Fitting instruction

DMF

Vehicle Type

All DMF

Diagnosis of damage and inspection

Visual Inspection

Fig. 1

1. Visual inspection can be done when the flywheel is installed on the engine also. In this case we use powerful light to conduct the inspection as shown in figure 1.

Fig.2

2. Check no trace of grease or oil on the friction surface of the secondary flywheel. Check grease egress which may require DMF replacement as shown on figure 2.

Fig. 3

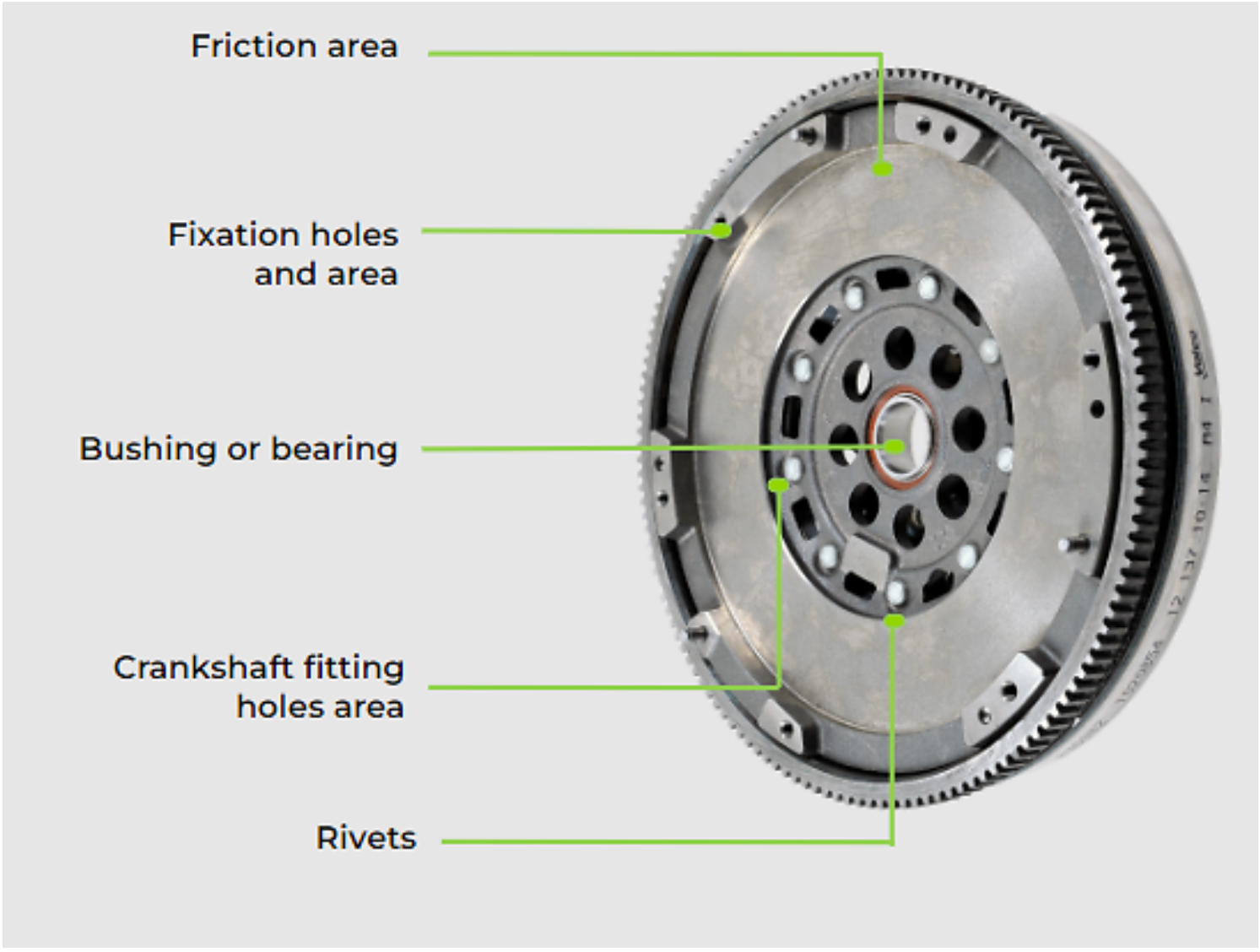
3. Dual-mass flywheels with worn or damaged starter ring gears must be replaced as shown in figure 3.

If the starter ring is heavily worn, also check the starter as it may be defective.

Fig. 4

4. The friction that occurs during the slip time of the clutch disc can cause high thermal as shown in figure 4:

- Blue colour and hot spots on the friction surface.
- Blue colour on the cover fixation zone.
- Blue colour on the rivet zone.



2. Tilt Measurement:

This is the clearance between the primary and the secondary masses.

A simple measurement procedure as the following steps:

Fig. 5

1. Place the DMF on the workbench with the secondary mass facing upwards as shown in figure 5.

2. Place the Vernier Caliper on the friction surface upwards the outer surface (not on the friction surface but on the outer ring).

Fig. 6

3. Press gently on the opposite side of the secondary flywheel until it comes into contact with the primary flywheel as shown in figure 6.

Fig.7

4. Rest the instrument.

5. Press the side where the comparator ins situated and read the value found (Peak to Peak).

6. Refer to the maximum permissible value and replace the DMF. if it exceeds the acceptance criteria (2.6 mm for DMF with bushing 1.2 mm for DMF with bearing as shown in figure 7.

3. Secondary flywheel free-play angle measurement:

The angle corresponds to angular free-play between the secondary flywheel and the primary flywheel, it can be checked by the following steps:

Fig. 8

1. Place the DMF on the workbench with the secondary flywheel facing upwards as shown in figure 8.

2. Apply angular clockwise to the secondary flywheel until feel the elastic reaction of the springs.

Fig. 9

3. Make the corresponding in the mark in the primary and the secondary flywheels as shown in figure 9.

4. Rotate the flywheel counter-clockwise until feel the elastic reaction of the springs. The space between the two marks is angle J1.

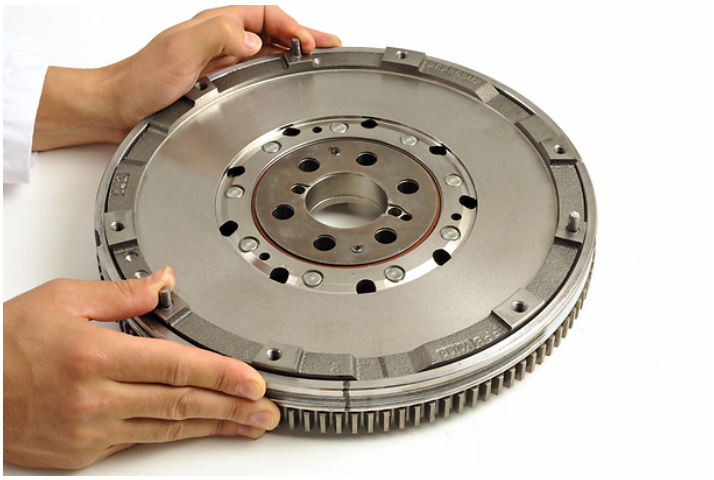


Fig. 10

5. Count the number of teeth of starting ring gear between the two marks as shown in figure 10.

The max acceptable angle is 15 degree which is 6 teeth in counting.