

# **SERVICE BULLETIN**

SB1900

**ADDRESSEES** : Owners and operators

ABC Customer Care and Parts Source

**VEHICLE MODEL** : CX35, CX45, TX40, TX45

MANUAL CHAPTER : 08.06 Climate control – Water circuit

BULLETIN TYPE : Product improvement

DATE : November 17<sup>th</sup>, 2020

SUBJECT : Introduction of new Eberspächer coolant heater

circulating pump

**TERMS & CONDITIONS**: This document does not entitle to any reimbursement

### **APPLICATION:**

As from following units onwards, vehicles are factory fitted with a FT6000SC circulating pump (VH11286525) instead of the previously installed FT5000 circulating pump (VH11444635).

| Model       | VIN   |
|-------------|-------|
| CX35 MY2020 | 49983 |
| CX45 MY2020 | 81456 |
| TX45 MY2020 | 41718 |

As the new pump also can be used on vehicles with a FT5000 circulating pump, only the new pump will continue to be available as a spare part. Please refer to the material list and step-by-step instructions when replacing a FT5000 circulating pump by a FT6000SC circulating pump.



Figure 1: Coolant heater compartment, in front of left drive wheels

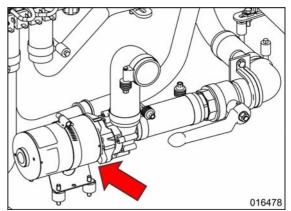


Figure 2: Location of FT5000 coolant circulating pump (Combustion heater not drawn for clarification purposes)

Continued on next page.

#### **SPECIAL TOOLS:**

This job requires a coolant hose pinch-off pliers (1x) (VH A996250061).

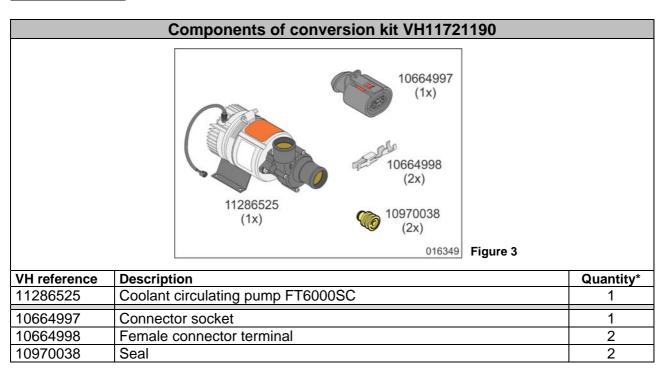
Only if connector socket for circulation pump must be replaced:

- Crimping tool PRO-CRIMPER III for connector terminal (Tyco 58583-1)
- Die for crimping tool PRO-CRIMPER III (Tyco 58583-2)

# **JOB QUALIFICATION:**

The task has to be carried out by an experienced automotive technician.

# **COMPONENTS**:



<sup>\*</sup>Sufficient for one vehicle

# **PREPARATIONS:**

- Park the vehicle on a level floor. Apply the parking brake. Stop the combustion engine. Switch off all systems and turn off the battery isolation switch on the dashboard.
- Install a "DO NOT OPERATE" warning message on the steering wheel.
- Put chocks in front of and behind the front-axle wheels.
- Read the entire procedure before starting to work.



#### **WARNING!**

Observe safe shop practices at all times.

Continued on next page.

# **PROCEDURE**:

| Step     | Action   |
|----------|--|
| 1        | Open the exterior access door in front of the left drive wheels.   |
| 2        | WARNING! Carefully slacken the filler cap on the coolant expansion tank and let the pressure escape. Once all the pressure is off, continue to turn.   |
|          | Unscrew the filler cap from the expansion tank and remove it.  |
| 3<br>4   | Install a suitable container under the circulating pump to collect the coolant.  |
| 4        | <ul> <li>Close the manual valve in the supply line to the interior heating. To this end, turn the manual-valve handle clockwise until the handle is perpendicular to the line.</li> <li>Pinch off the coolant-heater outlet line with a special pair of pliers (see under special tools).</li> </ul> Figure 4: Isolating valve in heating Figure 5: Combustion heater outlet line to |
|          | system supply line be pinched off  |
| <u>5</u> | Disconnect the electrical connector of the pump.  Detach both hose clamps at the pump.   |
| 7        | Undo the mounting clamp around the circulating pump and remove the pump.   |
| 8        | Undo the mounting clamp around the circulating pump and remove the bracket. This bracket is not used any more further on in the procedure!   |
| 9        | Slide the connections of the new circulating pump in the silicone hoses. Install the circulating pump with the mounting clamp, but do not yet tighten the clamp!   |
| 10       | Check the alignment of the silicone hose with respect to the coolant heater and the circulating pump. Adjust when necessary. Tighten the clamps of the silicone hoses to a torque of $7 \pm 0.5$ Nm (62 $\pm 4$ in.lbf). Tighten the circulating-pump clamp.   |

Continued on next page.

NOTE: Only to be performed when the connector socket of the vehicle wiring doesn't match the connector plug of the new circulating pump.

At the coolant heater side, adapt the electric wiring for the circulating pump as follows:

- a. Cut the conducting wires of the existing connector socket. Slide seal 10970038 from the kit over each conducting wire. Strip back the conducting wires over a distance of 3 to 3.5 mm (0.12 to 0.13 inch).
- b. Install connector terminal 10664998 from the kit.
- c. Crimp the connector terminal on the conducting wire. To this end, use crimping tool Tyco PRO-CRIMPER III (Tyco 58583-1) and die (Tyco 58583-2). For more information, consult Tyco instruction sheet 408-4165.
- d. Check the crimping.

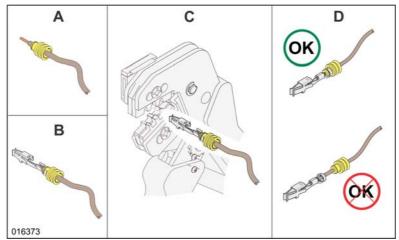


Figure 10

e. Introduce the red conducting wire into contact number 1 of the connector socket, and the brown conducting wire into contact number 2. Check whether the cable terminal is well secured by pulling the conducting wire gently. Connect the connector socket to the circulating-pump wiring.

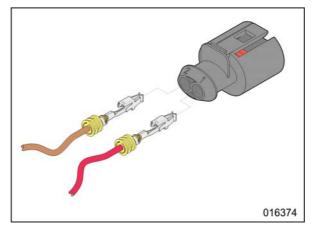


Figure 11

| 12 | Open the manual valve in the supply line to the interior heating. Remove the special pairs of pliers in the coolant-heater outlet line.   |
|----|---|
| 13 | Check the coolant level in the coolant expansion tank. Top up coolant if necessary.   |
| 14 | Screw the filler cap on the expansion tank.   |
| 15 | Go for a ride to warm up the engine (operating temperature).  |
| 16 | Stop the engine and check the installation for leaks. Retighten the hose clamps to a torque of $7 \pm 0.5$ Nm ( $62 \pm 4$ in.lbf). Seal the head of the fastening screw with a spot of lacquer to indicate that the hose clamp is correctly tightened. To avoid damage to hose or hose clamp, do not retighten sealed hose clamps! |
| 17 | Check the coolant level as soon as the installation has cooled down completely. Top up coolant if necessary.  |

End of procedure

#### **DISCLAIMER**:

The procedures contained herein are not exclusive. Van Hool cannot possibly know, evaluate, or advise the transportation industry of all conceivable ways in which a procedure may be undertaken or of the possible consequences of each such procedure. Other procedures may be as good, or better, depending upon the particular circumstances involved. Each carrier who uses the procedures herein must first satisfy itself thoroughly that neither the safety of its employees or agents, nor the safety or usefulness of any products, will be jeopardized by any procedure selected.

#### **INFORMATION HANDLING:**

Important additions and modifications regarding technical information not yet included in the manual will be communicated through Service Bulletin.

# **VAN HOOL CUSTOMER PORTAL:**

Consult the customer portal regularly for the latest service documentation. In addition to the maintenance manual, you will also find the operating manual and the spare parts catalogue of your vehicle on the customer portal. The customer portal is accessible through <a href="www.vanhool.be">www.vanhool.be</a>, but only with a code (password) from Van Hool. If you do not have a password yet, request it by using the link on the Van Hool website.