



YMF Car Parts

www.ymfcarparts.co.uk

SMART CHOICE

ISSUE 77 • MAY - JUL 2025

THE SMART CHOICE FOR TODAY'S TECHNICIAN!



IN THIS ISSUE

THE REVOLUTION IN ENGINE OIL FILTRATION



HAVE YOU SIGNED UP FOR MY COMMA YET? SEE INSIDE FOR MORE DETAILS



THE IMPORTANCE OF USING THE RIGHT AC OIL



YMF CAR PARTS TRADE EVENT

Thursday 8th May, 5.30pm – 8.30pm

York College, Sim Balk Lane, Bishopthorpe, York, YO23 2BB

Come and meet the suppliers and get the latest updates and developments in parts, garage equipment, tools, and diagnostics.

- Live demonstrations on the night
- Free bar and food
- Over 80 prizes to be won on our Spin The Wheel competition
- Free T-Shirt & Goodie Bag
- Special deals on all tools and equipment ordered at the show

OVER 80 PRIZES
to be won!

IFA **ad**
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CALL YOUR LOCAL YMF BRANCH TODAY

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THIRSK
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YORK - LAYERTHORPE
Tel: 01904 628828

YORK - POPPLETON
Tel: 01904 917280



25.261.00 THE REVOLUTION IN ENGINE OIL FILTRATION

The UFI oil filter for Hyundai and Kia applications features a plastic body and a **compact size** that help **reduce the engine's weight and fuel consumption**.

It is composed of a **cartridge made from eco-friendly and recyclable materials** and is equipped with a **bypass valve**, a **drain plug** for service operations, and an **oil pressure and temperature sensor**. It has a filtration efficiency of **99% for particles up to 38 micron according to ISO 4548-12**. The spare part is available in aftermarket catalogue with code 25.261.00.

99% FILTRATION EFFICIENCY
for particles up to 38 µm
according to ISO 4548-12



CARTRIDGE CODE

25.261.00

MAIN APPLICATIONS

HYUNDAI i20 1.6 T-GDi N 11/20 ›
HYUNDAI Tucson III 1.6 T-GDi 05/21 ›
HYUNDAI Tucson III Full Hybrid and Mild Hybrid 1.6 T-GDi 11/20 ›
HYUNDAI Tucson III Plug-in Hybrid 1.6 T-GDi 05/21 ›
KIA Sportage V 1.6 T-GDi 09/21 ›
KIA Sportage V Full Hybrid, Mild Hybrid and Plug-in Hybrid 1.6 T-GDi 11/21 ›
KIA Sportage V 1.6 LPG 01/23 ›

PLUS

- + 100% environment-friendly:
made of recyclable materials
- + Filtering media in **FORMULA UFI CELL**

UFI FILTERS CONFIRMS LEADERSHIP IN FILTRATION SYSTEMS FOR FORMULA 1, SUPPLYING 10 OUT OF 10 TEAMS

UFI Filters has cemented its position as a top producer of filtration systems by supplying **ten of the ten teams competing in the 2025 Formula 1 season**.

The announcement is a prestigious recognition of the technologies developed by the High-Tech Division of UFI Filters, founded in 1999.

In Formula 1, UFI Filters does not limit itself to providing teams with oil, air and petrol filters. The complexity of today's racing cars also demands up to fifteen filter elements in a car. In total, UFI produces around 8,000 such F1 filters annually.

For Formula 1, **each filter is tailor-made** for the needs of the different teams, with **customised solutions provided in terms of size and materials used**. Their design requirements are the result of a co-design process between technicians in UFI Filters' High-Tech Division and the individual racing teams.



Is there a difference between OE and aftermarket brake pads?

Last year, we featured an important interview with Ferodo about the traceability of their braking products, focusing on the difference between aftermarket brake pads and OE. The answer? It's well worth reiterating. Identifying a Ferodo pad is straightforward, highlighting an important fact: there is no difference because they come from the same production plant. Simply put, when you fit Ferodo, you're fitting the same product as the VMs, no difference, no compromise on quality, and most importantly, no comebacks.

Here's a recap of the discussion for those who missed it the first time or want a refresher.



For most brake pad manufacturers, the short answer is yes. Many friction product producers lack OE production knowledge and focus exclusively on aftermarket specifications. Ferodo, however, stands apart with a strong OE pedigree. In fact, one in four vehicles leaving the factory today—totalling 25 million a year—are fitted with Ferodo brake pads. That's a staggering statistic!

Ferodo supplies OE brake pads for a wide range of vehicle manufacturers, including Alfa Romeo, Audi, Bentley, BMW, Chrysler, Citroën, Dacia, Fiat, Ford, GM, Hyundai, Isuzu, Jaguar, Lamborghini, Lancia, Land Rover, LDV, Maserati, Mazda, Mercedes-Benz, Mini, Mitsubishi, Nissan, Opel,

Peugeot, Renault, Seat, Skoda, Smart, Tesla, Toyota, Volkswagen, and Volvo.

With Ferodo, you get a top-level friction product that guarantees longer pad life, reduced noise, and minimal brake dust—benefits that cannot always be assured when opting for generic aftermarket braking parts.

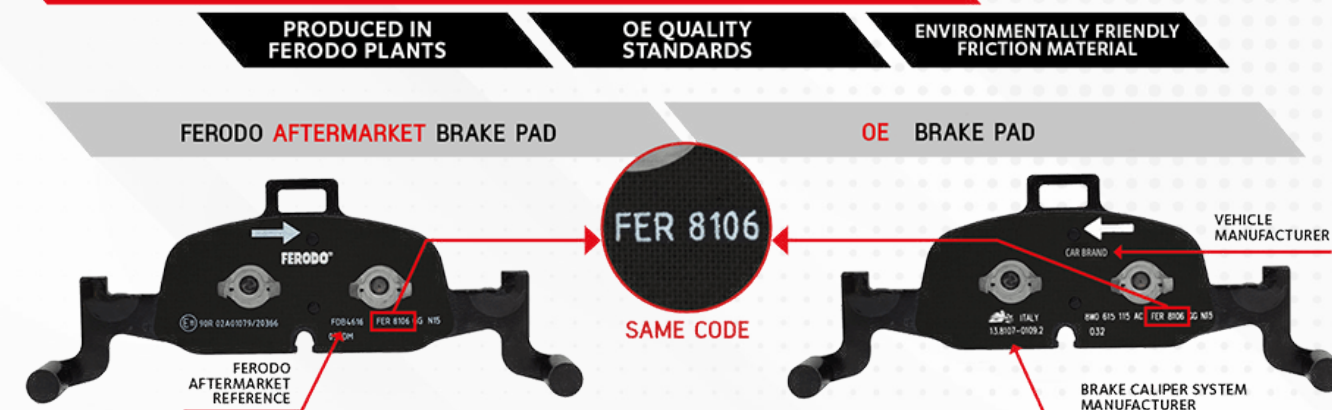
Are aftermarket Ferodo pads the same as OE? Yes. Whether certified Original Equipment or aftermarket brake pads, every Ferodo friction product goes through the same high-end production lines and is manufactured to the same rigorous engineering standards. This quality assurance offers peace of mind for a

workshop replacing brake pads on a customer's vehicle.

All Ferodo brake pads come with the OE Original Quality label. With 14 production facilities worldwide, producing over 40 million brake pad pieces each year, choosing Ferodo as a braking supply partner ensures you're covered.

Our Top Tip: Ensuring you're fitting an official Ferodo brake pad. To verify the authenticity of a Ferodo brake pad, read the unique Ferodo formula code on any aftermarket or OEM pad. Use the official Ferodo Friction Formula Trace Chart to validate your brake pads instantly.

FERODO FRICTION FORMULA TRACE CHART



Stellantis Engine Reliability Issues and New Oil Specifications

Since the introduction of the Stellantis Group's EB2 and DV5R engine types, reliability concerns have plagued various Peugeot, Citroen and Vauxhall models, with many instances of premature engine failure. To address these issues, Stellantis has revised its recommended engine oil specifications multiple times. These frequent changes have led to widespread confusion among vehicle owners and mechanics, making it difficult to determine the correct oil for affected vehicles.

As of September 2024, the Stellantis group have simplified their recommendations with most engine codes now requiring an oil meeting FPW9.55535-03 5W/30 specification and viscosity.

From October 21, 2024, this oil must be used in vehicles fitted with EB2 Turbo GEN 1, GEN 2, DV5R, DW12RU engine types with the following engine codes:

EB2DT 81KW	EB2ADTS_I UE63	EB2ADTD UE64	EB2ADTS_I UE64	EB2ADTX/EU63	DV5RUC
EB2DTS 96KW	EB2ADTD_I UE63	EB2ADT 81KW	EB2ADTS UE64	EB2ADTD_B	DV5RUC D
EB2DTS 81KW	EB2ADT_I UE64	EB2ADTS 96KW	EB2ADTD/EU63	EB2ADT/EU62V	DV5RE
EB2DTS M 96KW	EB2ADT UE64	EB2ADTXM	EB2ADTMD	EB2ADTS+	DW12RUC
EB2DT M 81KW	EB2ADTD_B UE64	EB2ADTSM 96KW	EB2ADT/EU63	DV5RC	DW12RUD
EB2ADT_I UE63	EB2ADTD_I UE64	EB2ADTM 81KW	EB2ADTS/EU63 1200	DV5RD	DW12RUE

The required engine oil contains specific additives to protect these engine types against wear on the moving parts especially the pistons, piston ring and cylinder block linings and effectively control soot build up and deposits.

FS-ST 5W/30

Recommended for:

- **ACEA:** C3
- **API:** SN Plus & SP
- **GM:** Dexos™ 2
- **MB:** 229.31, 229.51 & 229.52
- **PSA:** B71 2290 (<2017)
- **Stellantis:** FPW9.55535/03

FS-PC 0W/20

Recommended for:

- **ACEA:** C5
- **API:** SP
- **Fiat:** 9.55535-DM1
- **PSA:** B71 2010

FS-PX 0W/30

Recommended for:

- **ACEA:** C2
- **PSA:** B71 2312



Key benefits of the FPW9.55535-03 5W/30 specification:

- ✓ **Improved Wear Protection**
Reduces friction and extends engine component lifespan.
- ✓ **Enhanced Deposit Control**
Minimises soot accumulation, which can lead to engine performance issues.
- ✓ **Optimized Performance**
Maintains engine efficiency and longevity under various operating conditions.

Invented for life

Bosch wipers under test

At Bosch, the test engineers push the limits of what is possible in the pursuit of visibility and safety. In various durability tests, Bosch wipers must prove their performance. To ensure this, Bosch has many strict quality tests in addition to the prescribed standard tests required for acceptance into the program. These tests are divided into four categories: wiping performance, environmental influences, load tests, and durability.



Above: Strict performance and load tests for optimal function

1. Wiping performance on the test bench

To ensure optimal wiping performance, the wipers undergo four testing scenarios: wiping quality, acoustics, high-speed contact, and durability. During development, wipers are tested on a windshield in the laboratory, focusing on streaks, smears, water residues, and marks. Only when test requirements are met and the wiping pattern is flawless are the wiper rubber or blades approved for production. An acoustic laboratory tests the wiper system to reduce squeaks and noise, enhancing customer comfort. Wind tunnel and test track evaluations ensure wipers maintain contact at high speeds, verifying their effectiveness during fast driving.

2. Resistance to environmental influences

The wipers must withstand extreme

weather, including prolonged UV exposure and high temperatures, without cracking or deforming. Salt spray tests evaluate corrosion resistance, while temperature cycling tests assess resilience from low to high temperatures. Successful tests show no cracks, deformations, or significant wiping quality loss.

3. Load test at the limit

In wintry conditions, wipers face intense stress. Bosch conducts load tests, including freezing at -20°C and snow load assessments, to ensure winter suitability. Endurance tests simulate 500,000 wiping cycles to verify durability, while the mechanical robustness of components is evaluated in specialised tests.

4. Increased resistance

The fourth and final testing category focuses on the wipers' resistance. They are exposed to

various aggressive chemicals, and afterwards, the test results are analysed under a microscope to determine if any traces of the substances remain. Bosch experts evaluate all test results according to strict quality standards and continuously improve Bosch wipers. Ensuring high-quality standards of Bosch wipers are met.

5 things you can rely on with Bosch wipers:

- #1 outstanding wiping performance
- #2 quiet wiping
- #3 increased service life
- #4 easy installation
- #5 safety in all weather conditions



For even more Bosch wiper know-how: Simply scan the QR-Code.

Bracket for Camshaft 171970, 172004

To Fit: Various Volkswagen,
Audi, SEAT and Skoda
models

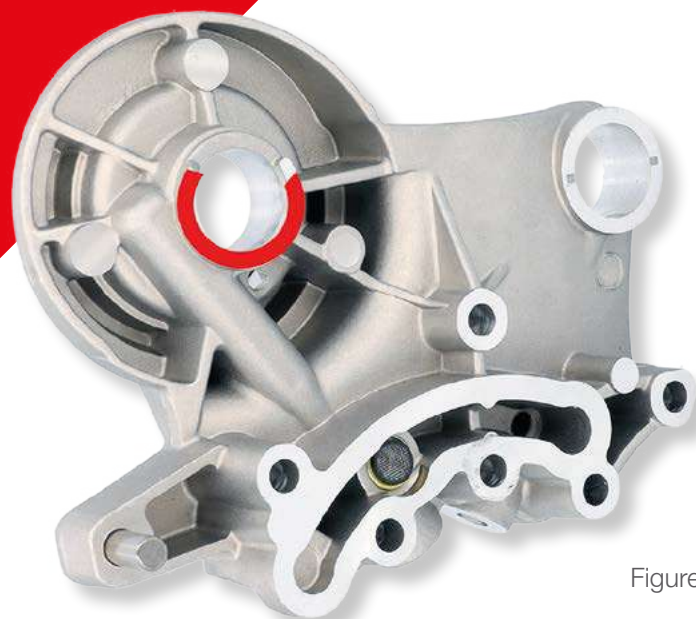


Figure 1 - Thrust Surface

Problem

The engine-cranking time before starting is extended, and/or there is a 'rattling' noise from the engine area. The engine management fault lamp is illuminated and/or the engine is not starting.

The following fault codes may be stored:

- P0016 Camshaft timing advance (Bank 1) target value not attained.
- Other fault codes can also be stored at the same time.

Cause

Elongation of the timing chain. Failure of the oil non-return valve for the camshaft timing control. However, on some 2016 and 2017 model year vehicles equipped with the 2.0 TFSI engine with engine codes CPMB, CAED or CCTA, fault code P0016 may be set due to a worn intake side and camshaft bearing bridge thrust surface.

Solution

If the following fault code is stored in the engine control module memory: 'P0016 Camshaft timing advance (Bank 1) target value not attained',

proceed as follows:

- Measure the 'end play' of the intake camshaft.
- If the 'end play' of the intake camshaft is less than 0.2mm, it is within the manufacturer's tolerances. The cause of the fault code could be excessive elongation of the timing chain or failure of the oil non-return valve for the camshaft timing control, which will require further investigation before proceeding.
- If the 'end play' of the intake camshaft is greater than 0.2mm, replace the camshaft bearing bridge with the improved febi part 171970 or 172004 which has a 50% larger thrust surface area than the original. (Fig.1) This matches the OE part 06H 103 144K which was brought into vehicle production in October 2017.
- It is also recommended that the engine oil and filter are replaced as part of this repair.

Rely on tested OE matching quality replacement parts from febi. The entire range of febiPLUS parts can be found at: partsfinder.bilsteingroup.com.

Ball Joint Production and Structure

Guiding you through every
twist and turn in the road



Figure 1 - Ball Joint

The ball joint is a critically important part of the suspension system, connecting the steering and suspension components to the road wheels. The spherical ball pin and socket design of the ball joint enables the suspension to travel up and down as the road surface conditions continually change, as the vehicle is driven through the twists and turns of the road. It allows for smooth movement as the vehicle navigates varying road conditions. febi ball joints are manufactured using high-quality materials, meeting OE standards to ensure optimal performance, durability, and precise wheel alignment. This helps reduce suspension noise and enhances overall chassis handling.

Protective rubber boot

The Chlorophene rubber boot is important, because it protects the ball joint against moisture, road debris and is resistant to heat, oil and weathering from the direct effects of sunlight. It seals the joint at any angle, ensuring durability and longevity.

Clamping rings

Spring steel clamping rings secure the rubber boot, supporting both static and dynamic sealing of the ball pin.

Casting/housing

The ball joint housing is designed to meet specific load and function requirements, either bolted or riveted to the control arm, or pressed and secured with a retaining ring, as in built-in ball joints used in forged and cast control arms and links.

Ball pin

febi ball pins are made to OE specifications, using light alloy steel for increased wear resistance, surface hardness and durability. This ensures a stronger, safer ball joint that improves vehicle agility, stability and driving dynamics while meeting the necessary load demands for driver and passenger safety.

Acetal bearing

Polyoxymethylene (POM) is an engineering thermoplastic used in precision steering and suspension parts, offering high stiffness, low friction, and excellent dimensional stability for smooth axial movement.

Steel cap

The steel cap, resistant to impact and corrosion, is sealed in place through a rolling process, protecting the internal components of the ball joint.

High performance grease

febi's grease is specially designed for ball joints, using semi-synthetic oil thickened with polyurea. It's free of heavy metals and solid lubricants, with additives that improve adhesion to steel and plastic, enhancing the damping effect between friction surfaces.

Trust febi for OE-quality steering and suspension parts. Explore the full range at: partsfinder.bilsteingroup.com

Have you signed up to myComma yet?

For 60 years, Comma has been a trusted partner to workshops and mechanics, delivering high-performance lubricants, expert knowledge, and the right tools to keep vehicles moving. As the industry evolves, we continue to invest in the trade, helping both workshop owners and mechanics stay ahead with high quality products and technical support.

Now, with myComma, we're offering even more. Workshop owners can unlock exclusive rewards and offers, while mechanics gain access to the free MOT data tools and exclusive training modules, all designed to support your success on the job.

Join myComma today and take advantage of everything Comma has to offer.



COMMA®

60 YEARS

made for mechanics



EuroFlo

ULTRA PREMIUM EMISSION SYSTEMS



THE IMPORTANCE OF QUALITY - AT EVERY STAGE OF THE PRODUCTION PROCESS

EuroFlo: Ultra Premium Emission Systems

At EuroFlo, our mission is simple-deliver the most powerful and reliable emissions program on the market. Every aspect of our exhaust systems is designed to meet and exceed industry expectations, ensuring superior performance, durability, and efficiency.

Premium-Grade Materials for Unmatched Durability

Despite soaring raw material costs, EuroFlo remains committed to using only the highest-quality materials. Our silencers are crafted with fully aluminised components, featuring:

- Double-layer 0.6mm steel for silencer bodies
- 1.5mm steel for baffles
- 1.5mm or 2.0mm steel for pipes

Unlike conventional designs, our silencers incorporate unique sound absorption chambers with mechanically assembled interiors with no welding - ensuring long-lasting, reliable performance.

OEM-Level Performance & Engineering

Every EuroFlo exhaust system is meticulously reverse-engineered from original equipment (OE) to deliver an exact match in back-pressure and noise output. This guarantees a performance standard that rivals, if not exceeds, OE quality.

Leak Testing for Maximum Efficiency

Silencers are among the most complex components in exhaust manufacturing. To uphold our exceptional quality standards, we conduct rigorous leak testing at multiple production stages. This ensures:

- Optimal engine performance
- No fuel or oxygen loss
- Maximum power output
- Reduced fuel consumption
- Lower emissions

'Bullet-Proof' Jigs for Precision Fitment

Our advanced, heavy-duty jigs are a core element of EuroFlo's manufacturing excellence. Designed



to maintain intricate geometric specifications, they prevent thermal deformation by strategically placing fixation devices like pins, levers, clamps, and stoppers. The result? Precision fitment, every time.

Robot Welding for Unrivalled Consistency

Precision matters. Our state-of-the-art robot welders guarantee uniform, high-

quality welds with minimal splash and zero porosity, ensuring the structural integrity of every exhaust component.



Why Choose EuroFlo?

- Ultra-premium quality
- Industry-leading 3-year, no-quibble warranty
- Unbeatable competitiveness
- Rapid development at least 15 new references per month
- Extensive range & outstanding availability
- Accurate, industry-leading cataloguing

EuroFlo's precision engineering in manufacturing allows us to set incredibly high standards, and means that we can confidently offer our industry leading 3 year, no quibble warranty across our entire exhaust range.

Delivery and Availability

As a distributor of EuroFlo products, our branches have instant same-day access and availability from their regional warehouses. This means that the chances of even the most exotic or unusual vehicle clogging up your ramp while waiting for a EuroFlo emissions component are extremely low. After all - Time is money!



For more information on EuroFlo's full range
Please visit www.euroflo.co.uk or contact your local branch



Oil is Oil, Right...?

One of the key ingredients to a well functioning AC system is having the right lubricant in place.

Oil is as important as refrigerant in an AC system. The refrigerant is subjected to extreme pressure changes which generates heat. The oil absorbs the heat and keeps the AC components lubricated.

With a number of companies marketing "universal" oils you could be forgiven in thinking you can use just the one oil in every vehicle, this is NOT the case. The only thing universal about a universal oil is the risk it poses to the vehicle it is used in.

Similar to a vehicle's engine, there isn't one type of engine oil that is safe to use in every vehicle. It is vital that the correct oil is used, using the wrong type, viscosity grade or amount of oil in a car engine will only end badly. The same rule applies to the AC system.

In this feature we will go through the different types of oils available and the failures you can expect to see if the wrong type of oil is used.

PAG (Polyethylene Glycol) oil

PAG oil is a synthetic oil that is available in several different viscosities. PAG 46 which is the most common. PAG 68, PAG 100, PAG125 & PAG 150 are also available. The PAG oil viscosity used in each vehicle is determined by the manufacturer.

POE/ESTER oil

Ester oil is also a synthetic oil, typically used in systems that have been retro fitted. Ester oil provides excellent performance in both High and Low temperature environments, it reduces friction, prevents wear and acts as a seal between the High and Low pressure sides. This oil is safe to use in Hybrid vehicles.

MRL85 (POE based)

MRL85 was once marketed as the "one for all" AC oil, this is

not true or so it seems with new information being presented by manufacturers. This oil is safe to use in HYBRID & Electric Vehicles and is ideal for vehicles whose manufacturers recommend a POE type compressor oil. It can be used in both R134a & R1234yf, however it is better suited for the R1234yf systems.

HFO-PAG46e & HFO-PAG100e

These types of oil have recently become available on the market. Like the MRL85, this type of oil can be used in HYBRIDS & PLUG-IN-EVs when the vehicle manufacture specifies the use of a PAG based lubricant. These have been manufactured with low hygroscopic properties to minimise moisture ingress and retention. It can be used in both R134a & R1234yf.

PAG and POE oil must never be mixed. They will separate when the system is not in use and when switched back on the separated oil will not properly lubricate the internal pistons/scrolls of the compressor, causing abnormal wear and eventual seizure of the unit. The compressor is operated by the same drive belt as the remainder of the engine, which may cause the belt to lock and your engine to seize. If this happens whilst driving you will no longer have any power steering or brake boosters to easily stop your vehicle.

All OE compressor manufacturers highlight the use of the correct oil, if a mix of oils has been found in any warranty inspection regarding a compressor, most will automatically reject the claim due to incorrect fitting of the unit.

To safeguard against any possible future issues, you must identify which type and grade of oil is recommended by the vehicles manufacturer and ensure only that oil, in the correct quantities, is used.



TOP 20 SELLING CONSUMABLES

PART NO: 41-0002A



DESCRIPTION:
LEAK STOP
ELKE R134A

PART NO: 41-1020A



DESCRIPTION:
1 LTR PAG OIL ISO 46
SPIO R134A

PART NO: 41-1020



DESCRIPTION:
250ML PAG OIL ISO 46
SPIO R134A

PART NO: 42-0018



DESCRIPTION:
250MLUV DYE R134A/
R1234YF/HYBRID

PART NO: 41-0002B



DESCRIPTION:
LEAK STOP
ELKE 1234YF

PART NO: 41-1020B



DESCRIPTION:
PAG 46 C/W DYE
1 LTR R134A

PART NO: 42-0022



DESCRIPTION:
UNIVL 1L PAG OIL 68 R134A
& 1234YF

PART NO: 43-AAG0357



DESCRIPTION:
O RING KIT
UNIVERSAL

PART NO: 41-1132



DESCRIPTION:
1/4 X 16MM
HI SIDE Adapter

PART NO: 41-1130



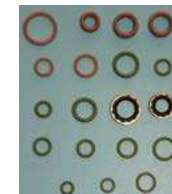
DESCRIPTION:
1/4 X 13MM
LO SIDE Adapter

PART NO: 41-1025



DESCRIPTION:
PAG46 ND12 COMP
250ML 1234YF

PART NO: 16-COND



DESCRIPTION:
COND
O RING KIT

PART NO: 14-COMP



DESCRIPTION:
COMP
O RING KIT

PART NO: 41-1029



DESCRIPTION:
POE 85 UNI OIL 250ML
1234YF, HYBRID, R134A

PART NO: 41-50015A



DESCRIPTION:
FLUSHING FLUID
FLAMMABLE

PART NO: 41-1009A



DESCRIPTION:
VALVE CORE KIT
76PCS

PART NO: 43-0358



DESCRIPTION:
DOUBLE
O RING KIT

PART NO: 41-5374



DESCRIPTION:
CAP KIT
R134A

PART NO: 41-4168



DESCRIPTION:
VALVE CAP & SHRADER
VALVE 1234YF

PART NO: 41-1117



DESCRIPTION:
BUBBLE
LEAK

TOP 10 SELLING COMPRESSORS

PART	DESCRIPTION
14-9698P	GOLF SANDEN
14-1309P	CITROEN/PEUGEOT
14-7479P	ASTRA COMP
14-9731P	RENAULT COMP
14-0128P	FORD RANGER 3.2D COM
14-1274P	DENSO AUDI COMP
14-9721P	AUDI A6 COMP PATTERN
14-9698	VW GOLF SANDEN/DENSO
14-1126P	VW COMP
14-9774P	HYUNDAI I10 COMP 1.2



TOP 10 SELLING CONDENSORS

PART	DESCRIPTION
16-9817	NISSAN QUASHQAI 2013
16-1058	VW GOLF COND/AUDI A3
16-9127	FORD FOCUS/C MAX 14-
16-1054	AUDI/GOLF COND 04> C
16-9007	SEAT IBIZA COND
16-8917	BMW MINI COOPER COND
16-9948	BMW 3 COND
16-9972	FORD FOCUS COND
16-9928	CIT C4 PICCASO COND
16-1985	NISSAN JUKE 1.6 DIG





NATIONAL



There's only one choice The right choice

Climate change is all around us, its impact is undeniable, and now more than ever, the automotive industry is under pressure to reduce its environmental footprint. As vehicle technicians, you play a crucial role in ensuring that climate-control systems are maintained efficiently while minimising harm to the planet.

Many drivers may not realise that their air-conditioning system contributes to emissions, but as professionals, you understand the impact of refrigerants. Over the past decade, the industry has transitioned to Solstice® 1234yf refrigerant, which is now standard in all new European cars, more than 100 million vehicles and counting, with over 180 million globally. This has replaced the outdated R-134a, significantly reducing global warming potential (GWP) by over 350 times.

GWP measures how much heat a greenhouse gas traps in the atmosphere over a specific period, compared to carbon dioxide (CO₂), which has a GWP of 1. The lower the GWP, the less a refrigerant

impacts climate change. However, servicing older vehicles still requires handling R-134a, which remains in circulation. It's essential to ensure the correct containment and responsible disposal. Fortunately, lower-GWP alternatives, such as R-32 and R-454B, are now available and being introduced across the industry. These refrigerants offer significantly lower GWP values than previous generations, aligning with global efforts to reduce environmental impact. Additionally, new regulations in 2025 will further limit the use of high-GWP hydrofluorocarbons (HFCs), pushing the industry toward more sustainable solutions.

As a technician, your expertise ensures that climate-control systems function optimally without unnecessarily contributing to climate change. By staying informed and adopting best practices, you help drive the industry towards a greener future.

Don't let vehicle climate control compromise the planet's climate control.

www.nationalref.com

Nissens
DELIVERING THE DIFFERENCE

The combination of Nissens Automotive and AVA provides workshops with the complete air conditioning system service solution

Although motorists often don't think of their air conditioning (AC) until the first hot day in spring, workshops need to be much more proactive and have the system on their 'to do' list, while there is still a chill in the air.



satisfaction through the optimum performance of the AC system.

Alongside Nissens Automotive, AVA provides workshops with 'The Clever Choice', as its replacement components are designed and manufactured to provide a reliable solution, which combines performance and value, to fulfil the needs of the older car parc.

AVA's AC range comprises more than 3,150 references, which correspond to 16,375 original equipment part numbers, precisely reflecting the applications in use and maximising sales potential for its customers. Honing this offering, alongside its optimised range, AVA recognises that workshops need solutions that provide them with quality, convenience, and reliability, which is why it has now developed the Clever Fit Concept, a product range designed for top performance, ease of installation, and maximum efficiency. Everything that's required for a quick, hassle-free installation – O-rings, clips, and washers – are all neatly packaged in the box.

Details of the complete Nissens Automotive AC range can be found by visiting: nissens.com/climate with the AVA programme accessible via: ava-cooling.com

Today, rather than simply looking at the AC as the system that keeps the interior cool and the occupants comfortable, the reality is that it is now integral to the thermal management of the entire vehicle.

Technology is shifting to the point where the energy created in the AC system, whether it is cooling or heating, is now also being utilised elsewhere in the vehicle to increase performance, range and efficiency of the engine or battery pack.

Therefore, the annual service and maintenance of the AC system must become a necessity, because if it does not work, or is underperforming, it is not now just a comfort issue, but will have significant repercussions and at best reduce the efficiency of the vehicle's other systems, or at worst cause it to breakdown.

With this reality in focus, the opportunities for workshops are obvious, but so too is the need for a reliable AC partner, which is where Nissens Automotive, a veteran in the field of thermal management systems, steps in with its comprehensive replacement parts programme and considerable expertise.

The Nissens range of AC system parts is known as one of the most complete

solutions for the independent sector and has been designed to suit a variety of segments, from passenger cars to heavy-duty vehicles, and cover all types of drivetrains. With nine main product lines and more than 4,000 parts, catering for 16,000 plus reference numbers, it provides for up to 93% of EU car parc coverage in some lines.

This allows workshops to supply their customers with premium quality components for most European vehicles, manufactured to Genuine Nissens Quality standards, which ensures they are both reliable and easy to install. The purpose behind developing such an advanced range is to streamline the repair process and ultimately boost the owner's





Don't let GDi carbon buildup become a big issue!

Leading remanufacturer and fuel systems specialist, Carwood, gives advice on how to deal with carbon build-up on GDi engines - an old service issue that can rob drivers of performance and challenge even experienced technicians.



In a traditional multi-point or port fuel injection engine, fuel is injected into the intake port of each cylinder, where it washes over and cleans the intake valves. In a gasoline direct injection or GDi engine, however, the fuel is injected at high pressure directly into the combustion chamber of each cylinder, bypassing the valves. Subsequently, small amounts of dirt, carbon and other particles from the air intake and crankcase ventilation system can build up and burn onto the intake wall, which over time, leads to carbon deposits on the valves, cylinder head inlet ports and injectors.

What to look out for:

The effects of carbon buildup are gradual, and often subtle to start, so keep an eye out for:

- Reduced acceleration/power
- Rough idle/hard engine starts at cold
- Engine misfires
- Excessive engine ping on acceleration
- Lower fuel economy
- Black exhaust smoke under hard acceleration
- Cylinder misfire fault codes from one or more cylinders

- Check engine light
- Faulty sensors from fouling

How to diagnose carbon buildup:

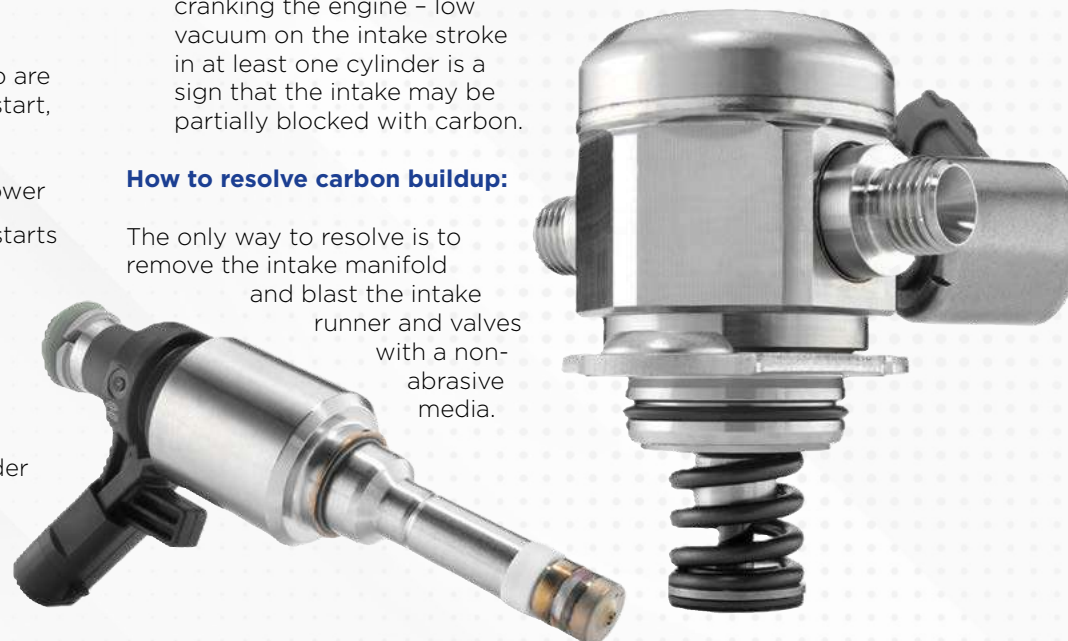
- Use a diagnostic scan tool to check for random and single cylinder misfire or cylinder disabled codes.
- Remove the intake manifold and inspect the cylinder head intake runners for carbon deposits on the walls and back of the valves. Check the injectors too.
- Connect a pressure transducer to the intake manifold whilst cranking the engine - low vacuum on the intake stroke in at least one cylinder is a sign that the intake may be partially blocked with carbon.

How to resolve carbon buildup:

The only way to resolve is to remove the intake manifold and blast the intake runner and valves with a non-abrasive media.

Technicians should also remove the injectors and perform off-vehicle diagnostic tests and cleaning, on a GDi bench. Carwood has invested in this capability and can offer professional injector diagnostics and servicing at a competitive price. It also offers a full range of Bosch OE GDi pumps and injectors, and expert technical support, if parts need replacing.

So don't let carbon buildup become a big issue! With OE parts, solutions and know-how, Carwood can help you keep it under control. And take advantage of this lucrative service opportunity.



BECKERMANN



AIRFLOW MASTERED

Precision. Performance. Perfection.

Beckermann Mass Air Flow Sensors are engineered to exacting Original Equipment standards, ensuring uncompromising accuracy and reliability. Every unit is meticulously crafted to perform within the vehicle manufacturer's parameters, delivering precise air flow readings to the ECU.

The result? Optimised combustion. Peak engine performance. Absolute efficiency.

And for complete peace of mind, every Beckermann Mass Air Flow Sensor is backed by a 5-year warranty, a testament to our unwavering commitment to quality and longevity.

When every detail matters, trust in Beckermann, where precision sense and control meets automotive excellence and value.



All Beckermann Mass Air Flow Sensors are tested and guaranteed to perform to the vehicle manufacturer's original parameters.

MASS AIR FLOW SENSORS (MAFS) FITTING TIPS

It is highly recommended to change the air filter before replacing the MAFS.

Most units have an arrow on the outer case to indicate the correct direction of air flow through the MAFS to the engine. Ensure the arrow points in the correct direction when mounting.

In most cases the ECU does not have to be manually reset but it may take up to 60 miles for the ECU to recalibrate and reset the error code. If a manual reset is required please follow manufacturer's instructions.

TECHASSIST  01675 437 429



beckermann.co.uk



SMART PARTS

Don't Dial the Dealer – Call us First!

In today's fast-paced workshops, getting the right parts quickly is essential. Too often, our customers instinctively call the dealer, assuming certain components are only available through them.

That's why we created Smart Parts to show you that we're your go-to source for a wide range of parts you may have thought were dealer-exclusive. From engine components and steering parts to braking systems and electronics, we stock everything you need to keep vehicles on the road, at highly competitive prices.

THE A TO Z OF KEEPING YOU COVERED

You'll be amazed at the range of parts we stock for Audi & VW, BMW & Mini, Fiat, Ford, Mercedes, Nissan, PSA Group, Renault, Vauxhall, and a whole host more.....

- ABS Rings
- AdBlue Injectors
- Air Charger Hoses
- Airbag Clock Springs
- Anti-Roll Bar Bushes
- Bonnet Release Cables
- Boost Pressure Sensors
- Brake Cable Clips
- Brake Pedal Rubbers
- Brake Pipe Clips
- Brake Vacuum Pumps
- Clutch Forks
- Clutch Forks & Bushes
- Clutch Forks with Pins
- Clutch Guide Bushes
- Clutch Master Cylinders
- Clutch Slave Cylinder Adaptors
- Cooling Flanges
- Door Entry Switches
- Door Locks
- Door Handle Hinges
- Door Handles
- Doughnut Couplings
- DPF Fuel Injectors
- DPF Regeneration Fluid
- Drop Arms & Repair Kits
- EGR Valve Hose Kits
- Engine Mountings
- Expansion Caps
- Expansion Tanks & Sensors
- Flasher Units
- Fuel Filter Housing Covers
- Fuel Filter Housings
- Fuel Hoses
- Fuel Overflow Pipes
- Fuel Pressure Regulators
- Fuel Pressure Valves
- Gear Cable Clamps
- Gear Lever Clips
- Gear Lever Linkages
- Gear Linkage Repair Kits
- Gearbox Mountings
- Glow Plug Control Units
- Haldex Transmission Filter Kits
- Hand Brake Cable Guides
- Hand Brake Switches
- Hazard Light Switches
- Headlamp Switches
- Heater Hoses
- Heater Resistor Wiring Looms
- Heater Resistors
- Ignition Coil Repair Kits
- Ignition Switches
- Intake Manifolds
- Lower Steering Columns
- Modified Breather Kits
- Nox Sensors
- Oil Filler Caps
- Oil Filter Caps
- Oil Filter Housings
- Oil Pumps
- Particulate FAP Additive Pouches
- PAS Hoses
- PAS Unions
- PEF Additive Reservoirs
- PEF Reservoir Pump Repair Kits
- Power Steering Hoses
- Power Steering Pump Pulleys
- Propshaft Centre Bearings
- Propshaft Bearings
- Rear Axle Bushes
- Rear Bump Stops
- Rear Bush Kits
- Rear Diff Mounts
- Rear Mountings
- Rear Strut Mountings
- Rear Subframe Bushes
- Rear Trailing Arm Bushes
- Secondary Air Filter Housings
- Steering Column Switches
- Sump Plugs & Seals
- Swirl Flaps
- Tensioner Bearings
- Thermostats
- Thermostat Flanges
- Thermostat Housings
- Thermostat Housing Tops
- Thermostat Modules
- Thermostat Wiring Looms
- Timing Case Covers
- Top Mountings & Bearing Kits
- Top Strut Mountings & Bearings
- Trailing Arm Bushes
- Transmission Filter Housing Covers
- Transmission Mountings
- Vacuum Pump Gaskets
- Vacuum Pumps & Repair Kits
- Vitesco Injectors
- Washer Pump Wiring Harnesses
- Washer Pumps
- Water Flange Outlets
- Water Pump Connectors
- Wheel Bolts
- Wiper Linkages
- Wiper Linkage Clips
- Wishbone Bolt Kits
- Wishbone Bushes

By choosing our specialist range, you're not just saving money, you're getting top-quality parts, exceptional availability, and expert support.

So next time you need a part, skip the dealer and call us first! Visit your nearest branch or browse our full range online today.



Separator Assy
Part No: 624-0003
Application: Ford Transit Custom Ecoblue 16 >, Tourneo 15 >



AdBlue Injector
Part No: 484-0001
Application: PSA Berlingo, C3, C4, DS3, DS4, DS5, Jumper iV 2008, 208, 3008, 5008, 508, Expert, Partner, Rifter, Traveller



Secondary - Air Filter With Housing
Part No: 116-0002
Application: Ford Transit MK8 2.0 + 2.2 diesel



Hazard Switch
Part No: 555-0009
Application: Vauxhall Vivaro X82, Renault Traffic X82, Nissan NV300



Engine Mounting
Part No: 175-0056
Application: Ford Transit MK8 2.2 2014 > 2017, Transit Custom 2.2 2012 >



Front Wiper Motor & Linkage
Part No: 800-0113
Application: BMW X3 E83 2003-11



Universal Joint
Part No: 749-0024
Application: Mercedes Vito 03 >, Sprinter 06 >



Wiper Motor - Front
Part No: 800-0107
Application: Renault Megane III 2008 >



Fuel Filter Inc Housing
Part No: 375-0008
Application: Ford Focus MK3, Mondeo MK4, S-Max, Transit Connect 13> TDCi

Call your local branch today for all your specialist parts!

Smart Parts
Ask for a copy today!





Original Equipment Quality

Made to ISO and TUV standards

OE Specification Steel

Latest in OE-specification spring steel to ensure strength & integrity

Advanced Protection

Coatings protect against corrosion

Comprehensive Range

All popular modern vehicles

2 Year Warranty

Aftermarket Prices



CD Coil Springs

Demand for replacement coil spring repairs continues to accelerate in the face of poor quality road surfaces and ever higher costs, making clear the value of quality springs at affordable prices.

Made to ISO and TUV standards with the latest OE specification steel for OE matching quality, CD coil springs offer the confidence of a quality performing solution at market friendly prices.

Available in singles, CD recommend replacing coil springs in pairs. When any one spring fails, its axle partner will have travelled the same journey, experiencing millions of cycles that cause fatigue and diminish the springs strength and flexibility. The improved performance of a new spring on the axle only adds to the stresses of the already fatigued older spring.

Fitting quality coil springs can rightly

be considered safety critical, as they sit right at the heart of the suspension setup and play a vital role in the overall vehicle performance. As they support optimum handling, original ride height and balanced wheel contact with the road surface, matching pairs will likely appeal to customers - especially with CD's competitive pricing.

Quick, accurate parts identification with Autocat V9 certified data.

CD Shock Absorbers

The ups and downs of motoring on our poorly maintained roads is demanding more from suspension systems, and in a climate of increasing costs means the value of high quality shock absorbers, at appealing prices has never been so important. Manufactured to both ISO and TUV standards to achieve OE matching quality, CD Shock Absorbers offer the confidence of a quality performing solution at market friendly prices.

Working constantly to keep all wheels in optimum contact with the road, shock absorbers play a vital role in optimum vehicle performance. Considered safety critical parts, the fitting of a quality replacement pair brings a whole array of benefits to the end user. New, evenly matched shock absorbers contribute to a balanced return to the vehicles original ride height, with more fully responsive handling and cornering.

The improvement in tyre contact adds to the braking performance, as well as better fuel economy and more even tyre wear. When fitted in pairs, both shock absorbers work together with the same strengths and advantages. Replacing shock absorbers in pairs can certainly appeal to customers - especially with CD's competitive pricing. Quick and accurate parts identification with the latest Autocat V9 certified data.

Original equipment quality

Manufactured to ISO and TUV standards

Advanced Technology

Advanced Nitrogen gas-charged technology

Comprehensive range

All popular modern cars and light commercial vehicles

2 year warranty

Aftermarket prices



Original equipment quality

Manufactured to ISO and TUV standards

Premium One Box solution

Vehicle specific matched front pairs with factory mounted fittings

Comprehensive range

All popular modern cars and light commercial vehicles

Complete rear arms

Aftermarket prices

CDPlus Wiper Blades

With modern vehicles having a greater variation in windscreen sizes, differing lengths for the driver and passenger side front wiper blades has become more common, along with vehicle specific adaptors.

CDPlus Direct-Fit wiper blades answer all of these varying requirements in a single premium 'one box' solution for each vehicle.

Fast and simple installation with no more need for assorted adaptors.

Each vehicle specific wiper blade is boxed in matched front pairs and rear singles, complete with exact fittings pre-mounted in the factory.

CD's flat, aerodynamic design is built around a solid 'flexed' pre-tensioned steel beam blade to evenly distribute contact pressure for increased wiping performance. An integrated spoiler reduces lift even at higher speeds.

The CDPlus rear arm and blade range is the answer for the growing number

of vehicles where it is only possible to replace the rear wiper blade along with the arm as a complete unit.

All CDPlus wiper blades are made to original equipment quality matching standards and engineered for the highest levels of performance.

Fast and reliable sales, competitive pricing and Autocat V9 certified data gives complete confidence that each CDPlus set and single wiper is the perfect fit - first time, every time!



WIX Spin-on filters, from inception to a full product range for your vehicle.

The spin-on oil filter is ubiquitous with filtration of oil in an engine. Although perhaps seen as an older design and superseded by the oil filter cartridge element, the spin-on oil filter is very much alive and kicking and still a go-to choice for many vehicle assemblers.

prevents premature wear and tear as the oil pressure builds from the sump.

Manufactured and quality tested to ISO9001, IATF 16949 International Standards and ISO 14001:2015 environmental standards.

With a full range for the European car-parc, supplemented by the newer filter element design, the WIX range of oil filters is a quality choice. Backed by both the heritage of the first design of the spin-on, and now by the WIX brand being incorporated into the MANN+HUMMEL Group since 2016, confidence is assured.

WIX Filters. They get the job done.



What many may not know is that this type of filter was invented by engineers at the WIX Filters Laboratory in 1954, and hence became a world standard. Originally patented by Jack Wicks and Paul Cranshaw from North Carolina, the original spin-on was referred to as the "twist of the wrist" thread filter. This filter consists of an element located in a steel-threaded housing, with which the filter is screwed directly onto the engine body. Spin-on filters are easy to replace and have a construction which is resistant to various factors (e.g. high pressure). Replacing the spin-on oil filter can be done virtually without the risk of introducing impurities into the engine oil system, and is usually fit-and-forget, without the need to check housing assemblies and seals.

Spin-on filters, should the engine block have this design, are also able to be fitted in small spaces, and hence are still popular. With no need to incorporate a housing and associated piping, simplicity is synonymous with engines with spin-on oil filters and can be cheaper for a vehicle assembler to incorporate too.

With high-quality internal components, WIX spin-on filters have you covered: -

Engine specific bypass valves to ensure that oil is constantly flowing to the engine, even in circumstances where the oil would not normally pass through the filter media (cold start and thick, viscous oil in winter) or a blocked filter that needs servicing and is full of contaminant/has reached the end of its service interval.

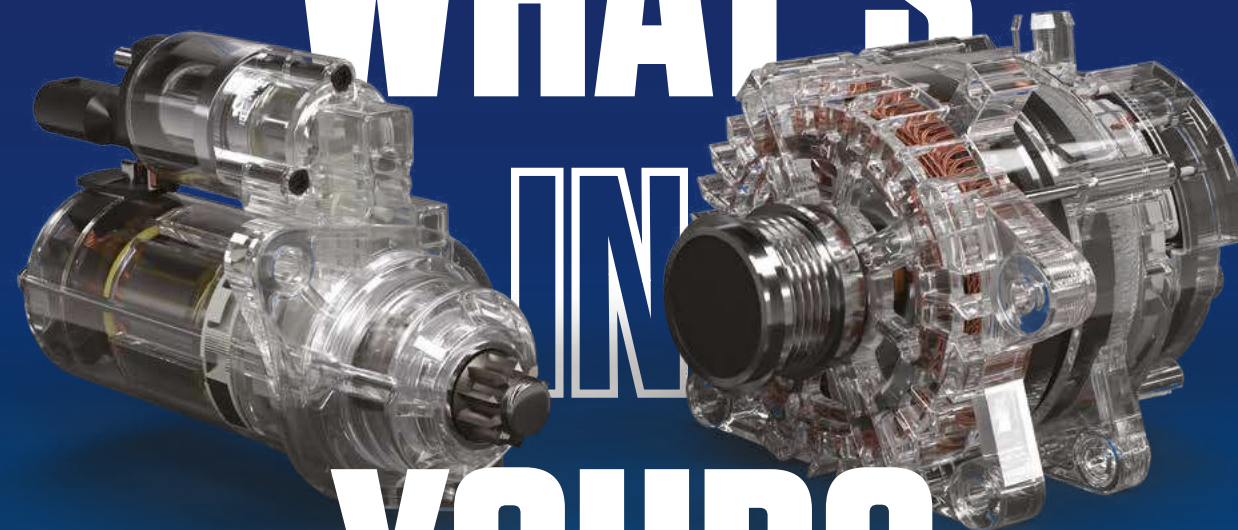
High quality filter media to capture the finest contaminant and prolong the life of the engine, also formulated to withstand high temperatures and degradation of oil quality.

Anti-drain valves, to retain oil and 'charge' the filter should the filter canister be installed in an upside-down position. This

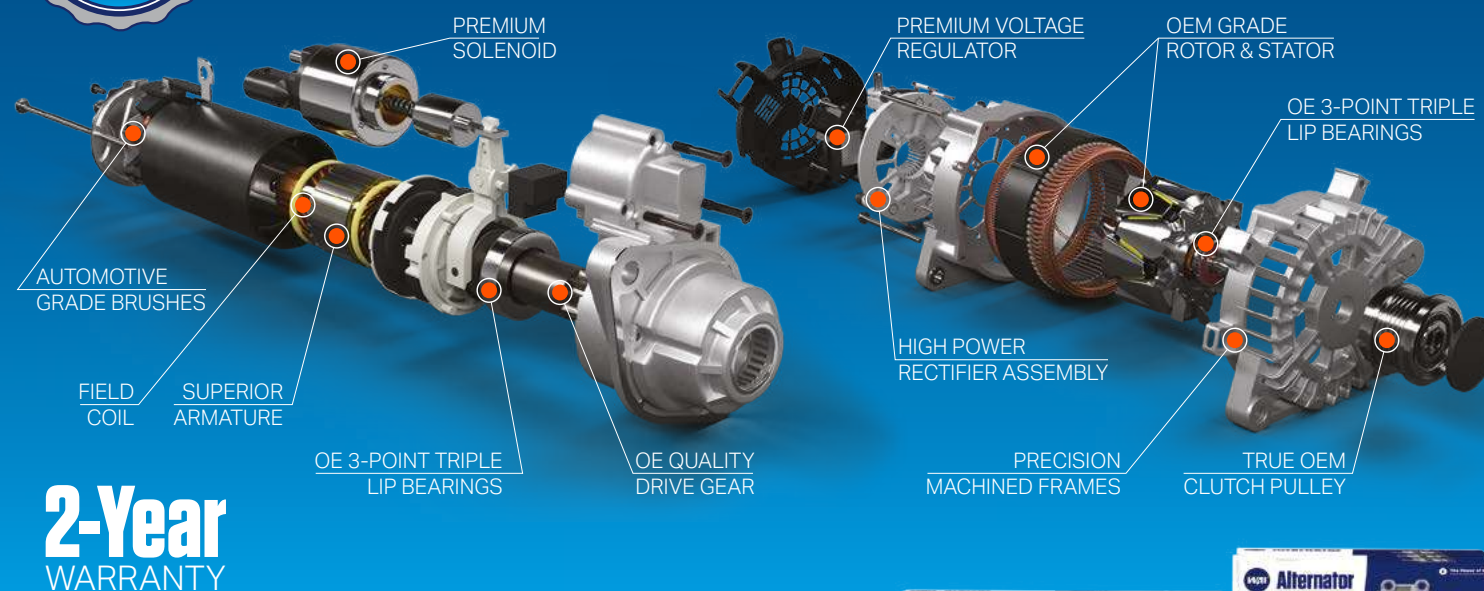


The Power of WAI

WHAT'S IN YOURS



STARTER MOTORS & ALTERNATORS



2-Year WARRANTY

- Extensive product line available with **1200+** starter motor and **1750+** alternator part numbers
- WAI products are tested to OE specifications



It's what's on the **INSIDE** that matters.

WAI, A USA COMPANY

Discover more at
WAIglobal.com





#**BESTUNDERPRESSURE**

ENGINEERED
IN GREAT BRITAIN

ENGINEERED FOR SAFETY AND DURABILITY

BGA's Steering & Suspension components are precision engineered using CNC machining and high grade, heat treated materials to deliver maximum strength and longevity.

Induction hardened ball pins and low friction polymer bearings ensure seamless operation, while advanced corrosion resistant coatings provide superior protection against wear and environmental damage.

Rigorous testing in BGA's UK based Research & Development guarantees that every component meets or exceeds OE standards for reliability, ensuring unmatched performance and safety on the road.



BGA STEERING & SUSPENSION PARTS
ARE MANUFACTURED TO MATCH OR
SURPASS ORIGINAL EQUIPMENT
QUALITY STANDARDS.

POPULAR REPAIR:

53,522 NISSAN JUKE F15 DIG-T 2014-2019

REGISTERED ON THE UK ROADS TODAY

	BU6319 CONTROL ARM MOUNTING		LS6318 STABILISER BAR LINK		SJ6308 BALL JOINT
	SM91040 SUSPENSION STRUT MOUNT		SR6311 TIE ROD END		SR6312 TIE ROD END
	SR6313 INNER TIE ROD		TRC6318 TRACK CONTROL ARM		TRC6319 TRACK CONTROL ARM



EV+ | WORLD CLASS BRAKING
ENGINEERED FOR EVS

Allied Nippon delivers installation best practices for pads and discs

Best practice procedures and the use of high-quality parts will aid technicians in tackling challenges on the workshop floor.



Solution: Inspect the entire brake and wheel assembly system to ensure bearings, alignment and hydraulics are in good condition.

8. Post-installation issues...

Problem: Motorists may hear noise, feel vibration or experience reduced efficiency if the bedding-in process isn't followed correctly.

Solution: Communicate clearly with customers on the proper bedding-in techniques – in short, observing gradual, progressive braking within the first 200 miles post-installation. Furthermore, choosing Allied Nippon brake pads, featuring a resin-based layer that strengthens braking performance during the bedding-in period, will improve braking efficiency from point of fitment.

Allied Nippon's braking DNA explained

An OEM, Allied Nippon's braking range features exclusive friction materials and durable components crafted from premium raw materials, produced in internationally renowned manufacturing facilities.

Its brake pads, for example, incorporate Noise Control Technology and exceed aftermarket standards, undergoing rigorous testing beyond R90 regulations to ensure exceptional stopping power.

Allied Nippon's discs, meanwhile, are finished with a specialised coating, enhancing aesthetics, corrosion resistance and helping a fast, simple fit.

For more information about Allied Nippon's braking range, go to www.allied-nippon.eu



For independent technicians, replacing brake discs and pads is usually routine. Yet Allied Nippon believes some scenarios can test even the most experienced professionals. In this latest article in Smart Choice, Allied Nippon's experts offer solutions to challenges designed to ensure best practices and customer satisfaction.

Rusted components, warped hubs, compatibility and strange vibrations are just some of the symptoms and challenges technicians can face on the workshop floor – here are eight identified problems and their solutions:

1. Rust and corrosion...

Problem: Rust can build up on brake discs, often due to moisture or road salt, making removing them from the hub difficult.

Solution: Apply penetrating oil, use a rubber mallet or a specialised puller, or, in severe cases, carefully apply heat to loosen the disc. Future issues can be prevented by fitting Allied Nippon coated discs, which feature an anti-corrosion coating that prevents rust and makes the replacement process simpler.

2. Seized or stuck fasteners...

Problem: Bolts or screws may seize due to rust or overtightening.

Solution: Use penetrating oil, an impact driver or heat to free the fasteners. As a last resort, try drilling them out!

3. Damaged or warped hubs...

Problem: If a hub is dirty or uneven, this can result in improper disc seating, causing wobble or vibration during braking.

Solution: Clean the hub with a wire brush or abrasive paper. Check for runout using a dial gauge. If a hub is severely damaged, the entire hub assembly may need to be replaced.

4. Incorrect installation...

Problem: Misalignment or failure to torque bolts properly can lead to uneven braking or damage.

Solution: Follow the manufacturer's installation procedures and always use a torque wrench.

5. Brake pad issues...

Problem: Combining old or incompatible brake pads with new discs can cause uneven wear or poor performance.

Solution: Always install new brake pads when replacing discs and fit them using axle sets. Allied Nippon's R-90 approved brake pads complement its coated discs for outstanding stopping power.

6. Runout and vibrations...

Problem: Excessive runout, when new discs are installed, can cause brake judder.

Solution: Measure for runout and replace any components causing misalignment.

7. Underlying issues...

Problem: Hidden problems, such as wheel bearing failure or improper alignment, can lead to repeated failures.

For more information...

To discover more about the Allied Nippon range, installers can download a comprehensive product brochure at <https://tinyurl.com/Allied-Nippon-Brochure>.

MotoRad®

Motorad is a leading Manufacturer and supplier of advanced engine and thermal management solutions for automotive OEM and aftermarket industry.

Established in 1958, MotoRad develops, manufactures and supplies innovative thermostat solutions, cap solutions and engine management solutions. The MotoRad name is synonymous with quality, reliability, comprehensive coverage of vehicle models and exceptional customer service.

For our Extensive and innovative product portfolio visit our website



#1 in European COVERAGE

OEM SUPPLIER

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www.motorad.com

Thermostats



A temperature controlled valve that regulates the flow of coolant through the engine.

Fail-Safe® Thermostats



MotoRad® Fail-Safe® thermostats are designed to help protect your engine when overheating occurs. Based on premium, patented technology.

UltraStat® Thermostats



MotoRad® UltraStat® thermostats are made of heavy gauge stainless steel construction which provides the most corrosion resistance of any thermostat on the market. Proprietary BLVT™ valve design technology prevents thermal shock.

MAP Thermostats



These thermostats are controlled and adjusted by the vehicle's Engine Control Unit (ECU).

BEV Thermostatic Valves



Part of battery module thermal management system.

Thermostat with Housing



A bolt-on solution with the thermostat and housing integrated into one unit.

Coolant Flange



The coolant flange serves as a connection point in the cooling system, usually connecting hoses, pipes, or other components to allow the circulation of coolant between the engine, radiator, and heater core.

Coolant Caps



MotoRad radiator pressure caps are designed and manufactured to provide precise pressure control for the vehicle's cooling system.

Fuel/Oil filters/Sealing oil filling port Caps



OEM quality replacement for a wide selection of oil and fuel caps carefully crafted to meet the highest standards of compatibility.

Ignition Coils



Ignition coils convert low battery voltage into high voltage to spark the spark plugs, igniting the air-fuel mixture for combustion, ensuring efficient engine performance and smooth operation.

Mass Air Flow Sensor



The mass air flow (MAF) sensor measures the amount of air entering the engine, helping the ECU adjust fuel delivery for optimal combustion, improving performance, efficiency, and reducing emissions.

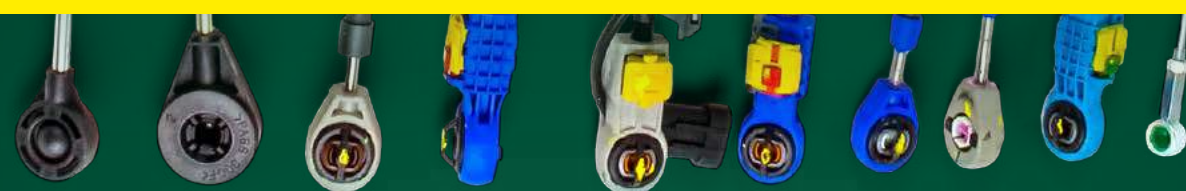
Camshaft + Crankshaft Position Sensor



The camshaft position sensor tracks camshaft movement for accurate valve timing, while the crankshaft position sensor monitors crankshaft speed and position for ignition timing. Together, they help the engine control unit (ECU) optimize performance, fuel efficiency, and emissions by synchronizing fuel injection and ignition systems.

PREMIUM QUALITY CABLES

AVAILABLE FROM FIRST LINE



DON'T GO TO THE DEALER!

With more than 400 Gear Control Cables available, you don't need to go to the dealer!

The demand for premium quality replacement Cables to service the gear control mechanism on numerous automotive and light commercial vehicles is growing rapidly year on year. Similar to a traditional gear linkage, the Gear Control Cable selects and engages the different gears within the transmission system. To ensure a smooth gear selection it needs to be in good condition and replaced with a high quality product when it becomes worn.

In some instances, it is still a common thought that these are dealer only products, when in fact, First Line offers an extensive range for passenger car and light commercial vehicle applications, all of which are available from your local branch.

WHY DO THEY FAIL?

There are a number of reasons Gear Control Cables fail, here are some of the more common ones:

1. Cold weather can have a particularly adverse effect, as freezing conditions can cause the gearbox system, including the gear cable, to seize up and excessive force can inadvertently be applied by the driver. As a result, the inner wire can break when they attempt to change gear.
2. A secondary reason is that there is an issue with the function of the gearbox, a gear failure for example, which can also result in excess force being applied to the gear cable, causing the inner cable to break.
3. Cables five years or older are the most likely to fail, as the lubricant inside the outer sleeve loses its performance as its viscosity increases, which causes the inner wire to bind and therefore, not move properly.
4. Similarly, a problem with the gear arm lever or mechanism, which can cause the cable to operate at the wrong working angles, can also result in the failure of the cable at its connection points.
5. Finally, if the vehicle is operating in extremely hostile conditions, such as off-road and in mud or dust, debris can get inside the gear cable and block or restrict the movement of the inner wire, meaning the gear cable cannot correctly control the gear selection.

MOST REQUESTED

Here are a selection of the most requested applications entering the workshops today.

Vauxhall Astra 2015-
FKG1304

Ford Ka 2009-2016
FKG1273

Fiat 500 2007-
FKG1321

Hyundai ix35 2010-2015
FKG1302

Mercedes Sprinter 2006-2018
FKG1276

PSA Expert, Evasion 2006-
FKG1009

Fiat 500 2012-
FKG1098

2,020+ REFERENCES

Brake Cables:

VW GOLF PLUS V (2005-2013) - FKB3350

Clutch Cables:

KIA PICANTO (2004-2011) - FKC1495

Gear Control Cables:

VAUXHALL ASTRA 2015 - FKG1304

Speedometer Cables:

FORD ESCORT (1973-1980) - FKS2013

Accelerator Cable:

PEUGEOT 206 (1998-2009) - FKA1084

CHECK OUT OUR WORKSHOP VIDEOS



Scan the QR code to view our selection of Gear Control Cable installation videos

MAKE FIRST LINE YOUR FIRST CHOICE FOR GEAR CONTROL CABLES

FIRST LINE
THE ALL MAKES SPECIALIST

www.firstline.co.uk

Elring Parts Ltd

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Tel: +44 (0)191 491 5678
Email: sales@elringparts.co.uk
Web: www.elringparts.co.uk

elring parts Ltd

MAHLE

Stay cool this spring: MAHLE Aftermarket stresses the importance of quality thermal management solutions

MAHLE provides a comprehensive range of thermal management products for all vehicle types

The MAHLE TechTool platform gives technicians instant access to essential technical insights and support.

With warmer weather on the horizon, maintaining effective thermal management systems is crucial for garages and motor factors. MAHLE Aftermarket is reinforcing the importance of high-quality cooling and air conditioning solutions to ensure vehicle performance and passenger comfort.

Proven expertise in thermal management. Thermal management is one of MAHLE's core strengths, making up a substantial part of its extensive aftermarket portfolio. The company offers both Standard (S) and Premium (P) product lines, ensuring workshops can meet a variety of customer needs.

The S range delivers reliable, cost-effective aftermarket options.

The P range represents MAHLE's OE products, designed to offer long-lasting durability and peak performance throughout the vehicle's lifecycle.

Technical support at your fingertips. Pairing the right parts with expert knowledge is key to effective thermal management. That's where MAHLE's TechTool comes in. This intuitive online platform provides technicians with instant access to technical processes, troubleshooting guidance and product-specific information for passenger cars and trucks. With interactive, visual diagrams, TechTool simplifies complex systems, putting crucial

information right in the hands of technicians.

A complete thermal management offering. MAHLE's extensive product range covers both air conditioning and engine cooling components, including:

- **A/C components:** Condensers, filter-driers, evaporators and expansion valves.
- **Engine cooling products:** Radiators, charge air coolers, expansion tanks, oil coolers, and EGR coolers.
- **Compressors:** Including Compact Variable Compressors (CVC) for both combustion and electric vehicles.
- **Thermostats and valves:** For precise temperature control, ensuring efficient engine operation.
- **Cooling fans, fan modules, and blowers:** To maintain optimal airflow.

For electric and hybrid vehicles, MAHLE also provides advanced coolant and refrigerant

based systems to regulate battery temperatures, even during fast charging.

Keeping vehicles running at their best. Designed to meet the demands of modern combustion, hybrid and electric vehicles, MAHLE's thermal management solutions ensure reliability, longevity and peak efficiency. Whether it's keeping cabins cool or maintaining optimal battery temperatures, MAHLE's cutting-edge technology keeps vehicles performing at their best.

To explore MAHLE's thermal management range or discover the benefits of TechTool, visit www.techtool.mahle.com/en/home



HOW SEASONAL CHANGES IMPACT CLUTCH PERFORMANCE

As with all friction products temperature can have an effect. During hot weather transmission temps are higher and more heat is retained in the clutch & transmission area. The friction materials used in National brand clutches retain a friction coefficient of $\geq 0.3\mu$ @ up to 350°C so are well suited to hot conditions.

Very cold and / or damp weather can cause clutch judder but this is mitigated by the use of good quality friction materials.

THE QUALITY AND MANUFACTURING PROCESSES AROUND YOUR PRODUCT/S

All National brand clutches have their specifications set by our in-house technical team. OEM or OES parts are the starting point, their specs being analysed by the use of specialist computer controlled test rigs. The rigs are the same as our suppliers' so results can be compared accurately.

Left to right: Clutch cover assembly test rig, driven plate torsional characteristics & clamped thickness testing, single mass flywheel sample from a supplier being measured on a CMM.



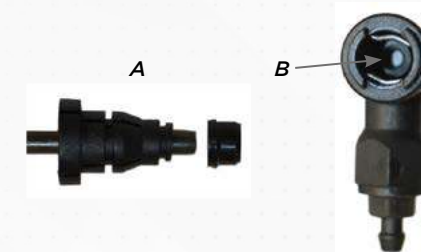
We routinely test clutch deliveries, comparing the results to certificates of conformity from the manufacturer.



Where your product is factory fitted by the VM's

References to specific vehicles where say a common fault occurs.

Vauxhall Corsa, Astra, Zafira apps with a male connector on the CSC. The rubber seal from the CSC (item A) being replaced gets stuck in the female connector from the master cylinder (item B). If the CSC is replaced and it is not noticed that the seal is still in the connector then a severe restriction of the hydraulic oil flow occurs. Oil can be pushed down the pipe but cannot return so pressure builds up and failure occurs. Use a sharp pick to remove the old seal from the connector cap.



Mk1 Aygo, C1, 107 If the clutch pedal free play is not adjusted to the VM's spec the clutch will preload causing bearing noise and slip. Set the free play to 18mm to 28mm using the cable adjusting mechanism.

All CSCs with riveted back plates - Most if not all VMs have used variations on this design at some point. (Fig 1.)

Make sure the threaded fixing holes in the gearbox are free of old thread lock compound and ensure the bolts are tightened to the correct torque and the CSC is flat against the gearbox casing. Failure after installation occurs when there is a small gap between the backplate and the gearbox it is mounted to due to incorrect installation. When the clutch pedal is depressed the pressure of the hydraulic oil pushes the unsupported backplate out causing leakage and failure.

Warranty Information

2 Year 20,000 mls No Quibble, 3 Year 30,000 mls. Parts only.

Technical Support

Our customers can call our team of experienced technicians and catalogue staff 08.15 to 17.00 Monday to Friday on 01773 527 210.



Find out more at www.mahle-aftermarket.com



SHAFTEC TRANSMISSION RANGE – QUALITY AND RELIABILITY FOR WORKSHOP TECHNICIANS

For over 30 years, Shaftec has been a leading supplier of remanufactured and new automotive components to the UK aftermarket.

Driveshaft Remanufacturing Excellence

Take their driveshafts, as an example. Renowned for their quality, each driveshaft is meticulously identified, stripped down, and thoroughly inspected to meet high-quality benchmarks. The driveshaft is then rebuilt to its original specifications and reassembled using new ancillary components, including high-quality CV joints, boots, grease, and clips. This rigorous process allows Shaftec to confidently offer a 60-month/60,000-mile warranty on its driveshaft range.

Comprehensive Transmission Components

In addition to driveshafts, the company's transmission product line includes CV joints, CV boot kits, axle shafts, and propshafts. Shaftec is continually expanding its OEM-quality propshaft range, ensuring a broad selection of options to suit various vehicle sizes and specifications.

Advancements in Electric Power Steering

Recognising the growing demand for Electric Power Steering (EPS), Shaftec has invested in an expert team dedicated to developing this technology. Through collaboration with institutions such as Warwick University, the company is pioneering projects like 3D printing to produce its components. This innovation enables Shaftec to remanufacture parts previously considered unserviceable due to unavailable components.



Cutting-Edge Electric Steering Product Range

Shaftec's electric steering product range features some of the latest vehicle models, demonstrating its commitment to staying ahead in modern automotive technology:

- AUDI Q3 (F3B) e-Drive (03/2024 onwards) – Plug-In Hybrid
- BMW i4 (G26) 45 TFSI e (03/2024 onwards) – Electric Motor

Technical Support and Training Resources

Shaftec's Knowledge Hub provides a wealth of technical information and training resources to support workshop technicians. This platform offers free access to technical documentation, product fact sheets, fitting guides, and best-practice advice to help technicians perform repairs and installations efficiently. More information can be accessed at www.shaftec.com/knowledge-hub.

A dedicated helpline is available at 0844 257 1818 for additional technical support, operating **Monday through Friday, 8:30 a.m. to 5:30 p.m.**

shaftec.com

SKF - For Technicians Who Demand Quality

As a vehicle technician, you need parts that fit well, perform reliably, and last. SKF's components are designed to help you confidently get the job done. From timing systems to auxiliary drive components, our range is built to meet the demands of modern workshops, offering the quality and durability you expect.

Every SKF part is tested to meet or exceed OE standards, reassuring you that what you're fitting is built

to last. Whether it's a timing belt kit, a water pump, or a tensioner, you can trust SKF components to do their job correctly. Our seals and bearings are made to withstand harsh conditions, helping to protect against wear, leaks, and contamination.

We know the time in the workshop is valuable, so SKF parts are designed with straightforward installation in mind. There is no unnecessary hassle, just well-engineered components that help you work efficiently, and with SKF's technical support and training resources, you'll always have the correct information to hand.

Whether you're doing routine servicing or major repairs, SKF provides the parts and expertise to keep vehicles running correctly. Reliable, well-made, and backed by years of engineering experience, SKF is a name you can fit with confidence.



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For technical support and insights, visit: vehicleaftermarket.skf.com or scan the QR code to know more about the SKF products.

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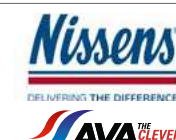
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- Quick and easy ordering – the simplicity of all the right parts with just one order number.

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