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TESTS:

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Citroen CX2400 Pallas;

Toyota's front-drive Tercel.

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Australia's cheapest,
most economical
two-seater!



Wayne Cantell test drives the latest Citroën CX 2400 Pallas — a car which now incorporates several specification changes purely for the Australian market!

CX 2400 ...vie agréable!

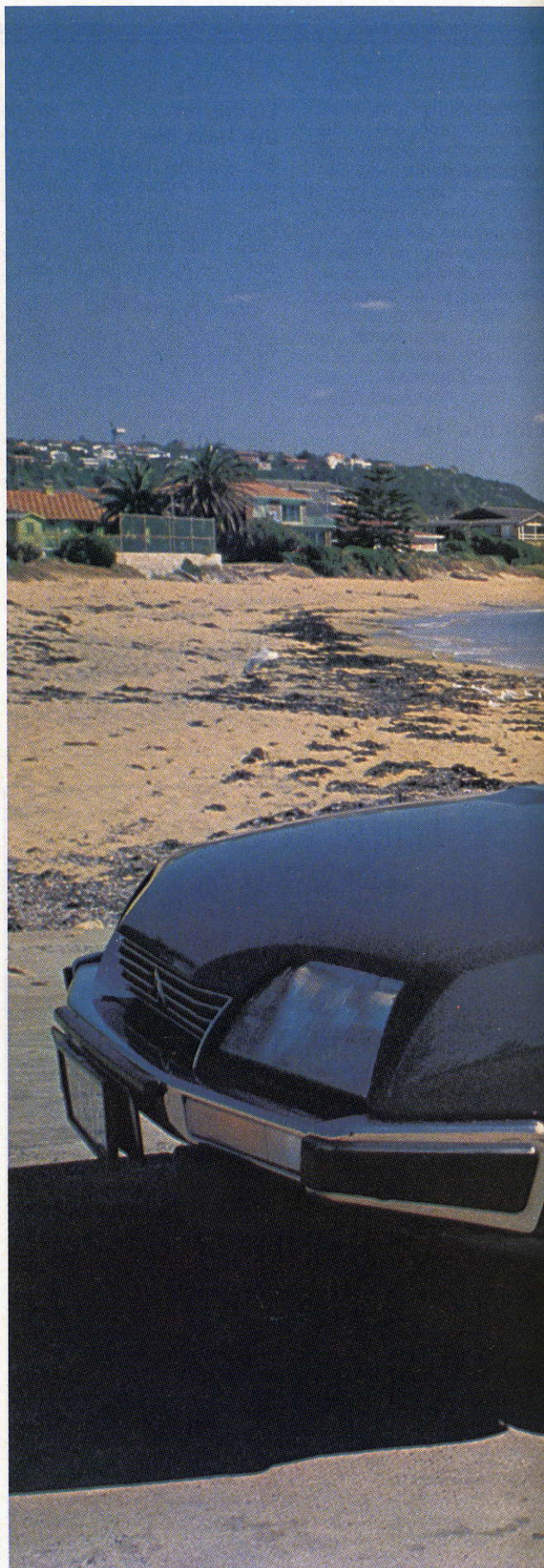
AFTER suffering for years as a result of inadequate distribution and service, Citroën is again on the move in Australia.

Sydney's Bryson Industries, and Maxim Motors in Queensland, are now beginning to move these fine French cars after a major re-think and re-organisation of distribution, sales and servicing facilities.

Included in the re-organisation was the establishment of a mechanics training school by Brysons, and the installation of advanced electronic service facilities in their main Sydney service complex.

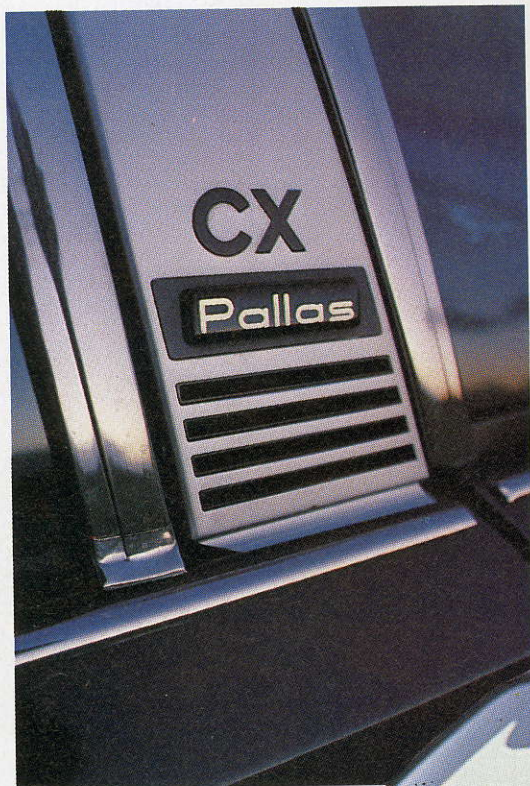
Add to this the upgrading of the car's specifications for Australia and you have on your hands a competitive, if exclusive, luxury package.

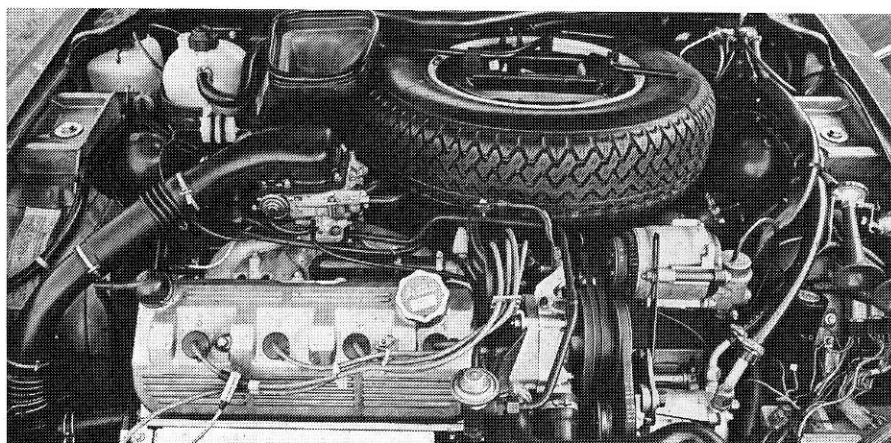
COMPUTEST





This wide angle shot (right) accentuates the space-age lines of the CX. The interior (below right) takes the theme even further with aircraft-like instrumentation, fingertip controls and a console housing stereo, manual/ auto shift, and hydraulic suspension controls.





The Citroën's 2.4 litre engine is mounted transversely and drives the front wheels. In spite of looking cluttered, all basic engine components are easily accessible. The unusual headlight shape (below) and general front end design contribute greatly to the car's excellent aerodynamics.

Many people are frightened of Citroën for two valid, but very different reasons. First of all there is the design. It is advanced, aerodynamic and unusual. And like anything which is not an accepted convention, people will either like it or dislike it . . . intensely.

The second thing that makes people uncertain of the marque is its complexity of design and the difficulty that creates, in attaining adequate service. This latter point is the one which the new distributors have taken very seriously, hence the training school and the new electronic maintenance equipment. Even so, the market for the Citroën CX is limited and the distributors admit that. Theirs is an exclusive clientele, but one which they would still like to increase.

The new car is not a lot different to its predecessor, the CX 2000.

The engine capacity has been increased by increasing the bore size by 3.5mm to 93.5mm. The stroke has remained the same at 85.5mm. The increased bore size resulted in an additional 172cc of capacity to take the engine to 2347cc.

The extra capacity has also uprated the engine's power output slightly from 82kW to 85.75kW at 5500rpm.

Although only a slight increase (4.5 percent), it does show up in the car's uphill performance particularly in the C-matic (auto) version.

However, one other very interesting change to the car is the installation of a special air-conditioning unit developed for Citroën Australia by Sydney's All Car Air Conditioning.

The unit features a dual condenser system. In the front is a completely conventional air-conditioning system as we all understand it. Then, in the boot of the car is a second condenser to supply additional cooling for the rear outlets. A single compressor is used and the coolant pumped back to the rear condenser through a complex under-floor pipe system. The move almost doubles the cooling capacity of the unit which originally was found inadequate for Australian conditions because of the large areas of steeply raked glass on the car.

The air-conditioning (ventilation) in the CX is quite interesting. It has eleven front outlets (three demister, two eyeball, two centre console, two front footwell and two rear) and four rear outlets mounted in the back parcel shelf and operating via the boot-mounted condenser. The outlets are designed in such a manner that the air, whether warm or cold, circulates the car and exhausts through a series of vents under the leading edge of the



rear seat. It's ingenious and works very well.

The CX 2400 Pallas is available only in two forms in Australia. Everything is standard — C-matte auto, power steering, AM/FM radio cassette, tinted glass, electric front windows, electric door mirror and of course Michelin tyres. The price? \$22,220. The only available option is genuine leather upholstery and that will set the buyer back a cool grand. That's right, an additional one thousand dollars!

The standard finish to the interior is a synthetic jersey wool type fabric. It's very comfortable and appears to handle our climatic conditions very well, allowing the body and seat to breathe in hot conditions for good passenger comfort.

The seats are soft and enveloping in the traditional French style and provide remarkably good support all round. For a standard seat they are very well shaped. Rear seat passengers also get individual bucket-style seating separated by a pull-down armrest. The rear seat will carry three passengers, although the centre passenger doesn't get the same amount of comfort. The car is ideally suited as a four-seater only.

The interior is lined with deep pile carpet throughout and sound deadening is excellent. The only disappointing aspect of the interior is the plastic looking door trims which detract from the overall finish, and on rough roads do tend to rattle. Front seat passengers gain a handy carry pouch in the front door linings in the area devoted in the rear doors to the manual window winder.

In the cockpit area — deserving of the aircraft title because of its appearance — the driver gets everything he wants at finger-tip level. It does take a little getting used to, but once you've settled into the various idiosyncrasies of the system it's all very logical.

Right in front of the driver is a space-age

pod. It's the only way to describe it. From the base of the pod extends the single curved arm to which the steering wheel is affixed. Framed in the wheel are the two major instruments which stare back at you from behind thick magnifying lenses — the tachometer and the speedo. Between these two instruments are the mileage (kilometrage) recorder and the odometer. On the outside are the clock (to the left) and the fuel gauge and voltmeter (to the right). Then in a narrow band right across the top of the instrument pod are all the warning lights.

The extremities of the instrument housing curve back towards the steering wheel and driver. Almost touching the wheel these areas locate rocker switches for the indicators and horn (left hand side) and the high beam dip switch and headlight flasher on the right. Under the pod are the light switch and panel rheostat (right) and wiper/washer and hazard warning switch to the left. The ignition switch is just to the left of the steering column and the manual clock to the right.

Completing the driver cocoon is the centre console. The most eye-catching feature is the tennis-ball like device on the very top. After a few moment's fiddling it opens — an ashtray! The stereo system is next down the console and controls for the air-conditioning. Then there's a small bits and pieces compartment and the gear lever. Yes, it's an automatic with a gear lever.

You can leave the car in second gear all day around the city, selecting first for steep hills and top for open road cruising. Alternatively you can drive it just like a manual three-speed without clutch. As you apply pressure to the gear lever, a torque converter automatically engages and disengages the clutch. (Similar to the Porsche, Volkswagen, NSU Ro80 sportmatic boxes). This section of the console also houses the hydro-pneumatic suspension controls, the power window switches, etc.

Special things to note? There's no self-cancelling on the indicators which is a no-no, although something you get used to. Having the dip-switch where it is at fingertip level is also a no-no. When you're driving in the straight ahead position it's fine — try dipping your lights in the middle of a corner!

The horn — well that's something again. It's a two position button. Press it lightly and a relatively loud conventional electric horn will move little old ladies and kids out of the way without frightening them to death. Push it a little harder and it cuts in a triple horn system which is guaranteed to take ten years off the

life of any stray Richard Cranium doing 80km/h in the fast lane!

The ride in the Citroen is notable because it is so quiet and comfortable. In the CX Pallas the clever use of sound absorbing materials (such as heavy carpets and the heavy jersey style fabric) reduces road noise to a minimum. Wind noise is almost negligible, thanks to excellent aerodynamics and engine noise becomes obtrusive only at very high revs.

What is disconcerting is the way the car will settle and level itself out on the hydro-pneumatic suspension everytime you stop.

I think most people understand a little about the suspension system so I won't go into a great deal of technical detail. Basically what happens is this. Each wheel is connected to a suspension ball which replaces the conventional shock absorber/spring system. The ball is filled with a mixture of gas and oil. The interaction between the oil (incompressible) and the gas (compressible) absorbs the road shocks and improves stability, ensuring at the same time that the car remains level. This applies whether on rough or uneven surfaces or when the car is heavily laden with luggage.

The system also provides a built in anti-dive system by compensating for weight transfer under heavy braking.

The car's handling is a combination of good and bad.

In long sweeping curves it is excellent. The self-levelling suspension keeps the car flat and level maintaining maximum wheel contact with the road surface at all times.

Ideal for freeways and the autobahns and autostradas of Europe. Unfortunately here on our lousy roads the self-levelling suspension doesn't take kindly to short sharp corners and curves, or twisty bends. In fact it goes berserk trying to compensate and sets up violent body roll which can be quite frightening to the uninitiated.

The power steering is another thing you must get used to.

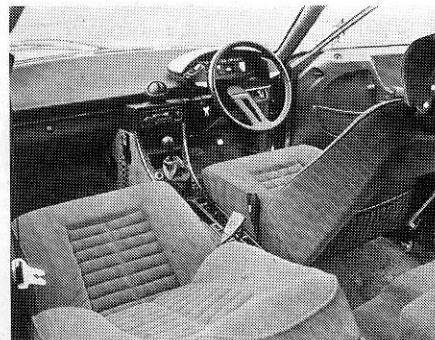
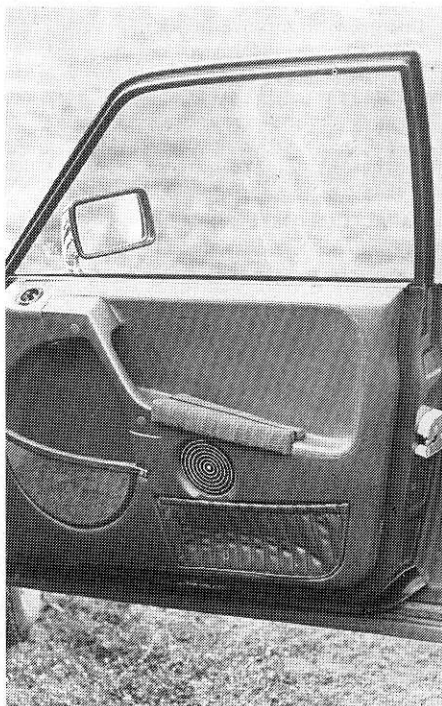
The system — known as Diravi — is power steering with variable ratio and automatic self-centring. The power decreases as the car's speed increases, which is fine. But the power return or self-centring can catch you unawares and have you wallowing all over the road. At standstill, the power assist is so strong that you can turn to full lock and then let the wheel go, and the automatic return will turn the wheels back to the straight ahead position!

Driving around the city at low speeds, where the power steering is at its strongest, is where you notice this problem most. When the over-correction situation occurs the suspension also tries to compensate for the body roll and results in a weird rocking motion from side to side. As I said, it takes some getting used to. However it just can't be beaten for out and out manoeuvrability.

The Citroen's performance is not staggering. It's comfortable and adequate and its high speed touring capability is most probably its strongest point. To really get it going around town you have to work the gears and the engine hard — and that results in poor economy and increased interior noise.

But, out on the open road the car will cruise very comfortably all day at 100km/h plus, in

Door trims (below left) were disappointing. The plastic-style finish rattles on rough roads. The map pocket and storage bin are excellent ideas and the car gets electric remote-control exterior mirrors. The interior (below right) is very plush. The front passenger map light is standard, interior trim comes in a jersey material as shown here, or in genuine leather. Seats are excellent.



complete comfort.

I managed an average fuel consumption for our test period of 13.1 litres/100km (21.5mpg) which is not spectacular for a four cylinder car but is acceptable in the light of the car's size, weight, appointments and comfortable carrying capacity. It is also marginally better than the consumption of the CX 2000, its predecessor, which carried the same load with a smaller engine. The CX 2200 returned a best of 12.8 litres for a hundred kilometres (22 mpg).

Braking is without any doubt at all the Citroen's strongest and most remarkable point. The car does not have a pedal, but a button on the floor which looks similar to a pedal. This activates the four wheel discs at a touch, and again like everything with the Citroen it takes getting used to! The first few attempts will result in dramatically sudden stops... then you realise that the brakes require only a touch. The self-levelling suspension works well in conjunction with the brakes, ensuring flat and level stops under any circumstances. There is little or no brake fade, even after a number of emergency stops and it is impossible to lock the wheels and skid.

In fact, in an attempt to lock the wheels during one test run I threw my full weight (a mean 88kg) onto the stop button to such an extent that the muscles in my calf cramped on me, and still no-lock-up!

But, that is the Citroen... a car of extremes. Extremely advanced design, extremely complex, extremely good at some things and not so good at others.

But, at close to \$23,000 on the road, I find it difficult to believe the car would appeal to more than the dedicated and enthusiastic Citroen owner. □

THE SYDNEY TO HOBART

SPECTACULAR IN-DEPTH COVERAGE.

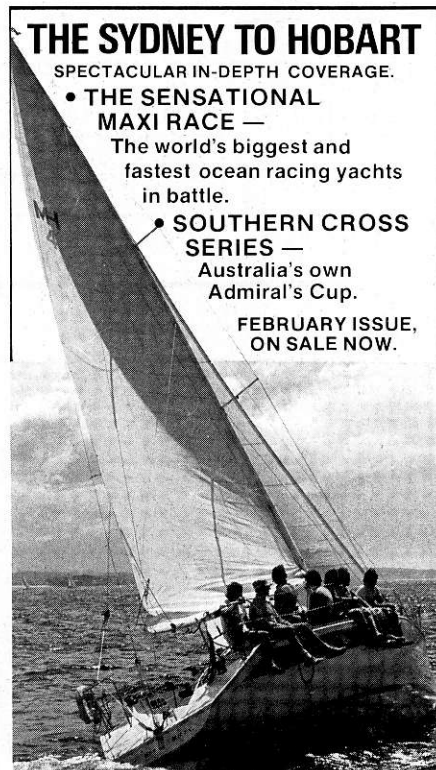
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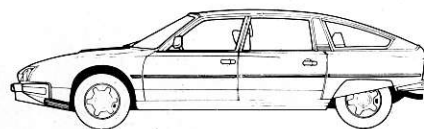
FEBRUARY ISSUE, ON SALE NOW.



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CITROEN CX2400 PALLAS ROAD TEST DATA

(As tested)



ENGINE

Location.....Front
Cylinders.....Four, in-line
Bore x Stroke.....93.5 x 85.5 mm
Capacity.....2347 cc
Carburation.....Weber, twin-throat, down-draft
Compression Ratio.....8.75 to 1
Fuel Pump.....Mechanical
Valve Gear.....Single side-mounted camshaft
Claimed Power.....85.75kW at 5500 rpm
Claimed Torque.....179 Nm at 2750 rpm
Maximum Recommended Engine Speed.....6000 rpm
Specific Power Output.....36.5 kW/litre

TRANSMISSION

Type.....Three-speed, semi-automatic
Driving Wheels.....Front
Gearbox Ratios
Gear.....Ratio.....km/h-1000 rpm.....Max Speed
First.....1.900.....13.5.....79.2
Second.....1.100.....21.2.....127
Third.....0.800.....32.0.....182
Final-Drive Ratio.....4.800

SUSPENSION

Front/Rear.....Hydro-pneumatic with automatic
self-levelling and adjustable ride height
Wheels.....5.5J14
Tyres.....Michelin XVS 185/14

BRAKES

Front.....260 mm discs
Rear.....233 mm discs

STEERING

Type.....Diravi power-assist
Turns, Lock to Lock.....2.5
Ratio.....Variable
Turning Circle.....10.9 metres

DIMENSIONS AND WEIGHT

Wheelbase.....2845 mm
Front Track.....1474 mm
Rear Track.....1360 mm
Overall Length.....4666 mm
Overall Width.....1734 mm
Overall Height.....1360 mm
Ground Clearance.....Variable 155-275 mm
Kerb Weight.....1300 kg
Weight to Power.....15.2 kg/kW

CAPACITIES AND EQUIPMENT

Fuel Tank.....68 litres
Cooling System.....8.75 litres
Engine Sump.....4.6 litres
Battery.....12 V 55 Ah
Alternator.....72A

FUEL CONSUMPTION

Average for Test.....13.1 litres/100 km
Best Recorded.....12.8 litres/100 km

ACCELERATION

0-60 km/h.....6.1 seconds
0-80 km/h.....9.6 seconds
0-100 km/h.....15.0 seconds
0-110 km/h.....17.9 seconds
0-120 km/h.....19.9 seconds
Standing 400 metres.....20 seconds

OVERTAKING TIMES

	2nd	3rd
50-80 km/h.....	6.6	8.6
60-100 km/h.....	10.0	13.2

BRAKING

100-0 km/h.....44.6 metres

THE FIVE-STAR TEST

Finish	★★★★★
Comfort	★★★★★
Handling	★★★★
Brakes	★★★★★
Performance	★★★★★
Quietness	★★★★★
Luggage Capacity	★★★★
Value for money	★★★★

CHECKLIST

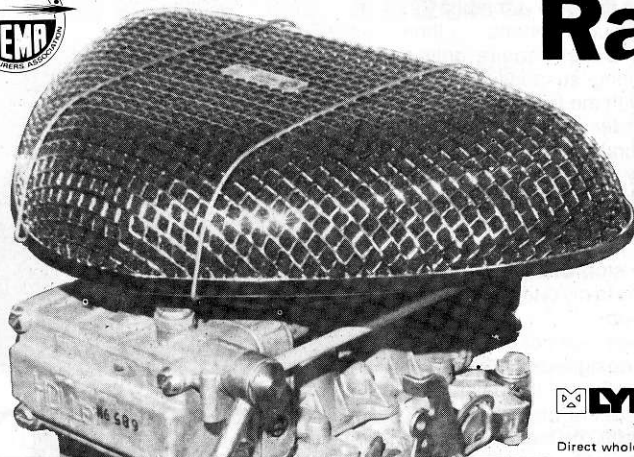
Alloy wheels.....	Yes
Adjustable steering.....	No
Air-conditioning.....	Yes
Carpets.....	Yes
Central door locking.....	No
Clock.....	Yes
Intermittent wipers.....	Yes
Laminated screen.....	Yes
Petrol-filler lock.....	No
Power steering.....	Yes
Power windows.....	Yes
Radio.....	Yes
Rear-window wiper.....	No
Remote outside mirror adjustment.....	No
Sun roof.....	No
Tachometer.....	Yes
Tape player.....	Yes

COMPARISONS

CAR	CAPACITY (cc)	POWER (kW)	ACCELERATION Standing 400m (Seconds)	BRAKING 100 km/h-0 (Metres)	FUEL (L/100 kms)	PRICE \$
Citroen CX 2400	2347	85.75	20.0	44.6	13.1	22,220
Rover 3500	3528	120.0	18.7	44.0	14.9	24,750
BMW 323i	2315	105	17.9	41.0	12.9	19,320
Saab 5-dr Turbo	1985	107	17.3	43.0	12.8	24,750
Peugeot604	2664	940	19.5	45.0	15.0	22,950



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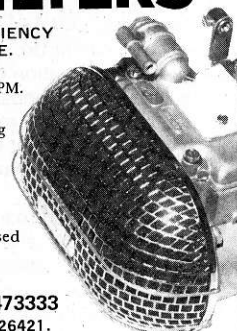
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One of the real ingredients of success is an open mind.

It is not easy to convince some people to drive a Citroën. But if you are successful enough to have a luxury car, may we ask whether you achieved that success by following everyone else?

The Citroën is unlike other cars. But you cannot be better without being different.

There are so many things both better and different about the Citroën CX2400 that you're not giving yourself a chance if you simply say it's not for you. As Mike Kable wrote in *The Australian* October 23rd, 1979, 'The CX2400 has what it takes to qualify as the best all-round imported luxury car for the price.'

It makes normal driving expectations quite out of

date. Its safety is remarkable, its high speed performance is sensational, its city performance makes driving a pleasure. It has a proven, simple, economical 4-cylinder engine. It has every luxury, mounted in what is possibly the most revolutionary car of its time.

It costs nothing to open your mind. Bryson Industries Limited, distributors of Citroën, Sydney 358 4266, Melbourne 428 1551, Adelaide 212 4131.

Queensland distributors

Maxim Motors, Newstead 52 7177.

WA distributors Motts of Welshpool, 458 3855.

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