

KOYKER MANUFACTURING LENNOX, SD

2 SPOOL PLUMBING KIT #672826

CASE-IH MXM120-MXM130-MXM140-MXM155 NEW HOLLAND TM115-TM120-TM125-TM130-TM135-TM140-TM150-TM155- TM165

INSTALLATION INSTRUCTIONS:

1. First install the mount kit on the tractor (See mount instruction)
2. Then start with installing two 1" long adapters (Part #15) into the two rear working ports on the topside of the valve. (These are needed to raise the hoses over the front two working ports.) Next install five adapters (Part #11) into the remaining working ports, and also the pressure in, return out and load sense port(s).
3. Once that has been done attach the valve plate (Part #3) onto the bottom of the RH rear axle with four 18mm x 1.5 pitch x 40 mm bolts and lockwashers (Part #28 & 32).
4. Then install the valve (Part 1) onto the valve plate with four 3/8" x 1" HH cap screws, lockwashers and hexnuts (Part #26, 31 & 34). See Fig 1-1.
5. Next locate the stack valve at the back of the tractor. Remove the plugs from the pressure and return ports on the valve. Install an adapter (Part #12) into the pressure port, and another adapter (Part #13) into the return port. Attach a 58" hose (Part #19) from the pressure port to the valve, and also attach a 48" hose (Part #18) from the return port to the valve. See instruction sheet for proper connections to the valve. See Fig 1-2.
6. Then locate the load sense port on the tractor. It is located on the RH side of the rear housing. Remove port plug and attach a 16" hose (Part #17) into the port and connect to the load sense port on the valve. See Fig 1-3. **TIGHTEN ALL THE CONNECTIONS SECURELY!**
7. Next the joystick handle bracket (Part #5) must be attached to the joystick cable control kit (Part #4) with two 5/16" x 3 1/2" HH cap screws, lockwashers, hexnuts and flatwashers (Part #38, 33, 33, 32 & 36), if joystick needs a 1/4 turn remove two sleeves for the bolts from joystick and reinsert them at a 1/4 turn. Note: Attach all fasteners loosely to allow for desired adjustment later.
8. Then you will have to gain access to the side counsel in the cab. Remove the plastic molding from the front side counsel. The handle bracket adapter (Part #6) will have to be attached to the framework of the side counsel with two 8mm x 1.25 pitch x 70mm bolts (Part #25).
9. Two holes will have to be custom drilled in the plastic molding. Then attach the joystick assembly to the handle bracket adapter through the plastic molding with two 5/16" x 1" HH cap screws, lockwashers and hexnuts (Part #23, 30 & 33). Adjust the according brackets to acquire the most desirable position for the joystick handle. You will need to route the cable ends down through the access hole in the cab floor just ahead of the side counsel. Depending upon tractor model further modifications may be needed to install joystick into cab. (For non-cab tractors it may require further customizing to fit.) See Fig 1-4
10. 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 knob in (located on the side of joystick) 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. Make sure the end of the cable does not hit the valve push rod. 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 tighten the joystick will not be right.** 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 Fig 1-4.**

11. Next attach the four male halves of a quick coupler (Part #10) onto the bulkhead adapters (Part #11) and sandwich onto the coupler plate (Part #2). Attach the coupler plate to the mount point on the back of the RH mount with two 3/8" x 1 1/4" bolts, lockwashers and hexnuts (Part #27, 31 & 34).
12. Next attach the four remaining 58" hoses (Part #19) from the working ports on the valve to the end of the bulkhead adapters installed in the coupler plate. Note: At this point install the male half of the colored plugs (Part #9) need to be installed. See Fig 1-5.
13. Then attach the four 72" hoses (Part #20) to the female halves of the quick couplers (Part #10). Note: At this point install the female half of the colored plugs (Part #9, 10, 11 & 12) to the hose assembly. Attach the other end of the hoses to the steel oil lines on the loader frame. Then couple the couplers together. Refer to the top view of the working port diagram and the loader manual to determine the function of the port.
14. Use the hose wrap to secure hoses together and do not interfere with any tractor operations.
15. 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.

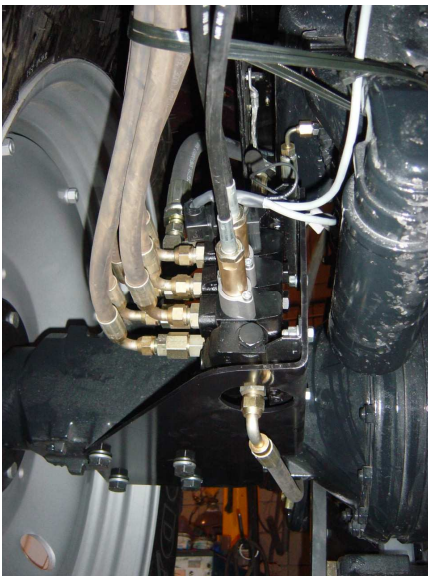


Fig 1-1



Return Port

Fig 1-2

Pressure Port

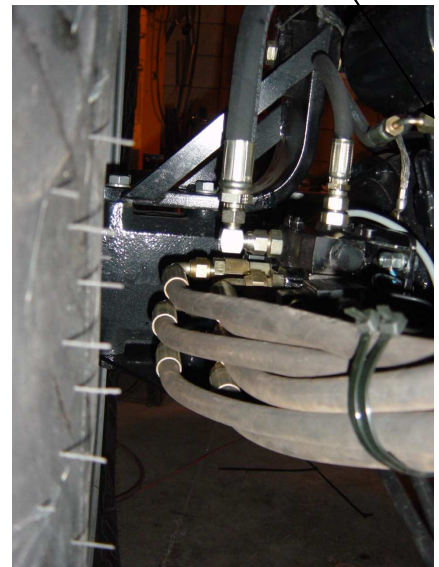


Fig 1-3

Load Sense Port



Fig 1-4



Fig 1-5