

Keep With Operator's Manual

THIRD FUNCTION SOLENOID SELECTOR VALVE KIT 2408TL, 2408, 2409

Third function valve kit can be installed using tools ordinarily available. References to right or left, forward or rearward, refer to position of operator sitting in tractor seat facing front of tractor.



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

- *DO NOT use your hands 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.

INSTALLING THIRD FUNCTION VALVE KIT (Figure 1)

1. Lower loader to ground. Level bucket and shut off tractor engine. Relieve hydraulic pressure by activating control levers several times.
2. Remove oil line shield from top of loader crossmember. Position angle bracket (17) so rubber pad with cushion oil lines is centered on cutout on angle and back of angle is 2.56" from back edge of bolt and parallel to back of cross member.

Note: Mark to locate holes on crossmember using angle bracket (17) as a template. Drill two 3/16 holes in crossmember and attach angle bracket (17) to crossmember using 1/4 X 1 self tapping screws (13). Reinstall oil line shield onto top of loader crossmember.

3. Attach selector valve (1) to mounting bracket (2) with solenoid positioned facing right side of loader boom as shown in Figure 1. Fasten selector valve (1) to mounting bracket (2) using 1/4 X 2 cap screws (4) 1/4 lock nuts (5) spacer plate (38) and 1/4 flat washer (37).
4. Install 3/4 X 90° extra long elbow fitting (6) and 3/4 x 90° elbow fitting (7) into top and rear ports of selector valve (1). On top ports, long elbow fitting (6)

goes in left port and points toward right. On rear ports long elbow fitting (6) goes into right port and points toward left.

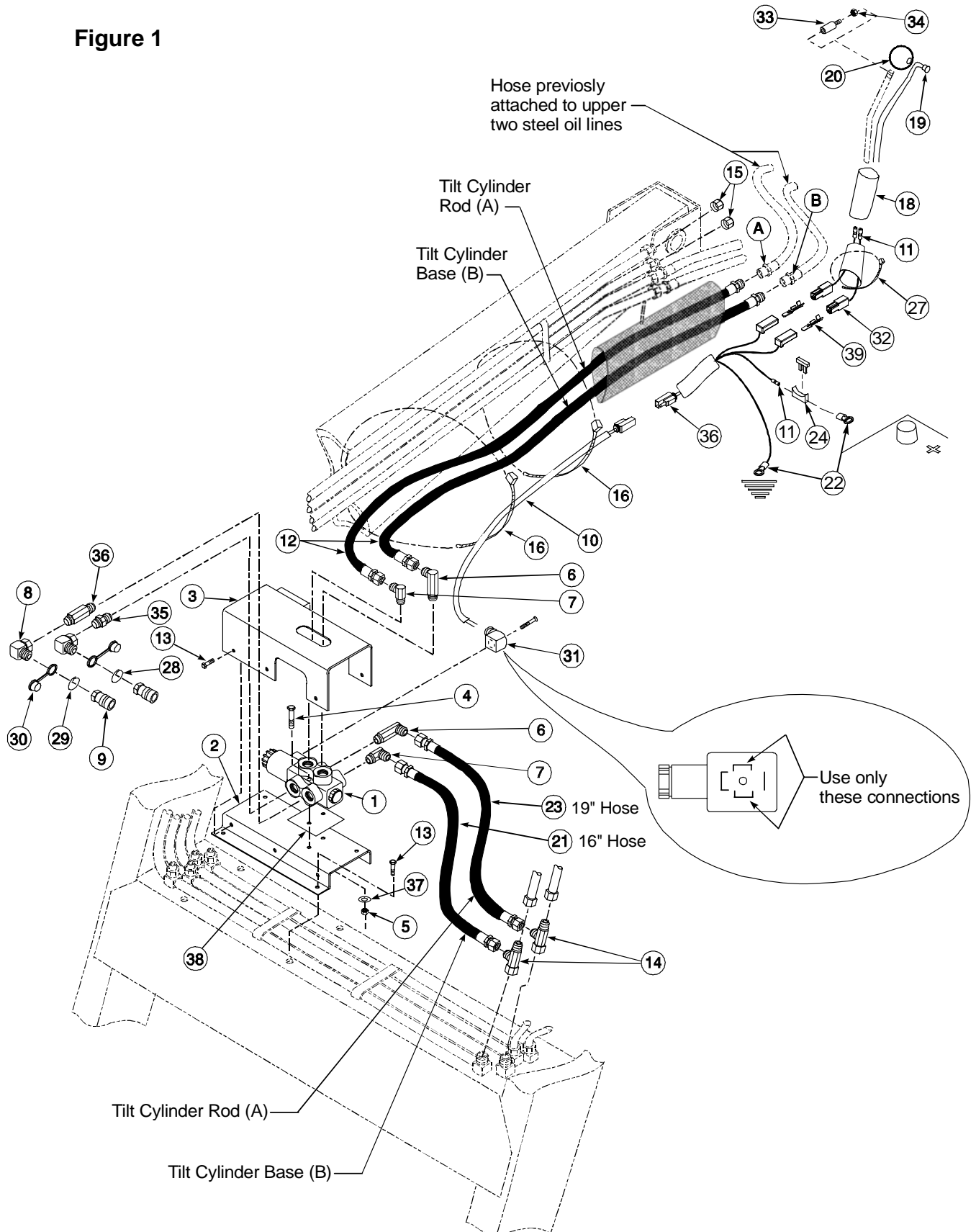
5. Disconnect left bucket cylinder hoses from steel oil lines. Connect street tees (14) into oil lines and reconnect hoses to tees.
6. Connect 3/8 x 19" hose (23) and 3/8 x 16" hose (34) from selector valve rear ports to street tees (14).
7. Attach mounting bracket rear hole to angle bracket (17) using 1/4 x 1 self tapping screw (13). (Rear of mounting bracket should be position over back of angle bracket) Using mounting bracket (2) as a template, drill two 3/16" holes through top of crossmember and fasten mounting bracket (2) to crossmember using 1/4 x 1" self tapping screws (13).
8. Install long 3/4 O.R. x 3/4 JIC fitting (36) into right front port on selector valve. Install shorter 3/4 O.R. x 3/4 JIC fitting (35) into left front port on selector valve. Install 90° fitting (8), dust plugs (30), colored rings (28 & 29), and quick couplers (9).
9. Route wiring harness (26) from loader mountings to a 12 volt power source (either to the tractor battery or to the tractor fuse panel). Cut off excess wire. Attach fuse holder (24) to black wire using butt connector (11). Attach terminal ends (22) to opposite side of fuse holder and to the white wire on wiring harness (26). Connect terminal end on fuse holder to positive side of battery or fuse panel and terminal end on white wire to ground.
10. Unscrew existing knob from control handle on loader joystick. Slide shrink tube (18) over control handle. Screw knob (20) with switch (19), jam nut (34) and handle adapter (33) onto control handle slip shrink tube (18) over switch wires.
11. Using excess wire that was cut from wiring harness (26) in step above, attach wire leads coming from switch (19) using butt connectors (11). Cut to length and attach spade terminals (32) onto wires and install plastic tabs (39) over spade terminals. Connect to wiring harness (26).

(Continued on Page 4)

PARTS LIST - THIRD FUNCTION VALVE KIT

Item	Part No.	Description	Qty.
1	53374	VALVE, Double Selector	1
2	53431	BRACKET, Mounting	1
3	53432	COVER, Valve, Assembly	1
4	G180044	SCREW, Cap, 1/4-20	2
5	G9424215	NUT, Hex, 1/4-20	2
6	41796-1	FITTING, Elbow, 3/4-16 x 3/4-16 90°, (Extra Long)	2
7	32845-2	FITTING, Elbow, 3/4-16 x 3/4-16 90°	2
8	46095-2	FITTING, Adapter, 3/4-16 JIC x 3/8 NPT x 90°	2
9	6147-4	FITTING, Coupler, Female	2
10	48404	WIRE, 2 Strand, Gray	240 in.
11	22727	CONNECTOR, Wire, 14 Ga.	3
12	46746-1	HOSE, 3/8 x 66"	2
13	40253-2	SCREW, Hex Head Self Tapping, 1/4 x 1"	7
14	37850-2	TEE, Swivel Nut Run 3/4-16	2
15	G9403372	CAP, End, 3/4-16 JIC	2
16	8137-3	STRAP, Plastic Adjustable, 1/2"	5
17	53433	ANGLE BRACKET	2
18	39447	SHRINK TUBE	6 in
19	44278	SWITCH, Push Button with Leads	1
20	44280	KNOB, with Button Hole	1
21	36844-1	HOSE, 3/8 x 16"	1
22	24082-5	TERMINAL, 3/8 x 14 Ga.	2
23	36844-2	HOSE, 3/8 X 19"	1
24	41805	HOLDER, Fuse	1
25	41804-1	FUSE, 10 AMP	1
26	50502	CONNECTOR, Two Pole	1
27	8137-1	STRAP, Adjustable, Plastic, 3/16"	4
28	36240-5	BAND, Plastic, Spiral, Blue	2
29	36240-6	BAND, Plastic, Spiral, Red	2
30	4838-6	PLUG, Dust	2
31	41802	CONNECTOR, 2 Pole	1
32	42411	CONNECTION TAB	2
33	46747	HANDLE, Adapter	1
34	G124925	JAM NUT, 3/8-24	1
35	32844-4	FITTING, Adapter, 3/4-16 O-Ring x 3/4-16 JIC	1
36	32844-16	FITTING, Adapter, Long, 3/4-16 O-Ring x 3/4-16 JIC	1
37	42502-6	WASHER, Flat, 1/4	2
38	46748	PLATE, Spacer	1
39	48420	PLASTIC COVER	2
40	34853-11	NYLON SLEEVE, 66"	1

Figure 1



INSTALLING THIRD FUNCTION VALVE KIT (Continued) (Figure 1)

12. Connect wiring harness (10) to wiring harness (26) at loader mount and secure wiring harness (10) to oil lines on loader right boom arm using plastic ties (16)
Note: Do not snug ties completely because these plastic ties also secure hoses (12), which are added in a later step, to loader boom. Cut off excess wire at end of wiring harness allowing ample wire to make connection at selector valve (1).
13. Slid compression nut onto wiring harness (10) and thread harness through connector housing and into wiring harness connector (12). Expose about 1 inch of individual wire and strip away 3/8" of insulation off end of wire. Connect black terminal to #1 terminal and white wire to #2 terminal of connector receptacle.
14. Install receptacle part of connector into connector housing so terminal #3 is adjacent to wire entrance port in housing. Tightly screw compression nut onto connector housing. Remove plastic terminal protector from selector valve. Terminals on solenoid should face back of loader crossmember. If they do not, loosen plastic nut at end of solenoid and turn solenoid slightly and retighten plastic nut. Plug connector (31) onto terminals of solenoid and secure to solenoid with screw supplied with connector (31).
15. Attach mounting bracket cover (3) to mounting bracket (2) and angle bracket (17) using 1/4 x 1 self tapping screws (13).
16. Connect 3/8 x 66" hoses (12) to top ports of selector valve. Route hoses through plastic tie straps on loader boom arm. Disconnect bucket cylinder hoses from steel oil lines at rear of loader boom arm hose of loader boom arm (hoses come from valve kit on tractor or from tractor rear remotes). Connect hoses just removed from steel oil lines to 3/8 x 66" hoses (12). Install caps (15) to steel oil lines on loader boom arm. Make sure all hydraulic connections are tight.
17. Install fuse (25) into fuse holder (24). Start tractor and check operation of joystick. Loader bucket should roll back when joystick is moved to the left and attachment should clamp when joystick is moved to the left with button to energize selector valve is depressed.

If bucket function is backwards, but attachment functions correctly; switch hoses where selector valve feeder hoses are connected to loader hoses. This will also result in hoses to selector valve couplers from attachment having to be switched.

If both functions are backwards, only the hoses feeding the selector valve at the hoses from the tractor need to be switched. If attachment function is only function that is backwards, switch hoses at quick couplers at selector valve.
18. Install red and green identification rings (29) & (30) to third function attachment hoses and to quick couplers on selector valve.

NEW REPAIR PARTS BREAKDOWN

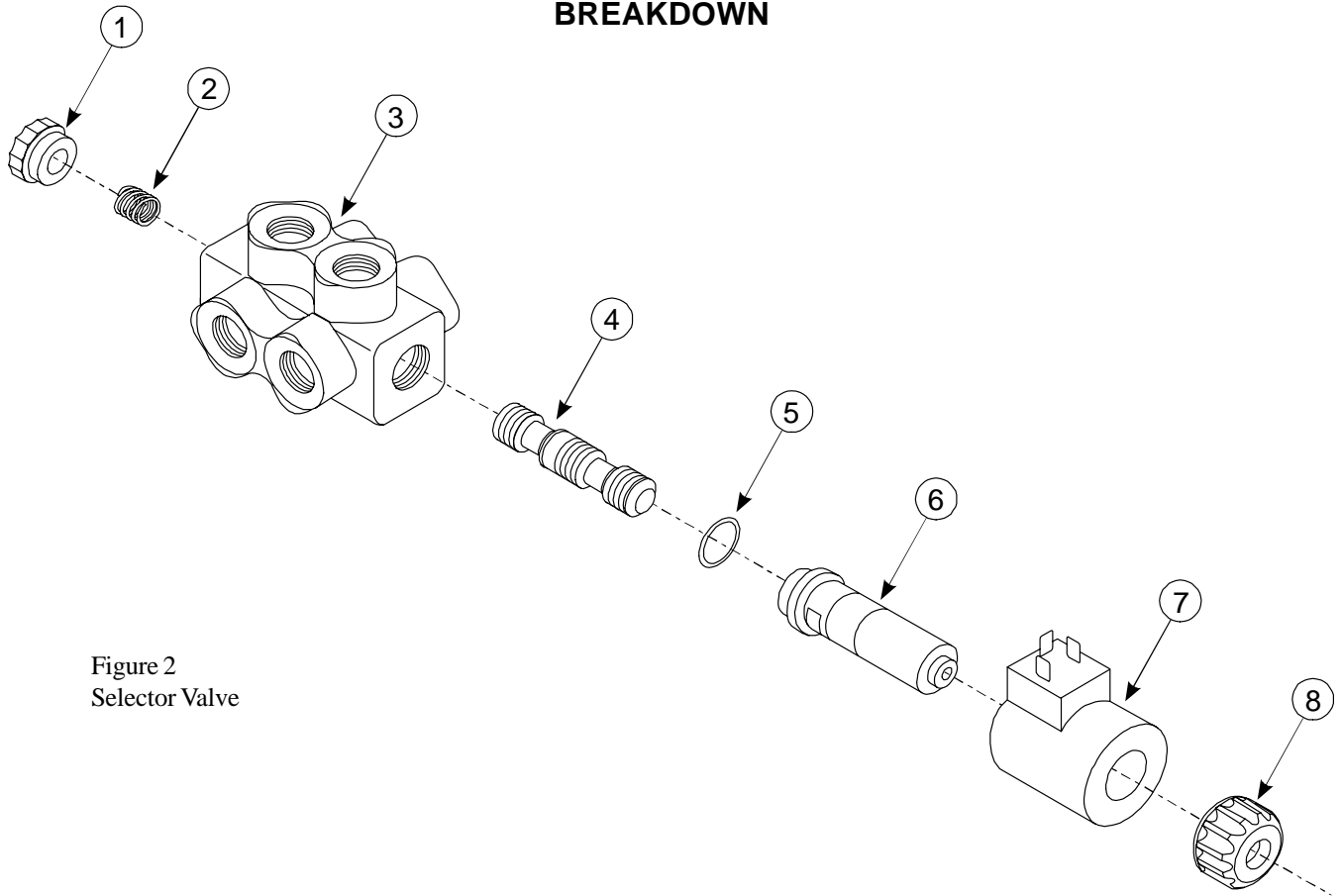


Figure 2
Selector Valve

REPAIR PARTS LIST - SELECTOR VALVE- WALVOIL DFE052/6B18ES

Item	Part No.	Description	Qty.
1	*	PLUG	1
2	53377	SPRING	1
3	*	BODY	1
4	*	SPOOL	1
5	53378	O-RING	1
6	*	TUBE	1
7	53375	BINDER COIL	1
8	53376	BINDER RETAINER	1

* Not available as repair parts

INSTALLATION INSTRUCTIONS