



PRW POWER
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FABRICATED ALUMINUM VALVE COVERS FOR LS SERIES ENGINES

COMPONENTS	QTY
ROCKER ARM VALVE COVERS	2 EACH
VALVE COVER GASKETS (MAY ALREADY BE INSTALLED)	2 EACH
HEX HEAD BOLTS W/GASKETS	8 EACH
OIL FILLER CAP (MAY ALREADY BE INSTALLED) W/O-RING SEAL	1 EACH

WARNING TO INSTALLER: READ THIS SECTION COMPLETELY AND THOROUGHLY BEFORE ATTEMPTING TO INSTALL THESE RACING VALVE COVERS. RETURNS ARE NOT ACCEPTED FOR ANY VALVE COVERS THAT HAVE BEEN INSTALLED, CUSTOMIZED, RETROFIT, OR MODIFIED IN ANY FASHzION. THESE VALVE COVERS ARE NOT INTENDED AS FACTORY REPLACEMENTS.

PRW Fabricated Aluminum Valve Covers are designed for racing engines, and as such, may require minor modifications for proper installation and fitment. There are no STANDARD PROVISIONS FOR EPA/CARB or Vehicle Emissions Equipment fittings that may be present and functioning on your vehicle.

The billet rails on each valve cover have been custom-machined to fit most racing rocker arm systems from a wide variety of manufacturers. This will significantly reduce the amount of time and energy required to fit various pedestal-shaft mount rocker arm systems. However, the Installer must assure that there is no interference or contact between the valve covers and any aftermarket rocker arm systems.

Additional machining may be required to assure proper clearances. Oil baffles and positive locking breathers or fittings must be carefully checked to assure there is no operational interference with other valve train parts.

WARNING TO INSTALLER: The installer is responsible to assure proper clearance of brake boosters and other accessories prior to installation! Any and all modifications and/or retrofit for these items are the sole responsibility of the Installer. **Warranty is limited to factory defects. Installation voids warranty. Please call Technical Support with any questions BEFORE attempting to installation!**

Please read these instructions carefully before beginning your installation. Also, take a moment to review the limited warranty information. If there are any questions or problems during the installation, please do not hesitate to contact the PRW Customer Service Hotline at 1-888-377-9779, between the hours of 7 a.m. and 4 p.m. PST Monday through Friday.

- 1) Confirm that all parts are included by comparing to the parts list.
- 2) Make certain that you have all the tools necessary to complete the project.
- 3) Assembly lube and/or lubricating oil should be readily available for installation.

Valve Cover Fitment Preparation and Installation:

Step 1: Carefully remove the existing coil covers and other accessories necessary to disassemble the OEM valve covers from the engine; following manufacturer's published instructions.

Step 2: Clean the gasket surface of both the cylinder heads and any fuel rails or parts that may have debris that could fall into the engine. Many petroleum cleaning products leave a residue that can prevent a good seal, so choose cleaning agents carefully.

Step 3: If not already installed, match the formed O-Ring gaskets carefully and install into the groove of the valve cover rail.

- a. When working on the rail, always protect the top of the valve covers by placing a protective material on your work surface.
- b. Start by pressing the O-Ring gaskets into the groove, matching the "divots" and shape of the gasket to the rail.
- c. Do NOT stretch the gaskets, as they are designed to fit exactly.
- d. Any stretch may cause a mismatched or uneven seal and an oil leak.

Step 4: Thoroughly inspect both cylinder heads to ensure that there are no obstructions that may impair the valve covers from bolting into place on an even plane.

- a. Match the valve covers to the cylinder heads, looking for any intake manifold or other protrusion on the OUTSIDE of the valve cover rail that may impair the alignment for a good seal.
- b. If you have installed aftermarket rocker arms, you must also check the INSIDE of the valve cover rail to assure there is no contact between the valve cover and any moving parts!
- c. When working on the rail, always protect the top of the valve covers by placing a protective material on your work surface and "Blue" low adhesion masking tape on the valve cover itself to prevent scratching or scuffing of the surface.
- d. Using a Dremel tool or die grinder, carefully remove any minor interference areas from either the intake manifold or the valve cover rails to make certain the gasket aligns properly over the lip of the cylinder head.
- e. If you are installing with OEM rocker arms, proceed to Step 7.

Step 5: If you are planning to install positive locking breathers or fittings, now is the time to do it.

- a. Decide where the accessory or fittings will be attached.
- b. Mark the center of the hole with a center punch.
- c. Use a drill bit or hole saw size specified by the manufacturer of the breather or fitting; always drilling from the inside surface if possible.
- d. Use a round file to clean-up any rough edges or burrs and to enlarge the hole slightly if necessary.
- e. To install grommets cut a 1-3/16" hole through the valve cover and then incorporate a round file or Dremel tool for final finishing (usually about 1.22").

Step 6: If you are installing in conjunction with aftermarket rocker arm systems, a final check is required.

- a. You must confirm there is no contact between moving parts and the INSIDE rail of the valve cover by turning the engine over while someone holds a valve cover properly aligned in place.
- b. Any movement of the valve cover or noticeable noise or contact must be resolved before completing the installation.

- c. If the rocker arm system required removal of any material from the cylinder head, or the aftermarket cylinder heads have already been relieved, you must match those areas on the inside rail of the valve covers.

Step 7: For final fitment and installation, place the valve cover over the lip of the cylinder head and align to assure a good seal.

- a. You may wish to coat the gasket with a clear or blue silicone to minimize any oil leaks; but do so sparingly as not much is required to minimize leaks.
- b. Have the bolts and necessary tools available to hand-tighten to maintain proper alignment.

Step 8: Hand-tighten each of bolts used to secure each valve cover, rechecking the alignment one more time.

- a. Tension each of the valve cover bolts; starting with the center bolts and working outwards to each end.
- b. Do NOT over-torque. Be certain that the bolts are not “bottoming-out” during installation. This usually occurs when the valve cover gaskets you installed are too thin; or there is carbon or not adequate depth of threads to result in a good seal.
- c. Allow the silicone sealer to cure for at least two (2) hours.

Step 9: Reinstall the coils on the valve covers (if used with part numbers with stand-offs) or remote mount coil locations for valve covers without stand-offs.

Step 10: Before starting and running the engine, confirm that all fittings are tight and the area is secure.

- a. Start the engine; check for leaks.
- b. Allow the engine to reach full operating temperature; check for leaks again.
- c. Assure all equipment is fully functional before test driving the vehicle.

Limited Warranty

PRW warrants that all of its products are free from defects in material and workmanship, and against excessive wear for a period of (1) one year from the date of purchase. This limited warranty shall cover the original purchaser.

PRW's obligation under this warranty is limited to the repair or replacement of its product. To make a warranty claim, the part must be returned within (1) one year of purchase to the address listed below, freight prepaid. Items covered under warranty will be returned to you freight collect. It is the responsibility of the installer to ensure that all of the components are correct before installation. PRW assumes no liability for any errors relative to tolerances, component selection, or installation.

There is absolutely no warranty on the following:

- i. Any parts used in racing applications, or;
- ii. any product that has been physically altered, improperly installed or maintained, or;
- iii. any product used in improper applications, abused, or not used in conjunction with the proper parts.

There are no implied warranties of merchantability or fitness for a particular purpose and no warranties which extend beyond the description of the face hereof. PRW will not be responsible for incidental and consequential damages, property damage or personal injury damages to the extent permitted by law. Where required by law, implied warranties or merchantability and fitness are limited for a term of (1) one year from the date of original purchase. This warranty may give you specific legal rights. You may also have other legal rights, which vary from state to state.