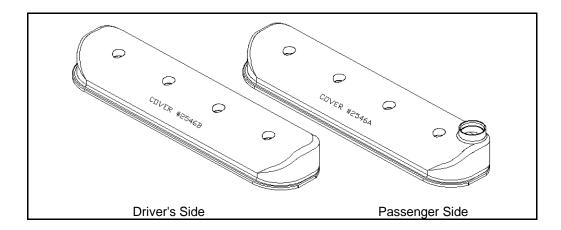


# Valve Cover Installation Instructions KAT-A2833, KAT-A3842, KAT-A2842, KAT-A4699 aluminum KAT-A5032, KAT-A5033 carbon fiber

# <u>Important</u>: Please follow this order of installation to prevent dirt or metal chips from being introduced into your engine!

### **Contents of Rocker Cover Kit:**

Qty	P.N.	Descripti	on	
1	2546A	Rocker Ar	m Cover (aluminum) w/Oil Fill	(KAT-A2833 and KAT-A3842 only)
1	2546B	Rocker Ar	m Cover (aluminum)	(Qty 2 in KAT-A2842 and KAT-A4699)
or				
1	5033	Valve cover (carbon) w/oil fill		(KAT-A5033 only)
1	5032	Valve cov	er (carbon) w/oil fill	(Qty 2 in KAT-A5032)
Hardware:				
1	KAT-6795	Oil fill cap		(KAT-A2833, KAT-3842 and KAT-A5033 only)
1	KAT-6796 Oil filler ne		eck	
8	KAT-A2547 Bolt/Stanc		chion Assembly	
2	FS-PH-129HB-6-4		Brass fitting	
1	MCF-25KSPDB		Brass plug	
2	12560696	Gasket		
4	ITW-8913-61-	-13-5710	Bolt grommet (spares)	



## **Tools Required for Installation**

10mm deep well socket

13mm socket

15mm socket

1/4" Drive universal joint

1/4" & 3/8" Racheting wrench

Inch-lb torque wrench

Grinder

5mm allen key socket

#### Pre-Installation:

1 For KAT-A2833 or KAT-A3842 the oil filler neck must be installed.

If Katech powdercoated the valve covers for you, the filler neck will already be installed.

If you are powdercoating the valve covers yourself, the filler neck must be installed AFTER powdercoating.

- 1a. Heat valve cover to approximately 400F
- 1b. Remove o-ring from oil filler cap
- 1c Assemble cap onto filler bung snugly
- 1d Use proper gloves to avoid getting burned

- 1e Remove valve cover from oven
- 1f Orient the logo on cap/bung assembly appropriately in relation to valve cover
- 1g Insert oil bung/cap assembly in bore on valve cover until filler bung flange meets cover
- 1h Let valve cover cool to touch
- 1i Remove oil cap and reinstall o-ring
- 1j Lube o-ring with oil or grease
- 1k Reinstall cap
- 2 This products requires the ignition coils to be re-located. The OEM brackets will not bolt on these rockers covers. A coil relocation kit as available:

KAT-A4666 for LS1/LS6 coils

KAT-A4667 for LS2/LS3/LS7 coils

KAT-A4182C required for LS2 truck coils

KAT-A4669 for Truck coils (note: some trucks use LS2 coils)

- 3 This product may not fit all aftermarket rocker arms (non-factory rocker arms). If aftermarket rocker arms are used, check for interference on the inside of the cover at the rocker arm and springs. Clearancing is provided, although some additional clearancing may be required.
- 4 Make sure valve covers are cleaned and cleared of all packing medium.
- 5 This cover is designed to use the factory valve cover gaskets
- This is a good time to install the coil relocation brackets (separate instructions with brackets) if you are using them in your application. Install the coils on the brackets after the rocker covers are installed in the vehicle. Install the (4 per cover) #A2547 bolt assembly's through the top of the cover and pull down on the bolt assembly from the bottom to seat the rubber grommet.

The rocker arm covers are now ready for installation.

#### Installing the Rocker Covers on the Engine:

Take picture of the OEM coil installation for reference if the OEM ignition may be re-installed back on the engine at a later date. A picture is included here for reference but your engine may differ depending on year.

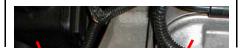




Pre-Installation Picture

**Note on PCV:** For older Corvettes that do not have the PCV in the valley cover additional breather holes may need to be put into these valve covers. There is also the option of replacing the valley cover with GM PN 12568002 (requires 12568010 PCV tube as well) to update the engine to new specifications.

- 7 Blow off engine around valve covers with high pressure air before removing old rocker covers.
- 8 Remove the coil harness from the coils. Take care not to injure the harness as it will be used later.
- 9 You must back out the alternator bolt until it is flush with the rear of the bracket. Remove the alternator lead wire to access the coil bracket 10mm bolt with a deep well socket



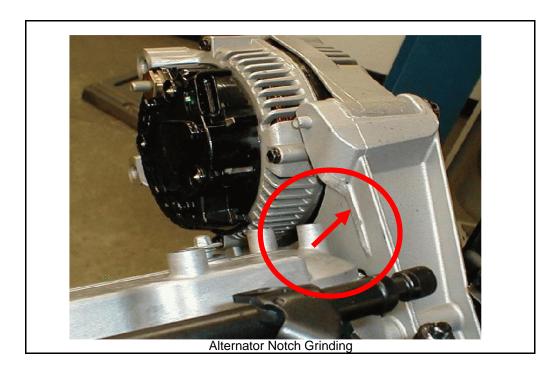
on a universal joint drive.

- 10 Remove the coil brackets with the coils still in place. The brackets will not be used in this application, but you may want to save them to be able to put the engine back to OEM specifications at a later date.
- 11 Remove the coils from the coil brackets. Set coils aside for later. The coils are all the same, so there is no need to keep them separated.



Alternator Bolt Backed Out Until Flush

- \*\* Coils can be installed onto Katech coil brackets at this point if purchased.
- 12 Grind a notch in the OEM alternator bracket for rocker cover clearance. See picture below.
  - \*\* BE SURE TO DO THIS BEFORE REMOVING PRODUCTION ROCKER COVERS!
  - \*\* Blow off chips/dirt again prior to removing production rocker covers.



Install Hint: The rocker covers can be installed without removing the fuel rail.

Depending on how you choose to route the driver side coil harness, removing the fuel rail allows the harness to be located inboard, underneath the fuel rail assembly.

On LS1/LS6 engines the fuel rail inlet may need additional clearance for the coil relocation bracket rail. To gain clearance, use a socket and extension over the fuel rail inlet to gently bend the tubing up.

- 13 Place covers on heads and slide around to verify proper clearance. If aftermarket rockers are used this should be done out of the vehicle to ensure proper inspection conditions. Be sure to check the rockers against the back of the cover and against the internal ribs. Also check the springs against the internal ribs if using larger diameter valve springs. Production rockers will not have a problem.
- 14 Torque the rocker cover bolts to 90 in/lbs. (The rocker covers virtually are supported in rubber but the bolts will solid out and will be able to torque to specification)
- 15 Connect PCV tubing. This can be done by using a small piece of rubber fuel line hose and coupling it to the plastic hose, or by cutting the fittings out of the ends of the plastic hose and replacing the

entire plastic hose with rubber hose. To remove fittings from the end of the hose, make a one inch cut length-wise down the hose to pull the fitting out.

Thank you for purchasing this Katech product. We hope you enjoy it for years to come.

**Contact Information:** 

Address: 24324 Sorrentino Ct. Phone 586-791-4120

Clinton Twp., MI 48035 Email: sales@katechengines.com