


TTS/TGS/TTH/TGH Spare Part Kit

KIT COOLING FAN ASSEMBLY

100373 & 100373-1

 <p>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.</p>			
<p>Consult the appropriate Danfoss LLC Service Manual on www.turbocoroem.com for detailed service instructions.</p>	<p>Never power compressor without covers in place and secured.</p> <p>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.</p> <p>Before removing top cover, wait at least 20 minutes after isolating AC power to allow the high voltage capacitors to discharge.</p>	<p>Always wear appropriately rated safety equipment when working around equipment and/or components energized with high voltage.</p> <p>This equipment contains hazardous voltages that can cause serious injury or death.</p>	<p>Recover all refrigerant from compressor in accordance with local codes and ensure pressure is fully vented before the removal of refrigerant containing components.</p>

1 - Introduction:

COOLING FAN ASSEMBLY replacement. The replacement fan includes an adapter board that is attached to the fan. In some cases, the adapter board is not required. Refer to Section 2 for specific details.

2 - Soft Start Identification:

This kit contains a fan and an adapter board along with associated hardware. In some cases, usage of the adapter board will not be necessary. In order to identify whether or not the adapter board is needed, locate the revision of the Soft Start. Refer to Figure 1 (Closed-Top Soft Start Revision Identification).

Closed-Top Soft Starts with revision **P and earlier** require the use of the adapter board. Soft Starts with revision **Q and later** do not require the adapter board. Also, *ALL* Open-Top Soft Starts do not require the adapter board.

CAUTION: Use of the adapter board on Open-Top Soft Starts and on Soft Starts with revision Q and later may cause the fan not to start leading to Soft Start over-temperature faults. Not incorporating the adapter board on Soft Starts with revision P and earlier will cause premature failure of the Soft Start Fan.



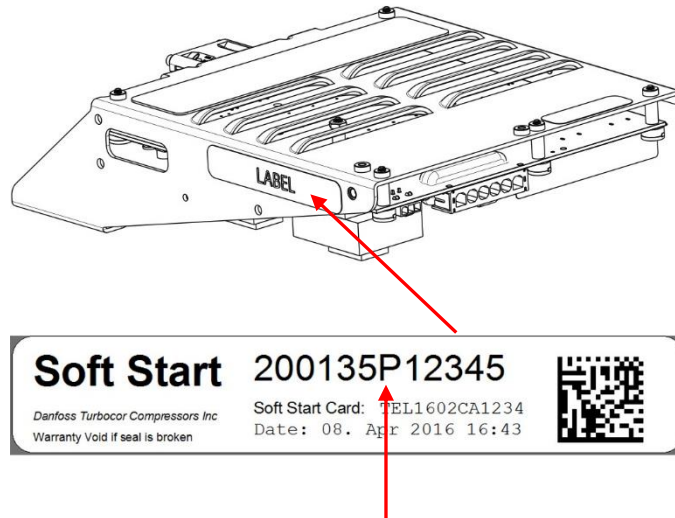


Figure 1. Closed-Top Soft Start Revision Identification

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 website at 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



3 - COOLING FAN ASSEMBLY Removal Instructions:

1. Isolate compressor power as described in Section "Electrical Isolation of the Compressor" of the Service Manual (M-SV-001).
2. Unplug the Fan Power Supply from the Soft Start.
 - J5 on the Closed-Top Soft Start
 - J3 on the Open-Top Soft Start
3. Remove the four (4) mounting fasteners securing the cooling fan to the Soft Start Bracket. Be careful not to drop the fasteners onto the compressor components. Refer to Figure 2 (Closed-Top Soft Start without Adapter Board) for details.

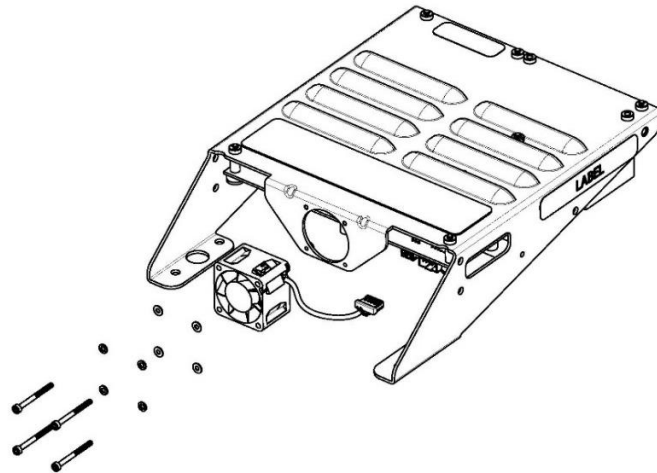


Figure 2. Closed-Top Soft Start without Adapter Board

4 - COOLING FAN ASSEMBLY Installation Instructions:

Fan with Adapter Board

NOTE: A label is attached to the end of the adapter board cable. This label is not shown in the illustrations; however, it **must** be removed prior to installation.

1. Orient the fan so the arrows are pointing counter clockwise and toward the Soft Start. Figure 3 (Fan Orientation with Adapter Board) shows an upside-down view of the Soft Start and where the fan arrows should be pointing.

NOTE: When no adapter is required, the fan will be rotated to where the arrows are visible from the top of the fan (does not apply to Open-Top Soft Starts).

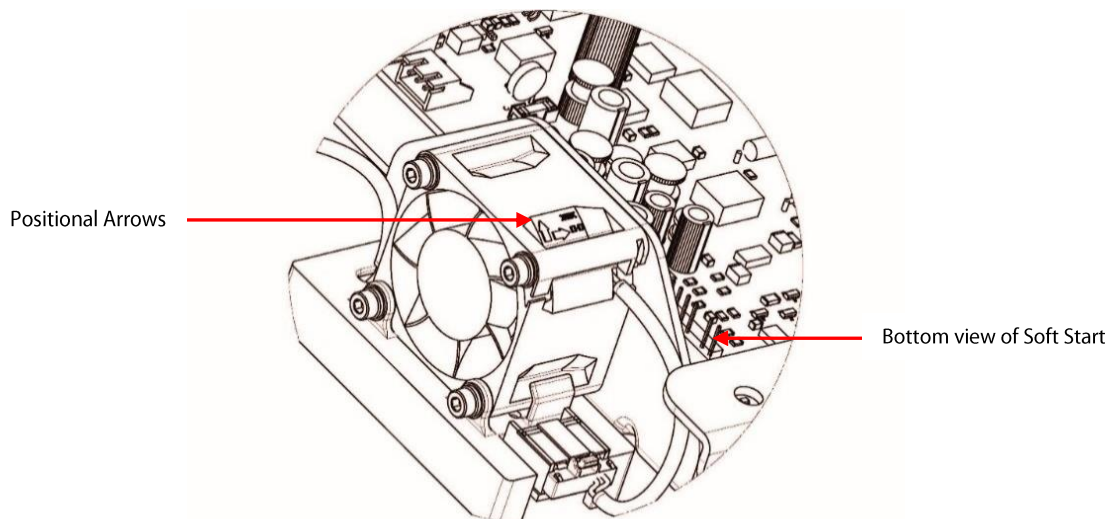


Figure 3. Fan Orientation with Adapter Board

2. Finger tighten the two (2) fasteners to secure the fan and adapter board to the Soft Start Bracket. Be sure to use the supplied fasteners.
3. Insert the two (2) remaining fasteners along with the washers, then torque all four (4) to 6 in.lb.

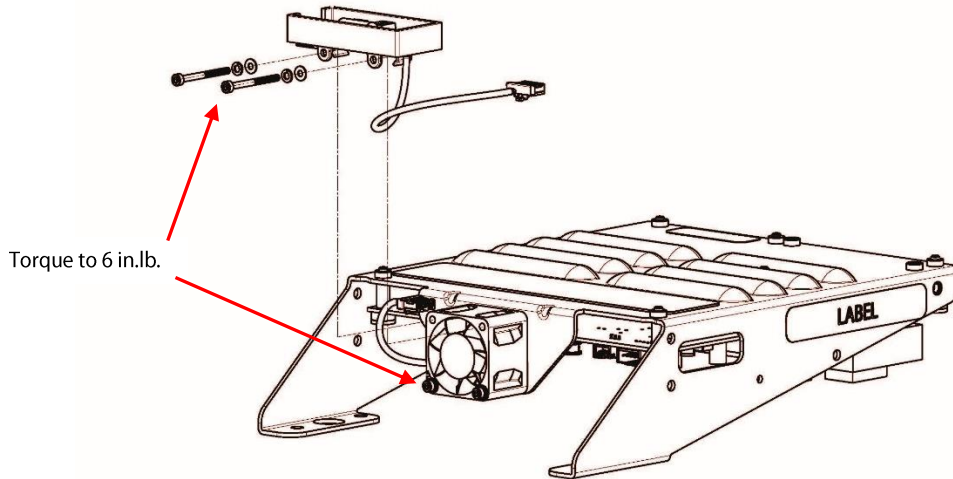


Figure 4. Mounting Adapter

4. Plug the connector of the new fan adapter board into the Soft Start.
 - J5 on the Closed-Top Soft Start
 - J3 on the Open-Top Soft Start
5. Plug the connector of the new fan into the adapter board.

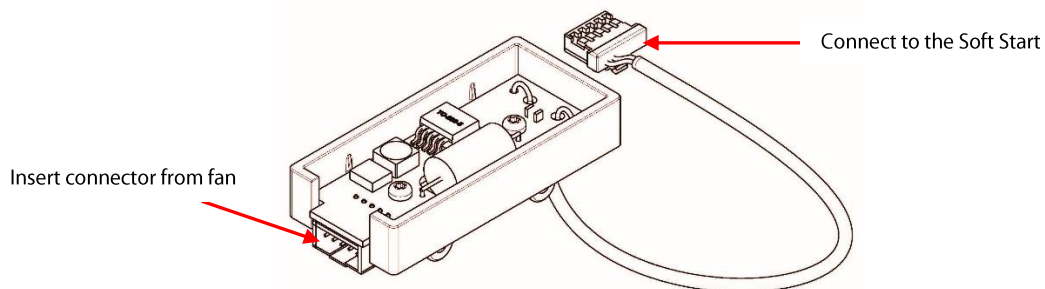


Figure 5. Adapter Electrical Connections

6. Install the top covers.
7. Return the compressor to normal operation.

Fan Only (No Adapter)

1. Remove the adapter board from the fan by removing the two (2) upper fasteners.

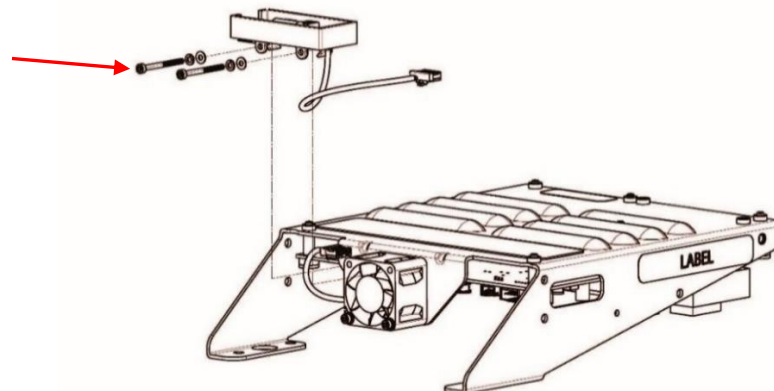


Figure 6. Adapter Removal

- Orient the fan so the arrows are pointing counter clockwise and toward the Soft Start. Refer to Figure 7 (Fan Orientation W/O Adapter Board).

NOTE: Once the fan is installed on Open-Top Soft Starts, the fan arrows will be located on the bottom right corner of the fan and will no longer be visible.

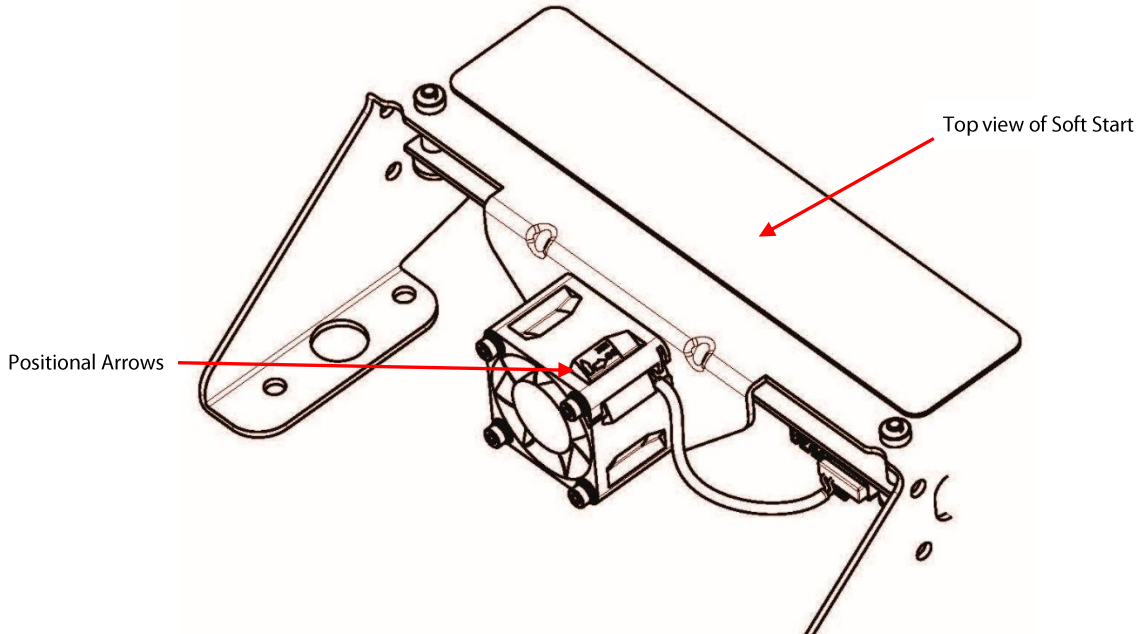


Figure 7. Fan Orientation W/O Adapter Board

- Secure the fan to the Soft Start Bracket using the provided new fasteners and washers. Torque to 6 in.lb.

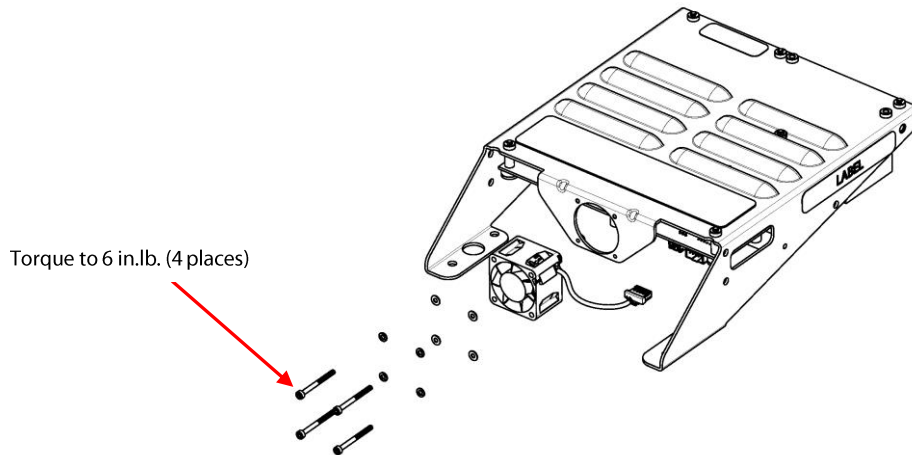


Figure 8. Closed-Top Soft Start with New Style Fan

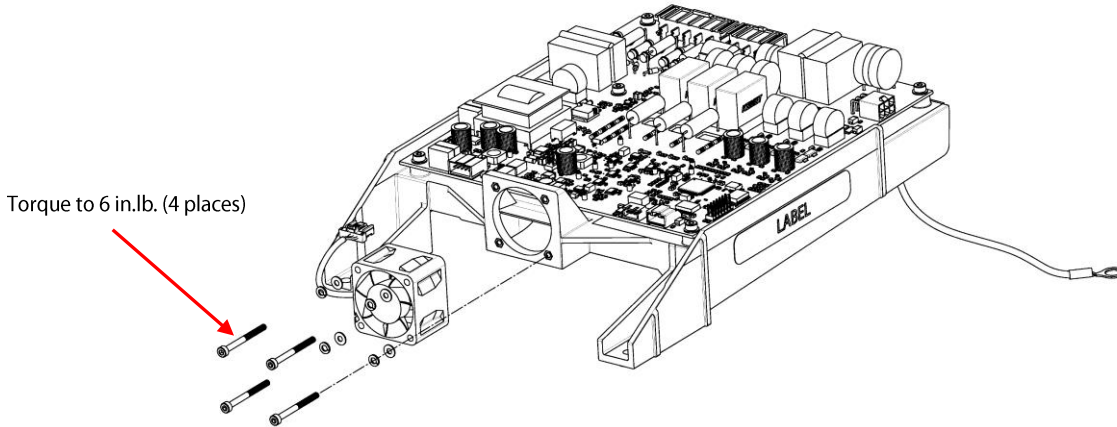


Figure 9. Open-Top Soft Start with New Style Fan

NOTE: The adapter Boards are not to be used with Open-Top Soft Starts.

4. Plug the connector of the new fan into the Soft Start.
 - J5 on the Closed-Top Soft Start
 - J3 on the Open-Top Soft Start
5. Install the top covers.
6. Return the compressor to normal operation.

5 - 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 numbers	Compressor models	
100373	ALL MODELS	
QTY	Part(s) Description	Picture(s)
1	COOLING FAN	
1	ADAPTER BOARD <i>(Only for P and earlier revision Soft Starts)</i>	
4	WASHER M3, FLAT - 902835	
4	WASHER M3, SPLIT LOCK - 902838	
4	SCREW M3X35, SOCKET HEAD CAP - 902851	

Kit numbers	Compressor models	
100373-1	ALL MODELS	
QTY	Part(s) Description	Picture(s)
1	COOLING FAN	
1	ADAPTER BOARD <i>(Only for P and earlier revision Soft Starts)</i>	
4	WASHER M3, FLAT - 902835	
4	WASHER M3, SPLIT LOCK - 902838	
4	SCREW M3X35, SOCKET HEAD CAP - 902851	

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.