

# INSTRUCTIONS FOR INSTALLING 191320A1 TRENCHER HYDRAULIC KIT, 191321A1 P75 ATTACHMENT KIT, AND 191322A1 P40 ATTACHMENT KIT ON MAXI SNEAKER SERIES C

## PARTS LIST - 191320A1 Kit

REF.	PART NO.	DESCRIPTION	QTY.	REF.	PART NO.	DESCRIPTION	QTY.
1.	179581A1	LEVER - valve .....	1	19.	L12437	JOINT - ball .....	1
2.	432-48	PIN - cotter, 1/16 x 1/2 .....	1	20.	495-11034	WASHER - .344 x .688 x .065 .....	3
3.	H35279	PIN - clevis .....	1	21.	413-616	BOLT - 3/8 NC x 1 .....	2
4.	241-1315	LINK - connector .....	1	22.	495-11041	WASHER - .406 x .812 x .065 .....	6
5.	413-536	BOLT - 5/16 NC x 2-1/4 .....	1	23.	232-4116	NUT - 3/8 NC .....	2
6.	232-4115	NUT - 5/16 NC .....	3	24.	218-736	UNION - 5/8 x 5/8 .....	1
7.	H419101	DECAL - digging chain .....	1	25.	L18331	STRAP - tie .....	4
8.	H544718	VALVE - control, trencher .....	1	26.	515-23444	CLAMP - P-type .....	1
9.	218-5107	ELBOW - 90 degree, adjustable .....	2	27.	413-516	BOLT - 5/16 NC x 1 .....	6
10.	218-5062	CONNECTOR - short .....	4	28.	225-14210	NUT - no. 10 .....	1
11.	H432542	HOSE - 400 mm (16 inches) .....	1	29.	179590A1	ROD - neutral switch .....	1
12.	L78468	HOSE - 940 mm (37 inches) .....	1	30.	179583A1	HARNESS - neutral switch .....	1
13.	H432609	HOSE - 2100 mm (83 inches) .....	2	31.	106402A1	SWITCH - neutral start .....	1
14.	179579A1	BRACKET - valve mounting .....	1	32.	496-11034	WASHER - flat, 5/16 .....	5
15.	321-3214	DECAL - warning .....	1	33.	H346650	NUT - U-type, 5/16 .....	5
16.	H419473	DECAL - one attachment .....	1	34.	179582A1	COVER - neutral switch .....	1
17.	413-540	BOLT - 5/16 NC x 2-1/2 .....	1	35.	495-21038	WASHER - .375 x .875 x .083 .....	1
18.	193-1000	NUT - no. 10 .....	1				

## PARTS LIST - 191321A1 Kit, Trencher with P75 Plow

REF.	PART NO.	DESCRIPTION	QTY.	REF.	PART NO.	DESCRIPTION	QTY.
36.	H433466	HOSE - 2050 mm (81 inches) .....	1	39.	218-5105	ELBOW - 90 degree, adjustable .....	2
37.	H165340	HOSE - 305 mm (12 inches) .....	1	40.	H757815	ORIFICE .....	2
38.	218-5135	ELBOW - 45 degree, adjustable .....	1	41.	321-4651	DECAL - control .....	1

## PARTS LIST - 191322A1 Kit, Trencher with P40 Plow

REF.	PART NO.	DESCRIPTION	QTY.	REF.	PART NO.	DESCRIPTION	QTY.
42.	H165282	HOSE - 533 mm (21 inches) .....	1	49.	H757815	ORIFICE .....	1
43.	H171264	HOSE - 457 mm (18 inches) .....	1	50.	H419119	DECAL - selector .....	1
44.	218-5135	ELBOW - 45 degree, adjustable .....	1	51.	H434287	DECAL - raise/lower attachment .....	1
45.	218-5105	ELBOW - 90 degree, adjustable .....	6	52.	H672689	VALVE - selector .....	1
46.	H248989	HOSE - 686 mm (27 inches) .....	1	53.	413-652	BOLT - 3/8 NC x 3-1/4 .....	2
47.	H169151	HOSE - 610 mm (24 inches) .....	1	54.	495-11041	WASHER - .406 x .812 x .065 .....	4
48.	H433466	HOSE - 2050 mm (81 inches) .....	1	55.	232-4116	NUT - 3/8 NC .....	2



## GENERAL INFORMATION

The illustrations for this instruction sheet are on the last pages. Separate the pages so that you can see the illustrations as you read the instructions.

The reference numbers and the letters on the illustrations are the same as the reference numbers and letters in the instructions.

Special torque specifications are included in the instructions. If torque specifications are not included in the instructions, use standard torque specifications. See your Service Manual or Case Dealer if you need standard torque specifications.

## CONTROL VALVE INSTALLATION

**See Figures 1 and 2 for steps 1 through 26.**

1. Put the valve mounting bracket (14) in position on the RH side console.
2. Install the two bolts (21), six flat washers (22), and two nuts (23).
3. Install the elbows (9) in ports (A and B) of the control valve (8) as shown.
4. Install two short connectors (10) in ports (C and D) of the control valve (8).
5. Put the control valve (8) in position under the bracket (14) and install the bolts (5 and 17), two flat washers (20), and two nuts (6) in locations shown.
6. Put the valve lever (1) in position in the bracket (14) and install the clevis pin (3) and cotter pin (2).
7. Use the link (4) to connect the valve lever (1) to the control valve (8).
8. Fasten the neutral start switch (31) to the bracket (14) using two bolts (27), flat washers (32), and U-nuts (33).
9. Connect the neutral start switch wire to the main wiring harness using the harness (30).
10. Install the rod (29) between the neutral start switch (31) and the valve lever (1). Use the ball joint (19) and nuts (18 and 28) as shown.
11. Adjust the rod (29) in the neutral start switch (31) so that the machine will only start in the NEUTRAL position. Tighten the rod (29) in the neutral start switch (31).
12. Connect a hose (13) to the connector (10) at the front port (C) of the control valve (8). Put an identification tag on the other end of the hose with the words "C port" on the tag.
13. Connect the other hose (13) to the connector (10) at the rear port (D) of the control valve (8).
14. Route both hoses (13) along the fender towards the front of the machine.
15. Use the clamp (26) to fasten the two hoses (13) to the fender.
16. Install a bolt (27), flat washer (20), and nut (6) through the clamp (26) and existing hole in the fender.
17. Install the other two short connectors (10) in both ports of the trencher motor (G).
18. Connect the hose (13) with the tag "C port" to the connector (10) at the top port of the trencher motor (G).
19. Connect the other hose (13) to the connector (10) at the bottom port of the trencher motor (G).
20. Connect the hose (12) to the elbow (9) at the IN (A) port of the control valve (8).
21. Connect the hose (11) to the elbow (9) at the OUT (B) port of the control valve (8).
22. Remove the existing bolt and flat washer from the console cover so that the cover (34) can be installed.
23. Install the cover (34) to the bracket (14) using the three bolts (27), flat washers (32), and U-nuts (33).
24. Fasten the cover (34) to the console cover using the flat washer (35) and the existing bolt.
25. Install the decal (7) to the valve mounting bracket (14) in location shown.
26. If installing Kit 191322A1, install the decal (50) to the cover (34) in location shown.

## HOSE CONNECTIONS FOR MACHINE WITHOUT HYDRA-BORER

1. See Figure 3. Disconnect the hose (A) from the elbow (B).

See Figure 4 for steps 2 and 3.

2. Use the union (24) to connect hose (11) to the hose (A) you disconnected from the hydraulic pump (D).
3. Connect the hose (12) to the elbow (B) at the hydraulic pump (D).

## HOSE CONNECTIONS FOR MACHINE WITH HYDRA-BORER

1. See Figure 5. Disconnect the hose (H) from the elbow (B).

See Figure 6 for steps 2 and 3.

2. Connect the hose (12) to the elbow (B) at the hydraulic pump (D).
3. Use the union (24) to connect hose (11) to hose (H) connected to the Hydra-Borer control valve (IN port).

## P40 SELECTOR VALVE INSTALLATION

See Figure 7 for steps 1 through 14.

1. Install the elbow (44) in port (B) of the selector valve (52).
2. Install five elbows (45) in ports (A and C through F) of the selector valve (52).
3. Put the selector valve (52) in position on the bracket (14).
4. Install the two bolts (53), four flat washers, and two nuts (55) to fasten the selector valve (52).
5. Connect the hose (48) to the elbow at the E port.
6. Route the hose (48) along the fender with the existing two hoses to the front of the machine.

7. Install the last elbow (45) in the base end of the trencher lift cylinder (K).
8. Connect the hose (48) to the elbow (45) at the trencher lift cylinder (K).
9. Route the hose (G) back along the fender with the existing three hoses to the selector valve (52).
10. Connect the hose (G) to the elbow (45) at the F port of the selector valve (52).
11. Connect the hose (43) to the elbow (45) at the A port of the selector valve (52).
12. Connect the hose (42) to the elbow (44) at the B port of the selector valve (52).
13. Connect the hose (47) to the elbow (45) at the C port of the selector valve (52).
14. Connect the hose (46) to the elbow (45) at the D port of the selector valve (52).

## P40 HOSE CONNECTIONS FOR PLOW LIFT CYLINDER TO STEERING VALVE

**NOTE:** The steering valve is located behind the console.

1. See Figure 8. Remove the hoses (E and F) from the steering valve (A) and plow lift cylinder (D).

See Figure 7 for steps 2 through 8.

2. Connect the hose (42) to the closed end of the plow lift cylinder.
3. Connect the hose (43) to the rod end of the plow lift cylinder.
4. Connect the hose (46) to the connector (J) at the steering valve (H).
5. Install the orifice (49) in the port of the steering valve (H) as shown. The slot in the orifice (49) must be away from the steering valve (H).
6. Reinstall the elbow (L) in the steering valve (H) as shown.
7. Connect the hose (47) to the existing elbow (L) at the steering valve (H).
8. Use a tie strap (25) to fasten the hoses (42, 46, and 47) as shown.

## P75 HOSE CONNECTIONS FOR TRENCHER LIFT CYLINDER TO STEERING VALVE

**NOTE:** *The steering valve is located behind the console.*

**See Figure 9 for steps 1 through 4.**

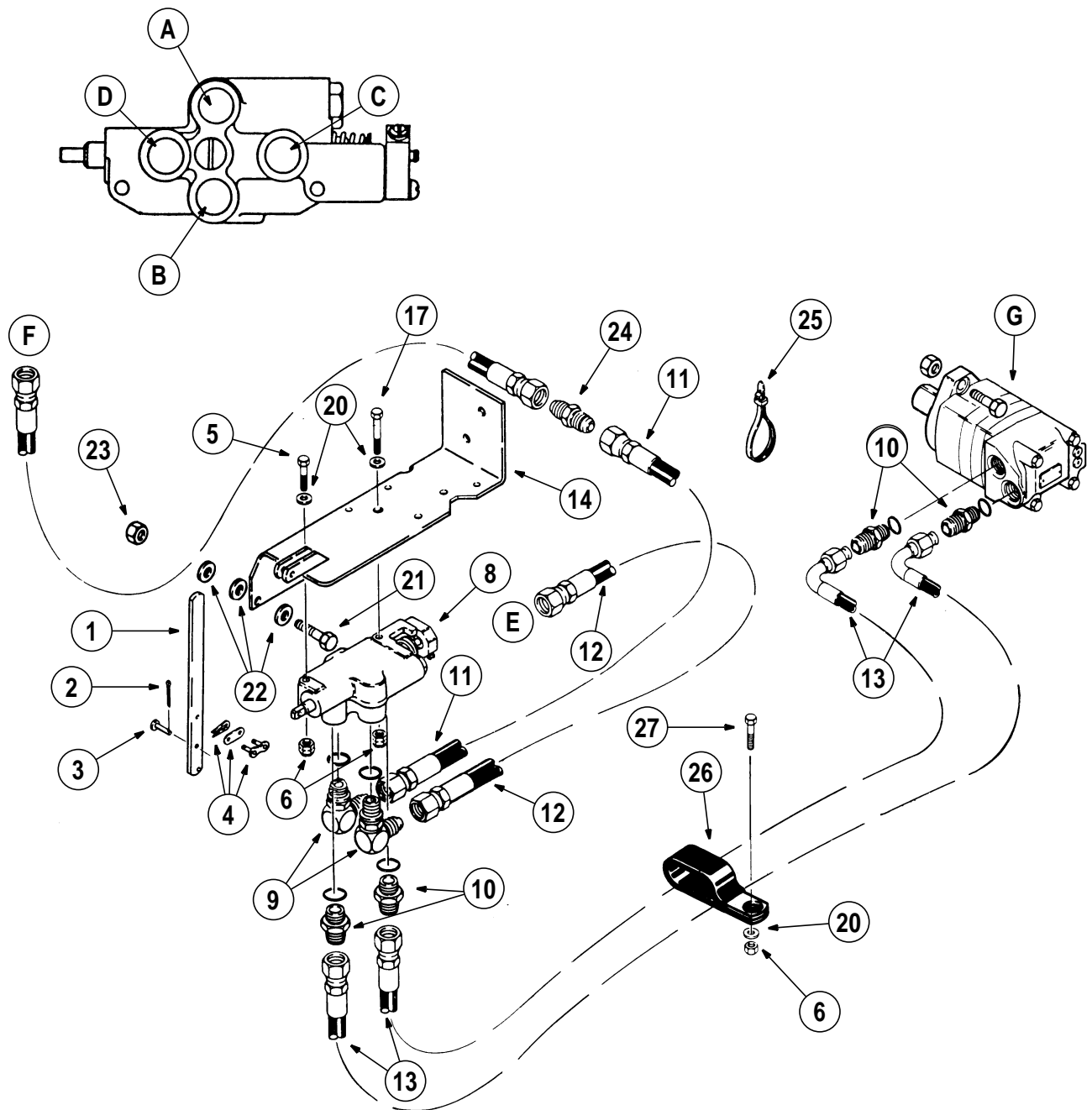
1. Replace the 45 degree elbow located in the front of the steering valve (A) with the 90 degree elbow (39) and an orifice (40) as shown. The slot in the orifice (40) must be away from the steering valve (A).
2. Replace the straight connector located in the bottom of the steering valve (A) with the 45 degree elbow (38) and the other orifice (40) as shown. The slot in the orifice (40) must be away from the steering valve (A).
3. Replace the fitting in the closed end of the trencher lift cylinder (B) with the other elbow (39).
4. Replace the hoses that run between the steering valve (A) and the trencher lift cylinder (B) with the new hoses (36 and 37) as shown.

## DECAL INSTALLATION

1. **See Figure 10.** Install the decals (15, 16, and 41 or 51) to the console (A) in locations shown.

## CHECKING HYDRAULIC CONNECTIONS

1. See the Operators Manual and check the level of oil in the hydraulic reservoir. Add as needed.
2. Start the engine and run the engine at low idle.
3. Put the selector lever in the PLOW LIFT position.
4. Use the attachment lever to raise and lower the plow 2 or 3 times.
5. Lower the plow to the ground.
6. Put the selector lever in the TRENCHER LIFT position.
7. Use the attachment lever to raise and lower the trencher boom 2 or 3 times.
8. Put the trencher boom approximately 305 mm (12 inches) above the ground.
9. Slowly push the DIGGING CHAIN lever to the TRENCH position for approximately 30 seconds.
10. Slowly pull the DIGGING CHAIN lever to the STOP position.
11. Lower the trencher boom to the ground.
12. Stop the engine and check for hydraulic oil leaks.
13. See the Operators Manual and check the level of oil in the hydraulic reservoir. Add as needed.

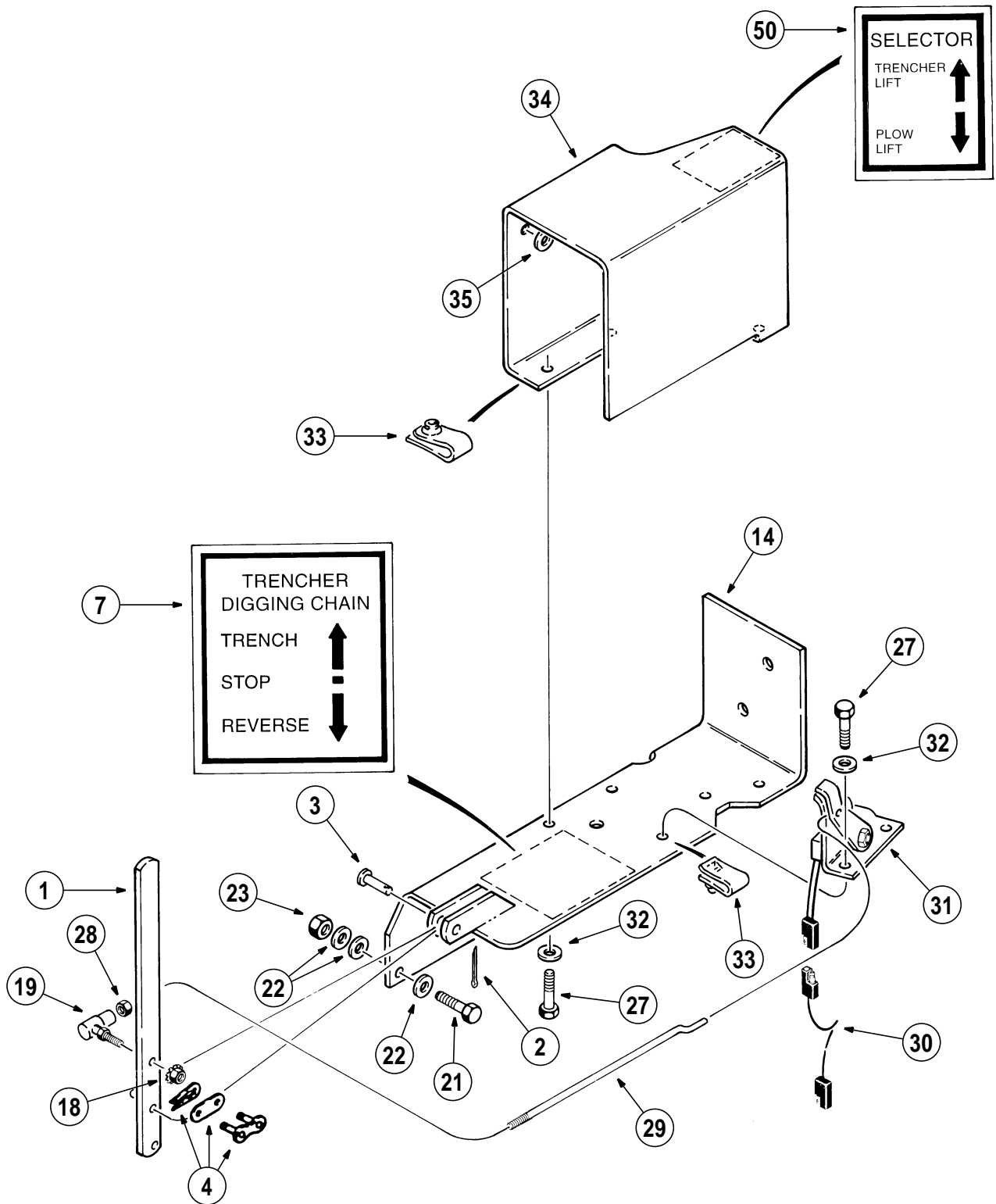


A. IN Port  
 B. OUT Port  
 C. Front Port  
 D. Rear Port

E. To Hydraulic Pump  
 F. To Plow Control Valve or Hydra-  
 Borer Control Valve (IN Port)  
 G. Trencher Motor

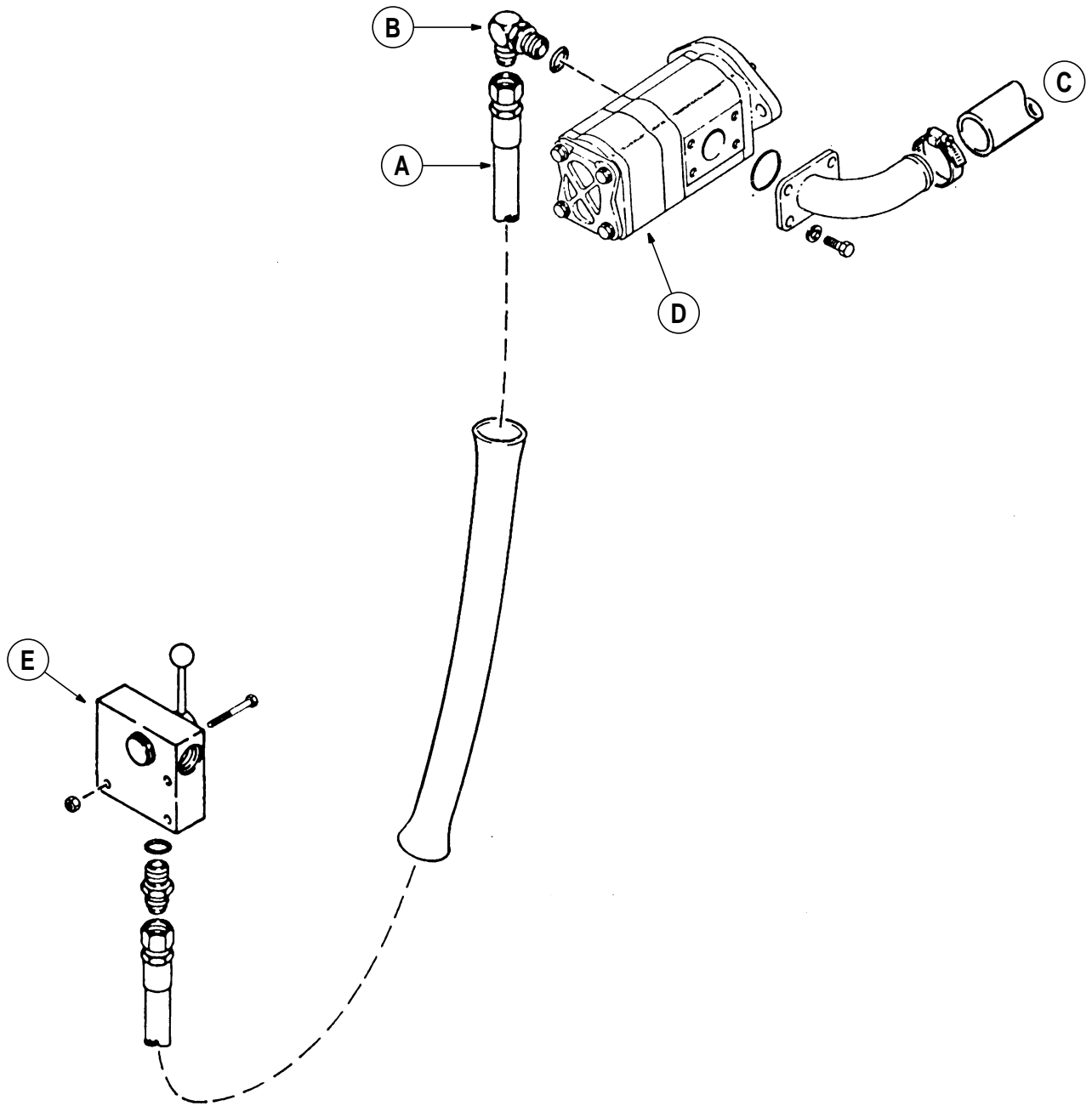
**Figure 1**

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BS95F101

Figure 2



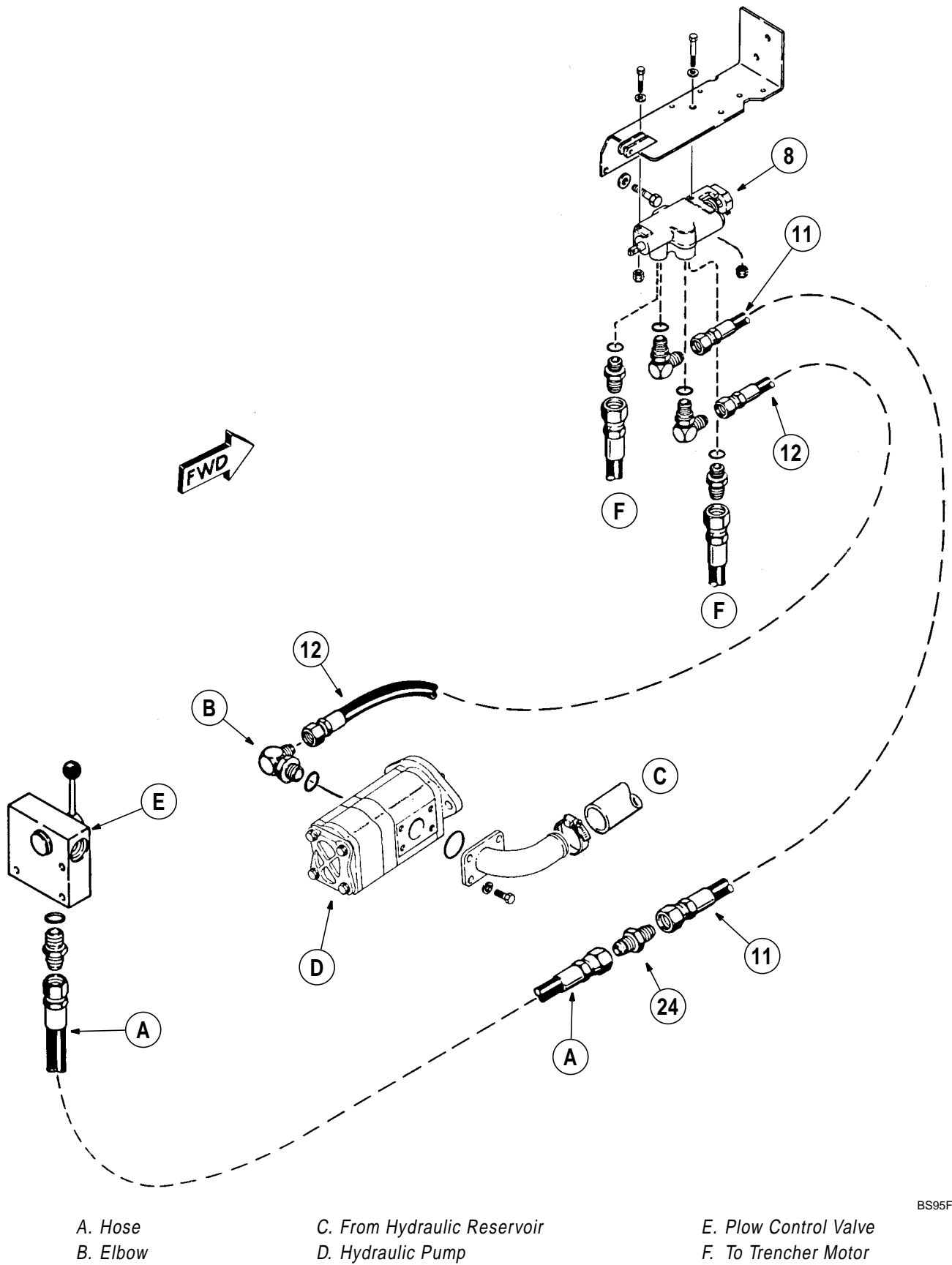
A. Hose  
B. Elbow

C. From Hydraulic Reservoir  
D. Hydraulic Pump

E. Plow Control Valve

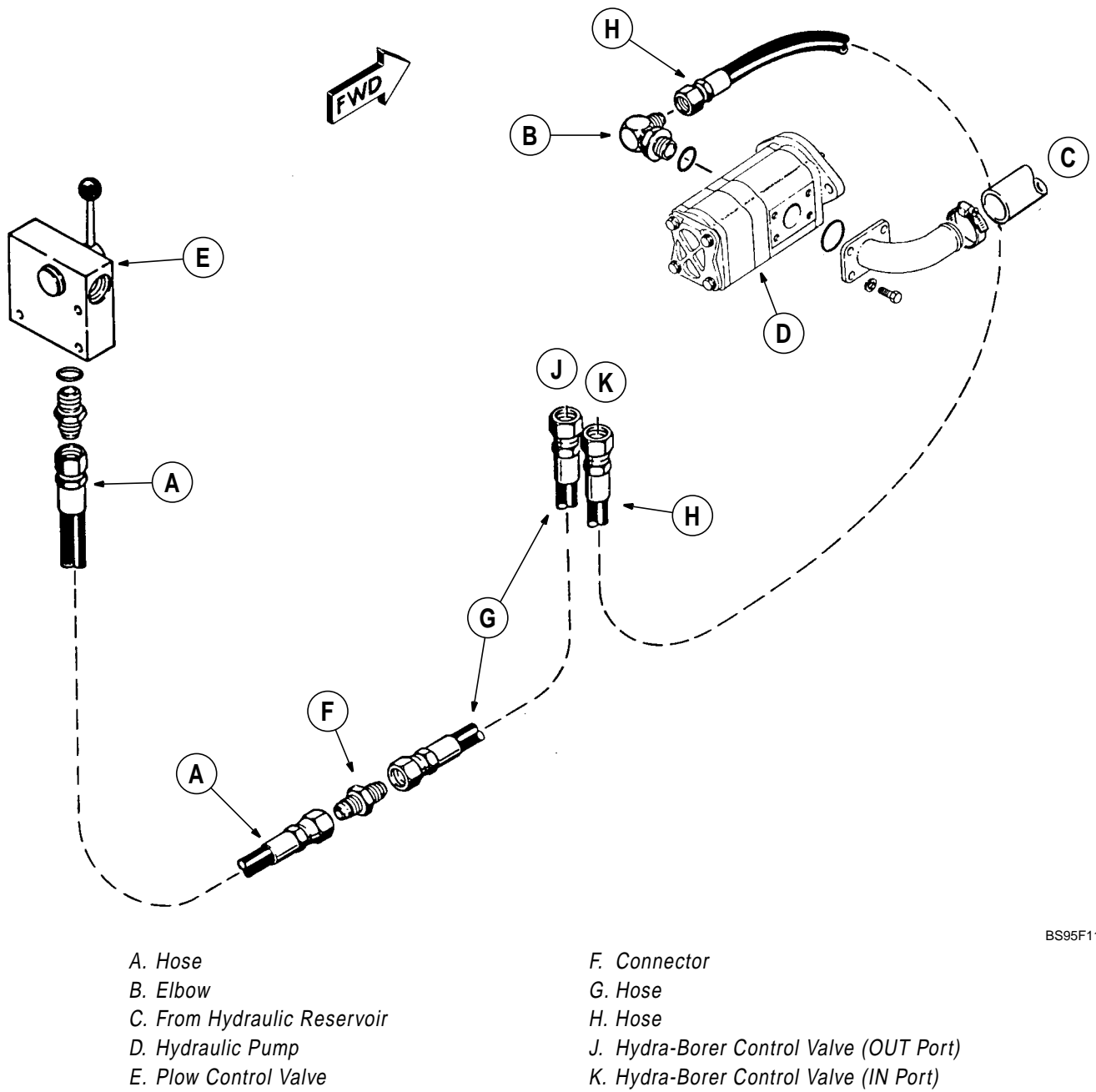
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**Figure 3**

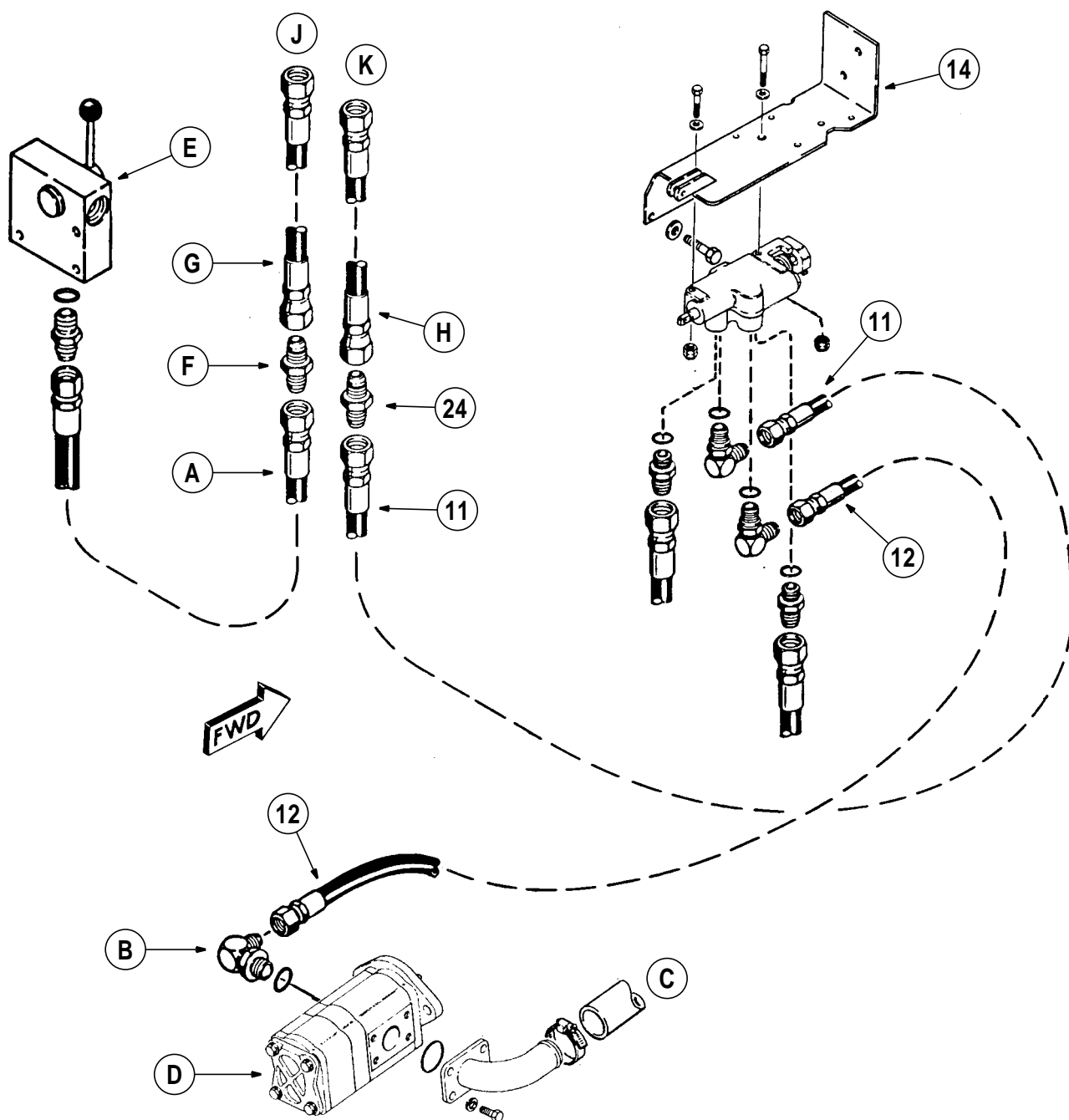


**Figure 4 - Without Hydra-Borer**





**Figure 5 - Hydra-Borer Control Valve Connections**

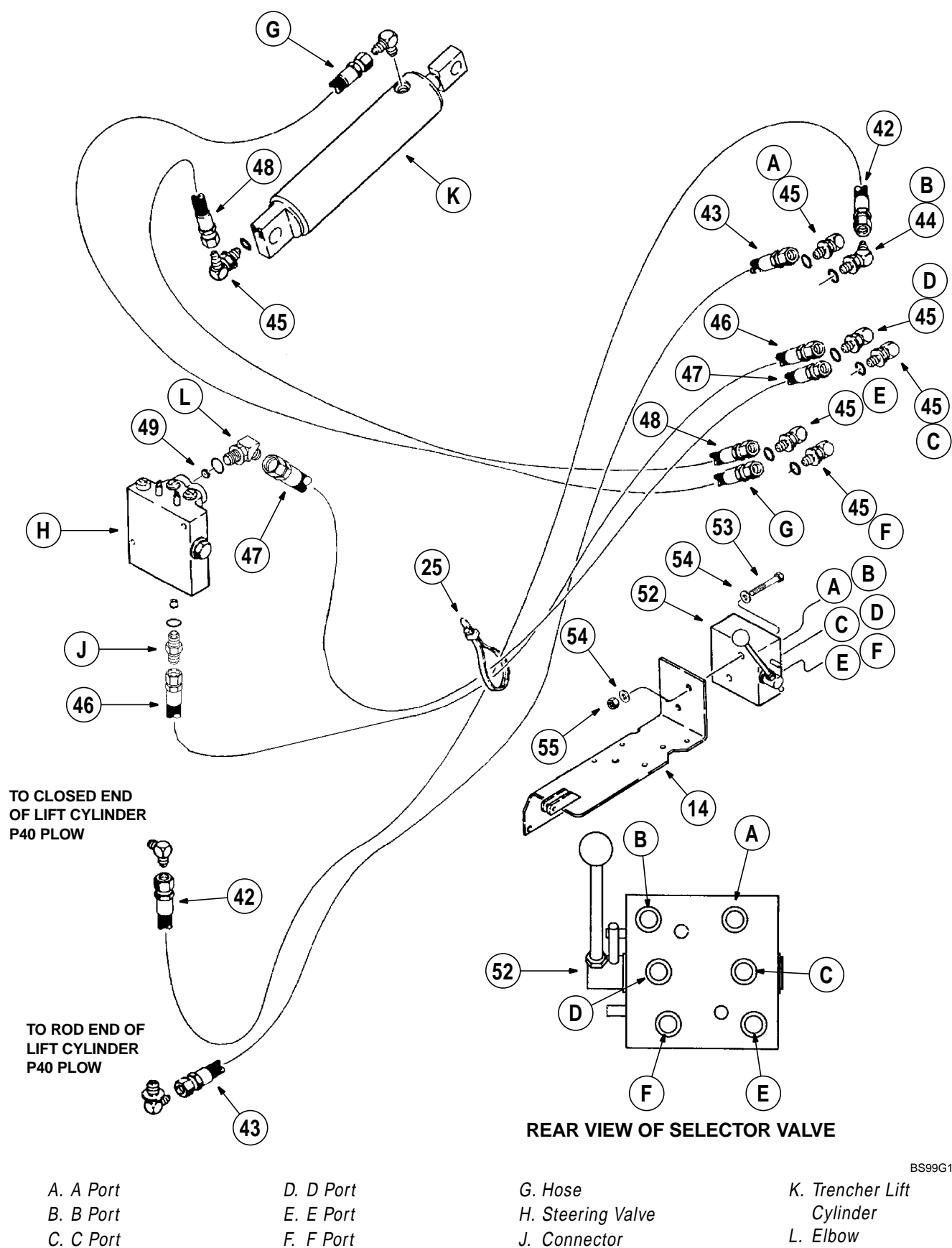


A. Hose  
 B. Elbow  
 C. From Hydraulic Reservoir  
 D. Hydraulic Pump  
 E. Plow Control Valve

F. Connector  
 G. Hose  
 H. Hose  
 J. Hydra-Borer Control Valve (OUT Port)  
 K. Hydra-Borer Control Valve (IN Port)

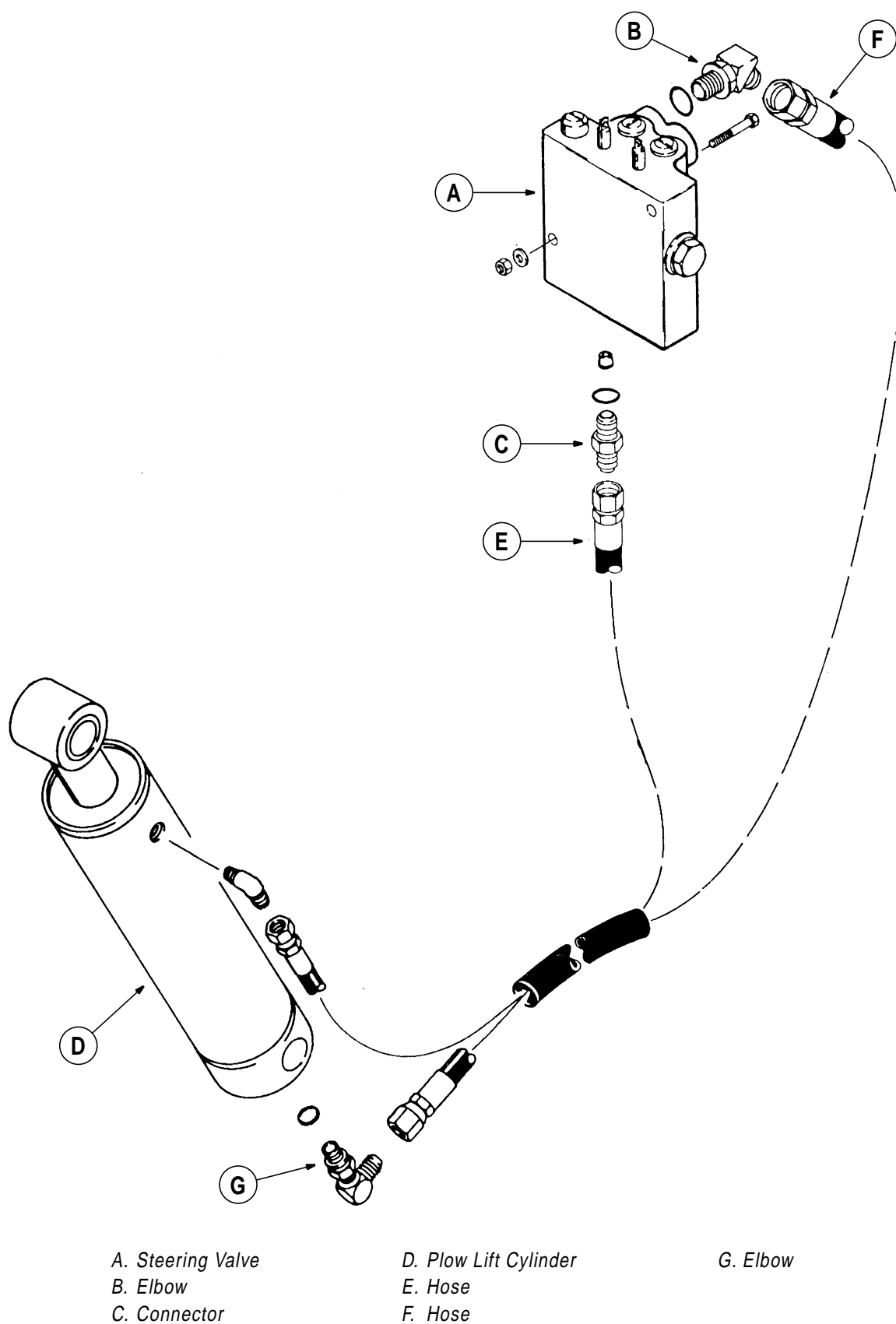
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**Figure 6 - With Hydra-Borer**



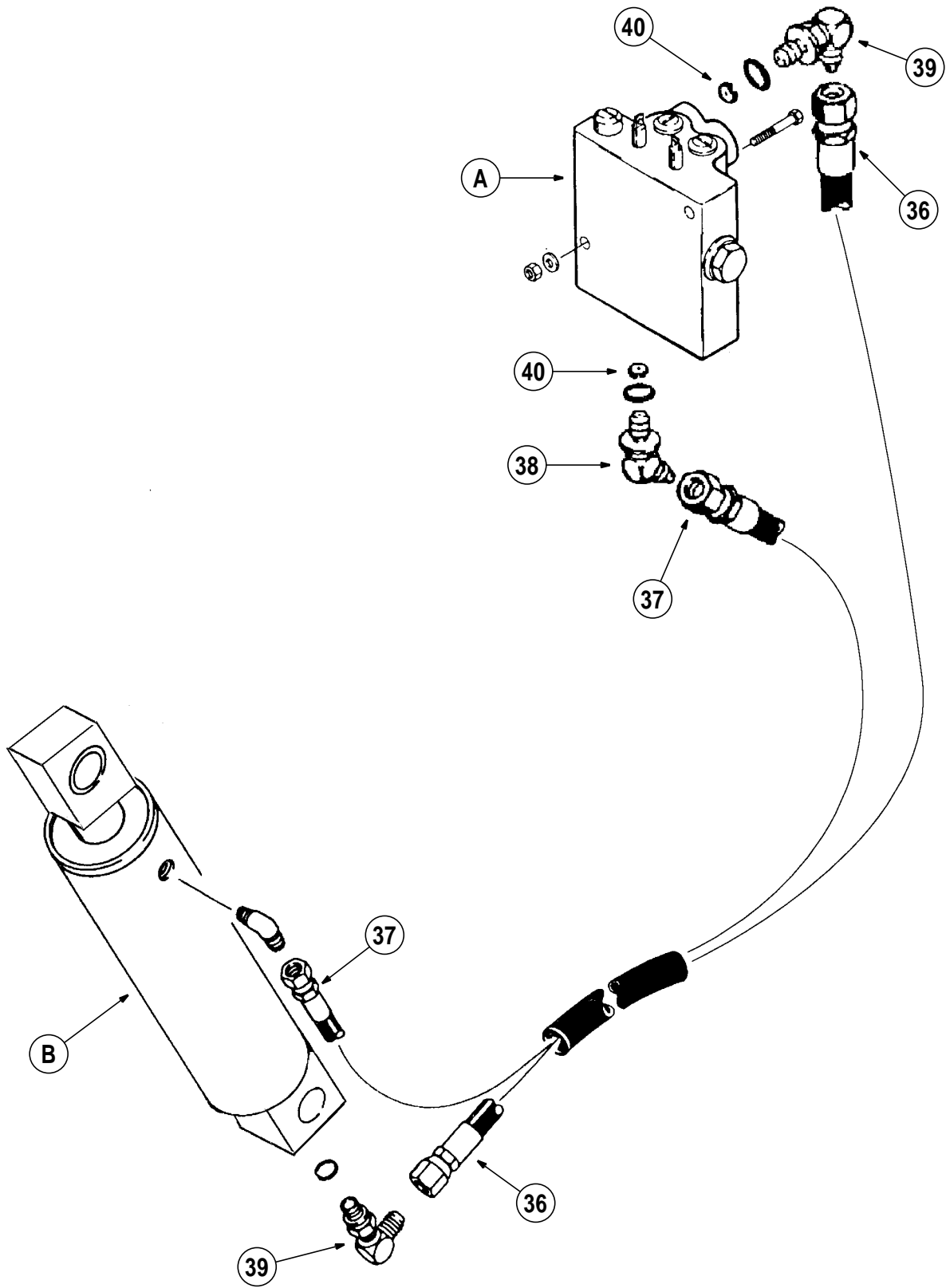
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Figure 7 - with P40 Plow



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**Figure 8 - with P40 Plow**



A. Steering Valve

B. Trencher Lift Cylinder

Figure 9 - with P75 Plow

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**! WARNING**  
 PERSONNEL MUST BE CLEAR  
 OF DIGGING CHAIN AREA  
 WHEN CHAIN IS RUNNING

15

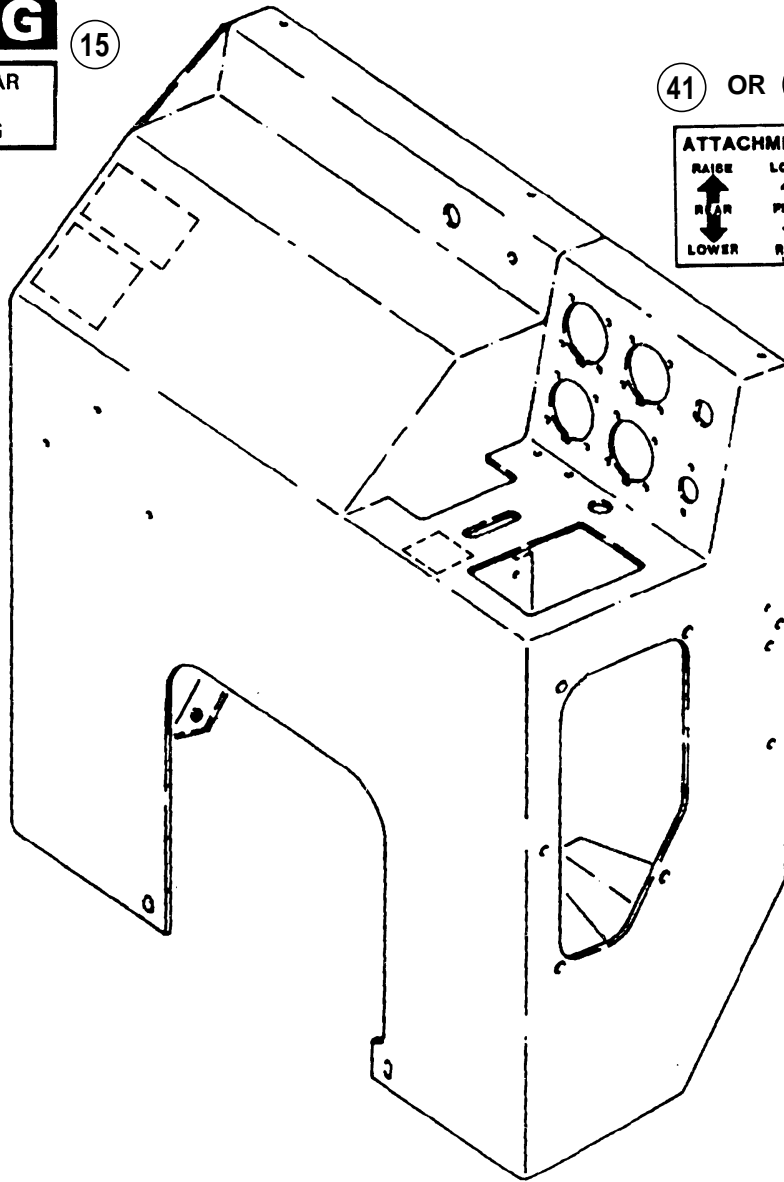
41 OR 51

**ATTACHMENT**  
 RAISE LOWER  
 REAR FRONT  
 LOWER RAISE

16

**IMPORTANT**  
 OPERATE ONLY ONE  
 ATTACHMENT AT A  
 TIME

A



A. Console

BS95F117

**Figure 10**