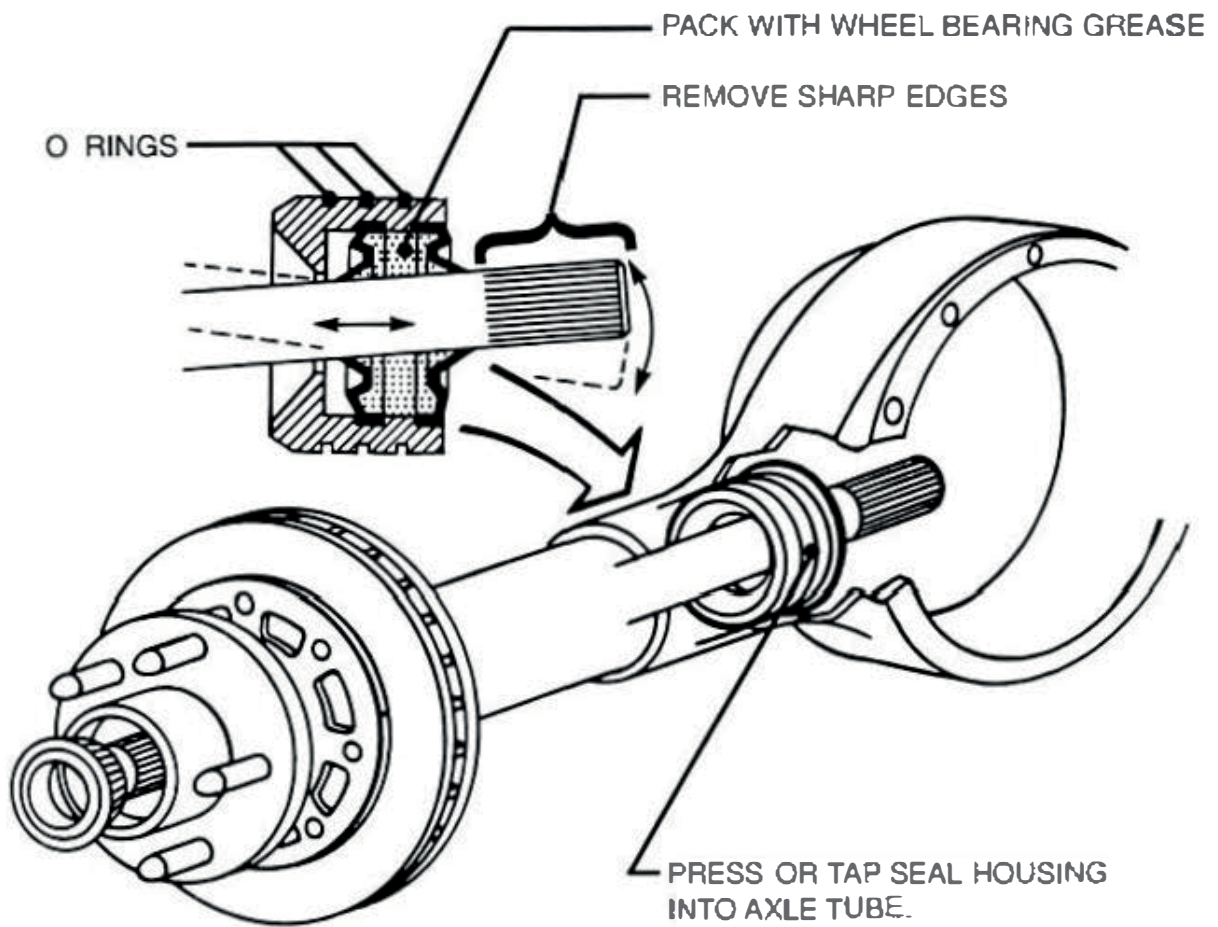




## ***AXLE SEAL***

### ***RECOMMENDED INSTALLATION PROCEDURE***

*BEFORE ASSEMBLY...*

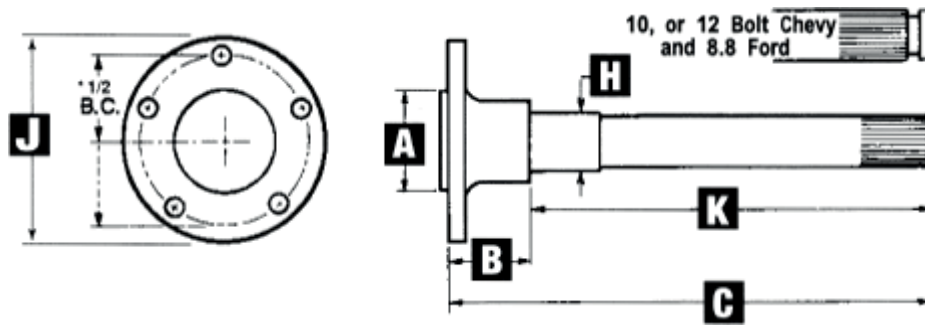


### **HOUSING DIMENSIONS**

<b>COLOR</b>	<b>HOUSING <math>\varnothing</math></b>	<b>FITS TUBING <math>\varnothing</math></b>
GOLD	2.470 $\varnothing$	2.500 $\varnothing$
BLUE	2.540 $\varnothing$	2.562 $\varnothing$
RED	2.605 $\varnothing$	2.625 $\varnothing$
SILVER	2.720 $\varnothing$	2.750 $\varnothing$

# **A/S SERIES**

**Measuring for Individual Axle Length:**



**Driver Side (C):** \_\_\_\_\_ (inches)

**Driver Side (K):** \_\_\_\_\_ (inches)

**Passenger Side (C):** \_\_\_\_\_ (inches)

**Passenger Side (K):** \_\_\_\_\_ (inches)

**Type of Rear End:**  
 (9" Ford, 12 Bolt Chevy, \_\_\_\_\_  
 Dana, etc.)

**Dimension of (A) as shown** \_\_\_\_\_ (inches)

**Bolt Circle (B.C)** \_\_\_\_\_ (inches)

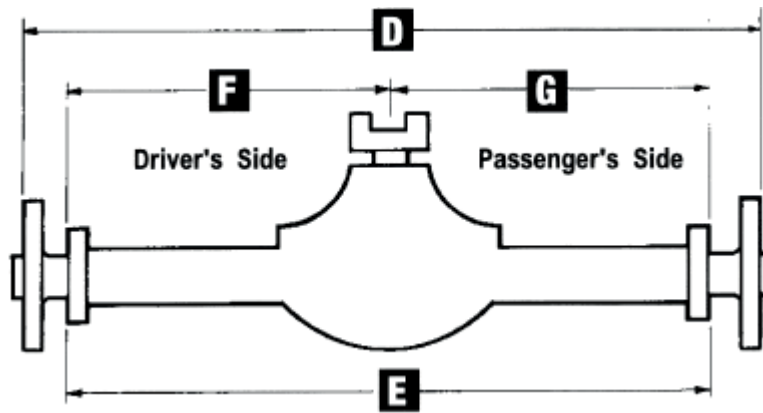
**Stud Type** \_\_\_\_\_ Screw In \_\_\_\_\_ Press In

**Dimension of (B) as shown** \_\_\_\_\_ (inches)

**Dimension of (H) as shown** \_\_\_\_\_ (inches)

**Spline Count**  
 (Please list carrier type, manufacturer, make and model if available.) \_\_\_\_\_

**Measuring for Rear End Width:**



**Type of Rear End:**

(9" Ford, 12 Bolt Chevy, \_\_\_\_\_  
Dana, etc.)

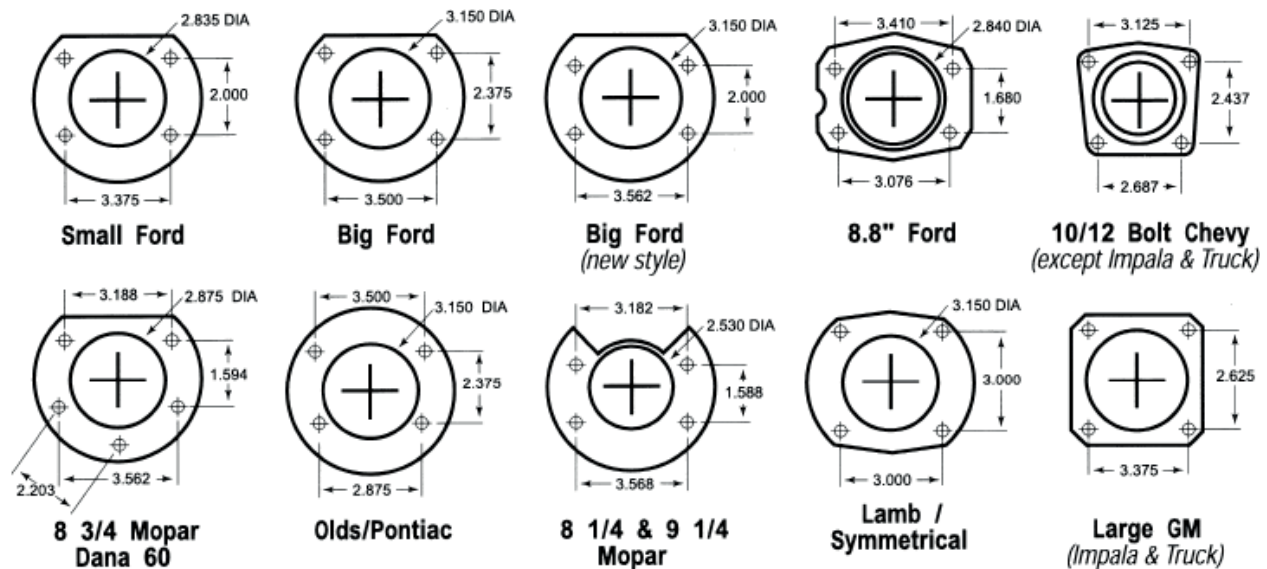
**Wheel to Wheel Width (D):** \_\_\_\_\_ (inches)

**Housing flange to housing flange (E):** \_\_\_\_\_ (inches)

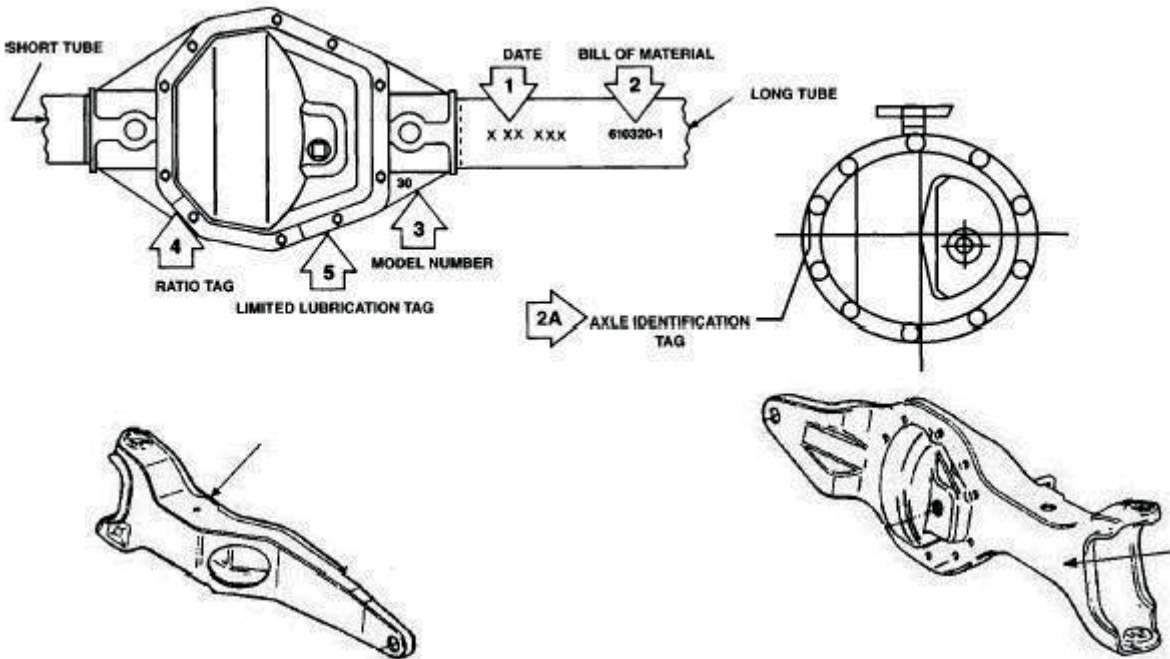
**Driver side housing flange to pinion center (F):** \_\_\_\_\_ (inches)

**Passenger side housing flange to pinion center (G):** \_\_\_\_\_ (inches)

**Housing End Dimensions (for identifying which housing you have):**



## How to Identify a Spicer Axle:



## How To Identify A Spicer Axle

ALL SPICER CARRIER TYPE AXLES (RIGID OR LEAF SPRING) ARE IDENTIFIED WITH A MANUFACTURING DATE AND BILL OF MATERIAL (PART NUMBER) STAMPED ON THE RIGHT OR LEFT HAND TUBE ON DRIVING AXLES. EACH AXLE CONTAINS A GEAR RATIO TAG AND IF AXLE IS EQUIPPED WITH A LIMITED SLIP DIFFERENTIAL, IT WILL HAVE A TAG SPECIFYING THE TYPE OF LIMITED SLIP LUBRICANT TO BE USED.

THE BILL OF MATERIAL WILL ALWAYS CONTAIN SIX DIGITS (BASIC NUMBER), FOLLOWED BY A DASH NUMBER. EXAMPLE: 610036-4. THE SEVENTH DIGIT, THE -4, WILL IDENTIFY AXLE RATIO AND OPTIONS.

AXLE MODEL 30, 44, ETC., WILL BE CAST OR STAMPED INTO WEB IN AREA SHOWN IN ILLUSTRATION.

**On Driving Axles, these numbers are stamped on either the long or short tube.**

HOW TO

# Avoid Axle Accidents



Speedway Engineering's Frank Ferrell takes a look at the condition of a racer's axle.

*Take these measures to ensure the longevity of your axles.*

Story and photographs by  
**Mike Adaskaveg**

**A**xle problems in racing commonly result from the mistakes of racers. Those mistakes include forgetting to put an adjustment bolt on the end of an axle used in a full spool rear end without a cross pin or block.

"Because the full-spool rear end has no cross pin, the bolt takes up the space," says Speedway Engineering's Frank Ferrell.

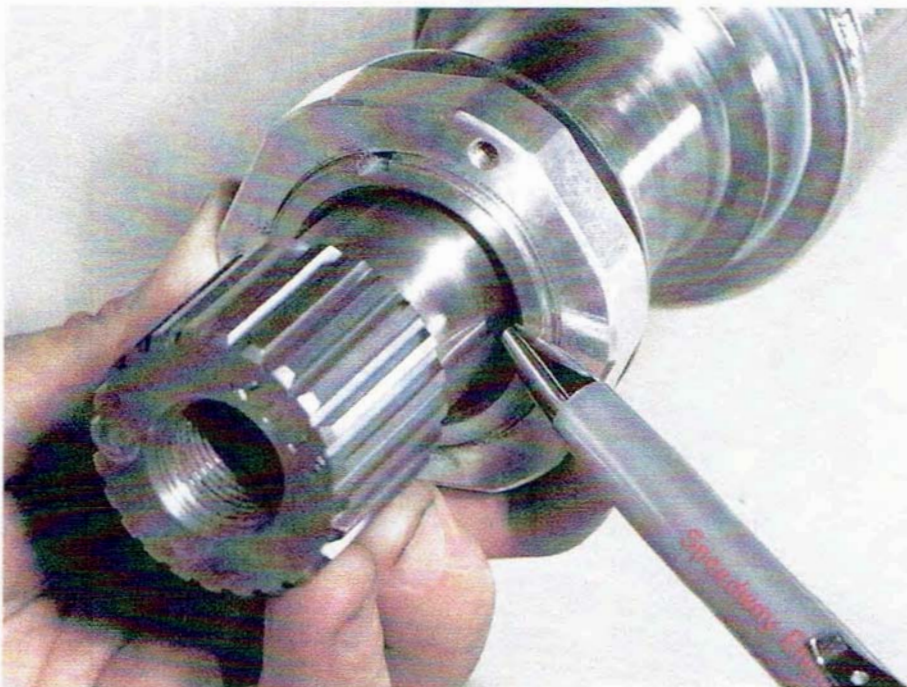
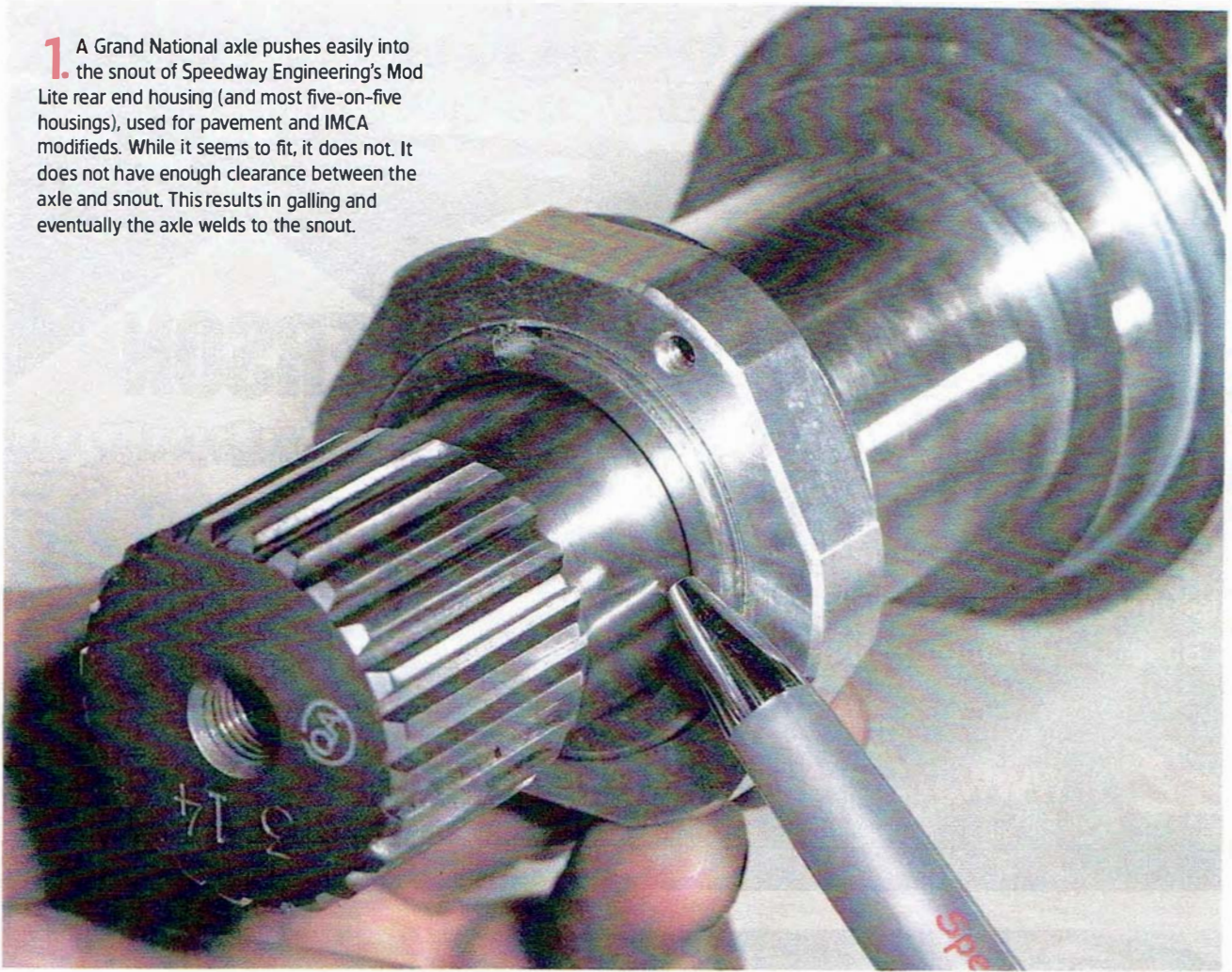
The lack of a bolt allows the axle to go too far in, causing the 24-spline end of the

axle to rub the end of the snout, creating a burr on the axle's spline. Then, it can float back out and tear up the splines on the drive plate.

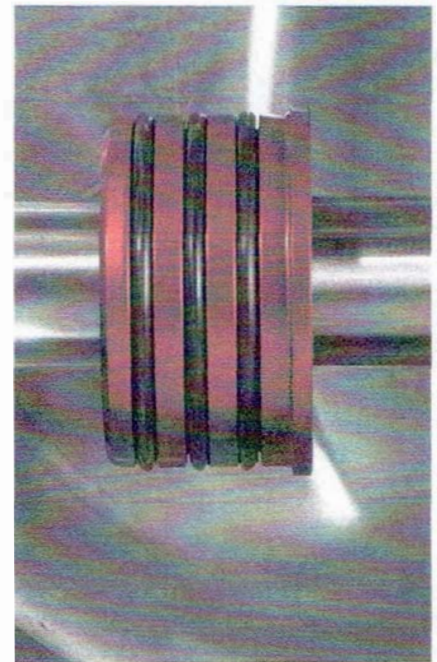
Axes intended for a Grand National rear end fit a five-by-five rear end, but may not have the required  $\frac{1}{8}$ "-clearance between the snout and axle, so the axle will eventually seize.

"Never go to the parts truck or order an axle without first checking the inner diameter of the snout," says Ken Sapper, of Speedway Engineering.

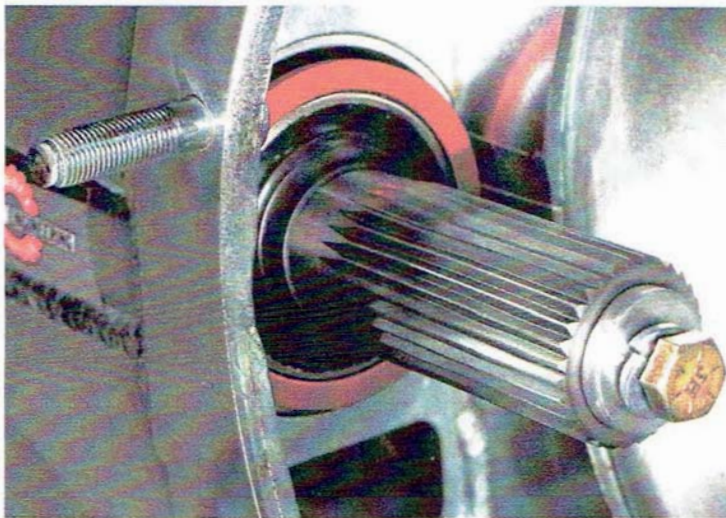
**1.** A Grand National axle pushes easily into the snout of Speedway Engineering's Mod Lite rear end housing (and most five-on-five housings), used for pavement and IMCA modifieds. While it seems to fit, it does not. It does not have enough clearance between the axle and snout. This results in galling and eventually the axle welds to the snout.



**2.** The proper axle, with an OD of 1.250" fits easily into the Mod Lite snout, which has a 1.375" ID. Carefully push it in and check the clearance between it and the snout. The 1/8" (0.125") clearance should be visible to the eye and can be felt when you move the axle.

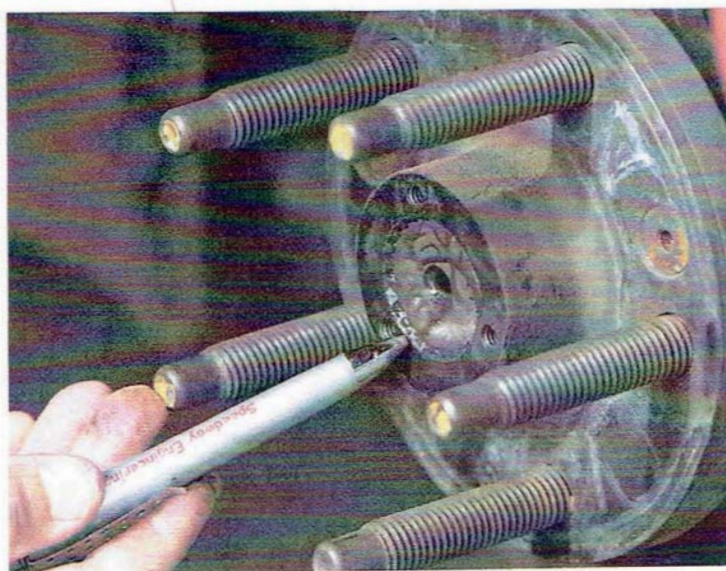
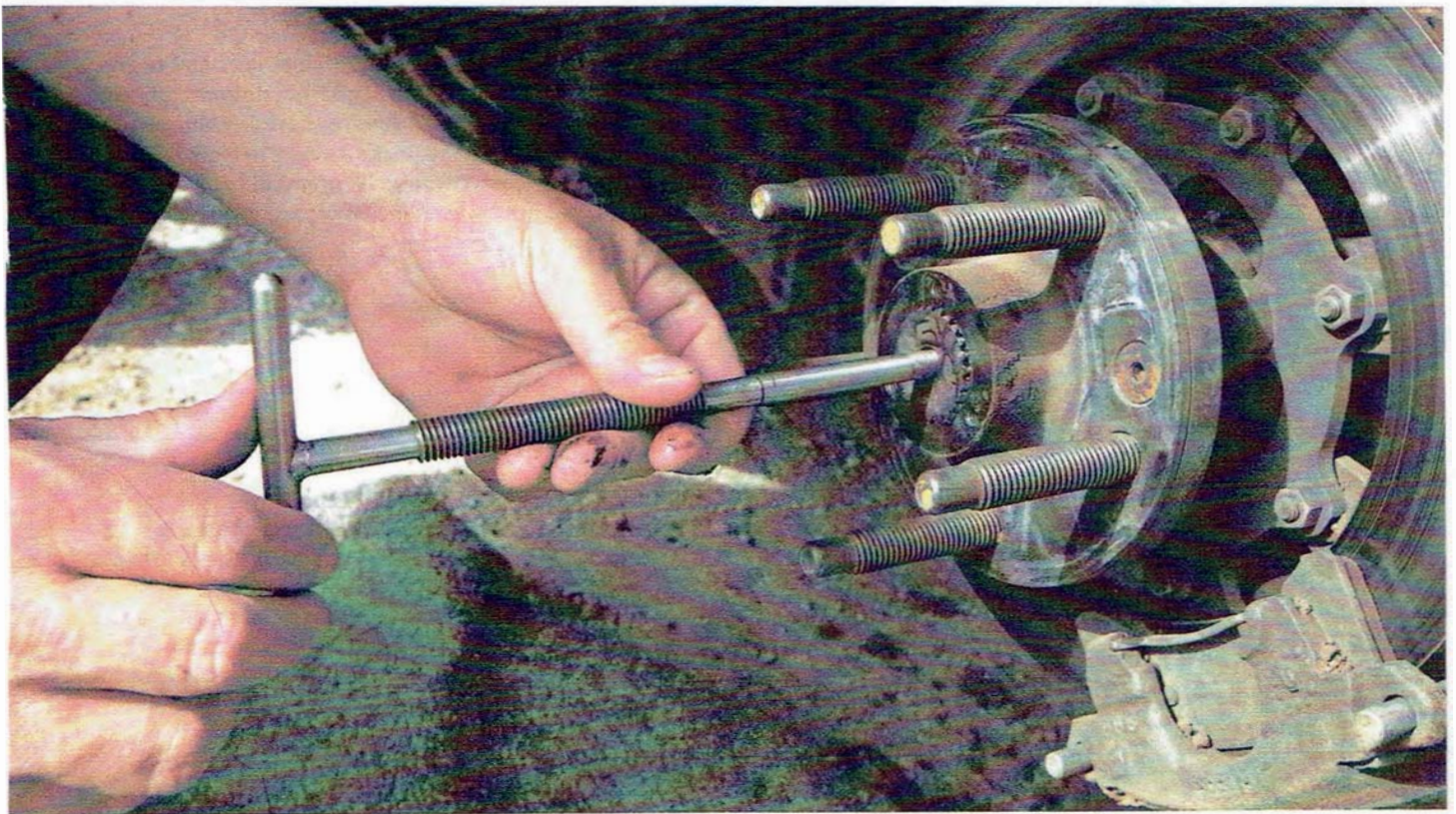


**3.** The tube seal keeps the oil on the gears, where it needs it most. You should pack grease between the inner seals of the multi-lipped tube seal.



**4.** Although the seal is firmly seated in the rear end housing, it still allows movement of the axle. However, the seal can handle some misalignment from a small hit without allowing the gear oil to leak. Note the adjustment bolt on the left, which you need when not using a cross pin or block.

**5.** Take the dust cap off, use an axle tool, and remove it from the rear end housing to check for proper end play and wear of the axle's splines and drive plate. Remove the old grease, which contains metallic particles that can act as an abrasive between the axle and drive plate. Clean the splines of both the axle and drive plate with solvent and a clean rag. Then add new grease. Never use anti-seize on the splines of the axle and drive plate, because it contains an abrasive.



**6.** Make sure you have an adjustment bolt on the inside end of either the left or right axle when a cross pin isn't used. Without an adjustment bolt, the splines may rub the end of the snout and get damaged. With an adjustment bolt, the axle fits the drive plate and does not move back and forth excessively.

# Seals-it

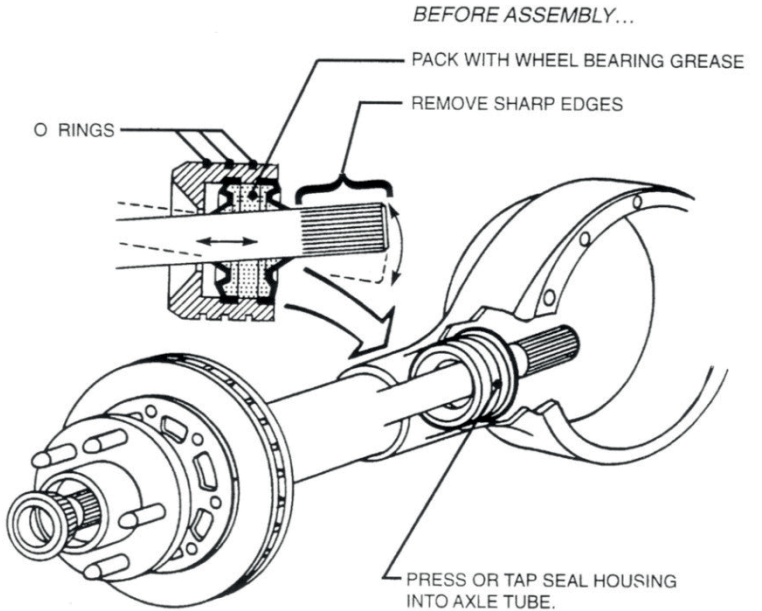
## WHAT WE DO BEST

### AXLE SEAL / TORQUE TUBE SEAL AS SERIES / TT SERIES

PART #	COLOR	TUBING SIZE	HOUSING SIZE
AS9250	GOLD	2.500°	2.470°
AS9218	BLUE	2.560°	2.540°
AS9188	RED	2.625°	2.605°
AS9125	SILVER	2.750°	2.720°



High cornering forces the gear lube out of the center section and down the axle tube leaving the ring and pinion high and dry! This billet aluminum seal has three O-rings that seal it to the axle tube and two bonded, heavy duty, neoprene inner seals designed to compensate for any amount of axle shaft runout.



PART #	COLOR	TUBING I.D.
TT9250	GOLD	2.500°
TT9218	BLUE	2.562°
TT9188	RED	2.625°
TT9125	SILVER	2.750°



This seal is installed in the tube to prevent the rear end lube from traveling up the tube and leaking out the bell. This aluminum seal has three O-rings and two grease resistant, high temperature seal on the inside.

