

THEME COMPONENT INSTALLATION

NON-PRODUCT RELATED TURBO FAILURES



PROBLEM FEW SPECIFIC TURBO MODELS HAVE ISSUES, RELATED TO INSUFFICIENT KNOWLEDGE AND WORKMANSHIP.

CAUSE IMPROPER LUBRICATION OF THE TURBO - OIL STARVATION CAUSED BY BLOCKAGES AND CARBON BUILD-UP

ABSTRACT

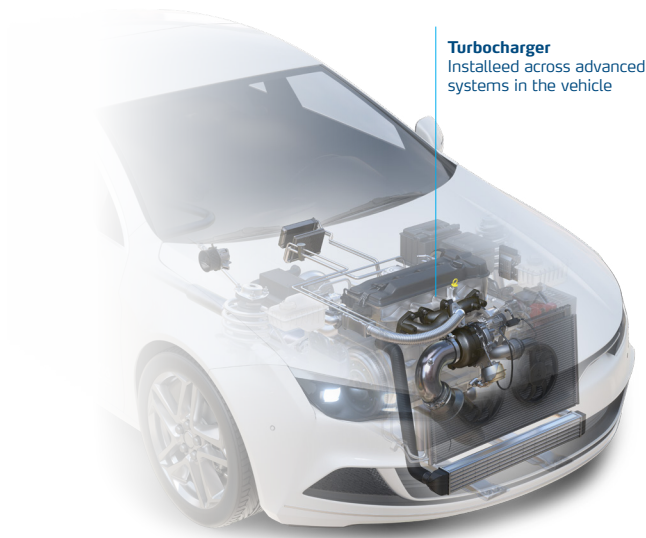
Specific turbo models for 1.6 diesel engines fitted across Citroën, Peugeot, Ford, Mazda, Mini, Toyota and Volvo vehicles have a considerable higher return rate than the market average. Again, by far the majority of these returns are due to incorrect replacement of the turbo.

NISSENS SUPPORTIVE ROLE IN: MARKET LEVEL RETURN RATES & PROBLEMATIC MODELS

It is the aim of Nissens to ensure that the independent aftermarket (IAM) garages perform their repair work at minimum the same level as the authorized garages. At the same time, we should create a common understanding throughout the value chain that turbos are particularly sensitive products to install and, even more so important, that the guidelines for installing are followed.

For supporting this, Nissens has developed supporting tools aimed at the installers. We depend on the wholesalers to support Nissens in distributing the materials and handling the potential challenges professionally in cooperation with Nissens.

A. TURBO IS PART OF MANY COMPLEX SYSTEMS



A turbocharger is part of several complex systems in a vehicle, namely the exhaust system, air intake system, cooling system, engine lubrication system and engine management & electrical systems.

This means that a turbo can malfunction due to a variety of reasons and from the influence of other faulty components across the systems, such as defective oil feed components, EGR valve, intercooler etc.

Due to above facts, the general return rate for turbos (wholesale distributor level) in the European markets is at a level of +6% (depending on market). Out of these returns, more than 90% is due to insufficient workmanship at the point of installation.



INDUSTRY-AVERAGE RETURN LEVEL
Hereof +90% are non-product related claims/returns

B. FEW SPECIFIC MODELS HAVE ISSUES, RELATED TO INSUFFICIENT KNOWLEDGE AND WORKMANSHIP.

SPECIFIC TURBO MODELS FOR 1.6 DIESEL ENGINES FITTED ACROSS CITROËN, PEUGEOT, FORD, MAZDA, MINI, TOYOTA AND VOLVO VEHICLES HAVE A CONSIDERABLE HIGHER RETURN RATE THAN THE ABOVE-MENTIONED AVERAGE. AGAIN, BY FAR THE MAJORITY OF THESE RETURNS ARE DUE TO INCORRECT REPLACEMENT OF THE TURBO.

The main reason for the high failure rate of the 1.6 turbos is due to carbon build up inside the engine because of different parameters. This means the new turbo is lubricated with contaminated oil. In worst case, there will be lack of oil to the turbo because of a clogged oil pump and pipes. In both cases, the bearings inside the turbo will be damaged very fast and cause the turbo to malfunction or break down. Failure to ensure free paths of lubrication by replacing the necessary parts, such as oil pipes, oil adaptor, filters and making an engine flush, will cause continuous break down of the turbo.

C. NISSENS' SOLUTION

To increase the level of repair of the garages in the IAM and prevent improper installation, Nissens has prepared following courses and materials to support both the wholesalers and garages:

MATERIAL	FORMAT	DETAILS
Nissens Training Concept (NTC)	Live & Online training sessions	A complete Efficiency & Emissions Systems educational program for all levels of the IAM
Installation Guides	Paper, PDF + Video	Comprehensive fitting instruction for specialists and mechanics
Technical Bulletins	Paper, PDF + Video	Model specific installation instructions for demanding vehicle types, HDI engines included
Technical Posters	Paper, PDF	System diagnostics and component installation

Contact a relevant Nissens' sales representative to learn more about the materials availability in your market.

