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Heritage > 5700 Models
> 4700 Models 5900 Models
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General Information

This procedure applies to all vehicles built with driveshafts SPL140, SPL170 or SPL250 with first order driveline vibration. Vehicles built in the USA from 7/03/2017 through 2/28/2018, and vehicles built in Mexico from 8/11/2017 through 1/04/2019 are equipped with a hard rubber carrier bearing which is more durable, but may exaggerate vibration back to the cab. Before sending drivelines to be balanced and/or straightened, replace the old midship carrier bearing with a new bearing (SP 10094142).

Parts

Parts Required	
Part Number	Description
SP 10094142	Midship Carrier Bearing

Table 1, Parts Required

Midship Bearing Replacement

Removal

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
2. Remove the coupling shaft from the vehicle. See **Section 41.00** of the *Western Star Workshop Manual* for instructions.
3. Clamp the coupling shaft in a soft-jawed vise; do not distort the tube with excessive grip.
4. Remove the end-yoke; see [Fig. 1](#) for a half-round end-yoke, or see [Fig. 2](#) for a full-round end-yoke. Then, remove the midship bearing and slingers, if equipped. See [Fig. 3](#).

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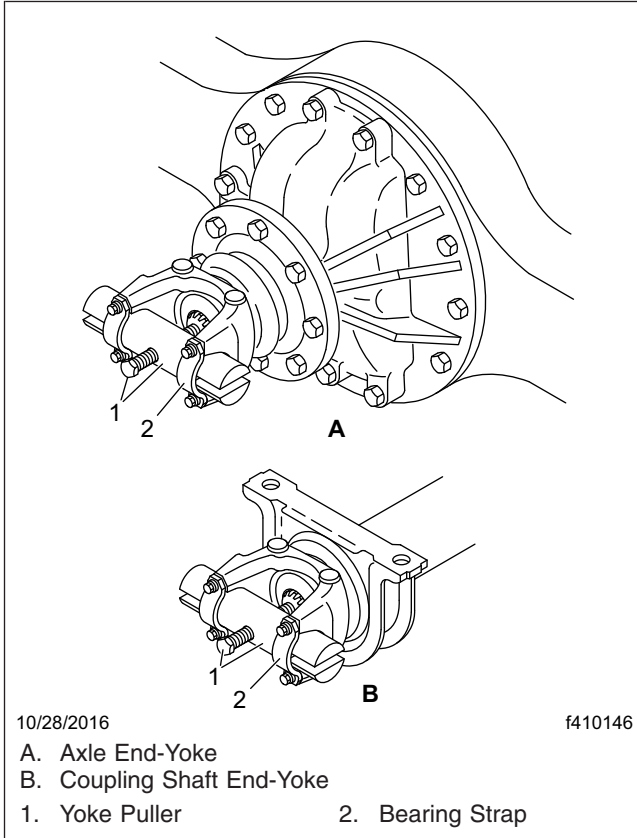


Fig. 1, Remove a Half-Round End-Yoke

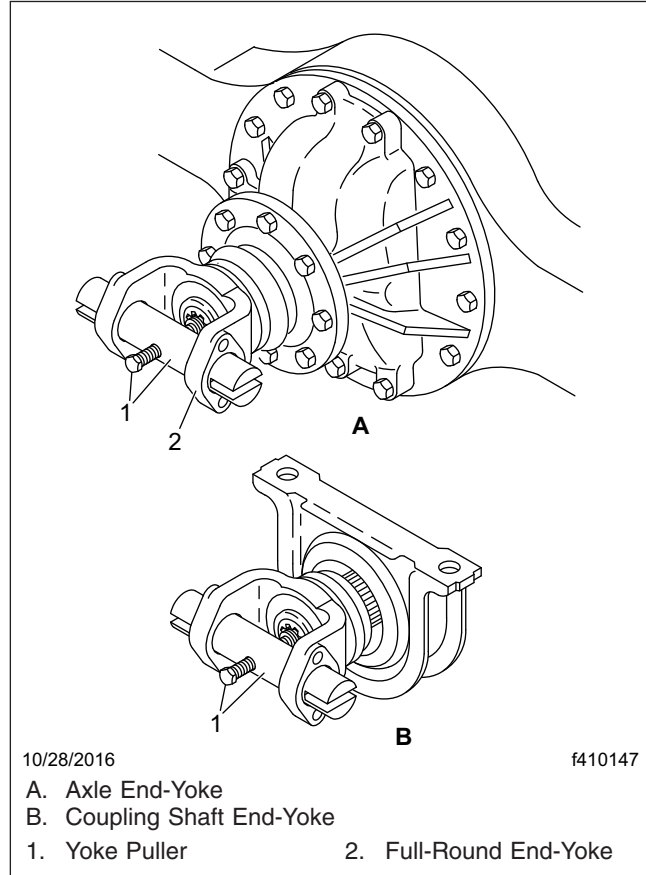


Fig. 2, Removing a Full-Round End-Yoke

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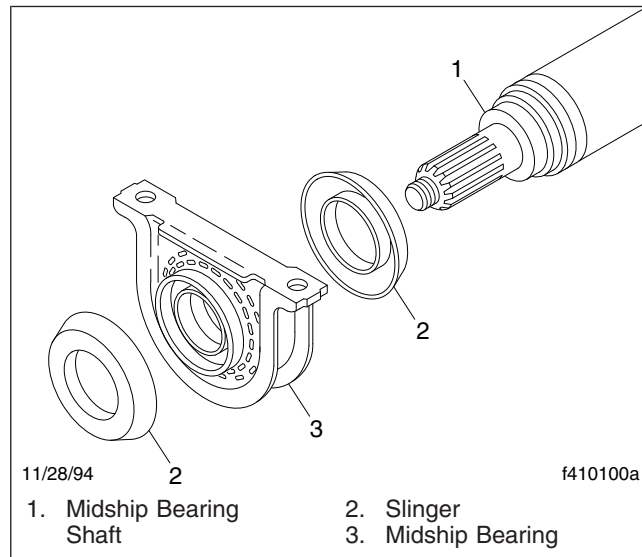


Fig. 3, Midship Bearing and Slings

- 4.1 Use a marking stick or paint to mark the end-yoke and coupling shaft with alignment marks. See [Fig. 4](#).

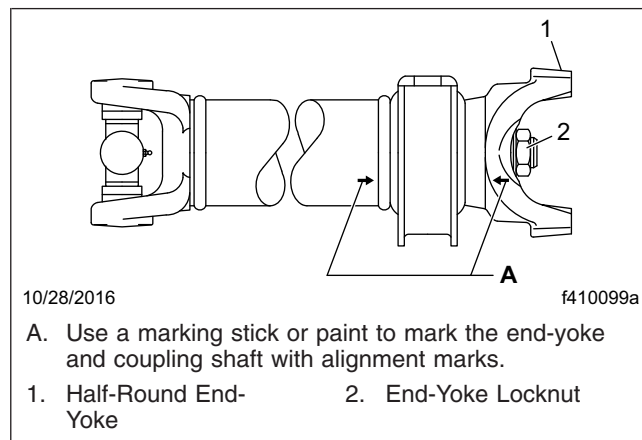


Fig. 4, Alignment Marks on a Coupling Shaft With an End-Yoke

- 4.2 Remove the coupling shaft end-yoke locknut.
- 4.3 Using a yoke puller, remove the end-yoke. See [Fig. 1](#) for a half-round end-yoke, and [Fig. 2](#) for a full-round end-yoke.
- 4.4 Use a hammer and a brass drift to remove the midship bearing and slingers. See [Fig. 3](#).

Installation

IMPORTANT: Parts for different series drivelines must not be intermixed. Incorrectly assembled or worn components can affect the entire driveline, resulting in too much vibration or driveline damage.

NOTE: Vehicles manufactured after January 18, 2002, were built with a newly designed Meritor midship hanger bearing assembly. Separate dust shields, or "slingers," common to the previous design, are no longer required.

1. Place the coupling shaft in a soft-jawed vise; do not distort the tube with excessive grip.
2. Fill the entire cavity around the midship bearing with a waterproof grease, to shield the bearing from water and contaminants. Use enough grease to fill the cavities to the extreme edge of the slingers that surround the front and rear of the bearing. See [Fig. 5](#).

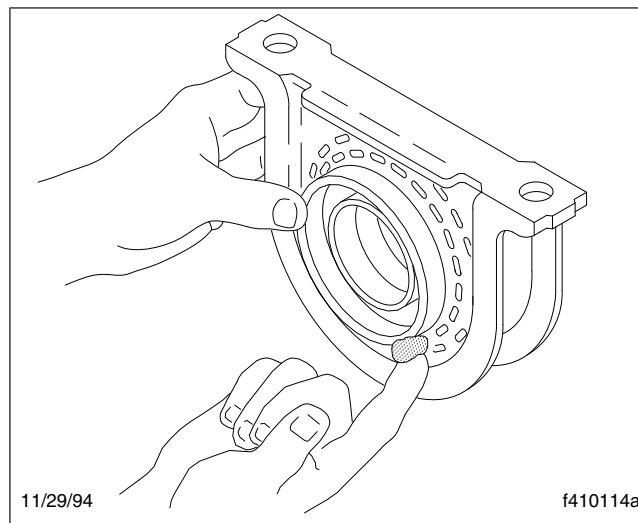


Fig. 5, Greasing a Midship Bearing

NOTE: Most midship bearings are permanently lubricated when manufactured; it is not necessary to pack these bearings with grease.

3. Install one of the slingers, the midship bearing, then the other slinger on the coupling shaft. Press the bearing and slingers on by hand, as far as they will go.
4. Install the end-yoke. See [Fig. 6](#).

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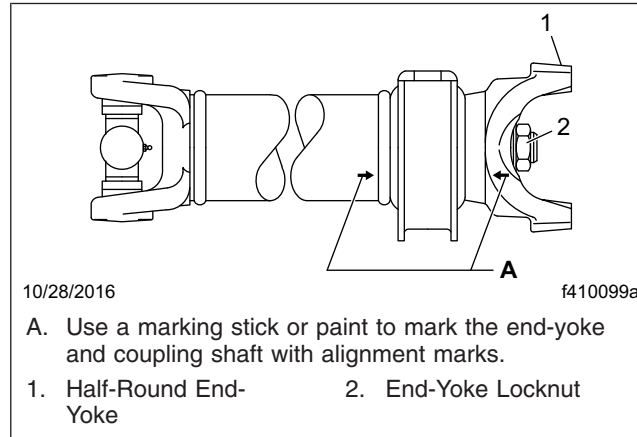


Fig. 6, Alignment Marks on a Coupling Shaft With an End-Yoke

- 4.1 Apply Loctite® 242 to the shaft threads where the end-yoke locknut will be installed.
- 4.2 Align the marks added to the coupling shaft and end-yoke during removal, then place the end-yoke on the shaft so the yoke bores are aligned at both ends of the shaft. See [Fig. 6](#).
- 4.3 Install the end-yoke nut, and tighten it 475 to 525 lbf-ft (645 to 710 N·m). Then back the nut off slightly, and tighten it to the same torque.

Warranty

This is an information bulletin only. Warranty does not apply.