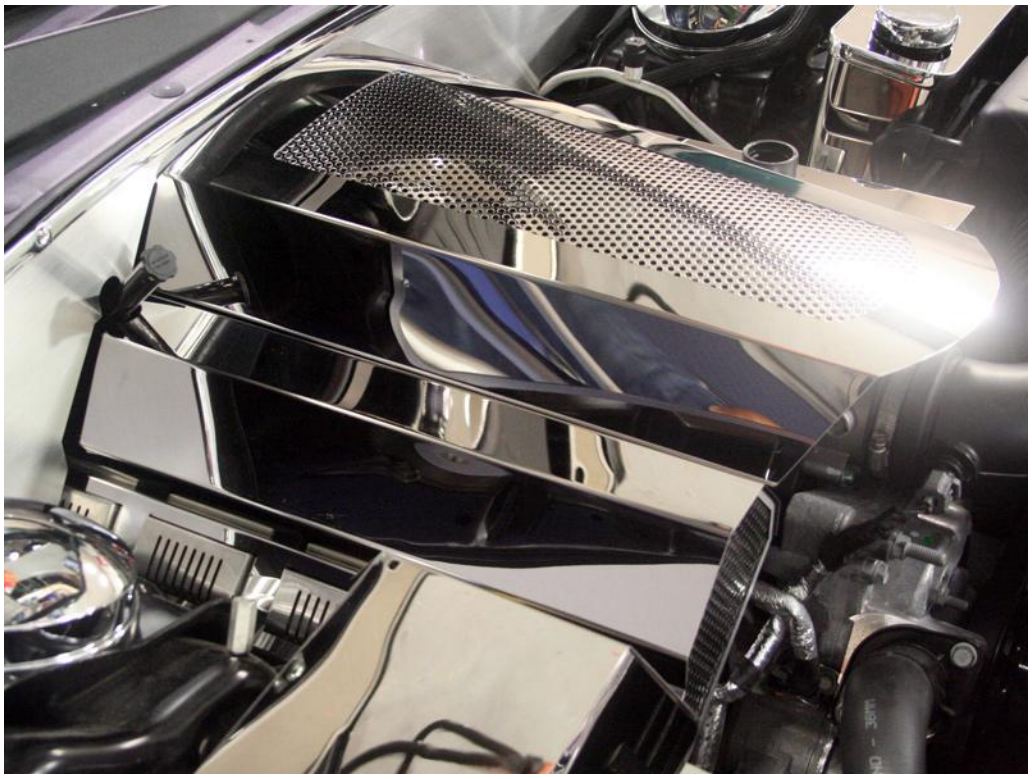
AMERICAN CAR CRAFT INSTRUCTIONS

CHRYSLER 300 5.7L HEMI FUEL RAIL COVERS & PLENUM COVER PKG

Part #333013 Fuel Rail Covers and/or Part #333019 Plenum Cover



PARTS INCLUDED:

333013 FUEL RAIL COVERS:

8-brushed stainless coil pack covers
16-6MM 1.75" threaded replacement bolts
16-stainless 6/32 - ½" truss head coil pack cover attachment screws
2-polished stainless fuel rail covers
4-long zip ties
1-aluminum extension bracket
1-¼" 20 nut and bolt attached
3-90 degree rubber elbow
4-3/4" #12 pan head stainless Philips screw

333019 PLENUM COVER:

1-plenum cover promoter
8- ¾" attachment cookies attached
1- chrome oil cap
1- packet of adhesive
1-5amp fuse holder (Illuminated version only)

This kit will greatly enhance the appearance of the currant Chrysler 5.7L HEMI engine. In order to install these accessories you will need to perform a few mild alterations in order to allow the engine to be able to receive each component!

PROTECTIVE LINER INFORMATION: Your new accessories will come to you with a protective surface liner. Leave this liner in place until the installation is complete to prevent finger prints and/or possible scratches during installation.

1. The first step will be to remove the factory engine shroud. Also remove the four stud bolts that secured the factory engine shroud and then snap them back into the removed cover for re-use if you decide to return to stock in the future.

2. Install the (4) ¾" #12 pan head stainless screws to secure the fuel rails. See images 1 & 2 below.

Image 1

Image 2

3. With the factory cover removed take a good look at the engine so you can familiarize yourself with a few things that will need to be done. One of the first things you will notice is the two main vacuum hoses on both sides of the factory plenum. These two hoses will need to be rerouted and tightened up in order to allow the new covers to set in place properly. We will start with the passenger side first. You have been provided with three 90 degree rubber elbows. Two of these elbows will be used on this side. Remove the rubber hose from the plenum. Then attach the two rubber elbows provided to each port. Then bring the factory hose close to the elbows to determine the length and cut the factory hose so that you will be able to insert the two ends into the elbows thusly creating a tighter configuration of this vacuum hose. It is important that you accomplish this so that the new configuration rests just inside the fuel rail as in the pictures 3 & 4. This will allow the new plenum cover to rest onto the factory's flat fuel rail without any obstruction from the vacuum hose.

Image 3

Image 4

4. The driver side hose leading up to the factory air box will also need to be tightened up and rerouted. This hose emanates from the side of the engine and juts out over to the factory air box. Remove this hose. We will use the remaining 90 degree elbow to re-direct the new hose provided towards the front of the engine which will hide under the front end of the new fuel rail cover. Attach the new hoses 90 degree elbow directly to the factory air box so that the hose turns down towards the floor. Then reroute the hose over to the plenum in such a way as to allow it to lead up to the plenum port. Attach the rubber elbow so that the end of the elbow faces the front of the car. Bring the new hose up to this end making sure there are now kinks in the hose that may limit its ability to allow vacuum and also have enough slack to allow the new fuel rail cover to set in place properly. Depending on how exactly you route this new hose you may or may not need to trim the length before you attach it onto the new elbow.

5. The next step will be to create some needed clearance at the far left passenger side corner firewall area. At this location there are several wire harnesses as well as a relatively large vacuum actuator. You have been provided with an aluminum extension bracket. The purpose of this bracket is to allow you to unbolt this vacuum actuator and reattach it a little further back into the firewall area thusly creating needed clearance for the new fuel rail

cover. Simply unbolt the actuator from its perch, attach the new extension bracket to it using the nut and bolt provided with the bracket and then reattach the actuator to the factory perch. The extension will effectively set the actuator further back towards the firewall.

6. Now that you have successfully relocated the factory vacuum actuator you would have noticed the wire harness routed along this very same area. These harnesses will need to be tightened up to create clearance. Simply zip tie the harness to the actuator bracket effectively pulling them away from the engine creating the needed clearance.

7. The last thing you will need to do will be to reposition the factory wire harness that supplies the coil packs. Simply remove the two wire harnesses from both side of the engine from there perches and set them in between the factory valve cover and plenum. This procedure will allow the new covers to set atop the factory fuel rails without clamping themselves over these harnesses thusly eliminating any possibility of chafing the harnesses. You will most likely need to detach each harness from the coil pack connectors in order to roll them over to their new placements and then reattach.

8. Now that you have successfully prepared the engine for the new accessories the rest is pretty strait forward. Remove all (16) factory coil pack attachment bolts and replace them with the threaded bolts provided with your kit. Then remove the protective liners and simply attach all (8) custom coil pack covers using the attachment screws provided. Leave the two far screws of the two rear covers out at this time.

9. Set the new fuel rail covers over the factory fuel rails. You will most certainly need to tweak the overall shape of the new covers in order to allow them to set nice and contoured to the engine. Simply take a look at what might need to be done by initially setting them into position and then remove them to adjust the covers by hand so that they set in place perfectly. Once you have been able to get the covers to set nicely, align the small hole in the new covers with the last hole in each of the two back coil pack covers. This may require a small flash light to see the whole alignment and perhaps a small #3 screw driver or scratch awl to align the holes and then place the remaining two stainless screws with a stubby screwdriver to set the two covers. At this point in the installation take a look at the hoses and all wire harnesses to make sure there is adequate clearance for everything and plenty of clearances.

10. Now you are ready to remove the protective liner from the Fuel Rail Covers.

11. Finally the next step will be to set the new plenum cover. You will notice that the new cover has four small hook and loop fastener attachment cookies attached to the underside flat rails on both sides. Remove the 8 halves from the cover and set the new cover directly to the installed fuel rail covers. At this point you will need to tweak the shape of the plenum cover so that the rear end aligns with the top edge of the fuel rail covers and the front end sits as low as possible to the throttle body. This is very important in order to maintain adequate clearance between the new plenum cover and hood liner. Ideally it should rest directly on top of the throttle body. This can be achieved by simply forming the cover by hand until it rests in place in this way. Once you have tweaked the shape like this, mark the angle of the plenum covers position to the fuel rail covers using a length of masking tape. Also mark each of the 8 locations of the hook and loop fastener attachment cookies attached to the plenum cover to the tape. Then remove the cover and swipe the fuel rails with the adhesive promoter at the 8 locations. Then set the hook and loop fastener cookie half's removed earlier and set them beneath the tape line in the positions marked. Then remove the protective liner and set the plenum into position to finish the installation.