apd AUTOPARTS & DIAGNOSTICS

SMART CHOICE

ISSUE 80 • FEB - APR 26

THE SMART CHOICE FOR TODAY'S TECHNICIAN!

IN THIS ISSUE

PROTIPS

Rear Brake Pads & Discs

ADC44288, ADM542112, ADM542114, ADM543124, ADM543127
To Fit: Mazda 6, Mazda CX-5 equipped with an electronic parking brake (EPB)

Problem
When replacing the rear brake pads and/or the rear brake discs, the vehicle is required to be set into maintenance mode. By doing this, the EPB motor gear unit will operate and allow the brake pistons to be pressed in for brake maintenance purposes.

Cause
When the EPB is applied, the EPB system detects the current brake disc position and automatically adjusts it to the optimum EPB release position (brake pad to disc clearance).

Failure to carry out the correct procedure (i.e. initially setting the vehicle into maintenance mode) will potentially cause an operational problem with the EPB system.

Solution
When performing repairs and maintenance to the rear brakes on the vehicles listed above, it is important to set the vehicle into maintenance mode as explained above right.

Caution: If performing this procedure while the vehicle is on the ground, block the front and rear wheels using wheel blocks. Failure to do this may result in the vehicle moving when the electric parking brake is released.

The EPB system will not work if the battery voltage is insufficient. Therefore, it is advised to use a battery support unit while carrying out this operation.

Setting to maintenance mode.

1. Switch the ignition ON (engine off).
2. Release the electric parking brake.
3. Switch the ignition off, and then switch the ignition ON (engine off) within 5 seconds while maintaining the following conditions.
   - Press the electric parking brake switch.
   - Depress the accelerator pedal fully.
4. Verify that the electric parking brake warning light is illuminated in an amber colour and the mode is switched to maintenance mode.
5. Switch the ignition off.

Carry out all necessary repairs or replacement of the rear brakes.

Ending maintenance mode

1. Switch the ignition ON (engine off).
2. Switch the ignition off, and then switch the ignition ON (engine off) within 5 seconds while maintaining the following conditions.
   - Pull-up the electric parking brake switch.
   - Depress the accelerator pedal fully.
3. Verify that the electric parking brake warning light turns off and the maintenance mode is ended.
4. Switch the ignition off.

After all repairs have been completed, check the EPB operation when the engine is running or with a fully charged battery (engine off).

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PROTIPS

Brake Caliper 194820, 194821

To Fit: Mazda CX-5 equipped with electric parking brake

Problem

Vehicles equipped with an Electric Parking Brake (EPB) system may exhibit rear brake caliper drag, resulting in brake noise and accelerated or uneven wear of the outer brake pad. The vehicle may also momentarily roll to one side when starting from a standstill with the EPB applied. The EPB is failing to automatically release both wheels at the same time.

Cause

The symptoms described above are caused by the EPB not being completely released. The EPB control module determines that the parking brake is fully released when the motor current falls below the specified threshold as the spindle‘s rotating torque decreases. The spindle may momentarily spin freely during the EPB release process, this causes its rotating torque to drop to the threshold level before the parking brake is fully released.

Solution

Carry out the following steps to verify that the EPB is automatically released on both sides at the same time when starting the vehicle from a standstill with the EPB ON.

- Ensure the driver’s door is closed and the driver’s seat belt is fastened otherwise the automatic release function of the EPB may not work properly.
- Depress the brake pedal firmly, turn on the EPD switch and release the brake pedal.
- Start the vehicle, pull away slowly from a standstill and check if the vehicle is held and rolls to one side.
- If the vehicle rolls for more than 0.2 seconds, the caliper on the side that the vehicle rolls to requires replacement.
- If the vehicle does not roll, the EPB is automatically released correctly at this moment.
- Drive the vehicle at low speeds and check if the rear brake dragging noise is heard.
- If yes, the caliper on the side producing the noise is defective. NOTE: If it is difficult to detect which side the noise comes from, raise the vehicle and turn the wheels to verify that the brake disc rotates by hand when the EPB is off.
- Raise the vehicle and remove the rear wheels. Depress the brake pedal firmly and turn ON the EPB switch. Release the brake pedal. Depress the brake pedal and turn OFF the EPB. Then, verify that the brake disc rotates by hand.
- If the brake disc does not rotate then that caliper is defective.
- If both brake discs rotate easily, check the brake disc and pads for damage or discoloration caused by brake dragging.
- If one or more of the conditions specified are found, it indicates brake dragging and that the caliper on the affected side is defective.
- Replace the affected side with a new brake caliper as well as new brake discs and pads. Bleed the brake system and retest

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Why Vans Deserve a Different Approach to Braking

If your workshop treats vans the same way it treats cars, it may be time to rethink that approach, especially when it comes to braking.

Vans are not just cars with a load area. They work harder, carry more weight and place far greater demands on their braking systems. And with more vans than ever before on UK roads, this difference represents both a technical challenge and a genuine commercial opportunity for your business.

According to the latest industry data, the number of vans operating in the UK reached a record high in 2024, with over 5.1 million vans on the road, a 1.8% increase on the year and more than 1 million additional vans since 2015. That means van customers make up a growing and significant part of the vehicle parc opportunity, and they are far more likely than passenger cars to require frequent, high-wear services such as brake maintenance and replacement.

The first and most obvious factor in van braking is weight. Even unladen, a van is significantly heavier than a car. Add tools, stock or equipment and the braking system is immediately under greater strain. More mass means more momentum; every stop requires more energy to be absorbed by the brakes. In day-to-day workshop terms, this translates into higher brake wear, greater heat build-up, and a greater reliance on consistent friction performance.

This is where the friction coefficient becomes critical.* In simple terms, it describes how effectively the brake pad grips the disc. On a van, braking performance needs to be predictable whether the vehicle is lightly loaded or fully loaded. If friction levels vary too much, particularly under heat, stopping distances can increase and brake fade becomes a real risk.

Heat management is another key difference. Vans often operate covering high mileages and spending long hours on the road. This constant braking, especially in loaded conditions, generates significantly more heat than in a typical car application. If friction materials are not designed to remain stable across a wide temperature range, performance can deteriorate quickly. For your workshop, that can mean, lack of braking performance, noise complaints, premature wear or costly comebacks.

*What is the Coefficient of Friction in Braking?

- Describes how effectively the brake pad grips the brake disc
- Influences stopping power, pedal feel and braking consistency
- Higher friction is not always better. Stability is what counts.
- Friction behaviour changes with heat, load and braking pressure
- Repeated heavy braking can reduce friction and cause brake fade
- Inconsistent friction can lead to longer stopping distances
- Well-engineered pads maintain stable friction across their operating range
- Consistent friction helps reduce noise, vibration and premature wear

That is why we recommend Ferodo braking, developed with an OE-led focus on controlled and consistent friction performance.

From a business perspective, this is where vans present a clear opportunity. Van customers depend on their vehicles for work, and downtime is rarely an option. They are more likely to prioritise reliability, durability and safety over the lowest upfront price. Offering braking solutions designed specifically for the demands of commercial vehicles allows you to add value, build trust and differentiate your service.

This is why we choose Ferodo. Ferodo's approach is rooted in OE-led friction development, with a focus on controlled, stable braking performance rather than aggressive friction levels. For vans, this means predictable pedal feel, reduced fade under load and consistent behaviour throughout the life of the brake pad. In practical terms, it supports reliable repairs and helps protect your reputation.

AVOIDING OIL FILTER INSTALLATION MISTAKES – WHY THE SMALLEST DETAILS MATTER

Replacing an oil filter is one of the most routine maintenance tasks carried out on vehicles, yet it remains one of the areas where small errors can lead to disproportionately large consequences.

What should be a straightforward job can quickly result in oil leaks, pressure loss, accelerated engine wear or even complete engine failure if done incorrectly. As a global leader in filtration and engine components, MAHLE, who also sell their filter range under the Knecht brand, has seen the impact of these mistakes first-hand, and the good news is that almost all of them are entirely avoidable.

One of the most common mistakes starts even before the new filter is unpacked: using the wrong filter. Each vehicle requires a specific filter size, design, and flow specification. Installing a filter that only looks similar can restrict oil flow, fail to fit correctly, or prevent proper sealing, all of which risk engine damage.

Another simple oversight involves preparation. The mating surface on the engine block must be perfectly clean. Any residue, leftover sludge, dust, gasket fragments, or even a thin film of old oil, can prevent a proper seal. Even the smallest debris can create a path for oil to escape once the engine warms up and pressure builds.

Depending on the type of oil filter, different errors can occur. Problems involving gaskets or felts typically apply to oil filter elements, where the sealing system differs from spin-on filters. Failure to seat an element correctly, or installing it dry, can cause leaks or poor filtration just as quickly as a mistake with a traditional spin-on filter.

Equally problematic is the issue of the forgotten gasket. When an old spin-on filter is removed, its rubber O-ring can stick to the housing. If unnoticed, the new filter is fitted on top, creating a "double gasket" that almost guarantees sudden leakage. Many technicians have experienced the frustration of watching oil pour out as soon as the vehicle is started, in nearly every case caused by that hidden leftover seal.

Tightening presents its own set of challenges. There is a fine balance between securing a filter properly and damaging it. Over-tightening can crush the O-ring or distort the filter body, compromising its ability to seal and making removal difficult months later. Under-tightening leaves the filter vulnerable to vibration and seepage. The correct technique is always controlled, confident hand-tightening: firm, but never excessive. When installing a new seal, technicians must also ensure that the oil filter housing thread is clean and undamaged, preventing sharp edges from cutting into the new gasket.

Lubrication is another vital step. The O-ring should always receive a light coat of fresh oil before installation, so it seats smoothly rather than dragging or tearing. The same principle applies to element-style filters with a felted end; installing these dry prevents them from forming an adequate seal.

Choosing the correct filter from the outset remains critical. Modern engines rely on precise oil flow characteristics and high-performance filtration. A filter that looks similar externally may restrict flow, fail to seal correctly, or allow contaminants to bypass the system entirely. Pairing a new filter with old, contaminated oil, or with incorrect or poor-quality oil, undermines the entire job and can cause a fresh filter to clog far sooner than expected.

Each of these missteps, a dirty surface, an unnoticed gasket, a dry seal, the wrong filter, may seem trivial in isolation. Yet collectively, they affect the fundamental health of the engine. Oil leaks reduce pressure, starving components of lubrication. Poor sealing allows unfiltered oil to circulate, accelerating wear on pistons, bearings, and camshafts. In severe cases, sudden oil loss can cause catastrophic engine failure while driving.

Best Practices for Oil Filter Installation

To avoid these costly mistakes, MAHLE recommends the following best-practice steps:

- Only install the oil filter catalogued for the vehicle by MAHLE either under the MAHLE or Knecht brand and use the correct, high-quality oil.
- Always double-check that the old gasket has been completely removed.
- Wipe the mounting surface clean before installing the new filter.
- Lightly oil the new filter's O-ring and, where applicable, the felt on element-style filters.
- Hand-tighten the filter until snug, then give it approximately ¾ of a turn more (following manufacturer instructions).
- Ensure no foreign material (cloth fibres, paper towel fragments, etc.) remains on the mating surfaces.
- Fill the sump to the correct level, some engines require special procedures. Always read the owner's manual.
- Refill carefully to avoid spilling oil onto the engine or exhaust components.
- Check the drained sump oil for contamination, a sump magnet may help identify metal particles.
- Dispose of the old filter and waste oil responsibly, in accordance with local regulations.

For MAHLE, precision matters at every stage. Using the correct filter, preparing surfaces properly, refilling with the right oil, and taking a moment to inspect the drained oil are all small actions that deliver big protection. This combination of careful installation and high-quality components keeps modern engines running reliably, cleanly and efficiently, mile after mile.

FRAM®

GLOBAL FILTRATION EXPERT

THE TRUTH ABOUT OIL FILTERS: WHY QUALITY MATTERS MORE THAN YOU THINK

Small part, big impact: Discover why the right oil filter is essential for engine health—and why the wrong one could cost you thousands.

Modern engines face extreme conditions: oil flows at **up to 6 bar** and **temperatures exceed 100°C**.
In this environment, a reliable filter is essential. A quality filter traps up to **2 grams of contaminants** per litre, keeps **oil flowing at 30 litre per minute** under pressure, and captures **99% of particles over 20 microns**.
It also **regulates pressure with bypass and anti-drain valves**—features cheap filters often lack.

The result? Better protection, consistent lubrication, and longer engine life. Skimping on quality can lead to wear, seizure, and costly repairs.

3D rendering of a FRAM® spin-on oil filter

The hidden risks of cheap filters

Ineffective Filtration: A poor-quality filter often uses the wrong media:

- Too coarse → lets harmful particles through. Just **20 microns of debris can scratch** bearings and pistons.
- Too fine → clogs quickly, restricting oil flow, can **starve the engine in under 30 seconds**.

Short Lifespan: Limited filter surface means premature clogging. When the filter blocks, oil bypasses through the relief valve—circulating unfiltered oil straight into your engine, **can occur after only 3,000 miles** with low-grade filters.

Inferior Materials: Cheap fibres degrade under heat and chemicals, while weak adhesives or seals cause leaks and allow oil to bypass the filter. A failed seal can dump up to **1 litre of oil per minute**, causing catastrophic lubrication loss.

Design Flaws: Poorly calibrated bypass valves open too early or too late, causing either unnecessary unfiltered oil flow or dangerous lubrication shortages. Incorrect sealing can let up to **10% of oil bypass the filter** entirely.

Mechanical Consequences: The result? Accelerated wear, risk of engine seizure, filter collapse under pressure (up to 6 bar), and contamination from disintegrated filter media. **A single failure could potentially cost between £2500 - £7000 in engine repairs**

Your engine deserves better than shortcuts. Choose quality.

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OE SUPPLIER

THE FAIRYTALE OF A SINGLE OIL FOR ALL CARS

LIQUI MOLY explains why there are so many different motor oils and what workshops should pay attention to.

Many years ago it was easy: You did not have to worry about the right motor oil because the same oil was suitable for almost all cars. This is totally different today. Oliver Kuhn, deputy manager of the LIQUI MOLY oil laboratory, tells us why there is no longer a universal motor oil.

In the past, it was almost irrelevant which oil you poured into the engine: There were hardly any differing types of oil, and the car tolerated almost everything. Later there were more oil types, but the various viscosities, such as 10W-40 or 15W-40, still offered some orientation. This describes how thick or thin the oil is in cold and hot conditions. But today, the viscosity is just one of many important properties, like the cleaning effect, shear behavior, friction coefficient, or sulfur content. Viscosity offers little help in the search for the right oil, says Oliver Kuhn.

The importance of specifications

Industry standards are decisive for motor oil today, such as those set by the European Automobile Manufacturers' Association (ACEA) or the American Petroleum Institute (API). Furthermore, European car manufacturers especially have developed their own oil specifications. "Overall, there are currently more than 70 specifications for motor oil," explains Oliver Kuhn.

But what happened for the jungle of oil types to keep growing like this? In their efforts to improve efficiency as well as reduce fuel consumption and therefore also emissions, European car manufacturers especially discovered motor oil to be one of many adjustment screws. When they develop a new engine, the properties that the oil should have are set out early on. It is then up to the oil industry to develop such oil. Because each car manufacturer follows a different technological approach, the required oil properties deviate from one another. Sometimes numerous properties can be combined in a single oil, but sometimes not. This means that the general lubricant from previous decades has become a highly specialised liquid. And that's why there cannot be a universal oil today that fits all vehicles. The German lubricant specialist has the right oil for practically every car. Workshops will find what they need at LIQUI MOLY.

Motor oil as a liquid spare part

The question of the "best oil" cannot really be answered in general terms. Instead, it is a question of using the correct oil for each car. Today, motor oil is something like a liquid spare part. Putting in the wrong oil is like fitting the wrong part. This threatens dangers that go beyond a little oil sludge. There are actually oil-engine combinations that destroy the engine after just a few hundred miles. Even experienced mechanics will have trouble overlooking the sheer mass of motor oils.

A change in trend towards fewer oil types is not on the horizon. Quite the opposite: In the future, the variety of oils will grow even further and the trend towards ever more specialised oils will continue. "This makes life more complicated for car drivers and mechanics alike," says Oliver Kuhn.

How do you find the right oil? Use the LIQUI MOLY Oil Guide!

Simply scan the QR code and enter the vehicle information:

www.liqui-moly.com

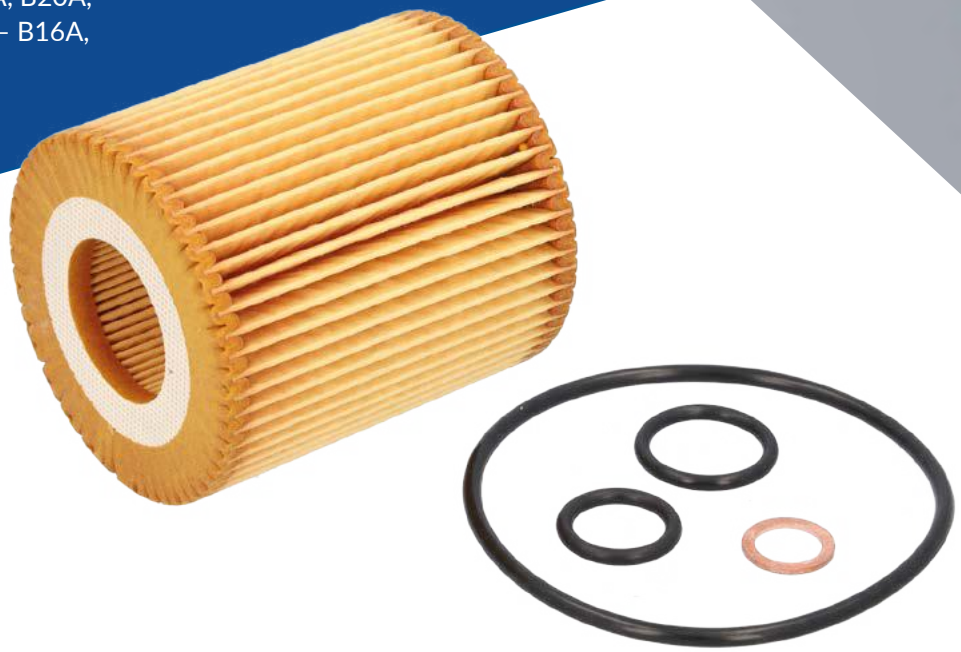
LIQUI MOLY

FOR THE DRIVERS

PROTIPS

ADB112106 Oil Filter

To Fit: BMW:
1 Series - E81, E82, E87, E88.
3 Series - E90, E91, E92, E93.
5 Series - E60, E61
Engine: N40 – B16A, N42 – B18A, B20A, N43 –B16A, B16AA, B20A, N45 – B16A, B16AC, B20A, N46 – B18A



Problem

The engine is very noisy and 'rattling' on start-up, with the oil pressure warning light and engine warning lamp illuminated. The engine is in reduced power ('limp home') mode.

Possible fault code stored in the engine control unit: 30C1 static engine oil pressure control.

Cause

The oil filter may have become twisted or broken-up inside the oil filter housing; restricting oil flow.

Solution

Firstly, check if the engine oil is at the correct level and adjust if necessary. Subject to the oil level being correct, carry out a diagnostic test (using a suitable diagnostic tool) to check for fault codes and the pressure of the engine oil.

The oil pressure can also be checked at the oil filter housing – using a suitable, external oil pressure gauge. The minimum oil pressure at idle is 1.5 bar (22 PSi) at normal operating temperature.

If the oil pressure is found to be below 1.5 bar (22 PSi), drain the engine oil and remove the oil filter.

Inspect the oil filter element to check if it is twisted and broken-up inside the oil filter housing. If it is, you will need to replace the engine oil and filter, and re-test.

If the oil filter element is complete, replace with a new oil filter – refilling it with the correct grade and quantity of engine oil. Clear the fault codes and re-test. If the problem is still apparent, further investigation of the oil pressure control valve, oil pump and timing chain tensioner and guides will be required.

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HOW BM CATALYSTS CONTINUES TO DRIVE CLEANER PERFORMANCE WITH EMISSIONS INNOVATION

BM Catalysts, Europe's leading manufacturer of aftermarket hot end emissions products, recognise that in a rapidly evolving automotive landscape, emissions technology plays a pivotal role.

Stricter legislations, changing engine designs and increased real-world testing requirements have forced manufacturers to rethink how emissions control devices are made.

That is how BM Catalysts range of Gasoline Particulate Filters (GPFs) were born. The days of relying on conventional catalytic converter technology are long gone. The rise of the gasoline direct injection (GDI) engines introduced a new challenge to the aftermarket. BM Catalysts reacted quickly with a forward-thinking approach, investing in next-generation solutions such as GPFs.

Sometimes referred to as a PPF (petrol particulate filter) or OPF (otto particulate filter) GPFs are specifically designed to reduce particulate (soot) emissions from GDI engines.

Containing a wall-flow honeycomb structure and made from the ceramic cordierite, just like BM Catalysts DPF range, these GPFs can withstand high temperatures and are extremely resistant to thermal shock. An important characteristic, given that petrol engines heat up and cool down much quicker than diesel engines.

By introducing GPF technology into the product range, BM Catalysts signalled a clear focus on future-proofing the aftermarket. Focused not only on meeting todays emissions standards but anticipating the next phase of regulatory and technical requirements as petrol powertrains continue to evolve.

BM Catalysts have done just that, since the introduction of GPFs, 22-part references have been released, providing 288 fitments across the vehicle car parc. All of which align with Euro 6 legislations. BM Catalysts' GPF range still allows for the chemical reaction to take place when harmful exhaust gases pass through the channel walls of the honeycomb structure. Whereas, in this instance fine particulates caused from the localised rich combustion of GDI engines are reduced to carbon dioxide at the same time as the unwanted hydrocarbons, nitrogen oxides and carbon monoxide are converted into small amounts of carbon dioxide, nitrogen and water.

The development and subsequent growth of the GPF range by BM Catalysts isn't an isolated move. It reflects a broader innovation strategy; to actively track emerging engine technologies and emissions trends, then respond with engineered solutions to keep pace with or even stay ahead of the market.

Innovation in the aftermarket is not just about new products, it is also about confidence. Workshops, distributors and vehicle owners depend on trusted brands to deliver solutions that work first time, every time. With continued investment in advanced technologies such as GPFs, BM Catalysts is helping the aftermarket transition smoothly into the next era of emissions control.

To explore our GPF range in more depth scan the QR code below.

MODERO

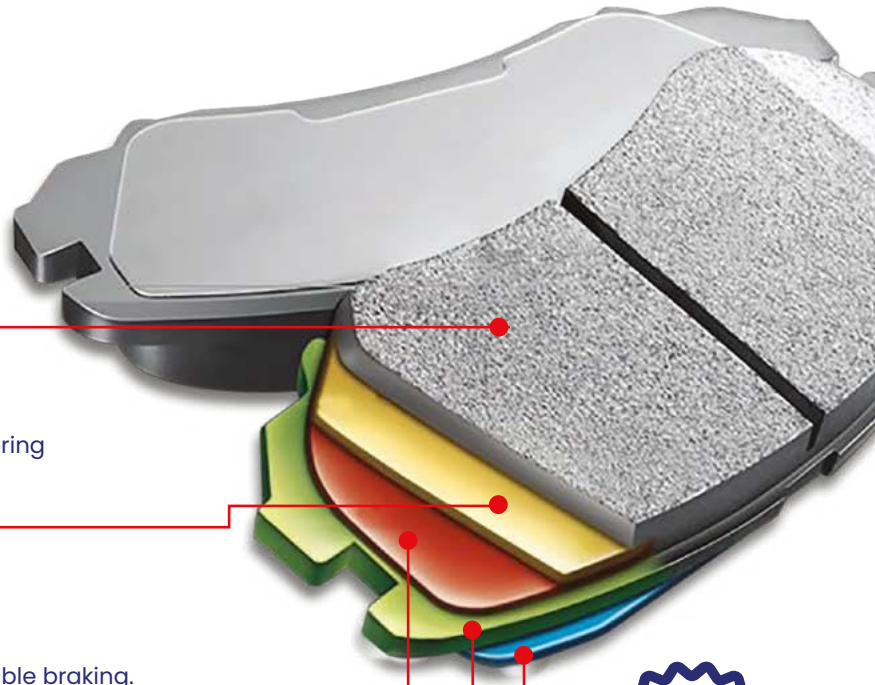
SAFETY COMES FROM QUALITY

BRAKE DISCS

Every Modero brake disc is manufactured to exact tolerances to ensure correct fit and consistent performance. Mounting points, including bolt holes and centre location, are precisely controlled to support accurate installation. Each disc is checked for runout and thickness variation to promote smooth braking. Balance testing helps ensure stable operation in use. The result is dependable braking performance with reduced vibration and fewer fitment concerns.

BRAKE PADS

Every Modero brake pad is designed as a complete, multi-layer component. The friction material is produced using controlled manufacturing processes to deliver consistent braking performance. A dedicated underlayer helps manage heat and improve braking stability. High-strength bonding secures the friction material to a precision steel backing plate. Anti-noise shims and an optimised slot-and-chamfer design help eliminate any vibration and brake squeal.



FRICTION MATERIAL

Formulated from over 100 raw materials.
Manufactured using positive hot pressing with precise chamfering and uniform pressure for consistent performance across various driving conditions.

UNDERLAYER

Acts as a thermal barrier to dissipate heat generated during braking. Enhances pad compression, reduces noise, and improves braking comfort and stability.

ADHESIVE

Strongly bonds the friction material to the backing plate.
Shear strength exceeds 3 MPA, ensuring safer, more reliable braking.

BACKING PLATE

Made from high-quality steel with precision blanking.
Precisely engineered to OE specifications for a perfect vehicle fit.

ANTI-NOISE SHIM

Coated with premium SBR for enhanced scratch resistance and appearance.
Reduces vibration and ensures quieter braking.

PASS

moderoparts.com

Klarius™

FIT FIRST TIME IN FREEZING CONDITIONS

Winter has a habit of exposing weaknesses in vehicles, components, and sometimes in workshop routines. Failed exhausts are common at this time of year, but fitting and repairing them in freezing conditions presents a different set of challenges altogether.

From brittle rubbers to seized fasteners, winter installations demand a slightly different approach to avoid leaks, rattles and unwanted return visits.

Here, we look at best-practice techniques for fitting exhausts during the colder months, and how correct installation, combined with quality, OE-matched parts, helps ensure a first-time fix, even when workshop temperatures are working against you.

Why Winter Fitting Is Different

Low temperatures change how materials behave. Rubber mounts stiffen, metal contracts, and corrosion that's been quietly developing all year suddenly makes itself known. Exhaust rubbers that would normally flex into position can resist movement, while clamps and bolts exposed to moisture and salt often seize solid. Forcing components into place under these conditions may save a few minutes initially, but it can introduce stress into the system that becomes apparent only when the exhaust heats up and expands.

This is why winter exhaust fitting is as much about preparation and technique as it is about the part itself.

Best Practice On The Ramp

One of the most important winter fitting habits is to leave final tightening until the entire system is correctly aligned. Exhaust sections should be loosely assembled first, allowing hangers and joints to settle naturally into position. Only once the system is sitting square, with adequate clearance around heat shields, suspension components and bodywork, should clamps and fixings be fully tightened. This reduces stress on joints and welds once the exhaust reaches operating temperature.

Hanger positioning is equally critical. Cold, rigid rubbers can be tempting to stretch or lever into place, but doing so risks splitting the rubber or pulling the exhaust out of alignment. Where possible, warming rubbers slightly and ensuring correct orientation can make a significant difference. Replacing tired or perished mounts rather than reusing them is also a simple step that pays dividends in winter.

Seized fixings are another common frustration. The controlled use of anti-seize compounds on new clamps and fasteners can make future removal far easier, while careful preparation during disassembly helps prevent damaged studs or distorted joints; problems no technician wants to deal with.

The Role Of Exhaust Design

Of course, technique can only go so far if the exhaust itself doesn't fit as intended. Exhaust systems with OE-matched geometry and accurately positioned mounting points naturally fall into place, even in less forgiving conditions. When hangers, flanges and pipe angles mirror the original design, there's far less need for adjustment, levering or force.

This is where quality aftermarket exhausts, such as those produced by Klarius, come into their own. Designed to match original equipment dimensions and mounting locations, they reduce installation time and minimise the risk of stress-related issues once the vehicle leaves the ramp.

Fit Once, Fit Right

Winter is not the season for shortcuts. Taking a little extra care with alignment, tightening sequences and fittings can be the difference between a smooth installation and a costly comeback. Combine correct technique with a properly engineered exhaust system, and even winter's freezing conditions won't stand in the way of a first-time fix, keeping workshops productive and customers satisfied when demand is at its highest.

BECKERMANN

5 YEAR WARRANTY

FUEL VAPORISERS

Precision. Performance. Perfection.

WHAT IS A FUEL VAPORISER?

A fuel vaporiser supports active DPF regeneration by raising exhaust gas temperatures without relying on traditional post-injection strategies.

DPF regeneration requires extremely high temperatures to burn off accumulated soot. When normal driving conditions cannot achieve this, diesel fuel is supplied to the fuel vaporizer instead of being injected into the combustion chamber.

Inside the unit, an electrically heated glow plug atomises and evaporates the fuel before injecting it directly into the exhaust stream ahead of the diesel oxidation catalyst. Here, the vaporised fuel is burned in an exothermic reaction, increasing exhaust temperatures before the DPF and enabling controlled regeneration, without oil dilution.

WHY ARE THEY USED?

Traditional post-injection can allow fuel to wash past the piston rings, contaminating engine oil and increasing wear. Fuel vaporisers eliminate this risk while allowing regeneration to occur more frequently, even under low-load or urban driving conditions.

COMMON CAUSES OF FAILURE

- Soot clogging of the outlet nozzle
- Internal glow plug failure
- Overheating due to insufficient fuel supply

Once blocked, fuel vaporisers cannot usually be cleaned effectively and replacement is required.

SYMPTOMS AND MISDIAGNOSIS

When a fuel vaporiser fails, effective DPF regeneration cannot occur. This leads to increased soot loading, warning lights, reduced power modes and fault codes relating to the DPF.

These faults are frequently misdiagnosed as a DPF issue, leading to repeated forced regenerations or unnecessary DPF replacement, without addressing the root cause.

Ford diesel applications, including Mondeo and Transit platforms, are particularly prone to fuel vaporiser related DPF issues.

THE WORKSHOP TAKEAWAY

Fuel vaporiser failure is becoming an increasingly common aftermarket repair as diesel vehicles reach higher mileages. Correct diagnosis is essential for a first-time fix.

Beckermann fuel vaporisers are engineered to OE specifications and designed to deliver reliable performance under demanding regeneration conditions, giving independent workshops a dependable solution when addressing DPF related faults.

TECHASSIST

QUICK FACTS

- Supports active DPF regeneration
- Reduces oil dilution risk
- Common failure point on Ford diesels
- Often misdiagnosed as a DPF fault

Allied Nippon

REVEALS FIX FOR COMMON INSTALLATION ISSUE ON ABS RINGS AND SENSORS

As vehicles age, corrosion-related fitment problems become more common, particularly in harsh environments or where road salt is used.

Preventative checks before installation
Before fitting brake discs with integrated ABS rings, Allied Nippon recommends:

- Inspecting and cleaning the ABS sensor mounting point
- Ensuring the correct air gap is maintained
- Checking the old ABS ring for signs of wear

By addressing corrosion at the ABS sensor mounting point before installation, technicians can prevent repeat repairs and unnecessary part returns.

On vehicles with integrated ABS rings, corrosion at the ABS sensor mounting point can interfere with correct sensor positioning, often resulting in ABS warnings immediately after brake disc replacement.

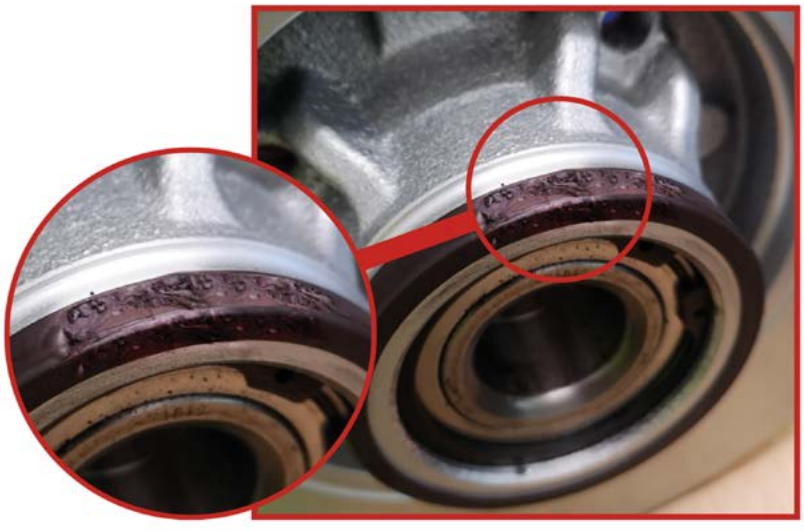
How to diagnose
In some cases, misalignment may be visible before disassembly, but issues most often become apparent during or shortly after installation. ABS system faults can occur if the ABS sensor contacts the ABS ring, preventing correct signal communication.

When installed correctly, a defined air gap must exist between the ABS sensor and the ABS ring. Corrosion build-up at the sensor mounting point can reduce or eliminate this air gap, causing the sensor to contact the ring when a new disc is fitted. This contact can lead to ABS fault codes and, in some cases, visible scoring or wear on the ABS ring, often evident on the disc being replaced.

Warning signs and symptoms
Technicians should be alert to the following:

- ABS warning light illuminates immediately after disc installation
- Stored ABS fault codes due to signal loss or incorrect readings
- Damage to the ABS ring on a newly installed disc
- Visible wear or scoring on the ABS ring of the removed disc

The image below shows the typical damage caused by a mis-located ABS sensor.



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.

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VS ELECTRONIC PARKING BRAKE CALIPERS
KEEPING PACE WITH A CHANGING MARKET

The traditional handbrake is fast disappearing from modern vehicles, replaced by electronic parking brake (EPB) systems that are now standard across much of the UK vehicle parc. What was once a premium feature has become mainstream, driven by packaging benefits, ease of use and the growing integration of vehicle safety and control systems.

As this shift has gathered pace, VS EPB calipers have been developed to meet the needs of both modern vehicles and today's workshops, offering an OE-equivalent product.

ELECTRONIC PARKING BRAKES ARE NOW THE NORM

In recent years, EPBs have moved from niche applications to widespread adoption across petrol and diesel vehicles. By 2021, more than four-fifths of new mainstream models were supplied with an electronic system, with year-on-year growth continuing as manufacturers remove manual handbrake levers entirely from their ranges.

Brands such as Volvo, Jaguar, Mercedes-Benz, Porsche and Alfa Romeo now sell no UK passenger cars with a manual handbrake. Even high-volume models traditionally associated with mechanical systems have transitioned to electronic operation, confirming that EPBs are no longer limited to premium segments.

EPBs offer clear advantages for vehicle manufacturers. The operation is more straightforward for the driver, engaging at the press of a switch and releasing automatically when pulling away. Removing the mechanical handbrake assembly also frees up interior space, enabling greater cabin design flexibility.

From a systems perspective, EPBs integrate with modern safety technologies and driver-assistance features, aligning with the broader move towards automated and semi-autonomous vehicle functions.

VS CALIPERS ARE MANUFACTURED TO OE SPECIFICATIONS

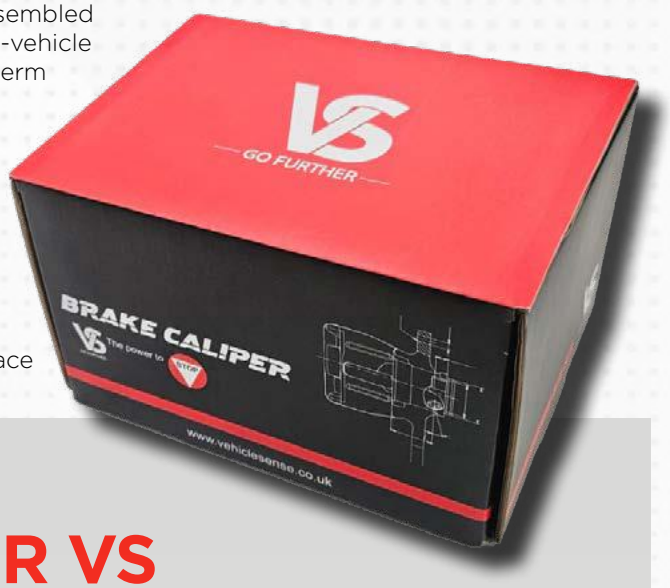
VS EPB calipers are manufactured to OEM specifications in accredited production facilities, with quality systems aligned to TS16949 and ISO9001 standards. Each caliper is developed to meet the mechanical, functional and safety demands required on modern EPB systems.

Product development follows a structured, multi-stage process. This includes initial motor development for each new application, complete factory testing of the assembled caliper, and extended on-vehicle testing to confirm long-term reliability and consistent performance in real-world conditions.

VS calipers undergo comprehensive testing regimes designed to replicate the environments they will face in service. This includes endurance testing, salt-spray exposure, high and low-pressure testing, material composition verification, and operation across extreme temperatures.

Only once these criteria are met are new references released into the range, ensuring confidence for technicians fitting EPB calipers on modern vehicles.

As EPBs become standard fitment, correct replacement parts are essential to avoid warning lights, system faults or customer comebacks.



RING TODAY AND ASK FOR VS

rollco®
MOVING PARTS
Rotating electric specialists since 1979

THINGS HAVE CHANGED

Alternator technology has moved on considerably over the last decade, even though the component itself may look much the same. The UK vehicle parc now spans everything from older vehicles with straightforward charging systems to modern applications where the alternator is fully integrated into the vehicle's electronic control network. Rollco has worked hard to stay ahead of the change, supplying alternators for both traditional systems and the more advanced designs demanded by today's vehicles.

FROM STRAIGHTFORWARD CHARGING TO SYSTEM-CONTROLLED OUTPUT

Historically, alternators operated with a fixed or near-fixed output whenever the engine was running. These systems remain common across older vehicles and are appearing in workshops regularly. However, many modern cars are now fitted with Smart Charge systems, where the engine ECU or body control module controls the alternator output.

The charging voltage is adjusted in real time based on battery state of charge, electrical demand, engine load, and driving conditions. Rollco's alternator range reflects this transition, supporting both conventional charging systems and ECU-controlled applications where correct specification is critical.

VOLTAGE REGULATION HAS BECOME PART OF THE BIGGER PICTURE

In earlier designs, voltage regulation was contained mainly within the alternator itself. Today, regulation is often influenced by battery monitoring sensors and multiple control modules. This allows the vehicle to protect the battery, improve fuel efficiency and maintain stable voltage for increasingly sensitive electronic systems.

Rollco alternators are matched to original system requirements, helping ensure compatibility across both older internally regulated systems and newer electronically managed platforms. This reduces the risk of charging faults that can otherwise be mistaken for battery or wiring issues.

START-STOP SYSTEMS RAISE THE BAR

The widespread adoption of start-stop technology has placed additional demands on the alternator. Frequent engine restarts and higher electrical loads require faster battery recovery and greater support from the charging system.

Even though vehicle manufacturers have had to switch their focus to EVs, technical development has continued on more advanced starting and charging systems for internal combustion engined (ICE) vehicles.

Some of the latest start-stop systems are now using a combined starter and alternator unit which is belt driven. Systems such as the Valeo iStARS, which stands for integrated Starter Alternator Reversible System, are becoming commonplace on popular vehicles.

Rollco has expanded its range to include alternators designed to cope with higher cycling frequency and sustained demand.

FITTING PROCEDURES MATTER MORE THAN EVER

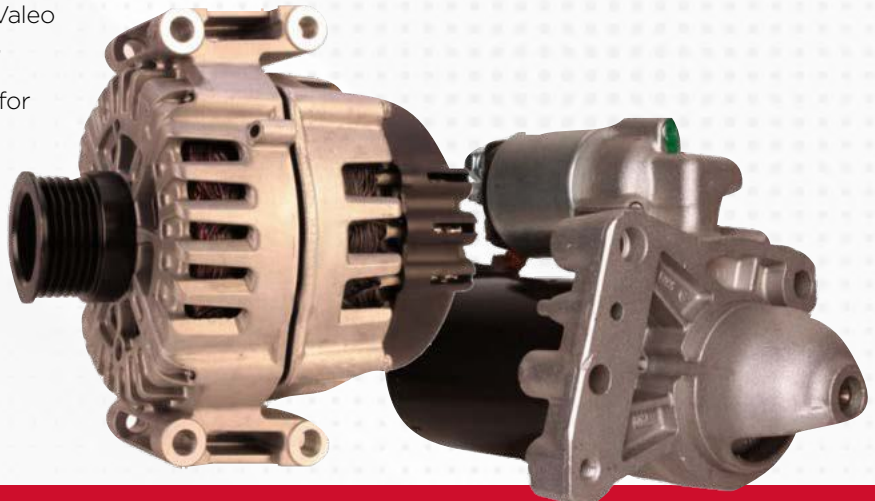
Installation procedures have also evolved. Clearing fault codes, confirming battery specification and carrying out battery registration or system resets are now routine on many vehicles.

Rollco alternators support OE-style charging strategies across a wide range of vehicle ages and technologies but following the correct procedures remains vital. We're here to help, and information relating to fitting and technical issues can be found on our website. Go to rollingcomponents.com for more details.

ROLLCO - KEEPING PACE

The alternator remains a critical component, and from the older, mechanically regulated systems to modern electronically controlled applications, Rollco has evolved its range to keep pace with real-world vehicle technology and workshop requirements.

FIT THE BEST, FIT ROLLCO!

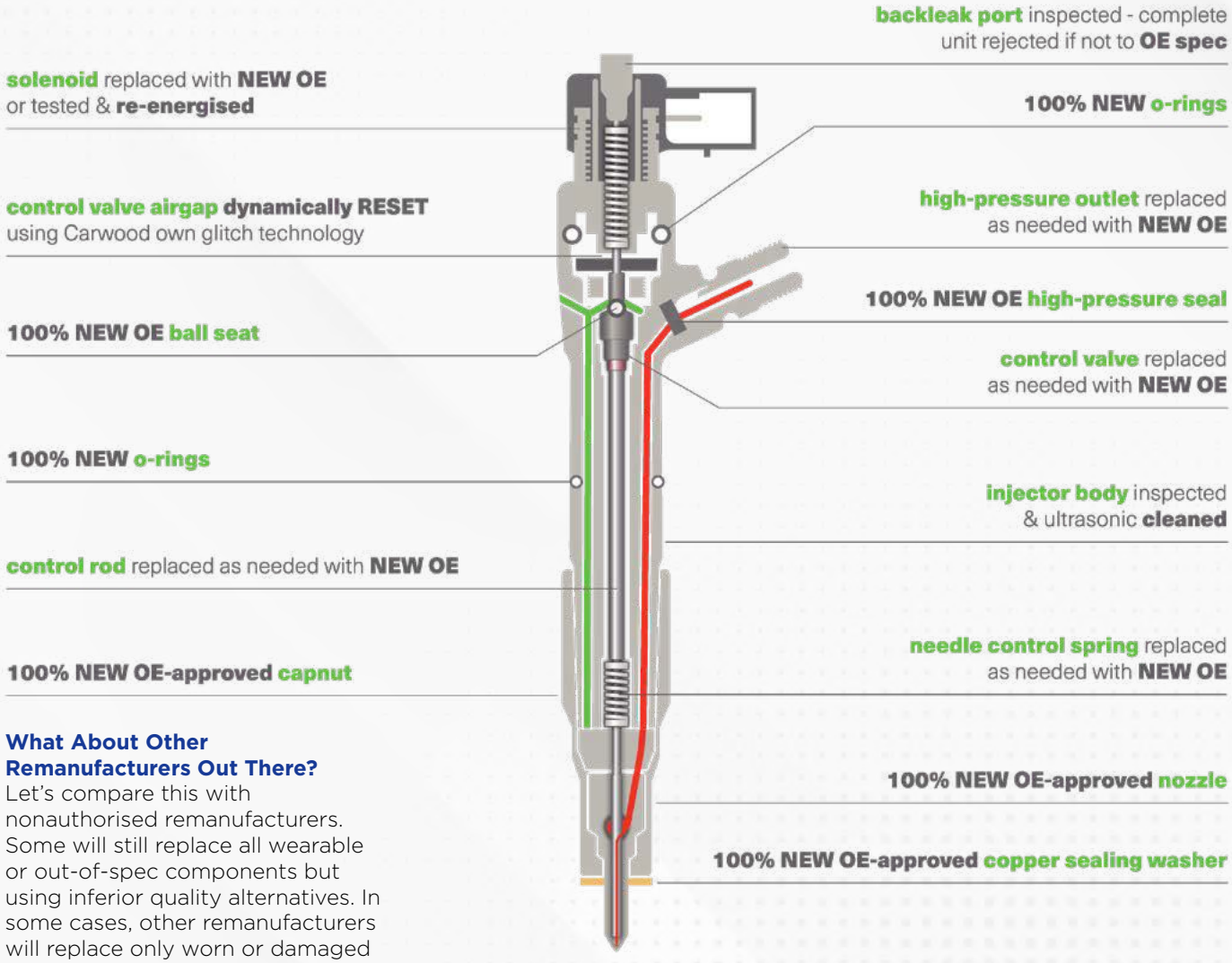


All Rollco products are 100% BRAND NEW

IT'S WHAT'S INSIDE THAT COUNTS

Whilst on the surface, a remanufactured injector from an OE-approved supplier like Carwood may look like any other injector. Look further, and you'll see that's where any similarities end.

That's because unlike other remanufacturers, we replace all wearable components with OE-approved parts. Other components are cleaned and rigorously inspected, measured and tested to ensure they meet OE tolerances; any that don't are replaced. The result? An injector that not only looks like the OE, but fits, performs and lasts just as long.



What About Other Remanufacturers Out There?

Let's compare this with nonauthorised remanufacturers. Some will still replace all wearable or out-of-spec components but using inferior quality alternatives. In some cases, other remanufacturers will replace only worn or damaged components, meaning that serviceable parts with some level of wear and tear, may be reused. Either way, the injector's performance and lifespan will be compromised.

Why It Matters!

With today's increasingly sophisticated technology, the fuel must be injected into the engine with millimetre precision. This process relies on delivering the correct amount of fuel at precisely the right moment, with exact pressure, angle and spray pattern, and is repeated multiple times during each combustion cycle.

Any deviation, even by a fraction, whether caused by wear or a substandard component, will lead to issues such as:

- Poor engine performance
- Reduced fuel economy
- Increased emissions
- Premature wear and tear to key components

By choosing Carwood, you're getting an injector that has been designed, engineered and manufactured to deliver the same reliable, long-lasting engine power, fuel economy and emissions performance as the OE.

Furthermore, by reusing the injector core, it costs less for YOU, your customers and the environment.

Innovation from experience

Cylinder-head gaskets - solutions in any position.

As key components, cylinder-head gaskets contribute to efficient, safe and economical engine operation. Whether it's Metaloflex™ metal layer, metal-elastomer or metal/soft material cylinder-head gaskets - the Elring range includes all types tailored to the relevant requirements: for individually powerful, economical and environmentally-friendly engines.

Cylinder-head bolt sets – for 100 % safety.

Professional cylinder head repair always requires a new cylinder head gasket and new cylinder head bolts during installation. Elring therefore not only offers the cylinder head gasket, but also the appropriate cylinder head bolt sets in tested quality. For almost all passenger cars and commercial vehicles - packaged in a special box with thread protection.

Plastic parts - heat-resistant lightweights.

Thanks to the tried-and-tested ElringKlinger OE expertise, the plastic parts from Elring – Das Original provide a tailored and reliable repair solution - despite their low weight, they have sufficient rigidity to distribute the sealing load evenly. The valve covers and oil sumps are supplied ready to install and therefore ensure a time-saving, repair-orientated installation.

Gasket sets - everything complete and ready to hand.

For professional repair work, everything has to be perfectly matched, precisely coordinated and available quickly. Elring gasket sets cover a comprehensive range for full and partial inspection of both passenger car and commercial vehicle engines, transmissions and units: in line with requirements and tailored to the relevant repair. These include full sets (S), cylinder head sets (ES), conversion sets for crankcases (CS), water pump sets (WPS) and transmission sets (GSM). Saves time in ordering, storage and installation.

Sealants - Quality impresses at first glance.

Wherever components need to be reliably sealed, Elring offers a comprehensive range of high-performance sealants for the professional and do-it-yourself sector that has proven itself in practise.

Radial shaft seals and valve shaft seals.

Dynamic seals round off the product range. Elring offers radial shaft and valve shaft sealing rings, some with a sensor, in a wide range of designs, materials and dimensions. For engines, transmissions and axles - in tested quality, of course.

Elring – Das Original

Das Original

Niterra

IGNITION PARTS

PRECIOUS METAL MYTHBUSTING

There are five common misconceptions about precious metal spark plugs that hold people back from a premium service offering. In this article, Niterra UK Ltd explores those assumptions, to separate fact from fiction.

Precious metal spark plugs are tarnished by a lot of misconceptions, but when it comes to modern vehicle performance, they have more to offer than many people realise. Here are five common myths that need busting:

1. "Only high-performance engines use precious metal"
It's easy to assume that precious metal spark plugs are only relevant for high-performance vehicles, but that simply isn't the case. They offer just as many benefits for a 1.2-litre engine as they do for a 3-litre powerhouse. Those smaller turbocharged engines are often working to their maximum capacity and demand reliable, efficient combustion. Iridium and platinum plugs deliver that by providing a more stable spark and better ignition performance under load.

2. "They're new, they haven't been around long enough"
NGK has been manufacturing precious metal spark plugs for decades. Iridium IX was launched in 2006, and the company's expertise with these materials goes back even further. This isn't new technology. The benefits are proven, and it's certainly not going away. As vehicle manufacturers continue to specify iridium and platinum in original equipment designs, this is now trusted, established technology.

3. "It's just an excuse to charge more"
Yes, they cost a little more, but that price reflects the real value of the materials used. Iridium is one of the hardest metals on Earth, with a melting point of 2,450°C. It resists wear and spark erosion far better than standard metals. NGK's iridium and platinum tips are laser welded to ensure maximum performance and durability, giving drivers tangible improvements in reliability and efficiency. As a result, service life is typically double that of standard nickel plugs.

4. "They only last longer, that's the only benefit"
Longevity is just one part of the story. Precious metal plugs operate at higher temperatures, which helps prevent carbon build-up. That's a major benefit in urban driving and stop-start traffic where fouling can be a real issue. Their lower voltage demand also reduces strain on the ignition system overall, protecting coils and the wider ignition eco-system.

5. "You're wasting mileage if you follow standard service intervals"
In truth, these plugs are capable of lasting far beyond standard service intervals. That's part of their appeal. There's no need to worry about poor starting or rough idling towards the latter end of the running interval before next service. It means that if a customer misses a scheduled service when things get busy, these plugs keep performing. It's about peace of mind and protecting engine health when life gets in the way.

NGK: Precision and performance powered by precious metal
Niterra has been developing spark plug technology for nearly a century and its NGK brand is the world's number one. Drivers benefit from improved on-the-road performance, better fuel economy, and lower emissions. This precious metal range is trusted by leading vehicle manufacturers and workshops across the UK and Ireland to boost performance, cut emissions and help workshops deliver standout service with confidence.

So the message is clear: there's no need to be precious about using precious metal spark plugs. They have more to offer than you think!

For more details on NGK's full range, visit www.ngkntk.com/uk

PROTIPS

Axle Beam Mount 177544

To Fit: Toyota Yaris I

Fig. 1.

Problem
Uneven tyre wear and inconsistent vehicle handling.

Cause
Axle beam mounting rubber worn and deteriorated, causing axle misalignment.

Solution
It is recommended to replace both axle beam mountings for a reliable repair. To do so, the complete rear axle has to be removed from the vehicle. Remove the rear wheels. Clamp the flexible rear brake hoses and disconnect the brake pipes from the rear brakes.

Disconnect the ABS wheel speed sensors and parking brake cables from the axle beam. Disconnect and remove the shock absorbers and road springs. Lower the axle beam and disconnect from the vehicle's body.

To remove the axle beam mounting, first mark the alignment of the bush to the axle. (Fig.1)

Use a suitable chisel and hammer to bend the two portions of the inner flat side of the bush, then using a suitable pressing tool, push the bush out of the axle mounting. (Fig.2)

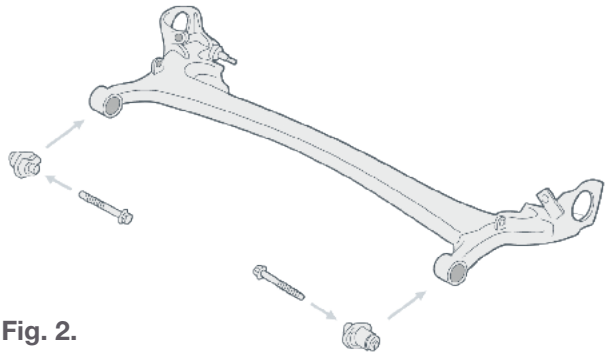


Fig. 2.

Clean all mating surfaces so that they are free of corrosion and road debris. Align the new bush to ensure the correct orientation before pressing the new mounting into the axle, repeat for the other side. (Fig.3)

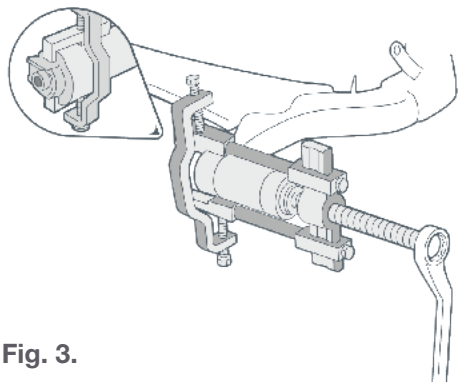


Fig. 3.

With the new axle beam mountings replaced, refit the complete axle to the vehicle including all fixings, suspension and brake components. Tighten the axle beam mounting bolts to 82 Nm with the rear suspension in the neutral position.

Remove the brake hose clamps and bleed the brake system of any air. Refit the wheels and check the axle alignment.

For more technical information please visit:
partsfinder.bilsteingroup.com

SOLUTIONS
DRIVEN BY YOU

www.febi.com

Our Precision, Your Advantage

REVOLUTIONARY **ENVIRONMENTALLY FRIENDLY HYDRAULIC FLUID** FOR SHOCK ABSORBERS LAUNCHED

KYB has unveiled a brand new truly environmentally friendly hydraulic fluid called SustainaLub™.

Shock absorbers play an important role in stabilising the movement of a car by using hydraulic pressure and friction. Hydraulic oil supports this operation. Without this oil, the shock absorber cannot perform efficiently. Conventional hydraulic fluids are packed with years of research, know-how and advanced technology, but many of their main components are base oils derived from petroleum. The newly developed SustainaLub™ aims to be a truly environmentally friendly shock absorber hydraulic fluid that eliminates the environmental risks associated with petroleum. SustainaLub™ is a sustainable product that is both carbon neutral and recyclable. Full release to the market is planned for 2026.

As a specialised global manufacturer of hydraulic equipment, **KYB** has long been involved in maintaining and improving the safety and comfort of automobiles. Using that experience, we are striving to achieve environmental balance without compromising performance or reliability. Not only does SustainaLub™ improve manoeuvrability and stability by applying it to the various damping force valves that we already offer, but it also improves the feel of the product by applying friction control technology, for example **KYB** Prosmooth® shock absorbers. With Prosmooth®, internal shock absorber friction is controlled by using newly developed materials for sliding parts, and variable hydraulic fluid additive adjustment technology. This product delivers both a luxurious ride and superb cornering.

This new fluid contributes to carbon neutrality by switching from petroleum derived base oil to naturally derived base oil. It absorbs CO_2 from the atmosphere during cultivation of the plants used for the base oil raw materials, also reducing CO_2 emissions during transportation. It is biodegradable up to 60% or more according to the Eco Mark certification standard (OECD301). The base oil and additive formulation is recyclable, reducing environmental issues in the long term.

All new **KYB** products undergo reliability evaluation at the **KYB** Development Centre in Japan. Thorough performance and quality evaluation involves both bench tests and actual vehicle testing on our state-of-the-art test track. This in-house design of a hydraulic oil recipe is unique to a manufacturer specialising in shock absorbers.

Replacing petroleum based oil in **KYB** shock absorbers with this new hydraulic fluid will save up to **15.6 million litres of oil per year.**

KYB plans to ultimately apply this technology to all hydraulic products involved in realising a sustainable mobility society. As a specialised manufacturer of hydraulic equipment, **KYB** has long been working to improve the ride comfort and handling stability of automobiles. Based on this experience, **KYB** will continue to pursue advances in performance and reliability while keeping environmental impact at the forefront of development.

PREMIUM QUALITY STEERING & SUSPENSION

AVAILABLE FROM FIRST LINE

OE MATCHING QUALITY

More than 8,700 steering & suspension parts available (inc. engine mounts).

The demand for high-quality steering & suspension components continues to rise as vehicles become more advanced and road conditions more demanding. These critical parts ensure safe handling, ride comfort, and vehicle stability, which is why worn or failing components must be replaced promptly with trusted, OE-matching quality parts.

First Line offers an extensive range covering thousands of passenger car and light commercial vehicle applications – all available through your local branch.

FIRST LINE COVERS EV'S & HYBRIDS

Not only does First Line offer a complete solution for Internal Combustion Engine (ICE) vehicles, it is proud to offer a rapidly growing range for electric vehicles (EV) and hybrid applications to reflect the changing demands of the UK aftermarket.

To date, First Line has introduced more than 2,000 parts across 360 EV applications, with an additional 4,000 parts covering 450 hybrid applications. This substantial investment demonstrates a clear commitment to equipping the aftermarket with the breadth and depth of coverage required to meet future servicing demands, helping workshops remain competitive in a rapidly evolving market.

Example Coverage

JAGUAR F-PACE (2015>)

95+ Part Numbers

Example Coverage

TESLA MODEL 3 (2017>)

45+ Part Numbers

SAMPLE POPULAR REFERENCES AVAILABLE NOW

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

Suspension Arm:

Volvo XC40 2019>2023 (FCA8011 & FCA8012)

Ball Joint:

VAG A3, Golf 2011> (FBJ5463 & FBJ5464)

Stabiliser Link:

Audi A3 2003> (FDL6732)

Tie Rod End:

Ford Fiesta VI 2008>2017 (FTR5520 & FTR5521)

Engine Mounting:

Mercedes E-Class 2010>2016 (FEM4475)

Rack End:

Ford Kuga 2019> (FTR6282)

SAMPLE EV & HYBRID REFERENCES AVAILABLE NOW

First Line offers a comprehensive range of EV & Hybrid part numbers with examples including:

Stabiliser Link:

Tesla Model S 2015> (FDL7695)

Suspension Arm:

Jaguar F-Pace 2015> (FCA7761 & FCA7762)

Top Strut Mounting:

Cupra Born 2021> (FSM5609)

Ball Joint:

BYD Dolphin EV 2021> (FBJ5811)

CHECK OUT OUR WEBCAT

Scan the Webcat QR code to view First Line's extensive parts catalogue

MAKE FIRST LINE YOUR FIRST CHOICE FOR STEERING & SUSPENSION

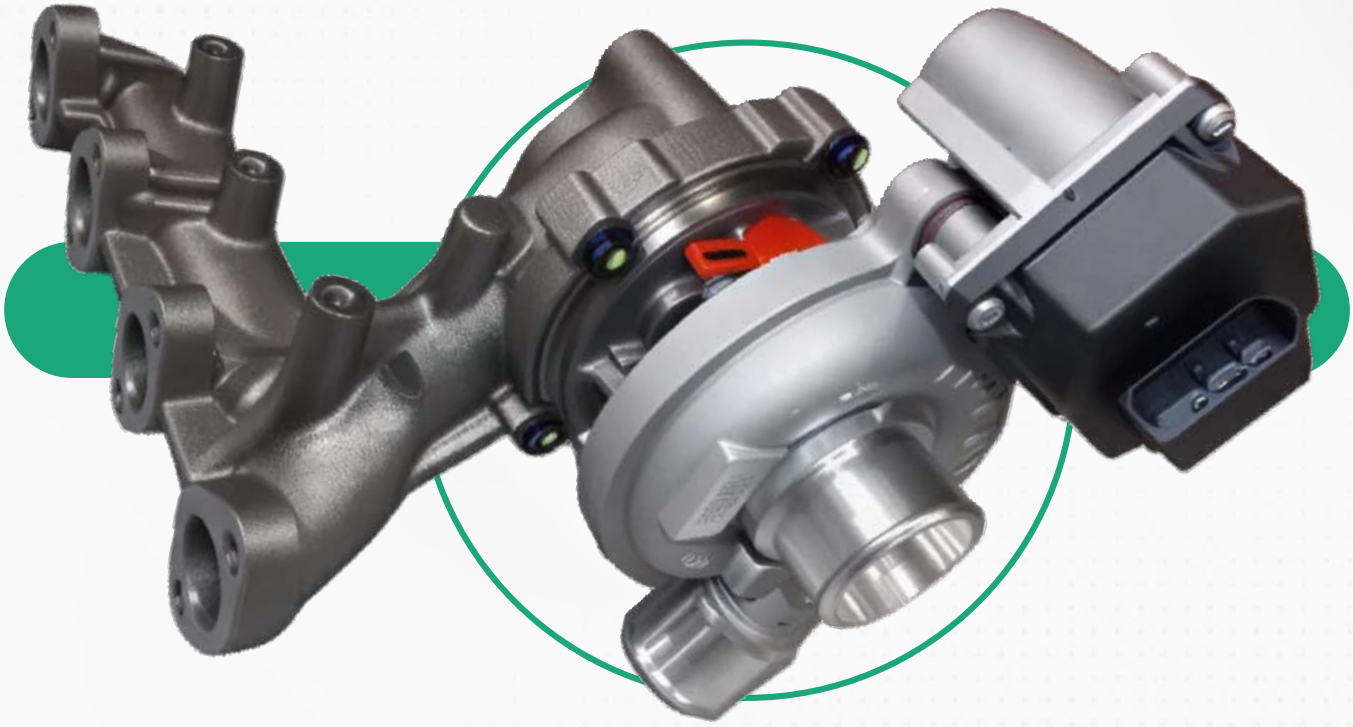
FIRST LINE
THE ALL MAKES SPECIALIST

www.firstline.co.uk

autocharge
turbochargers

BOOST YOUR WORKSHOP WITH AUTOCHARGE TURBOCHARGERS

In the fast-paced world of automotive repair, choosing the right turbocharger supplier can make all the difference. Autocharge sets a benchmark for quality and reliability in the industry, offering workshops a dependable source for both new and remanufactured turbochargers.



State-of-the-Art Quality You Can Trust

Every Autocharge turbocharger is manufactured using cutting-edge processing equipment and dynamic balancing facilities to ensure maximum performance. Built and tested to match the vehicle manufacturer's original factory specifications, Autocharge delivers turbochargers that you and your customers can trust. Their ever-expanding product range means you'll always have access to the latest part numbers for even the most recent vehicle models.

Remanufactured to Perfection

Autocharge doesn't just offer new turbochargers; their remanufactured options are crafted to meet stringent standards in facilities across the UK and Europe. These products are backed by ISO9001 accreditation, guaranteeing OE-matching quality and reliability. By choosing Autocharge remanufactured turbos, you're not just getting a cost-effective option, you're getting premium quality that rivals new components.

Confidence Backed by a Market-Leading Warranty

When you invest in an Autocharge turbocharger, you're not just buying a product; you're buying peace of mind. Both their new and remanufactured turbochargers are supported by an industry-leading warranty, underscoring their commitment to delivering reliable, high-quality products.

Comprehensive Support for Workshops

Autocharge knows that quality extends beyond the product itself. That's why 95% of their turbochargers come complete with gasket kits, fitting instructions, troubleshooting guides, and warranty details. Plus, their team of dedicated turbocharger engineering experts is always on hand to provide technical support and advice whenever needed.

Why Choose Autocharge?

By choosing Autocharge turbochargers, workshops gain access to products that are not only built to perform but are also backed by a company dedicated to quality, innovation, and customer satisfaction. Whether you're looking for new or remanufactured turbochargers, Autocharge is the trusted partner you can rely on to keep your customers' vehicles running at peak performance.

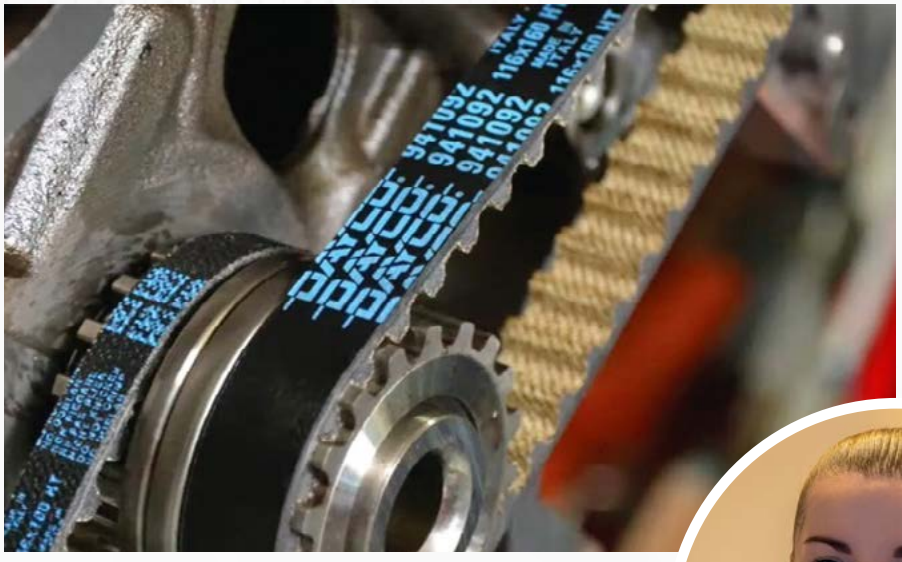
Make the smart choice for your workshop today. Ask for Autocharge turbochargers and see the difference in quality, reliability, and service for yourself!

DAYCO

MOVE FORWARD. ALWAYS.™

BELT IN OIL TECHNOLOGY, THE DEVELOPMENT CONTINUES

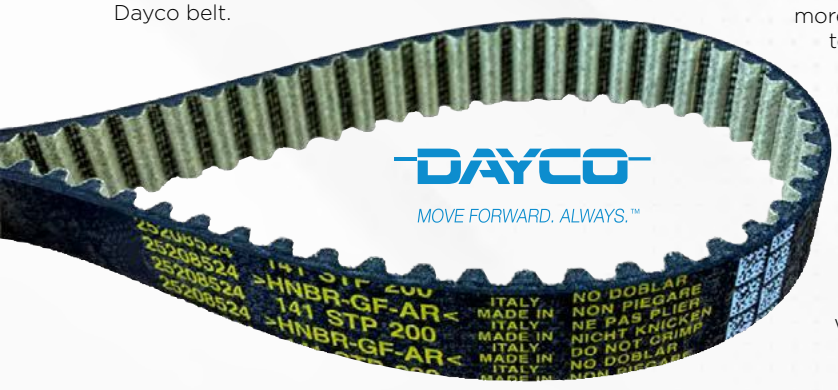
Following on from the information it recently shared, regarding the development of the belt in oil (BIO) oil pump belt in the VW 1.6-litre TDi engine used in many VAG vehicles, Dayco is able to highlight the fact that the use of BIO solutions is continuing to increase.



Original Equipment Expertise

To recap, although some vehicle manufacturers (VMs) prefer to use a traditional chain drive system, several, including Ford, PSA, VAG, and now GM, have wholeheartedly embraced BIO technology, and the benefits it delivers, particularly when it comes to weight saving, noise, vibration and harshness performance, as well as emissions reductions.

Dayco, the company that pioneered BIO development on behalf of the VMs, is therefore delighted to announce that, in recognition of Dayco's deep technical capabilities, GM has approved Dayco as the OE/OES BIO supplier for its 1.0 and 1.2-litre petrol engines produced for the LATAM region; the incumbent supplier is being replaced due to the superior performance and advanced technological level of the Dayco belt.



With emissions reduction, noise abatement and weight saving as key VM goals, the BIO concept plays an important role in delivering these objectives. However, having to function in a chemically aggressive environment throughout the engine's entire service life, and in contrasting climates across the globe, demands precise design and enhanced materials.

Accurately defining the real-world conditions these belts have to cope with is therefore essential, and Dayco's development of a superior formulation that is even more resistant to chemical attack from prolonged exposure to petrol, diesel and additives has resulted in this new supply agreement with GM.

Furthermore, Dayco engineers are presently working alongside those from GM to approve the supply of the BIO system for the oil pump drive on the same 1.0 and 1.2-litre units, further cementing Dayco's relationship with GM Brazil.

Aftermarket Solutions

"Securing OE contracts, such as these, proves the quality and performance of our belts is at the highest level," explains Dayco UK's Ann-Marie Dean. "So, as both our OE and aftermarket belts are produced to the same standards, on the same production lines, in the same facilities, when it comes to the belts we supply to the aftermarket, we're able to guarantee the same quality that the VMs like GM, and many others, demand.

"This should give independent workshops great confidence in the Dayco brand, but it's still important that the technicians fitting our replacement belts understand, and rigidly follow, the installation instructions, procedures and torque values that the VMs specify for the engines on which they are working.

"This is not a case of a manufacturer lecturing professionals and telling them how to do their jobs; rather, it's a case of highlighting the realities of modern replacement best practice to ensure the job is done right first time, with the positive benefits that come with that to the workshop's customers and its reputation.

"The complete Dayco BIO kit range is significantly broader than the competitor offerings and now extends to more than 20 individual kits, several of which also contain a water pump. Together, these cater for hundreds of applications for VMs, including Citroën, DS, Ford, Peugeot and Vauxhall, as well as VAG, and so provide a comprehensive OE aftermarket solution."

WHY ARE GARAGES MOVING TOWARDS COMPLETE TURBO KITS?

SCM TURBO

THE PROBLEM WITH PARTIAL REPLACEMENTS

Turbo failure can often be traced back to issues that have nothing to do with the turbo itself. Contaminated oil feed lines, damaged seals, or incorrect fittings can all cause premature failure.

Relying on existing oil pipes or gaskets can introduce hidden risks, as debris, carbon build-up, or small cracks may restrict oil flow or lead to leaks.

The result? Costly comebacks and unnecessary downtime for both the garage and the customer.

YOUR COMPLETE SCM FIT KIT!

Our Complete SCM Fit Kit makes turbo replacement simpler and more reliable, giving you the option to source every essential component together:

- **The turbocharger**
- **Oil feed pipe**
- **Gaskets, studs and nuts**

Meaning you can be confident that every part of the system is new, clean, and built to work together.

This not only reduces fitting time but also lowers the risk of failure and warranty claims. With every part available through our new SCM Aftermarket range, garages can fit with confidence, knowing each component is built for performance and reliability.

CONTACT YOUR LOCAL BRANCH TODAY FOR PRICE AND AVAILABILITY!

NATIONAL

Wheel Bearing Kits

Wheel hub units: fully integrated system with pre-lubricated and pre-set bearing, complete with flange and ABS sensors.

- Kits include all the components required for correct assembly.
- Accessories include bolts, nuts, split pins and end caps - depending on application.
- Integral ABS sensors and connecting leads are included where appropriate.
- Balls, rollers and races are made from GCr15 high-carbon chrome steel.
- Fully interchangeable with OE.

2 YEAR/20,000 MILE
GUARANTEE

National wheel bearings are engineered to deliver OE-equivalent performance, reliability and ease of installation for today's professional vehicle technician. The range includes complete wheel hub units and bearing kits designed as fully integrated systems, with pre-lubricated and pre-set bearings supplied ready to fit. Where applicable, hub units are complete with flanges and integral ABS sensors, eliminating the risk of incorrect assembly and saving valuable workshop time. National wheel bearing kits include all components required for correct installation, with application-specific accessories such as bolts, nuts, split pins and end caps supplied as standard. Manufactured using high-quality GCr15 high-carbon chrome steel for balls, rollers and races, National wheel bearings are fully interchangeable with OE, offering a dependable, fit-first-time solution that technicians can install with confidence.

National wheel bearing kits comprising of wheel bearing, hub and components.

Wheel Hub Kits

metelli

SAFETY FIRST.
PERFORMANCE ALWAYS.

BRAKE CYLINDERS

BRAKE MASTER CYLINDERS

BRAKE CORRECTORS

CLUTCH CYLINDERS

CLUTCH MASTER CYLINDERS

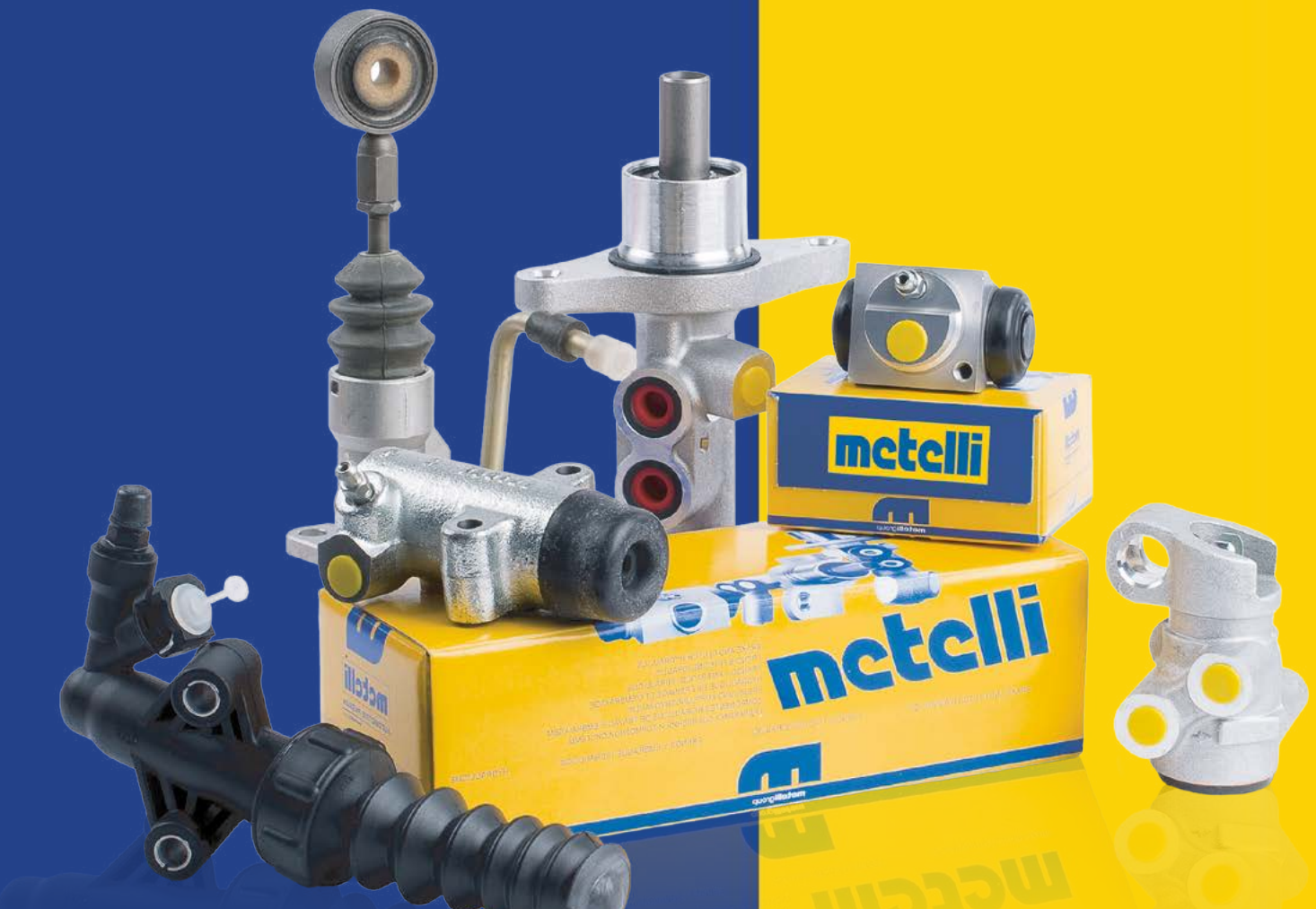
CONCENTRIC CLUTCH CYLINDERS

BRAKE HOSES

Metelli hydraulics deliver OE technology in every cylinder, with each unit 100% tested for leak-free operation.

Advanced production ensures long-lasting durability, supported by extensive coverage across European vehicles.

Our CSC units are engineered for smooth, precise and backlash-free performance, giving every drive the reliability it deserves.



SKF WHEEL BEARINGS AND HUB UNITS. OE QUALITY FROM THE START.

In the workshop, replacing an original equipment wheel bearing or any other part with an OE-quality product is often the simplest way to avoid problems later.

We all recognise that when a bearing fits exactly as intended, common issues can be eliminated. SKF is a brand long associated with OE supply, and that background is clearly reflected in how its wheel bearings and hub units perform once fitted. We reviewed the SKF offering to understand why it remains a trusted choice in professional workshops.

SKF wheel bearings are engineered as complete systems rather than individual components. The bearings are sealed for life and pre-lubricated with application-specific, high-performance grease. This removes two of the most common causes of failure, contamination and incorrect lubrication. From a fitting perspective, this reduces uncertainty and lowers the risk of issues developing once the vehicle has left the ramp.

SKF hub units follow the same original equipment design philosophy. Supplied as fully integrated assemblies, they are designed to install exactly as the factory intended. For higher-load applications, SKF's patented X tracker hub units are engineered to improve stiffness and load distribution. This supports consistent handling, stable braking behaviour and controlled noise and vibration.

SKF wheel bearing and hub kits are supplied complete with the correct fixings where required, including nuts, bolts or screws. This helps ensure correct clamping forces are achieved and removes the temptation to reuse old fasteners. SKF also designs and manufactures its own seals, ensuring the bearing, lubrication, and sealing systems perform as a matched unit.

ABS performance is another area where OE accuracy is critical. Where required, SKF supplies wheel bearing and hub units with original-equipment-quality ABS impulse rings and sensors.

SKF also supports workshops beyond just the part itself. Clear fitting instructions and technical bulletins are available, and the instructional videos found on YouTube are excellent. They are practical, easy to follow and clearly developed with real workshop conditions in mind. Structured online training is also available through SKF's own website, covering wheel bearing technology and correct installation practices.

Smart Choice Verdict

Choosing OE quality from the start remains one of the most effective ways to avoid unnecessary problems later. SKF wheel bearings and hub units reflect that approach, combining OE-level engineering with complete fitting solutions and strong technical support, and all supplied with a 2-year, unlimited-mileage warranty. We think SKF bearings and hubs are a **smart**, dependable **choice** for any workshop.

WHY THE ARM MATTERS AS MUCH AS THE BLADE

The wiper blade is usually the first component to be replaced when a screen isn't clearing properly. However, when wiping problems persist after new blades are fitted, the issue may actually be the wiper arm.

Wiper arms are not routinely replaced, but they play a critical role in maintaining correct blade pressure and wipe consistency. As vehicles age, the condition of the arm can deteriorate, leading to symptoms that mimic a worn blade.

Understanding the Symptoms

Persistent streaking, judder or missed areas on the windscreen are often blamed on blade quality. Reduced wiping performance at speed, uneven pressure across the blade or incorrect parking position are further indicators that the arm may no longer be functioning correctly. Recognising these signs early allows technicians to move beyond repeat blade replacement and identify the actual cause of the problem.

Why Wiper Arms Fail Over Time

Cold weather is a major contributor to arm damage. When blades freeze to the glass and the system is activated, excessive load is placed on the arm and its mounting. This can damage splines, loosen fixings or distort the arm, reducing its ability to apply even pressure.

Heat and UV exposure also take their toll. The internal spring within the arm gradually loses tension through constant cycling, reducing blade contact with the windscreen. This loss of pressure is often misdiagnosed as premature blade wear.

Contamination plays a role, too. Road dirt, insects and tree sap increase friction, particularly when wipers are operated on a dry screen.

Corrosion at the pivot point can restrict smooth movement, leading to uneven wipe patterns or judder. In addition, accidental impacts from heavy snow, falling debris or routine cleaning can bend the arm or alter blade angle enough to affect performance.

Tech Tip. What to Check Before Replacing Blades Again

If new blades do not improve wiping performance, take a moment to inspect the arm. Compare spring tension side to side, check alignment and blade angle, confirm free movement at the pivot and inspect splines and fixings for wear or corrosion. Identifying a worn or damaged arm early helps prevent repeat visits and unnecessary component changes.

The Blade and the Arm Work Together

While arm condition is often overlooked, blade selection remains critical. Trupart supplies a wide range of wiper blades, including conventional, flat and aero designs, covering a broad range of vehicle applications. Using the correct blade type for the vehicle ensures optimal contact with modern curved windscreens, but that performance relies on the arm applying consistent pressure.

A Complete Repair Approach

Replacing a worn wiper arm alongside the correct blade restores proper system function, improving visibility and overall safety. With comprehensive coverage across both wiper arms and wiper blades, Trupart provides technicians with the components needed to address wiping issues at the source, rather than treating the symptoms.

By considering the entire wiper system, technicians can deliver a more accurate diagnosis, a more durable repair, and, of course, a clearer screen.

READY FOR WINTER?

Winter battery readiness in the workshop

Winter places significant demand on vehicle electrical systems, and workshops are likely to see an increase in battery-related issues as temperatures fall. Cold starts, high accessory loads, short-run usage, and ageing stop-start systems all make this the busiest season for battery failures. For technicians, proactive testing and correct replacement are key to reducing returns, workshop comebacks, and customer breakdowns.

Why winter is hard on batteries

As temperatures drop, a battery's ability to deliver cranking power can fall by up to 30% at 0°C. At the same time, drivers rely more heavily on electrical consumers such as heated screens, blowers, lighting, and wipers. In vehicles that cover mainly short journeys, the alternator often cannot replenish the charge used during starting and accessory operation.

This leads to a gradual reduction in state of charge and, eventually, a no-start situation. Start-stop systems intensify the challenge: they cycle batteries more frequently, require higher charge acceptance, and demand OE quality performance to function correctly.

The workshop opportunity

Carrying out a quick battery test on every winter service or customer visit allows technicians to identify weak or deteriorating units before they cause problems. This approach helps prevent non-starts on the forecourt, increases customer confidence in the workshop's diagnostic ability, and supports proactive maintenance that keeps vehicles reliable throughout the season.

Professional testing equipment provides an accurate picture of state of health and charge level, ensuring informed decisions about replacement rather than relying on symptoms that only appear once the temperature drops.

Why Yuasa is a trusted choice for technicians

With over a century of battery development and a strong OE pedigree, Yuasa provides high-quality products that technicians can depend on. The range includes advanced EFB and AGM technologies designed to meet the demands of modern start-stop systems, as well as robust conventional batteries that deliver excellent cold-cranking performance. This reliability helps reduce warranty claims and ensures that customers drive away with a battery capable of handling winter's increased electrical loads.

Smarter winter battery care in the workshop

Cold weather quickly exposes weakness in ageing batteries, making routine testing essential during winter checks. A quick health and charging assessment helps technicians spot declining performance early and confirm the electrical system is working correctly. When results fall outside recommended limits, advising replacement prevents cold-weather breakdowns and maintains customer confidence. Fitting the correct specification, particularly for EFB and AGM systems, ensures modern vehicles continue to operate reliably.

YUASA

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MADE IN EUROPE*

SILENCIO™
THE ORIGINAL

Valeo WORLDWIDE LEADER* NO.1 ORIGINAL EQUIPMENT WIPER SYSTEMS

*2023 Original Equipment market share

Front wipers are replaced on average every 3 years -
the recommendation is every year!

TRUST THE N°1 WIPER

Valeo is the World's N°1 O.E. Wiper System Specialist,
with over 100 years of wiping innovation!

WIPING AS A SAFETY FACTOR

It is a major safety factor to have a reliable functioning wiper system to ensure maximum driver visibility when cleaning the windscreen and travelling at speed.
Wiper Systems are used for 7% of the total driving time, so it's a must to have them regularly checked and replaced as necessary.

ENSURE WIPERS ARE MOT READY!

Windscreen wipers not clearing the windscreen effectively are a common cause of MOT failure. If the blades don't clear the water effectively from the screen and leave areas untouched or smears across the driver's view then this may result in a failure.

It is recommended that wiper blades are replaced annually due to the damage caused by road and driving conditions.

SILENCIO™ THE ORIGINAL

To supply customers with the exact same blade as the original conventional, hybrid, flat and rear wiper blades

SILENCIO™ CONVENTIONAL RANGE
Covers all O.E specifications available on the market: standard, metal, curved, spoiler and washer ramp.

SILENCIO™ FLAT BLADES
Ensure perfect initial wiping quality and improved wiping efficiency over time thanks to the brand new VisioRubber™.

SILENCIO™ REAR BLADES
Provide the driver with perfect visibility at the rear of their vehicle. Improve safety by also replacing the rear blade!

SILENCIO™ HYBRID
Is a mix of conventional and Flat blade technology developed for Asian car manufacturers.

SILENCIO™ AQUABLADE™
SILENCIO™ Aquablade™ delivers wiper fluid directly onto the windshield via the wiper blades, rather than via nozzles mounted on the hood.
The windshield is wiped instantly and uniformly, regardless of vehicle speed, allowing for constant and perfect visibility.

Front-facing cameras, which are now more and more common on car windshields, also benefit from an improved field of vision.

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