The Motor Road Test No. 14/60

Make: Ford **Type:** Prefect de luxe (107 E)

Makers: Ford Motor Company Ltd., Dagenham, Essex

Test Data

CONDITIONS: *Weather: Cool and dry with moderate breeze. (Temperature 48°-54°F., Barometer 29.9 in. Hg.) Surface: Dry concrete and tarred macadam. Fuel: Premium-grade pump petrol (approx. 96 Research Method Octane Rating).*

INSTRUMENTS

Speedometer at 30 m.p.h.	5% fast
Speedometer at 60 m.p.h.	11% fast
Distance recorder	7% fast

WEIGHT

Kerb weight (unladen, but with oil, coolant and fuel for approx. 50 miles)	15¾ cwt.
Front/rear distribution of kerb weight	56/44
Weight laden as tested	19½ cwt.

MAXIMUM SPEEDS

Flying Mile.

Mean of four opposite runs	72.9 m.p.h.
Best one-way time equals	75.9 m.p.h.

"Maximile" Speed. (Timed quarter mile after one mile accelerating from rest.)

Mean of four opposite runs	71.2 m.p.h.
Best one-way time equals	73.1 m.p.h.

Speed in gears

Max. speed in 3rd gear	62 m.p.h.
Max. speed in 2nd gear	39 m.p.h.
Max. speed in 1st gear	22 m.p.h.

FUEL CONSUMPTION

49.5 m.p.g. at constant 30 m.p.h. on level
45.5 m.p.g. at constant 40 m.p.h. on level.
39.0 m.p.g. at constant 50 m.p.h. on level.
32.0 m.p.g. at constant 60 m.p.h. on level.
24.0 m.p.g. at maximum speed of approx. 73 m.p.h. on level.

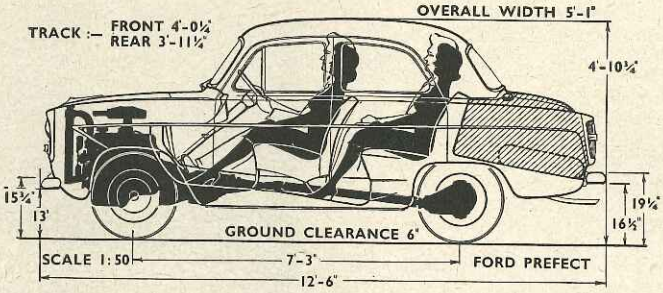
Overall Fuel Consumption for 1,054 miles, 35.1 gallons, equals 30.1 m.p.g. (9.4 litres/100 km.)

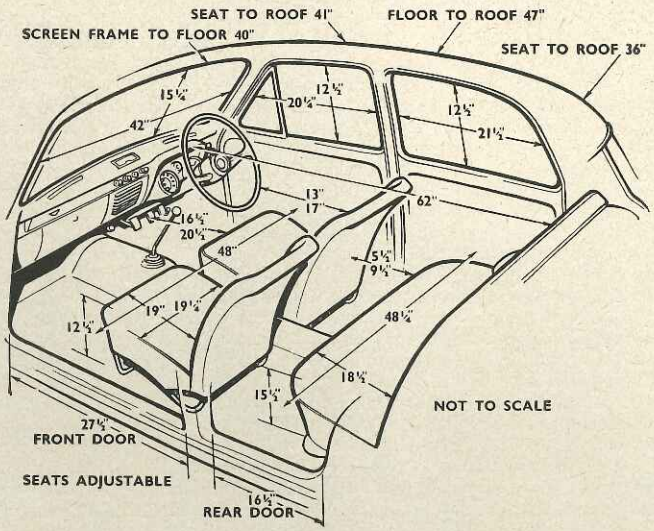
Touring Fuel Consumption (m.p.g. at steady speed midway between 30 m.p.h. and maximum, less 5% allowance for acceleration) 36 m.p.g.

Fuel tank capacity (maker's figure) 7 gallons.

STEERING

Turning circle between kerbs:	
Left	31 ft.
Right	31¾ ft.
Turns of steering wheel from lock to lock	2





ACCELERATION TIMES from standstill

0-30 m.p.h.	5.9 sec.
0-40 m.p.h.	10.3 sec.
0-50 m.p.h.	16.6 sec.
0-60 m.p.h.	27.2 sec.
Standing quarter mile	23.2 sec.

ACCELERATION TIMES On Upper Ratios

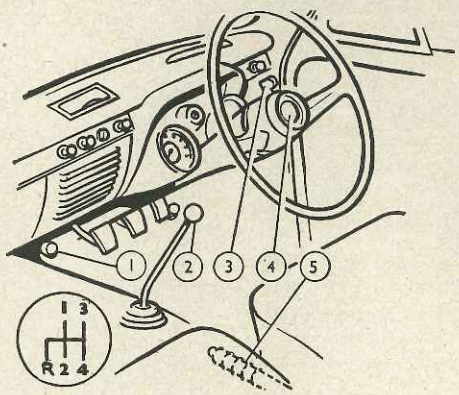
	Top gear	3rd gear
10-30 m.p.h.	13.2 sec.	8.2 sec.
20-40 m.p.h.	12.5 sec.	8.1 sec.
30-50 m.p.h.	14.8 sec.	10.8 sec.
40-60 m.p.h.	20.3 sec.	19.4 sec.

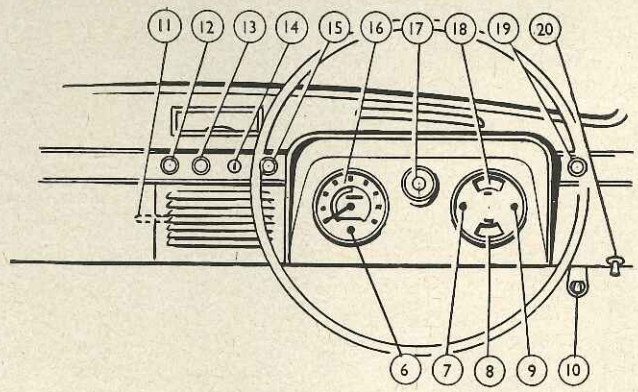
BRAKES from 30 m.p.h.

0.84 g retardation (equivalent to 35¾ ft. stopping distance) with 65 lb. pedal pressure.
0.70 g retardation (equivalent to 43 ft. stopping distance) with 50 lb. pedal pressure.
0.41 g retardation (equivalent to 73½ ft. stopping distance) with 25 lb. pedal pressure.

HILL CLIMBING at sustained steady speeds.

Max. gradient on top gear	1 in 11.7 (Tapley 190 lb./ton)
Max. gradient on 3rd gear	1 in 7.8 (Tapley 285 lb./ton)
Max. gradient on 2nd gear	1 in 4.9 (Tapley 445 lb./ton)





1, Dip switch. 2, Gear lever. 3, Direction indicator switch. 4, Horn button. 5, Handbrake. 6, Headlamp main beam indicator. 7, Oil pressure warning light. 8, Water thermometer. 9, Dynamo charge warning light. 10, Heater fan switch. 11, Bonnet catch release (inside cubby). 12, Choke control. 13, Windscreen wipers switch. 14, Ignition switch. 15, Starter switch. 16, Speedometer and distance recorder. 17, Direction indicator warning light. 18, Fuel contents gauge. 19, Lights switch. 20, Instruments light switch.

The FORD PREFECT 107E

FOUR-DOOR bodywork of compact size is used on the familiar Prefect, now sold only with de luxe specification and using a new engine-gearbox unit to gain livelier performance.

A Compact 4-Door Saloon with a New Engine and 4-Speed Gearbox

ANNOUNCED as long ago as September 1953 and subsequently smartened up without its appearance being changed drastically, the Ford Prefect is for many people an old friend. In its 1960 form with a very modern o.h.v. engine and a four-speed gearbox, this "old friend" becomes livelier in acceleration, faster in maximum speed, yet also slightly more economical to run, so that, at a tax-paid price of only £621 12s. 6d., it is remarkably good value for money.

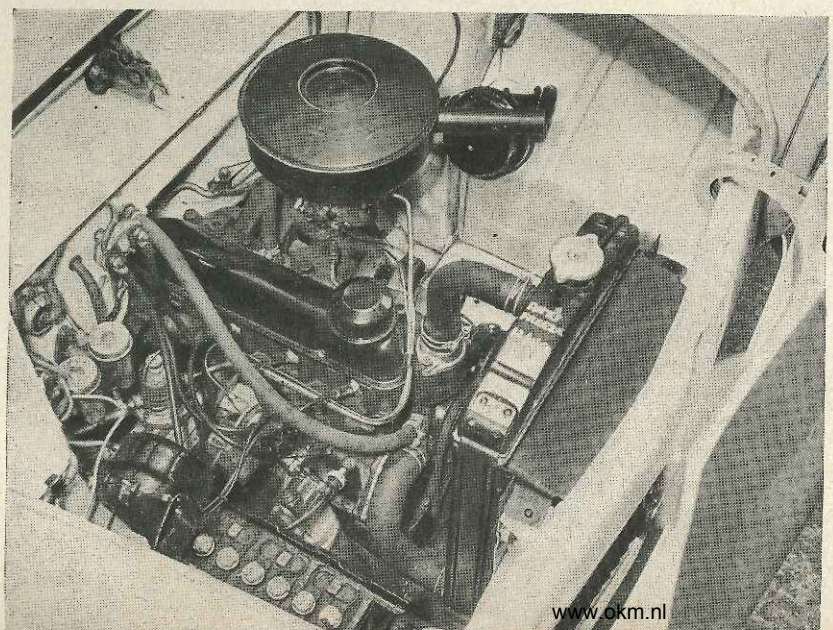
With an overall length of 12 ft. 6 in., this is the sort of small car to which countless British motorists are accustomed, compact enough for easy parking in town or accommodation in a suburban home garage, but not in any sense a "miniature." Although the wheelbase is a modest 7 ft. 3 in., a four-door body is used and four adults can genuinely be accommodated, whilst there is also a very roomy luggage locker. A clever original body design has been subtly modernized in details, the interior in particular now being very neat. Internal width is very ample (individual front seats and slight intrusion of the wheel arches into the rear seat emphasize that three-abreast seating is not envisaged), but legroom for rear-seat passengers depends upon the seats ahead of them not being slid back to the limit of their adjustment. Four- rather than two-door bodywork offers only very limited advantage on a car of this compactness, the centre pillars being far enough back to limit ease of access to the rear seat: elderly passengers enter or leave the back seats more easily if a front seat is tilted forwards on its hinged mounting.

Limited though rear seat roominess is, the most used seats are the front ones, which proved very comfortable for either short or tall people, the latter enjoying quite good leg room. The seating is fairly upright and, although slimmer windscreen pillars would be an advantage, the good view ahead over a short and low bonnet flanked by visible wings greatly facilitates traffic driving. The new shorter gear lever is convenient to use, there is a pull-up handbrake lever accessibly placed between the front seats, and pendant pedals are comfortably arranged, although a footrest to the right of the accelerator pedal annoyed some people who found that the edge of a shoe sole could catch under it.

Since we last tested a Prefect, the old 1,172 c.c. side-valve engine has given place to an o.h.v. unit of 15% smaller displacement which, thanks to more modern short-stroke design and a high compression ratio, develops at least as much medium-speed torque and appreciably greater power at high r.p.m. No change has been made in the rear axle ratio, although hypoid bevel gearing replaces the spiral bevel variety, but the former 3-speed gearbox with rather widely spaced ratios has given place to a new 4-speed unit with modern synchromesh on three of its four ratios.

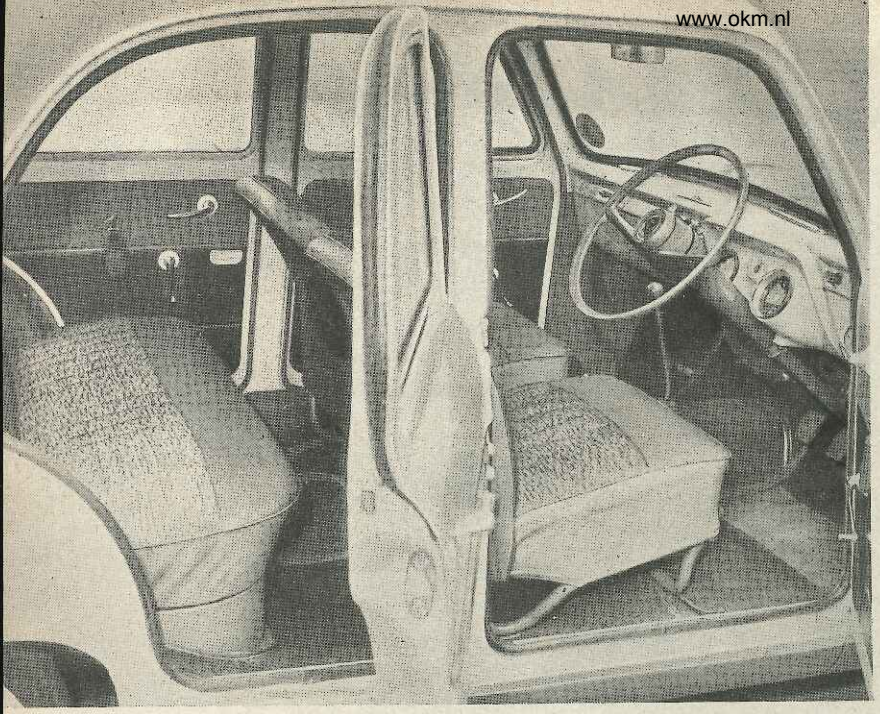
Measurable changes in the performance of the Prefect since we last tested it in 1,172 c.c. form are very significantly for the better. Maximum speed has risen from 70.7 m.p.h. to 72.9 m.p.h., the natural cruising gait on a good road rising from 60-65 m.p.h. to 65-70 m.p.h. Top gear acceleration is exactly as hitherto over the 10 m.p.h. to 30 m.p.h. range, but at higher speeds the new engine gives an advantage which amounts to around 5%. Acceleration through the gears is substantially

OVERHEAD VALVES are used in the 997 c.c. engine which now powers the Prefect. Access to components through a front-hinged bonnet panel is easy.

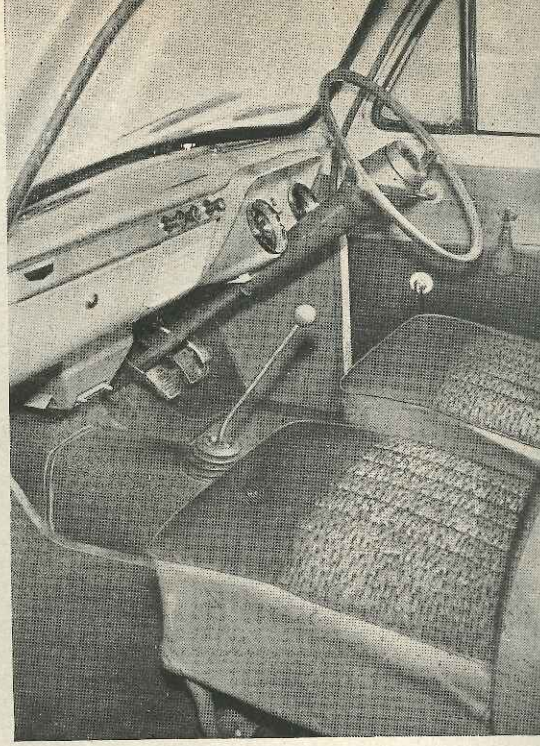


In Brief

Price £438 plus purchase tax £183 12s. 6d. equals £621 12s. 6d.	
Capacity	997 c.c.
Unladen kerb weight ...	15¾ cwt.
Acceleration:	
20-40 m.p.h. in top gear ...	12.5 sec.
0-50 m.p.h. through gears	16.6 sec.
Maximum direct top gear gradient	1 in 11.7
Maximum speed	72.9 m.p.h.
"Maximile" speed	71.2 m.p.h.
Touring fuel consumption ...	36 m.p.g.
Gearing: 14.6 m.p.h. in top gear at 1,000 r.p.m.; 46.0 m.p.h. at 1,000 ft./min. piston speed.	



INTERIOR details of the bodywork include separately adjustable front seats of comfortable shape, a two-spoke steering wheel, front and rear ashtrays, a carpeted floor, and upholstery which combines fabric with leathercloth.



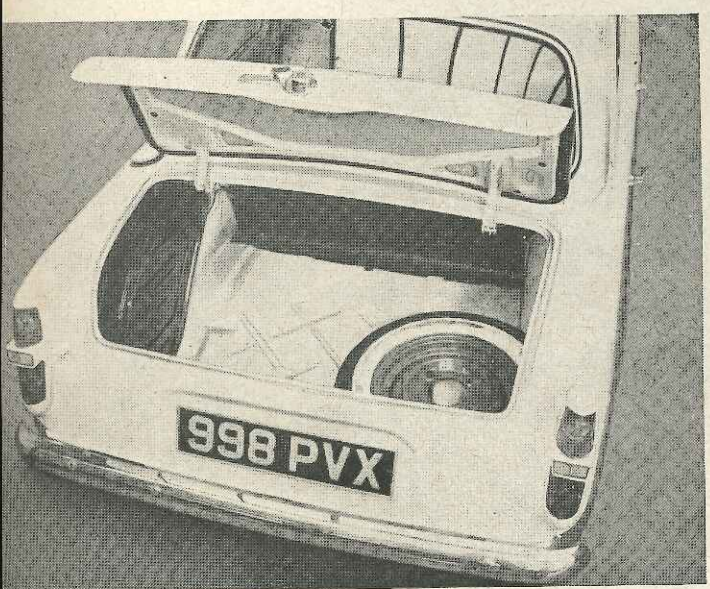
COCKPIT of the latest Prefect is recognizable by the new gear lever controlling four forward ratios, and a neat facia with a lockable glove-box on the near-side.

The FORD PREFECT

improved by the latest engine-gearbox combination, 50 m.p.h. being attainable from rest in 18% less time than formerly. Despite these advantages, petrol economy at any speed is better than hitherto, savings varying from 20% at a steady 30 m.p.h. to 10% at a steady 60 m.p.h., but certainly being quite sufficient to offset the new engine's need for Premium-grade petrol in comparison with the 10% cheaper grade which could generally be used in the former side-valve engine.

Moderate advantages in respect of measured performance are, in this instance, appreciated on the road as giving much easier running. The Prefect is somewhat lower geared than the latest Anglia two-door saloon with which it shares the new Ford engine-gearbox unit, and it offers very reasonable flexibility down to low speeds in top gear. But the biggest improvement over earlier Prefects is the new 4-speed gearbox, which provides quick and smooth changes as well as having a much more sensible and adequate selection of ratios than the old 3-speed gearbox could provide: notably, 3rd gear is now useful up to well over 50 m.p.h. when slower traffic is being overtaken. Since we tested the similarly-powered Anglia approximately seven months ago, the warming-up performance of the engine and its smoothness at low r.p.m. seem to have been improved very usefully, but we found the gearbox surprisingly audible at town speeds, and the carburation still suffers to some extent from a flat spot if the accelerator is depressed sharply at very low engine r.p.m. At the opposite end of the speed range, power tails off beyond the 5,000 r.p.m. peak of the power curve without the short-stroke engine sounding at all frenzied. Once top gear has been engaged, there is no fuss until favourable conditions are exploited to attain speeds beyond the ordinary maximum, by which time the speedometer (contrary to erstwhile Ford traditions, this instrument exaggerated both speed and distance run) has gone far beyond the end of its scale.

Greater weight and frontal area have led to this car being geared lower than the Anglia, and although this allows acceleration figures comparable with the two-door car to be recorded (at speeds below 45 m.p.h. this Prefect is actually the livelier model) lower gearing involves a penalty in respect of petrol economy. Nevertheless, severe test conditions (comprising a mixture of fast journeys and of short runs around London traffic) showed an overall petrol consumption on the economical side of 30 true miles per gallon; in more than 1,000 hard miles, the engine needed no topping up of its oil sump.



ACCOMMODATION for a large amount of luggage is provided in a rear locker, the 7-gallon petrol tank being at the left side and the spare wheel bolting down to the floor on the right.

Comfortable Riding

Although the riding of this car can be fairly lively when a rough surface is tackled with little weight aboard, there is quite fair insulation against shock without any exaggerated softness to make passengers queasy, a long journey bringing added respect for the general standard of comfort provided by suspension and seats. The optional-extra interior heater is powerful and inexpensive (£9 10s.) but, being of air-recirculating pattern, whereas units which heat up incoming fresh air are nowadays more usual, it allows windows other than the windscreen (onto which warm air jets are directed) to mist up in damp weather. Opening the windows does not cause much wind noise at high cruising speeds, but the interior of the body is not free from draughts if any ventilation is being enjoyed.

Handling characteristics of this car can be faulted in a good many details, yet the overall effect is quite pleasing. There is a certain amount of friction in the steering, and while an unladen car can suffer rear axle hop on a bumpy corner, with weight in the rear luggage locker the car can show some hesitancy as to whether or not it understeers: going into a corner it gives one impression, but once it is cornering steadily its "feel" changes appreciably. Oddly enough, none of these particular comments prevented critical drivers liking

the car, its steering being sufficiently quick and positive mechanically for the driver always to feel confidently in charge of the situation.

Ordinary touring motorists will find that the hydraulic brakes of this Prefect model are perfectly smooth, and they respond to very light pedal pressures. For more extreme usage involving repeated hard stops from high speeds, the brake lining areas within 8-inch drums are rather moderate, the rear wheels tending to lock first unless there are rear seat passengers. The handbrake works effectively on quite steep gradients, and although the engine's tick-over can (as with so many other cars) become uncertain when the car is checked on a steep ascent, 1st gear will let a moderately laden car re-start almost anywhere that its wheels can find grip.

Interior Layout

Without any great elaboration, the interior layout of this latest Prefect has been made very pleasing. The painted metal facia has a lockable glove-box in front of the passenger, and above the steering column there is a neatly designed panel carrying two circular dials and four warning lamps. One instrument dial combines a thermometer with the fuel contents gauge, the other is a speedometer of the kind on which a broad red translucently-lit strip moves around the dial to give a very legible reading. A lighting switch on the right hand edge of the facia has a twist-pull action which eliminates risk of turning off the sidelamps accidentally, but makes it a clumsy action to flash the headlamps as a motorway "hooter." The minor control knobs are all identified pictorially, surprising detail being choice of a starting handle as the picture to indicate the pull-out starter switch, even though no Ford car now carries this item of equipment.

BREADTH of the rear window can be seen in this tail view of the Prefect, other details being the separation of amber turn signal flashers from the red rear reflectors and stop-tail lamps.

As has been indicated, the capacity of the Prefect's luggage locker is generous by small car standards, and loading through a lift-up external lid is easy. The luggage locker interior normally loses much of its flat floor area because the spare wheel lies at one side, but for 65s. a spare wheel carrier, which fits below the tail of the body, is available as a worthwhile extra. Located in the left rear wing, the 7-gallon fuel tank has a top filler which will accept petrol at a fast rate and allows the level to be seen visually.

Whilst there are many newer-looking small cars now available on the British market and abroad, the Prefect at its very moderate price has a great deal to offer. Years of development work on its basic design have resulted in good finish, an air of sturdiness, and comfort of a very practical kind. A very modern engine-gearbox-axle combination has kept standards of liveliness and refinement thoroughly competitive. Especially suitable for the comparatively short journeys in crowded conditions which represent such a large part of present-day motoring, the Type 107E Ford Prefect is a pleasant and sensible small car at something of a bargain price.

Specification

Engine

Cylinders	4
Bore	80.96 mm.
Stroke	48.41 mm.
Cubic capacity	997 c.c.
Piston area	31.9 sq. in.
Valves	Pushrod o.h.v.
Compression ratio	8.9/1 (optional 7.5/1)
Carburetter	Solex 30 ZIC-2 downdraught
Fuel pump	AC mechanical
Ignition timing control	Centrifugal and vacuum
Oil filter	Full-flow (AC or Tecalemit)
Max. power (gross)	41 b.h.p (net 39 b.h.p.)
at	5,000 r.p.m.
(With low compression ratio, 39 b.h.p. gross and 37 b.h.p. net)	
Piston speed at max. b.h.p.	1,585 ft./min.

Transmission

Clutch	Ford 7¼ in. single dry plate
Top gear (s/m)	4.429
3rd gear (s/m)	6.254
2nd gear (s/m)	10.612
1st gear	18.239
Reverse	23.934
Propeller shaft	Hardy Spicer series 1140, open
Final drive	Hypoid bevel
Top gear m.p.h. at 1,000 r.p.m.	14.6
Top gear m.p.h. at 1,000 ft./min. piston speed	46.0

Chassis

Brakes	Girling hydraulic (2 l.s. at front)
Brake drum diameters	8 in.
Friction areas: 76.8 sq. in. of lining working on 126 sq. in. rubbed area of drums.	
Suspension:	
Front: Macpherson-type i.f.s. by coil springs, telescopic struts, and lower wishbones incorporating anti-roll torsion bar.	
Rear	Semi-elliptic leaf springs
Shock absorbers:	
Front	Armstrong telescopic in i.f.s. struts
Rear	Armstrong telescopic
Steering gear	Ford/Burman worm and peg
Tyres	5.20—13 tubeless (4-ply)

Coachwork and Equipment

Starting handle	None
Battery mounting	Alongside engine on right
Jack	Bipod screw-type with ratchet handle
Jacking points	External, one under each side of body
Standard tool kit	Jack, wheelbrace and screwdriver in bag
Exterior lights: 2 headlamps, 2 sidelamps/flashers, 2 stop/tail lamps, number plate lamp.	
Number of electrical fuses	One (in turn indicator circuit)
Direction indicators	Self-cancelling flashers (white at front, amber at rear)
Windscreen wipers	Twin-blade self-parking, vacuum operated with reservoir
Windscreen washers	Optional extra
Sun visors	Two
Instruments: Speedometer with non-decimal total distance recorder, fuel contents gauge, coolant thermometer.	
Warning lights: Dynamo charge, oil pressure, headlamp main beam, turn indicators.	
Locks:	
With ignition key	Ignition switch, driver's door, glove box, luggage locker
With other keys	None
Glove lockers	One on facia with lockable lid
Map pockets	None
Parcel shelves	One behind rear seat
Ashtrays	One on facia, 2 in rear doors
Cigar lighters	Optional extra
Interior lights	One above windscreen, manually switched
Interior heater	Optional extra recirculatory heater and screen de-mister
Car radio	Optional extra (Ford/Ekco)

Extras available: Leather upholstery, heater, white-wall tyres, two-tone paint, radio, bumper over-riders, wheel trims, hub cap medallions, exhaust deflector, seat covers, roof rack, cigar lighter, vanity mirror for sun visor, radiator blind, under-body spare wheel carrier, tool kit, tyre pump, grease gun, rubber floor mats, reversing lamp, exterior mirrors, locking fuel cap, windscreen washers, anti-mist panel for rear window, etc.

Upholstery material: P.V.C. plastic or fabric/plastic combination (leather on wearing surfaces at extra cost).

Floor covering: Carpets

Exterior colours standardized: 12 (at extra cost, four two-tone colour schemes).

Alternative body styles: None (Anglia uses same power unit in two-door body of different design).

Maintenance

Sump (including filter)	4½ pints, S.A.E. 20
Gearbox	1¾ pints, S.A.E. 80 EP gear oil
Rear axle	2 pints, S.A.E. 90 hypoid gear oil
Steering gear lubricant	S.A.E. 90 EP gear oil
Cooling system capacity	11½ pints (2 drain taps)
Chassis lubrication	By grease gun every 1,000 miles to 11 points
Ignition timing	10° before t.d.c. static
Contact-breaker gap	0.015 in.
Sparking plug type	Champion N5, 14 mm.
Sparking plug gap	0.028-0.033 in.
Valve timing: Inlet opens 10° before t.d.c. and closes 50° after b.d.c.; exhaust opens 44° before b.d.c. and closes 10° after t.d.c.	
Tappet clearances (cold):	
Inlet	0.008 in.
Exhaust	0.018 in.
Front wheel toe-in	⅛-¼ in.
Camber angle	0° 45′-2° 15′ (unladen)
Castor angle	1°-2 30′
Steering swivel pin inclination	3° 30′-5°
Tyre pressures:	
Front and rear	24 lb.
Brake fluid	Girling
Battery type and capacity	12-volt, 38 amp. hr.