LUBRI NEWS

THE OFFICIAL MORRIS LUBRICANTS NEWSLETTER

MORRIS
LUBRICANTS

SPRING 2024

How Oil Is Used With Guy Martin: Automotive Edition

Guy Martin has spent many hours in his workshop, working on a whole variety of different vehicles. From his bikes, trucks, tractors to his cars, he always makes sure they are maintained with the best quality oils, lubricants and greases to help ensure their optimal performance.

In the new 'How Oil is Used' series of videos, Morris Lubricants' Technology Manager Adrian Hill visits Guy's workshop to discuss the latest developments in the automotive industry, the advancements in engine technology and why it is so important to maintain cars with the correct quality oils and lubricants specified by the OEM (Original Equipment Manufacturer).

Each episode sees Guy and Adrian delve into a variety of different elements that are important to consider when maintaining cars and other automotive vehicles. Episode one reviews why it is still important to use the correct specification of engine oils in vehicles out of warranty. Episode two looks at the advances and considerations of engine oils used in vehicles under warranty. Episode three discusses what lies ahead for engine oils and potential future power options for cars. In Episode four they chat about the importance of antifreeze coolants. Episode five covers the various requirements of gear and transmission oils. The final episode looks at the wide variety of ancillaries available for automotive and car maintenance.

These short videos give a great overview of the oil, lubricant and grease requirements for cars on the road today.

Lights, camera, action!

Filming starts

Guy Martin, Morris Lubricants' Brand Ambassador

Selecting the correct quality engine oil is important

NEW Video Series!

EPISODE 1:
SELECTING THE CORRECT ENGINE OILS FOR CARS OUT OF WARRANTY

EPISODE 2:
WHICH ENGINE OILS TO USE FOR CARS UNDER WARRANTY

EPISODE 3:
WHAT LIES AHEAD FOR CAR ENGINE OILS?

EPISODE 4:
CHOOSING THE CORRECT ANTIFREEZE COOLANTS FOR CARS

EPISODE 5:
GEAR AND TRANSMISSIONS OILS FOR CARS

EPISODE 6:
CAR MAINTENANCE ANCILLARIES

Want to learn more?

You can watch this series on morrislubricants.co.uk or by looking for the videos on the Morris Lubricants Social Media and YouTube channels.

Morris Lubricants ready for an era of rapid change

To be ready, you must get ahead, and following a £3m investment in the Shrewsbury production facility, which sees it optimised for the sustainable manufacture of sophisticated small-batch formulations, Morris Lubricants is equipped to meet the demands of a rapidly changing lubricants industry. The days of having one oil fits all engine types are long gone.

"It's my role to ensure the business is fit for purpose and reacting to our environment." explains Andrew Goddard, Morris Lubricants' Executive Chairman, who regards the "ever evolving" challenge of creating a more diverse and technically complex range of products as an opportunity for Morris Lubricants to do what it does best.

"Moving with the times is something we've done for over 150 years and this project has enabled us to ensure we are at the very leading edge of technological advancements so that we can continue to provide the quality and service our customers have a right to expect from us." says Andrew.

With a focus on efficiency and flexibility, as well as the mitigation of carbon emissions and waste within operations, improvements to the production plant have included the installation of a new tank farm comprising of thirty stainless steel storage vessels, the relocation and reconfiguration of production lines, and the integration of a state-of-the art, fully automated control and recovery system.

"The benefits have been felt immediately and it's working as it was designed to.", says Andrew. *"In addition to delivering logistics efficiencies, which ensure we can provide best value for our customers,"* Andrew adds, *"the changes have led to a reduction in waste, and with sustainable practices central to the plant's redesign, low energy LED lamps have also been fitted throughout the production facility."* This investment builds upon the existing sustainable solutions which includes on-site solar power generated electricity, ultrasonic product blending capabilities and the use of recyclable packaging.

Andrew Goddard, Executive Chairman

As a business whose reputation is built on excellence, rigorous quality control standards have always been par for the course. To ensure the purity and quality of each product batch, at various stages of its manufacture, tests are performed and checked in the on-site Morris Lubricants' Quality Control Laboratory. Around 5,000 tests are performed by the Quality Control Laboratory each month. To guarantee that Morris Lubricants' wide variety of oils and lubricants sold each day meet the exacting and consistent standards customers rely on to protect their assets, there is no room for error. Andrew adds: *"We have never and will never sacrifice the quality of our products, so to keep competitive we must improve our own internal practices, which is what this investment is all about."*

Andrew continues *"Due to the hygienic nature of the new stainless steel pipework, we now have the flexibility to transfer 600 different product combinations from source to destination without disruption, whereas before, product compatibility would play a big part when transferring and storing products."*

Dedicated On-Site Quality Control Laboratory

Part of the masterplan is to facilitate the repeat manufacture of the more bespoke formulations that industry regulations stipulate and OEMs require. This ability to maintain the flow of production means that Morris Lubricants can manufacture multiple grades simultaneously.

Previously, global specifications such as API and ACEA have been the backbone of engine manufacturer's demands, but OEMs are now pushing for new advanced engine oil formulations as the drive towards reduced emissions puts pressure on them to accelerate engine architecture development.

Andrew continues *"This has led to a requirement to evolve our product categories. Fuel efficiency has resulted in lower viscosity products, such as 0W-20s, 0W-16s and lower being needed, where internal energy sapping drag can be reduced. These newer grades are also required for stop/start operation, particularly in hybrids, where rapid response is necessary to eliminate wear during rapid cold start."*

As a result of this ambitious £3m initiative, Morris Lubricants is uniquely positioned as one of the most technologically advanced, sophisticated and flexible oil blending plants in the world. *"As technology and customer needs change, our service and product offering will change. We plan on being here for the long-term, so investing in the future has always been a priority."*, says Andrew Goddard, and he concludes,

"Whatever the future brings, Morris Lubricants will be well placed to supply whatever is needed."

Quality product filled in 25 litre drums

MORRIS LUBRICANTS APPOINTS ITS FIRST CHIEF OPERATIONS OFFICER

Morris Lubricants has recently promoted Owen Lloyd to become its first Chief Operations Officer (COO). In his new role, Owen will oversee and manage the key operational functions of the company, which includes product manufacturing.

As Owen states, "The lubricants industry is changing and we are reacting. At Morris Lubricants we are investigating the requirements for emerging, alternative fuelled vehicles, whether that be electric, hydrogen or other synthetic fuels."

Morris Lubricants' Executive Chairman, Andrew Goddard, added

"I would like to congratulate Owen on his recent promotion. The company is very progressive; not only in developing a range of different products for various market sectors, but also in training and developing our employees."

Andrew Goddard, Executive Chairman (R) congratulates Owen Lloyd (L) on his new role.

MORRIS LUBRICANTS LAUNCHES NEW ANTIFREEZE COOLANT RANGE

A new and bigger antifreeze coolant range, called Ultralife, has been launched. Covering 169 different engine specifications, the new Ultralife range of antifreeze coolants has been formulated to offer refined levels of protection to engines employed across a wide range of market sectors, including passenger cars, commercial vehicles, agricultural vehicles, off-highway vehicles and large stationary gas engines.

ULTRALIFE 1 ANTIFREEZE COOLANT

Ultralife 1 is an OAT (Organic Acid Technology) based antifreeze coolant that is qualified for use in a wide range of vehicles. This includes engines found in trucks, commercial vehicles, agricultural vehicles, off-highway vehicles and passenger cars. This antifreeze coolant provides high levels of rust and corrosion protection.

- Available in 5 litre, 20 litre, 205 litre and IBC
- Protects against frost damage down to -37°C
- Improved oxidation stability
- pH stabilisation
- Superior flux compensation
- Optimised corrosion protection

48 SPECIFICATIONS

ULTRALIFE 2 ANTIFREEZE COOLANT

Ultralife 2 is a phosphated OAT antifreeze coolant, designed for Japanese, Korean and European car manufacturers where seal and gasket compatibility are essential to prevent deterioration and leaks. This antifreeze coolant contains phosphate technology for effective pH control and enhanced corrosion protection.

- Available in 5 litre, 20 litre, 205 litre and IBC
- Protects against frost damage down to -37°C
- Hard water stabilisers
- Improved oxidation stability
- pH stabilisation
- Superior flux compensation

35 SPECIFICATIONS

ULTRALIFE 3 PSI-OAT ANTIFREEZE COOLANT

Ultralife 3 is an antifreeze coolant that has been developed in line with German OEM requirements, with a silicate inhibitor for advanced aluminium protection and phosphate to buffer the pH and keep the product slightly alkaline. This OAT antifreeze coolant covers engines used in the commercial vehicle, off-highway and passenger car markets.

- Available in 5 litre, 20 litre, 205 litre and IBC
- Protects against frost damage down to -37°C
- Superior oxidation stability
- Phosphated Silicated OAT
- Flux compensation
- Superior corrosion protection

26 SPECIFICATIONS

ULTRALIFE 4 LONG LIFE OAT ANTIFREEZE COOLANT

Ultralife 4 is a robust and versatile antifreeze coolant spanning multiple vehicle sectors, this product has long established credentials due to its tried and tested OAT inhibitor chemistry. This product is ideal for mixed commercial vehicles fleets employing a range of OEMs and equipment types, including large stationary gas engines.

- Available in 20 litre, 205 litre and IBC
- Protects against frost damage down to -37°C
- Established profile
- Proven technology
- Wide specification coverage
- Used in a variety of different market sectors

71 SPECIFICATIONS

Also Available...

ULTRALIFE RED ANTIFREEZE COOLANT

Ultralife Red antifreeze coolant is suitable for the cooling systems of modern engines in cars, vans, trucks and contractors' plant, where an OAT antifreeze is recommended.

- Available in 1 litre, 5 litre, 20 litre, 205 litre and IBC
- Protects against frost damage down to -37° C
- Organic Acid Technology (OAT) coolant technology

31 SPECIFICATIONS

MEG-BASED ANTIFREEZE COOLANT

MEG (Monoethylene Glycol) based antifreeze coolant is suitable for engine cooling systems found in classic cars, vans, trucks, off-highway vehicles and agricultural equipment.

- Available in 1 litre, 5 litre, 20 litre, 205 litre and IBC
- Non-OAT (mineral) technology
- Protects against frost damage down to -37° C

4 SPECIFICATIONS

A Guide To Ultralife Antifreeze Coolants

Charlotte Vowden and Adrian Hill

To help get a better understanding of the importance of the new Ultralife antifreeze coolant range, Writer, Presenter and Automotive Adventurer Charlotte Vowden sat down with Morris Lubricants' Technology Manager, Adrian Hill to learn about the recent developments of the product range and why using the correct antifreeze coolant will ensure maximum operational efficiency when an engine is running, as well as preventing freezing, overheating and costly damage.

In this series of videos Adrian explains to Charlotte: What are antifreeze coolants? The capabilities of these vital products and the science behind them, how to select the correct antifreeze coolant and how Morris Lubricants has used its years of experience to meet the challenge of this antifreeze coolant evolution head on.

The new Ultralife range covers 169 different vehicle and engine specifications and offers refined levels of protection to engines employed across a wide range of market sectors, including passenger cars, commercial vehicles, agricultural vehicles, off-highway vehicles and large stationary gas engines.

EPISODE 1:
What are Antifreeze Coolants?

The key features of an antifreeze coolant are discussed, including how it prevents freezing, stops overheating and controls rust and corrosion.

EPISODE 2:
The Capabilities of Antifreeze Coolants

Adrian explains to Charlotte the large number of vehicle and engine specifications the Ultralife antifreeze coolant range covers, 169 in total.

EPISODE 3:
The Science Behind Antifreeze Coolants

The different chemistries and technologies that go into formulating the various Ultralife antifreeze coolants are discussed and explained.

EPISODE 4:
Choosing the Correct Antifreeze Coolant

Adrian highlights that the colour of an antifreeze coolant is purely cosmetic, therefore coolant choice should always be based on OEM specifications.

EPISODE 5:
Antifreeze Coolants Backed Up by Knowledge

Adrian summarises the key points of antifreeze coolants and explains how to find out which Ultralife antifreeze coolant is right for a specific vehicle.

Watch these now on Morris Lubricants YouTube Channel and Social Media

Serving the Agricultural and Farming Communities with Agrimax

Morris Lubricants recently exhibited at LAMMA 2024, providing the perfect platform to showcase Agrimax, the company's innovative range of advanced multifunctional lubricants designed specifically for agricultural requirements.

Applications for Morris Lubricants' range of agricultural oils and lubricants include engines, gearboxes, hydraulics, backends, transmissions, engine coolant systems, oil immersed brakes and general maintenance in a wide range of agricultural equipment including tractors, combine harvesters, mini diggers, and a variety of other agricultural machinery.

Developed with the latest additive technology and high-quality base oils, the Agrimax range of agricultural lubricants offers maximum performance levels, enhanced fuel efficiency, reduced running costs and improved reliability, regardless of which manufacturer of agricultural machinery is used.

These oils and lubricants also help to minimise downtime with superior operational and protective performance even in the harshest of operating conditions.

The Agrimax range has achieved a wide range of OEM approvals, enabling users to cut the number of lubricants they need whilst reducing the risk of any misapplication. Experts at Morris Lubricants have found that agricultural users are often overloaded with a myriad of different grades of oil for each application. The Agrimax range of agricultural lubricants aims to help users consolidate their inventory and use fewer products.

Jason Vigrass, Marketing Manager said:

"The agricultural sector is one in which we are very strong and have been servicing for many years. We know the huge problems users have with so many different grades of oil for a mixed fleet of vehicles and equipment."

Jason continues *"With technical intervention, we can identify incorrect lubricants, advise corrective action and help consolidate users' inventory so they are using fewer products. Not only will the equipment be getting optimised levels of protection but reduced stocking can provide cost savings."*

Morris Lubricants has been innovating and developing quality solutions for the agricultural industry for over 150 years. The company is proud of the relationships it has developed with customers, end users and original equipment manufacturers over many years and prides itself in offering expert technical advice and exceptional customer support.

A Selection of the Agrimax Range:

AGRIMAX
SUPERIOR QUALITY AGRICULTURAL OILS

Don't Forget...

Guy Martin recorded a series of videos with Morris Lubricants' Technology Manager, Adrian Hill, exploring 'How oil is used' in agricultural vehicles and farming equipment.

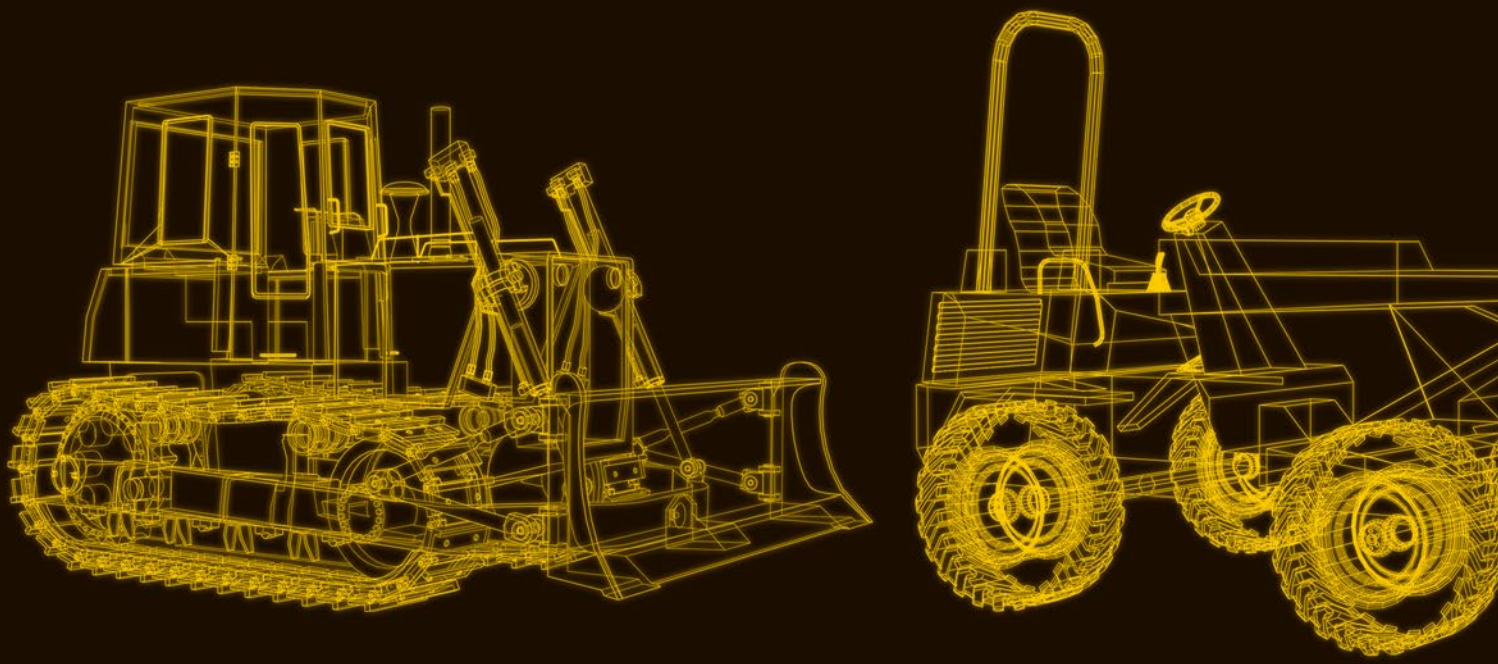
Adrian went to Guy's workshop to show him why it is so important to select the correct oil for any type of tractor, agricultural vehicle or farm machinery, no matter what age, brand or model.

Adrian and Guy discuss agricultural engine oils, tractor backend and transmissions oils, hydraulic oils, and a wide variety of maintenance ancillaries. Together they answer the question, why the quality of your oil is so important in maintaining reliability and the performance of your agricultural vehicles and equipment?

The videos are available on the Morris Lubricants website, YouTube and Social Media channels.

Lubricating Off-Highway Equipment

Why it is important to use the correct oils, lubricants and greases for bull dozers, dump trucks and excavators.



ENGINES

Off-highway engines have a tough life. Unlike their on-highway counterparts, they spend more time idling or working at slow speeds, sometimes with extremely high loads. This type of work generates a lot of soot which must be controlled by the engine oil. The oil has to have good dispersancy to stop the soot from sticking together. If this happens it will thicken the oil and reduce its cooling capability, as well as blocking oilways that can lead to oil starvation and engine failure. Soot is also very abrasive and good anti-wear properties are also required.

Morris Lubricants' range of engine oils used in off highway vehicles have been developed to combat the issue caused by soot even during long duty hours, as well as following the latest OEM specifications and industry requirements.

HYDRAULICS

Off-highway equipment relies heavily on hydraulic systems to do a whole host of different jobs. The main use of hydraulics will be to move booms, buckets, back-hoes or any other piece of functional equipment. Some off-highway equipment is propelled using a hydrostatic transmission, which uses hydraulic fluid pressure to drive motors that turn tracks or wheels. Hydraulic oils have to protect the heart of the system which is the pump and provide consistent operational performance over a wide range of extreme temperatures, either very cold or very hot.

Formulated using the latest anti-wear technology, Morris Lubricants' hydraulic oils perform over and over again whilst maintaining the integral parts of the hydraulic system, even in the toughest of environments.

TRANSMISSIONS

The job of the transmission is to take power from the engine and deliver it to the wheels or tracks. The ground speeds can be fairly slow but with high loads and for improved operator comfort, heavy duty automatic transmissions are usually chosen. This saves the operator from having to shift gears manually which will cause a lot of wear and tear on clutches. Automatic transmissions select the appropriate gear ratio for the operating conditions. The transmission fluid must provide cooling and protection to gears and bearings whilst still ensuring positive engagement of brake bands and clutch packs required for gear ratio selection.

The range of transmission oils from Morris Lubricants ensure that off-highway equipment still performs in extreme temperatures with outstanding friction control as well as superb rust and corrosion protection for transmission components.

GEARS

To drive wheels or tracks, the power has to be delivered through geared systems. These may take the form of drive axles that contain differentials and reduction hubs. More advanced axles use limited slip differentials that ensure when the equipment is operating on loose or muddy surfaces that full traction is maintained allowing the vehicle to move without slippage. Gear oils have to provide high levels of extreme pressure protection to maintain the integrity of meshing gears and to look after bearings. Limited slip differential oils have extra extreme pressure protection to cope with shock loadings.

Morris Lubricants' range of high performance gear oils used in off-highway vehicles have exceptional extreme pressure performance, outstanding temperature control as well as superb rust and corrosion protection for gear sets.

OIL IMMERSED BRAKES

The off-highway world brings with it all sorts of challenges for equipment and brake systems are no different.
Air ventilated disc brakes would not survive very long where there is a lot of abrasive material in the working environment. To overcome this, brake systems are enclosed to protect them and are cooled using wet brake oil (also known as oil immersed brake oil).
The job of the oil is to control frictional heat generated by the application of the brakes, to flush the friction surfaces free of any generated debris and to ensure positive engagement of clutch packs without slippage. Correctly balanced additive chemistry in the oil is essential to prevent noise and vibration.

Formulated using the latest friction modifying technology, Morris Lubricants' oils for off-highway wet brake systems offer maximum performance whilst eliminating 'squawk and chatter' and prolonging component life.

In all these applications, it is both quality and following the correct OEM specifications that count. There is often a temptation to use cheaper oils which can be of inferior quality. However, these lower quality oils may not perform as they should, may not protect the off-highway vehicle as it should and their use may result in a long stay in the workshop for costly repairs.

The key message is to make sure you use a quality oil that follows OEM and industry specifications – just like Morris Lubricants' range of quality oils, lubricants and greases.

Sky's the limit for Morris Lubricants to support the Air Ambulance

The sky's the limit for employees of Morris Lubricants, as the company is raising money for the Midlands, Wales and Great North Air Ambulance charities this year.

Two employees, Elliot Hotchkiss, Senior Buyer and Clayton Matcham, Internal Sales Account Manager have courageously signed up for the Midlands Air Ambulance Charity Tandem Skydive to support fundraising.

The exhilarating skydive is just one of many fundraising activities planned during the year to boost funds, including a charity football match, cake sales and a Christmas jumper competition.

Clayton has a special reason for wanting to support the air ambulance service, as his father, Neil, was airlifted to hospital with a broken collarbone after a motorcycle accident around 20 years ago.

"The air ambulances are great charities to support, especially as my dad has been in one of them when he was airlifted to hospital in Bangor," he said.

"I have always thought the idea of doing a skydive would be very exhilarating. The fact that it is for a very good cause pushed me to do it even more, although I expect I'll be nervous when it comes to jumping out of the hatch of a plane at 10,000ft."

"Elliot and I hope to raise as much money for the charity as possible."

Commending Clayton and Elliot, Morris Lubricants' Executive Chairman Andrew Goddard said:

"They are both very brave to be taking on this challenge and let's hope they raise a lot of money. I am very proud of them but shall be supporting them with my feet firmly planted on the ground! We chose the air ambulance services as our charities for 2024 because they do such fantastic work and have the potential to be called upon by any of our employees as well as our customers, although we hope they don't have to."

Casey Johnson, Corporate Partnerships Executive at Midlands Air Ambulance said the charity is "thrilled" to be supported by Morris Lubricants.

She added, *"Being supported alongside both Wales and Great North Air Ambulance will raise further awareness of the advanced pre-hospital care air ambulance services bring to those in critical need across the UK."*

"After seeing the success of the company's previous fundraising efforts, we are extremely grateful to have them on board as a new corporate partner, raising vital funds for our lifesaving service."

To support Elliot & Clayton's skydive and to make a donation to this fantastic cause head to the Morris Lubricants' JustGiving page by scanning the QR code, or following this link:

justgiving.com/page/morris-lubricants-uk-1708619230415

Elliot Hotchkiss (L) and Clayton Matcham (R) visit Midlands Air Ambulance headquarters

MORRIS LUBRICANTS RAISES NEARLY £26,000 FOR HOPE HOUSE CHILDREN'S HOSPICE

L-R: Paul Cox, Stacey Evans, Andrew Goddard, Bekki Fardoe (Hope House), Elaine Green and Owen Lloyd

Employees of Morris Lubricants raised almost £12,000 for Hope House Children's Hospice during 2023, boosting support for the charity to nearly £26,000 over the last two years.

Over the last 12 months, a series of imaginative fundraising events have taken place organised by employees of Morris Lubricants.

These sponsored events included the gruelling Long Mynd Hike in October by Chief Operations Officer Owen Lloyd and colleagues Kim Mamaras, Russell Fox and Joe Fox. Engineer Paul Cox also took on a 66-mile bike ride around Loch Ness and Morris Lubricants' footballers held a charity match against Greenhous which ended all square at 4-4.

Morris Lubricants' Executive Chairman Andrew Goddard said: *"Raising nearly £26,000 for Hope House over the past two years has been a fantastic team effort."*

"It's a local charity that everybody is very aware of and that does phenomenal work. We are delighted to have supported Hope House the best we can. As parents, we all hope that we will never need to use their services but it's reassuring to know that Hope House is there to support children and families."

Bekki Fardoe, Area Fundraiser for Hope House, said: *"We are really grateful to Morris Lubricants for supporting us over the last two years and raising a staggering sum for the children and families that we support."*

Dave Jenkins Gears Up For The 2024 Truck Racing Championship

Morris Lubricants ambassador Dave Jenkins is eagerly gearing up for the 2024 British Truck Racing Championship Season. Morris Lubricants has been in partnership with Dave on and off the track for over 12 years.

On the track, Dave has Morris Lubricants' quality oils and lubricants flowing through his MAN TGX 12,000cc racing truck. Away from the track, Dave utilises Morris Lubricants' products in his workshop where he maintains and services a wide variety of vehicles including HGVs, trucks, cars, vans & LCVs.

As Dave is prepping his 'Man in Black' truck ahead of the new season he explained why he is keen to make sure he is maintaining his truck with the best quality oils and lubricants. *"With Morris Lubricants' quality engine, gear and transmission oils I can feel safe knowing that I have the best products maintaining my truck to keep it in peak condition."*

He continues *"I also use a wide variety of Morris Lubricants' products in my business. My customers require the best and I can feel safe in the knowledge that by servicing their vehicles using Morris Lubricants' quality oils, lubricants and greases they are in safe hands".*


Dave Jenkins

To keep up-to-date with Dave's progress, head over to Morris Lubricants' Facebook page for all the latest news. A full list of dates for the season are detailed below:

ROUND 1: Brands Hatch	**31 March – 1 April**
ROUND 2: Pembrey	**18 – 19 May**
ROUND 3: Thruxton	**6 – 7 July**
ROUND 4: Donnington	**10 – 11 August**
ROUND 5: Snetterton 300	**14 – 15 September**
ROUND 6: Le Mans	**28 – 29 September**
ROUND 7: Brands Hatch	**2 – 3 November**

Heavy-Duty Transmission Oils And Their Role In Improving Fuel Efficiency And Reducing Emissions

The focus for ensuring commercial vehicles continue to become more fuel efficient in a move towards reducing emissions, tends to fall on engine technology, however, they are only one part of the overall driveline. Transmission choices and the correct lubricant use can also make a significant contribution to reducing emissions.

Adrian Hill, Technology Manager explains more...

There are three main types of transmission that can be fitted in a commercial vehicle: Automated Manual Transmission (AMT), Automatic Transmission (AT) and Manual Transmission. Each of these has different technical aspects and different transmission oil requirements to help ensure efficient operation and reduced emissions.

AMTs are fitted to most of the commercial vehicles registered in Europe. The AMT can operate as an automatic and in this mode, computer management control systems ensure faster and more fuel-efficient gear selection than those that the driver can make. This optimises power output in any given situation. AMTs also tend to be more compact and less complex in design than an AT as the internals in the AMTs are a Manual Transmission that use synchronisers employing electro or electro-hydraulically actuated gear selectors.

For the driveline to work correctly and not breakdown when you need it most, the AMT needs the correct transmission oil for full protection. The gear sets require a transmission oil with outstanding EP (Extreme Pressure) protection and a tough oil film to look after bearings under a wide variety of workloads and duty cycles. Friction control and multi-metal corrosion protection is also required to protect the synchronisers.

Additionally, we have now seen a move to lower viscosity transmission oils for improved fuel efficiency. An evolution has taken place from old-school 80W-90s to 75W-90s and 75W-80s, which have improved cold start fluidity, where a thinner oil film at start-up and working temperature, reduces energy sapping churning losses.

The other key transmission type, AT, is the ideal choice for commercial vehicles involved with predominantly stop-start work. Examples would include municipal vehicles, such as those used for refuse collection, buses and fire engines. The use of ATs makes the driving experience more comfortable for the driver and removes the likelihood of wear and tear on components such as clutch assemblies and thrust bearings.

The transmission oil requirements for an AT are very different to those of an AMT and this is down to its increased level of design complexity. In an AT, gear ratios are selected using a combination of clutch packs and brand bands that are engaged and disengaged hydraulically, in various combinations, to adjust the speed of the output shaft to the drive axles. As with AMTs, computer management control systems monitor speeds and loads to make the appropriate gear ratio selection to optimise the power to the wheels, whilst maintaining the best possible level of fuel efficiency.

Transmission oils used in these heavy-duty AT applications have a variety of functions. Firstly, they need to ensure positive engagement of the clutch packs by the addition of friction modifiers in the oil's formulation to minimise the possibility of slippage. This is also the requirement for brake bands that 'brake' the carriers holding the planetary gear sets that contribute to the various gear ratios. Transmission oils used in AT also have to protect the gear sets in the same way a standard gear oil would, to prevent wear and maintain integrity, especially under load. And of course, there are the bearings that need to be lubricated and protected from wear.

The conventional Manual Transmission still deserves a mention and in Europe, is still fitted to predominantly smaller units. It is particularly useful where vehicles are hired or leased short term, as training is unlikely to be needed due to their conventional 'stick' operation. However, they are only a small percentage of transmissions fitted in Europe and do not contribute to fuel saving as operational efficiency will depend on driving style.

The transmission oil used in Manual Transmissions are designed to prevent wear and maintain the integrity of the gear sets. Transmission oils used in AMTs, ATs and Manual Transmissions also share common characteristics. Oxidation is a killer for transmission oils and this is a challenge when you get heat soaks over long periods of time. The oil will start to break down (oxidise) and it will cause deposits, form sludges and various other contaminants that can impede the action of the transmission. So, the oil itself is formulated to combat this unwanted side effect. Keeping components clean, protecting them under load and circulating effectively at low and high temperatures ensures maximum operational efficiency.

The ultimate goal here, with new generation engine designs (Euro 6 soon to be Euro 7) used in conjunction with computer-controlled transmissions is to become more fuel efficient, reduce emissions and minimise environmental impact. This also brings the benefit of fuel savings which can, for a fleet operator, translate into money in the bank.

Of course, the operational efficiency of this hardware relies on the critical fit of the correct transmission oil, so it is important you follow the manufacturers' specifications for that vehicle.

If you are unsure seek advice from the Morris Lubricants Technical Team or you can use the WhatOil online lubricant selector. By selecting the correct oils and lubricants, it gives you the best opportunity to keep your vehicles out of the workshop and earning their keep on the road.

What's New:
Products & Services Update

NEW PRODUCT!
Multivis ECO PC 0W-20

Morris Lubricants has launched a new automotive engine oil, Multivis ECO PC 0W-20 specifically designed for a selection of engines fitted in the new generation of PSA vehicles.

Multivis ECO PC 0W-20 is a new low-viscosity, high-performance engine oil that has been formulated for use in PSA DV5Rx; EP6LTD; EB2FA & LTD; EB2ADTx e-HDI and Puretech stop-start engines, in production after February 2023. **These engines are fitted in a wide variety of models of Peugeot, Citroen, DS, Vauxhall and Opel brands.**

Multivis ECO PC 0W-20 complies with the performance parameters set out in the PSA B71 2010 specification issued by the Original Equipment Manufacturer (OEM).

This new advanced engine oil has many performance benefits to help ensure protection during engine use. Multivis ECO PC 0W-20 provides protection against low-speed pre-ignition (LSPI). LSPI is an uncontrolled combustion event which is a phenomenon associated with highly rated petrol engines that use gasoline direct injection systems. LSPI can cause catastrophic damage, but the new Multivis ECO PC 0W-20 helps to eliminate this issue, which can occur under conditions of hard acceleration.

Gasoline particulate filters (GPFs) are also becoming commonplace where emissions legislation is continuing to drive down exhaust emissions. In order to prevent premature blocking, the amount of ash generated when engine oil is burnt in the combustion chamber has to be carefully controlled. Multivis ECO PC 0W-20 complies with these chemical limits to help ensure maximum GPF life.

This advanced engine oil is also suitable for use in engines used in hybrid designs where the oil circulates rapidly from cold to minimise wear and combats the potential side effects of water and fuel contamination, which can be an issue due to intermittent and stop/start duty cycles.

Additionally, Multivis ECO PC 0W-20 contributes to the overall reduction of emissions by helping to promote fuel efficiency due to an ultra-thin oil film that minimises internal energy losses. Polymer technology helps the oil film down at these low levels to protect bearings and other surfaces from wear.

Readily available in 1 litre, 5 litres, 25 litres, 205 litres and Bulk containers, further information on Multivis ECO PC 0W-20 can be found at morrislubricants.co.uk

The Multivis Automotive Engine Oil Range

The Multivis range of superior quality automotive engine oils are suitable for a wide variety of petrol, diesel and hybrid engines.

Using the latest synthetic technology and oil formulations, this product range has been devised to be used in low-emission engine designs and meets the performance specifications of a wide variety of Original Equipment Manufacturers (OEMs). The chemical profiles and formulations in the Multivis range of engine oils are tailored carefully to ensure maximum aftertreatment device compatibility.

The developments in engine design are getting more complex, especially with the use of aftertreatment devices, such as particulate filters and catalysts, combined with the extra demands for increased fuel economy. Bearing these factors in mind, the Multivis engine oil range not only offers the maximum levels of component protection, but also helps to ensure operating efficiency is always maintained.

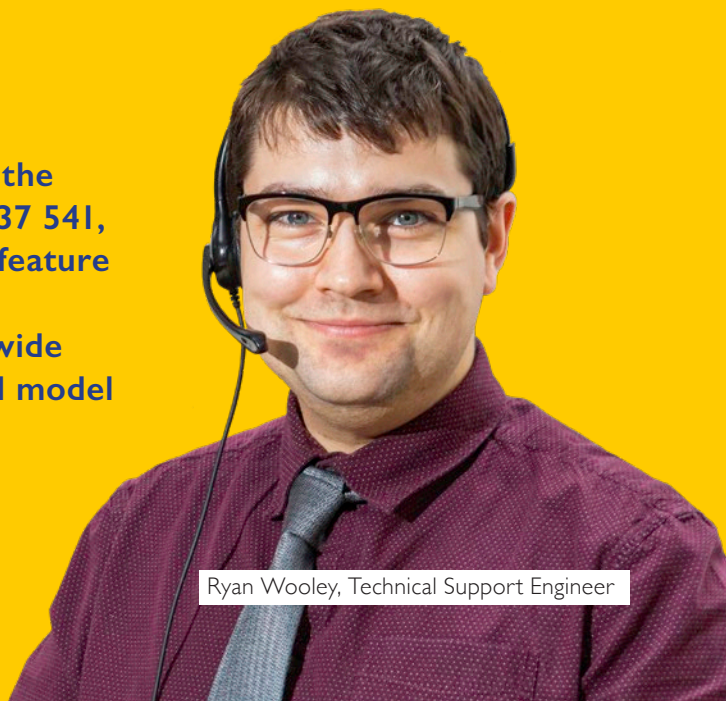
MULTIVIS

Visit morrislubricants.co.uk to find out more...

Need Advice?

If you are unsure which oil suits your needs, call the Morris Lubricants Technical Helpline on 01743 237 541, or use the company's WhatOil lubricant lookup feature on the website at morrislubricants.co.uk.
Simply enter a registration number or search a wide variety of vehicles by entering the age, make and model and the recommended oil is shown.

T: 01743 237 541
E: technicalhelpdesk@morris-lubricants.co.uk
whatoildoineed.com morrislubricants.co.uk



Ryan Wooley, Technical Support Engineer

MORRIS LUBRICANTS LAUNCHES TRUCK REGISTRATION LOOKUP

Are you unsure what oils and lubricants to put into commercial vehicles? Don't worry, Morris Lubricants has the answer!

Morris Lubricants has launched an update to its powerful oil and lubricant lookup tool WhatOil.

If you don't know what oil is needed for trucks, HGVs and lorries then head to whatoildoineed.com where you can now search by Truck Vehicle Registration Number (VRN). That is right, you can see exactly what oils and lubricants you need for your truck by just using the VRN.

Simply enter the truck VRN into WhatOil and the recommended engine oils, gear and transmission oils, antifreeze coolants, greases and many other commercial vehicle lubricants will be shown specifically for that vehicle.

The new commercial vehicle VRN lookup on Morris Lubricants WhatOil tool has been designed for fleet operators, mechanics and maintenance professionals to find the correct specification of oils and lubricants for different makes and models of commercial vehicles.

Available 24 hours a day 7 days a week, WhatOil has the potential to cut out huge amounts of time and eliminate any costly guesswork, when trying to find the correct oil and lubricant for a commercial vehicle.

Many of our customers find it so easy to identify the oils, lubricants and greases they need by using their registration number on WhatOil. Why not give it a try?

whatoil?

Morris WhatOil registration lookup

Don't know the VRN?

Don't worry, you can also search a wide variety of commercial vehicles on WhatOil? by entering the vehicle age, make and model to find the recommended oils, lubricants and coolants.

Still not sure?

Alternatively, if you are still unsure which oil will suit your needs, you can also call the Technical Helpline at Morris Lubricants today on 01743 237 541, or complete a 'Contact Us' at morrislubricants.co.uk

Faye Crawley, Senior Internal Sales Account Manager

New 500g threaded cartridge for K323 grease

Morris Lubricants has launched a new 500g cartridge with a screw top for K323, a very popular versatile grease. This new cartridge is suitable to be used in grease guns that require 20mm male thread.

GREAT PROTECTION:

- Lithium & Calcium based
- Lithium provides high temperature protection
- Calcium provides great water resistance

IDEAL FOR:

- Off-highway equipment
- Agricultural equipment
- Commercial vehicles

VERSATILE:

- Use for high loads
- Ideal for slow moving parts
- Perfect for outdoor use

HIGH QUALITY:

- Made using quality base oils
- Heavy duty
- High load capability

APPLICATIONS:

- Trailer bearings
- Chassis lubrication points
- Machine chucks / centres

HIGH PERFORMANCE:

- Strong adhesion
- Minimal water washout
- Vibration resistance

APPEARANCE:

- Blue grease
- 500g
- 20mm screw thread

Ian Haslum, Technical Advisor

Ground Force for perfect open space maintenance

As the spring months turn into the summer sun, it is time to make sure gardens, parks, summer sports pitches, green sites and public spaces are looking their best! Did you know that Morris Lubricants has a specific range of products designed for those who maintain these open spaces?

Yes, that's right, Morris Lubricants' Ground Force range of horticultural oils, lubricants and greases, covers everything from 2 stroke and 4 stroke engine oils, gear and transmission oils, greases, hydraulic oils, chainsaw oils, cutter bar oils, maintenance sprays and much, much more.

The Ground Force range from Morris Lubricants, helps to ensure horticultural equipment including all-terrain vehicles (ATVs), strimmers, lawnmowers, chainsaws and many more stay well maintained and don't breakdown when you need them most.

To find out more about this range, visit the Morris Lubricants website morrislubricants.co.uk

VERSIMAX
SUPERIOR QUALITY DIESEL ENGINE OIL

Product Update

The very popular Versimax HD11 5W-30 top tier heavy duty diesel engine oil has been updated to now include DAF PSQL2.IE-LD specification.

To find out more or explore the Versimax range, please visit morrislubricants.co.uk