


SNUBBER CAPACITOR

199K0078

 <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 covers or opening panels will expose you to hazardous voltages. Ensure the mains input power is off and locked out before removing covers or opening panels.</p> <p>Before removing covers or opening panels, 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

We have included the specific instructions detailing the specific steps required to install the new Snubber Capacitors. For all other steps, please refer to our Service Manual for the remainder of the replacement instructions.

To access the manual, you may scan the applicable QR code below or you may go to our DTC website at www.turbocoroem.com. At the bottom of the page there is a Section named "Categories" that includes various menus including one for Manuals.

Refer to the applicable QR code below to download the TT/TG Series Service Manual.

English



Chinese



2 - Snubber Capacitor Removal

1. Isolate compressor power as described in Section "Electrical Isolation of the Compressor" of the Service Manual (M-SV-001).
2. Remove the top covers (refer to the Service Manual for details).
3. Remove the Soft Start (refer to the Service Manual for details).
4. Remove the Snubber Capacitors.

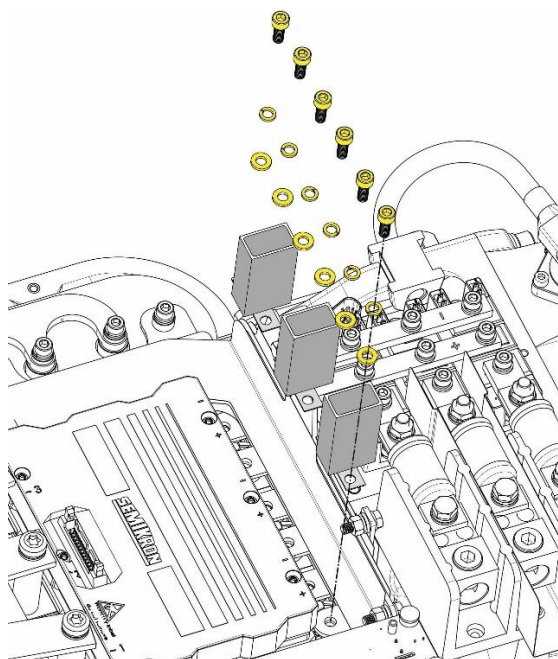


Figure 1 - Snubber Capacitor Removal

5. Remove the four DC bus bar fasteners shown in Figure 2 - Fastener Removal. **Only remove one at a time to avoid the mylar shifting between the DC bus bars.** Refer to Step 1 in the Snubber Capacitor Installation section when installing the new fasteners.

NOTE

The new fastener should be installed after each of the old fasteners have been removed.

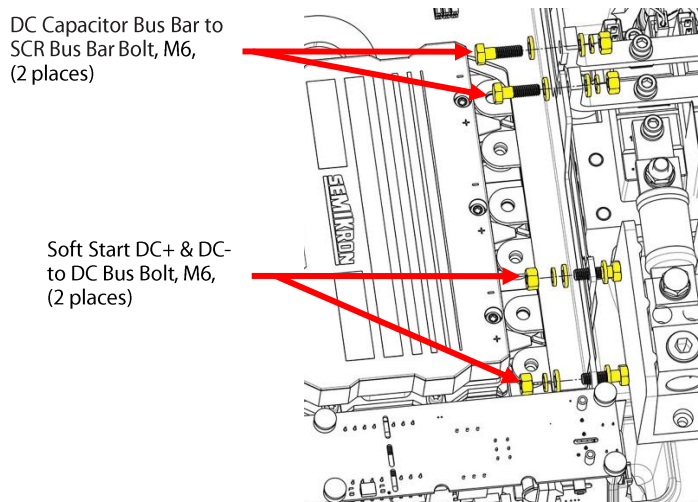


Figure 2 - Fastener Removal

3 - Snubber Capacitor Installation

1. Install the four DC bus bar fasteners shown in Figure 3 - Install New Fasteners. Install the new fastener following the removal of each of the old fasteners. Torque the fastener to 10 Nm. (7.3 ft.lb.).

NOTE

The head of the new button-head fasteners should be installed through the DC bus bars from the Inverter side, with button head facing the Inverter and the nuts for the new button-head fasteners facing the IGV assembly.

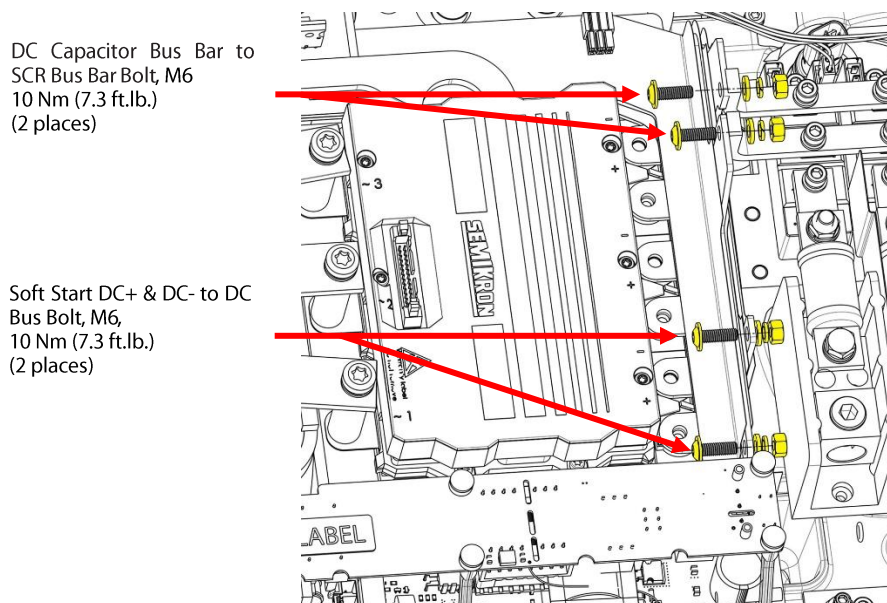


Figure 3 - Install New Fasteners

2. Loosely install the new Snubber Capacitors again noting that one leg is longer than the other. The longer leg should be installed on the lower connection of the bus bars and Inverter. Refer to Figure 4 – Snubber Capacitor Install.

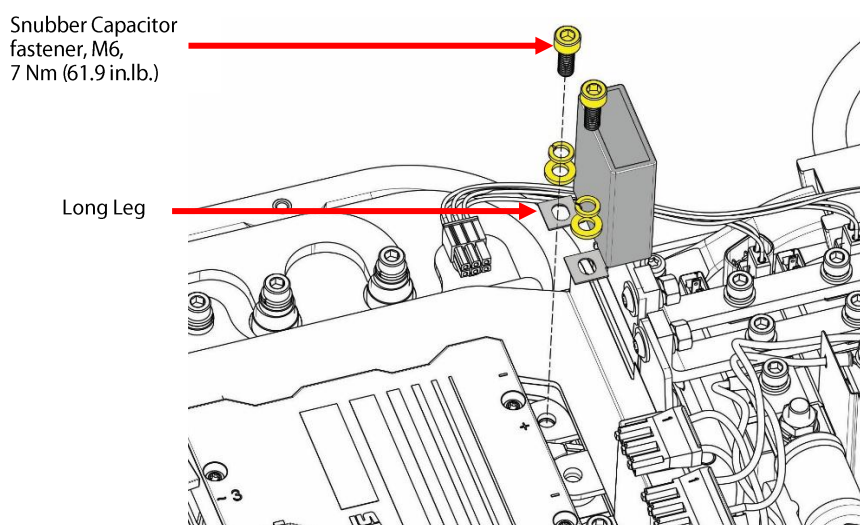


Figure 4 – Snubber Capacitor Install

3. When installing the Snubber Capacitor, the fastener of the shorter leg should be torqued prior to the longer leg. Refer to Figure 5 – Snubber Capacitor Torque Sequence for this and the following step.

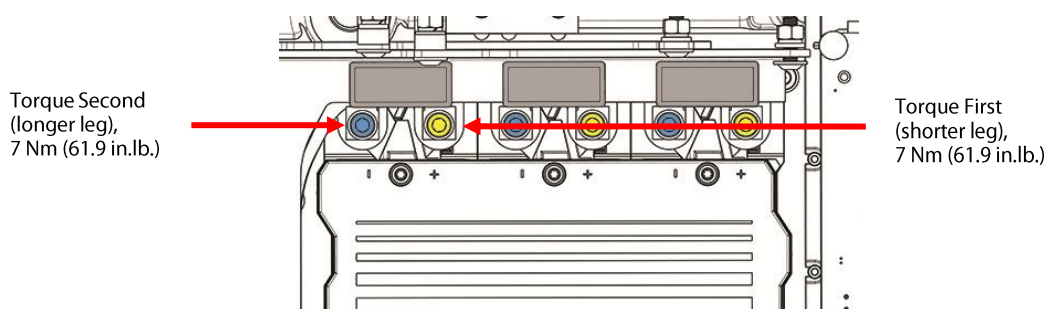


Figure 5 – Snubber Capacitor Torque Sequence

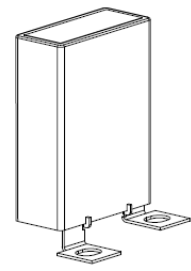

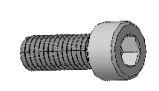

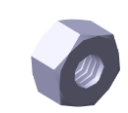
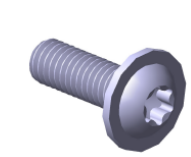
4. Tighten the Snubber Capacitor closest to the DC Bus Capacitors first.
 - a. Finger-tighten both fasteners for the Snubber Capacitor.
 - b. Torque the fastener for the shorter leg to 7 Nm (61.9 in.lb.).
 - c. Torque the fastener for the longer leg to 7 Nm (61.9 in.lb.).
 - d. Continue to the next Snubber Capacitor.
5. Install the Soft Start.
6. Install the top covers. (refer to the Service Manual for details).
7. Return the compressor to normal operation.

Torque Specifications

Description	Nm	Ft.Lb.	In.Lb.
DC Capacitor Bus Bar to SCR Bus Bar Bolt/nut, M6	10	7.3	88.5
Soft Start DC+ & DC- to DC Bus Bolt/nut, M6	10	7.3	88.5
Snubber Capacitor fastener, M6x16	7	5.1	61.9
Cover Fastener, M5x15	2.5	-	22.1

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 number: 199K0078		
QTY	Part(s) Description	Picture(s)
3	CAPACITOR, SNUBBER, 0.56 μ f 1000 VDC- 600A0558	
10	WASHER, M6, SPLIT LOCK - 902809	
6	SCREW, M6x16, SOCKET HEAD CAP - 902818	
10	WASHER, M6, FLAT - 902804	
4	NUT, M6, HEX - 902813	
4	SCREW, M6X18, TORX BUTTON FLANGE HEAD - 600A0638	

5 - List of Changes

Revision	Date	Description of Change
A	1/21/2026	New document

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