

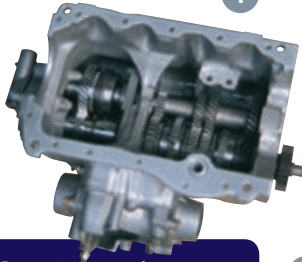
## 43 Gearbox, Levers, Gaitors & Mounts



### 5 Speed Rod Change Gearboxes

The gearcase undergoes extensive modifications plus 58 new linkage and gear modification parts. Modified to a closer ratio by virtue of new redesigned laygear and 1st motion shaft producing 3.282 1st gear, 1.966 2nd gear, 1.283 3rd gear, 1.1 4th gear and a 5th gear ratio of 0.882. Straight cut versions using Evolution Clubman gears produces a 5th gear ratio of 0.865. See gears page for Clubman ratios. Used since 1994 on all applications up to 1380cc (except extra boosted turbos), the strength of the helical cut gear box is dependant on the torque capability of the original 2nd/3rd gears plus the final drive pinion (i.e. 80-85 ft. lb. of torque). Keith Dodd & others used these gear boxes on 1380's & 8port road cars.

1. a. 5 Speed complete A-plus gearbox with 3.4 diff. .... **MSG04**
- b. 5 Speed complete A-plus gearbox with 3.4 crosspin diff. .... **MSG05**
- c. 5 Speed complete Evolution Clubman straight cut. 3.4 diff. ... **MSG06**
- d. 5 Speed complete Evolution Clubman straight cut with 3.4 crosspin diff. .... **MSG07**



### Gear Levers, Gaitors & Mounts

Quickshifts are not recommended for 5 speed gearboxes



2. Reverse gearlock for remote type gear levers to remove possibility of going into reverse in error ..... **MS71**
3. a. Chrome quick shift gear change for rod change gearbox. Nearly halves lever travel between gear changes. .... **C-22A1751**
- b. New improved hi tech version Genuine K.A.D. supplied with an alloy gear knob ..... **C-22A1752**
4. Chrome quick shift gear change for remote gearbox. Nearly halves lever travel for gear changes ..... **C-22A1750**
5. Shift Bias Lever. (Rod change only). Makes second to third gear changes smoother and quicker, like most modern-day cars. Fitted to all 5 speeds. .... **MSG12**
6. Mounting for the remote control housing. .... **21A956**
7. Mounting for rod change gear lever housing. .... **22G2205**
8. Remote control housing large rubber plug. .... **22A271**
9. Remote housing to gearbox plug ..... **22A285**
10. Gaiter 1959 upto introduction of remote control type fits on gear lever base. .... **22A1380**
11. Magic wand gear lever rubber gaiter. 1959 upto introduction of remote control type. Fits onto floor. .... **14A6860**
12. Remote type gear lever rubber gaiter. Upto 1973 when rod change type was introduced. .... **22A608**
13. Metal gaiter retainer for above. .... **14A9942**
14. Rod change type gear lever rubber gaiter. From 1973. .... **CZH4278**
15. Metal Gaiter retainer for above. .... **FJN10003**
16. a. Gear lever black vinyl gaiter. Rod change only. .... **BHH2002**
- b. black with red stitching. .... **BHH2002AM**

### Gearbox Components

17. Over 12 years and 5000 sales have passed since an in-depth analysis was carried out to accumulate the contributing factors to the horrendous wear rates and failures, enabling Mini Spares to produce a new generation of pins that would almost eradicate the problem apart from those caused by poorly machined planet gears. Production tolerances were tied down to exacting specifications with a material and heat treatment upgrade. Planet gear contact area is increased as is the core strength of the pin combining with a finer ground surface to give a very tough and hard wearing component.
  - a. Performance strength diff pin ..... **C-BTA166**
  - b. Genuine Rover tufridrid diff pin ..... **22G2583**
  - c. Extra performance strength diff pin. For extra powerful road cars, autotesters and all types of racing where a standard diff has to be used we have developed the same exacting specification pin further by molybdenum coating the planet wheel contact areas. Must not be used with the bushed type planet gears as excessive wear will be created. .... **C-BTA164**
18. Bushed Planet Wheel+Diff Pin Kit for performance use. This is the ultimate way of stopping diff pin wear for any use and especially when competition regulations do not allow use of X pin or LSD differential units. The kit contains 2 specially bushed planet gears with thrusts, diff pin and a new securing roll pin. .... **C-BTA167**
19. Current standard baulk rings produced in sintered metal are not tough enough to deal with the demands of performance usage, in many instances only lasting one race before breakage and other failures. The main reason is the incompatibility of the material specification with the usage to which it is being put. Basically it is too brittle. Mini Spares competition baulk ring is a replication of the steel version similar to those originally fitted and used in the 1960 era. Manufactured in iron, induction hardened and then finished by hand to give an exact fit on the baulk ring cone.
  - a. Steel competition baulk ring for use on Mini Spares Moly coated gears. Order individually **C-22A1741**
  - b. Standard Rover sintered Order individually **22G2033**
  - c. Mini Spares sintered. Order individually **22G2033MS**
20. Center oil pick up pipe. To ensure an uninterrupted supply of oil to the engine during high rpm and hard cornering it is imperative to fit a center oil pick up pipe. This draws oil from a centralised position at the lowest point of the gearbox, therefore avoiding aeration caused by surge. The internal size of the pick up pipe bore has been optimised along with the filter gauze size and efficiency, so it is now (approximately) double the filter area without restricting pick up flow or compromising fitting. This greatly reduces oil pump and engine damage caused by foreign particles being sucked up the pipe. It is recommended to fit the extended drain plug DPI. .... **C-AHT54**
21. Rod Change Gear Box Leak Fix. Most engine / gearbox oil leaks originate from the gearchange rod seal. One remedy used to be fitting two seals, but this did not support the rod centrally. To overcome this problem an alloy spacer with an 'O' ring fitted centralises the gear change rod and helps restrict oil leaks. The original oil seal is then fitted to stop leaks and then a dust cover as final protection slides over the rod to stop road debris penetrating the seal.
  - a. Gearbox leak fix complete kit .. **MSSK050**
  - b. Alloy spacer ..... **DAM8706**
  - c. Seal for above. .... **CDU1563**
  - d. Rod change linkage oil seal .... **AHU1672**
  - e. Rod change seal gaitor ..... **DAM3022**
22. Gearbox case linkage bush ..... **13H7286**
23. Roll pin punch tool ..... **TOOL17**