

Clutch component failure diagnosis part 2

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.

To 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.

Worn Release Bearing Thrust Face (1)

Cause

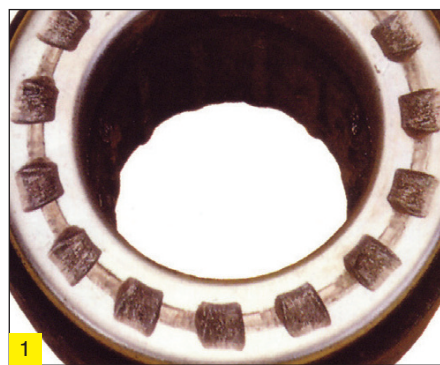
Excessive misalignment of release bearing.

Effect

Noisy and jerky clutch pedal action.

Remedy

Correct the cause of the misalignment and renew bearing.



Burst Drive Plate (2)

Cause

Excessive rotational speed caused by incorrect gear selection.

Effect

Total clutch failure.

Remedy

Renew all clutch components and check for consequential damage to the other components.



Bent Drive Strap (3)

Cause

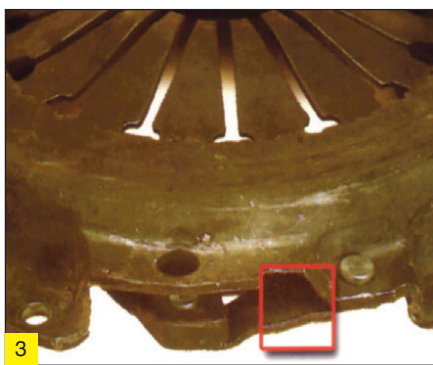
Over-travel of the bearing, allowing a spring finger to contact the drive plate.

Effect

Clutch drag.

Remedy

Renew cover assembly using the correct retainer clips and correct clutch compressing tool.



Broken Pressure Plate (4)

Cause

Overheating due to clutch slip.

Effect

Total clutch failure.

Remedy

Eliminate the cause of clutch slip and renew all clutch components. Check for consequential damage.



Broken Damper Springs and Worn Centre (5)

Cause

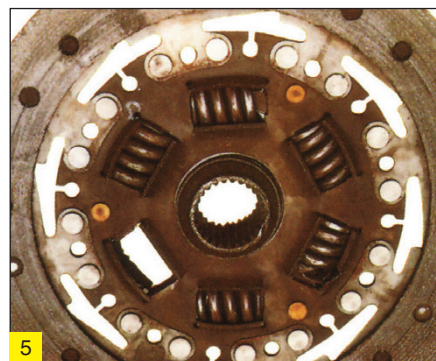
Misalignment of engine to gearbox.

Effect

Noise and vibration, leading to total failure.

Remedy

Correct the misalignment which may be due to bent engine back plate, burrs or debris trapped between mating faces, cracked bell housing; worn pilot or gear box bearings; incorrect or missing dowels. Check for correct position and condition of gearbox dowels and dowel holes.



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

