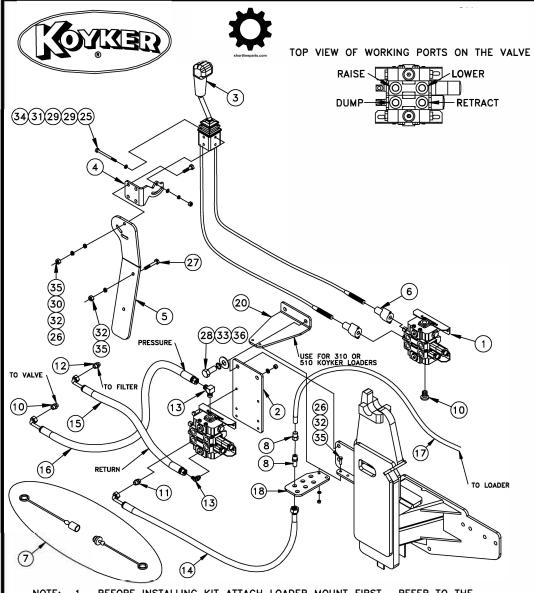
### 680326 2 SPOOL PLUMBING KIT FOR JOHN DEERE 2940-2950-2955-3055-3130-3140-3150-3155-3255



| KEY | PART NO.  | DESCRIPTION                             | QTY. |
|-----|-----------|---|------|
| 1   | 668962    | 2 SPOOL VALVE (LOAD SENSE)              | 1    |
| 2   | 680328    | VALVE PLATE                             | 1    |
| 3   | 683154    | JOYSTICK CABLE CONTROL KIT W/78" CABLES | 1    |
| 4   | 684725    | JOYSTICK HANDLE BRACKET                 | 1    |
| 5   | 669899    | HANDLE BRACKET ADAPTER PLATE            | 1    |
| 6   | 669298    | CABLE CONNECTOR KIT                     | 2    |
| 7   | 673956    | COLOR COUPLER PLUG KIT                  | 1    |
| 8   | 673740    | QUICK COUPLER SET; -8 O-RING            | 4    |
| 9   | 6408-10   | FITTING; PLUG 10 O-RING MALE            | 1    |
| 10  |           | ADAPTER; -6 MJIC x 14MM x 1.5P MALE     | 1    |
| 11  |           | ADAPTER; -8 MJIC x -10 ORM              | 4    |
| 12  |           | ADAPTER; -8 MJIC x -12 ORM              | 1    |
| 13  | 6801-8-10 | 90° ELBOW; -8 MJIC x -100RM             | 2    |
| 14  | 676925    | 30" HYDRAULIC HOSE                      | 4    |
| 15  | 675512    | 48" HYDRAULIC HOSE (RETURN)             | 1    |
| 16  | 659306    | 58" HYDRAULIC HOSE (PRESSURE)           | 1    |
| 17  | 673909    | 72" HYDRAULIC HOSE                      | 4    |
| 18  | 672858    | COUPLER PLATE                           | 1    |
| 19  | 680331    | COUPLE PLATE (310 OR 510 LOADER)        | 1    |
|     | 669686    | 36" HOSE WRAP                           | 1    |
|     | 652393    | NYLON TIE                               | 5    |
|     | 663708    | JOYSTICK DECAL                          | 1    |
|     |           |   |      |
|     | #345      | HARDWARE BAG                            | 1    |
| 25  | 669618    | HH CAP SCREW; 5/16" x 3 1/2"            | 2    |
| 26  | 640032    | HH CAP SCREW; 3/8" x 1 1/4"             | 9    |
| 27  | 673012    | HH CAP SCREW; 3/8" x 1 3/4"             | 2    |
| 28  | 640079    | HH CAP SCREW; 5/8" x 2"                 | 2    |
| 29  | 640152    | FLATWASHER; 5/16"                       | 4    |
| 30  | 640154    | FLATWASHER; 3/8"                        | 2    |
| 31  | 640151    | LOCKWASHER; 5/16"                       | 2    |
| 32  | 640153    | LOCKWASHER; 3/8"                        | 9    |
| 33  | 640159    | LOCKWASHER; 5/8"                        | 2    |
| 34  | 652360    | HEXNUT; 5/16"                           | 2    |
| 35  | 640132    | HEXNUT; 3/8"                            | 9    |
| 36  | 640142    | HEXNUT; 5/8"                            | 2    |

BEFORE INSTALLING KIT ATTACH LOADER MOUNT FIRST. REFER TO THE NOTE: 1.

INSTRUCTIONS PROVIDED WITH THAT KIT.

2. REFER TO WRITTEN INSTRUCTIONS ON ADDITIONAL INFORMATION TO INSTALL KIT.

3. USE HOSE WRAP AND NYLON TIE TO SECURE HOSES TOGETHER.

Short Line Parts, LLC www.shortlineparts.com 605-951-0167

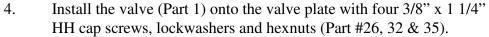


#### 2 SPOOL PLUMBING KIT #680326

### JOHN DEERE 2940-2950-2955-3055-3130-3130-3140-3150-3155-3255

#### INSTALLATION INSTRUCTIONS:

- 1. First install the mount kit on the tractor (See mount instructions).
- 2. Once that has been done attach the valve plate (Part #2) onto the RH side of the tractor behind the rear mount. See Fig 1-1. Secure with two 5/8" x 1 3/4" HH cap screws, lockwashers and flatwashers (Part #28, 33 & 36). If you have 310 or 510 loader use the couple mount (Part #19).
- 3. Install plug (Part #10) into this port. Then install eight adapters (Part #11 & 13) into the pressure, return and all the working ports on the top of the valve. TIGHTEN ALL THE CONNECTIONS **SECURELY!**



- Next the joystick handle bracket (Part #4) must be attached to the 5. joystick cable control kit (Part #3) with two 5/16" x 3 1/2" HH cap screws, lockwashers, hexnuts and flatwasher (Part #25, 31, 29, 29 & 34), if joystick needs a ¼ turn remove two sleeves for the bolts from joystick and reinsert them at a ¼ turn. Then attach this assembly to the handle bracket adapter plate (Part #5) with three 3/8" x 1 1/4" HH cap screws, lockwashers, hexnuts and one flatwasher (Part #26, 32, 30 & 35). Note: Attach all fasteners loosely to allow for desired adjustment later.
- 6. Then custom fit the handle bracket adapter plate (Part #5) onto the fender wall just ahead of the side counsel in the cab of the tractor. (For non-cab tractors it may require further customizing to fit.) Attach with two 3/8" x 1 3/4" HH cap screws, lockwashers and hexnuts (Part #27, 32

the side counsel. Adjust the according brackets to acquire the

most desirable position for the joystick handle. See in Fig. 1-2. 7. When this has been done attach the cable ends to the valve body with the connector kits (Part #6). 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

> Note: Only hand tighten the valve connecter, if over tighten the joystick will not be right. Now push large o-ring

the holes. Thread the cable connector to the valve by hand.



Fig 1-1

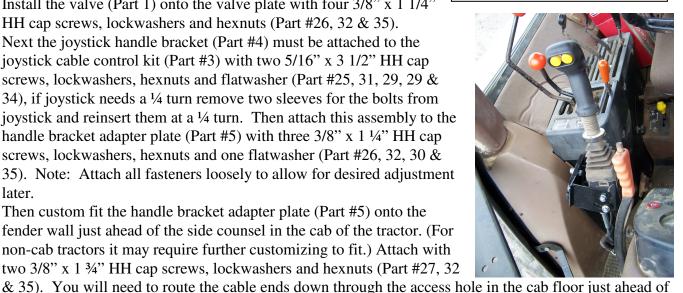


Fig 1-2



Fig 1-3

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.

Pressure

Return

- 8. Route the pressure 58" hose (Part #16) to the pressure port on the valve and to the valve on the tractor. See instruction sheet for proper connections. **See in Fig. 1-4.**
- 9. Route the return 48" hose (Part #15) to the filter on the tractor. See instruction sheet for proper connections. **See in Fig. 1-5.**
- 10. Next put the bulk head adapters and the male halve (Part #9) on the mid-mount couple plate (Part #18). Note: At this point install the female halve of the colored plugs (Part #7) along with the couplers. **See in Fig. 1-6.**
- 11. Install the mid-mount couple plate (Part #18) to mount with two 3/8" x 1 1/4" HH cap screws, lock washers and hex nuts (Part #26, 32 & 35).
- 12. Route the 30" hoses (Part #14) to the proper bulkheads on the mid-mount couplers already installed on the loader mount of the tractor. See instruction sheet for proper connections.
- 13. After this has been done attach the female halve of the quick coupler (Part #8) onto the 72" hoses (Part #17). Note: At this point install the male half of the colored plugs (Part #7). Attach the other end of the hoses to the steel oil lines on the loader frame. Refer to the top view of the working port diagram and the loader manual to determine the function of the port.
- 14. Secure hoses together with the 36" of hose wrap and nylon ties to make sure they do not interfere with any tractor function.
- 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 1-4

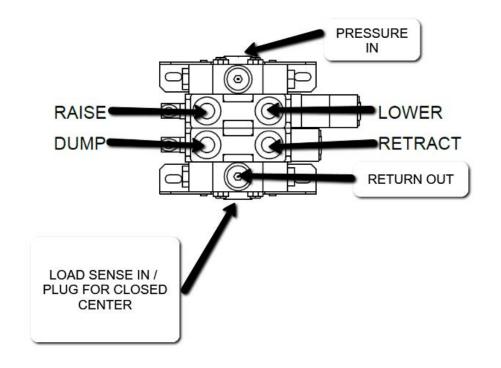


Fig 1-5

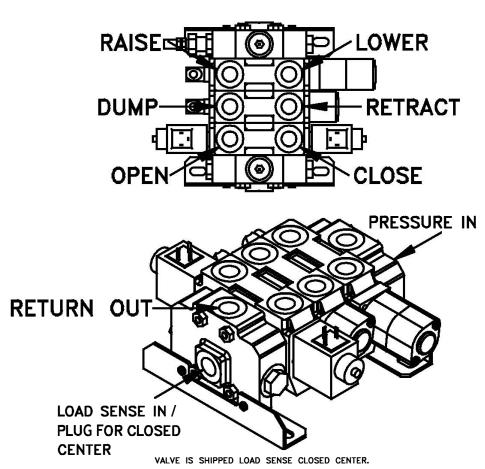


Fig 1-6

# 2 SPOOL LOAD SENSING/CLOSED CENTER VALVE PORTS LABELED



# 3 SPOOL LOAD SENSING/CLOSED CENTER VALVE PORTS LABELED



## VIDEOS:

CONNECTING CABLES TO VALVE: https://youtu.be/AOKy1CnuU4o



**CONNECTING CABLES TO JOYSTICK:** 

https://youtu.be/vbcYCtpPtaw

