SAE International™

SURFACE VEHICLE RECOMMENDED PRACTICE

SAE J44 FEB2009

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Service Brake System Performance Requirements—Snowmobiles

RATIONALE

This document is being revised to remove obsolete references in Section 2.

1. SCOPE

This SAE Recommended Practice establishes performance requirements for hand-operated brake systems on recreational, noncompetition snowmobiles.

2. REFERENCES

2.1 Applicable Publication

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

2.1.1 SAE Publication

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

SAE J45 Brake System Test Procedure—Snowmobiles

2.2 Related Publication

The following publication is provided for information purposes only and is not a required part of this specification.

2.2.1 SAE Publication

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

SAE J1282 Snowmobile Brake Control Systems

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)**
Tel: 724-776-4970 (outside USA)
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3. GENERAL REQUIREMENT

The brake systems shall be functional under winter operating conditions.

4. PERFORMANCE REQUIREMENTS

When subjected to the test procedures given in SAE J45, the following requirements must be satisfied by the service brake system:

4.1 Preburnish Check

4.1.1 No component failure shall occur during the 400 N (90 lb) force application.

4.1.2 Deceleration shall be at least 3 m/s^2 (10 ft/s^2).

4.2 Burnish Procedure

No unusual variations in deceleration versus brake lever force shall occur during the burnishing operation.

4.3 Effectiveness Test

4.3.1 Testing shall result in an average deceleration of at least 6 m/s^2 (20 ft/s^2) or a locked track, if 6 m/s^2 (20 ft/s^2) is unobtainable, from initial vehicle speeds of 32 and 64 km/h (20 and 40 mph).

4.3.2 During all phases of the test, no condition shall be permitted to cause the vehicle to lose stability due to track skid, to overturn, or to pull or swerve out of a test lane 1.2 m (4 ft) wider than the vehicle.

4.4 Water Test

Deceleration shall be at least 3 m/s^2 (10 ft/s^2).

4.5 Fade and Recovery Test

4.5.1 Fade Test

Each stop shall be achieved with a deceleration of at least 4.6 m/s^2 (15 ft/s^2).

4.5.2 Recovery Test

Testing shall result in an average deceleration of at least 6 m/s^2 (20 ft/s^2) or a locked track, if 6 m/s^2 (20 ft/s^2) is unobtainable, from an initial vehicle speed of 64 km/h (40 mph).

4.6 Final Inspection

4.6.1 Unusual wear, scores, or cracks of the brake friction material which may interfere with braking function shall be reason for rejection.

4.6.2 All components of the brake system shall be intact and functional.