

High performance lounge

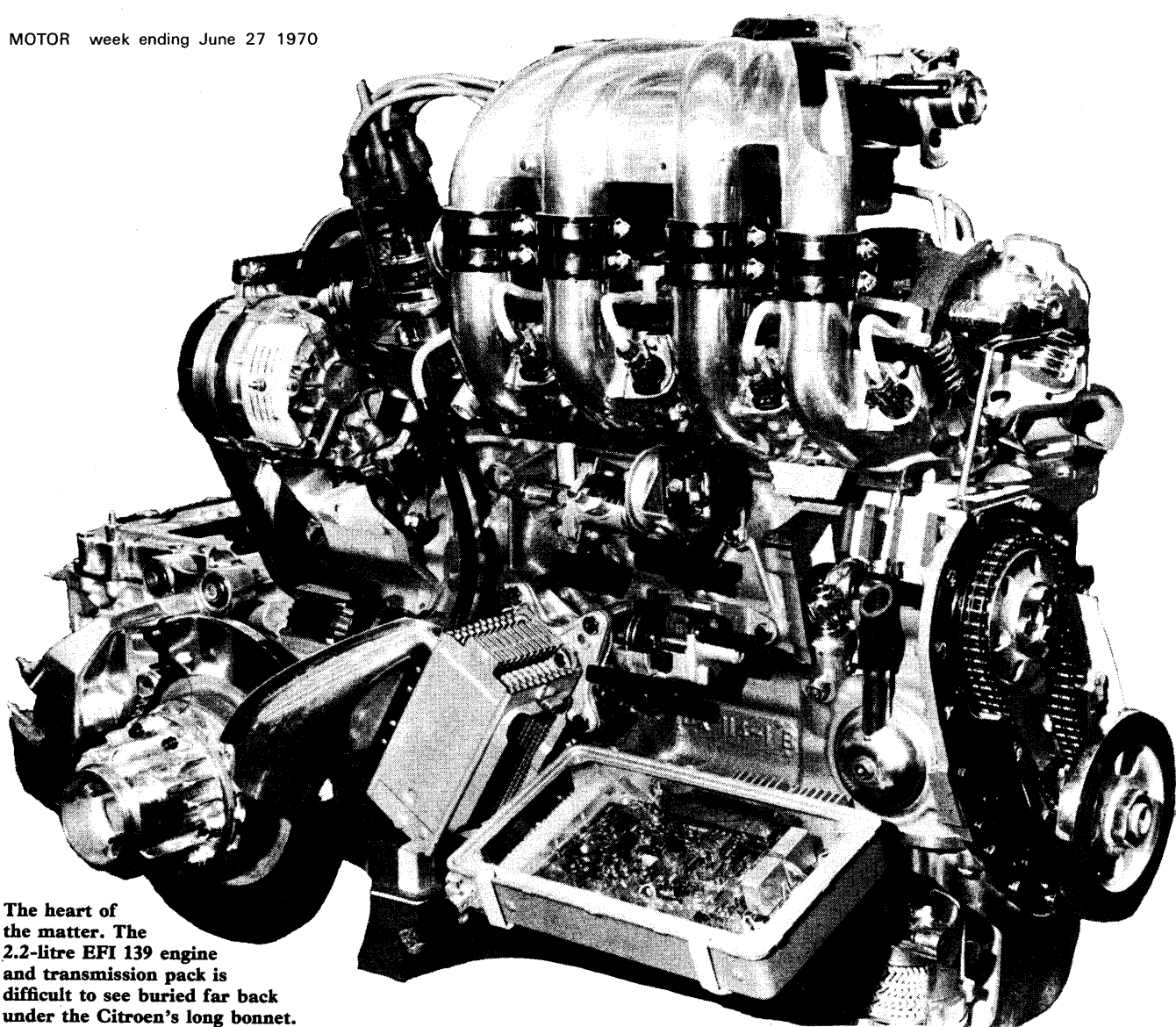
Fuel injection gives good performance; outstanding ride and roadholding; responsive power steering with feel; comfortable seats and well trimmed; expensive

The range of big Citroens is vast. The basic £1458 D19 with the 81 bhp 1985 cc engine, is followed by the D20 Super and the DS 20 both with 91 bhp, the DS with better trim. The DS21 at £1983 is the first to take the 2.2 litre engine with 106 bhp; the greater capacity is obtained by increasing the bore from 86 to 90 mm, which makes the engine even more oversquare. For another £267 you can have the luxury trim that goes with the Pallas; or if you prefer extra performance, £240 will buy the fuel injected engine. This gives 125 DIN bhp, 139 bhp SAE the latter figure giving the injected DS its cumbersome title EFI (for Electronic Fuel Injection) 139. Then if you're really greedy you can have the lot—Pallas luxury and fuel injected performance—for a grand total of £2490, more than £1000 above the price of the basic D19.

PRICE: £1905 9s. 10d. plus £584 10s. 2d. equals £2490. Extras on test car (with tax): metallic paint finish £30. Total as tested £2,520.

The Bosch electronic injection is entirely without temperament and makes the heavy Pallas (26.4 cwt.) really lift its pneumatic skirts and fly. The engine is an instant starter, and particularly impressive in the way it pulls from cold without a trace of stutter. Unfortunately the all-round excellence of the injection equipment does not mask the raucous character of the four-cylinder engine when it's extended. Nevertheless the low speed torque is so good that you don't need to use the revs to go quickly. Our 30-50 time in top of 11.8s. is not outstanding but the torque curve is very flat and the engine will pull smoothly and without snatch from as low as 1000 rpm. Maximum torque is 135 lb. ft. at 2500 rpm.

The acceleration is impressive for such a heavy car. As always it was difficult to get off the line quickly as violent wheelspin promotes severe tramping. Even so, 50 mph comes up in 8.5s. and the quarter in 18.2s. We can't directly compare these figures with previous models as the last 2.2-litre engined Pallas we tried had semi-automatic transmission; the lighter D19 with the



The heart of the matter. The 2.2-litre EFI 139 engine and transmission pack is difficult to see buried far back under the Citroën's long bonnet. This is what it looks like on its own—a striking piece of machinery. Intakes of the Bosch fuel injection dominate the head

This picture doesn't really do the magnificent lights justice but it does show the twin pools of lights—from the fixed beams on the right and the swivellers on the left, turning into the corner



smaller engine took 10.6s. and 20.0s. respectively. Good aerodynamics give even the modestly powered cars a high maximum speed. The D19 did over 95 mph, the EFF 139 nearly 114 mph round MIRA. It doesn't take an age to get there either—witness our mean maximum of 107.0 mph. Our performance runs were done in very hot weather so on a cool day (with better volumetric efficiency) the figures might be even higher. Over a test distance of 740 plus miles our fuel consumption was just over 20 mpg.

On the road the performance is as good as the figures suggest, helped considerably by the long-legged gearing which gives nearly 60 mph in second and just under 90 mph in third—very useful for brisk overtaking. But to reach these speeds the engine has to be taken up to its rev limit at 6000 rpm when it becomes rough and noisy; 5000 rpm is a more tolerable limit. The column gearchange is without clunks and fairly notch-free but it is difficult to make really quick changes.

Smooth braking is not helped by Citroën's unique pressure-sensitive button brake pedal. Despite Citroën's efforts to persuade us otherwise, we still think it is poor ergonomically. The button makes it impossible to heel and toe. The other pedals are not very satisfactory either; you have to lift your foot off the floor to open the throttle fully and the clutch is set far too high.

The fuel-injected car's good performance helps underline the excellence of the road-holding and ride. Near fully trailing suspension geometry at the rear and parallel links at the front give ground level roll centres and a fair amount of roll, controlled by anti-roll bars at each end. But this doesn't seem to matter and the Pallas can be chucked around with abandon. The enormous Michelin XAS tyres give excellent grip, and the car displays no front-drive tendency to go straight on at corners under power. The extremely responsive power steering makes the car feel very agile, even twitchy until you are used to it. It has some peculiar quirks all of its own, too, apart from the single

spoke steering wheel. Movements from the straight ahead position produce a chuffing from the various valves that provide the power; and on full lock the wheel chunters to and fro. Surprisingly the steering is quite heavy for parking.

The other power circuits that keep the big Citroen on an even keel also have their own noises; at traffic lights the ride height adjustment produces a noise like a stick caught in the spokes of a cycle wheel; when you park the Citroen it sighs and sinks slowly to its knees. But the suspension works so well that rough surfaces are covered with no undue thumps, bangs or crashes; small holes are soaked up without murmur. On the Pallas the front and rear of the driver's luxurious armchair seat can be raised but lateral support is insufficient. Low wind noise up to 80 mph (with frameless windows, too) makes the injected Pallas a superb long distance tourer—at 70 mph the engine is doing only 3400 rpm, just a subdued thrum from up front.

Minor controls are mostly contained on three stalks. One operates the two-speed wipers and powerful washers, the other the indicators and feeble horn. The left hand stalk operates the lights which on full beam, with the supplementary

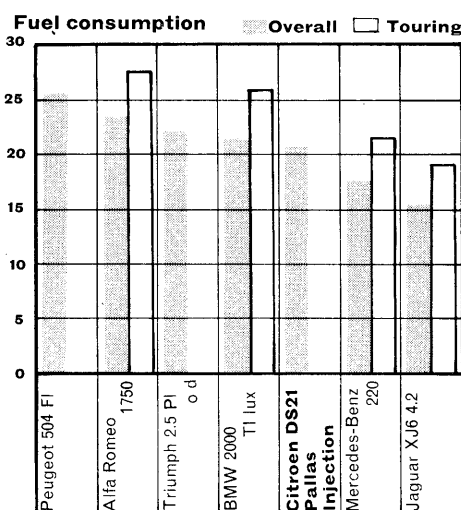
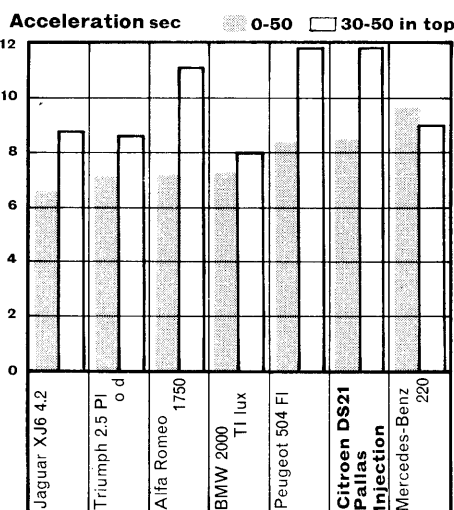
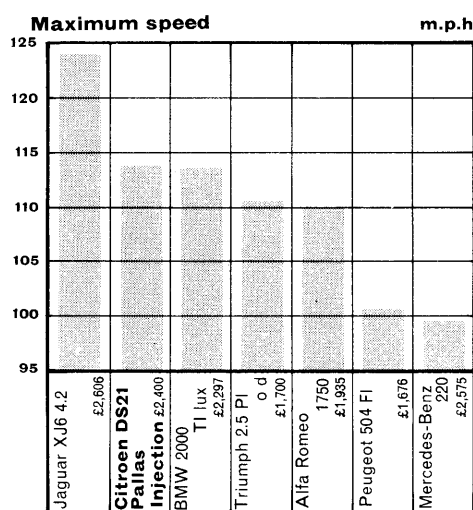
see-round-corners quartz halogen units, give a carpet of light that would satisfy a rally man. The gate in which the light switch works is confusing though.

There are two very bright interior lights in the Pallas operated by courtesy action on the doors or by a fascia switch. A heated rear window is also part of the Pallas' spec. Further Pallas plus-features are thicker foam-backed pile carpets covering the complete floor area; fully trimmed door panels and cant rails; different interior door handles; illuminated heater controls; foam-backed headlining; anodised aluminium door sill treads; and an external stainless steel body-side moulding with rubber insert to identify the luxury specification. Only a discreet electronic injection badge on the boot identifies the high-power engine.

Another feature that impressed us was the fresh air ventilation system which, though rather noisy when partially open, gave plenty of cold air if required and could be supplemented in traffic by a booster fan. The seat belts are awkward to do up, particularly if the short piece falls between the seats; and you can't get at the handbrake when strapped in.

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PERFORMANCE AND SPECIFICATION



Performance tests carried out by Motor's staff at the Motor Industry Research Association proving ground, Lindley.

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Conditions

Weather: Warm and dry; wind 0-7 mph
 Temperature: 70-84°F
 Barometer: 29.6 in. Hg.
 Surface: Dry tarmac/adam
 Fuel: Premium 98 octane (RM) 4-Star rating

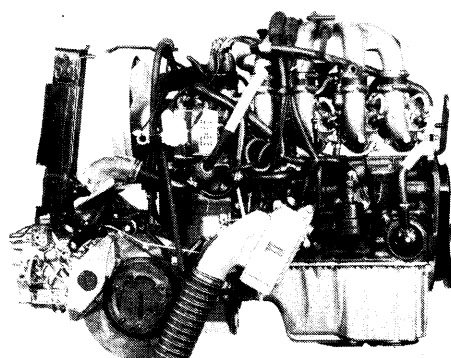
Maximum Speeds

	mph	kph
Mean lap banked circuit	113.8	183.0
Best one-way 1/4-mile	115.5	185.8
3rd gear	73	116.5
2nd gear	48	77
1st gear	27	43.5
"Maximile" speed: (Timed quarter mile after 1 mile accelerating from rest)		
Mean	107.0	
Best	108.3	

Acceleration Times

mph	sec.	3rd
0-30	4.0	
0-40	6.1	
0-50	8.5	
0-60	11.2	
0-70	15.3	
0-80	19.6	
0-90	26.2	
0-100	36.5	
Standing quarter mile	18.2	
Standing Kilometre	33.1	

mph	Top	3rd
10-30	—	7.9
20-40	12.5	7.1
30-50	11.8	7.0
40-60	11.2	7.0
50-70	12.6	7.2
60-80	15.0	7.5
70-90	15.5	—
80-100	16.1	—



Fuel Consumption

Overall	20.5 mpg
(= 13.8 litres/100km)	
Total test distance	724 miles

Speedometer

Indicated	10 20 30 40 50 60 70 80 90 100
True	9 18 28 39 51 60 71 80 90 101
Distance recorder	2.4% fast

Weight

Kerb weight (unladen with fuel for approximately 50 miles)	26.4 cwt.
Front/rear distribution	67/33
Weight laden as tested	30.1 cwt.

Engine

Block material	Cast Iron
Head material	Alloy
Cylinders	4
Cooling system	Water, pump, fan and thermostat
Bore and stroke	90mm (3.54in) 86mm (3.4in)
Cubic capacity	2175 cc (132.6 cu.in.)
Main bearings	5
Valves	OHV
Compression ratio	9:1
Induction	Bosch electronic fuel injection
Fuel pump	Electric

Oil Filter	Full flow
Max. power (net)	125 bhp at 5250 rpm
Max. power (gross)	139 bhp at 5500 rpm
Max. torque (net)	135 lb.ft. at 2500 rpm
Max. torque (gross)	144 lb.ft. at 4000 rpm

Transmission

Clutch	s.d.p. diaphragm spring
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Internal gear box ratios	
Top gear	0.852:1
3rd gear	1.207:1
2nd gear	1.833:1
1st gear	3.25:1
Reverse	3.155:1
Synchromesh	On all forward gears
Final drive	Hypoid bevel 4.375:1
M.p.h. at 1,000 r.p.m. in:—	
Top gear	20.71
3rd gear	14.61
2nd gear	9.62
1st gear	5.42

Chassis and body

Construction	Bolt-on detachable panels on a punt chassis frame
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Brakes

Type	Discs front, drum rear servo-assisted
Dimensions	11.81 in. dia. front, 10.04 in. dia rear
Friction areas:	
Front:	36.1 sq.in. of lining operating on 260 sq.in. of disc/drum
Rear:	66.4 sq.in. of lining operating on 173 sq.in. of disc/drum

Suspension and steering

Front	Equal length parallel wishbones with self levelling oleo-pneumatic struts and anti-roll bar
Rear	Trailing arms with self-levelling oleo-pneumatic struts and anti-roll bar
Shock absorbers:	Incorporated in suspension struts
Steering type	Power-assisted rack and pinion
Tyres	185 HR 380 Michelin XAS
Wheels	Pressed steel, five stud fixing
Rim size	5½J x 15