



Broadcast Electronics Inc.

4100 North 24th Street, Quincy, Illinois 62305 USA • Phone (217) 224-9600 • Fax (217) 224-9607 • www.bdcast.com • bdcast@bdcast.com



4MX Series Transmitters

AC Power Supply Filter Capacitor Upgrade Application Guide

597-0415, Revision B
10/2/08

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AC Power Supply Filter Capacitor Upgrade Application Guide

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1 Upgrade Preparation

1.1 Overview / Estimated Completion Time For Upgrade

B.E. Field Upgrade Kit (977-0415) contains the necessary items to upgrade a 4MX 25, a 4MX 50, or a 4MX 100 AC Power Supply with Filter Capacitors.

Providing that you have the tools and items listed below, it will take approximately 30-45 minutes to complete the Upgrade.

1.2 Items / Tools required for the Upgrade Process

- 1/4" Nut Driver
- 5/16" Nut Driver
- 3/8" Nut Driver
- No. 2 Phillips Screwdriver
- Medium Flat Blade Screwdriver
- 977-0415 Kit, Field Upgrade, 4MX AC Power Supply
 - 949-6002, (Qty 1) Harness, AC Filter Caps, 4MX 25/50/100
 - 047-5063-370, (Qty 3) Capacitor, 50uF, 370VAC, Motor Run
 - 453-0008, (Qty 3) Bracket, Capacitor Mounting, VR8
 - 421-4008, (Qty 9) Kepnut, 4-40
 - 420-6112, (Qty 3) Screw, 6-32 x .75
 - 421-6008, (Qty 3) Kepnut, 6-32
 - 471-5799, (Qty 1) Plate, Capacitor Mounting
 - 510-286, (Qty 1) Bumper, Rubber, Adhesive Back
 - 597-0415, (Qty 1) Application Guide, Field Upgrade, 4MX AC Power Supply

2 Upgrading the 4MX AC Power Supply Capacitors

2.1 Install Capacitor Brackets and Hardware onto Mounting Plate

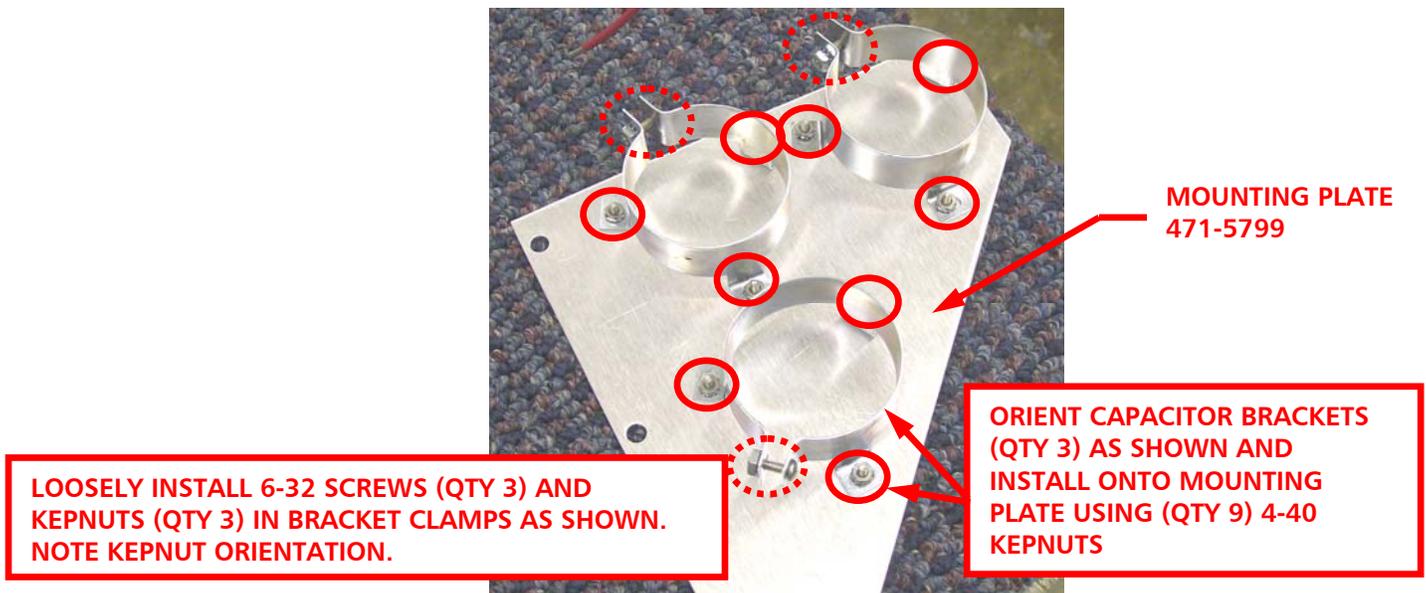


Figure 1 – Install Cap Brackets and Hardware on Mounting Plate

2.2 Install Rubber Bumper

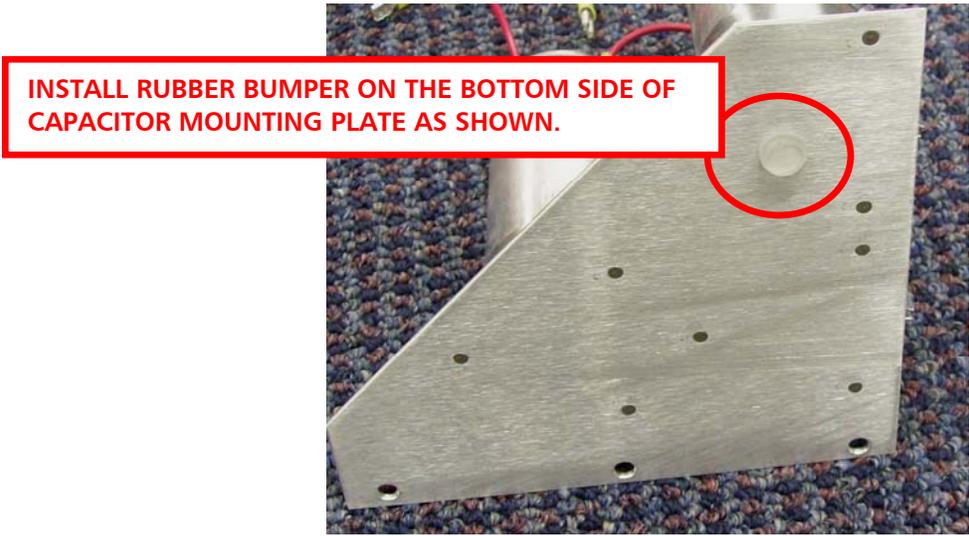


Figure 2 - Field Upgrade, 4MX AC Power Supply

2.3 Install Caps and Wire Harness (230VAC System)

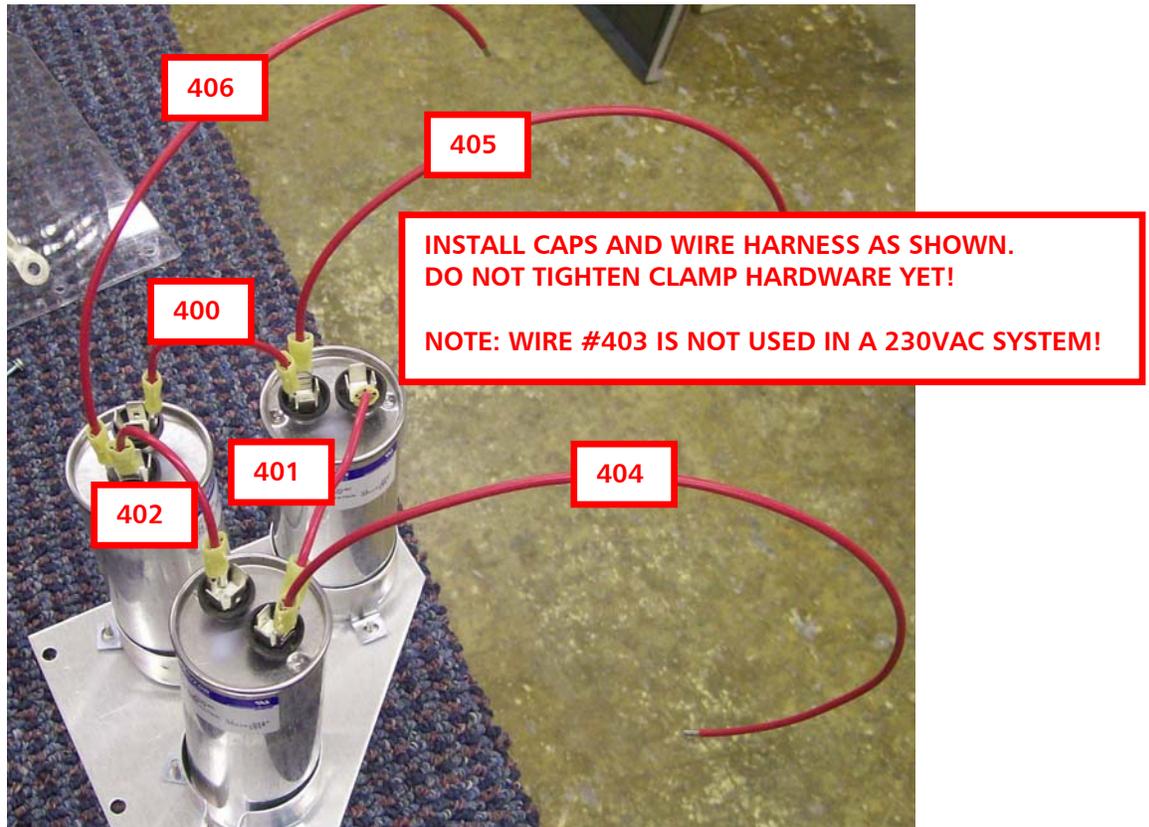


Figure 3 – 230VAC System

2.4 Install Caps and Wire Harness (400VAC System)

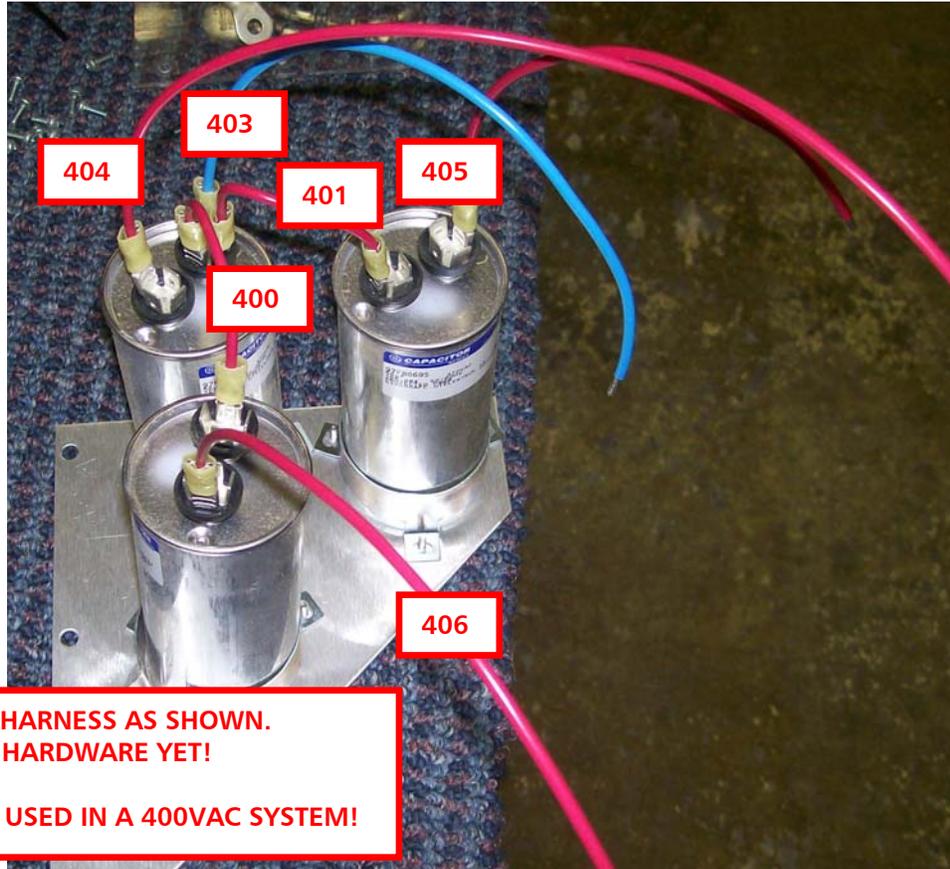


Figure 4 – 400VAC System

2.5 Remove Capacitors from Brackets (Leave Wiring Installed on Caps)



Figure 5 – Remove Caps

2.6 Turn the 4MX 50 AC Breaker to OFF and Remove Lower Rear Door



Figure 6 – Turn 4MX AC Breaker to OFF

2.7 Remove Kepnuts in 4MX Cabinet then Install Cap Mounting Plate

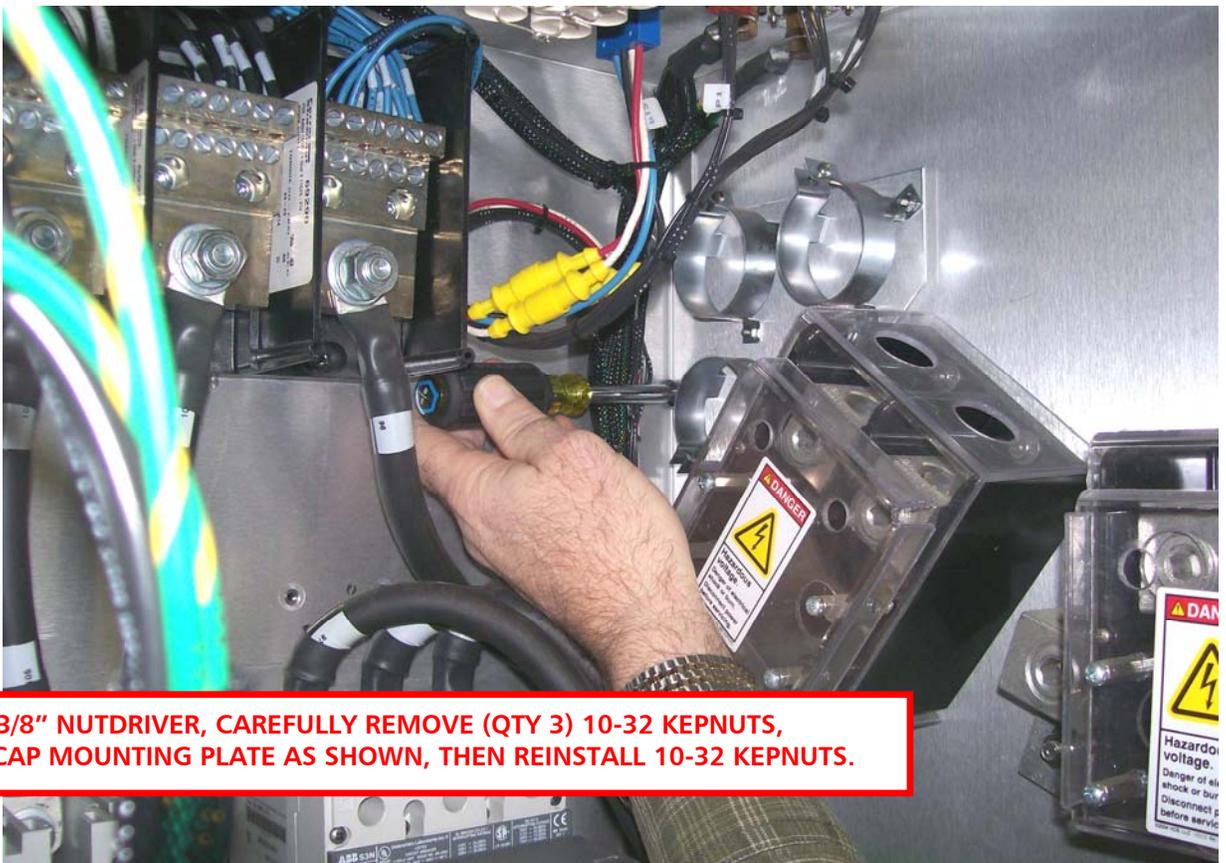


Figure 7 – Install Cap Mounting Plate into 4MX

2.8 Re-Install Caps into Brackets

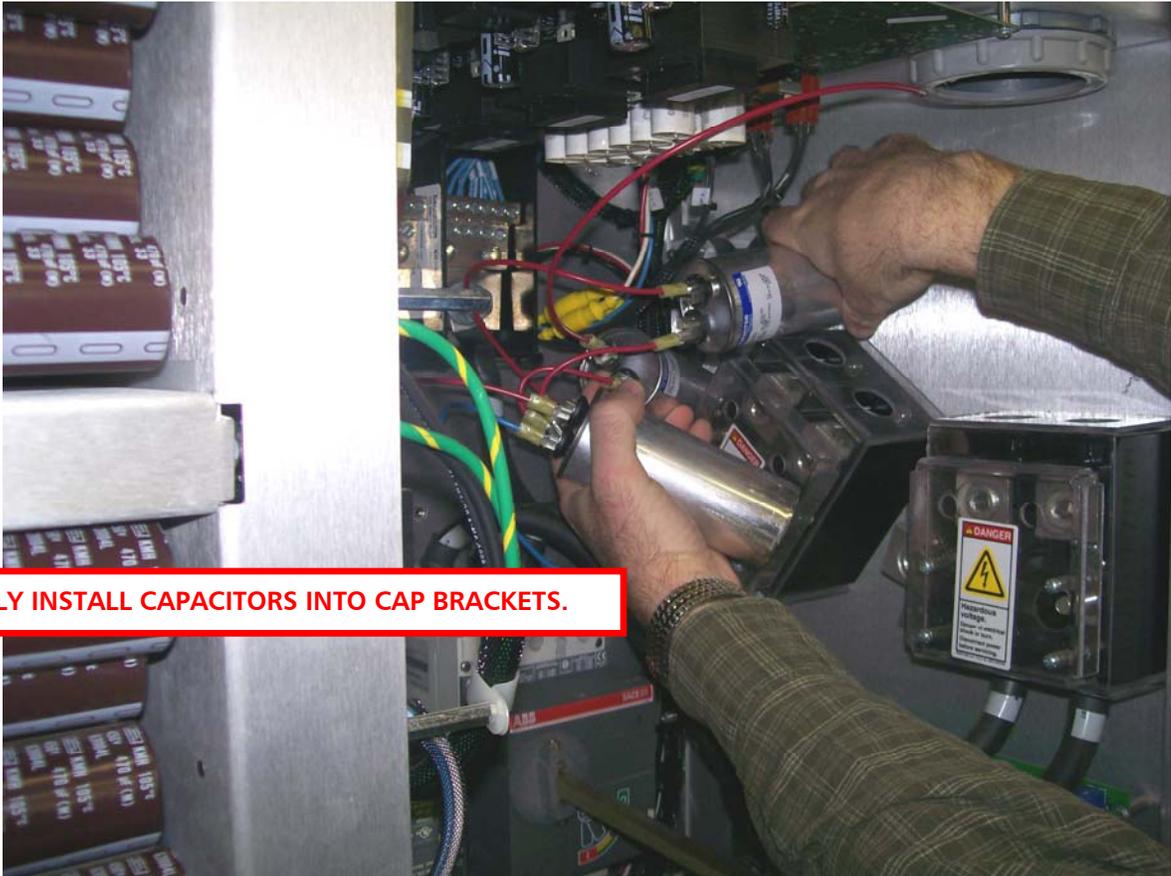


Figure 8 – Install Capacitors

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2.9 Caps Re-installed into Brackets

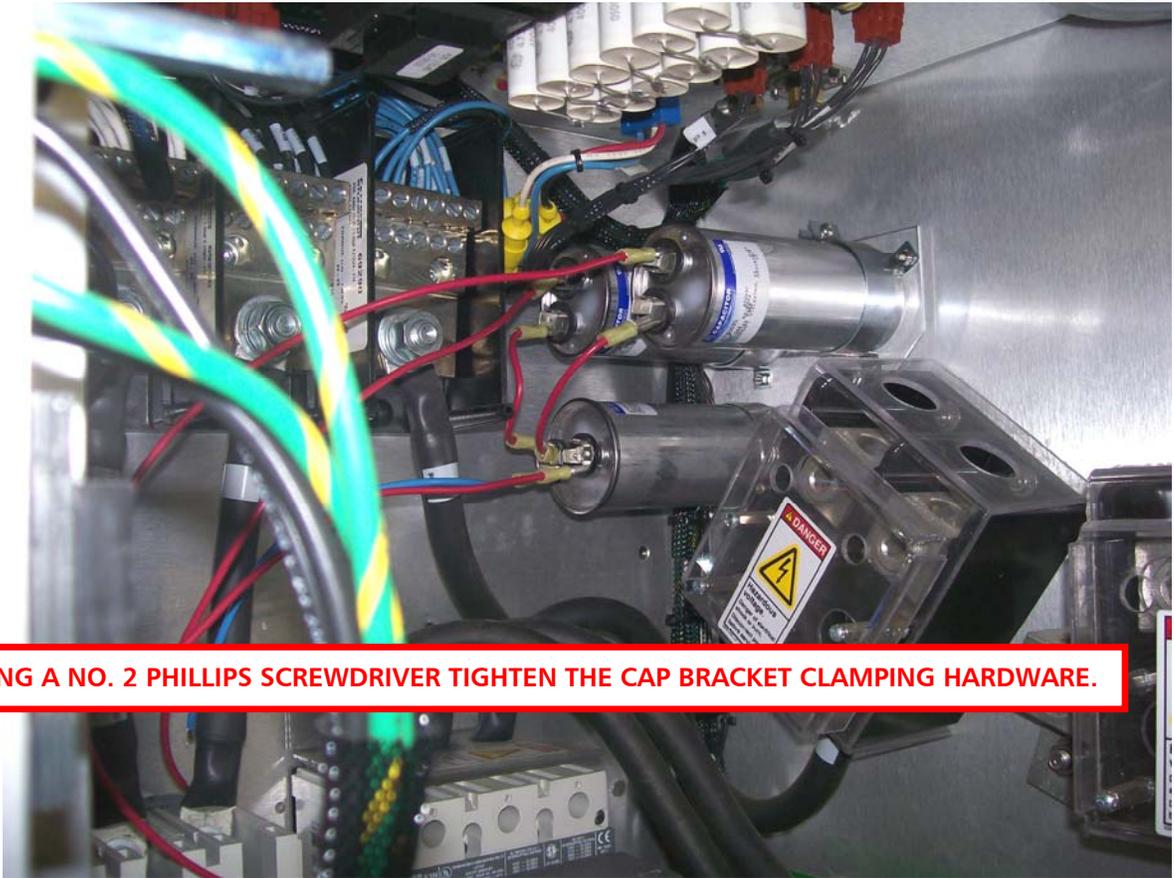


Figure 9 – Capacitors Installed

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2.10 Connect Capacitor Wire Harness Leads to AC Distribution Blocks

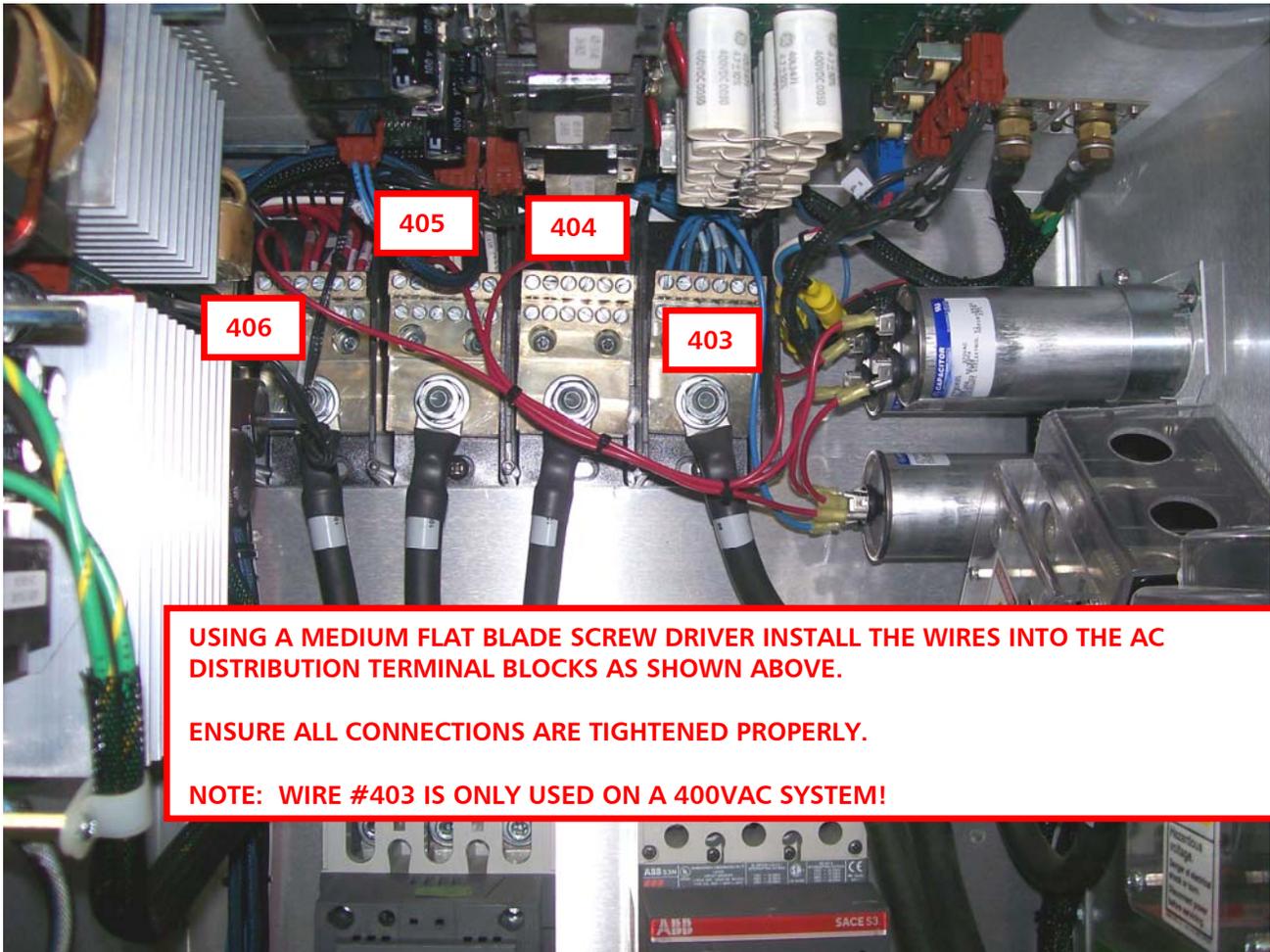


Figure 10 – Connect Capacitor Wire Harness Leads to AC Distribution Terminal Blocks

2.11 Install Lower Rear Door and Turn the 4MX 50 AC Breaker to ON



Figure 11 – Turn 4MX AC Breaker to ON

2.12 Verify that the Transmitter is Operating Properly

3 RF Technical Services Contact Information

RF Technical Services -

Telephone: (217) 224-9617

E-Mail: rfservice@bdcast.com

Fax: (217) 224-6258

4 Wiring Diagram

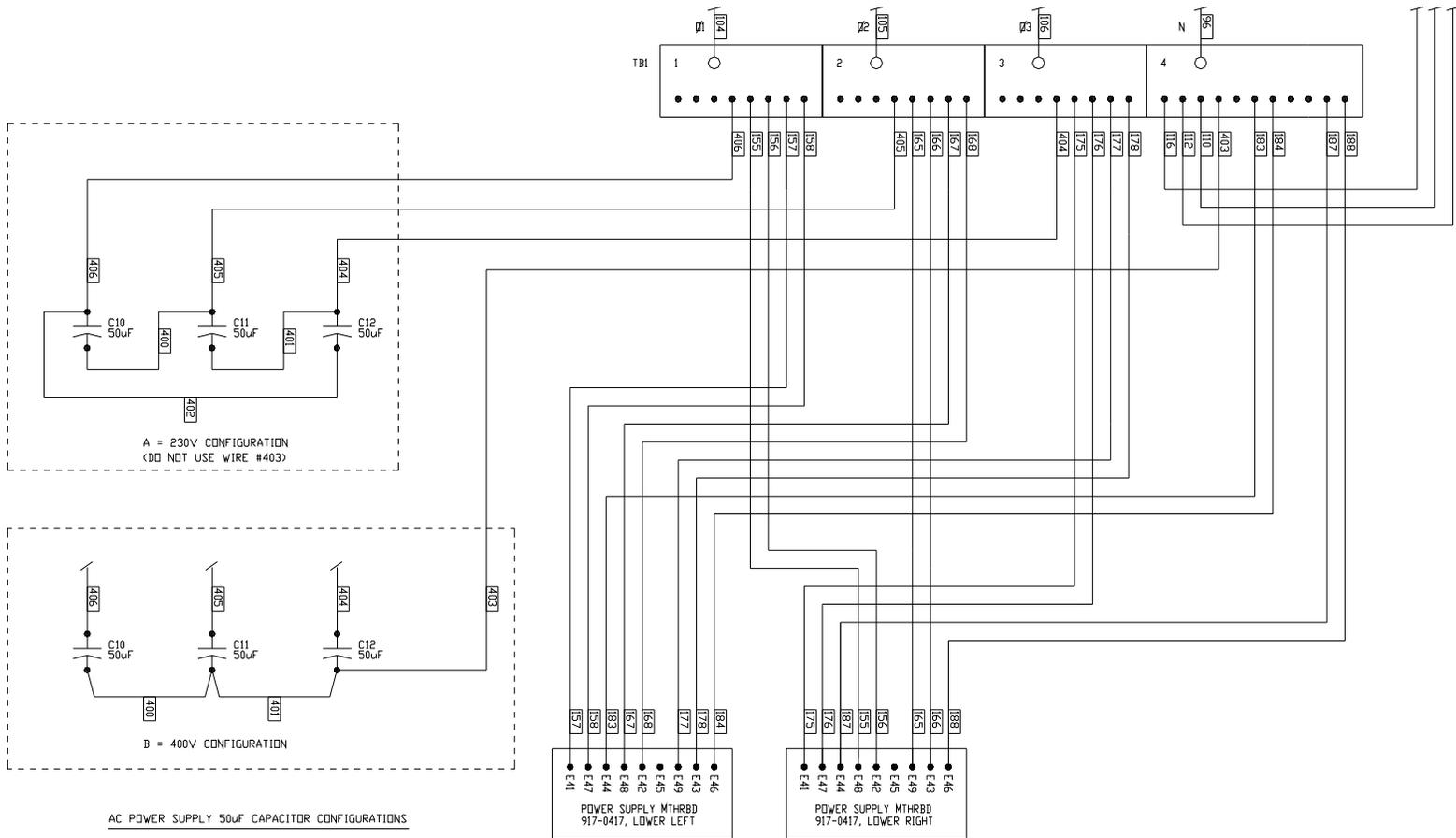


Figure 12 – Wiring Diagram

