



Performer RPM Cylinder Heads For Holden VN V8s P/N 61379, 61385, 61389 INSTALLATION INSTRUCTIONS

Please study these instructions carefully before installing your new cylinder heads. If you have any questions, please call our **Technical Hotline at: 1-800-416-8628**, 7:00 am - 5:00 pm, Monday through Friday, Pacific Standard Time.

IMPORTANT NOTE: Proper installation is the responsibility of the installer. Improper installation will void warranty and may result in poor performance and engine or vehicle damage.

DESCRIPTION: The Edelbrock Performer RPM heads are designed for high performance street use. Edelbrock cylinder heads offer “out-of-the-box” bolt-on performance with no additional porting required. The performance range is 1500-6500 rpm for great throttle response as well as top-end horsepower. The intake and exhaust ports are CNC machine “matched” and have been designed for maximum flow velocity when matched with the Performer RPM Air Gap intake manifold #7594 (Carb) and #75945 (EFI).

Complete cylinder heads are assembled with hardened valve spring seats and prepared for installation right out of the box. Bare cylinder heads will have valve guides and seats installed, but will require final sizing and a valve job to match the valves you will be using.

ACCESSORIES: Although Edelbrock RPM Heads will accept OEM components (rocker arms, valve covers, intake manifold, head bolts, etc.), we highly recommend that premium quality hardware be used with your new heads. See our catalog for details. **To order a catalog, call (800) FUN-TEAM.**

- **Head Bolts or Studs:** High quality head bolts or head studs with hardened washers must be used to prevent galling of the aluminum bolt bosses.
- **Rocker Arms:** The valve springs supplied will accommodate valve lifts up to .575”, which is much higher than stock rocker arms will allow. Roller rocker arms will be required if your camshaft has more than .480” lift. Stock rockers may require longer-than-stock pushrods to clear the valve springs. **WILL NOT ACCEPT RAIL ROCKER.**
- **Valve Covers:** Because most roller rockers are physically larger than stock rockers, taller valve covers are usually required to clear them. Verify valve cover clearance before attempting to install the valve covers.
- **Intake Manifold:** Although stock intake manifolds will fit, the Edelbrock RPM Heads are matched in size and operating range with Edelbrock RPM Air Gap intake manifolds #7594 (Carb) and #75945 (EFI).
- **Exhaust Headers:** Any header or manifold designed for original equipment heads will fit the Edelbrock Street Cylinder Heads.
- **Spark Plugs:** Use 14mm x 3/4” reach gasketed spark plugs. Heat range will vary by application from Champion RC9YC to Champion RC14YC. The RC12YC is the plug used in the RPM applications (or equivalent). *Use anti-seize on the plug threads to prevent galling in the cylinder head, and torque to manufacturer’s specification for aluminum heads.*
- **Head Gaskets:** Head gaskets requirements change according to the application for which the cylinder heads are being used.

INSTALLATION: Before final installation of the cylinder heads, several things need to be checked to assure proper engine operation:

1. **Piston to Valve Clearance** - Minimum intake valve clearance should be .080”. Minimum exhaust valve clearance should be .110”. The point of minimum intake valve to piston clearance will usually occur somewhere between 5° and 20° ATDC during valve overlap. The point of minimum exhaust valve to piston clearance will usually occur 20° to 5° BTDC during valve overlap.
2. **Proper Hydraulic Lifter Pre-Load and Rocker Geometry** - Rocker geometry should be checked making sure that the contact point of the roller or pad on a stock rocker remains properly on the valve tip and does not roll off the edge. Visual inspection of the rockers, valve springs, retainers, and pushrods should be made to ensure that none of these components come into improper contact with each other. If problems with valve train geometry occur, simple changes such as pushrod length may have to be made.

OTHER ASSEMBLY TIPS:

- When installing the sparkplugs and exhaust manifolds, be sure to use a high temperature anti-seize compound on the threads to reduce the possibility of thread damage in the future.
- **Do not exceed a torque of 16-18 ft./lbs. on the intake manifold bolts and lubricate the bolt threads prior to assembly.**
- If pushrod to cylinder head contact is a problem, loosen rocker studs and re-position guideplate as needed for clearance.
- Installation is the same as for original equipment cylinder heads. Consult service manual for specific procedures, if necessary. Be sure that the surface of the block and the surface of the head are thoroughly cleaned to remove any oily film before installation. Use alcohol or lacquer thinner on a lint-free rag to clean. Apply assembly lube to head bolt threads, washer, and area under head bolt to prevent galling and improper torque readings. Torque bolts in three or four steps following the factory tightening sequence (see Figure 1), then torque to 65 ft./lbs. A re-torque is recommended after initial start-up and cool-down (allow 2-3 hours for adequate cooling).

SPECIFICATIONS

Head Bolt Torque:65 ft./lbs. (in steps of 30-45-65)
Rocker Stud Torque:.....45 ft./lbs.
Spark Plug Position:Stock
Combustion Chamber Volume:62cc
Port Volume.....Intake: 61385 - 200cc; 61389 - 195cc
.....Exhaust: 60cc
Deck Thickness:.....11/16"
Valve Seats:Ductile Iron
Valve Size:.....Intake - 2.020"
.....Exhaust - 1.600"
Valve Spring Outer Diameter:1.45"

P/N 61385

Valve Spring Installed Height:1.800"
Max. Valve Lift:.....0.690"
1st Load:130 lbs. @ 1.800"
2nd Load:327 lbs. @ 1.200" (.600" Lift)
Coil Bind:.....1.060" (.690" Max Lift Recommended)

P/N 61389

Valve Spring Installed Height:1.800"
Max. Valve Lift:.....0.650"
1st Load:125 lbs. @ 1.800"
2nd Load:314 lbs. @ 1.305" (.500" Lift)
Coil Bind:.....1.100" (.650" Max Lift Recommended)

HEAD BOLT TORQUE SEQUENCE

