

## **Classic Dash Fox Body Mustang Installation Guide**

These are the items you may need for installation:

- Side cutter or "dykes" pliers
- Soldering iron with solder (or "red" butt connectors)
- Electrical/crimping pliers
- Multi-meter (or 12-volt tester)
- Crazy glue
- Center punch or ice pick
- Tape measure
- Screwdrivers
  - (Phillips, standard and small slot type)

- Razor blade or box cutter
- Open end wrenches or 1/4" or 3/8" drive socket set (imperial sizes 3/8"-9/16" and metric sizes 7-15)
- T-15 Torx socket wrench
- Shrink wrap with heating device
- electrical tape

Note: It is recommended to solder wire connections and use the provided shrink wrap as opposed to using crimped connector.



1. Strip wires 1/2" to 3/4" and lay opposing as shown. Slide sleeve over one wire.



2.Twist together. Keep away any heat source.



3. Apply heat to the splice from the soldering iron and apply a small diameter, quality 50/50 solderto the iron. Let the molten solder absorb into the connection.



4. Slide the tubing over connection. Apply heat from a heatgun soit shrinks the sleeve and seals the joint.

### Step 1

Install the gauges into your dash panel as shown. For best results, use the aluminum clamps on the oil and volt gauges and the plastic brackets for the remaining gauges.

### Step 2

Drill four 5/32" size holes for your LED kit. Install (from the front side) the green LEDs in the LEFT and RIGHT turn indicator locations you chose. The red LED is for your CHECK ENGINE indicator and the amber LED is for your HIGH BEAM indicator. You can use a droplet of ABS glue to help secure the lights if you choose.

### Step 3 (1987-89 ONLY)

On panels equipped with the four fluid warning lights (low oil, low coolant, low washer fluid and low fuel) insert the white LEDs from the front of the panel (figure 3). They are barrel shaped and will snap into place. Straighten out the red and black leads. You can use a droplet of ABS glue to help secure the lights if you choose.

### Step 4 (1987-89 ONLY)

Peel off the backing and attach the foam gasket to the warning light block. This prevents light from leaking into adjacent openings.

### <u>Step 5</u>

Gather up the four black leads from the high beam, check engine and turn indicator lights and twist the wires together. Attach them to the black ground wire that is stripped, soldered and heat shrunk.

### Step 6 (1987-89 ONLY)

Do the same thing with the four black wires from the white warning lights, connecting them to the warning light feed.

TOP





### <u>Step 7</u>

Now attach the harness (figure 4) to the gauges. Begin with water temperature. Find the green wire marked "WATER TEMP" and attach it to the appropriate blade ("S" for signal) on the gauge. Attach the pink wire marked "IGNITION" to the "I" blade and the black "GROUND" wire to the "GND" terminal.

The gray "GAUGE LIGHT" wire connects directly to the gauges with built in LEDs. Gauges with plug-in lights, use the supplied grounding adapters. The adapter is attached to the "GND" blade on the gauge and the black ground wire attached to it.

Attach the fully insulated male terminals to the white and black gauge light wired and crimp, then plug the white wire into the grey wire and the blacks together (figure 5).



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### <u>Step 8</u>

Follow the same procedure and attach the wiring harness to the remaining five gauges using the color code diagram as a guide. You will notice that there is an extra pink (IGNITION) and black (GROUND) wire left. These are for your speedometer sending unit (Step 17).



### Step 9

Locate the red "HIGH BEAM" wire and connect it to the lead from the amber LED light in the panel. Protect with tape or shrink wrap.

### <u>Step 10</u>

Take the white/black stripe "RIGHT IND" wire and attach it to the right turn indicator light (which will be on the left side of the panel looking at the back side). Protect with tape or shrink wrap.

### <u>Step 11</u>

Connect the orange "LEFT IND" wire to the left turn indicator light, which is on the right side looking at the back of the panel. Protect with shrink wrap or electrical tape.

### Step 12

The black "CHECK ENGINE LIGHT" wire is to be connected to the red Check Engine light. Protect with shrink wrap or electrical tape.

### <u>Step 13</u>

Disconnect the positive (+) terminal to your battery.

### <u>Step 14</u>

Locate the OEM oil pressure sending unit. Replace it with the sender included with the new oil pressure gauge. Reconnect the factory wire. Do the same to the water temperature sensor.

### <u>Step 15</u>

You may need to drop the steering column for clearance. Remove the factory dash cover by unscrewing the two fasteners at the top of the panel and pulling it toward you. Stow the cover nearby.

### <u>Step 16</u>

Remove the four bolts that secure the gauge bezel. Slip your fingers behind the panel and locate the two plugs that connect the panel wires to the loom. Squeeze the two tangs on the male plug and disconnect. Repeat on the second plug. Pull the gauge bezel toward you and disconnect the factory cable from the speedometer.

### <u>Step 17</u>

If you are using a mechanical speedometer, you will use your speedo cable. You will need to purchase a Ford Mechanical Speedometer Adapter, PN# 200-00-4000 (sold separately), to attach the speedo cable to the new mechanical speedometer.

If you are using an electric speedometer, you will NOT use the speedo cable. An electric speedometer sending unit or GPS unit will be required instead.

You will need to disconnect the speedo cable at the transmission and remove it completely. The speedometer sending unit will screw into the transmission, replacing the cable. If using the GPS unit, permanently plug the hole as you will not need to use it.

### <u>Step 18</u>

For a standard electrical speedometer, install the Ford Speedometer Sending Unit (figure 7) pulse generator using the original bolt (sold separately). For a GPS speedometer, refer to separate instructions included with the GPS.

### <u>Step 19</u>

Take the 10-foot lengths of pink, purple and black wires that came with the harness and twist the black and purple wires together like a candy cane. Bind the three wires together with tie wraps every 6 inches. Connect the pink and black wires to the similar colored wires on the Classic Dash panel loom and plug the purple wire directly onto the Speedometer (SIG) tab. Feed them through the route originally used for the speedometer cable.



### <u>Step 20</u>

Trim the excess length of the wires coming from the panel so they cleanly mate with the wires on the transmission sending unit. The red wire on the sensor connects to the pink wire coming down from the panel. The white sensor wire connects to the purple panel lead and the black wires to each other. Solder the connection and use the supplied shrink wraps.

### <u>Step 21</u>

Trial fit the new Classic Dash panel and trim if required.

### <u>Step 22</u>

Pull the panel towards you and locate the factory loom plugs. Squeeze the tangs together and insert the male end into the female receptor on the Classic Dash loom. Make sure both plugs are secure.

### <u>Step 23</u>

Attach the new bezel using the four original bolts and replace the dash cover using the two factory bolts. You may need to make alterations to your dash bezel as to reinstall dash bezel to the dash carrier. See image below.



### <u>Step 24</u>

After you reconnect the battery, you may need to re-excite the alternator if your charging system does not show a charge. Use a 12-volt test light (or a multimeter) to identify a switched 12-volt source and jump it to the light green/red striped wire while the vehicle is running. This will reenergize the alternator.

# Ford Mustang Wiring Diagram for 1987-1993 Instrument Cluster



1990-1993 Wiring Chart

in Number	Circuit	Circuit Function	Pin Number	Circuit	Circuit Function
-	LG/W	Left Turn Indicator	1	Not Used	Not Used
2	GY/W	High Beam Indicator	2	<b>R/LG</b>	Ignition Switch
33	R/W	Coolant Temperature Sender Feed	3	Not Used	Not Used
+	R/Y	12v Input	4	Not Used	Not Used
0	P/W	Check Brake Indicator Feed	5	Not Used	Not Used
01	LB	Low Coolant Indicator Feed	9	Not Used	Not Used
7	R/Y	12v Input <sup>1</sup>	7	R/Y	<sup>1</sup> 12v Input <sup>1</sup>
3	GY	Check Oil Indicator Feed	8	W/R	Oil Pressure Gauge Feed
•	BK/LB, PK/LG	Malfunction Indicator Lamp (MIL) Feed	9	BK	Ground
10	BK/Y	Air Bag Indicator	10	W/Y	Fuel Gauge Feed
Ξ	T/Y	Tachometer Feed	11	LB/R	<sup>1</sup> Illumination Feed
12	Not Used	Not Used	12	W/LB	Right Turn Indicator
13	LB/R	Illumination Feed	13	DG/LG	Fasten Seat Belt Indicator
[4	BK	Ground	14	LG/R	Battery Indicator Feed

<sup>1</sup> Match to same colors as the 1987-1989 harness.

# 1987-1989 Wiring Chart

Pin Number	Circuit	Circuit Function	Pin Number	Circuit	Circuit Function
1	LG/W	Left Turn Signal Indicator	1	GY	Low Oil Indicator Lamp
2	BK	Ground	2	R/W	Switch to Warning Lamp
3	R/W	Temp to Sender	3	P/O	??? (not used in conversion)
4	R/Y	Warning Lamps Feed	4	Not Used	Not Used
5	R/LG	Ignition Switch to Coil-Batt	5	Not Used	Not Used
6	LG/R	Ignition Switch to Alt-Reg	6	Y/BK	Signal Unit Lamp to Fuel Signal Relay
7	P/W	Brake Warning Signal Light	7	PK/Y	Washer Fluid Low Indicator
8	BK/L	Warning Lamp Prove Out <sup>2</sup>	8	Y/BK	Signal Unit Lamp to Fuel Signal Relay
9	Not Used	Not Used	9	W/R	Oil Pressure Signal
10	GY	Low Oil Level to Signal	10	Y/W, LB	Fuel Gauge Feed / Low Fuel Indicator Relay
11	DG/Y	Tachometer Feed	11	R/Y	Warning Lamps Feed
12	Not Used	Not Used	12	BK	Ground
13	W/LB	Right Turn Signal Indicator	13	DG/LG	Coolant Temp Relay Feed
14	LG/BK	High Beam Indicator	14	LB/R	Instrument Panel Lamps Feed

If you are attempting to install a 1990-1993 steering wheel in a 1987-1989 car, the steering column must also be changed. All connections will hook up in the steering column except for the harness from the steering wheel, which provides the horn and the cruise control signal. The windshield wipers will not work if the 1990-1993 switch is used on the 1987-1989 harness. Testing with a multimeter will show you the wires that Ford chose to move when the design of the switch changes. All controls have the same wiring except the windshield wipers. After the correct wires are determined, it is an easy task to remove the wires from the plug by pressing down on the tab on the front of the plug and sliding the wire out the back. Then, the wire can be inserted into the previously unused connection hole on the plug.

(6"-8"), and they can be successfully wire tapped and soldered to the factory 1987-1989 harness. This process is much easier if you have an old harness from a 1990-1993 that comes out of the instrument cluster. The wires need to be as long as possible

<sup>2</sup>Used to test lights when ignition is turned to the "Start" position

