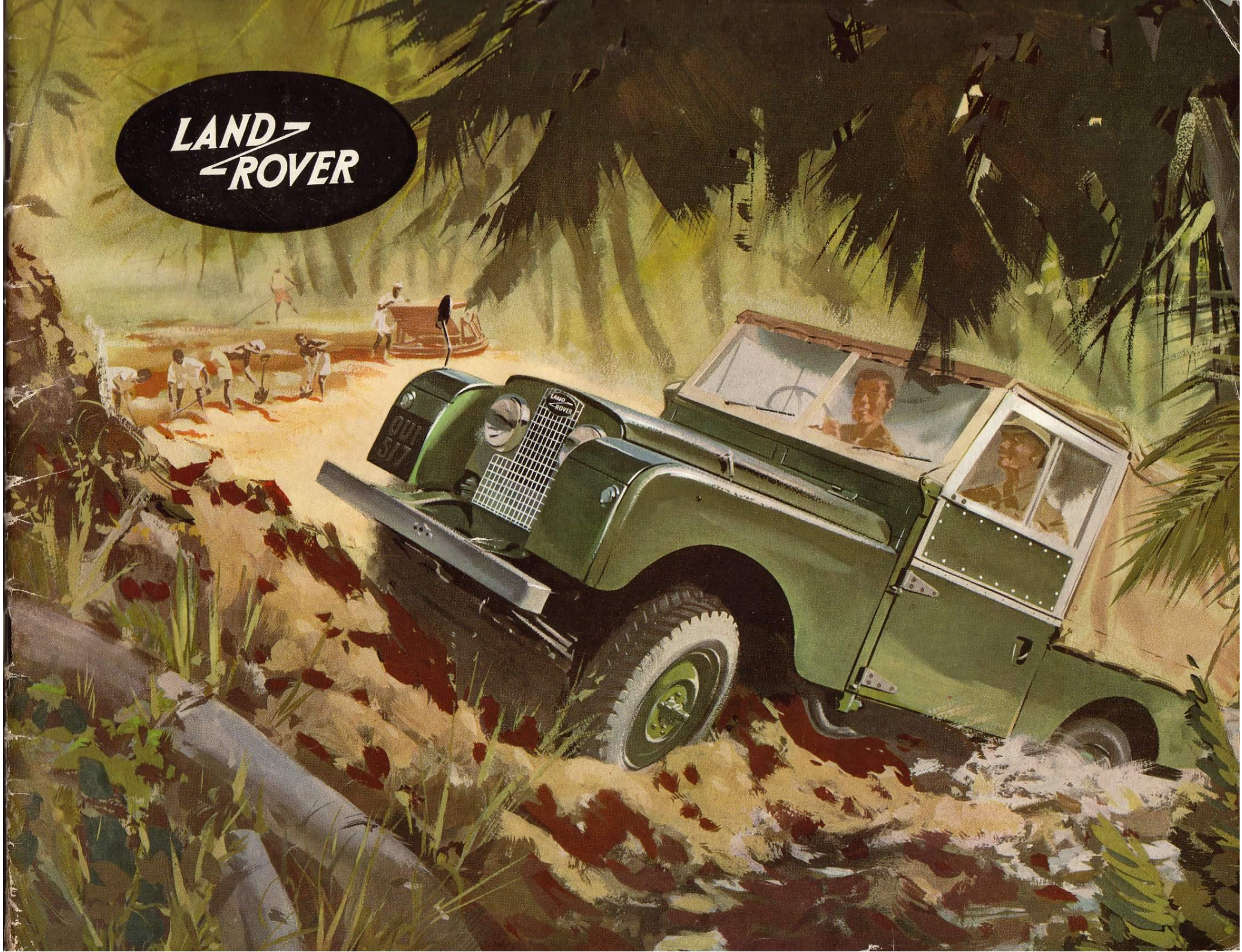
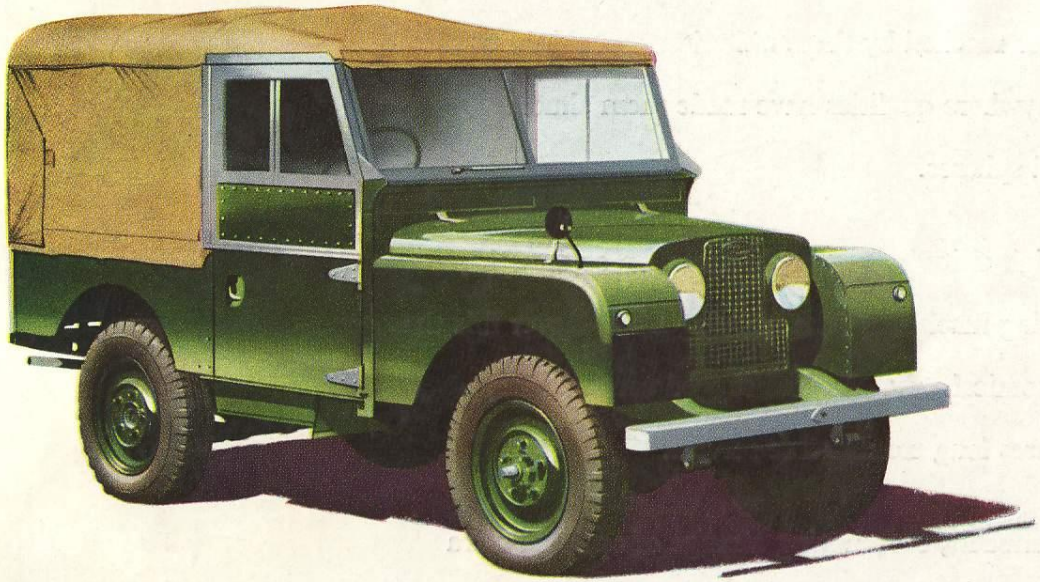

LAND ROVER
LAND ROVER
OUR 317

88" WHEELBASE 'REGULAR'

LAND-ROVER



NOW AVAILABLE WITH ROVER DIESEL ENGINE

The 88 in. wheelbase ' Regular,' four-wheel drive Land-Rover is the general factotum of the range, providing the sort of go-anywhere transport that is needed on farms, ranches, estates and indeed in any situation where versatility and cross-country mobility are required. It can operate as a completely open vehicle or be fully enclosed by the weather-proof canvas hood which is supplied as standard equipment. In either event the body provides excellent accommodation for three people and loads of up to 1,000 lb. (454 kg.).

All body panels are of non-rusting aluminium ; steel portions, such as hinges, handles and reinforcements being galvanised to resist corrosion. The vehicle is thus not affected by weather or climate and can work indefinitely under the most appalling conditions.

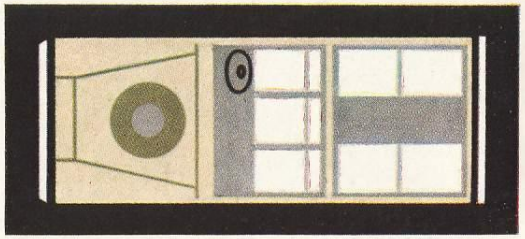
To add to its almost unlimited field of operation, the Land-Rover is provided with centre and rear power take-off points enabling many varied types of machinery to be driven.

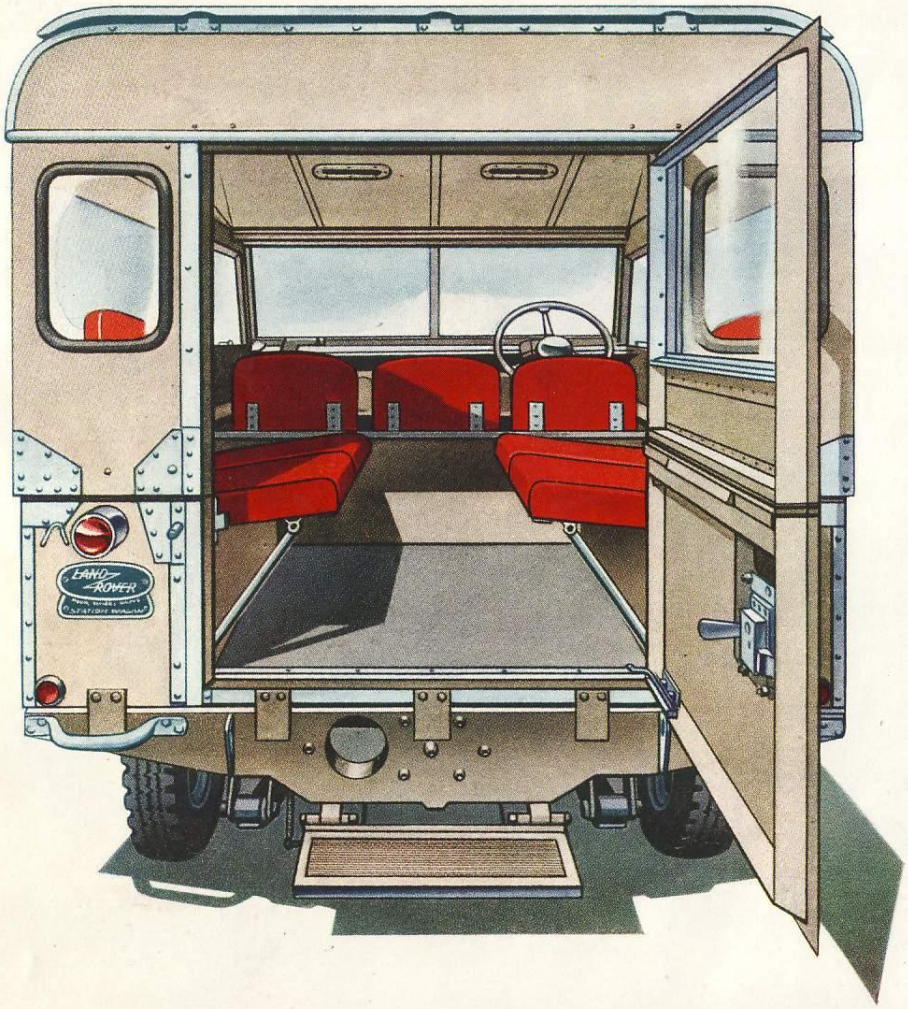
All in all the Land-Rover can justly claim to be the world's most versatile vehicle.

LAND-ROVER

88" WHEELBASE
'REGULAR' STATION WAGON

7 Seater version of the famous 4 wheel drive Land Rover





As an alternative passenger or goods carrier the Land-Rover 88 in. ' Regular ' Station Wagon has great appeal in territories where tough conditions are likely to be met. It will, for instance, travel smoothly and comfortably on made-up roads, deal easily with untended tracks, or with four-wheel drive engaged, take to the rough with a facility achieved by no other make of vehicle.

As a passenger carrier the Station Wagon is a seven seater. Accommodation is provided in the front compartment for three people, while four fold-up seats are fitted in the body, these being easily accessible through a wide door at the rear. With the seats folded, excellent floor space is available for the transport of goods and equipment of every kind.

Toughly built and having a generous ground clearance, the Land-Rover 88 in. wheelbase ' Regular ' Station Wagon is ever ready for day to day duty or high adventure in the inaccessible places of the world.

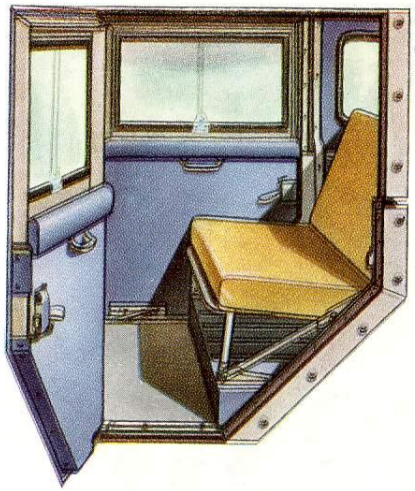
NOW AVAILABLE WITH ROVER DIESEL ENGINE

LAND-ROVER

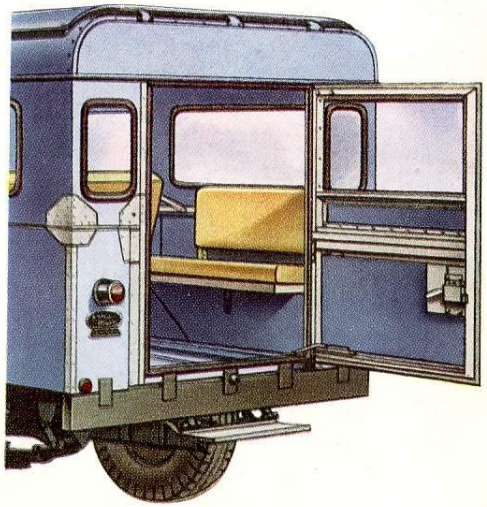
107" WHEELBASE
'LONG' STATION WAGON

With ten-seater bodywork built on the long wheelbase chassis, the 107 in. wheelbase ' Long ' Station Wagon is an important addition to the Land-Rover range.

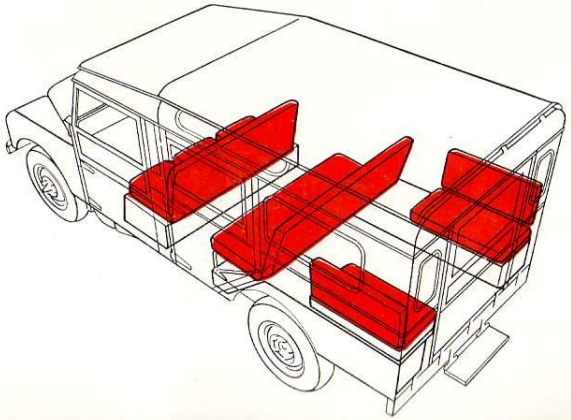
The seating arrangement provides accommodation for three people in front, three on the back seat and four, facing inward, on additional seats fitted to the rear wheel boxes. If the wheel box seats are removed and the back seat is folded right forward the whole body is available for load carrying, or alternatively, the back seat squab can be folded backward and the front seat cushions and squab redisposed to form a comfortable bed. Provision is made on the bonnet for carrying the spare wheel. Like all Land-Rovers the ' Long ' Station Wagon has four-wheel drive, and affords an ideal means of carrying personnel or equipment over difficult country. Its possibilities are numerous ; oilfield, survey and safari duties providing exceptional scope for its outstanding versatility and powers of progress.



Wide doors give excellent access to the back seat which will comfortably accommodate three people.



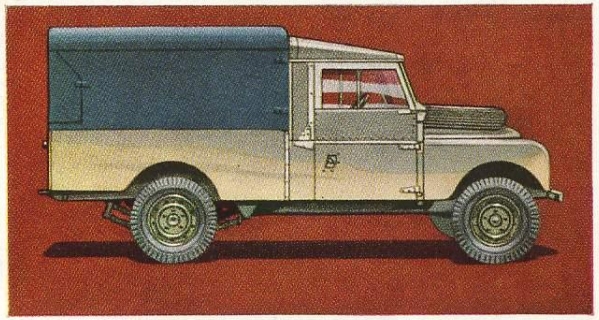
Additional seats mounted on the rear wheel boxes will carry four passengers, two on each side.



All seats are neatly arranged to give ample accommodation for ten people.

109" WHEELBASE
'LONG' LAND-ROVER

Another version of the four-wheel drive Land-Rover is the 109 in. wheelbase ' Long ' vehicle with all-purpose open body. The cab is fully enclosed and, if required, a weather-proof hood can be supplied at extra cost to protect the load space. As with its 88 in. wheelbase counterpart, the 109 in. is a model that has a great number of applications, its extra capacity making it a load carrier of exceptional merit.



For difficult cross-country work loads of 1,200 lb. (544 kg.) can be carried in addition to the driver and two passengers, while on journeys using more normal road surfaces, payloads of 1,500 lb. (680 kg.) can be satisfactorily dealt with.

Two types of the 109 in. wheelbase ' Long ' Land-Rover are available : the standard model having a normally equipped cab, and the de luxe model with special interior upholstery and trim providing extra comfort for driver and passengers. A wide choice of other optional equipment is also available to ensure characteristic Land-Rover versatility.

NOW AVAILABLE WITH ROVER DIESEL ENGINE

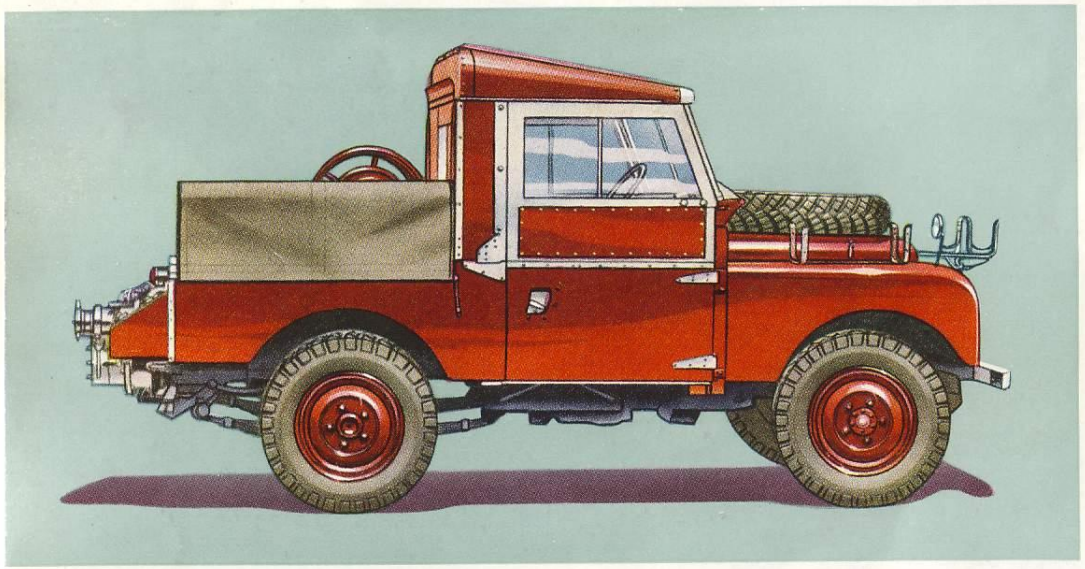
LAND-ROVER

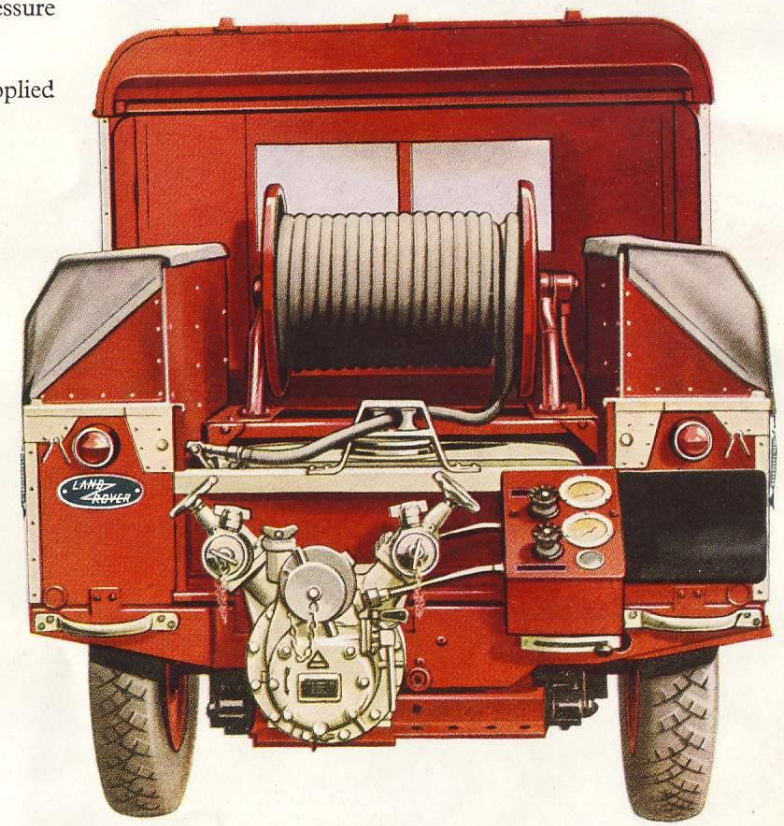
FIRE ENGINE

The Land-Rover Fire Engine is an exceptionally mobile self-contained appliance that can be employed with particular advantage in towns and villages with narrow streets, rural areas, factories, forestry reservations and similar locations where manoeuvrability and sturdiness are essential. Its modest size in conjunction with its two driving axles enables it to go virtually anywhere to reach outbreaks that cannot be approached by larger vehicles.

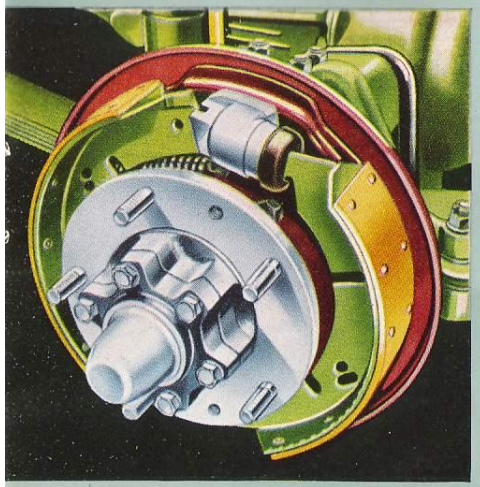
Standard equipment of the Land-Rover Fire Engine includes 40-gallon first aid water tank, 120 feet of rubber hose coiled on a drum, hose lockers and pump control panel. The pump itself has a rating of 210 gallons per minute at 100 lb. per sq. in. pressure for a 10 ft. lift.

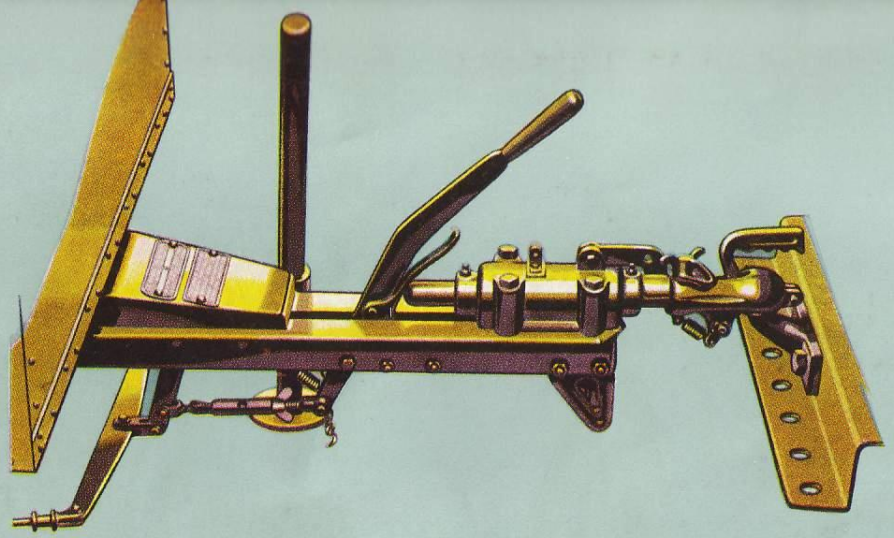
The metal cab shown and a variety of other optional extra equipment can be supplied by arrangement.





NOW AVAILABLE WITH ROVER DIESEL ENGINE



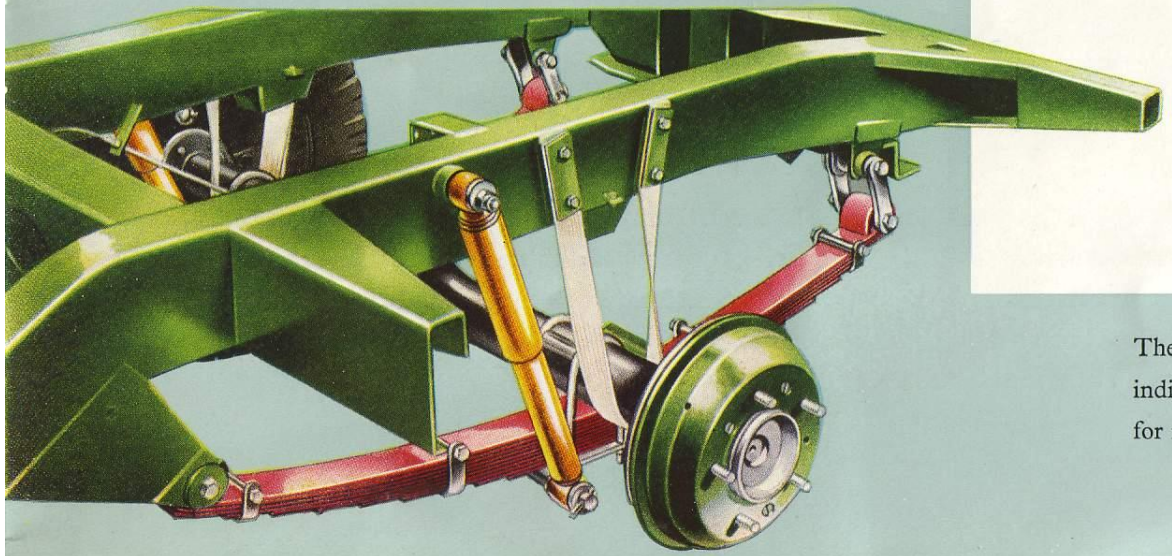


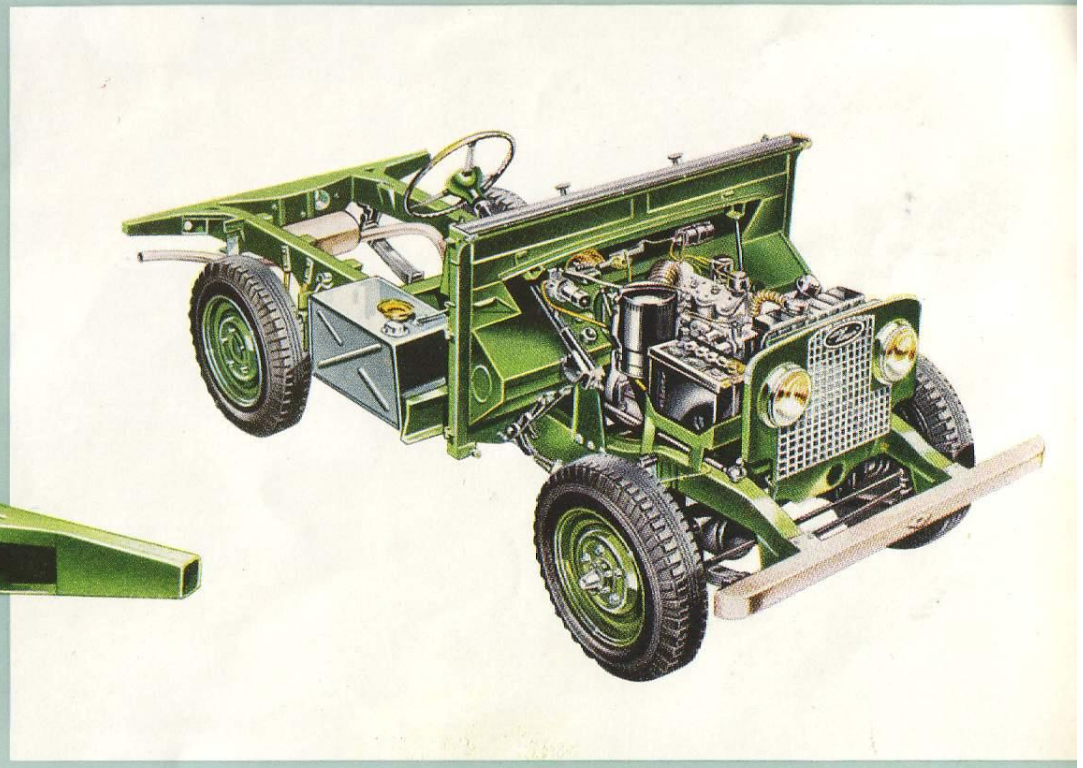
Land-Rover brakes are hydraulically operated. Leading and trailing shoes are used for 'Regular' models, while long wheelbase vehicles employ two-leading shoes on front wheels.

A towing bar can be supplied as an optional extra. It provides a simple but effective means of securing a trailer attachment.

& DETAILS

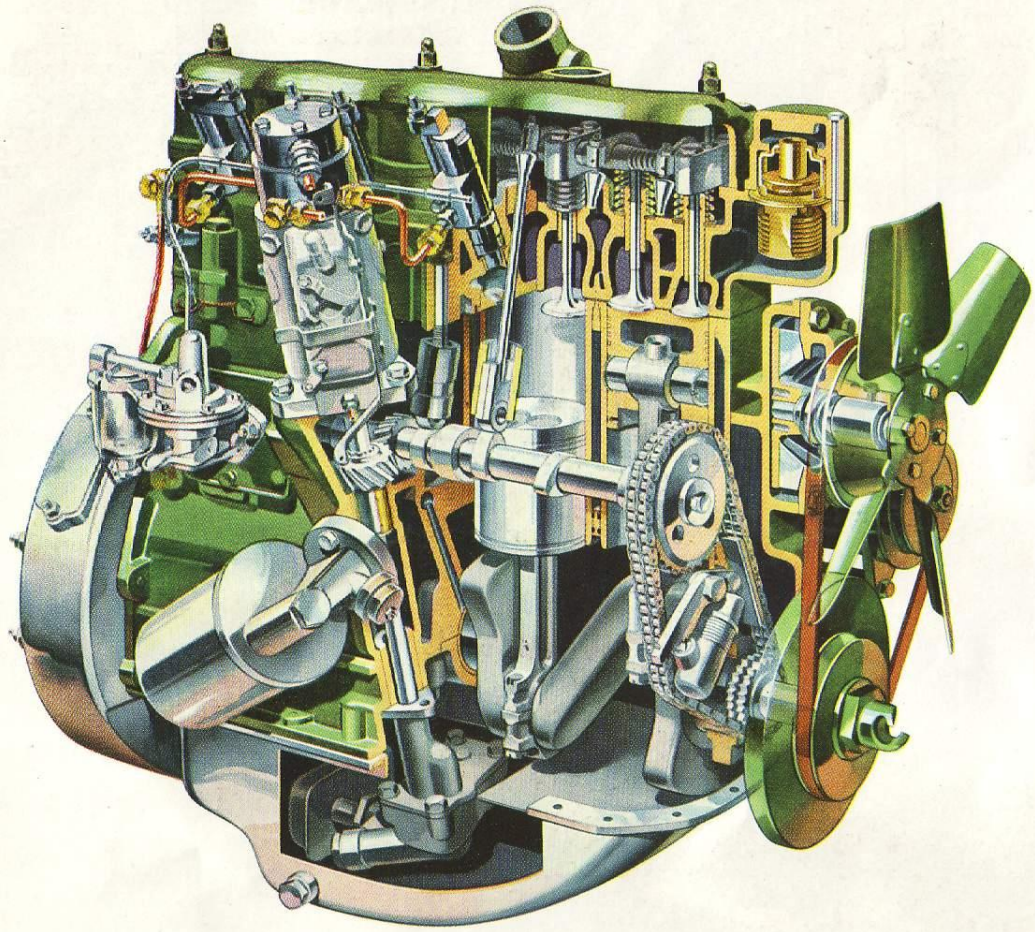
Suspension is an important matter on a vehicle that must carry out so many duties in so many different kinds of territory. Land-Rover springs have, in fact, been specially graded to combine the riding qualities required for main road travel with ample toughness for hard work over rough ground. They are supplemented by telescopic hydraulic shock absorbers which give highly efficient control.





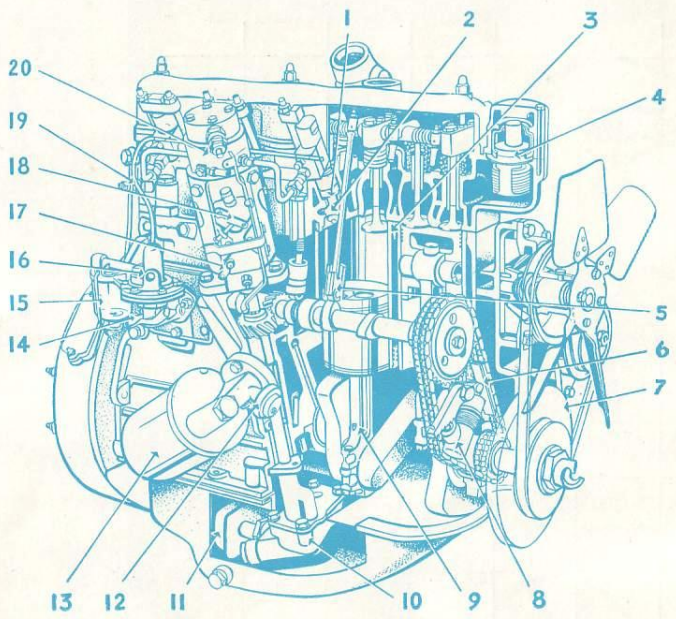
The layout of the engine compartment is compact yet the individual units are so placed that they are readily accessible for maintenance and adjustment.

ROVER 2-LITRE DIESEL ENGINE



Rover-designed and Rover-built, the new diesel engine enhances the already great universal appeal of the Land-Rover by increasing its efficiency and economy in conditions which favour diesel operation.

A truly rugged, four-cylinder unit of two-litres capacity, the Rover diesel engine develops 52 b.h.p. at 3,500 r.p.m. Its speed range is, in fact, so similar to that of the Land-Rover petrol engine that the same transmission units can be used for both.



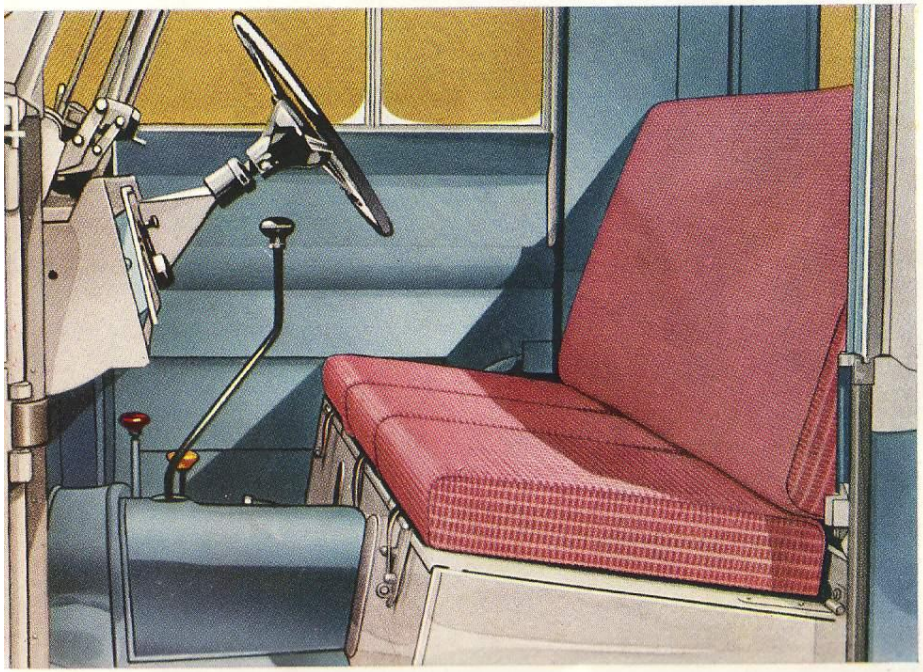
1. Pintaux Injection Nozzles.
2. Ricardo Comet V Combustion Chambers.
3. Wet Cylinder Liners.
4. By-pass Thermostat.
5. Roller Tappets.
6. Rubber Damper Pad.
7. Crankshaft Vibration Damper.
8. Hydraulic Timing Chain Tensioner.
9. Oil Jet to Cylinder Walls.
10. Oil Pump.
11. Gauze Strainer.
12. Oil Pressure Warning Light Switch.
13. Large Capacity Full-Flow Oil Filter.
14. Hand Priming Lever.
15. Sediment Bowl.
16. Fuel Lift Pump.
17. Stop Lever.
18. Accelerator Lever.
19. Glow Plugs.
20. CAV.DPA. Injection Pump with Mechanical Governor.

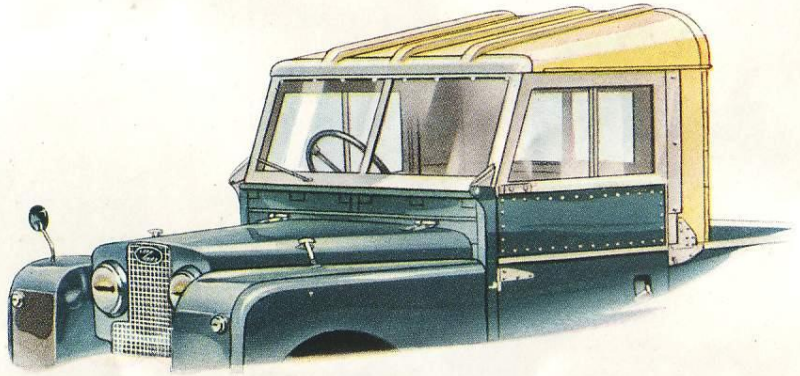
Optional body Equipment

To complete the impressive Land-Rover picture a wide range of body extras can be supplied. For instance, a detachable metal body cover or separate metal cab is available for the 88 in. wheelbase 'Regular' model to give extra weather protection, while a tropical roof can be fitted to vehicles destined for hot countries. And there are many other optional items that may be added. Everything, in fact, is provided to make the Land-Rover body suitable for the greatest possible number of uses.

A detachable metal top can be fitted to 88 in. wheelbase ' Regular ' models. Note that side windows are for export models only.

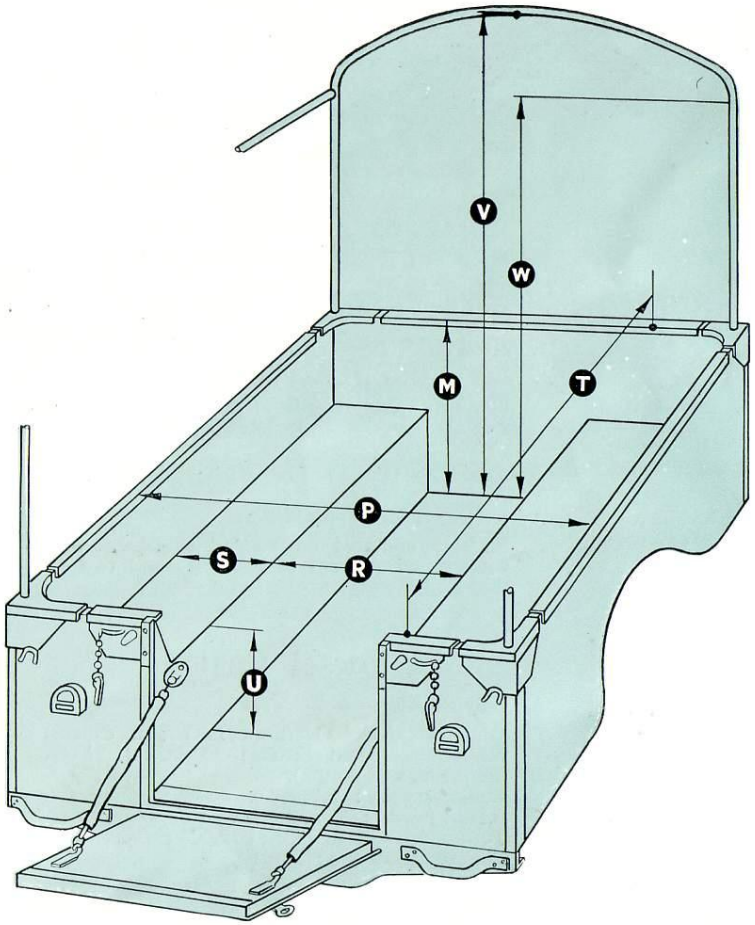
A de luxe cab is an optional extra on the 109 in. wheelbase 'Long' Land-Rover. With trimmed door casings and carpets it affords a very high standard of comfort for driver and passengers.





Truck type cabs are fitted as standard equipment on the ' Long ' model but can also be supplied as an optional extra on the ' Regular.' A tropical roof is available for this type of unit.

Body Specification



OVERALL DIMENSIONS	'Regular' English	'Regular' Metric	'Long' English	'Long' Metric
Wheelbase	88 in.	2·24 m.	*107 in. †109 in.	2·72 m. 2·77 m.
Track	50 in.	1·27 m.	50 in.	1·27 m.
Ground Clearance	8 in.	0·20 m.	8¾ in.	0·22 m.
Overall Length	140¾ in.	3·58 m.	173½ in.	4·41 m.
Overall Width	62 9/16 in.	1·59 m.	62 9/16 in.	1·59 m.
Overall Height (max.)				
Station Wagon	76 in.	1·93 m.	78 in.	1·98 m.
Other Types	76 in.	1·93 m.	78 in.	1·98 m.
INTERNAL DIMENSIONS				
M	14½ in.	0·36 m.	20½ in.	0·52 m.
P	57⅞ in.	1·45 m.	57⅞ in.	1·45 m.
R	36 5/16 in.	0·92 m.	36 5/16 in.	0·92 m.
S	12 in.	0·30 m.	12 in.	0·30 m.
T	45 11/16 in.	1·16 m.	72¾ in.	1·85 m.
U	8 11/16 in.	0·22 m.	8 11/16 in.	0·22 m.
V	46½ in.	1·18 m.	52¾ in.	1·34 m.
W	40¾ in.	1·04 m.	47 in.	1·19 m.
PAYLOADS				
'Regular'	3 Persons + 1000 lb. (453·6 kg.)			
'Long'	**Roads:** 3 Persons + 1500 lb. (680·4 kg.) **Rough:** 3 Persons + 1200 lb. (544·3 kg.)			
'Long' Station Wagon... ...	**Roads:** 10 Persons or 6 Persons + 700 lb. (317·5 kg.) **Rough:** 8 Persons or 6 Persons + 400 lb. (181·4 kg.)			

* Station Wagon. † Open Vehicle.

THE ROVER COMPANY LTD.

SOLIHULL WARWICKSHIRE ENGLAND

Telephone : Sheldon 4242. *Telegrams :* Rover, Solihull. Service Depot : SOLIHULL. *Telegrams :* Rovrepair, Solihull.

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Telephone : FULham 1221. *Telegrams :* Rovrepair, Wesphone, London.

Printed in England by Hudson & Son Ltd., Birmingham.

Publication No. 507/C.

THE 4 WHEEL DRIVE

LAND-ROVER

Chassis

Petrol Engine

GENERAL

Four cylinders. Overhead inlet valves, side exhaust valves. Bore and Stroke : 77·8 mm. (3·063 in.) × 105 mm. (4·134 in.).
Cubic Capacity : 1,997 c.c. (121·8 cu. in.).
B.H.P. (Max.) : 52 at 4,000 r.p.m.
Torque (Max.) : 101 lb. ft. (14 m. kg.) at 1,500 r.p.m.
Compression Ratio : 6·9 : 1.

Cylinders : Monobloc, cast integral with crankcase.

Cylinder Head : Detachable, cast iron and carrying inlet valve gear.

Inlet Valve Operation · By rockers, tubular push rods and cam followers.

Exhaust Valve Operation : By rockers direct on to valve stems.

Crankshaft : Forged steel. Fully balanced and with counterweights.

Main Bearings : Three, thin shell, steel-backed copper-lead. Thrust taken at centre bearing.

Camshaft : Forged steel. Four bearings, split Mazak die castings. Drive by Duplex roller chain. Chain tension maintained by self-adjusting jockey sprocket controlled by coil compression spring and oil pressure.

Pistons : Low expansion aluminium alloy, tin plated. Two compression rings, one stepped scraper ring and one slotted scraper ring. Fully floating gudgeon pins.

Valves : Inserted valve seats.
Exhaust : XB steel with Bright Ray facing.
Inlet : Silchrome No. 1 Steel.

The location of inlet valves in the cylinder head and exhaust valves in the cylinder block gives advantages such as :

Greater area of inlet valve.
Closer relation of water jacket to exhaust valve.
More direct induction system.
Most efficient location of sparking plug.
Part-spherical combustion chamber promoting turbulence and more thorough burning of mixture.
More efficient scavenging.

Connecting Rods : Forged steel with thin shell steel-backed copper-lead big-end bearings.

LUBRICATION SYSTEM

By submerged gear type pump driven from camshaft. Oil delivered to main, big-end and camshaft bearings under a running pressure of 55-65 lb./sq. in. Tubular oil gallery, inserted in the crankcase supplying the oil feed for the camshaft bearings, exhaust valve gear, and the inlet valve gear in the head. Gauze pump intake filter in the sump : removable full-flow external oil filter.

Oil Filler : Integral with exhaust valve rocker cover and incorporating oil-wetted gauze breather. Similar breather fitted to inlet valve rocker cover.

Sump Capacity : 10 pints (5·68 litres). Level determined by dipstick.

COOLING SYSTEM

Pump operated and thermostat controlled. Water pipe inserted in block directs water to the points of highest temperature.

Pump : Centrifugal type, belt driven, mounted on front end of cylinder block.

Radiator : Film block type.

Fan : Four bladed, mounted on water pump spindle and both driven by common belt. Belt tensioned by pivot mounted dynamo method.

Thermostat : A.C. bellows type.

Capacity of System : 17 pints (9·66 litres).

FUEL SYSTEM

Separate induction manifold.

Carburettor : Solex downdraught type 32 PB 1-2.

Fuel Pump : S.U. Electric.

Air Cleaner and Silencer : A.C. large capacity oil bath type, with built-in pre-cleaner.

Petrol Tank : Carried outside side-member under right-hand seat and fitted with protective underplate. Electric petrol gauge fitted.

Filler : Telescopic filler tube and filter to facilitate filling from can. Filler cap incorporates air vent. Provision for padlock to secure the tank contents.

Tank Capacity : 10 gallons (45·46 litres).

EXHAUST SYSTEM

Silencer : Flexibly mounted transversely behind rear axle.

Tail Pipe : Integral with silencer.

IGNITION SYSTEM

Coil ignition. Lucas 12 volt.

Distributor : Driven from camshaft. Automatic advance and supplementary vacuum control.

Sparking Plugs : Lodge long reach 14 mm.

ENGINE UNIT MOUNTING

Flexibly mounted on bonded rubber at four points, two at front of crankcase and two on transfer box.

Diesel Engine

GENERAL

Four cylinders. Overhead inlet and exhaust valves. Bore and Stroke : 3⅜ in. × 3½ in. (85·7 mm. × 88·9 mm.).
Cubic capacity : 2,052 c.c.
B.H.P. (max.) : 52 at 3,500 r.p.m.
Torque (max.) : 87 lb. ft. at 2,000 r.p.m.
Compression Ratio : 19·5 : 1.

Cylinders : Wet cast-iron liners.

Cylinder Head : Detachable, cast iron, carrying all valve gear. Ricardo Comet V combustion chambers.

Valve Operation : By rockers, solid push rods and roller cam followers.

Crankshaft : Forged steel. Fully balanced and with counterweights.

Main Bearings : Three, thin shell, steel backed, copper-lead. Thrust taken at centre bearing.

Camshaft : Forged steel. Four bearings of wrap round white metal on steel backing. Drive by duplex roller chain. Chain tension maintained by self-adjusting jockey sprocket controlled by coil compression spring and oil pressure.

Tappets : Hardened steel rollers running in lead tin-plated bronze shoes.

and Engine Specification

Pistons : Low expansion aluminium alloy, tin plated with Ricardo Comet recesses cast in the crown. One parallel faced chrome compression ring. Two taper faced iron compression rings. One slotted scraper ring. Fully floating gudgeon pins.

Valves : Exhaust. XB Steel bright ray faced.
Inlet. Silchrome No. 1 Steel.

Connecting Rods : Forged steel with thin shell steel backed copper-lead big-end bearings.

LUBRICATION

By submerged gear type pump driven from camshaft. Oil celivered to main, big-end and camshaft bearings and to tappet gallery under a running pressure of 50-60 lb./sq. in. Rocker shaft and rockers lubricated by external pipe from the camshaft bearing oil gallery. Gauze pump intake filter in the sump : removable full flow external oil filter.

Oil Filler : Tube from front camshaft housing side cover plate incorporating oil wetted breather. Similar breather fitted to valve rocker cover.

Sump Capacity : 11 pints. Level determined by dipstick.

COOLING SYSTEM

Pump operated and by-pass thermostat controlled. Water gallery cast on the side of the cylinder block directs water between the liners, it is then routed up to the head, where it passes round injector and combustion chamber bosses. From here the water is directed through tube inserts which squirt the water between the portings.

Pump : Centrifugal type, belt driven, mounted on front end of cylinder block.

Radiator : Film block type.

Fan : Four bladed (fabricated). Mounted on water pump spindle and both driven by common belt. Belt tensioned by pivot mounted dynamo method.

Thermostat : A.C. bellows type by-pass.

Capacity of system : 15½ pints.

INDUCTION SYSTEM

Separate induction manifold.

AIR CLEANER and SILENCER

A.C. large capacity oil bath type.

EXHAUST SYSTEM

Silencer : Flexibly mounted transversely behind rear axle.

Tail Pipe : Integral with silencer.

FUEL SYSTEM

Fuel Lift Pump : A.C. mechanical, driven off eccentric on camshaft.

Fuel Filter : CAV F4/1 paper element type with air bleed.

Injection Pump : CAV DPA type with mechanical governor.

Injection Nozzles : Pintaux type.

Combustion Chambers : Ricardo Comet V.

Glow Plugs for Cold Starting : K.L.G. 14 mm., 17V., 38A., 2-P operated by press button on starting lever.

ENGINE UNIT MOUNTING

Flexibly mounted on bonded rubber at four points, two at front of crankcase and two on transfer box.

Transmission

CLUTCH

Single dry plate type. 9 in. (0·23 m.) diameter. Spring cushion drive. Fitted in enclosed bell housing in which is mounted clutch operating shaft and levers. Light operating pressure.

Clutch Operation : Clutch pedal mounted on frame and operating through adjustable linkage. Control shafts lubricated by oil gun through nipples.

Clutch Withdrawal Thrust : Ball thrust race enclosed in special housing and fully lubricated.

MAIN GEARBOX

Four forward speeds, one reverse.

Synchromesh : Top and third gears.

Overall Ratios, including Axle : First 16·171 : second 11·026 : third 7·435 : top 5·396 : reverse 13·745.

Gear Change : By direct central ball change lever on top of gearbox.

Oil Capacity : 2½ pints (1·42 litres).

TRANSFER GEARBOX

Giving a reduction on the output from the main gearbox and providing additional overall ratios as follows : first 40·688 ; second 27·742 ; third 18·707 ; top 13·578 ; reverse 34·585.

Transfer Gear Change : By independent lever, also giving intermediate neutral position.

Speedometer Drive Gear : Incorporated with output shaft of transfer gearbox.

Oil Capacity : 4½ pints (2·56 litres).

FOUR WHEEL DRIVE

Automatically selected when transfer box low ratio is engaged. Drive to front axle optional with high ratio engaged. Selected by an independent lever.

POWER TAKE OFF

Centre and rear power take-off drives available as optional extras except on Station Wagons.

PROPELLER SHAFTS

Hardy Spicer open propeller shafts to front and rear axles.

Lubrication : By oil gun through nipples.

REAR AXLE

Semi-floating type. Spiral bevel drive in banjo type axle case.

Ratio : 4·7 · 1.

Bevel Pinion Bearings : Taper roller journal, preloaded.

Hub Bearings : Single row ball journal. Fitted with oil seals.

Oil Capacity : 3 pints (1·70 litres).

Specification

FRONT AXLE
Fully-floating type. Spiral Bevel drive in banjo type axle case.
Ratio : 4·7 : 1.
Bevel Pinion Bearings : Taper roller journal, pre-loaded.
Hub Bearings : Taper roller journal.
Angularity of Universal Joint at Full Lock : 26°.
Oil Capacity, Differential : 3 pints (1·70 litres).
Oil Capacity, Universal Joint Housing : 1 pint (0·57 litre).

ROAD SPEED
In m.p.h. at 1,000 r.p.m. : first 5 ; second 7·34 ; third 10·9 ; top 15.

Suspension

Springs : Semi-elliptic type, underslung. Silent-bloc bushes all round. Second leaves wound round shackle pin eye to give extra strength.
Shock Absorbers : Monromatic double-acting telescopic type.

Steering

Burman worm and nut type with recirculating ball. Thrust adjustment by nut at top of column.
Ratio : 15 : 1.
Steering Wheel : 17 in. (0·43 m.) diameter. Spring spokes. Cellulose acetate covering.
Relay Unit : Consists of spring loaded Tufnol damping cones.
Drag Link, Track Rod, and Longitudinal Tube : Tubular, with non-adjustable ball joints requiring no lubrication.
Turning Circle : 88 in. wheelbase 'Regular' with 6·00×16 tyres—41 ft. (12·5 m.) diameter. 107 in. wheelbase Station Wagon with 7·00×16 tyres—48½ ft. (14·78 m.) diameter. 109 in. wheelbase 'Long' with 7·00×16 tyres—50 ft. (15·24 m.) diameter.

Brakes

Foot Brake : Girling hydraulic.
'Regular'—leading and trailing shoes all round. Size of brakes 10 in.×1¾ in. (25·4 cm.×3·8 cm.). Lining area 104·7 sq. in. (677 sq. cm.).
'Long'—two leading shoes on front brakes, leading and trailing shoes on rear brakes. Size of brakes 11 in. ×2¾ in. (27·9 cm.×5·7 cm.). Lining area 183·8 sq. in. (864 sq. cm.).
Hand Brake : Internal expanding transmission type at rear of gearbox. Girling mechanical actuation.
Hand Brake Lever : Extending forward horizontally from seat box and accessible to driver's hand.
Stop Light Switch : Operated mechanically from brake pedal shank.

Frame

Welded fabricated box section with box section cross-members, providing great torsional and diagonal rigidity.
Body Mounting : On outriggers welded to side-members.
Bumper : Bolted to front dumb-irons. Channel section, heavily galvanized.

Electrical Equipment

Dynamo : 12 volt Lucas. Fan ventilated. Compensated voltage control. Belt driven.
Battery : Lucas 12 volt. 51 A.H. Carried under bonnet.
Ignition Coil : Lucas. Mounted on engine side of scuttle.
Starter : Lucas type. Control by direct push switch situated below facia.

INSTRUMENTS AND CONTROLS
Speedometer : Large diameter with total mileage recorder.
Petrol Gauge and Ammeter : Combined in large dial matching speedometer.
Electric Horn : Mounted under bonnet. Push button on steering column.
Electric Windscreen Wiper : Mounted on lower edge of windscreen frame. Switch on motor.
Panel Light : Illuminating speedometer, ammeter and petrol gauge. Switch does not operate unless side and tail lamp switch is closed.
Dip Switch : Mounted on floor. Red warning lamp on ammeter and petrol gauge dial indicates high beam.
Ignition Switch : Operated by key and concentric with rotary switch for head, side and tail lamps.
Ignition Warning Light : Red.
Choke Warning Light : Amber.
Oil Pressure Warning Light : Green.
Headlamps : Mounted in radiator cowling. Twin filament bulbs for double dipping.
Side Lamps : Mounted on front wings.
Tail Lamps : Twin units having double filament stop/tail bulbs, incorporating number plate illumination.

Road Wheels

Pressed steel disc easy-clean type with ventilation slots. Five wheel studs.
Tyres : 'Regular,' basic equipment 6·00×16 dual purpose. 'Long,' basic equipment 7·00×16, dual purpose.

Tools

Full kit of hand tools in roll. Starting handle, wheelbrace, oil gun, jack.