



EDELBROCK/MUSI BIG VICTOR PRO-PORT CYLINDER HEAD

For Big Block Chevrolet

Part #777569

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 Pro-Port 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 unmachined open-style combustion chambers can facilitate virtually any compression ratio. 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 valve seats and valve guides are included but not installed and will need final clearances to be performed by the engine builder. The intake and exhaust ports have been left deliberately undersized to allow for a wide variety of machining to achieve the desired flow level. **These heads must be professionally ported prior to installation.** Please note that these heads have undergone a professional Hot Isostatic Pressing (HIP) treatment prior to machining. This process significantly improves metal density and tensile strength and therefore may affect ideal tool speed and other aspects of the machining process.

INSTALLATION PROCEDURE

IMPORTANT NOTES: The #777569 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 port work that will be performed on the cylinder heads. Edelbrock offers a wide selection of Spread Port Victor manifolds designed to optimize power in a variety of applications. Please consult with your engine builder or contact Edelbrock via our **Technical Hotline at 1-800-416-8628** for information regarding intake 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. Use the exhaust gasket recommended for use with your headers (such as Fel-Pro #1412) as a template for shaping your exhaust port exits. 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

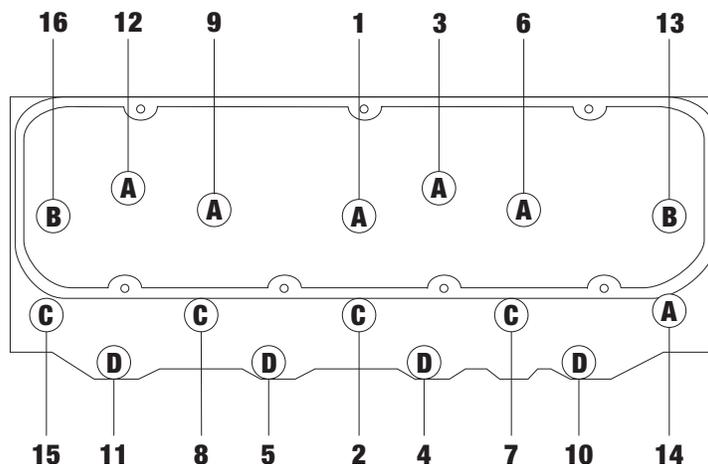


Figure 1 - Cylinder Head Stud/Nut Torque Sequence and Bolt Boss Height Chart
 Torque nuts according to stud manufacturer's instructions.

Boss Height and Bolt Length			
<u>Letter</u>	<u>Boss Height</u>	<u>Recommended Stud Length</u>	<u>Qty.</u>
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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