

2010-up Camaro S/C Engine covers Installation guide

Fits Whipple equipped 5th Gen Camaros

Items needed:

10 mm deep socket

Ratchet

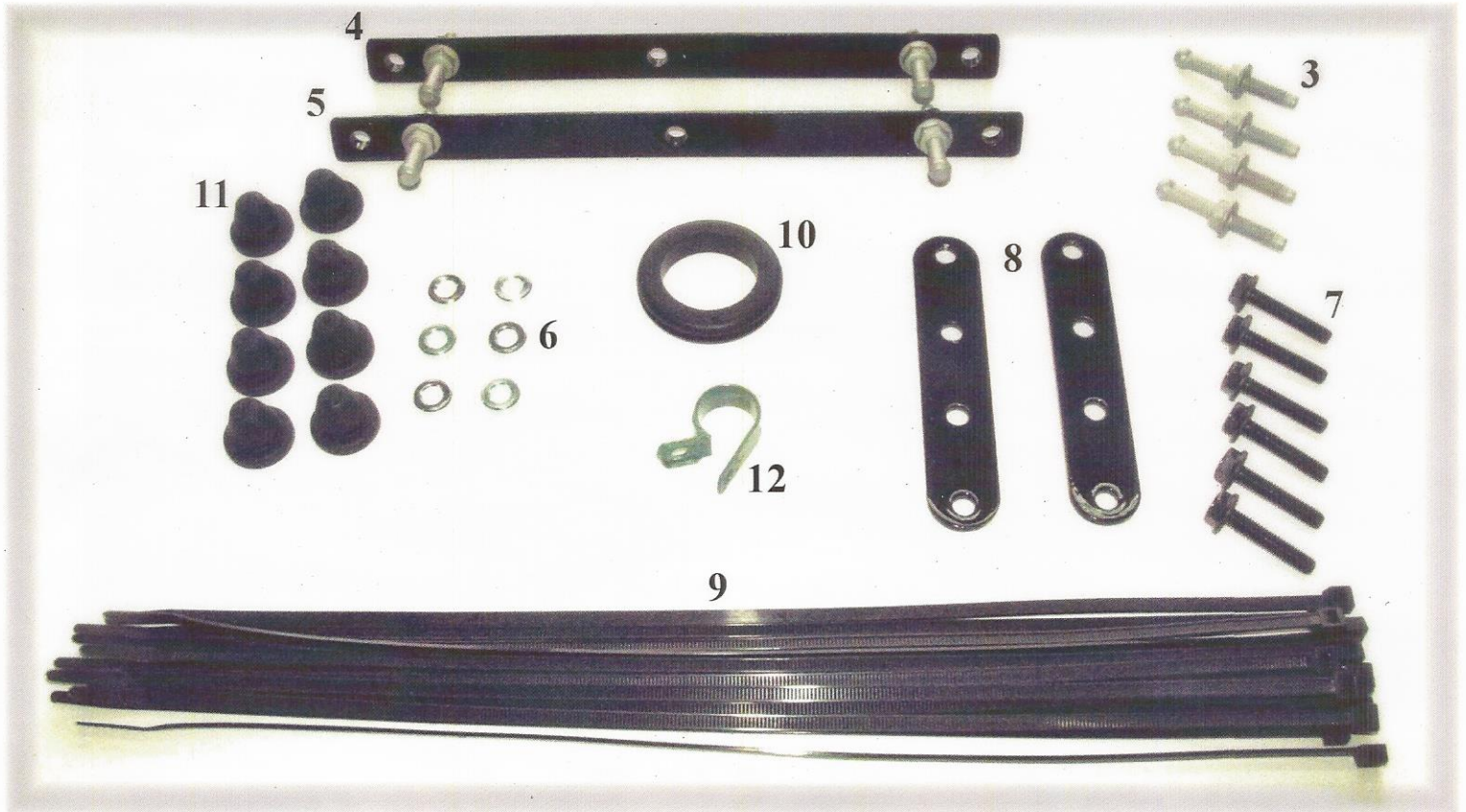
Pliers/side cuts

Safety glasses

Shop rag

Please read instructions carefully before beginning the installation.

S/C Cover Parts List



Part Number

Qty

1) Engine cover, left (not shown)	1
2) Engine cover, right (not shown)	1
3) Lower stud	4
4) Upper stud plate assembly, left	1
5) Upper stud plate assembly, right	1
6) 3/16" metal spacer	6
7) M6 x 1 x 30 mm bolt	6
8) Hose bracket	2
9) Cable tie	14
10) 1 1/2" grommet	1
11) Engine cover mounting grommet	8
12) Loom holder	1

Pre-assembly left side (driver's side)

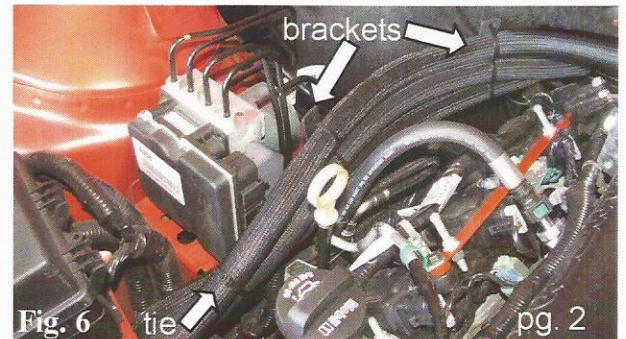
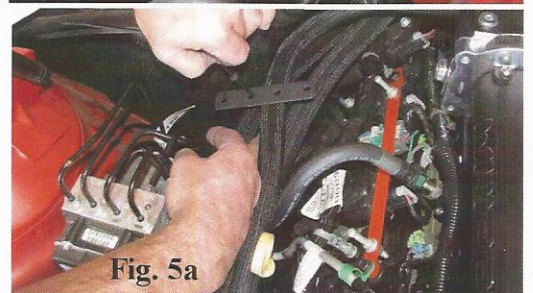
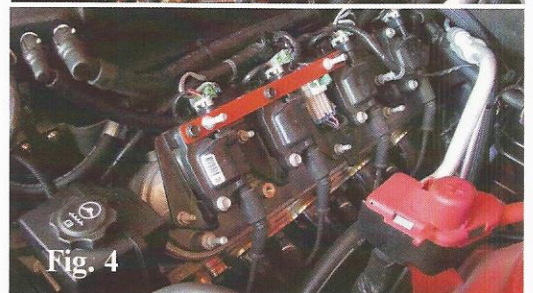
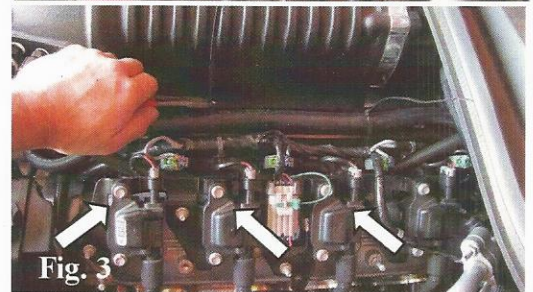
Important: If still installed, remove the stock engine cover mounting stud located on the lower front portion of the left valve cover. It is not the same size as those we supply. Locate two of the #3 lower studs. Install them in the locations shown in Fig. 1.

Using two #9 cable ties, secure the large vacuum hose to the top of the fuel rail as shown in Fig. 2. It will be helpful to pre-bend the tie for feeding around the fuel line. **Do not overtighten the tie which will collapse the hose. If this happens remove the tie and install another.** Use side cuts to trim the long end.

Remove the top bolt from each of the first three coils. See Fig 3. Locate the #4 left stud plate assembly. It is the shorter of the two stud plates and has an "L" stamped on it. Also locate three of the #7 30 mm bolts and three of the # 6 spacers. With the "L" towards the front of the motor, insert a #7 bolt through the first mounting hole and insert a #6 spacer on the *bottom* side. While holding the spacer in place, insert the bolt through the first coil and install appr. 2 turns. Carefully slide a spacer under the next mounting hole, insert another bolt and start it appr. 2 turns. Repeat this for the third mounting hole. Level the bracket vertically and tighten all three bolts. See Fig 4.

Pre-assembly right side. (passenger's side)

Locate one #8 hose bracket and three #9 cable ties. Starting with the bottom hose, secure the bracket to the hoses as shown. **IMPORTANT** The tie should be snug, but loose enough that the hose can still slide back and forth in the tie. Repeat this for the middle hose, then the top hose. Repeat this process for the remaining #8 hose bracket. Locate the brackets as shown. See Fig 5a and 5b. Install a #9 cable tie and locate brackets in locations shown in Fig.6.



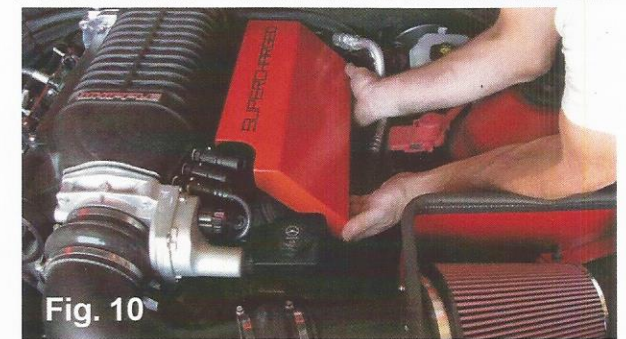
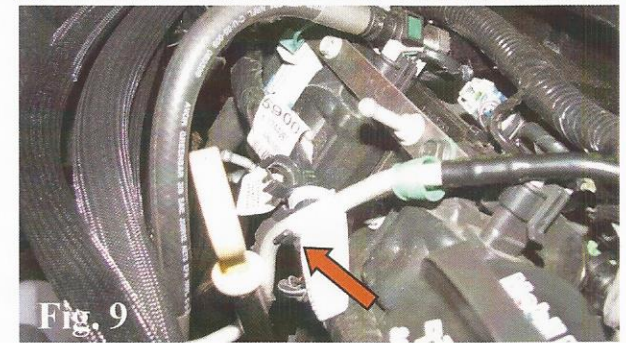
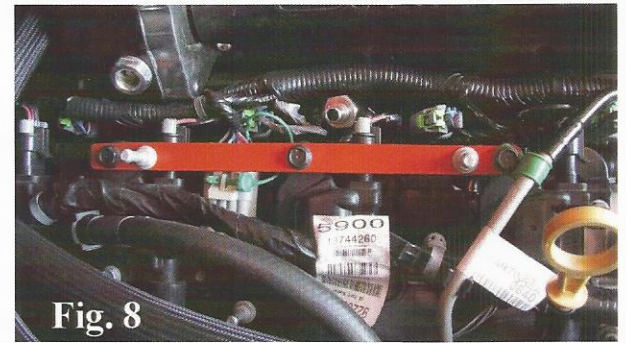
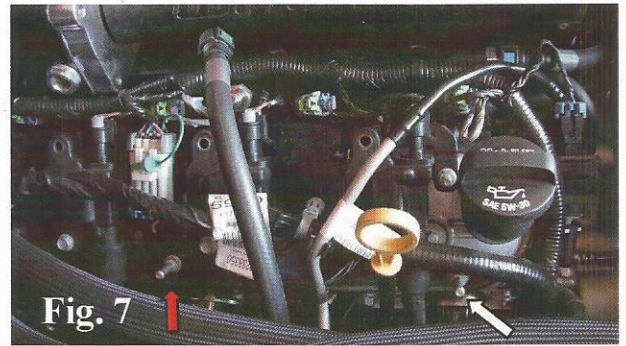
Using your 10 mm socket, remove the mounting bolt in the location of the red arrow shown in **Fig. 7**. Replace the bolt with a #3 stud. The remaining #3 stud will mount in the threaded boss below the oil cap. See **Fig. 7**.

Like the left side, remove the top bolts from the *front* three coils. Locate the #5 right stud plate, three #7 30 mm bolts, three #6 3/16" spacers and the #12 loom holder. The "R" on the stud plate will go towards the front of the car. place the #12 loom holder around the 1/4" metal line as shown in **Fig 8**. Insert a #7 bolt through the #12 loom holder, then through the front mounting hole of the stud bracket. Insert a #6 spacer on the *bottom* side and start bolt appr. 2 turns. Install the remaining two mounting bolts using the spacers on the bottom side between the bracket and the top surface of the coil. Level the bracket and tighten the three bolts. **IMPORTANT** While tightening the bolt with the loom holder, make sure the 1/4" line is snapped into the lower factory retainer as shown in **Fig. 9**.

At this time, make sure the coil harness and all wiring is clear of the fuel line for easy on/off of the fuel line. Unplug the coil and re-route if necessary.

Left engine cover installation

We recommend you install the left cover first to become familiar with installing the covers as it has fewer obstacles to deal with. Locate the left cover and four #11 engine cover grommets. Install the grommets in the mounts on the bottom of the cover. This is done by pushing the grommet in and then rotating it until it is seated. Working from over the left fender, use your fingers to align the lower grommets with the lower studs. Do not seat the grommets at this time. After lower grommets are sitting atop the studs, either look under the front of the cover or wiggle the upper portion of the cover to make sure the upper grommets are on top of the studs. Next, push on the outside of the cover to seat the grommets. **IMPORTANT** Only push hard enough to seat the ball and socket. Excessive pressure will cause the stud to puncture through the grommet. Gently pull on the cover to ensure all grommets are seated. Keep in mind you will feel a small amount of play in the cover. **TIP-** When removing the left cover, keep your hand between the cover and the A/C line towards the rear to prevent the cover from contacting the line when the grommet pops off of the stud.



The engine must be completely cool and the key removed from the ignition before proceeding with the passenger side cover installation.

Even with the key off, the fuel line may be under pressure.

Locate the right side cover, #10 1 1/2" grommet and the remaining four #11 engine cover grommets. Install the #10 O-ring in the 1 1/2" hole on the engine cover. Next, install the four engine cover grommets in the mounts on the back of the cover in the same fashion as the left side.

Disconnecting the fuel line

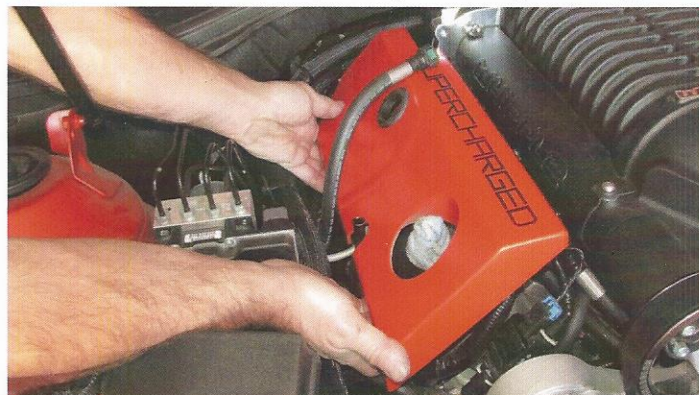
Wear safety glasses and have a rag under the fuel line to prevent spillage. Push the fuel line inward a small amount and fully depress the green button on the side of the line. While keeping the button fully depressed, pull outward to disconnect the fuel line. While removing the line you can position the rag around the entire fitting to shield from possible spraying of fuel. A small amount of fuel will exit the line-this is normal. Just use the rag to absorb it.



Remove the engine oil dipstick and the oil fill cap. Like the left side, use your fingers align the lower grommets with the lower studs.

Next, fully seat the **lower grommets only**.

Lean the cover outward and insert the fuel line through the large hole with grommet. Look around the cover to align the fuel line fitting with the fuel rail nipple. When aligned, push the fuel line all the way onto the nipple. You should hear a click when it is engaged. Pull outward on the line to make



sure it is fully engaged. Without starting the car, we recommend you "key up" the car at this time. This will allow the fuel pump to start and you can visually check for leaks. If you have no leaks, turn the key off and continue with the installation.

Look under the cover to be sure the upper grommets are sitting atop the mounting studs.

Gently push on the outside of the cover *within* the area of the two top mounts. Do not push on the front third of the cover as there are no mounts to engage in that area. Gently pull on the cover to be sure it is seated. Keep in mind there is a small amount of play in the mounting system. **Re-install the engine oil dipstick and the engine oil cap at this time.**

Final check- due to engine movement, components can't be in contact with the engine covers. Closely inspect both sides to be sure there is no contact between the covers and any fuel lines, water lines or wiring. Contact can result in wear and possible rupturing of lines. If there is contact, use the supplied cable ties to secure components from contacting the covers before starting the vehicle. Congratulations! Your install is now complete!