



TIPS AND TRICKS

Dual Mass Flywheel

Part numbers

All DMF P/N

DMF FAILURE DIAGNOSIS



Starter ring gear

Failure: Excessive wear or broken tooth.

Effect: Noise when starting the engine.



Flex plate

Failure: Cracks or broken flex plate.

Please note that the color is not relevant.

Effect: Noise. DMF doesn't dampen properly.



Secondary flywheel

Failure: Secondary flywheel blocked in both directions, very hard to spin or spins freely for 360° without dampening.

Effect: Noise. DMF doesn't dampen properly.



Please visit us @
valeservice.us



Technical Assistance
1-888-718-2536

Press option #2 for
technical support

Smart care for you
valeservice.com





Secondary flywheel facing

Failure: High thermal load.

Effect: Noise. Loss of torque transfer or slipping.



In-between secondary and primary flywheels

Failure: Ventilation holes show build up of worn disc friction material.

Effect: Noise. DMF doesn't dampen properly.



Riveting surface

Failure: Contamination by an external substance.

- Oil or grease contamination
- Rust

Effect: Noise. Loss of torque transfer or slipping and/or rust.



Heavy grease leakage

Failure: Liquid or solid grease traces on the clutch side.

Please note that light, liquid grease coming from the flex plate holes is allowed.

Effect: Loss of dampening, friction noise, vibrations.



Please visit us @
valeoservice.us



Technical Assistance
1-888-718-2536
Press option #2 for
technical support

Smart care for you
valeoservice.com





Balance weights

Failure: Missing weights, indicated by clearly visible welding points.

Effect: Vibrations or noises.



Starting problem (TDC sensor)

Failure: The DMF has a different number of teeth than the original, generating a failure of the TDC sensor or the flywheel is potentially damaged.

Effect: The vehicle will not start, or engine rpm is unstable.

Diagnostic Recommendations

- When diagnosing a DMF while it is installed it is always important to determine **whether noise is emitted from adjacent components** such as exhaust system, heat shields, engine mounts, accessories, etc.
- Additionally, it is important to **isolate any noise caused by front end accessories** such as belt tensioning units or A/C compressors.
- **Clicking noise when engaging/shifting gears**, and during load changes can originate in the powertrain. This can be caused by **excessive gear clearance in the transmission**, play in the propulsion driveshaft or in the differential.
- To determine if imbalance is the root cause of the humming noise, perform the following steps:
 - While stationary **increase the speed of the engine**.
 - If vibration increases as engine speeds increase, the DMF is defective.
 - Here it is helpful to **compare the vehicle to another car** with an identical or similar engine version.



Please visit us @
valeoservice.us



Technical Assistance
1-888-718-2536
Press option #2 for
technical support

Smart care for you
valeoservice.com

