

RUBICRAWLER CONTROL MODULE

KIT CONSISTS OF:

No.	Qty	Part No.	Description
1.	1	42R800	CONTROL MODULE KIT
			KIT INCLUDES
	2	722542	SCREW-TEK HEX SELF DRILLING #10- 16 X 1/2
	5		1/4"x1" HEAT SHRINK
	1		3 WIRE DELPHI CONNECTOR
	1		2 WIRE DELPHI CONNECTOR
	10		CABLE TIE - BLACK 4"



Tool List:

1. DRILL
2. 13/64" OR 5.25mm DRILL BIT
3. SOLDERING IRON
4. HEATING ELEMENT (HEAT GUN OR LIGHTER)

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RUBICRAWLER CONTROL MODULE

Introduction:

The RubiCrawler Control Module was designed to integrate the vehicles wiring harness, transfer case position switch, and the RubiCrawlers position switch. This module will alert the vehicle when the RubiCrawler is shifted into low so that the vehicle will allow you to control the locking differentials, disconnect the sway bar(JK only), and disable the stability control(ESC). The control module will also communicate with an AeroForce gauge(sold separately) which will display the current shift state of the RubiCrawler.

Preparing the Wiring:

NOTE: If installing a RubiCrawler simultaneously, start here when the transfer case is removed for ease of installation. If the RubiCrawler has been previously installed, you can still install this at any time.

NOTE: Pictures of connectors and the position switch can be found on the last page along with a wiring schematic.

1. Unplug the connector from the transfer case position switch if the transfer case is still in the vehicle.
2. Cut the connector off the wiring harness with about 3" of wire left on the connector.
3. Make sure that there is a piece of 1/4" heat shrink over **both** wires, and then one piece of heat shrink over **each** wire that was just cut off.
4. The Module is used for several applications, and you will be required to cut one of the male plug off the module. The plug that has the orange and brown wires connected need to be cut and wires striped, pull back the wire loom . You can use a piece of tape to hold the wire loom away from the end of the wires so you can solder.
5. Solder the T-case position plug to the orange and brown wires from the RubiCrawler control module. Polarity does not matter.
6. Heat shrink the soldered connections with the heat shrink placed over the individual wires in step 3.
7. Remove the tape from the wire loom and feed it into the heat shrink that is over both wires. If the wire loom is too long use some side cutters to shorten the wire loom. Once the wire loom is fed into the heat shrink, heat up the heat shrink sealing the wire loom into place.
8. Make sure there is a piece of heat shrink on each wire of the loose two wire Delphi connector that came with the control module.
9. Solder the loose two wire Delphi connector to the previously cut two wires in the vehicle wiring harness. See the chart below for vehicle specific wiring.
10. Heat shrink the soldered connections made in the previous step.

Control Module Wire	Connect To		
	03-04 TJ	05-06 TJ	07-10 JK
Blue	Black/Light Blue	Dark Blue/Dark Green	Dark Blue/Yellow
Green	Brown/White	Brown/White	Yellow/Light Green

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Installation:

1. Mount the control module in a secure place under the vehicle, not in direct contact with any hot objects. Our recommended mounting location can be seen in the pictures below. The wiring harness is long enough to reach all connectors if installed in the recommended place.

2. **Jeep JK:** We recommend drilling the holes into the gas tank skid plate as shown in *Figure 1*. To protect the gas tank when drilling through the plate, it is strongly recommended to place a piece of scrap metal between the gas tank and the skid plate. Do not forget to remove the scrap metal when done.

Jeep TJ: We recommend mounting it to the locker solenoid mounting plate. (See *Figure 2*).

3. Bolt the RubiCrawler Control Module into place using the two self tapping screws

4. Plug in the connectors from the RubiCrawler Control Module to the RubiCrawler, the transfer case, the wiring harness connector, and the three wire delphi connector included in this kit.

5. The purple wire is a signal wire for an AeroForce gage(P/N 716091) which is an optional item that can be purchased separately.

Jeep JK: It is recommended to run the purple wire up through the floor grommet directly over the rear face of the transmission. This will bring it up under the console which will be close to the required location to mount to the AeroForce gage(sold separately).

Jeep TJ: Route the purple wire through the firewall with the power and ground.

6. **Jeep JK:** Run the red(power) and black(ground) wires along the frame on the passenger side up to the fuse box. Make sure to safely zip-tie the wiring away from the exhaust, any pinch points or other hot objects. The Fuse attaches in the fuse box in the empty fuse slot labeled M14 - TTOW BUX. Refer to the under side of the fuse box lid for the proper location. Make sure to install it in the same direction as seen in the figure below.

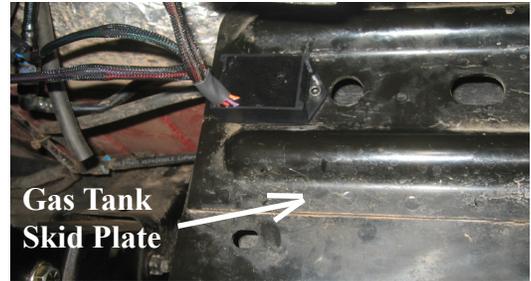


Figure 1: JK Mounting Location



Figure 2: TJ Mounting Location



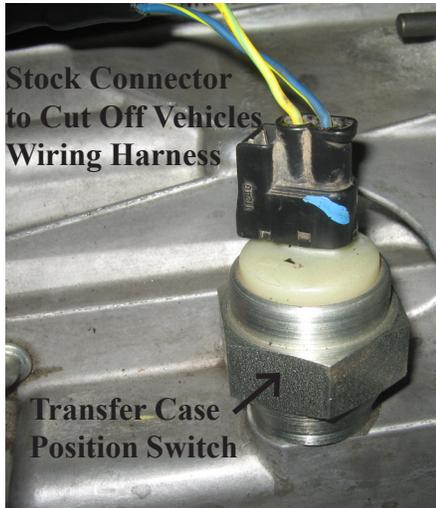
Figure 3: JK Power Connection



Figure 4: JK Ground Terminal

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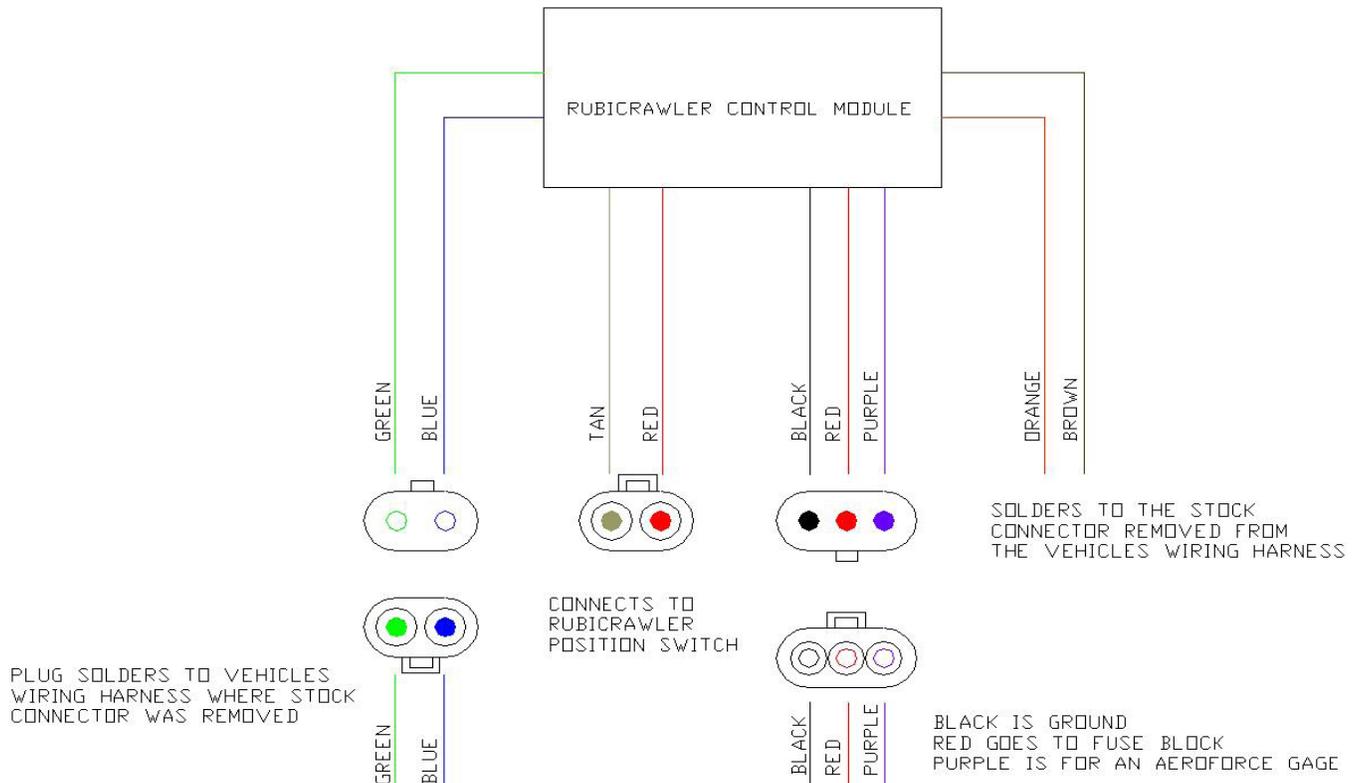
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A notch will need to be cut into the fuse box for the wire to run out, which can also be seen in *Figure 3*. The ground can be run along the side of the fuse block to the ground terminal on the passenger fender next to the fuse box.

JeepTJ: Route the power and ground through the firewall to the fuse box behind the glove box. Mount the ground to the firewall. The power should be plugged into the fuse block in an empty ignition hot fuse slot.

Wiring Schematic



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