

1 GLOBAL ROAMER CORPORATION

Thank you for buying this Model DS-B ROAMERDRIVE.



This overdrive will fit any Defender model 90, 110 and 30 Land Rover fitted with a Suffix C or later 230 transfer case. The upper gear in your transfer case should have 26 teeth and be 33 mm wide.

This ROAMERDRIVE will not fit early 90 and 110 vehicles with four speed gearboxes or Suffix A and B 230 transfer cases or vehicles retrofitted with Discovery transfer cases. Consult our factory if you are in any doubt about your application.

High Power Engines

When this ROAMERDRIVE is fitted to a Land Rover with a non-standard engine or to a Td5 engine with more than normal power output, it is essential that our oil cooling sump cover (Part DS-COV) be fitted to the transfer case (See 14).

2 TOOLS AND LUBRICANT REQUIRED

Check the contents of the box against the parts list and organise some mechanics tools. You will need socket wrenches, flat spanners, screwdrivers and a small funnel. Note that keys to fit the fill and drain plugs are supplied.

If the gearbox in your Land Rover is excessively dirty you may wish to have the transfer case area steam cleaned or pressure washed before you start the installation.

You will need four litres of API-GL4 Manual Transmission Fluid. For a list of suppliers of API-GL4 lubricants see page attached.

Do not use API GL5 or API GL4-5 Hypoid axle oils. These oils are blended for use in hypoid axles and contain additives corrosive to bronze parts in the overdrive. Use of such oils voids your warranty.

IMPORTANT

With the transfer case warm, drain out the old oil before starting to install this overdrive. Check the old oil for metal contamination. Excessive metal shavings on the sump magnet and brass particles on the floor of the drain pan indicate existing problems in the transfer case that should be repaired before the overdrive is installed.

3 REMOVING GEARBOX TUNNEL CARPETS AND COVERS

Remove the carpet from the gearbox tunnel. Unscrew the gear knobs. Slide the rubber gaiter up off the levers. Now remove the Philips head screws that fix the metal or fibreglass cover over the gearbox and lift the cover out over the levers.



REMOVE THIS COVER



Installation may be easier if you open the hatch over the transfer case by removing the centre front seat or cuddy box.

4 REMOVING THE STOCK DRIVE GEAR

Take the round PTO cover off the rear of the transfer case by removing six 10mm bolts.

On older units remove the two slotted countersunk screws. Tap off the second round plate.



REMOVE THIS GEAR

Reach into the aperture and remove the gear visible inside the housing. You will have to put the gearbox and transfer case in neutral and rotate the gear to remove it.

Check that this gear has 26 teeth and is 33 (NOT 27) mm wide otherwise the DS-B model ROAMERDRIVE will not fit.

Remove any gasket residue from the gasket surface. Check that the spline on the main shaft inside the transfer case is not worn as is sometimes the case.

Look for signs of leakage in sump cover, output shafts and brake drum as this is a great opportunity to fix them.

Retain the bolts, gear and cover plates in case you need them in future. A wooden box is provided for this purpose.