

# OWEN MOTORING CLUB

## CLASSIC VEHICLE GROUP

FOR ALL CLASSIC VEHICLE ENTHUSIASTS

[WWW.OWENMOTORINGCLUB.CO.UK](http://WWW.OWENMOTORINGCLUB.CO.UK)

*Polish it THEN use it !!*



(August 2020 - Issue No. 68)

Welcome to the August newsletter and another month of COVID-19 news. I will start this month with the sad news that we have decided to cancel our November stand at this year's Lancaster Insurance Classic Motor Show, with Discovery. None of us really wanted to make this decision as we have displayed at this great annual event since 2000 as well as it being our club's 60th anniversary year but due to the current pandemic and the fact that the majority of our members are in the 60 plus age bracket we felt we had no other option but to cancel. I am hearing from my sources that other clubs have now cancelled with the same reasons so it remains to be seen if this show will go ahead. To be fair the organisers have gone to a lot of trouble to stage this event with wider aisles, one-way systems, deep cleaning, contact less payment, temperature checks etc. Let us hope some sort of normality can resume and we can return in 2021.

Further down this newsletter you will see a list that our new competition secretary, Derrick Wallbank, has compiled of Owen events for the remainder of this year and next (regs will be available on our website) and then finally some more information for you to peruse, which friends have sent me, regarding E10 fuel which is being introduced next year and its possible effects.



Distressing photos surfaced on social media a couple of weeks ago of the famous Ford Capri from the long-running TV series Minder which had caught fire. The car is now undergoing a full repair at Classic Car Restorations in Kent

Some people online had diagnosed the fire because of ethanol eating the petrol lines,

but the incident actually occurred due to an electrical short circuit in the engine bay. The Capri was not actually being driven by the car's owner at the time of the incident, but rather ironically, by a mechanic taking it for a MOT. The quick-thinking mechanic thought to lift the bonnet when the blaze started, meaning that the fire brigade did not have to smash up the front of the car to extinguish it when they arrived on the scene.

On Sunday 5<sup>th</sup> August we had an unplanned 'mini' OMC classic car meeting at Middleton Hall (John & Di, Dean, Elaine & Martin plus prospective new members Rog & Sue) my 'green thing' should have been there but decided it didn't want to go and locked its rear brake late on Saturday afternoon! Future gatherings are on Sunday 6<sup>th</sup> September & Sunday 4<sup>th</sup> October and again they will be limiting the number of show vehicles to 60. All tickets MUST be pre-booked online early (as it is extremely popular) and if you turn up without a pre-booked ticket, unfortunately you will be turned away.



Show cars must be on site by 11.00am and if you turn up after 11:00am, you will be turned away even if you have bought a ticket. Admission is £5 per show car and full details can be found here

<https://www.middleton-hall.co.uk/events/middleton-motors-monthly-4/>

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At the British Motor Museum (Gaydon) on Sunday 23<sup>rd</sup> August (ticket sales end on 21<sup>st</sup> August for display vehicles) there will be a display of classic Fords built before 1995. Next to the main show arena will be some post-1995 Ford vehicles and nearby trade stands with spares and accessories. For this and other shows visit their website on <https://www.britishmotormuseum.co.uk/whats-on>

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Another date for your diary is the Bicester Sunday Scramble on 4<sup>th</sup> October. Founded in 2014 the Sunday Scramble began as a 'cars and coffee' get together amidst the early stages of the WW2 RAF Bomber Training Station restoration works. Six years on and the Sunday Scramble is an event of national repute, attracting enthusiasts from across the UK and Europe, offering the opportunity to explore the former RAF base, the restored wartime buildings and the specialist's businesses based here. It truly is an open day and car meet unlike any other. Starting with some 100 visitors at the first Scramble in 2014, the event has grown significantly with over 7,000 visitors now at these events. Having been off limits to the public for the best part of one hundred years in the hands of the RAF and MOD, historic vehicle owners and enthusiasts can now drive through the gates to this once hidden location and spend a Sunday freely exploring. Tickets are now available on their website and selling out fast, certainly looks a good day out. <https://www.eventbrite.com/e/scramble-tickets-94358443645>

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Just for fun can you identify these classic cars, answers next month



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Provisional Calendar of Owen Motoring Club Organised Motorsport Events 2020/21

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|-----------------------------------|---|
| Sunday 27 <sup>th</sup> September | Ernest Owen PCT at Catton Park.                 |
| Sunday 18 <sup>th</sup> October   | Bright Sparks Autosolo/Autotest at Curborough.  |
| Sunday 27 <sup>th</sup> December  | Slithering Santa Autosolo at Curborough.        |
| Sunday 7 <sup>th</sup> February   | Crimson Dynamo Autosolo/Autotest at Sieghford.  |
| Sunday 21 <sup>st</sup> March     | AGBO Rally at Weston Park.                      |
| Sunday 2nd May                    | Happy Landings Grass Autotest at Manorial Farm. |
| Sunday 20 <sup>th</sup> June      | Graham Hill Sprint at Curborough.               |
| Sunday?? September                | Ernest Owen PCT at tbc.                         |
| Sunday 17 <sup>th</sup> October   | Bright Sparks Autotest at Curborough.           |
| Sunday 27 <sup>th</sup> December  | Slithering Santa Autotest at Curborough.        |

# E10 PETROL EDGES CLOSER

**R**ecent weeks have seen countless reports in the wider press that E10 petrol will be the new standard grade for unleaded fuel in 2021, a situation that continues to occupy headlines due to the potential damage it can cause to older vehicles.

At the time of writing, nothing had been confirmed by a UK Government understandably rather busy with other things, but it does look increasingly likely that E10 will finally arrive in the UK next year.

Currently, unleaded petrol in the UK contains up to five per cent bioethanol, a grade known as E5 and labelled on the pumps as such since last year. E10 petrol contains up to 10 per cent bioethanol and is available in European countries, but not the UK as yet. The Government says that its introduction could reduce CO2 emissions by 750,000 tonnes per year, which is the equivalent of taking 350,000 cars off the road.

E10 is of concern to historic vehicle owners because ethanol easily absorbs water, potentially leading to corrosion in fuel tanks, fuel lines and carburettors. It's also a solvent that can disintegrate fibreglass, plastic and particularly rubber, so injector seals, O-rings or diaphragms in carburettors and fuel pumps may fail. The bioethanol may also dislodge particles on older fuel systems causing blockages. It doesn't burn as efficiently either, potentially resulting in a leaner mixture and higher fuel consumption.

The Government is currently analysing feedback on a second E10 consultation. The first, which began in 2018, was about whether and how it could be introduced in the

UK, while the second spelled out specific proposals for it to replace standard E5 from next year. This approach has been backed by the UK and Ireland Fuel Distributors Association (UKIFDA) and the Federation of British Historic Vehicle Clubs (FBHVC), providing that E5 was kept available in a higher octane 'protection grade'.

Since then, Sir Greg Knight MP, chairman of the All-Party Parliamentary Historic Vehicles Group, has written to Parliament and been assured by a DfT Minister that the Government recognised that historic vehicles needed such a fuel. In response to a similar written question from FBHVC President Lord Steel, the DfT reply went further and stated that the Government intended to make the continued availability of the protection grade fuel a legal requirement for five years, which is the longest period permitted before a review.

There are already various additives available to stabilise ethanol, to suit vehicles with or without catalytic converters, in a similar vein to lead-replacement additives.

Otherwise, it's a case of modifying your classic to make it compatible. Guy Lachlan, MD of Classic Oils, said: "You've either got to use fuel with no ethanol [ESSO Supreme is thought to be ethanol free in most areas] or change the materials that don't like it. If you are in any doubt about your rubber fuel lines, change them. Get rid of your fibreglass petrol tank and install an aluminium one. The other thing ethanol really doesn't like is solder. If you are running a soldered float in your carburettor, then think about carrying a spare — they're generally quite easy to change."

## The Good, the Bad and the Ugly

The UK Government is planning to introduce petrol containing 10% ethanol (alcohol) next year. This is referred to as E10. Most of what has been written on this subject does not tell the whole story, focussing on the potential damage this fuel can cause. This article aims to allay owner's fears, especially for those with classic vehicles. It is based on research performed at Manchester University using an engine designed in the late 1930's. For anybody wanting to find out the full story, the results and recommendations have been published in a very readable book, *Classic Engines, Modern Fuel - The Problems, the Solutions*. (<https://classicenginesmodernfuel.org.uk/>)

The carbon in the ethanol comes from renewable sources. It is a by-product of the sugar industry. When running on E10 a petrol engine still emits the same amount of carbon into the atmosphere. However, only 90% of it comes from fossil fuel. E10 effectively reduces the carbon load by 10%.

**The good** news is adding ethanol to petrol is not new. Cleveland Discol was introduced in 1928 and sold until 1968. Discol did not appear to cause serious problems then. The Good Modern petrol is both physically and chemically different from classic petrol. Physical differences include a lower boiling point. Chemical differences include the addition of ethanol. Both alter the way a classic engine runs on modern fuel. The Manchester tests showed modern fuel increases the severity of a phenomena called Cyclic Variability. Making it worse at the RPM and throttle settings used when driving in normal traffic. All petrol engines suffer from Cyclic Variability. It reduces power output and increases petrol consumption. Worst still, it can cause serious damage. Burning valves and pistons and destroying the big end bearings. A high level of Cyclic Variability is very damaging for an engine. Modern petrol makes this level worse. The book *Classic Engines, Modern Fuel; The Problems, the Solutions* describes Cyclic Variability and how an engine can be tuned to reduce its severity. The rankings of the fuels tested at Manchester are shown on the diagram. Three of the top six best performing fuels contained ethanol (shown in orange), the other three (shown in grey) were specialist fuels. Fuels without ethanol (shown in blue) ranked poorly. The test engine ran considerably better on petrol containing ethanol as these reduced the level of Cyclic Variability. E10 ranked 3rd best, scoring twice as many points as nonblended fuels. The good news is that E10 promises to reduce potentially awfully expensive damage to an engine. A positive fact other articles do not make clear.

**The Bad** A great deal has been written about the damage ethanol can cause to fuel system components. It rots older non-metallic components such as rubber hoses, seals, diaphragms, and plastic floats. Also, it contains oxygen which weakens the mixture. E10 makes these problems worse. Rotting hoses can be a serious problem, especially if they go undetected. Petrol leaks around the engine is the last thing you want. Petrol is highly flammable, and leaks are a serious fire risk. Age as well as ethanol causes hoses to rot. In any case, it is worth replacing old hoses, etc. Ethanol proof replacements are now available for most vehicles. This problem is not as bad as it would first appear. Fitting replacement hoses, etc., is a lot cheaper than rebuilding an engine! The other problem, that ethanol contains oxygen, is something to be aware of. This causes an engine tuned to run on normal petrol to run weak. Insufficient petrol enters the cylinder. Like Cyclic Variability, weak running can cause serious damage to an engine. The good news is that variable jet carburettors such as SU and Stromberg only need minor adjustments to offset the effects of E10. Unfortunately, these adjustments are harder with fixed jet carburettors such as Weber and Zenith. These may need new jets or emulsion tubes. Modern electronic fuel injection systems can adjust by themselves. One interesting result of the Manchester tests was that petrol containing ethanol increased the engine's power output. This is because it reduces the degree of the damaging Cyclic Variability. As a result, classic engines running on E10 will possibly deliver more MPG not less as some authors have suggested. The bottom line is that E10 does cause some problems. If owners are aware, addressing them is neither difficult nor expensive.

**The Ugly** The ugly face of ethanol blended petrol is its ability to dissolve metal. When water comes into contact with ethanol blended petrol it draws the ethanol out of the petrol making the water acidic. It is this acid that attacks the metal components. This problem is as serious with current petrol blends as it will be with E10. All it needs is a single drop of rainwater getting into the fuel system. Unfortunately, inhibitors sold to protect against ethanol will not help in this situation. *Classic Engines, Modern Fuel - The Problems, the Solutions* describes some ways of avoiding this problem. Conclusion E10 is not as bad as some people make out. Older engines run better on ethanol blended petrol, reducing the expensive damage Cyclic Variability can cause. While there are some issues, they can be addressed with care and low-cost solutions. Perhaps the forthcoming introduction of E10 is not so bad after all!