

**Brand:**Speedmaster  
**Part Number:** PCE281.1539  
**Part Type:**Cylinder Heads

**Cylinder Head Style:**Bare  
**Cylinder Head Material:**Aluminum  
**Cylinder Head Finish:**Natural  
**Combustion Chamber Volume (cc):**62 cc  
**CNC-Machined Combustion Chamber:**No  
**Intake Runner Volume (cc):** 175 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:** No  
**Intake Valve Diameter (in):** 2.020 in.  
**Exhaust Valves Included:** No  
**Exhaust Valve Diameter (in):** 1.600 in.  
**Valve Springs Included:** No  
**Damper Spring Included:** No  
**Retainers Included:** No  
**Locks Included:** No  
**Valve Stem Seals Included:** No  
**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 individually.

**Calculator**[Compression Calculator](#)

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.