Reverse gear difficult or impossible to engage or jumps out when car is reversed

Cars concerned

Background
On account of damaged synchromesh components, reverse gear on certain cars can be difficult or impossible to engage or it may jump out of engagement when the car is reversed. In the event of customer complaints, the following steps can be taken.

Tools
16-87 92 475 Pressing sleeve
This a new tool for pressing the differential bearings into place. Place has been provided for it on the manual gearbox tool board (half-size board), coordinates C6.

Materials
87 34 477 Sleeve
87 34 824 Gasket, Saab 900
87 34 832 Gasket, Saab 9000
87 35 102 Reverse gear lever (changed if dimensions incorrect)
87 35 516 Nut
87 40 151 Driver, reverse gear (gearbox No. J53207 and earlier) (groove 0.5 mm wider)
87 43 460 Reversing shaft gear, complete It is expected that the parts will be in stock by week 26.
Procedure

1. Remove the reverse gear lever and measure it as shown. If the dimensions are not as indicated, it must be changed.

2. Lubricate the new reverse gear with motor oil and fit it in the gearbox.

**IMPORTANT**

If the baulk ring’s molybdenum coating is damaged, that is to say if molybdenum has fastened on the synchronesh cone or particles of molybdenum have flaked off the baulk ring (see Fig. A), the gearbox will have to be dismantled so that the molybdenum particles can be washed off all the parts. Furthermore, in these cases, the differential bearings and the tapered roller bearings on the input shaft and output shaft will have to be changed.

(A baulk ring without molybdenum treatment is fitted from gearbox Nos. J42883 (Saab 900) and J42874 (Saab 9000), inclusive.)
3 Check that reverse gear engages properly before fitting the gear case.

4 Assemble the gearbox, see Service Manual 4:1 "Manual gearbox", and fit it in the car.

   **Tightening torque, reversing shaft support, 28 Nm (20.7 lbf ft).**

5 **Saab 900:** Adjust the position of the gear lever, see SI 432-1609 or the next page.
Adjusting the position of the gear lever, Saab 900

Two persons will be needed to carry out the following adjustment.
This method replaces the method described in Service Manual 4:1 "Manual gearbox".

Please make a note of the different method of adjustment in this manual.
1. Engage reverse gear and remove the ignition key.
2. Undo the clamp securing the gear rod to the gearbox linkage.
3. Lift up the gear-lever gaiter.
4. Insert a 3 mm feeler gauge between the gear lever and the reverse gear detent.
5. Press the gear lever lightly forwards against the stop and the feeler gauge. Hold the gear lever in this position while points 6 and 7 are carried out.
6 Press the entire gear linkage against the gearbox so that reverse gear is positively engaged. Release the linkage.

![Image of gear linkage]

7 Tighten the clamp securing the gear rod to the linkage.

**Tightening torque 21 Nm (15.5 lbf ft)**

8 Release the gear lever and remove the feeler gauge.

9 Check that 5th gear can easily be engaged and that the ignition key can be turned to the LOCK position and removed from the ignition switch with the gear lever in reverse.

- Is 5th gear easy to engage and can the ignition key be removed when the ignition switch is in the LOCK position and the gear lever in reverse?
  - Yes - The adjustment is correct.
  - No - Repeat the whole procedure, but using a feeler gauge that is 0.5 mm thicker (3.5 mm).

**Standard time information**

Object code:

47335
47171 (removed)

Fault code: 77
Localization code: 00
Action code: 01
Time: 0.2

In other respects, see the standard time list.

**Warranty information**

Regular warranty rules apply.