

CHAPTER 4



289/302 STROKER KITS & PROJECTS

The marketplace is filled with a wealth of great stroker kits for your 289/302ci engine building project. Which kit you choose depends on your expectations, budget, and needs. This means you have to examine the contents of each kit to determine which kit works for your engine-building project.

Stroker selection depends on your planned mission for the engine. Despite everything you have likely been told in bench racing circles, street engines do not need steel or billet crankshafts. High-nodular iron crankshafts (also known as cast steel) work quite well for street use in applications up to 500 horsepower. If you're going to supercharge or throw high concentrations of nitrous at your engine, a steel crankshaft becomes mandatory in the interest of engine survival. If you do weekend road racing with your driver, a steel crank is good life insurance for your engine. Weekend drag racers don't always need a steel crankshaft because the high-stress experience is brief, unless you are using nitrous or supercharging.

Choosing a connecting rod is right in there with choosing a crankshaft. If you're going to go with H-beam rods, then you will likely go with a steel or billet crank. For cast steel or nodular iron cranks, sportsman level I-beam

302ci

Speed-O-Motive
131 North Lang Ave.
West Covina, CA 91760
626/869-0270 • 626/869-0278 FAX
www.speedomotive.com

Bore:	4.000"
Stroke:	3.000"
Crankshaft:	Nodular Iron Ford 302
Rod Type:	Stage 1 with ARP Wave-Loc Bolts
Rod Length:	5.565"
Rod Ratio:	1.85:1
Pistons:	Keith Black Hypereutectic
Rings:	Speed Pro Cast Iron
Bearings:	Clevite Tri-Metal
Max. RPM:	6,500
Max. HP:	400
Approx. Price:	\$1,000.00
Comments:	The Speed-O-Motive Long Rod 302 kit doesn't increase stroke or displacement. But, it increases piston dwell time at the top and bottom of the bore to make the most of your fuel/air mixture. The Long Rod 302 kit gives you more torque.

317ci

Coast High Performance
2555 W. 237th St.
Torrance, CA
310/784-2977 • 310/784-2970 FAX
www.coasthigh.com

Bore:	4.060"
Stroke:	3.100"
Crankshaft:	Nodular Iron 302
Rod Type:	Eagle H-Beam
Rod Length:	5.400"
Rod Ratio:	1.60:1
Pistons:	Probe Forged Aluminum
Rings:	Childs & Albert
Bearings:	Clevite 77
Max. RPM:	7,800
Max. HP:	550
Approx. Price:	\$1,700.00
Comments:	This kit provides a solid foundation on which to build. You can grow into this kit with a supercharger, nitrous, a more radical camshaft, you name it. This is a kit you can spin tight without worry, assuming proper assembly technique.

rods will work just fine. Each kit listing is specific about the type of connecting rod and crankshaft used. Most stroker-kit manufacturers have this packaging process down to a science. Connecting rods and crankshafts tend to be quite compatible in most of these kits.

Piston selection boils down to the type of driving you're going to do. Warmed up street engines really don't need forged pistons. If seat-of-the-pants torque is what you are seeking from your street small block, you can get away with using hypereutectic pistons. Opt for forged pistons if you are going to supercharge or use nitrous. Forged pistons for powerful street engines don't make much sense in terms of cost and engine noise. Forged pistons have more unforgiving expansion properties. It takes a forged piston more time to expand as the engine warms. Forged pistons also expand

more than cast or hypereutectic pistons, which means they need greater clearances. This is why forged pistons tend to rattle in cold engines.

Most of the following stroker kits are available as published. But most manufacturers will allow you to custom tailor your stroker kit. Coast High Performance, for example, will package a stroker kit any way you desire as long as it makes good sense. Plus, they will advise you along the way.

The following stroker kits are listed how they were available at the time of printing. Not all of these kits will forever remain the same. Kits are developed and kits are dropped from time to time, depending on availability and consumer demand. In our description of each of these kits, we are completely frank about the kit described. We are not at the mercy of advertising dollars and will tell it just like it is.

317ci

Ford Performance Solutions

1004 Orangefair Lane
Anaheim, CA 92801
714/773-9027 • 714/773-4178 FAX
www.f-p-s.com

Bore: 4.060"
Stroke: 3.100"
Crankshaft: Nodular Iron 302
Rod Type: Eagle H-Beam
Rod Length: 5.400"
Rod Ratio: 1.74:1
Pistons: Ross Ultra-Lite
Rings: Childs & Albert
Bearings: Clevite 77
Max. RPM: 8,000
Max. HP: 650
Approx. Price: \$1,700.00
Comments: This kit provides a solid foundation on which to build. You can grow into this kit with big horsepower adders. Very similar to the Coast High Performance kit just mentioned.

317ci

Speed-O-Motive

131 North Lang Ave.
West Covina, CA 91760
626/869-0270 • 626/869-0278 FAX
www.speedomotive.com

Bore: 4.030"
Stroke: 3.100"
Crankshaft: Race Prepped Nodular Iron 302 Crank
Rod Type: Forged I-Beam
Rod Length: 5.565"
Rod Ratio: 1.85:1
Pistons: Keith Black Hypereutectic
Rings: Speed Pro Cast Iron
Bearings: Clevite Tri-Metal
Max. RPM: 6,500
Max. HP: 400
Approx. Price: \$1,000.00
Comments: This mild increase in stroke will net you increases in power. Properly assembled, your 317ci Speed-O-Motive stroker can spin to 6,500 rpm.

319ci

Propower

4750 N. Dixie Highway, No. 9
Fort Lauderdale, FL 33334
954/491-6988 • 954/491-2874 FAX
www.propowerparts.com

Bore: 4.030"
Stroke: 3.120"
Crankshaft: Nodular Iron 302
Rod Type: Eagle
Rod Length: 5.400"
Rod Ratio: 1.73:1
Pistons: JE Pistons
Rings: JE Plasma Moly
Bearings: King High Performance
Max. RPM: 7,500
Max. HP: 500
Approx. Price: \$2,000.00
Comments: A good improvement over stock. Better reliability.

320ci

D.S.S. Competition Products

960 Ridge Avenue
Lombard, IL 60148
630/268-1630 • 630/268-1649 FAX
www.dssracing.com

Bore: 4.030"
Stroke: 3.125"
Crankshaft: Nodular Iron 302
Rod Type: Eagle
Rod Length: 5.400"
Rod Ratio: 1.72:1
Pistons: Venolia
Rings: Speed-Pro
Bearings: Federal-Mogul
Max. RPM: 6,500
Max. HP: 500
Approx. Price: \$2,000.00
Comments: This kit has a good rod ratio and is good for a few extra horses. But this is not a kit you want to use with nitrous or supercharging. This kit is good for a strong, naturally-aspirated street engine.