

5 Light with Valve Assembly and Handle

Stazworks

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Rear Steer Wire Harness Install Directions

The wires in the harness are the same color as the wires in the aluminum box. If your kit does not have the control box plugs pre-installed it is easiest to match the wires as you install the connector plugs. Just match the wires color in the harness to the color of wire inside the black box. When inserting the pin into the connector you should hear/feel a click indicating the pin is properly installed. If you do not hear the click, flip the pin over and try again. Once you figure out the proper way repeat for all remaining pins. On the face of the plug the white part should be extended past the black housing about a 1/8" to be able to insert the pins. If it is not, the pins will not click into place. After inserting the pins push the white piece in flush with the black housing to lock the pins in place. Most harnesses are shipped with control box plugs installed.

To make installing as simple as can be start by following the steps in order.

#1 Install hydraulic components, pump, valve, cylinder and plumbing.

#2 mount the hard components. Control box, joystick, return switch, master switch (if used), indicator lights.

#3 Mount the sensor. To mount the sensor, have the wheels pointed straight and set the sensor at mid stroke and figure best mounting position. It is best to have the electrical plugs pointing upwards. Also to ensure even stroke in both directions you should have the kingpin center and the pivot points at both ends of the sensor sitting at right angle. It is best to only have your mounts tacked in place until you can cycle the system and be sure further adjustment is not needed.

#4 Install and wire in all main harness wires as described below.

#5 install tail harness as described. Hook up the valve at random and only the two dark color plugs on the rear harness

#6 before hooking up the light harness, get your system fired up and try to steer it. If your left or right orientation is backwards it can be changed at the joystick as described below.

#7 once left/right is established, try centering the rear axle by the momentary return switch.

#8 as described in the Tail harness section, if system returns improperly correct plugs location.

#9 only after the axle centers properly hook up the outer light color plugs on the rear sensor.

#10 Now that sensor is properly terminated, the lights can be wired in. you can test. wires for signal to establish which ones are left and right.

#11 Last the sensor should be checked for optimal setting. If the wheels are not turning as far as you would like, the sensor may be limiting them by the anti-stall feature. This can be adjusted by moving the pivot point closer to the kingpin for more travel and away for less.

Keep in mind that sensor should be sitting with the three pivot points at a right angle when the wheels are straight.

Main Harness, (MH)

Red wire = switched power,

Yellow wire = signal from the return switch (push button in the joystick handle)

Brown = signal from the return switch. This is referred to as "Auto Return Mode switch" This is one of the supplied 2 position toggle switches.

Orange = power to joystick

White = left or right signal from joystick

Gray = Left or right signal from joystick

Billet Joystick handle Wiring

The small red and yellow wires are the return switch.

The orange, White and Gray wires are the Joystick.

All these wires will connect to the same color wire in the main harness.

The white and gray wires are the left and right. If needed these can be swapped to change the orientation of the joystick left and right. (white to gray and gray to white)

The red and brown wire from the harness should go to the "Auto Return Switch". One wire on each side of the switch. The red wire from the joystick can join the red wire at this switch as well. Also, from this red wire on this switch there should be a wire leading to the "master on/off" toggle switch. Some customers do not use this switch and go directly to a key on ignition source. From the other side of the master switch needs to be power fed from a key on power source. See the provided wire diagram for more details on this.

There is a 5-amp fuse as well as a spare fuse on the circuit board inside the control box. If you want to fuse the system before entering the control box, you should use a 5-amp fuse. You may want to increase the fuse size on the board to 7.5 amp so that the external fuse is always the first to blow.

Tail Harness, (TH)

There are only three wires to connect. The white and gray wires are for left and right at the valve. The black wire is a ground for the valve and ECU. Due to limitations on available pins at the connectors, the ECU is grounded through the valve assembly. The

(black 1 inch square) DIN connectors are for the valve. Din connectors are only provided when a valve assembly is purchased with the kit. If valve DIN connectors are provided but not installed, the white wire will attach to pin # 1 on one connector and the gray to pin #1 on the other connector. The connector is internally grounded so the black wire can go to pin #2 or the ground pin. Only one connector needs to be grounded. The black wire is only grounding the ECU, the valve is grounded through the body of the valve. The third pin (Ground Pin) is connected (grounded) through the body of the valve. The prewired connectors at the end of the harness are for the sensor. The dark blue and dark green wire goes in the middle two switches. Plug only these two in at first. Install them at random side to side for now on the sensor. At this point fire up the system and try and turn off center and then hit return. This is a simple trial and error procedure. If the axle does not return properly but rather goes to full lock under auto return the two switches are most likely backwards. Once this returns properly install the other two plugs. These control the outer two lights on the dash as well as the anti-stall. Anti stall is when the valve shuts off at full stroke even when the joystick is telling it to keep turning.

It is important that the dark colored wires are on the middle switches and the light color wires are on the outer switches. Also, it is very important that the colors are in order as follows,
Light green, Dark Blue, Dark green, Light Blue

Light Harness, (LH)

Orange wire is signal to the center green light.

Dark blue and Dark green are for the Yellow/Amber lights on each side of the green light.

Light green and Light Blue are the outer red lights.

Black wire is a common ground for all the lights. This wire can also be chassis ground if the valve is not well grounded for the ECU.

It is recommended to ground this if convenient to ensure optimal ground of the ECU.

If the lights indicate backwards as in the left comes on when the right is supposed to be on swap this at the lights not at axle sensor.

Any input we can use to help improve this kit is greatly appreciated. Feel free to call John at 715-333-7467 with any comments, questions, or suggestions.

Thank you for your purchase.

John

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Return switch signal

Return switch power

Joystick power

Joystick L/R

Joystick L/R

