



KIT BACKPLANE ASSEMBLY MODULE

100021, 100021-1.



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>Consult the appropriate Danfoss Turbocor Compressors Inc. (DTC) Service Manual on turbocor.danfoss.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>
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1 - Introduction:

BACKPLANE ASSEMBLY MODULE Removal and Installation Instructions.

2 - Removal Instructions:

1. Isolate and lockout 3 phase compressor power.
2. Remove the Service Side Cover.
3. Wait for all the Backplane LEDs to go out.
4. Remove the BMCC and the Serial Driver modules and set aside.
5. Remove the screws that secure the PWM Module to the main compressor housing and pull the module from housing. Do NOT disconnect the bearing feed cables from the feed throughs.
6. Disconnect and remove all connectors from the Backplane, including earth lead under the right-hand top of the Backplane circuit board.
7. Remove the three (3) screws that secure the Backplane assembly to the compressor housing. Refer to Figure 1 (Backplane Fasteners). Do NOT remove the screw from center bottom or top left of the Backplane circuit board.

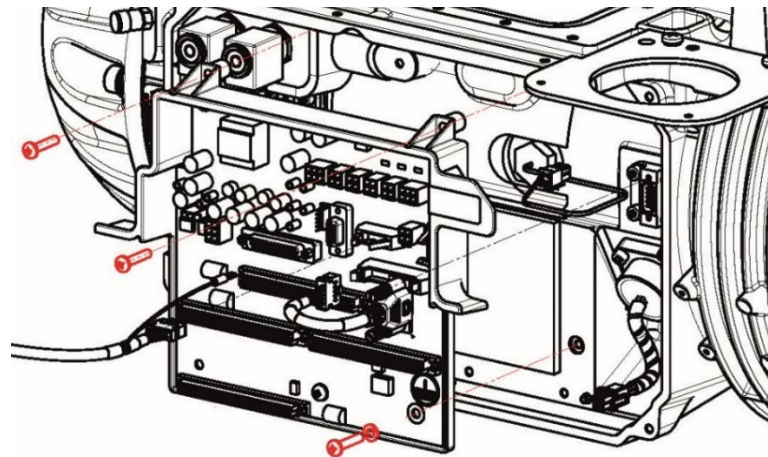


Figure 1– Backplane Fasteners

8. Withdraw the Backplane assembly from the service-side housing and set aside.

3 - Backplane installation Instruction:

1. Position the plastic stand-offs to the main compressor housing and loosely install the Backplane housing screws.
2. Install Backplane grounding screw in lower R/H corner of the Backplane circuit board. Install a metal (not plastic) washer under screw head. Tighten remaining screws.
3. Attach the grounding ring terminal from the IGBT interface cable to the screw at the upper right corner of the Backplane and torque to 3 Nm (27 in.lb.).
4. Reconnect all plugs.

NOTE: To reinstall the Backplane, make sure that inputs are connected to the proper connectors. Verify printed codes on the male terminals (harness side) with the corresponding female terminals on the Backplane.

4 - PWM, BMCC, and Serial Driver Module Installation Instruction:

NOTE: Ensure heat transfer paste present between PWM and housing.

1. Align the PWM Amplifier Module’s heat sink with the two guide pins in the main compressor housing.
2. Insert the PWM Amplifier Module into the connector on the Backplane.
3. Secure the PWM Amplifier Module’s heat sink to the main compressor housing with three (3) screws. Torque to 4 Nm (35 in.lb.).
4. Verify that the module’s heat sink is firmly seated against the main compressor housing.
5. Install BMCC and Serial Driver modules.

5 - Kit Contents

QTY	Part(s) Description	Picture(s)
1	MODULE - BACKPLANE ASSEMBLY	
3	SCREW M5x25 TORX PAN HEAD	
1	WASHER M5 FLAT	



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