

Problems starting a 2.4D Transit?



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Valeo technical have received a number of calls regarding an issue with Ford Transit 2.4 diesels, that are not starting once a conversion clutch and flywheel kit has been fitted. Here are some of the common problems that they have found, with a remedy for each situation.

Some common problems have been identified that are occurring after fitting a replacement clutch or a solid flywheel conversion. These are faults that have been reported to Valeo's technical experts, along with the possible source of the problems. After further investigation of these calls, all issues were resolved and some common factors were found. This technical guide has been produced to offer help trouble shooting these problems.

Is it the correct part?

Some problems are the result of the most basic of mistakes, the wrong part has been supplied and fitted. The best time to check this is, of course, before the part is installed. Check that the conversion kit supplied is the correct application for the Transit you are working on. Ensure the conversion kit is designed for the correct model, including all possible variants that will affect the identification of the correct replacement part. Valeo produce different conversion kits for model years 2000 to 2006 and also for 2006 onwards Ford Transits.

Possible wiring mix up

On the Ford Transit, there are two electrical plugs on the gearbox, one for the road speed sensor

and one for the timing sensor. The two wiring plugs visually look different but can fit either way round. If the wiring connectors have been connected to the wrong sensors, the ECU will receive a sensor signal that is wrong and it will not operate. This will need to be checked to ensure the wiring is connected correctly.

Is the timing sensor clean?

If the Transit will still not start after confirming the wiring to the sensors is correct, check that there is not any damage or contamination on the timing sensor. As the original dual mass flywheel wears, metal particles and dust is produced, and it would have been attracted to the magnet on the sensor. If there is a high accumulation of flywheel metal particles on or around the sensor, the sensor will not register the flywheel timing marks and cause a non-start issue.

Is the timing sensor circuit complete?

If the timing sensor is working correctly or a new sensor has been fitted and the wiring plugs are connected correctly and the Ford Transit is still not starting, check the continuity of the timing sensor circuit back to the engine control unit (ECU). If the wiring has been broken, chaffed, kinked, crimped, nicked or earthed, the ECU will not be able to see



the signal from the sensor, and the ECU will not allow the engine to start.

What is the battery voltage?

It is possible that the battery can produce enough current to engage the starter and crank the engine, but the battery voltage will be too low for the ECU to operate. This fault will not trigger any diagnostic Trouble Codes, but it will prevent the engine from starting. If the battery voltage has dropped, give it a charge or install a fresh battery.



A timing sensor and a road speed sensor are located on the Transit gearbox. The connectors on both sensors can be accidentally switched.



Metal particles can contaminate the timing sensor, so make sure it is clean so that it can work properly.