



Large Bore Mega Pistons

NOTE: We supply and sell each piston individually.
Order 4 pistons for a complete engine set.
Ringsets are for all four pistons.

Owing to poor supplies of performance pistons 10 years ago we recruited AE Hepolite to develop and design a range of Mini Spares pistons, using their technical and manufacturing expertise. Made in AE109TF lightweight alloy with special double heat treatment they have a full skirt for maximum piston and ring stability. One thick crown height to allow for machining when long stroke cranks, or longer con rods are used.

WARNING Do not use synthetic based oil for the running-in period as it is detrimental to the ring bedding in process



1. a. **6.5cc dished piston** available in +20, +40, +60. **C-AJJ3378**
b. **Turbo 9.4CR with 11.3cc dish** available in +40 only uses Mega ringset, Will not take excessive extra boost. **P22357-40**
2. a. **Flat top piston** available in +20, +40, +60. **C-AJJ3382**
b. **Ringsets** for C-AJJ3378, C-AJJ3382 and P22357S and Omega. Available in +20, +40, +60 **C-AJJ3379**
3. **7cc dished, 73.5mm piston.** **C-STR310**
4. **11cc dished, 73.5mm piston.** **C-STR312**
5. **Ringsets** for C-STR310, C-STR312 and Omega 73.5mm. (4 pistons set). **C-STN96**

Large Bore Pistons

Large Bore Pistons for all Cooper "S" and 1275cc Minis are manufactured by AE Hepolite pistons (Federal Mogul), the largest manufacturer of pistons in the world. These high quality pistons have been used in many successful competition applications.



6. **The different CR's are achieved by different pin to crown heights, with 21.4cc cylinder head camber size.** The P21253 pistons are the best suited to high performance use, with a much smaller oil drain slot behind the oil control ring, thereby reducing the possibility of breakage.
 - a. **8.8CR, 1275cc low drag slipper piston.** Available in Standard, +20, +40 and +60, 8.1cc dished **P21251**
 - b. **Ringsets** for P21250 & P21251. Available in standard, +20, +30, +40, +60 **R35960**
 - c. **9.75CR, 1275cc low drag slipper piston.** Available in Standard, +20, +40 and +60, 8.1cc dished.
When fitted to Cooper "S" and early 1300 blocks can equal 10:1CR **P21253**
 - d. **Ringsets** for P21253. Available in standard, +20, +40, +60 **R41570**
7. a. **73.5mm "Powermax" big bore 9cc dished piston.** **P20659-00**
b. **Ringset** for P20659 **R39390-00**



WHEN ORDERING PISTONS OR RINGSETS PLEASE STATE SIZE REQUIRED.
NOTE: ALL PISTONS SOLD INDIVIDUALLY.

Small Bore Pistons

8. **The low drag slipper piston** used by the Rover Group in the last 998cc Mini and Metros proved to be exceptionally reliable having been used in Mini race engines. They are available in flat top with press fit gudgeon pins but +40 only. Obviously the correct rod type should be used (can be modified by experts).
 - a. **10.3CR Flat top, press fit gudgeon pin 998cc.** (RoverNo.TAM2052) **P22463-40**
 - b. **Ringset** for P22463. Available in +20, +40. **R43240**
9. a. **8.3CR Dished piston 998cc.** Inexpensive replacement piston with oil groove. Fully floating gudgeon pin with circlips Available in +20, +40 and +60 **P20773**
b. **Ringset** for P20773 **R33636**



Pistons Liners

10. All piston liners are supplied individually.
 - a. **998 piston liner.** Customer order only. **12G164**
 - b. **1275 piston liner.** (HEPOLITE SU3598). **AEG428**



Evolution Performance Pistons

The Evolution range was produced to fill the gap in the market for top quality, high strength pistons for performance and standard use. Manufactured in top grade cast aluminum with advanced heat treatment, plus a far higher silicon content than almost all other mass-manufactured pistons means it is lighter and more durable for use in any engine. All wrist pins are oil fed from the oil control ring land rather than rely on splash from whirling components. To extend the life of blocks 73mm and 74mm sizes for 1275cc and a plus 80 oversize for 998cc have been made.

11. **SMALL BORE, based on the original 998cc flat top piston** but with oil holes, rather than slots behind the rings to give crown strength, the only other change is the ring pack, to use a readily and sensibly priced set. Otherwise it retains the full skirt design with circlip retention of the wrist pin which means they can also be used for the later press fit pin rods from the A plus engines, by either leaving the circlips out and using the original interference fit, or honing out the small end of the con rod for a floating pin fit and using the circlips for retention. This piston replaces the original Hepolite 18516KR and P20950 as used on the 998 Coopers but do not mix with old Hepolite as they are not an exact copy.
 - a. **Suitable for all 998cc engine use, up to 12-1cr.** This flat top design will give a 9.5/6cr when used with a Cooper 998 head. Ring sets are C-STN99. Available in plus 20/40/60/80 (plus 80 giving 1061cc) **P20950**
 - b. **The same type of piston for 1098CC** including in-line engines but owing to extra skirt length the distributor spindle will need modifying. Available in 40/60/80 **P20951**
12. **Before taking blocks out to 73.5 we have introduced a new 73mm option to extend block life.** On a standard stroke 73mm gives 1362cc and shows no measurable loss of performance over the 73.5mm 1380cc size and also alleviates any cylinder head gasket problems that might be encountered. We have also had the 73.5 and 74mm size made identical with the same 10cc dish shape for improved swirl/burn. The pistons are lighter than cast pistons of its size and a lighter wrist pin is used to enhance this. Ring sets for 73mm are C-STN98 and for 73.5mm are C-STN97.
 - a. **For 73.00mm piston** **C-STR313**
 - b. **For 73.5mm piston** **C-STR311**
 - c. **For 74mm piston** **C-STR314**

