

PERFORMER RPM CYLINDER HEADS For Chrysler Magnum 5.2L & 5.9L V8 Engines Catalog # Bare - 61767 (NHRA Legal), 61769 Catalog # Complete - 61775, 61779 INSTALLATION INSTRUCTIONS

PLEASE study these instructions carefully before beginning this installation. Most installations can be accomplished with common tools and procedures. However, you should be familiar with and comfortable working on your vehicle. If you do not feel comfortable performing this installation, it is recommended to have the installation completed by a qualified mechanic. If you have any questions, please call our **Technical Hotline at: 1-800-416-8628**, 7:00 am - 5:00 pm, Pacific Standard Time, Monday through Friday.

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

DESCRIPTION: Designed for 1992 and later 5.2L (318 c.i.d.) and 1993 and later 5.9L (360 c.i.d.) Chrysler Magnum V8s, the Performer RPM Chrysler Magnum cylinder heads provide substantial performance improvements for street/strip and offhighway performance use. They offer an easy bolt-on upgrade for these modern engines. Stock Magnum intake and exhaust flange and port locations ensure fit with all Magnum-based aftermarket equipment including our all new RPM Air-Gap Magnum carbureted intake manifold #7577. These heads feature 176cc intake ports and 75cc exhaust ports with 58cc combustion chambers for a slight increase in compression over the factory heads. 2.02" intake and 1.60" exhaust valves with 11/32" valve stems offer more flow than stock and they accept adjustable aftermarket rocker arms (hardened pushrods required).

The complete cylinder heads are assembled with the following:

- Cylinder Head Gaskets; Mopar Performance #P4876048, Fel-Pro #HS9898PTI, or Equivalent
 Intake Manifold Gaskets; Mopar Performance #P4876049, or Equivalent
 Exhaust Gaskets; Mopar Performance #P4876102, or Equivalent
 Edelbrock Head Bolt Kit #8577 (See Instructions Below)
- Adjustable Rocker Arms (See Instructions Below)
 NOTE: These heads are assembled with 3/8" rocker studs and will not accept factory pedestal mount rocker arms. A high performance, stud mounted roller rocker arm is recommended for use with these heads, such as Crane Cams #11759-16, or Comp Cams #1302-16. These rocker arms are listed as 1.6:1 ratio for use on Small Block Chevy V8s with
- ☐ Hardened Pushrods Compatible with Adjustable Rocker Arms; Edelbrock #9638 (6.936" Long) or Equivalent
- 14mm x 3/4" Reach, Gasketed Spark Plugs; Champion RC-12YC or Equivalent (May Vary Depending on Engine Specifications).

NOTE: Complete cylinder heads are assembled 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.**

CHECKING PISTON-TO-VALVE, PISTON-TO-BORE AND PISTON-TO-HEAD CLEARANCES: Prior to installation, it is highly recommended that valve-to-piston clearances are checked and corrected to minimum specs, if necessary. These cylinder heads have larger-than-stock valve sizes and may not work with the valve pockets in stock pistons, especially if a high lift cam is used. The use of aftermarket pistons and/or custom machining of your pistons may be required. Actual valve-to-piston clearance should be specified by your camshaft manufacturer. Valve-to-bore clearance should also be checked, and the top of the bore notched for clearance, if necessary.

ACCESSORIES -

Although Edelbrock Cylinder Heads will accept most OEM components (valve covers, intake manifold, etc.), we highly recommend that premium quality hardware be used with our heads.

Head Bolts or Studs: High quality head studs or head bolts with hardened washers must be used to prevent galling of the aluminum bolt bosses. Edelbrock Head Bolt Kit #8577 is recommended. Other aftermarket bolt kits may be used if they are intended to be used with hardened washers. Stock bolts are not recommended, as they do not provide proper thread engagement when used with hardened head bolt washers.

Rocker Arms & Valve Train: Adjustable rocker arms must be used. These heads are assembled with 3/8" rocker studs and will not accept factory pedestal mount rocker arms. A high performance, stud mounted roller rocker arm is recommended for use with these heads, such as Crane Cams #11759-16, or Comp Cams #1302-16. These rocker arms are listed as 1.6:1 ratio for use on Small Block Chevy V8s with 3/8" rocker studs. Valve cover modification may be required with the use of roller rockers (See *Valve Covers* section below).

Valve Covers: Edelbrock Performer RPM heads accept stock valve covers for the year and model for which they are listed. When using roller rockers with these heads, the stock valve covers may need to be spaced up about 3/8" with extra thick valve cover gaskets, or by laminating multiple gaskets together using silicone sealer or gasket adhesive. Aftermarket valve covers are recommended, such as Mopar Performance #P5249343 (Black Wrinkle Finish) or P4876041 (Polished Finish) cast aluminum valve covers.

3/8" rocker studs.

Intake Manifold: Although stock intake manifolds will fit, Edelbrock Performer RPM cylinder heads are matched in size and operating range with the Edelbrock RPM-Air Gap manifold #7577. The #7577 is a carbureted manifold designed to be used when using a Magnum 5.2L or 5.9L engine in non-emissions, engine swap applications in early model vehicles.

Exhaust Headers: Any header or exhaust manifold designed for original equipment cylinder heads will fit Edelbrock Performer RPM Chrysler Magnum cylinder heads. The exhaust ports are CNC profiled to match Mopar Performance #P4876102 exhaust gaskets which are recommended for this application.

Spark Plugs: Use 14mm x 3/4" reach, gasketed spark plugs. Heat range may vary by application, but we recommend Champion RC-12YC (or equivalent) for most applications. **Use anti-seize on the spark plug threads to prevent galling in the cylinder head, and torque to 10 ft./lbs. Do not overtighten spark plugs!**

LUBRICANTS: For added performance and protection, we recommend using Edelbrock performance lubricants.

Engine Oils

| 3 | | | | |
|---|---------------|----------|--|--|
| High Performance Synthetic | 10w40 w/Zinc | P/N 1072 | | |
| High Performance Synthetic | 5w30 CAT Safe | P/N 1071 | | |
| High Performance Petroleum | 10w40 w/Zinc | P/N 1073 | | |
| Or supplement your favorite brand of engine oil | | | | |

| Zinc Additive | - | P/N 1074 |
|---------------|---|----------|
| | | |

Protect your brand new engine

| High Performance Break-In Oil | SAE 30 | P/N 1070 |
|-------------------------------|--------|----------|
| Engine Assembly Lube | - | P/N 1075 |

INSTALLATION

Installation is the same as for original equipment cylinder heads. Consult a service manual for specific procedures, if necessary. Be sure that the surface of the block and the surface of the head is thoroughly cleaned to remove any oily flim before installation. Use alcohol or lacquer thinner on a lint-free rag to clean. Apply oil suitable thread lubricant to head bolt threads and the under side of bolt heads and washers. Torque bolts to 95 ft/lbs in three steps (45-65-95), following the factory tightening sequence (**See Figure 1**). A retorque is recommended after initial start-up and cool-down (allow 2-3 hours for adequate cooling).

SPECIFICATIONS

Head Bolt Torque 95 ft/lbs (in steps of

45-65-95)

Rocker Stud Torque: 45 ft/lbs Combustion Chamber Volume: $58 \text{ cc } (\pm 2 \text{ cc})$

Deck Thickness: 5/8"

Valve Seats: Hardened, interlocking,

compatible with any fuel.

Valve Size: Intake - 2.02",

Exhaust - 1.60"

Valve Spring Diameter: 1.450" Valve Spring Installed Height: 1.800"

Valve Spring Seat Pressure: 128 lbs (Flat Tappet Cam)

150 lbs. (Hydra. Roller Cam)

Maximum Valve Lift: .580"

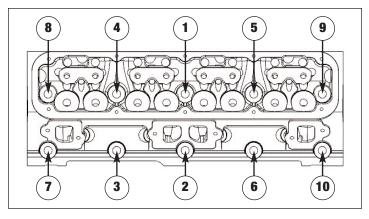


Figure 1 - Bolt Tightening Sequence



Edelbrock LLC • 2700 California St. • Torrance • CA 90503 Tech Line: 800-416-8628