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Document ID: IK0600001

Availability: ISIS, FleetSIS, Body Builder, NotSIR

Major System: PROP SHAFTS

Current Language: English

Other Languages: [Français](#), [Español](#), [Portuguese](#).

Viewed: 3738

Revision: 10

Created: 8/10/2007

Last Modified: 3/30/2026

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Coding Information

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Title: Offset Phasing on some Interaxle Driveshafts

Applies To: Interaxle shaft Feature Codes: 14GEP 14GER 14GES 14GEZ 14GGH 14GGJ 14GGY 14GHD 14GJC 14GGG 417F3Mxxxx 417F5M0520 417F5Pxxxx 425F3Qxxxx 425F5Qxxxx 417F3Dxxxx 417F5Dxxxx 425F3Dxxxx 425F5Dxxxx 440R3Bxxxx 440R5Bxxxx 450R3Bxxxx 450R5Bxxxx 417F5Cxxxx 417F5C0520 417F5C0525 417L3Mxxxx 417L5M0520 417L5Pxxxx 425L3Qxxxx 425L5Qxxxx 417L3Dxxxx 417L5Dxxxx 425L3Dxxxx 425L5Dxxxx 417LTFxxxx 417LTGxxxx 417L5Cxxxx 417L5C0520 417L5C0525

10/15/2025- Added new PNs of phased shafts and Dana letter and misc
 11/07/2018- Updated owner
 09/02/2015- Clarified Phasing of DriveShaft
 06/01/2015 - iKNow Updated to Include 0417LTG Interaxle Driveshafts built 03/12/2009 and Later
 08/10/2007 - Initial Article Release

Description

Some interaxle shafts (the driveshaft connecting 2 drive axles) utilise special phasing. This is by design to reduce torsional vibrations. See Dana/Spicer letter [here](#) & Meritor [here](#).

Dana DS404 rear axle housing families use offset interaxle driveshaft phasing to reduce torsional vibrations. Depending on the interaxle driveshaft series, the phasing will be different. Vehicles built with 0417LTFXXXX drivelines until 03/23/2009 use 32-degree phasing, while vehicles built with 0417LTGXXXX drivelines from 3/12/2009 to the present use 48-degree phasing. There is an overlap of 11 days where either shaft could have been used.

Servicing Driveline

The driveline should never need to be disassembled. If disassembly occurs, then the correct phasing of the driveshaft will need to be found. Always mark the driveline using a paint pen in 3 positions at 0, 90, and 180 degrees before disassembling the slip joint portion of the driveline. This will ensure the driveline will be at the correct phasing and not 180 degrees out for balancing reasons. If the driveline was not marked, then follow the service information below to properly phase the interaxle shaft.

Driveshaft Series Identification

Meritor RPL shaft decoding [here](#)

Using the parts catalog, look for the driveshaft part number in the Line Set Ticket portion of the parts catalog. There, you will be able to find the prop code for that vehicle. The interaxle shaft will always be listed under location 4 or 7. The last 4 digits specify the length of the driveshaft in millimeters.

- If the 6th character is a NUMBER, then this interaxle shaft has unique phasing

0417F3Mxxxx

- OR if the shaft matches a number in the "applies to" in this IK, then the interaxle shaft has unique phasing



Parts Catalog

Home | Cross Reference | Support | Training | Feedback

Figure List | Keyword | Part Number | Visual

Line Set Ticket

VIN Number: Model: [PROSTAR PREMIUM 6X4](#) Build Date: 3/18/2009

Eng SRI Number: Model Code: LF62700 Order Qty: 5

Dealer Number: Order Number/Suffix: Starting Job Number

Sold To: Sales Region: 226 Paint Code: 8752

GVWR: 52350 Ignition Key: Z000 Wheel Base: 236.2 in / 600.0 cm

AF Dimension: 55.1 in / 140.0 cm Gear Ratio: 3.36 Recall Pending: No

Grp Unit	Description	Cost Code
1	133HR S 01	8752 CHROL MET

[Explanation of Prop Shaft Locations](#)

Prop Code	Qty	Location
0417LTF0565	1	4
0425LTA0925	1	2
0425LTA0940	1	1
0425LTH1080	1	3

Front Tire		Rear Tire		Spare Tire		Pusher Tire		Tag Tire	
Code	Qty	Code	Qty	Code	Qty	Code	Qty	Code	Qty
07702490127	2	07702498101	8						

0417LTFXXX Drivelines

These are the earlier shafts that were phased at 32 degrees. This is 3 teeth counterclockwise from the normal 0-degree phasing.

0417LTGXXX Drivelines

These are the later-designed shafts that are phased at 48 degrees. This is 4 teeth clockwise from the normal 0-degree phasing. With the slip joint portion positioned the furthest away from you and the tube portion closest to you, the shaft is rotated 4 teeth clockwise, or to the right.

Additional Resources

[Spicer Life Series Manual DSSM0100](#)

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