

# GET THE BOOST

The drive towards greater engine efficiency has meant in recent years that means more and more vehicles employ a turbo

**N**issens Automotive Marketing Manager Jan Zieleskiewicz said: "In order to conform with European emissions legislation, whatever their fuel type, many vehicle engines are small capacity units employing forced induction combustion systems, which are almost always reliant on a turbocharger."

He continued: "As the turbo is such an important element for the correct running and efficiency of the engine, when problems arise and they need to be replaced, quality is key, but so too is the general support provided by the turbo manufacturer."

## Highly developed

Commenting on the Turbocharger technical support available from Nissens Automotive, Jan said: "A large part of this additional support comes through a highly developed training resource which offers education in various forms, from live onsite sessions, through online self-learning courses, to technical marketing materials in both print and digital formats.

"Included within this helpful information resource and a suite of comprehensive technical solutions that are essential for professional turbo installation, maintenance and troubleshooting, with technical bulletins focusing on specifics, such as possible carbonisation, oil degradation, exhaust sealing, oil flow restrictions, compressor wheel damage and coolant connection, as examples."

The company's e-learning, live learning and technical stories related to turbos are available via:

[www.nissens.com/experts](http://www.nissens.com/experts)

For information on correct replacement and more from the Nissens turbo offering, go to: [www.nissens.com/turbos](http://www.nissens.com/turbos)

## Ongoing Expansion

Commenting on the ongoing expansion of the turbo range at BORG Automotive, Data Manager Ole Fjord observed: "Since June, 216 new parts numbers have been added, making the car parc coverage grow to a total of 81%. BORG Automotive offers a comprehensive range of turbochargers under the Elstock, Lucas, TMI, and DRI brands, including 1,009 available part numbers. BORG Automotive does not only offer a wide range; "We also offer quality on par with OE, with a lower environmental impact. BORG Automotive



**Above:** Turbo disassembly at Melett

exclusively remanufactures OE turbocharger cores at the group's Spanish plant, which is certified to the IATF 16949 supplier standard."

## Environmental impact

With sustainability being an increasingly important factor in the automotive aftermarket, since last year, BORG Automotive has offered life cycle assessments (LCAs) on their products. BORG Automotive's Sustainability Manager, Line S. Meldgaard, explained: "LCAs are a widely used method for assessing the environmental impacts associated with a product. Our LCAs, which were created by Linköping University and critically reviewed by the independent third party SustainX, show that BORG Automotive's remanufactured products have a significantly lower environmental impact than newly manufactured products. A remanufactured turbocharger from BORG Automotive emits 32% less CO<sub>2</sub>eq than a newly manufactured turbocharger. With these LCAs, BORG Automotive not only proves that our remanufactured products causes less environmental impact than newly manufactured products, they also provide a starting point for further improvements."

## Special attention

Any debris that enters a turbocharger through the air or exhaust has the potential to seriously damage the system, and Melett is reminding technicians of the risk such objects can pose to turbocharger systems if they get inside.

Tom Wright, Product Manager at Melett, said: "Technicians can potentially diagnose a turbocharger with foreign object damage if a system is suffering from rattling or grinding noises during operation, and drivers experience loss of engine power. Causes of foreign object intake can also include faulty or damaged turbo hoses, which inadvertently cause small particles to enter through any gaps in the system.

"A turbocharger repair specialist will be able to diagnose foreign object damage if there are visible marks on the compressor or turbine blade, or pitting marks around the compressor inlet and nozzle ring assembly vanes. If the turbine or compressor blade is found to be damaged, the turbocharger should stop being used immediately, as the rotor balance will be affected, and this could impact its service life. To prevent turbo failure from foreign object

damage, we recommend that technicians always replace or fully clean intake pipes and check for debris before fitting a replacement turbo. All air hoses should be free from contaminants and blockages. Hoses should also be checked regularly as part of routine turbocharger servicing."

For more information, visit: [www.melett.com](http://www.melett.com)

## Demand

Commenting on the prevalence of turbos, Ivor Searle Commercial Director David Eszenyi said: "The extensive use of turbochargers in both the car and LCV segments has seen the number of applications increasing significantly in the UK's vehicle parc, resulting in growing demand from workshops for replacement units. As a remanufacturer, Ivor Searle offers an all makes turbo programme which provides over 90% parc coverage and our range is constantly expanding to reflect demand for specific applications. For example, we have just added 70 new car and van applications to our already extensive offering to ensure it is fully up-to-date."

On why workshops should opt for remanufactured turbos, David said: "Costing up to 40% less than OE, Ivor Searle remanufactured turbochargers provide workshops with a competitive advantage without compromising on quality, warranty protection or customer service."

For more information, visit: [www.ivorsearle.co.uk](http://www.ivorsearle.co.uk)

## Protect

Due to their extremely high rotational speeds, the

lubrication is particularly important for turbochargers. With this in mind, LIQUI MOLY offers an additive to protect turbos after they have been repaired or have been first fitted. David Kaiser, Head of Research and Development at LIQUI MOLY observed: "If a new turbocharger is installed or the old turbocharger is repaired, the plain bearings are dry. When the turbocharger starts for the first time, the motor oil has not yet lubricated all bearings. This not only causes a sudden increase in wear, but it can also lead to initial damage that drastically shortens the service life of the turbocharger."

## Remanufactured Turbos from Ivor Searle

Ivor Searle's turbocharger programme covers diesel and petrol cars and LCVs with new applications constantly being added. All Ivor Searle turbochargers are covered by two years unlimited mileage, parts and labour warranty. Ivor Searle also offers free next day UK mainland delivery for stock items ordered before 3.30pm. Ivor Searle turbochargers undergo quality checks and test procedures throughout the remanufacturing process. Internal components are renewed as a matter of procedure, with each turbo's rotating assembly balanced on a computerised VSR machine before undergoing final quality inspection.

[www.ivorsearle.co.uk](http://www.ivorsearle.co.uk)

