

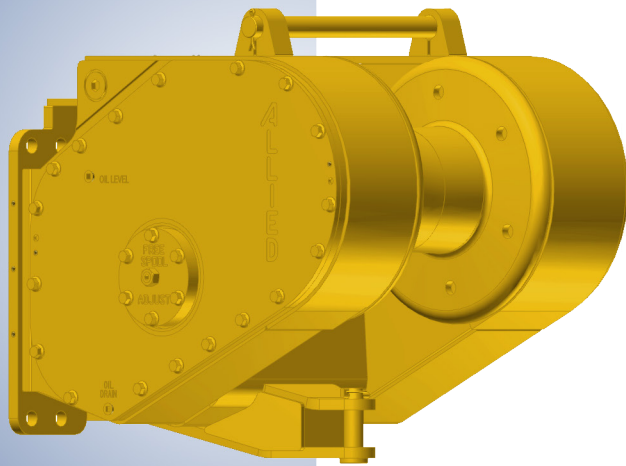


Parts Manual

Allied H5C

Hydraulic Winch

for Caterpillar Dozers



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www.alliedsystems.com

Customer Edition

Safety Precautions

Read, understand and observe the Safety Summary on pages 1 through 3 to prevent injury to personnel and damage to equipment.

Winch serial number _____

Date put into service _____

NOTE: This publication may be translated to different languages for sole purpose of easy reference in non-English speaking locations. Should there be differences in interpretations to the text, please refer to the English language edition published by Allied Systems Company as the controlling document.

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Safety Summary

General Safety Notices

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

The following symbols and 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 serious injury or death. Carefully read the message that follows to prevent serious injury or death.

WARNING

The “WARNING” symbol appears wherever incorrect operating procedures or practices could cause serious injury or death. Carefully read the message that follows to prevent serious injury or death.

CAUTION

The “CAUTION” symbol appears where a hazardous situation which, if not avoided, could result in minor to moderate injury and equipment damage.

NOTICE

This signal word 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.

Safety Regulations

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’ country, the national regulations should be followed.

Operation, Inspection, and Maintenance Warnings

WARNING

Multiple hazards.

Ignoring safety warnings may cause equipment damage, personal injury or death.

All possible safety hazards cannot be foreseen and included in this manual. The operator must always be alert to possible hazards that could endanger personnel or damage the equipment.

Training

- Do not operate the winch unless your are authorized and trained to do so.
- Read, understand, and follow the operating, inspection, and maintenance instructions in this manual.
- Keep yourself informed of any applicable codes, regulations and standards for the job.

Personnel Safety

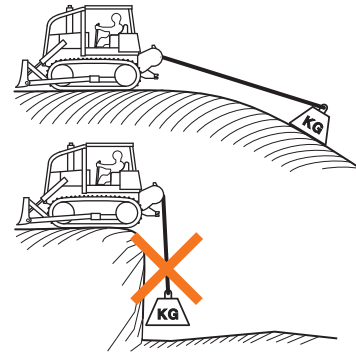
- Stay in the operator’s seat when operating the winch.
- Do not stand on the vehicle when operating the winch.
- Avoid winch operation near people or other machines.
- Never stand nor permit others to stand in the bight (loop) of a wire rope.

- Do not stand nor permit others to be near the winch or wire rope when there is tension on the wire rope.



- Make sure ground personnel are in plain view of the operator, and at a distance of at least 1½ times the working length of the wire rope.
- Observe jobsite rules.
- Do not use the control levers for hand holds when entering or leaving the vehicle.
- Be in complete control at all times.
- Do not use the control levers as hangers for clothes, water bags, grease guns, lunch pails, etc.
- Do not leave the vehicle when the winch wire rope is under tension.
- Do not permit riders on the vehicle or load.
- Operation Warnings
- Do not operate the winch unless the vehicle is equipped with a screen to protect the operator if the wire rope breaks.
- Be aware of the ground conditions, and make sure the ground and tractor are stable enough to pull the intended load.
- Do not attempt to pull loads in excess of the rated capacity of the winch.
- Make sure that any hand signals used by ground personnel are clearly defined and understood by everyone involved.
- Do not attempt to “jerk” or “shock” a load free. Doing so can cause loads in excess of the rated capacity of the wire rope, winch, or mounting hardware.

- Your winch may have temperature shut-off system for protection of tractor and winch. Manual override of high temperature shut-off will cause damage to tractor and winch.
- This winch is neither intended, designed, nor rated for any application involved in the lifting or moving of personnel.
- Do not use the winch as an anchor for a double or two-part line.
- Do not pull the hook through the throat or over the drum, which will cause damage.
- When the winch is not in use, make sure the control lever is in **BRAKE-ON** position and the winch brake is applied.
- Do not use winch as a hoist. Tractor and skidder mounted winches are designed for towing.



Wire Rope Safety

- Always inspect wire rope, tail chain and other rigging components for wear, damage, broken strands or abuse before use.
- Never use wire rope, tail chain or other rigging that is worn-out, damaged or abused.
- Never overload wire rope, tail chain or rigging.
- Wire rope and tail chain will fail if worn-out, overloaded, misused, damaged, improperly maintained or abused.

WARNING

Wire rope or tail chain failure may cause serious injury or death.

Inspect rigging before use and obey all safety warnings.

- Do not terminate wire rope to tail chain by the use of a knot.
- Do not handle wire rope if the hook end is not free. A load could break away, suddenly tensioning the wire rope, resulting in serious injury or death.
- Stay clear of wire rope entry areas (fairlead or arch rollers, winch drum etc).
- Maintain a **minimum of three (3) complete wraps of wire rope** on the drum for normal operation. It may help to paint the last five wraps of wire rope a contrasting color, to serve as a visual indicator.
- Do not handle wire rope with bare hands. Wear leather gloves at all times.
- Align the tractor with the load to prevent side loading the winch, and to maintain even spooling of the wire rope.
- If applying tension to the wire rope manually during spooling:
 - ... ensure that the operator is winching in slowly,
 - ... keep your hands and clothing well clear of any rollers or the winch drum,
 - ... do not maintain tension by letting the wire rope to slip through your hands,
 - ... use a hand-over-hand technique to maintain tension.
- The hydraulic system must be kept clean and free of contamination at all times.
- Do not weld on any part of the winch. Contact Allied Systems if weld repairs are needed.

Hydraulic Hazards

- 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.

 **DANGER**

Injection hazard.

Infection and gangrene will result when hydraulic oil penetrates the skin. See a doctor immediately to prevent loss of limb or death.

Use a piece of cardboard to check for hydraulic leaks.

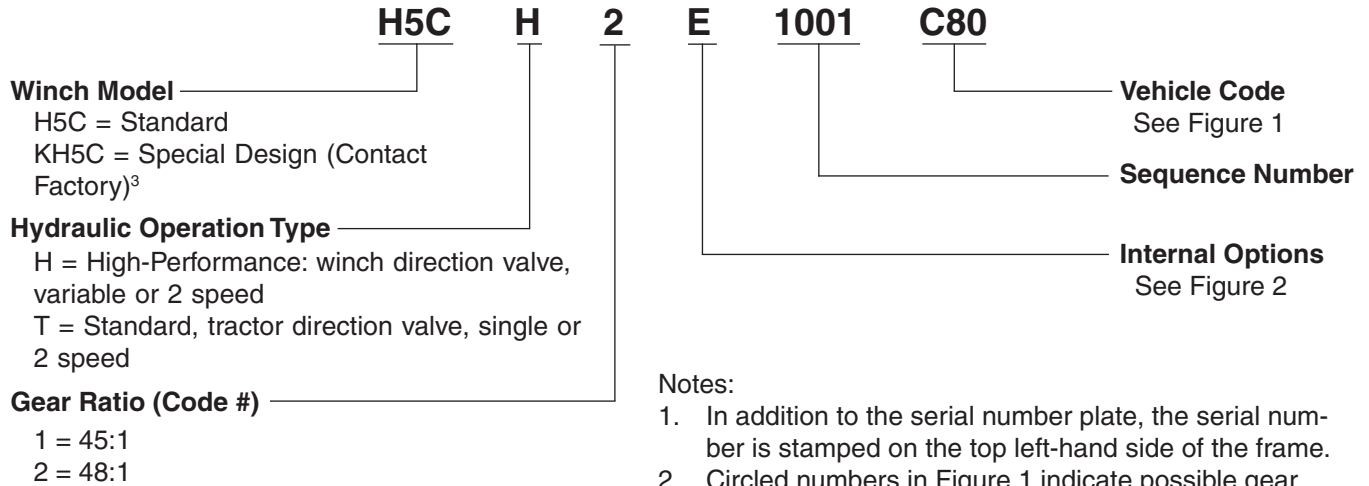
Maintenance Warnings

- Do not permit other people near the control area when you inspect or repair a machine.
- Never inspect, repair, or perform maintenance on a machine that is in motion.
- Inspect the winch before each use:
 - ... Make sure that the controls and instruments operate correctly.
 - ... Report the need for repairs immediately.
 - ... Do not work with a damaged or worn wire rope.
 - ... Do not use a winch that needs repairs.
 - ... If the wire rope and ferrule must be removed from the drum, make sure the end of the wire rope and ferrule are controlled when the ferrule is released. The end of the wire rope can suddenly move from the drum like a compressed spring when the ferrule is released, and cause an injury.
- Replace any parts only with genuine Allied Winch parts.
- Use only the lubricants listed in the Recommended Oil List. See page 6.



Unit Identification

Allied Winch Serial Number Nameplate Data For Dozer Mountings



Notes:

1. In addition to the serial number plate, the serial number is stamped on the top left-hand side of the frame.
2. Circled numbers in Figure 1 indicate possible gear ratios.
3. If your serial number begins with the letter "K", contact the factory for parts and service information.
4. If your serial number ends with the letter "M", contact the factory for parts and service information.

C O D E	C Caterpillar
80	D6K ① ②
801	D6K2 ① ②
802	D6K2 Fireplow ②
805	D6K2 T4f ①
391	D6K2 PL61 ①
953	963D Track Loader ②

Figure 1, Dozer or Skidder Identification Codes and Available Gear Ratios

Circled numbers in Figure 1 indicate possible gear ratios.

	D	E	U
FREESPOOL	X	X	X
EXTERNAL PUMP	X	X	X
PFR	X	X	X
OVERWIND	X	X	
UNDERWIND			X
SINGLE SPEED		X	X
2 SPEED	X		
BRAKE-OFF (HI-P)		X	X

Figure 2, Internal Options

Using this Manual

When the part number and the next higher assembly is not known:

1. Determine the function and application of the part required. Turn to the illustrated index page immediately behind the front cover, and select the most appropriate area.
2. Use the table of contents at the beginning of each chapter to determine the assembly which would normally contain the part required. Proceed then to locate the part on the assembly breakdown page.

When the part number is not known and the next higher assembly is known:

1. Determine the assembly the required part is used on. Turn to the master index (which immediately follows the illustrated index).
2. Locate the assembly on which the required part is used, and turn to the page indicated for that assembly. Proceed to locate the part on the assembly breakdown page.

When the part number is known:

Use the numerical index to find the part number. Turn to the page listed and locate the part as indicated by the reference number.

General:

The assembly breakdowns include part numbers, descriptions, quantities required, keys and footnotes to help in selecting the correct parts.

Keys are used to show effective serial numbers for two or more similar assemblies, LH and RH assembly parts, etc. Select the appropriate key, "A," "B," "C," or "D" and the corresponding quantity column to find the required parts.

Indent dots are used to indicate assemblies and sub-parts of assemblies. No dot indicates the major assembly. Part descriptions which are indented with dots are sub-parts of the major assembly shown above.

Quantities shown are for one assembly. Note that when two assemblies are shown, but the quantity of the sub-parts is indicated as three, this means three per assembly, for a total of six. AR means As Required, and NSS indicates Not Sold Separately.

Serial numbers are shown to allow for the most current parts information to be incorporated into the parts manual. See page 4 for serial number information.

Abbreviations

Abbreviations are used both on the winch and in this manual. For example, a manifold may have a port stamped "FS". That port is related to the "freespool" circuit. This abbreviation is also used on pages in this manual that reference this port, or the ports connected to this port. Figure 3 lists the most common abbreviations used in this manual.

Abbreviation	Full Name
P	Pressure
T	Tank
BO	Brake Off
FA	Filter Outlet
FE	Filter Inlet
FS	Freespool
HS	High Speed
LS	Load Sense
PD	Pilot Drain
PP	Pilot Pressure
PS	Pilot Supply
RI	Reel In
RO	Reel Out
TP	Test Port
TS	Temperature Switch

Figure 3, Abbreviations

Oil Specifications

Oil Selection

For winches using tractor-supplied hydraulics for winch operation, use the dozer manufacturer's specified fluids. For gear oil, use the oils specified listed here. The winch gear housing factory fill is Mobil 424, which has an ISO Viscosity Grade 46 to 68.

The hydraulic circuit and winch gear housing have different fluids.

Note: Some hydraulic system oils are not recommended for use inside the winch case.

	Hydraulic System (Pump)	Winch Case (Gear Train)
Chevron	Use Tractor Fluid	Drive Train Fluids HD
Exxon-Mobil	Use Tractor Fluid	Mobil Trans HD Series

Figure 5, Recommended Oil List

Oil Capacity

The oil capacity for H5C winch case (gear train) is 17 quarts (16 liters).

Ordering Parts

When ordering replacement parts, give the unit serial number, part number, name of part and quantity required.

For any further information on parts, service or ordering, consult your local winch dealer, or contact Allied Systems Company:

Allied Systems Company
21433 SW Oregon Street
Sherwood, OR 97140 U.S.A.

Phone: 503-625-2560

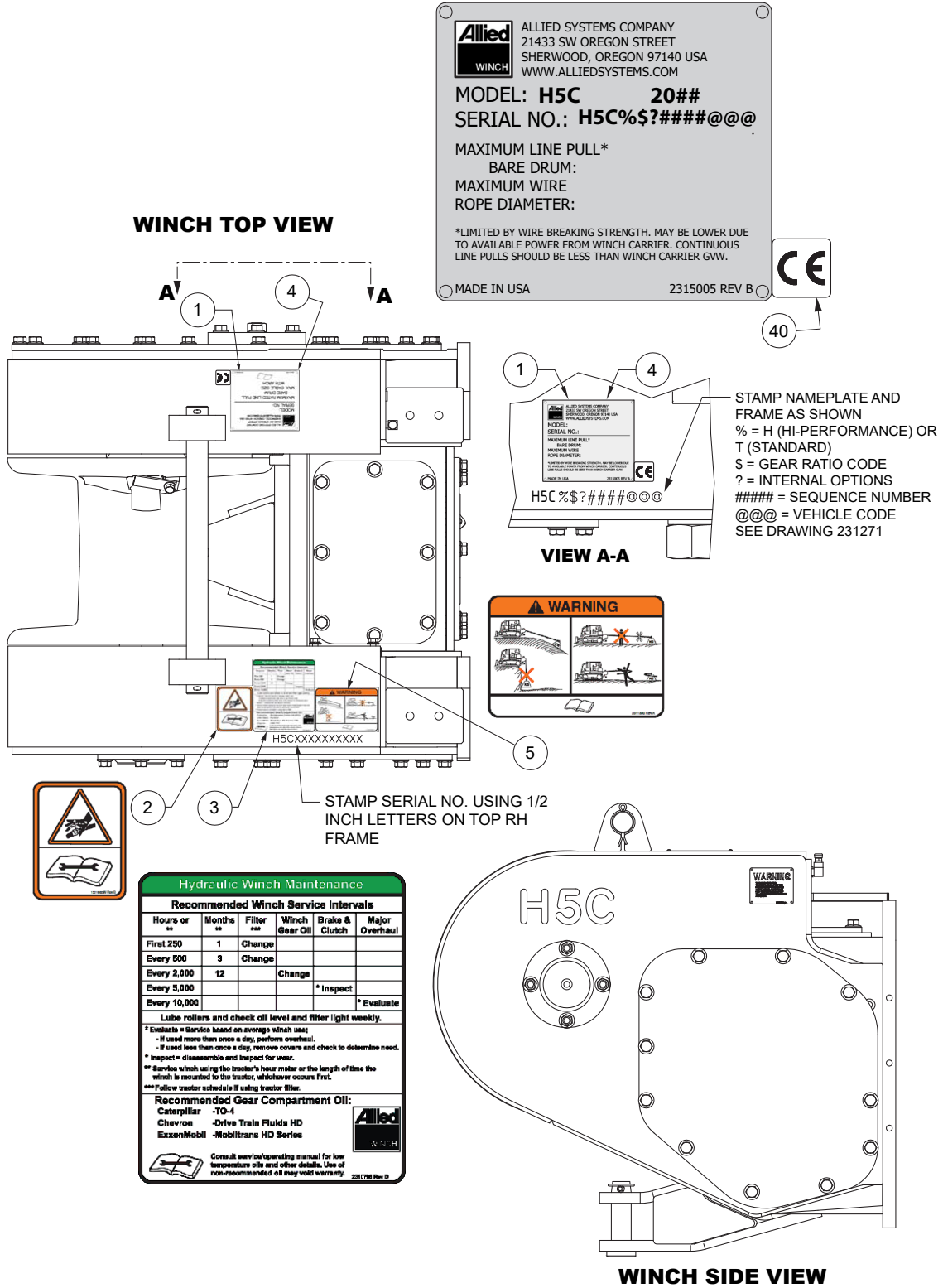
Fax: 503-625-5132

E-mail: parts@alliedsystems.com

Also see our website, www.alliedsystems.com, where the most current copy of this manual is always available.

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Nameplate & Decals



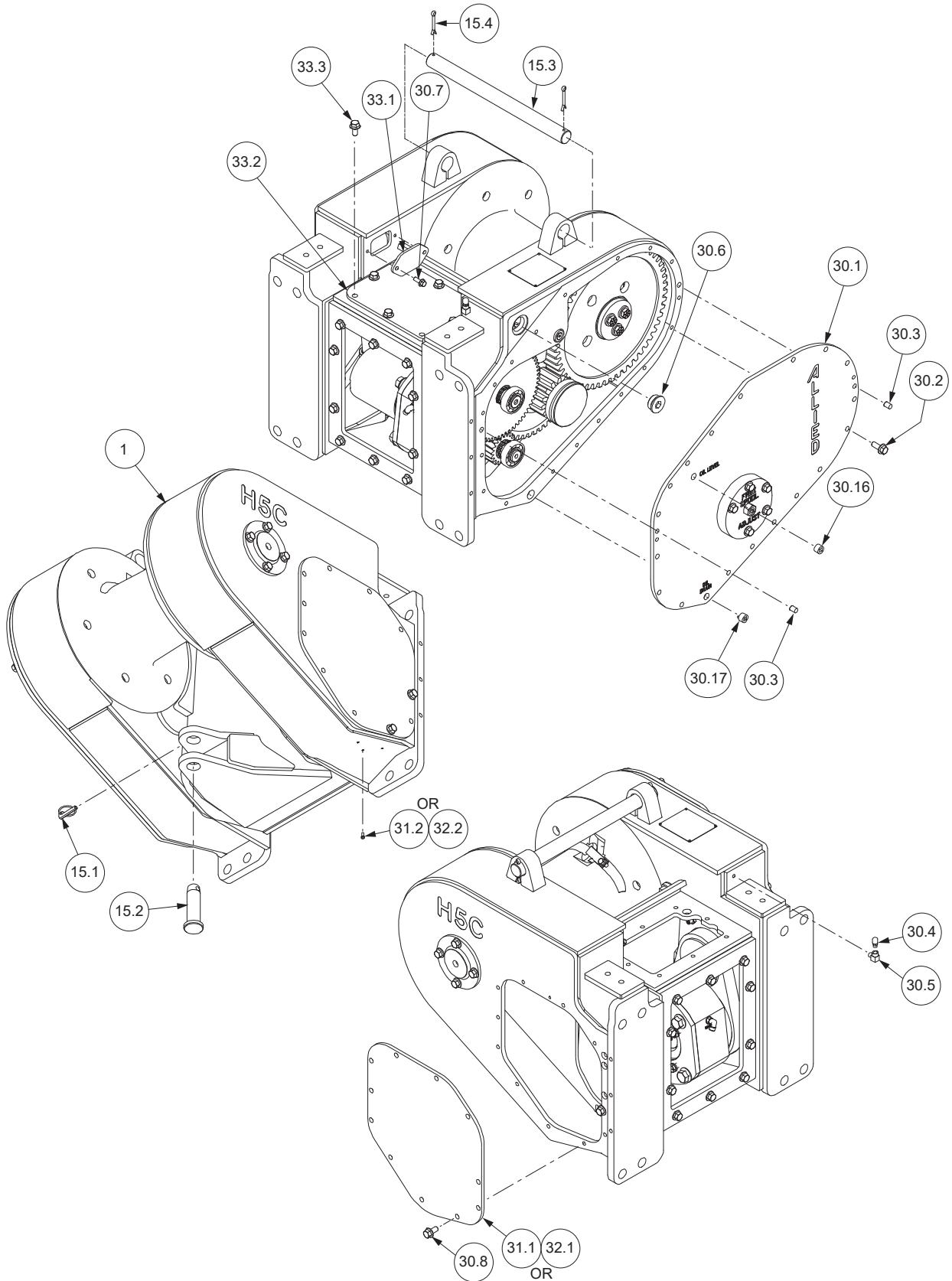
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	*	-----	1 Nameplate	5	2311330	1	Decal, Load & Wire Rope
2	1321665W	2	Decal, Warning	40	2311557	AR	Label, CE Mark
3	2311329	1	Decal, Maintenance				
4	16602W	4	Screw	*	Contact Factory		

Section 1
Frames/Covers/Mounting Parts

Frame and Covers

Caterpillar D6K (H5CT1E**C80, H5CT1D**C80 and H5CT1E**C80), PL61 (H5CH1D**C391 and H5CT2D**C953), D6K2 (H5CT1D**C801 and H5CT1D**C805)

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Frame and Covers

Caterpillar D6K (H5CT1E**C80, H5CT1D**C80 and H5CT1E**C80), PL61 (H5CH1D**C391 and H5CT2D**C953), D6K2 (H5CT1D**C801 and H5CT1D**C805)

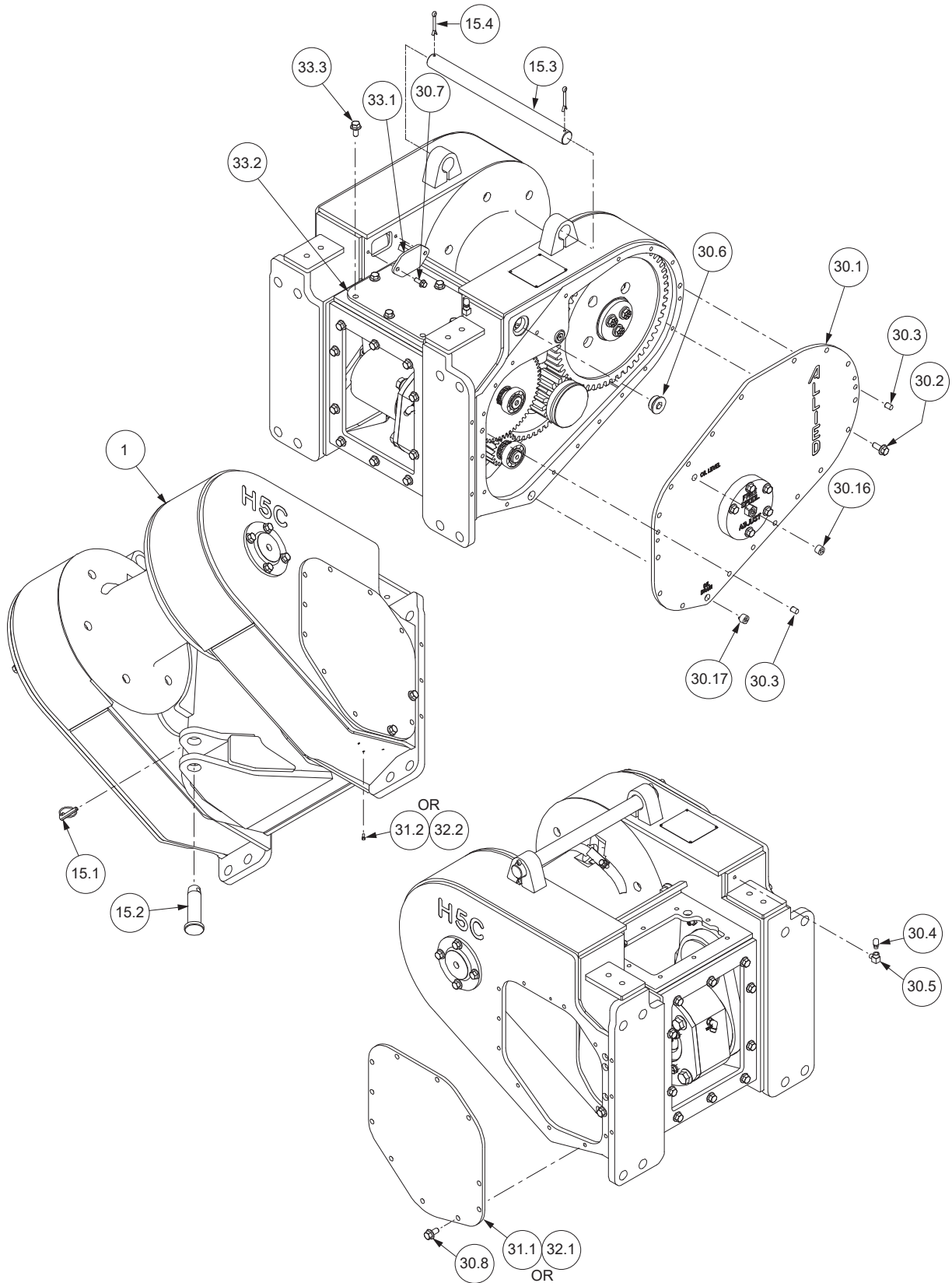
Page 2 of 2

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	2306189W	1	Frame	30.9	264159W	1	Adhesive
15.1	2303221W	1	Pin, Retaining	30.12	16243W	1	Screw
15.2	1314656W	1	Pin, Drawbar	30.16	15315W	1	Fitting
15.3	93927W	1	Rod, Tie	30.17	15290W	1	Fitting
15.4	15256W	2	Cotter Pin	31.1	2307097W	1	Cover, RH
30.1	2306570W	1	Cover, LH	31.2	16243W	1	Screw
30.2	2303848W	18	Screw, Flange	32.2	16243W	3	. Screw
30.3	176208W	2	Pin	33.1	2307342W	1	Cover, Inner, RH
30.4	2304101W	1	Breather	33.2	2302513W	1	Cover, Top
30.5	16151W	1	Fitting	33.3	398817W	4	Screw, Flange
30.6	188210W	1	Fitting	33.4	16243W	1	Screw
30.7	398567W	2	Screw, Flange				
30.8	398817W	15	Screw, Flange				

Frame and Covers

Caterpillar D6K (H5CH2E**C80, H5CH2E**C80A), D6K2 (H5CH2E**C801, H5CH2E**C802)

Page 1 of 2



Frame and Covers

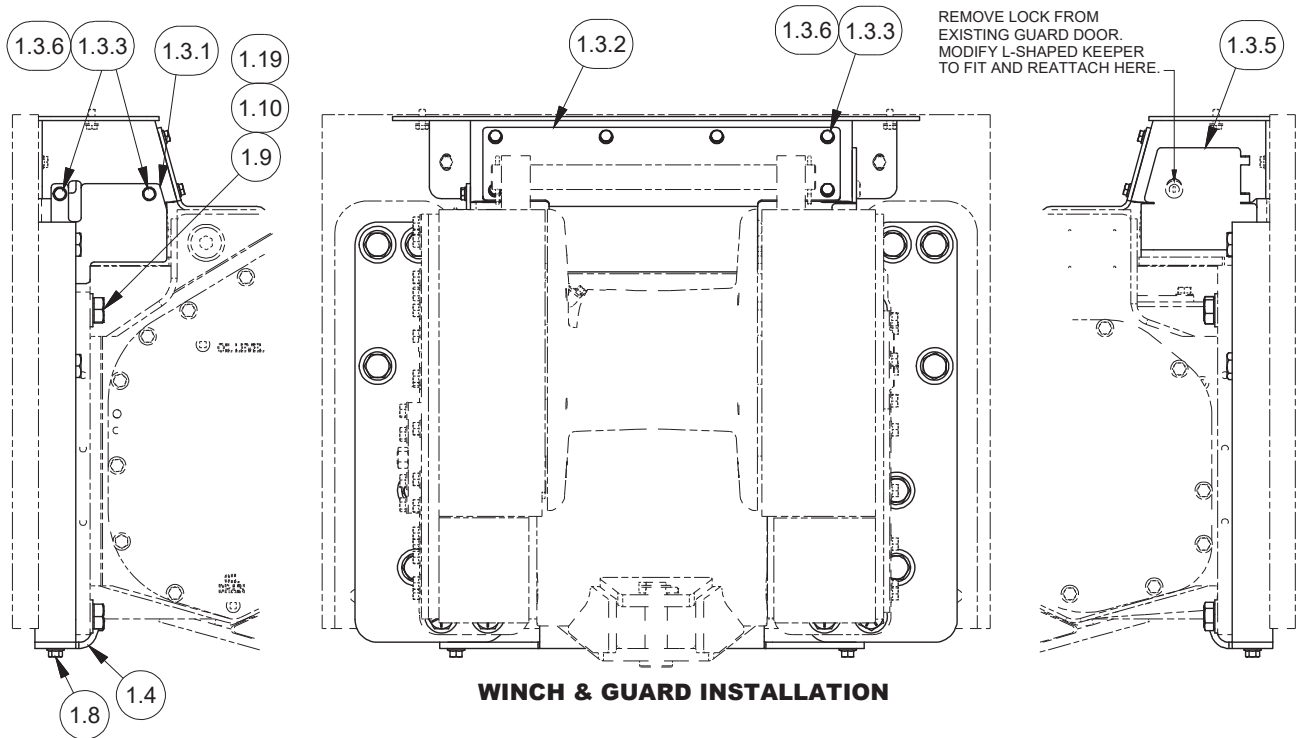
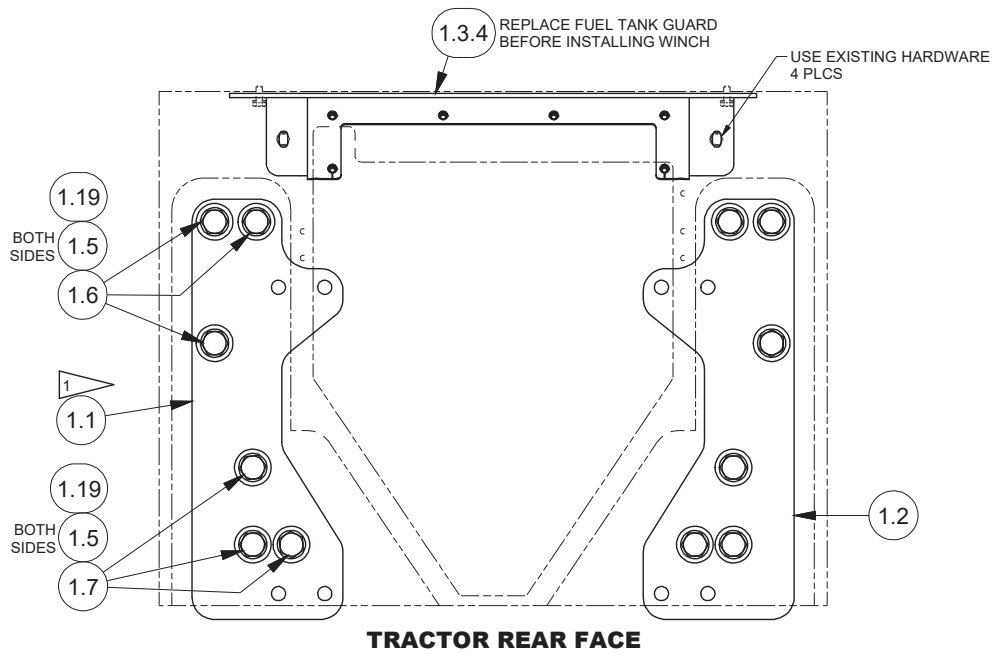
Caterpillar D6K (H5CH2E**C80A), D6K2 (H5CH2E**C801, H5CH2E**C802)

Page 2 of 2

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	2306189W	1	Frame	30.9	264159W	1	Adhesive
15.1	2303221W	1	Pin, Retaining	30.12	16243W	1	Screw
15.2	1314656W	1	Pin, Drawbar	30.16	15315W	1	Fitting
15.3	93927W	1	Rod, Tie	30.17	15290W	1	Fitting
15.4	15256W	2	Cotter Pin	31.1	*a 2307097W	1	Cover, RH
30.1	2306570W	1	Cover, LH	31.2	*a 16243W	1	Screw
30.2	2303848W	18	Screw, Flange	32.1	*b 2306509W	1	Cover, RH
30.3	176208W	2	Pin	32.2	*b 16243W	3	Screw
30.4	2304101W	1	Breather	33.1	2307342W	1	Cover, Inner, RH
30.5	16151W	1	Fitting	33.2	2302513W	1	Cover, Top
30.6	188210W	1	Fitting	33.3	398817W	4	Screw, Flange
30.7	398567W	2	Screw, Flange	33.4	16243W	1	Screw
30.8	398817W	15	Screw, Flange				
				*b	H5CH Variable Speed		
				*a	H5C Hi-P 2 Speed & Rescue		

Mounting Parts

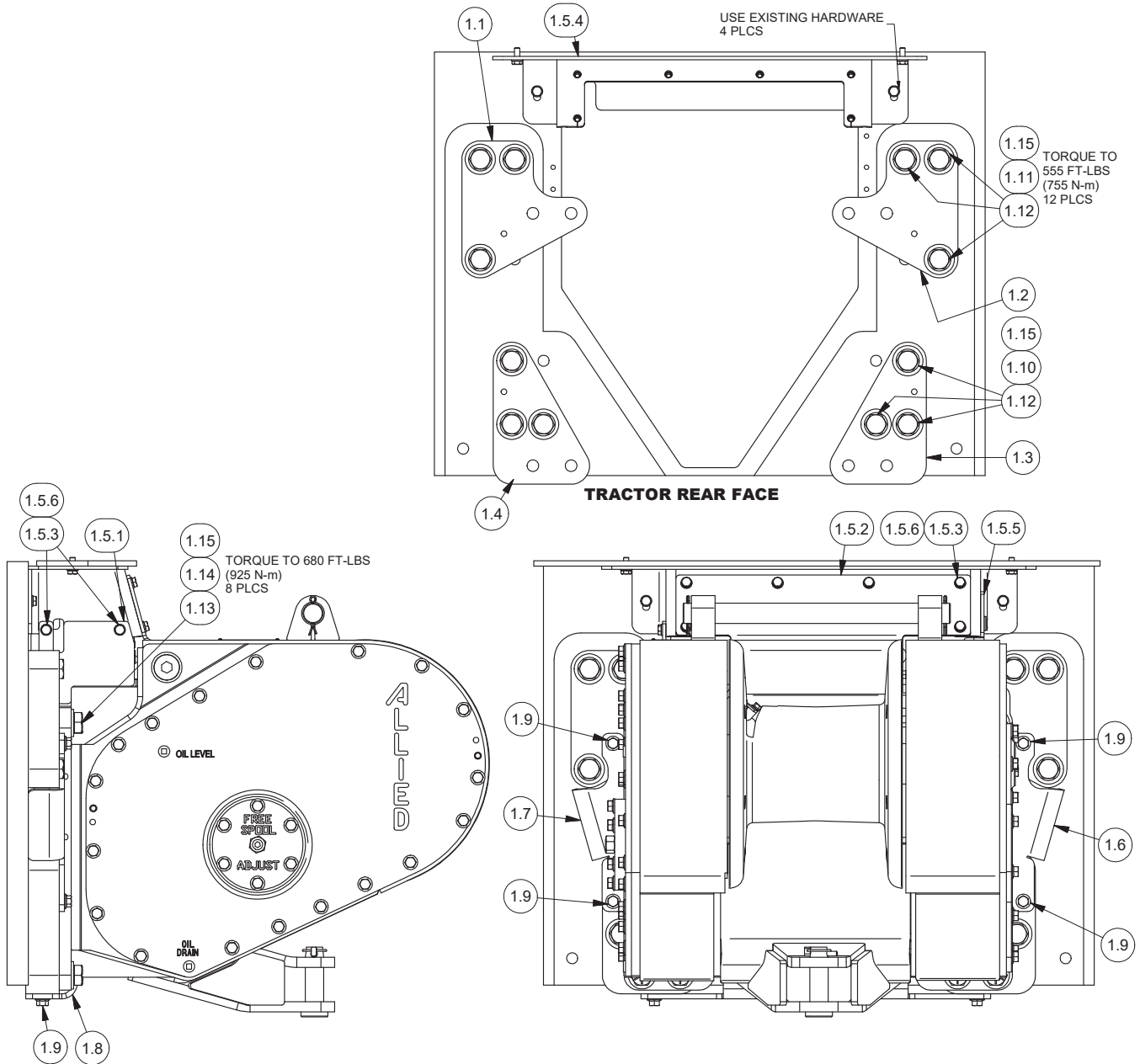
Caterpillar D6K (H5CT1D**C80)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1.1	2315094	1	Bracket, Mounting, LH	1.5	296434W	12	Washer
1.2	2315095	1	Bracket, Mounting, RH	1.6	*a 293729W	6	Capscrew
1.3.1	2311271	1	Cover LH	1.7	*a 274044W	6	Capscrew
1.3.2	2311273	1	Cover, Top	1.8	398817W	2	Screw, Flange
1.3.3	293628W	8	Capscrew	1.9	*a 221690W	8	Capscrew
1.3.4	2311268	1	Guard	1.10	221780W	8	Washer
1.3.5	2311270	1	Cover, RH	1.19	318702W	AR	Threadlock
1.3.6	296420W	8	Washer				
1.4	2310103	1	Guard, Hose, Lower	*a	Uses 318702W Thread Lock		

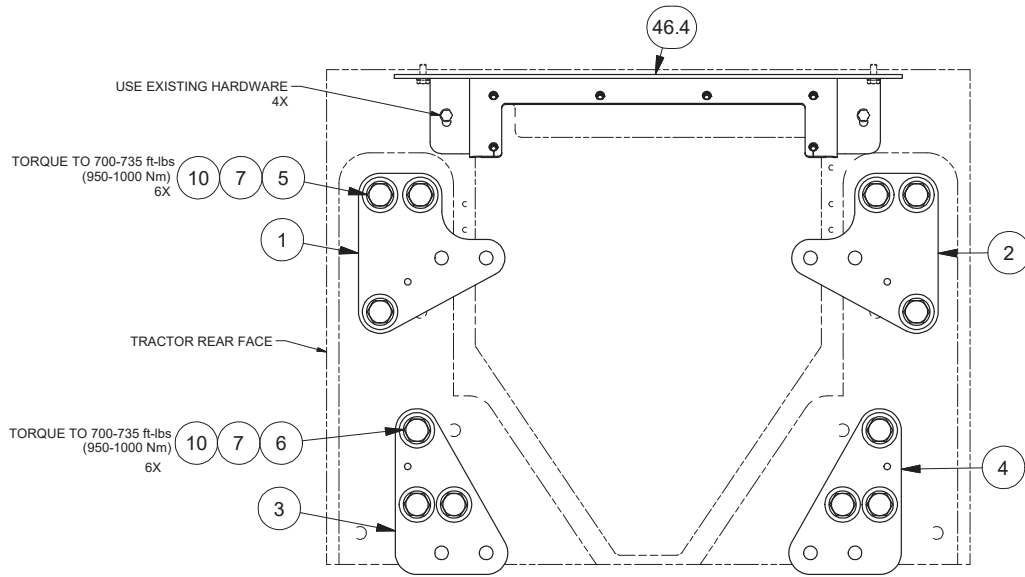
Mounting Parts

Caterpillar D6K (H5CT1E**C80)

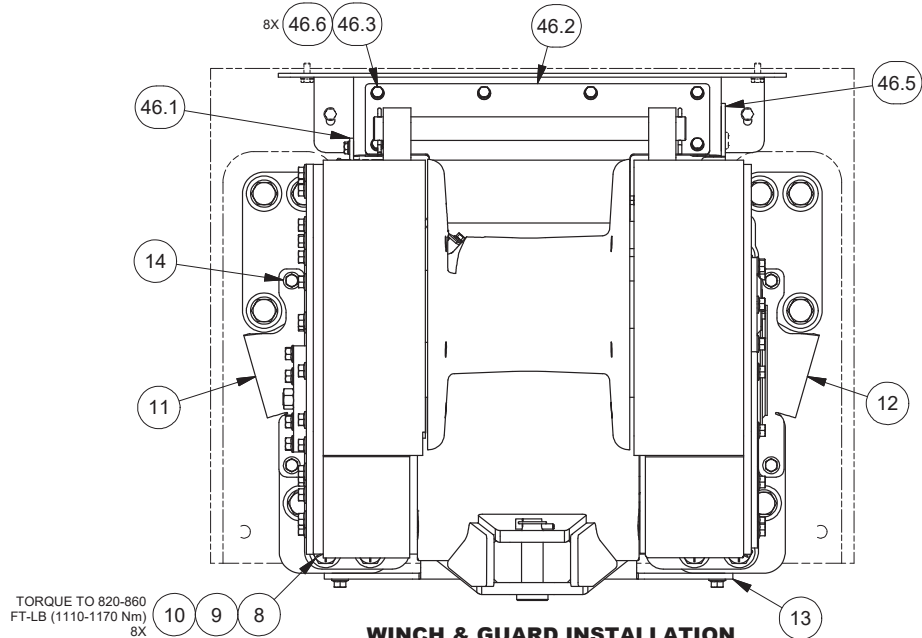


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1.1	2310085	1	Bracket, Mounting, LH Upper	1.7	2310102	1	Guard, Hose, LH
1.2	2310086	1	Bracket, Mounting, RH Upper	1.8	2310103	1	Guard, Hose, Lower
1.3	2310084	1	Bracket, Mounting, RH Lower	1.9	398817W	6	Screw, Flange
1.4	2310088	1	Bracket, Mounting, LH Lower	1.10	*a 274044W	6	Capscrew
1.5.1	2311271	1	Plate Cover LH	1.11	*a 293729W	6	Capscrew
1.5.2	2311273	1	Plate, Cover, Top	1.12	296434W	12	Washer
1.5.3	293628W	8	Capscrew	1.13	*a 221690W	8	. Capscrew
1.5.4	2311268	1	Weldment, Guard	1.14	221780W	8	. Washer
1.5.5	2311270	1	Plate, Cover, RH	1.15	318702W	AR	. Threadlock
1.5.6	296420W	8	Washer				
1.6	2310101	1	Guard, Hose, RH	*a	Uses 318702W Thread Lock		

Mounting Parts Caterpillar D6K (H5CH2E**C80A)



MOUNTING BRACKET INSTALLATION



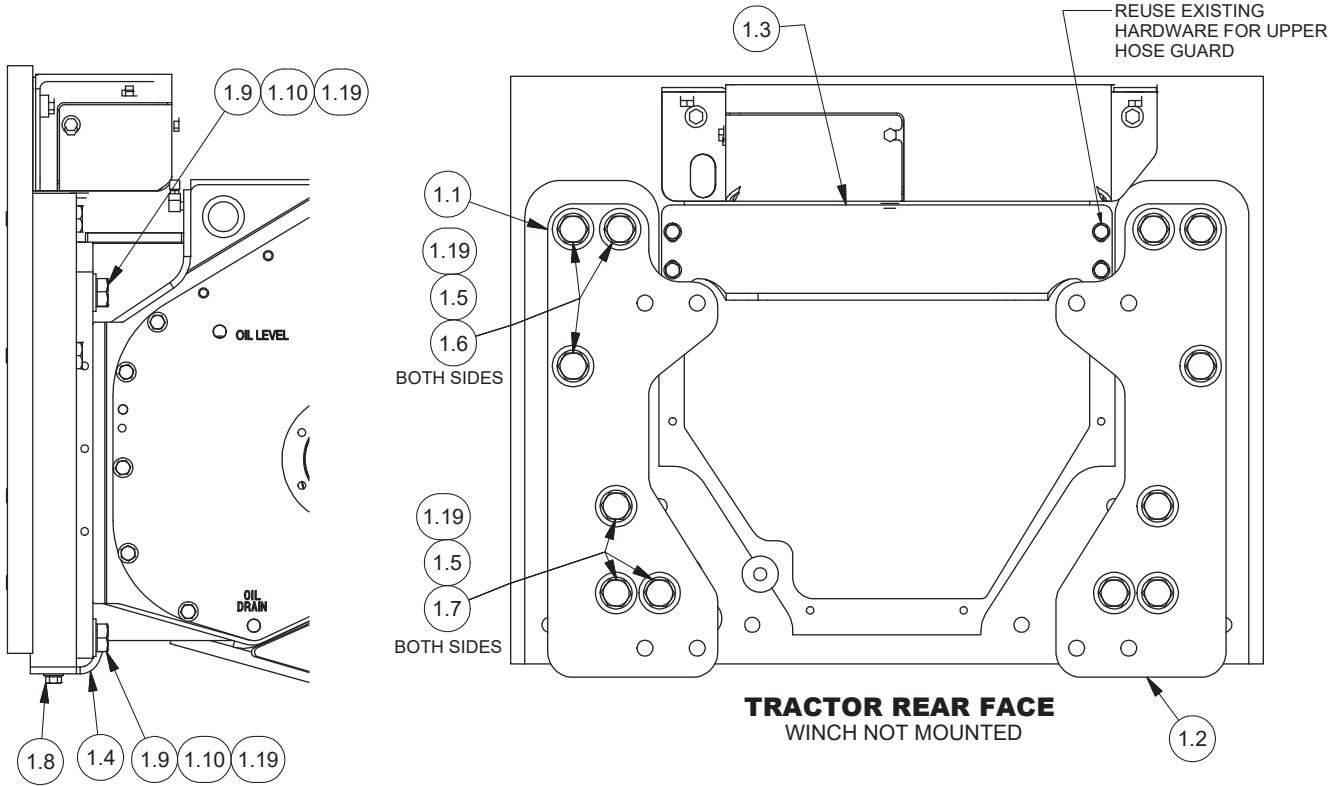
WINCH & GUARD INSTALLATION

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	2310085	1	. Bracket, Mounting, LH Upper	11	2310102	1	. Guard, Hose, LH
2	2310086	1	. Bracket, Mounting, RH Upper	12	2310101	1	. Guard, Hose, RH
3	2310088	1	. Bracket, Mounting, LH Lower	13	2310103	1	. Guard, Hose, Lower
4	2310084	1	. Bracket, Mounting, RH Lower	46.1	2311271	1	. Plate Cover LH
5	*a 293729W	6	. Capscrew	46.2	2311273	1	. Plate, Cover, Top
6	*a 274044W	6	. Capscrew	46.3	293628W	8	. Capscrew
7	296434W	12	. Washer	46.4	2311268	1	. Weldment, Guard
8	*a 221690W	8	. Capscrew	46.5	2311270	1	. Plate, Cover, RH
9	221780W	8	. Washer	46.6	296420W	8	. Washer
10	318702W	AR	. Threadlock				

*a Uses 318702W Thread Lock

Mounting Parts

Caterpillar D6K (H5CT1D**C801, H5CT1D**C805)

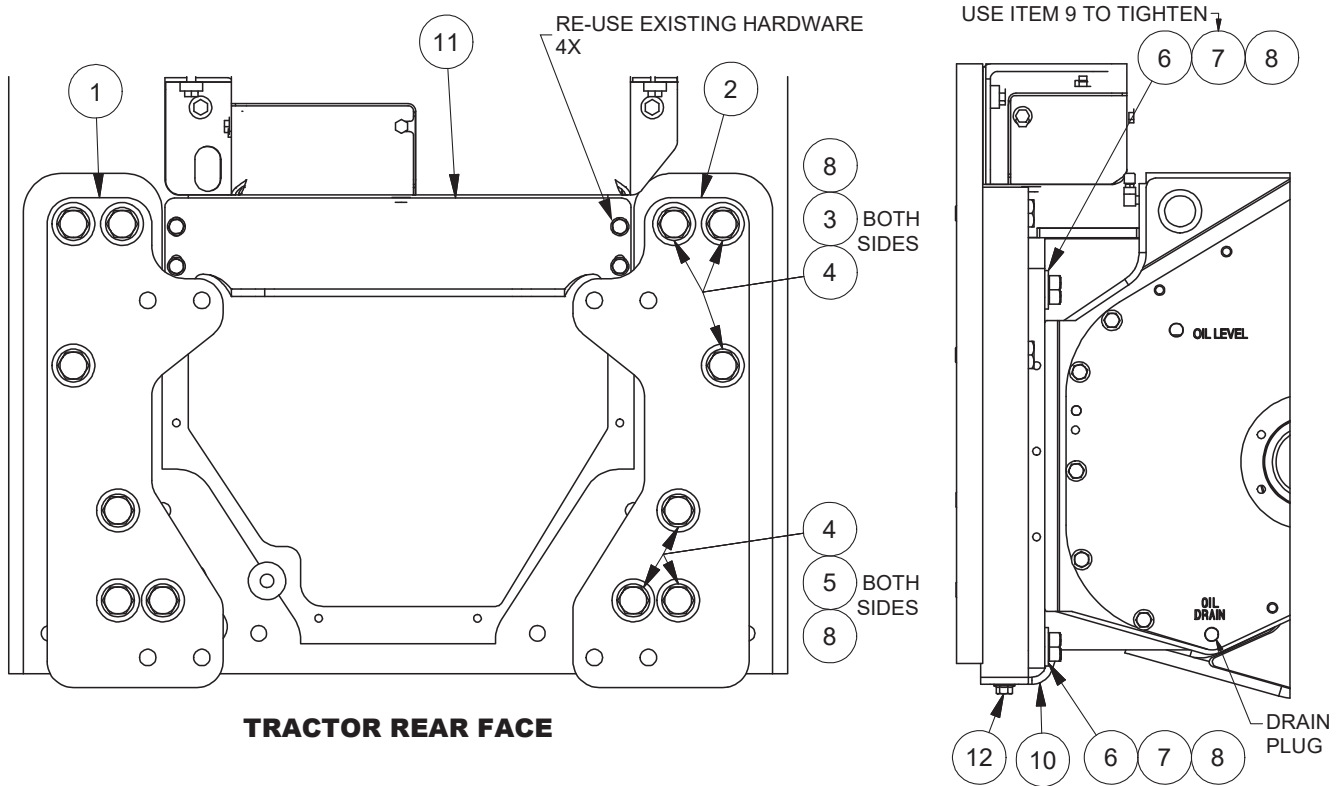
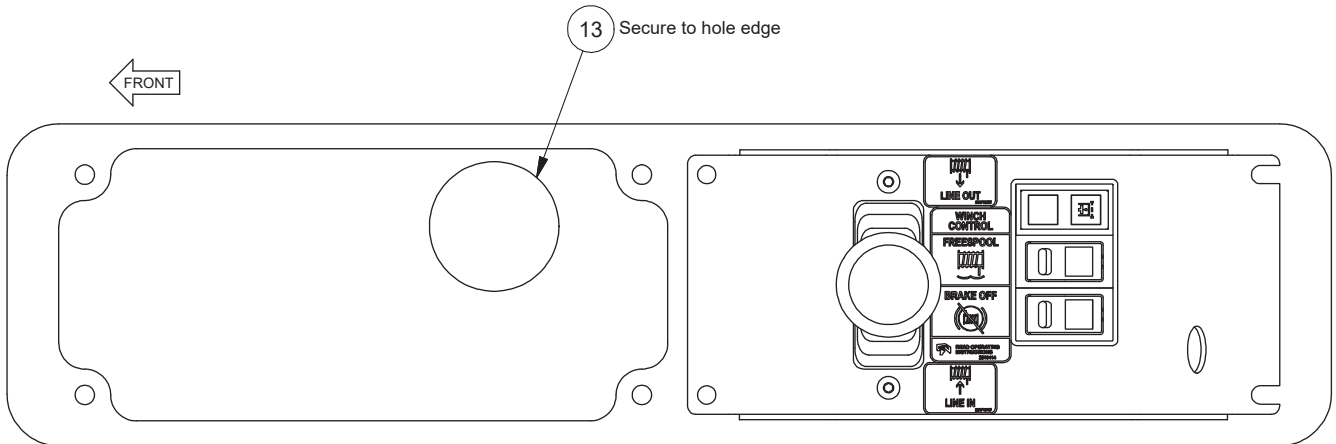


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1.1	2315094	1	Bracket, Mounting, LH	1.7	*a 274044W	6	Capscrew
1.2	2315095	1	Bracket, Mounting, RH	1.8	398817W	2	Screw, Flange
1.3	2314967	1	Guard	1.9	*a 221690W	8	Capscrew
1.4	2310103	1	Guard, Hose, Lower	1.10	221780W	8	Washer
1.5	296434W	12	Washer	1.19	318702W	AR	Threadlock
1.6	*a 293729W	6	Capscrew				

*a Uses 318702W Thread Lock

Mounting Parts

Caterpillar D6K2 (H5CH2E**C801)

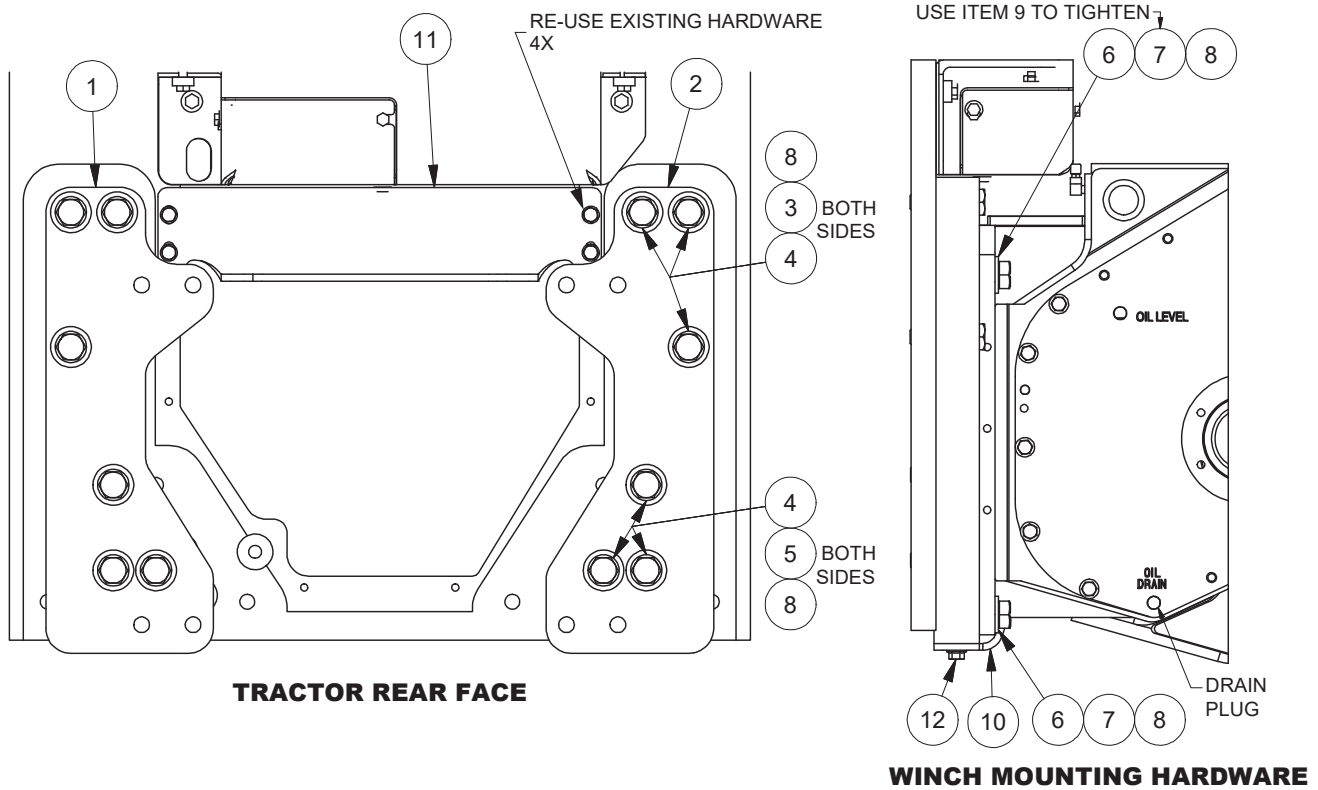


TRACTOR REAR FACE

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	2315094	1	Bracket, Mounting, LH	8	318702W	AR	Threadlock
2	2315095	1	Bracket, Mounting, RH	9	*a 2314046	1	Wrench, Torque Extension
3	*b 293729W	6	Capscrew	10	2310103	1	Guard, Hose, Lower
4	296434W	12	Washer	11	2314967	1	Guard
5	274044W	6	Capscrew	12	398817W	2	Screw, Flange
6	221780W	8	Washer	13	222328	1'	. Grommet
7	*b 221690W	8	Capscrew				
				*a	Not Shown		
				*b	Uses 318702W Thread Lock		

Installation

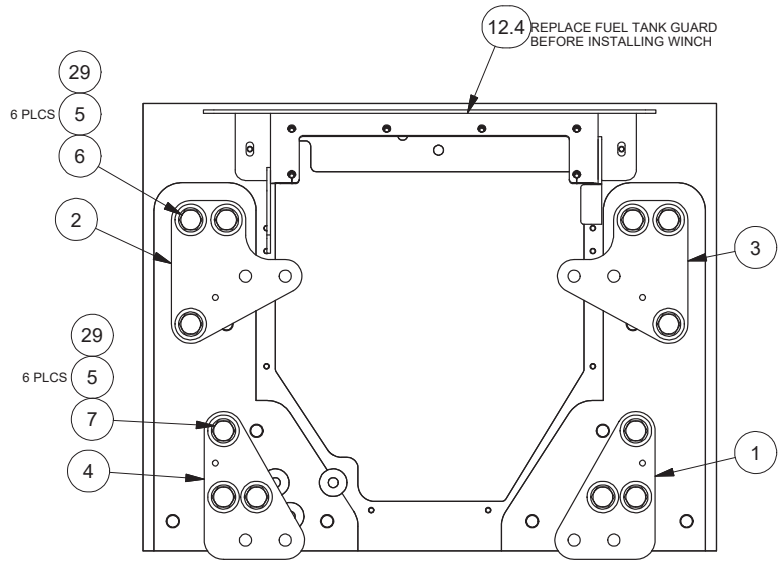
Caterpillar D6K2 (H5CH2E**C802)



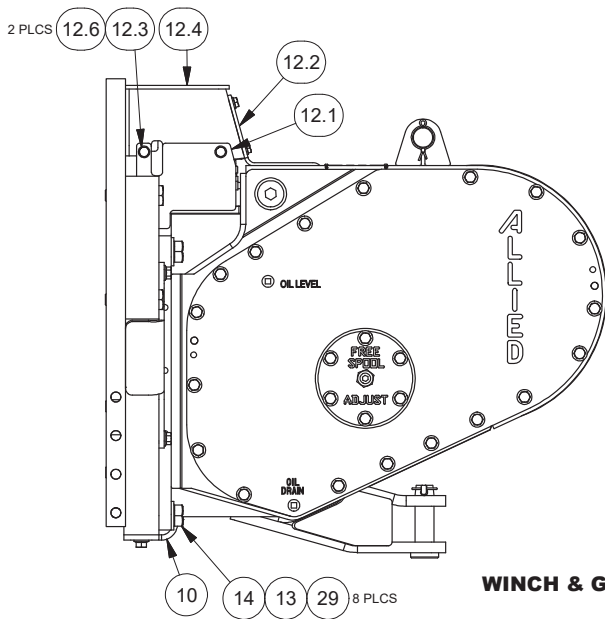
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	2315094	1	Bracket, Mounting, LH	9	*a 2314046	1	Wrench, Torque Extension
2	2315095	1	Bracket, Mounting, RH	10	2310103	1	Guard, Hose, Lower
3	*b 293729W	6	Capscrew	11	2314967	1	Guard
4	296434W	12	Washer	12	398817W	2	Screw, Flange
5	*b 274044W	6	Capscrew				
6	221780W	8	Washer				
7	*b 221690W	8	Capscrew				
8	318702W	AR	Threadlock				
				*a	Not Shown		
				*b	Uses 318702W Thread Lock		

Mounting Parts

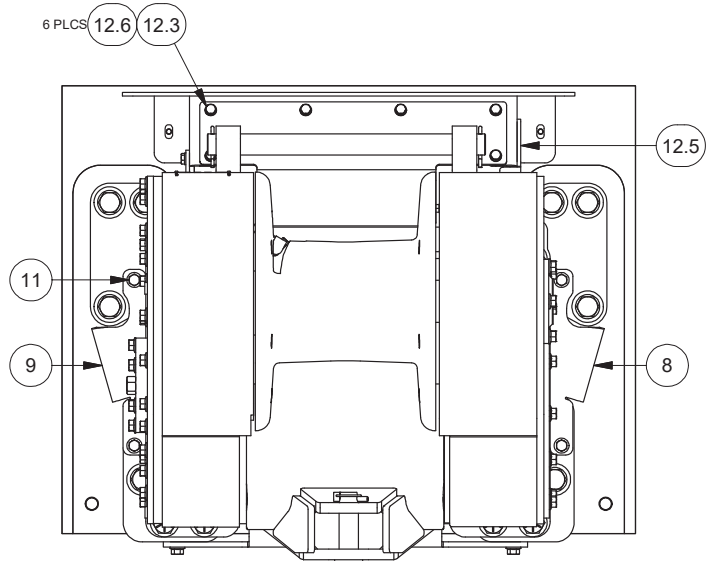
Caterpillar PL61 (H5CH1D**C391)



MOUNTING BRACKET INSTALLATION



WINCH & GUARD INSTALLATION

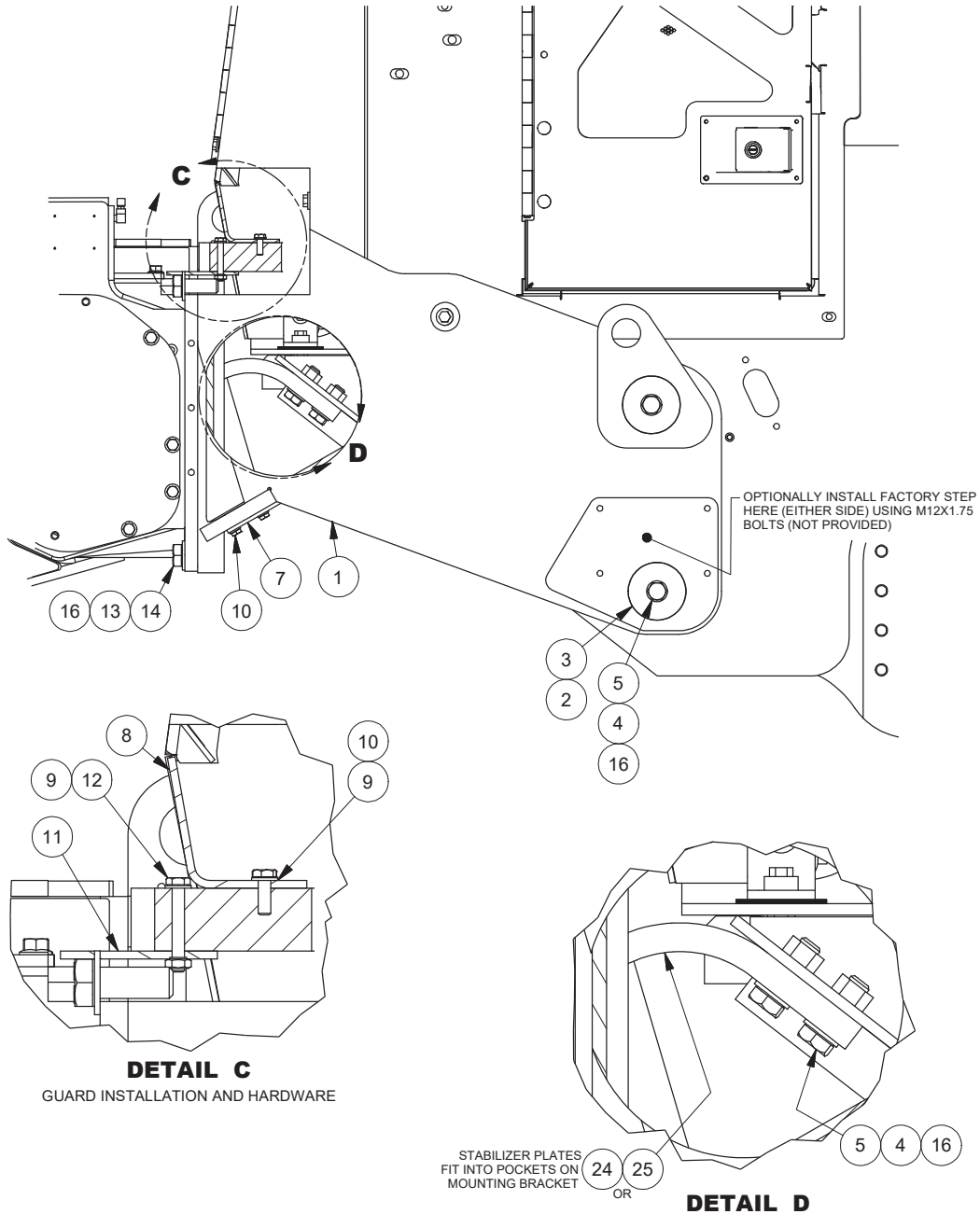


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	2310084	1	Bracket, RH Lower	12	2311302	1	Fuel Tank Guard
2	2310085	1	Bracket, LH Upper	12.1	2311271	1	. Plate Cover LH
3	2310086	1	Bracket, RH Upper	12.2	2311273	1	. Plate, Cover, Top
4	2310088	1	Bracket, LH Lower	12.3	293628W	8	. Capscrew
5	296434W	12	Washer	12.4	2311268	1	. Weldment, Guard
6	*a 293729W	6	Capscrew	12.5	2311270	1	. Plate, Cover, Rh
7	274044W	6	Capscrew	12.6	296420W	8	. Washer
8	2310101	1	Guard, Hose, RH	13	*a 221780W	8	Washer
9	2310102	1	Guard, Hose, LH	14	*a 221690W	8	Capscrew
10	2310103	1	Guard, Hose, Lower	29	318702W	AR	Threadlock
11	398817W	6	Screw, Flange				

*a Uses 318702W Thread Lock

Mounting Parts

Caterpillar 963D Track Loader (H5CT1B**C963)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	2315440	1	Bracket, Mounting	11	2315470	1	Weldment, Shield
2	2315461	4	Pin, Mounting	12	293637W	2	Capscrew
3	2315476	8	Plate, Round	13	221780W	8	Washer
4	296430W	14	Washer	14	*a 221690W	8	Capscrew
5	*a 293708W	14	Capscrew	16	318702W	AR	Threadlock
7	2315463	1	Plate, Cover, Lower	24	2315596	1	Plate, Stabilizer, Left
8	2315471	1	Plate, Guard, Upper	25	2315597	1	Plate, Stabilizer, Right
9	296420W	16	Washer				
10	Y09C-M1030	14	Capscrew	*a	Uses 318702W Thread Lock		

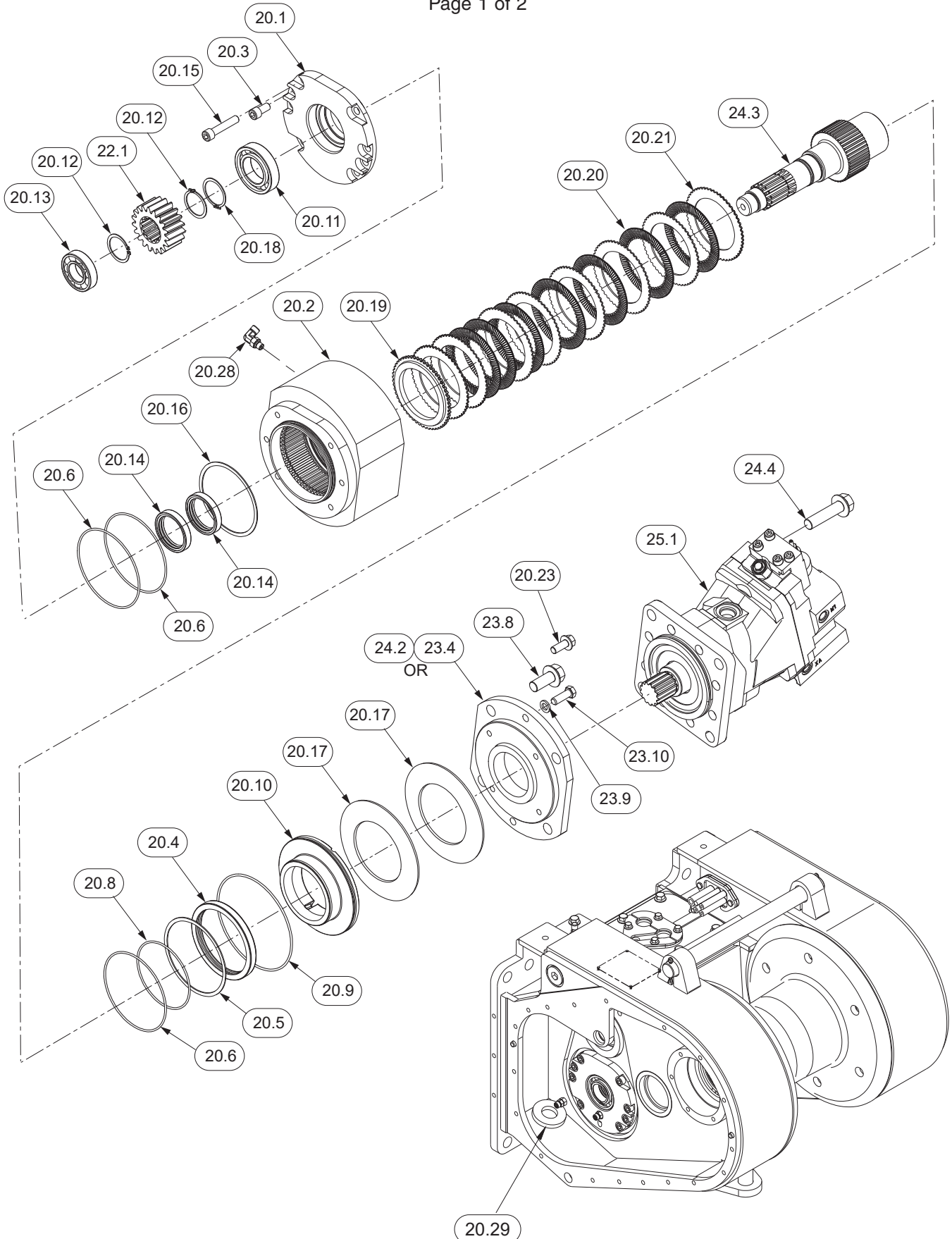
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Section 2
Gear/Shaft Train

Motor Shaft Assembly

Caterpillar H5CH2E**C80 NC, H5CH2E**C801, H5CH2E**C802, H5CH2E**C80A

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Motor Shaft Assembly

Caterpillar H5CH2E**C80 NC, H5CH2E**C801, H5CH2E**C802, H5CH2E**C80A

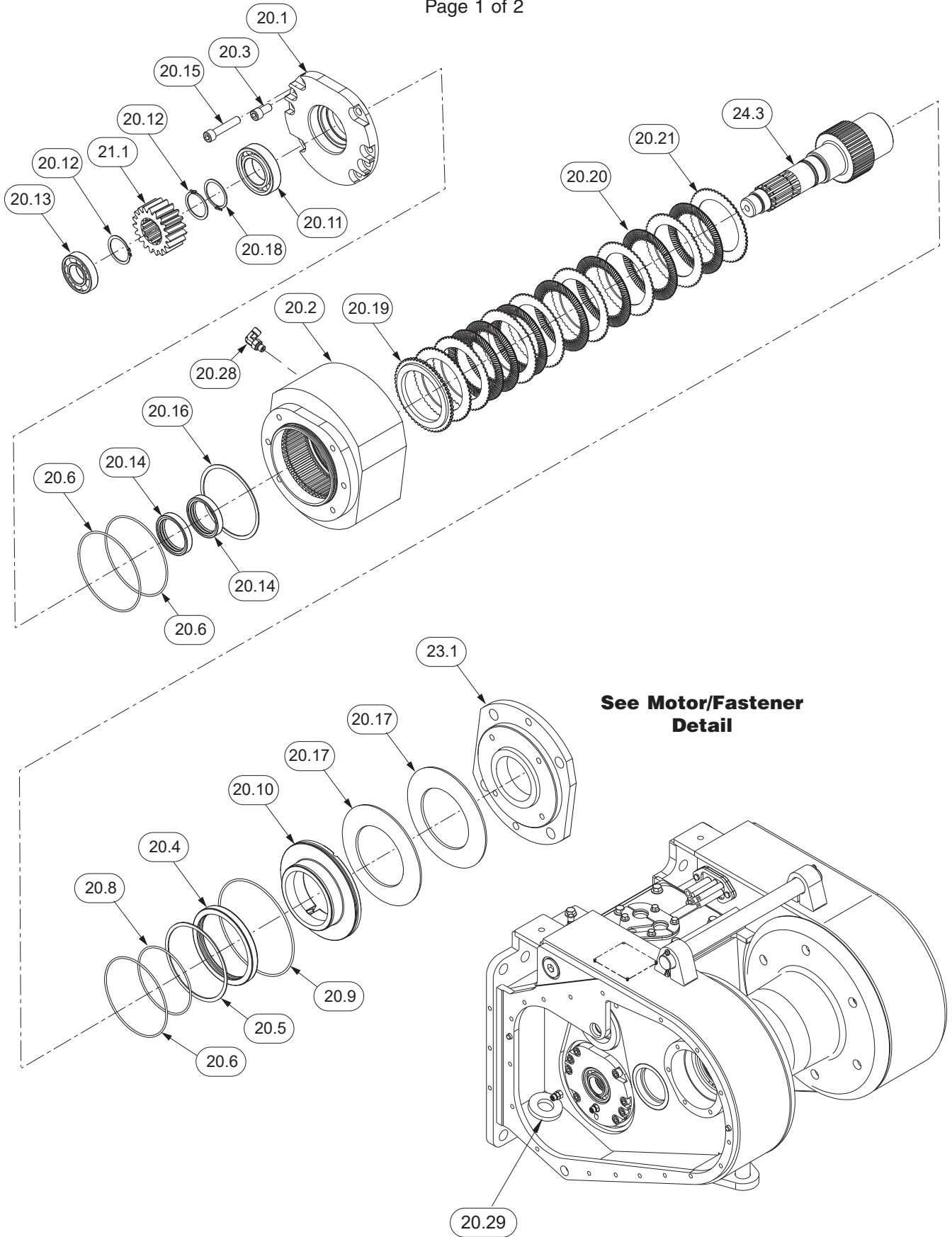
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Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
20.1	2314062	1	Plate- Mounting, Brake	20.18	12944W	1	Snap Ring
20.2	2306078W	1	Housing, Brake	20.19	334442W	1	Plate, Pressure
20.3	Y73G-0816	2	Capscrew	20.20	2306198W	7	Disc, Friction
20.4	2306599W	1	Sleeve	20.21	2304874W	8	Plate, Separator
20.5	2306604W	1	Snap Ring	20.23	398820W	2	Screw
20.6	89776W	3	O-Ring	20.25	313022W	1	Adhesive (for 20.23)
20.8	86596W	1	O-Ring	20.28	R833251	1	Fitting
20.9	87287W	1	O-Ring	20.29	R525293	1	Magnet, Ceramic
20.10	2306077W	1	Piston, Brake	22.1	2311411	1	Gear, 24T
20.11	41210W	1	Bearing, Ball	24.1	399939W	2	Screw, Flg
20.12	12916W	2	Snap Ring	24.2	2306076W	1	Plate, Mounting, Motor
20.13	41207W	1	Bearing, Ball	24.3	2306079W	1	Shaft, Motor
20.14	2306073W	2	Seal	24.4	398829W	2	Screw, Flg
20.15	Y73G-0840	6	Capscrew	25.1	* - - - - -	1	Motor
20.16	334475W	1	Ring, Snap, Int				
20.17	219084W	2	Spring		* Contact Factory		

Motor Shaft Assembly

Caterpillar H5CT1D**C80, H5CT1D**C801, H5CT1D**C805, H5CH1D**C391, H5CT2D**C953

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Motor Shaft Assembly

Caterpillar H5CT1D**C80, H5CT1D**C801, H5CT1D**C805, H5CH1D**C391

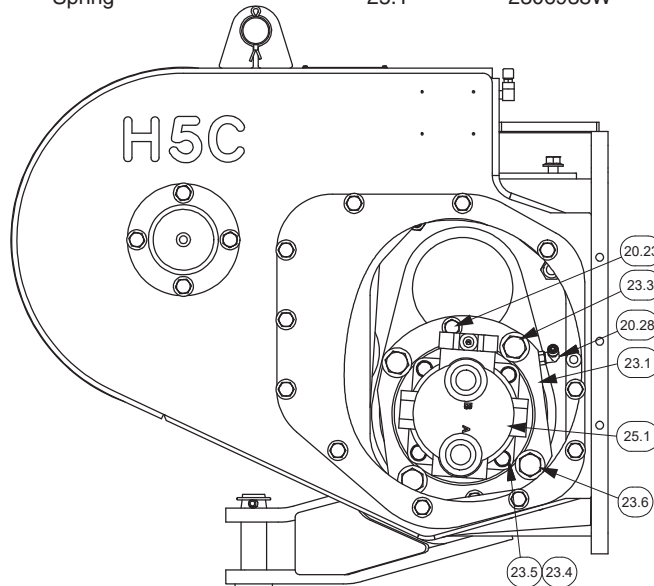
Page 2 of 2

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
20.1	2314062	1	Brake Mounting	20.18	12944W	1	Snap Ring
20.2	2306078W	1	Housing, Brake	20.19	334442W	1	Plate, Pressure
20.3	Y73G-0816	2	Capscrew	20.20	2306198W	7	Disc, Friction
20.4	2306599W	1	Sleeve	20.21	2304874W	8	Plate, Separator
20.5	2306604W	1	Snap Ring	20.23	398820W	2	Screw
20.6	89776W	3	O-Ring	20.25	264159W	1	Adhesive (for 20.23)
20.8	86596W	1	O-Ring	20.28	R833251	1	Fitting
20.9	87287W	1	O-Ring	20.29	R525293	1	Magnet, Ceramic
20.10	2306077W	1	Piston, Brake	22.1	2306228W	1	Gear, 19T
20.11	41210W	1	Bearing, Ball	23.1	2306214W	1	Plate, Mounting, Motor
20.12	12916W	2	Snap Ring	23.3	398828W	2	Screw
20.13	41207W	1	Bearing, Ball	23.4	15158W	4	Lockwasher
20.14	2306073W	2	Seal	23.5	18588W	4	Capscrew
20.15	Y73G-0840	6	Capscrew	23.6	917373W	2	Capscrew
20.16	334475W	1	Snap Ring, Internal	24.3	2306494W	1	Shaft
20.17	219084W	2	Spring	25.1	2306938W	1	Motor, Hydraulic, 2 Speed (See p. 34)

Motor Shaft Assembly

Caterpillar H5CT2D**C953

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
20.1	2314062	1	Mounting, Brake	20.18	12944W	1	Snap Ring
20.2	2306078W	1	Housing, Brake	20.19	334442W	1	Plate, Pressure
20.3	Y73G-0816	2	Capscrew	20.20	2306198W	7	Disc, Friction
20.4	2306599W	1	Sleeve	20.21	2304874W	8	Plate, Separator
20.5	2306604W	1	Snap Ring	20.23	398820W	2	Screw
20.6	89776W	3	O-Ring	20.25	313022W	1	Adhesive (for 20.23)
20.8	86596W	1	O-Ring	20.28	R833251	1	Fitting
20.9	87287W	1	O-Ring	20.29	R525293	1	Magnet, Ceramic
20.10	2306077W	1	Piston, Brake	22.1	2311411	1	Gear, 24T
20.11	41210W	1	Bearing, Ball	23.1	2306494W	1	Shaft
20.12	12916W	2	Snap Ring	23.2	2306214W	1	Plate, Mounting, Motor
20.13	41207W	1	Bearing, Ball	23.3	398828W	2	Screw, Flg
20.14	2306073W	2	Seal	23.4	15158W	4	Lockwasher
20.15	Y73G-0840	6	Capscrew	23.5	18588W	4	Capscrew
20.16	334475W	1	Ring, Snap, Int	23.6	917373W	2	Capscrew
20.17	219084W	2	Spring	25.1	2306938W	1	Motor, Hydraulic 2 Speed (See p. 34)

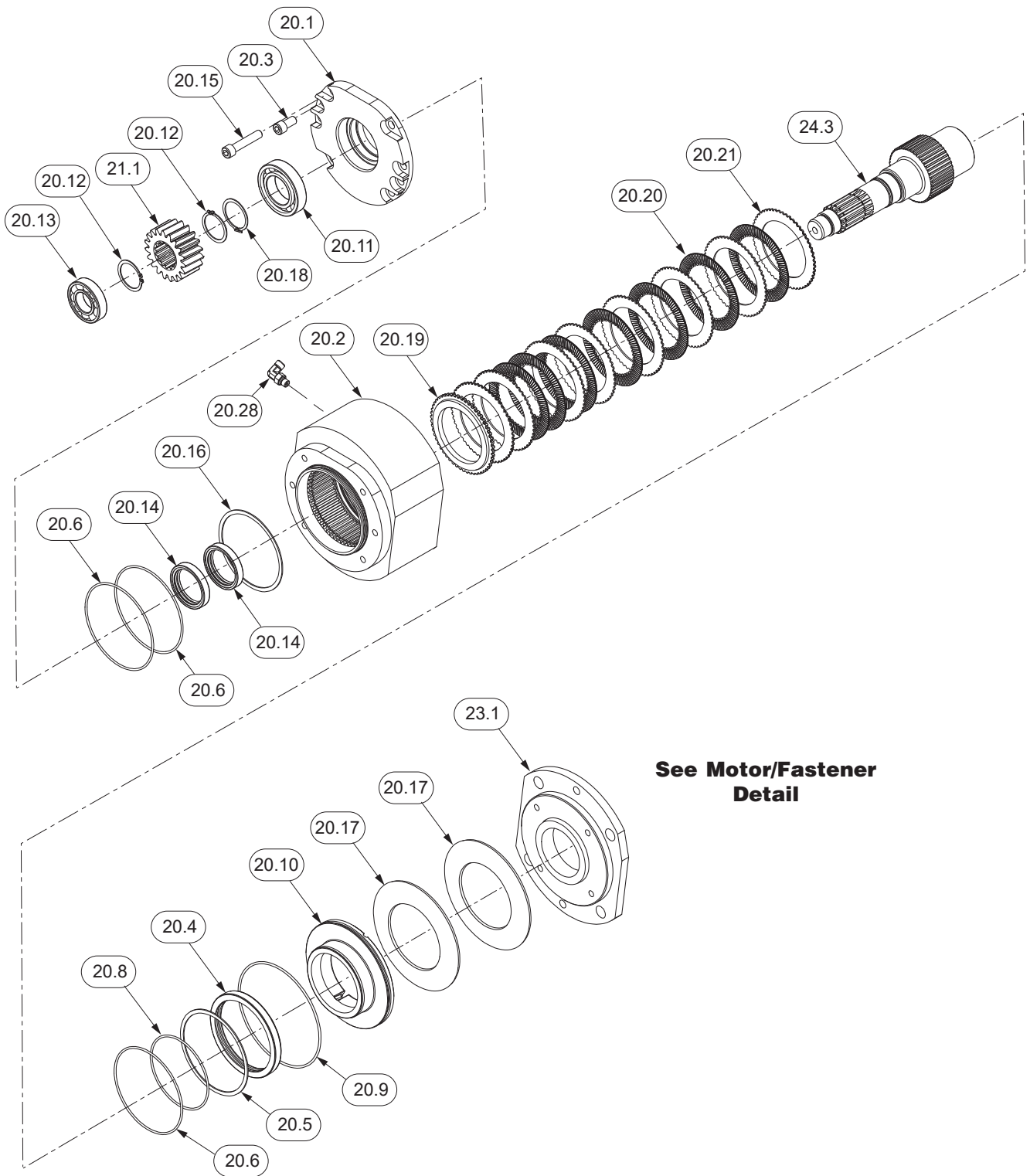


Motor/Fastener Detail

Motor Shaft Assembly

Caterpillar H5CT1E**C80

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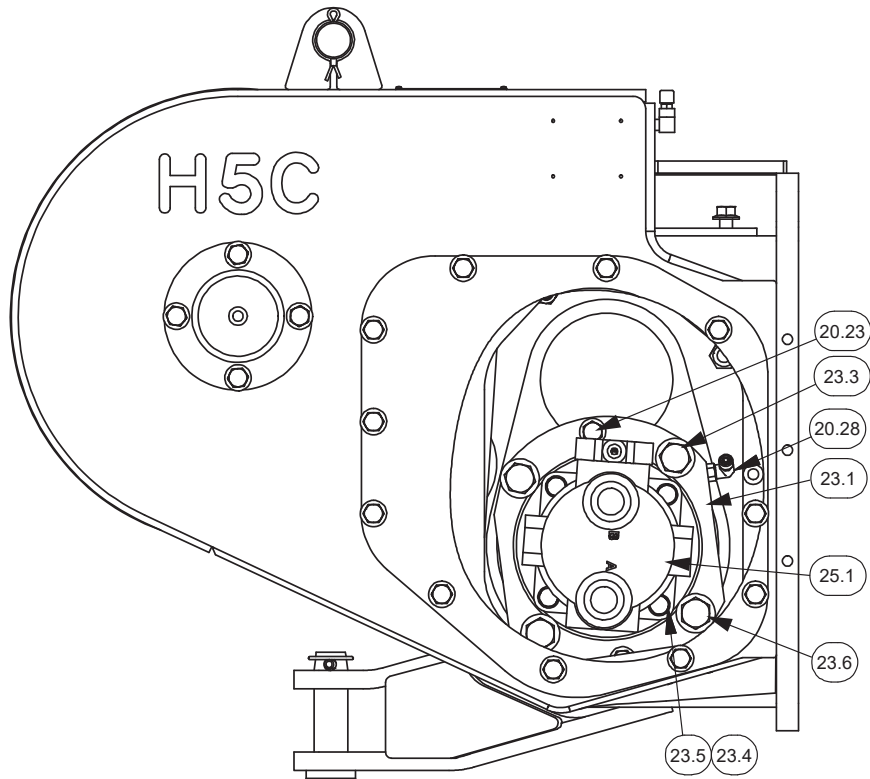


Motor Shaft Assembly

Caterpillar H5CT1E**C80

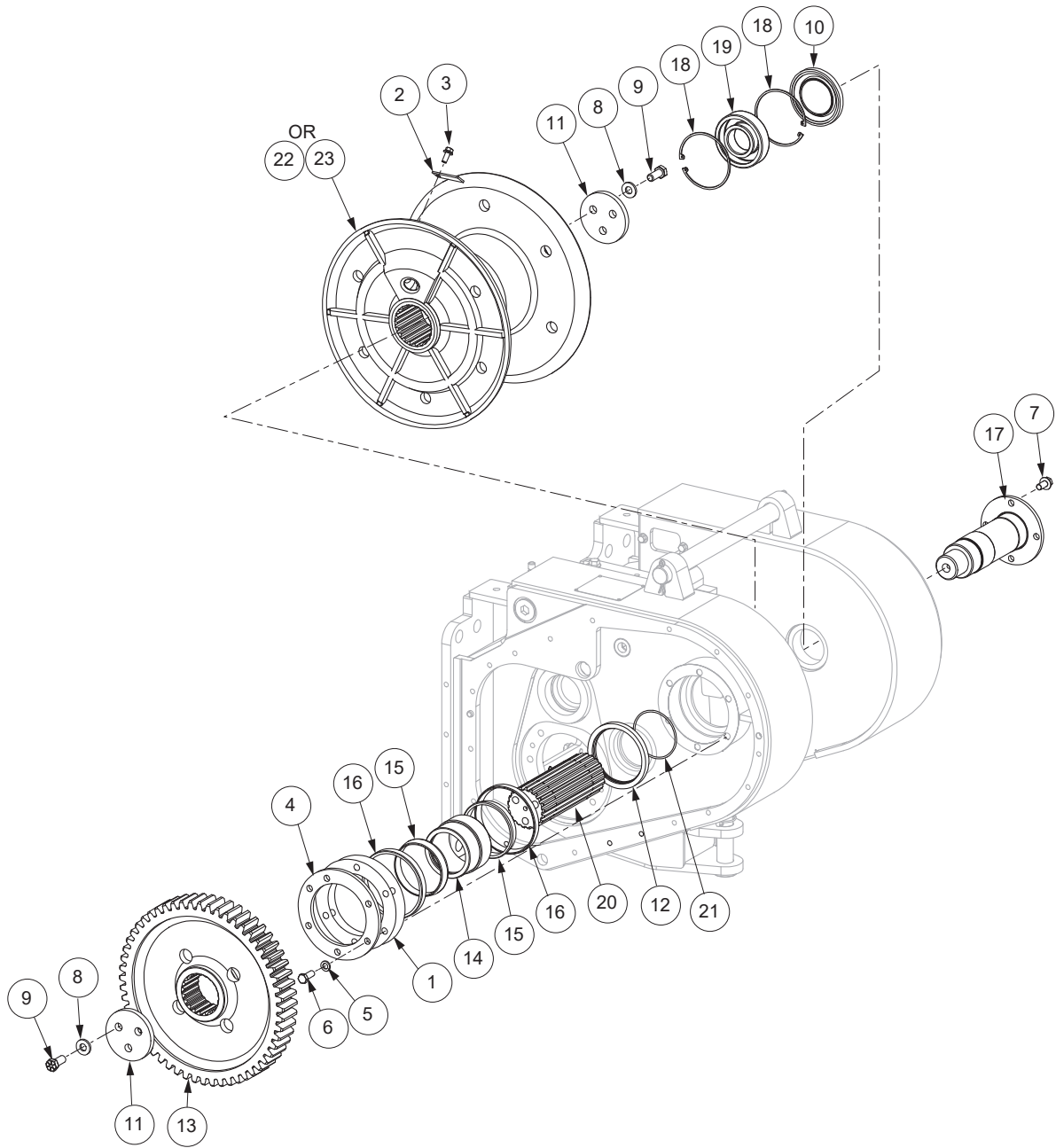
Page 2 of 2

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
20.1	2314062	1	Mounting Plate, Brake	20.20	2306198W	7	Disc, Friction
20.2	2306078W	1	Housing, Brake	20.21	2304874W	8	Plate, Separator
20.3	Y73G-0816	2	Capscrew	20.23	398820W	2	Screw
20.4	2306599W	1	Sleeve	20.25	264159W	1	Adhesive
20.5	2306604W	1	Snap Ring	20.28	R833251	1	Fitting
20.6	89776W	3	O-Ring	20.29	R525293	1	Magnet, Ceramic
20.8	86596W	1	O-Ring	21.1	2306228W	1	Gear, 19T
20.9	87287W	1	O-Ring	23.1	2306494W	1	Shaft
20.10	2306077W	1	Piston, Brake	23.2	2306214W	1	Plate, Mounting, Motor
20.11	41210W	1	Bearing, Ball	23.3	398828W	2	Screw
20.12	12916W	2	Snap Ring	23.4	15158W	4	Lockwasher
20.13	41207W	1	Bearing, Ball	23.5	18588W	4	Capscrew
20.14	2306073W	2	Seal	23.6	917373W	2	Capscrew
20.15	Y73G-0840	6	Capscrew	25.1	2307694W	1	Motor, 1 Speed (See p. 33)
20.16	334475W	1	Ring, Snap, Internal				
20.17	219084W	2	Spring				
20.18	12944W	1	Snap Ring				
20.19	334442W	1	Plate, Pressure				



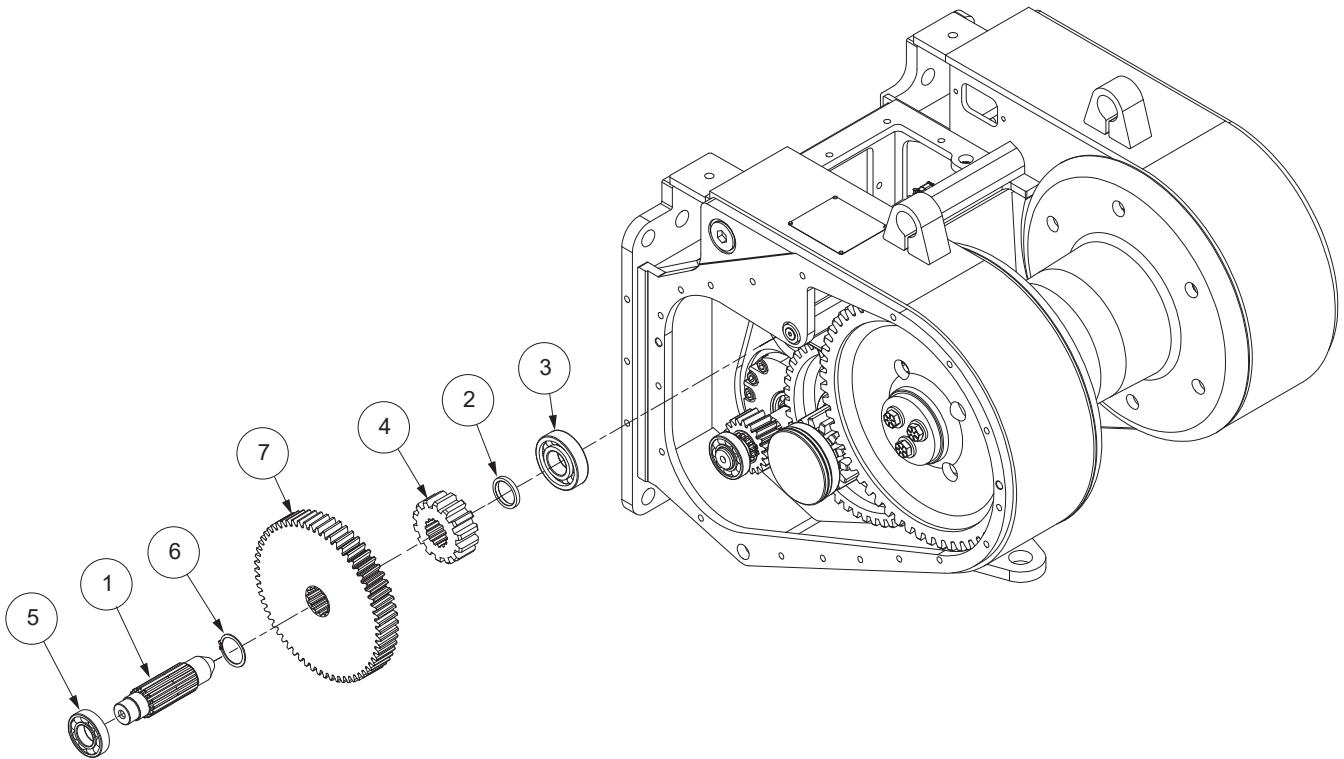
Motor/Fastener Detail

Drum Shaft



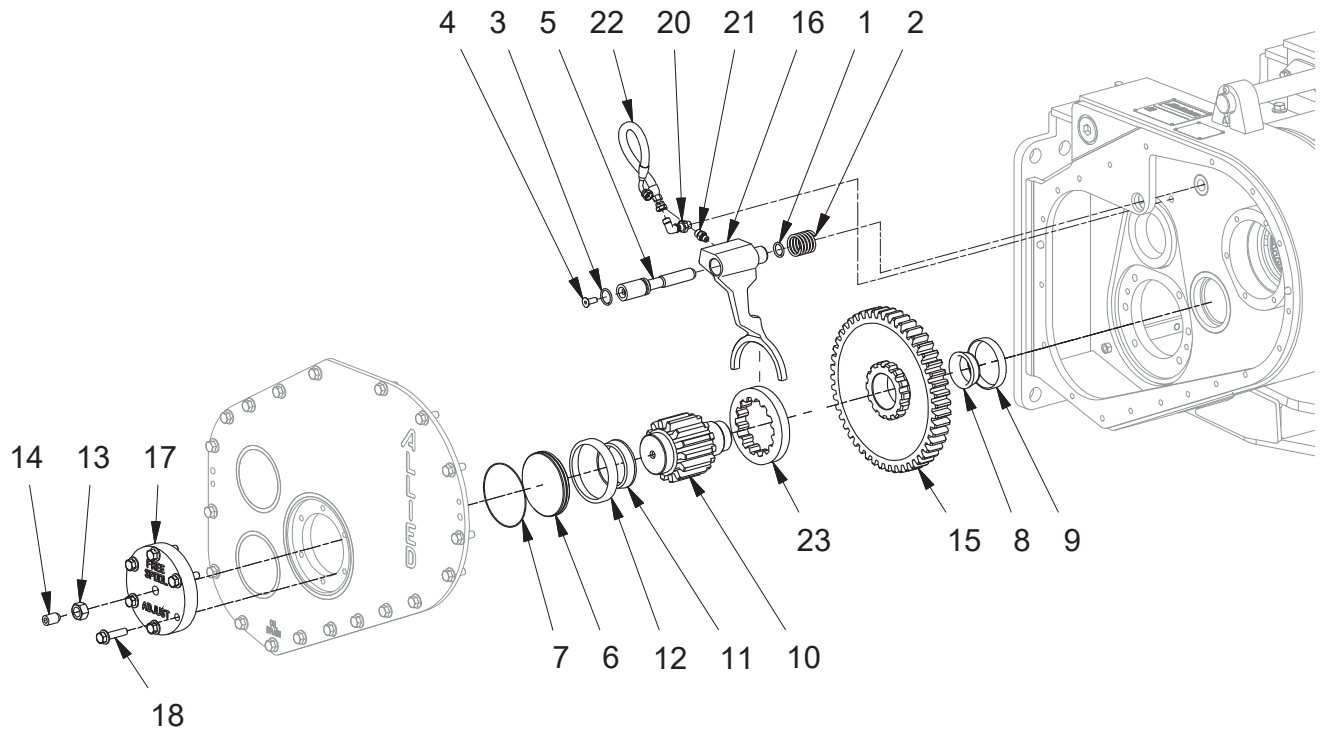
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	2303257W	AR	Shim, .005	14	2302335W	1	Spacer
2	1314503W	1	Keeper, Ferrule	15	219093W	2	Cone, Roller Bearing
3	1300780W	1	Screw, Flange	16	219094W	2	Cup, Roller Bearing
4	2303256W	1	Retainer	17	2302379W	1	Shaft, Drum
5	15158W	6	Washes	18	12956W	2	Ring, Snap
6	16830W	6	Capscrew	19	219095W	1	Bearing, Roller
7	2303902W	4	Screw, Flange	20	2302334W	1	Shaft, Drum
8	221775W	6	Washer	21	203533	1	O-Ring
9	Y17C-1024	6	Capscrew	22	2302338W	1	Drum, Overwind
10	133523W	1	Seal, Oil				
11	*a 2302336W	2	Retainer	*a	Use 246159W Adhesive		
12	339681W	1	Seal, Oil				
13	2302333W	1	Gear, Drum				

Shaft, Idler



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	2307282W	1	Shaft, Idler	6	12916W	1	Ring, Snap
2	2300842W	1	Spacer	7	2306229W	1	Gear, 62T (Ratio #1 Only)
3	2304580W	1	Bearing, Cylinder Roller	*a	2311412	1	Gear, 84T (Ratio #2 Only)
4	219066W	1	Gear, Pinion				
5	41207W	1	Bearing, Ball	*a	First Used on S/N H5C*****1024		

Intermediate Gear Shaft With Freespool

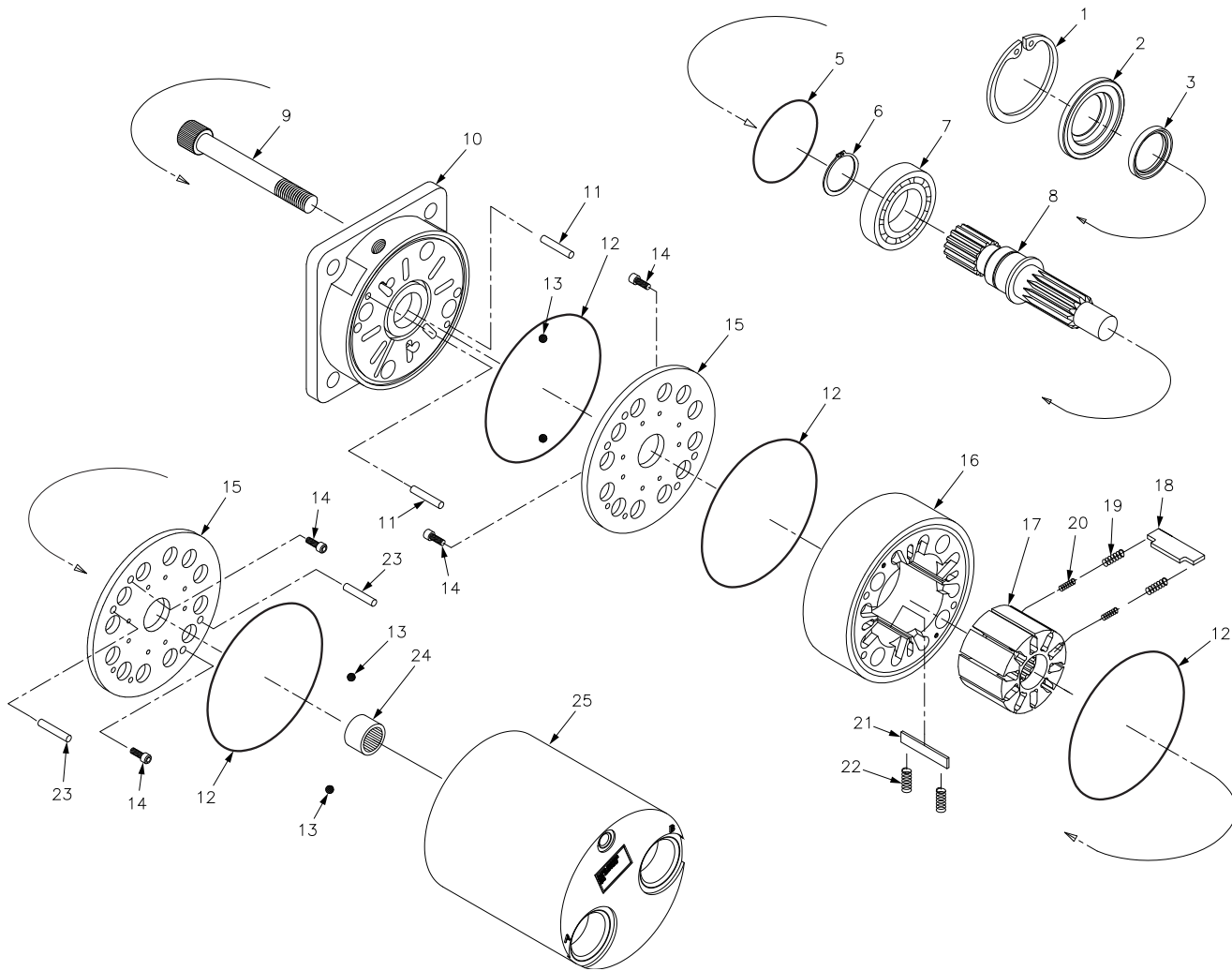


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	61142W	1	O-Ring	14	2304803W	1	Screw
2	2303906W	1	Spring, Freespool	15	225050W	1	Assy, Intermediate Gear
3	61056W	1	O-Ring	16	2303908W	1	Fork, Freespool Shifter
4	Y09G-0616	1	Capscrew	17	2302625W	1	Housing, Freespool Adjust
5	2303907W	1	Shaft, Freespool	18	2305415W	6	Screw, Flange
6	2302624W	1	Piston, Freespool Adjust	20	2307081W	1	Fitting
7	159940W	1	O-Ring	21	231439	1	Fitting
8	2305923W	1	Cone, Roller Bearing	22	*a 2307037W	1	Assy, Hose
9	45733W	1	Cup, Roller Bearing	23	224108W	1	Clutch, Dental
10	2305915W	1	Shaft, Pinion				
11	219114W	1	Cone, Roller Bearing				
12	2302515W	1	Cup, Roller Bearing				
13	221717W	1	Nut				

*a Use 264159W Pipe Thread Sealant (HCE-83)

Hydraulic Motor, Single Speed

Caterpillar D6K (H5CT1E**C80)

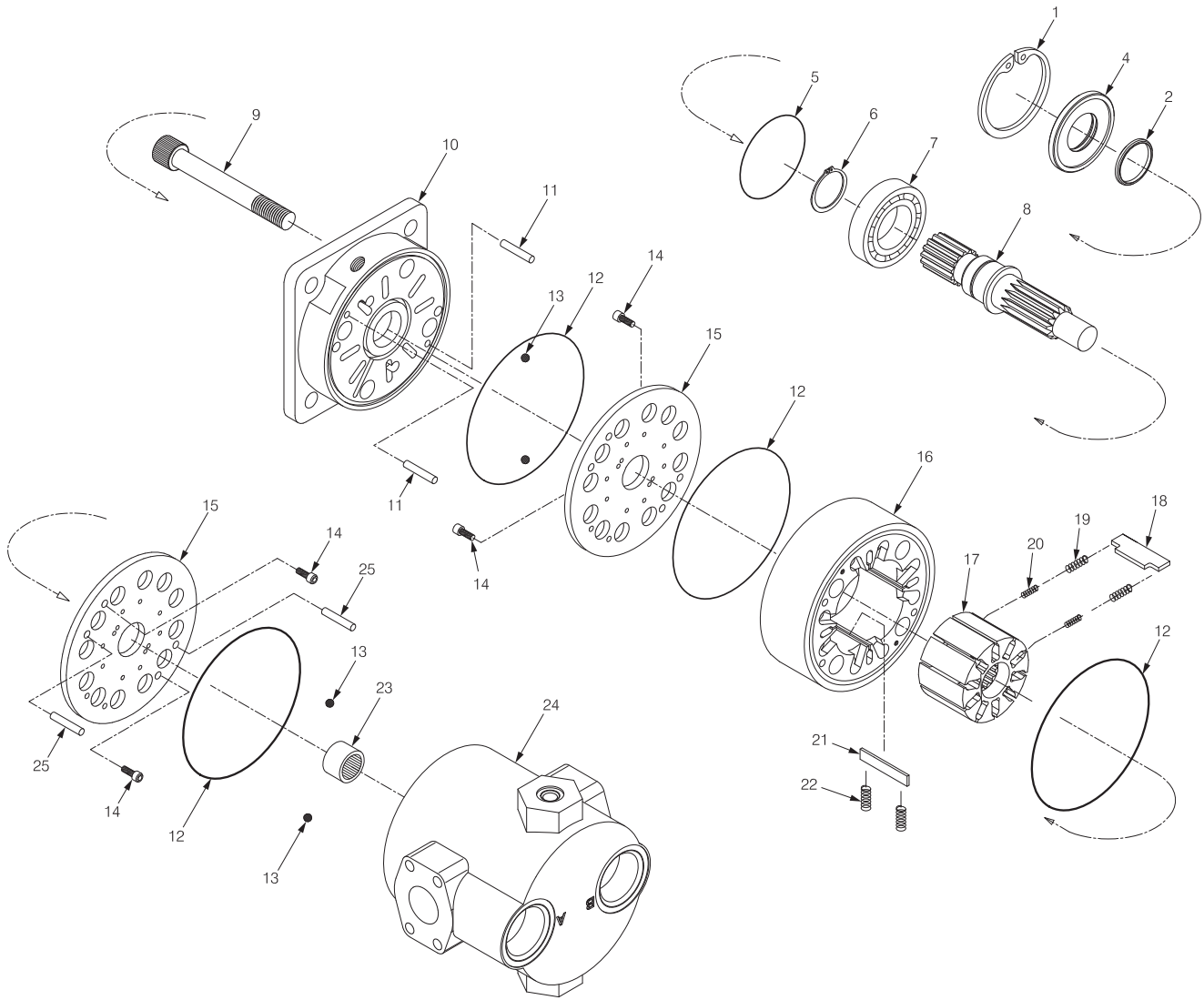


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
2307694W Hydraulic Motor, Single Speed							
	2307289W	1	.. Motor, Single Speed Vane	14	238068	4	.. Screw
1	*a 238060	1	.. Ring, Snap	15	2307962W	2	.. Timing Plate
2	*a 238061	1	.. Plate, Seal	16	238070	1	.. Stator
3	*a 238056	1	.. Seal	17	238073	1	.. Rotor
5	*a 238058	1	.. O-Ring	18	*b 238074	10	.. Vane, Rotor
6	238062	1	.. Ring, Snap	19	*b 238075	20	.. Spring, Outer
7	238063	1	.. Bearing	20	*b 238076	20	.. Spring, Inner
8	238064	1	.. Shaft	21	*b 238072	4	.. Vane, Stator
9	238065	4	.. Bolt	22	*b 238071	8	.. Spring, Vane
10	NSS	1	.. Housing	23	238080	2	.. Pin, Rear Dowel
11	238067	2	.. Pin, Front Dowel	24	238078	1	.. Bearing, Needle
12	*a 238059	4	.. O-Ring	25	NSS	1	.. Housing, Rear
13	238077	4	.. Check, Ball				

*a Included in Seal Kit 2307244W

*b Included in Vane & Spring Kit 246726

Hydraulic Motor, 2-Speed



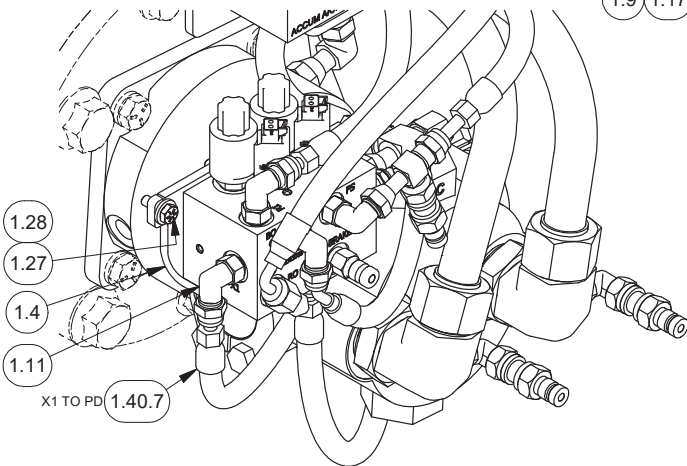
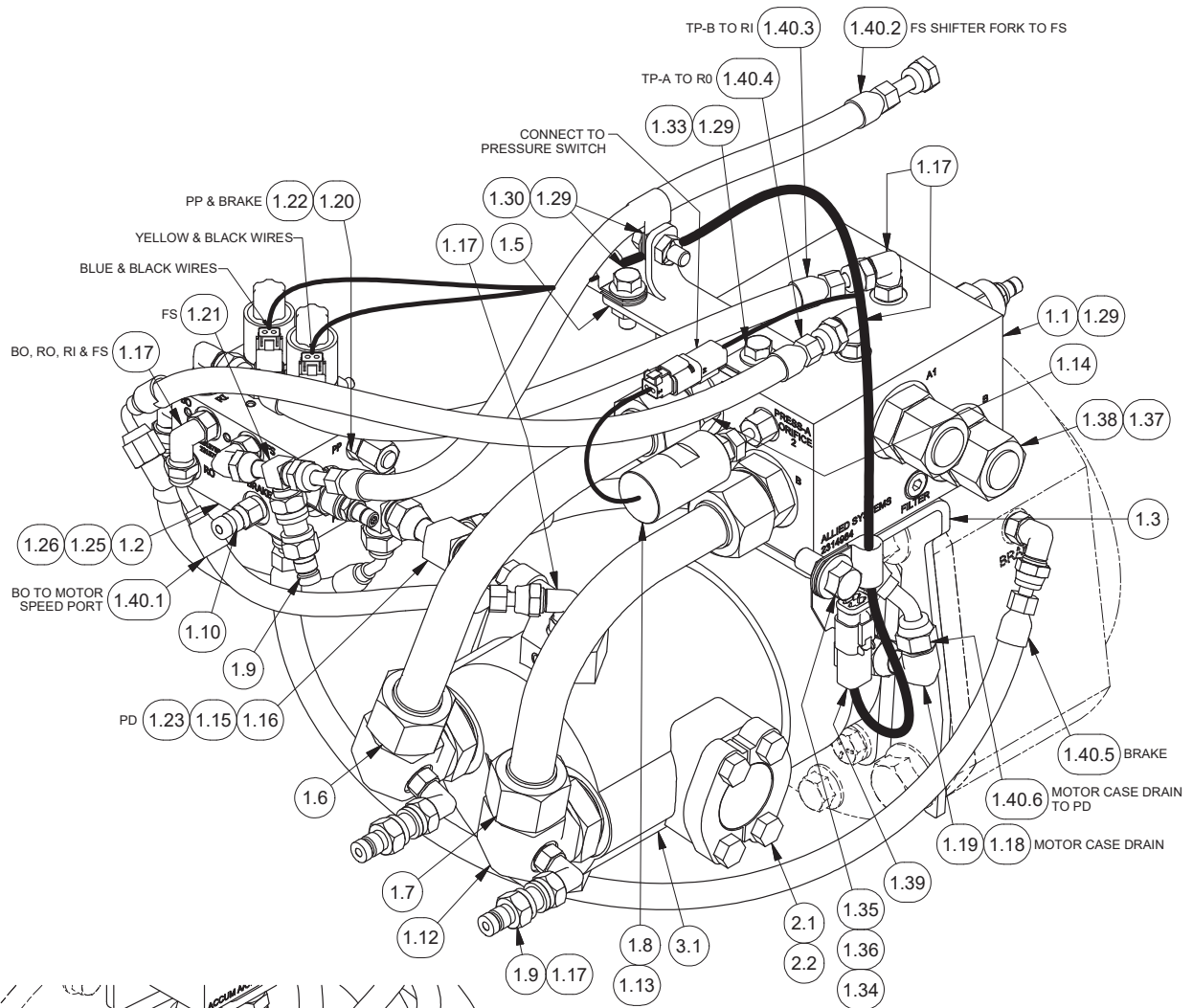
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
2306938W Hydraulic Motor, 2-Speed							
1	*a 238060	1	. Ring, Snap	15	2307962W	2	. Plate, Timing
2	*a 238056	1	. Seal	16	238070	1	. Stator
4	*a 238061	1	. Seal Plate	17	238073	1	. Rotor
5	*a 238058	1	. O-Ring	18	*b 238074	10	. Vane, Rotor
6	238062	1	. Ring, Snap	19	*b 238075	20	. Spring, Outer
7	238063	1	. Bearing	20	*b 238076	20	. Spring, Inner
8	238064	1	. Shaft	21	*b 238072	4	. Vane, Stator
9	238065	4	. Bolt	22	*b 238071	8	. Spring, Vane
10	NSS	1	. Housing	23	238078	1	. Bearing, Needle
11	238067	2	. Pin, Front Dowel	24	NSS	1	. Rear Housing
12	*a 238059	4	. O-Ring	25	238080	2	. Pin, Rear Dowel
13	238077	4	. Check, Ball				
14	238068	4	. Screw				
				*a	Included in Seal Kit 2307244W		
				*b	Included in Vane & Spring Kit 246726		

Section 3
Hydraulics/Electrical/Controls

Internal Hydraulic Group

Caterpillar D6K (H5CT1D**C80, H5CT1D**C801, H5CT1D**C805)

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NOTE: PLUGS ARE NOT SHOWN. INSTALL PLUGS IN CBR MANIFOLD PORTS ORIFICE 1, ACCUM A/ORIFICE 3 & ACCUM B/ORIFICE 4

Internal Hydraulic Group

Caterpillar D6K (H5CT1D**C80, H5CT1D**C801, H5CT1D**C805)

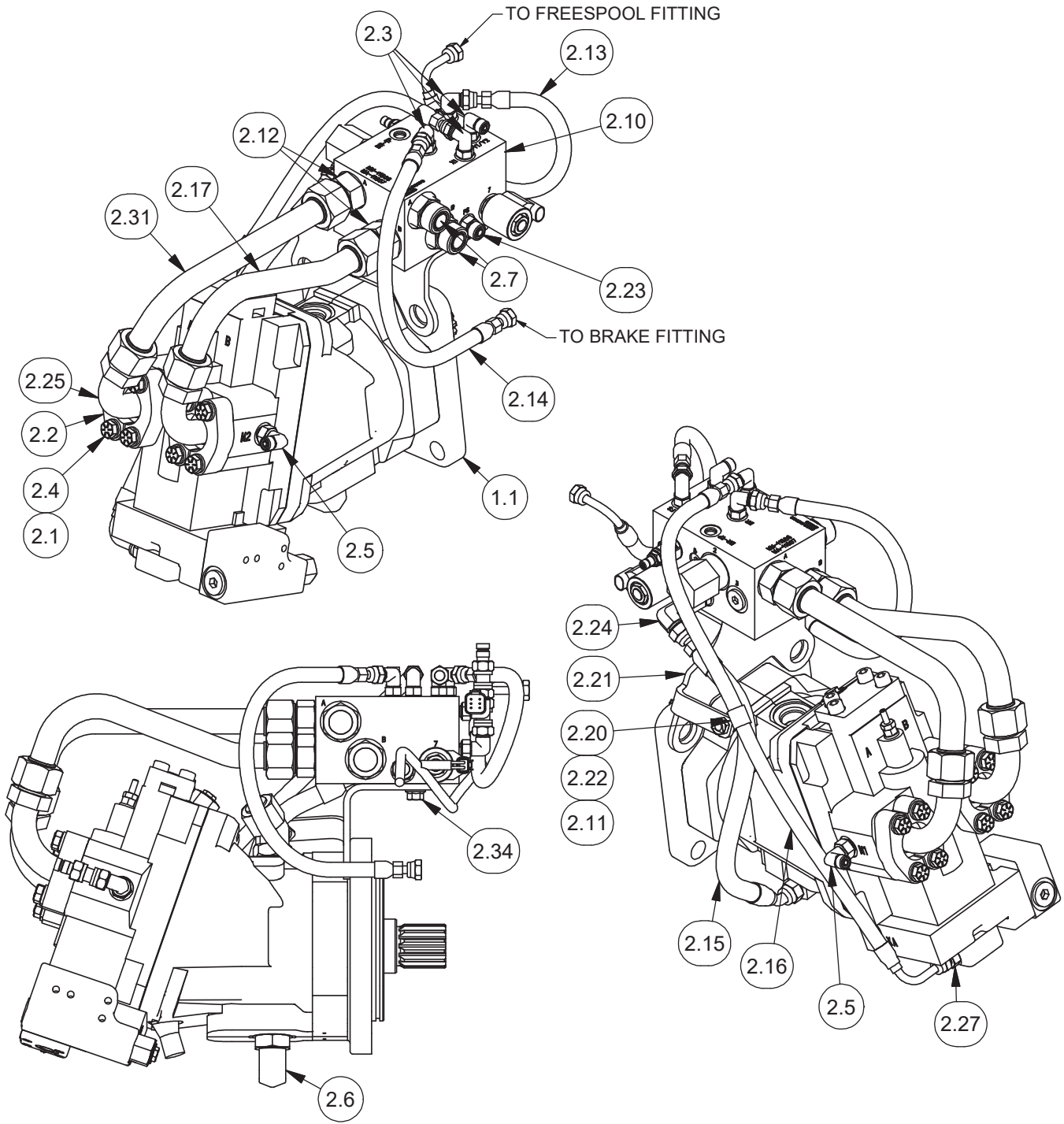
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Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1.1	2314984	1	Counterbalance Manifold Assy (See p. 79)	1.25	293628W	2	Capscrew
				1.26	296420W	2	Washer
1.2	2313758	1	Control Manifold Assy (See p. 77)	1.27	224120W	2	Capscrew
				1.28	221763W	2	Washer
1.3	2314983	1	Bracket, Manifold	1.29	398567W	5	Screw, Flange
1.4	2313443	1	Bracket, Manifold	1.30	209579	2	Clip, Insul
1.5	2316646	1	Bracket, Support, Hose	1.33	2311550	1	Clip, Harness Mounting
1.6	2312197	1	Tube Assembly, Motor A	1.34	2313663	1	Clip, Harness Mounting
1.7	2314986	1	Tube Assembly, Motor B	1.35	398817W	1	Screw, Flange
1.8	2307291W	1	Switch	1.36	R13807642	1	Clip, Insul
1.9	2307625W	3	Fitting	1.37	R833127	2	Fitting
1.10	R14040	1	Coupler, Male	1.38	231821	2	Fitting
1.11	2311500	1	Fitting Assembly		232382	1	. O-Ring
1.12	2307123W	2	Fitting	1.39	2315003	1	Harness, Wire, Winch
1.13	2304147W	1	Fitting	1.40	2315012	1	Kit, Hose
1.14	231444	2	Fitting	1.40.1	2313639	1	. Hose Assembly
1.15	231465	1	Fitting	1.40.2	257331	1	. Hose Assembly
1.16	231955	1	Fitting	1.40.3	2315374	1	. Hose Assembly
1.17	R833251	9	Fitting	1.40.4	2315375	1	. Hose Assembly
1.18	231440	1	Fitting	1.40.5	243178	1	. Hose Assembly
1.19	R833801	1	Fitting	1.40.6	2312695	1	. Hose Assembly
1.20	231439	2	Fitting	1.40.7	2314993	1	. Hose Assembly
1.21	236855	1	Fitting	2.1	11740	2	Kit, Split Flange
1.22	232984	1	Fitting	2.2	24531	2	Fitting
1.23	231822	1	Fitting	3. 1	2306938W	1	Motor (See p. 34)
1.24	229383	3	Fitting				

Internal Hydraulic Group

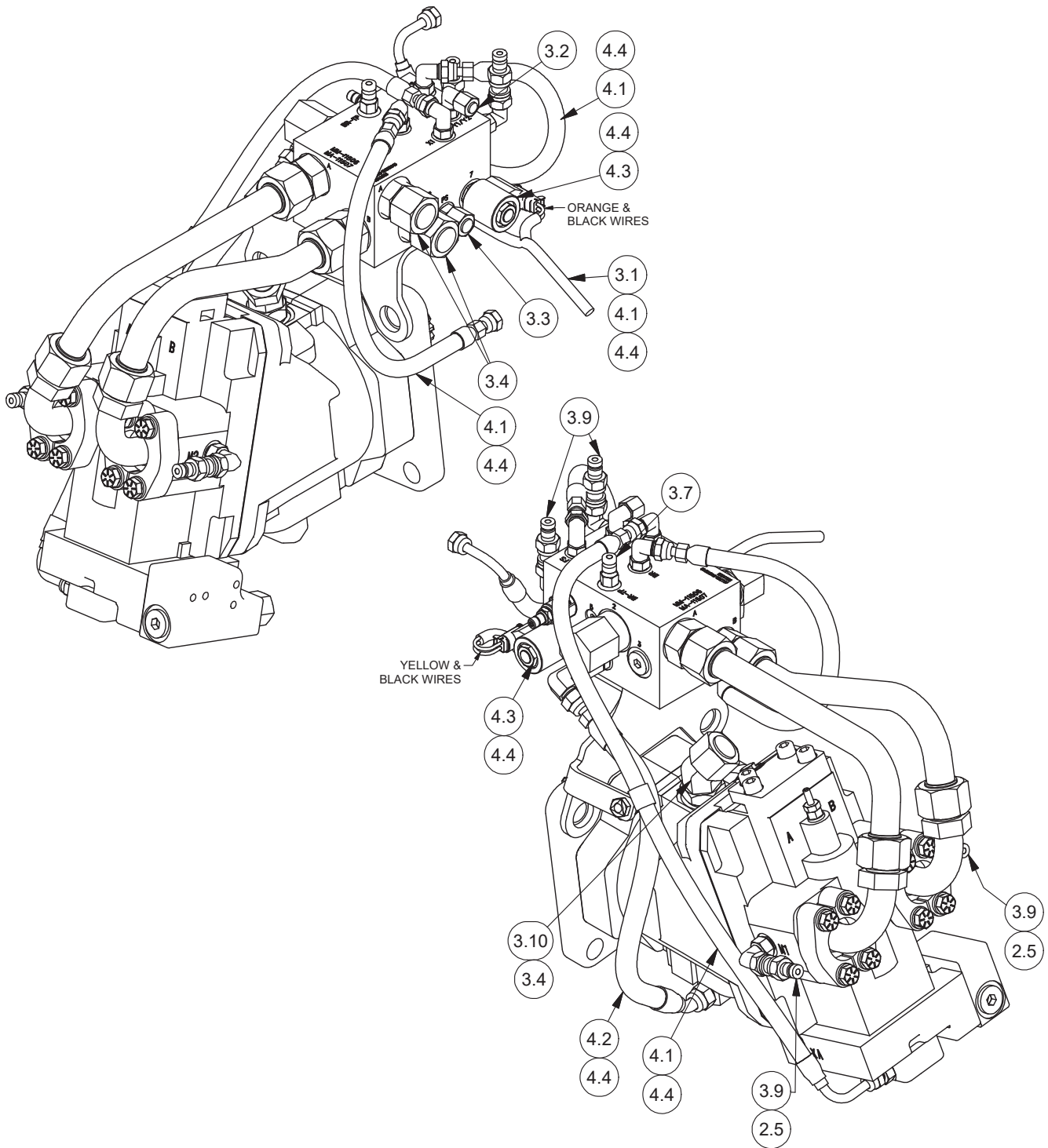
Caterpillar D6K (H5CH2E**C80, H5CH2E**C80A, H5CH2E**C801, H5CH2E**C802)

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Internal Hydraulic Group

Caterpillar D6K (H5CH2E**C80, H5CH2E**C80A, H5CH2E**C801, H5CH2E**C802)



Internal Hydraulic Group

Caterpillar D6K (H5CH2E**C80, H5CH2E**C80A, H5CH2E**C801, H5CH2E**C802)

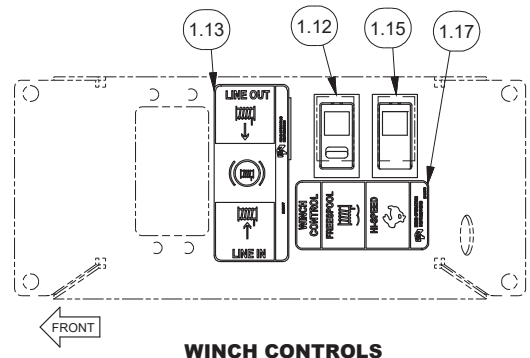
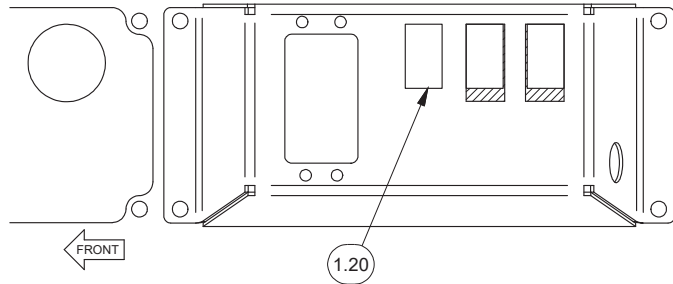
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Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
2.1	15157W	8	Lockwasher	2.23	231440	1	Fitting
2.2	236973	4	Clamp Half	2.24	R833301	1	Fitting
2.3	R833251	4	Fitting	2.25	2310603	2	Assembly, Fitting
2.4	R13801834	8	Capscrew	2.27	R833103	1	Fitting
2.5	R833253	2	Fitting	2.31	2310535	1	Tube Assembly, Motor A
2.6	R833260	1	Fitting	2.34	399784W	2	Screw, Flg
2.7	231443	2	Fitting	3.1	2311343	1	Wire Harness, Winch
2.10	2311613	1	Manifold, Control (See p. 70)	3.2	232984	1	Fitting
2.11	15134W	1	Washer	3.3	231822	1	Fitting
2.12	231450	2	Fitting	3.4	231821	3	Fitting
2.13	2310339	1	Hose Assembly, FS		232382	1	. O-Ring
2.14	2310543	1	Hose Assembly	3.7	R14040	1	Coupler, Male
2.15	2310340	1	Hose Assembly, Drain	3.8	R833251	2	Fitting
2.16	2314384	1	Hose Assembly	3.9	2307625W	4	Fitting
2.17	2310536	1	Tube Assembly, Motor B	3.10	231463	1	Fitting
2.20	209579	1	Clip, Insul	4.1	245926	10'	Sleeve, Fire
2.21	2310554	1	Bracket, Manifold	4.2	242683	2'	Sleeve
2.22	16597W	1	Capscrew	4.3	249538	1'	Sleeve, Fire
				4.4	589423	14	Clamp

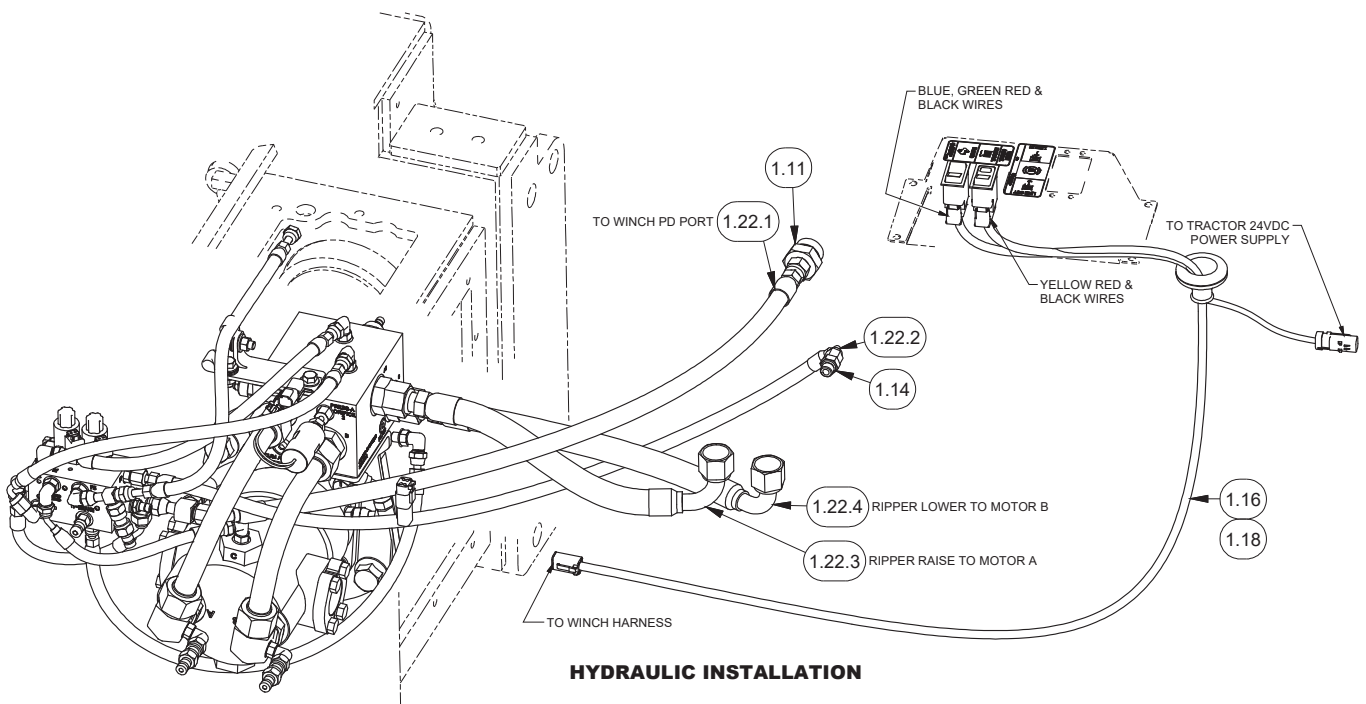
Hydraulic/Electrical Installation

Caterpillar D6K (H5CT**C80)

RIGHT CONSOLE ALTERATION



WINCH CONTROLS TOP VIEW



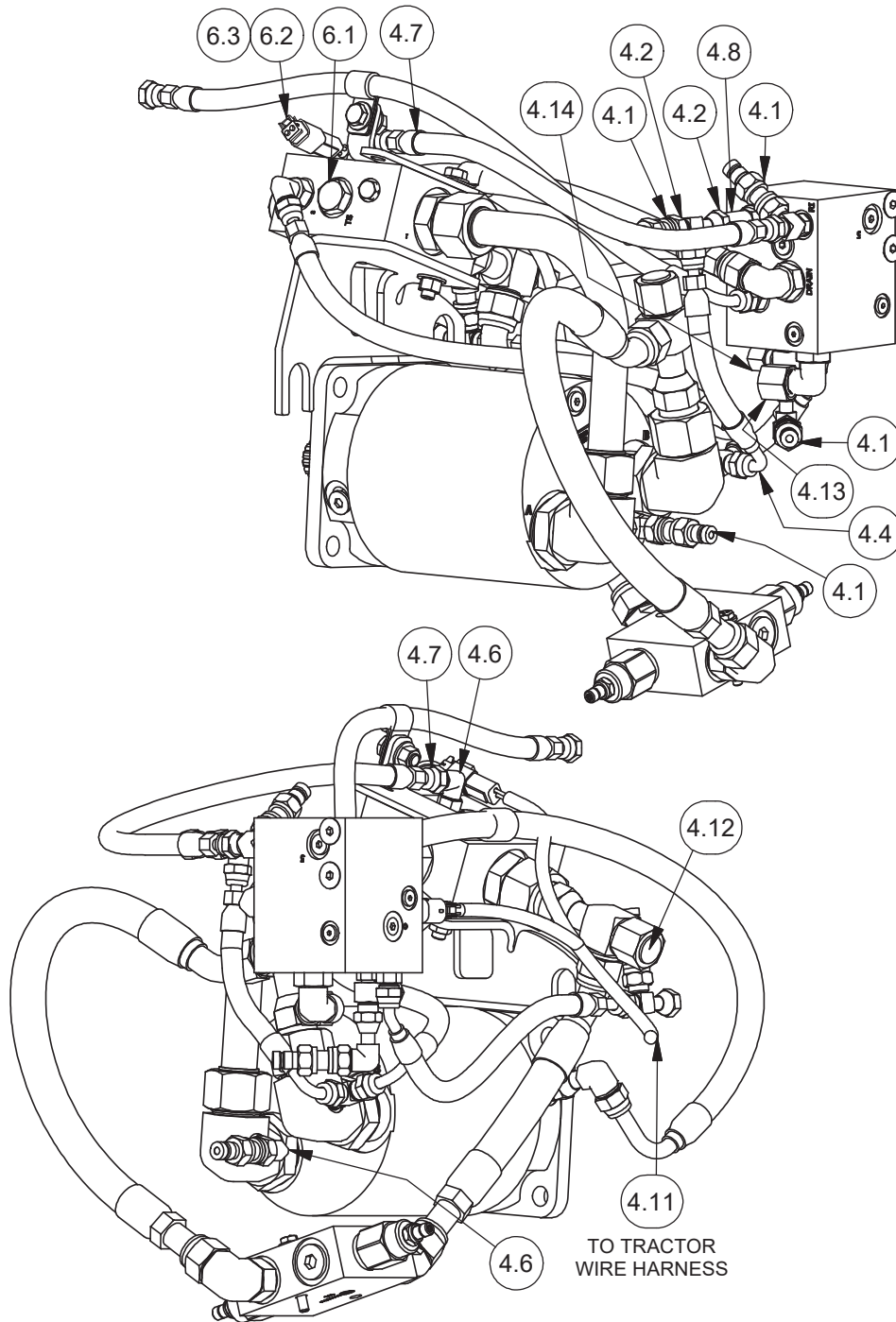
HYDRAULIC INSTALLATION

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1.11	R833117	1	Fitting	1.20	2313766	1	Plate, Insert
1.12	2310013	1	Switch Assy, Yellow	1.21	*a 2314046	1	Wrench, Torque Extension
1.13	2312177	1	Decal, Line In, Line Out	1.22	2315112	1	Kit, Hose
1.14	R833103	1	Fitting	1.22.1	2315124	1	. Hose Assembly
1.15	2310502	1	Switch Assy, Green	1.22.2	2310591	1	. Hose Assembly
1.16	2313643	1	Wire Harness	1.22.3	2315371	1	. Hose Assembly
1.17	2313676	1	Decal, Winch Control	1.22.4	2315372	1	. Hose Assembly
1.18	242587	20	Cable Tie				

*a Not Shown

Internal Hydraulic Group

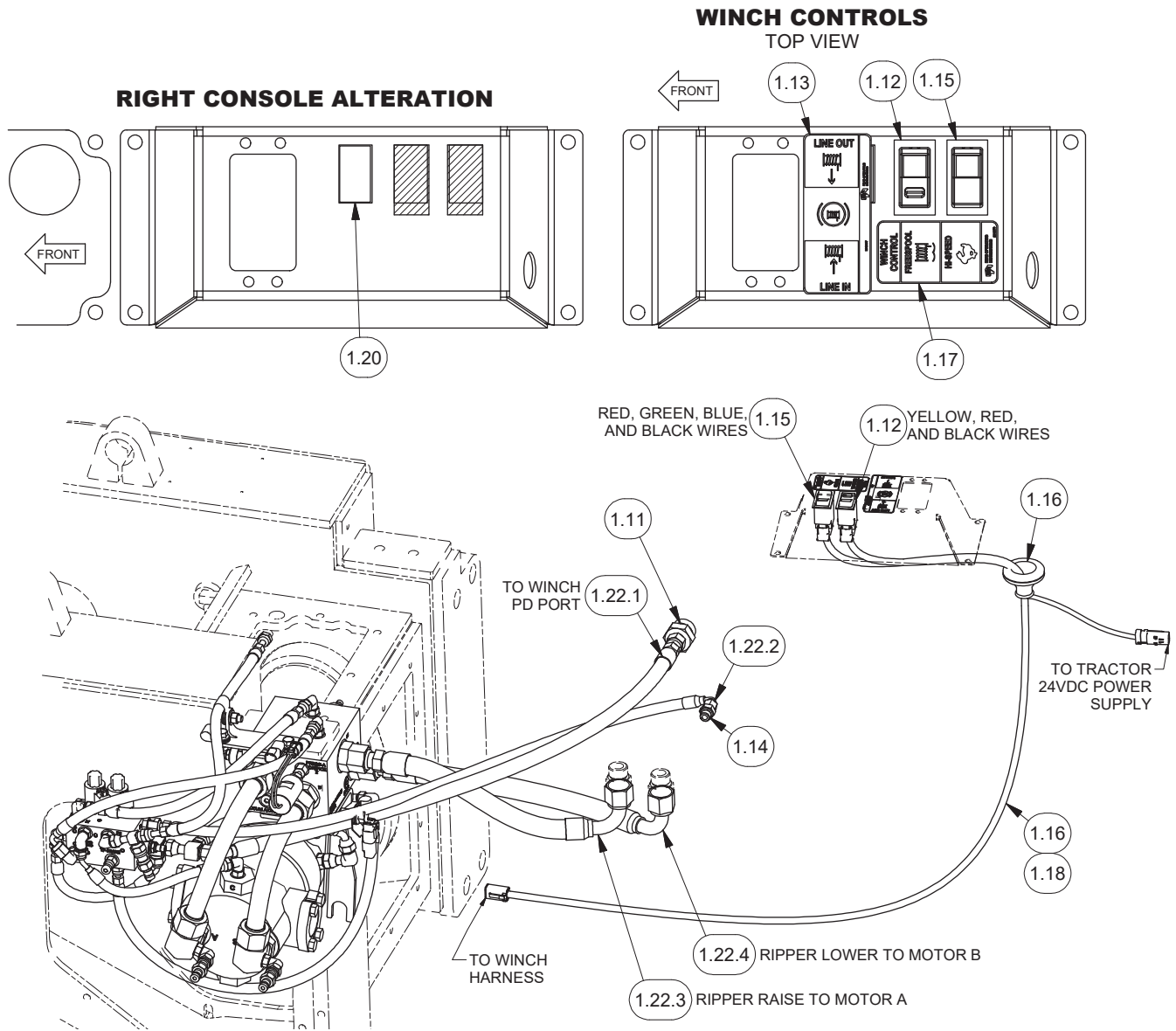
Caterpillar D6K (H5CT1E**C80)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
4.1	2307625W	5	Fitting	4.11	2307629W	1	Wire Harness
4.2	236855	1	Fitting	4.12	R834254	2	Fitting
4.4	2310581	1	Hose Assembly	4.13	R834253	1	Fitting
4.5	2310181	1	Plug	4.14	232984	1	Fitting
4.6	R833251	2	Fitting	6.1	210709	1	Fitting
4.7	2310582	1	Hose Assembly	6.2	243502	1	Plug
4.8	2310688	1	Fitting	6.3	219288	1	Plug

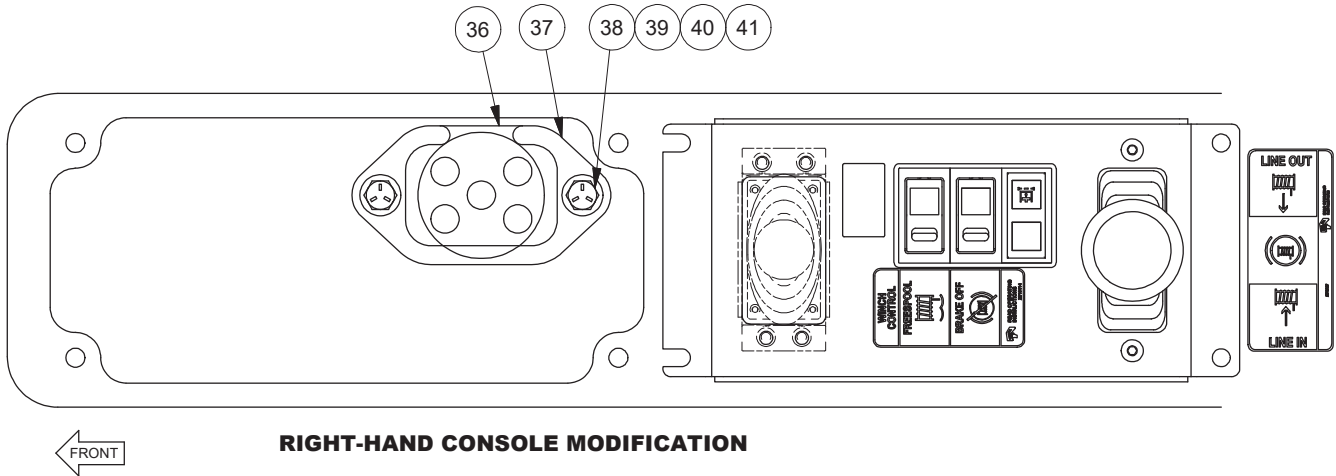
Hydraulic/Electrical Installation

Caterpillar D6K (H5CT1D**C801)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1.11	R833117	1	Fitting	1.21	* 2314046	1	Wrench, Torque Extension
1.12	2310013	1	Switch Assy, Yellow	1.22	2315112	1	Kit, Hose
1.13	2312177	1	Decal, Line In, Line Out	1.22.1	2315124	1	. Hose Assembly
1.14	R833103	1	Fitting	1.22.2	2310591	1	. Hose Assembly
1.15	2310502	1	Switch Assy, Green	1.22.3	2315371	1	. Hose Assembly
1.16	2313643	1	Wire Harness	1.22.4	2315372	1	. Hose Assembly
1.17	2313676	1	Decal, FS & Hi-Speed				
1.18	242587	20	Cable Tie	*	Not Shown		
1.20	2313766	1	Plate, Insert				

Electrical Installation
Caterpillar D6K2 (H5CH2E**C802)

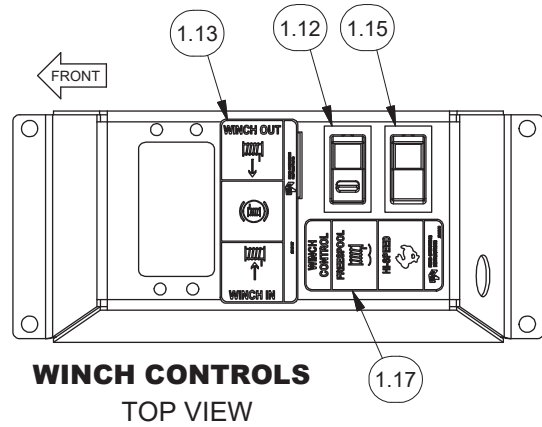
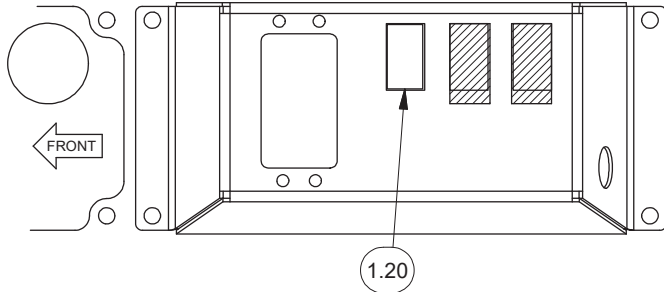


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
36	2314873	1	Gasket, Hose Seal				
37	2307226W	1	Cover				
38	16828W	2	Capscrew				
39	15134W	4	Washer				
40	15086W	2	Jam Nut				
41	2312119	2	Spacer				

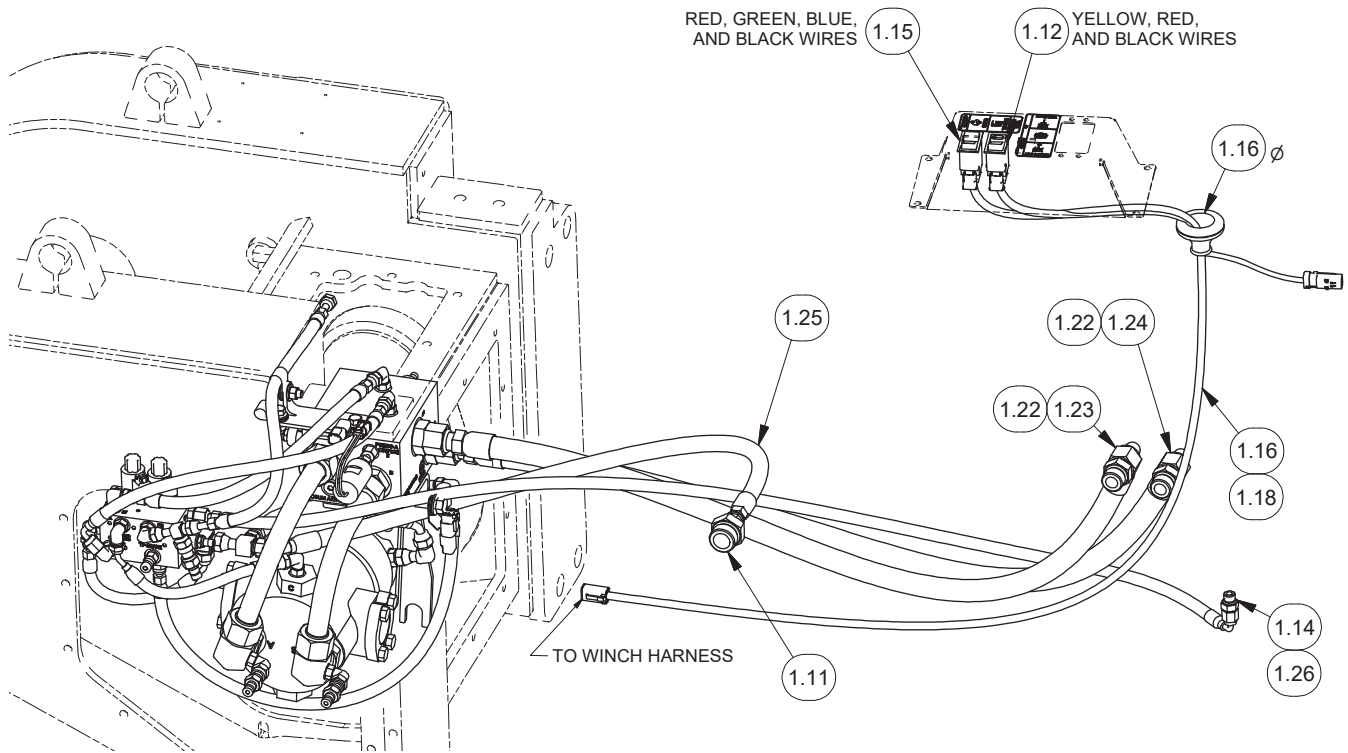
Hydraulic/Electrical Installation

Caterpillar D6K2 (H5CT1D**C805)

RIGHT CONSOLE ALTERATION



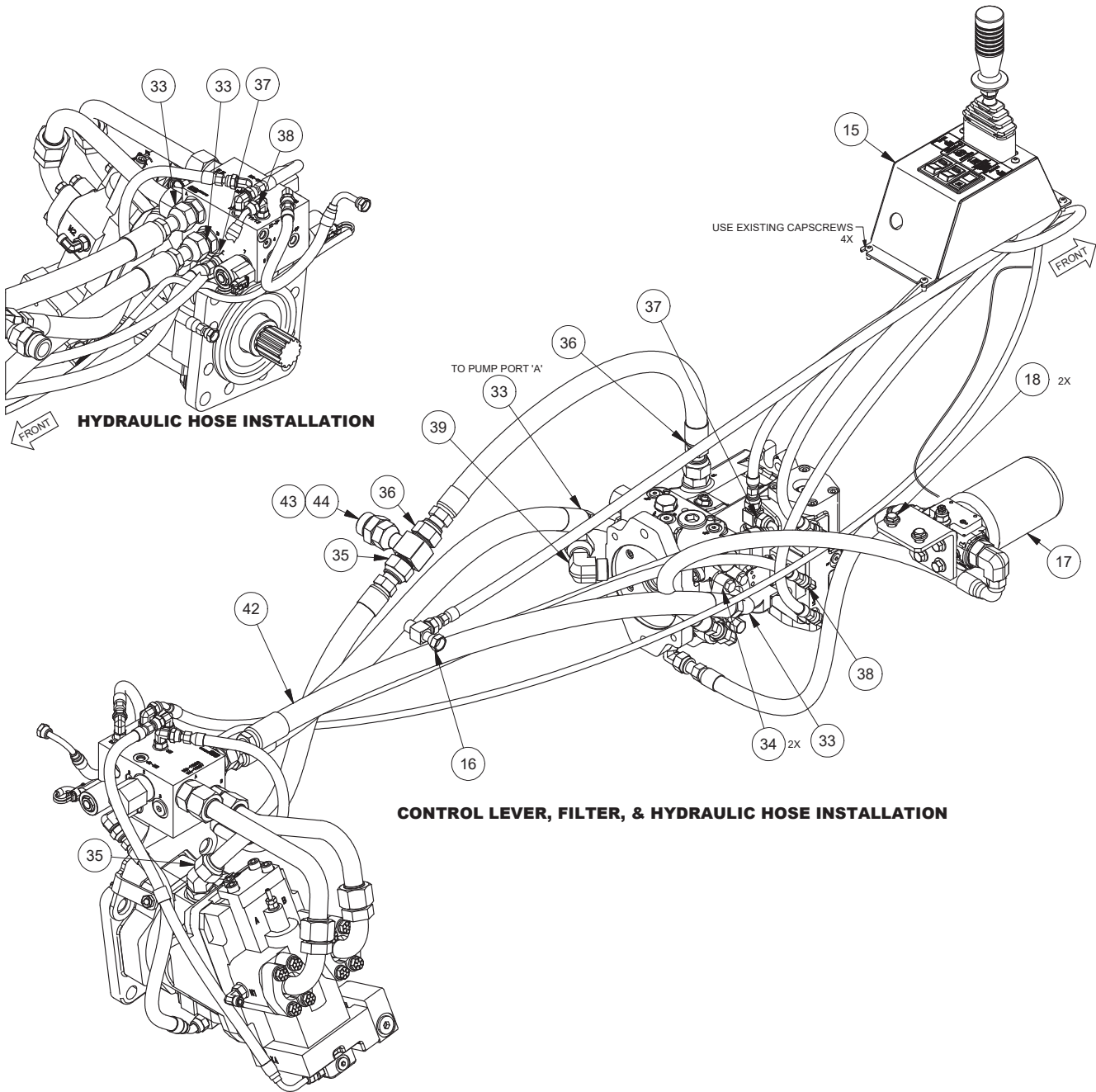
WINCH CONTROLS
TOP VIEW



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1.11	R833117	1	Fitting	1.18	242587	20	Cable Tie
1.12	2310013	1	Switch Assy, Yellow	1.20	2313766	1	Plate, Insert
1.13	2312177	1	Decal, Line In, Line Out	1.22	231443	1	Fitting
1.14	R833103	1	Fitting	1.23	2317087	1	Hose Assembly
1.15	2310502	1	Switch Assy, Green	1.24	2317088	1	Hose Assembly
1.16	2313643	1	Wire Harness	1.25	2317089	1	Hose Assembly
1.17	2313676	1	Decal, FS & Hi-Speed	1.26	2317090	1	Hose Assembly

Hydraulic/Electrical Installation

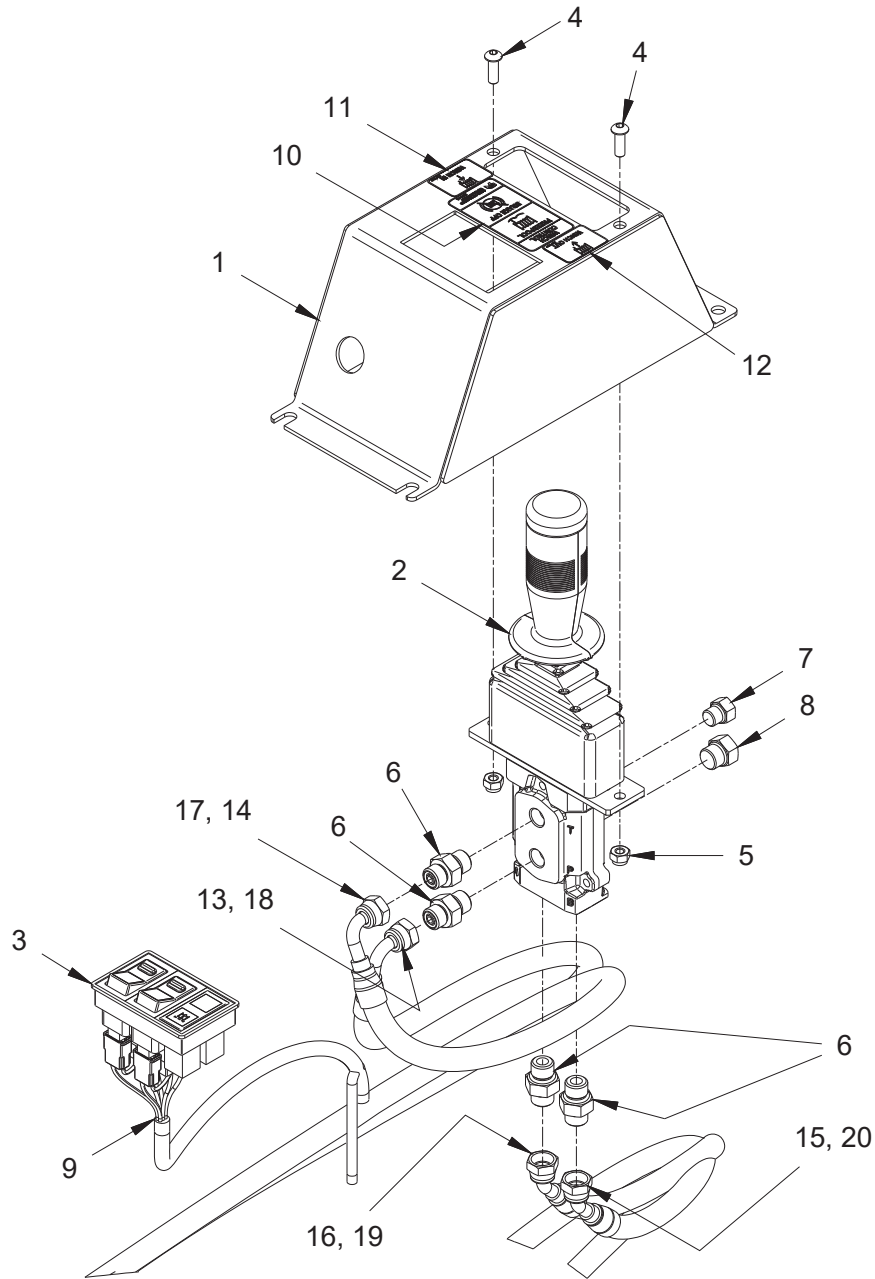
Caterpillar D6K (H5CH2E**C80A)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
15	*a 2313790	1	Assy, Control Lever (See p. 49)	35	R12303	1	Hose Assembly
	*b 2315780	1	Assy, Control Lever (See p. 51)	36	2311582	1	Hose Assembly
16	231955	1	Fitting	37	2311562	1	Hose Assembly
17	2311261	1	Filter Assy (See p. 68)	38	2311541	1	Hose Assembly
18	2303609W	2	Screw, Ser Flg	39	R833804	1	Fitting
33	2311564	2	Hose Assembly	42	242587	20	Cable Tie
34	229447	2	Kit, Split Flange	43	2311097	1	Fitting
	203438	1	. O-Ring	44	R833127	1	Fitting
	236972	2	. Clamp Half	*a	Last Used SN1174		
	Y17C-0624	4	. Capscrew	*b	First Used SN1175		

Control Lever Assembly

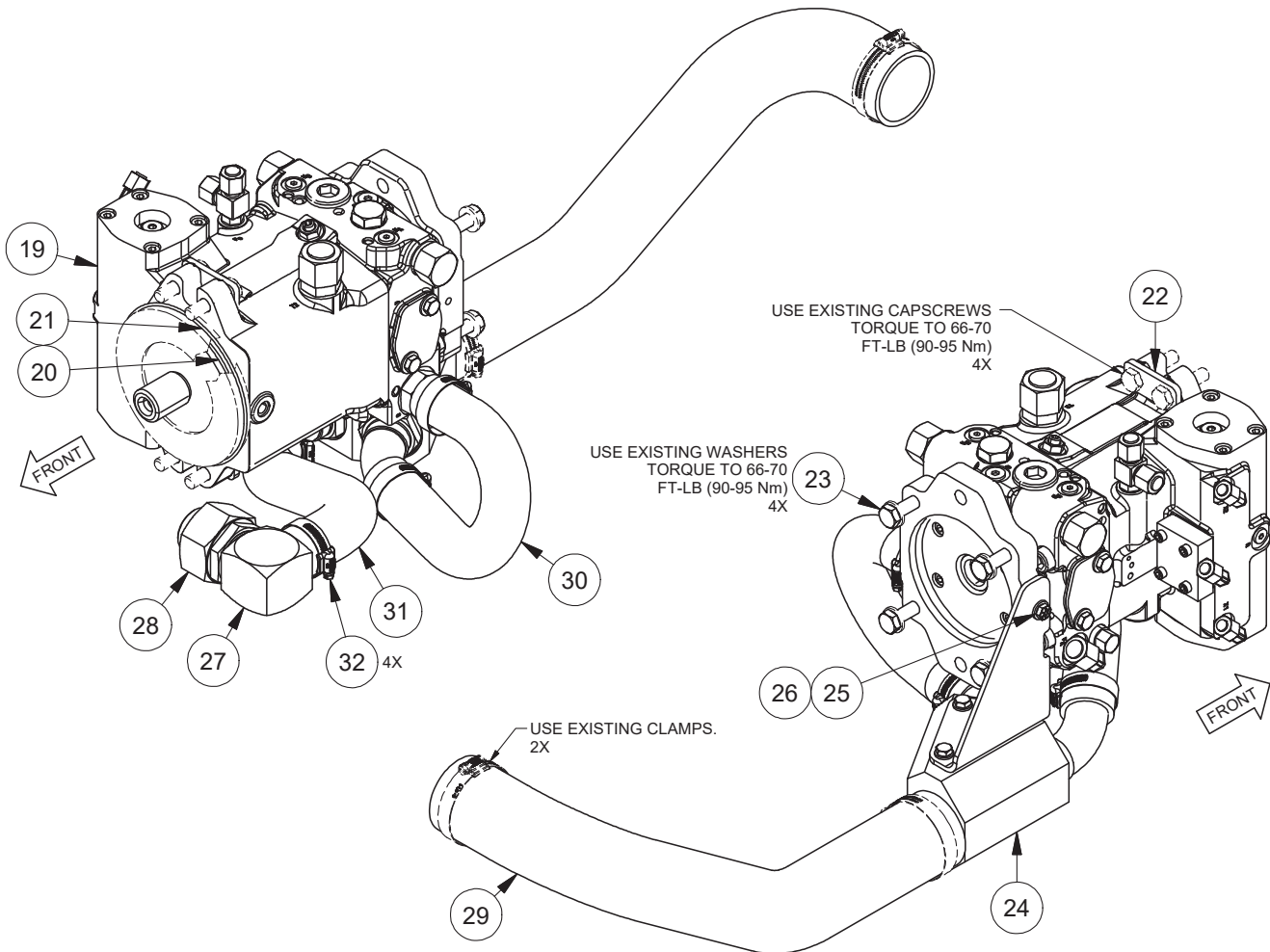
Caterpillar D6K (H5CH**C80A)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2313790		Assy, Control Lever				
1	2311071	2	. Bracket, Control Lever	11	2307121W	1	. Decal, Winch In
2	2310929	1	. Control Lever, Pilot Controller	12	2307122W	1	. Decal, Winch Out
3	2311350	1	. Assy, Switch (See p. 69)	13	2306152W	1	. Label, PS
4	18720W	2	. Capscrew	14	2306151W	1	. Label, T
5	15113W	2	. Nut	15	2306154W	1	. Label, X2
6	R833103	4	. Fitting	16	2306155W	1	. Label, X1
7	209423	1	. Fitting	17	2313783	1	. Assy, Hose
8	212762	1	. Fitting	18	2311534	1	. Assy, Hose
9	2311344	1	. Console, Wire Harness	19	2313784	1	. Assy, Hose
10	2310414	1	. Decal, Switch Panel	20	2313785	1	. Assy, Hose

Pump and Suction Hose Installation

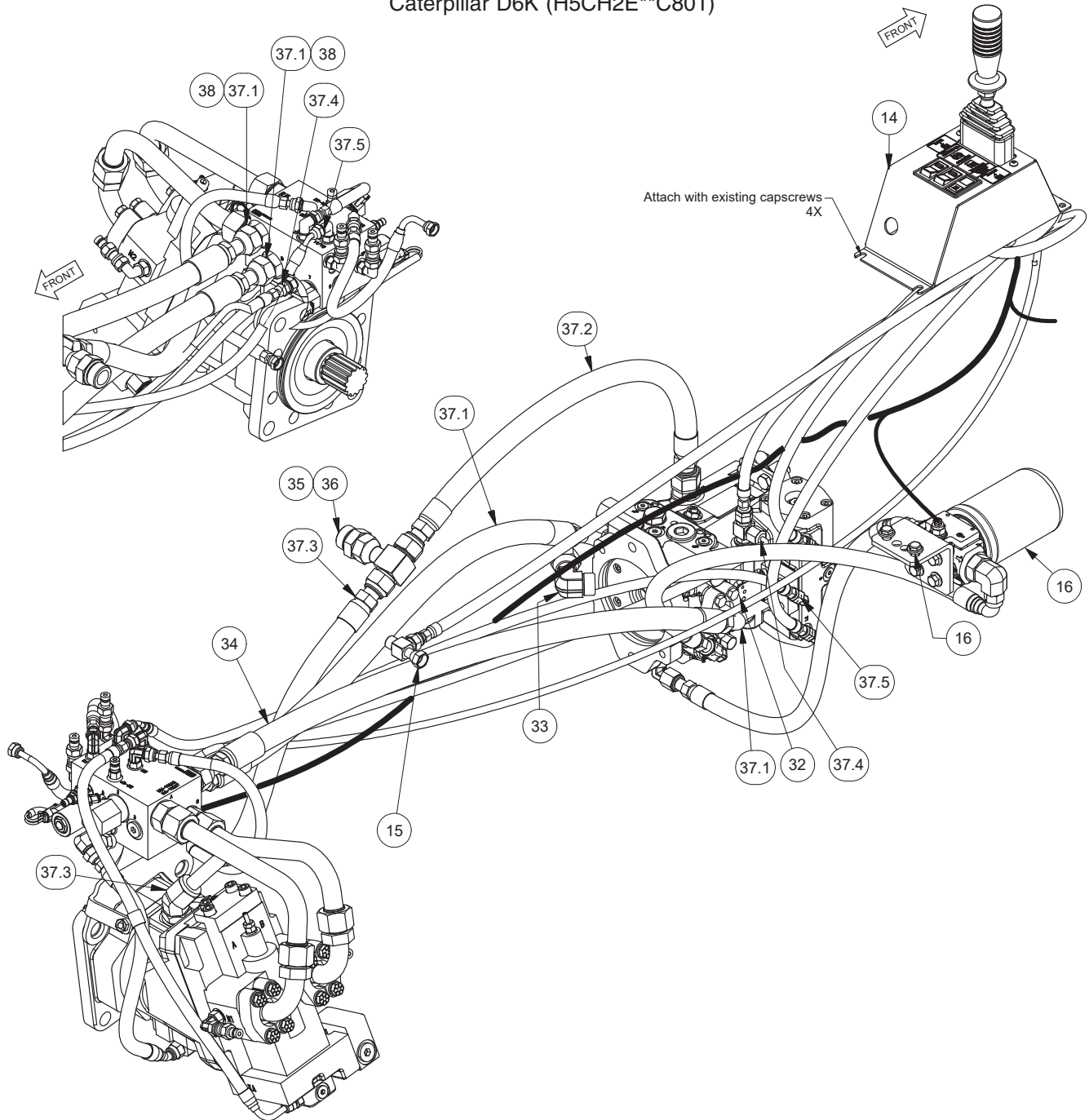
Caterpillar D6K (H5CH2E**C80A)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
19	2311085	1	Assembly, Pump (See p. 66)	25	R13811011	1	Capscrew
20	27725	1	O-Ring	26	R13802914	1	Washer
21	237349	1	O-Ring	27	222513W	1	Fitting
22	2311547	2	Plate, Pump, Ear	28	2311098	1	Fitting
23	293647W	4	Capscrew	29	2311089	1	Hose
24	2311252	1	Assembly, Block, "Y" (See p. 67)	30	2311091	1	Hose
				31	2311092	1	Hose
				32	206289	4	Hose Clamp

Hydraulic/Electrical Installation

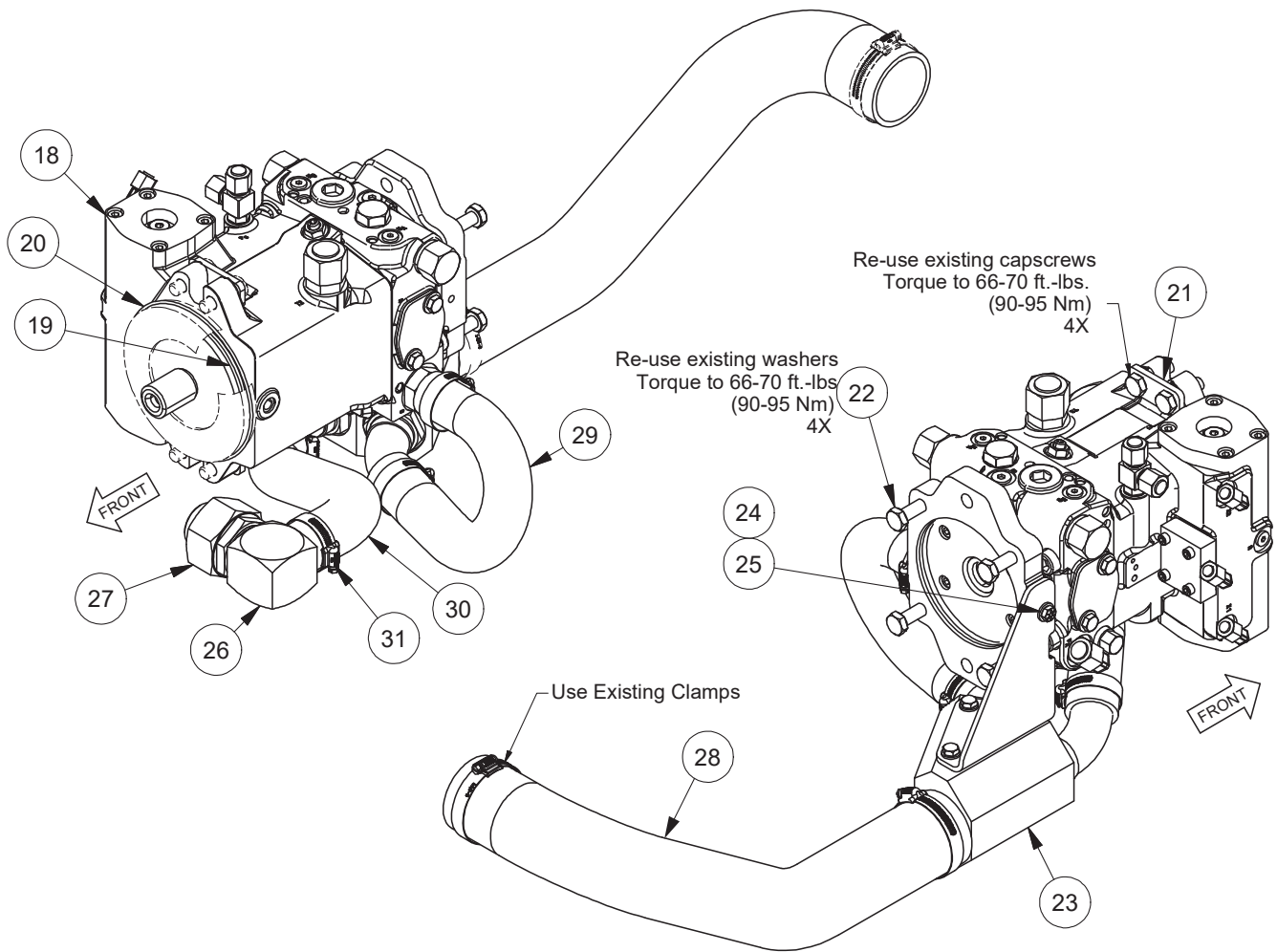
Caterpillar D6K (H5CH2E**C801)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
14	*a 2313790	1	Assy, Control Lever (See 3-55)	37.1	2311564	2	Hose Assembly
	*b 2315780	1	Assy, Control Lever (p. 52)	37.2	2311582	1	Hose Assembly
15	231955	1	Fitting	37.3	R12303	1	Hose Assembly
16	2311261	1	Filter Assembly	37.4	2311562	1	Hose Assembly
32	229447	2	Kit, Split Flange	37.5	R12024	1	Hose Assembly
	203438	1	. O-Ring	37.6	2311560	1	Hose Assembly
	236972	2	. Clamp Half	37.7	2311561	1	Hose Assembly
34	242587	20	Cable Tie	38	2311485	2	Fitting
35	2311097	1	Fitting	*a	Last Used SN1174		
36	R833127	1	Fitting	*b	First Used SN1175		

Pump & Suction Hose Installation

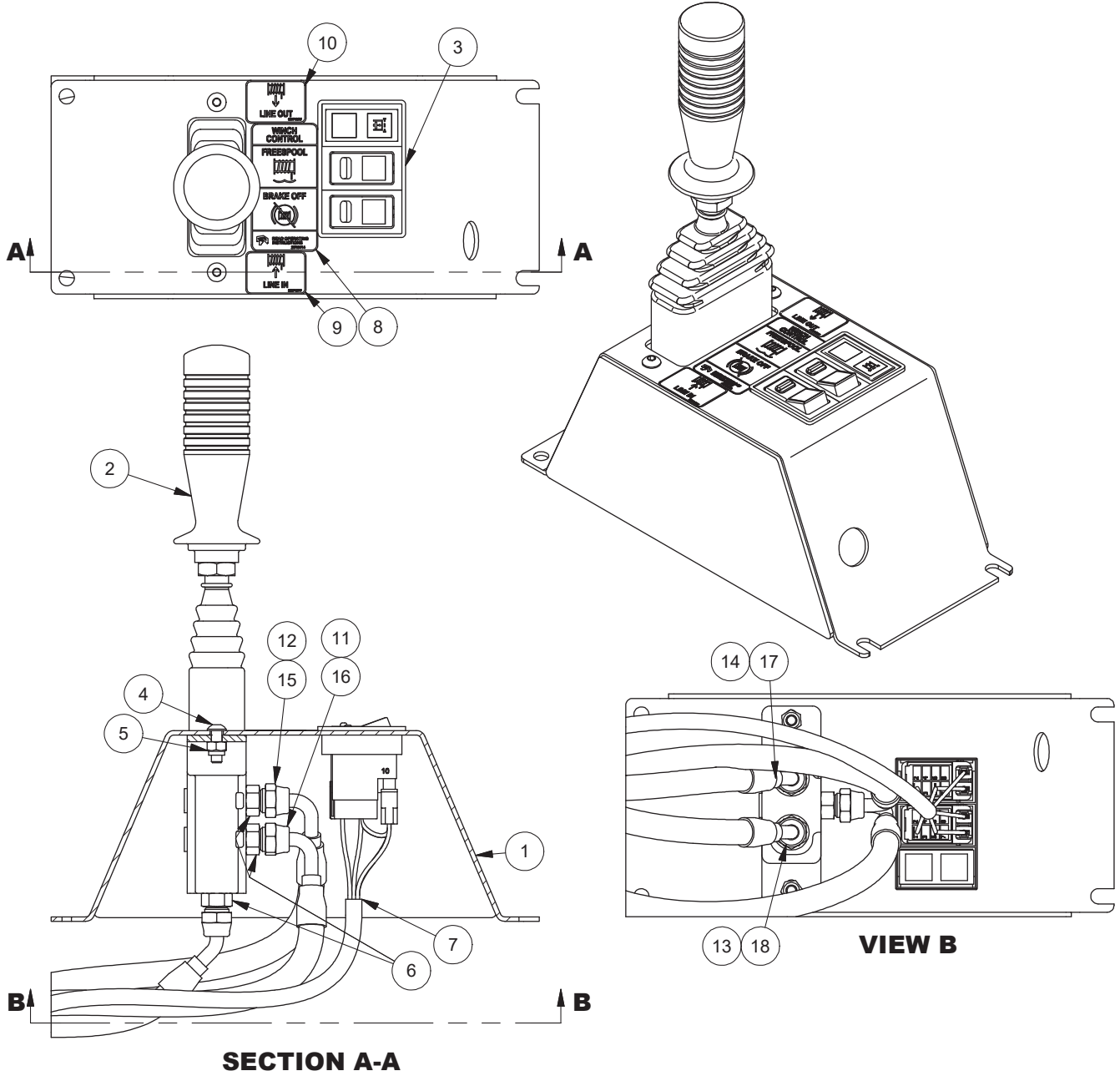
Caterpillar D6K2 (H5CH2E**C801)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
18	2311085	1	Pump Assy (See p. 66)	25	R13802914	1	Washer
19	27725	1	O-Ring	26	222513W	1	Fitting
20	237349	1	O-Ring	27	2311098	1	Fitting
21	2311547	2	Plate, Pump, Ear	28	2311089	1	Hose
22	293647W	4	Capscrew	29	2311091	1	Hose
23	2311252	1	Block Assy, "Y" (See p. 67)	30	2311092	1	Hose
24	R13811011	1	Capscrew	31	206289	4	Hose Clamp

Control Lever Assembly

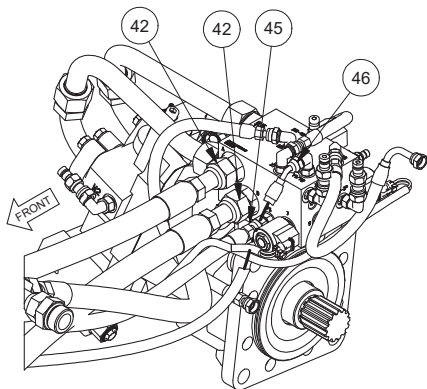
Caterpillar D6K2 (H5CH2E**C801)



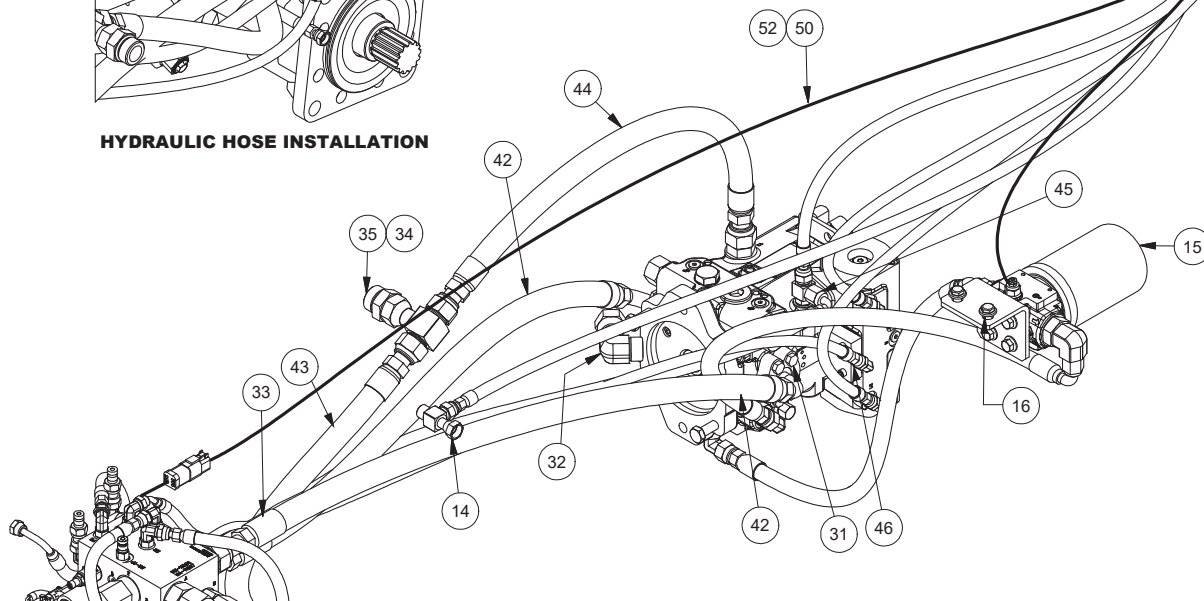
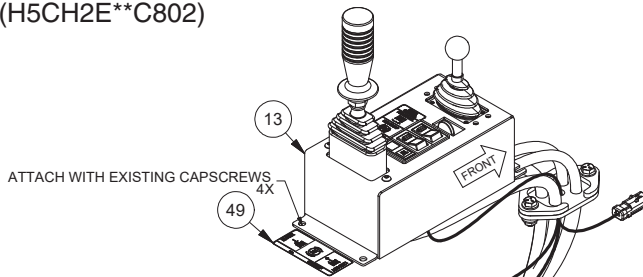
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2315780		Control Lever Assembly	10	2307122W	1	. Decal, Winch Out
1	2315781	1	. Bracket, Control Lever	11	2306152W	1	. Label, Ps
2	2315561	1	. Lever, Control	12	2306151W	1	. Label, T
3	2311350	1	. Assy, Switch (See p. 69)	13	2306154W	1	. Label, X2
4	18720W	2	. Capscrew	14	2306155W	1	. Label, X1
5	15113W	2	. Locknut	15	2313783	1	. Hose Assembly
6	231439	4	. Fitting	16	2311534	1	. Hose Assembly
7	2311344	1	. Console, Wire Harness	17	2313784	1	. Hose Assembly
8	2310414	1	. Decal, Switch Panel	18	2313785	1	. Hose Assembly
9	2307121W	1	. Decal, Winch In				

Hydraulic/Electrical Installation

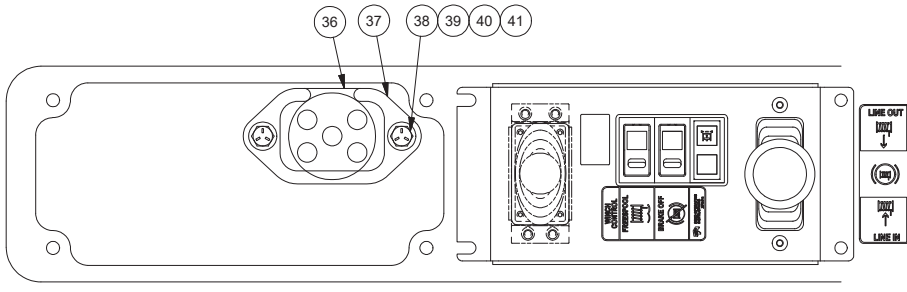
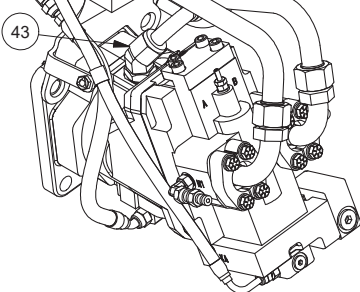
Caterpillar D6K2 (H5CH2E**C802)



HYDRAULIC HOSE INSTALLATION



CONTROL LEVER, FILTER, AND HYDRAULIC HOSE INSTALLATION

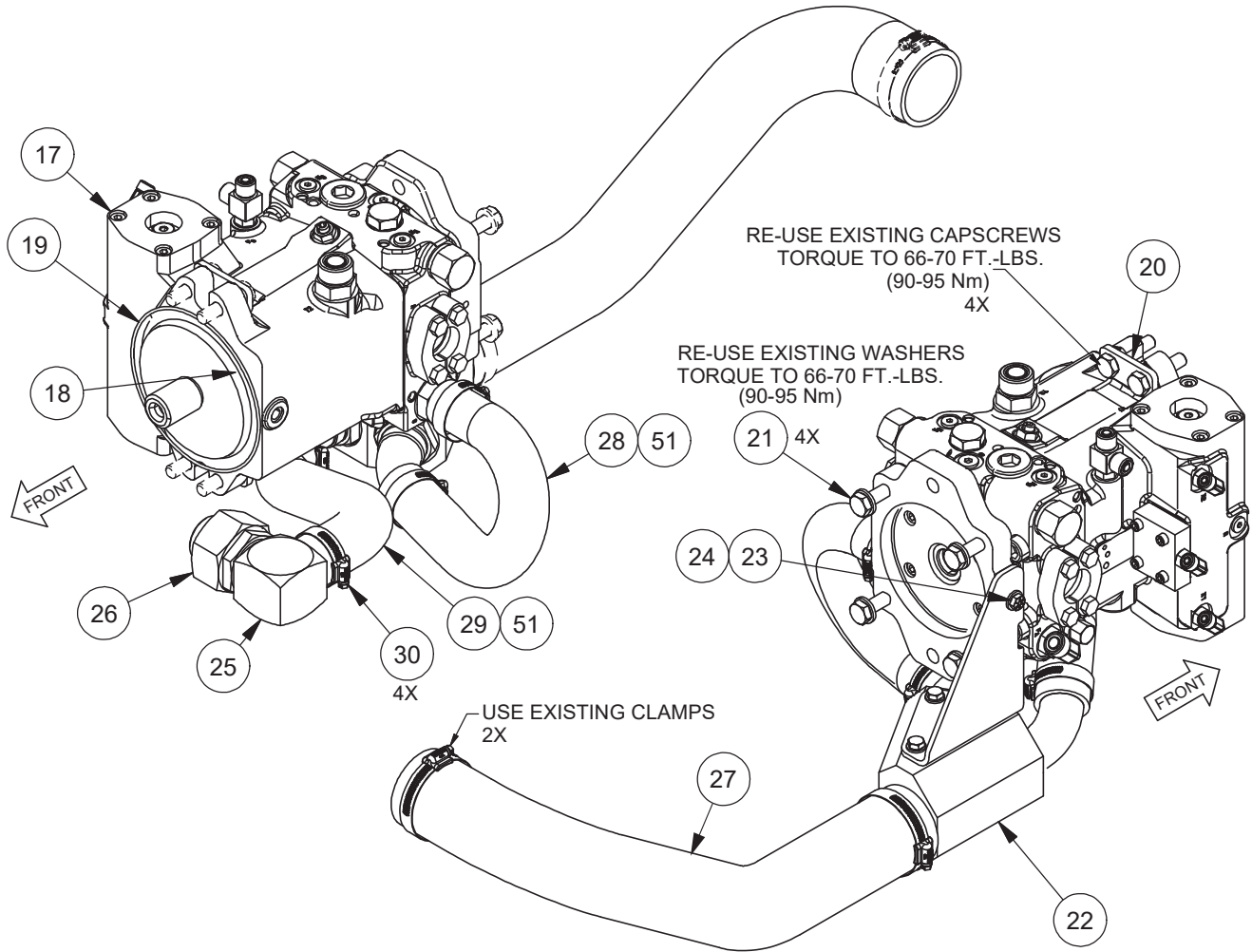


RIGHT-HAND CONSOLE MODIFICATION

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
13	*a 2315645	1	Control Lever Assy (See p. 54)	36	2314873	1	Gasket, Hose Seal
	*b 2315783	1	Control Lever Assy (See p. 55)	37	2307226W	1	Cover
14	231955	1	Fitting	38	16828W	2	Capscrow
15	2315786	1	Assembly, Filter (See p. 78)	39	15134W	4	Washer
16	2303609W	2	Screw, Fig	40	15086W	2	Jam Nut
31	229447	2	Kit, Split Flange	41	2312119	2	Spacer
	203438	1	. O-Ring	42	2315789	2	Hose Assembly
	236972	2	. Clamp Half	43	2315790	1	Hose Assembly
	Y17C-0624	4	. Capscrow	44	2315791	1	Hose Assembly
32	R833804	1	Fitting	45	2315792	1	Hose Assembly
33	242587	20	Cable Tie	46	2315793	1	Hose Assembly
34	2311097	1	Fitting	49	2312177	1	Decal, Line In, Line Out
35	R833127	1	Fitting	50	245926	35'	Sleeve, Fire
				52	589423	14	Clamp
				*a	Last Used SN1174		
				*b	First Used SN1175		

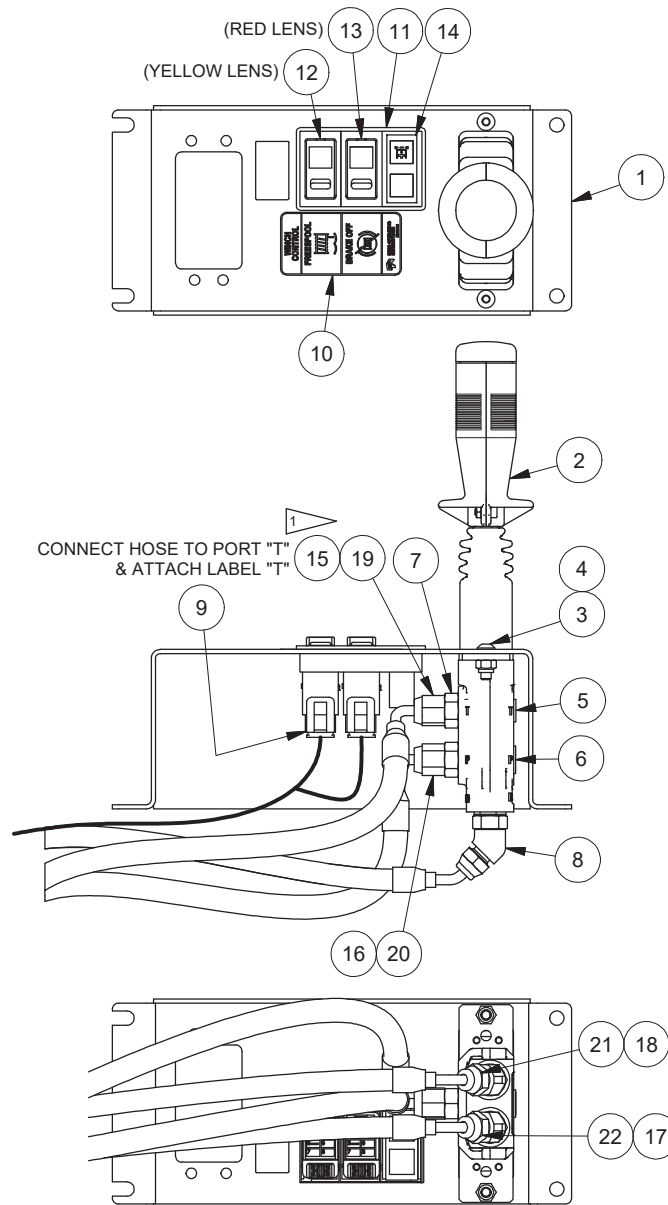
Pump & Suction Hose Installation

Caterpillar D6K2 (H5CH2E**C802)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
17	2311085	1	Assy, Pump (See p. 66)	25	222513W	1	Fitting
18	27725	1	O-Ring	26	2311098	1	Fitting
19	237349	1	O-Ring	27	2311089	1	Hose
20	2311547	2	Plate, Pump, Ear	28	2311091	1	Hose
21	293647W	4	Capscrew	29	2311092	1	Hose
22	2311252	1	Assembly, Block, "Y" (See p. 67)	30	206289	4	Hose Clamp
23	R13811011	1	Capscrew	51	254777	3'	Sleeve, Fire
24	R13802914	1	Washer				

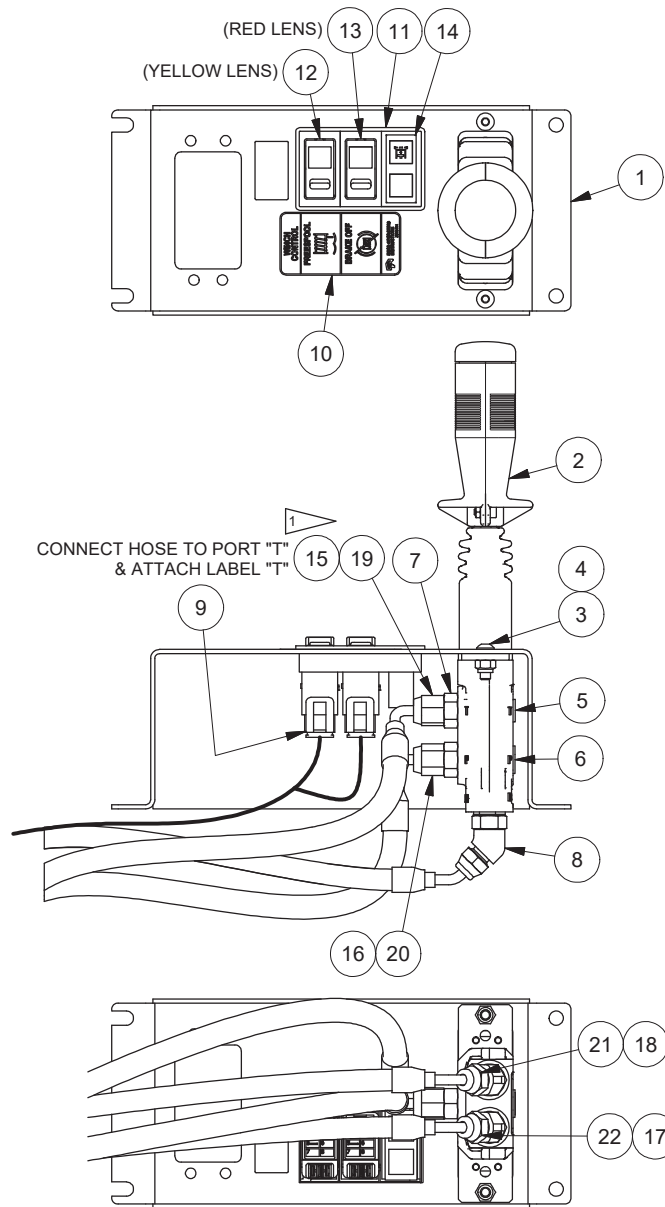
Control Lever Assembly Caterpillar D6K2 (H5CH2E**C802)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2315645		Assembly, Control Lever				
1	2315650	1	. Control Lever Bracket	12	2310013	1	. Switch Assy, Yellow
2	2310929	1	. Handlever	13	2310504	1	. Switch Assy, Red
3	18720W	2	. Capscrew	14	2311352	1	. Indicator Assy, Oil Filter
4	15113W	2	. Locknut	15	2306151W	1	. Label, T
5	235387	1	. Fitting	16	2306152W	1	. Label, Ps
6	229383	1	. Fitting	17	2306154W	1	. Label, X2
7	R833103	2	. Fitting	18	2306155W	1	. Label, X1
8	R833201	2	. Fitting	19	2313783	1	. Hose Assembly
9	2311344	1	. Console, Wire Harness	20	2311534	1	. Hose Assembly
10	2310414	1	. Decal, Switch Panel	21	2313784	1	. Hose Assembly
11	234740	1	. Frame, Mounting	22	2313785	1	. Hose Assembly

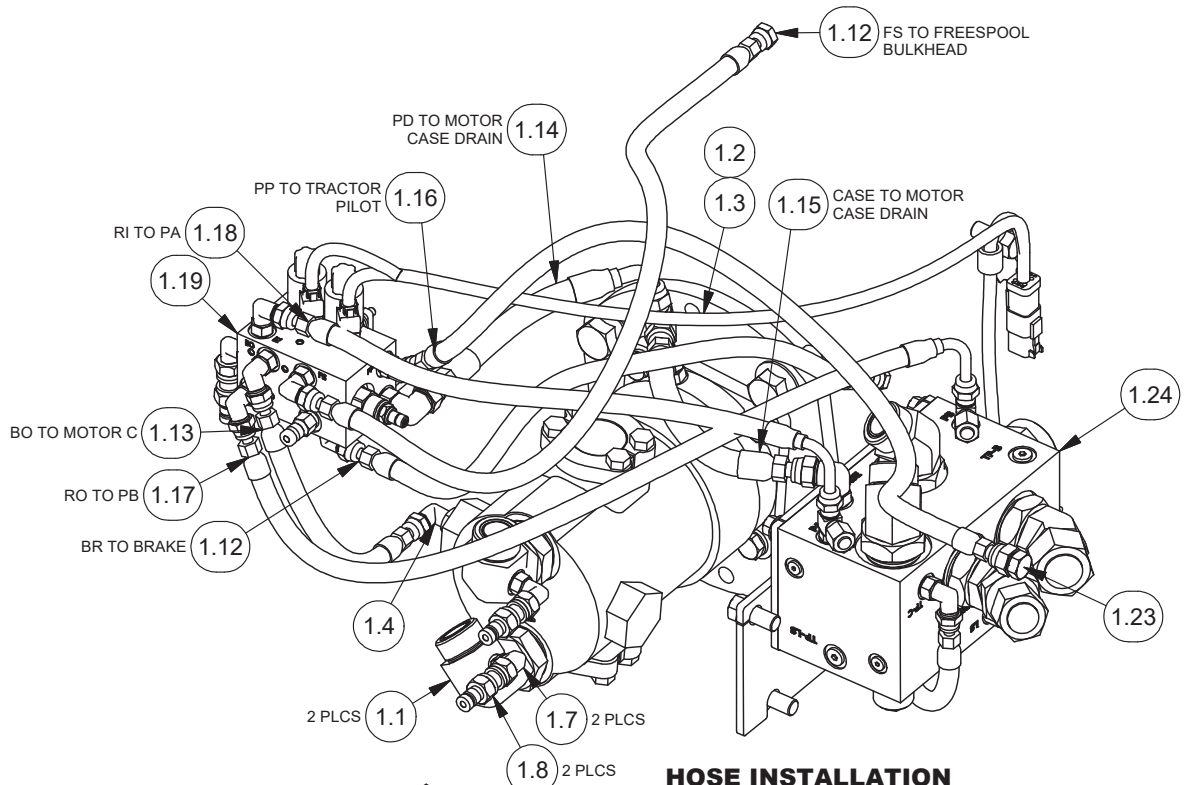
Control Lever Assembly

Caterpillar D6K (H5CH**C802)

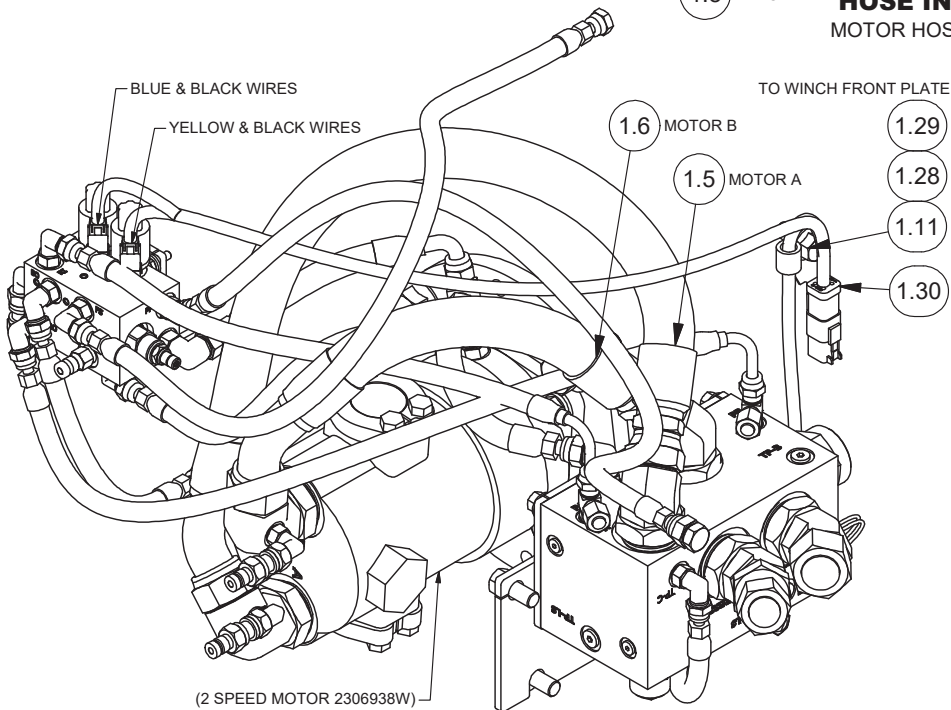


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2315783		Assembly, Control Lever				
1	2315784	1	. Bracket, Control Lever	12	2311352	1	. Indicator Assy, Oil Filter
2	2315561	1	. Lever, Control	13	2306151W	1	. Label, T
3	18720W	2	. Capscrew	14	2306152W	1	. Label, PS
4	15113W	2	. Locknut	15	2306154W	1	. Label, X2
5	231439	2	. Fitting	16	2306155W	1	. Label, X1
6	R833200	2	. Fitting	17	2313783	1	. Hose Assembly
7	2311344	1	. Console, Wire Harness	18	2311534	1	. Hose Assembly
8	2310414	1	. Decal, Switch Panel	19	2313784	1	. Hose Assembly
9	234740	1	. Frame, Mounting	20	2313785	1	. Hose Assembly
10	2310013	1	. Switch Assy, Yellow				
11	2310504	1	. Switch Assy, Red				

Hydraulic Group
 Caterpillar PL61 (H5CH1D**C391)
 Page 1 of 2



HOSE INSTALLATION
 MOTOR HOSES NOT SHOWN

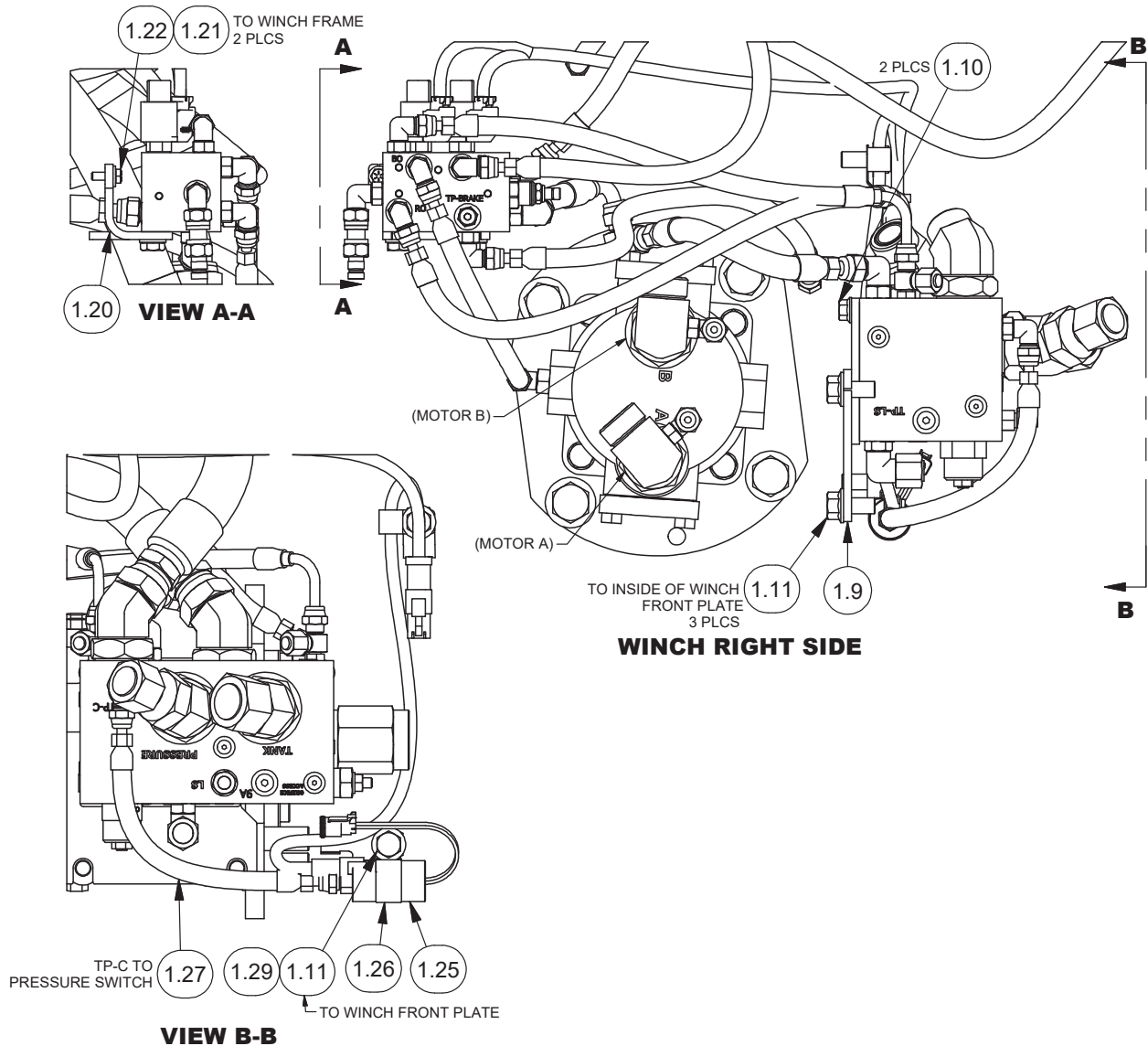


MOTOR HOSE AND HARNESS INSTALLATION

Hydraulic Group

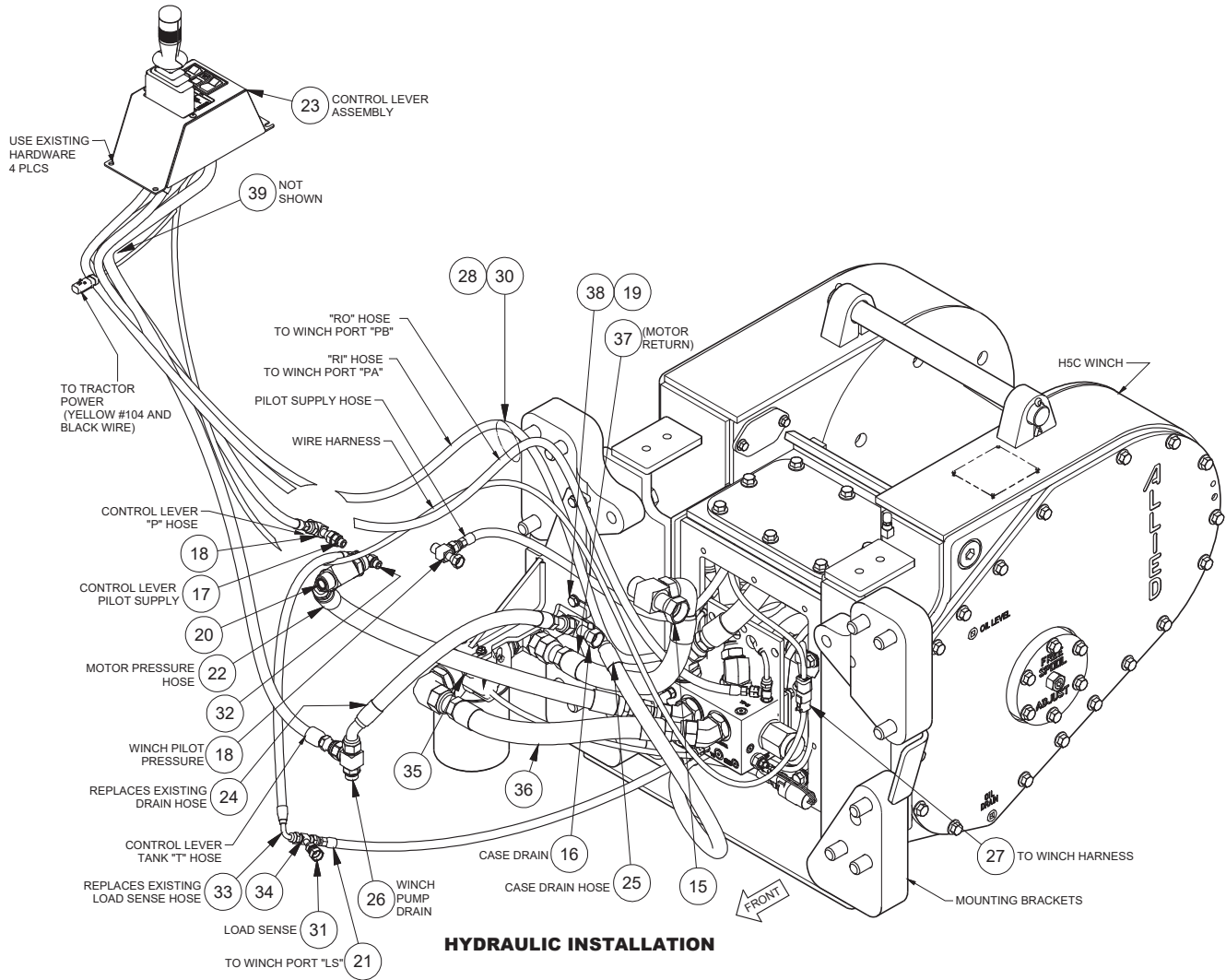
Caterpillar PL61 (H5CH1D**C391)
Page 2 of 2

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	2307123W	2	Fitting	1.17	2313662	1	Hose Assembly
1.2	231440	1	Fitting	1.18	2313458	1	Hose Assembly
1.3	231955	1	Fitting	1.19	2313473	1	Manifold Control Assy (See p. 72)
1.4	R833253	1	Fitting	1.20	2313443	1	Bracket, Manifold
1.5	2313460	1	Hose Assembly	1.21	221763W	2	Washer
1.6	2313461	1	Hose Assembly	1.22	224120W	2	Capscrew
1.7	R833251	2	Fitting	1.23	R834201	1	Fitting
1.8	2307625W	2	Fitting	1.24	2313486	1	Direction Manifold Assy (See p. 73)
1.9	2313446	1	Bracket, Manifold	1.25	2307291W	1	Switch
1.10	398567W	2	Screw, Flange	1.26	227398	1	Clamp
1.11	398817W	5	Screw, Flange	1.27	2313566	1	Hose Assembly
1.12	257331	2	Hose Assembly	1.28	R13807642	1	Clip, Insul
1.13	2313456	1	Hose Assembly	1.29	2313663	2	Harness Mounting Clip
1.14	2312358	1	Hose Assembly	1.30	2313568	1	Winch Wire Harness
1.15	242818	1	Hose Assembly				
1.16	2313457	1	Hose Assembly				



Hydraulic/Electrical Installation

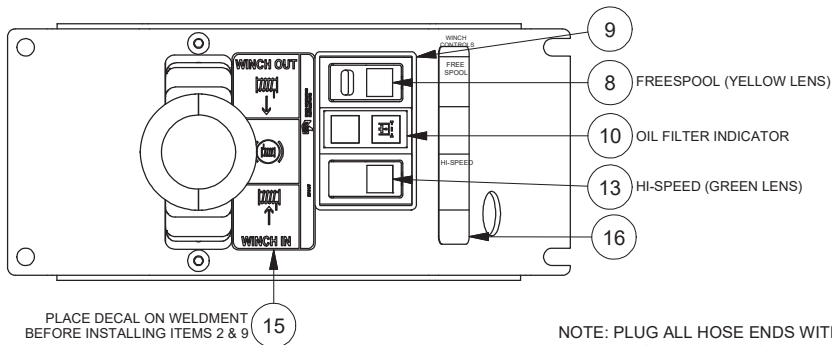
Caterpillar PL61 (H5CH1D**C391)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
15	R834056	1	Fitting	26	R833407	1	Fitting
16	R834003	1	Fitting	27	2313567	1	Wire Harness, Console
17	231440	1	Fitting	28	R13846	8 Ft	Sleeve, Cordura
18	231955	2	Fitting	30	213257	20	Strap, Tie
19	296420W	2	Washer	31	242629	1	Fitting
20	2313660	1	Fitting	32	R833253	1	Fitting
21	2313454	1	Assembly, Hose	33	2313453	1	Assembly, Hose
22	2313455	1	Assembly, Hose	34	R834000	1	Fitting
23	2313451	1	Assy, Control Lever	35	2313667	1	Assembly, Filter (See p. 76)
24	2313505	1	Assembly, Hose	36	2313668	1	Assembly, Hose
25	2313506	1	Assembly, Hose	37	2313670	1	Assembly, Hose
				38	Y09C-M1025	2	Capscrew
				39	222328	1	Grommet

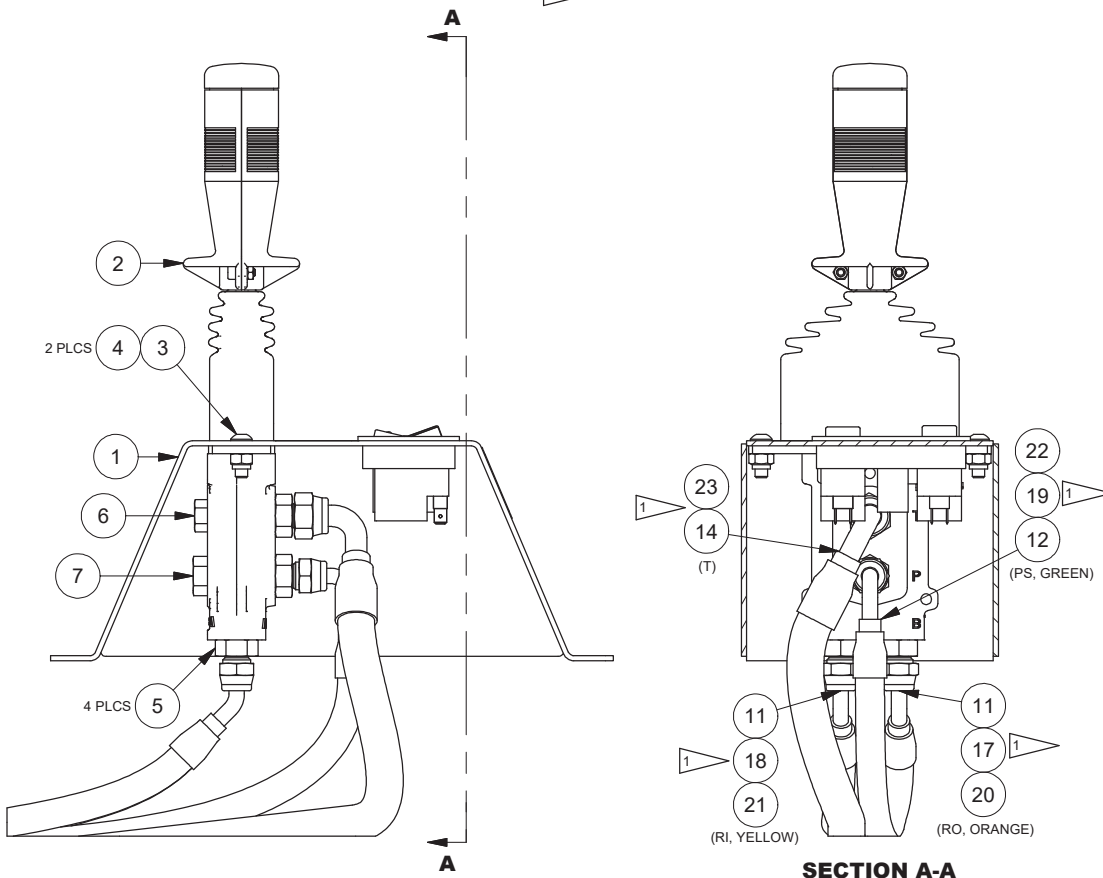
Control Lever Installation

Caterpillar PL61 (H5CH1D**C391)



NOTE: PLUG ALL HOSE ENDS WITH PLASTIC CAPS TO PREVENT CONTAMINATION.

1 SECURE CABLE TIES AND LABELS TO LOOSE END OF HOSE.

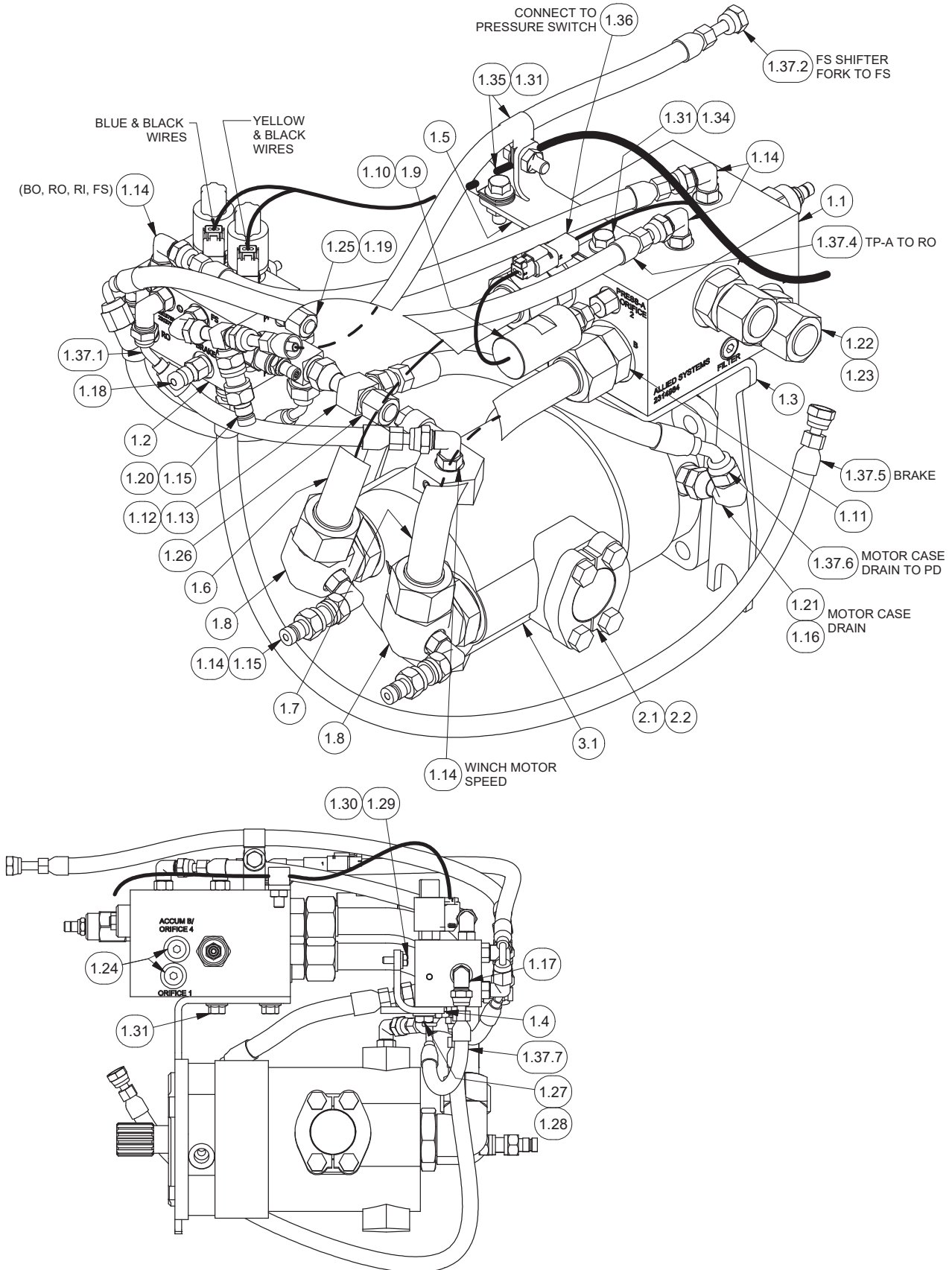


Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2313451		Assembly, Lever, Control				
1	2311071	1	. Bracket, Handlever	14	2313590	1	. Hose Assembly
2	2310929	1	. Handlever	15	2312177	1	. Decal, Winch In, Winch Out
3	18720W	2	. Capscrew	16	2307296W	1	. Decal, Switch Panel
4	15113W	2	. Locknut	17	242596	1	. Cable Tie
5	R833103	4	. Fitting	18	242597	1	. Cable Tie
6	209423	1	. Fitting	19	242598	1	. Cable Tie
7	212762	1	. Fitting	20	2307238W	1	. Label, RO
8	2310013	1	. Switch Assy, Yellow	21	2307239W	1	. Label, RI
9	234740	1	. Frame, Mounting	22	2306152W	1	. Label, PS
10	2311352	1	. Indicator Assy, Oil Filter	23	2306151W	1	. Label, T
11	2313462	2	. Hose Assembly				
12	2313463	1	. Hose Assembly				
13	2310502	1	. Switch Assy, Green				

Hydraulic Group

Caterpillar 953 (H5CT2D**C953)

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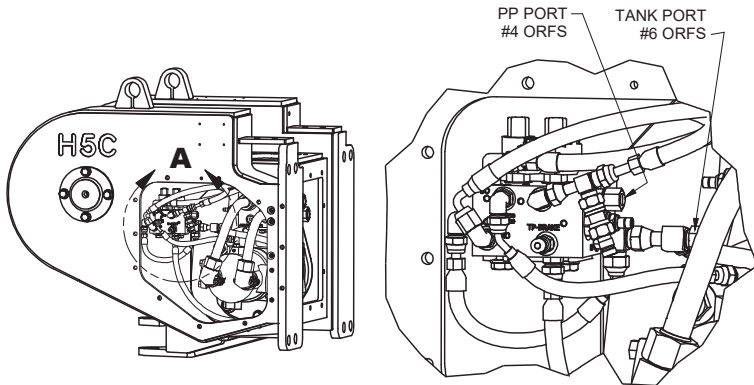


Hydraulic Group

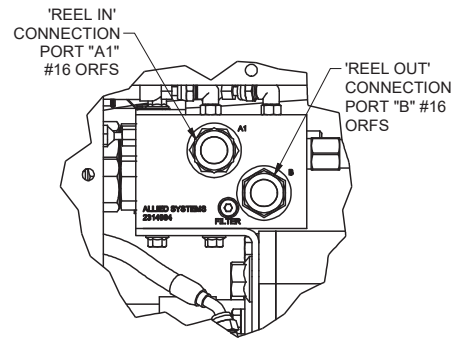
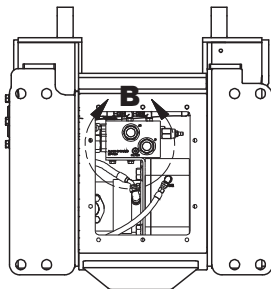
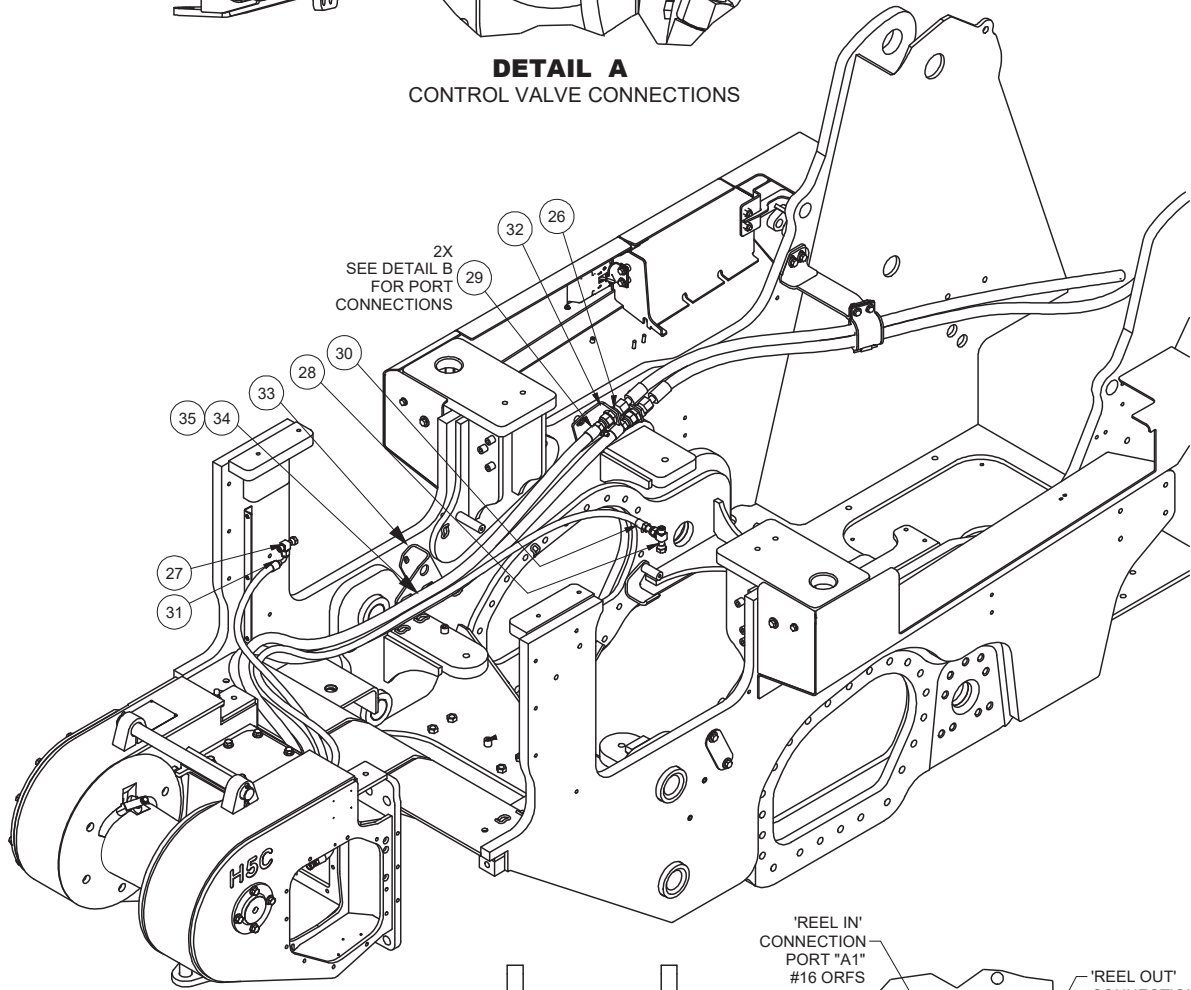
Caterpillar 953 (H5CT2D**C953)
Page 2 of 2

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1.1	2314984	1	Counterbalance Manifold Assy (See p. 79)	1.23	R833127	2	Fitting
				1.24	229383	3	Fitting
1.2	2313758	1	Control Manifold Assy (See p. 77)	1.25	232984	1	Fitting
				1.26	231822	1	Fitting
1.3	2314983	1	Bracket, Manifold	1.27	293628W	2	Capscrew
1.4	2313443	1	Bracket, Manifold	1.28	296420W	2	Washer
1.5	2316646	1	Bracket, Support, Hose	1.29	224120W	2	Capscrew
1.6	2312197	1	Tube Assembly, Motor A	1.30	221763W	2	Washer
1.7	2314986	1	Tube Assembly, Motor B	1.31	398567W	5	Screw, Flange
1.8	2307123W	2	Fitting	1.34	2311550	1	Clip, Harness Mounting
1.9	2307291W	1	Switch	1.35	209579	2	Clip, Insul
1.10	2304147W	1	Fitting	1.36	2315003	1	Harness, Wire, Winch
1.11	231444	2	Fitting	1.37	2315012	1	Kit, Hose
1.12	231465	4	Fitting	1.37.1	2313639	1	. Hose Assembly
1.13	231955	1	Fitting	1.37.2	257331	1	. Hose Assembly
1.14	R833251	9	Fitting	1.37.3	2315374	1	. Hose Assembly
1.15	2307625W	3	Fitting	1.37.4	2315375	1	. Hose Assembly
1.16	231440	1	Fitting	1.37.5	243178	1	. Hose Assembly
1.17	2311500	1	Fitting Assembly	1.37.6	2312695	1	. Hose Assembly
1.18	R14040	1	Coupler, Male	1.37.7	2314993	1	. Hose Assembly
1.19	231439	2	Fitting	2.1	11740	2	Kit, Split Flange
1.20	236855	1	Fitting	2.2	24531	2	Fitting
1.21	R833801	1	Fitting	3.1	2306938W	1	Motor
1.22	231821	2	Fitting				
	232382	1	. O-Ring				

Electrical Installation
 Caterpillar 953 (H5CT2D**C953)
 Page 1 of 2



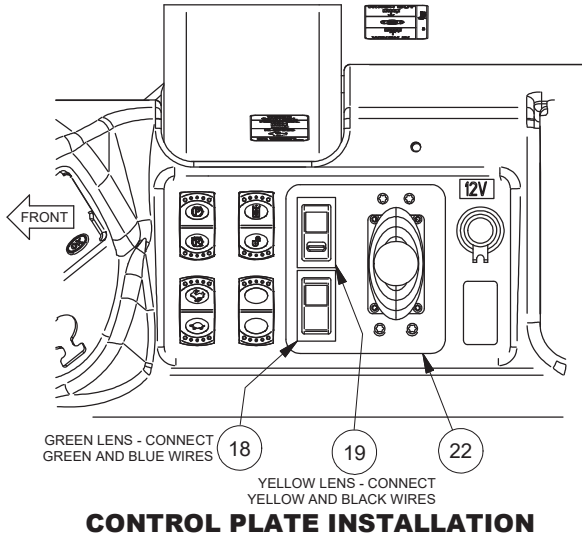
DETAIL A
 CONTROL VALVE CONNECTIONS



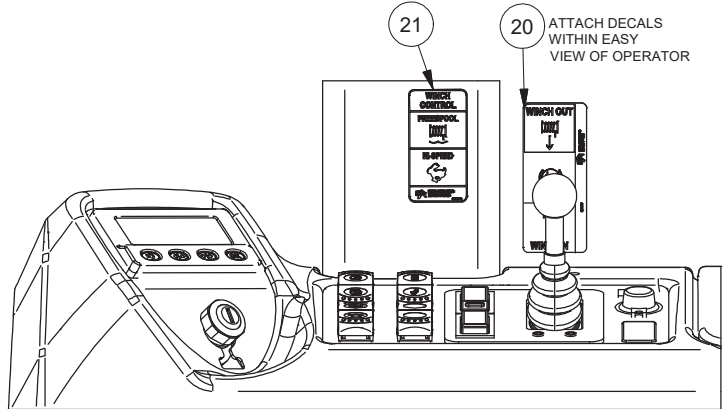
DETAIL B
 COUNTERBALANCE VALVE CONNECTIONS
 (REMOVE CAPS)

Electrical Installation

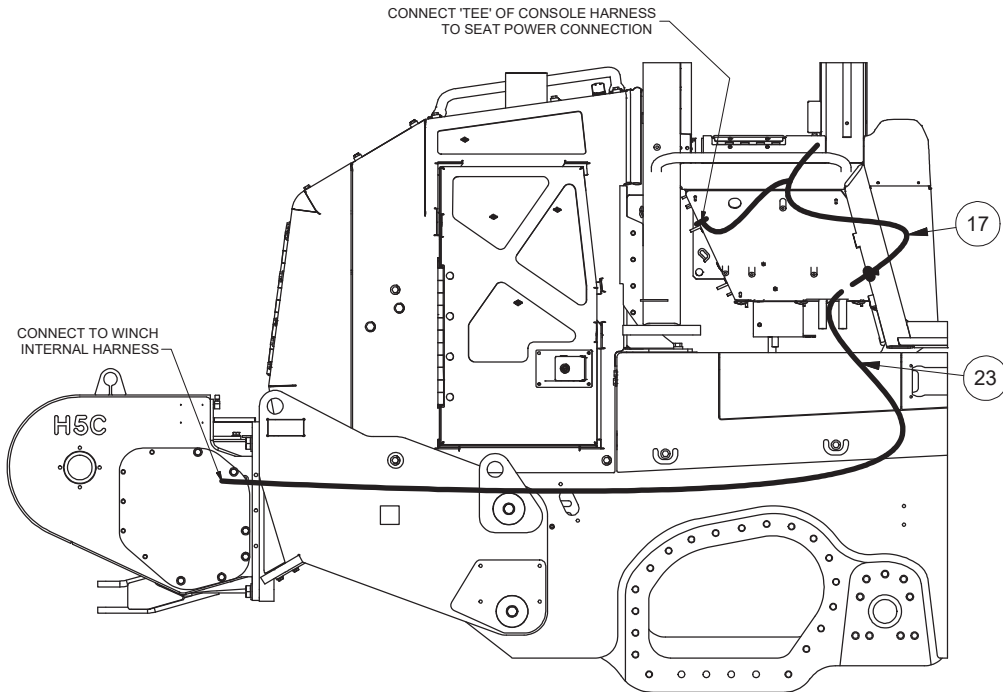
Caterpillar 953 (H5CT2D**C953)
Page 2 of 2



CONTROL PLATE INSTALLATION



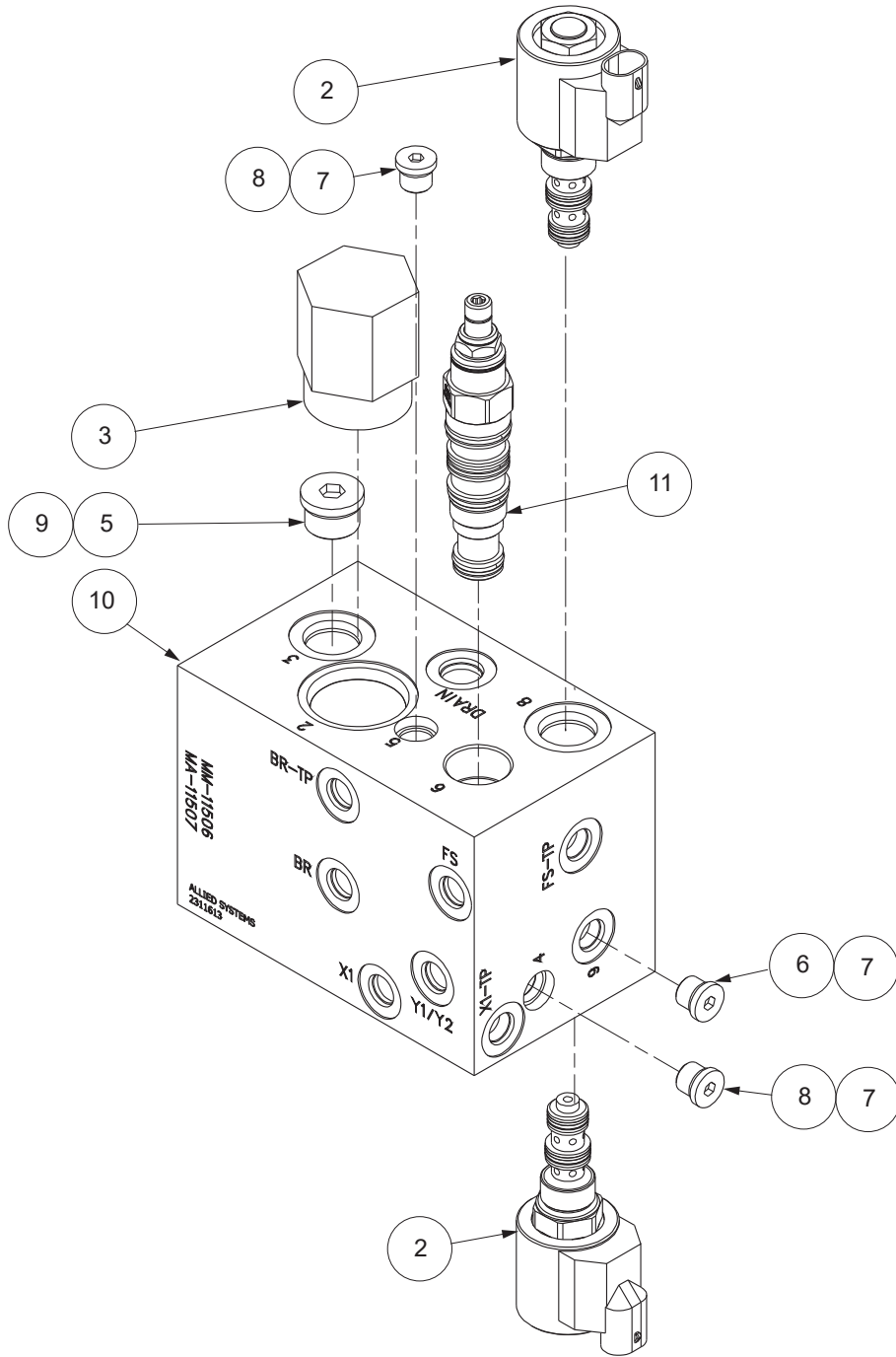
DECAL LOCATIONS



WINCH HARNESS INSTALLATION

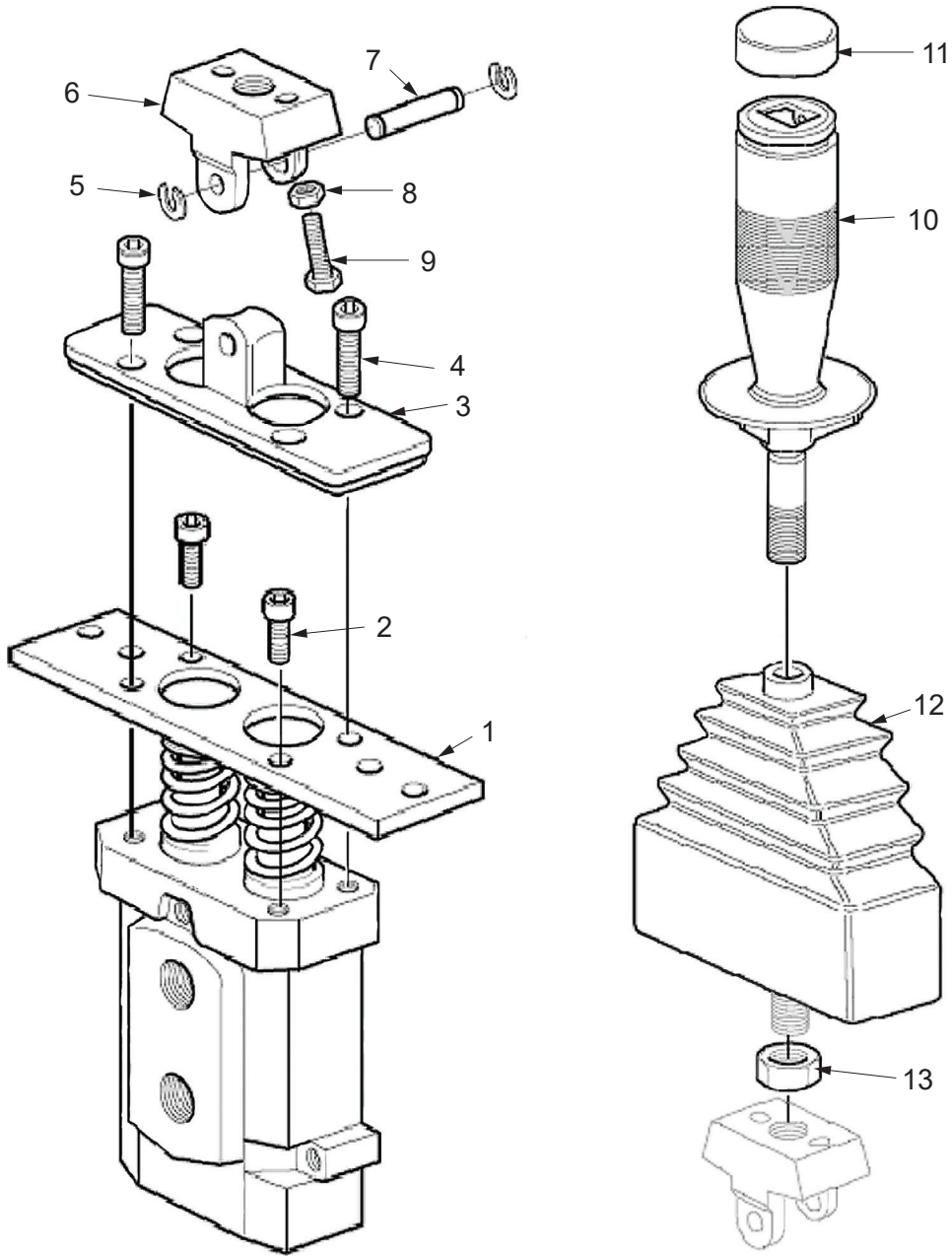
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
17	2315478	1	Console, Wire Harness	27	231955	1	Fitting
18	2310502	1	Switch Assy, Green	28	R834052	1	Fitting
19	2310013	1	Switch Assy, Yellow	29	2315618	2	Hose Assembly
20	2312177	1	Decal, Winch In, Winch Out	30	2315619	1	Hose Assembly
21	2313676	1	Decal, FS & Hi-Speed	31	2315620	1	Hose Assembly
22	2315593	1	Plate, Control Mounting	32	2315595	1	Bracket, Hose
23	2315594	1	Harness, Wire Extension	33	2315622	1	Bracket, Rear Hose
24	2315596	1	Plate, Stabilizer, Left	34	129563W	10	Cable Tie
25	2315597	1	Plate, Stabilizer, Right	35	R12577881	8'	Sleeve, Cordura
26	R834106	2	Fitting				

Control Manifold Assembly



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2311613		Manifold, Control Assy	7	235387	3	. Fitting
2	2310430	2	. Valve, Cartridge	8	2307227W	2	. Valve, Shuttle
	R15668	1	.. Seal Kit		2307231W	1	.. Seal Kit
3	2307461W	1	. Valve, Directional	9	2310368	1	. Plug, Orifice
5	229345	1	. Fitting	10	Ref.		. Manifold
6	2310369	1	. Plug, Orifice	11	2311592	1	. Valve, Brake
					252566	1	.. Seal Kit

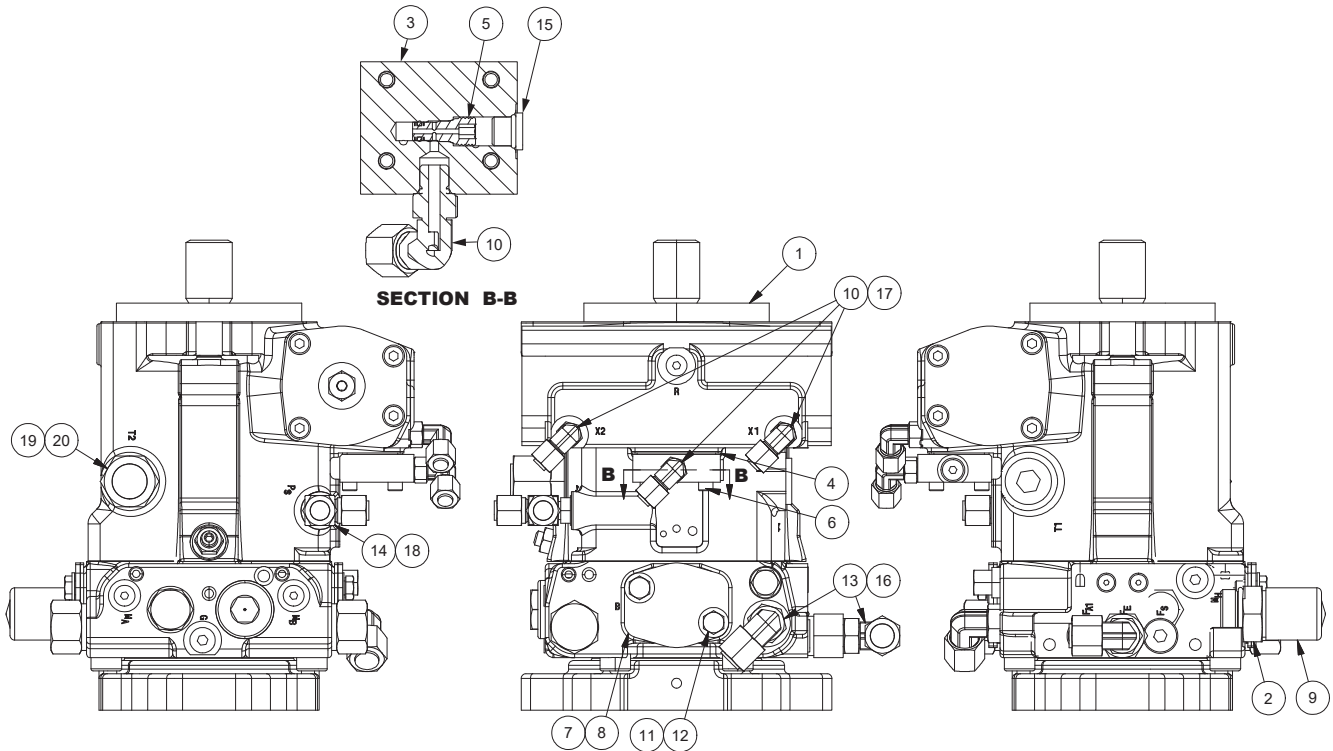
Pilot Controller Handlever Assembly



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2310929		Handlever, Pilot Controller				
1	NSS	1	. Plate, Mounting	8	NSS	2	. Nut
2	NSS	2	. Screw	9	NSS	2	. Capscrew
3	NSS	1	. Link, Lever	10	2312609	1	. Lever, Hand
4	NSS	1	. Screw	11	2312610	1	. Cap
5	NSS	2	. Washer, Lock	12	2312608	1	. Bellows
6	NSS	1	. Level, Link	13	2312606	1	. Nut
7	NSS	1	. Pin, Shaft				

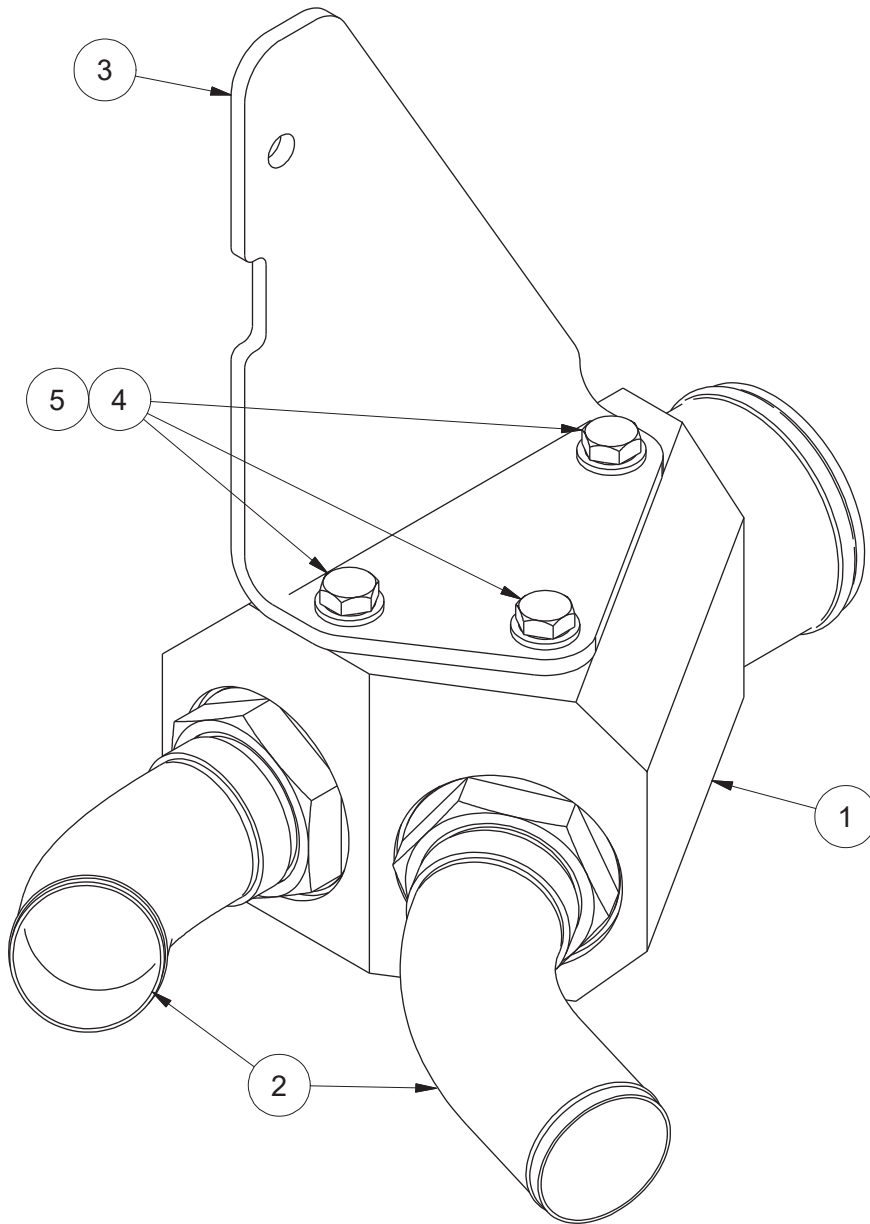
Pump Assembly

Caterpillar D6K2 (H5CH2E**C801)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2311085		Pump Assembly	10	R833251	3	. Fitting
1	2311018	1	. Pump	11	15134W	4	. Washer
2	128547W	1	. Nipple, Hose	12	18535W	4	. Capscrew
3	2304014W	1	. Manifold	13	231452	2	. Fitting
4	2304193W	1	. Gasket	14	231465	1	. Fitting
5	2307227W	1	. Valve, Shuttle	15	235387	1	. Fitting
	2307231W	1	. . Seal Kit	16	R834253	2	. Fitting
6	293796W	4	. Capscrew	17	232984	3	. Fitting
7	2304257W	2	. Gasket	18	231822	2	. Fitting
8	2304258W	2	. Plate	19	231443	1	. Fitting
9	2306026W	1	. Cap	20	231821	1	. Fitting
					232382	1	. . O-Ring

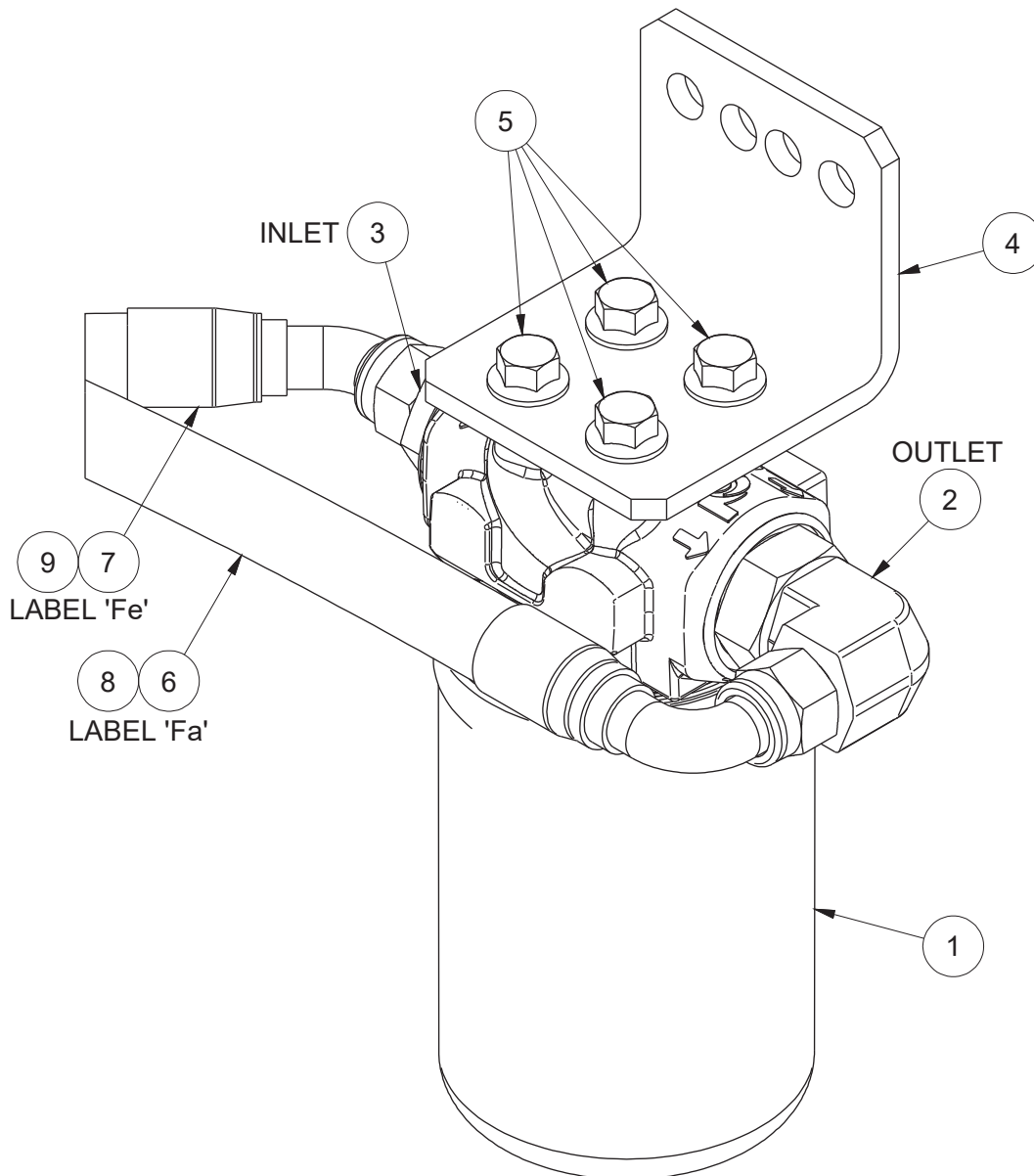
Y Block Assembly
Caterpillar D6K2 (H5CH2E**C801)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2311252		Assembly, Block, "Y"				
1	2311090	1	. Block	4	293613W	3	. Capscrew
2	2311088	2	. Fitting	5	296418W	3	. Washer
3	2311414	1	. Mounting, Suction Tubing				

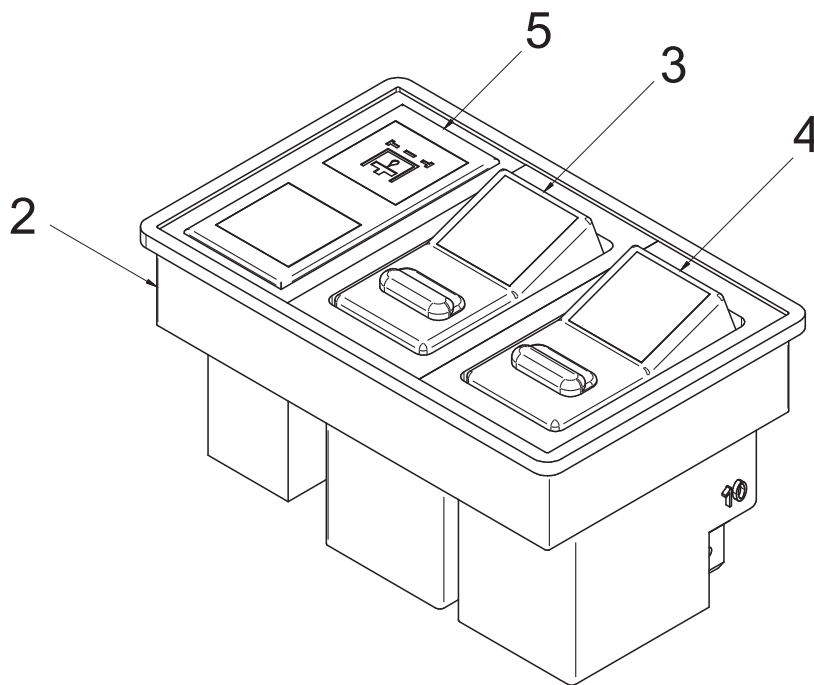
Hydraulic Filter Assembly

Caterpillar D6K2 (H5CH2E**C80A, H5CH2E**C801)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2311261		Filter Assembly				
1	2305713W	1	. Assembly, Filter	4	2311275	1	. Bracket, Mounting
	2305132W	1	. . Filter Head	5	134803W	4	. Screw, Ser Flg
	2304112W	1	. . Filter Element	6	2310595	1	. Hose Assembly
	2305712W	1	. . Pressure Switch	7	2311581	1	. Hose Assembly
2	235314	1	. Fitting	8	2310918	1	. Label, FA
3	R833115	1	. Fitting	9	2306157W	1	. Label, FE

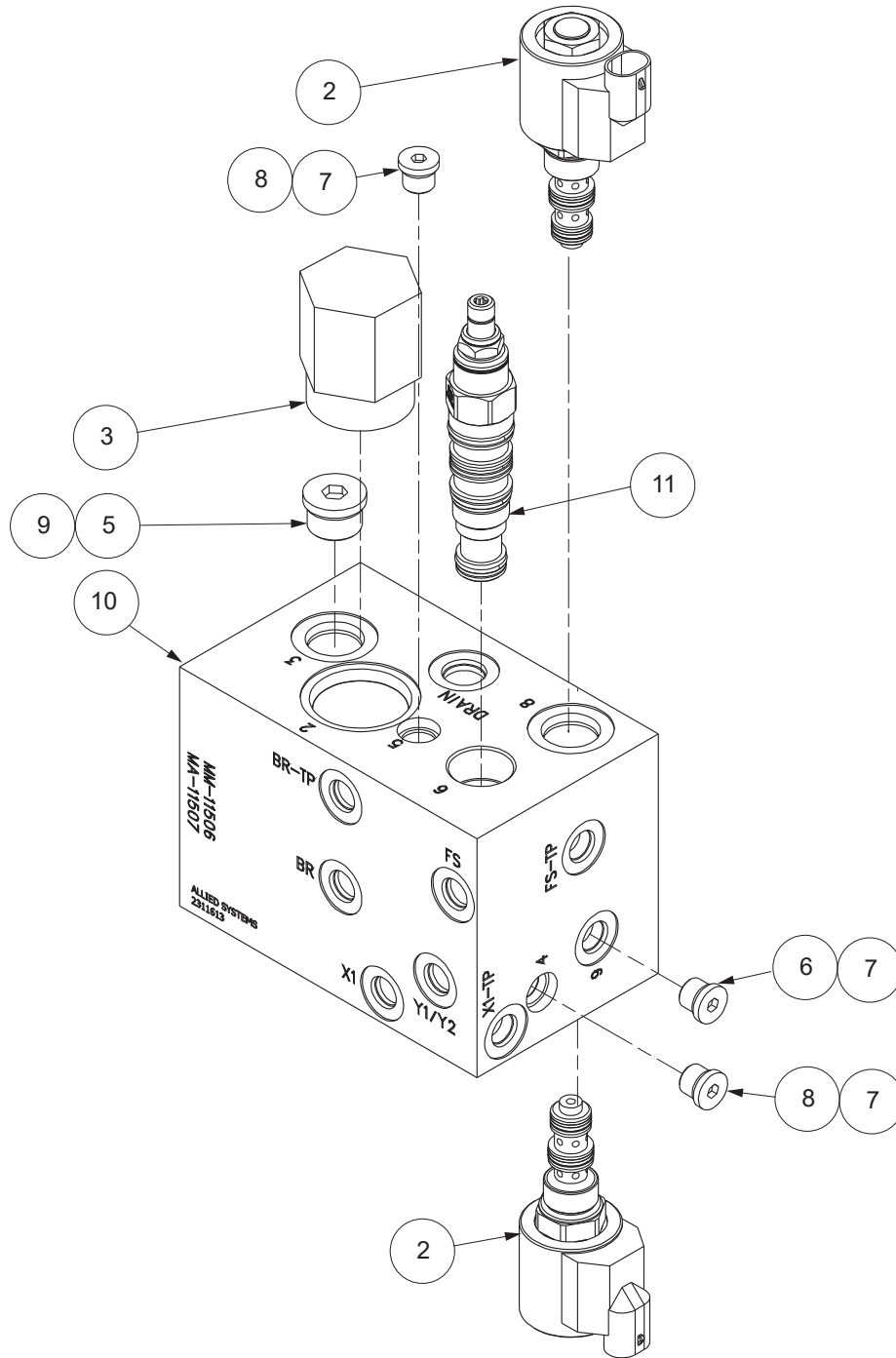
Switch Assembly
High Performance Winch (H5CH)
 Caterpillar D6K (H5CH**C80A, H5CH**C801, H6HH*BC805)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2311350	1	Switch Assembly				
2	234340	1	. Frame, Mounting	4	2310504	1	. Assy, w/Lock, 24V Red LED
3	2310013	1	. Assy, Switch, 24V Yellow LED	5	2311352	1	. Assy, Oil Filter Indicator

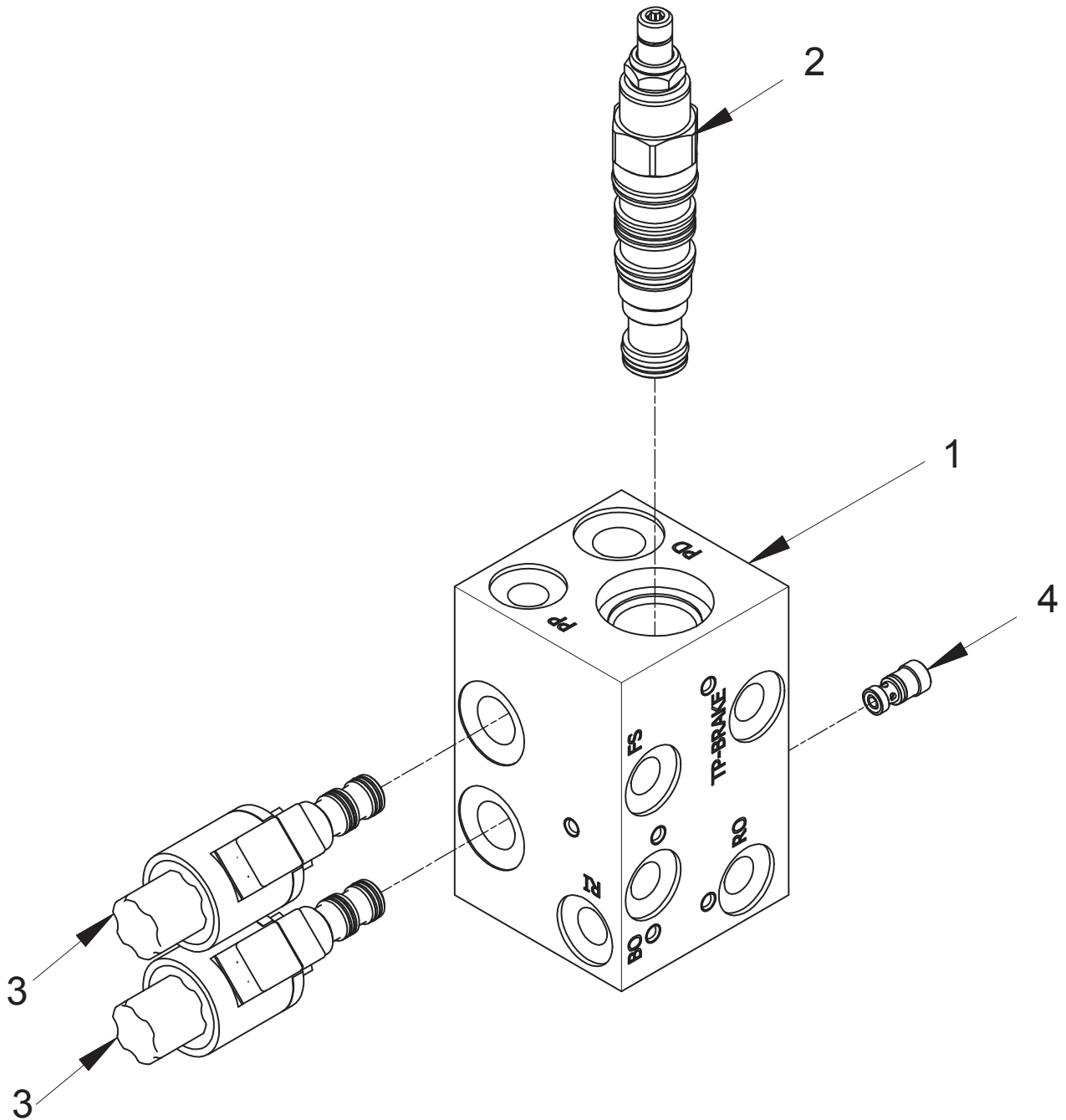
Control Manifold Assembly

Caterpillar D6K2 (H5CH2E**C802)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2311613		Manifold, Control				
2	2310430	2	. Valve, Solenoid Cartridge	7	235387	3	. Fitting
	R15668	1	.. Kit, Seal	8	2307227W	2	. Valve, Cartridge Shuttle
	252134	1	.. Valve		2307231W	1	.. Kit, Seal
	2313921	1	.. Coil	9	2310368	1	. Plug, Orifice
3	2307461W	1	. Valve, Directional	10	Ref.	1	. Manifold, Control Block
	2313495	1	.. Kit, Seal	11	2311592	1	. Directional Valve
5	229345	1	. Fitting		252566	1	.. Kit, Seal
6	2310369	1	. Plug, Orifice				

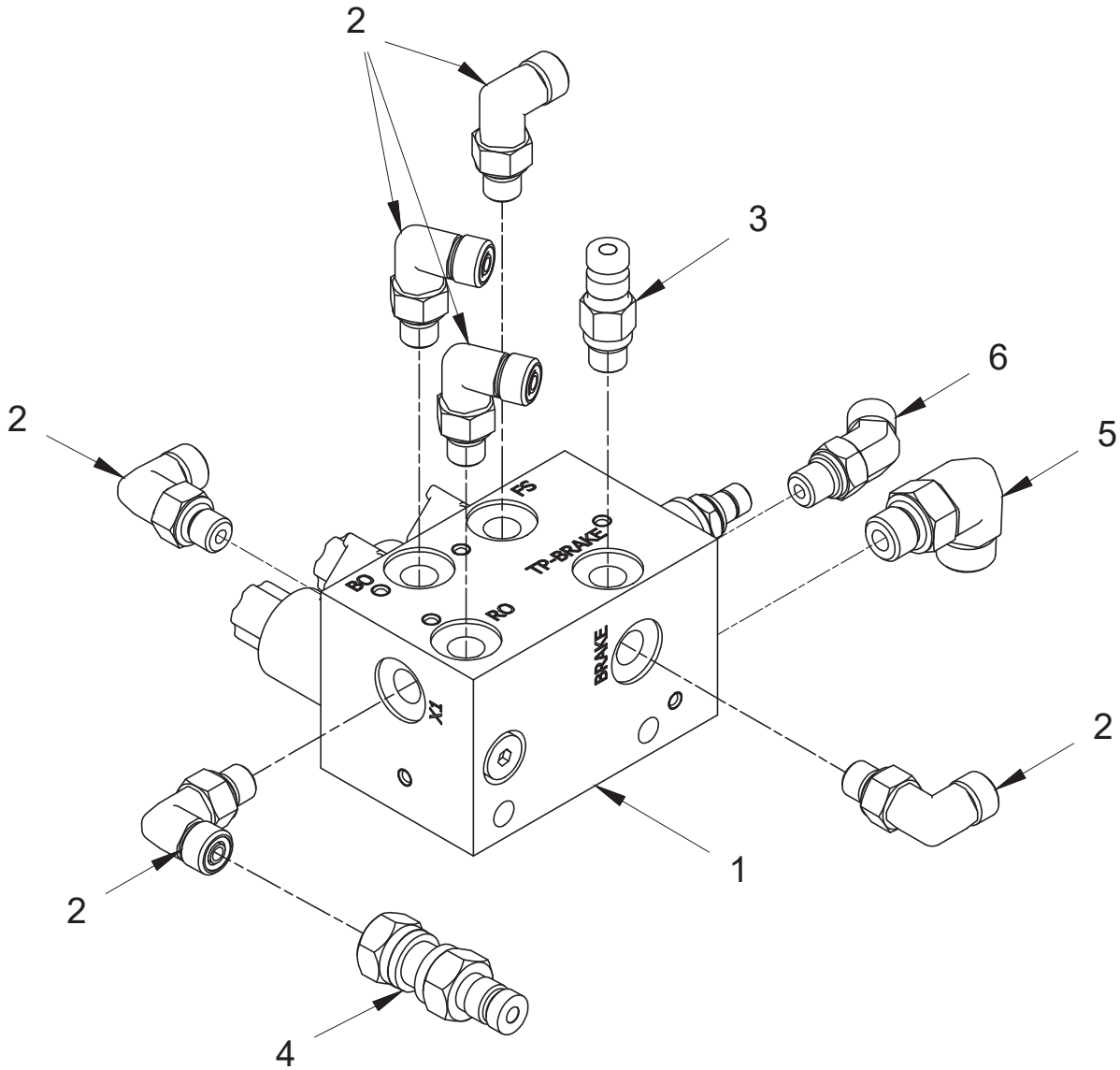
Control Manifold Assembly



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2311770	1	Assy, Control Manifold				
1	2311771	1	. Body, Control Manifold	4	2312074	1	. Valve, Shuttle
2	2311592	1	. Valve, Directional		2312112	1	.. Seals, O-Ring
	252566	1	.. Kit, Seal				
3	2312073	2	. Valve, Cartridge				
	2314106	1	.. Base, Valve Cartridge				
	2313984	1	.. Coil				
	2312111	1	.. Kit, Seal				

Control Manifold Assembly

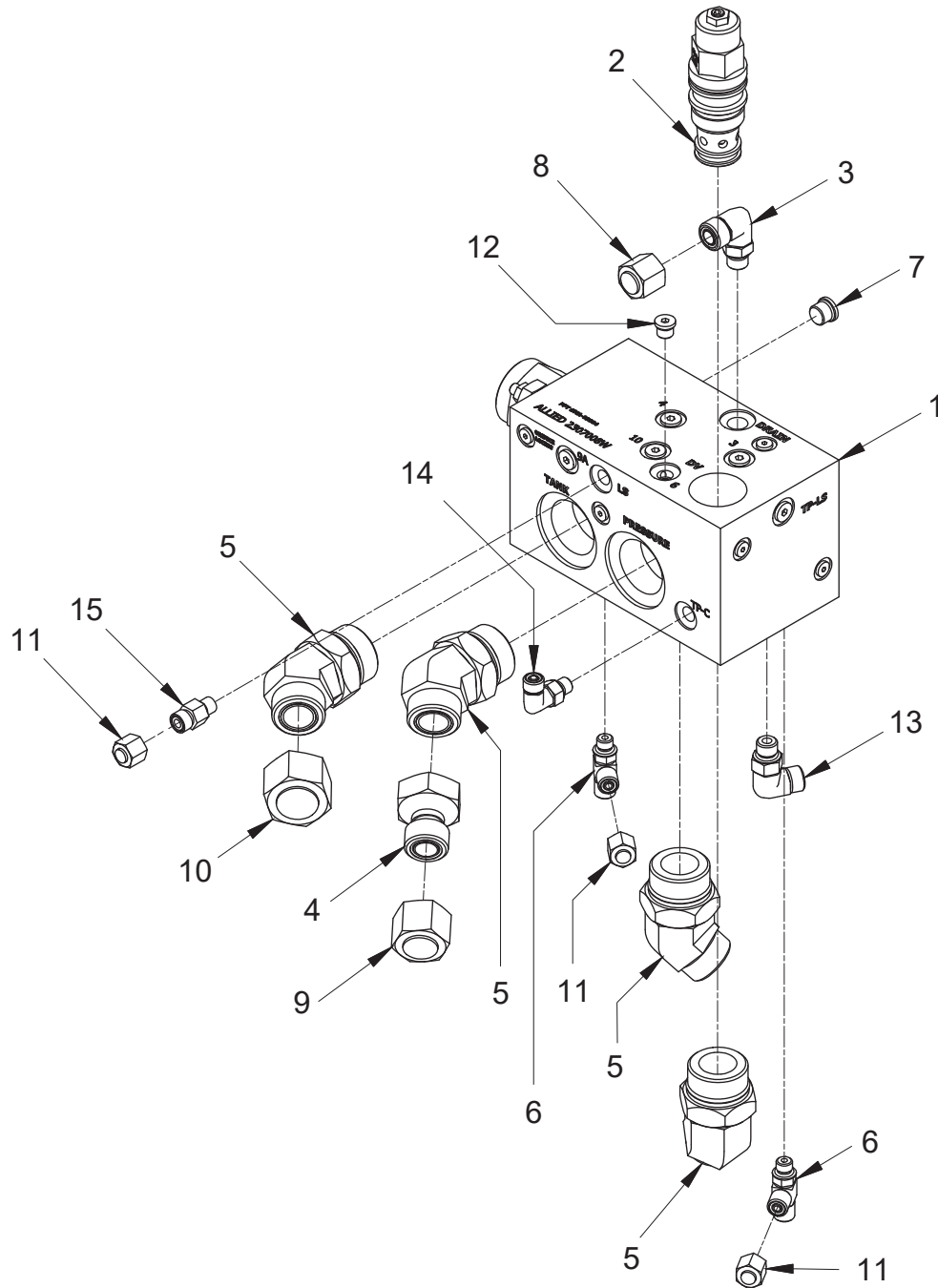
Caterpillar PL61 (H5CH1D**C391), 953D (H5CT2D**C953)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2313473		Assy, Control Manifold				
1	2311770	1	. Assy, Control Manifold (See p. 71)	4	2307625W	1	. Coupler, Quick Male
2	R833251	6	. Fitting	5	R833257	1	. Fitting
3	R14040	1	. Coupler, Q.D. Male	6	R833200	1	. Fitting

Direction Manifold Assembly

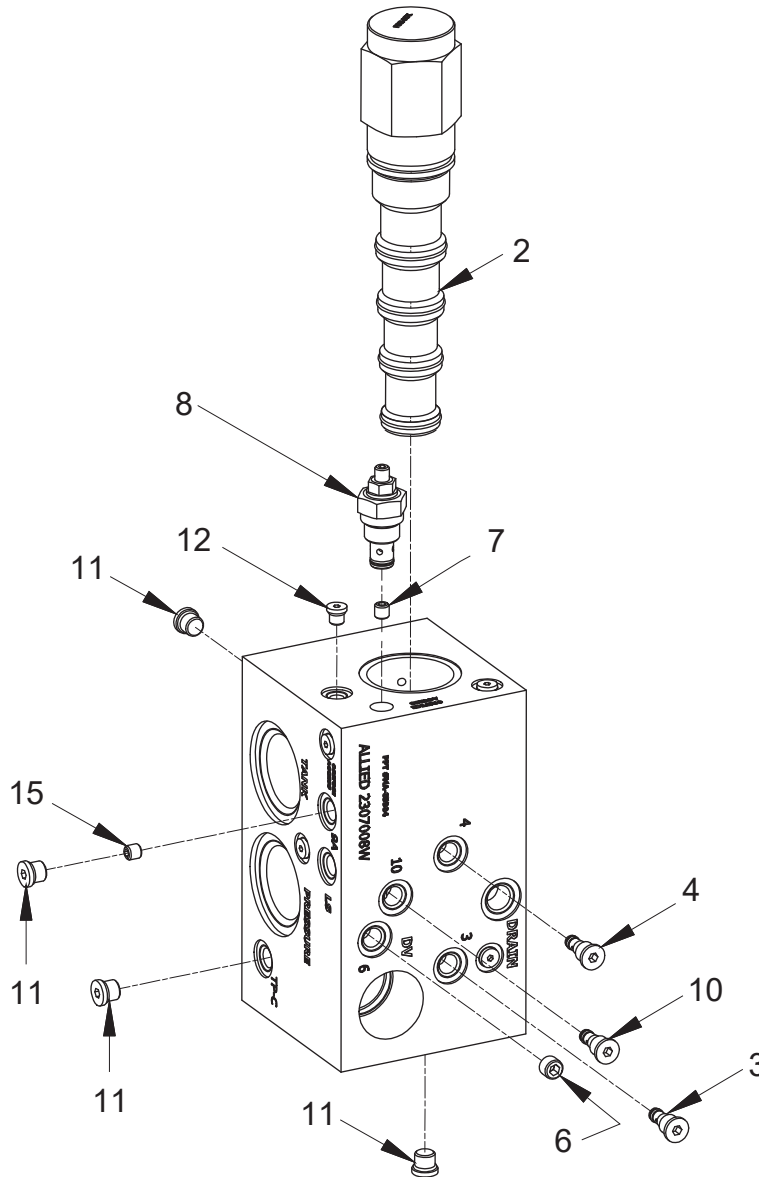
Caterpillar PL61 (H5CH1D**C391)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2313486		Assy, Directional Manifold				
1	2307008W	1	. Manifold, Directional (See p. 74)	8	229383	1	. Fitting
2	2307265W	1	. Valve, Counterbalance	9	R834253	1	. Fitting
	243815	1	. . Kit, Seal	10	231821	1	. Fitting
3	R833261	1	. Fitting	11	232382	1	. . O-Ring
4	234191	1	. Fitting		231820	1	. Fitting
5	2313661	1	. Valve, Check		232383	1	. . O-Ring
6	R833218	4	. Fitting	12	232984	3	. Fitting
7	R833400	2	. Fitting	13	235387	1	. Fitting
				14	R833257	1	. Fitting
				15	2311500	1	. Fitting Assembly

Direction Manifold Assembly

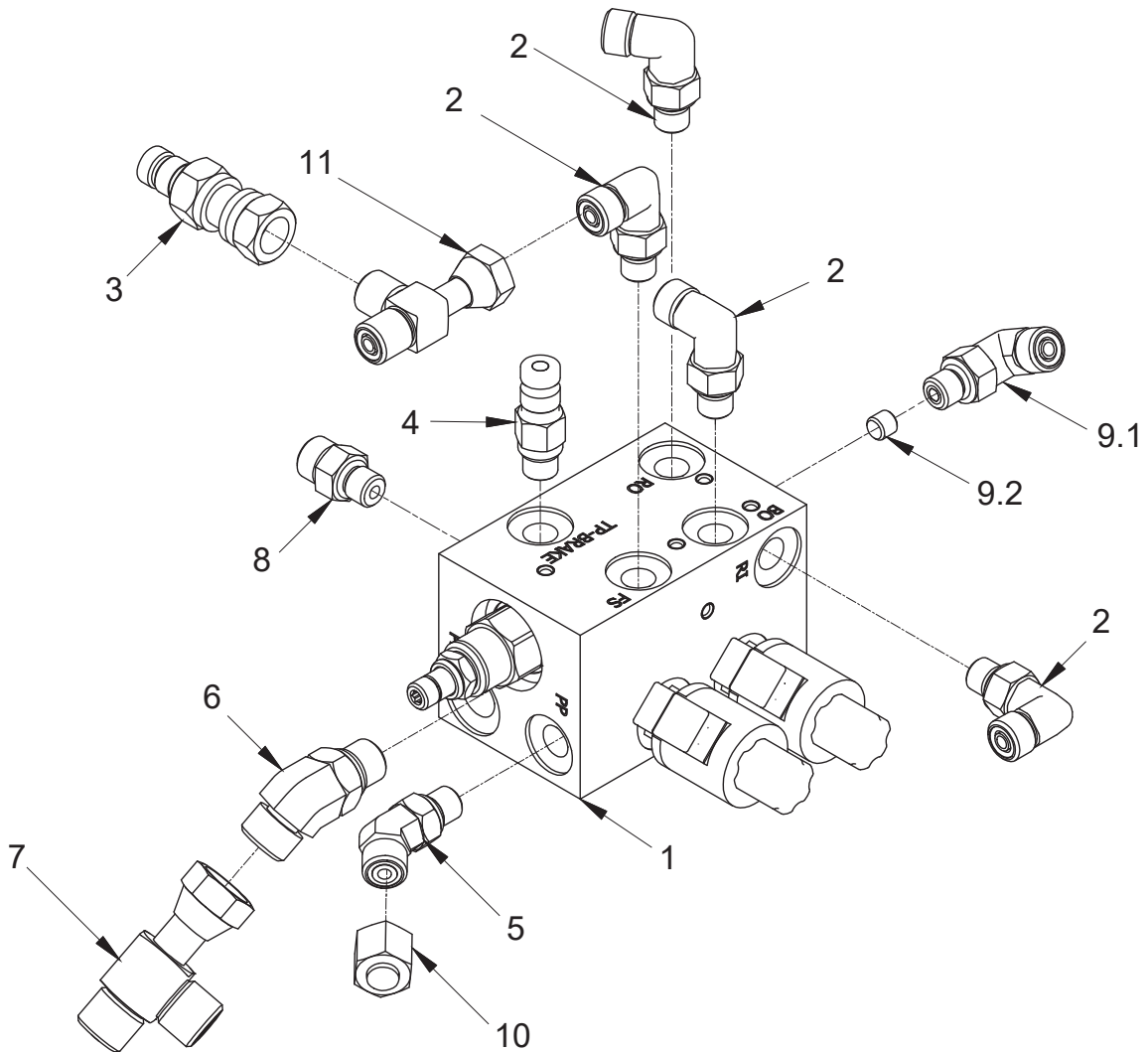
Caterpillar PL61 (H5CH1D**C391)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2307008W		Direction Manifold Assy				
1	2307232W	1	. Manifold-Body	7	2307233W	1	. Plug
2	2307024W	1	. Valve, Cartridge	8	2307236W	1	. Valve, Cartridge Relief
	2307235W	1	. . Seal Kit		2307246W	1	. . Seal Kit
3	2307234W	3	. Check Valve	11	222442W	5	. Fitting
	2307245W	1	. . Seal Kit	12	2310978	1	. Orifice
6	220998W	1	. Set Screw	15	2307736W	1	. Orifice

Control Manifold Assembly

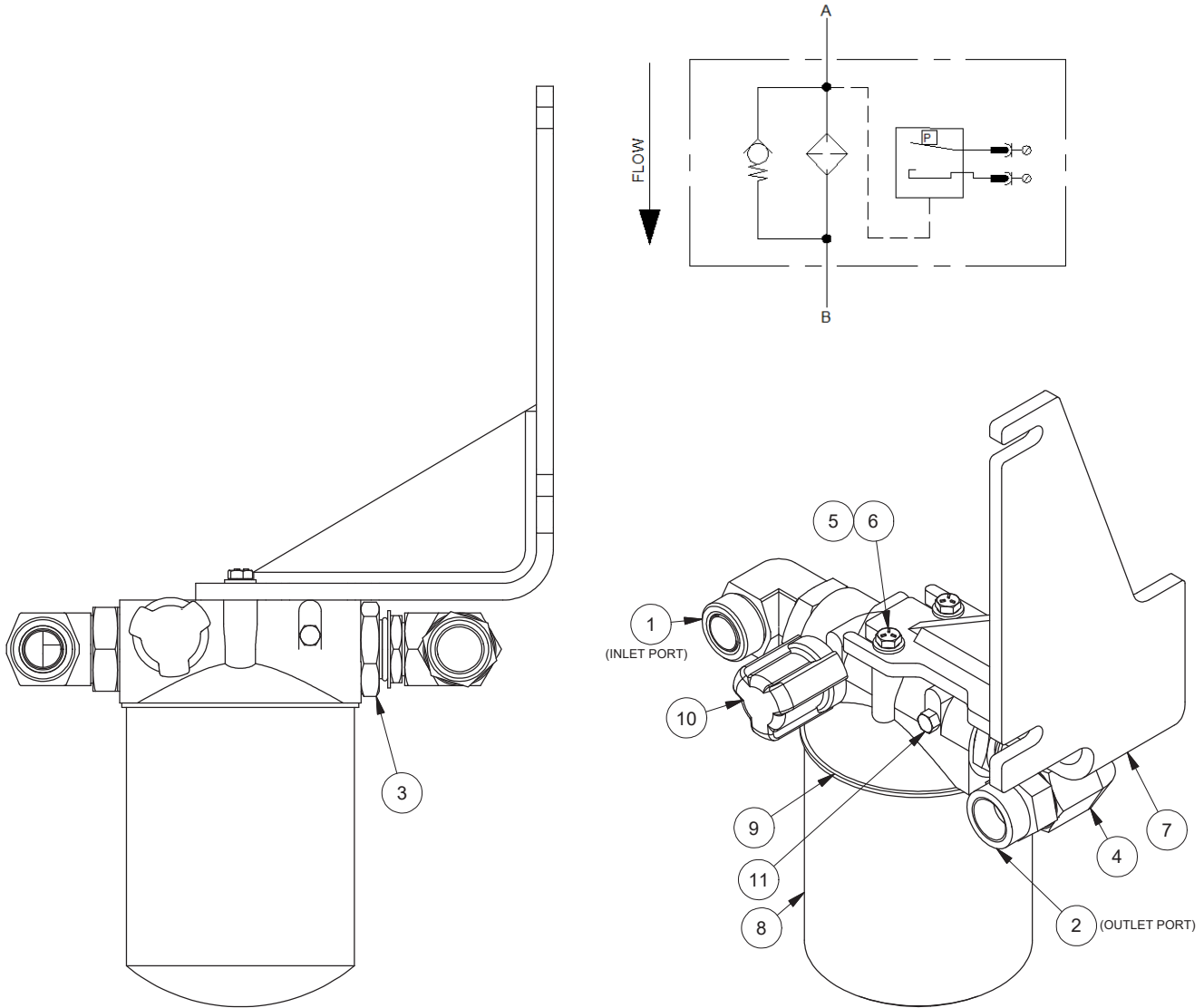
Caterpillar D6K H5CT**DC80, H5CT**DC801



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2313635		Assy, Control Manifold				
1	2311770	1	. Assy, Control Manifold (See p. 71)	7	231955	1	. Fitting
2	R833251	4	. Fitting	8	231439	1	. Fitting
3	2307625W	1	. Coupler, Quick Male	9	2311500	1	. Assy, Orifice Fitting
4	R14040	1	. Coupler, Q.D. Male	9.1	2311499	1	. . Fitting, Modified
5	R833200	1	. Fitting	9.2	2310181	1	. . Plug, Orifice
6	R833204	1	. Fitting	10	232984	1	. Fitting
				11	236855	1	. Fitting

Filter Assembly

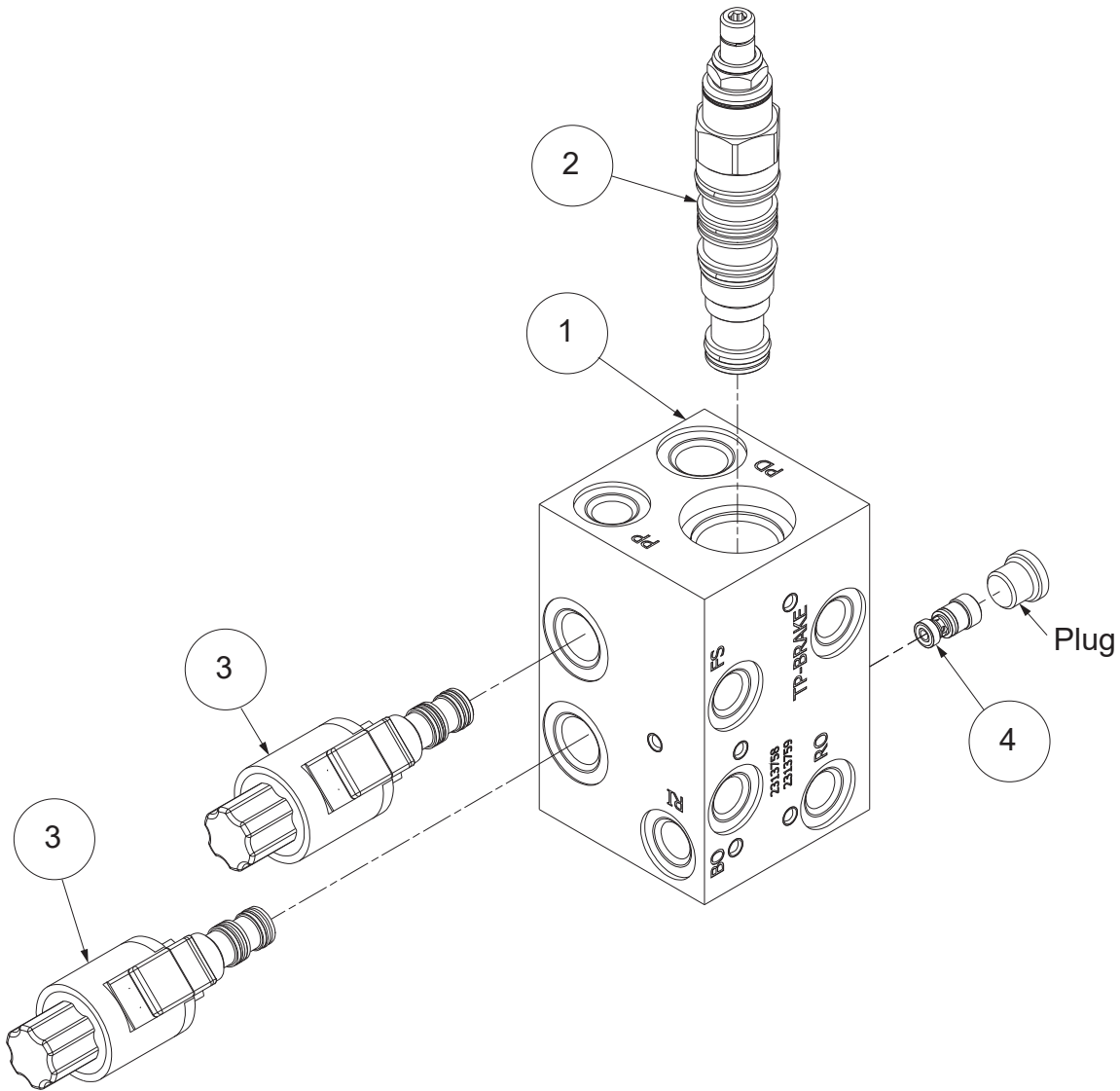
Caterpillar PL61 (H5CH1D**C391)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2313667		Assembly, Filter				
1	R833276	1	. Fitting	7	2313679	1	. Weldment - Bracket, Filter
2	2313669	1	. Valve, Check	8	2313671	1	. Filter, Element
3	21527	1	. Fitting	9	2313672	1	. Filter, Head
4	252315	1	. Fitting	10	2313673	1	. Switch, Pressure Filter
5	R13802914	2	. Washer	11	209511	3	. Fitting
6	16836W	2	. Capscrew				

Control Manifold Assembly

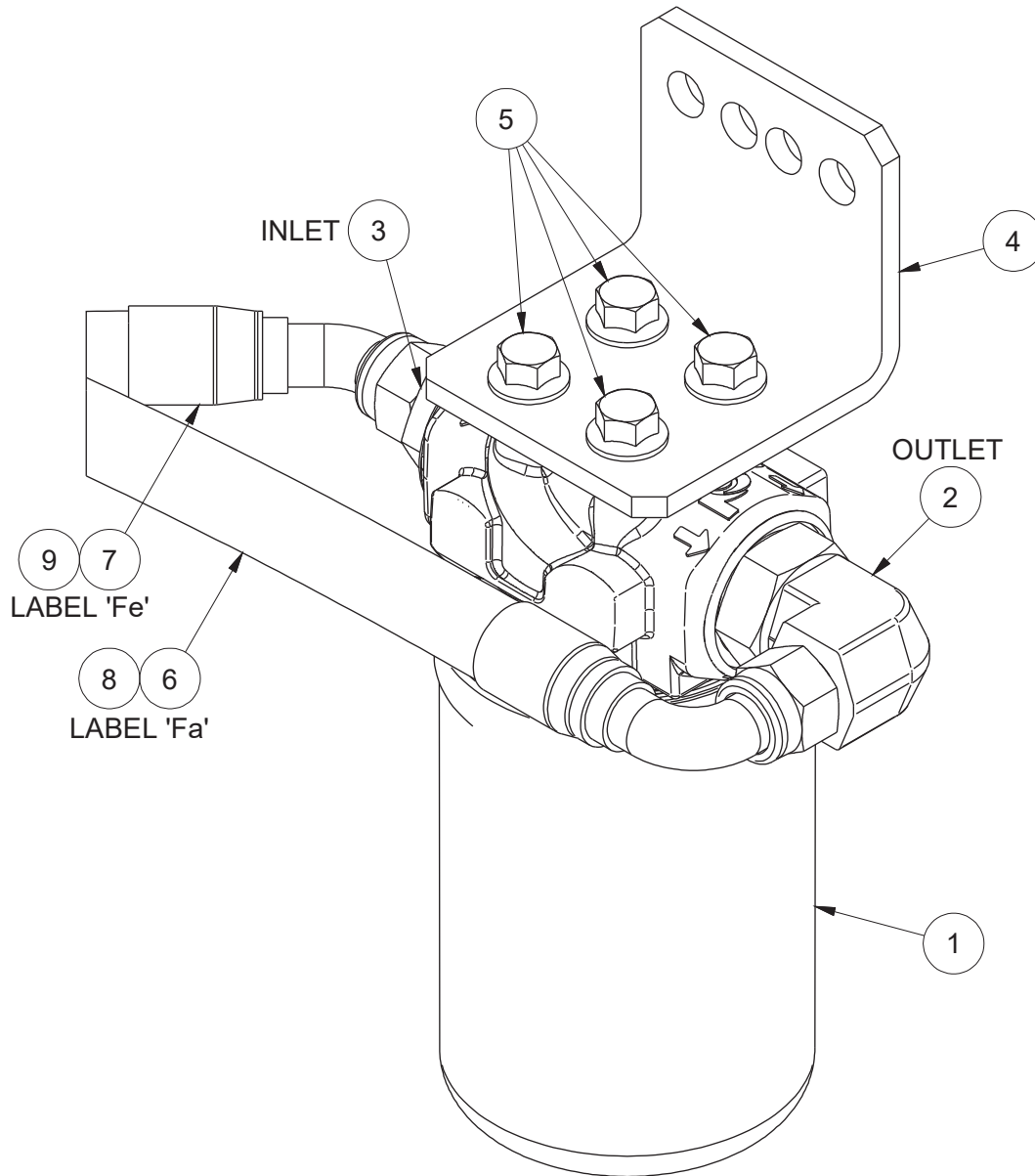
Caterpillar PL61 (H5CH1D**C391), C953D (H5CT2D**C953), D6K (H5CT1D**C80, H5CT1D**C801, H5CT1D**C805)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2313758		Control Manifold Assy				
1	2313759	1	. Manifold, Body, Control	3	2312073	2	. Valve, Solenoid
2	2311592	1	. Valve, Brake		2312111	1	.. Seal Kit
	252566	1	.. Seal Kit	4	2312074	1	. Valve, Shuttle
					2312112	1	.. Seal Kit

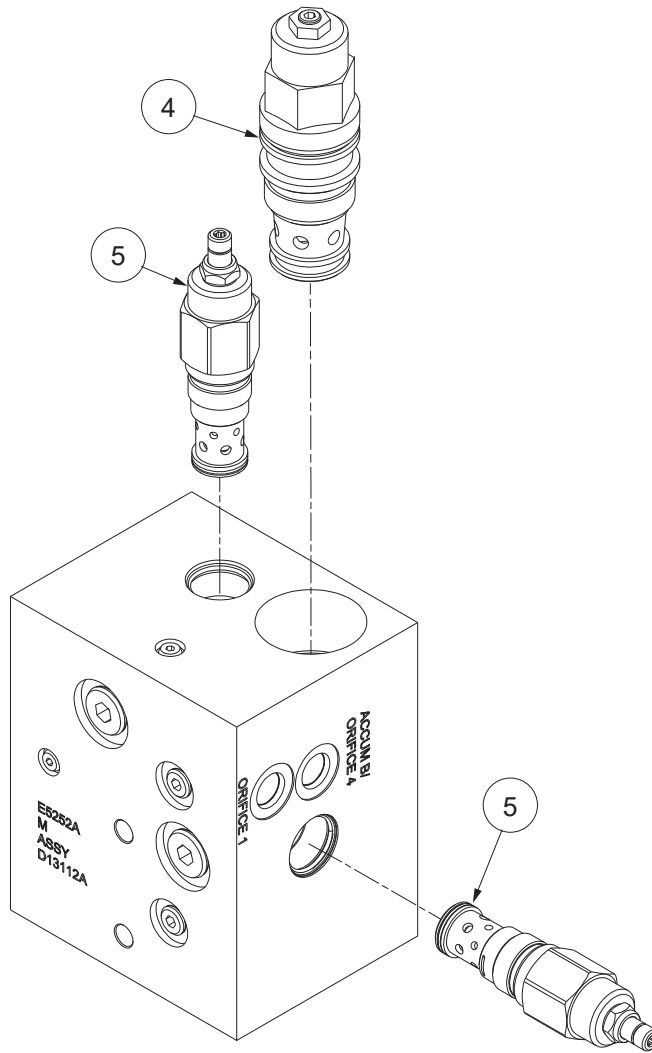
Hydraulic Filter Assembly

Caterpillar D6K2 (H5CH2E**C802)



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2315786		Filter Assembly				
1	2305713W	1	. Assembly, Filter	4	2311277	1	. Bracket, Mounting
	2305132W	1	.. Filter Head	5	134803W	4	. Screw, Ser Flg
	2304112W	1	.. Filter Element	6	2315787	1	. Hose Assembly
	2305712W	1	.. Pressure Switch	7	2315788	1	. Hose Assembly
2	235314	1	. Fitting	8	2310918	1	. Label, FA
3	R833115	1	. Fitting	9	2306157W	1	. Label, FE

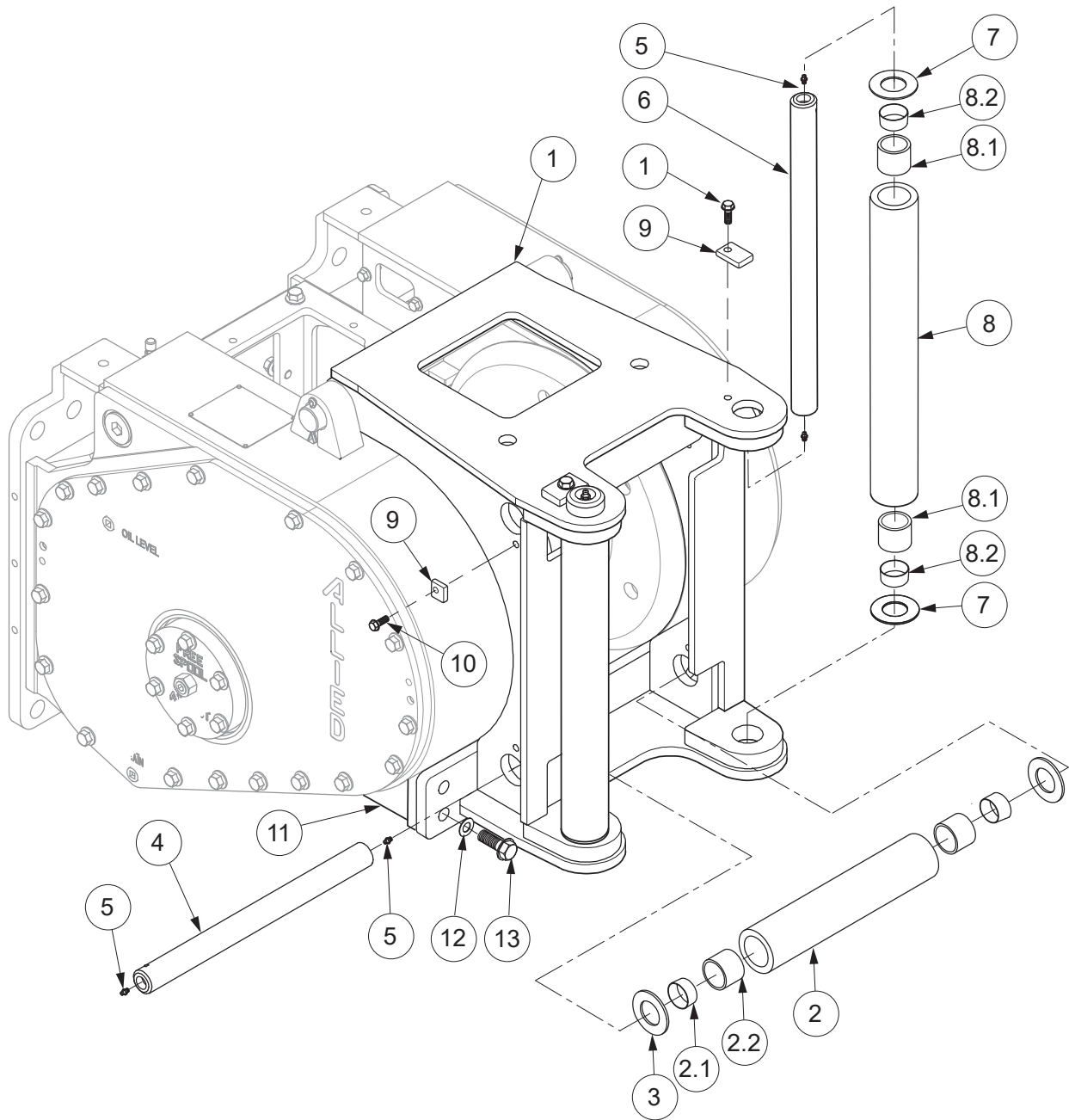
Counterbalance Manifold Assembly



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2314984		Counterbalance Manifold Assembly				
4	2312068	1	. Counterbalance Valve				
	243815		.. Kit, Seal				
5	2307438W	2	. Relief Valve				
	259258	1	.. Seal Kit				

Section 4
Optional Equipment

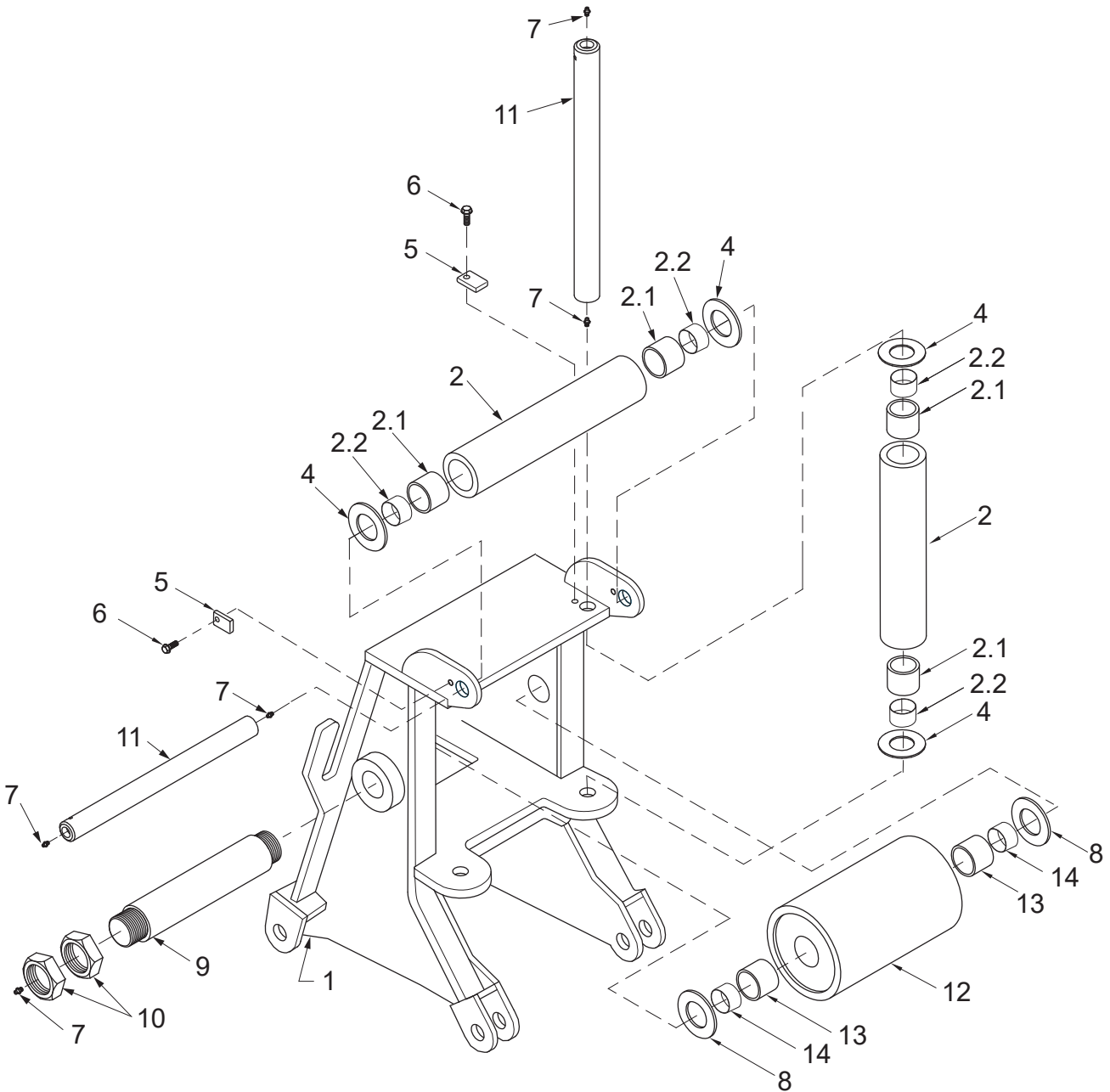
Fairlead



A = 3-Roller Fairlead
 B = 4-Roller Fairlead

Item	Part No.	Qty A/B	Description	Item	Part No.	Qty A/B	Description
	2307784W	1--	Fairlead, 3-Roller				
	2306335W	--1	Fairlead, 4-Roller				
1	2306333W	1/1	. Frame	7	331767W	4/4	. Washer
2	2301727W	1/2	. Assy Roller	8	2301907W	2/2	. Assy Roller
2.1	2570W	2/4	.. Bushing	8.1	2301742W	2/2	.. Spacer
2.2	2301961W	2/4	.. Spacer	8.2	35135W	2/2	.. Bushing
3	33394W	2/2	. Washer	9	2301706W	3/4	. Keeper
4	2301722W	1/2	. Shaft	10	398817W	3/4	. Screw, Flange
5	16001W	8/8	. Fitting, Lube	11	2306330W	2/2	Block, Mounting
6	2306572W	2/2	. Shaft	12	221777W	4/4	Washer
				13	221657W	4/4	Capscrew

Arch Assembly



Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	2301923W		Assy Arch				
1	2301922W	1	. Arch	7	16001W	8	. Fitting, Lube
2	2301910W	3	. Ass'y Roller	8	2821W	2	. Washer
2.1	2301742W	2	.. Spacer	9	2302120W	1	. Shaft
2.2	35135W	2	.. Bushing	10	221336W	4	. Nut
4	331767W	6	. Washer	11	2301919W	3	. Shaft
5	2301706W	3	. Keeper	12	2301925W	1	. Roller
6	398817W	3	. Capscrew	13	2301927W	2	.. Spacer
				14	2817W	2	.. Bushing

Wire Rope Assemblies

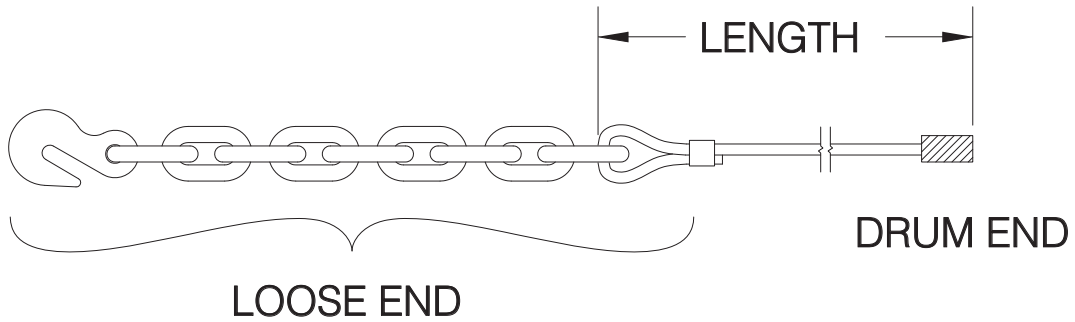


Figure A

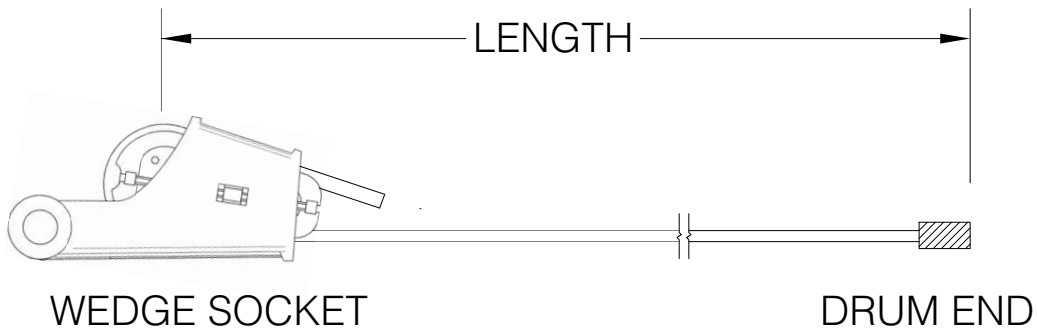


Figure B

	Wire Rope	Tail Chain & Hook
Wire Rope Diameter Dia (in)	Breaking Strength New (lbs)	Working Load Limit (lbs) 3.5:1 Design Factor
5/8	41,200	13,000
3/4	58,800	34,200
7/8	79,600	34,200

⚠ CAUTION

Do not use larger than 5/8" diameter wire rope if winch is equipped with arch assembly.

Part No.	Wire Diameter	Length FT (M)	Part No.	Wire Diameter	Length FT (M)
WR5-279L	5/8"	279 (85) *c			
WR5-423L	5/8"	423 (129) *a			
WR6-197L	3/4"	197 (60) *c			
WR6-298L	3/4"	298 (91) *a			
WR7-142L	7/8"	142 (43) *c			
WR7-215L	7/8"	215 (66) *a			
YS7-215LWS	7/8"	215 (66) *b			

*a WR Series Wire Rope (Illustrated in Figure A)
 *b YS Series Wire Rope (Illustrated in Figure B)
 *c Length to fill drum to 2/3 capacity (recommended)
 *d Length to fill drum to full capacity

Section 5
Recommended Service Parts, Intervals & Kits

Recommended Winch Service Intervals and Kits

Following the service schedule recommended here to help keep tractor winch downtime to a minimum, optimize winch operation, and extend the life of your

investment. See Table 1 for recommended service intervals, and Table 2 for recommended service kits.

Hydraulic Winch Maintenance					
Recommended Winch Service Intervals					
Hours or **	Months **	Filter ***	Winch Gear Oil	Brake & Clutch	Major Overhaul
First 250	1	Change			
Every 500	3	Change			
Every 2,000	12		Change		
Every 5,000				*Inspect	
Every 10,000					*Evaluate
Lube rollers and check oil level and filter light every week.					

* Evaluate = Service based on average winch use;

If used more than once a day, perform an overhaul.

If used less than once a day, remove covers and check to determine need.

* Inspect = Disassemble and inspect for wear.

** Service winch using the tractor's hour meter or the length of time the winch is mounted to the tractor, whichever occurs first.

*** Follow tractor schedule if using tractor filter.

Table 1 Recommended Winch Service Intervals

Service Kits for H5C Winches			
Service Description	Kit Description	Winch Serial Number	Kit Part#
Filter change	Filter kit	All	Refer to tractor operator and service manuals
Complete oil change (every 1,000 hours)	N/A	All	Check our website for current operator's and service manuals for appropriate oils
Clutch and brake overhaul (every 5,000 hours)	Motor, reducer & brake assembly rebuild kit	All	2312857
Major overhaul (every 10,000 hours)	Intermediate/drum shaft & brake assembly rebuild kit	All	2311896

Table 2 Routine Maintenance Kits

H5C Hydraulic Winch Recommended Service Parts

The following pages list some of the service parts and kits that are available for your Allied H5C Winch.

Page 87 includes lists of gaskets and seals. Keep these parts in stock at all times for regular maintenance. Order parts from the table based on your winch.

Page 87 and page 88 contain kits for 5,000 hour and 10,000 hour scheduled maintenance. Order these kits in preparation for these intervals. Each kit includes all parts listed in the table. Order parts from the table based on your winch.

Page 89 contains lists of wire rope assemblies and hose kits. Order parts or kits as required and as relevant for your installation.

Page 90 contains lists of tool kits and diagnostic tools, which are useful when you install, maintain and service your winches.

Note: Allied Winch parts manuals are available for no charge download at <http://www.alliedsystems.com/pubs/pubs.htm>.

Gaskets & Seals		Order as Required		
Allied P/N	Description	Quantity on Winch	See Parts Manual Page	Order Qty
2314873	Gasket, Hose Seal	1	Hydraulic/Electrical Installation	
R15668	Seal Kit, Solenoid Cartridge Valve (2310430)	1	Valve Manifold Assembly	
252566	Seal Kit, Directional Valve (P/N 2311592)	1	Control Manifold Assembly	
259258	Seal Kit (Buna), Relief Valve (P/N 2307438W)	2	CBR Manifold Assembly	
243815	Seal Kit, Counterbalance Valve (P/N 2312068 and 2307265W)	1	CBR Manifold Assembly	
2307231W	Seal Kit, Shuttle Valve (2307227W)	1	Control Manifold Assembly	
2312111	Seal Kit, Cartridge Valve (P/N 2312073)	2	Control Manifold Assembly	
2312112	Seal Kit, Shuttle Valve (P/N 2312074)	1	Control Manifold Assembly	

Motor, Reducer & Brake Assembly Rebuild Kit, P/N: 2312857				
Applies to: All				
Service Interval: Every 5,000 Hours				
Allied P/N	Description	Quantity in Kit	See Parts Manual Page	Order Quantity
2312857	Kit, Motor, Reducer & Brake Assy Rebuild	1		
12916W	. Ring, Snap	2	Motor Shaft	
12944W	. Ring, Snap	1	Motor Shaft	
2306073W	. Seal, Rotary	2	Hydraulic Group	
89776W	. O-Ring	3	Hydraulic Group	
86596W	. O-Ring	1	Hydraulic Group	
87287W	. O-Ring	1	Motor Shaft	
334475W	. Ring, Snap	1	Motor Shaft	
12944W	. Ring, Snap	1	Motor Shaft	
246722	. Kit, Seal	1	Hydraulic Motor	

Intermediate/Drum/Idler Shaft, Motor and Brake Assembly Rebuild Kit, P/N: 2311896
Applies to: All
Service Interval: Every 10,000 hours

Allied P/N	Description	Quantity in Kit	See Parts Manual Page	Order Quantity
2311896	Kit, Intermediate, Idler, Drum Shaft, Motor & Brake Assembly Rebuild	1		
41207W	. Bearing, Ball	1	Motor Shaft	
41210W	. Bearing, Ball	1	Motor Shaft	
2306198W	. Disc, Friction	7	Motor Shaft	
2304874W	. Plate, Separator	8	Motor Shaft	
218214	. O-Ring	1	Intermediate Gear Shaft	
212380	. O-Ring	1	Intermediate Gear Shaft	
159940W	. O-Ring	1	Intermediate Gear Shaft	
2305923W	. Cone, Roller Bearing	1	Intermediate Gear Shaft	
45733W	. Cup, Roller Bearing	1	Intermediate Gear Shaft	
219114W	. Cone, Roller Bearing	1	Intermediate Gear Shaft	
2302515W	. Cup, Roller Bearing	1	Intermediate Gear Shaft	
133523W	. Seal, Oil	1	Drum Shaft	
339681W	. Seal, Oil	1	Drum Shaft	
219093W	. Cone, Roller Bearing	1	Drum Shaft	
219094W	. Cup, Roller Bearing	1	Drum Shaft	
12956W	. Ring, Snap	2	Drum Shaft	
219095W	. Bearing, Roller	1	Drum Shaft	
203533	. O-Ring	1	Drum Shaft	
2304580W	. Bearing, Cylinder Roller	1	Idler Shaft	
41207W	. Bearing, Ball	1	Idler Shaft	
12916W	. Ring, Snap	1	Idler Shaft	

Wire Rope Assemblies		Order as Required		
Allied P/N	Description	Length	Will Fill Drum To:	Order Quantity
WR5-279L	Wire Rope Assy 5/8" TC	279' (85 M)	2/3 Capacity (Recommended)	
WR5-423L	Wire Rope Assy 5/8" TC	423' (129 M)	Full Capacity	
YS5-279LWS	Wire Rope Assy 5/8" WS	279' (85 M)	2/3 Capacity (Recommended)	
YS5-423LWS	Wire Rope Assy 5/8" WS	423' (129 M)	Full Capacity	
WR6-197L	Wire Rope Assy 3/4" TC	197' (60 M)	2/3 Capacity (Recommended)	
WR6-298L	Wire Rope Assy 3/4" TC	298' (91 M)	Full Capacity	
YS6-197LWS	Wire Rope Assy 3/4" WS	197' (60 M)	2/3 Capacity (Recommended)	
YS6-298LWS	Wire Rope Assy 3/4" WS	298' (91 M)	Full Capacity	
WR8-142L	Wire Rope Assy 7/8" TC	142' (43 M)	2/3 Capacity (Recommended)	
WR7-215L	Wire Rope Assy 7/8" WS	215' (66 M)	Full Capacity	
YS7-142LWS	Wire Rope Assy 7/8" TC	142' (43 M)	2/3 Capacity (Recommended)	
YS7-215LWS	Wire Rope Assy 7/8" WS	215' (66 M)	Full Capacity	

TC = Tail chain and hook
 WS = Wedge socket

Hose Kits		Order as Required		
Applies to: See "Relevant for Installation" Column				
Allied P/N	Description	Quantity on Winch	Relevant for Installation	Order Quantity
2314767	Hose Kit, Winch Hydraulics	1		
2314768	Hose Kit, Winch Hydraulics	1		
2314769	Hose Kit, Winch Hydraulics	1		
2315051	Hose Kit, Winch Hydraulics	1		
2315054	Hose Kit, Winch Hydraulics	1		

Tool Kits

Order these Tool Kits as required for installation, maintenance and service of your winch(es).

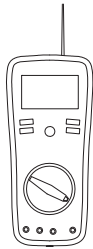
Allied P/N	Description	Order Quantity
588466	Socket Set, 3/8DR 3/8" to 7/8" STD/Deep, 22 PC	
588467	Socket Set, 1/2DR 3/8" to 1-1/4" STD/Deep, 30 PC	
588468	Socket Set, 3/4DR 7/8" to 2-3/8" STD, 29 PC	
588469	Wrench Set, 5/16" to 2-1/2", 31 PC	
588527	Hex Key Sets, .025" to 5/8", 18 PC	
588530	Socket Sets, 3/8DR 6mm-19mm 12 Point	
588529	Socket Sets, 1/2DR 10mm-26mm 12 Point	
588528	Wrench Sets, 7mm-24mm, 18 PC	
588526	Hex Key Sets, .07mm-17mm, 15 PC	

Diagnostic Tools

Order as Required

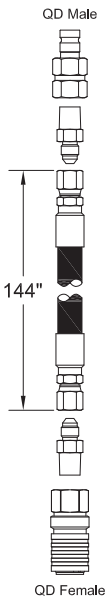
Order these Tools as required for maintenance and service of your winch(es).

Allied P/N	Description	Order Quantity
906601	0 to 8700 PSI Digital Pressure Gauge W/Female QD Connector	
69782	72" Hose Assembly W/QD Connectors Both Ends	
70381	144" Hose Assembly W/QD Connectors Both Ends	
69778	Multi-Meter, 12 Function	



69778
Multi-Meter, 12 Function

AC/DC Voltage & Current,
Resistance, Capacitance,
Frequency, Type K & IR
Temperature, Diode/Continuity,
Duty Cycle Non-Contact
InfraRed Thermometer
CAT III Test Leads
Type K Bead Wire Temp Probe

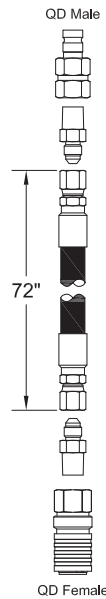


QD Male

144"

QD Female

70381
Kit, Hose Assembly, W/QD Both Ends




QD Male

72"

QD Female

69782
Kit, Hose Assembly, W/QD Both Ends



QD Female

906601
Kit, Digital Pressure Gauge
W/ Female QD Connector
0 to 8700 PSI

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