

Australian Standard™

**Brake shoe assemblies and disc brake
pad assemblies—Attachment**

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Australian Automotive Aftermarket Association
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PREFACE

This Standard was prepared by Standards Australia Committee ME/54, Automotive Components, to supersede AS D20—1972, *Bonded brake shoe assemblies*.

This Standard includes test procedures for shear strength in Appendix A and resistance to water, saline solutions, oil and brake fluid in Appendix B.

The test method in Appendix A has been adopted with national modifications from ISO 6312:1981, *Road vehicles—Brake linings—Shear strength of disc brake pad and drum brake shoe assemblies—Test procedure*.

The test method in Appendix B has been adopted with national modifications from ISO 6314:1980, *Road vehicles—Brake linings—Shear strength of disc brake pad and drum brake shoe assemblies—Test procedure*.

During the preparation of this Standard consideration was given to ISO 6313:1980, *Road vehicles—Brake linings—Effects of heat on dimensions and form of disc brake pads—Test procedure*; ISO 6314:1980, *Road vehicles—Brake linings—Resistance to water, saline solution, oil and brake fluid—Test procedure*; SAE J840, *Test procedures for brake shoe and lining adhesives and bonds*; and ECE 13 Regulation 90, *Uniform provisions concerning the approval of replacement brake lining assemblies for power-driver vehicles and their trailers*.

Explanation: The modifications to the ISO documents comprise changes in presentation. Some preliminary elements and reporting procedures have been deleted or incorporated into the body of the Standard to avoid repetition. Some steps in the test procedures have been reworded to clarify that they are mandatory.

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STANDARDS AUSTRALIA

Australian Standard

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1 SCOPE This Standard specifies the performance requirements for attaching the brake lining material to the lining carrier of brake shoe assemblies and disc brake pad assemblies used on road vehicles.

Appendix A specifies a test procedure for shear strength of disc brake pad and drum brake shoe assemblies.

Appendix B specifies a test procedure for resistance to water, saline solution, oil and brake fluid.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

ISO

1817 Rubber, vulcanized—Determination of the effect of liquids

4926 Road vehicles—Hydraulic brake systems—Non-permeation base reference fluids

3 DEFINITIONS For the purpose of this Standard the definitions below apply.

3.1 Attaching process—a method of attaching, such as bonding, riveting and integral moulding.

3.2 Brake—a system in which forces oppose the movement or the tendency to movement of a road vehicle.

3.3 Brake shoe assembly—the assembly which comes into contact with the drum during the operation of a drum brake.

3.4 Compliance—a measure of the fidelity with which the product, taken at the point of acceptance, conforms to the specified requirements.

NOTE: Throughout this Standard the term product includes goods and services.

3.5 Disc brake—a friction brake in which the frictional force is produced between the components attached to a fixed part of the vehicle and the faces of one or more discs.

3.6 Disc brake pad assembly—the assembly which comes into contact with the disc during the operation of a disc brake.

3.7 Drum brake—a friction brake in which the frictional force is produced between the components attached to a fixed part of the vehicle and the internal or external surface of a drum.

3.8 Lining—the friction material component of a brake shoe assembly or a disc pad assembly.

3.9 Lining carrier—the component of a brake shoe assembly or a disc brake pad assembly to which the lining is attached.

3.10 Lot (Batch)—A quantity of some commodity produced under conditions which are considered uniform.

NOTE: Each lot or batch is assumed, as far as practicable, to consist of materials or items of a single type, grade, class, size, and composition, and to have been manufactured under essentially the same conditions at essentially the same time.