



RT Off-Road – Part Number RT35004
Installation Instructions for Aluminum 4.2L Valve Cover Kit
Fits: ALL 1981/1986 Jeep® & AMC 4.2L (258cid) Engines

Kit Contents:

- (1 pc.) Valve Cover
- (1 pc.) Valve Cover Gasket (P/N: 8053050-AL)
- (5 pcs.) Allen Head Bolts (5/16" x 18)
- (5 pcs.) Attaching Screws
- (1 pc.) Oil Fill Plug (P/N: 33001016-AL)
- (2 pcs.) PCV Valve Grommets
- (2 pcs.) Allen Head Bolts (1/4" x 20)
- (2 pcs.) Non-Studded Rocker Arm Bridges



1. Disconnect negative battery cable. Remove air cleaner and PCV lines from original valve cover and move out of the way.
2. Remove your original plastic valve cover and gasket. Clean the engine mounting surface thoroughly, using acetone or a similar cleansing product.
3. Remove the (2) Studded Rocker Arm Bridges, loosening each bolt 1/2 turn at a time, and replace them with the Non-Studded Rocker Arm Bridges included in the kit. Torque hardware to 19 ft. lbs.
4. Test fit the valve cover included in the kit on the engine's cylinder head without the gasket to ensure that all mounting holes line up properly. You may find that you need to drill and tap a hole in the front and the back of your cylinder head. If needed, install the valve cover and mark the correct bolt location on the cylinder head and drill and tap for a 1/4" x 20 bolt. (**CAUTION! ONLY DRILL INTO THE CYLINDER HEAD AS DEEP AS NECESSARY TO ACCOMMODATE FOR THE BOLTS AFTER PASSING THROUGH THE NEW VALVE COVER AND GASKET. FAILURE TO FOLLOW INSTRUCTIONS MAY CAUSE DAMAGE TO THE CYLINDER HEAD AND/OR VALVE COVER.**) The five mounting holes that were previously used for the plastic valve cover may need to be tapped using a 5/16" x 18 thread tap. If all bolt holes are already drilled and tapped in your cylinder head and line up with all of the mounting holes on the new valve cover, then you can move to the next step.
5. Apply a sparing amount of silicone to both sides of your new gasket and place the gasket on the cylinder head. This should keep the gasket in place when you install the valve cover and mounting bolts.
6. Carefully install the new valve cover and hand-tighten each of the mounting bolts. Check to ensure the gasket is properly seated on the cylinder head. Now torque each of the 5/16" mounting bolts to 55 in. lbs. starting at the center of the valve cover and working toward each end. Torque the 1/4" mounting bolts to 40 in. lbs.
7. Install the provided PCV valve grommets into the valve cover and re-install the PCV valves along with all other parts that were removed. Check engine oil level and add as needed. Reconnect negative battery cable.
8. Check for leaks after the first few trips and re-torque the valve cover bolts after 100 and 500 miles.

FINAL NOTES: Since every engine compartment is slightly different depending on the accessories and options in each vehicle, some repositioning and/or minor modifications may be necessary to allow clearance for installation or your new valve cover kit. **DO NOT** attempt to modify the valve cover as you will void the warranty and may damage the valve cover.

While every attempt is made to ensure that the information contained in these instructions is correct, no liability can be accepted by the authors for loss, damage, or injury caused by any errors in, or omissions from the information given. All service should be performed by qualified mechanics. RT Off-Road and Crown Automotive Sales Co., Inc. cannot be held responsible for any mechanical work performed. Standard and accepted safety precautions should be used in every procedure.