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Brake Disc and Drum Thermocouple Installation

1. **Scope**—This SAE Recommended Practice describes two methods for installing thermocouples in automotive brake discs or drums for the purpose of indicating bulk temperature during inertia dynamometer and vehicle road tests.

1.1 **Purpose**—To provide a uniform method for installing thermocouples in automotive brake discs and drums.

1.2 **Rationale**—In reviewing the document it was found to be obsolete.

2. **References**—There are no referenced publications specified herein.

3. **Equipment**

Method A—Resistance welder

Method B—General shop tools

4. **Procedure**

Method A—Use a resistance welder to attach each wire of the thermocouple to the disc or drum in the locations shown in Figure 1.

Method B—Drill two holes in the brake disc or drum in the locations shown in Figure 2. Stake the thermocouple wires in the holes with a center punch.

When thermocouples are installed in a ribbed or finned drum the location shall be between the ribs or fins.

Thermocouple wires shall be 20 gage, 0.032 in. (0.8 mm) dia, with glass braid insulation.

In all installations the wires shall be protected from water, dirt, salt, and oxidation and against breakage from fatigue by surrounding the junction with high temperature silicone adhesive sealant, or equivalent.

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