

**W**HEN YOU THINK of Production sports car racing and Class E at the same time one car stands head and shoulders above any other, A.C.'s Ace Bristol. It figures to be an outstanding car. Weighing in at 1900 lbs. or a shade less and, in what the factory calls 100 D2 tune, pumping 130 bhp, the A.C. Bristol has to go. When you throw in the handling provided by four-wheel independent suspension and braking to match the go, the winning ways of the car are only to be expected.

A race bred car, it was derived from the very successful Tojeiro Bristol Special that was matched in England only by the Lister Bristol in the capable hands of the late Archie Scott-Brown.

It is an axiom in racing that speed costs money and the Ace is no exception. Of the nine cars in this section, the A.C. Bristol

comes the dearest. You can go racing in an Ace Bristol for about \$6000 give or take a ten-spot but in a big event or an SCCA National you won't be fielding a winner. It won't be back of the pack but it won't be first place either. It isn't that the car won't go but there are certain options that others will have that will give them the slight edge that spells the difference between first place and second, third or fourth.

To begin with the obvious, the SCCA demands roll bars and the factory will comply with this at your request, installing a small, demountable bar that has to our knowledge stood the test of use at least three times this past season. Second, as with the Twin Cam MGA on the succeeding pages, the windshield will hold you back. Again the makers have come through with a molded Perspex competition screen

that weighs nothing and draws no wind at all. With these and the seat belt you're in racing any time you want to head for the track. But there's more.

The Ace chassis is suspended by two transverse leaf springs fore and aft. As set up normally, the car handles beautifully—once you get used to it. A former Porsche or Siata 208-S owner finds that this comes easily; but to one used to a classic hard-sprung sports car ride and "slidability," it takes a bit of sympathetic acclimatizing. There is a definite feeling at first that the body and chassis on the one side and the suspension system and wheels on the other are two separate entities. It's disconcerting at first but you rapidly become aware of the fact that the wheels, all four of 'em, are sticking like glue, that any unevenness in the road is being ignored while you and the body are doing all the leaning. From



*Despite its generous body lean, the all-independently sprung Ace feels as if it were painted on the road.*

then on it's merely a matter of getting used to it. The car will drift but not like a live-axle machine. One of the tricks you learn rapidly under competition conditions is that you don't toss the car into a corner and let 'er slide. Best times are made by driving into the corner and applying power early on coming out. If the car is provoked into a slide, particularly with the Michelin Xs that are normal wear, it has a lurching feel that is definitely something a bit less than exhilarating. Powered in a mild drift, however, it imparts a feeling that one is painted on the road and is utterly secure.

The manufacturer will make this transition to the joys of 4-wheel independently suspended motoring a bit easier by providing optional shock absorbers that are both stiffer and set with a 50/50 rate. Additionally, the use of the leaf springs makes changing the spring rates a snap (with a little work) since extra leaves can be added or removed. Those who have been winning regularly, however, say that too much stiffness, particularly at the front begets an unwanted understeer effect and consequent plowing. Another point is tires. Bill Woodbury, the East Coast importer of the marque, swears that the Michelins are the only answer and points to the fact that three of his cars went through the entire 12 hours at Sebring without one tire change as proof of his contention. Western owners, however, prefer the stiffer Englebert Competition P racing skin. This, they claim, eliminates a harmless but occasionally annoying habit of tail waggle, slight but there, that all Aces shod with Michelins seem to have when really in a hurry on a long straight. It all boils down to individual preference. That's about all that can be said regarding handling changes for competition—as it comes the car gives a road bite that is maximal. Any changes in setting will be made to suit individual preferences only; none are really necessary to get around a

circuit in a hurry.

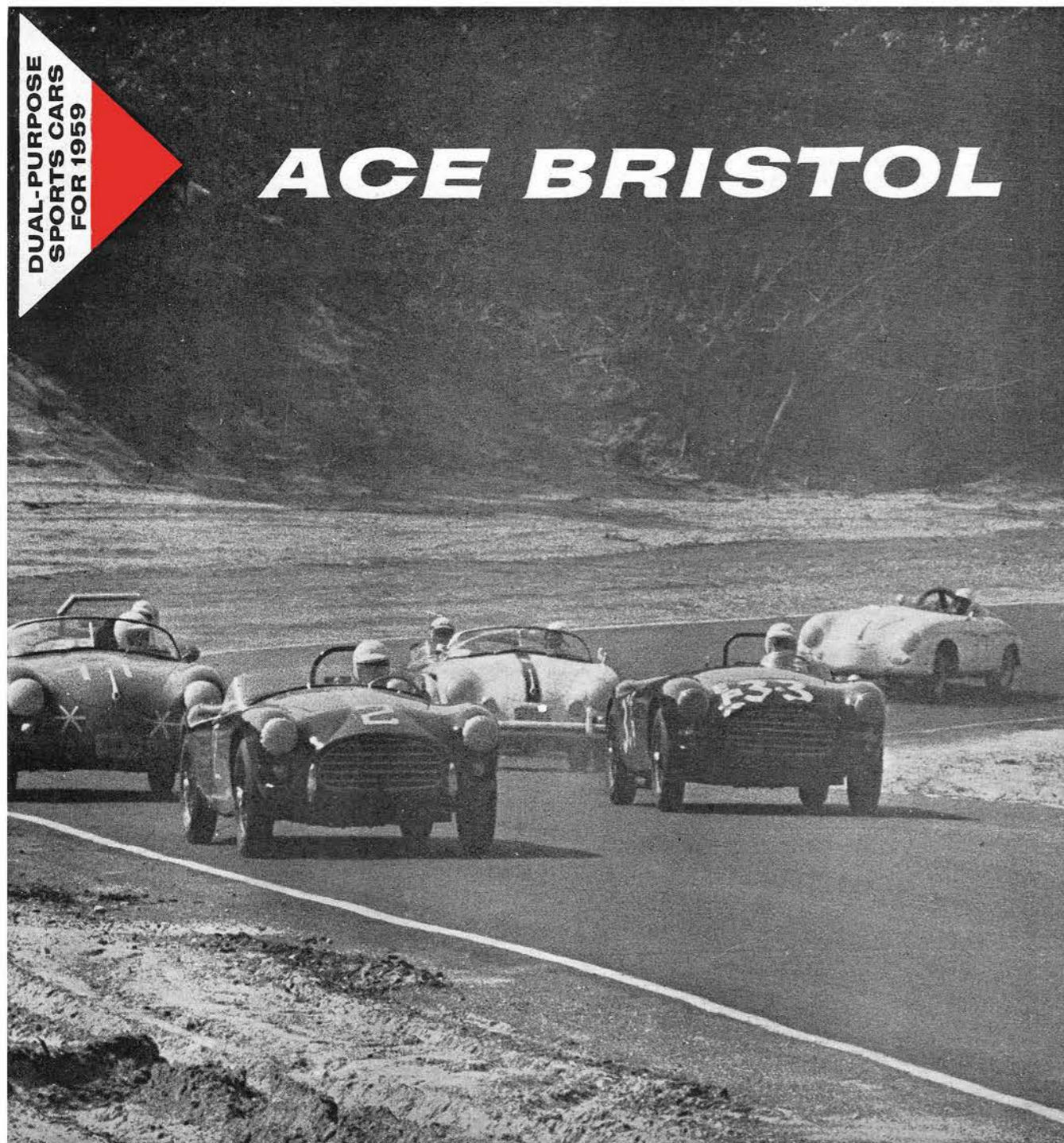
The engine is another matter entirely. The Bristol engine in almost all its many variants is one of the most willing engines built. In the mild B tune it will go up to the red line of 5000 rpm in a swinging rush and then will go beyond that if demanded. In competition D2 form the red line is 5750 rpm but virtually every competition Ace has gone well beyond that—6000 being seen often, 6500 frequently and some brave types have been known to turn up 7200 with regularity when the occasion demanded. There is a Stage II form but those who claim to have it are most reticent about what it is. Mixing up Bristol engine parts can produce results but only if one knows what one is doing—lack of knowledge here can result in the owner being in possession of a basketful of very expensive English metal where once he had an engine. One thing is sure, the Bristol engine requires perfect timing both in valves and ignition. The use of a degree wheel is mandatory when resetting valves. The car comes with a manual ignition advance and retard knob on the dash but playing with this except for starting from cold does nothing except louse up the tune.

Carburation is another ticklish point. The Bristol must be run rich—the more fuel you can give it the better but to run it as rich as it needs requires that all supplementary jets and air correction jets are in accord. Exhaust tuning is also essential and this should be done on a dynamometer, a task which is not too difficult since the muffler and tail piping are readily removable and the remaining stacks open right under the door on the right hand side. Most of the successful tuners use a length that opens right in front of the rear wheel which will do for a start but only as a start; the difference of an inch either way can create an impossible situation in choosing carburetor jets to match the exhaust tuning if it's off. To help in

evening out the carburetor problems the factory will, on request, supply a set of air straightener ram-type air cleaners which promote a smooth flow into the carbs. Additionally, Solex carburetors have the plus factor of having interchangeable venturi. As original equipment, the cars come through with 28 millimeter venturi tubes which are adequate for factory jetting. With bigger jets and exhaust tuning a larger venturi size is called for. Available from the factory, from jobbers handling Solex parts and from many dealers handling Solex equipped cars, particularly Porsche, are venturii in all sizes up to and above 40 mm. If you cannot readily procure these, there is another, though slightly expensive way out. Any good machinist can carve out a set from brass stock or white-metal. We can't begin to estimate what the tariff will be but it won't be cheap. Actually the price will probably be a result of haggling and his interest in the job. The point is, the Bristol engine can use all the fuel and air you can get into it.

From where we sit at the moment, we can see no immediate challenger in Class E for the Ace Bristol. Light, handy and powerful it is currently king of the class. It should be, it's as close to a racing sports car as you can get and still have a "streetable" machine. It is useable, too, though it's quite true that the top point winners are trailed. We accompanied one on two long hauls. The first time out it wasn't right. The second time was an 11 hour drive from New York to Danville's Virginia International Raceway where against some very rough opposition the car copped third place. In fact, that particular car was never trailed by that owner. Its new owner trails it but mainly for safety's sake and the convenience of not having to strip and reassemble the car at the track. Besides, he already had the trailer. In any case the car is still hauling in silver gewgaws. *jpc*

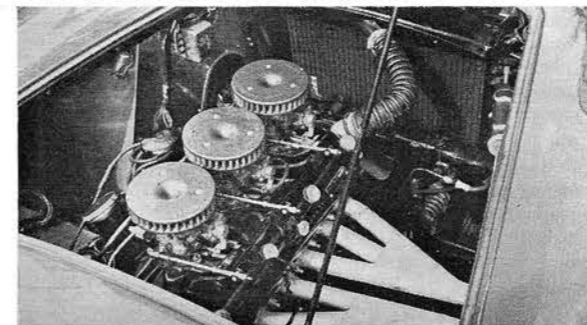
*Ace drivers Bill Wonder and Ed Hamburger lead the pack at a recent Bridgehampton Regional.*



**9**  
DUAL-PURPOSE  
SPORTS CARS  
FOR 1959

# ACE BRISTOL

*BMW to Frazer-Nash to Bristol, venerable but violent.*



*Invitation to the race; a most acceptable one.*

