

# THE DAY of THE DIESEL

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PHOTOS BY RIC WILLIAMS &  
BRYAN HUNTER

**E**ach year our Wagon of the Year test confirms two things: with five people doing the testing there will be five distinct, opinionated answers, and from those opinions BUSHDRIVER will make its choice of Wagon of the Year.

As of late, diesel engine performance and preference on the Australian scene have increased. Because of this, our test deviated a bit this year. Instead of testing petrol power, we decided on diesel. Our four 4-door wagons selected for Wagon of the Year are: Toyota 2.8-litre 4Runner, Holden Jackaroo DLX 2.8-litre turbo, Mitsubishi Pajero EXE 2.5-litre intercooled turbo, and Toyota LandCruiser GXL 4-litre turbo.

The testers are: Fred Black, Out of Town 4WD; Norm Needham, Traction 4; Bryan Hunter, technical feature writer; Ray Muddle, Out of Town 4WD research and development; and Todd Hallenbeck, BUSHDRIVER. Admittedly we have our biases and value aspects of each vehicle differently, but those biases get flushed out in the final tally, and if we still can't reach a decision, we flip a coin.

Seriously, a tribute to the quality of the four 4WDs was our difficulty in choosing a favourite. During the four days of testing, it wasn't until the third day that we had become familiar enough with each vehicle to forecast a winner.

Of the tested quartet, Toyota unambiguously finished either first or second. This point in particular carries great weight because not only does our test entail judging the vehicle's physical ability but also judging the general philosophy of the vehicle.

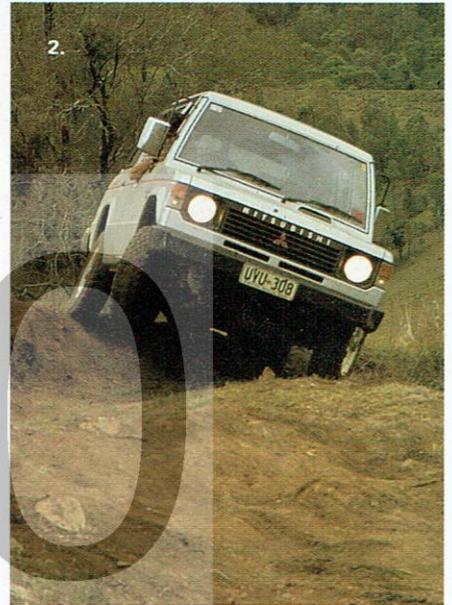
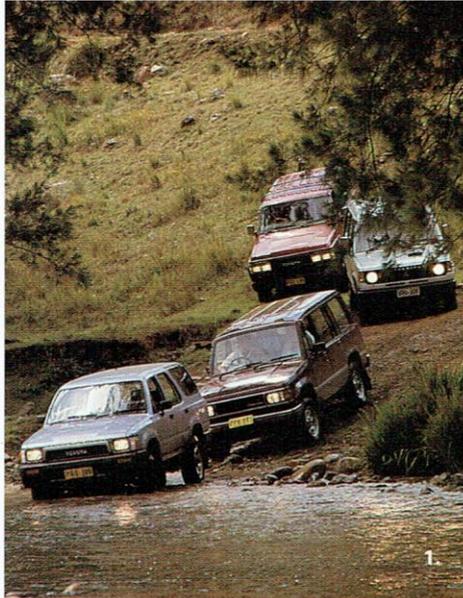
Does it show improvements over previous models? Does it move the 4WD market in a new direction? How well does it meet the consumer's needs? These philosophical criteria are in addition to more tangible or practical categories such as interior, on and off-road performance, component protection, under the bonnet servicing, and fuel economy. All totalled, each vehicle is scrutinised 99 ways.

We began by hoisting the four for a close underside look. Any new gadgets or anything out of place? The Jackaroo was the only one to have disc brakes on all corners. It was also the only one with a centre universal joint on the rear drive shaft. Nothing was out of place or vulnerable; the Jackaroo is quite sound mechanically.

A few details under the 4Runner caught our attention. Attached to the front diff was a rubber block used to deaden and absorb harmonics. The exhaust pipe was oddly routed under the transfer case. We predicted a few problems with this set-up. By test's end, our predictions didn't come true although we did have trouble with the 4Runner's exhaust. Also mounted quite low were the rear trailing arm mounts, but they also went unscathed. The 5-link rear coil suspension was the biggest news on the underside. We rated it as excellent for on and off-road ride. Toyota has taken an extra precautionary measure by moving the lower rear shock mounts as near the wheels as possible to a less vulnerable location, a Range Rover trick.

Not much new under the LandCruiser. Still uses leaf spring suspension.

*Continued on P. 23*



1. Introducing the combatants: Toyota 2.8-litre diesel 4-door 4Runner, Holden 2.8-litre turbo diesel Jackaroo, Mitsubishi 2.8-litre intercooled turbo diesel, Toyota LandCruiser GXL turbo diesel.  
 2. We returned to Mount Sea View to find our test track had shifted in a mud slide.



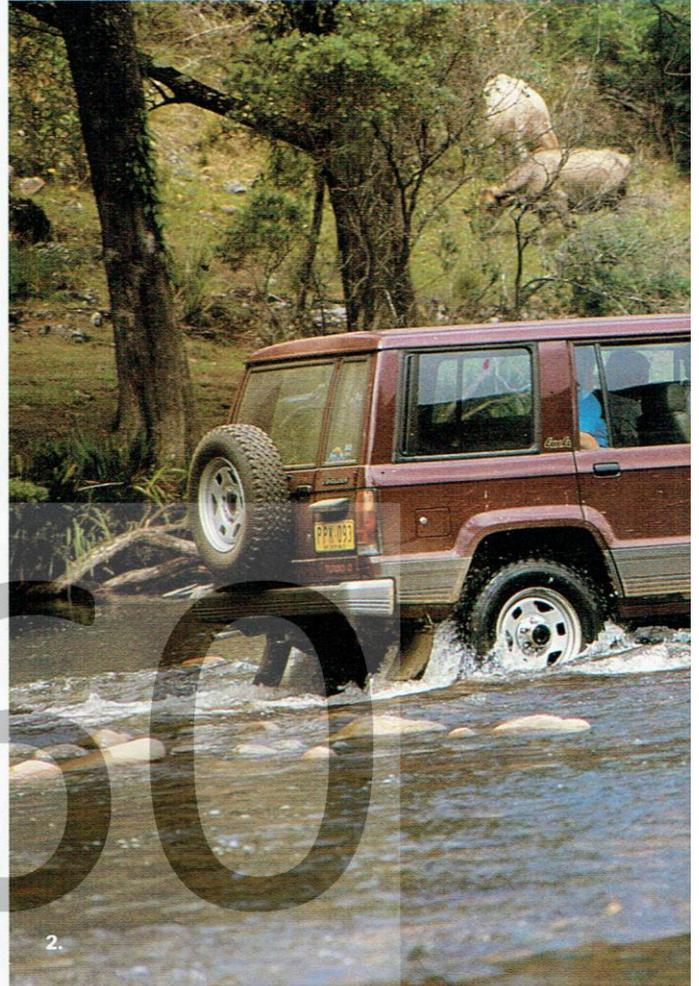
3. Over the bonnet visibility in the 4Runner is especially limited when cresting a hill.  
 4. Literally in a class by itself, the LandCruiser has plenty of power.

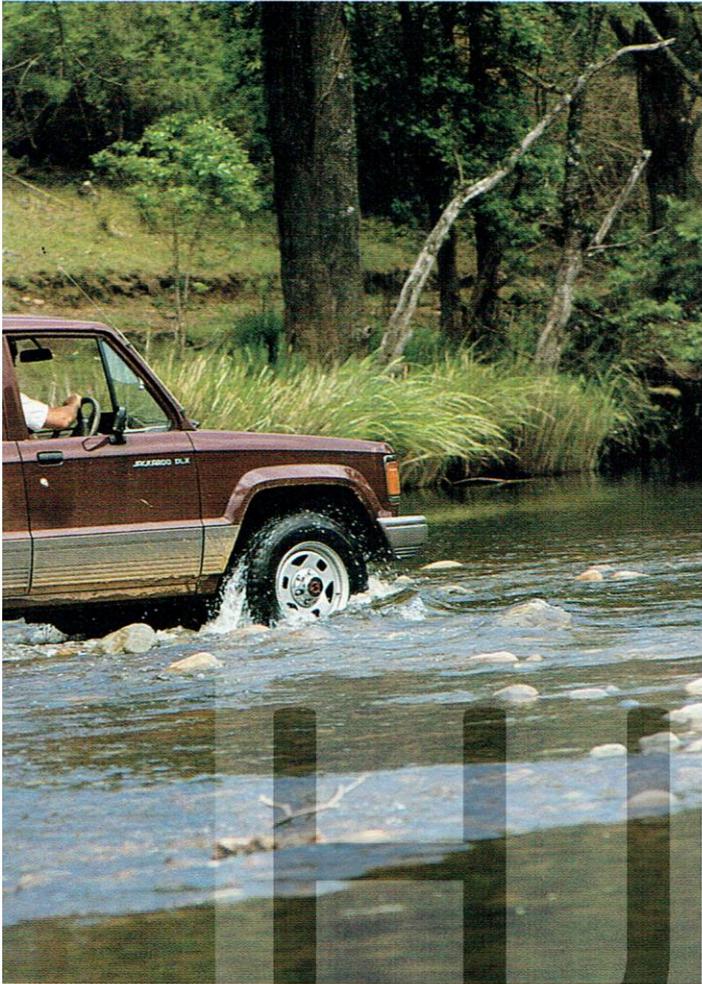


5. Four days of testing and the Jackaroo came away without a scratch.

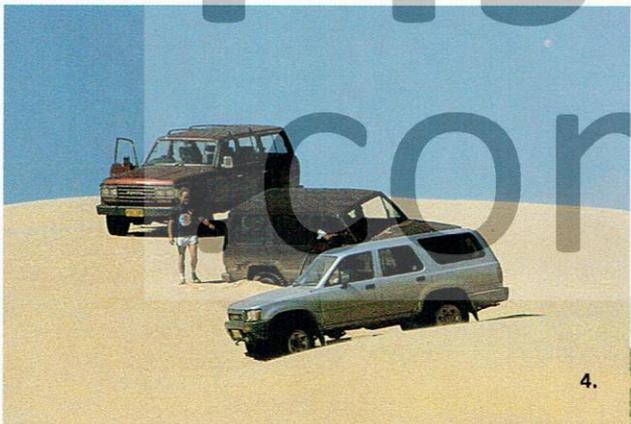
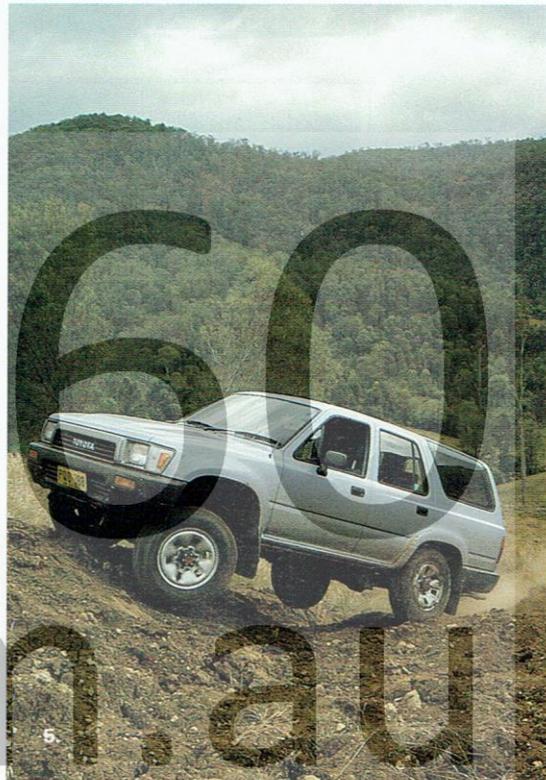


1. The Pajero leaned, arched and bounced but always found traction.
2. Rear seat passengers in the Jackaroo are in for a mouthful of knee.





3. Plenty of wheel travel in those leaf springs.  
 4. We finished off the Wagon of the Year testing at the Stockton sand dunes.



4.

5. The 4Runner takes a new direction as a 4WD. It is truly a sport wagon.  
 6. Given the final once-over, we were ready to declare a winner.



6.



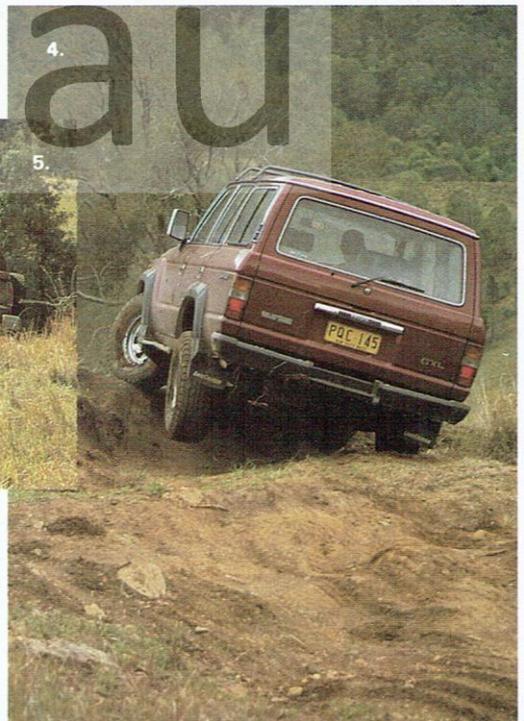
2.



3.



4.



5.



1. The 4-litre turbo diesel LandCruiser, as expected, didn't fare too well in our fuel consumption tests.
2. The Pajero's limited-slip rear diff is simply impressive.
3. All coil suspension is the 4Runner's greatest advantage.
4. There is no doubt that the GXL Cruiser still has plenty of 4WD ability.
5. The Jackaroo was the sleeper of the four. It did everything well but not spectacularly.

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It is worth noting that the LandCruiser is the only one of the four to have full floating axles. The others use semi-floating. If an axle is broken, the LandCruiser can be driven where the other can't. Even though the big Cruiser is at the end of its production life cycle, it is still very capable in the off-road.

The belly of the Pajero is fairly well protected with the exception of the exhaust. It too seems vulnerable in its low hanging position. Compared to the 4Runner's coil suspension, the Mitsubishi uses a 3-link system. Absent are upper trailing arms, and unlike the Toyota, the Pajero's coils are not aided by bump rubbers. Although the two make similar use of coil rear springs, their rides are not similar.

Ray Muddle describes the Pajero, "The rear suspension produces excessive bounce. This gives a feeling of instability when pushing the vehicle at slightly above average speeds. On rough surfaces the bounce and pitch produced from the rear result in passenger discomfort and the need for greater concentration by the driver to maintain control. The rear suspension also bottoms-out on moderate potholes at even slow speeds." On the other hand, "with the 4Runner there seemed to be an equal balance between the front suspension and rear suspension ride. For example, the Pajero feels good up front but is too spongy to the point of bouncing freely at the rear. The Jackaroo meanwhile is good up front but harsh or abrupt at the rear causing a bucking sensation representative of leaf spring suspension. The 4Runner felt balanced whether loaded or empty."

We sorted out the differences between vehicles at Mount Sea View. Our once tough test track got even tougher when it slipped downhill in a mud slide. In addition to the track driving, we drove the vehicles over extremely rough, dirt roads, muddy roads, potholed roads, bitumen, sand, water crossings, steep descents, city and highway, winding paved roads, winding dirt roads, and in the rain and dry during day and night. We weren't able to find snow.

As Norm Needham pointed out, we tested three classes of vehicles from two price ranges: the LandCruiser, an old design, fully optioned, traditional, strong, heavy 4WD; Pajero and Jackaroo, an old design price built, traditional and medium duty 4WD;

and 4Runner, an innovative new design, price built and medium duty 4WD.

The price tags start at \$30,000 and go beyond \$50,000. With all these variables to consider, we argued, discussed and finally decided on the Wagon of the Year.

Our choice is the Toyota 4-door 2.8-litre diesel 4Runner.

The 4Runner's forte is its design and direction. Considering the Jackaroo, Pajero and LandCruiser styling are severely aging, we believe the smooth lines of the 4Runner will become contemporary with Holden and Mitsubishi following the design direction set by Toyota. If you were to purchase a 4Runner tomorrow, it would still be fashionable in five years' time. This cannot be said for the Jackaroo and Pajero. In five years' time their military styling will show its age.

The 4Runner is by far the most improved when compared to last year's model. Four doors, coil suspension, improved performance from its diesel power plant, an all-steel body, entirely rethought interior, and split folding rear seat had three of the five testers making it their choice.

It is worth noting that our choice is the diesel 4Runner, not to be confused with the petrol 4Runner models. In bumper-to-bumper comparisons with the three turbo diesels, the naturally

aspirated 4Runner was slower and less powerful, but it revved freely from idle to red line, was quiet, and had plenty of power throughout its rev range. In 0 to 100 kph tests, the 4Runner finished dead last: LandCruiser - 19.5 seconds, Jackaroo - 22.9 seconds, Pajero 23.0 seconds, and 4Runner 27.2 seconds. Going against turbos, this was expected. Consumption tests put the Jackaroo first at 11.8 litres/100 km, 4 Runner at 12.4 litres/100 km, Pajero at 14.1 litres/100 km, and LandCruiser at 14.9 litres/100 km.

The 2.8-litre turbo Jackaroo proved to have, by far, the best matched engine to transmission combination. The Jackaroo's power band continued pulling through the 4000 rpm mark. The 5-speed transmission was fluid. It shifted easily with each gear of the 5-speed maximising the engine's output.

The Jackaroo fell flat however during slow speed 4WD conditions. The engine surges with the slightest throttle input. The problem is worsened by extremely poor pedal layout. The throttle pedal is far too low in relation to the brake pedal.

The same can be said for the LandCruiser. The pedals are poorly situated. No dead pedal to rest your left foot, and the throttle response is similar to the Jackaroo, but not as bad.

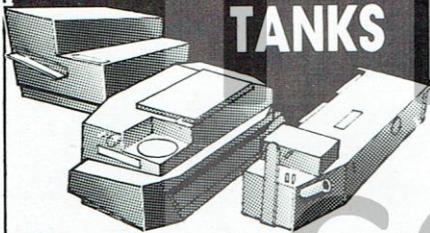
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*Right: More than once, the 4Runner's exhaust needed a good "bush" rebend. Below: Wheel-travel testing the Pajero. The 3-link rear-coil suspension provides plenty of wheel articulation.*



# TANKS

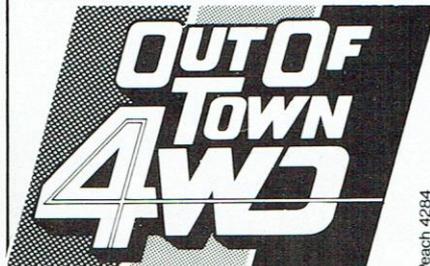
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The Pajero 2.5-litre intercooled was easy to drive at slow speeds. It has extreme torque at low revs with good throttle control.

The Pajero's shortcomings are noticed at the high rpm range. 3200 rpm is the beginning of its end. The engine stops pulling when revved higher. Fifth gear at 3200 equals 120 kph. Once the 5-speed transmission has warmed, it shifts easily and quietly. The shift lever is located laterally; therefore, shifting is done more from the hip.

The greatest differences with the four vehicles were their driving positions. We have grown accustomed to the upright seating position traditionally found in the Jackaroo and Pajero. In this position, front visibility is at its maximum. In the 4Runner the driver is put back in a reclining position sacrificing forward visibility. The interior ergonomics are designed to surround the driver. You feel a part of the 4Runner; whereas in the Jackaroo and Pajero, you feel as if you command

the car from a seated throne. The LandCruiser straddles the two approaches.

Perhaps the last aspect that swayed us toward the 4Runner was its split rear seat. Its advantage would come when carrying three people and a large load. For example a ski trip, skis on one side, the third passenger on the other. By far, the Jackaroo had the worst rear seat! Hard to ride in, hard to sit in, and hard to lay flat.

One point where the 4Runner flops is its totally illogical tailgate. On one extreme, the LandCruiser has the best tailgate in the business; on the other extreme there is the 4Runner's. For starters, there is no handle on the gate. Every time the tailgate is lowered, an electric window has to be dropped. If the electrics don't work, then the gate is useless. Because there is no handle, to open and close it you have to grip the top lip of the gate. If it is muddy or dusty, you get dirty and the paint gets scratched. Also, through time, where the gate is constantly handled the sheet metal will become dimpled. All Toyota had to do was use the proven tailgate system of the LandCruiser on the 4Runner, and we would have none of the hassles.

Taking the good and bad into consideration, we cast our ballot.

*Continued on P. 30*

*Right: The GXL LandCruiser was the most luxuriously appointed of the four, excellent sound system, electric windows and air conditioning.  
Below: It wasn't often that the Jackaroo needed a swift push in the butt. It's true, there's nothing you can't do in a Jackaroo.*



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<u>Fred Black</u>	<u>Norm Needham</u>	<u>Bryan Hunter</u>
4Runner	LandCruiser	4Runner
LandCruiser	4Runner	LandCruiser
Pajero	Pajero	Pajero
Jackaroo	Jackaroo	Jackaroo

<u>Ray Muddle</u>	<u>Todd Hallenbeck</u>
4Runner	LandCruiser
LandCruiser	4Runner
Jackaroo	Jackaroo
Pajero	Pajero

Each of us agreed that each of the four vehicles is pointed at an exact segment of the 4WD market. Norm Needham related each vehicle to horses:

"LandCruiser is a draft horse: big, strong, hard working over a long period of time. It doesn't require a lot of affection or special care and can take some abuse without suffering too much. Will work for just about anyone.

"4Runner is a trotter: lightweight, nimble and fast on flat ground. Smooth and precise in movement and must be

pushed to perform at its best. Fragile and easily injured. It needs to be in the hands of an expert who knows its capabilities and limitations. Needs considerable attention to keep it performing at its best.

"Pajero is a quarterhorse: another

*Below: Before hitting the beach, we aired down to 17 psi. We later dropped to 12 psi.*



working horse of medium weight but not happy in pulling harness. Nimble and manoeuvrable on broken ground with great recovery ability when it puts a foot wrong. Not the sort of horse everyone can control. Again its master must know its limitations.

"Jackaroo is a polo pony: built lightweight and manoeuvrable. Won't go a full game without the breaks. At its best when in competition. Its breeding helps it avoid injury through just enough strength and protection in the right places. Not very keen on rough ground but capable of handling it if asked."

If we had to choose one of the four to take on a quick 300-km trip, we answered: Bryan - 4Runner, Norm - LandCruiser, Fred - 4Runner, Todd - Jackaroo, and Ray - Pajero.

Fred summarises it this way: "My choice for the best value for the money and the most practical 4WD we tested would go to Pajero. If I were going to tow a van around Australia, I would take the Toyota HJ60 GLX wagon. If my wife required a second vehicle, I would buy the Jackaroo."

Each vehicle performs differently with different strengths and weaknesses, but with biases set aside and ballots tallied, the Toyota 4Runner is our choice for BUSHDRIVER's 1989 Wagon of the Year. 

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