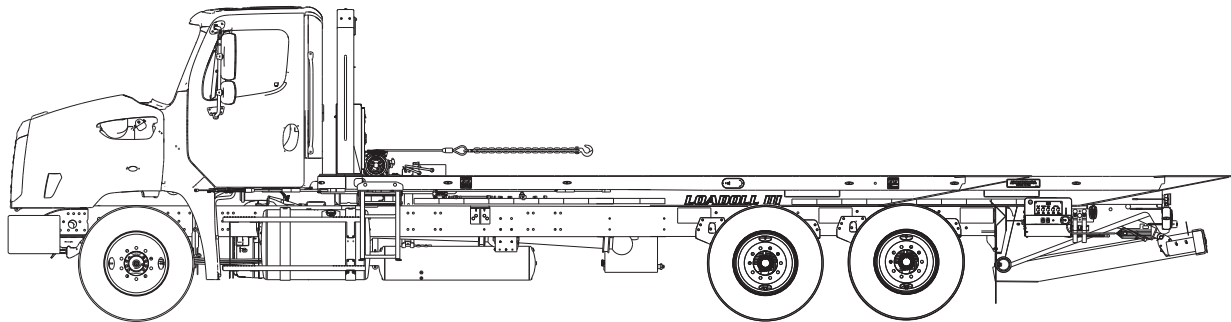
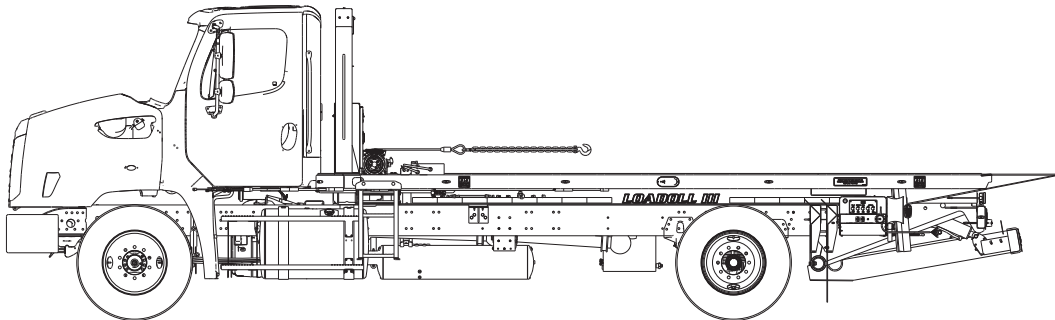




**HD LOADOLL III**  
**22' through 30'**  
**Parts and Operator's Manual**



**LANDOLL COMPANY, LLC.**

1900 North Street

Marysville, Kansas 66508

(785) 562-5381

800-428-5655 ~ [WWW.LANDOLL.COM](http://WWW.LANDOLL.COM)

# Instructions for Ordering Parts

**\*\* Repair parts must be ordered through an Authorized Dealer \*\***

## DEALER INSTRUCTIONS FOR ORDERING PARTS FROM LANDOLL PARTS DISTRIBUTION CENTER

Phone #: 800-423-4320 or 785-562-5381

FAX #: 888-527-3909

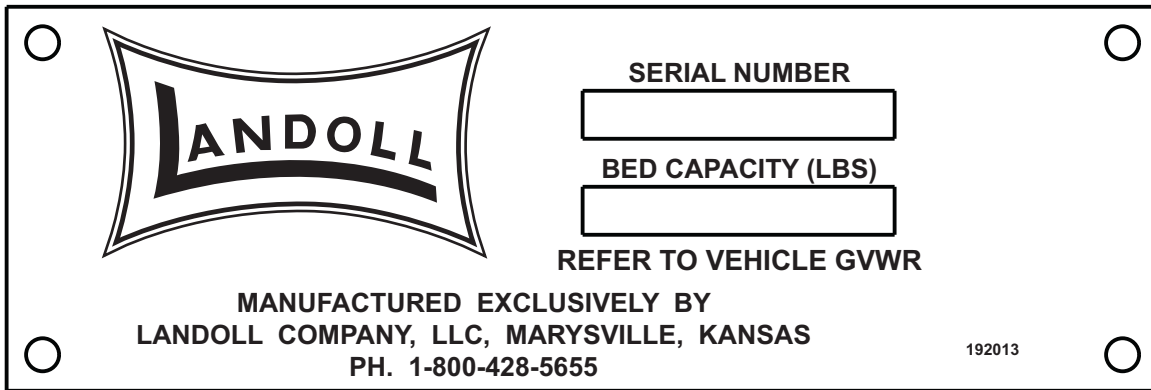
Order online: [dealer.landoll.com](http://dealer.landoll.com)

### IDENTIFICATION PLATE

The identification plate, which lists the model number and serial number, is located on the tilting sub-frame behind the driver's side controls.

### SERIAL NUMBER

The serial number is located on the identification plate.



**Identification Plate and Location**

### Manuals for Loadoll III

Manual Number	Manual Type
F-983	Operator's and Parts Manual

# Table of Contents

---

<b>1</b>	<b>Introduction and Safety Information</b>	
	Understanding Safety Statements . . . . .	1-2
	Transporting Safety . . . . .	1-2
	Maintenance Safety . . . . .	1-2
	Protective Equipment . . . . .	1-2
	Prepare for Emergencies . . . . .	1-2
	High Pressure Fluid Safety . . . . .	1-2
	Safety Precautions . . . . .	1-3
<b>2</b>	<b>Standard Specifications</b>	
<b>3</b>	<b>Kit Installation</b>	
	Tools and Supplies Required for Installation . . . . .	3-1
	Chassis Inspection . . . . .	3-2
	Chassis Modification . . . . .	3-3
	Installing Sub-Frame, Bed and Bulkhead . . . . .	3-3
	Hydraulic Installation . . . . .	3-3
	Hydraulic Plumbing . . . . .	3-4
<b>4</b>	<b>Operations</b>	
	Winch Control Levers . . . . .	4-1
	Tilt Control Levers . . . . .	4-2
	Bed Control Levers . . . . .	4-3
	Hitch Up / Down Control Levers (Stabilizer) . . . . .	4-3
	Hitch In / Out Control Levers (Option) . . . . .	4-4
	Power Take-Off (PTO) . . . . .	4-4
	Bed Off Operation . . . . .	4-5
	Bed On Operation . . . . .	4-6
	Load Placement . . . . .	4-7
	Securing Loads to Bed . . . . .	4-8
	Hitch Operation (Option) . . . . .	4-8
	Vehicle Towing . . . . .	4-8
	Vehicle Disconnection . . . . .	4-9
	Remote Control (Option) . . . . .	4-9
	Cold Weather Operation . . . . .	4-10
	Hot Weather Operation . . . . .	4-10
<b>5</b>	<b>Maintenance and Troubleshooting</b>	
	Maintenance Schedule . . . . .	5-2
	Maintenance Procedures . . . . .	5-2
	Cleaning . . . . .	5-4
	Frame and Deck . . . . .	5-4
	Hydraulic System . . . . .	5-4

**6 Troubleshooting Guide**

Electrical ..... 6-1  
 Hydraulic System ..... 6-2  
 Hydraulic Pressure Testing ..... 6-4  
 Remote Control ..... 6-5  
 Miscellaneous Problems ..... 6-6

**7 Illustrated Parts List**

Sub-Frame, Components ..... 7-1  
 Sub-Frame, Electrical ..... 7-7  
 Sub-Frame, Electrical, Remote Control (Before 08/01/2019) ..... 7-13  
 Sub-Frame, Electrical, Remote Control (After 08/01/2019) ..... 7-15  
 Sub-Frame, Hydraulics ..... 7-17  
 Cylinder, Hydraulic, 4 X 126 ..... 7-20  
 Short Bed Frame Assembly ..... 7-21  
 Long Bed Frame Assembly ..... 7-23  
 Frame Mounting Kit (BEFORE 12/16/2022) ..... 7-25  
 Frame Mounting Kit (AFTER 12/16/2022) ..... 7-29  
 Ladder Assembly ..... 7-33  
 Lock Assembly ..... 7-35  
 Bulkhead Assembly, Frame Mount ..... 7-36  
 Lights Bulkhead ..... 7-37  
 Strobe Light ..... 7-41  
 Work Light ..... 7-43  
 Bulkhead Tool Boxes & Panels ..... 7-44  
 Tool Box Assembly 48 x 18 x 18 ..... 7-45  
 Winch Installation, Warn 12K ..... 7-47  
 Winch Components, Warn 12K ..... 7-50

**8 Glossary**

**9 Index**

**10 Instructions for Ordering Parts**





# Introduction and Safety Information

---

This manual provides operating, servicing, and maintenance instructions for HD Loadoll III with Steel Bed, manufactured by Landoll Company, LLC., Marysville, Kansas 66508.

<b>CHAPTER 1</b>	gives basic instructions on the use of this manual and understanding the safety statements.
<b>CHAPTER 2</b>	gives product specifications for the trailer, including measurements and component specifications. A Standard Bolt Torque Table is provided to give guidelines for bolt torques to be used when servicing this product.
<b>CHAPTER 3</b>	gives detailed kit installation instructions along with a list of required tools.
<b>CHAPTER 4</b>	gives instructions for the proper operation of the equipment.
<b>CHAPTER 5</b>	gives general maintenance procedures, a maintenance schedule, and a lubrication schedule. Improper maintenance will void your warranty.
	<b>IF YOU HAVE ANY QUESTIONS CONTACT: LANDOLL COMPANY, LLC. 1900 NORTH STREET MARYSVILLE, KANSAS 66508 PHONE # (785) 562-5381 or (800) 428-5655</b>
<b>CHAPTER 6</b>	is a troubleshooting guide to aid in diagnosing and solving problems with the trailer.
<b>CHAPTER 7</b>	is a Parts Manual showing the various assemblies, sub-assemblies, and systems. Refer to the chapter when ordering Landoll replacement parts. Order parts from your Landoll dealer.
<b>WARRANTY</b>	The Warranty Registration form is included with the product documents. Fill it out and mail it within 10 days of purchase. <b>NOTE: IMPROPER ASSEMBLY, MODIFICATION, OR MAINTENANCE OF YOUR LANDOLL MACHINE CAN VOID YOUR WARRANTY.</b>
<b>COMMENTS</b>	Address comments or questions regarding this publication to: <b>LANDOLL COMPANY, LLC. 1900 NORTH STREET MARYSVILLE, KANSAS 66508 ATTENTION: PUBLICATIONS -DEPT. 55</b>

## Understanding Safety Statements

You will find various types of safety information on the following pages and on the machine signs (decals) attached to the vehicle. This section explains their meaning.

The Safety Alert Symbol means ATTENTION! YOUR SAFETY IS INVOLVED!



### DANGER

**Danger means a life-threatening situation exists. Death can occur if safety measures or instructions on this label are not properly followed.**



### WARNING

**Warning means serious injury or death can occur if safety measures or instructions on this label are not properly followed.**



### CAUTION

**Caution means serious equipment or other property damage can occur if instructions on this label are not properly followed.**

#### NOTE

*Means that failure to follow these instructions could cause damage to the equipment or cause it to operate improperly.*

#### NOTE

*Make sure you read and understand the information contained in this manual and on the machine signs (decals) before you attempt to operate or maintain this vehicle.*

Examine safety decals and be sure you have the correct safety decals.

Order replacement decals through your Landoll dealer.

Keep these signs clean so they can be observed readily. Replace decals that become damaged or lost.



### DANGER

**Do not allow anyone to ride on the machine. Riders could be struck by foreign objects or thrown from the machine. Never allow children to operate equipment. Keep bystanders away from machine during operation.**

## Transporting Safety

#### IMPORTANT

**It is the responsibility of the owner/operator to comply with all state and local laws.**

## Maintenance Safety

- Block the machine so it will not roll when working on or under it to prevent injury.
- Do not make adjustments or lubricate the machine while it is in motion.
- Make sure all moving parts have stopped.
- Understand the procedure before doing the work. Use proper tools and equipment.

## Protective Equipment

- Wear protective clothing & equipment appropriate for the job. Avoid loose fitting clothing.
- Because prolonged exposure to loud noise can cause hearing impairment or hearing loss, wear suitable hearing protection, such as earmuffs or earplugs.

## Prepare for Emergencies

- Keep a First Aid Kit and Fire Extinguisher handy
- Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.

## High Pressure Fluid Safety

Escaping fluid under pressure can be nearly invisible and have enough force to penetrate the skin causing serious injury. Use a piece of cardboard, rather than hands, to search for suspected leaks.

Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

Avoid the hazard by relieving pressure before disconnecting hydraulic lines.

#### NOTE

*Wear protective gloves and safety glasses or goggles when working with hydraulic systems.*

## Safety Precautions

- Diesel and gasoline fuels are toxic and flammable. skin and eye protection is required. good general ventilation is normally adequate. Cap all open fuel containers and fuel systems. Catch and contain all spillage in an approved fuel container. Keep all fuels away from open flame, sparks, friction, and other ignition sources. Failure to properly handle and store fuel may result in serious personal injury or death.
- Welding and cutting operations produce heat, toxic fumes, radiation, metal slag, and carbon particles. welding and cutting goggles (with the proper tinted lenses), gloves, apron or jacket, and welders boots are required. Failure to use proper safety equipment may result in serious personal injury.
- Engine exhaust produces heat and toxic fumes. Use an exhaust evacuation system when operating inside enclosed areas. Failure to provide adequate ventilation will cause serious illness or death. Direct contact with any exhaust system may cause serious personal injury.
- Do not handle the winch cable when the winch is in the engage position. Hands or clothing could get caught in cable and be pulled into the spool causing serious personal injury.
- Never attempt to disengage the winch cable spool when the cable is under tension. The load will be allowed to roll away causing serious injury or death to anyone or anything in the path of the rolling vehicle.
- Both the operator of the Loadoll and passers-by must stay clear of load being winched onto the truck. If the load were to become disconnected from the winch, the load could be allowed to roll away, resulting in serious injury or death to anyone in the path of the load or flying objects.
- All personnel must stay clear of all moving parts while operating the Loadoll. Never get between the truck frame and sub-frame or bed. Interfering with moving truck components or getting between the truck frame and sub-frame or bed could result in serious personal injury or death. Serious injury or death may result if you are under, in front of, or behind the bed, sub-frame, rear bumper, or chassis at any time during operation of the Loadoll. The sub-frame can move 6 inches and the bed can travel an additional 126 inches. Any person or object in the same areas may be damaged, or cause damage to the Loadoll.
- Read and study this manual before attempting to operate the Loadoll improper operation could result in personal injury or death. The Loadoll could roll during operations. Secure the Loadoll from rolling by blocking front and of each wheel.
- The sub-frame can roll until the bumper contacts the ground. Anything under the bumper will be pinned.
- Secure the sub-frame by installing jack stands under the rear bumper until the hydraulics are functional.
- The truck transmission must be in neutral and the parking brake applied when operating the PTO.



# Standard Specifications

---

<b>MODEL LOADOLL III</b>	
<b>BED LENGTH</b>	22', 24', 26', 28' and 30'
<b>LOAD BED HEIGHT*</b>	11" Above Truck Frame
<b>LOAD BED ANGLE*</b>	12-1/2 to 20-1/2 Degrees
<b>BED WIDTH</b>	8' 6"
<b>BED CAPACITY</b>	20,000 lbs. or 30,000 lbs.
<b>SYSTEM</b>	12,000 lbs.
<b>TOW-BAR or WHEEL LIFT OPTION CAPACITY</b>	5,000 lbs.
<b>WINCH WARN</b>	12,000 lbs., 20,000 lbs. or 30,000 lbs.
<b>HYDRAULIC RESERVOIR CAPACITY</b>	35 Gallons
<b>WEIGHT*</b> (of kit only, add your chassis weight for total)	6,800 lbs. to 7,600 lbs.

\*DEPENDS ON THE TIRE SIZE AND MODEL OF TRUCK

**LANDOLL COMPANY, LLC  
GENERAL TORQUE SPECIFICATIONS (REV. 4/97)**

THIS CHART PROVIDES TIGHTENING TORQUES FOR GENERAL PURPOSE APPLICATIONS WHEN SPECIAL TORQUES ARE NOT SPECIFIED ON PROCESS OR DRAWING.  
ASSEMBLY TORQUES APPLY TO PLATED NUTS AND CAPSCREWS ASSEMBLED WITHOUT SUPPLEMENTAL LUBRICATION (AS RECEIVED CONDITION). THEY DO NOT APPLY IF SPECIAL GRAPHITE MOLY-DISULFIDE OR OTHER EXTREME PRESSURE LUBRICANTS ARE USED.  
 WHEN FASTENERS ARE DRY (SOLVENT CLEANED), ADD 33% TO AS RECEIVED CONDITION TORQUE.  
 BOLT HEAD IDENTIFICATION MARKS INDICATE GRADE AND MAY VARY FROM MANUFACTURER TO MANUFACTURER.  
 THICK NUTS MUST BE USED ON GRADE 8 CAPSCREWS.  
 USE VALUE IN [ ] IF USING PREVAILING TORQUE NUTS.

**TORQUE IS SPECIFIED IN FOOT POUNDS**

UNC Size	SAE Grade 2		SAE Grade 5		SAE Grade 8		UNF Size	SAE Grade 2		SAE Grade 5		SAE Grade 8	
1/4-20	4	[5]	6	[7]	9	[11]	1/4-28	5	[6]	7	[9]	10	[12]
5/16-18	8	[10]	13	[16]	18	[22]	5/16-24	9	[11]	14	[17]	20	[25]
3/8-16	15	[19]	23	[29]	35	[43]	3/8-24	17	[21]	25	[31]	35	[44]
7/16-14	24	[30]	35	[43]	55	[62]	7/16-20	27	[34]	40	[50]	60	[75]
1/2-13	35	[43]	55	[62]	80	[100]	1/2-20	40	[50]	65	[81]	90	[112]
9/16-12	55	[62]	80	[100]	110	[137]	9/16-18	60	[75]	90	[112]	130	[162]
5/8-11	75	[94]	110	[137]	170	[212]	5/8-18	85	[106]	130	[162]	180	[225]
3/4-10	130	[162]	200	[250]	280	[350]	3/4-16	150	[188]	220	[275]	320	[400]
7/8-9	125	[156]	320	[400]	460	[575]	7/8-14	140	[175]	360	[450]	500	[625]
1-8	190	[237]	408	[506]	680	[850]	1-14	210	[263]	540	[675]	760	[950]
1-1/8-7	270	[337]	600	[750]	960	[1200]	1-1/8-12	300	[375]	660	[825]	1080	[1350]
1-1/4-7	380	[475]	840	[1050]	1426	[1782]	1-1/4-12	420	[525]	920	[1150]	1500	[1875]
1-3/8-6	490	[612]	110	[1375]	1780	[2225]	1-3/8-12	560	[700]	1260	[1575]	2010	[2512]
1-1/2-6	650	[812]	1460	[1825]	2360	[2950]	1-1/2-12	730	[912]	1640	[2050]	2660	[3325]
1-3/4-5	736	[920]	1651	[2063]	2678	[3347]	1-3/4-12	920	[1150]	2063	[2579]	3347	[4183]

**METRIC**

COARSE THREAD METRIC CLASS 10.9 FASTENERS AND CLASS 10.0 NUTS AND THROUGH HARDENED FLAT WASHERS, PHOSPHATE COATED, ROCKWELL "C" 38-45.  
 USE VALUE IN [ ] IF USING PREVAILING TORQUE NUTS.

Nominal Thread Diameter mm	Standard Torque		Nominal Thread Diameter mm	Standard Torque					
	Newton-Meters	Foot-Pounds		Newton-Meters	Foot-Pounds				
6	10	[14]	7	[10]	20	385	[450]	290	[335]
7	16	[22]	12	[16]	24	670	[775]	500	[625]
8	23	[32]	17	[24]	27	980	[1105]	730	[825]
10	46	[60]	34	[47]	30	1330	[1470]	990	[1090]
12	80	[101]	60	[75]	33	1790	[1950]	1340	[1450]
14	125	[155]	90	[115]	36	2325	[2515]	1730	[1870]
16	200	[240]	150	[180]	39	3010	[3210]	2240	[2380]
18	275	[330]	205	[245]					

**Table 2-1: General Torque Specifications**

**LANDOLL COMPANY, LLC  
HYDRAULIC FITTING TORQUE SPECIFICATIONS  
37° JIC, ORS, & ORB (REV. 10/97)**

THIS CHART PROVIDES TIGHTENING TORQUES FOR HYDRAULIC FITTING APPLICATIONS WHEN SPECIAL TORQUES ARE NOT SPECIFIED ON PROCESS OR DRAWING.

ASSEMBLY TORQUES APPLY TO PLATED CARBON STEEL AND STAINLESS STEEL FITTINGS ASSEMBLED WITHOUT SUPPLEMENTAL LUBRICATION (AS RECEIVED CONDITION). THEY DO NOT APPLY IF SPECIAL GRAPHITE MOLY-DISULFIDE OR OTHER EXTREME PRESSURE LUBRICANTS ARE USED.

BRASS FITTINGS AND ADAPTERS - 65% OF THE TORQUE VALUE FOR STEEL. STAINLESS STEEL, ALUMINUM AND MONEL - THREADS ARE TO BE LUBRICATED.

**TORQUE IS SPECIFIED IN FOOT POUNDS**

**PARKER BRAND FITTINGS**

Dash Size	37 Degree JIC	O-Ring (ORS)	O-Ring Boss (ORB)
-4	11-13	15-17	13-15
-5	14-16	—	21-23
-6	20-22	34-36	25-29
-8	43-47	58-62	40-44
-10	55-65	100-110	57.5-62.5
-12	80-90	134-146	75-85
-16	115-125	202-218	109-121
-20	160-180	248-272	213-237
-24	185-215	303-327	238-262
-32	250-290	—	310-340

**GATES BRAND FITTINGS**

Dash Size	37 Degree JIC	O-Ring (ORS)	O-Ring Boss (ORB)
-4	10-11	10-12	14-16
-5	13-15	—	—
-6	17-19	18-20	24-26
-8	34-38	32-40	37-44
-10	50-56	46-56	50-60
-12	70-78	65-80	75-83
-14	—	65-80	—
-16	94-104	92-105	111-125
-20	124-138	125-140	133-152
-24	156-173	150-180	156-184
-32	219-243	—	—

**AEROQUIP BRAND FITTINGS**

Dash Size	37 Degree JIC	O-Ring (ORS)	O-Ring Boss (ORB)
-4	11-12	10-12	14-16
-5	15-16	—	18-20
-6	18-20	18-20	24-26
-8	38-42	32-35	50-60
-10	57-62	46-50	72-80
-12	79-87	65-70	125-135
-14	—	—	160-180
-16	108-113	92-100	200-220
-20	127-133	125-140	210-280
-24	158-167	150-165	270-360
-32	245-258	—	—

**Table 2-2: Hydraulic Fitting Torque Specifications**





# Kit Installation

---

This manual has been written for the installation of a LOADOLL III kit onto trucks capable of handling rated bed capacity. Any modification of the LOADOLL III kit as designed by LANDOLL COMPANY, LLC may affect performance, operation, **AND SAFETY!** The truck must meet the requirements of LANDOLL ENGINEERING specifications LES-311-002. The kit shall be installed according to this manual and installation drawing 3-410-011225. Make sure the latest revision level of 3-410-011225 is obtained from the LANDOLL ENGINEERING DEPARTMENT before installation. The LANDOLL LOADOLL III is a quality product designed to give years of trouble-free performance. By following each step in this manual, your unit will look and perform as designed for you and your business.

## Tools and Supplies Required for Installation

1. TIRE PRESSURE GAUGE
2. BASIC SET OF HAND TOOLS
3. TAPE MEASURE
4. PLASTIC TARP
5. FIRE EXTINGUISHER (suitable to be used on fuels)
6. APPROVED, PROPERLY LABELED FUEL CONTAINER
7. FRAMING SQUARE
8. (6) ADJUSTABLE JACK STANDS
9. CUTTING TORCH
10. PORTABLE HAND GRINDER
11. WELDER AND SAFETY SUPPLIES FOR WELDING
12. E-7018 WELDING ROD.OR EQUIVALENT WIRE
13. MISC. C-CLAMPS
14. BLACK ENAMEL AUTOMOTIVE PAINT
15. ELECTRICAL WIRING PLIERS/TERMINAL CRIMPER
16. TWIST DRILL AND BITS (1/8" through 3/4")
17. POP RIVET GUN
18. MEANS TO LIFT 3000 LB. SUB-FRAME AND POSITION ON TRUCK FRAME
19. MEANS TO LIFT AND SLIDE THE BEDS THAT WEIGH BETWEEN 3000 LB. (19FT. X 102" wide) AND 3700 LB. (30FT.X 102" wide) ONTO THE SUB-FRAME.
20. 35 GALLON HYDRAULIC OIL (AMOCO RYCON MV or equivalent)

### **NOTE**

*All welding must be done in accordance with the American Welding Standard (AWS) D1.1 Using E-7018 Welding Rod or Equivalent Wire.*

## Chassis Inspection

1. Position chassis on a solid, level work area.
2. INSPECT THE CHASSIS TIRES FOR THE FOLLOWING CONDITONS:
  - a. All tires on the same axle must be of the same size.
  - b. All tires are properly inflated to the recommended pressures. All tires of the same axle must have equal pressures.
3. INSPECT THE CHASSIS FRAME AS DETAILED BELOW:
  - a. Check both frame rails and all frame cross members for visible damages or rust. Any frame damage must be corrected before modification begins.
  - b. Check the frame for being square. Measure diagonally from the front of one side to the of the other side. Locate measurements off of cross member rivets. **See Figure 3-1.** Record both diagonal measurements below. Both measurements must be within 1/4" of each other.
 

Diagonal A \_\_\_\_\_ inches.

Diagonal B \_\_\_\_\_ inches.
  - c. Check the frame height (ride height). Measure the distance between the frame and the ground on each side of the chassis at 3 check points; (A) just in front of the front axle, (B) 12 inches behind the cab, and (C) just behind the mounting bracket of the rear axle springs. The measurement of both frames at the same check point must be within 1/4" of each other. **See Figure 3-1.** If any of the above frame checks fail, have the chassis checked and corrected by a qualified chassis technician before proceeding.
4. Check to make sure chassis meets Landoll specifications LES-311-002. If the chassis does not meet these specifications, make necessary changes to meet specifications before proceeding.

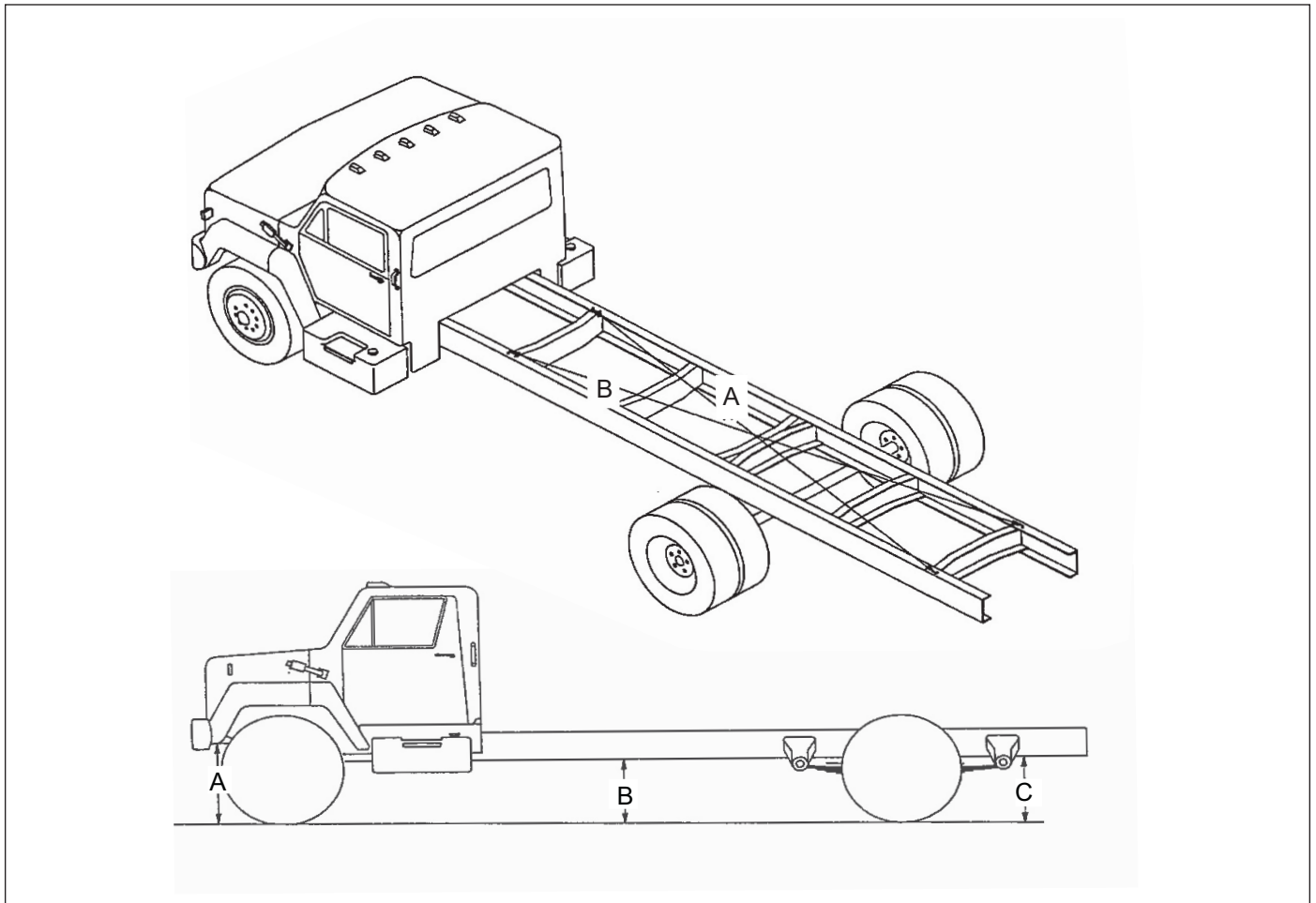


Figure 3-1: Chasis Inspection

## Chassis Modification

1. When welding next to fuel tanks, drain and remove fuel tanks and store in a safe place to prevent a chance of a fire or explosion.
2. Disconnect the chassis wiring harness from the tail light harness at the rear of the truck frame.
3. Disconnect wiring harness from truck frame from the rear of the frame up to the rear axle and roll it up to protect it for later use.
4. Cut the frame off behind the rear axle according to installation drawing 3-410-011225.
5. Grind the frame smooth and square where each cut was made.

## Installing Sub-Frame, Bed and Bulkhead

1. Center the sub-frame on top of the truck frame. At the rear end, there shall be at least 11/16" gap between the top of the truck frame and the bottom of the 4" x 6" SQ. tubes on the sub-frame. *See Figure 7-1.*
2. Weld sub-frame to truck frame per install drawing. Add frame gussets between sub-frame and truck frame. Locate and install front tilt cylinder cross member by welding it together inside the truck frame.
3. Make the welds to the sub-frame at least as thick as the thinnest material being welded, using E7018 or equivalent welding wire.
4. Slide the bed onto the rear of the sub-frame starting with the front of the bed at the of the sub-frame. The bottom flange of the bed will slide in between sub-frame and truck frame. Slide the bed onto within 10" of the of the cab. Pin the bed cylinder anchor to the bed cylinder then slide the bed until the holes in the cylinder anchor line up to the nearest holes in the anchor plate on the bed. Bolt the cylinder anchor on with 6 each, 5/8" bolts. *See Figures 7-12 and 7-14.*
5. Mount bulkhead on the truck frame so the ears on the bulkhead fit tight into the slots in front of the beds main beams with the bed within 1/16" of all the way forward. A spacer plate will probably be required between the top of the truck frame and the bottom of the bulkhead to make sure the ears fit properly in the slots. The bulkhead will have an anchor plate with four holes in it and a flat bar welded to the bulkhead. The anchor plate will then bolt to the truck frame. *See Figure 7-22* for detailed location.
6. Mount the flex track, attached to the sub-frame, to the bottom of the bed on the mounting plate provided. With the bed all the way forward, mount the track as far forward on the bed as possible.

## Hydraulic Installation

1. When installing hydraulic plumbing, install trim-lock on all sharp edges that hydraulic hoses contact.
2. Tie wrap hoses to non-moving parts to avoid contact with sharp, abrasive or moving objects.
3. **DO NOT USE TEFLON TAPE or THREAD SEALANT!**
4. The Landoll supplied PTO is selected based on the transmission data supplied on the sales order.
5. Kits ordered for vehicles with standard transmissions will have a PTO to be mounted directly on the transmission. The hydraulic pump is intended to be mounted directly on the PTO. The pump can be jack shaft mounted if necessary. If this is chosen, the jack shaft end which mates with the pump will have to be equipped with a spline compatible with pump.
6. Every Landoll supplied PTO is shipped with a PTO mounting booklet, which serves as guide for installation. Follow the PTO instructions exactly and you will be assured of proper installation.
7. Mount the PTO without the hydraulic pump attached. This will allow you to check the PTO for noise without operation of the pump.
8. Refill the transmission with clean, approved lubricant after the PTO installation is complete.
9. Start the vehicle engine and operate the PTO briefly to check for unusual noise.
10. Check the engage and disengage of gear shifting functions. The PTO shaft should rotate when in gear, and stop rotating when the PTO is shifted to the neutral position. If everything checks out properly, continue. If noise or shifting problems exist, correct before installing pump.
11. The hydraulic pump mounts directly to the PTO The pump is BI-ROTATIONAL. Some PTO's rotate clockwise and some rotate counter-clockwise. To determine which port on the pump is the pressure port and which port is the suction port, after the pump is mounted to the PTO, engage PTO and operate for a second while your hand is covering a port. If your hand is sucked toward the port, the port is the suction port. If your hand is pushed away from the port, the port is the pressure port. **DO NOT PUT FINGER INTO PORT.**

**NOTE**

*Do not operate the PTO for more than a second if the pump is attached and dry. Operating the pump for more than a second dry will cause permanent damage to the pump, affect hydraulic system performance, and cause possible damage to other hydraulic components.*

## Hydraulic Plumbing

1. The hydraulic tank is mounted directly to the right side frame rail.
2. Landoll hydraulic tanks are cleaned and preserved before shipping. Contaminants can enter the tank during shipping and handling. Clean hydraulic tank out thoroughly by sweeping the inside with a magnet and flushing with clean hydraulic oil.
3. If breather cap/strainer assembly is not already installed, install the breather cap/strainer assembly by inserting strainer into the tank with a gasket between. Place the second gasket on the strainer flange and then the cap, securing flange on top. Align all 6 holes and secure to the tank with 6 screws provided with the kit.
4. Assemble the hydraulic oil filter and attaching components. **See Figure 7-9.**
5. Install hydraulic suction, pressure, and return lines accordingly.
6. Route the hydraulic winch hose from valve through the flex track to winch hydraulic tubes on bed. Tie wrap hoses up so they do not catch on anything.
7. Fill the hydraulic reservoir. Cycle all cylinders and motors to remove air from the system. Add hydraulic fluid as required. Normal oil level is 1" below the top of the hydraulic tank when all cylinders are retracted.

## Operations

This section supplies information for operation of the Loadoll. It describes and locates controls and gives general operation procedures. Read all instructions, warnings, cautions and danger notes before attempting to operate the carrier. Operators must have proper training before operating the carrier.

Do not operate your Loadoll until a complete inspection has been performed. A defect may cause personal injury, damage to your Loadoll, or time consuming down time. Operation of your Loadoll is easy, efficient, and dependable if installation was done properly. The engine must be running and the PTO engaged before any controls will become functional. Some units require turning on the clearance lights to get power to the remote hydraulic control.

**! DANGER**

**Serious Injury or Death May Result if a Person is Under, in Front of, or Behind: The Bed, Sub-frame, Rear Bumper, or Chassis at any time during operation of the Loadoll. The Sub-frame can swing up and the bed can travel back 126" for 22' and 24' beds and 150" inches for 26', 28' and 30' beds any object in the same areas may be damaged, or cause damage to the Loadoll.**

**! WARNING**

**Do Not Operate the Loadoll with any known fault that might endanger the occupants, nearby workers, other traffic, the load, or the equipment.**

**! WARNING**

**Do Not Operate the Loadoll until you have read the Operator's Manual and completely understand the proper use and function of all controls. Improper use can cause personal injury, Damage to your Semi -Trailer and Cargo, and cause time consuming breakdowns.**

**! CAUTION**

**Do Not Handle the Winch Cable When the Winch is in the Engage Position. Hands or Clothing Could Get Caught In Cable and Causing Serious Personal Injury.**

## Winch Control Levers

### Free Spool Clutch Operation (Warn Winch)

Warn Series XL winches are equipped with either a manual or air operated Free Spool Clutch depending on the model.

1. The Manual Free Spool Clutch is operated by depressing the detent latch and turning the Winch Clutch Handle located on the winch gearbox housing as indicated on the winch label.
2. The Air Free Spool Clutch is operated by a Palm Button Valve that supplies/releases air pressure to/from the winch gearbox housing. It requires 50-120 psi (245-827 Kpa) of air pressure to disengage the free spool clutch. The Winch Free Spool Palm Button is located on the front streetside of the bed near the winch, See Figure 4-1.

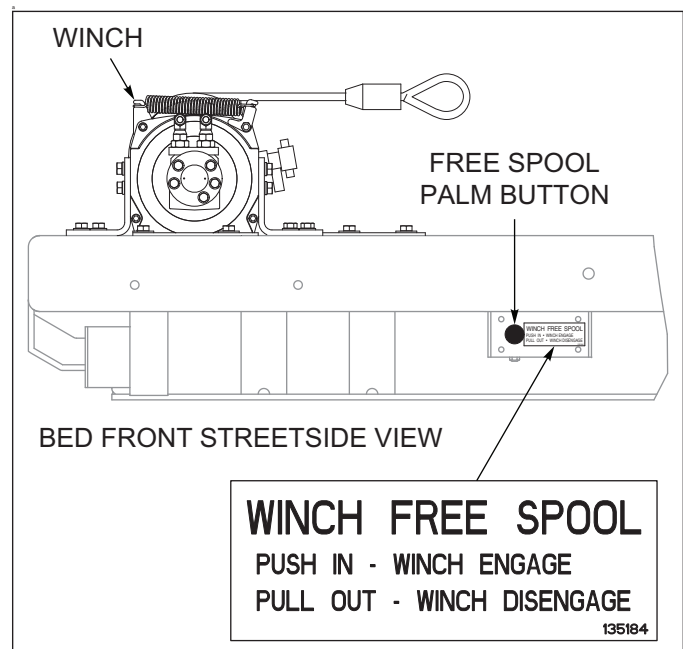


Figure 4-1: Free Spool Palm Button

PALM CONTROL BUTTONS	
<b>PUSH IN ENGAGE</b>	Pushing in on the Button will exhaust air pressure from the winch assembly and engage the clutch for hydraulic operation.
<b>PULL OUT DISENGAGE</b>	Pulling out on the Button will supply air pressure to the winch assembly to disengage the clutch.

**! DANGER**

1. The Winch is not designed or intended to be Used For Lifting Or Moving People. Using it this way can cause serious injury or death.
2. Serious Injury or Death may result if a person is under or in the path of item(s) being loaded, unloaded, or secured. Any object in the same areas may be damaged, or cause damage to the Loadoll.
3. Make certain the Winch Free Spool Clutch is set to engage and clutch is fully engage before load tension is applied to winch cable. Never attempt to disengage the Winch Free Spool when the cable is under tension. Loss of load control, property damage, injury or death can result.
4. Failure to leave at least five winch cable wraps on the winch cable spool could allow the cable to come off the spool, resulting in serious personal injury or death.

**! CAUTION**

A Minimum of 5 wraps of cable must be left on the winch drum. See Figure 4-2.

**Winch Control Levers**

The Hydraulic Winch Control Levers are located on both sides of the bed behind axles mounted on the bed sub-frame. They control the direction of rotation of the winch drum, See Figure 4-5.

WINCH CONTROL LEVER	
<b>IN- PUSH</b>	This will allow the winch to reel cable on to the winch drum when the winch clutch handle is engaged.
<b>CENTER</b>	This is the neutral position. The winch drum should not move in this position.
<b>OUT-PULL</b>	This will allow the winch to reel cable off of the winch drum when the winch is engaged.

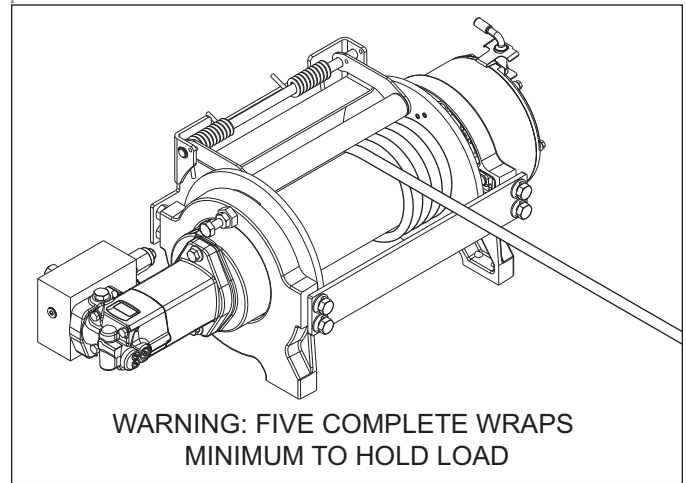


Figure 4-2: Winch

**Tilt Control Levers**

**! DANGER**

1. ALWAYS check behind and under the truck for persons and objects before moving. Failure to check can lead to serious personal injury or death to others, or damage to property.
2. To prevent serious injury or death from pinching: Keep all persons and objects clear while any part of the machine is in motion.
3. DO NOT Tilt Up until the bed has been moved back to gain clearance between the bed and bulkhead area. Failure to comply can lead to serious personal injury or death to others, or damage to property.

The Tilt Control Levers are located on both sides of the bed behind axles mounted on the bed sub-frame. They control the front of the bed and bed sub-frame assembly's up and down movement. See Figure 4-5.

TILT CONTROL LEVER	
<b>IN- PUSH</b>	This will allow the front of the bed assembly to raise up.
<b>CENTER</b>	This is the neutral position. The bed assembly should not move in this position.
<b>OUT-PULL</b>	This will allow the front of the bed assembly to lower down.



## Bed Control Levers

**! DANGER**

1. ALWAYS check behind and under the truck for persons and objects before moving. Failure to check can lead to serious personal injury or death to others, or damage to property.
2. To prevent serious injury or death from pinching: Keep all persons and objects clear while any part of the machine is in motion.
3. DO NOT move bed until the Hitch/Stabilizer has been position to support overhanging weight. Failure to comply can lead to serious personal injury or death to others, or damage to property.

The Bed Control Levers are located on both sides of the bed behind axles mounted on the bed sub-frame. They control the off/backward and on/forward movement of the bed and sub-frame assembly, See Figure 4-5.

BED CONTROL LEVER	
IN- PUSH	This will allow the bed assembly to move back off the truck frame.
CENTER	This is the neutral position. The bed assembly should not move in this position.
OUT-PULL	This will allow the bed assembly to move forward on to the truck frame.

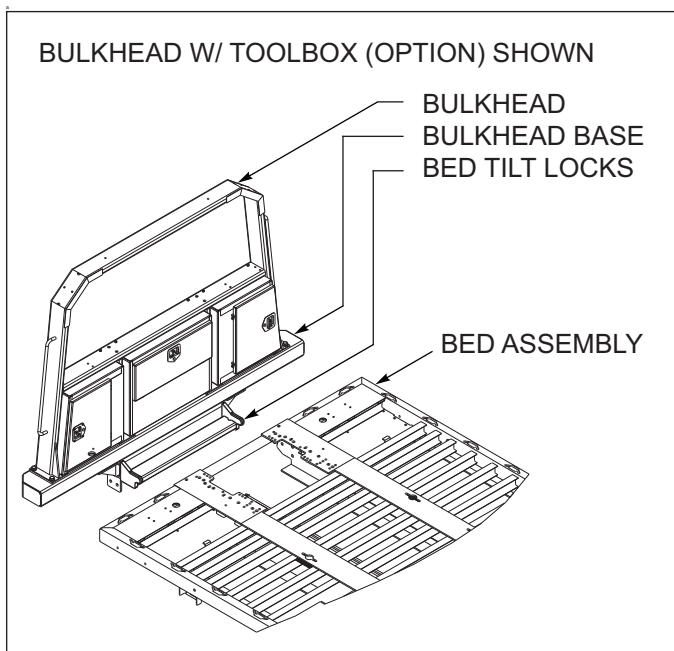


Figure 4-3: Bed and Bulkhead Assembly

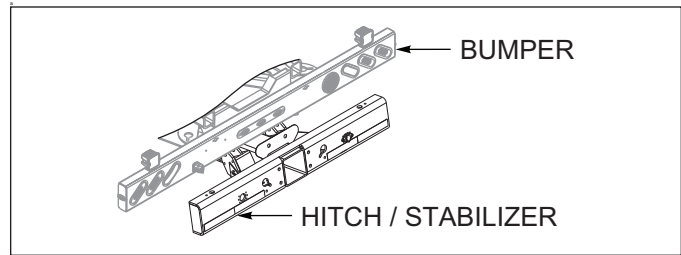


Figure 4-4: Hitch Assembly

## Hitch Up / Down Control Levers (Stabilizer)

**! DANGER**

1. ALWAYS check behind and under the truck for persons and objects before moving. Failure to check can lead to serious personal injury or death to others, or damage to property.
2. To prevent serious injury or death from pinching: Keep all persons and objects clear while any part of the machine is in motion.
3. DO NOT move bed until the Hitch/Stabilizer has been position to support overhanging weight. Failure to comply can lead to serious personal injury or death to others, or damage to property.
4. ALWAYS use the Hitch/Stabilizer during ANY loading and unloading procedures to not allow the truck and bed assembly to become unstable and lose contact with the ground. Failure to comply can lead to serious personal injury or death to others, or damage to property.

The Hitch Up/Down Control Levers are located on both sides of the bed behind axles mounted on the bed sub-frame. They control the up and down movement of the hitch/stabilizer assembly, See Figure 4-5. The hitch/stabilizer assembly provides support to the rear structure of the truck to prevent loss of ground contact of the trucks front wheels.

HITCH UP / DOWN CONTROL LEVER	
IN- PUSH	This will allow the hitch/stabilizer assembly to raise up.
CENTER	This is the neutral position. The hitch/stabilizer assembly should not move in this position.
OUT-PULL	This will allow the hitch/stabilizer assembly to lower down.



## Hitch In / Out Control Levers (Option)

**DANGER**

1. **ALWAYS** check behind and under the truck for persons and objects before moving. Failure to check can lead to serious personal injury or death, or damage to property.
2. To prevent serious injury or death from pinching: Keep all persons and objects clear while any part of the machine is in motion.
3. **ALWAYS** make sure the bed assembly is fully down and fully forward in the tilt locked position maximizing space between the bed assembly and towed vehicle. Failure to comply may result in serious personal injury or death, or damage to property.

The Hitch In/Out Control Levers (Option) are located on both sides of the bed behind axles. They control the retracting in and extending out movement of the telescoping hitch assembly, **See Figure 4-5.**

HITCH IN / OUT CONTROL LEVER (OPTION)	
<b>IN- PUSH</b>	This will allow the telescoping hitch assembly to retract in.
<b>CENTER</b>	This is the neutral position. The telescoping hitch assembly should not move in this position.
<b>OUT-PULL</b>	This will allow the telescoping hitch assembly to extend out.

## Power Take-Off (PTO)

The PTO control is located in the chassis cab. When the PTO is engaged, engine powers a high pressure hydraulic pump, thus providing power to the hydraulic controls.

### IMPORTANT

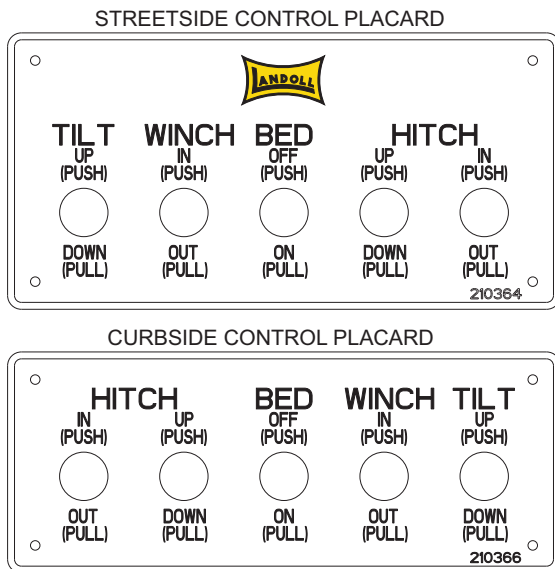
**Most Truck Transmissions must be in Neutral and Park Brake applied when operating the PTO. Follow Instructions provided by PTO Manufacturer.**

### IMPORTANT

**Never Transport with the PTO Control Engaged. Extensive Damage may result to the Chassis Transmission, PTO Unit, Hydraulic Pump, and other components.**

### IMPORTANT

**Do Not Exceed 1500 Engine RPM with the PTO Engaged. Pump and Hydraulic System Components will be Adversely Affected by Higher RPM's.**



**Figure 4-5: Load Control Placards**

## Bed Off Operation



### DANGER

1. **ALWAYS** check behind and under the truck for persons and objects before moving. Failure to check can lead to serious personal injury or death to others, or damage to property.
2. To prevent serious injury or death from pinching: Keep all persons and objects clear while any part of the machine is in motion.
3. **ALWAYS** use the Hitch/Stabilizer during ANY loading and unloading procedures to support the overhanging weight. If not used, will cause the truck and bed assembly to become unstable and lose contact with the ground. Failure to comply can lead to serious personal injury or death to others, or damage to property.
4. **ALWAYS CENTER WEIGHT** of an empty or loaded bed over the rear axle's center before tilting up or down. Overhanging weight may cause the truck and bed assembly to become unstable and lose contact with the ground. Failure to comply can lead to serious personal injury or death to others, or damage to property.
5. **DO NOT TILT UP** the bed until it has been moved backwards off to gain clearance between the bed and bulkhead area. Failure to comply can lead to serious personal injury or death to others, or damage to property.



### WARNING

1. Before operating: **DO NOT** exceed the gross axle weight ratings for on your vehicle. The combined weight of truck and cargo must not exceed the gross vehicle weight rating (GVWR).
2. **DO NOT** secure load until the bed is in transport position. Items may get wedged and bind during bed movement. Failure to do so may result in serious injury or death, or damage to property.

1. Practice all standard industrial safety standards. **DO NOT** overload any component of the truck or cause an unsafe condition.
2. Position the truck bed in line with the item being loaded.

3. Back the truck up to the load. Maintain a minimum of 10 feet (120 inches) to allow for bed movement.
4. Shift the truck transmission into neutral and set parking brake.

### IMPORTANT

**Do Not Exceed 1500 Engine RPM with the PTO Engaged. Pump and Hydraulic System Components will be Adversely Affected by Higher RPM's.**

5. Shift the PTO into gear. Follow the PTO Manufacturer's instructions.
6. Set Truck Throttle Control to 1,000 RPM's
7. Pull the HITCH DOWN Control Lever to lower the Hitch/Stabilizer to about 6 inches off the ground. **See Figure 4-6 Image 1.**
8. Push the BED OFF Control Lever to move the bed backward enough to clear the Bed Tilt Locks and bulkhead assembly. **See Figure 4-6 Image 2.**
9. Push the TILT UP Control Lever to raise the front of the bed and allow the Hitch/Stabilizer to rest on the ground. This will allow the sub-frame to be supported in the front and back. **See Figure 4-6 Image 3.**



### DANGER

**ALWAYS CENTER WEIGHT** of an empty or loaded bed over the rear axle's center before tilting up or down. Overhanging weight may cause the truck and bed assembly to become unstable and lose contact with the ground. Failure to comply can lead to serious personal injury or death to others, or damage to property.

10. Push the BED OFF Control Lever to move the bed backward until the empty bed or load is centered over the rear axle. **See Figure 4-6 Image 4.**



### DANGER

**ALWAYS** use the Hitch/Stabilizer during ANY loading and unloading procedures to support the overhanging weight. If not used, will cause the truck and bed assembly to become unstable and lose contact with the ground. Failure to comply can lead to serious personal injury or death to others, or damage to property.

### IMPORTANT

**The truck's front tire may leave the ground if the Hitch/Stabilizer is raised too high during movement.**

11. Raise the front of the bed to 10 degrees. Alternate between the HITCH UP and TILT UP Control Levers to raise the front of the bed to the load angle. Observe the truck's front tires and adjust the Hitch/Stabilizer as needed to maintain support. Use the rear angle of the bed frame as a reference point, should be parallel to the ground. **See Figure 4-6 Image 5.**
12. Push the BED OFF Control Lever to move the bed backward just before contact with the ground. Fine tune the load angle by alternating between the HITCH and TILT Control Levers. Once angle is obtained, rest the bed on the ground. **See Figure 4-6 Image 6.**

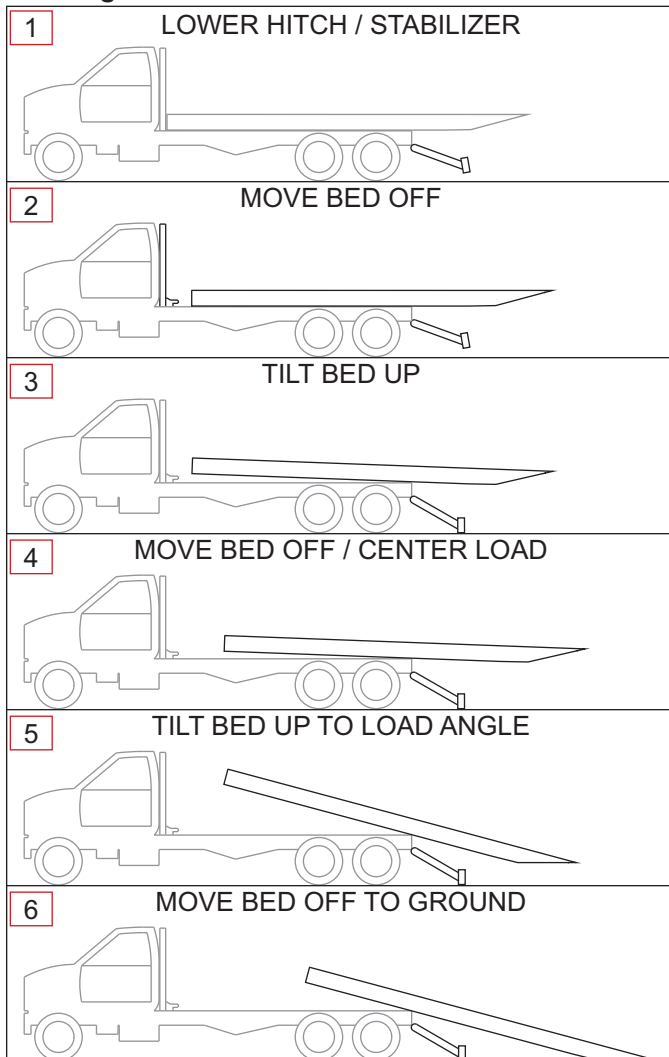


Figure 4-6: Bed Unloading

## Bed On Operation

### DANGER

1. **ALWAYS** check behind and under the truck for persons and objects before moving. Failure to check can lead to serious personal injury or death to others, or damage to property.
2. To prevent serious injury or death from pinching: Keep all persons and objects clear while any part of the machine is in motion.
3. **ALWAYS** use the Hitch/Stabilizer during ANY loading and unloading procedures to support the overhanging weight. If not used, will cause the truck and bed assembly to become unstable and lose contact with the ground. Failure to comply can lead to serious personal injury or death to others, or damage to property.
4. **ALWAYS** CENTER WEIGHT of an empty or loaded bed over the rear axle's center before tilting up or down. Overhanging weight may cause the truck and bed assembly to become unstable and lose contact with the ground. Failure to comply can lead to serious personal injury or death to others, or damage to property.
5. **DO NOT** TILT UP the bed until it has been moved backwards off to gain clearance between the bed and bulkhead area. Failure to comply can lead to serious personal injury or death to others, or damage to property.

### WARNING

1. Before operating: **DO NOT** exceed the gross axle weight ratings for on your vehicle. The combined weight of truck and cargo must not exceed the gross vehicle weight rating (GVWR).
2. **DO NOT** secure load until the bed is in transport position. Items may get wedged and bind during bed movement. Failure to do so may result in serious injury or death, or damage to property.

1. Practice all standard industrial safety standards. **DO NOT** overload any component of the truck or cause an unsafe condition.
2. Shift the truck transmission into neutral and set parking brake.

**IMPORTANT**

**Do Not Exceed 1500 Engine RPM with the PTO Engaged. Pump and Hydraulic System Components will be Adversely Affected by Higher RPM's.**

3. Shift the PTO into gear. Follow the PTO Manufacturer's instructions.
4. Set Truck Throttle Control to 1,000 RPM's



**DANGER**

**ALWAYS use the Hitch/Stabilizer during ANY loading and unloading procedures to support the overhanging weight. If not used, will cause the truck and bed assembly to become unstable and lose contact with the ground. Failure to comply can lead to serious personal injury or death to others, or damage to property.**

**IMPORTANT**

**The truck's front tire may leave the ground if the Hitch/Stabilizer is raised too high during movement.**

5. Ensure the Hitch/Stabilizer is firmly on the ground. Pull the HITCH DOWN Control Lever just enough to apply a little force onto the ground.

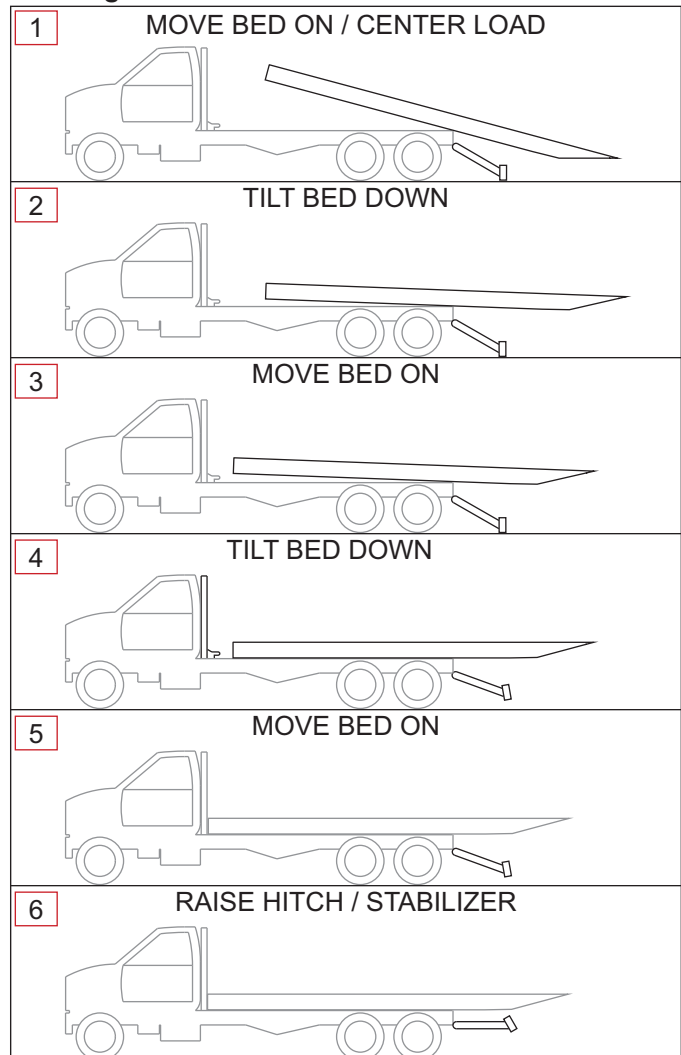


**DANGER**

**ALWAYS CENTER WEIGHT of an empty or loaded bed over the rear axle's center before tilting up or down. Overhanging weight may cause the truck and bed assembly to become unstable and lose contact with the ground. Failure to comply can lead to serious personal injury or death to others, or damage to property.**

6. Pull the BED ON Control Lever to move the bed forward until the empty bed or load is centered over the rear axle. **See Figure 4-7 Image 1.**
7. Pull the TILT DOWN Control Lever to lower the front of the bed, DO NOT rest bed on truck frame, leave around 3 inches above the truck frame. This will allow the tilt cylinders to maintain support of the bed assembly. Alternate between the TILT DOWN and HITCH DOWN Control Levers to lower the bed from the load angle. Observe the truck's front tires and adjust the Hitch/Stabilizer as needed to maintain support. **See Figure 4-7 Image 2.**
8. Pull the BED ON Control Lever to move the bed forward until it is within 1 foot (12 inches) of the Bed Tilt Locks and bulkhead assembly. **See Figure 4-7 Image 3.**
9. Pull the TILT DOWN Control Lever and fully lower the bed assembly onto the truck frame. **See Figure 4-7 Image 4.**

10. Pull the BED ON Control Lever to move the bed fully forward to engage the Bed Tilt Locks. **See Figure 4-7 Image 5.**
11. Push the HITCH UP Control Lever to fully raise the Hitch/Stabilizer into travel position. **See Figure 4-7 Image 6.**



**Figure 4-7: Bed Loading**

**Load Placement**

In most situations, the load is to be placed as far forward on the bed as possible and centered from side to side. If your load is confined to a small area (such as crated item at the weight limit), position so 10% of the load transfers to the front axle, and 90% of the load on the rear axle.

Containers usually overhang the rear of the bed 16" so they are easier to remove from bed unless it overloads the truck axles by doing so.

## Securing Loads to Bed



### WARNING

1. **DO NOT** exceed the gross axle weight ratings for on your vehicle. The combined weight of truck and cargo must not exceed the gross vehicle weight rating (GVWR).
2. **DO NOT** secure load until the bed is in transport position. Items may get wedged and bind during bed movement. Failure to do so may result in serious injury or death, or damage to property.

All vehicles, machinery, crated goods, or loose parts must be securely tied down to the bed of the Loadoll. Key Holes that are provided in front and rear of the bed to anchor chain.

The front sides and rear of the load must be secured to the front and to the rear of the bed. Do not rely on the winch to secure the load to the bed per Cargo Securement Regulations.

Do not allow any slack in the hold down chains. Slack will allow load to shift. A shifting load will create sufficient momentum to break chains. Remove chain slack by using chain boomers, or other slack adjusters designed to be used for securing loads.

## Hitch Operation (Option)

This section is intended to provide safe, efficient operating instructions for the Loadoll Hitch. Read all instructions carefully before operating the hitch. Safety precautions are included to alert you to possible hazardous conditions. Be sure to read and understand all instructions completely before operating the hitch.



### DANGER

**Never attempt to carry more than specified of load limits on the hitch. Always maintain at least fifty percent (or one half) of the truck's original front axle weight when the hitch is loaded. Failure to maintain the proper weight ratio or attempting to carry more than 3,000 pounds on the hitch may result in loss of control of the vehicle resulting in damage to the Loadoll, the hitch, and/or the towed vehicle. serious personal injury or death may also result if loss of control over the Loadoll is experienced.**



### DANGER

**Never crawl under the truck or towed vehicle during Hitch Operations. Never crawl under the hitch at any time. Failure to comply may result in serious personal injury or death.**



### WARNING

**Never stand between the truck and the towed vehicle. standing between the truck and the towed vehicle may result in serious personal injury**

## Vehicle Towing

1. Back the Loadoll to directly in front of the vehicle to be towed, leaving a minimum of 6 feet between the two vehicles. Set the parking brake on the truck.
2. Set the Hitch to Towing Position.

### IMPORTANT

**The Truck Bed should remain in the forward position for the entire Hitch Operation.**

3. Adjust the Hitch Up or Down or Out to mate with the towed vehicle.
4. Make proper connections to the towed vehicle.
5. Do not exceed the towing limits listed on the standard specifications page at the front of this manual.
6. Connect breakaway cables and electrical connections as required.
7. Adjust Hitch Height so the towed vehicle is level.



### CAUTION

**Uneven roads, dips, bumps, and ramps should be avoided when ever possible. Never exceed ten miles per hour when one of these, or similar obstacles must be encountered. Proceed slowly while stopping occasionally to check the position of the towed vehicle. It may be necessary to raise or lower the hitch slightly to clear one of these type obstacles. Failure to exercise these cautions when encountering these types of obstacles may result in loss of the towed vehicle from the hitch resulting in damage to the hitch and/or the towed vehicle.**

8. Check to make sure the towed vehicle is ready to be towed, such as lifting support jacks and removing wheel chocks.
9. Retract the hitch as much as possible leaving enough clearance between the truck and the towed vehicle



that the towed vehicle will not interfere with the trucks cornering capabilities.

10. Attach safety chains from the towed vehicle to Loadoll.

## Vehicle Disconnection

1. Locate the towed vehicle in an open, level area. Apply the Loadoll's parking brakes. Disconnect safety chains and place back in storage compartment. Remove breakaway and electrical connections.
2. Lower jack and/or other supports required when vehicle is to be disconnected.

### IMPORTANT

The bed of the Loadoll should remain in the fully forward position for the entire Hitch Operation.

3. Chock the wheels of the towed vehicle so it will not roll.
4. Lower the hitch so the towed vehicle is supported by the support jacks.
5. Move the hitch in or out to relieve any pressure from the hitch. Disconnect hitch.
6. Adjust hitch so it clears when Loadoll is pulled ahead.
7. Move the Loadoll forward if there is not enough room to lift the hitch.
8. Raise the hitch to a horizontal position, making sure that the rear lights of the Loadoll are not obstructed.
9. Retract the hitch all the way and make sure the Loadoll is ready to go down the road.

Some hitches need to have the end rotated forward before the Loadoll can be tilted to the ground so the hitch does not hit the ground.

## Remote Control (Option)

A wireless six function radio remote control is available **See Figure 4-8.** The wireless radio remote has six momentary push button switches that operate the functions as labeled on the hand held remote.

Most units have the optional remote control that can be used to control the first three hydraulic controls. Some units require the clearance lights to be turned on to provide power to the remote. Other units provide power to the remote when the PTO is engaged.

If the remote does not operate after PTO is engaged, turn the clearance lights on. Slide bed back enough so that bed comes out of bed hold downs using the bed slide (bed) controls.

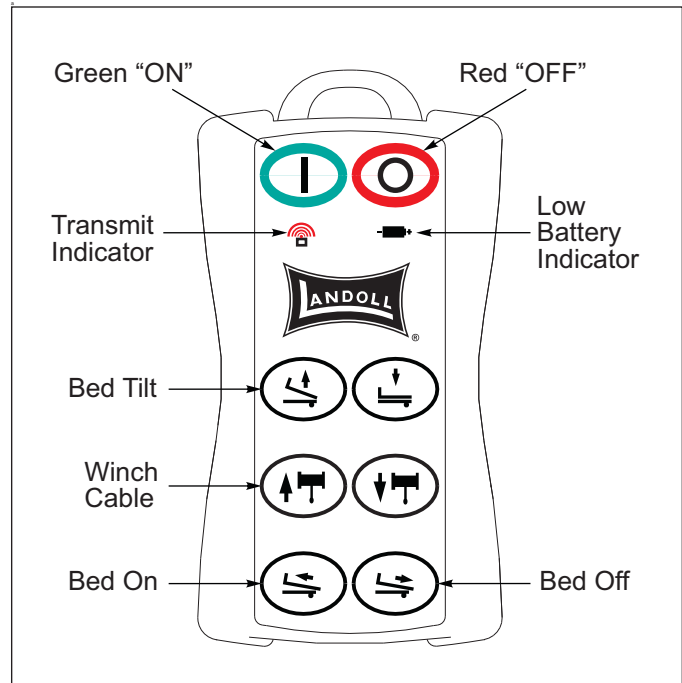


Figure 4-8: Remote Control Transmitter

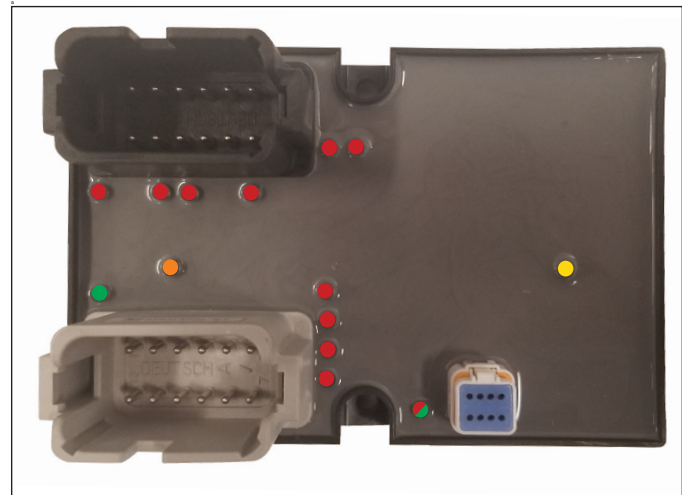


Figure 4-9: LED Indicator Lights

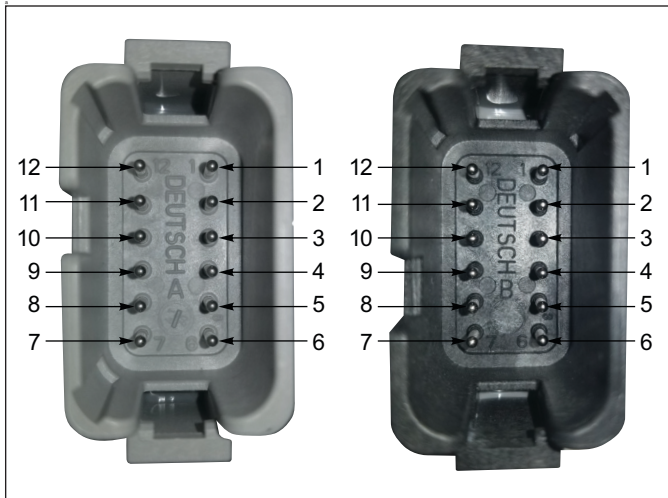
### TO OPERATE THE REMOTE:

1. Press and hold the POWER button for at least 2 seconds and release.
2. There are multiple LEDs on the back of the sealed body on the transmitter. Each LED corresponds to a proper function or a fault. **See Page 6-5** for troubleshooting faults.

### SYNCHRONIZING TRANSMITTER TO RECEIVER

1. Power cycle the receiver OFF and then ON.
2. On the Transmitter press and hold the Red OFF button. At the same time, press and hold the Green

- ON button for approximately 10 seconds.
3. The synchronizing sequence must be done within 10 seconds or the process will need repeated.
  4. The wireless activity LED indicator should flash Orange 3 (three) times for a successful pair.
  5. A hard reset can be performed on the transmitter by holding the Red OFF button for 15 seconds. This will clear the connection between the receiver and transmitter.



**Figure 4-10: Deutsch A and B Pin Locations**

For additional remote information, reference the **“Brand Hydraulics - Wireless Hydraulic Control System, Installation and Operation Manual”** shipped with the remote.

## Cold Weather Operation

Cold weather causes lubricants to congeal, insulation and rubber parts to become hard, which may lead to problems found in bearings, electrical systems, and air systems. Moisture attracted by warm parts can condense, collect and freeze to immobilize equipment. The vehicle operator must always be alert for indicators of cold weather malfunctions.

During any extended stop period, neither the service nor parking brake should be used as they can freeze up. Use wheel chocks to secure the vehicle from moving. chocks to secure the vehicle from moving.

Check all structural fasteners, air system fittings, gaskets, seals and bearings for looseness that can develop due to contraction with cold. Do not over-tighten.

Check tire inflation. Tire inflation decreases when the temperature decreases.

Periodically check drain holes in the storage compartments. They must be open at all times to avoid moisture entrapment.

## Hot Weather Operation

Hot weather operation can cause expansion of parts, resulting in tightening of bearings, fasteners, and moving parts. Failure of gaskets or seals can occur.

The vehicle should be parked in the shade if possible. Long exposure to the sun will shorten service life of rubber components (i.e., tires, light and hose grommets, hoses, etc.) and paint life.

Check tire pressure early in the day before beginning operations while the tire is cool. Put all valve stem caps back on after checking.

If the area is extremely humid, protect electrical terminals with ignition insulation spray. Coat paint and bare metal surfaces with an appropriate protective sealer.

# Maintenance and Troubleshooting

This chapter contains instructions necessary for proper maintenance of the Loadoll. The Loadoll is designed for years of service with minimal maintenance. However, proper maintenance is important for durability and safe operation and is an owner/user responsibility.



### DANGER

Operating the vehicle with defective, broken or missing parts may result in serious injury or death; damage to the vehicle, its cargo, or property in its path.



### DANGER

Serious injury or death may result if a person is under, in front of, or behind: The bed, sub-frame, rear bumper, or chassis at any time during operation of the Loadoll. The sub-frame can swing up and the bed can travel several feet. Any object in the same areas may be damaged or cause damage to the Loadoll.



### DANGER

If maintenance is required in any of these areas, block both ends of the sub-frame to prevent it from tilting. Secure the bed from moving.

LUBE	SEASON	BRAND & PRODUCT (WEIGHT AND/OR TYPE)				
		EXXON	MOBIL	PHILLIPS 66	TEXACO	SHELL
1	ALL YEAR	NUTO H 32	DTE 24	Mega Flow HVI 32 SAE 52-20	Rando HD 32	Tellus T 32
2	ALL YEAR	-----	-----	-----	-----	Aeroshell 64MS
3	ALL YEAR	-----	-----	76 Moly Low Tem Grease	-----	-----
4	SUMMER	-----	Mobilube HD SAE 85W-140	-----	-----	-----
	WINTER	-----	Mobilube 1 SHC SAE 75W-90	-----	-----	-----
5	ALL YEAR	Teresstic 32	DTE Light	Condor 32 or Magnus 32	Regal Oil R&O 32	Turbo T 32

**Table 5-1: Lubrication Specifications**



## Maintenance Schedule

Loadoll maintenance includes periodic inspection and lubrication. **See Figure 5-2, Maintenance Schedule,** lists the recommended maintenance and lubrication tasks by time interval and by accumulated mileage (use whichever occurs first).

### Inspection

Inspect the vehicle and deck system periodically for damage or signs of pending failure. Damaged or broken parts must be repaired or replaced at once. Determine the cause of any binding or hydraulic leakage at once. Correct the problem before using the vehicle. Use the Troubleshooting Guide to check for “**SYMPTOMS**” and “**PROBLEMS**” of any vehicle system not functioning correctly, or where wear, distortion, or breakage are found. Administer “**REMEDY**” according to the right-hand column of the Troubleshooting Guide.

### Lubrication

**Figure 5-2, Maintenance Schedule,** details lubrication points and intervals, method of application, and lubricant required. During inspections of the vehicle if lubricants are found to be fouled with dirt or sand, those parts should be cleaned with paint thinner, dried and re-lubricated immediately. Dirt in a lubricant forms an abrasive compound that will wear parts rapidly.



## WARNING

Paint thinner and other solvents are flammable and toxic to eyes, skin, and respiratory tract. Avoid skin and eye contact. Good general ventilation is normally adequate. Keep away from open flames or other combustible items.

## Maintenance Procedures

### Standard Torque Values.

**See Tables 2-1 and 2-2** lists torque values for standard hardware and is intended as a guide for average applications involving typical stresses and mechanical surfaces. Values are based on the physical limitations of clean, plated, and lubricated hardware. In all cases, when an individual torque value is specified, it takes priority over values given in this table. Replace original fasteners with hardware of equal grade.

Loadoll MAINTENANCE AND LUBRICATION SCHEDULE								
ITEM	1st 5 Hrs	Weekly	Monthly	6 Mo.	Yearly	Lube #	Chart Notes	Notes
	50 Miles	500 Miles	2,000 Miles	12,000 Miles	25,000 Miles			
LIGHTS	I	I						Inspect Weekly During Walk Around Inspections
WIRING & CONNECTIONS	I		I					Inspect Monthly During Walk Around Inspections
FASTENERS	I,T		I				b	Inspect Monthly And Tighten As Required
CHAIN GEAR BOX CASE	I		I			2		Inspect Weekly For Safe And Efficient Operation, Lubricate Monthly
BED SLIDE PLASTIC STRIPS	I		I					Inspect Weekly, Inspect Monthly, Making Sure In Place
SUBFRAME PIVOTS	L		L			3		Inspect While Greasing Monthly
SUBFRAME & HITCH CYLINDER PINS	L			L				Inspect While Greasing Every 6 Months
WINCH CABLE ASSEMBLIES	I		I,L			4		Inspect Weekly, Lubricate Monthly
HYDRAULIC OIL	I	I			R	1		
HYDRAULIC FILTER	R			R				
HOSES	I		I		I,R			Inspect And Replace As Needed
TIRE INFLATION & WEAR	I	I						Inspect Daily, Adjust As Required to Maintain Tire
WHEEL LUG NUTS	I,T	See Truck Owner's Manual for Service Intervals						

**I - Inspect, R - Replace, T-Tighten/Adjust Torque, L-Lubricate, C - Clean**

**Table 5-2: Maintenance Schedule**

**Chart Notes:**

- a. Perform at the time shown. Shorten service intervals when operating in severe or dirty conditions
- b. **See Tables 2-1 and 2-2** (General Torque Specifications) for correct torque
- c. **See Table 5-1** (Lube Specification Chart) for recommended lubricant
- d. Inspect prior to and after each use
- e. Recommended lubrication for Warn 12K Winch Planetary Gear Case - Aeroshell 64MS

- f. Recommended lubrication for Warn 20 & 30K Winch Planetary Gear Case - 76 Moly Low Temp Grease

**Lubrication # Specifications:**

**See Table 5-1** to obtain the lube number, type and brand reference to service Landoll carriers with.

## Cleaning

Wash carrier to remove all accumulated dirt and grime.

Clean the sliding surfaces with solvent or mineral spirits every six months or more frequently if exposed to extreme dirt or weather conditions. The slide wear strips are impregnated with a special lubricant, however, additional lubrication may be required to prevent chattering or squealing.

After disassembling any components, thoroughly clean dirt and old lubricant from all parts. Do not use a wire brush on any bearing parts or surfaces, use a stiff bristle brush. Do not use compressed air, or spin bearing parts when cleaning. These practices can throw solvents, dirt, or metal particles into your eyes. Dry clean parts with lint free, clean, soft, absorbent, cloth or paper. Wash and dry hands.

Inspect seals, seal wiping surfaces, bearing caps, and bearing cones for wear, pitting, chipping, or other damage.

Use Troubleshooting Guide to check for “**SYMPTOMS**” AND “**PROBLEMS**” of any carrier system not functioning correctly, or where wear distortion, or breakage can be found. Administer “**REMEDY**” according to right-hand column of Troubleshooting Guide.

## Frame and Deck

### Repairing Structural Defects

If any structural defect is found, the fault must be corrected before further use of the vehicle. To continue usage could endanger the vehicle, its load, personnel, traffic, and properties. Inspect the deck daily for broken or missing attachments. Replace any defective parts promptly.

## Hydraulic System

Check the hydraulic oil level weekly, or after any leakage. **See Table 5-1** for proper hydraulic oil.

Check the hydraulic oil level by sliding the deck enough to gain access to the reservoir cap. Have the bed level with the chassis frame, and the hitch fully retracted. Shut off the engine. Proper oil level is 2” below top of oil reservoir. Filling to the top will result in overflow when the bed is slid forward.

If a cylinder seal leaks, disassemble the cylinder and determine the cause of the leak. Small scores caused by chips or contaminated fluid can usually be worked out with fine emery cloth to avoid re-occurring of the trouble. Any time a component is opened up, or whenever any seal replacement is necessary, it is advisable to thoroughly clean all components and replace all seals in that component. Seal kits are available from your Landoll dealer.

# Troubleshooting Guide

Troubleshooting should be performed by a trained technician. Landoll Company, LLC. is not responsible for equipment that is improperly maintained. Contact an authorized Landoll Service center for servicing.

## Electrical

Most electrical system problems show up as a burned out light or fuse, or inoperative electrical component. Wiring, grounds, or components may be at fault. Locate the symptom in this section that best identifies your electrical problem. Check out each possible problem under that symptom. If the problem cannot be located, see an automotive electrical specialist.

PROBLEM	PROBABLE CAUSE	SOLUTION
NO LIGHTS	Fuse blown	Replace fuse
	Connection at plug-in	Tighten connection.
	Broken or corroded wires	Replace wire.
	Ground wire loose	Clean and tighten ground.
	Light burned out	Replace light.
LIGHTS FLICKERING OR DIM	Vibration	Locate source of vibration and repair.
	Short circuit	Replace fuse and try all accessories. If fuse blows right away, locate short and repair.
	Loose connection	Check lamp sockets and ground connections.
	Intermittent short	Locate short and repair.
	Improper voltage	Check voltage regulator output.
FUSE BLOW-OUT OR CIRCUIT BREAKER TRIPPING	Vibration	Locate source of vibration and repair.
	Short circuit	Replace fuse and try all accessories. If fuse blows right away, locate short and repair.
<b>REMOTE CONTROL WINCH:</b>		
DOES NOT OPERATE	Fuse blown	Replace fuse.
	Defective switch	Repair and replace.
	Broken or corroded wires	Replace wire.
	Ground wire loose or bad	Clean and tighten ground or replace.
	No power to remote	Turn clearance lights on or turn PTO on.
OPERATES ONE WAY ONLY	Incorrect wiring	Confirm proper wiring.
	Defective switch	Repair and replace.
	Broken or corroded wires	Replace wire.
OPERATES WRONG DIRECTION	Wires reversed on solenoid	Reverse wires

**Table 6-1: Electrical Diagnosis**

## Hydraulic System

Most hydraulic system failures follow the same pattern: a gradual or sudden loss of pressure or flow with a resulting loss of cylinder or motor power. Any one of the system's components may be at fault. By following step-by-step procedures, the trouble can be located in a short time.

PROBLEM	PROBABLE CAUSE	SOLUTION
SYSTEM INOPERATIVE	Not enough oil in system	Fill, check for leaks.
	Wrong oil in system	Change oil, see specifications.
	Filter dirty or clogged	Drain oil and replace filter.
	Hydraulic lines dirty or collapsed	Clean or replace as necessary.
	Air leaks in pump suction line	Repair or replace as necessary.
	Worn or dirty pump	Clean, repair or replace. Check for contaminated oil. Drain and flush.
	Badly worn components	Examine for internal leakage. Replace faulty components. Check for cause of wear.
	Leakage	Check all components, and relief valve for proper settings.
	Excessive load	Check unit specifications for load limits.
	Slipping or broken pump drive	Repair or replace couplings. Check for alignment.
SYSTEM OPERATES ERRATICALLY	Air in the system	Check suction side of system for leaks. Repair leaks.
	Cold oil	Allow ample warm-up time. Use proper weight oil for operating temperature.
	Dirty or damaged components	Clean or repair as needed.
	Restriction in filters or lines	Clean and/or replace filter or lines.
	Not enough oil in system	Fill and check for leaks.
SYSTEM OPERATES SLOWLY	Oil viscosity too high, or "cold oil"	Allow oil to warm up before operating.
	Low pump drive speed	Increase engine speed (check pump owners manual for specifications).
	Low oil level	Check reservoir and add oil as necessary.
	Air in system	Check suction side for leaks. Repair leaks.
	Badly worn pump, valves, cylinder	Repair or replace faulty component(s) as necessary.
	Restrictions in lines or filter	Clean and/or replace filter or lines.
	Improper adjustments	Check orifices, relief valves, etc. Adjust as necessary.
	Oil leaks	Tighten fittings. Replace seals, gaskets and damaged lines.
SYSTEM OPERATES TOO FAST	Wrong size or incorrectly adjusted restrictor	Replace or adjust as necessary.
	Engine running too fast	Reduce engine speed.

**Table 6-2: Hydraulic Diagnosis (1 of 2)**

<b>PROBLEM</b>	<b>PROBABLE CAUSE</b>	<b>SOLUTION</b>
OVER HEATING OF OIL IN SYSTEM	Oil passing thru relief valve for excessive time	Return control valve to neutral when not in use.
	Incorrect, low, dirty oil	Use recommended oil. Fill reservoir with clean oil. Replace filter.
	Engine running too fast	Reduce engine speed.
	Excessive component internal leakage	Repair or replace component as necessary.
	Restriction in filters or lines	Clean and/or replace filter or lines.
	Insufficient heat radiation	Clean dirt and mud from reservoir and components.
	Malfunctioning component	Repair or replace.
FOAMING OF OIL	Incorrect, low, or dirty oil	Replace, clean or add oil as needed.
	Water in oil	Replace oil
	Air leaks	Check suction line and component seals for suction leaks. Replace defective parts.
NOISY PUMP	Low, incorrect, foamy oil	Replace, clean, or add oil as needed.
	Suction line plugged	Clean out obstruction or replace line. Flush system, replace filter.
	Pump damaged	Repair or place.
LEAKY PUMP	Damaged or worn shaft seal	Replace seal and/or shaft and check for misalignment.
	Loose or broken parts	Tighten or replace.
CYLINDERS MOVE WITH CONTROL VALVE IN NEUTRAL POSITION	Leaking cylinder seals or fittings	Replace worn seals or fittings.
	Control valve not centering when released	Check linkage for binding and repair.
	Valve damaged	Repair or replace.
	Counterbalance Valve Worn or Contaminated	Clean out obstruction or replace valve.
CONTROL VALVE LEAKS	Seals damaged or worn	Replace.
CYLINDER LEAKS	Seals worn or damaged	Replace.
	Rod damaged	Replace.
	Barrel damaged	Replace.
CYLINDERS DO NOT FUNCTION OR CREEP WITH PTO DISENGAGED	Leaking fittings or cylinder seals	Tighten loose fittings. Replace worn seals or fittings.
	Counterbalance valve or o-ring leak	Replace defective component.
SUBFRAME WILL NOT TILT	<p>Some units have a proximity switch so the subframe does not tilt until the bed is slide far enough, so that metal plate is not directly above the proximity switch. Slide bed far enough so plate is not above switch.</p> <p>The proximity switch should have indicator light on when PTO is engaged. The PTO wire engages a relay that powers the proximity switch. The proximity switch needs to have between 1/32" to 1/4" clearance with the metal plate at rear of bed to work properly. The magnet in the proximity switch allows the switch to send a signal to the hydraulic dump valve to dump oil to the hydraulic tank so no pressure builds up to tilt subframe.</p>	

**Table 6-3: Hydraulic Diagnosis (2 of 2)**

## Hydraulic Pressure Testing

### SET-UP:

With the Loadoll unloaded, install a 0 to 3000 psi pressure gauge between the pump pressure hose and the valve "IN" port, using a "T" fitting and close pipe nipple.

### TEST 1:

Start the vehicle engine and operate the PTO. Do not run vehicle engine more than 1200 RPM. Check pressure without operating any function.

**From 25 to 300 psi:** NORMAL

**Greater than 300 psi:** Restriction in valve, filter, or plumbing.

**Less than 25 psi:** Weak pump or restriction in pressure line.

### NOTE

*If STEP 1 indicates normal pressures, proceed to STEP 2. STEP 1 pressures must be normal for the following tests!*

### TEST 2:

Run the bed forward to the transport position. Hold the valve in the "BED ON" position to cause hydraulic oil to go through the pressure relief valve. Read pressure, then return the control valve to neutral. Do the same test on the tilt cylinder, checking it while the bed is in the transport position.

**From 1800 to 2500 psi:** NORMAL

**Greater than 2500 psi:** Pressure relief valve is set too high.  
Pressure relief valve is malfunctioning.

**Less than 1800 psi:** \*Internal cylinder leak.  
\*\* Pressure relief valve set too low.  
\*\*Weak pump.

*\* This may be the problem if one cylinder is at the normal pressure and the other is at a lower pressure.*

*\*\* This may be the problem if both cylinders show the same pressure.*

### TEST 3:

Run the tilt cylinder until the bumper almost touches the ground. Return the cylinder to the transport position. Check pressures while the bed is tilting.

**From 1000 to 2500 psi:** NORMAL

**Greater than 2500 psi:** Restriction in return hoses or cylinder.  
Binding cylinder.  
Binding tilt mechanism.

**Less than 1000 psi:** Weak pump.  
Pressure hose restriction  
Internal cylinder leak.

### TEST 4:

Slide the bed cylinder and then forward. Check pressures while the bed is moving out. The following pressures are with the bed installed.

**From 300 to 900 psi:** NORMAL

**Greater than 900 psi:** Restriction in return hoses or cylinder.  
Binding cylinder.  
Binding slide mechanism.

**Less than 300 psi:** Weak pump.  
Pressure hose restriction  
Internal cylinder leak.

### TEST 5:

Unhook the winch cable and lay it loosely on the bed. Operate the winch both directions.

Check pressures while the winch is operating.

**From 800 to 1200 psi:** NORMAL

**Greater than 1200 psi:** Restriction in return hoses or winch motor.  
Binding winch motor.  
Binding winch gears or drum.

**Less than 800 psi:** Weak pump.  
Pressure hose restriction  
Internal motor leak.

## Remote Control

PROBLEM	PROBABLE CAUSE	SOLUTION
No response from receiver	Check that transmitter power is on.	Self-explanatory.
	Power is connected in reverse	If the amber reverse polarity LED is lit the power input and system ground connections have been reversed.
	Output in not properly connected	If a red output LED on the receiver turns on when a button is pressed on the transmitter the output may be improperly connected. Verify the correct output is properly connected to the load.
	Receiver is locked out due to overcurrent	The receiver will trip and lockout if 10A or more is through the board. The transmit LED will still flash each time a message is received but no output LED will turn on. Check for a heavy voltage load or short circuit, cycle power to receiver and try again.
	Receiver is locked out due to a message error	The transmit LED will be lit red and will not change. Cycle power to the receiver and try again.
No response from the transmitter when button is pressed.	Transmitter is on the Off state	Press the On button
	Transmitter has a low or dead battery	If the transmitter is placed in the On state and the Low Battery LED or no LEDs flash the battery may be low or dead. Replace with a CR2450 coin cell battery.
	Transmitter is not properly paired with the receiver	The Transmit LED on the receiver and on the transmitter should both periodically flash while a button is held and the transmitter is in the On state. If only the transmitter Transmit LED is flashing follow the pairing sequence on Page 4-25
Outputs are not properly functioning	Receiver input voltage is too low	The receiver will connect the input voltage to the output after a button is pressed on the transmitter. If the voltage supplied is not high enough to run the connected function it will not turn on.
	Load is too far away	If a very heavy load is placed at the end of a very long cable the voltage can drop to a point that is too low to run the function. Shorten the cable distance or increase voltage.
Output intermittently turn off while button is held	System is out of range	Ensure that the system is within operating range and remove as many obstacles between receiver and transmitter as possible.
	Transmitter battery is low	Replace battery in transmitter.
	Intermittent connection on the receiver	Ensure that the power input, output and appropriate ground are properly connected

Table 6-4: Remote Control Diagnosis

For additional remote information, reference the **“Brand Hydraulics - Wireless Hydraulic Control System, Installation and Operation Manual”** shipped with the remote.



## Miscellaneous Problems

PROBLEM	PROBABLE CAUSE	SOLUTION
BED CHATTERS OR SQUEALS WHEN SLIDING	Rough slide tubes on subframe.	File or sand smooth and lubricate with dry silicone or other non dirt and grit collecting lubricant.
WORN NYLATRON SLIDES		When Nylatron wears enough that screws heads are rubbing on slide tubes, replace Nylatron slides.
<b>PIVOT PINS:</b>		
EXCESSIVE WEAR	Not lubricated:	Grease pins at grease zerk.
	Bent or broke subframe	Check for bows or cracks in subframe.
PREMATURE BREAKAGE	Overweight loads and/or rough road conditions	Check weight limitations and adjust driving style to road conditions.
BED SLIDE STRIPS EXCESSIVE WEAR	Lubricated with heavy grease	Remove grease and use dry silicone or other non dirt and grit collecting lubricant.
	Rough slide tubes on subframe	Smooth tubes.
REMOTE WILL NOT COME ON		Some units require the clearance lights to be on to power the remote.

**Table 6-5: Miscellaneous Problems Diagnosis**

## Illustrated Parts List

### Sub-Frame, Components

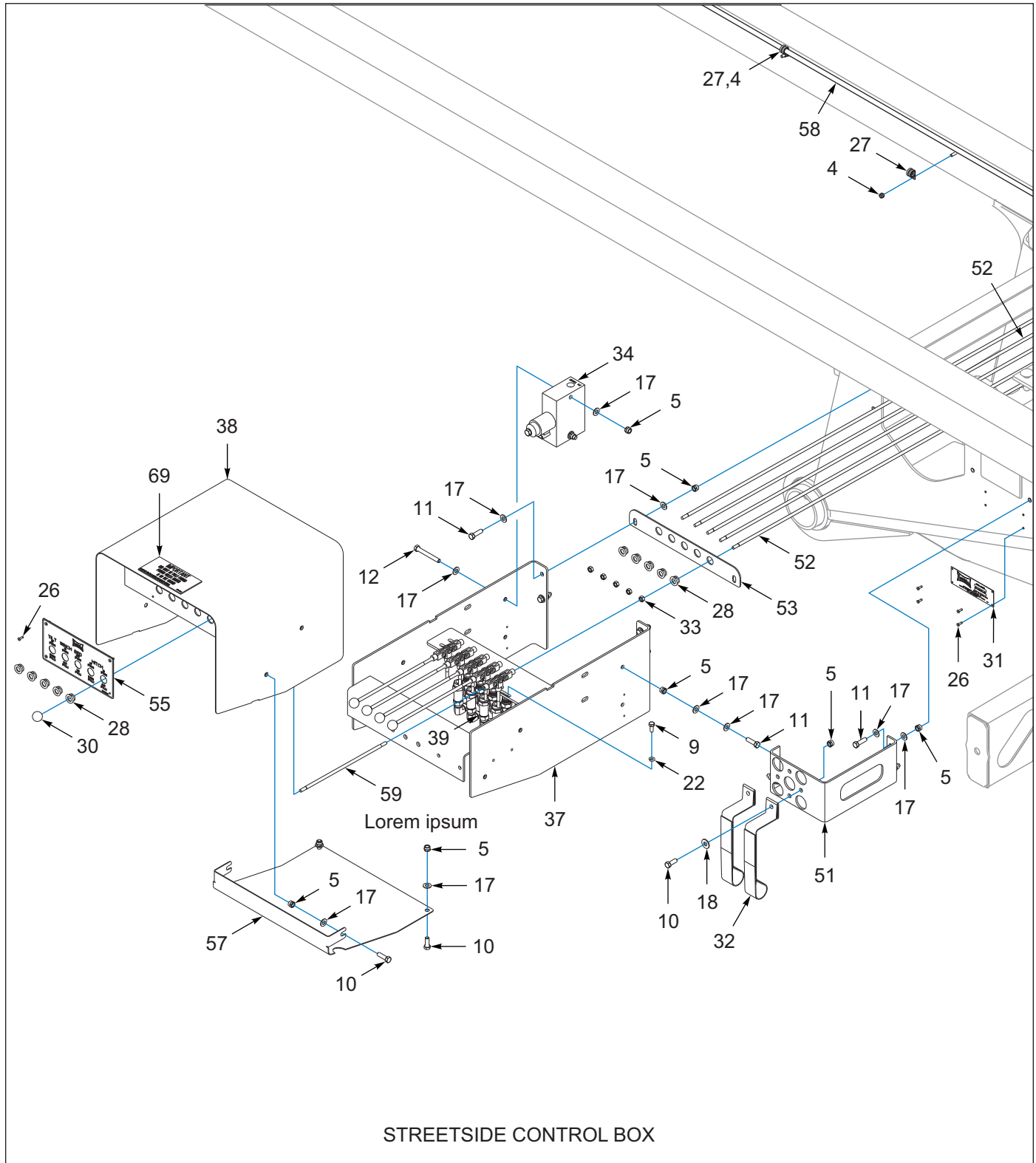
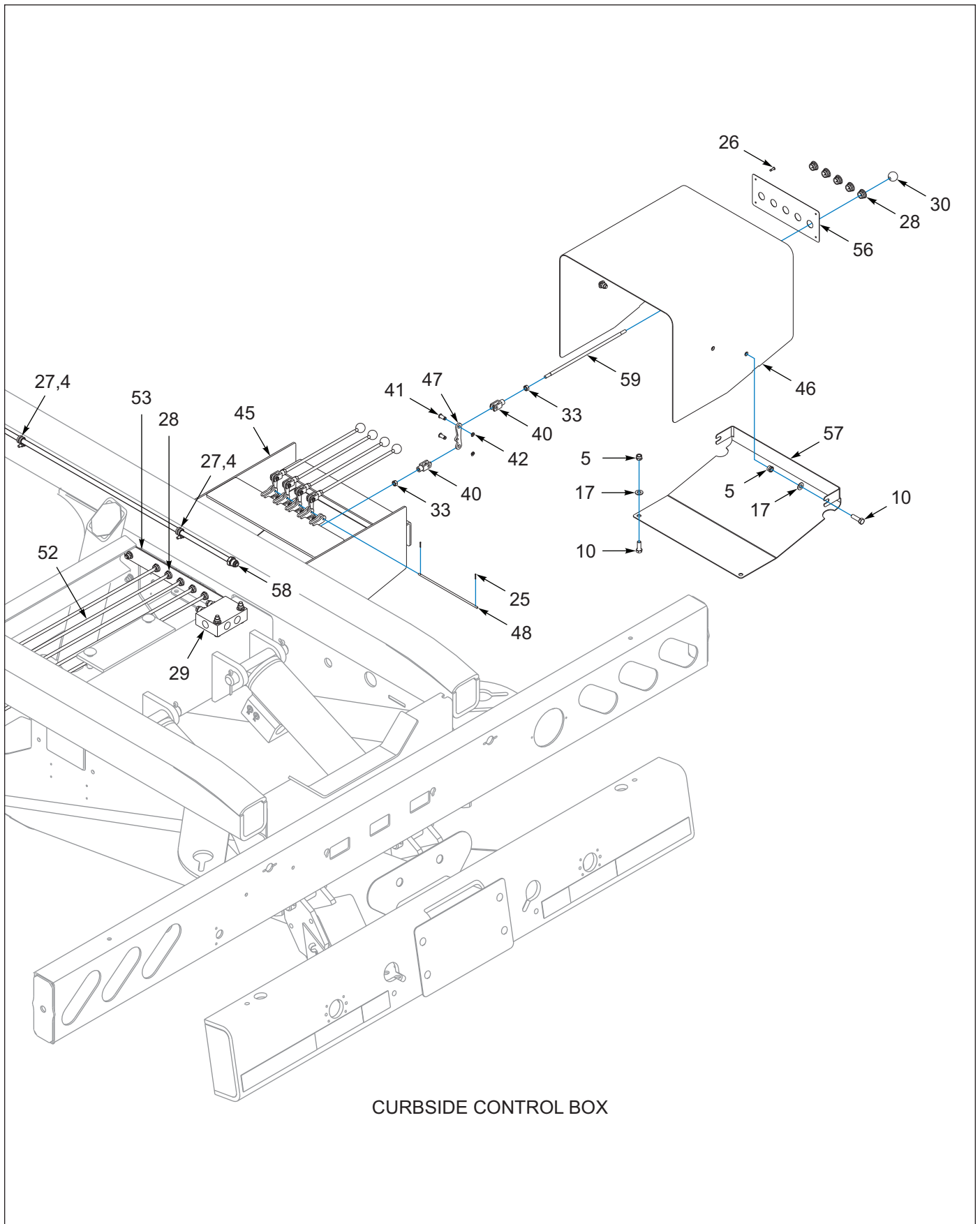


Figure 7-1: Sub-Frame, Components (1 of 3)



CURBSIDE CONTROL BOX

Figure 7-2: Sub-Frame, Components (2 of 3)

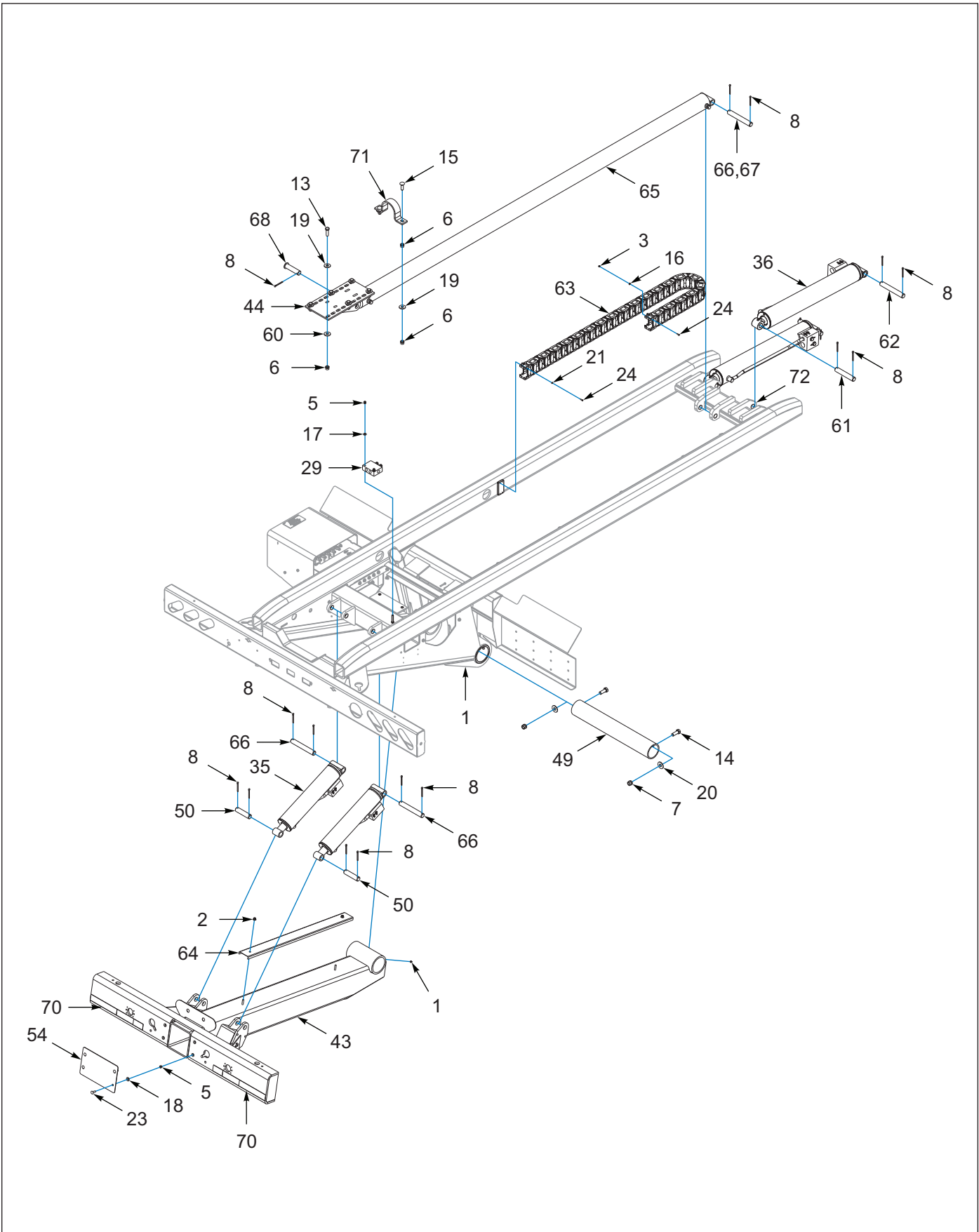


Figure 7-3: Sub-Frame, Components (3 of 3)

## Sub-Frame, Components

ITEM	PART NUMBER	DESCRIPTION	QTY.
	210373	FRAME ASSY 22' LOADOLL HD (22', 24' BED)	--
	210417	SUB FRAME ASSY LOADOLL3 LONG (26', 28', 30' BED)	--
1	1-298-010001-1	ZERK FITTING 1/4 SAE (BEFORE 06/08/2020, 11 EACH) (AFTER 06/08/2020, INCLUDES 2 EACH PER CYLINDER)	3
2	1-510-010001	NUT, 3/8-16 UNC FLG LOCK GR G	2
3	1-512-010003-06	NUT,HEX,SLFLKG W/NLY 10-24	4
4	1-512-010005-01	NUT,HEX,SLFLKG GRB 1/4-20	5
5	1-512-010005-05	NUT, HEX, SLFLKG GRB 3/8-16	34
6	1-512-010005-13	NUT,HEX SLFLKG GRB 5/8-11	8
7	1-512-010005-15	NUT,HEX,SLFLKG GRB 3/4-10	2
8	1-557-010362-65	PIN COTTER, 1/4X2-1/2 ZP	19
9	1-654-010049-03	SCREW HX CP 5/16-18UNCX3/4GR5	4
10	1-654-010051-05	SCREW,HEX CAP 3/8-16UNCX1 GR5	14
11	1-654-010051-06	SCREW,HEX CAP 3/8-16UNCX1-1/4	12
12	1-654-010051-13	SCREW,HX CP,3/8-16UNCX3,GR5	2
13	1-654-010059-05	SCREW,HEX CAP,5/8-11UNCX2 GR5	6
14	1-654-010061-05	SCREW,HHC,3/4-10UNCX2,GR5,ZP	2
15	1-654-010126-05	SCREW,RD HD, SQNCK,5/8-11X2 G5	2
16	1-861-010032-03	WASHER, FLAT #10 ZP/CD	4
17	1-861-010032-10	WASHER, FLAT 3/8" N ZP/CD	42
18	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	6
19	1-861-010032-19	WASHER, FLAT 5/8 W ZP/CD	8
20	1-861-010032-21	WASHER, FLAT 3/4 W ZP/CD	2
21	1-861-010034-07	WASHER,LKG,HLCL SPR, NO 10	4
22	1-861-010034-10	WASHER,LKG 5/16	4
23	101864	SCREW,RD HD 3/8-16X1-1/4 GR5	4
24	109410	SCREW, BHSC #10-24UNCX3/4	8
25	114067	PIN,1/16X1/2 COTTER	2
26	12420301-017	RIVET,BLIND .156 X 1/4 GRIP	12
27	125893	CLAMP,CABLE 1/2 SST	5
28	178444	BUSHING NYLON INSERT 9/16ID	20
29	184585	VALVE,DUAL COUNTER BALANCE,30G (INCLUDES 236533 - CARTRIDGE, 2 EACH)	1
30	186877	KNOB BLACK 1" ROUND M8X1.25THD (ITEM 41 INCLUDES 5 EACH)	10
31	192013	SERIAL NUMBER PLATE	1
32	192037	HANGING STRAP 5" DIA	2
33	1DM8ER	NUT HEX HD M8X1.25 CL8.8	15
34	200427	VALVE N.O. SOLENOID HYDR 2W	1
35	208107	CYLINDER 4X16 W/CB VALVE (INCLUDES ITEM 1, 2 EACH)	2
36	208108	CYLINDER 4-1/2 X 30 W/CB VALVE (INCLUDES ITEM 1, 2 EACH)	2
37	208120	SUPPORT, VALVE WLDMT HDCL RMT (STREETSIDE)	1
38	208126	SHIELD VALVE WLDMT (STREETSIDE)	1
39	208131	VALVE 5SPL REXROTH HDCLIII ASM (INCLUDES ITEMS 30 & 59)	1
40	208133	CLEVIS END M8-1.25 CLEVISJOINT	10
41	208134	PIN CLEVIS JOINT M8X1.25	10
42	208135	E-RING CLEVIS JOINT M8-1.25	10
43	208146	HITCH WLDMT MAIN SHORT	1
43	210376	GALV OF 208146 (HITCH WLDMT)	1

## Sub-Frame, Components

ITEM	PART NUMBER	DESCRIPTION	QTY.
44	208160	ANCHOR CYL WLDMT BOLT-ON (22', 24')	1
44	210424	WLDMT CYL BOLT-ON BED LONG (26', 28', 30')	1
45	208179	SUPPORT, VALVE WLDMT HDCL RH (CURBSIDE)	1
46	208871	VALVE SHIELD WLDMT, RH (CURBSIDE)	1
47	208873	PLATE CONTROL PIVOT	5
48	208875	PIN, VALVE HANDLE	1
49	209131	TUBE PIVOT MAIN TILT HD CL	1
50	209132	PIN 1-1/4" X 5-1/4" CYLINDER	2
51	210359	BRACKET TOOL HOLDER	1
52	210360	ROD HANDLE,61",M8X1.25 ENDS	5
53	210361	SUPPORT ROD HANDLE	2
54	210362	COVER HITCH OPENING	1
55	210364	PLACARD LH CL CONTROL PANEL (STREETSIDE)	1
56	210366	PLACARD RH CL CONTROL PANEL (CURBSIDE)	1
57	210367	PLATE BOTTOM COVER CONTROLS	2
58	210368	TUBE ASSY 1/2"X120"#8MJIC ENDS	1
59	210372	ROD HANDLE,12",M8X1.25 ENDS (ITEM 41 INCLUDES 5 EACH)	10
60	210398	WASHER 11/16"IDX1-3/4"ODX 3/16	6
61	212350	PIN CYL 1-1/4 IN DIA X 6	2
62	212351	PIN CYL 1-1/4 IN DIA X 8	2
63	218049	SUPPORT E-CHAIN E4-32 42 LINK (22', 24')	1
63	218051	SUPPORT E-CHAIN E4-32 52 LINKS (26', 28', 30')	1
64	3-181-010040	CLAMP HOSE LONG	1
65	3-242-010185	CYLINDER4X126LOADOLL(22',24')(SEALKIT,PMCK-BB-0686)	1
65	210399	CYLINDER 4-1/2 X 150 LOADOLL (26', 28', 30')	1
66	3-557-010447	PIN CYL 4 FRT (22', 24', REQ 3 EACH) (26', 28', 30', REQ 2 EACH)	--
67	210429	PIN 1-1/4" X 9 (26', 28', 30')	1
68	3-557-010494	PIN,CYL ROD END 1-1/4 WLDMT	1
69	3-573-010105	DECAL IMPORTANT BED FORWARD	1
70	3-573-010377	DECAL,2"REFLEXITE TAPE,RD/WHT	44
71	3-755-010003	SUPPORT CYL MIDDLE (22', 24')	1
71	210427	SUPPORT, CYLINDER 4-1/2" CYL (26', 28', 30')	1
72	5410	FITTING GREASE 1/4-28 90 1911 (BEFORE 06/08/2020, 4 EACH) (AFTER 06/08/2020, ANCHOR ZERKS HAVE BEEN OMITTED)	--



# Sub-Frame, Electrical

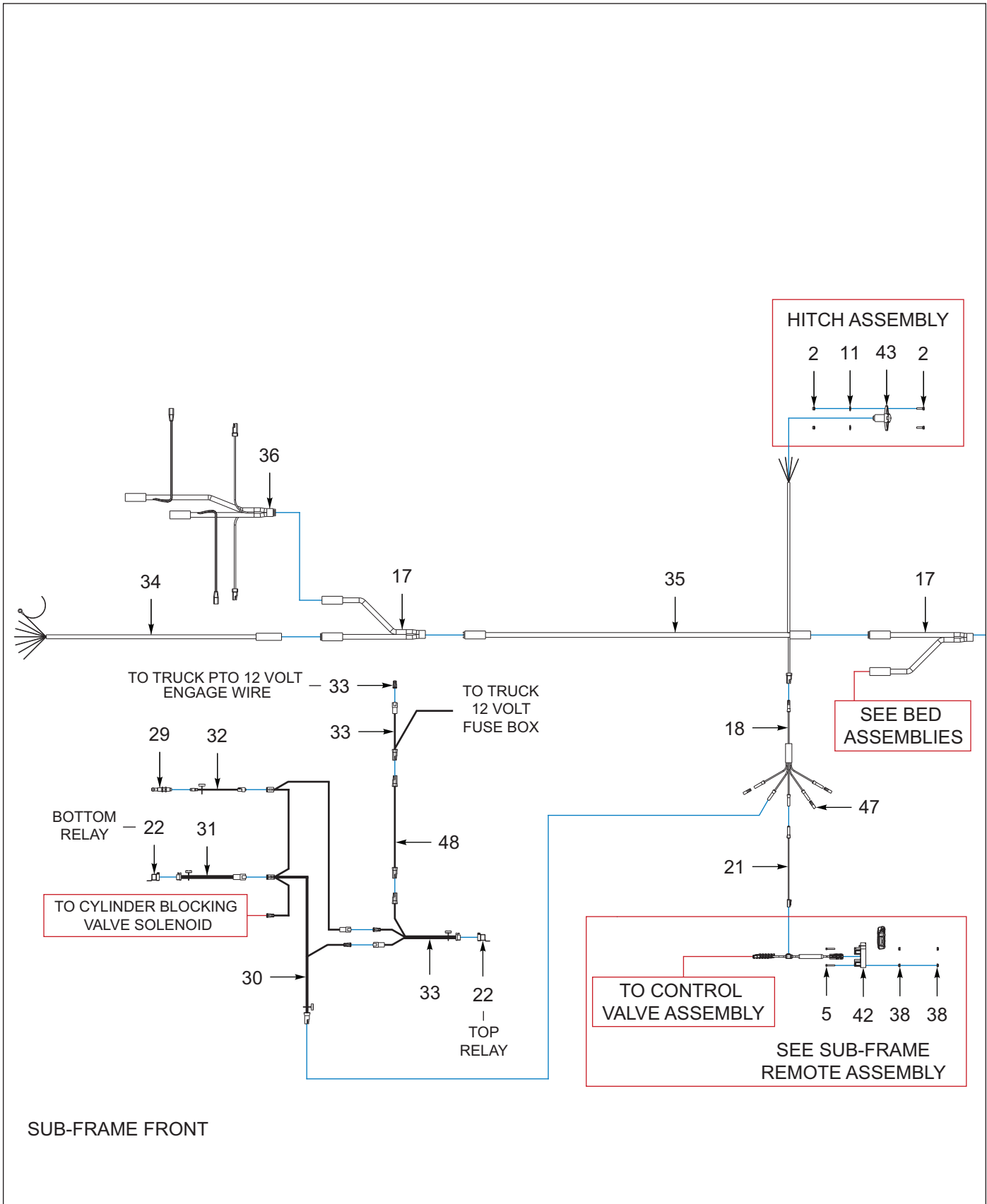


Figure 7-4: Sub-Frame, Electrical (1 of 3)



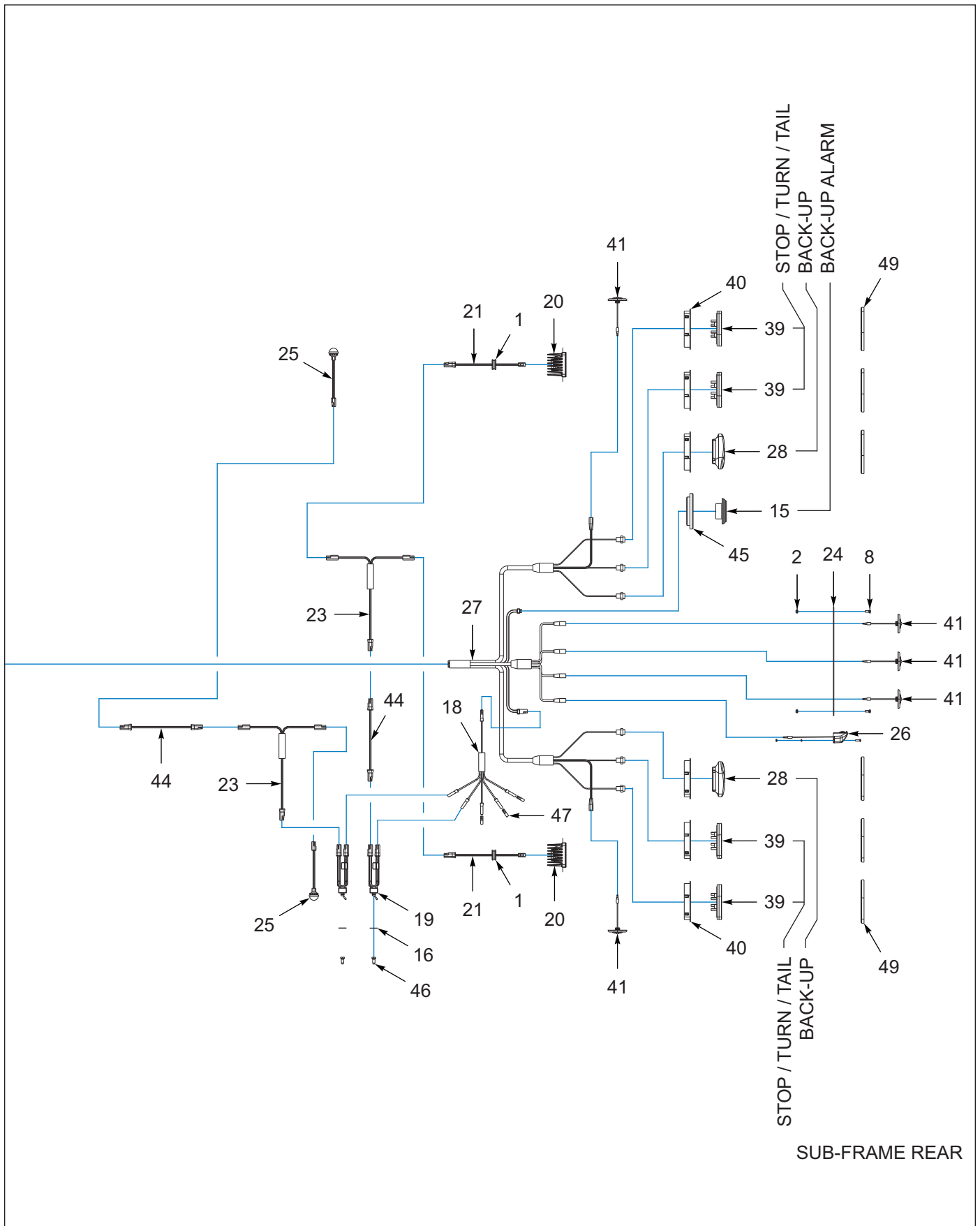


Figure 7-5: Sub-Frame, Electrical (2 of 3)

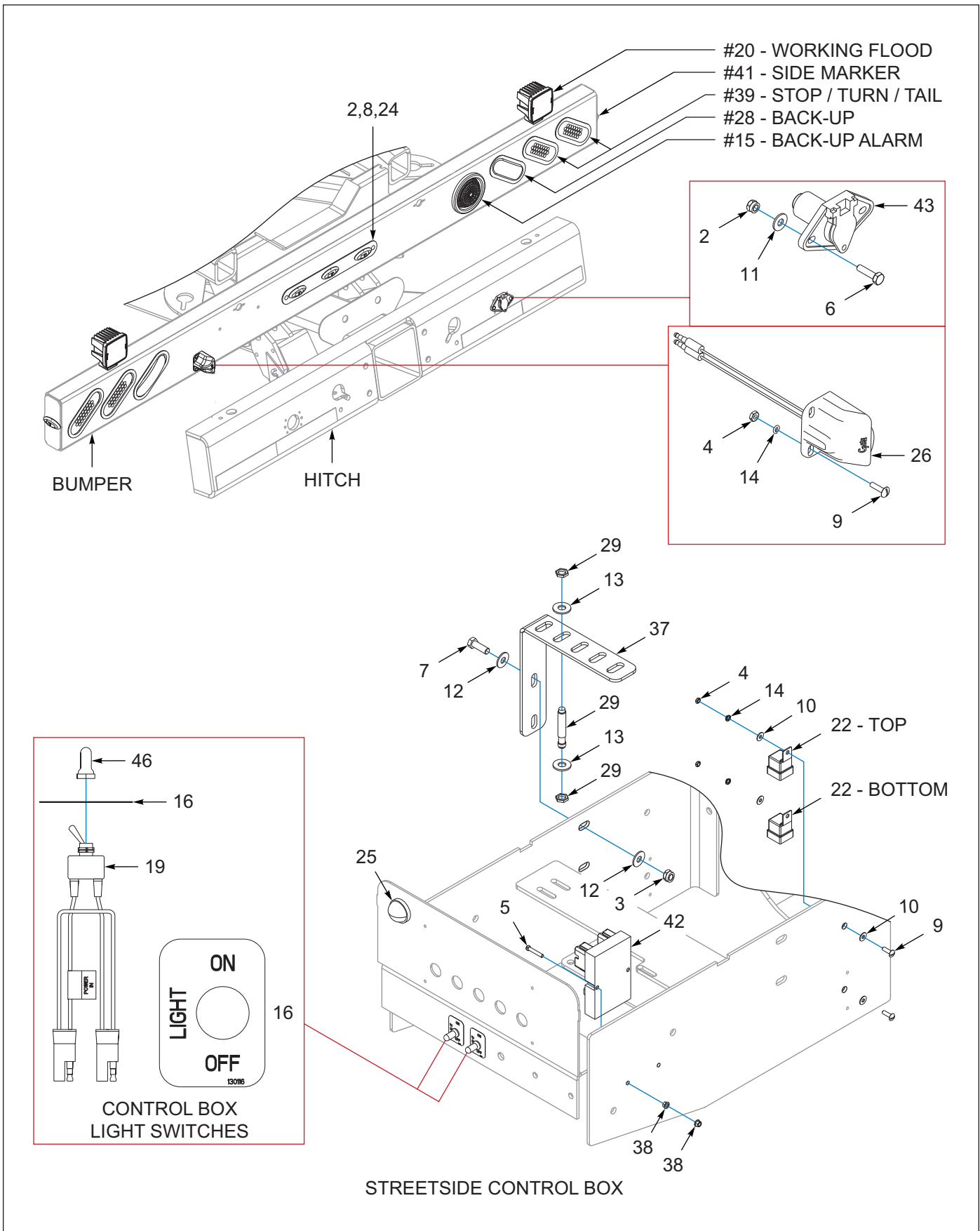


Figure 7-6: Sub-Frame, Electrical (3 of 3)

## Sub-Frame, Electrical

ITEM	PART NUMBER	DESCRIPTION	QTY.
	210373	FRAME ASSY 22' LOADOLL HD (22', 24' BED)	--
	210417	SUB FRAME ASSY LOADOLL3 LONG (26', 28', 30' BED)	--
1	1-343-010006	GROMMET	2
2	1-512-010005-01	NUT,HEX,SLFLKG GRB 1/4-20	4
3	1-512-010005-05	NUT, HEX, SLFLKG GRB 3/8-16	2
4	1-512-010007-03	NUT, HEX 10-24 GR2 ZP	4
5	1-654-010024055	SCREW,MACH,FLSTR,#10-24X1-1/4	2
6	1-654-010047-06	SCREW,HX CP 1/4-20UNCX1 GR5	2
7	1-654-010051-06	SCREW,HEX CAP 3/8-16UNCX1-1/4	2
8	1-654-010158-1	SCREW,RHD,SQ NCK,1/4-20UNCX3/4	2
9	1-656-010003051	SCREW,RH HD MACH 10-24X3/4	4
10	1-861-010032-04	WASHER,FLAT 3/16 ZP	4
11	1-861-010032-07	WASHER,FLAT 1/4 ZP	2
12	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	4
13	1-861-010032-14	WASHER, FLAT 1/2" N ZP/CD	2
14	1-861-010034-07	WASHER,LKG,HLCL SPR, NO 10	4
15	123436	ALARM BACKUP 12 VOLT	1
16	130116	DECAL, ON/OFF LIGHT	2
17	146929	HARNESS Y SPLITTER GROTE	2
18	150093	HARNESS 5 AUX BRANCHES GROTE	2
19	150117	SWITCH ASSY LIGHT GROTE	2
20	163996	LIGHT,12V SQUARE LED FLOOD	2
21	164052	HARNESS,60"BRANCH,WORK LIGHT	3
22	169534	RELAY, SEALED, 20/40A,SPDT,12V <b>(1 EACH INCLUDED WITH ITEM 31) (1 EACH INCLUDED WITH ITEM 33)</b>	2
23	169853	HARNESS T PWR BRANCH	2
24	179906	PLATE MTG MICRO ID LIGHTS	1
25	185059	LIGHT,LED COURTESY, GROTE	2
26	187860	LIGHT ASSY LICENSE LED GROTE	1
27	190733	HARNESS REAR SILL CL	1
28	190735	LIGHT BACK-UP LED CLEAR	2
29	200431	SENSOR, PROXIMITY XL RANGE <b>(INCLUDES JAM NUTS, 2 EACH)</b>	1
30	201526	HARNESS, LOADOLL DEUTSCH ASSY	1
31	201527	CONNECTOR,SEALED RELAY,DEUTSCH <b>(INCLUDES ITEM 22)</b>	1
32	201528	HARNESS,PROXIMITY SWTCH,DEUTSC	1
33	202759	HARNESS PTO TO RELAY ASSY <b>(INCLUDES ITEMS 22, 48)</b>	1
34	209117	HARNESS MAIN FRONT CL	1
35	209119	HARNES MAIN REAR CL	1
36	209120	HARNESS BULKHEAD MAIN CL	1
37	210378	MOUNT SENSOR TILT STOP	1
38	212074	NUT 10-24 FLANGE HD SERRATED	4
39	179902	LIGHT S/T/T RED CLEAR LENS GRT <b>(BEFORE 01/02/2020)</b>	4
39	213295	LIGHT CLEAR LENS S/T/T <b>(AFTER 01/02/2020)</b>	4
40	143114	GROMMET OVAL GROTE <b>(BEFORE 01/02/2020,</b> <b>(USED WITH ITEM 49)</b>	6
40	213296	FLANGE CHROME FLAT OBLONG <b>(AFTER 01/02/2020)</b>	6
41	187864	LIGHT RED LED.75CL/MK CLEAR CB <b>(BEFORE 01/02/2020)</b>	5

---

## Sub-Frame, Electrical

---

ITEM	PART NUMBER	DESCRIPTION	QTY.
41	213298	LIGHT RED CLEAR LENS MKR <b>(AFTER 01/02/2020)</b>	5
42	213498	REMOTE KIT BRAND 6 FUNC L-OLL	1
43	3-272-010003	CONNECTOR ELECT 4 POLE FM	1
44	3-368-010252	HARNESS ASSY BKHD LIGHT EXT	2
45	40700	GROMMET 4 LAMP TRUCK LITE	1
46	81264	RUBBER BOOT FOR ELECT SWITCH	2
47	143121	DUMMY PLUG MALE/FEM BULLET	6
48	150111	HARNESS 300 IN MALE.FEMALE <b>(INCLUDED WITH ITEM 33)</b>	1
49	180570	COVER CHROME OBLONG GROMMET <b>(OBSOLETE AFTER 01/02/2020) (USED WITH ITEM 40, 143114)</b>	6



Sub-Frame, Electrical, Remote Control (Before 08/01/2019)

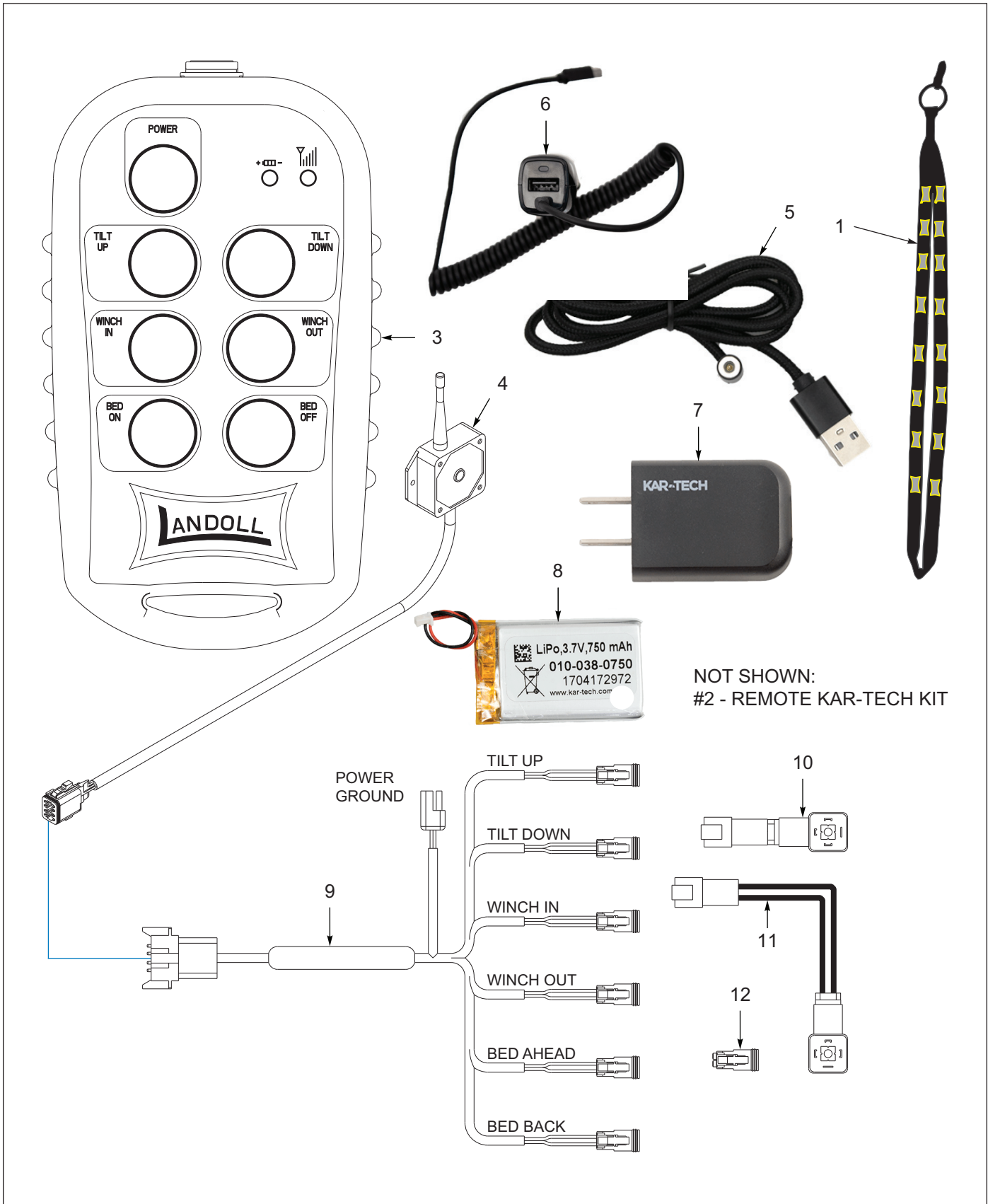


Figure 7-7: Sub-Frame, Electrical, Remote Control (Before 08/01/2019)

## Sub-Frame, Electrical, Remote Control (Before 08/01/2019)

ITEM	PART NUMBER	DESCRIPTION	QTY.
	168650	RECEIVER/TRANS MACRO KAR CL <b>(INCLUDES ITEMS 1-2)</b>	--
1	168979	LANYARD LANDOLL	1
2	168980	REMOTE KAR-TECH CL <b>(INCLUDES ITEMS 3-6)</b>	1
3	168981	TRANSMITTER MACRO CL	1
4	175583	RECEIVER 6FUNCT FOR 138151	1
5	235291	CHARGER 12V TO MAGNETIC USB <b>(CORD ONLY, REQUIRES ITEM 6)</b>	1
6	168976	CHARGER 12V TO MICRO USB <b>(CAR CHARGER W/MICRO USB, REQUIRES ITEM 5)</b>	1
7	168982	CHARGER 120V TO MICRO USB <b>(NOT INCLUDED)</b> <b>(WALL CHARGER, REQUIRES ITEM 5)</b>	1
8	197460	BATTERY REPLACE KARTECH MACRO <b>(NOT INCLUDED)</b> <b>(CERTAIN TRANSMITTER MODEL NUMBERS ONLY. FOR COMPATIBILITY, CONTACT LANDOLL SERVICE DEPARTMENT)</b>	1
9	186882	HARNESS,CONTROL VALVE,DUETSCH <b>(NOT INCLUDED)</b>	1
10	218023	ADAPTER DIN 43/2PIN DUTSCH <b>(NOT INCLUDED)</b> <b>(PRINCE VALVES ONLY)</b> <b>(BEFORE 03/08/2022 - AFTER REPLACED BY ITEMS 11-12)</b>	6
11	229494	ADAPTER DIN/2PIN DUTSCH 6IN <b>(NOT INCLUDED)</b> <b>(PRINCE VALVES ONLY) (AFTER 03/08/2022)</b>	4
12	194407	PLUG ASSY DUMMY DEUTSCH 2 PIN <b>(NOT INCLUDED)</b>	--

Sub-Frame, Electrical, Remote Control (After 08/01/2019)

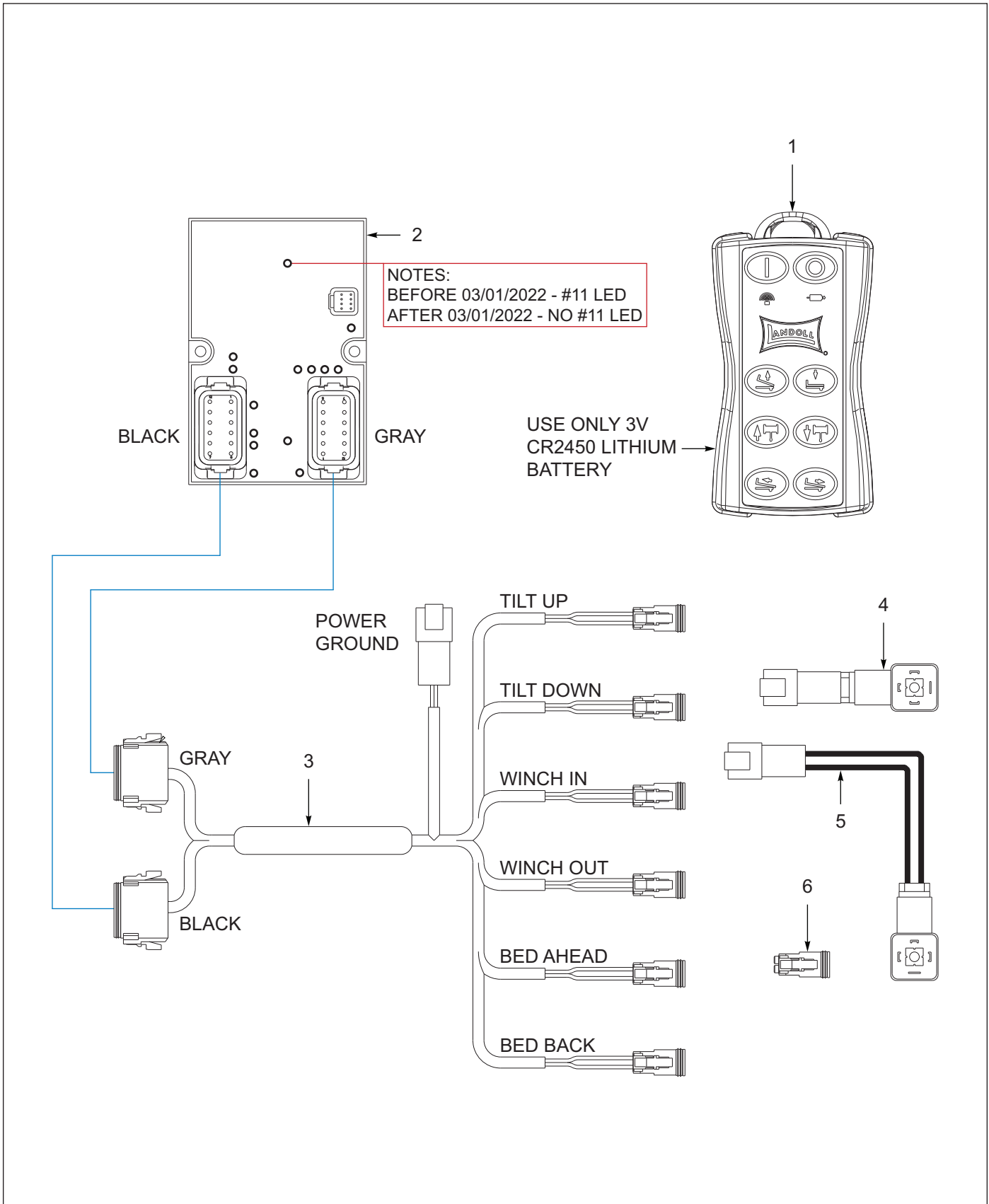


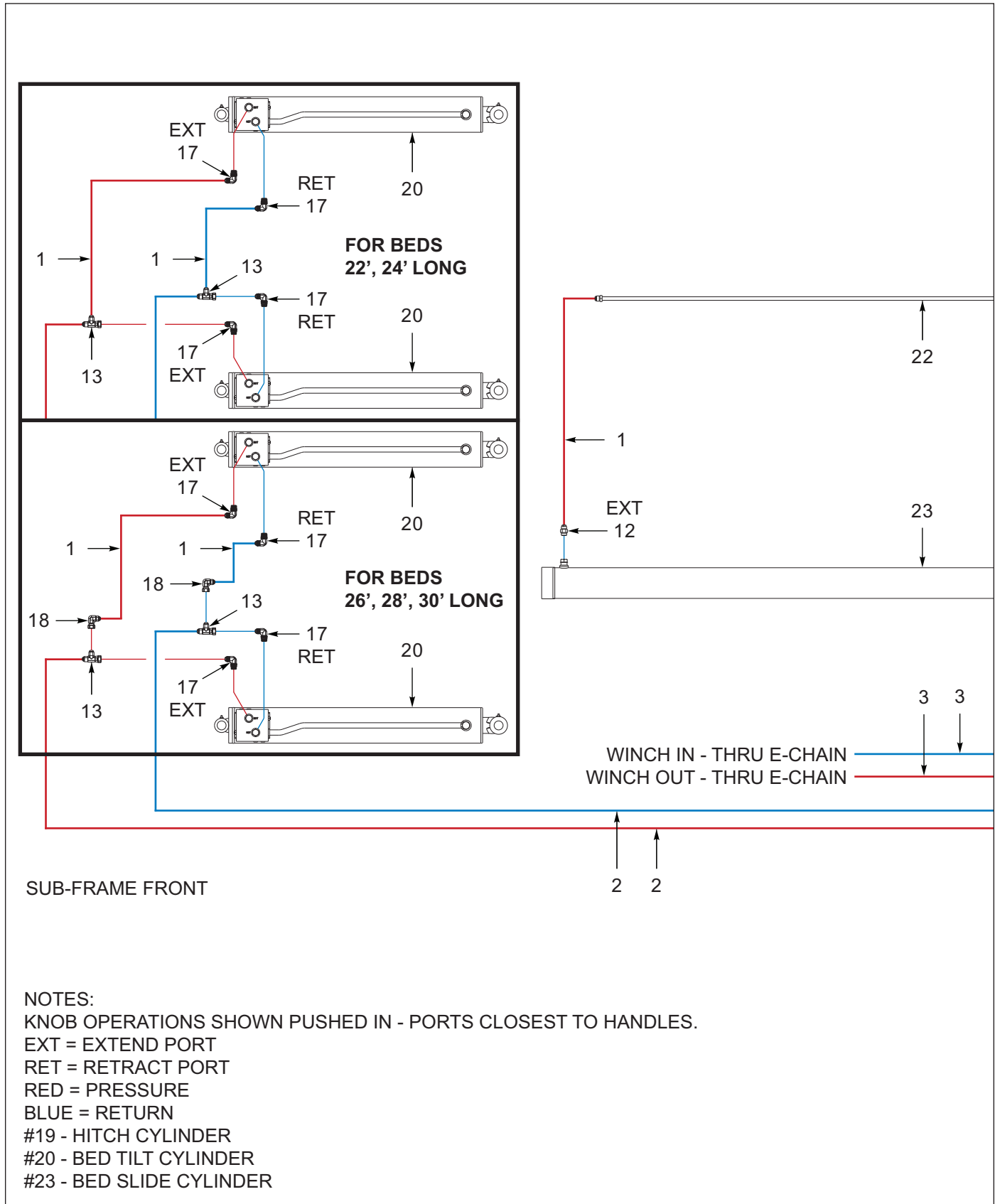
Figure 7-8: Sub-Frame, Electrical, Remote Control (Before 08/01/2019)



## Sub-Frame, Electrical, Remote Control (After 08/01/2019)

ITEM	PART NUMBER	DESCRIPTION	QTY.
	213498	REMOTE KIT BRAND 6 FUNC L-OLL <b>(INCLUDES ITEMS 1-3)</b>	--
1	213504	TRANSMITTER 6 FUNC LOADOLL	1
2	209102	RECEIVER 6 FUNC SIDE AX	1
3	209103	HARNESS RECEIVER 6 FUNC SLIDE	1
4	218023	ADAPTER DIN 43/2PIN DUTSCH <b>(NOT INCLUDED)</b> <b>(PRINCE VALVES ONLY)</b> <b>(BEFORE 03/08/2022 - AFTER REPLACED BY ITEMS 5-6)</b>	6
5	220692	ADAPTER DIN46/2PIN DUTSCH <b>(NOT INCLUDED)</b> <b>(PRINCE VALVES ONLY) (AFTER 03/08/2022)</b>	2
6	229494	ADAPTER DIN/2PIN DUTSCH 6IN <b>(NOT INCLUDED)</b> <b>(PRINCE VALVES ONLY) (AFTER 03/08/2022)</b>	4
7	194407	PLUG ASSY DUMMY DEUTSCH 2 PIN <b>(NOT INCLUDED)</b>	--

# Sub-Frame, Hydraulics



**NOTES:**

KNOB OPERATIONS SHOWN PUSHED IN - PORTS CLOSEST TO HANDLES.

EXT = EXTEND PORT

RET = RETRACT PORT

RED = PRESSURE

BLUE = RETURN

#19 - HITCH CYLINDER

#20 - BED TILT CYLINDER

#23 - BED SLIDE CYLINDER

Figure 7-9: Sub-Frame, Hydraulics (1 of 2)

NOTES:  
 KNOB OPERATIONS SHOWN PUSHED IN - PORTS CLOSEST TO HANDLES.  
 EXT = EXTEND PORT  
 RET = RETRACT PORT  
 RED = PRESSURE  
 BLUE = RETURN  
 #19 - HITCH CYLINDER  
 #20 - BED TILT CYLINDER  
 #23 - BED SLIDE CYLINDER

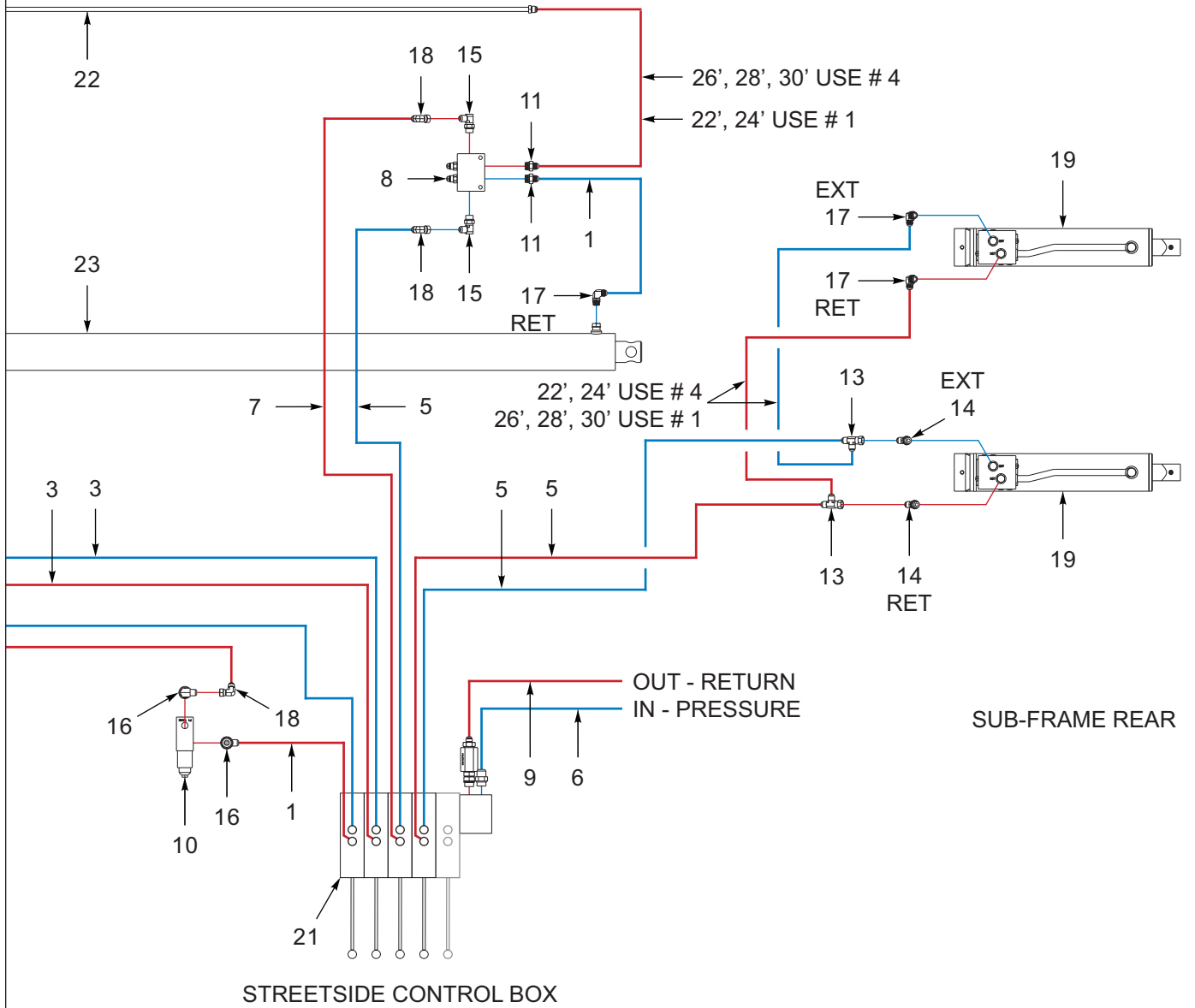


Figure 7-10: Sub-Frame, Hydraulics (2 of 2)

## Sub-Frame, Hydraulics

ITEM	PART NUMBER	DESCRIPTION	QTY.
	210373	FRAME ASSY 22' LOADOLL HD (22', 24')	--
	210417	SUB FRAME ASSY LOADOLL3 LONG (26', 28', 30')	--
1	1-397-010301018	HOSE ASSY1/2X18,SAE 37,STR-STR (22', 24' REQ 6 EACH) (26', 28' 30' REQ 7 EACH)	--
2	1-397-010301194	HOSE ASSY,1/2X194,SAE37, STR (22', 24')	2
2	1-397-010301238	HOSE ASSY 1/2X238,SAE37, STR (26', 28', 30')	2
3	1-397-010301208	HOSE ASY,1/2X208,SAE37STR-STR	2
4	111301	HOSE ASSY 1/2X36,SAE37,STR-ST (22', 24' REQ 2 EACH) (26', 28' 30' REQ 1 EACH)	--
5	124130	MHE HOSE HYD 1/2X44	3
6	125558	HOSE ASSY,3/4X188,SAE37,STR	1
7	1410119	HOSE ASSY 1/2X50 SAE37 STR	1
8	184585	VALVE,DUAL COUNTER BALANCE,30G (INCLUDES 236533 - CARTRIDGE, 2 EACH)	1
9	192034	HOSE ASSY, 1/2X342,SAE37,STR	1
10	200427	VALVE N.O. SOLENOID HYDR 2W	1
11	202702-10-8S	ADAPTER, #10 O-RING #8 TUBE	2
12	202702-8-8S	ADAPTER #8 O-RING TO #8 TUBE	1
13	203102-8-8S	ADAPTER,TEE,1/2 #8JICX#8JICSWV	4
14	2061-8-8S	ADAPTER, 45, #8 O-RING-TUBE	2
15	2062-10-8S	ADAPTER,90, #10 O-RING-TUBE	2
16	2062-12-8S	ADAPTER,90,#12 O-RING-#8 TUBE	2
17	2062-8-8S	ADAPTER, 90, #8 O-RING-TUBE	7
18	2071-8-8S	ADAPTER90 #8 FLR SWIVEL #8JIC (22', 24' REQ 3 EACH) (26', 28' 30' REQ 5 EACH)	--
19	208107	CYLINDER 4X16 W/CB VALVE	2
20	208108	CYLINDER 4-1/2 X 30 W/CB VALVE	2
21	208131	VALVE 5SPL REXROTH HDCLIII ASM	1
22	210368	TUBE ASSY 1/2"X120"#8MJIC ENDS	1
23	3-242-010185	CYLINDER 4X126 LOADOLL (22', 24')	1
23	210399	CYLINDER 4-1/2 X 150 LOADOLL (26', 28', 30')	1

# Cylinder, Hydraulic, 4 X 126

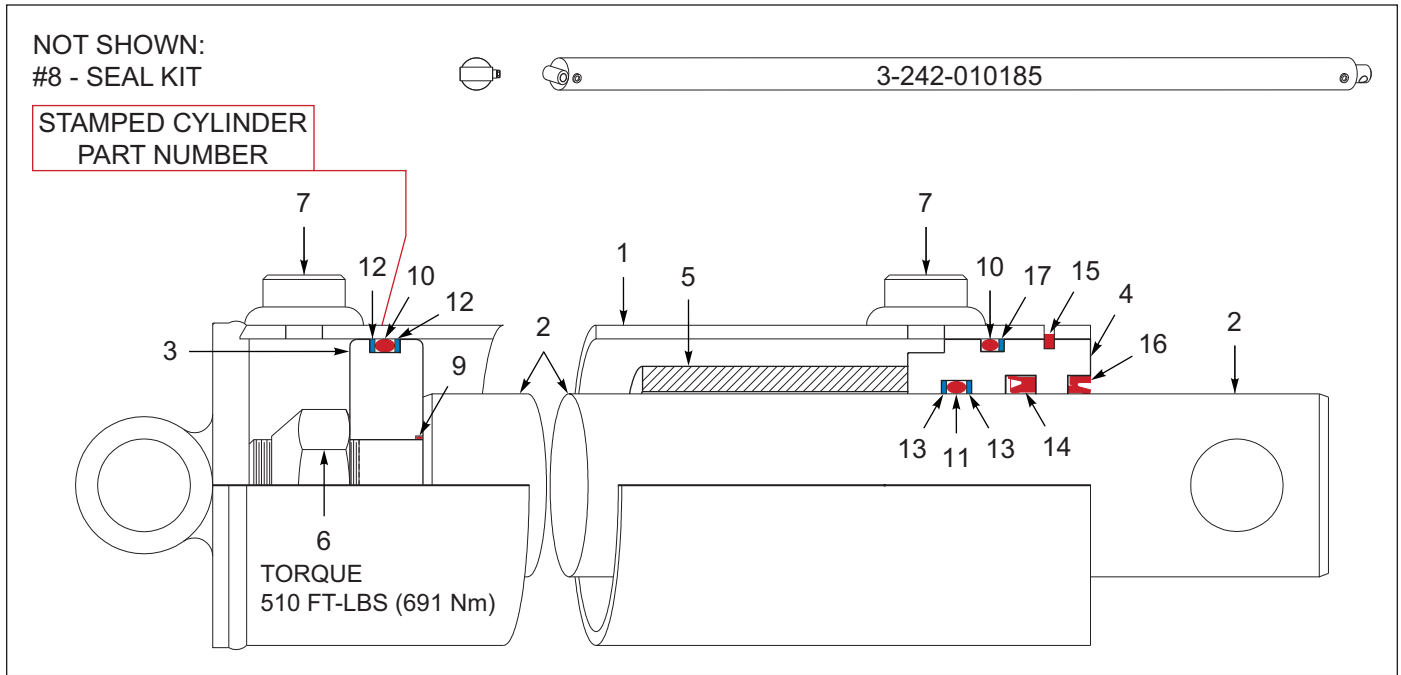


Figure 7-11: Cylinder, Hydraulic, 4 x 126

# Cylinder, Hydraulic, 4 X 126

ITEM	PART NUMBER	DESCRIPTION	QTY.
	3-242-010185	CYLINDER 4X126 LOADOLL (22', 24' BEDS)	--
1	-----	BUTT AND TUBE ASSEMBLY (22', 24' BEDS)	1
2	011300179	PISTON ROD	1
3	071900195	PISTON, 4X126 CYL	1
4	081900277	GLAND FOR 3-242-010103	1
5	-----	SPACER	1
6	220000212	NUT LOCKING 1-242-010042	1
7	-----	SAE ORB PLUG	2
8	PMCK-BB-0686	PACKING KIT FOR 3-242-010185 (NOT SHOWN) (INCLUDES ITEMS 9-17)	1
9	-----	O-RING	1
10	-----	O-RING	2
11	-----	O-RING	1
12	-----	BU-WASHER	2
13	-----	BU-WASHER	2
14	-----	U-CUP	1
15	-----	SQUARE WIRE RETAINER	1
16	-----	CANNED WIPER	1
17	-----	BU-WASHER	1

# Short Bed Frame Assembly

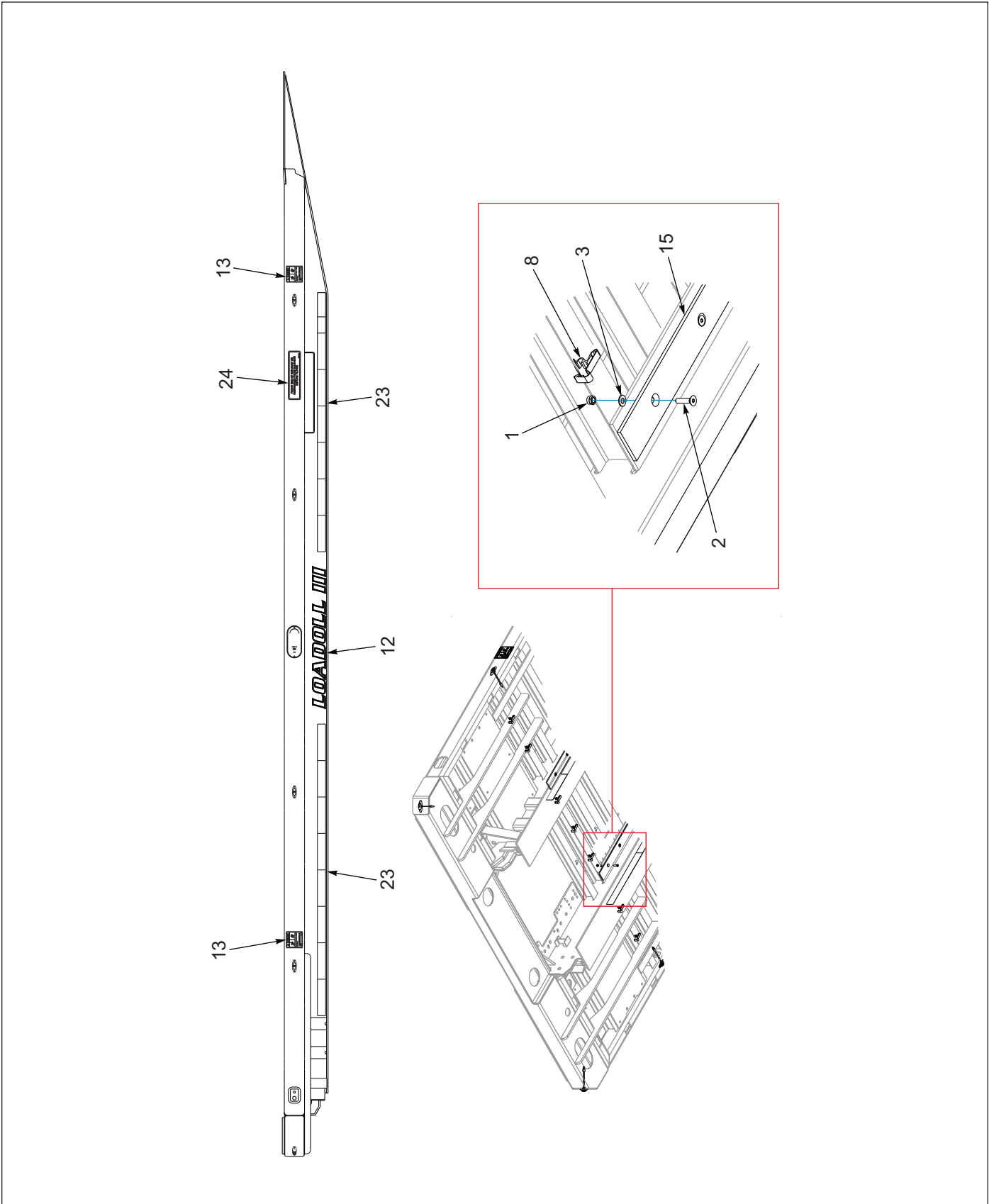


Figure 7-12: Short Bed Frame Assembly (1 of 2)

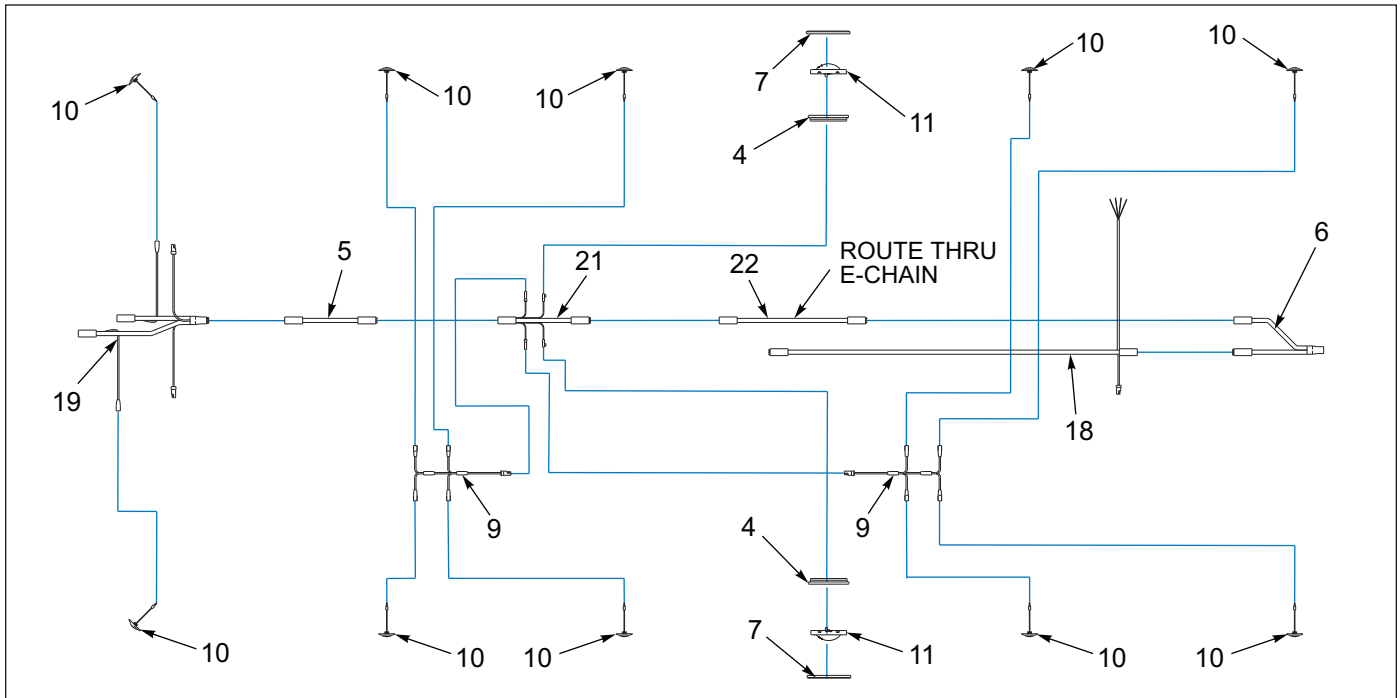


Figure 7-13: Short Bed Frame Assembly (2 of 2)

## Short Bed Frame Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-512-010005-03	NUT HEX SLFLKG GRB 5/16-18	50
2	1-654-010034-06	SCREW HX SKT CTSK,5/16-1-1/4	50
3	1-861-010032-08	WASHER,FLAT 5/16 N ZP	50
4	143114	GROMMET OVAL GROTE (BEFORE 01/02/2020)	2
4	213296	FLANGE CHROME FLAT OBLONG (AFTER 01/02/2020)	2
5	143167	HARNESS EXT 84 IN GROTE	1
6	146929	HARNESS Y SPLITTER GROTE	1
7	180570	COVER CHROME OBLONG GROMMET (OBSOLETE AFTER 01/02/2020)	2
8	187833	CLIP HARNESS, CROSS-MEMBER	35
9	187855	HARNESS MARKER UPR DECK	2
10	187863	LIGHT YEL LED.75CL/MK CLEAR CB (BEFORE 01/02/2020)	10
10	213297	LIGHT YEL CLEAR LENS MKR (AFTER 01/02/2020)	10
11	187868	LIGHT MID-TURN LED CLEAR LENS	2
12	199189	DECAL LOADOLL III LARGE	2
13	2-573-010335	DECAL, DANGER PINCHING	4
14	208100	BED WLDMT, LOADOLL 3 22'	1
15	208879	NYLATRON PAD, 120"	2
16	208880	NYLATRON PAD, 80"	2
17	209091	BED MOD BULKHEAD MOUNT WLDMT	--
18	209119	HARNES MAIN REAR CL	--
19	209120	HARNESS BULKHEAD MAIN CL	--
20	209130	GALV OF 208100 (22' BED)	--
21	212343	HARNESS BED MAIN LOADOLL	1
22	212352	HARNESS EXT 7-COND 240"	1
23	3-573-010377	DECAL,2"REFLEXITE TAPE,RD/WHT (BY THE INCH)	272
24	3-573-010419	DECAL,BED SLIDE BEFORE TILT	2

# Long Bed Frame Assembly

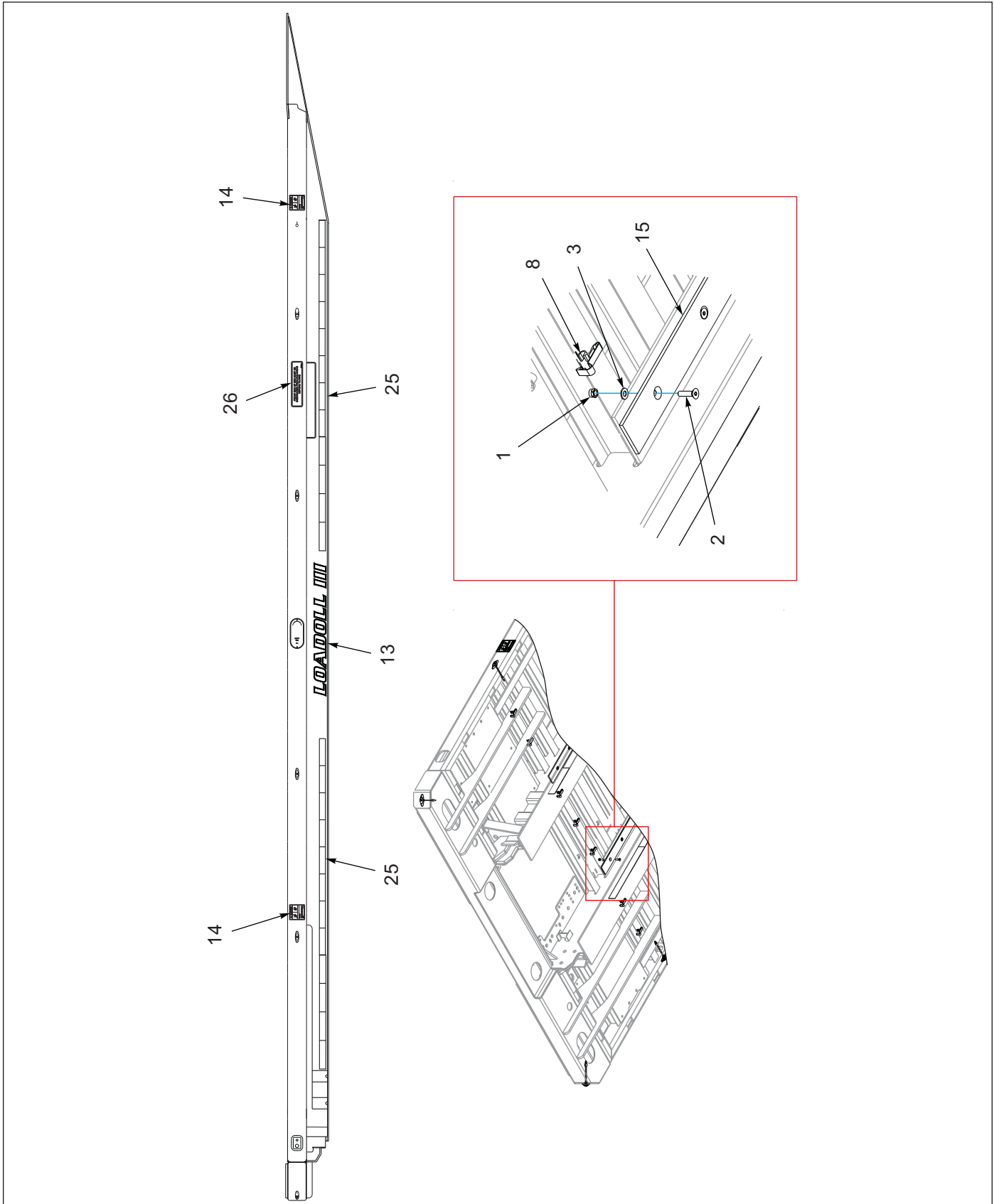


Figure 7-14: Long Bed Frame Assembly (1 of 2)



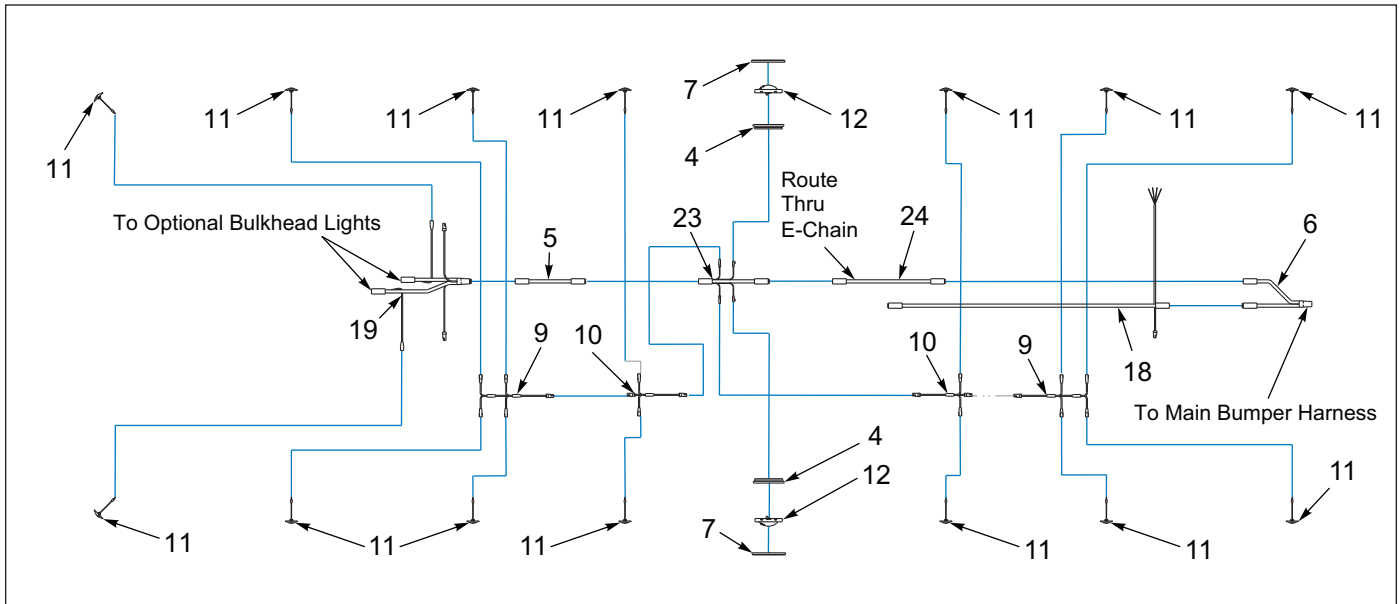


Figure 7-15: Long Bed Frame Assembly (2 of 2)

### Long Bed Frame Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-512-010005-03	NUT HEX SLFLKG GRB 5/16-18	68
2	1-654-010034-06	SCREW HX SKT CTSK,5/16-1-1/4	68
3	1-861-010032-08	WASHER,FLAT 5/16 N ZP	68
4	143114	GROMMET OVAL GROTE <b>(BEFORE 01/02/2020)</b>	2
4	213296	FLANGE CHROME FLAT OBLONG <b>(AFTER 01/02/2020)</b>	2
5	143167	HARNESS EXT 84 IN GROTE	1
6	146929	HARNESS Y SPLITTER GROTE	1
7	180570	COVER CHROME OBLONG GROMMET <b>(OBSOLETE AFTER 01/02/2020)</b>	2
8	187833	CLIP HARNESS, CROSS-MEMBER	49
9	187855	HARNESS MARKER UPR DECK	2
10	187857	HARNESS MARKER ADDITION	2
11	187863	LIGHT YEL LED.75CL/MK CLEAR CB <b>(BEFORE 01/02/2020)</b>	14
11	213297	LIGHT YEL CLEAR LENS MKR <b>(AFTER 01/02/2020)</b>	14
12	187868	LIGHT MID-TURN LED CLEAR LENS	2
13	199189	DECAL LOADOLL III LARGE	2
14	2-573-010335	DECAL, DANGER PINCHING	4
15	208879	NYLATRON PAD, 120"	2
16	208880	NYLATRON PAD, 80"	2
17	209091	BED MOD BULKHEAD MOUNT WLDMT	--
18	209119	HARNES MAIN REAR CL	--
19	209120	HARNESS BULKHEAD MAIN CL	--
20	210404	BED WLDMT 28' LOADOLL III	1
21	210405	GALV OF 210404 (28' BED)	1
22	210443	NYLATRON PAD 72-1/8"	2
23	212343	HARNESS BED MAIN LOADOLL	1
24	212352	HARNESS EXT 7-COND 240"	1
25	3-573-010377	DECAL,2"REFLEXITE TAPE,RD/WHT <b>(BY THE INCH)</b>	400
26	3-573-010419	DECAL,BED SLIDE BEFORE TILT	2

# Frame Mounting Kit (BEFORE 12/16/2022)

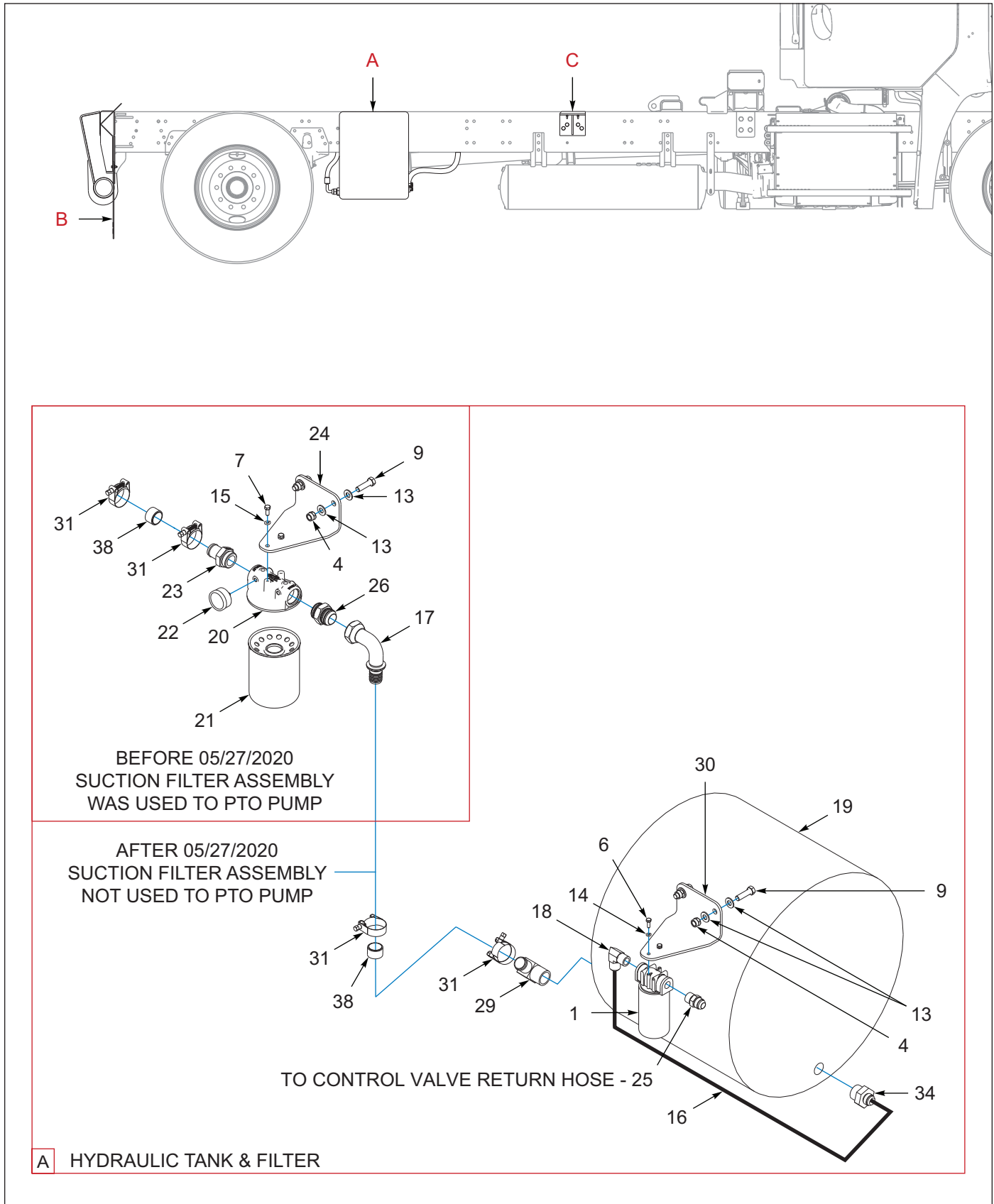
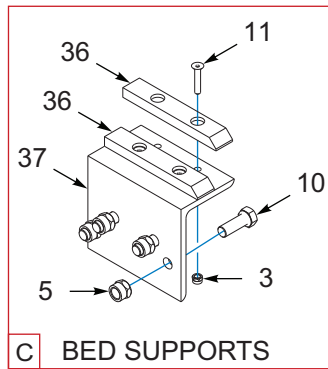
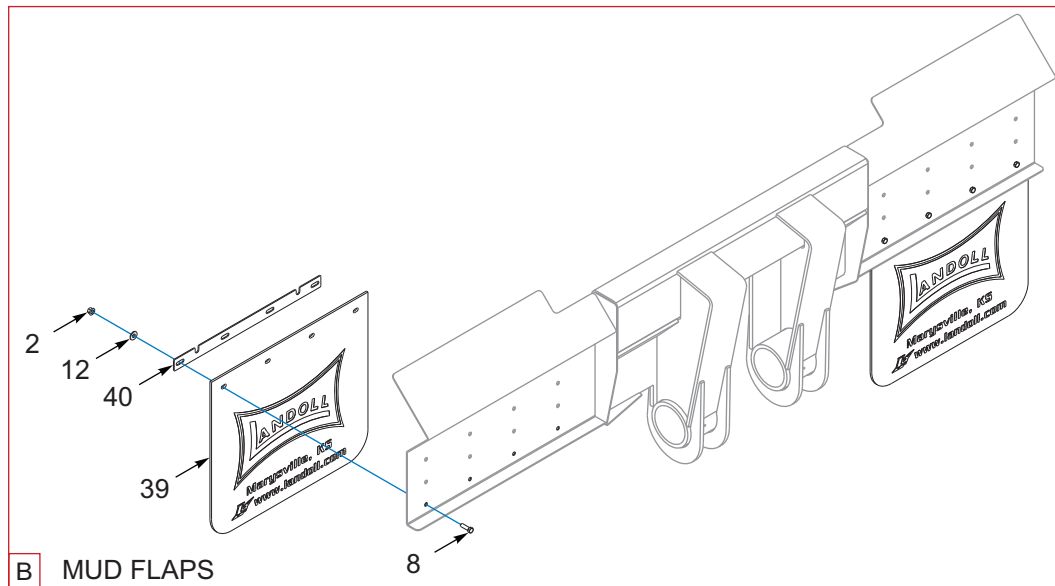


Figure 7-16: Frame Mounting Kit (BEFORE 12/16/2022) (1 of 2)



NOTE:  
 CONTACT LANDOLL TRAILER SERVICE  
 DEPARTMENT FOR THE FOLLOWING.  
 NOT SHOWN:  
 27 - CROSSMEMBER, FRT WLDMT  
 28 - FRAME-SUB NOT-TILT WLDMT  
 32 - GUSSET REAR NON-TILT  
 33 - GUSSET BIG NON-TILT  
 35 - CROSSMEMBER, CYL GUSSET WLDMT

Figure 7-17: Frame Mounting Kit (BEFORE 12/16/2022) ( 2 of 2)

## Frame Mounting Kit (BEFORE 12/16/2022)

ITEM	PART NUMBER	DESCRIPTION	QTY.
	208976	FRAME MOUNTING KIT	--
1	1-295-010001	FILTER, RETURN LINE <b>(INCLUDES FILTER 1-295-0100002)</b>	1
2	1-510-010001	NUT, 3/8-16 UNC FLG LOCK GR G	8
3	1-512-010005-03	NUT HEX SLFLKG GRB 5/16-18	8
4	1-512-010005-10	NUT HEX 1/2-20 SLF-LKG GRB <b>(BEFORE 05/27/2020, 4 EACH)</b>	2
5	1-512-010005-13	NUT,HEX SLFLKG GRB 5/8-11	8
6	1-654-010047-04	SCREW,HEX CAP,1/4-20X3/4 GR5	2
7	1-654-010049-03	SCREW HX CP 5/16-18UNCX3/4GR5 <b>(BEFORE 05/27/2020)</b>	2
8	1-654-010051-06	SCREW,HEX CAP 3/8-16UNCX1-1/4	8
9	1-654-010055-04	SCREW,HEX CAP,1/2-13UNCX1-3/4 <b>(BEFORE 05/27/2020, 4 EACH)</b>	2
10	1-654-010059-04	SCREW,HEX CAP 5/8-11X1-3/4 G5	8
11	1-654-010121-08	SCREW HX SKT CTSK 5/16X1-3/4	8
12	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	8
13	1-861-010032-14	WASHER, FLAT 1/2" N ZP/CD <b>(BEFORE 05/27/2020, 8 EACH)</b>	4
14	1-861-010034-09	WASHER, LKG HLCL SPR, 1/4	2
15	1-861-010034-10	WASHER,LKG 5/16 <b>(BEFORE 05/27/2020)</b>	2
16	112813	HOSE ASSY,3/4X38,SAE37,STR90	1
17	116330	FITTING 1.25F 37-1.25 BARB 90 <b>(BEFORE 05/27/2020)</b>	1
18	1408243	ADAPTER,PIPE SW -JIC	1
19	166735	HYD TANK ALUM 35GAL POLISHED	1
20	194420	SUCTION FILTER HEAD <b>(BEFORE 05/27/2020)</b>	1
21	194421	SUCTION FILTER <b>(BEFORE 05/27/2020)</b>	2
22	194422	SUCTION FILTER GAUGE <b>(BEFORE 05/27/2020)</b>	1
23	194423	ADAPTER-20 O-RING TO 1-1/4 H <b>(BEFORE 05/27/2020)</b>	1
24	194430	BRACKET FILTER SUPPORT <b>(BEFORE 05/27/2020)</b>	1
25	2021-12-12S	ADAPTER 3/4M PIPE X1-1/16MJIC	1
26	202702-20-20S	ADAPTER #20 O-RING #20 TUBE <b>(BEFORE 05/27/2020)</b>	1
27	208116	CROSSMEMBER, FRT WLDMT 21'	1
28	208118	FRAME-SUB NON-TILTING WLDMT	1
29	208977	FITTING, 1-1/4 NPT- 1-1/4 BARB	1
30	208978	BRACKET FILTER SUPPORT	1
31	209878	HOSE CLAMP T-BOLT25/32 X 1-3/4 <b>(BEFORE 05/27/2020, 4 EACH)</b>	2
32	210396	GUSSET REAR NON-TILT FRAME	4
33	210397	GUSSET BIG NON-TILT FRAME	4
34	210456	ADAPTER 1-1/4 MNPT X #12 JIC	1
35	212218	CROSSMEMBER, CYL GUSSET, WLDMT	2
36	3-311-012719	NYLATRON BED SUPPORT	4
37	3-311-012787	BED SUPPORT ANGLE WLDMT	2
38	3-399-010001	HOSE 1-1/4 SUCTION <b>(BY THE FOOT)</b>	19
39	3-485-010001	FLAP, MUD 21 IN	2
40	3-762-010017	CLAMP MUD FLAP	2



# Frame Mounting Kit (AFTER 12/16/2022)

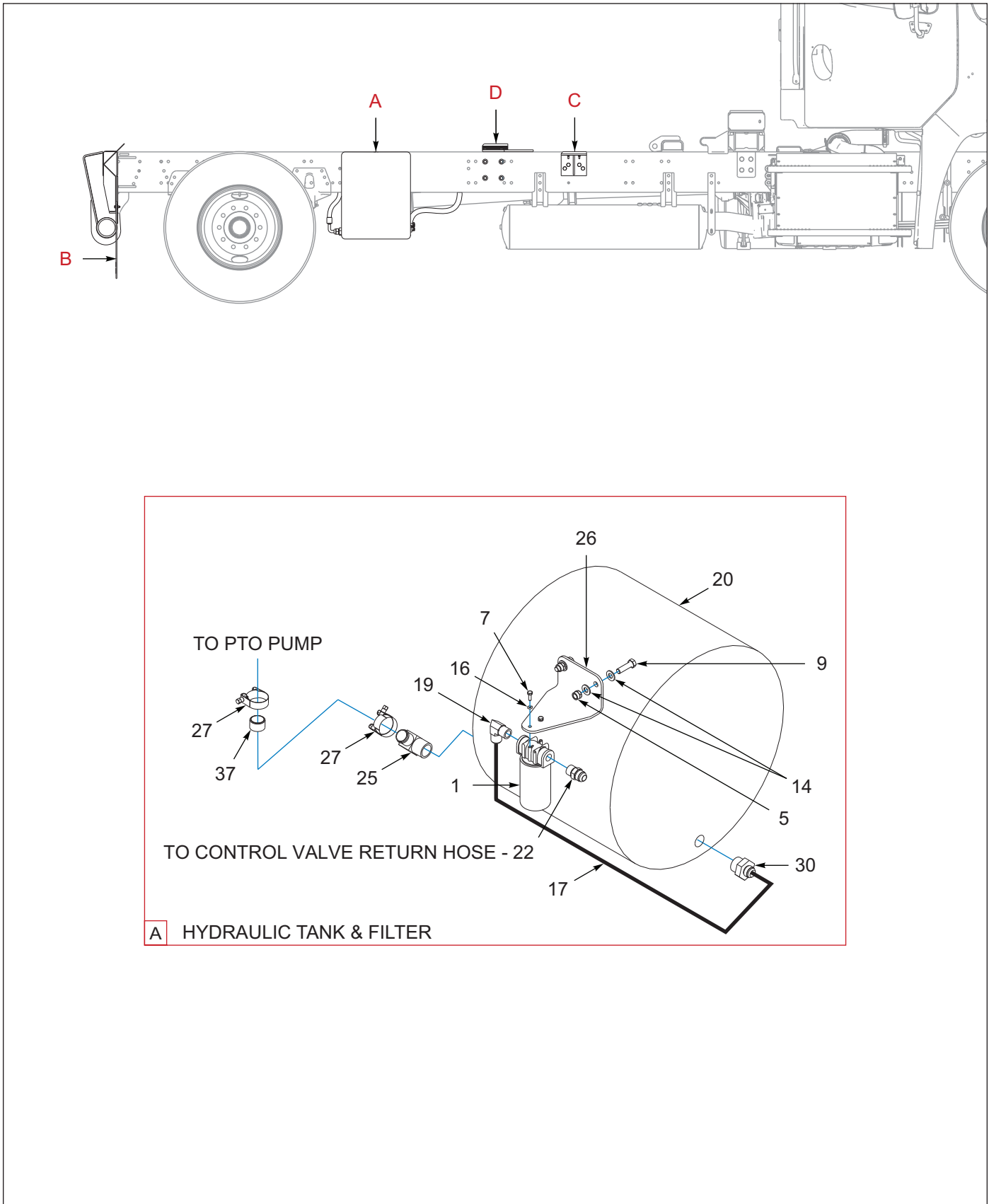
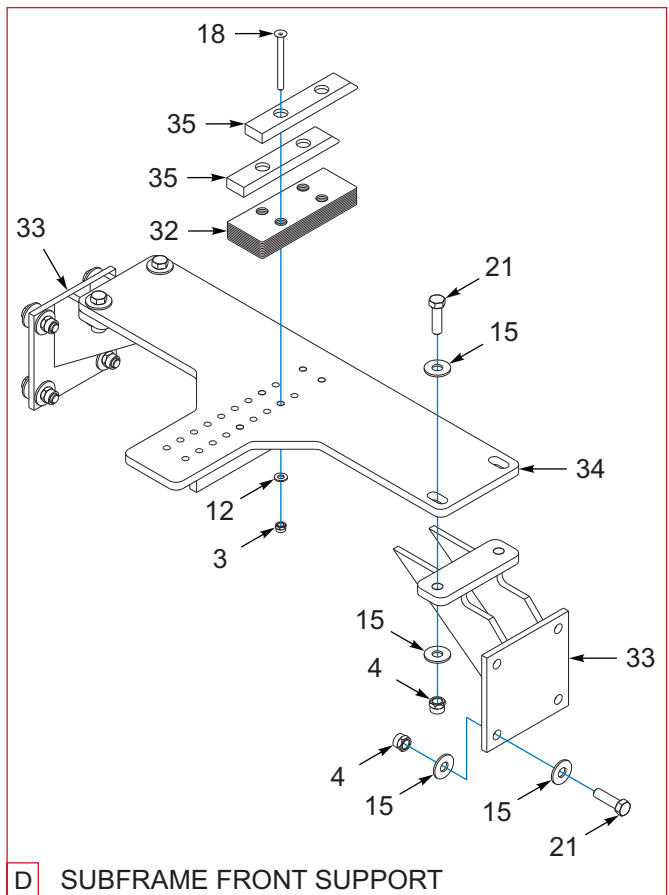
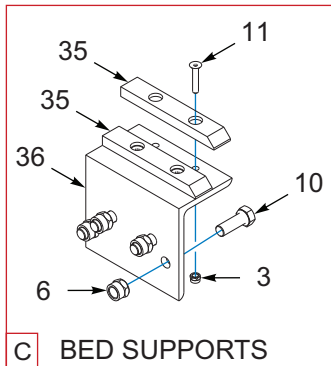
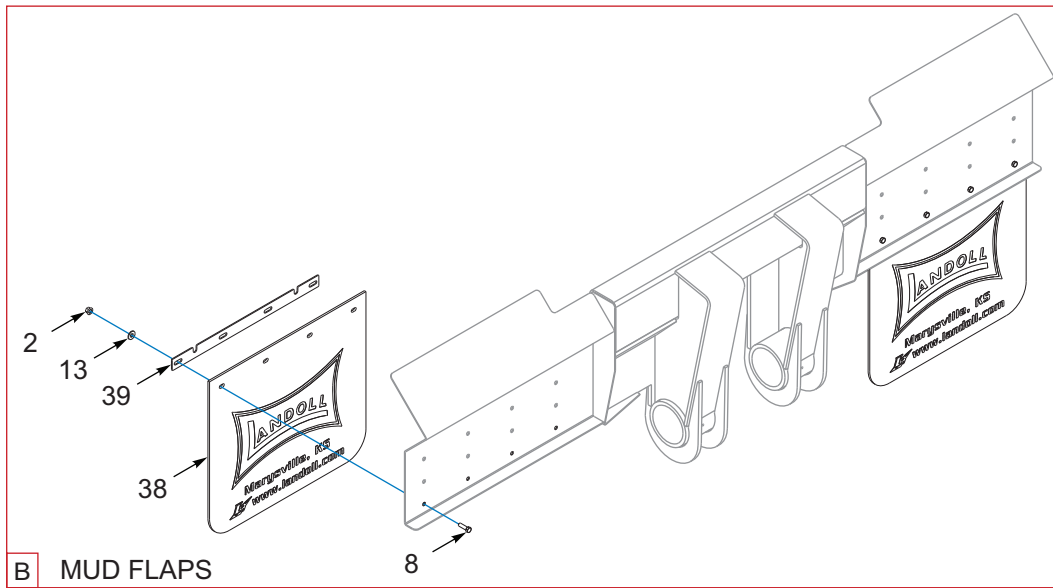


Figure 7-18: Frame Mounting Kit (AFTER 12/16/2022) (1 of 2)



NOTE:  
 CONTACT LANDOLL TRAILER SERVICE  
 DEPARTMENT FOR THE FOLLOWING.  
 NOT SHOWN:  
 23 - CROSSMEMBER, FRT WLDMT  
 24 - FRAME-SUB NOT-TILT WLDMT  
 28 - GUSSET REAR NON-TILT  
 29 - GUSSET BIG NON-TILT  
 31 - CROSSMEMBER, CYL GUSSET WLDMT

Figure 7-19: Frame Mounting Kit (AFTER 12/16/2022) (2 of 2)

## Frame Mounting Kit (BEFORE 12/16/2022)

ITEM	PART NUMBER	DESCRIPTION	QTY.
	208976	FRAME MOUNTING KIT	--
1	1-295-010001	FILTER, RETURN LINE	1
2	1-510-010001	NUT, 3/8-16 UNC FLG LOCK GR G	8
3	1-512-010005-03	NUT HEX SLFLKG GRB 5/16-18	12
4	1-512-010005-09	NUT,HEX,SLFLKG, 1/2-13 GRB	12
5	1-512-010005-10	NUT HEX 1/2-20 SLF-LKG GRB	2
6	1-512-010005-13	NUT,HEX SLFLKG GRB 5/8-11	8
7	1-654-010047-04	SCREW,HEX CAP,1/4-20X3/4 GR5	2
8	1-654-010051-06	SCREW,HEX CAP 3/8-16UNCX1-1/4	8
9	1-654-010055-04	SCREW,HEX CAP,1/2-13UNCX1-3/4	2
10	1-654-010059-04	SCREW,HEX CAP 5/8-11X1-3/4 G5	8
11	1-654-010121-08	SCREW HX SKT CTSK 5/16X1-3/4	8
12	1-861-010032-08	WASHER,FLAT 5/16 N ZP	4
13	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	8
14	1-861-010032-14	WASHER, FLAT 1/2" N ZP/CD	4
15	1-861-010032-15	WASHER, FLAT 1/2 W ZP/CD	24
16	1-861-010034-09	WASHER, LKG HLCL SPR, 1/4	2
17	112813	HOSE ASSY,3/4X38,SAE37,STR90	1
18	130590	SCREW,HXSKT CTSK5/16-18X3-1/2	4
19	1408243	ADAPTER,PIPE SW -JIC	1
20	166735	HYD TANK ALUM 35GAL POLISHED	1
21	191302	SCREW 1/2-13X1-3/4 GR8 FULL TD	12
22	2021-12-12S	ADAPTER 3/4M PIPE X1-1/16MJIC	1
23	208116	CROSSMEMBER, FRT WLDMT 21'	1
24	208118	FRAME-SUB NON-TILTING WLDMT	1
25	208977	FITTING, 1-1/4 NPT- 1-1/4 BARB	1
26	208978	BRACKET FILTER SUPPORT	1
27	209878	HOSE CLAMP T-BOLT25/32 X 1-3/4	2
28	210396	GUSSET REAR NON-TILT FRAME	4
29	210397	GUSSET BIG NON-TILT FRAME	4
30	210456	ADAPTER 1-1/4 MNPT X #12 JIC	1
31	212218	CROSSMEMBER, CYL GUSSET, WLDM	2
32	218065	SHIM CL BED SUPPORT	10
33	242667	WLDMT SUBFRAME FRONT SUPPORT	2
34	242668	WLDMT XMBR SUBFRAME SUPPORT	1
35	3-311-012719	NYLATRON BED SUPPORT	6
36	3-311-012787	BED SUPPORT ANGLE WLDMT	2
37	3-399-010001	HOSE 1-1/4 SUCTION	19
38	3-485-010001	FLAP, MUD 21 IN	2
39	3-762-010017	CLAMP MUD FLAP	2





# Ladder Assembly

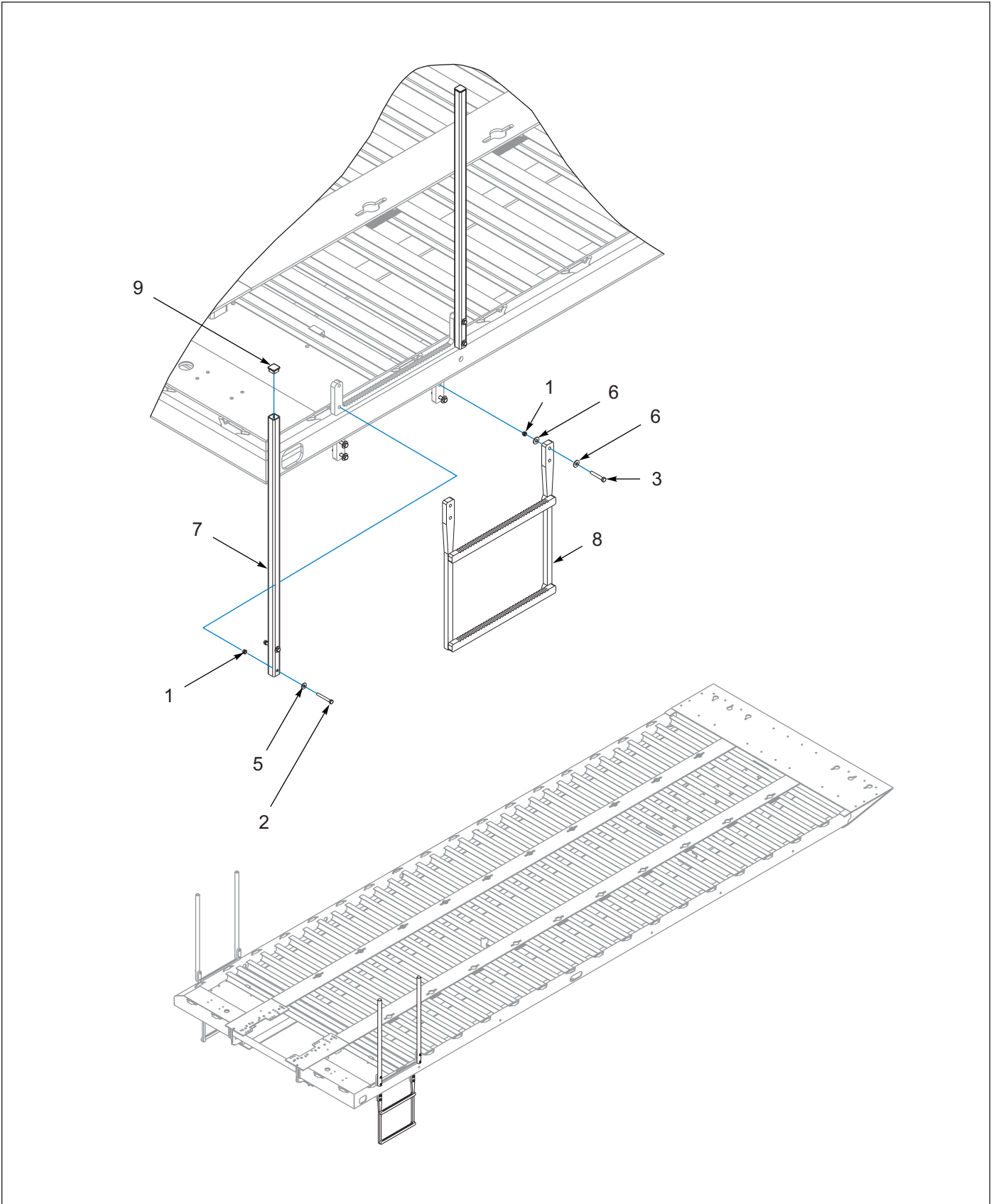


Figure 7-20: Ladder Assembly

## Ladder Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-512-010005-03	NUT, HEX, SLFLKG, 5/16-18UNC,GRB	8
2	1-654-010049-11	SCREW, HEX, 5/16-18UNC X 2-1/2 GR5	4
3	1-654-010051-10	SCREW, HEX 3/8-16UNC X 2-1/4 GR5	4
4	1-660-010006	SILICONE, CLEAR RTV ( <b>NOT SHOWN</b> )	0.1
5	1-861-010032-09	WASHER, FLAT, ZP/CD, 5/16	4
6	1-861-010032-11	WASHER, FLAT, ZP/CD, 3/8	8
7	188287	HANDLE, STOW LADDER STOW	2
8	188910	LADDER WLDMY	1
9	208980	PLUG, SQUARE TUBE 1-1/4, 10-14 GA	2

# Lock Assembly

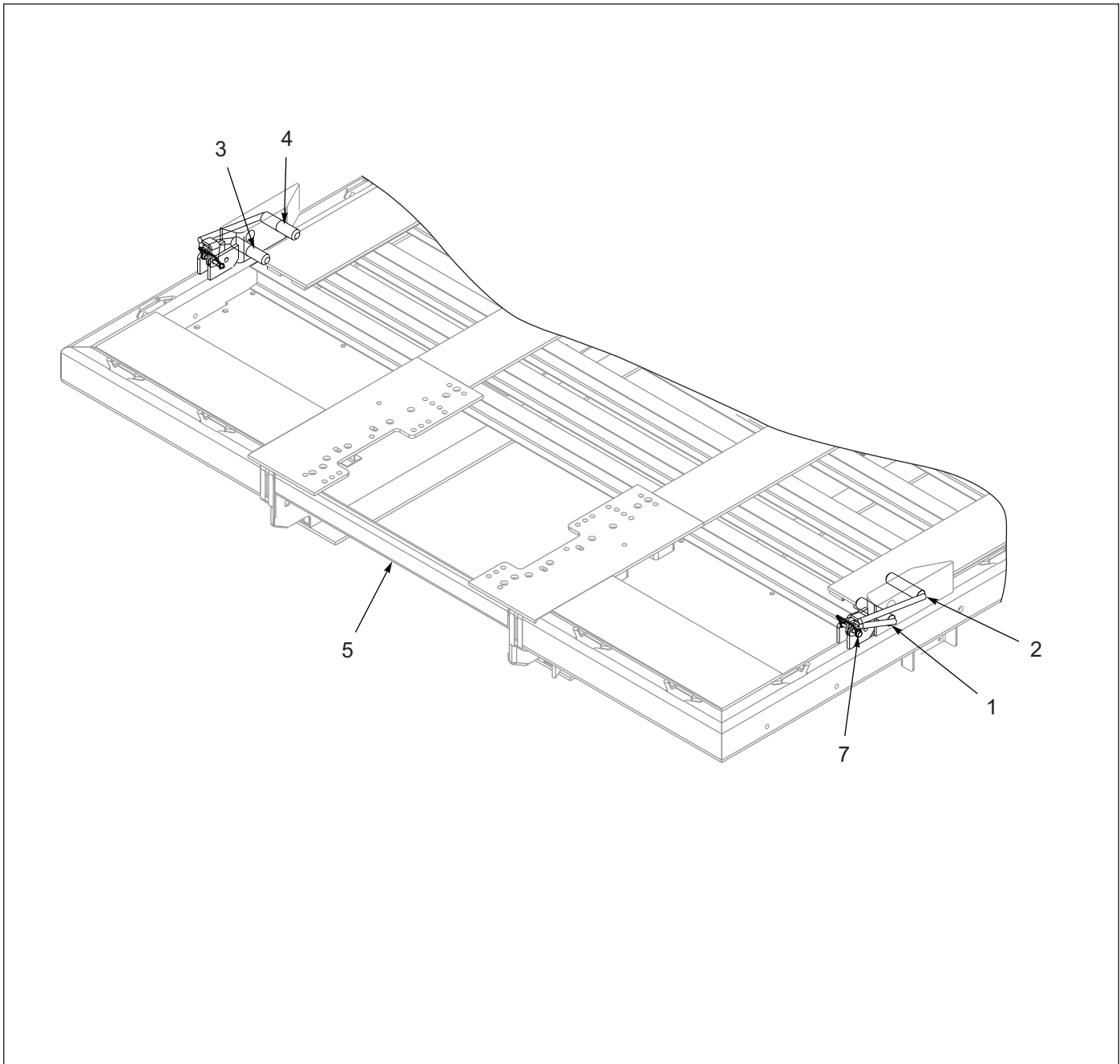


Figure 7-21: Lock Assembly

## Lock Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	170394	PIN, WLDMT HOLD-DOWN LF	1
2	170395	PIN, WLDMT HOLD-DOWN LR	1
3	170396	PIN, WLDMT HOLD-DOWN RF	1
4	170397	PIN, WLDMT HOLD-DOWN RR	1
5	209077	WLDMT LOCK INSTL CONT	1
6	209078	GALV OF 209077 (LOCK INSTL)	1
7	516-22PTL	PIN, MUD FLAP	2

# Bulkhead Assembly, Frame Mount

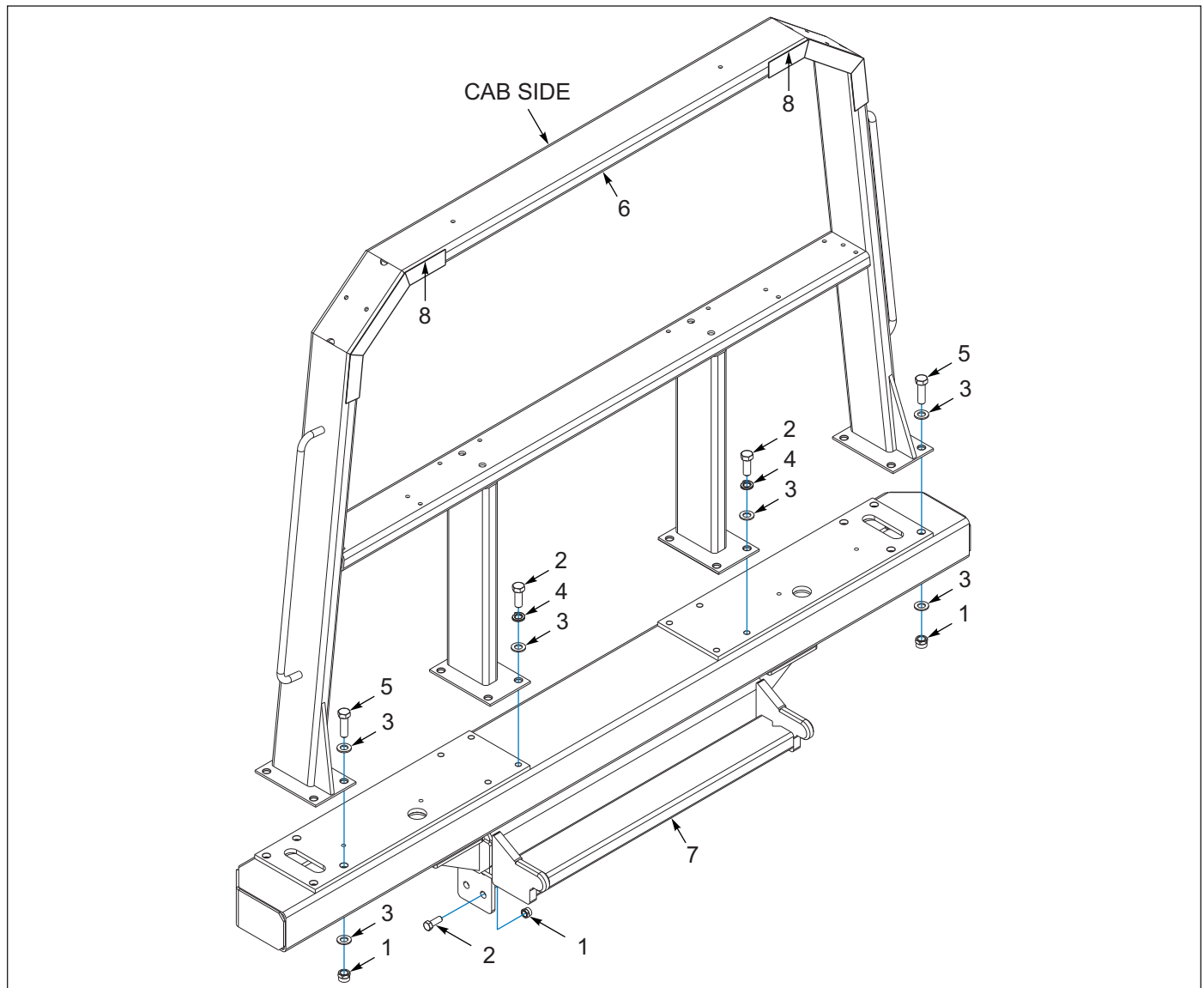


Figure 7-22: Bulkhead Assembly, Frame Mount

## Bulkhead Assembly, Frame Mount

ITEM	PART NUMBER	DESCRIPTION	QTY.
	210375	BULKHEAD ASSY FRAME MOUNT	--
	242690	BULKHEAD ASSY FRM MNT GALV (GALV)	--
1	1-512-010005-15	NUT,HEX,SLFLKG GRB 3/4-10	16
2	1-654-010032-05	SCREW HEX CAP 3/4-10X2 GR8	16
3	1-861-010032-20	WASHER, FLAT,3/4 N ZP/CD	24
4	1-861-010034-17	WASHER,LKG,HLCL SPR,3/4	8
5	104483	SCREW 3/4-10X2-1/2 HXCP ZPGR8	8
6	242717	PC OF 208918 (BULKHEAD WLDMT)	1
6	242692	GALV OF 208918 (BLKHD WLDMT) (GALV)	1
7	242716	PC OF 208919 BULKHEAD BASE	1
7	242691	GALV OF 208919 (BLKHD BASE) (GALV)	1
8	3-573-010377	DECAL,2"REFLEXITE TAPE,RD/WHT (BY THE INCH)	52

# Lights Bulkhead

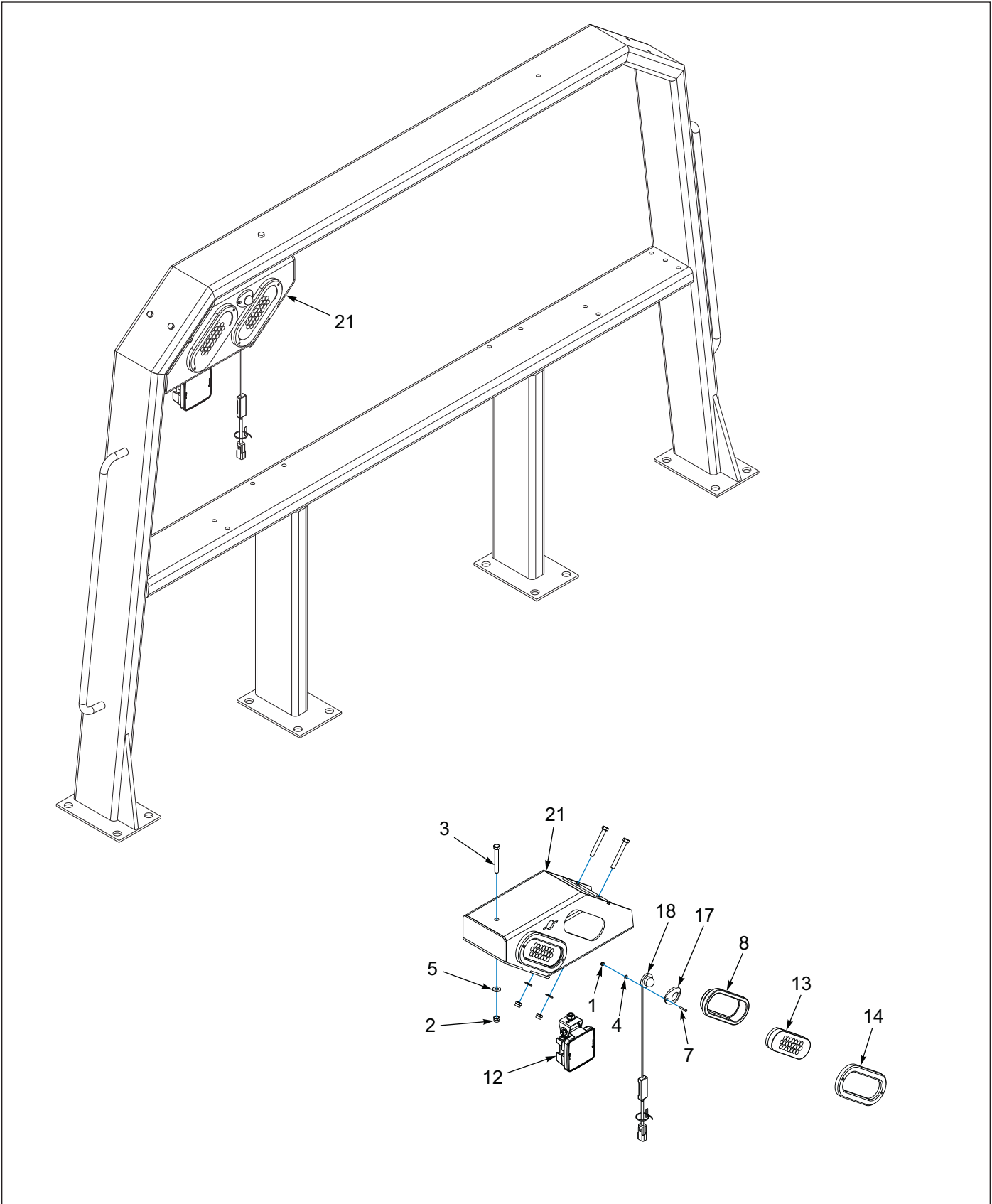


Figure 7-23: Lights Bulkhead (1 of 2)

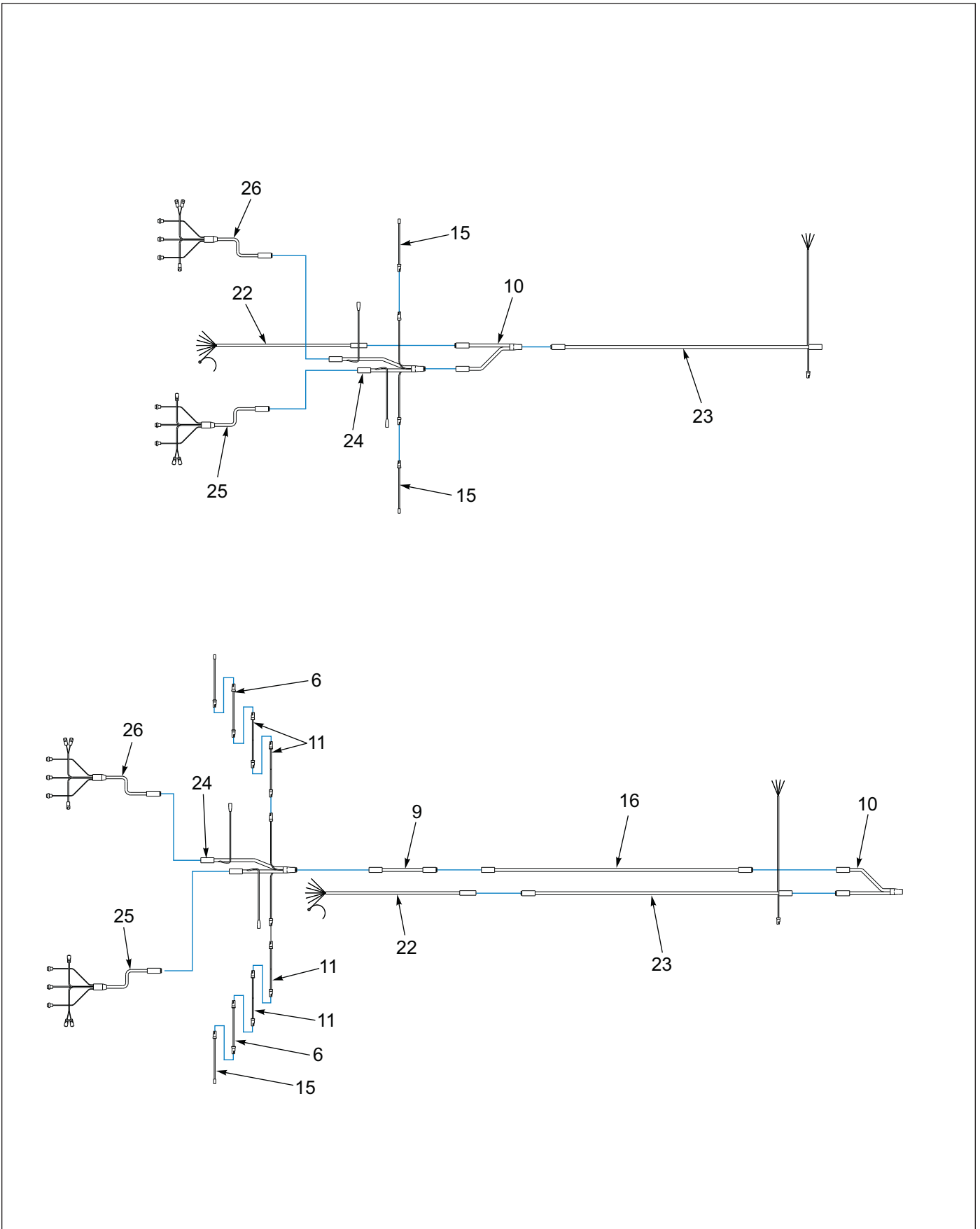


Figure 7-24: Lights Bulkhead (2 of 2)

## Lights Bulkhead

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-512-010003-02	NUT,HEX,SLFLKG W/NYL #6-32	4
2	1-512-010005-05	NUT, HEX, SLFLKG GRB 3/8-16	6
3	1-654-010051-13	SCREW,HX CP,3/8-16UNCX3,GR5	6
4	1-861-010032-01	WASHER, FLAT #6 ZP/CD	4
5	1-861-010032-10	WASHER, FLAT 3/8" N ZP/CD	6
6	3-368-010252	HARNESS ASSY BKHD LIGHT EXT	2
7	122187	SCREW,MACH SLOT FILL 6-32X3/4	4
8	143114	GROMMET OVAL GROTE <b>(BEFORE 01/02/2020)</b>	4
8	213296	FLANGE CHROME FLAT OBLONG <b>(AFTER 01/02/2020)</b>	4
9	143167	HARNESS EXT 84 IN GROTE	--
10	146929	HARNESS Y SPLITTER GROTE	1
11	150111	HARNESS 300 IN MALE.FEMALE	4
12	163996	LIGHT,12V SQUARE LED FLOOD	2
13	179902	LIGHT S/T/T RED CLEAR LENS GRT <b>(BEFORE 01/02/2020)</b>	4
13	213295	LIGHT CLEAR LENS S/T/T <b>(AFTER 01/02/2020)</b>	4
14	180570	COVER CHROME OBLONG GROMMET	4
15	190744	HARNESS POWER FROM TRUCK	2
16	202088	HARNESS EXT 7-COND 320 IN	--
17	207291	BEZEL CHROME SURFACE MT VERTEX	2
18	207292	LIGHT ASSY STROBE/CONNECTOR	2
19	208918	WLDMT, BULKHEAD	--
20	208964	BULKHEAD LIGHT BRKT WLDMT LH	1
21	208965	BULKHEAD LIGHT BRKT WLDMT RH	1
22	209118	HARNESS MAIN FRONT CL ASSY	--
23	209119	HARNES MAIN REAR CL	--
24	209120	HARNESS BULKHEAD MAIN CL	--
25	209121	HARNESS BLKHD LH CL	1
26	209122	HARNESS BLKHD RH CL	1





# Strobe Light

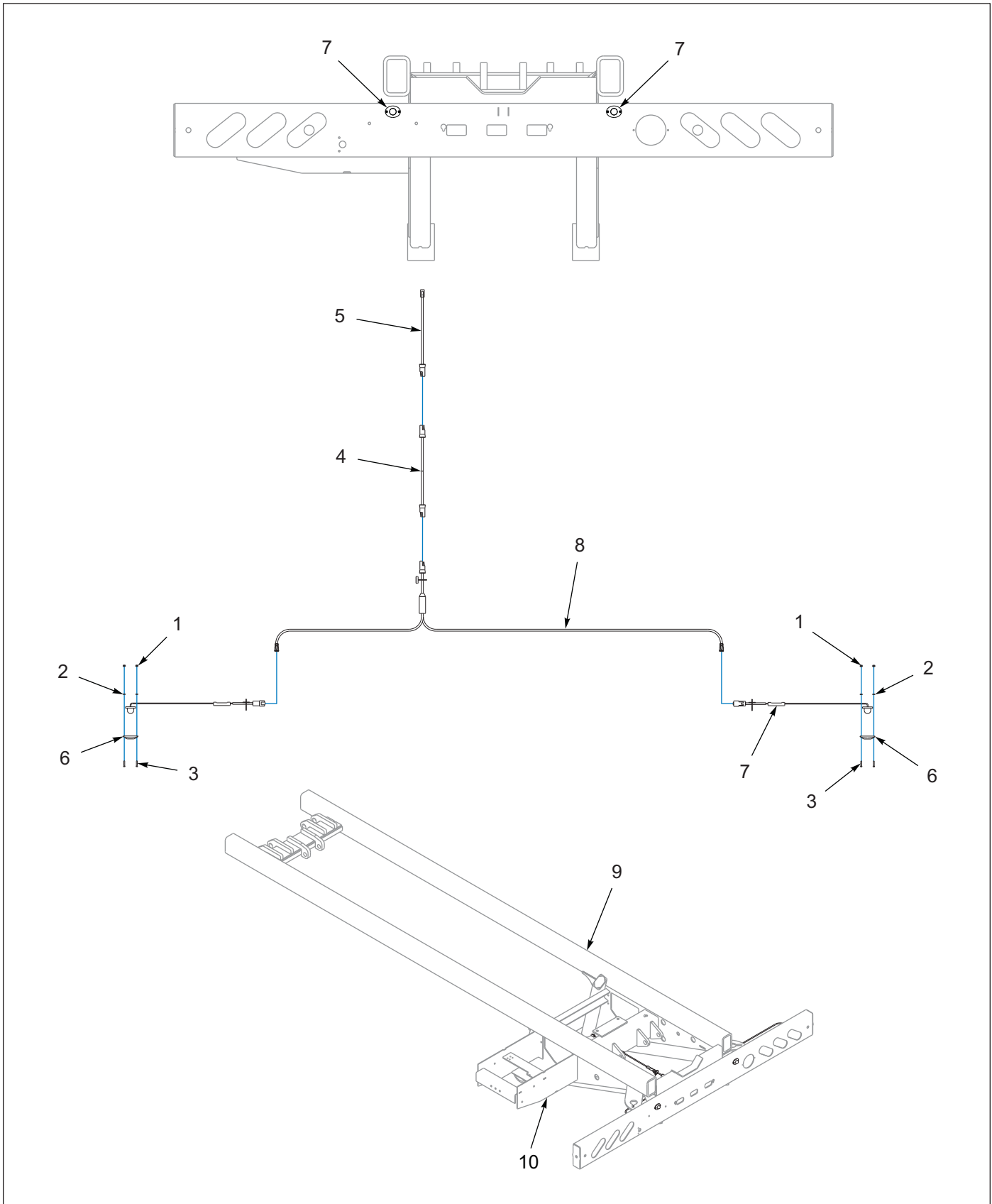


Figure 7-25: Strobe Light

## Strobe Light

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-512-010003-02	NUT,HEX,SLFLKG W/NYL #6-32	4
2	1-861-010032-01	WASHER, FLAT,ZP /CD, #6	4
3	122187	SCREW,MACH,SLOT FILL,6-32 X 3/4	4
4	150111	HARNESS 300 IN MALE/FEMALE BULLET	1
5	190744	HARNESS 60" BRANCH WORK LIGHT	1
6	207291	BEZEL CHROME SURFACE MT VERTEX	2
7	207292	LIGHT ASSY STROBE/CONNECTOR	2
8	207293	HARNESS MOD. BUMPER STROBE (DEUTSCH)	1
9	208099	FRAME, SUB-TILT WLDMT	--
10	208120	SUPPORT, VALVE WLDMT HDCL RMT	--

# Work Light

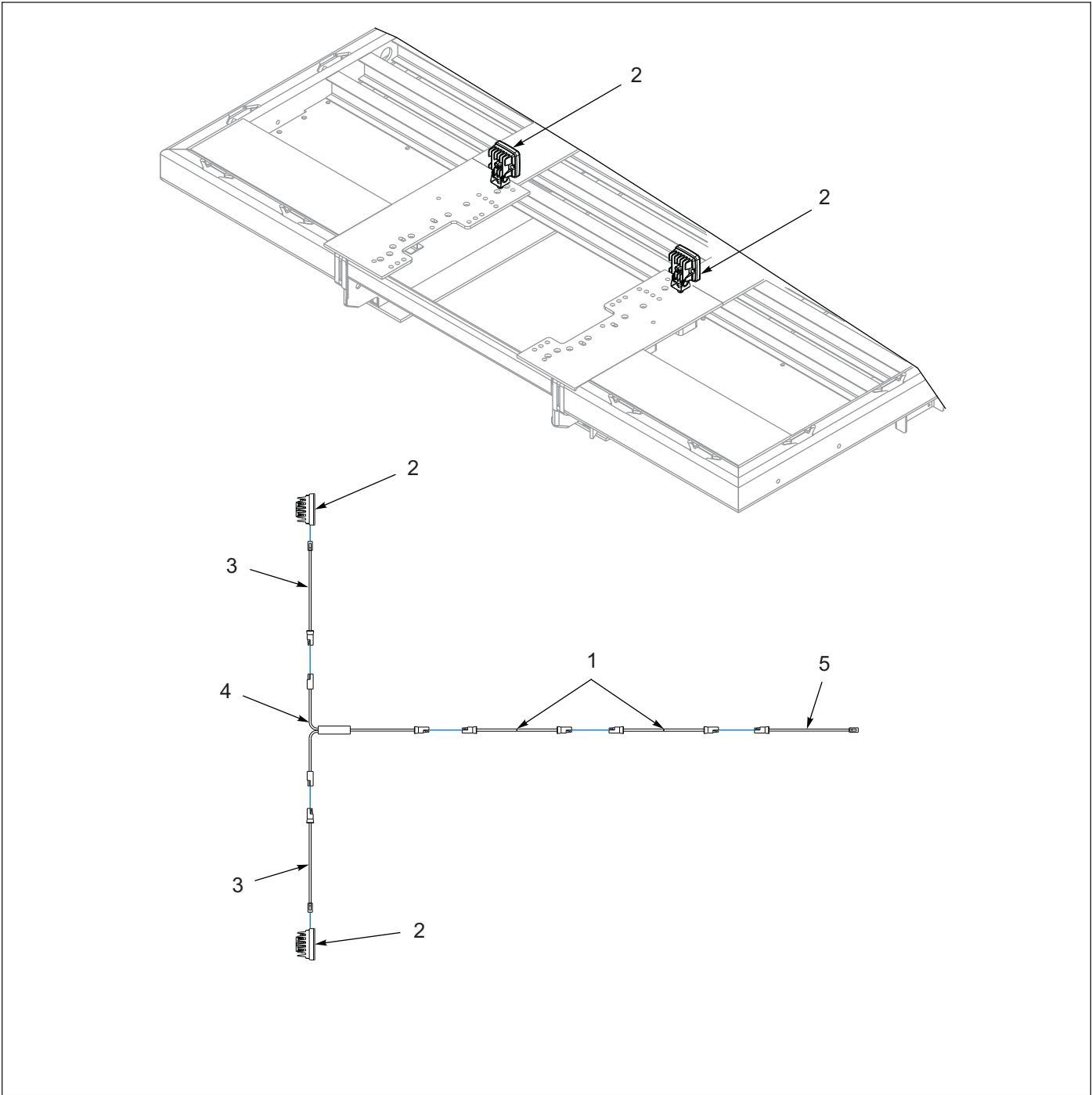


Figure 7-26: Work Light

# Work Light

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	150111	HARNESS 300 INCH MALE/FEMALE BULLET	2
2	163996	LIGHT LED WHITE FLOOD LAMP	2
3	164052	HARNESS 60" BRANCH WORK LIGHT	2
4	169853	HARNESS JUMPER T-POWER	1
5	190744	HARNESS 60" BRANCH WORK LIGHT	1

## Bulkhead Tool Boxes & Panels

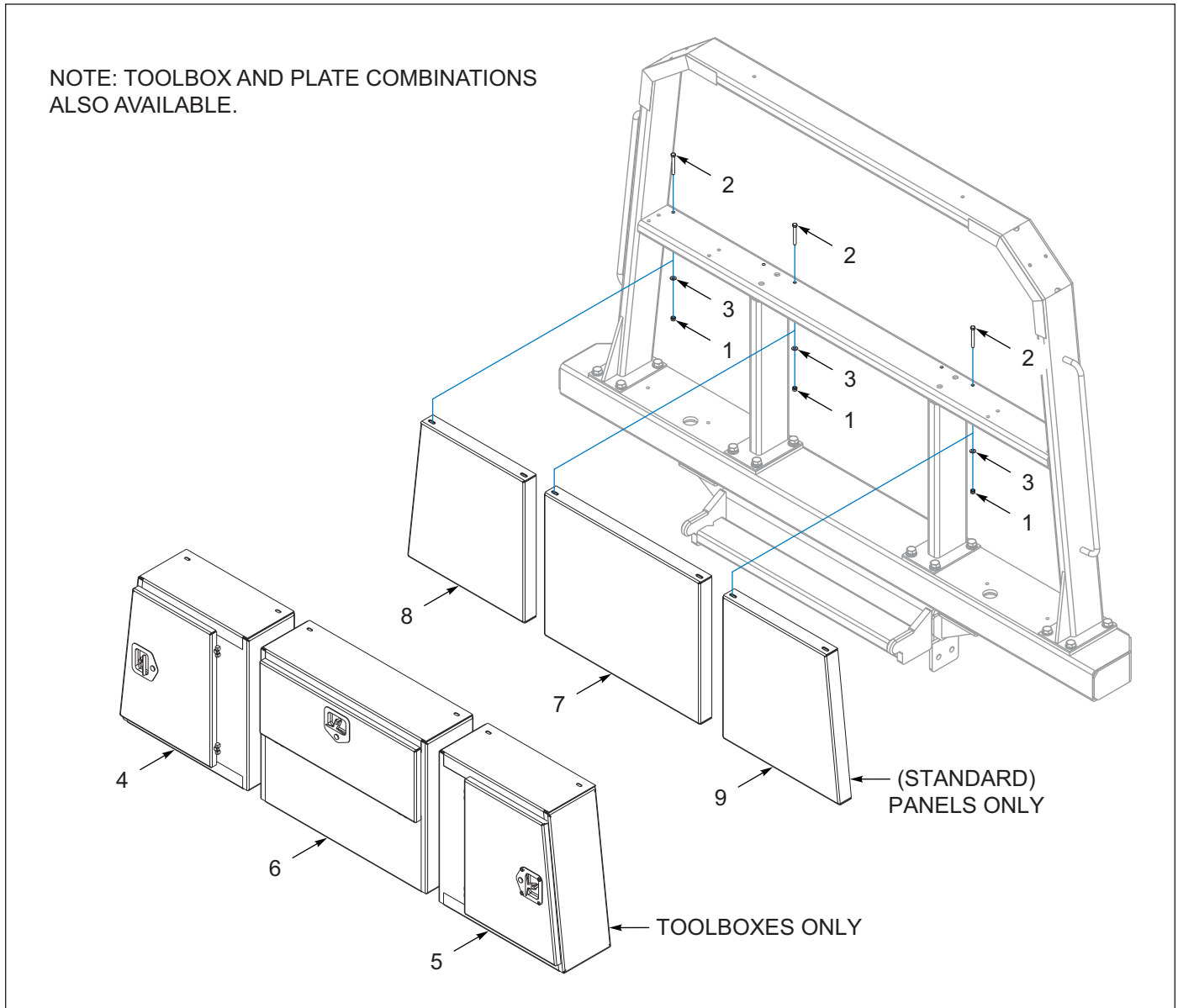


Figure 7-27: Bulkhead Tool Boxes & Panels

## Bulkhead Tool Boxes & Panels

ITEM	PART NUMBER	DESCRIPTION	QTY.
	209107	BLKHD PANELS ONLY INSTL	--
	209108	BLKHD TLBX ONLY INSTL	--
1	1-512-010005-05	NUT, HEX, SLFLKG GRB 3/8-16	6
2	1-654-010051-13	SCREW,HX CP,3/8-16UNCX3,GR5	6
3	1-861-010032-10	WASHER, FLAT 3/8" N ZP/CD	6
4	208934	TOOLBOX ASSY LH 25X21X9	1
5	208941	TOOLBOX ASSY RH 25X21X9	1
6	208950	TOOLBOX ASSY CTR 31X25X9	1
7	208984	PLATE, BULKHEAD BACK CENTER	1
8	208985	PLATE, BULKHEAD BACK LEFT	1
9	209105	PLATE, BULKHEAD BACK RIGHT	1

# Tool Box Assembly 48 x 18 x 18

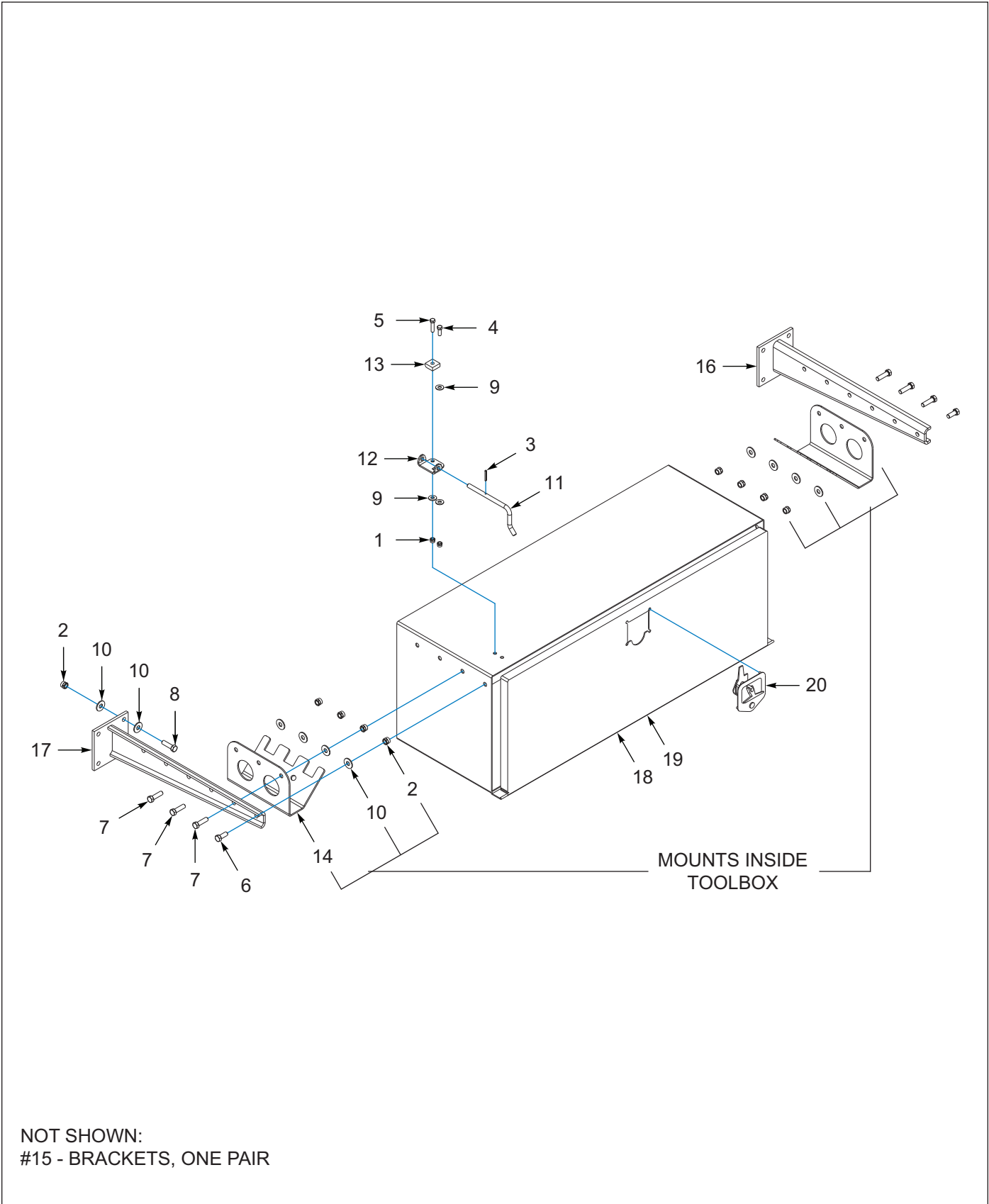


Figure 7-28: Tool Box Assembly 48 x 18 x 18

## Tool Box Assembly 48 x 18 x 18

ITEM	PART NUMBER	DESCRIPTION	QTY.
	125063	TOOLBOX ASSY 48X18X18 SS DR	--
1	1-512-010005-05	NUT, HEX, SLFLKG GRB 3/8-16	2
2	1-512-010005-09	NUT,HEX,SLFLKG, 1/2-13 GRB	16
3	1-647-010004177	PIN,SPRING,SLTD 3/16X1-1/2	1
4	1-654-010051-05	SCREW,HEX CAP 3/8-16UNCX1 GR5	1
5	1-654-010051-07	SCREW,HEX CAP,3/8-16UNCX1-1/2	1
6	1-654-010055-02	SCREW 1/2-13UNCX1-1/4 CP GR5	2
7	1-654-010055-03	SCREW,HEX CAP,1/2-13UNCX1-1/2	6
8	1-654-010055-04	SCREW,HEX CAP,1/2-13UNCX1-3/4	8
9	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	3
10	1-861-010032-15	WASHER, FLAT 1/2 W ZP/CD	24
11	190728	PIN DOOR STOP	1
12	190729	BRACKET DOOR STOP	1
13	192038	SPACER TOOLBOX	1
14	192041	TOOLBOX SUPPORT PANEL SHT	2
15	173411	BRACKETS, TOOLBOX - ONE PAIR <b>(BEFORE 05/18/2022 - AFTER OBSOLETE, ORDER ITEMS 16 &amp; 17)</b>	--
16	241380	BRACKET, TOOLBOX MNT WLDMT RH <b>(AFTER 05/18/2022)</b>	1
17	241381	BRACKET, TOOLBOX MNT WLDMT LH <b>(AFTER 05/18/2022)</b>	1
18	123730	TOOL BOX 48", SS DOOR <b>(INCLUDES ITEMS 19-20)</b>	1
19	228948	DOOR FOR 123730 TOOLBOX	1
20	232699	LATCH,CHROME REPLACEMENT HSG <b>(PROVIDE KEY CYLINDER NUMBER WHEN ORDERING)</b>	1
20	232700	LATCH,BLACK REPLACEMENT HSG <b>(PROVIDE KEY CYLINDER NUMBER WHEN ORDERING)</b>	1

# Winch Installation, Warn 12K

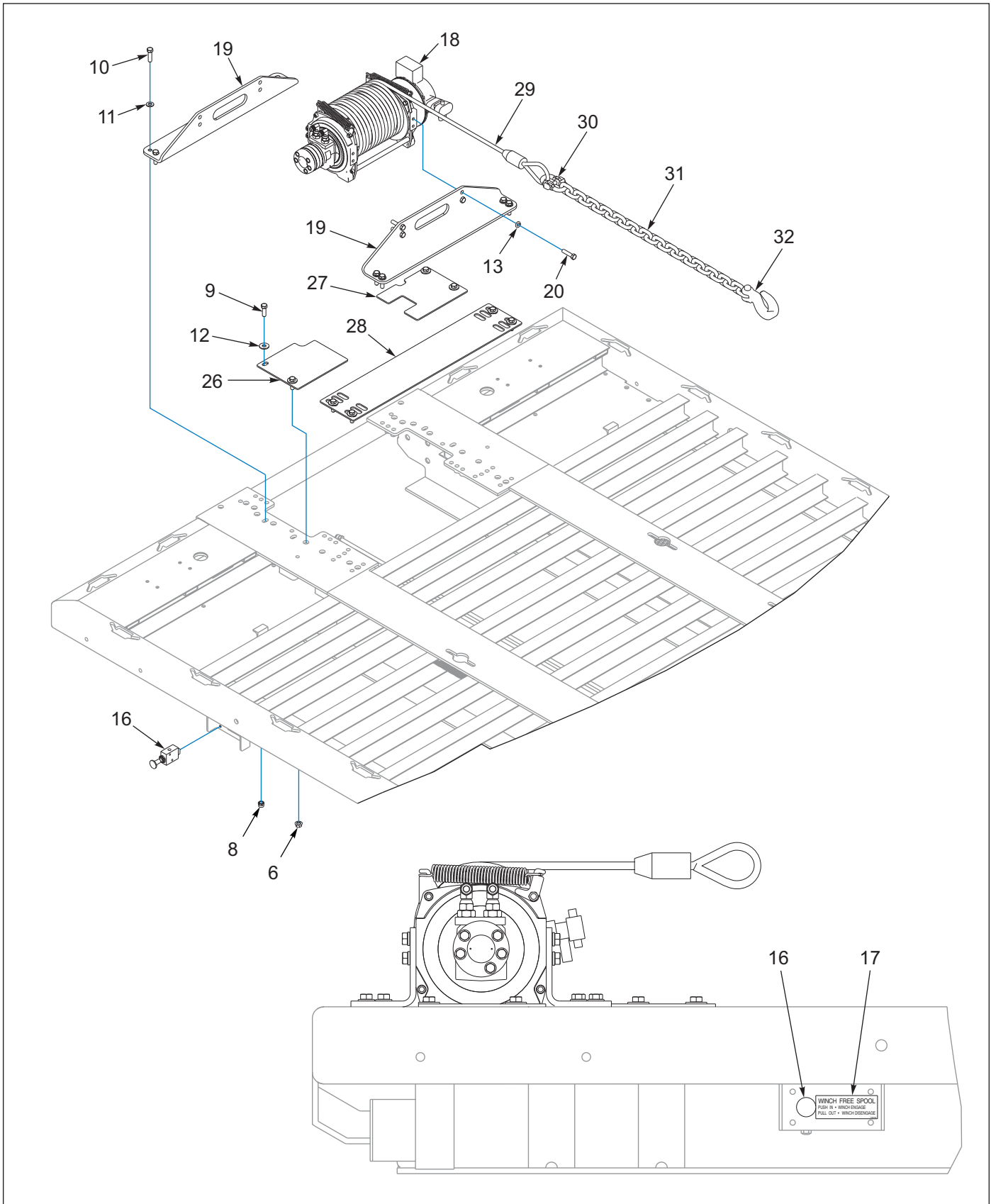


Figure 7-29: Winch Installation, Warn 12K (1 of 2)



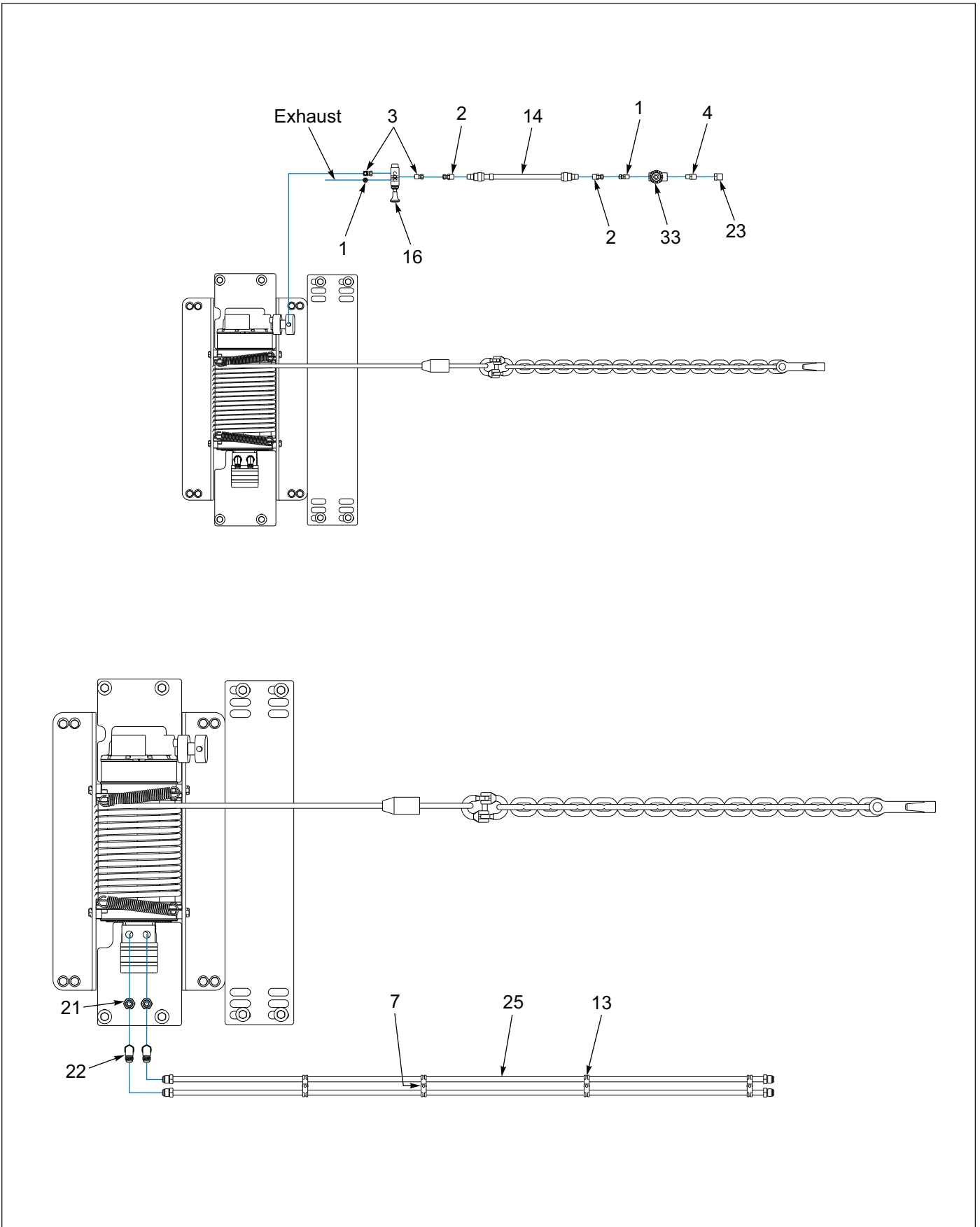


Figure 7-30: Winch Installation, Warn 12K (2 of 2)

## Winch Installation, Warn 12K

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-297-010007-05	FITTING, AIR, 1/4TUBEX1/4NPT	2
2	1-297-010007-06	FITTING,AIR,1/4TUBE TO 3/8NPT	2
3	1-297-010008-07	FITTING AIR 90 1/4TUBEX1/4NPT	2
4	1-297-010019-05	FITTING,BRS PIPE,HX 3/8X1/4	1
5	1-397-010301024	HOSE ASSY1/2X24 SAE37,STR-STR	2
6	1-510-010003-09	NUT,1/2-13 FLANGE HD,SERRATED	8
7	1-512-010005-03	NUT HEX SLFLKG GRB 5/16-18	4
8	1-512-010005-09	NUT,HEX,SLFLKG, 1/2-13 GRB	8
9	1-654-010055-03	SCREW,HEX CAP,1/2-13UNCX1-1/2	8
10	1-654-010055-04	SCREW,HEX CAP,1/2-13UNCX1-3/4	8
11	1-861-010032-14	WASHER, FLAT 1/2" N ZP/CD	8
12	1-861-010032-15	WASHER, FLAT 1/2 W ZP/CD	8
13	1-861-010034-13	WASHER, LKG HLCL SPR, 1/2	8
14	103738	HOSE ASM AIR 3/8X100,W/3/8 END	1
15	125893	CLAMP,CABLE 1/2 SST	8
16	134657	VALVE AIR 3WAY/2POS 1/4NPT <b>(INCLUDES KNOB 201635)</b>	1
17	135184	DECAL, WINCH FREE SPOOL	1
18	166421	WINCH 12M WARN W/LW&RMTC <b>(SEE PAGE 7-47)</b>	1
19	196818	BRACKET FRONT 12K WARN	2
20	198996	SCREW M12-1.75X50 HCS8.8ZP FUL	8
21	202702-10-8S	ADAPTER, #10 O-RING #8 TUBE	2
22	2071-8-8S	ADAPTER90 #8 FLR SWIVEL #8JIC	2
23	2081-8-6S	REDUCER 1/2NPT X 3/8NPT	1
24	208100	BED WLDMT, LOADOLL 3 22'	--
25	210369	TUBE ASSY 1/2"X60"#8MJIC ENDS	2
26	210386	PLATE WINCH COVER STREETSIDE	1
27	210387	PLATE WINCH COVER CURBSIDE	1
28	210441	PLATE WINCH TRIM LOADOLL	1
29	3-155-010017-4	CABLE 1/2 W/LOOP 85FT	1
30	3-174-010038	CHAIN LINK CONNECTING 1/2	1
31	3-174-010039036	CHAIN 1/2X36" GRD 7 21LINKS	1
32	7HCGHT500	HOOK CLEVIS GRAB 1/2 GR70	1
33	905-54-107	BRAKE PROTECTION VALVE <b>(INCLUDES FILTER 481 00 200)</b>	1

## Winch Components, Warn 12K

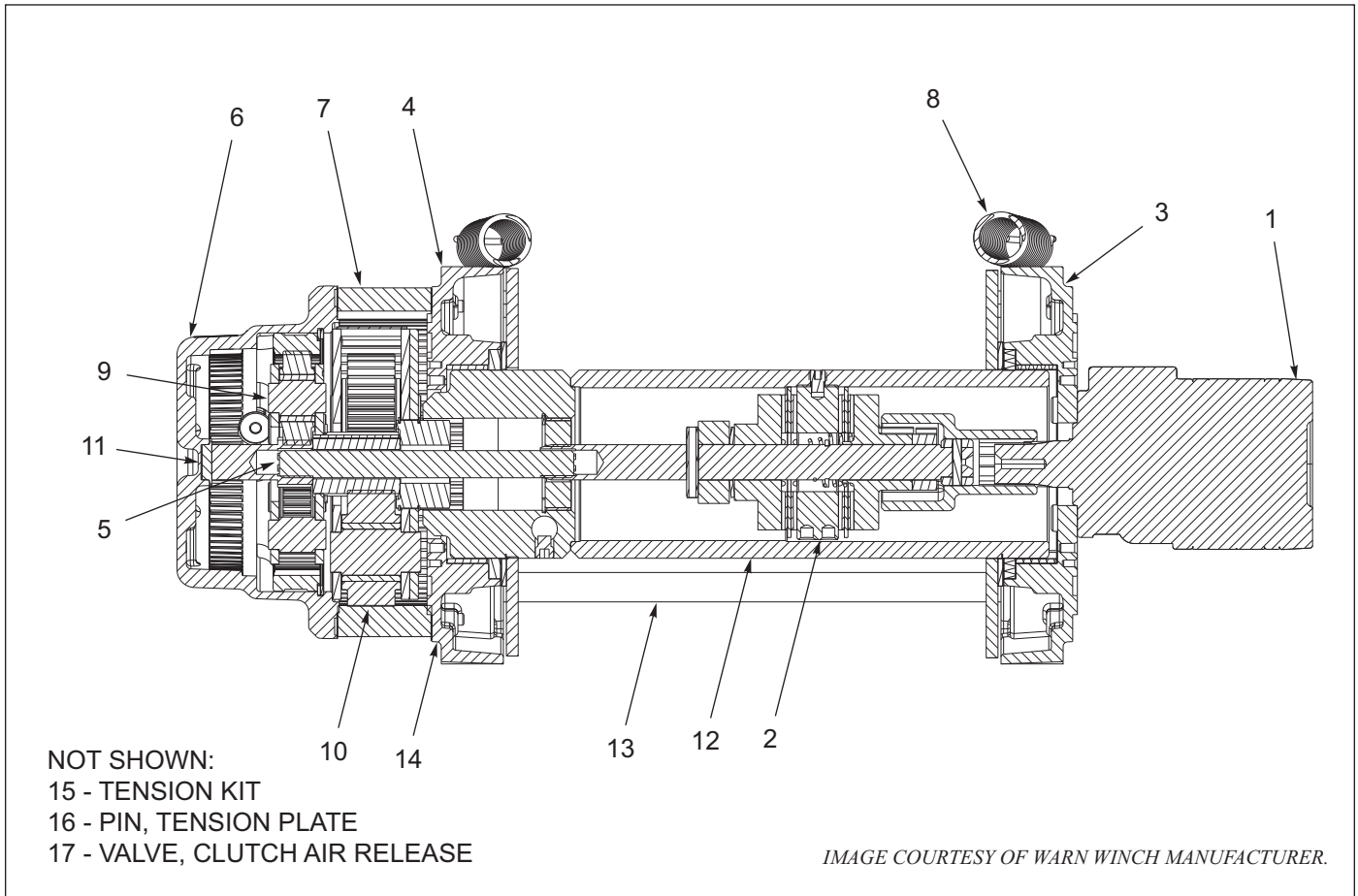


Figure 7-31: Winch Components, Warn 12K

## Winch Components, Warn 12K

ITEM	PART NUMBER	DESCRIPTION	QTY.
	166421	WINCH, 12M WARN W/LW & RMTC	--
1	218610	MOTOR WINCH WARN 12K (194305)	1
2	194306	BRAKE ASSEMBLY	1
3	194307	DRUM SUPPORT, MOTOR	1
4	194308	DRUM SUPPORT, GEAR END	1
5	194309	DRIVE SHAFT, HEX	1
6	194310	END HSG ASSY AIR	1
7	194117	GEAR RING	1
8	194118	SPRING EXTENSION, TENSIONER	2
9	194119	CARRIER, STAGE 2 M12000	1
10	194120	CARRIER, STAGE 3 4340	1
11	194121	GEAR, 15T	1
12	194122	DRUM ASSEMBLY	1
13	194123	TIE ROD	3
14	194124	GASKET, RING GEAR	2
15	213120	TENSION KIT WINCH 12M WARN (NOT SHOWN)	1
16	214437	PIN WINCH TENSIONER PLATE (NOT SHOWN)	1
17	223922	VALVE AIR RELEASE CLUTCH (NOT SHOWN)	1

# Glossary

For clarity this glossary of industry standard abbreviations and their definitions are provided. For additional information, see instruction on the inside front cover or the last page of this manual.

## A

A/R	Air Ride
AG	Agriculture
AL	Aluminum
APT	Apitong
ASM	Assembly
ASSY	Assembly
AX	Axle

## B

B/T	Beavertail
BATT	Battery
BHSC	Button Head Socket Cap
BKT	Bucket
BLK	Black

## C

CB	Carriage Bolt
CON	Construction
CONN	Connector
CRG	Carriage
CTR	Center
CTSK	Countersunk
CTWT	Counterweight
CVR	Cover
CYD	Cylinder

## D

DBL	Double
DIA	Diameter
DS	Dropside

## E

ENCLSD	Enclosed
--------	----------

## F

FHCS	Flanged Head Cap Screw
FHHCS	Flanged Hex Head Cap Screw
FL OR FLG	Flange
FLT	Flat
FT	Foot

## G

G/N	Gooseneck
GA	Gauge
GAL	Gallon
GALV	Galvanized
GR	Grade

## H

HHCS	Hex Head Cap Screw
HCS	High Carbon Steel
HD	Head
HD	Heavy Duty
HLCL	Helical
HCSKT	Hex Socket
HF	Hydraulic Flip
HSFC	Hex Socket Flat Countersunk
HYD	Hydraulic
HX	Hexagon

## I

ID	Inside Diameter
INST	Installation

## J

JIC	Joint Industrial Council
-----	--------------------------

## L

LH	Left Hand
LKG OR LOCK	Locking
LP	Low Profile
LWR	Lower

---

**M**

**MANF** ..... Manifold  
**MNT** ..... Mount

---

**N**

**NRW** ..... Narrow  
**NSS** ..... Not Serviced Separately  
**NYL** ..... Nylatron

---

**O**

**OD** ..... Outside Diameter  
**OHG** ..... Overhead Guard  
**ORFS OR ORS** ..... O-Ring Seal  
**ORP OR ORB** ..... O-Ring Boss  
**OPT** ..... Option

---

**P**

**PC** ..... Paver/Construction  
**P/O** ..... Pull Out  
**P-STEER** ..... Power Steering  
**POL** ..... Polished  
**PTFE** ..... Polytetrafluoroethylene (Teflon)

---

**Q**

**QT** ..... Quart

---

**R**

**RD** ..... Round  
**RES** ..... Reservoir  
**REQ** ..... Requires  
**RH** ..... Right Hand  
**RND** ..... Round

---

**S**

**S/U** ..... Suspension  
**SER** ..... Series  
**SHCS** ..... Socket Head Cap Screw  
**SHLD** ..... Shield  
**SKT** ..... Socket  
**SLFLKG** ..... Self Locking  
**SOC** ..... Socket

**SPD** ..... Speed  
**SPDT** ..... Single Pole Double Throw  
**SPR** ..... Spring  
**SQ** ..... Square  
**SRTD** ..... Serrated  
**STL** ..... Steel  
**SSCR** ..... Setscrew  
**SST** ..... Stainless Steel  
**STD** ..... Standard  
**SWVL** ..... Swivel

---

**T**

**TRL** ..... Trailer  
**TRGH** ..... Trough

---

**U**

**UPR** ..... Upper

---

**V**

**VDC** ..... Volts Direct Current

---

**W**

**WD** ..... Wood  
**WHL** ..... Wheel  
**WLD OR WLDMT** ..... Weldment

---

**X**

---

**Y**

---

**Z**

**ZP** ..... Zink Plate

## Index

## Numerics

011300179	7-20	1-397-010301208	7-19
071900195	7-20	1-397-010301238	7-19
081900277	7-20	1408243	7-27, 7-31
101864	7-4	1410119	7-19
103738	7-49	143114	7-10, 7-22, 7-24, 7-39
104483	7-36	143121	7-11
109410	7-4	143167	7-22, 7-24, 7-39
111301	7-19	146929	7-10, 7-22, 7-24, 7-39
112813	7-27, 7-31	150093	7-10
114067	7-4	150111	7-11, 7-39, 7-42, 7-43
116330	7-27	150117	7-10
122187	7-39, 7-42	1-510-010001	7-4, 7-27, 7-31
123436	7-10	1-510-010003-09	7-49
123730	7-46	1-512-010003-02	7-39, 7-42
124130	7-19	1-512-010003-06	7-4
12420301-017	7-4	1-512-010005-01	7-4, 7-10
125063	7-46	1-512-010005-03	7-22, 7-24, 7-27, 7-31, 7-34, 7-49
125558	7-19	1-512-010005-05	7-4, 7-10, 7-39, 7-44, 7-46
125893	7-4, 7-49	1-512-010005-09	7-31, 7-46, 7-49
1-295-010001	7-27, 7-31	1-512-010005-10	7-27, 7-31
1-297-010007-05	7-49	1-512-010005-13	7-4, 7-27, 7-31
1-297-010007-06	7-49	1-512-010005-15	7-4, 7-36
1-297-010008-07	7-49	1-512-010007-03	7-10
1-297-010019-05	7-49	1-557-010362-65	7-4
1-298-010001-1	7-4	163996	7-10, 7-39, 7-43
130116	7-10	164052	7-10, 7-43
130590	7-31	1-647-010004177	7-46
1-343-010006	7-10	1-654-010024055	7-10
134657	7-49	1-654-010032-05	7-36
135184	7-49	1-654-010034-06	7-22, 7-24
1-397-010301018	7-19	1-654-010047-04	7-27, 7-31
1-397-010301024	7-49	1-654-010047-06	7-10
1-397-010301194	7-19	1-654-010049-03	7-4, 7-27
		1-654-010049-11	7-34
		1-654-010051-05	7-4, 7-46

---

1-654-010051-06	7-4, 7-10, 7-27, 7-31	1-861-010032-03	7-4
1-654-010051-07	7-46	1-861-010032-04	7-10
1-654-010051-10	7-34	1-861-010032-07	7-10
1-654-010051-13	7-4, 7-39, 7-44	1-861-010032-08	7-22, 7-24, 7-31
1-654-010055-02	7-46	1-861-010032-09	7-34
1-654-010055-03	7-46, 7-49	1-861-010032-10	7-4, 7-39, 7-44
1-654-010055-04	7-27, 7-31, 7-46, 7-49	1-861-010032-11	7-4, 7-10, 7-27, 7-31, 7-34, 7-46
1-654-010059-04	7-27, 7-31	1-861-010032-14	7-10, 7-27, 7-31, 7-49
1-654-010059-05	7-4	1-861-010032-15	7-31, 7-46, 7-49
1-654-010061-05	7-4	1-861-010032-19	7-4
1-654-010121-08	7-27, 7-31	1-861-010032-20	7-36
1-654-010126-05	7-4	1-861-010032-21	7-4
1-654-010158-1	7-10	1-861-010034-07	7-4, 7-10
1-656-010003051	7-10	1-861-010034-09	7-27, 7-31
1-660-010006	7-34	1-861-010034-10	7-4, 7-27
166421	7-49, 7-50	1-861-010034-13	7-49
166735	7-27, 7-31	1-861-010034-17	7-36
168650	7-14	186877	7-4
168976	7-14	186882	7-14
168979	7-14	187833	7-22, 7-24
168980	7-14	187855	7-22, 7-24
168981	7-14	187857	7-24
168982	7-14	187860	7-10
169534	7-10	187863	7-22, 7-24
169853	7-10, 7-43	187864	7-10
170394	7-35	187868	7-22, 7-24
170395	7-35	188287	7-34
170396	7-35	188910	7-34
170397	7-35	190728	7-46
173411	7-46	190729	7-46
175583	7-14	190733	7-10
178444	7-4	190735	7-10
179902	7-10, 7-39	190744	7-39, 7-42, 7-43
179906	7-10	191302	7-31
180570	7-11, 7-22, 7-24, 7-39	192013	7-4
184585	7-4, 7-19	192034	7-19
185059	7-10	192037	7-4
1-861-010032-01	7-39, 7-42	192038	7-46

---

192041	7-46	2062-10-8S	7-19
194117	7-50	2062-12-8S	7-19
194118	7-50	2062-8-8S	7-19
194119	7-50	2071-8-8S	7-19, 7-49
194120	7-50	207291	7-39, 7-42
194121	7-50	207292	7-39, 7-42
194122	7-50	207293	7-42
194123	7-50	208099	7-42
194124	7-50	208100	7-22, 7-49
194306	7-50	208107	7-4, 7-19
194307	7-50	208108	7-4, 7-19
194308	7-50	208116	7-27, 7-31
194309	7-50	208118	7-27, 7-31
194310	7-50	208120	7-4, 7-42
194407	7-14, 7-16	208126	7-4
194420	7-27	208131	7-4, 7-19
194421	7-27	208133	7-4
194422	7-27	208134	7-4
194423	7-27	208135	7-4
194430	7-27	208146	7-4
196818	7-49	208160	7-5
197460	7-14	208179	7-5
198996	7-49	2081-8-6S	7-49
199189	7-22, 7-24	208871	7-5
1DM8ER	7-4	208873	7-5
200427	7-4, 7-19	208875	7-5
200431	7-10	208879	7-22, 7-24
201526	7-10	208880	7-22, 7-24
201527	7-10	208918	7-39
201528	7-10	208934	7-44
202088	7-39	208941	7-44
2021-12-12S	7-27, 7-31	208950	7-44
202702-10-8S	7-19, 7-49	208964	7-39
202702-20-20S	7-27	208965	7-39
202702-8-8S	7-19	208976	7-27, 7-31
202759	7-10	208977	7-27, 7-31
203102-8-8S	7-19	208978	7-27, 7-31
2061-8-8S	7-19	208980	7-34



---

208984	7-44	210398	7-5
208985	7-44	210399	7-5, 7-19
209077	7-35	210404	7-24
209078	7-35	210405	7-24
209091	7-22, 7-24	210417	7-4, 7-10, 7-19
209102	7-16	210424	7-5
209103	7-16	210427	7-5
209105	7-44	210429	7-5
209107	7-44	210441	7-49
209108	7-44	210443	7-24
209117	7-10	210456	7-27, 7-31
209118	7-39	212074	7-10
209119	7-10, 7-22, 7-24, 7-39	212218	7-27, 7-31
209120	7-10, 7-22, 7-24, 7-39	212343	7-22, 7-24
209121	7-39	212350	7-5
209122	7-39	212351	7-5
209130	7-22	212352	7-22, 7-24
209131	7-5	213120	7-50
209132	7-5	213295	7-10, 7-39
209878	7-27, 7-31	213296	7-10, 7-22, 7-24, 7-39
210359	7-5	213297	7-22, 7-24
210360	7-5	213298	7-11
210361	7-5	213498	7-11, 7-16
210362	7-5	213504	7-16
210364	7-5	214437	7-50
210366	7-5	218023	7-14, 7-16
210367	7-5	218049	7-5
210368	7-5, 7-19	218051	7-5
210369	7-49	218065	7-31
210372	7-5	218610	7-50
210373	7-4, 7-10, 7-19	220000212	7-20
210375	7-36	220692	7-16
210376	7-4	223922	7-50
210378	7-10	228948	7-46
210386	7-49	229494	7-14, 7-16
210387	7-49	232699	7-46
210396	7-27, 7-31	232700	7-46
210397	7-27, 7-31	235291	7-14

---

---

241380	7-46
241381	7-46
242667	7-31
242668	7-31
242690	7-36
242691	7-36
242692	7-36
242716	7-36
242717	7-36
2-573-010335	7-22, 7-24
3-155-010017-4	7-49
3-174-010038	7-49
3-174-010039036	7-49
3-181-010040	7-5
3-242-010185	7-5, 7-19, 7-20
3-272-010003	7-11
3-311-012719	7-27, 7-31
3-311-012787	7-27, 7-31
3-368-010252	7-11, 7-39
3-399-010001	7-27, 7-31
3-485-010001	7-27, 7-31
3-557-010447	7-5
3-557-010494	7-5
3-573-010105	7-5
3-573-010377	7-5, 7-22, 7-24, 7-36
3-573-010419	7-22, 7-24
3-755-010003	7-5
3-762-010017	7-27, 7-31
40700	7-11
516-22PTL	7-35
5410	7-5
7HCGHT500	7-49
81264	7-11
905-54-107	7-49

**P**

---

PMCK-BB-0686	7-20
--------------	------

# Instructions for Ordering Parts

**\*\* Repair parts must be ordered through an Authorized Dealer \*\***

## DEALER INSTRUCTIONS FOR ORDERING PARTS FROM LANDOLL PARTS DISTRIBUTION CENTER

Phone #: [800-423-4320](tel:800-423-4320) or [785-562-5381](tel:785-562-5381)

FAX #: [888-527-3909](tel:888-527-3909)

Order online: [dealer.landoll.com](http://dealer.landoll.com)

### IDENTIFICATION PLATE

The identification plate, which lists the model number and serial number, is located on the front of the frame.

#### SERIAL NUMBER

The serial number is located on the identification plate.



**Identification Plate and Location**

### Manuals for Loadoll III

Manual Number	Manual Type
F-983	Operator's and Parts Manual

### Document Control Revision Log:

Date	Form #	Improvement(s): Description and Comments
04/2018	F-983-0418	Initial Release
09/2020	F-983-0920	Updated Remote and Maintenance Schedule
11/2021	F-983-1121	Add Wiring Harness P/N 218023 (Adapter, DIN 43/2PIN DUTSCH)
11/2022	F-983-1122	ECN Updates
11/2023	F-983-2311	ECN Updates on parts.



---

# Intertek

Equipment from Landoll Company, LLC is built to exacting standards ensured by ISO 9001 registration at all Landoll manufacturing facilities.

## HD LOADOLL III

## 22' through 30'

## Re-Order Part Number F-983

**LANDOLL COMPANY, LLC.**

1900 North Street

Marysville, Kansas 66508

(785) 562-5381

800-428-5655 ~ [WWW.LANDOLL.COM](http://WWW.LANDOLL.COM)



Copyright 2024. Landoll Company, LLC.

“All rights reserved, including the right to reproduce this material or portions thereof in any form.”

