

## **DEDICATED FUEL SYSTEM 00-12031**

## INSTALLATION INSTRUCTIONS

This Nitrous Outlet Dedicated Fuel System is designed specifically for the 2015+ Dodge Charger. If you need any assistance during installation or if you have questions about this item, call our Tech Help Line at (254) 848-4300.

\*\*\*Parts List is in the back of this Installation Guide\*\*\*

#### **Tools Needed For Installation:**

- Drill
- 5/16" Drill Bit
- 1/4" Drill Bit
- Step Bit
- Ratchet
- Extension
- 10mm Socket
- 11mm Socket

- 15mm Socket
- 5/32" Hex Wrench
- 9/16" Wrench
- 11/16" Wrench
- 13/16" Wrench
- 3/4" Wrench
- Trim Tool
- Hose Cutters



## Step 1:

Open the trunk of the vehicle and remove the floorboard. Then, disconnect the battery with a 10mm wrench.



#### Step 2:

Remove the foam insert from the spare tire well. Then place the dedicated fuel systems tank into the spare tire well. The fittings on the tank should be facing the rear of the vehicle, and the tank should be all the way to the front of the spare tire well. Use a marker to mark the mounting hole locations on the fuel systems tank.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



**DEDICATED FUEL SYSTEM 00-12031** 

## INSTALLATION INSTRUCTIONS



## Step 3:

After the mounting holes have been marked, remove the dedicated fuel system from the trunk of the vehicle.



## Step 4:

Use a drill and 5/16" drill bit to drill the mounting holes. Before drilling, look under the vehicle to ensure the area is clear of anything that may be damaged by the drill bit.



#### Step 5

Once the 4 mounting holes have been drilled, use a vaccum to clean any debris from drilling.



#### Step 6:

Place the dedicated fuel system back into the spare tire well, and ensure that the bolt holes are aligned. If they are, place the mounting bolts that came with your dedicated fuel system into the holes.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



## **DEDICATED FUEL SYSTEM 00-12031**

## INSTALLATION INSTRUCTIONS



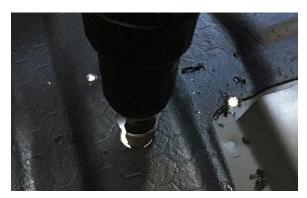
## Step 7:

Mark the locations of the holes you'll need to drill for the hoses to pass through. There are 3 holes that will need to be drilled directly in front of the outlet fittings on the fuel tank.



## Step 8:

After the holes are marked, use a 5/16" bit to drill pilot holes.



## Step 9:

Use a stepped drill bit to make three 1 1/16" holes.



### **Step 10:**

Place the 3 rubber grommets that came with your dedicated fuel system into the holes.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



**DEDICATED FUEL SYSTEM 00-12031** 

## INSTALLATION INSTRUCTIONS



**Step 11:** 

Route the fuel hose through one of the holes.



## **Step 12:**

Once the hose is pushed through, route the hose up and over any suspension or exhaust components. After it's past the suspension, route it towards the drivers side of the vehicle.



## **Step 13:**

Route the hose behind the plastic gas tank cover.



### **Step 14:**

After the hose is through the plastic gas tank cover, route it towards the front of the vehicle following the existing fuel hose.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



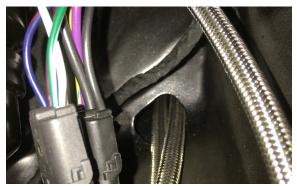
## **DEDICATED FUEL SYSTEM 00-12031**

## INSTALLATION INSTRUCTIONS



## **Step 15:**

Use your hands or a trim tool to pop loose the small trim panel just behind the front drivers side fender well. Then, route the hose up through the fender.



## Step 16:

Route the hose through the hole under the Master Cylinder and into the engine bay of the vehicle. Be sure that the hose is long enough to reach the fuel pressure regulator mounting location, which will be near the middle of the drivers side valve cover.



### **Step 17:**

Thread the 90° hose end onto the dedicated fuel system and place the dedicated fuel system back into the spare tire well of the vehicle. Mark the hose with a marker where you will need to cut it.



#### **Step 18:**

Use a pair of hose cutters to cut the hose to the needed length.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



**DEDICATED FUEL SYSTEM 00-12031** 

## INSTALLATION INSTRUCTIONS



## **Step 20:**

Mount the dedicated fuel system using the 4 supplied bolts, nuts, and washers. Tighten it down with a ratchet, extension, and 11mm socket. You will need someone to hold the nut below the vehicle with a 11mm wrench.



### **Step 21:**

Ensure that the hose has a clean cut. If needed, cut any strands of steel braid that may interfere with the hose end.



### Step 22:

Push the female side of the hose end onto the hose.



### **Step 23:**

Spray some lubricant on the threads of the male fitting, and screw it into the hose. Use 2 13/16" wrenches to tighten the hose end down. After the hose end is tightened down, blow the hose out with a air hose to clear any debris that may be inside the fuel hose.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



## **DEDICATED FUEL SYSTEM 00-12031**

## INSTALLATION INSTRUCTIONS



## **Step 24:**

Thread the hose end onto the dedicated fuel system and tighten it down with a 11/16" wrench. Now repeat steps 11-22 for the other hose.



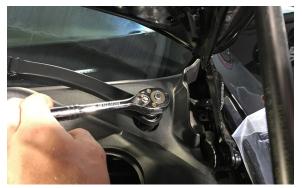
## **Step 25:**

Place a hose end on the rubber vent hose and tighten it onto the tank with a 9/16" wrench. Then, route the other end of the vent hose through the hole in the bottom of the spare tire well.



### **Step 26:**

Remove the caps off of the windshield wiper nuts.



#### **Step 27:**

Use a 15mm socket and ratchet to remove the nuts off of the windshield wipers.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



**DEDICATED FUEL SYSTEM 00-12031** 

## INSTALLATION INSTRUCTIONS



## **Step 28:**

Repeat steps 26-27 on the other windshield wiper.



## Step 29:

Remove the windshield wipers by pulling upwards on them. You may need to lift the wiper off of the windshield to release the tension on the wiper in order for it to come off.



### **Step 30:**

Use a trim tool to remove the 7 trim tabs on the cowl of the vehicle.



#### **Step 31:**

After the trim tabs are removed, pull the windshield cowl upwards to release the remaing clips that hold it in place.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



## **DEDICATED FUEL SYSTEM 00-12031**

## INSTALLATION INSTRUCTIONS



## **Step 32:**

Remove the cowl from the engine bay of the vehicle.



## **Step 33:**

Remove the trim tab on the cowl crossmember that's just to the left of the master cylinder.



### **Step 34:**

Use an electric drill and 1/4" drill bit to drill though cowl crossmember where you removed the trim tab.



#### **Step 35:**

Mount the regulator bracket to the cowl crossmember using the supplied bolt and nut. The bracket will mount on the backside of the crossmember, and face the front of the vehicle.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



**DEDICATED FUEL SYSTEM 00-12031** 

## INSTALLATION INSTRUCTIONS



### **Step 36:**

Mount the regulator and install the fittings so that they match this picture. Ensure that the orientation of the fittings will clear everything under the hood.



## **Step 37:**

Remove the fittings and place a drop of blue loc-tite on the threads of the fittings. Then, screw the fittings back into the regulator. Use a 3/4" wrench or crescent wrench to tighten the fittings down.



#### **Step 38:**

Wipe off any excess loc-tite with a rag or blow it off with an air hose.



#### **Step 39:**

Take note of which hose is the fuel feed and which is the return fuel hose. Thread the return hose onto the fitting coming out of the bottom of the regulator. Thread the fuel feed onto the 90° fitting on coming out the side of the regulator. Tighten the hoses with a 11/16" wrench. Do not over tighten them.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



## **DEDICATED FUEL SYSTEM 00-12031**

## INSTALLATION INSTRUCTIONS



## **Step 40:**

Mount the fuel pressure regualtor to the bracket using a 5/32" Hex head wrench. Then, mount the bracket to the cowl crossmember using a 10mm socket and ratchet.



## **Step 41:**

Measure the distance between the fuel pressure regulator and fuel solenoid, then cut the remaining hose to that length. Place a female hose end on both ends of the hose.



### **Step 42:**

Spray lubricant on the threads of the male portion of the hose end, then thread it into the female hose end.



### **Step 43:**

Tighten the hose ends with 2 13/16" wrenches.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



**DEDICATED FUEL SYSTEM 00-12031** 

INSTALLATION INSTRUCTIONS



## **Step 44:**

Blow the hose out with air, then tighten the fuel hose onto the fuel solenoid with a 11/16" wrench. Then, tighten the other end of the hose to the fuel solenoid with a 11/16" wrench. Do not overtighten the hose.

Your dedicated fuel system is now installed. Use the attached wiring diagram to complete the wiring of your fuel system. After the system is wired, check for leaks by turning the system on and inspect all hoses and fittings for signs of fuel.

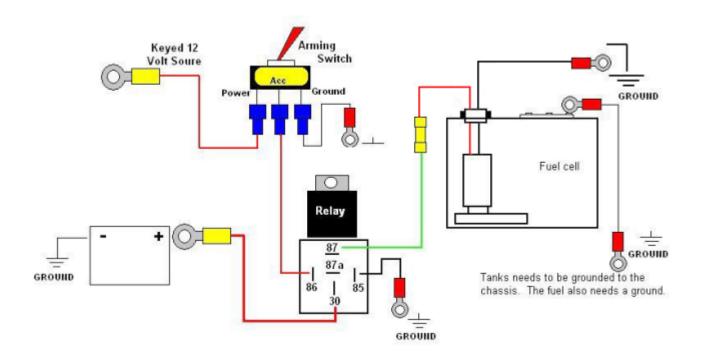
305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



**DEDICATED FUEL SYSTEM 00-12031** 

## INSTALLATION INSTRUCTIONS

## **Dedicated Fuel System Wiring Diagram**



305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



**DEDICATED FUEL SYSTEM 00-12031** 

INSTALLATION INSTRUCTIONS

## **Sealing Your Fittings**

When sealing NPT fittings for your nitrous or fuel system, we recommend using Blue Loc-Tite. If you use Teflon Tape or a liquid Teflon sealant, you risk pieces of Teflon coming loose and entering your nitrous or fuel system. These small pieces can affect the performance of your system or cause damage to your nitrous/fuel system and engine. AN type fittings are self sealing, and do not need any type of additional sealant.

### **Setting Your Fuel Pressure**

Nitrous Outlet jetting recommendations are based on flowing fuel pressure rather than static fuel pressure. This means that in order to set your Fuel Pressure Regulators output pressure, you'll need to set the regulator with fuel flowing through it. When setting the flowing fuel pressure you need to use a Flowing Fuel Pressure Test Gauge. If you or a shop near you doesn't have one, they can be ordered from Nitrous Outlet using part number 00-63010.

Your Aeromotive Fuel Pressure Regulator is capable of running both low pressure (3-20PSI) and high pressure (20-60PSI). Your Fuel Pressure Regulator uses springs to switch between low and high fuel pressure. When you receive the Fuel Pressure Regulator the low pressure spring is installed in it, and the high pressure spring is inside the hardware package for your Dedicated Fuel System. To change the spring inside the fuel pressure regulator, carefully disassemble the regulator using the 4 bolts that hold the top (black) and bottom (red) halves together. Once the bolts are loose, the regulator should come apart easily. Slowly pull the 2 halves apart from each other, paying close attention to how the regulator is assembled. It is imperative that once you change the springs out that you assemble the regulator back together correctly. If it's not assembled correctly, you could have problems maintaining a steady fuel pressure.

## **Forced Induction Applications**

The vacuum fitting located on your fuel pressure regulator does not need need to be used unless you are also running a Supercharger or Turbocharger. In the event that you are using forced induction, this fitting will be for your boost reference. If your nitrous system injects before the Supercharger or Turbocharger (via Nozzle System or Throttle Body Plate System) you will not need to use the boost reference port. However; if you are injecting the nitrous on the boosted side of the Supercharger or Turbocharger (Spray Bar Systems or Direct Port Systems), you will need to use the boost reference port on the fuel pressure regulator. Connecting a vacuum line to the regulator will ensure that as your boost rises, the fuel pressure will rise accordingly. This will keep a steady fuel pressure under boost conditions.

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300



## **DEDICATED FUEL SYSTEM 00-12031**

## INSTALLATION INSTRUCTIONS

#### **PARTS LIST:**

**Dedicated Fuel System Tank** 

Fuel Cap

Fuel Pressure Regulator

Fuel Pressure Regulator Bracket

Fuel Pressure Regulator High Pressure Spring (Low Pressure Spring is installed in Regulator)

2 x 3/8" NPT Hex Plugs

2 x 3/8" x 6AN 90\* Fittings

3/8" x 6AN Straight Fitting

4 x 6AN Straight Hose End

3 x 6AN 90" Hose End

6AN 90\* Push-Loc Hose End

1ft 6AN Push Loc Hose

40ft 6AN Stainless Braid Fuel Hose

Relay & Harness

305 S. 28th street Waco, TX 76710 - TEL 254-848-4300