

Automated Steering Hydraulic Installation Kit

P/N: ED-L400

Fits Lexion Combine Models:

560 / 560R 460 / 465 / 460R / 465R
 570 / 570R / 575R 470 / 475 / 470R / 475R
 580R / 585R 480 / 485 / 480R / 485R

Overview

A series of equipment specific hydraulic installation kits have been developed to work in conjunction with the automated steering system. This kit contains the necessary components and detailed instructions to install automated steering hydraulics on the Lexion 400 and 500 Series combines. Please read this manual thoroughly before beginning the installation.



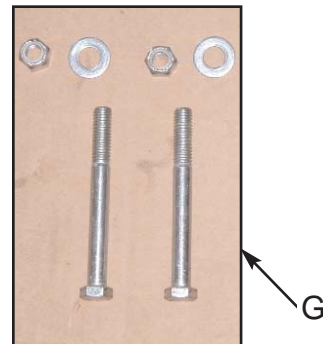
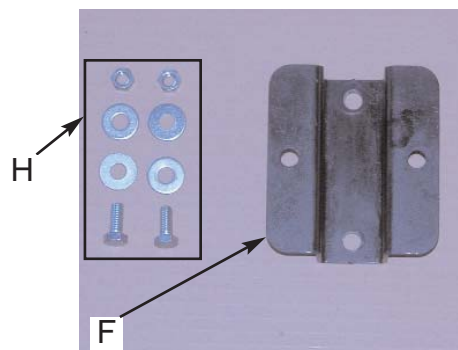
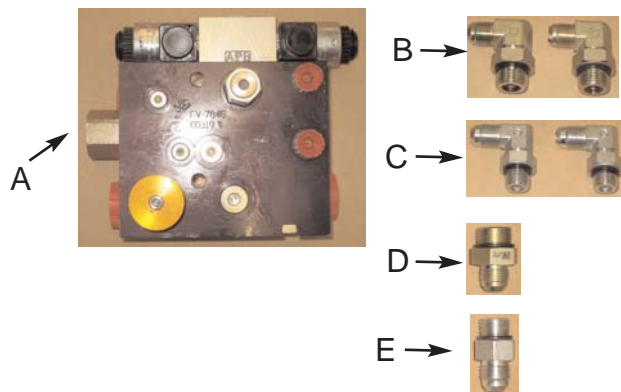
Machine Preparation

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

Kit Contents

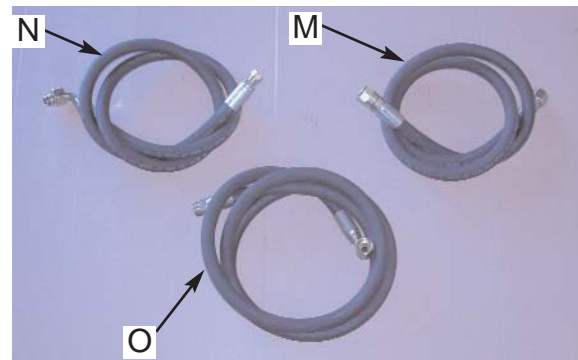
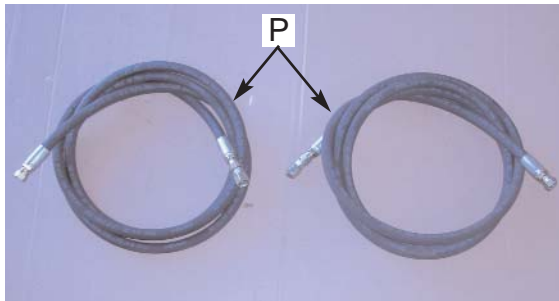
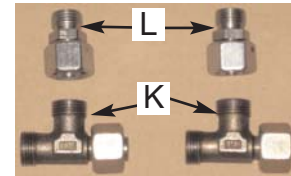
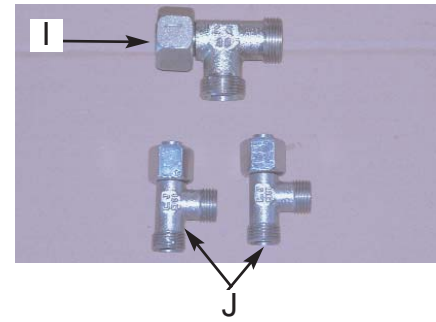
Unpack the installation kit and identify the required parts as shown.

REF	P/N	QTY	DESCRIPTION
A	760-0007	1	Assy, Hyd. Valve Block - OC
Bag #1 of 3 includes B, C, D, & E			
B	760-2009	2	Adapter, Hyd. 90 Elbow - #10maleJIC x #12maleORB
C	760-2058	2	Adapter, Hyd. 90 Elbow - #6maleJIC x #6maleORB
D	760-2008	1	Adapter, Hyd. - #10maleJIC x #12maleORB
E	760-2056	1	Adapter, Hyd. - #6maleJIC x #6maleORB
F	640-0022	1	Hyd. Block Mount - CNH MXM/TM
Bag #2 of 3 includes G & H			
G	675-2006	2	Bolt - 3/8NC x 3-3/4" Gr5, ZP
	678-1054	2	Washer, Narrow Flat - 3/4"OD x 13/32ID x 1/16"thk, ZP
	676-1035	2	Nut, NyLock - 3/8NC ZP
H	675-2007	2	Bolt - 3/8NC x 3/4" Gr5, ZP
	676-1035	2	Nut, NyLock - 3/8NC ZP
	678-1054	4	Washer, Narrow Flat - 3/4"OD x 13/32ID x 1/16"thk, ZP



Kit Contents (cont.)

REF	P/N	QTY	DESCRIPTION
Bag #3 of 3 includes I, J, K & L			
I	760-2025	1	Adapter, Hyd. Run Tee - #15L EO
J	760-2003	2	Adapter, Hyd. Run Tee - #10L EO
K	760-2013	2	Adapter, Hyd. Run Tee - #12LEO
L	760-2100	2	Adapter, Hyd. - #12femLEO x 10 maleLEO
M	760-1207	1	Hose, Hyd. - 1/2" x 76", #10fJICswiv x #15femMLEswiv
N	760-1208	1	Hose, Hyd. - 1/2" x 65", #6femJICswiv x #15femMLEswiv 90EL
O	760-1209	1	Hose, Hyd. - 1/2" x 94", #10fJICswiv90EL x #15maleMLE
P	760-1206	2	Hose, Hyd. - 3/8" x 120", #6fJICswiv x #10femMLEswiv
Q	051-0143	1	Cable, Valve Interface - 15 ft.
	677-2001	20	Tie Strap, 11" Heavy Duty, Not Shown
	710-0053	1	Steering Wheel Switch Kit, 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:

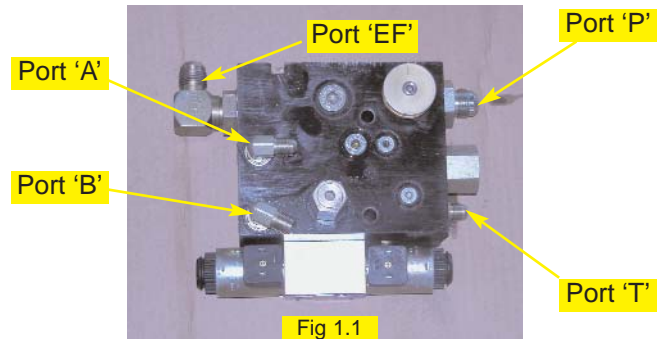
PREVENT HYDRAULIC SYSTEM CONTAMINATION. It is essential to thoroughly clean hydraulic system fittings and hose connections prior to disconnecting or removing. Use a spray cleaner such as 'Brake Clean' to prevent hydraulic system contamination. Note that o-rings used on ORB and ORFF type fittings may 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:

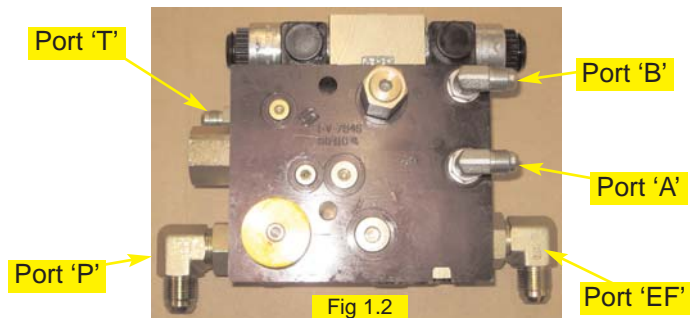
400 Series Lexion:

Make sure the hydraulic control block (A) is clean and dust free. Remove the plastic plugs and install the elbow adapters (C) in the A and B ports. Install the larger elbow adapters (B) in the EF port. Install the larger straight adapter (D) into the P port. Install the smaller straight adapter (E) into the T port of the hydraulic block. (Figure 1.1)



500 Series Lexion:

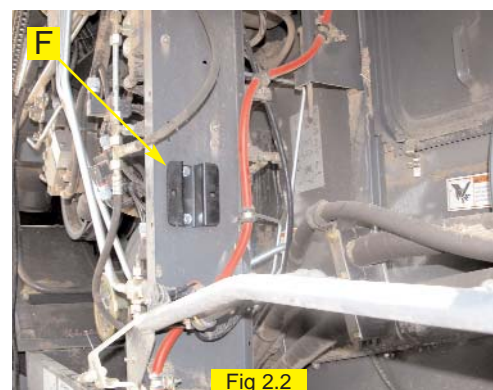
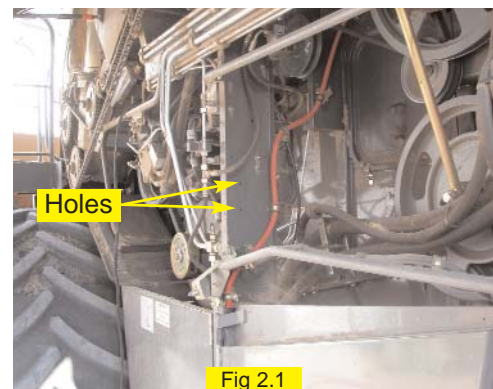
Make sure the hydraulic control block (A) is clean and dust free. Remove the plastic plugs and install the small elbow adapters (C) in the A and B ports. Install the larger elbow adapters (B) into the EF and P port. Install the smaller straight adapter (E) into the T port of the hydraulic block. (Figure 1.2)



2. Mount Hydraulic Control Block:

400 Series Lexion:

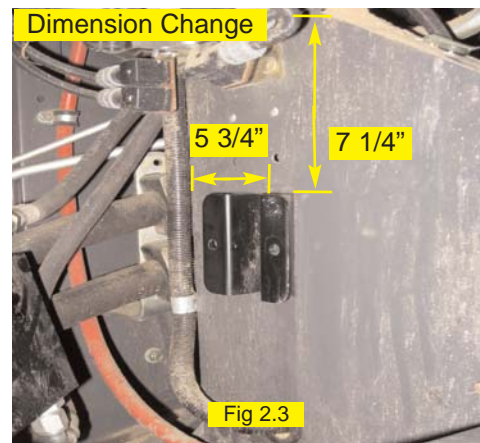
Install the hydraulic block mounting bracket (F) to the center brace on the left side of the combine frame. Use the existing holes in the combine frame and the hardware in group (H) to secure the bracket. (Figure 2.1 and 2.2)



2. Mount Hydraulic Control Block (cont.):

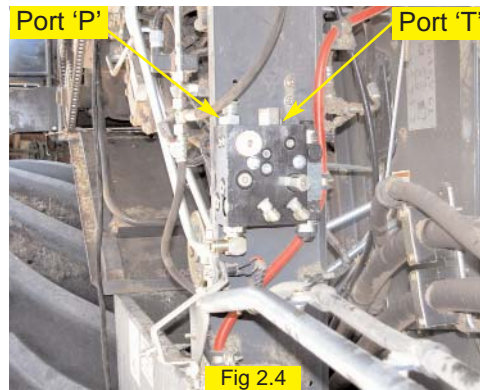
500 Series Lexion:

Install the hydraulic block mounting bracket (F) to the front side of the center brace on the left side of the combine frame. Use the bracket as a template to drill two 3/8 inch holes as shown in Figure 2.3. (Figure 2.3)



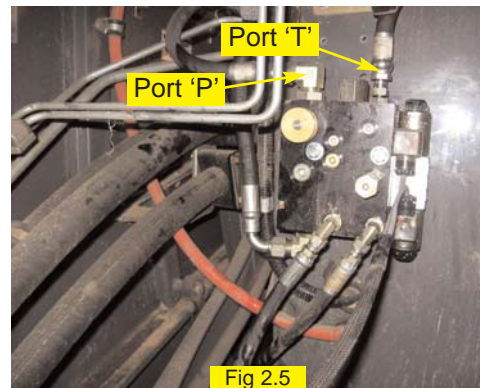
400 Series Lexion:

Install the hydraulic control block, as prepared in step 1, to the mounting bracket using the mounting hardware in group (G). Be sure the hydraulic block is oriented with the P and T ports pointing up, and tighten the mounting bolts securely. (Figure 2.4)



500 Series Lexion:

Install the hydraulic control block, as prepared in step 1, to the mounting bracket using the mounting hardware in group (G). Be sure the hydraulic block is oriented with the P and T ports pointing up, and tighten the mounting bolts securely. (Figure 2.5)



3. Pressure, Tank and Excess Flow Fittings Locations:

The hydraulic control block will be connected in series with the Working Hydraulic Pump where the rubber pressure line connects to the steel line on the left side of the combine. The rubber pressure line from the pump will be connected to the hydraulic control block by using the supplied hose (M). (Figure 3.1)

Excess flow from the hydraulic control block will be returned to the steel pressure line to allow normal operation of the combine working hydraulics. (Figure 3.1)

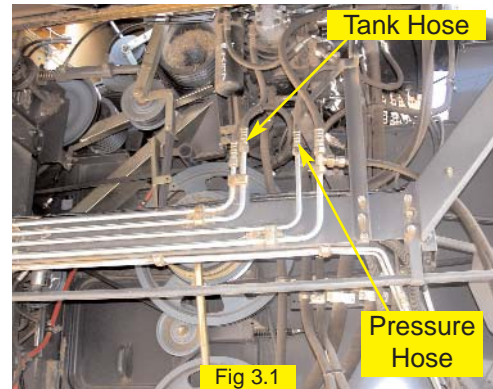


Fig 3.1

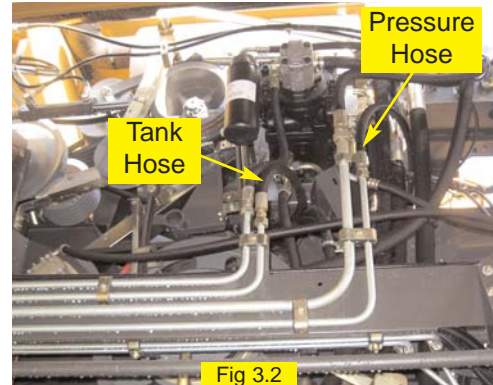


Fig 3.2

Tank flow from the hydraulic control block will be connected to the return line on the steering hydraulic circuit. Install the provided run-tee (I) in the tank return line as shown. (Figure 3.3)

NOTE: On 500 series Lexion combines, the pressure line is the smaller line behind the return line. This will be the location for pressure (Figure 3.2)

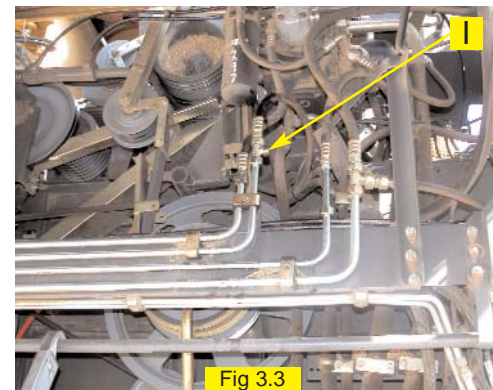


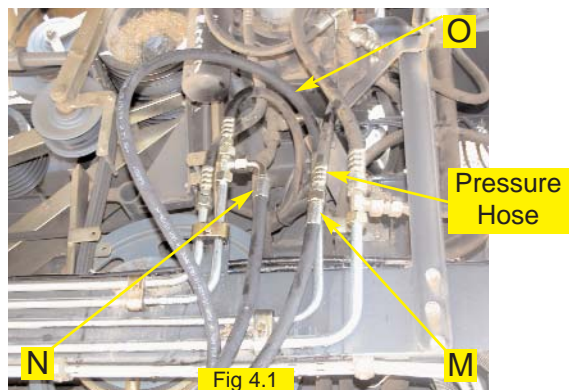
Fig 3.3

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

Disconnect the combine pressure hose from the steel line and install the provided excess-flow hose (O) between the steel line and the EF port of the hydraulic control block. (Figure 4.1 and 4.3)

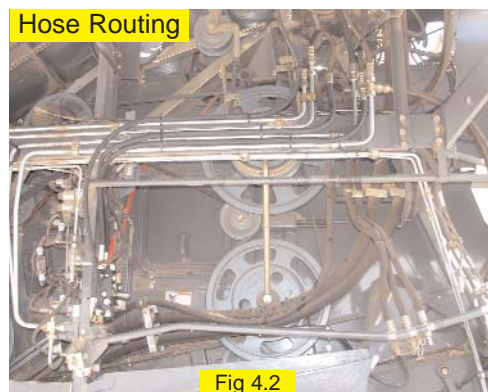
Connect the provided pressure hose (M) between the combine's pressure hose and the P port of the hydraulic control block. (Figure 4.1 and 4.3)

Connect the provided tank hose (N) between the T port of the hydraulic control block and the run-tee installed in step 3. (Figure 4.1 and 4.3)



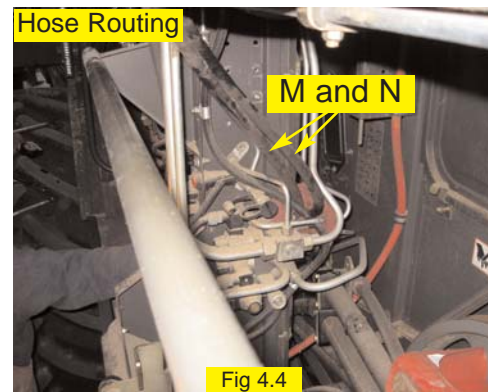
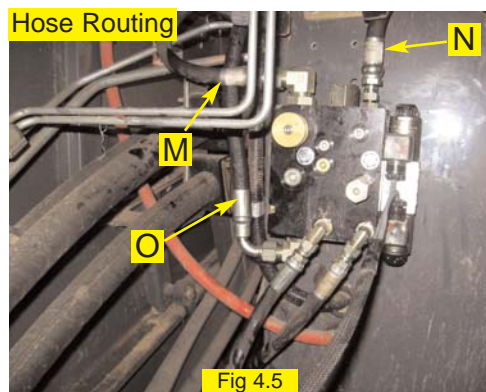
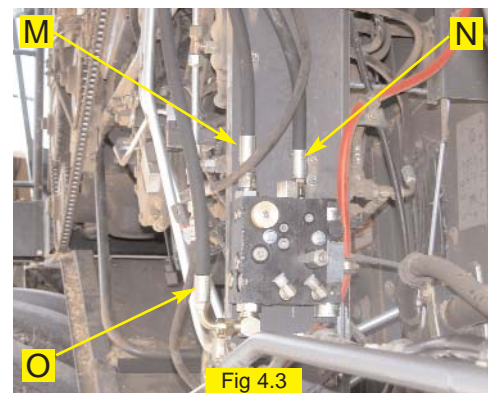
400 Series Lexion:

Route hoses as shown in Figure 4.2 and secure with the provided tie straps. Tighten all connections securely. (Figure 4.2)



500 Series Lexion:

Route hoses as shown in Figure 4.4 and 4.5 and secure with the provided tie straps. Tighten all connections securely. (Figure 4.4 and 4.5)



5. Install Steering Output Fittings:

Locate the combine steering lines on the left side of the machine above the rear axle where the rubber hoses are connected to the steel lines, figure 5.1. Install the provided run-tees (**J**) in the steering lines as shown. Use plastic caps to prevent excess leakage from the open run-tee ports. (Figure 5.2)

NOTE: On 500 series Lexion combines, the larger run tee (**K**) will be used with the adapter fitting (**L**) on the branch of the run tee.

6. Install Steering Output Hoses:

400 Series Lexion:

Install the provided steering output hoses (**P**) between the run-tees installed in step 5 and the **A** and **B** ports of the hydraulic control block. Route hoses with existing lines as shown. Use the heavy tie-straps provided to secure the hoses away from moving parts. (Figure 6.1, 6.2 and 6.3)

500 Series Lexion:

Install the provided steering output hoses (**P**) between the run-tees installed in step 5 and the **A** and **B** ports of the hydraulic control block. Route hoses with existing lines as shown. Use the heavy tie-straps provided to secure the hoses away from moving parts. (Figure 6.1, 6.2 and 6.4)

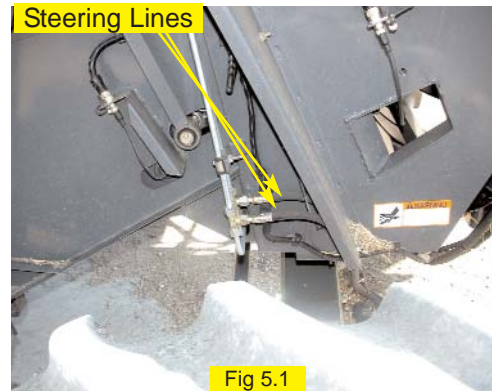


Fig 5.1

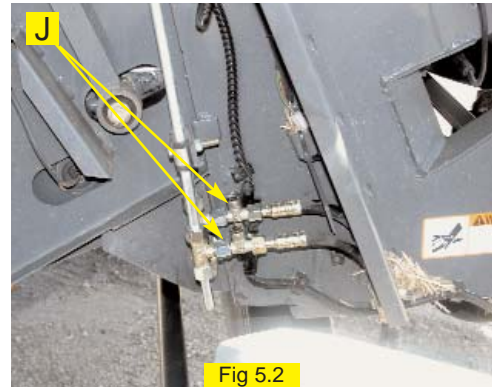


Fig 5.2

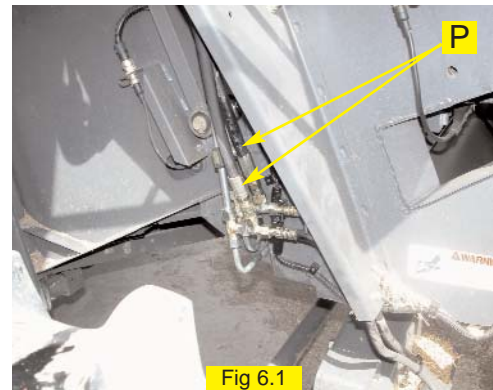


Fig 6.1

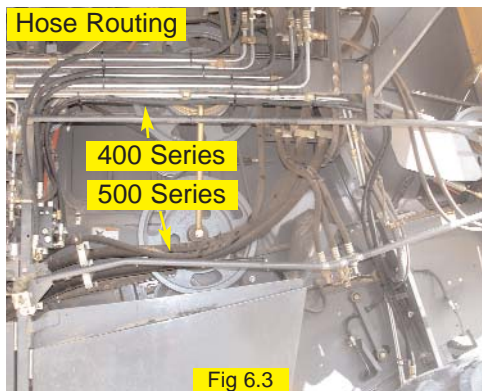


Fig 6.3

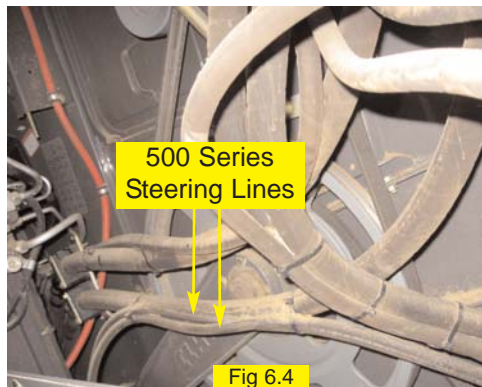


Fig 6.4

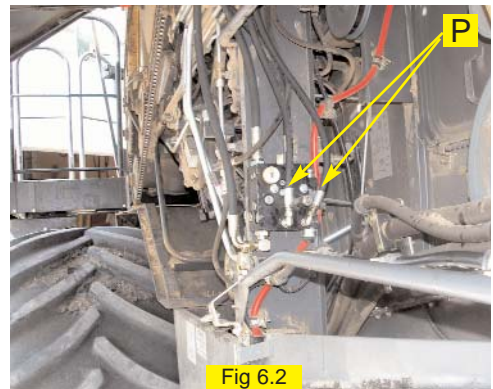
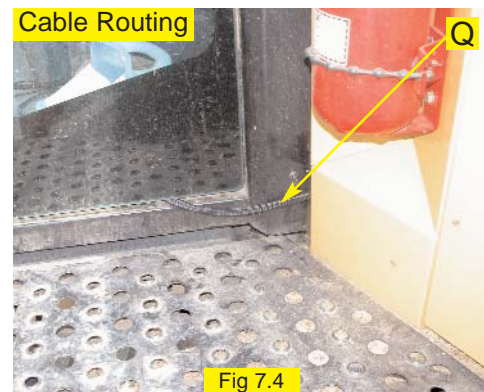
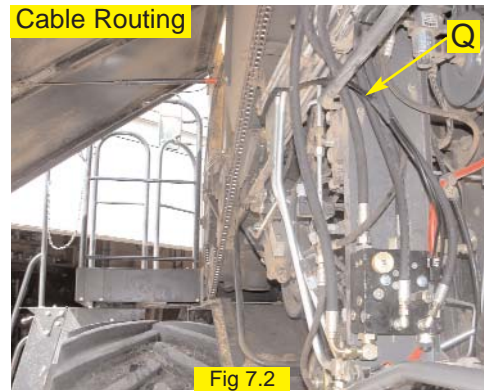
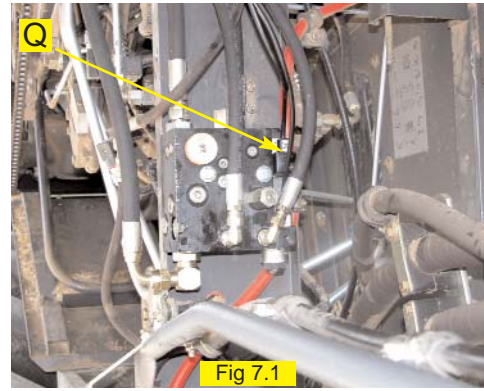


Fig 6.2

7. Install the Valve Control Cable:

Install the valve control cable (Q) at the hydraulic control block by attaching the DIN connectors to the coils, figure 7.1. Route the cable along the side of the machine, away from moving parts, and through the door as shown. Secure the cable using the provided tie straps as necessary. (Figure 7.2, 7.3 and 7.4)



8. 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.



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.

On the hydraulic control block, adjust the oil flow control knob to a starting position of **1 1/4 turns** from completely closed. To adjust the knob, turn clockwise to reduce flow, counter-clockwise to increase flow. The knurled locking nut should be tightened against the cartridge face to maintain desired setting. (Figure 8.1)

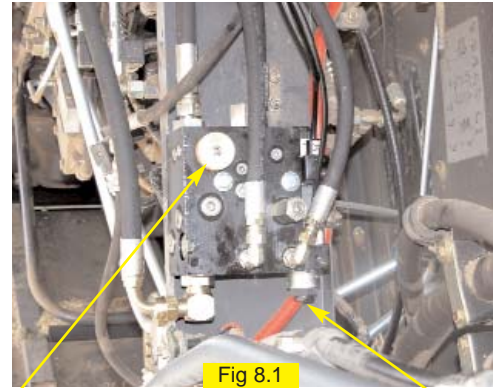
The coils on the control block have manual push button overrides. Push either manual override to move the sprayer wheels all the way to one extreme. Count the number of seconds for the steering wheels to move all the way in the opposite direction while pressing the manual override of the other coil.



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..

Adjust the hydraulic oil flow control knob to achieve an end to end steering cycle time of approximately **14** seconds.

9. Complete Electronic Installation and Setup: Refer to the owner's manual supplied with the automated steering system to complete the electronic installation and setup.



Flow Control

Manual Override

