Winchester LT230 Stage 1 & 2

The Winchester LT230 Stage 1 & 2.

These transfer boxes have been developed by ourselves and with the help of a few other small engineering companies, to produce what we believe, is the strongest road going transfer box possible. A two year warranty comes as standard with Stage 1 & Stage 2

Both Stage 1 & Stage 2 have the same full spec but have different center differentials. The Stage 1 has a billeted cross pin, replacing the existing two cross pins. The Stage 2 has a torque biasing ATB.





The main casing has been strengthened, by machining the bore of the intermediate shaft allowing a steel bush to be inserted, preventing the aluminium wearing from the head of the intermediate shaft. This is a common fault and ultimately results with leaks. (See image above.)

We also machined the bore of the main shaft bearing housing, that sits behind the speedo housing. We machined this 5mm over bore and inserted a steel sleeve to house the outer race of the bearing. This is another weak point of the main casing. The aluminium wears and the gears no longer sit in perfect mesh and ultimately fail. (Image below to the left shows the sleeve and the image to the right shows with the new bearing race fitted.)





The Intermediate shafts are also prone to wear, so we had a new heavy duty pin manufactured from 17.4PH stainless steel to replace the existing.





The Center Differential

This is where the Stage 1 and Stage 2 units differ. The Stage 2 is fitted with an Ashcroft ATB Torque biasing center. Although this is still an open diff, torque is delivered much more evenly between axles and is able to take greater loads of torque.





The Stage 1 box uses the original main shaft and diff housing but we fit a billeted heavy duty cross pin replacing the 2 existing pins.





Of course all bearings and every seal is replaced including all O rings and fiber washers. All casing bolts have been upgraded to 12,9 high tensile. New flange couplings are fitted with new prop bolts. Casings are sealed with "Wurth bond and seal". Bearing Pre load and torque settings are all to Land Rovers Work Shop manual figures.

Available in two ratio options 1.4 and 1.2 we are able to offer other ratio options on request.













