

# CoolWave<sup>®</sup> 2 Phase Control Board and Cable Replacement Kit

Use the Phase Control Board and Cable Kit to upgrade your CoolWave 2 power supply to the new configuration.

**NOTE:** Retain the box used for shipping the kit to comply with the conditions of warranty.



**WARNING:** Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation. A qualified and competent electrician must carry out all electrical maintenance and servicing of this equipment.



**WARNING:** This equipment operates at high voltages up to 5000 volts dc and is therefore potentially dangerous. The electrician servicing this equipment must take all precautions.



**WARNING:** Isolate the equipment at the main disconnect or lockout before removing any of the cover panels.

## New Phase Control Board

See Figure 1. Connectors CONN4 and CONN5 on the new phase control board have sockets rather than pins.

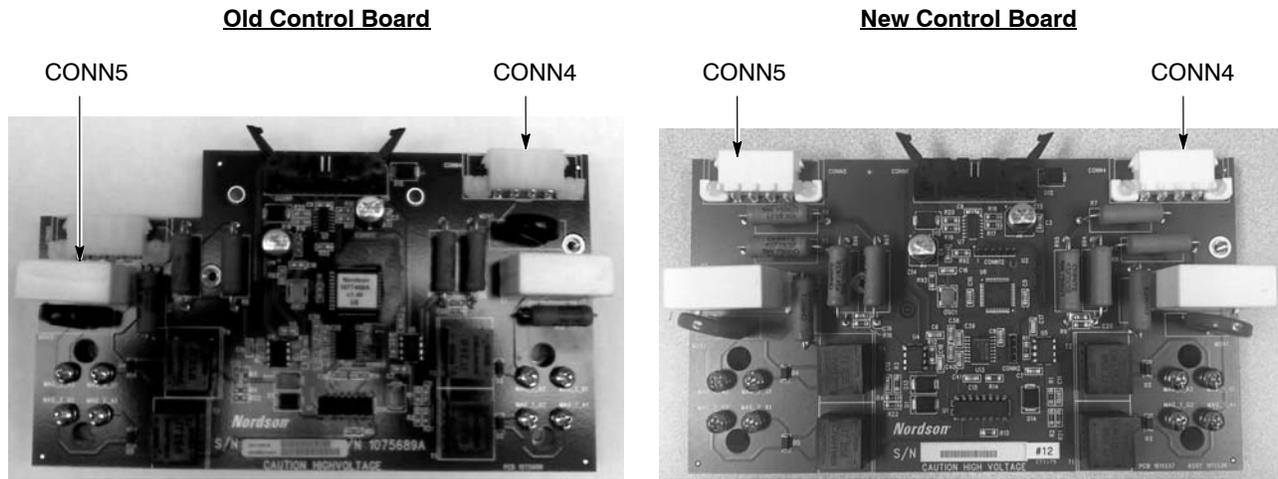


Figure 1 Old and New Versions of the Phase Control Board

## New Cables

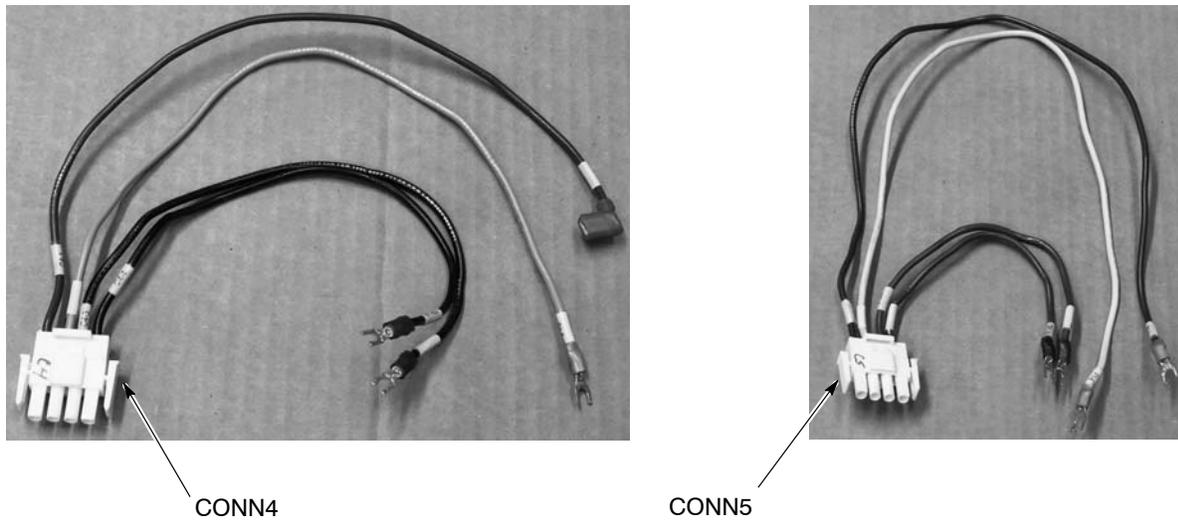


Figure 2 New CONN4 and CONN5 Cables

# Replacing the Phase Control Board and Cables

## Removing the Old Phase Control Board and Cables

1. Remove electrical power from unit.
2. See Figure 3. Remove the six M5 screws from the power supply cover. Remove the cover and set it aside.
3. On the phase control board, disconnect the three electrical connectors (power cables CONN4 and CONN5 and ribbon cable CONN1).

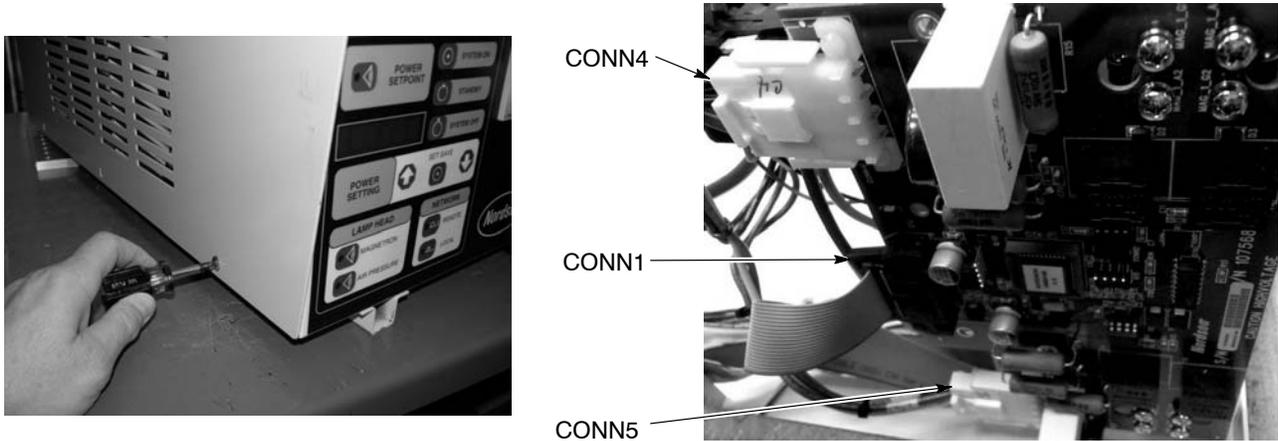


Figure 3 Disconnecting Electrical Connectors

4. See Figure 4. Remove the four M4 screws and washers from the front side of the phase control board.

**NOTE:** Access to screws obtained through holes on the board.

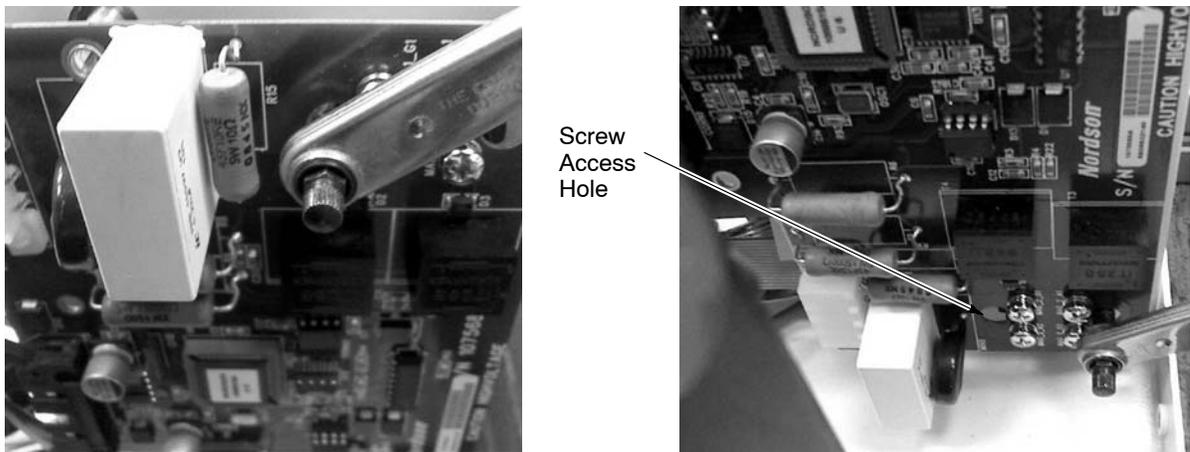


Figure 4 Remove four M4 Screws and Washers from the Front Side of the Phase Control Board

5. See Figure 5. Two M4 screws and washers from the back side of the phase control board. Remove the phase control board and set it aside for proper disposal (see the *Control Board and Cable Disposal* section for instructions on proper disposal).

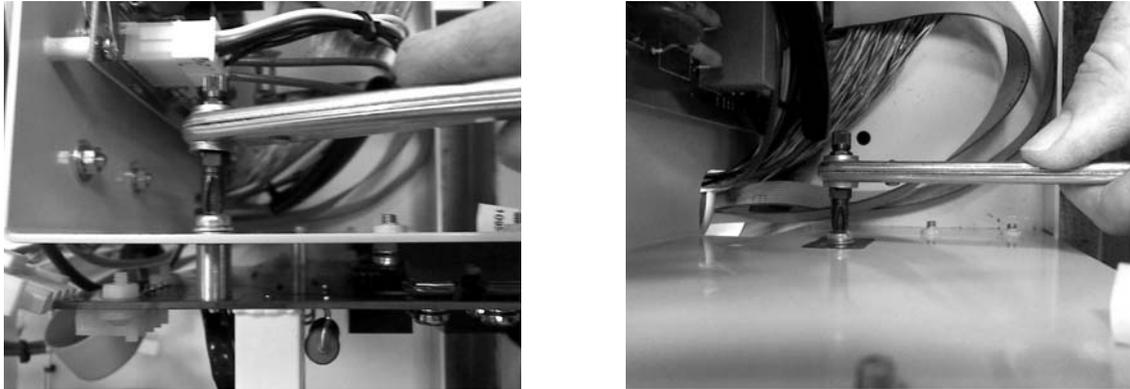


Figure 5 Remove two M4 Screws and Washers from the Back Side of the Phase Control Board

6. See Figure 6. Cut two wall mount cable ties and remove transformer T2.



Figure 6 Remove Transformer T2

7. See Figure 7. Loosen the terminal screws to remove the cables from the contactor CR1 and fuse block F1. Set the old cables aside for proper disposal (see the *Board and Cable Disposal* section for instructions on proper disposal).

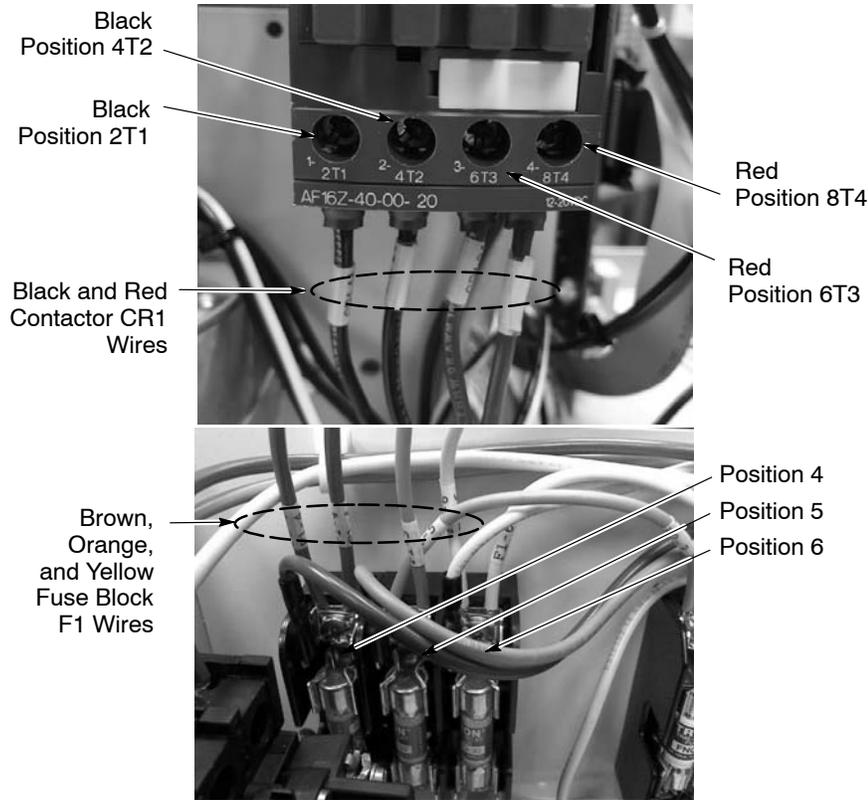


Figure 7 Remove Old Cables from Contactor and Fuse Block

### Installing the New Phase Control Board and Cables

1. Mount and secure the new phase control board to the cabinet wall with the six M4 screws and washers removed in Figure 5.
2. One at a time, matching the wire label to the terminal label, insert the wire leads into the contactor and tighten the screws securely.

From Phase Control Board	Wire Color and Label	To Contactor	Wire Color and Label
CONN4-4	Black, C4-4	2T1	Black, CR1-2T1
CONN4-3	Black, C4-3	4T2	Black, CR1-4T2
CONN5-4	Red, C5-4	6T3	Red, CR1-6T3
CONN5-3	Red, C5-3	8T4	Red, CR1-8T4

3. One at a time, matching the wire color to the existing wires, insert the wire leads into the fuse blocks and and tighten the screws securely.

From Phase Control Board	Wire Color and Label	To Fuse Block	Wire Color and Label
CONN4-1	Brown, C4-1	Position 4	Brown, F1-4
CONN4-2	Orange, C4-2	Position 5	Orange, F1-5
CONN5-1	Brown, C5-1	Position 4	Brown, F1-4
CONN5-2	Yellow, C5-2	Position 6	Yellow, F1-6

4. Re-connect the power cables CONN4 and CONN5 and ribbon cable CONN1 to the phase control board.

**NOTE:** The connectors have a key to help guide the installation. Connectors should securely snap into place for correct installation.

5. Replace the power supply cover and secure with the six M5 screws.

## Phase Control Board and Cable Disposal

Dispose of equipment and materials used in operation and servicing according to local codes.

## Returns under Warranty

When returning a control board or contactor that is under warranty, the items must be sent with the original packaging in which it was received. Failure to comply with these instructions will void the warranty.

Send return items to:

UV System Group  
Nordson Corporation  
Warranty Division  
444 Gordon Ave.  
Amherst, Ohio, 44001

## Parts

To order parts, call the Nordson Industrial Coating Systems Customer Support Center at (800) 433-9319 or contact your Nordson representative.

### *Replacement Kit*

Part	Description	Note
1612366	KIT, phase control board and cable, CoolWave 2	

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