



# **XDBKITS5 BUS / DB TERMINAL KIT (SIZE 5)**

**INSTALLATION MANUAL**

**DPD00116**

# Need Help?

This manual answers most installation and startup questions that may arise. However, if you have any problems, please let your first call be to us.

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# INSTALLING THE BUS / DB TERMINAL OPTION KIT

## INTRODUCTION

The XDBKITS5 option kit is designed to allow the Size 5 X4 and X5 AC drives to be easily adapted to install either external DB resistors or to interconnect the DC bus terminal with another controller. Included in that Size 5 category are the following X4 and X5 drive models:

X4 AC Drive Model No.	X5 AC Drive Model No.
X4C41250D	X5C41250D
X4C41500D	X5C41500D
X4C42000D	X5C42000D
X4C51250D	X5C51250D
X4C51500D	X5C51500D
X4C52000D	X5C52000D

## APPLICABLE DOCUMENTS

This manual is supplied as a supplement to the X4 AC Drive User's Manual (DPD 00088; previously Form 1428), and the X5 AC Drive User's Manual (DPD 00089; previously Form 1434).

## OPTION KIT CONTENTS

The option kit is illustrated in Figure 1:

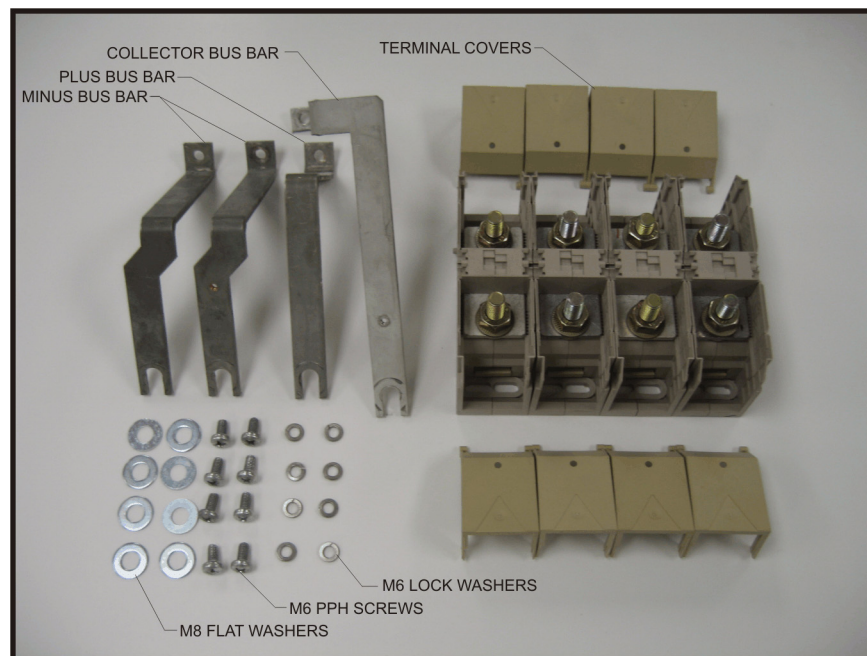


Figure 1: The XDBKITS5 option kit

## INSTALLATION PROCEDURES

### WARNING

#### SENSITIVE EQUIPMENT

This assembly contains static-sensitive components. It should be handled only by a static-safe installer, using a grounded wrist strap.

**Failure to observe this precaution may cause premature equipment failure.**

### DANGER

#### HAZARDOUS VOLTAGE

- Disconnect all power before servicing a drive unit or its components. **WAIT 5 MINUTES** until the DC bus capacitors discharge.
- Ensure that any other power sources that may feed control logic have been disconnected.
- **DO NOT** short across DC bus capacitors or touch unshielded components or terminal strip screw connections with voltage present.
- Install all covers before applying power or starting and stopping the drive.
- The user is responsible for conforming to all applicable code requirements with respect to grounding all equipment.
- Many parts in a drive, including printed circuit boards, operate at line voltage. **DO NOT TOUCH.** Use only electrically-insulated tools.

Before servicing any drive.

- Disconnect all power.
- Place a "DO NOT TURN ON" label on the drive disconnect.
- Lock the disconnect in the open position.

**Failure to observe these precautions will cause shock or burn, resulting in severe personal injury or death.**

### STEP 1.

Open the upper enclosure door by unthreading the door screws in four places. Lift and rotate the door into the open position.

**STEP 2.**

Install four power terminal blocks with the eight M6 Phillips-head screws and corresponding lock washers provided in the kit (see Figure 2). Tighten to a maximum torque of 26 in-lbs..

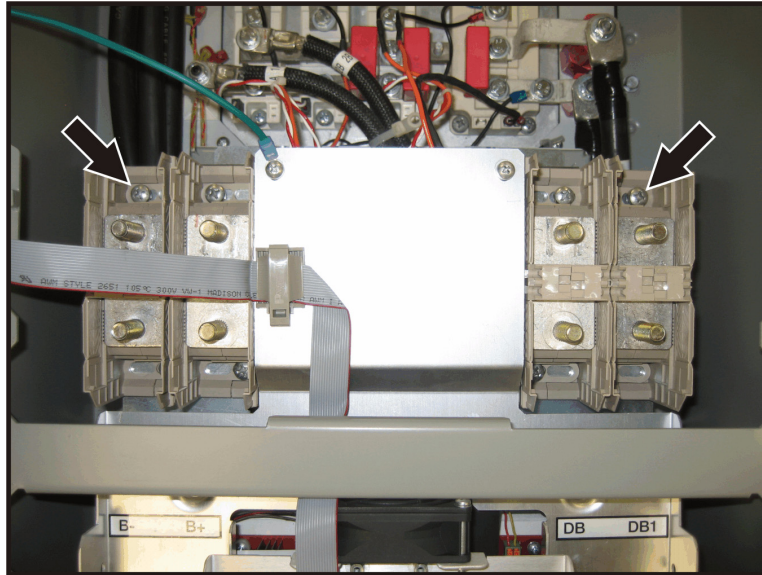


Figure 2: Installing power terminal blocks

**STEP 3.**

Remove the nut, washers, hex standoff, and setscrew from the terminal designated 1A (see Figure 3).

Discard the hex standoff and the setscrew, as these will no longer be needed.

Remove the bolt and washers from the terminal designated 2B (see Figure 3).

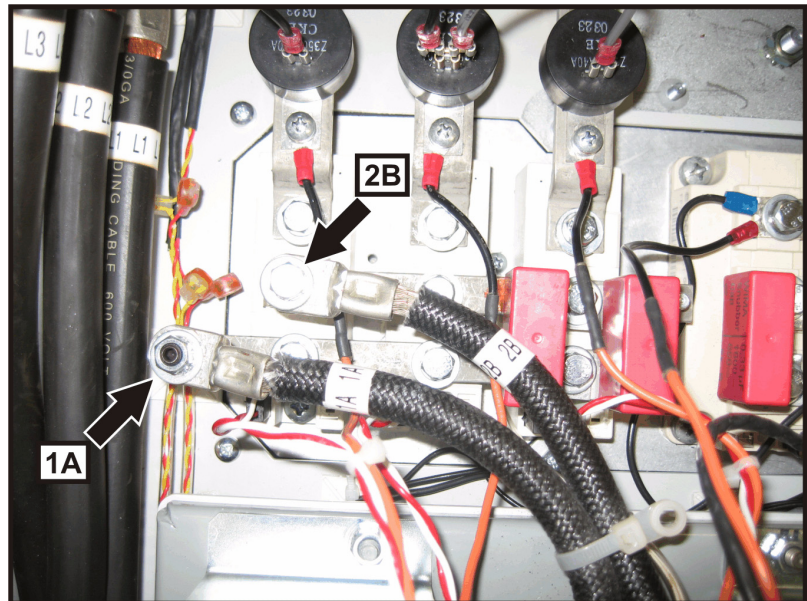


Figure 3: Location of terminals 1A, 2B

**STEP 4.**

Install the minus bar over the terminal previously designated 1A and to the respective power terminal block.

Reconnect wire 1A on top of the bus bar. Install and tighten the hardware previously removed in Step 3 using a maximum torque of 26 in-lbs. (See Figure 4.)

**STEP 5.**

Install the plus bar over the terminal previously designated 2B and to the respective power terminal block. Reconnect wire 2B on top of the bus bar. Install and tighten the hardware previously removed in Step 3 using a maximum torque of 26 in-lbs. (See Figure 4.)

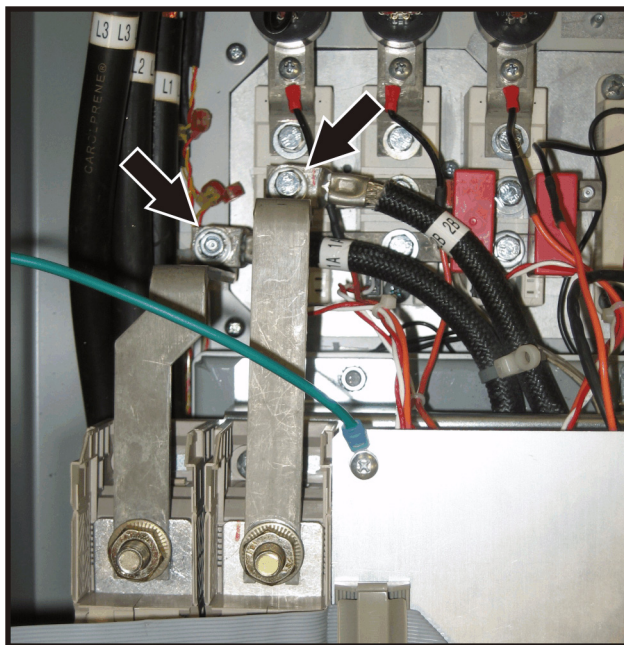


Figure 4: Installing the minus bar and the plus bar

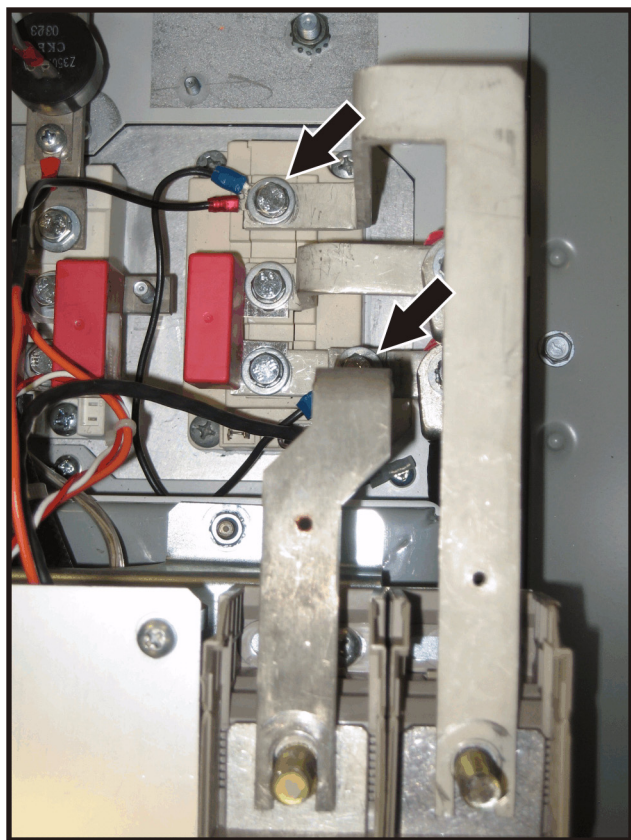


Figure 5: Installing bus bars

**STEP 6.**

Remove the M6 hex head screws, washers, and the leaded wires from the terminal designated 1B and 2A. (See Figure 5.)

**STEP 7.**

Install the minus bar to the terminal designated 2A and to the respective power terminal block. Re-install the M6 screws, washers, and leaded wire. Tighten, using a maximum torque of 26 in-lbs. (See Figure 5.)

**STEP 8.**

Install the collector bus bar to the terminal designated 1B and to the respective power terminal block. Re-install the M6 screws, washers, and leaded wires. Tighten using a maximum torque of 26 in-lbs. (See Figure 5.)

**STEP 9.**

.Install four flat washers provided in the kit. Tighten the four power terminal block nuts used for connecting the bus bars in the previous steps to a maximum of 132 in-lbs. (See Figure 6.)

The remaining four flat washers are to be used when connecting power wires to the unit.

**STEP 10.**

Cut the ends of the terminal cover off and snap the covers onto the power terminal blocks in eight places (see Figure 7 and Figure 8). Discard the plastic terminal cover ends.

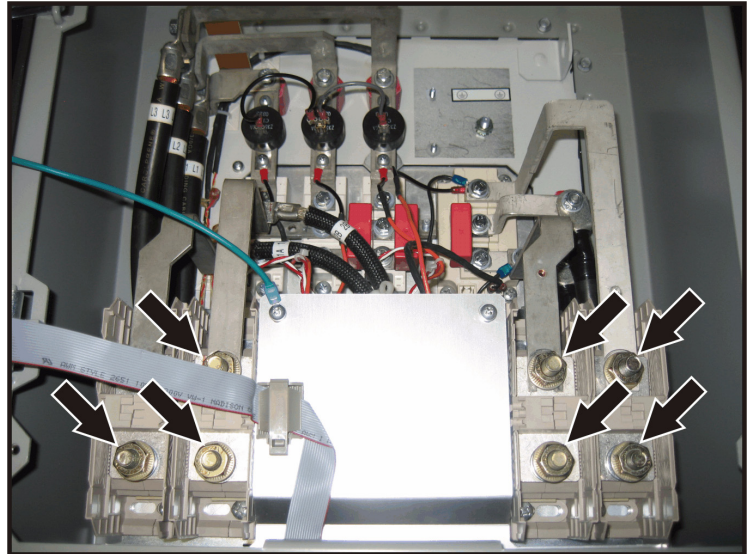


Figure 6: Tightening power terminal block nuts

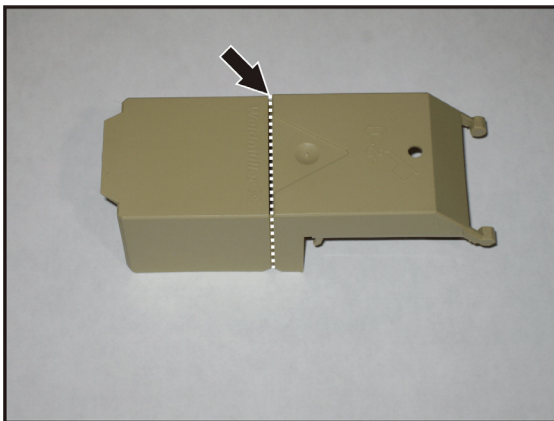


Figure 7: Cutting terminal covers

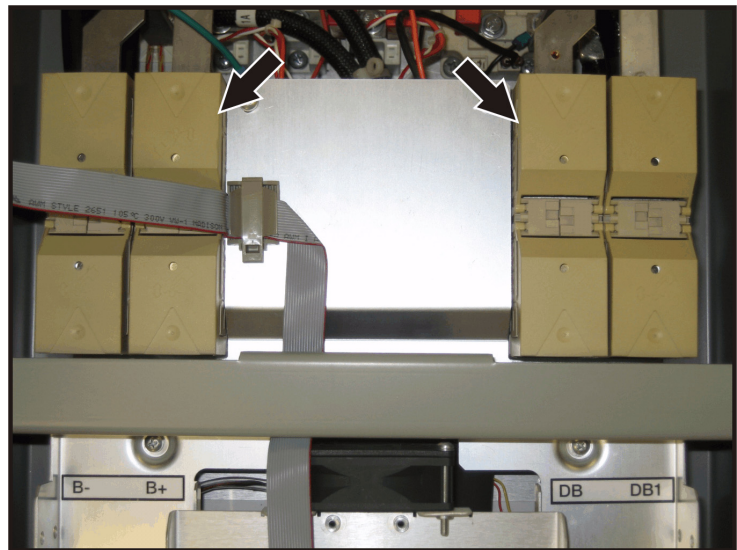


Figure 8: Placing covers on power terminal blocks

**STEP 11.**

Close the door and tighten the cover screws to a maximum of 26 in-lbs.

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