

KOYKER MANUFACTURING LENNOX, SD

3 SPOOL PLUMBING KIT #680366

Massey Ferguson 5435-5445-5455-5460-5465-5475

INSTALLATION INSTRUCTIONS:

1. Mount kit should be installed before proceeding to ensure that there is no interference.
2. First locate the remotes kit to verify tractor. First remove the two plugs from the valve and replace with power beyond plugs (Part #21). **See in Fig. 1-4 and Fig 1-5.**
3. Install nine adapters (Part #11 & 13) into the pressure, return, load sense and all the working ports on the top of the valve. Note: Attach all fasteners loosely to allow for desired adjustment later.
4. Install the valve (Part 1) onto the valve plate (Part #3) with four 3/8" x 1 1/4" HH cap screws, lock washers and hex nuts (Part #26, 35 & 39).
5. Once that has been done attach the valve plate (Part #3) onto the RH side of the tractor in under the cab. Secure with two 16mm – 2.0 P x 100mm HH cap screws (Part #30). **See in Fig. 1-1.**
6. Next the joystick handle bracket (Part #5) must be attached to the seat with 3/8" x 1" HH self tap cap screws and, if needed use the extension spacer round (Part #29 & 43). Then attach this handle bracket adapter plate (Part #4) with 3/8" x 1 1/4" HH cap screws, 3/8" flat washer, 3/8" center lock nut, 7/16" x 1 1/4" HH cap screws, 7/16" flat washer, 7/16" spring lock washer and 7/16" hex nut (Part #26, 32, 42, 28, 33, 36 & 40). Note: Attach all fasteners loosely to allow for desired adjustment later. **See in Fig. 1-2.**
7. Next the joystick handle bracket (Part #4) must be attached to the joystick cable control kit (Part #2) with two 5/16" x 3 1/2" HH cap screws, lock washers, hex nuts and flat washers (Part #25, 31, 31, 34 & 38). **Note: The joystick locking tab must face to the rear of the tractor.** If joystick needs a 1/4 turn, remove the two metal sleeves for the bolts from joystick base and reinsert them at a 1/4 turn. Note: Attach all fasteners loosely to allow for desired adjustment later. You need to cut a hole thru the cab floor to route the cable ends down through the hole in the cab floor just under of the side counsel. Adjust the according brackets to acquire the most desirable position for the joystick handle. **See in Fig 1-2.**

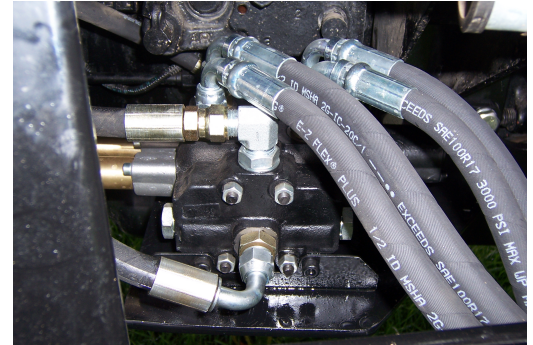


Fig 1-1



Fig 1-2

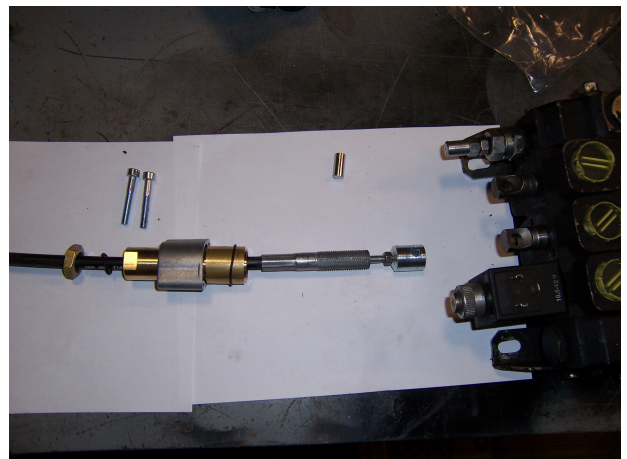


Fig 1-3

8. When this has been done attach the cable ends to the valve body with the connector kits (Part #8). **Note: Make sure the joystick is in the locked position.** Center the joystick and push the joystick tab in to lock joystick. First screw the nut on to the cable then put the small o-ring on the cable past the threads. Slide large o-ring on the connector and thread the cable connector and slide the valve controller on the cable. Now thread the small nut and the pin connector onto the cable and tighten. Now push pin connector onto the valve push rod and slide the pin through the holes. Thread the cable connector to the valve by hand. **Note: Only hand tighten the valve connector, if over tightened, the joystick will not be centered.** Now push large o-ring to the valve into the groove of cable connector. Then slide the valve connector to the valve and bolt together with given Allen head bolts. Slide the small o-ring to cable connector groove on the end and thread the large nut to cable connector and tighten. **Note: Make sure the cable connector does not move. See in Fig. 1-3.**

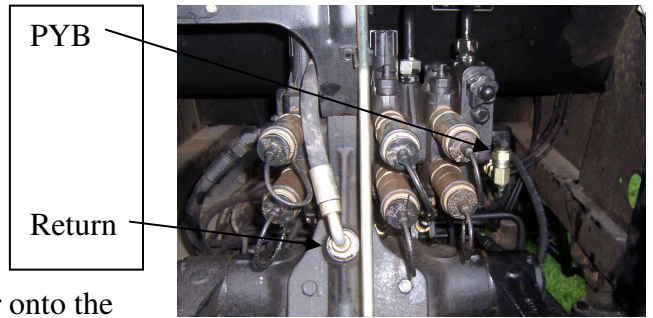


Fig 1-4

9. Next attach the wiring harness (Part #20) onto the valve, and route up to the joystick handle. Attach the ends together. You will have to supply electrical power to the wiring harness via the tractor. Note: Make sure the power source for the valve is connected to the key switch so the electric 3rd function can not operate with key switch in the “off” position.
10. Route the 60” hose (Part #17) the return, underneath the tractor cab and attach to the rear proper port with adapter (Part #12) on the back of the tractor. See instruction sheet for proper connections. **See in Fig. 1-4.**
11. Disconnect the hose from the right side on the rear remotes to right hand side pump. Now install the two elbows (Part #14) and route the pressure 45” hose (Part # 16) from pump to valve. **See in Fig. 1-5.**
12. Now route the PBY 72” hose (Part #18) to the valve. **See in Fig. 1-4.**
13. Next put the bulk head adapters and the male half (Part #10) on the mid-mount couple plate (Part #7). Note: At this point install the female half of the colored plugs (Part #9) along with the couplers.
14. Install the coupler bracket (Part #6) with four 1/2” x 2 1/2” HH cap screws, lock washers and hex nuts (Part #27, 37 & 41).
15. Now install the mid-mount couple plate (Part #7) with two 3/8” x 1 1/4” HH cap screws, lock washers and hex nuts (Part #26, 35 & 39). **See in Fig. 1-6.**

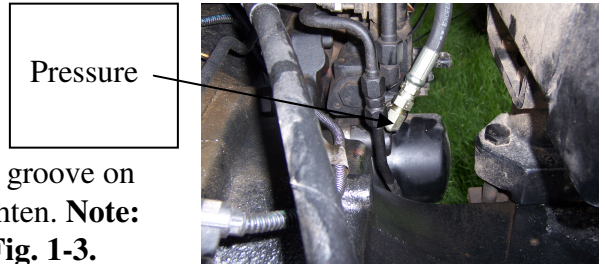


Fig 1-5

16. Run hydraulic 30” hoses (Part #15) from valve to mid-mount coupler.
17. After this has been done attach the female half of the quick coupler (Part #10) onto the 72” hoses (Part #19). Note: At this point install the male half of the colored plugs (Part #9). Attach the other end of the hoses to the steel oil lines on the loader frame. Then attach to the mid-mount coupler. Refer to the top view of the working port diagram and the loader manual to determine the function of the port.

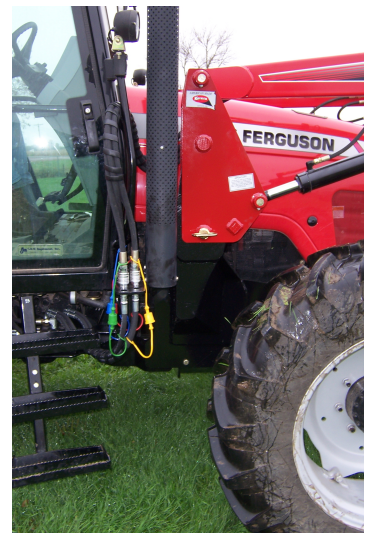


Fig 1-6

18. **TIGHTEN ALL THE CONNECTIONS SECURELY!** Secure hoses together with the 36” of hose wrap and nylon ties to make sure they do not interfere with any tractor function.

19. Finally start the tractor, actuate the loader to charge the hydraulic system with oil and add hydraulic fluid to the tractor as required using the recommended fluid for your tractor. Refer to the hydraulic section of the tractor owner's manual for the specific details regarding hydraulic fluid levels.