



Gear Durability Strength Test for FR 4*4 T/M Gear

KES T – F007

(EST.) 1990 – 08 – 20

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1. Scope of Application

This shall be applied to the entire manual transmissions equipped with 4 × 4 transmission.

2. Test Purpose

This shall be for the purpose of evaluating the trustworthiness of gears in the manual transmission equipped with 4 × 4 transmission and acquiring the damage distribution of each gear.

3. Test Preparation

3.1 Preparation of equipment and tool

- (1) Mission fixing table
- (2) Transmission boss section
- (3) Propeller shaft or drive shaft

3.2 Preparation of test sample

- (1) The test sample should be transmission complete.
- (2) Use the gear fatigue tester for power unit.
- (3) Fix the safety guard to the fixing part of the mission.
- (4) Connect the regulated cooling unit.
- (5) Set up the thermocouple to measure the temperature in the case of the transmission and transfer.

(Including the extension housing)
- (6) Inject the designated amount of oil.
- (7) At the high gear of the mission, perform the preliminary test by rotating the T/F for 5 minutes at the input torque of 50% of each engine torque (T_e) in the high range and low range of the T/F case and at the nominal input speed of 1000rpm.