



THE COMPLETE BRAKE JOB

When doing a complete brake job it is important to develop certain guidelines that you insure are done each and every time. The list that we have produced in this bulletin is a recommended practice for insuring that brakes function properly. Always remember that most problems can be diagnosed by a close inspection of the old parts.

ON DISASSEMBLY OF BRAKE SYSTEM COMPONENTS

1. **Before pulling the wheels, check each for endplay.** This step will indicate to you any problems with seals and bearing cup wear problems.
2. **Inspect all shoes for even wear.** If all shoes are not worn evenly, there will be failed or misadjusted components that will need to be corrected before replacing the brake shoes.
3. **Inspect lining surface for heat checking.** If heat checking is present, this will be an indication of excessive heat. It can indicate that one wheel is doing more work than it is designed to do. It can also identify when the improper friction material is used in the lining effort. This can also indicate overloading, excessive heat or improper friction selection. All of these items should be checked.
4. **Check the wear across each shoe.** An uneven pattern or excessive grooves can indicate the drums need replacing. An uneven pattern can also indicate a bent spider or Bellmouthed drum.
5. **Inspect lining surface for oil or grease. NEVER** reuse a grease- or oil-soaked brake lining or shoe. Grease and oil on the friction material will cause the lining to glaze and not do its share of the braking. Only do a one-wheel brake job if the lining is less than 10% worn.
6. **Inspect drum surface for even wear.** Heat checks, cracks and blue spots are indications of excessive heat. **NEVER** reuse a drum if diameter wear is over .080 or if heat checks are aligned across the braking surface or if hard spots exist.
7. **Check S-cam for wear at the bushings, head and spline areas.** The wheel with a worn S-cam or worn S-cam bushings is more than likely not doing its share of the braking.
8. **Check slack adjusters for proper settings and operation.** Check clevis pins and slack bushings for wear. If wear is over .030, replace both. Never mix manual and automatic slack adjusters. Never use different manufacturers slack adjusters on the same axle.
9. **Check wear difference between the front and rear axle shoes.** If the wear is not equal, this can indicate an air-timing imbalance or different rated friction materials. Check for inconsistent use of elbows in airlines. One 90-degree elbow is equal to 7" of extra hose.
10. **Inspect brake spiders.** Pay special attention to the anchor pinhole area and for squareness.