

MODEL I-900 SCRAPER

HOW TO ORDER PARTS:

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

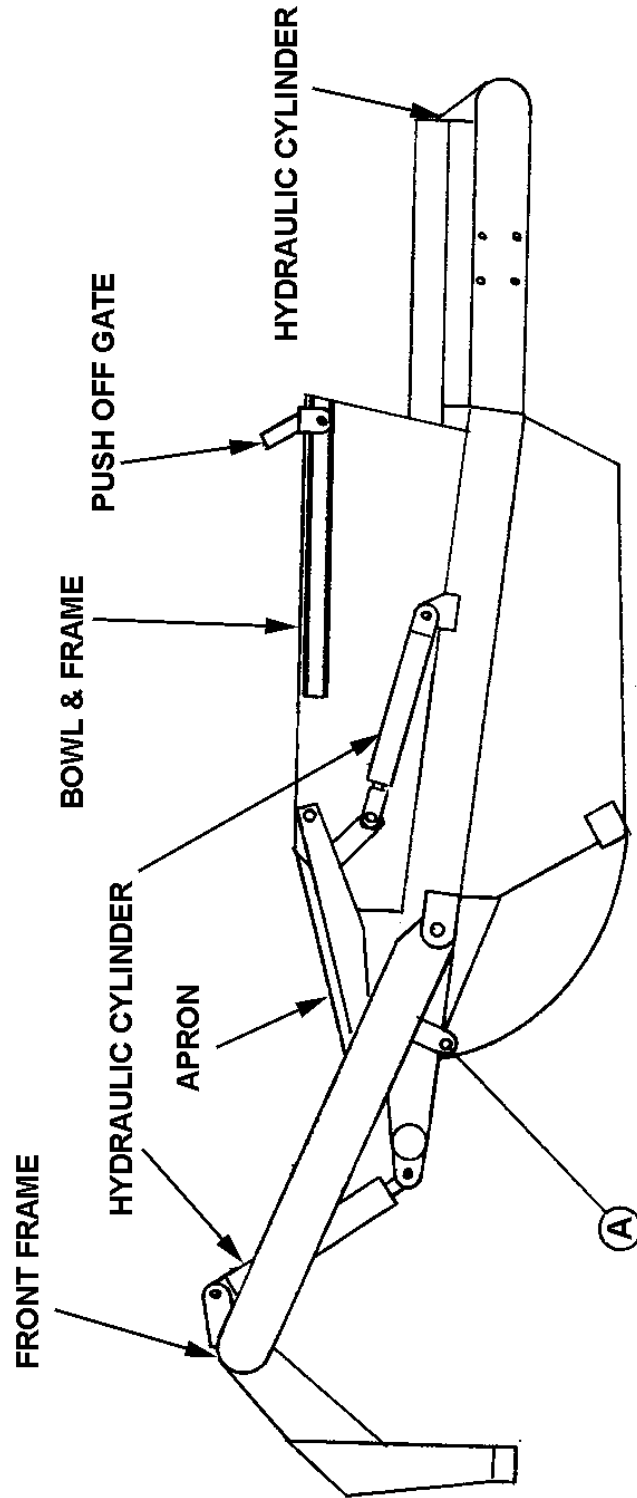
Unless this is done, we cannot provide prompt service or assure shipment of the correct parts.

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ILLUSTRATION - ASSEMBLY



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

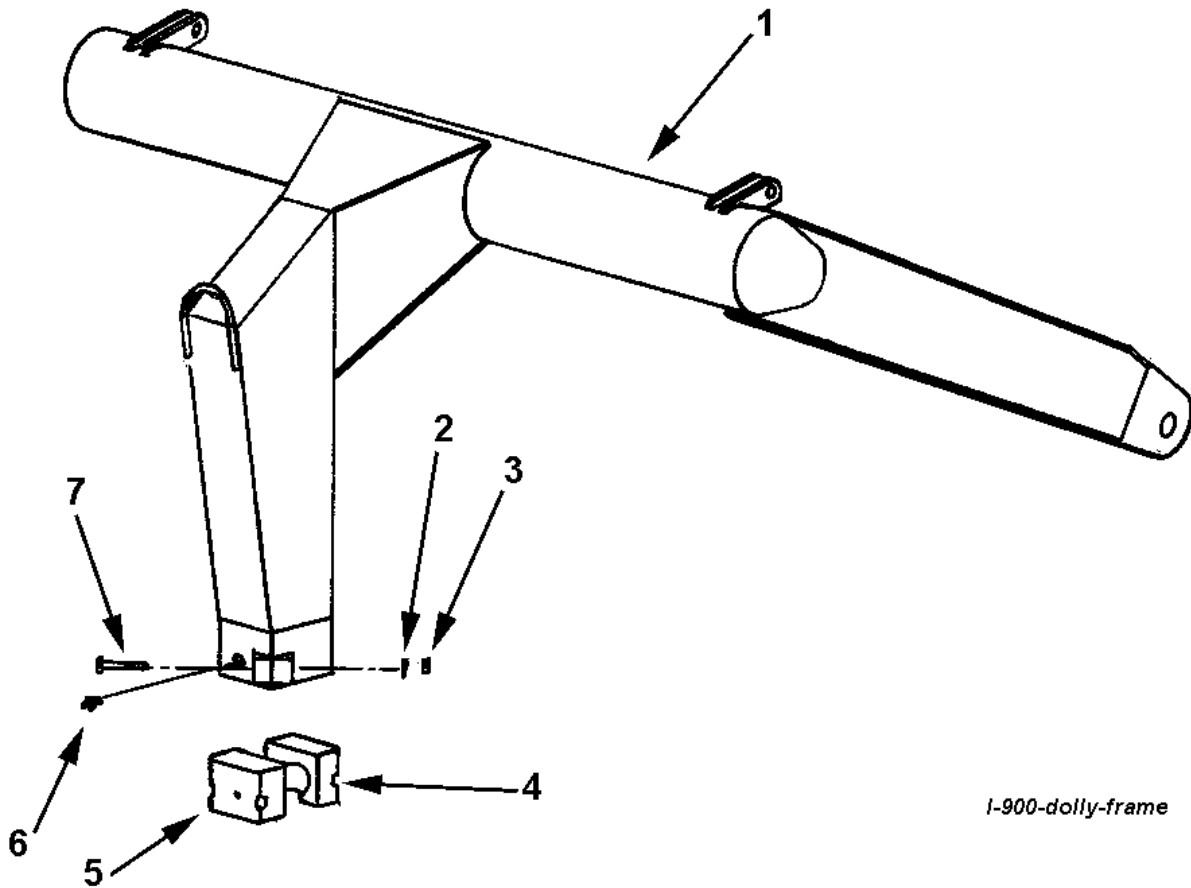
The scraper should be greased at all points where grease fittings are provided. Connect hydraulic hoses to the tractor and retract lift cylinders to remove transport lock pins (point A), then extend and retract all cylinders several times to force out any air from the hydraulic cylinders and lines. Check the oil level in the tractor hydraulic system and add to maintain the proper level. Care should be taken 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.

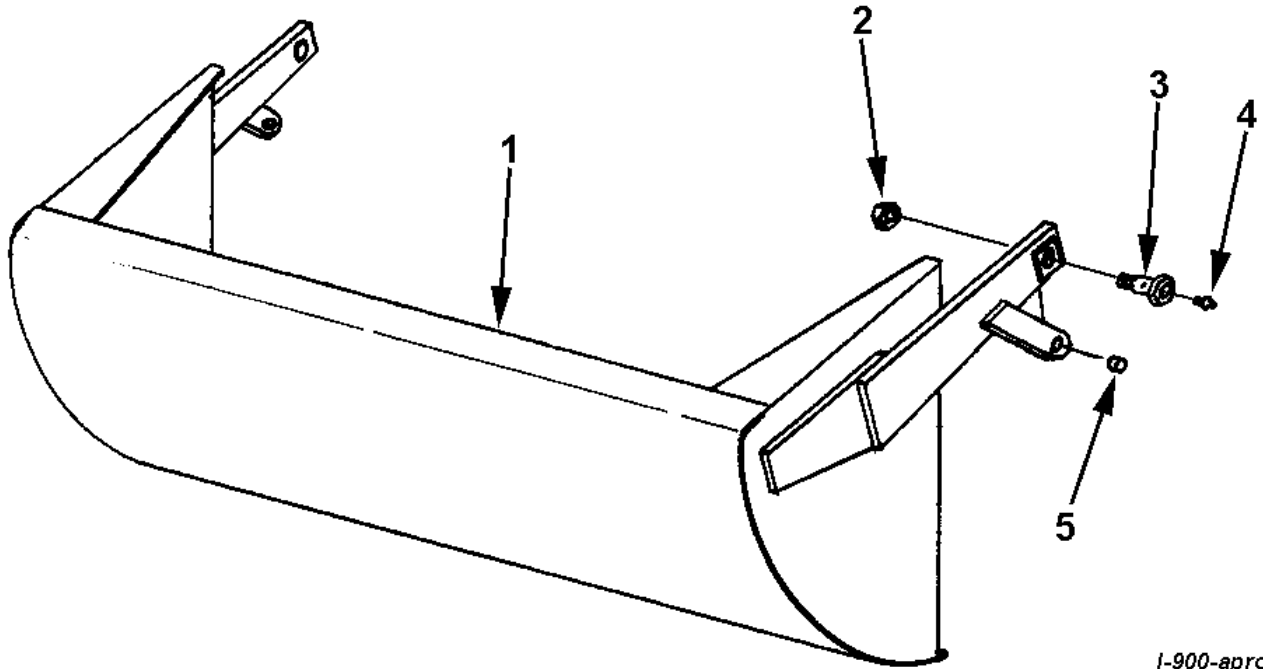
GOOSENECK FRAME ASSEMBLY



I-900-dolly-frame

KEY NO.	PART NO.	DESCRIPTION
1	A9057	Gooseneck frame
2		Lock washer, 5/8"
3		Nut, 5/8" NC
4	A90004	Cast socket half, rear
5	A90005	Cast socket half, front w/ zerk hole
6	A2206	Grease zerk, long shank
7		Bolt, 5/8" NC x 4"

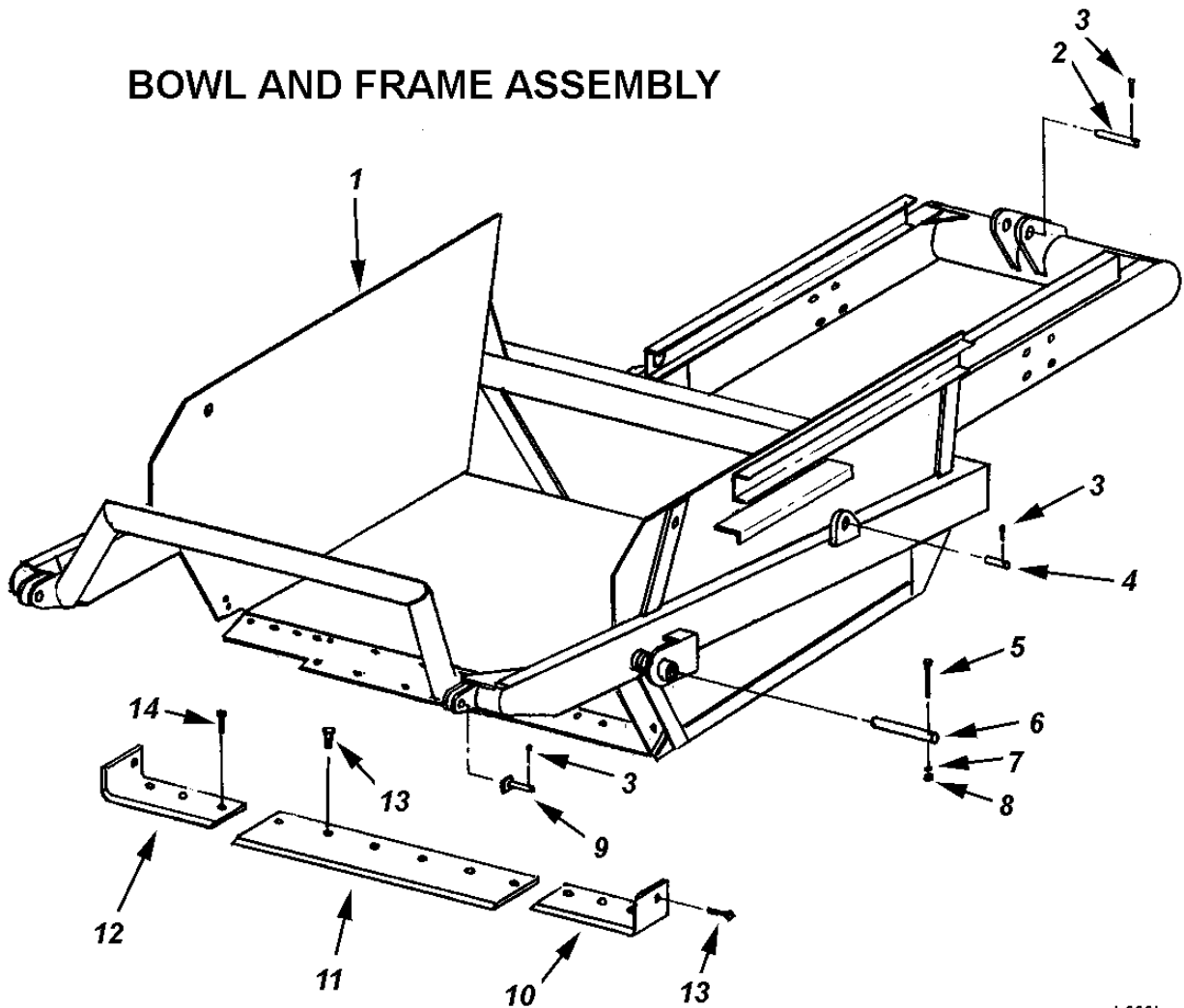
APRON ASSEMBLY



1-900-apron

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	A8060	Apron
2		Self locking nut, 1-1/4"
3	A6010	Shoulder pin, 1-5/8" to 1-1/4" with zerk in head
4		Grease fitting
5	A10155	Bushing, 1-1/2" OD x 1-1/8" ID x 1-1/8" long

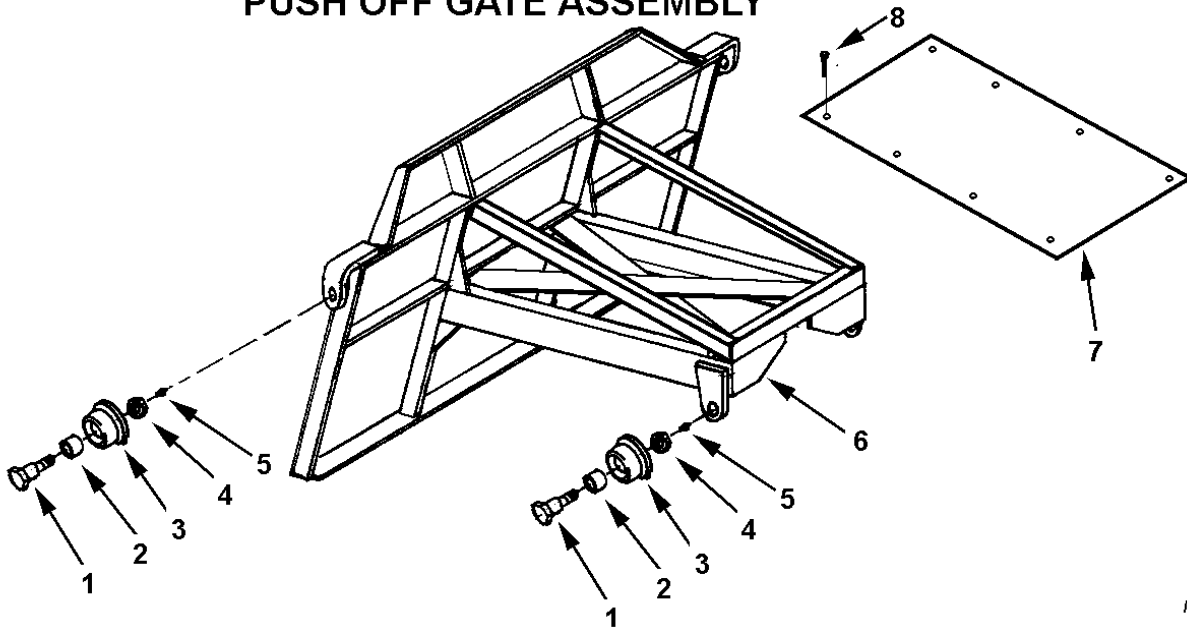
BOWL AND FRAME ASSEMBLY



I-900bowl

KEY NO.	PART NO.	DESCRIPTION
1	A9055	Bowl and Frame
2	A8062	Pin, 1-1/4" x 7"
3		Cotter pin
4	A1217	Pin, 1" x 3-1/2"
5		Bolt, 3/8" NC x 4"
6	A8056	Pin, 1-3/4" x 8"
7		Lockwasher, 3/8"
8		Nut, 3/8" NC
9	A8064	Pin, 1-1/8" x 3-7/8"
10	A8031A	Left cutting edge, 3/4" x 6" used on s/n 17196 & up
	A2225	Right cutting edge, 1/2" x 6", used through s/n 17178
11	A8030	Center cutting edge, 5/8" x 8" x 54"
12	A8029A	Right cutting edge, 3/4" x 6", used on s/n 17196 & up
	A2222	Left cutting edge, 1/2" x 6" used through s/n 17178
13		Plow bolt, 5/8" x 2" with nut (6 req'd)
14		Plow bolt, 5/8" x 2-1/2" with nut (8 req'd)

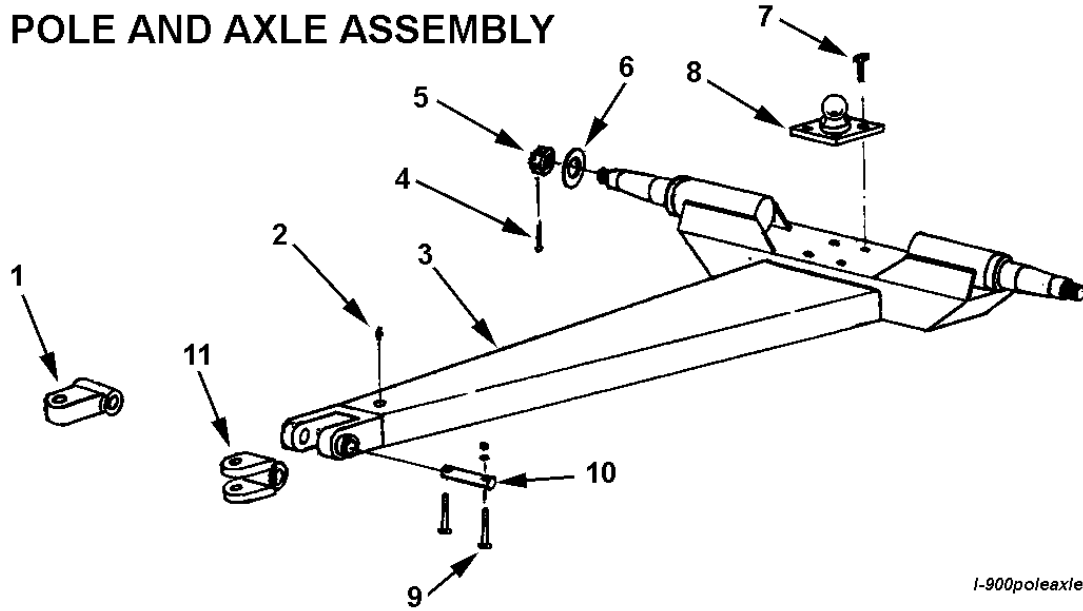
PUSH OFF GATE ASSEMBLY



I-900gate

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	A10008	Shoulder pin, 1-5/8" to 1-1/4" with zerk in threaded end
2	A10162	Bushing, 2" OD x 1-5/8" ID x 1-1/2"
3	A10161	Gate roller, with bushing
4		Jam nut, 1-1/4" NF
5		Grease fitting, 1/8" NPT straight
6	A9056	Push off gate
7		Dirt shield
8		Bolt, 3/8" NC x 1"

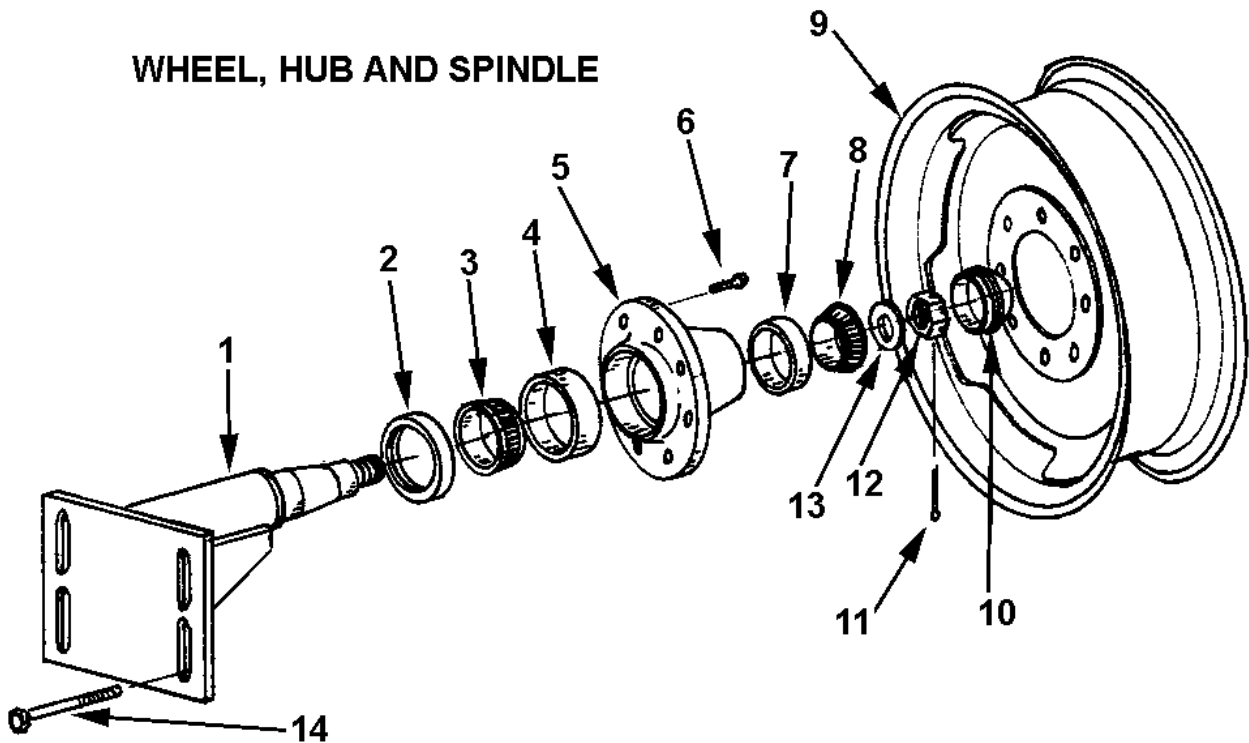
POLE AND AXLE ASSEMBLY



I-900poleaxle

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	A10033A	Single lip hitch
2		Grease fitting, 1/8" NPT
3	A9059	Pole
4		Cotter Pin, 3/16" x 2"
5		Nut, castellated, 1-1/4" NF
6	A8027	Washer, special, 1-1/4" flat
7		Bolt, 3/4" NC x 2-1/2" long
8	A40006	Ball swivel
9		Bolt, 5/16" x 2-1/2" w/ nut & LW
10	A10034	Pin, 1-1/2" x 6-1/4"
11	A10033	Clevis hitch, optional
***	A9008A	Spindle, Blank weldable upto S.N. 20197
***	A9062	Spindle, Blank weldable S.N. 20198 above

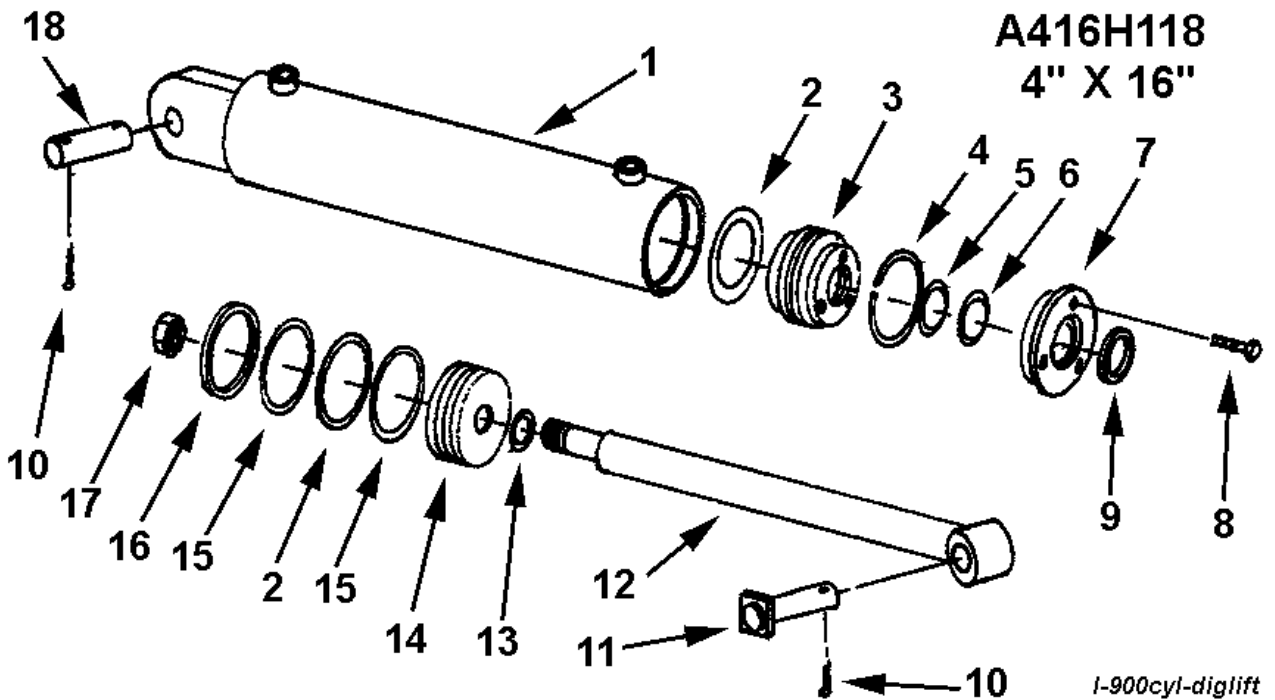
WHEEL, HUB AND SPINDLE



I-900wheel

<u>KEY NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	A9060	Spindle, Rear with flange base plate
2	A8020	Grease seal, 4-13/16" OD x 3-1/2" ID
3	A8021	Bearing cone, inner
4	A8022	Bearing cup, inner
5	A8023	Hub, (Casting No. Q848)
6	A4519	Wheel bolt, 9/16" NF
7	A8024	Bearing cup, outer
8	A8025	Bearing cone, outer
9	A6022A	Wheel, 16.1 x 11" DC, front and rear
	A6023	Large wheel (optional) 24" x 15"
10	A8026	Hub cap
11		Cotter pin
12		Spindle nut
13	A8027	Spindle washer, special
14		Bolt, 1" NC x 6-1/2" long

HYDRAULIC CYLINDER DIG AND LIFT CIRCUIT

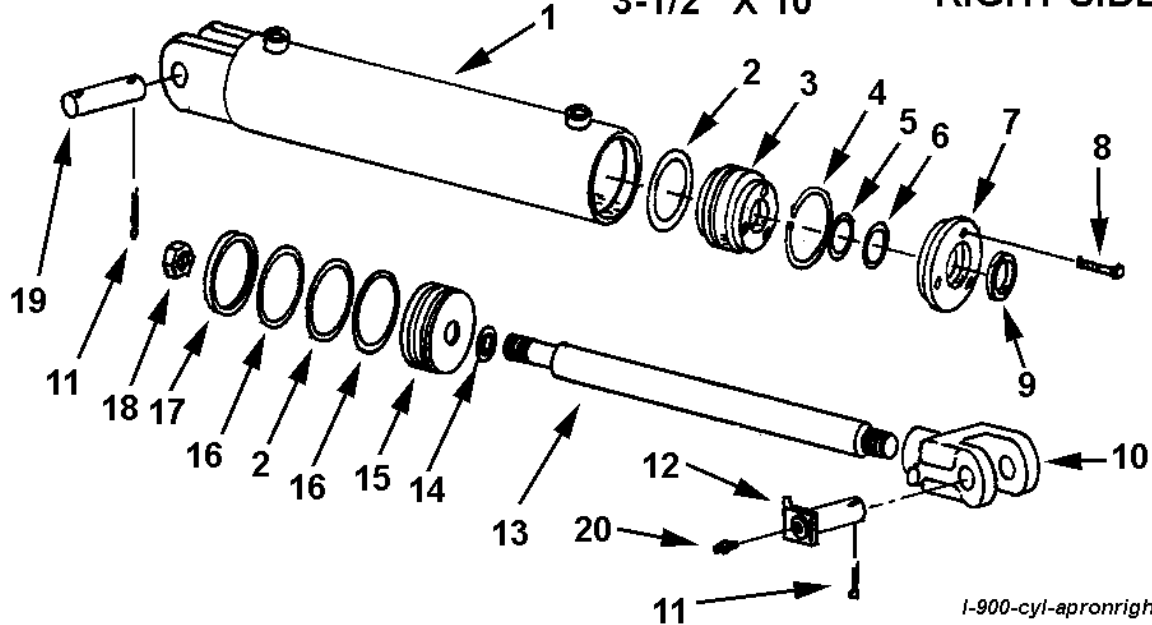


KEY NO.	PART NO.	DESCRIPTION
1	A45H04	Barrel Assembly
2	A300H06	O-ring, 4" OD x 3/16"
3	A300H11	Head gland
4	A300H12	Retainer ring
5	A22H15	O-ring, 1-1/2" ID x 1/8"
6	A22H15A	Backup washer
7	A300H13	Head cap
8	A22H18	Capscrew, 1/4" x 1"
9	A22H17	Wiper seal, 1-1/2" ID
10		Cotter pin, 3/16" x 1-1/2"
11	A10168	Pin, 1-1/8" x 3-3/4"
12	A45H03	Shaft, 1-1/2" diameter
13	A45H05	Piston gasket, 1" ID
14	A300H07	Piston, 4"
15	A300H05	Backup washer, 4" OD
16	A300H04	Cast iron ring, 4" OD
17	A300H03	Piston nut
18	A45003	Pin, 1-1/8" x 3-1/4"
	A300H14B	Packing kit containing:
		1 - A300H04 2 - A22H15 2 - A300H05
		1 - A22H15A 2 - A300H06 1 - A22H17
		1 - A45H05

HYDRAULIC CYLINDER

A3510H1
3-1/2" X 10"

APRON CIRCUIT,
RIGHT SIDE



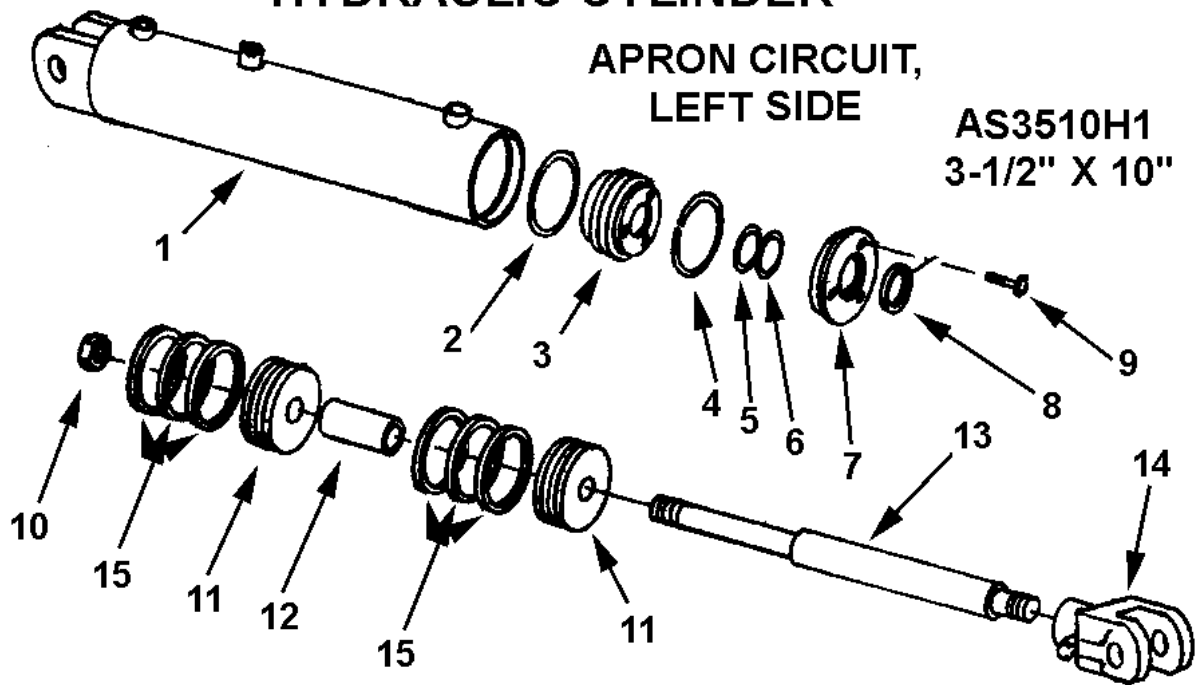
1-900-cyl-apronright

KEY NO.	PART NO.	DESCRIPTION
1	A12H04	Barrel
2	A22H08	O-ring, 3-1/2" OD
3	A22H13	Head gland
4	A22H14	Retainer ring
5	A22H15	O-ring, 1-1/2" ID x 1/8" thickness
6	A22H15A	Backup washer
7	A22H16	Head cap
8	A22H18	Socket head capscrew, 1/4 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 3-1/16"
13	A12H02	Shaft, 1-1/2" diameter
14	A22H10	Piston gasket, 3/4" ID
15	A22H09	Piston
16	A22H07	Back up washer, 3-1/2" OD
17	A22H06	Piston ring, 3-1/2" x 3/16"
18	A22H05	Piston nut, 3/4" NF
19	A1217	Pin, 1" x 3-1/2"
20	A2205	Grease fitting
		Packing kit containing:
	1 - A22H06	2 - A22H07 2 - A22H08
	1 - A22H10	1 - A22H14 1 - A22H15
	1 - A22H15A	1 - A22H17

HYDRAULIC CYLINDER

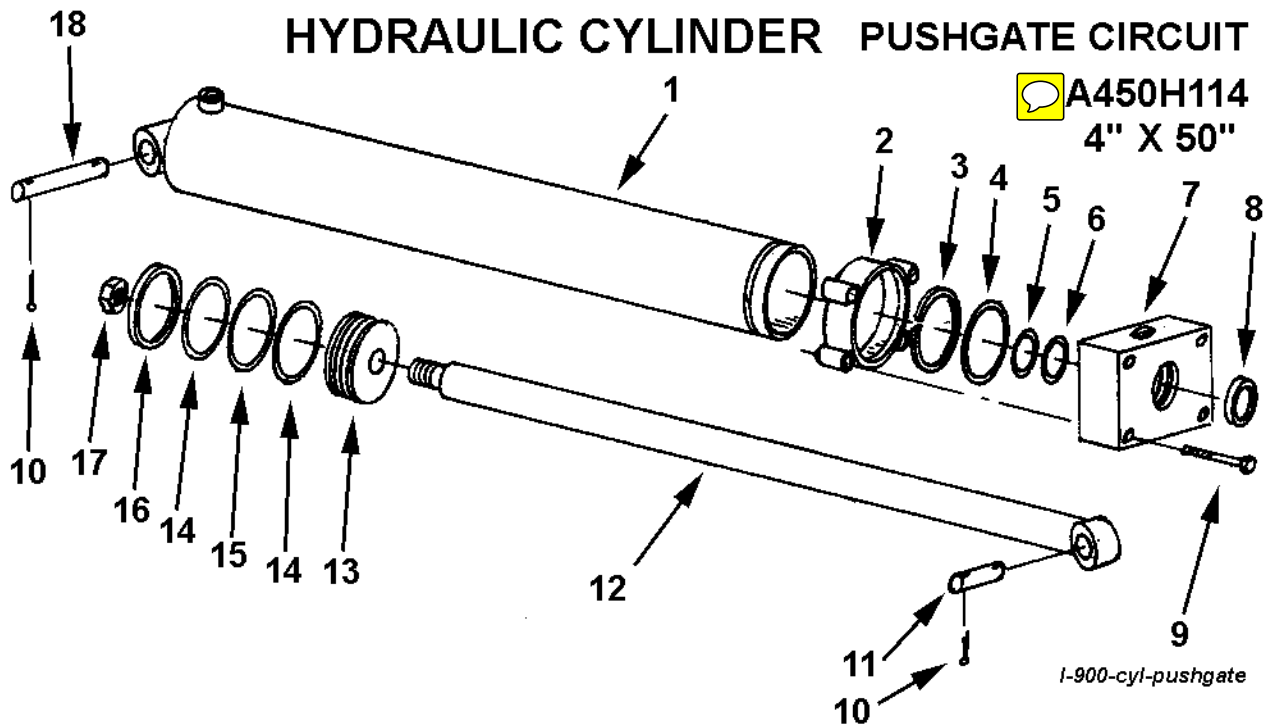
APRON CIRCUIT, LEFT SIDE

AS3510H1
3-1/2" X 10"



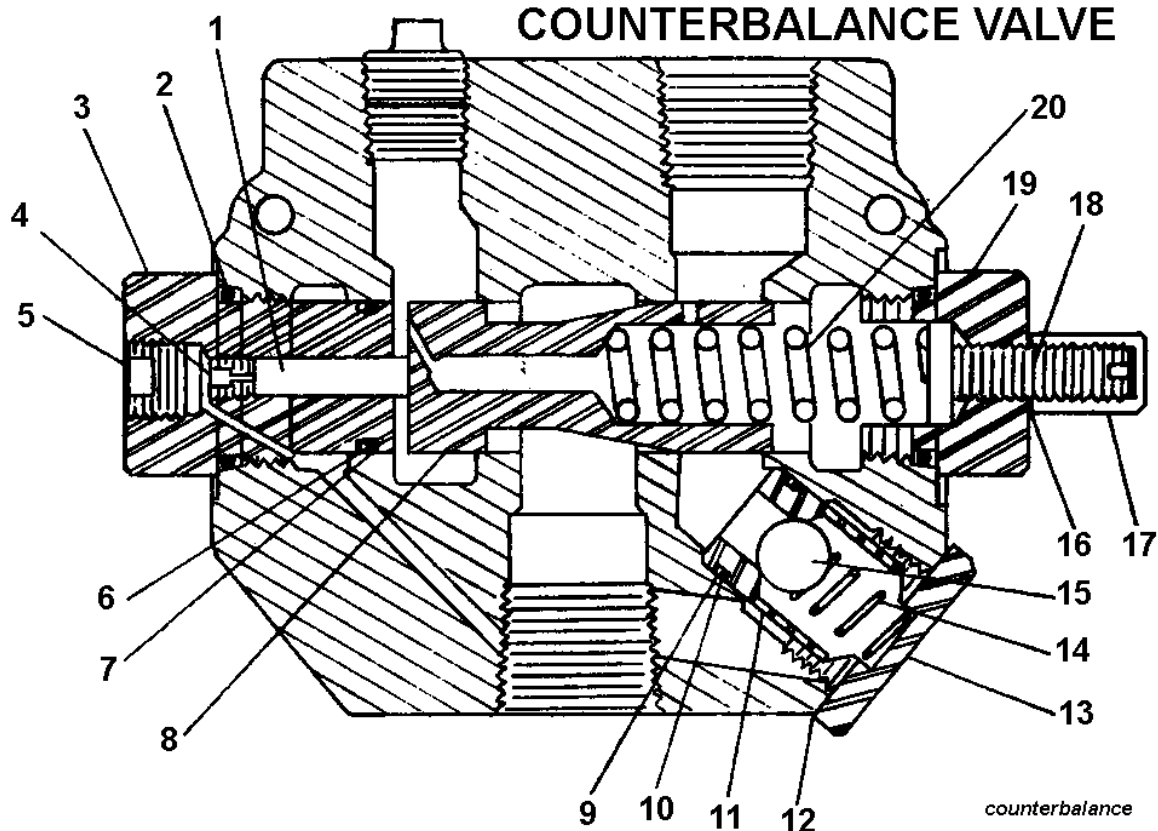
I-900-cyl-apronleft

KEY NO.	PART NO.	DESCRIPTION
1	A101H78A	Barrel
2	A22H08	O-ring, 3-1/2" OD x 3/16"
3	A22H13	Head gland
4	A22H14	Retainer ring
5	A22H15	O-ring, 1-1/2" ID
6	A22H15A	Backup washer, 1-1/2" ID
7	A22H16A	Gland cap
8	A22H17	Wiper seal, 1-1/2" ID
9	A22H18A	Capscrew, 1/4" NC x 1"
10	A300H03	Piston nut
11	A101H79A	Piston, 3-1/2"
12	A130H12A	Piston spacer
13	A101H80A	Shaft, 1-1/2" diameter
14	A12H03	Clevis end
15	A22H06A	Cast iron rings, 3-1/2" x 1/4"
	A101H81A	Packing kit containing:
	6 - A22H06A	1 - A22H08
	1 - A22H15A	1 - A22H17
		1 - A22H15



KEY NO.	PART NO.	DESCRIPTION
1	A90H25	Barrel Assembly
2	A80H22	Clamp ring
3	A80H23	Retainer ring
4	A80H24	O-ring, 4" OD x 1/8"
5	A400H12	O-ring, 2" ID
6	A400H12A	Backup washer
7	A80H25	Head gland
8	A80H06	Wiper seal, 2" ID
9		Bolt, 1/2" NF x 4-1/2", Gd. 5, w/ nut
10		Cotter pin, 1/4" x 4"
11	A8061	Pin, 1-1/4" x 4"
12	A90H26	Rod assembly
13	A80H27	Piston
14	A300H05	Backup washer, 4" OD
15	A300H06	O-ring, 4" OD x 3/16"
16	A300H04	Cast iron ring, 4" OD
17	A400H17	Piston nut, 1-1/4" NF
18	A8062	Pin, 1-1/4" x 6-1/2"
	A80H30	Packing kit containing:
		1 - A80H24 2 - A300H05 1 - A400H12
		1 - A300H06 1 - A400H12A 1 - A300H04
		1 - A80H06

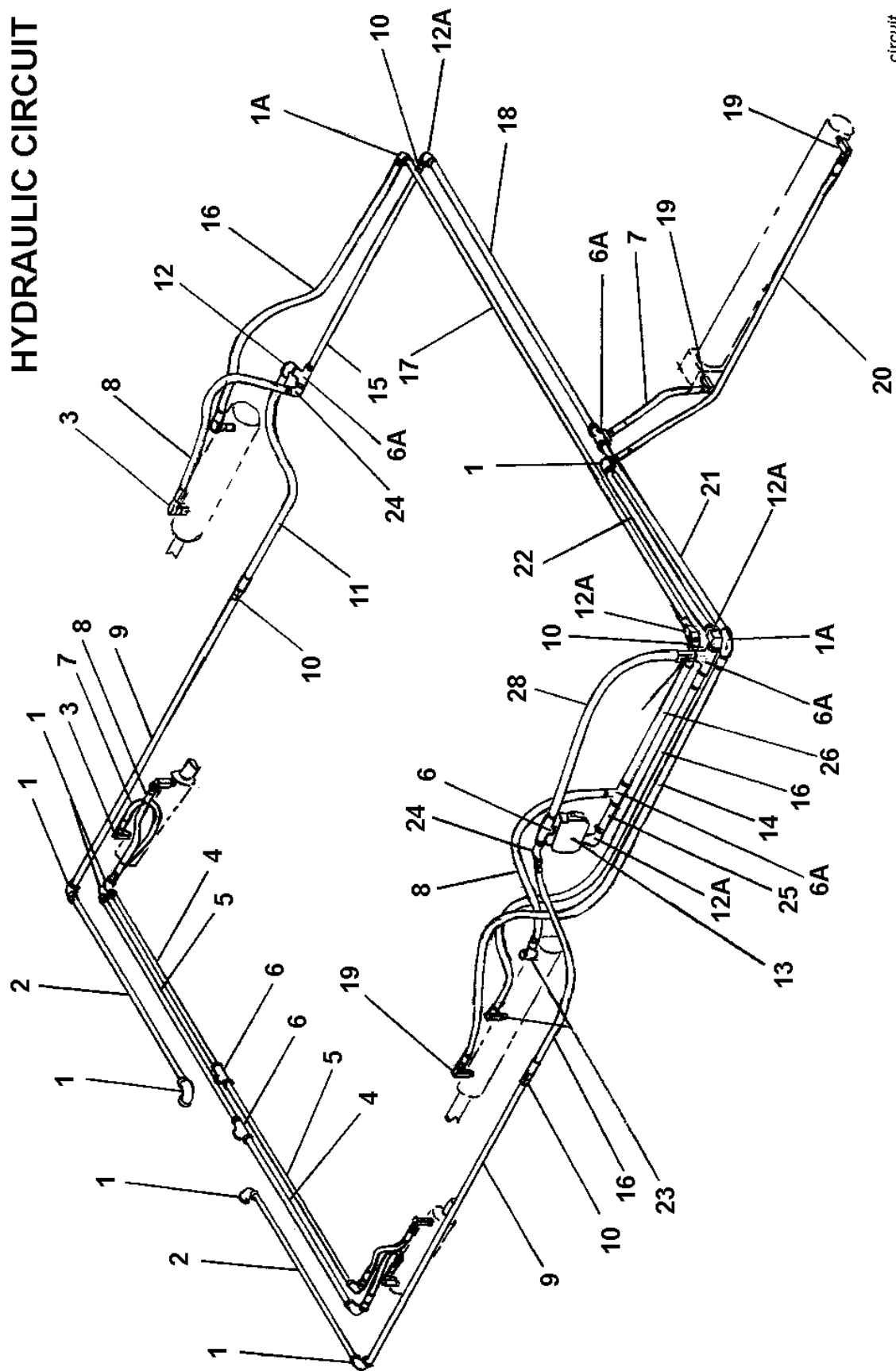
COUNTERBALANCE VALVE



<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	Backup washer
*8	A101H56	Metering spool
9	A101H57	Backup 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
*	A101H71	Valve body

* NOT SOLD SEPARATELY

HYDRAULIC CIRCUIT



PARTS LIST

HYDRAULIC CIRCUIT

<u>KEY NO.</u>	<u>NO. REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	9		Elbow, 90°, 1/2" NPT, Cast
1A	2		Elbow, 90°, 1/2" NPT, Steel
2	2		Pipe, 1/2" x 41" long
3	6	A45H07	Swivel adapter, 90°, 3/8" male x 1/2" female
4	2		Pipe, 1/2" x 32-3/4" long
5	2		Pipe, 1/2" x 34-3/4" long
6	3		Pipe tee, 1/2" NPT, Cast
6A	4		Pipe tee, 1/2" NPT, Steel
7	3	A60H01A	Hose, 1/2" x 18" long
8	4	A45H06	Hose, 1/2" x 24" long
9	2		Hose, 1/2" x 64" long
10	4	A101H74	Swivel adapter, straight, 1/2" female x female
11	1	A80H11	Hose, 1/2" x 40" long
12	1		Street elbow, 90°, 1/2" NPT, Cast
12A	4	A101H73	Street elbow, 90°, 1/2" NPT, Steel
13	1	A101H48	Counterbalance valve
14	1	A130H24	Hose, 1/2" x 58" long
15	1		Pipe, 1/2" x 32-1/4" long
16	3	A80H29	Hose, 1/2" x 46" long
17	1		Pipe, 1/2" x 85-3/4" long
18	1		Pipe, 1/2" x 47-1/4" long
19	5	A400H02	Swivel adapter, 90°, 1/2" male x female
20	1	A101H82	Hose, 1/2" x 55" long
21	1		Pipe, 1/2" x 39-3/4" long
22	1		Pipe, 1/2" x 37-1/4" long
23	2		Pipe bushing, 3/4" NPT x 1/2" NPT
24	2		Street elbow, 45°, 1/2" NPT, Cast
25	1		Pipe, 1/2" x 3" long
26	1		Pipe, 1/2" x 21" long
27	1	A600H28	Check valve
28	1	A101H76	Hose, 1/2" x 33" long

COUNTERBALANCE VALVE

PURPOSE of the 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 the closed position.

INSTRUCTIONS for establishing counterbalance valve setting:

When properly adjusted, the front gate will close 40% from full open position and hold at that position until the rear pushgate is fully retracted. If the front gate is closing more than 40%, remove the acorn cap nut and turn the adjusting screw clockwise until the front gate holds at that position. Turn an additional $\frac{1}{4}$ turn clockwise, then tighten the lock nut. DO NOT turn the adjusting screw more than is necessary to hold the front gate at 40% open.