FORM NO. 3313-419

TORO

Part No. 66-9470

INSTALLATION INSTRUCTIONS

SELECTOR VALVE KIT

for Reelmaster®350-D

Since this instruction sheet covers only a minimal amount of information necessary to maintain and operate your machine, we suggest that you keep this material with your Operator's Manual so that both may be referred to for instructions concerning safe operation and proper maintenance procedures.

NOTE: This kit contains component parts for any one of the five positions on the mower. If all five positions are to be installed, five kits are required. Any excess components supplied with kit and not used, for the specific valve position may be discarded. Use the following chart to determine required parts for each specific valve.

#1 Cutting Unit	#2 Cutting Unit	#3 Cutting Unit	#4 Cutting Unit	#5 Cutting Unit
Selector Valve(1)	Selector Valve(1)	Selector Valve(1)	Selector Valve(1)	Selector Valve(1)
O-Ring(3)	O-Ring(3)	O-Ring(3)	O-Ring(3)	O-Ring(3)
Flange Lock Nut(2)	Flange Lock Nut(2)	Flange Lock Nut(2)	Flange Lock Nut(2)	Flange Lock Nut(2)
Truss Head Screw(1)	Spacer(1)	Spacer(1)	Spacer(1)	Spacer(1)
Space (1)	Rubber Boot(2)	Rubber Boot(2)	Rubber Boot(2)	Rubber Boot(2)
Rubber Boot(2)	Capscrew(2)	Capscrew(2)	Capscrew(2)	Capscrew(2)
Capscrew(2)	Shoulder Bolt(1)	Shoulder Bolt(1)	Shoulder Bolt(1)	Shoulder Bolt(1)
Shoulder Bolt(1)	Adapter Plate(1)	Front Push Rod(1)		
	Flange Lock Nut(2)	Cotter Pin(1)		
	Machine Screw(2)	Push Rod Adapter(1)		
	Push Rod Spacer(1)			
	Set Screw(1)			

Disassembly

IMPORTANT: When disassembling hydraulic lines make sure plugs are placed in the open end of the line to prevent foreign debris from contaminating the hydraulic oil. Keep all lines clean and free from debris. During replacement avoid overtightening fittings. Check the hydraulic reservoir for level of hydraulic fluid after replacement of any component.

1. Tag and identify the hydraulic lines leading to the selector valve(s) being replaced. Disconnect and cap the lines and fittings with plastic plugs. Refer to Figure 1 for selector valve locations and descriptions.

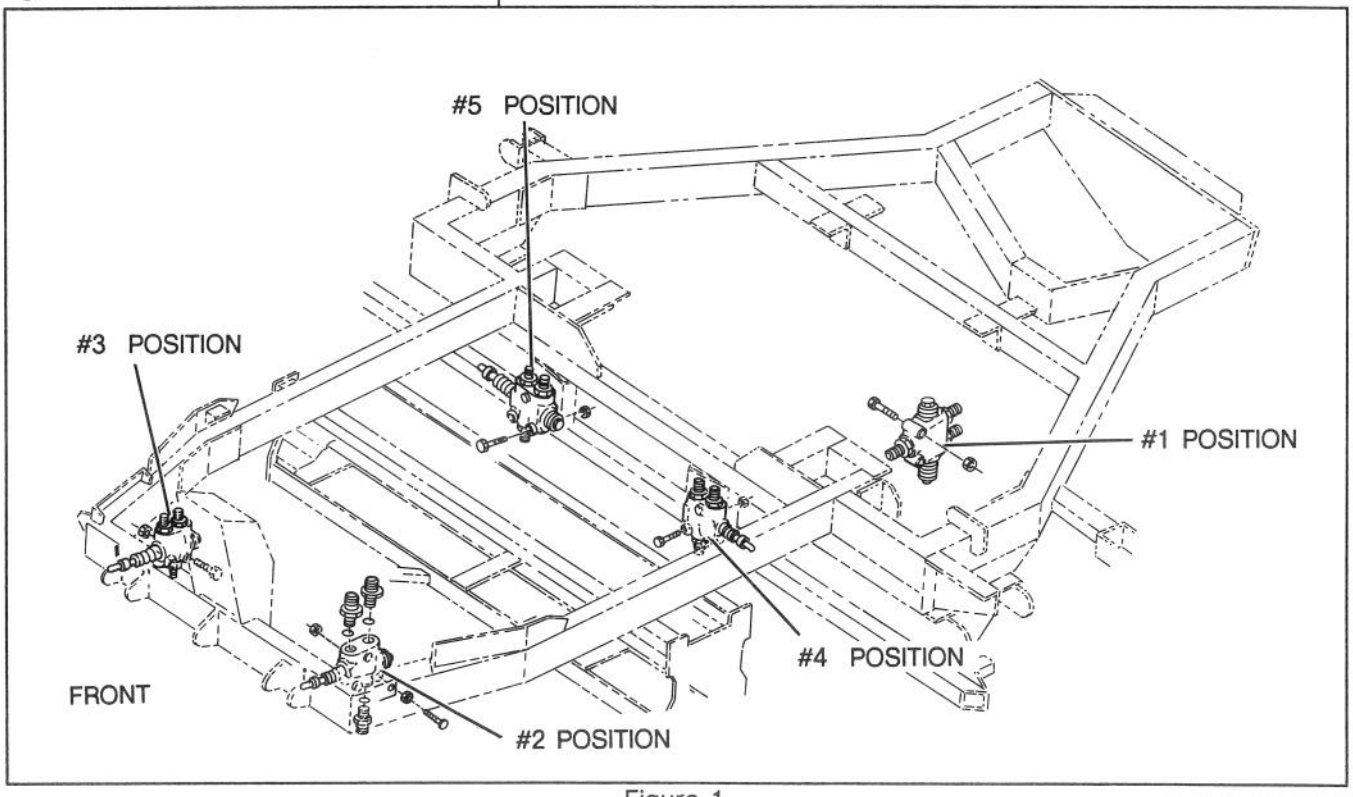


Figure 1

2. Remove capscrews, washers and nuts securing valve(s) to frame. Remove valve(s) from frame.

3. Remove the (3) adapter fittings from each valve and retain for use when installing new valve.

4. When removing valve(s), make sure to remove and retain the rubber mounts from #2, #3, #4 or #5 cutting unit positions,and the push rods from #2, #4 or #5 cutting unit positions. They will be used for re-installation of new valves.

Assembly

Note: When installing new valve(s), make sure valve spool does not bind and valve return spring will extend valve spool to its maximum extended length. Valve to be positioned in mounting slots so spool is fully extended when in mowing position and is providing maximum oil flow thru valve. The valve shall also shut-off oil flow when the cutting unit lift arm is positioned about midway between the mow position and transport position.

#1 Cutting Unit

1. Install a rubber boot over output end of valve spool and onto edge of valve boss. Thread shoulder bolt into end of spool (Fig.2).

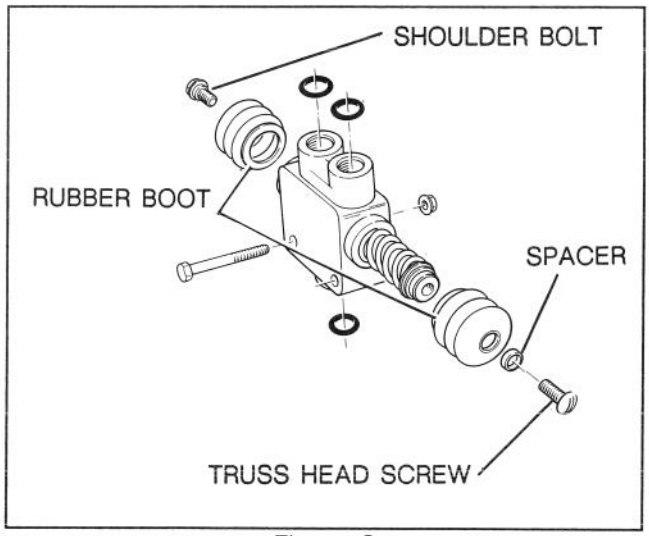


Figure 2

2. Install a rubber boot over input end of valve spool (Fig.2). Stretch boot so it fits over casting flange.

3. Insert a spacer into boot opening, on input end of valve spool (Fig.2).

4. Thread a Truss Head Screw into input end of spool (Fig.2).

5. Coat (3) new o-ring seals with oil and install in new valve.

6. Thread adapter fittings into valve and tighten to 72-80 ft/lb.

7. Mount valve to frame using (2) capscrews and flange locknuts (Fig. 2).

8. Thread hydraulic hose fittings onto adapter fittings and tighten to 60-70 ft/lb.

#2 Cutting Unit

1. Install a rubber boot over output end of valve spool and onto edge of valve boss. Thread shoulder bolt into spool end (Fig.3).

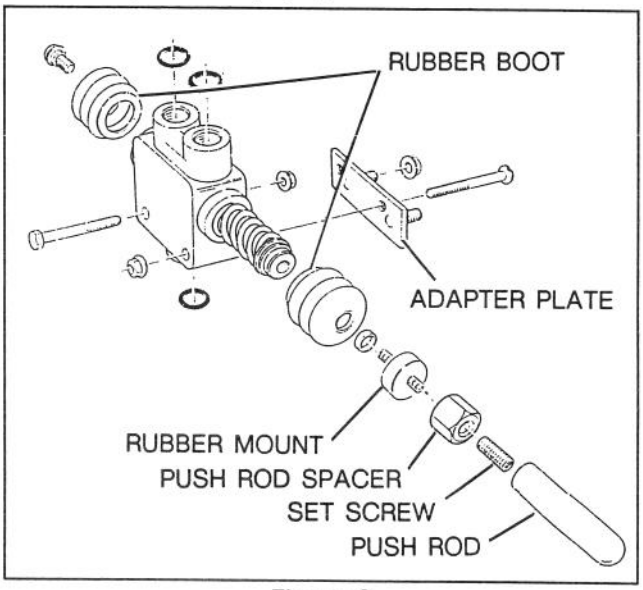


Figure 3

2. Install a rubber boot over input end of valve spool (Fig.3). Stretch boot so it fits over casting flange.

3. Insert a spacer into boot opening, on input end of valve spool (Fig.3).

4. Thread the rubber mount,removed from old valve, into input end of spool (Fig.3).

5. Thread a push rod spacer onto rubber mount (Fig. 3).

6. Thread a set screw into push rod spacer (Fig.3).

7. Thread the push rod, removed from old valve, onto set screw (Fig.3).

8. Mount adapter plate to valve with (2) machine screws and flange lock nuts, as shown in fig.3.

9. Coat (3) new o-ring seals with oil and install in valve.

10. Thread adapter fittings into valve and tighten to 72-80 ft/lb.

11. Mount valve and adapter plate to frame with (2) flange lock nuts. Make sure push rod is inserted through frame guide when installing.

12. Thread hydraulic hose fittings onto adapter fittings and tighten to 60-70 ft/lb.

#3 Cutting Unit

1. Install a rubber boot over output end of valve spool and onto edge of valve boss. Thread shoulder bolt into spool end (Fig.4).

2. Install a rubber boot over input end of valve spool (Fig.4). Stretch boot so it fits over casting flange.

3. Insert a spacer into boot opening, on input end of valve spool (Fig.4).

4. Thread the rubber mount,removed from old valve, into input end of spool (Fig.4).

5. Thread a push rod adapter onto rubber mount (Fig. 4).

6. Mount cotter pin to new front push rod as shown in fig.4.

7. Insert front push rod into frame guide at location where valve is to be installed.

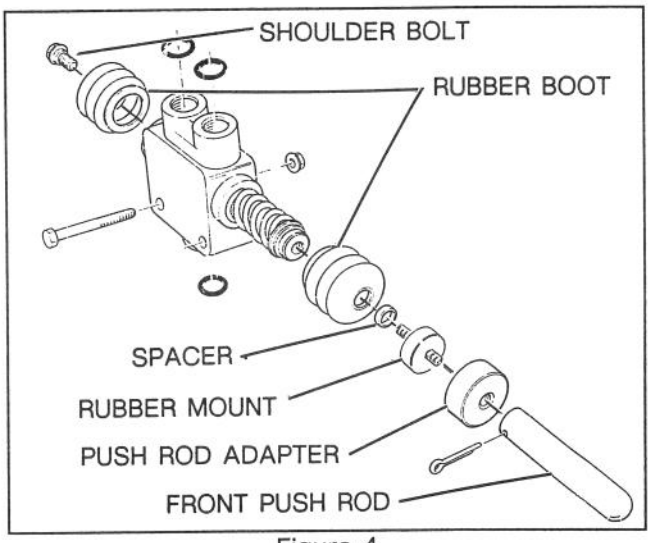


Figure 4

8. Coat (3) new o-ring seals with oil and install in valve.

9. Thread adapter fittings into valve and tighten to 72-80 ft/lb.

10. Mount valve to frame using (2) capscrews and flange locknuts (Fig. 4). Make sure push rod is aligned with input end of valve spool.

11. Thread hydraulic hose fittings onto adapter fittings and tighten to 60-70 ft/lb.

#4 & # 5 Cutting Units

1. Install a rubber boot over output end of valve spool and onto edge of valve boss. Thread shoulder bolt into spool end (Fig.5).

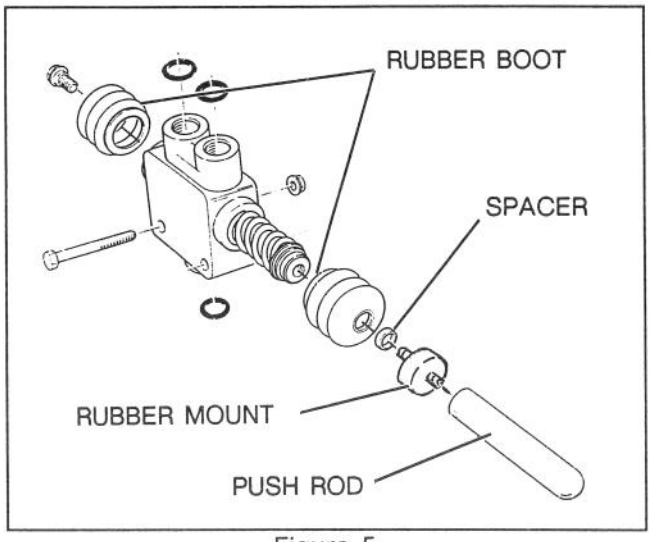


Figure 5

2. Install a rubber boot over input end of valve spool (Fig.5). Stretch boot so it fits over casting flange.

3. Insert a spacer, into boot opening, on input end of valve spool (Fig.5).

4. Thread the rubber mount,removed from old valve, into input end of spool (Fig.5).

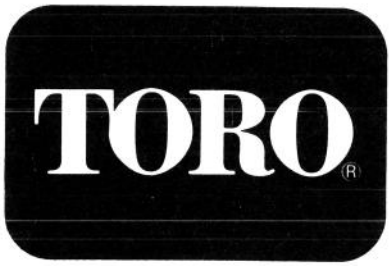
5. Thread the appropriate push rod, removed from old valve (#4 or #5 position), onto rubber mount (Fig.5). .

6. Coat (3) o-ring seals with oil and install in valve.

7. Thread adapter fittings into valve and tighten to 72-80 ft/lb.

8. Mount valve to frame using (2) capscrews and flange locknuts (Fig. 5).

9. Thread hydraulic hose fittings onto adapter fittings and tighten to 60-70 ft/lb.


TORO®