



ROAD TEST

RENAULT ALPINE GTA V6 TURBO

Sensational looks are matched to prodigious performance and competent handling; but best of all, it's a highly individual car that owes nothing to any other machine...

CAR August 1988



THE Normandy port of Dieppe is a picturesque provincial town set into a tapestry of yellow mustard fields, orchards and ocean – hardly the place you'd expect to become significant in motoring history.

Yet it was here that Renault dealer Jean Redele built his original Alpine-Renault in 1954, using the underpan and running gear of a Renault 4CV, and began one of the most interesting chapters of French motoring folklore. The affordable little competition machine went down well and eventually led to the A110, one of the most famous and successful rally cars of all time.

This uncompromising machine became a national symbol for Gallic motoring enthusiasts during the early 'seventies, winning the 1971 and '73 World Rally Championships, while its vicious but glorious tail slides made it the darling of the dare-devil brigade. Its successor, the A310, began the

KEY FIGURES

Maximum speed.....	247 km/h
1 km sprint.....	27,57 seconds
Fuel tank capacity.....	72 litres
Litres/100 km at 100.....	7,17
Optimum fuel range at 100.....	1,004 km
*Fuel index.....	10,04
Engine revs per km.....	42,98
Odometer error.....	0,3 per cent over
National list price.....	R150 000
(*Consumption at 100 plus 40%)	

process of "civilising" the concept for broader use as a grand touring coupé and in turn led to the GTA, a car now fully integrated into Renault's model line-up and winning a growing reputation in Europe as a real and charismatic rival to Porsche's 911.

UNIQUE CHARACTER

The Renault Alpine GTA V6 Turbo's extraordinary character thus shouldn't come as quite such a surprise. The depth of its roots might not be that obvious, but it is no one-off whim of

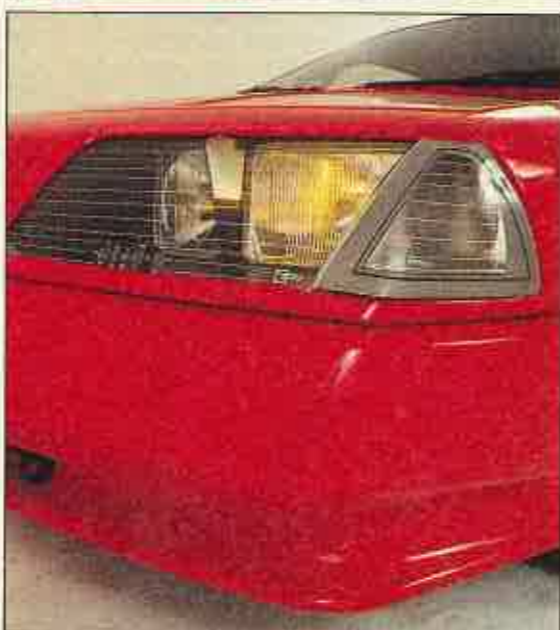
a marketing man keen on the US market, as it might appear to be, to the uninitiated. *Sacré bleu*, how could you suggest such a thing, Monsieur? Can you not feel the *nuance*, the Gallic flav-vour, the taste of Dieppe *moutard*?

The one loose thread is how this Renault managed suddenly to appear on the local market so long after Renault Africa's withdrawal to Billancourt? The answer is that Genuine Parts, a company in the Midas Group (which obtained the Renault franchise), is now importing the GTA V6 and the GTA V6 Turbo, the subject of this test.

Seeing the car in the flesh (layered polyester) for the first time is like suddenly encountering Isabelle Adjani strolling on a Riviera beach. It is sensational! The roof is so low it hardly reaches your hip, yet the sweeping expanses of glass, the thrusting, aggressive front end and the



The turbocharged, intercooled 2.4-litre V6 (left) traces its ancestry back to Renault's F1 engine and is refined and flexible. The cockpit (left, centre) is well laid out with the exception of the pedals, while the front seats (bottom, left) provide comfort and excellent support. The nose compartment (below) is shared by the fuel tank and a tiny 'boot,' while the aggressive frontal treatment (bottom) leaves no doubt as to the GTA's considerable abilities.



boldness of line are all hung together in a shape of outstanding harmony. And best of all, it doesn't look remotely like anything else.

For head-snapping attention-getting we can recall few cars with quite the same powers as the Alpine. It seemed capable of instantly riveting onlookers to the spot, inducing the most serious bouts of slavering. Moreover, it possessed a dash of appealing Gallic recklessness.

In typical Alpine manner, the GTA's structure is a composite consisting of a steel backbone chassis bonded to a glass-reinforced polyester (GRP) hull and body. In previous models the steel chassis has taken most of the load, but in the GTA it is integrated into 12 layers of thermally bonded GRP to form a rigid monocoque which provides impressive torsional rigidity.

GRP is also outstanding as a sound insulation material, but its disadvantage, ironically, lies in its weight, which can be 50 per cent more than steel of an equivalent strength, and the car tipped the scales at 1 260 kg in test trim.

REAR ENGINED

Alpines have always been rear-engined and the GTA's blown V6 hangs out behind the rear transaxle. Independent suspension via double wishbones, variable rate coil/dampers, and anti-roll bars front and rear make up the underpinnings, which are fairly straightforward in concept but refined in application. The roll centre is exceptionally low, but a mass distribution with a 38,5/61,5 rearward weight bias conjures up (erroneous) images of wayward oversteer, à la Porsche 911.

The 2 458 cm³ V6 is a derivative of that in the R25 Turbo, with adjacent big-end crankshaft journals rotated through 30 degrees to attain equal firing impulses in the 90-degree vee. Pistons, bearings, valves and a number of other key components are updated to deal with the boost delivered by the single Garrett AiResearch T3 turbo, which blows through an air-to-air intercooler. Electronic fuel injection and a fully mapped Renix engine management system complete the picture and the power/torque outputs of 147 kW/285 N.m are impressive, particularly as the torque peak occurs at only 2 500 r/min.

Power is delivered through a specially built Alpine five-speed transaxle mounted in a detachable subframe at the rear of the backbone chassis, via a pair of massive 255/45 VR 15 Pirelli P700s - about the best streetlegal rubberwear money can buy. The front tyres are 195/50 VR 15s and the substantial difference in the sizes indicates just how much taming this

combination of power and rearward weight bias has taken.

Alpine's many years of taming rear-engined cars is evident in such small touches as the seven-degree forward inclination of the lower front wishbones to induce anti-squat during acceleration, while full advantage has been taken of a rear-engined car's exceptionally stable braking attitude. The brakes are huge, 259 mm ventilated discs front and rear, while the enormous 8,5 x 15 (front) and 6 x 15 inch (rear) alloy wheel rims allow plenty of space for cooling. Their attractive turbo styling in fact encourages extraction of hot air.

Where a rear engine in this type of car really pays dividends, however, is in efficient space utilisation. But before you get a chance to examine the inviting interior, the clever detailing on the body's exterior catches the attention. Alpine claims a drag co-efficient of 0,28 and a cdA (cd x frontal area) of only 0,48, which would make it the world's most aerodynamically slippery production car.

Apart from the basic shape, this is achieved by bonding the windscreen and beautifully curved triangular quarter lights directly to the frame, while the underpan is smooth and even the door catches are totally flush. The finished sheen of the GRP, which in the test car was a vivid red, had to be seen to be appreciated, and some observers refused to believe that it was plastic.

ROOMY INTERIOR

Push the tiny door handle and the door springs out from the body just enough to allow you to open it, but don't let your long-fingernailed girlfriend attempt it! If you were expecting to find a utilitarian interior with necessary items hastily added to a dated layout, you'll get a shock.

The concept of Gran Turismo motoring in Alpine's terms (or more likely, Renault's) clearly means that the occupants should lack for nothing. Standard equipment includes electric windows, central locking with an infra-red remote control facility, electric rear view mirrors, air-conditioning (only in left-hand drive form, as tested), leather upholstery, a superb Philips six-speaker audio system, a trip computer and electric door latches.

Moreover, for a GT coupé the interior is surprisingly roomy, far better than that of a Porsche 911 or a 944, for example, and the well shaped rear seats need not be dismissed as occasional. Adults really can sit in them quite comfortably, even over fair distances, although they more or less disappear into a tailored recess and their knees have to be played.

Alternatively the rear seat backrests fold down to form a flat luggage platform, complete with built-in retaining straps. Access to the rear is awkward however, emphasised by the fact that the car is so low.

In fact, entry and egress even from the front can be a major problem, compounded by the relatively narrow angle to which the door opens. You have to watch your forehead as you settle into the driver's seat and on the move, using the sunvisor requires you to turn your head to obtain enough clearance for it to fold down.

SUPERB COCKPIT

Once settled however, the driver is presented with a superb command post, perfectly located and just snug enough. The shallow fascia recedes under the screen line and a compact instrument nacelle containing the essential dials is placed precisely behind the wheel's top half. To the left there is a bank of auxiliary gauges and rocker switches, while the active check panel and secondary controls reside to the right.

Simple but effective controls for heating / ventilation / air-conditioning are located on the massive console, behind the gearlever, while ahead of it the Philips audio system is integrated neatly into a sloping panel. A single stalk on the left of the steering column controls wipe/wash, while a satellite stalk on the right makes it (safe) child's play to operate the radio/tape without having to look down.

The front seats are a delight. Compact, immensely supportive yet fairly roomy, they can be adjusted for rake and squab angle and incorporate built-in head restraints, while the small diameter, fat-rimmed, leather-clad steering wheel is as good. Only in the footwell has something gone wrong.

The pedals are bottom hinged and thus require an excessive amount of ankle pivoting from the low seating position. There is also not quite enough room around them, but worst of all, your toes tend to get hung up on the trim above the footwell, even if you take only a size seven.

FLIMSY COMPONENTS

We were also less than impressed by the shiny plastic look of the fascia itself or by the flimsy feel of some Renault-sourced components, such as the column stalk. And quite why the doors require electrically operated latches, which were backed-up by mechanical units let into the door sills for emergency use, was not clear (perhaps there had to be a touch of French eccentricity *somewhere?*)

Moreover, whoever designed that abysmal windscreen wiper system should be made to learn the *Marseil-*

laise in German. It consists of two blades located close together in the centre of the screen, each sweeping outwards, and the result is an annoying unwiped triangle bang in the middle.

On sunny days visibility is a strong point in the Alpine, which must be one of few coupes without a notable blind spot. Also unusual in this type of car is the generous provision of stowage space in the form of two console bins, door pockets and a reasonably sized glovebox, but the tiny "boot" in the nose will take a briefcase and a vanity bag and that's it. We didn't even bother to measure it, while the unfortunate catch, which is not spring loaded, is a throwback from another era.

This compartment has in fact been sized to accommodate a wheel should the spacesaver emergency spare be required, an eventuality we wish on no Alpine owner. The spare is located in the engine compartment and to get to it, the turbo intake pipe must first be disconnected. Although a nicely tailored kit in the cubby includes a bag for the dirty wheel and a pair of gloves to ease changing, such groveling doesn't fit too well with the Gucci image!

Okay, okay, but how does it go? *Ah oui monsieur, now you are talking!* Fire up the blown mill and you are greeted with a whistling snarl behind you somewhere which dies away to a whisper. Snick the well-weighted gearshift into first, ease away and bury the loud pedal. There is little sign of the explosion of noise and hell-for-leather action you were expecting. Instead, the whistling turns into a raunchy growl and you're suddenly rocketing along, snatching gears as fast as the tacho needle spins round the dial.

Hey, wait a bit! Where's the desperate howl of tyres grappling for grip, the sock in the jaw as they finally stop spinning, the anguished scream of the engine and the armful of opposite lock as the tail slews off sideways? *Non, non, monsieur, this is an Alpine, not a 911!*

Initially, it's a bit disappointing, but then the true level of achievement comes sharply into focus. Here's a stormer that runs to 100 km/h in 7.51 seconds and a true top speed of 247 km/h, yet does so with absolutely no drama. In some ways it's *too* isolated, too cool. It's difficult not to run the turbine smooth engine past the 6 200 r/min redline and into the rev limiter, for instance, while sometimes you tend to change down at much higher revs than you intended, simply because you can't really "feel" the engine working.

Mid-range punch is towering, with perfectly matched gearing seldom

allowing even the hint of turbo lag to spoil response. Indeed, in this critical measure of true performance, the Alpine overshadows the 3.2-litre Porsche 911 Carrera, which is noted for its flexibility, although it can't match its outright sprint and top speed capabilities. The Dieppe missile accelerates from 80-100 km/h in 4.61 seconds in fifth gear, for example, versus the Carrera's 5.88 seconds.

The end result is a very quick car which doesn't force its occupants to endure the usual drawbacks of the genre, such as cramped accommodation and high noise levels. At the end of the day, its finely balanced blend of performance and refinement is its most powerful attraction and it becomes clear that the Alpine is of an entirely new and more advanced generation than the venerable 911.

Fuel efficiency, despite the performance, is impressive. Steady speed consumption of only 7.17 l/100 km/h at 100 km/h is startling, for example, while our calculated fuel index (consumption at 100 plus 40 per cent) works out at 10.04. Our actual average consumption during the test, including performance testing and plenty of driving on the limit, was an impressive 13.58 l/100 km.

WELL BALANCED

Handling and overall balance also come as a pleasant surprise. On the open road the Alpine is immensely stable, with beautifully-weighted (manual rack and pinion) steering, quick responses and a startlingly high level of grip. It took a session at Killarney to really wring it out and we came away mightily impressed. Its balance is brilliant, considering the rear-mounted engine, and it will not snap into oversteer either through deliberate provocation via the throttle or abrupt shut-off. When it does go, it signals its intention early, making correction a cinch.

Surprisingly, understeer isn't a problem, although it is easy to induce, and the car's crisp, precise turn-in is a delight. Clearly, the aerodynamics play a great part in the car's dynamic refinement, for even at full speed the front end is steady, something rare with this type of layout. But surely there's *something* flawed? Well, we wouldn't like to push it to the limit in the wet, come to think of it, and the brakes aren't quite as progressive as a 911's. But yes, chassis-wise, it knocks the Porsche sideways.

TEST SUMMARY

What a welcome breath of fresh air the Alpine-Renault is on our German/Japanese dominated market. It certainly captures more than its fair share of *joie de vivre*, but of more importance, it is a masterly achieve-

ment in its own right. We can't help thinking that this is what the Porsche 911 would be like, in many ways, if its fans would only allow it to grow up, but then that's hardly fair to the Alpine. It's a car which doesn't owe anything to anyone, except maybe Jean Redelé.

SPECIFICATIONS

ENGINE:
Cylinders V6
Fuel supply electronic injection, intercooled turbocharger
Bore/stroke 91/63 mm
Cubic capacity 2 458 cm³
Compression ratio 8.6 to 1
Valve gear s-o-h-c per bank
Ignition electronic, mapped
Main bearings four
Fuel requirement 98-octane Coast 93-octane Reef

Cooling water

ENGINE OUTPUT:
Max. power I.S.O (kW) 147
Power peak (r/min) 5 750
Max. usable r/min 6 200
Max. torque (N.m) 285
Torque peak (r/min) 2 500

TRANSMISSION:
Forward speeds five
Gearshift on console
Low gear 3,364 to 1
2nd gear 2,059 to 1
3rd gear 1,381 to 1
4th gear 0,964 to 1
Top gear 0,756 to 1
Reverse gear 3,545 to 1
Final drive 3,444 to 1
Drive wheels rear

WHEELS AND TYRES:
Road wheels light alloy
Rim width 8.5x15 (rear)/6x15 (front)
Tyre make Pirelli P700
Tyre size 255/45 VR 15 (rear) 195/50 VR 15 (front)

Tyre pressures (front) 240 kPa
Tyre pressures (rear) 240 kPa

BRAKES:
Front 259 mm ventilated discs
Rear 259 mm ventilated discs
Hydraulics dual circuit
Boosting vacuum
Handbrake position between seats

STEERING:
Type rack and pinion
Lock to lock 3.0 turns
Turning circle 11.4 metres

MEASUREMENTS:
Length overall 4 330 mm
Width overall 1 754 mm
Height overall 1 197 mm
Wheelbase 2 339 mm
Front track 1 493 mm
Rear track 1 462 mm
Ground clearance 130 mm
Licensing mass 1 180 kg
Mass as tested 1 260 kg

SUSPENSION:
Front independent
Type double wishbones, coil/damper units, anti-roll bar
Rear independent
Type double wishbones, coil/damper units, anti-roll bar

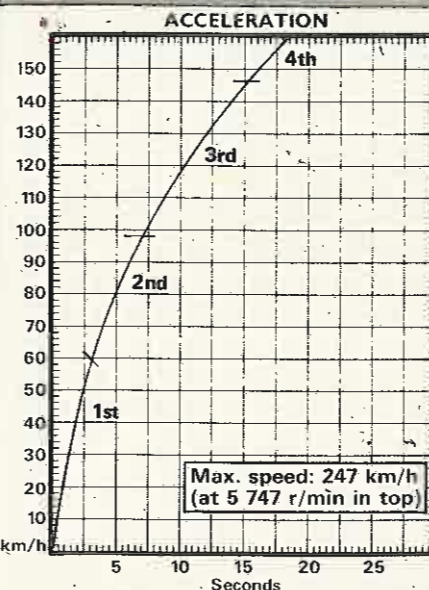
CAPACITIES:
Seating four
Fuel tank 72 litres
Luggage trunk see text
Utility space see text

WARRANTY:
12 months irrespective of distance.

TEST CAR FROM:
Genuine Parts (Midas Group).

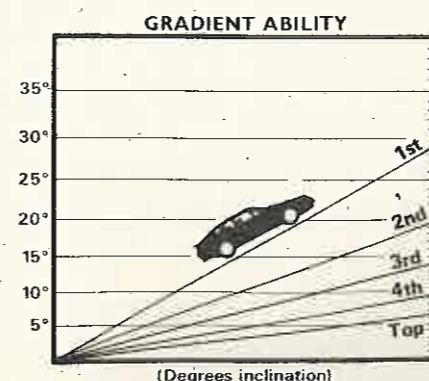
TEST RESULTS

RENAULT ALPINE GTA V6 TURBO



PERFORMANCE FACTORS:
Power/mass (W/kg) net 124.58
Frontal area (m²) 2.10
km/h per 1 000 r/min (top) 42.98
(Calculated on licensing mass, gross frontal area, gearing and I.S.O. power output)

TEST CONDITIONS:
Altitude at sea level
Weather overcast, light wind
Fuel used 98 octane
Test car's odometer 4 780



MAXIMUM SPEED (km/h):
True speed 247
Speedometer reading 260
Calibration:
Indicated: 60 80 100 120
True speed: 54 73 92 110

ACCELERATION (seconds):
0-60 2.96
0-80 4.77
0-100 7.51
0-120 10.15
1 km sprint 27.57
Terminal speed 193.7 km/h

OVERTAKING ACCELERATION:

Gear	3rd	4th	Top
40-60	2.84	4.89	7.32
60-80	2.24	3.51	5.84
80-100	2.30	3.51	4.61
100-120	2.53	3.76	5.03

FUEL CONSUMPTION (litres/100 km):
60 6.15
80 6.61
100 7.17
120 8.31

BRAKING TEST:
From 100 km/h
Best stop 3.50
Worst stop 3.70
Average 3.59

(Measured in seconds with stops from true speeds at 30-second intervals on a good bitumenised surface)

GRADIENTS IN GEARS:

Gear	1st	2nd	3rd	4th	Top
Low gear	1 in 1.8	1 in 2.8	1 in 4.0	1 in 6.2	1 in 9.1

(Tabulated from Tapley (x gravity) readings, car carrying test crew of two and standard test equipment)

GEARED SPEEDS (km/h):

Gear	56*	60
Low gear	91*	98
2nd gear	135*	146
3rd gear	194*	209
4th gear	247*	266

(Calculated at engine power peak* - 5 750 r/min and at max. usable r/min - 6 200 r/min)

INTERIOR NOISE LEVELS:

	Mech.	Wind	Road
Idling	49	-	-
60	64	-	-
80	68	75	73
100	70	77	75

(Measured in decibels, "A" weighting, averaging runs both ways on a level road: "mechanical" with car closed, "wind" with one window fully open, "road" on a coarse road surface)

