

P A R T S L I S T

H Y D R A U L I C C Y L I N D E R
5" BORE X 16" STROKE

TYPE I - IDENTIFIED BY FOUR CAPSCREWS IN HEAD CAP

MODEL 60 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A60H50	Nut, 1 $\frac{1}{4}$ " NF
2.	A400H04	Cast iron ring 5" OD
3.	A400H05	Back up washer 5" OD
4.	A400H06	O-ring seal, 5" OD x $\frac{1}{4}$ "
5.	A60H51	Piston, 5"
6.	A22H27	O-ring 1 $\frac{1}{4}$ "OD x 1/8"
7.	A60H53	shaft 2" dia.
8.	A40012	Pin, 1-1/8"x 6-5/16" Capscrew, $\frac{1}{2}$ " x 1" NC w/LW
9.	A45003	Pin, 1-1/8" x 3 $\frac{1}{4}$ " Cotter pin, 3/16" x 1 $\frac{1}{2}$ "
10.	A60H54	Barrel assembly
11.	A60H55	Head gland
12.	A60H56	Spiral ring retainer ring
13.	A400H12	O-ring 2" ID x 3/16" ID
14.	A60H57	Back up washer, 2" ID
15.	A60H58	Wiper seal, 2" ID
16.	A60H59	Head cap
17.		Capscrew, 5/16"x 3/4"
	A60H60	Packing kit contents: 1 A400H04 1 A22H27 2 A400H05 1 A400H12 2 A400H06 1 A60H57 1 A60H56 1 A60H58

NOTE:

When ordering for 4" bore cylinders, please specify 4" bore.



PARTS MANUAL

ASHLAND INDUSTRIES, INC.

Manufacturers of Quality Earth Moving Equipment

P.O. Box 47 Ashland, Wisconsin 54806

Old
60

ASHLAND INDUSTRIES, INC.
P.O. Box 47
Ashland, Wisconsin

Bulletin No. 91567

Subject: Ashland Scrapers

RE: Hydraulic cylinder size in relation to pressure setting

Basis: 1 cubic yard of earth equals 2500 pounds

Model 600 scraper - 5" bore	- Standard	1220 PSI minimum
& 4" bore	- Optional	1900 PSI minimum
60 scraper - 3-1/2" bore	- Special	2430 PSI minimum
Model 450 scraper - 5" bore	- Optional	975 PSI minimum
& 4" bore	- Standard	1525 PSI minimum
45 scraper - 3-1/2" bore	- Special	1975 PSI minimum
Model 350 scraper - 3-1/2" bore	- Standard	1400 PSI minimum
& 35 scraper - 2-1/2" bore	- Optional	2770 PSI minimum
Model 25 scraper - 3-1/2" bore	- Standard	960 PSI minimum
2-1/2" bore	- Optional	1885 PSI minimum

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

ASSEMBLY INSTRUCTIONS FOR MODEL 60 SCRAPER.

1. A suitable hoist or lift should be available for assembly.
2. Raise rear of frame and install wheels to hub. Also install wheels to front axle assembly.
3. Loosen the two $3/4$ " x 7" bolts that hold the ball socket halves in the pole and axle assembly and remove.
4. Raise the front of the frame and roll the pole and axle assembly under the gooseneck. Place the socket halves around the ball swivel at the bottom of the gooseneck. Lower the frame into place so that the socket halves seat into the "nest" on the pole assembly. (If necessary clamp together with C-clamp while lowering into place.) Tighten securely the $3/4$ " x 7" bolts which hold the socket halves in place making sure the clamp bar is seating properly against the front socket half. Install long shank grease fitting into the rear socket through the hole in the rear side of the pole and axle assembly.
5. 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 $2-13/16$ " pin (with tab type head) from the inside of the bucket. Secure with $5/8$ " x $1-1/4$ " bolt through bucket side with the locking nut to the outside.
6. Connect a short chain from the cutting edge to the cross pipe of the actuating frame then raise this bucket and actuating frame assembly over the main frame and lower into place so that the front of the actuating frame can be connected to the $1-1/2$ " bushing on each side of the frame. Secure with $1-1/2$ " x $6-3/8$ " pins. Fasten the pins with $1/2$ " x 1" NC capscrews and lockwashers.
7. Install the left and right actuating arm bars to the front holes in the bucket making sure that the roller on the opposite end is facing towards the center of the scraper. Insert the $1-1/4$ " x $2-13/16$ " pin (with tab type head) from the inside of the bucket. Secure with $5/8$ " x $1-1/4$ " bolt through the bucket side with lock nut on the outside.
8. Lift the end of actuating arms and connect to the brackets on the front frame crossmember using the $1-1/4$ " x $4-1/8$ " pins (with square head). Secure with $1/4$ " x 2" cotter pins.

CONTINUED:

MODEL 60 ASSEMBLY INSTRUCTIONS CONTINUED:

9. 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 6-3/8" pin at the rod end of the cylinder. Secure with 1/2" x 1" NC capscrew and lockwasher.
10. Install 3/8" 90° swivel adapters into front and rear ports on each cylinder. Tighten so that the hose fitting faces to the rear.
11. Connect a 1/2" 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.
12. Connect a 1/2" x 38" hose from the front port of each cylinder to the remaining pipe line on the rear cross frame.
13. 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 1-1/4" shoulder pins through the apron arms and into the bucket. Install nylon insert lock nuts inside the bucket and tighten securely.
14. Install all the grease fittings and grease liberally.
15. 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 spindles to obtain equal distance on both sides.

ASHLAND INDUSTRIES, INC.

MODEL 60 SCRAPER

HOW TO ORDER PARTS

IMPORTANT

Be sure to state MODEL and SERIAL NO. of machine,
PART NO. DESCRIPTION and QUANTITY needed.

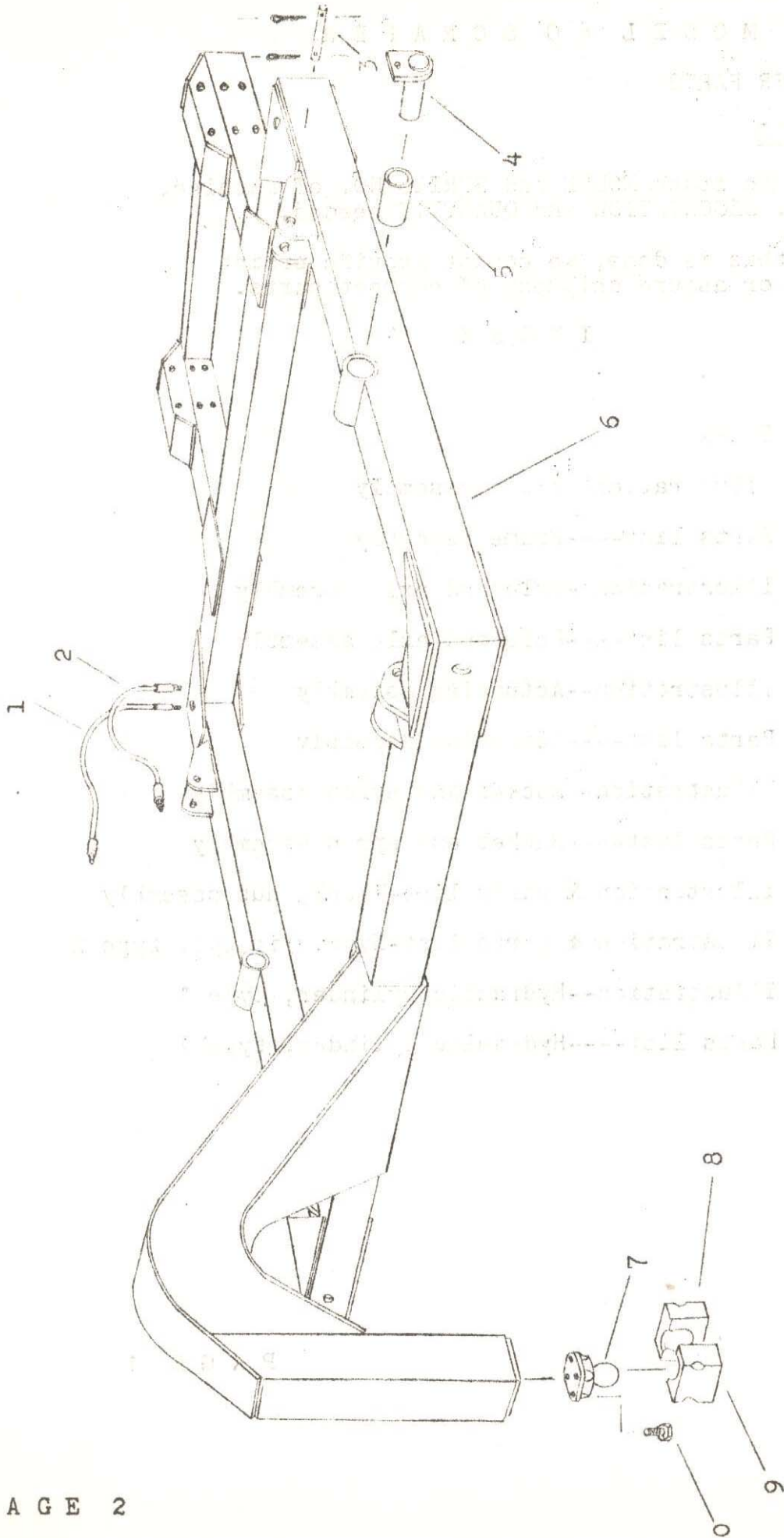
Unless this is done, we cannot provide prompt
service or assure shipment of correct parts.

I N D E X

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ILLUSTRATION - FRAME ASSEMBLY



P A R T S L I S T
F R A M E A S S E M B L Y

MODEL 60 SCRAPER

KEY NO.	PART NO.	DESCRIPTION
1.	A400H01	Hydraulic hose, $\frac{1}{2}$ " x 38"
2.	A60H01A	Hydraulic hose, $\frac{1}{2}$ " x 18"
	A400H02	Swivel adapter, $\frac{1}{2}$ " 90°
3.	A45003	Pin, 1-1/8" x 3 $\frac{1}{4}$ ", cotter pin, 3/16" x 1 $\frac{1}{2}$ "
4.	A40016A	Pin, 1-3/4" x 6-5/16 ser. 10780 & up, 4 wheel (ser. 10848 & up, 2 wheel)
	A40016	Pin, 1 $\frac{1}{2}$ " x 6-5/16 used up to ser. 10756 4 wheel (used up to ser. 10734 2 wheel)
5.	A6001A	Bushing, 2-1/8 x 1-3/4 x 4-3/8 ser. 10780 & up 4 wheel model (ser. 10848 & up 2 wheel model)
	A6001	Bushing, 1-7/8 x 1 $\frac{1}{2}$ " x 4-3/8" used up to serial 10756 4 wheel (used up to ser. 10734 2 wheel)
6.	A6002A	Frame, 4 wheel model, serial 10780 and up
	A6002	Frame, 4 wheel model, used up to 10756
	A6003A	Frame, 2 wheel model, serial 10848 and up
	A6003	Frame, 2 wheel model, used up to ser. 10734
7.	A40006	Ball swivel
8.	A40005	Cast socket half, rear w/zerk hole
9.	A40004	Cast socket half, front
10.		Capscrew, 3/4" x 3"
		Lockwasher, 3/4"

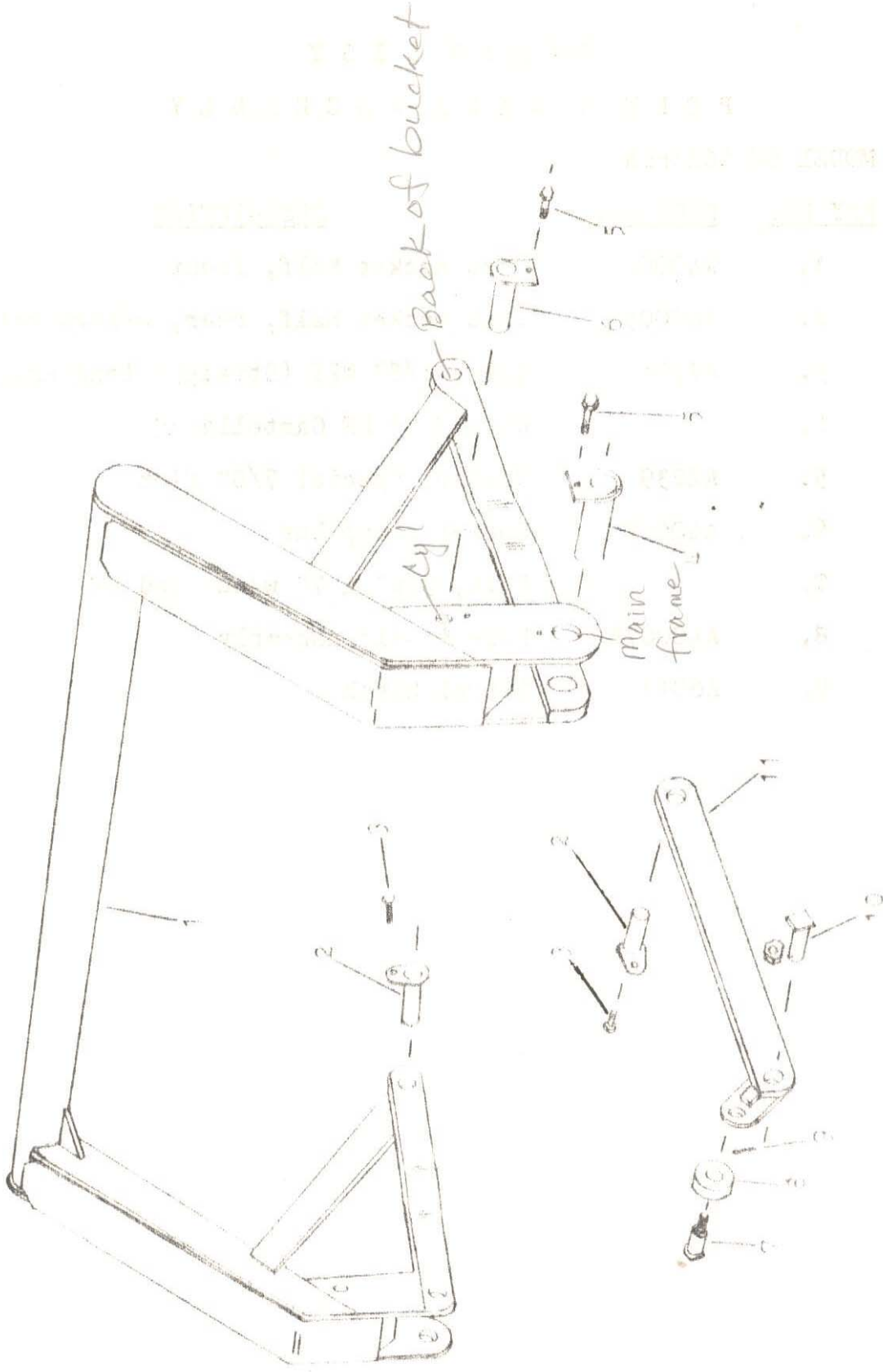
PARTS LIST

POLE & AXLE ASSEMBLY

MODEL 60 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A40004	Cast socket half, front
2.	A40005	Cast socket half, rear, w/zerk hole
3.	A2206	Zerk, 1/8" NPT (Straight long shank)
4.		Nut, 7/8" NF Castellated
5.	A2239	Washer, Special 7/8" flat
6.	A40008	Socket clamp bar
7.		Bolt, 3/4" x 7" w/nut and LW
8.	A40007B	Pole & axle assembly
9.	A6013	Swivel hitch

ILLUSTRATION ACTUATING ASSEMBLY

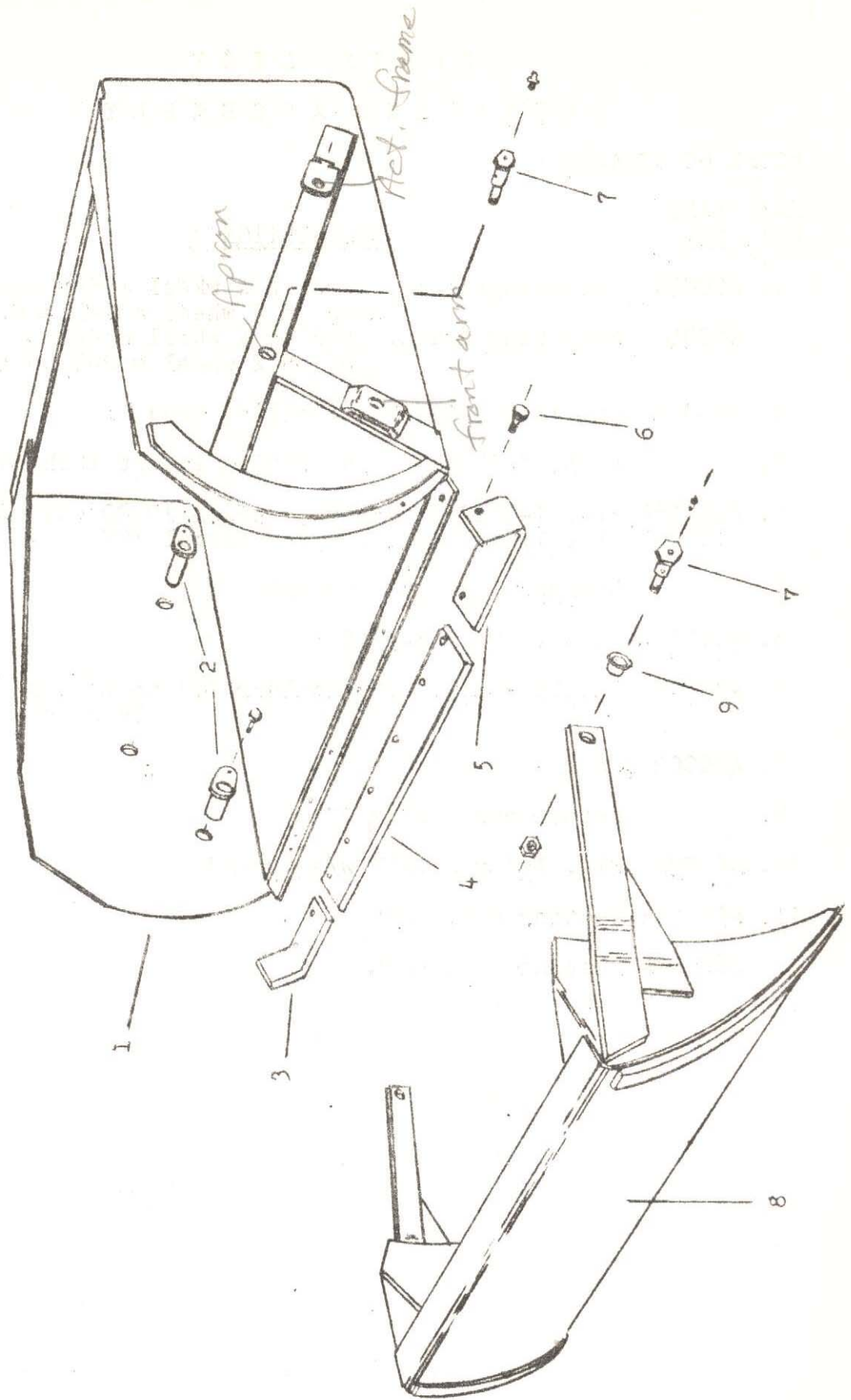


P A R T S L I S T
A C T U A T I N G A S S E M B L Y

MODEL 60 SCRAPER

<u>KEY</u> <u>NO.</u>	<u>PART</u> <u>NO.</u>	<u>DESCRIPTION</u>
1.	A6004A	Actuating frame, used on 4 wheel model ser. 10870 and up (used on 2 wheel model ser. 10848 and up)
	A6004	Actuating frame, used on 4 wheel model up to ser. 10756 (used on 2 wheel model up to ser. 10734)
2.	A40023	Pin, $1\frac{1}{4}$ x 2- $\frac{13}{16}$ " w/locking head
3.		Bolt, $\frac{5}{8}$ " x $1\frac{1}{4}$ " NF w/nylon insert lock nut
4.	A40016A	Pin, 1- $\frac{3}{4}$ " x 6- $\frac{5}{16}$ ", serial 10780 and up
	A40016	Pin, $1\frac{1}{2}$ " x 6- $\frac{5}{16}$ ", up to serial 10756
5.		Capscrew, $\frac{1}{2}$ " x 1" NC w/LW
6.	A40012	Pin, 1- $\frac{1}{8}$ " x 6- $\frac{5}{16}$ "
7.	A30003	Shoulder pin, 2 $\frac{1}{2}$ " shoulder $1\frac{1}{4}$ " to 1" w/NF nylon insert lock nut
8.	A30002	Roller
9.		Cotter pin, $\frac{1}{4}$ " x 2"
10.	A6007A	Pin, $1\frac{1}{4}$ " x 4- $\frac{1}{8}$ " w/sq. head
11.	A6005	Actuating arm, left
	A6006	Actuating arm, right

ILLUSTRATION - BUCKET & APRON ASSEMBLY



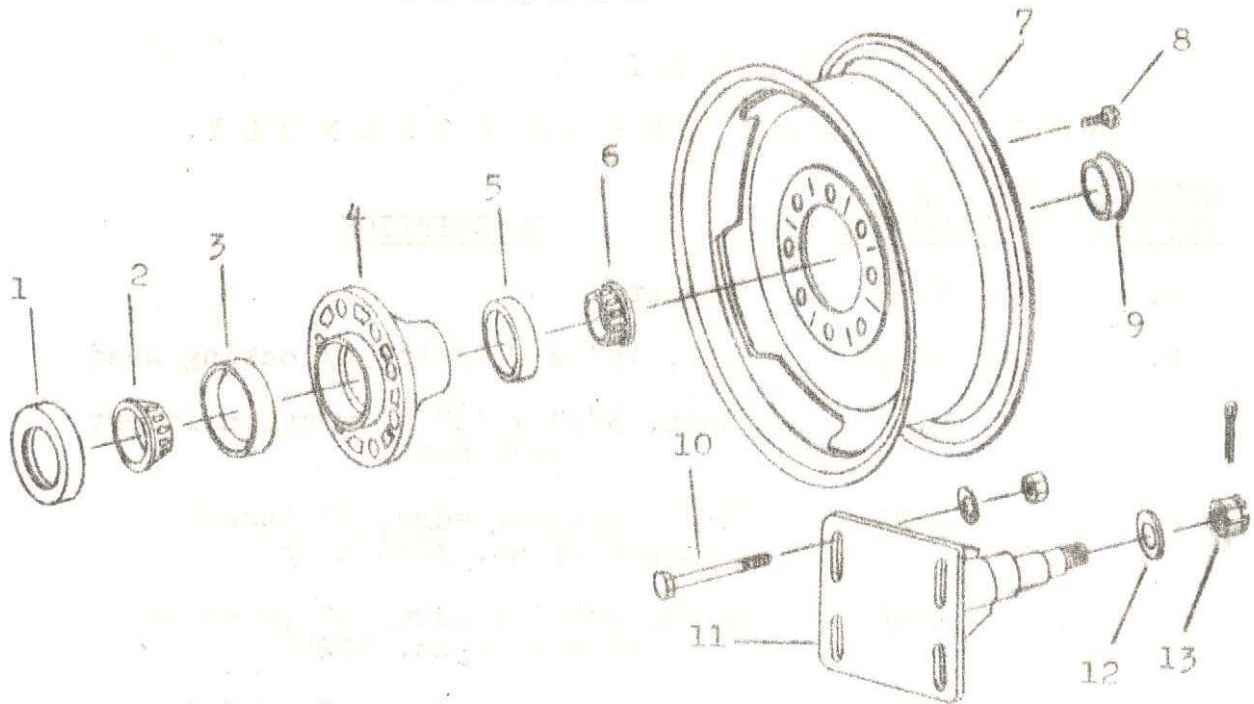
PARTS LIST

BUCKET AND APRON ASSEMBLY

MODEL 60 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A 6008	Bucket
2.	A 40023	Pin, 1 $\frac{1}{4}$ " x 2 $\frac{13}{16}$ " w/locking head Bolt, 5/8" x 1 $\frac{1}{4}$ " NF w/nylon insert lock nut
3.	A 2225	Right cutting edge, 6" (used on serial no. 3253 & up)
	A 2224	Right cutting edge, 4" (used up to serial no. 3224)
4.	A 60005	Center cutting edge, 8" x 54" (used on serial no. 3253 & up)
	A 40001	Center cutting edge, 6" x 54" (used up to serial no. 3224)
5.	A 2222	Left cutting edge, 6" (used on serial no. 3253 & up)
	A 2221	Left cutting edge, 4" (used up to serial no. 3224)
6.		Flaw bolt, $\frac{1}{2}$ " x 1 $\frac{3}{4}$ " w/nut Flaw bolt, 5/8" x 2" w/nut
7.	A 6010	Shoulder pin, 1 $\frac{5}{8}$ " x 1 $\frac{1}{4}$ " Nut, 1 $\frac{1}{4}$ " NF, NF nylon insert lock type
8.	A 6009	Apron
9.	A 6011	Bushing, 1 $\frac{5}{8}$ " ID (used up to serial no. 10042)

ILLUSTRATION
WHEEL, HUB, & SPINDLE
ASSEMBLY



PARTS LIST

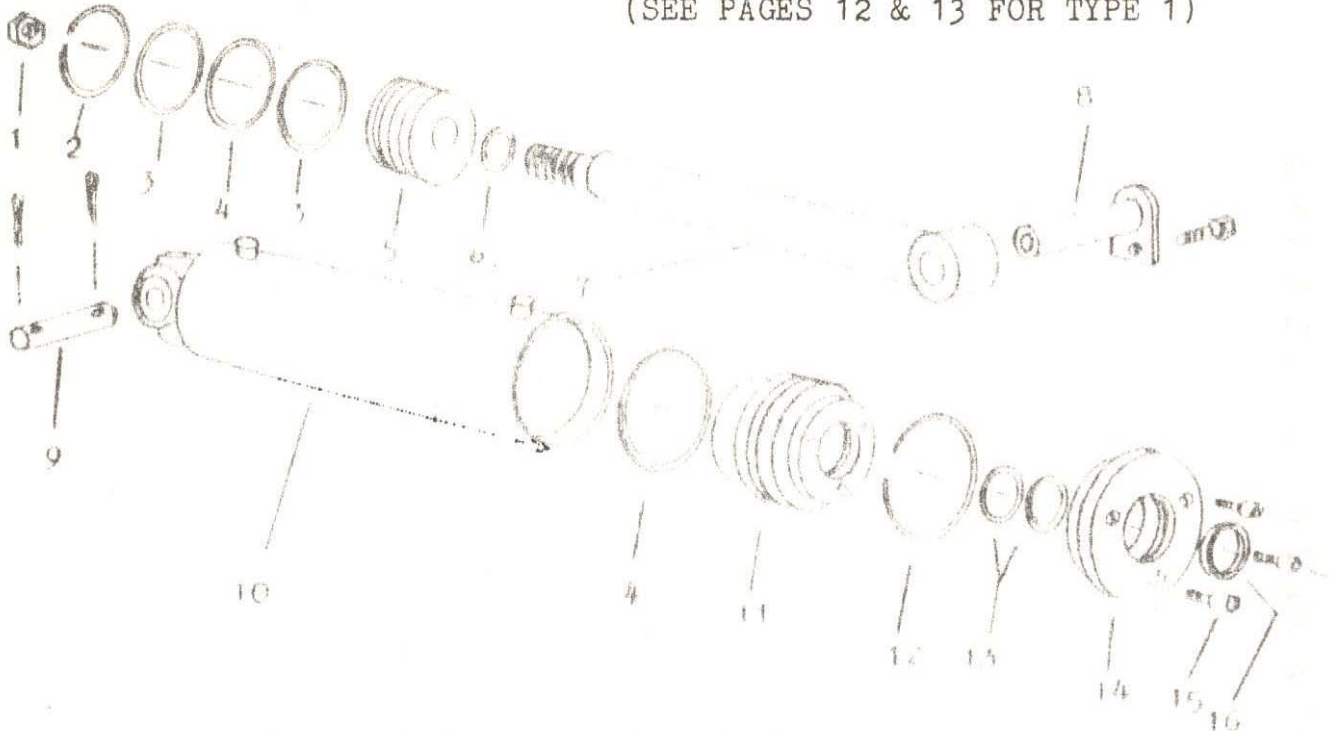
WHEEL, HUB, & SPINDLE ASSEMBLY
MODEL 60 SCRAPER

KEY NO.	PART NO.	DESCRIPTION
1.	A 4512	Grease seal
2.	A 4513	Bearing cone (inner)
3.	A 4514	Bearing cup (inner)
4.	A 4515	Hub (less bearings)
5.	A 2233	Bearing cup (outer)
6.	A 4516	Bearing cone (outer)
7.	A 4521A	Wheel, 20" DC
8.	A 4519	Wheel bolt
9.	A 2235	Hub cap
10.		Bolt, 3/4" x 6" w/flat washer & nut
11.	A 4520	Spindle
12.	A 2239	washer, special 7/8" flat
13.		Nut, 7/8" NF castellated

ILLUSTRATION
 HYDRAULIC CYLINDER
 5" BORE x 16" STROKE

TYPE 2 - IDENTIFIED BY THREE CAPSCREWS IN HEAD CAP

(SEE PAGES 12 & 13 FOR TYPE 1)



MODEL 60 SCRAPER

PARTS LIST

CYLINDER NO.
A516H118

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A400H17	Piston nut, 1 1/4" NF
2.	A400H04	Cast iron ring 5" OD
3.	A400H05	Back up washer, 5" OD x 1/4"
4.	A400H06	O-ring seal, 5" OD x 1/4"
5.	A400H07	Piston, 5"
6.	<i>A22H27</i> A400H16	Piston gasket, 1 1/4" ID
7.	A400H08	Shaft, 2" Dia.
8.	A40012	Pin, 1-1/8" x 6-5/16"
9.	A45003	Capscrew, 1/2" x 1" NC w/LW pin, 1-1/8" x 3 1/4" Cotter pin, 3/16 x 1 1/2
10.	A400H09	Barrel assembly
11.	A400H10	Head gland
12.	A400H11	Retainer ring
13.	A400H12	O-ring, 2" ID x 3/16, 2 used (early -
	A60H61	T-ring, 2" ID 1 used (late models)
14.	A400H13	Head cap
15.	A22H18	Capscrew, 1/4" x 1" NC
16.	A400H14	Wiper seal
	A400H15	Packing kit <i>A22H27</i> contents
	A400H15A	1 A400H04 1 <i>A22H27</i> A400H16 1 (A60H61 late)
		2 A400H05 1 A400H11 1 A400H14
		2 A400H06 2 A400H12 - early

NOTE:

When ordering for 4" bore cylinders,
 please specify 4" bore.

ILLUSTRATION HYDRAULIC CYLINDER

