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: Designed for high-performance non-emission 1965-79 Oldsmobile 400, 425 and 455 cubic-inch engines, this head features an improved 77cc combustion chamber design that increases the quench area for a more efficient burn. This results in outstanding horsepower and torque. The complete heads (#61029) are assembled and ready-to-run with stainless steel 2.150" intake valves and 1.680" exhaust valves, hardened ductile iron valve seats for compatibility with unleaded fuels, and phosphor bronze valve guides. The valvetrain has been upgraded from the factory pedestal-mount system to a 7/16" screw-in stud and 3/8" pushrod-slot guideplate for increased valvetrain stability. The factory location ports feature 218cc intake runners and 128cc raised-floor exhaust runners for substantially improved flow and increased power. Head bolt holes are drilled for the stock 7/16" bolts, but can be easily modified for 1/2" bolts or studs by drilling the 1/2" counterbore from the deck side through the top. Aftermarket rocker arms and 9.800" long hardened pushrods are required for installation. Some engines may require longer or shorter pushrods to achieve proper valve train geometry. These heads will also fit 350-403 Small Block Oldsmobile engines, but only if used in conjunction with Edelbrock manifold #7111 (port matching is required). Although these heads will fit on Small Block Oldsmobile engines, the 77cc combustion chamber size is not ideal for Small Block applications and will lower compression. See PN 61035 & 61039 for Small Block specific cylinder heads.

Complete cylinder heads are assembled with the following components: Stainless steel, one-piece intake and exhaust valves with under-cut swirl polished stems for increased flow; high quality Manganese Bronze valve guides; metal jacketed oil seals; 7/16" rocker arm studs and 3/8" guide plates; Hardened steel valve spring cups; Edelbrock Valve Springs, retainers and valve keepers. #61029 comes with springs for hydraulic flat tappet cams and #61025 comes with springs for hydraulic roller cams.

BEFORE BEGINNING INSTALLATION

IMPORTANT NOTES: READ BEFORE BEGINNING INSTALLATION!

For a successful installation, 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; Edelbrock #7340
- □ Intake manifold gaskets; Edelbrock #7284
- □ Exhaust gaskets; Edelbrock #7238
- □ Valve Cover gaskets; Edelbrock #7598

NOTE: Edelbrock Cylinder Head Gasket Set #7373 may also be used in place of individual gaskets. This set contains all gaskets necessary for cylinder head installation, including cylinder head, intake (requires valley cover plate), exhaust, and valve cover gaskets.

- □ Edelbrock head bolt kit #8558
- □ 14mm x 3/4" reach x 5/8" hex, gasketed spark plugs (heat range to be determined by specific application)
- □ Adjustable rocker arm assembly (Premium roller rockers recommended)
- □ 9.800" hardened pushrods; for most rocker assemblies

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". Performer & Performer RPM cylinder heads are designed for use with flat-top pistons.

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 350 ci engines and larger. Use extreme caution if installing this head on a smaller engine as 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 Aluminum Cylinder Heads will accept some OEM valve covers and intake manifolds, we highly recommend that premium quality components be used with your new heads.

INTAKE MANIFOLD: Although stock intake manifolds will fit, the Edelbrock Oldsmobile Cylinder Heads are matched in size and operating range with Edelbrock Performer Olds 455 intake manifold #2151 on 400-425-455 c.i.d. engines. These heads **must** be used with Performer RPM Olds manifold #7111 only on 350-403 c.id. engines. Manifolds may be used as-is, or port matched to the same size as the cylinder heads for optimum performance.

HEAD BOLTS or STUDS: Edelbrock Head Bolt Kit #8558 must be used with these cylinder heads. These cylinder heads will not accept stock length head bolts. To prevent stripping of head bolts or improper torque, you must use the correct length bolt in each location. See Figure 1 for head bolt location.

PUSHRODS: Hardened pushrods are required for installation. Use 9.800" long pushrods for 400-425-455 engines.

VALVE COVERS: Use Edelbrock Signature Series valve covers #4485.

Installation is the same as for original equipment cylinder heads. Consult service manual for specific procedures, if necessary. Use Edelbrock head gasket #7340 or equivalent. Be sure that the surface of the block and the surface of the head has been thoroughly cleaned to remove any oily film before installation. Use alcohol or lacquer thinner on a lint-free rag to clean. Coat threads, washers and underside of bolt heads with motor oil or special lube supplied with head bolt kit for accurate torque readings. Torque 7/16" head bolts to 85 ft.-lbs. If using 1/2" head bolts (which require drilling out the bolt bosses in the heads), torque bolts to 90 ft.-lbs. Torque head bolts in three even increments (see Figure 1). Start in the center and work out towards the ends. A re-torque is recommended after initial start-up and cool-down (allow 2-3 hours for adequate cooling).

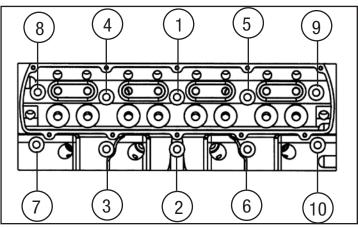


Figure 1- Head Bolt Tightening Sequence

Note: Torque bolts to 85 ft.-lbs. (7/16") or 90 ft.-lbs. (1/2") in three even increments. Coat threads, washers, and underside of bolt heads with motor oil for accurate torque readings. Start in center and work out towards ends following numbered sequence. Re-torque all head bolts after initial warm-up and cool-down.

SPARK PLUGS: Use 14mm x 3/4" reach gasketed spark plugs. Heat range will vary by application and may range from Champion RC-9YC to RC-14YC (or equivalent). For typical street use, Champion RC-12YC or equivalent should work well. **Use anti-seize on the plug threads to prevent galling in the cylinder head, and torque to 10 ft.-lbs. Do not overtighten sparkplugs!**

EXHAUST HEADERS: Any header or manifold designed for original equipment heads will fit the Edelbrock Oldsmobile Cylinder Heads. Exhaust ports are CNC profiled for optimum performance and **should not be enlarged** to fit the header gaskets. Fel-Pro header gaskets #1439 are recommended.

ROCKER ARMS: Roller rocker arms are required, stock rocker arms will not fit! We recommend use of Crane roller rockers or equivalent. Carefully check for pushrod interference with the pushrod clearance holes in the cylinder heads. Please check this area carefully before starting engine!

INSTALLATION PROCEDURE

SPECIFICATIONS	
Head Bolt Torque:	85 ftlbs. (7/16")
	90 ftlbs. (1/2")
Rocker Arm Stud:	7/16"
Rocker Arm Stud Torque:	45 ft./lbs.
Combustion Chamber Volume:	77 cc
Deck Thickness:	5/8"
Valve Seats:	Hardened, interlocking,
	compatible with any fuel
Valve Size:	Intake- 2.150",
	Exhaust- 1.68"
Valve Stem Diameter:	11/32"
Valve Spring Diameter:	1.45"
Valve Spring Installed Height:	1.800"
Valve Spring Seat Pressure:	128 lbs.(Flat Tappet) / 150lbs
	(Hydra. Roller)
Max. Valve Lift	.600"
Push Rod Dia. (Guide Plate Slot) :	3/8"
Push Rod Length (400-425-455):	9.800"



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