

MODEL 500 SCRAPER

HOW TO ORDER PARTS:

Be sure to state MODEL and SERIAL NO. of machine, PARTS NO., DESCRIPTION, and QUANTITY wanted.

Unless this is done, we cannot provide prompt service or assure shipment of the correct parts.

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MODEL 500 SCRAPER ASSEMBLY INSTRUCTIONS

1. A suitable hoist or lift should be available for assembly.
2. Pack wheel bearing with grease and install hubs to rear spindles and front axle assembly. Be sure to follow the bearing numbers as shown in the parts listing as the front hubs require different bearings than the rear.
3. Raise the rear of the frame and install wheels to hubs. Also install wheels to front axle assembly.
4. Raise front of frame and remove the two 5/8" x 4" bolts which hold the cast socket halves inside the gooseneck. Remove the cast socket halves.
5. Roll the pole and axle assembly directly under the gooseneck, place the cast socket halves around the ball socket on the axle. Lower the frame into place so that the socket halves seat into the gooseneck. (If necessary, clamp halves together with C-clamp while inserting into gooseneck). Replace 5/8" x 4" bolts and tighten securely. Install long shank grease fitting into the hole in the back side of gooseneck.
6. Raise actuating frame over bucket and lower into place so that the holes in the arms of the actuating frame align with the rear hole on each side of the bucket. Insert 1 1/4" x 2-9/16" pin (with tab type head) from the inside of the bucket. Secure with 5/8" x 1 1/2" bolt through bucket side with lock nut to the outside.
7. Connect actuating arm bars to the front holes in the bucket. In doing so, be sure that the cast roller on the opposite end of the actuating arm is in the up position and facing inward. Insert 1 1/4" x 2-9/16" pin (with tab type head) from the inside on the bucket. Secure with 5/8" x 1 1/2" NF bolt through the bucket side with lockwasher and nut to the outside.
8. Connect a short chain from the cutting edge to the cross pipe of the actuating frame, then raise this bucket and actuating assembly over the main frame and lower into place so that the front of the actuating frame can be connected to the 1 1/2" ID bearing on each side of the main frame. Secure with 1 1/2" x 5-5/8" pins on each side. Lock these pins in place by turning the pin until the hole in the head aligns with threaded hole in the actuating frame, then secure with 1/2" x 1" NC capscrew and lockwasher.
9. Lift front end of actuating arms and connect to the brackets on the front frame cross member using the 1 1/4" x 4-1/8" pins. Secure with 1/4" x 2" cotter pin.
10. Installing the hydraulic cylinders:
 - A. Install the cylinder with three hose ports on the left side of the scraper with the rod end to the actuating frame and the grease hole in the rod end bushing facing up. Use 1-1/8" x 3 1/4" pin at the base of the cylinder. Secure with 3/16" x 1 1/2" cotter pins. Use 1-1/8" x 6" pin at the rod end of the cylinder. Secure with 1/2" x 1" NC capscrew and lockwasher.
 - B. Install 3/8" NPT 90° swivel adapters in all three ports of the cylinder. Tighten so that the swivel will be facing toward the rear. The extreme forward swivel will have to be turned slightly to the outside so that the hose will clear the swivel in the center port.

- C. Connect a 3/8" x 18" hose from the forward pipe line on the frame cross-member to the base (rear) port of the cylinder.
- D. Connect a 3/8" x 36" hose from the pipe line on the frame cross-member to the center port of the cylinder.
- E. Connect a 3/8" x 36" hose from the center pipe line on the frame cross-member to the extreme forward port of the cylinder.
- F. Install the cylinder with the two hose ports on the right side of the scraper with the rod end to the actuating frame, and the grease hole in the rod end bushing facing up. Use the same size pins as the cylinder on the left side.
- G. Install 3/8" NPT 90° swivel adapters in both ports of the cylinder. Tighten so that the swivel will be facing toward the rear.
- H. Connect a 3/8" x 18" hose from the forward pipe line on the frame cross-member to the base (rear) port of the cylinder (same as left cylinder).
- I. Connect a 1/2" x 36" hose from the remaining pipe line on the frame cross-member to the forward port of the cylinder.
- J. Install the 4" x 8" hydraulic cylinder on the rear of the scraper with the rod end connected to the rear frame section with the grease hole facing up. Insert the 1-1/8" x 3-1/8" square head pin at the base of the cylinder. Secure with 3/16" x 1 3/4" cotter pin. Use 1-1/8" x 3 1/2" square head pin at the rod end of the cylinder and secure with a 3/16" x 1 3/4" cotter pin.
- K. Install 3/8" NPT male x 1/2" NPT female 90° swivel adapters in the two ports of the rear cylinder. Tighten so the swivels face toward each other and somewhat to the left of the scraper.
- L. Install one 1/2" x 24" hose from the lower elbow of the single line lock valve to the base port of the cylinder. Install the remaining 1/2" x 24" hose from the upper elbow of the lock valve to the rod end port of the cylinder.
11. Raise the apron assembly over the scraper and lower into position so that the holes in the arms of the apron align with the holes in the bucket sides. Insert the 1 1/4" to 1" shoulder pin through the apron arms and into the bucket. Install lock nut inside the bucket and tighten securely.
12. Install all the grease fittings and grease liberally.
13. If available, place assembled scraper on level floor or pavement and measure the distance from the cutting edge to floor, on both left and right sides, and then adjust axle spindle to obtain equal distance on both sides.

OPERATOR AND MAINTENANCE INSTRUCTIONS

The scraper is a durable piece of equipment and with proper care will yield many years of trouble free operation. The scraper requires a power source with one 4-way (double acting) hydraulic control valve.

After scraper has been assembled, it should be greased at all points where grease fittings are provided. Connect hydraulic hoses to tractor and operate the scraper to maximum raise and drop several times to force any air from the hydraulic lines and cylinders. Check the oil level in the tractor hydraulic system and add to maintain the proper level.

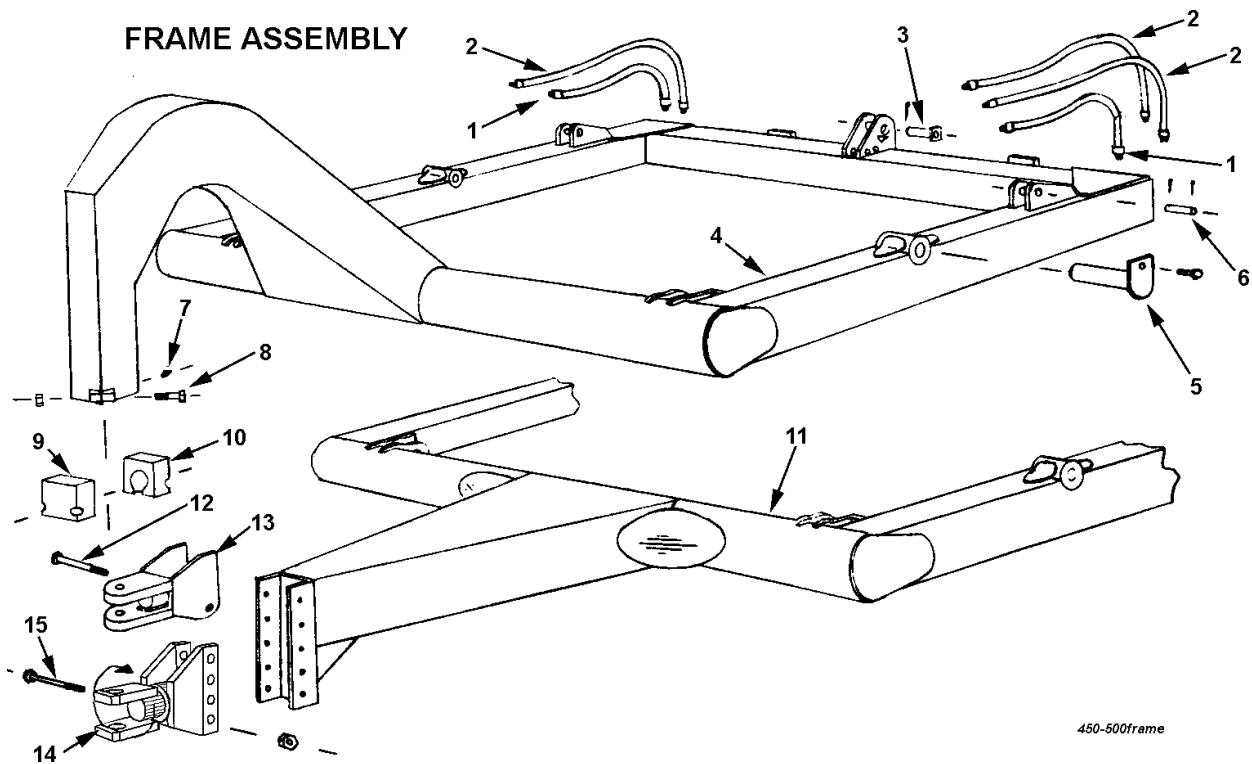
When the scraper is placed into operation, the operator will have to "feel out" the amount of depth of cut to obtain maximum loading efficiency. This is usually accomplished by taking a lesser and more uniform cut. However, some soil conditions such as loose sand may require a "pumping action" obtained by taking successive deep cuts and lifting out of cut as the tractor begins to lose power or traction.

1. After 10 hours work, all bolts should be checked and tightened if necessary.
2. Every 10 hours all grease fittings should be lubricated.
3. After 50 hours work, all bolts should be rechecked and tightened if necessary. Check wheel bearings and adjust if necessary.
4. After 300 hours work, clean and repack wheel bearings and replace, if necessary, cutting edges, worn pins, etc.

SPREAD CONTROL ON MODEL 500 SCRAPERS

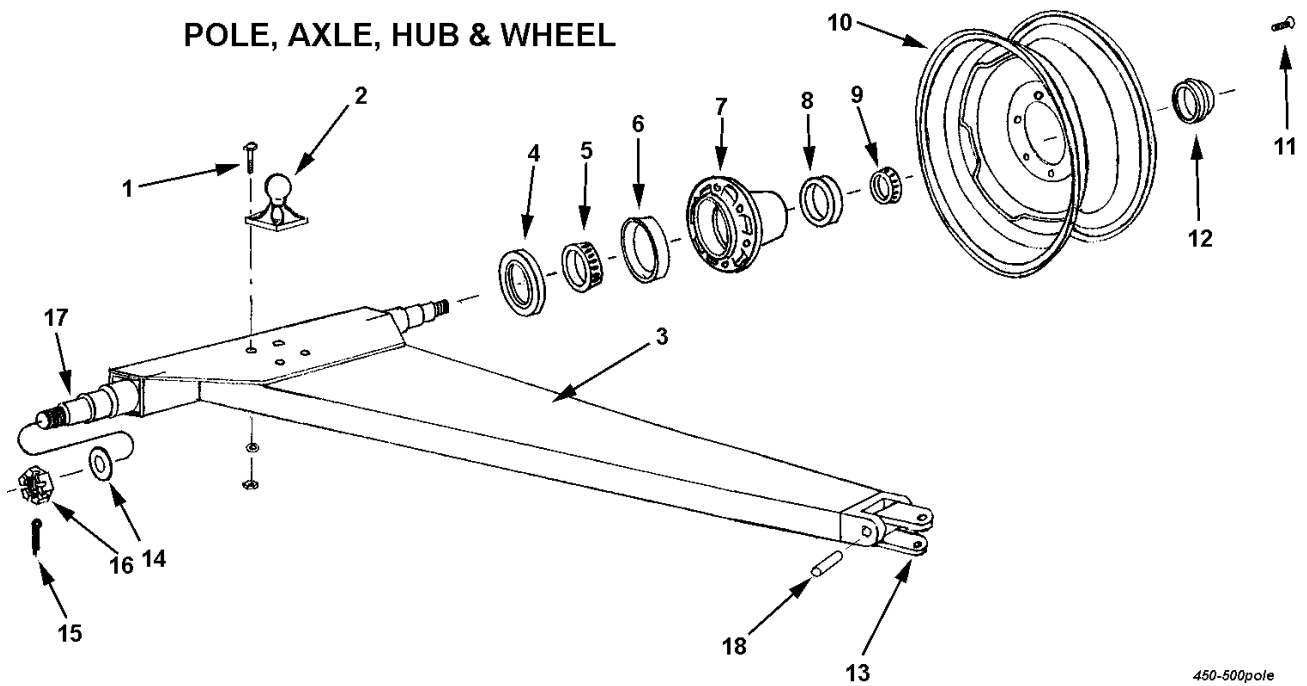
The hydraulic cylinder on the rear section of the main frame controls the distance the cutting edge is from the ground after the bucket is in dump position. When the bucket first reaches dump position, the cutting edge is at the minimum spreading depth (approx. 2") and as additional depth of spread is desired, the same hydraulic control valve on the tractor is actuated and the cutting edge raises allowing for the increased depth of spread. This is accomplished when the flow of hydraulic oil is automatically diverted from one of the hydraulic cylinders on the side of the scraper to the hydraulic cylinder at the rear. The rear cylinder lifts the entire main frame and bucket assembly upward, allowing for the increased distance between the cutting edge and the ground.

ASHLAND INDUSTRIES, INC.



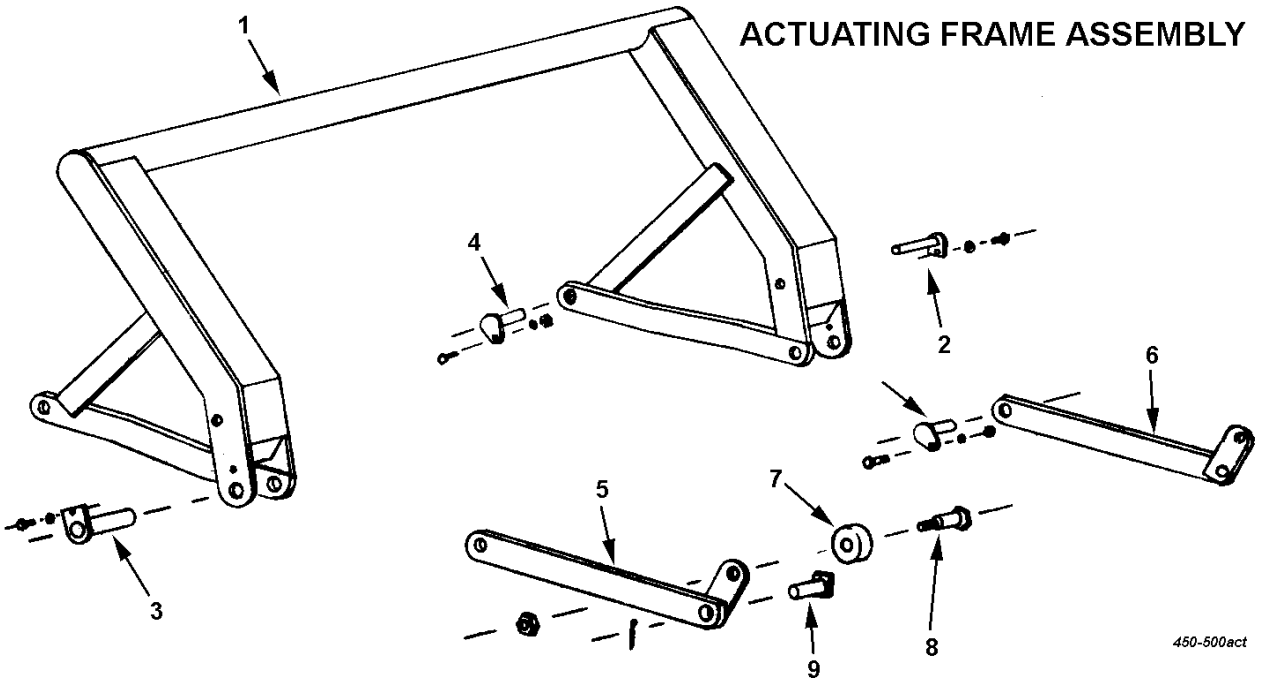
| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|---|
| 1 | A450H01 | Hydraulic hose, 3/8" x 18" single braid |
| 2 | A450H02 | Hydraulic hose, 3/8" x 36" single braid |
| 3 | A22H03 | Swivel adapter, 3/8" 90° |
| 4 | A45001 | Pin, 1-1/8" x 3-1/8" w/ sq. head |
| 5 | A45002 | Cotter pin, 3/16" x 1-1/2" |
| 6 | A2502 | Pin, 1-1/2" x 5-5/8" w/ tab head |
| 7 | A45003 | Pin, 1-1/8" x 3-1/4", cotter both ends |
| 8 | A2206 | Cotter pin, 3/16" x 1-1/2" |
| 9 | A40004 | Grease fitting, 1/8" NPT strt. long shank |
| 10 | A40005 | Bolt, 5/8" x 4" NC, w/ nut & LW |
| 11 | A45004 | Cast socket half, front |
| 12 | A4523 | Cast socket half, rear w/ grease hole |
| 13 | A5004 | Frame, two wheel, Model S |
| 14 | A45004 | Frame, four wheel, Model D |
| 15 | A5004 | Bolt, 3/4" x 6" NC w/ nut & LW |
| | | Hitch |
| | | Swivel hitch |
| | | Bolt, 1" x 6-1/2" NC w/ nut & LW |

POLE, AXLE, HUB & WHEEL

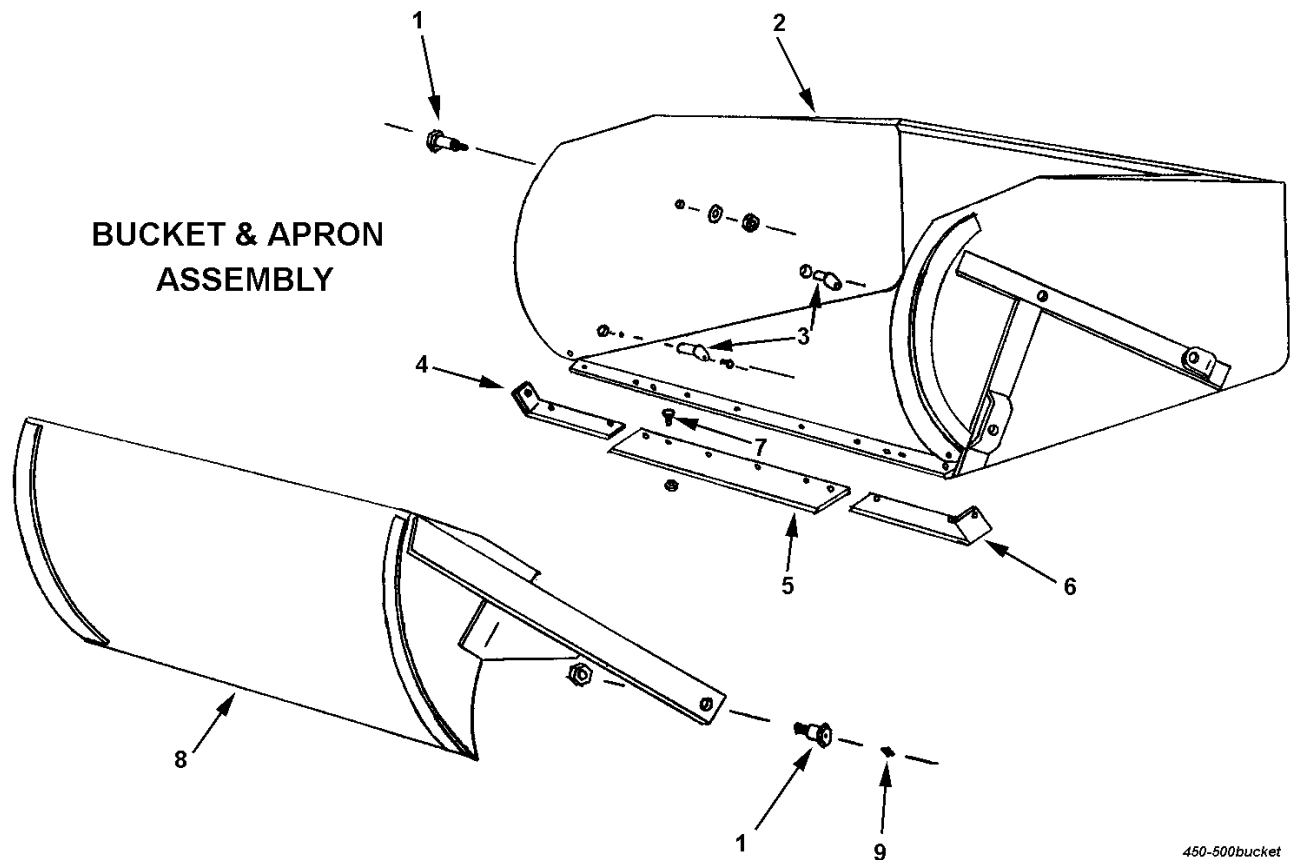


450-500pole

| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|---------------------------------------|
| 1 | | Bolts, 3/4" x 2-1/2" NC w/ nut & LW |
| 2 | A40006 | Ball swivel |
| 3 | A5002 | Pole and axle |
| 4 | A2229A | Grease seal (CR 20079) |
| 5 | A2230A | Bearing cone, inner (Timken 342S) |
| 6 | A2231 | Bearing cup, inner (Timken 332) |
| 7 | A2232 | Hub, less bearing cups |
| 8 | A2233 | Bearing cup, outer (Timken 14276) |
| 9 | A2234 | Bearing cone, outer (Timken 14137A) |
| 10 | A4554 | Wheel, 15" x 8" |
| 11 | A2236 | Wheel bolt |
| 12 | A2235 | Hub cap |
| 13 | A4553 | Swivel hitch |
| 14 | A2239 | Washer, special 7/8" flat |
| 15 | | Cotter pin, 5/32" x 1-1/4" |
| 16 | | Nut, 7/8" NF castellated |
| 17 | A5006 | Spindle, weld |
| 18 | A6014 | Pin, 1-3/4" x 6-3/4" |

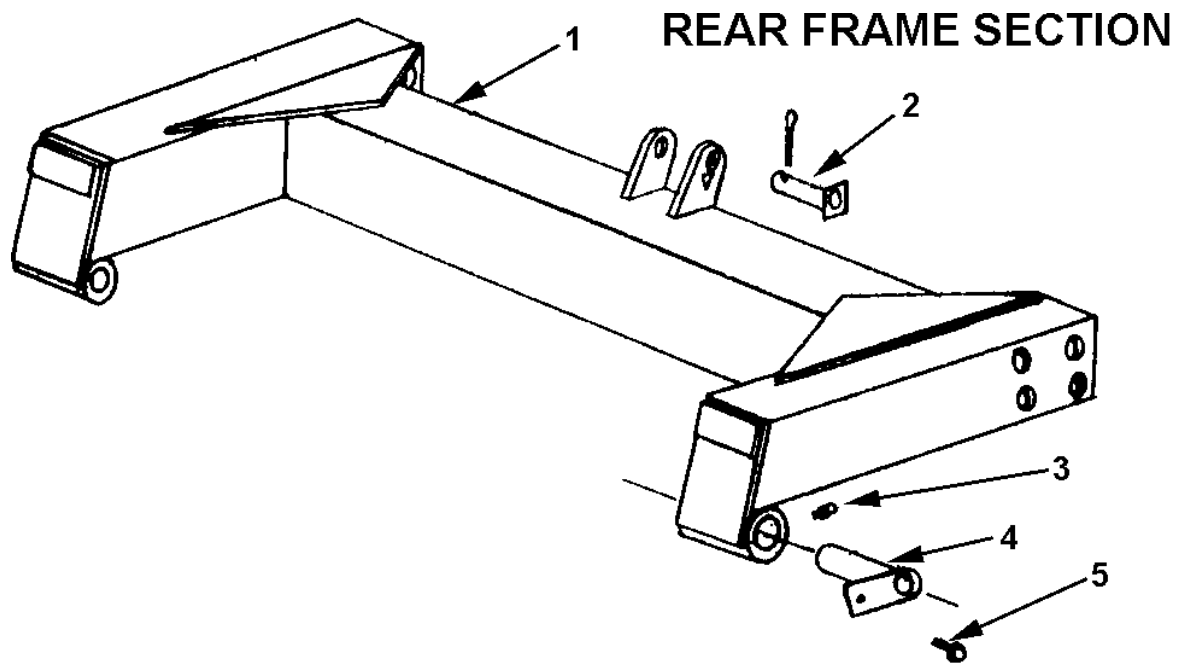


| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|---|
| 1 | A45005 | Actuating frame |
| 2 | A4524 | Pin, 1-1/8" x 6" w/ tab head |
| | | Capscrew, 1/2" x 1" NC w/ LW |
| 3 | A2502 | Pin, 1-1/2" x 5-5/8" |
| | | Capscrew, 1/2" x 1" NC w/ LW |
| 4 | A45006 | Pin, 1-1/4" x 2-9/16" w/ locking head |
| | | Bolt, 5/8" x 1-1/2" NC w/ LW |
| 5 | A45008 | Actuating arm, right |
| 6 | A45007 | Actuating arm, left |
| 7 | A30002 | Roller |
| 8 | A30003 | Shoulder pin, 2-1/2" shoulder, 1-1/4" to 1" |
| | | Nut, 1" NF w/ lock nut |
| 9 | A6007A | Pin, 1-1/4" x 4-1/8" w/ sq. head & hole for gr. zerk Cotter pin, 1/4" x 2" |



450-500bucket

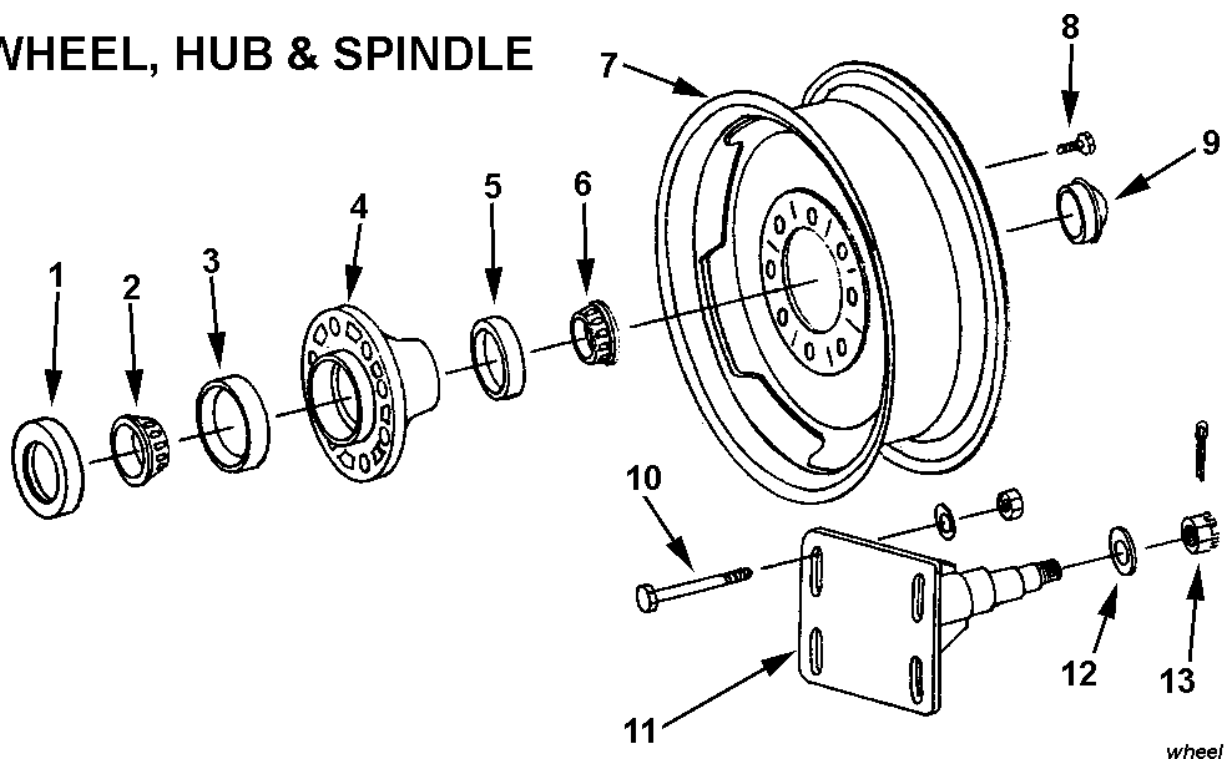
| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|---|
| 1 | A30020 | Shoulder pin, 1-1/4" to 1" NF w/ ctsk. hole Nut, 1" NF lock type |
| 2 | A5003 | Bucket, used on Model 500 |
| 3 | A45006 | Pin, 1-1/4" x 2-9/16" w/ locking head |
| 4 | A2225 | Bolt, 5/8" x 1-1/2" NC w/ lock washer |
| 5 | A45010 | Right cutting edge, 6" |
| 6 | A2222 | Center cutting edge, 8" x 50" |
| 7 | | Left cutting edge, 6" |
| 8 | A45011 | Plow bolt, 1/2" x 1-3/4" w/ nut (6 req'd) Apron |
| 9 | | Plow bolt, 5/8" x 2" w/ nut (6 req'd) Grease fitting, 1/8" NPT regular |



450-500rearframe

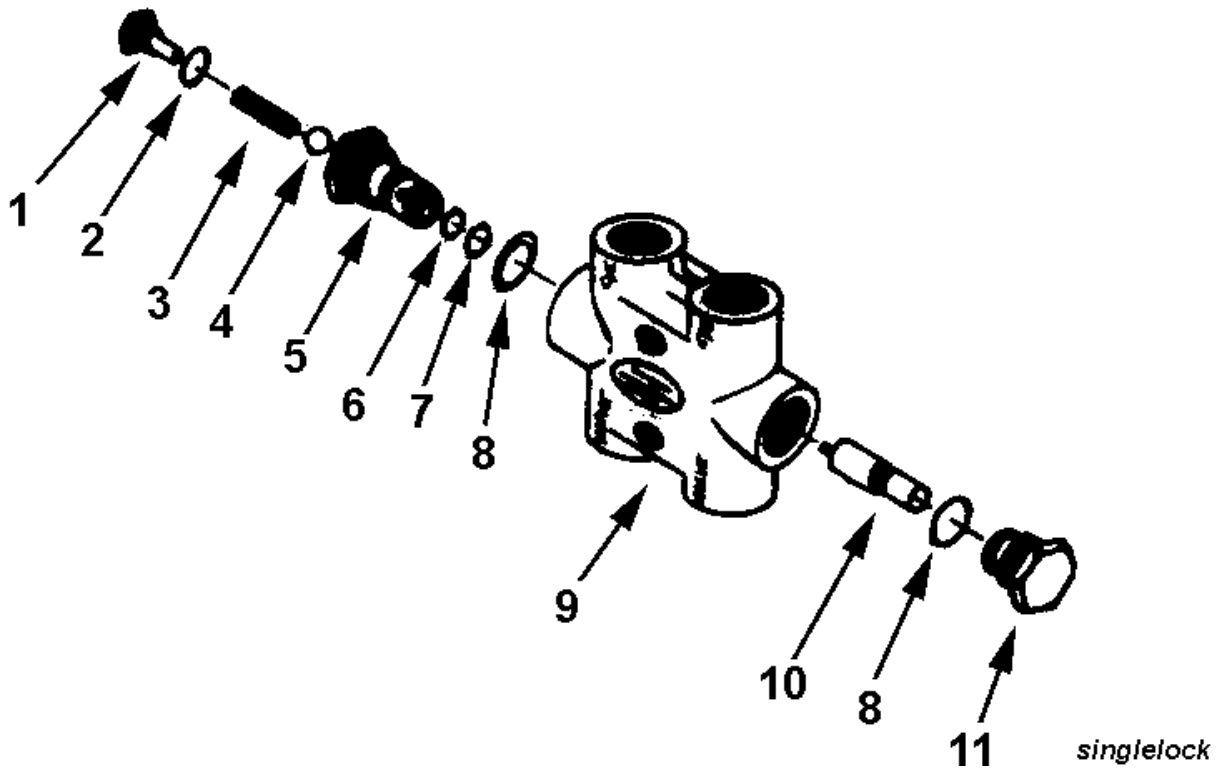
| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|--------------------------------------|
| 1 | A45012 | Frame section |
| 2 | A60002 | Pin, 1-1/8" x 3-5/8" w/ sq. head |
| | | Cotter pin, 3/16" x 1-1/2" |
| 3 | | Grease fittings, 1/8" NPT strt. std. |
| 4 | A2502 | Pin, 1-1/2" x 5-5/8" |
| 5 | | Capscrew, 1/2" x 1" NC, w/ LW |

WHEEL, HUB & SPINDLE



| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|--|
| 1 | A4512 | Grease seal (National 415082) |
| 2 | A4513 | Bearing cone, inner (Timken 3784) |
| 3 | A4514 | Bearing cup, inner (Timken 3720) |
| 4 | A4515 | Hub, less bearing cups |
| 5 | A2233 | Bearing cup, outer (Timken 14276) |
| 6 | A4516 | Bearing cone, outer (Timken 14137A) |
| 7 | A4521A | Wheel, 20" D.C. |
| 8 | A4519 | Wheel bolt |
| 9 | A2235 | Hub cap |
| 10 | | Bolt, 3/4" x 6" NC w/ nut & FW |
| 11 | A4520 | Spindle |
| 12 | A2239 | Washer, special 7/8" flat |
| 13 | | Nut, 7/8" NF castellated Cotter pin |

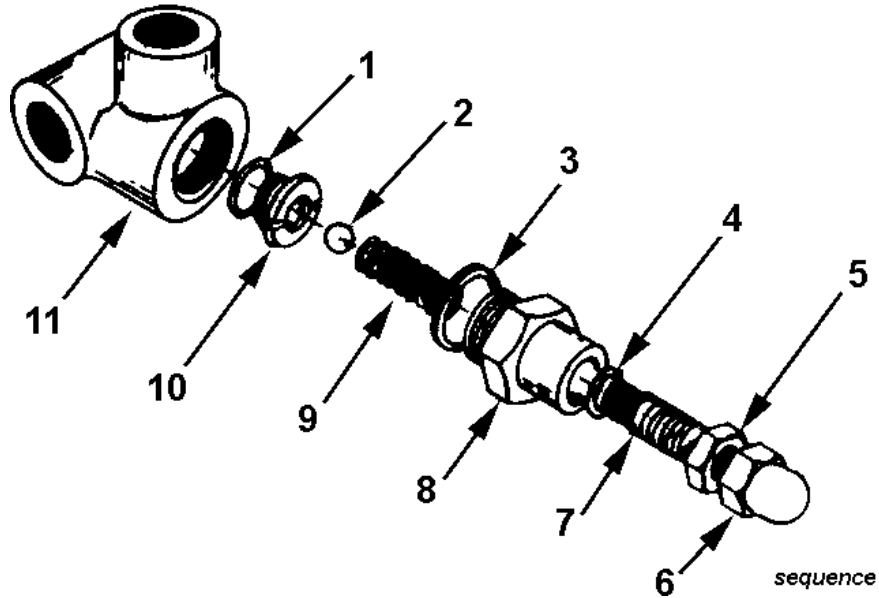
SINGLE LOCK LINE VALVE



| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|-------------------------|
| *1 | A600H01 | Valve stem plug |
| *2 | A600H02 | O-ring, seal |
| *3 | A600H03 | Spring |
| *4 | A600H04 | Ball valve |
| *5 | A600H05 | Valve seat sleeve |
| *6 | A600H07 | O-ring seal |
| *7 | A600H08 | Backup washer |
| *8 | A600H06 | O-ring seal |
| 9 | A600H10 | Valve housing |
| *10 | A600H09A | Plunger kit |
| *11 | A600H11 | Plug |
| | A600H12 | Complete valve assembly |

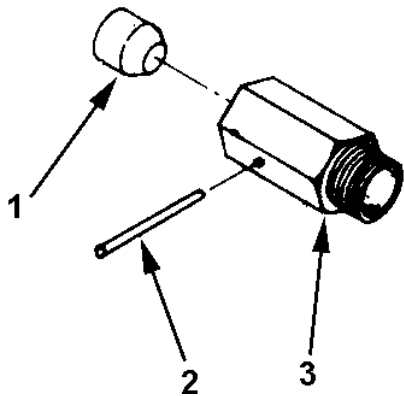
* Parts sold in kit only, Kit No. A600H09A

SEQUENCE VALVE



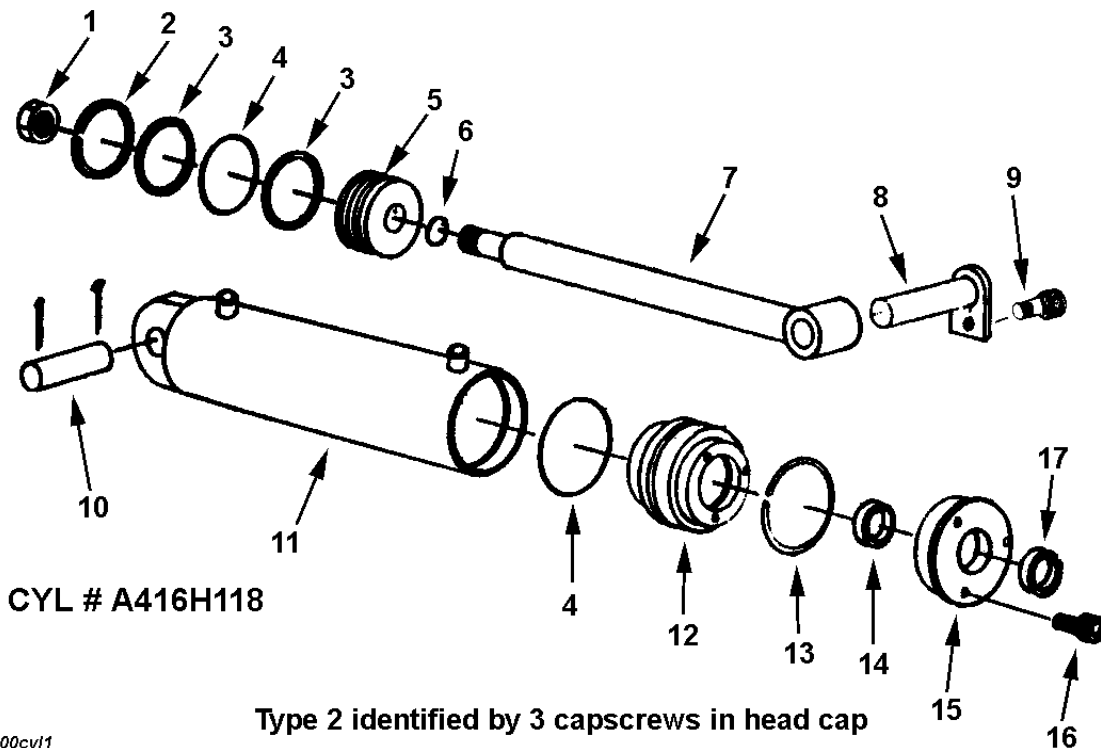
| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|-------------------------|
| 1 | A600H22 | Relief seat O-ring |
| 2 | A600H20 | Ball |
| 3 | A600H18 | Valve body gasket |
| 4 | A600H16 | Adjusting screw O-ring |
| 5 | A600H14 | Jam nut |
| 6 | A600H13 | Acorn cap |
| 7 | A600H15 | Adjusting screw |
| 8 | A600H17 | Valve body |
| 9 | A600H19 | Spring |
| 10 | A600H21 | Relief seat |
| 11 | A600H23 | Valve housing |
| | A600H24 | Complete valve assembly |

LINE CHECK VALVE



| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|-------------------------|
| 1 | A600H25 | Check poppet |
| 2 | A600H27 | Taper pin |
| 3 | A600H26 | Valve body |
| | A600H28 | Complete valve assembly |

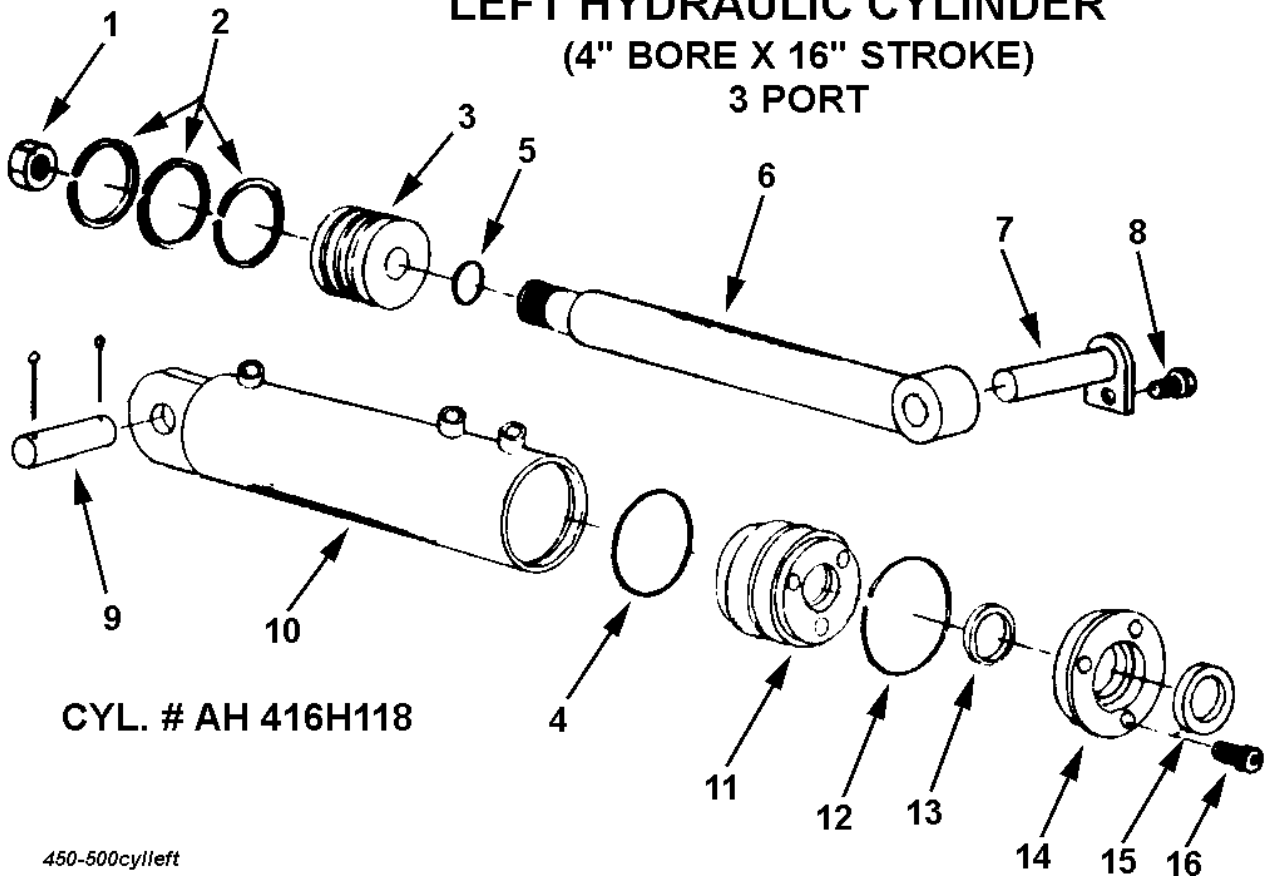
RIGHT HYDRAULIC CYLINDER 4" BORE X 16" STROKE



450-500cyl1

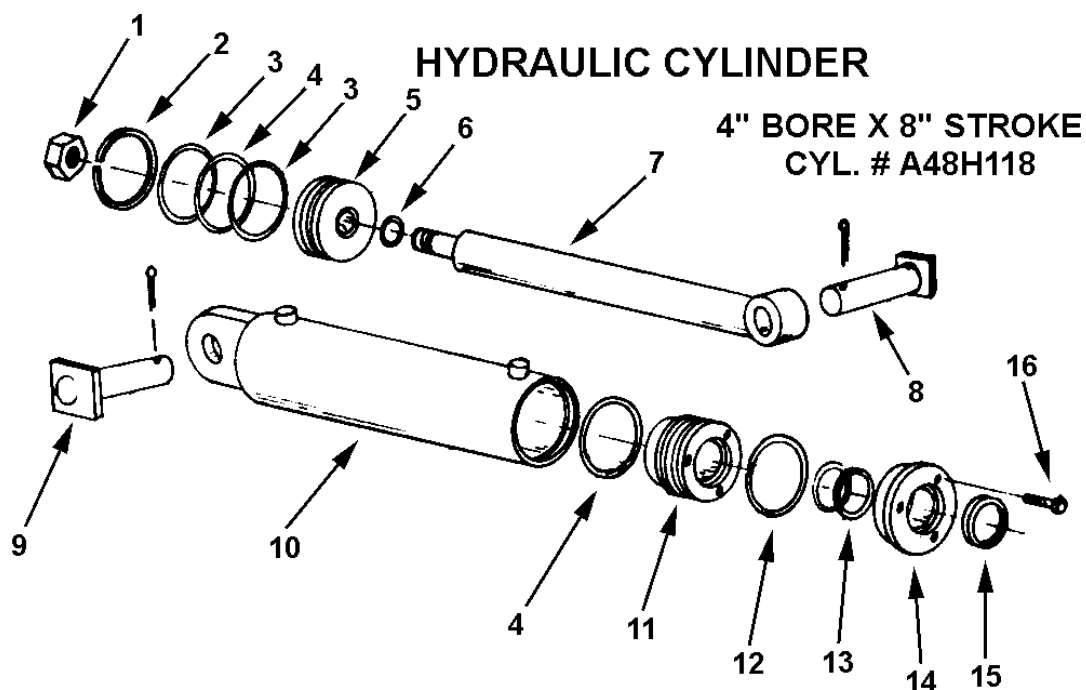
| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|--|
| 1 | A300H03 | Piston nut, 1" NF |
| 2 | A300H04 | Cast iron ring, 4" OD |
| 3 | A300H05 | Backup washer, 4" OD |
| 4 | A300H06 | O-ring seal, 4" OD x 3/16" |
| 5 | A300H07 | Piston, 4" |
| 6 | A45H05 | Piston gasket, 1" |
| 7 | A45H03 | Shaft, 1-1/2" dia. |
| 8 | A4524 | Pin, 1-1/8" x 6" |
| 9 | | Capscrew, 1/2" x 1" NC w/ LW |
| 10 | A45003 | Pin, 1-1/8" x 3-1/4" |
| | | Cotter pin, 3/16" x 1-1/2" |
| 11 | A45H04 | Barrel assembly |
| 12 | A300H11 | Head gland |
| 13 | A300H12 | Retainer ring |
| 14 | A22H15 | O-ring, 1-1/2" x 1/8" |
| | A22H15A | Backup washer |
| 15 | A300H13 | Head cap |
| 16 | A22H18 | Capscrew, 1/4" x 1" NC |
| 17 | A22H17 | Wiper seal, 1-1/2" ID |
| | A300H14B | Packing kit, containing: |
| | | 1 - A300H04 2 - A22H15 2 - A300H05 |
| | | 1 - A22H15A 2 - A300H06 1 - A22H17 |
| | | 1 - A45H05 |

LEFT HYDRAULIC CYLINDER (4" BORE X 16" STROKE) 3 PORT



450-500cylleft

| KEY NO. | PART NO. | DESCRIPTION | |
|---------|-------------|-------------------------------------|-------------|
| 1 | A300H03 | Piston nut, 1" NF | |
| 2 | A300H04 | Cast iron ring, 4" OD | |
| 3 | A450H15 | Piston, 4" | |
| 4 | A300H06 | O-ring seal, 4" OD, x 3/16" | |
| 5 | A45H05 | Piston gasket, 1" | |
| 6 | A45H03 | Shaft, 1-1/2" dia. | |
| 7 | A4524 | Pin, 1-1/8" x 6" | |
| 8 | | Capscrew, 1/2" x 1" NC w/ LW | |
| 9 | A45003 | Pin, 1-1/8" x 3-1/4" | |
| | | Cotter pin, 3/16" x 1-1/2" | |
| 10 | A450H10 | Barrel assembly w/ sequence porting | |
| 11 | A300H11 | Head gland | |
| 12 | A300H12 | Retainer ring | |
| 13 | A22H15 | O-ring, 1-1/2" x 1/8" | |
| | A22H15A | Backup washer | |
| 14 | A300H13 | Head cap | |
| 15 | A22H18 | Capscrew, 1/4" x 1" NC | |
| 16 | A22H17 | Wiper seal, 1-1/2" ID | |
| | A450H11B | Packing kit containing: | |
| | 3 - A300H04 | 1 - A300H06 | 1 - A45H05 |
| | 2 - A22H15 | 1 - A22H17 | 2 - A22H15A |

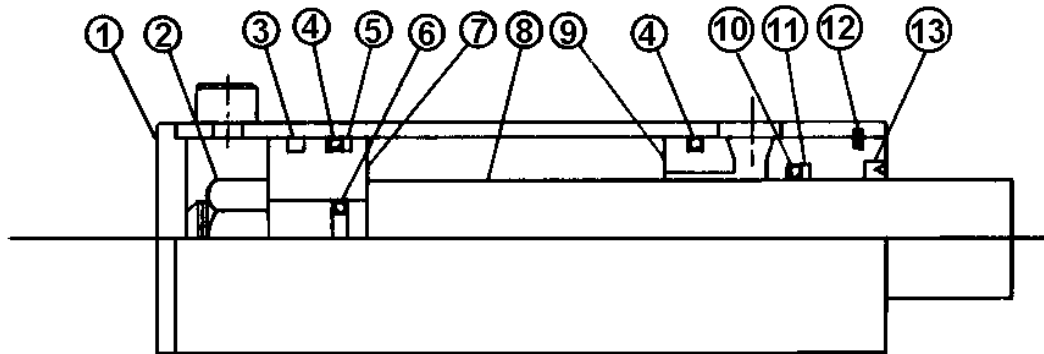


cyl4x8

| KEY NO. | PART NO. | DESCRIPTION |
|---------|----------|--|
| 1 | A300H03 | Piston nut, 1" NF |
| 2 | A300H04 | Cast iron ring, 4" OD |
| 3 | A300H05 | Backup washer, 4" OD |
| 4 | A300H06 | O-ring seal, 4" OD x 3/16" |
| 5 | A300H07 | Piston, 4" OD |
| 6 | A45H05 | Piston gasket, 1" |
| 7 | A600H32 | Shaft, 1-1/2" |
| 8 | A60002 | Pin, 1-1/8" x 3-1/2" w/ sq. head |
| 9 | A45001 | Cotter pin, 3/16" x 1-1/2" |
| 10 | A600H33 | Barrel assembly |
| 11 | A300H11 | Head gland |
| 12 | A300H12 | Retainer ring |
| 13 | A22H15 | O-ring seal, 1-1/2" |
| | A22H15A | Backup washer |
| 14 | A300H13 | Head cap |
| 15 | A22H17 | Wiper seal, 1-1/2" ID |
| 16 | A222H18 | Socket head capscrew, 1/4" x 1" |
| | A300H14B | Packing kit, containing: |
| | | 1 - A300H04 1 - A45H05 2 - A300H06 |
| | | 2 - A22H15 1 - A22H17 1 - A22H15A |
| | | 2 - A300H05 |

4" Bore
16" Stroke
2 Port

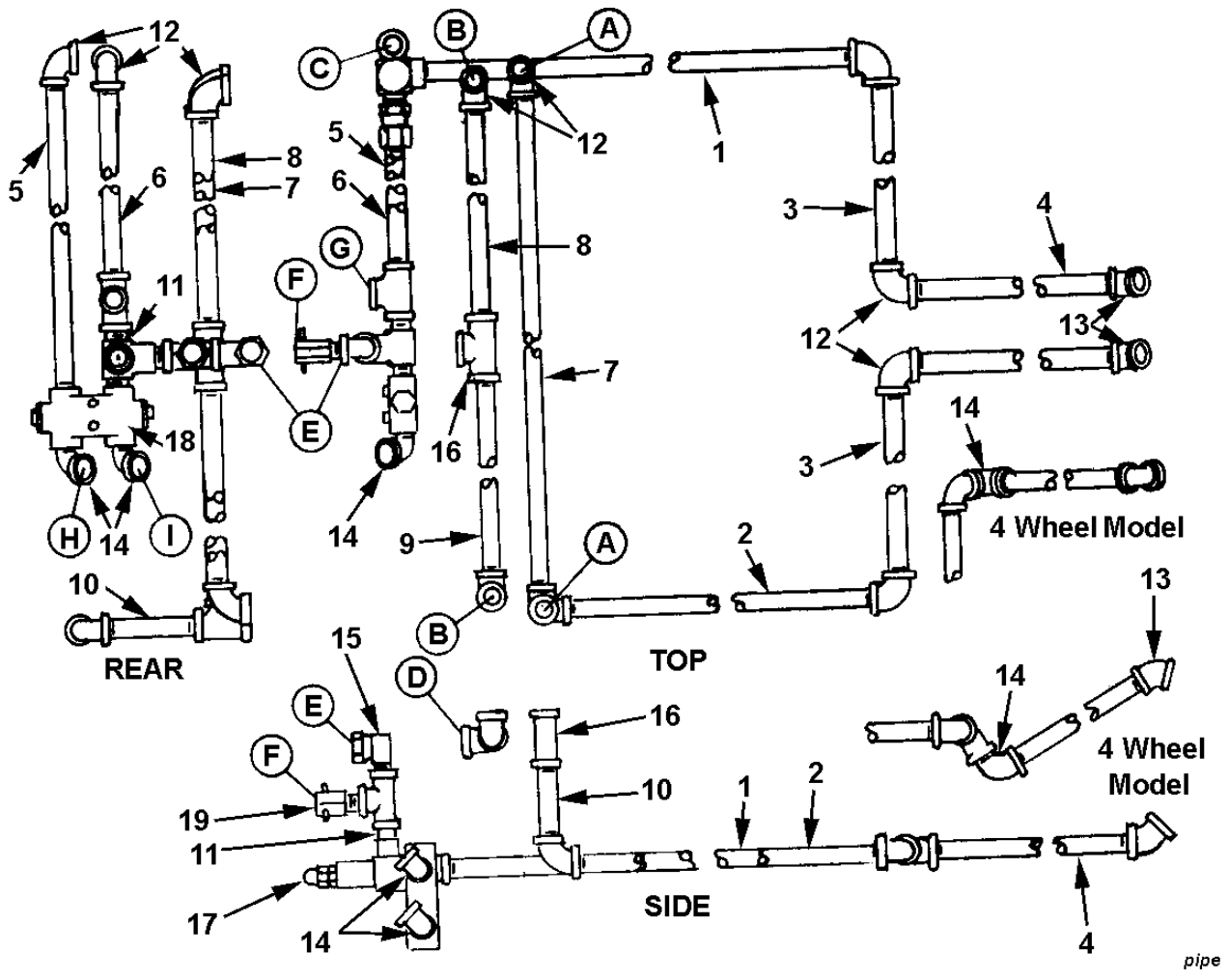
PMC-5600D Series



Type 4 identified by Snap ring securing gland

cyl-pmc-5600d

| KEY NO. | QTY. | PART NO. | DESCRIPTION |
|---------|------|------------|------------------------|
| 1 | 1 | A45H04-P | Butt and tube assembly |
| 2 | 1 | A-2043-8 | Lock nut |
| 3 | 1 | PMAP-R-45 | Piston ring |
| 4 | 2 | PMAP-O-45 | O-ring |
| 5 | 1 | PMAP-W-45 | Bu-washer |
| 6 | 1 | PMAP-O-19 | O-ring |
| 7 | 1 | P4-1130 | Piston |
| 8 | 1 | A45H03-P | Piston rod |
| 9 | 1 | GIC-3940 | Gland |
| 10 | 1 | PMAP-O-32 | O-ring |
| 11 | 1 | PMAP-W-32 | Bu-washer |
| 12 | 1 | PMAP-VB-32 | Wiper |
| 13 | 1 | TSR-400 | Snap ring |
| | 1 | PMCK-5600D | Packing kit |



PIPE AND FITTINGS

| KEY NO. | DESCRIPTION | LENGTH | QTY. |
|---------|---------------------|--------|------|
| 1 | 1/2" STD Black Pipe | 90-1/4 | 1 |
| 2 | 1/2" STD Black Pipe | 86-1/2 | 1 |
| 3 | 1/2" STD Black Pipe | 34-1/2 | 2 |
| 4 | 1/2" STD Black Pipe | 27-3/4 | 2 |
| 5 | 1/2" STD Black Pipe | 37-1/2 | 1 |
| 6 | 1/2" STD Black Pipe | 31-1/2 | 1 |
| 7 | 1/2" STD Black Pipe | 90 | 1 |
| 8 | 1/2" STD Black Pipe | 39-3/4 | 1 |
| 9 | 1/2" STD Black Pipe | 45-3/4 | 1 |
| 10 | 1/2" STD Black Pipe | 3 | 1 |

HYDRAULIC HOSES

| QTY. | LOCATION | LG. |
|------|----------------------------|-----|
| 2 | A to base port side cyl. | 18" |
| 2 | B to rod port side cyl. | 38" |
| 1 | C to center port left cyl. | 38" |
| 1 | D to E | 24" |
| 1 | F to G | 24" |
| 1 | H to base port rear cyl. | 24" |
| 1 | I to rod port rear cyl. | 24" |

| KEY NO. | DESCRIPTION | QTY. |
|---------|---------------------------|------|
| 11 | 1/2" NPT Close nipple | 3 |
| 12 | 1/2" NPT x 90° elbow | 10 |
| 13 | 1/2" NPT x 45° elbow | 2 |
| 14 | 1/2" NPT x 90° st.elbow | 4 |
| 15 | 1/2" x 90° swivel adapter | 1 |
| 16 | 1/2" NPT TEE | 3 |
| 17 | Relief valve | 1 |
| 18 | Lock valve | 1 |
| 19 | Check valve | 1 |

HOW TO OPERATE THE W7B-20DC RIM

Note: This rim has been developed for 20" used truck tires up to and including 9.00-20 ten ply. However, many users have found it possible to mount 10.00-20 twelve ply tires. The following procedures should be followed:

Tools and Materials Required:

One Set Firestone Truck Tire Tools (48-A-200)
One Pair Vise-Grip Pliers
Lubricant (Avoid use of compound that contains water . . . or a solvent injurious to rubber — see your rim distributor)

MOUNTING:



1. Remove flap inasmuch as it is not required on the drop center rim mounting and it prevents mounting the tire. Check to see tube is in casing and inflated sufficiently to prevent sag below tire beads.



2. Place rim on floor with valve hole side up. Place tire over rim with valve stem pointing upwards. Force lower bead into well of rim as far as possible.



3. Lubricate last section of lower bead to facilitate mounting.



4. Using straight end of tool (with stop resting on rim flange) take small bites to work remaining section of lower bead onto rim.



5. Stand tire up with valve and valve hole at top of rim. Insert valve into valve hole.



6. To get top bead in place stand on tire and force bead down as far as possible and clamp vice grip pliers on the flange. (snub side toward tire). Using spoon end of tire iron with lug side towards rim, work progressively around bead using small bites until bead slips over flange onto rim base. In order to mount last 6" of bead it usually is necessary to insert second tire iron and lubricate the last bead portion.

DEMOUNTING:



1. Remove valve core to deflate and loosen tire from bead seat of rim on both sides. Lubricate upper bead of tire thoroughly. With stops toward rim, insert spoon ends of both tools about 10 inches apart. While standing on tire to hold bead in well, pull one tool back toward center of rim.



2. Hold first tool in position with one foot and pull second tool toward center of rim. Progressively work top bead off rim, taking additional bites if necessary.



3. Stand tire and tube in vertical position with valve at top of assembly and remove valve from valve hole. Then place valve at bottom of assembly and pull out upper portion of tube so it will not interfere with demounting the second bead. Lubricate second bead. At top of assembly insert straight end of tool between bead and back flange of rim at about a 45° angle. Turn tool so it is perpendicular to rim. Pry second bead off.

ELECTRIC WHEEL COMPANY-QUINCY, ILL.

Division of the Firestone Tire & Rubber Company