

THE ALLARD REGISTER  
&  
SPORTS CAR ASSOCIATION.

THE BULLETIN.

May/June 1971

Page.1.

Hon. Sec. R. W. May, 8 Paget Close, Horsham, Sussex. (Telephone, Horsham 61372.)

An Allard Special. Part.2.

Before dealing with the steps member Les Davies took to increase the power output, we should advise our members that the completed road car develops around 450 b.h.p. per ton power-to-weight ratio with a total dry weight of 21 cwts, approx.,

The Firepower engine had the hydraulic tappets fitted to big American V8s, and these were converted to solid; the adjustment is now achieved by shims inserted under the cam followers. The valve diameter of  $1\frac{3}{4}$ " was not altered, but the springs were increased by distance pieces. The compression ratio was raised to 9 to 1 by special solid skirt pistons with chromed rings, and these are in fact similar to the type fitted to many of the American hot-rods and dragsters. In order to achieve the greatest increase in the torque at the lower end of the rev range (rather than sheer top end power) the valve timing was left untouched, for this has already a 15 degrees overlap. The torque curve apparently now reaches its peak at about 2,900 r.p.m. The crankshaft was also left untouched.

The impressive looking exhaust systems were specially made up to give two sets of twin pipes emerging from each pair of the banks of four cylinders, passing into four Servais silencers emerging on either side immediately before the rear wheels. To hear the Chrysler engine warming up is something to be experienced, but to have one's eardrums blasted by a quick throttle opening to clear the plugs is really shattering.

Ignition naturally presented something of a problem since no coil would be satisfactory for a high efficiency unit of this type and therefore a Scintilla Vertex magneto has been fitted, and the electrical leads are neatly clipped to the heads on either side.

The petrol feed to the four enormous Strombergs is taken care of by a double S. U. electric and one mechanical pump, and petrol reaches the carburettors via a special main ring piping which links the float chambers.

The working pressure of the oil pump was increased to a steady 70-80 lbs by removing the valve spring, and the SAE 30 lubricant circulates through a Tecalmit oil filter (which can be manually operated to remove sludge) to an ex-BMW  $\frac{1}{2}$  gallon oil cooler in front of the radiator. The total oil capacity is just over 2 gallons.

The cooling system, with a capacity of just on four gallons, was modified extensively. The Allard radiator was lowered six inches in the frame, and the top centre pipe was blanked off and replaced by two take-offs on either side. The Chrysler thermostat was also modified to suit the new conditions, and the fan, although left in its original position, was replaced by one with shorter blades in order to accommodate the lower radiator and the correspondingly lower bonnet line. The dynamo, replaced by a Lucas unit, was taken from the centre of the V and mounted low down on the right-hand side of the block, by a special bracket. It is still driven off the fan belt however. The tachometer drive is taken from the

rear of the dynamo, and reads to a calibrated 8,000 rpm.

The general appearance of the engine bay corresponds to that of the whole car, having an air of neat and functional efficiency. This is borne out by the very neat throttle linkages, and rods of which all run in self-aligning bearings.

The body is of aluminium, and the bonnet is a one-piece section in 16 gauge fully annealed aluminium which is hinged at the nose to open forwards.

The cockpit is well laid out with twin bucket seats in red leather. Under the seats are two hinged panels which cover twin 12 volt heavy duty batteries. The dashboard has the usual instruments and switches which are all conveniently placed. The windscreen has a polished alloy frame and stainless steel bracing struts, but there is no hook or side-screens.

Performance is electrifying and with a 3.5 to 1 crown wheel and pinion, gives a maximum speed of 150 m.p.h. With a 2.9 to 1 rear end ratio, the car could, on paper, top the 200 mark. However, with the lower of the two rear axle ratios, there is a third gear maximum of 125 m.p.h. at 6,000 rpm.

To sum up, Mr. Davies, is to be congratulated on producing such a very fine machine. He could not, however, give any idea on the number of man-hours his project had taken except that it took nearly 4 years of his spare time, and as to the cost, this must have been very considerable. As one can expect from the hands (and brain) of such a highly qualified engineer, this car is outstanding in every way.

The End.

-----  
Jackie Stewart - A man on the move.

Jackie Stewart is a human dynamo moving almost as fast off the track as he does on it, working hard to promote himself, his sponsors, and motor racing; in that order. His jet flits to London for meetings which are carefully rationed time-wise. Discussions in his hotel suite have to be finished at a predetermined time so that a new meeting can start. He asks executives to ride with him in his chauffeur-driven car out to the Lola factory at Slough "because that will give us forty minutes without being interrupted by the 'phone..." The journey from his home in Switzerland to Geneva airport is timed almost to the fraction of a second. He drives a German Ford and has his own parking space just twenty feet from the main doors of the airport! Next year Jackie has a full programme now that he has signed with Goodyear and it will mean a David Frost sort of schedule back and forth across the Atlantic. Jackie will drive a Lola in Canam sports car racing as well as the Tyrrell-Ford in Grand Prix racing. America is where motor racing is really happening, says Jackie. "There is a whole new generation growing up who like road racing. I suppose their average age is about 23 and they understand the finer points of the art of road racing where the cars turn right as well as left. The Indianapolis generation are in their middle forties."

-----  
On Broadway, it is said that the average New Yorker is a man who has never been to the top of the Empire State building, never seen the Statue of Liberty, and never found an empty parking space.

Sign at a level crossing in the Deep South: "It takes a train 14 seconds to pass this crossing, whether your car is on it or not!"

Men still die with their boots on - but usually one boot is on the accelerator.

-----

ALLARD CARS.

STEERING FAULTS.

CAUSES. Excessive Castor Angle. Unequal castor and camber angles. Excessive wheel movement. Wheel balance. General wear. Tyres. Wear in centre steering arm or axle centre bushes (Silentbloc).

TO CORRECT Castor angle to be as shown below, both sides equal, arrived at by resetting beams, or radius rods or packing radius rods from chassis fixing point. Check rear spring for weakness and settling. Length between centres of spring eyes under normal load - 46.4" - 46.5" Camber angle (Front) to be as shown below, both sides equal arrived at by packing washers in coil spring pans. On leaf spring cars perch bolts should be checked, and replaced if necessary.

Shock absorbers must be effective.

When tracking it is essential that adjustment be made equally on both track rods, with centre steering arm parallel to centre of car.

Wheels must be balanced both statically and dynamically to within 10in/oz limit.

Ensure no wear in steering box, king pins, and steering joints.

Tyres, pressures to be equal, amount of wear equal side to side, maintain common make if possible.

<u>YEAR.</u>	<u>Models</u>	<u>Camber</u>	<u>Castor</u>	<u>Toe-in</u>
1946/49	Leaf Spring	2°	2°	1/8"
1949/53	Coil Springs P1/M2/J2/K2.	2°	3° - 4°	3/16"
1953/55	Coil Springs J2X/M2X/P2/K3.	2° - 3°	2°	1/8"
1953/56	Palm Beach Mark 1.	2°	2°	1/8"
1955/56	J2R.	2°	4°	1/8"
1957/60	Palm Beach Mark II } Gran Turismo }	1 1/2° - 2°	1 1/2°	1/8"

FOR SALE.

Allard J2 fitted 283 Corvette engine with 3/4 race camshaft and three carburettor manifold. Muncie four-speed gearbox. Mileage under 100 since completely restored. Price \$4250. Cordell H. Bahn, M.D. 12305 Exline St., El Monte, California 91732.

oOo

Allard K3 roadster 1953. Cadillac engine fitted two four-barrel carbs with Mallory Magspark ignition system. Price \$3250, -and-

Allard K3 roadster 1954. Modified Cadillac engine with 6 carbs and Corvette four-speed gearbox. Brand new top and carpeting. Price \$2850 or offer, -and-

Many Allard K3 spare parts incl., body sections, doors, drive train, etc., C. Keeley, 253, Bradwell Road, Barrington, Illinois, 60010.

oOo

WANTED.

Parts required for De Dion rear axle. Information to James E. Dale, 181 North McCadden Place, Los Angeles, California, 90004.

oOo

EXCHANGE.

Allard M type coupe. The Ford engine runs but body shell is in bad condition. Would make useful source of spares. Towable. Anything considered in exchange or sell. S. C. Stocker, 44, Tennison Road, Cambridge, Cambridgeshire.

-----