

Subject: Pilot Bearing Spacer 02-14069-000 – Detroit Diesel Engines

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Issue Description: Reduced transmission input shaft support caused by insufficient engagement of the pilot bearing on Detroit Diesel engines.

Reduced input shaft pilot support can cause the following symptoms and failures.

- Oil leak at transmission front bearing cover.
- Transmission main drive gear and input shaft damage.
- Difficult to get transmission into a start gear.
- Clutch noise and vibration.
- Clutch release bearing, driven disc, and pressure plate damage

Field Containment: Detroit Diesel has released a spacer to properly place the pilot bearing in the engine flywheel. Part number **02-14069-000** is available through the Freightliner / Western Star dealer network.

Installation / Inspection Process:

- Install spacer 02-14069-000 between the flywheel and a new pilot bearing when the transmission is removed for service work.
- Inspect the transmission input shaft pilot surface and oil return threads (see picture below). Replace the input shaft if there is evidence of any wear at these locations or the transmission was leaking oil at the front bearing cover before it was removed.
- Replace the transmission front bearing cover if the input shaft oil return threads are damaged.
- Remove shift bar housing and inspect the main drive gear set for tooth damage before placing the transmission back in the vehicle. Replace any damaged gearing.

Note: Detroit Diesel has made a flywheel change on production engines built after March 5, 2015 (Freightliner Service Bulletin 01-101). The pilot bearing will protrude approximately .250” from the flywheel surface if a spacer has already been installed or if the engine has a revised flywheel.



Worn input shaft pilot surface



Damaged oil return threads

Affected Models: All Detroit Diesel engines built before 03/05/2015.

- DD13 - EPA07 / EPA10
- DD15 - EPA07 / EPA10
- DD16 - EPA10

Warranty Coverage: Secondary transmission or clutch damage caused by this pilot bearing placement issue is considered non-warrantable.

The material contained in this bulletin is product improvement information.