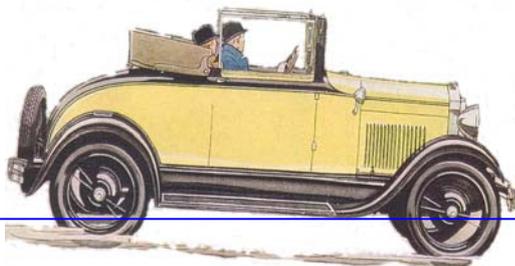


Model A Flyer



Model A Ford Club of NSW Inc

Web site www.modelafordclubofnsw.com.au

May 2017

Club Meetings are held at Holroyd Community Centre, Miller St., Merrylands. The parking entrance is in Newman Street. Meetings are held from 8 pm on the second Friday of each month unless otherwise stated.

PRESIDENT'S REPORT



Happy Mothers Day to all the wonderful mothers and wives. You are the glue that keeps this club running smoothly.

In May we have a run to the Steam & Kero Show at Menangle and the Northern A's are off to the Toronto Fair. Then in June in Sydney we are visiting the new Bus Museum, but we may be limited on how many Model A's can attend due to parking space onsite.

Thanks to everyone who has already booked

their accommodation for Orange at the end of September. Please call and reserve your room, details again in this issue.

At our maintenance day in April, members requested a "differential seminar" for the next maintenance day. This will be Saturday August 5th, see details this issue.

The inaugural "**Rattletrap**" event for Classic Hot Rods, Vintage Race Cars and Vintage Bike Trials was held at The Surf Life Saving Club, Crowdy Head NSW on Sunday 7th May. Some of our members attended, and Alan Hale entered his Model A Tourer. More pictures in this flyer.

We had an overwhelming positive response regarding membership fees being reduced to \$35/\$25 + adding \$10 if you want the flyer mailed rather than emailed. So the committee will discuss making this change at renewal time. Thanks for the responses.

Regards, Rob Taylor

Your 2017 committee

President	Rob Taylor	0434 314 198	CFC & CMC	Phil Dalton	0413 970 704
V/President	Peter Butler	4739 5723		Ron Elks	0419 296 201
Treasurer	Jim Haling	0431 904 311	Librarian	Carol Butler	4739 5723
Secretary	Robert Brown	0439 731 066	Wanderers	Tom Virgona	0420 342 392
Committee #1	Ken Young	0428 697 717	Newsletter	Rob Taylor	0434 314 198
Committee #2	Ron Williams	0427 868 197			
Public Officer	Rob Taylor	0434 314198			
Membership	Jim Haling	0431 904 311			

thetaylors79@bigpond.com

Mail: PO Box 1038 MERRYLANDS 2160

Get your Model A out and join us!

Sunday 21st May - Oil Steam & Kerosene Family Day

Meet gam @ Campbelltown Steam & Machinery Museum, 86 Menangle Road GILEAD.

About: Oil, Steam and Kerosene Field Days celebrate Australia's past with working displays of industrial, agricultural and civil machinery; including tractors, traction engines, oil engines, a two foot gauge railway and antique earthmoving displays. Fun for all the family with anything that whirrs, hisses or bangs in all of its mechanical glory. Food stalls will be available.

Bring a picnic lunch, or enjoy the food stalls onsite for the day.

Event Co-ordinator - Russ Johnson
0438-130-641



Sunday 21st May - Northern A's "Blast from the past picnic Toronto"



Meet gam at Toronto Workers Club, enter via James Street to convoy to the meet.

Location Victory Parade foreshore Toronto.

Bring your own chair, food and drink available at site

Co-ordinator Di Paice, please let her know you are coming on 0408-414-681

Sydney Bus Museum - Sunday 18th June

Step inside the 100 year old Leichhardt Tram Shed and see the extensive collection of vintage buses. Also ride on a vintage double-decker across the ANZAC Bridge to the QVB & return. All included in your admission ticket of \$10 concession/children or \$15 adults. We will have allocated parking for the Model A's but will be restricted to the number that can attend. So book early for this one. Co-ordinator Phil Dalton



Presidents Run to Orange - 22nd - 25th September

The proposed schedule for this exciting weekend away:

Accommodation Central Caleula Motor Lodge, 60 Summer Street Orange Ph 6362 7699,
I have 15 rooms on hold for the this event, so if attending, please call them and take one of the reserved rooms. \$157 twin per night or \$142 for a single.

Friday 22nd Sept Arrive Orange - group dinner to be organised.

Saturday 23rd Sept Model A Run to historic towns of Canowindra, Cudal & Borenore. Afternoon free in Orange. Dinner to be organised that night.

Sunday 24th Sept Historic house drive-by in Orange then on to Mt Canobolas Lookout, followed by lunch at a venue TBA. Afternoon free followed by an organised dinner.

Monday 25th Sept After breakfast at the motel, checkout and head home.

Maintenance Day in April @ Mal Bradley's.

Again another big turnout to view Mal's 31 A400 Model A under restoration. Mal talked everyone through the difficulties of this resto, and it makes restoring normal Model A's look simple. Thanks Mal for hosting this event, and opening your garage with so many great photos to all the members.



Next Maintenance Day Saturday 5th August @ Rob Taylor's Sydney Safety Training Centre in Guildford. Topic will be the overhauling of a differential. Bring your Model A too!

Northern A's April Run Report to Lemon Tree Passage

Four Model A's travelled from West Wallsend to Hungry Jacks Heatherbrae, where they met up with two others. The 6 cars made quite a spectacle in the carpark while the members enjoyed coffee and pastries from the bakery.

The convoy then cruised past Grahamstown Dam to Lemon Tree for lunch via the now closed historic Tanilba House and the stunning foreshore view of Tanilba Bay. The weather was perfect to enjoy fish & chips and a good chat by the glistening water. Before departing, we enjoyed a short 'koala walk' through the eucalypts and mangroves along the water's edge. Thanks Ian for a fabulous day with friends enjoying their common interest of driving their A's. **Di Paice**



April Run Report to Norman Lindsay's Museum/ Gallery

Everyone met at Glenbrook Visitor Centre for a quick cuppa. We then followed Peter Butler to Faulconbridge and the Norman Lindsay Museum. There were nine Model A's, a Morris Minor (Ron Cox), and an ex Army Fargo Truck (Russ Johnson) plus four modern cars. Twenty six members toured the museum viewing the wonderful (provocative?) works of the talented and well known artist Norman Lindsay. This was followed by presentation of the history of Norman and his works by one of the volunteers who took us to the gallery where he did most of his paintings. We were then shown another gallery where Norman carried out his etching work on copper after which his wife then transferred these etchings onto cloth via a special press imported especially for this work from England by Norman Lindsay.

We were given a section of the grounds for the purpose of parking our cars and going by the number of people gathering around the cars it seemed there were more people interested in the cars than the Museum!! As usual, all in all it was a great day out made better by the excellent weather on the day. Thanks to "The Butlers" for organising this event. **Ken Young.**



See many more pictures of the above events at our Model A Website Gallery
http://modelafordclubofnsw.com.au/?page_id=1965

The Wednesday Wanderers

Report for 3rd May -

Hyde Park Barracks Queens Square Sydney

Due to school holidays our May venue changed to the Hyde Park Barracks. Construction of the barracks by convict labour began in 1817 and took two years. The workmanship was impeccable due to the incentive scheme, make a mistake or step out of line and get flogged near to death! The current reconstructed dormitory of closely mounted single deck hammocks is clean and comfortable but I suspect that in real time they would have had multiple decks of smelly threadbare units with no room at all for personal effects. Later days the buildings were used to house newly



arrived migrants and later became an asylum for destitute women. With a history of accommodating convicts, slaves, conspirators, bushrangers, immigrants and destitutes, the buildings eventually became Courts and Government offices till 1984. After conservation they opened up in their present form. Having completed our tour the sixteen Wanderers went to the

café for a tasty lunch and refreshment, and contemplated our good fortune in not being past inmates of this obnoxious domicile.

Cheers till next we wanderer, Tom.

Ps. I would like to locate the old Wanderers' attendance book please if anyone can assist?

Upcoming : Wednesday 7th June, Lunch Cook Café

Meet 10am at Cook Café corner Ward Street & Prince Charles Parade Kurnell for morning tea.

Bring your Model A or modern, plenty of parking.

After morning tea we will drive to Captain Cook's Landing & Sir Joseph Banks' Memorial. (Level walk)

We will return to Cook Café for lunch. (licenced with facilities).

Jim & Maureen Allingham



Market Place

For Sale: 1929 Model A Ford Roadster restored, Brown & Black in colour, can send photos. \$27000 Brian Johnson 95253204 or brj@optusnet.com.au Looking for RHD pickup.

For Sale: 1931 Victoria LHD B Model motor many extras \$32000 Pam Gee 0414 421 855
E-mail: pam@altusinsurance.com.au

For Sale: 1929 Horn Rod near new \$100 & Rebuilt C Model Motor & Gearbox \$9200.00 includes carbi, generator, water pump, dizzy all manifolds rebuilt, so this is an easy motor change.
Call Ron Elks 0419 296 201 or Email ron.elks@hotmail.com

For Sale: 1928 Phaeton (Norm Boshers old car) - \$28500 call Rolf Chrystal 0414 653 250

Free: Model A front bumper, cross pieces only.. Call Peter Wigzell 0419-259-056

Wanted: 1930 Model A roadster in good condition. Eddy Tabone (02) 9636 7776 or 0412 663 608

Services: Model A Ford White Metal Bearings - if needed call Dean, Dean Repairs 0401767761

Hot Rods & Vintage Car Beach Sprints “Rattletrap”

The Drag-ens Hot Rod Club hosted the inaugural **The Rattletrap** event for Classic Hot Rods, Vintage Race Cars and Vintage Bike Trials at The Surf Life Saving Club, Crowdy Head NSW on Sunday 7th May. We had two members that I know of attend, Di & Peter Paice and Alan Hale who participated in his tourer.

The event included bracket sprints, grudge matches and an Exhibition Class for unique or historical vehicles.



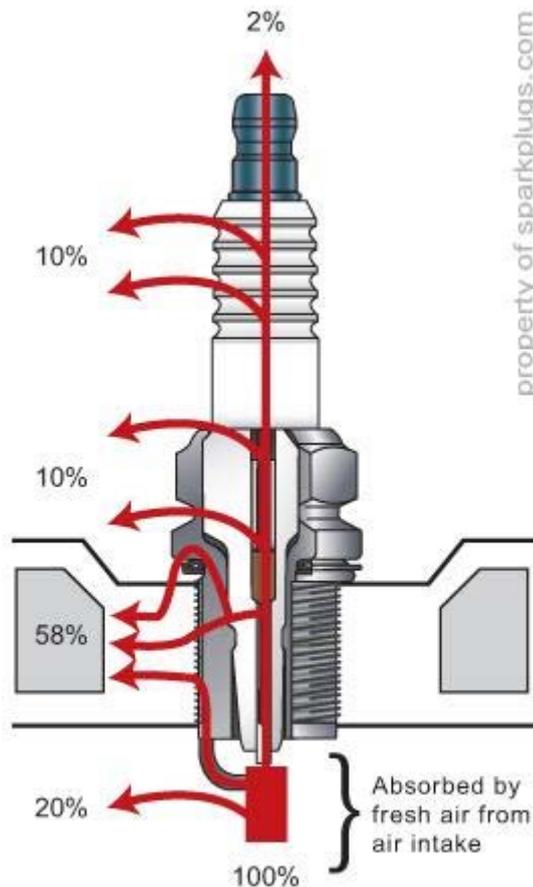
Alan Hale



Di Paice



What do you know about spark plugs??



HEAT DISSIPATION

Spark plugs are one of the most misunderstood components of an engine. Numerous questions have surfaced over the years, leaving many people confused.

This guide was designed to assist the technician, hobbyist, or race mechanic in understanding, using, and troubleshooting spark plugs. The information contained in this guide applies to all types of internal combustion engines: two stroke engines, rotary engines, high performance/racing engines and street vehicles.

Spark plugs are the "window" into your engine (your only eyewitness to the combustion chamber), and can be used as a valuable diagnostic tool. Like a patient's thermometer, the spark plug displays symptoms and conditions of the engine's performance. The experienced tuner can analyze these symptoms to track down the root cause of many problems, or to determine air/fuel ratios.

Spark Plug Basics

The spark plug has two primary functions:

- To ignite the air/fuel mixture
- To remove heat from the combustion chamber

Spark plugs transmit electrical energy that turns fuel into working energy. A sufficient amount of voltage must be supplied by the ignition system to cause it to spark across the spark plug's gap. This is called "Electrical Performance."

The temperature of the spark plug's firing end must be kept low enough to prevent pre-ignition, but high enough to prevent fouling. This is called "Thermal Performance", and is determined by the heat range selected.

It is important to remember that spark plugs **do not create heat**, they can only **remove** heat. The spark plug works as a **heat exchanger** by pulling unwanted thermal energy away from the combustion chamber, and transferring the heat to the engine's cooling system. The heat range is defined as a plug's ability to dissipate heat.

The rate of heat transfer is determined by:

- The insulator nose length
- Gas volume around the insulator nose
- The materials/construction of the centre electrode and porcelain insulator

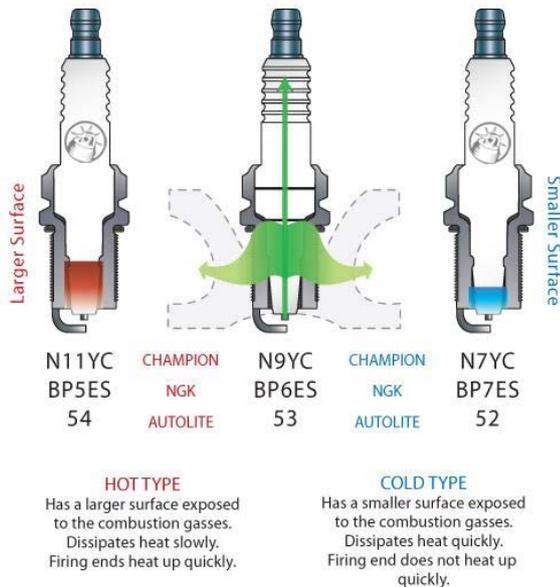
A spark plug's heat range has no relationship to the actual voltage transferred through the spark plug. Rather, the heat range is a measure of the spark plug's ability to remove heat from the combustion chamber. The heat range measurement is determined by several factors; the length of the ceramic centre insulator nose and its' ability to absorb and transfer combustion heat, the material composition of the insulator and centre electrode material.

Heat rating and heat flow path of NGK Spark Plugs

The insulator nose length is the distance from the firing tip of the insulator to the point where insulator meets the metal shell. Since the insulator tip is the hottest part of the spark plug, the tip temperature is a primary factor in pre-ignition and fouling.

Whether the spark plugs are fitted in a lawnmower, boat, or a race car, the spark plug tip temperature must remain between 500C-850°C. If the tip temperature is lower than 500°C, the insulator area surrounding the centre electrode will not be hot enough to burn off carbon and combustion chamber deposits.

These accumulated deposits can result in spark plug fouling leading to misfire. If the tip temperature is higher than 850°C the spark plug will overheat which may cause the ceramic around the centre electrode to blister and the electrodes to melt. This may lead to pre-ignition/detonation and expensive engine damage. In identical spark plug types,



the difference from one heat range to the next is the ability to remove approximately 70°C to 100°C from the combustion chamber. A projected style spark plug firing tip temperature is increased by 10°C to 20°C.

Tip Temperature and Firing End Appearance

The firing end appearance also depends on the spark plug tip temperature. There are three basic diagnostic criteria for spark plugs: good, fouled and overheated. The borderline between the fouling and optimum operating regions (500°C) is called the spark plug self-cleaning temperature. The temperature at this point is where the accumulated carbon and combustion deposits are burned off.

Bearing in mind that the insulator nose length is a determining factor in the heat range of a spark plug, the longer the insulator nose, the less heat is absorbed, and the further the heat must

travel into the cylinder head water journals. This means the plug has a higher internal temperature, and is said to be a hot plug. A hot spark plug maintains a higher internal operating temperature to burn off oil and carbon deposits, and has no relationship to spark quality or intensity.

Conversely, a cold spark plug has a shorter insulator nose and absorbs more combustion chamber heat. This heat travels a shorter distance, and allows the plug to operate at a lower internal temperature. A colder heat range is necessary when the engine is modified for performance, subjected to heavy loads, or is run at high rpms for a significant period of time. The colder type removes heat more quickly, and will reduce the chance of pre-ignition/detonation and melting or damage to the firing end. (Engine temperature can affect the spark plug's operating temperature, but not the spark plug's heat range).

Below is a list of some of the possible external influences on a spark plug's operating temperatures. The following symptoms or conditions may have an effect on the actual temperature of the spark plug. The spark plug cannot create these conditions, but it must be able to cope with the levels of heat...if not, the performance will suffer and engine damage can occur.

Air/Fuel Mixtures seriously affect engine performance and spark plug operating temperatures.

- Rich air/fuel mixtures cause tip temperature to drop, causing fouling and poor driveability
- Lean air/fuel mixtures cause plug tip and cylinder temperature to increase, resulting in pre-ignition, detonation, and possibly serious spark plug and engine damage
- It is important to read spark plugs many times during the tuning process to achieve the optimum air/ fuel mixture

Higher Compression Ratios/Forced Induction elevates spark plug tip and in-cylinder temperatures

- Compression can be increased by performing any one of the following modifications:
 - A. reducing combustion chamber volume (i.e.: domed pistons, smaller chamber heads, milling heads, etc.)
 - B. adding forced induction (Nitrous, Turbocharging or Supercharging)
 - C. camshaft change

As compression increases, a colder heat range plug, higher fuel octane, and careful attention to ignition timing and air/fuel ratios are necessary. Failure to select a colder spark plug can lead to spark plug/engine damage.

Advancing Ignition Timing

Advancing ignition timing by 10° causes tip temperature to increase by approx. 70°-100° C

Engine Speed and Load

Increases in firing-end temperature are proportional to engine speed and load. When traveling at a consistent high rate of speed, or carrying/pushing very heavy loads, a colder heat range spark plug should be installed

Ambient Air Temperature

As air temperature falls, air density/air volume becomes greater, resulting in leaner air/fuel mixtures. This creates higher cylinder pressures/temperatures and causes an increase in the spark plug's tip temperature. So, fuel delivery should be increased. As temperature increases, air density decreases, as does intake volume, and fuel delivery should be decreased.

Humidity

- As humidity increases, air intake volume decreases
- Result is lower combustion pressures and temperatures, causing a decrease in the spark plug's temperature and a reduction in available power.
- Air/fuel mixture should be leaner, depending upon ambient temperature.

Barometric Pressure/Altitude

- Also affects the spark plug's tip temperature
- The higher the altitude, the lower cylinder pressure becomes. As the cylinder temperature decreases, so does the plug tip temperature
- Many mechanics attempt to "chase" tuning by changing spark plug heat ranges
- The real answer is to adjust jetting or air/fuel mixtures in an effort to put more air back into the engine

Types of Abnormal Combustion:

Pre-ignition

- Defined as: ignition of the air/fuel mixture before the pre-set ignition timing mark
- Caused by hot spots in the combustion chamber...can be caused (or amplified) by over advanced timing, too hot a spark plug, low octane fuel, lean air/fuel mixture, too high compression, or insufficient engine cooling
- A change to a higher octane fuel, a colder plug, richer fuel mixture, or lower compression may be in order
- You may also need to retard ignition timing, and check vehicle's cooling system
- Pre-ignition usually leads to detonation; pre-ignition and detonation are two separate events

Detonation

- The spark plug's worst enemy! (besides fouling)
- Can break insulators or break off ground electrodes
- Pre-ignition most often leads to detonation
- Plug tip temperatures can spike to over 3000°F during the combustion process (in a racing engine)
- Most frequently caused by hot spots in the combustion chamber.
- Hot spots will allow the air/fuel mixture to pre-ignite. As the piston is being forced upward by mechanical action of the connecting rod, the pre-ignited explosion will try to force the piston downward. If the piston can't go up (because of the force of the premature explosion) and it can't go down (because of the upward motion of the connecting rod), the piston will rattle from side to side. The resulting shock wave causes an audible pinging sound. This is detonation.
- Most of the damage that an engine sustains when "detonating" is from excessive heat
- The spark plug is damaged by both the elevated temperatures and the accompanying shock wave, or concussion

Misfires

- A spark plug is said to have misfired when enough voltage has not been delivered to light off all fuel present in the combustion chamber at the proper moment of the power stroke (a few degrees before top dead centre)
- A spark plug can deliver a weak spark (or no spark at all) for a variety of reasons...defective coil, too much compression with incorrect plug gap, dry fouled or wet fouled spark plugs, insufficient ignition timing, etc.
- Slight misfires can cause a loss of performance for obvious reasons (if fuel is not lit, no energy is being created)
- Severe misfires will cause poor fuel economy, poor driveability, and can lead to engine damage

See next page...

