

Turbo Compound Double Idler Gear Replacement

Updated 8/4/2026 – Updated the Expiration Date.

Service Category Service Department

Section Function Group 292

Technician Skill Level A

Market North America

Applicability

VOLVO

Years	Models
2025	VN, VN 4

Introduction

Volvo Trucks has determined that certain VN and VN 4 model trucks equipped with a D13 Turbo Compound (TC) engine may experience TC Double Idler Gear failure due to incorrect bearing preload. TC units within this population are suspected to be affected, which could result in failure and potential engine damage. For the affected vehicle population, please follow the instructions provided below to remove the TC unit, replace the double idler gear with a new one, and reinstall the TC 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, EM-USA24	27-February-2024	10-October-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
2921-03-02-01	Turbo Compound, Replacement	Reference Impact
2925-03-05-01	Idler Gear, Double, Replacement. TC Unit Removed	0.2
Causal Part	24870422	
SCC Authorization Code	S4532	
Expiration Date	October 30, 2026	

Turbo Compound Double Idler Gear Replacement

Part order

Order all parts through normal process.

Part Numbers	Part Names	Quantity
24870422	Gear	1
24369695	Install kit (EGR cooler)	1
85152135	Install kit (turbo)	1
947282	Gasket	2
21060426	V-clamp	1
21095721	Gasket	1
21472836	V-clamp	1
21895636	Gasket	1
21940610	Sealing ring	1
22206133	Plane gasket	1
1547252	Sealing ring	1
21096684	O-ring	1
1675066	O-ring	1
20592783	V-clamp	1

Repair Procedure

1. Secure the vehicle for service.
2. Remove the TC unit from the engine following the first half of operation (**2921-03-02-01 Turbo compound, Replacement**) in Impact.
3. Replace the TC Idler Gear following operation (**2925-03-05-01 Idler Gear, Double, Replacement**) in Impact.
4. Install the repaired TC unit back on the engine following the second half of operation (**2921-03-02-01 Turbo compound, Replacement**) in Impact.
5. After repair is complete return the truck to service.