

peugeot504.info

MOTOR MANUAL

FULL TEST
PEUGEOT
504 DIESEL

MARCH '79 75c'

Registered for posting as a publication (Category B)



JUST HAULIN'
- 928 STYLE!

Here at last!
Datsun's new 120Y

World Ch'ship Grand Prix Guide



FULL TEST PEUGEOT 504 GLD 'Frugal French Diesel'

If the Golf GLD is too small and the Mercedes 300D too expensive but you're still determined to go diesel, try the latest from Peugeot.

YOU GET ALL the old chestnuts thrown at you when you're driving a diesel engined car. You know the sort of thing — "Gee the tappets are noisy," or "They don't make 'em like they used ter do they mister". It becomes a bit of a pain really, but not quite as bad as that anxious, gentle driving around looking for a diesel fuel pump equipped gas station when the fuel needle is approaching at "zero".

Mind you, you can go a lot further looking for the pump when you're diesel powered, and anyway, if you've been an owner for a while, you'd undoubtedly have checked out all the garages in your area for supplies long before.

So often we read how diesel motoring is THE answer to pollution and economy questions, and maybe it is. But it takes a certain kind of psyche to live with it.

If you like the odd scoot away from the lights, or a quick acceleration past the car ahead, maybe it's not for you. On the other hand, for the placid, considerate driver who is practical and cost conscious, it's just the ticket.

Some prospective buyers might be worried about operating a diesel car. For those people, have no worries. The world's diesel passenger car manufacturers have taken all the hassles out of morning starts and any other minor irritations which early examples might have given air to.

Though prices in Australia suggest little advantage in cost per litre of fuel terms, kilometres per litre and longevity of engine life can be computed to demonstrate very worthwhile savings over a long period.

For our test of the Peugeot 504 GLD, we bought our fuel at 20 cents a litre — but we didn't buy much!

It's appropriate really that Peugeot should have been one of the first car companies to offer a diesel engined automobile, for Rudolf Diesel was actually born in France in 1858, the son of a German father.

He produced his first compression ignition engine in 1892 when he was working for M.A.N. in Augsburg. Those early engines were intended for stationery industrial use, but the type soon was adopted for heavy haulage.

Peugeot's first diesel suitable for use in a car was designed in 1922, but it wasn't until 1928 that they went into production. This was seven years before Mercedes Benz introduced the Mercedes 260D in 1935.

Since 1928 Peugeot has built more than a million diesel engined passenger cars, and today they are available in 1357cc form as fitted to the 304 GLD, or in 1948cc, 2112cc and 2304cc form fitted to the 504. It is the latter capacity unit that has now been introduced to Australia as the power behind the Peugeot 504 GLD.

Australia's diesel car market is restricted to just three models. At the top of the list is the Mercedes 300D at \$30,367, a price which doesn't seem to discourage at least 450 sales a year, a figure close to that of the far more expensive 450 SEL, and representing almost 5% of MB's Australian sales annually.

Volkswagen's Golf GLD you would think might suffer a little from the fact that the normal petrol engined Golf is so good economy-wise and has a price advantage of almost \$1000. Besides, the kind of customer

peugeot504.info

likely to be shopping for a diesel is possibly more interested in having a full sized car.

But Volkswagen's sales of the little 1500cc oiler have gone very well since its introduction early in 1978. In fact, for the year no less than 617 GLD Golfs were sold compared with 777 petrol engined models. Indeed, VW Australia is confidently looking at a figure in excess of one for one in 1979, forecasting as many as 1200 - 1500 diesels being sold for the year, so long as supply can be maintained.

Of course the deutschmark is the fly in the ointment. It has been revaluating in comparison with the Australian dollar in the same way as the Japanese yen, thus accounting for the heavy price increases that have been plaguing the importers of German cars. That they can project such levels of sales in the face of these problems indicates a great deal of faith in the miserly little car.

It's for those diesel customers wanting a full five seater with all the known levels of Peugeot comfort that the Peugeot 504 GLD has been introduced. It has a level of specification that a person investing \$12,000 or more might expect to enjoy, while still providing the down to earth rationale of economy. And it's not quite so subject to exchange rate fluctuations as it is assembled here in Australia at Renault Peugeot's Heidelberg plant.

Base GLD gets vinyl seats non metallic paint and no laminated windshield at \$11950. The better equipped "Speciale" has better trim, the laminated screen, metallic paint and a stereo cassette player with "record on the move" facility. It is priced at \$12410.

Performance figures for the diesel, in manual four speed form, get very close to those of the petrol engined 1971cc car with automatic gearbox, a fact which surprised us as the GLD seemed so much slower. The standing 400 metres time of 21.9 wasn't too bad either.

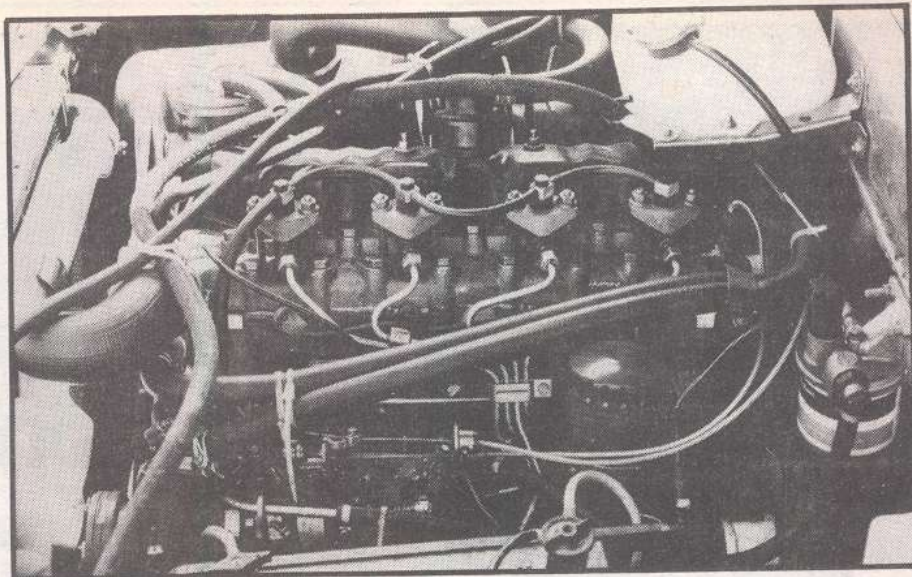
Although top speed observed during the test was a shade over 140 km/h, it must be recorded that cruising at 125 km/h to 130 km/h was easy going, and the handling of the car allowed such speed to be maintained over almost any sort of roads.

This is the key to diesel motoring after all. The type is at its best when running at a constant speed, lacking as it does, initial and mid range acceleration. On a long steady run, therefore, it's a fine performer, to the extent that its oil fired character is forgotten.

Around town there's little need for performance other than at the proverbial traffic light grand prix, and the engine will lug along in the high gears without any signs of stress.

Early morning starts in summer are simplicity personified. The ignition key is inserted and the ignition turned on. Then there's a short pause while the glow plug gets going, upon which a little orange light becomes visible on one of the instrument dials. Now the engine can be switched on, clacking into life only slightly hesitantly.

When switching the engine off it is disconcerting at first to feel and hear it stop almost insantaneously due to the 22.2:1 compression ratio.



Under normal driving conditions it soon becomes second nature to squeeze the throttle pedal rather than prod it. That way the engine accelerates at a better pace, and gathers momentum as the revs rise. In the gears it will spin happily to well over 4500 rpm before reaching its peak.

Though there's a fair bit of clatter noticeable when idling, or starting up in the early

TOP: Although a little less tidy than the petrol engine's compartment, the 2.3 litre diesel engine fits into the bay with plenty of access room.

ABOVE: GLD interiors are the same as the GL, complete with those typically French seats— soft, but with plenty of support in the right places.

'Frugal French Diesel'

hours of the morning when all around is quiet, on the move it can hardly be heard within the car. Indeed, it's hard to realise there's a diesel up front so smoothly does it run in the 2000 rpm to 4000 rpm range.

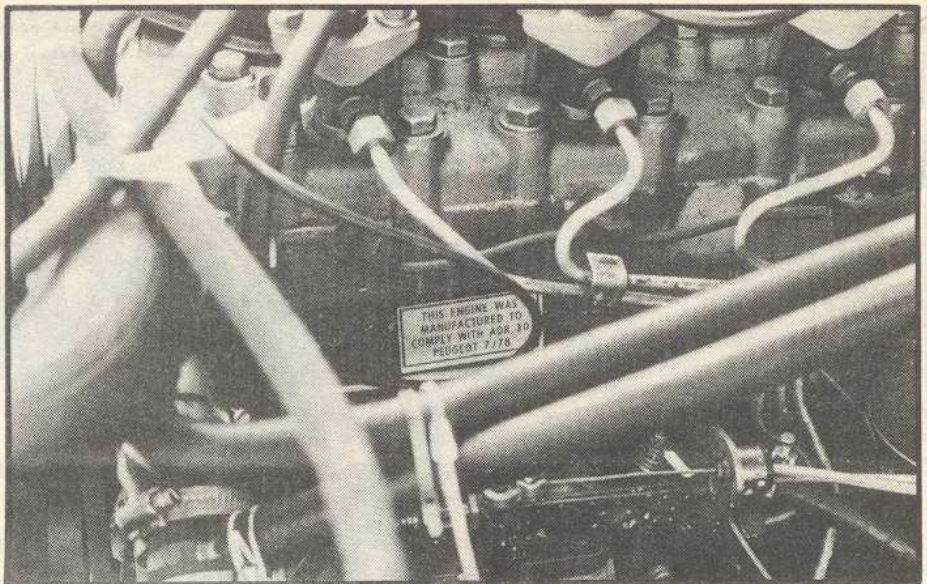
Despite all this though it's no good trying to assert that the overall feeling is as satisfying as petrol engine power. But then, you can't have everything, and well over 30 mpg is worth considering as fuel prices continue to rise.

Engine apart, the Peugeot GLD differs little from the normal GL. Interior trim and design is the same as are the chassis specifications.

There's a 50 kilogram weight hike due to the heavier oil engine, but this is not felt in the car's handling even though much of the extra is up front. Indeed, steering seems to be lighter than we remember it, the pleasant, sure footed rack and pinion system doing its job well.

Front spring rates are up a little and the shock absorbers are a little stronger perhaps, but the ride is excellent, enhanced by the semi trailing arm, coil spring independent rear end.

We found that the balance was very good indeed, allowing rapid, safe progress on



loose gravel as well as on twisting bitumen. Only on hills of any length or steepness, did we find the gearbox coming into play, especially with a full load on board.

Although we didn't get the opportunity to experiment ourselves, we understand from Tim Britten at "Caravan World," that the GLD makes a fine, efficient tow vehicle, hardly suffering from the substantial increases in fuel consumption one expects from petrol cars when towing. As Tim told us, the power isn't excessive, and the gearbox has to be used a fair bit on gradients, but the GLD still provides cheap towing for medium sized camper trailers and caravans.

It all comes back to practicality. In Europe it is rare to see petrol engined taxis, those in Paris or other big French cities, being more

often Peugeots than anything else. In Germany its Mercedes diesels, in England Austins, in Tokyo Datsun or Toyota. And they keep going on and on.

In France it is common to see many early Peugeot 404 models that are oil fuelled, going as well as ever decades after they were introduced as new. Perhaps our "throw away" society might prevent us from adopting the theme totally, but there are obviously quite a large number of people in the market here. And if manufacturers' forecasts are to be believed, the numbers still have some way to go before they peak out.

An excellent AM/FM radio, stereo cassette system is augmented by this on board recording feature for dictation and the like.



MOTOR MANUAL



Action Analysis

PEUGEOT GLD



COMPETITION COMPARISON: PEUGEOT 504 GLD "SPECIAL" \$12,410

CAR	PRICE	TESTED
MERCEDES BENZ 300D	\$30,367	MARCH '78
VOLKSWAGEN GOLF GLD	\$8940	AUGUST '78

STAR RATING (OUT OF FIVE)

ENGINE:	★ ★ ★
GEARBOX:	★ ★ ★ ★
BRAKES:	★ ★ ★ ★
STEERING:	★ ★ ★ ★ ★
RIDE:	★ ★ ★ ★ ★
ROAD HOLDING:	★ ★ ★ ★
FEATURES:	★ ★ ★ ★
PERFORMANCE:	★ ★ ★
FINISH:	★ ★ ★
OVERALL:	★ ★ ★

MODEL..... Peugeot 504 GLD
MANUFACTURER..... Renault (Australia) Pty. Ltd.

BODY TYPE/SEATS..... Four Door Sedan/5

PRICE -
 Basic
 As tested

OPTIONS FITTED (and cost)
OTHER MAJOR OPTIONS AVAILABLE

ENGINE:

Location..... Front
 No. of cylinders..... Four
 Capacity (cc)..... 2304
 Bore and stroke (mm)..... 94 x 83
 Block..... Iron
 Head..... Iron
 Valve gear..... overhead
 Induction..... Kugel Fischer Diesel injection
 Compression ratio..... 22.2:1
 Max. power (kW/bhp)..... 52.19/at 4500 rpm
 Max. Torque (NM/ft lbs)..... /97 at 2000 RPM

TRANSMISSION:

Type..... Four speed manual
 Shift Location..... Centre console
Ratios-
 First..... .273
 Second..... .461

Third..... .710
 Fourth..... 1.000
 Final drive..... 3.7

BODY/CHASSIS:

Construction..... Unitary
 Panel material..... Steel

SUSPENSION:

Front..... Independent McPherson Struts
 Rear..... Independent semi trailing links coil springs

STEERING:

Type..... Rack and pinion

BRAKES:

Type..... Dual circuit, power assisted, hydraulic
 Front..... Disc
 Rear..... Drum

WHEELS AND TYRES:

Wheel type..... Ventilated steel disc
 Diameter..... 14"
 Tyre make/type..... Michelin XZX steel radial
 Dimensions..... 175 SR 14

DIMENSIONS:

Weight (kg)..... 1245
 Length (mm)..... 4490 mm
 Width..... 1690 mm
 Height..... 1460 mm
 Wheelbase..... 2740 mm

Front track..... 1420 mm
 Rear track..... 1360 mm
 Turning circle (m)..... 11 m
 Fuel tank capacity (litres)..... 56

PERFORMANCE:

Speedometer error (km/h)
 Indicated..... 60 80 100
 Actual..... 53.6 73.9 93.7
 Maximum speeds in gears (km/h)
 First..... 38 km/h
 Second..... 70 km/h
 Third..... 105 km/h
 Fourth..... 141 km/h
 Acceleration from rest to -
 60 km/h..... 6.7s
 80 km/h..... 11.5s
 100 km/h..... 17.8s
 120 km/h..... 27.7s
 Acceleration from 60 km/h to -
 100 km/h..... 13s
 Standing start to 400 metres -
 Elapsed time..... 21.9s
 Terminal speed (km/h)..... 102 km/h
 Braking -
 110 km/h to rest (average)..... 50 metres
 Fuel consumption (litres per 100 km/mpg)
 Driven normally 9.2/36

*Performance figures recorded using SILICONIX ET 100 digital stop watches from Smiths Industries P/L, Technical Sales Division, 132 Bank Street, Melb. 3205