Why your next 4wd should be a Land Rover.

How the new Land Rovers got here.

Land Rover have come a long way since the first production model rolled off the assembly line. While the exterior of the new Land Rovers bears a passing resemblance to its pioneering predecessors, many years of constant development have brought changes to every single component.

The first Land Rover was unveiled at the Amsterdam Motor Show in 1948, where it shocked Rover purists and stunned everybody else.

With its 1.6 litre engine, aluminium body, and 4WD, it was half way between a tractor and a car. Such luxuries as doors, weather protection, windscreens and heating, were available only as optional extras.

But, at the very reasonable price of £450, the farmer's friend became an immediate success.

However, it wasn't long before the farmer's friend became everybody's friend and also something of a legend.

"The trouble is" designer Tom Barton once remarked, "people expect their Land Rover to do anything."

Year after year, Land Rover expeditions conquered the unconquerable: The Darien Gap between Central and South America; the Sahara Desert; the Amazon; and Africa from coast to coast.

Some 55 armies all around the world put Land Rover on their shopping list and adapted them for bomb disposal, gun platforms, troop

transport and for moving heavy artillery.

In Britain, the military fitted out a Land Rover with tank-like tracks which enabled it to do pretty well everything except climb walls.

A soil fertility company created a Land Rover hovercraft for spraying seed beds.

And British MP, Ernest Marples, even had a special bodied Land Rover caravan made for his honeymoon.

"We didn't realise just what the public would ask their Land Rover to tackle" admitted designer Tom Barton. "That explains why we've done so much work on engines and transmissions over the years. At first they were just very strong – now they're nearly bomb-proof."

The variety of demands caused the introduction of a variety of body styles.

Chassis cab, ute, tray top, hard top and station wagon, with a choice of engines.

The farmer's friend, though now a far cry from our pride of '48, still continues a tradition of doggedness, roughness and miserliness.

It's available with a sensible 4 cylinder engine, a 2.3 litre petrol or a 2.3 litre diesel for maximum economy.

But the pride of the new Land Rovers is the new 3.5.

With the transmission, and lightweight 3.5 litre aluminium engine of the Range Rover, this new Land Rover is not only absolute master of the rough, but also of the smooth, as a quick run down your local freeway will prove.

When challengers to Land Rover's supremacy first appeared, the factory

issued a statement promising, "When better Land Rovers are made, the Rover Company will make them".

The new Land Rover 3.5 is unquestionably the best of all.

When better Land Rovers are made, the Rover Company will make them.

Over the past 3 decades, we've produced nearly 1½ million Land Rovers. And while not a single component or casting from the first Land Rover is used in the Series 3 machines, many of the design principles employed then still hold true today.

It's a constant source of wonder to us that the many Land Rover imitators have not yet grasped the primary requirement of practical off-road vehicles.

They must endure.

Aluminium or steel?

From the beginning Land Rover has had aluminium alloy body panels. The alloy used is tougher and stronger than pure aluminium and extraordinarily resistant to corrosion, even when panels are torn or punctured. This means that, although damaged sections can easily be replaced, they needn't be, so long as vehicle performance is not affected.

It seems to us to be foolish indeed to put a body that rusts onto a vehicle designed to go where Land Rovers go.

Yet our imitators persist with steel body panels.

The use of aluminium has other advantages, no less considerable.

The bolt-on construction method allows a variety of body arrangements.

There is also a substantial weight saving which effectively lowers the vehicle's centre of gravity, and improves load carrying beyond the capacity of its steel-bodied bigger-engined competitors.

But, most importantly, the lighter body means there's less weight to cart around which in turn means you'll use less fuel.

The box-section chassis.

From the beginning, the Land Rover has had a box-section chassis.

When you think about it, a box-section chassis is only common sense.

The inherent strength and rigidity of box-section chassis-members give them enormous resistance to twisting and bending stresses.

The Land Rover box-section chassis is not only scrolled, but has the extra strength of a continuous seam weld.

This prevents the accumulation of mud and water in the chassis-members and provides vital protection against rust.

Perhaps chassis construction isn't the most critical factor in selecting a 4WD, but it should nonetheless play an important part in your decision making.

Strength.

Land Rovers have occasionally been criticised for being more robust than perhaps they need be.

True, not everybody will make the sort of excessive demands on their Land Rover as, say, the Swiss who use 4-cylinder Land Rovers as timber jinkers in the alps.

But it's better, we feel, to make you a 4WD that's tougher than the task rather than the other way around.

Indeed, it's not uncommon for Land Rovers to be used to pull their competition out of trouble.

This quest for strength and reliability shows in endless detail and technical niceties.

Steering connections are split-pinned once the nuts are adjusted.

The ends of the second leaf in the multi-leaf springs are wound around the edge of the eye of the main spring to support the vehicle should the main spring fail.

Another important detail about our front springs is that the spring shackles are on the rear of these springs. (Other 4WDs have their spring shackles on the front of these springs.)

Our way, bumps are flattened, not accentuated. Making Land Rover handle with more stability both off and on the road.

Further, a fully-floated axle shaft is used to minimise stress.

This means you're less likely to break an axle, which is always a threat in 4WDs.

The floating axle shaft also increases the load carrying capacity.

This attention to detail prompted a mining executive to comment:

"Out here there are three kinds of country. The worst kind, you can only get into by helicopter. The easy kind anybody can get into in any 4WD. And then there's everything in between, which belongs exclusively to the Land Rover."

That, we feel, says it all.

Why your next 4WD should be a Land Rover 3·9 diesel.

The new Land Rover 3.9 Diesel is the most powerful 4WD Diesel Australia's ever seen.

Its 3.9 litre Isuzu engine was originally designed to haul a 4 tonne payload.

Now it develops a gutsy 72kW of power under the familiar front of the world's toughest 4WD. And enough torque to easily haul a 1.3 tonne load up a mountain.

When it comes to dependability you can count on it.

This engine was built as a truck power unit, with features that include chromed cylinder liners, heavy duty componentry and long service intervals.

And its fuel efficiency puts a lot of other 4WD's to shame.

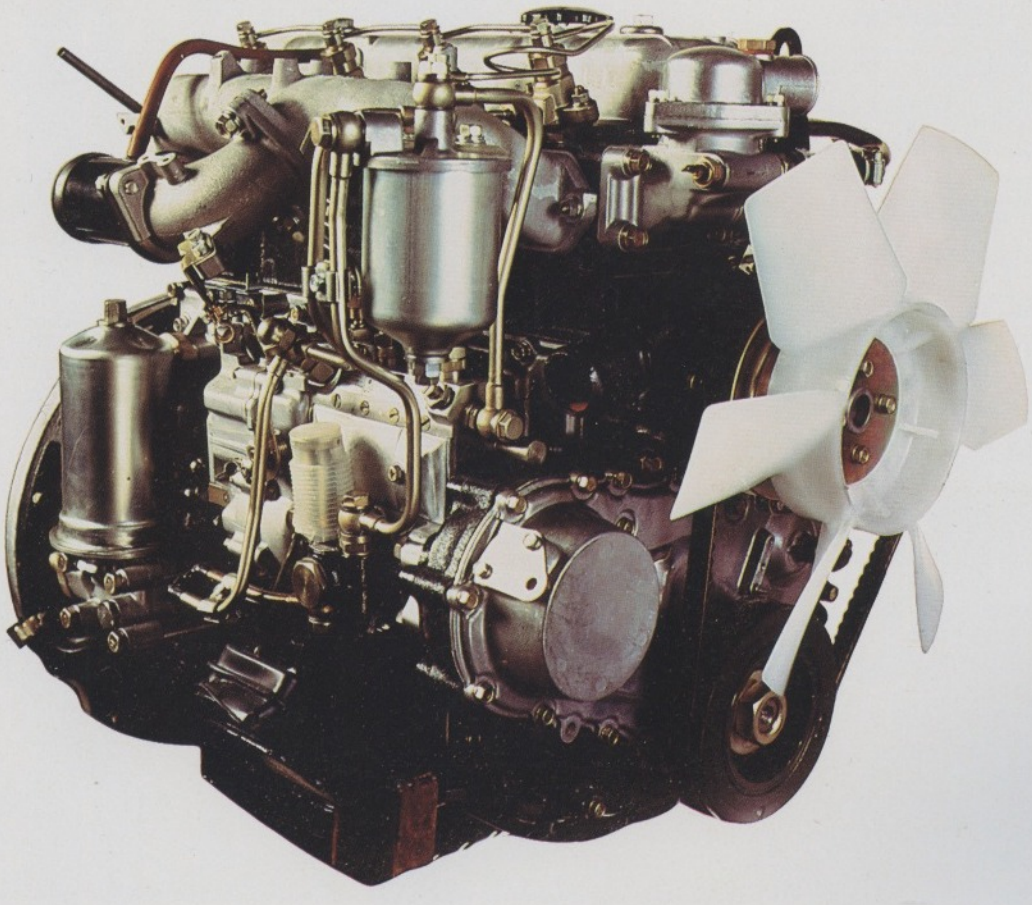
Fifteen litres per 100km on the city cycle means that the Land Rover 3.9 is suitably cost efficient.

On the highway it does an amazing 9.3 litres per 100km (30mpg).

Land Rover's handling is also quite brilliant. And something you should experience for yourself.

It now has the famous Range Rover permanent 4WD System.

Which, combined with the compression ratio of 17:1, provides the ultimate in engine braking on all four wheels.



It allows you to drive off the road, without stopping to engage 4WD. And gives you an improved turning circle over previous models.

Of course there are some aspects of the 3.9 Isuzu Land Rover which are not new.

The aluminium alloy body and box section chassis are the same as the traditional Land Rover.

The body doesn't rust even if scratched or holed.

And the box section chassis is less likely to bend or twist under stress.

It's worth mentioning that in Australia there are Land Rovers still working after 30 years of tireless service.

So you can be sure the 3.9 Diesel will still deliver, even when the others are dead and gone.

Why your next 4WD should be a Land Rover 3·5.

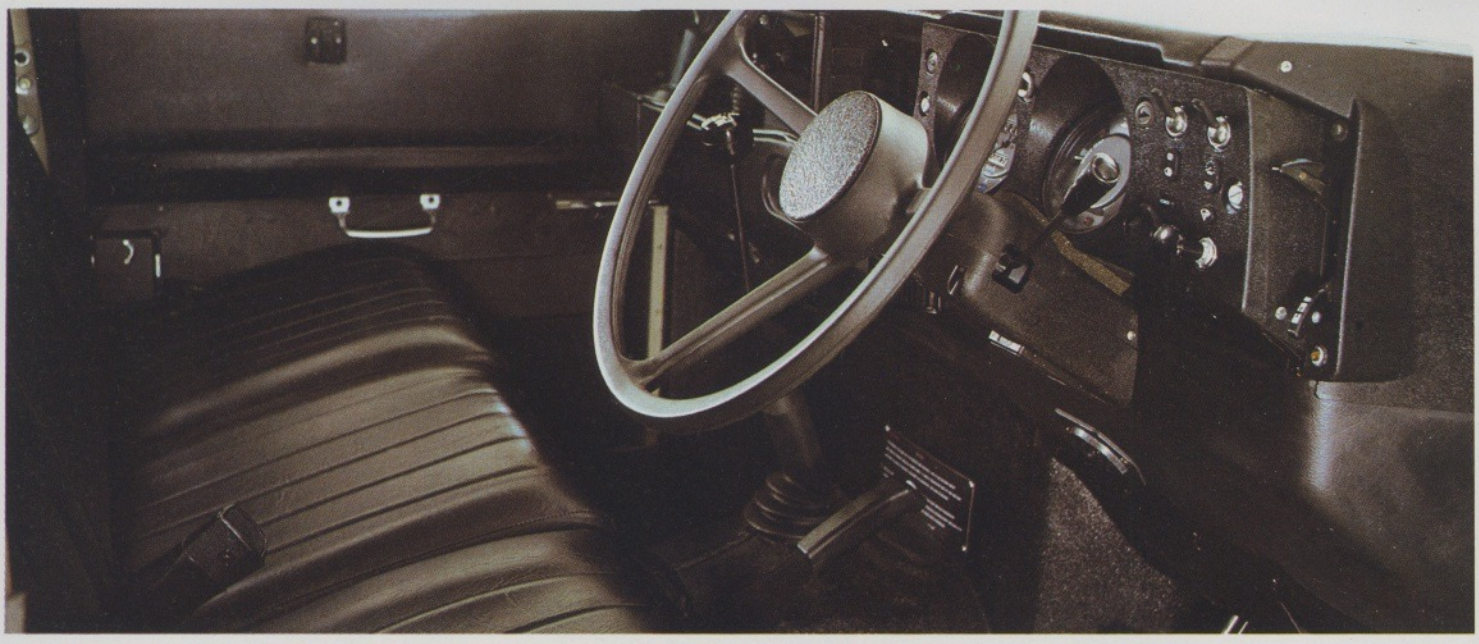
While history and experience have provided ample proof of Land Rover's off-road superiority, the new Land Rover 3.5 also demonstrates outstanding capabilities on the road.

It has the same 3½ litre, lightweight, aluminium engine that drives the fast touring Range Rover, and the same permanent 4WD transmission.

It can cruise all day at speeds up to 130 kph with such steadiness and neutral steering characteristics that 'Overlander' magazine was prompted to write: "Stepping back into a Toyota afterwards left one feeling slightly insecure".

However, the Land Rover 3.5 is not simply a Range Rover in workmen's clothing.

The incredible motor has been specially developed to generate its maximum torque at a low 2000 rpm,



which means that the motor is hardly working when its pulling hardest.

The result of such high pulling power at low revs is the ability to tow or carry heavy loads at speed without frequent gear changing; the ability to conquer incredibly steep grades; and the ability to cover long distances over rough terrain without engine strain.

Lower gearing also gives the Land Rover 3.5 a mighty advantage when the going gets really tough.

First gear, low range in the latest Toyota station wagon is 39.04:1, the Nissan MQ Patrol 36.13:1 with the new Land Rover 3.5 lowest of the lot at 47.81:1.

When the going becomes nigh impossible, the Land Rover 3.5 has a diff lock which lets you distribute equal power to both axles for optimum traction, at the flick of a lever.

So great is the off-road capability that 'Overlander' concluded that "...first high was capable of crawling speeds comparable to first low in other 4WDs." And again, "Time and time again the performance in rough terrain staggered us".

But while the Land Rover 3.5 is unquestionably one of the fastest, most powerful, most comfortable and quietest Land Rovers ever built, it remains true to its original concept of a practical working vehicle.

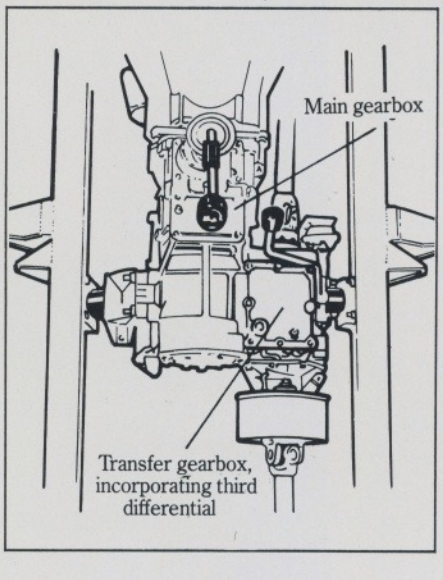
The extra power is a great asset to the high payload rating.

Further, the efficiency and lightness of the engine, coupled with the lightness of the aluminium body, gives a power-to-weight ratio which ensures excellent fuel economy.

Perhaps the best summation of the new Land Rover 3.5 comes from an official evaluation prepared by officers of the Sultan of Oman's Armed Forces.

"The Land Rover V8 is far more stable at speeds, uses less fuel and carries a greater payload for a greater distance than the Land Cruiser."

So there.



Why your next 4WD should be a Land Rover 2·3 diesel.

Other makers of 4WDs also offer diesels.

But the important point to bear in mind is that only Land Rover offer the advantages of a diesel with the advantages of a Land Rover.

While diesel motors cost more initially, they're more than justified by long term economies.

However, given that diesel 4WDs are bought for long term economies, we fail to see the logic in putting long lasting engines into vehicles which, unlike the Land Rover, are more susceptible to rust.

If fuel costs are a major factor in your decision, the Land Rover 2.3 could hardly be more appropriate.

And on this score, the Land Rover Diesel is perfectly suited to the times.

Its 2.3 litre diesel is not only economical but delivers its maximum torque at particularly low revs: 137 Nm at 1800 rpm.

This, coupled with its low gearing, gives the Land Rover diesel an enormous off-road ability.

The diesel Land Rover is available in a range of body styles – chassis cab, ute, tray top and hard top.

Choose carefully, because whatever you choose will be with you a long time.

Why your next 4WD should be a Land Rover 2·3.

More than half the total Land Rovers sold in Australia over the past 30 years are still going strong.

More, we suspect, are still going strong tucked away in banana plantations and the like, never to see the light of a Motor Registry Office.

The Land Rover 2.3, in a somewhat more highly developed form, is built on the foundations of the Land Rover legend.

The motor is designed to start at a cool −30° and still deliver full torque at searing outback temperatures.

With torque of 159 Nm at 2000 rpm, it delivers all the punch you need but, more importantly, does it economically.

And in these days when petrol can be a problem, a small engine can be a big advantage.

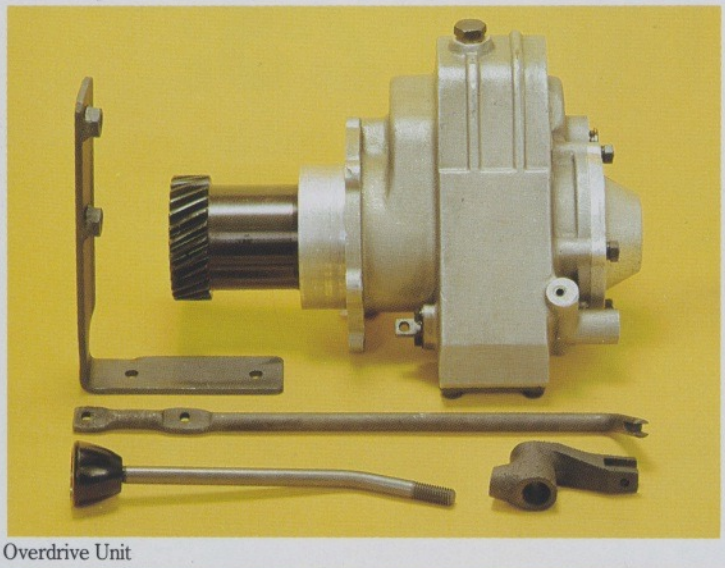
But when you compare the Land Rover 2.3 with other makes, be careful not to overlook the Land Rover advantages which are exclusive to Land Rover.

The non-rusting aluminium alloy body. The box section steel chassis which is considerably tougher and far less likely to rust out than conventional U-section chassis. The lower centre of gravity. And three power take-offs.

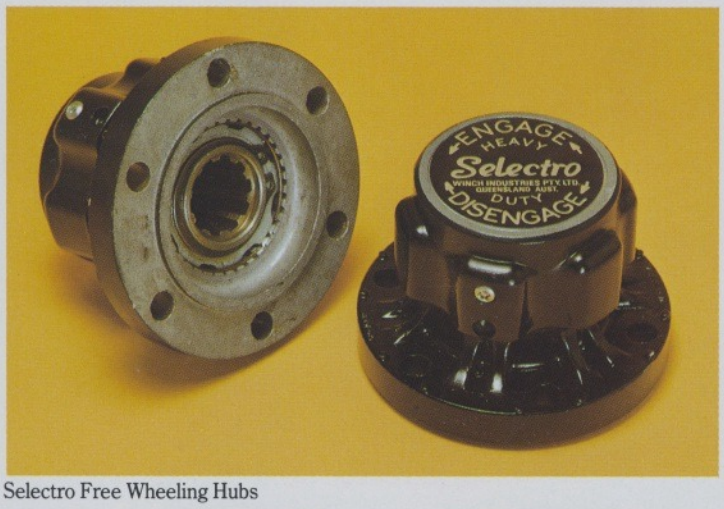
In short, there's a simple answer to why no other 4WD has a reputation to match Land Rover's.

No other 4WD can match Land Rover.

Accessories and options.

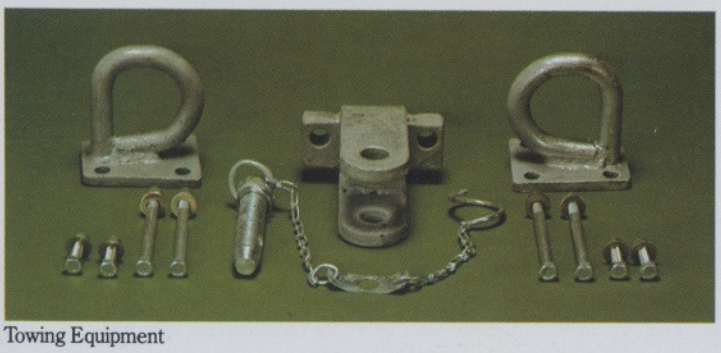


Overdrive Unit

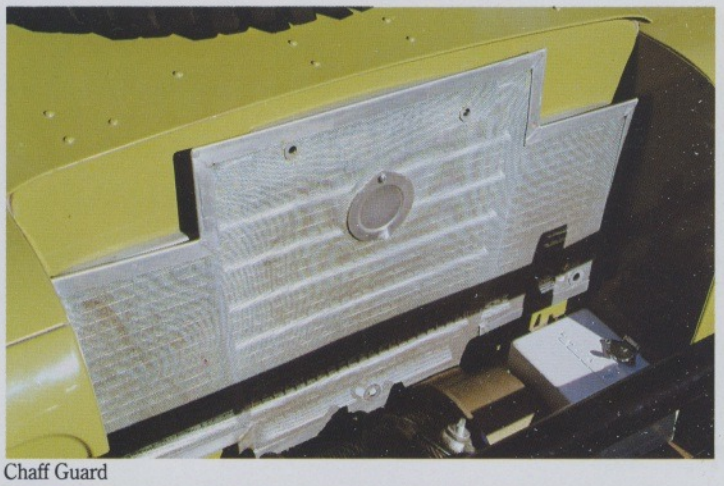


Selectro Free Wheeling Hubs

Fairey Free Wheeling Hubs

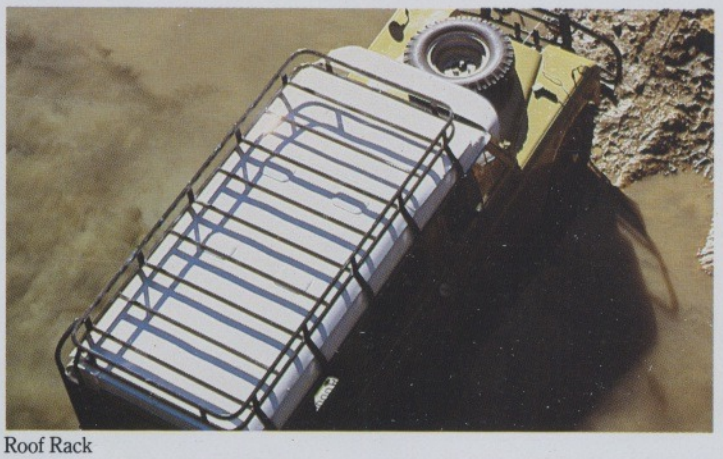


Towing Equipment

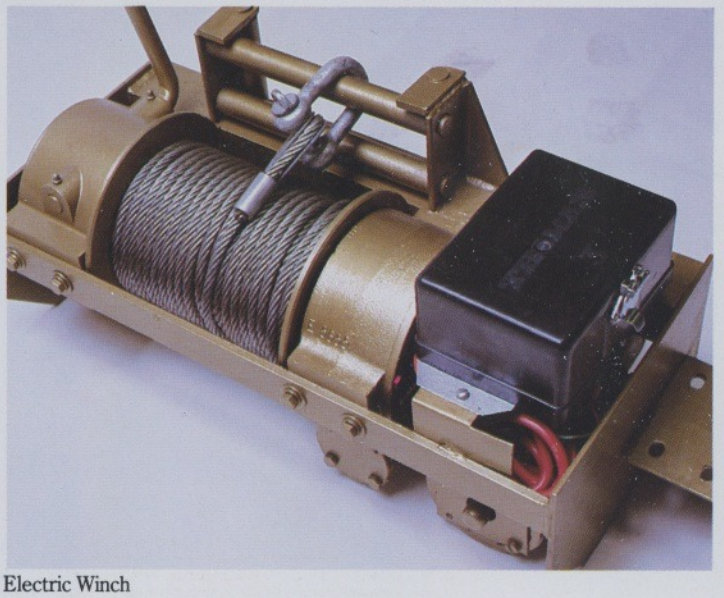


Chaff Guard

Bull Bar "Game"



Roof Rack



Electric Winch

Winches – electric & PTO
Bull bars
Driving and fog lights
Towing equipment –
towing jaws & pins
towing brackets & balls
lifting & towing rings
Floor mats & gearbox covers
Power take off units –
centre mechanical
rear mechanical
bottom mechanical
bottom hydraulic
Overdrive
Freewheeling hubs
Tropical roofs
Roof racks
Folding steps
Weather shields
Sun visors
Auxiliary instruments –
tachometers
ameters
oil pressure gauges
oil temperature gauges
battery condition indicator gauges
Auxiliary fuel tanks
Aeon rubber springs
Bonnet locks
Fuel cap locks
Hand throttles
Chaff guards
Fly screens
Locking wheel carriers

Over the past 3 decades, the Land Rover has been just about everywhere it's possible for a vehicle to go, and done just about everything it's possible for a vehicle to do.

So it should come as no surprise to learn that Land Rover has a range of options and accessories unmatched by any other 4WD.

How to four wheel drive in a book.

We've told you why you should buy a Land Rover.

Now let us tell you how to get the best out of it.

Read the book "How to Four Wheel Drive".

"How to Four Wheel Drive" is essential reading for any off-road enthusiast.

It'll tell you all about proper driving techniques, emergency repairs, recovery and winching, essential equipment, and even how to survive the desert.

The "How to Four Wheel Drive" book is available from your nearest Land Rover dealer.

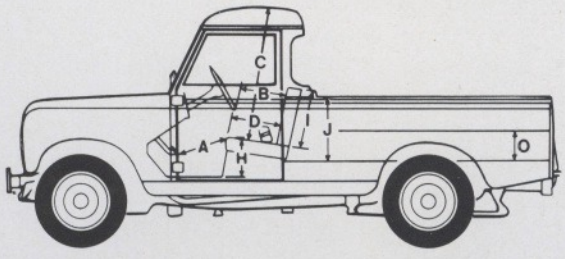
And it costs only $2 to come a little closer to the experts.

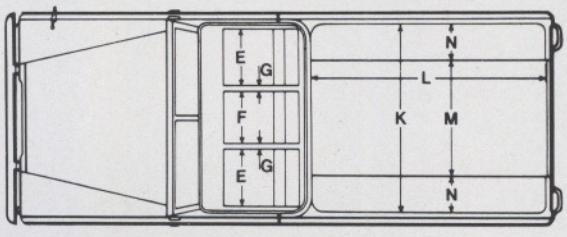
What your next Land Rover will look like.

SPECIFICATIONS.

Land Rover 3.9D stage I 109 Wheelbase.

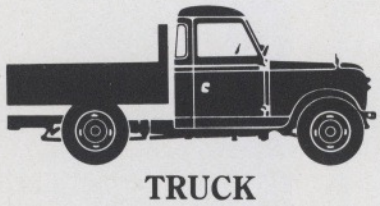
NOMINAL CHASSIS DIMENSIONS





		mm	ins.
	Wheelbase	2768	109.00
	Track	1334	52.50
	Overall length	4445	175.00
	Overall width (over hinges)	1680	66.00
	Overall height of cab	2006	75.50
	Overall height with hood	1980	78.00
	Ground clearance	209	8.25
A	Front cushion to accelerator pedal	468	17.25
B	Front squab to steering wheel	350	14.50
C	Headroom front seat (uncomp.)	991	39.00
D	Front to rear of front cushion	420	16.00
E	Width of front cushion	460	18.00
F	Width of front centre cushion	380	15.00
G	Width between front seats	25	1.00
H	Top of front cushion to floor	380	14.50
I	Front squab height	540	17.00
J	Height of body sides	495	19.50
K	Width of body interior	444	56.87
L	Length of body interior	1850	72.75
M	Interior body width between wheel boxes	920	36.25
N	Width of wheel boxes	254	10.00
O	Height of wheel boxes	229	9.00

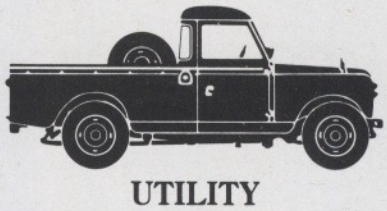
HARDTOP



TRUCK

CHASSIS CAB

STATION WAGON



UTILITY

ENGINE

Diesel
No. of Cylinders — 4
Bore — 102 mm
Stroke — 118 mm
Capacity — 3856 c.c.
Compression Ratio — 17:1
Max. Power — 72 kW @ 3200 R.P.M.
Max. torque — 255 Nm @ 1900 R.P.M.

LUBRICATION SYSTEM

Pressurised by submerged gear type pump. Red warning light on instrument panel when pressure drops below 69 kPa. Filtration through gauze intake pump filter in sump plus external full flow filter. Oil capacity 9.5 litres including 0.5 litre in filter.

OIL COOLER — Plate tube type located on right hand side of the cylinder block cooled by engine cooling water.

Land Rover 3.9D stage I 109 Wheelbase.

COOLING SYSTEM
Type — pressurised with centrifugal pump wax type thermostat (82°C opening), expansion tank and cross flow radiator.
Fan type — 6 blade plastic (406 mm).
Capacity — 12.5 litres.

FUEL SYSTEM
Fuel injection Bosch A type inline pump (variable speed controlled governor). High pressure mechanical pump with hand primer. Bosch 4 hole injector nozzle with separate cold start glow plugs.
Fuel Tank — capacity 68 litres.

CLUTCH
Single dry plate diaphragm spring type. 275 mm diameter. Hydraulic operation.

MAIN GEARBOX
Four speed and reverse. Synchromesh on forward gears.

TRANSFER GEARBOX
2 Speed reduction on main gearbox output. Front and rear drive permanently engaged via a lockable 3rd differential. Differential locked by a vacuum control from a heel board mounted switch. Two speeds controlled by a speed change lever with high/neutral/low positions.

PROPELLER SHAFT
Open type 50 mm diameter. Front shaft with double hook joint at gearbox end.

AXLES
Front — Spiral bevel type with enclosed constant velocity joints. Ratio 3.5385:1.
Rear — Hypoid bevel fully floating. Ratio 3.5385:1.

OVERALL RATIOS
(FINAL DRIVE)

	High Transfer	Low Transfer
Top	3.94:1	11.75:1
Third	5.93:1	17.68:1
Second	9.65:1	28.76:1
First	16.03:1	47.81:1
Reverse	14.44:1	43.05:1
Diferential Ratio (both axles)	3.54:1.	

FRAME
Welded twin channel construction side members with fabricated box section cross members, black enamel dipped.
Channel section galvanised front bumper.

SUSPENSION
Semi-elliptic, dual rate rear road springs. Hydraulic double acting telescopic shock absorbers.

STEERING
Recirculating ball, worm and nut. 432 mm diameter steering wheel. No. of turns lock to lock — 4.7.

BRAKES
Footbrake — Hydraulic drum brakes 279.4 mm dia. drums, servo assist., dual line system. Frictional lining area 1432 cm^a.
Handbrake — Mechanical, internal expanding drum brake on transfer box output shaft.

WHEELS AND TYRES
Ventilated disc wheels. Size 5.50J x 16 in.
Standard tyre and tube size: 7.50 x 16 in x 8 ply.
Standard tread: dual purpose (road and cross country).
Special purpose tyres are available as optional extras.

ELECTRICAL SYSTEM
Negative earth, 12 volt.
Battery — 80 AH.
Alternator — Vacuum Pump — 40 amp.
Windscreen wiper and washer — two speed twin arms and blades with rack and pinion final drive. Electric washers.
Horn — Windtone horn push on steering column stalk.
Heater/demister — fresh air type with two speed fan control.

INSTRUMENTS & CONTROLS
Large diameter speedometer with total km recorder and tripmeter, incorporating oil pressure, headlamps main beam and cold start warning lights. Panel lights illuminate speedometer, water temperature and fuel gauge.
Heater/starter/auxiliary switch operated by key.
Toggle switch for head, side and tail lamps. Engine stop control. Dip switch operated by steering column switch.

LIGHTING
Headlamps. Side lamps. Tail lamps — twin units having double fialment stop/tail bulbs. Number plate illumination. Reversing lamps.

BODY
All body panels are non-corrosive light alloy and all external steel fittings are galvanised.

CARRYING CAPACITY

	HT	UTE	CC	SW	AL Tray	Steel Tray
Tare (kg)	1860	1750	1620	1980	1730	1796
GVM (kg)	3060	3060	3060	3060	3060	3060
GCM (kg)	6750	6750	6750	6750	6750	6750
Payload (kg)	1200	1310	1440*	1080	1330	1264

*Payload for cab/chassis includes weight of body to be fitted.

OPTIONAL EQUIPMENT
A wide range of optional equipment is available for all models.

IMPORTANT
The specification of this model is correct at March 1982 but as development is a continuing process, please check details with your dealer.
Leyland Australia is constantly seeking ways to improve the specification, design and production of its vehicles and alterations take place continually. While every effort is made to produce up-to-date literature, this brochure should not be regarded as an infallible guide to current specifications, nor does it constitute an offer for sale of any particular vehicle.
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LAND ROVER

SPECIFICATIONS.

Land Rover 109 Wheelbase, series III 3-5.

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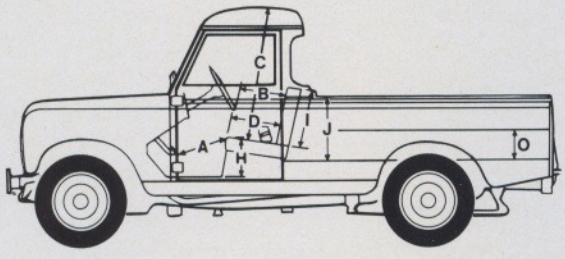

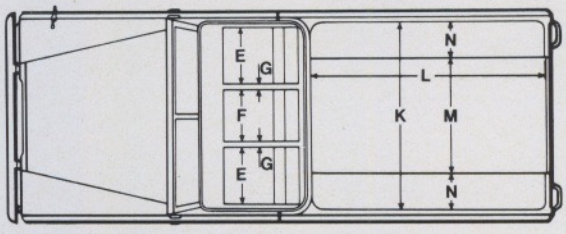

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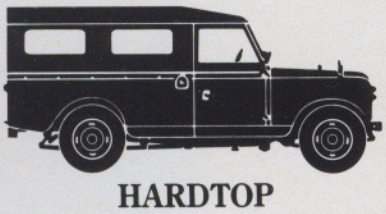
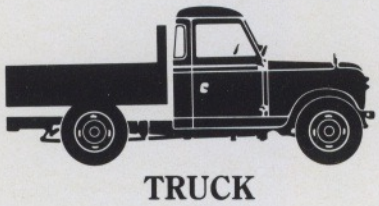


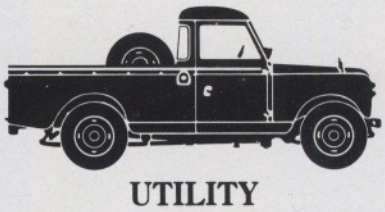
HARDTOP



TRUCK

CHASSIS CAB

STATION WAGON



UTILITY

ENGINE
3.5 Petrol
No. of Cylinders — 8
Bore — 88.9 mm
Stroke — 71.12 mm
Capacity — 3528 c.c.
Compression Ratio — 8.13:1
Max. Power — 69 kW @ 3500 R.P.M.
Max. torque — 230 Nm @ 2000 R.P.M.

LUBRICATION SYSTEM
Pressurised by external pump on right-hand side of block. 206-275 kPa at 2400 R.P.M.
Red warning light on instrument panel when pressure drops below 69 kPa. Filtration through gauze intake pump filter in sump plus external full flow filter.
Oil capacity 5.68 litres including 0.568 litres in filter.

Land Rover 109 Wheelbase, series III 3-5.

COOLING SYSTEM
Type — pressurised with centrifugal pump, viscous coupled fan, wax type thermostat (80°C opening), expansion tank and cross flow radiator.
Fan type — 7 blade plastic (406 mm).
Capacity — 11.75 litres.

FUEL SYSTEM
Twin Zenith/Stromberg C.D.S.E. carburettors. Cold start control — variable jet size with manual control and amber warning light on dash.
Bendix electric fuel pump with maximum working pressure — 23-34kPa.
Fuel Tank — capacity 68 litres.

CLUTCH
Single dry plate diaphragm spring type. 267 mm diameter. Hydraulic operation.

MAIN GEARBOX
Four speed and reverse. Synchromesh on forward gears.

TRANSFER GEARBOX
2 Speed reduction on main gearbox output. Front and rear drive permanently engaged via a lockable 3rd differential. Differential locked by a vacuum control from a heel board mounted switch. Two speeds controlled by a speed change lever with high/neutral/low positions.

PROPELLER SHAFT
Open type 50 mm diameter. Front shaft with double hook joint at gearbox end and gaiter fitted to sliding coupling.

AXLES
Front — Spiral bevel type with enclosed constant velocity joints. Ratio 3.5385:1.
Rear — Hypoid bevel fully floating. Ratio 3.5385:1.

OVERALL RATIOS
(FINAL DRIVE)

	High Transfer	Low Transfer
Top	4.7281:1	11.7497:1
Third	7.1154:1	17.6822:1
Second	11.5745:1	28.7634:1
First	19.2390:1	47.8101:1
Reverse	17.3253:1	43.0538:1

Differential Ratio (both axles) 3.54:1.

FRAME
Welded twin channel construction side members with fabricated box section cross members, black enamel dipped.
Channel section galvanised front bumper.

SUSPENSION
Semi-elliptic, underslung road springs. Hydraulic double acting telescopic shock absorbers.

STEERING
Recirculating ball, worm and nut. 432 mm diameter steering wheel. No. of turns lock to lock — 3½.

BRAKES
Footbrake — Hydraulic drum brakes 279.4 mm dia. drums, servo assist., dual line system. Frictional lining area 1432 cm^2.
Handbrake — Mechanical, internal expanding drum brake on transfer box output shaft.

WHEELS AND TYRES
Ventilated disc wheels. Size 5.50J x 16 in.
Standard tyre and tube size: 7.50 x 16 in x 6 ply.
Standard tread: dual purpose (road and cross country).
Special purpose tyres are available as optional extras.

ELECTRICAL SYSTEM
Negative earth, 12 volt.
Battery — 68 AH.
Alternator — 18 A.C.R.
Windscreen wiper and washer — two speed twin arms and blades with rack and pinion final drive. Electric washers.
Horn — Windtone horn push on steering column stalk.
Heater/demister — fresh air type with two speed fan control.

INSTRUMENTS & CONTROLS
Large diameter speedometer with total km recorder and tripmeter, incorporating oil pressure, headlamps main beam and cold start warning lights. Panel lights illuminate speedometer, water temperature and fuel gauge.
Combined ignition/starter switch operated by key.
Toggle switches for head, side and tail lamps. Dip switch operated by steering column control stalk.

LIGHTING
Headlamps. Side lamps. Tail lamps — twin units having double filament stop/tail bulbs. Number plate illumination. Reversing lamps.

BODY
All body panels are non-corrosive light alloy and all external steel fittings are galvanised.

CARRYING CAPACITY

	Petrol Models			
	HT	UTE	CC	SW
TARE (kg)	1650	1570	—	1770
GVM (kg)	2760	2760	2760	2760
GCM (kg)	6750	6750	6750	6750

OPTIONAL EQUIPMENT
A wide range of optional equipment is available for all models.

IMPORTANT
The specification of this model is correct at March 1981, but as development is a continuing process, please check details with your dealer.
Leyland Australia is constantly seeking ways to improve the specification, design and production of its vehicles and alterations take place continually. While every effort is made to produce up-to-date literature, this brochure should not be regarded as an infallible guide to current specifications, nor does it constitute an offer for sale of any particular vehicle.
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LAND ROVER

Why your next 4wd should be a Land Rover.