

# Inlet pipe, Charge Air cooler, Leak

V-265-002

(September 2022)

## Valid for

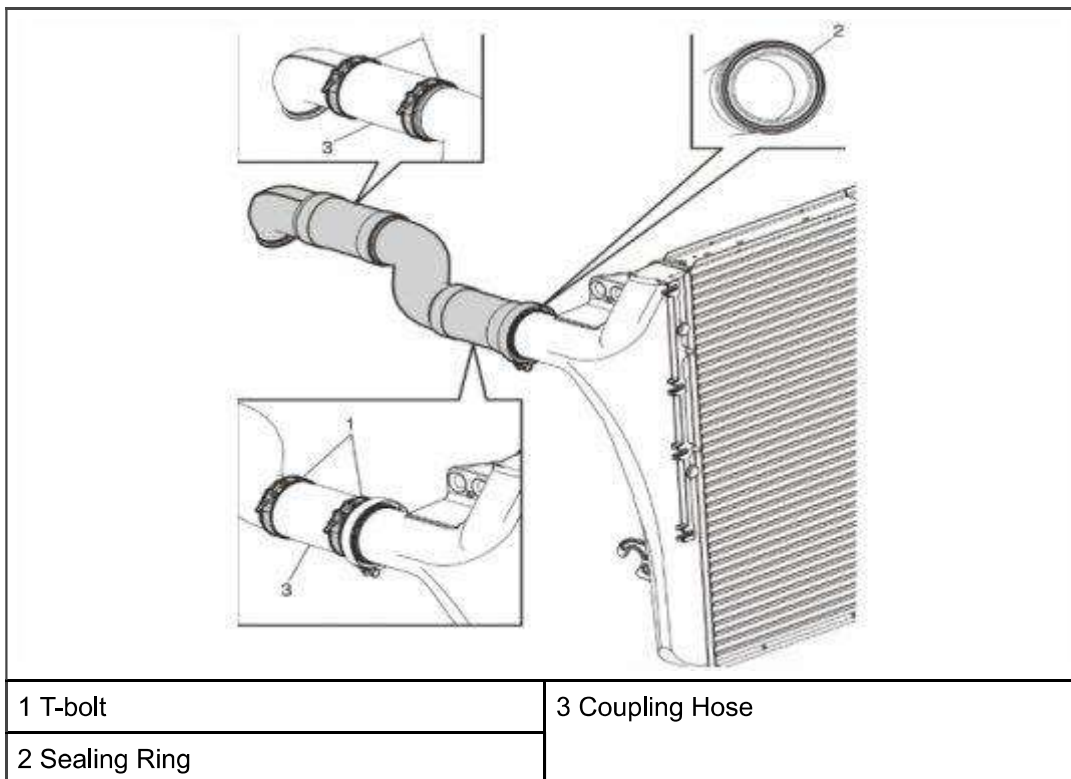
All Volvo Trucks 2007 to current

## Case description

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. The crimped clamps can be replaced with T-bolt clamps making it possible to replace individual pieces of the CAC piping rather than replacing the entire assembly.

## Parts

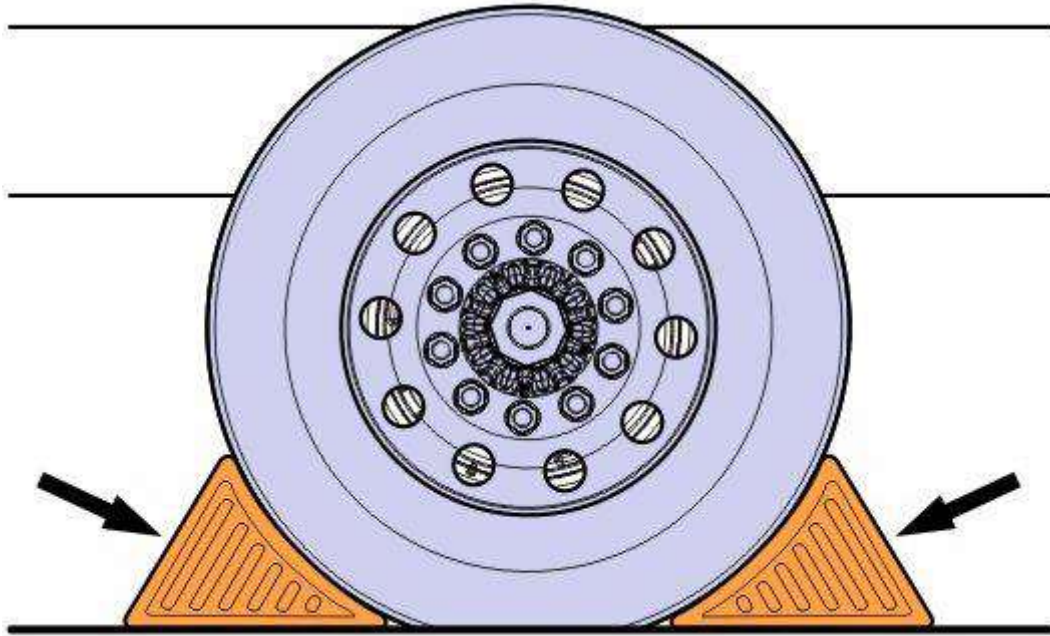
Part Number	Description	Quantity
85137462	T-bolt Clamp	*



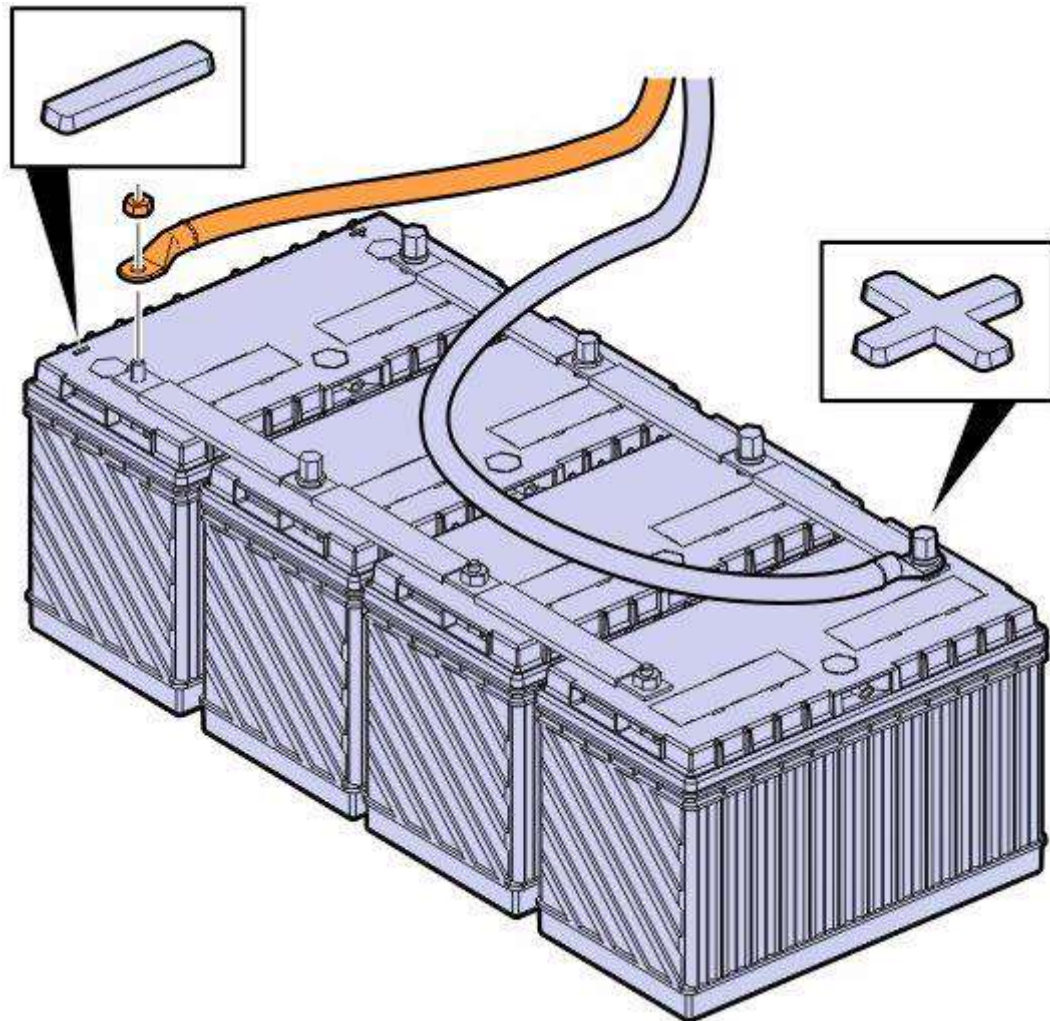
## Repair Procedure for Charge Air Cooler (CAC) Hose at Turbo Outlet Elbow

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.

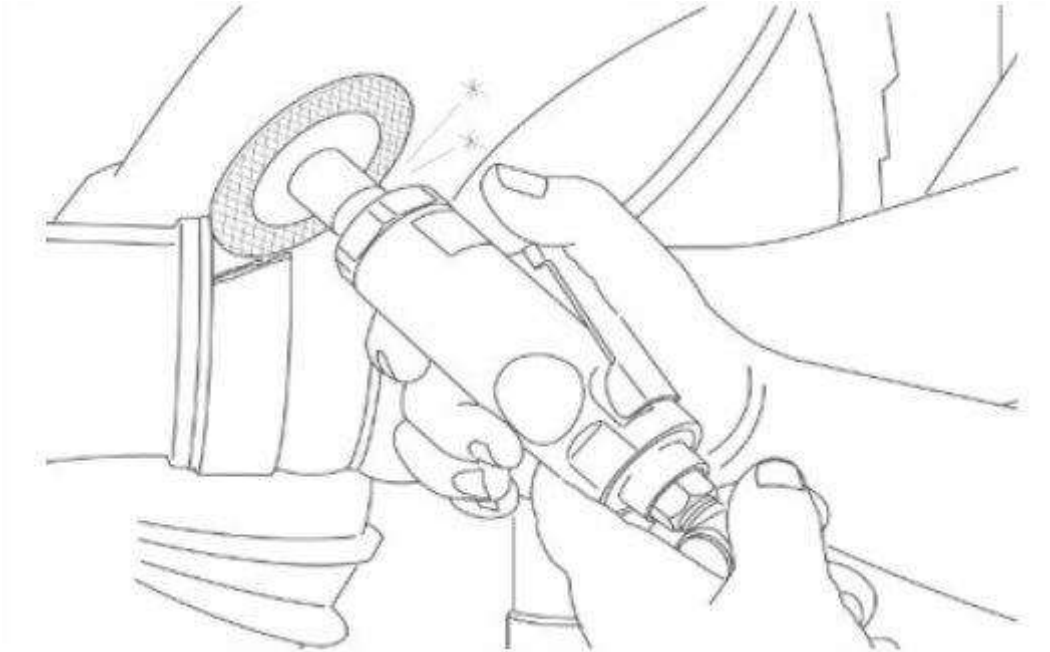


6. Unlatch and raise the hood.
7. At the rear CAC hose clamp location (next to the Turbo Outlet Elbow), carefully cut through the crimped-on clamp. Cut the clamp at a slight diagonal angle to avoid damaging the Turbo Outlet Elbow. Use a high-speed cut-off wheel/tool to perform the cut.



**Danger**

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



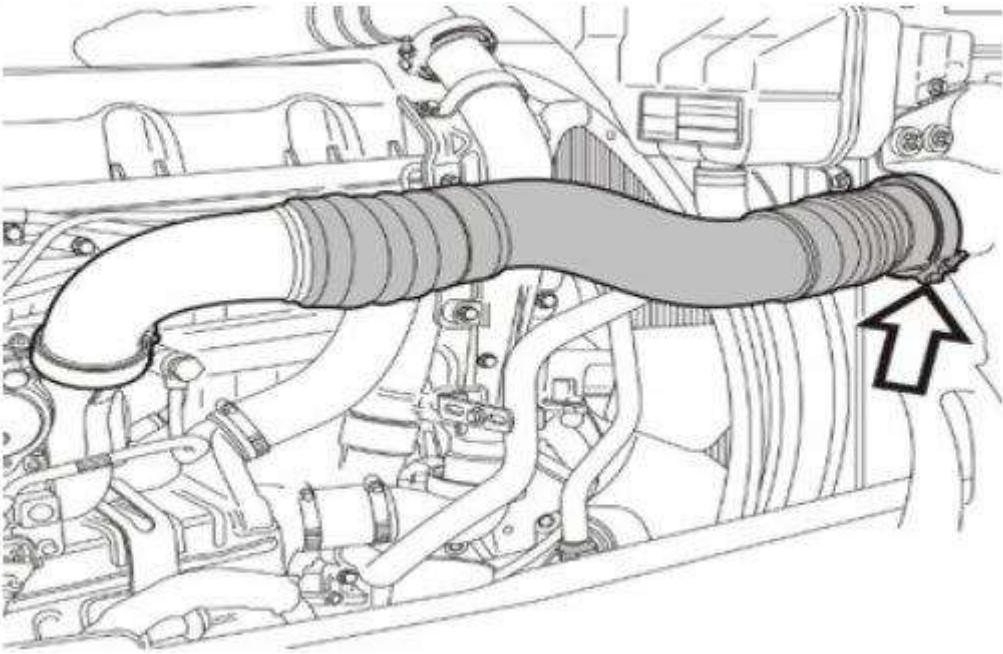
8. Using pliers, loosen the crimped-on hose clamp to allow it to separate from the Turbo Outlet Elbow.



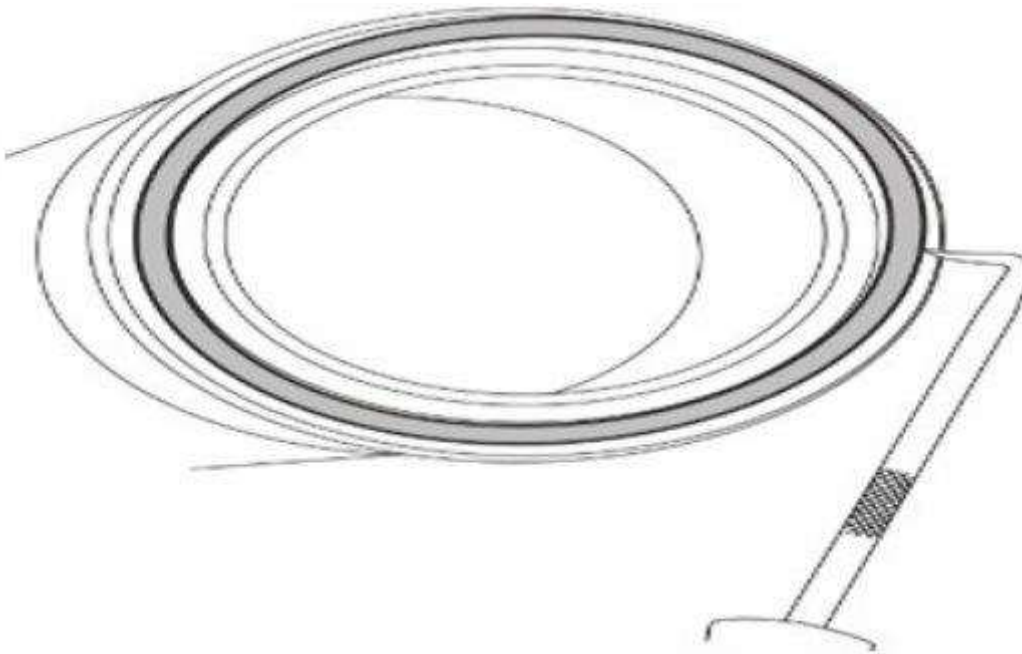
**Warning**

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.

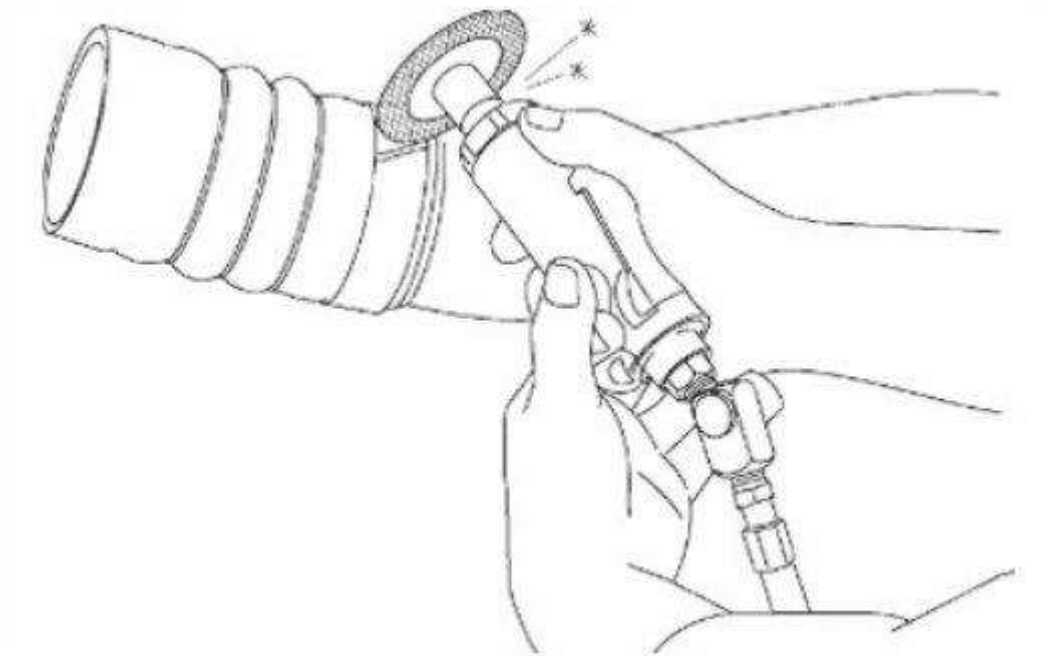
9. Loosen the V-band clamp at the CAC and remove the CAC hard pipe assembly from the engine.



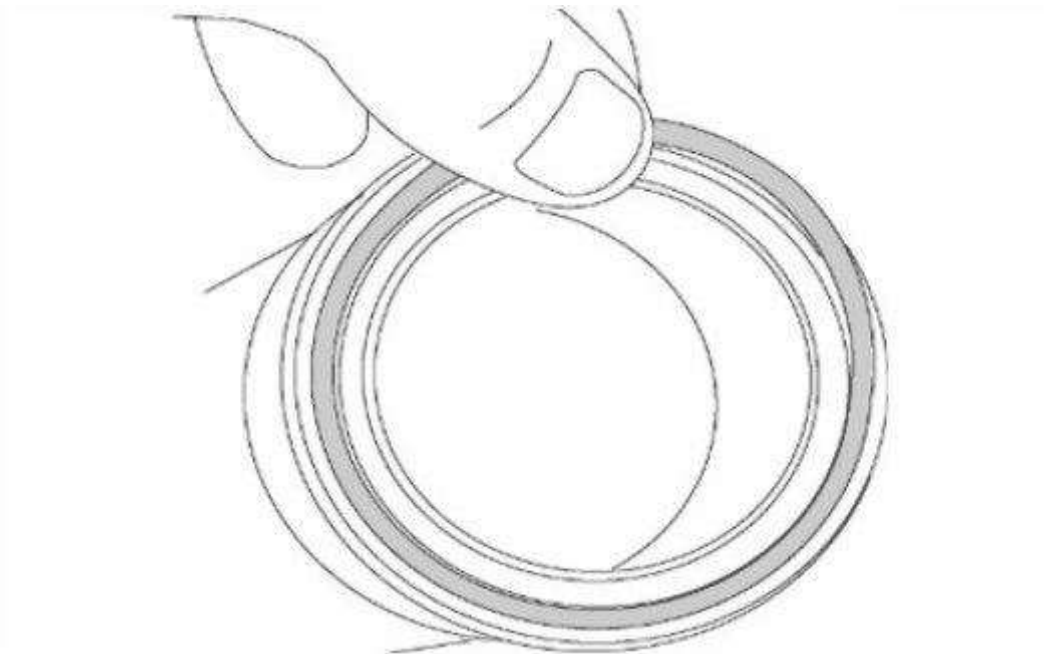
10. Remove and discard the O-ring from the charge air cooler end of the CAC hard pipe.



11. Using a high-speed cut-off wheel/tool, cut the remaining crimped-on clamp from the rear hose of the CAC hard pipe. Cut the clamp at a slight angle to avoid damage to the CAC hard pipe.

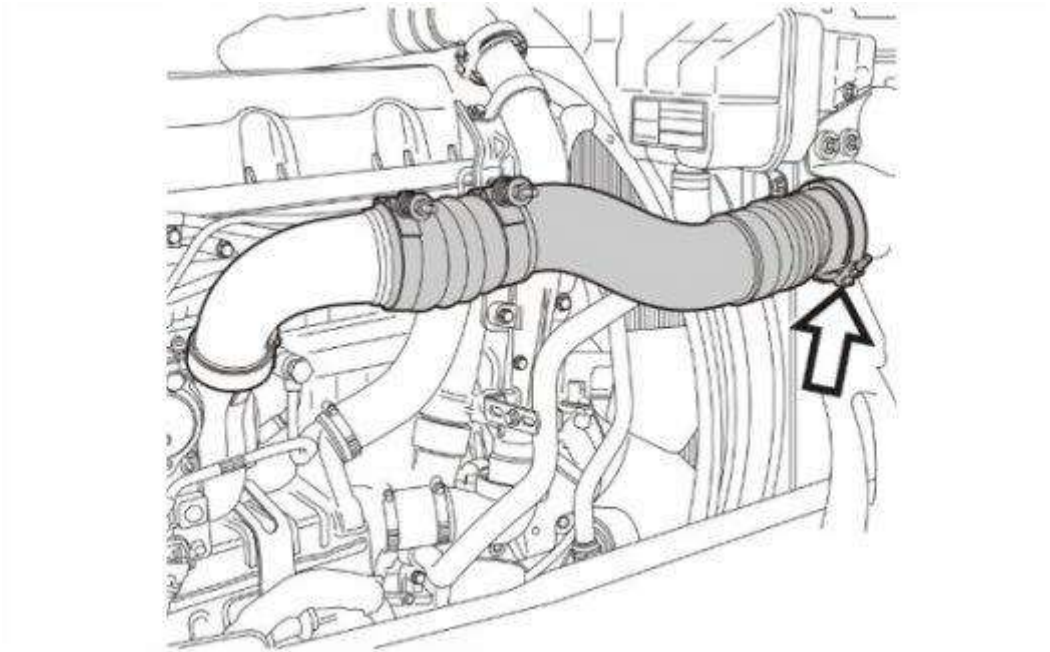


12. Using pliers, loosen the crimped-on hose clamp to allow it to separate from the CAC hard pipe.
13. Clean the hose connection areas on the Turbo Outlet Elbow and the hard pipe.
14. Position the hose with attaching T-bolt clamp onto the CAC hard pipe. Position the remaining end of the CAC hose onto the Turbo Outlet Elbow and secure using an additional T-bolt clamp.
15. Place a new O-ring in position on the flange of the CAC hard pipe where it connects to charge air cooler.

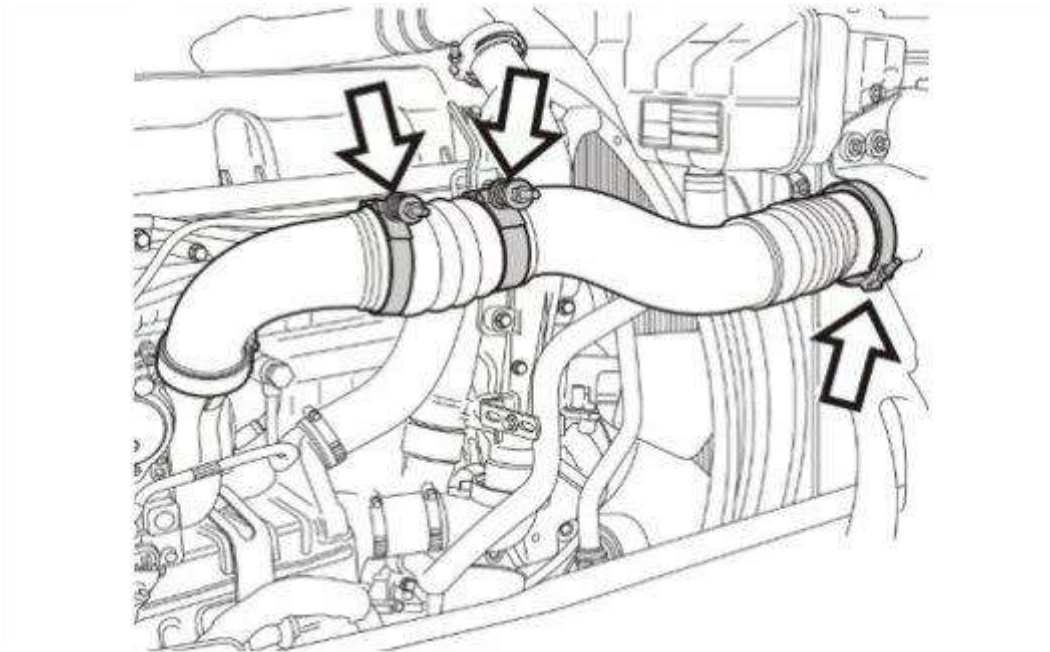


16. Inspect the CAC hard pipe V-band clamp for wear or damage, replace as necessary. Position the CAC hard pipe with O-ring against the charge air cooler and secure with the V-band clamp. Lubricate the threads and v-inserts.

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

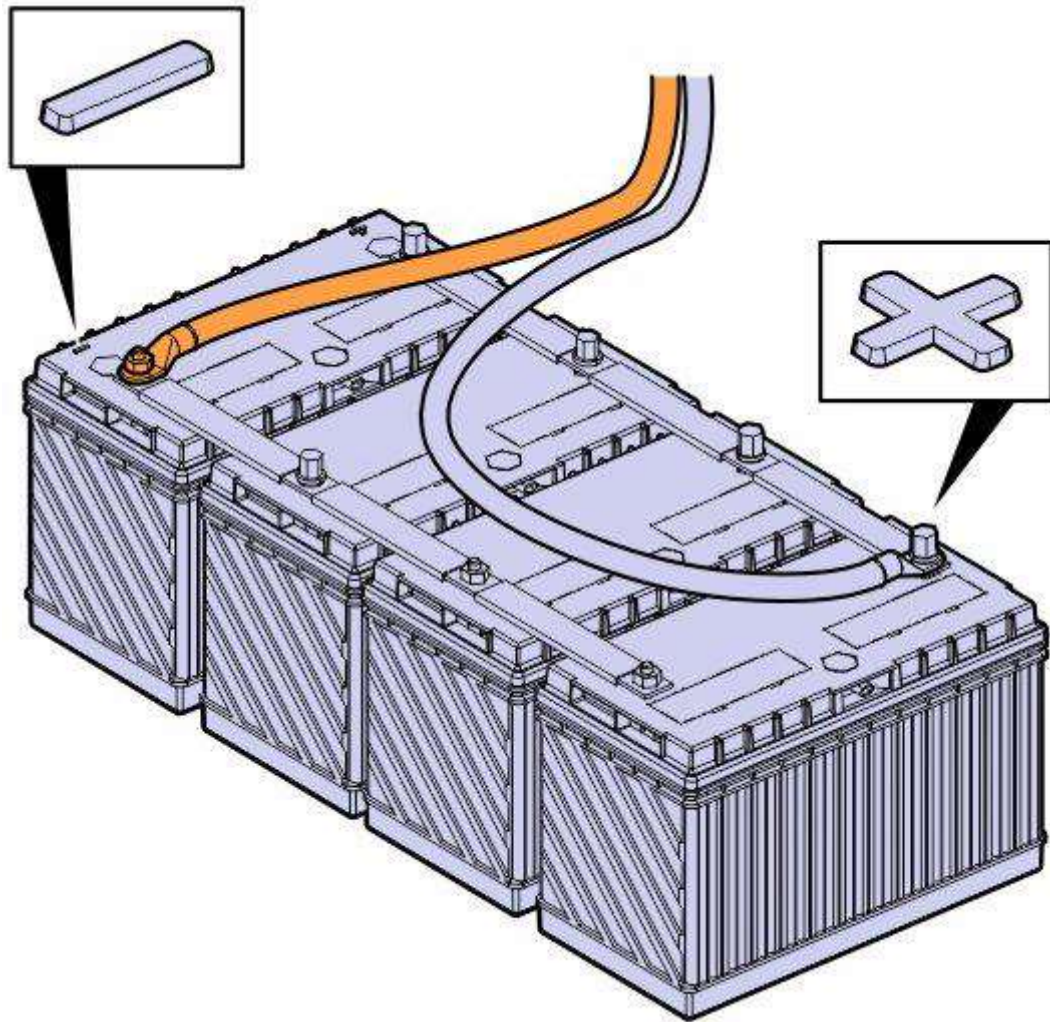


17. Torque tighten clamps to specification.

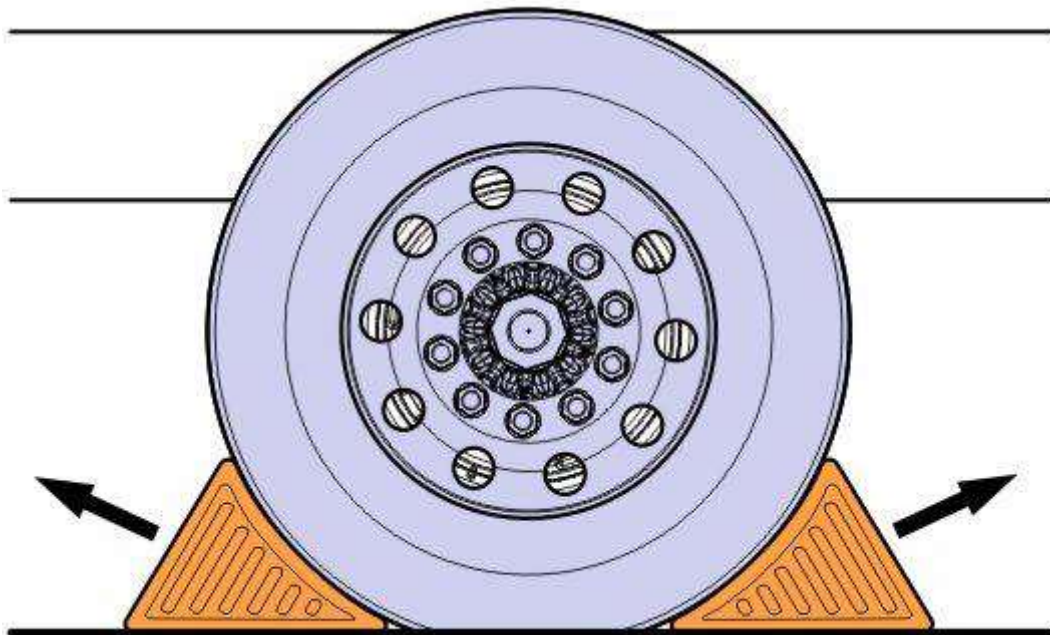


Tightening torque	
T-bolt clamp	$10 \pm 1.5 \text{ Nm}$ ( $7.4 \pm 1.1 \text{ lbf-ft}$ )
V-band clamp	$7 \pm 1 \text{ Nm}$ ( $62 \pm 9 \text{ in-lb}$ )

18. Reconnect the cable from the negative terminal.

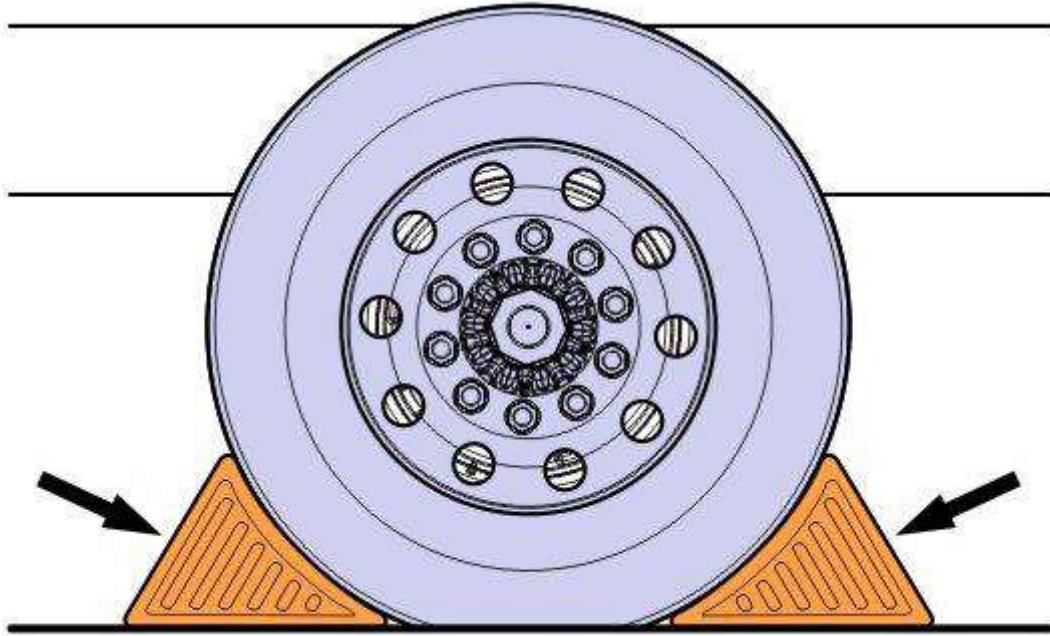


19. Start the engine, check for leaks and proper operation.
20. Close and latch the hood.
21. Remove wheel chocks.

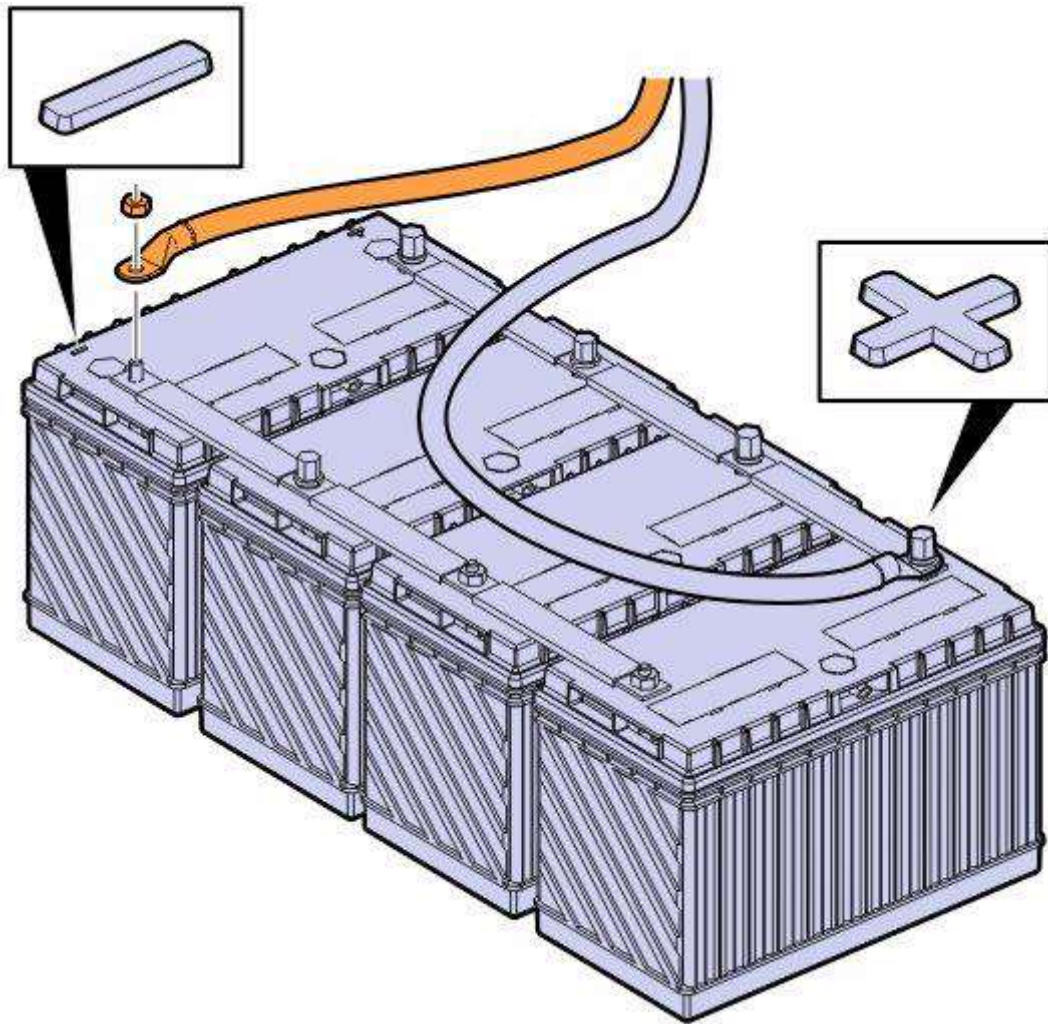


## Repair Procedure for Charge Air Cooler (CAC) Hose at Cooler

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.

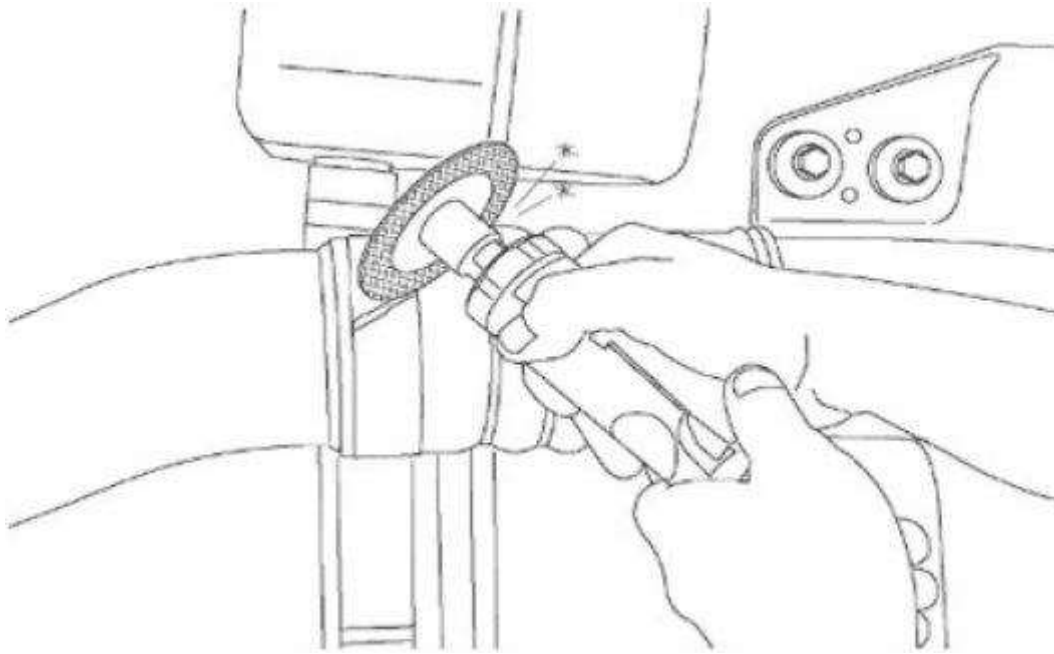


6. Unlatch and raise the hood.
7. On the CAC hard pipe assembly at the front hose location (next to the hard pipe connection), carefully cut through the crimped-on clamp. Cut the clamp at a slight diagonal angle to avoid damaging the CAC hard pipe connection. Use a high-speed cut-off wheel/tool to perform the cut.



**Danger**

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



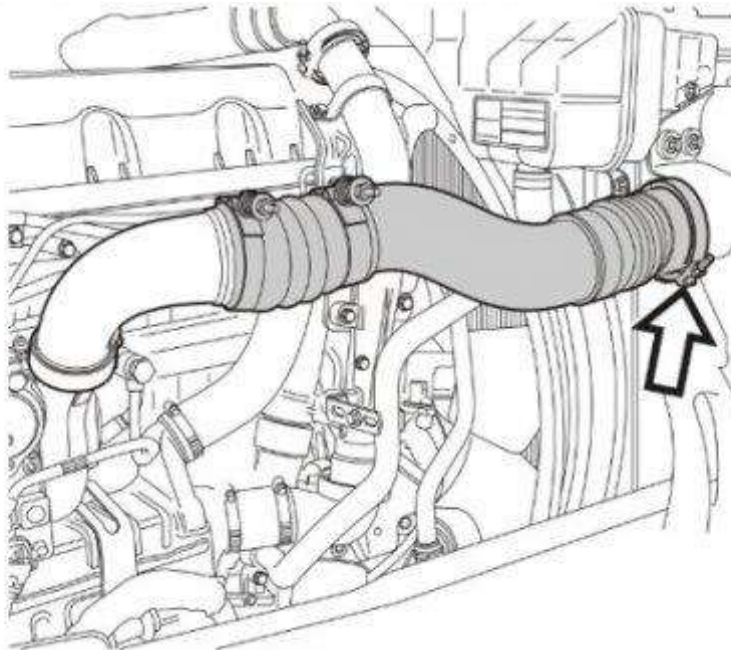
- Using pliers, loosen the crimped-on hose clamp to allow it to separate from the CAC hard pipe.



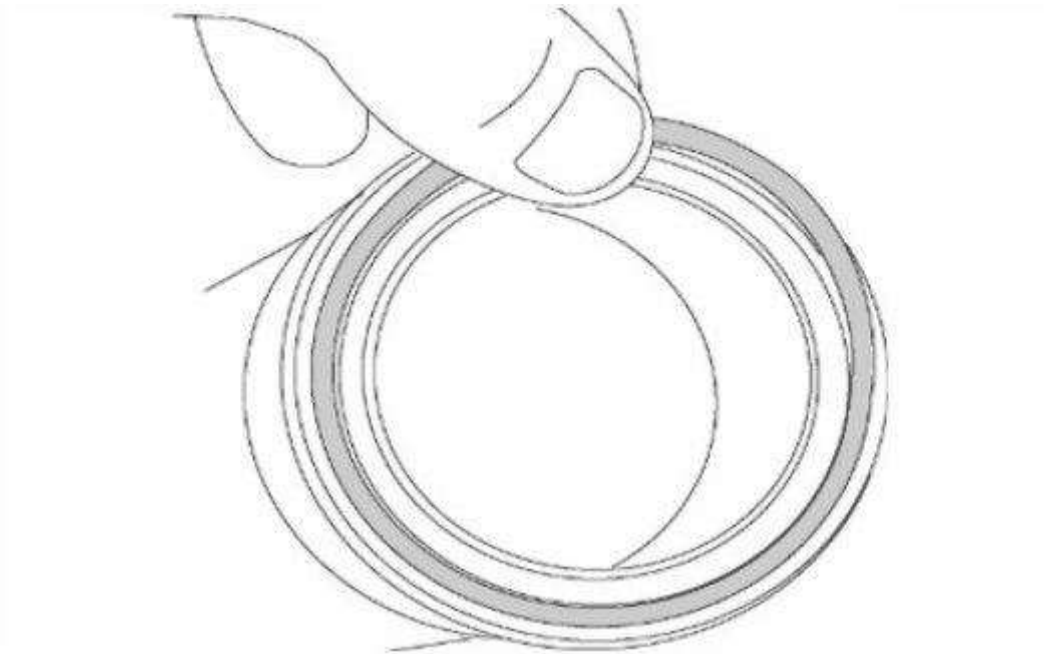
### Warning

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.

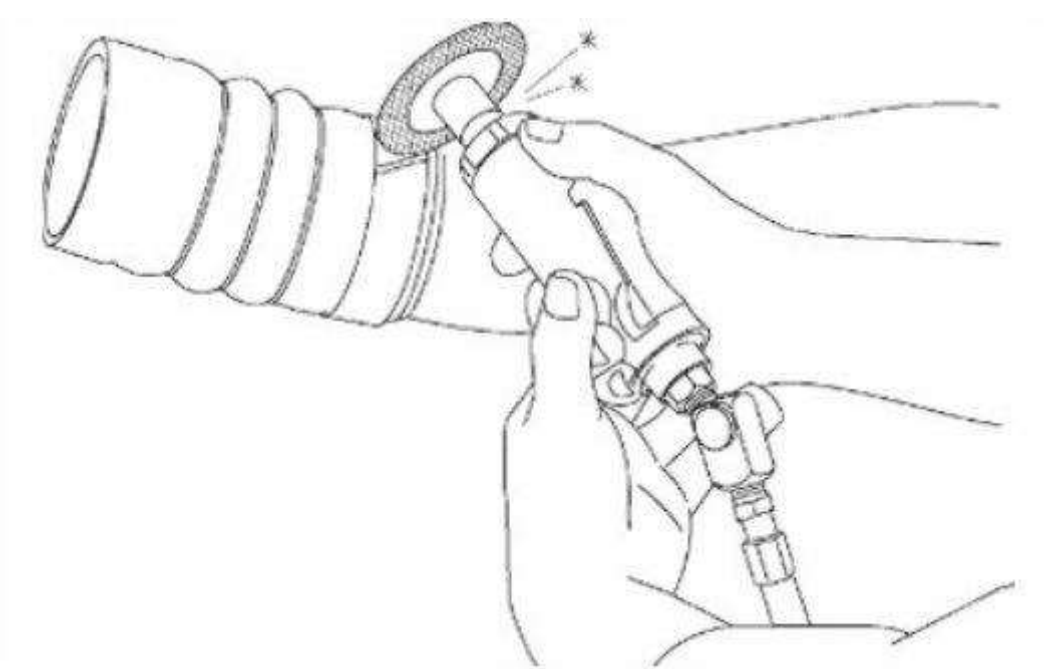
- Loosen the V-band clamp at the charge air cooler inlet and remove only the hose and V-band clamp connection portion of the hard pipe assembly.



- Remove and discard the O-ring from the charge air cooler end of the CAC hard pipe



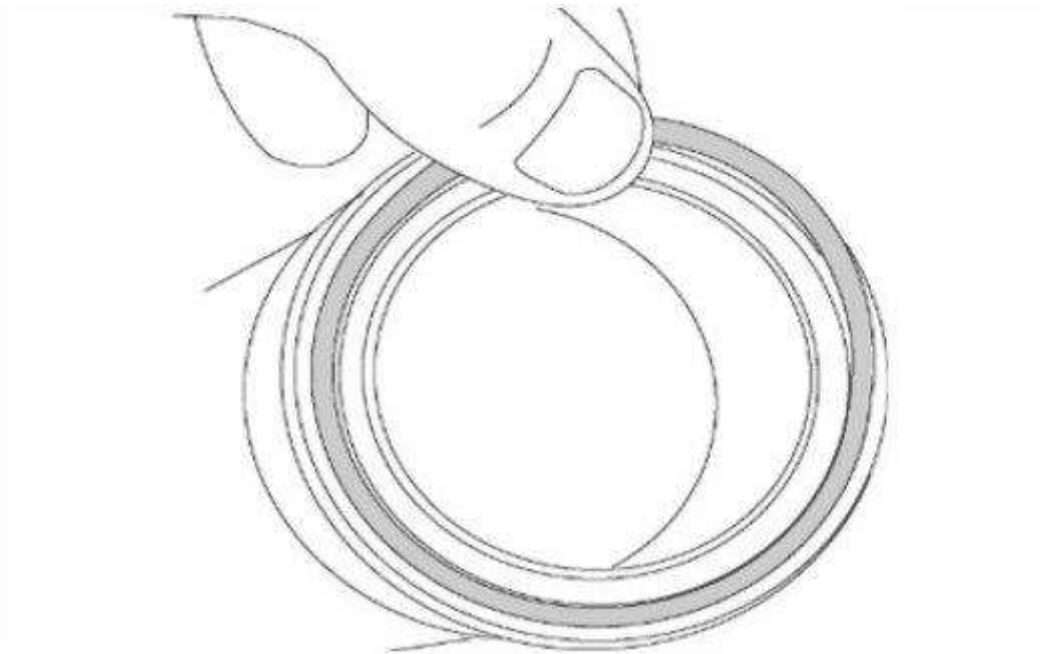
11. Using a high-speed cut-off wheel/tool, cut the remaining crimped-on clamp from the hose of the CAC pipe V-band clamp connector. Cut the clamp at a slight angle to avoid damage to the CAC pipe connection.



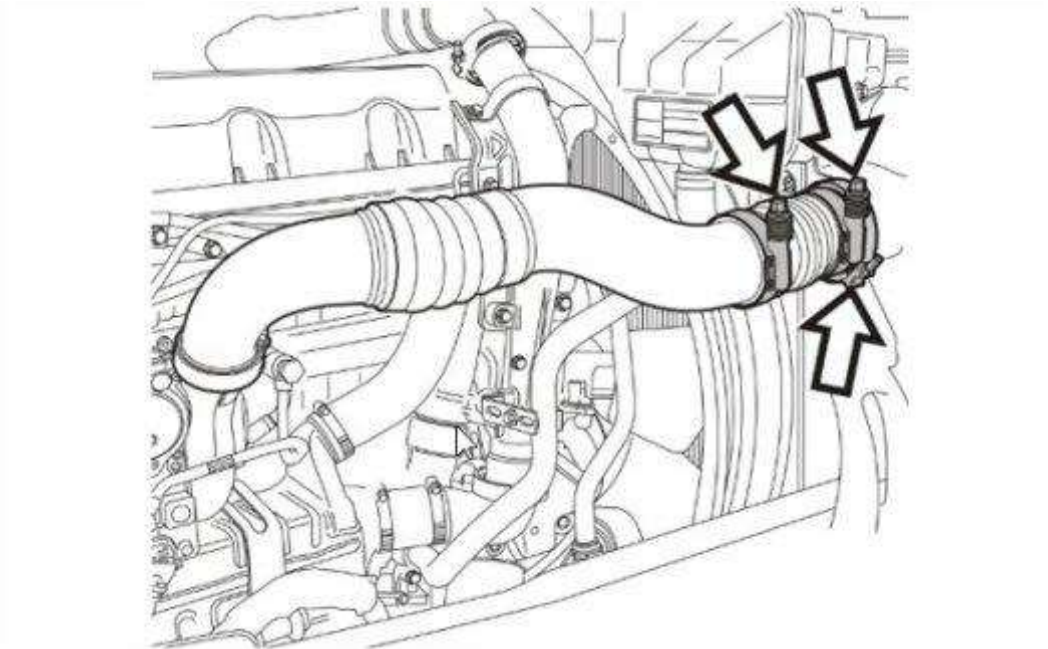
12. Using pliers, loosen the crimped-on hose clamp to allow it to separate from the CAC inlet V-band clamp connector.
13. Clean the hose connection areas on the CAC hard pipe and V-band clamp connector.
14. Position the hose with attaching T-bolt clamp onto the CAC hard pipe. Position the remaining T-bolt clamp followed by the V-band clamp connector onto the CAC hard pipe assembly.

*Note: Make sure the threads on both T-bolt clamps are pointing down to prevent interference with hood splash shields.*

15. Place a new O-ring in position on the flange of the CAC hard pipe where it connects to charge air cooler.

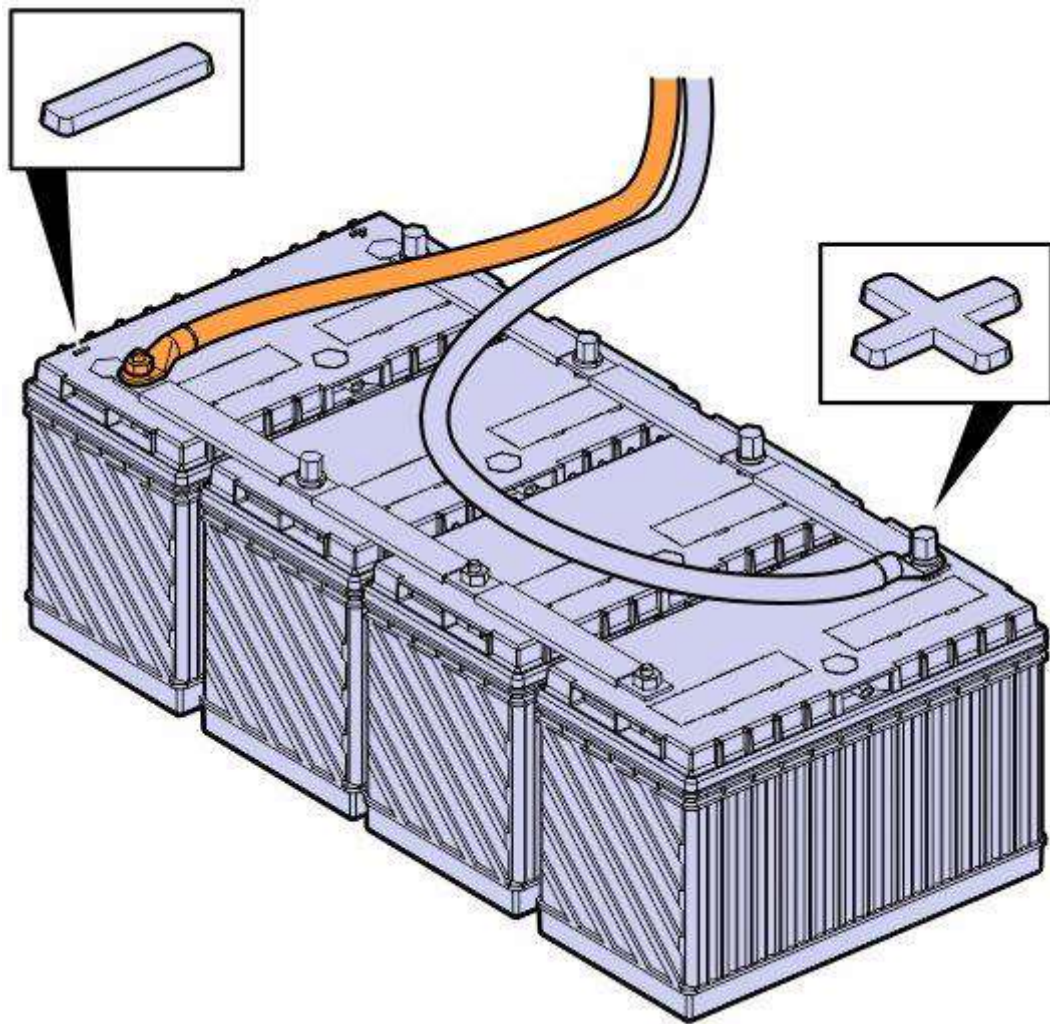


16. Inspect the CAC hard pipe V-band clamp for wear or damage, replace as necessary. Position the CAC hard pipe with O-ring against the charge air cooler and secure with the V-band clamp. Lubricate the threads and v-inserts
17. Torque tighten clamps to specification.

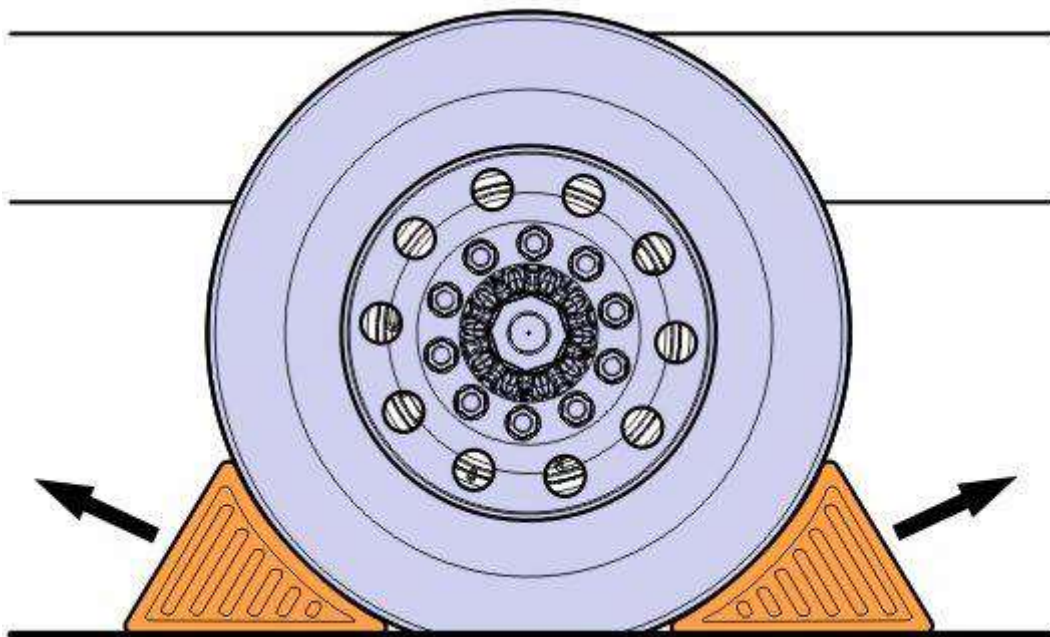


Tightening torque	
T-bolt clamp	$10 \pm 1.5$ Nm ( $7.4 \pm 1.1$ lbf-ft)
V-band clamp	$7 \pm 1$ Nm ( $62 \pm 9$ in-lb)

18. Reconnect the cable from the negative terminal.



19. Start the engine, check for leaks and proper operation.
20. Close and latch the hood.
21. Remove wheel chocks.



## Warranty information

Reimbursement

<b>This repair may be eligible for reimbursement if a product failure was experienced within time and mileage limits of the applicable Warranty coverage. Reimbursement is obtained via the normal claim handling process.</b>	<b>UCHP Reimbursement</b>
<b>Claim Type (used only when uploading from the Dealer Bus. Sys.)</b>	W
<b>Labour Code</b>	
Primary Labour Code Clamp or O-ring, Replacement	2652-03-02-02 (0.4 hrs)

## Issued by

Technical Service