PERFORMER RPM CYLINDER HEADS
NHRA Super Stock Only
For Small-Block Chevrolet V8 Engines
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 will void your warranty and may result in poor performance and engine or vehicle damage.

DESCRIPTION

These heads are similar to #60949 and #60889 cylinders heads, but in order to be legal for NHRA use, the finishing operations performed on the Performer RPM version (#60949 and #60889) have been eliminated (such as final valve job, gasket match profiling, and hand blending in the bowl area of both ports). These omissions are signified by the NHRA logo engraved on the ends of each head and the logo must remain on the heads for NHRA to consider them legal. Cylinder Heads are designed for use on 1986 & earlier 302, 327, 350, and 400 c.i.d. Chevrolet engines (not centerbolt).
NOTE: The Intake runner volume may require modification to comply with Super Stock class rules. Please check NHRA rulebook for more details.

Part Number	Int/Exh Port Volume	Chamber Volume	Plug Type
60617	185cc / 65cc	70cc	Angled
60637	185cc / 65cc	70cc	Straight
60947	185cc / 65cc	64cc	Angled
60887	185cc / 65cc	64cc	Straight

BEFORE BEGINNING INSTALLATION

IMPORTANT NOTES: READ BEFORE BEGINNING INSTALLATION!
For a successful installation, the Edelbrock Performer RPM NHRA Cylinder Heads require some components other than original equipment parts. To complete your installation, you will need the following items:

- ❑ Head gaskets; Edelbrock #7310
- ❑ Intake manifold gaskets; Edelbrock #7201
- ❑ Exhaust gaskets; Edelbrock #7204
- ❑ Valve Cover gaskets; Edelbrock #7549

  NOTE: *Edelbrock Cylinder Head Gasket Set #7361 may also be used in place of individual gaskets. This set contains all gaskets necessary for cylinder head installation, including cylinder head, intake, exhaust, and valve cover gaskets.*

- ❑ Edelbrock head bolt kit #8550 (see instructions below)
- ❑ 14mm x 3/4" reach x 5/8" hex, gasketed spark plugs *(heat range to be determined by specific application. Champion RC-12YC are a good spark plug for street applications)*
- ❑ Adjustable rocker arm assembly *(Premium roller rockers recommended)*
- ❑ +.100" longer-than-stock hardened pushrods; Edelbrock #9629 (For use with stamped steel rocker arms or with 64cc heads in some cases)

CHECKING VALVE-TO-PISTON CLEARANCE: Prior to installation, it is highly recommended that valve-to-piston clearances are checked and corrected to minimum specs, if necessary. Minimum intake valve clearance should be .100". Minimum exhaust valve clearance should be .110".

PISTON-TO-CYLINDER HEAD CLEARANCE: Edelbrock cylinder heads are designed for use with flat-top pistons. The use of domed pistons requires that piston-to-head clearance be checked before installation. Recommended minimum piston-to-head clearance is .050".

VALVE-TO-BORE CLEARANCE: Edelbrock cylinder heads are designed to be used on engines with a minimum bore size of 4.000". If used on engines with a bore size less than 4.000" (307, 305, 283, 267, 265, & 262 c.i.d.), do not use a camshaft with more than .450" lift or the valves may hit the cylinder bores.

ROCKER GEOMETRY: Rocker geometry should be checked, making sure that the contact point of the roller (or pad on a stock rocker arm) 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, changes such as pushrod length may have to be made.

ACCESSORIES

Although Edelbrock Performer RPM cylinder heads will accept OEM components we highly recommend that premium quality hardware be used.

- **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. We recommend Edelbrock Head Bolt Kit #8550. OEM head bolts may be used if they meet these specs for length: 1-3/4" (short bolts); 3" (medium bolts); 3-13/16" (long bolts). Shorter bolts do not have enough thread engagement for use with hardened washers. With OEM bolts, use hardened GM #10051155, ARP #200-8511, or equivalent washers. Bolt threads, underside of bolt heads, and washers should be lubricated with an oil/moly mix prior to installation and torquing.

- **Rocker Arms:** Stock (stamped) type rocker arms will require +.100" longer-than-stock hardened pushrods (Edelbrock #9629) to maintain proper geometry. The valve springs supplied will accommodate valve lifts up to .575", which is much higher than stock rocker arms will allow. Long-slot stamped or roller rocker arms will be required if your camshaft has more than .480" lift.

  NOTE: *64cc heads may require +.100" longer-than-stock pushrods even with roller rocker arms. You must check retainer-to-rocker clearance.*

  CAUTION: *Some factory heads are equipped with "self-aligning" rocker arms. These rocker arms have a stamped recess on the valve tip end to guide the rocker arm on the valve stem which allows the rocker arm to guide the pushrod.*

- **Intake Manifold:** Although stock intake manifolds will fit, the Edelbrock Street Cylinder Heads are matched in size and operating range with Edelbrock Performer RPM intake manifolds. For best results, use stock or Edelbrock intake manifolds listed as stock replacement parts for the year and model of your vehicle. Use recommended intake manifold gaskets. Apply Edelbrock Gasgacinch #9300 to intake surface of heads and both sides of intake gasket. **DO NOT** use cork or rubber end seals supplied with gaskets; instead, use RTV Silicone sealer. Apply a 1/4" bead along front and rear of block, overlapping gaskets at the four corners. Torque manifold bolts to 25 ft./lbs.

- **Exhaust Headers:** Any header or manifold designed for original equipment heads will fit Edelbrock Cylinder Heads. Exhaust ports are CNC profiled to match Edelbrock #7204 exhaust gaskets which are recommended for this application. Some applications may require the use of straight plug heads, due to header tube interference which can be caused by angle plug heads.

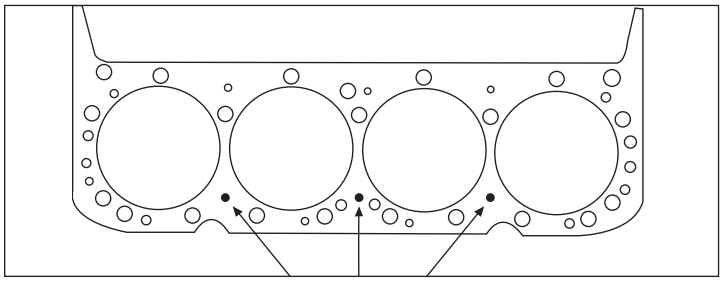
- **Spark Plugs:** Use 14mm x 3/4" reach x 5/8" hex gasketed spark plugs. Heat range may vary by application, but we recommend Champion RC-12YC (or equivalent) for most applications. Champion RC-12YC (5/8" Hex) are a 1/4" shorter than "N" series plugs and may be required for header clearance. Use anti-seize on the plug threads to prevent galling in the cylinder head, and torque to 10 ft./lbs. **NOTE: Do not overtighten sparkplugs!**

- **Valve Covers:** Edelbrock cylinder heads accept stock valve covers for the year and model for which they are listed.

INSTALLATION PROCEDURE

Installation is the same as for original equipment cylinder heads. Consult service manual for specific procedures, if necessary. Use Edelbrock head gasket #7310. #7310 has a flattened steel O-ring around each bore and will provide an excellent, long lasting seal. However, it will compress the aluminum and you must use #7310 for subsequent gasket changes to get a good seal. ***NOTE: YOU MUST DRILL "STEAM HOLES" IN CYLINDER HEADS FOR 400 ENGINES (See Figure 1).***

Figure 1 - Steam Hole Locations (400 C.I.D. Engines ONLY)



Drill three .125" holes in each head using 400 c.i.d. head gasket as a guide. ***DRILL ONLY THE THREE LOWER STEAM HOLES*** *(closest to the spark plugs) as indicated. Drill straight into the head (90° from the deck) until the drill breaks through into the water jacket (about 9/16").*

COOLANT HOLES ABSOLUTELY MUST NOT OVERLAP INTO THE HEAD GASKET SEALING RING AREA!

IMPORTANT NOTICE

Due to the diameter of the valve spring cups (when applicable), it may be necessary to clearance the headbolt washer #1 ***(See Figure 2 and 3)***. The headbolt washer in the #1 location is the only washer that may require clearancing. This will allow the headbolt washer to seat properly to the cylinder head. This can also be accomplished by removing the valve spring and cup, and position the washer prior to the installation of the cylinder head.

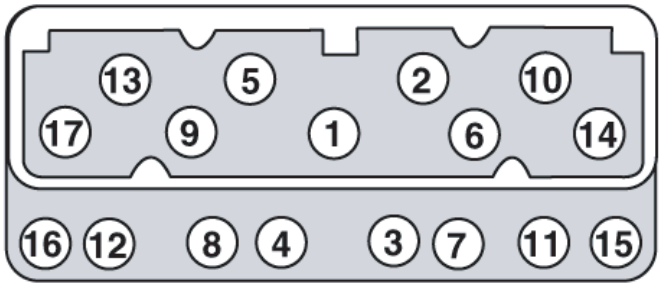
Be sure that the surface of the block and the surface of the head is thoroughly cleaned to remove any oily film before installation. Use alcohol or lacquer thinner on a lint-free rag to clean. Apply RTV silicone or ARP thread sealer to head bolt threads, and apply engine oil or ARP lubricant to the head bolt washers and underside of bolt heads. Torque bolts to 65 ft./lbs. in three steps (40-55-65), following the factory tightening sequence ***(See Figure 3)***. Check to make sure engine has proper grounds to chassis. When pouring coolant back in the radiator make sure to use at least a 50/50 mixture of coolant to water. A re-torque is recommended after initial start-up and cool-down (allow 2-3 hours for adequate cooling).

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.

NOTE: Torque sparkplugs to 10 ft./lbs. Do not overtighten sparkplugs! If short reach plug is used, poor performance and possible engine damage may occur.

Figure 2 - #1 Head Bolt Washer

Figure 3 - Cylinder Head Bolt Torque Sequence
Torque Bolts to 65 ft./lbs. in Three Steps (40-55-65)



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