

KES

Speed Meter Gear High Speed Fatigue Strength Test

KES T-B125

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1. Scope of Application

This standard shall specify the high speed fatigue strength test of speed meter gear used in the front-wheel drive, rear-wheel drive and 4-wheel drive cars.

2. Purpose

The purpose of this standard shall be to measure the fatigue strength of speed meter gear in the high speed driving condition.

3. Test Preparation

- (1) Prepare a transmission. (A used one is available)
- (2) Prepare the speed meter gear set more than 5.
- (3) Prepare speed meter cable and speed meter plate.
- (4) The option part of structure that comes to be load to the revolution of speed meter should be put together.

4. Test Procedure and Method

4.1 Test Condition

- (1) Engine RPM : The engine RPM correspond to the maximum car speed. (Choose the engine RPM of the higher maximum car speed in case of the automatic and manual transmission)
- (2) Gear : 5'th order or drive.
- (3) Oil temperature : $135^{\circ}\text{C} \pm 5^{\circ}\text{C}$ (the temperature around speed meter)
- (4) Use the lower value of standard as oil regulation level and, use the oil made by A.T.F.

4.2 Test Method

- (1) Install the transmission at the motoring bench.