



MAINTENANCE INFORMATION

MI21-13A

DATE :

SECTION : 22 HVAC

SUBJECT : HVAC PERFORMANCE - AUTOMATED SUPERHEAT TEST FROM THE DRIVER SEAT

Revision: A

December 9, 2021

IMPORTANT NOTICE

This procedure is recommended by Prevost to evaluate your vehicle's performance. Note that no reimbursement will be awarded for carrying out this procedure.

December 2021

DESCRIPTION

An automated test is available to check the **big** HVAC superheat from the driver seat. This test is controlled by Multiplex, eliminating interventions and the need to take measures on the vehicle.

IMPORTANT NOTE: Make sure that you have completed all normal checks on the HVAC system before performing this overheat test.

This test is available on all models from 2018. Multiplex program version update must be as shown below or later.

X3 Series Motorhomes:	06100122 P20
H3 Series coaches and Motorhomes:	06100123 P23
X3 Series coaches:	06100124 P22

- 1. Check the vehicle MUX program version using the Driver Information Display (DID).
- 2. Select *Diagnostics* menu.



3. Select Part Number.

Diagnostics 4/6 View Active Faults ℜ View Inactive Faults Cluster Selftest Part Number & Reset Inactive Faults Vehicle Tests 189.8km (HO) Diagnostics 4/ Part Number Engine ECU Instrument Cluster Vehicle ECU Electrical System Aftertreatment ECU Battery Monitor ECU Brake ECU **1** (10) 189.8km iagnostics 4 Part Number Electrical System Hardware number: VOLVO+23317363P01 08015265 Software number 035000 6100123P0800200695A01

4. Select Electrical System.

5. The program version (and the actual revision number PXX will show. In this example, the program version is 06100123 and the actual revision P08.

189.8km

PROCEDURE



2. Select the A/C Compressor Pressure gauge on the Driver Information Display (DID).

1. Start the engine, set fast idle and wait for the engine to warm up at 170 °F.



A/C COMPRESSOR PRESSURE GAUGE

3. Turn ON both sections (driver & passenger) on the HVAC control unit. Do not turn on the overhead compartment cooling.



4. Set temperature units to Celsius on HVAC control unit.





Temperature Unit Selection °F / °C

To switch the temperature units, press simultaneously both fan speed buttons (6) for 3 seconds.

- 5. Quickly press *Recirculate* button (REC on previous unit, button (9) on the new unit) 6 times on the HVAC control unit. A red LED on the HVAC control unit should turn on. "TEST" should blink in the DID status bar.
- 6. At this point, the **A/C Compressor Pressure** gauge should indicate LoS: 0 PSI and HiS: 0 PSI. The test will run until the passenger's area ambient temperature reaches 27 °C.
- 7. When the passenger's area ambient temperature reaches 27 °C, the defroster fan stops. The red LED turns off and a green LED turns on to indicate full A/C is engaged.
- 8. The temperature will drop to 23 °C and the test will record the different values on the DID during this temperature drop.
- 9. Check the **A/C Compressor Pressure** LoS value. LoS shows the current superheat value in 1/10 in °C. HiS shows a timer from 0 to 180 seconds.

Displayed example: LoS: 36 PSI HiS: 82 PSI

means the current superheat is 3.6 °C and the time-lapse is 82 seconds

10. When the timer reaches 180 seconds, you will hear a buzzer indicating the test is completed. At this moment, LoS shows the average value of all readings which occurred during the 180-second period.

The appropriate value of SUPERHEAT value shown on the DID should be **between 4** °C and 8.5 °C

11. To stop the test, press once on *Recirculate* button.



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