



INSTRUCTION BULLETIN

No. 340042
Machine: 355/385
Published: 3-97/00
System: HYDRAULICS

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you the cost of ordering an entire kit.

NOTE: Numbers in parenthesis () are reference numbers for parts listed in Bill of Materials.

Installation Instructions for Kit number 374546

SYNOPSIS / PROBLEM:

This kit contains the parts needed to replace the main hydraulic control valve, handles, on the machines listed above. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: None

(Estimated Time to complete: 3 hours)

PREPARATION:

FOR SAFETY: Before leaving or servicing machine, stop on level surface and set parking brake. Then turn off machine and remove key.

1. Disconnect battery cables from machine.



WARNING: Always disconnect battery cables from machine before working on electrical components.

2. Open the engine cover and side door.

TO REMOVE OLD VALVE:

(Refer to FIG. 1)

FOR SAFETY: Before leaving or servicing machine, stop on level surface and set parking brake. Then turn off machine and remove key.

1. Remove and retain the plastic knobs from the three valve handles. (Refer to Fig. 1)

NOTE: Mark each hydraulic hose location to assure proper reassembly.

2. Remove and plug the hydraulic hoses leading to the main control valve starting from the side of the valve nearest the outside of the machine and working inward. (Refer to Fig. 1)

NOTE: Observe hydraulic cleanliness requirements when opening hydraulic lines.

3. On the **385** and **355E** models; the hydraulic pressure switch must be disconnected from the main harness. (Refer to Fig. 1)
4. Remove and discard the two hex screws holding the control valve to the valve mount bracket. (Refer to Fig. 1)
5. Disconnect the spring from the inside valve handle. (Refer to Fig. 1)

6. Carefully drop the valve and handle assembly down and then out of the machine.

NOTE: Be careful not to tear the rubber valve handle boot on top of the center panel.

TO INSTALL CONTROL VALVE:

(Refer to Fig. 1)

1. Remove and retain the hair pins and "C" pins from the old valve. (Refer to Fig. 1)
2. Remove the hydraulic fittings from the old valve and install them in the new valve in the same orientation.
3. The old valve can now be set aside and used as a reference for proper fitting orientation on the new valve.
4. Install the new valve handles (2) & (3) on the new valve (1) using the existing "C" pins and hair pins. Use the new clevis pins (4) and flat washers (5). (Refer to Fig. 1)

NOTE: The inside link is installed in the reversed direction from the two outside links. Two washers (15) are installed on the outside of this link before the cotter pin is installed.

NOTE: Make sure the straight handle is installed in the center position and the handles with a bend are installed with the top of the handle pointing outward. (Refer to Fig. 1)

5. Position the new valve assembly in the machine. Carefully push the valve handles up through the rubber boot. A small amount of WD40 or other lubricant will make this easier. (Refer to Fig. 1)
6. Attach the new valve assembly to the existing valve mount bracket using the two hex screws, two sleeves, and two nyloc nuts. *The sleeves are placed between the valve and valve mount bracket.* Tighten the hardware to 7 - 10 ft lb. (Refer to Fig. 1)
7. Reconnect the hydraulic hoses to the new valve (1) starting from most inside fitting and working outward. (Refer to Fig. 1)

NOTE: Observe hydraulic cleanliness requirements when opening hydraulic lines.

8. Reinstall the plastic knobs to the three valve handles. (Refer to Fig. 1)
9. Start the machine and operate the hydraulic components. Check the new valve and hoses for any leaks. Turn off the machine and check the hydraulic fluid reservoir for proper fluid level. (Refer to Fig. 1)

BILL OF MATERIALS FOR MAIN CONTROL VALVE REPLACEMENT KIT 374546

Ref.	TENNANT Part No.	Description	Qty.
1	374547	Hydraulic control valve	1
2	374548	Straight valve handle	1
3	374549	Bent valve handle	2
4	374550	Clevis pin	3
5	19066	#10 flat washer	3

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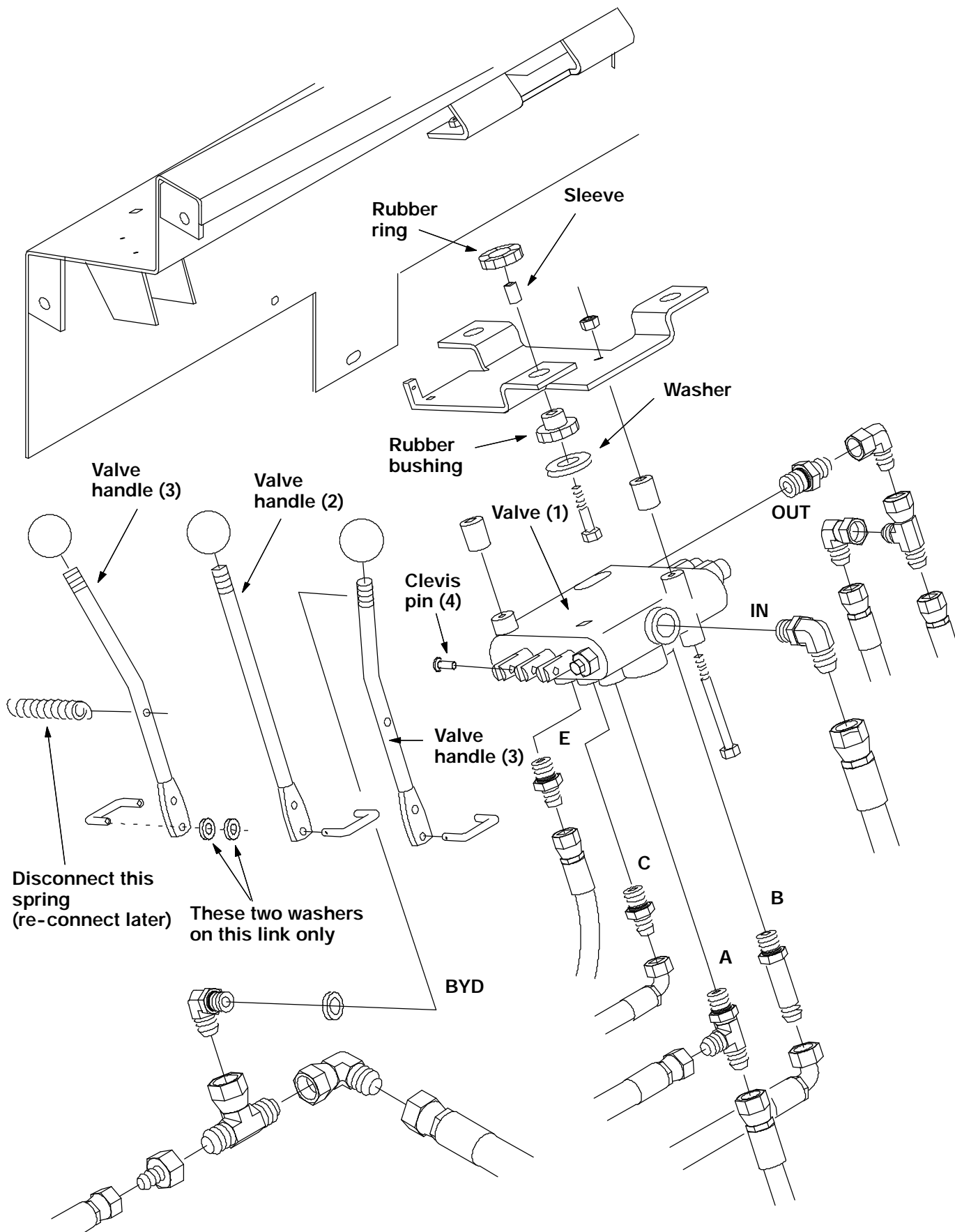
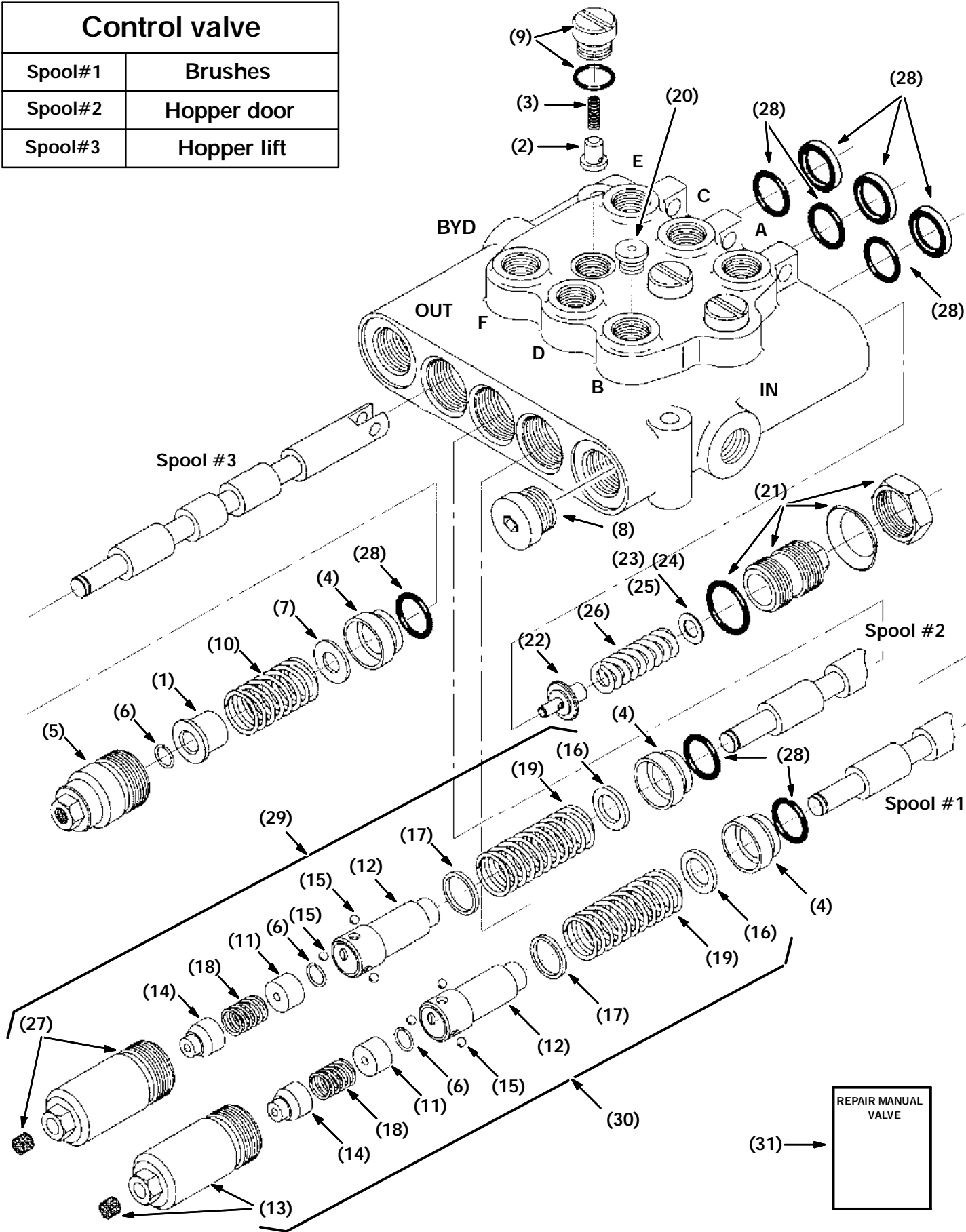


FIG. 1 - Valve Installation

Control valve	
Spool#1	Brushes
Spool#2	Hopper door
Spool#3	Hopper lift



374547 Valve Breakdown

REPAIR PARTS LIST FOR MAIN CONTROL VALVE 374547

Ref.	TENNANT Part No.	Description	Qty.
1	79785	Spacer	1
2	79786	Plunger	1
3	79787	Spring	1
4	79788	Bushing	3
5	79789	Cap assembly	1
6	79792	Retainer ring	3
7	79794	Washer	1
8	13907	#8 plug	1
9	79795	Plug and O-ring	3
10	79796	Spring	1
11	79801	Spacer	2
12	79802	Detent adaptor	2
13	79803	Cap assembly	1
14	79800	Cone	2
15	79804	Ball	6
16	79806	Washer	2
17	79805	Washer	2
18	79807	Spring	2
19	79808	Spring	2
20	13904	Plug and #6 O-ring	2
21	79790	Plug assembly	1
22	79791	Poppet	1
23	79793	Shim, .035	0
24	79798	Shim, .015	0
25	79799	Shim, .010	0
26	21915	Spring	1
27	79821	Cap assembly	1
28	79812	Seal kit	1
29	79813	Kit, detent out	1
30	79815	Kit, detent in and out	1
31	79820	Repair information	1