

**BROADSPEED
SOUTHAM, WARWICKSHIRE,
ENGLAND**

The ability of Ralph Broad's firm to produce results is known the world over. They have been responsible for winning many national and international saloon-car championships and very often are responsible for the preparation of works entered cars. It's hardly surprising that with all their attributes, they should turn their attention to turbocharging. At present they offer two turbocharged engines, the English V-6 in a turbocharged form, and a turbocharged version of the 1.9-liter Opel Manta. Both turbocharge installations use the "blow-through-the-carb" method for installation reasons. They use a novel recirculating valve to reduce throttle lag and serve as a boost limiter. Horsepower increases on both these models are as shown below:

RPM	3-liter V-6 Ford	
	Naturally Aspirated Horsepower	Turbocharged Horsepower
2000	64	72
3000	105	150
4000	125	187
5000	135	215
5500	135	220
6000	125	220

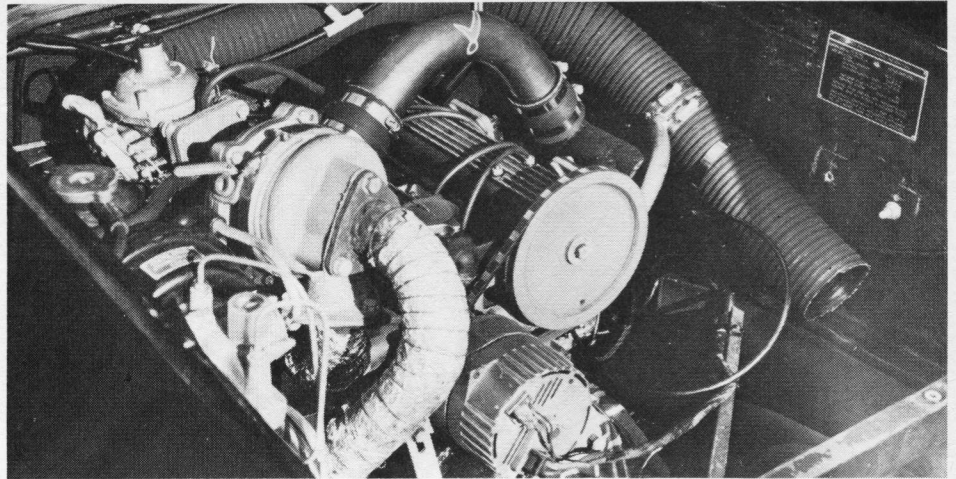
Boost was 6.5 psi for the above results. A later version using 8.5 psi produces 230 HP.

RPM	1.9-liter Opel	
	Naturally Aspirated Horsepower	Turbocharged Horsepower
2000	35.5	45
3000	59	88.5
4000	77	133
5000	80	155
5500	80	157
6000	73	156

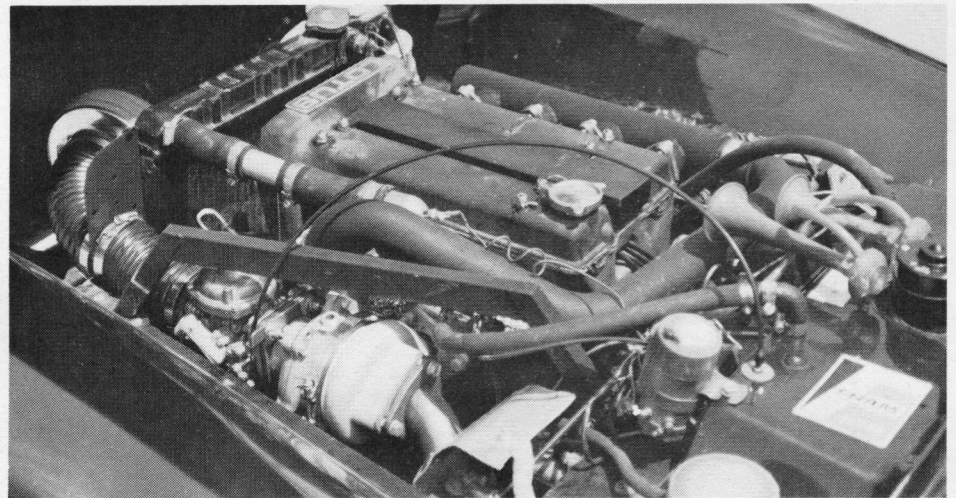
This performance is obtained with 9.5 psi boost.

**CHECKPOINT AMERICA
ST. LOUIS, MISSOURI**

Checkpoint America of St. Louis, Missouri, has a turbocharger kit for the Lotus Europa equipped with a 1600cc twin-cam engine. Installation as shown in the photograph is quite simple but very effective. Robert Vandivort of Checkpoint



Checkpoint America's Lotus Europa twin-cam kit uses Rajay 377B40 turbo with the stock 9.5 compression. Boost starts at 2800 RPM, is restricted to 11 psi. Front Stromberg CD carb is retained. Standard air filter and exhaust systems are used. Exhaust manifold is stainless-steel seamless tubing; incorporates support brace for turbo. Distributor has standard advance curve; is retarded 2°. 0-60 MPH time is 6.1 seconds; 1/4 mile elapsed time is 13.7 seconds. Fuel consumption is same as stock.



1972 Lotus Super 7 twin-cam with Checkpoint America turbo kit. Rajay 377B40 turbo pumps up to 21 psi. Single Stromberg CD 1-3/4 inch replaced dual twin-choke Webers. Boost starts at 1500 RPM and a rev limiter is set at 7000 RPM. Lucas distributor is used with a CD unit. Fuel consumption is 37 MPG.

