



Subaru WRX STI LGT FXT TXL Heavy Gauge Fuel Pump Hardwire Kit

INSTALLATION GUIDE

Thank you for purchasing a Ryder Racing product. Disclaimer: installation of this product should only be undertaken by a licensed mechanic/technician who has experience with fitting aftermarket automotive parts. If the vehicle is to be raised, the technician should use appropriately rated jack stands or a hoist rated for the country or state, failure to do so may cause injury or death. Upon installing the Ryder Racing product(s) the driver should be aware that aftermarket parts can change the driving characteristics of the vehicle and should adapt to them in controlled conditions. See ryderracing.com.au/T&C for additional information. This product carries lifetime replacement warranty if installed by a licensed technician, proof of installation required for all warranty claims. See T & Cs for further information.

Kit #19-FP-TXLHWK-V3



What's in the kit?

- 4.5m x Red 10 AWG TXL wire
- 1m x Red 12 AWG TXL wire
- 1m x Black 12 AWG TXL wire
- 1m x Blue 18 AWG TXL wire
- 1 x 4 pin 30 amp relay and fuse
- 1 x pre-wired cradle to all TXL wires
- Terminals crimped to TXL wires
- 1 x length of Raychem shrink tube (requires cutting)
- Splice connectors + 1 Heavy gauge Barrel Splice
- Cable ties for clean up
- 1 x 1/8 rubber grommet

Let's see how it's done

Wiring relay pins:

30 - Red 10g TXL wire goes to the battery, (Thicker longer red cable).

87 - Red 12g TXL wire goes to the fuel pump, (Thinner shorter red cable).

86 - Blue 18g TXL wire goes to the car, (Blue wire).

85 - Black 12g TXL wire goes to ground, (Black wire).

Be sure to read these instructions thoroughly before attempting installation.

Safety tips:

1. Disconnect the negative terminal on the battery.
2. Ensure you have all relevant personal protective equipment
3. If you're installing a new fuel pump remove petrol cap to release any tank pressure (It's recommended replace the wire as close as possible to the new pump plug, this is located under the back seat.

Installation:

4. **(Optional for fuel pump installation and grommet method)** remove the 4 phillips head screws from the fuel pump cover plate **(while using correct protective equipment)** drill a 7mm hole towards the center of the cover plate, be sure to remove all shards from the plate. Install the rubber grommet into this hole, you may need to lubricate the grommet with a non-oil based lubricant to make it easier.

(recommended a qualified auto electrician to perform remaining fuel pump installation). **FIG S1**



HINT If you installed the rubber grommet, skip instruction 10 and go to 11. If you don't wish to install the rubber grommet follow instruction 10 and skip instruction 11.

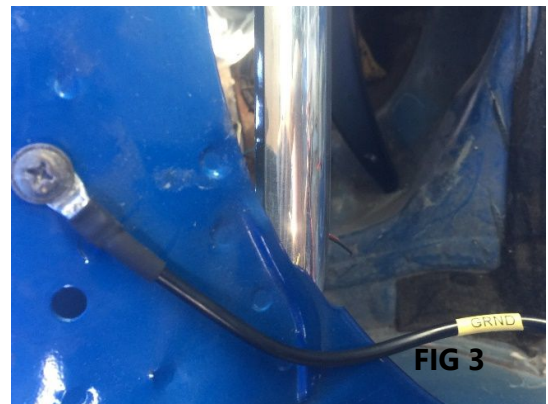
5. Remove the relay from the relay cradle, mount the relay cradle in your desired position using the supplied self-tapping screw(screw driver required), unwind wires and ensure there are no tangles. **FIG 1, Picture depicts the previous model relay base, these are no a sealed unit.**



6. Run the red 10g TXL (Thicker longer red) wire from the fuel pump cover plate area to the battery. We recommend running the wire away from any heat sources. **HINT** removing the passenger side door kick panels makes it easier to install under the carpet, also run it along the same side the battery is located. **FIG 2**



7. Run the black 12g TXL (shorter black) wire to your chosen chassis point. Using the last supplied self-taping screw mount the ground terminal ensuring its tight, alternatively uses a M8 threaded bolt which is already fitted to the vehicle. **This methois will provide constant voltage to you fuel pump with no 2 second safety cut off.** be sure to use a good conducting ground point. Make sure you don't have excessive strain on the wire to the relay cradle, see **FIG 3.**

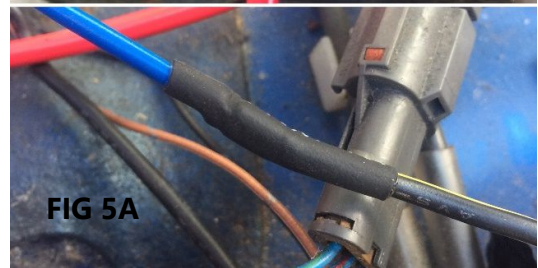


If you wish to retain the factory 2 second safety where the vehicle pumps shuts off when the engine stops you will connect this wire the fuel pump earth. It is located next to the fuel pump positive. Simply crimp the fuel pump factory earth and the black wire on the relay. If you are using Bulk Heads this method remains the same except the earth goes to ground via pig tail supplied in that kit **(recommended).**

8. Locate the white fuel pump harness plug under the rear seat, peel back the factory electrical tape and snip the Black and Yellow wire (**wires vary from model to model**). This wire is 12v supply to your pump. If in doubt check the wire to be sure you're using the correct wire. Make sure you leave enough wire on both ends as you will be putting splice connectors and heat shrink on both ends of this snipped wire. See **FIG 4**



9. Run the blue 18g TXL (SIGNAL) wire to the harness end of the fuel pump wiring harness, slide a small piece of Raychem heat shrink (**make sure it is long enough to cover the splice connector**). Use a splice connector crimp the factory and SIGNAL wire together, ensure it's a good connection See **FIG 5**.



Slide the heat the shrink tube over the join and reduce. See **FIG 5A**

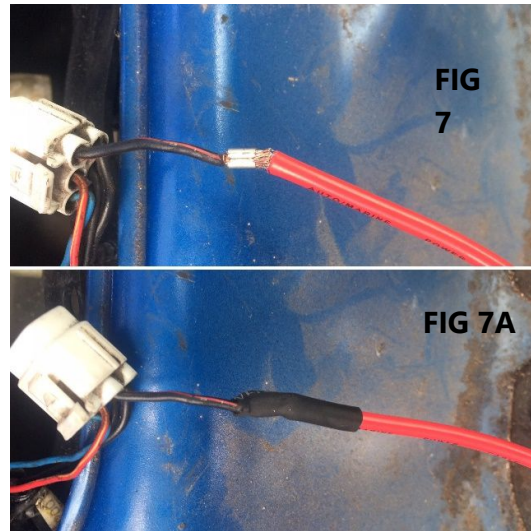
10. Run the red 12g TXL (PUMP) wire to the pump side of the fuel pump wiring harness, take Raychem shrink tube and slide it onto the wire, (ensuring the shrink tube is long enough to cover splice connector join) place the splice connector onto the two wires, crimp the splice checking the connection to ensure they're secure, see **FIG 6**.



Reduce the shrink tube over the join, see **FIG 6A**



11. **HINT** If you are replacing the wire all the way to the fuel pump you will not need to complete the connection listed in step 10. Illustrated in **FIG 6 and FIG 6A**, continue to push the 12g TXL (PUMP) wire through the rubber grommet first (lubrication maybe be needed as the wire will be tight), slide a piece of Raychem shrink tube over the wire when it's on the inside on the fuel pump cover plate (be sure the shrink tube is long enough to cover the splice connection). Continue to place a splice connector over the two wires and crimp the connection. See **FIG 7**.



You can now reduce the Raychem shrink tube over the connection. See **FIG 7A**

HINT To allow full removal of the cover plate you can use a Deutsch single pin connector between the fuel pump plug and 10g (PUMP) wire. These plugs are for purchase in our store.

12. Cables tie any loose wires, double check relay. Connect the negative terminal on the battery and check fuel pump operation.



CONGRADULATION YOU HAVE JUST INSTALLED THE RYDER RACING FUEL PUMP HARD WIRE KIT!

SAFTEY DISCLOSURE

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