

Laden with badge bars, side mirrors, trunk load of chrome, tools, plaques, and other unnecessary ballast, Jag broils the quarter in less than 15 secs.

## DRAGSTRIP DANDY

By **RUSS KELLY**

A couple of hundred years ago you knew it was the gent in the fancy suit you had to look out for. He had a dirk up each ruffled sleeve and like as not, another in his pleated shirt front, but times change. Today we expect things to look the way they're going to act and on a drag strip we like to think we can depend on it.

Under these circumstances, Andy Anderson's Jaguar coupe comes as a shock. Stock bodied in *legitimate* Concours trim including badge bar, contestants plaques and complete chrome tool kit, this heavy-weight blown coupe hauls. Firestone slicks are the only concession to convention and by the time 6000 rpm is reached in second, they're sizzling—it's Little Lord Fauntleroy with vitamins.

It's no accident that this 3000 pounds plus jewel ends the quarter mile traveling almost 100 mph. The leverage it exhibits is carefully built in and according to Anderson, the 215 hp it delivers to the rear wheels now is not to be the final figure.

In this never ending search to get more and more hp from less and less cubic inches, superchargers are getting a tremendous play. Anderson's coupe is an excellent example of a modified and blown engine that conservatives could hardly object to and even all-out racers will find interesting.

The original bore and stroke of the '55 engine was left unaltered (83 mm x 106 mm, 3.27 in. x 4.17 inches). The major rotating and reciprocating masses in the engine were carefully balanced both statically and dynamically. Included in this balancing were the clutch assembly and the blower drive pulley. In view of the intention to raise the maximum

rpm limit to 6000 instead of the stock 5750 rpm, D type inserts were substituted for stock bearings. The higher revolving D's use Indium coated lead-bronze shells.

The critical compression-pounds-boost ratio relationship was worked out on the assumption that the McCulloch was capable of sustaining a maximum six pounds boost with this 210 inch engine. This figure allowed the use of D-type nine to one pistons. Apparently, the choice leaves a bit of a safety margin, since detonation has never occurred.

This model was one of the earliest delivered in 1955. As such, it did not have the C type head fitted as original equipment. However, a wrecked C type supplied the desired head. With its 1.875-in. intake valves and 1.50-in. exhaust valves, the C head would normally bring about a 10% increase over stock (190 to 210 bhp). Before installation the head and manifold were carefully cleaned up and polished by Anderson, a locksmith by profession and not a stranger to hand tools. No attempt was made to alter the porting. The cams are an Iskendarian re-grind and sodium exhaust valves are used instead of the solid stem variety.

At the time the C head was purchased, the large bore 2-inch C carburetors were also acquired. A large venturi area can sometimes make itself felt adversely at small throttle openings under atmospheric induction. However, this does not apply to the same extent with supercharging. It's sometimes a little difficult to get *enough* area.

Ignition is stock except for the use of a Runbaken oil-coil.

The blower is the conventional McCulloch Jaguar installation. Belt driven with a heavy duty variable speed drive,

### *The tough arena of the dragstrip is the last place to expect a concourse-prepared Jaguar — but this is Little Lord Fauntleroy with vitamins.*

it can deliver six pounds boost over quite a wide range of engine rpm's.

Air under pressure is delivered from the blower to the carburetor pressure box through a 2.125-in. steel cord reinforced neoprene tube. The pressure box, which completely encloses the two carburetors, is an aluminum casting. This pressure box effectively offsets one big disadvantage of having the blower ahead of the carburetors, that of inequalities in pressures between the inside and outside of these pressure sensitive units. Other than the fuel inlet line, which is a simple matter to seal, the throttle rod entry at the rear of the box is the only spot where trouble from leaks might conceivably arise. To make full boost immediately available, a manually operated switch allows Anderson to override the variable speed mechanism, locking it in the maximum output position.

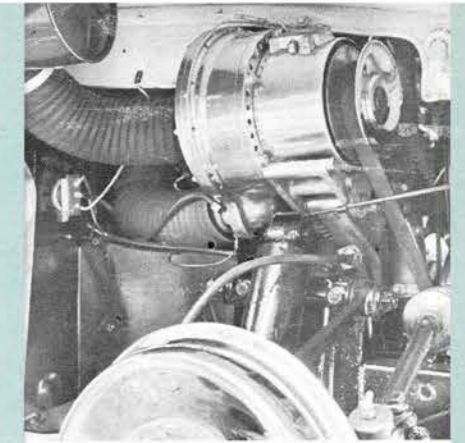
In anticipation of heating difficulties a new radiator was fabricated using a four inch core. The stock Jaguar header tank and hose outlets were retained. The additional room taken up by the wider core and the blower drive pulley made it necessary to relocate the new radiator. This was done by advancing the bottom of the unit slightly and then raking it back at the top to keep it inside the hood and grille line. Slight alterations were necessary to the inner sides of the front fenders to make room for the advanced base of the core. The distance between the fan and the relocated radiator was felt to be critical. To overcome the possibility of overheating at a standstill or at low speeds, a shroud was fabricated of sheet metal to make sure the air displaced by the fan was drawn through the radiator core.

In spite of these precautions, overheating did occur. A slightly lean fuel mixture was found to be contributory. The altering of existing needles, since nothing standard proved suitable, was done on a lathe. Even the richer mixture failed to make the cure complete, so the cooling system underwent examination. A thermal engineer came up with the answer. Acknowledging the fact that efficient cooling is accomplished by making the greatest use of the coolant available, the flow of water through the head was restricted. It was believed that with the two inch entry into the head, the water circulated at such a rate that heat absorption from the head and heat loss in the radiator were both at a minimum. The determination of a head entry orifice of 1.25 inches was arrived at by a calculation involving the total area inside the head. In this case theory was borne out in practice. No further trouble with overheating has been experienced.

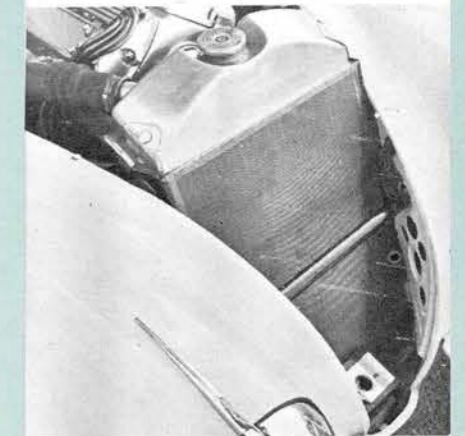
The exhaust system from the stock headers' back is dual, employing two straight through mufflers. The stock 3.54 rear end ratio is hardly the best suited for dragging, but still turns in times consistently between 98 and 100 mph. This is good enough to eat up most street sports coupes, including 300SL's.

With ten first in class or outright wins in West Coast Concours in the past year, Anderson can be justifiably proud of his car. In addition to this, he's got the perfect answer to the unwary one who comes up with that old question, "It's pretty, but does it go?"

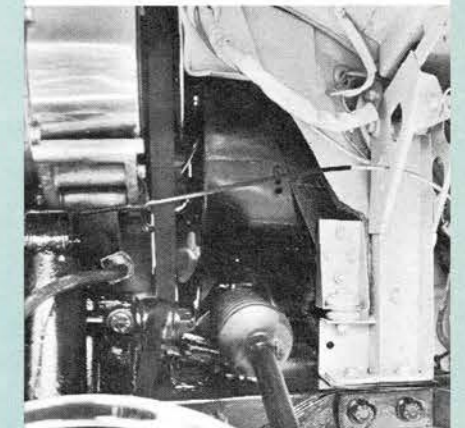
Side panel was neatly cut out for unusual mounting of blower under fender. Variable drive pulley was drilled for balancing. Pressure gauge line is seen at exhaust port.



Reworked radiator with four inch core retained stock header tanks and hose connections. See how radiator is raked at top to keep it under hood line.



Relocation of radiator meant reworking the inner fenders to make room for the advanced radiator bottom. Fan shroud channels all air through radiator core.



Aluminum pressure box fits over carbs keeping pressure throughout the entire carb layout equal. In compartment are oil can, extinguisher, and extra plugs.

