

Supercharger kit

Mini Mania has developed and produced the ultimate in bolt-on performance for the A-Series motor. Modern technology in compressors and modern manufacturing has resulted in serious performance improvements, indeed performance unheard of in A-Series history. The supercharger's biggest benefit, torque, is the ideal upgrade to the A-Series motor. While horsepower is typically achieved by increasing RPM, torque has been the sole property of increased displacement. A

V-8 has loads more torque than a 4 cylinder, but the application of modern superchargers has greatly diminished this distinction. Since all A-Series motors have 3 main bearing cranks, they are best suited to lower RPM (less horsepower) and can take advantage of the major benefit of superchargers- torque!

Twin Screw Compressor Design:

The twin screw supercharger is actually a positive displacement "compressor", not just a blower. This unique design allows the Mini Mania Supercharger to force a greater volume of air, at lower temperatures, into the manifold than "Rootes" design blowers.

Volometric Efficiency (VE) measures how well a supercharger breathes and how much leakage occurs. For example, if a supercharger has a displacement of 10 liters and only 8.8 liters exit, the unit is 88% VE. Naturally a less efficient supercharger with a lower VE will have to work that much harder to produce sufficient air. The Mini Mania supercharger has an 88% VE, while most "Rootes" type blowers will produce 60% VE. **Adiabatic Efficiency (AE)**, measures how well a supercharger uses the energy delivered to the drive shaft and how well it controls temperature from intake to exit. The low exit temperature of the Mini Mania Supercharger, as referenced to intake temperature, precludes the need for internal engine modifications or compression changes.

The Mini Mania Supercharger requires less power to turn its rotors, and condenses the air to produce more cool air than normal blowers. The horsepower numbers are tremendous but the "feel" of power, the torque, the grunt is even more spectacular.

Complete kit

The package includes supercharger with manifold, HIF6 S.U. carb, special aluminum water pump, alternator, and crank and idler pulleys, poly-v belt. All parts are new and tailored to fit the Mini!

SPC100



"Big Bore" Engine

113 Horsepower! 1380cc Power Unit

Because so many Mini Mania customers ask for built-up high performance engines, we have decided to develop our own "ultimate street engine". Our 1380cc "Big Bore" power units have been on the road since 1994. In 2000, Steve Weber successfully completed the "One Lap of America" endurance run driving a Mini equipped with a 1380 with the optional five-speed!

All assembly and testing is done by Bill Gilcrease's Mincomp Racing shop in southern California. Because driveability and reliability are of utmost importance, only components from well established suppliers are utilized. The cylinder head is a genuine Longman GT6, which is not only fully ported, but has hardened valve seats for use with unleaded fuels. We use Hepolite Powermax 73.5mm pistons which are specifically designed for this application. Elgin Cams supplied the custom ground camshaft. The distributor is an Aldon yellow. We sell these engines ready to bolt in and run. This means, of course that they are already mated with transmissions. The tranny is also fully rebuilt, with your choice of rod-charge or remote shift. Flywheel and clutch are all in place. Carburation provided is a single HIF6 carb with K&N air filter on an aluminum manifold and also included is a Long Center Branch (LCB) exhaust manifold. You provide only your own cooling system, tailpipe, and Mini!



Specifications:

- 113 Horsepower
- 73.5mm Powermax pistons
- A-Plus engine block
- 10:1 Compression
- 10/10 Crank w/ Vandervell bearings
- Elgin Cam.003 timed in at 108° for best horsepower
- .014/.016 Valve lash (Hot)
- HIF6 SU Carburetor with BDK needle
- 113 horsepower at the flywheel at 6500 R.P.M.
- 102 ft./lbs of torque at 4700 R.P.M.
- Longman G16 cylinder head
- LCB Exhaust Header
- Dyno tested and run-in
- Complete with transmission (Rod change or remote type)
- Aldon Yellow Distributor
- Optional Weber Carb
- Optional high lift rockers for added top-end horsepower
- Optional Aluminum Cylinder Head
- Optional five-speed transmission

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