

MODEL 61 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 61 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 2-11/16" pin (with tab type head) from the inside of the bucket. Secure with 5/8" x 1 1/2 " NF bolt through bucket side with lockwasher and nut to the outside.
7. Connect actuating arm bars to the front holes in the bucket. In doing so, be sure that the ear and ear reinforcement on the opposite end of the actuating arm is in the up position and facing inward. Insert 1 1/4 x 2-11/16 " 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 3/4 " ID bearing on the side of the main frame. Secure with 1 3/4 " x 6" 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. Install hydraulic cylinders to main frame and actuating frame with rod end to actuating frame. Be sure the grease hole in the rod end is 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" x 1/2" NC capscrew and lockwasher.
11. Install 1/2" 90° swivel adapters into front and rear port on each cylinder. Tighten so

that the hose connection faces the rear.

12. Connect a ½" x 18" hose from the rear port of each cylinder to one of the pipe lines on the rear cross frame. Be sure both hoses from the rear ports are connected to the same pipe line.

13. Connect a ½" x 38" hose from the front port of each cylinder to the remaining pipe line on the rear cross frame.

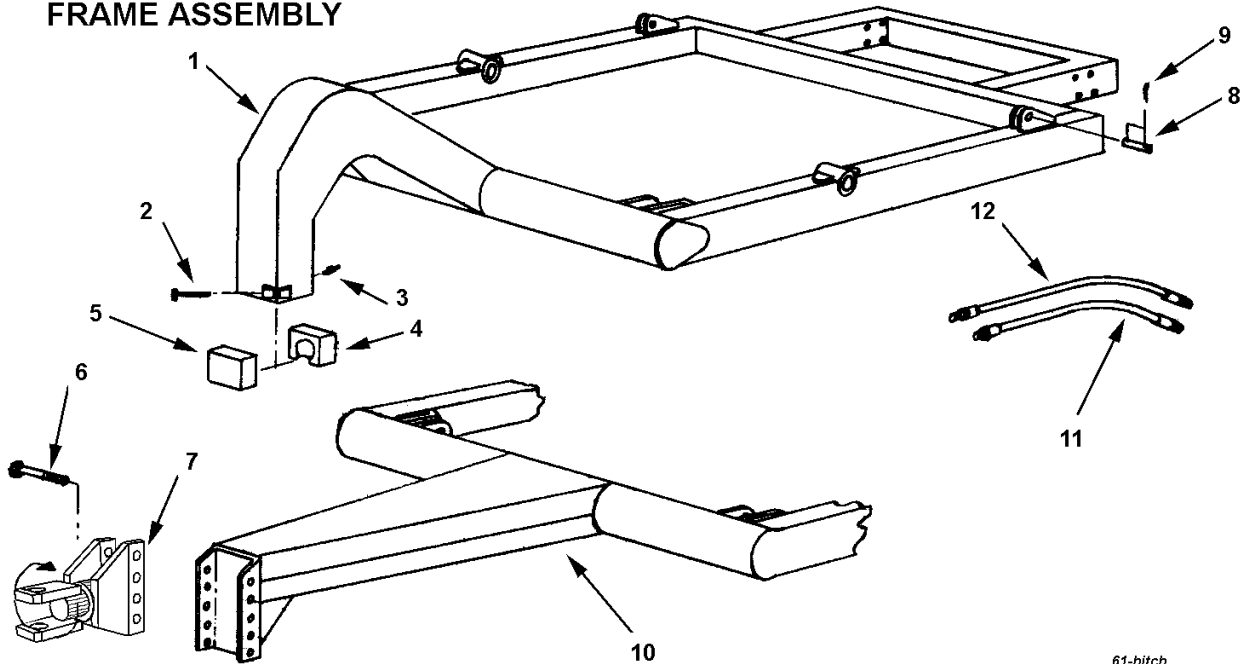
14. Raise the apron assembly over the scraper and lower into position so that the holes in the arms of the apron align with the holes in the bucket sides. Insert the 1-5/8" to 1 ¼" shoulder pin through the apron arms and into the bucket. Install lock nut inside the bucket and tighten securely. Slide actuating link around pin located on apron arm. Install lock block with 3/8" x 4 ½" NC bolt through link and block. Connect lower end of link to actuating arm with 1 ¼" to 1" shoulder pin with 1" lock nut to the outside.

15. Install all the grease fittings and grease liberally.

16. 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.

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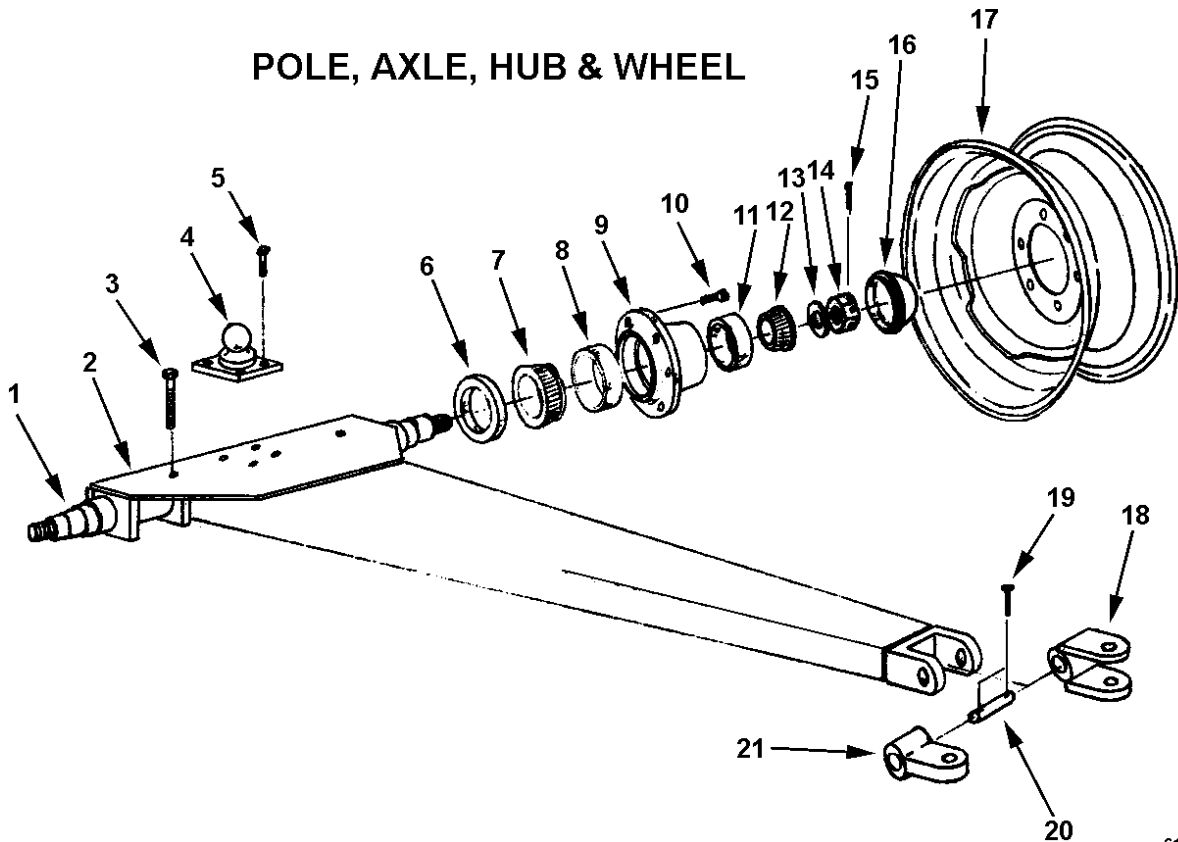
FRAME ASSEMBLY



61-hitch

KEY NO.	PART NO.	DESCRIPTION
1	A6103	Frame, Four wheel, Model D
2		Bolt, 5/8" x 4" NC, w/ nut & LW
3	A2206	Grease fitting, 1/8" NPT straight, long
4	A40005	Socket half, rear with grease hole
5	A40004	Socket half, front
6		Bolt, 1-1/4" x 7" NF w/ lock nut
7	A8033	Swivel hitch
8	A45003	Pin, 1-1/8" x 3-1/4", Cotter both end
9		Cotter pin, 3/16" x 1-1/2"
10	A6104	Frame, Two wheel, Model S
11	A60H01A	Hydraulic hose, 1/2" x 18"
12	A400H01	Hydraulic hose, 1/2" x 38"

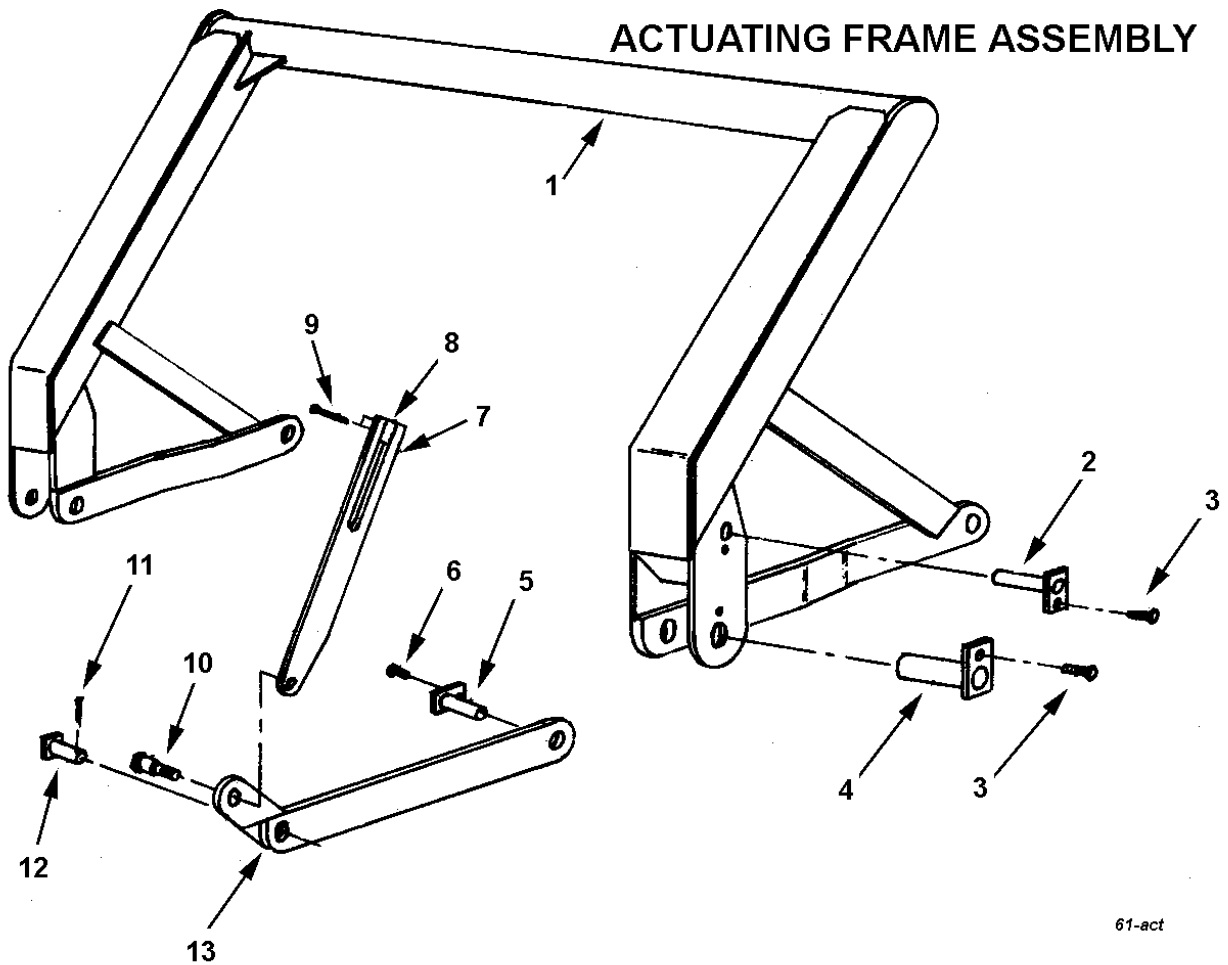
POLE, AXLE, HUB & WHEEL



KEY NO.	PART NO.	DESCRIPTION
1	A5006	Spindle - bolt on
2	A5005	Pole assembly
3		Bolt, 1/2" x 4-1/2" NF Grade 5 w/ nut & LW
4	A40006	Ball swivel
5		Bolt, 3/4" x 2-1/2" NC w/ nut & LW
6	A2229A	Grease seal (CR 20079)
7	A2230A	Bearing cone, inner (Timken 342S)
8	A2231	Bearing cup, inner (Timken 332)
9	A2232	Hub
10	A2236	Wheel bolt
11	A2233	Bearing cup, outer (Timken 14276)
12	A2234	Bearing cone, outer (Timken 14137A)
13	A2239	Washer, special 7/8" Flat
14		Nut, 7/8" NF castellated
15		Cotter pin, 5/32" x 1-1/4"
16	A2235	Hub cap
17	A3319A	Wheel, 15" x 8"
18	A4553	Clevis hitch
19		Bolt, 5/16" x 2-1/2"
20	A6014	Pin, 1-1/4" x 6-3/4" w/ bolt holes
21	A4553A	Single lip hitch

61-pole

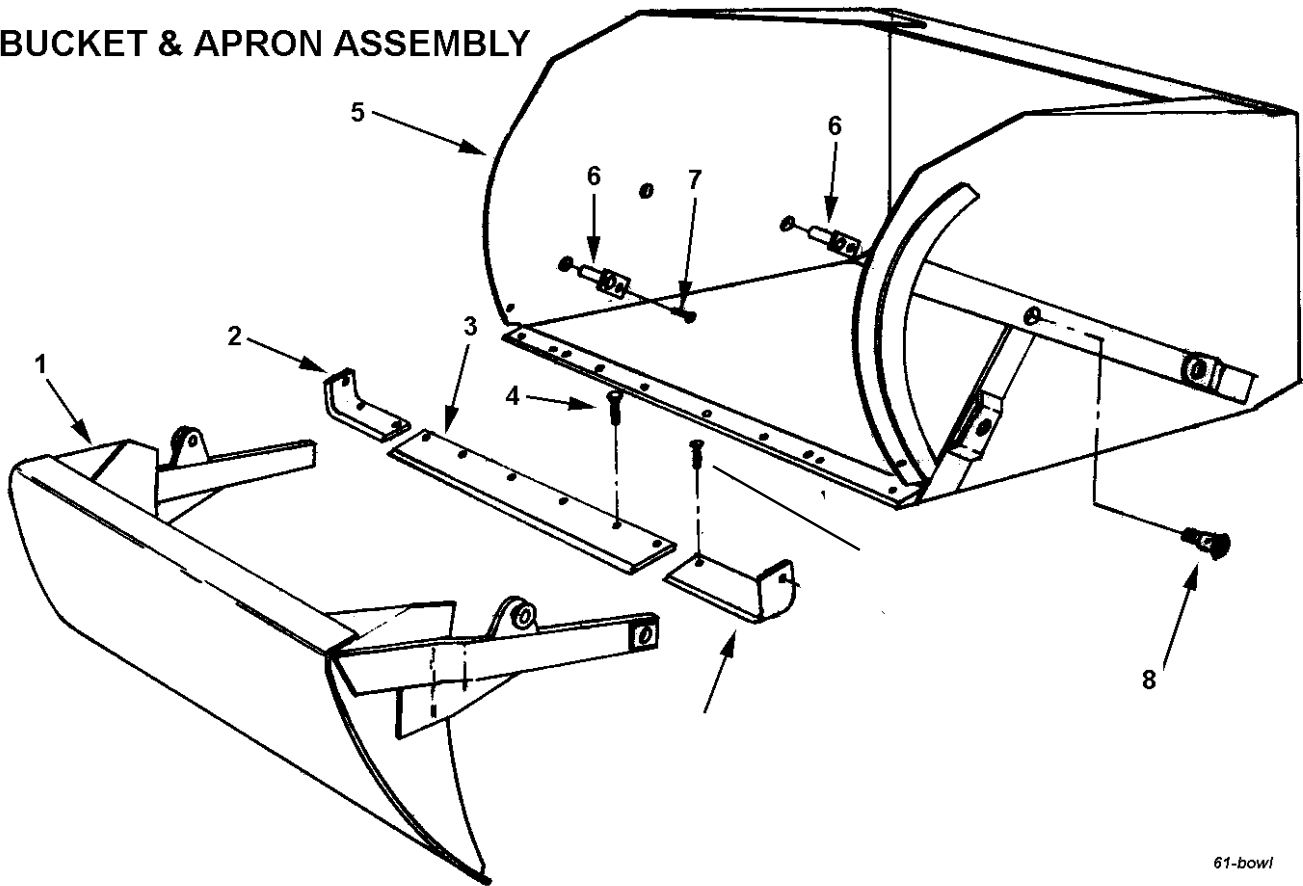
ACTUATING FRAME ASSEMBLY



61-act

KEY NO.	PART NO.	DESCRIPTION
1	A6105	Actuating frame
2	A4524	Pin, 1-1/8" x 6" w/ tab head
3		Capscrew, 5/8" x 1-1/4" NC w/ LW
4	A6101	Pin, 1-3/4" x 6-1/8" w/ tab head
5	A8005	Pin, 1-1/2" x 2-11/16" w/ tab head
6		Capscrew, 5/8" x 1-1/2" w/ nut & LW
7	A6106	Actuating link
8	A6107	Stop block
9		Bolt, 3/8" x 4-1/2" NC w/ nut & LW
10	A30020	Shoulder pin, 1-1/4" x 1" w/ ctsk grease hole in head w/ lock nut
11		Cotter pin 1/4" x 2"
12	A6007A	Pin, 1-1/4" x 4-1/8" w/ square head & hole for grease zerk
13	A6108	Actuating arm, L. H.
	A6109	Actuating arm, R. H.

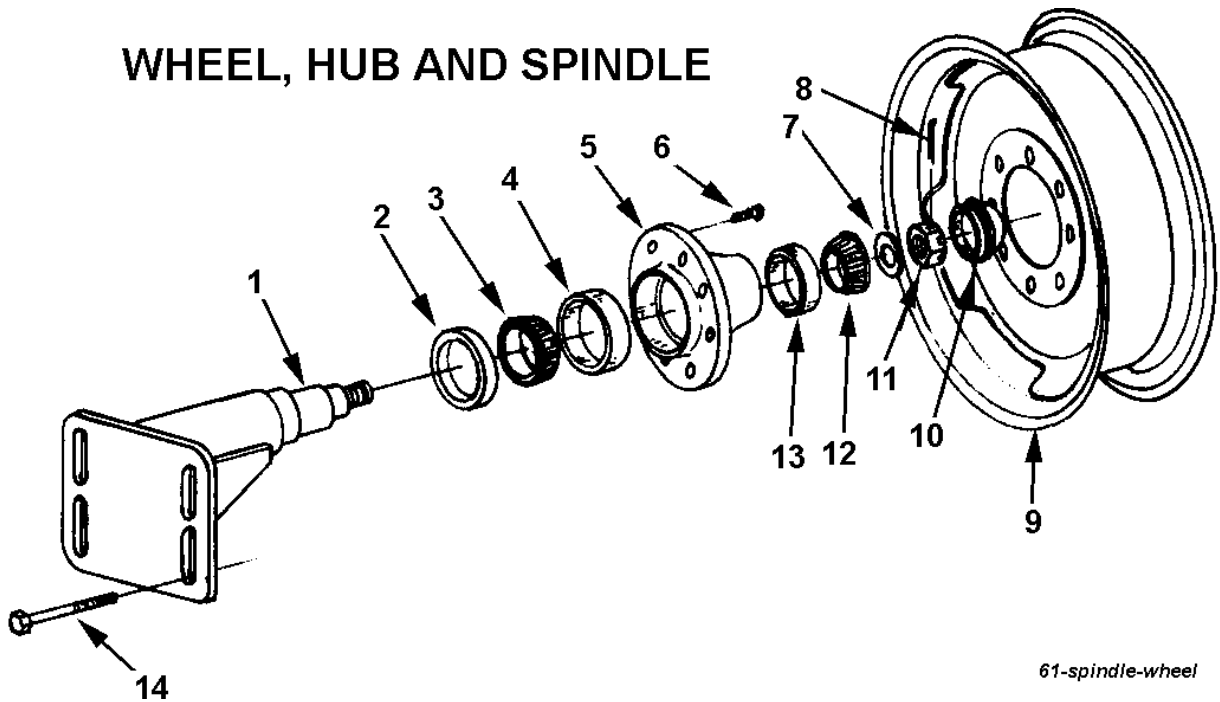
BUCKET & APRON ASSEMBLY



61-bowl

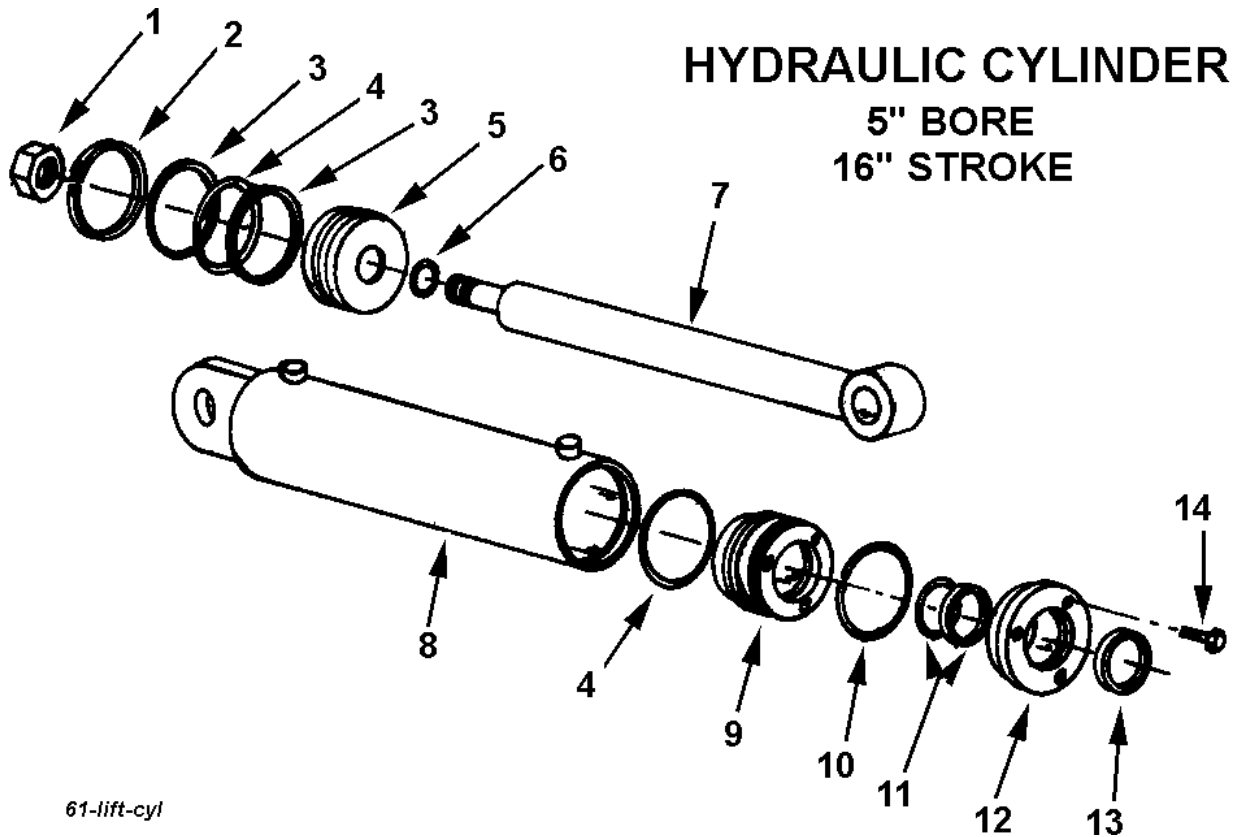
KEY NO.	PART NO.	DESCRIPTION
1	A6110	Apron
2	A2225	Cutting edge, Right 6"
3	A45010	Cutting edge, Center, 8" x 50"
4		Plow bolt, 5/8" x 2" w/ nut (6 req'd)
5	A6111	Bucket
6	A8005	Pin, 1-1/2" x 2-11/16" w/ tab head
7		Capscrew 5/8" x 1-1/2" w/ nut & LW
8	A6010	Shoulder pin, 1-5/8" to 1-1/4" w/ grease hole in head w/ lock nut
9	A2222	Cutting edge, Left 6"
10		Plow bolt, 1/2" x 1-3/4" (6 req'd)

WHEEL, HUB AND SPINDLE



61-spindle-wheel

KEY NO.	PART NO.	DESCRIPTION
1	A4520	Spindle, rear with flange
2	A4512	Grease seal (National 415082)
3	A4513	Bearing cone, inner (Timken 3784)
4	A4514	Bearing cup, inner (Timken 3720)
5	A4515	Hub, with bearing cups
6	A4519	Wheel bolt
7	A2239	Washer, special 7/8" flat
8		Cotter pin
9	A4521A	Wheel, 20" DC, 8 hole
10	A2235	Hub cap
11		Nut, 7/8" NC castellated
12	A2234	Bearing cone, outer (Timken 14137A)
13	A2233	Bearing cup, outer (Timken 14276)
14		Bolt, 3/4" x 6" NC w/ flat washer and nut



61-lift-cyl

CYLINDER PART NO. A516H118

KEY NO.	PART NO.	DESCRIPTION
1	A400H17	Lock nut, 1-1/4" NF
2	A400H04	Cast iron ring, 5" OD
3	A400H05	Back up washer, 5" OD
4	A400H06	O-ring, 5" OD x 1/4"
5	A400H07	Piston, 5" OD
6	A22H27	Piston gasket, 1-1/4" ID
7	A400H08	Shaft, 2" diameter
8	A400H09	Barrel assembly, 5" ID
9	A400H10	Head gland, 5" OD
10	A400H11	Retainer ring
11	A400H12	O-ring, 2" ID
	A400H12A	Back up washer, 2" ID
12	A400H13	Head cap
13	A400H14	Wiper seal, 2" ID
14	A22H18A	Capscrew, 5/16" x 1" NC
	A400H15C	Packing kit containing:
		1 - A400H04 1 - A400H11
		2 - A400H05 1 - A400H14
		2 - A400H06 1 - A400H12
		1 - A22H27 1 - A400H12A

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