

CXA Requested Topic

- Covers blowing off front differentials with no previous signs of leakage ... two different customers recently [PII Removed].
 - Most commonly cover is secondary to a pinion bearing failure. The bearing failure impacts the cover and knocks it off
 - [PII Removed]. This was built before any of our implementations for high heat (pinion bearing failures, covers blowing off, etc.)
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 - If the cover is off the carrier must be replaced.
 - Rapid loss of lube and debris ingestion will lead to a failure if replacement of the cap alone is attempted.
 - A loss of pinion pre-load from bearing spalling will cause the cover to be damaged or displaced.
- Multiple output & diff seals are bad - managers say it's like not being sealed good at factory. 67-400k mile failures
Carrier seal PFP: DDE 23525918
 - If diff seals mean carrier to housing leaks – we are in the process of changing our Loctite from 5900 to 5810b. we have run trials at our Saltillo plant (they have a high population of NFD dropped carriers) starting late march of 2023 and we have seen a major improvement and in the process of changing this to our new standard Loctite.
 - Output seal leaks, we will investigate our assembly lines and take corrective actions if necessary.

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Title of presentation / Department / Date

TSB-35-042-FTL

HIGH TEMP, TRACTOR, NO AXLE TEMP SENSORS, LUBE OKAY

1. ☐ Is the vehicle being driven at speeds exceeding 70 mph (113 km/h)? ☒
 - a. ☐ Yes → Check for the following: external leaks, any unusual gear noise, a loose or displaced pinion cover, and loose rollers/cage when removing the pinion cover. Additionally, inspect for pitting on bearing races if the pinion cover is removed for inspection. Look for external signs of heat on the carrier casting, such as rust in the pinion area while other areas appear normal, a purple color on the casting from heat, any cracks or a broken housing. If any of these issues are identified, the carrier should be replaced. ☒
 - b. ☐ No → Go to step 2 ☒
2. ☐ Verify that the carrier has the correct amount of oil, inspect for external leaks, ensure the tire sizes match, and verify that the front and rear ratios are consistent. Additionally, check the exhaust routing, as proximity to axle shielding or routing could potentially pose issues. ☒

Repair leaks as necessary and verify that the carrier has the proper amount of oil before returning the vehicle to service. See **Axle Lubricant Quality Check for Excessive Water**.

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Leaking Pinion Cover New Final Drive

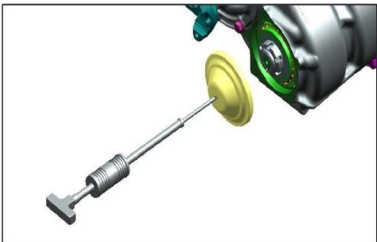


Description

- Leaks on the New Final Drive pinion cover (forward rear axle).
- Some root causes are the Loctite sealant drying prior to cover installation, pinion cover damage prior to installation, and a pinion cover not made correctly.
- ZEUS 1956773 & FSPR 29390.

Factory Resolution

- Added inspection of pinion cover to check list in Sep-17.
- Single bead of Loctite spread up along sides in Sep-17. Goal is to achieve increased contact with OD of cover.
- Window optimization has been increased to detect damaged pinion covers in Sep-17.
- New integrated seal on the cover implemented with [PII Removed].



Field Resolution

- TBD. Tooling is being developed to replace the cover.

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