

Submitted for recognition as an American National Standard

## SNOWMOBILE DRIVE MECHANISMS

**Foreword**—This reaffirmed document has been changed only to reflect the new SAE Technical Standards Board Format.

1. **Scope**—This SAE Recommended Practice 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 Publication**—The following publication forms a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply.

2.1.1 SAE PUBLICATION—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J33—Snowmobile Definitions and Nomenclature

3. **Equipment**—Provide means capable of spinning the test samples to the velocities set out in 5.2, a tachometer accurate to  $\pm 1\%$  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.

4. **Requirements**—The mechanisms chosen for the test shall withstand the test of Section 5 without any resultant fractures or cracks.

### 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 prime mover but not less than 12 000 rpm, and times any effective drive ratio, or
- b. 1.25 times engine rpm at wide open throttle with no load (belt removed).

5.3 Maintain the applicable rpm for 2 min.

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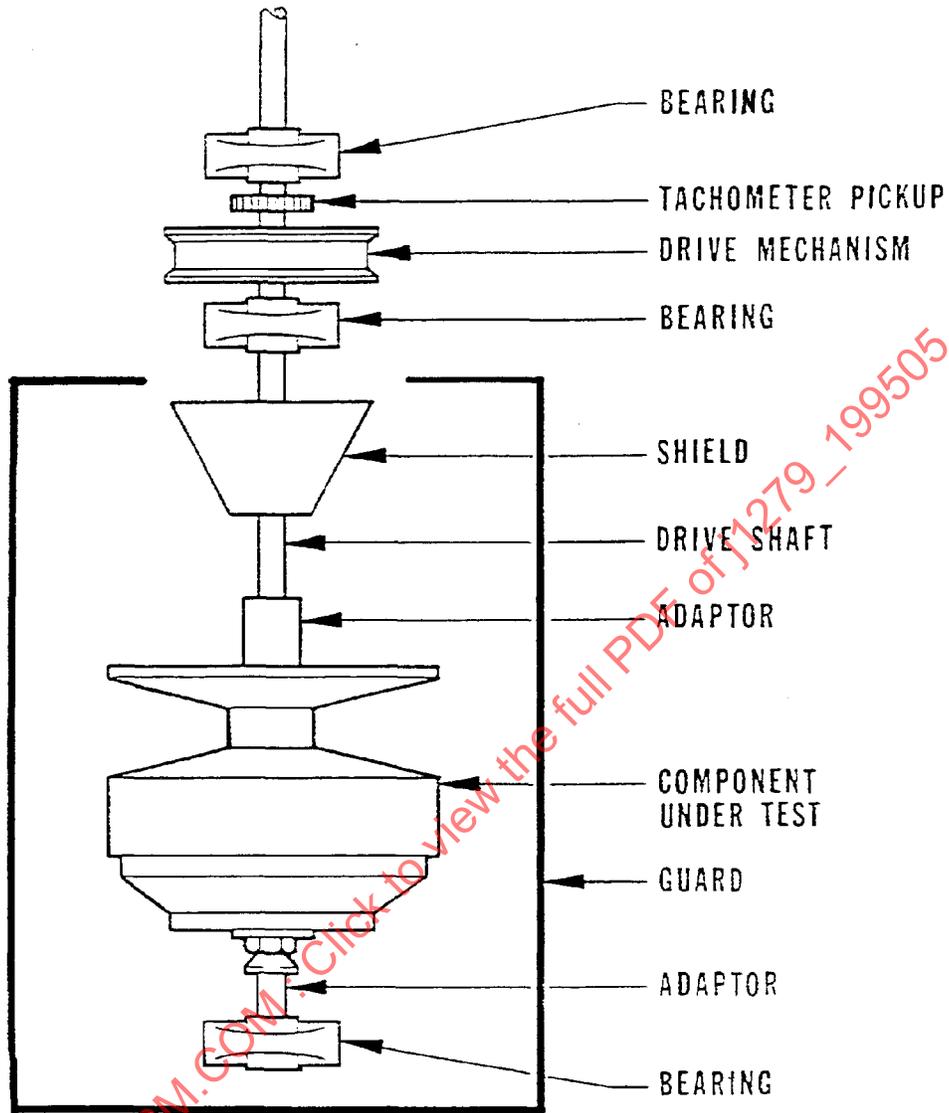


FIGURE 1—EXAMPLE OF SPIN TEST MECHANISM

PREPARED BY THE SAE SNOWMOBILE COMMITTEE