



INSPECTION AND MEASUREMENT OF BRAKE COMPONENTS

Each brake service or friction reline requires that all components be of quality materials and specifications. Before, during, and after the brake service or reline, measurements must be taken to insure that all components are in the proper position and aligned correctly. Inspection and measuring are essential to making sure that all of the components will function as they were intended.

Some, but not all of the components we are talking about are as follows:

1. **Brake spyder assembly:** The brake spyder assembly is part of the basic foundation of all the wheel-end brake components. It is designed to keep all of the brake components in alignment with the brake drum. Any bend or distortion will cause problems with braking ability and performance. Part of the shop measuring equipment must include a good spyder gauge for each spyder used or manufactured.
2. **Brake drums:** Brake drums are another key ingredient for a good brake service. Brakes are a heat sink, plain and simple. The friction material needs to get rid of heat to the brake drum, and the brake drum dissipates it to the atmosphere. The thickness of the drum determines how much heat can be dissipated during braking. If any drum is larger than the other drum on an axle set, it can cause mild to severe problems.
3. **Brake shoe stretch gauge:** Brake shoe tables can become stretched, twisted, and worn out from excessive heat. Before installation of the brake shoes, it is very important to test the brake shoe table that your friction material is attached to for the proper length and dimensions. The size of the anchor-end pinhole is also critical to insuring brake shoes are properly aligned. This is extremely important to good mileage in friction material.
4. **Measuring device for brake temperature:** One of the most overlooked devices that should be used in brake service is a thermal measuring device to insure temperatures that are within the proper range for operation. When friction material is evenly heated and evenly temperate, it can function in an effective way. Even-in-range friction material is properly working material.