

MODEL I-100 SCRAPER, I-110 SCRAPER

HOW TO ORDER PARTS:

IMPORTANT

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

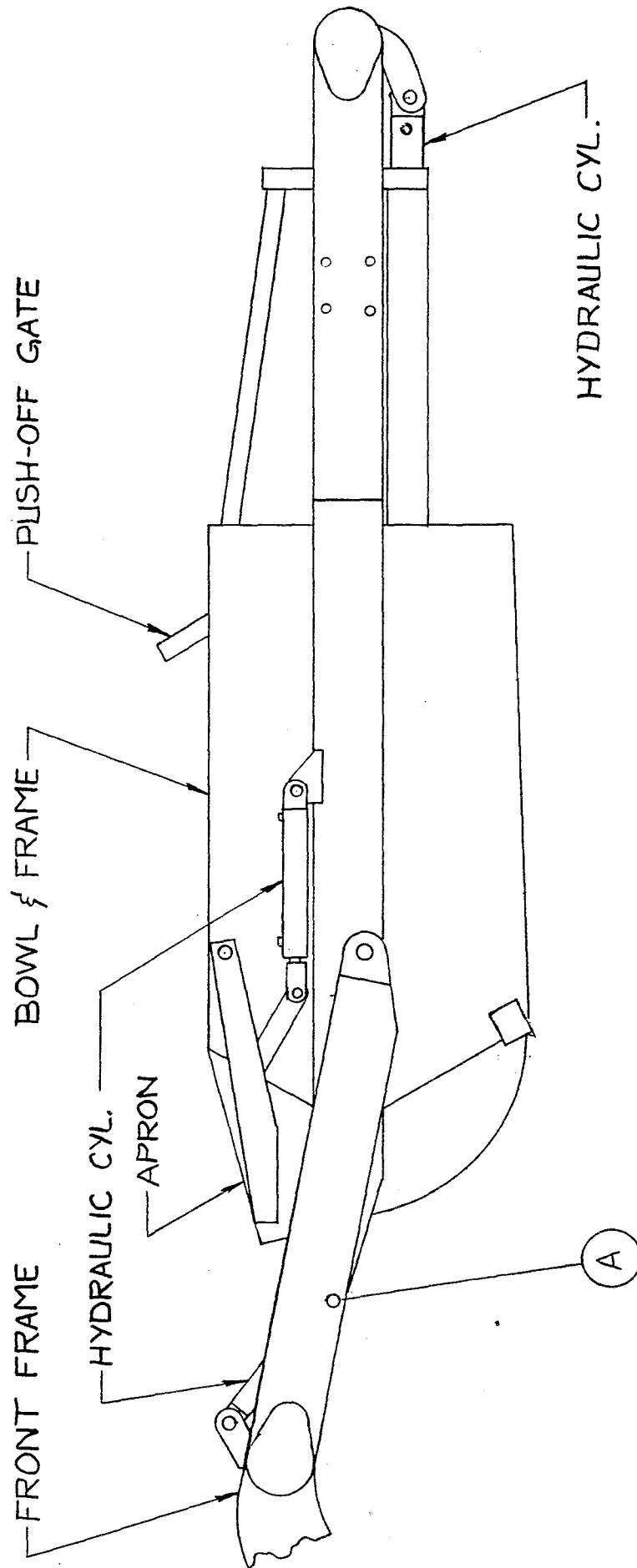
Unless this is done, we cannot provide prompt service or assure shipment of correct parts.

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ILLUSTRATION * ASSEMBLY



OPERATORS 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 TWO 4 way (double acting) hydraulic control valves.

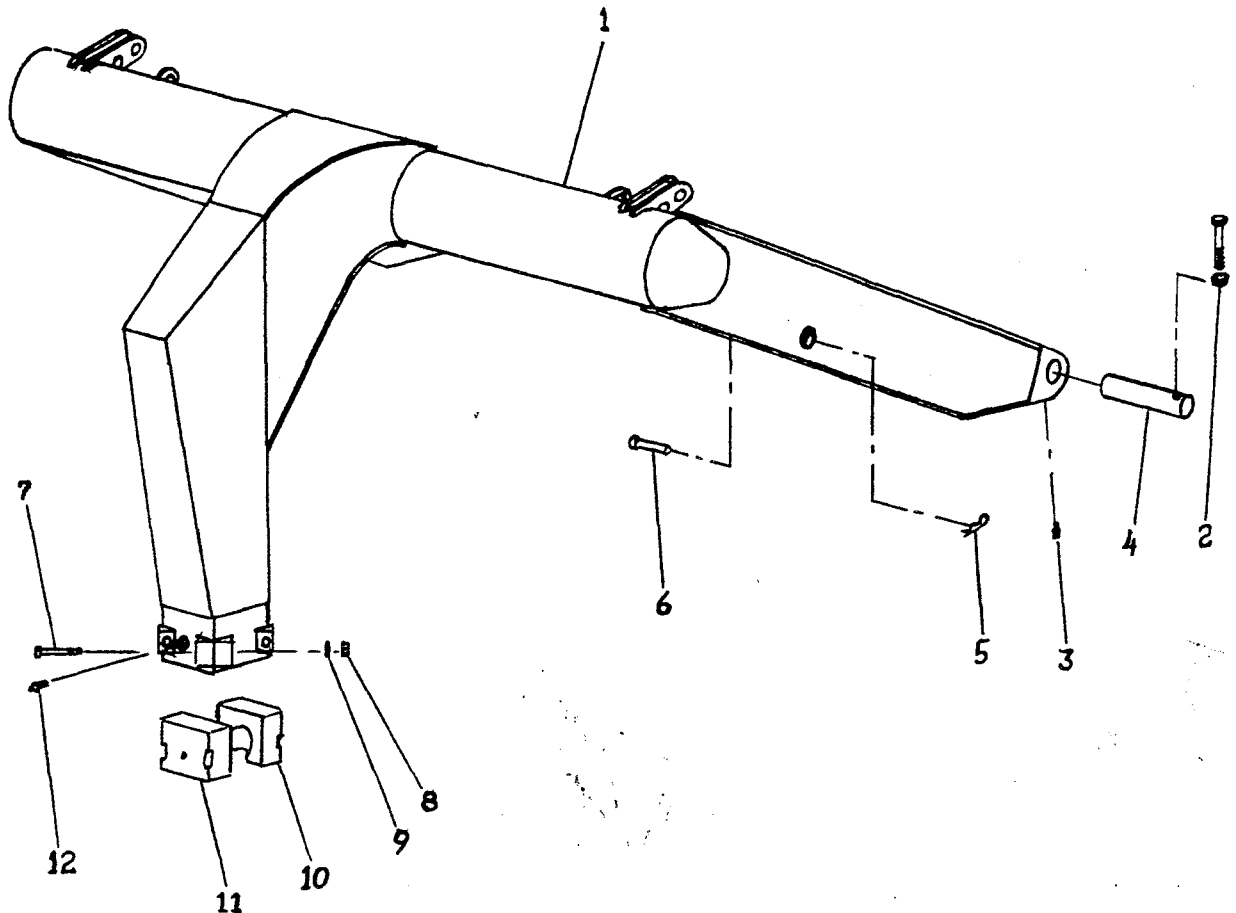
The scraper should be greased at all points where grease fittings are provided. Connect hydraulic hoses to the tractor and retract lift cylinders to remove transport lock pins (point A), then extend and retract all cylinders several times to force out any air from the hydraulic cylinders and lines. Check the oil level in the tractor hydraulic system and add to maintain the proper level. Care should be used when adding oil or when disconnecting any oil line to keep all dirt out of the oil as dirt is a major factor in the failure of hydraulic components.

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.

ASHLAND INDUSTRIES, INC.

ILLUSTRATION
GOOSENECK FRAME ASSEMBLY

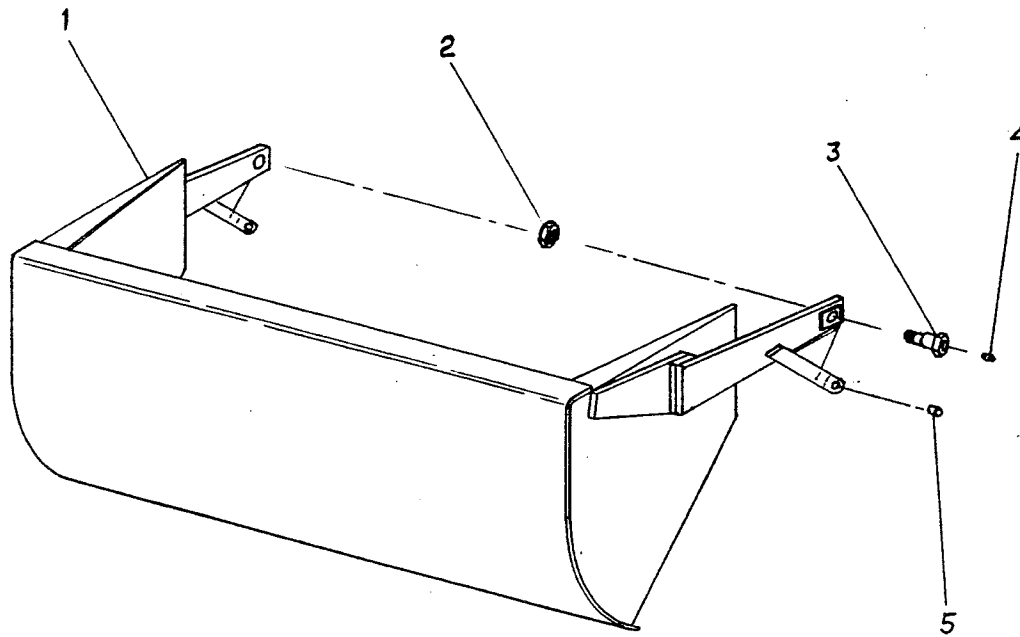


PARTS LIST

MODEL I-130 SCRAPER, OPTIONAL I-110 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A13001	Gooseneck Frame
2.	---	Bolt, 1/2 NC x 3-1/2" w/Nut
3.	---	Grease Zerk - Straight
4.	A10152A	Pin, Frame Attach
5.	---	Hair Pin
6.	A10153	Pin, Transport Lock
7.	---	Bolt, 3/4 NF x 4 1/2
8.	---	Nut, 3/4 NF
9.	---	Lockwasher, 3/4
10.	A14002	Cast Socket Half - Rear
11.	A14003	Cast Socket Half - Front w/Zerk Hole
12.	A2206	Grease Zerk - Long Shank

ILLUSTRATION
APRON ASSEMBLY

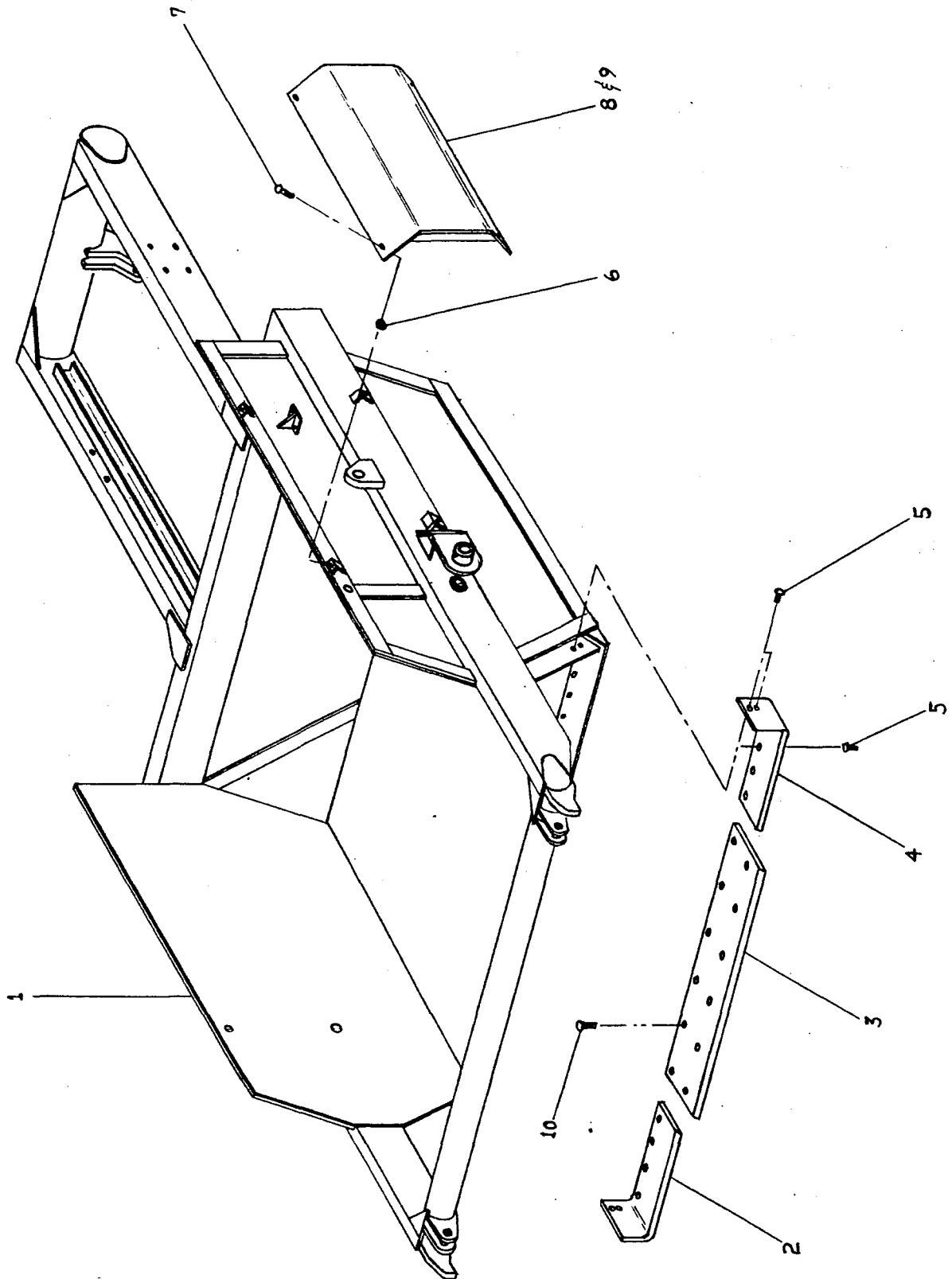


PARTS LIST

MODEL I-100 SCRAPER, I-110 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A10154	Apron
2.	---	Self Lock Nut, 1-1/4" NF
3.	A6010	Shoulder Pin, 1-5/8" to 1-1/4" w/Zerk in Head
4.	---	Grease Fitting
5.	A10155	Bushing, 1-1/2" OD x 1" ID x 1-1/8"

ILLUSTRATION
BOWL and FRAME ASSEMBLY



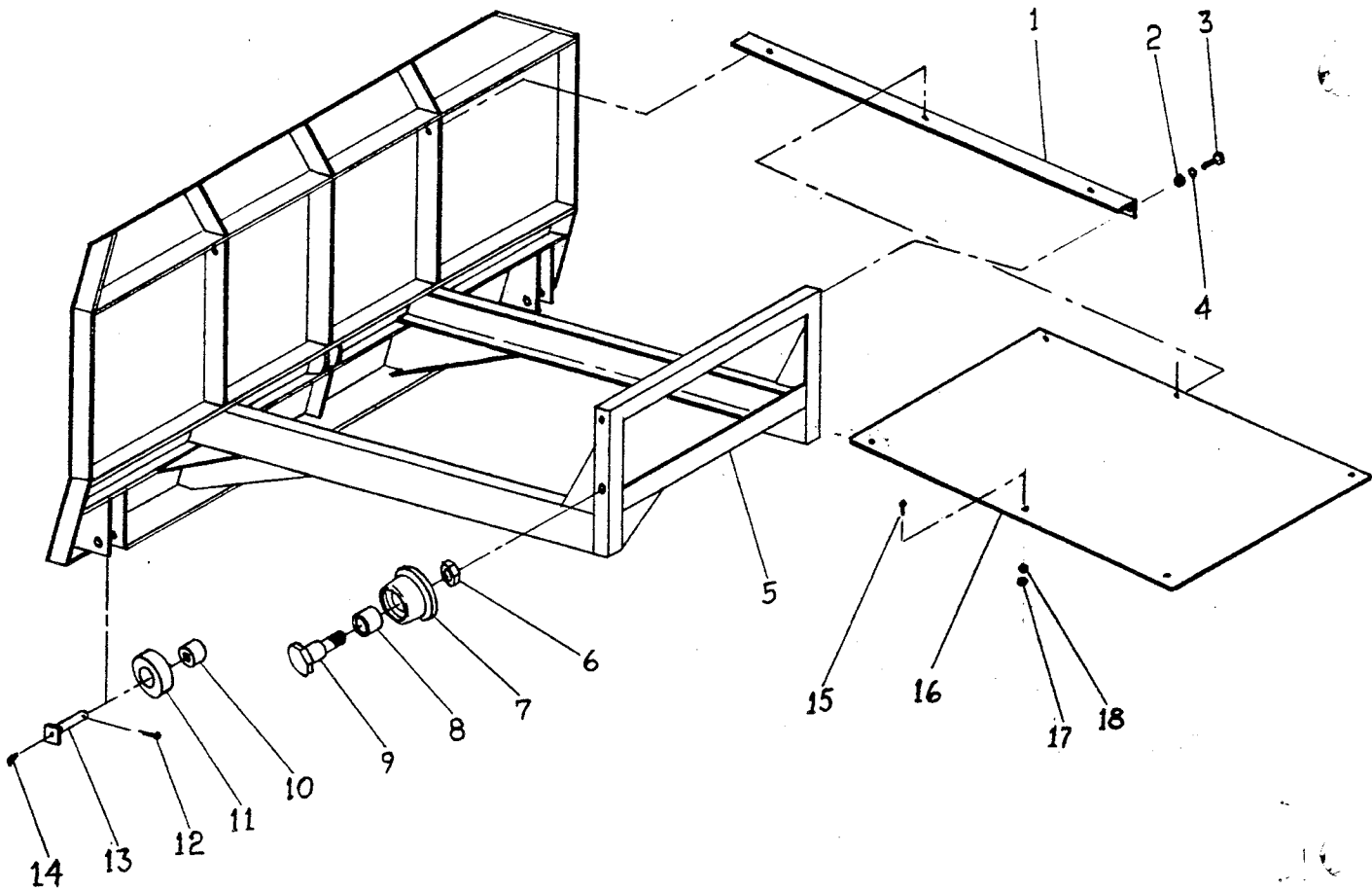
PARTS LIST
BOWL and FRAME ASSEMBLY

MODEL I-100 SCRAPER, I-110 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A10156	Bowl and Frame
2.	A10010A	Right Cutting Edge
3.	A10012	Center Cutting Edge
4.	A10011A	Left Cutting Edge
5.	---	Flow Bolt, 5/8" NC x 2" w/Nut
6.	---	Nut, 3/8" NC
7.	---	Bolt, 3/8" x 1"
8.	A10157	Left Hand Cylinder Guard
9.	A10158	Right Hand Cylinder Guard
10.	---	Flow Bolt, 5/8" NC x 2-1/2" w/Nut

ILLUSTRATION

PUSH OFF GATE ASSEMBLY

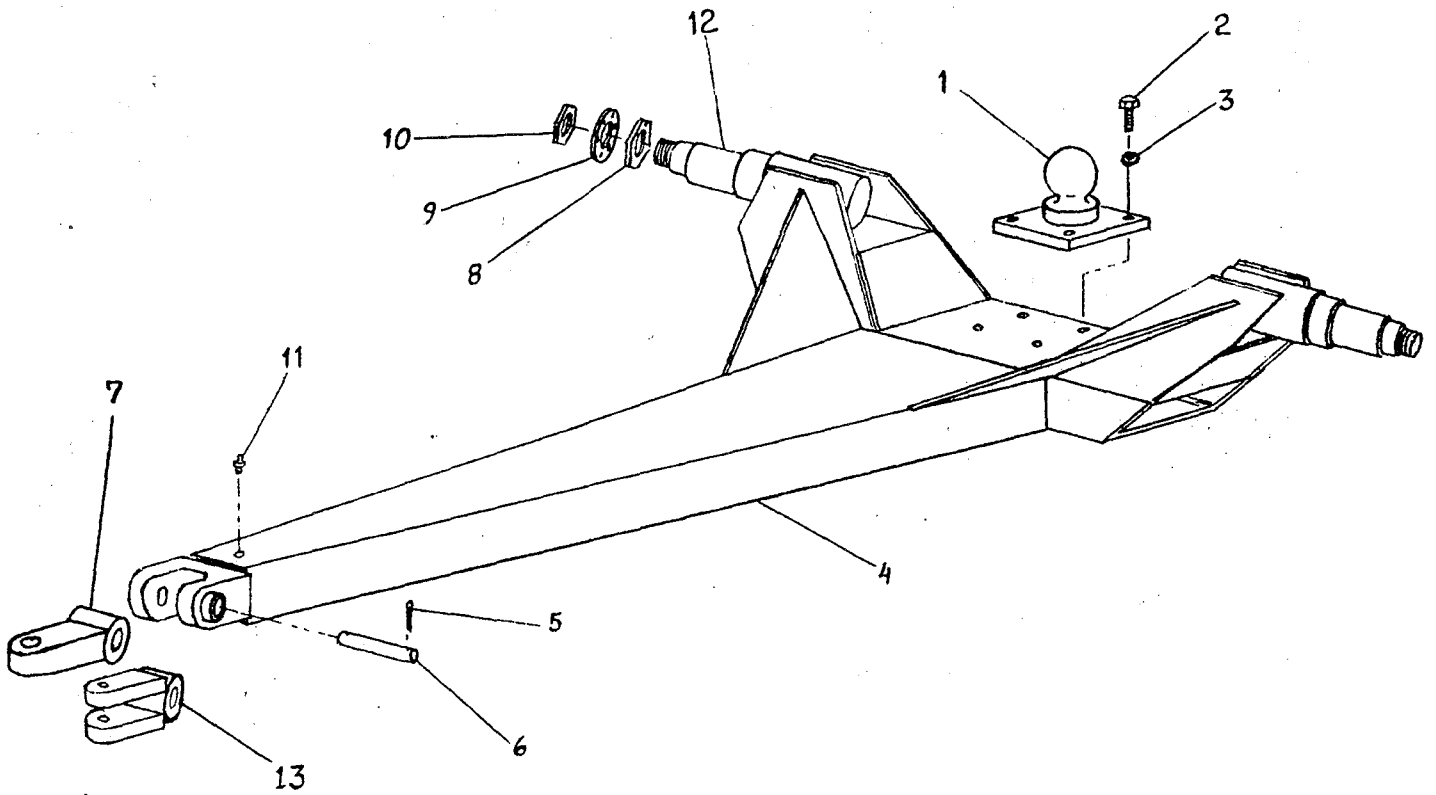


PARTS LIST

MODEL I-100 SCRAPER, I-110 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A10159	Brace, R.H. & L.H. same
2.	---	Nut, 3/4" NC
3.	---	Bolt, 3/4" NC x 1-1/2" Lg.
4.	---	Lockwasher, 3/4"
5.	A10160	Push Off Gate
6.	---	Jam Nut, 1-1/4" NF
7.	A10161	Gate Roller, Rear
8.	A10162	Bushing, 2" OD x 1-5/8" ID x 1-7/16"
9.	A10008	Shoulder Pin, 1-5/8" to 1-1/4" with Zerk in Thd. End
10.	A10163	Bushing, 1-3/4" OD x 1-1/4" ID x 2-3/8" Lg.
11.	A10164	Gate Roller, Front, 4-1/4" OD
12.	---	Cotter Pin, 1/4" x 2" Lg.
13.	A6007A	Pin, 1-1/4" x 4-1/8" Lg.
14.	---	Grease Zerk, 90° x 1/8" NPT
15.	---	Bolt, 1/4" x 1" NC
16.	A10171	Dirt Shield
17.	---	Nut, 1/4" NC
18.	---	Lockwasher, 1/4"

ILLUSTRATION
POLE and AXLE ASSEMBLY

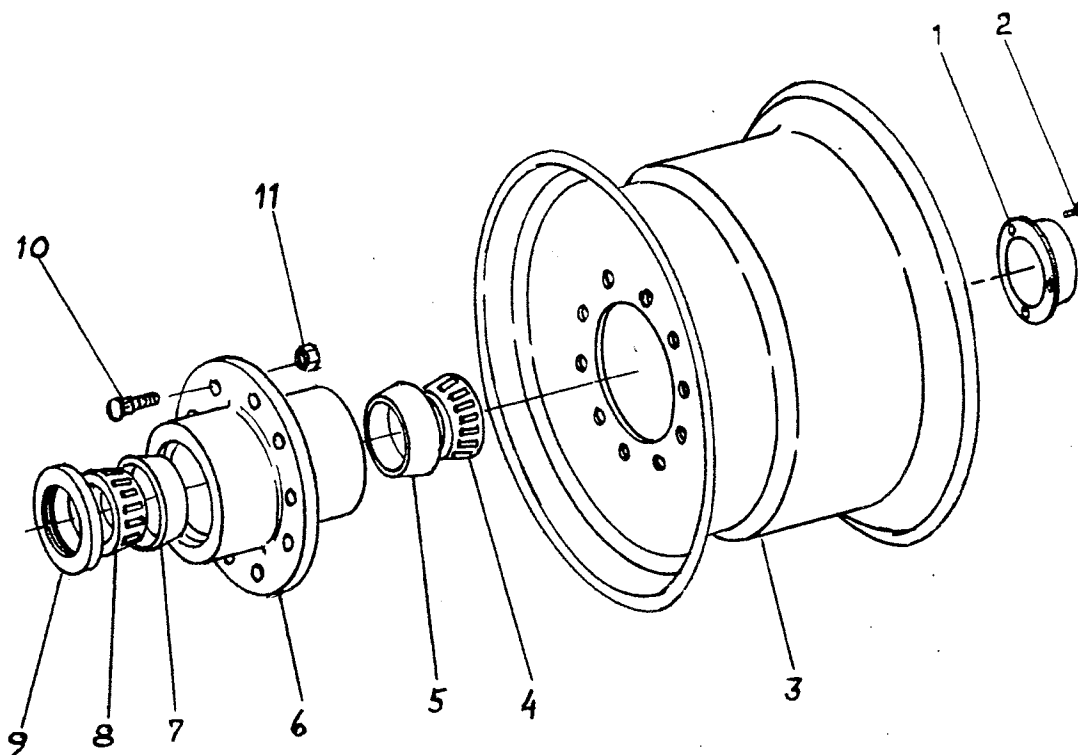


PARTS LIST

MODEL I-110 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A14017	Ball Swivel
2.	---	Bolt, 1" NC x 3" Lg.
3.	---	Lockwasher, 1"
4.	A13006	Pole
5.	---	Cotter Pin, 5/16 x 3
6.	A14019	Pin, 1-3/4 x 7-3/8 Lg.
7.	A14020A	Swivel Hitch Single Lip
8.	A10172	Nut w/Lock Pin
9.	A10049A	Lock Collar
10.	A10048	Spindle Nut
11.	---	Grease Fitting
12.	A14021	Spindle (Weld On)
13.	A14020	Swivel Hitch, Double Lip (Optional)

ILLUSTRATION
FRONT WHEEL and HUB ASSEMBLY



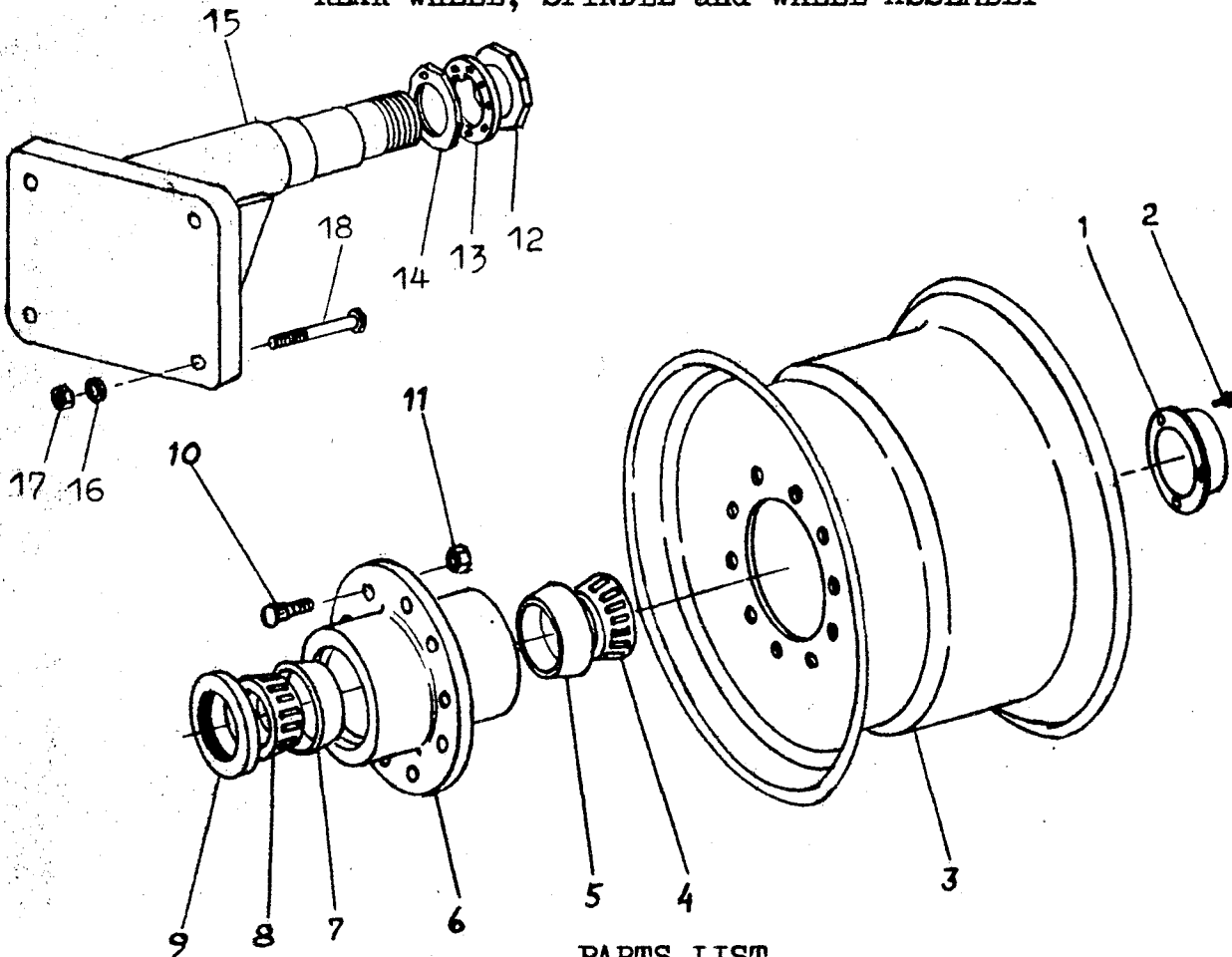
PARTS LIST

MODEL I-110 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A14004	Hub Cap
2.	----	Bolt, 5/16 NC x 5/8 Lg.
3.	A10170	Wheel, 11 x 16.1
4.	A14015	Bearing Cone
5.	A14014	Bearing Cup
6.	A14010	Hub
7.	A14013	Bearing Cup
8.	A14012	Bearing Cone
9.	A14011	Grease Seal
10.	A10176	Stud
11.	A10046	Lug Nut

ILLUSTRATION

REAR WHEEL, SPINDLE and WHEEL ASSEMBLY



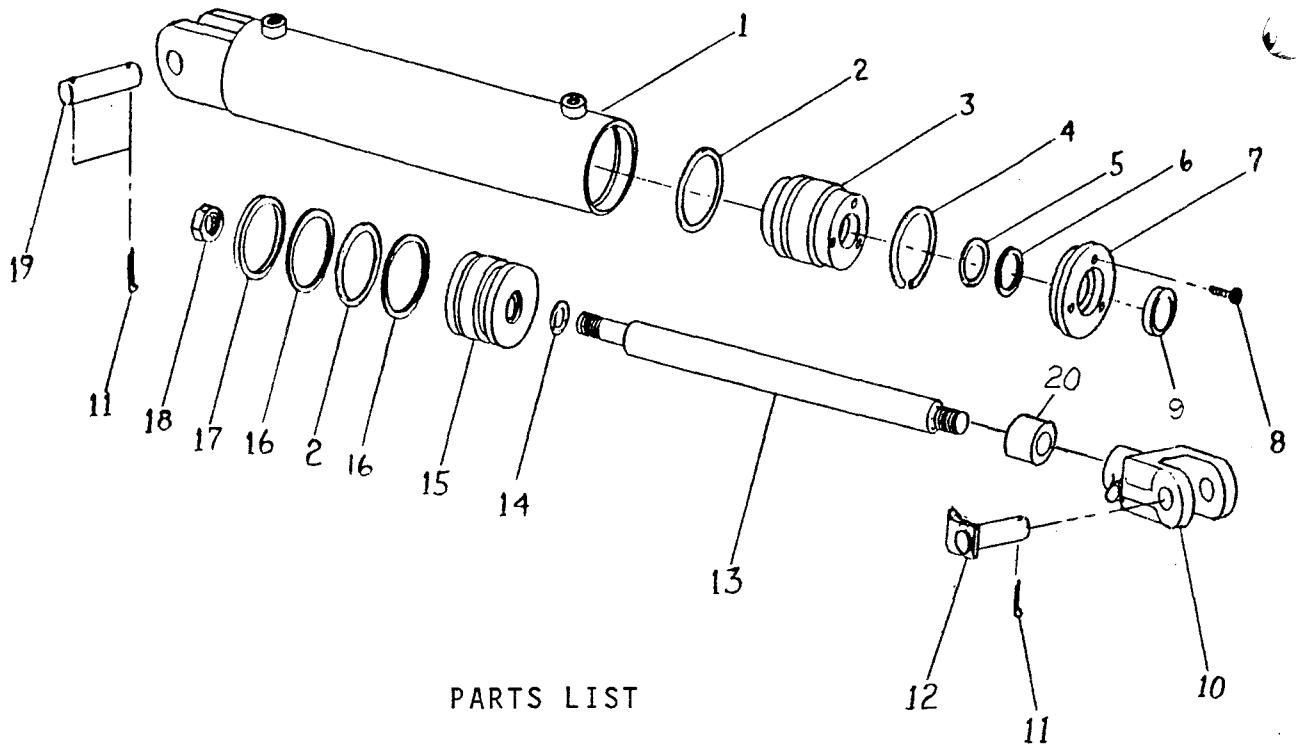
PARTS LIST

MODEL I-110 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A14004	Hub Cap
2.	---	Bolt, 5/16 NC x 5/8 Lg.
3.	A10039	Wheel, 16 x 26 Drop Center
4.	A14015	Bearing Cone
5.	A14014	Bearing Cup
6.	A14010	Hub
7.	A14013	Bearing Cup
8.	A14012	Bearing Cone
9.	A14011	Grease Seal
10.	A10176	Stud
11.	A10046	Lug Nut
12.	A10048	Spindle Nut
13.	A10049A	Lock Collar
14.	A10172	Nut w/Lock Pin
15.	A14037	Spindle
16.	---	Lockwasher, 1"
17.	---	Nut, 1" NC
18.	---	Bolt, 1" NC x 6-1/2" Lg.

ILLUSTRATION

HYDRAULIC CYLINDER, A412H1, 4" x 12",
APRON CIRCUIT, RIGHT SIDE



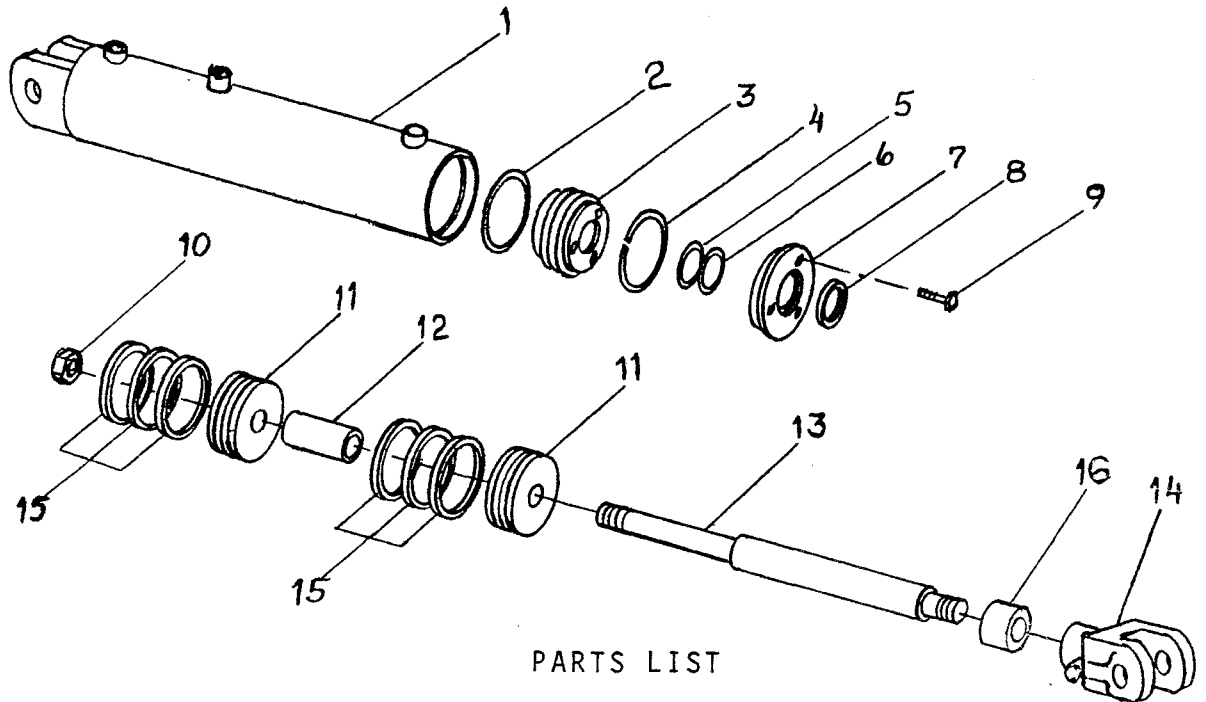
PARTS LIST

MODEL I-110 SCRAPER

KEY NO.	PART NO.	DESCRIPTION
1.	A175H01	Barrel Assembly
2.	A300H06	"O" Ring Seal, 4" OD x 3/16"
3.	A300H11	Head Gland
4.	A300H12	Retainer Ring
5.	A22H15	"O" Ring, 1-1/2" x 1/8"
6.	A22H15A	Back Up Washer
7.	A300H13	Head Cap
8.	A22H18	Capscrew, 1/4" NC x 1"
9.	A22H17	Wiper Seal, 1-1/2" ID
10.	A12H03	Clevis End
11.	---	Cotter Pin, 3/16" x 1-1/2"
12.	A10167	Pin, 1" x 1-1/16"
13.	A175H02	Shaft, 1-1/2" Dia.
14.	A45H05	Piston Gasket, 1"
15.	A300H07	Piston, 4" Dia.
16.	A300H05	Back Up Washer, 4" OD
17.	A300H04	Cast Iron Ring, 4" OD
18.	A300H03	Piston Nut, 1" NF
19.	A1217	Pin, 1" x 3-1/2"
	A300H14B	Packing Kit, containing:
		1 A300H04 2 A22H15
		2 A300H05 1 A22H15A
		2 A300H06 1 A22H17
		1 A45H05
20.	A101H84	Spacer

ILLUSTRATION

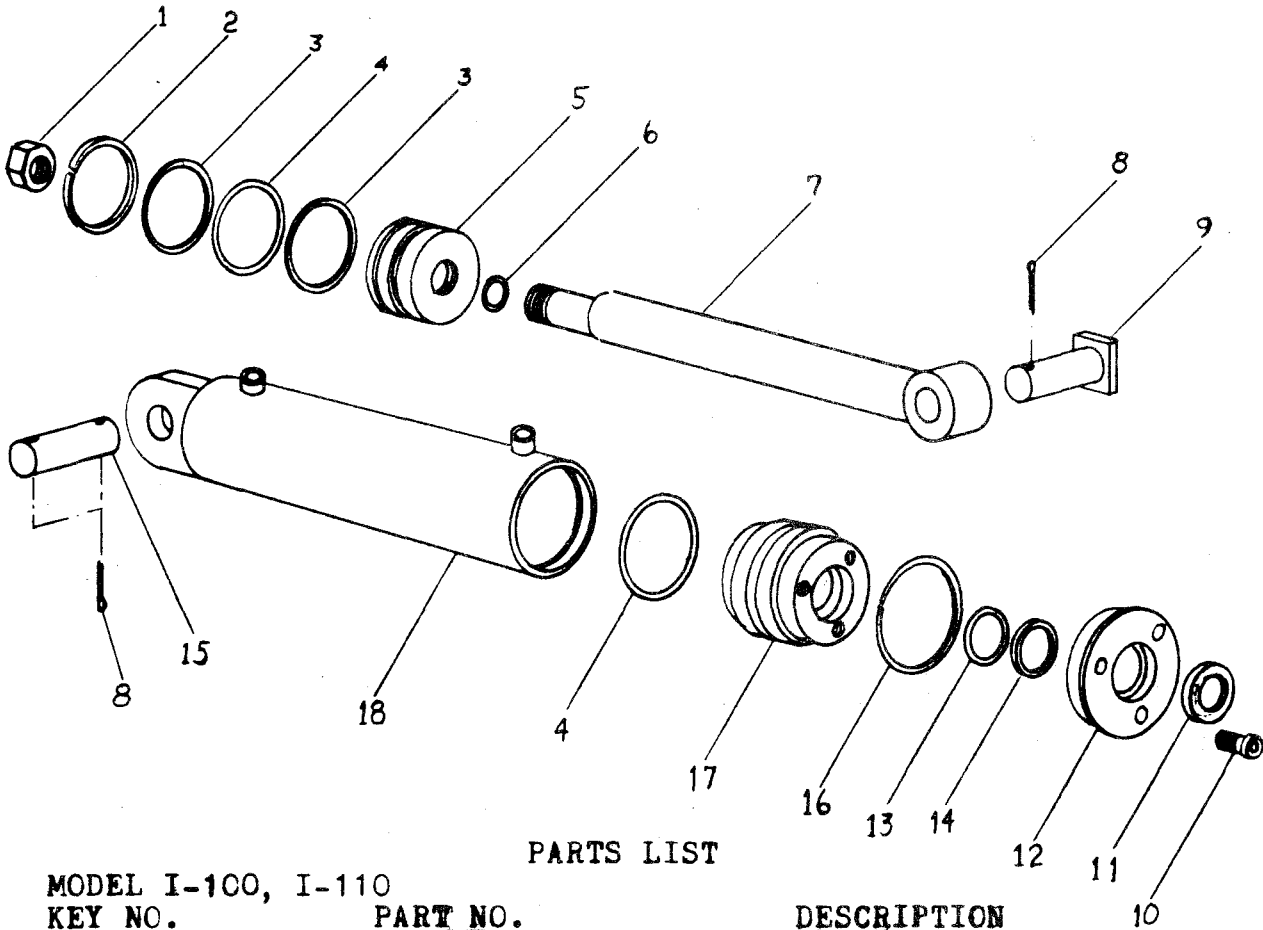
HYDRAULIC CYLINDER - A412H1, 4" x 12",
APRON CIRCUIT, LEFT SIDE



PARTS LIST

MODEL I-110 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A175H13	Cylinder Barrel
2.	A300H06	"O" Rings, 4" OD x 3/16"
3.	A300H11	Head Gland
4.	A300H12	Retainer Ring
5.	A22H15	"O" Ring, 1-1/2" ID
6.	A22H15A	Back Up Washer, 1-1/2" ID
7.	A300H13	Gland Cap
8.	A22H17	Wiper Seal, 1-1/2" ID
9.	A22H18	Capscrew, 1/4" NC x 1"
10.	A300H03	Piston Nut
11.	A450H15	Piston, 4"
12.	A130H12	Piston Spacer
13.	A175H14	Shaft, 1-1/2" Dia.
14.	A12H03	Clevis End
15.	A300H04	Cast Iron Rings, 4" OD
	A130H23	Packing Kit containing:
		6 A300H04
		1 A22H17
		1 A22H15
		1 A22H15A
		1 A300H06
16.	A101H84	Spacer



PARTS LIST

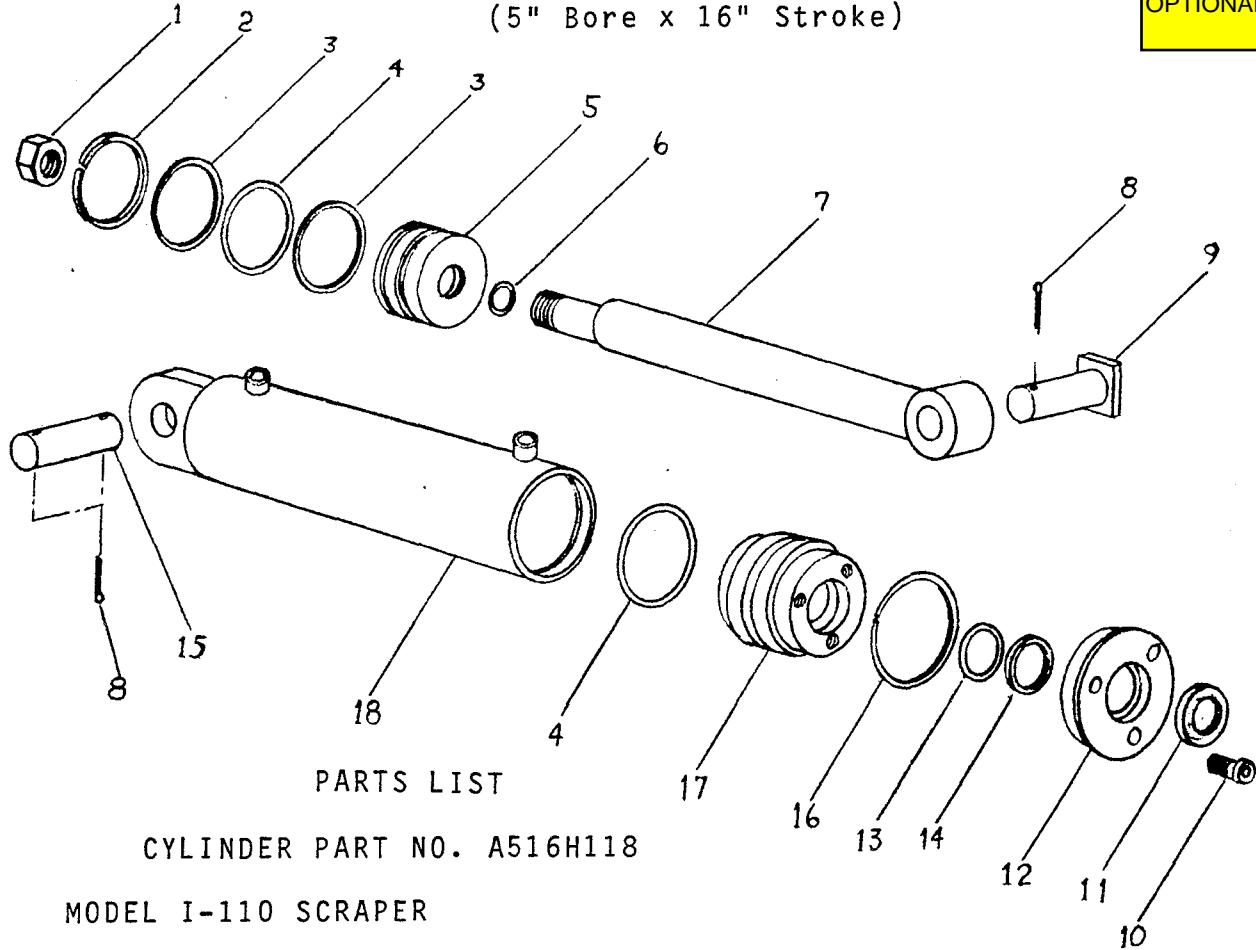
MODEL I-100, I-110

KEY NO.	PART NO.	DESCRIPTION
1.	A300H03	Piston Nut
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 Seal 1" ID.
7.	A45H03	Shaft 1-1/2 Dia
8.	----	Cotter Pin 3/16 X 1-1/2
9.	A10168	Pin 1-1/8 X 3-3/4
10.	A22H18	Capscrew 1/4 NC. X 1"
11.	A22H17	Wiper Seal 1-1/2 ID.
12.	A300H13	Head Cap
13.	A22H15	O-Ring 1-1/2 ID. X 1/8
14.	A22H15A	Backup Washer
15.	A45003	Pin 1-1/8 X 3-1/4
16.	A300H12	Retainer Ring
17.	A300H11	Head Gland
18.	A45H04	Barrel Assembly
	A300H14B	Packing Kit -Contains

- 1- A300H04
- 2- A300H05
- 2- A300H06
- 1- A45H05
- 2- A22H15
- 1- A22H15A
- 1- A22H17

ILLUSTRATION
 HYDRAULIC CYLINDER, DIG and LIFT CIRCUIT
 (5" Bore x 16" Stroke)

OPTIONAL CYLINDER



PARTS LIST

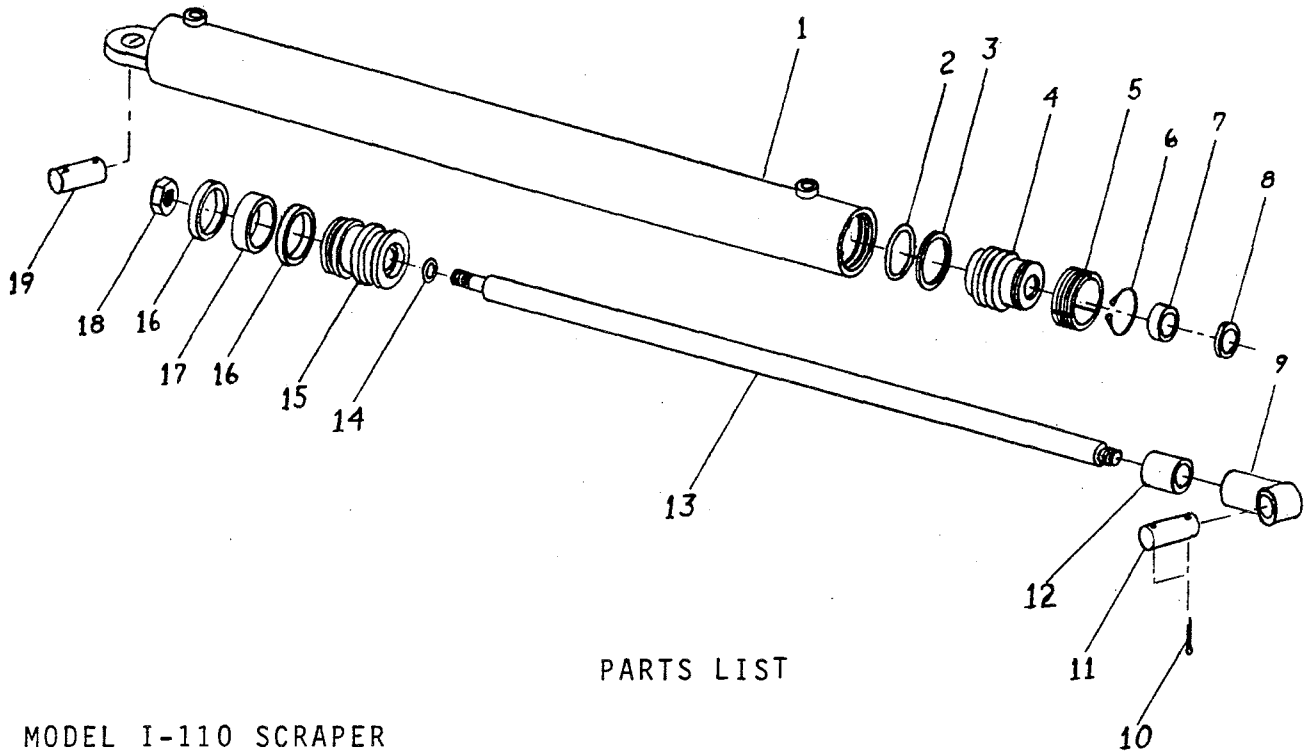
CYLINDER PART NO. A516H118

MODEL I-110 SCRAPER

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.	A60H52	O-ring, 1-1/4" ID x 1/8"
7.	A400H08	Shaft, 2" Dia.
8.		Cotter Pin, 3/16" x 1-1/2"
9.	A10168	Pin, 1-1/8" x 3-3/4"
10.	A22H18A	Capscrew, 5/16" NC x 1"
11.	A400H14	Wiper Seal
12.	A400H13	Head Cap
13.	A400H12	O-ring, 2" ID
14.	A400H12A	Back Up Washer, 2" ID
15.	A14034	Pin, 1-1/8" 3-3/4"
16.	A400H11	Retainer Ring
17.	A400H10	Head Gland, 5" OD
18.	A400H09	Barrel Ass'y, 5" ID
	A400H15C	Packing Kit, containing:
	1 A400H04	1 A400H11
	2 A400H05	1 A400H14
	2 A400H06	1 A400H12
	1 A60H52	1 A400H12A

ILLUSTRATION

HYDRAULIC CYLINDER, A554H114, 5" x 54", PUSHGATE CIRCUIT



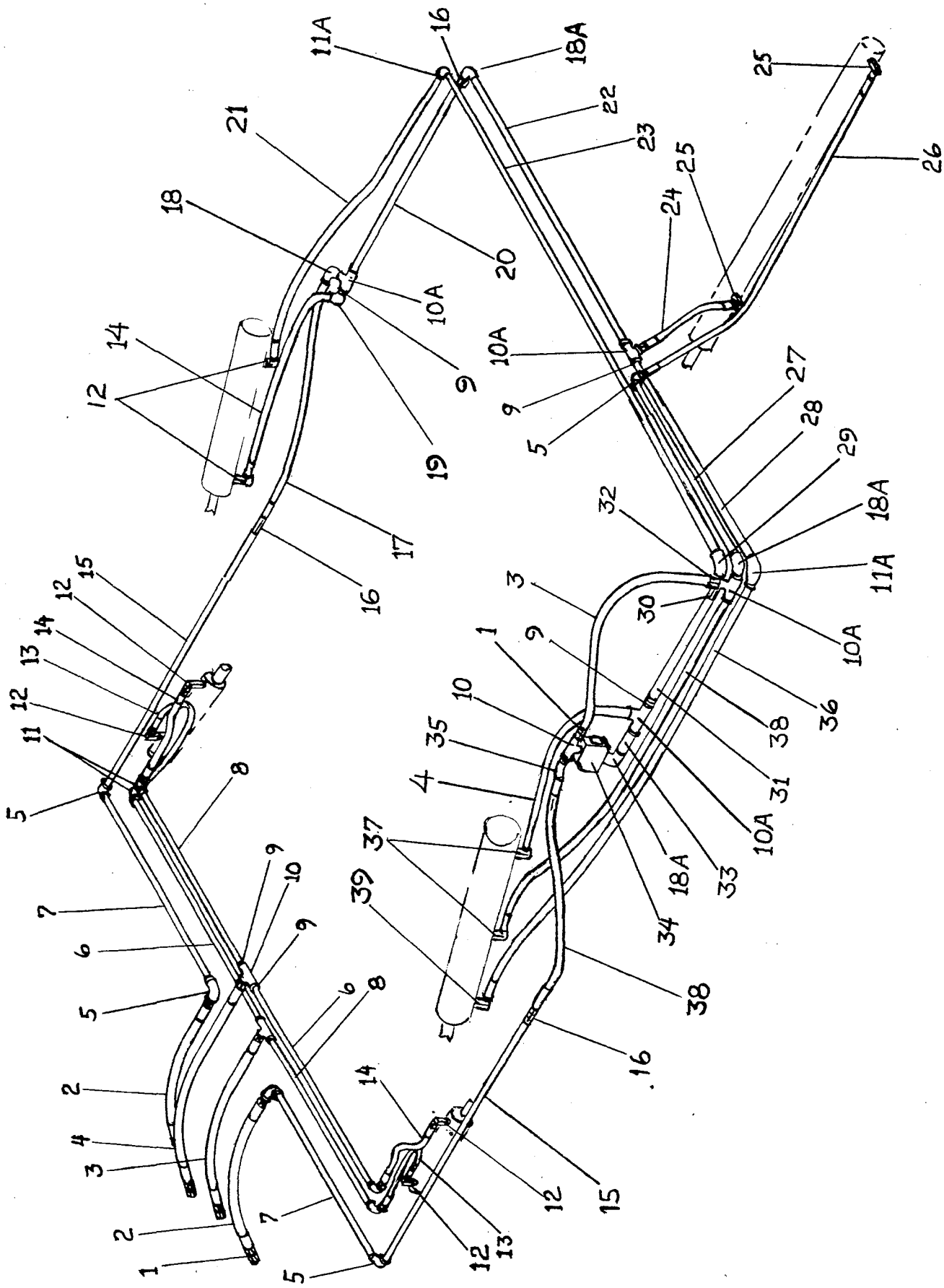
PARTS LIST

MODEL I-110 SCRAPER

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A101H85	Barrel, 5"
2.	A400H06	O-Ring, 5" OD
3.	A400H05	Back Up Washer, 5" OD
4.	A140H04	Gland, 2-1/2" ID
5.	A101H87	Triple Lock Retainer
6.	A101H93	Snap Ring
7.	A101H92	OU Cup Seal, 2-1/2" ID
8.	A101H22A	Wiper Seal, 2-1/2" ID
9.	A101H23	Eye
10.	---	Cotter Pin, 3/16" x 2"
11.	A10038	Pin, 1-1/4" x 4-1/4"
12.	A101H94	Spacer, 2-1/2" ID
13.	A101H86	Shaft, 2-1/2" Dia.
14.	A101H91	O-Ring, 1-1/2" ID
15.	A140H10	Piston
16.	A101H89	OU Cup Seal, 5" OD
17.	A101H90	Bearing Ring
18.	A101H88	Lock Nut, 1-1/2" NF
19.	A10020	Pin, 1-1/4" x 3-1/2"
	A101H95	Packing Kit, containing:
	1 A400H06	1 A101H22A
	1 A400H05	1 A101H91
	1 A101H93	2 A101H89
	1 A101H92	1 A101H90



ILLUSTRATION - HYDRAULIC CIRCUIT
 MODEL I-110 SCRAPER, serial no. 16256 and up

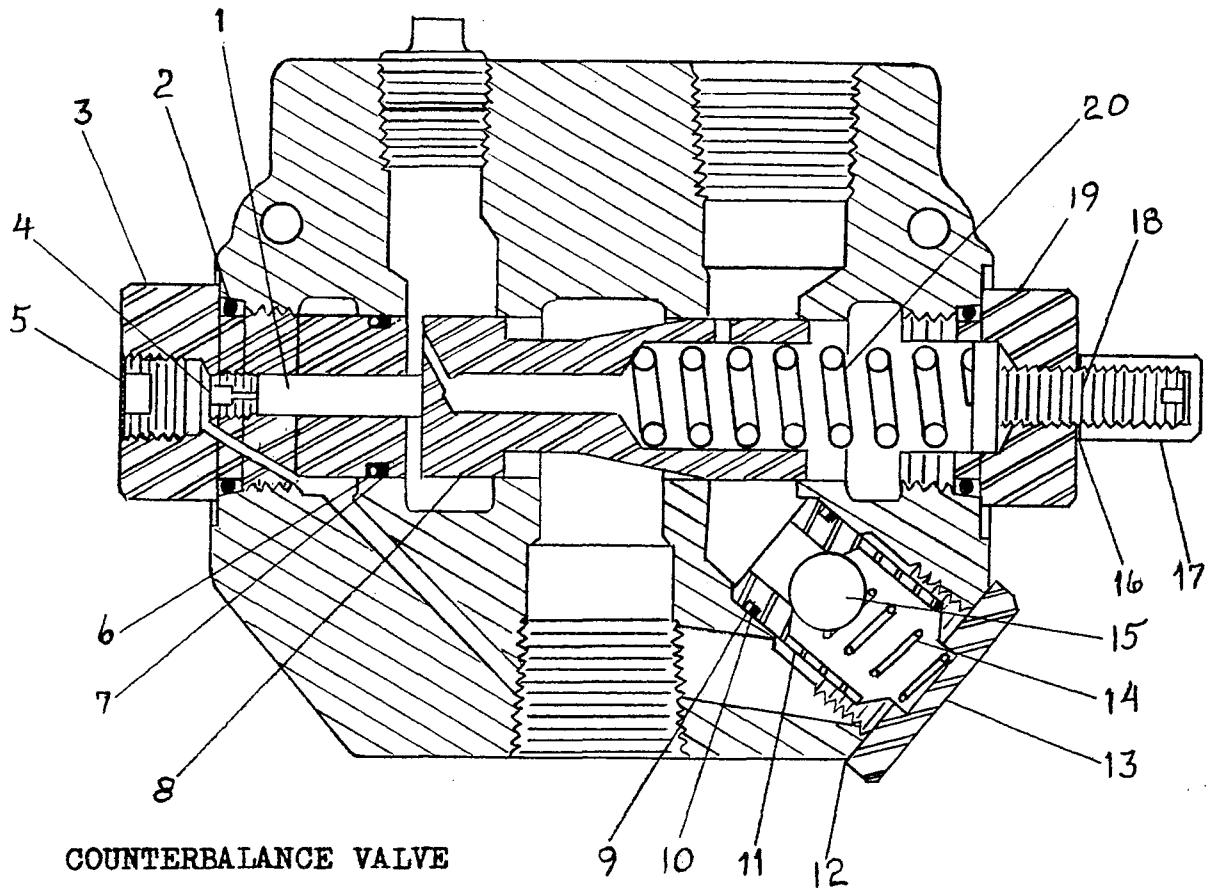


PARTS LIST
HYDRAULIC CIRCUIT

MODEL
I-110 SCRAPER, serial no. 16520 and up

<u>KEY NO.</u>	<u>NO. REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	5	A101H72	Swivel adapter, str. 3/4 male x female
2.	2	A101H32	Hose, 3/4 x 21 lg.
3.	2	A101H46	Hose, 3/4 x 24½ lg.
4.	2	A101H31A	Hose, 3/4 x 27 lg.
5.	5	----	Elbow, 90° x 3/4 NPT, Cast
6.	2	----	Pipe, 1/2 x 38-1/4 lg.
7.	2	----	Pipe, 3/4 x 48 lg.
8.	2	----	Pipe, 1/2 x 35-3/4 lg.
9.	7	----	Pipe bushing, 1/2 NPT x 3/4 NPT
10.	3	----	Pipe tee, 3/4 NPT, Cast
10A.	4	----	Pipe tee, 3/4 NPT, Steel
11.	4	----	Elbow, 90°, 1/2 NPT, Cast
11A.	2	----	Elbow, 90°, 1/2 NPT, Steel
12.	6	A45H07	Swivel adapter, 90°, 3/8 male x 1/2 female
13.	2	A60H01A	Hose, 1/2 x 18 lg.
14.	3	A45H06	Hose, 1/2 x 24 lg.
15.	2	----	Pipe, 3/4 x 78-1/4 lg.
16.	3	A101H35	Swivel adapter, str. 3/4 female x female
17.	1	A101H36	Hose, 3/4 x 33 lg.
18.	1	----	Street elbow, 90°, 3/4 NPT, Cast
18A.	3	----	Street elbow, 90°, 3/4 NPT, Steel
19.	1	----	Street elbow, 45°, 1/2 NPT, Cast
20.	1	----	Pipe, 3/4 x 28 lg.
21.	1	A101H83	Hose, 1/2 x 44 lg.
22.	1	----	Pipe, 3/4 x 53 lg.
23.	1	----	Pipe, 1/2 x 97-7/8 lg.
24.	1	A101H37	Hose, 3/4 x 18 lg.
25.	2	A101H39	Swivel adapter, 90°, 1/2 male x 3/4 female
26.	1	A101H38A	Hose, 3/4 x 71 lg.
27.	1	----	Pipe, 3/4 x 48 lg.
28.	1	----	Pipe, 1/2 x 44 lg.
29.	1	A101H73	Street elbow, 90°, 1/2 NPT, Steel
30.	1	A101H74	Swivel adapter, str. 1/2 female x female
31.	1	----	Pipe, 1/2 x 11-3/4 lg.
32.	1	A101H75	Check valve
33.	1	----	Pipe, 3/4 x 5-1/2 lg.
34.	1	A101H48	Counterbalance valve
35.	1	----	Street elbow, 45°, 3/4 NPT, Cast
36.	1	A101H82	Hose, 1/2 x 55 lg.
37.	2	A101H77	Swivel adapter, 90°, 3/4 male x female
38.	2	A101H42	Hose, 3/4 x 42 lg.
39.	1	A400H02	Swivel adapter, 90°, 1/2 male x female

ILLUSTRATION - HYDRAULIC VALVE
Serial no. 14656 and up



<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	A101H49	Piston
2.	A101H50	"O" Ring
3.	A101H51	External Pilot Plug
4.	A101H52	Orifice
5.	A101H53	Plug
6.	A101H54	"O" Ring
7.	A101H55	Back-up Washer
* 8.	A101H56	Metering Spool
9.	A101H57	Back-up Washer
10.	A101H58	"O" Ring
11.	A101H59	Check Seat
12.	A101H60	Aluminum Washer
13.	A101H61	Check Plug
14.	A101H62	Check Spring
15.	A101H63	Check Ball
16.	A101H64	Aluminum Washer
17.	A101H65	Acorn Nut
18.	A101H66	Adjusting Screw
19.	A101H67	Adjusting Plug - RD1075 CB
20.	A101H68	Metering Spring
* 21.	A101H71	Valve Body

* NOT SOLD SEPARATELY

COUNTERBALANCE VALVE

PURPOSE of counterbalance valve is to prevent the front gate from closing before the rear pushgate is fully retracted when the scraper is empty. This enables the operator to start the next cut without having to reopen the gate from closed position.

INSTRUCTIONS for establishing counterbalance valve setting. When properly adjusted, the front gate will close 40% from full open position (26½" from bottom of gate to cutting edge) and hold at that position until the rear pushgate is fully retracted. If the front gate is closing more than 40%, loosen the lock nut under the hex socket head screw and turn the screw clockwise until the front gate holds at that position. Turn an additional 1/4 turn clockwise, then tighten the lock nut. DO NOT turn the adjusting screw more than is necessary to hold the front gate at 26½" open.