



MODEL DS ROAMERDRIVE GLOBAL ROAMER CORPORATION

FOR LAND ROVER DEFENDER MODELS



ROAMERDRIVES have been tested on expedition duty in four continents covering many thousands of miles under all conditions. This ROAMERDRIVE equipped 110 is crossing Western Australia's Gibson desert. The Gunbarrel highway was experiencing unusually wet conditions.



The distinctive third lever on the centre console of a Defender identifies it as a vehicle equipped with a ROAMERDRIVE overdrive.

This rugged, bolt on accessory has been proven in hundreds of installations and tested under the most demanding expedition conditions.

No other modification improves the performance and economy of your Land Rover like a ROAMERDRIVE.

- * The DS model overdrive is an auxiliary gearbox that is easily fitted to a Land Rover 90 or 110 with standard five speed transmission. The unit adds an optional 28% to the ratio of the drive train giving improved fuel economy. Reduced engine speed contributes to quieter more comfortable travel under motorway conditions and reduces wear and tear on mechanical components.
- * The ROAMERDRIVE is a completely mechanical device built in the tradition of rugged dependability that has made Land Rover the world's favourite expedition vehicle. These overdrives have no electronic or hydraulic components. They are controlled by moving the convenient hand lever.
- * Unlike a high ratio transfer case that will permanently detract from the versatility of the gearbox the ROMERDRIVE does not alter the vehicle's designed gear ratios. Off road performance is enhanced as the overdrive ratio can be added to any gear in high or low range. The units can be employed on enhanced TD5 and 2.8 engines.
- * The ROAMERDRIVE uses the same epicyclical gear technology as a modern automatic transmission and is very quiet running. This is particularly evident at high speeds and makes driving a Land Rover for long distances a pleasurable experience.
- * Fuel savings will depend on your driving habits. On long journeys ROAMERDRIVE users have reported fuel savings of up to 18% - not surprising when you consider that the engine lopes along the highway at about 2000 R.P.M. - a favourable spot on the diesel torque band.

DS INSTALLATION



Installation of the ROAMERDRIVE takes about three hours and can be done by any mechanically inclined person using normal shop tools. There is no need to drill holes or cut any part of the Land Rover bodywork.

The ROAMERDRIVE is installed by replacing the upper gear and cover in the Land Rover 230 transfer case. This can be done from below or from above via the removable panel in the seat box.

The unit is engaged by means of a metal rod from the control lever. Connecting rod rose joints have nylon bushings to eliminate rattles.

The control lever is mounted on top of the gearbox. This can be done without removing the tunnel cover but it is more convenient to remove this cover which is secured to the floor by screws. The existing rubber boot sealing the transmission

cover is replaced by a new boot that accommodates all three operating levers. On vehicles with non-standard engines (or chipped TD5 engines), driven at high speeds in hot climates, our oil cooling transfer case DS-COV and temperature gauge DX-T should be fitted. Please consult our factory for advice if needed.

LUBRICATION

The overdrive is lubricated by oil that is shared with the vehicle transfer case. After installing the overdrive and filling the transfer case, an additional half litre of oil is added to the ROAMERDRIVE housing. No other lubrication or service is required, other than normal oil changes to the transfer box. A handy oil level plug is supplied to monitor transfer case oil level.



IMPORTANT!

API-GL4 MTF oil must be used when a ROAMERDRIVE is installed. API GL5 or GL4/5 hypoid axle oils must NOT be used as such oils may have additives corrosive to bronze components. A list of suitable API-GL4 MTF oil brands is supplied with the overdrive installation instructions.

USING YOUR GLOBAL ROAMER DS OVERDRIVE

The overdrive is a versatile tool that will enable you to get the best performance from your Land Rover. When the operating lever is in the aft position your vehicle will have exactly the same gear ratios as before giving lots of grunt for towing and other hard work.

The overdrive is most useful on highways. To engage, wait until you are cruising in fifth gear, then depress the clutch and move the ROAMERDRIVE lever forward. On releasing the clutch you will immediately feel the RPM drop and cab noise decrease.

As traffic conditions dictate, simply shift the main gear lever into other gears. You do not have to disengage the ROAMERDRIVE unless you come to a complete stop. In practice the gear ratio of overdrive fourth gear is similar to normal fifth. The stubby ROAMERDRIVE shift lever is more convenient to use than the main gear lever. In non-motorway situations you can drive for hours in fourth gear shifting in and out of overdrive. Used in low range the overdrive can be used to increase ground speed. This can be very useful on expedition duty in heavy desert sand.

The inclination to drive faster with the ROAMERDRIVE negates considerable fuel savings to be had if one retains one's original driving habits. Our experience shows that drivers who use the ROAMERDRIVE at moderate speeds will save up to 18% on fuel costs. The long-term saving of less wear and tear on engine and drive line components are also considerable. Bear this in mind and your ROAMERDRIVE will pay for itself quickly.

BRITISH OFF ROAD supply and fit the ROAMERDRIVE



BRITISH OFF ROAD
7069 Chevallum road
Forest Glen, Sunshine Coast, QLD
(Bruce Highway Exit 200)
07 5445 1094
www.britishoffroad.com