



SAFETY RECALL

SR24-13

DATE : May 2024 SECTION : 22 HVAC
SUBJECT: PREHEATER HYDRONIC L2 - REWORK
CLEANING INSTRUCTIONS FOR THE PRECISE
CO2 MEASUREMENT

First Release

05-17-2024

APPLICATION

NOTICE TO SERVICE CENTERS Verify vehicle eligibility by checking warranty bulletin status with SAP or via ONLINE WARRANTY SYSTEM available on Service / Warranty tab of Prevost website.				
Model				
X3-45 coaches Model Year: 2024	From 2PCG33492 <u>R</u> C73 <u>4001</u> up to 2PCG33490 <u>R</u> C73 <u>4045</u> incl. From 2PCG33493 <u>R</u> C73 <u>6937</u> up to 2PCG33493 <u>R</u> C73 <u>6999</u> incl.			
H3-45 coaches Model Year: 2006	2PCH33493 <u>6</u> 101 <u>0586</u>			
H3-45 coaches Model Year: 2013	2PCH33499 <u>D</u> C71 <u>2302</u>			
H3-45 coaches Model Year: 2017	2PCH33493 <u>H</u> C71 <u>3449</u>			
H3-45 coaches Model Year: 2020	2PCH33499 <u>L</u> C72 <u>0737</u> & 2PCH33493 <u>L</u> C72 <u>1060</u> 2PCH33492 <u>L</u> C72 <u>1065</u>			
H3-45 coaches Model Year: 2023	2PCH33496 <u>P</u> C72 <u>1317</u>			
H3-45 coaches Model Year: 2024	From 2PCH33495 <u>R</u> C72 <u>1506</u> up to 2PCH3349X <u>R</u> C72 <u>1825</u> incl.			
H3-45 VIP motorhomes Model Year: 2010	2PCVS3493 <u>A</u> C71 <u>1602</u>			
This Safety Recall does not necessarily apply to all the above-mentioned vehicles. Some vehicles may also have been modified before delivery. The owners of the vehicles affected by this recall will be advised by a letter indicating the Vehicle Identification Number (VIN) of each vehicle concerned.				

DESCRIPTION

For Canadian customers:

On vehicles affected by this recall, Eberspächer will inspect all subject vehicles and, if required, clean the preheater's internal components, replace damaged components, and adequately adjust the air to fuel ratio per the supplier's instructions.

The work will be performed by an authorized Eberspächer dealer.

Eberspächer rework cleaning instructions # 25.2486.95.2683.0A.

Meanwhile, the supplier's recommendation is to immediately stop using the preheaters (coolant heaters) until they are remedied.

For US customers:

On vehicles affected by this recall, Prevost will inspect all subject vehicles and, if required, clean the preheater's internal components, replace damaged components, and adequately adjust the air to fuel ratio per the supplier's instructions include with the bulletin.

The work will be performed by Prevost.

Meanwhile, the supplier's recommendation is to immediately stop using the preheaters (coolant heaters) until they are remedied.

FOR US CUSTOMERS ONLY

MATERIAL

Order parts that may be required:

Part No.	Description	Qty
870106	FUEL ATOMIZER NOZZLE	1
870101	IGNITION ELECTRODE, WITH CHECK GAUGE	1
870077	BURNER	1
870088	PUMP, 24V COMPLETE	1
870100	IGNITION SPARK GENERATOR, 24V, WITH CHECK GAUGE	1
870102	NOZZLE PRE-HEATER 24V	1
870139	ELECTRIC MOTOR, 24V, INCL. COUPLING	1
870260	CONTROLL UNIT	1

NOTE

Material can be obtained through regular channels.

TOOLS

TPI 708 COMBUSTION EFFICIENCY ANALYZER WITH FLUE PROBE



SAFETY PRECAUTIONS

- Eye protection should always be worn when working in a shop.
- Rules for Personal Protection Equipment should always be respected. Wear your PPE including but not limited to the following:



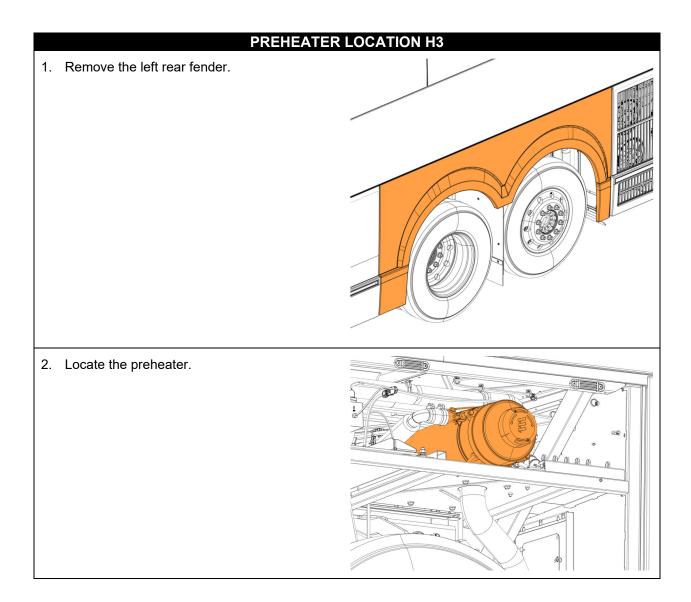
PROCEDURE

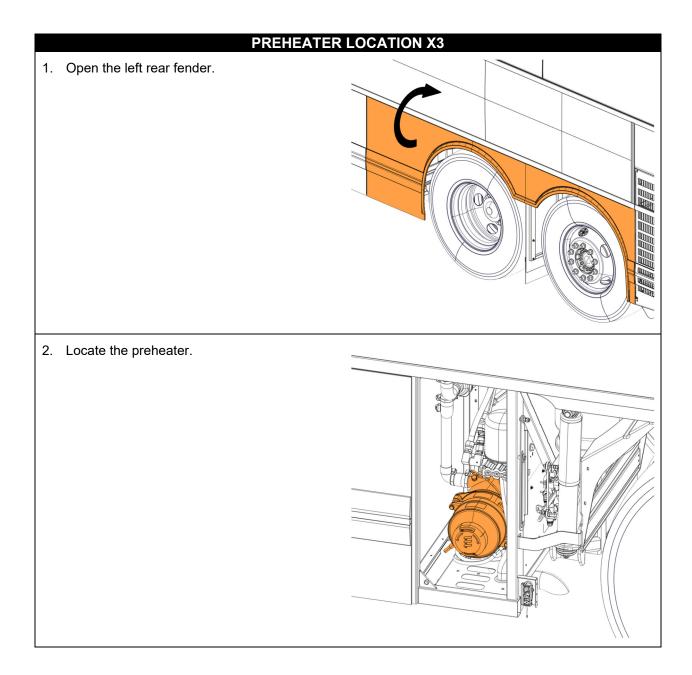


Park vehicle safely, apply parking brake, stop the engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button. On Commuter type vehicles, set the battery master switch (master cut-out) to the OFF position.

Lockout & Tag out (LOTO) must be performed during set-up, maintenance or repair activities. Refer to your local procedure for detailed information regarding the control of hazardous energy.

SR24-13





	PERFORM REWORK						
1.	See the Eberspächer rework cleaning instructions # 25.2486.95.2683.0A. at appendix A.	A WORLD OF COMFORT	pächer				
		REWORK CLEANING INSTRUCTIONS FOR THE PRECISE CO2 MEASUREMENT HYDRONIC L2	Г				
2.	Before completing the bulletin, you must fill in the form inside the Eberspächer document and add the VIN.	2 Confirmation form for rework action i NOTE The rework form must be completed for each reworked heater/burner					
3.	Attach form to warranty email: prevost.warranty@volvo.com, please make sure you have added the VIN.	Customer					

PARTS DISPOSITION

All replaced parts must be returned to Prevost according to the Return Shipping Instructions available on <u>www.prevostcar.com</u> (under service / warranty section) for full reimbursement. A copy of the warranty claim form must be enclosed with the shipment.

Discard waste according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)

WARRANTY

This modification is covered by Prevost's normal warranty. We will reimburse you the parts and 1 1/2 hour (1.5) of labor upon receipt of and a completed A.F.A. Please submit claim via our Online Warranty System, available at <u>www.prevostcar.com</u> (under service \ warranty section).

OTHER

VBC Bulletin	N/A	A
Fail Code	22.09	<u>h</u>
Defect Code	09	0 F
Syst.Cond	R	ty
Causal Part	870012	m

access all our Service Bulletins on <u>attp://techpub.prevostcar.com/en/</u> r scan the QR-Code with your smart phone. E-mail us at <u>technicalpublications_prev@volvo.com</u> and

ype "ADD" in the subject to receive our warranty bulletins by enail.



Appendix A

Eberspächer rework cleaning instructions # 25.2486.95.2683.0A





EN / VEHICLE HEATERS / TECHNICAL DOCUMENTATION

REWORK CLEANING INSTRUCTIONS FOR THE PRECISE CO₂ MEASUREMENT HYDRONIC L2

Engine-independent water heater for diesel fuel

Designation

Hydronic L16 Hydronic L24 Hydronic L30 Hydronic L35

Order No.

25.2486.02.0000 25.2487.02.0000 25.2599.02.0000 25.2600.02.0000

Order No. - compact version

25.2487.05.0000 25.2599.05.0000 25.2600.05.0000

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Eberspächer

1 REWORK INSTRUCTION

- 1.1 Rework steps
 - 1.1.1 CO₂ Measurement
 - 1.1.2 Options how to proceed
 - 1.1.3 Dismantling the heater
 - 1.1.4 Dry-clean the components
 - 1.1.5 Assembling the heater
 - 1.1.6 Air flap in centre position
 - 1.1.7 Adjusting the air flap

1 Rework instruction

- The following steps have to be carried out to clean the Hydronic L2 heater properly and to set the CO₂ measurement value.
- These Hydronic L2 heaters and Hydronic L2 burners are affected: Parts produced as of May 1st 2023 until January 31th 2024.
- All documents needed are attached to the heater or are available online at: <u>https://partner.eberspaecher.com/de</u>

(i) NOTE

Please record your rework action in this document on page 5 and send it to Eberspächer to have your costs reimbursed.

1.1 Rework steps

1.1.1 CO₂ Measurement

- > Measure and determine the current CO₂ value during the operation of the heater.
- > Use a suitable CO₂ measuring device, e. g: MSI 150 Euro flue gas analyser 5600593
- > Connect the CO₂ measuring device to the exhaust system of the heater.
- > Wait about 60 seconds after starting the heater, until the combustion runs stable, or longer, depending on the ambient conditions (until you hear a stable and even combustion!).

! CAUTION!

RISK OF POISONING

- Do not operate the heater longer than necessary.
- Switch off the heater after you have measured a reliable CO₂ value.

(i) NOTE

- You will find the CO₂ specification in the Technical Description of the heater.
- The Technical Description of the heater
 - is attached to the product
 - is available online at: https://partner.eberspaecher.com





1.1.2 Options how to proceed

- The CO_2 value is within the tolerance.
 - \rightarrow No further step is necessary.
- The CO₂ value is outside the tolerance, but the heater was not in operation (with combustion).
 - \rightarrow Continue with chapt. 1.1.6.
- The CO₂ value is outside the tolerance and the heater has been in operation (with combustion)
 - → Carry out chapt. 1.1.3 to chapt. 1.1.7

1.1.3 Dismantling the heater

- > Remove the hood, the burner and the combustion chamber from the heat exchanger.
- In doing so, please consult and follow the disassembly steps in the Troubleshooting and Repair Instructions of the Hydronic L2 heater.

(i) NOTE

You will find the Troubleshooting and Repair Instructions of the Hydronic L2 heater online at: <u>https://partner.eberspaecher.com</u>



1.1.4 Dry-clean the components

- > Dry-clean all components contaminated with black soot (burner, hood, combustion chamber, heat exchanger).
- > Use a cleaning cloth and a suitable wire brush.
- > Soot particles can be sucked out of the heat exchanger with a dust extractor.

(i) NOTE

- Please consider the local regulations regarding dust classes.
- If the fuel nozzle is affected with residues, it must be replaced.
- \rightarrow See troubleshooting and repair instructions.

U CAUTION!

RISK OF DAMAGED SURFACES

- Do not damage the surfaces of the heat exchanger.
- \rightarrow Use a wire brush only.
- → Do not use liquid cleaners, e. g. brake cleaner.

RISK OF DAMAGED COMPONENTS

• When cleaning the burner, always pay attention to sensitive components, e.g. plug- and-socket connections.

RISK OF FUEL BLOCKAGE

- The fuel nozzle is a very sensitive component. Do not touch it under any circumstances.
- → If the fuel nozzle is dirty, it must be replaced (see Repair Instructions).



> See example pictures below for cleaning the combustion chamber and the heat exchanger:





Combustion chamber before ... and after cleaning.





Heat exchanger before

... and after cleaning.

1.1.5 Assembling the heater

> Assemble the heater as described in the Troubleshooting and Repair Instructions.

1.1.6 Air flap in centre position

- > Loosen the two screws on the air adjustment flap and roughly adjust as shown in the picture on the right (medium setting of the flap).
- > This prevents further coarse soot formation during fine adjustment.



1.1.7 Adjusting the air flap

- > Allow the heater to warm up and measure the CO₂ values by using a suitable CO₂ measuring device.
- > Set the correct CO₂ value by turning the air adjustment flap.

(i) NOTE

- Turn the air adjustment flap
 - to the left: increase of the CO₂ value.
 - to the right: decrease the CO₂ value.
- In order to obtain a valid result, wait approx.
 100 s after each small adjustment of the air flap until the actual CO₂ value is displayed.
- > When the correct CO₂ value is reached,
 - turn off the heater.
 - tighten the screws of the air flap.



Confirmation form for rework action 2

(i) NOTE

The rework form must be completed for each reworked heater/burner

Customer		
Installation Date		
	st measurement	
CO2 – value after r		

Short description of performed work

The rework will be reimbursed by Eberspächer Climate Control Systems as follows:

- CO2 on heater or on burner must be adjusted (heater was not in operation) \rightarrow 5AW
 - = 30 minutes
- CO2 on heater or on burner must be adjusted (heater has been in operation) Heater must be cleaned
 - → 15AW = 90 minutes

Please send this completed form and the invoice including the labour costs to the following invoice address with reference

HL-II CO2 adjustment rework to:

CC-Warranty-Service@eberspaecher.com PL-OL-faktury@eberspaecher.com

Invoice recipient, stated on the invoice: Eberspächer Climate Control Systems Sp. z o.o. **Climate Control Systems** Godzikowice 50 P 55-200 Oława Polska







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