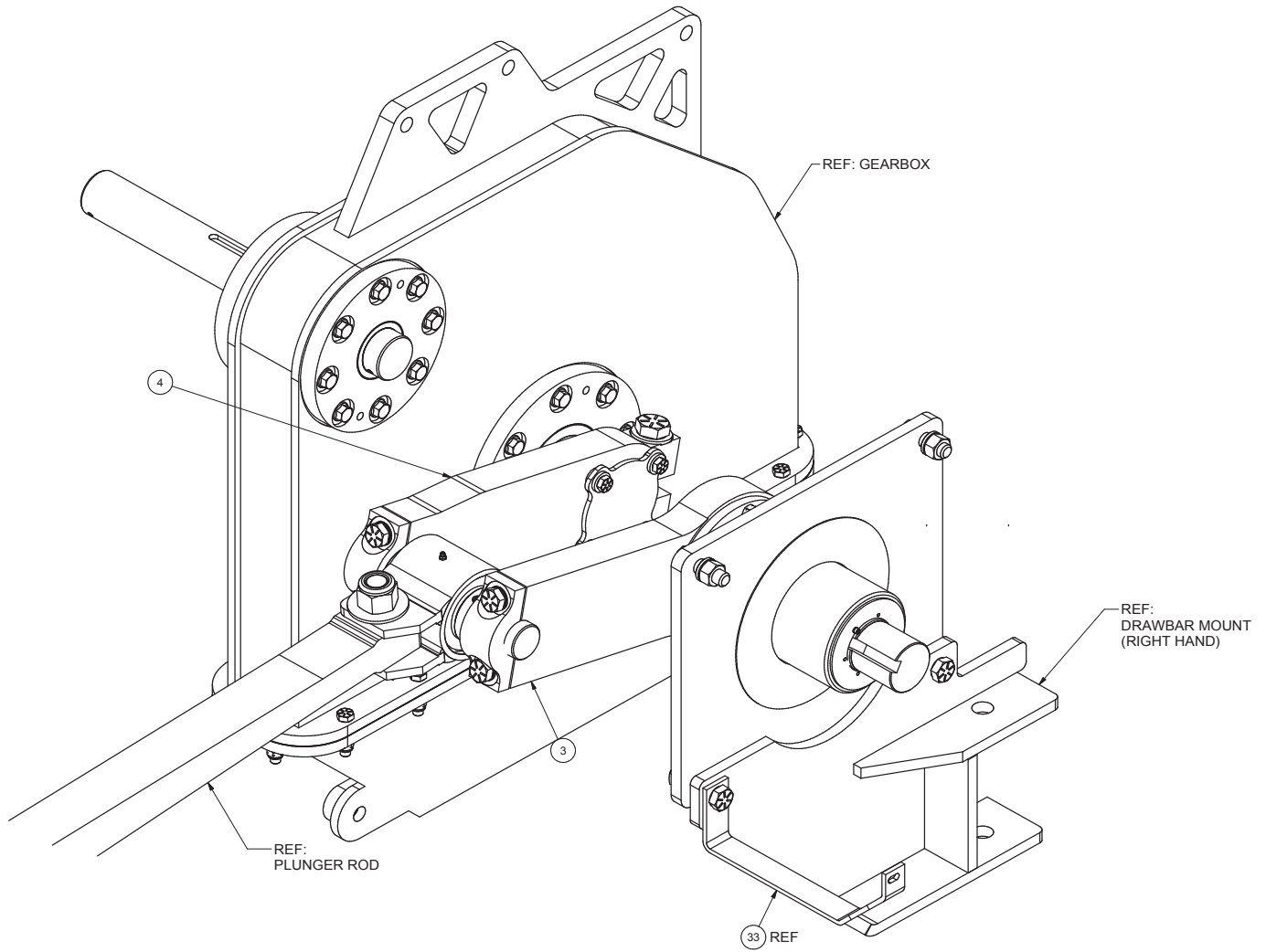
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PLUNGER STOP DOG

Gearbox Installation 14"KTD (16" Frame)

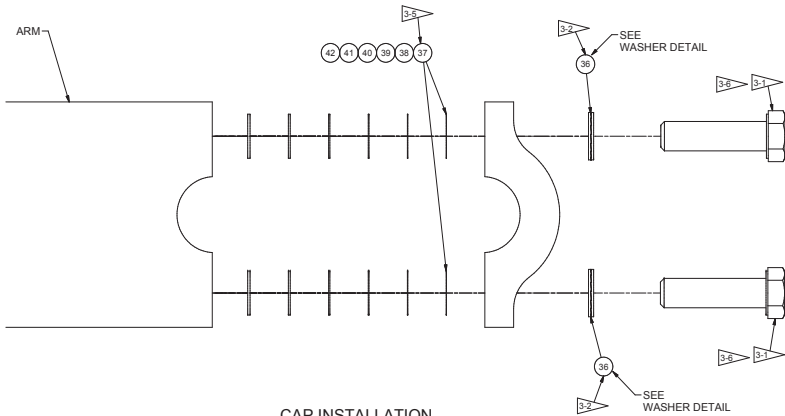
Page 4 of 5



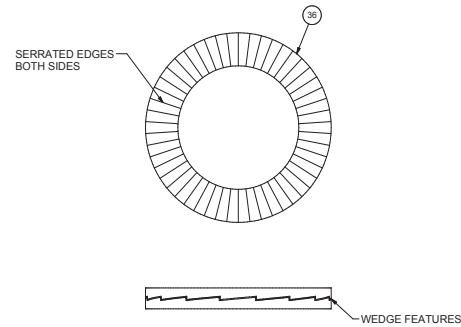
DETAIL C
ROLL PIN INSTL
DRIVE ARM NOT SHOWN

Gearbox Installation 14"KTD (16" Frame)

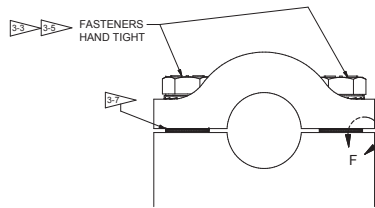
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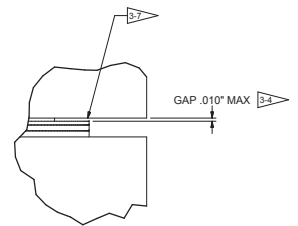
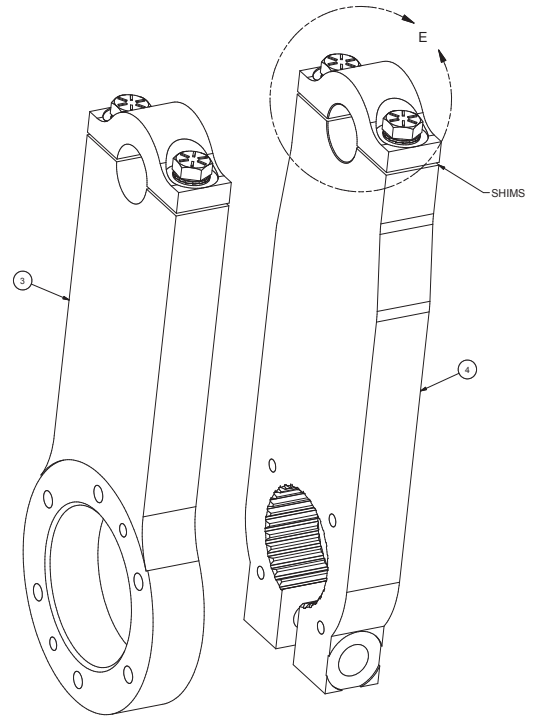
CAP INSTALLATION
SAME FOR 904466 & 906841



WASHER DETAIL



DETAIL E



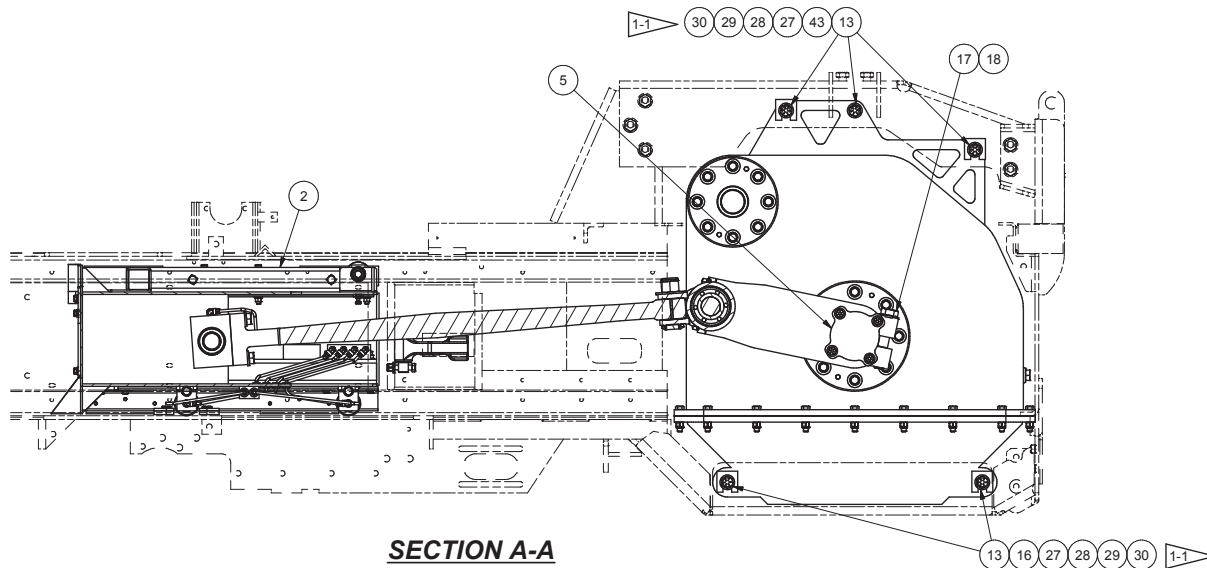
DETAIL F

INSTALLATION NOTES:

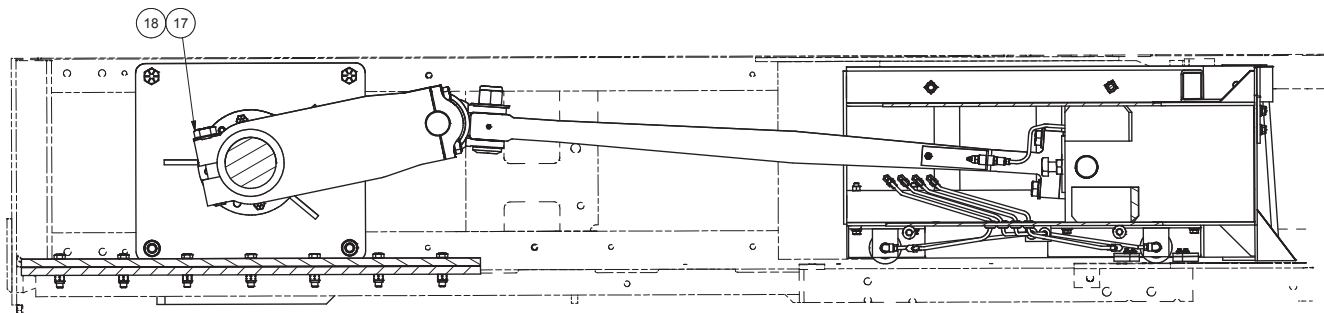
- 3-1 USE THE HARDWARE PROVIDED WITH THE ARM.
- 3-2 INSTALL ITEM 36 SERRATED EDGES FACING OUT AND WEDGE FEATURES MESHED.
- 3-3 PLACE CAP ON SHAFT, HAND TIGHTEN BOLTS, MEASURE GAP (BOTH SIDES) BETWEEN CAP & CRANK/DRIVE ARMS.
- 3-4 SHIM AS REQUIRED TO ACHIEVE A GAP 0.010" OR LESS WHEN BOLT IS HAND TIGHT. GAP DOES NOT NEED TO BE THE SAME ON BOTH SIDES.
- 3-5 RE-ASSEMBLE WITH SHIMS, HAND TIGHTEN BOLTS AND CONFIRM GAP (MAX 0.010") BEFORE TIGHTENING.
- 3-6 TORQUE BOLTS EVENLY TO 340 FT-LB. TORQUE BOTH BOLTS FIRST TO 100 FT-LB, THEN TO 200 FT-LB AND FINALLY TO 340 FT-LB.
- 3-7 INSPECT BOLTED CONNECTION TO CONFIRM GAP IS ELIMINATED (BOTH SIDES).

Gearbox Installation 14"X21"KTD (16" Frame)

Page 1 of 5



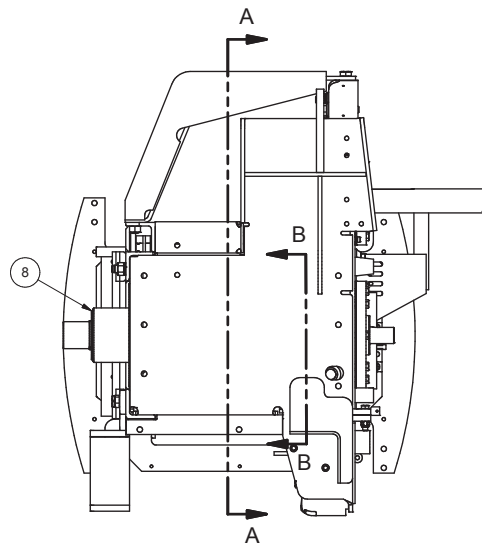
SECTION A-A



SECTION B-B

NOTES:

- 1-1 SHIM GEARBOX TO ALIGN CRANK ARM PIN HOLE WITH DRIVE ARM PIN HOLE IN 4 QUADRANTS IN ITS RANGE OF MOTION.
- 1-2 16" CHAMBER & PLUNGER ASSY. SHOWN, REFER TO CHART FOR PLUNGER ASSEMBLIES FOR OTHER CHAMBER SIZES.
- 1-3 SHIM AS NEEDED FOR STOP DOG TO FULLY ENGAGE PLUNGER STOP.
- 1-4 USE LOCTITE #242.
- 1-5 ADD 12.7 LBS (6.62 LITERS) OF LUBRICATING OIL TO GEARBOX. OIL LEVEL SHOULD BE LEVEL WITH THE BOTTOM OF THE FILL OPENING.
- 1-6 TORQUE SIDE PLATE BOLTS TO 365 FT-LBS.
- 1-7 PHOTO SHEET FOR SIDE PLATE BOLT CONFIGURATION IS AVAILABLE FOR REFERENCE UNDER CHART DRAWING (906223).
- 1-8 INSTALL ITEM 33 AT THIS LEVEL, IT IS CALLED OUT IN THE SHIELD GROUP.
- 1-9 CONFIRM STOP DOG (ITEM 9) EXTENDS AT LEAST 1/2" BEYOND CHAMBER LINER.



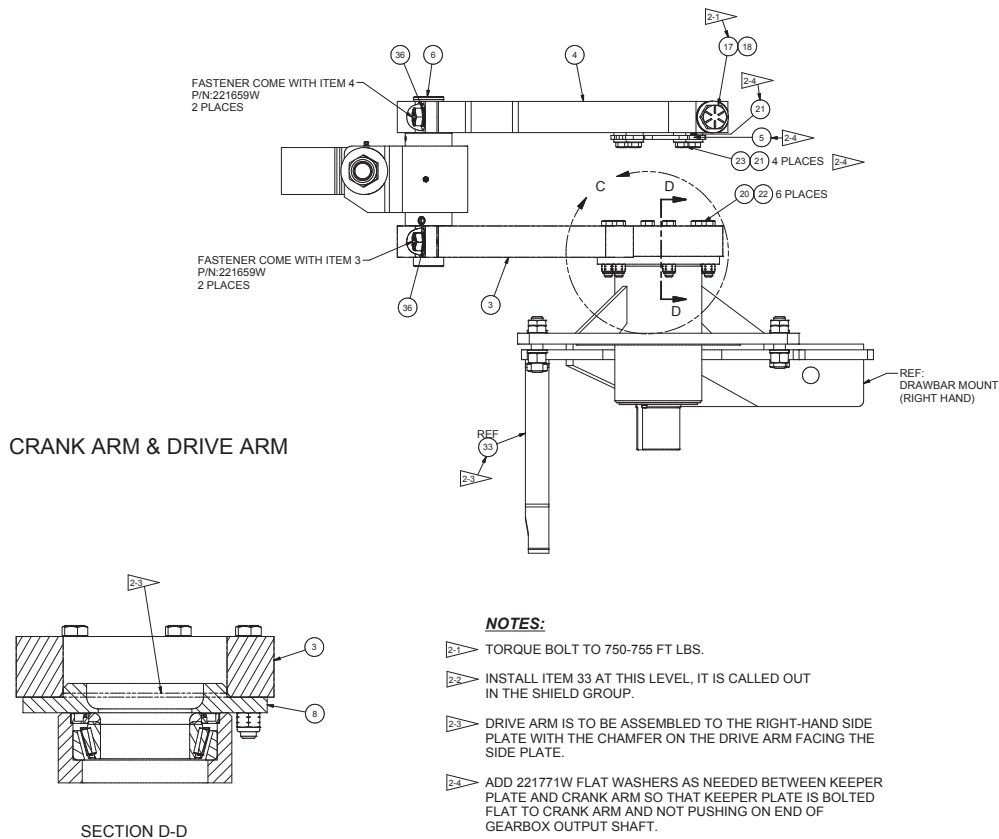
Gearbox Installation 14"X21"KTD (16" Frame)

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Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
909236 Gearbox Installation 14"X21"KTD (16" Frame)							
1	* 906765	1	. Gearbox Assembly	25	R13806363	1	. Capscrew
2	* 908708	1	. Plunger Assembly	26	221660W	2	. Capscrew
3	904466	1	. Drive Arm Assembly	27	SHM0163090	7	. Shim
3.1	904479	1	. Drive Arm	28	SHM0163091	7	. Shim
3.2	177192W	2	. Capscrew	29	SHM0163092	7	. Shim
4	906841	1	. Crank Arm Assembly	30	SHM0163093	7	. Shim
4.1	906840	1	. Crank Arm	31	232854	1	. Capscrew
4.2	177192W	2	. Capscrew	32	235720	2GL	. Lubricant, Gear
5	904409	1	. Plate, Keeper	33	904814	0	. Plate, Brace
6	906842	1	. Pin, Crank,	34	221717W	4	. Hex Nut
7	903503	1	. Bracket Weldment, Drawbar	35	F000007239	2	. Pin, Roll
8	* PLT0163070	1	. Side Plate W/Brgs RH	36	907012	4	. Washer, Wedge Lock
9	909423	1	. Stop Dog	37	908678	2	. Shim
10	PIN0035710	1	. Pin Assembly	38	908673	2	. Shim
11	ZZ00000209	1	. Mach Bushing	39	2302030W	2	. Shim
12	027-0933	1	. Set Screw	40	2520704	2	. Shim
13	221777W	10	. Hard Washer	41	908674	2	. Shim
14	221716W	5	. Hex Nut	42	2508285	2	. Washer, Thrust
15	200608	9	. Lockwasher	43	221662W	3	. Capscrew
16	221666W	5	. Capscrew				
17	R13801901	1	. Capscrew				
18	221780W	1	. Hard Washer				
19	221576W	2	. Capscrew				
20	R13811082	6	. Capscrew				
21	221771W	10	. Hard Washer				
22	223587	8	. Nut, Esna				
23	221560W	4	. Capscrew				
24	221656W	1	. Capscrew				

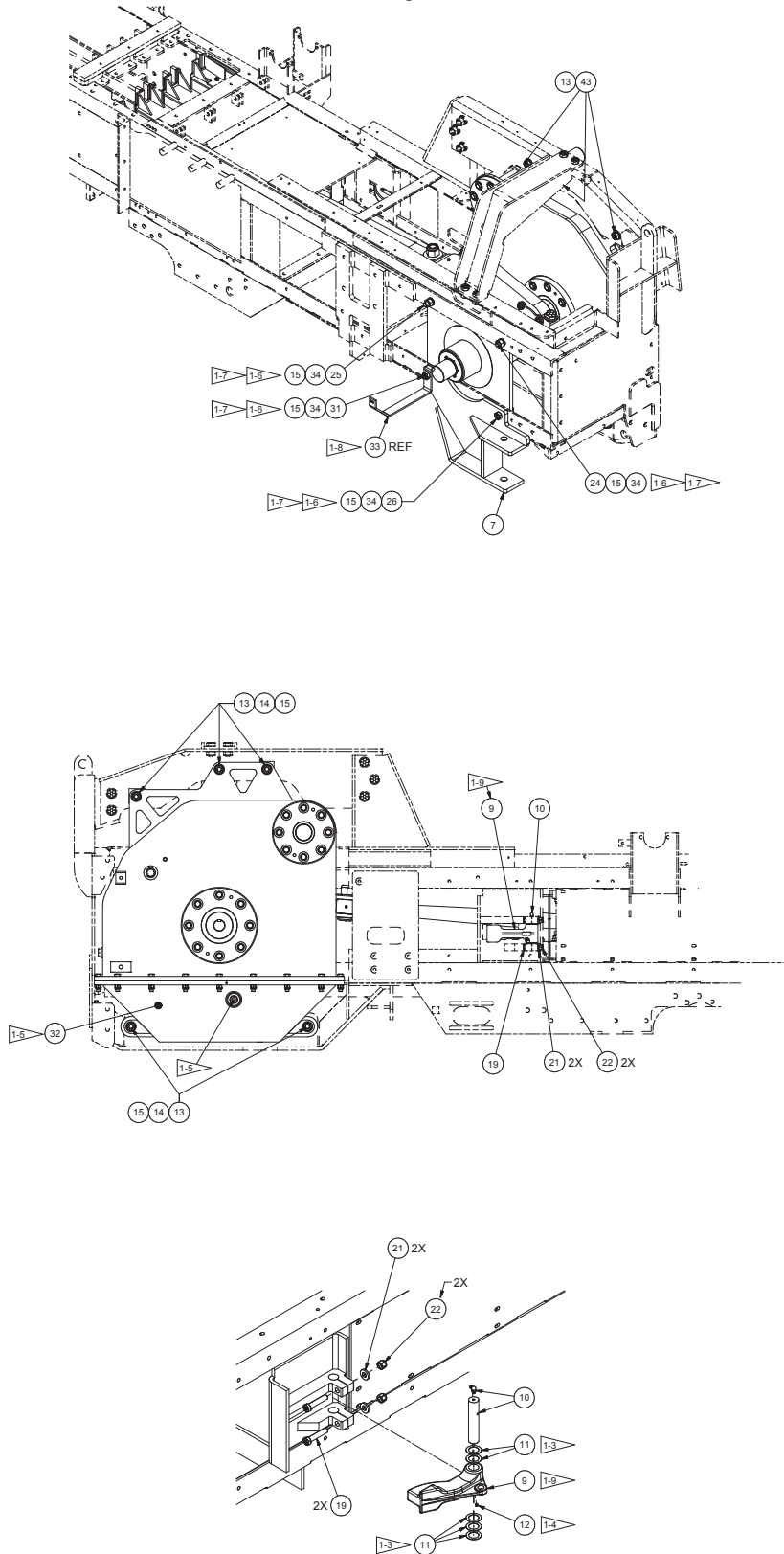
* See Separate Coverage

Rev BA



Gearbox Installation 14"X21"KTD (16" Frame)

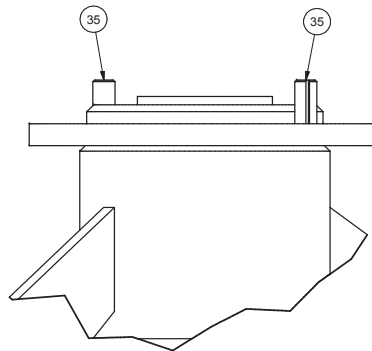
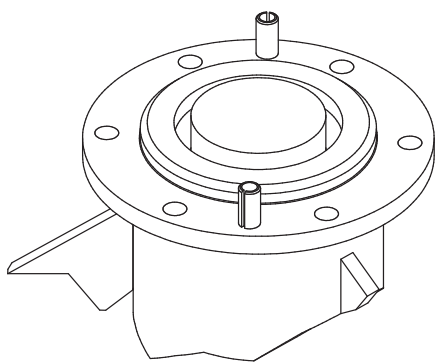
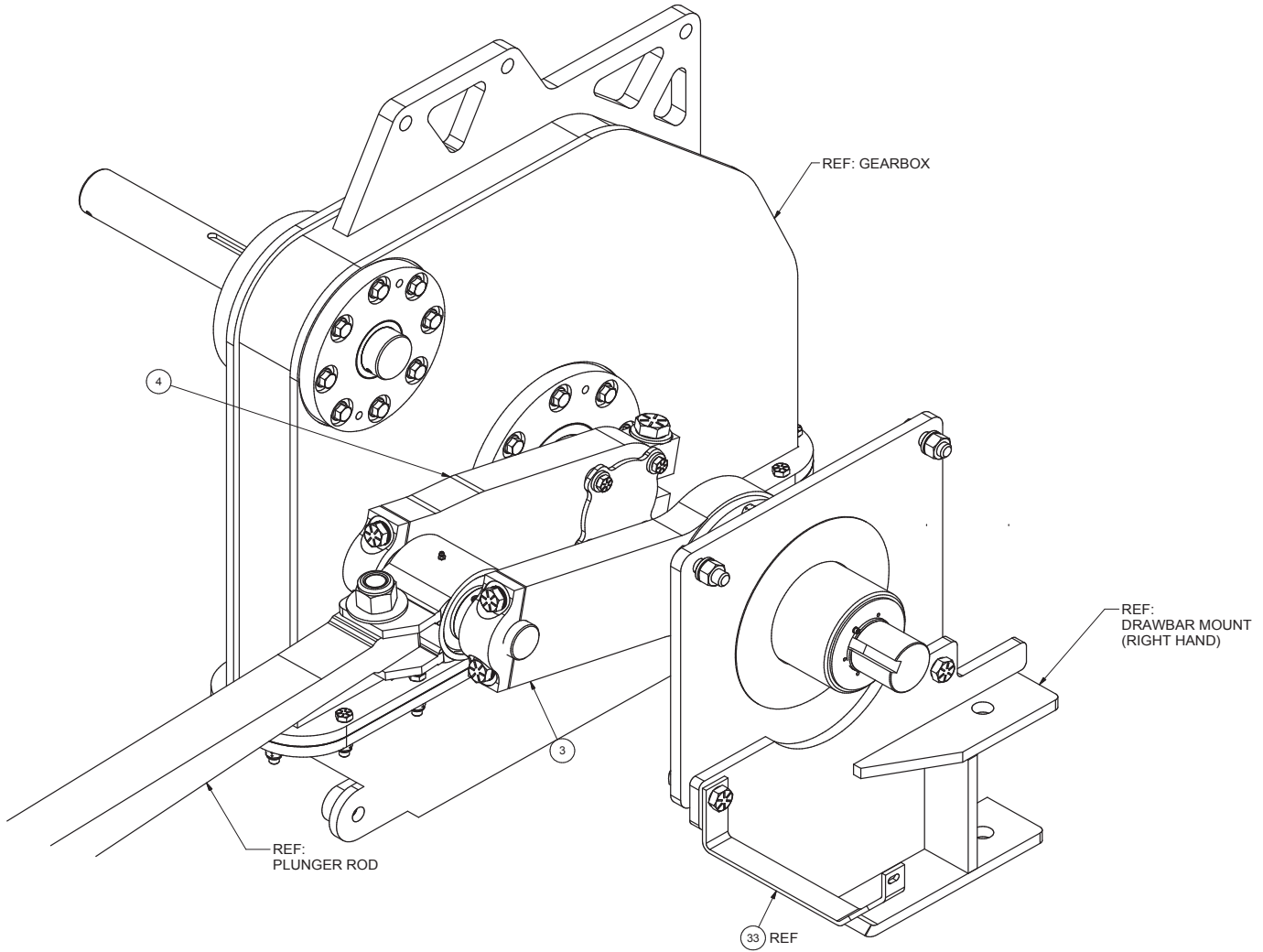
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PLUNGER STOP DOG

Gearbox Installation 14"X21"KTD (16" Frame)

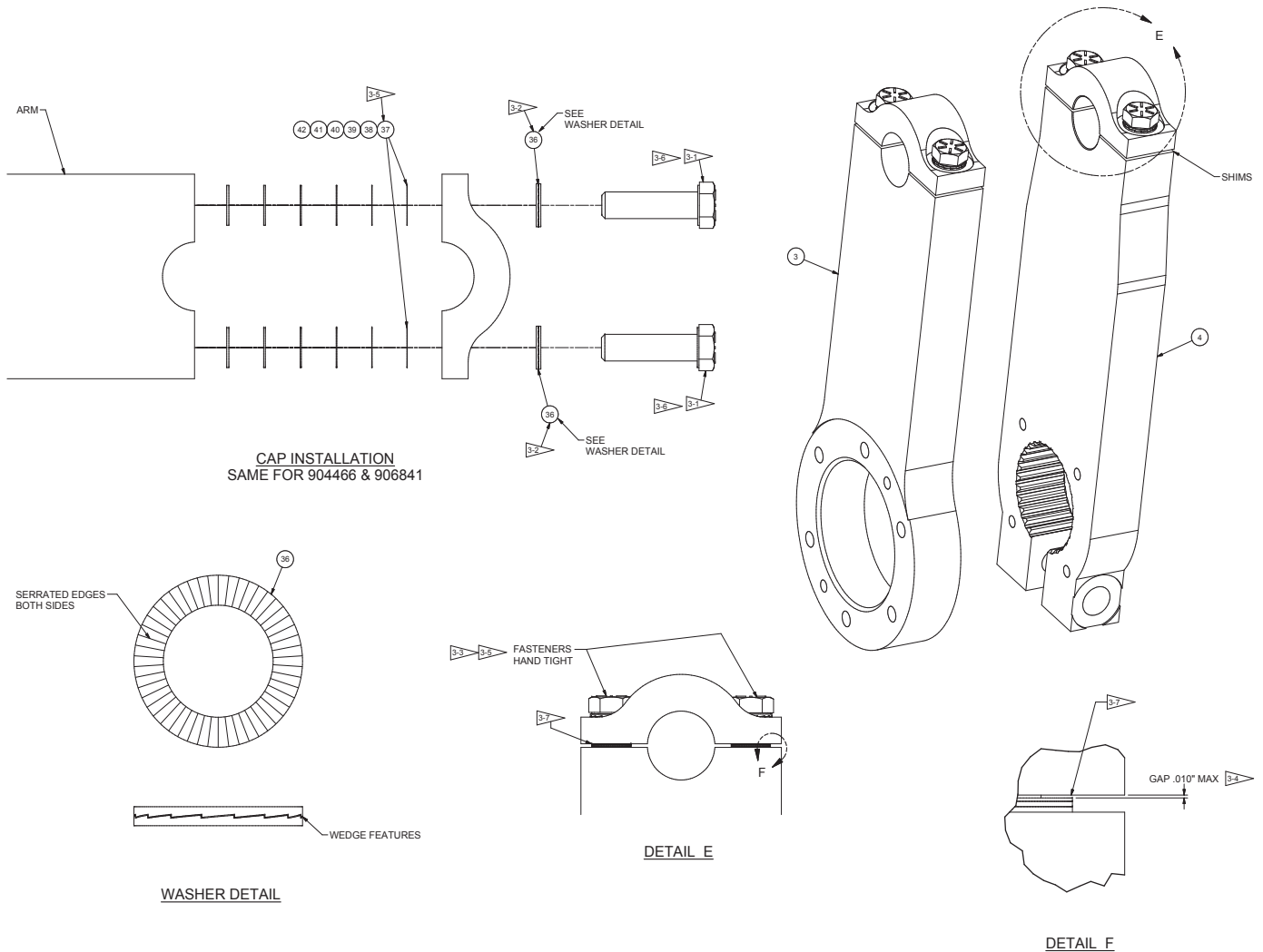
Page 4 of 5



DETAIL C
ROLL PIN INSTL
DRIVE ARM NOT SHOWN

Gearbox Installation 14"X21"KTD (16" Frame)

Page 5 of 5



INSTALLATION NOTES:

- 3-1 USE THE HARDWARE PROVIDED WITH THE ARM.
- 3-2 INSTALL ITEM 36 SERRATED EDGES FACING OUT AND WEDGE FEATURES MESHED.
- 3-3 PLACE CAP ON SHAFT, HAND TIGHTEN BOLTS, MEASURE GAP (BOTH SIDES) BETWEEN CAP & CRANK/DRIVE ARMS.
- 3-4 SHIM AS REQUIRED TO ACHIEVE A GAP 0.010" OR LESS WHEN BOLT IS HAND TIGHT, GAP DOES NOT NEED TO BE THE SAME ON BOTH SIDES.
- 3-5 RE-ASSEMBLE WITH SHIMS, HAND TIGHTEN BOLTS AND CONFIRM GAP (MAX 0.010") BEFORE TIGHTENING.
- 3-6 TORQUE BOLTS EVENLY TO 340 FT-LB. TORQUE BOTH BOLTS FIRST TO 100 FT-LB, THEN TO 200 FT-LB AND FINALLY TO 340 FT-LB.
- 3-7 INSPECT BOLTED CONNECTION TO CONFIRM GAP IS ELIMINATED (BOTH SIDES).

Gearbox

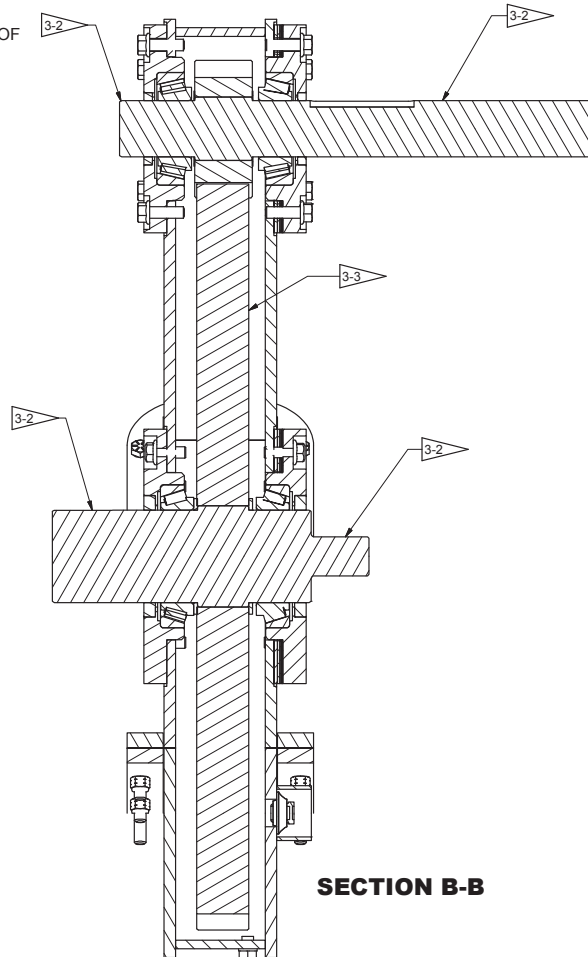
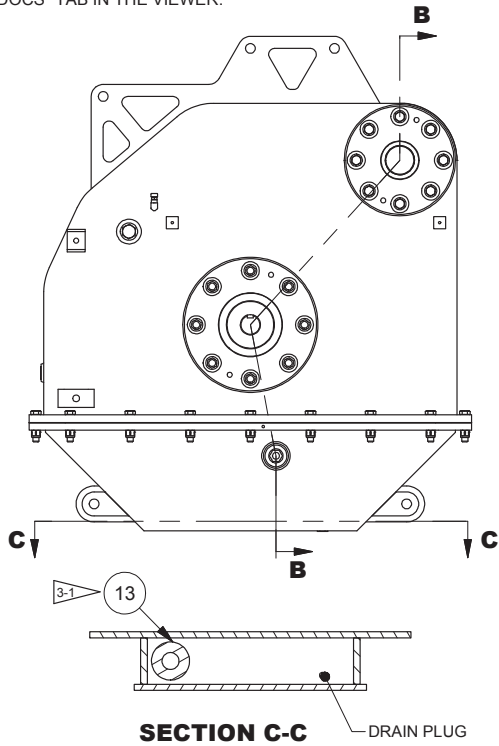
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NOTES:

- 3-1 PLACE MAGNET (R525293) IN A LOCATION INSIDE THE BOTTOM WELDMENT WHERE IT DOES NOT MAKE CONTACT WITH THE GEAR.
- 3-2 DO NOT PAINT EXPOSED SURFACE OF SHAFTS.
- 3-3 PRIOR TO INSTALLATION OF PINION SHAFT, MEASURE THE MOVEMENT OF THE GEAR TO CONFIRM IT MEETS THE FOLLOWING CRITERIA

END PLAY: .005" OR LESS
 RUNOUT : .015" OR LESS
 WOBBLE : .007" OR LESS AFTER
 END PLAY REMOVED

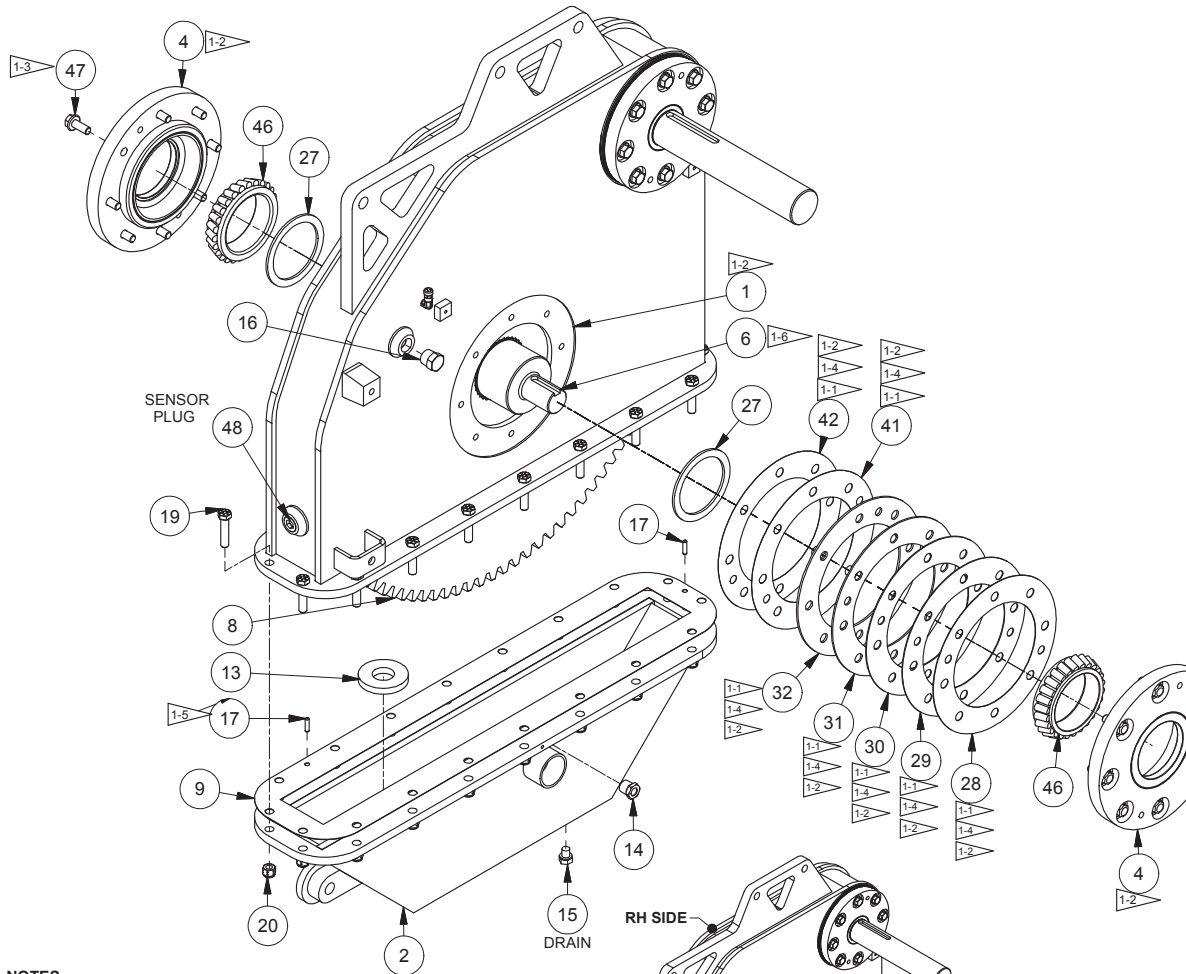
PROCEDURE TO MEASURE THESE VALUES ARE LOCATED UNDER THE "DOCS" TAB IN THE VIEWER.



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	906765		Gearbox Assy				
1	906774	1	. Top Weldment	28	908248	1	. Shim, Carrier
2	906781	1	. Bottom Weldment	29	908249	1	. Shim, Carrier
3	906772	2	. Carrier Assy	30	908250	1	. Shim, Carrier
4	906770	2	. Carrier Assy	31	908251	1	. Shim, Carrier
5	906767	1	. Shaft, Pinion	32	908252	1	. Shim, Carrier
6	906766	1	. Shaft, Gear	33	908253	1	. Shim, Carrier
7	906769	1	. Pinion	34	908254	1	. Shim, Carrier
8	906768	1	. Gear	35	908255	1	. Shim, Carrier
9	906792	1	. Gasket	36	908256	1	. Shim, Carrier
12	21420W	1	. Breather	37	908257	1	. Shim, Carrier
13	R525293	1	. Magnet, Ceramic	38	244260	1TB	. Sealant, Anaerobic
14	253208	1	. Glass, Sight	39	246037	1BTL	. Threadlock
15	256829	1	. Plug, Drain	40	FT00000171	1	. 1/8 Std Blk Pipe 90* Elbow
16	209918	1	. Fitting	41	909506	1	. Shim, Carrier
17	222703W	2	. Pin, Dowel	42	909542	1	. Shim, Carrier
18	SMS0000404	32	. Screw	43	909543	1	. Shim, Carrier
19	221574W	18	. Capscrew	44	909544	1	. Shim, Carrier
20	223587	18	. Nut, Esna	45	906795	2	. Cone, Roller Bearing
26	906788	2	. Shim, Pinion Shaft	46	1314686W	2	. Bearing Cone
27	908260	2	. Shim, Gear Shaft	47	2301597W	16	. Screw, Ser Flg

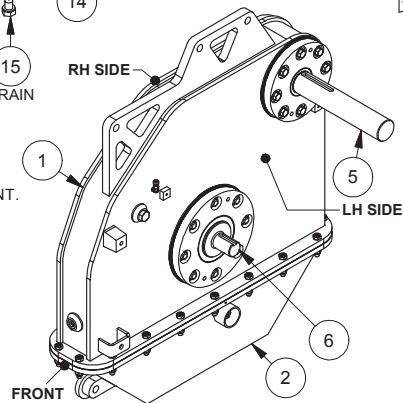
Gearbox

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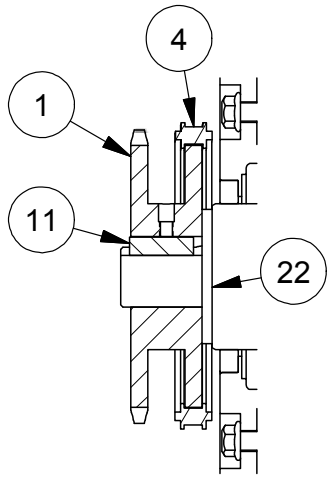
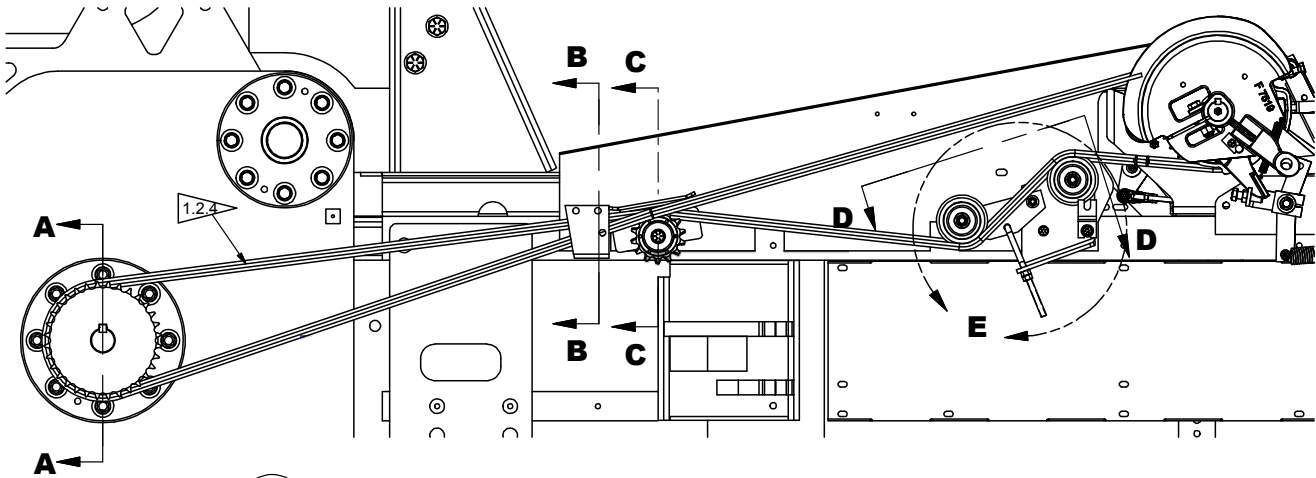
NOTES

- 1-1 SHIM THIS SIDE AS REQUIRED. SHIM UNTIL THERE IS THE LEAST AMOUNT OF ENDPLAY (.003" OR LESS) WITH THE SUPPLIED SHIMS (ITEM 28 THRU 37, 41 THRU 44) PRIOR TO APPLICATION OF ANY SEALANT.
- 1-2 USE SEALANT (ITEM 38) ON SURFACES BETWEEN ITEM 4 & SHIMS, ITEM 1 & SHIMS, ITEM 1 & 4, AND INDIVIDUAL SHIMS.
- 1-3 USE ITEM 39 ON THREADS OF ITEM 47.
- 1-4 POSITION CLEARANCE HOLE FOR JACKING BOLT IN LINE WITH JACKING TAP ON BEARING CARRIER.
- 1-5 PLACE MAGNET (R525293) IN A LOCATION INSIDE THE BOTTOM WELDMENT WHERE IT DOES NOT MAKE CONTACT WITH THE GEAR. REFER TO SHEET 3 FOR PREFERRED LOCATION.
- 1-6 DO NOT PAINT EXPOSED SURFACE OF SHAFTS.

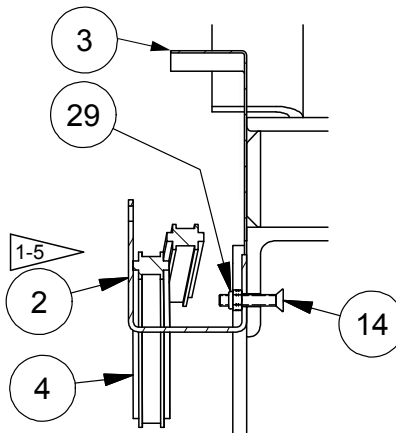


Knotter Drive Installation, Gearbox Baler

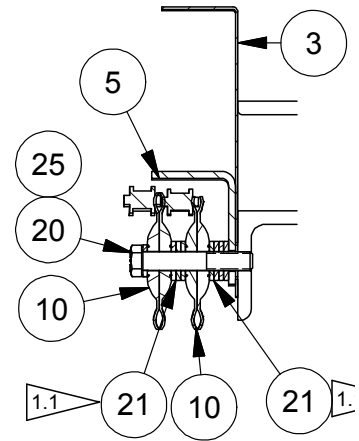
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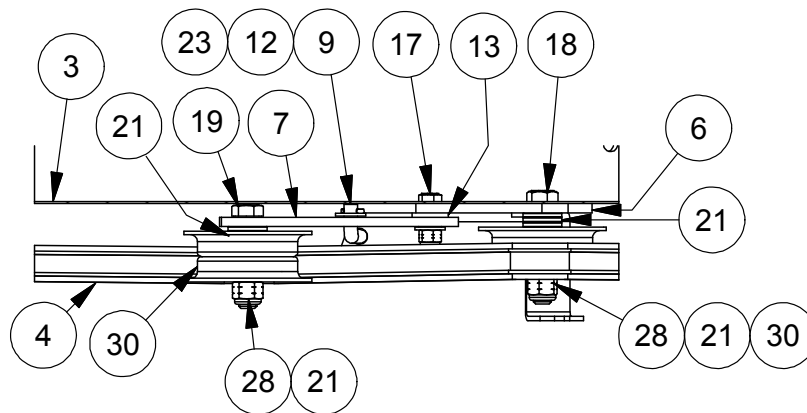
SECTION A-A



SECTION B-B



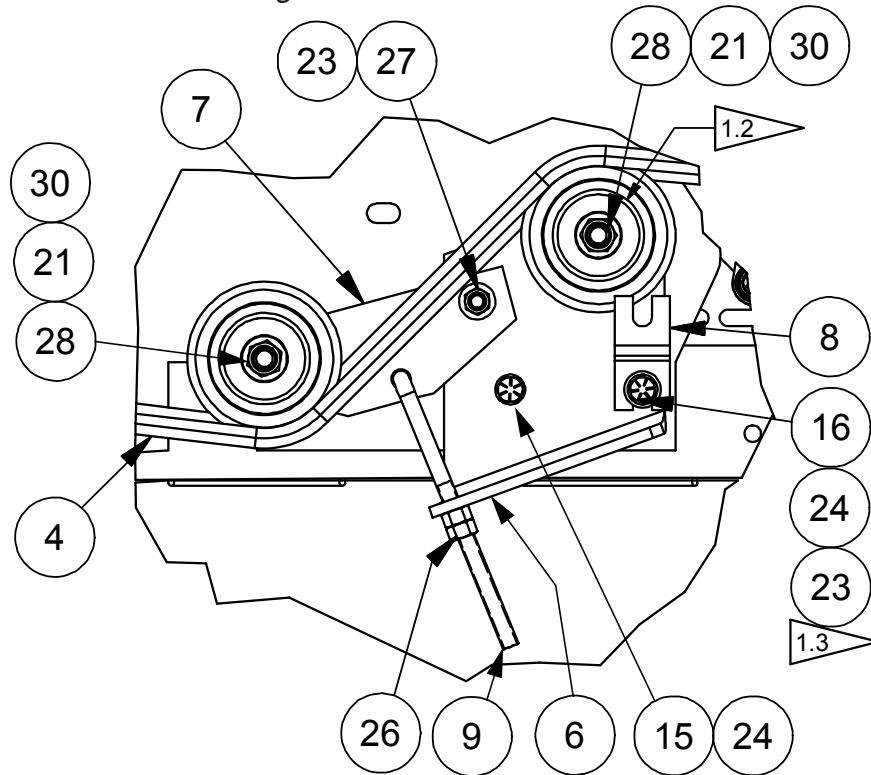
SECTION C-C



SECTION D-D

Knotter Drive Installation, Gearbox Baler

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DETAIL E

NOTES:

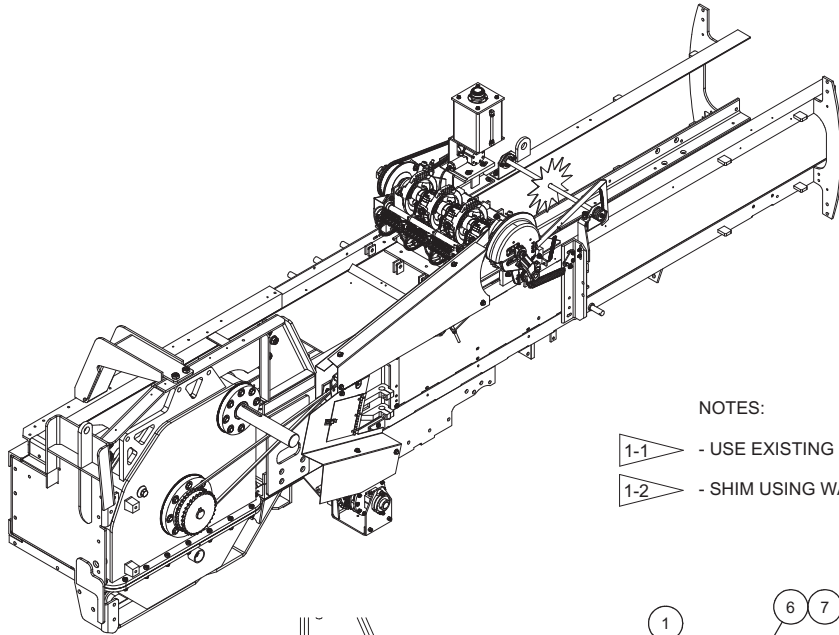
- 1.1 - IDLER SPROCKET ALIGNED TO FOLLOW PATH OF CHAIN. CHAIN SHOULD NOT RUB KNOTTER SHAFT SPROCKET WHEN OPERATING. USE AS REQUIRED BUT SUGGESTED QUANTITY IS SHOWN.
- 1.2 - CHAIN ASSEMBLY NOTES:
 - 1.2.1 - TAILLESS KNOTTER: USE (2) OFFSET DRIVE LINKS (F000000759) AND (1) CONNECTING LINK (F000000760) FROM F0000007055.
 - 1.2.2 - CONVENTIONAL KNOTTER: USE (1) CONNECTING LINK (F000000760) FROM F0000007055.
 - 1.2.3 - INSTALL CLIP FOR CONNECTING LINK FURTHEST FROM THE FRAME.
 - 1.2.4 - ROUTE THIS SIDE OF THE CHAIN TO THE INSIDE IDLER SPROCKET.
- 1.3 - (2) OF ITEM 23 IS NEEDED TO PREVENT BOLT FROM PUSHING ON THE CHAMBER LINER.
- 1.4 - PHOTO SHEET IS AVAILABLE FOR REFERENCE IN THE VIEWER. CHAIN BRACKET (906818) IS CALLED OUT AND PRE-MOUNTED DURING CHAMBER INSTALLATION.
- 1.5 - CHAIN BRACKET (906818) IS CALLED OUT AND PRE-MOUNTED DURING CHAMBER INSTALLATION

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
908293 Installation, Knotter Drive							
1	253836	1	. Sprocket	17	Y17C-0624	1	. Capscrew
2	906818	0	. Bracket, Center Chain Shield	18	R13811080	1	. Capscrew
3	906817	1	. Shield, Inner Chain	19	221576W	1	. Capscrew
4	F000007055	1	. Chain, Knotter Drive	20	R13801850	1	. Capscrew
5	F000008112	1	. Plate, Hold Down	21	221771W	16	. Hard Washer
6	F000008086	1	. Bracket	22	Y27E-28	1	. Hard Washer
7	F000008083	1	. Bracket, Chain Tightener	23	221767W	4	. Washer, Flat
8	906819	1	. Bracket, Chain Shield	24	R13812514	2	. Lockwasher
9	F000008084	1	. Rod, Chain Tightener	25	234665	1	. Lockwasher
10	F000007397	2	. Sprocket	26	221707W	2	. Hex Nut
11	ZZ00000459	1	. Key	27	237567	1	. Nut, Esna
12	00103384	1	. Cotter Pin	28	223587	2	. Nut, Esna
13	F000000440	1	. Ferrule	29	232939	1	. Nut, Esna
14	Y09G-0528	1	. Capscrew	30	F000000883	2	. Pulley, Idler
15	162572W	1	. Capscrew				
16	Y17C-0616	1	. Capscrew				

Rev E

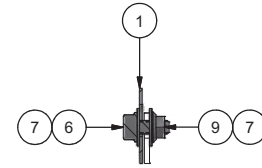
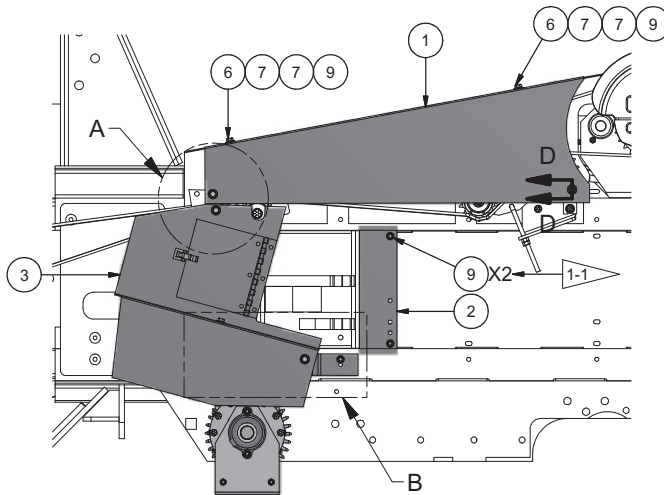
Shield Installation; LH

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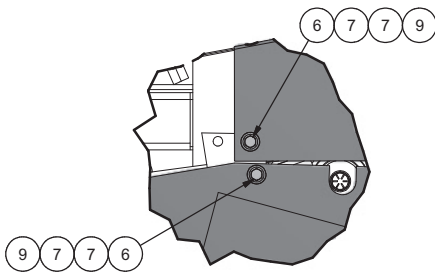


NOTES:

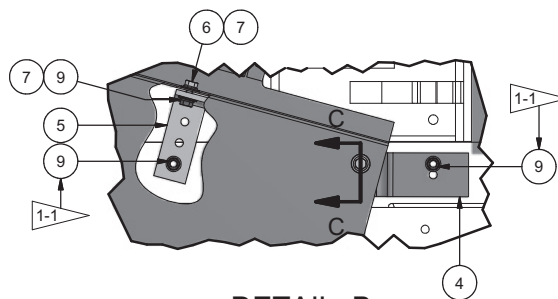
- 1-1 - USE EXISTING CAPSCREW.
- 1-2 - SHIM USING WASHER TO ALIGN SHIELD ITEM 3



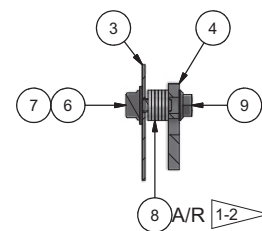
SECTION D-D



DETAIL A



DETAIL B



SECTION C-C

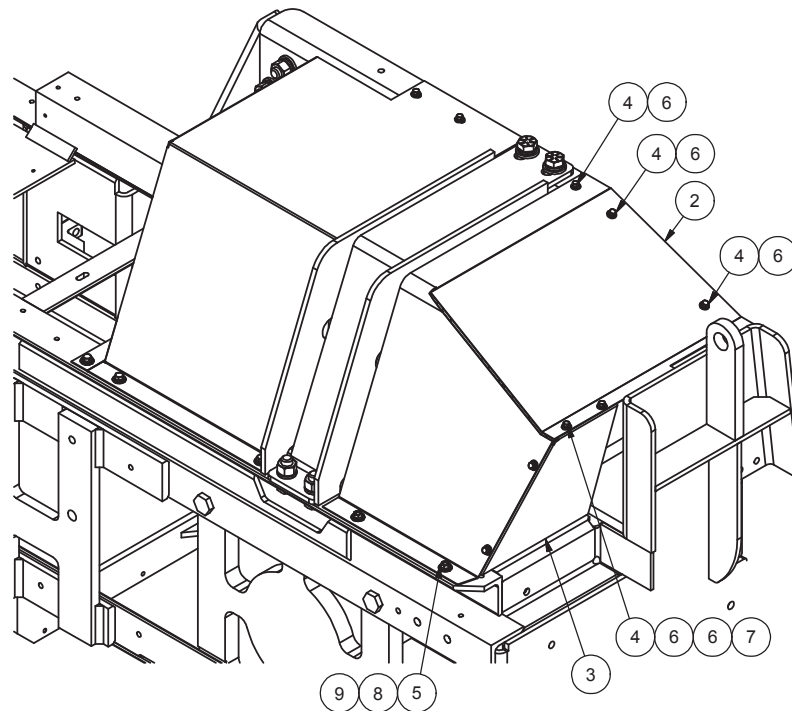
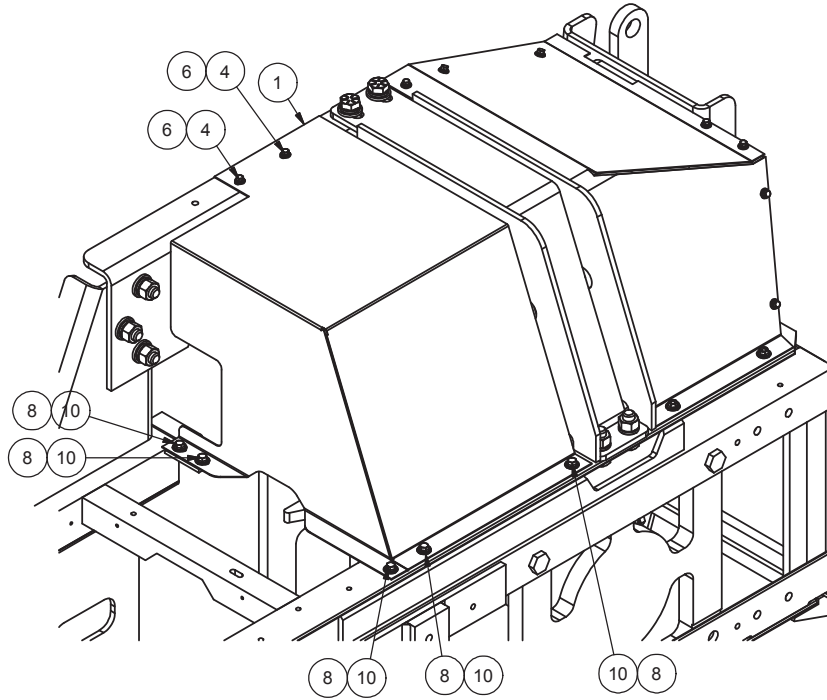
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
906829 Shield Installation, LH							
1	F000008155	1	. Plate, Shield	6	SMS0000184	7	. Bolt, Whiz
2	COV0008038	1	. Plate, Cover	7	223428	13	. Flat Washer
3	* SHD0008040	1	. Shield Assembly	8	R13802914	6	. Hard Washer
4	BKT0008024	1	. Rear Bracket-Pickup Dr Belt Shiel	9	191534W	11	. Nut
5	906830	1	. Bracket, Front				

* See Separate Coverage

Rev -

Shield Installation; Crank Arm

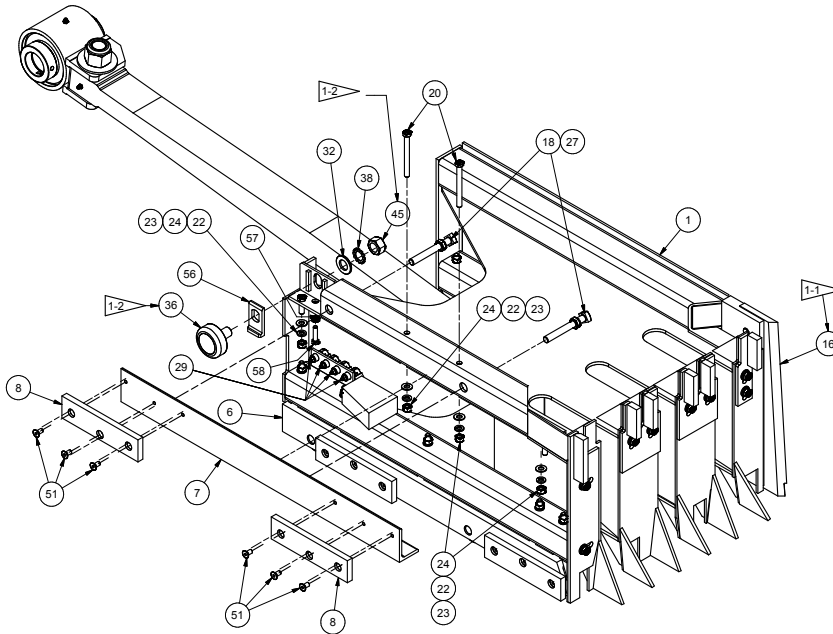
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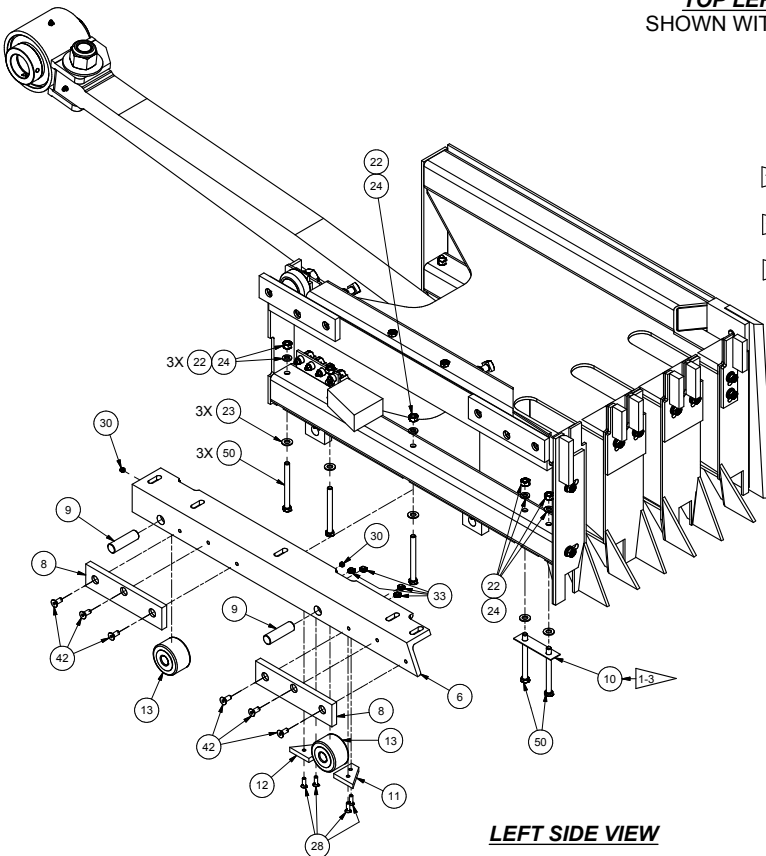
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
906833 Shield Installation							
1	909551	1	. Plate, Rear Shield	7	264150W	4	. Nut
2	909552	1	. Plate, Fnt Shield	8	223428	7	. Flat Washer
3	903911	1	. Plate, Fnt Shield	9	191534W	2	. Nut
4	399741W	9	. Screw, Ser Flg	10	SMS0000184	5	. Screw, Ser Flg
5	SMS0000177	2	. Screw, Ser Flg				

Plunger Assy, 16"x22"

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TOP LEFT SIDE VIEW
SHOWN WITHOUT CON ROD



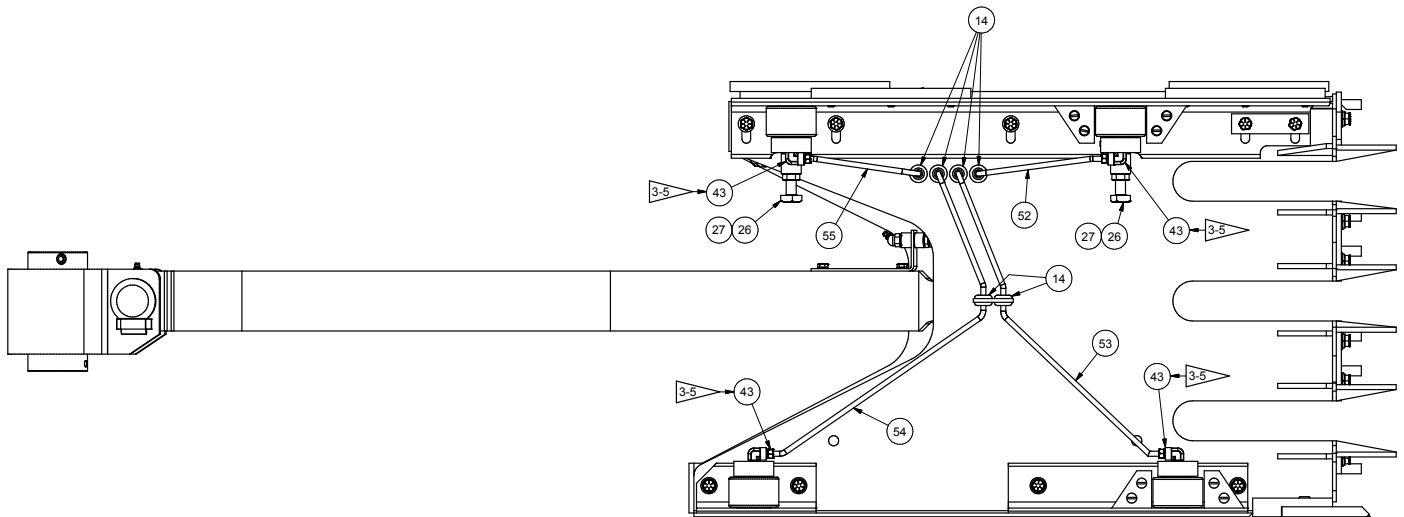
LEFT SIDE VIEW

NOTES:

- 1-1 PLUNGER KNIFE CANNOT EXTEND MORE THAN .002" PAST SIDE OF PLUNGER OR BE RECESSED MORE THAN .005" BELOW THE PLUNGER SIDE.
- 1-2 USE 145 - 150 FT-LB TORQUE WHEN INSTALLING BEARING. THREADED SHAFT OF BEARING IS EQUIVALENT TO A GRADE 2 FASTENER.
- 1-3 BEND EDGES OVER TO PREVENT CAPSCREW FROM TURNING WHILE ADJUSTING HARD SLIDES.

Plunger Assy, 16"x22"

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BOTTOM VIEW

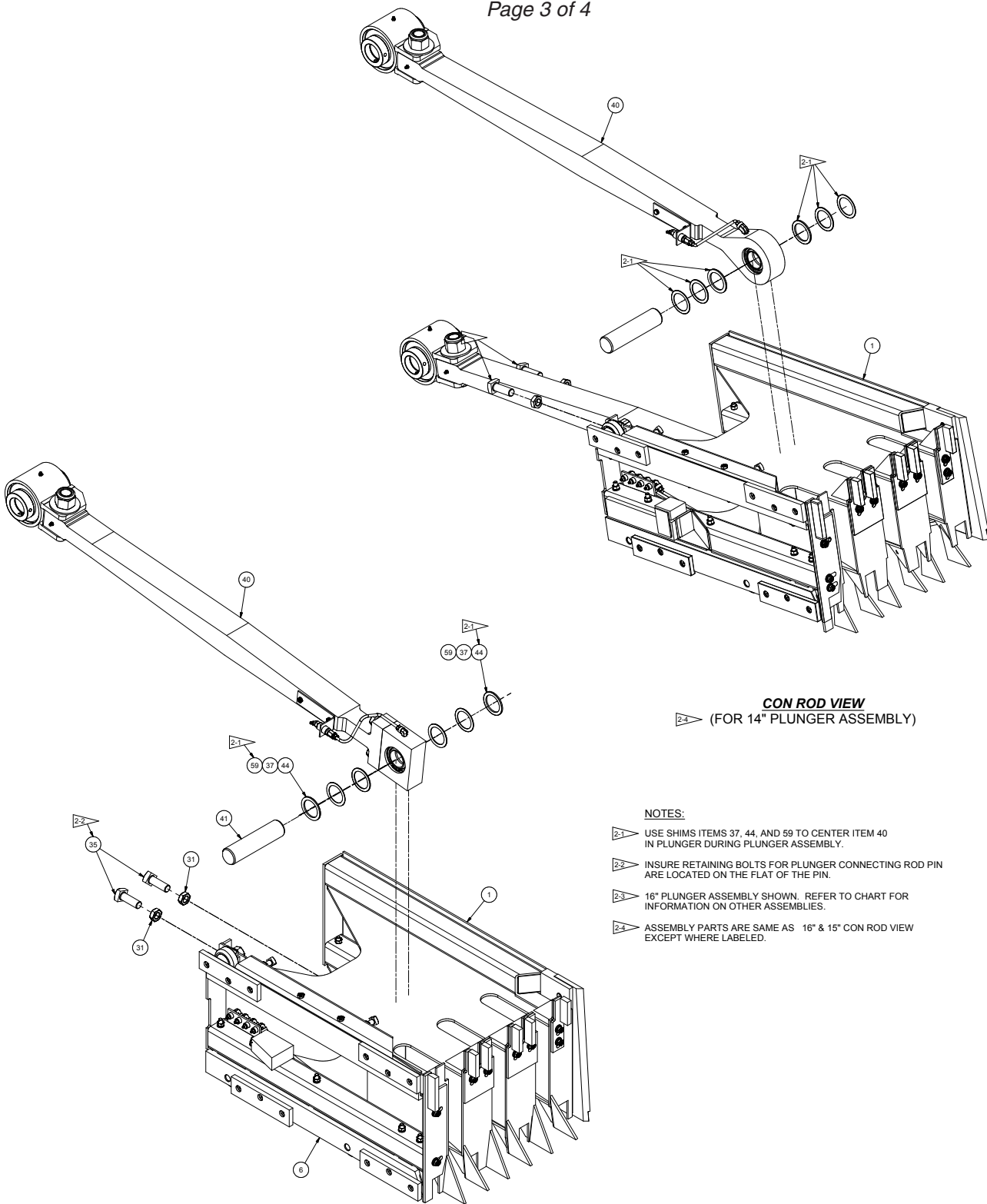
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
904473 Plunger Assy, 16"x22"							
1	905083	1	. Plunger	31	247008	2	. Jam Nut
2	F000008056	1	. Pad, Adjusting, Right	32	R13811457	1	. Flat Washer
3	F000008057	2	. Pad, Adjusting, Center	33	4196303	8	. Locknut
4	SHM0034535	A/R	. Shim, Knife, Plunger (Not Shown)	35	SQS7502250	2	. Set Screw
5	SHM0034534	A/R	. Shim, Knife, Plunger (Not Shown)	36	BRG0001636	1	. Top Roller Bearing
6	903882	1	. Mount, LH Btm Roller & Slide	37	ZZ00000203	A/R	. Mach Bushing
7	905084	1	. Mounting Rail, Hard Slide, Top LH	38	WES0007500	1	. Ext. Star Washer
8	F000001537	4	. Plunger Hard Slide	39	PLG0007839	1	. Mounting Weldment, RH Rear
9	PIN0007831	4	. Pin, Roll	40	* 904474	1	. Connecting Rod Assy, Gearbox
10	LOK0005857	1	. Plate, Lock	41	F000007914	1	. Pin
11	F000000986	2	. Rear Wiper	42	R13807736	6	. Capscrew
12	F000000774	2	. Front Wiper	43	F000001441	8	. Fitting
13	F000000775	4	. Bearing, Roller	44	ZZ00000200	A/R	. Mach Bushing
14	F000007735	6	. Grommet, Rubber	45	221717W	1	. Hex Nut
15	PLG0007840	1	. Roller Mount, RH Front	50	R13811047	5	. Capscrew
16	KNF0011157	1	. Plunger Knife	51	Y09G-0510	6	. Capscrew
17	F000000227	3	. Plunger Knife Bolt-Flat Hd Soc	52	904564	1	. Tube
18	F000000073	2	. Square Head Set Screw	53	904565	1	. Tube
19	F000008058	1	. Pad, Adjusting, Left	54	904566	1	. Tube
20	R13811046	6	. Capscrew	55	904567	1	. Tube
21	Y17C-0616	8	. Capscrew	56	905095	1	. Angle, Mounting
22	234135	21	. Lockwasher	57	NCJ0000313	1	. Hex Jam Nut
23	R13802623	21	. Flat Washer	58	231661	1	. Capscrew
24	221707W	12	. Hex Nut	59	ZZ00000202	A/R	. Bushing
26	SQS5002500	2	. Set Screw				
27	234218	4	. Jam Nut				
28	00113991	8	. Machine Screw				
29	00191758	4	. Fitting, Lube				
30	STS3125313	4	. Socket Set Screw				

* See Separate Coverage

Rev BD

Plunger Assy, 16"x22"

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CON ROD VIEW
 (FOR 14" PLUNGER ASSEMBLY)

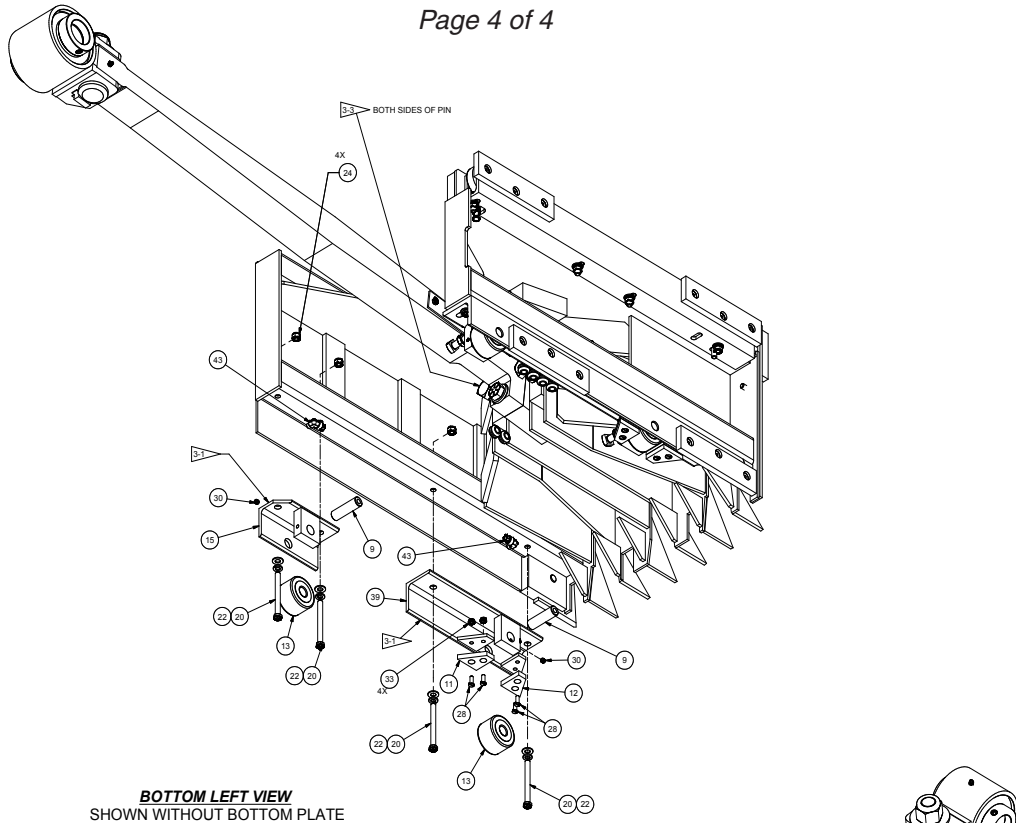
NOTES:

- 2-1 USE SHIMS ITEMS 37, 44, AND 59 TO CENTER ITEM 40 IN PLUNGER DURING PLUNGER ASSEMBLY.
- 2-2 INSURE RETAINING BOLTS FOR PLUNGER CONNECTING ROD PIN ARE LOCATED ON THE FLAT OF THE PIN.
- 2-3 16" PLUNGER ASSEMBLY SHOWN. REFER TO CHART FOR INFORMATION ON OTHER ASSEMBLIES.
- 2-4 ASSEMBLY PARTS ARE SAME AS 16" & 15" CON ROD VIEW EXCEPT WHERE LABELED.

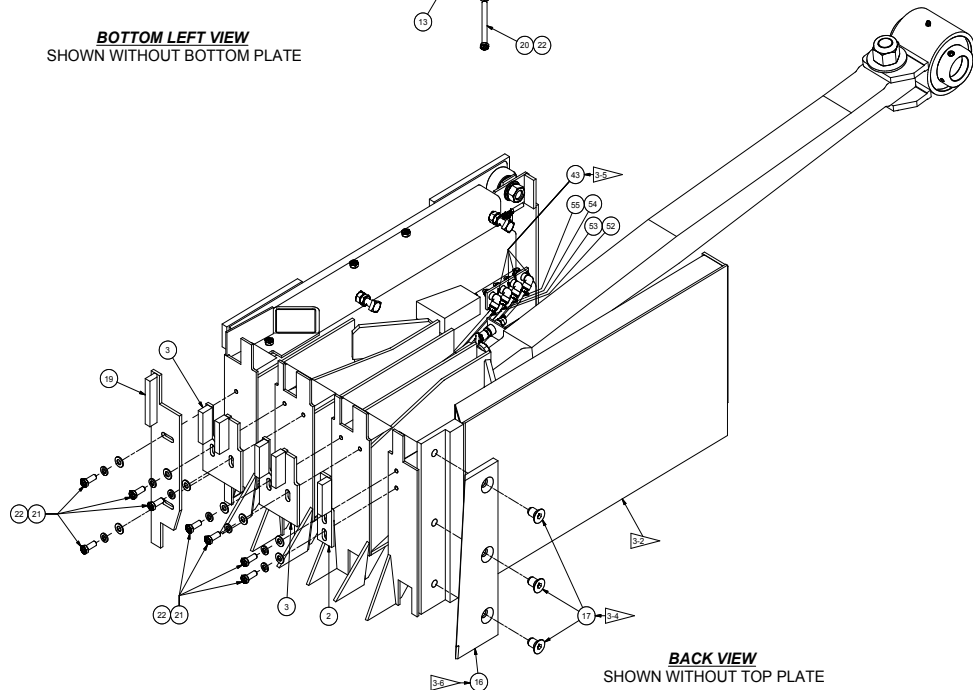
CON ROD VIEW
 (FOR 16" & 15" PLUNGER ASSEMBLIES)

Plunger Assy, 16"x22"

Page 4 of 4



BOTTOM LEFT VIEW
SHOWN WITHOUT BOTTOM PLATE



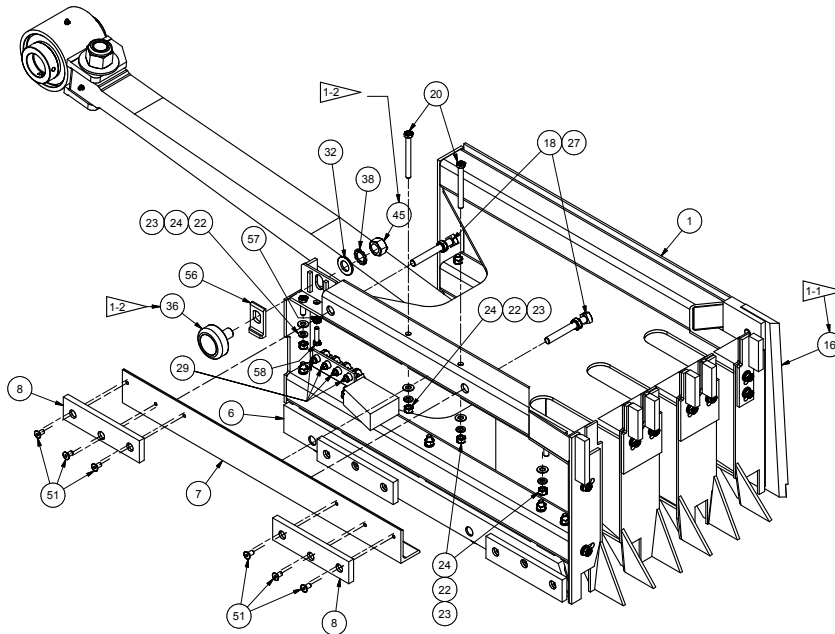
BACK VIEW
SHOWN WITHOUT TOP PLATE

NOTES:

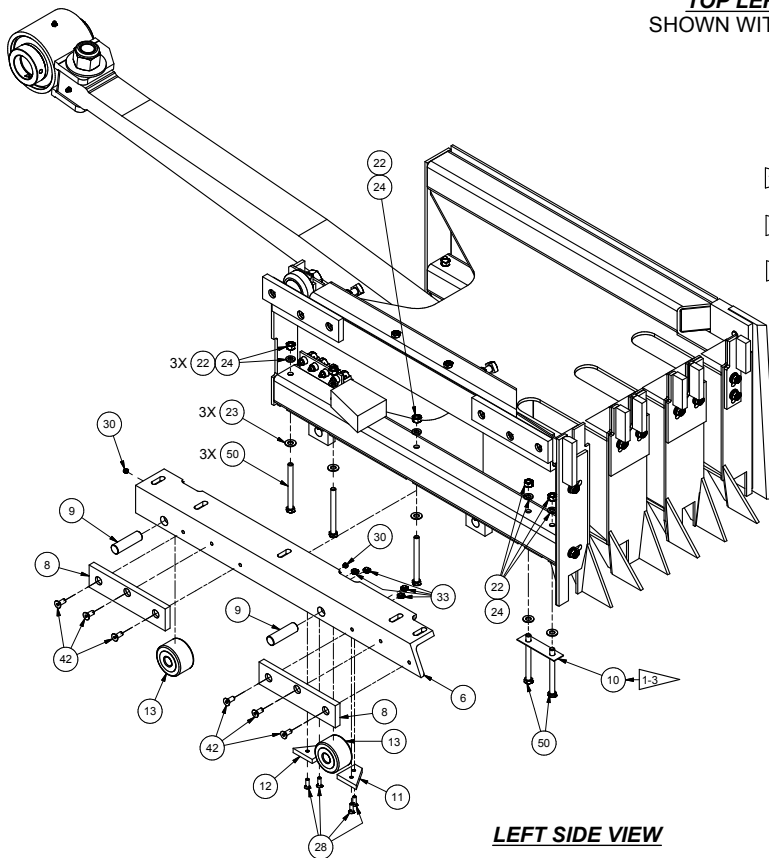
- ▶ USE ITEMS 4 & 5 AS REQUIRED TO MAKE ALL ROLLERS CONTACT AND ROLL ON ASSEMBLY STAND. ROLLERS SHOULD BE FLAT WITHIN .003" WITH THE ASSEMBLY STAND.
- ▶ RIGHT SIDE OF PLUNGER ASSEMBLY SHOULD BE PERPENDICULAR WITHIN +/- 0.015" TO ASSEMBLY STAND.
- ▶ INSURE RETAINING BOLTS FOR PLUNGER CONNECTING ROD PIN ARE LOCATED ON THE FLAT OF THE PIN.
- ▶ TORQUE TO 130 FT LBS
- ▶ USE LOCTITE #242 ON FITTING THREADS
- ▶ PLUNGER KNIFE CANNOT EXTEND MORE THAN .002" PAST SIDE OF PLUNGER OR BE RECESSED MORE THAN .005" BELOW THE PLUNGER SIDE

Plunger Assy, Kitted for 15"x22"

Page 1 of 4



TOP LEFT SIDE VIEW
SHOWN WITHOUT CON ROD



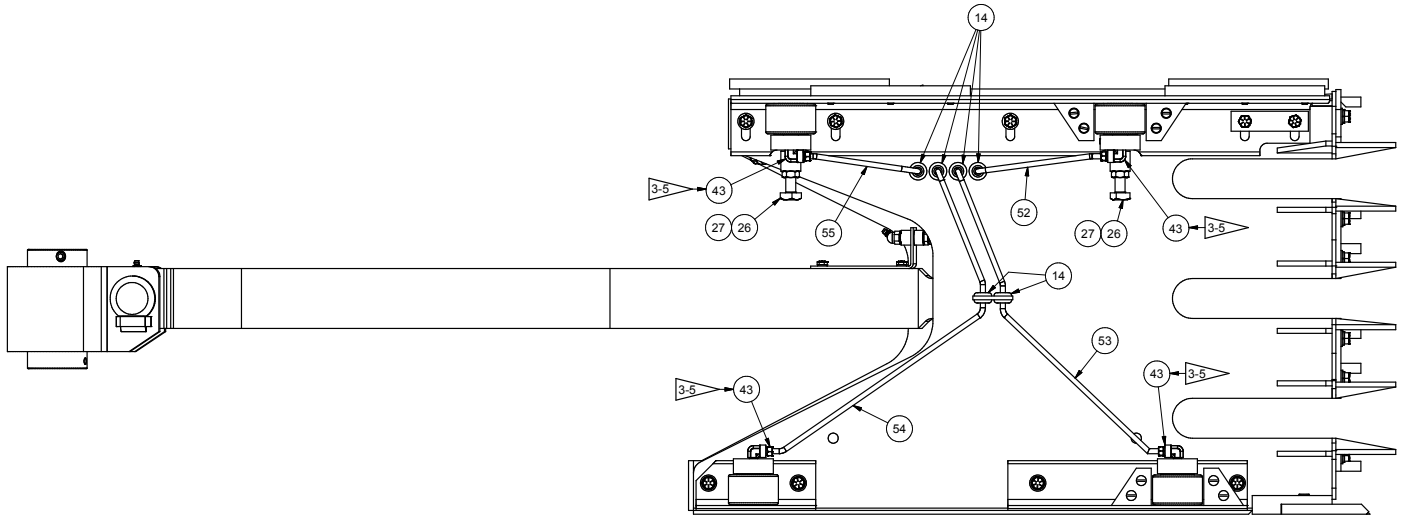
LEFT SIDE VIEW

NOTES:

- 1-1 PLUNGER KNIFE CANNOT EXTEND MORE THAN .002" PAST SIDE OF PLUNGER OR BE RECESSED MORE THAN .005" BELOW THE PLUNGER SIDE.
- 1-2 USE 145 - 150 FT-LB TORQUE WHEN INSTALLING BEARING. THREADED SHAFT OF BEARING IS EQUIVALENT TO A GRADE 2 FASTENER.
- 1-3 BEND EDGES OVER TO PREVENT CAPSCREW FROM TURNING WHILE ADJUSTING HARD SLIDES.

Plunger Assy, Kitted for 15"x22"

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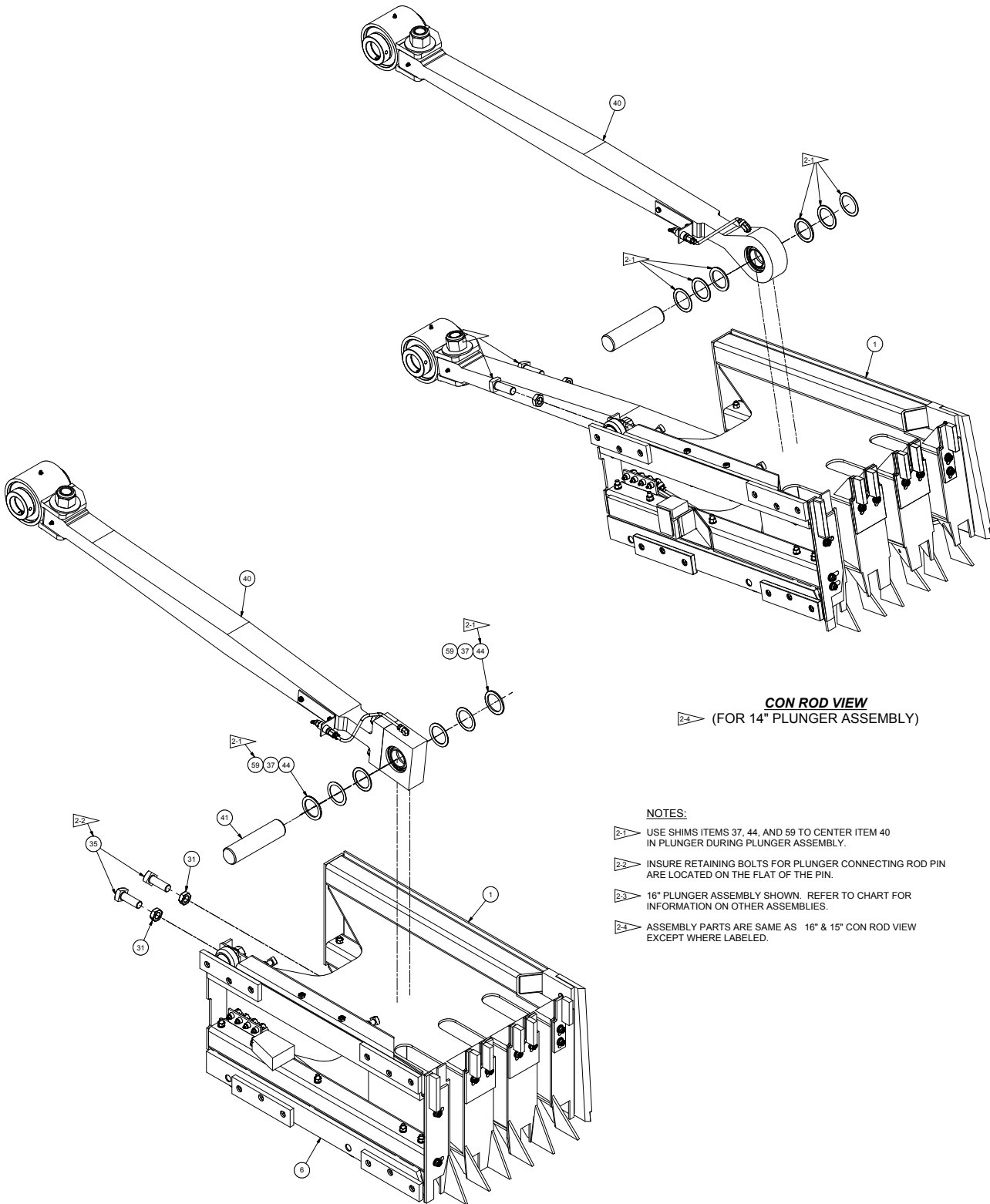


BOTTOM VIEW

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
906224 Plunger Assy, Kitted for 15"x22"							
1	906333	1	. Plunger	31	247008	2	. Jam Nut
2	F000008056	1	. Pad, Adjusting, Right	32	R13811457	1	. Flat Washer
3	F000008057	2	. Pad, Adjusting, Center	33	4196303	8	. Locknut
4	SHM0034535	A/R	. Shim, Knife, Plunger (Not Shown)	35	SQS7502250	2	. Set Screw
5	SHM0034534	A/R	. Shim, Knife, Plunger (Not Shown)	36	BRG0001636	1	. Top Roller Bearing
6	903882	1	. Mount, LH Btm Roller & Slide	37	ZZ00000203	A/R	. Mach Bushing
7	905084	1	. Mounting Rail, Hard Slide, Top LH	38	WES0007500	1	. Ext. Star Washer
8	F000001537	4	. Plunger Hard Slide	39	PLG0007839	1	. Mounting Weldment, RH Rear
9	PIN0007831	4	. Pin, Roll	40	* 904474	1	. Connecting Rod Assy, Gearbox
10	LOK0005857	1	. Plate, Lock	41	F000007914	1	. Pin
11	F000000986	2	. Rear Wiper	42	R13807736	6	. Capscrew
12	F000000774	2	. Front Wiper	43	F000001441	8	. Fitting
13	F000000775	4	. Bearing, Roller	44	ZZ00000200	A/R	. Mach Bushing
14	F000007735	6	. Grommet, Rubber	45	221717W	1	. Hex Nut
15	PLG0007840	1	. Roller Mount, RH Front	50	R13811047	5	. Capscrew
16	KNF1115715	1	. Plunger Knife	51	Y09G-0510	6	. Capscrew
17	F000000227	3	. Plunger Knife Bolt-Flat Hd Soc	52	904564	1	. Tube
18	F000000073	2	. Square Head Set Screw	53	904565	1	. Tube
19	PLG0018049	1	. Pad, Adjusting, Left	54	904566	1	. Tube
20	R13811046	6	. Capscrew	55	904567	1	. Tube
21	Y17C-0616	8	. Capscrew	56	905095	1	. Angle, Mounting
22	234135	21	. Lockwasher	57	NCJ0000313	1	. Hex Jam Nut
23	R13802623	21	. Flat Washer	58	231661	1	. Capscrew
24	221707W	12	. Hex Nut	59	ZZ00000202	A/R	. Bushing
26	SQS5002500	2	. Set Screw				
27	234218	4	. Jam Nut				
28	00113991	8	. Machine Screw				
29	00191758	4	. Fitting, Lube				
30	STS3125313	4	. Socket Set Screw				
				* See Separate Coverage			
				Rev -D			

Plunger Assy, Kitted for 15"x22"

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CON ROD VIEW
 (FOR 14" PLUNGER ASSEMBLY)

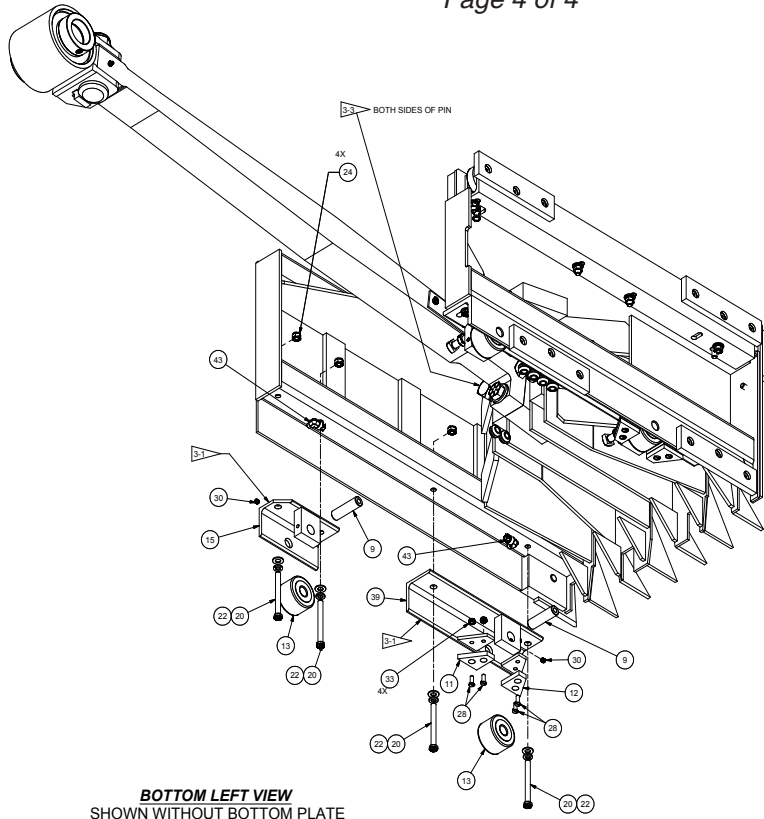
NOTES:

- 2-1 USE SHIMS ITEMS 37, 44, AND 59 TO CENTER ITEM 40 IN PLUNGER DURING PLUNGER ASSEMBLY.
- 2-2 INSURE RETAINING BOLTS FOR PLUNGER CONNECTING ROD PIN ARE LOCATED ON THE FLAT OF THE PIN.
- 2-3 16" PLUNGER ASSEMBLY SHOWN. REFER TO CHART FOR INFORMATION ON OTHER ASSEMBLIES.
- 2-4 ASSEMBLY PARTS ARE SAME AS 16" & 15" CON ROD VIEW EXCEPT WHERE LABELED.

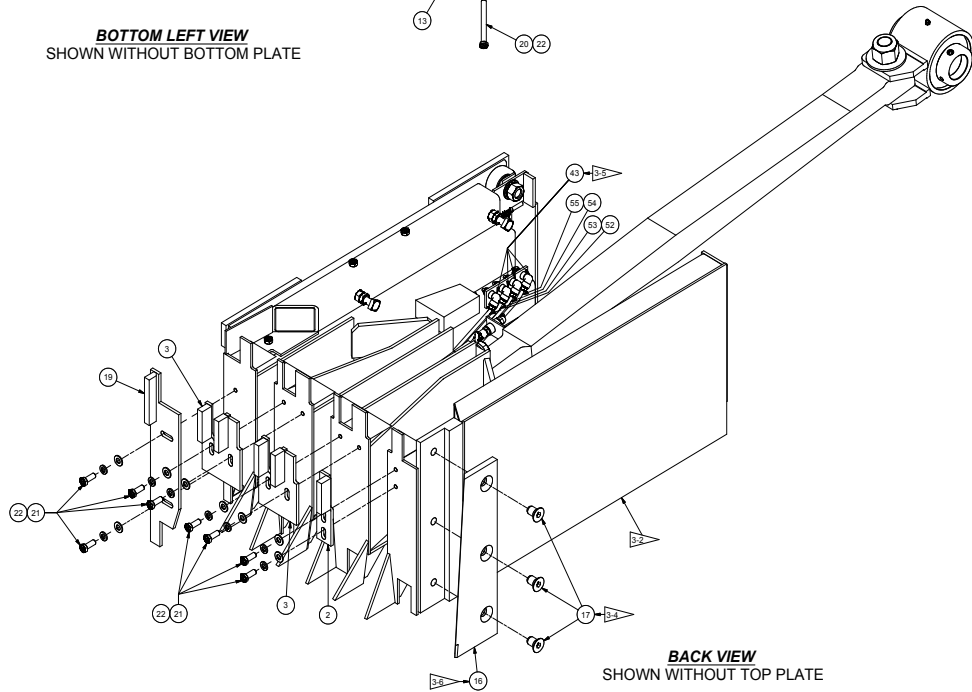
CON ROD VIEW
 (FOR 16" & 15" PLUNGER ASSEMBLIES)

Plunger Assy, Kitted for 15"x22"

Page 4 of 4



BOTTOM LEFT VIEW
SHOWN WITHOUT BOTTOM PLATE

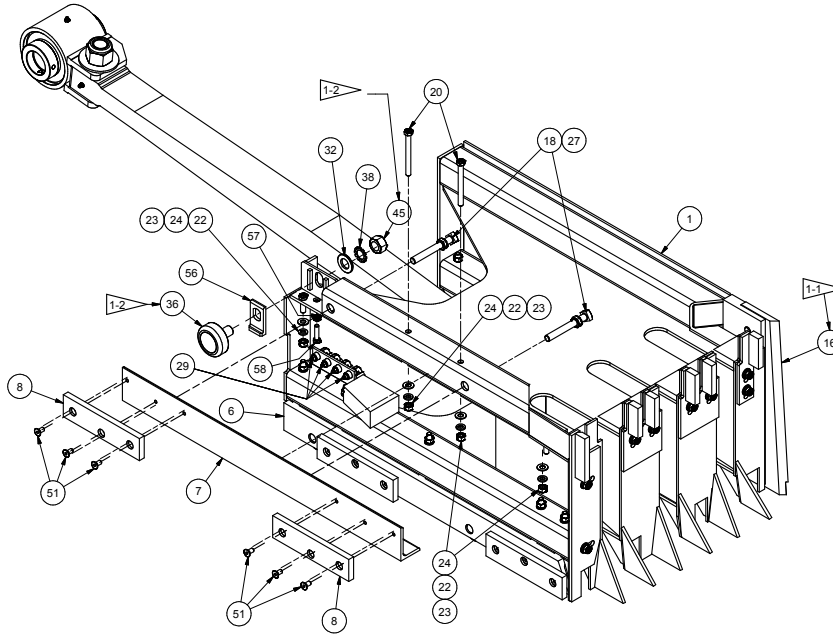


BACK VIEW
SHOWN WITHOUT TOP PLATE

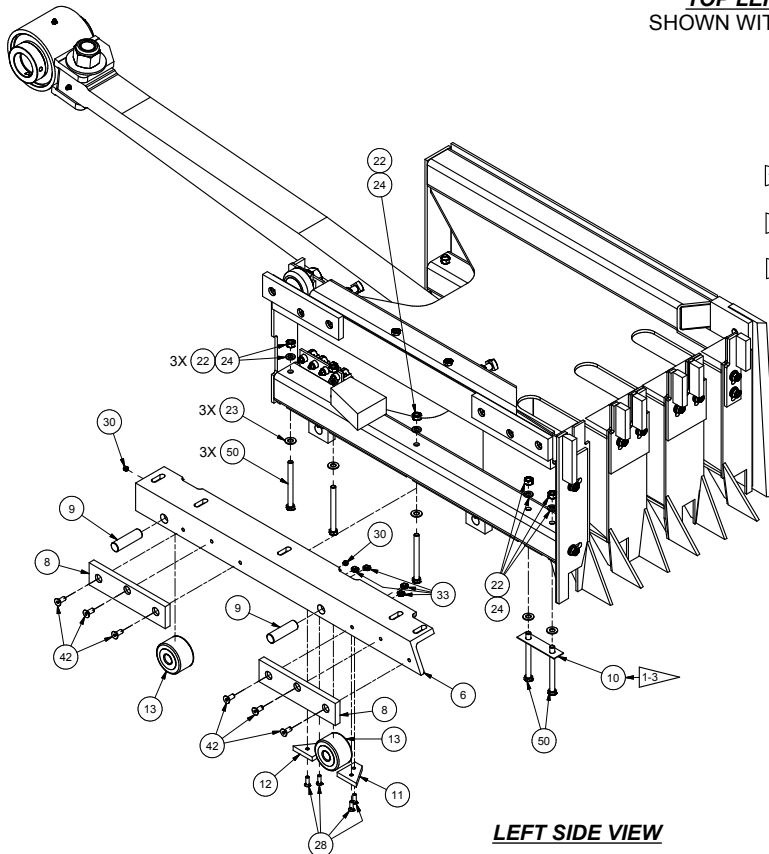
- NOTES:**
- ▶ 21 USE ITEMS 4 & 5 AS REQUIRED TO MAKE ALL ROLLERS CONTACT AND ROLL ON ASSEMBLY STAND. ROLLERS SHOULD BE FLAT WITHIN .003" WITH THE ASSEMBLY STAND.
 - ▶ 22 RIGHT SIDE OF PLUNGER ASSEMBLY SHOULD BE PERPENDICULAR WITHIN +/- 0.015° TO ASSEMBLY STAND.
 - ▶ 23 INSURE RETAINING BOLTS FOR PLUNGER CONNECTING ROD PIN ARE LOCATED ON THE FLAT OF THE PIN.
 - ▶ 24 TORQUE TO 130 FT LBS
 - ▶ 25 USE LOCTITE #242 ON FITTING THREADS
 - ▶ 26 PLUNGER KNIFE CANNOT EXTEND MORE THAN .002" PAST SIDE OF PLUNGER OR BE RECESSED MORE THAN .005" BELOW THE PLUNGER SIDE

Plunger Assy, Kitted for 14"x22"

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TOP LEFT SIDE VIEW
SHOWN WITHOUT CON ROD



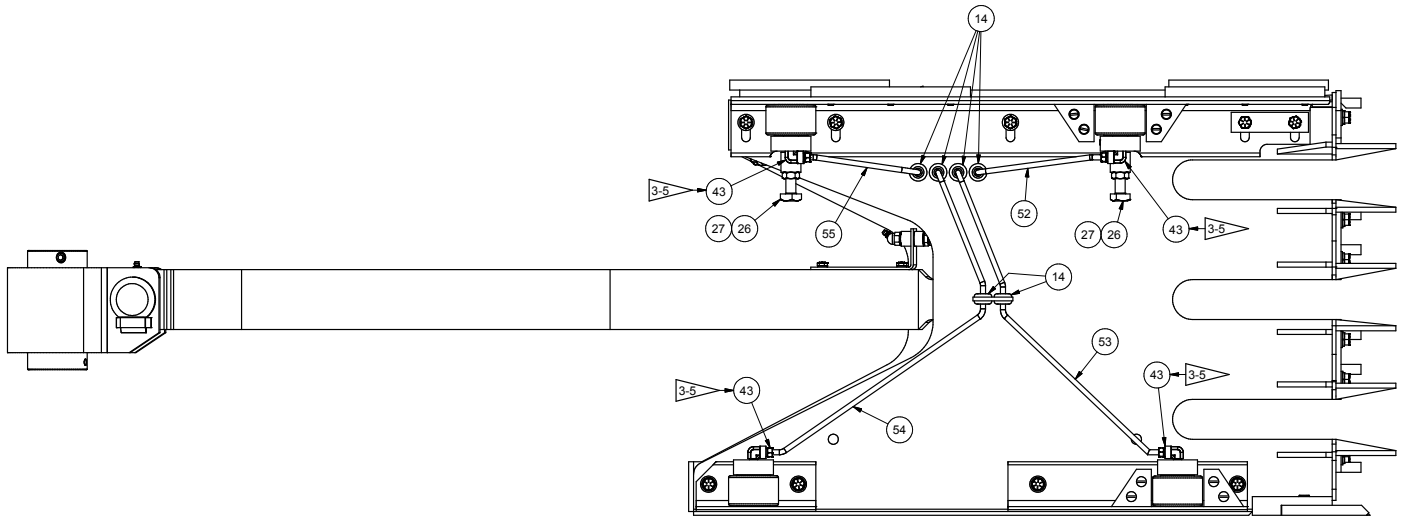
LEFT SIDE VIEW

NOTES:

- 1-1 PLUNGER KNIFE CANNOT EXTEND MORE THAN .002" PAST SIDE OF PLUNGER OR BE RECESSED MORE THAN .005" BELOW THE PLUNGER SIDE.
- 1-2 USE 145 - 150 FT-LB TORQUE WHEN INSTALLING BEARING. THREADED SHAFT OF BEARING IS EQUIVALENT TO A GRADE 2 FASTENER.
- 1-3 BEND EDGES OVER TO PREVENT CAPSCREW FROM TURNING WHILE ADJUSTING HARD SLIDES.

Plunger Assy, Kitted for 14"x22"

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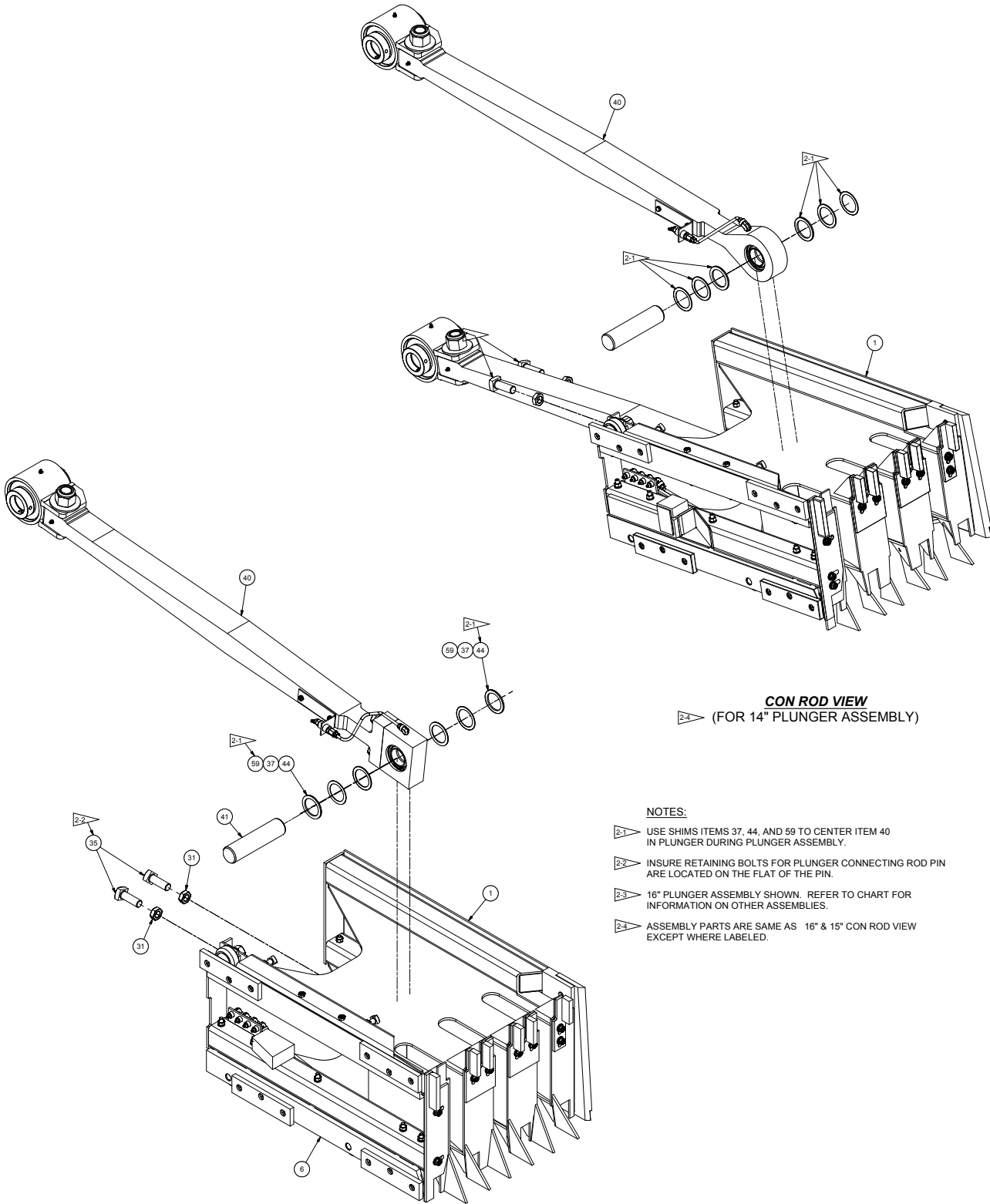


BOTTOM VIEW

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
906225 Plunger Assy, Kitted for 14"x22"							
1	906228	1	. Plunger	31	247008	2	. Jam Nut
2	F000008056	1	. Pad, Adjusting, Right	32	R13811457	1	. Flat Washer
3	F000008057	2	. Pad, Adjusting, Center	33	4196303	8	. Locknut
4	SHM0034535	A/R	. Shim, Knife, Plunger (Not Shown)	35	SQS7502250	2	. Set Screw
5	SHM0034534	A/R	. Shim, Knife, Plunger (Not Shown)	36	BRG0001636	1	. Top Roller Bearing
6	903882	1	. Mount, LH Btm Roller & Slide	37	ZZ00000203	A/R	. Mach Bushing
7	905084	1	. Mounting Rail, Hard Slide, Top LH	38	WES0007500	1	. Ext. Star Washer
8	F000001537	4	. Plunger Hard Slide	39	PLG0007839	1	. Mounting Weldment, RH Rear
9	PIN0007831	4	. Pin, Roll	40	* 906301	1	. Connecting Rod Assy, Gearbox
10	LOK0005857	1	. Plate, Lock	41	F000007914	1	. Pin
11	F000000986	2	. Rear Wiper	42	R13807736	6	. Capscrew
12	F000000774	2	. Front Wiper	43	F000001441	8	. Fitting
13	F000000775	4	. Bearing, Roller	44	ZZ00000200	A/R	. Mach Bushing
14	F000007735	6	. Grommet, Rubber	45	221717W	1	. Hex Nut
15	PLG0007840	1	. Roller Mount, RH Front	50	R13811047	5	. Capscrew
16	KNF0021901	1	. Plunger Knife	51	Y09G-0510	6	. Capscrew
17	F000000227	3	. Plunger Knife Bolt-Flat Hd Soc	52	904564	1	. Tube
18	F000000073	2	. Square Head Set Screw	53	904565	1	. Tube
19	F008058-14	1	. Pad, Adjusting, Left	54	904566	1	. Tube
20	R13811046	6	. Capscrew	55	904567	1	. Tube
21	Y17C-0616	8	. Capscrew	56	905095	1	. Angle, Mounting
22	234135	21	. Lockwasher	57	NCJ0000313	1	. Hex Jam Nut
23	R13802623	21	. Flat Washer	58	231661	1	. Capscrew
24	221707W	12	. Hex Nut	59	ZZ00000202	A/R	. Bushing
26	SQS5002500	2	. Set Screw				
27	234218	4	. Jam Nut				
28	00113991	8	. Machine Screw				
29	00191758	4	. Fitting, Lube				
30	STS3125313	4	. Socket Set Screw				
							* See Separate Coverage
							Rev -D

Plunger Assy, Kitted for 14"x22"

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CON ROD VIEW
 (FOR 14" PLUNGER ASSEMBLY)

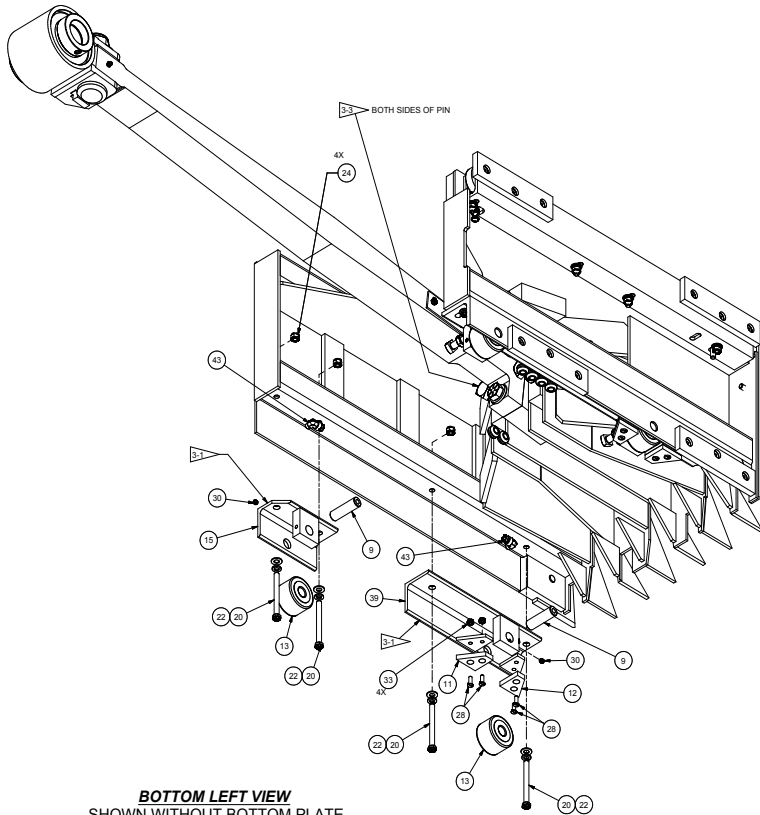
NOTES:

- 2-1 USE SHIMS ITEMS 37, 44, AND 59 TO CENTER ITEM 40 IN PLUNGER DURING PLUNGER ASSEMBLY.
- 2-2 INSURE RETAINING BOLTS FOR PLUNGER CONNECTING ROD PIN ARE LOCATED ON THE FLAT OF THE PIN.
- 2-3 16" PLUNGER ASSEMBLY SHOWN. REFER TO CHART FOR INFORMATION ON OTHER ASSEMBLIES.
- 2-4 ASSEMBLY PARTS ARE SAME AS 16" & 15" CON ROD VIEW EXCEPT WHERE LABELED.

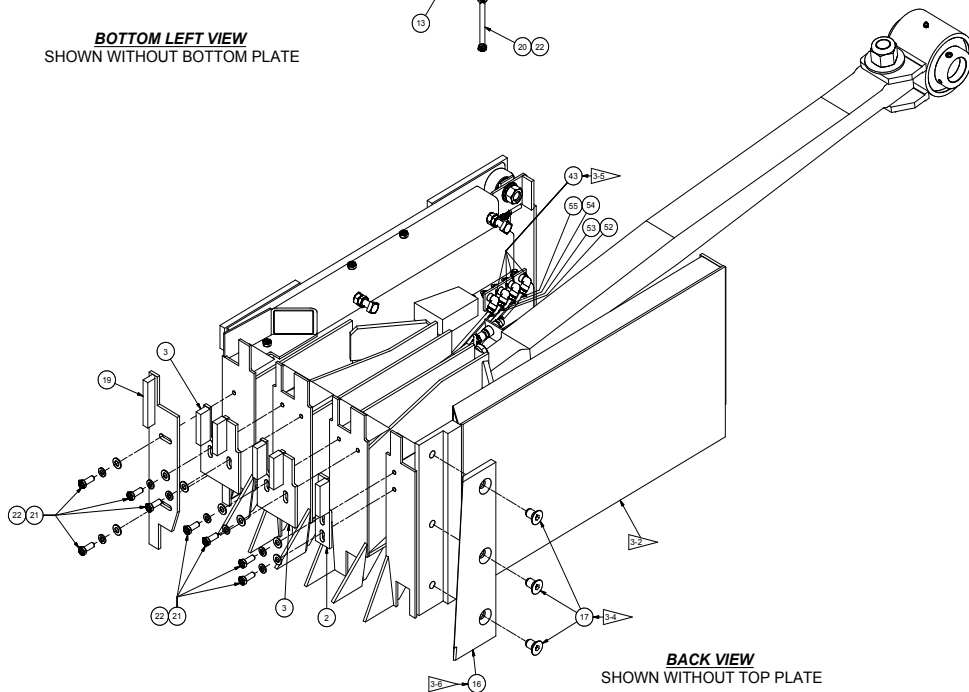
CON ROD VIEW
 (FOR 16" & 15" PLUNGER ASSEMBLIES)

Plunger Assy, Kitted for 14"x22"

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BOTTOM LEFT VIEW
SHOWN WITHOUT BOTTOM PLATE



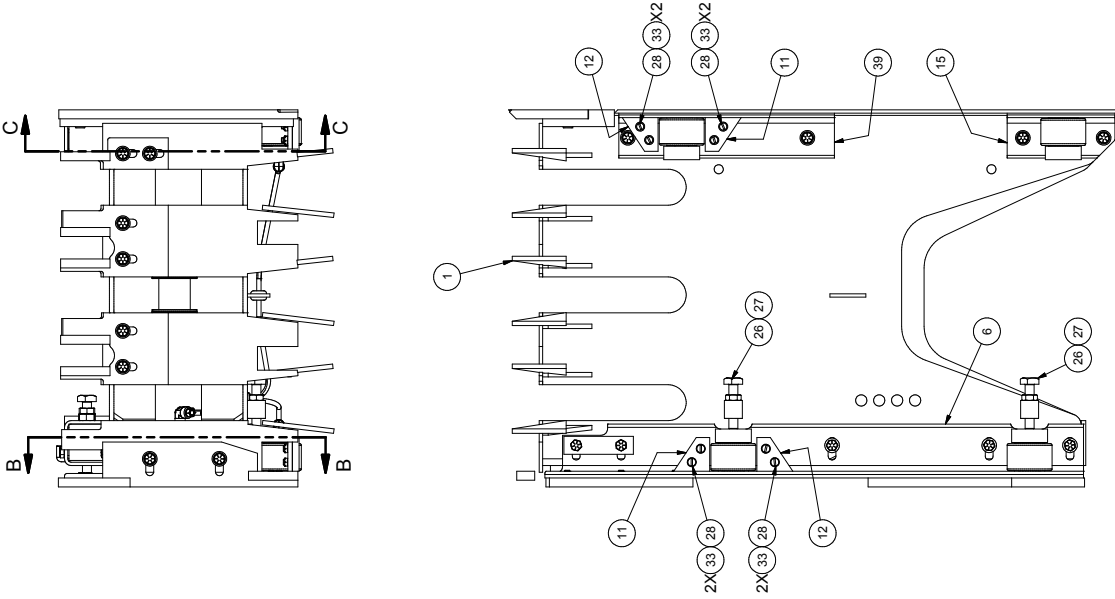
BACK VIEW
SHOWN WITHOUT TOP PLATE

NOTES:

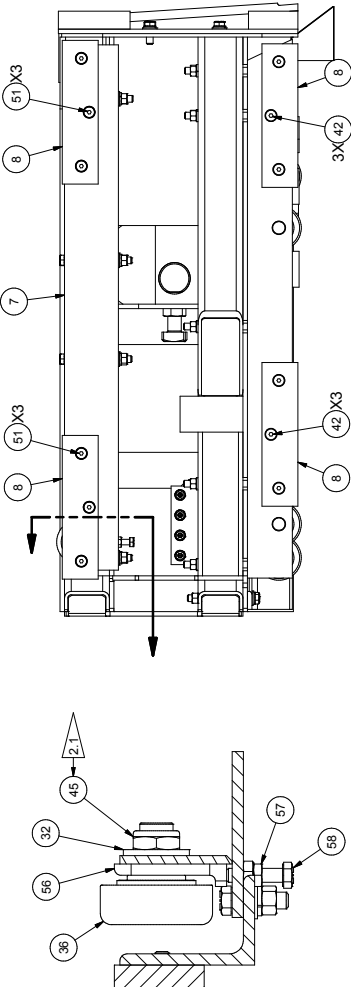
- ▶ USE ITEMS 4 & 5 AS REQUIRED TO MAKE ALL ROLLERS CONTACT AND ROLL ON ASSEMBLY STAND. ROLLERS SHOULD BE FLAT WITHIN .003" WITH THE ASSEMBLY STAND.
- ▶ RIGHT SIDE OF PLUNGER ASSEMBLY SHOULD BE PERPENDICULAR WITHIN +/- 0.015" TO ASSEMBLY STAND.
- ▶ INSURE RETAINING BOLTS FOR PLUNGER CONNECTING ROD PIN ARE LOCATED ON THE FLAT OF THE PIN.
- ▶ TORQUE TO 130 FT LBS
- ▶ USE LOCTITE #242 ON FITTING THREADS
- ▶ PLUNGER KNIFE CANNOT EXTEND MORE THAN .002" PAST SIDE OF PLUNGER OR BE RECESSED MORE THAN .005" BELOW THE PLUNGER SIDE

Plunger Assy, Kitted for 14"x21"

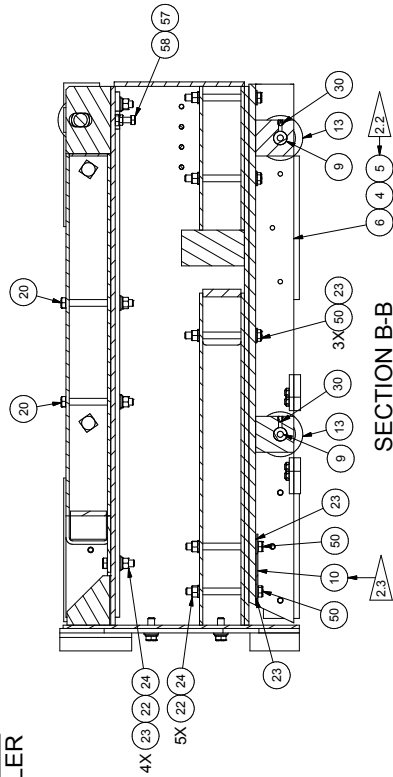
Page 1 of 3



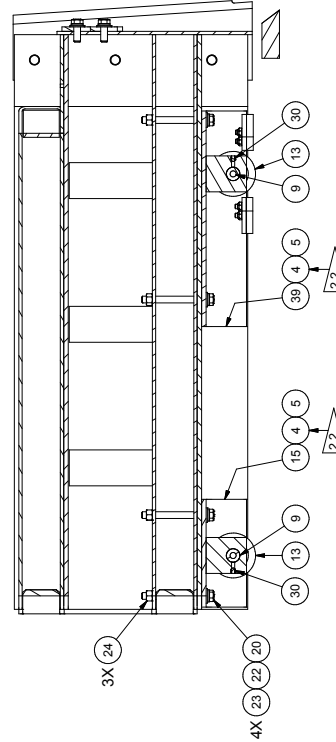
RAILS AND ROLLERS



**SECTION A-A
TOP ROLLER**



SECTION B-B



SECTION C-C

NOTES:

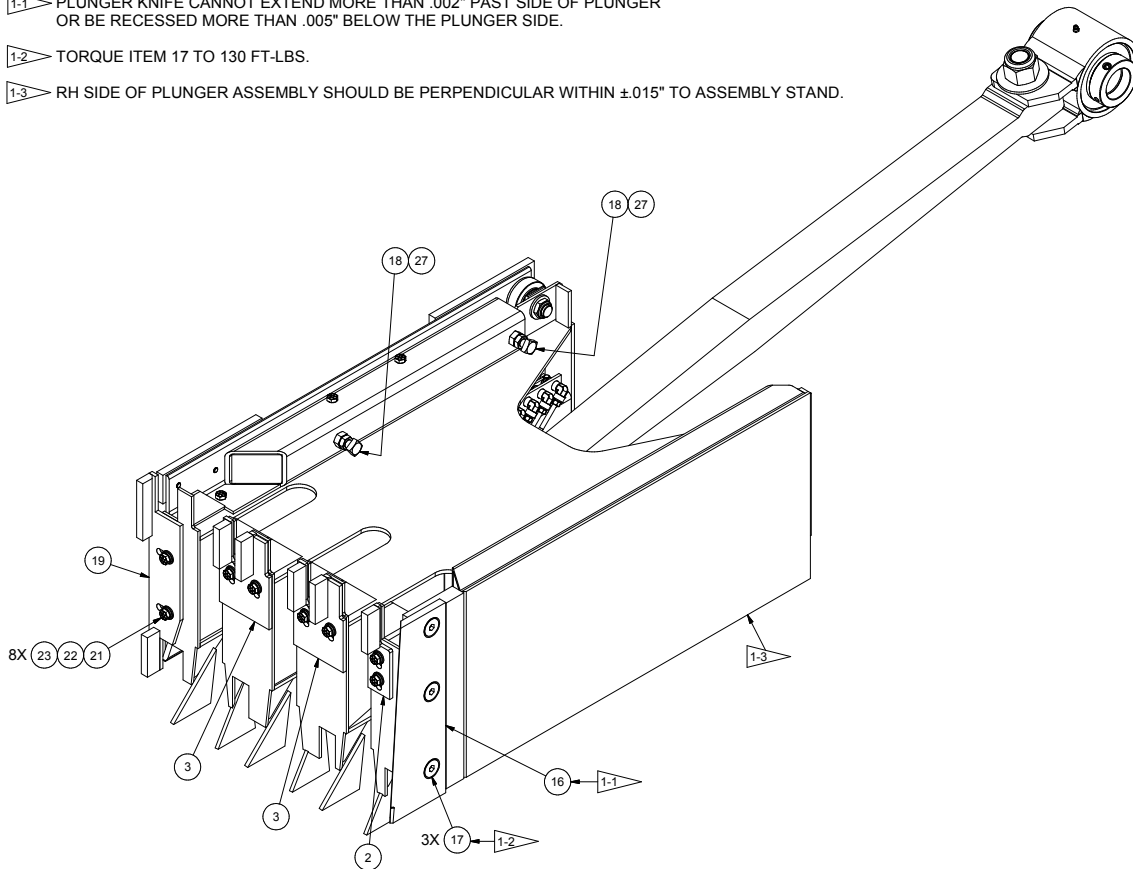
- 2-1 USE 145 - 150 FT-LB TORQUE WHEN INSTALLING BEARING. THREADED SHAFT OF BEARING IS EQUIVALENT TO A GRADE 2 FASTENER.
- 2-2 USES ITEMS 4 & 5 AS REQUIRED TO MAKE ALL ROLLER CONTACT AND ROLL ON ASSEMBLY STAND ROLLERS SHOULD BE FLAT WITHIN .003" WITH THE ASSEMBLY STAND
- 2-3 BEND EDGES OVER TO PREVENT CAPSCREW FROM TURNING WHILE ADJUSTING HARD SLIDES.

Plunger Assy, Kitted for 14"x21"

Page 2 of 3

NOTES:

- 1-1 PLUNGER KNIFE CANNOT EXTEND MORE THAN .002" PAST SIDE OF PLUNGER OR BE RECESSED MORE THAN .005" BELOW THE PLUNGER SIDE.
- 1-2 TORQUE ITEM 17 TO 130 FT-LBS.
- 1-3 RH SIDE OF PLUNGER ASSEMBLY SHOULD BE PERPENDICULAR WITHIN ±.015" TO ASSEMBLY STAND.



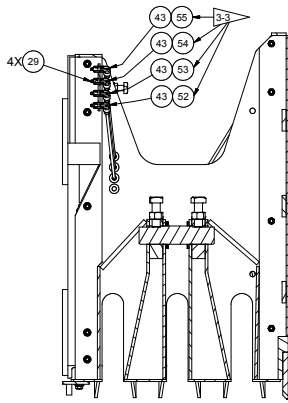
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
908708 Plunger Assembly; 14X21							
1	908704	1	. Plunger Weldment	30	STS3125313	4	. Screw, Set
2	906754	1	. Pad Weldment, RH	31	247008	2	. Jam Nut
3	F000008057	2	. Pad Weldment	32	R13811457	1	. Flat Washer
4	SHM0034535	1	. Shim	33	221342W	8	. Locknut
5	SHM0034534	1	. Shim,Knife,Plunger	35	SQS7502250	2	. Screw, Set
6	903882	1	. Mounting Weldment	36	BRG0001636	1	. Bearing, Top Roller
7	905084	1	. Angle, Mounting Rail	37	ZZ00000203	2	. Bushing
8	F000001537	4	. Slide	39	PLG0007839	1	. Roller Angle, Rh
9	PIN0007831	4	. Pin	40	* 906301	1	. Connecting Rod Assembly
10	LOK0005857	1	. Plunger Bolt Lock	41	F000007914	1	. Pin
11	F000000986	2	. Wiper, Rear Plunger	42	R13807736	6	. Capscrew
12	F000000774	2	. Wiper	43	F000001441	8	. Fittingbow
13	F000000775	4	. Bearing, Roller	44	ZZ00000200	3	. Bushing, Machine
14	F000007735	6	. Grommet, Rubber	45	906920	1	. Jam Nut
15	PLG0007840	1	. Angle Weldment, RH	50	R13811047	5	. Capscrew
16	KNF0021901	1	. Knife, Plunger	51	Y09G-0510	6	. Capscrew
17	F000000227	3	. Bolt	52	904564	1	. Tube
18	F000000073	2	. Set Screw	53	904565	1	. Tube
19	906756	1	. Pad Weldment, RH	54	904566	1	. Tube
20	R13811046	6	. Capscrew	55	904567	1	. Tube
21	Y17C-0616	8	. Capscrew	56	905095	1	. Angle, Mounting
22	R13812514	21	. Lockwasher	57	NCJ0000313	1	. Jam Nut
23	221767W	21	. Washer, Hard	58	R13811015	1	. Capscrew
24	221707W	12	. Hex Nut	59	ZZ00000202	1	. Bushing, Machine
26	SQS5002500	2	. Setscrew				
27	234218	4	. Jam Nut				
28	00113991	8	. Screw, Machine				
29	00191758	4	. Fitting, Lube				

* See Separate Coverage

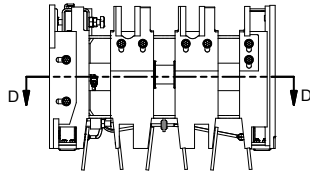
Rev A

Plunger Assy, Kitted for 14"x21"

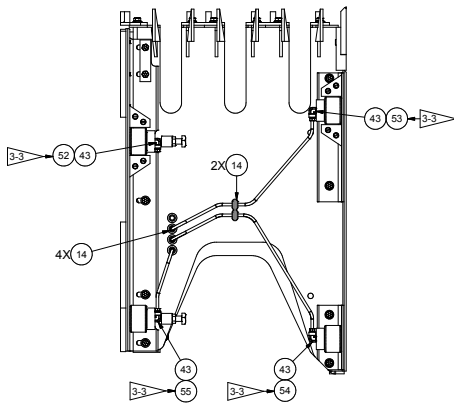
Page 3 of 3



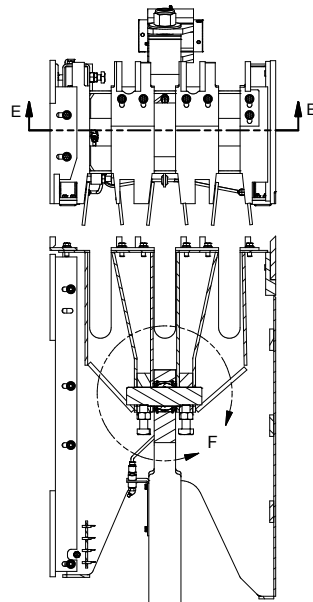
SECTION D-D



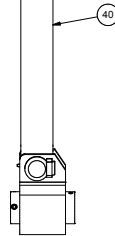
D



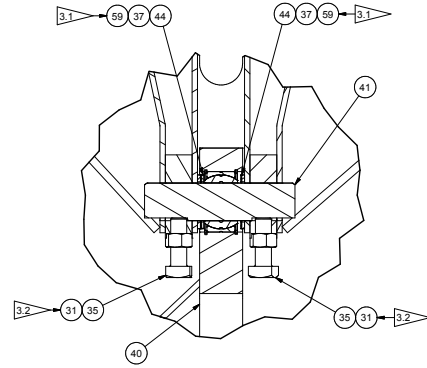
SECTION E-E



E



SECTION E-E



DETAIL F

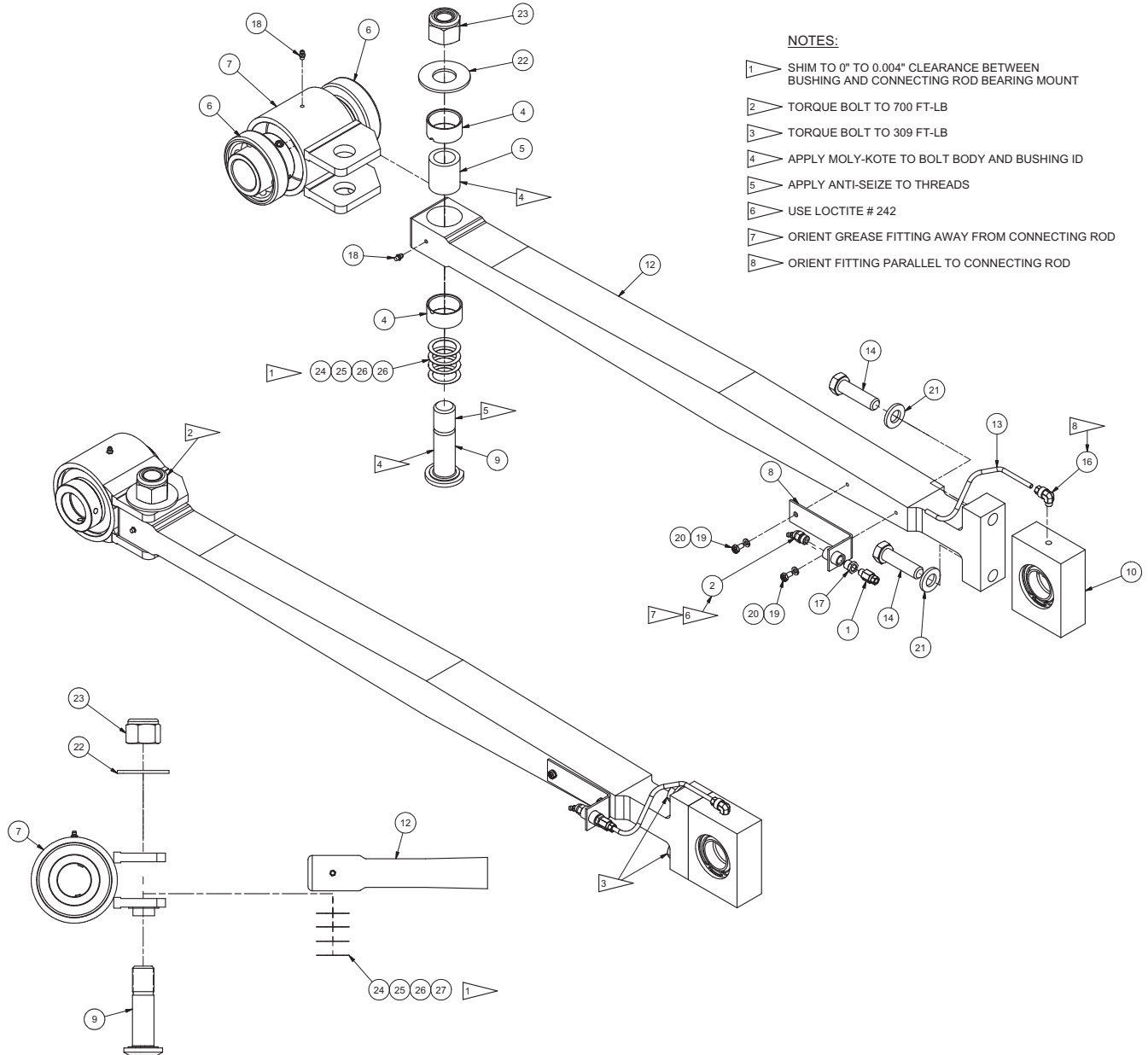
LUBRICATION LINES & CON-ROD

NOTES:

- 3.1 USE ITEM 37, 44 & 59 AS REQUIRED TO CENTER ITEM 40 IN PLUNGER DURING PLUNGER ASSEMBLY.
- 3.2 ENSURE RETAINING BOLTS FOR ITEM 41 ARE LOCATED ON THE FLAT OF ITEM 41.
- 3.3 USE LOCTITE #242 ON FITTING THREADS

Connecting Rod Assy, Gearbox Baler, 15/16" 3-Tie

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NOTES:

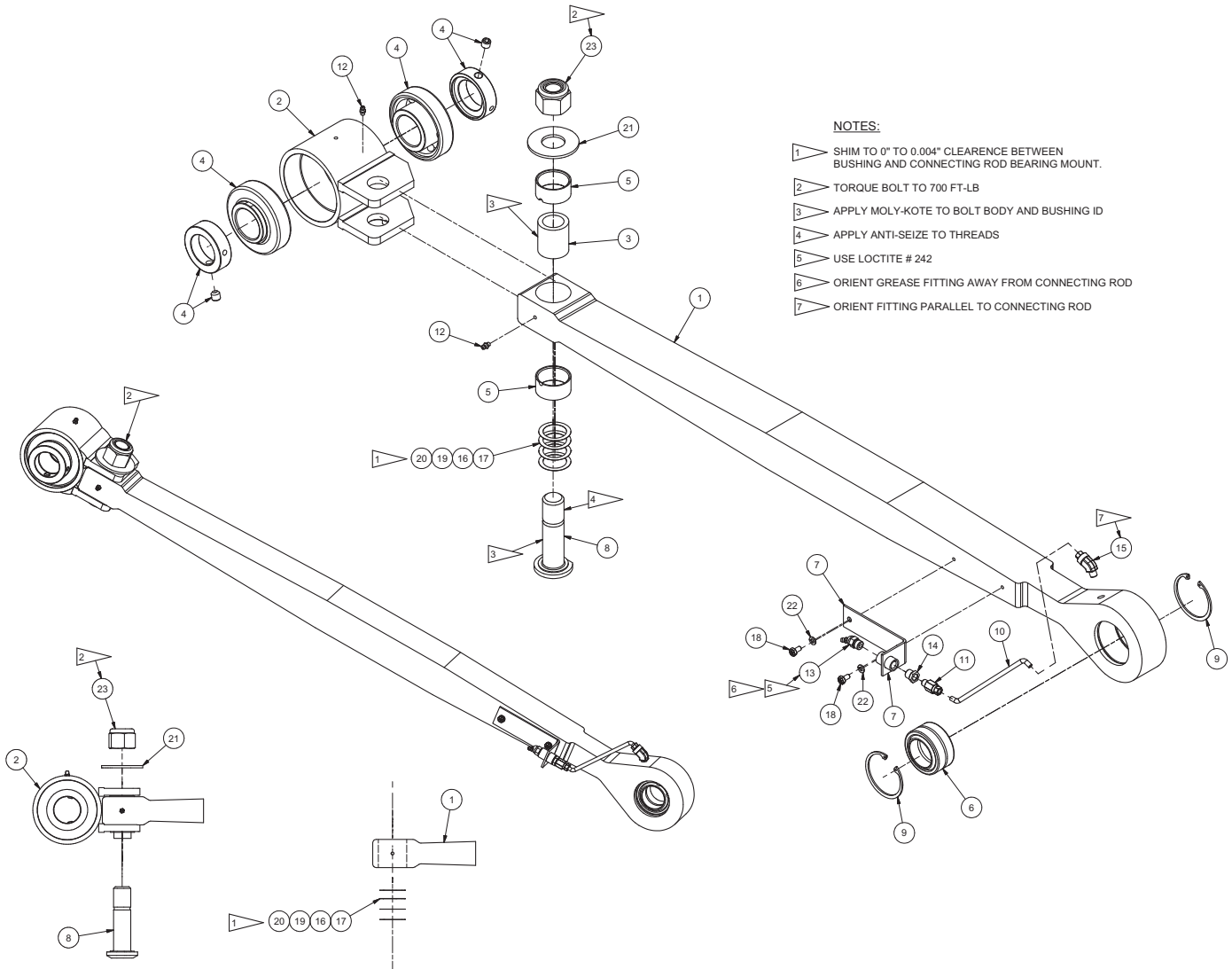
- 1 SHIM TO 0" TO 0.004" CLEARANCE BETWEEN BUSHING AND CONNECTING ROD BEARING MOUNT
- 2 TORQUE BOLT TO 700 FT-LB
- 3 TORQUE BOLT TO 309 FT-LB
- 4 APPLY MOLY-KOTE TO BOLT BODY AND BUSHING ID
- 5 APPLY ANTI-SEIZE TO THREADS
- 6 USE LOCTITE # 242
- 7 ORIENT GREASE FITTING AWAY FROM CONNECTING ROD
- 8 ORIENT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

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
904474 Connecting Rod Assembly							
1	F00000778	1	. Tube Connector	17	209500	1	. Fitting
2	F000007651	1	. Grease Fitting	18	11079	2	. Fitting, Lube
4	F000008077	2	. Bearing, Inner Race	19	R13810989	2	. Capscrew
5	F000008078	1	. Connecting Rod Bushing	20	223871	2	. Lockwasher
6	F000008100	2	. Bearing	21	221777Wv	2	. Washer
7	903615	1	. Mount, Conn Rod Brg	22	225851	1	. Hard Washer
8	F000008263	1	. Bracket	23	222465	1	. Locknut
9	PIN0008670	1	. Connecting Rod Pivot Pin	24	F000007977	1	. 0.010 Spacer Washer
10	HSN0238330	1	. Plunger Bearing Housing W/ Brgs	25	F000007978	1	. 0.005 Spacer Washer
12	903235	1	. Plate, Conn Rod	26	SHM0000105	1	. 0.020 Steel Shim
13	903268	1	. Tube	27	SHM0000103	1	. Shim
14	221659W	2	. Capscrew				
16	F000001441	1	. Fitting				

Rev - F

Connecting Rod Assy, Gearbox Baler, 14" 3-Tie

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NOTES:

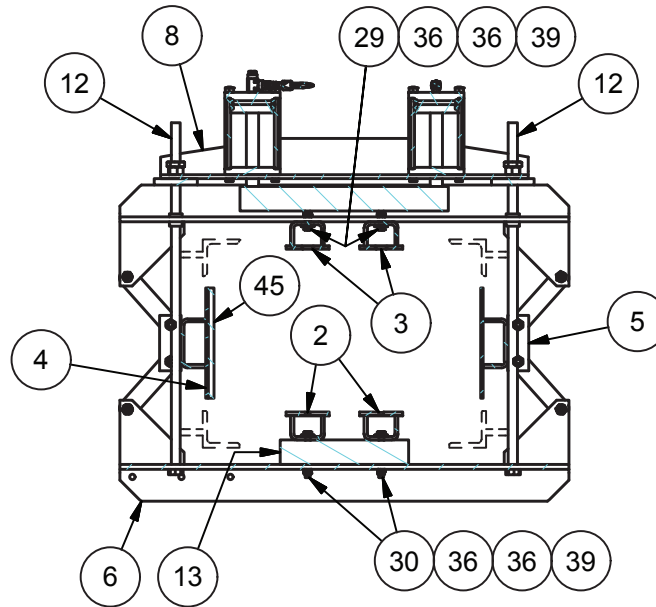
- 1 SHIM TO 0" TO 0.004" CLEARANCE BETWEEN BUSHING AND CONNECTING ROD BEARING MOUNT.
- 2 TORQUE BOLT TO 700 FT-LB
- 3 APPLY MOLY-KOTE TO BOLT BODY AND BUSHING ID
- 4 APPLY ANTI-SEIZE TO THREADS
- 5 USE LOCTITE # 242
- 6 ORIENT GREASE FITTING AWAY FROM CONNECTING ROD
- 7 ORIENT FITTING PARALLEL TO CONNECTING ROD

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
906301 Connecting Rod Assembly							
1	ROD0034342	1	. Plate, Conn Rod	13	F000007651	1	. Fitting, Grease
2	903615	1	. Mounting, Conn Rod Brg	14	209500	2	. Fitting
3	F000008078	1	. Connecting Rod Bushing	15	253694	1	. Fitting
4	F000008100	2	. Bearing	16	SHM0000103	1	. Shim
5	F000008077	2	. Bearing, Inner Race	17	SHM0000105	1	. 0.020 Steel Shim
6	R1574466	1	. Bearing, Sealed Self Aligned	18	R13810989	2	. Capscrew
7	F000008263	1	. Bracket	19	F000007978	1	. 0.005 Spacer Washer
8	PIN0008670	1	. Connecting Rod Pivot Pin	20	F000007977	1	. 0.010 Spacer Washer
9	F000007917	2	. Ring, Snap	21	225851	1	. Hard Washer
10	908716	1	. Tube	22	223871	2	. Lockwasher
11	F000000778	1	. Tube Connector	23	222465	1	. Locknut
12	11079	2	. Fitting, Lube,				

Rev E

Tensioning/Rear Mnt Inst, 37X - 16"

Page 1 of 4



16" CHAMBER

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
909386 Tensioning/Rear Mounts Installation							
1	PLT0035077	2	. Bar, Upper	32	221563W	16	. Capscrew
2	TNS0034362	2	. Weldment, Rail	33	200454W	6	. Capscrew
3	TNS0022284	2	. Weldment, Rail	34	234889	4	. Capscrew
4	TNS0018902	1	. Weldment, Tension Rail - LH	35	R13801857	2	. Capscrew
5	TNS0018903	1	. Weldment, Tension Rail - RH	36	R13802623	10	. Flat Washer
6	TNS0007049	1	. Weldment, Tension Angle - Btm	37	R13812514	4	. Lockwasher
7	TNS0007050	1	. Weldment, Tension Angle - Top	38	234665	10	. Lockwasher
8	*FT00000277	1	. Assy, Dual Ram	39	237567	6	. Nut, Esna
9	MNT037760B	2	. Plate, Support	40	221711W	8	. Hex Nut
10	PAD0018804	2	. Pad, Support	41	NEJ0000500	16	. Nut, Esna
11	F000000497	8	. Linkage Bar	42	R13804125	6	. Locknut
12	F000000600	2	. Bolt, Tension	43	221716W	2	. Hex Nut
13	N/A	0	. Plate, Spacer	44	247008	2	. Jam Nut
14	*FT00015049	1	. Tension Pump & Tank Assy	45	N/A	0	. Side Tension Liner
15	909079	1	. Assy, Chain	46	N/A	0	. Capscrew
16	SPK0004030	1	. Sprocket	47	N/A	0	. Nut
17	FT00000192	1	. Bypass Box	48	238206	2GL	. Oil, Hydraulic
18	FT00000050	1	. Cover Plate	49	221569W	2	. Capscrew
19	HSP0000004	3	. Hose Protector	50	R13810993	1	. Capscrew
20	FT00000252	2	. Hose Clamp	51	R13811015	2	. Capscrew
21	CLP0000165	1	. Clamp, Jiffy	52	221499W	2	. Capscrew
22	909389	1	. Hose Assy	53	221763W	1	. Hard Washer
23	237534	1	. Hose Assy	54	R13802914	4	. Hard Washer
24	FT00000221	1	. Hose Assy	55	221767W	2	. Hard Washer
25	589773	1	. Hose Assy	56	R13812512	1	. Lockwasher
26	SMS0000173	3	. Screw, Ser Flg	57	223588	2	. Nut, Esna
27	R13811031	2	. Capscrew	58	09411507	1	. Nut
28	174413W	1	. Screw, Ser Flg	59	909078	1	. Plate, Tank Mnt
29	Y17C-0624	4	. Capscrew				
30	Y17C - 0624	2	. Capscrew				
31	R13801840	2	. Capscrew				

* See Separate Coverage

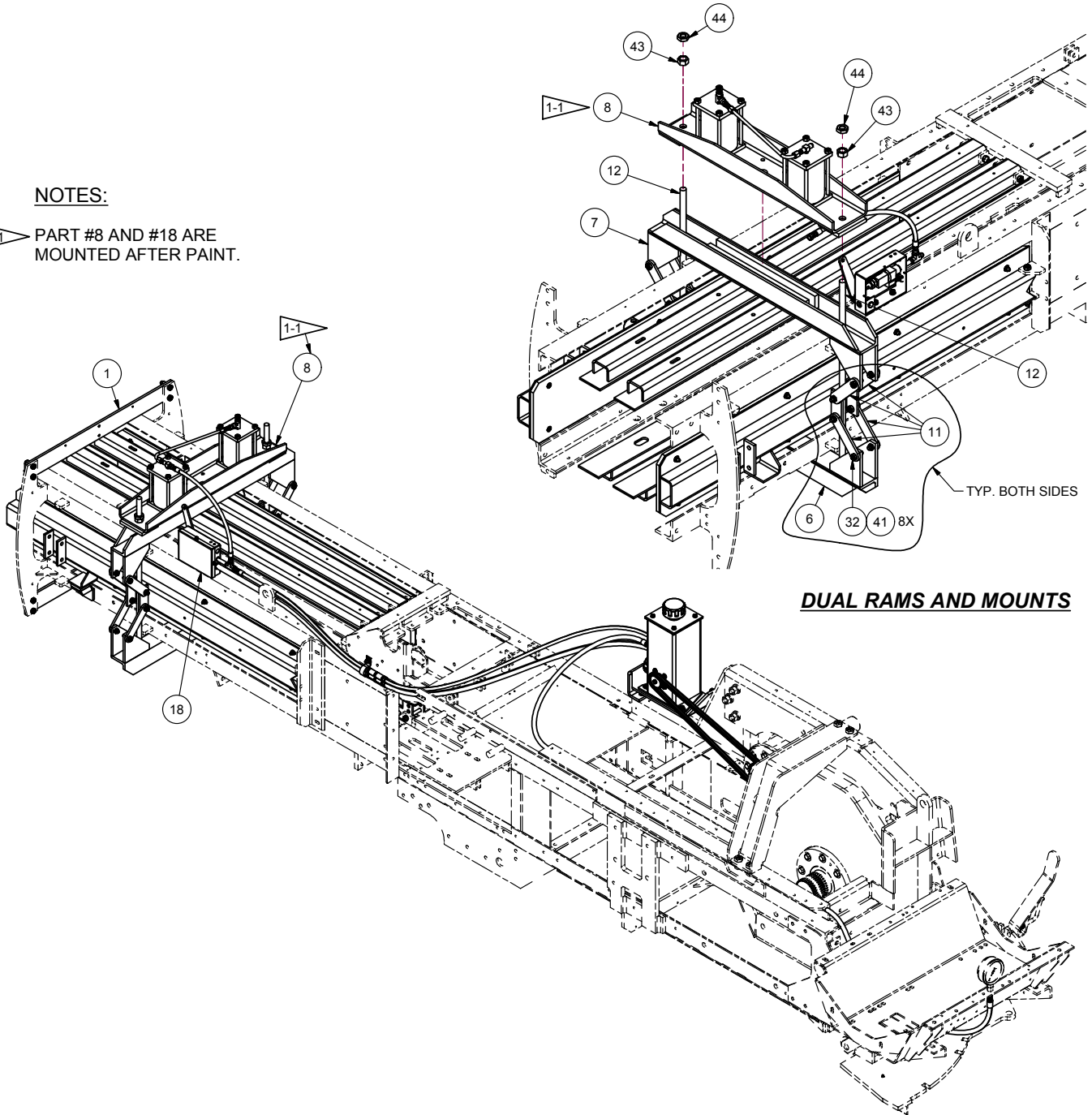
Rev A

Tensioning/Rear Mnt Inst, 37X - 16"

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NOTES:

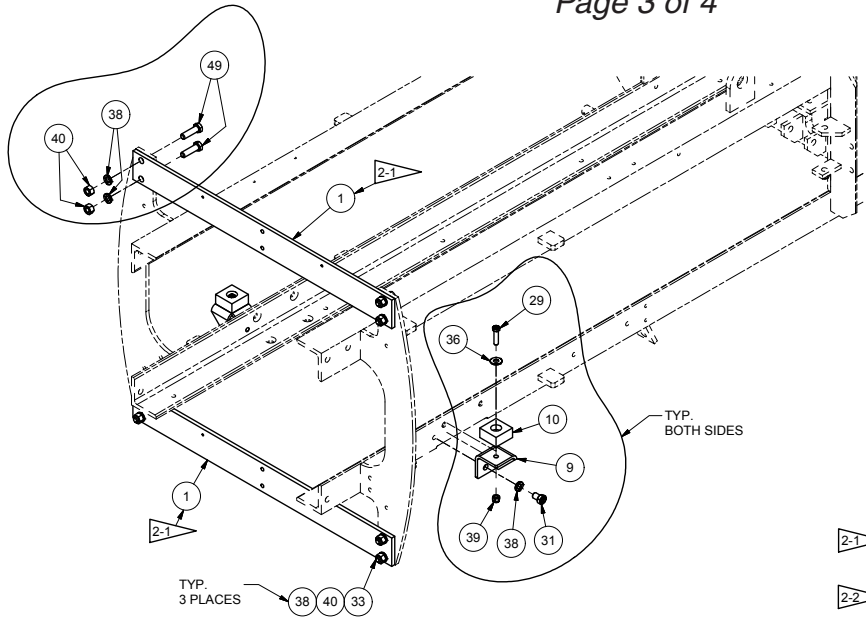
1-1 PART #8 AND #18 ARE MOUNTED AFTER PAINT.



DUAL RAMS AND MOUNTS

Tensioning/Rear Mnt Inst, 37X - 16"

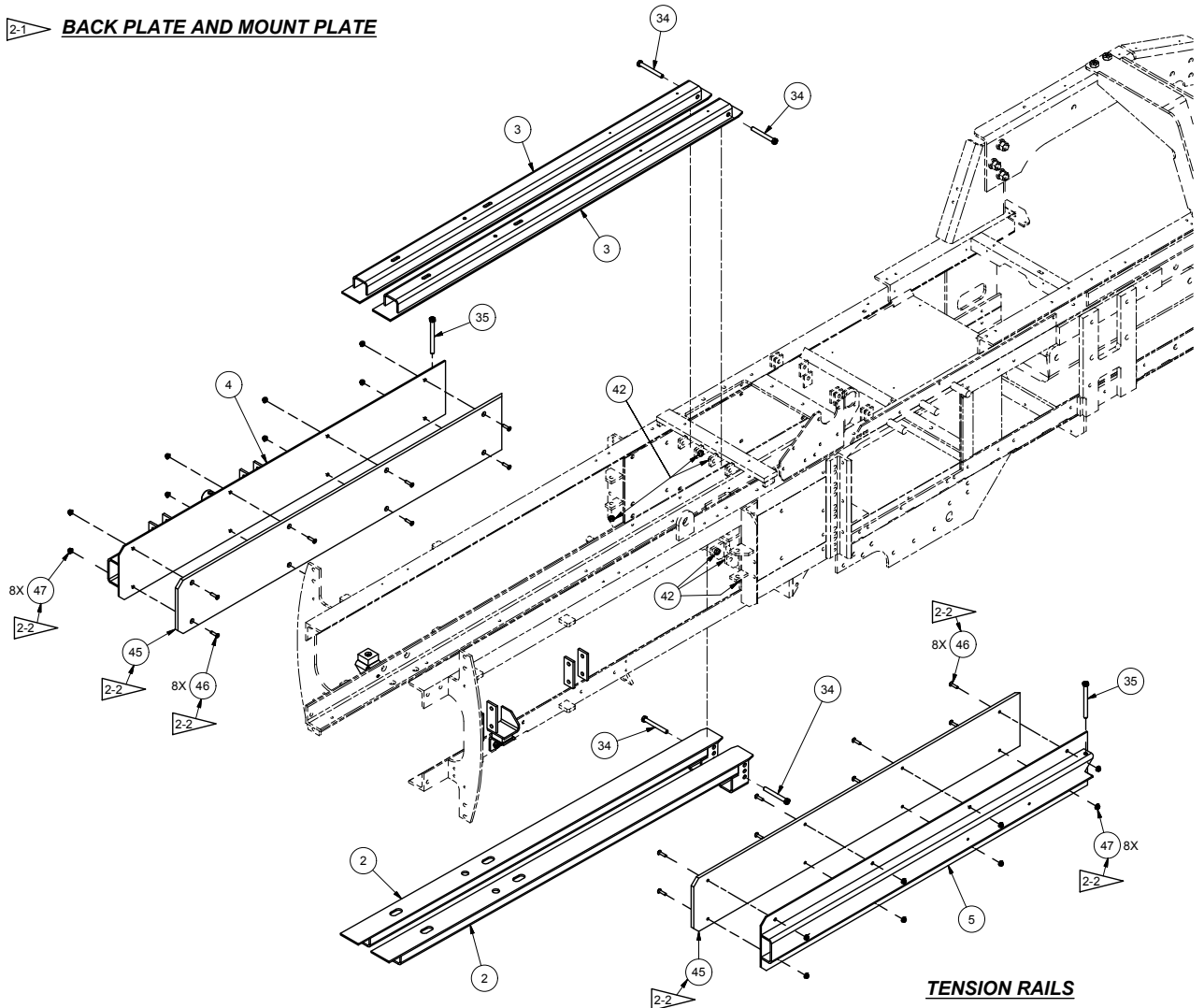
Page 3 of 4



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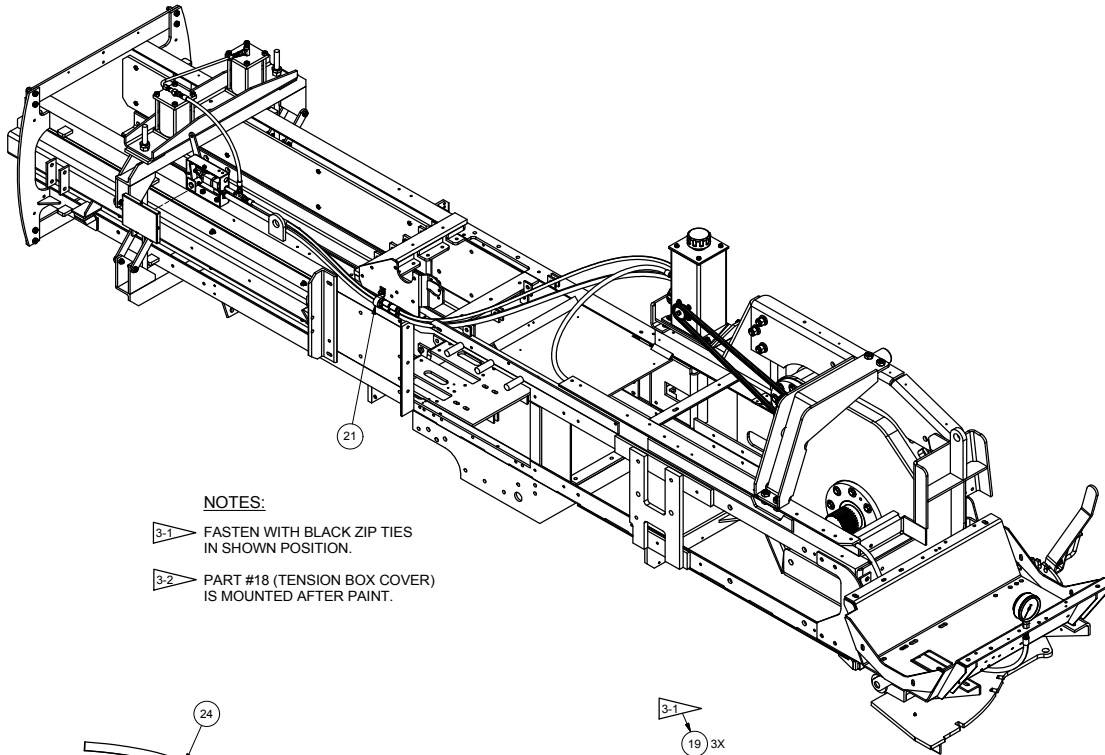
- 2-1 WORK INSTRUCTIONS ARE AVAILABLE FOR INSTRUCTION OF FRAME TIE PLATES.
- 2-2 ONLY USED WITH 14X21 CHAMBER KITS.

2-1 **BACK PLATE AND MOUNT PLATE**



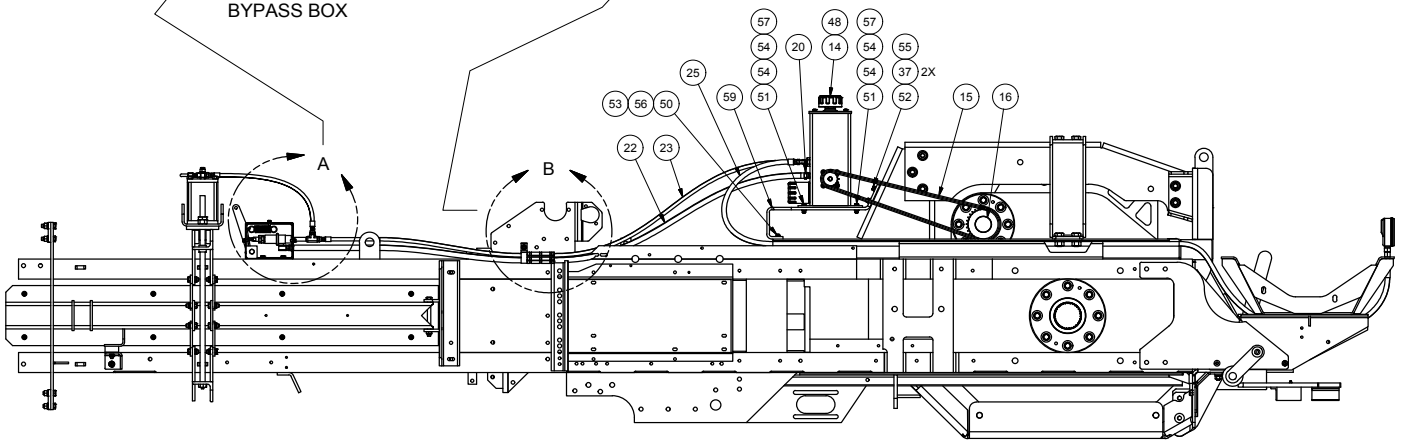
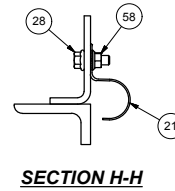
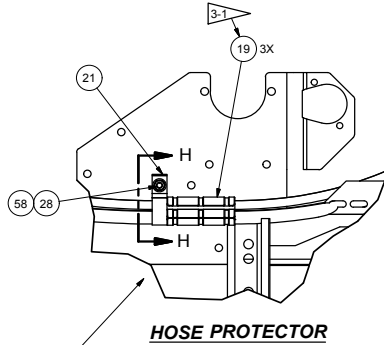
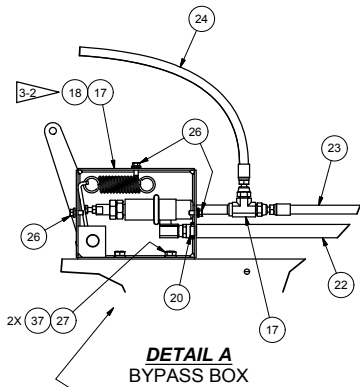
Tensioning/Rear Mnt Inst, 37X - 16"

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NOTES:

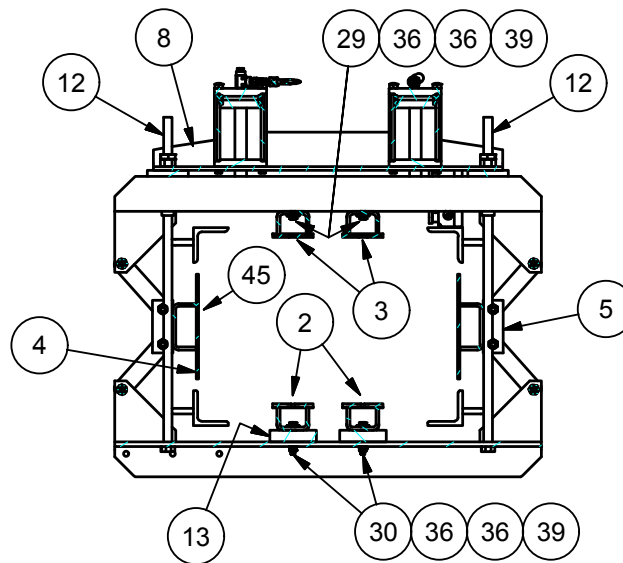
- 3-1 FASTEN WITH BLACK ZIP TIES IN SHOWN POSITION.
- 3-2 PART #18 (TENSION BOX COVER) IS MOUNTED AFTER PAINT.



**TENSION PUMP & TANK
BYPASS BOX & HOSE**

Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-15"

Page 1 of 4



15" KITTED

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
909387 Tensioning/Rear Mounts Installation							
1	PLT0035077	2	. Bar, Upper	32	221563W	16	. Capscrew
2	TNS0034362	2	. Weldment, Rail	33	200454W	6	. Capscrew
3	TNS0022284	2	. Weldment, Rail	34	234889	4	. Capscrew
4	TNS0018902	1	. Weldment, Tension Rail - LH	35	R13801857	2	. Capscrew
5	TNS0018903	1	. Weldment, Tension Rail - RH	36	R13802623	10	. Flat Washer
6	TNS0007049	1	. Weldment, Tension Angle - Btm	37	R13812514	4	. Lockwasher
7	TNS0007050	1	. Weldment, Tension Angle - Top	38	234665	10	. Lockwasher
*8	FT00000277	1	. Assy, Dual Ram	39	237567	6	. Nut, Esna
9	MNT037760B	2	. Plate, Support	40	221711W	8	. Hex Nut
10	PAD0018804	2	. Pad, Support	41	NEJ0000500	16	. Nut, Esna
11	F000000497	8	. Linkage Bar	42	R13804125	6	. Locknut
12	F000000600	2	. Bolt, Tension	43	221716W	2	. Hex Nut
13	903552	2	. Plate, Spacer	44	247008	2	. Jam Nut
*14	FT00015049	1	. Tension Pump & Tank Assy	45	N/A	0	. Side Tension Liner
15	909079	1	. Assy, Chain	46	N/A	0	. Capscrew
16	SPK0004030	1	. Sprocket	47	N/A	0	. Nut
17	FT00000192	1	. Bypass Box	48	238206	2GL	. Oil, Hydraulic
18	FT00000050	1	. Cover Plate	49	221569W	2	. Capscrew
19	HSP00000004	3	. Hose Protector	50	R13810993	1	. Capscrew
20	FT00000252	2	. Hose Clamp	51	R13811015	2	. Capscrew
21	CLP0000165	1	. Clamp, Jiffy	52	221499W	2	. Capscrew
22	909389	1	. Hose Assy	53	221763W	1	. Hard Washer
23	237534	1	. Hose Assy	54	R13802914	4	. Hard Washer
24	FT00000221	1	. Hose Assy	55	221767W	2	. Hard Washer
25	589773	1	. Hose Assy	56	R13812512	1	. Lockwasher
26	SMS0000173	3	. Screw, Ser Flg	57	223588	2	. Nut, Esna
27	R13811031	2	. Capscrew	58	09411507	1	. Nut
28	174413W	1	. Screw, Ser Flg	59	909078	1	. Plate, Tank Mnt
29	Y17C-0624	4	. Capscrew				
30	180959W	2	. Capscrew				
31	R13801840	2	. Capscrew				

* See Separate Coverage

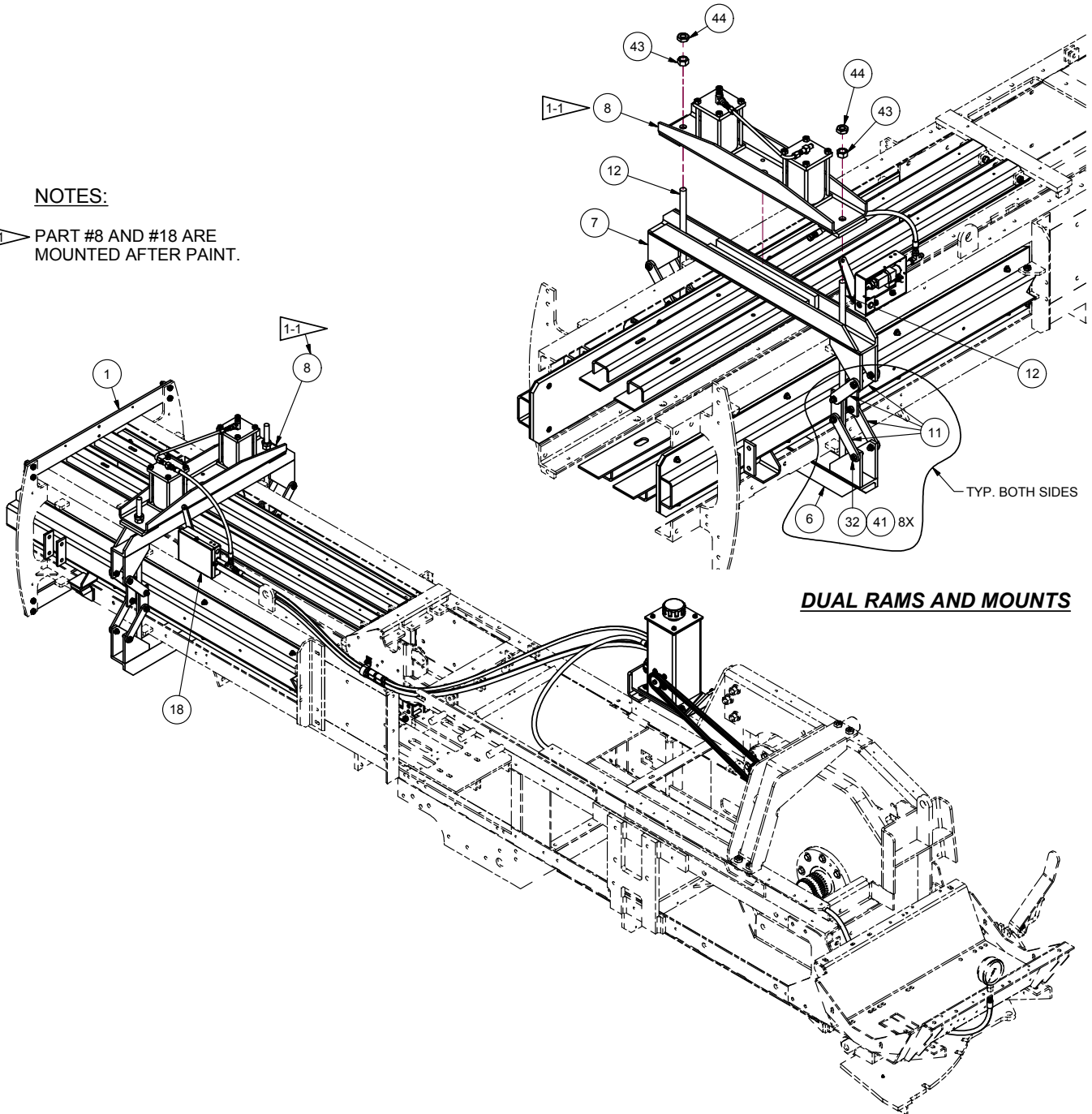
Rev A

Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-15"

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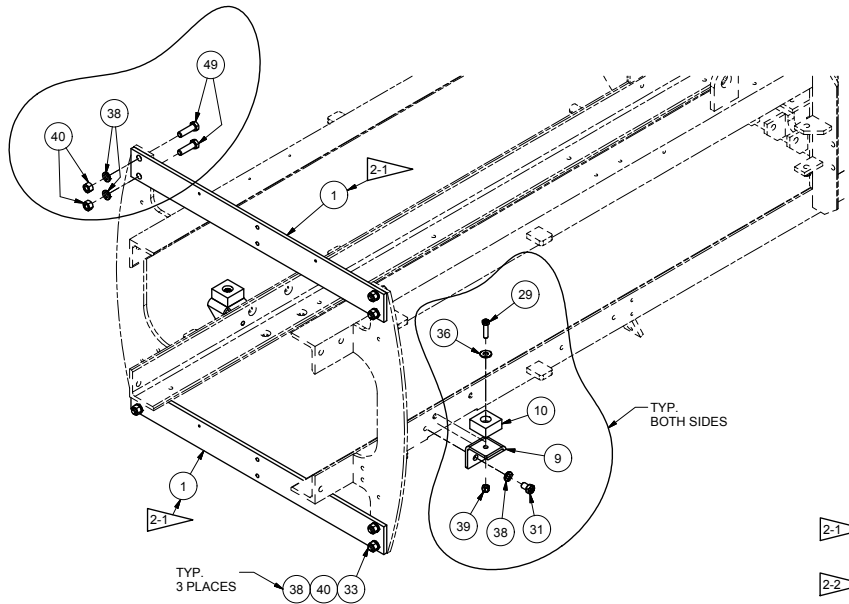
NOTES:

1-1 PART #8 AND #18 ARE MOUNTED AFTER PAINT.



Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-15"

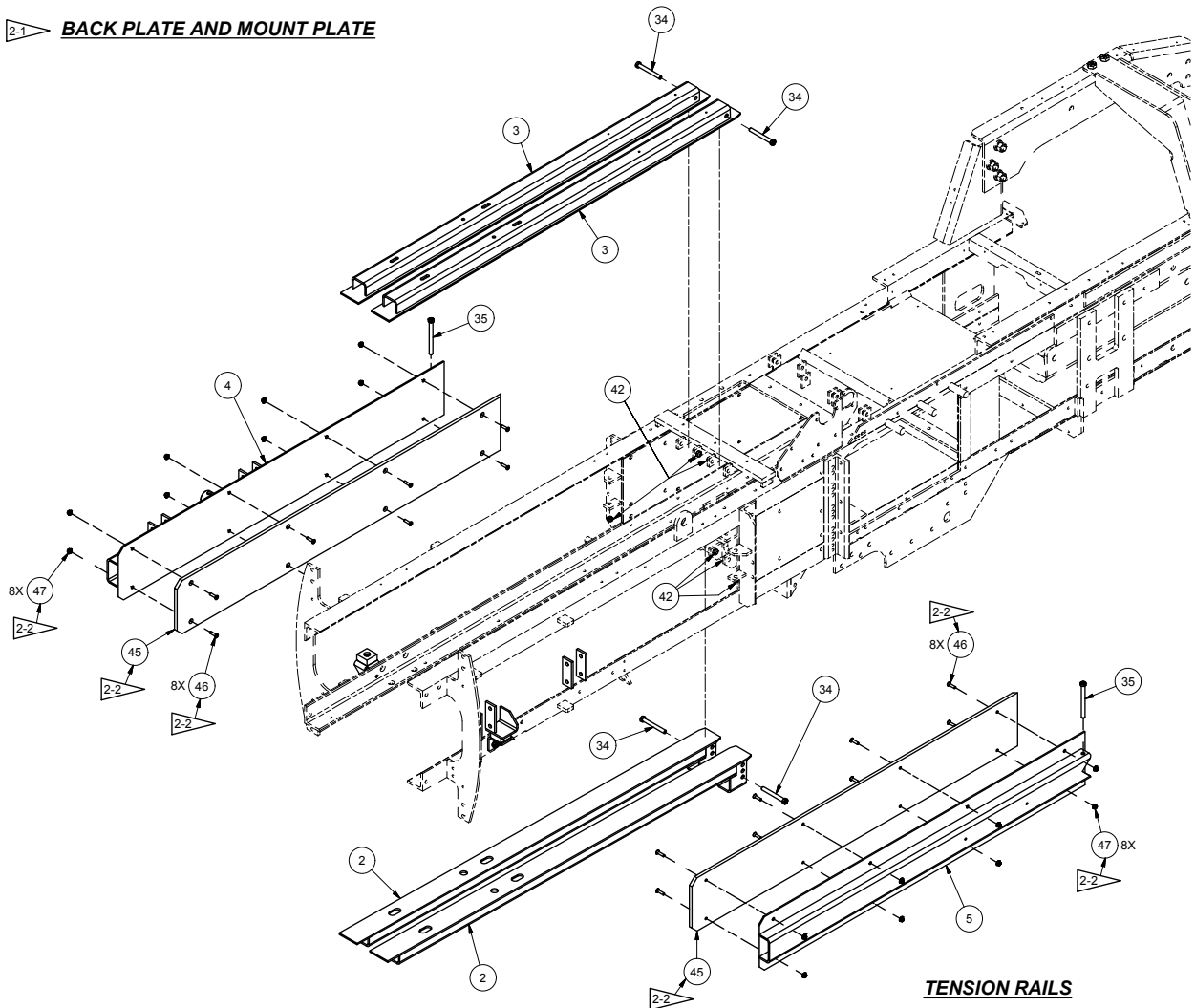
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NOTES:

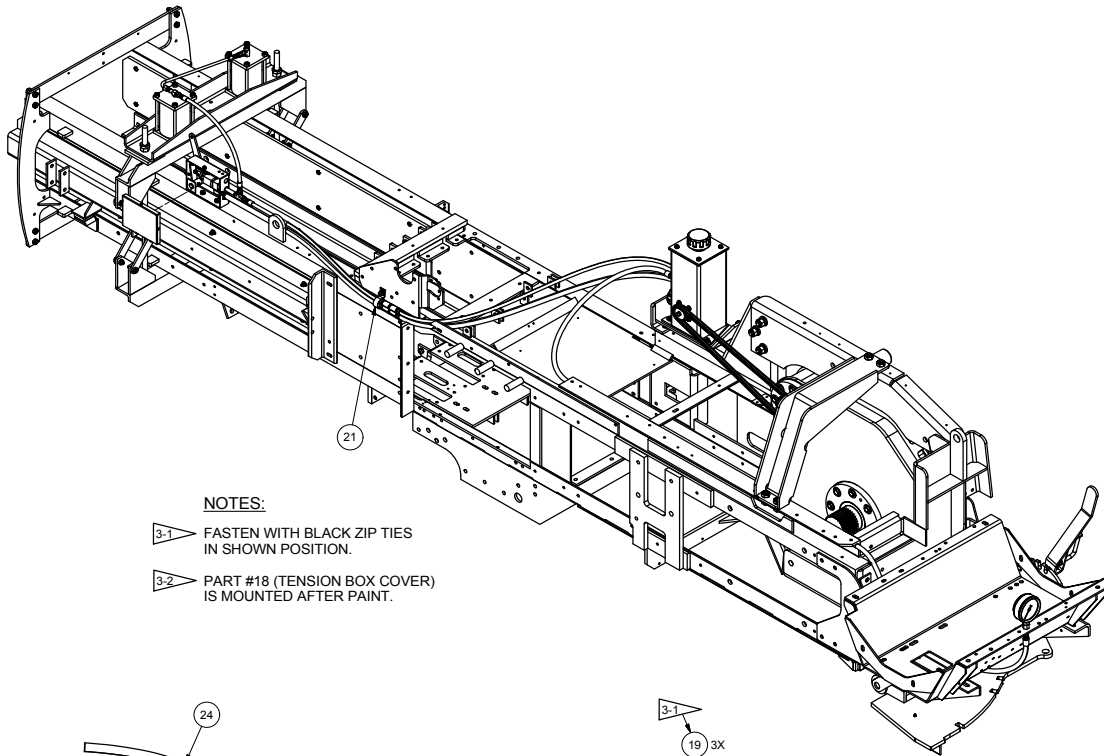
- 2-1 WORK INSTRUCTIONS ARE AVAILABLE FOR INSTRUCTION OF FRAME TIE PLATES.
- 2-2 ONLY USED WITH 14X21 CHAMBER KITS.

2-1 BACK PLATE AND MOUNT PLATE



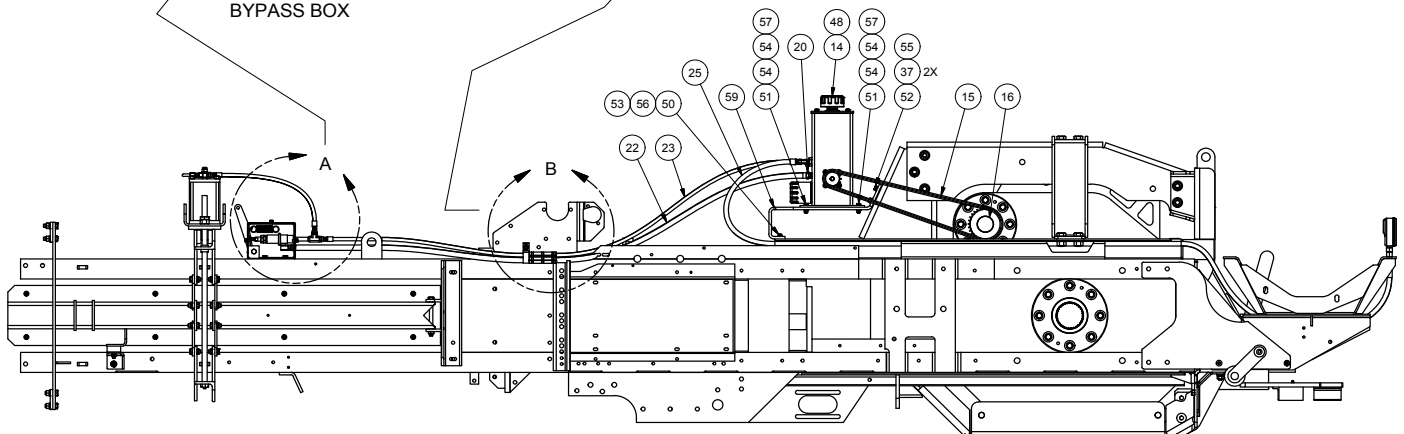
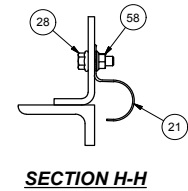
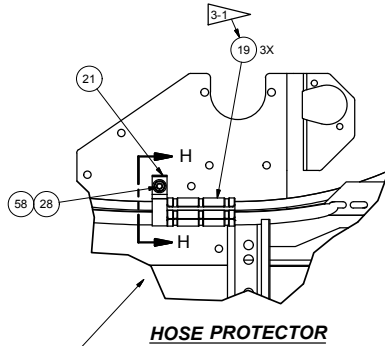
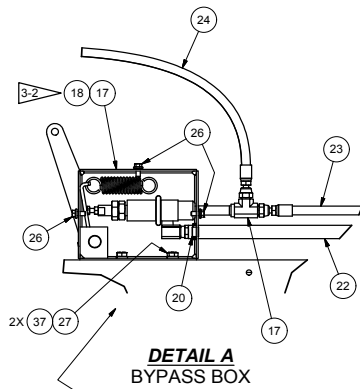
Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-15"

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NOTES:

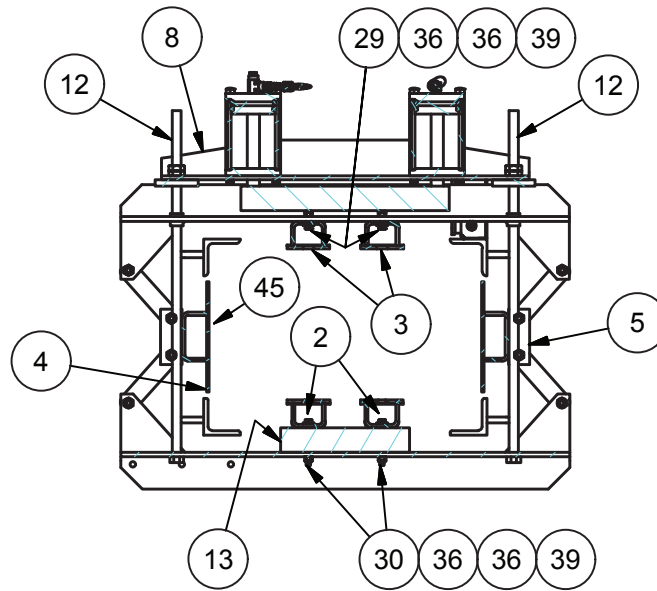
- 3-1 FASTEN WITH BLACK ZIP TIES IN SHOWN POSITION.
- 3-2 PART #18 (TENSION BOX COVER) IS MOUNTED AFTER PAINT.



**TENSION PUMP & TANK
BYPASS BOX & HOSE**

Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-14"

Page 1 of 4



14" KITTED

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
909388 Tensioning/Rear Mounts Installation							
1	PLT0035077	2	. Bar, Upper	32	221563W	16	. Capscrew
2	TNS0034362	2	. Weldment, Rail	33	200454W	6	. Capscrew
3	TNS0022284	2	. Weldment, Rail	34	234889	4	. Capscrew
4	TNS0018902	1	. Weldment, Tension Rail - LH	35	R13801857	2	. Capscrew
5	TNS0018903	1	. Weldment, Tension Rail - RH	36	R13802623	10	. Flat Washer
6	TNS0007049	1	. Weldment, Tension Angle - Btm	37	R13812514	4	. Lockwasher
7	TNS0007050	1	. Weldment, Tension Angle - Top	38	234665	10	. Lockwasher
8	*FT00000277	1	. Assy, Dual Ram	39	237567	6	. Nut, Esna
9	MNT037760B	2	. Plate, Support	40	221711W	8	. Hex Nut
10	PAD0018804	2	. Pad, Support	41	NEJ0000500	16	. Nut, Esna
11	F000000497	8	. Linkage Bar	42	R13804125	6	. Locknut
12	F000000600	2	. Bolt, Tension	43	221716W	2	. Hex Nut
13	903411	1	. Plate, Spacer	44	247008	2	. Jam Nut
14	*FT00015049	1	. Tension Pump & Tank Assy	45	N/A	0	. Side Tension Liner
15	909079	1	. Assy, Chain	46	N/A	0	. Capscrew
16	SPK0004030	1	. Sprocket	47	N/A	0	. Nut
17	FT00000192	1	. Bypass Box	48	238206	2GL	. Oil, Hydraulic
18	FT00000050	1	. Cover Plate	49	221569W	2	. Capscrew
19	HSP0000004	3	. Hose Protector	50	R13810993	1	. Capscrew
20	FT00000252	2	. Hose Clamp	51	R13811015	2	. Capscrew
21	CLP0000165	1	. Clamp, Jiffy	52	221499W	2	. Capscrew
22	909389	1	. Hose Assy	53	221763W	1	. Hard Washer
23	237534	1	. Hose Assy	54	R13802914	4	. Hard Washer
24	FT00000221	1	. Hose Assy	55	221767W	2	. Hard Washer
25	589773	1	. Hose Assy	56	R13812512	1	. Lockwasher
26	SMS0000173	3	. Screw, Ser Flg	57	223588	2	. Nut, Esna
27	R13811031	2	. Capscrew	58	09411507	1	. Nut
28	174413W	1	. Screw, Ser Flg	59	909078	1	. Plate, Tank Mnt
29	Y17C-0624	4	. Capscrew				
30	R13811045	2	. Capscrew				
31	R13801840	2	. Capscrew				

* See Separate Coverage

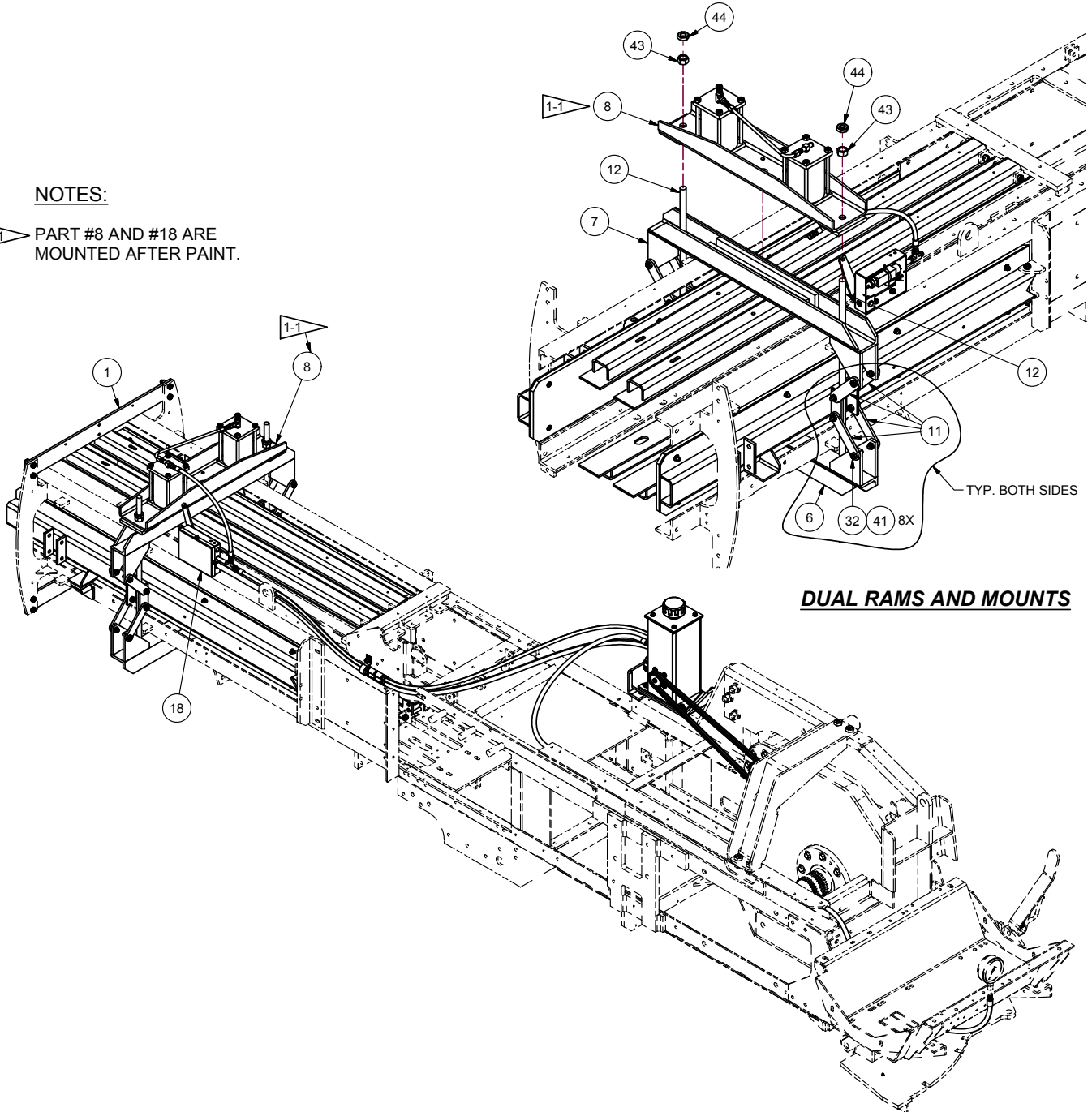
Rev A

Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-14"

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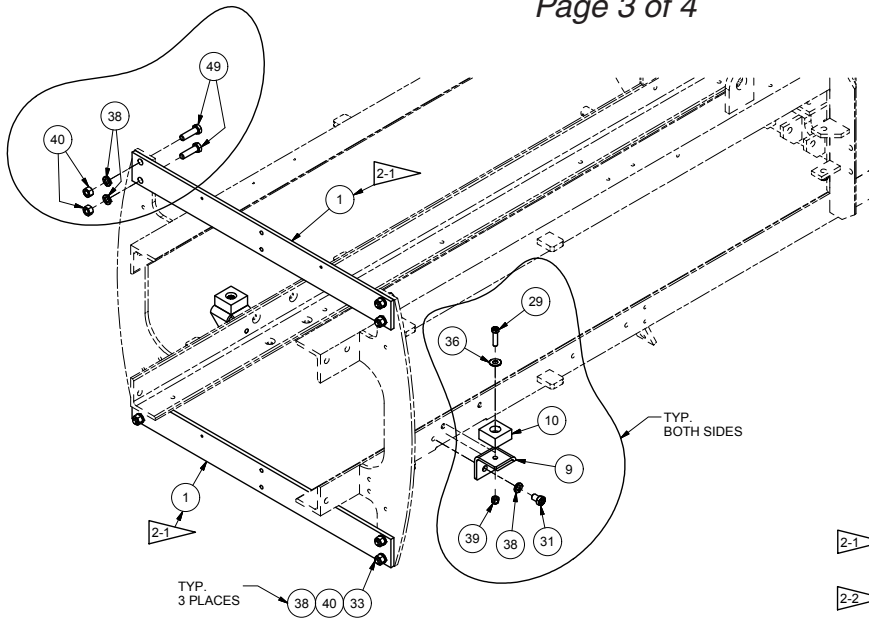
NOTES:

1-1 PART #8 AND #18 ARE MOUNTED AFTER PAINT.



Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-14"

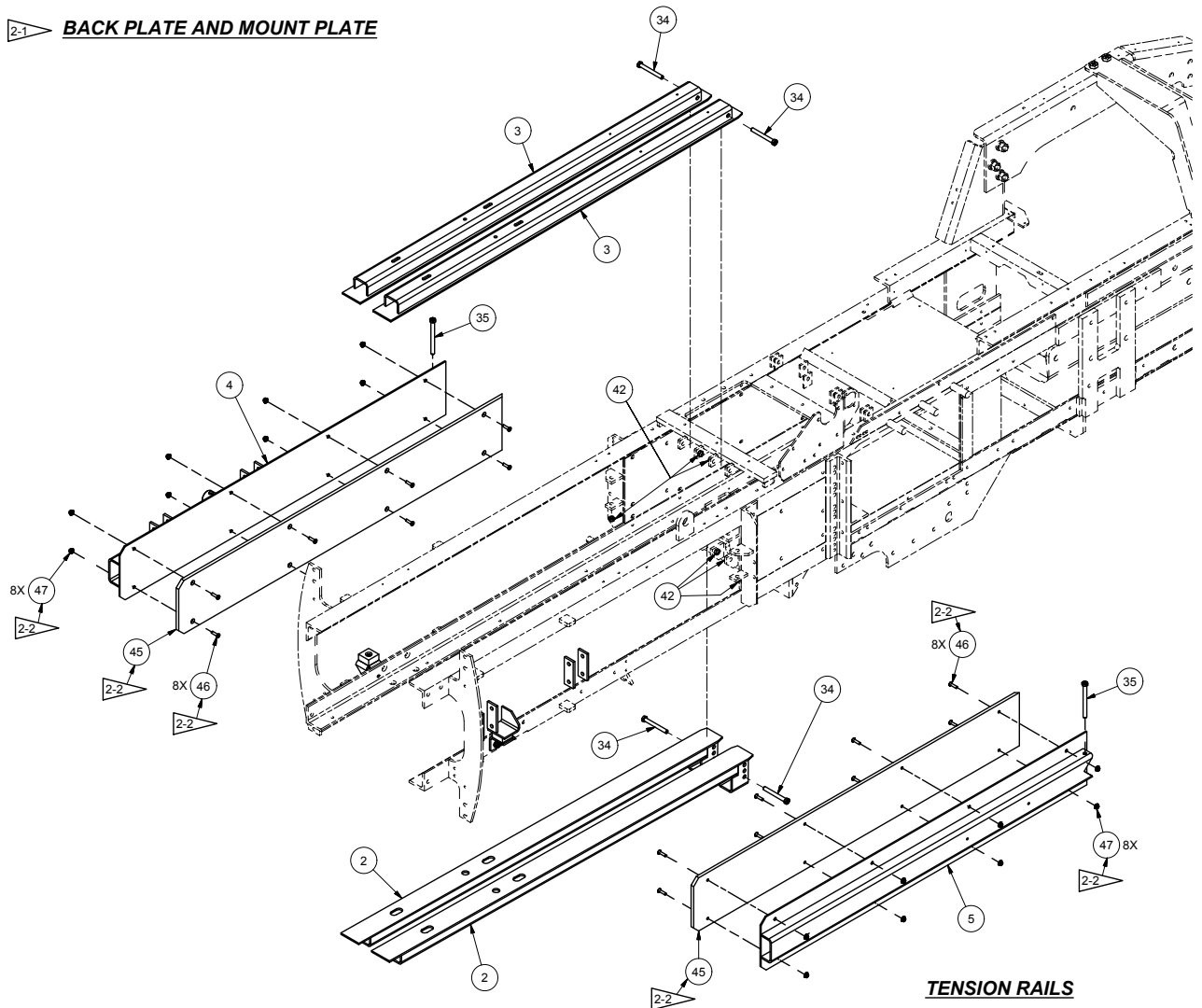
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NOTES:

- 2-1 WORK INSTRUCTIONS ARE AVAILABLE FOR INSTRUCTION OF FRAME TIE PLATES.
- 2-2 ONLY USED WITH 14X21 CHAMBER KITS.

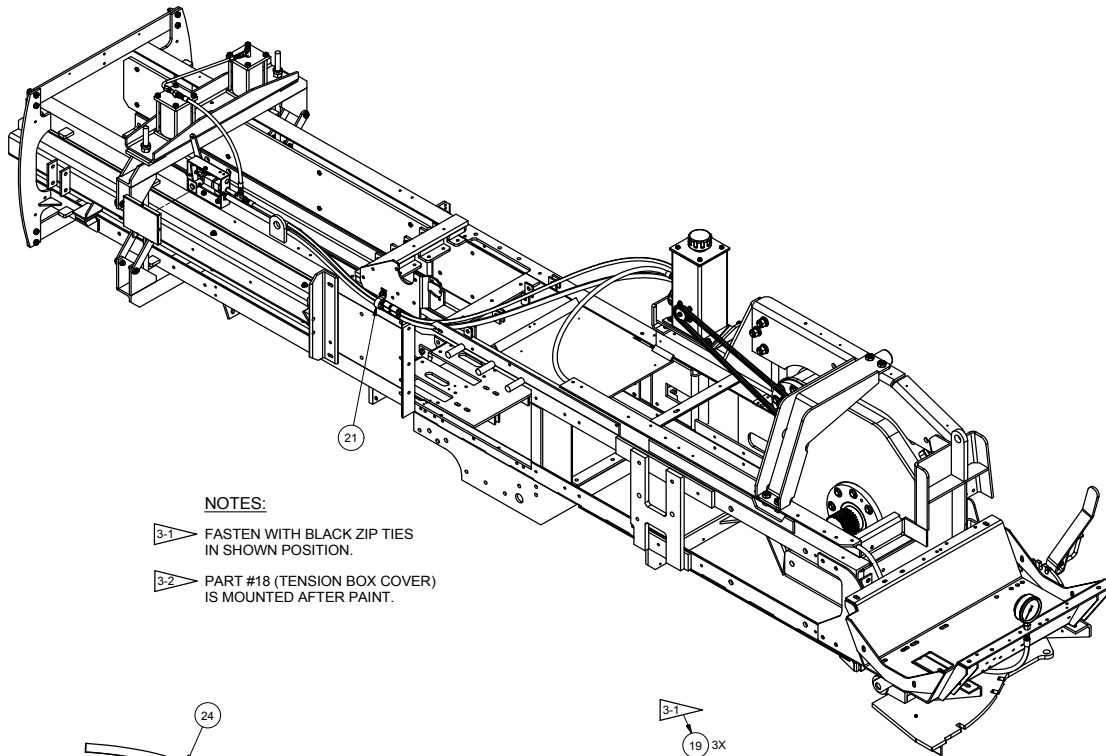
2-1 **BACK PLATE AND MOUNT PLATE**



TENSION RAILS

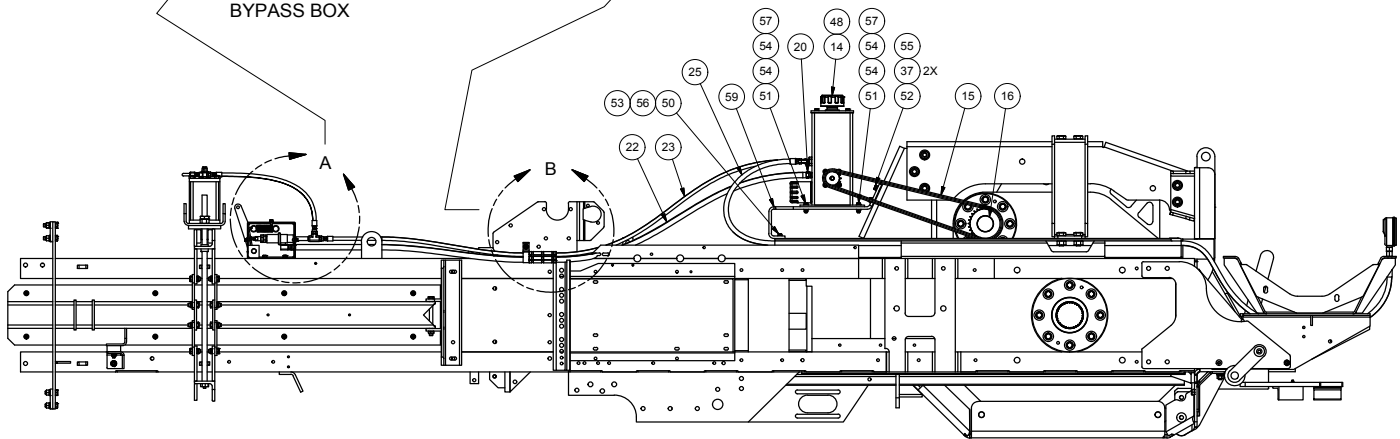
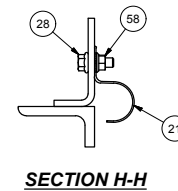
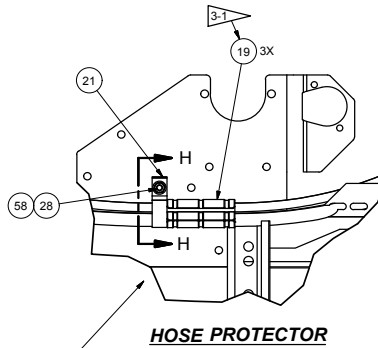
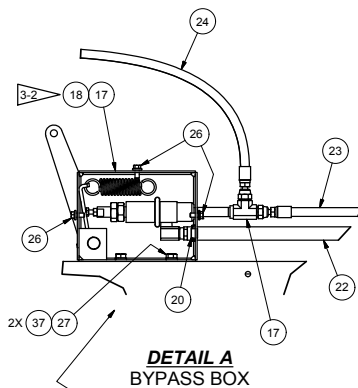
Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-14"

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NOTES:

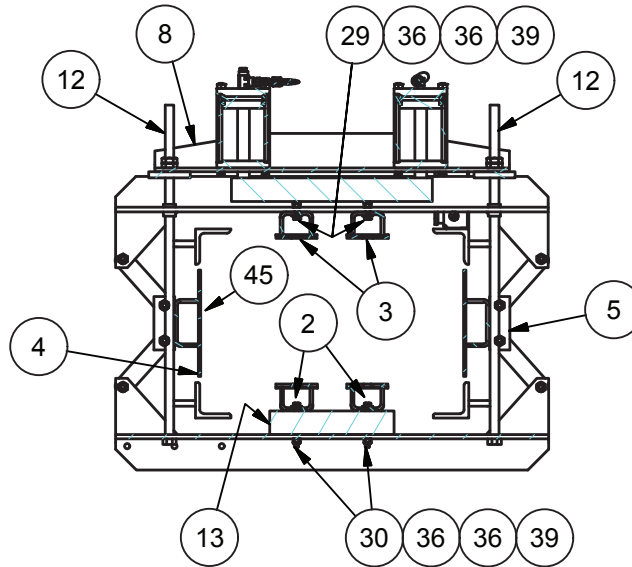
- 3-1 FASTEN WITH BLACK ZIP TIES IN SHOWN POSITION.
- 3-2 PART #18 (TENSION BOX COVER) IS MOUNTED AFTER PAINT.



**TENSION PUMP & TANK
BYPASS BOX & HOSE**

Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-14"x21"

Page 1 of 4



14" KITTED

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
908288 Tensioning/Rear Mounts Installation							
1	PLT0035077	2	. Bar, Upper	32	221563W	16	. Capscrew
2	TNS0034362	2	. Weldment, Rail	33	200454W	6	. Capscrew
3	TNS0022284	2	. Weldment, Rail	34	234889	4	. Capscrew
4	TNS0018902	1	. Weldment, Tension Rail - LH	35	R13801857	2	. Capscrew
5	TNS0018903	1	. Weldment, Tension Rail - RH	36	R13802623	10	. Flat Washer
6	TNS0007049	1	. Weldment, Tension Angle - Btm	37	R13812514	4	. Lockwasher
7	TNS0007050	1	. Weldment, Tension Angle - Top	38	234665	10	. Lockwasher
8	*FT00000277	1	. Assy, Dual Ram	39	237567	6	. Nut, Esna
9	MNT037760B	2	. Plate, Support	40	221711W	8	. Hex Nut
10	PAD0018804	2	. Pad, Support	41	NEJ0000500	16	. Nut, Esna
11	F000000497	8	. Linkage Bar	42	R13804125	6	. Locknut
12	F000000600	2	. Bolt, Tension	43	221716W	2	. Hex Nut
13	903411	1	. Plate, Spacer	44	247008	2	. Jam Nut
14	*FT00015049	1	. Tension Pump & Tank Assy	45	906760	2	. Side Tension Liner
15	909079	1	. Assy, Chain	46	Y09G-0520	16	. Capscrew
16	SPK0004030	1	. Sprocket	47	191534W	16	. Nut
17	FT00000192	1	. Bypass Box	48	238206	2GL	. Oil, Hydraulic
18	FT00000050	1	. Cover Plate	49	221569W	2	. Capscrew
19	HSP00000004	3	. Hose Protector	50	R13810993	1	. Capscrew
20	FT00000252	2	. Hose Clamp	51	R13811015	2	. Capscrew
21	CLP0000165	1	. Clamp, Jiffy	52	221499W	2	. Capscrew
22	909389	1	. Hose Assy	53	221763W	1	. Hard Washer
23	237534	1	. Hose Assy	54	R13802914	4	. Hard Washer
24	FT00000221	1	. Hose Assy	55	221767W	2	. Hard Washer
25	589773	1	. Hose Assy	56	R13812512	1	. Lockwasher
26	SMS0000173	3	. Screw, Ser Fig	57	223588	2	. Nut, Esna
27	R13811031	2	. Capscrew	58	09411507	1	. Nut
28	174413W	1	. Screw, Ser Fig	59	909078	1	. Plate, Tank Mnt
29	Y17C-0624	4	. Capscrew				
30	R13811045	2	. Capscrew				
31	R13801840	2	. Capscrew				

* See Separate Coverage

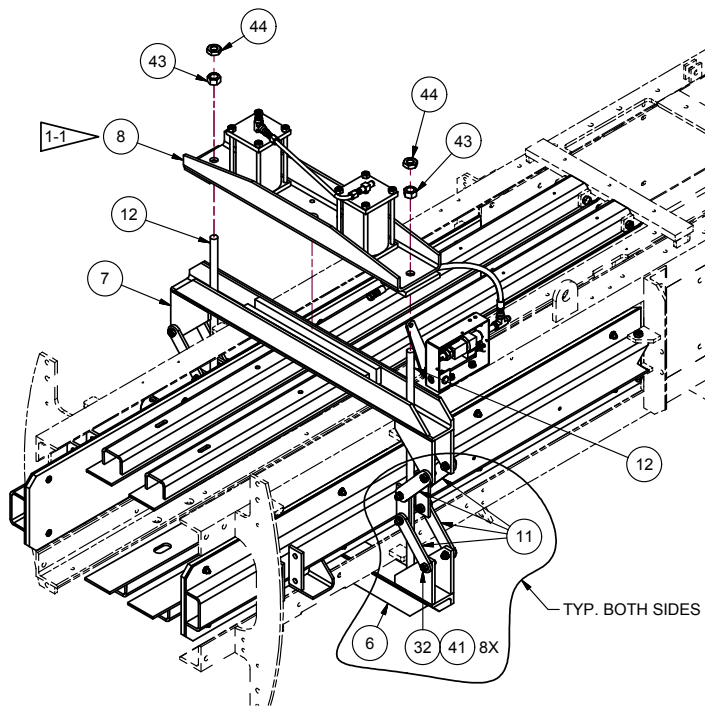
Rev A

Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-14"x21"

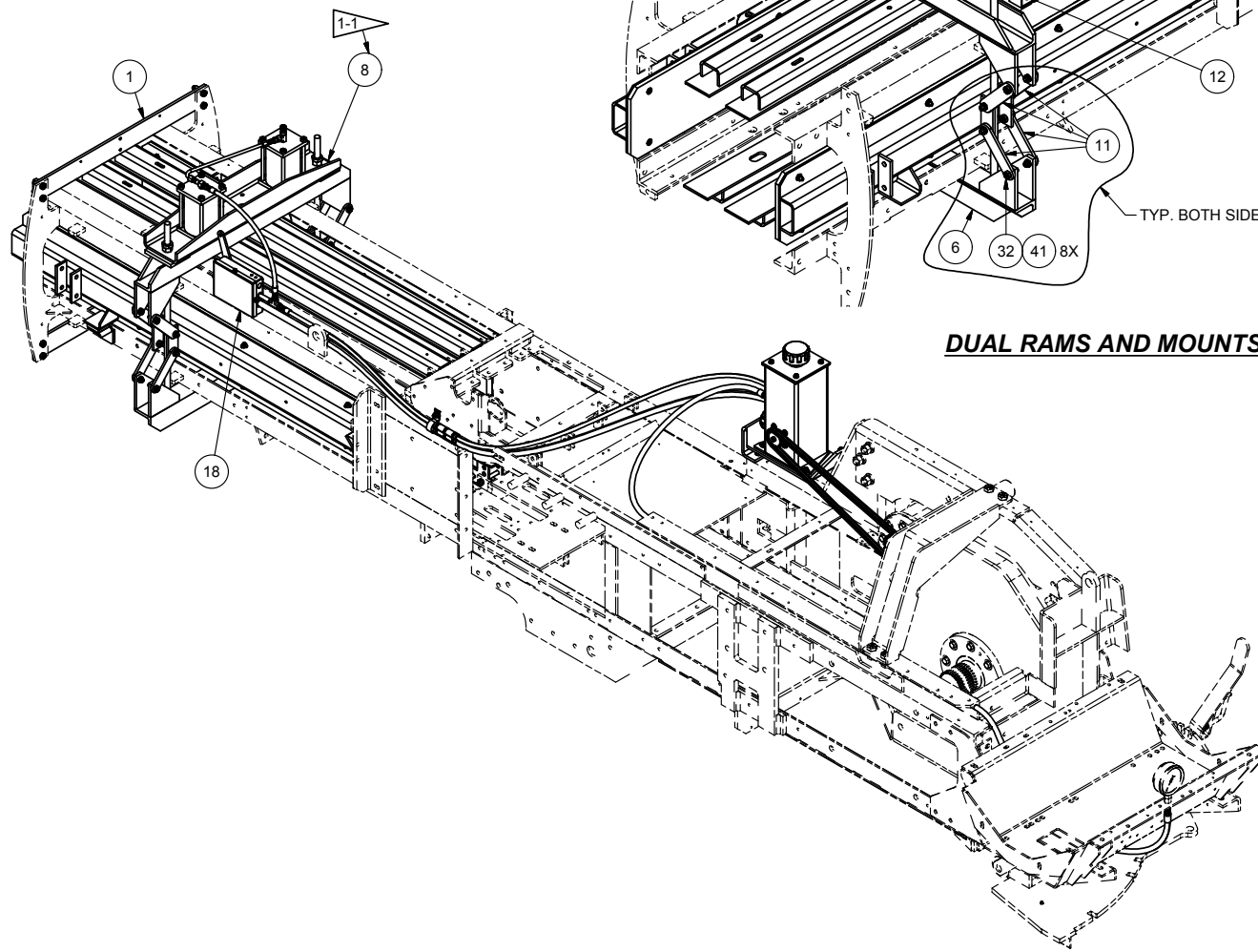
Page 2 of 4

NOTES:

1-1 PART #8 AND #18 ARE MOUNTED AFTER PAINT.

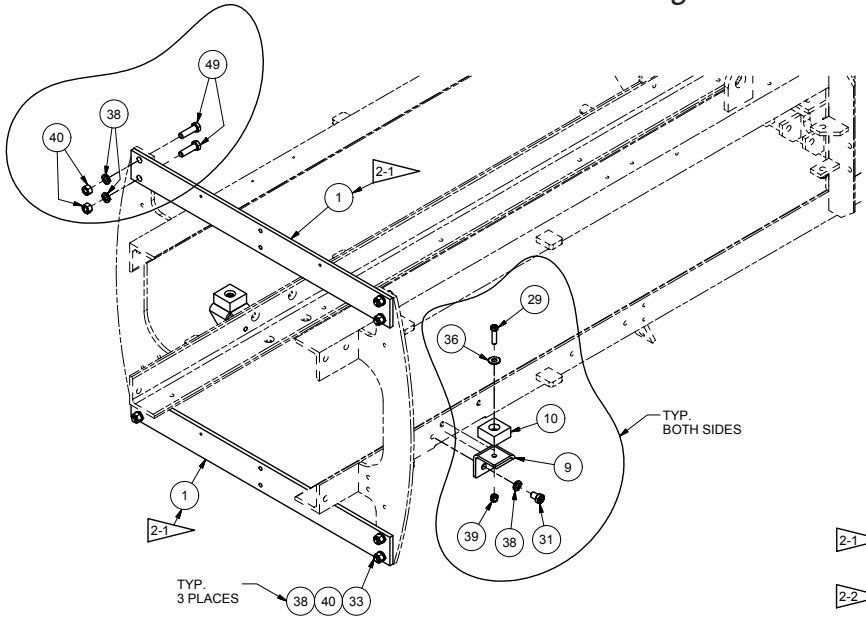


DUAL RAMS AND MOUNTS



Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-14"x21"

Page 3 of 4

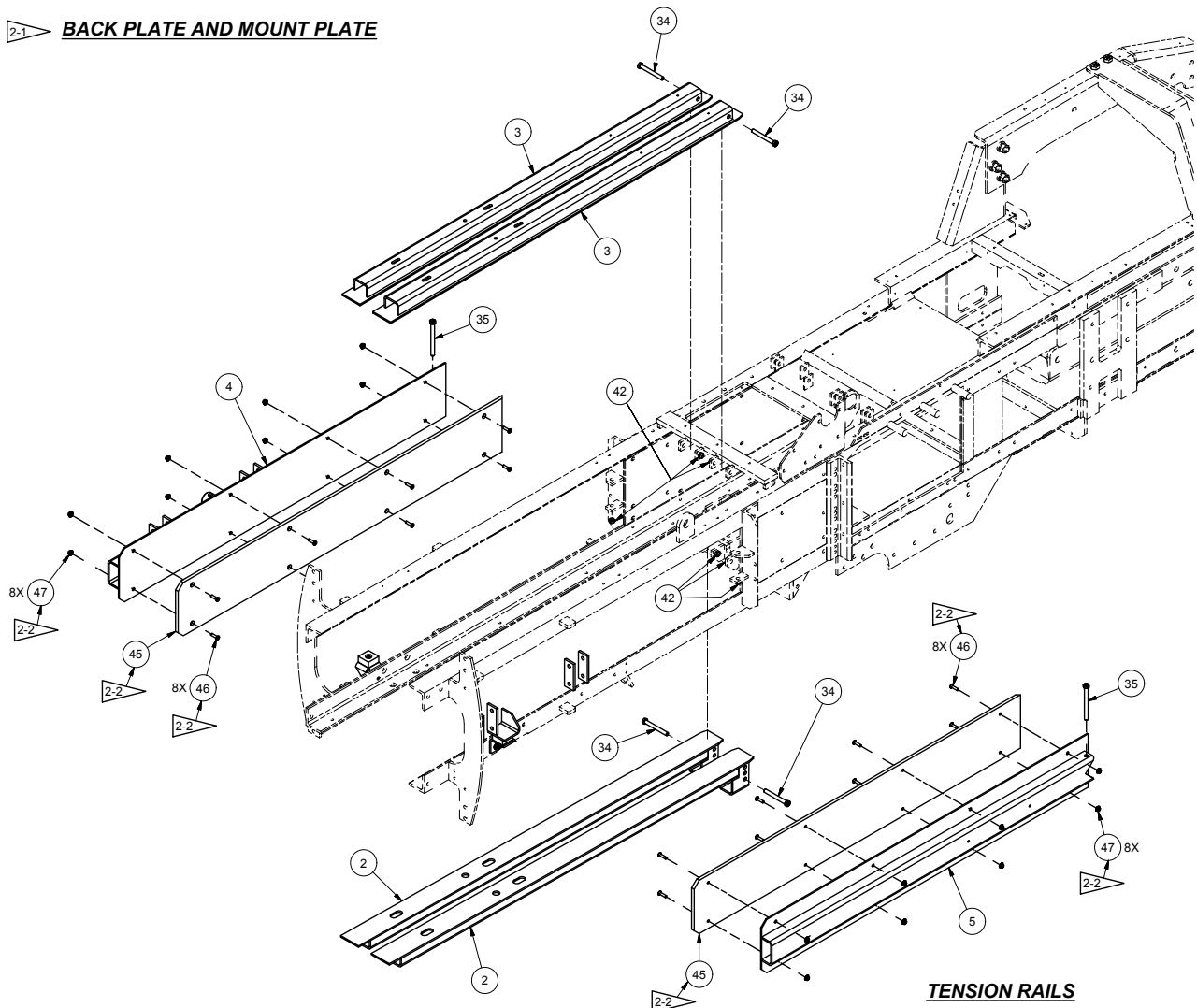


NOTES:

2-1 WORK INSTRUCTIONS ARE AVAILABLE FOR INSTRUCTION OF FRAME TIE PLATES.

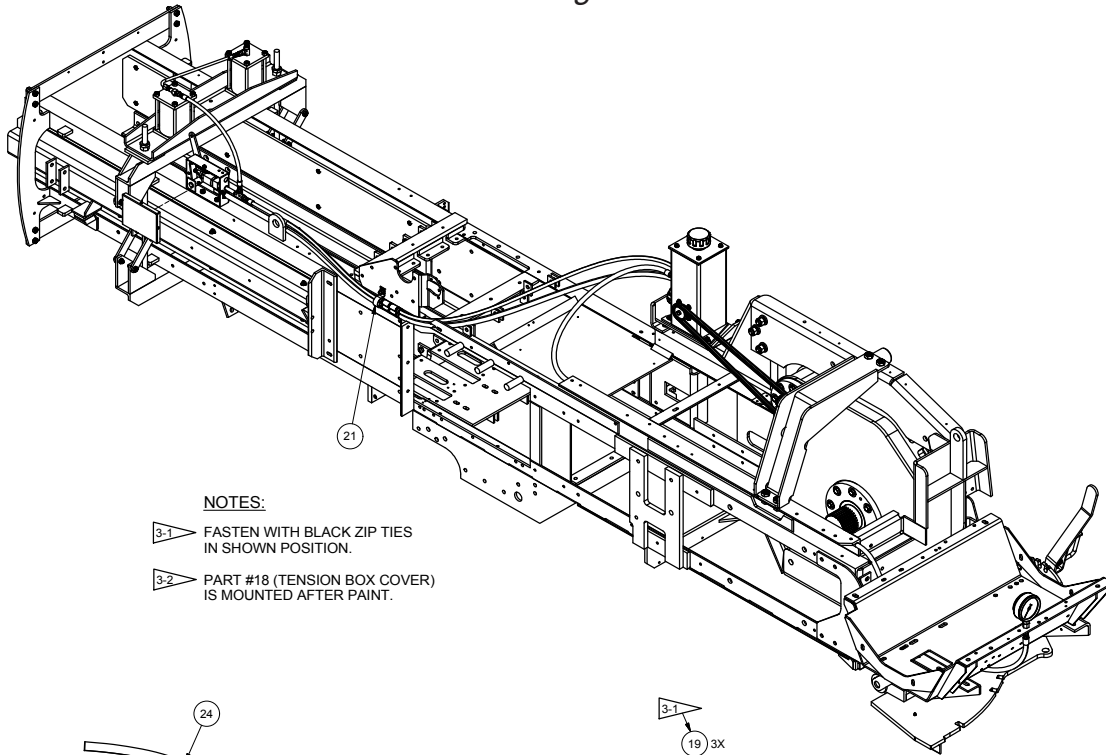
2-2 ONLY USED WITH 14X21 CHAMBER KITS.

2-1 **BACK PLATE AND MOUNT PLATE**



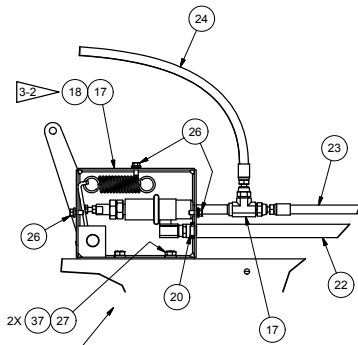
Tensioning/Rear Mnt Inst, 37X - 16" Frame Ktd-14"x21"

Page 4 of 4

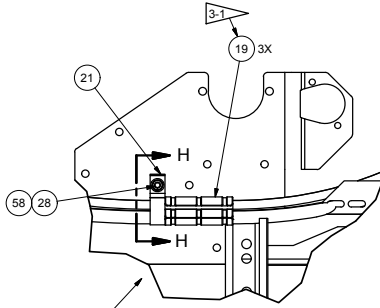


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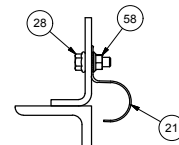
- 3-1 FASTEN WITH BLACK ZIP TIES IN SHOWN POSITION.
- 3-2 PART #18 (TENSION BOX COVER) IS MOUNTED AFTER PAINT.



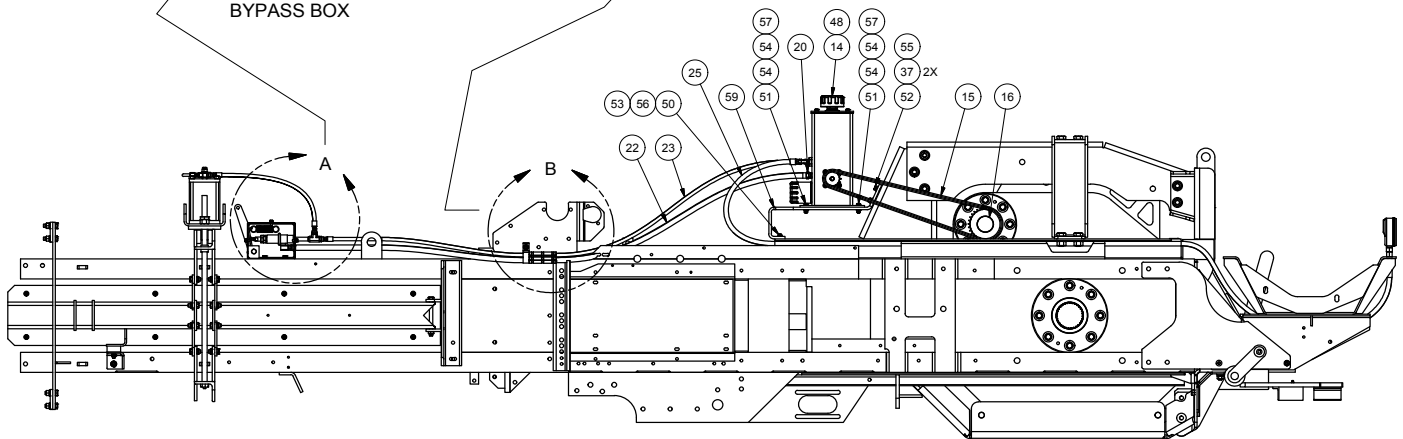
**DETAIL A
BYPASS BOX**



HOSE PROTECTOR



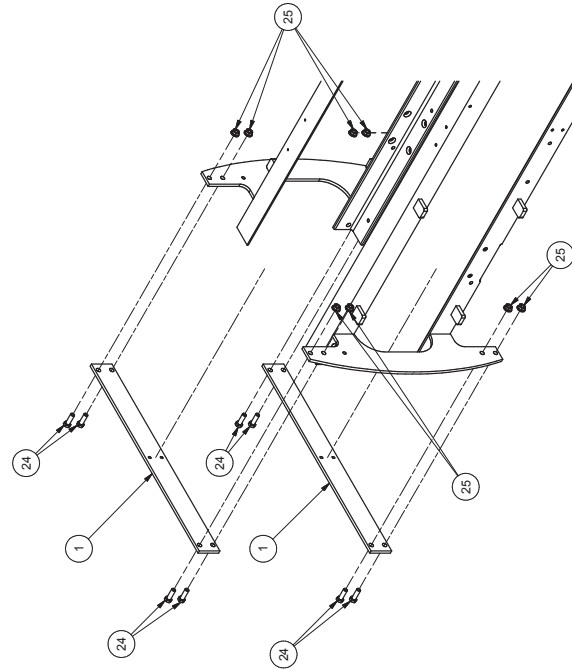
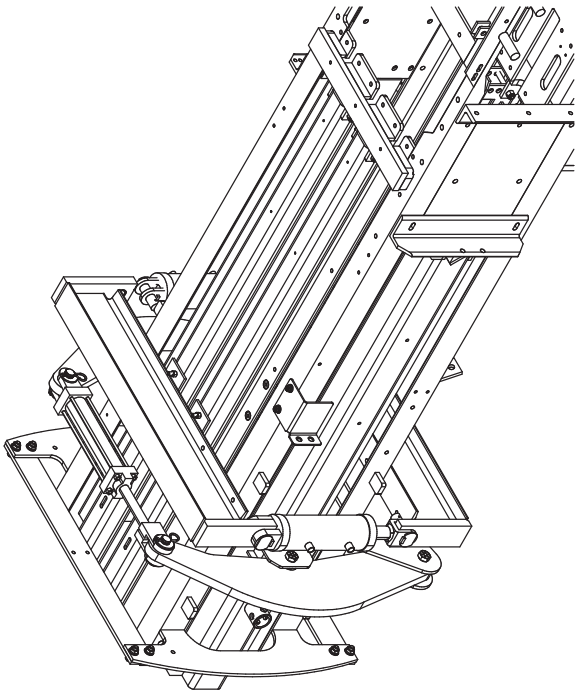
SECTION H-H



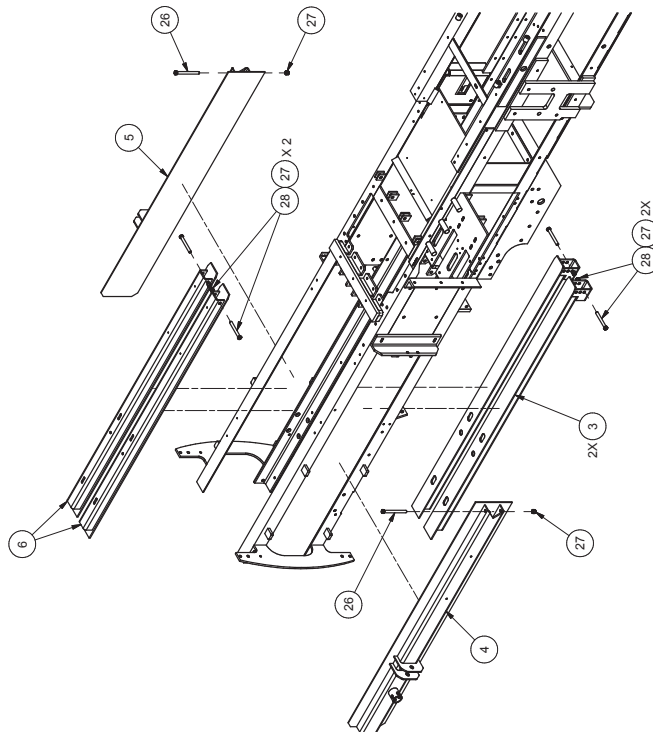
**TENSION PUMP & TANK
BYPASS BOX & HOSE**

Tensioning/Rear Mnt Inst - 380/385, 14" Kitted

Page 1 of 2



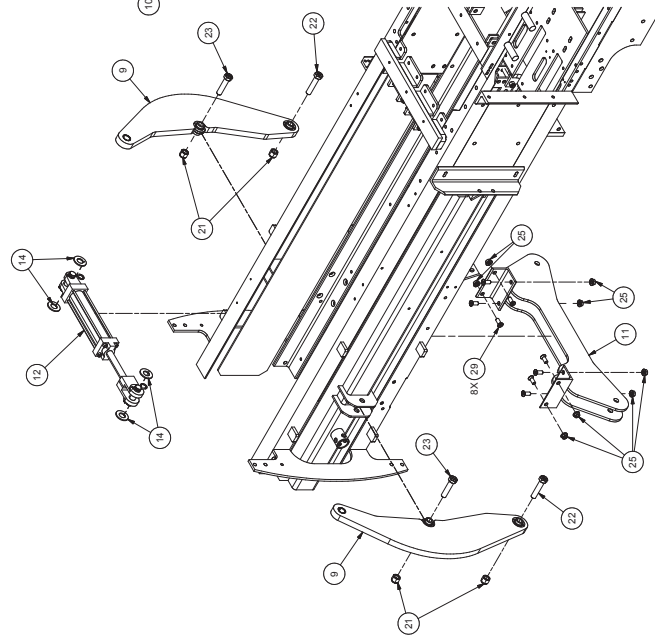
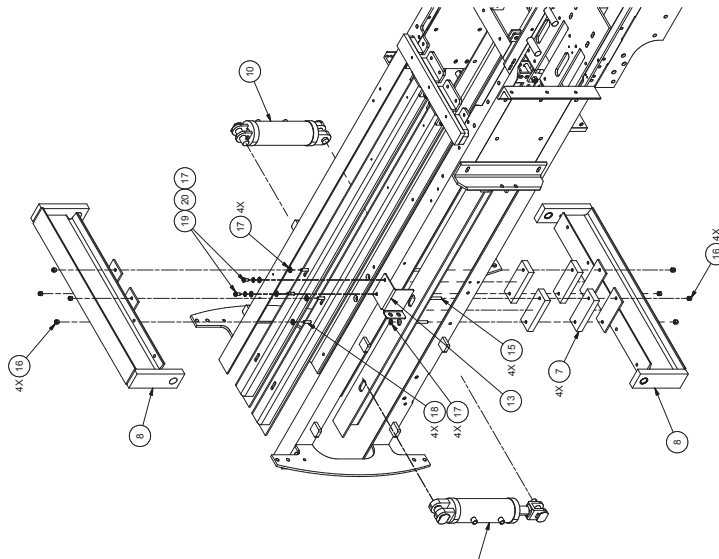
INSTALLATION OF REAR BAR BRACKETS



INSTALLATION OF TENSION RAILS

Tensioning/Rear Mnt Inst - 380/385, 14" Kitted

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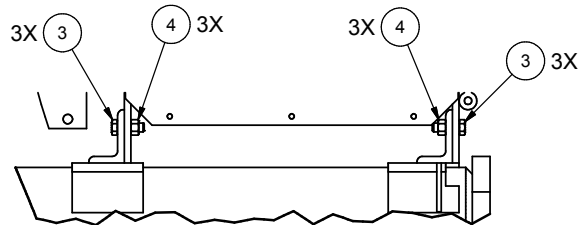
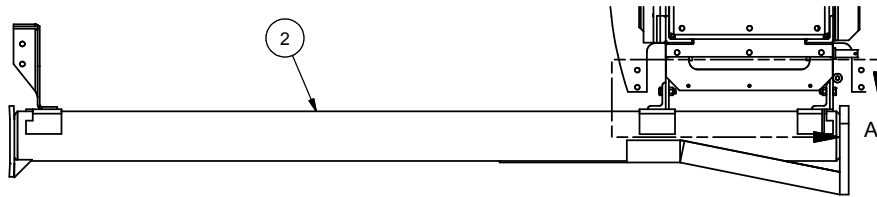
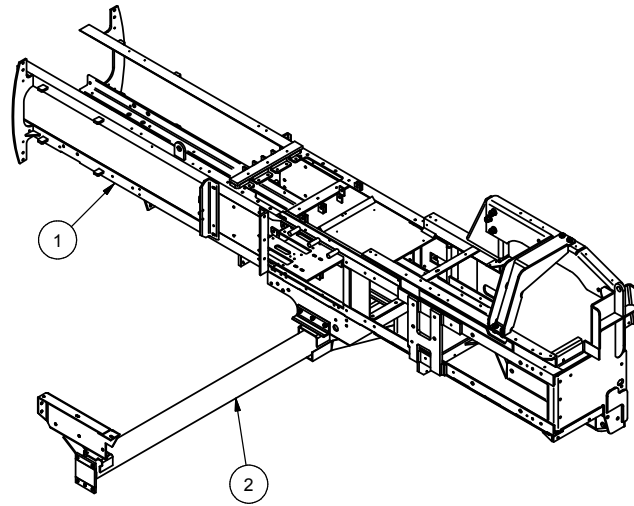


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
905867 Tensioning/Rear Mnt Inst							
1	PLT0035077	2	. Bar, Upper	16	R13811191	8	. Locknut
3	TNS0034362	2	. Weldment, Rail	17	R13802623	10	. Flat Washer
4	TNS036528D	1	. Tension Rail Weldment, LH	18	Y17C-0624	4	. Capscrew
5	TNS036527D	1	. Tension Rail Weldment, RH	19	R13811032	2	. Capscrew
6	TNS0022284	2	. Weldment, Rail	20	R13812514	2	. Lockwasher
7	SPC0035591	4	. Bar, Spacer	21	R13811196	4	. Locknut
8	TNS036531E	2	. Tension Rail & Beam Assembly	22	221664W	2	. Capscrew
9	TNS035803B	2	. Tension Rail Squeeze Plate	23	221662W	2	. Capscrew
10	CYL0033749	2	. Cylinder	24	200454W	8	. Capscrew
	SEL000KT25	1	. Seal Kit	25	R13804125	16	. Locknut
11	YOK036534D	1	. Yoke Weldment	26	R13801857	2	. Capscrew
12	F000006519	1	. Cylinder	27	R13811193	6	. Nut, Esna
	SEL0008408	1	. Seal Kit	28	234889	4	. Capscrew
13	BKT037356B	1	. Bracket	29	Y09G-0820	8	. Capscrew
14	ZZ00000218	4	. Bushing				
15	221518W	4	. Capscrew				

Rev A

Frame & Axle, 16"

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DETAIL A

NOTES:

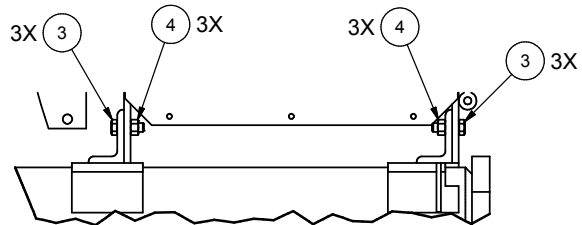
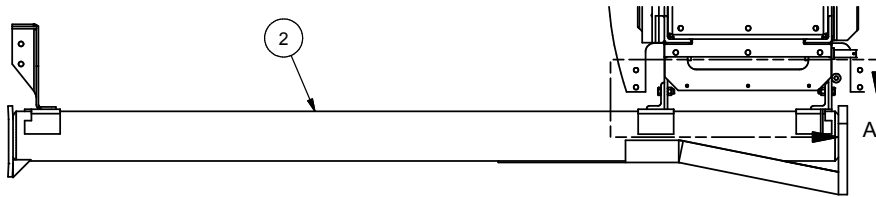
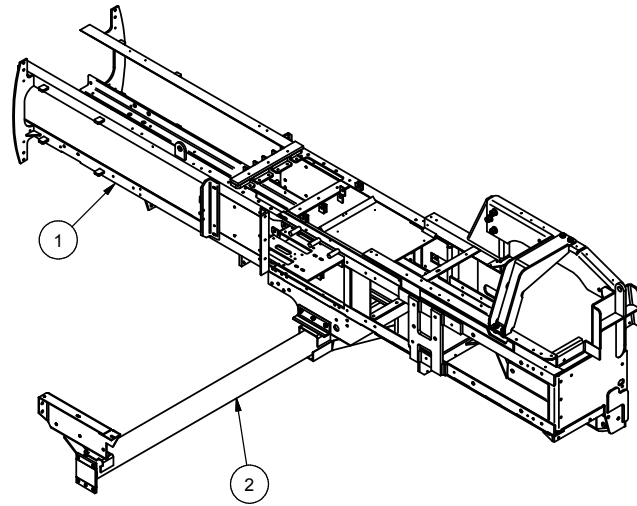
1. VIEWS ARE OF 16" 3-TIE BULLGEAR FRAME.

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	909327		Frame & Axle Assembly				
1	906811	1	. Frame, 16"; 3 Tie, Gearbox Baler				
2	AXL0030902	1	. Axle				
3	200454W	6	. Capscrew				
4	221711W	6	. Nut				

Rev -

Frame & Axle, 14 X 21"

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DETAIL A

NOTES:

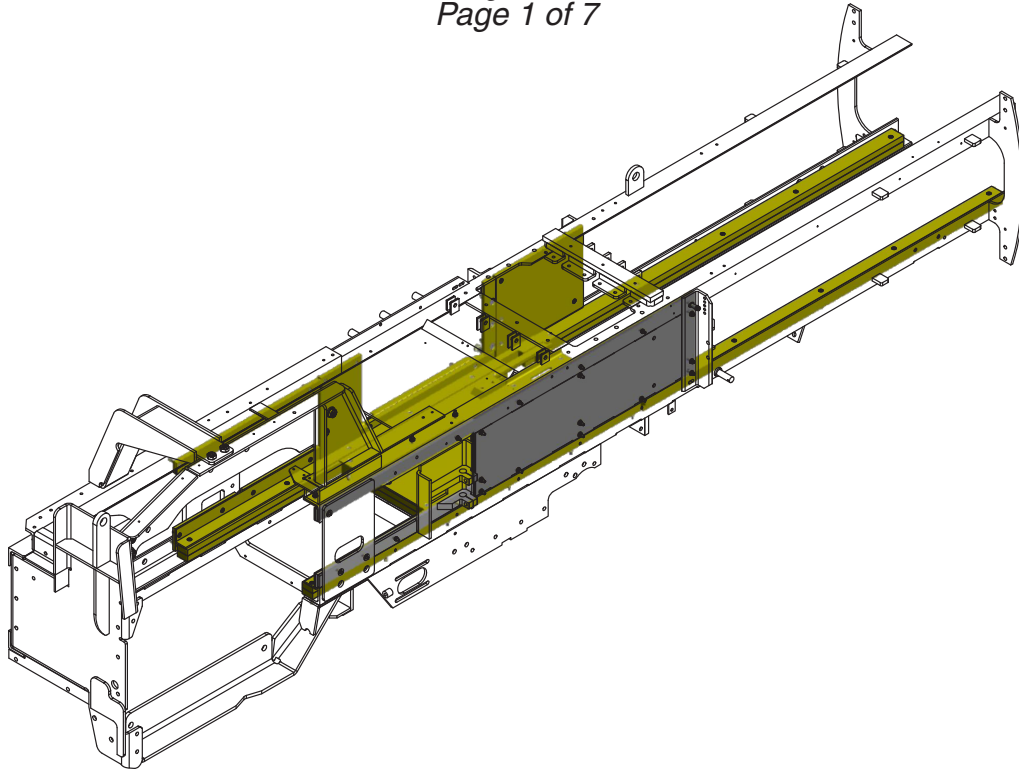
1. VIEWS ARE OF 16" 3-TIE BULLGEAR FRAME.

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	909328		Frame & Axle Assembly				
1	908289	1	. Frame, 14x21"; 3 Tie, Gearbox Baler				
2	AXL0030902	1	. Axle				
3	200454W	6	. Capscrew				
4	221711W	6	. Nut				

Rev -

Chamber Inst, 14x21 Gearbox 3 Tie

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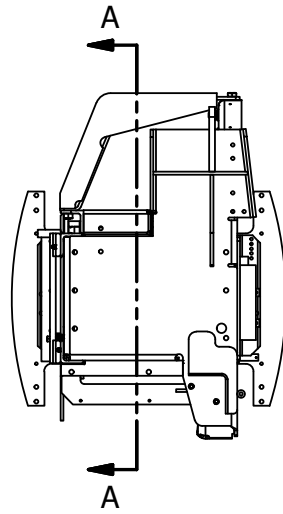
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
908280 Chamber Inst, 14x21 Gearbox 3 Tie							
1	F000000299	1	. Bar, RH	34	Y09G-0540	1	. Capscrew
2	906729	1	. Guide Weldment	35	Y09G-0548	11	. Capscrew
3	F000007744	1	. Stationary Knife	36	Y09G-0556	24	. Capscrew
4	905059	1	. Rail, Bottom LH	37	Y09G-0656	3	. Capscrew
5	905062	1	. Bar, Side Rail	38	PWB5001750	3	. Bolt, Plow
6	906724	1	. Plate, RH Rail	39	R13802914	27	. Hard Washer
7	906731	1	. Plate, RH Liner	40	R13811449	6	. Flat Washer
8	F000007813	1	. Bar, RH	42	221767W	9	. Hard Washer
9	F000007816	1	. Liner, RH	43	R13812514	6	. Lockwasher
10	F000007818	1	. Liner, LH	44	R13812516	4	. Lockwasher
11	F000007819	1	. Bar, LH	45	221705W	2	. Hex Nut
12	PLG0026593	1	. Bar, Bottom RH	46	237567	3	. Nut
13	905060	1	. Rail	47	223587	3	. Nut
14	SPC0018514	8	. Bar, Spacer	48	SQS5001750	1	. Set Screw
15	SPC0018515	8	. Spacer	49	234218	1	. Jam Nut
16	SPC0018516	6	. Bar, Spacer	50	Y17C-1028	1	. Capscrew
17	SPC0018517	2	. Spacer	51	222462	1	. Jam Nut
18	SPC0018519	2	. Bar, Spacer	53	901737	2	. Shim
19	SPC035753B	2	. Bar	54	SPC0033118	1	. Spacer
20	908282	1	. Plate, Btm Chm Liner	61	232939	80	. Nut
21	903119	3	. Block, Track	62	906723	1	. Plate, RH Support
22	903364	1	. Plate	63	906725	1	. Plate, RH Side
23	908285	1	. Plate, LH Btm Liner	64	906726	1	. Plate, RH Top
24	903368	1	. Adapter Weldment	65	906730	1	. Plate, Rh Liner
25	903370	1	. Plate, RH Rail	66	906732	1	. Plate, Spacer
26	903371	1	. Plate, LH Rail	67	906735	1	. Spacer, LH
27	R13811045	6	. Capscrew	68	906308	2	. Bar, Spacer
28	R13801840	4	. Capscrew	69	908283	1	. Spacer, LH Btm
29	Y09G-0520	4	. Capscrew	70	908284	1	. Spacer, LH Top
30	Y09G-0524	13	. Capscrew				
31	Y09G-0528	21	. Capscrew				
32	Y09G-0532	6	. Capscrew				
33	Y09G-0536	1	. Capscrew				

* See Separate Coverage

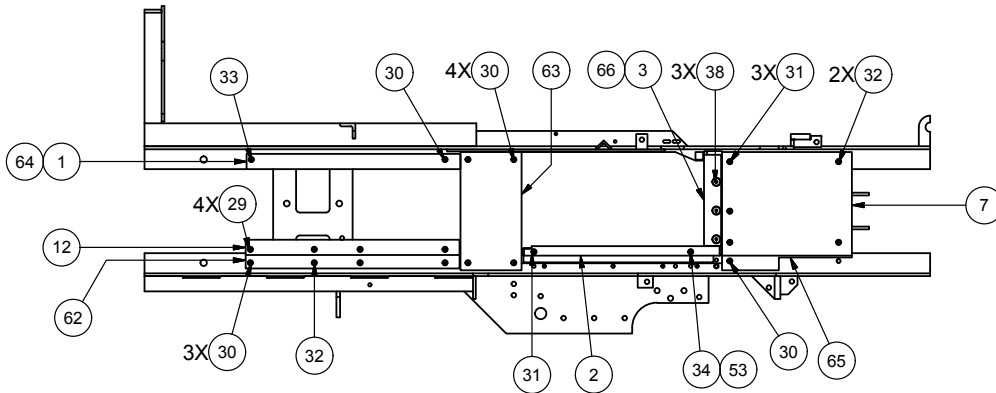
Rev -

Chamber Inst, 14x21 Gearbox 3 Tie

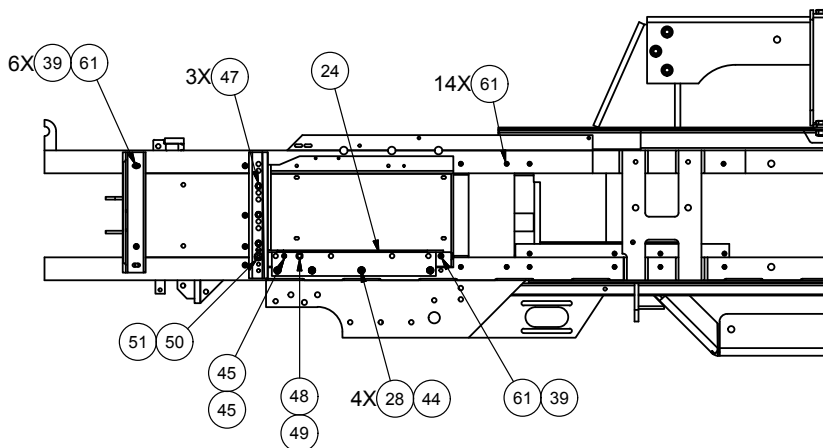
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RH SIDE INSTALLATION

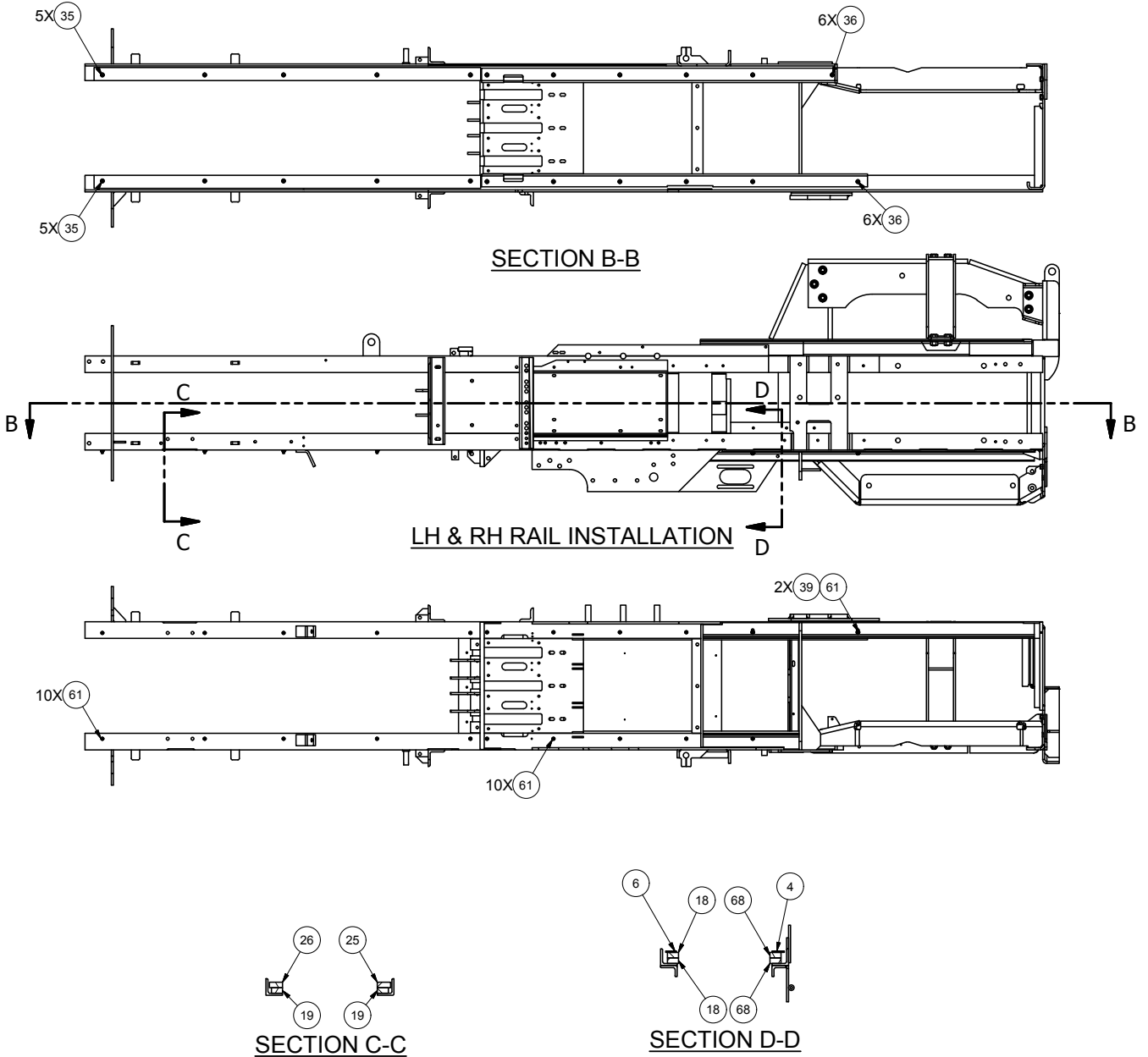


SECTION A-A



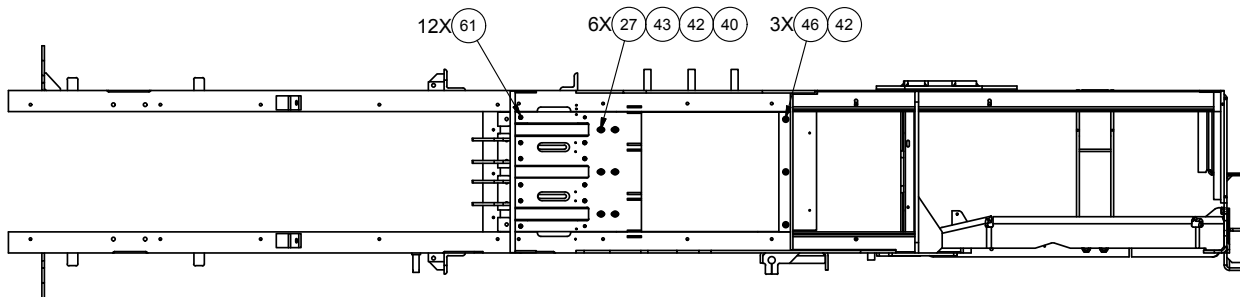
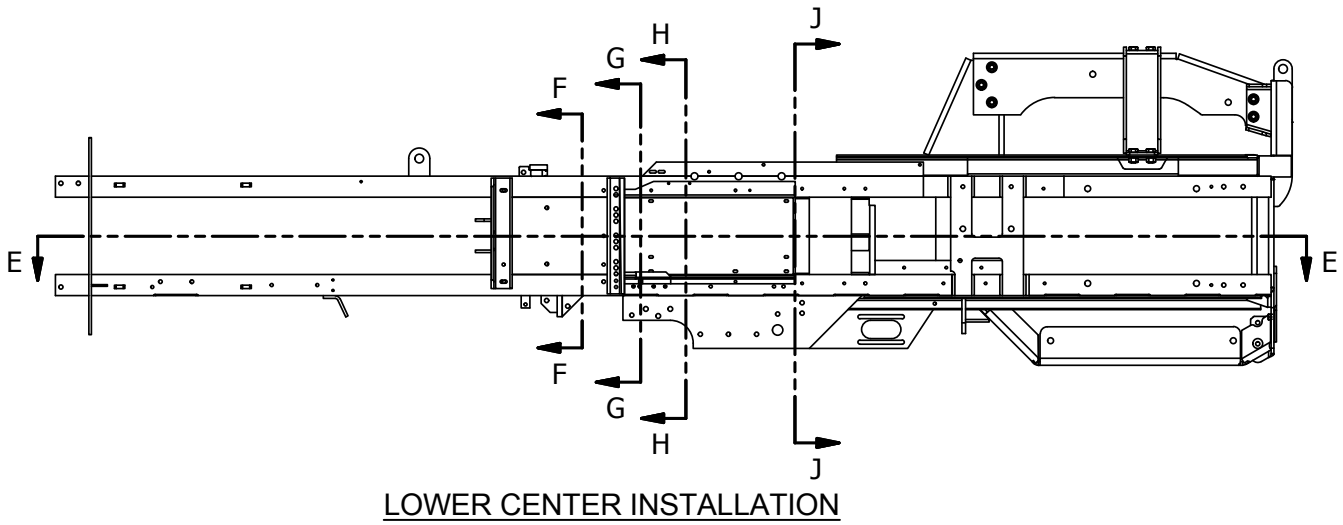
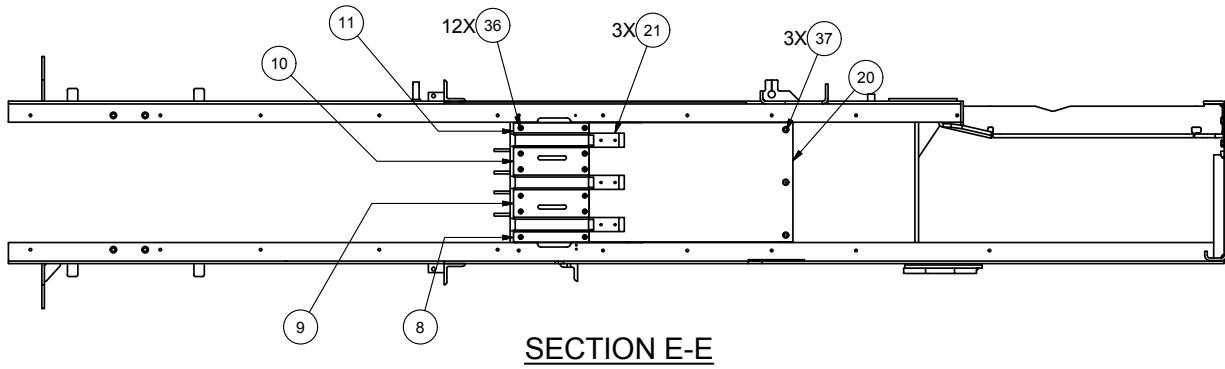
Chamber Inst, 14x21 Gearbox 3 Tie

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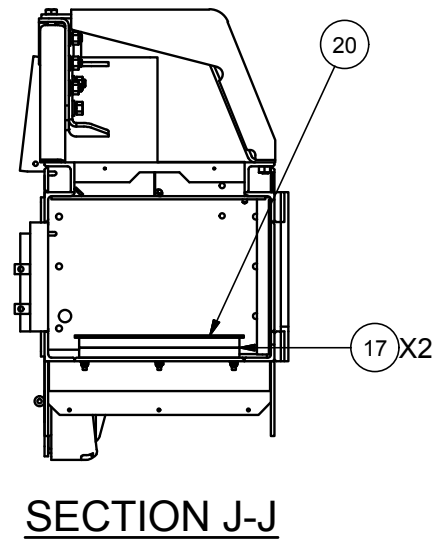
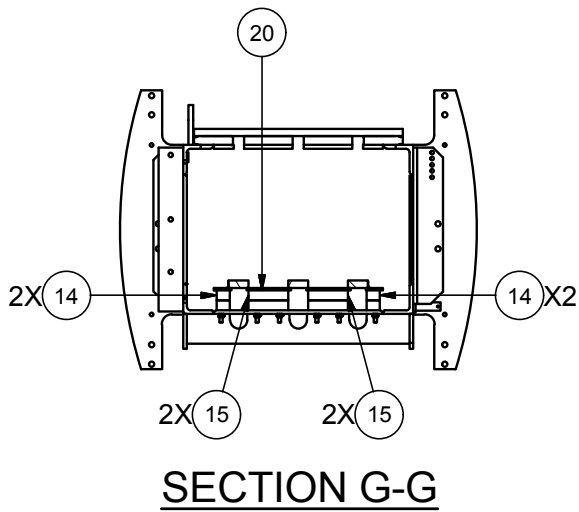
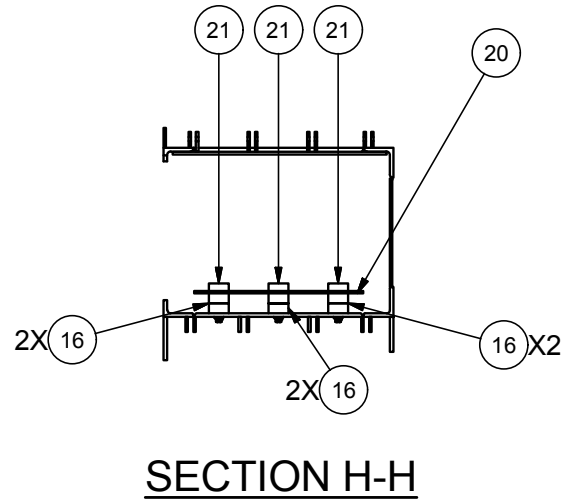
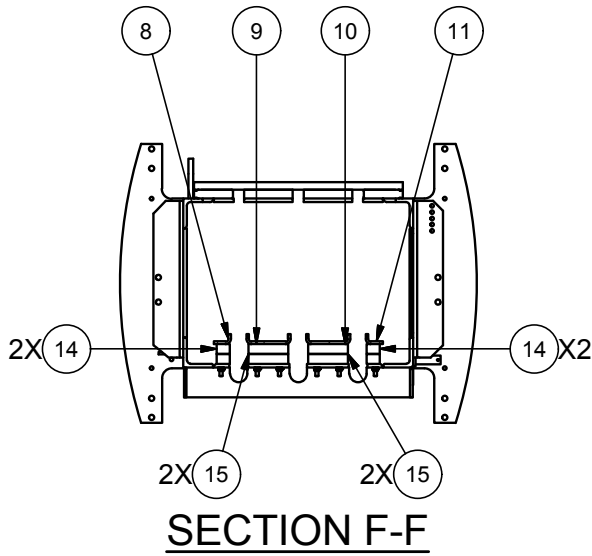
Chamber Inst, 14x21 Gearbox 3 Tie

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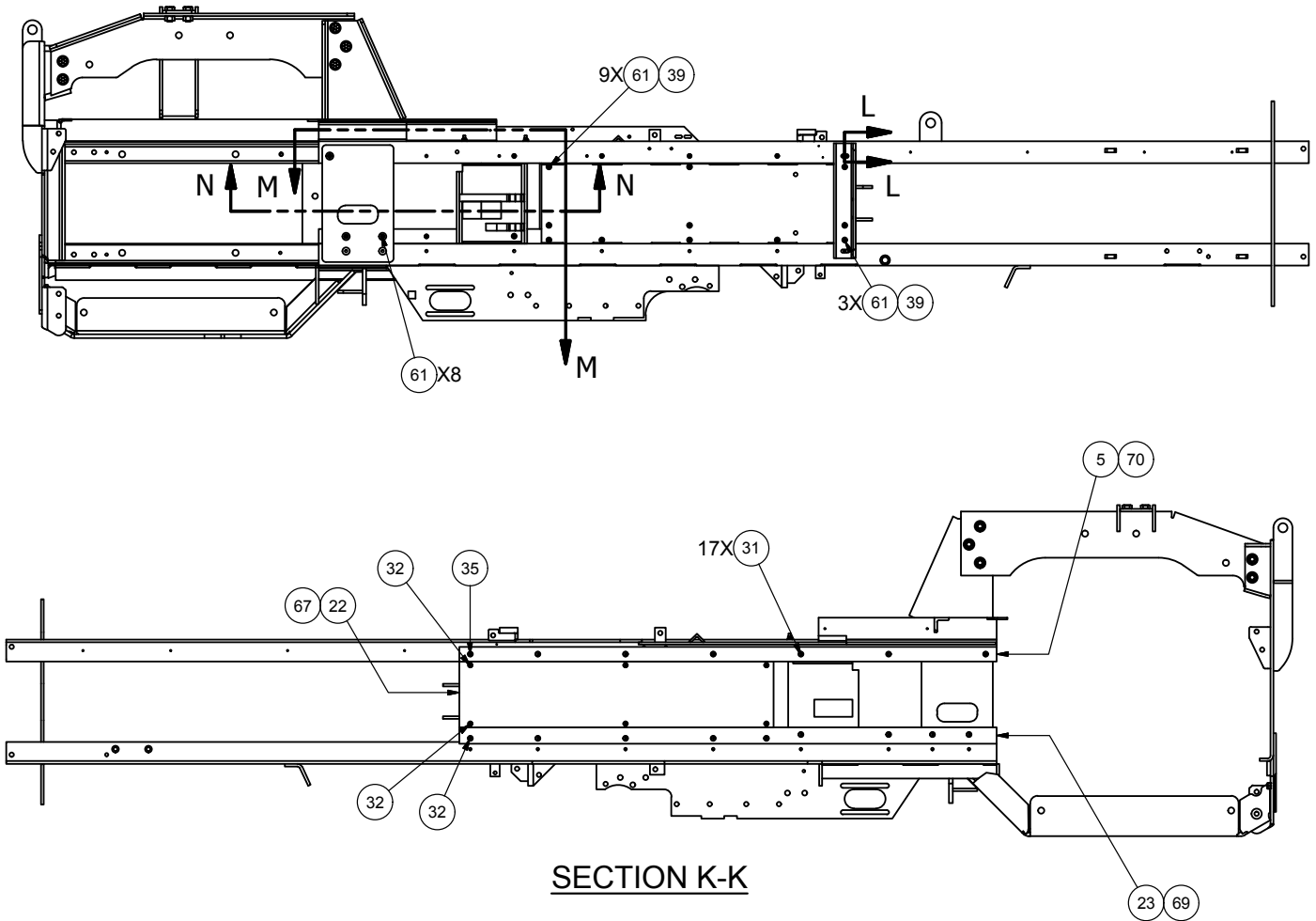
Chamber Inst, 14x21 Gearbox 3 Tie

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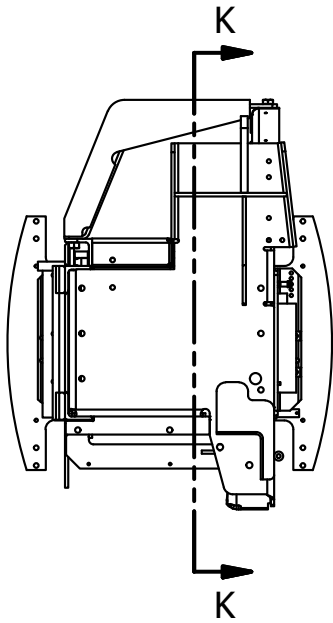
Chamber Inst, 14x21 Gearbox 3 Tie

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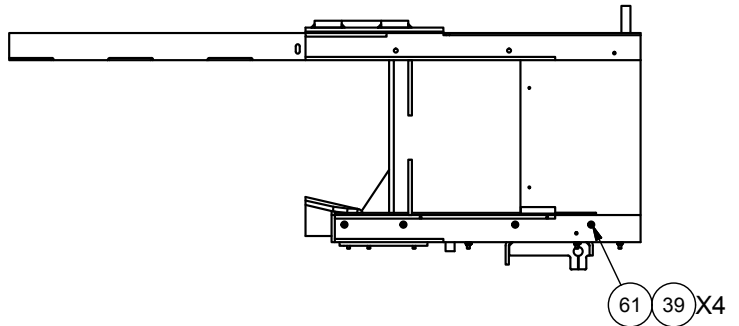


Chamber Inst, 14x21 Gearbox 3 Tie

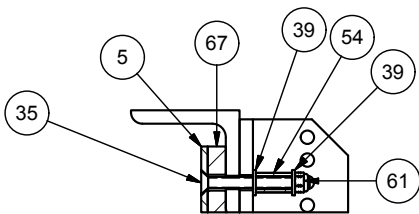
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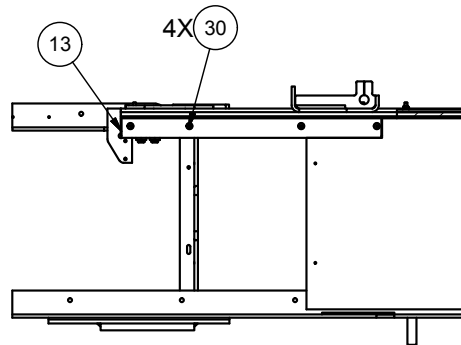
LH SIDE INSTALLATION



SECTION M-M



SECTION L-L

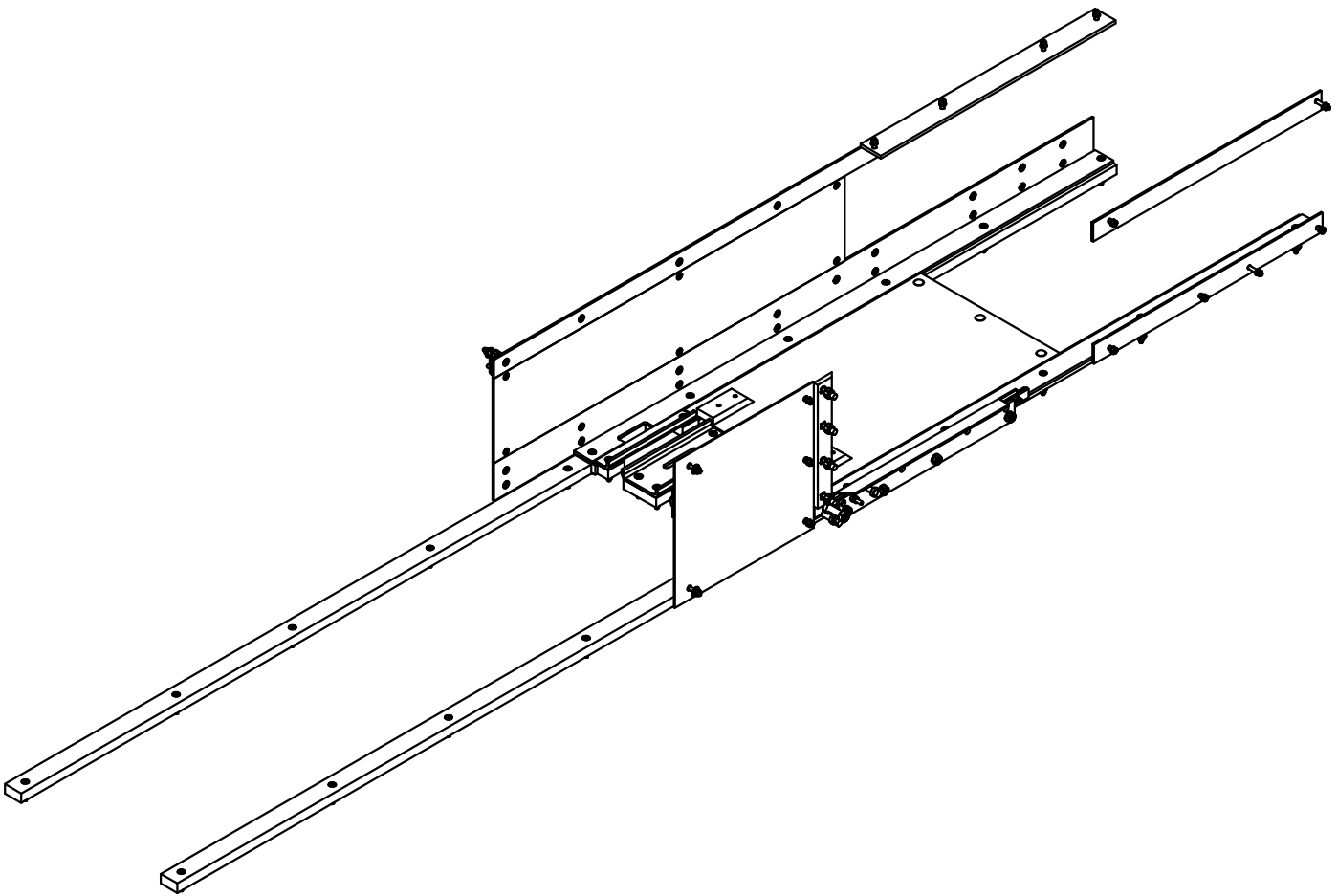


SECTION N-N

Chamber Installation Gearbox 3 Tie

14x22,15x22,16x22

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Chamber Installation Gearbox 3 Tie

14x22,15x22,16x22

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Item	Part Number	Description	905058 16" CHM, Conv. Knot	906975 15" CHM, Conv. Knot	906309 14" CHM, Conv. Knot	907036 16" CHM, Tailless Knot	907037 15" CHM, Tailless Knot	907038 14" CHM, Tailless Knot
			Quantity					
1	F00000299	RH Upper Slide Plunger Plate						1
2	F000007439	Knife Guide Under Feed Opening						1
3	905059	Bottom LH Plunger Rail						1
4	905062	Plunger, Side Rail						1
5	F000007767	Bottom RH Plunger Rail						1
6	F000007812	Bale Chamber Liner, RH						1
7	F000007813	Btm Chm Liner, Outer Right						1
8	F000007816	Btm Chamber Liner, Right Center						1
9	F000007818	Btm Chamber Liner, R/Left Center						1
10	F000007819	Btm Chm Liner, Outer Left						1
11	PLG0026593	Plunger Side Rail, Rh Bottom						1
12	905060	Top Plunger Rail LH						1
13	902728	Bale Chamber Bottom Liner						1
14	903364	Chamber Liner, L.H						1
15	905061	Plunger Side Liner, LH Bottom						1
16	906818	Center Chain Sheild Bracket						1
17	901737	Knife Guide Shim						2
18	R13802623	Washer, Flat						6
19	R13811449	Washer, Flat						6
20	Y27E-06	Washer, Hard						3
21	R13812514	Washer, Lock						6
22	R13811191	Nut, Lock						3
23	00273802	Nut, Serrated						9

Chart: 907604

Rev: A

Chamber Installation Gearbox 3 Tie

14x22,15x22,16x22

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Item	Part Number	Description	Quantity					
			905058 16" CHM, Conv. Knot	906975 15" CHM, Conv. Knot	906309 14" CHM, Conv. Knot	907036 16" CHM, Tailless Knot	907037 15" CHM, Tailless Knot	907038 14" CHM, Tailless Knot
31	Y09G-0516	Capscrew	37	32	32	40	32	32
32	Y09G-0520	Capscrew	16	4	4	16	4	4
33	Y09G-0524	Capscrew	9	9	9	10	10	10
34	Y09G-0528	Capscrew	7	3	3	7	3	3
35	Y09G-0532	Capscrew	1	18	0	0	18	0
36	Y09G-0536	Capscrew	2	14	2	0	12	0
37	Y09G-0544	Capscrew	0	4	0	1	5	1
38	Y09G-0548	Capscrew	0	0	12	0	0	12
39	Y09G-0556	Capscrew	0	0	12	0	0	12
40	Y09G-0564	Capscrew	0	0	4	0	0	4
41	223428	Washer, Flat	17	15	15	15	15	15
42	R13812513	Washer, Lock	61	74	74	63	73	73
43	R13811512	Nut, Hex	65	75	75	63	73	73
44	CRB3750150	Bolt, Carriage	3	0	0	3	0	0
45	CRB3750250	Bolt, Carriage	0	3	0	0	3	0
46	CRB3753500	Bolt, Carriage	0	0	3	0	0	3
47	Y17C-0624	Capscrew	6	0	0	6	0	0
48	180959W	Capscrew	0	6	0	0	8	0
49	R13811045	Capscrew	0	0	6	0	0	6
51	F000007744	14" Stationary Knife	0	0	1	0	0	1
52	KNF0018468	15" Stationary Knife	0	1	0	0	1	0
53	F000001609	Stationnary Knife, Sq Holes	1	0	0	1	0	0
54	PWB5002000	Bolt, Plow	4	4	3	4	4	3
55	223587	Nut, Esna	4	4	3	4	4	3
56	903368	Adapter Wldmt: Chamber	0	0	1	0	0	1
57	DPT0034314	Adaptor Chamber, 15"	0	1	0	0	1	0
58	R13801840	Capscrew	0	4	4	0	4	4

Chamber Installation Gearbox 3 Tie

14x22,15x22,16x22

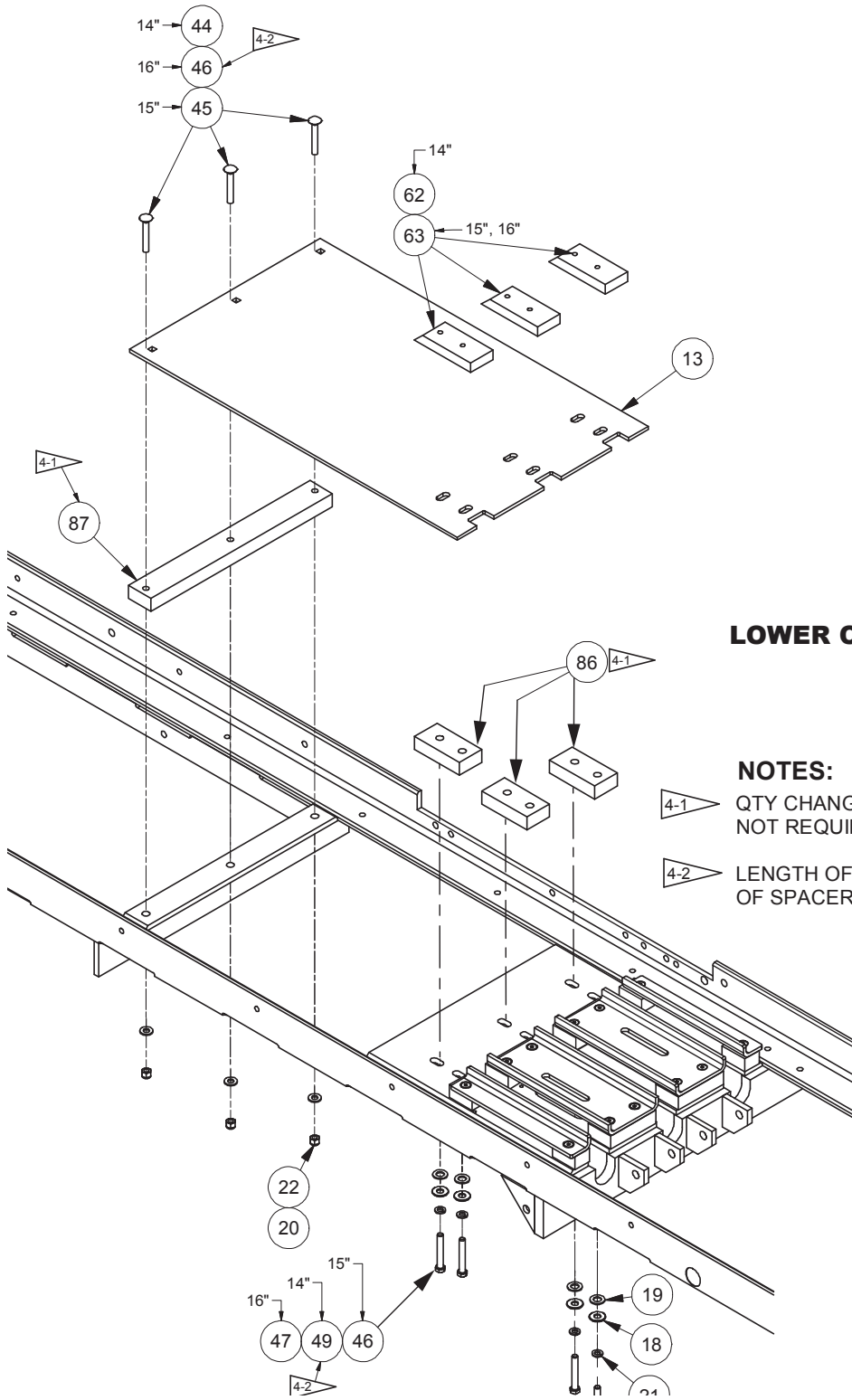
Page 4 of 11

Item	Part Number	Description	Quantity					
			905058 16" CHM, Conv. Knot	906975 15" CHM, Conv. Knot	906309 14" CHM, Conv. Knot	907036 16" CHM, Tailless Knot	907037 15" CHM, Tailless Knot	907038 14" CHM, Tailless Knot
59	R13812516	Washer, Lock	0	4	4	0	4	4
60	SQS5001750	Sq Head Set Screw	2	2	1	2	2	1
61	234218	Nut, Jam	2	0	1	2	0	1
62	903119	Needle Track Block, 14" Chamber	0	0	3	0	0	3
63	902703	Needle Track Block, Sq Edge	3	3	0	3	3	0
64	Y17C-1028	Capscrew	0	0	1	0	0	1
65	222462	Nut, Jam	1	0	1	0	0	1
71	MNT037222A	Trip Arm Spring Mount	1	1	1	0	0	0
72	SPC0033118	Bullgear Bolt Pin Spacer	0	0	0	1	1	1
73	232939	Nut, Esna	2	2	2	0	0	0
74	R13811017	Capscrew	1	1	1	0	0	0
81	903370	Rear Conv Spacer Rail, RH, 16" to 14"	0	0	1	0	0	1
82	903371	Rear Conv Spacer Rail, LH, 16" to 14"	0	0	1	0	0	1
83	SPC035753B	Rear Conversion Spacer, Rail	0	2	2	0	2	2
84	SPC0018514	Conversion Spacer, 1 3/8" x 2"	0	4	8	0	4	8
85	SPC0018515	Conversion Spacer, 2" x 4"	0	4	8	0	4	8
86	SPC0018516	Rear Conversion Spacer, 2" x 4"	0	3	6	0	3	6
87	SPC0018517	Front Conversion Spacer, 2" x 16 1/8"	0	1	2	0	1	2
88	SPC0018519	Plunger Rail Conversion Spacer	0	1	2	0	1	2
89	906308	Plunger Rail Spacer	0	1	2	0	1	2

Chamber Installation Gearbox 3 Tie

14x22,15x22,16x22

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LOWER CENTER FRONT

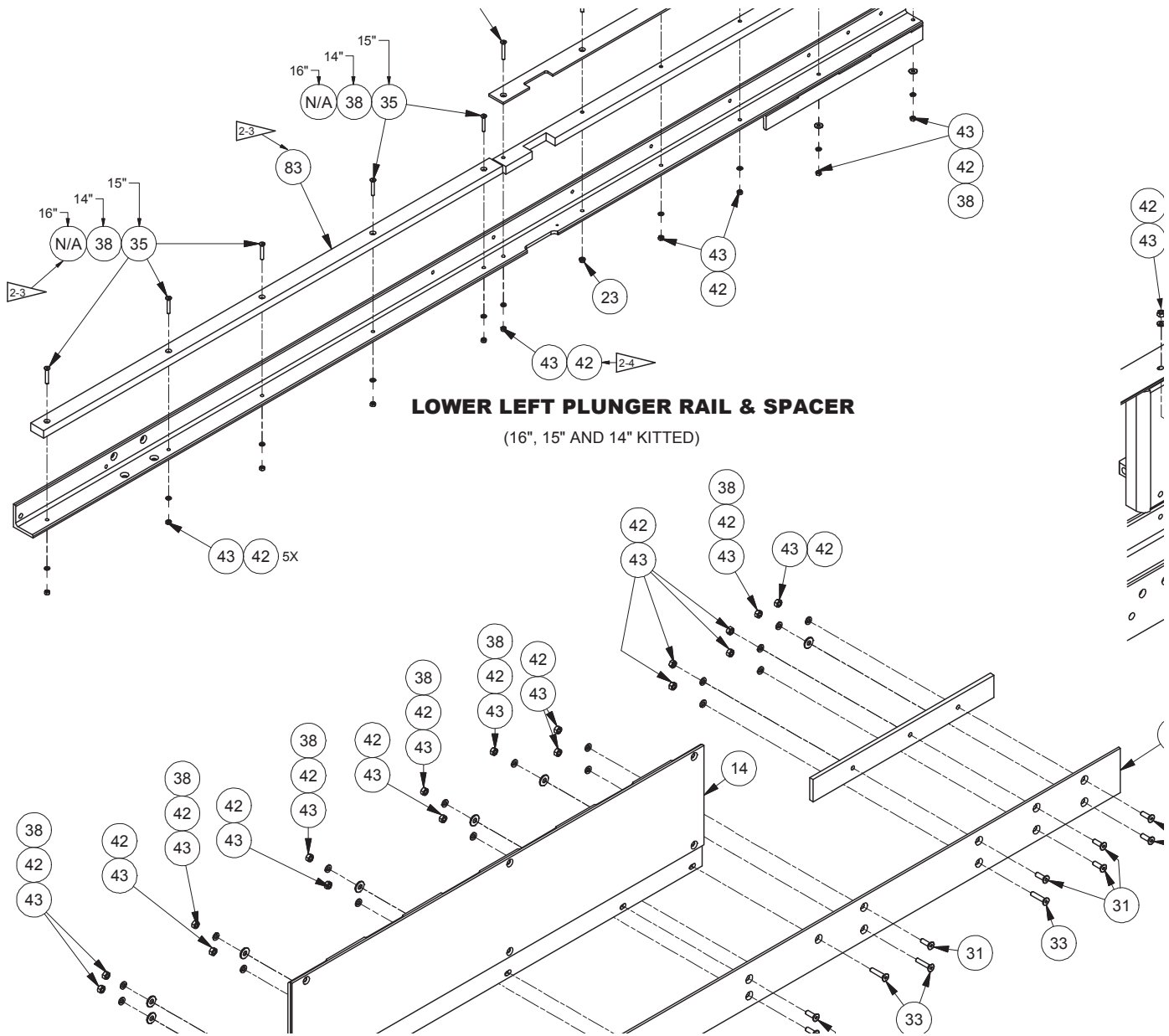
NOTES:

- 4-1 QTY CHANGE TO SUIT KITTED CHAMBER SPACERS
NOT REQUIRED FOR 16" NON-KITTED BALERS.
- 4-2 LENGTH OF FASTENERS CHANGE TO SUIT NUMBER
OF SPACER REQUIRED FOR NON-KITTED BALERS.

Chamber Installation Gearbox 3 Tie

14x22,15x22,16x22

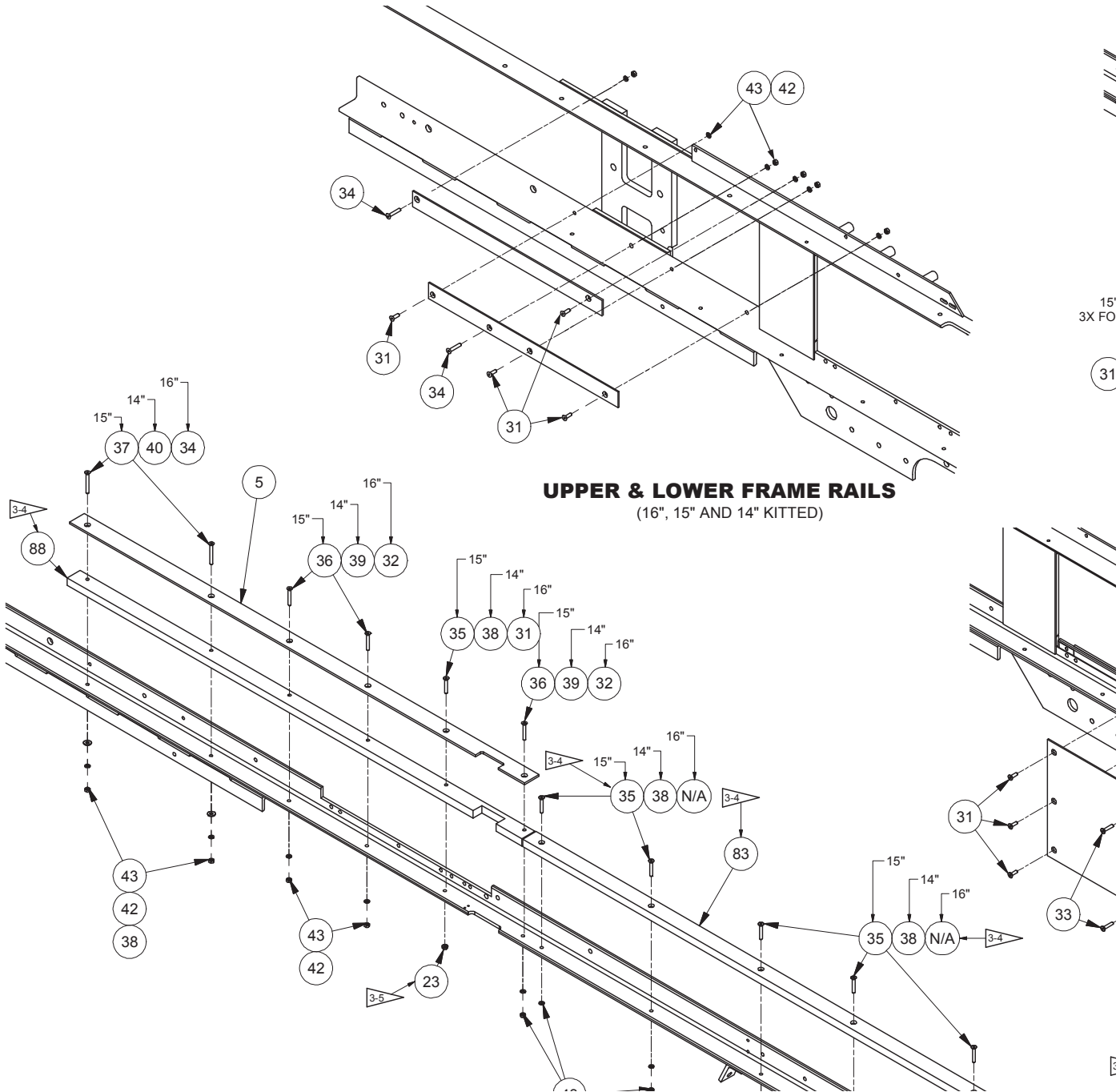
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Chamber Installation Gearbox 3 Tie

14x22,15x22,16x22

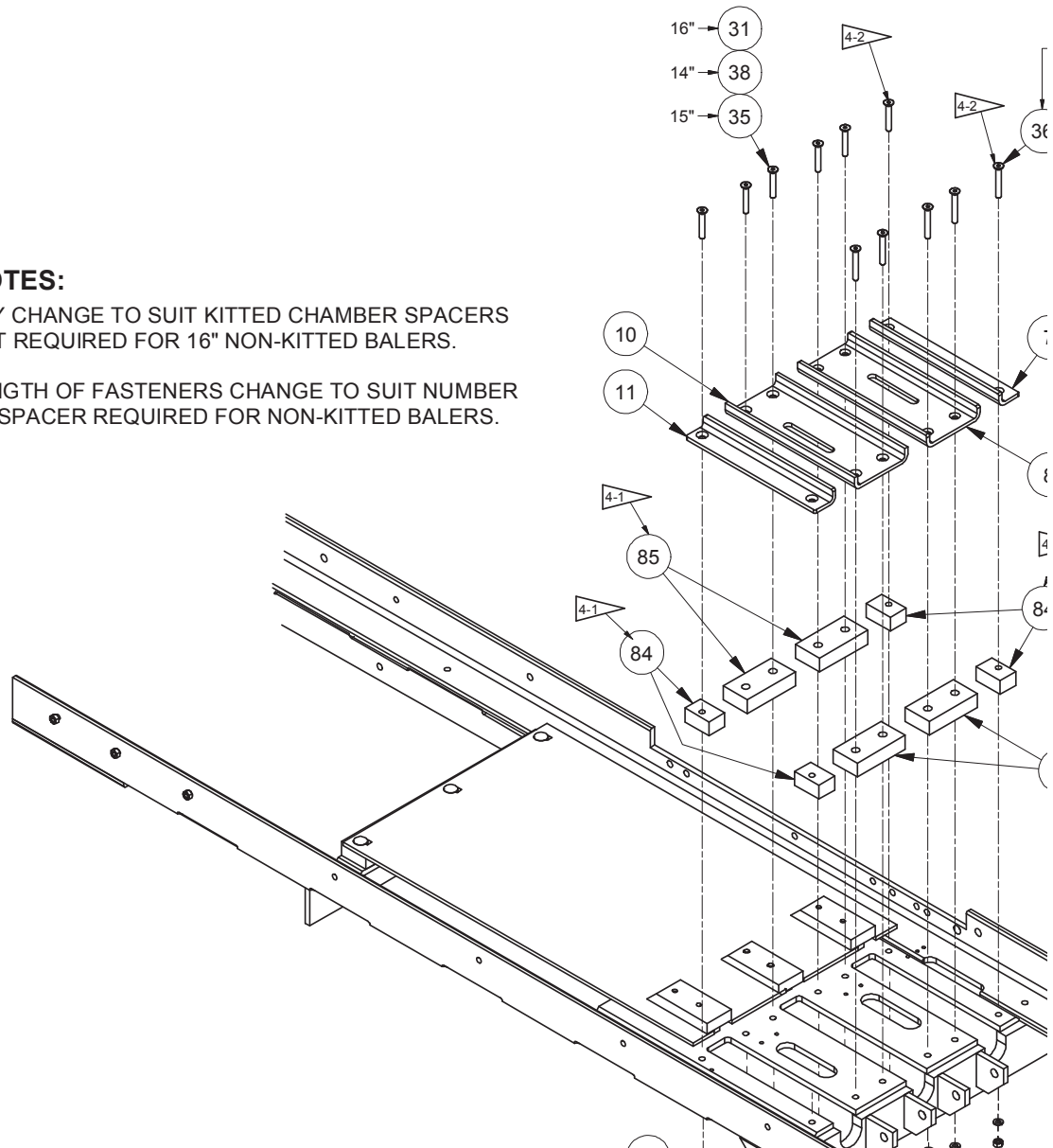
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Chamber Installation Gearbox 3 Tie 14x22,15x22,16x22

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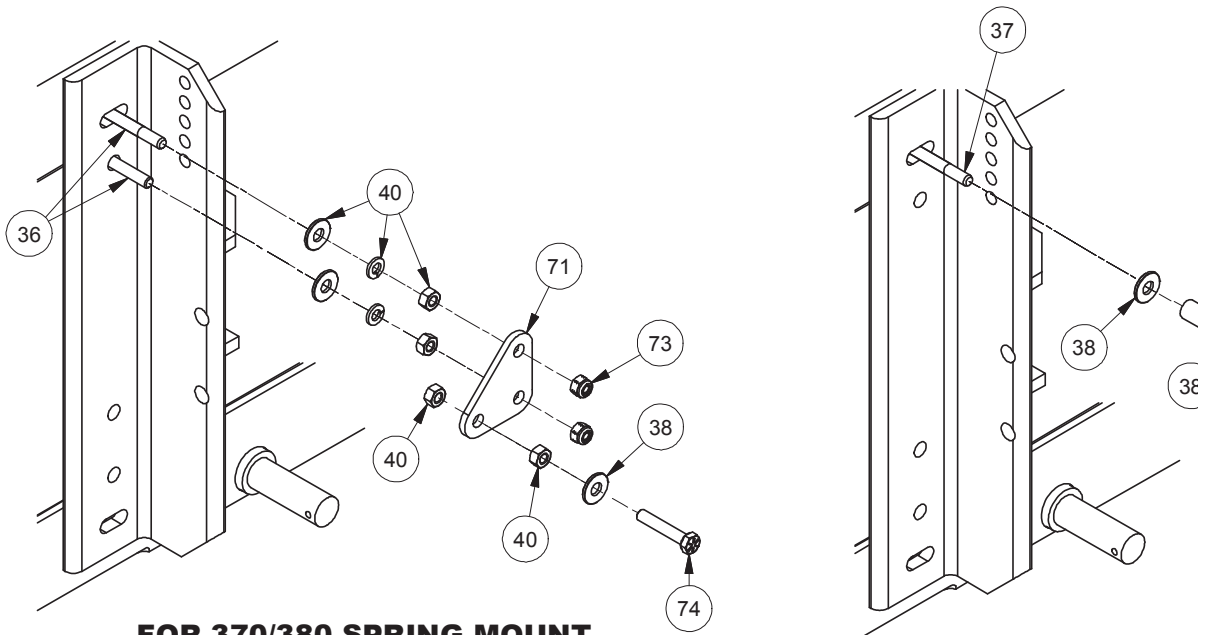
- NOTES:**
- 4-1 QTY CHANGE TO SUIT KITTED CHAMBER SPACERS NOT REQUIRED FOR 16" NON-KITTED BALERS.
 - 4-2 LENGTH OF FASTENERS CHANGE TO SUIT NUMBER OF SPACER REQUIRED FOR NON-KITTED BALERS.



Chamber Installation Gearbox 3 Tie

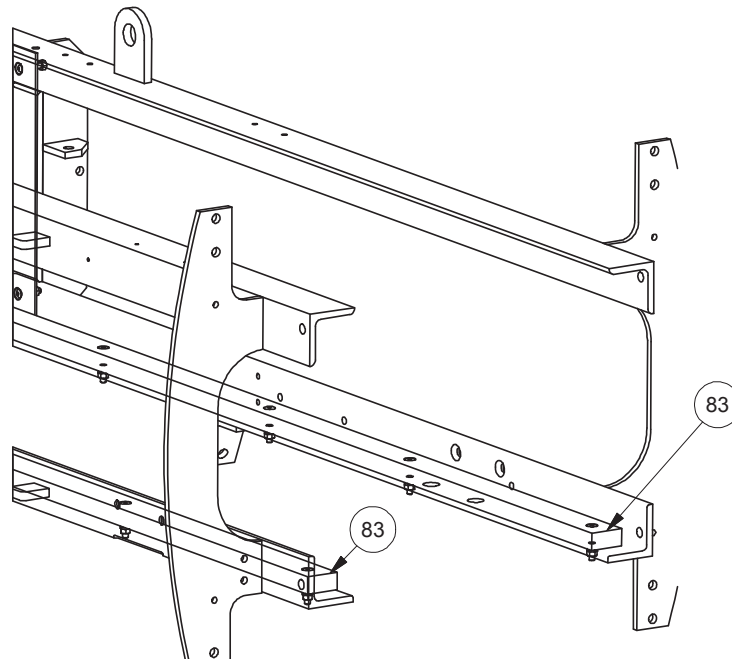
14x22,15x22,16x22

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FOR 370/380 SPRING MOUNT
(16", 15" AND 14" KITTED)

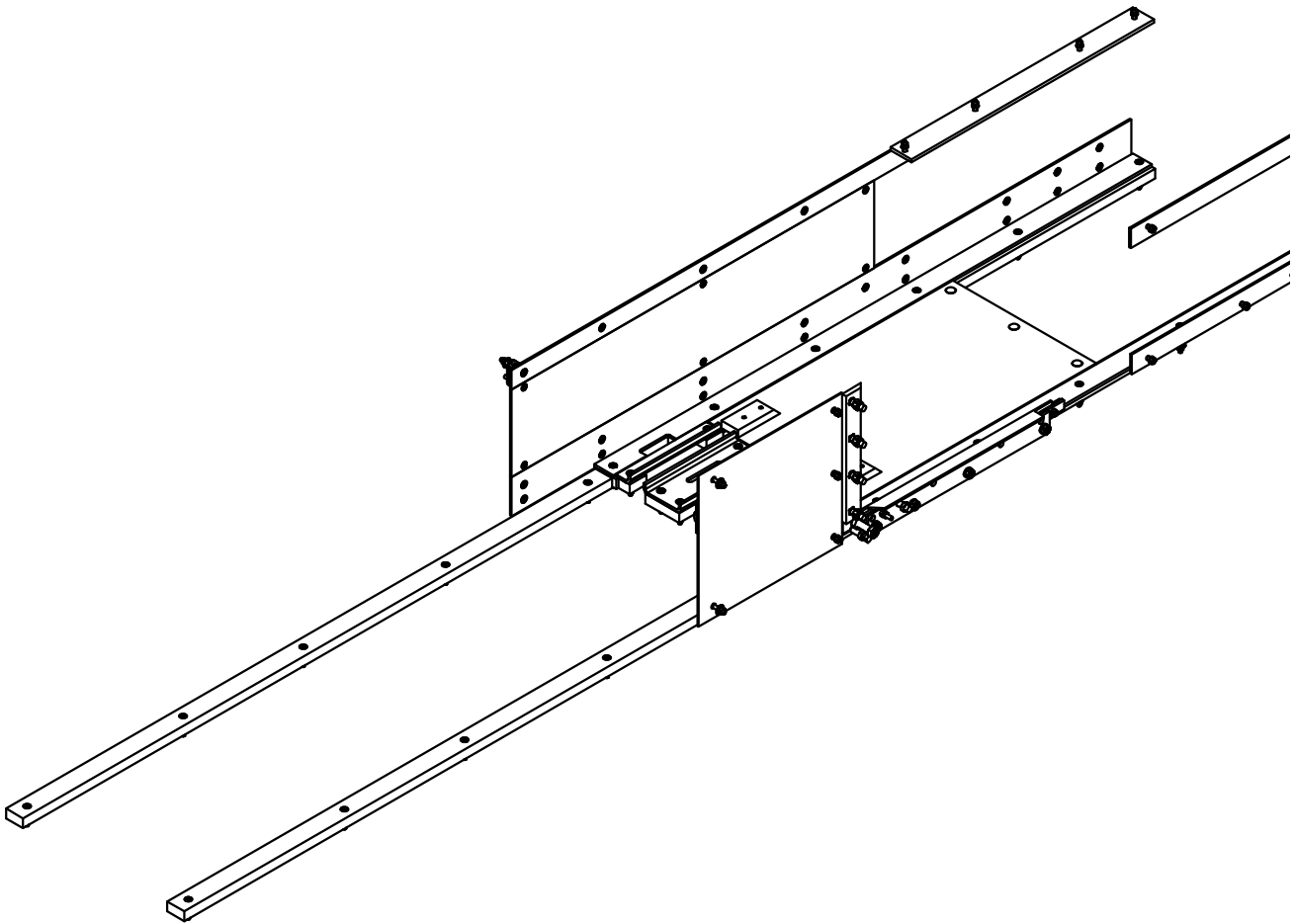
FOR 375/385 SPRING
(16", 15" AND 14" KITTEL)



REAR CONV. SPACER FOR 14" CHAMBER
(16", 15" AND 14" KITTED)

Chamber Installation Gearbox 3 Tie 14x22,15x22,16x22

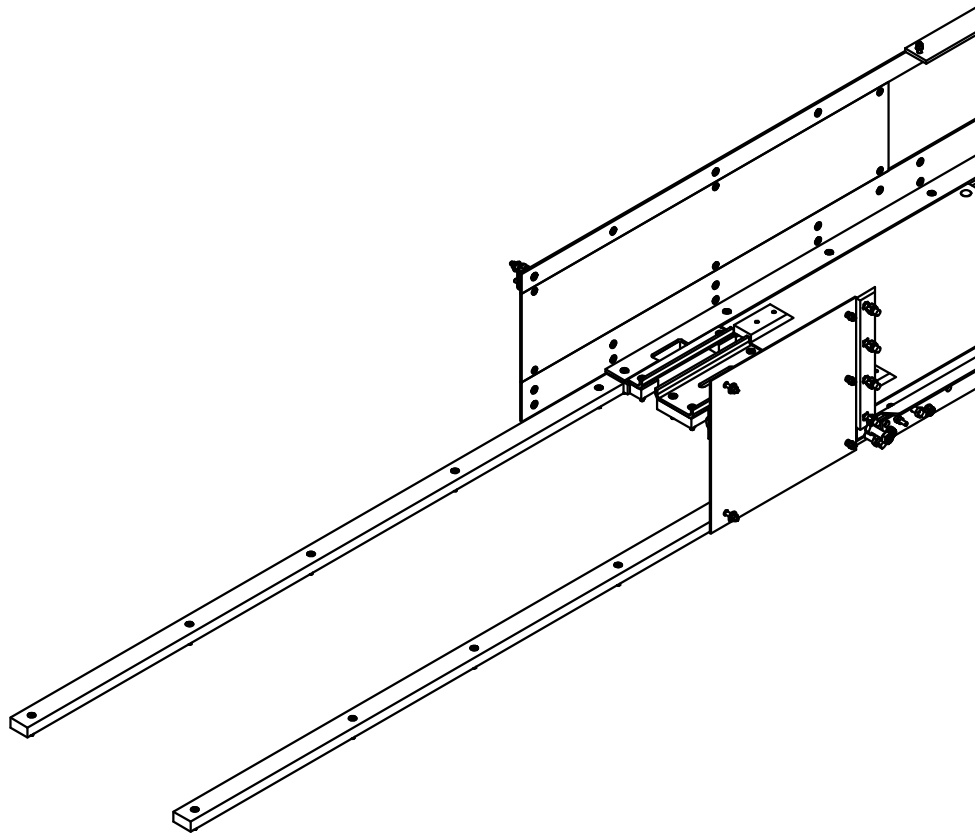
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Chamber Installation Gearbox 3 Tie

14x22,15x22,16x22

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