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 Conversion Calculator

1992 Ford Truck F 250 2WD Pickup V8-7.3L DSL

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Differential - Oil Leaks At Pinion Nut

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Article No. 94-8-21

^ AXLE - FORD 10.25 - OIL LEAKS AT PINION NUT (PAST SPLINES)

^ NUTS - REAR AXLE PINION - LOOSE OR BACKING OFF

LIGHT TRUCK:

1985-92 F-250, F-350

ISSUE:

Rear axle pinion nuts may back off or axle lube may leak at the pinion nut (past splines) on vehicles with 10.25" [ring gear](#) axles. This condition can occur at relatively low mileage under severe duty use, with the incident rate increasing in manual transmission applications. This concern may be due to a loose fit between [pinion gear](#) and [companion flange](#) splines.

ACTION:

If, upon inspection, axle lube is leaking at the pinion nut (past splines), and there is [companion flange](#) spline-to-pinion spline play, indicating a loose pinion nut and potentially worn splines, install a new companion flange, pinion seal and pinion nut. Refer to the following procedure for service details.

NOTE: IF THE NEW [COMPANION FLANGE](#) IS A SLIP FIT, THIS INDICATES EXCESSIVE PINION SPLINE WEAR AND THE RING AND PINION GEARSET MUST BE REPLACED. TO ENSURE PROPER FIT, THE NEW COMPANION FLANGE SHOULD NEVER ENGAGE THE PINION SPLINES MORE THAN 50% DURING HAND INSTALLATION. IF THE NEW COMPANION FLANGE INSTALLS TOO EASILY ON THE PINION SPLINES (MORE THAN 50%), INSTALL NEW (4209) GEARSET, FRONT AND REAR PINION BEARINGS, PINION SEAL AND PINION NUT.

Perform the following procedure to replace the pinion seal, [companion flange](#) and pinion nut:

NOTE: REFER TO THE APPROPRIATE MODEL YEAR LIGHT TRUCK SERVICE MANUAL FOR SERVICE PROCEDURES AND SPECIAL SERVICE TOOL USAGE.

1. Remove rear wheel and tire assemblies.
2. Remove brake drums (to eliminate brake drag).
3. Disconnect the driveshaft assembly at the [companion flange](#) and remove it or tie it out of the way.
4. Remove and discard the [companion flange](#), pinion seal and pinion nut.
5. Install new pinion seal.
6. Install new [companion flange](#), using Companion Flange Replacer T85T-4851-AH.
7. Install new pinion nut. Tighten pinion nut, rotating the pinion occasionally to make sure the [pinion bearings](#) are seated properly.

PINION BEARING PRELOAD CHART	
ORIGINAL BEARINGS	NEW BEARINGS
0.9 - 1.5 N-m (8-14 lb-in)	1.8 - 3.3 N-m (16-29 lb-in)

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8. Continue to tighten the pinion nut, taking frequent [pinion bearing](#) preload readings by rotating the pinion with a N-m/lb.in. torque wrench through several revolutions until the correct preload is obtained:
9. Check the rear axle lubricant level. Refer to the appropriate model year Light Truck Service Manual, Section 15 for 1985-89 models and Section 05-02A for 1990-92 models, for service details.
10. If the ring & pinion gearset is to be replaced, Refer to the appropriate model year Light Truck Service Manual, Section 15 for 1985-89 models and Section 05-02A for 1990-92 models, for service details.

NOTE: UNDER NO CIRCUMSTANCES SHOULD THE PINION NUT BE BACKED OFF TO REDUCE PRELOAD. IF REDUCED PRELOAD IS REQUIRED, A NEW COLLAPSIBLE SPACER AND PINION NUT MUST BE INSTALLED.

NOTE: REFER TO DEALER MASTER PARTS CATALOG FOR CORRECT RING AND PINION GEARSET USAGE IF GEARSET REPLACEMENT IS REQUIRED.

PART NUMBER	PART NAME	CLASS
E5TZ-4851-A	Companion Flange (1330)	BM
E7TZ-4851-A	Companion Flange (1350)	B
390313-S100	Pinion Nut	BM

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PART INFORMATION

OTHER APPLICABLE ARTICLES: NONE

WARRANTY STATUS:

Eligible Under The Provisions Of Bumper To Bumper Warranty Coverage For 1992 Models, Basic And Powertrain Warranty Coverage For All Other Models

OPERATION	DESCRIPTION	TIME
940821A	Inspect And Install New Companion Flange, Pinion Seal And Pinion Nut	0.8 Hr.
940821B	Inspect And Install New Ring And Pinion Set With New Pinion Bearing , Pinion Seal And Nut	2.6 Hrs.

DEALER CODING

BASIC PART NO.	CONDITION CODE
4851	38

OASIS CODES: 509000, 510000