



PROCEDURES AND TOOLS FOR BRAKE SERVICE

Brakes are the number one safety item on any heavy-duty vehicle. The proper operation of the braking system is essential to safe stopping on the highways. Insuring that the brakes are in proper working order requires the use of tools and procedures that have been put in place to insure that the job is done right. There are many cautions in service manuals and issued by axle and brake system manufacturers. All of the procedures and special tools required for proper installation are not suggested; they are necessary for the right job to be done.

SERVICE NOTES FROM MANUFACTURERS

Service notes are contained in every service manual put out by the truck component or system manufacturers. The warnings and guidelines are very serious and must be followed to insure that the service job is done correctly and to the manufacturer's specifications. Here is how they are worded: "You must follow your company procedures when you service or repair equipment or components. You must understand all procedures and instructions before you begin to work on a unit. Some procedures require the use of special tools for safe and correct service. Failure to use special tools when required can cause serious personal injury to service personnel, as well as damage to equipment and components?"

TOOLS REQUIRED FOR BRAKE SERVICE

There are many tools required to do the proper brake service to a heavy-duty vehicle. They are not considered SHOULD HAVE but rather REQUIRED. Here is a list of the most important tools for the proper removal and installation of brakes.

1. Torque wrench:

A good and working torque wrench is essential for proper installation and fastening of components. Every fastener has a torque requirement. However, if you do have a torque wrench, it still may not be able to do the job for you. Torque wrenches come in a variation of sizes and values. When purchased for use, the manufacturer calibrates them. Calibration must be maintained to insure that the torque wrench is correct. Calibration should be done on a regular basis as recommended by the manufacturer. If the wrench is damaged, as when the wrench has been dropped or fallen and crashed to the floor, it must be recalibrated immediately.

2. Drum micrometer:

A drum micrometer is essential to insure the drum diameter is correct even with the installation of new brake drums. You should not assume that new drums are correct; you should be check! Drum concentricity (roundness) must be checked for proper operation of the braking system when the drum is installed. When using drums over again on a second reline, the drum diameter reading is essential to determine the size of the friction material that will be reinstalled. When a brake drum is .060," it is essential to install oversized lining, or the performance will suffer.