EDELBROCK DR-23 VICTOR 23° CYLINDER HEAD
For Big Block Chevrolet
Part #614468, 614469
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: The Edelbrock DR-23 cylinder head is the third generation of the Victor BBC cylinder head. These heads retain the use of conventional intake manifolds, but utilize evolved head architecture based on the capability of high performance intake manifolds. The heads have a rolled deck from the Gen 2 design producing a 23 degree valve angle. Other improvements include revised valve locations, improved plug placement and head porter friendly water jacket design. This head requires use of the Edelbrock 7 bolt Big Victor valve cover 4259 (sold separate). The 614468 is a finished version while the 614469 is for those wishing to do their own porting. Both castings are made with special, small run methods reserved for the highest quality and are HIP processed to produce a casting beyond compare.

NOTE: *Prior to standard machining and heat treating procedures, this cylinder head was subjected to a process know as Hot Isostatic Pressing (HIP). During this process the casting is exposed to heat in excess of 900° F and inert gas pressures of nearly 30,000 psi. This combination of heat and pressure eliminates any gas pores remaining from when the head was originally cast. By elevating the material density of the cylinder head to nearly the level of billet aluminum, significantly increased durability and longevity under extreme conditions is achieved.*

IMPORTANT NOTES: #614468 and #614469 heads are designed for a 4.560" or larger bore. A smaller bore size can be accommodated, but

INSTALLATION PROCEDURE

bore relief on the exhaust side of the chamber will be required. The #614468 has finished ports and valve job for 2.400" intake diameter and 1.880" exhaust diameter both with 55° seat angles. Complete valve specification recommendations are available on the Edelbrock website or from the Edelbrock tech line. These heads require a shaft mounted rocker arm system. Aftermarket rocker arm companies either have or are developing systems for these heads.

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 Bolts: High quality head bolts or head studs with hardened washers must be used to prevent galling of the aluminum bolt bosses. The head bolt boss heights and required bolt lengths are listed below ***(See Fig. 1)***, along with the head bolt tightening sequence. The bolt bosses adjacent to the exhaust port exits (position 2, 7, 8, and 15), require a 5.60" long head bolt. These bosses have been raised to provide more material thickness between the head bolt boss counterbore and the exhaust port wall. Many of the other head bolt boss heights have also been adjusted to prevent head bolt bottoming in Mark IV, Gen V, and Gen VI engine blocks**.**

NOTE: *On blocks with blind bolt holes, mount the heads on the block without a gasket then test fit all head bolts without washers to ensure that the flange of each head bolt tightens flush against the bolt boss. Any bolts that bottom out prior to contacting their boss will need to have sufficient threads removed so that they seat flush to the bo*ss**.**

Shaft Style Rocker Arms: Edelbrock recommends the use of Jesel, T&D, or Crower rockers**.**

Valve Covers: Edelbrock #4259 cast aluminium valve covers or equivalent and Edelbrock #7559 gaskets are required for this cylinder head.

Intake Manifolds: Choosing the correct intake manifold will depend upon your specific engine combination. Please consult with your engine builder or contact Edelbrock via our **Technical Hotline** at **1-800-416-8628** for information regarding intake manifold selection**.**

Distributor: A distributor with an adjustable collar is required with these heads.

End Seals: Spacers for the end seal gap are provided.

Exhaust Headers: Any header or manifold designed for original equipment heads will fit the Edelbrock Race Cylinder Heads. Fel-Pro exhaust gaskets, #1411, #1412, or equivalent are recommended for this application. It is recommended to check proper clearance between the exhaust flange and the head bolt relief**.** Exhaust ports are raised 0.600" over stock so check header clearance.

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.**

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
4. Rocker Arm to Valve Cover Clearance
5. 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. For 454 and small Mark IV engines, use Fel-Pro head gasket #1017-1, or equivalent. For 502 c.i.d. Gen V and Gen VI engines, use Fel-Pro head gasket #1047 or equivalent. 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 bolt threads that thread into coolant passages. Torque the head bolts 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 Bolt Torque:	70 ft.-lbs.
Rocker Stud Torque:	45 ft.-lbs.
Combustion Chamber Volume:	92 cc (614468 only)
Intake Port:	390-400* (614468 only)
Exhaust Port:	125-140* (614468 only)
Deck Thickness:	3/4”
Valve Seats:	Intake - CHE B1
	Exhaust - CHE Bx
Valve Diameter:	Intake - 2.40”
	Exhaust - 1.88”
Valve Seat Angle:	55° Intake / 50° Exhaust
Valve Guide ID:	11/32”
Valve Spring Pocket Diameter:	1.76”

*Volumes may vary depending on valve and valve job

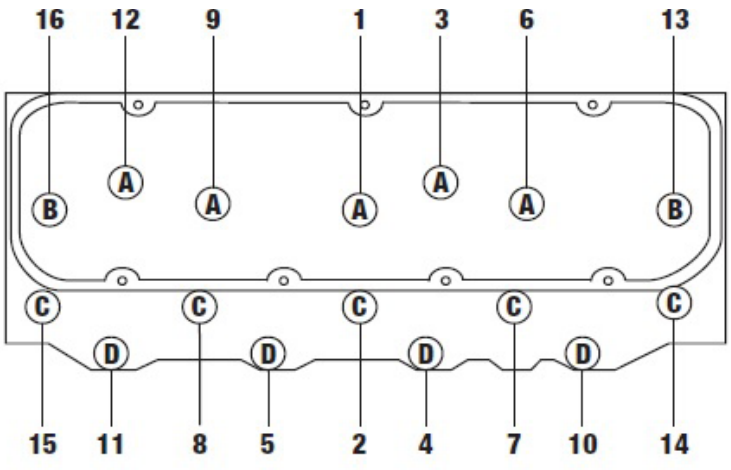

Figure 1 - Cylinder Head Bolt Torque Sequence and Bolt Boss Height Chart
Torque Bolts to 70 ft.-lbs In The Sequence Shown

Boss Height and Bolt Length

Letter	Boss Height	Recommended Bolt Length	Qty.
A	3.70”	4.50”	5
B	3.700”	4.50”	2
C	4.800”	5.60”	5
D	1.300”	2.10”	4

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