VICTOR SMALL-BLOCK CYLINDER HEADS
CHRYSLER LA 1967-91 318-360 C.I.D.
GENERAL 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 your warranty and may result in poor performance and engine or vehicle damage.

DESCRIPTION

These are Victor cylinder heads for use on 1967-1991, 318-360 c.i.d. Chrysler LA engines. It features fully CNC ported 58cc combustion chambers, intake ports with a volume of 225cc (approximately), and 62cc exhaust ports. This head is an in-line valve race head incorporating deviations from the pure stock configuration that permit power levels not possible with even heavily ported versions of the stock head. The heads use the Chrysler W5 bolt pattern and have raised exhaust ports. The intake port is raised approximately ¾" and the flange is extended conveniently permitting the use of a stock (race) intake manifold such as our 2815. End-seal spacers are provided to affect a seal on the front and rear china walls. An in-line valve configuration is used with a 16.1° valve angle (stock is 18°). Finally, a 5.56" overall length valve (+0.600" from stock) and raised rocker cover permit larger port cross-sections than in the stock head. 61749 is a Pro-Port version; it features an unfinished chamber and undersize intake and exhaust ports.

Part Number	Description	Int/Exh Port Volume	Chamber Volume
61709	Bare	225cc / 62cc	58cc
61719	Bare w/ Valves	225cc / 62cc	58cc
61729	For Solid Roller Cam	225cc / 62cc	58cc
61739	For Solid Flat Tappet & Hydraulic Roller Cam	225cc / 62cc	58cc
61749	Bare - Pro Port HIP'd	N/A	N/A

BEFORE BEGINNING INSTALLATION

IMPORTANT NOTES: READ BEFORE BEGINNING INSTALLATION!
For a successful installation, the Edelbrock Victor Cylinder Heads require some components other than original equipment parts. To complete your installation, you will need the following items:

- ❑ Head gaskets; Edelbrock #7326 or equivalent
- ❑ Intake manifold gaskets; Edelbrock #7276 or equivalent
- ❑ Headers; These heads use the factory W5 pattern. Headers and header flanges are available from T.T.I. (951-371-4878).
- ❑ Valve Cover gaskets; Edelbrock #7592 or equivalent
- ❑ These heads do not accept stock length head bolts. Please consult ARP or your engine builder in regards to custom head bolts.
- ❑ Adjustable rocker arm assembly (Premium roller rockers recommended)
- ❑ Pushrods compatible with adjustable rocker arm assembly.

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. These heads have larger-than-stock valve sizes and may not work with the valve pockets in stock pistons, especially if a high lift cam is used. The use of aftermarket pistons and/or custom machining to your pistons may be required. Actual valve-to-piston clearance should be specified by your camshaft manufacturer. If these heads are used on small bore engines, valve-to-bore clearance should also be checked, and the top of the bore notched for clearance if necessary. A minimum of .100" is recommend.

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.

ACCESSORIES

Although Edelbrock Cylinder Heads will accept OEM components (valve covers, intake manifold, etc.), we highly recommend that premium quality hardware be used with your new heads.

HEAD BOLTS or STUDS: These heads do not accept stock length head bolts. Please consult ARP or your engine builder in regards to custom head bolts.

ROCKER ARMS AND VALVE TRAIN: Adjustable rocker arms must be used with cams having greater than stock valve lift. We recommend original equipment or aftermarket adjustable rocker arm assemblies, along with matching pushrods.

NOTE: These heads are designed to accommodate stock Big Block Mopar Wedge rocker arm assemblies and aftermarket stock-like setups with a minimum of .150" intake offset. Ductile iron adjustable arms can be used but will require special clearancing of the rocker arm body in order to clear the valve spring retainers. Also, non-stock spec, aftermarket rocker arms may require special modifications. Please call Hughes Engines at (309) 745-9558 for compatible rocker arm setups.

CAUTION: Before installing rocker shafts, check for burrs or other obstructions on the machined saddles where the shaft sits. Remove any burrs and clean saddles thoroughly, if necessary.

INTAKE MANIFOLD: Edelbrock Victor Cylinder Heads are matched in size and operating range with Edelbrock Victor intake manifold #2915. Edelbrock #7276 intake manifold gaskets is recommended. Apply Gasgacinch, Edelbrock #9300, to intake surface of heads and position intake gaskets. Install supplied endseal spacers to the block end rails with RTV silicone or (preferred) with bolts by drilling and tapping the block. Set the manifold on the engine with gaskets installed and measure the gap between the block and the manifold endseal spacers. Be sure to remove any dowel pins which may have been used with the stock intake manifold. Remove the manifold and apply enough automotive RTV Silicone sealer to fill the gap along front and rear of block, overlapping gaskets at the four corners. Install manifold and torque manifold bolts to 25 ft./lbs.

VALVE COVERS: Edelbrock Victor heads accept stock or aftermarket valve covers. Edelbrock offers valve covers #4176, & #4495 along with gasket set # 7592 for this particular application.

EXHAUST HEADERS: These heads use the factory W5 pattern. Headers and header flanges are available from T.T.I. (951-371-4878).

SPARK PLUGS: Use 14mm x 3/4" reach gasketed spark plugs. Heat range may vary by application, but we recommend Champion RC-12YC (or equivalent) for most applications. **Use anti-seize on the plug threads to prevent galling in the cylinder head, and torque to 10 ft./lbs. DO NOT OVERTIGHTEN SPARKPLUGS!**

Lubricants: For added performance and protection, we recommend using Edelbrock performance lubricants.

Protect your brand new engine		
Zinc Additive	-	P/N 1074
High Performance Break-In Oil	SAE 30	P/N 1070
Engine Assembly Lube	-	P/N 1075

INSTALLATION

Installation is the same as for original equipment cylinder heads. Consult service manual for specific procedures, if necessary. 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 oil or suitable thread lubricant to head bolt threads and under side of bolt heads and washers. Torque to 95 ft./lbs. in three steps (45-65-95) 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).

WARNING!: *When installing heads on engines with new flat tappet camshafts, the inner valve springs must be removed prior to the initial startup and manufacturer's recommend camshaft break-in procedure. This is only required on applications running new flat tappet camshafts.*

SPECIFICATIONS:

Head bolt torque:	95 ft./lbs. (in steps of 45-65-95)
Rocker shaft bolt torque:	25 ft./lbs.
Combustion chamber volume:	58cc (± 2cc)
Deck thickness:	5/8"
Valve Seats:	Hardened, interlocking, compatible with any fuel
Valve Size:	Intake- 2.15", Exhaust- 1.60"
Valve Spring Diameter:	1.55"
<u>For Solid Flat Tappet / Hydraulic Roller Cam</u>	
Valve Spring Installed Height:	1.900"
Valve Spring Seat Pressure:	150 lbs.
Max. Valve Lift:	.700"
<u>For Solid Roller Cam</u>	
Valve Spring Installed Height:	1.900"
Valve Spring Seat Pressure:	220 lbs.
Max. Valve Lift:	.700"

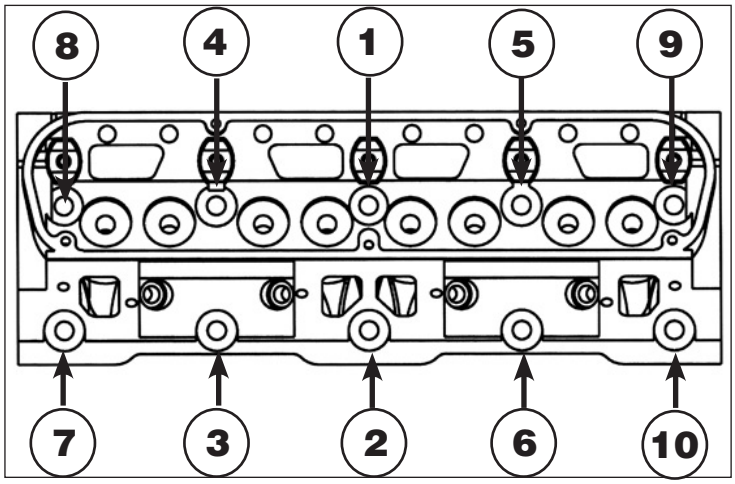

Figure 1 - Tightening Sequence