



# HUB INSTALLATION INSTRUCTIONS

## HUB, HUB-DRUM, AND HUB ROTOR INSTALLATION INSTRUCTIONS

### TOOLS AND MATERIALS REQUIRED

1. 13/16" lug wrench
2. 1-1/8" socket or open end wrench (Use a torque wrench if available).
3. 1/8" x 1-1/4" long cotter pin
4. Hammer or rubber mallet
5. Snap ring pliers
6. Flat blade screwdriver
7. 1/2" wrench

### INSTALLATION PROCEDURE

1. Installation of hub, hub-drum, or hub-rotor (same procedure applies to any)
  - a. Install inner bearing and seal.
  - b. Carefully install hub on spindle.
  - c. Fill any open area between spindle and hub with grease..
  - d. Install outer bearing cone on spindle.
  - e. Install "D" washer and spindle nut.
  - f. Tighten spindle nut to 20-25 foot-pounds. Rotate hub three revolutions by hand. Loosen spindle nut to zero torque.
  - g. Tighten spindle nut to 18 inch-pounds torque (finger tight). Attempt to move hub back and forth to check for end play. If there is any end play, tighten nut again (finger tight).
  - h. Install spindle nut retainer. Position retainer as necessary to a setting where cotter pin can be inserted through retainer and hole in spindle. Do not loosen or tighten spindle nut in order to position retainer. Move only retainer until correct position is found. This adjustment system gives very precise bearing take-up.
  - i. Install cotter pin. Bend ends of cotter pin to keep it in place.
2. Install dust cap by knocking into position with rubber mallet.
3. Install wheel and tighten wheel bolts to 90-95 foot-pounds torque.

A brisk spin of the tire should result in 3/4 to full revolution of the wheel. Less than 1/2 revolution means bearings are too tight. Reset.

Note: check wheel bolt tightness (90-95 foot-pounds) after first 50 miles of Travel and periodically thereafter.
4. Check wheel bearing adjustment every year.
  - a. Jack up one side of trailer.
  - b. Attempt to move tire and wheel back and forth on spindle.
  - c. Bearings are properly adjusted if there is no, or only very slight, Movement (end play).
  - d. If bearings are excessively loose, tighten spindle nut as recommended