

# Clutch component failure diagnosis

Despite the complex nature of the modern clutch system, many technicians remain under the misapprehension that clutch replacement is a simple and straightforward affair. However, with clutch replacement now often taking several hours, it's imperative to workshop profitability, that technicians have the information they need to fit the replacement right, first time. Borg & Beck highlights some common failures and their causes.

**T**o help mechanics, clutch specialists Borg & Beck have produced a useful fault diagnosis chart to highlight the issues that can result from incorrect clutch fitment, so that fitting problems can be avoided and business profits and customer satisfaction retained. Using the chart to recognise the symptoms, technicians can identify the cause, its effect and the remedy and therefore prevent costly installation problems before they occur. The examples below are just a portion of those on the chart.

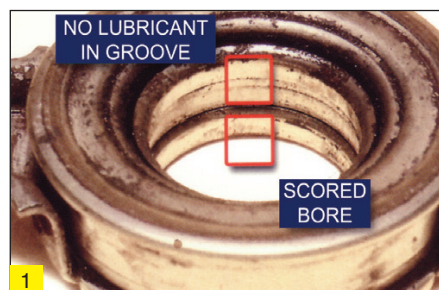
## Grease Is The Word

To ensure the correct operation and maximise service life, the correct quantity and formulation of grease is crucial, which is why all Borg & Beck clutch kits contain a sachet of grease that ticks both quality and quantity boxes.

### Release bearing not lubricated (1)

Without grease on the bearing guide tube or in the bearing recess, the bearing bore will become scored and the clutch action jerky, with heavy pedal feel.

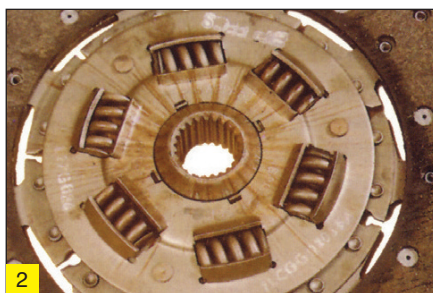
**Remedy:** Ensure that the grease is applied to the bearing guide tube or the groove on a new bearing is filled with good quality, high melting point grease. If necessary, also renew the bearing guide tube.



### Incorrect spline grease (2)

The wrong grease on the driven plate splines will lead to clutch drag due to dirt contamination on the splines.

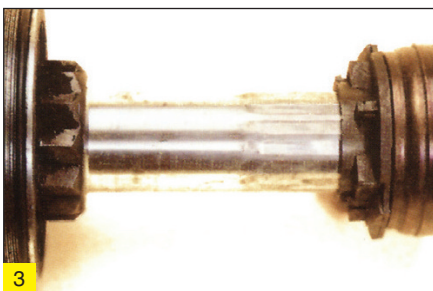
**Remedy:** Thoroughly clean the first motion gearbox input shaft and apply a fine smear of approved grease and renew the driven plate.



### Worn bearing guide tube (3)

The incorrect lubrication on the bearing guide tube will also cause jerky clutch action and a heavy pedal.

**Remedy:** Replace the worn guide tube and lightly lubricate it with the approved grease.

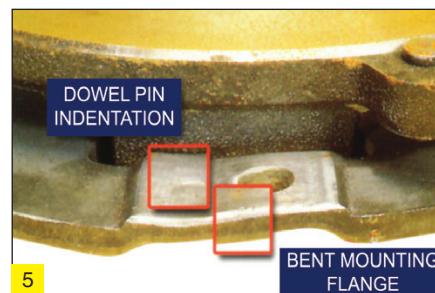


### Location, Location, Location Broken spring fingers (4)

**Remedy:**

When the cover assembly is not located correctly on the flywheel, the bearing over travels, which allows the spring fingers to come into contact with the driven plate and break off.

**Remedy:** Ensure that the release mechanism,



including the auto adjuster is working correctly and replace the complete clutch and any other damaged parts, before re-setting it properly.

### Distorted cover mounted flange (5)

Another effect of an incorrectly located cover assembly is vibration and clutch drag.

**Remedy:** Check the flywheel dowels for damage. If they are okay, correctly fit a new cover assembly.



### Damaged driven plate (6)

If the driven plate is fitted the wrong way round, the clutch could be completely inoperative and damage will result.

**Remedy:** Replace the driven plate assembly and install it in the correct direction, while also checking for damage. If necessary, replace the cover assembly.

You can contact the Borg & Beck technical helpline on +44 (0) 1869 329 709. or visit [www.borgandbeck.com/technical](http://www.borgandbeck.com/technical). The Fault Diagnosis Chart that these faults were taken from can be downloaded from [Techtips.ie](http://Techtips.ie).

