

29 Head Gaskets & Valve Springs



Head Gaskets

1



- 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

10



- Engines with side plate tappet chest covers.** **AJM202MS**
- 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**