



## PERFORMER RPM - ALUMINUM CYLINDER HEADS 318, 340 & 360ci Small-block Chrysler GENERAL INSTRUCTIONS

### CATALOG #'s

<b>60175 (340ci, For Hydraulic Roller Cam)</b>	<b>60769 (Bare)</b>
<b>60179 (340ci, For Hydraulic Flat Tappet Cam)</b>	<b>60775 (For Hydraulic Roller Cam)</b>
<b>60197 (340ci, NHRA Legal)</b>	<b>60779 (Hydraulic Flat Tappet Cam)</b>
<b>60767 (NHRA Legal)</b>	

**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**, 7am-5pm, Monday through Friday.

### DESCRIPTION

Designed for non-emissions 1967-1991 Chrysler 318-340-360 c.i.d. engines, these heads feature a 65cc combustion chamber along with a 171cc intake port and an 77cc exhaust port volume. Other outstanding features include phosphor-bronze valve guides, interlocking, ductile iron valve seats and premium one-piece, stainless steel, high-flow 2.02" and 1.60" intake and exhaust valves. Heat treated, machined steel retainers and valve locks along with heavy duty valve springs work with cams having valve lifts up to .575". These powerful heads use the stock location for intake and exhaust bolt holes and flanges, rocker shafts, spark plugs and valve cover rails, for compatibility with original equipment and aftermarket parts. These 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 #5767, retainers #9736, and valve keepers #9611. Complete cylinder heads are assembled and prepared for installation right out of the box.

### ADDITIONAL PARTS REQUIRED

You will need the following, non OEM, parts in order to successfully install the Edelbrock Performer RPM Cylinder Heads:

- Head gaskets; Edelbrock # 7326 or Fel-Pro #1008 (see installation instructions)
- Intake manifold gaskets; Edelbrock #7276, Fel-Pro #1213 or equivalent
- Exhaust gaskets; Edelbrock #7236, Fel-Pro #1413 or equivalent
- Edelbrock Head Bolt Kit #8555; (see instructions below)
- Adjustable rocker arm assembly

**NOTE:** These heads are designed to accommodate stock stamped steel rocker arm assemblies, and stock-like aftermarket setups. Ductile iron adjustable arms may require special clearancing of the rocker arm body in order to clear valve spring retainers. Also, non-stock spec, aftermarket rocker arms may require special modifications.

- Pushrods compatible with adjustable rocker arm assembly (stock length- 7.375")
- 14mm x 3/4" reach gasketed spark plugs; Champion RC-12YC or equivalent

### ADDITIONAL NOTES

#### 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 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 to your pistons may be required. Actual valve-to-piston clearance should be specified by your camshaft manufacturer.

If these heads are used on small bore engines, valve-to-bore clearance should also be checked, and the top of the bore notched for clearance if necessary.

**Special Note:** Use P/N 60179 for high compression 340 engines with negative piston deck height (Pistons protrude above the deck on the block). **In all cases, you must make sure that there is at least .035" clearance between the piston and any part of the cylinder heads.**

## ACCESSORIES

Although Edelbrock Cylinder Heads will accept 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 Kit #8555 includes two longer-than-stock bolts which must be used with these cylinder heads. If you use any other head bolts, you must use the two head bolts and washers supplied with these heads in position #5 in Fig. 1. **This position will not accept stock length head bolts.**

**ROCKER ARMS AND VALVE TRAIN:** Adjustable rocker arms must be used with cams having greater than stock valve lift. We recommend original equipment or aftermarket adjustable rocker arm assemblies, along with matching pushrods (stock length, 7.375”).

**NOTE:** These heads are designed to accommodate stock stamped steel rocker arm assemblies, and stock-like aftermarket setups. Ductile iron adjustable arms may require special clearancing of the rocker arm body in order to clear valve spring retainers. Also, non-stock spec, aftermarket rocker arms may require special modifications.

**CAUTION:** Before installing rocker shafts, check for burrs or other obstructions on the machined saddles where the shaft sits. Remove any burrs and clean saddles thoroughly, if necessary.

**INTAKE MANIFOLD:** Although stock intake manifolds will fit, Edelbrock Performer RPM Chrysler Cylinder Heads are matched in size and operating range with Edelbrock Performer RPM intake manifold #7176. Edelbrock #7276 or Fel-Pro intake manifold gaskets #1213 are recommended. Apply Gasga-cinch Edelbrock #9300 to intake surface of heads and position intake gaskets. Do not use cork or rubber end seals supplied with gaskets. Set the manifold on the engine with gaskets installed and measure the gap between the block and the manifold end seal surface. Be sure to remove any dowel pins which may have used with the stock intake manifold. Remove the manifold and apply enough automotive RTV Silicone sealer to fill the gap along front and rear of block, overlapping gaskets at the four corners. Install manifold and torque manifold bolts to 25 ft./lbs.

**VALVE COVERS:** Edelbrock Performer RPM heads accept stock or aftermarket valve covers. Edelbrock offers valve covers #4495 & #4295, along with gasket set # 7592 for this particular application.

**EXHAUST HEADERS:** *Most* headers or manifolds designed for original equipment heads will fit Edelbrock Performer RPM Chrysler Cylinder Heads. Exhaust ports are CNC-profiled to match Edelbrock #7236, or Fel-Pro #1413 exhaust gaskets. **NOTE: OEM driver side exhaust manifold casting #2863553 will NOT fit.**

**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 SPARK PLUGS!**

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

### Protect your brand new engine

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

### Or supplement your favorite brand of engine oil

Zinc Additive	-	P/N 1074
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## 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 is 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 under side of bolt heads and washers. Torque to 95 ft./lbs. in three steps (45-65-95) following the factory tightening sequence (**see Figure 1**). A re-torque is recommended after initial start-up and cool-down (allow 2-3 hours for adequate cooling).

## SPECIFICATIONS:

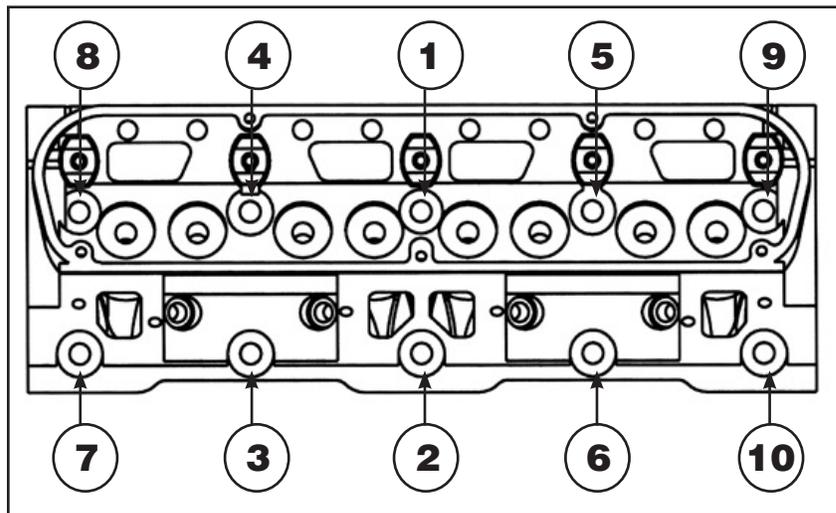
Head bolt torque:	95 ft./lbs. (in steps of 45-65-95)
Rocker shaft bolt torque:	25 ft./lbs.
Combustion chamber volume:	65cc ( $\pm$ 2cc)
Deck thickness:	5/8"
Valve Seats:	Hardened, interlocking, compatible with any fuel
Valve Size:	Intake- 2.02", Exhaust- 1.60"
Valve Spring Diameter:	1.45"

### For Hydraulic Flat Tappet Cam

Valve Spring Installed Height:	1.800"
Valve Spring Seat Pressure:	114 lbs.
Max. Valve Lift:	.575" (Coil Bind @ .670")
Replacement Spring PN	5767

### For Hydraulic Roller Cam

Valve Spring Installed Height:	1.800"
Valve Spring Seat Pressure:	150 lbs.
Max. Valve Lift:	.575" (Coil Bind @ .650")
Replacement Spring PN	5845



**Figure 1 - Tightening Sequence**



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