**News Bulletin** 



June 2022

### **Club Events**

#### Mystery Run – Sunday 12<sup>th</sup> June

Meet 11:00 @ the Fox and Hounds, Station Road Theale RG7 4BE, where you will then receive your instructions on the route to our lunch stop.

Please Email <u>v.woolls@hotmail.co.uk</u> or phone Don on 01189 733568 by the 6<sup>th</sup> June if you intend to join us.

Club Night – 13<sup>th</sup> June - Cancelled

Club Night – 11<sup>th</sup> July

Coveted car evening

Club Night – 8<sup>th</sup> Aug

Walking rally

Club Night – 12<sup>th</sup> Sept

**Guest Speaker** 

#### Other Events – 2022 (Please check before going)

Blackbush Car Meet – last Sunday of each month

**Farnham Festival of Transport** – 5<sup>th</sup> June, 10:00-4:00, Upper Hart Car park behind Waitrose, in aid of Phyllis Tuckwell.

Aldermaston Classic vehicle gathering – REC SOC car park RG7 4PR, 7<sup>th</sup> June @ 17:00 onwards

Hartley Witney carnival and car show - 11th June

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**Blackbushe** – 11<sup>th</sup> June, 80<sup>th</sup> anniversary 1942-2022, Airport fly in and motor show, 11:00-5:00. Adults £12.00, parking £5 per car.

**Upton Grey** – 11<sup>th</sup> June, Fete and car show, Old vicarage gardens, cars in meadow opposite.

**Fleet Classic car show** – 2<sup>nd</sup> July 11:00 to 5pm, Calthorpe park

**Bourne Show** – 2<sup>nd</sup> July, south of Farnham, opens 12:30 pm

#### Beaulieu, Hampshire,- National Austin Seven Rally – 3 July

One of the biggest events for anything Seven or Seven-based, and you can bring along other Austins or pre-1975 classics if you register in advance. Also autojumble and driving skills tests.

Aldermaston Classic vehicle gathering – REC SOC car park RG7 4PR, 5<sup>th</sup> July @ 17:00 onwards

Thames traditional boat Fest 15<sup>th</sup> to 17<sup>th</sup> July, Henley

**Dogmersfield fete & car show** – 16<sup>th</sup> July

Austin 7 Centenary – 19th-24th July. Entry by pre-booked ticket only : <u>www.a7centenary.com</u>

Brooklands – 24<sup>th</sup> July, Auto jumble & car show, 100stalls etc

Aldermaston Classic vehicle gathering – REC SOC car park RG7 4PR, 2<sup>nd</sup> Aug @ 17:00 onwards

The British Motor Show, Farnborough 18th -21st Aug

**Swallowfield show** – 28<sup>th</sup>, 29<sup>th</sup> Aug, Swallowfield park, Church road. (contact Trevor M) <u>https://www.swallowfieldshow.co.uk/</u>

Beaulieu Auto jumble - 10<sup>th</sup> & 11<sup>th</sup> September

West Green House, Hartley Witney – 18<sup>th</sup> Sept.

# Swallowfield Show 2022

Following a two-year gap resulting from Covid19, plans are now taking shape for this year's Swallowfield Show which will be held in Swallowfield Park on **Sunday and Monday, 28<sup>th</sup> and 29<sup>th</sup> August**.

All of the favourite attractions from previous shows will be there, together with some new entertainers and activities for you to enjoy. e.g.

Dog display team Falconry BMX Scottish pipe band Horticultural show Food Hall Craft marquee Art group exhibition

And most importantly -

#### **Classic Wheels**



The Classic Wheels Parade in the main arena, has become a firm favourite for the audience as they enjoy the parade of truly magnificent vehicles. Spot a vehicle you like, then go and see its owner after the parade and get an even closer look. Now attracting over 100 vehicles on both days, a wide variety of cars, motorcycles, tractors and commercial vehicles is assured.

#### Membership Details

This is also an opportunity for me say to all members, that should members wish to be kept well informed of important up-to-date information, plus keeping my Membership List current, could I please ask if there is any change of personal contact details i.e: Email address, home address, telephone number(s), would you please bear me in mind. Its very important to stress, and remind you that details are kept in the strictest of confidence, and never used without a members authority, and are only available to elected Committee Members.

#### Isle of Wight Trip

Unfortunately the day trip to the Isle of Wight, originally planned for Sunday 4<sup>th</sup> September has been CANCELLED due to a lack of interest.

Up in the morning, Curtains back and the weather looking good! Load the car and off to the New Inn for around 10.30am. The Landlord Steve had the room all set out with coffee, tea and biscuits (courtesy of Our Club) before all participants had arrived. With all the coffee, tea and biscuits gone it was time to make a start. A very quick chat from me and it was time to hand out the route and instructions etc.

Trevor 'M' had the Rally plaques for all the cars.

When Trevor was at the NEC a few weeks ago, one stall was there selling the plaques for a  $\pm 10.00$  donation per plaque towards Child Line. At a Club Committee Meeting Trevor mentioned the plaques and it was agreed that it would be good if all the Drive It Day competitors received a plaque. These were ordered and a  $\pm 120$  cheque was sent from our Club as a donation to Childline.

When all competitors had set off from the New Inn, Val and I helped Steve to re-arrange the room for Lunch.

We then decided it would be nice to drive part of the route ourselves and take some photo's as the cars came by. Unfortunately, we had only gone 2 or 3 miles down the road to pick up the route and to our horror there was Hazel, Dave and Callam with a large dent in the rear of their Morris Minor, and the near side rear wing almost ripped off. Dave was indicating to turn right with 5 or 6 cars stopped behind him, one of which was Christopher P who was immediately behind Dave. A very high powered Motorbike overtook them and could not stop. As you can imagine all four of our members were extremely shaken and very upset.

Dave, Hazel and Callam decided they needed to go home straight away. 3 or 4 Competitors completed the course and eventually all arrived at the New Inn for Sunday Lunch. Christopher did join us for lunch, but left early also feeling very upset.

Finally 1 would just like to say a big thank you to all competitors that took part on the day and hope you will join us on our next adventure on the 12<sup>th</sup> June - "A Mystery Tour"!

Don B

### A guide to Spark Plugs (© Cool Air – VW Specialists)

The way that your old spark plug looks can tell you a lot about what your engine is doing and potentially why it isn't running correctly.

Wet or dry, black or white, we'll tell you what you need to do to get your engine running better based on your spark plug condition and how it looks with a visual inspection.

## But first things first...What is a spark plug?

There are four spark plugs on all aircooled VW engines. Two are located each side of the engine, with one per cylinder. The job of a spark plug is to deliver electrical current from the ignition system to the combustion chamber to ignite the fuel/air mixture. The electrical current travels down the centre of the plug to a point on the end where an electrode is mounted onto the end of the plug and the plug is screwed into the cylinder head. Between the point of the plug and the electrode is an air gap. The spark plug is earthed on the outside (when screwed into the cylinder head) and a spark is created every time the current gets to the end of the plug. This spark then ignites the fuel/air mixture and creates combustion.



## So what do all the numbers mean on your spark plug?



Cool Air stock two brands of spark plugs, Bosch and NGK. Using the first few letters and numbers on a spark plug we can ascertain what size, length and heat rating it is.

As standard, a VW aircooled engine spark plug has a 14mm thread. However some aftermarket cylinder heads use a 12mm thread. All of our Bosch plugs are 14mm. If you require a 12mm plug then you will need to look at our range of NGK plugs which we stock in both 12mm and 14mm.

The thread of the spark plug is shown by the first letter printed on the side of the plug.

• Bosch plugs which have a 14mm thread start with the letter 'W' and require a 21mm socket to undo them.

- NGK plugs with a 14mm thread start with the letters 'B' and require a 13/16" socket to undo them.
- NGK plugs with a 12mm thread start with the letter 'D' and require an 18mm socket to undo them.

On some of the plugs we stock there is a second letter that follows the first. This letter refers to the design of the spark plug. The most common letters are either 'P' which shows the plug has a projected insulator or 'R' which means that the plug includes an interference suppression resistor.

# The importance of heat range

The next digit on the spark plug should be a number. This number refers to the heat range that the spark plug works at.

Every spark plug designed has a set heat rating which is a measure of the amount of heat dissipation. This heat rating is indicated by a number which is printed on the side of the spark plug. Numbers range from 2 being the hottest plug to 10 being the coldest plug. But which type is right for you?

Generally lower numbers (hotter plugs) are for use on standard engines and higher numbers (colder plugs) are used on performance engines.

The effect of selecting the wrong heat range can cause damage to the spark plug and cause poor running of your engine. When a heat rating is too high the spark plug temperature remains too low and causes deposits to build up on the end of the plug. As these deposits build up the spark is reduced and eventually will stop sparking all together. However when the heat rating on your spark plug is too low the spark plug temperature rises too high and can cause pre-ignition. This leads to the spark plug electrode melting and can even cause problems such as piston seizure due to the combustion happening while the piston is still travelling up the cylinder towards the head.

## So it's important to get it right.

After the heat range number you will then see a 3<sup>rd</sup> letter. This letter shows the thread length of the plug. Generally Type 1 aircooled engines use short reach plugs and Type 4 engines use long reach plugs But again some aftermarket cylinder heads can change this formula so best to check. Short reach plugs have a thread length of 12.7mm and long reach plugs have a thread length of 19mm.

- Bosch plugs with the letter 'A' after the number is a short reach plug.
- Bosch plugs with the letter 'C' after the number is a long reach plug.
- NGK plugs with the letter 'H' after the number is a short reach plug.
- NGK plugs with the letter 'E' after the number is a long reach plug.

So now we know the basics of the spark plug we can now remove your plugs from your engine with the correct socket. Access is quite tight to the spark plugs on aircooled VW engines. So it might be worth investing in a spark plug socket with a stumpy ratchet and universal joint to make life a little easier.

In order to access the end of the plug you first need to pull off the HT lead. Make sure when you pull off the HT lead, you hold the bakelite connector and not the lead itself.

If you pull the lead, the chances are you will pull the lead out of the connector.

When you remove your spark plug you should check the end where the spark happens to see if it is dry or wet and what colour it is.



## Dry plug, that is brown or light grey in colour:

If the firing end of the spark plug is brown or light grey in colour then it means that it is working properly.

The heat range is correct and you are free to re-fit or replace with the same heat rated plug.



# Dry Spark plug, that is black in colour:

Spark plugs that are black in colour suggest that the plug is suffering from carbon deposits on the end of the plug. This can cause starting problems and miss firing of your engine. This can be caused by one of the following reasons:

Too much fuel entering the combustion chamber at the point of ignition. – Adjust your carburettor jet size (Smaller Jet)

Spark plug heat rating is too high (plug is too cold at ignition) – Change the spark plug to a hotter plug (has a lower number on the side)

# Dry Spark plug that is white in colour:

Spark plugs that are white in colour generally mean that the spark plug is overheating at the point of combustion. This can be caused by one of the following reasons:

Too much air and not enough fuel entering the combustion chamber at the point of ignition – Adjust your carburettor jet size (Larger Jet).

Spark plug heat rating is too low (plug is too hot at ignition) – Change spark plug to a colder plug (has a higher number on the side)



# Wet and oily Spark plugs:

If your plugs are wet then this can be because of a number of reasons.

The most common reason is that the plug is not firing at all causing your engine to 'flood'. Check your HT leads to make sure that you have good connections both at the spark plug and distributor end.

If this is not the case then you may have to further investigate as your piston rings may need replacing.

## Setting your plug gaps:

For most aircooled VW engines the plug gap should be 0.024" or 0.6mm but double check in your workshop manual first. To check your gap you will need to use your trusty feeler gauge.

Gaps can be opened up with a flat head screw driver and closed by tapping the end of the plug on a work bench or similar.

## Re-installing your spark plugs:

The thread on the spark plug is made from steel The cylinder head you are about to screw the plug into is made from aluminium. This means that the thread on the plug is much harder than the thread in the head. So if you do not screw the plug in correctly then guess what, it's the head you are going to damage which can become very expensive. So when you screw the spark plug into the head **do it by hand**. Do not use a socket until the plug is screwed in all the way down. Then once you are happy you can attach your socket to the spark plug and give it a final tighten. By doing it this way you will reduce the risk of cross threading the plug and damaging the thread in the cylinder head. **Spark plugs should be torque to 25ftlb**.

Once all your plugs are in you can then re-connect your HT leads. It's ideal to remove one HT lead at a time, remove the plug, re-fit the new plug and then reconnect the HT lead to that plug. Then move onto the next plug and repeat. By doing it this way you shouldn't get the HT leads mixed up and connected to the wrong plugs.

If however you end up having to fit the HT leads to all the plugs at the same time then you need to connect them in the firing order 1-4-3-2.

## So how often should you check your spark plugs?

Spark plugs should be checked at regular intervals of around 6000 miles. This check should include checking the gaps and cleaning the end of the plug with a brass wire brush. Plugs should be replaced every 12000 miles.

Stay safe NHAEG Committee