Callout	Component Name
1	Bearing Area
2	Mounting Area Pressure Plate
3	Locating Pins
4	Friction Surface
5	Riveting Area

Exploded View Dual Mass Flywheel with Additional Mass

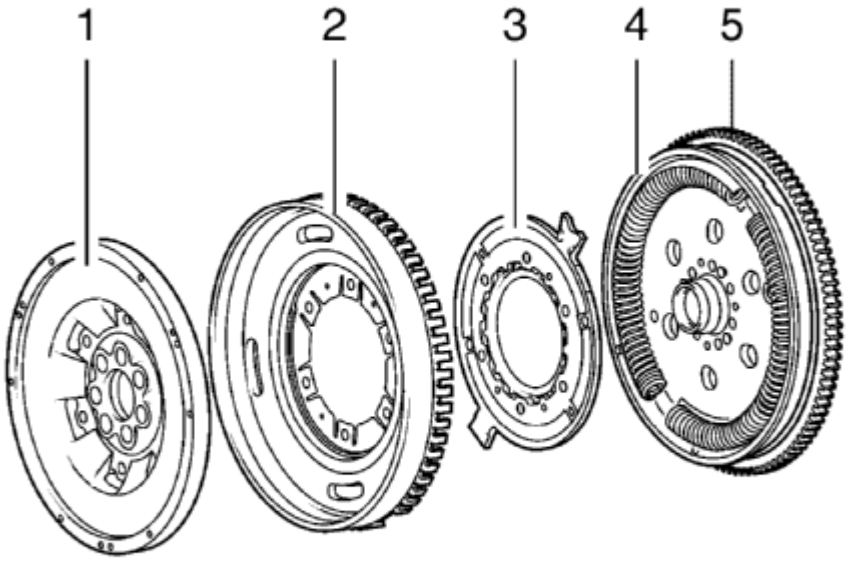

Fig. 8: Exploded View Dual Mass Flywheel with Additional Mass
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1	Secondary Flywheel Mass
2	Additional Mass, Coupled with Cover and Pulse-Generator Ring
3	Flange
4	Primary Flywheel Mass with Bowed Springs and Plain Bearing/Bearing Bolt
5	Toothed Ring

Check for Damaged Components

All following checking procedures have to be carried out at installed dual mass flywheel. For visual check at vehicle very bright light and a additional bright and small pocket lamp is necessary. Damages like grease on primary flywheel and loose ore missing balance weights cannot be checked at installed condition. During visual check material alteration can be stated which eliminate a further operating suitability.

For comparison different damages at dual mass flywheel with the corresponding further procedure are presented here.

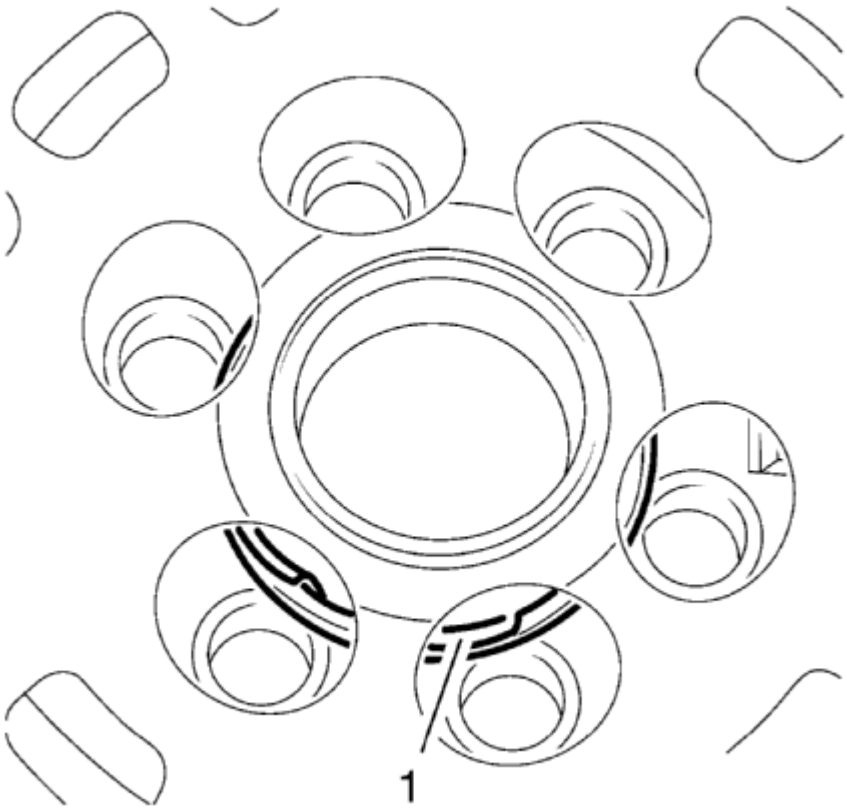

Fig. 9: Plain Bearing
Courtesy of GENERAL MOTORS COMPANY

NOTE: In case of mechanical damages at plain bearing the dual mass flywheel has to be replaced.

1. Inspect plain bearing (1) for damages.

   Dependent of the manufacturer damages can be detected through ventilation openings of secondary flywheel. Parts of the bearing (1) are detached or lie loose around the bearing bolt.

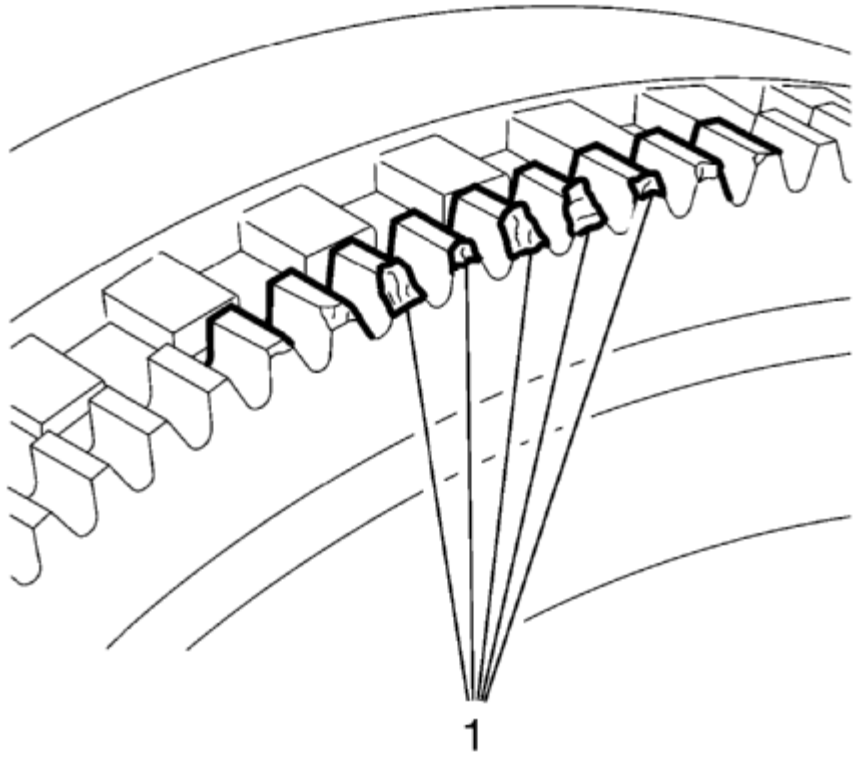

Fig. 10: Toothed Ring
Courtesy of GENERAL MOTORS COMPANY

NOTE: Light abrasion on frontal areas of teeth is allowed. If problems occur during starting the engine the dual mass flywheel has to be replaced.

2. Inspect toothed ring (1) for damages.

   The toothed ring is needed to start the engine. Through a lot of starting procedures and/or an incorrect engaging starter signs of abrasion can occur on teeth of the toothed ring. The profile of damages can reach from only low signs of abrasion up to heavy material removal. The installation of a pulse-generator ring depends on the manufacturer.

   The image shows signs of abrasion and mechanical damages at toothed ring (1), they occur through abrasion due to a lot of starting procedures. In this case the dual mass flywheel has to be replaced.

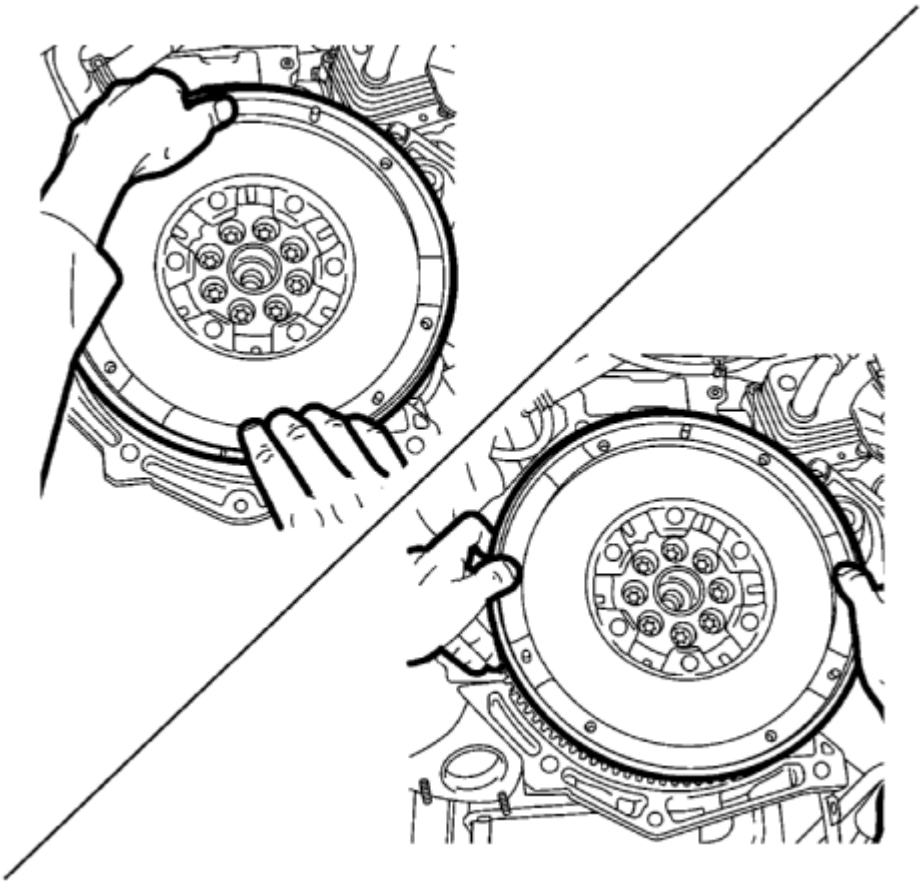

Fig. 11: Inspecting Tilt Clearance
Courtesy of GENERAL MOTORS COMPANY

NOTE: The check must be carried out only by hand without any tools.

3. Inspect tilt clearance.

   At dual mass flywheel the additional-mass ring looms over the gap between primary and secondary flywheel. It is not possible to carry out just a visual check.

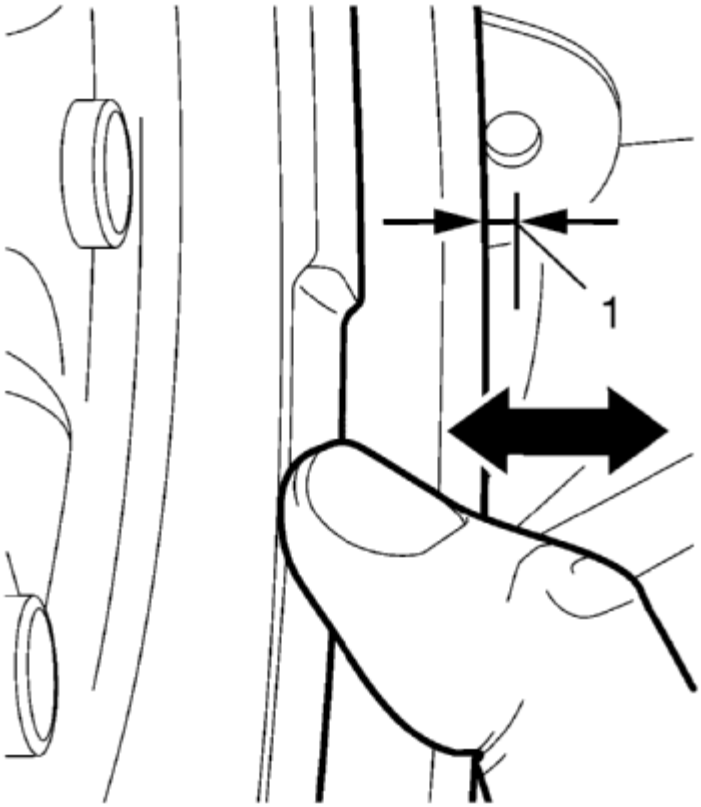

Fig. 12: Tilt Clearance Height
Courtesy of GENERAL MOTORS COMPANY

NOTE: An absolute clear measurement is not possible with this check due to the different applied forces of the several workshop employees during the check.

4. Embrace dual mass flywheel and apply thumbs onto the outer radius of secondary flywheel.
5. Apply pressure onto the secondary flywheel alternating on upper, lower, left and right side

During the tilt clearance check a functional metal rattling noise may occur.

If tilt clearance is higher than 3 mm (MUST be measured, DO NOT make an estimation) (1) the dual mass flywheel has to be replaced.

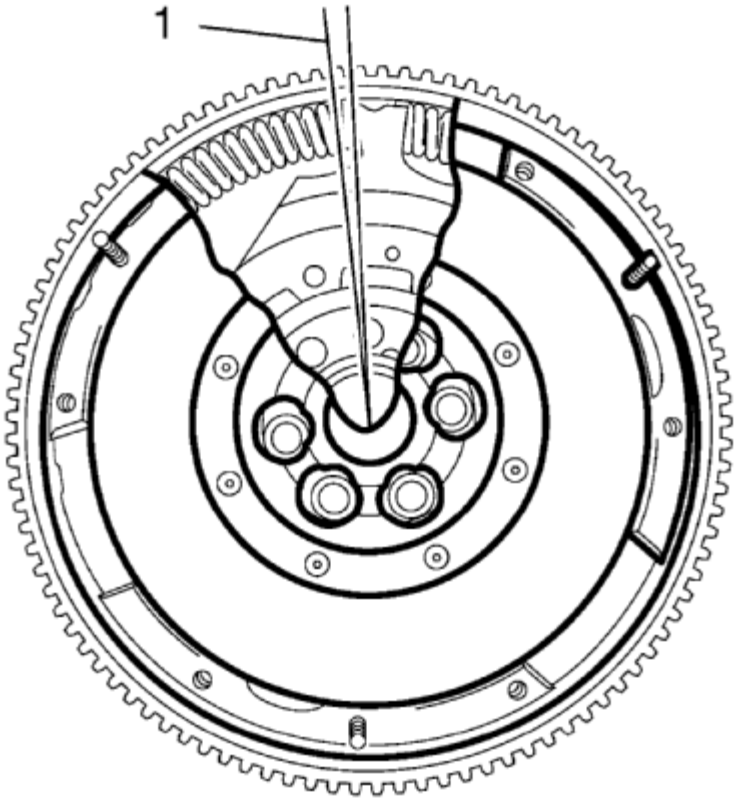

Fig. 13: Tilt Clearance Angle
Courtesy of GENERAL MOTORS COMPANY