

INSTALLATION METHOD FOR CHEVY LS 2 PIECE VALVE COVER



PCE314.1249



PCE314.1249.01



PCE314.1249.02

APPLICATIONS

Fits LS1, LS2, LS3, LS6, and LS7 engines. The Gen I and Gen V style coil bodies (OE and aftermarket) fit the valve because of its integrated coil mounts.

NOTE: Will work with PCE382.1024 ignition coil.

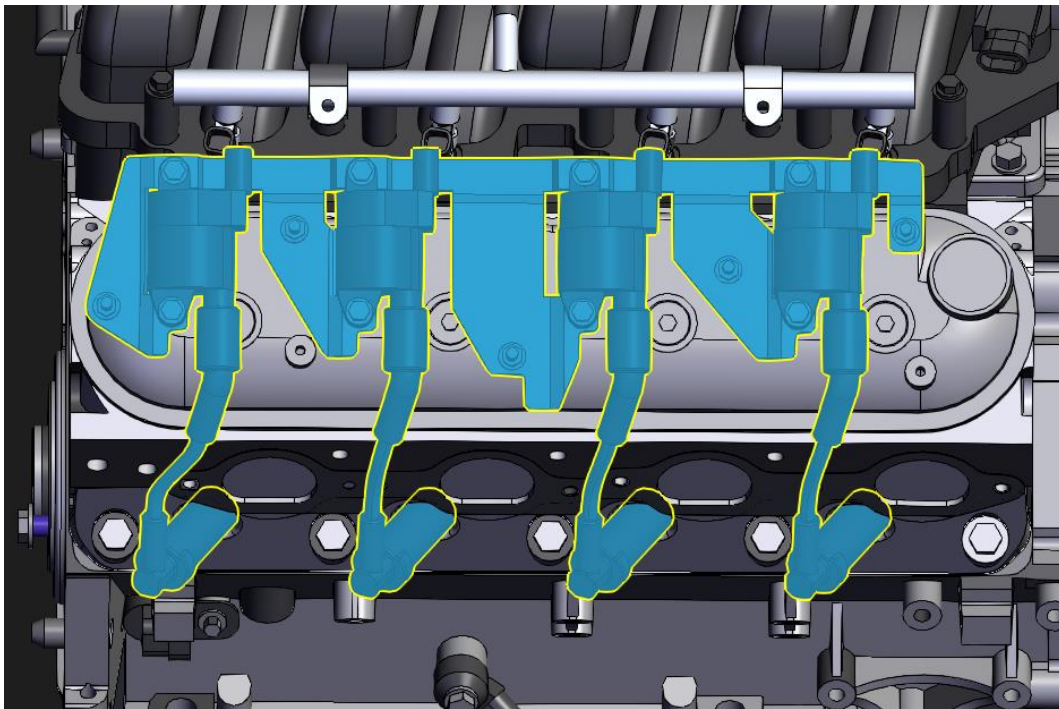
NOTE: The valve covers do not include valve cover mounting bolts. You may re-use the factory bolt assemblies, or other factory height hardware.

NOTE: New valve cover gaskets are recommended, but not required.

CAUTION: Inspect all components that will be reused before installation.

INSTALLATION

1. Before beginning, clean debris off the engine using an air hose.
2. Disconnect the battery.
3. Remove any cosmetic engine/coil covers. Refer to the vehicle's service manual for proper removal procedure. If these covers mount to the original valve covers, they will not be reinstalled.
4. Disconnect the plug wire from each coil by twisting and pulling on each wire boot.
5. Disconnect the main coil harness plug as shown in the figure below.



6. Remove the coils, coil brackets, coil harnesses, PCV hose, and existing valve covers from the vehicle.
7. Remove the original LS valve cover gaskets by gently pulling them out of the valve cover grooves.
8. Remove the valve cover retention bolt assemblies by carefully working the grommets out of the original valve covers. The original grommets are likely to have softened and swelled with age.
9. Reinstall the gaskets by working them into the grooves in each valve cover base. The gaskets will be slightly long as compared to the grooves and will need to be evenly worked around the cover distributing the extra length. Press firmly to properly seat the gasket.
10. Reinstall the factory LS valve cover retention bolts by carefully working each hardware assembly (bolt, spacer, and grommet) into each valve cover base until the grommet is fully seated against the surface of each hole.

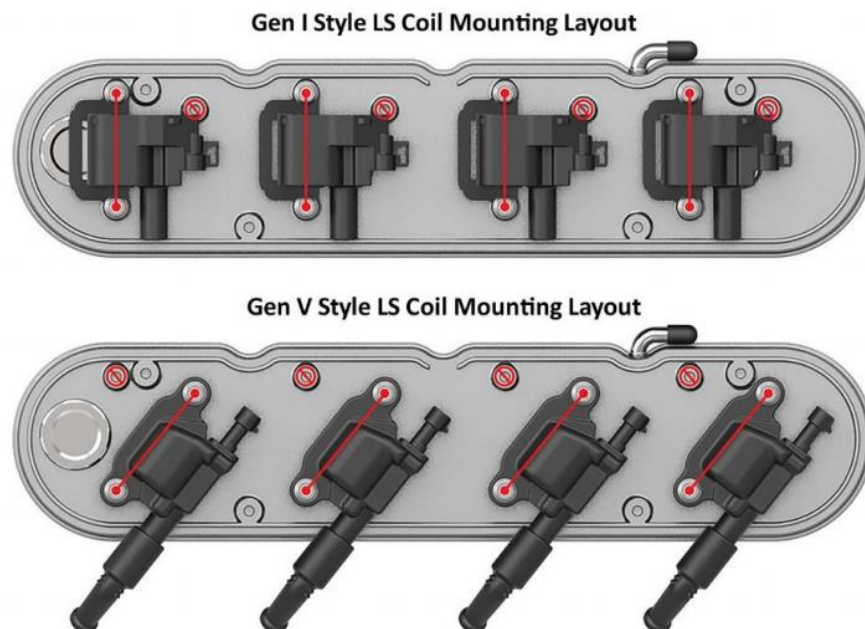
11. Install each valve cover base onto the engine, making sure the gasket remains seated in the valve cover groove and the bolts are making contact with the threads in the cylinder head. Evenly torque each valve cover retention bolt to 106 in/lb (9 ft/lb).
12. Remove the corresponding rubber caps on the internally baffled ventilation tubes of your 2-piece LS valve cover bases and reconnect the PCV/ventilation hose(s).
13. Remove the coil bodies from the original bracket and install them onto the corresponding mounting posts on each valve cover base. Be sure to use the correct coil-specific spacers for your application and the included coil retention bolts. As shown in the diagram below, different upper coil mounting holes are used for Gen I and Gen V style LS coil bodies. (See notes below) Torque each coil retention bolt to 106 in/lb (9 ft/lb).
14. Remove the coil harnesses from the original brackets and plastic conduits. Reconnect the coil harnesses to the individual coils that were mounted onto each valve cover base. Make sure the coil harnesses are not switched to the opposing sides and that each corresponds to the same coil that it was removed from - if harnesses are accidentally switched, the firing order will be wrong. Neatly tuck the wires around the mounted coils and route the main harness so that it will fit through the hole in the valley side of the top-cover once installed.
15. Install the valve cover top-cover using the supplied dress-up bolts and rubber grommets. When installing the top-cover with Gen V LS coil bodies, first carefully slide the ends of the coils through the plug wire holes in the cover, and then rotate the cover lengthwise to route it around the coils and wiring harness. Be sure to check that the main coil harness clears the valley side exit hole and is not being pinched.
16. Reinstall the spark plug wires and rotate the boots for maximum exhaust clearance and visual appeal.
17. Make sure all electrical connections are secure and reconnect the battery.
18. Start the vehicle and verify that there are no oil leaks.

OIL FILL CAP

The billet cap threads into each valve cover base and should be turned clockwise to install and counter-clockwise to remove.

NOTE: Oiling the billet fill cap's O-ring will ease the cap remove/reinstallation process and is recommended.

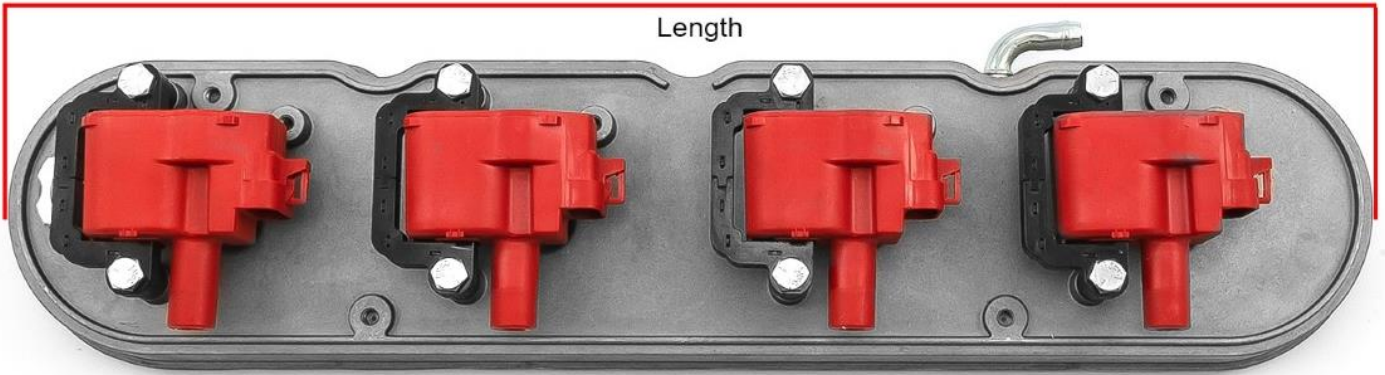
NOTE: When using the Gen I coil bodies, the coil body closest to the oil cap will need to be removed when removing/reinstalling the oil cap. See figure below.



DIMENSIONS

19.500 (in.)

Length



Width

4.500 (in.)

Height

3.625 (in.)