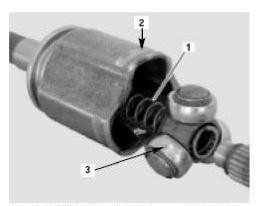
2006 MINI Cooper S

2002-07 GENINFO Driveline - Overview - MINI



Inner Joint Components

44-03-407

- 1. Retaining Spring
- 2. Inner Tri-End Housing
- 3. Inner Joint Bearings

Fig. 140: Outer Joint Components (2 Of 2) Courtesy of BMW OF NORTH AMERICA, INC.

Inner Joints

The inner joint is of the tripod type with spherical bearings to reduce sliding resistance. The joint has three bearings supported on needle roller bearings. This allows the shaft to slide horizontally inside the joint. The horizontal sliding movement will allow the overall length (differential to hub) of the shaft to increase or decrease as required with suspension travel.

A maximum drive angle of 25° is possible with this type of joint but the working angle is normally less than 10°. This is why tripod plunge joints are normally positioned at the differential end of the drive shaft.

On the left hand inner joint, used with the R65 gearbox, the drive shaft it is retained in the differential by pressure from a spring located between the two halves of the inner joint.



- 1. Circlip
- 2. Shield

Inner Joint Retention Ring (Getrag/ECVT) 44-03-40

Fig. 141: Inner Joint Retention Ring (Getrag/ECVT) Courtesy of BMW OF NORTH AMERICA, INC.