

BASIC FUNDAMENTALS OF BRAKE SERVICE

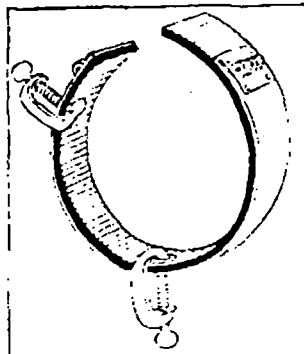
It'll pay even expert brake mechanics to review this information.

Because so much stress has been laid on the actual adjustment of brake mechanisms, the question of the proper method of relining shoes is often omitted in any instruction procedure. Many complaints from dissatisfied customers come from failure to follow basic fundamentals rather than from the brake lining used. This subject is of such vital importance that we are considering it first.

Relining of Brake Shoes and Bands

(1) External Brake Bands

Before relining external brake bands, it is necessary to see that the bands are free from rust and are shaped to the contour of the drum. Care must also be taken that none of the brackets are loose or that any rivets joining together pieces of the band and the brackets have become worn or are loose. In the case of soft woven lining, the ordinary procedure of relining external brake bands is to cut the lining about an inch and a half longer than the inside circumference of the band, rivet the two ends to the ends of the band, and buckle the lining into place. The buckle may be hammered down with a hammer, and this method usually assures a tight fit of such lining to the brake band. In the case of more rigid woven linings, it is necessary to hold these to the brake band by means of a suitable brake lining clamp, or, if this is not available, small C clamps should be used to assure a tight fit to the band. If a tight fit is not obtained, squeals and squeaks will result. Whenever brake bands indicate that the lining should be cut to allow flexibility of the band, this must be done. Care also must be



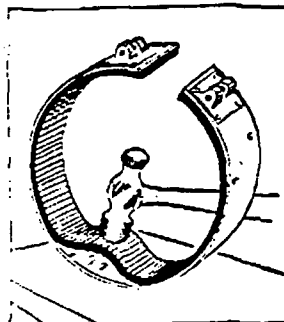
With tightly woven lining such as Multidury

taken that the lining near the ends of the shoe is trimmed to the correct length and that it is chamfered slightly to avoid digging into the brake drum.

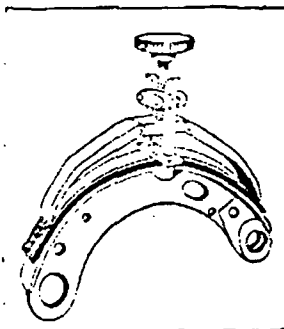
Soft woven brake linings should be counter-bored about one-half the depth of the lining. More dense woven linings should be counter-bored approximately two-thirds the depth of the lining.

(2) Internal Brake Shoes

Shoes for internal brakes should be thor-



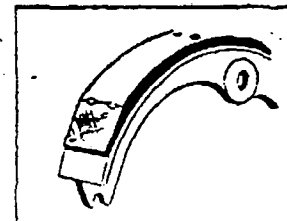
With soft woven lining such as Busduty



oughly cleaned before relining. They should be examined to see that they are not bent or cocked in any way, and that the web or fin is not broken away from the flat portion of the brake shoe. All internal brake lining should be applied to brake shoes with a brake lining clamp in order to insure a tight fit and to prevent squeaks, groans, and chatter. Lining should be counter-bored approximately two-thirds of its thickness, and brass semi-tubular rivets with heads large enough to fill the counterbore and shanks of the proper diameter to fit the holes in the brake shoe, and of sufficient length to allow an adequate clinch or roll, should be used.

In order to avoid any possibility of space between the lining and the shoe (called windows), it is recommended that a filler material be used between the lining and the shoe. Such a filler should be a soft plastic material which will not interfere with the assembly of the brake lining against the shoe, but which will fill any voids or hollows in the brake shoe and thus avoid vibration and squeaks which may result.

Linings should be cut to the correct length for the shoe being lined. Some Multibestos TAILORED Sets are supplied in standard lengths to fit a variety of different shoe lengths. Where longer pieces of brake lining are supplied for use in sets of shorter length, they must be cut to the correct length, which is approximately one-half an inch beyond the last rivet hole. Brake linings should be chamfered back three-quarters of an inch on both ends of the lining, at least to the center of the end rivet holes. For model B and V-8 Ford, and 1926-29 Nash front brakes, special long chamfer TAILORED Sets are supplied. Be sure both ends of lining are chamfered.



Chamfering

High spots and burrs around rivet holes should be removed by light grinding or with sandpaper or a file. Avoid the use of emery cloth.

Before removing shoes from a brake mechanism it is well to mark them so that correct material will be placed on each shoe. Multibestos TAILORED Sets using more than one kind of lining are clearly stamped on the friction surface indicating which to use on forward shoes. Reversal of materials causes erratic brake performance.

Care must also be taken to use the correct lining for the particular type of brake. In other words, the lining that is satisfactory for a two-shoe Bendix brake may be very unsatisfactory on another type and should not be used on it even though the width, thickness, and drum diameter correspond.

The thickness of Multibestos TAILORED Sets is carefully maintained so that grinding is unnecessary except for twisted or bent shoes or to remove the high spots and burrs around the rivet holes. With turned brake drums, Multibestos TAILORED Sets may be easily oversized with LX shim stock of the proper thickness.

Importance of Correct Clearance

As the clearance between the brake shoe and the drum governs effective brake travel, it is essential to follow carefully the clearance shown in this book under each type of brake. It is also given on the instruction tag that