

Technical Bulletin

Model
1991 911t

Group
3

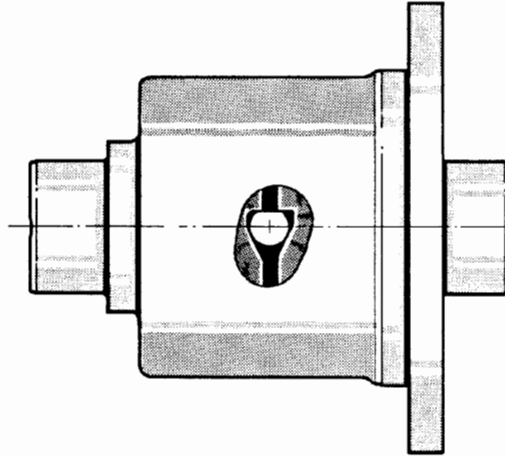
Subject: ZF-Type Limited Slip Differential

Part Identifier
3940

Number
9101

ATTENTION: Service Manager/Service Technician

Models Affected: **1991 911 turbo**



Concern:

Operation of the new ZF-type limited slip differential.

General Information:

The new ZF-type limited slip differential is designed to provide **different** locking values for driving load and deceleration load. The ZF limited slip differentials formerly installed had a locking value of approximately 40% under driving load and deceleration load.

This new design features a locking value of 20% under driving load and up to 100% under deceleration load. The locking value under deceleration is generated as in the former version differential — thrust pieces working against a pin, squeezing a clutch pack. The 20% locking value under driving load, however, is not dependent on torque input. This locking value is generated entirely by cup spring preload on the clutch packs. The 20% locking value is constant regardless of traction load.

It is important to note that the deceleration load locking mechanism is also active in reverse gear. **For this reason some differential growl may be noticed on very sharp turns when backing the car. This noise is a normal function of the new differential design. No repair attempt should be made.**

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