

Fuel system

- Standard port injectors
- Standard fuel rails and fuel lines

Intercooler system

- Uses existing top mount air to air intercooler core or an aftermarket core as long as it mounts in the original position using the original cast ducting
- Has an adaptor plate that enables original cast ducting to be fitted

Engine cooling system

- As the original supercharger had a mechanical water pump driven off the rear of the supercharger we have had to replace this with an electric water pump (Davies Craig EWP150).
- New electric water pump loom supplied, 15 Amp fused.
- Engine cooling kit includes preformed and fabricated aluminium tubes and new moulded lower radiator/electric pump hoses along with new heater hose and the necessary hose clamps.

Supercharger kit

- Supercharger is a TVS900 with special front cover that is required for the mounting of the supercharger
- Supercharger mounts in OEM position and uses standard belt route.
- The pulley and offset is custom to this kit, standard kit comes with a 70mm diameter (6PK) pulley, (minimum pulley size 55mm, (have made 65 and 60mm pulleys in the past))
- Standard belt length for the 70mm pulley is 6PK1400, (6PK1385 for a 65mm pulley which results in similar boost as the original SC with a 15% overdrive)
- Standard kit as is runs about 100Kpa (14.5 psi) of boost which is very much the same as the standard SC. The 65mm pulley will increase it to around 114Kpa (16.5psi)
- The standard kit with the 70mm pulley should run with the standard tune
- Installation should take around 5-6 hours, just depends how familiar you are with the vehicle.

VEHICLE	POWER CORRECTION	MODIFICATIONS	POWER @ the hubs	TORQUE @ the hubs
2004 Cooper S	SAE 2004	Stock M45 Supercharger (15% overdriven, 16.7 PSI boost), JCW Intake and Catback Exhaust.	158hp @ 6700 rpm	152 ft-lb @ 3750 rpm
2004 Mini Cooper S	SAE 2004	As Above, M45 Factory Supercharger replaced by Harrop TVS900 Supercharger and 65mm Pulley (16.4 PSI boost) and ECU Recalibration.	188hp @ 7000 rpm	164 ft-lb @ 3750 rpm
Mini Club Race car	SAE 2004	Stock M45 Supercharger (15% overdriven, 16.8 PSI boost), Ported Head, Camshaft Upgrade, Forged Rotating Internals, Full Exhaust, Headers and Top Mount Intercooler	181hp @ 6400 rpm	173 ft-lb @ 4250 rpm
Mini Club Race car	SAE 2004	As Above, M45 Factory Supercharger replaced by Harrop TVS900 Supercharger and 65mm Pulley (14.7 PSI boost) and ECU Recalibration for E85.	269hp @ 7700 rpm	197 ft-lb @ 6050 rpm