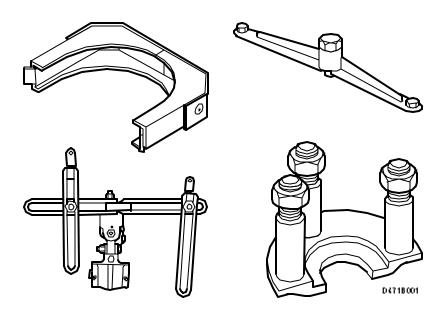
#### SERVICE INFORMATION

Bulletin Nbr: 104-1728

Date: ..........FEBRUARI 1997

Market: ALL

New special tools for working on gearbox



#### **Cars affected**

All M94-

# Background

Due to modifications in the design of the manual gearbox with closer tolerances as a result, certain work on the gearbox is impossible to do without suitable aids. This has led to the introduction of three new tools to facilitate such work. The tools should be placed on the toolboard for manual gearboxes.

In addition, a lifting tool has been introduced for use when a complete gearbox is to be removed from and/or fitted in the car. This lifting tool is suitable for manual gearboxes and automatic transmissions alike.

These tools are not included in any subscription but must be ordered separately.

Parts required

87 92 517 Counterstay

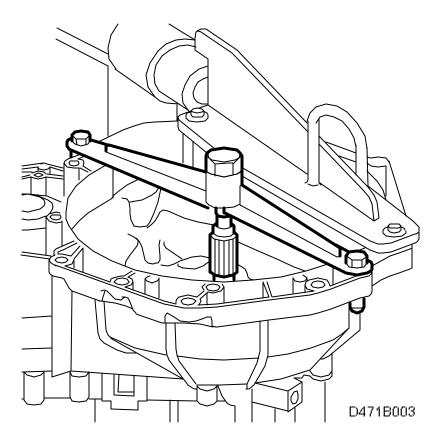
87 92 566 Puller

10/30/01

87 92 582 Assembly jig

87 92 608 Lifting tool mkm 886

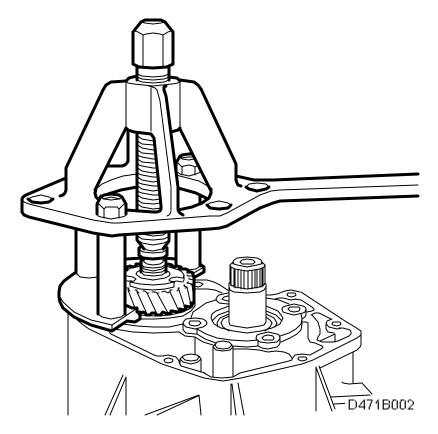
**Procedure** 



# **87 92 517 Counterstay**

Used as a counterstay for the input shaft when the 5th gear synchromesh hub is to be tapped down.

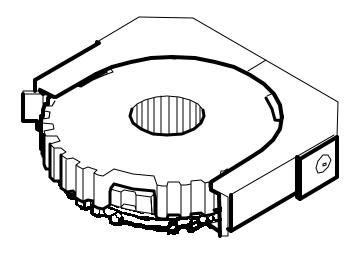
The tool should be placed on the half-size toolboard for manual gearboxes, between coordinates C6 and D6. An overlay is supplied.



87 92 566 Puller

Used in conjunction with puller 89 96 084 when the 5th gear pinion is to be removed.

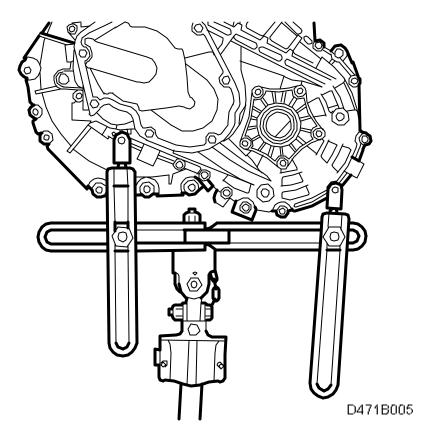
The tool should be placed on the full-size toolboard for manual gearboxes, coordinate C1. It replaces tool 87 90 768, which is to be placed elsewhere in the workshop. An overlay with the new part number (87 92 566) is supplied and should be mounted over the old one (87 90 768).



## 87 92 582 Assembly jig

Used for holding together the wire retaining ring, the three leaf springs, the synchromesh sleeve and the hub when assembling the 5th gear synchromesh hub.

The tool should be placed on the half-size toolboard for manual gearboxes, coordinate C9. An overlay is supplied.



## 87 92 608 Lifting tool mkm 886

Used when the complete gearbox is to be removed from or fitted in a car. The tool can be mounted on the majority of single-pillar jacks.

The tool is to be kept in a suitable place in the workshop.

**Manual gearbox 900/9000:** The lifting tool is bolted in place by means of two of the bolts at the mating face between the gearbox casing and clutch housing, as shown, and adjusted so that its centre is in alignment with the gearbox's centre and mating face.

**Automatic transmission 900:** The lifting tool is bolted to the two threaded lugs and adjusted so that its centre is in alignment with the lifting lug on the top of the transmission casing.

**Automatic transmission 9000:** The lifting tool is bolted by means of the long bolt at the front of the mating face between the transmission casing and the torque converter housing and the rear, lower bolt at the rear of the bearing bracket. It should be adjusted so that its centre is at the cover for the transmission's oil filter.



Take care to ensure that the jack does not tip over.