

Turbo Compound Inspection/Replacement

Service Category Service Department

Section Function Group 292

Technician Skill Level A

Market North America

Applicability

Volvo

Model Years	Models
2022-2025	VN

Introduction

Volvo Trucks has identified that certain VN model trucks equipped with a D13 Turbo Compound (TC) engine may be at risk of TC unit failure due to an under-torqued idler gear bracket. TC units with the serial numbers listed in the table below are suspected to be affected, which could result in failure and potential engine damage. For impacted vehicles, please refer to the instructions provided below.

1. Inspect the serial number tag on the TC unit and compare to the list below.
2. If the serial number on the TC unit matches one listed below, replace the TC unit with a new unit.

Production Change Information

This bulletin applies to vehicles built within the specified production changes below.

Brand	Engine	Emission Level	Starting Build Date	Ending Build Date
Volvo	D13 TC	EM-USA21	21-April-2021	16-July-2024

Warranty Information

This repair is covered by an authorized Service Program. Reimbursement is obtained through the normal claim handling process.		
Claim Type (used only when uploading from the Dealer Bus. Sys.)		B
Main Labor Code	Description	Hours
1720-16-09-01	Campaign General (Serial tag inspection) 0.1 x 3	0.3
Labor Code	Description (If Replacement is Needed)	Hours
2921-03-02-01	Turbo Compound, Replacement	6.3
Causal Part	23174611	
SCC Authorization Code	S4346	
Expiration Date	January 31, 2026	

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Serial Number List

1406131133	2406252150	2407030850	2408261226	4405301157	4411051145
1406131137	2406260752	2407091401	2408290931	4407081036	4411051414
1407191146	2406260801	2407091846	2409171203	4408141926	4411132133
2404291328	2406260814	2407111607	2409181342	4409190736	4411132221
2405301729	2406260822	2407171027	2411071252	4411011423	4411140834
2406131400	2406260826	2407180714	2411071620	4411040737	4411141425
2406171738	2407022000	2408141142	2411071852	4411050713	4411141900
2406191245	2407022044	2408191619	2411071933	4411051028	4411150756
2406211423					

Parts Information

If replacement of the TC unit is required, order the listed parts below. If parts kit **24369695** and **85152135** are not available, the parts can be ordered individually. Please see the kit breakdown chart at the end of this document.

TC units must be ordered through VOR process. Only order ONE TC unit per vehicle VIN.

Part Numbers	Part Names	Quantity
23174611	TC Unit	1 (If required)
24369695 See kit breakdown on last page	Install kit (EGR cooler)	1 (If required)
85152135 See kit breakdown on last page	Install kit (turbo)	1 (If required)
947282	Gasket	2 (If required)

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21060426	V-clamp	1 (If required)
21095721	Gasket	1 (If required)
21472836	V-clamp	1 (If required)
21895636	Gasket	1 (If required)
21940610	Sealing ring	1 (If required)
22206133	Plane gasket	1 (If required)
1547252	Sealing ring	1 (If required)

Calibration Information

N/A

Repair Procedure

1. Park the vehicle on level surface.
2. Apply the parking brake.
3. Place the gear lever in neutral.
4. Install the wheel chocks.
5. Locate the serial number tag on the lower side of the TC unit.



6. Compare the serial number on the TC unit tag to the listed serial numbers listed above.
 1. If the serial number on the TC unit does not match the listed ones above, no further action is needed, and the truck can be released back into service.
 2. If the serial number on the TC unit is on the list above continue to **step 7**.

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7. Follow operation (**2921-03-02-01 Turbo compound, Replacement**) in Impact to replace the TC unit with a new one.
8. After repair is complete return the truck to service.

If parts kit **24369695** and **85152135** are not available, the parts can be ordered individually. Please see the kit breakdown (chart below).

24369695	Install kit (EGR cooler)	1
Kit contents	Part Names	Quantity
11994	Gasket	1
1547253	Sealing ring	2
20504408	Clamp	3
21693026	Clamp	1
21844960	Sealing ring	2
21944175	Gasket	1
23491449	Gasket	1
960629	Plug	1
967343	Sealing ring	1

85152135	Install kit (turbo)	1
Kit contents	Part Names	Quantity
25073472	Spacer sleeve	4
20592787	Clamp	1
20707685	Gasket	1
21827328	Clamp	1
21827334	Clamp	1

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21940610	Sealing ring	1
21940615	Sealing ring	1
21965006	Gasket	1
22206133	Gasket	1
984737	Flange screw	4
993811	Flange screw	4