Clutch component failure diagnosis part 4

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.

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.

Overheated, Cracked Facings (1) Cause

(i) Tech Tips

Prolonged slipping of the clutch. Effect Clutch drag followed by loss of drive. Remedy

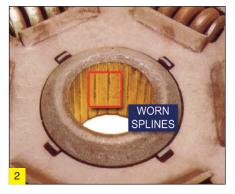
Rectify cause of clutch slip and then replace all necessary clutch components. Check flywheel for damage.



Worn Away Hub Splines (2) Cause Bent first motion shaft or warn gearbox bearings. Effect Loss of drive.

Remedy

Correct the gearbox fault and replace the driven plate.



Hung gearbox (3) Cause Gearbox has not been fully installed and left unsupported. Effect Clutch drag due to the damage within the spline. Remedy Replace clutch kit and use a cradle to support the gearbox.



Contaminated Oil in Gearbox (4)

Cause Clutch fluid has not been maintained & become contaminated.

Effect

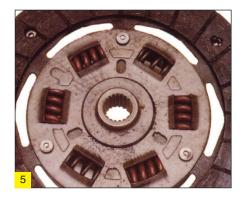
Fluid leakage due to internal seal expansion. Remedy

Replace CSC & check clutch for contamination. Flush & replace clutch fluid.



Oil Contaminated Driven Plate (5) Cause Oil leak from gearbox main shaft seal or from engine main bearing seal. Effect Progressing through clutch drag, judder and finally slip. Remedy

Eliminate oil leak and renew clutch components.



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.

