## Previous Technical Bulletins

## **CL 037** Signs worn DMF causes clutch failure Vehicles: All Models with DMF Setup

When a Dual Mass Flywheel (DMF) starts to fail, there are tell tale signs on the clutch kit fitted that will help to indicate this.

- **Markings on the pressure plate (Top Right)** On the clutch pressure plate there will be radial markings with equally spaced "spots" on the surface. This is due to the dampening effect of the flywheel becoming insufficient, causing the drive plate to "judder" against the pressure plate and producing heat spots.

- Damage to the hub splines (Bottom Left) The hub splines on the friction plate will have worn either to a point, to a saw tooth pattern or, in extreme cases, been worn away or the hub has broken up. This is due to the DMF rotational dampening becoming ineffective and allowing the undampened "shocks", caused by the engine against the resistance of the gearbox, to erode the drive plate splines. If the axial movement of the DMF is outside the specified tolerances, this will also cause wear on the drive plate splines and can cause the hub to detach from the drive plate.

## **CL 038** Damaged splines on clutch friction plate Vehicles: All Vehicles

A number of clutch kits have been returned with the reason being "the clutch is not disengaging" or "is dragging when the clutch pedal is depressed". During inspections for the returned parts with these issues, it has been found that the cause was due to the drive plate input shaft splines being damaged. This damage can be caused by a number of factors:

- Incorrect alignment of the gearbox to the engine during assembly.
- The splines on the gearbox input shaft weren't aligned correctly or are in poor condition.
- The gearbox was manipulated during assembly.

## **PE 001** Sensors not detecting/too sensitive Vehicles: Vehicles fitted with select Beep & Park<sup>®</sup> Kits

Beep and Park<sup>®</sup> kits have been returned due to problems with sensors not detecting objects or being too sensitive thus activating the alert when there is no object in range. After inspecting the returned items it has come to light that the sensors supplied in the kit have been painted. The Valeo beep and park kits that include non-paintable sensors are:

632000 - Kit 1 / 632001 - Kit 2 / 632002 - Kit 3 632003 - Kit 4 / 632004 - Kit 5 / 632015 - Kit 6 (LCV) The sensors supplied in the Beep and Park® kits should not be painted as this can affect the sensitivity of the units.



- **Markings on the release bearing (Bottom Right)** Where the release bearing is located on the release fork, there are wide "shuffling" marks and there is no wear on the release mechanism. This has resulted from excessive rotational movement of the worn DMF, causing the cover to oscillate and produce a high amount of acceleration and deceleration through the bearing.



This issue will only occur during reassembly so attention must be paid when refitting the gearbox.

Ensure the gearbox input shaft is in-line with the engine crankshaft and the shaft is perpendicular with the flywheel. A gearbox support will be beneficial as it allows the gearbox to be at the correct alignment whilst the splines are fine tuned into position.

As the input shaft is being offered into the drive plate hub, ensure the splines on the two parts are matching up and are guided in until the engine and gearbox are fully secured together.

DO NOT ALLOW THE GEARBOX TO BE SUPPORTED ON THE SPLINES ONLY AS THIS COULD CAUSE TERMINAL DAMAGE TO THE DRIVE PLATE AND ITS COMPONENTS!

Valeo do supply specially designed sensors separately which CAN be painted to match the colour of a user's vehicle, listed as:

- Phase 1 (Obsolete) 632014
- Phase 2 (While stocks last) 632114
- Phase 3 (New) 632214

Valeo warranty will not accept claims for Beep and Park<sup>®</sup> kits where the standard sensors supplied have been painted.



Standard sensor supplied



valeo added.