




# O-RINGS FOR INVERTER & SCR PLATE

## ALL TT SERIES COMPRESSORS

(EXCEPT TTS300/TGS230)

100310-1

 <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:

O-RINGS FOR INVERTER & SCR PLATE replacement (Excluding TTS300/TGS230 compressors).

This kit contains the Inverter O-rings, the SCR O-rings, and required fasteners. The instructions are divided into two (2) sections; SCR O-ring replacement and Inverter O-ring replacement. These instructions contain the basic steps regarding the replacement of the included O-rings and only address the major steps (they do not address any removal and installation of wiring harnesses). It is highly recommended to also reference the instructions in our Service Manual when replacing the O-rings. The Service Manual will include all of the details, including when to remove wire harnesses and the torque specifications for the replacement fasteners.

We have made the **TT Series 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 "Manuals". 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 - SCR Cooling Manifold Removal Instructions:**

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1. Isolate compressor power as described in Section "Electrical Isolation of the Compressor" of the Service Manual (M-SV-001).
2. Isolate the compressor and recover the refrigerant according to industry standards.
3. Remove the Soft Start.
4. Remove the Terminal Block assembly.
5. Carefully remove the SCR Cooling Manifold from the Compressor.
6. Remove the SCR Manifold Return Brass Fitting.
7. Remove the Brass Plug.
8. Remove the O-ring from the Inverter Heat Sink Plate.
9. Remove and discard the three (3) O-rings from the SCR Manifold Return Brass Fitting.
10. Remove the O-ring from the Brass Plug.

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**3 - SCR Cooling Manifold Installation Instructions:**

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1. Clean all O-ring grooves with a lint-free cloth.
2. Apply O-lube to the three (3) new O-rings for the SCR Manifold Return Brass Fitting and install them onto the fitting.
3. Install the SCR Manifold Return Brass Fitting into the compressor housing.
4. Apply O-lube to the new O-ring for the Brass Plug and install it onto the fitting.
5. Install the Brass Plug.
6. Apply O-lube to the new O-ring for the Inverter Heat Sink Plate and install it into the O-ring groove.
7. Carefully install the SCR cooling plate over the SCR Manifold Return Brass Fitting.
8. Leak test and evacuate compressor in accordance with standard industry practices.
9. Install the Terminal Block assembly.
10. Install the Soft Start.
11. Install the top covers.
12. Return the compressor to normal operation.

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#### 4 - Inverter Removal Instructions:

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1. Isolate compressor power as described in Section "Electrical Isolation of the Compressor" of the Service Manual (M-SV-001).
2. Isolate the compressor and recover the refrigerant according to industry standards.
3. Remove the Capacitor Cover.
4. Remove the Soft Start.
5. Remove the Terminal Block assembly.
6. Remove the Snubber Capacitors.
7. Remove the DC Capacitor Bus Bar assembly.
8. Remove the Motor Bus Bars.
9. Carefully remove the SCR Cooling Manifold from the Compressor.
10. Remove the SCR Manifold Return Brass Fitting.
11. Remove the Brass Plug.
12. Remove and discard the three (3) O-rings from the SCR Manifold Return Brass Fitting.
13. Remove the O-ring from the Brass Plug.
14. Remove the DC-DC from the Inverter Heat Sink Plate.
15. Remove the Inverter.
16. Remove and discard the large Inverter O-ring from the compressor housing.

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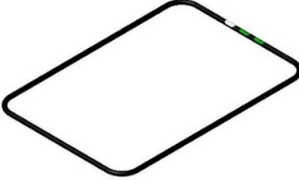




#### 5 - Inverter Installation Instructions:

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1. Clean all O-ring grooves with a lint-free cloth.
2. Clean the underside of the Inverter Heat Sink Plate.
3. Apply O-lube and install the Inverter O-ring in the compressor housing groove.
4. Install the Inverter.
5. If the DC-DC is a potted style, apply heat sink paste to the underside of the DC-DC.
6. Install the DC-DC.
7. Install the Motor Bus Bars.
8. Apply O-lube to the three (3) new O-rings for the SCR Manifold Return Brass Fitting and install them onto the fitting.
9. Install the SCR Manifold Return Brass Fitting into the compressor housing.
10. Apply O-lube to the new O-ring for the Brass Plug and install it onto the fitting.
11. Install the Brass Plug.
12. Apply O-lube to the new O-ring for the Inverter Heat Sink Plate and install it into the O-ring groove.
13. Carefully install the SCR cooling plate over the SCR Manifold Return Brass Fitting.
14. Leak test and evacuate compressor in accordance with standard industry practices.
15. Install the DC Capacitor Bus Bar assembly.
16. Install the Snubber Capacitors.
17. Install the Terminal Block assembly.
18. Install the Soft Start.
19. Install the Capacitor Cover.
20. Install the top covers.
21. Return the compressor to normal operation.

6 - 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.

QTY	Part(s) Description	Picture(s)
3	O-RING - 901862	
2	O-RING - 901850	
1	O-RING - 901865	
18	WASHER, M6 FLAT	
18	SCREW, M6X30 SOCKET HEAD CAP - 902820	
4	SCREW, M6X35 SOCKET HEAD CAP - 902821	
1	LUBRICATION-SUPER-O-LUBE-2G	

7 - List of Changes

Revision	Date	Description of Change
N	10/19/2022	The removal and replacement steps were completely revised. Added two 901862 O-rings to the Kit Contents.

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