

Big Block Chevy Cylinder Head

Big Block Chevy cylinder head, bare casting cast iron, 360cc intake runner, 119cc combustion chamber, 2.300" intake/1.880" exhaust valves

Specifications

Port Volume: INTAKE EXHAUST 360cc 135cc

 Port Dimension:
 1.700" X 2.450"
 1.560" X 1.900"

 Port Location:
 Stock
 raised .500"

Valve Angle: 24°(stock angle is 26°) 15° (stock angle is 17°)

Valve Head Diameter: 2.300" 1.880"

 Valve Length:
 5.468" (std length + .250")
 5.468" (std length + .100")

 Valve Seat Dimensions:
 2.380" X 1.900" X .375"
 2.006" X 1.900" X .375"

Valve Seat Angles: 40/45/60/75 40/45/Radius

Valve Guide Diameter: 11/32" 11/32"

Valve Guide Dimensions: .502" O.D. X 2.100"L X .530" boss dia. .502" O.D. X 2.100"L X .530" boss dia.

Valve Guide Material: Premium bronze material for superior heat dissipation and longer life

Material:Cast ironChamber Volume:119ccSpark Plug Location:Stock

Spark Plug Type: 14mm, .750" reach, 5/8" hex, flat gasket style

Spring Pocket Diameter: 1.550"

Pushrod Diameter: 3/8" (larger diameter will require clearancing)

Weight: 78 lbs

Features

- Optimal port design for greater flow, better atomization & enhanced dynamics
- · Unique multi-angled intake & radiused exhaust valve seats for increased flow and horsepower output
- · Hardened valve seat for exceptional durability even when used in extreme applications with harsh fuels
- · More efficient water jacket design for improved cooling and thermal conductivity, and reduced risk of detonation
- Thick deck faces with added material to allow angle milling for increased compression
- Revised combustion chamber design for excellent combustion thermodynamics and enhanced fuel efficiency
- All accessory bolt holes drilled and tapped to exact tolerances

Tech Notes

Flat Milling: .006" per cc

Angle Milling: .0075" per cc (excessive milling can cause intake manifold misalignment)

Head Bolt Torque: Refer to cylinder head bolt manufacturer's specifications

Rocker Stud Torque: 45 lb/ft **Intake Manifold Torque:** 35 lb/ft

Spring Pocket Machining: Can be machined to 1.750" maximum diameter, cannot be machined deeper

Pushrod Length: Measuring with length checker required to verify pushrod geometry **Piston to Valve Clearance:** Must be verified -minimum clearance is .080" intake and .100" exhaust

Retainer to Guide Clearance: Must always be measured when using high lift cams

Chamber to Dome Clearance: Must always be checked with domed pistons, clearancing may be necessary

Chamber Volume: Varies due to valve margins and dishes, should always be verified before installation

Valve Guide Clearance: Must be checked due to the variance in valve stem diameters between manufacturers

Recommended clearance: intake .0015"-.0016", exhaust .002"-.0025"

Water jackets require flushing prior to cylinder head installation

Cylinder Head Bolts: Raised exhaust ports require longer exhaust side head bolts/studs

Header/Spark Plug Clearance: Spark plug/ wire boot clearance verification is required prior to header installation.

Minor modifications may be necessary in order to achieve proper clearance.

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Suggested Assembly Components

Part Type Description

Intake Valves 2.300", + .250" long, 11/32" valve stem diameter Exhaust Valves 1.880", + .100" long, 11/32" valve stem diameter

Valve Springs 1.509" O.D. dual valve springs, 112# @ 1.900", max lift .600"

1.625" O.D. dual valve springs, 214# @ 1.950", max lift .750"

Retainers 1.500" 10° steel retainer set 1.625" titanium retainer set

Valve Locks 11/32" 10° valve lock set

11/32" 10° valve lock set

Valve Stem Seals .530" metal body viton valve stem seals

Spring Locators 1.550" valve spring locators 1.625" valve spring locators

Guide PlatesRocker Arm Studs
3/8" guide plate set
7/16" rocker arm stud set

Additional Recommended Components

Part Type Description

Spark Plugs Street/strip: 14mm, .750" reach, 5/8" hex, premium spark plug set

Race: 14mm, .750" reach, 5/8" hex, premium spark plug

Rocker Arms1.7 ratio rocker arm set, 7/16" stud diameter
1.7 ratio rocker arm set, 7/16" stud diameter

Intake Gaskets Intake manifold gasket set, 1.82" X 2.54" port,.060" thick

Exhaust Gaskets Header gasket set, 1.880" X 1.880" port size, graphite

Head GasketsCylinder head gasket, 4.375" bore X .040" compressed thickness

Cylinder head gasket, 4.630" bore X .040" compressed thickness

Sand cast aluminum valve covers w/mounting studs and gaskets

Valve Cover Gaskets Valve cover gasket set, silicone impregnated

Head Bolts** 135-3703 ARP or equivelant

Head Studs** 8740 head stud set, includes correct studs for raised exhaust ports

Additional Notes

** Recommended components only, individual application must be verified prior to installation

EQ-CH454B



Valve Covers





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