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TECHNOTES

By **KARL LUDVIGSEN**

BACKYARD CORNER

I've been thinking about building a sports car from parts available. I plan to use a Jaguar front suspension, Chevrolet engine (F.I.), and a Jag 4-speed box hooked up to an AC Ace swing rear. It'll be based on a steel tube frame. How about tread and brakes (I'd like one type and not two different makes). Also, where could I get a Fiberglas body built to my specifications? You've got a wonderful magazine 'cause you got me away from the rods!

Maurice Conte
McKeesport, Pennsylvania

We're glad we won you over, but our view is that there isn't so darn much difference anyway! It's just nice to have a car that'll handle as well as run.

The Chev engine is fine, and see our February, 1957 issue for modifications. For competition, it's best to steer clear of the needlessly complex Chev injection system and use the much simpler Hilborn rig.

The AC Ace parallel action rear end is good for a relatively light machine, but should be beefed up for the heavier use that you propose. You might even consider mounting a solid axle in the manner of the Ferrari Testa Rossa (March, 1957 SCI), in combination with a Lyeth or similar limited-slip differential. A Jag axle might go well, and would clear you up on the brake situation. Best to have slightly less rear tread than front for good high-speed handling, and just the other way for low-speed responsiveness.

Rather than build your own Fiberglas body, or have one made specially, why not buy a standard one and rebuild it the way you want it? This would be cheapest by far in the long run. Get in touch with Vic-tress, 11823 H Sherman Way, North Hollywood, California. They have some good shells, as does Sorrell Engineering, 9616 Felton Street, Inglewood, Calif.

PUSH CORRECTION

In the January, 1957 issue, the article "More Push for the Porsche", I believe the valve timing should read as follows:

- Intake opens BTDC
- Intakes closes ABDC
- Exhaust opens BBDC
- Exhaust closes ATDC

Some Porsche pushers may be tempted to use a combination oil for winter driving, such as 10-30. This should be avoided in Porsche and VW, as the oil pressure relief valve depends on a change in viscosity with temperature to bypass the oil cooler.

Doug Brown
Joliet, Illinois

REBORING RENAULT

With reference to inquiries on Renault hop-ups: I have rebored Renault cylinder sleeves to 2¼ inches and fitted Briggs and Stratton pistons from their "N" series.

Only other work necessary was to make bushings to fit the Briggs and Stratton piston pins to the Renault connecting rods.

J. Eisenstark
Yorktown Heights, N. Y.

VERY BASIC

Your November, 1956 issue contained an article on the 2.4 Jag engine, which caused quite a discussion in our auto mechanic class. How do you convert liters to cubic inches? How many inches and horsepower are provided by the 1953 4.1 Ferrari mill?

Peter Mellon
Anchorage, Alaska

To convert liters to cubic inches, multiply the number of liters by 61.05. One liter is thus roughly 60 cubic inches, or approximately one quart. A two liter car is thus about 120 cubic inches. Further, of course, each liter contains 1000 cubic centimeters, so 1500 cc. is the same as 1½ liters, or 90 inches. The 4.1 liter Ferrari thus has 4.1 x 61.05, or almost exactly 250 cubic inches. The touring "America" version put out roughly 220 bph, while the tuned "Mexico" cars were probably closer to 270-280 bph. None of the Italian outputs are too reliable, being optimistic for the most part.

MORE FOR MAGNETTE

I have an MG Magnette, which I feel is quite good but is lacking in get up and go. Could you give me some information regarding hopping this up? I also feel that it leans a little too much on corners. Can you recommend a brand of shocks that will be stiffer?

G. Harrop
Powell River, B.C., Canada

Basically the Magnette engine is a BMC B-type, so much of the MGA manifold and equipment is directly applicable. Also, the Alexander Engineering Co. Ltd., at Haddenham, Bucks, England, markets a conversion setup for the Magnette, as well as for most other popular English cars. Its reworked head has compression ratio hiked from 7.2/1 to 8.25/1, and cleaned-up ports. 1½ inch SU's, on a new (possibly MGA) manifold replace the stock 1¼'s, and a new, cleaner exhaust system is fitted. Finally the rear end ratio was changed from 4.875 to 4.3. Result was much improved acceleration and top speed around 92 mph. You could either inquire to Alexander or have the modifications made up in your area.

Since the shocks all around are tubular, you could experiment with Gabriel adjustables or Columbus dampers. To retain your own, which are basically good, send them to A. J. Swanson Co., 1526 N. Ivar, Hollywood, California and request them to modify them for better control, describing the conditions that you want to avoid. They specialize in this type of work.