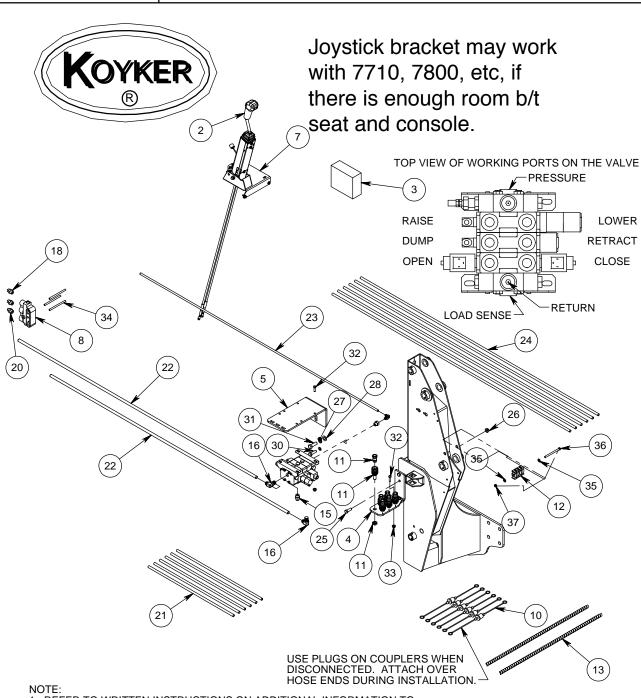
PART NUMBER 690139

### 3 FUNCTION PLUMBING KIT FOR JOHN DEERE 7130-7230-7330-7430-7530 W/BLOCK



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	668963	3 SPOOL LOAD SENSING VALVE
2	1	683153	KIT-JOYSTICK BENT 59" 3 SP
3	1	683162	WIRING HARNESS
4	1	672858	COUPLER PLATE
5	1	676424	VALVE PLATE
6	1	689591	VALVE BRACKET
7	1	691620	JOHN DEERE JOYSTICK MOUNT KIT
8	1	685383	POWER BEYOND BLOCK
9	2	669298	CABLE CONNECTOR KIT
10	1	673957	COLORED PLUG SET - 3SP
11	6	673740	QUICK COUPLER BULKHEAD SET
12	4	672503	OIL LINE CLAMP TWIN .500
13	2	669686	36" HOSE WRAP
14	5	652393	14.25 NYLON CABLE TIE
15	6	6400-8-10	FITTING - HYD ADA 8MJX - 10ORM
16	2	6801-10-10	FITTING - HYD ELB 90 10MJX-10ORM
17	1	6801-6-6	FIITTING-HYD ELB 90 6MJX-6MOR
18	1	6MJIC-14MM	1.5 FITTING - HYD ADA 6MJX-14MM-1.5P O-RING
19	1	6410-10-6	FITTING - ADA 100RM - 60RF
20	2	10MJIC-22N	M1.5 FITTING - HYD ADA 10MJX-22MM-1.5P
21	6	676925	HOSE - HYD .500-30 8FJX-8FJX90
22	2	676921	HYD HOSE .625-84 10FJX-10FJX45
23	1	676922	HYD HOSE .375-84 6FJX-6FJX45
24	6	676988	HYD HOSE .5-84 8ORM-8MJX
25	2	640059	SCREW50-13 X 1.50 GR 5 HHC
26	2	683932	NUT50 X 13 FLANGE
27	2	640159	WASHER - 5/8" SPRING LOCK
28	2	652048	WASHER - 5/8" FLAT N-SERIES
29	2	651717	WASHER - 14MM SPRING LOCK
30	2	640114	SCREW - 14MM - 2.0 X 45 GR 8.8 HHC
31	2	656016	SCREW - 16MM - 2.0 X 50 GR 10.9 HHC
32	7	640032	SCREW375-16 X 1.25 GR 5 HHC
33	7	682413	NUT375 X 16 FLANGE
34	3	685384	STUD - 142.5MM
35	2	640154	WASHER - 3/8" FLAT
36	1	750412	SCREW375-16 X 5.00 GR 5 HHC
37	1	700560	NUT375-16 GR 2 CENTER LOCK

NOTE.

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

2. USE HOSE WRAP AND NYLON TIES TO SECURE HOSES TOGETHER.

SHORT LINE PARTS, LLC | SALES@SHORTLINEPARTS.COM

#### 3 SPOOL PLUMBING KIT #690139

#### JOHN DEERE 7130-7230-7330-7430-7530

Load

Sense

Return

#### **INSTALLATION INSTRUCTIONS:**

- 1. Mount kit should be installed before proceeding to ensure that there is no interference.
- 2. First, attach power beyond block kit (Part #8) using longer studs (Part #34) to right hand side valve stack. **See in Fig. 1-1.** Once that has been done, attach the valve plate (Part #5) onto the RH side of the tractor behind the rear mount. Secure with two 14mm – 2.0 P x 45mm HH cap screws, flat washers and lock washers (Part #30, 29 & 28) or 16mm – 2.0 P x 50mm HH cap screws, flat washers and lock washers (Part #31, 27 & 28). See in Fig. 1-2.
- Install nine adapters (Part #15, 16, 19 and 17) into the 3. pressure, return, load sense and all the working ports on the top of the valve. TIGHTEN ALL THE CONNECTIONS SECURELY!
- 4. Install the valve (Part #1) onto the valve plate with four 3/8" x 1 1/4" HH cap screws, and flange nuts (Part #32 & 33).
- 5. Install the joystick mount kit (Part #5) at this time. Refer to the instruction sheet for this kit. Note: The locking tab on the base of the joystick has to face to the rear of the tractor, if joystick needs a 1/4, turn, remove the two metal sleeves for the bolts from joystick and reinsert them at a ¼ turn.
- There are removable plugs in the cab floor just ahead of the 6. side console to route the cable ends down to the valve. Adjust the bracket to acquire the most desirable position for the joystick handle. See in Fig. 1-3 and Fig 1-4.
- 7. When this has been done attach the cable ends to the valve body with the connector kits (Part #9). Note: Make sure the joystick is in the locked position. (Center the joystick, and push the joystick locking tab in (located on the side of joystick) to lock joystick.). First, screw the large nut on to the cable past the threads. Then slide the small o-ring on the cable past the threads. Now thread the small nut and the pin connector onto the cable and tighten. Slide large o-ring onto the connector. Slide the valve connector on the cable. Now push pin connector onto the valve push rod and slide the pin through the aligned holes. Thread the cable connector to the valve by hand holding the pin in place. Note: Only hand tighten the valve connecter, if over tightened the joystick will not be correct. Now push large o-ring to the valve into



Fig 1-1



Fig 1-2



Fig 1-3

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. 1-5.

- 8. Next, attach the wiring harness (Part #3) to the valve and attach ground wire to one of the valve mounting bolts. Route the other end with the red power wire up through the floor alongside of the joystick cables and connect to the wiring harness coming out of the joystick. **Note:** Fasten red power wire to a power source that is only activated with the key in the "run" or "on" position.
- 9. Route the three 84" hoses (Part #22 & 23) underneath the tractor cab and attach to the proper ports on the manifold block already installed on the back of the tractor. See instruction sheet for proper connections.
- 10. Next, put the female quick coupler with bulkhead (Part #11) on the mid-mount couple plate (Part #4). **Note:** At this point, install the male half of the colored plugs (Part #10) onto the couplers.
- 11. Now install the mid-mount couple plate (Part #4) to the upright valve bracket (Part #6) with two 3/8" x 1 1/4" HH cap screws and flange nuts (Part #32 & 33). Then attach the upright bracket (Part #6) to the loader upright with two ½" X 1 1/2" HH cap screws and flange nuts (Part #25 & 26).
- 12. Run the four 30" hydraulic hoses (Part #21) from valve to mid-mount coupler.
- 13. After this has been done attach the male half of the quick coupler (Part #11) onto the 84" hoses (Part #24).

  Note: At this point, install the female half of the colored plugs (Part #10). Attach male end to female coupler. Attach the other end of the hoses to the steel oil lines on the loader. Refer to

the top view of the working port diagram and the loader manual to determine the function of the port.

14. Using 3 of the plastic oil clamps (Part #12) stack the hyd hoses from the coupler plate to the steel loader lines using one 3/8" X 4" HH cap screw, 2 flat washers and a lock nut (Part #36, 35, and 37). See Fig. 1-6.





Fig 1-4



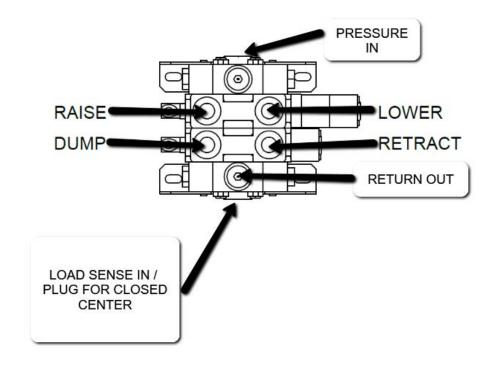
Fig 1-5



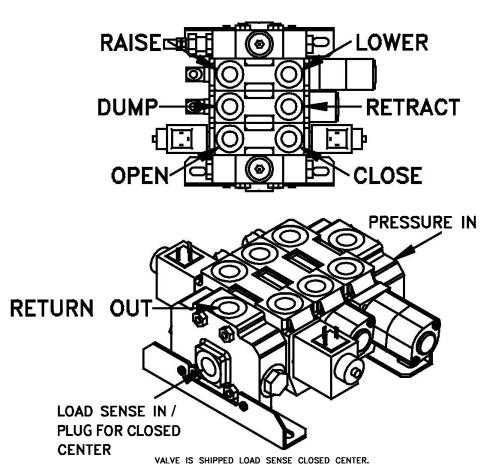
Fig 1-6

- 15. Secure hoses together with the 36" of hose wrap and nylon ties to make sure they do not interfere with any tractor function.
- 16. 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.

# 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



COMPLETE JOYSTICK KIT INSTALLED ON

JD 7130:

https://youtu.be/JdWkNpW4TTs

