

BUNDLE 2-5641
84Q LOADER 1-LEVER CONTROL VALVE & PLUMBING
TO TRACTOR HYDRAULICS INSTRUCTIONS FOR
CASE-IH 275 4WD AND MITSUBISHI MT300 & MT300D TRACTORS

The valve and plumbing can be installed on the tractor and loader using tools ordinarily available. Engage the tractor brakes and shut off tractor engine during installation.

NOTE: Apply sealant only to all tapered threads except when coupled with swivel adapters. When using teflon tape, wrap tape clockwise (as viewed from end) and wrap tape only twice. Keep sealant away from first two threads of tapered end to prevent contamination of hydraulic fluid. Do not use sealant on SAE or JIC threads.

ATTACHING ENCLOSED VALVE AND STAND TO LOADER MOUNTING BRACKET

1. Fasten flanged end of valve stand tube (34) to angle bracket near right end of loader mid mounting bracket using 3/8 x 1-1/2 cap screws (35) lock washers (36) and nuts (37).
2. Remove cover (25) of valve enclosure by removing #10 x 1/2 pan head screws (27). Reposition elbow fitting (15) in power beyond port of valve as necessary and fasten valve box (24) to valve stand tube (34) through pair of holes near corner of valve box using 3/8 x 2-1/4 cap screws (38) and lock nuts (39).

NOTE: To avoid chafing the power beyond hose, keep the bend radius as large as possible by routing it between the front plate of enclosure and tube attachment tab.

3. Retighten jam nut on power beyond elbow (15) and refasten cover (25) to valve box (24) using original #10 x 1/2 pan head screws (27). Making sure the surface of valve box is clean and dry, remove backing from decal (40) and apply to box where it will be visible to the operator.

PLUMBING CONTROL VALVE TO TRACTOR HYDRAULICS

1. Remove lower cover located to right of and below tractor seat to access tractor hydraulics. Remove plug from tractor tank port near same location. Install 3/8-3/8 straight fittings (41) into all three ports. Install 3/8-9/16 straight fittings (42) into 3/8-3/8 fittings (41).
2. Route hose (20 & 21) down the valve mounting bracket, along the loader right reinforcement bracket, then up through hole in tractor footrest platform to fittings (42) in tractor hydraulic outlet. Connect hose (20) from tank port of loader control valve (labeled "OUT" to 3/8-9/16 straight fitting (42) in rearmost (tank) port, connect hose (20) from pressure port (labeled "IN") to fitting (42) in middle (pressure) port, and connect hose (21) from power beyond port ("PB") to fitting in front (power beyond) port. Secure hoses (20 & 21) to valve mounting tube, loader right reinforcement bracket and tractor footrest platform using plastic tie straps (43).

PLUMBING CONTROL VALVE TO TRACTOR HYDRAULICS (continued)

NOTE: It may be necessary to remove the differential lock pedal stopper to install hoses (20 & 21) and fittings (41 & 42). Reinstall stopper after connecting hoses.

PLUMBING LOADER TO CONTROL VALVE

1. Install 3/8 x 78 hoses (44) onto boom oil line tubes. Install and tighten hose fittings one at a time from the bottom up. Loosening the closest oil line clamp will ease installation.
2. Install 5/8 spiral bands (45) onto free ends of hoses (44) to match bands (30) on female quick couplers (29). Slide nylon sleeve (46) over hoses (44) and install male quick couplers (47) onto free ends.
3. Connect hoses from the upper two boom oil lines to the lower quick couplers and connect hoses from the lower two boom oil lines to the upper two quick couplers. Wrap one end of rubber strap (48) around hoses and sleeve and hook it onto itself. Attach the other end of rubber strap to the hole provided near front corner of loader right side frame channel.
4. After all plumbing has been completed and all parts are secure, start the tractor engine and slowly cycle the lift and bucket cylinders several times to purge any air from the hydraulic system, then retract cylinders and shut off tractor engine. Add additional tractor hydraulic fluid as specified in the tractor operator's manual to bring the fluid level up to the full mark.

NOTE: When cycling the loader, operate the valve according to the operation decal (40) on the valve box. If direction of control lever is wrong, recheck hose connections, interchange related quick couplers and switch spiral identification bands accordingly.



WARNING: Escaping hydraulic fluid under pressure can have sufficient force to penetrate the skin causing serious personal injury. If injured by escaping fluid, obtain medical treatment immediately.

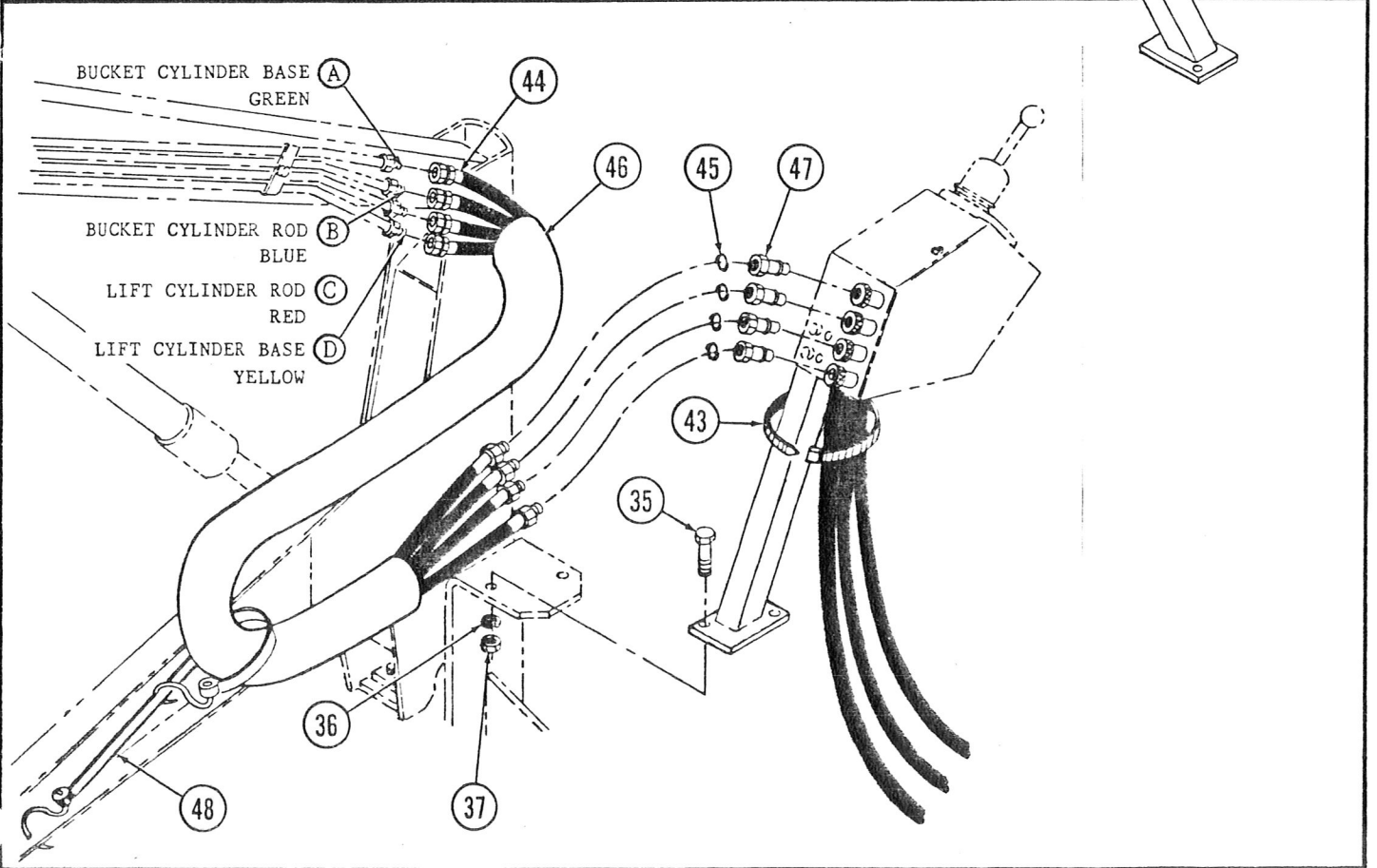
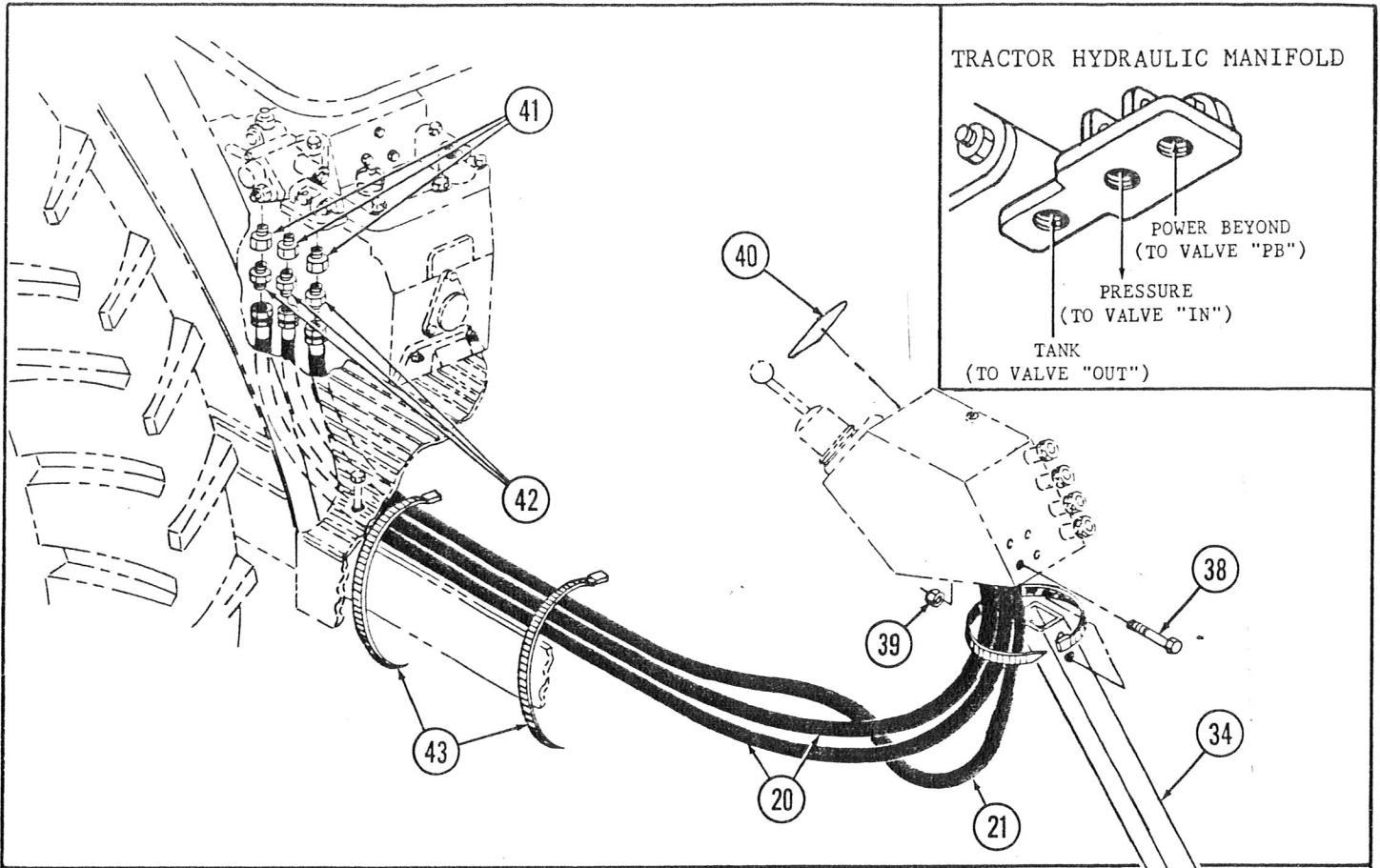
PARTS LIST

Item	Part No.	Description	Qty.
*1	38411	VALVE, DFP Model 1627-FT	1
*2	38903	ANGLE, Handle Attachment	1
*3	38911-1	SCREW, Flat Head Socket, 5/16-24 x 3/4	1
*4	38910-2	SCREW, Socket Head Cap, 5/16-24 x 3/4	1
*5	38908	LEVER, Valve Handle	1
*6	38901-5	BALL JOINT, Male	2
*7	38900-5	BALL JOINT, Female	1
*8	38904-1	STUD, Ball Joint	1
*9	38910-1	SCREW, Socket Head Cap, 1/4-20 x 3/4	3

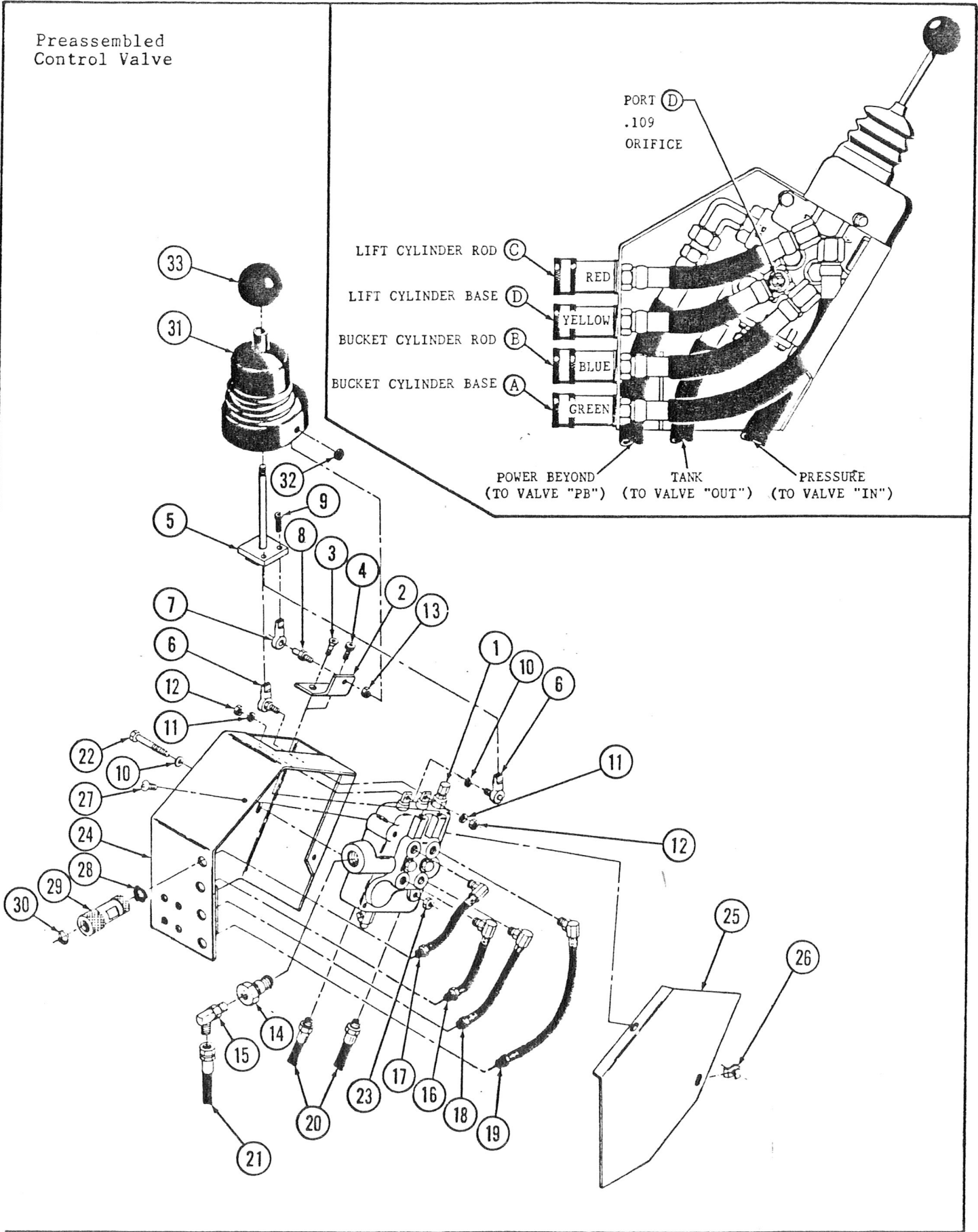
PARTS LIST (continued)

Item	Part No.	Description	Qty.
*10	G120392	WASHER, Flat, 1/4	3
*11	G120380	WASHER, Lock, 1/4	2
*12	G120367	NUT, Hex, 1/4-28	2
*13	G9416430	NUT, Lock, 1/4-28	1
*14	36584	FITTING, Power Beyond Sleeve	1
*15	32845-1	FITTING, Elbow, 9/16-9/16 x 90°	1
*16	38928-1	HOSE, 3/8 x 6-15/16	1
*17	38928-2	HOSE, 3/8 x 7-7/8	1
*18	38928-3	HOSE, 3/8 x 8-1/2	1
*19	38928-4	HOSE, 3/8 x 13	1
*20	36388-10	HOSE, 3/8 x 86	2
*21	36386-10	HOSE, 3/8 x 90 86	1
*22	G180044	SCREW, Cap, 1/4-20 x 2	2
*23	G9424215	NUT, Lock, 1/4-20	2
*24	38926	BOX, Valve Mounting	1
*25	38927	COVER, Valve Box	1
*26	38440-1	NUT, Panel, "J" Clip	2
*27	G9426105	SCREW, Pan Head Type AB, #10-16 x 1/2	2
*28	38912	SPACER, Quick Coupler	4
*29	6147-4	COUPLER, Quick, Female	4
*30	36240-9	BAND, Spiral, 1, Blue	1
*	36240-10	BAND, Spiral, 1, Red	1
*	36240-11	BAND, Spiral, 1, Yellow	1
*	36240-12	BAND, Spiral, 1, Green	1
*31	38653	BOOT, Handle	1
*32	38930-1	CAP NUT	1
*33	38902	KNOB, Valve Handle	1
34	39080	TUBE, Valve Mounting Stand	1
35	G180126	SCREW, Cap, 3/8-16 x 1-1/2	2
36	G120382	WASHER, Lock	2
37	G120377	NUT, Hex, 3/8-16	2
38	G180132	SCREW, Cap, 3/8-16 x 2-1/4	2
39	G9413534	NUT, Lock, 3/8-16	2
40	38929	DECAL, Single Lever Control	1
41	25945-1	FITTING, Straight, 3/8 ISO - 3/8 NPT	3
42	31221-4	FITTING, Straight, 3/8 NPT - 9/16 JIC	3
43	8137-1	STRAP, Plastic, 3/16 x 11	4
44	36336-1	HOSE, 3/8 x 78	4
45	36240-5	BAND, Spiral, 5/8, Blue	1
	36240-6	BAND, Spiral, 5/8, Red	1
	36240-7	BAND, Spiral, 5/8, Yellow	1
	36240-8	BAND, Spiral, 5/8, Green	1
46	38453-2	SLEEVE, Nylon Hose	1
47	6137-4	COUPLER, Quick, Male	4
48	7438-1	STRAP, Rubber	1

*NOTE: Items 1 through 33 have been preassembled.



Preassembled
Control Valve



ENCLOSED VALVE AND HANDLE DISASSEMBLY AND REASSEMBLY

If it is necessary to replace or repair any component of the valve enclosure or handle, it will need to be disassembled to the point where the damaged part is removed, then reassembled with a repair part. If a part should fail during the warranty period, return the entire assembly, without disassembling, to your authorized service department or contact your service department for instructions. See the 84Q loader owner's manual for valve service instructions. Unauthorized disassembly of the valve in the warranty period will **VOID WARRANTY**.

Follow the following procedure to disassemble and reassemble the valve handle and enclosure.

VALVE HANDLE DISASSEMBLY

1. Remove the cap nut (32) from threaded end of ball joint stud (8) and unscrew handle knob (33) from end of valve handle (5). Slip rubber boot (31) off ball joint stud (8) and slide rubber boot off valve handle (5).
2. Unscrew 1/4 x 3/4 socket head cap screws (9) from ball joints (6 & 7) to remove valve handle lever (5).

NOTE: The valve, with hoses and fittings, may be removed from the enclosure without further disassembly of the handle mechanism. See **VALVE ENCLOSURE, HOSE AND FITTING DISASSEMBLY** instructions if further disassembly of the handle mechanism is not required.

3. Remove 1/4 - 28 hex nuts (12), lock washers (11) and flat washers (10) which fasten male ball joints (6) onto spools of valve (1).

NOTE: Rotate tilt spool (spool without float) approximately 45° to each removal of nut (12) and lock washer (11) from male ball joint (6).

4. Slide female ball joint (7) off stud (8) and remove ball joint stud (8) from handle attachment angle (2) by removing 1/4-28 lock nut (13).
5. Remove handle attachment angle (2) from valve (1) by removing 5/16 x 3/4 flat head cap screw (3) and socket head cap screw (4).

VALVE ENCLOSURE, HOSE, AND FITTING DISASSEMBLY

1. Remove cover (25) from valve box (24) by removing #10 x 1/2 pan head screws (27) and "J" clips (26).
2. Remove female quick couplers (29), spiral bands (30) and spacers (28) from ends of hoses (16, 17, 18 & 19). Remove hoses (16, 17, 18 & 19) from working ports of valve (1).

NOTE: Do not lose one-way restrictor plate from working port D of valve (1).

VALVE ENCLOSURE, HOSE AND FITTING DISASSEMBLY (continued)

3. Remove 1/4 x 2 cap screws (22) and lock nuts (23) to remove valve with attached fittings and hoses from box (24).
4. Remove hoses (20) from the inlet and outlet ports of valve (1). Remove hose (21) from fitting (15) in power beyond port of valve (1). Remove elbow fitting (15) from power beyond sleeve (14).

REASSEMBLING SINGLE LEVER CONTROL ONTO VALVE

1. Fasten handle attachment angle (2) to valve (1) using the 5/16 x 3/4 flat head cap screws (3) and socket head cap screws (4).
2. Fasten ball joint stud (8) to handle attachment angle (2) with 1/4-28 lock nut (13), then slide female ball joint (7) onto stud (8). Fasten both male ball joints (6) onto both spools of valve (1) with 1/4-28 hex nuts (12) and lock washers (11). One quarter-inch washer (10) may be used between the valve lift spool (spool with float) and ball joint (6) to change angle of handle lever (5).

NOTE: Rotate tilt spool (spool without float) approximately 45° to ease installation of male ball joint (6) lock washer (11) and lock nut (12).

3. Fasten valve handle lever (5) to ball joints (6 & 7) using 1/4-28 x 3/4 socket head cap screws (9).

REASSEMBLING VALVE AND HOSES IN BOX

1. Install 9/16-9/16 x 90 elbow (15) into power beyond sleeve (14) in valve port marked "PB".
2. Install 3/8 x 6-15/16 hose (16) into port D of valve (1). Install 3/8 x 7-7/8 hose (17) into port C, install 3/8 x 8-1/2 hose (18) into port B and install 3/8 x 13 hose (19) into port A. Connect male end of pressure hose (20) into valve port marked "IN" install the tank hose (20) into "OUT" port and install power beyond hose (21) onto elbow (15) in power beyond port.

NOTE: Make sure one-way restrictor plate with .109 hole is positioned in working port D with grooved side facing out before installing 3/8 x 6-15/16 hose (16). This plate is to prevent the loader from lowering too fast.

3. Fasten valve with attached hoses and fittings to valve box (24) using 1/4 x 2 cap screws (22) and lock nuts (23). Put ends of working port hoses (16, 17, 18 & 19) through holes in valve box as shown and install female quick couplers (29) and spacers (28). Install colored bands (30) over spacers to identify quick couplers.
4. Slide panel nuts (26) onto valve box (24) and cover (25) and fasten cover (25) onto box using #10 x 1/2 pan head screws (27). Slide rubber boot (31) over valve handle (5) and press around bottom so threaded end of ball joint stud (8) protrudes through hole. Fasten cap nut (32) onto protruding threads. Screw valve handle knob (37) onto end of valve handle.