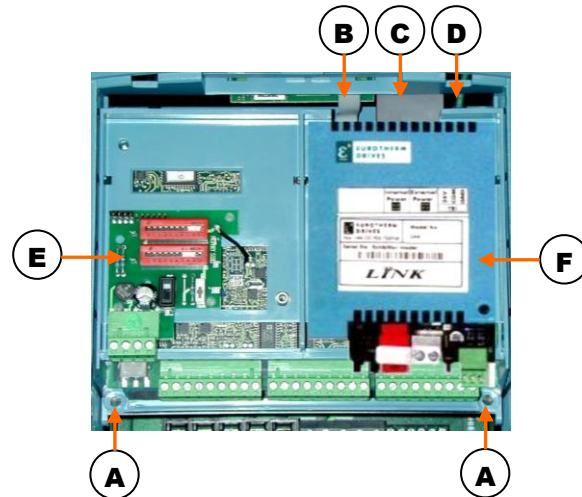


Introduction

Frame 1 and 2 590+ drives have integrated control boards housed in a cradle, part number LA470617Uxxx, picture shown below. Larger drive chassis are fitted with a 590+ control door, very similar to the 590 door. This application note explains how to replace and calibrate the 590+ control cradle. Unlike the 590, the calibration for armature current, armature voltage and field current are now done exclusively in software.



590+Cradle LA470617Uxxx



Removing and Replacing

1. Remove the terminal cover of the drive, to access the control cradle
2. Remove the two Philips screws (A) in the picture
3. Slide the cradle downwards approximately 1 inch, while lifting it slightly
4. Unplug the two headers (B) and (C). Remove the ground wire (D) with a firm tug. The cradle is now free to remove.
5. Remove any feedback board (E) and techbox (F) if present, and mount them on the new cradle
6. Follow steps 1 through 4 in the reverse order to install the new cradle

CAUTION
 Remove power from the drive before attempting to replace the cradle

CAUTION
 Do not touch the exposed circuit board on the underside of the cradle

CAUTION
 Insert header C with caution. Damage to pins may lead to drive failure

Setting the Product Code

1. Hold down the **UP**, **E** and **PROG** buttons simultaneously and apply power to the drive.
2. You should see



HP @ 500V	Max DC amps
7.5	15
20	35
25	40
30	55
40	70
50	90
60	110
75	125
100	165

3. Using the **UP** and **DOWN** keys, scroll to the appropriate current rating of the drive (refer to the rating label on the side panel of the drive) and 4Q for regenerative or 2Q for non-regenerative. For a 20HP regenerative drive, select DC 4Q 35A
4. Press **E** twice to save the setting.

Calibration

Now that the Product Code has been set, it is time to calibrate the drive in the Configure Drive Menu.

The 590+ can also be calibrated using the programming tool software



- Set CONFIGURE ENABLE to DISABLE. The drive will display “CALIBRATING”
- Under MENU LEVEL/PARAMETER SAVE, press the M and UP to save your settings