EXAMPLE — Determine required spacer thickness as follows:

Dial Indicator Reading ..... .094" (2.38 mm)
Thickness Stamped on Shaft ..... .203" (5.16 mm)

EQUALS

Required Spacer Thickness ..... .297" (7.54 mm)

4) Select required spacer. Spacers are available in 18 sizes, ranging from .291-.293" (7.38-7.44 mm) to .331-.333" (8.40-8.46 mm) in .002" (.05 mm) increments. For size identification, spacers are numbered "05" (smallest size) through "22" (largest size).

5) Pack grease seals and bearings with suitable bearing grease. Install outer grease seal and press outer bearing onto stub axle. Install rotor on stub axle. Place knuckle in position on stub axle, install spacer and press inner bearing onto stub axle and knuckle assembly until it just bottoms. Install inner seal, then reinstall knuckle and wheel to vehicle.

6) Tighten spindle nut to 87-145 ft. lbs. (12.0-19.8 kgm) and rotate wheel several times in both directions to settle bearings. Retorque spindle nut. Loosen nut 90° and tighten to align cotter pin. Insert cotter pin.

NOTE — *Spindle nut may be tightened as much as 15° to insert cotter pin.*

FIAT

Brava & Spider 2000 — While rotating hub, torque spindle nut to 14.5 ft. lbs. (2 mkg). Completely loosen nut and retighten to 5 ft. lbs. (.7 mkg). Loosen nut 30° and stake collar of spindle nut into machined slot on spindle. Attach dial indicator with magnetic base on brake drum and actuating foot on spindle. Hub end play should not exceed .004" (.1 mm).

NOTE — *Whenever spindle nut has been removed it must be replaced with a new nut.*

Strada — Tighten front and rear spindle nuts to 159 ft. lbs. (22 mkg), then stake collar of spindle nut to spindle.

X1/9 — Tighten front and rear spindle nuts to 112 ft. lbs. (15.5 mkg). When spindle nuts are properly tightened, stake collar of spindle nut into machined slot on spindle.

FIESTA

Front — No adjustment is required. Tighten front spindle nut to 150-175 ft. lbs.(21-24 mkg).

Rear — Adjust rear bearing by tightening nut to 15-18 ft. lbs. (2.1-2.5 mkg) while rotating drum. Loosen nut ½ turn and fit nut retainer with cotter pin.

HONDA

All Models (Front) — Front wheel bearings are not adjustable. Torque front spindle nut to 108 ft. lbs. (15.0 mkg).

All Models (Rear) — Tighten spindle nut to 14-22 ft. lbs. (2.0-3.0 mkg) and rotate drum several times. Loosen lock nut. Tighten spindle nut to 3 ft. lbs. (.4 mkg) on Civic and Prelude or 2-4 ft. lbs. (.3-.6 mkg) on Accord.

JAGUAR

All Models — While rotating hub, tighten nut until no end play is evident. Loosen nut 1 or 2 flats to line up cotter key and install cotter key. End play should be measured with a dial indicator and should be .002-.006". If not within specifications, adjust axle nut to correct end play.

LUV

On 4-WD models, place transfer case in "2H" and free wheeling hub in "FREE", then remove hub cover, snap ring, shims, free wheeling hub body and lock washer. On all models, rotate wheel or hub and tighten nut. On 4-WD, tighten nut until wheel locks. On 2-WD, torque nut to 22 ft. lbs. (3 mkg). Loosen nut until it can be turned by fingers, then tighten nut with fingers. No play should be felt at this point. Using an accurate spring tension gauge, adjust nut so starting force is 2.6-4 lbs. (1.2-1.8 kg) on 4-WD or 1.1-2.6 lbs. (.5-1.2 kg) on 2-WD models.

MAZDA

GLC — Tighten adjustment nut to 14-18 ft. lbs. (2.0-2.5 mkg). Rotate brake discs several times in both directions. Loosen adjustment nut. Using a spring pull scale, set bearing preload (using adjustment nut) to .33-1.32 lbs. (.15-.60 kg).

All Other Models — With vehicle raised and supported under lower control arms, remove wheel. On RX7 and pickup models, tighten nut until wheel locks. On all other models, torque wheel nut to 14-18 ft. lbs. (2-2.5 mkg). On all models, rotate hub to seat bearings. Loosen nut, then using spring tension gauge, tighten nut until correct starting force is obtained. Starting force should be .77-1.92 lbs. (.35-.87 kg) on 626, .99-1.43 lbs. (.45-.65 kg) on RX7, or 1.3-2.4 lbs. (.59-1.1 kg) on pickup.

MERCEDES-BENZ

All Models — While rotating hub, tighten clamping nut until hub can just be turned. Loosen clamping nut and release bearing tension by striking steering knuckle spindle with plastic hammer. Using a suitable dial indicator, check wheel bearing end play. End play should be .0004-.0008" (.01-.02 mm). Adjust clamping nut until end play is within limits. Tighten socket bolt of clamping nut. Washer between outer bearing and clamping nut should rotate with light pressure applied to it.

MG

MGB — Raise front of vehicle and remove front wheels. Using suitable dial indicator, measure hub end play. Correct end play is .002-.004" (.05-.10 mm). If not within specifications, remove spindle nut, washer, and outer bearing. Add or remove shims behind outer bearing until correct end play is obtain with spindle nut torqued to 40 ft. lbs. (5.5 mkg)