Form No. 3350-226

Solenoid Mounting Kit
for Multi-Pro® 1100 and Workman Vehicles

Model No. 95-9242

Installation Instructions

Loose Parts

Description	Qty.	Use
Grommet	2	Installing the solenoid assembly upgrade
Mounting bracket	1	
Bolt (6 x 16 mm)	3	
Nut (6 mm)	3	
Spring Washer (6 mm)	3	
R–clamp	1	
Solenoid shield	1	
Flange screw (1/4 x 3/8 inch)	2	

Multi-Pro 1100 & Workman Solenoid Upgrade

Note: Determine the left and right sides of the machine from the normal operating position.

Note: In the following instructions, “sealer” refers to the Teflon Thread Tape.

Important Use new sealer on all fittings.

Removing the Solenoid Assembly

1. Disconnect all electrical connections to the solenoid assembly and control valve.
2. Loosen the hose clamp and detach the flow meter hose from the inlet port of the control valve (Fig. 1).
3. Loosen the hose clamps and detach the boom feeder hoses (3) from the solenoid barbs (Fig. 1).
4. Loosen the hose clamp and detach the pressure gauge hose from the 90° barb in the solenoid assembly (Fig. 1).
5. Remove the fasteners mounting the control valve bracket and solenoid assembly to the cross support angle. Save the fasteners for later use.
6. Unscrew the solenoid assembly from the control valve and the 45° elbow connection. The 45° elbow remains connected with the control valve.
7. Remove the 90° barb from the solenoid assembly. Save the barb for later use (Fig. 1).

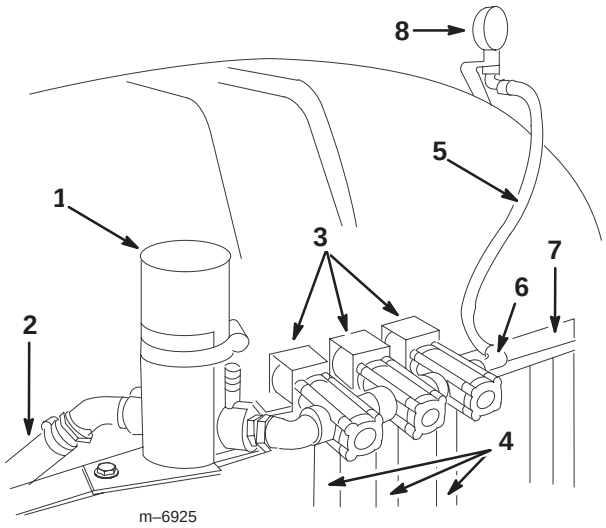

Figure 1

1. Control valve assembly
2. Flow meter hose
3. Solenoid assembly
4. Boom feeder hose
5. Pressure gauge hose
6. 90° hose barb
7. Cross support angle
8. Pressure gauge

8. Discard the old solenoid assembly.

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Installing the Solenoid Assembly Upgrade

1. Install the 90° barb into new solenoid assembly (Fig. 2).

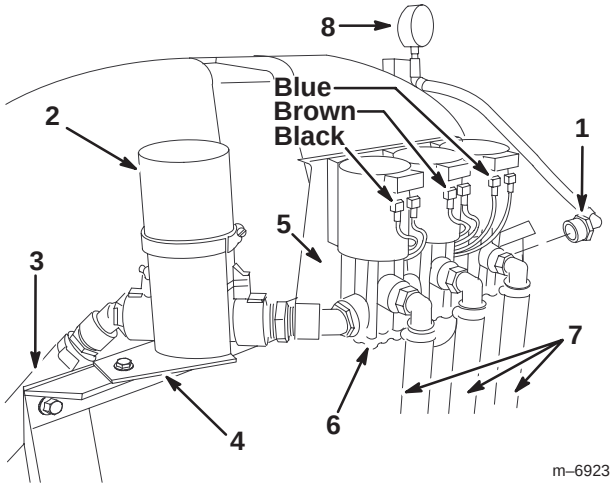

Figure 2

1. 90° hose barb
2. Control valve assembly
3. Flow meter hose
4. Control valve bracket
5. Solenoid mounting bracket
6. New solenoid assembly
7. Boom feeder hoses
8. Pressure gauge

2. Connect the new solenoid assembly to the control valve using the 45° elbow (Fig. 2).

3. Apply thread sealer and install three 90° hose barbs (3/4 inch) into the outlet ports of the solenoid valves.

4. Install the barbed 90° elbow previously removed into the end of the solenoid assembly (Fig. 2).

5. Install 2 grommets into the two large holes in the solenoid mounting bracket (Fig. 4).

6. Slide the head of the (3) bolt (6 x 16 mm) to the top of the mounting groove in each solenoid valve (Fig. 3).

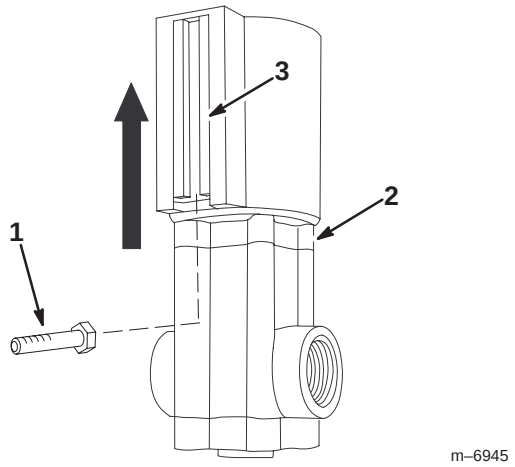

Figure 3

1. Bolt (6 x 16 mm)
2. Solenoid
3. Mounting groove

7. Mount the solenoid valve assembly to the mounting bracket using the 3 bolts just installed in the solenoids with 3 nuts (6 mm) and 3 spring washers (6 mm).

8. Install the control valve and bracket assembly to the cross support (Fig. 2) using the fasteners removed previously. Repeat for the solenoid and mounting bracket assembly (Fig. 4).

9. Connect the flow meter hose, pressure gauge hose, and boom feeder hoses. Use liquid soap to coat the barbs if necessary when reconnecting the hoses.

10. Route the flow control cable across the cross support angle to make electrical connections to the control valve and solenoid valves (Fig. 4).

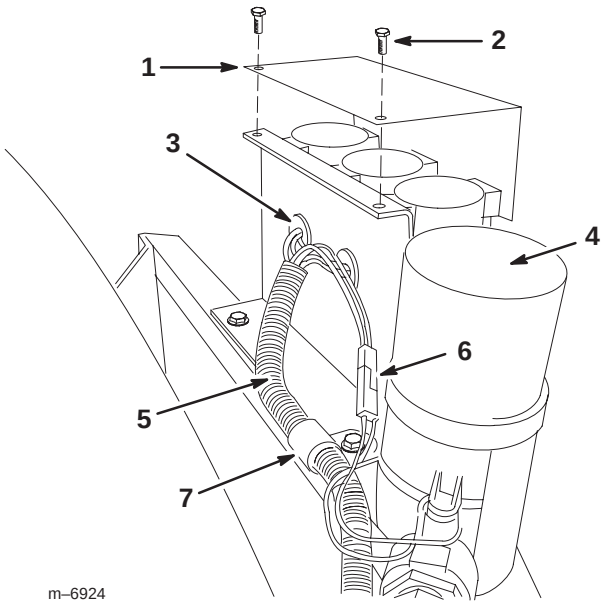

Figure 4

1. Solenoid valve shield
2. Flange screw (1/4 x 3/8 inch)
3. Grommet
4. Control valve assembly
5. Flow control cable
6. Control valve connector
7. R–clamp

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11. Connect the control valve to the respective electrical connector from the flow control cable (Fig. 4).

12. Feed the remaining control cable wires through the two grommets in the solenoid mounting brackets. The wires are distributed as follows: the black wire to the left solenoid, the brown wire to the middle solenoid, and the blue wire to the right solenoid. A white jumper (3) is connected to all three solenoids (Fig. 2 & 4).

13. Secure the flow control cable to the boom frame with the R–clamp (Fig. 4).

14. Install the solenoid valve shield to the top of the solenoid mounting bracket and secure with (2) flange screws (1/4 x 3/8 inch).


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