# **KIT** FRONT BEARING POWER FEED THROUGH

110026.



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.	Never power compressor without covers in place and secured. Opening the drive panel will expose you to a voltage hazard of up to 575V AC and 900V DC. Ensure the mains input power is off and locked out before opening panel. Before opening the drive panel, wait at least 20 minutes after isolating AC power to allow the high voltage capacitors to discharge.	rated safety equipment when working around equipment and/or components	Recover all refrigerant from compressor in accordance with local codes and ensure pressure is fully vented before the removal of refrigerant containing components.
---	---	--	---

## 1 - Introduction

This kit contains the Front Bearing Power Feed Through. 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.









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

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

### 2 - FRONT BEARING POWER 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 IntraFlow<sup>™</sup> Valve (IFV) Assembly (VTT only).
- 4. Remove the Suction Housing.
- 5. Remove the End Cap.
- 6. Remove the VTX Diffuser (VTX only).
- 7. Remove the First Stage Impeller.
- 8. Remove the Second Stage Fluid Module/Volute.
- 9. Remove the Second Stage Impeller.
- 10. Remove the front Touchdown Bearing /Labyrinth Seal Plate with the 'U'-Spacer.
- 11. Disconnect the Bearing Power Feedthrough wire from the internal connector.
- 12. Remove the Service Side Cover.
- 13. Disconnect the PWM Bearing Power Cable from the Bearing Power Feedthrough.
- 14. Remove the Bearing Power Feedthrough from the housing.

### 3 - FRONT BEARING POWER FEEDTHROUGH Installation Instructions

- 1. Carefully slide the internal connector into the housing until the Bearing Power Feedthrough is in place.
- 2. Connect the Bearing Power Feedthrough wire to the internal connector.
- 3. Install the Bearing Power Feedthrough to the housing.
- 4. Connect the PWM Bearing Power Cable to the Bearing Power Feedthrough.
- 5. Install the Service Side Cover.
- 6. Install the front Touchdown Bearing /Labyrinth Seal Plate following with the 'U'-Spacer on the shaft.
- 7. Install the Second Stage Impeller.
- 8. Install the Second Stage Fluid Module/Volute.
- 9. Install the First Stage Impeller.
- 10. Install the VTX Diffuser (VTX only).
- 11. Install the End Cap.
- 12. Install the Suction Housing.
- 13. Install the IntraFlow<sup>™</sup> Valve (IFV) Assembly (VTT only).
- 14. Leak test and evacuate compressor in accordance with standard industry practices.
- 15. Return the compressor to normal operation.
- 16. 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		Compressor models		
numbe	rs			
110026	;	VTT/VTX		
QTY	Part	(s) Description	Picture(s)	
1	ASSEMBLY - FEEDTHROUGH TWIN POWER			

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

12	SCREW, M12 – 902522	
12	WASHER, M12 FLAT – 902122	0
12	WASHER, M12 SPLIT – 902123	0
4	WASHER, M5 SPLIT – 902488	0
4	SCREW, M5 – 902480	
1	O-RING – Volute VTT/VTX – 920383	0
1	O-RING – Suction Inlet VTX – 902954	0
1	O-RING – Touchdown Bearing – 901857	0
1	O-RING – Suction Inlet VTT – 920365	0
1	O-RING – Discharge 920354	0
2	O-RING – IFV Pipe – 920333	0
1	O-RING – Economizer – 920331	0
1	O-RING – Suction Housing VTT – 920386	0
1	O-RING – Suction Housing VTX – 902959	0
1	O-RING – End Cap – 920382	0
1	O-RING – Feedthrough – 920120	0
4	LUBRICATION-SUPER-O-LUBE-2G	

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.