



I-900 PARTS MANUAL



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MODEL I-900 SCRAPER

HOW TO ORDER PARTS:

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

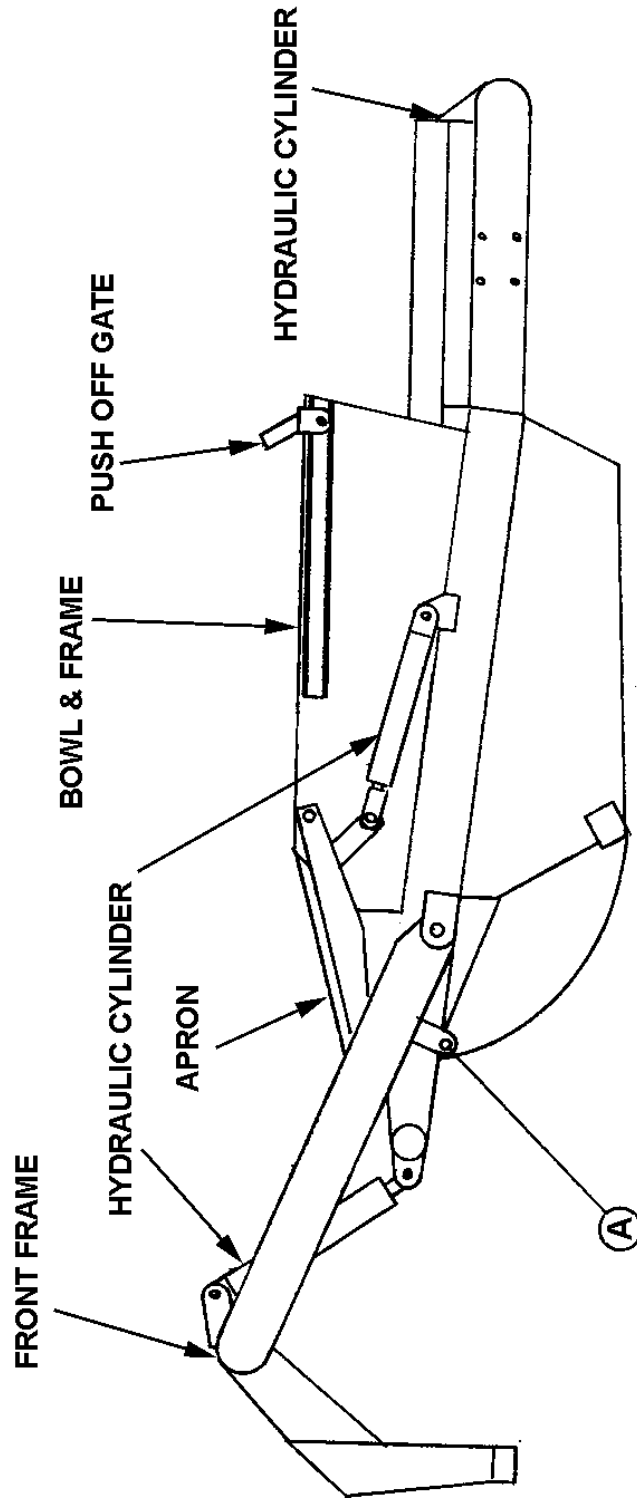
Unless this is done, we cannot provide prompt service or assure shipment of the correct parts.

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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.

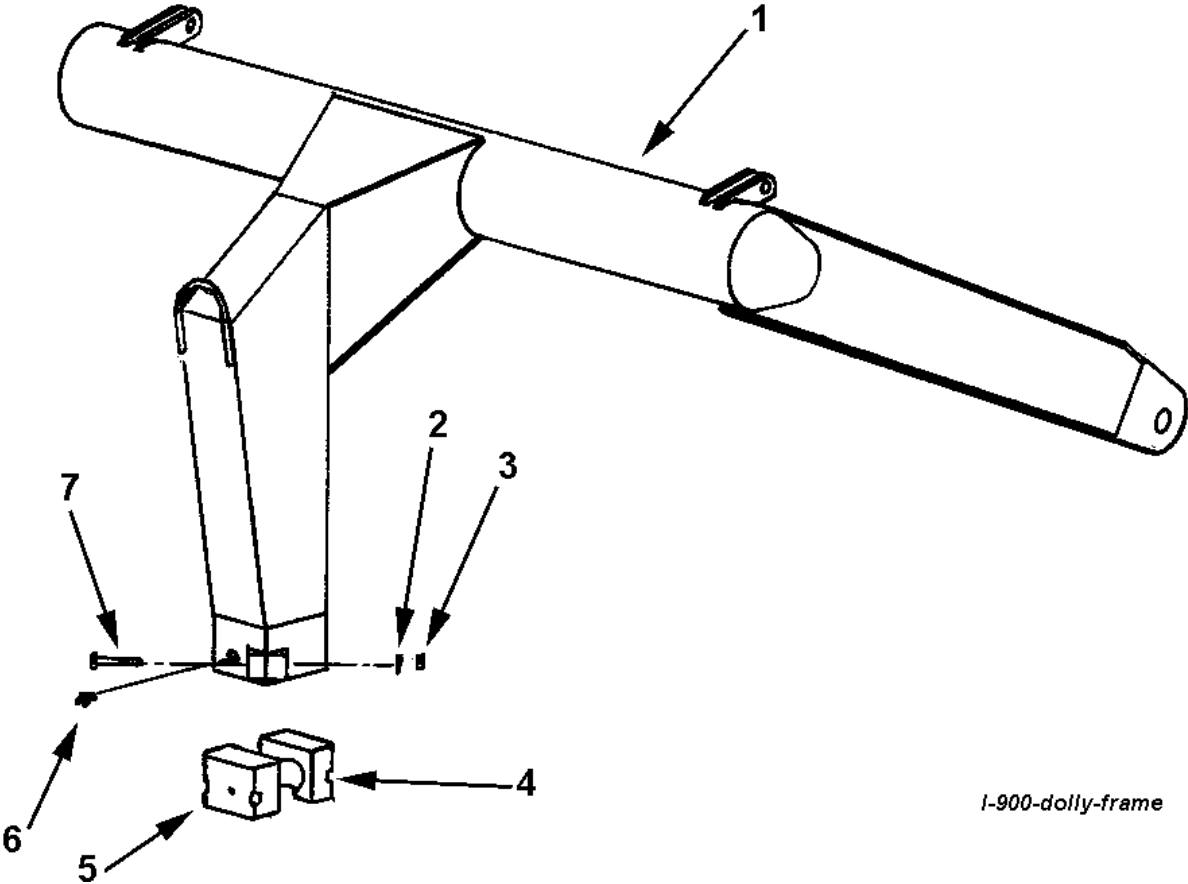
The scraper should be greased at all points where grease fittings are provided. Connect hydraulic hoses to the tractor and retract lift cylinders to remove transport lock pins (point A), then extend and retract all cylinders several times to force out any air from the hydraulic cylinders and lines. Check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

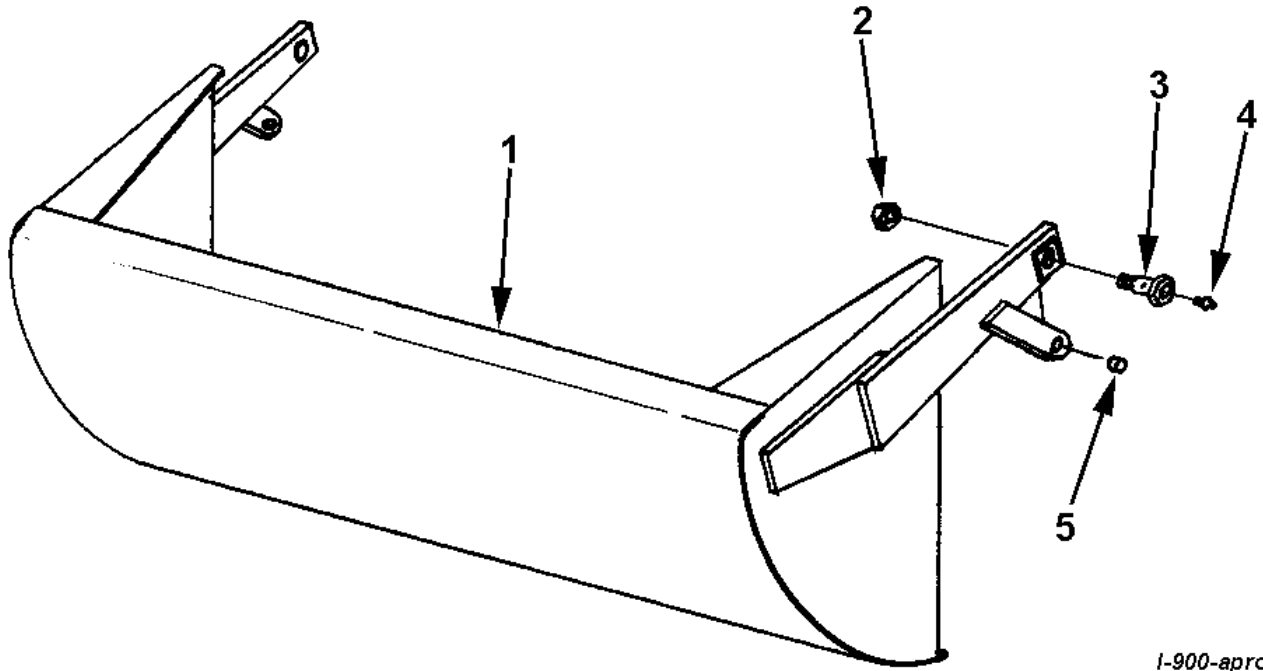
GOOSENECK FRAME ASSEMBLY



I-900-dolly-frame

KEY NO.	PART NO.	DESCRIPTION
1	A9057	Gooseneck Frame
2	8110	Lock washer, 5/8"
3	7530	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	AFB-00002	Bolt, 5/8" NC x 4"

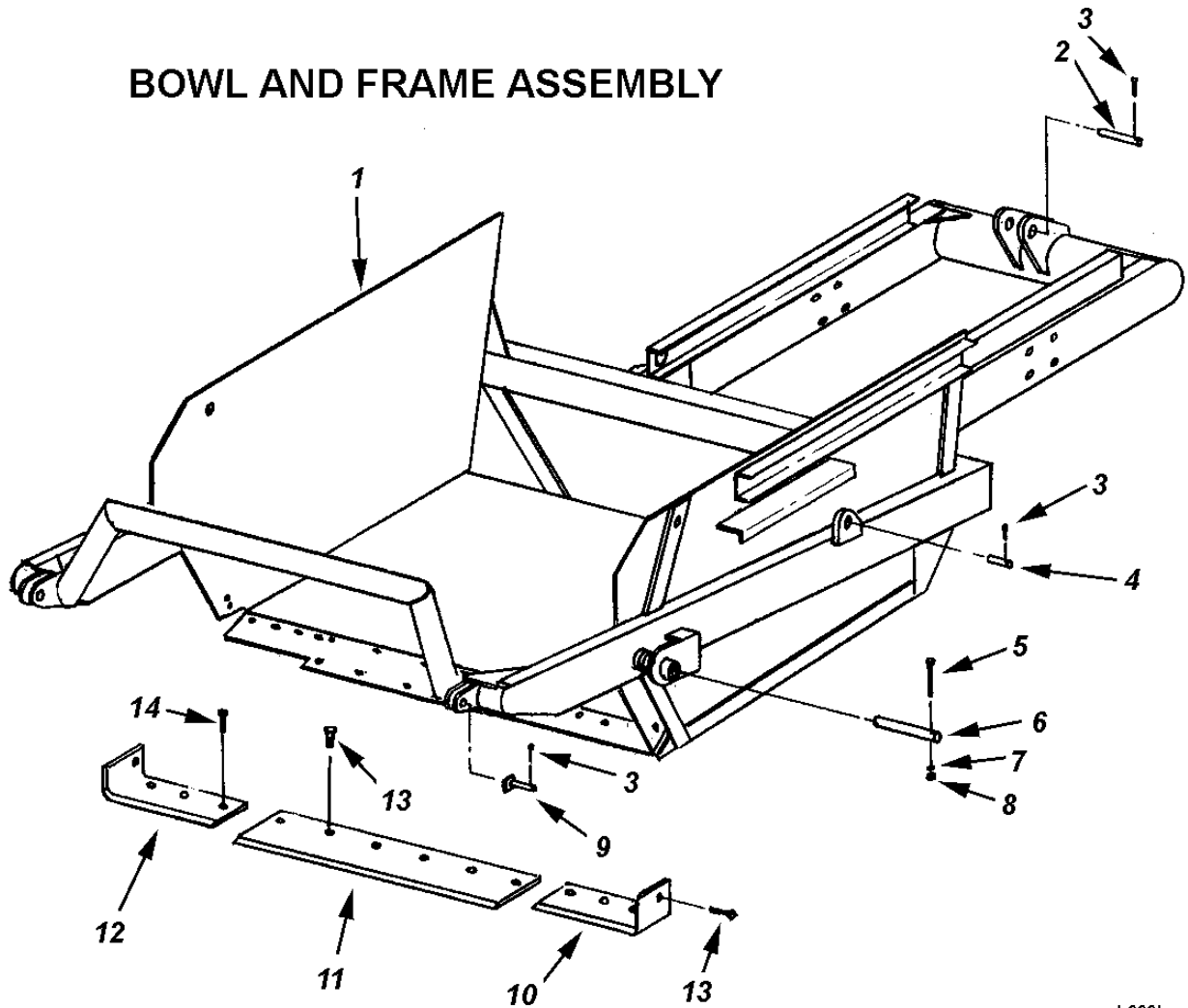
APRON ASSEMBLY



1-900-apron

KEY NO.	PART NO.	DESCRIPTION
1	A8060	Apron
2	AFN-00009	Self locking nut, 1-1/4"
3	A6010	Shoulder pin, 1-5/8" to 1-1/4" with zerk in head
4	14505	Grease fitting
5	A10155	Bushing, 1-1/2" OD x 1-1/8" ID x 1-1/8" long

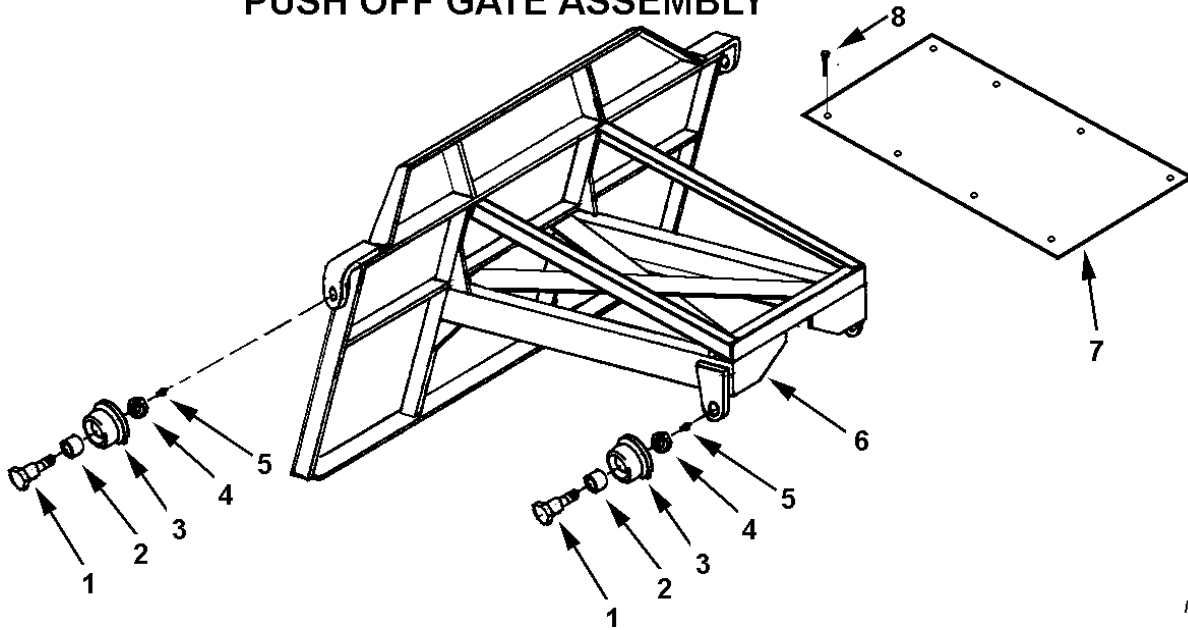
BOWL AND FRAME ASSEMBLY



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	8078	Lockwasher, 3/8"
8	7450	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	PB8P-NC-063-0200	Plow bolt, 5/8" x 2" (6 req'd)
	7530	Nut: 5/8" NC
14	PB8P-NC-063-0250	Plow bolt, 5/8" x 2-1/2" (8 req'd)
	7530	Nut: 5/8" NC

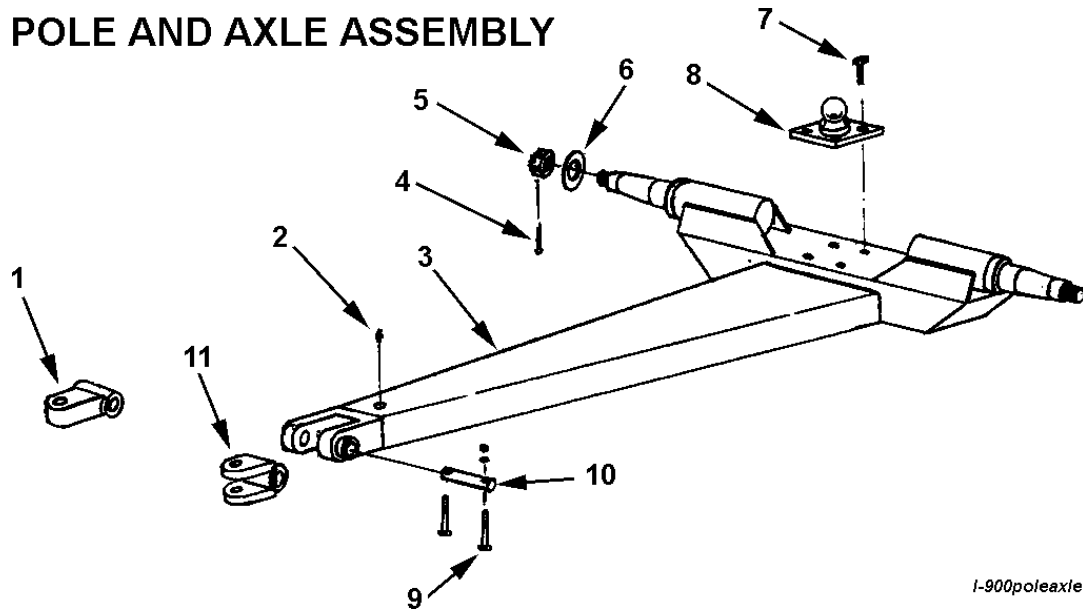
PUSH OFF GATE ASSEMBLY



I-900gate

KEY NO.	PART NO.	DESCRIPTION
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	AFN-00024	Jam nut, 1-1/4" NF
5	14505	Grease fitting, 1/8" NPT straight
6	A9056	Push off gate
7		Dirt shield
8	AFB-00034	Bolt, 3/8" NC x 1"

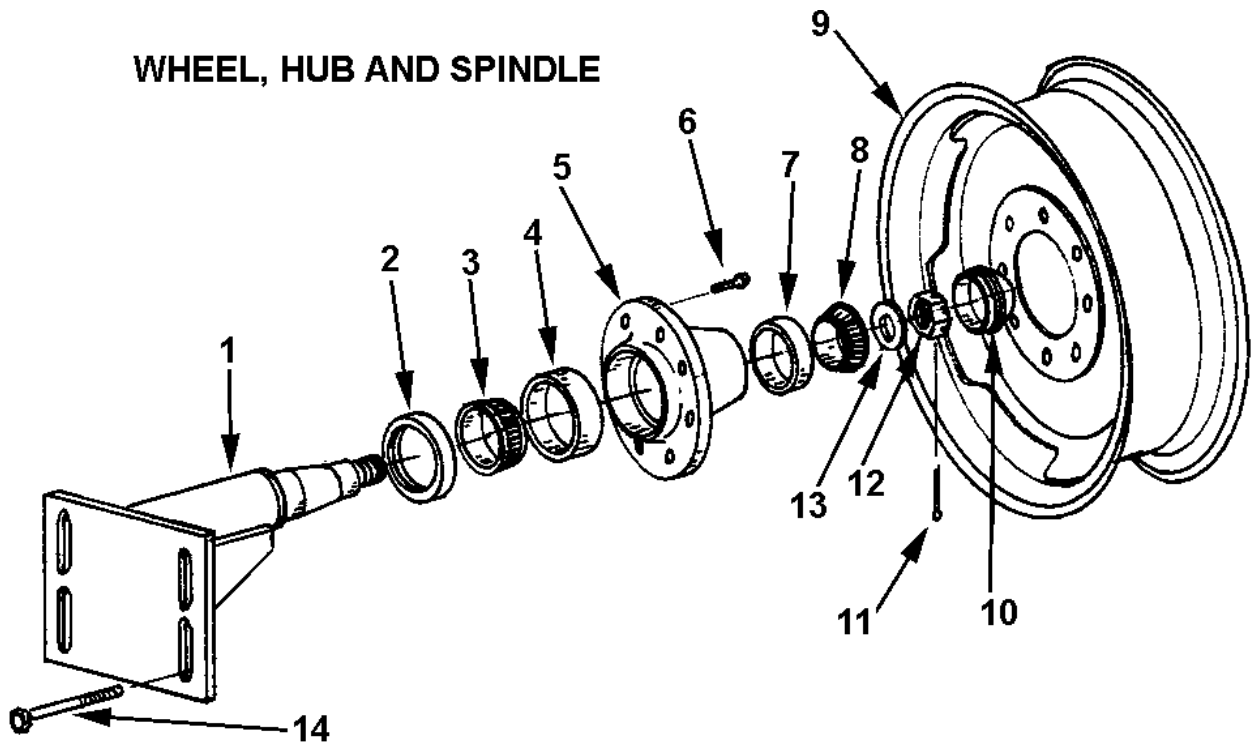
POLE AND AXLE ASSEMBLY



I-900poleaxle

KEY NO.	PART NO.	DESCRIPTION
1	A10033A	Single lip hitch
2	14505	Grease fitting, 1/8" NPT
3	A9059	Pole
4		Cotter Pin, 3/16" x 2"
5	AFN-00010	Nut, castellated, 1-1/4" NF
6	A8027	Washer, special, 1-1/4" flat
7	AFB-00005	Bolt, 3/4" NC x 2-1/2" long
8	A40006	Ball swivel
9		Bolt, 5/16" x 2-1/2"
	7430	Nut: 5/16"
	8070	Lockwasher: 5/16"
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

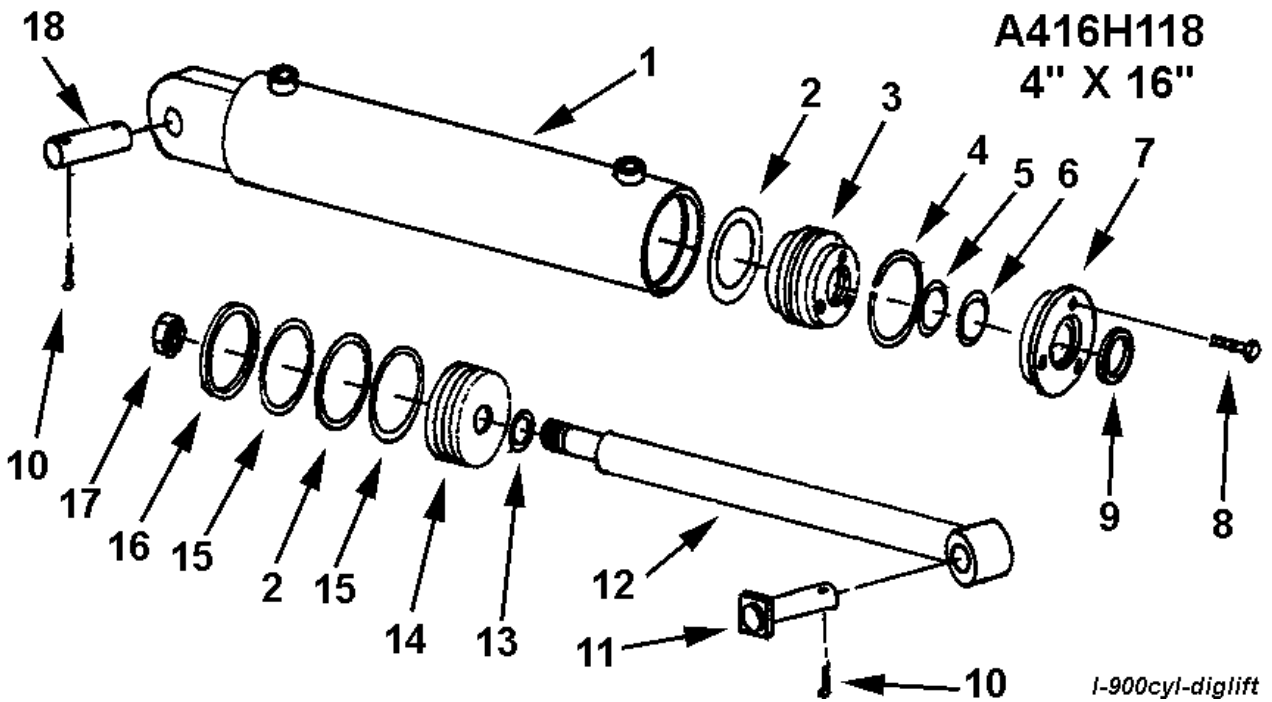
WHEEL, HUB AND SPINDLE



I-900wheel

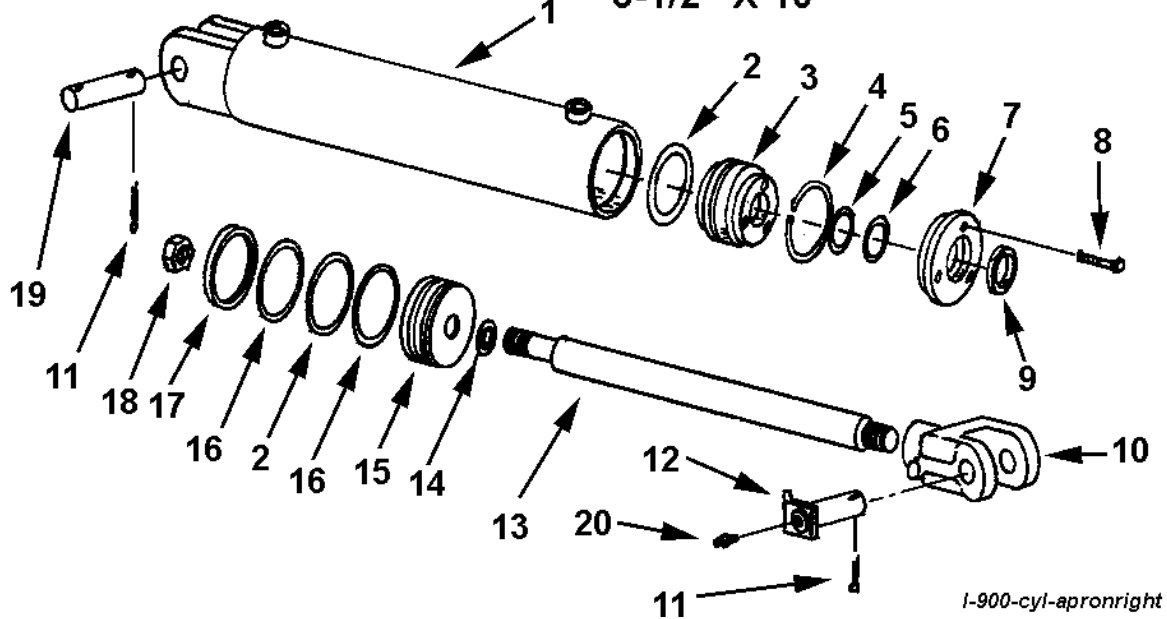
KEY NO.	PART NO.	DESCRIPTION
1	A9060	Spindle, Rear with flange base plate, s.n. 17908 above
	A9008	Spindle, Rear with flange base upto s.n. 17907
2	A8020	Grease seal (CR 35062)
3	A9061	Bearing cone, inner s.n. 17908 above (Timken 39585)
	A8021	Bearing cone, inner upto s.n. 17907 (Timken 39581)
4	A8022	Bearing cup, inner (Timken 39520)
5	A8023	Hub
6	A4519	Wheel bolt, 9/16" NF
7	A8024	Bearing cup, outer (Timken 3525)
8	A8025	Bearing cone, outer (Timken 3585)
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	AFN-00005	Spindle nut
13	A8027	Spindle washer, special
14	AFB-00001	Bolt, 1" NC x 6-1/2" long

HYDRAULIC CYLINDER DIG AND LIFT CIRCUIT



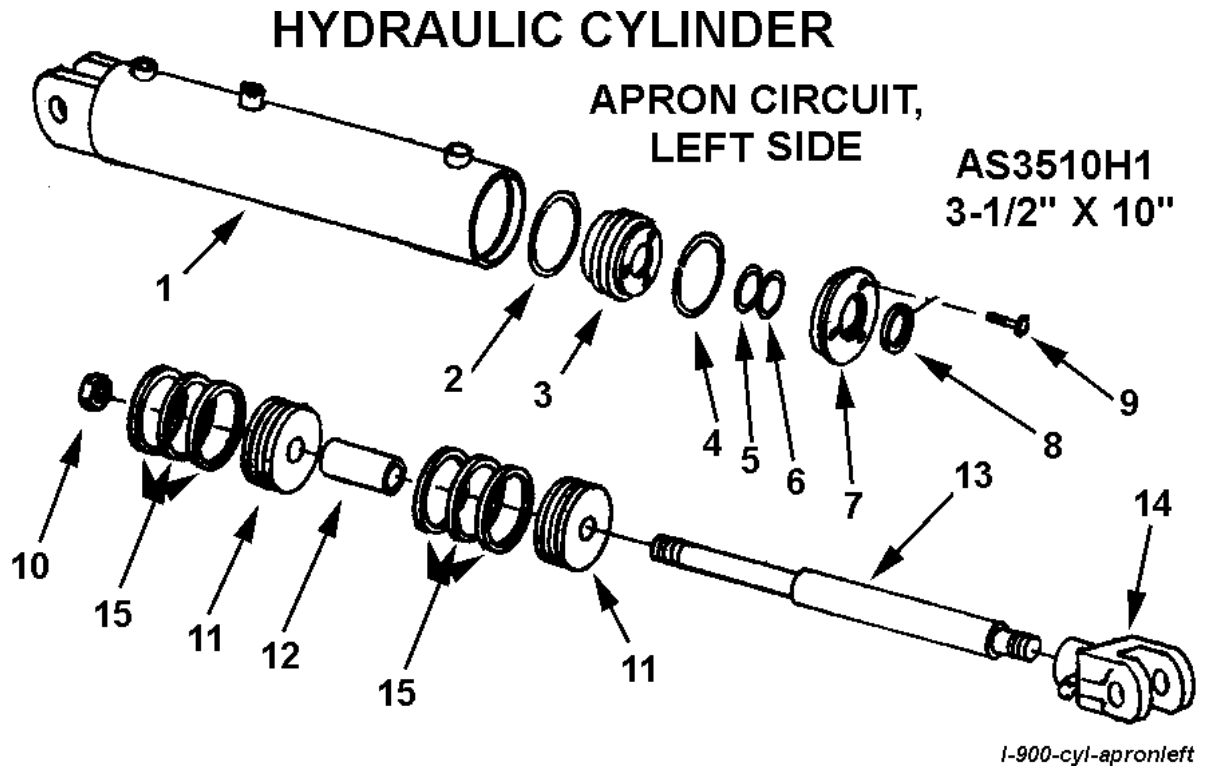
KEY NO.	PART NO.	DESCRIPTION
1	A45H04	Barrel Assembly
2	A300H06	O-ring, 4" OD x 3/16"
3	A300H11	Head gland
4	A300H12	Retainer ring
5	A22H15	O-ring, 1-1/2" ID x 1/8"
6	A22H15A	Backup washer
7	A300H13	Head cap
8	A22H18	Capscrew, 1/4" x 1"
9	A22H17	Wiper seal, 1-1/2" ID
10		Cotter pin, 3/16" x 1-1/2"
11	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,



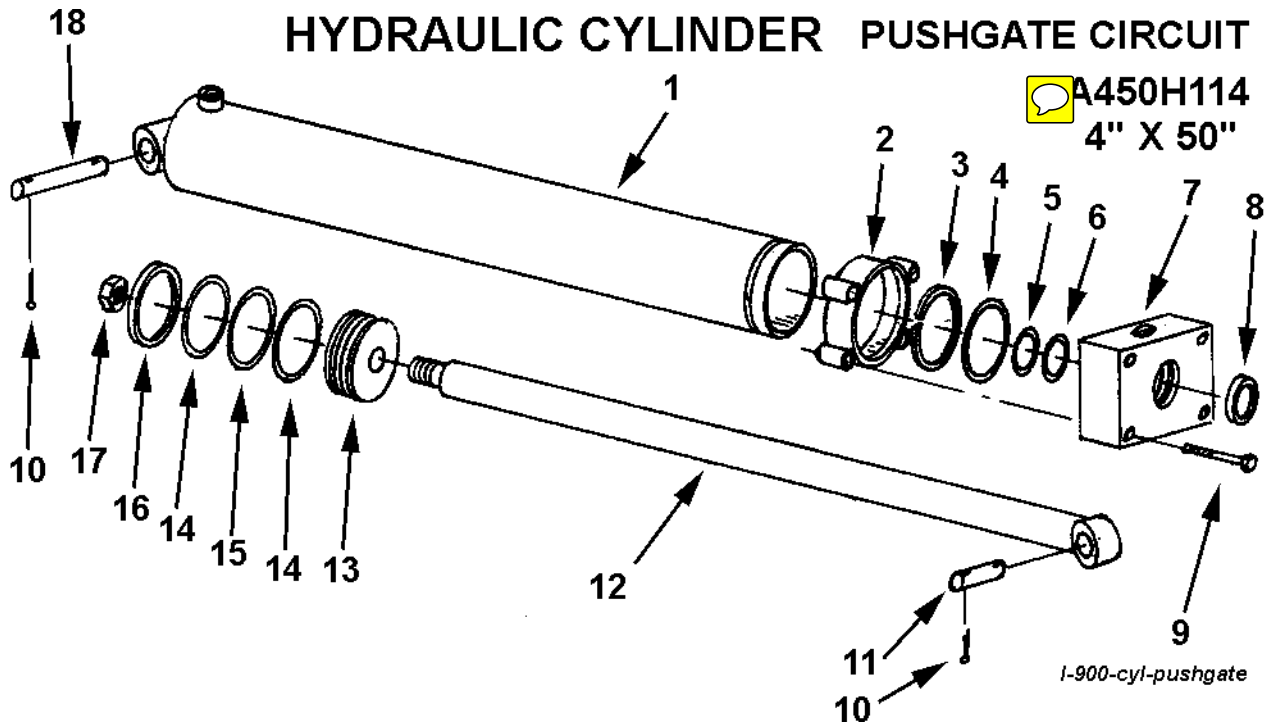
RIGHT SIDE ONLY UP TO S/N 20395
LEFT & RIGHT SIDE FROM S/N 20396 UP

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	



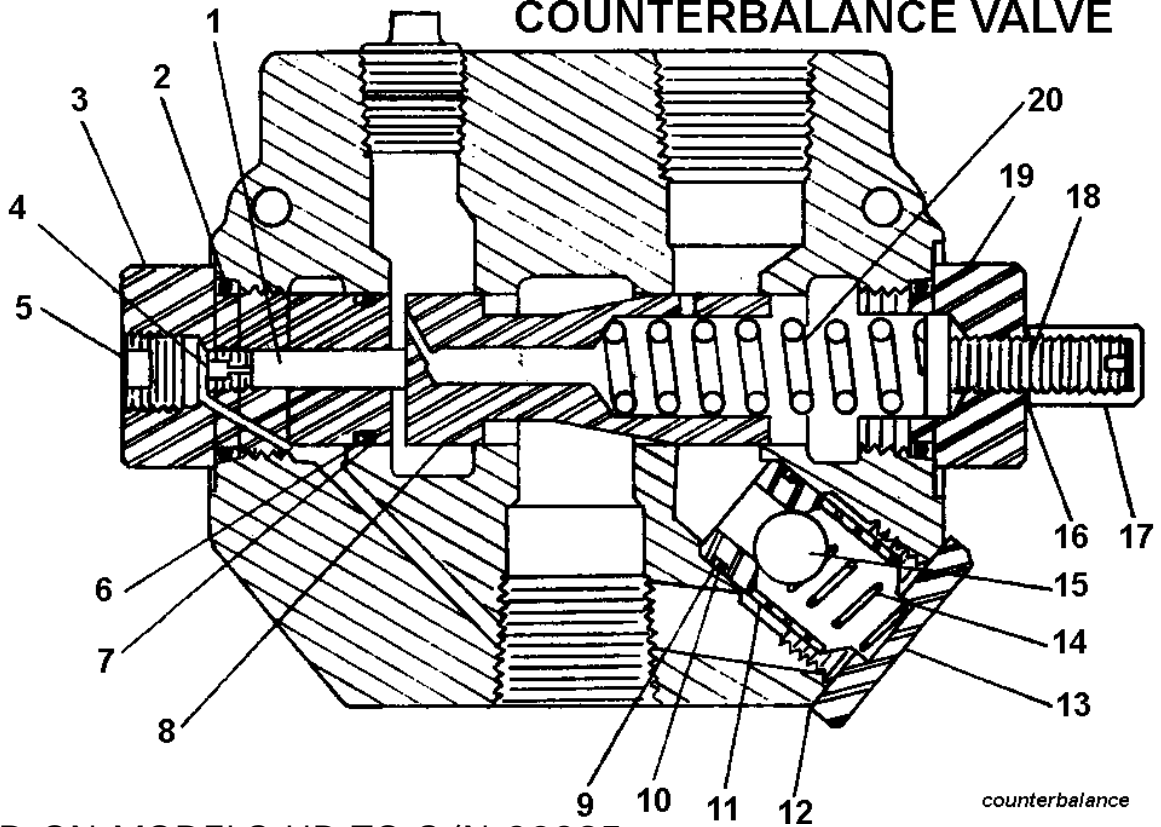
LEFT SIDE ONLY UP TO S/N 20395

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

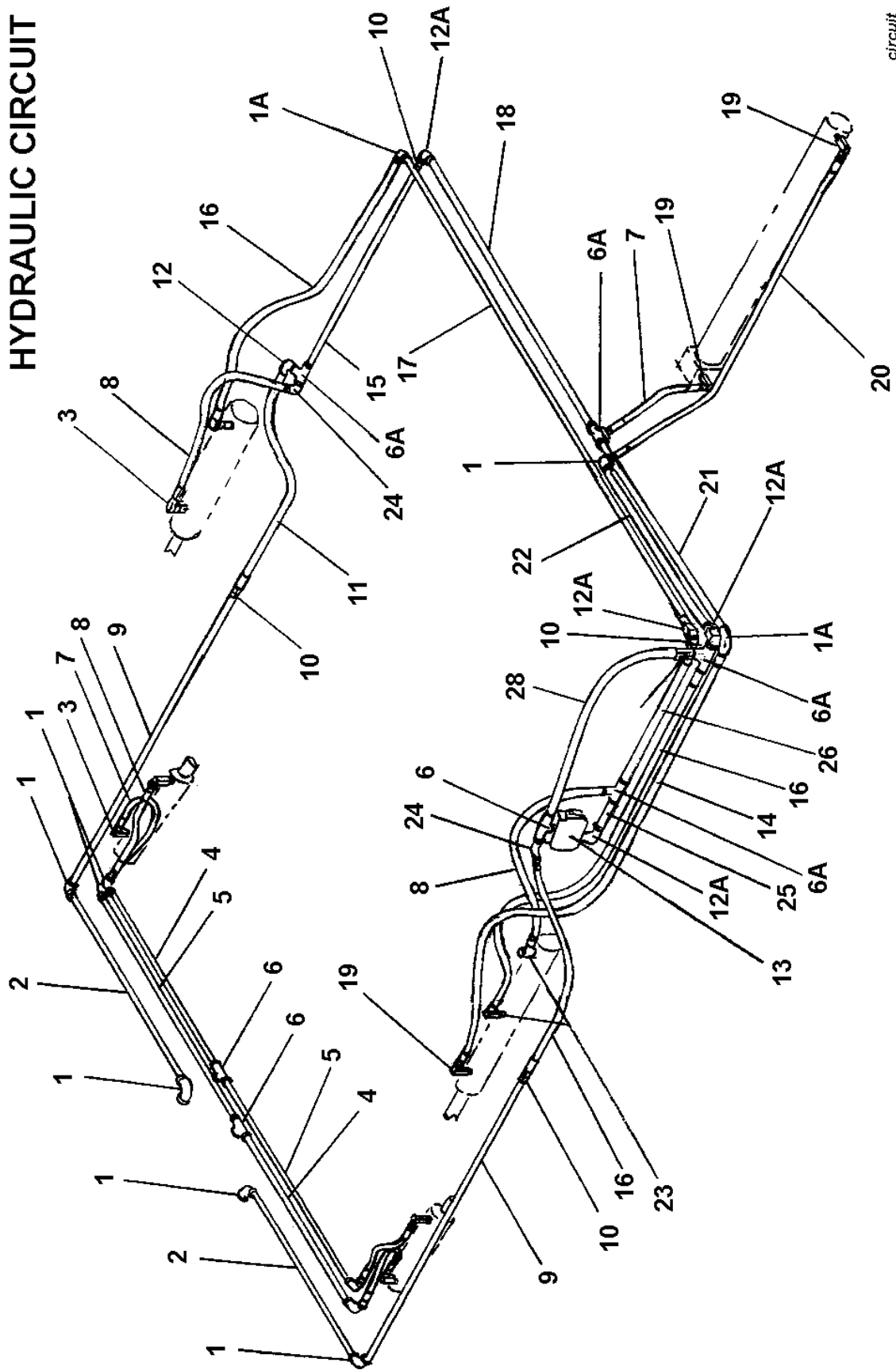


USED ON MODELS UP TO S/N 20395

KEY NO.	PART NO.	DESCRIPTION
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

FOR MODELS UP TO S/N 20395

HYDRAULIC CIRCUIT



circuit

FOR MODELS UP TO S/N 20395

PARTS LIST

HYDRAULIC CIRCUIT

KEY NO.	NO. REQ'D	PART NO.	DESCRIPTION
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

FOR MODELS UP TO S/N 20395

COUNTERBALANCE VALVE

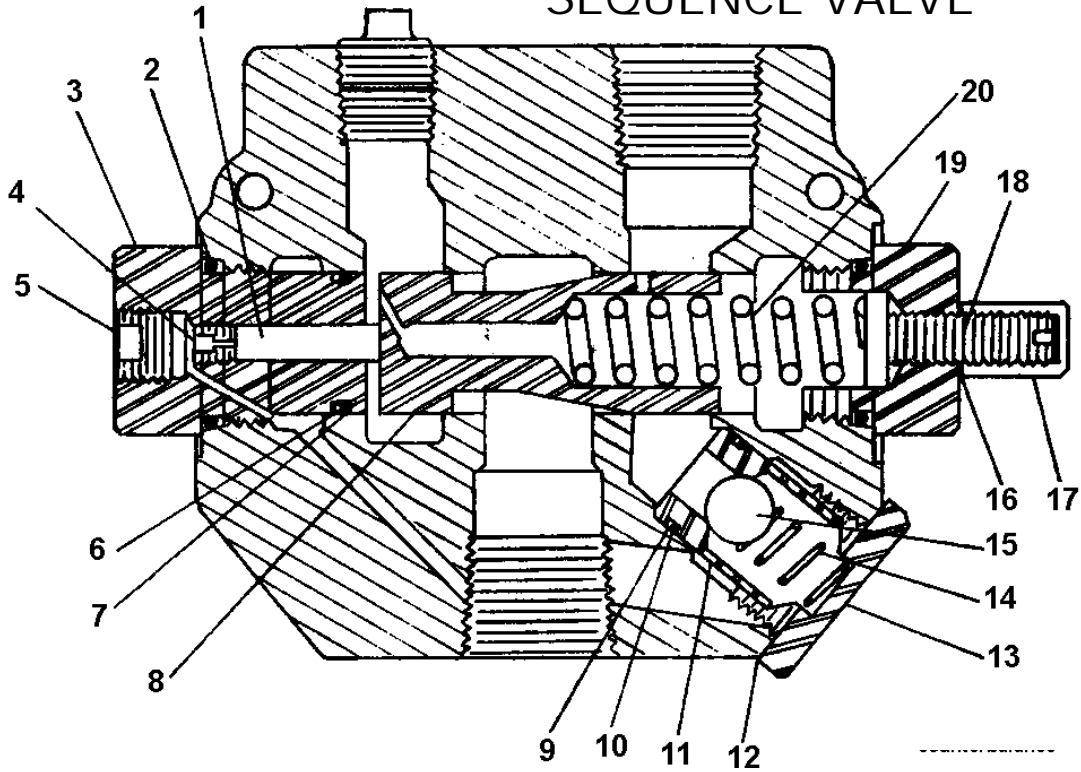
PURPOSE of the counterbalance valve is to prevent the front gate from closing before the rear pushgate is fully retracted when the scraper is empty. This enables the operator to start the next cut without having to reopen the gate from the closed position.

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.

FOR MODELS AFTER S/N 20396

SEQUENCE VALVE



KEY NO.	PART NO.	DESCRIPTION
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	A101H70	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	A101H69	Adjusting plug - RD1075 SM
20	A101H68	Metering spring
*	A101H71	Valve body

* NOT SOLD SEPARATELY

FOR MODELS AFTER S/N 20396

SEQUENCE VALVE

The sequence valve controls two hydraulic circuits with one hydraulic remote. Ashland Industries incorporates a sequence valve to control the Apron and Pushoff cylinder systems. When the tractor's hydraulic remote is activated, oil flows first to the apron cylinders until they are fully extended. Once the cylinders are fully extended, the apron circuits' hydraulic pressure begins to increase. Once the pressure threshold is surpassed (which is adjustable. See adjustment section), the sequence valve diverts the oil flow to the pushoff's hydraulic circuit. Once the pushoff is completely extended the operator then reverses the tractor's hydraulic remote. This will direct oil first to the Apron circuit. Once the apron cylinders are fully retracted, again the hydraulic pressure begins to increase allowing the pushoff to retract fully once the oil has been diverted from the sequence valve.

INSTRUCTIONS for establishing sequence valve setting:

Remove acorn nut from end of sequence valve with a 1/2" wrench. Turn adjustment screw, using a 4mm hex wrench, clockwise until front apron rises before the push-off advances while the earthmover is empty. Turn the adjustment screw an additional 1/4 turn clockwise, then replace the acorn nut and tighten. Torque check valve assembly and internal pilot plug to 25 ft.-lbs. maximum.

Limited Warranty Statement

Ashland Industries Inc. warrants each new product to be free from defects in material and workmanship. This warranty is applicable only for the normal service life expectancy of the product or components, not to exceed six consecutive months from the date of delivery of the new Ashland Industries product to the original purchaser, or the date the product is first put into service via a rental agreement or other means, whichever occurs first.

Genuine Ashland Industries Inc. replacement parts and components will be warranted for 30 days from date of purchase, or the remainder of the original equipment warranty period, whichever is longer.

Under no circumstances will it cover any merchandise or components thereof, which in the opinion of the company, has been subjected to misuse, unauthorized modification, alterations, an accident or if repairs have been made with parts other than those obtained through Ashland Industries Inc.

Ashland Industries Inc. in no way warrants Tires since these items are warranted separately by their respective manufacturer. Please call Ashland Industries Inc. to receive phone numbers of tire suppliers.

Ashland Industries Inc. in no way warrants wearable items such as cutting edges, front dolly wheel balls, socket halves.

Our obligation under this warranty shall be limited to repairing or replacing, free of charge to the original purchaser, any part that, in our judgement, shall show evidence of such defect, provided further that such part shall be returned within 30 days from the date of failure to Ashland Industries Inc. routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid. Upon warranty approval proper credits will be reimbursed for transportation.

This warranty shall not be interpreted to render Ashland Industries Inc. liable for injury or damages of any kind or nature to person or property. This warranty does not extend to the loss revenue, extra labor cost associated with downtime, substitute machinery, rental or for any other reason.

Except as set forth above, Ashland Industries Inc. shall have no obligation or liability of any kind on account of any of its equipment and shall not be liable for special or consequential damages. Ashland Industries Inc. make no other warranty, expressed or implied, and, specifically, Ashland Industries Inc. disclaims any implied warrant or merchantability or fitness for a particular purpose. Some states or provinces do not permit limitations or exclusions of implied warranties or incidental or consequential damages, so the limitations or exclusion in this warranty may not apply.

This warranty is subject to any existing conditions of supply which may direct affect our ability to obtain materials or manufacture replacement parts.

Ashland Industries Inc. reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligation to owners of units previously sold

No one is authorized to alter, Modify or enlarge this warranty nor the exclusion, limitations and reservations.

Ashland Industries Inc.
Warranty Department