

**T.S.B. No: RE001s**

**Product: STARTER MOTOR**

**Make:** FORD  
**Model:** FORD 2.0 / 2.4 Diesel  
**Part No:** VS801  
**Subject:** Starter Motor Failure



Fig.1 Fine metal particles from Dual Mass Flywheel, clutch dust contamination of the pinion and drive assembly.

## THE PROBLEM

Valeo Service Warranty Department are receiving a high level of returns of starter motor VS801. A high number of the returned units do not exhibit any manufacturing defects and have failed prematurely due to contamination of the pinion and drive assembly.

On inspection of the units, we have found that the motor pinion shaft and motor magnets are heavily contaminated by a high level of fine metal dust and clutch dust. (See fig.1)

This is due to a gradual failure of the Dual-Mass Flywheel, which causes fine metal dust to impregnate the pinion/drive area and motor magnets. This results in the following symptoms: - Clicking solenoid but doesn't engage, or intermittent starter operation.

This is not a fault of the starter motor but as a direct consequence of the metal dust contamination. If the original unit displays build up of fine metal dust around the pinion area on removal, any replacement starter motor will fail in a short period of time if the cause of the original is not rectified and the transmission bell housing is not thoroughly cleaned.

Valeo Service cannot accept any units under this warranty that have failed in this way, as it is not a manufacturing defect or a failure of the starter motor.