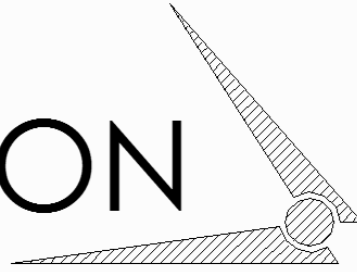


CHAMPION

Hoist and Equipment

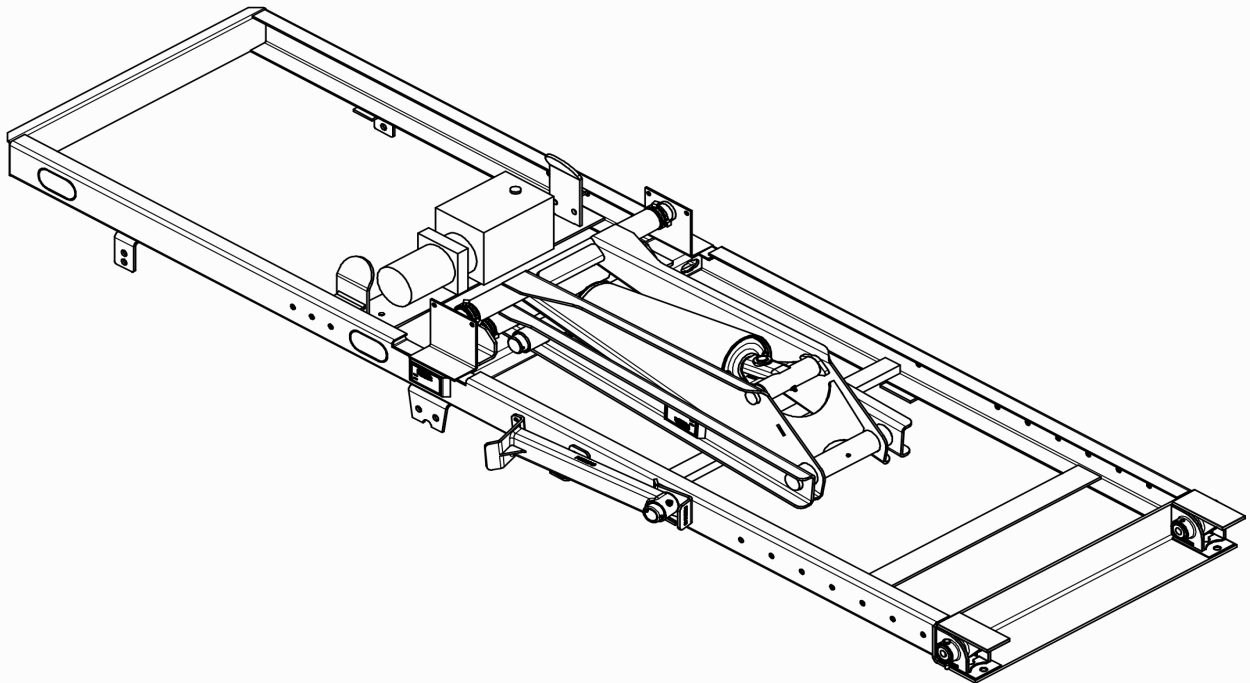


AN AFFILIATE OF



200 DUNN DRIVE
DUNN, NC 28334
PHONE: (910) 897-4995
FAX: (910) 897-7306

9' 515T 50° Subframe
11' 615T 50° Subframe
15' 620T 50° Subframe
15' 6620T 50° Subframe



Operation and Installation Manual

NOTICE: This manual is to remain with the truck after subframe is installed

Notes

It is recommended that the Owner/Operator record the following information immediately after purchasing and have this manual on hand when calling for parts, service, and sales.

Dump Truck Body

Model Number _____

Serial Number _____

Subframe Assembly

Model Number _____

Serial Number _____

Hoist Assembly

Model Number _____

Serial Number _____

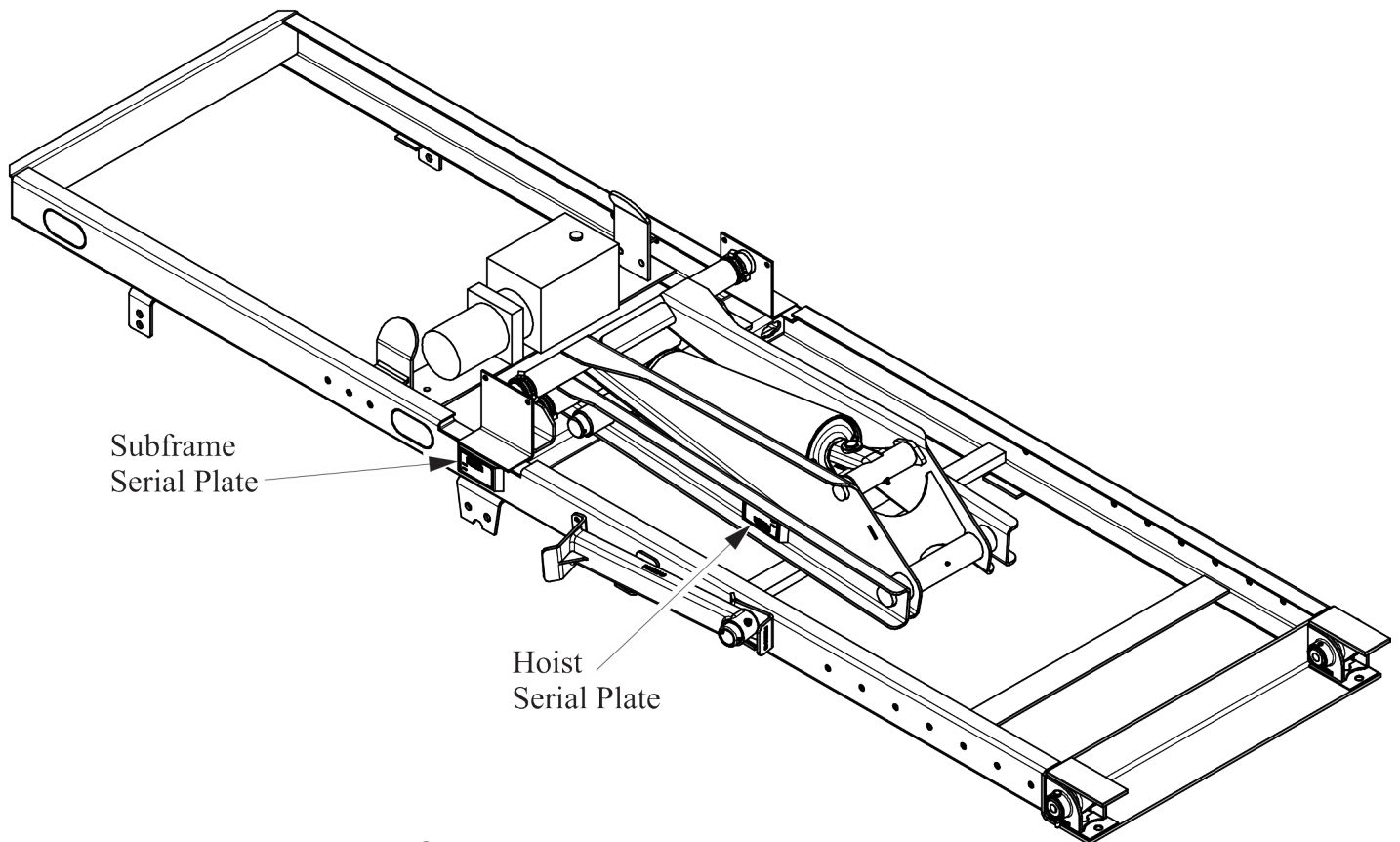
Truck

Year _____

Make _____

Model _____

Truck Number _____



Champion Hoist and Equipment
200 Champion Drive
Dunn, NC 28334
1-800-649-4995 or (910) 897-4995
Fax: (910) 897-7306
June 2021

Table of Contents

Safety Alert Symbols	4
Safety Checklist	5
Periodic Inspections	6
Scissor Hoist Pressure Caution	7
Subframe Installation Instructions	8-9
Spacer Block Installation	9
Hydraulic Pump Installation	9
Pump Cable Installation	9
Correct Hoist Alignment	9
Dump Body Installation Instructions	10
Cab to Axle Dimensions (MP50074A)	11
Figure 2: Cross-Sectional View of Subframe, Hoist, & Truck Chassis	12
Subframe and Hoist Lubrication Instructions	13
Hydraulic Plumbing Diagram, Single Acting Electric Pump (PD40048)	14
Hydraulic Plumbing Diagram, Double Acting Electric Pump (PD40045)	15
Electric Pump Priming Procedure (MP50398)	16
Electric Pump Troubleshooting Procedure (MP50399)	17
Pump Rotation and Porting	18
Hydraulic Plumbing Diagram with 8C Valve	19
Hydraulic Plumbing Diagram with 8S Valve & Twin Cylinders	20
Hydraulic Plumbing Diagram with 8S Valve & Single Cylinder	21
Hydraulic Plumbing Diagram with 8S-B Valve & Single Cylinder	22
Champion Subframe Model: 9' 515T 50°	23-25
Champion Subframe Model: 11' 615T 50°	26-28
Champion Subframe Model: 15' 620T 50°	29-31
Champion Subframe Model: 15' 6620T 50°	32-34

Attention: Before Operating, Maintaining, or Repairing the Subframe read this manual completely and refer to it continuously.

Safety Alert Symbols

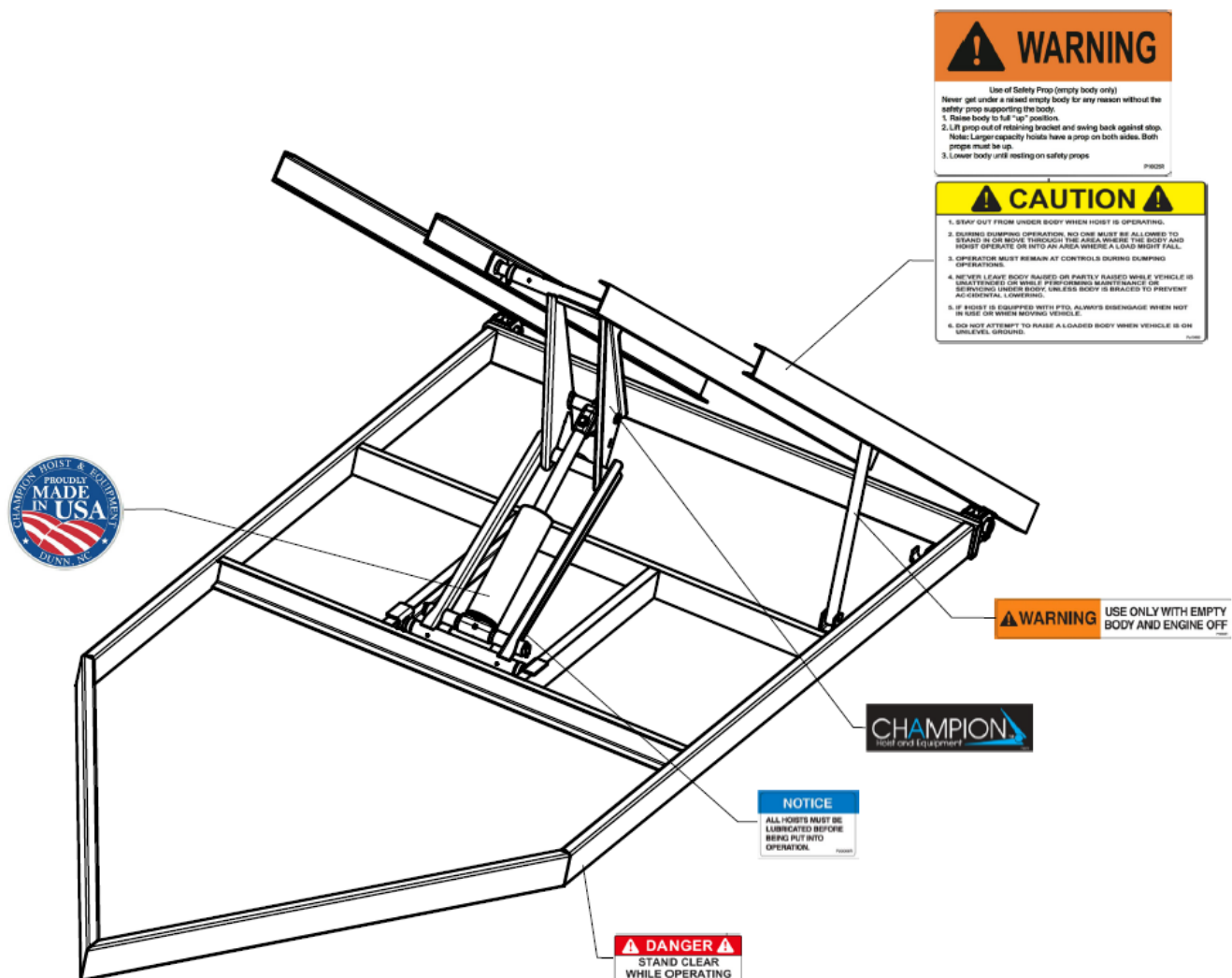
The terms Danger, Warning, and Caution are used to indicate different levels of potential hazard to equipment and personnel.

⚠ DANGER Indicates a hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.

⚠ WARNING Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION Indicates a hazardous situation which, if not avoided, could result in minor injury.

NOTICE Used to warn of a potential hazard to the equipment.



Decal and Safety Decal Location

Safety Checklists



To prevent possible death or injury to personnel and damage to the equipment, the following checklist is to be performed prior to and during operation of the truck and hoist.

Pre-Operation Checklist

- ☐ Prior to initial operation of truck and hoist read this manual completely and refer to it continuously.
- ☐ Prior to operation of hoist, read and understand all safety symbols, (cautions, warnings, and dangers) in this manual, identify them on the truck and hoist, and follow their instructions carefully. If any safety symbols are missing or incomplete on the subframe, hoist, or dump body, order them from Godwin Manufacturing.
- ☐ Do not allow unauthorized personnel to operate this equipment.
- ☐ Do not allow personnel to ride in or on the truck body.
- ☐ Do not operate a loaded truck on unlevel or soft surfaces.
- ☐ Prior to operation of hoist inspect to ensure that the safety props, pump/valve guard, and PTO shaft guards are in place and in good working order.
- ☐ Disengage the PTO drive prior to operating the truck. Moderately high PTO speeds will damage the pump and sustained high PTO speeds may cause the hydraulic oil temperature to rise high enough to damage the pump.

Operational Checklist

- ☐ Before loading the truck make sure that the load does not exceed the Gross Vehicle Weight (GVW) rating of vehicle or the hoist's rated lifting capacity.
- ☐ Always load the dump body evenly from side-to-side and from front-to-rear.
- ☐ Prior to operating the hoist ensure the area is clear of personnel and equipment.
- ☐ Do not allow hoist controls and the area around them to become cluttered with tools, etc.
- ☐ Do not operate the hoist under power lines.
- ☐ Do not raise the hoist when truck is in motion.
- ☐ Do not move the truck with the hoist raised.
- ☐ Always release tailgate latching controls prior to lifting the dump body.
- ☐ Always operate the hoist controls from inside the truck cab.
- ☐ Do not go underneath a loaded and raised truck body under ANY circumstances.
- ☐ Do not go underneath a truck with the engine running.
- ☐ Do not go underneath an unloaded raised truck body unless the safety props are properly installed.
- ☐ Do not leave truck unattended with truck body raised.

Post-Operation Checklist

- ☐ Do not use hands or other body parts to check for hydraulic leaks.
- ☐ Follow all Federal, State, and Local regulations pertaining to this equipment.
- ☐ Keep all equipment properly maintained and serviced.

Periodic Inspections

The following checklist is to be followed prior to operating and while operating the truck and hoist:

Daily Inspection (Before operating)

- ☐ Check hydraulic oil level and add more to the reservoir as needed
 - For PTO driven pumps use HD 32 hydraulic oil
 - For electric driven pumps use Dextron ATF automatic transmission fluid ONLY!
- ☐ Check for any fluid leaks under truck and hoist
- ☐ Make sure all components are securely fastened, such as frame/pump guard, tool box is closed, hydraulic hoses for spreader/plow properly stowed, etc.
- ☐ Check all lighting to be sure it is functioning properly
- ☐ Check lighting on any towed equipment
- ☐ Inspect hitch if towed equipment is attached and be sure safety chains are fastened
- ☐ Test hydraulic functions and observe for proper operations
- ☐ Check tire pressure per markings on the tires

Weekly Inspection

- ☐ Perform all of the above checks
- ☐ Inspect all mechanical functions, i.e., hoist pivots, rear hinge pivots, single hitch, etc. Be sure they have been properly lubricated and show no signs of stress
- ☐ Test low oil shutdown system to be sure it is operating properly

Bi-Monthly Inspection

- ☐ Lubricate all hoist pivot points and rear hinge assemblies with chassis grease
- ☐ Lubricate pintle hitch with chassis grease

Six Months to One Year (*Depending upon usage*)

- ☐ Change hydraulic oil filter (First change should be done after 50 hours of operation)
- ☐ Inspect suction strainer in oil tank
- ☐ Check hydraulic oil for contamination, discoloration, signs of wear, etc.

Scissor Hoist Pressure Caution



The chart below provides hoist/hydraulic system specification for all 4", 5" and 6" cylinder units whether used as single cylinder hoist or twin cylinder hoist system applications. The hoist cylinders are designed to operate as single or double acting hydraulic systems.

<u>Single Cylinder Hoist Systems</u>			
Hoist Cylinder Model	GPM Flow (Maximum)	Body Up Pressure	Body Down Pressure
412T, 415T/515T/615T 520T/620T, 628T 412TRK, 415TRK/515TRK/615TRK 415LP/515LP/615LP 615HDLP, 620HDLP 628LP,	8 gallon/minute(max.)	3200 psi Single or Double Acting	0 psi - Single Acting 750 psi - Double Acting

<u>Twin Cylinder Hoist Systems</u>			
Hoist Cylinder Model	GPM Flow (Maximum)	Body Up Pressure	Body Down Pressure
5520T/6620T 6615LP, 5520LP/6620LP 5530LP/6630LP	12 gallon/minute(max.)	3200 psi Single or Double Acting	0 psi - Single Acting 750 psi - Double Acting

Subframe Installation Instructions (Refer to MP50074A)

⚠ WARNING Subframes are heavy! Be careful when lifting or moving.

1. Set Subframe on chassis 3" from truck cab. Align Subframe evenly on chassis.
Note: Make sure there are no obstructions (muffler etc.) between Cab and Subframe.
2. Insert mounting brackets between Subframe & chassis and locate them per MP50074A.
3. Mark location for holes to be drilled on chassis and remove mounting brackets.

⚠ CAUTION Remove Mounting brackets prior to drilling into the chassis to prevent binding on the drill bit! A bound drill bit can cause the drill to spin violently and cause injury to personnel.

4. Drill one 1/2" hole thru each side of chassis for Front Mount Bracket.
5. Drill two 11/16" holes thru each side of chassis for Lower Bunk Bracket.
6. Drill two 5/8" hole thru each side of chassis for Rear Hinge Angle and install 5/8" x 2 1/2" bolt.
7. Reinsert mounting brackets between Subframe & chassis and bolt them to the Subframe.
8. Weld mounting brackets to Subframe with a 1/2" continuous weld, per Figure 1 below.
9. Remove excess chassis.

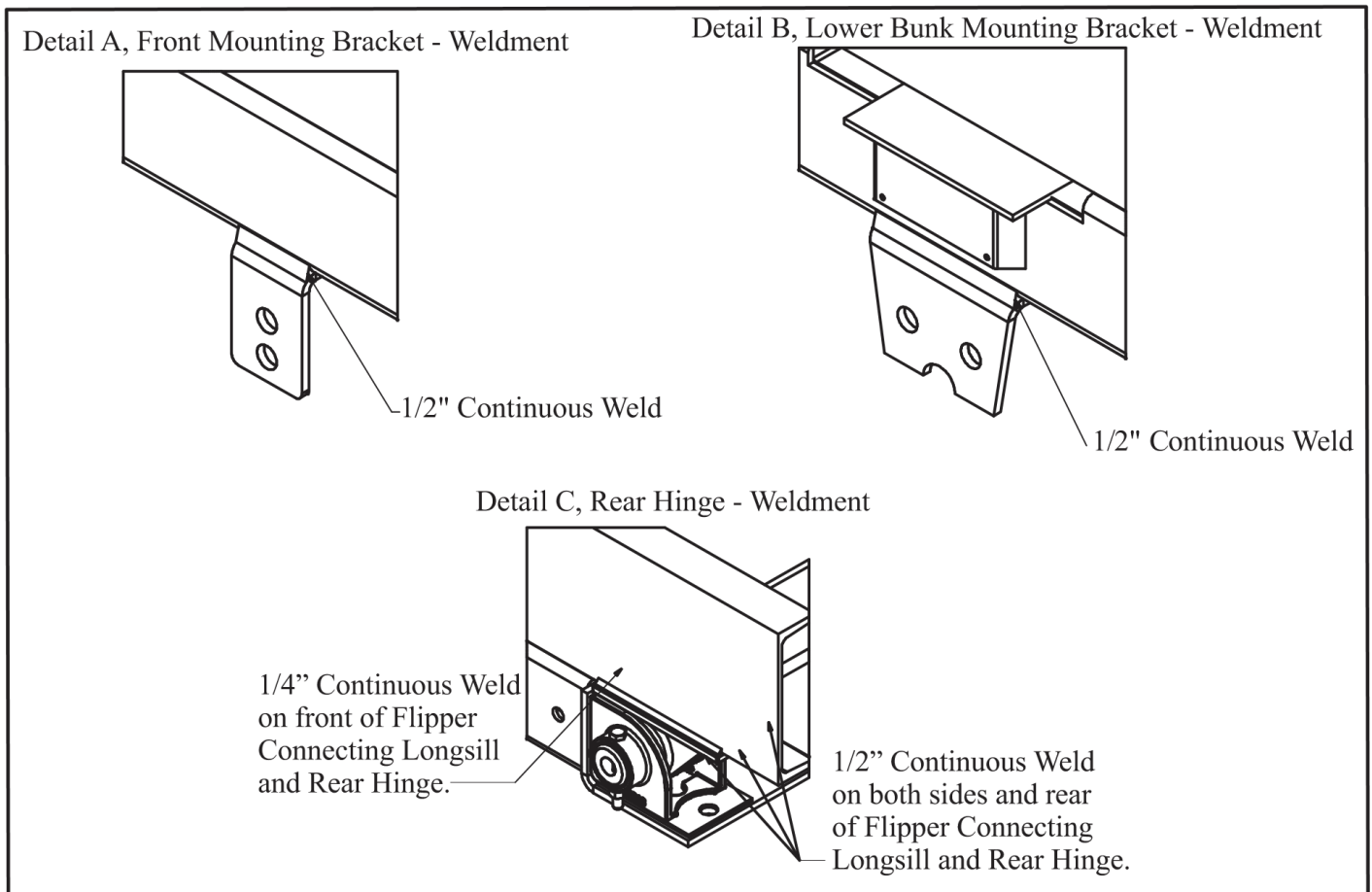


Figure 1: Subframe to Chassis Weldments (Refer to MP50074, page 9)

Subframe Installation Instructions (continued)

Spacer Block Installation

NOTICE

Spacer Blocks are used to spread the load between Subframe and Truck Chassis. The mounting brackets and rear hinges are 3/8" thick so the spacer blocks must also be 3/8" thick. For shorter trucks carrying lighter loads it may not be necessary to add spacer blocks. For longer trucks carrying heavier loads it will be necessary to add several spacer blocks.

Note: Spacer Blocks must be the width of the Subframe and 3/8" thick.

1. Cut an even number of Spacer Blocks out of 3/8" thick material.
2. Position Spacer Blocks on top of the Chassis Rails on both sides of truck.
3. Weld Spacer Blocks to Long Sills of body. Do not weld spacer blocks to the Truck Chassis!

Hydraulic Pump Installation

1. For electric driven pumps, align hydraulic pump to hydraulic pump mounting bracket provided with subframe. Bolt the hydraulic pump to the mounting bracket.
2. Plumb hydraulics per plumbing diagram outlined on PD40045 and PD40048.
3. After hydraulic connections are completed and cable assembly is installed, fill reservoir with oil.

Note: For electric driven pumps use ATF, automatic transmission fluid.

Pump Cable Assembly Installation in Cab

1. Carefully select a location in the floor of the cab to drill a 1/2" hole through to mount the cable. The location must be close enough to the operator but not near power cables and other obstructions.

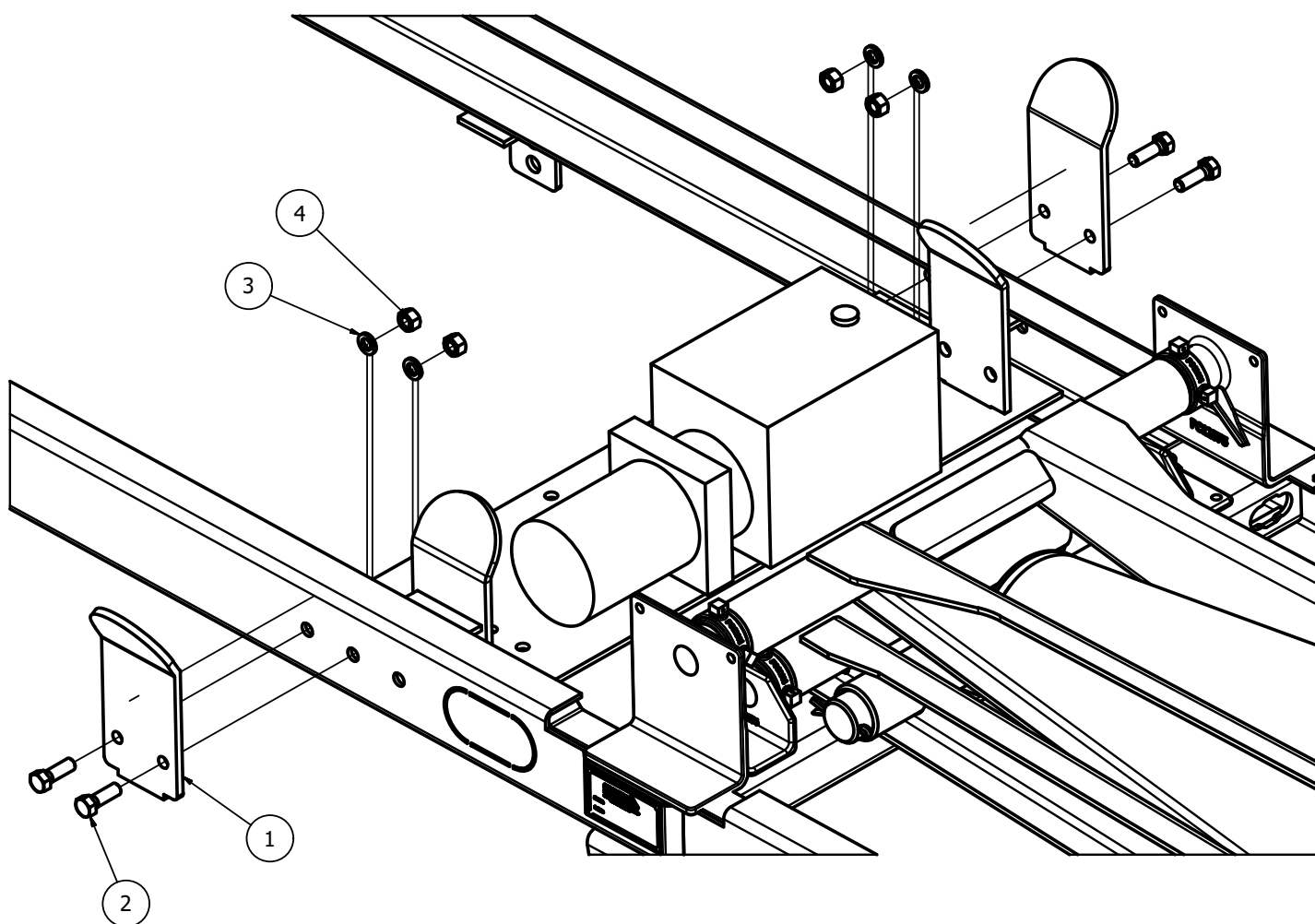
Note: Control cable must be mounted in floor due to cable length.

2. Drill through cab floor with a 1/2" hole drill bit.
3. Carefully thread the cable through the hole and lay it out along the best route to the pump. Pay close attention to not damaging the cable on the sharp edges of the hole and routing the cable in such a way as to not bind the cable during operation.
4. Install the cable to the pump.
5. Inject silicon gel into the hole in the cab and around the cable to seal the hole and protect the cable.

Correct Hoist Alignment

Note: The Hoist is centered in the Subframe at the factory but may have shifted slightly during shipping. If so, perform Steps 1 and 2 below.

1. Loosen the Square Head Set Screws on the Lower Mounting Brackets and carefully adjust the hoist so it is evenly aligned from side to side and centered within the Subframe Rails. Tighten set screws.
2. Loosen the Square Head Set Screws on the Upper Mounting Brackets and slide the Upper Lift Points to align with the Subframe Rails. Tighten set screws.



PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	PC181552	BODY GUIDE, READING (STAMPING)
2	4	102-407-A1	HEX HEAD BOLT, 1/2 UNC X 1 1/2
3	4	118-5-A1	Lock Washer, 1/2
4	4	116-5-A1	Hex Nut, 1/2

Dump Body Installation Instructions (Refer to MP50074A)

⚠ WARNING Dump Bodies are heavy! Be careful when lifting or moving.

1. Suspend Body over Subframe a minimum of 3 inches away from the Cab and lower body onto subframe.

NOTICE The body and Subframe must be aligned correctly with the body long sills resting on the subframe rails and the upper lift points.

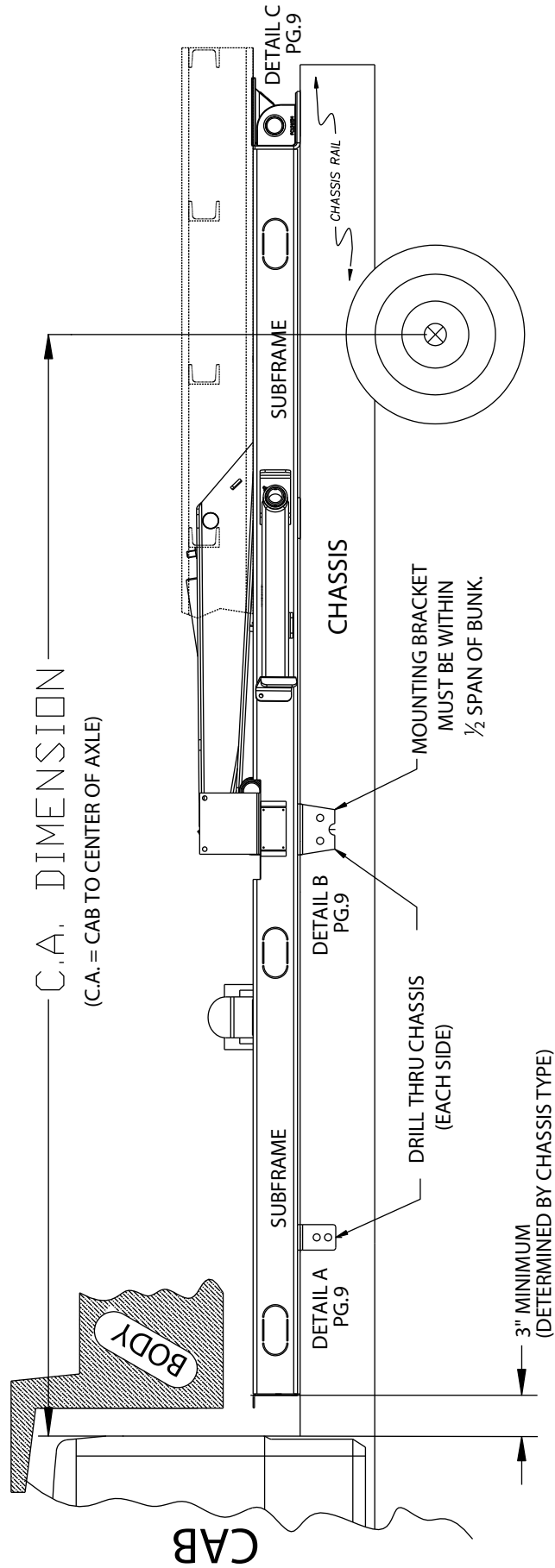
2. Weld around all accessible contact areas of Rear Hinge Flippers to Long Sills of Body with a 1/2" continuous weld.
3. Use C-clamps to temporarily attach the upper lift points to the long sills.
4. Using the hoist power, raise the body approx. 1 1/2" as measured from the end closest to the cab.
Note: This will remove any slack in the rear hinge and hoist pivot points.
5. Tack weld upper lift Points to long sills.
6. Lower the body and check again for correct alignment of the hoist.
7. Raise the body high enough to use the safety prop.

⚠ DANGER Do not go under a raised, empty body without securely propping it.

8. Securely prop the dump body up and finish welding rear hinge flippers and upper lift points to the body.

⚠ CAUTION Inspect all welds, check that all hardware is secure, check plumbing connection for leaks, and repair as needed.

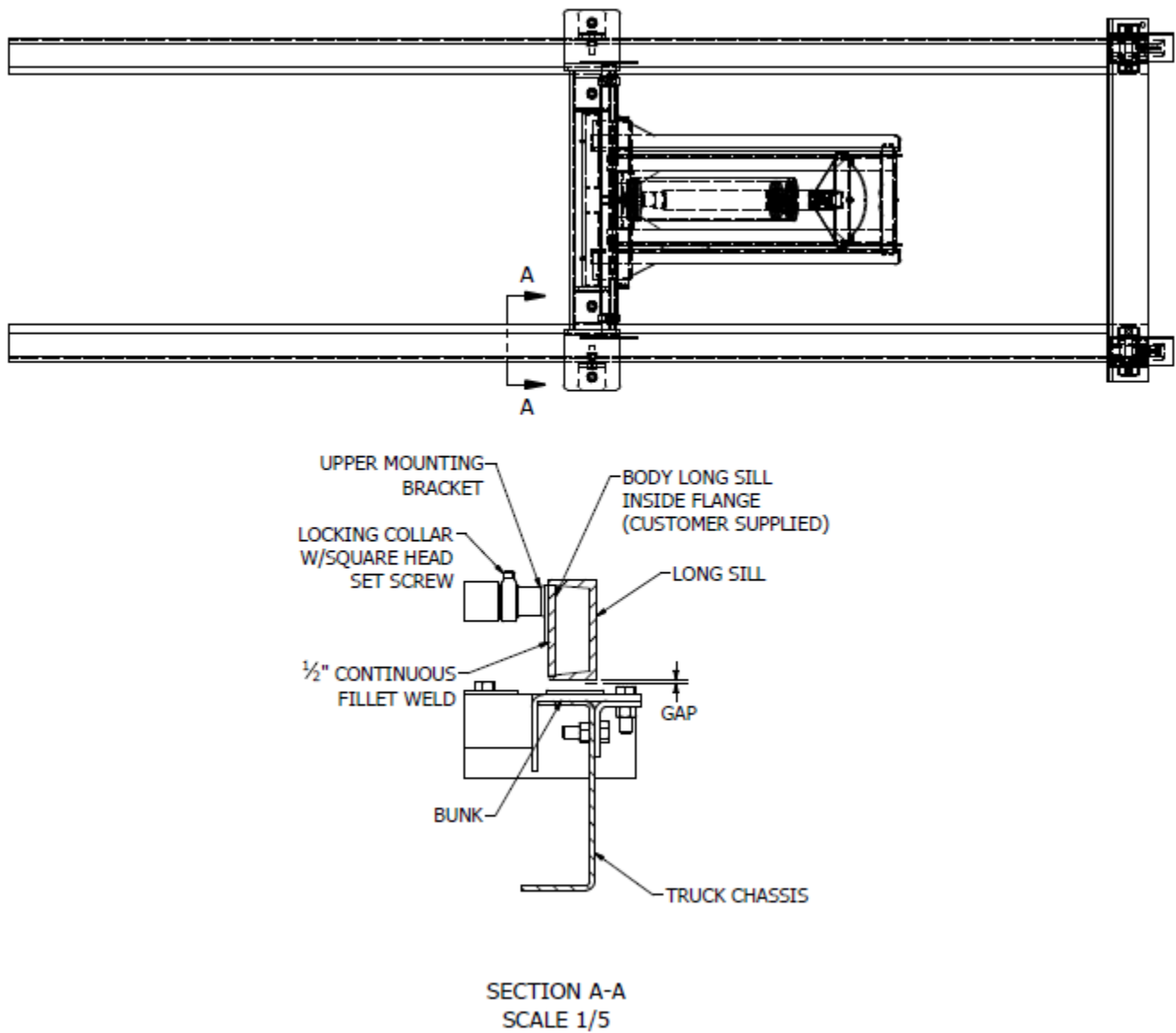
9. Allow welds to cool and grease all Pivot Points and grease fittings with EP- 2 chassis grease or equivalent. Refer to page 13 for grease fitting locations.



NOTE:
SEE WELD DETAILS FOR
MOUNTING BRACKETS AND REAR
HINGE ON SHEET 9 (MP50074A)

C.A. DIMENSIONS (CAB TO CENTER OF AXLE)									
C.A. DIMENSION	60"	72"	84"	96"	108"	120"	132"	144"	156"
BODY LENGTH	8'	9'	10'	11'	12'	13'	14'	15'	16'

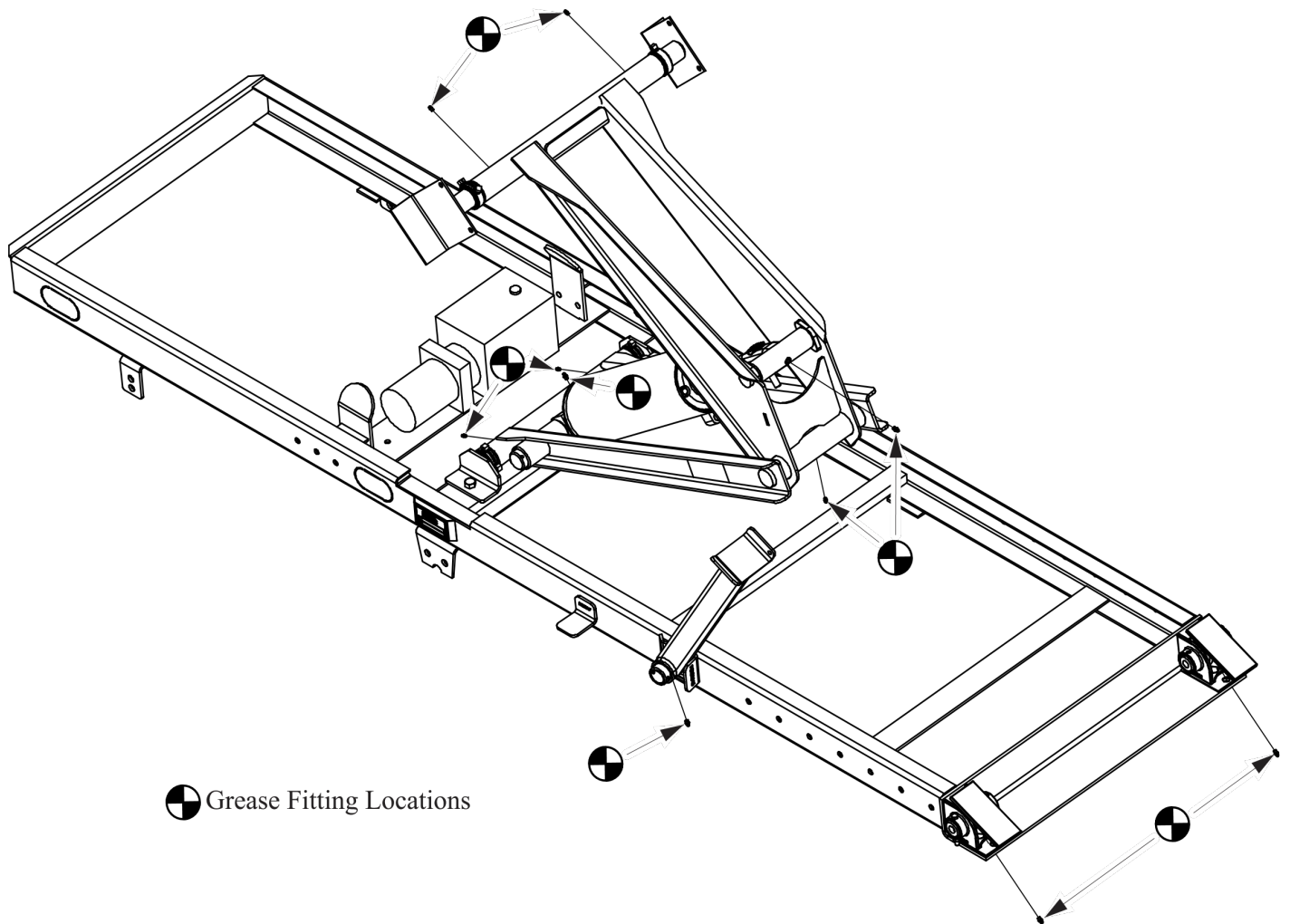
Figure 2: Cross Sectional View of Subframe, Hoist, and Truck Chassis

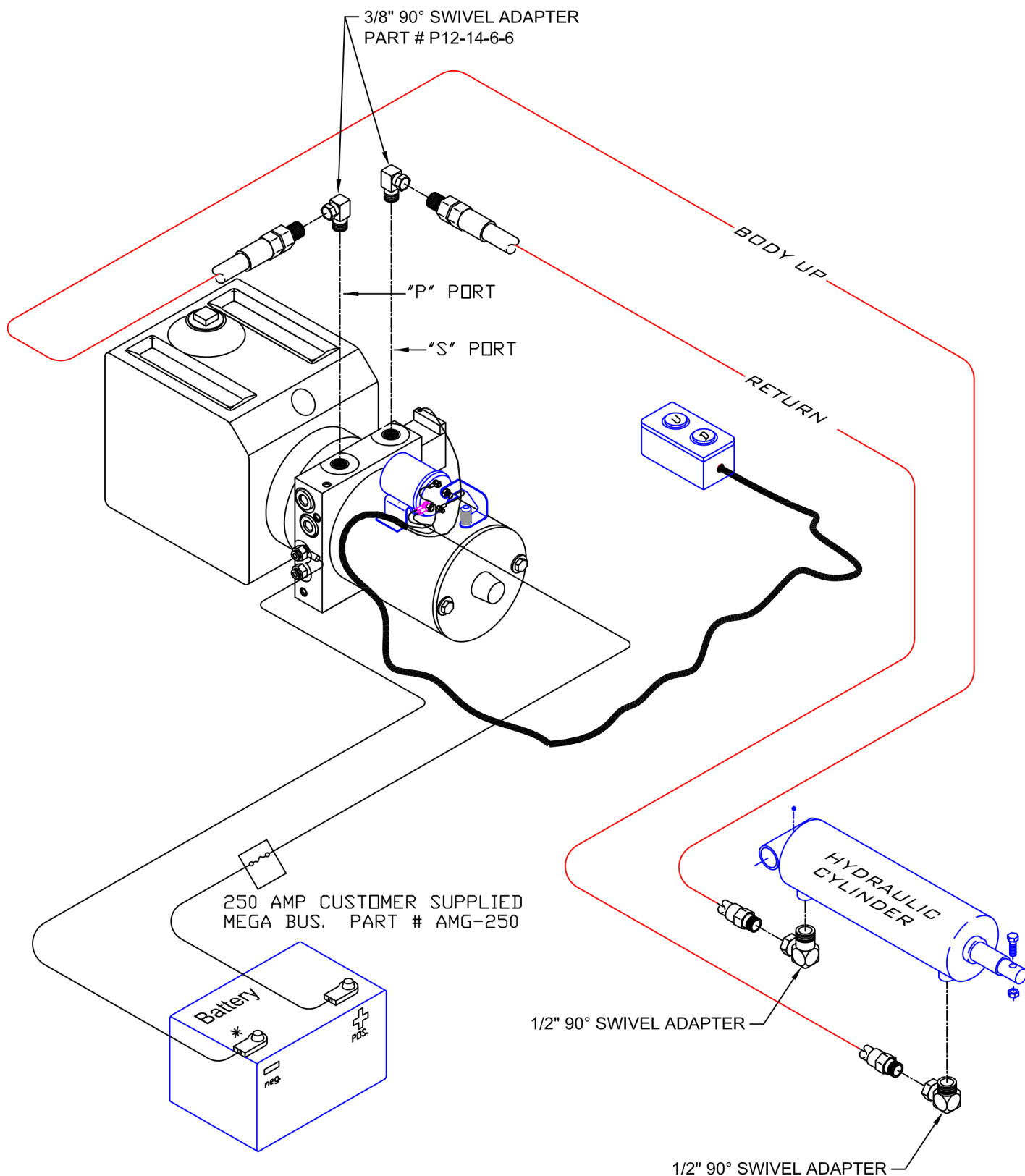


SECTION A-A
SCALE 1/5

Subframe and Hoist Lubrication Instructions

Grease fittings are highlighted below and must be lubricated with EP-2 chassis grease or equivalent each time the truck is serviced.





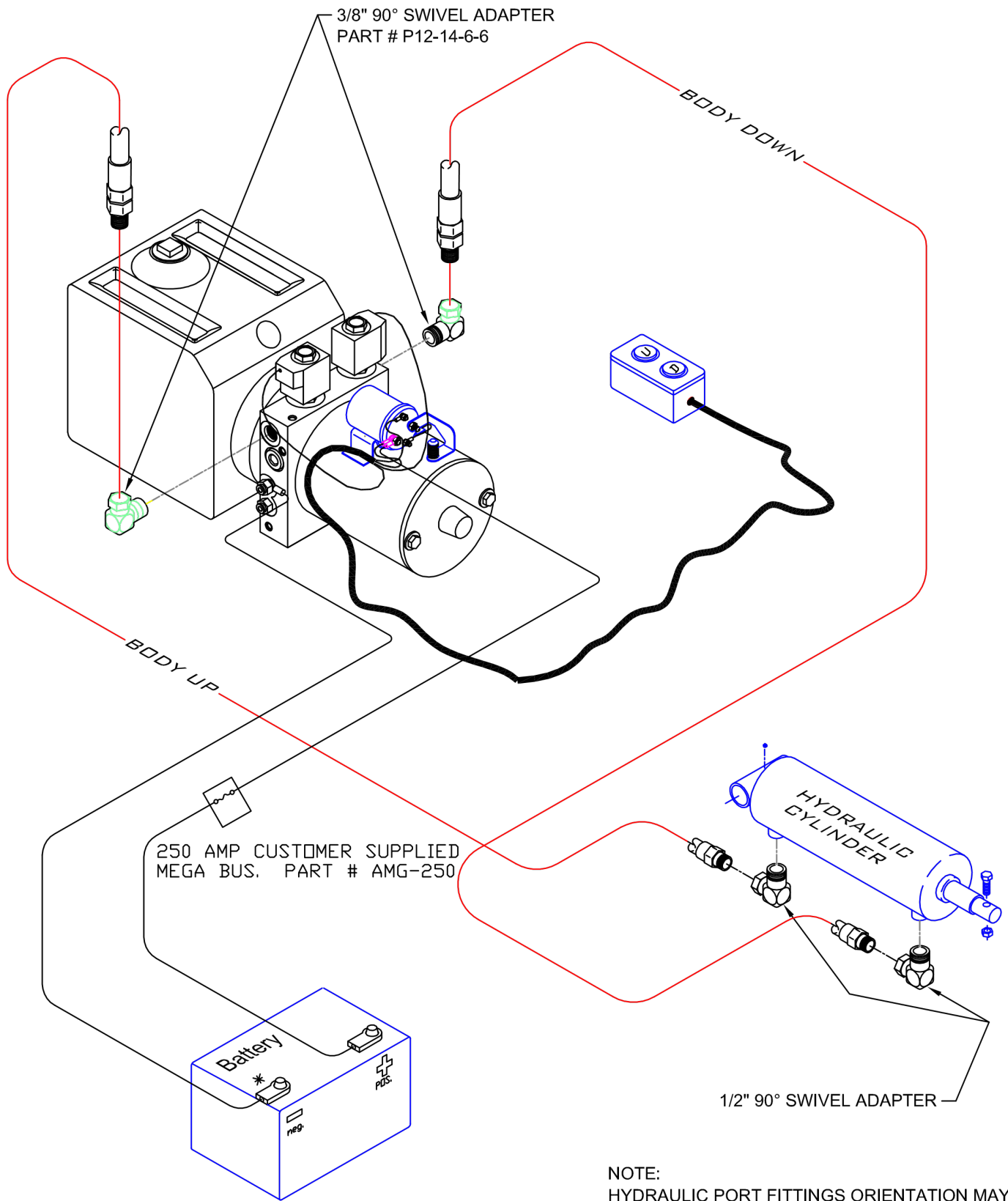
NOTE: Ground Wire is to be ground to valve body.
DO NOT GROUND TO CHASSIS!!

NOTE:
HYDRAULIC PORT FITTINGS ORIENTATION MAY
VARY DEPENDING ON CHASSIS TYPE.

HYDRAULIC PLUMB DIAGRAM SINGLE ACTING ELECTRIC PUMP

GODWIN MFG. CO., INC.
DUNN, NORTH CAROLINA

PD40048



NOTE: Ground Wire is to be ground to valve body.
DO NOT GROUND TO CHASSIS!!

NOTE:
HYDRAULIC PORT FITTINGS ORIENTATION MAY
VARY DEPENDING ON CHASSIS TYPE.

HYDRAULIC PLUMB DIAGRAM
DOUBLE ACTING ELECTRIC PUMP

GODWIN MFG. CO., INC.
DUNN, NORTH CAROLINA

PD40045

Electric Pump Priming Procedure

Single acting (M-3519) or Double acting (M-3551)

- A. Be sure hoist and electric pump are completely installed and ready to safely operate.
Fill electric pump reservoir with Automatic Transmission Oil to within 1 inch of top.
- B. Power the hoist up using the white button the push button controller.

NOTE: If hoist does not start to raise within 10 seconds, stop and check that the hydraulic lines are correctly installed. See below:

- | | |
|--------------------------------------|--|
| Monarch 3551 (double acting, yellow) | “C1” port = hoist raise (white button) = 3200 PSI. |
| | “C2” port = hoist lower (black button) = 800 PSI. |
| Monarch 3519 (single acting, orange) | “P” port = hoist raise (white button) = 3200 PSI. |
| | “S” port = lower/vent to res (black button) = 0 PSI. |

NOTICE To prevent damage to the equipment, Do not allow the hydraulic reservoir to run out of hydraulic, Automatic Transmission Oil. Always maintain at least half a tank of oil.

- C. When powering the hoist up the first time, it is imperative that the reservoir NOT run out of oil. Maintain a half tank of oil on the first lift by stopping and filling as needed.
- D. Check for leaks during lifting operations and check for obstructions.
- E. For double acting pump only- Lower the hoist by pressing the black button.
Note: Lower the hoist 1/3 and stop for 20 seconds, repeat two more times until hoist is fully lowered. Once the hoist has fully lowered CONTINUE to hold the black button until the oil in the reservoir stops moving (turbulence), about 20 seconds. The turbulence in the reservoir during this crucial step is filling the top side (or down side) of the cylinder. This typically has to be done only upon the initial installation or when the unit has run low in oil and is being refilled.
- F. After steps A through E have been done, fill the reservoir as needed to maintain $\frac{2}{3}$ to $\frac{3}{4}$ full with the bed down.

Helpful Hints:

1. Perform the above priming steps no more than twice in 30 minutes due to oil aerating.
2. If the reservoir overflows when lowering, the following could cause overflowing.
 - (a) Aerated oil
 - (b) “Hoist lower” line too small or obstructed
 - (c) Wrong ports used on pump
 - (d) Extremely cold conditions.
3. Make sure the customer understands that the electric power unit (used when necessary) has the same lifting capacity but will be slower than a PTO driven unit.
4. Do not operate pump more than two minutes at a time or without truck engine running so as to keep a charge in battery.

Electric Pump Troubleshooting Procedure

Single acting (M-3519) or Double acting (M-3551)

Electric pump solenoid does not click:

A. Bad hot (+) or ground (-) cables(s) from battery to pump. Be sure to use both cables and connect directly to the battery. Install a 250 amp mega fuse at the positive battery connection.

NOTE: On newer trucks, the ground cable from battery to chassis is too small to carry the load of the electric pump unit. Two individual positive and ground cables from battery to electric pump unit are needed to correct for the higher current draw.

B. Check for 12 volt signal at small post of solenoid when pressing the up button on the control. If voltage is below 12 volts it may be an alternator or battery issue. If no voltage, it may be the switch or a broken or corroded wire.

Electric pump Solenoid clicks but motor does not operate:

A. Check battery connection between solenoid and motor

B. Contacts in solenoid could be burned. (Check this by shorting the two large posts on the solenoid, if motor turns replace solenoid assembly)

C. Bad motor

D. Seized pump

Motor/pump turns but hoist will not work:

A. Check for 12 volts at valve coil(s). Could be bad switch or broken wire.

B. Are coils magnetized when button is pressed? Could be bad coil or connector.

C. Cartridge stem could be bent. Lower bed completely, remove cartridge, and roll it on a table to check for alignment.

D. Check pump unit pressure. Up pressure should be 3200 PSI and down (on double acting units) should be 800 PSI.

Hoist stuck in Up position, will not come down:

A. Check for 12 volts at down coil.

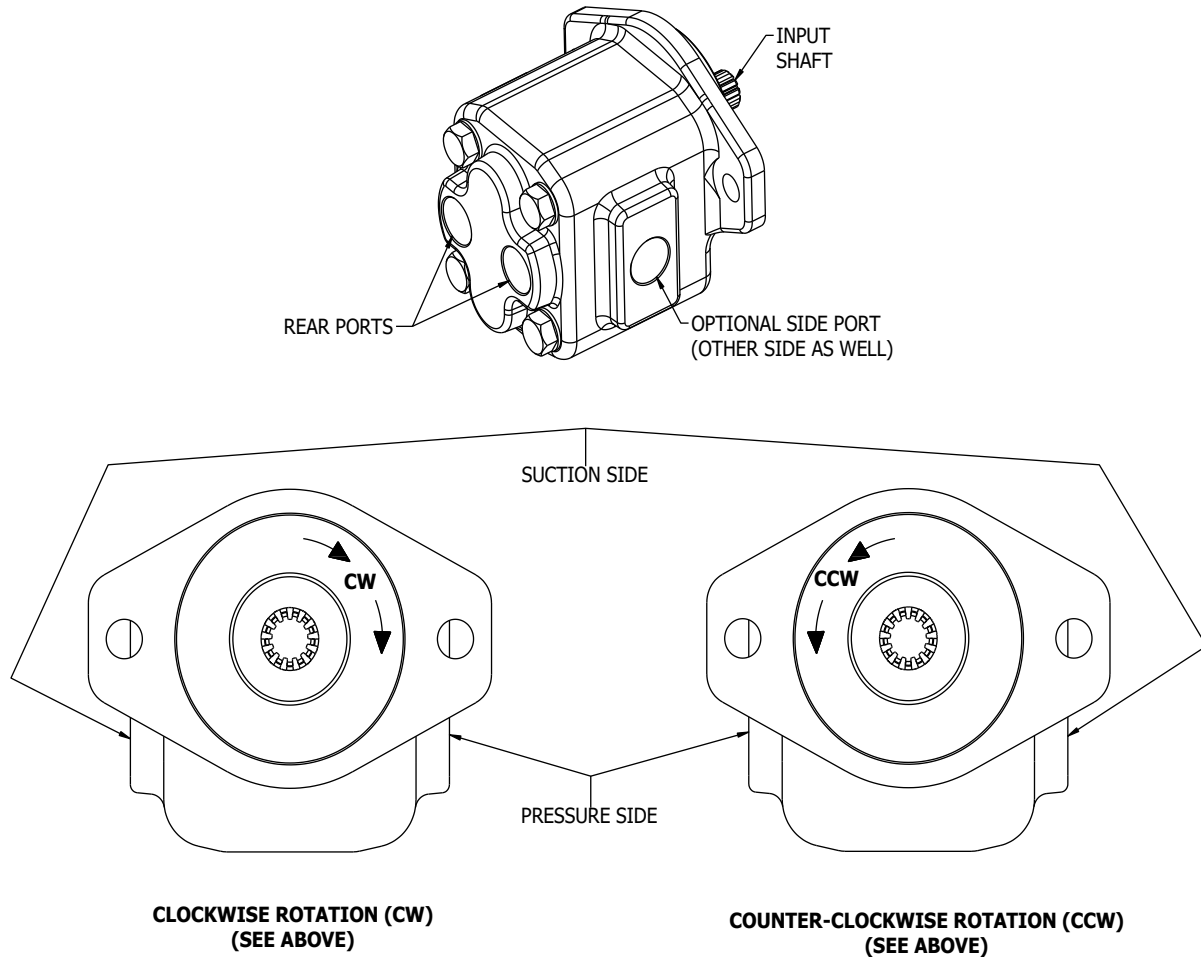
B. Check for bent stem on down cartridge. Call for service technician.

DO NOT ATTEMPT TO REPAIR!



A hoist that is stuck in the up position is an extremely dangerous situation and must be handled with great care. DO NOT ATTEMPT TO REPAIR! Contact a service technician.

PUMP ROTATION AND PORTING

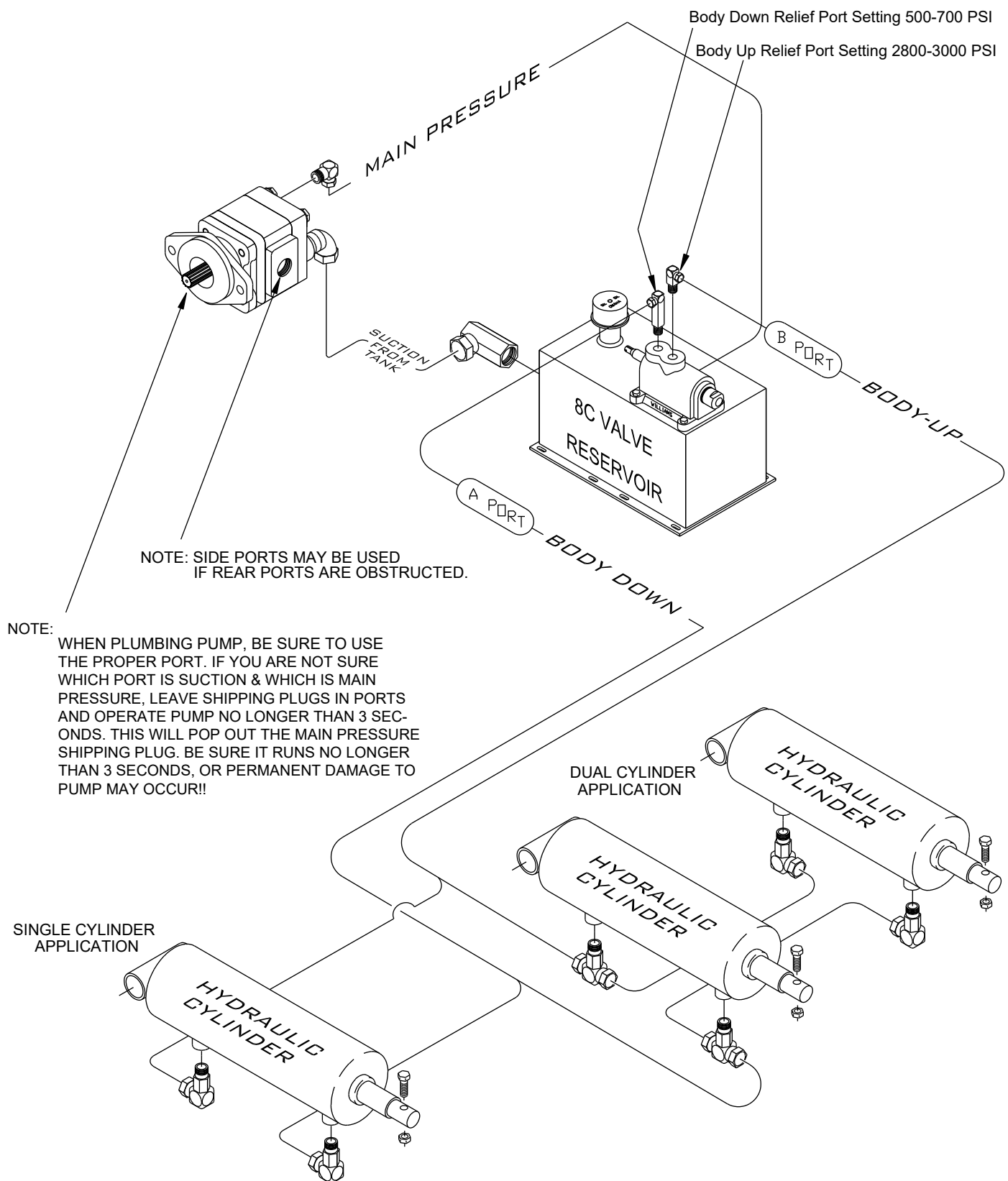


The P21 and P22 Pumps are bi-directional and offer side and rear (NPT) Porting. The pumps are shipped with the side ports plugged. To utilize side porting move the steel plugs from the side ports to the rear ports and plumb the hydraulic lines. Refer to the illustration above for Port Designation based on pump rotation.

Helpful Hint:

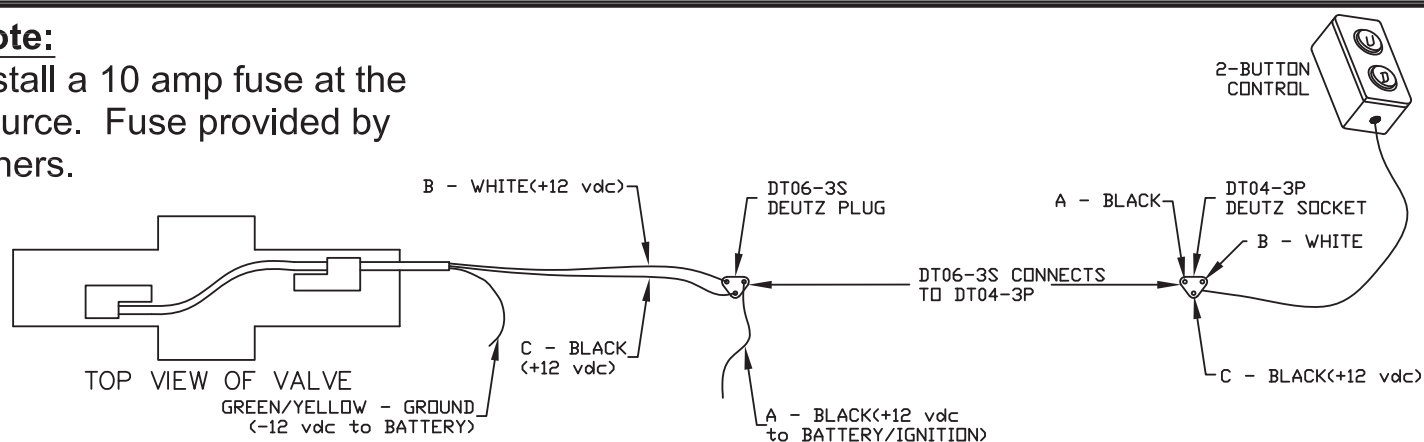
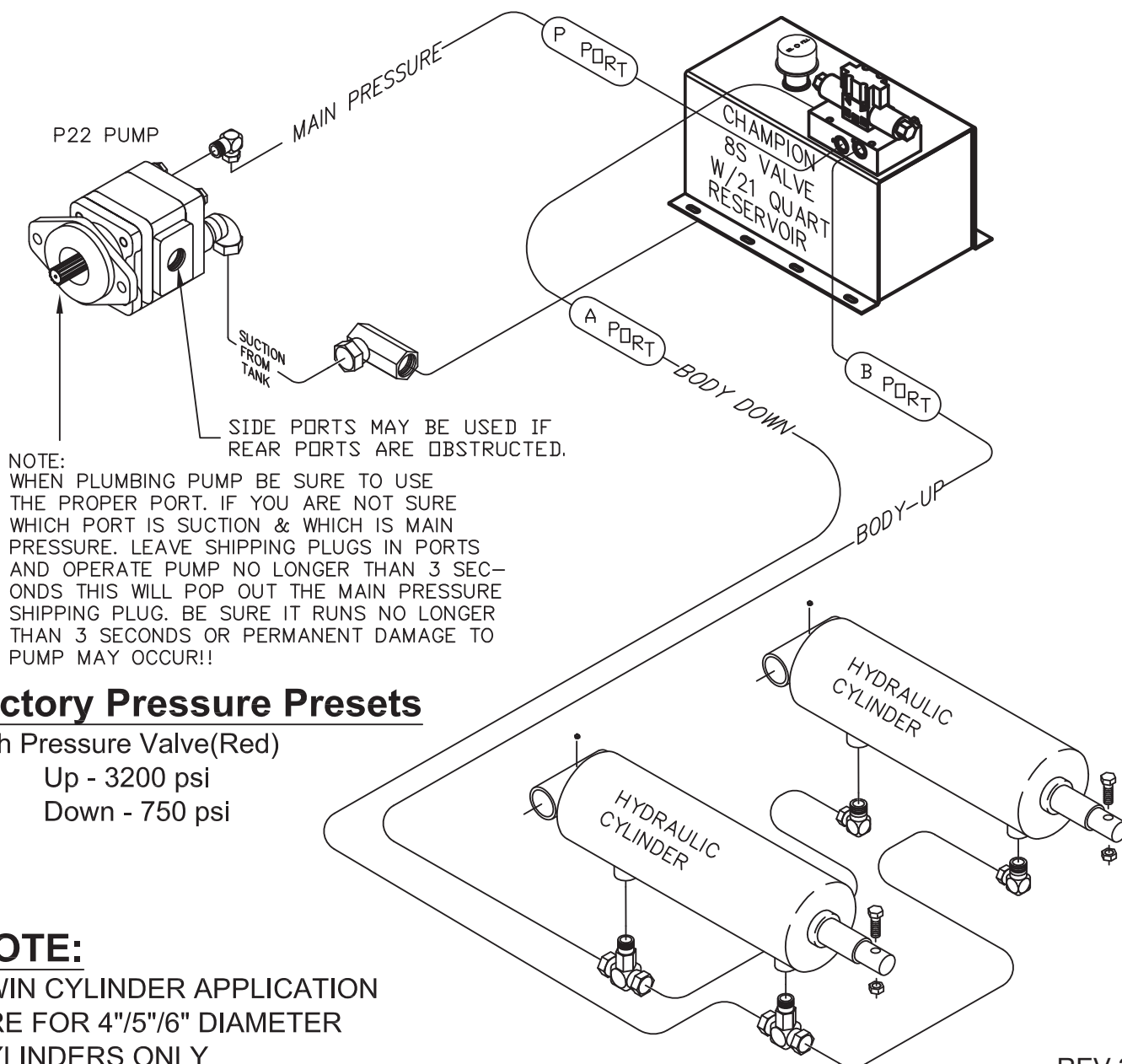
To determine pump rotation, do not remove the plastic shipping plugs. Temporarily bolt pump to the mounted PTO. Start truck engine and engage PTO for approximately 3 seconds, then disengage PTO and shut-off engine. The plastic shipping plug on the pressure port should have popped out of the pump housing.

Hydraulic Plumb Diagram with 8C Valve



Note:

Install a 10 amp fuse at the source. Fuse provided by others.

**WIRING DIAGRAM****Factory Pressure Presets**

High Pressure Valve(Red)

Up - 3200 psi

Down - 750 psi

NOTE:

TWIN CYLINDER APPLICATION ARE FOR 4"/5"/6" DIAMETER CYLINDERS ONLY

HYDRAULIC PLUMBING DIAGRAM

REV 3-10-21

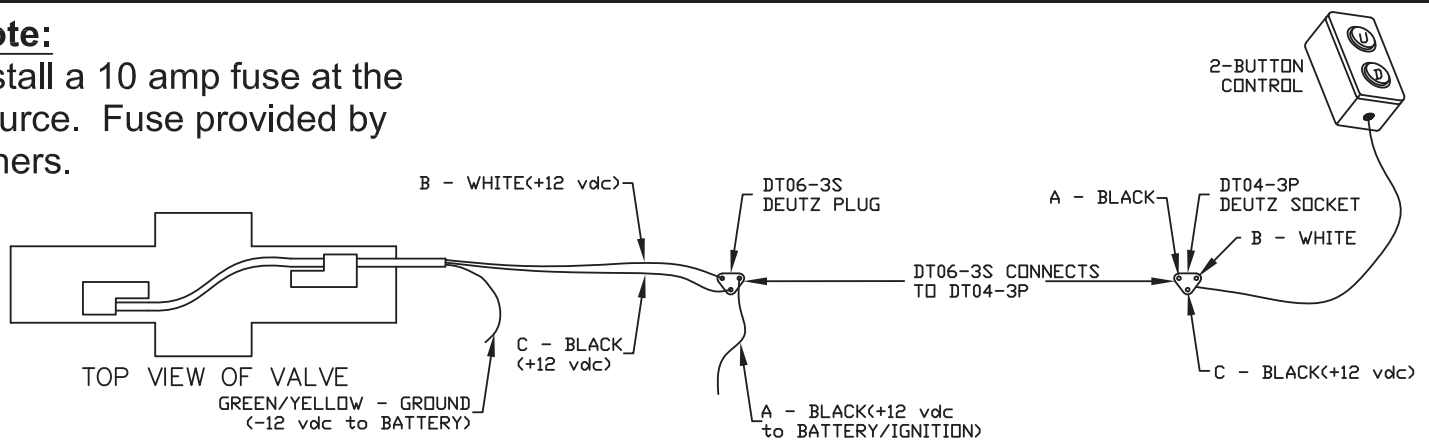
CHAMPION 8S VALVE- TWIN
HYDRAULIC PLUMBING DIAGRAM

GODWIN MFG. CO., INC.
DUNN, NORTH CAROLINA

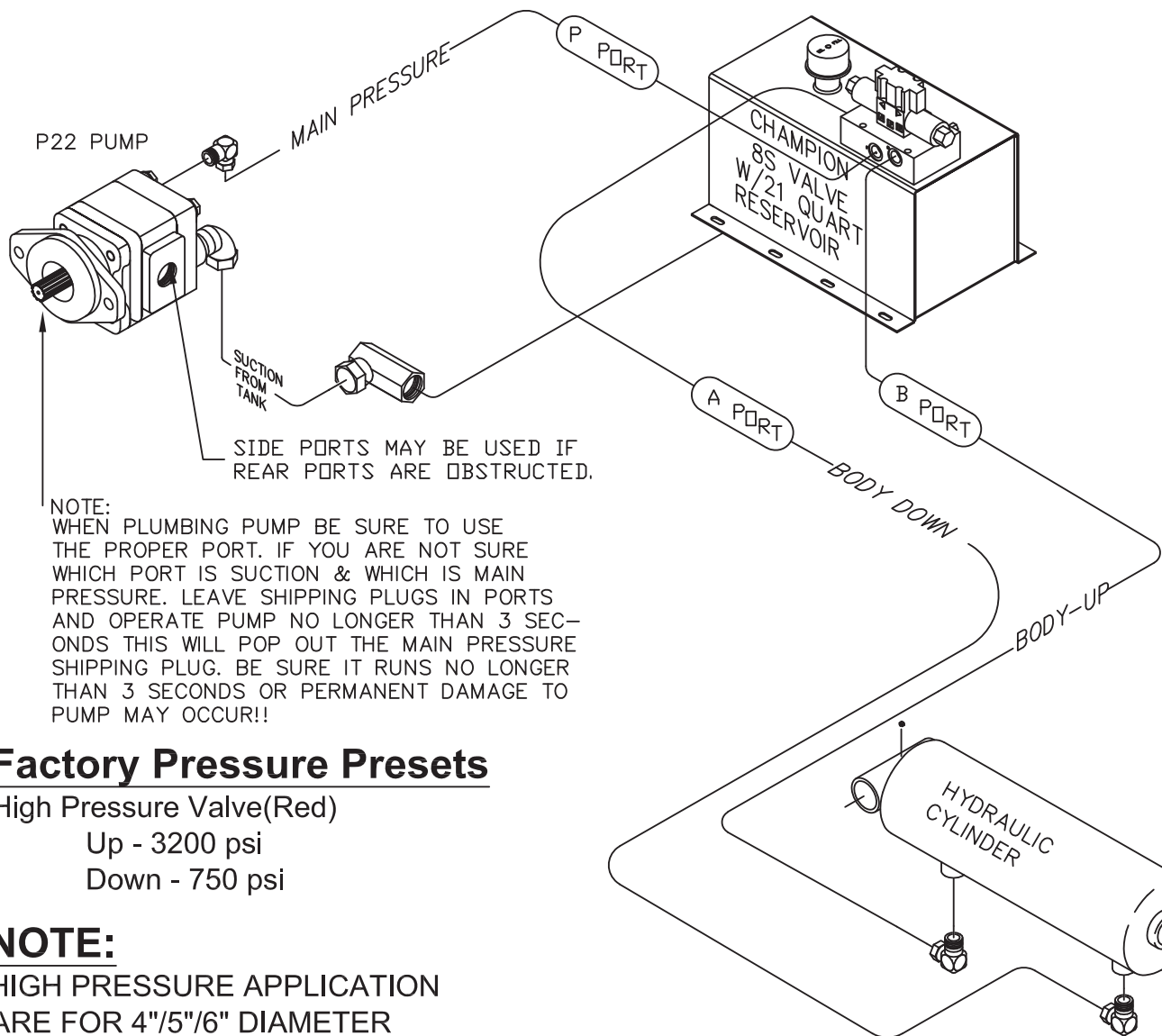
PD40087-8S

Note:

Install a 10 amp fuse at the source. Fuse provided by others.



WIRING DIAGRAM



Factory Pressure Presets

High Pressure Valve(Red)

Up - 3200 psi

Down - 750 psi

NOTE:

HIGH PRESSURE APPLICATION ARE FOR 4"/5"/6" DIAMETER CYLINDERS ONLY

REV 3-10-21

HYDRAULIC PLUMBING DIAGRAM

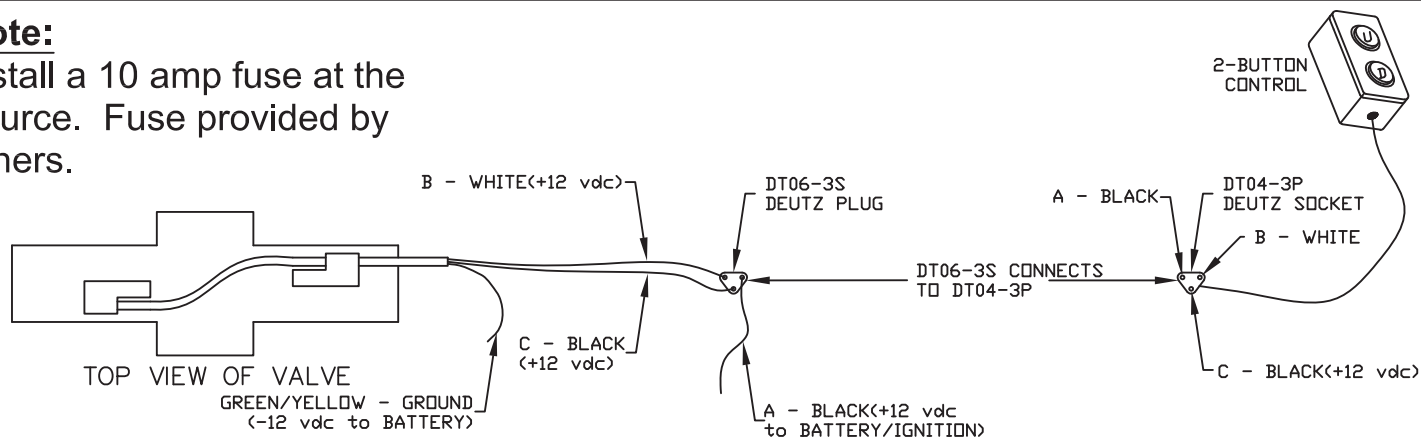
CHAMPION 8S VALVE- SINGLE
HYD PLUMBING/WIRING DIAGRAM

GODWIN MFG. CO., INC.
DUNN, NORTH CAROLINA

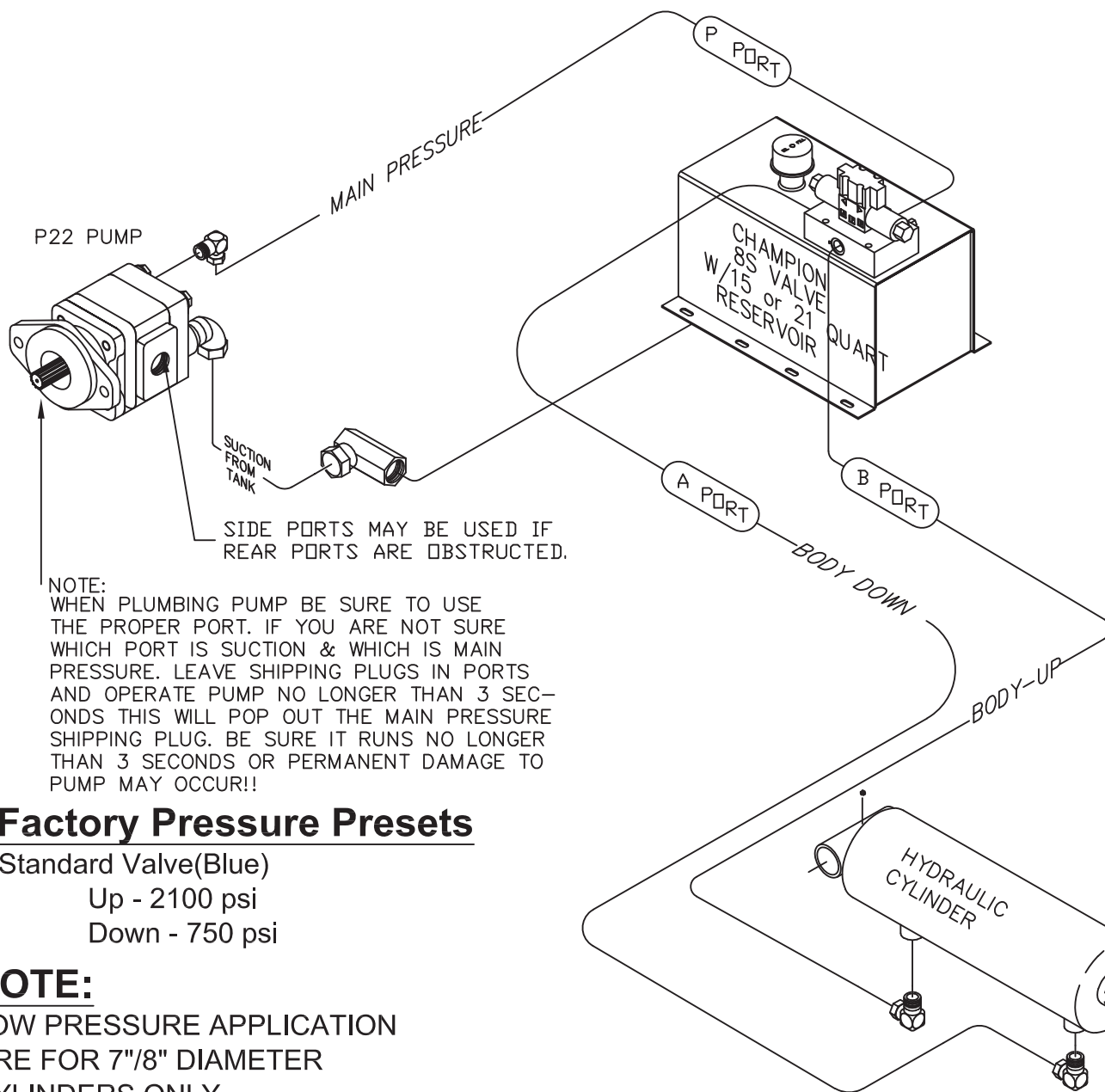
PD40088-8S

Note:

Install a 10 amp fuse at the source. Fuse provided by others.



WIRING DIAGRAM



Factory Pressure Presets

Standard Valve(Blue)

Up - 2100 psi

Down - 750 psi

NOTE:

LOW PRESSURE APPLICATION ARE FOR 7"/8" DIAMETER CYLINDERS ONLY

REV 3-10-21

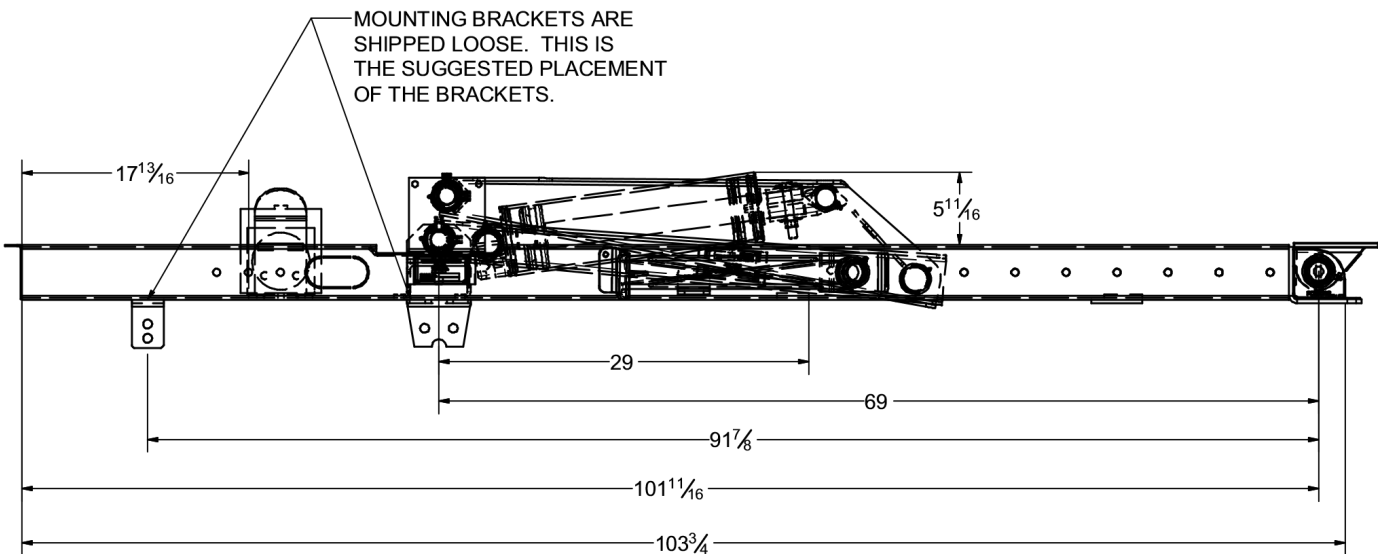
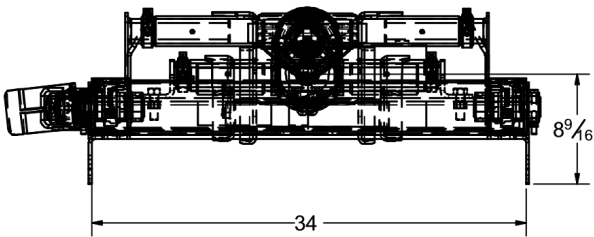
HYDRAULIC PLUMBING DIAGRAM

CHAMPION 8S-B VALVE- SINGLE
HYD PLUMBING/WIRING DIAGRAM

GODWIN MFG. CO., INC.
DUNN, NORTH CAROLINA

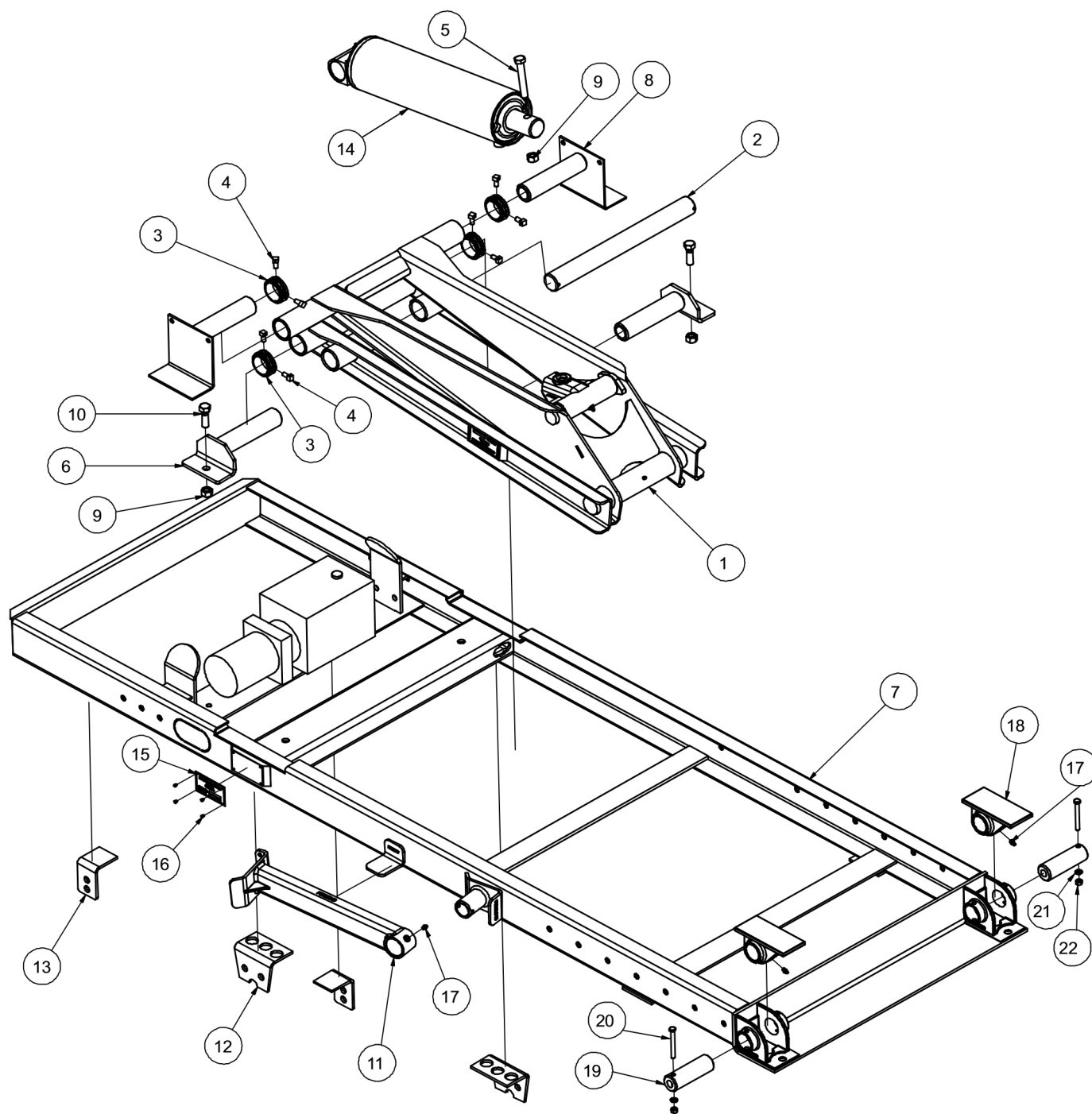
PD40114-8S-B

Champion Subframe Model: 9' 515T 50°



CS515T-09 Hoist Capacity (Tons)(3000 PSI)		
Body Length	Overhang (IN)	50° Dump Angle (69")
9	12	9.4

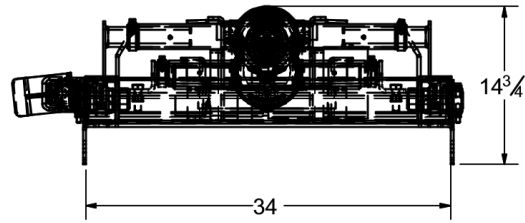
Champion Subframe Model: 9' 515T 50°



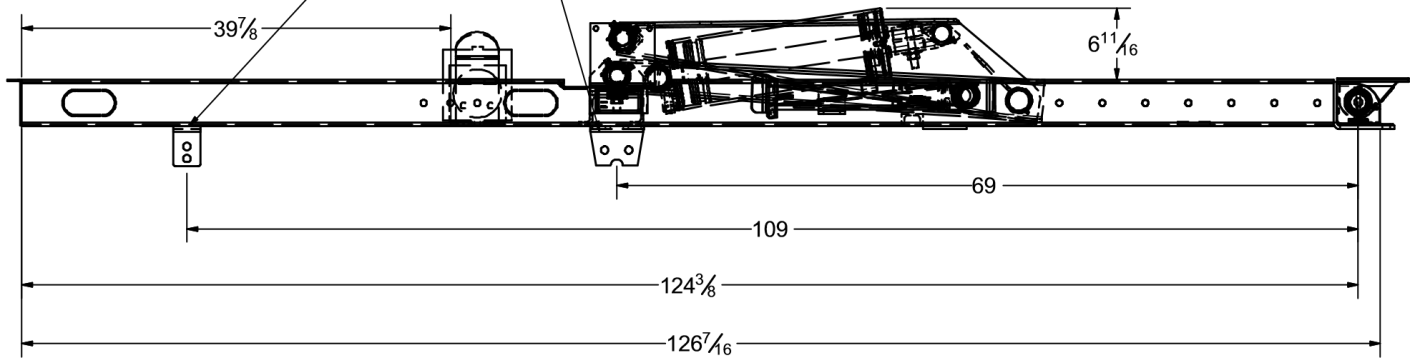
9' 50 Degree CS515T Subframe & Scissor Hoist - Parts List

Item	Qty.	Part No.	Description
1	1	W12334	Scissor Hoist Weldment, 415T/515T/615T
2	1	SM12016	Bottom Cylinder Shaft, 415/515/615/615LS/415T/515T/615T
3	4	PC12161	Collar, Lift Arm 1-7/8"
4	8	P34	Set Screw 3/8"-16 x 3/4" SQHD
5	1	102-617-L	Hex Cap Screw 5/8" x 4, GR 9
6	2	W13934	Weldment; Lower Pivot, Subframe - Reading
7	1	W131182	Weldment, 515T Subframe, 9' Body - 50 Degree Dump
8	2	W131019	Upper Lift Arm Weldment - Knaphiede
9	3	116-5-A1	Nut, Hex, 5/8 UNC
10	2	102-609-A1	Hex Bolt - UNC (Regular Thread - Inch)
11	1	PC131048	Safety Prop Pivot Arm - Reading
12	2	F131024	Subframe Mounting Bracket - Reading
13	2	F13937	Mounting Bracket, 2 Hole - Reading
14	1	W21211	Weldment, 515 Cylinder & Cap
15	2	P10100	Serial Plate
16	8	PAAP43	Rivet, 1/8" Cherry Pop
17	3	P800	1/8" Pipe Thread Grease Fitting
18	2	PC10463	Hinge - 1-3/4" Flipper
19	2	PC10816	1-3/4" Rear Hinge Pin, Short Version
20	2	102-214	Hex Cap Screw 3/8" x 3-1/4
21	2	118-3-A1	Lock Washer, 3/8
22	2	116-3-A1	Hex Nut, 3/8 UNC

Champion Subframe Model: 11' 615T 50°



MOUNTING BRACKETS ARE SHIPPED LOOSE. THIS IS THE SUGGESTED PLACEMENT OF THE BRACKETS.



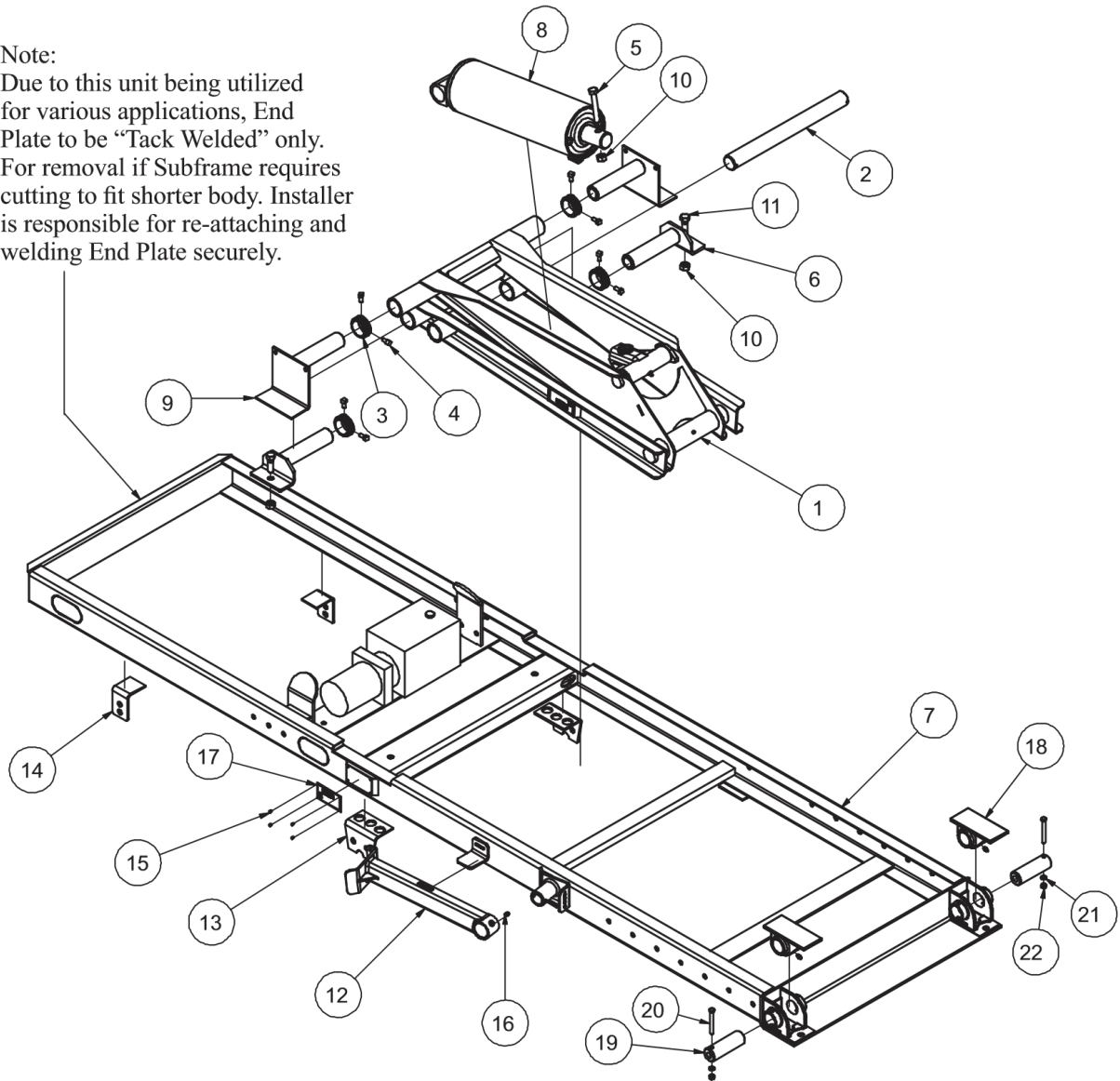
CS615T-11 Hoist Capacity (Tons)(3000 PSI)

Body Length	Overhang (IN)	50° Dump Angle (69")
11	12	10.5

Champion Subframe Model: 11' 615T 50°

Note:

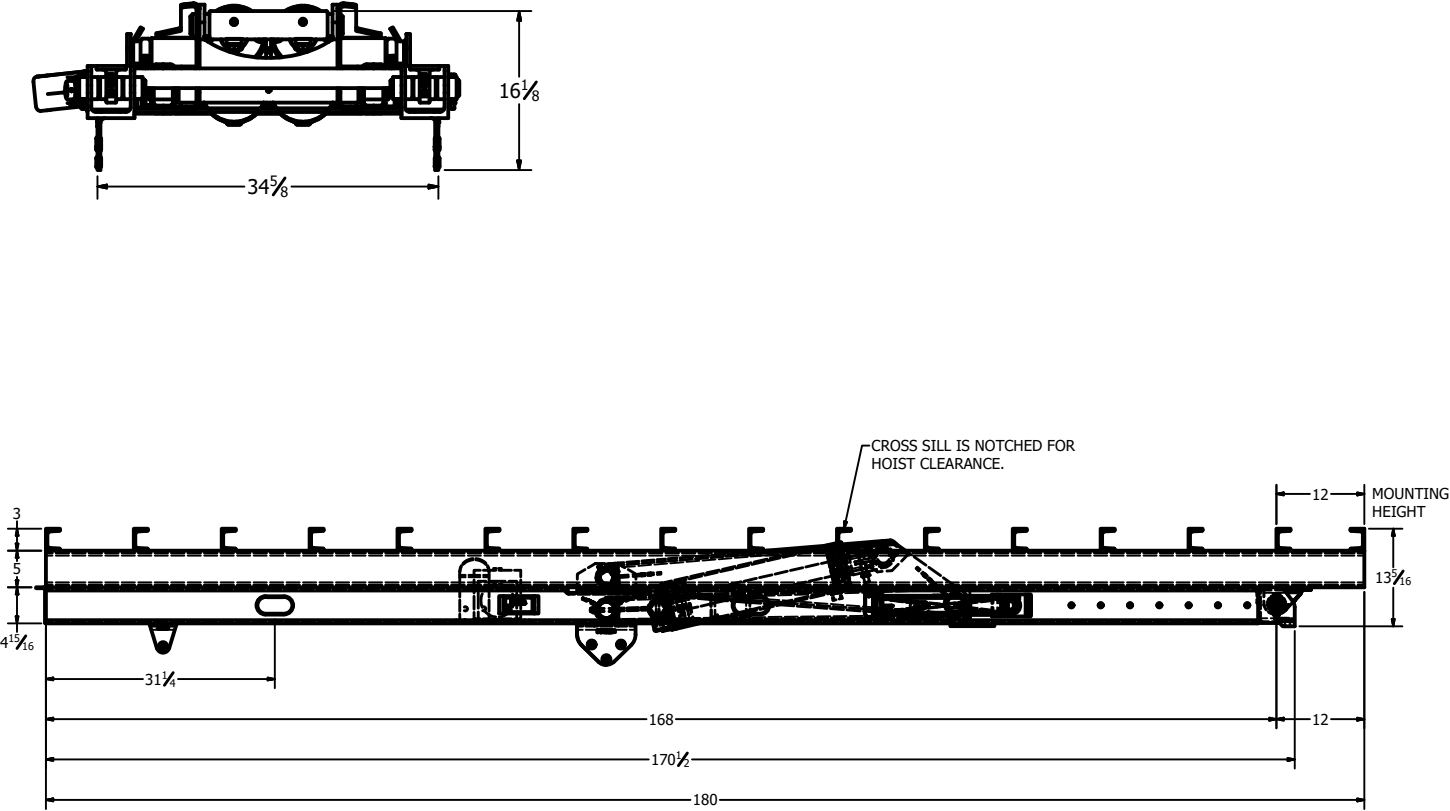
Due to this unit being utilized for various applications, End Plate to be "Tack Welded" only. For removal if Subframe requires cutting to fit shorter body. Installer is responsible for re-attaching and welding End Plate securely.



11' 50 Degree CS615T Subframe & Scissor Hoist - Parts List

Item	Qty.	Part No.	Description
1	1	A112339	615T Scissor Hoist Assembly
2	1	SM12016	Bottom Cylinder Shaft, 415/515/615/615LS/415T/515T/615T
3	4	PC12161	Collar, Lift Arm 1-7/8"
4	8	P34	Set Screw 3/8"-16 x 3/4" SQHD
5	1	102-617-L	Hex Cap Screw 5/8" x 4, GR 9
6	2	W13934	Weldment; Lower Pivot, Subframe - Reading
7	1	W131110	Weldment, 615T Subframe, 11' Body - 50 Degree Dump
8	1	A21323	Assembly, 615 DA Cylinder
9	2	W131019	Upper Lift Arm Weldment - Knaphiede
10	3	116-7-A1	Nut, Hex, 5/8 UNC
11	2	102-609-A1	Hex Bolt - UNC (Regular Thread - Inch)
12	1	PC131048	Safety Prop Pivot Arm - Reading
13	2	F131024	Subframe Mounting Bracket - Reading
14	2	F13937	Mounting Bracket, 2 Hole - Reading
15	8	PAAP43	Rivet, 1/8" Cherry Pop
16	3	P800	1/8" Pipe Thread Grease Fitting
17	2	P10100	Serial Plate
18	2	PC10463	Hinge - 1-3/4" Flipper
19	2	PC10816	1-3/4" Rear Hinge Pin, Short Version
20	2	102-214	Hex Cap Screw 3/8" x 3-1/4
21	2	118-3-A1	Lock Washer, 3/8
22	2	116-3-A1	Hex Nut, 3/8 UNC

Champion Subframe Model: 15' 6620T 50°

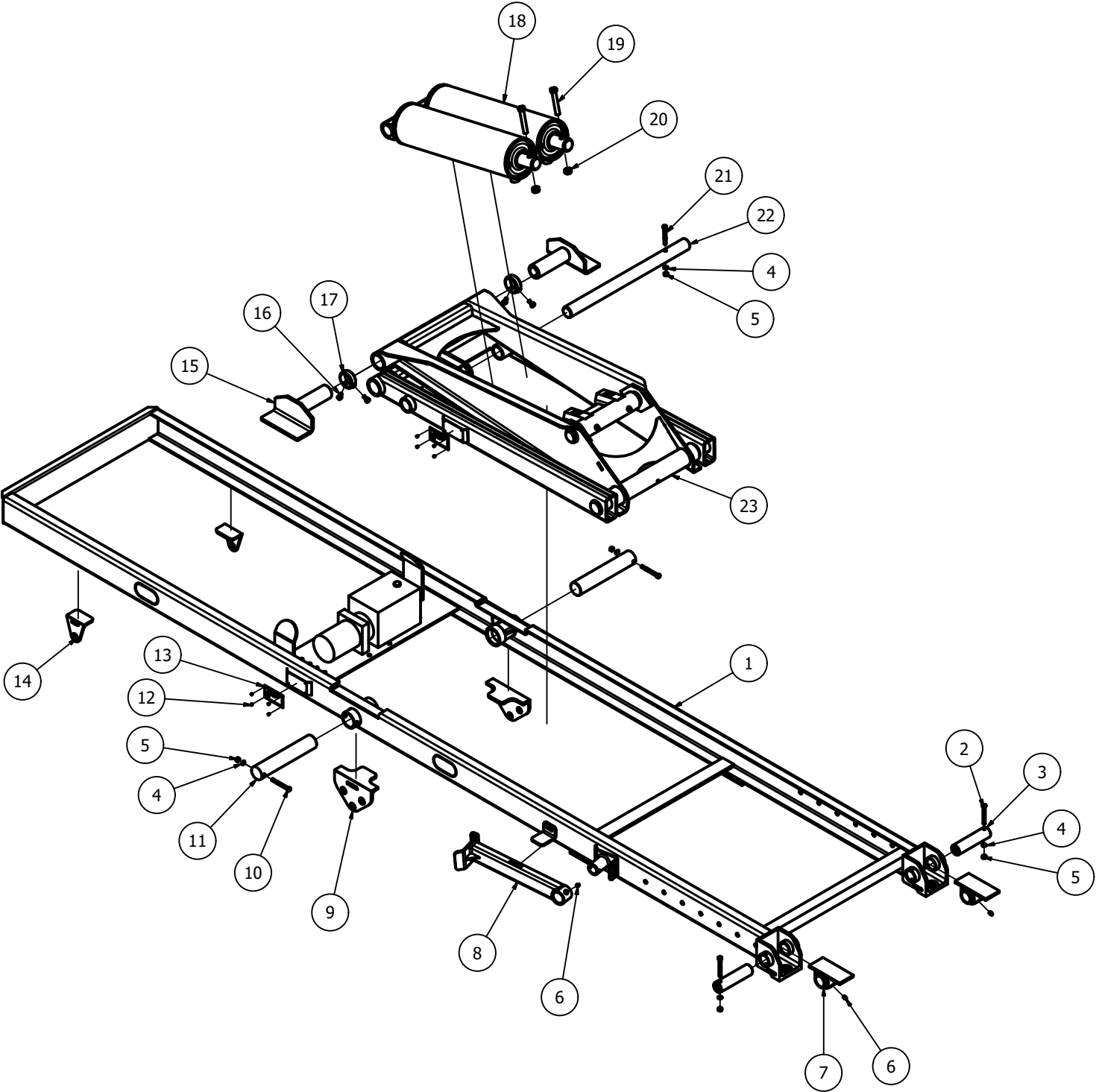


CS6620T-15 Hoist Capacity (Tons)(3000 PSI)		
Body Length	Overhang (IN)	50° Dump Angle (91-1/2")
15'	12"	18.4

15' 50 Degree 6620T Subframe and Scissor Hoist- Parts List

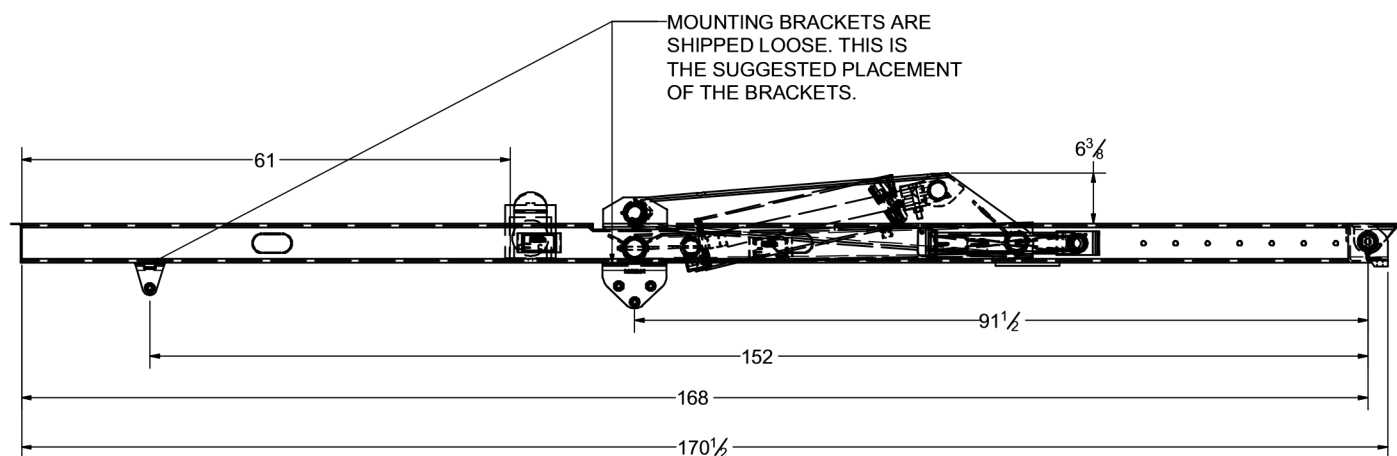
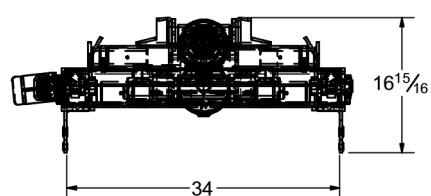
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	W131143	WELDMENT, 15' 620T SUBFRAME
2	2	102-214	Hex Cap Screw, 3/8 X 3 1/4
3	2	PC10525	REAR HINGE PIN 816-820 SF
4	5	118-3-A1	Lock Washer, 3/8
5	5	116-3-A1	Hex Nut, 3/8-16 UNC
6	3	P800	1/8" PIPE THREAD GREASE FITTING
7	2	PC10463	HINGE - 1-3/4" FLIPPER
8	1	PC131048	SAFETY PROP PIVOT ARM - READING
9	2	PC13272	8" MOUNTING BRACKET
10	2	102-215-A1	3/8 x 3-1/2" HEX CAP SCREW
11	2	PC12262	SHAFT, UNIVERSAL SUBFRAME, 2 1/4
12	8	PAAP43	RIVET, 1/8" CHERRY POP
13	2	P10200	CHAMPION SERIAL PLATE
14	2	PC13280	4" MOUNTING BRACKET
15	2	W13974	WELDMENT, LOWER LIFT ARM 2-1/4" - MIRAGE
16	4	P34	SET SCREW 3/8"-16 x 3/4" SQHD
17	2	PC12157	SET COLLAR FOR 2-1/4" LIFT ARM
18	2	A21328	ASSEMBLY, 620 DA CYLINDER
19	2	102-617-A1	CAP SCREW, 5/8 x 4
20	2	162-10-S	1/2" LOCK NUT
21	1	102-213-A1	HEX BOLT, 3/8 X 3 LG. GR 8
22	1	PC12058	CYLINDER MOUNT SHAFT, 6615/6620/5530/6630/5520T/6620T
23	1	W12336	WELDMENT, 5520T/6620T SCISSOR HOIST

Champion Subframe Model: 15' 6620T 50°



CHAMPION SUBFRAME MODEL: 15' 620T SUBFRAME

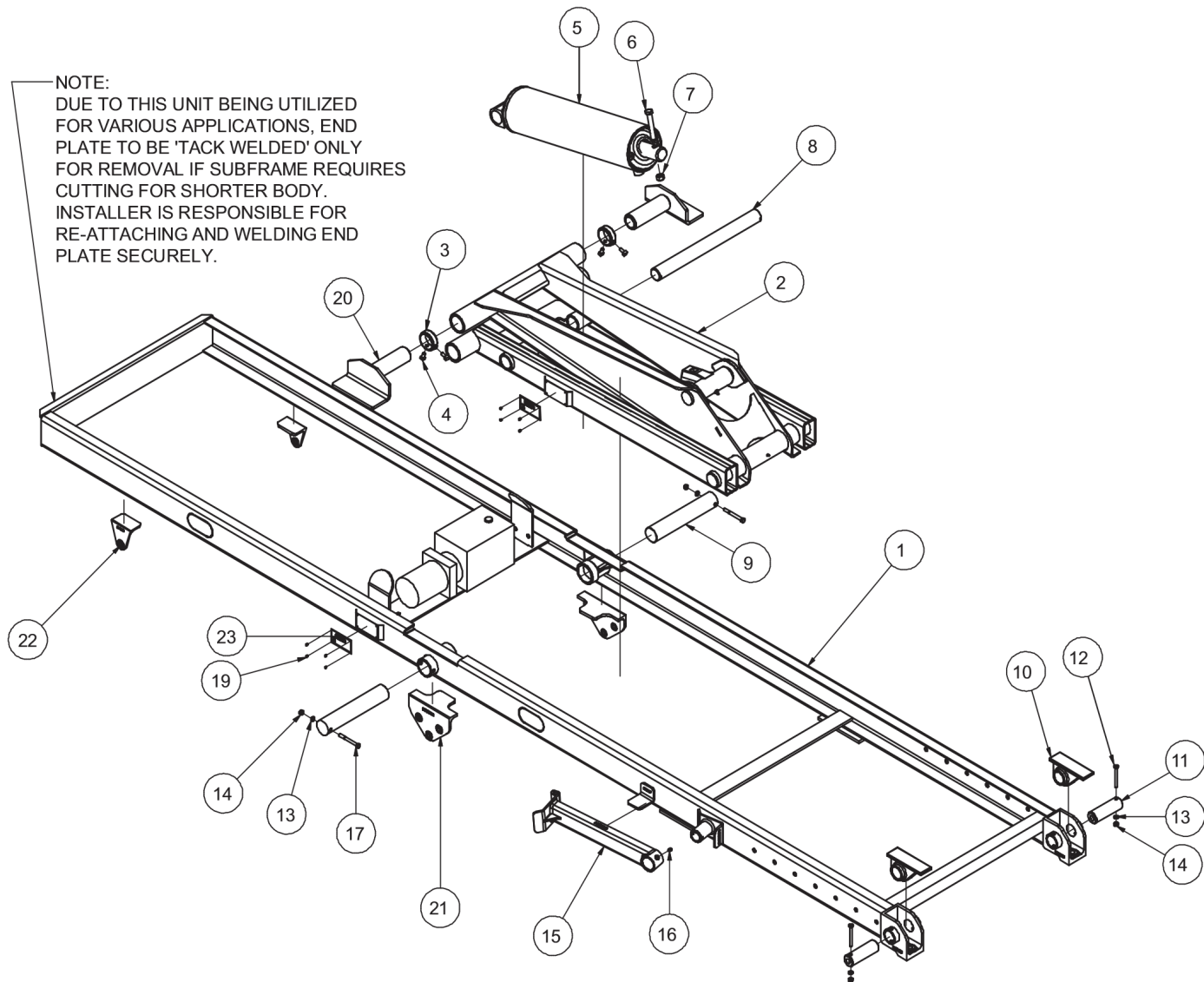
NOTE:
SUBFRAME UNIT CAN BE USED WITH
A 520T, 620T, 5520T, OR 6620T HOIST.



Hoist Capacity (Tons)(3000 PSI)			
Body Length	Overhang (IN)	Hoist Size	50° Dump Angle (91-1/2")
15	12	CS520T	6.4
		CS620T	9.2
		CS5520T	12.8
		CS6620T	18.4

CHAMPION SUBFRAME MODEL: 15' 620T SUBFRAME

NOTE:
DUE TO THIS UNIT BEING UTILIZED
FOR VARIOUS APPLICATIONS, END
PLATE TO BE 'TACK WELDED' ONLY
FOR REMOVAL IF SUBFRAME REQUIRES
CUTTING FOR SHORTER BODY.
INSTALLER IS RESPONSIBLE FOR
RE-ATTACHING AND WELDING END
PLATE SECURELY.



15' 50 Degree CS620T Subframe & Scissor Hoist - Parts List

Item	Qty.	Part No.	Description
1	1	W131143	Weldment, 15' 620T Subframe, - 50 Degree Dump
2	1	W12335	Scissor Hoist Weldment, 520T/620T
3	2	PC12157	Set Collar, Lift Arm 2-1/4"
4	4	P34	Set Screw 3/8"-16 x 3/4" SQHD
5	1	W21215	Weldment, 620 DA Cylinder & Cap
6	1	102-617-A1	Cap Screw 5/8" x 4
7	1	162-10-S	1/2" Lock Nut
8	1	SM12304	Cylinder Mount Shaft, 520T/620T
9	2	SM12262	Shaft, Universal Subframe, 2 1/4"
10	2	PC10636	Hinge Flipper, 1-3/4"
11	2	PC10816	1-3/4" Rear Hinge Pin, Short Version
12	2	102-214	Hex Cap Screw 3/8" x 3-1/4
13	4	118-3-A1	Lock Washer, 3/8"
14	4	116-3-A1	Hex Nut, 3/8" UNC
15	1	PC131048	Safety Prop Pivot Arm - Reading
16	1	P800	1/8" Pipe Thread Grease Fitting
17	2	102-215-A1	Hex Cap Screw - 3/8 x 3-1/2
19	8	PAAP43	Rivet, 1/8" Cherry Pop
20	2	W13974	Weldment; Lower Lift Arm 2-1/4" - Mirage
21	2	PC13272	8" Mounting Bracket
22	2	PC13280	4" Mounting Bracket
23	2	P10200	Champion Serial Plate

Maintenance and Service Record

[illegible]