

# **Front Mount Telescopic Hoist**



# **Operation and Installation Manual**

# Notes

It is recommended that the Owner/Operator record the following information immediately after purchasing. So that when calling for Parts or Service, the information will be readily on hand.

Serial Number         Hoist Assembly         Model Number         Serial Number         Serial Number         Truck         Year         Make         Model         Truck Number	Dump Truck Body Model Number	
Model Number Serial Number Truck Year Make Model Truck Number		
Truck Year Make Model Truck Number	Model Number	
Year Make Model Truck Number		
Make Model Truck Number		
Model Truck Number		
Truck Number		
	Iruck Number	

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**Notice:** Before Operating, Maintaining, or Repairing the Front Mount Telescopic Hoist 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.



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.

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

**ACAUTION** Indicates a hazardous situation which, if not avoided, could result in minor injury.

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



### Safety Checklists

# 

To prevent possible death or injury to personnel and damage to the equipment, the following checklist is to be performed prior to operating and while operating 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 the 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.
- $\Box$  Do not allow personnel to ride in or on the truck body.
- $\Box$  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, & 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.
- $\Box$  Prior to operating the hoist ensure the area is clear of personnel and equipment.
- $\Box$  Do not allow hoist controls and the area around them to become cluttered with tools, cans, etc.
- $\Box$  Do not operate the hoist under Power Lines.
- $\Box$  Do not raise the hoist when truck is in motion.
- $\Box$  Do not move the truck with the hoist raised.
- □ Always release tailgate latching controls prior to lifting the dump body.
- $\Box$  Always operate the hoist controls from inside the truck cab.
- $\Box$  Do not go underneath a loaded and raised truck body under <u>ANY</u> circumstances.
- $\Box$  Do not go underneath a truck with the engine running.
- $\Box$  Do not go underneath an unloaded raised truck body unless the safety props are properly installed.
- $\Box$  Do not leave truck unattended with truck body raised.

#### **Post Operation Checklist**

- $\Box$  Do not use hands or other body parts to check for hydraulic leaks.
- □ Follow all Federal, State, and local regulation pertaining to this equipment.
- $\Box$  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 ATF, automatic transmission fluid.
- $\Box$  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.
- $\Box$  Check all lighting to be sure it is functioning properly.
- □ Check lighting on any towed equipment.
- $\Box$  Inspect hitch if towed equipment is attached and be sure safety chains are fastened.
- $\Box$  Test hydraulic functions and observe for proper operations.
- $\Box$  Check tire pressure per markings on the tires.

#### **Weekly Inspection**

- $\Box$  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.
- $\Box$  Lubricate pintle hitch with chassis grease.

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

- □ Change hydraulic oil filter. (First change after 50 hours of operation.)
- $\Box$  Inspect suction strainer in oil tank.
- □ Check hydraulic oil for contamination, discoloration, signs of wear, etc.



## **Front Mount Telescopic Installation**

Note: Refer to Figure 1, below; Figure 2, page 8; and Figure 3, pages 12-19 for the following instructions.



Carefully measure and inspect the Truck's Chassis Rails for obstructions prior to installing the Lower Bunk and Rear Hinges. The following instructions must only be performed after all measurements have been completed and any obstructions are relocated or removed. If an obstruction cannot be relocated or removed then the Bunk or Rear Hinge can be placed slightly aft (to the rear) of the ideal location.

#### **Lower Bunk Installation**

**A DANGER** Lower Bunks are heavy! Be careful when lifting or moving.

1. Determine the ideal location for the Lower Bunk by using the dimensions shown in Figure 3, pages 12-19.

**Note:** The final location for each individual truck may vary from the ideal location. Factors such as Body Length, Obstructions, and Overhang all must be accounted for before the Lower Bunk is mounted on the Chassis Rails.

**Note:** Inspect chassis rails to determine if any obstructions will prevent ideal placement of the mounting brackets, i.e., wiring, hydraulic hoses, welded-on chassis cross members, or the engine exhaust.

- 2. Relocate or remove any obstructions to placement of the mounting brackets.
- 3. Place Mounting Brackets on the chassis rails at the correct locations to secure the Lower Bunk.
- 4. Using an Overhead Crane, place Lower Bunk onto the mounting brackets that are resting on the chassis rails.
- 5. Align the Lower Bunk and mounting brackets.
- 6. Weld the mounting brackets to the Lower Bunk **only**, using a 3/4 inch continuous weld. Refer to Figure 1 below, Figure 2, page 8; and Figure 3, pages 12 thru 19. **Do NOT weld brackets to the chassis!**

### **A** CAUTION Drilling through two pieces of metal can cause the drill bit to bind and stop spinning. A bound drill bit can cause the drill to spin violently and cause injury to personnel.

- 7. Using a 1/2 inch diameter drill bit, carefully drill into the chassis thru the mounting holes in the brackets. Only drill deep enough to mark the location for the bolt holes. There are 4 bolt holes in each side of the chassis.
- 8. Using an Overhead Crane, move the Bunk along the chassis far enough to expose the drill marks and drill 1/2 inch diameter holes thru the chassis.
- 9. Move the Bunk back and align the brackets with the bolt holes.
- 10. Install attaching hardware (bolts, washers, & nuts) and tighten securely.



Figure 1: Lower Bunk, Long Leg, Mounting Bracket Weldments



# Front Mount Telescopic Installation (Continued)



Figure 2: Lower Bunk, Short Leg, Mounting Bracket Weldments

### **Rear Hinge Installation**

Note: Refer to Figure 3, pages 12 thru 19; and Figure 4, page 20; for the following instructions.

- 1. Locate and mark the Centerline location of Rear Hinge.
- **Note:** Inspect chassis rails to determine if any obstructions will prevent ideal placement of the Rear Hinge, i.e., wiring, hydraulic hoses, or welded-on chassis cross members.
- 2. Remove excess chassis.
- 3. Notch the chassis and weld Rear Hinge to both Chassis Rails using a 1/2 inch continuous weld.

### **Hydraulic Pump Installation**

**Note:** Prior to mounting Hydraulic Pump check rotation of pump to be sure which port is the pressure port. Refer to Figure 5, page 21.

- 1. For Electric driven pumps, determine the best location for the hydraulic Pump Bracket and weld it to the Subframe. Bolt the Hydraulic Pump to the Mounting Bracket.
- 2. For Power Take-Off (PTO) driven pumps, mount Hydraulic Pump to PTO.
- 3. Plumb Hydraulics per Plumbing Diagram outlined on PD40098, page 22; or PD40099, page 23.
- 4. After hydraulic connections are completed and cable assembly is installed, fill reservoir with oil.

Note: For PTO driven pumps use HD 32 hydraulic oil.

For electric driven pumps use ATF, automatic transmission fluid.

# Pump Cable Assembly Installation in Cab

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 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 particular 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 so as to seal the hole and protect the cable.



# **Dump Body Installation**

#### Aligning the Body

#### **A WARNING** Dump Bodies are very heavy! Be careful when lifting or moving.

Note: Inspect chassis rails to determine if any obstructions will prevent ideal placement of the Body.

- 1. Using an Overhead Crane, suspend Dump Body over the chassis rails behind the bunk and cylinder.
- 2. Lower the Body down low enough to extend the Cylinder Rod to the Upper Bunk connection.
- 3. Connect the cylinder to the Upper Bunk connection.
- 4. Move the body forward until it is a minimum of 4 inches away from the Cab, or obstruction (i.e., Exhaust Pipe) and lower the Body onto the chassis.
- 5. Set Spacer Blocks on top of chassis in such a way that they will not interfere with the Lower Bunk and Reservoir Tank.

**Note:** The spacer blocks will be welded to the Body Main Runners. Do **NOT** weld to main runners until the Upper Bunk connection is completely installed. Refer to Figure 3, Detail "B" pages 12-19.

6. Inspect body for correct alignment to chassis and adjust alignment until correct.

#### Welding Rear Hinge Flippers and Spacer Blocks

7. Weld the Rear Hinge Flippers to the main body runners with a continuous 1/2 inch weld. Refer to Figure 3, Detail "C" on pages 12-19.

**Note:** The spacer blocks will be welded to the Body Main Runners. Do not weld to main runners until the Upper Bunk connection is completely installed.

8. Weld spacer blocks to body main runners only, do **NOT** weld spacer blocks to chassis.

**Note:** While the Body rests on the Lower Bunk, spacer blocks and Rear Hinge Flippers select a location for the Body Guides. The Body Guides should be located midway between the rear of the Bunk and the front of the rear axle, or the first rear axle in a tandem axle truck. Be careful to locate the Body Guides between the Gussets on the Body and clear of obstructions to drilling holes in the Chassis Rails for the Guides. The Body Guides must be mounted as close to opposite of each other on the Chassis Rails as the obstructions will allow.

9. Prior to lifting the Body, mark the locations for the Body Guides with chalk, soapstone, or brightly colored tape.

#### Welding Safety Prop Cups

10. Using an Overhead Crane, raise the front of dump body high enough to install the Safety Props and Safety Prop Cups. Leave body raised until installation is complete.

**Note:** The Safety Prop Cup must be located on a Dump Body cross channel and supported by a body. This means that the cup will be tucked-up inside of the dump body so that it can be welded to the cross channel and the floor of the body.

**Note:** When correctly installed the Safety Prop will angle slightly (80°) towards the rear of the truck. Put another way, 90° is perpendicular (vertical) to the truck frame therefore 80° is 10° off of vertical. This will prevent the Safety Prop from slipping out of the Safety Cup.

- 10. Mount the Safety Cup to the cross member and underside of the floor. Secure it with a C-Clamp and weld all contact points with 3/8 inch continuous bead.
- 11. Remove C-clamps and put Safety Props in the cups and lower the Body down onto the Safety Props.
- 12. Check the fluid level in the Reservoir and fill until full, (three inches from the top). Fully lower the body and disconnect the Overhead Crane.



# **Dump Body Installation (Continued)**

#### **Installing Body Guides**

13. Using C-Clamps mount the Body Guides to the Chassis Rails where previously marked.

**CAUTION** Drilling through two pieces of metal can cause the drill bit to bind and stop spinning. A bound drill bit can cause the drill to spin violently and cause injury to personnel.

- 14. Using a 1/2 inch drill bit, carefully drill into the Chassis Rail thru the mounting holes in the Body Guides. Drill just deep enough to mark the location for the bolt holes.
- 15. Remove the C-clamp and Body Guides.
- 16. Drill four 1/2 inch holes thru the Chassis Rails and install the Body Guides.
- 17. Inspect all welds and check all hardware/plumbing connections for looseness and oil leaks. Repair as needed.

#### Purging the Hoist and Lubricating

- 18. Check the fluid level in the Reservoir and fill until full, (three inches from the top). Fully lower the body and disconnect the Overhead Crane.
- 19. Raise body with Hoist Power until the cylinder is fully extended and the Safety Props are put in place.
- 20. Open the Bleeder Valve on the cylinder and purge air out of the cylinder until a steady stream of oil expels. Close bleeder valve and lower body to chassis. Repeat several times, until only oil comes out (no air bubbles).
- 21. Grease all Pivot Points and grease fittings.



# **Dump Body Installation (Continued)**

### **Pneumatic Knock-Off Installation and Adjustment**

Note: Refer to PD40102, page 25; and Figure 7, page 26 for the following instructions.

The Pneumatic Knock-Off is a safety device used to limit body dump angle and to prevent the cylinder from over extending.

#### Installation

- 1. Securely mount the Pneumatic Knock-Off to the mounting bracket provided with the Knock-Off. Using two M6 washers and locking nuts and tighten them to 4 Newton Meters (Nm).
- 2. Using a C-clamp locate and mount the Pneumatic Knock-Off on the Lower Bunk directly behind the center of cylinder as shown in Figures 8-15, pages 27-36.
- **Note:** The distance between work line of the Pneumatic Knock-Off and the pivot of cylinder should be a MINIMUM of 125 mm.

# **A**CAUTION A bound drill bit can cause the drill to spin violently and cause injury to personnel.

- 3. Using an 8 mm drill bit, carefully drill into the Lower Bunk thru the mounting holes in the brackets. Drill just deep enough to mark the location for the bolt holes.
- 4. Remove the C-clamp and Pneumatic Knock-Off assembly.
- 5. Drill two 8 mm diameter holes through the Lower Bunk.
- 6. Install the Pneumatic Knock-Off assembly using two M8 x 30 Hex Head Bolt and tighten to 20 Nm.
- 7. Connect Knock-Off to the pneumatic system according to PD40102, page 25; and Figure 7, page 26.
- 8. Fit at least 30 cm of 6 mm air hose to Port 3, the Exhaust port of the Knock-Off. Point the empty end of the air hose downwards and firmly attach it with a tie-wrap.

#### Adjustment

- 1. Turn the adjustment fully inward.
- 2. Keeping the engine at low revs, run the cylinder out to the end of stroke.
- 3. Lower the cylinder 6 to 8 inches.
- 4. Turn the adjustment bolt outward until it touches the cylinder and lock it with the contra-nut.
- 5. Check for proper function by lowering and raising the cylinder at low engine revs.
- 6. If cylinder raises too far and reaches end of stroke, turn out the adjustment bolt by 3 turns and check again. Repeat this step until cylinder stops extending 6 to 8 inches from end of stroke.
- 7. Check for proper function by lowering and raising the cylinder at high engine revs.
- 8. If cylinder raises too far and reaches end of stroke, turn out the adjustment bolt by 3 turns and check again. Repeat this step until cylinder stops extending 6 to 8 inches from end of stroke.

Front Mount Telescopic Hoist/Body Recommendation			
	dy	Cab to Axle/	Hoist
Length	Model	Tandem	
12'	400T	102" CT	63096T
13'	400T	108" CT	63110T
14'	400T	108" CT	63119T
15'	500TR	120" - 126" CT	63119T / 73119T
16'	500TR	132" - 138" CT	74135T
17'	500TR	144" -150" CT	74135T
18'	500TR	162" - 168" CT	74158T

Note: Hoist recommendations based on Godwin MFG. body applications.





















Grease Fitting Locations

	Rear Hinge Assembly		
Item	Qty.	Part Number	Description
1	1	W18128	Rear Hinge Weldment, 2"
2	2	PC10335	Rear Hinge Block, 2"
3	2	PC10523	Rear Hinge Pin, 2"
4	2	102-415-A1	Hex Bolt, 1/2-13 UNC x 3 1/2 GRD8
5	2	118-5-A1	Lock Washer, 1/2"
6	2	116-5-A1	Hex Nut, 1/2-13 UNC
7	2	P800	Grease Fitting, Pipe Thread, 1/8"



# **Instructions to Reverse C102 Pump Rotation**

- **Note:** When viewing a Clockwise (CW) pump from the Shaft End Cover with the Drive Shaft on top. The Valve Spool will be on the RIGHT side of the pump.
- **Note:** When viewing a Counterclockwise (CCW) pump from the Shaft End Cover with the Drive Shaft on top. The Valve Spool will be on the LEFT side of the pump.

#### Adjustment

- 1. Securely mount Pump Flange in a vise, Shaft down.
- 2. Remove the four, 5/8" 11 hex bolts and washers that hold the body of the pump together.
- 3. Remove the Valve and Center sections of pump leaving the Front Cover and Gears in place.
- 4. Rotate the Valve and Center sections 180 degrees from their original position and carefully lower them back onto the Gears and Front Cover.
- 5. Reinstall the four, 5/8" 11 hex bolts and washers and evenly torque to 200 foot pounds in a diagonal pattern.



Figure 5: C102 Pump







# Figure 6: Pyramid Hydraulic Reservoir Assembly



	Parts List		
Item	Qty.	Part Number	Description
1	1	W15051	Weldment, 26 Gallon Telescopic Reservoir (Narrow)
1	1	W15153	Weldment, 32 Gallon Telescopic Reservoir (Low Profile)
1	1	W15154	Weldment, 35 Gallon Telescopic Reservoir (Wide Pyramid)
2	1	P10241	Cap - Breather
3	2	P10181	Elbow, Plastic, 1/2" Barbed
4	4 1 P26-498-24 Sight Tube, 1/2" UNC x 2"		
5	5 2 102-409-A1 Hex Head Bolt, 1/2" UNC x 2"		
6	2	118-5-A1	Lock Washer, 1/2"
7	2	116-5-A1	Hex Nut, 1/2"





# Figure 7: Pneumatic Knock- Off Assembly







# Figure 9: Lower Bunk, Long Leg Assembly with Stabilizer Bars - Parts List

	Lower Bunk, Long Leg Assembly, (A131284) - Parts List			
Item	Qty.	Part Number	Description	
1	1	W131261	Weldment, Single Telescopic Cylinder, Lower Bunk	
2	1	A15067	26 Gallon Telescopic Reservoir Assembly	
3	2	Stabilizer Arm	Telescopic Stabilizer Arm	
4	2	P800	1/8" Pipe Thread Grease Fitting	
5	2	Support Ring	Telescopic Stabilizer Arm Support Ring	
6	2	102-611-A1	Cap Screw, HH, 5/8" UNC x 2-1/2"	
7	1	Hyva Hyd Cylinder	Hyva Hydraulic Cylinder	
8	2	120-7	Flat Washer, 5/8"	
9	2	162-12-S	Stover Lock Nut, 5/8"	
10	1	P14700506	Knock-Off Cylindrical with Support (Refer to Figure 6, Page 24)	
11	1	PC13443	Pin, Cylinder, Single Telescopic Lower Bunk with Stabilizer	
12	2	122-15B	Washer Bushing 3" Outside Diameter 2" Inside Diameter 14GA	
13	2	125-411	Cotter Pin 1/2" x 3-1/2"	
14	1	102-215-A1	Hex Cap Screw, 3/8" x 3 1/2"	
15	1	118-3-A1	Lock Washer, 3/8"	
16	1	116-3-A1	Hex Nut, 3/8" UNC	
17	2	SM13580	Safety Prop, 48 Inch	
18	2	102-417-A1	Cap Screw, HH 1/2" UNC x 4" GR8	
19	2	118-5-A1	Lock Washer, 1/2"	
20	2	116-5-A1	Hex Nut, 1/2"	
21	4	PAAP43	Rivet, 1/8" Cherry Pop	
22	1	P10200	Champion Serial Plate	
23	2	PC13278	10" Mounting Bracket, Single Telescopic	
24	2	PC13280	4" Mounting Bracket	









		-	$\checkmark$
	Lower Bunk, Long Leg Assembly, (A131283) - Parts List		
Item	Qty.	Part Number	Description
1	1	W131261	Weldment, Single Telescopic Cylinder, Lower Bunk, Long Leg
2	1	A15067	26 Gallon Telescopic Reservoir
3	1	Hyva Hyd Cylinder	Hyva Hydraulic Cylinder
4	1	P147000506	Knock-Off Cylindrical with Support (Refer to Figure 6, Page 24)
5	1	SM13105	Pin, Cylinder
6	1	102-215-A1	Hex Cap Screw, 3/8" x 3 1/2"
7	1	118-3-A1	Lock Washer, 3/8"
8	1	116-3-A1	Hex Nut, 3/8" UNC
9	2	SM13580	Safety Prop, 48 Inch
10	2	102-417-A1	Cap Screw, HH 1/2" UNC x 4" GR8
11	2	118-5-A1	Lock Washer, 1/2"
12	2	116-5-A1	Hex Nut, 1/2"
13	1	P10200	Champion Serial Plate
14	4	PAAP43	Rivet, 1/8" Cherry Pop
15	2	PC13278	10" Mounting Bracket, Single Telescopic
16	2	PC13280	4" Mounting Bracket
			21



# Figure 12: Lower Bunk, Short Leg Assembly with Stabilizer Bars - Parts List

	Lower Bunk, Short Leg Assembly, with Stabilizer Bars (A131282) - Parts List				
Item	Qty.	Part Number	Description		
1	1	W131269	Weldment, Lower Bunk, Single Telescopic Cylinder		
2	2	Stabilizer Arm	Telescopic Stabilizer Arm		
3	2	P800	1/8" Pipe Thread Grease Fitting		
4	2	Support Ring	Telescopic Stabilizer Arm Support Ring		
5	2	102-611-A1	Cap Screw, HH, 5/8" UNC x 2-1/2"		
6	2	120-7	Flat Washer, 5/8"		
7	2	162-12-S	Stover Lock Nut, 5/8"		
8	1	Hyva Hyd Cylinder	Hyva Hydraulic Cylinder		
9	1	P14700506	Knock-Off Cylindrical with Support (Refer to Figure 6, Page 24)		
10	1	PC13443	Pin, Cylinder, Single Telescopic Lower Bunk with Stabilizer		
11	2	122-15B	Washer Bushing 3" Outside Diameter 2" Inside Diameter 14GA		
12	2	125-411	Cotter Pin 1/2" x 3-1/2"		
13	1	102-215-A1	Hex Cap Screw, 3/8" x 3 1/2"		
14	1	118-3-A1	Lock Washer, 3/8"		
15	1	116-3-A1	Hex Nut, 3/8" UNC		
16	2	SM13580	Safety Prop, 48 Inch		
17	2	102-417-A1	Cap Screw, HH 1/2" UNC x 4" GR8		
18	2	118-5-A1	Lock Washer, 1/2"		
19	2	116-5-A1	Hex Nut, 1/2"		
20	4	PAAP43	Rivet, 1/8" Cherry Pop		
21	1	P10200	Champion Serial Plate		
22	2	PC13278	10" Mounting Bracket, Single Telescopic		
23	2	PC13280	4" Mounting Bracket		







Item         Qty.           1         1           2         1	Part NumberW131269Hyva Hyd Cylinder	Description           Weldment, Single Telescopic Cylinder, Lower Bunk
$\begin{array}{c c} 1 & 1 \\ \hline 2 & 1 \\ \end{array}$		
2 1	Hvva Hvd Cylinder	
		Hyva Hydraulic Cylinder
3 1	P14700506	Knock-Off Cylindrical with Support (Refer to Figure 6, Page 24)
4 1	SM13105	Pin, Cylinder
5 1	102-215-A1	Hex Cap Screw, 3/8" x 3 1/2"
6 1	118-3-A1	Lock Washer, 3/8"
7 1	116-3-A1	Hex Nut, 3/8" UNC
8 2	SM13580	Safety Prop, 48 Inch
9 2	102-417-A1	Cap Screw, HH 1/2" UNC x 4" GR8
10 2	118-5-A1	Lock Washer, 1/2"
11 2	116-5-A1	Hex Nut, 1/2"
12 1	P10200	Champion Serial Plate
13 4	PAAP43	Rivet, 1/8" Cherry Pop
14 2	PC13278	10" Mounting Bracket, Single Telescopic
15 2	PC13280	4" Mounting Bracket





**Hoist Cylinders Note:** "PH5-3-96" equals 5 Inch Diameter - 3 Stage - 96 Inch Stroke.

Hoist Cylinder and Stabilizer Kit		
Part Ni	umbers	
Cylinder	Stabilizer Kit	
РН5-3-96Е	K181788	
PH5-3-101E	K181788	
PH5-3-110E	K181788	
PH5-3-119E	K181788	
РН5-3-119Е НС	K181788	
РН5-3-127Е	K181777	
РН5-3-137Е	K181777	
РН6-3-96	K181778	
PH6-3-101	K181778	
PH6-3-110	K181778	
РН6-3-119 НС	K181778	
РН6-3-119Е	K181785	
РН6-3-127	K181779	
РН6-3-127Е	K181786	
РН6-3-127Е НС	K181786	
РН6-3-137	K181779	
РН6-3-137Е	K181786	
РН6-3-137Е НС	K181786	
РН6-3-147Е	K181785	
РН6-4-135Е	K181785	
РН6-4-135Е НС	K181785	
PH6-4-158E	K181786	
PH6-4-170E	K181786	
PH6-4-183E	K181786	
PH7-3-119	K181781	
РН7-3-119 НС	K181781	
PH7-3-127	K181780	
РН7-3-127 НС	K181780	
PH7-3-137	K181780	
РН7-3-137 НС	K181780	
PH7-3-147	K181781	
PH7-4-135	K181781	
РН7-4-135 НС	K181781	
PH7-4-158	K181780	
PH7-4-170	K181780	
PH7-4-170E HC	K181787	
PH7-4-183	K181780	
MN7-4-183E HC	K181787	



# Power Take Off (PTO) and Electric Pump Operations

**A WARNING** Disengage PTO before driving truck.

PTO operation is controlled by either a cable, electric hydraulic system, or air shift system. (Refer to Figure 14 below.)

### To Engage PTO on Standard Transmission.

**NOTICE** The follow instructions are to be performed with the engine running at idle speed, transmission in neutral, and the park brake engaged.

- 1. Allow the engine to slow to idle speed, shift into neutral, and engage the park brake.
- 2. Depress and hold down the clutch pedal.
- 3. Pull PTO control out until the red PTO light illuminates.
- **NOTE**: If light does not illuminate, and PTO does not engage. Slowly release the clutch pedal while pulling on the PTO control.
- 4. When the PTO is engaged, slowly release the clutch pedal to supply power to the Hoist pump.
- 5. The pump/hoist control should be in the neutral or "hold" position.
- 6. Depress the Safety button and pull the pump/hoist control to raise the bed.
- 7. When bed raises to desired height push the pump/hoist controls to the center neutral or "hold" position this will stop bed movement up or down.
- 8. To lower the bed depress the Safety button and push pump/hoist control.
- 9. Depress clutch pedal, and push PTO control to disengage.

### To Engage PTO on Automatic Transmission.

- 1. Allow the engine to slow to idle speed, engage the park brake, and shift into a drive gear. This will stop the transmission gears from turning.
- 2. Shift PTO into gear, then shift transmission into neutral. This will start transmission gears turning, and in turn, put PTO into operation.

### **Electric Pump**

Press and hold the appropriate button. **NOTE**: Pump will stop when button is released.



Figure 16: PTO & Electric Pump Controls



# WARRANTY

Champion Hoist and Equipment warrants these products for a period of 36 months from the date of sale to the customer.

This warranty provides that the equipment shall be free of defective materials and workmanship, or we will replace or repair at our factory, any part that our inspection shows to be defective.

The hydraulic valve, pump, motor, hoses, and other purchased products are not manufactured or warranted by Champion Hoist and Equipment and are therefore covered by the warranties of the manufacturer of these products.

Any part shipped to the factory shall be prepaid, and will be returned collect. Champion Hoist and Equipment does not assume responsibility for shipping, labor or travel expenses.

We reserve the right to make improvements to any of our product without notice or obligation regarding model previously sold.



Maintenance and Service Record					
Date	Date Maintenance and Services Performed				
	40				