

# Throttle Body Instruction Manual

If you are installing a Twisted Smog do this install **to completion first**. run and drive the vehicle to confirm it is installed correctly before you begin with the throttle body swap. This creates less variables to work through if a wiring mistake has occurred.

## Step 1 :

Remove keys from Ignition.

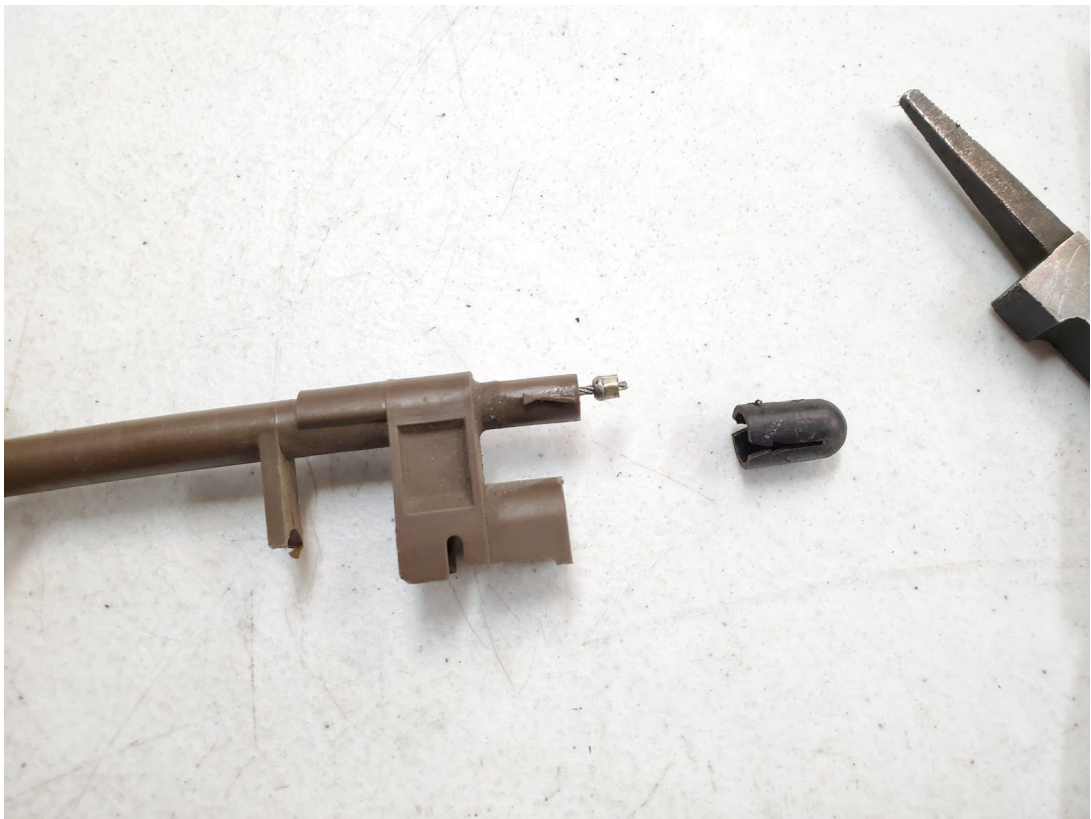
Disconnect battery.

## Step 2 :

Disconnect your cruise control cable from the throttle body, then unbolt it from the inner fender, unplug the electrical connector and remove the unit from the vehicle.

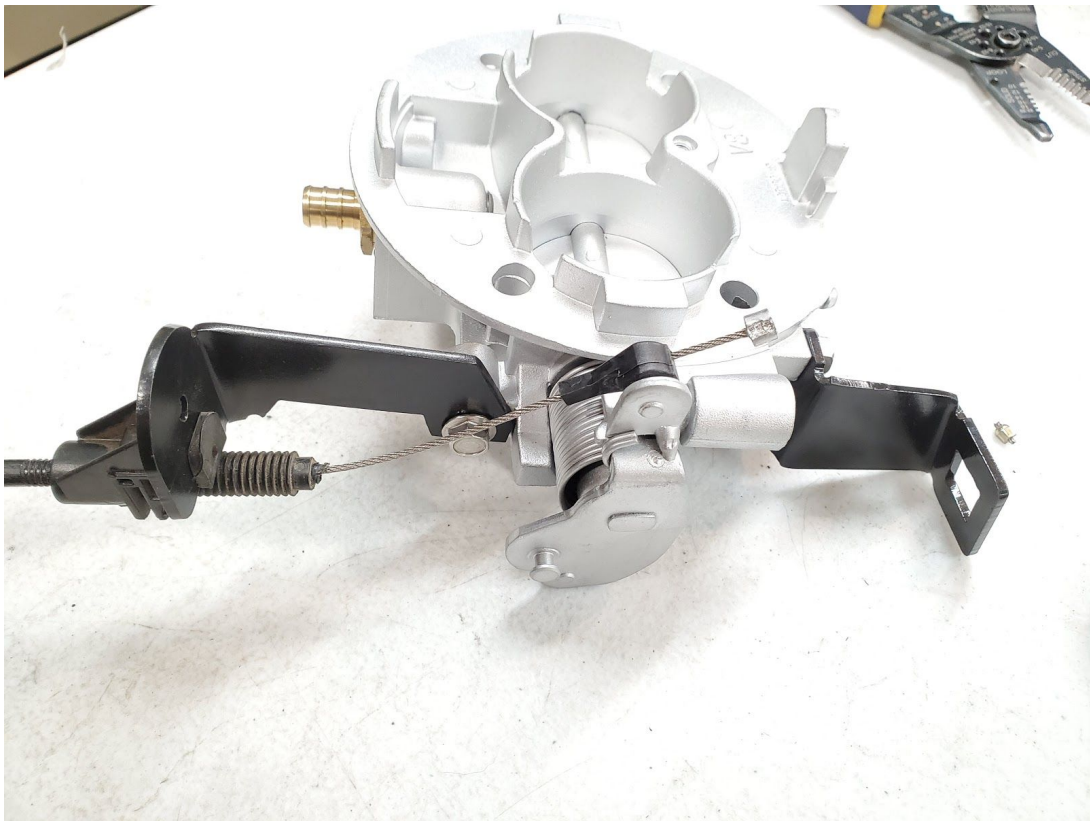
## Pieces for converting your Cruise Control Cable:

You will be converting your cruise control cable with the included pieces. This can be a bit tricky so take your time. Follow the detailed pictures outlining the steps. You will remove the black plastic cap from the brown slide unit. Use pliers and work it around to pop it off. Slide the brown unit towards the cable housing to expose the crimped end. Using sharp good wire cutters- cut the very end of your inner wire flush the the crimped end (leaving it as long as possible. Slide one of the black plastic detent clips onto the inner cable. You will need your crimpers (!!! that have a spike/stake !!!). Carefully twist and slide one of the aluminum cable crimp pieces onto the inner cable and crimp it flush to the end. Next remove the hold clip from the cable (this will allow you to adjust the cruise control cable). Clip the retainer into the cruise bracket. Then clip the plastic detent onto the top (welded on) part of the throttle body blade. Adjust the housing to where it is slightly tight ( but not pulling on the throttle body blade). \*\* It is better to have it a touch loose than too tight\*\*\*. Re-Install the cable housing retainer and the cruise is setup. You can keep it attached for the rest of the install.









**Step 3 :**

Disconnect the throttle cable from the pedal. To do this: gently squeeze the plastic retainer on the back side of the pedal and pop it towards you, then slide it upwards. Make sure it doesn't re-seat during the next step. Unbolt the cable housing bracket from the firewall and gently pull it through the firewall.

**Step 4 :**

Remove the rubber air intake tubes from the air filter box to the throttle body and idle air control valve (located under the throttle body).

**Step 5 :**

Unbolt the EGR valve from the upper plenum.

**Step 6 :**

Unplug air lines / vacuum tubes from the upper plenum.

**Step 7 :**

Cut both the idle air bypass & the TPS pigtail wires 1.5" from the plug.

**Step 8 :**

Strip back the electrical tape on both sides of the cut on both sets of wires to reveal the wires and their colors. Using your wire strippers strip  $\frac{3}{8}$ " of the wire ends.

**Step 9 :**

Remove upper plenum from intake.

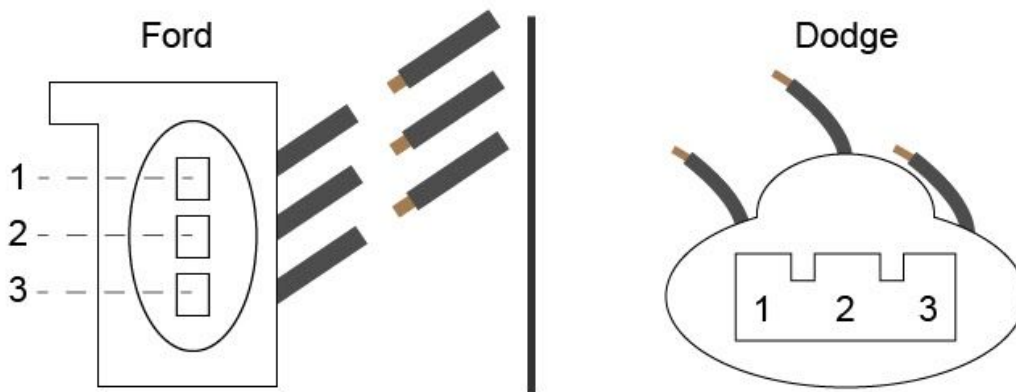
**Step 10 :**

Install the new throttle body onto the intake.

You can now replace the cut off pigtail ends with the included pigtail ends. Reference the included pictures of which wire from the new pigtails to connect to your harness

**TPS PIGTAIL CONVERSION**

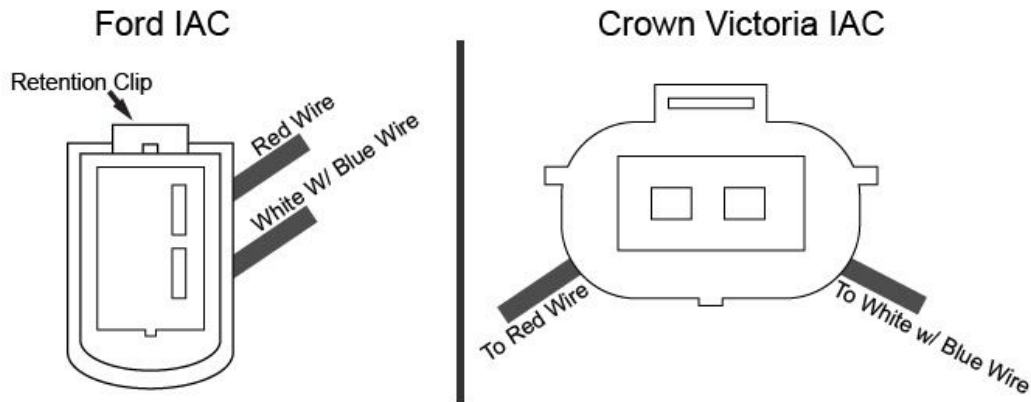
You will be cutting off your Ford TPS sensor pigtail, and replacing it with the Dodge TPS pigtail.



Cut these wires 1 inch from the back of the Ford connector. Then connect Wire #1 from the harness to new TPS pigtail wire #1 on the Dodge using included pink heat shrink butt connectors. Repeat step for wires #2 & #3. Do not concern yourself with the colors of the wires, only the number sequence.

## IDLE AIR CONTROL VALVE CONVERSION

You will be cutting off your Ford IAC sensor pigtail, and replacing it with the Crown Victoria IAC pigtail.



Cut these wires 1 inch from the back of the Ford connector. Then connect Red Wire to new IAC pigtail Red Wire on the Crown Victoria using included pink heat shrink butt connectors. Repeat step for the White with Blue Stripe Wire.

If the IAC pigtail we included has black wires, reference this picture for color orientation.

## For your throttle cable conversion:

You will be using a few parts from your old throttle cable on our new throttle cable. This will give you a factory fitment and attachment to your firewall and pedal. You will keep the plastic piece that attaches to the firewall and also the plastic piece that clips into your throttle pedal.

Begin by cutting your old throttle cable housing 1" from the plastic piece of the cable that attaches to the firewall. Set the plastic pedal piece aside for later.

To remove the cable housing from the firewall pass through plastic part of the factory throttle cable:

Grab the cable housing with pliers.

Hold the plastic piece with your hands.

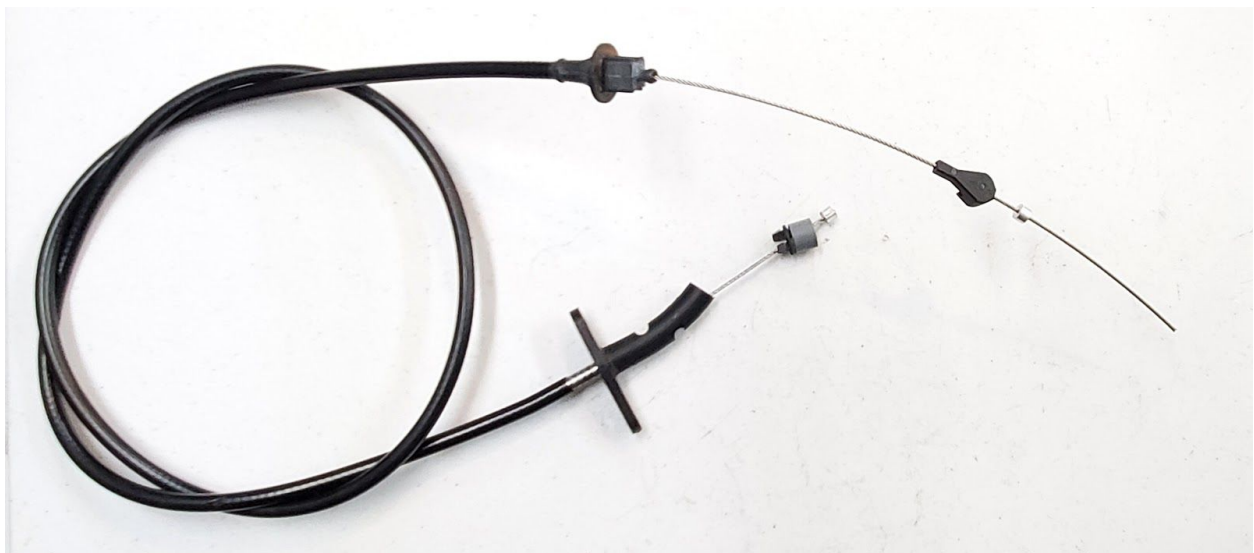
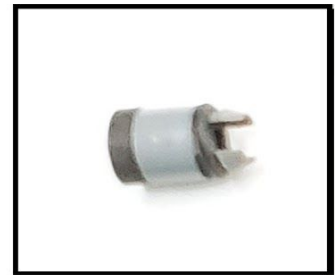
Twist the cable housing back and forth and pull to remove it.

If it doesn't want to detach you will need to dissect it. Slice the outer layer off with a utility knife and strip the sheathing. Then pop the outer wires out with pliers. Remove the inner guts with pliers. Once you pull those it will come out easily. Sometimes you need to chase the hole with a 1/4 drill bit to clean it out. Don't drill too deep though. Go slow and careful. You will use this piece on the new included cable. Once you get it ready it will look like this:



Save these pieces :

The piece that clips into your throttle pedal (small image to the right, - which can look a little different from this examples) and the Firewall Mounting Piece of the Throttle Cable (main image below).



You can now assemble your new throttle cable with all the components. It helps to put your components all together and through before you attach the firewall piece onto the cable



housing. It is a pain to, but if you leave the un-crimped end towards the throttle body it will make setting the length much easier later. In this picture you'll notice the exposed metal. You will want to use some silicone or glue on the metal before you put your firewall piece onto the metal. **ON THE METAL NOT IN THE PLASTIC PIECE!!** Otherwise your glue will get on the inner cable. Usually the plastic piece fits so tight you will need to turn and thread it onto the cable housing. Put some tape over the other end so you don't lose any components while your working. We include an extra aluminum cable crimp in-case you make a mistake and need to shorten it (in next picture).

## Hooking up to the Vacuum Ports:

The large port on the rear of the throttle body is used for the PCV vacuum tube, there are two smaller ports on the front. Use the larger one for your map sensor and the smaller one for your fuel pressure regulator.

The idle air bypass needs to draw filtered air. If you received our air filter base you can simply install the included  $\frac{3}{4}$ " hose onto the idle air control valve. Grease the grommet to allow it to slide onto the  $\frac{3}{4}$ " hose.

You will also notice you receive an elbow to use to hook up the breather vent on the driver side valve cover to the air filter base. Simply run a short length of tube down from the metal air filter base port to the elbow and then over to the port on the driver's side valve cover.