



Quality

Equipment

PARTS MANUAL

Manufacturer:

ASHLAND INDUSTRIES, INC.

P.O. BOX 717 ASHLAND, WISCONSIN 54806



MODEL 700

MODEL 700 SCRAPER

HOW TO ORDER PARTS:

IMPORTANT

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

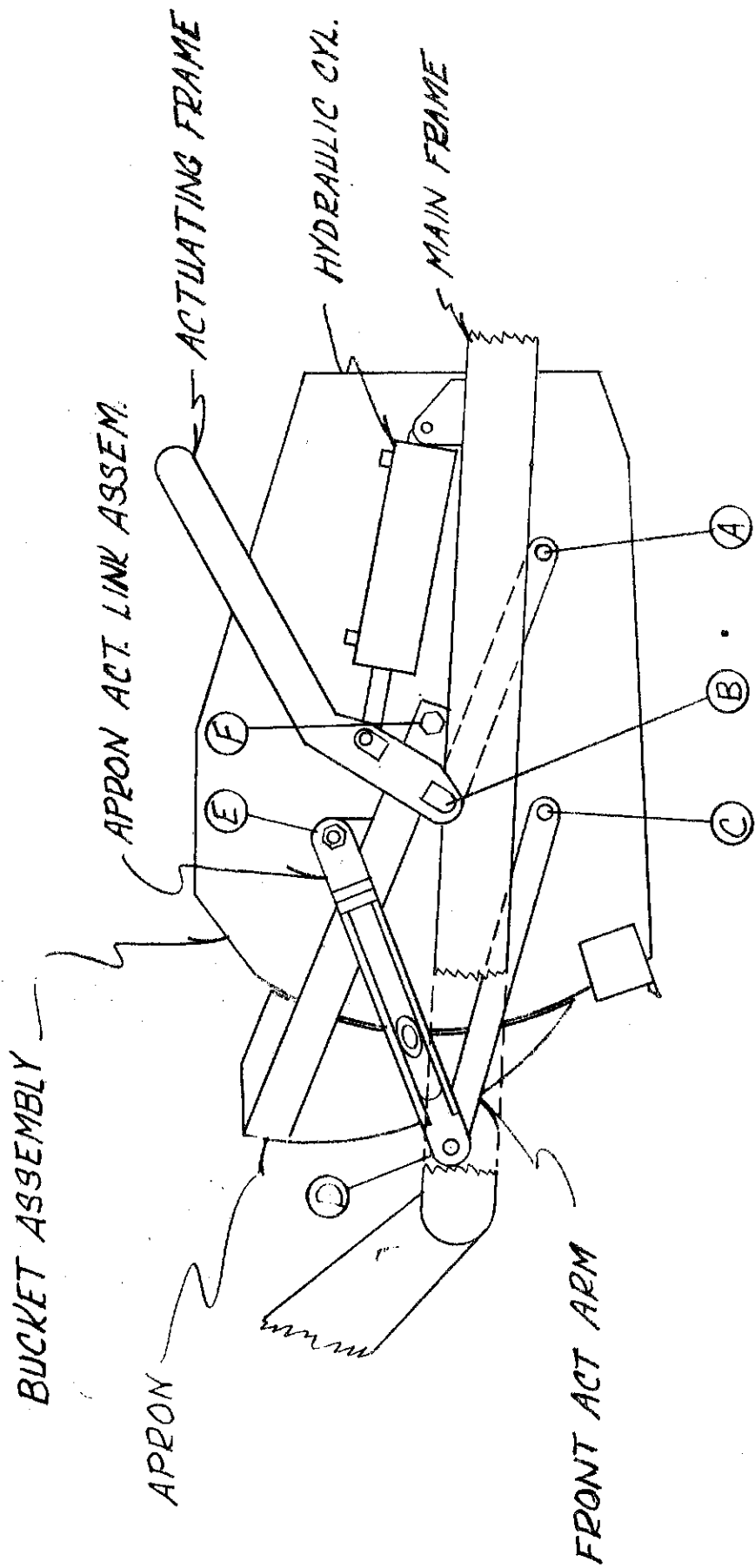
Unless this is done, we cannot provide prompt service or assure shipment of correct parts.

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ILLUSTRATION - ASSEMBLY



ASSEMBLY INSTRUCTIONS FOR MODEL 700 SCRAPER
(Refer to illustration on Page 1)

1. A suitable hoist or lift should be available for assembly.
2. Pack wheel bearings with grease and install hubs to rear spindles and to front axle assembly on model 700D scrapers.
3. Install rear spindles to frame in lowest possible setting to obtain the maximum spreading depth between cutting edge and ground. If less depth of spread is desired, select a lower setting or reverse the spindle - bottom to top. Install wheels with mounted tires to hubs.

(Steps 4 and 5 refer to model 700D scrapers only.)

4. Raise the front of the frame and remove the two 5/8" x 4" bolts which hold the cast socket halves inside the gooseneck post. Remove the socket halves.
5. Roll the pole and axle assembly directly under the gooseneck and place the cast socket halves around the ball swivel 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 lowering gooseneck.) Replace the two 5/8" x 4" bolts and tighten securely. Install long shank grease fitting into hole provided.
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. (Point A) Insert 1-1/2" x 2-3/4" pins (with tab type head) from the inside of the bucket. Secure with 5/8" x 1-1/2" NF bolt through bucket side with the nut and lock washer to the outside.
7. Connect a short chain from the cutting edge to the cross pipe of the actuating frame then raise the bucket and actuating frame assembly over the main frame and lower into place so the front of the actuating frame can be connected to the 1-3/4" bushing on each side of the frame. (Point B) Secure with 5/8" x 1-1/4" NC capscrews and lockwashers.
8. Install the actuating arm bars to the front holes in the bucket. (Point C) Insert 1-1/2" x 2-3/4" pins (with tab type head) from the inside of the bucket. Secure with 5/8" x 1-1/2" NF bolt through bucket side with nut and lock washer on the outside.
9. Lift the end of actuating arms and connect to the brackets on the front frame crossmember using 1-1/2" x 4-1/2" pins. (Point D) Do not insert the pins completely.
10. Attach the apron actuating links (linkage with built-in spring) to the bracket on each apron arm, (Point E) using the 1-5/8" x 1-1/4" shoulder pins, (with grease hole in threaded end). Be sure the open end of the tube containing spring is facing downward.

ASSEMBLY INSTRUCTIONS FOR 700 SCRAPER (Continued)

11. Raise the apron over the scraper and lower into place so the hole in the end of the arms aligns with the hole in each side of the bucket walls. (Point F) Attach with 1-5/8" to 1-1/4" shoulder pins (with grease hole in hexagon head).
12. Connect the opposite end of the apron actuating links, referred to in step 10, to the bracket on the front frame crossmember, referred to in step 9, adjacent to the actuating arms connected from the bucket. (Point D) Insert the pins the remainder of the way and secure tab to bracket with 1/2" NC x 1-1/4" capscrew and lockwasher.
13. Installing 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 1-1/4" x 6" pin at the rod end of the cylinder. Secure with 1/2" NC x 1" capscrew and lockwasher.
 - B. Install 1/2" 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 1/2" x 18" hose from the forward pipe line on the frame crossmember to the base (rear) port of the cylinder.
 - D. Connect a 1/2" x 38" hose from the pipe line on the back side of the frame crossmember to the center port of the cylinder.
 - E. Connect a 1/2" x 38" hose from the center pipe line on the frame crossmember to the extreme forward port of the cylinder.
 - F. Install the cylinder with 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 1/2" NPT 90° swivel adapters in both ports of the cylinder. Tighten so that the swivel will be facing toward the rear.
 - H. Connect a 1/2" x 18" hose from the forward pipe line on the frame crossmember to the base (rear) port of the cylinder (same as left cylinder).
 - I. Connect a 1/2" x 38" hose from the remaining pipe line on the frame crossmember to the forward port of the cylinder.

ASSEMBLY INSTRUCTIONS FOR 700 SCRAPER (Continued)

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 grease hole facing up. Insert the 1-1/8" x 3-1/8" sq. head pin at the base of the cylinder. Secure with 3/16" x 1-1/2" cotter pin. Use 1-1/8" x 3-1/2" sq. head pin at the rod end of the cylinder and secure with a 3/16" x 1-1/2" cotter pin.

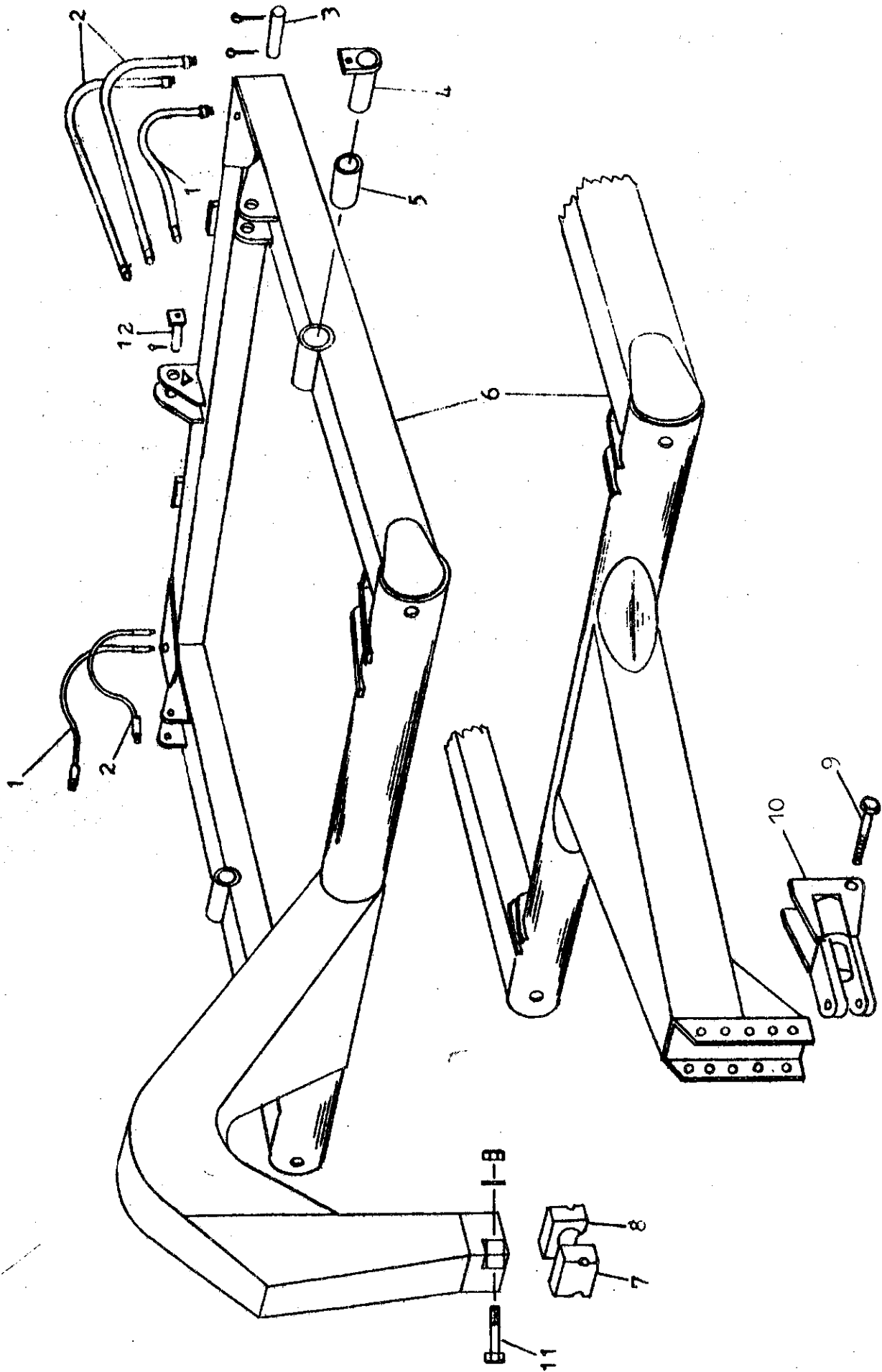
K. Install 3/8" x 1/2" x 90° swivel adapters in the two ports of the rear cylinder. Tighten so the 1/2" female threads face toward each other and somewhat to the left of the scraper.

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.

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.

ILLUSTRATION - FRAME ASSEMBLY

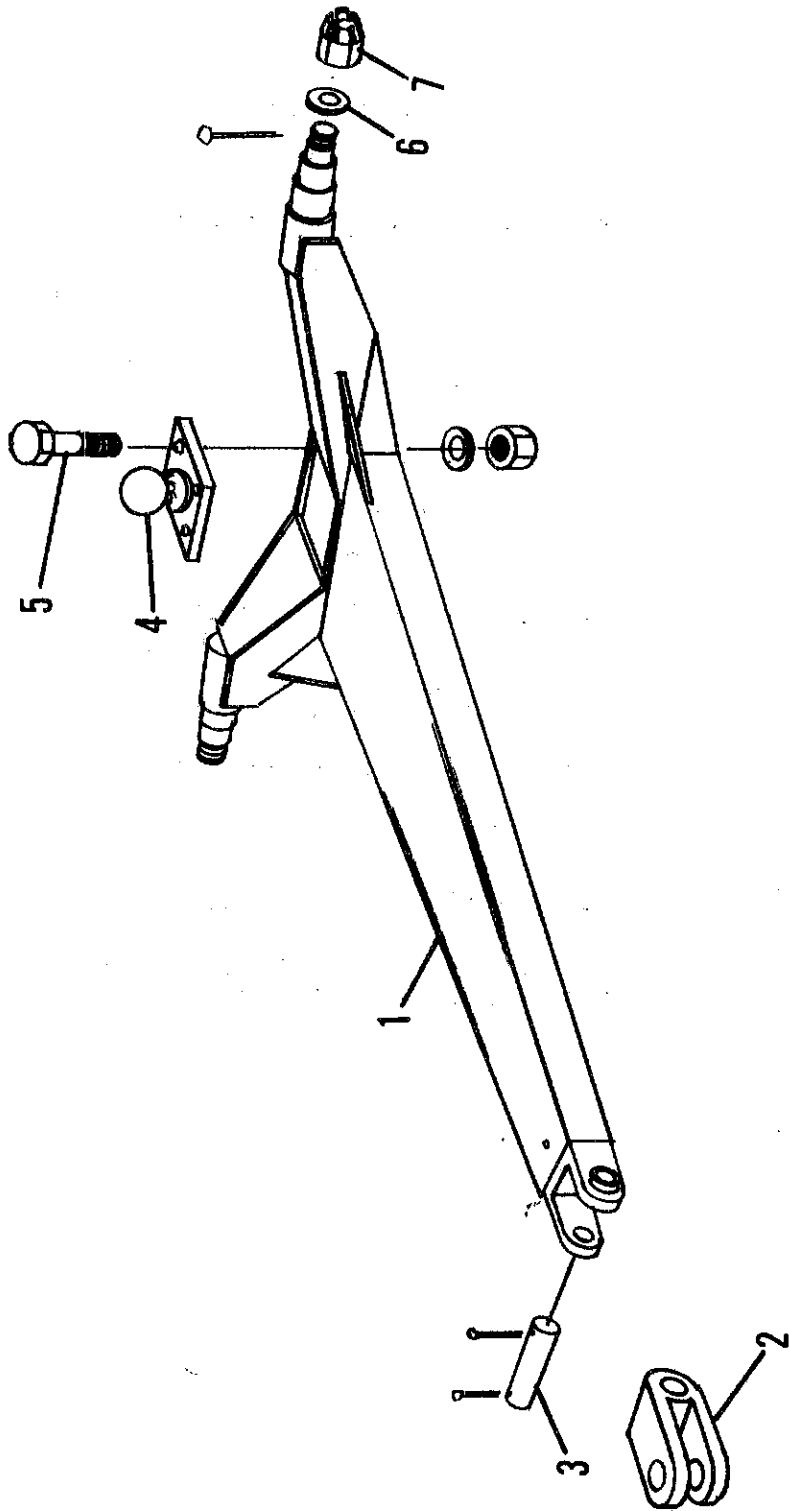


P A R T S L I S T
F R A M E A S S E M B L Y

MODEL 700 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A60H01A	Hydraulic hose, 1/2" x 18"
2.	A400H01	Hydraulic hose, 1/2" x 38"
3.	A45003	Pin, 1-1/8" x 3-1/4" with 3/16" x 1-1/2" cotter pins
4.	A40016A	Pin, 1-3/4" x 6-3/8" with tab head
5.	A6001A	Bushing, 2-1/8" x 1-3/4" x 4-3/8"
6.	A60001B A60003B	Frame - 4 wheel Frame - 2 wheel
7.	A40005 A2205	Cast socket half, front (w/zerk hole) Zerk w/long straight shank
8.	A40004	Cast socket half, rear
9.		Bolt, 1-1/4" NF x 7" w/locknut
10.	A8033	Swivel hitch
11.		Bolt, 5/8" NC x 4" w/nut & lockwasher
12.	A45001	Pin, 1-1/8" x 3-1/8" w/sq. head Cotter pin, 3/16" x 1-1/2"

ILLUSTRATION - POLE & AXLE ASSEMBLY

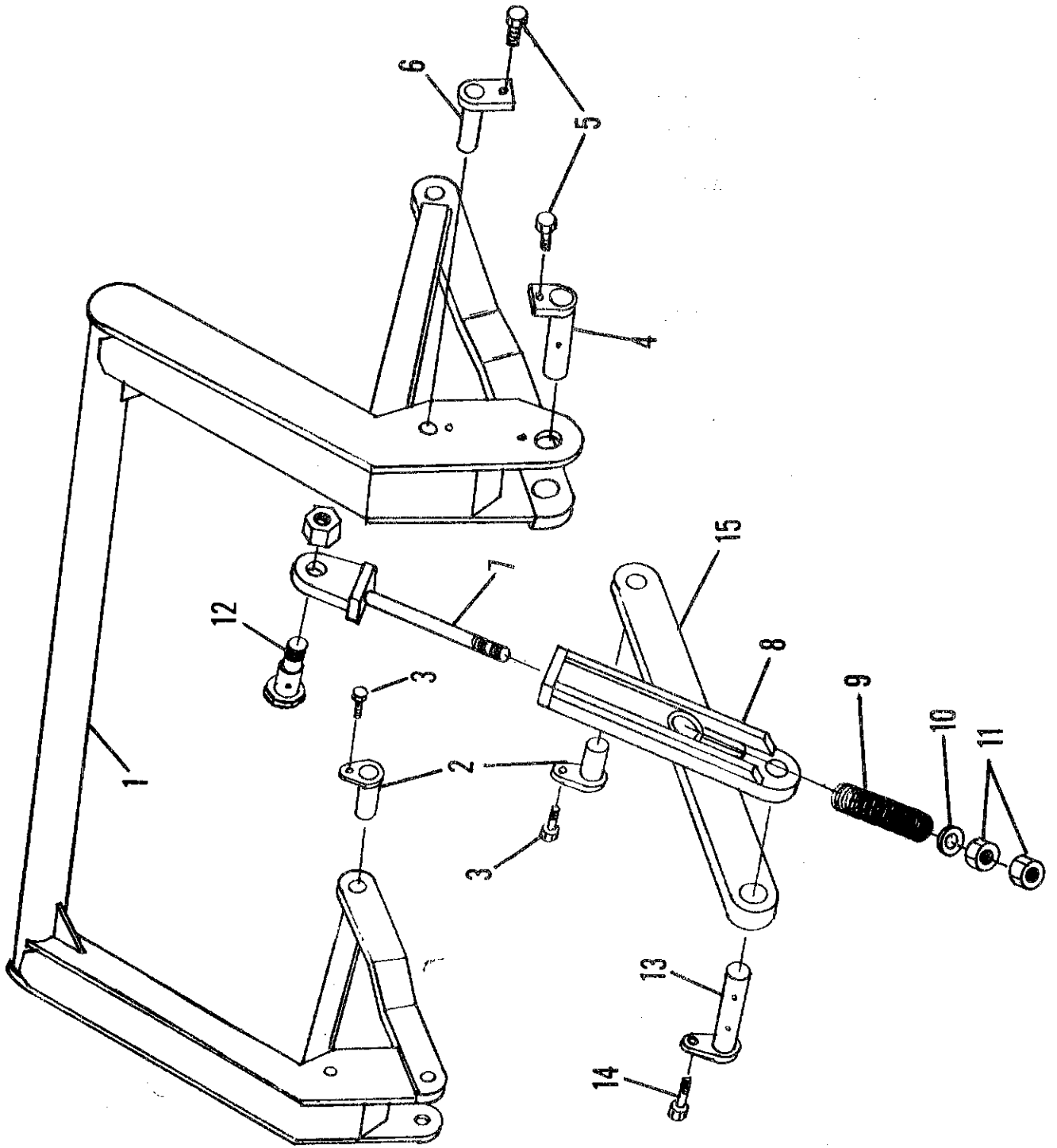


P A R T S L I S T
P O L E & A X L E A S S E M B L Y
(4 Wheel Models only)

MODEL 700 SCRAPERS

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A40007D	Pole & Axle Assembly
2.	A6013	Swivel hitch, double lip
	A6013A	Swivel hitch, single lip
3.	A6014	Pin, 1-1/4" x 5-3/4", w/5/16" NC x 2-1/2" bolt
4.	A40006	Ball Swivel
5.	---	Bolt, 3/4" x 2-1/2" w/nut & lockwasher
6.	A2239	Washer, special 7/8" flat
7.	---	Nut, 7/8" NF castellated

ILLUSTRATION - ACTUATING ASSEMBLY

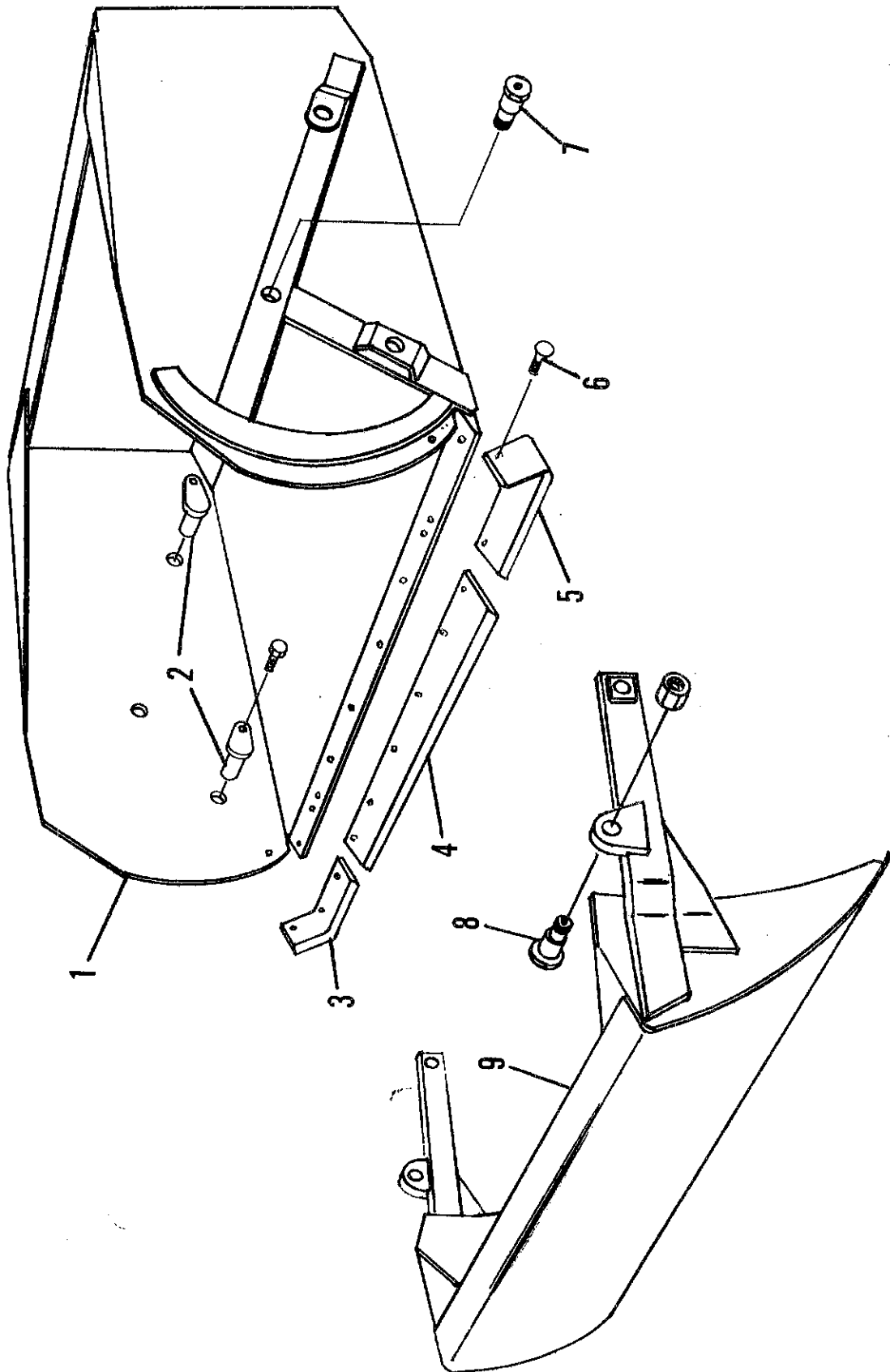


P A R T S L I S T
A C T U A T I N G A S S E M B L Y

MODEL 700 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A7004	Actuating frame
2.	A8005	Pin, 1-1/2" x 2-3/4" with locking head
3.	---	Bolt, 5/8" x 1-1/2" NF w/nut & lock washer
4.	A40016A	Pin, 1-3/4" x 6-5/8" with locking head
5.	---	Capscrew, 5/8" x 1-1/4" NC w/lockwasher
6.	A7010	Pin, 1-1/4" x 6" w/locking head
7.	A6015	Actuating link (Upper half)
8.	A6016	Actuating link (Lower half)
9.	A6018	Compression Spring, 1" ID x 2" OD x 10" long
10.	---	Washer, 1" narrow rim
11.	---	Nut, 1" NF
12.	A6019	Shoulder pin, 1-5/8" to 1-1/4" w/zerk on threaded end
	---	Nut, 1-1/4" NF, lock type (thin)
13.	A6020	Pin, 1-1/2" x 4-1/2" w/locking head & zerk
14.	---	Capscrew, 1/2" NC x 1-1/4" w/lockwasher
15.	A7006	Actuating arm

ILLUSTRATION - BUCKET & APRON ASSEMBLY



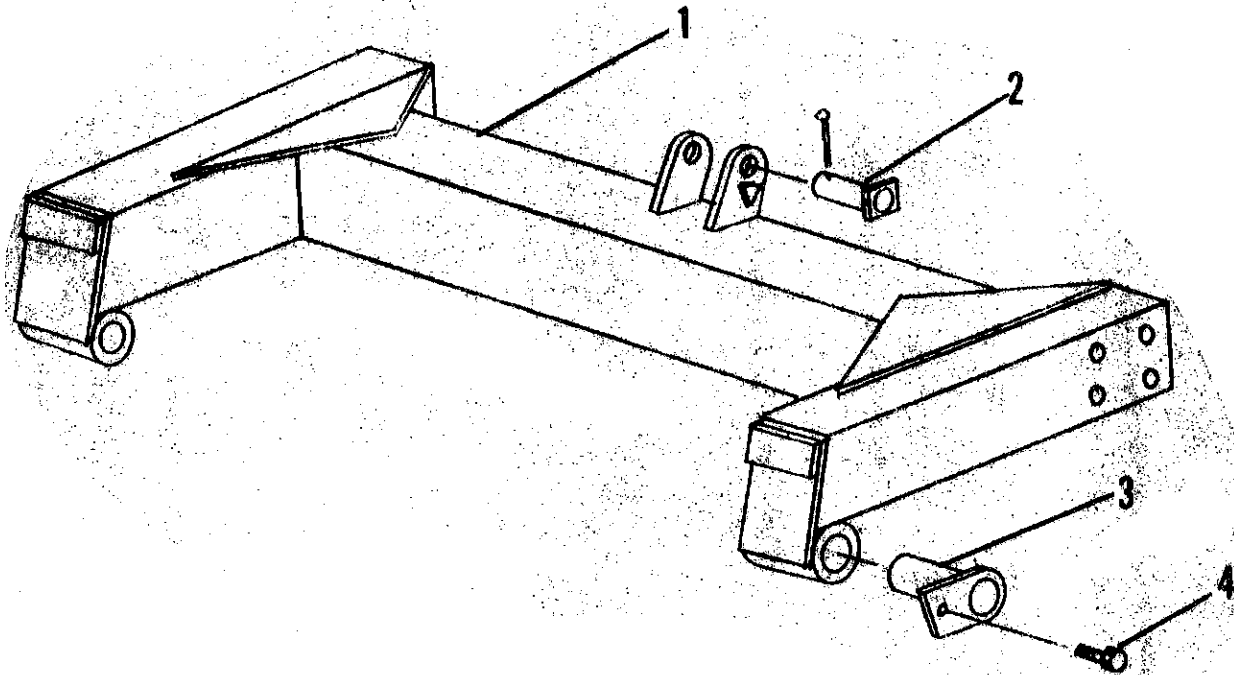
PARTS LIST

BUCKET AND APRON ASSEMBLY

MODEL 700 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A7008	Bucket
2.	A8005	Pin, 1-1/2" x 2-3/4" w/locking head
	---	Bolt, 5/8" x 1-1/4" NF w/nut & lockwasher
3.	A2225	Right cutting edge, 6"
4.	A8030	Center cutting edge, 8" x 54"
5.	A2222	Left cutting edge, 6"
6.	---	Plow bolt, 1/2" x 1-3/4" w/nut
	---	Plow bolt, 5/8" x 2" w/nut
7.	A6010	Shoulder pin, 1-5/8" to 1-1/4" w/zerk in head
	---	Nut, 1-1/4" NF, lock type
8.	A6019	Shoulder pin, 1-5/8" to 1-1/4" w/zerk in threaded end
	---	Nut, 1-1/4" NF, lock type (thin)
9.	A7009	Apron

ILLUSTRATION
REAR FRAME SECTION

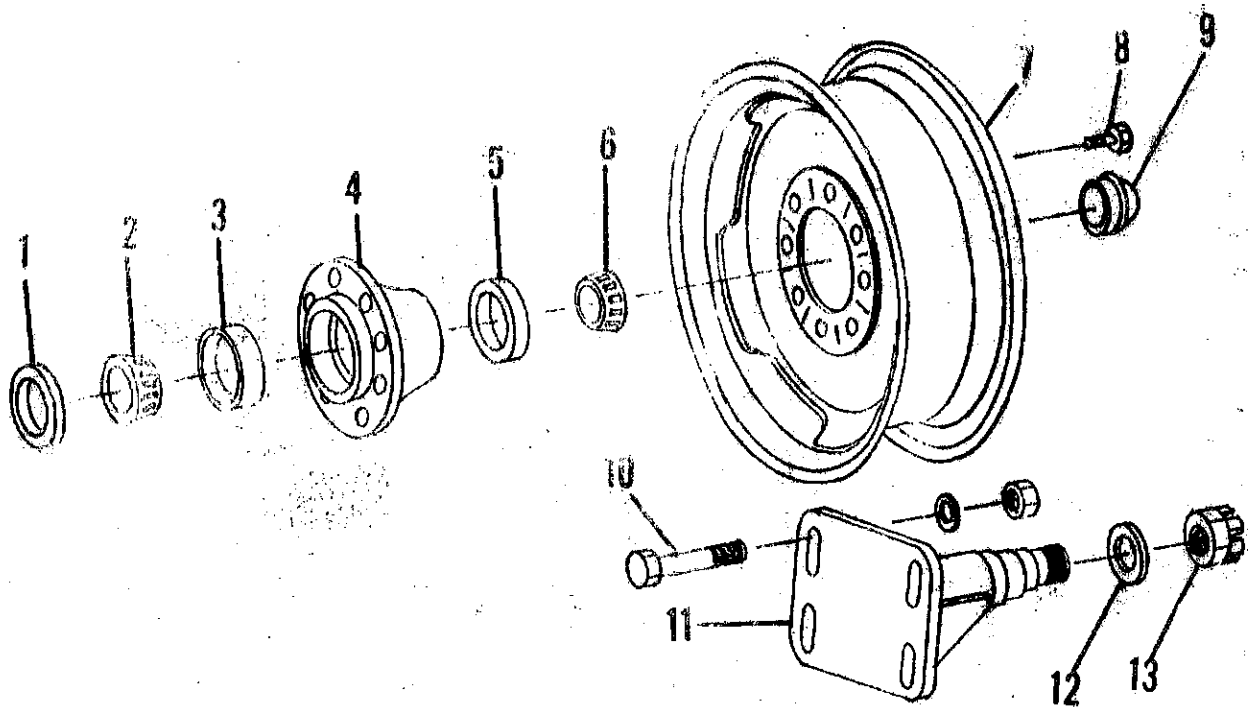


PARTS LIST
REAR FRAME SECTION

MODEL 700 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A60009	Frame section
2.	A60002	Pin, 1-1/8" x 3-5/8" w/sq. head
	---	Cotter pin, 3/16" x 1-1/2"
3.	A40016	Pin, 1-1/2" x 6-3/8"
4.	---	Capscrew, 1/2" x 1" NC w/lockwasher
	A45H06	1/2" x 24" hydraulic hose
	A45H07	1/2" x 3/8" x 90° swivel adapter

ILLUSTRATION
WHEEL, HUB & SPINDLE
ASSEMBLY



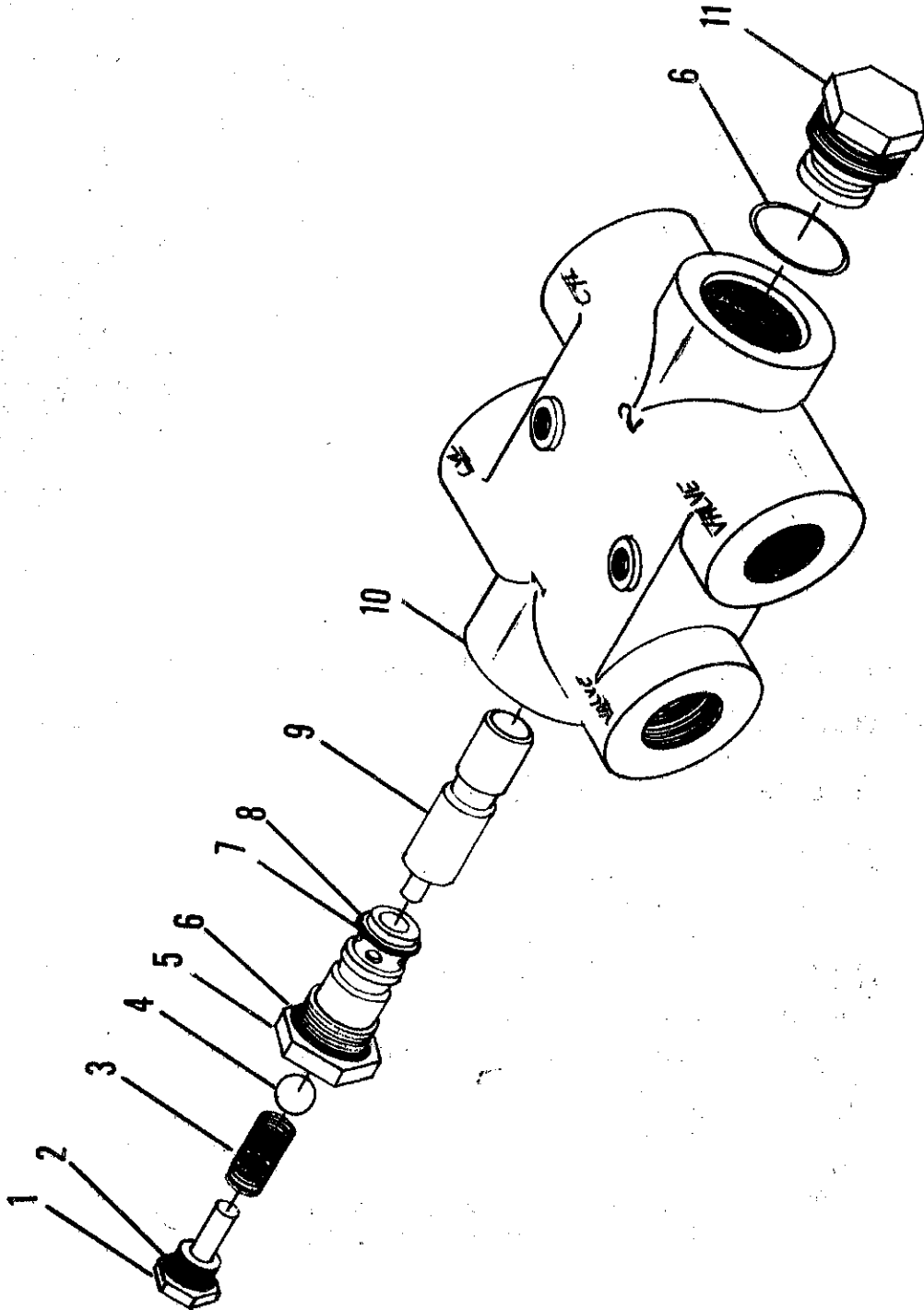
PARTS LIST

WHEEL, HUB & SPINDLE ASSEMBLY

MODEL 700 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A4512	Grease seal
2.	A4513	Bearing cone (inner)
3.	A4514	Bearing cup (inner)
4.	A4515	Hub (less bearing)
5.	A2233	Bearing cup (outer)
6.	A4516	Bearing cone (outer)
7.	A4521A	Wheel, 20"DC
	A6022	Wheel, 16" x 11" DC (opt.)
8.	A4519	Wheel bolt, 9/16" NF
9.	A2235	Hub cap
10.		Bolt, 3/4" x 6" w/flat washer & nut
11.	A4520	Spindle
12.	A2239	Washer, special, 7/8" flat
13.		Nut, 7/8" NF castellated

ILLUSTRATION SINGLE LINE LOCK VALVE



P A R T S L I S T
S I N G L E L I N E L O C K V A L V E

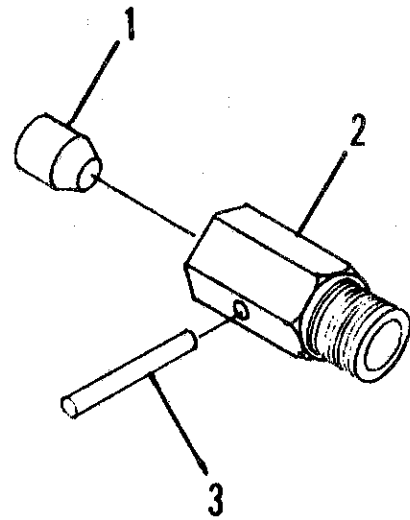
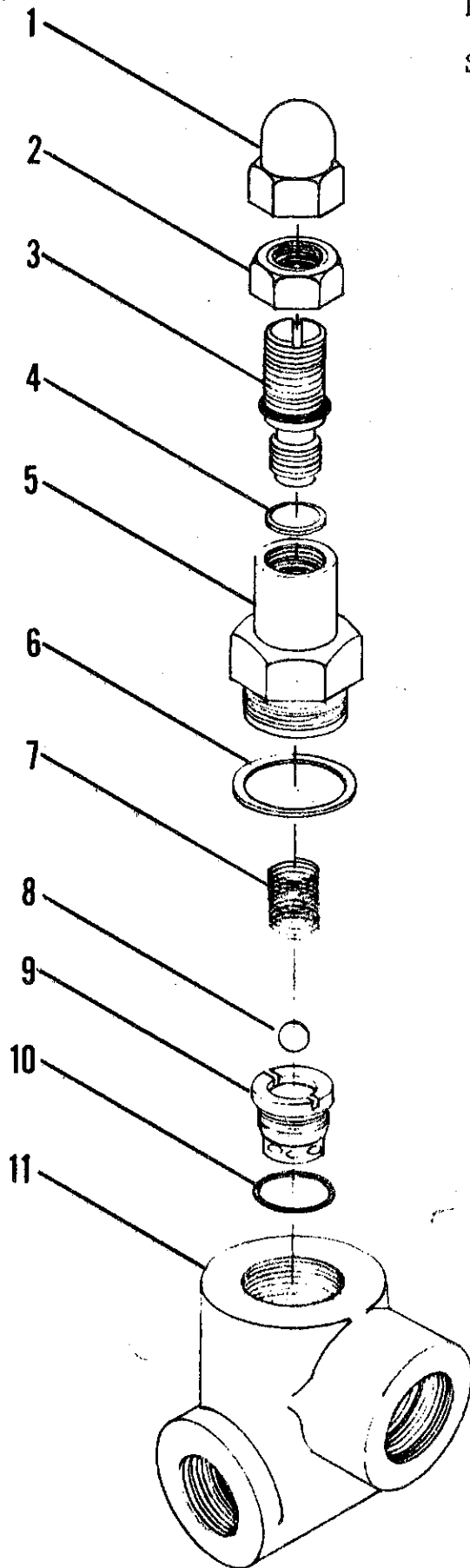
MODEL 700 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
* 1.	A600H01	Valve stem plug
* 2.	A600H02	O-ring seal
* 3.	A600H03	Spring
* 4.	A600H04	Ball valve
* 5.	A600H05	Valve seal sleeve
* 6.	A600H06	O-ring
* 7.	A600H07	O-ring
* 8.	A600H08	Back up washer
* 9.	A600H09A	Plunger Kit
10.	A600H10	Valve housing
*11.	A600H11	Plug
	A600H12	Complete valve assembly

* Parts sold in kit only, Kit No. A600H09A

ILLUSTRATION

PRESSURE RETAINING
SEQUENCE VALVE



ILLUSTRATION

LINE CHECK VALVE

P A R T S L I S T

P R E S S U R E R E T A I N I N G S E Q U E N C E V A L V E

MODEL 700 SCRAPER

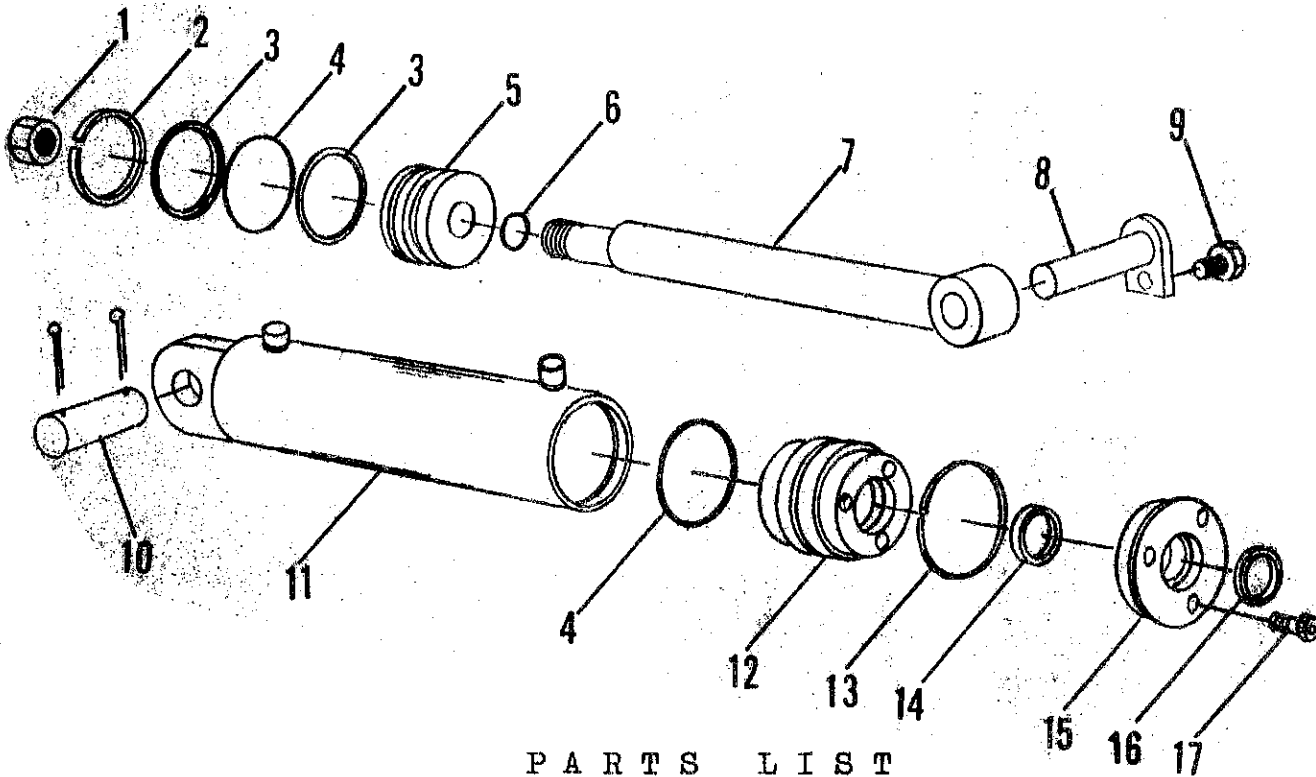
<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A600H13	Acorn cap
2.	A600H14	Jam nut
3.	A600H15	Adjusting screw
4.	A600H16	Adjusting screw o-ring
5.	A600H17	Valve body
6.	A600H18	Valve body gasket
7.	A600H19	Spring
8.	A600H20	Ball
9.	A600H21	Relief seal
10.	A600H22	Relief seat o-ring
11.	A600H23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

P A R T S L I S T

L I N E C H E C K V A L V E

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A600H25	Check poppet
2.	A60026	Valve body
3.	A600H27	Taper pin
	A600H28	Complete check valve assembly

RIGHT HYDRAULIC CYLINDER
(5" BORE - 16" STROKE)

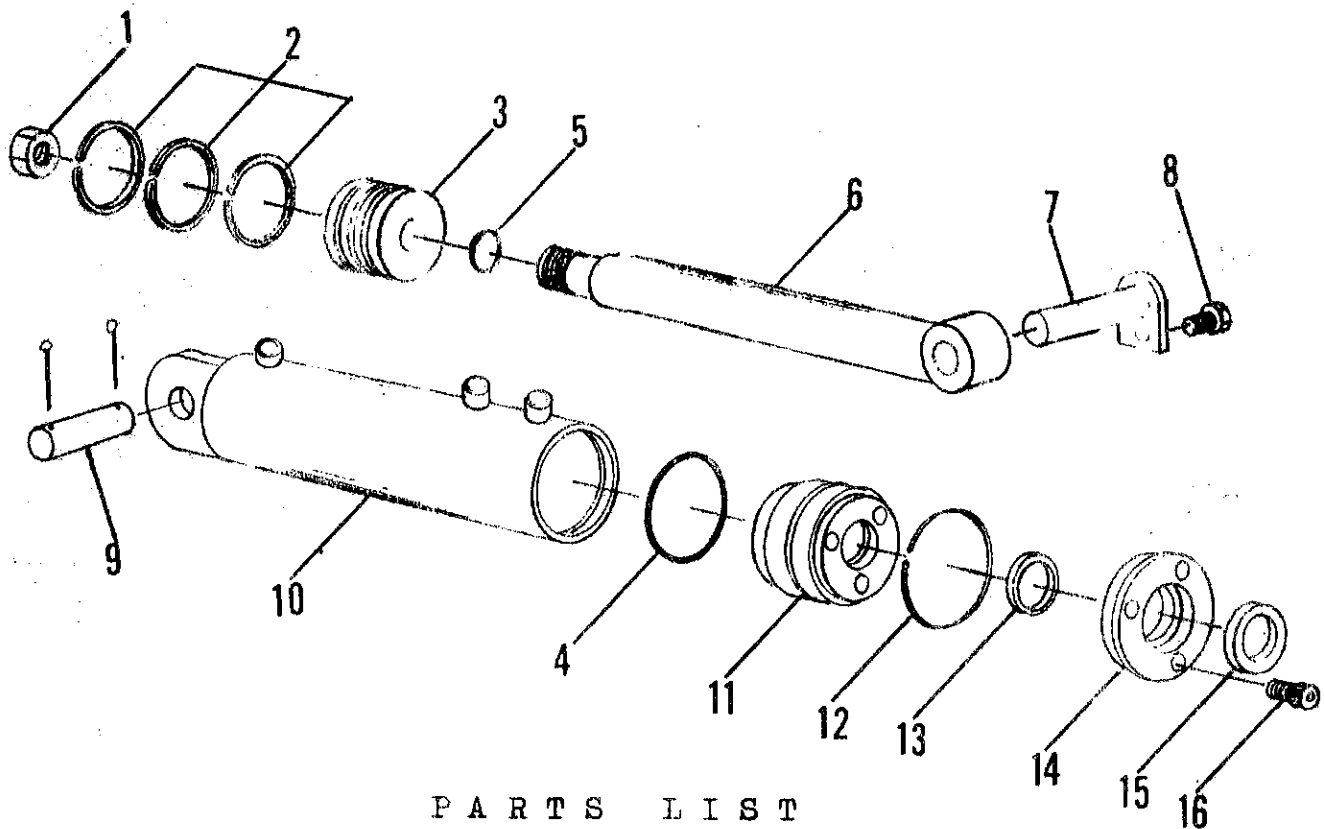


P A R T S L I S T

MODEL 700 SCRAPER
Cylinder Part No. A516H118-114

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A400H17	Piston nut, 1-1/4"
2.	A400H04	Cast iron ring, 5" OD
3.	A400H05	Back up washer, 5" OD
4.	A400H06	O-ring seal, 5" OD x 1/4"
5.	A400H07	Piston, 5"
6.	A60H52 <i>A22H27</i>	Piston O-ring, 1-1/4" ID x 1/8"
7.	A400H08	Shaft, 2" dia.
8.	A7010	Pin, 1-1/4" x 6"
9.		Capscrew, 1/2" NC x 1" w/lockwasher
10.	A45003	Pin, 1-1/8" x 3-1/4"
		Cotter pin, 3/16" x 1-1/2"
11.	A400H09	Barrel Assembly, 5" ID
12.	A400H10	Head gland
13.	A400H11	Retainer ring
14.	A400H12	O-ring
	A400H12A	Back up washer
15.	A400H13	Head cap
16.	A400H14	Wiper seal, 2" ID
17.	A22H18	Capscrew, 1/2" NC x 1"
	A400H15B	Packing kit containing:
	1 A400H04	1 A400H11
	2 A400H05	2 A400H12
	2 A400H06	1 A400H12A
	1 A60H52	1 A400H14

ILLUSTRATION
LEFT HYDRAULIC CYLINDER
(3 PORT - 5" BORE - 16" STROKE)

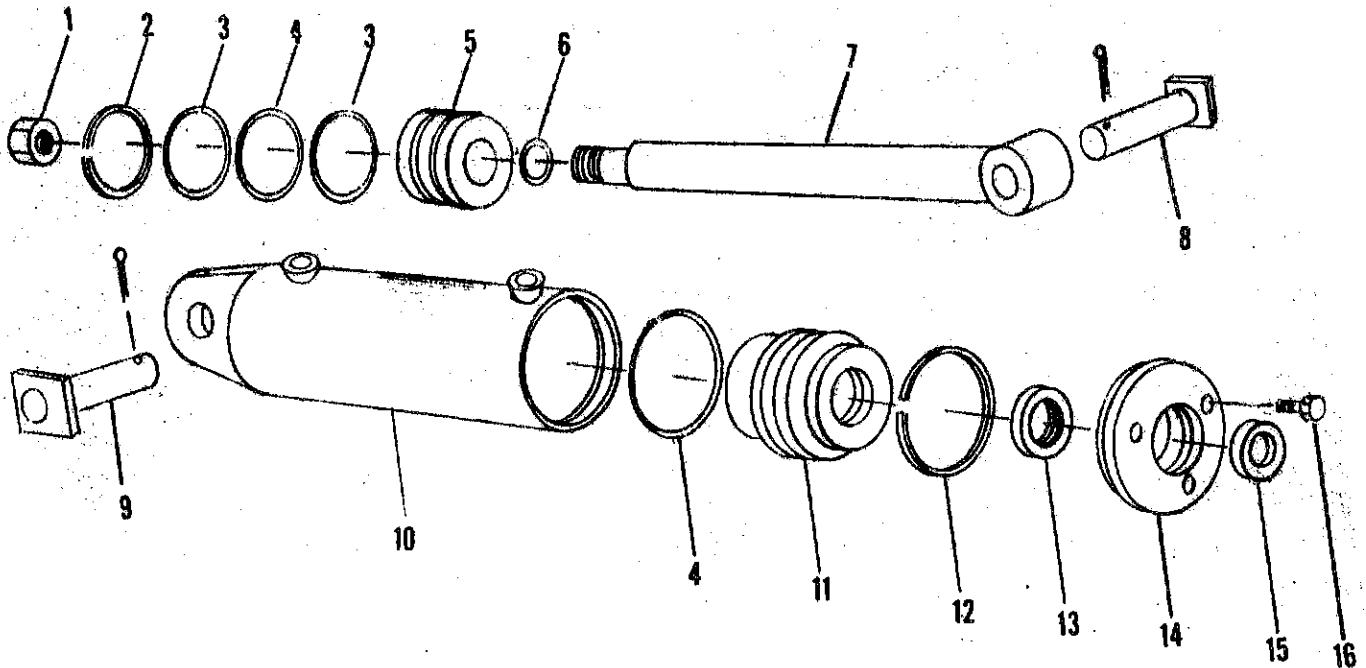


P A R T S L I S T

MODEL 700 SCRAPER
Cylinder Part No. AH516H118-114

KEY NO.	PART NO.	DESCRIPTION
1.	A400H17	Piston nut, 1-1/4" NF
2.	A400H04	Cast iron ring, 5" OD
3.	A600H50	Piston, 5"
4.	A400H06	O-ring, 5" OD x 1/4"
A22H27 5.	A60H52	Piston O-ring, 1-1/4" ID x 1/4" 1/8"
6.	A400H08	Shaft, 2" dia.
7.	A7010	Pin, 1-1/4" x 6"
8.		Capscrew, 1/2" NC x 1"
9.	A45003	Pin, 1-1/8" x 3-1/4"
10.	A600H30	Cotter pin, 3/16" x 1-1/2"
11.	A400H10	Barrel assembly w/sequence porting
12.	A400H11	Head gland
13.	A400H11	Retainer ring
	A400H12	O-ring
	A400H12A	Back up washer
14.	A400H13	Head cap
15.	A400H14	Wiper seal, 2" ID
16.	A22H18	Capscrew, 1/4" NC x 1"
	A600H53B	Packing kit containing:
	3 A400H04	1 A400H11
	1 A400H06	1 A400H14
	1 A60H52	2 A400H12
		1 A400H12A

ILLUSTRATION
HYDRAULIC CYLINDER
(4" BORE - 8" STROKE)

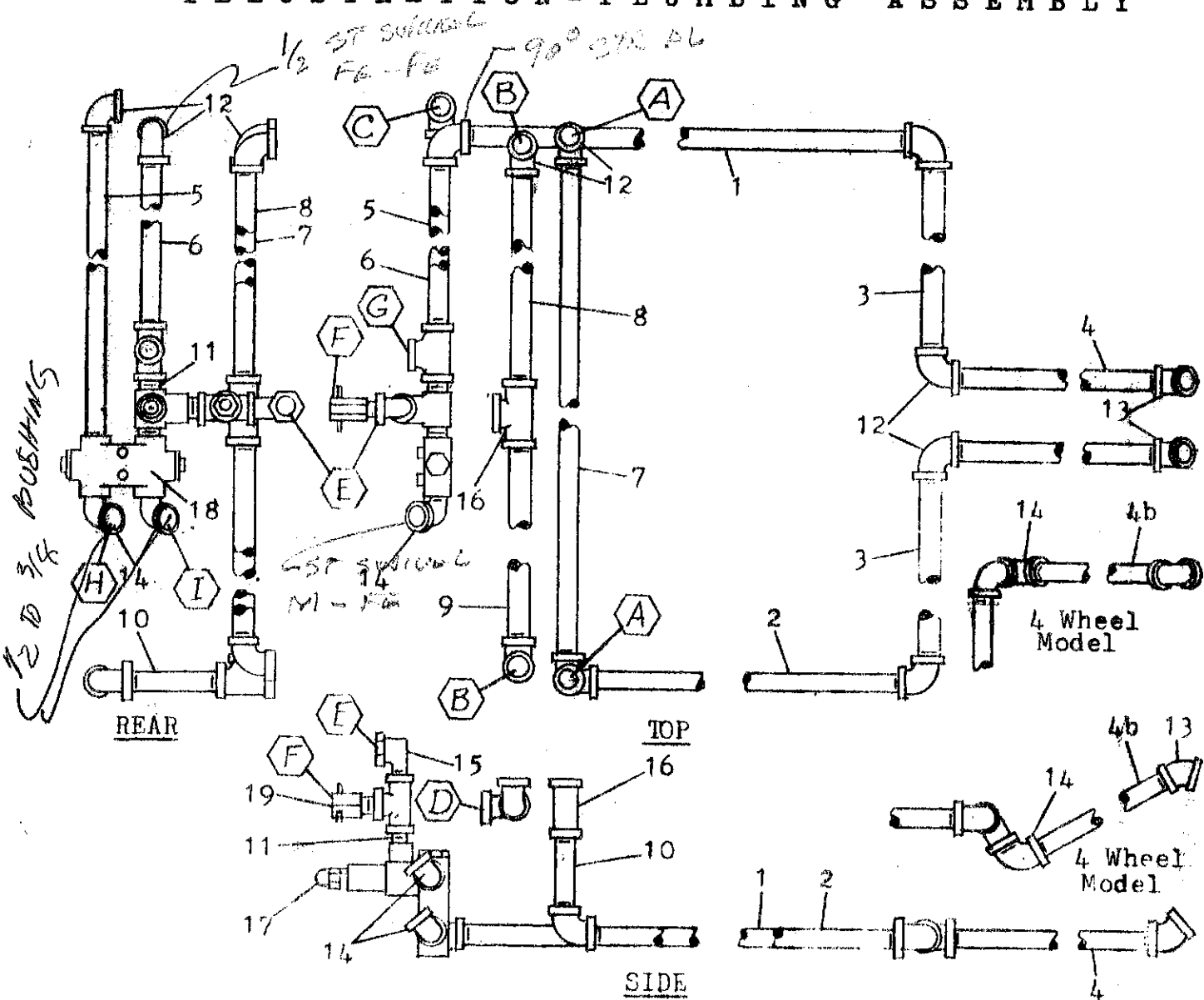


P A R T S L I S T

MODEL 700 SCRAPER
Cylinder Part No. A48H118

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A300H03	Piston nut, 1" NF
2.	A300H04	Cast iron ring, 4" OD
3.	A300H05	Back up washer
4.	A300H06	O-ring, 4" OD, 3/16"
5.	A300H07	Piston, 4" OD
6.	A45H05	Piston O-ring, 1" ID
7.	A600H32	Shaft 1-1/2"
8.	A60002	Pin, 1-1/8" x 3-5/8" w/sq. head
9.	A45001	Cotter pin, 3/16" x 1-1/2"
		Pin, 1-1/8" x 3-1/8" w/sq. head
		Cotter pin, 3/16" x 1-1/2"
10.	A600H33	Barrel Assembly
11.	A300H11	Head gland
12.	A300H12	Retainer ring
13.	A22H15	O-ring
	A22H15A	Back up washer
14.	A300H13	Head cap
15.	A22H17	Wiper seal, 1-1/2" ID
16.	A22H18	Capscrew, 1/4" x 1"
	A300H14B	Packing kit containing:
	1 A300H04	1 A300H12
	2 A300H05	2 A22H15
	2 A300H06	1 A22H15A
	1 A45H05	1 A22H17

ILLUSTRATION - PLUMBING ASSEMBLY



PIPE AND FITTINGS

ITEM	DESCRIPTION	LENGTH	QTY.	QTY.	LG.	LOCATION
1.	1/2" std blk pipe	90-1/4	1	2	18"	A to base port side cyl.
2.	" " "	86-1/2	1	2	38"	B to rod port side cyl.
3.	" " "	44-3/4	2	1	38"	C to center port left cyl.
4.	" " "	34	2	1	24"	D to E
4b.	" " "	42-1/2	2	1	24"	F to G
5.	" " "	40	1	1	24"	H to base port rear cyl.
6.	" " "	30 3/4	1	1	24"	I to rod port rear cyl.
7.	" " "	95-1/2	1			
8.	" " "	42-1/4	1			
9.	" " "	48-1/4	1			
10.	" " "	3	1			
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		2			
	(4 wheel model requires 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			

3/8 x 90° SW NUT BL AT CYL