

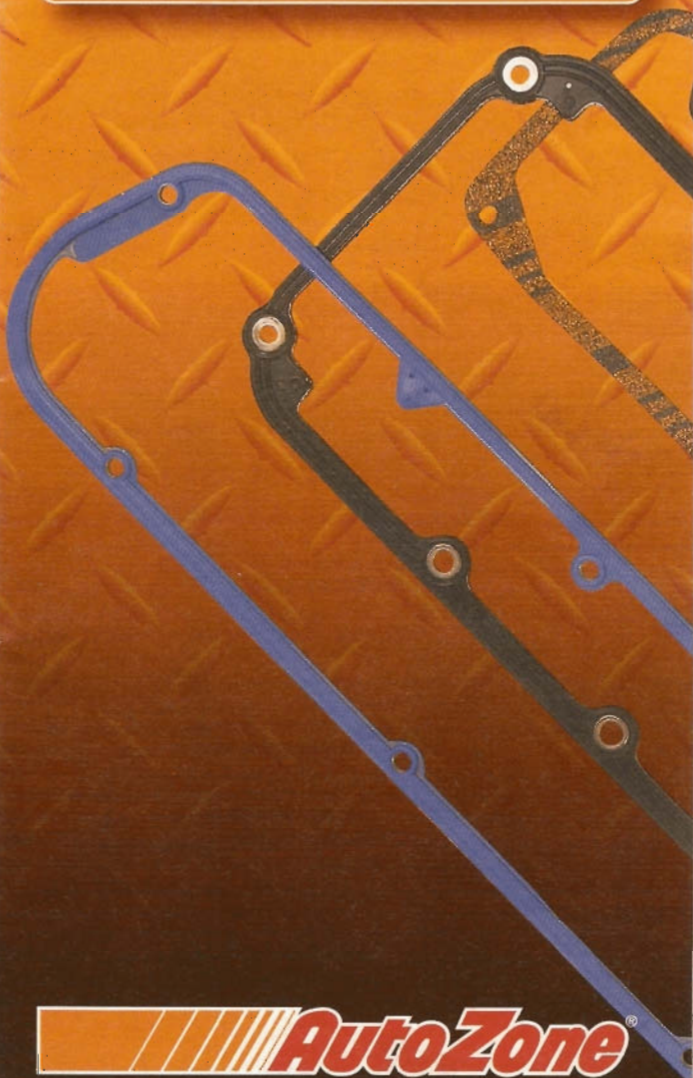
**YOU CAN DO IT!**

# Replacing Valve Cover Gaskets

*Skill Level: Beginner-Intermediate*

*Estimated Cost Savings: \$110*

*Estimated Time Required: 1-3 Hours*



**AutoZone**

## How To Tell If You Need To Replace A Valve Cover Gasket

- Oil leaks onto cylinder head
- Oil leaks onto intake manifold
- Oil smoke from exhaust manifold

## Benefits Of Replacing Your Valve Cover Gaskets

- Cleaner engine compartment
- Reduced oil consumption
- More efficient running engine



## Gasket Replacement Procedures -- Doing It The Right Way

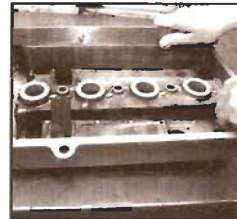
Refer to a repair manual for technical details and vehicle-specific information

- 1 Remove and clean valve cover**  
Remove all brackets or wire looms and unbolt and remove the cover from the cylinder head. If the cover sticks, gently rock it until it breaks free. Scrape all old gasket material away and remove all oil, grease and adhesive from the sealing flanges.



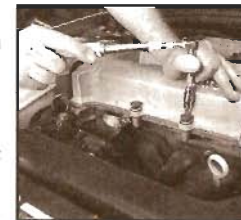
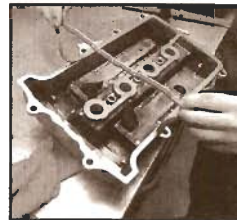
- 4 Install supplementary valve cover seals**  
Install any additional cover seals required for your application, including semi-circular plugs (on overhead cam heads), spark plug tube seals, or valve cover bolt or stud grommets.

- 2 Check cover for damage**  
Use a straight edge to check the surface flatness of the sealing flange. Covers that are cracked or warped should be replaced. Bolt holes on stamped steel covers may be straightened with a ball peen hammer and a block of wood.



- 5 Install cover on cylinder head**  
Carefully place the valve cover onto the head. Avoid accidentally trapping any engine wires, hoses, or cables underneath the cover. Be sure not to disturb the valve cover gasket and supplemental seals when putting the cover in place. Now attach all brackets and wire looms back onto the cover.

- 3 Install new gasket**  
If the cover has a channel cast in it, be sure the gasket is correctly seated inside the channel. DO NOT use a sealer on the gasket-it could cause the gasket to slide out from under the cover. Only quick-setting contact adhesive may be used on die-cut cork-rubber or synthetic rubber gaskets. Do not use any sealers or adhesives on FEL-PRO PermaDry® premium molded rubber gaskets and PermaDryPlus® rigid carrier design silicone rubber gaskets.



- 6 Torque mounting bolts and check for leaks**  
Install all bolts, load spreading pieces, and studs. Torque down all cover fasteners in a spiral or X-pattern, starting from the cover center and moving outward. Follow the engine manufacturer's torque specifications, being careful not to over torque the fasteners. Too much torque can split the valve cover gasket or distort the cover to the point where you cause a leak. Check the cover flange for leaks, to ensure the new gasket is sealing correctly.

GASKET MATERIAL	ADHESIVE
Cork-Rubber	Contact Adhesive
Synthetic-Rubber	Contact Adhesive
All Others	None



## Material Choices

### Available FEL-PRO® Valve Cover Gasket Material Choices

#### Blue Stripe®

Cork-rubber combines the best qualities of both cork and rubber gaskets.

#### Fel-CoPrene®

Synthetic rubber doesn't shrink or wick oil when installed.

#### PermaDry®

Premium molded silicone rubber gaskets are engineered to work specifically with modern cast aluminum and plastic valve covers.

#### PermaDryPlus®

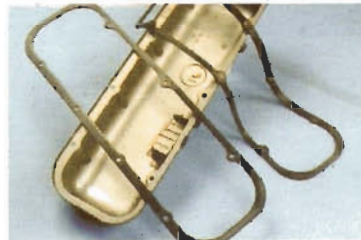
Rigid carrier design gaskets provide perfect fit, easier installation without adhesives, precision silicone edge-molded sealing beads, torque limiters to prevent over-compression, and superior heat resistance.



## Tools For The Job

- **Valve cover gasket set**  
(select the FEL-PRO® material that is best for your application)
- **Gasket scrapers**  
(use a non-metallic scrapers on aluminum and plastic covers)
- **Load Spreaders™**  
(to help even bolt clamping and improve sealing – use one set per valve cover)
- **Contact adhesive**  
(not required for PermaDry® or PermaDryPlus® premium gaskets)
- **Assorted hand tools**

Other needed tools available through *AutoZone's Free Loan-A-Tool® Service*



 **FEL-PRO®**



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