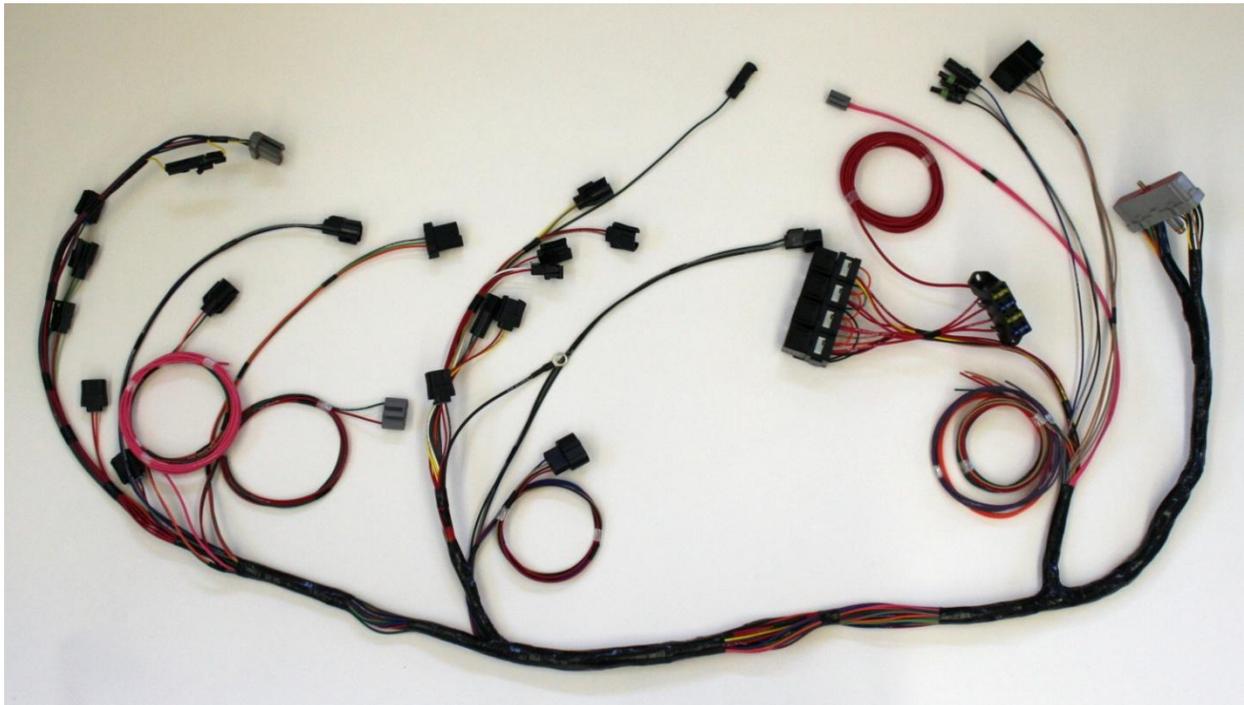




PIMP Ford 5.0 Harness
Installation Manual



Part Number: PM-75

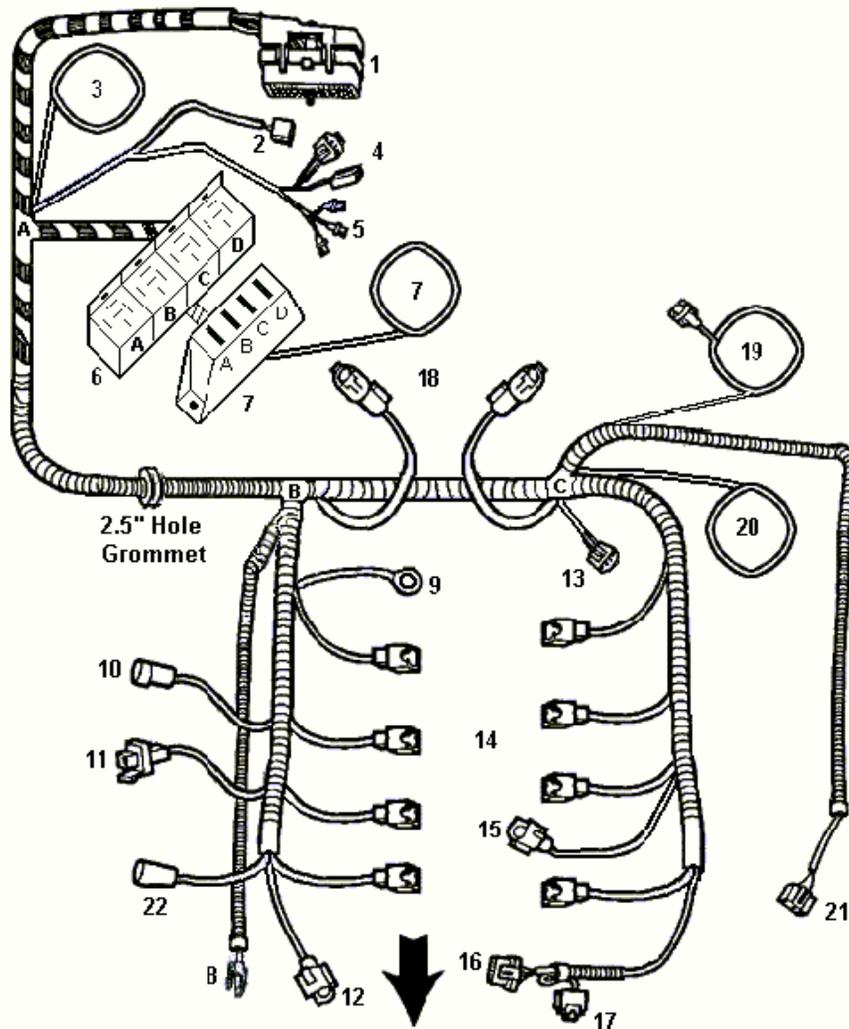
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Pre-Installation Notes:

- This system is designed to install a PIMP based ECM into Ford bodied vehicles.
- Please thoroughly read and comprehend the documentation Stinger provides with the PIMP ECM.
- Make sure that all the components you have are compatible before installing them.
 - The fuel rail will dictate which side the intake faces. Make sure you have the correct one. This harness is set up for a passenger side facing intake when in stock form.
- This harness is set up for a “High Output” firing order of 1-3-7-2-6-5-4-8 in it’s stock form.
- This harness includes no provisions for emissions: EGR, Air Pump or Canister Purge.
- This harness is designed so that once installed on the engine, the harness runs to the passenger side and through firewall into passenger compartment on passenger side.
- We have provided a connector for a typical Ford heated oxygen sensor, as found on the 1988 – 1993 Mustang 5.0. If using a wideband O2, see item 8 below.
- Always disconnect the battery when working on vehicle’s fuel or electrical systems. Any electrical spikes can damage parts of the fuel injection system.
- Use extreme caution if and when welding on any vehicle with a fuel injection system.
- We have supplied an install kit that includes four sizes of zip loom, two sizes of tie wraps, two rolls of wrap tape and a fire wall grommet. Once you have finalized the wire paths for the harness, use the install kit to finish off the harness. Proper planning and patience will create a good looking job when complete.

Pre-Installation Instructions:

Install the lower intake, fuel injectors, and fuel rail on the engine if not already installed. Remove the upper intake if it is installed and install stock fuel pressure regulator. Plumb fuel lines with appropriately rated line. Use caution when working on fuel system, 40-100PSI can be held within system. To release fuel pressure, remove fuse or relay to fuel pumps, then start engine and allow it to stall. Crank starter for several seconds to insure all pressure has been released. Before installation spread out the harness in a well lighted open area to identify all the connectors and become familiar with what will need to be done.

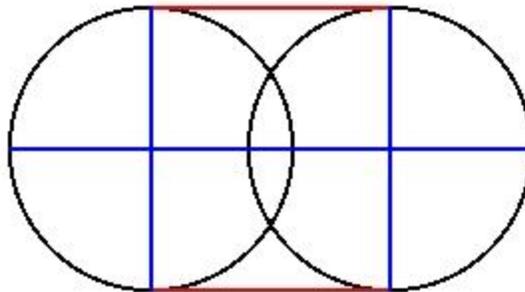


- | | | |
|--|---------------------------------|------------------------------|
| 1) Computer Connector | 10) Throttle Position Center | 21) Ignition Coil Connection |
| 2) Inertia Fuel Cutoff Switch | 11) Idle Speed Control | 22) Alternator Connection |
| 3) Tachometer, Ignition Feed,
Oil Press, Water Temp Gauge Feeds
Launch Control Lead, Table Switch Lead | 12) Engine Coolant Temp Sensor | |
| 4) Not present in this harness | 13) Boost Control Solenoid | |
| 5) Not present in this harness | 14) Injectors (8) | |
| 6) Relay Center | 15) Air Charge Temp Sensor | |
| 7) Fuse and Main Battery Feed | 16) TFI Distributor Connection | |
| 8) Not present in this harness | 17) Spout | |
| 9) Ground | 18) Right & Left Oxygen Sensors | |
| | 19) Vehicle Speed Sensor | |
| | 20) Fuel Pump Connection | |

Installation Instructions:

Refer to the diagram for item locations. All wires are marked indicating their use.

- 1 Lay the harness into the engine compartment with the relay and fuse block on the passenger side.
- 2 Locate where in the firewall you wish to route the computer plug and other dash connections. Using the grommet supplied, cut the appropriate hole in the firewall. Use the following template for the grommet:



- 3 Pass the engine section of the harness through the firewall. Route as much of the harness as possible before mounting the computer or covering the harness. This ensures a quality installation.
- 4 Remove the last bolt holding the lower intake down on the passenger side. Install #9 engine ground and torque the bolt back down to specifications. This is extremely important and should be the first connections made!
- 5 Install all eight fuel injector connectors starting with cylinder #1 and working your way around. Connecting the injectors now helps get the majority of the harness into position.
- 6 Connect #12 Engine Coolant Temp sensor and #15 Air Charge Temp sensor.
- 7 Route #18 Right & Left O2 sensors, #19 Vehicle Speed sensor, and #20 Fuel Pump power wires down to their locations under vehicle. Route #19 Vehicle Speed sensor and #20 Fuel Pump power connectors along the left frame rail. Keep them away from hot exhaust moving parts like driveshaft.

- 8** Weld exhaust bungs into both sides of the exhaust approximately 9-12 inches from the last cylinder head exhaust port or 3” from the collector. Clean any debris from oxygen sensor ports and threads.
- a) Use a small amount of anti-seize on the threads when installing Oxygen Sensors. Use SG23 Oxygen sensors with short headers. Use SG40 Oxygen Sensors with long tube headers.
 - b) Connect #18, oxygen sensors to their connectors and attach any free harness to the firewall or frame to keep them from falling against the exhaust.
 - c) If you are using wideband oxygen sensors, the **Green** wire is the signal to the ECM (Pin 29) for the RIGHT/PASSENGER SIDE and the **Blue** wire is the signal to the ECM (Pin 43) for the LEFT/DRIVER SIDE. The **Black** wires are for ground, and the **Grey** wires are switched and fused 12 volt.
- 9** Install Vehicle Speed Sensor between the transmission and speedometer cable. Route #19 Vehicle Speed Sensor connector along the left frame rail and plug into the Vehicle Speed Sensor.
- 10** #20 is a 14Ga pink wire to power your fuel pump(s); you will need to splice this wire if you are using 2 fuel pumps that are not mounted together. Make sure the fuel pump(s) are well grounded.
- 11** Carefully route #21 Ignition Coil connector along firewall and fender to the coil. Keep Radio power wires and antenna cables away from Ignition Coil to prevent future distortion or interference.
- 12** Item 3 is a group of wires under the dash.

Color	Printing	Purpose
Orange	Keyed Run	Ignition Power Supply
Purple	Start	Start Signal for ECM
Green	Tach	Tachometer
Dk Blue	Temp	Water Temp Gauge Feed
White	Oil	Oil Pressure Gauge Feed
Yellow	ECM 30->LAUNCH CTRL	Launch Control
Tan	ECM 24->TABLE SWITCH	Table Switching

- a) Connect the Orange wire marked “Keyed Run” to the keyed ignition switch hot wire. This wire must have +12 volts with the key in run and start positions.
- b) Connect the Purple wire marked “Start” to the keyed ignition start wire. This wire must have +12 volts only when the key is in the start position.

*****This circuit should only be hot when the key is cranking the engine. The intent is that the system retards timing during crank to help the engine start up. If you connect this wire to always hot with key on you will experience an undesirable rev limiter at 2000-3000 RPM's.**

- c) The Green wire marked "Tach" is for your tachometer. Connect to your tach. Refer to the tachometer manufacturer information for any additional details.
 - d) Connect the Dk Blue to your water temp gauge.
 - e) Connect the White wire to your oil pressure gauge.
 - c) Launch Control Lead. This is a **Yellow** wire marked ECM 30->LAUNCH CTRL. This circuit needs to go to ground to activate. For example, run this yellow wire to a switch for activating launch control. The other side of the switch would go to ground.
 - d) Table Switching Lead. This is a **Tan** wire marked ECM 24->TABLE SWITCH. This circuit needs to go to ground to activate. For example, run this tan wire to a switch for activating another table. The other side of the switch would go to ground.
- 13** You can install the upper intake plenum onto the lower intake and install the throttle body to the upper intake. Now would also be a good time to finish the vacuum system.
- 14** Connect #10 Throttle Position sensor and #11 Idle Speed Control.
- 15** Before you install the distributor, make sure the engine is at TDC for cylinder #1 and you have mounted the TFI to the side of the distributor. Drop the distributor into position so the rotor is aligned with the 1 molded into the cap. Make sure there is enough room to rotate the distributor in the block 1/8th of a turn. You will need to rotate it to set the base timing to 10 degrees BTDC.
- Connect #16 to the TFI module on the distributor and make sure that #17 SPOUT connector is connected firmly. Only disconnect the SPOUT to check and set the base timing.
- 16** It is advised that you use an inertia switch to turn off the fuel pump(s) in the event of a crash. Under the dash is connector #2 for the Inertia Fuel Cutoff Switch. Mount the Inertia Switch completely upright and connect it to the harness. Mounting the switch any other way or bypassing this switch can cause risk of fire or loss of life. Before continuing, tap the switch until the button on top pops up and reset it. This will confirm its action and get you familiar with how it works.
- 17** Connector #1 is for the computer, make sure the computer pins are not bent or damaged. Then connect the harness with a 10mm socket. **DO NOT** use air or power tools to install this connector!
- 18** Next to the Fuse & Relay blocks is a large 10Ga red wire connect this 10Ga Red 3/8" terminal to Battery Positive or the starter solenoid.
- 19** #22 is ignition power wire for your alternator. It is not meant to charge the vehicle, but to turn the alternator ON when you turn the key to RUN. Consult your alternator installation manual for further instructions.

Fuse and Relay Key	
Fuse and Relay Designation	Fuse Size
O2, BCS, Alternator (Relay A)	20 AMP
Fuel Pump (Relay B)	20 AMP
Coil & TFI Module ECM, Injectors & ISC (Relay C)	20 AMP
Fan Relay (Relay D)	20 AMP

Tech Line Number: 610-485-1981

Warranty Information

All Ron Francis Wiring products are warranted for 1 year from purchase date. There are no other representations, warranties or conditions expressed or implied, statutory or otherwise except those herein contained. Warranty does not cover any defect which is the result of improper installation or modification of the system or any of its components by purchaser.

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Rev B 1/2017