

April 2021
D21M1

Subject: DT12 Transmission Drive Shaft Cover Plug Reseal

Models Affected: DT12 Transmissions

General Information

Daimler Trucks North America LLC, on behalf of its DETROIT™ Powertrain Division, is initiating Field Service Campaign D21M1 on certain DT12 transmissions in order to reseal the bypass plugs of the drive shaft cover located in front housing.

All affected units will require transmission removal in order to reseal the bypass plugs.

This is the only repair authorized under this campaign. Some oil loss from the plugs is expected. If oil loss is excessive or location differs from the plugs called out in this document, additional repairs **outside** of this campaign will be required. Please conduct those repairs in accordance to the published work instructions available online.

There are approximately 66 units affected by this field service campaign.

Work Instructions

Please refer to the attached work instructions. **Prior to performing the recall campaign, check the vehicle for a completion sticker (Form WAR261).**

Replacement Parts

Replacement parts are now available by ordering the new part number(s) listed below from your facing Parts Distribution Center.

Table 1 Replacement Parts for D21M1 (All 66 vehicles)

Campaign Group	Part Number	Part Description	Quantity Required
A	LOC 56707	PST 567 6ML TUBE	1
A	A 715 261 07 80	GASKET, INPUT SHAFT HOUSING	1
A	DDE N000908018011	SCREW PLUG (optional) – Temperature Control Valve	1
A	DDE N007603018101	SEAL RING – Temperature Control Valve	1
A	A 003 990 29 17	SCREW PLUG (optional) – Bypass Control Valve	1
A	DDE N007603027100	SEAL RING – Bypass Control Valve	1
A	N000908 042001	PLUG, OIL SCREEN M42x1.5 (optional) – Pressure Control Valve	1
A	N007603 042100	SEAL RING, OIL SCREEN PLUG – Pressure Control Valve	1

April 2021

D21M1

Labor Allowance

Table 2 – Labor Allowance for D21M1

Procedure	Time Allowed (hours)	SRT Number	Corrective Action
D21M1			
FRONT COVER, DT12, RESEAL (D21M1)	7.3 – 8.2	996-F026A	12-Repair Recall/Campaign

Claim Reimbursement

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in OWL:

Table 3 - Claim Reimbursement

Claim Type	Field Service Campaign
Campaign	D21M1
Component Code	026-001-007
Cause Code	A1- Campaign
Primary Failed Part	N000908 042001
Procedure A¹	
Use the following operation	
Labor Number	996-F026A
Labor Hours	7.3 – 8.2 FRONT COVER, DT12, RESEAL (D21M1)
Part Number	Refer to Replacement Parts List above
Parts Return	NONE
¹ Administrative time (SRT 939-6010A) for 0.3 hours is automatically added to the claim.	

This Field Service Campaign will terminate on **April 13, 2022**. Dealers will be notified of any changes.

IMPORTANT: OWL must be viewed prior to beginning work to ensure the vehicle is involved and the campaign has not previously been completed.

All claims must be submitted within 30 days of the repair and within 30 days of the termination date of the campaign.

For questions, U.S. and Canadian dealers, contact the Warranty Campaigns Department via Web inquiry at DTNAConnect.com / WSC. Export distributors submit a Web inquiry or contact your International Service Manager.

Daimler Trucks

North America LLC

Field Service Modification

**April 2021
D21M1**

Detroit Diesel Corporation
13400 Outer Drive, West
Detroit, Michigan 48239-4001
Telephone: 313-592-5000

Copy of Notice to Owners

Subject: Field Service Campaign D21M1 DT12 Transmission Drive Shaft Cover Plug Reseal

Daimler Trucks North America LLC, on behalf of its DETROIT™ Powertrain Division, is initiating Field Service Campaign D21M1 to reseal the bypass plugs of the Drive shaft Cover located in the front housing of the transmission. All units will require the transmission removal in order to reseal the bypass plugs.

This is the only repair authorized under this campaign. Some oil loss from the plugs is expected.

Records available to us indicate that your vehicle has one of the affected assemblies. Instructions for this Field Service Campaign have been sent to your local Freightliner Authorized Repair Facility and the labor time required to perform this repair is **8.2** hours.

Please contact a Freightliner Authorized Repair Facility to arrange to have the Recall Campaign performed. To locate an authorized facility, search online at <https://demanddetroit.com/find-a-dealer/>

This service will be completed for you at no charge, prior to **April 13, 2022** under the provisions of this notice.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your continued satisfaction with our products.

DETROIT WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

April 2021
D21M1

Work Instructions

Subject: DT12 Transmission Drive Shaft Cover Plug Reseal

Models Affected: DT12 Transmissions

Special Tools

Description	Part Number
Lift Assembly	DDE DSN012T18003
Transmission Stand Set	DDE DSN012T18002
Air Line Socket	DDE DSN012T18009
Front Housing Lift Handle	DDE DSN012T18005
Guide Stud	DDE DSN012T18010
Seal Protector Sleeve	DDE DSN012T18008

Corrective Procedure

1. Remove the transmission, Refer to "Removal of the Transmission" section in the Detroit Transmissions Manual and follow all applicable steps and WARNINGS.

NOTICE

Depending on the manufacturer, clutch friction materials can contain asbestos. Compressed gases, such as shop air, should never be used to disperse dust in the bell or flywheel housings.

2. Lift the transmission off the transmission jack and set it vertically using the lift assembly (DDE DSN012T18003) in the stand (DDE DSN012T18002), Refer to "Transmission Stand Set" section in the Detroit Transmissions Manual.

April 2021
D21M1

3. Remove the clutch position sensor pass-thru harness, and clutch actuator.



d510275

4. Remove the counter shaft brake air line connection, at the front cover (DDE DSN012T18009).
5. Remove the wire ties and swing the counter shaft brake air line out of the way.



d280279

6. Using two of the CPCA fasteners, install the front cover lift handle (DDE DSN012T18005), hand-tight.

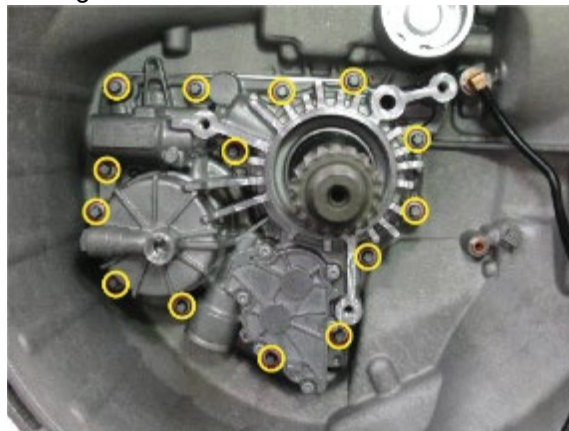
April 2021
D21M1



7. Install the seal protector sleeve (DDE DSN012T18008) on the splined section of the input shaft.



8. Remove the fasteners holding the front cover to the transmission case.



9. Evenly lift the cover from the housing, being careful not to drop the bearing races that may be caught in the housing during removal.

April 2021
D21M1



d260283

10. Confirm all the shims and bearings are reinstalled in the transmission.



d260284

11. Support the housing on a non-mar surface, and remove the pressure control valve cap and seal ring.



d260286

April 2021
D21M1

NOTICE

Do not allow the passages and valves in the housing to be exposed to solvents. If cleaning with solvents apply them to a lint-free cloth and wipe down the threads in the housing.

12. Clean the port and cap, and assemble the cap and seal ring.

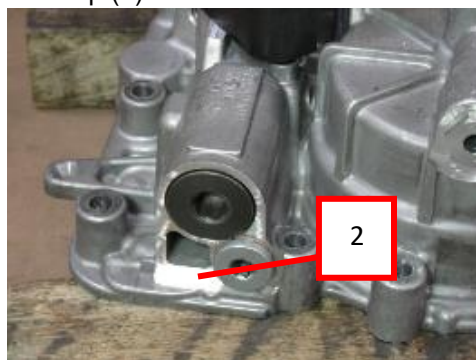


d26c2b9

13. Apply Loctite 567 (LOC 56707), high temperature thread sealant or equivalent, to the threads of the cap.
14. Install the cap and torque to 100 N·m (74 lb·ft).
15. Remove the temperature control valve cap (1).



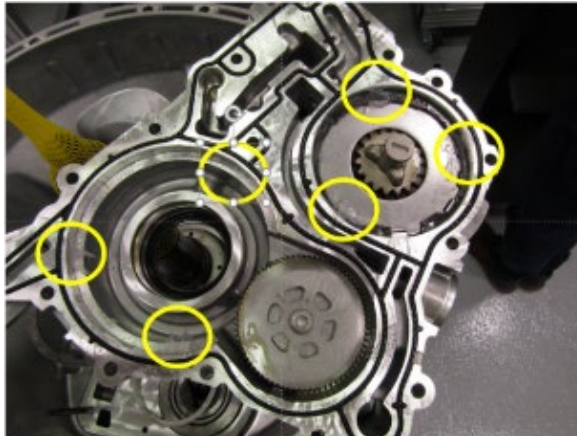
16. Clean the port and cap, and assemble the cap and seal ring.
17. Apply Loctite 567, high temperature thread sealant or equivalent, to the threads of the cap.
18. Install the cap and torque to 60 N·m (44 lb·ft).
19. Remove the bypass control valve cap (2).



April 2021

D21M1

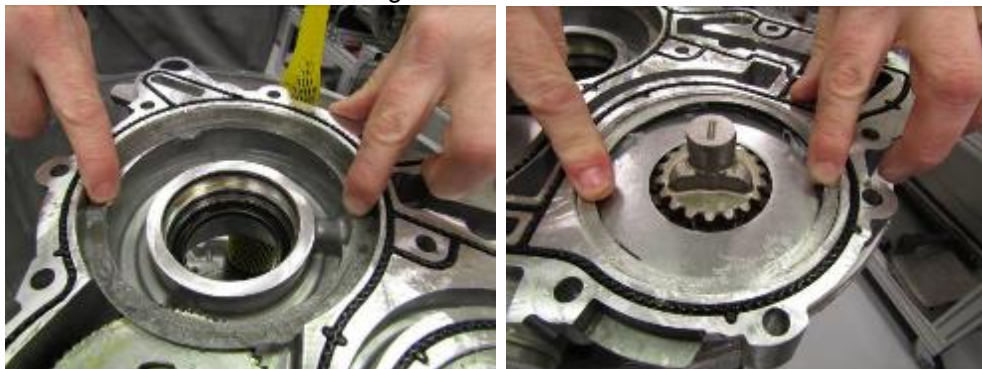
20. Clean the port and cap, and assemble the cap and seal ring.
21. Apply Loctite 567, high temperature thread sealant or equivalent, to the threads of the cap.
22. Install the cap and torque to 40 N·m (30 lb·ft).
23. Apply small amount of petroleum jelly to the front cover housing bearing bores, in the zones shown below, to hold the shims in place.



NOTICE

If the shims fall out of the front cover they will get damaged in subsequent steps.

24. Install the shims into the front housing.



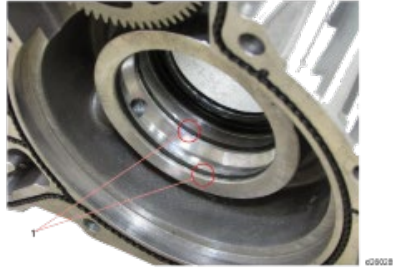
April 2021

D21M1

WARNING

If the oil control rings are not centered, they can catch on the edge of the input shaft and break during installation.

25. Apply a small amount of petroleum jelly to the oil control rings (1) in the cover, and center them in the grooves.



26. Install the front housing seal (A 715 261 07 80).
27. Clean the fasteners and threads in the transmission case, for attaching the front cover housing.
28. Inspect the sealing surface, and clean to remove any residual oil, particles, and residue.
29. Install the guide stud (DDE DSN012T18010) in the top corner position of the front cover bolt pattern.



30. If not already done, install the Seal Protector Sleeve (DDE DSN012T18008) on the input shaft to protect the seal from the clutch splines; see graphic below. To prevent damage to the seal and sleeve, do not allow the sleeve to cover the seal area of the shaft.



31. Install the front cover housing.
 - 1) Apply medium strength thread locker to the first fastener.
 - 2) Position the front cover on the input shaft, and feed it onto the guide stud.
 - 3) Turn the input shaft as you lower the cover into position, noting there are two alignment tasks (countershaft brake drive & oil pump drive) required to seat the cover fully.

April 2021
D21M1

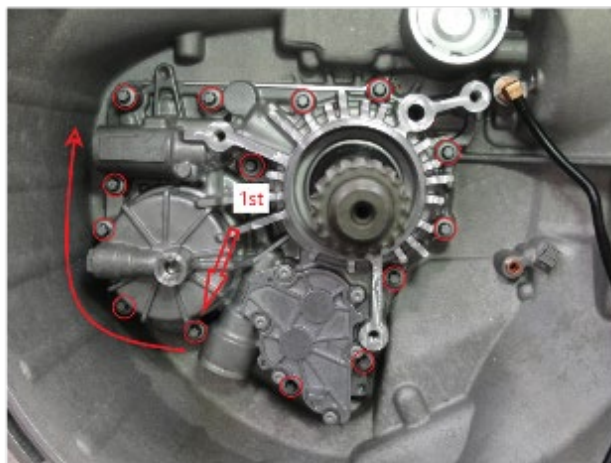


4260216

NOTICE

Once the counter-shaft brake drive engaged, the brake release detent spring will be pushing the cover away from the transmission housing. Keep pressure on the front cover and install one bolt to maintain the position and alignment of the components. Test the rotation of the transmission, by turning the input shaft to confirm there is no binding.

32. Remove the guide stud.
33. Remove the seal protector sleeve.
34. Apply medium strength thread locker to the remaining fasteners.
35. Install the remaining bolts in a clockwise pattern, as shown in the figure below, and use the same pattern to torque to 23 N·m (17 lb·ft).



4260216

36. Remove the front cover lift handle.

April 2021

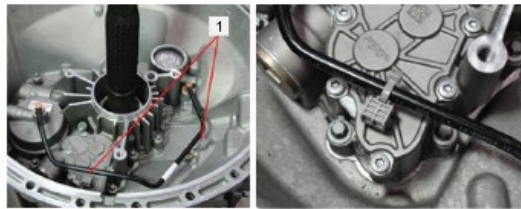
D21M1

37. Install the counter shaft brake line connection and torque to 10 N·m (7 lb·ft.).

NOTICE

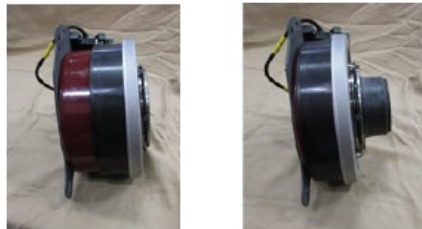
When the front cover, the bearing races and shims are set correctly, the input shaft should rotate without binding. The amount of torque required depends on the gear position of the Range group, but the input shaft should turn smoothly.

38. Secure the counter-shaft brake air line to the clipping points (1).



d280315

39. Compress and install the clutch actuator, and torque to 55 N·m (40 lb·ft).



d280316

40. Install the clutch position sensor harness pass-thru.



d280317

41. Lift the transmission off the stand and set it horizontally in the transmission jack. Refer to "Transmission Stand Set" section in the Detroit Transmissions Manual.
42. Install the transmission. Refer to "Installation of the Transmission" section in the Detroit Transmissions Manual.
43. Repairs are complete.

April 2021

D21M1

Completion Stickers

- Upon completion of Field Service Campaign **D21M1**, clean a spot on the base label (Form WAR259), write the Field Service Campaign Number **D21M1** on a blank, completion sticker (Form WAR261), and attach the completion sticker to the base label.

Label ordering info: DTNAConnect > Services and Reference > Publications & Warranty Supplies > Warranty