

Automated Steering Hydraulic Installation Kit

P/N: ED-AC1064

Fits Ag-Chem RoGator Models:

864 874

1064 1074

(hydraulic track adjust only)



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 Ag-Chem RoGator models listed above. Please read this manual thoroughly before beginning the installation.

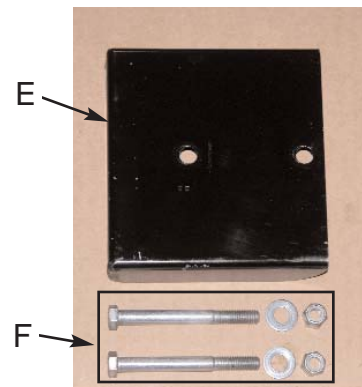
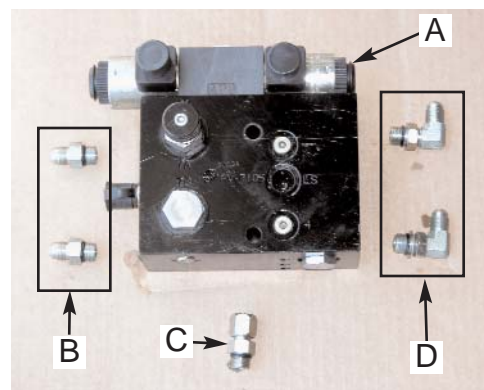
Machine Preparation

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

Kit Contents

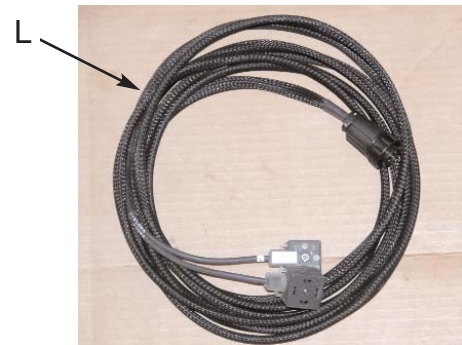
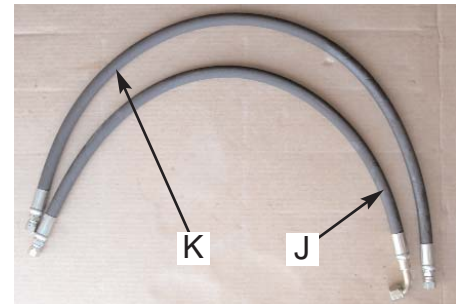
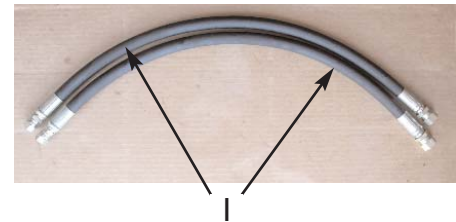
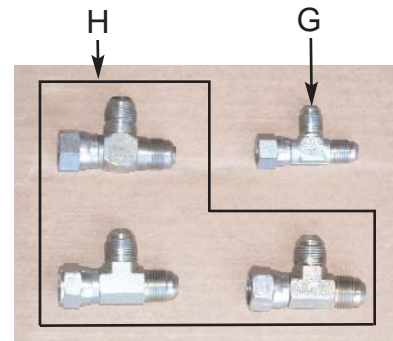
Unpack the installation kit and identify the required parts as shown.

REF	P/N	QTY	DESCRIPTION
A	760-0003	1	Assy, Hyd. Valve Block - LS
Bag #1 of 3 includes B, C, & D			
B	760-2056	2	Adapter, Hyd. - #6maleJIC x #6maleORB
C	760-2045	1	Adapter, Hyd. Plug - #6maleORB
D	760-2058	2	Adapter, Hyd. 90 Elbow - #6maleJIC x #6maleORB
E	640-0030	1	Hyd. Block Mnt
Bag #2 of 3 includes F			
F	675-2005	2	Bolt - 3/8NC x 3-1/4" 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



Kit Contents (cont.)

REF	P/N	QTY	DESCRIPTION
Bag #3 of 3 includes G & H			
G	760-2054	1	Adapter, Hyd. Run Tee - #6 JIC
H	760-2077	3	Adapter, Hyd. Run Tee - #8 JIC
I	760-1098	2	Hose, Hyd. - 3/8" x 21", #6femJICswiv x #8femJICswiv
J	760-1125	1	Hose, Hyd. - 3/8" x 36", #6femJICswiv x #8femJICswiv90EL
K	760-1100	1	Hose, Hyd. - 3/8" x 40", #6femJICswiv both ends
L	051-0144	1	Cable, Valve 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.

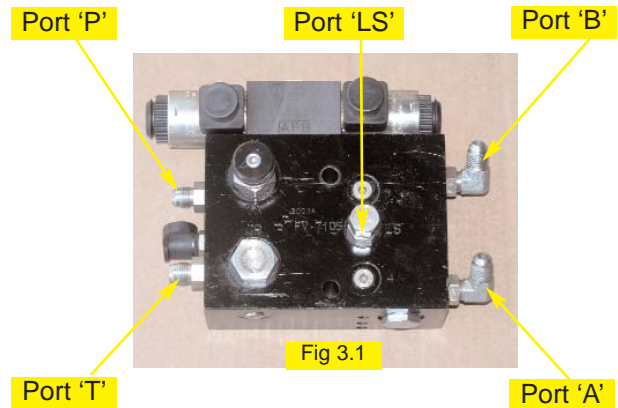
IMPORTANT:

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:

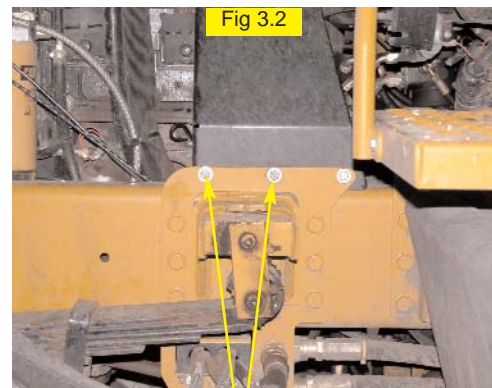
Make sure the hydraulic control block is clean and dust free. Remove the plastic plugs and install the straight adapter fittings (**B**) in the **P** and **T** ports. Install elbow adapter fittings (**D**) into the **A** and **B** ports, and install the ORB plug (**C**) into the **LS** port of the hydraulic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



2. Install Mounting Bracket:

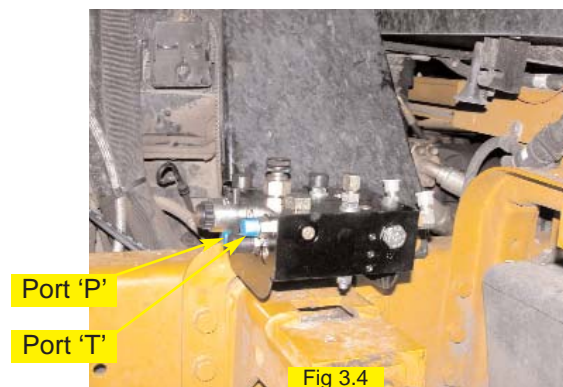
Locate the three bolts that fasten the sheet metal to the frame in front of the cab on the lower left side. (Figure 3.2)

Remove the two bolts as indicated and install the hydraulic block mounting bracket (**E**). Secure the mounting bracket to the sheet metal and frame as shown. (Figure 3.3)



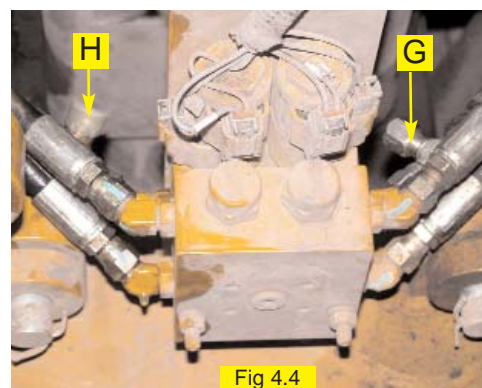
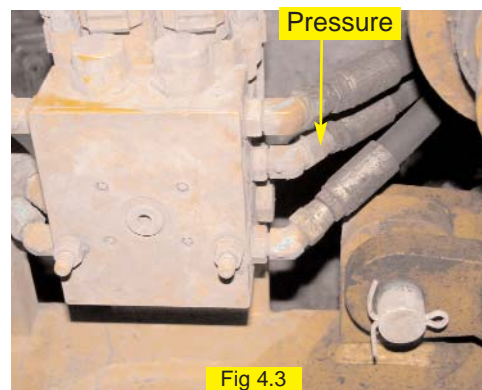
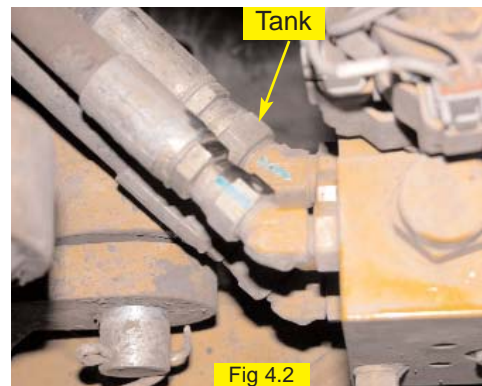
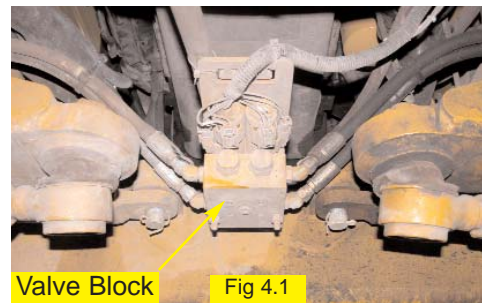
3. Install Hydraulic Control Block:

Install the hydraulic control block, as prepared in step 1, to the mounting bracket as shown using the mounting hardware in group (**F**). Be sure the hydraulic block is oriented with the **P** and **T** ports pointed toward the front of the machine, and tighten the mounting bolts securely. (Figure 3.4)



4. Install Pressure and Tank Fittings:

Locate the valve block behind the front axle used to actuate the front track width cylinders. (Figure 4.1) On the valve block there will be a hose connected to a port marked **T** on the left side and a hose connected to a port marked **P** on the right side. These two lines will be the pressure (**P**) and tank (**T**) connections for the hydraulic control block. (Figure 4.2 and 4.3) Remove these two hoses and insert the provided run-tees (**G** and **H**). Run-tee (**G**) into pressure hose and run-tee (**H**) into the tank hose (Figure 4.4). Use plastic caps to prevent excess leakage from the run-tees during installation.



5. Install Pressure and Tank Hoses:

Install the pressure (**K**) and tank (**J**) hoses between the runtees installed in step 4 and the **P** (pressure) and **T** (tank) ports of the hydraulic control block respectively. (Figured 5.1 and 5.2)

The hoses should be routed inside the sprayer frame along with other hydraulic plumbing. (Figure 5.3) Make sure all hoses are routed properly and free from entanglement. Use heavy tie straps (included) as needed.



Fig 5.1

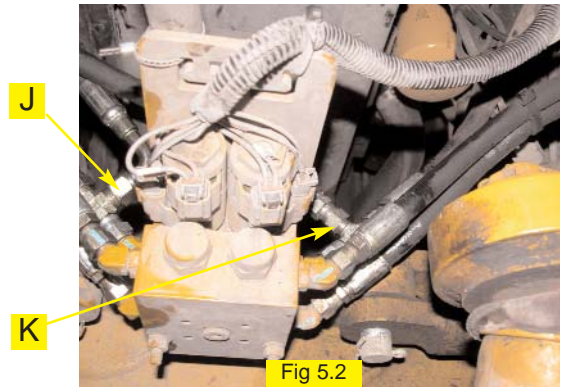


Fig 5.2

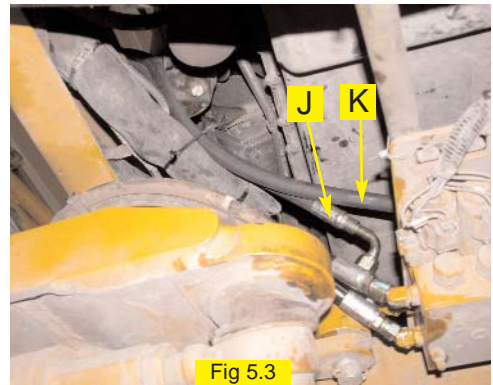
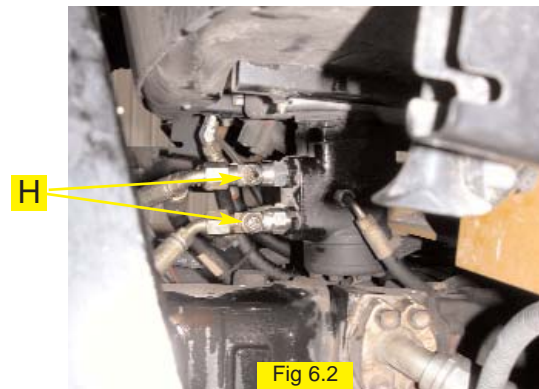
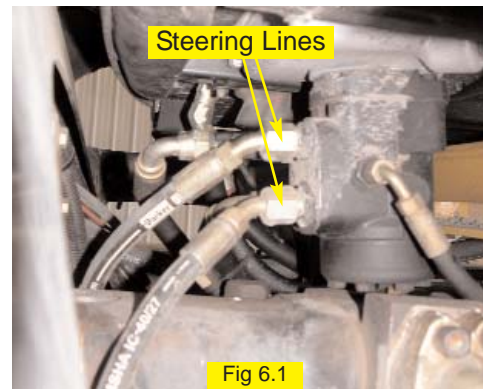


Fig 5.3

6. Install Steering Output Fittings:

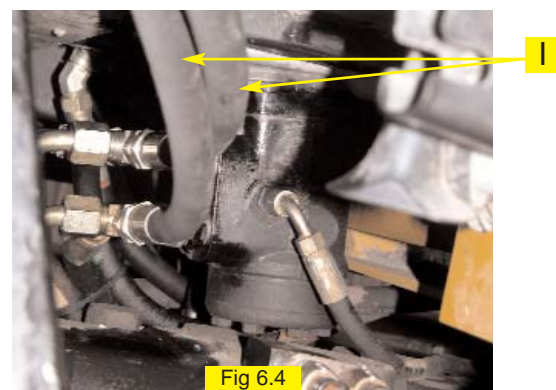
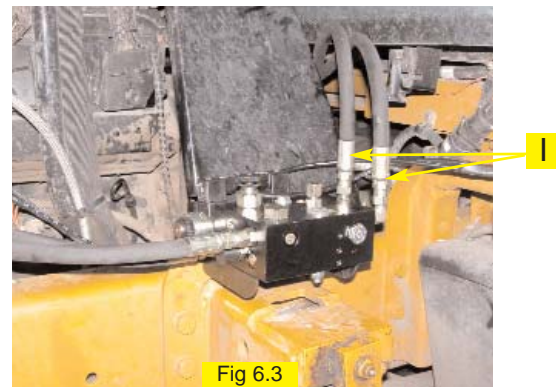
Locate the steering lines on the left side of the steering orbital under the cab. (Figure 6.1) Install run-tee fittings (**H**) in the steering lines at the orbital. (Figure 6.2) Use plastic caps to prevent excess leakage from the run-tees during installation.



7. Install Steering Output Hoses:

Install the steering hoses (**I**) to the branches of the run-tees installed in step 6 and to the **A** and **B** ports of the hydraulic control block. (Figure 6.3 and 6.4)

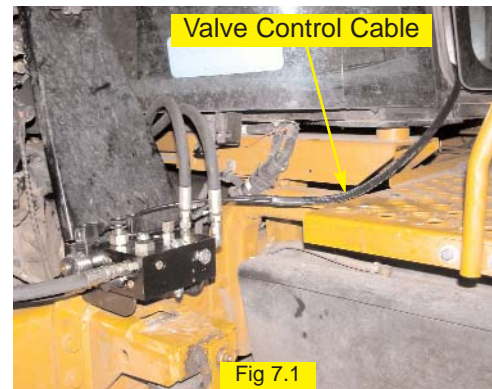
The hoses should be routed up to the steering orbital securely and free from entanglement. Use heavy tie straps (included) as needed.



8. Install the Valve Control Cable:

Attach the hydraulic valve cable to the DIN connectors on the hydraulic block and route it into sprayer cab through the door seal. (Figure 7.1) The cable can be routed under the floor mat to the desired location in the cab.

Be sure the cable is routed securely and free from entanglement. Use tie straps (included) as needed.



9. Verify Operation and Set Steering Control Rate:

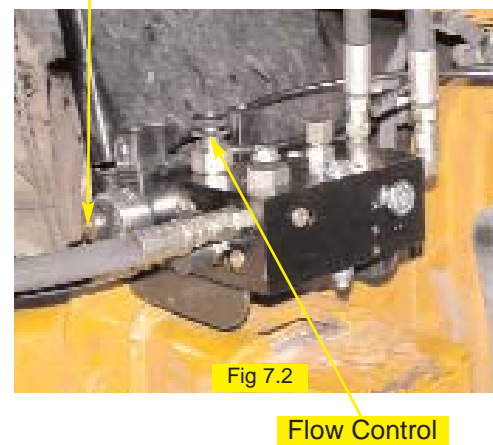
Cleanup the installation area around the sprayer and make certain that it is safe to operate. Start the sprayer and check hydraulic connections for any leaks. Rotate the steering wheel from one extreme to the other, and back.

Adjust the hydraulic oil flow control knob to a starting position of **2 1/2 turns** from completely closed. (Figure 7.2) To adjust the knob, lift and turn clockwise to reduce flow, counter-clockwise to increase flow.

The coils on the control block have manual push button overrides. (Figure 7.2) Push either manual override to move the sprayer steering linkage all the way to one extreme. Count the number of seconds for the sprayer steering linkage to move all the way in the opposite direction while pressing the manual override of the other coil.

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

Manual Override



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.

10. Complete Electronic Installation and Setup:

Refer to the owner's manual supplied with 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.

