SAE INTERNATIONAL

SURFACE VEHICLE STANDARD

J1279™ AUG2024

Issued 1988-12
Reaffirmed 2008-01
Revised 2024-08

Superseding J1279 JUN2018

Snowmobile Drive Mechanisms

RATIONALE

This standard has been revised to update engine terminology to allow for new or other technologies and some formatting updates. This revision also changed SAE J1279 from a recommended practice to a standard.

1. SCOPE

This SAE Standard is applicable to snowmobiles as defined in SAE J33.

1.1 Purpose

To provide minimum requirements and tests for evaluating the structural integrity of snowmobile drive mechanisms (that is, drive pulleys, driven pulleys, torque converters, centrifugal clutches, or similar mechanisms).

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

SAE J33 Snowmobile Definitions and Nomenclature

3. EQUIPMENT

Provide a means capable of spinning the test samples to the velocities set out in 5.2, a tachometer accurate to ±1%, and any guards or shields necessary to protect operators and observers. Figure 1 is an example of such equipment. The test equipment shall not alter the structural integrity of the sample.

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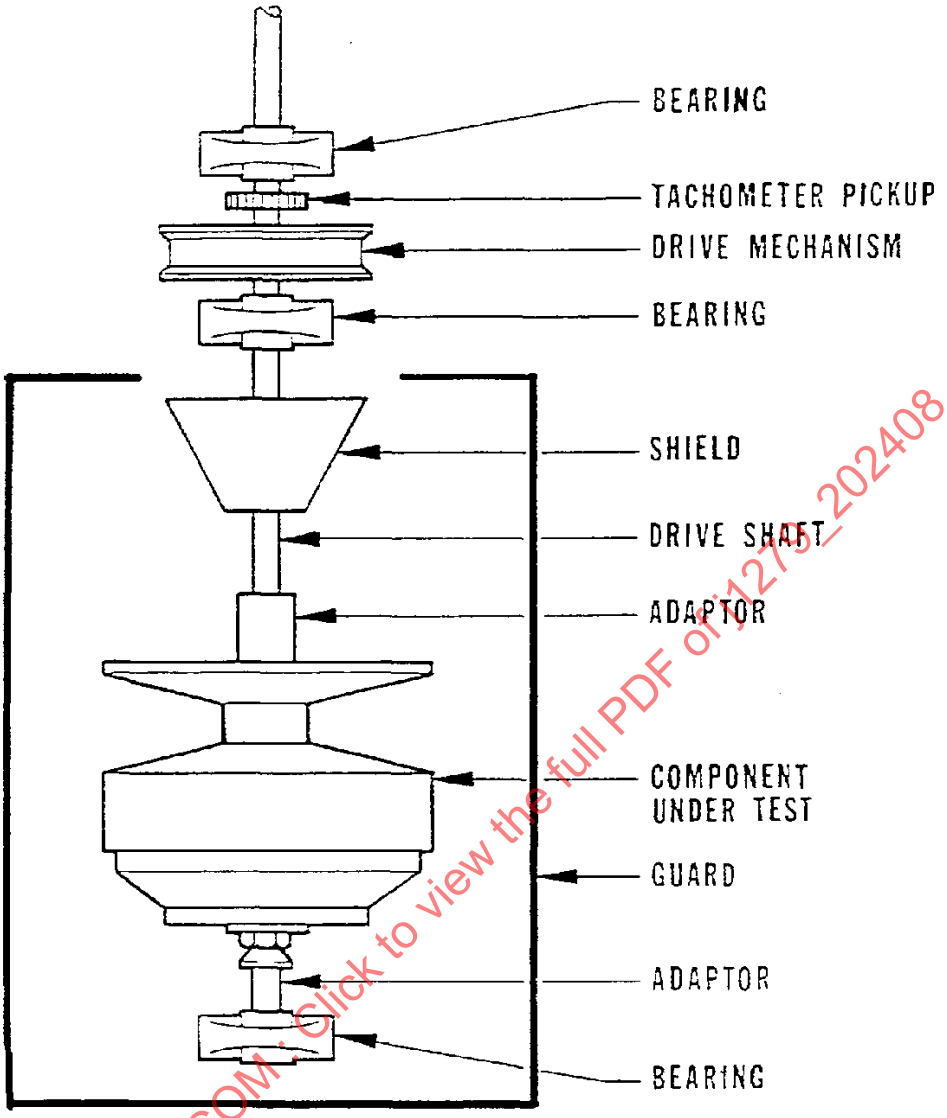

Figure 1 - Example of spin test mechanism

4. REQUIREMENTS

The mechanisms chosen for the test shall withstand the test of Section 5. A visual examination conducted post testing shall not reveal structural cracks, fractured components, or deformation of the test samples.

5. TEST PROCEDURE

5.1 Perform the test at any ambient temperature.

5.2 Spin the sample about its axis of rotation. Each mechanism shall be tested at an rpm of:

a. No less than 1.5 times the maximum horsepower rpm of the engine/motor but not less than 12000 rpm, and times any effective drive ratio, or

b. 1.25 times engine/motor rpm at wide open throttle with no load (belt removed).

5.3 Maintain the applicable rpm for 2 minutes.