



# PERFORMER RPM - ALUMINUM CYLINDER HEADS RECTANGLE PORT 454ci BIG-BLOCK CHEVROLET

## 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: (800) 416-8628** from 7:00 am to 5:00 pm, Monday through Friday, Pacific Standard Time.

### CATALOG #'s

60547 (NHRA Legal)

60549 (Bare)

60555 (Complete, For Hydraulic. Roller Cam)

60559 (Complete, For Hydraulic Flat Tappet Cam)

605515 (Complete, Polished, For Hydraulic. Roller Cam)

605519 (Complete, Polished, For Hydraulic Flat Tappet Cam)

*These Heads are not legal for sale or use on pollution-controlled motor vehicles.*

### DESCRIPTION

The Edelbrock Performer RPM Cylinder Head is designed for high performance street use and is interchangeable with any high performance rectangular port big-block Chevrolet cylinder head. These cylinder heads offer "out of the box" bolt-on performance with no additional porting required. The performance range is 6500 rpm's but offers great: throttle response throughout the power band, and top-end horsepower. The intake and exhaust ports are CNC machine matched and have been designed for maximum flow velocity when matched with other Edelbrock components (See WANT MORE POWER) . The 118cc combustion chamber is an open chamber designed to maximize combustion efficiency while still retaining streetable compression ratios. **NOTE:** This head has no exhaust crossover passage and will not work on any vehicle requiring EGR. This cylinder head is compatible with all 1965-1996 big-block Chevy blocks.

**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, 7/16" rocker studs and 3/8" guideplates; Edelbrock Sure-Seat Valve Springs #5745 (For Hydraulic. Flat Tappet Cam), #5823 (For Hydraulic. Roller Cam); retainers #9715, valve keepers #9615; Valve spring seats #5770. 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.

### ACCESSORIES

Although Edelbrock Street Cylinder Heads will accept OEM components (rocker arms, 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 must be used to prevent galling of the aluminum bolt bosses. **Edelbrock Head Bolt Kit #8551 includes eight longer-than-stock bolts which must be used with these cylinder heads. If you use any other head bolts, you must use the eight head bolts and washers supplied with these heads in positions #15, #8, #2, and #7 in Figure 1.** These positions will not accept stock length head bolts. **NOTE:** Head bolts may bottom out in blocks with blind bolt holes (Bowtie, 502 Mark V, etc.). Check for clearance, and if necessary shorten bolts or replace with a set specifically designed for use with blind holes.

**VALVE COVERS:** Most roller rockers are physically larger than stock rockers so taller valve covers are usually required for clearance. Use Edelbrock Signature Series chrome valve covers #4680 or Elite Series polished aluminum valve covers #4280.

**ROCKER ARMS:** The valve springs supplied will accommodate valve lifts up to .700", check the spring pressures required by your cam manufacturer for your camshaft. This lift is much higher than stock rocker arms will allow. Roller rocker arms will be required if your camshaft has more than .500" lift. Stock rockers may require longer-than-stock pushrods to clear the valve springs.

**NOTE:** A visual inspection of rocker arm to valve alignment is recommended. In some cases, it maybe necessary to loosen the guide plate and adjust the plate to get proper alignment. Make sure to re-torque the studs to recommended torque listed below.



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### ACCESSORIES CONTINUED

**INTAKE MANIFOLD:** Although stock rectangular port intake manifolds will fit, the Edelbrock Street Cylinder Heads are matched in size and operating range with Edelbrock Performer RPM intake manifolds #7163 or #7562. Additionally, any manifold that matches: Fel-Pro gasket #1211, or Edelbrock #7202 may be used (Edelbrock Torker, Victor Jr., Victor Ram, etc.). Rectangular port intake manifolds may be used as-is, or port-matched to the same configuration as the cylinder heads for optimum performance.

**EXHAUST HEADERS:** Any header or manifold designed for original equipment heads will fit the Edelbrock Street Cylinder Heads. Exhaust ports are CNC-profiled to match: Fel-Pro #1411/Edelbrock #7205 exhaust gaskets which are recommended for this application.

**SPARK PLUGS:** Use 14mm x 3/4" reach gasketed spark plugs. Heat range will vary by application and may range from Champion N-9Y to N-14Y (or equivalent). If required for header clearance, use Champion Premium Gold #2071,RC-12YC or equivalent which are 1/4" shorter than "N" series plugs. **Use anti-seize on the plug threads to prevent galling in the cylinder head, and torque to 10 ft./lbs. Do not over tighten sparkplugs!**

**NOTE: Spark plugs must be checked for proper piston clearance, when using dome pistons**

**PISTONS:** Some dome style pistons will not clear the spark plugs properly, for a complete line of dome pistons designed for these heads contact piston manufactures like JE or ROSS pistons.

**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
Zinc Additive	-	P/N 1074
Engine Assembly Lube	-	P/N 1075

### WANT MORE POWER

These heads have been designed for maximum flow velocity when matched with other Edelbrock components such as:

#### Intake Manifold

- #7163 - Performer RPM intake manifold for square-bore carbs.
- #7562 - RPM Air-Gap 2-R intake manifold for square-bore carbs.

#### Carburetor

Performer Series square-bore carburetors.

#### CamShaft Kit

- #7162 - Performer RPM hydraulic flat tappet cam kit.
- #2261 - Rollin' Thunder hydraulic roller camshaft kit For 1965-1995 Mark IV and Gen V engines.
- #2262 - Rollin' Thunder hydraulic roller camshaft kit For 1996 + Gen VI engines.

### INSTALLATION

Installation is the same as for original equipment cylinder heads. If necessary, Consult service manual for specific procedures. For 454 and smaller Mark IV engines, use Edelbrock head gasket #7302, Fel-Pro head gasket #1017-1, or equivalent. For 454 Gen V engines, use Fel-Pro head gasket #1037, Edelbrock # 7375, or equivalent. For 502 c.i.d. Gen V engines, use Fel-Pro head gasket #1047, Edelbrock # 7375, or equivalent.

**NOTE:** For 454 and smaller Mark IV engines, Edelbrock Cylinder Head Gasket Set #7362 may be used. The set contains all gaskets necessary to install these cylinder heads onto a Mark IV engine, including intake, exhaust, cylinder head, distributor, water neck, and valve cover gaskets. 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 liquid teflon or suitable thread sealer to head bolt threads. Torque short bolts to 65 ft./lbs. and long ones to 75 ft./lbs. in three steps 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).



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### SPECIFICATIONS

<b>Head bolt torque:</b> .....	65 ft./lbs. (short bolts; #11, #5, #4, and #10), 75 ft./lbs. (long bolts; all others)
<b>Rocker stud torque:</b> .....	45 ft./lbs.
<b>Combustion chamber volume:</b> .....	118 cc
<b>Deck thickness:</b> .....	9/16"
<b>Valve Seats:</b> .....	Hardened, interlocking, compatible with unleaded fuels
<b>Valve Size:</b> .....	Intake- 2.19", Exhaust- 1.88"
<b>Valve Stem Diameter:</b> .....	11/32"
<b>Valve Spring Diameter:</b> .....	1.54"
<b>For Hydraulic Flat Tappet Cam</b>	
<b>Valve Spring Installed Height:</b> .....	1.975"
<b>Valve Spring Pressure:</b> .....	120 lbs. @ 1.975"
<b>Max. Valve Lift:</b> .....	.700" - Check spring pressures per cam manufacturer.
<b>Valve Spring Coil Bind:</b> .....	1.150"
<b>For Hydraulic Roller Cam</b>	
<b>Valve Spring Installed Height:</b> .....	1.975"
<b>Valve Spring Pressure:</b> .....	175lb @ 1.975" 465lb @ 1.375"
<b>Max. Valve Lift:</b> .....	.700" - Check spring pressures per cam manufacturer.
<b>Valve Spring Coil Bind:</b> .....	1.150"

### Bolt Boss Height

- A = 3.38"**
- B = 2.88"**
- C = 4.44"**
- D = 1.38"**

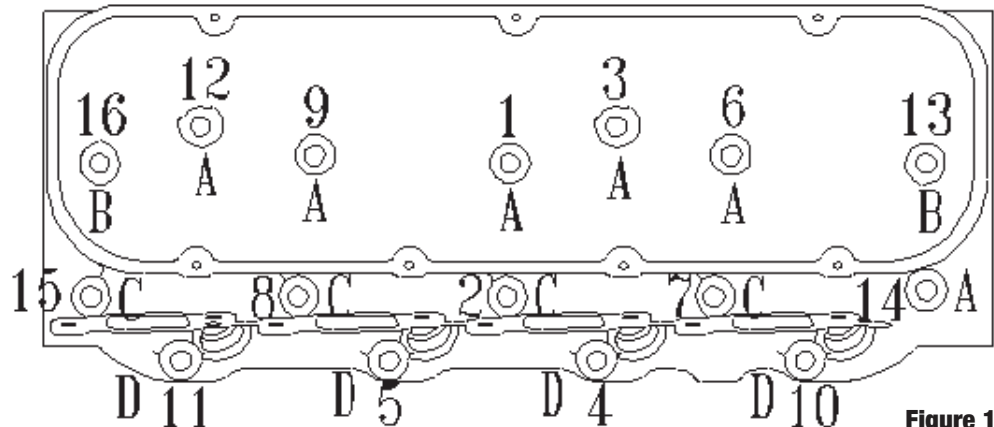


Figure 1



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