

EDS

Engineering,
GM DAEWOO Auto & Technology
Standards

DURABILITY TEST TRANSMISSION INPUT SHAFT AND MAIN SHAFT BALL BEARING

EDS-T-2215

ISSUED DATE: 1996. 07. 10

REVISED DATE: 2006. 06. 19

VERSION: 3

1. PURPOSE

This standard evaluates the durability of input shaft and main shaft ball bearing of manual transmission.

2. SCOPE

This standard shall be applied to manual transmission for R25 RWD.

3. EQUIPMENT

- 3.1. Transmission bearing test stand
- 3.2. Transmission case with input shaft and main shaft
- 3.3. Pick up for sound conducted through solids with noise switch.
- 3.4. Remote thermometer to measure transmission oil temperature.
- 3.5. Tension springs to apply radial force
- 3.6. Calibration facility to measure the spring force
- 3.7. Time recorder to record test time
- 3.8. Case for R25 Manual transmission (Install case as shown in Fig 1 and 2)

4. PREPARATION

- 4.1. Sight check of the bearing to be tested.
- 4.2. Installation into appropriate transmission case (refer to drawing).
- 4.3. Fill with released transmission oil above upper edge of bearing.
- 4.4. Operational check of the noise switch and adjustment of desired sensitivity.

5. PERFORMANCE

- 5.1. Sample speed to be $2,800 \text{ min}^{-1}$
- 5.2. The radial tension load is to be applied via calibration cup spring. For tension load values, refer to chart.
- 5.3. The transmission oil temperature shall be kept at $+80^{\circ}\text{C} \pm 5^{\circ}\text{C}$. ($353\text{K} \pm 5\text{K}$)