



Instructions for

Trick Flow Cast Aluminum 4.6L/5.4L 2V Valve Cover Kit

TFS-51800801, TFS-51811801, TFS-5180B801 (Romeo)

TFS-51800802, TFS-51811802, TFS-5180B802 (Windsor)

Thank you for purchasing Trick Flow Specialties' Cast Aluminum Valve Covers for the Ford 4.6L/5.4L 2V engines. These valve covers are made from durable cast aluminum and eliminate the cracking and distortion issues that plagued the factory plastic covers.

Parts list:

- (2) Trick Flow Cast Aluminum Valve Covers
- (22) #14 ID x 1/2" OD Stainless Steel O-Ring Washers
- (2) Valve Cover Gaskets
- (1) 90° 5/8" Tube x 1/2" NPT Nylon Elbow
- (1) 5/8" Tube x 1/2" NPT Nylon Fitting
- (3) 3/4" x 1-1/4" Valve Cover Breather Grommets
- (22) M6 x 1.0 x 25mm Zinc Plated Flange Bolts (Romeo)
- (27) M6 x 1.0 x 25mm Zinc Plated Flange Bolts (Windsor)
- (2) 3/4" Oil Fill Plugs

Recommended Tools:

| | | |
|--------------------|----------------------|-----------------------------|
| 1/4" Drive Ratchet | 7mm Socket | Small Flathead Screwdriver |
| 1/4" Drive Swivel | 8mm Deep Well Socket | 1/4"-6" or Longer Extension |
| 5mm Socket | Small Torque Wrench | |

Installation Instructions:

1. Disconnect the negative (-) battery cable.
2. First let's work on the passenger side.
3. Remove the air filter box and inlet hose from the throttle body. (8mm)
4. Disconnect all the connectors and sensors on the wiring harness that cover the driver's side valve cover. They include the crank sensor, AC compressor, coolant sensor, fuel injectors, spark plug coils, IAC valve and map sensors, black four wire connector, and the gray single wire connector.
5. Disconnect the red vacuum lines.
6. Remove the black Schrader valve cover above the fuel rail and depress the valve with the small flathead screwdriver to release the fuel pressure.
7. Remove the fuel rail bolts and carefully remove the fuel rail. (8mm)
8. Carefully inspect and remove the fuel injectors. Set them away from any possible damage or contamination.
9. Remove the spark plug coils. (7mm)
10. Loosen the valve cover bolts (attached to the valve covers) and carefully lift the valve cover off the cylinder heads. (8mm deep well socket, extension and swivel)
11. Clean the gasket surface.
12. Place the valve cover gaskets into your new valve cover.
13. Lower the valve cover into place and insert the M6 bolts.
14. Tighten the bolts from the center of the valve cover outwards to 71-106 inch pounds.
15. Re-install the spark plug coils and torque to 45-60 inch pounds.
16. Re-install the fuel injectors, fuel rail and connect all the vacuum and electrical connections you disconnected in Step 4.

17. Re-install the inlet hose and air filter box.
18. Move to the Driver's side.
19. Disconnect all the connectors and sensors on the wiring harness that cover the driver's side factory valve cover as you did with the passenger side.
20. Disconnect any vacuum lines that may be in the way of the install.
21. Disconnect the throttle cable at the firewall. (8mm)
22. Disconnect the clutch cable at the firewall. (5mm)
23. Disconnect the electrical connection from the brake reservoir.
24. Repeat Steps 6-16 for the driver's side.
25. Reconnect the connection at the brake reservoir and the throttle cable and the clutch cable at the firewall.
26. After double checking all wiring harness connections and vacuum lines, reconnect the negative (-) terminal to the battery.
27. Start the engine, test drive and enjoy.

IMPORTANT NOTE

Due to the location of the PCV valve and the oiling system in the 4.6L/5.4L heads, oil is consumed and discharged through the PCV valve. The factory system vents these vapors and residual oil back into the intake and may lead to detonation and oil deposits in the intake track and on the valves. This problem is inherent to a stock 4.6L/5.4L engine, but can be worse depending on the modifications made to the stock engine, including the installation of these valve covers. Trick Flow highly recommends running an air-oil separator or catch can between the PCV valve and the vacuum source to help eliminate this issue. If you have any questions as to which air-oil separator will work for you and your application, call us at 1-330-630-1555.

Ultimate Bolt-On Performance® Lifetime Warranty

Trick Flow Specialties cylinder head castings are backed by a lifetime warranty. If a cylinder head casting fails to provide the original purchaser with complete satisfaction, Trick Flow Specialties will repair or replace it free of charge — guaranteed!

Moreover, the valves, valve guides, valve seats, valve job, valve springs, valve spring retainers, valve locks, rocker arm studs, guideplates, and valve stem seals included on assembled Trick Flow Specialties cylinder heads are warranted to the original purchaser to be free from defects in materials and workmanship for a period of two years from the date of purchase. All other Trick Flow Specialties products are warranted to be free from defects in materials and workmanship for a period of 90 days. There are no mileage limitations.

Extent of Warranty

Customers who believe they have a defective product should return it to the dealer from which they purchased or ship it freight prepaid to Trick Flow Specialties along with proof of purchase and a complete description of the problem. If a thorough inspection indicates defects in materials or workmanship, our sole obligation is to repair or replace the product.

This warranty is only if the product is properly installed, subjected to normal use and service, did not fail due to owner negligence or misuse, and has not been altered or modified.

Trick Flow Specialties warranties do not cover any installation or removal costs.

Trick Flow Specialties is not liable for consequential damages for breach of contract of any warranty in excess of the purchase price of the product sold.

PROPOSITION 65 WARNING

This product may contain one or more substances or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

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