# **MODEL SS ROAMERDRIVE** GLOBAL ROAMER CORPORATION

#### FOR LAND ROVER SERIES I, II, III



This is 'Bean' a 1968 model 88 Series IIA Land Rover that was purchased in England in 2002 and used extensively in Europe as a ROAMERDRIVE test bed and demonstrator driving as far south as Spain and as far north as Sweden. Bean emigrated to Canada in 2005.



The distinctive extra lever on the right hand side of the transmission tunnel on a Series I,II,or III Land Rover shows that it is equipped with a GLOBAL ROAMER OVERDRIVE.

Since 2002 the majority of new overdrives fitted to these timeless vehicles have been simple rugged units now manufactured by our company in Western Canada.

Proven in hundreds of installations worldwide, this rugged and well engineered product will improve the performance and economy of your collectable Land Rover.

- The SS model ROAMERDRIVE is an auxiliary gearbox that is easily fitted to a Series I, II or III Land Rover with a 4 or 6 cylinder engine. The unit adds an additional 28% to the ratio of the transmission giving improved fuel economy. Reduced engine speed contributes to quieter more comfortable travel at highway speeds and extends the life of drive train components.
- The ROAMERDRIVE is a completely mechanical device built in the same 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 engaged or disengaged by moving a convenient lever.
- ★ Unlike a high ratio transfer case that will permanently detract from the versatility of the gearbox the ROAMERDRIVE does not affect the vehicle's designed gear ratios. The unit provides useful 'splitter' gears such as a gear ratio midway between conventional third and fourth.
- ★ The ROAMERDRIVE uses the same epicyclical gear technology as a modern automatic transmission and is very quiet running. This is particularly evident at higher speeds and makes driving a Series Land Rover for long distances a more pleasurable experience.
- ★ Fuel savings will depend on your driving habits. On long journeys ROAMERDRIVE users have reported fuel savings of up to 18%.

### SS INSTALLATION



Installation of the overdrive takes about three hours and can be done by any mechanically inclined person using normal shop tools.

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

A 50 mm hole must be cut in the gearbox tunnel cover to accommodate the control lever.

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

The GLOBAL ROAMER SS OVERDRIVE is supplied set up to fit the common four cylinder engines. If a six cylinder Land Rover engine is fitted, an

extension must be welded to the lever mounting bracket. This overdrive will not fit Land Rover V8's. If a non-standard higher horsepower engine is fitted, an optional oil cooler is recommended and synthetic oil should be used. Consult factory if you require additional information.

#### LUBRICATION

The overdrive shares oil with the vehicle transfer case. A handy dip stick is included that screws into the transfer case port and a new top cover with filler plug is provided. After installation the transfer case is filled to the tip of the dip stick and an extra half litre of oil is added to the ROAMERDRIVE housing. No other lubrication or service is required other than normal oil changes.

#### IMPORTANT !

The correct oil to use in ths overdrive is rated API-GL4 MTF.

<u>API GL5 or GL4/5 hypoid axle oils must NOT be used</u> as such oils may have additives corrosive to bronze components. <u>Damage caused by the use of such oil is not covered in the product warranty</u>. A list of suitable API-GL4 MTF oil brands is supplied with the overdrive installation instructions.

## USING YOUR GLOBAL ROAMER SS OVERDRIVE

The ROAMERDRIVE is not normally required in urban traffic and the lever is kept in the aft position. Once on the open road the overdrive can be engaged. To do this simply depress the clutch and move the control lever forward as one would do with a normal gear lever. When conditions require a downshift, leave the overdrive engaged and simply shift the main gearbox into third or second gear as required. Depress the clutch and disengage the overdrive in stop-start traffic and engage again as required.

When driving off road in sand, you will find the overdrive useful as it will give you a higher top speed in low range and reduce the need to shift between high and low ranges. The unit cannot be damaged if it is left engaged (even in reverse) but you will notice

the change in ratio when pulling off from a stop.

BRITISH OFF ROAD supply and fit the ROAMERDRIVE



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