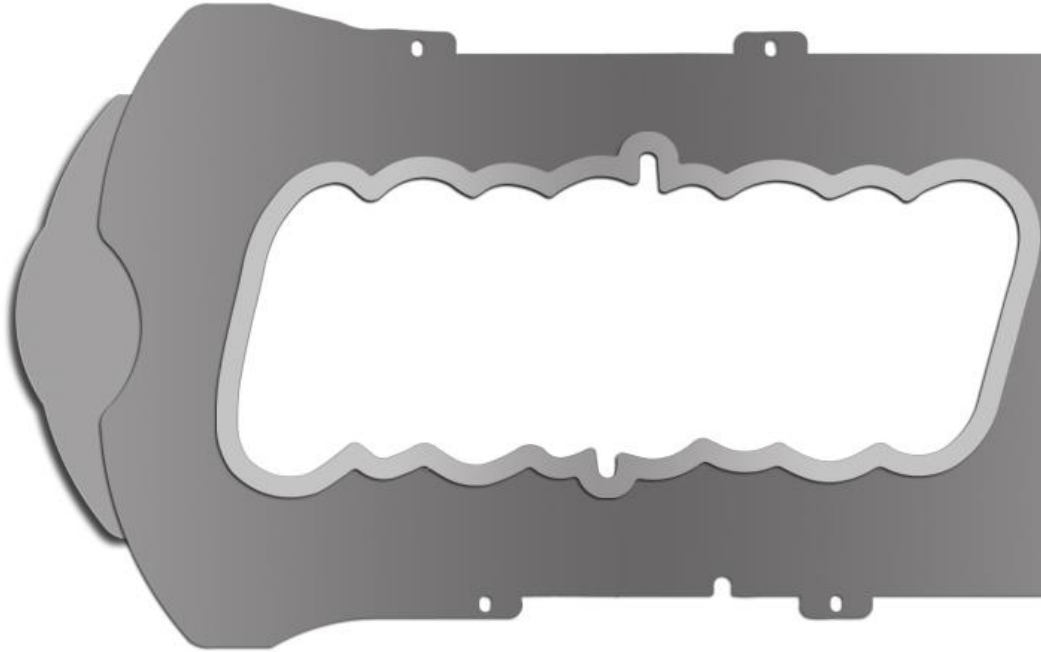




## **AMERICAN CAR CRAFT INSTRUCTIONS**

### **2010 Camaro LS3 Custom Plenum Shroud Cover**

#### **Part #103035**



#### **PARTS INCLUDED:**

- 4-1/4" 20 Clip Nuts
- 4-1" Flat Head Bolts
- 4-5/16" Stainless Washers
- 4-Yellow spacers

**Introduction:** This new and unique accessory has been designed to expose the factory plenum cover allowing you to paint the factory plenum or chrome plate it for an even more custom look.

**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. In order to install this part you will need to follow the engine wire tuck procedures on the following page. This will explain how to rearrange a few things so that you will have a nice neat engine set up prior to this installation.

### **INSTALLATION INSTRUCTIONS FOR WIRE HARNESS AND LINE TUCK**

This instruction is to allow you to rearrange the factory placement of wire harnesses, vacuum lines and heater hoses to allow the installation of American Car Crafts New Camaro Engine Bay Dress up Accessories. Providing an alternative to the factory engine shroud cover, the procedure for rearranging the factory placement of these items are relatively simple and straight forward. Designed to clean up the look of the engine and will allow you a more direct access to the coil packs, fuel injectors and fuel lines much in the same way you would be able to in a Corvette.

This procedure is completely reversible and in no way will void any warranty or permanently alter or damage the engine and or its performance.

**You will need to purchase:**

3' of 5/8 Heater Hose

3' of 3/4 Heater Hose

8' of 3/8 Standard Vacuum Hose

1-Vacuum Quick Connect Release Disk

1. Remove the factory engine cover and save for restoration purposes.
2. Now that the engine is uncovered take a minute to look over the engine to identify the areas we will rearrange. You will notice the two heater hoses strung over the engine as well as hard plastic vacuum lines and top mounted wire harnesses. You will also notice the factory fuel line strung across the engine leaping over to a wheel well bracket. In the next several steps we will reposition these things into a more appealing arrangement.
3. The first thing you will need to do will be to temporarily remove the factory air tube, releasing the two attached clamps, and vacuum line protruding from the left side of the tube. This vacuum tube is a quick release and need only be examined to see how to release it.
4. Next remove the four 10mm bolts securing the aluminum throttle body and remove it for now. At this time you may want to think about polishing the throttle body while it is detached from the engine. This is a relatively easy thing to do and will look great with your new accessories.
5. The next thing we will do is to remove the factory heater hoses and save them. You will notice that the two heater hoses contain a quick disconnect joint at the front side of the motor. Remove the steel clip at the center of the two connectors. Place a drain bucket at this area to catch the antifreeze. Clamp the hose as to not allow the fluid to escape when you are ready to separate the hose. You can do this easily by clamping a couple of vise grips on either side of the connector. When you are ready simply pull the connector apart. A limited amount of fluid will escape into your bucket. Tip the end of the connector into the bucket and release the fluid by unclamping the vise grip. Release the fluid from both ends of the hose until the fluid is completely drained. Perform this same procedure for the other hose as well. With the fluid drained completely remove the factory heater hoses from the car and save. Remove the four spring clams from the hoses as you will be using them on the new replacement hoses.
6. Now that the factory hoses have been removed we can now route the new hoses. Starting with the 5/8 hose route the end of the hose behind the passenger side heat shield attached to the wheel well. Route the hose up to the fire wall so that you are nice and tight to the brake lines located there and up to the 5/8 pipe connection. Slide the factory hose clamp onto the end and then attach it to the pipe. Be sure to arrange the hose so that there are no kinks and/or bad twists in the hose. Then simply cut the hose at the other end so that it will line up nicely to the water pump location at the engine and clamp it there as well. Perform the same exact procedure with the 3/4" hose. Secure the two hoses at the fire wall where they cross the brake lines with a good zip tie to finish this part of the engine tuck.
7. The next step in our procedure will be to reroute the two black plastic vacuum lines running over the top of the throttle body area. To do this detach each of the quick connect tubes and save. Replace the tubes with your 3/8" vacuum line only rout the tubes under the throttle body opening. You will see that there is plenty of room to do this and the new rubber vacuum hose will slip perfectly over the quick connector tube on the motor providing a perfectly alternate routing. Change each of the two tubes separately to make sure you don't crisscross the connections. Route the long vacuum tube under the driver side coil pack bracket completely concealing this tube until it comes up to the rear vacuum line connection point.
8. Remove the last vacuum line from the valve at the front of the passenger side engine head completely and replace this line as well routing it along the wire harness that stanches across to the wheel well bracket. You will need a small plastic release tool for this line. This can be found at any auto parts store costing less than a dollar.

9. Next remove the plastic engine cover retainer by removing the single 10mm bolt securing the one end. Once removed lift the bracket off the fuel line and then replace the bolt. Save this bracket for restoration.
10. The next step will be to reposition the engine fuel line. Remove the 10mm bolt holding the single line clamp to the engine. Once this is released snip the end of this bracket so that the hole will become a notch using a common tin snip. Rotate the entire line so that it will be rerouted behind the engine. This line will rotate easily at both connection points allowing you to relocate the line bracket at the rear passenger side plenum bolt location. Loosen this bolt and then slide the bracket you snipped earlier and then secure. Because the metal line is very stiff you will need to manipulate the line a little to get the right placement. Tip the passenger side end so the line will be able to be routed in back of the heat shield you routed the heater hoses earlier and then zip tie its position to the brake line there so that it is nice and secure.
11. The last thing you will need to do is tuck the three main wire harnesses so that they will no longer be stung over the top of the coil packs. To do this removes all the fasteners of the harness. Detach each of the spark plug wires on the passenger side and route the lower harness under the coil pack bracket. You will notice a hole in this bracket. Use this hole to secure the harness using a zip tie. Reinstall the spark plug wires. The two remaining wire harnesses can be tucked just below the fuel injectors by unplugging each of the injectors and tucking the two harnesses below the injectors and then simply reinstall the injector connectors to finish the engine line tucking procedure.
12. Replace the factory air tube assembly.

## **INSTALLATION INSTRUCTIONS FOR PLENUM COVER**

1. With the engine wire tuck procedures completed the first step will be to install the Four 1/4 20 clip nuts provided in your kit directly to the newly exposed tabs protruding from each of the two fuel rails. Set the clips in place so that the threaded sleeve of the clip nut faces inward toward the plenum.
2. You have been provided with four flat headed bolts and four tight stainless washers. Place each of the bolts through a washer. Set the new shroud over the fuel rails and align the holes. This may require you to slide the clip nuts around a little until you get correct alignment. It is important to know that the new shroud has been designed to not touch the plenum leaving a varying space all around the part. Should you elect to paint the factory plenum cover; this space will serve you well in not damaging the plenum while allowing lighting to shine up through if you chose to install the lighted version of this new shroud. Although it should not be necessary to adjust the shape or angle of the new plenums sides, we have supplied some spacers to allow you to set the new shroud to the fuel rails without warping and or changing this angle. Simply set the new shroud in place to determine if spacers are needed, if any at all.
3. Once you have achieved a nice alignment and everything looks to be nice and even simply install the bolts. **TECH INFO:** the tight stainless washers need only be used if you are also installing the ACC custom fuel rail covers. This washer is provided to create a space for the fuel rail cover to slide onto. If you are not installing these parts at this time do not use the washers and simply snug the bolts after removing the protective liner.