

Automated Steering Hydraulic Installation Kit

P/N: ED-CFLX

Fits CaseIH FLX Series Floater

Models:

FLX3010

FLX3510



Overview

A series of equipment-specific hydraulic installation kits has been developed to work in conjunction with your automated steering system. This kit contains the necessary components and instructions to install automated steering hydraulics on the CaseIH FLX Series Floaters listed above. Please read this manual thoroughly before beginning the installation

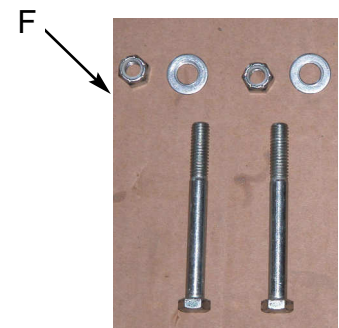
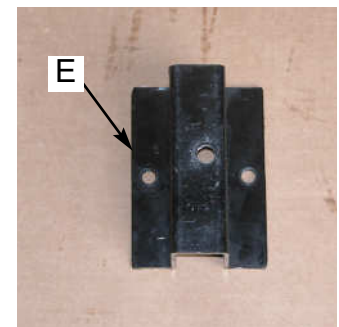
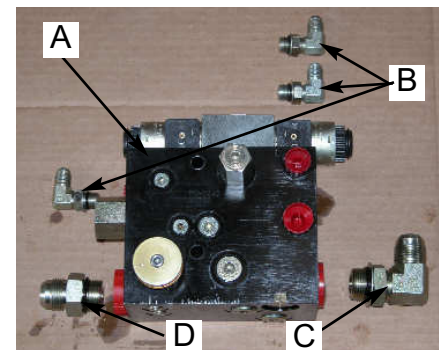
Machine Preparation

Before attempting to install hydraulics, park the machine on a clean level floor with adequate clearance to work all around.

Kit Contents

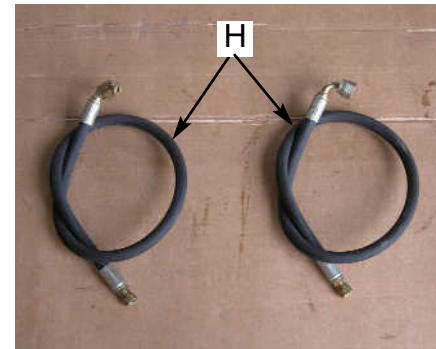
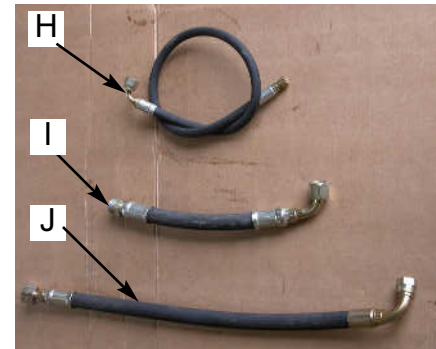
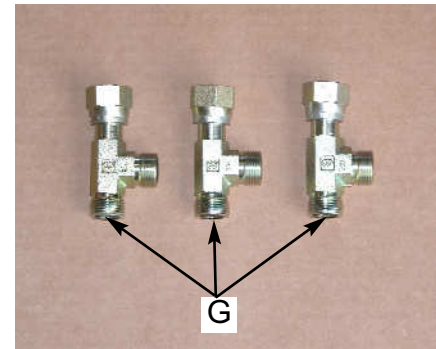
Unpack the installation kit and identify the required parts as shown.

REF	P/N	QTY	DESCRIPTION
A	760-0007	1	Assy, Hyd. Valve Block - OC/HF Low Range
Bag #1 of 3 includes B, C, & D			
B	760-2058	3	Adapter, Hyd. 90 Elbow - #6maleJIC x #6maleORB
C	760-2019	1	Adapter, Hyd. 90 El - #12maleJIC x #12maleORB
D	760-2018	1	Adapter, Hyd. - #12maleJIC x #12maleORB
E	640-0044	1	Hyd. Block Mnt-CaseIH FLX
Bag #2 of 3 includes F			
F	675-2006	2	Bolt, 3/8" NC x 3-3/4" Gr5 ZP
	678-1054	2	Washer, Narrow Flat - 3/4"OD x 13/32"ID x 1/16"thk ZP
	676-1035	2	Nut, NyLock - 3/8" NC ZP



Kit Contents (cont.)

REF	P/N	QTY	DESCRIPTION
Bag #3 of 3 includes G			
G	760-2069	3	Adapter, Hyd Run Tee - #8 ORFF
H	760-1123	3	Hose, Hyd. - 3/8"x40", #6femJICswiv x #8femJICswiv90EL
I	760-1194	1	Hose, Hyd. - 3/4"x14", #12femJICswiv90EL x #12maleORFF
J	760-1193	1	Hose, Hyd. - 3/4"x30", #12femJICswiv90EL x #12femORFFswiv
K	051-0144	1	Cable, Interface - 10 ft.
	677-2001	20	Tie Strap, 11" Heavy Duty, Not Shown
	710-0053	1	Kit, Steering Wheel Switch, Not Shown



WARNING:

HIGH-PRESSURE FLUID HAZARD. Hydraulic oil may be hot and under high pressure. To prevent serious injury or death: Relieve system pressure and allow to cool before repairing or disconnecting. Wear proper hand and eye protection when searching for leaks, using wood or cardboard instead of hands. Keep all hydraulic components in good repair.

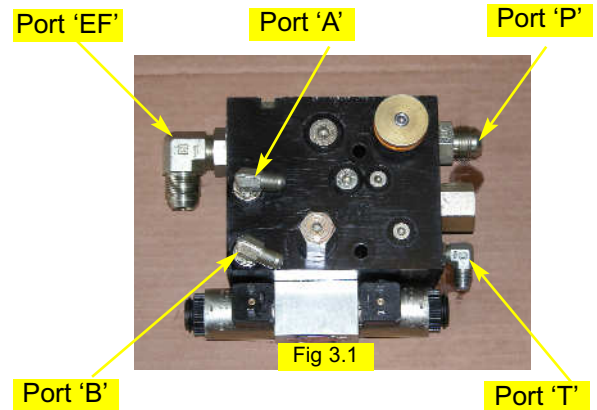
IMPORTANT:

PREVENT HYDRAULIC SYSTEM CONTAMINATION. It is essential to thoroughly clean hydraulic system fittings and hose connections prior to disconnecting or removing. Use a spray cleaner such as 'Brake Clean' to prevent hydraulic system contamination. Note that o-rings used on ORB and ORFF type fittings may be damaged by solvent cleaners such as 'Brake Clean'. If a fitting is to be cleaned internally, the o-ring should first be removed and cleaned with a fiberless cloth.

INSTALLATION

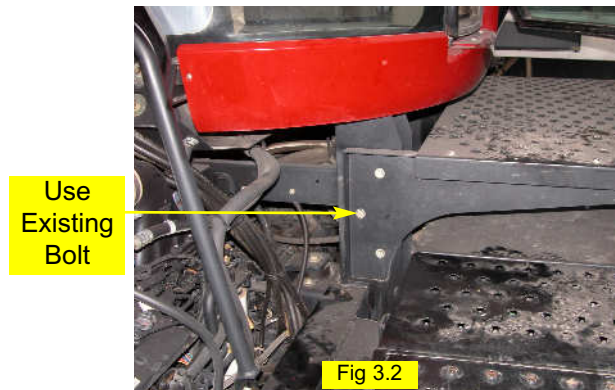
1. Prepare Hydraulic Control Block:

Make sure the hydraulic control block is clean and dust free. Remove the plastic plugs and install the elbow adapters (**B**) in the **T**, **A**, and **B** ports. Install the larger elbow (**C**) in the **EF** port and the straight adapter (**D**) in the **P** port of the hydraulic control block. (Figure 3.1)



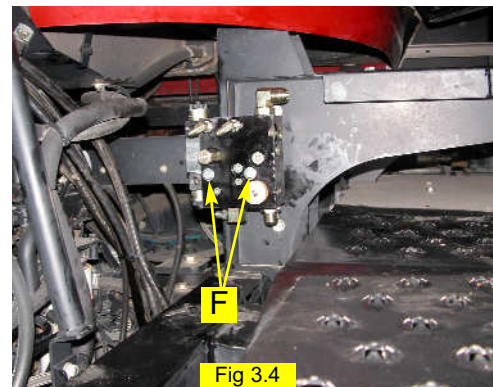
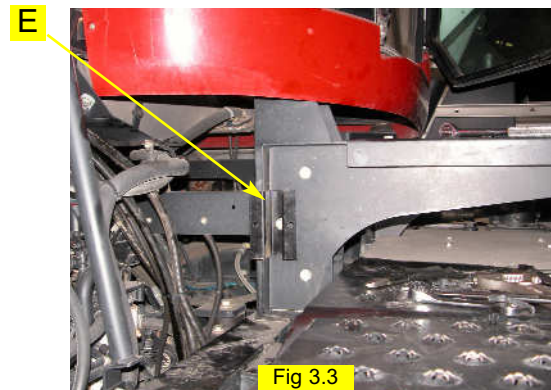
2. Install Mounting Bracket:

Install the mounting bracket (**E**) on the left side platform bolt under the door. (Figure 3.2 and 3.3)



3. Install Hydraulic Control Block:

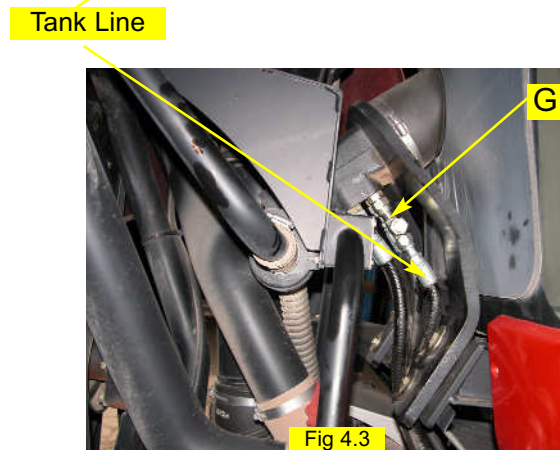
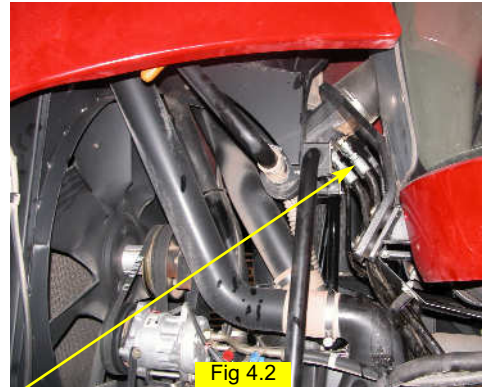
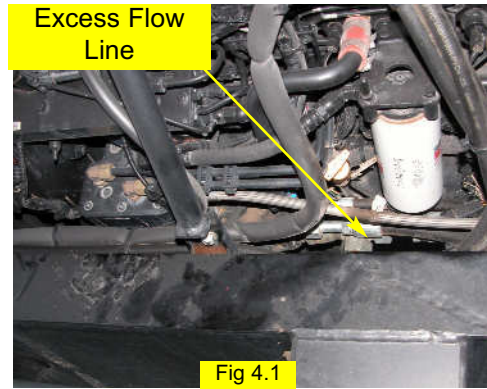
Use the provided mounting hardware in group (**F**) to attach the prepared hydraulic block to the mounting bracket in the orientation shown. (Figure 3.4)



4. Pressure, Tank, and Excess Flow Connection Locations. Install Tank fitting:

The hydraulic control block will be connected in series with the main hydraulic pump. The hydraulic pump is located on the left side of the engine near the engine oil dipstick. Pressure will be supplied to the hydraulic block from the excess flow port of the pump. The hydraulic block will return excess flow to the rest of the hydraulics via the existing excess flow line. (Figure 4.1)

Tank flow from the hydraulic block will be returned to the tank line on the steering orbital. Install the provided run-tee (**G**) in the orbital tank line. (Figure 4.2 and 4.3)



5. Install Pressure, Tank, and Excess Flow Hoses:

Install the provided tank hose (**H**) between the **T** port of the hydraulic control block and the branch of the run-tee installed in step 4. (Figure 5.1 and 5.4) The tank hose is routed from the hydraulic block, to the steering orbital, with existing plumbing.

Disconnect the excess flow line from the hydraulic pump and use hose (**I**), provided, to join the excess flow line with the **EF** port on the hydraulic block. (Figure 5.2) The excess flow line is routed outside the frame to the hydraulic control block as shown.

Connect the pressure hose (**J**) to the **P** port of the hydraulic control block and the open port on the hydraulic pump. (Figure 5.3 and 5.4)

Use heavy tie-straps provided to secure the hoses to the machine and frame away from moving parts. Tighten all hydraulic connections securely to prevent leaks.

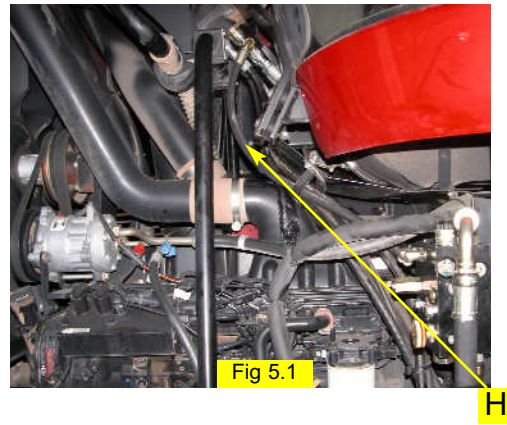


Fig 5.1

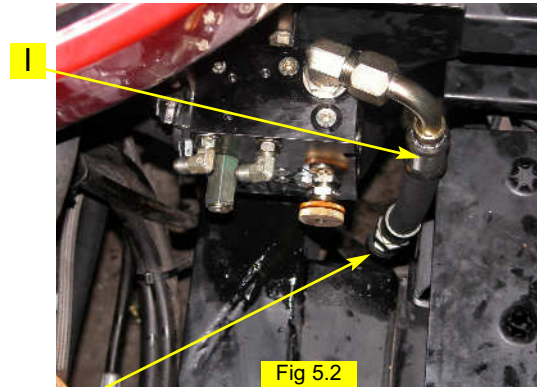


Fig 5.2

Machine Excess
Flow Line

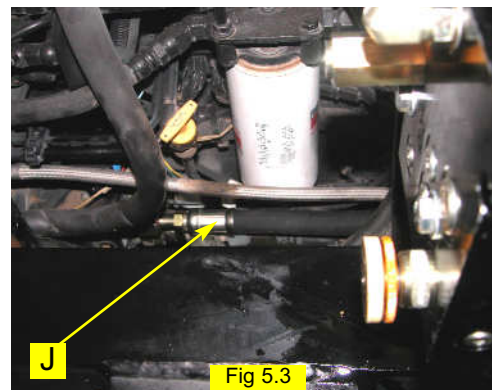


Fig 5.3

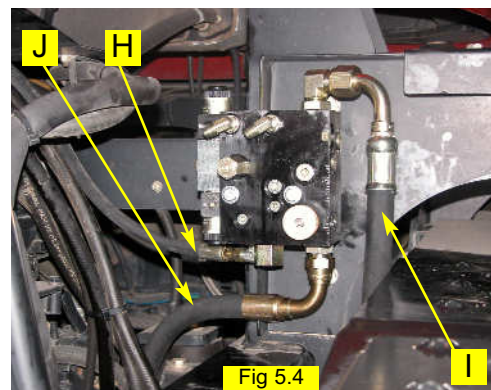
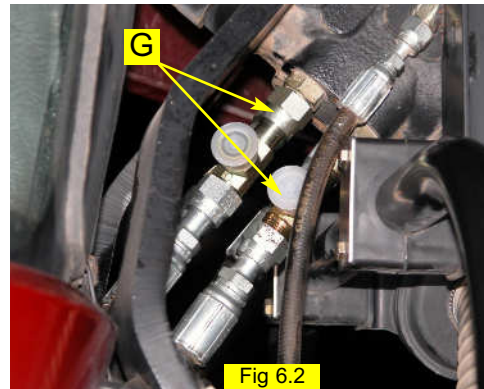
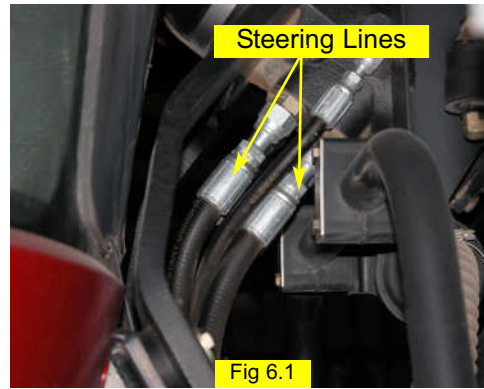


Fig 5.4

6. Install Steering Output Fittings:

Locate the machine steering lines on the right side of the steering orbital as shown. (Figure 6.1) Install the provided run-tees (G) in the steering lines. (Figure 6.2) Use plastic caps to prevent excess leakage from the open run-tee ports.



7. Install Steering Output Hoses:

Install the provided steering output hoses (**H**) between the run-tees installed in step 6 and the **A** and **B** ports of the hydraulic control block. (Figure 7.1) Attach the hose ends equipped with 90-degree elbows to the run-tees and attach the straight hose ends to the hydraulic block. (Figure 7.2) Route hoses with existing steering lines as shown. (Figure 7.3) Use the heavy tie-straps provided to secure the hoses away from moving parts.

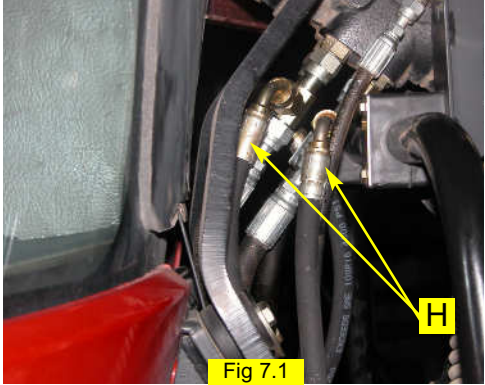


Fig 7.1

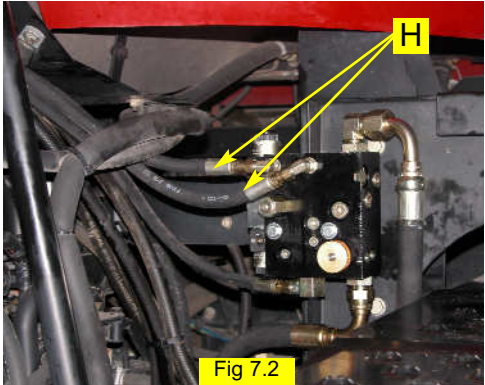


Fig 7.2

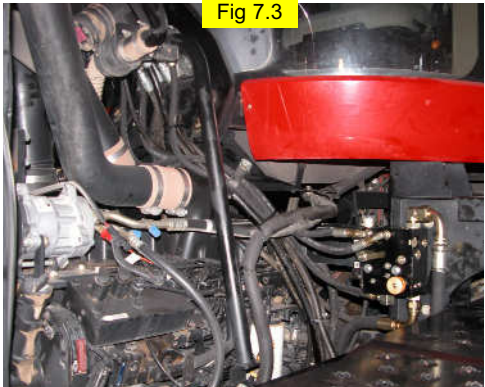
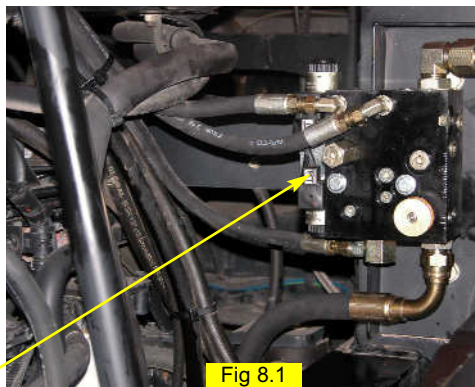


Fig 7.3

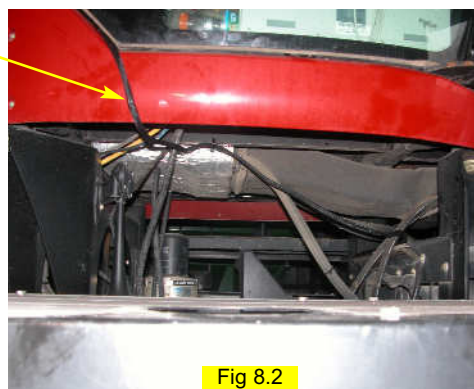
Hose Routing

8. Install the Valve Control Cable:

Install the valve control cable (**K**) at the hydraulic block by attaching the DIN connectors to the coil. (Figure 8.1) Route the cable under the cab, with the existing wires, and through the right side access door. (Figure 8.2) Secure the cable using the provided tie straps as necessary.



K

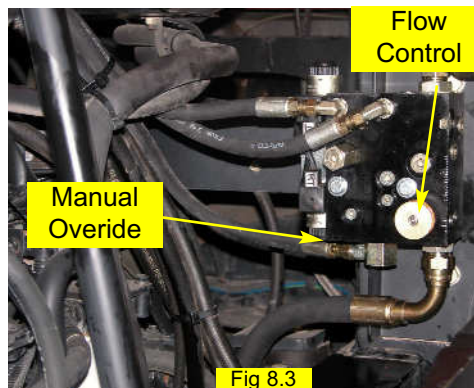


9. Verify Operation and Set Steering Control Rate:

Cleanup the installation area around the machine and make certain that it is safe to operate. Start the machine and check hydraulic connections for any leaks. Rotate the steering wheel from one extreme to the other, and back.

Adjust the hydraulic oil flow control knob to a starting position of **2 turns** from completely closed. To adjust the knob, turn clockwise to reduce flow, counter-clockwise to increase flow. (Figure 8.3)

The coils on the control block have manual push button overrides. Push either manual override to move the steering all the way to one extreme. Count the number of seconds for the steering to move all the way in the opposite direction while pressing the manual override of the other coil. (Figure 8.3)



Adjust the hydraulic oil flow control to achieve an end to end steering cycle time of approximately **18 seconds**. Use the knurled locking nut to secure the final flow control setting.

***Note:** To activate the manual overrides, a tool such as a small screw driver or allen wrench must be inserted into the end of the coil to depress the override button.*

11. Complete Electronic Installation and Setup:

Refer to the owner's manual supplied with the your automated steering system to complete the electronic installation and setup.



WARNING:

PINCH POINT HAZARD. To prevent serious injury or death, avoid unsafe practices while manually operating hydraulic steering circuit. Keep others away and stay clear of mechanical steering linkages.