

# Further modifications and improvements to Andy's Mk 1 Jaguar for greater performance, reliability and safety - 1985 - 1995

*By Andy Bryant*

*(Continued from pages 8-12 in September mag)*

## **Andy's car-1958 Mk 1, 2.4 litre, 4-wheel disc brakes, 4 speed, 4.27 Diff**

\*When introduced in 1955, the Mk 1 required 90hp at the rear wheels to do 100mph. With full spats, narrow grille and overdrive – the “Autocar” road test car did 101mph, in 1956, in overdrive.

\*Mine, on 195/60 x 15” tyres did 100.3mph at 6000rpm – as it did 1200rpm at 20mph, 6000 rpm at 100mph. \*Conversely, on 205/60 x 15” tyres, it could pull 108-115mph, on a long enough straight!!

\*The 2.4 litre, with its 76mm stroke, could rev higher and occasionally I used that maximum rev limit, which gave 70mph in second on the speedo (6300 rpm or thereabouts was valve crash territory, when valves hit pistons)

\*Peter Blank's Mk 1 had 178 bhp at the back wheels in 1989, at Ardmore. \*In earlier times, Dave Silcock's Mk 2 put out 192hp at the back wheels, and Mike Hawthornes Mk 1, 3.4 litre repeatably had 225bhp at the flywheel.

Modern 3.8 litre Mk 2's with triple Weber's, big valve heads, race cams, and up to 12.5:1 compression, put out 282/283hp at the back wheels. This is true for the ex-Mike Westall brown/bronze Mk 2 (Top speed – 145 - 150mph, at which speed they get airborne.

For the 1991/1992 season, we raised the compression so that 100 octane fuel was required- known as “Aviation Gas” or “Av. Gas.” With this improvement, the car flew – especially in top, 60-115mph but 100 octane fuel was essential.

\*On race day-and every race day, I fitted and gapped a set of brand-new N3C (Copper plugs) and bled the brakes.

Prior to any race day, the engine oil and filter were changed and so were the gearbox oil and differential oil. Sump plugs were wired.

\*An isolator switch was fitted – as compulsory, under the regulations. \*Also, for safety and ease of driving, the fog lights and headlights were wired up for a 4-headlight system on full beam, using a relay.

\*A battery box, made up by Fred Wilton of Manukau City Jaguar, stopped the battery falling out and creating a possible fire, should an overturn/roll over occur.

\*Finally, I tuned the carbs “Rich” myself – as at full revs, 6000rpm + – I did not want the mixture too lean, causing overheating and misfiring. This required a new fuel pump – an XJ6 one, with a fuel filter also in the boot.

***\*Wairarapa Car Club figures on a flying ¼ mile, 1985.***

A fire extinguisher was secured by the transmission tunnel – and after the engine, gearbox, clutch re-build, a gearbox extension fitted. The selectors were also reconditioned in 1992.

The motor, gearbox, clutch and a rear spring were re-built in May 1992 by Ken Allcott in Tauranga. At this time, we reduced the compression – with a thicker gasket, so the continual need for 100 octane/Av. Gas petrol ceased.

### **Possible future modifications beyond 1993:**

Had the car not been sold December 1995, along with the Mk 8, further modifications would have been made to improve its performance, namely:

Road/Race cams, 2" Carbs, Electric fan, Thicker core radiator. (Or an alloy one). Mk 2 back axle with quick change square pads.

As it was in 1992, when the motor was fully rebuilt, a special thicker head gasket was fitted to reduce the compression for normal road use.

In its most developed state, we estimated that the power at the flywheel was between 135bhp and 145bhp.

Two events, are warmly remembered:

### **The Intermarque Relay race – March 1988.**

Peter Blank, Horotu's "Tom Walkinshaw", entered a team of four (4) Mk 1's against other JDC teams and other marques.

Car no 1 - Peter Blank – 1958 Mk 1, 3.8 litre - originally Imperial Maroon, 3.4 litre.

Car no 2 – Fred Wilton – Mk 1, 3.8 litre (3xSU 2") Black.

Car no 3 - Andy Bryant – 1958 Mk 1, 2.4 litre – Honey/Beige.

Car no 4 – Reserve: Stephen Ward – Mk 1, 4.2 litre, Black.

In practice, Steve's 4.2 litre couldn't keep up with my 2.4 litre down the back straight.

Our team of 4 Mk 1s – practiced on the Saturday – after scrutineering, in the dry, only to find it wet on the Sunday.

My Firestone High Performance radials tyres with hard compound rubber, were about as useful as an ashtray on a motorcycle in the wet – no grip at all.

So care was needed – third gear out of the hairpin – a gear up, everywhere, and very careful on the throttle/power out of all corners. Smoothness was called for.



**8am In the pits setting up: (From left)  
Bending over - Derek Morgan  
Hamilton JDC.  
(Helper - Peter Blanks Mk 1, 3.8 litre)  
Stephen Ward - President Auckland  
JDC (Reserve car 9R - 4.2 litre)  
Andrew Fink & Philip Lawton - Andy's  
helpers in the pits.**

Each driver had to do a certain number of laps – and during their stint, have a wheel removed, bounced on the road, and put back on. Then a spark plug changed, using a plug holder, mounted on the inner wing.

In the wet, all our lap times were much slower and with the Mk1/Mk2 models which are nose heavy already – braking at the end of straights made the rear wheels with their narrow track, very prone to sliding out abruptly – particularly under hard braking, or abrupt acceleration out of a corner.

It was an exciting day, during which two boys from Hillcrest High School, Andrew Fink and Philip Lawton, helped in the pits.

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***John Sharplin's XK 140MC F.H.C.  
Bob Whitehouse's XK 150 3.4 litre?***



***The XK Team - Auckland JDC  
From the right:  
David Eddlestone's XK 150S Roadster  
An (Alloy?) Early XK120 O.T.S Roadster  
John Sharplin's XK 140MC F.H.C.***



***Andrew Fink poses with my Mk 1,  
2.4 litre - 9C***

***On this occasion, sponsored by  
Grimmer Motors Ltd, Heaphy  
Terrace, Hamilton***





***Peter Blank's first Mk 1 3.4 litre - featured in Richard Waugh's book "Classic Jaguars in New Zealand".***

***Peter at the wheel, accelerating hard out of the hairpin at Pukekohe. Here, the car is on 14" rims***

***Andy's Mk 1, 2.4 litre in the wet. Full speed in top gear, past the pits.***



## **Ardmore – January 1989**

This was an international event – in that Sir Stirling Moss, Jack Brabham, Chris Amon, Denny Hulme and other celebrity drivers were invited do a (celebrity) lap of honour. Moss drove a 300SI Mercedes.

Only a small section of the original circuit was used – with two short straights, and tight corners. The saloons were divided into two classes, category one and two. My Mk 1, 2.4 litre – being mildly modified, along with Hamilton JDC member Ray O'Fee in his Mk 9 (160hp at the back wheels).

Peter Blank in his Mk 1, 3.8 litre (178hp) was relegated category 2 – and had to fight it out with Mike Westfall's triple weber carbs - which Peter said could pull away under acceleration.

I spent the day, in front of a standard Mk 2, 3.8 litre, four-wheel drifting with great joy on the hot mix tar seal.

Many competitors were now spending more on motor development, than I had on the whole car. These Fiat 125s, 127s, Cooper S cars, Lotus Cortina's etc, were now essentially race cars, not shopping transport.

It was a very, very hot day – great for racing, and great for the spectators!!

*Andy*