

Brand:Speedmaster
Part Number: PCE281.1035
Part Type:Cylinder Heads

Cylinder Head Style:Assembled
Cylinder Head Material:Aluminum
Cylinder Head Finish:Natural
Combustion Chamber Volume (cc):119 cc
CNC-Machined Combustion Chamber:No
Intake Runner Volume (cc): 305 cc
Exhaust Runner Volume (cc): n/a
CNC-Machined Intake Runner: No
CNC-Machined Exhaust Runner: No
Intake Port Shape: Oval
Intake Port Location: Standard
Exhaust Port Shape: Rectangular
Exhaust Port Location: Raised
Spark Plug Style: Angle
Comp. Valve Job: No
Intake Valves Included: Yes
Intake Valve Diameter (in): 2.250 in.
Exhaust Valves Included: Yes
Exhaust Valve Diameter (in): 1.880 in.
Valve Springs Included: Yes
Maximum Valve Lift (in):0.580 in.
Outside Diameter of Outer Spring (in):1.450 in.
Damper Spring Included:Yes
Number of Springs Per Valve:Dual
Retainers Included:Yes
Retainer Material:Chromoly steel
Locks Included:Yes
Lock Style:10 degree
Valve Stem Seals Included:Yes
Valve Stem Seal Style:Positive stop
Rocker Arm Studs Included: No
Rocker Arms Included: No
Rocker Arm Nuts Included: No
Guideplates Included: No
Valve Cover Mounting Style: Center & Perimeter Bolt
Accessory Bolt Holes Drilled: Yes
Intake Valve Angle: 24 deg.
Exhaust Valve Angle: 15 deg.
Valve Guides Included: Yes
Valve Guide Material: Bronze
Valve Seats Machined: Yes
Valve Seat Machine Style: 3-angle
Valve Seat Material: Ductile iron
Steam Holes Drilled: No
Oiling Style: Through pushrod
Machined for O-Ring: No
Heat Crossover: No
Quantity:Sold as a pair.
Calculator[Compression Calculator](#)

Assembly Specifications

Max Lift: .580
Coil Bind: .740
Intake Install: 130lbs @ 1.8
Exhaust Install: 130lbs @ 1.8
Closed Sear Pressure: 125lbs
Open Seat Pressure: 320lbs

As with all Speedmaster cylinder heads, our Big Block Chevrolet heads are Gravity Die Cast . This casting process creates a much more uniform and robust cylinder head. With the increasingly large displacements becoming common, the need for more airflow is necessary. If you are looking to build a 400-500+hp engine, give our PCE281.1489 heads a try. They offer a smaller cross - section to increase the incoming air s velocity, resulting in great driveability, power and economy. On engines over 500hp, use the rectangle port PCE281.1488 heads. The mid-size cross section works well on engines under 540cu.in and under 7000RPM. If you are working on a larger, or higher RPM engine, step up to the CNC ported PCE281.1511 heads. The added volume of the PCE281.1511 intake ports (360cc) helps to fill in the gap between As-Cast performance heads and All-Out racing heads. If you re looking for 750+hp the PCE281.1523 with their competition valve job fit the bill perfectly.

HEAD GASKETS

Due to the wide combustion chamber needed to fit around the large 2.250/ 1.880 valves, we recommend our PCE348.1004 MLS head gaskets. These gaskets are .041 thick, and fit bore sizes as large as 4.540 on all Mark IV and VI blocks, as well as aftermarket blocks. Felpro 1017 gaskets will also work with these head/ block combos. To install our BBC heads on Mark V blocks, you will need to use our SM5233L and SM5233R Elite Series MLS head gaskets. Alternatively, you can use Victor Reinz # 4918(R) & #4923(L) head gaskets on Mark V blocks with our heads.

INTAKE GASKETS

The PCE281.1488 heads work well with our PCE349.1007 rectangle port gaskets. The PCE281.1489 heads require our PCE349.1008 oval port gaskets. If you prefer Felpro gaskets, the PCE281.1488 heads take a 1275 or 1275-5 gasket, depending on the thickness you require.

The CNC-ported heads (PCE281.1511 & PCE281.1523) are matched to the Felpro 1275 & 1275-5 gaskets.

SPARK PLUGS

Our heads require the use of 14mm. x 3/4 reach 5/8 hex gasket seat sparkplugs. Some recommended plugs are; NGK BCPR6ES or R5671A-7, Champion RC12YC, Autolite AR3923 or AR3924. Remember these are for mild street engines. Higher compression or boost requires colder sparkplugs!

HEAD BOLTS / STUDS

Due to the raised (+.625) exhaust port location on our heads, +.100 longer bolts / studs are needed next to each port. Use our PCE279.1005 head stud Kit. ARP #135-3703 12pt. Head bolts, and #235-4303 Head studs work too. If you already have a standard BBC head stud kit and are just looking for the 8 +.100 studs, use our PCE279.1006 or ARP # 235-4306. These heads should be torqued to 65ft.lbs. using high pressure moly lube or 70ft.lbs. using 30wt. oil.

Please consult your fastener manufacturer for their specific recommended torque values.

EXHAUST GASKETS

Our BBC heads utilize a 1.88 x 1.88 square exhaust port. This exhaust port requires specific gaskets. Our PCE355.1003 gaskets are made of re-useable copper, or if you prefer paper, use our pn# SM5123. Felpro also offers gaskets that work with our heads as # 1410.