

PERFORMER AND PERFORMER RPM CHEVROLET ALUMINUM CYLINDER HEADS for Small-block Chevrolet V8s CATALOG PERFORMER #60659, #60759, #60909, #60849, #60859, #60869, #60879 PERFORMER RPM #60719, #60739, #60899, 60999 INSTALLATION INSTRUCTIONS

PLEASE study these instructions carefully before installing your new cylinder heads. If you have any questions or problems, do not hesitate to contact our **Technical Hotline at: 1-800-416-8628**, 7 am - 5 pm, Monday-Friday, Pacific Standard Time or e-mail us at edelbrock.edelbrock.com.

DESCRIPTIONS:

The #60659, #60759 and #60909 Performer Cylinder Heads are designed for street high performance use, and replace original equipment small-block Chevrolet cast iron cylinder heads on 1986 & earlier 302, 327, 350, and 400 c.i.d. Chevrolet engines (not centerbolt). These heads have an exhaust crossover passage and are street legal replacement parts on any vehicle. Contact Edelbrock for the current E.O. number if required for emission validation. They accept either stock or Edelbrock valve covers #4449 or #4248.

The #60849 and #60859 Performer Centerbolt Cylinder Heads are designed for street high performance use, and replace original equipment small-block Chevrolet cast iron centerbolt cylinder heads on 1987 through 1994 5.7 Litre Chevrolet engines (except LT-1 or LT-5 Corvettes) using centerbolt valve covers and the 1987 & later revised intake manifold bolt pattern. These heads have an exhaust crossover passage and are street legal replacement parts on any vehicle. Contact Edelbrock for the current E.O. number if required for emission validation. Available with straight plugs only.

The #60869 and #60879 Performer Corvette Centerbolt Cylinder Heads are designed for street high performance use, and replace original equipment small-block Chevrolet aluminum cylinder heads on 1987 through 1991 5.7 Litre Chevrolet Corvette engines (except LT-1 or LT-5 Corvettes) using centerbolt valve covers and early style "straight" intake manifold bolt pattern. They also fit 1986 Corvette convertibles originally equipped with aluminum heads. When used with Fel-Pro head gaskets #1003 or #1010, they will produce the same compression ratio as the stock 57cc heads. These heads have an exhaust crossover passage and are street legal replacement parts on any vehicle. Contact Edelbrock for the current E.O. number if required for emission validation. Available with angled plugs only.

The #60719, #60739, #60899 and #60999 Performer RPM Cylinder Heads are designed for street high performance use on 1986 & earlier 302, 327, 350, and 400 c.i.d. Chevrolet engines (not centerbolt). The intake and exhaust ports are CNC machine matched and have been designed for maximum flow velocity when used with Edelbrock Performer RPM intake manifold #7101, Performer RPM cam kit #7102, and Performer Series Carburetor #1407 (750 cfm). **NOTE:** These heads have no exhaust crossover passage and will not work on any vehicle requiring EGR. #60719 and #60999 available with angled plugs only. #60739 and #60899 available with straight plugs only.

Complete cylinder heads are assembled with the following components: Stainless steel, one-piece, swirl-polished intake and exhaust valves with under-cut stems for increased flow; 2-ring positive oil control seals; 3/8" rocker studs and 5/16" guideplates; Edelbrock Sure-Seat Valve Springs, retainers and valve keepers. 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.

IMPORTANT NOTES: READ THIS BEFORE BEGINNING INSTALLATION!

NOTE: 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.

To complete your installation, you will need the following items:

- Fresh coolant
- Head gaskets; Fel-Pro #1003, #1014 or Detroit #55656HG
- Intake manifold gaskets; (see Specifications)
- Exhaust gaskets; Fel-Pro #1404 or equivalent
- Specific head bolts with hardened washers; (see Head bolts)
- Hardened pushrods; .100" longer-than-stock (if using stock type rocker arms);
Pushrods for conventional hydraulic lifter cams: Edelbrock #9629, Competition Cams #7693-16, Crane #11622-16
Pushrods for hydraulic roller lifter cams: Competition Cams #7949-16, Isky #203-HG Minus .460, Lunati #83132, or equivalent
- Non-self aligning rocker arms; Crane #11801-16, Sealed Power #R-865R, Pioneer-Barnes #818001, roller tip rocker arms, or equivalent
- 14mm x 3/4" reach gasketed spark plugs; Champion RC-12YC or equivalent

Piston-to-Head Clearance:

Caution: Edelbrock cylinder heads are designed to be used 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".

Piston-to-Valve Clearance:

Caution: Piston-to-valve clearance must be checked if a cam with more than .450" lift is used, and is highly recommended in all cases. Minimum piston-to-valve clearances are .120" (exhaust) and .100" (intake).

ACCESSORIES: Although Edelbrock Cylinder Heads will accept some OEM components (valve covers, intake manifold, head bolts, etc.), we highly recommend that premium quality hardware be used with your new heads.

HEAD BOLTS or STUDS: High quality head studs or head bolts with hardened washers, such as Edelbrock Head Bolt Kit #8550, must be used to prevent galling of the aluminum bolt bosses. Stock 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). Bolts not meeting these specs do not have enough thread engagement for use with hardened washers. The recommended hardened washers are GM #10051155, ARP #200-8511, or equivalent.

ROCKER ARMS: Stock (stamped type) rockers will require +.100" longer-than-stock hardened pushrods(Edelbrock #9626) 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 #60899 may require +.100" longer-than-stock pushrods even with roller rocker arms. You must check retainer-to-rocker clearance.

CAUTION: Some Chevrolet V8 cylinder heads are factory 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. Edelbrock cylinder heads are equipped with hardened pushrod guideplates. Therefore, Non "self-aligning" (i.e., Crane #11801-16, Sealed Power #R-865R, Pioneer-Barnes #818001 etc.) rocker arms are recommended or roller rocker arms may be used with stock length hardened pushrods.

PUSHROD GUIDE PLATE ALIGNMENT:

See page #4

VALVE COVERS: Edelbrock Performer RPM heads accept stock valve covers for the year and model for which they are listed. They will accept Edelbrock valve covers #4449, #4649, #4249 or #4248.

NOTE: Most taller-than-stock valve covers will interfere with the EGR system and other accessories, and are not legal on emission controlled vehicles.

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 Gasga-cinch Edelbrock #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 Fel-Pro #1404 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. Edelbrock makes emissions-legal Tubular Exhaust Systems for many applications. Check the Edelbrock catalog for complete listing, or call our Technical Hotline.

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. Champion RC-12YC are 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. **Do not overtighten sparkplugs!**

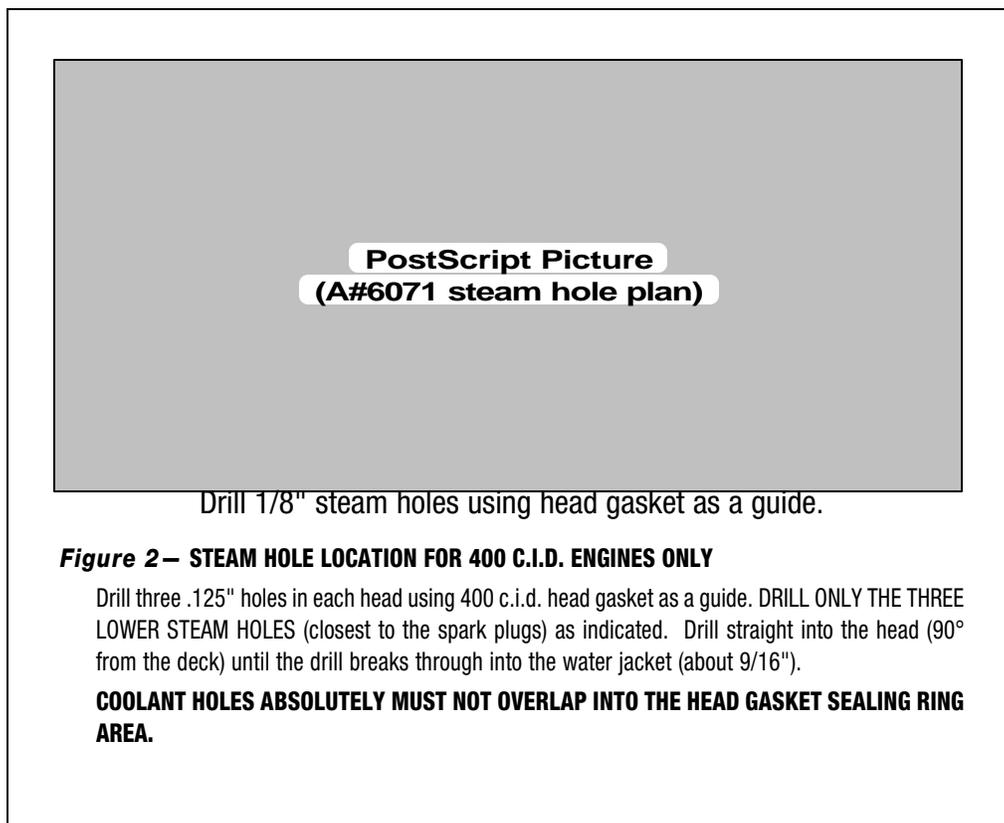
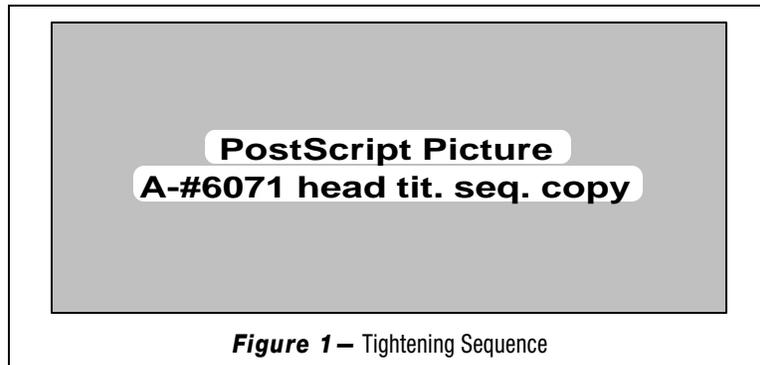
SPECIFICATIONS

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|--|------------------------------------|
| Head bolt torque: | 65 ft./lbs. (in steps of 40-55-65) |
| Rocker stud torque:..... | 45 ft./lbs. |
| Intake Gaskets: | |
| #60659-#60759-#60909..... | *Fel-Pro#1256 |
| #60719-#60739-#60899..... | *Fel-Pro#1205 |
| #60849-#60859..... | *GM#10159409 |
| #60869-#60879..... | *GM#10148096 |
| Combustion chamber volume: | |
| #60849, #60859, #60869, #60879..... | 60cc |
| #60899, #60909, 60999..... | 64cc |
| #60659, #60719, #60739, #60759..... | 70cc |
| Deck thickness:..... | 9/16" |
| Valve Seats: Hardened, interlocking, compatible with | unleaded fuels |
| Valve Size: | Intake- 2.02", Exhaust- 1.60" |
| Valve Spring Diameter: | 1.45" |
| Valve Spring Installed Height: | 1.800" |
| Valve Spring Seat Pressure:..... | 120 lbs. |
| Max. Valve Lift: | 0.575" |

* Or equivalent

INSTALLATION

Installation is the same as for original equipment cylinder heads. Consult service manual for specific procedures, if necessary. For 350 and smaller engines, use Fel-Pro head gasket #1003 or Detroit #55656HG. #1003 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 #1003 for subsequent gasket changes to get a good seal. For 400 c.i.d. small-blocks, use Fel-Pro #1014. **YOU MUST DRILL "STEAM HOLES" IN CYLINDER HEADS FOR 400 ENGINES (see Figure 2).** 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. Torque to 65 ft./lbs. in three steps (40-55-65) following the factory tightening sequence (see Figure 1). Check to make sure engine has proper grounds to chassis. When pouring coolant back in the radiator make sure to use atleast 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).

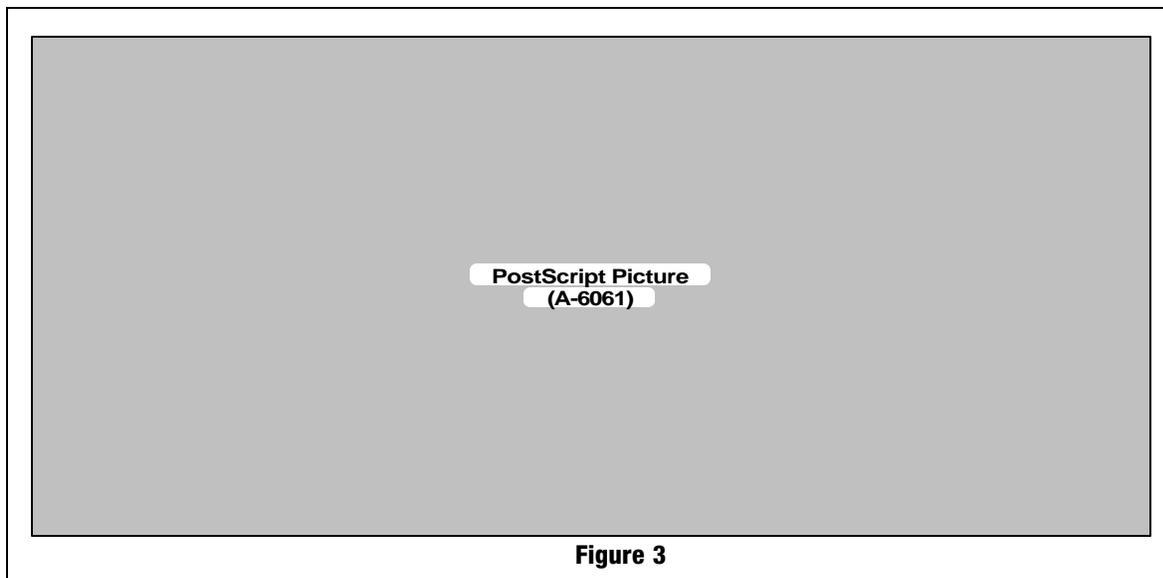


PUSHROD GUIDEPLATE ALIGNMENT

Complete Edelbrock cylinder heads are sold with the pushrod guideplates and rocker studs installed, but they will require checking for proper valve train alignment and pushrod clearance before operating engine.

The pushrod guideplates are attached to the cylinder heads with two (each) rocker studs. There is enough clearance around the stud holes to adjust the guideplates for optimum alignment of your valve train components (see Figure 3).

1. After the heads have been bolted on your engine and torqued to specs, install your pushrods, rocker arms, and rocker arm adjusting nuts.
2. Check pushrod-to-cylinder head clearance. **YOU MUST CHECK TO ENSURE THAT THERE IS CLEARANCE BETWEEN THE PUSHRODS AND THE CYLINDER HEADS (.005" min.). See Note "A" (Fig 3).**
3. If adequate clearance exists between pushrod and head, slowly turn engine over through at least two revolutions while watching pushrod. Make sure that pushrod does not rub on the head either at full lift or when the valve is seated closed.
4. If pushrod rubs on the cylinder head, remove rocker arms, loosen the rocker studs and move the guideplate as needed to provide clearance.
5. After checking all pushrods for proper clearance, ensure that the tip of the rocker arm is making adequate contact with the top of the valve stem.
6. Carefully re-torque to 45 ft./lbs. any rocker studs that were loosened. Check alignment again to be sure that the guideplates did not move while torquing the studs.



Special Instructions for Performer Centerbolt Heads #60859 used as part of the Total Power Package

Performer Centerbolt Heads #6085 can be used as part of a Total Power Package on 1987 and later 305 /350 V8s with T.B.I. (Throttle Body Injection) along with Performer-Plus Camshaft #3702 and Performer T.B.I. manifold #3704. This combination of parts gave an incredible performance gain of 2.61 seconds in 0 to 60 m.p.h. testing on a full-sized 1993 Suburban. In order for all of these components (Edelbrock heads, cam, and intake manifold) to give the best performance, it is necessary to change the computer chip in the stock ECM (Electronic Control Module). **It is only necessary to change the computer chip if all three components (Edelbrock heads, cam, and intake manifold) are used. If only one or two of these parts are used, it is not necessary to change the chip. In fact, changing the chip without using all three Power Package parts will result in loss of power.**

Due to the vast number of different chips used in production vehicles, you will need to complete the enclosed Chip Information Card and return it to Edelbrock. The correct chip for your vehicle will then be sent to you at no charge via UPS.

PLEASE complete and mail your warranty card. Be sure to write the model number of this product in the "Part #____" space.

THANK YOU.

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