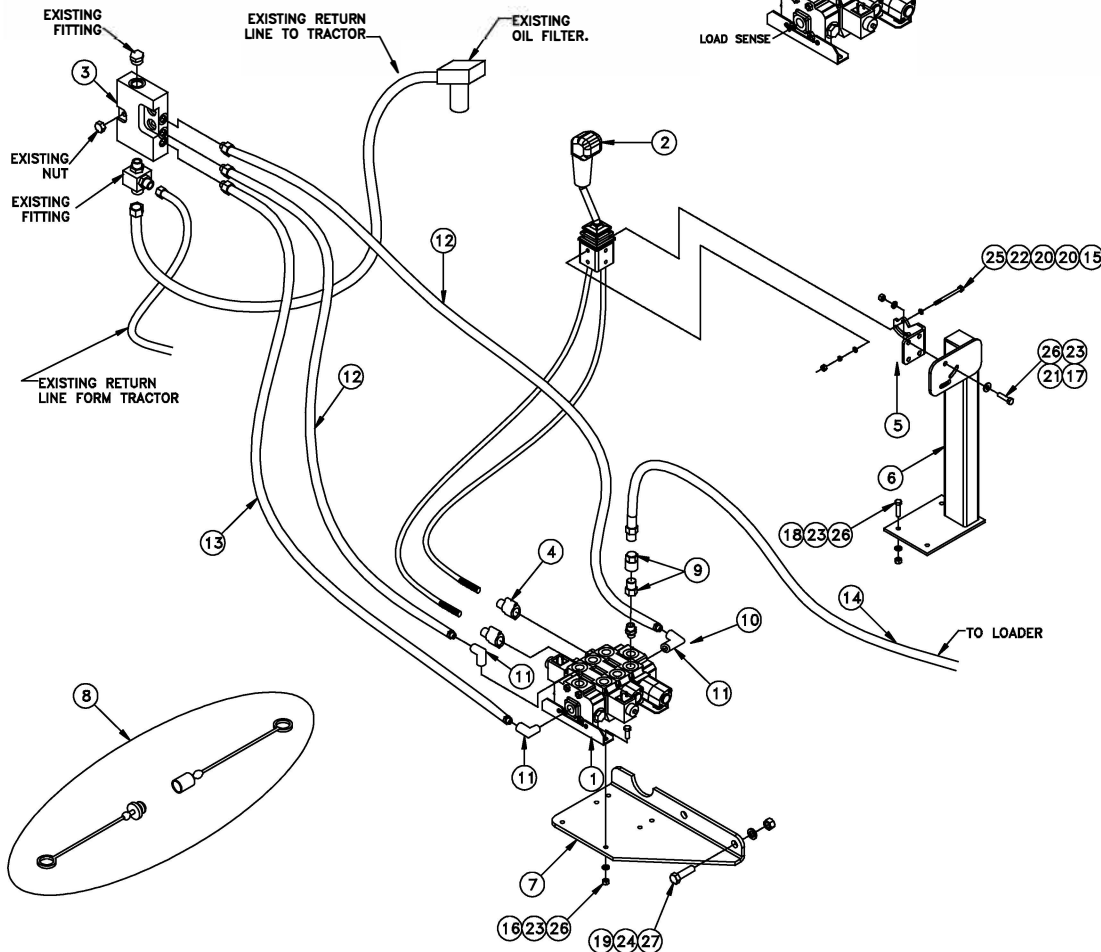
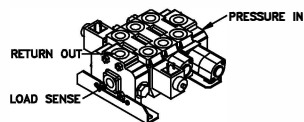
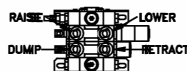


677840 2 SPOOL PLUMBING KIT FOR CASE-IH 7110-7120-7130-7140-7150



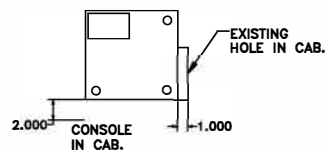
SHORT LINE PARTS WWW.SHORTLINEPARTS.COM
SALES@SHORTLINEPARTS.COM

TOP VIEW OF WORKING PORTS ON THE VALVE



- NOTE:**
1. BEFORE INSTALLING KIT ATTACH MANIFOLD BLOCK KIT FIRST. REFER TO THE 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.

KEY	PART NO.	DESCRIPTION	QTY.
1	668962	2 SPOOL VALVE (LOAD SENSING)	1
2	683154	JOYSTICK CABLE CONTROL KIT W/78" CABLES	1
3	670392	VALVE BLOCK	1
4	669298	CABLE CONNECTOR KIT	2
5	684725	JOYSTICK HANDLE BRACKET	1
6	670395	HANDLE STAND	1
7	670398	VALVE PLATE	1
8	673956	COLOR COUPLER PLUG KIT 2 SPOOL	1
9	673780	QUICK COUPLER SET; 1/2" O-RING	4
10	6403-10-8	ADAPTER; 10ORM-8ORM	4
11	6809-10-8	90° ELBOW; 8FJX-10ORM	3
12	673948	60" HYDRAULIC HOSE (PRESSURE & RETURN)	2
13	675948	60" HYDRAULIC HOSE (LOAD SENSE)	1
14	673390	96" HYDRAULIC HOSE	4
	669686	36" HOSE WRAP	2
	#903	HARDWARE BAG	1
15	669618	HH CAP SCREW; 5/16" x 3 1/2"	2
16	640028	HH CAP SCREW; 3/8" x 1"	4
17	640032	HH CAP SCREW; 3/8" x 1 1/4"	4
18	640034	HH CAP SCREW; 3/8" x 1 1/2"	3
19	651220	HH CAP SCREW; 5/8" x 2 1/4"	2
20	640152	FLATWASHER; 5/16"	4
21	640154	FLATWASHER; 3/8"	2
22	640151	LOCKWASHER; 5/16"	2
23	640153	LOCKWASHER; 3/8"	14
24	640159	LOCKWASHER; 5/8"	2
25	652360	HEXNUT; 5/16"	2
26	640132	HEXNUT; 3/8"	11
27	640142	HEXNUT; 5/8"	2
	663708	JOYSTICK DECAL	1



2 SPOOL PLUMBING KIT #677840
CASE-IH 7110-7120-7130-7140-7150

INSTALLATION INSTRUCTIONS:

1. Mount kit should be installed before proceeding to ensure that there is no interference.
2. First remove old valve block from tractor and then attach valve block kit (Part #2) using existing nuts and o-rings to tractor. **See in Fig. 1-1.** Also, see instruction Sheet (677840) attached with that kit.
3. Once that has been done attach the valve plate (Part #7) onto the RH side of the tractor behind the rear mount. Secure with two 5/8" x 2 1/4" HH cap screws, lock washers and nuts (Part #19, 24 & 27). **See in Fig. 1-2.**
4. Install nine adapters (Part #11 and 12) into the pressure, return, load sense and all the working ports on the top of the valve. **TIGHTEN ALL THE CONNECTIONS SECURELY!**
5. Install the valve (Part #1) onto the valve plate with four 3/8" x 1" HH cap screws, lock washers and hex nuts (Part #16, 23 & 26).
6. 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, lock washers, hex nuts and flat washer (Part #16, 21, 21, 23 & 28). The tab on joystick base should face to the rear, if joystick needs a 1/4 turn remove two sleeves for the bolts from joystick and reinsert them at a 1/4 turn.
7. Then custom fit the handle bracket adapter plate (Part #6) onto the front right corner just ahead of the side counsel (approximately 2") in the cab of the tractor. Attach with three 3/8" x 1 1/2" HH cap screws, lock washers and nuts (Part #18, 23 & 26). You need to drill three holes thru the cab floor to mount stand in the cab floor just ahead of the side counsel. Then attach this assembly to the handle bracket adapter plate (Part #5) with two 3/8" x 1 1/4" HH cap screws, lock washers, and one flat washer (Part #25, 30, 32 & 36). Note: Attach all fasteners loosely to allow for desired adjustment later. Adjust the according brackets to acquire the most desirable position for the joystick handle. **See in Fig. 1-3.**
8. When this has been done attach the cable ends to the valve body with the connector kits (Part #4). **Note: Make sure the joystick is in the locked position.** (Center the joystick and push the tab in (located on the back 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

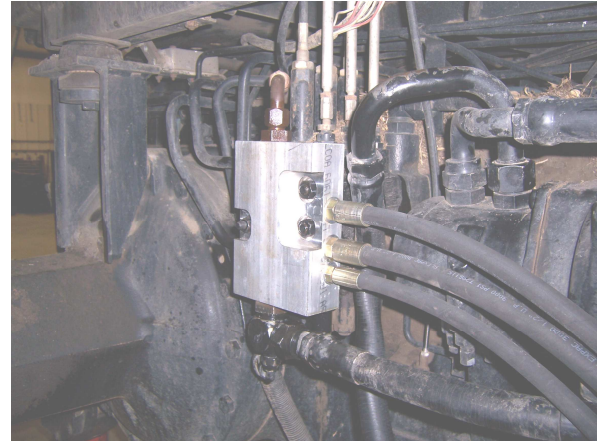


Fig 1-1

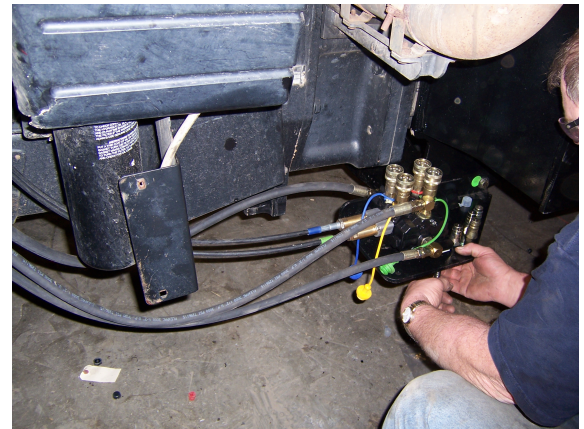


Fig 1-2



Fig 1-3

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 tightened 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 in Fig. 1-4.**

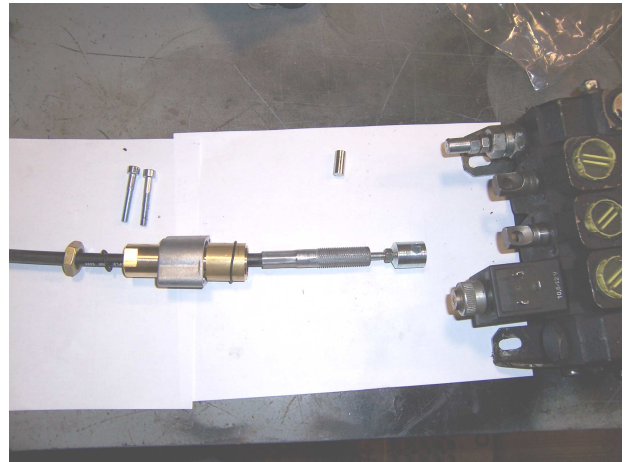
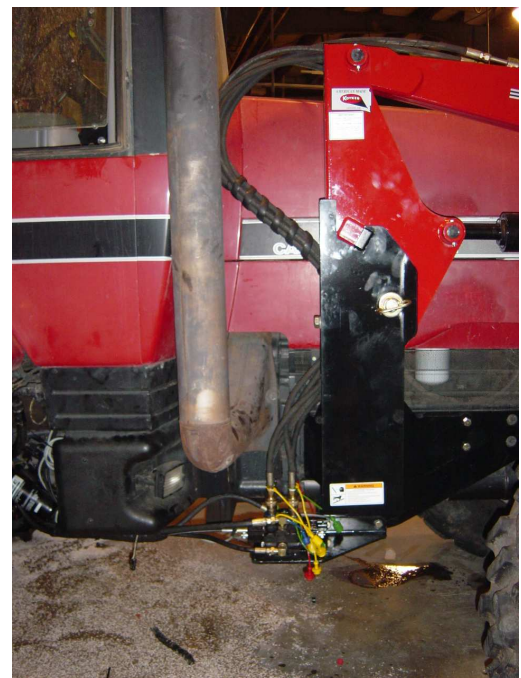
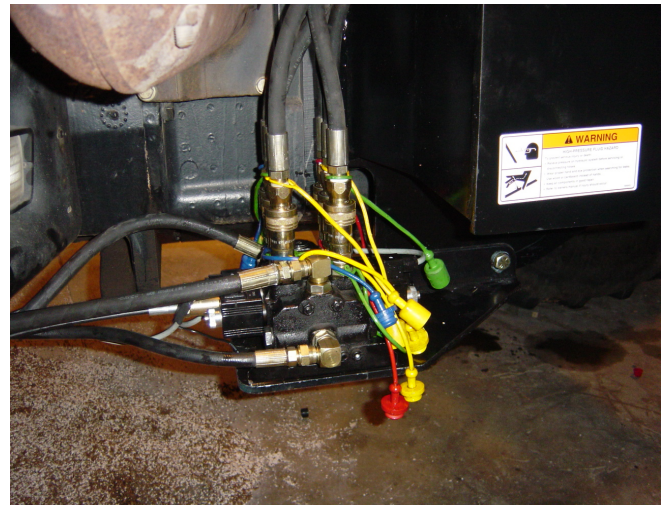
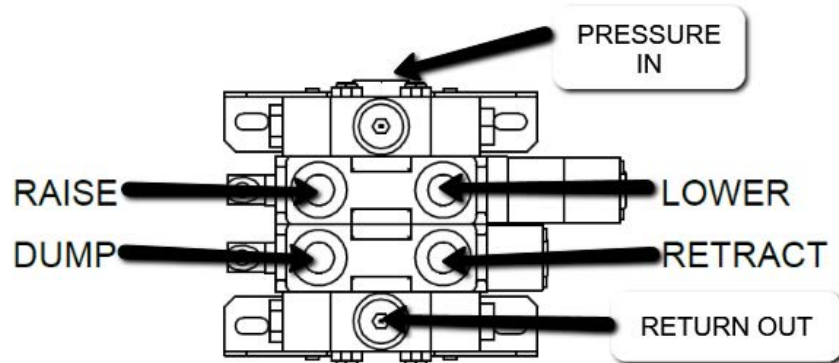


Fig 1-4

9. Hook up the existing hoses and fitting to new block.
10. Route the 60" hoses (Part #12 & 13) 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.
11. Next put the male half (Part #9) on the valve (Part #1). Note: At this point install the female half (Part #9) of the colored plugs (Part #8) along with the couplers.
12. After this has been done attach the female half of the quick coupler (Part #9) onto the 96" hoses (Part #15). Note: At this point install the male half of the colored plugs (Part #8). 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.
13. Secure hoses together with the 36" of hose wrap and nylon ties to make sure they do not interfere with any tractor function.
14. 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.

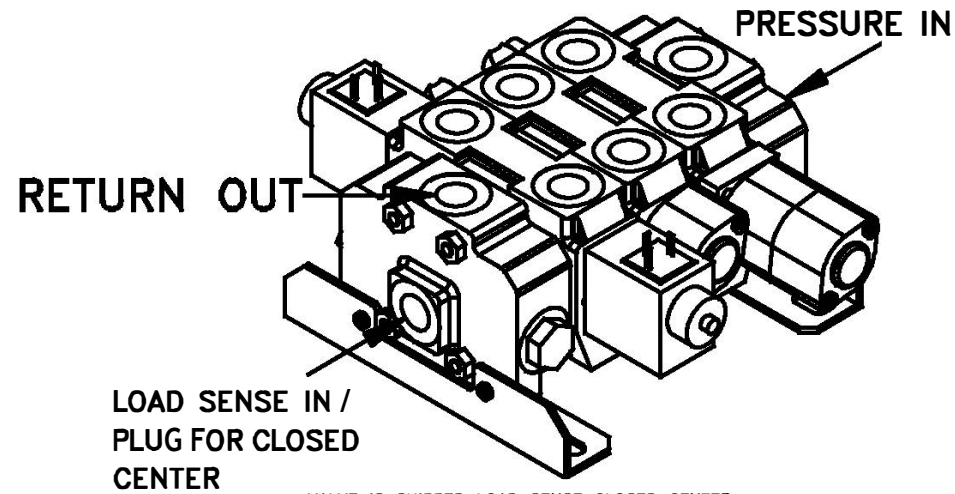
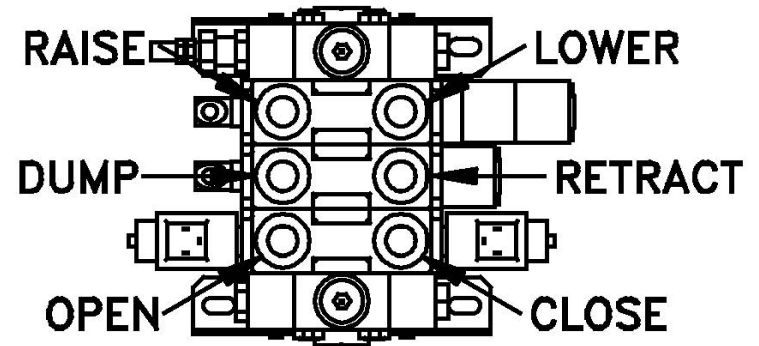


2 SPOOL LOAD SENSING/CLOSED CENTER VALVE
PORTS LABELED



LOAD SENSE IN /
PLUG FOR CLOSED
CENTER

3 SPOOL LOAD SENSING/CLOSED CENTER
VALVE PORTS LABELED



VALVE IS SHIPPED LOAD SENSE CLOSED CENTER.

VIDEOS:

CONNECTING CABLES TO VALVE:

<https://youtu.be/AOKy1CnuU4o>



CONNECTING CABLES TO JOYSTICK:

<https://youtu.be/vbcYCtpPtaw>

