



PERFORMER & PERFORMER RPM ALUMINUM CYLINDER HEADS
1967-1991 AMC 343, 360, 390, & 401 c.i.d. V8 Engines
Catalog #s: Performer - 60129 & 60139
Performer RPM - 60107, 60109 & 60119
INSTALLATION INSTRUCTIONS

Please study these instructions carefully before installing your new cylinder heads. If you have any questions, do not hesitate to contact 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: Designed for 1967-91 343, 360, 390, and 401 c.i.d. AMC engines, these street high-performance heads provide out-of-the-box, bolt-on power for AMC muscle cars and Jeep V8s. They offer improved power throughout the rpm range for great throttle response and top-end horsepower. The intake and exhaust ports are CNC profiled for superior flow and efficient 54cc dual-quench combustion chambers produce approximately a 9.5:1 compression ratio in 401c.i.d. engines using a stock style dished piston. Hardened valve seats are compatible with any fuel and a 45° intake seat angle (stock is 30°) improves mid to high lift flow. These heads include stepped dowel pins for use on pre-1970 blocks, and feature 1970 and later 1/2" bolt holes. Use Edelbrock Head Bolt Bushing kit #9693 in place of hardened washers to allow use on pre-1970 blocks. These heads feature an improved overall oil drain circuit. Performer heads include a drilled exhaust cross-over, to meet emissions requirements.

The 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
- ☐ Edelbrock Sure-Seat valve springs #5792
- ☐ Retainers #9644
- ☐ Valve keepers #9616
- ☐ Valve spring seats #5771

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 BEFORE BEGINNING INSTALLATION!

For a successful installation, the Edelbrock Performer RPM Cylinder Heads require some components other than original equipment parts.

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

- ☐ Head gaskets; Fel-Pro #8266PTI (see instructions below)
- ☐ Intake manifold gaskets; Fel-Pro #MS96011 or equivalent
- ☐ Exhaust gaskets; Edelbrock #7239 or equivalent
- ☐ Edelbrock head bolt kit #8531 for Pre-1970, or #8532 for 1970 and later (see instructions below)
- ☐ Adjustable rocker arm assembly (Highly Recommended)
- ☐ Edelbrock hardened steel pushrods #9637 or equivalent
- ☐ 14mm x 3/4" reach gasketed spark plugs; Champion RC-12YC or equivalent

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 your new 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 kits #8531 for Pre-1970 (also use Edelbrock Head Bolt Bushings #9693 in place of washers on Pre-1970 blocks), or #8532 for 1970 and later blocks include all bolts which must be used with these cylinder heads. Stock headbolts may be used with hardened washers.

ROCKER ARMS AND VALVE TRAIN: Although stock rocker arms may be used (if new lock nuts are used), we highly recommend using adjustable aftermarket roller rocker arms such as Crane Cams #36750-16, Crower #73645-16 or 72845-16, or any equivalent. Long slot, roller tip rockers such as Comp Cams #1442-16 may also be used.

VALVE COVERS: Edelbrock Performer RPM cylinder heads accept 1967-1991 stock valve covers. They also will accept Edelbrock valve covers #4431.

INTAKE MANIFOLD: Although stock intake manifolds will fit, Edelbrock Performer and Performer RPM AMC Cylinder Heads are matched in size and operating range with Edelbrock Performer manifolds #2131 and #3731(EGR) for 1970-1991 engines, and with RPM Air-Gap AMC manifolds #7530 for 1967-69 engines, and #7531 for 1970-91 engines. Fel-Pro intake manifold gasket #MS96011 or equivalent is recommended. Follow the manifold or gasket manufacturer's recommendations for installation.

EXHAUST HEADERS: Check and make sure there is enough header/manifold-to-spark plug clearance BEFORE INSTALLING CYLINDER HEAD ON ENGINE. Exhaust ports are CNC-profiled to match Fel-Pro #1434 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 plug threads to prevent galling in the cylinder head, and torque to 10 ft./lbs. Do not overtighten sparkplugs! If short reach plug is used, poor performance and possible engine damage may occur.**

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

Engine Oils

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
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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 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 oil or suitable thread lubricant to head bolt threads and the underside of bolt heads and washers ...

Torque to 65-70 ft./lbs (7/16" bolts) and 100-110 ft./lbs (1/2" bolts) in four steps (30, 40, 50, 60-75; or 30, 60, 90, 100-110) following the factory tightening sequence (**See Figure 1**). See intake manifold instructions for installation of the intake manifold.

NOTES: *EARLY BLOCKS* - Use supplied step-dowel pins to locate heads on the block when installed on 1967-1969 blocks. Early blocks require 7/16" bolts. Use Edelbrock Head Bolt Bushings with Integral Washers #9693 in place of washers supplied with your head bolt kit. *ALL BLOCKS* - Two 7/16" and two 1/2" diameter (3" long) bolts are supplied for the two center-end bolts of the heads (**See Figure 1**). Select the appropriate diameter for your application (7/16" or 1/2"). A re-torque is recommended after initial start-up and cool-down (allow 2-3 hours for adequate cooling).

SPECIFICATIONS:

Head Bolt Torque:	7/16" Bolts: 65-70 ft./lbs. 1/2" Bolts: 100-110 ft./lbs. (Applied gradually in 4 steps)
Rocker Stud Torque:	50 ft./lbs.
Combustion Chamber Volume:	54 cc
Deck Thickness:	5/8"
Valve Seats:	Hardened ductile iron, non-interlocking, compatible with any fuel
Valve Size:	Intake - 2.02", Exhaust - 1.60"
Valve Spring Diameter:	1.55"
Valve Spring Installed Height:	1.900"
Valve Spring Seat Pressure:	115 lbs.
Max. Valve Lift:	.580"

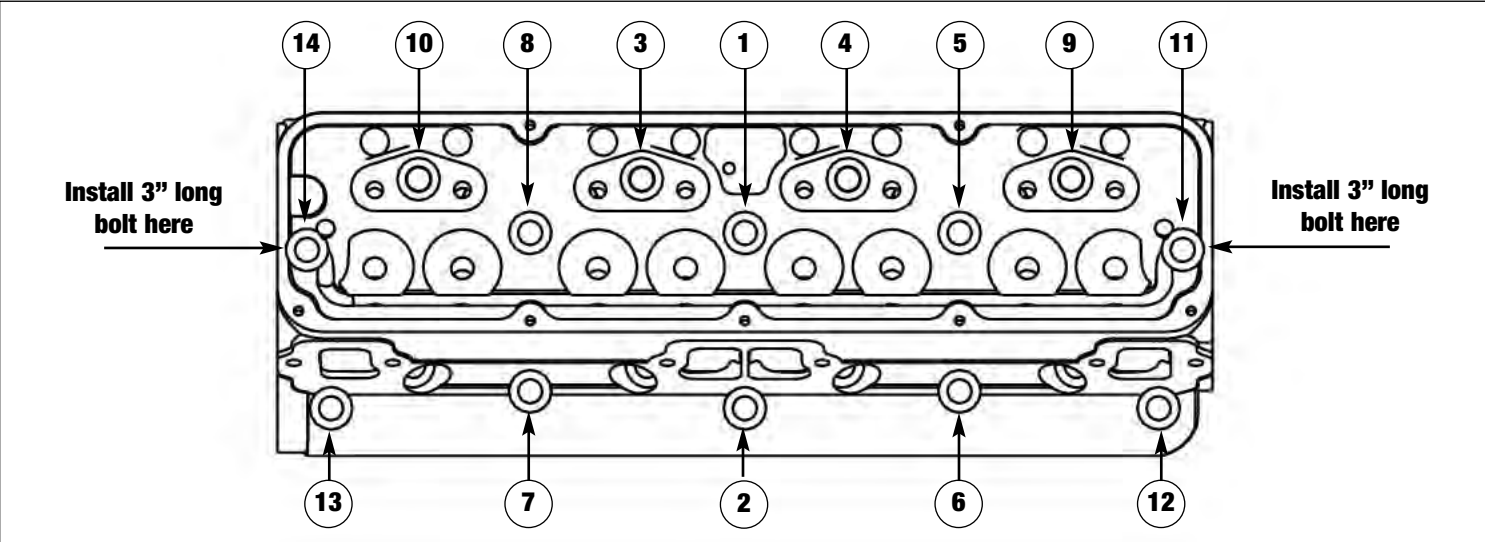


Figure 1 - AMC Cylinder Head Bolt Tightening Sequence
(Tighten in four steps: 30, 40, 50, 65-70 or 30, 60, 90, 100-110 ft/lbs)

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