




# CAVITY TEMP SENSOR

100196-1, 2, 3, 4 & 100034, 100034-1.

 <p><b>Installation and servicing of Danfoss Turbocor® compressors by qualified and product trained personnel only. Follow these instructions and sound refrigeration/electrical/servicing practices relating to installation, commissioning, maintenance and service.</b></p>			
<p>Consult the appropriate Danfoss Turbocor Compressors Inc. (DTC) Service Manual on <a href="http://www.turbocoroem.com">www.turbocoroem.com</a> for detailed service instructions.</p>	<p><b>Never power compressor without covers in place and secured.</b></p> <p><b>Removing the mains input cover will expose you to a voltage hazard of up to 575V. Ensure the mains input power is off and locked out before removing cover.</b></p> <p><b>Before removing top cover, wait at least 20 minutes after isolating AC power to allow the high voltage capacitors to discharge.</b></p>	<p>Always wear appropriately rated safety equipment when working around equipment and/or components energized with high voltage.</p> <p><b>This equipment contains hazardous voltages that can cause serious injury or death.</b></p>	<p><b>Recover all refrigerant from compressor in accordance with local codes and ensure pressure is fully vented before the removal of refrigerant containing components.</b></p>

## 1 - Introduction

CAVITY TEMP SENSOR Removal and installation.

The Cavity Sensor is located behind the Backplane. To access, the Backplane must be removed.

This kit contains the Cavity Sensor and O-ring. Please refer to our Service Manual for details regarding the replacement of the sensor.

We have made the **TTS/TGS/TTH/TGH Service Manual** available to anyone. To access the manual, you may scan the applicable QR code below or you may go to our DTC website at [www.turbocoroem.com](http://www.turbocoroem.com). At the top of the page there is a pull-down menu called "Quick Links." Click this menu and select the appropriate service manual.

Refer to the applicable QR code below to download the TTS/TGS/TTH/TGH Service Manual.

**English**



**Chinese**



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## 2 - CAVITY TEMP SENSOR Removal Instructions:


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1. Isolate compressor power.
2. Isolate the compressor and recover the refrigerant according to industry standards.
3. Remove the Service Side Cover.
  1. Remove Serial Driver.
  2. Remove the BMCC.
  3. Remove the PWM.
4. Disconnect and remove all connectors from back plane, including earth lead under right-hand top of Backplane.
5. Remove the two upper fasteners that secure the Backplane assembly to the housing. Remove the fastener from the lower right of the Backplane. Do NOT remove the fastener from center bottom or top left of the Backplane.
6. Remove the Backplane.
7. Using a (24 mm/15/16") wrench or slotted socket, remove the motor cavity sensor.

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## 3 - 100196-1 Installation Preparation:

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 Note: if installing part 100196-1, this component is factory installed with Loctite, cold removal will damage housing threads and may require compressor replacement to rectify if the following procedure is not carefully followed.

1. Remove insulation from around sensor.
2. Apply heat to housing in circular motion around the sensor using a MAPP Gas torch or equivalent.
3. Continue to apply heat until housing is WARM to touch (**NOT HOT**).
4. Wait 5 minutes for heat to soak Loctite.
5. Using a 24 mm/ (15/16)" combination wrench or slotted socket, carefully unscrew the sensor, using forward and reverse.
6. If excessive force is required, return to Step 3.







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## 4 - CAVITY TEMP SENSOR Installation Instructions:

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1. Clean the compressor housing, O-ring, and groove in the sensor.
2. Apply O-lube on the O-ring.
3. Install the O-ring into the sensor groove.
4. Hand tighten the sensor.
5. Using a 24 mm/ (15/16)" combination wrench or slotted socket, tighten the sensor to 10 Nm.
6. Leak test and evacuate compressor in accordance with standard industry practices.
7. Install the Backplane.
8. Install the PWM.
9. Install the BMCC.
10. Install the Serial Driver.
11. Install the Service Side Cover.
12. Return the compressor to normal operation.
13. Test run the compressor and check for proper cavity temperature indication.

5 - Kit Contents:

QTY	Part(s) Description	Picture(s)
1	CAVITY TEMP SENSOR	
1	O-RING or SEAL For 100034, it is a SEAL-BONDED 1/8" BSP-SELF CENTRING.	
1	LUBRICATION-SUPER O-LUBE-2G	
QTY	Part(s) Description	Picture(s)
1	CAVITY TEMPERATURE SENSOR	
1	O-RING or SEAL For 100034, it is a SEAL-BONDED 1/8" BSP-SELF CENTRING.	
1	LUBRICATION-SUPER O-LUBE-2G	

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