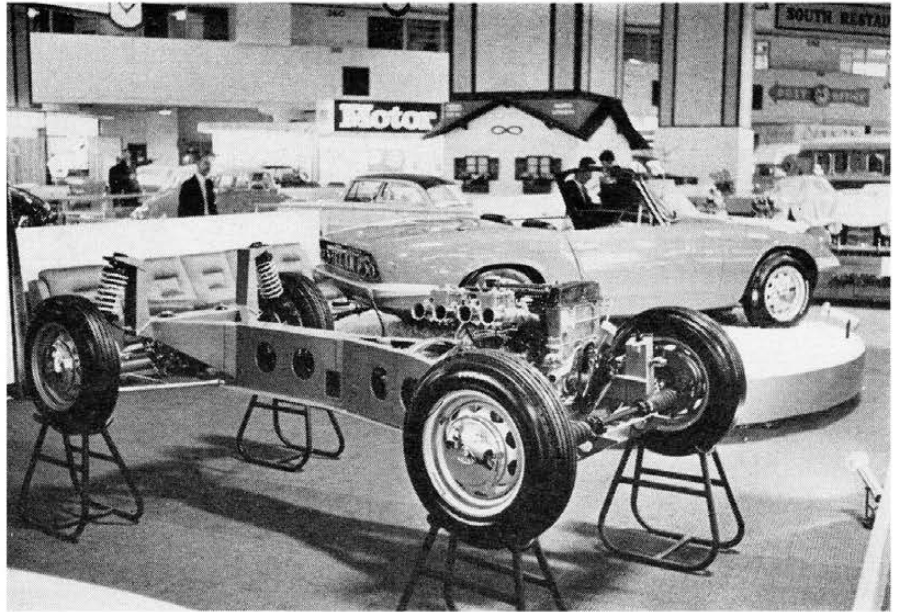


# AUTOS ABROAD



DEEP BACKBONE Z-section frame spreads apart around engine.

## A NEW LOTUS BLOSSOMS . . .

ONE OF THE more interesting automobiles to debut this year is the Elan sports roadster, the 26th Lotus model to be designed by England's Colin Chapman during the past 10 years. Its smooth fiberglass envelope body encloses a noteworthy chassis design and an exciting engine.

The latter is a 91.4-cu. in. powerplant which develops 100 bhp from the Ford 4-cyl. 116-E block (with 5 main bearings) used in the English Ford Classic. A Lotus-engineered double overhead camshaft cylinder head, incorporating a built-in intake manifold fed through a pair of 40-DCOE Weber

carburetors, is responsible for most of the increase in power output. The twin camshafts, each running in four bearings, are chain-driven and operate the valves through the inverted cups which also enclose the valve springs.

A relatively narrow included angle of 54° is used for the valves, to facilitate use of a fairly high compression ratio with flat-top pistons. Although the water pump and the front timing cover are new, much of the engine remains Ford. Crankshaft, connecting rods, pistons and camshaft (to drive the oil pump and distributor) are stock, the result of successful usage of this

5-main bearing block in Formula Junior racing.

Separating driver and passenger is the deep central backbone, a design feature which provides torsional stiffness to a degree normally found only in the best unitized design. The deep flanged side members of the propeller shaft tunnel run forward to flank the engine and provide mountings for the front suspension. A similar layout at the rear incorporates kick-ups for the rear suspension and final drive unit.

Unequal-length double wishbones and coil springs make up the front suspension, while integral coil spring and shock absorber units mount high in the rear with wide-based wishbones forming the lower locating members. Disc brakes are fitted on all wheels, 9.5 in. in front and 10 in. in the rear.

Five moldings—body shell, hood, trunk lid and two wide doors—make up the body. Retractable headlamps, operated by a vacuum mechanism, smooth out the fender contours and avoid the frog-like positioning that would have been required by some state laws in this country.

The adjustable seats are so designed that with the seat at full forward, the cushion is at the highest point and the backrest is most upright, but as it is moved rearward the cushion becomes lower and the backrest more reclining. Full instrumentation includes tachometer, speedometer, oil-pressure gauge, water temperature gauge and fuel gauge. A 3-spoke wood-rimmed steering wheel and wooden gear lever knob are standard. The 8-cu. ft. capacity of the trunk is supplemented by a small amount of behind-seat space and a small glove bin in the instrument panel. Price has not been announced. ■

SLEEK ENVELOPE body is fitted with "weatherproof" top.

