

# Aluminum Valve Cover Adapter – Small Block Chevy to LS Engine

## 241-296 (Polished Finish) 241-297 (Black Finish) 241-298 (Natural Cast Finish)

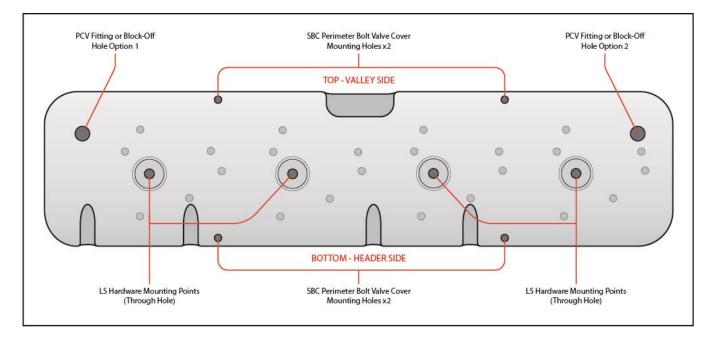
Instruction Sheet – 199R11685

### PARTS LIST:

Qty.	Description
1	Driver's Side Aluminum Adapter Plate (LH)
1	Passenger's Side Aluminum Adapter Plate (RH)
8	LS Adapter Plate Mounting Bolts w/ Washers (2-15/16" long)
16	SBC Valve Cover / Coil Mounting Studs (1-15/16" long)
16	Coil Mounting Spacers (3/4" tall)
16	Coil Mounting Stud Nuts
24	Lock Washers for SBC Valve Covers / Coil Mounting Studs
8	Grommets for LS Adapter Plate Mounting Bolts
2	Barbed PVC Fittings (1/2")
2	Block-Off Plugs (1/2")
2	PVC Baffle Block-Off Plate + Screws

## **REQUIRED TOOLS:**

¼" Ratchet	10mm Wrench
10mm Socket	6mm Allen Head Socket
In/lbs. Torque Wrench	



## **OPTIONAL PARTS:**

Purchasing new LS valve cover gaskets and Small Block Chevy valve cover gaskets is recommended, but not required. These components can be purchased separately.

#### LS Valve Cover Gaskets (Set of 2) – Mr. Gasket P/N: 61040G

#### SBC Perimeter Bolt Valve Cover Gaskets (set of 2) – Mr. Gasket P/N: 5860

\*SBC gasket materials and thicknesses will vary by customer preference and valve cover flange requirements

## **APPLICATIONS:**

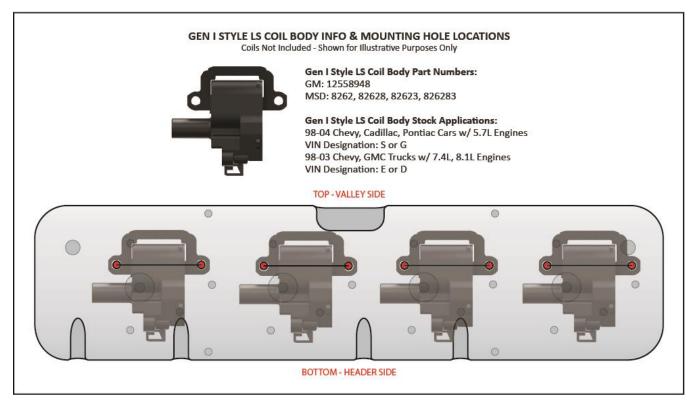
Fits LS1, LS2, LS3, LS6, and LS7 engines using the following style of GM LS coils shown below.

These cast aluminum adapter plates are designed to accommodate (3) different styles of common GM LS coils. Please take a look at the diagrams below to identify which style coil you are using. Each diagram will identify the holes you will use for mounting each coil body, as well as the orientation of each coil so that the coil harness and spark plug wires can be routed correctly and reside underneath the valve cover.

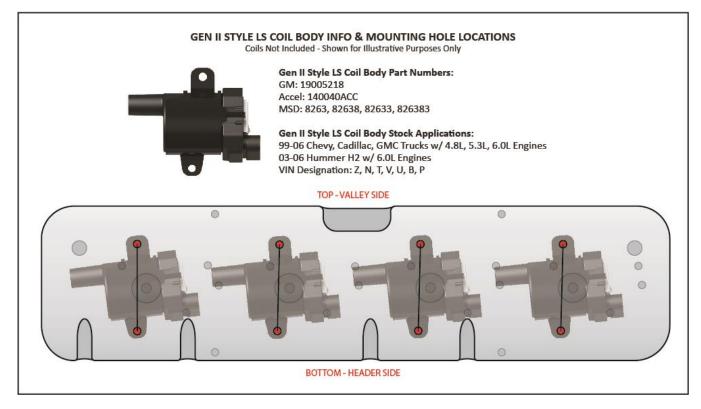
## LS COIL BODY IDENTIFICATION:

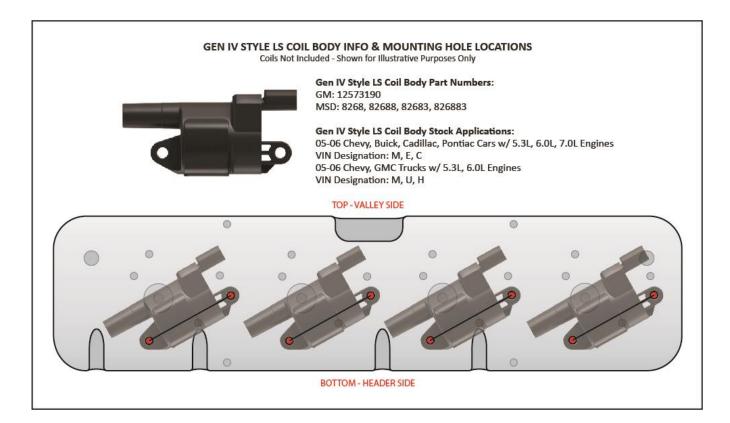
Holley's SBC to LS valve cover adapter plates are designed to work with 3 specific LS coil bodies. Each type can be identified by the look of the coil body, OEM and aftermarket part numbers, and original VIN number applications using the diagrams below. Once you have identified your LS coil body, be sure to make note of which mounting holes should be used to install the corresponding coil mounting studs, spacers, and coil bodies onto your LS valve cover adapter plate.

It is strongly recommended that the coil mounting studs be installed into the adapter plates, using the supplied mounting studs (1-15/16" long) prior to installing each LS valve cover adapter onto the cylinder head. This will allow you to easily and accurately orient your coils.



## LS COIL BODY IDENTIFICATION (CONTINUED):





## **INSTALLATION INSTRUCTIONS:**

- 1) Remove your existing GM LS style valve cover and any corresponding components (ventilation hoses, coil harness plugs, spark plug boots, coil mounting brackets, etc).
- Remove the gasket from the valve cover you uninstalled in Step 1, or use a new replacement if necessary, and install it into the channel on the underside of the LS valve cover adapter plate. Make sure the gasket fully seats into the adapter plate channel.
- 3) Carefully clean the mounting surface on the LS cylinder head to ensure that the surface is free of any debris or residue and will provide a proper seal. Be careful not to allow any loose debris to enter the cylinder head.
- 4) Place the LS valve cover adapter plate onto the LS cylinder head mounting flange. Check to make sure the adapter plate is flush to the mounting surface to eliminate the possibility of any leaks
- 5) Locate (4) of the LS adapter plate bolts (x2-15/16" long), (x4) flat washers, and (x4) grommets. Slide a washer onto each bolt, then a grommet onto each bolt. The four depressed mounting holes near the center of the LS adapter plate should be aligned with the mounting holes on the LS cylinder head. Thread each bolt assembly, by hand, into each of the four holes until hand tight. Once all four bolt assemblies are hand tight, check sealing surface of the plate to make sure the LS adapter plate is flush and the gasket is not pinched and protruding outside of the channel. Tighten each bolt to factory spec of **106 in/lbs**.
- Once the LS valve cover adapter is bolted down, slide (x1) coil spacer (3/4" tall) onto each of the coil mounting studs (1-15/16" long). You will need two mounting studs and spacers for each LS coil body.
- 7) Slide each coil onto the mounting studs with the installed spacers according to the coil identification diagrams (above). Each LS coil body should be oriented according to the diagrams so that the coil harness connectors and the spark plug wires will properly connect and feed through the indentations in the top and bottom lips of the LS valve cover adapter plate.
- 8) Once the coil(s) are installed onto the mounting studs with spacers, install (x1) supplied lock washer and (x1) nut onto each mounting post and tighten to **30 in/lbs**.
- 9) At the top of the LS adapter plate, there is a 2" depression where your coil harness connectors should feed into the valve cover. Feed the harness into this area and connect each of the (x4) coil packs. Once all coil packs are securely plugged in, move to the lower side of the adapter plate and connect the (x4) ends of your coil bodies to each of the spark plug wires. At the bottom of the adapter plate, there are (x4) <sup>3</sup>/<sub>4</sub>" wide depressions which will be the routing channels for each spark plug wire to come out from underneath.
- 10) Install (x4) SBC perimeter bolt mounting studs (1-15/16" long) into the holes along the top edge and bottom edge of the LS adapter plate. These will be the mounting studs for your SBC perimeter bolt valve cover.
- 11) Screw in (x1) of the provided barbed PCV fittings into the hole of your choice on either end of the plate. The other hole without the barb fitting should be filled with one of the provided  $\frac{1}{2}$  block off plugs.
- 12) Install a Small Block Chevy Valve Cover gasket using the (x4) mounting studs as guide points for the gasket. This is not a functional sealing gasket its purpose is to reduce vibrations, and secure the spark plug wires and coil harness feeding through the depression at the top and bottom of the LS valve cover adapter.
- 13) Connect the PCV hose to the barbed fitting in the LS valve cover adapter and route the hose through the oil fill/breather opening in your SBC valve cover in order to connect the other end of the hose.
- 14) Make sure all coil connector wiring and spark plug wires are tucked neatly within the perimeter of the LS valve cover so as not to be pinched when sliding the SBC valve cover down onto the LS adapter plate.
- 15) Install the Small Block Chevy (SBC) perimeter bolt valve cover of your choice over the (x4) mounting studs that were installed in Step 10.

- 16) Install valve cover mounting hardware and tighten each fastener to **36 in/lbs**.
- 17) Repeat Steps 1-16 for adapter plate on the opposite side of the engine.

Holley Technical Support 1801 Russellville Road Bowling Green, KY 42101 270-781-9741 or 1-866-464-6553 www.holley.com

© 2018 Holley Performance Products. All Rights Reserved. Tous Droits Réservés.

199R11685 Date: 10-22-18