SMART IDEAS + SMART ADVICE + SMART THINKING

ISSUE 67 • NOVEMBER/DECEMBER 2022





**SEE INSIDE FOR DETAILS...** 

# PLUS...

**BATTERIES** All you need to know about Agm and efb batteries



PLUS...







ALL OFFERS END 31 DECEMBER 2022 AND ARE SUBJECT TO AVAILABILITY. ALL PRICES EXCLUDE VAT.

# FROM ALTERNATORS TO WIPERS... WE'VE GOT IT COVERED! **WELCOME TO SMART CHOICE ISSUE 67 NOVEMBER/DECEMBER 2022**

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#### **SMART CHOICE TERMS & CONDITIONS**

Offers end 31 December 2022. All offers subject to availability and change without notice. Certain featured products may not be stocked by all members. Call your local IFA Member with any stock or pricing queries. These offers cannot be used in conjunction with any offer except at the discretion of your local IFA Member. All prices shown are exclusive of VAT. Pictures used are for illustrative purposes only and products are not shown at actual size or to scale. All product/marketing claims are

the responsibility of the company on behalf of whom they are made and are not the liability of the IFA or its agents. E & OE. All lease payment examples are based on a 60 month repayment period and with a NIL DEPOSIT facility. All lease figures guoted are subject to VAT and status. Alternative lease plans are available and can be tailored to your exact requirements. If you have any questions regarding lease facilities please call Alliance & General Leasing on 02478 220 000.

ZMB312 DEAL

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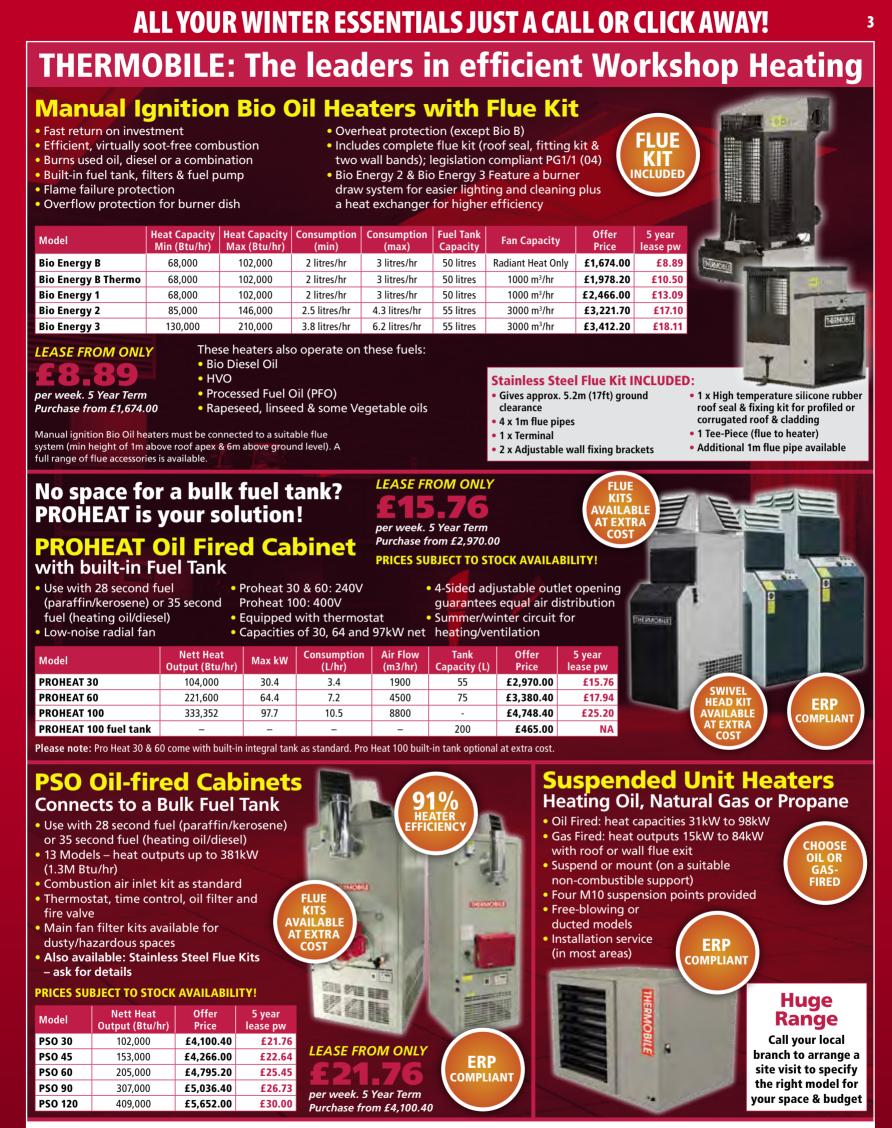


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**X2** FREE TWIN PACKS

ALL FOR JUST ...



# Call your local branch for all your heating needs

\*Waste Oil is subject to licensing control: Heaters burning Waste Oil fall under Chapter IV of the Industrial Emissions Directive (IED) A relevant permit is required under Schedule 13A of the Environmental Permitting Guidance (EPR). Full details at www.thermobile.co.uk, under 'News'. The Original THERMOBILE Manufacturing workshop heaters for over 50 years

Manufacturing workshop heaters for over 50 years Fully trained Service Agents ♦ Comprehensive stock of spare parts Ask for details of our full range, incl. downflow fans, dehumidifiers, etc





High-quality product materials



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# **TROUBLE SHOOTING:** SHOCK ABSORBERS

KYB offers important diagnostic advice about what you should look for when inspecting shock absorbers.



#### PISTON ROD SURFACE PEELING

CAUSE: A worn, damaged or absent protection kit, meaning the piston rod has been impacted by road debris and salt, causing damage.

#### **RESULT:**

- Increased chance of oil leak or loss.
- Reduced effectiveness of shock absorber.



#### **BROKEN PISTON ROD**

#### CAUSE

 Incorrect installation due to use of improper tools such as an impact wrench.

· Exceeding the recommended torque.

#### **RFSIIIT**

Complete failure of shock absorber.



#### **RUSTED CYLINDER**

#### CAUSE:

- Corrosion from water, accelerated by corrosive road salts.
- Excessive operation period (50,000 miles).
- **RESULT:**
- Compromised chrome surface.
- Increased chance of oil leak or loss.



#### MECHANIC PISTON DAMAGE

CAUSE: The use of improper tools on the piston rod, often caused by an adjustable wrench or hydraulic nliers

#### **RESULT:**

- · Compromised chrome surface.
- Increased chance of oil leak or loss.



#### **OIL LEAK**

#### CAUSE:

• Damage to piston rod and/or oil seal. Excessive operation period (50,000 miles).

#### RESULT:

- · Reduction in damping force
- · Impacted safety and comfort.
- · Accelerated wear of other components.



#### **BROKEN BOTTOM FIXATION**

#### CAUSE:

- · Excessive axle load.
- Incorrect torque when tightening threaded joints.Repair works performed with suspension not loaded with vehicle weight.

#### **RESULT:**

 Vibrations and noise. • Accelerated wear of other components.





#### TFARING

CAUSE: Pressure placed on piston rod caused by poorly aligned suspension. May occur after a collision or incorrect aligning of a mounting kit or spring.

#### **RESULT:**

- Compromised chrome surface.
- Increased chance of oil leak or loss.



#### DAMAGED OUTER CYLINDER

CAUSE:

#### External impact.

- **RESULT:**
- Compromised structural integrity. Increased chance of oil leak.
- Potential collapse and failure of unit.

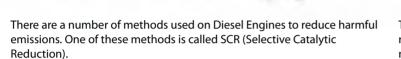
#### FOR MORE ADVICE **AND A RANGE OF** SUPPORT TOOLS. **PLEASE SCAN HERE:**





# CONTACT US IN BRANCH TO FIND OUT MORE.





SCR is an active emissions control system. Hot exhaust gases flow out of the engine and into the SCR system where aqueous urea (known as Diesel Exhaust Fluid, or DEF) is sprayed onto a special catalyst.

Diesel Exhaust Fluid (DEF) is a non-toxic fluid composed of 32% automotive grade aqueous urea and purified water. DEF is sometimes referred to as AdBlue.

The design of SCR technology is such that it permits nitrogen oxide (NOx) reduction reactions to take place in an oxidizing atmosphere. It is called "selective" because it reduces levels of NOx using ammonia as a reductant within a catalyst system. The DEF is rapidly broken down to produce the oxidizing ammonia in the exhaust stream.

### Common reasons for NOx Sensor failure

#### Damage to wiring

Contamination by water, soot or carbon build up can lead to sensor electrical failure. (Do not try to clean sensors with chemicals or compressed air)

NOx sensors contain a ceramic chip that can be damaged if subjected to heavy and excessive vibration.

#### Checks to be made before replacing NOx sensors

Any contamination on the sensor nozzle means that the source of this contamination needs to be investigated and the cause rectified before fitting a replacement unit.

- Check to see that the DEF/AdBlue is correct specification/quality and not contaminated.
- The installation area should be clean and grease free.
- Electrical connectors should be clean and rust free. ~
- All wiring should be free of damage.
- Check the Catalytic Convertor for damage/contamination.

The chemical reaction is known as "reduction" where the DEF is the reducing agent that reacts with NOx to convert the pollutants into nitrogen, water, and tiny amounts of CO2.

The component configuration of a SCR system can vary by the vehicle manufacturer, but the fundamental principle of operation remains the same. SCR systems are often used in conjunction with a DPF filter.

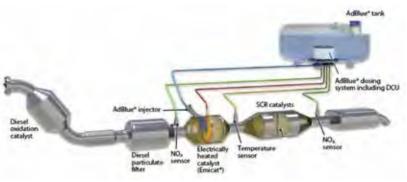
In order to inject the correct amount of DEF into the catalyst, the system employs one or two NOX Sensors. The NOx sensors are fitted before and after the SCR catalytic convertor and may be referred to as upstream and downstream.

The NOx sensors are required to accurately measure the amount of NOx in real time and feed this information to an FCU. This information in turn allows the ECU to accurately determine how much DEF needs to be injected into the catalytic convertor to produce the lowest emissions.

#### Installation

Where possible ensure that like for like by part number is being fitted. If the VM has introduced a supersession check that the supersession is correct.

Once fitted the sensor or sensors will have to be trained or coded to the vehicle. This process will vary by VM and will need to be carried out by a VM-authorised workshop or a specialist workshop equipped with the appropriate equipment.



#### Please Note

The term "plug and play" is used quite often for aftermarket units. This is rarely true for 12v NOx sensors unless it is a particularly old application. Always assume that coding will be required.

24v NOx sensors used on commercial vehicles appear to be more likely to be "plug and play" currently. This may change with time of course.

Never attempt to replace the sensor only by splicing the wires on the complete NOx unit to those on a new sensor. Always replace with a complete unit.

# To find out more contact your local branch today

A selection of hard-to-find niche parts that are available



Nox Sensor • To fit: Mercedes E Class



#### **Nox Sensor**

• To fit: **PSA Group and Vauxhall** PSA c3 / c4 / ds3 / ds4 / ds5 / 208 / 308 / 2008 / 3008 / 5008 / Partner / Vauxhall Grandland X



Nox Sensor • To fit: PSA Group Relay / Boxer Van



Nox Sensor

To fit: VAG Group Caddy TDI
 To fit: VAG Grou
 To fit: VAG Grou



• To fit: **VAG Group** A4 / Alhambra and Sharon 2.0 TDI e. Call us for more details.



Nox Sensor • To fit: Nissan / Renault / Vauxhall NP 300 Navara / NV300 Traffic / Master Van and Movano / Vivaro



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# Blue Print Braking. Right First Time.

Blue Print's Braking range is **comprehensive** with over 5,500 components covering all makes and models. Every Blue Print product is researched, designed and manufactured to be **premium** OE matching **quality** and undergoes stringent and regular quality checks to ensure **optimum performance & long service life**.

Want quality and value? Choose Blue Print! Your Premium Quality Aftermarket Solution!



OE No. 31423721 SK1 To fit: Volvo S60 (2019>), Volvo V60 (2018>), Volvo XC60 (2017>) ADBP420085 Brake Pad Set

OE No. 44 06 066 59R To fit: Renault Captur (2020>)



ADBP420089 Brake Pad Set

OE No. 8008242-00-C To fit: Tesla Model 3 (2018>), Tesla Model Y (2019>)



www.blue-print.com



ADN143176 Brake Discs

OE No. 8008242-00-C To fit: Nissan Leaf (2010>2019), Nissan Qashqai (2013>), Renault Kadjar (2015>)

> You can find the complete overview of Blueprint Braking at: partsfinder.bilsteingroup.com



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COOLANT

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A Si-OAT ethylene glycol based coolant concentrate formulated for use in all engines including aluminium alloys.

Contains silicate stabilisers to prevent the formation of silicate gel often observed with interior products.

Required for most VAG vehicles manufactured from 2016 onwards to provide maximum protection.

#### Meets the requirements of:

ASTM: D3306 BS: 6580:2010 Cummins: CES 14603 Glycantin: G40 & GG40 MAN: 324 Typ Si-OAT MTU MTL 5048 SAE: J1034 Scania: TB 145 VW: G12++, G13, TL 774 G & TL 774 J

### Part of the high performance antifreeze range available from Granville

AD-TEC 20

# Improved AD Oil Range

- New Premium bottle 🖌
- High quality additives
- Improved wear protection
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ANTIFREEZE



## **Brand New Units. Hassle-Free.**

PREMIUM STARTERS AND ALTERNATORS FROM THE BRAND YOU CAN TRUST



FILTRATION SYSTEMS

HELLA GUTMANN

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# ENGINEERED TO PERFORM

**Beckermann** EGT Sensors are engineered to original equipment standards and built to withstand extreme heat and conditions for long lasting, reliable performance.



Scan here to read our in-depth guide to EGTS. Including diagnostic and fitting advice.

EGTS EXTENDED RANGE Available now from Beckermann

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BECKERMANN.CO.UK



# HELLA, the electrics and electronics specialist of choice

HELLA, the renowned original equipment (OE) manufacturer and system supplier, has more than 60 years of experience in the fields of electrics and electronics, stretching back to the introduction of the first flasher control units in 1957. Now an established supplier of innovative vehicle electronics globally, the company pioneered the 24 GHz radar sensor for rear end applications, paving the way for further automated driving functions, and was the first supplier to bring radar sensors into the aftermarket. This business segment now makes up 34% of its sales.

The HELLA electronics portfolio includes more than 45 product groups and covers vehicle functions such as emissions, comfort and safety. One of the company's fastest growing aftermarket product lines is wheel speed sensors, or ABS sensors as they are otherwise known, reflecting the demand for replacements that come from independent workshops country wide.

#### **Overview**

Wheel speed sensors come in passive and active designs, but both are equipped with cables, with or without protective covers, in different lengths and with sensor angles at 90 degrees or straight.

#### **Passive sensors**

The wheel speed sensors are positioned directly above the impulse wheel, which is connected to the wheel hub or drive shaft. The pole pin, surrounded by a winding, connects to a permanent magnet whose magnetic effect extends to the pole wheel. The rotation of the impulse wheel and the resulting switching from tooth-to-tooth space brings about a change in the magnetic flow caused by the pole pin and winding. This changing magnetic field induces a quantifiable, or measurable, alternating voltage (AC) in the winding.

The frequency and amplitudes of this AC voltage are in relation to the wheel speed, so inductive passive sensors do not require a separate power supply from the control unit. Since the range for signal detection is defined by the control unit, the amplitude level must be within a specific voltage range. The distance between the sensor and the pulse wheel is determined by the axis design.

#### Active sensors

The active sensor is a proximity sensor with integrated electronics that is supplied with a defined voltage from the ABS control unit. A multipole ring can be used as an impulse wheel while at the same time being integrated in a sealing ring of a wheel bearing and inserted in this sealing ring are magnets with alternating pole directions. The magneto-resistive resistors integrated in the electronic circuit of the sensor detect an alternating magnetic field when the multipole ring rotates. This sinusoidal signal is converted by the electronics in the sensor into a digital signal. It is then transferred to the control unit as a current signal using the pulse-width modulation method.

The sensor is connected to the control unit via a two-pole electric connecting cable and the sensor signal is also transmitted at the same time over a power supply line. The other line is used as a sensor ground.

In addition to magneto-resistive sensor elements, nowadays Hall sensor elements are also fitted, which permit a larger air gap and respond to the smallest of changes in the magnetic field. If a steel impulse wheel is installed in a vehicle in place of a multipole ring, a magnet is also affixed to the sensor element. When the impulse wheel turns, the constant magnetic field in the sensor changes. The signal processing and IC are identical to the magneto-resistive sensor.

#### At-a-glance advantages

- Wheel speed detection from standstill that facilitates speed measurements down to 0.1 km/h, which is relevant to traction control systems as soon as the vehicle accelerates
- Hall sensors detect forward and backward movements
- The sensor is in design smaller and lighter
- The lack of impulse wheels simplifies the power transfer linkage
- Less sensitive to electromagnetic interference
- Changes in the air gap between the sensor and magnetic ring have no direct impact on the signal
- Virtual insensitivity to vibrations and fluctuations in temperature

#### Quality and range

As wheel speed sensors are an integral part of the vehicle's driving safety system, replacing a faulty sensor with one of OE quality should be the natural choice for the independent workshop and helpfully, HELLA provides the ideal solution with more than 340 12-volt part numbers, for multiple applications, including numerous models within the BMW and VAG line ups.

However, it's not just the passenger car sector to which HELLA's range extends, as its 24-volt offering includes 48 part numbers that cater for several relevant truck, bus and trailer manufacturers, including BPW, DAF, Iveco, Kogel, Krone, Liebherr, MAN, Mercedes Benz, Renault, Scania, Schmitz Cargobull, Tata, and Volvo.



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#### **UFI FILTERS, THE BEST CHOICE** FOR ORIGINAL EQUIPMENT AND FOR THE AFTERMARKET.

UFI Filters is a global leader in filtration technology and thermal management. It serves a wide range of sectors from automotive, aerospace and marine to specialised industrial and customised hydraulics applications.



Being the choice of the main car makers is the guarantee of the original quality for the Aftermarket. **UFI Filters' diesel filtration module** has been selected for the new generation of **FIAT DUCATO**, whose engine is the first

#### **CARTRIDGE CODE**

#### 26.H2O.03

#### MAIN APPLICATIONS

FIAT DUCATO 2.0 L DW10, 2.2 L DW12 CITROEN Jumper III 2.0 BlueHDI 110 81KW 110HP

12/18>09/19 PEUGEOT Boxer III 2.0 BlueHDI 110 81KW 110HP 12/18> entirely developed by **Stellantis**. The UFI diesel module can be found both on the new 2.2-litre Diesel Multijet3 engine and on the DW10 and DW12 engines (2.0 and 2.2 litres respectively). The cartridge's media is produced with the exclusive **FormulaUFI.EXTREME** receipe, or UFI Deep Filtration Media which guarantees a filtration capacity of 96% and water separation of >93%, according to the innovative concept of **coalescence** which consolidates the water particles emulsified in the fuel into larger droplets which then fall to the bottom of the filter tank. The module is made in **reinforced plastic** to withstand the fuel high operating pressures; is also **equipped with an electric sensor with a heater to facilitate start-up** during winter months, as well as a purge tap for **draining** the residual water filtered from the diesel.

#### PLUS

- + Filtration capacity: more than 96%
- + Cartridge media made in exclusive FormulaUFI.EXTREME
- + Electric sensor with a heater
- + **Purge tap** for draining the residual water filtered from the diesel.



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# All you need to know about AGM and EFB batteries

With more and more modern vehicles featuring emissions reduction technology such as start-stop, battery replacement has become more complex and time consuming.

On vehicles with start-stop technology it is essential the battery is replaced with one of the correct technology and specification. If a vehicle is fitted with an AGM Start-Stop battery then the replacement must also be AGM Start-Stop. The same applies to EFB products.



"If a vehicle is fitted with an AGM Start-Stop battery then the replacement must also be AGM Start-Stop." Most modern vehicles come fitted with a Battery Management System (BMS) which must be reset through the on-board diagnostics (OBD) port to tell the vehicle when the battery has been replaced. Failure to fit the correct battery or reset the BMS can cause issues such as battery failure and complete loss of start-stop functionality.

On many new vehicles, the battery is not fitted under the bonnet and locating it can take time. The replacement process can also take far more

time than on standard ignition vehicles, with some vehicles requiring up to an hour and a half of work. Yuasa's USB Smart Button, Online Battery Lookup and GS Yuasa Yu-Fit Battery Configurator all offer a simple solution to save you time and money.

Yuasa's online battery lookup tool **fit.yuasa.com** is the industry's leading battery lookup. It will identify the correct battery for the vehicle, and provide a wealth of information including battery location, estimated fitting time, reprogramming required and detailed fitting.

GS Yuasa's award-winning Yu-Fit Battery Configuration tool is the ideal solution for reprogramming the battery management system on start – stop vehicles. It connects to the vehicles OBD port, and is quick and easy to use with robust construction.



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Heater Resistors and Speed Controllers

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Delivering one of the widest ranges throughout the UK and Europe

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# MAXI**SYS906S**pro £1,795 excl. VAT

### £9.53pw excl. VAT

Includes

- Extended 2 years warranty
- Extended 2 years software free updates

#### MaxiCVI V200 Bluetooth VCI

- **SPECIFICATIONS**
- Android 10 OS
- Fast Qualcomm Octa-Core 2.3G + 4\*A53 1.7G processor
- Huge 128GB internal memory
- 3 x Ultra fast Wi-Fi connectivity
- 8" 1920 x 1200 high-resolution touchscreen
- 5 MP front camera and 16 MP rear camera 11,600mAh Lithium-Polymer Battery

**BT506** 

**£160** excl. VAT

MaxiVCI V200 wireless Bluetooth vehicle communication interface

MAXIBAS

DoIP and CAN-FD compatible



Software Updates

Future 12 months Update

£575.00 excl. VAT

ADAS

ADAS Software Upgrade

£850.00 excl. VAT

+ Bolt-ons

Connects to Autel Tablet

#### **SPECIFICATIONS**

- Connectivity : USB 2.0, Type C
- Working Current : < 150 mA at 12 V DC
- Voltage Range : 6 to 36 V
- CCA Range : 100 to 2000 A
- Working Temperature : -10° to 50° C
- Input Voltage : 5v DC
- Weight: 320g

The BT506 is a battery and electrical system analysis tool that use as Adaptive Conductance an advanced battery analysis method, to produce a more accurate examination of the battery's cold cranking ability and reserve capacity, vital to determining a battery's true health.

也

The BT506 is a 'bolt-on' accessory to the MS908s, MS908ProS, MS Elite, MS909, MS919 or MS Ultra, and enables technicians to view the health status of vehicle's battery and electrical system



# **MS909** £2,995 excl. VAT £15.90pw excl. VAT

The all new MaxiSYS MS909, is our replacment to the MS Elite and shares the same tablet hardware as the MS919. The MS909 does not include multi-purpose VCMI, but instead is supplied with our standard MaxiFlash VCI with Enhanced Protocol Compatability, which supports D-PDU, RP1210, CANFD. J2534 and DoIP protocols.

The MS909 combines diagnostics, service, extensive live data, channel coding and ECU reflashing. The MS909 also has further programming options directly within the tool software itself (focusing on BMW and Merecdes). In addition, the MS909 has all new software specialist capabilities that we have named **Repair** Assist, DTC Analysis, Topology Mapping and Relevant Cases.

The MS909 can be upgraded to an MS919 at a later date by purchasing the Autel VCMI.



# + Bolt-ons







# EV7S £590 excl. VAT **AC CHARGING SOLUTIONS**



- 🔄 CHARGING NETWORKS
- 📇 COMMERCIAL PARKING
- (🔨) WORK SHOP



Our EV7S electric vehicle chargers, are our most affordable intelligent socket chargers to date with built-in smart technology powered by Monta, and designed with professional applications in mind.

The EV7S single-phase AC charger is a new generation of intelligent products launched by Intelli EV, and as with the EV7T, can be installed in both residential and business environments

It is possible to install either the EV7T and EV7S at a residential property or work place with a single-phase connection

The EV22S three-phase AC charger enables faster charging but requires a three-phase electrical connection. Three-Phase connections are often found on business premises, but very rarely at residential addresses\*.

\* A three-phase AC charger can not be successfully installed on a property with a single-phase connection.

# For more information contact your local branch today!



# DRIVEN BY POSSIBILITY™

# THE SUM OF ALL PARTS: A WINNING TEAM

Belt drive components work together. The problem is, if they are not all replaced at the same time, they wear at different rates. The overall performance of the drive system starts to fade. There's a parallel for winning motor racing teams. They know that one poor performance can cost them the Championship.

With a wide range of OE partners, Gates understands what it's like to be part of a winning team. That's why whenever it's time to change the belt, we recommend replacement of all the drive system components together, as a single unit. Micro-V<sup>®</sup> and PowerGrip<sup>™</sup> kits, from Gates, make this easy. Get all of the OE quality parts you need for a complete overhaul in a single box.

Gates. Reliable OE quality, better performance, fewer comebacks and happier customers.





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### **FUEL UP WITH CARWOOD**



Leading remanufacturer and technical services provider, Carwood, explains why and how it is continuing to invest in its ever-growing diesel business...



#### Plenty of mileage in diesel

By 2030 forecasts suggest that **80%** of the UK vehicle parc will still be **powered by some form of internal combustion engine (ICE)**, be it petrol, diesel or a hybrid combination. With the average age of a car currently at 8.4 years, coupled with the fact that diesel registrations were at an all-time high not that long ago, there will be a significant parc of diesel vehicles on the roads for a long time to come. Much longer for commercial vehicles, where no other source can offer better emissions, range, affordability or usability.

#### Legislation driving improved technology

They just won't be the engines you know today. Although modern diesels are already impressively clean, OEMs are continuing to enhance software and controls. The addition of sophisticated aftertreatment, such as diesel particulate filters and selective catalytic reduction, will ensure tougher Euro 7 targets are met. But it will also make them more challenging to diagnose and repair.

#### Fuel up with Carwood

To service these increasingly complex vehicles, factors and garages will need a supplier that can offer a broad range of **high-quality**, **high-tech products**, backed by **expert diagnostic and technical support**. Which is why Carwood is continuing to invest in its fuel systems business.

#### Reman at its core

As an **approved remanufacturer** for the leading OEMs – Bosch, Delphi Technologies, Denso, VDO and Stanadyne - Carwood is adding to its range of **cost- and eco-friendly** pumps and injectors, with new introductions geared towards Euro 6 applications.

Whether supplied to the vehicle manufacturer or the independent network, every part is built in a suite of ISO14644 Class 7 certified clean rooms and tested to the OEMs very latest test plans, by factory trained technicians, on one of more than 25 OE test benches. Only through this meticulous approach can the company deliver a product that **performs just like the OE**, somtimes better.



#### Now a Bosch distributor

More recently, it has added a full Bosch programme to its line-up. As an official distributor, Carwood now stocks Bosch fuel pumps, injectors and spare parts for diesel and petrol vehicles, including Bosch new, Bosch eXchange and repair components.



#### Giving customers a choice

Alongside its own OE-approved reman parts, diagnostics, test equipment and technical support, aftermarket companies can access a full range of proven quality, competitiively priced solutions for the very latest fuel technologies. All from one supplier. **CARWOOD!** 

### Contact your local IFA member for more

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NGK Spark Plugs (UK) Ltd

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VEHICLE ELECTRONICS

# SENSORED

With the growing demand for today's vehicles to be more economical and environmentally-friendly while retaining performance, it is becoming more and more vital to fit the right sensors.

NTK LAMBDA SENSORS – the No.1 choice of vehicle manufacturers (VMs) providing exactly the right sensor for every vehicle application. They give:

- Improved engine efficiency
- Reduced emissions
- Increased economy

The experience NGK has in supplying the VMs worldwide allows it to offer exactly the right sensor for every vehicle application with 986 part numbers giving 76 percent coverage of European vehicles.

The company has just released the Lambda Sensors Catalogue 2022/23 which comprises 160 pages and features 449 total part numbers including 43 new additions, of which 35 are wideband sensors, to increase vehicle parc coverage by 2.1 million.

NGK is also a leading supplier of other engine management sensors under its NTK brand.

#### Other sensors include:

NTK CAMSHAFT & CRANKSHAFT SENSORS – comprising more than 200 UK-specific part numbers with excellent UK vehicle parc coverage.

**NTK MAF & MAP SENSORS** – a range of 87 NTK Mass Air Flow (MAF) sensors and 69 Manifold Absolute Pressure (MAP) sensors.

**NTK EXHAUST GAS TEMPERATURE (EGT) SENSORS** - with 38 part numbers covering 33 million cars.

### **TECHNICAL TIPS FOR NTK LAMBDA SENSORS**

Lambda sensor positioning in the exhaust system has many descriptions throughout the automotive industry, which can differ from that read on fault diagnosis equipment. For 'sensor 1' it is also known as regulating, front, upstream, pre-cat or upper. For 'sensor 2' they can be referred to by some as diagnostic, rear, downstream, post-cat or lower.

To aid factor selection and correct supply first time, a fault code relating to 'sensor 1' and 'sensor 2' are commonly referred to on the factors' parts look-up systems as 'front' and 'rear' respectively. Referring to them as such can avoid delay and ensure correct supply first time.

When recorded fault codes relate to the Lambda sensor heater control, suspect the entire circuit. To eliminate the sensor; check there is a resistance reading between the two Lambda sensor heater wires (most commonplace between many sensor manufacturers are the two white wires). No continuity confirms the element is broken. Ensure any reading is aligned within the VM's tolerance.

Sometimes a fault code can be read that correctly relates to an issue with the Lambda sensor and replacing it can cure the issue. However, upon the removal of the sensor, closely inspect the inside of the connector for any oil contamination – however slight. On some vehicle models it is known for an engine oil leak to allow oil to enter the wiring loom. This can then migrate to other areas of the loom via capillary action.

Sometimes fault codes are recorded for Lambda 'sensor 2' (rear). Garages sometimes say the sensor they need has more wires than the one supplied. NOx sensors always have more wires than a Lambda sensor and outwardly are very similar in appearance, the Lambda sensor will be close by! TECHNICAL FOCUS

# SKODA OCTAVIA 2.0 TDI TIMING BELT KIT INSTALLATION

#### Dayco Kit KTBWP5630

The 2.0-litre TDI diesel engine used in the Octavia from 2008, features a timing belt driven water pump. As replacing the belt also requires the auxiliary drive system to be removed, Dayco recommend that all the systems' components - primary drive and auxiliary drive - be replaced at the same time.

This step-by-step technical guide will help technicians through the process, to avoid complications and ensure a first-rate job.

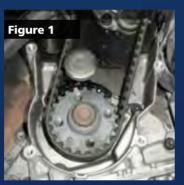
As with all primary drive system jobs, the work should be undertaken when the engine is cold, so ideally the vehicle will not have been run for at least four hours.

Remove the plastic cover to reveal the engine, followed by the mudguard moulding under the right hand wheel arch, which will allow access to the auxiliary drive system, then remove the tensioner and auxiliary belt.

Remove the tie rod beneath the engine and then the crankshaft, or TVD, pulley in order to remove the lower and central timing belt covers. Then from the top of the engine move the differential pressure sensor of the FAP with its bracket and the electric fuel pump with its bracket, followed by the fuel filter and cooling circuit tank, to be able to then remove the top timing belt cover.

Remove the lower bolt of the engine mounting bracket flange, correctly support the engine and then remove the upper right engine mounting bracket, followed by the bracket flange.

Rotate the crankshaft clockwise to match the timing reference marks on the pulley and lock the pulley in place using Dayco tool T10050 (figure 1). Insert Dayco tool 3359 into the camshaft pulley and a second into the fuel injection pump pulley and loosen both pulleys. After loosening the bolt of the tensioner, rotate the tensioner and remove the upper idler in order to remove the timing belt and then, remove the tensioner.



Remove and replace the belt tensioner stud with the new one supplied with the Dayco timing belt kit **KTBWP5630**, along with the lower and central idlers with nut and bolt respectively.

Remove the water pump from the casting and after flushing the system and ensuring the mating surfaces are clean, soap the O-ring and install the new water pump from the Dayco timing belt kit.

Install the new belt tensioner and nut, but make sure that the tooth is inserted into the slot in the housing as shown (figure 2). Then, after rotating both the camshaft and fuel injection pump pulleys clockwise, install the new Dayco HT (High Tenacity) timing belt, followed by the replacement top idler and bolt from the kit.



Rotate the belt tensioner with its position index inside the space in the back plate as shown **(figure 3)** and tighten to 20Nm +  $45^{\circ}$ .

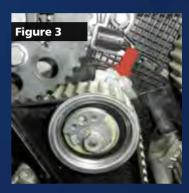
Then tighten the camshaft pulley bolts to  $20Nm + 45^{\circ}$  and the fuel injection pump bolts to  $20Nm + 90^{\circ}$  (figures 4 & 5).

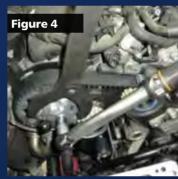
Remove all the timing tools and rotate the engine clockwise several turns to ensure that it is correctly timed and that the belt tensioner index is still in the space of the backing plate as shown previously.

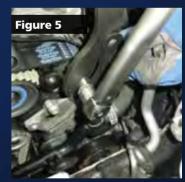
Remove the alternator pulley bolt and replace the pulley with Dayco **ALP2395** and using a 13mm ball-end Allen key, remove the bolt at the back of the auxiliary belt tensioner located under the rear side of the alternator and replace the tensioner with Dayco **APV2511**.

After replacing the timing belt covers and other previously removed components, replace the crankshaft pulley with Dayco **DPV1123** and tighten the bolts to 10Nm + 90°. Finally replace the auxiliary belt with Dayco **6PK1070**.

To view this installation, or any other Dayco technical video, visit www.daycoaftermarket.com and click on Dayco TV.







For more information regarding the OEM quality power transmission products in the Dayco range, visit: www.dayco.com



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DURABILITY: MTK WEAR VOLKSWAGEN T5 PLATFORM

Measurements performed by Applus IDIADA. Test conducted on a dyno (test bench) simulating the vehicle conditions. Shown is the average

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CALIPERS

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BRAKE ENGINEERING	MAKE & MODEL
CA3541	MERCEDES-BENZ: C-CLASS (W205), C-CLASS Coupe (C205), C-CLASS T-Model (S205), CLS (C257), E-CLASS (W213), E-CLASS All-Terrain (S213), E-CLASS Convertible (A238), E-CLASS Coupe (C238), E-CLASS T-Model (S213), EQC (N293), GLC (X253), GLC Coupe (C253)
CA3541R	MERCEDES-BENZ: C-CLASS (W205), C-CLASS Coupe (C205), C-CLASS T-Model (S205), CLS (C257), E-CLASS (W213), E-CLASS All-Terrain (S213), E-CLASS Convertible (A238), E-CLASS Coupe (C238), E-CLASS T-Model (S213), EQC (N293), GLC (X253), GLC Coupe (C253)
CA3592	MERCEDES-BENZ: C-CLASS (W205), C-CLASS Coupe (C205), C-CLASS T-Model (S205), CLS (C257), E-CLASS (W213), E-CLASS All-Terrain (S213), E-CLASS Convertible (A238), E-CLASS Coupe (C238), E-CLASS T-Model (S213), EQC (N293), GLC (X253), GLC Coupe (C253)
CA3592R	MERCEDES-BENZ: C-CLASS (W205), C-CLASS Coupe (C205), C-CLASS T-Model (S205), CLS (C257), E-CLASS (W213), E-CLASS All-Terrain (S213), E-CLASS Convertible (A238), E-CLASS Coupe (C238), E-CLASS T-Model (S213), EQC (N293), GLC (X253), GLC Coupe (C253)
CA3636	MERCEDES-BENZ: SPRINTER 3,5-t Platform/Chassis (B907, B910), SPRINTER 3,5-t Van (B907, B910), SPRINTER 3-t Platform/Chassis (B910, B907), SPRINTER 3-t Van (B910), eSPRINTER Van (B910)
CA3636R	MERCEDES-BENZ: SPRINTER 3,5-t Platform/Chassis (B907, B910), SPRINTER 3,5-t Van (B907, B910), SPRINTER 3-t Platform/Chassis (B910, B907), SPRINTER 3-t Van (B910), eSPRINTER Van (B910)
CA3645P1	MERCEDES-BENZ: SLC (R172)
CA3645RP1	MERCEDES-BENZ: SLC (R172)
CA3657	MERCEDES-BENZ: C-CLASS (W204), C-CLASS Coupe (C204), C-CLASS T-Model (S204), E-CLASS (W212), E-CLASS Coupe (C207), E-CLASS T-Model (S212)
CA3657R	MERCEDES-BENZ: C-CLASS (W204), C-CLASS Coupe (C204), C-CLASS T-Model (S204), E-CLASS (W212), E-CLASS Coupe (C207), E-CLASS T-Model (S212)
CA3662	MERCEDES-BENZ: C-CLASS (W203), C-CLASS T-Model (S203), SLK (R171)
CA3662R	MERCEDES-BENZ: C-CLASS (W203), C-CLASS T-Model (S203), SLK (R171)
CA3664	CHEVROLET: TRAX OPEL: MOKKA / MOKKA X (J13), MOKKA X VAN (J13) VAUXHALL: MOKKA / MOKKA X (J13)
CA3664R	CHEVROLET: TRAX OPEL: MOKKA / MOKKA X (J13), MOKKA X VAN (J13) VAUXHALL: MOKKA / MOKKA X (J13)
CA3674	MERCEDES-BENZ: SPRINTER 3,5-t Platform/Chassis (B907, B910), SPRINTER 3,5-t Tourer Bus (B907), SPRINTER 3,5-t Van (B907, B910), SPRINTER 3-t Platform/Chassis (B910, B907), SPRINTER 3-t Tourer Bus (B907)
CA3674R	MERCEDES-BENZ: SPRINTER 3,5-t Platform/Chassis (B907, B910), SPRINTER 3,5-t Tourer Bus (B907), SPRINTER 3,5-t Van (B907, B910), SPRINTER 3-t Platform/Chassis (B910, B907), SPRINTER 3-t Tourer Bus (B907)
CA3675	MERCEDES-BENZ: SPRINTER 3,5-t Platform/Chassis (B907, B910), SPRINTER 3,5-t Tourer Bus (B907), SPRINTER 3,5-t Van (B907, B910), SPRINTER 3-t Platform/Chassis (B910, B907), SPRINTER 3-t Tourer Bus (B907)
CA3675R	MERCEDES-BENZ: SPRINTER 3,5-t Platform/Chassis (B907, B910), SPRINTER 3,5-t Tourer Bus (B907), SPRINTER 3,5-t Van (B907, B910), SPRINTER 3-t Platform/Chassis (B910, B907), SPRINTER 3-t Tourer Bus (B907)

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What drives you, drives us

Please note: All offers end 31 DECEMBER 2022 and are subject to availability. All prices exclude VAT.

See the back page for branch contact details.

# Wiper Blade Focus

BOSCH

**a8%** 

Bosch Aerotwin

# **Bosch wiper blades for electric and hybrid vehicles**: a clear view with Aerotwin sets and rear wipers

Outstanding wiping performance and quiet wiping even under extreme weather conditions - that's what Bosch

Aerotwin stands for. Equipped with PPP wiper rubber with its patented coating and long life formula, it provides safety, ensures a clear view and increases driver satisfaction. In a European market, where the sales of electric and hybrid vehicles has seen a significant growth during the last decade, the request for wear & tear spare parts from both car drivers and workshops has increased as well. With an overall market coverage of 98%, Bosch is providing front and rear wiper blades for most electric and hybrid vehicles on the European market.

#### Power Protection Plus

**3** plus points with a single wipe

- Outstanding wiping performance
- Longer service life
- Quiet wiping

# **NEW!** Long-life wiper rubber formula

- Innovative wiper rubber admixture
   Improved resistance to environmental influences and debris on the windshield
   Less abrasion and wear
- **Evodium spring strips**

AEROTWIN

- Two customized high-tech spring steps
- High and uniform contact pressure
- Full-surface, streak-free cleaning of the windshield

#### Selection of top EV/HEV applications

Brand	Model	Fitment Period	Arm Type Front	Aerotwin Set Short Code	Aerotwin Set PN	Rear Short Code	Rear PN
AUDI	e-tron	09.18->	3	A 622 S*	3397014622	A 332 H	3397008635
BMW	3 Series	02.19->	6	A 606 S	3397014775		
FIAT	500X / 500e	11.14->	3	A 354 S	3397014354	H 840	3397004802
HYUNDAI	Kona	06.17->	1	AR 141 S	3397014141	H 281	3397011428
JAGUAR	I-Pace	03.18->	3	A 622 S	3397014622		
KIA	Niro / e-Niro	10.16->	1	AR 141 S	3397014141	A 300 H	3397016271
MERCEDES-BENZ	EQC-Class	05.19->	9	A 844 S	3397009844	A 282 H	3397008634
NISSAN	Leaf	01.18->	1	AR 141 S	3397014141	H 354	3397011433
RENAULT	Zoe	01.13->	3	A 300 S	3397007300	H 840	3397004802
TESLA	Model 3	06.16->	3	A 871 S	3397014871		
ΤΟΥΟΤΑ	C-HR	09.16->	10	A 157 S	3397014157	H 352	3397011430
ΤΟΥΟΤΑ	Prius	12.15->	10	A 159 S	3397014246		
VOLVO	XC90 II	06.15->	3	A 298 S	3397007298	A 351 H	3397008192
VW (VOLKSWAGEN)	ID.3	12.19->	3	A 988 S	339701400V		

\* Only for vehicles with no spray jet at wiper blade

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Our OEM quality range of new Propshafts offers 170 parts, this allows us to supply a myriad of vehicles no matter what the size.



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\*see website for our ECAT system showing actual vehicles



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# SHAFTEC<sup>®</sup> DRIVE.







# SHAFTEC ANNOUNCES NEW PROPSHAFT PROGRAMME – FIRST PRODUCT LAUNCH IN TEN YEARS

At launch, the range totals 170-part numbers – and many more references are already in development.

Offering exceptional car parc coverage, the programme of one-, two- and three-piece shafts covers Rear, All and Four-Wheel Drive passenger cars and light commercial vehicle applications. As with all its safety critical parts, Shaftec goes above and beyond to ensure material quality and strength, and all are tested to the extreme in line with strict industry guidelines. All parts are engineered for low NVH (Noise Vibration Harshness) 100 percent balanced and fully inspected.

With next day delivery available, the programme is backed by the highest levels of availability & customer service, marketing & technical support. All application details can be found on: Shaftec ECAT online catalogue; TecDoc & MAM and each part comes with a 24 month/24,000-mile warranty.

Shaftec's marketing manager, Adrian Kitchen, explains: "This is a big move for Shaftec – our first product launch in 10 years. But one for which we are fully prepared. We did the research and identified a gap in the market, which with our experience across the fields of driveshafts and CV joints, believe we can confidently fill. This product programme incorporates more than 25 years of experience and perfectly complements our existing portfolio – giving the aftermarket exactly what it needs."

"The benefits of purchasing this new range of propshafts from Shaftec are many," Adrian says. "Our entire operation takes place under one roof at our centrally located, UK based 42,000 sq. ft facility, we have a great range and excellent availability. And of course, these parts can be added to an existing order to improve efficiency. All of which means we are always ready to meet customer requirements."

A propeller shaft – or propshaft is the shaft that connects the gearbox to a differential, and you can have up to three on some 4WD vehicles. The handling of each propshaft is designed according to the class of vehicle it will be fitted to. In line with this, Shaftec's programme caters for all vehicle sizes, from the smallest to the largest. Furthermore, when it comes to ordering product for ease of identification, each component in the Shaftec programme is prefaced SPS followed by a three Digit code.

The programme caters for cross class models produced by most vehicle manufacturers active across the European car parc. Typical examples of applications per class are shown below:

- Rear Wheel Drive (RWD) BMW 5 and Mercedes C Class
- Four Wheel Drive (4WD) Land Rover, Range Rover and Toyota Landcruiser. These vehicles are good for off roading, often have differential locks and a low range. You can have up to three propshafts on a 4WD vehicle.
- All Wheel Drive (AWD) Audi Q7, Jeep Grand Cherokee, Ford Edge, Audi A4 Allroad, BMW xDrive, Mercedes 4 Matic, Golf Alltrack and VW 4motion. AWDs are similar in power to 4WD but are designed for speed and handling.
- Light Commercial Vehicles (LCV) Mercedes Benz Sprinter 3.5-ton van & Nissan NP300 Navara.

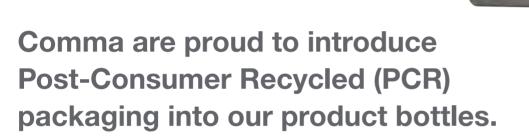
# **CONTACT YOUR LOCAL BRANCH TO FIND OUT MORE**



# **Confidence comes from within**

X-Elow

# Comma's Journey to Sustainability



### What is Post-Consumer Recycled (PCR) material?

PCR plastic refers to any type of plastic material that is made from post-consumer resins which have been recovered and reused from waste.

The PCR bottles implemented have undergone rigorous testing and trialling, to ensure that the quality remains unchanged. We hope this move is one which resonates with our partners, and we look forward to supporting your business needs with a sustainably focused approach.

### Why are Comma implementing PCR material?

The decision to implement PCR material within our product bottles ultimately reflects our goals to continually improve our business performance and environmental impact. This decision is one that also contributes to the UK's pledge to collectively reduce total carbon emissions, and this step Comma has taken supports this.

For more information, please visit www.CommaOil.com







# Inside The Factory

27

With what is already the biggest range of Exhausts, Catalytic Converters and DPFs in the UK aftermarket, you might think that EuroFlo are happy to rest on their laurels.

Well, it couldn't be further from the truth - every year EuroFlo develops and delivers hundreds of brand new part numbers into their already huge range.

So, how does that happen? The answer may surprise you...

#### **Planning & Development**

The planning and development of a new EuroFlo part number begins as soon as a new vehicle arrives on the roads.

The first step is to create a part number for each component which enables us to accurately gauge customer demand when it begins. We carefully record all requests and when demand is deemed to be sufficient, actual part number component development begins.

The first step in the development process is to purchase several original equipment samples.



These samples are carefully studied, measured and de-constructed.

Using specially designed software, EuroFlo

engineers determine precisely the type of raw material to use for each component, as well as all of the operations required to produce it. The software also helps to identify the correct tooling, settings and tolerances.

#### **Quality Control Plan**

Once we have all of the required measurements and related information, we create a Quality Control Plan which specifies a detailed set of instructions for manufacturing every single individual component which will make up the new part number.

This Quality Control Plan is used during production

to enable operators to assess and maintain the highest quality standards at each step of the production process.





#### 'Bullet Proof Jigs'

Jig construction now begins.

Jigs are an essential tool for exhaust system production and a major investment.

Exhausts are increasingly complex in design and in order to achieve our market leading quality standards, our jigs have had to become even better. When properly engineered, constructed and maintained, jigs are the best practical way of guaranteeing intricate and complicated geometric specifications are met, so consistently ensuring good fitment experiences.

In order to prevent thermic deformation, a great deal of planning goes into the location of fixation devices such as pins, levers, clamps and stoppers.



Highly engineered, heavy duty 'bullet proof' jigs are a feature of EuroFlo production, ensuring high quality products and consistent fitment every time. All jigs are approved and signed off by the Quality Controller before being released into the production process.

#### **Preliminary Production**

We begin preliminary production with a short run which enables us to fully test the production process. At this point,



we enable feedback from the operators who may suggest more efficient processes to optimise production. All suggestions are considered by the Production Director, who decides whether to implement them.

#### **Testing & Homologation**

When the new component goes into production, homologation certification is carried out by performing real life tests on a specification approved vehicle by an official approved testing centre.

These tests ensure that the new EuroFlo product performs at least as well as (and often better than) the OE product.

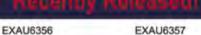
Only once we've carried out all of these steps, can we release the new component into the market-place.

#### **National Distribution Centre**

The new products are moved into our National Distribution Centre to join our existing stockholding of approximately half a million exhausts, catalytic converters and DPFs.

Every day thousands of EuroFlo emissions components are dispatched from our National Distribution Centre to our 10 strategically located regional distribution centres, ensuring that stock is available when you, and perhaps more importantly your customer, needs it.

### Just some of the Brand New Part Numbers





Rear Silencer Audi A3 1.6/2.0 2009 - 2014



EXFT6123



Rear Silencer Ford Kuge 2.0 2008 - 2013

EXGM6330

EXED6350

Stenote & Tail Pipe Fiel Panda 1 2 2012 - 2022 EXHY3020



Stenoer & Tail Pipe Veuxhail Mokka, Chevrolet Trax 2012 - 2017 EXHY4011

EXRN2106

and

Centre Pipe Hyundai Tucson 2.0 2004 - 2010 EXRN2107

EXVW2068

107

# 0

EXRN4087

Front Pipe Renault Captur, Cilo 2012 - 2020 EXRN4112



Centre Siencer Seat Leon, Skoda Karoq VW T-Roo 1.41.5 2014 -20: EXVW2080

VW Transporter 2.0 2005 -2017

#### For more information please visit www.euroflo.co.uk or contact your local branch

Keep warm & safe all the season

CLIMATE COMFORT SYSTEM

#### **CABIN HEATERS AND BLOWERS**

Driver's comfort and safety are of crucial importance in the colder seasons. With the Genuine Nissens quality cabin heaters and blowers, you can expect excellent thermal performance for the perfect interior heating. Our parts are easy to install and secure a long, trouble-free lifespan of the heating system.

Visit our web to learn more about all features of Nissens' climate comfort system parts.



nissens.com

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## **10L Oxy Pro Fuel Kit** 1 x SGS 0XY10 • 1 x SGS FUEL10 • 1 x SGS PFK10LW

**PFK10LW Includes:** 

- 1 x Oxygen Regulator
- **1 x Pro Fuel Regulator**
- 1 x 10L Trolley
- 1 x Oxygen Flashback Arrestor
- 1 x Pro Fuel Flashback Arrestor
- 1 x 5m, 6mm Oxygen Hose
- 1 x 5m, 6mm Pro Fuel Hose
- 1 x Lightweight Shank
- 1 x Lightweight Mixer

- 1 x Lightweight Cutting Attachment
- 1 x L/W #5 Welding Nozzle
- 1 x L/W #7 Welding Nozzle
- 1 x L/W Heating Nozzle
- 1 x FN Cutting Nozzle
- 1 x Cuplighter + Flints
- 1 x "Sports-type" Bag
- 1 x Spanner
- 1 x Goggles

#### **NOT QUITE LARGE ENOUGH?** THERE IS A 20L VERSION! ASK FOR PART NUMBER SGS PFK20LW AT YOUR LOCAL BRANCH!

Please note: PFK10LW does not include cylinders, which are sold separately.

www.SGSgases.co.uk Our full range of products are all available at your local branch!

2 I I I

#### NISSENS AUTOMOTIVE HEATER AND CABIN BLOWERS

Nissens Automotive (Nissens) is an established aftermarket replacement parts supplier with decades of thermal management experience, across both the vehicle's engine cooling (EC) and air conditioning (AC) systems. Its comprehensive product range, all of which is manufactured to Genuine Nissens Quality standards, to provide independent workshops with premium grade replacement parts, which operate to the same performance levels as the original, gives them a premium quality aftermarket solution they can depend on.

Although often overlooked when servicing or repairing the heating, ventilation and air conditioning (HVAC) system, heaters and cabin blowers serve a crucial role, particularly for the comfort of the occupants. So, particularly before the winter season, it is advisable to include these two components during an annual check and, if either are in need of replacement, use only premium quality aftermarket products.

#### **HEATERS**

The heater is an integral part of the EC system, but also contributes significantly to the climate system by ensuring the production of warm air to the cabin. It's often located behind the dashboard or in the HVAC module.

Hot coolant from the engine block passes through the heater, warming the intake air blown on its surface by the interior blower and this can be forwarded into the cabin, which during cold days in autumn and winter, significantly improves safety by reducing the time needed to demist the interior surfaces of the vehicle's windows.

#### **IMPORTANT TO KNOW**

- Scale that settles on interior surfaces and comes from the use of water instead of a proper coolant may block the heater core limiting the coolant flow. Sediment and grime from poor quality coolants, wrong coolant mixtures or residues of cooling system leak stops will also accumulate in the heater tubes limiting flow and reducing the heater's operating efficiency.
- A worn-out or broken thermostat valve may restrict coolant flow and so prevent the heater from operating properly.
- Due to the damp environment in which it's positioned, the heater is often exposed to corrosion, which may cause leakages.
- The lack of sufficient coolant caused by leakages (not just in the heater but from other components) will result in improper heater operation.

#### **BLOWERS**

The interior blower ensures the required amount of ambient air is drawn in through the intake and flows through the heat exchangers, i.e. the heater and evaporator. As it passes through the heat

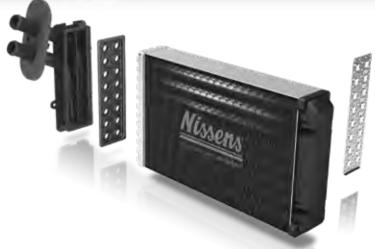


exchangers, the air can be either warmed or cooled and is distributed throughout the cabin by the blower. Typically, it is situated in the HVAC module located between the cabin and the engine compartment.

The interior blower is potentially vulnerable due to its plastic elements that can sometimes be fragile and, being an electrical device, it is sensitive to failures within the vehicle's electrical system.

#### **IMPORTANT TO KNOW**

- A clogged or defective cabin air filter can significantly reduce the blower's lifespan.
- The most common reasons for interior blower problems stem from failures in the vehicle's electrical system, restricted flow in the air intake system and improper handling during its installation.
- Blowers in vehicles used for commercial activities, such as taxis, coaches and buses etc., are often exposed to greater wear simply as a result of the mileage they cover and working hours they operate.



#### **GENUINE NISSENS QUALITY**

All of the company's products are designed and manufactured to Genuine Nissens Quality standards, which means they are engineered to deliver high performance and durability, as well as to fit perfectly when replacing the original part. In addition, the 'First-fit' policy ensures hassle free installation as whenever they are required, additional components, such as nuts, bolts, clips etc, are supplied within the Nissens box.

#### **QUALITY VS PRICE**

Although a cheap product might at first glance be appealing, for the reputation of the workshop and the satisfaction of the customer, quality must be the priority.

A replacement heater from Nissens will ensure workshops avoid issues such as a poor quality finish, limited heat exchange capacity and leakages and in contrast to cheap blowers that can generate noise and interfere with a car's electronics or radio, the company's blowers are comprehensively tested for durability and operating efficiency.

A poor quality blower can quickly malfunction and provoke expensive AC system failures, including compressor overload and breakdown, as no airflow through the evaporator means no, or limited, refrigerant state change, which leads to poor system performance and exposes the AC compressor to fluid intake/overload.

In addition, as replacing the heater/blower often requires the dashboard to be removed, the work is time consuming and therefore, expensive, so changing the original part to a low

#### THE NISSENS OFFERING

The Nissens range is both comprehensive and competitive, providing great market coverage for all vehicle segments, and even includes 120 blower and heater models for new energy vehicle applications, making it the ideal solution for workshops.

The heater programme encompasses 353 items, caters for 1,000 OE part numbers and covers 80% of the car parc, whereas the 327 blowers cater for 1,100 OE part numbers and provide 70% coverage, which makes the Nissens offering the one-stop solution for essential EC and AC system components





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# 

### Online training from a global leader in automotive technology



Delphi

#### What is the Delphi Technologies Academy?

An e-learning platform that provides technicians with the ability to enhance their skills and knowledge across a wide range of topics. From the very latest technology such as Hybrid/EV & ADAS right through to servicing traditional braking systems - it's all covered!

#### Who is it aimed at?

The breadth and depth of content means that the Delphi Technologies Academy is relevant to all levels of technician and allows users to learn at their own pace. There is no limit on the number of times that content can be viewed so its an ideal tool to refresh knowledge as well as learning new skills.

#### How is the content presented?

There are 8 different subject categories containing over 200 learning modules. The content is presented in a user-friendly format with an extensive library of video content being complemented by interactive text with questions. Any new content (of which there is plenty!) is highlighted on the home page to make sure that the user is always up-to-date with the latest technology.

### To find out more contact your local branch



Technologies Academy 📚



8 main training categories: Hybrid & Electric Vehicle | ADAS | Exhaust & Aftertreatment | Petrol Systems Diesel Systems | Chassis Systems | Vehicle Electrics | Other Systems

#### **Features**

- 200+ individual training modules
- Extensive video content filmed in real world workshop environment
- Interactive text and questions
- Engine simulator
- Training Needs Analysis questionnaires
- Own training profile containing all certificates earned
- Mock tests for IMI accreditation Designed for all devices including
- tablets and mobiles





# MAHLE INTRODUCES NEW REFERENCES FOR ENERGY-EFFICIENT FUTURE

#### 200 plus parts added to range All parts offer the best in OE quality

MAHLE Aftermarket UK has introduced over 200 new-to-range filters to its ever-growing product range, to meet the growing demand for energy fuel-efficient filters in the market.

The aftermarket specialist is committed to expanding its varied range to cover the growing European vehicle parc and offering OE quality parts to meet customer demand. As the market requires products that are more energy efficient, MAHLE has launched its latest new-to-range filters to meet this need.

MAHLE's additions include parts across its fuel, oil, air and cabin filter product portfolio and are suitable for many popular passenger car and commercial vehicle applications. This includes BMW, Kia, Toyota, Volkswagen, Mercedes-Benz, Renault, Peugeot, Nissan and DAF.

Alan Povey, Quality, Warranty and Technical Manager at MAHLE, comments: "Oil filters are designed to remove contaminants from engine oil, transmission oil, lubricating oil, or hydraulic oil. Vehicle production that directly impacts the filter market is expected to grow at a significant level.

"Along with advances in the automotive industry, the growing technology is projected to drive the automotive hydraulic filters

market with longer service life, optimum efficiency and gas mileage enhancement. This growth will also be in the use of Automatic type gear boxes, not only on the premium car range but the high-volume ranges (ie. Techtronic Gear Systems)."

As well as its new-to-range references, customers can also benefit from MAHLE's traffic light system that helps them to easily identify products that are 'ones-to-watch' and 'important-to-stock.'

The brand regularly updates its range with new part numbers, reflecting its commitment to lead the market with the highest quality OE-quality products from the widest selection available.

MAHLE recently launched TechTool to provide technicians instant access to technical information, covering both passenger cars and trucks. The resource provides users with detailed insights into technical processes around thermal management, active troubleshooting and general information.

The easy-to-use MAHLE TechTool allows technicians to search for information by vehicle category or they can opt to view information on specific components directly. TechTool also features useful information on each system and product, and includes interactive, visual diagrams, bringing each component to life.





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# THE MIRRORS TO BE SEEN WITH!

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## NEW TO RANGE MIRROR GLASS ALL AT COMPETITIVE PRICES NOW AVAILABLE FROM YOUR LOCAL BRANCH!

Trupart is always extending its range of products to make sure that it has a fully comprehensive range on offer at all times. We regularly add additional part numbers to our already extensive range.



#### **Fast Facts**

- Klarius has components available to fit 28 million vehicles on UK roads
- Every applicable Klarius component is type-approved
- Klarius supplies parts for automotive manufacturer OES programmes
- All Klarius parts are tested in-house at its dedicated R&D facility
- Klarius offers exhausts to fit complex hybrid vehicles

# **Avoid mounting troubles**

Many people underappreciate the importance of exhaust mountings. However, garage technicians aren't among them - especially those who have had to conduct a problematic exhaust repair. For this reason, Klarius Products offers mountings for every system in its range of 11,000 applications, ensuring that mechanics can carry out a straightforward, long-lasting exhaust repair.

#### Why mountings matter

The integrity of an exhaust system is tied to the quality of its mountings. In fact, failed mountings, usually signposted by some truly awful banging underneath the car, are among the most common of exhaust issues.

Whether rubber, composite or metal – mountings keep the exhaust in position and ensure an optimum fit. Without them, mechanical stresses and environmental conditions out on the roads will cause premature failure. Furthermore, a poorly fitted exhaust can lead to excessive noise, emissions and backpressure.

- Mountings ensure exhaust integrity
- · Mountings are essential for proper exhaust fitment
- · Poorly fitted exhausts negatively affect noise, emissions and backpressure

#### When mountings go wrong

As a garage professional, you want every repair job to be completed quickly and to a high-quality standard. This includes exhaust repairs.

However, not having the right exhaust mountings for a vehicle on the ramp causes problems. In many cases, costly and time-consuming improvised modifications will be required to get the exhaust to fit. With customer cars coming thick and fast, this is the last thing you want to have to be thinking about. Furthermore, the exhaust won't fit as well as the original, reducing service life, compromising vehicle performance and risking customer satisfaction.

- · Improper mountings lead to time consuming and costly modifications
- Poor mountings mean a poor fit
- Exhausts with the wrong mountings offer a reduced service life

#### The golden rules of mountings

Klarius recommends that every technician repairing an exhaust should install new mountings too. Reusing perished, damaged or weathered components will mean that the exhaust will fail prematurely. Nobody wants to hear that gut wrenching knocking so soon after an exhaust repair.

When specifying mountings, it's key to get the right design for the corresponding make, model and production year of the vehicle. This will avoid any headache inducing modifications to the underside of the car, saving you time and trouble.

- · A new exhaust should always be ordered with new mountings
- Specify mountings for corresponding vehicle make, model and production year
- · Correct mountings deliver a quick and quality repair

#### Go with the experts

Klarius offers the largest range of exhausts available in the UK, and because of this, the biggest selection of mountings too. Exhausts and mountings are developed on vehicles of correct make, model and production year to ensure they offer an optimum fit and a straightforward repair.

As a result, Klarius offers a Fit First Time guarantee across its entire range. When ordering a Klarius exhaust with mountings, you can be sure that you will avoid any mounting troubles at your garage.

- Bespoke mountings available for over 11,000 applications
- · Tested on vehicles of correct make, model and production year
- Fit First Time guarantee available across the range



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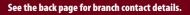
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Find out more about WIX Filters www.wixeurope.com facebook.com/wixeurope





Please note: All offers end 31 DECEMBER 2022 and are subject to availability. All prices exclude VAT.

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