

# Ignition Power Relay (IPR) Installation Instructions

## IPR -Ford

1. Remove the negative battery cable from the battery.

2. Remove the fuse from the IPR.

3. Locate the IPR under the starter solenoid allowing enough room to remove and reinstall the fuse. Mark the screw location.

4. Using the self drilling and tapping screw, drive the screw with a 5/16" driver. Remove the screw and remove any paint, rust, dirt, or oil, from the area around the screw hole to insure a good ground.

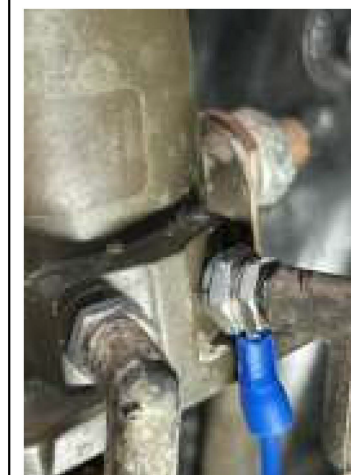
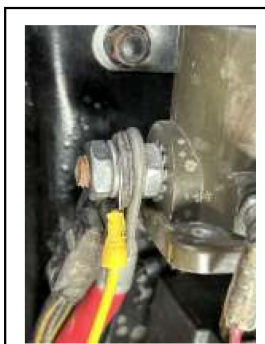
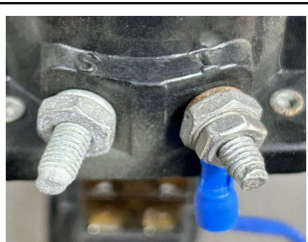
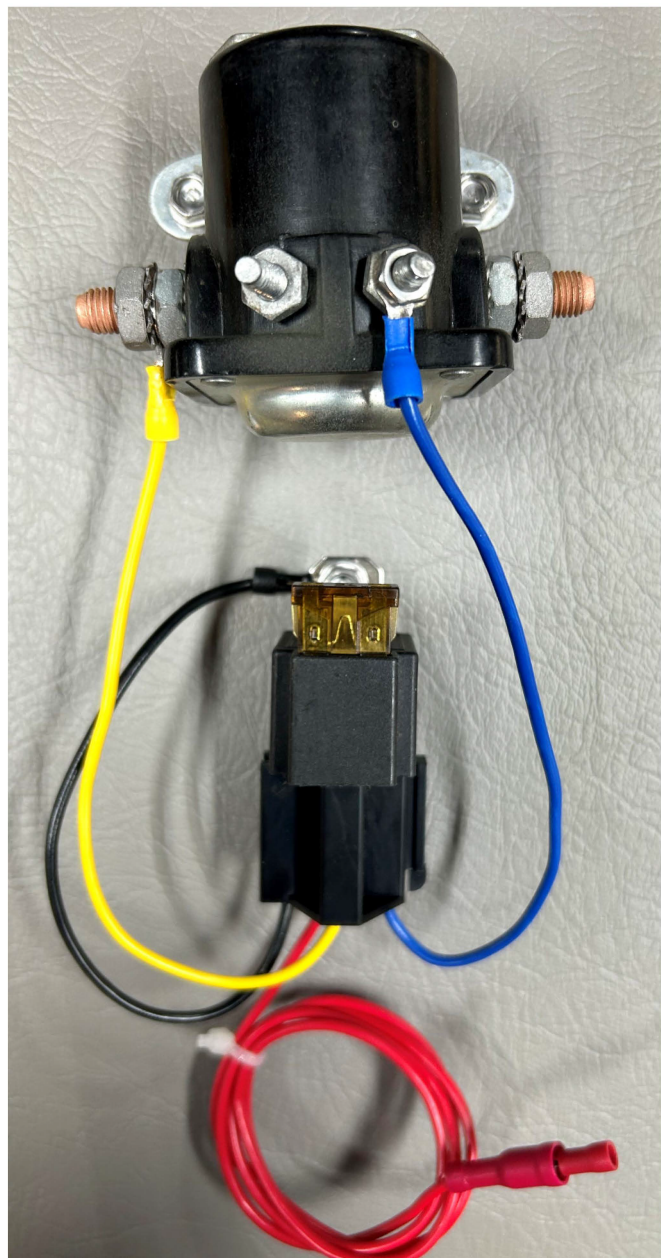
5. Put the screw through the washer, the ring terminal on the black wire, the mounting bracket on the IPR, and then screw it into the hole you made in step 4. Tighten securely.

6. Unplug the push-on connector on the (I) terminal on the front of the solenoid. (In some cases you will find a ring terminal and nut, remove the nut.) Put the ring terminal on the blue wire on the stud and tighten the supplied thin nut with a 5/16" driver. (Or put the ring terminal on the stud and replace the nut.) Slip the push-on connector back on the stud. You may need to squeeze the push-on connector to get a snug fit.

7. Remove the nut on the battery side of the solenoid. Put the ring terminal on the yellow wire on the stud and then replace and tighten the nut. Replace the fuse on the IPR.

8. Route the red wire to the engine. Typically you can follow the harness that goes to the alternator. Crimp the male bullet connector on the end of the red wire from your Pertronix Ignitor. Plug the wire from the Ignitor into the red wire from the IPR.

9. Replace the negative battery cable. You are now ready to run.



# **Ignition Power Relay: Frequently Asked Questions**

## **IPR-Ford**

### **What tools do I need for the installation?**

The easiest way to install the IPR is to use a 5/16" nut driver bit in a drill to drive the self drilling screw into the sheet metal below the starter solenoid. You can also pre drill the hole in any size under 1/8". You will need a 5/16" wrench to tighten the thin nut on the (I) stud on the front of the starter solenoid. You will need crimpers to crimp the bullet connector on the end of the red power wire on the Ignitor. Typically the nut on the battery side of the starter solenoid is 1/2" and the nut on the battery clamp is also typically 1/2".

So here is the list: 5/16" nut driver bit and drill. 5/16" nut driver or wrench. Crimpers. 1/2" wrench. Optional: predrill with 1/8" or smaller drill bit and use a 5/16" nut driver.

### **Can I use the relay to power other devices like my electric choke?**

Yes you can. The relay is rated for up to 30 amps of current. Any device you connect will be powered during both cranking and run.

### **Can I use the relay for other ignition systems besides Pertronix?**

Yes. As long as current draw is less than 30 amps. You can also use it for EFI systems like the Holley Sniper that require power during both cranking and run.

### **My car won't start. What should I check?**

With the key in the start or run position there should be power to the end of the red wire. If you have power here then the relay is working properly. If you are not getting power check these items first. Push-on connectors at the starter solenoid must be snug. Check the fuse. (The IPR comes with a 7 amp fuse.) Check the connection to the battery side of the solenoid.

### **Anti car theft benefit:**

If you remove the fuse, or unplug the bullet connector, your car won't start. Even if they run a hot wire to the coil it won't start. This won't stop a serious car thief but it just might slow one down.

### **The push on connectors on the starter solenoid just won't stay tight. What can I do?**

This is a common problem. If squeezing them with your crimpers doesn't work, the best solution is to cut the push on connectors off, relace them with ring terminals and secure them with #10- 32 tpi nuts. It is very common to find that cars have already been repaired this way.

### **Why do I need a full 12 volts?**

All Pertronix Ignitors are designed to use 12 volts. The power wire to the coil on Ford products has a resistor built in. It drops the voltage by at least 1/3, typically to less than 8 volts. Originally this protected the points from burning. The problem is that the electronic switch inside the Pertronix opens and closes much more slowly with reduced voltage. Switches hate being halfway open or closed and get very hot. This dramatically reduces the life of the Ignitor leading to early failure. You may notice a much improved idle after installing the IPR.