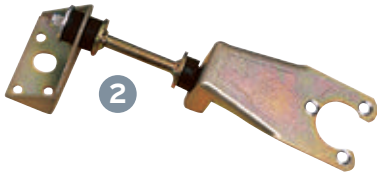
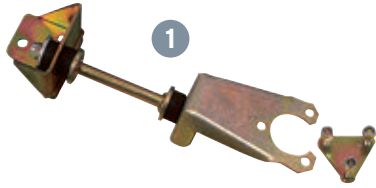




Engine Stabilisers

- 1. The original ultimate engine stabiliser kit complete with bushes.** This is the left hand drive version which bolts to the thermostat housing and the smaller end to the bulkhead. The bulkhead end needs to be drilled and the triangular plate with studs, as shown, fits up through the master cylinder box area inside the car, on the underside of the bulkhead area you have drilled. The kit as shown with the three thermostat holes is for 1275cc cylinder heads and L/H/D without sandwich plate **MSSK1302**

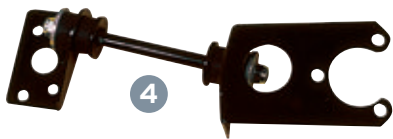


- 2. Ultimate engine stabiliser for the latest 1275cc cylinder heads** where a sandwich plate is fitted under the thermostat housing. Fits all R/H/D cars from 1990, except twin-point **MSSK1301**

- 3. a. Ultimate engine stabiliser - Painted black.** This is the original ultimate engine stabiliser for 850, 1000 and 1100cc cylinder heads. Fits from the thermostat housing and end manifold stud. The other end bolts to the bulkhead where the heater hoses go through **MSSK1000**
b. L/H/D kit for all non 1275cc heads, that is 850,998, 1100 which uses only two thermostat holes, because of its different position. **MSSK1000L**



- 4. The original ultimate engine stabiliser painted black.** Fits all 1275cc R/H/D cylinder heads pre 1990 without a sandwich plate. Fits to the thermostat housing and end manifold stud and also onto the bulkhead where the heater pipes go through **MSSK1300**



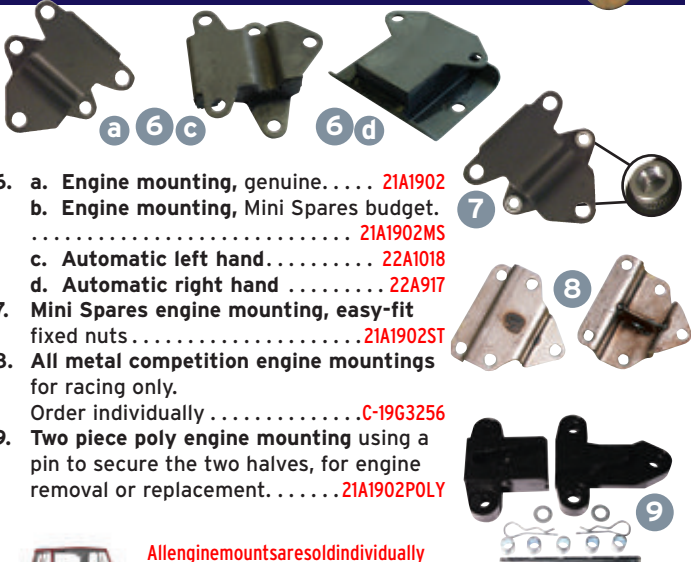
Adjustable Engine Stabiliser

- 5. Adjustable Engine stabiliser bar** allowing engine to be positioned at different angles to allow the fitting of turbos, oversized filters, or when needing extra clearance, this adjustable bar is essential. **MSSK1305**



Engine Mounts

- 6. a. Engine mounting, genuine.** **21A1902**
b. Engine mounting, Mini Spares budget. **21A1902MS**
c. Automatic left hand. **22A1018**
d. Automatic right hand **22A917**
- 7. Mini Spares engine mounting, easy-fit fixed nuts.** **21A1902ST**
- 8. All metal competition engine mountings for racing only.** Order individually **C-19G3256**
- 9. Two piece poly engine mounting** using a pin to secure the two halves, for engine removal or replacement. **21A1902POLY**



Bolt Repair Stabilisers

- 10. If any of the bolts from your original engine stabiliser bar break off in the block and can not be removed, the following four kits should rectify the problem.** The engine stabiliser bar (21A1109) shown in the picture is not included but shown as a guide only. All other parts and instructions are included.
a. If only the longer engine block bolt that goes through the bushes is broken and there is no breather fitted to the clutch housing. **MSSK002**
b. If both the engine block bolts are broken and no breather is fitted on the clutch housing **MSSK004**
c. If only the longer engine block bolt that goes through the bushes is broken and a breather is fitted to clutch housing (1275cc only) **MSSK003**
d. If both the engine block bolts are broken and a breather is fitted to the clutch housing 1275 only. **MSSK005**



Gearbox Stabilisers

- 11. Left hand lower engine/gearbox stabiliser** that fits to the lower front gearbox case studs/bolts and goes rearward to bolt on the rear leg of the subframe, where one hole will require drilling. **MSSK001**
- 12. Right hand lower engine/gearbox stabiliser** fits to the lower clutch casing/flywheel case studs and then goes rearward to bolt on the rear leg of the subframe, where one hole will require drilling. **MSSK**



Bushes

- 13. a. An alternative to rubber bushes on the engine steady bar are the polyurethane type,** which are more resistant to heat, oil, water and dirt. The kit includes four bushes and a new spacer for the engine end. **C-STR630**
b. As above but made from a harder poly for race/ competition. **C-STR630RACE**



- 14. Original standard rubber bush and tapered collar kit.** (4 of each)
a. with plastic inserts. **SBK1**
b. with metal inserts **SBK2**
- 15. Original standard rubber bush.** Order individually **CRC5329**
- 16. Single type engine steady bar bush** as fitted on twin point, 1996 onwards. New performance alternative to all above bushes. Fits all Minis. Now made with our own performance grade rubber, independently tested and found to have competition or better, performance properties. **KKF101320EVO**





Mini Spares Modified Heads

Mini Spares exclusive 9 stud lead free cylinder heads are flow bench proven to be the best available at these prices when compared to all our competitors. Best over-all air flow for fast road engines from 850 to 1430cc.



Super Sport Lead Free Heads



Unleaded with manganese bronze guides and race specEN21 4N stainless steel heat treated valves to eradicate wear.

1. a. 35.7mm inlet valve and 29.5 mm exhaust valve suitable for road sports use. For pre 1992 vehicle with bypass hose (21.4cc)MSE3
- b. as above but replicated on a brand new MPI head casting - outright sale onlyMSE8
2. 35.7mm inlet valve and 29.5mm exhaust valve as per MSE3 but with nominal 24-25cc combustion chamber size for use with 7cc dish 73.5mm pistonsMSE9
3. 35.7mm inlet valve and 29.5mm exhaust valve suitable for road sports use, but for cars after 1992 or without bypass hose. (21.4cc)MSE4
4. 35.7mm inlet valve and 31mm exhaust valve with bypass hose. (21.4cc)MSE5
5. Twin point injection cars only 35.7mm inlet valve and 29.5mm exhaust valveMSE7
6. 850/998/1100 modified head with largest valves 30.93mm inlet and 26.5mm exhaust (23.5cc)C-AHT88

Refundable surcharge may apply. Call for details.

Road Sport Modified Lead Free Heads

Unleaded heads with chromium plate stemmed valves and iron guides but near identical flow characteristics to Super Sport head



7. 35.7mm inlet valve and 29.2mm exhaust valve with bypass hose pre 1992C-AHT135
8. 35.7mm inlet and 29.2mm exhaust valve for 1992 on cars without bypass hose. MSE6
9. 35.7mm inlet valve and 29.2mm exhaust and nominal 24-25 cc combustion chamber size for use with 7cc dish 73.5mm pistonsC-AHT133
10. Twin point injection cars only 35.7mm inlet and 29.2mm exhaust valveC-AHT136

Refundable surcharge may apply. Call for details.

Standard Reconditioned Heads

11. Unleaded heads
 - a. 850/998cc with no temperature transmitter hole.CGG1001
 - b. 850/998cc with temperature transmitter hole.CGG1007MS
 - c. 998cc without bypass hose.CGG1007METRO
 - d. 1275cc head with bypass hoseCGG1009MS
 - e. 1275cc head without bypass hose and heater outlet.CGG1009METRO

Refundable surcharge may apply. Call for details.

ARDEN 8 Port Cylinder Head



12. The original Jim Whitehouse head homologated by Special Tuning Abingdon, now over 40 years old needed revamping using new state of the art casting boxes which encompassed the original cores to produce a high precision casting for road or race.

All heads now have a larger 21cc combustion chamber which facilitates sensible compression ratios on large bore engines. It is supplied fully assembled with springs / top caps and utilizes the original 35.6 inlet and 30.88 exhaust valves and will handle cam lifts up to .500".

Longer push rods are necessary and are available to ensure that the rocker geometry remains correct.

Extensive flow bench testing showed a larger 37.2 inlet valve plus new inlet port cores provides a further substantial increase in performance over the Original Special Tuning cylinder head and can be supplied by Special Order.

Fully assembled High Lift Roller Rocker sets have been manufactured by Minisparts and are needed to further increase performance and ensure correct rocker geometry.

A Special exhaust manifold and camshaft with transposed lobes on 2 and 4 cylinders are required. Original "S" Con rods / bolts will need modifying or a special 8 port conrod set is available from MiniMania.

12. Arden 8 port headC-AJJ4064
- 13 The Amal four carburettor kit was perhaps the most popular originally, as this compact kit fitted easily under the bonnet profile. This setup are best suited to smaller capacity engines (1000-1293cc) as choke size is restrictive over this. For the complete Amal kit.C-AJJ4083

The Weber provides more power potential especially when a long manifold for racing is used, but the carburettor mouths poke out through the bonnet. With the short manifolds the carburettors just squeeze under the standard bonnet profile. However, this second manifold pair are not tremendously efficient due to the offsets and angles used to tailor the fit. Both manifolds are formed and fabricated in steel by Manifold so produce the optimum flow achievable given the fitting criteria.

14. Pair of 90mm long Weber inlet manifolds for power potential protruding bonnetC-AHT507
15. Pair of 60mm Short Weber inlet manifold which just squeeze under bonnet.C-AHT508
16. a. Pushrods for 8 Port Arden head, 1275cc. 0.27" longerC-AEG583
- b. As above with alloy center for Sport only.C-AEG583EVO

8 Port Fuel Injection Kit



17. Bespoke kit designed to compliment the 8 Port head and optimise its full performance potential. The throttle bodies are a direct body to head design that will fit under the standard bonnet of the mini but for those customers who wish to extend the induction system length, parts will be available to do so.

The management system is fully programmable by an approved and competent engine tuner and the software is provided with every kit along with a base engine map which will allow initial start up followed by optimisation on an engine dyno or rolling road.

The comprehensive kit contains an ECU with bespoke loom, throttle bodies and linkage, Crank sensor and mounting kit, air and water temp sensors, air filter and pre drilled base, High pressure fuel pump, fuel filter, fuel regulator, throttle potentiometer, coil pack, Magnecor plug leads and 4 Pico injectors.

- 8 Port fuel injection kit.C-AJJ4065

NOTE: For refundable surcharge, heads must be returned complete and built up, including valves, springs, etc...



29 Head Gaskets & Valve Springs



Head Gaskets



- Group 'A' Metro Turbo head gasket.** This gasket has an extra reinforced fire ring to eliminate inter-chamber blowing. 3.1cc compressed volume. Necessitates modification of the block - details available from MSC. Not suitable for bores over +.040". Beware TAM1521 is stamped on this gasket which is also the standard gasket number on which it is based **C-STRI057**

- Original competition copper/composite head gasket.** Manufactured by Payen to their latest specifications. Essentially used on 1275cc plus engines, but also for small bore engines when using 12G940 head casting. Has a 3.8cc compressed volume, 3 waterway holes are larger..... **C-AHT188**

- Copper/composite Payen AF460 head gasket.** Suitable for all large bore modified engines. 3.6cc compressed volume..... **GEG300**

- a. Standard black in color composite steel reinforced gasket** used on all large bore engines (not for 8 port heads) as standard, but is an exceptionally good gasket. 4cc compressed volume, is asbestos free with a special sealing ring for the rocker oil feed supply hole. Stamped AF470 **GUG702560HG**

- b. The original black Payen head gasket,** fitted before AF470 as standard is also asbestos free stamped as BK450. This is the superior gasket. Has a 4cc compressed volume..... **TAM1521**

- Performance head gasket made from black fiber composite,** for all small bore especially large over bores. 2.8cc compressed volume **C-AEA647**

- Copper/composite head gasket for small bore.** Original Rover - Unipart high quality gasket. 2.8cc compressed volume. (was TAM2121) asbestos free with special sealing ring.. **GUG702506HG**

Head Gasket Sets

- A range of top quality budget priced gasket sets** are available which are rationalised to fit all models and change points by including the extra gaskets that can be discarded if not required.
 - 850/998/1100 Small bore engine.** **AJM1250MS**
 - 1275cc head set with TAM1521 head gasket** **AJM1140**
 - 1275 with standard copper head gasket** **AJM1140MS**
 - 1275 with AF460 Payen copper head gasket.**..... **AJM1141MS**
 - Single point head gasket set genuine.**..... **GUG701187HS**

Manifold Gaskets

- Large port competition manifold gasket, all 5 port heads.**
 - Large Port etc.**..... **C-AHT381**
 - Standard manifold gasket.**..... **AJM601**
 - Injection Cars** **GUG704053MG**
 - Turbo manifold gasket with metal retainer rings on exhaust ports.** **GUG704063MG**

Gearbox Gasket Sets

- Gearbox gasket set pre 1996** **AJM804B**
(This is not supplied with clutch seal or output shaft seals)

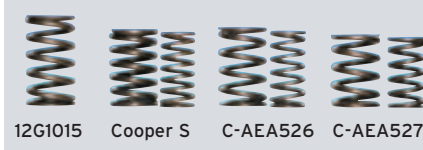
Engine Block Sets

- a. Engines with side plate tappet chest covers.** **AJM202MS**
- b. Engines without side plate tappet chest covers 1300cc only** **AJM206MS**

Valve Springs

A number of years ago modern hi-lift, short cams designed to run with hi-ratio rockers posed quite a few problems. Widely available performance valve springs were outdated over night as it became necessary to reduce spring crush valves. This, in turn, caused low valve seat pressures leading to valve float at high rpm levels and insufficient full lift and flank pressures causing the cam follower to lose contact with the lobe. Consequently performance losses resulted.

The latest cam designs, brings with it a more difficult set of criteria for the valve spring to meet. But again Mini Spares stepped in to solve the problem by a re-design on their phenomenally successful springs, adding a third spring pair to their range. Manufactured from superior quality Oteva silicone steel wire from Sweden and specific heat treatments during processing they retain high resistance to rate deterioration and breakage. Sensible design makes them compatible with standard fitment type top caps. Fitted as described in the instructions supplied they will not crush even with lifts up to 0.500-inch at the valve - common on race engines with 1.5 ratio rockers. Used on our own modified heads they have proven ultra-reliable.



Shows spring heights showing less coils on anti coil bind springs which help eradicate spring crush on high lift camshafts.

- Race valve springs for use in excess of 8,000rpm** and will take 0.500-inch lift at the valve, nominal rate 280lb on the nose. **C-AEA527**
- High performance road springs will take up to 8,000rpm** and valve lifts up to 0.500-inch, nominal rate 200lb on the nose **C-AEA526**
- Dual valve springs for standard and mild performance road use** will take up to 7,000rpm and valve lifts to 0.490-inch, nominal rate 160lb on the nose..... **C-AEA525**
- ISKEY type race springs** are used by some racers or for specific applications. (Special top caps required. No longer stocked). for 320lb (USA poundage measurements) Order set **C-AEA529**
- a. Single outer spring Pre A-plus 850,998,1100cc.** Order individually **AEA311**
- b. Single outer spring for all A-plus engines 998 and 1275cc.** Order individually **as12G1015**

Valve Shims / Collars

- Spring seat shims** when spring or valve seats have been over machined are available in following sizes
 - Set of four shims only 0.010"** **SS2**
 - Set of four shims only 0.030"** **SS3**
 - Set of four shims only 0.060"** **SS4**
- It is preferable to use bottom inner spring locating collars** with all dual springs to prevent breakage caused by the inner spring wandering at high rpm.
 - Competition lower inner spring locator.** Order individually **C-AEA654**
 - Standard lower inner spring locator AEA403,** is now obsolete from Rover but not required with our C-AEA526/7 twin spring sets.

Valve Top Caps

- Original steel 'S' competition top cap.** Order Individually **AEA653**
- Race top caps - ultra light weight, hard anodised aircraft alloy top caps.** Do not pull through at high rpm. Order Set... **C-AEA528**



Cam Followers

It is of great importance to use high quality cam followers to get the best performance and reliability from your cam. Use of poor quality followers will lead to definite failure of the cam. The cam followers supplied by Mini Spares are of the highest quality, manufactured by an OE supplier to Rover Group. Always use cam lube when fitting new cam followers.

1. **a. Standard weight cam follower.**
Weights 44 grams. Order individually. **2A13**
- b. Standard weight cam follower with oil drain hole.** Weights 44 grams. Order individually. **AEG584**
- c. Genuine AE cam follower**
(FederalMogul). Weights 44 grams. Order individually. **2A13EVO**
2. **Performance developed - To combine consistent base edge chamfering and foot curvature, plus accurate tolerances to ensure push rod socket location in the follower base, to minimise float and jump normally associated with original cam followers which ultimately lost power. Suitable for all cam types and uses. Double heat treated and then finish ground.**
 - a. **Light weight cam follower with oil hole. Standard height.**
Order set. **C-AEG579**
 - b. **As above but taller to increase follower stability improving follower life.** Order set. **C-AEG580**



Competition Valves

All our competition valves are produced in EN214N steel and require Manganese/ Silicon bronze alloy valve guides. They are stellite tipped and use the later narrow single collet groove and current high efficiency valve head shapes and designs. The statutory use of unleaded fuel causes premature wear on valve stems therefore all our competition valves will be heat treated to eradicate this problem.

3. **Inlet Valves. All valves sold individually.**
 - 37.2mm (1.464") inlet valve for 12G940 casting. **C-AHT55**
 - 35.7mm (1.406") inlet valve
 - a. for 12G940 casting. **C-AEG544**
 - b. triple grooved A-Plus valve*. **C-AEG543**
 - 35.7mm (1.406") inlet valve for AEG163 casting MK1'S' ... **AEG593**
 - 33.3mm (1.311") inlet valve for 12G940 casting. **C-AEG569**
 - 30.93mm (1.218") inlet valve all small bore head casting.*
..... **C-AEG588**
 - 35.6mm (1.405") Longer inlet valve. 8 port head only .. **C-AHT376**
4. **Exhaust Valves. All valves sold individually.**
 - 32mm (1.260") chrome stemmed exhaust valve for 12G940 casting. Not heat treated. Order Individually. **C-AEG570**
 - 31mm (1.220") exhaust valve for 12G940 casting. **C-AEG107**
 - 31mm (1.220") exhaust valve for AEG163 casting. **AEG594**
 - 29.5mm (1.161") exhaust valve
 - a. for 12G940 casting. **C-AEG106**
 - b. triple grooved A-Plus valve*. **C-AEG105**
 - 26.5mm (1.043") exhaust valve for all small bore castings.*
..... **C-AEG587**
 - 30.93mm (1.218") longer exhaust valve for 8 port head only.
..... **C-AHT377**



Standard Production Valves

5. **Inlet Valves for 1275cc. All valves sold individually.**
 - a. **Single grooved valve.**
35.6mm (1.484") inlet valve for 12G940 casting. **AEG592**
33mm (1.311") inlet valve for 12G940 casting. **12G941**
 - b. **Triple grooved valve.**
35.6mm (1.484") inlet valve for 12G940 casting. **TAM1059**
33mm (1.311") inlet valve for 12G940 casting. **TAM1058**
6. **Exhaust Valves for 1275cc. All valves sold individually.**
 - a. **Single grooved valve.**
29.2mm (1.149") exhaust valve for 12G940 casting. **CAM4601**
 - b. **Triple grooved valve.**
29.2mm (1.149") exhaust valve for 12G940 casting. **TAM1061**
 - c. **Lead free insert.** For exhaust valves. . **TAM2069**
7. **Exhaust Valves for 850/998/1100cc.**
 - a. **Early large collet groove** **AEA434**
 - b. **Small collet groove with AEA311 valve spring** **2A1987**
 - c. **A+ with 12G1015 valve spring** **CAM6503**
 - d. **Triple collet groove valve A+.** **TAM1770**

Rimflo Valves

We also stock a limited of range of Rimflo valves for the 'A' series. These are produced in EN214N steel with chrome plated stems which enable them to be used with standard iron guides. All Rimflo valves start with the prefix C-RIM.

8. **Rimflo Inlet Valves.**
All valves sold individually.
 - 36.6mm (1.44") inlet valve for 12G940 casting. **C-RIM55**
 - 35.7mm (1.405") inlet valve for 12G940 casting. **C-RIM544**
 - 33.3mm (1.311") inlet valve for 12G940 casting. **C-RIM569**
 - 31.8mm (1.252") inlet valve for small bore casting. **C-RIM104**
9. **Rimflo Exhaust Valves. All valves sold individually.**
 - 31.75mm (1.250") exhaust valve for 12G940 casting. **C-RIM570**
 - 30.9mm (1.217") exhaust valve for 12G940 casting. **C-RIM107**
 - 29.3mm (1.15") exhaust valve for 12G940 casting. **C-RIM106**
 - 27mm (1.06") exhaust valve for small bore casting. **C-RIM105**

Small bore available to customer order only



Valve Guides/Seals

Although Silicon bronze valve guides were used for their extremely good wear values they were very hard and not user friendly when fitting.

We have introduced the Manganese bronze guides which have good cutting properties and good wear characteristics and are original equipment on Porsche and Mercedes. Bronze alloy valve guides are required when using EN214N steel valves unless the valve stems are chrome plated. Guide material specifications may change as more modern materials are tested.

10. a. **All 5 port heads.**
Manganese bronze guide are sold in sets of 8 **C-AJJ4037**
b. **8 port head only set of 8** **C-AHT364**
11. **Iron guides are bullet shaped for better flow characteristics.**
Type shown are 12G1963 which accept ADU4905 seal.
Order individually. **12G1963**
12. **Top hat seals are always fitted on inlet valves and also on the exhaust valves on standard Rover unleaded heads.**
 - a. **Standard replacement.** Order individually. **ADU4905**
 - b. **New improved performance type.** As fitted to twin point injection, made in original Dupont Viton.
Order individually. **LJQ101160**



'Small bore' is a classification for 850/998/1098cc.

*only available in late type triple collet groove.

'Large bore' is any Cooper 'S' and all 1275cc+ engines

Triple Groove



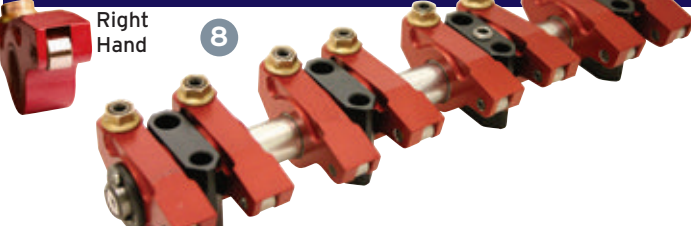


Forged Rocker Gear

- 1.5 Hi-Lift set with adjusting screws, posts and shaft. Super strong Cadcam designed drop forged high grade steel with hardened valve pad using thick wall rocker shafts. Complete kit **C-AHT436**
- Replacement single rocker for C-AHT436, less screw and nut **C-AHT435**
- The only current production rocker from Rover is sintered and runs without a bush. **CAM289**
- Adjuster screw fits 12G1221, C-AHT400/402/403/436/446A and CAM289 sintered rocker **AEG167**
- Set of 8 extra long adjuster screws, approximately 8mm ($\frac{5}{16}$ ") longer, ie. about 8 threads extra for use when standard screws are not long enough to give adjustment on certain modified engines plus 8 port heads. Set. **C-AEA692**
- Lock nut for screws 4 and 5 above. Order individually. **NT605061**
- Original rocker bush. Individually. **2A21**



Roller Rocker Assembly



The new generation of short period, high lift cams have been developed to give the best results in large bore engines when used in conjunction with 1.5 ratio, hi-lift rockers. For the small bore range, the 'S' 1.3 to 1 ratio is optimum. In certain instances a ratio of 1.7 to 1 is of benefit - but really this is only applicable to fully developed race engines. Not recommended for small bore engines except full race applications.

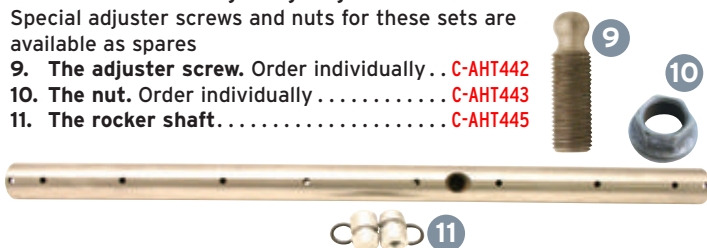
Hi-Lift Rocker Assembly.

The ultimate lightweight alloy valve gear giving maximum efficiency cutting down side loading on valve stem, reducing friction and wear whilst increasing rigidity. Available in 1.3 ratio lift which is standard or the 1.5 hi-lift which has valves open approximately 20% more at any given point, although opening and closing periods remain the same. The 1.5 to 1 lift vastly improves volumetric efficiency and therefore power output. When fitted to a 1275cc or large bore engine it gives the equivalent of fitting a mild camshaft. The alloy rockers have hard chrome roller tips and dual needle roller bearings that sit on a special rocker shaft.

8. Full roller tip and roller bushed rocker assemblies with 5/8" rocker shaft
 - a. For 1275cc engines giving standard lift 1.3 ratio. **C-AHT437**
 - b. For 1275cc engines giving hi - lift 1.5 ratio. **C-AHT438**
 - c. For 1000cc engines giving standard lift 1.3 ratio. **C-AHT439**
 - d. For 1000cc engines giving hi - lift 1.5 ratio. **C-AHT440**

Special adjuster screws and nuts for these sets are available as spares

9. The adjuster screw. Order individually. . **C-AHT442**
10. The nut. Order individually. **C-AHT443**
11. The rocker shaft. **C-AHT445**



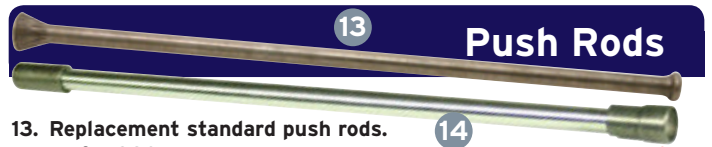
Super Thick Wall Rocker Shaft

12. a. Standard 3.6mm wall thickness rocker shaft. **12A1950**
- b. Performance 4.3mm thick wall shaft, Mini Spares own design is precision ground after heat treatment which increases durability and enables tighter tolerances on the bores, keeping the valve geometry more accurate for longer. **C-AEG399**



Push Rods

13. Replacement standard push rods.
 - a. for 998cc. **2A14**
 - b. for 1275cc. **AEG314MS**
14. Performance push rods. Larger 6.35mm diameter.
 - a. for 998cc. **C-AEG581**
 - b. for 1275cc. **C-AEG582**
 - c. for 1275cc Evolution extra rigid alloy for greater performance, widened to 8mm in center. Javelin shape type may require slight modification to block/head. **C-AEG582EVO**

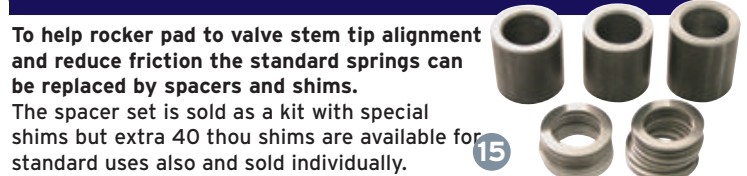


Rocker Spacers & Shims

To help rocker pad to valve stem tip alignment and reduce friction the standard springs can be replaced by spacers and shims.

The spacer set is sold as a kit with special shims but extra 40 thou shims are available for standard uses also and sold individually.

15. a. Kit developed to fit most rocker configurations with instructions. Order kit **C-AEG392**
- b. 40thou wide shims to adjust rocker alignment. Order individually. **AEG168**
16. Spacer for under rocker posts to rectify rocker geometry/alignment when required. 1.42mm thick. Order individually. **2A515**



Evolution Roller Tip Rockers

The roller tip set with bushes running on the shaft rather than needle rollers, uses the same alloy arm and hard chrome roller tips allowing fitment of a super thick wall rocker shaft, standard adjuster screws and nuts plus special posts.

All this culminates in a high quality yet infinitely more economical roller rocker set, as the roller tip is the most important factor to reduce valve and guide wear when using modern performance cams. To use on small bore heads it is necessary to rearrange the rockers to line up the tips with valve stems.

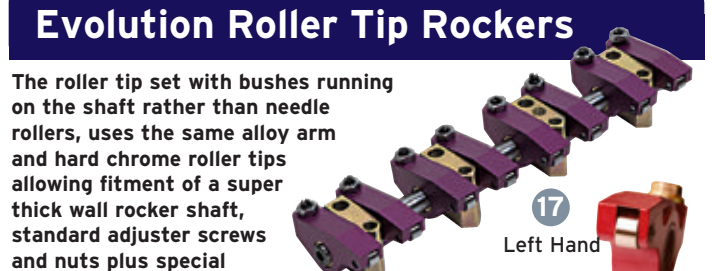
Since 1998 the rockers have been made in purple which denoted a change in angles. This slight change was to give better clearance for push rods on A-plus heads. You will need to use your existing spacer springs or spacers between the rockers (or see kit No.11)

By holding the rocker the correct way up with the adjusting nut closest towards you the roller is biased to the left or right which will then denote the side required. (see pic above)

All other individual parts are available to special order only.

The old original type were blue and are not available as a spare part. Note they are not interchangeable.

17. 1.5 Hi-Lift with roller tip rockers only and bronze bushes for 1275cc big bore engines only (purple). **C-AHT446A**
18. Spare rockers for C-AHT446A are available.
 - a. Right hand. **C-AHT447RIGHT**
 - b. Left hand (as shown above). **C-AHT447LEFT**
19. Standard lift 1.3 roller tip rockers for 1275cc big bore engines only. **C-AHT400**
20. a R/H rocker for C-AHT400 **C-AHT401RIGHT**
- b L/H rocker for C-AHT400 **C-AHT401LEFT**





Alloy Rocker Covers

- Flat top design alloy rocker cover fits all A-series cylinder heads, but may not allow sufficient clearance of hi-lift rockers. Supplied with chrome cap FP27 as shown.
 - In polished alloy.....FP26
 - In red.....FP26RED
 - In blue.....FP26BLUE
 - Cap only for above.....FP27



Mini Spares Rocker Covers

- Mini Spares embossed rocker covers were designed to fit any A-series cylinder head and allow fitment of all known hi-lift rocker assembly configurations. This rocker cover is supplied with GFE6003 black rocker cover cap or an alternative. This is the rocker cover often seen pictured on cars being promoted or reviewed by leading mini magazines.
 - For Mini Spares Rocker Cover

Color: Black Red Blue Polished Alloy
 Order: ROCKERCVR ROCKERCVR02 ROCKERCVR03 ROCKERCVR01



NOTE: For all rocker covers. Do not forget to order a new rocker cover gasket and nut seals. (see bottom of page)

Rocker Cover Caps

- Original vented black plastic cap with names of historic leading oil companies. As fitted to all A-Series with breather in cap which is recommended for service change every 12,000 miles. GFE6007 red cap is an alternative.....GFE6003
- Minifin rocker cover cap. Red in color where the original was orange.....GFE6007
- Chrome vented cap fits all alloy rocker covers except Mini Spares shown above.....FP27
- Monza type chrome cap for fitting to FP26 range of rocker covers.....FP29
 - For fitting to original Minifin CAM6822 rocker cover.....FP30



Rocker Cover Gaskets & Seals

- Rocker cover cork gasket for all A series and Mini 1959-2000
 - For 9 stud standard applications.....GUG705009VC
 - For 11 stud applications Cooper 'S'.....GUG5038VC
- Rocker cover nut seals harden and crack, so should be replaced with gasket.
 - Black rubber. Order individually.....12A1358
 - Black with neoprene content. Better heat resistant and sealing properties for longevity. Order individually.....12A1358MS
 - Red poly. Order individually.....12A1358RED
 - Yellow poly. Order individually.....12A1358YELLOW



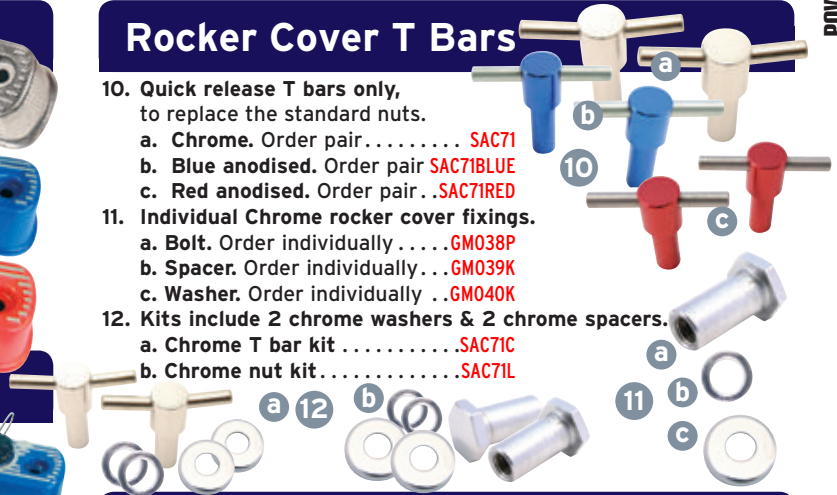
Engine Lifting Brackets

- Original type engine lifting hook. Sold individually (2 required).
.....12A1968



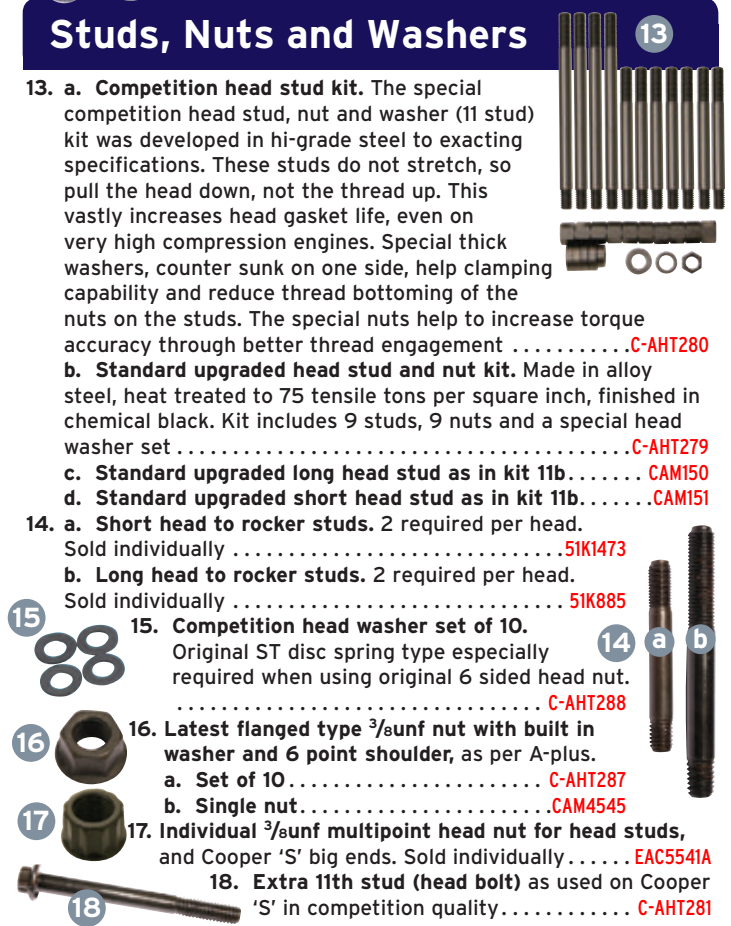
Rocker Cover T Bars

- Quick release T bars only, to replace the standard nuts.
 - Chrome. Order pair.....SAC71
 - Blue anodised. Order pair SAC71BLUE
 - Red anodised. Order pair.....SAC71RED
- Individual Chrome rocker cover fixings.
 - Bolt. Order individually.....GM038P
 - Spacer. Order individually.....GM039K
 - Washer. Order individually.....GM040K
- Kits include 2 chrome washers & 2 chrome spacers.
 - Chrome T bar kit.....SAC71C
 - Chrome nut kit.....SAC71L



Studs, Nuts and Washers

- Competition head stud kit. The special competition head stud, nut and washer (11 stud) kit was developed in hi-grade steel to exacting specifications. These studs do not stretch, so pull the head down, not the thread up. This vastly increases head gasket life, even on very high compression engines. Special thick washers, counter sunk on one side, help clamping capability and reduce thread bottoming of the nuts on the studs. The special nuts help to increase torque accuracy through better thread engagement.....C-AHT280
 - Standard upgraded head stud and nut kit. Made in alloy steel, heat treated to 75 tensile tons per square inch, finished in chemical black. Kit includes 9 studs, 9 nuts and a special head washer set.....C-AHT279
 - Standard upgraded long head stud as in kit 11b.....CAM150
 - Standard upgraded short head stud as in kit 11b.....CAM151
- Short head to rocker studs. 2 required per head. Sold individually.....51K1473
 - Long head to rocker studs. 2 required per head. Sold individually.....51K885
- Competition head washer set of 10. Original ST disc spring type especially required when using original 6 sided head nut.....C-AHT288
- Latest flanged type 3/8" nut with built in washer and 6 point shoulder, as per A-plus.
 - Set of 10.....C-AHT287
 - Single nut.....CAM4545
- Individual 3/8" multipoint head nut for head studs, and Cooper 'S' big ends. Sold individually.....EAC5541A
- Extra 11th stud (head bolt) as used on Cooper 'S' in competition quality.....C-AHT281



	Stainless Steel Kits corrosion resistant.	Order individually	
		Original Material Studs	Nuts
Heater tap stud	 Studs C-STR285 A+ Bolts C-STR283	 53K402	 GFK3211
Thermostat stud	 Pre A+Studs C-STR286 A+ LongBolts C-STR284	 CHS2515	 GFK3212
Manifold stud	 C-STR287	 53K487	 Short GFK3436 Long 51K1177

