# **KIT** FRONT BEARING SENSOR FEEDTHROUGH

110068.



Installation and servicing of Danfoss Turbocor<sup>®</sup> compressors by qualified and product trained personnel only. Follow these instructions and sound refrigeration/electrical/servicing practices relating to installation, commissioning, maintenance and service.

Consult the appropriate Danfoss Turbocor Compressors Inc. (DTC) Service Manual on turbocoroem.com for detailed service instructions.	expose you to a voltage hazard of up to 575V AC and	rated safety equipment when working around equipment and/or components energized with high voltage. This equipment contains hazardous voltages that	Recover all refrigerant from compressor in accordance with local codes and ensure pressure is fully vented before the removal of refrigerant containing components.
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## 1 - Introduction

This kit contains the Front Bearing Sensor Feedthrough. Please refer to our Service Manual for details regarding the replacement of this component.

We have made the **VTT/VTX 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 <u>www.turbocoroem.com</u>. 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 VTT/VTX Service Manual.





**Chinese** 



**NOTE:** The below instructions are a high-level view of the steps to replace the Front Bearing Sensor Feedthrough. Please refer to the Service Manual for the detailed steps.

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### 2 - FRONT BEARING SENSOR FEEDTHROUGH Removal Instructions

- 1. Isolate VTT/VTX power as described in Section "Electrical Isolation of the VFD" of the Service Manual (M-SV-VT-001).
- 2. Isolate the compressor and recover the refrigerant according to industry standards.
- 3. Remove the Service Side Cover.
- 4. Remove the IntraFlow<sup>™</sup> Valve (IFV) Assembly (VTT only).
- 5. Remove the Suction Housing.
- 6. Remove the End Cap.
- 7. Remove the VTX Diffuser (VTX only).
- 8. Remove the First Stage Impeller.
- 9. Remove the Second Stage Fluid Module/Volute.
- 10. Remove the Second Stage Impeller.
- 11. Remove the front Touchdown Bearing /Labyrinth Seal Plate with the 'U'-Spacer.
- 12. Disconnect the internal Front Bearing Sensor Feedthrough cable.
- 13. Disconnect the external Front Bearing Sensor Feedthrough cable from the feedthrough.
- 14. Remove the Front Bearing Sensor Feedthrough from the compressor housing.
- 15. Remove the O-ring.

## 3 - FRONT BEARING SENSOR FEEDTHROUGH Installation Instructions

- 1. Lubricate the new O-ring and place it onto the Front Bearing Sensor Feedthrough.
- 2. Carefully slide the internal connector into the compressor housing until the Bearing Sensor Feedthrough is in place.
- 3. Install and tighten the Front Bearing Sensor Feedthrough.
- 4. Connect the external Front Bearing Sensor Feedthrough cable to the feedthrough.
- 5. Connect the internal Front Bearing Sensor Feedthrough cable.
- 6. Use a cable tie to secure internal connector to internal cable.
- 7. Install the Service Side Cover.
- 8. Install the front Touchdown Bearing /Labyrinth Seal Plate following with the 'U'-Spacer on the shaft.
- 9. Install the Second Stage Impeller.
- 10. Install the Second Stage Fluid Module/Volute.
- 11. Install the First Stage Impeller.
- 12. Install the VTX Diffuser (VTX only).
- 13. Install the End Cap.
- 14. Install the Suction Housing.
- 15. Install the IntraFlow<sup>™</sup> Valve (IFV) Assembly (VTT only).
- 16. Leak test and evacuate compressor in accordance with standard industry practices.
- 17. Return the compressor to normal operation.
- 18. Test run the compressor to verify proper operation.

#### 4 - Kit Contents

**Note:** Any part numbers included in the kit contents are internal part numbers only. Please refer to our Spare Parts Manuals for any kit part numbers.

Kit num	nbers	Compressor models	
110068	3	VTT/VTX	
QTY	Part(s)	Description	Picture(s)

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1	FEEDTHROUGH-BEARING SENSOR FRONT	
4	WASHER, M5 SPLIT – 902488	
4	SCREW, M5 – 902480	
12	SCREW, M12 – 902522	
12	WASHER, M12 FLAT – 902122	0
12	WASHER, M12 SPLIT – 902123	0
1	O-RING – Volute VTT/VTX – 920383	$\bigcirc$
1	O-RING – Touchdown Bearing – 901857	0
1	O-RING – Suction Inlet VTT – 920365	$\bigcirc$
1	O-RING – Discharge 920354	$\bigcirc$
2	O-RING – IFV Pipe – 920333	0
1	O-RING – Economizer – 920331	$\bigcirc$
1	O-RING – Suction Housing VTT – 920386	$\bigcirc$
1	O-RING – Feedthrough – 920120	0
1	O-RING – End Cap – 920382	$\mathcal{O}$
4	LUBRICATION-SUPER-O-LUBE-2G	

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