

VS Commodore Dual Mass Flywheel

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NOTE : This information applies to the V6 Manual only.

From Holden Commodore VS onwards, V6 manual has a dual mass flywheel. The flywheel is divided into two parts that are linked radially by springs. The front section is bolted to the engine crankshaft while the clutch is bolted to the rear section. The clutch disc has a rigid centre, i.e. no damper spring. The dual mass flywheel helps to absorb engine vibrations that are not absorbed using the traditional flywheel and clutch arrangement.

SERVICING

The dual mass flywheel cannot be machined or resurfaced for the following reasons:

1. It is not possible to clamp the flywheel for machining without the possibility of misalignment.
2. Balancing the flywheel requires a special procedure that rotates the flywheel at 6000rpm.

The flywheel should be replaced if these signs are present:

1. The movement between the engine side and gearbox side of the flywheel is greater than 11 degrees or 27mm. To check, the flywheel must be fitted to the vehicle and rotated with reasonable force.
2. The ring gear is damaged. It is welded and cannot be replaced or repaired due to possible distortion of the flywheel.
3. If there are signs of wear that would normally require machining.
4. Prior to removal of flywheel, identify the position of the flywheel relative to the crankshaft.

INSTALLATION NOTES

The following are special requirements for the installation of the dual mass flywheel.

1. Fit the flywheel to the crankshaft using marks made prior to removal to align.
2. Use NEW bolts and torque according to the following 2 steps:
 - Torque all bolts to 18-22Nm
 - Further tighten all bolts a further 80-90 degrees.