THE SUNSHINE STATE "A"

Model 'A' News

Part 2

Model A Ford Club of Queensland

Index Part 2

Index: **President** Lindsay Harris, **Tour Director** John Hileman & **Editor** Alan Jones.

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Trip to the next NATIONAL MEET at ALBANY W.A.

29th MODEL A FORD NATIONAL – ALBANY 2026

The Club is putting together a group of Members to travel from Brisbane to the Albany National next year and has to date, 23 registrations totaling 42 people that have expressed an interest in joining the group. We are currently researching accommodation options at various overnight locations.
A small group of members have been working on, in addition to the accommodation, the intended route which currently is as follows

Brisbane to Goondiwindi	353 km overnight 03/10
Goondiwindi to Coonabarrabran	343 km overnight 04/10
Coonabarrabran to Cobar	389 km overnight 05/10
Cobar to Broken Hill	458km overnight 06 & 07/10 – note two-night stop
Broken Hill to Port Agusta	412 km overnight 08/10
Port Agusta to Streaky Bay	392 km overnight 09 &10/10 – note two-night stop
Streaky Bay to Penong	186 km overnight 11/10
Penong to Eucla	436 km overnight 12/10
Eucla to Cooklebiddy	273 km overnight 13/10
Cooklebiddy to Norseman	437 km overnight 14/10
Noresman to Esperance	202 km overnight 15/10
Esperance to Jerramungup	299km overnight 16/10
Jerramungup to Albany	overnight 17/10 ready for National registration 18/10

This route remains in draft form and may change as we move to finalize the detail over the next few weeks. Once completed, we will send the final detail including accommodation options to those that have registered an interest.
In addition to those that have registered there are a number that will be travelling independently of the group.

Les Dunstan
Secretary

TECHNICAL TALK

The Model A Front Brakes – What We Mostly Didn't Know!

By Trevor Davis

Summary: *The Model A front brakes were designed so that the brake shoe linings make full contact with the brake drum. This however depends on the following conditions:*

The brake shoes are contoured to the drums.
The brake adjusters are regularly adjusted for very close contact of the brake shoes to the brake drums.
The brake roller pins are a press fit in the brake shoes.
Pairs of brake adjusting shafts, on each wheel, are exactly the same length.
The brake tracks, which are attached to the backing plate and prevent downward movement of the brake shoes, have no significant wear.

In the Q & A section of the MAFCA Restorer of September/October 2016 the Technical Director Dave Bockman, in responding to a question from a John Spragg of Melbourne concerning the front Model A brakes, made the following statement –

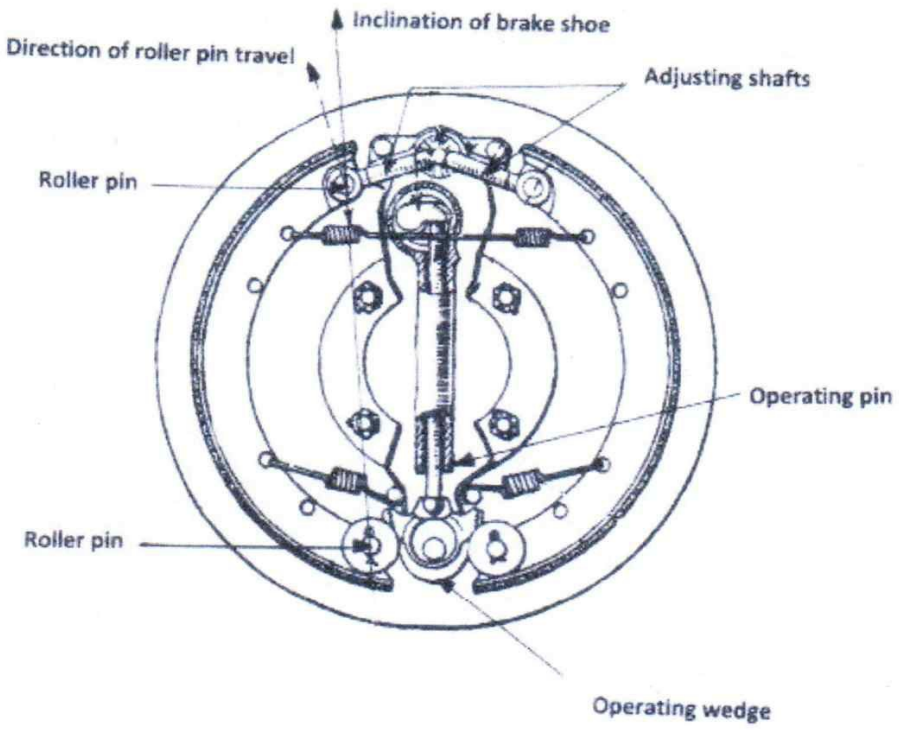
"To engage the brakes, the front brake shoes are only capable of moving or floating on one end while the other end moves only with the adjusting wedge."

However it can be questioned why shouldn't the Model A front brake design be able to make full contact with the brake linings. This necessitates however having to deduce from the design what the designer had in mind.

It will be seen from the diagram that the brake shoes are far from vertical with the top brake roller pins being much further apart than the bottom brake roller pins. Accordingly, when the brake is operated, the operating wedge forces the bottom roller pins further apart and the brake shoes become slightly more vertical. In the process the top roller pins move upwards by a small amount. These top roller pins are connected to the brake adjusting shafts which are designed with a taper to permit this movement, though limited in extent. As an analogy imagine a ladder leaning against a wall. If the bottom of the ladder is pushed towards the wall then the top of the ladder is moved slightly higher. An estimate has indicated that 0.020 inches of horizontal movement of the brake shoe by the operating wedge will result in approximately 0.002 inches of vertical movement of the brake shoe. Therefore any looseness of fit of the roller pins will have a major effect on the extent of this vertical movement.

An email was sent to Dave Bockman questioning his comments. Also an information copy was sent to Les Andrews who is the editor of the Model A Mechanics Handbook. Dave Bockman replied, pointing out however, that from his experience over many years, all front brake linings on replacement were found to have little or no wear at the top. I then replied that I was not surprised and suggested that there are a number of reasons for this rather than something being wrong with the original design:

1. One is the lack of appreciation by the average Model A restorer of the importance of contouring brake shoes to the brake drums.
2. Lack of awareness of acceptable wear limits for the brake drum and associated brake components.
3. Also a lack of awareness of the importance of keeping the top part of the brake lining adjusted to almost touching the brake drum. This is essential



The Model A Front Brakes – What We Mostly Didn't Know!

Continued.

as there is a limit to the capacity of the brake design to compensate for lack of regular adjustment by the operator.

4. That in the early days of Model A restoration there was a general quality control problem with replacement parts supplied by stockists, these in many cases having been made to sample rather than to manufacturing drawings.

Les Andrews forwarded an email to me that he remembered talking to Walt Bratton (of Bratton's Antique Auto Parts) when Walt started manufacturing new roller pins about 9 years ago. Walt found there was a big difference in the Ford drawing of the hole in the shoe and the diameter of the pin. According to the drawings, the rollers had clearance for the diameter of the pin so the rollers could rotate, but the hole in the shoe was smaller requiring a press fit of the brake pins in the shoe. Should correctly manufactured roller pins be difficult to obtain it is suggested a press fit might be obtained by hammering around the roller pin holes in the brake shoes with a ball-peen hammer.

Les Andrews has also advised that, provided new replacement brake parts made to manufacturing drawings are available, there is no need for centring the brake shoes. In his Model A Ford Mechanics Handbook however he did state that when centred, the top of the brake lining will be 0.001 ins from the drum

TECHNICAL TALK

The Model A Front Brakes – What We Mostly Didn't Know!

Continued.

and the bottom of the brake lining will be 0.010 ins from the drum. But centring he said applied in the days when replacement parts were of doubtful quality. Certainly when the Model A was in production there was no time allowed for centring brake shoes. It also should be noted that static centring for worn parts may not necessarily hold true when the brake shoes are operated and about to touch the brake drum.

The diagram shows that the bottom brake rollers are in contact with the operating wedge. The wedge however is in fact only resting on the rollers when the brake is not operated. The photograph however clearly shows that the outer bottom roller rests on the edge of the large washer which is part of the brake wedge assembly when the brake is not operated. This is not shown in the diagram however.

It is important to know whether tension of the brake rod has caused the operating wedge to move partially from the designed rest position when the brake is not operated. It is suggested therefore to be certain that when replacing ill-fitting roller pins that the front brake adjuster be set with the brake rod initially disconnected.

(The contributions by Dave Bockman & Les Andrews are acknowledged.)

Dear NSW Model A Club Members,

As you are aware our NSW club is the host of the 2022 National Meet. I am advising you that the meet is programmed for the week 11-17 September 2022, and am asking you to **SAVE THE DATE.**

After the unfortunate news from Victoria, we felt that Model A Ford owners around Australia would need something to look forward to.

Registration will be on Sunday afternoon 11th, and our farewell breakfast will be Saturday 17th September, 2022. We will be sending out a youtube clip towards the end of October with an "Expression of Interest" Form, showcasing the 27th Model A Ford National Meet Venue. We are hoping to have a National Meet web address by that time (more than likely a part of our existing website), and Victoria members have kindly asked if we were happy to take over their National Meet Facebook page, which can be handed on to the next hosts every two years. Great offer received with thanks.

Our rally steering committee is:

Rally Director – Ken Young
Rally Treasurer – James Haling
Rally Secretary – Rob Taylor

So as we rev things up you will be hearing a lot more from this small but very motivated group.

Thanks and best wishes

Rob Taylor
Rally Secretary
2022 Model A Ford 27th National Rally
Hosted by the NSW Model A Ford Club

TECHNICAL TALK

The Ford engineers did some clever design work with the front brakes on a Model A. This may not be understood by the average car owner who works on his own car.

The front brakes are activated by a wedge that is pushed by the operating pin through the king pin. As the wedge moves down it expands the shoes and slows the car. The wedge pushes on shoe rollers that are attached to the shoes with a roller pin.

The wedge has three sections with different slopes at each side where the shoe rollers ride. When the shoes are retracted the shoe rollers ride on the lower part, the narrower part of the wedge. There are bumps on both edges of the wedge, see Figure 1. As the rollers hit these bumps the shoes are put in contact with the drums. Further movement of the wedge puts more force on the shoes for more braking action. The last section of the wedge has different slopes that are at less of an angle. These slopes have more of a mechanical advantage than the other slopes so they really push on the shoes in case of a panic stop.

Figure 1, showing location of bumps

So the three sections have different jobs. The first section assures that the shoes are retracted where the shoe rollers are below the bumps, See Figure 2. The next section puts the shoes in contact with the drums and puts some force on the shoes, see Figure 3. The last section is reserved for a panic stop, See figure 4.

Figure 2, Rollers at section 1, retracted position

Figure 3, Rollers at section 2.
in contact with drums

Figure 4, Rollers at section 3.
panic stop

When rebuilding the brakes and adjusting them it is good to keep these sections in mind. With the drums off, watch the actions of the shoes at different angles of the arms at the top. Have the rods disconnected when you do this. All slop should be taken up with the arms 15 degrees forward and more movement of the arms to the rear will start the shoes moving. The wedge should be in the full upper position and the shoe rollers should be riding on the lower section 1. Adjust the 15 degree angle by adding a shim, using a new operating pin, or welding onto the end of the operating pin.

Move the arm to the rear and note when the shoe rollers are at section 2. Make a note of where the arm is when this is happening. On my car the arms are vertical when the shoe rollers are at section 2 of the wedge. Now move the arm further towards the rear and note when the shoe rollers are on the third section of the wedges. Keep notes and make diagrams or take photos.

Now assemble the hubs and drums to the axle. If these are newly lined shoes and they are dragging with the brake adjusting wedge screwed all the way out, then there is some work to do before proceeding.

Check that the shoes fit the drums by placing them in the drums. If they do not fit, fix that by having them arced or sand them. Check that the shoes are centered and if not fix that. If the shoes still drag then make sure the brake adjustment shafts are not binding in their holes.

TECHNICAL TALK

Make sure the shafts are the same lengths for each wheel and check the angle. Gauges are available at the usual part supply houses. You may have to shorten the shafts by one mm (0.040 inch).

Once the shoes are not dragging, assemble the drum to the axle and adjust the axle nut correctly. Insert the cotter pin but do not bend the end. Adjust the brake so that it just starts to drag and then back it off two clicks on the brake adjusting wedge. Now move the arm to the rear using a wrench for leverage to the point where you cannot move it further. Take note of this position. Compare that position to the position where the shoe rollers are at section 2 on the wedge. If things are working correctly it should be about the same position.

Next adjust the length of the brake rod and connect it to the arm so that the arm is in the position where all slack is taken up (15 degrees forward). Insert the clevis pin but do not install the cotter pin at this time.

If you are happy with the way things went and do not need to remove the drum or make further adjustments to the brake rods, then bend over the cotter pins on the axle nuts and install the cotter pins on the clevis pins.

When both front brakes are assembled, use your notched board or other means to depress the brake pedal until you cannot move the front wheels. Note the position of the arms. On my car they are straight up and down which corresponds to the section 2 on the wedges.

Continue to adjust the brakes to your liking. I highly recommend that you bias the brakes to the front 60/40 or at least 50/50. Then take the car for a test drive. Make slight adjustments to the front brakes to correct any tendency to swerve left or right. When you get back to the shop, check that the front brakes are not dragging and if they are, loosen both brake adjusting wedges one click or two clicks each and go for another test drive. Repeat this until the brakes are performing well. Do not adjust the brakes by changing the length of the rods.

To obtain front bias on the brakes, use the notched board or another means to push on the brakes, but instead of having the rear brakes start to drag first, adjust so that the front brakes start to drag first.

If the linings are new the shoes will bed in and multiple adjustments will be needed in the first few hundred miles. On my car I have the brakes biased to the front so I usually just adjust the front brakes when adjustment is needed.

If after all this you find that the shoes are dragging and no amount of adjustment fixes it, you will need to take the brakes apart and determine what is binding. In my car I found that the brake adjusting shafts were binding in their holes. I slightly ground the OD of the shafts and shortened them by 1 mm and this fixed the problem.

WANTED

Front doors for a 1930 Coupe.

Contact:- Ian Guthrie 07 40964177

MARKET PLACE

Toyota Crown Overdrives
(2) Give away
P/U at Gin Gin, QLD.
Call Geoff 0498 538993

FOR MARKET PLACE SALE

1928 Model A Phaeton

Past half way in a ground up restoration

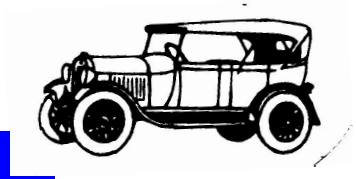
Complete with all parts needed to finish the project

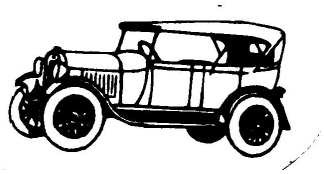
Plus another complete body

Too many parts to list

$18,000

Contact: - Rod Hull **0419 752 969** Located Gympie / Rainbow Beach





MARKET PLACE

FOR SALE

Alan & Jo would like to sell both together but will consider selling separately
Model A **$35,000,** Trailer **$10,000**

Due to progressing Parkinson Disease Alan & Jo need to sell 1930 Tudor, **LHD**

4 brand new tyres, Rebuilt Carby + spare carby & Spare distributor

Rego Current to date.

We can supply more photos inside and out

We have history on car Manufactured in Denmark

Tiltatrailer brand new only used half a dozen times

Hand Winch included

Price **$45,000** Trailer and car If interested contact:- Jo Evans direct.

Ph :- **0417747167** for more info

FOR MARKET PLACE SALE

1929 Model a Ford roadster

Older almost complete restoration
Engine / gearbox rebuild 20 years ago.

Less than 500 miles driven since.
Needs hood restoration only.

Irons and wood present.

$38,000.

Please phone Trevor Ray :- **0409 879 727**.
Aspley area, Brisbane, QLD.

FOR MARKET PLACE SALE

1928 Ford Model A

Ian Watson **$45,000**

Or near **OFFERS**.

Phone:- 0427 021 133

About This Vehicle

- Driven: 4,000 km.
- Manual Transmission.
- Exterior color: Red. Interior color: Grey.
- Fuel Type: Petrol.
- Engine size: 0.4 L.
- Housepower: 40 hp.
- 3+ Owners.

Our Merchandise

MODEL A FORD CLUB of QUEENSLAND – SHIRTS & JACKET

If you would like to order any of the following, please let Les Dunstan know by e-mail on dunstan.pms@bigpond.com

Men's. Polo shirts with Logo and pocket – Cost $44.00 each

Ladies. Polo shirts with Logo but (No pocket) – Cost $35.00 each

Men's sizes range from **S-5XL**

Ladies' sizes range from **8-24**

Additional options available

Pocket $10.00 (Ladies Only) as Men's has pocket

First name 10ml high $10.00

Full name $16.00

Men's.Blue Bisley Oxford Shirts with pocket & Club Logo – Short Sleeve $50.00 & Long Sleeve $53.00

Ladies. Bisley Oxford Shirts with Club Logo – Long Sleeve $52.00

Men's sizes range from **S-5XL**

Ladies' sizes range from **6-24**

Additional options as above but only names as this shirt has a pocket.

Navy JB Jacket with Club Logo on the front – Cost Price on Application

Men's sizes range from **S-5XL**

Ladies' sizes range from **6-24**

Additional option is to have Model a Ford Club of Queensland on back at a cost of $25

Our Merchandise

Our New Club Badge
$10.00 ea.

New Cap
$20.00 ea.

Club Mugs
$6.00 ea.

Hat Pin
$2.00 ea.

Model A Biro's $1.00 ea.

Cloth Badge
$12.00 ea.

Lapel Badge $12.00 ea.
Contact Les to place order with your NAME

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MODEL A FORD CLUB QUEENSLAND

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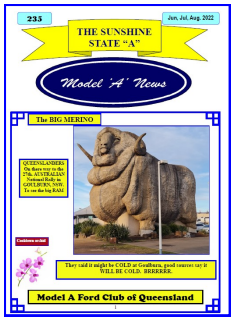

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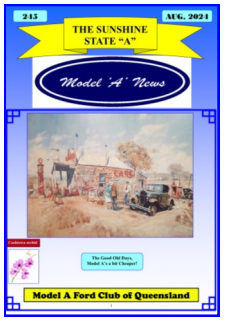

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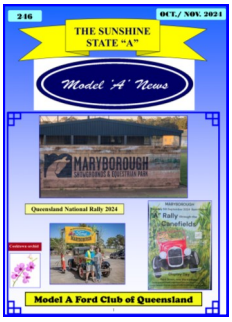

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NEW MEMBERS, If you want any BACK ISSUES, EMAIL me required copies.

MODEL "A" FORD CLUB of QUEENSLAND inc.

1376 OLD CLEVELAND ROAD
CARINDALE QLD 4152.
BRISBANE
AUSTRALIA

APPLICATION FOR MEMBERSHIP

Month/Year…./….

I, the undertsigned, wish to make application to your club, the "MODEL 'A' FORD CLUB OF QUEENSLAND Inc."

Surname :_____ Given Names :_____

Partner : _____

Address :_____

Postcode:_____ Phone Number ; Home_____ Mobile_____

Email Address :_____
Required for the sending of Club Newsletters

VEHICLE PARTICULARS

Engine Number :_____ Chassis Number :_____

Fully Restored: YES/NO - Registered: Full/Concessional/No or Status:_____
Year :_____ Body Style :_____

I agree to abide by the constitution of this Club, and will not hold the Club, or its members, responsible in the event of any accident involving my vehicle, thus causing damage to persons or property.

Signed:_____

Proposed by :_____ Seconded bt :_____ Date :_____

THE APPLICATION MUST SIGNED BY A PROPOSER AND SECONDER KNOWN TO THE APPLICANT

This application may be forwarded direct to the Secretary at the above address, Fees can be paid by Bank transfer to the Club account BSB 124 060 Account 90539837

It shall be accompained by the appropriate fee. Full membership shall be paid by a person with an eligible vehicle of the standard required by the club, or with the intention of owning or restoring a Model A Ford – Application Fee of $30 plus the first years membership (ends 30/9) of $40 i.e. a total of $70 must accompany this application. Any membership paid after the 31/3 will cover the next years membership. Membership will include an e-mail version of the Club newsletter throughout the year.

OUR CREED : The aim of this Club is to encourage the restoration and preservation of the Model "A" Ford in its original condition and to encourage participation in rallies and to generally foster friendship amongst people with similar interests.