



### THE COMPLETE BRAKE JOB

When doing a complete brake friction service or reline, it is very important to select the proper friction material based on your type of loads, position of the loads, and the operating terrain over which the vehicle will be operated. Also remember that many brake shoes look alike. Make sure that the friction material and the shoes you are installing are the same shoes that you removed.

### ON REASSEMBLY OF BRAKE SYSTEM COMPONENTS

1. **Inspect all brake hoses leading to chambers.** Replace hoses if you find they are cracked or damaged either externally or internally, especially if they are contaminated with dirt, oil or water.
2. **Always replace all shoe attaching hardware parts, anchor pin bushings, oil seals and cam bushings.** All parts being reused should be thoroughly cleaned with cleaner solvent and inspected for any signs of wear. Replace S-cams, bearings and cups as necessary keeping in mind that both sides of an axle should be replaced (in pairs).
3. **Lubricate anchor pins, brake rollers and the bushing area of camshafts.** Never lubricate the face of the roller; only lubricate the bearing surface of the roller that contacts the brake shoe web. Do not over lubricate.
4. **Install new drums. If drums are reused, oversized drums must be measured and turned and oversized friction material should be utilized.** Do not mix light and heavy-duty drums, as it will cause uneven brake shoe wear.
5. **Lubricate the axle shaft to insure that hubs slide on easily.** Slide hubs on to the axle far enough to be able to install the outer bearing and inside axle nut. NEVER slam the hubs onto the axle.
6. **Adjust all slack adjusters on all vehicle wheels.** Brake shoes should be as close to the drum as possible without ANY drag. All manual slack adjusters should be adjusted to .020 drum clearance. All automatic slack adjusters should be adjusted to manufacturer specifications. After adjustment, apply air by the treadle and check for 90-degree pushrod to slack to insure proper adjustment.
7. **Inspect all spring brake chambers for center seal leakage.** Also check to insure that the manufacturer of each spring brake chamber is the same from side to side on the axle. If they are not the same, consider replacement.
8. **Set pushrod stroke to correspond with chamber size and slack manufacturer's specifications.** Properly adjusted brakes should accomplish a 90-degree between the slack adjuster body and the pushrod. If this is not found, problems will exist in balance. NEVER mix long stroke chambers with standard stroke chambers.
9. **Always road test to break in new brake linings!** A road test should include ten brake snubs from 40 mph to 20 mph and ten snubs from 20 mph at moderate air pressure, and two stops from 20 mph using full air pressure. **ALWAYS RE-CHECK SLACKS AND CHAMBERS FOR PROPER AND EQUAL STROKE!**