

# LAND ROVER 110

## Heavy Duty 6 x 6



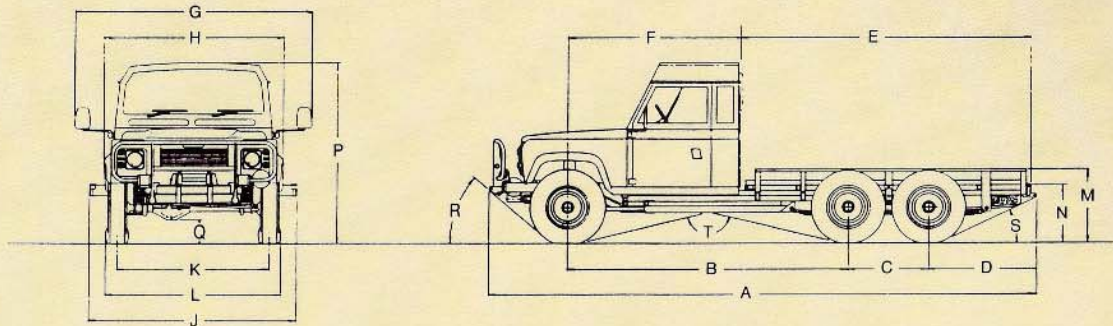
# LAND ROVER 110 Heavy Duty 6 x 6

ENGINE		ISUZU 4BD1 T	CHASIS & SUSPENSION		HEAVY DUTY 6 X 6
Type	4 Cylinder turbocharged direct injection diesel		Frame	Hot dip galvanised tubular steel frame with welded box section crossmembers. Pressed steel front bumper.	
Capacity	3.856 litres		Front Suspension	Axle located by leading arms and panhard rod and supported by long travel coil springs and telescopic dampers. 1750 kg capacity	
Max. Power	90 kW @ 3000 r.p.m.	DIN 70020 net	Rear Suspension	Dual rate semi-elliptic leaf springs linked via shackles to a rubber bushed load sharing rocker beam. Axle movement is controlled by four long travel telescopic dampers and steel cable rebound straps. 4100 kg capacity.	
Max. Torque	314 Nm @ 2,200 r.p.m.		Steering	Adwest power-assisted variable ratio worm and peg type 17.5:1 ratio – straight ahead. Left or right hand drive.	
Alternator	12 volt x 70 amp output, belt driven from crankshaft, incorporating vacuum pump for braking system.		Brakes	Dual line vacuum hydraulic system.	
Injection System	Bosch in line type with combined pneumatic and mechanical governor.		Wheels and Tyres	Heavy duty steel disc 6.00 F x 16 – 7 off Steel belted radial ply tyres 7.50 R 16 LT x 8 ply – 7 off Spare wheel is located under chassis behind rear axle.	
Air Cleaner	Donaldson two stage dry element type with filter replacement indicator.		Fuel System	Twin 65 litre mid mounted fuel tanks with fillers in cabin side panels. Motorised fuel change over valve.	
Exhaust System	Chassis mounted with single silencer discharging on right hand side of vehicle.		Battery	12 volt 98 amp hour low maintenance lead acid battery on carrier in engine compartment.	
Cooling System	Cross flow radiator with expansion tank. Pressurised to 100 kPa.		Options	Alternative wheels and tyres Long range fuel tank Rear towing pintle Helicopter slinging points Jerrycan stowage Chassis mounted tool boxes Chassis mounted vehicle recovery winch Chassis mounted radio batteries Tubular steel front brush guard	
Clutch	Single dry plate diaphragm spring 275mm ida.		<b>CAB</b>		
Options	Vertical discharge exhaust system Engine exhaust brake Supplementary 28 volt x 100 amp military alternator		Type	Wide, bonneted cab with hot dip galvanised steel space frame and aluminium alloy floor, back and wing panels. Steel framed bonnet with fibreglass skin. Cab painted with high durability polyurethane paint.	
<b>ENGINE</b>		<b>LAND ROVER 3.5 V8</b>	Trim	Fully trimmed doors, roof side and back panels. Sound proofing on toe boxes, seat box and floor panels.	
Type	V8 aluminium petrol engine		Fittings	Three fabric trimmed seats provided in cabin for driver and two passengers, all with fore/aft and rake adjustment. Inertia reel lap/sash seat belts fitted for outboard seating positions, with static lap belt for centre seat. Twin ventilation flaps in cabin front panel feeding full width louvres above fascia. Fibreglass fascia moulding with large storage compartment on passenger's side. High capacity heater/demister with fascia mounted controls. Twin sun visors, rear vision mirror and interior light mounted on cabin header panel.	
Capacity	3.528 litres		Glass	Laminated flat glass windscreen with zone tinted upper band. Wind up windows in side doors. Twin opening rear quarter light windows fitted in cabin rear side panel. Sliding glass window fitted high on cabin back panel.	
Max. Power	100 KW @ 5000 r.p.m.	DIN 70020 net	Controls	Column mounted waterproof switches for indicators, side and head lamps, horn, wipers and washers. Fascia mounted hazard warning, interior light/instrument light and heater blower switches. Heater directional controls and transfer box control switch mounted on fascia.	
Max. Torque	253 Nm @ 2,500 r.p.m.		Instruments	Speedometer, fuel gauge, water temperature gauge, voltmeter and warning lamp module fitted in fibreglass moulded instrument binnacle – with provision for additional instrumentation if required.	
Alternator	12 volt x 45 amp output, belt driven from crankshaft.		Options	Two piece side doors with door pockets and sliding glass windows Vinyl trimmed seats Cabin air conditioning Additional instrumentation Military lighting system Radio aerial mounts Roof Hatch Alternative body styles Disruptive pattern painting	
Carburation	Twin SU carburettors				
Options	12 volt x 65 amp alternator Supplementary 28 volt x 90 amp military alternator				
<b>GEARBOX/TRANSFER BOX</b>		<b>LAND ROVER LT95A</b>			
Type	4 speed heavy duty all synchromesh gearbox and 2 speed transfer box. Incorporates a lockable inter-axle differential plus a vacuum operated dog clutch to engage or disengage drive to the trailing axle via a fascia mounted switch.  The vehicle operates on-road in four wheel drive (to the front and centre axles), with six drive for cross country operation.				
Ratios:					
Gearbox	1st 4.069:1	4th 1.000:1			
	2nd 2.448:1	Rev 3.664:1			
	3rd 1.505:1				
Transfer Box					
– Diesel	High 0.996:1	Low 3.321:1			
– Petrol	High 1.336:1	Low 3.321:1			
Parking Brake	Mechanical 254mm dia drum brake fitted on rear of transfer box out shaft.				
<b>FRONT AXLE</b>		<b>LAND ROVER SPIRAL BEVEL</b>			
Type	Wide track fully floating spiral bevel steer/drive axle with heavy duty casing, enclosed outboard constant velocity joints, four pinion differential and high capacity driving head.				
Capacity	1750 kg.				
Ratio	4.70:1				
Brakes	298mm dia disc front brakes with four piston callipers.				
<b>REAR AXLES</b>		<b>SALISBURY 8HA</b>			
Type	Wide track fully floating hypoid bevel drive axles with offset four pinion differentials.				
Capacity	2050 kg/axle.				
Ratio	4.70:1				
Brakes	279mm dia drum brakes with leading/trailing shoes.				



Land Rover Australia offers this brochure as a general guide to product specifications of the Land Rover 110 6 x 6. All data presented in this brochure is believed to be correct as at May 1989. However, as development is an ongoing process, changes may occur from time to time which will not necessarily be reflected in this brochure. Therefore Land Rover Australia reserves the right to change specifications without notice. Accordingly, 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. Dealers and Distributors are not agents of Land Rover Australia, and have absolutely no authority to bind Land Rover Australia by any express or implied undertaking or representations.

# LAND ROVER 110 Heavy Duty 6 x 6



## NOMINAL DIMENSIONS\*

A	Overall Length	6001 mm
B	Intermediate Wheelbase	3040 mm
C	Rear Axle Spacing	900 mm
D	Rear Overhang	1183 mm
E	Cab Back to Rear Crossmember	3147 mm
F	Front Axle to Cab Back	1925 mm
G	Width Over Mirrors	2430 mm
H	Width Over Front Wings	1980 mm
J	Width Over Rear Crossmembers	2062 mm
K	Track - Front and Rear	1698 mm
L	Width Over Tyres - Front and Rear	1910 mm
M	Body Mounting Height	- Unladen 920 mm - Laden 840 mm
N	Rear Crossmember Heights	- Unladen 780 mm - Laden 700 mm
P	Cab Height	- Unladen 2080 mm - Laden 2050 mm
Q	Axle Ground Clearance	215 mm
R	Approach Angle	- Unladen 45° - Laden 41°
S	Departure Angle	- Unladen 33° - Laden 30°
T	Ramp Angle	- Unladen 148° - Laden 152°
	Turning Circle	- Wall to Wall 17.2 m - Kerb to Kerb 16.8 m

\*Standard dimensions shown. A range of alternative wheelbases and chassis lengths are available to order.

## PERFORMANCE DATA\*\*

MAXIMUM SPEEDS IN GEARS (km/h) @ MAXIMUM ENGINE r.p.m.			
Engine	4BD! T	3,5 V8	
Transfer Ratio	- High	0.996:1	1.336:1
	- Low	3.321:1	3.321:1
Axle Ratio	4.70:1	4.70:1	
Maximum Engine Speed	3200 rpm	5000 rpm	
Low Ratio	1st	7.1	11.1
	2nd	11.8	18.4
	3rd	19.2	29.9
	4th	28.9	45.0
	Rev	7.9	12.2
High Ratio	1st	23.6	27.5
	2nd	39.2	45.7
	3rd	63.8	74.4
	4th	96.1	111.9
	Rev	26.2	30.6

\*\* Applicable to base vehicle specification. Data for optional specifications are available on request.

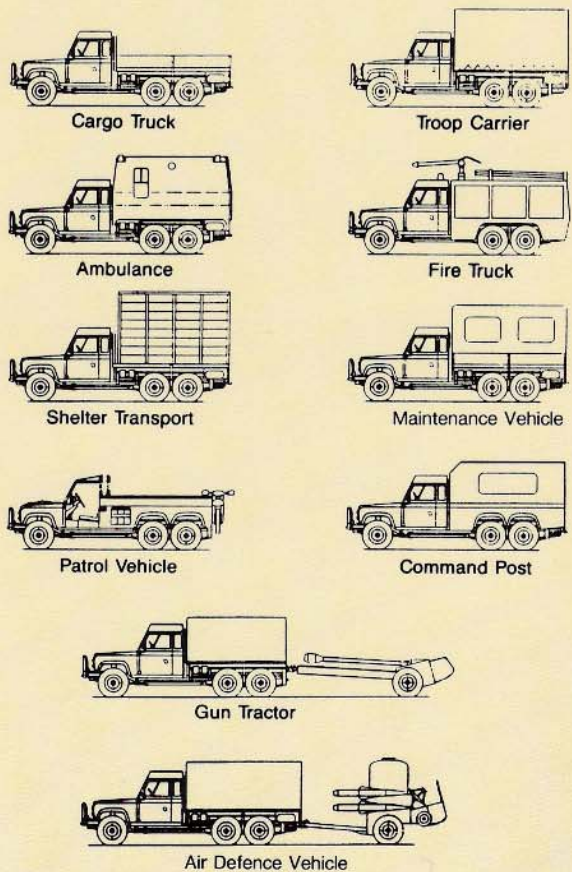
## MASS DATA

Unladen***	- Front	1350 kg
	- Rear	1250 kg
	- Total	2600 kg
Gross Vehicle Mass		5600 kg
Gross Combination Mass		7100 kg

\*\*\* Basic diesel engine chassis cab vehicle with full capacity of water, oil and fuel, plus spare wheel and tyre.

The above data are nominal figures only. Other ratings may be applicable for particular conditions, usage requirements and specifications variations.

## BODY CONFIGURATIONS\*\*\*\*



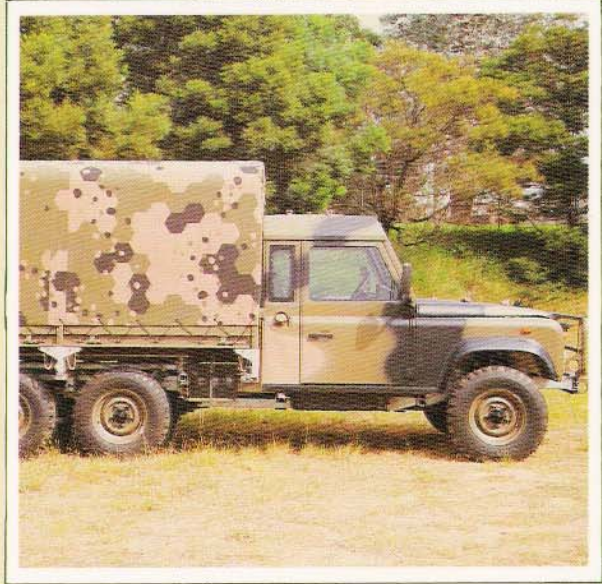
\*\*\*\*A wide variety of specialised body configurations can be made to order.



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The Land Rover 110 Heavy Duty 6 x 6 is now in volume production for the Australian Army after several years development trialing against international competition. The testing involved specific performance, durability, climatic and user trials in temperatures ranging from -18° to +52° C. Additionally, body components were required to pass a one thousand (1000) hour salt spray test.

The vehicle has been designed to accept either the Isuzu 4BD1T turbocharged diesel or the Land Rover V8 petrol engine in left or right hand drive. A range of derivatives has been developed including Cargo, Personnel Carrying, Ambulance, Gun Tractor, Air Defence, Maintenance Vehicles, Patrol Vehicle and Fire Fighting Vehicles – to suit a wide range of military and specialised civilian roles.

Some of the major features of the Land Rover 6 x 6 vehicle are:

- High payload carrying capability. (The basic chassis cab vehicle provides an allowance of 3.0 tonnes for optional fittings and equipment, rear body, payload and crew).
- Low rear chassis height.
- All derivatives are air transportable in a C130 Hercules – 2 per aircraft – without preparation. This includes the Ambulance and Maintenance Vehicles with modular rear bodies.
- High level of corrosion resistance (both the chassis frame and cab frame are hot dip galvanised, while extensive use is made of aluminium and galvabond panels).
- High standard of cross country ride and stability
- Easy rear body fitment (bodies can be attached directly to the Land Rover's rigid rear chassis).
- High spare parts commonality with other Land Rover vehicles.

The Land Rover 110 six wheel drive has been developed by Land Rover Australia (a division of JRA Limited) with full support from Land Rover Limited. It is available through Land Rover's worldwide distributor network with full sales and service support.

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