

CAR TEST

DATSUN SAFARI 4x4 PICK-UP

Even in the rugged world of 4-by-4 off-road vehicles, the new Safari pick-up, from Datsun-Nissan, stands out in the crowd.

It is a big, brute vehicle styled in the current North American idiom, with a torque-based version of the 2,8-litre "six" engine used in the Datsun Laurel cars, high-standing off-road suspension, and great-hearted load capability.

It is an open-bodied sister to the handsome Safari wagon released earlier as a special import in South Africa, with a high standard of equipment. But it is more than just a glamour off-roader: tapping on the body panels shows that it is built strong, of heavy-gauge metal sheet, to stand up to hard work and rough treatment.

ENGINE AND TRANSMISSION

The engine is a low-compression version of the L-28 which accepts regular-

KEY FIGURES

Maximum speed	143,1 km/h
1 km sprint	38,4 seconds
Terminal speed	125,5 km/h
Fuel tank capacity	82 litres
Litres/100 km at 80	13,25
Optimum fuel range at 80	619 km
*Fuel Index	17,23
Engine revs per km	2 130
National list price	R11 995
(*Consumption at 80, plus 30%)	

grade fuel, yet gives 92 kW of beefy power to drive all four wheels. It has a high-capacity cooling system and twin-choke carburettor with heavy-duty air-cleaner, and drives through a four-speed gearbox with floor shift, plus a transfer ratio with separate shift which introduces the "donkey gear" range.

The front wheels have free-wheeling hubs which are activated by twist-caps on the wheels, while at rear there is a limited-slip diff to give extra traction under difficult conditions. Tyres are massive 700 x 16 light commercial for maximum grip, and giving well-balanced overall gearing through the 4,875 to 1 final drives. When the transfer ratio is introduced, its 2,074 to 1 ratio creates an overall 10,111 to 1 for virtually unstoppable low-speed performance.

As with most heavy-duty 4 x 4's, there is a fair amount of transmission noise, but the shifts work cleanly and efficiently.

COMFORT FACTOR

The Safari pick-up is intended for multi-purpose use — including leisure motoring and caravan/trailer towing —
CAR October 1982

The 2,8 litres of smooth muscle, and a high level of furnishing and equipment, make this a sophisticated workhorse.

and it has an interesting range of equipment. The cab is big and comfortable, seating three on a bench seat which is split asymmetrically for tip-up access to the tool/jack space behind the seats. The driving seat is actually individually-tailored for posture comfort, and inertia-reel seat belts are fitted. The handbrake is mounted on the transmission hump.

The cab layout is particularly attractive, with a modern, squared, modular theme. Instruments (including rev-counter red-lined at 6 000) are set in a module in front of the driver, while a central module houses radio and speaker/s. There are very good ventilation and heating systems, with copious flow.

A robust and useful grabrail is fitted on top of the fascia on the passenger side, but we missed a roof or pillar-mounted grabhandle on the driver side as an aid to stepping up into, and down from, this high-set vehicle.

LOAD AND RIDE

The Safari could probably be classed as a one-ton load vehicle, although its GVM figure of 2 859 kg suggests that it can cope with even more. It has four-bladed leaf suspension front and rear, with two shaped assist springs at each rear wheel for heavy loads, and we found that it took heavy loads manfully.

Our Test was concerned more with a quantitative and road evaluation than with a full off-road test, but a quick trial in sand and a brisk run across rocky veld produced the kind of capable handling one would expect of a vehicle of this calibre.

The steering is very low-geared (5,2 turns lock-to-lock) and the ride is harsh on black-top, with a particularly pronounced wheel rebound action.

The load area measures 354 m² gross, with ribbed floor, sturdy rope hooks and squared wheel arches, but its side walls are not double-skinned.

HIGH BONNET LINE

We found that the high and angular bonnet line (obviously aimed at the big North American market) restricts road vision somewhat on undulating terrain: going over a sharp dune, for instance, the driver (and passengers) can see only

sky and bonnet in those crucial split seconds on the crest!

There is some justification for the big bonnet, though, to house the range of engines used overseas in this rough-rider, including a big diesel. Even the 2,8-litre "six" used in South Africa fills the engine compartment fairly respectably. The engine has a manual choke (without pilot light), and a manual throttle control for specialised off-road work.

Good features are that the steering is well-damped and transmits good feel without any severe road shock, even over real rough stuff, and there are boosted disc brakes at front to cope with heavy work.

ROAD PERFORMANCE

This is a big and heavy vehicle, turning the scales at 1,6 tons, but it has plenty of flexible muscle and is surprisingly brisk in acceleration tests. It makes a bit of a juddery start as the big wheels bite (with just a touch of spin) and gets to 80 in 10,5 seconds, and 100 in 16,7. Working engine range is 5 200 revs, with 6 000 available in short bursts, and the gearshift is precise and clean-working.

A true 100 km/h is available in 3rd gear, and the level-road maximum came up as 143,1 km/h, which is quick by big four-wheel-drive standards.

The instruments are reasonably accurate: the speedometer overread by seven per cent and the odometer by 1,7 per cent, while the rev-counter underread by 3,6 per cent at the top end.

FUEL ECONOMY

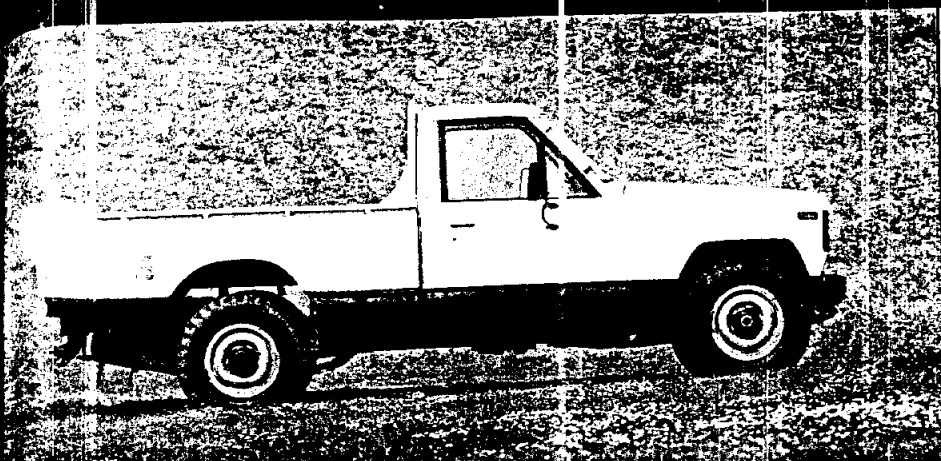
The Safari has dual electric fuel pumps set in an underfloor housing in a non-vulnerable area, which put out a high pressure through a recirculatory system.

No-one is likely to expect exciting fuel economy from a vehicle with the low gearing, considerable mass and high friction losses associated with a powerful 4 x 4, and we found that the Safari goes through its 82-litre tankful pretty quickly. In general test use we logged an overall 17,86 litres/100 km, and this comes out close to the Fuel Index of 17,23.

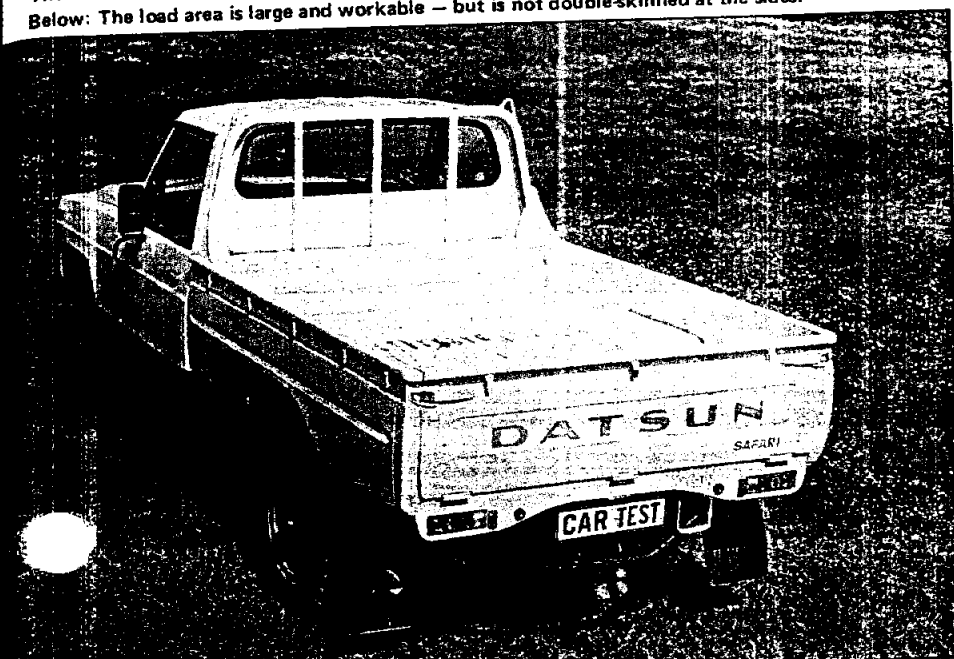
Specific consumption is 13,25 litres/100 km at 80, and 14,39 at 100 — in the region of 20 m-p-g on the open road. In acceleration and off-road work, of course, the figures could plummet.

SOUND AND BRAKING

There is a busy-machinery sound on the move, but actual mechanical noise levels are much lower than one would expect. We measured 79,0 decibels at



The vehicle stands high for good clearance, with short overhangs.
Below: The load area is large and workable — but is not double-skinned at the sides.

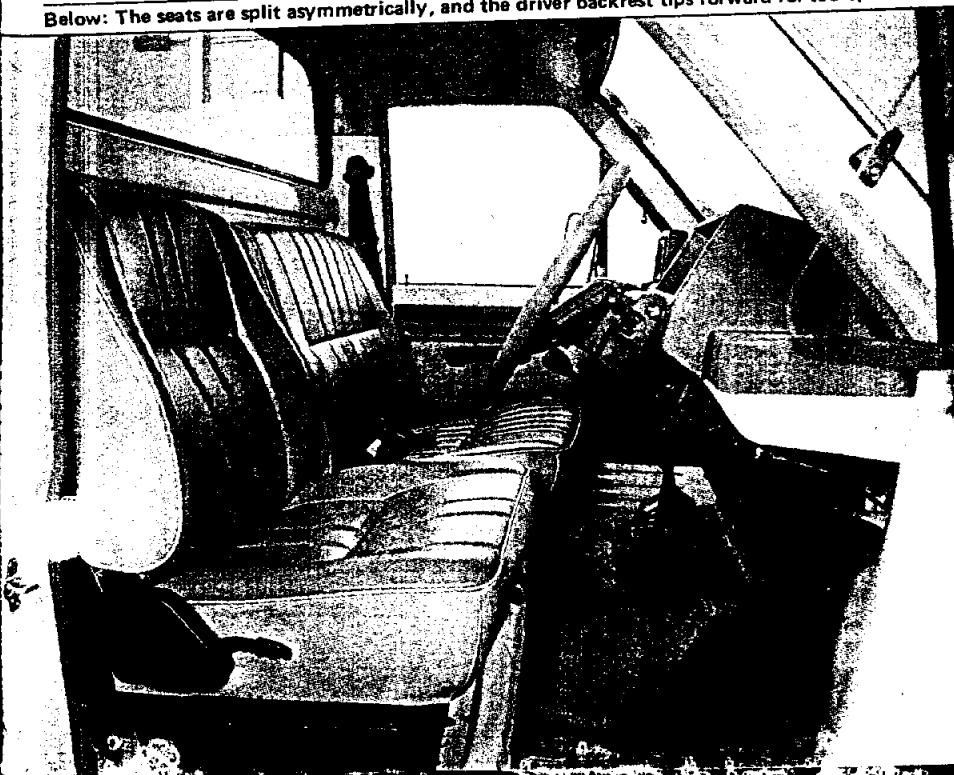


100 km/h inside the cab, but wind noise is high with a window open, and road rumble even higher.

The brakes started off fairly well under test in successive stops from 100

km/h, but a snatching left front wheel spoilt the averages. There was a bit of initial fade as the friction materials bedded-in, then stops steadied to a fair level of about four seconds.

Below: The seats are split asymmetrically, and the driver backrest tips forward for tool space access.



SPECIFICATIONS

ENGINE:
Cylinders six in line
(Model L-28)
Fuel supply Hitachi DAF 344-42
twin-choke carburettor
Bore/stroke 86,0/79,0 mm
Cubic capacity 2 753 cm³
Compression ratio 8,6 to 1
Valve gear o-h-v, single o-h-c
Ignition coil and distributor
Main bearings seven
Fuel requirement 93-octane Coast,
87-octane Reef
Cooling water; 10,8 litres

ENGINE OUTPUT:
Max. power I.S.O. (kW) 92
Power peak (r/min) 5 000
Max. usable r/min. 5 200
Max. torque (N.m) 195
Torque peak (r/min) 3 000

TRANSMISSION:
Forward speeds four, dual range
Gearshift floor
Low gear 3,519 to 1
2nd gear 2,517 to 1
3rd gear 1,449 to 1
Top gear direct
Reverse gear 4,181 to 1
Final drive 4,875 to 1
Transfer ratio 2,074 to 1
(10,111 to 1 overall)

Drive wheels rear, or all four

WHEELS AND TYRES:
Road wheels pressed steel
Rim width 5,5E
Tyres 7,00 x 16 light
commercial, 6 PR front, 8 PR rear
Tyre pressures (front) 240 to
260 kPa
Tyre pressures (rear) 240 to
500 kPa

BRAKES:
Front 295 mm discs
Rear 270 mm drums
Pressure regulation dual circuits
Boosting vacuum servo
Handbrake position on transmission
hump

STEERING:
Type recirculating ball
Lock to lock 5,2 turns
Turning circle 13,4 metres

SUSPENSION:
Front live axle
Type 3-blade leaf springs,
anti-roll bar
Rear live axle
Type 3-blade leaf springs,
2-blade assist springs

CAPACITIES:
Seating three
Fuel tank 82 litres
Load area 3,44 m²
Load rating 1 255 kg
(one ton)

The handbrake is set next to the driving seat and proved effective and easy to use.

TEST SUMMARY

The Safari is a very masculine vehicle, with some attractive features. It is good-looking, big, robust and well-equipped. It has an abundance of power, and is quite drivable, within the limits of hard suspension.

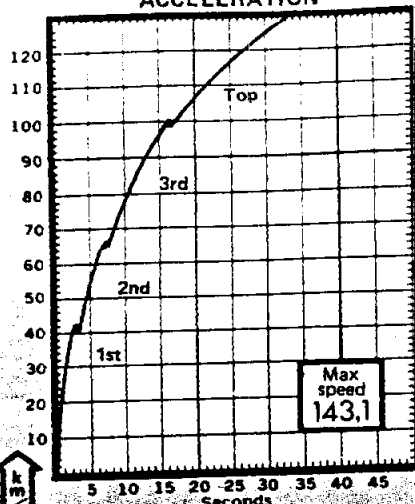
And it should be particularly good for serious off-road work, including such tasks as boat-trailer towing or load hauling. In this category, it's a strong and sophisticated workhorse.

(Graphs overleaf) ●

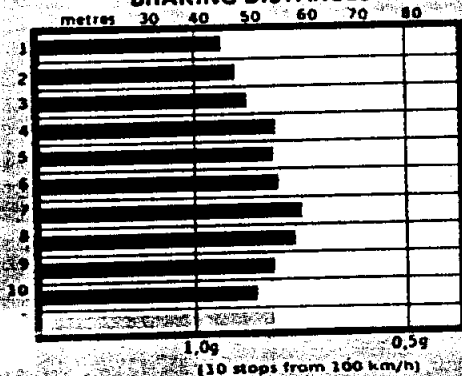
test

Datsun Safari 4x4
pick-up

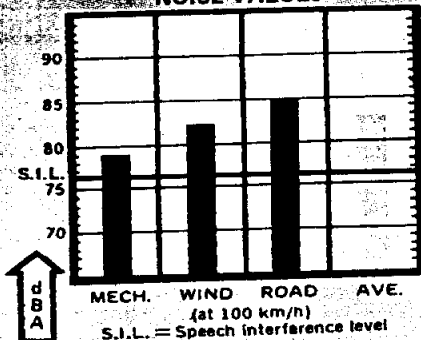
ACCELERATION



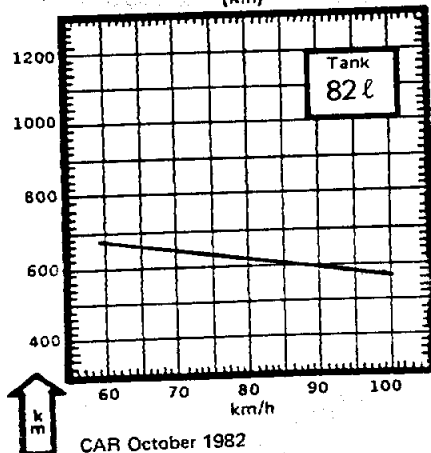
BRAKING DISTANCES



NOISE VALUES



CALCULATED FUEL RANGE



PERFORMANCE

PERFORMANCE FACTORS:
 Power/mass (W/kg) net 57.4
 Frontal area (m²) 3.11
 km/h per 1 000 r/min (top) 28.3

INTERIOR NOISE LEVELS:

	Mech	Wind	Road
Idling	54.5	—	—
60	73.0	—	—
80	76.0	79.0	81.0
100	79.0	82.5	85.0
Average dBA at 100	—	—	82.2

ACCELERATION (seconds):

0-60	5.8
0-80	10.5
0-100	16.7
1 km sprint	38.4

OVERTAKING ACCELERATION:

	3rd	Top
40-60	4.5	6.8
60-80	4.6	7.3
80-100	6.4	10.4

MAXIMUM SPEED (km/h):

True speed	143.1
Speedometer reading	153
Calibration:	

Indicated: 60 70 80 90 100	
True speed: 59 67.5 76 84.5 93	

FUEL CONSUMPTION (litres/100 km):

60	11.90
70	12.59
80	13.25
90	13.89
100	14.39

BRAKING TEST:

From 100 km/h	
Best stop	3.5
Worst stop	4.7
Average	4.17

GRADIENTS IN GEARS:

Low gear	1 in 3.2
2nd gear	1 in 4.5
3rd gear	1 in 6.7
Top gear	1 in 10.8

GEARED SPEEDS (km/h):

Low gear	40.2
2nd gear	65.6
3rd gear	97.7
Top gear	141.5
(Calculated at engine power peak — 5 000 r/min.)	

TEST CONDITIONS:

Altitude	at sea level
Weather	fine and mild
Fuel used	93 octane
Test car's odometer	8 952 km

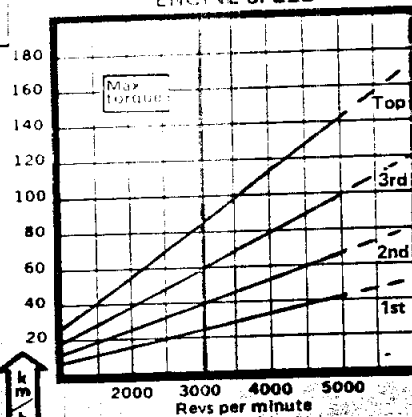
WARRANTY:

12 months or 20 000 km.

TEST CAR FROM:

Datsun-Nissan South Africa, Rosslyn, Pretoria.

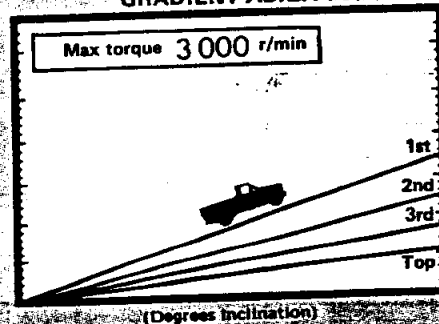
ENGINE SPEED



IMPERIAL DATA

ACCELERATION (seconds):
 0-60 m-p-h 15.6
MAXIMUM SPEED (m-p-h):
 True speed 88.9
FUEL ECONOMY (m-p-g):
 50 m-p-h 21.2
 60 m-p-h 19.9

GRADIENT ABILITY



CRUISING AT 100

Mech. noise level 79.0 dBA
 0-100 through gears 16.7 seconds
 Litres/100 km at 100 14.39
 Optimum fuel range at 100 570 km
 Braking from 100 4.17 seconds
 Maximum gradient (top) 1 in 15.4
 Speedometer error 7% over
 Speedo at true 100 107
 Tachometer error 3.6% under
 Odometer error 1.7% over
 Engine r/min at 100 3 535

STEADY-SPEED FUEL CONSUMPTION

