

**SAE** The Engineering Society  
For Advancing Mobility  
Land Sea Air and Space®

A Product of the  
Cooperative Engineering Program

**SAE J1279 DEC88**

## **Snowmobile Drive Mechanisms**

SAE Recommended Practice  
Issued December 1988

SAENORM.COM : Click to view the full PDF of J1279-198812

**S. A. E.  
LIBRARY**

Submitted for Recognition as  
an American National Standard

SAENORM.COM : Click to view the full PDF of J1279\_198812

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

Copyright 1989 Society of Automotive Engineers, Inc.

Submitted for recognition as an American National Standard

SNOWMOBILE DRIVE MECHANISMS

1. PURPOSE:

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

2. SCOPE:

This recommended practice is applicable to snowmobiles as defined in SAE J33 OCT84, 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. Fig. 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.

SAE Technical Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

- 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 minutes.

SAENORM.COM : Click to view the full PDF of J1279\_198812

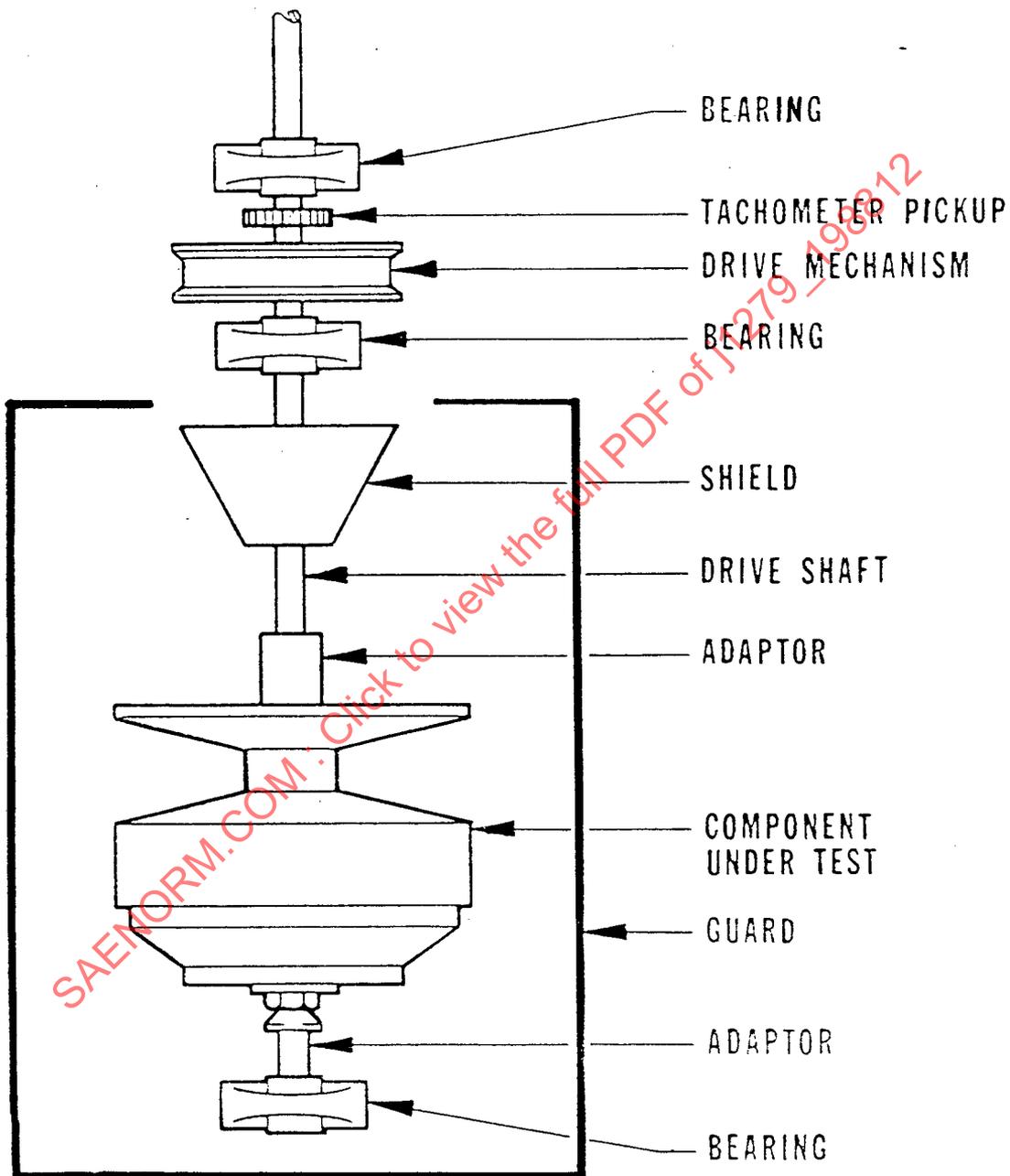


FIGURE 1 - Example of Spin Test Mechanism