

AMERICAN CAR CRAFT INSTRUCTIONS

CAMARO VALVE COVER/COIL PACK COVER SET 26pc ZL1 PART #103056



Parts Included:

- 20 Long Zip Ties
- 2 Stainless Valve Covers
- 8 Coil Pack Covers
- 16 10mm Chrome Bolt Covers
- 1 Large Plastic Gloves
- 1 3/8" Rubber Vacuum Cap
- 1 10" Length of #10 Wire
- 1 Large Ring Connector
- 1 Large Yellow Butt Connector
- 1 48" Length of 3/8" Vacuum Hose

<u>Introduction:</u> This all new design is the first to allow anyone to upgrade the factory valve cover coil pack assembly to an all custom high polished show car look.

<u>Liner Information:</u> 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.

The first step for this application will be to perform a much needed wire tuck procedure. This will rearrange the spaghetti like placement of the factory wire harnesses and vacuum line strummed across the engine.

- 1. Remove the factory engine shroud. Take a while to look at the overall placement of all harnesses and hoses. You will notice that all of these elements have been secured to their locations via factory plastic clips and retainers that have been attached with electrical tape. Remove all fasteners and retainers completely from all harnesses and hoses. This will allow you to reroute and rearrange these elements into a much tighter and out of view placement. Detach and remove all the engines coil packs. As well as any other redundant bolts that may exist on the valve covers. The packs are all the same so there will be no need to mark or number them.
- 2. You have been provided with 20 long zip ties to allow you to use your own judgment as needed to secure all harnesses and hoses nice and tight to the fuel rail brackets and lines. Starting at the passenger side of the engine. The main fuel line hopping over to the engine on the passenger side will need to be detached temporarily. To do this you will need to use a line release tool available at any auto parts store and generally will
 - cost about a buck. You have been provided with a 3/8" rubber vacuum cap to cap the fuel line preventing fuel from leaking out of the fuel rail. The line will have some residual pressure in it so have a paper towel around the line as you release it to catch any overflow. This line will be reattached at the end of the wire tuck procedure only instead of allowing the line to hop across to the engine you will reroute the fuel line towards the firewall and then over to the engine. Your factory fuel line will allow you to do this very easily it will shape and it will look like this was its original path.
- 3. You will notice a black plastic formed vacuum line. This is the fuel tanks vapor line and will need to be extended in order to eliminate it from hopping over to the engine. You have been provided with a 48" length of 3/8" vacuum hose. To install this hose simply detach the factory plastic hose at the two quick release ends and then replace the line by simply pushing the new rubber hose in place. Since this is a vacuum line there will be no need for clamps just makes sure the hose slips over the ridge at each end and the line will stay in place nice and secure.
- 4. At this time you will see exactly just how you will be able to bind all of the wire harnesses for the fuel injectors and coil packs nice and tight to the rails running alongside the engine. The main heavy harness present there is the main engine harness. Route this heavy cable so that it can route around the right side of the engines oil fill neck. Since the cable is relatively large you will need to man handle it a little in order for you to set it into just the right position clearing the way for the new covers. Band all of these elements making sure that you have left enough clearance for the factory engine shroud to snap back into place at the two ball studs provided for it.
- 5. You will notice that there will be two ground leads secured at the side of the engine head. One of these leads (the smaller one) will need to be extended in order to be able to remove it from its original location and reroute it over to the front end of the engine. You will notice an available bracket bolt at the forward end of the head. You have been provided with a 10" length of #10-wire and a large yellow butt connector as well as a large ring connector. Simply snip the factory ring connector off the end of this ground lead and extend it using these simple crimp connectors. Make sure your crimps are very secure as to insure there will have no ground faults in the future. You may elect to solder this extension for extra security. Once the ground lead has been successfully extended simply route it forward loosen the available bolt set the cables end to that location and reinstall the bolt and tighten securely.
- 6. The remaining ground lead is the main ground lead for the engine. This lead will be able to be relocated to the heavy bolt location on the engine blocks side. There will be other ground connections already there so this will

- serve as a completely adequate auxiliary ground location. Simply remove that bolt and then attach the ground and tighten securely.
- 7. With the electrical harnesses secured at this high location the coil pack leads should be set to come down just above each coil pack location. This will set things up so that they look good leading to the coil packs providing a real nice clean detailed and professional look.



Fig.1

- 8. Moving over to the driver side you will perform much of the same procedure only on this side you will be relocating the brake booster vacuum cable as well as an addition but much thinner vacuum line. Neither one of these vacuum lines need to be extended however they both will need to be relocated up high on the rails and that the brake booster vacuum hose is manipulated around the A/C line. This will set things up so that they have plenty of clearance for the new cover without any possibility of chafing any line. It is very important that you consider all harnesses and hoses to have adequate slack for engine movement as well as a free leading set up meaning no kinks or strain to any wires and or hoses. At first this may seem unattainable but however if you take a few minutes to analyze the location and routing of these elements you find that you will be able to rearrange things perfectly without sacrificing or threatening any of these elements. The end result should leave you with all four coil pack connectors nicely aligned to their proper locations. At this time install the factory engine shroud to make sure all of the elements have been successfully tucked under the cover removing them from plain view and that the cover itself will snap in place properly. You should see only the four coil pack electrical leads hanging down from the bottom of the factory engine shroud at this point of the installation.
- 9. Now that you have successfully performed the wire tuck procedure you can move on to installing your new covers. These all stainless covers have been designed to bolt directly to the factory coil pack mount locations. We have supplied you with a pair of large plastic gloves. This is to allow you to remove the protective liner of the

new covers at this point and handle their installation without fudging them up with finger prints as you insert them. Starting on the passenger side set the new cover into position and align the round holes of the new cover with the coil pack mounting hole locations. NOTE: The cover has been designed to fit closely around the oil fill neck so you will need to force a small part of the new cover into this location. Once you have lined everything up simply set each coil pack in place and then remove the protective liners and set the stainless coil pack covers over each pack and then loosely insert each of the eight factory bolts. Do not tighten any of these bolts as this will cause you to bind. Set each bolt in place then once they are all in place you can proceed to tighten them. You have been provided with eight chrome bolt caps. Simply tap on each cap to finish the passenger side kit installation and then snap on all four coil pack electrical connections. Repeat this exact installation for the driver side and make sure there is no obstruction of any wires hoses before you permanently install this side... especially the brake booster vacuum line and or any other lines or wires.

10. Images of the valve cover kit both driver and passenger sides



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