

The Elan Factory – Product Data Sheet



CV rear drive shaft conversion kit to suit Lotus Elan and Elan +2

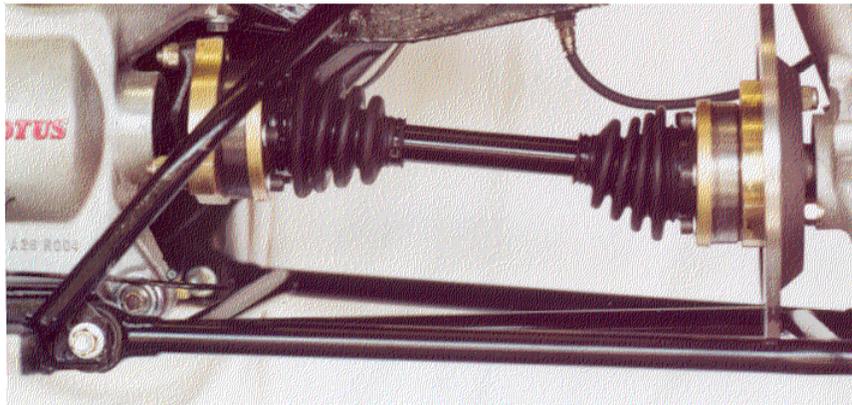
Upgrading the rear drive train on any Elan to a modern system improves the reliability of the vehicle. This modification also eliminates the undesirable surge caused by the original rubber drive shaft couplings. Using CV joints provides superior transmission of large amounts of torque over a large suspension travel.

Drive shaft kits that employ universal joints and sliding joints are out dated and are inefficient at transmitting large amounts of torque to the rear wheels. Universal joints are primarily designed to move through a small angle of travel such as in a propeller shaft installation. The racing version of the Lotus Elan (the 26R) employed universal joints and a sliding-spline that required regular maintenance and was never intended for regular road use. This type of conversion should be avoided, as it is possible to over extend the design angle of the universal joint and can result in the joint locking up.

The Elan Factory has carefully engineered a CV conversion kit that takes into account the large suspension travel and the resultant change in drive shaft length.

The kit contains the following items:

- CV joint complete with rubber dust boot, quantity 4
- Fully machined adapter plates, hand finished, bright gold zinc plated, quantity 4
- Fully machined solid billet half shafts (steel alloy 4140 heat-treated), quantity 2
- Adapter closing plate, bright gold zinc plated, quantity 4
- 2" x 5/16" UNF high tensile cap screw and spring washer, quantity 24
- 1 3/4" x 7/16" UNF high tensile bolt, bright gold zinc plated, plus nyloc nut, quantity 6
- 2" x 7/16" UNF high tensile bolt, bright zinc plated, plus nyloc nut, quantity 6



The kit also offers a unique design feature that incorporates captive drive shaft bolts in the adapter plates. This ensures ease of installation whilst providing correct safety fastening with nyloc nuts. The kit is ready for immediate installation without any other modification and bolts directly to the standard drive train components. The kit has been designed to handle significant amounts of torque and is race proven. Installing the conversion kit is straightforward. This involves removing the original rubber couplings and removing the intermediate drive shaft.

During installation it is recommended that all differential and outboard drive shafts should be removed and routinely crack tested. At the same time, the condition of the differential output shaft and outboard drive shaft wheel bearings should be inspected for wear and replaced if necessary.

Periodic CV joint maintenance is straightforward as the adapter plates are fitted with grease nipples. This allows the CV joints to be lubricated externally without the usual practice of dismantling the entire assembly.

For further information regarding suspension components, 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