



ADVISORY BULLETIN No. 2

Differential Carrier Cracks

The earlier cars did not have the opening in the differential carrier radiused which left a razor sharp edge creating stress risers where cracks could start propagating from.

The carrier is easily removed for inspection by removing the left rear top wishbone attachment bolts and lowering the corner assembly being careful not to drop the drive shaft. Remove all the carrier plate bolts and pull out the assembly. It should come out easily.

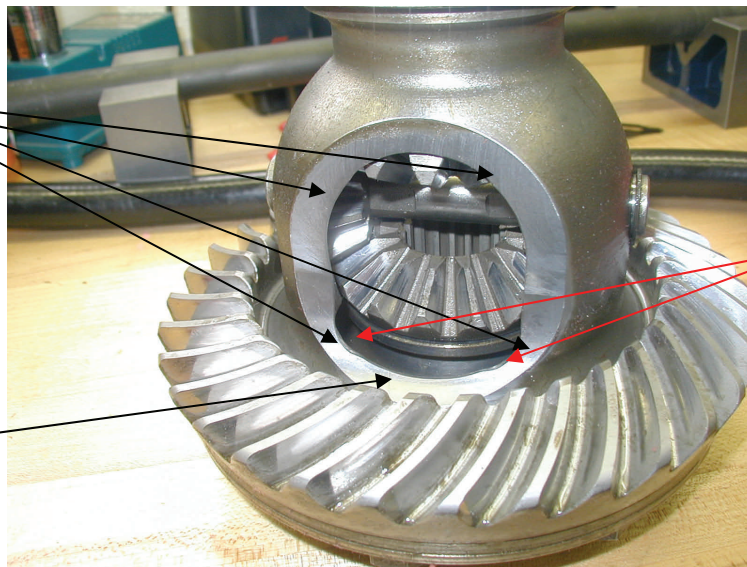
Inspect the inside of the opening for cracks, most are occurring in the corners as shown below. If you have cracks they may be ground out until they no longer can be seen with a 10X magnifying glass. If the cracks penetrate the “meat”, i.e. into the main part of the casting on both sides, contact Lee Williams at Williams Racing Development in San Diego, phone (858) 578-1044, cell (858) 220-0927, who is the Elite Transmissions Representative for further assistance.

If your carrier has not been radiused then do so with a rotary file all the way around the opening to provide a smooth rounded surface around the entire opening before reinstalling. Inspect the spider gears to insure they are rotating smoothly and the pin also rotates freely. There has been a report that both the pin and spider gears have frozen up for unknown reasons.

Be sure to insure that you have properly cleaned all the filing debris from the assembly and lube all the bearing surfaces before installing. A complete copy of the transmission and differential manual may be found in the technical section of our web site.

Cracks normally appear in these corners

Machining mark.



This photo shows a carrier that has already been radiused and no cracks were found on inspection. Note the chamfering that has been done to the inside opening which continues over the complete circumference.