



EDELBROCK PERFORMER RPM CYLINDER HEADS
Chrysler Gen III Hemi 5.7, 6.1, 6.2, 6.4
Part #61149, 61159, 61109, 61119, 61089, 61099
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 Gen III Hemi Performer RPM Cylinder Heads are designed for use on moderate to high performance Gen III Hemi Engine applications. The heads are sold individually, both bare and assembled. Edelbrock cylinder heads offer “out-of-the-box” bolt-on performance with no additional machine work required.

Bare cylinder heads are factory equipped with valve seats and guides.

Complete cylinder heads start with the bare head and are finish assembled with 2.165” diameter intake valves, 1.650” diameter exhaust valves and high performance valve springs ready for installation right out of the box.

The heads feature CNC'd bowls and chambers and are offered in 67cc, 73cc and 83cc versions. For optimum performance and flow, the port entries and exits are CNC profiled. The heads are designed to match the intake port opening size and location of the 6.4L Hemi but will also work with 5.7 Eagle, 6.1L and 6.2L intake manifolds as well as the Hellcat Supercharger.

Note: Factory intake and exhaust manifolds for early 5.7L engines will NOT work. Pushrods may be required for some engines.

ACCESSORIES: Although Edelbrock Gen III Hemi Cylinder Heads will accept OEM components (rocker arms, valve covers, intake/exhaust manifold (2009+ only), head bolts, etc.), we highly recommend that premium quality hardware be used with these heads. See our catalog for details. **To order a catalog, visit us on the web at <http://www.edelbrock.com> or call (800) FUN-TEAM.**

- **Head Studs/Bolts:** Edelbrock recommends the use of high quality head studs with hardened washers to prevent galling of the aluminum bolt bosses. **Recommended head stud kit: ARP #244-4300**

NOTE: The factory head bolts are torque to yield and **CAN NOT** be reused. If not using ARP head stud kit, new OEM head bolts can be used following the factory torquing sequence described below.

- **Rocker Arm/Shaft/Pushrod Assembly:** OEM or equivalent. **Custom pushrod length will be required for some engines.**
- **Valve Covers:** OEM or equivalent.
- **Intake Manifold:** OEM or equivalent.
- **Exhaust:** OEM or equivalent.
- **Spark Plugs:** OEM or equivalent.
- **Gaskets:** OEM or equivalent head gaskets, valve cover, intake and exhaust gaskets.

IMPORTANT NOTE: Torque Specs and procedures for head studs described below are ONLY applicable when using NEW OEM head bolts. If ARP head stud kit #244-4300 is used, follow ARP installation procedures.

INSTALLATION:

1. Clean and inspect all hardware and parts prior to installation. Look for obvious defects or shipping damages. Be sure that the surface of the block is properly prepared and clean the surface of the head to remove any oily film before installation. Use alcohol or lacquer thinner on a lint-free rag to clean.
2. To ensure proper thread engagement and accurate torque readings, clean ALL threads in the block. Chase if necessary with an appropriate thread chaser.
3. Install the provided 1/4” pipe plug into the threaded oil drain hole closest to the front of the engine. **Warning: Pipe plug installation is required on both sides of the engine to avoid oil leakage and possible engine damage.**
4. Install the cylinder head(s) with gasket(s) and check for binding or misalignment. Screw bolts into the block “HAND TIGHT ONLY”.

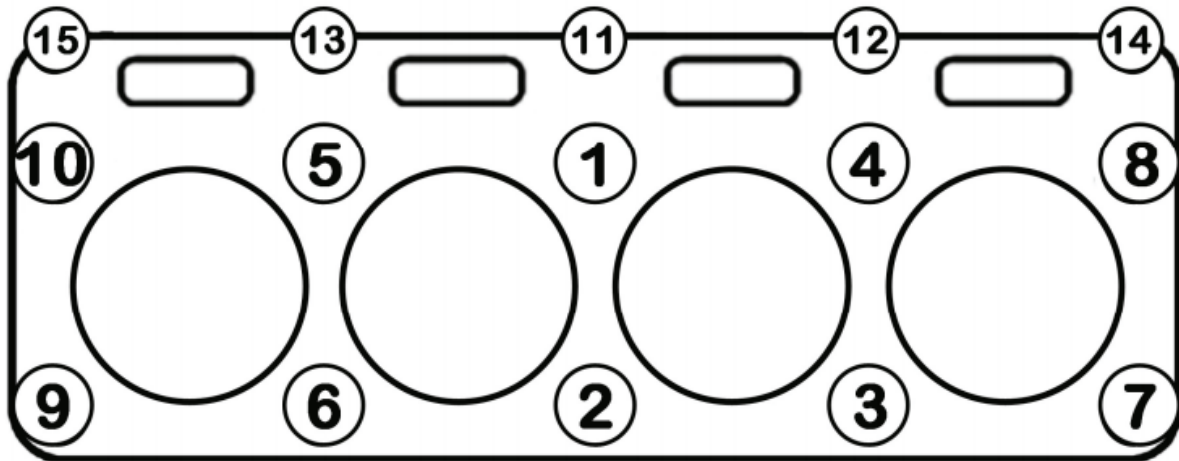
5. Follow the manufacturer's recommended torque sequence (shown below) and **tighten the bolts in three equal steps** to the following specifications.

Step 1— Snug tighten M12 cylinder head bolts, in sequence, to 34 N·m (25 ft. lbs.) and M8 bolts to 20 N·m (15 ft. lbs.) torque.

Step 2— Tighten M12 cylinder head bolts, in sequence, to 54 N·m (40 ft. lbs.) and verify M8 bolts to 20 N·m (15 ft. lbs.) torque.

Step 3— Turn M12 cylinder head bolts, in sequence, 90 degrees and tighten M8 bolts to 34 N·m (25 ft. lbs.) torque.

Bolt Torque Sequence



OTHER ASSEMBLY TIPS:

- Installation is the same as for original equipment cylinder heads. Consult service manual for specific procedures and torque specs, if necessary.
- Complete Edelbrock Gen III Hemi cylinder heads are assembled with valve springs that are compatible with stock and some popular aftermarket camshafts. However, if any aftermarket camshaft is used, check with the camshaft manufacturer for recommended spring load and maximum valve lift. Use the given spring specs below as a guide for compatibility.
- **It is always recommended to check pistons to valve clearance after cylinder head installation BEFORE starting the engine for the first time.**

SPECIFICATIONS

Combustion Chamber Volume:	PN 61149/61159: 67cc PN 61109/61119: 73cc PN 61089/61099: 83cc
Intake Port Volume:	202cc
Exhaust Port Volume:	75cc
Valve Size:	Intake - 2.165" Exhaust - 1.650"
Valve Spring Specifications:	
Valve Spring Installed Height:	1.800"
1st Load:	138 lbs @ 1.800"
2nd Load:	326 lbs @ 1.200"
Spring Solid Height (Coil Bind):	1.070"
Max Lift Recommended:	.680" (.050" clearance)
Replacement Spring P/N	#5768

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