

CLUNK IN DIFFERENTIAL

by Garth Lippmann

Most Elan owners are accustomed to various mysterious clunks and vibrations, even squeeks. I have cured one that has been bothering me for a year and the quiet happiness is worth passing on. At first this noise sounded like it was due to the excessive clearance between the ring and pinion gears. Accelerating away quickly in first gear would bring out the clunk as the clutch caught. As time went on the noise became noticeable in rough shifts into other gears as well as the reverse--first sequence.

A check of the ring-pinion play by moving the drive shaft, didn't reveal as much free movement as when checking my Cortina GT and the Cortina doesn't clunk. While changing a tire on the Elan and generally cleaning up around the differential I grabbed the drive shaft and pulled myself under the car. While pulling the differential moved about 1/4" to 3/8" up and down at the front. After feverishly pulling and pushing I could see the front bolts on the differential torque rods moving. When they were tightened the clunk disappeared. This phenomena may appear more frequently with Elans if the engine is prepared and putting out more than stock horsepower. For those of you who don't have shop manuals, the differential torque rods are places along the bottom of the differential (horizontal position) with a rubber shock mount at the back end. The rubber will undoubtedly be deteriorated from leaking gear oil and L.A. smog. They can be replaced with the standard shock absorber bushings. Incidentally, while beneath your motorcar, check the condition of your doughnuts. "A stitch in time saves nine" and a broken doughnut can cause lots of mechanical and body damage.