

The Elan Factory - Product Data Sheet



Constant Velocity drive shaft fitting instructions

Your solid drive shaft kit has been supplied fully assembled and ready for installation.

The only modification that may be necessary is, to remove the rotoreflex fail-safe pins that were installed on later production vehicles. These pins are approximately 10mm diameter by 38mm long and are welded to the centre of the drive flange of the differential and outboard drive shafts.

The first step is to remove the original intermediate drive shafts and rotoreflex couplings. These items should be carefully stored away, complete with the high tensile bolts and nyloc nuts.

Next, inspect the differential output drive shaft and wheel axle drive shaft for any signs of wear or damage. Pay careful attention to the boltholes and check for ovality. If there are any signs of significant wear, then for safety reasons the relevant component should be replaced.

For ease of fitment, remove the adapter plates and fit these to the (inner) differential output shaft and to the (outer) wheel hub drive shaft. Install the adapter plates on the shafts with the 7/16 UNF bolts and nyloc nuts but do not tighten.

Note that the adapter plates, captive bolts and caps are supplied as a matched set. Each set is numbered and care should be taken not to mix the various components. Each adapter plate has either a long or short 7/16 UNF bolt set. The longer bolt adapter should be installed at the wheel hub drive shaft location and the shorter bolt adapter should be installed at the differential drive shaft location.

Before installing the intermediate shaft assembly, make sure that the machined recess on the head of each 7/16 UNF bolt is in alignment with the machined recess circle inside the adapter plate.

Next, offer up the intermediate shaft assembly to the adapter plates and insert the cap screws in each CV joint so as to attach the adapter plate.

When attaching the CV joints to the adapter plates, align the 7/16 UNF bolts in each plate so they are directly opposite or in phase with each other. This ensures the smooth action and operation of each CV joint during rotation.

All the CV joint cap screws should then be tightened in a diagonal sequence to the correct torque setting of 15ft/lbs to 19ft/lbs.

All the adapter plate nyloc nuts should then be tightened to the correct torque setting of 45ft/lbs to 55ft/lbs.

After all the fixing bolts and screws have been installed correctly, check the CV drive shaft assembly and associated components are free (and smooth) to rotate with the suspension at full droop.

After an initial running period of approximately 500kms, check all bolts and cap screws again for tightness. The above procedure should be followed to ensure a safe and trouble free installation of your new solid drive shaft assemblies.

Routine Maintenance

It is recommended that the CV joints should be re-packed with Molybdenum based grease every 8000kms to 10,000kms. Later drive shaft kits incorporate grease nipples in the adapter plates. This allows routine CV joint lubrication during scheduled vehicle servicing intervals.

It is also recommended that the rubber boots be periodically inspected for fractures. Any splits or cracks will allow grit and water to enter the CV joint. In addition to this, splits will allow the loss of grease from the joints thus causing premature failure.

For further information regarding CV drive shaft kits, performance products or genuine Lotus products, please phone The Elan Factory on (613) 9761-1903 or fax on (613) 9739-8944. Alternatively you can write to The Elan Factory at 5 Marong Court, Boronia Heights 3155, Melbourne, Australia or e-mail at elanfactory@optusnet.com.au