

Brand:Speedmaster
Part Number: PCE281.1047
Part Type:Cylinder Heads

Cylinder Head Style:Assembled
Cylinder Head Material:Aluminum
Cylinder Head Finish:Natural
Combustion Chamber Volume (cc):62 cc
CNC-Machined Combustion Chamber:No
Intake Runner Volume (cc): 190 cc
Exhaust Runner Volume (cc): n/a
CNC-Machined Intake Runner: No
CNC-Machined Exhaust Runner: No
Intake Port Shape: Rectangular
Intake Port Location: Standard
Exhaust Port Shape: Square
Exhaust Port Location: Standard
Spark Plug Style: Standard
Comp. Valve Job: No
Intake Valves Included: Yes
Intake Valve Diameter (in): 2.020 in.
Exhaust Valves Included: Yes
Exhaust Valve Diameter (in): 1.600 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: Perimeter Bolt
Accessory Bolt Holes Drilled: Yes
Intake Valve Angle: 20 deg.
Exhaust Valve Angle: 20 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

One of the best upgrades to your Small Block Ford engine is the replacement of your cast iron head to a better performing and lighter aluminum head. How great is it that you can now do it at a price that's affordable. Our line of Small Block Ford performance heads have proven themselves time and time again both on the track and on the dyno, not to mention countless features in performance magazine articles. We offer Small block ford cylinder heads for a wide range of displacement applications. With bigger displacement engines becoming more common, the need for more airflow is necessary. If you are looking to build a 400-700 horsepower engine then you should consider Speedmaster Aluminum cylinder heads. Like the rest of our performance heads we use our Gravity Die Cast process. This casting process creates a much more uniform and robust cylinder head. They also offer a smaller cross section to increase the incoming air's velocity resulting in improved drivability, power and economy. We have them available in as cast for the mild street applications and in Fully CNC machined for the serious enthusiast. Speedmaster CNC ported cylinder heads are machined on a dedicated 5 axis CNC machining centers to ensure accuracy and cost effectiveness. Combustion chamber, exhaust and intake ports are fully CNC machined for better flow. CNC combustion chambers offer superior control over flame travel and quench area. CNC ported heads eliminate human error and variation from port to port.

INTAKE / EXHAUST GASKETS

Although our Small Block Ford cylinder heads fit on both 289 / 302 / 5.0L and 351W blocks, they use the same manifold to head gaskets, but require specific valley gaskets that are purchased separately from some aftermarket suppliers. Speedmaster PCE349.1006 comes with both lengths of valley gaskets as well as the manifold to head gaskets. Fel-pro has specific part numbers for each layout. Fel-Pro pn# 1262 is the manifold to head gasket that fits both engines. If you require a thicker gasket, or have our PCE281.16** CNC ported heads, use Felpro pn# 1262R.

For the exhaust gaskets, use our PCE355.1002 which is a re-useable copper gasket set, or Felpro pn# 1487 which is a paper gasket set.

HEAD GASKETS

Due to the popularity of the Small Block Ford engines, there are many different bore size gaskets available. The following is a small list of gaskets we recommend for use with our SBF cylinder heads:

Speedmaster PCE348.1007 (4.055 Bore size .041 thick, MLS)
Speedmaster PCE348.1008 (4.185 Bore size .041 thick, MLS)

Fel-Pro PN# 9333-PT1 (standard low performance use)
Fel-Pro PN# 1011-2 (4.100 Bore size, .039 thick, Comp.)
Fel-Pro PN# 1006 (4.145 Bore size, .039 thick, Comp.)
Fel-Pro PN# 1046 (4.200 Bore size, .051 thick, Comp.)
Fel-Pro PN# 1133 (4.100 Bore size, .041 thick, MLS.)
Fel-Pro PN# 1134 (4.185 Bore size, .041 thick, MLS.)
Fel-Pro PN# 1135 (4.200 Bore size, .041 thick, MLS.)

HEAD BOLTS / STUDS

Our heads don't require anything special as far as head bolts are concerned. We do however recommend that you replace your fasteners when installing a new set of heads.

289 / 302 / 5.0L engines use 7 / 16 hardware like the following for use w/ PCE281.1532 adapters:

Speedmaster PCE279.1010 (head stud kit)
ARP pn# 154-3605 (head bolt kit)
ARP pn# 154-4205 (head stud kit)

351W engines use 1 / 2 hardware like the following:

Speedmaster PCE279.1012 (head stud kit)
ARP pn# 154-3603 (head bolt kit)
ARP pn# 154-4203 (head stud kit)

SPARKPLUGS

Our Small Block Ford cylinder heads require the use of a 14mm thread, 5 / 8 hex, .750 reach spark plugs. Below you will find a list of some plugs that fit and work with our heads:

NGK - BCPR6ES, R5671A-7, R5671A-8
Autolite - 3923, 3924, AR3933, AR3934
Champion - RC12YC, RC10YC74, RC9YC3

Remember that you need a COLDER plug when you make more power, ie. N2O, turbo and supercharging.