Edelbrock E-CNC Rectangular Port Cylinder Heads
Big-Block Chevrolet V8s
PART #79529, 79535, 79539, 79549, 79555 & 79559
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: (800) 416-8628** from 7:00 am to 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: The Edelbrock E-CNC Cylinder Head is designed for street high performance use, and is interchangeable with any factory iron high performance big-block Chevrolet cylinder head. This new cylinder head offers "out of the box" bolt-on performance with no additional porting required. The performance range is 2500-7000 rpm with great throttle response throughout the power band as well as top-end horsepower. The intake ports, exhaust ports and combustion chambers have all been CNC ported to maximize flow and horsepower production. The 118cc combustion chamber (#79549, 79555 & 79559 only; #79529, 79535, 79539 have 108cc chambers) is an open chamber design to maximize combustion efficiency with streetable compression ratios.
NOTE: These heads have no exhaust crossover passage and will not work on any vehicle requiring EGR. These cylinder heads are 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 (#5823 for Hydraulic Roller Cam), retainers #9715, valve keepers #9615 and Valve spring seats #5770. Complete cylinder heads are assembled and prepared for installation right out of the box. #79549 and #79529 are bare heads and require final guide machining and valve jobs prior to installation.

ACCESSORIES: Although Edelbrock E-CNC 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.

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.

VALVE COVERS: Because most roller rockers are physically larger than stock rockers, taller valve covers are usually required to clear them. Use Edelbrock Signature Series chrome valve covers #4680 or Elite Series polished aluminum valve covers #4280.

INTAKE MANIFOLD: Edelbrock E-CNC Cylinder Heads are matched in size and operating range with Edelbrock Performer RPM intake manifolds #7163 or #7562. Additionally, any manifold that matches Edelbrock gasket #7202 may be used (Edelbrock Torker, Victor Jr., Victor Ram, etc.). Intake manifolds may be used as-is, or port-matched to the same configuration as the cylinder heads for optimum performance.

EXHAUST HEADERS: Edelbrock E-CNC Cylinder Heads have exhaust ports that are CNC-profiled to match Fel-Pro #1412 exhaust gaskets, which are recommended for use with this application. Only use headers with primary tubes large enough to clear the Fel-Pro #1412 gasket with your E-CNC Cylinder Heads.

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.

SPARK PLUGS: Use 14mm x 3/4" reach gasketed spark plugs. Heat range will vary by application and may range from Champion RC9YC to RC12YC (or equivalent). If required for header clearance, use Champion Premium Gold #2071, RC-12YC or equivalent which are 1/4" shorter than standard 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.***

INSTALLATION: Installation is the same as for original equipment cylinder heads. Consult service manual for specific procedures, if necessary. For 454 and smaller Mark IV engines, use Edelbrock head gasket #7302 or equivalent. For Gen V or VI engines, use Edelbrock head gasket #7375 or equivalent.

NOTE: 454 and smaller Mark IV rectangular port engines can use Edelbrock Cylinder Head Gasket Set #7362. Gen V & VI engines should use Edelbrock Head Gasket Set #7376.
These sets contain all gaskets necessary to install these cylinder heads onto a Mark IV, Gen V or VI 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 bolts to 70 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.

SPECIFICATIONS

Head bolt torque:	70 ft./lbs.
Rocker stud torque:	45 ft./lbs.
Combustion chamber volume:	108cc (#79529, 79535, 79539)
	118cc (#79549, 79555, 79559)
Deck thickness:	9/16”
Valve Seats:	Hardened, interlocking, compatible with unleaded fuels
Valve Size:	Intake - 2.30”, Exhaust - 1.88”
Valve Stem Diameter:	11/32”
Valve Spring Diameter:	1.54”
Valve Spring Installed Height:	1.975”
Valve Spring Seated Pressure:	Flat Tappet: 135 lbs. @ 1.975” (#79539, #79559)
	Hydraulic Roller Cam: 175 lbs. @ 1.975” (#79535, #79555)
Valve Spring Open Pressure	Flat Tappet: 360 lbs. @ 1.375” (#79539, 79559)
	Hydraulic Roller Cam: 465 lbs. @1.35” (#79535, #79555)
Max. Valve Lift:	.700”- Check spring pressures per cam manufacturer.
Replacement Valve Springs:	Flat Tappet Cam Springs - PN 5745
	Hydraulic Roller Cam Springs - PN 5823

Bolt Boss Height

A = 3.38”
B = 2.88”
C = 4.44”
D = 1.38”

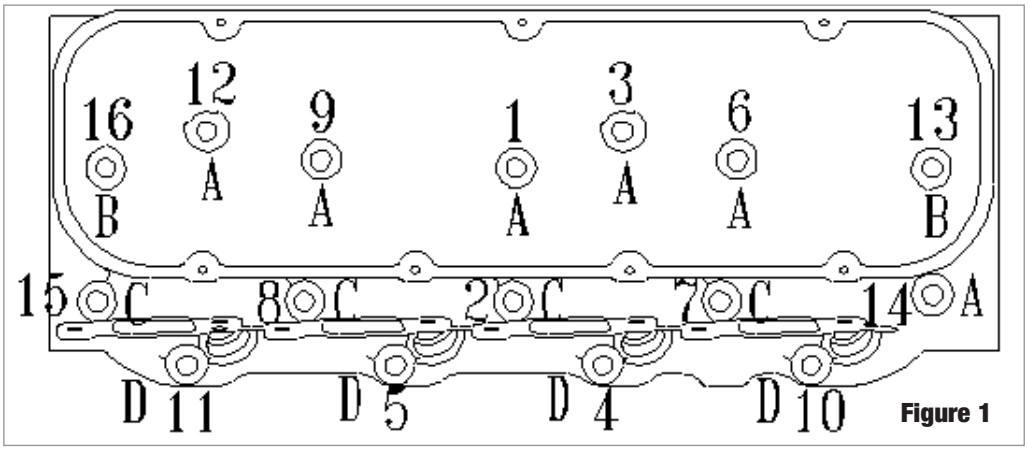

Figure 1

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