

Thank you for your purchase of our **Test/Bypass Cable** for **Mini-Blade** fuse slots, which is normally used with a Totally Integrated Power Module (TIPM) fuse box. Please visit our website for a current list of applicable tested vehicles. The following instructions apply to both cable types that we offer (Simple or Standard), although some tests utilizing LED feedback will require the Standard Cable.

Cable Capabilities:

- Bypasses a faulty fuel pump relay. It works for vehicles that won't start (fuel pump relay won't allow 12 VDC to pass to the fuel pump) or those that power the fuel pump when the vehicle is off (fuel pump stuck on), which drains your car battery.
- Checks fuel pump functionality. Service departments often claim that you have a bad fuel pump when the TIPM fuel pump relay is the true problem. With the vehicle turned off, your cable can power your fuel pump and you'll be able to hear it.
- Can be used to drain your fuel tank by powering the fuel pump while the vehicle is turned off. This capability is useful if improper fuel was dispensed into the tank or fuel tank modifications are needed, such as a fuel pump replacement.
- (Standard cable only) Can check the ability of the fuel pump relay inside the TIPM to allow 12 VDC to pass to the fuel pump using LED feedback. A removable green LED will illuminate whenever 12 VDC is detected within the test/bypass cable in bypass, fuel pump test, or fuel pump relay test mode.

Cable Limitations:

- If your vehicle has an external fuel pump relay installed per the nationwide recall (most 2011-2013 Dodge Durango or Jeep Grand Cherokees), this cable will be ineffective because your dealer cut wires under your TIPM. We recommend that you replace your external fuel pump relay.
- This cable won't solve problems that are unrelated to your fuel pump (i.e. windshield wipers, starter, lights, windows, door locks, etc.).
- If you turn your key and nothing happens (vehicle won't turn over and the starter will not attempt to turn the flywheel/engine with a properly charged battery), you likely have other issues that must be resolved before addressing a possible fuel pump relay issue.

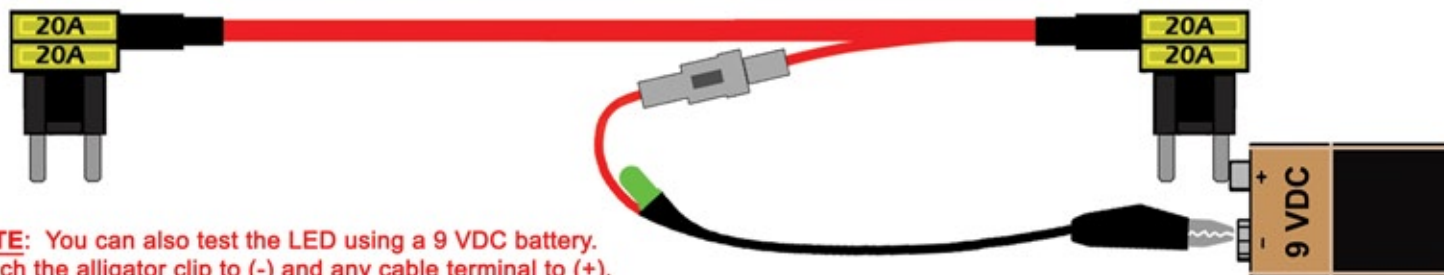


Our cables are normally used with the TIPM-7 series fuse box shown at left, utilizing fuse slots M7, M37, and M25. M7 consists of three terminals (right position provides 12 VDC when vehicle is on or off while the left position provides 12 VDC only when the key is on). M37 is the run/start 12 VDC supply that your bypass cable uses to power the fuel pump. One side of M25 is connected to the faulty fuel relay while the other side connects to the fuel pump. A fuse slot diagram is shown under your TIPM lid.

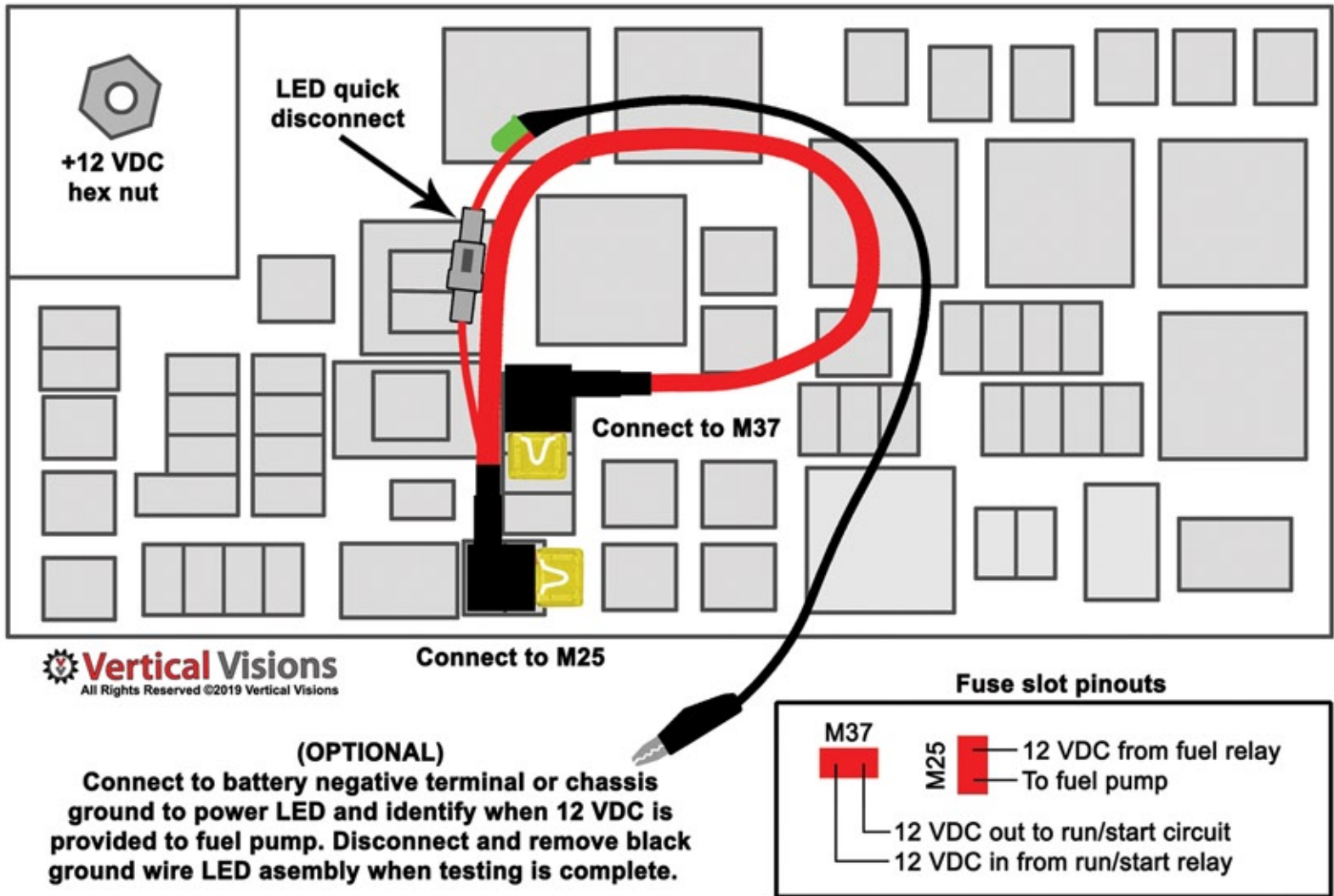
NOTE: Visit our website for a TIPM test/bypass cable video showing the tests and connections listed below. For a long term fix with additional functionality and a custom fit, our patented TIPM Plug-In Relay Systems are a great option. We also repair TIPMs with 24 hour service and a one year warranty. Discounts on these items are available to existing customers. See our website or contact us for details.

1) How To Test The LED and Ground Connection (Standard Cable Only)

- A proper ground connection and functioning LED is critical for accurate testing.
- Turn vehicle off and open your hood.
- Connect the alligator clip to the battery's negative terminal, a ground lug, or chassis ground (metal framework) connection.
- Remove the existing 20A fuse in fuse slot M7. Verify that M7 is your power adapter (cigarette lighter).
- Insert one end of the test/bypass cable into the RIGHT slots of the M7 fuse slot. Ensure the opposite end of the cable doesn't touch anything. The green LED should light up. If LED will not illuminate, confirm a proper alligator clip ground connection to bare metal if using chassis ground.



NOTE: You can also test the LED using a 9 VDC battery. Attach the alligator clip to (-) and any cable terminal to (+).



Bypass Mode

Frequently Asked Questions (Visit the online FAQ at www.VerticalVisions.com for additional questions and answers)

- 1) **My car still won't start with the TIPM test/bypass cable installed. What might cause this?**
 - TIPM test/bypass cable isn't hooked up to the proper fuse slots. It must be connected between M37 and M25 per the images on page 3 and 4.
 - Check cable fuses. Some people accidentally touch the cable to ground while plugged in to the TIPM, which may blow a fuse.
 - Make sure the top fuses on each end of our TIPM test/bypass cable are installed. These two yellow 20 amp fuses permit power to flow from one end of the cable (M37) to the other (M25). Bottom fuses allow the original fuse slot to function normally (M37).
 - Check your fuel pump using the TIPM test/bypass cable to see if it's working. A fuel pump pressure test is recommended if all else fails.
 - Do you have gas in the vehicle? Is your fuel gauge working properly?
 - Verify that an external relay is not installed, as our cables are incompatible with them due to wires that were cut under the TIPM. External relays are often installed on 2011-2013 Dodge Durango and Jeep Grand Cherokee vehicles per a 2015 recall. Most external relays can be identified by the presence of an orange or red wire attached to a ring terminal under the large hex nut (12 VDC supply) in the upper left corner of your TIPM. The orange or red wire is connected to an inline fuse and a small black box with "Omron G8JN" listed in white letters. Change the external relay, if present.
 - Check/replace your cam shaft and/or crank shaft sensors. There are dozens of things that can prevent a vehicle from starting, beyond the fuel pump relay issue that our cable was designed to solve.
 - Cables allow power to pass from one end to the other. If your TIPM won't provide power to the cable, no power will be available to the fuel pump.

2) **How long can I drive with the cable? Is it a permanent solution?**

Answer: Many people have used our cables for extended periods of time (3-4 years), but we prefer to list it as a temporary solution. Our cables mainly serve as testing tools to determine TIPM problems, but thousands of people use them to stay on the road. Our cables will not cause any engine codes or other problems to appear in your vehicle.

3) **Nothing happens when I turn the key. Is the cable at fault?**

Answer: If you turn the key and nothing happens (the starter does not rotate the flywheel/engine), you likely have a bad starter/solenoid, dead battery, bad alternator, faulty starter relay, blown starter fuse, or wiring problem. This problem is unrelated to the fuel pump relay or the use of a TIPM cable.

4) **My vehicle will not turn off after I turn off the engine. Why is this happening?**

Answer: The lower fuse on the M25 end of your cable was not removed. Your internal faulty fuel relay is stuck on and back feeding the run/start circuit. Properly configure your cable per the image at the bottom of page 3.

Questions? Please contact us via email or telephone. We greatly appreciate your business.

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