

CAC Crimped Clamp Replacement

Service Category Service

Section Function Group 265

Technician Skill Level A

Market North America

Applicability

VOLVO

Years	Models
2023	VN

Introduction

Certain Volvo trucks could experience leakage from the Charge Air Cooler Pipe Crimp Clamps. This could result in a boost leak or hose blowoff. A method for replacing the crimped hose clamps on the Charge Air Cooler (CAC) piping has been developed. Follow the instructions below to remove the four CAC crimped clamps and install four new T- bolt clamps.

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	D11, D13	EM-USA17, EM-USA21	10-January-2022	06-December-2022

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
2652-03-02-03	Charge Air Cooler Pipe, Replacement (X2)	0.8
Causal Part	21473669	
SCC Authorization Code	S3605	
Expiration Date	March 31, 2024	

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Parts Information

Part Numbers	Part Names	Quantity
85137462	T-bolt Clamp	4

Required Tools & Equipment

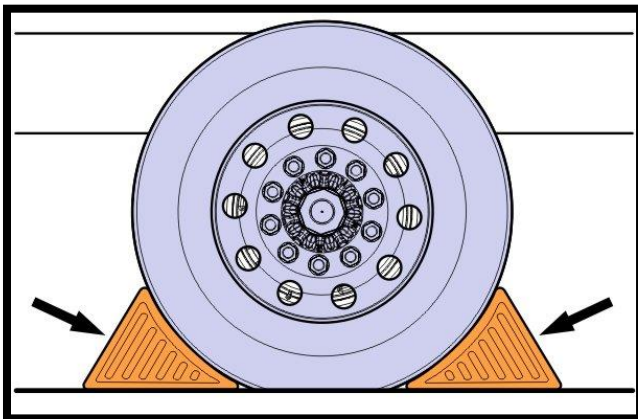
- None

Calibration Information

- None

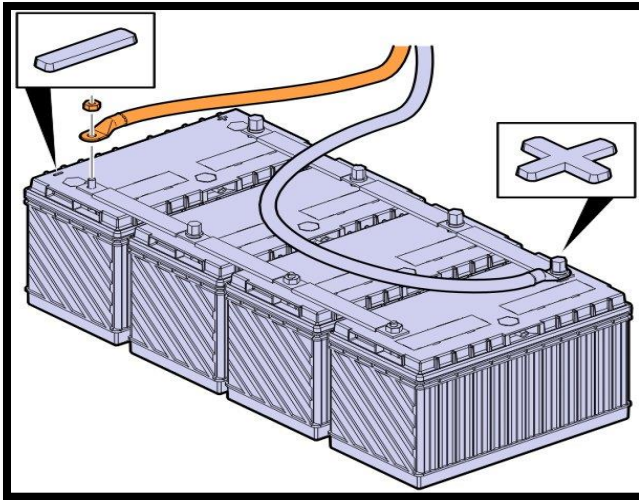
Repair Procedure

1. Park the vehicle on a level surface.
2. Apply the parking brake.
3. Place the gear lever in neutral.
4. Install the wheel chocks.



5. Disconnect the cable from the negative terminal.

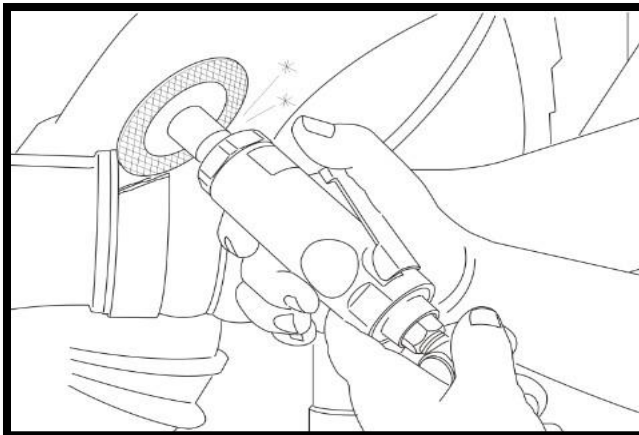
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6. Unlatch and raise the hood.
7. At the rear CAC hose clamp location (next to the turbo outlet elbow), carefully cut through the crimped-on clamps. Cut the clamps at a slight diagonal angle to avoid damaging the turbo outlet elbow. Use a high-speed cut-off/tool to perform the cut.

Danger

Wear proper eye protection during cut-off wheel/tool operation to prevent eye injury.



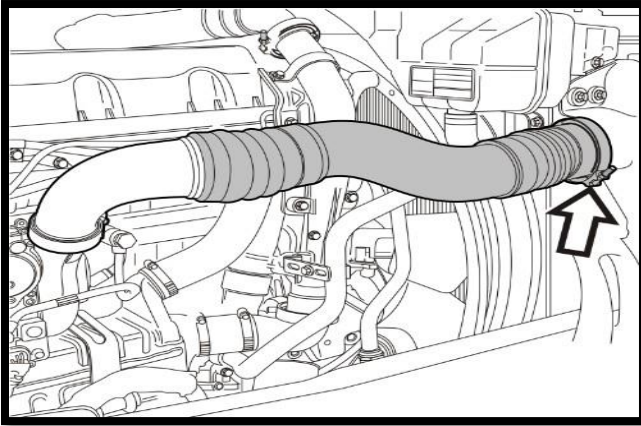
8. Using pliers, loosen the crimped-on hose clamps to allow it to separate from the turbo outlet hose.

Warning

Cutting the crimped-on clamp with a cut-off wheel/tool may produce extremely sharp edges. Use care when removing the clamp to avoid injury.

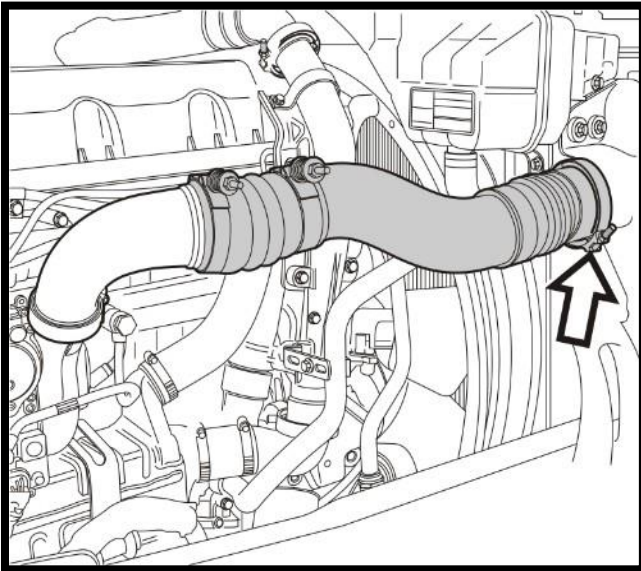
9. Loosen the V-band clamp at the charge air cooler and remove the CAC hard pipe assembly from the turbo elbow.

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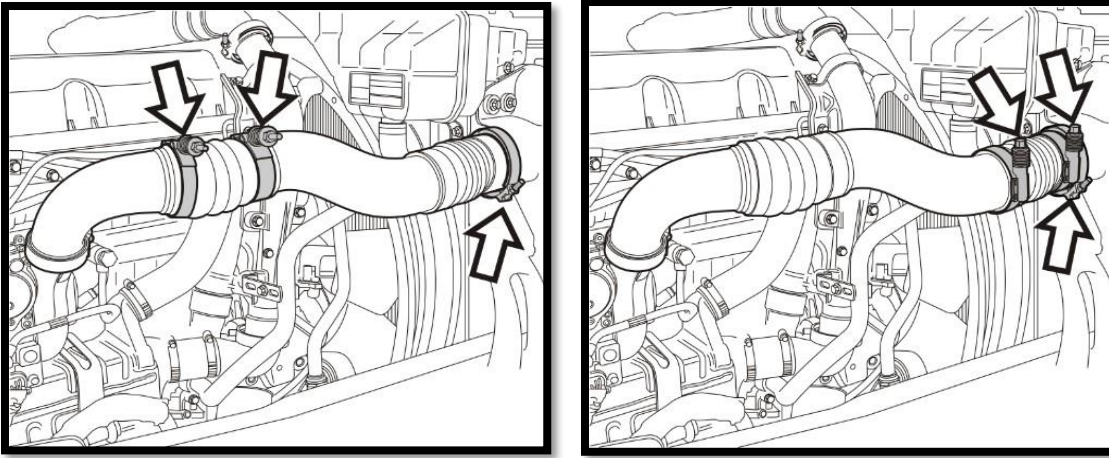
10. Using a high-speed cut-off/tool, cut the other three remaining crimped clamps from the CAC pipe.
11. Position the hoses with attaching T-bolt clamps onto the CAC hard pipe. Position the remaining end of the CAC hose into the turbo elbow.
12. Inspect the CAC hard pipe V-band clamp for wear or damage, replace as necessary. Position the CAC hard pipe with the O-ring against the charge air cooler and secure with the v-band clamp. Lubricate the threads and v-inserts.

Note
Make sure O-ring remains in place while positioning the pipe.



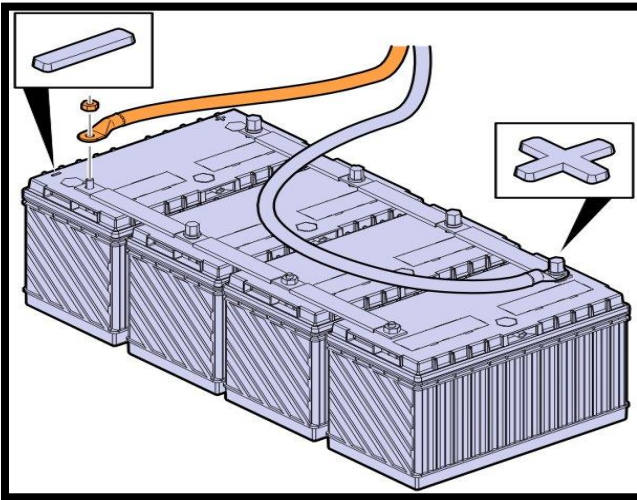
13. Torque-tighten all clamps to specification.

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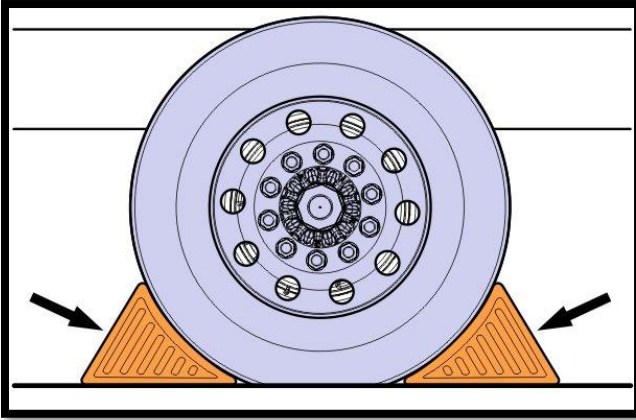
Torque-tighten	
T-bolt clamp	10 ± 1.5 Nm (7.4 ± 1.1 ft-lb)
V-band clamp	7 ± 1 Nm (62 ± 9 in-lb)

14. Reconnect the cable from the negative terminal.



15. Start the engine, check for any leaks, and verify the vehicle performs as intended.
16. Close and latch the hood.
17. Remove the wheel chocks.

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18. Release vehicle to service.