



No.: 18 TS-4Rev  
November 29, 2018

TO: Service Locations

FROM: Service Systems Development

SUBJECT: **DD Heavy Duty Platform Accessory Drive Belt**

**Note:** This document supersedes 11 TS-11, 12 TS-10, 13 TS-29, 14 TS-28, and 17 TS-9.

## ISSUE

The belt drive system is creating noises and/or throwing belts. It's possible to misdiagnose a belt tensioner as the primary failed part.

Material testing and inspections in Detroit shows a high No Trouble Found rate on belt tensioners. This is due to some repair shops not following the symptom-based troubleshooting "Belt Coming Off" or "Belt Drive Noise" found in the troubleshooting manuals.

## CAUSE

Winter is prime-time for old, worn out, and aged belts to begin squeaking (noise) due to material hardening and excess moisture. Belts are a maintenance item and are not covered under any warranty.

The belt drive system on the front of the engine is a complex system consisting of numerous components that must work in harmony with each other in order to function correctly. Normal variation in the alignment of these parts and worn out belts can lead to noisy belts and throwing of belts.

## REQUIRED ACTION

In September, 2016, and October, 2017, symptom-based troubleshooting "Belt Drive Noise" (found in the "Noise" chapter) and "Belt Coming Off" were updated in the *EPA07/10/GHG14 DDEC VI/10 Electronics and Troubleshooting Manual* (DDC-SVC-MAN-0084) and *GHG17 Troubleshooting Manual* (DDC-SVC-MAN-0191). This troubleshooting must be utilized. Do not replace the belt tensioner unless the troubleshooting calls for it. For these complaints, a new belt or belts will usually correct the problem. A belt coming off after installation is typically due to improper installation of the belt, or the use of an incorrect belt. Continued noise after belt replacement is typically due to improper installation of the belt, damaged belt pulleys, pulley contamination from old belt material or fluids (coolant, oil, fuel, belt dressing, etc.), or use of an incorrect belt. When replacing the belts, reference the "Poly-V-Belts" chapter in the *EPA07/10/GHG14 Engine Manual* (DDC-SVC-MAN-0081) and the "Belt Drive" chapter in the *GHG17 DD Platform Workshop Manual* (DDC-SVC-MAN-0190). These chapters were updated in February, 2018. Various belt information videos were published in February, 2018, and can

be found on DTNAConnect.com > Reference > Detroit Multimedia > DD Platform > Belt Tensioner.

In October, 2016, the belt maintenance interval was reduced to 150,000 miles for long haul service and 105,000 miles for short haul and severe service. Reference the *DD Platform Operators Manual* (DDC-SVC-MAN-0189) found on DTNAConnect.com > Search Literature > Detroit Literature > DD13/DD15/DD16. No logon is required to access this manual.

In March, 2018, new belts became effective at the truck plants to reduce belt issues by better accommodating variability in the belt drive system. These belts carryover the improvements first advertised in Technical Service letter 17 TS-9 for service-only belts for the DD13/DD15 on-highway truck engine with the variable speed water pump. These belts are now released for production with a new part number, and are joined by new belts for the fixed speed water pump for all EPA10 and later on-highway truck engines.

Do not use belts from incorrect engine types. For instance, don't use a belt from an engine with a fixed speed water pump on an engine with a variable speed water pump. The fixed speed water pump belt is 9mm longer and results in slack in the belt with the tensioner operating near the end stops and can cause the belt to come off. Refer to PartsPro on DTNAConnect.com for the latest belt part number information for a particular unit.

## REQUIRED MATERIAL

If the belts do need replacing, Table 1 provides a list of the new belt part numbers that superseded the prior part numbers. Stock of the former part numbers CANNOT be returned.

Application	Engine Model	Water Pump	Former P/N's	New P/N
DD13 on-highway truck	EPA10 DD13: 471903, 471911, 471913 GHG14 DD13: 471927 GHG17 DD13: 471928	Variable Speed	DTNA: 01-32732-671 Detroit: A4719932796	A4719935696 or A4719935496
		Fixed Speed	DTNA: 01-32732-680 Detroit: A4719931896	A4719935596
DD15/DD16 on-highway truck	EPA10 DD15: 472903, 472904 GHG14 DD15AT: 472906 GHG14 DD15TC: 472909 GHG14 DD16: 473908 GHG17 DD15: 472910 GHG17 DD16: 473910	Variable Speed	DTNA: 01-32732-691 Detroit: A4729932296	A4729933496 or A4729933296
		Fixed Speed	DTNA: 01-32732-700 Detroit: A4729931896	A4729933396

**Table 1 – Service Belt Part Numbers**

See Figure 1 below for help in identifying units with the variable speed water pump.



Figure 1 – Water Pump Identification

## CLAIM PROCESS

Normal in-warranty procedures apply. **Proactive removal of properly functioning parts is not allowed under warranty.** Again, belts are maintenance items and are not covered under any warranty.

## CONTACT INFORMATION

Please contact the Detroit™ Customer Support Center at 800-445-1980 or email [csc@daimler.com](mailto:csc@daimler.com) if you have any questions.