

Keep with Operators Manual

VALVE AND PUMP PLUMBING KIT

IMPORTANT: Some hardware necessary for installing loader is used to package parts for shipping. Save all hardware for possible later use.

NOTE: Leave attaching hardware loose until loader is completely assembled to facilitate assembly and proper alignment.

INSTALLING SIDEFAMES

1. Install hinges in sideframes using 5/8 x 3-1/2 carriage bolts and 5/8 lock nuts provided.
2. Position sideframes (without front mounting bracket attached) over midmounting tubes. Clamp hinges around midmounting tubes using 1/2 x 1-3/4 cap screws, 1/2 flat washers and 1/2 lock nuts (provided) but do not tighten.

NOTE: Allow sideframes to rotate forward until they touch the ground.

INSTALLING PUMP

1. Install pin mounting bracket (10) to front of tractor frame using 5/16 x 1 carriage bolts (43) and 5/16 lock nuts (5).
2. Install 7/8 x 7/8 elbow fitting (34) and 7/8 x 7/8 elbow fitting (35) to inlet port of pump.

NOTE: Pump is inverted when installed on front of tractor.

3. Install 3/4 x 9/16 adapter fitting (37), and 9/16 x 9/16 elbow fitting (38) to outlet port of pump (8). Position elbow fitting (38) as shown.
4. Install pressure hose (32) to outlet port and suction hose (13) to inlet port of pump.
5. Fasten pump (8) to pump mounting bracket (30) using 3/8 x 1-1/4 cap screws (11) and 3/8 lock nuts (5).
6. Wrap roller chain (3) around splined hub sprocket (2) and keyway hub sprocket (4) and fasten together using chain connector link provided. Insert woodruff key (42) into slot on pump shaft. Slide sprocket assembly onto pump shaft. Be sure woodruff key is properly seated between shaft and sprocket.
7. Secure sprocket assembly to pump shaft using socket head set screw (9).

INSTALLING VALVE

1. Install valve mounting bracket (27) to left side frame using 5/16 x 1 cap screw (45).
2. Fasten valve (18) to valve mounting bracket using 1/4 x 2-1/4 cap screws (21), 1/4 lock washers (17) and 1/4 lock nuts (16).

PLUMBING HYDRAULICS

1. Install 9/16 x 9/16 adapter fittings (22) to working ports of valve. Install 3/4 x 3/4 elbow fitting (33) to tank port and 3/4 x 9/16 45° elbow fitting (36) to pressure port of valve. Point elbow fittings (33) and (36) forward.
2. Install handles (20) and u-hooks (19) to valve using clevis pins (28) and cotter pins (29).
3. Install 3/8 x 3/8 adapter fitting (15), filter assembly (14) and 3/4 x 3/8 elbow fitting (40) to return port on back side of left sideframe.
4. Connect hose (31) to elbow fitting (40) on filter assembly and elbow fitting (33) on valve.
5. Connect pressure hose (32) to elbow fitting (38) on pump and elbow fitting (36) on valve.
6. Install 1/2 x 7/8 elbow fitting (41), 7/8 x 1/2 adapter fittings (39), Y-strainer (6) and 3/8 plug (7) to port on bottom inside of left sideframe.
7. Connect suction hose (13) to elbow fitting (35) on pump and adapter fitting (39) on Y-strainer.

NOTE: Hand bend steel oil lines away from loader and each other to ease installation of hoses (23 & 24).

8. Install hoses (23 & 24) to valve and steel oil lines on loader.

NOTE: Longer hoses (23) connect to rear working ports on valve.

9. Slide pump assembly onto splined power shaft on tractor and pin mounting bracket (10). Secure pump mounting bracket (30) to pin mounting bracket (10) using hair pin clip (1). Splined power shaft must engage sprocket hub at least 3/4 inches. Adjust sprocket with set screw on pump shaft if necessary.

2-6447

INSTALLING FRONT MOUNTING BRACKET

IMPORTANT: *Install front mounting bracket and bumper after installing sideframes, pump and plumbing hydraulics.*

Install front mounting bracket. Refer to (2-6446) instructions for mount kit.

INSTALLING BUCKET

1. Install 1/4 x 28 grease fittings (26) into pins (23). Attach bucket to boom using pins (23), 3/8 x 1 shoulder bolts (28) and 3/8 lock nuts (29). Attach bucket to bucket cylinders using pins (22 & 24), 3/8 shoulder bolts (28) and 3/8 lock nuts (29).
2. Install guide tube (3) to boom using 3/8 lock nuts (31).

NOTE: *Leave lock nuts loose enough so guide tube is free to rotate.*

3. Slide level indicator rod (2) through guide tube and attach to pin (22) using 5/16 x 1-1/2 cotter pin (37).

ACTIVATING HYDRAULIC SYSTEM

1. Be sure all fittings and hoses are tight.
2. Secure suction hose (13) and pressure hose (32) to inside of left sideframe using two tie straps (12) (Figure 13).
3. Fill tank to within six inches of top. Use AW#15 hydraulic oil or type "A" or "F" transmission fluid.
4. Engage hydraulic pump and set engine to idle speed.
5. Slowly cycle lift and bucket cylinders several times to remove air from system. Replenish oil tank to within six inches of top.

NOTE: *Pulling back on lift control handle should raise loader. Pulling back on bucket control handle should curl bucket upward. If direction of operation is reversed, switch hose connections between loader and valve.*



WARNING: *Escaping hydraulic fluid under pressure can penetrate skin causing serious injury.*

- *DO NOT use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks.*
- *Stop engine and relieve pressure before connecting or disconnecting lines.*
- *Tighten all connections before starting engine or pressurizing lines.*

If any fluid is injected into skin, obtain medical attention immediately or gangrene may result.

PARTS LIST - VALVE AND PUMP KIT

ITEM	DESCRIPTION	QTY.
1	HAIR PIN COTTER, 3/32 x 3-3/4	1
2	SPROCKET, w/spline hub #40b12	1
3	CHAIN, Roller, #40-2 x 12 Pitches	1
4	SPROCKET, w/Keyway hub, #40B12	1
5	NUT, Lock, 3/8-16	2
6	Y-STRAINER	1
7	PLUG, Pipe, 3/8 NPT	1
8	PUMP, Parker Model D14AA2A	1
9	SCREW, Set Socket Head, 1/4-20 x 1/4	1
10	BRACKET, Pin Assembly	1
11	SCREW, Cap, 3/8-16 x 1-1/4	2
12	STRAP, Adjustable, Tie	2
13	HOSE, 1/2 x 48 (Suction)	1
14	FILTER ASSEMBLY	1
15	FITTING, Adaptor, 3/8 x 3/8 (between tank return and oil filter)	1
16	NUT, Hex, 1/4-20	2
17	WASHER, Lock, 1/4	2
18	VALVE, Dukes Fluid Power Model 1627 DM	1
19	U-HOOK	2
20	HANDLE, Valve	2
21	SCREW, Cap, 1/4-20 x 2-1/4	2
22	FITTING, Adapter, 9/16 x 9/16	4
23	HOSE, 1/4 X 22	2
24	HOSE, 1/4 X 20	2
25	BREATHER CAP	1
26	HOSE CLAMP, 2"	1
27	BRACKET, Valve Mounting	1
28	CLEVIS PIN, 1/4 x 3/4	2
29	COTTER PIN, 1/16 x 1/2	4
30	BRACKET, Pump Mounting	1
31	HOSE, 3/8 x 26 (valve to filter)	1
32	HOSE, 1/4 x 66 (pressure)	1
33	FITTING, 3/4 O-ring X 3/4 JIC, 90° (outlet port on valve)	1
34	FITTING, 7/8 O-ring x 7/8 JIC, 90° (inlet port on pump)	1
35	FITTING, 7/8 JIC x 7/8 JIC, 90° (between inlet fitting pump and hose)	1
36	FITTING, 3/4 O-ring x 9/16 JIC, 45°	1
37	FITTING, 3/4 O-ring x 9/16 JIC (outlet port on pump)	1
38	FITTING, 9/16 x 9/16 JIC, 90° (between outlet fitting pump and hose)	1
39	FITTING, 7/8 JIC x 1/2 NPTF (each end of y-strainer)	2
40	FITTING 3/4-16 JIC x 3/8 NPTF, 90°	1
41	FITTING, 1/2 NPTF x 7/8 JIC, 90°	1
42	----- WOODRUFF KEY, 1/8 x 5/8 (comes with pump)	1
43	CARRIAGE BOLT, 5/16-18 x 1	2
44	NUT, Lock, 5/16-18	2
45	SCREW, Cap, 5/16-18 x 1	1

