

TECH NOTES-BRAKE SHOES

BY BILL KING

Another thing I noticed at the Dunkel swap meet in January were several sets of used drum brake shoes trading hands. I was curious about this so when I returned home I examined about 25 shoes from my stash to try to determine what one should look for in used brake shoes.

My first observation was that there were four different styles of shoes. I checked with Brad Ripley at NLA and according to him all four styles are suitable for our applications. My experience is that while some long time mechanics have preferences (e.g. some will not use Canadian made shoes), usually no reason is given for their bias.

The second thing I noticed was the thickness of the remaining friction material. I found that many of the shoes I examined still had a lot of lining left. Normal factory lining thickness is 7mm and many of the shoes had at least 5mm left.

None of the brake shoes I examined were worn to the metal pads, although one thing I noticed was that every one of the rear brake shoes was worn at a slight taper on the end with the pivot bolt. This must be related to the design of the rear brake with only one adjustment point for both shoes.

I found that the friction material also differed in the shoes. There seemed to be at least four different types of friction material based upon the color and composition.

I also noticed that the length of the lining material varied on some shoes. While most of the linings were about ten inches long, I found two shoes with linings only nine inches long. Clearly, you would lose ten percent of your stopping power if these shoes were used.

A final observation I made was that some of the shoes had cracking in the lining and that one shoe actually had small pieces about ready to fall out.

So is it safe to put used brake shoes in your 356? Here are some things to do before you make the decision:

1. Check the thickness of the lining material; it should be at least 5mm thick.
2. Check the lining material for oil saturation, cracking and good bonding to metal backing.
3. Match the shoes. Leading shoes and trailing shoes should match on both the front and rear brakes.
4. Clean up the shoes by placing a strip of 80 grit sandpaper inside the brake drum metal liner with the grit side towards the center and arch the shoes against the sandpaper.