



EDELBROCK/MUSI BIG VICTOR CNC CYLINDER HEAD

For Big Block Chevrolet

Part #617569

INSTALLATION INSTRUCTIONS

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 warranty and may result in poor performance and engine or vehicle damage.

DESCRIPTION: Edelbrock/Musi Big Victor CNC cylinder heads are designed for high rpm, large displacement big block Chevrolet race engines. These heads use an industry standard spread-port layout to maximize compatibility with existing manifold designs. The combustion chambers have been CNC machined to a volume of 94cc for use with high compression pistons. For maximum head gasket retention, these heads include two auxiliary head bolt holes. These heads will fit all 1965 and later big block Chevrolet blocks. The intake and exhaust ports have been fully CNC ported to maximize flow. These heads have also undergone a professional Hot Isostatic Pressing (HIP) treatment prior to machining. This process greatly improves the metal density and tensile strength of the cylinder heads and should significantly extend their usable life.

INSTALLATION PROCEDURE

IMPORTANT NOTES: The #617569 heads are designed for a 4.470" or larger bore. Intake valves should measure 6.850" or longer and exhaust valves should measure at least 6.600" in length. The unique valve locations and angles require several parts specific to this head, as outlined in the recommendations below.

ACCESSORIES & INSTALLATION ITEMS: We highly recommend that premium quality hardware be used with your new heads. See our catalog for details. To order a catalog, call **(800) FUN-TEAM**, or visit our website at: www.Edelbrock.com.

Head Studs: High quality head studs with hardened washers must be used to prevent galling of the aluminum bolt bosses. The boss heights are listed on the next page (**See Fig. 1**), along with the torque sequence. The bosses adjacent to the exhaust port exits (position 2, 7, 8, and 15), require longer studs. These bosses have been raised to provide more material thickness between the counterbore and the exhaust port wall. Edelbrock recommends the use of ARP stud kit #235-4112.

Rocker System: The Big Victor Cylinder Head requires a unique valve train that has been developed by Jesel, and is available from them as part #KPS-387154. This is a shaft mounted system that features a one-piece stand design that joins the intake and exhaust stands to maximize valvetrain stability. Contact Jesel for more information regarding the features and options available with this rocker setup.

Valve Covers: The Big Victor Cylinder Head has a unique valve cover rail design that requires the use of Edelbrock valve covers #7259. A unique valve cover gasket is also required, Edelbrock part #7559.

Spark Plugs: Use 14mm x 3/4" reach, gasketed spark plugs. Heat range for competition applications will vary. We recommend the use of **anti-seize** on the spark plug threads to prevent galling in the cylinder head, and torque to 10 ft/lbs. **DO NOT OVERTIGHTEN.**

Intake Manifolds: Choosing the correct intake manifold will depend upon your specific engine combination and the deck height of your block. Spread Port Victor manifolds have been designed specifically to optimize power in a variety of applications equipped with these cylinder heads. Refer to the table on the next page for recommendations. Please consult with your engine builder or contact Edelbrock via our **Technical Hotline at 1-800-416-8628** for more information regarding manifold selection.

Exhaust Headers: Big Victor Cylinder Heads feature a raised exhaust port design to facilitate greater flow and improved performance. Edelbrock recommends headers with a primary tube diameter of 2" or greater. The exhaust port exits have been profiled to match the Fel-Pro gasket #1412. It is also recommended that you check for proper clearance between the exhaust flange and the head bolt relief.

INSTALLATION:

Note: Prior to assembly, the following should be checked:

1. Valve to Cylinder Wall Clearance
2. Piston to Valve Clearance
3. Piston Dome to Combustion Chamber Clearance
3. Rocker Arm to Valve Cover Clearance
4. Rocker Arm to Valve Cover Rail Clearance (intake only)

Installation is the same as for original equipment cylinder heads. Consult a service manual for specific procedures, if necessary. Fel-Pro head gasket #1067, or equivalent, is recommended for bore diameters up to 4.60". Be sure that the surface of the block and the surface of the head are cleaned thoroughly to remove any oily film before installation. Use alcohol or lacquer thinner on a lint-free rag to clean. Apply liquid Teflon PST or suitable thread sealer to head stud threads that extend into coolant passages. Torque the head studs to 70 ft/lbs in three steps, following the factory tightening sequence (**See Fig. 1**). A re-torque is recommended after initial start-up and cool-down (Allow 2-3 hours for adequate cooling).

SPECIFICATIONS:

Head Stud Torque: (Refer to stud kit manufacturer's instructions)
 Deck Thickness: 3/4"
 Valve Seats: Intake: 2.55" x .438" x 2.00" I.D.
 Exhaust: 2.00" x .375" x 1.60" I.D.
 Hardened, interlocking, compatible with any fuel
 Valve Guides: .502" x 3.00", cut for .530" seal
 Valve Angles: Intake: 18.0° x 4.0°
 Exhaust: 9.0° x 3.9°
 Valve Spring Pocket Diameter: 1.76"
 Spark Plugs: 14mm x 3/4" reach, gasketed
 Recommended Valvetrain: Jesel KPS-381754

RECOMMENDED INTAKE MANIFOLDS:

Part Number	Fuel Delivery	Deck Height
2801	Carb	9.8"
28015	EFI	9.8"
2802	Carb	10.2"
28025	EFI	10.2"
2803*	Carb	9.8"
28035*	EFI	9.8"
2804*	Carb	10.2"
28045*	EFI	10.2"

**NOTE: The runners and port exits of these manifolds have been left deliberately undersized to allow engine builders to shape them to match their specific engine combination. They are not intended to be run directly out of the box.*

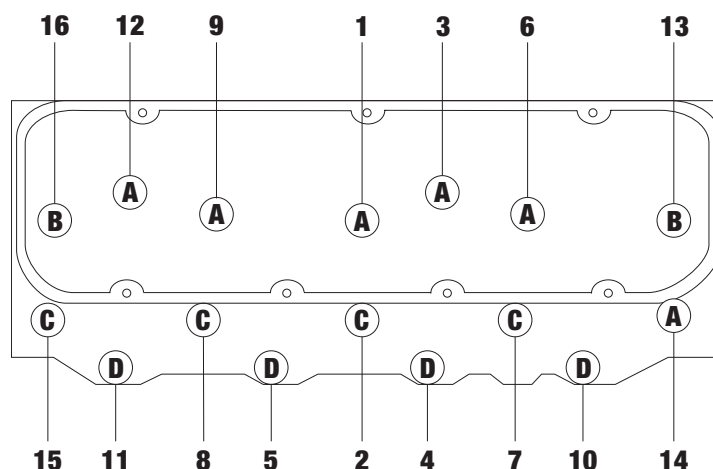


Figure 1 - Cylinder Head Stud/Nut Torque Sequence and Bolt Boss Height Chart
 Torque nuts according to stud manufacturer's instructions.

Boss Height and Bolt Length			
Letter	Boss Height	Recommended Stud Length	Qty.
A	4.50"	6.12"	6
B	4.50"	6.40"	2
C	5.46"	7.35"	4
D	1.32"	2.75"	4

NOTE: Recommended stud lengths are based on ARP kit #235-4112. Variations in stud length are acceptable, provided sufficient thread engagement is maintained.



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