

ACC-25/50 Main Circuit Board Replacement Product Installation Document

Document 51946 Rev A 05/06/02 ECN 02-056

This Product Installation Document outlines the replacement of the Main Circuit Board for the Audio•Command•Center•25/50 Audio Panel. Proper grounding, of the individual performing the replacement and the work area, is essential to prevent circuit board damage due to Electrostatic Discharge. Accepted industry practices must be employed.

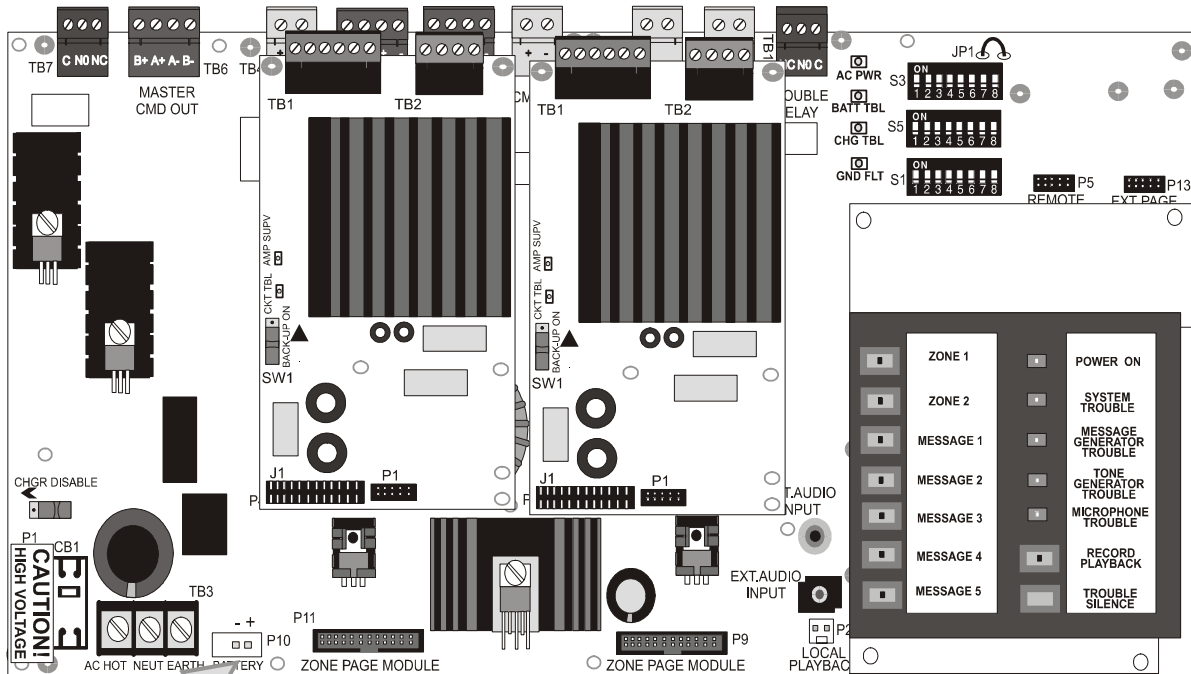
Note: All hardware, (screws, nuts, standoffs, etc.) required to mount the main circuit board and option modules, is included in the main circuit board replacement kit, in the event any of the original hardware is misplaced during the circuit board removal and installation. This hardware is not required if the original hardware is removed from the old circuit board.

CAUTION! Make certain all power (AC and DC) is removed before any replacement work is performed.

Audio•Command•Center•25/50 Audio Panel (ACC-25/50) Main Circuit Board Removal

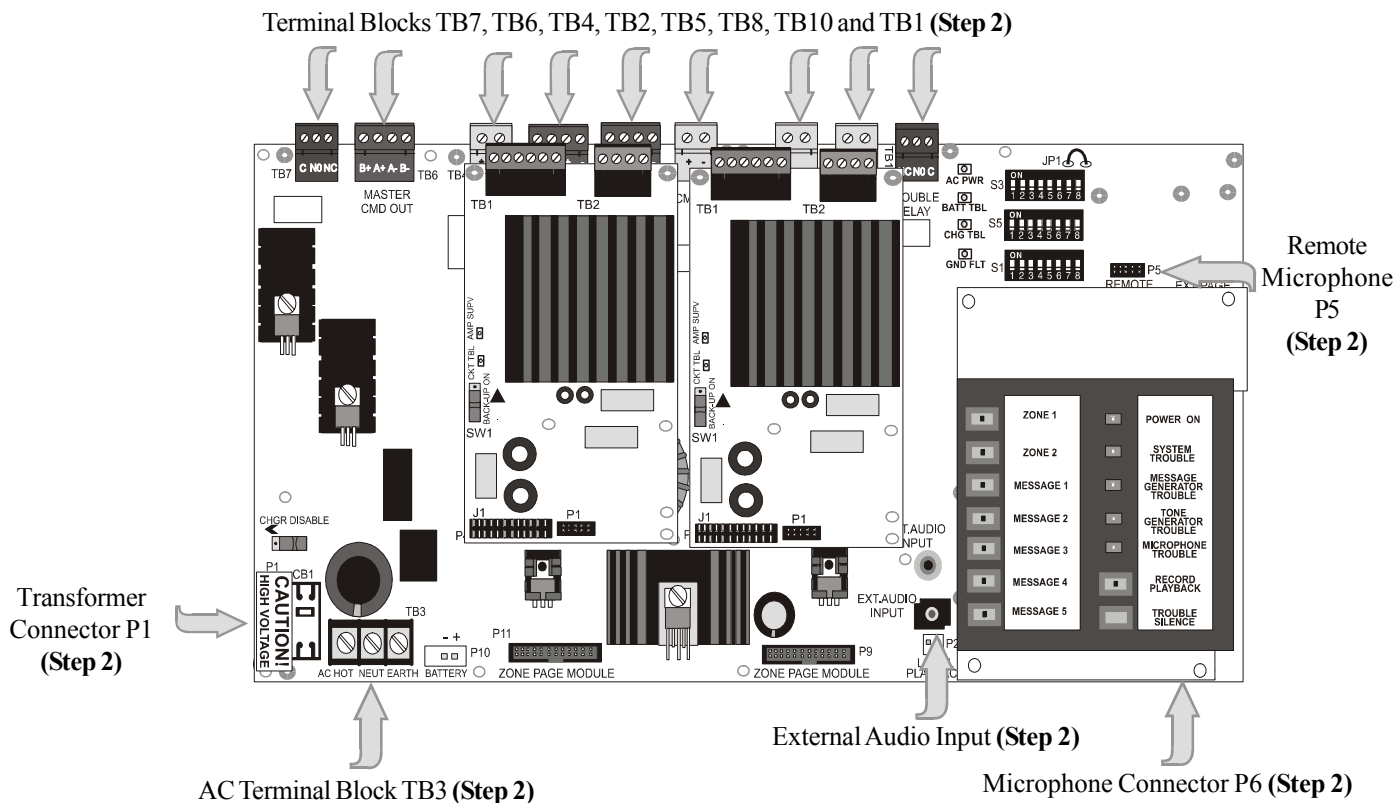
Note that the following steps assume that the optional audio amplifier module is installed. If the optional module is not installed, skip the corresponding step(s) and proceed to the next step.

1. Make certain AC power has been turned off at the main service circuit breaker and the battery cable has been disconnected from connector P10 of the main circuit board.

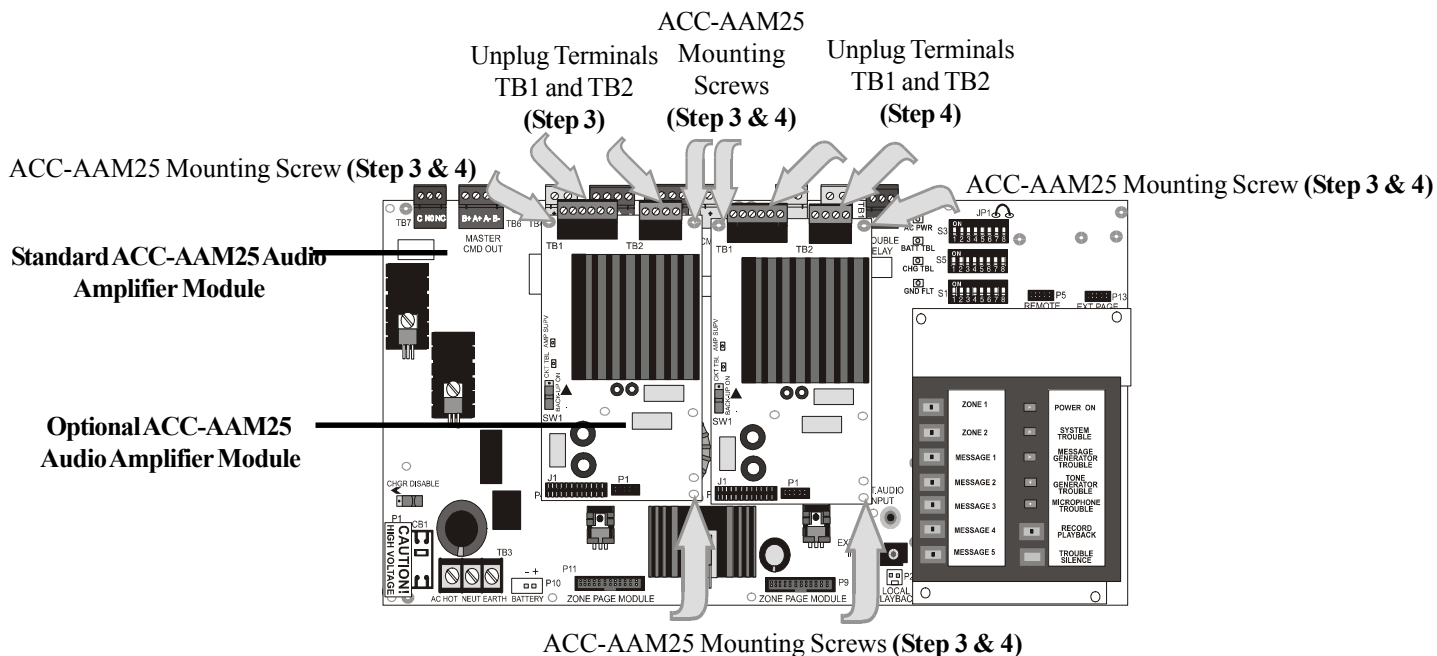


Battery Connector P10
(Step 1)

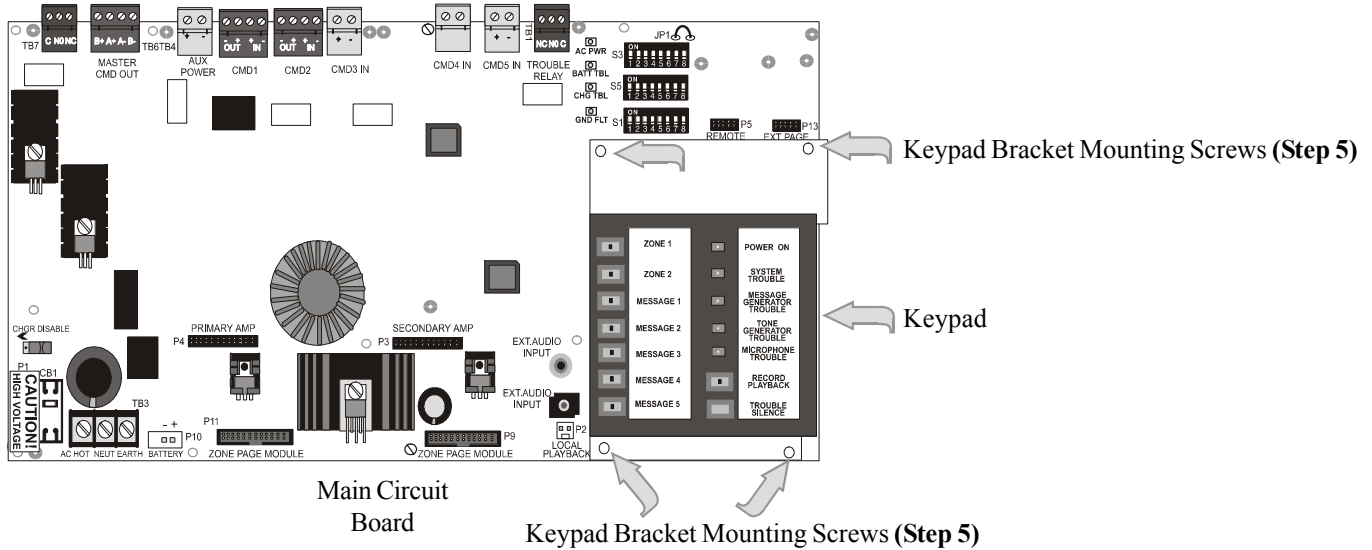
- If wiring is connected, unplug the field wiring terminal blocks from connectors TB7, TB6, TB4, TB2, TB5, TB8, TB10 and TB1 of the main circuit board. Disconnect the AC wiring from TB3 (circuit breaker was turned off in Step 1) and the transformer cable from P1. Disconnect all remaining external connections such as Remote Microphone from P5, Local Microphone from P6 and External Audio Inputs.



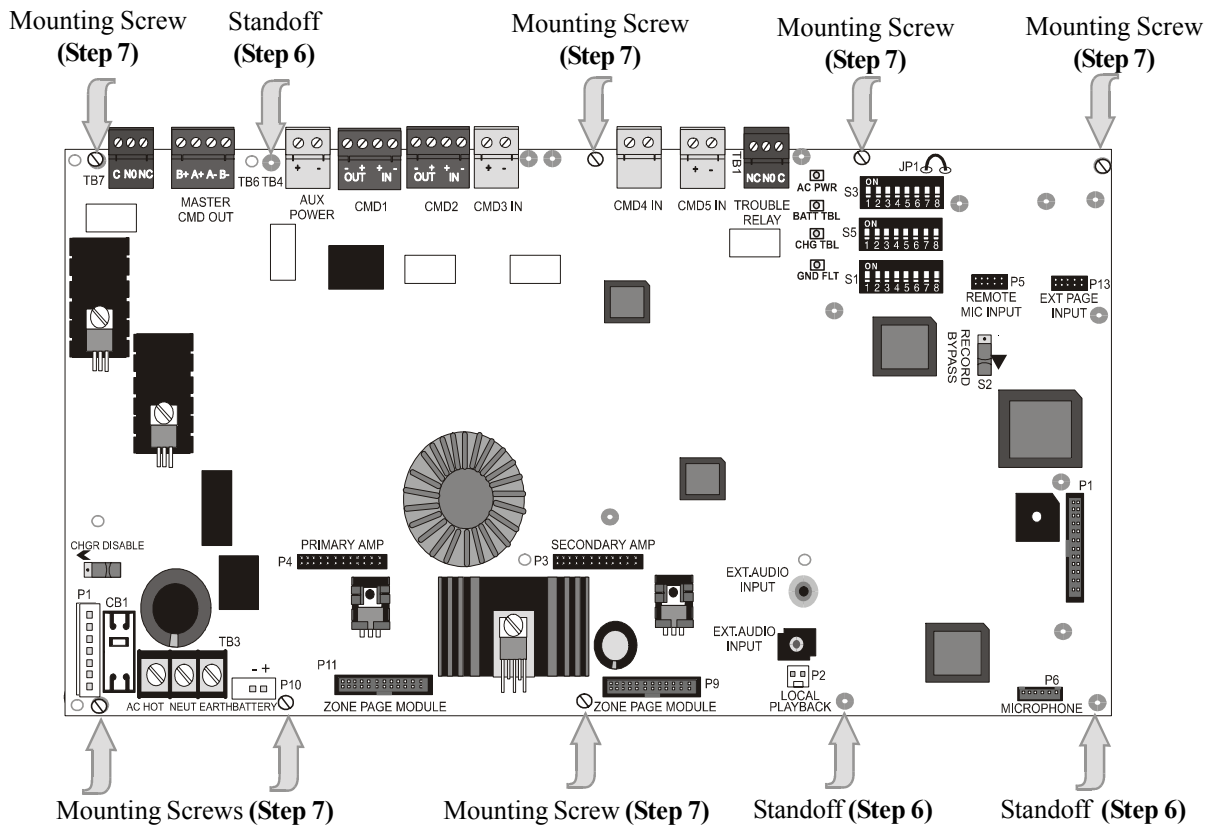
- Unplug the field wiring terminals from TB1 and TB2 of the standard ACC-AAM25 Audio Amplifier Module which is plugged into connector P4 of the main circuit board. Remove and retain the screws and washers from the corners of the module. Carefully unplug the module from the main circuit board and set aside for installation on the new main circuit board.
- Unplug the field wiring terminals from TB1 and TB2 of the optional second ACC-AAM25 Audio Amplifier Module which is plugged into connector P3 in the center of the main circuit board. Remove and retain the screws and washers from the corners of the module. Carefully unplug the module from the main circuit board and set aside for installation on the new main circuit board.



- Remove and save the four screws which secure the keypad bracket to the main circuit board, then remove the keypad from the standoffs. Carefully unplug the keypad cable from connector P1 of the main circuit board and retain the keypad assembly for installation on the new board.



- Remove three threaded metal standoffs (two used to support the lower portion of the keypad and one used to support the upper left corner of the standard audio amplifier) from the main circuit board by grasping and rotating in a counterclockwise direction. Refer to the illustration below for the location of the three standoffs. Retain the standoffs for reinstallation on the new circuit board.
- Remove the remaining mounting screws and washers from the main circuit board and retain for installation of the new circuit board. A total of ten (10) standoffs and/or screws are used to mount the main circuit board.



- Remove the main circuit board from the cabinet.
- Remove the remaining standoffs, which were used to secure the keypad mounting bracket and audio amplifiers, from the main circuit board by removing the screws from the back of the main circuit board. Retain these for installation on the new board.

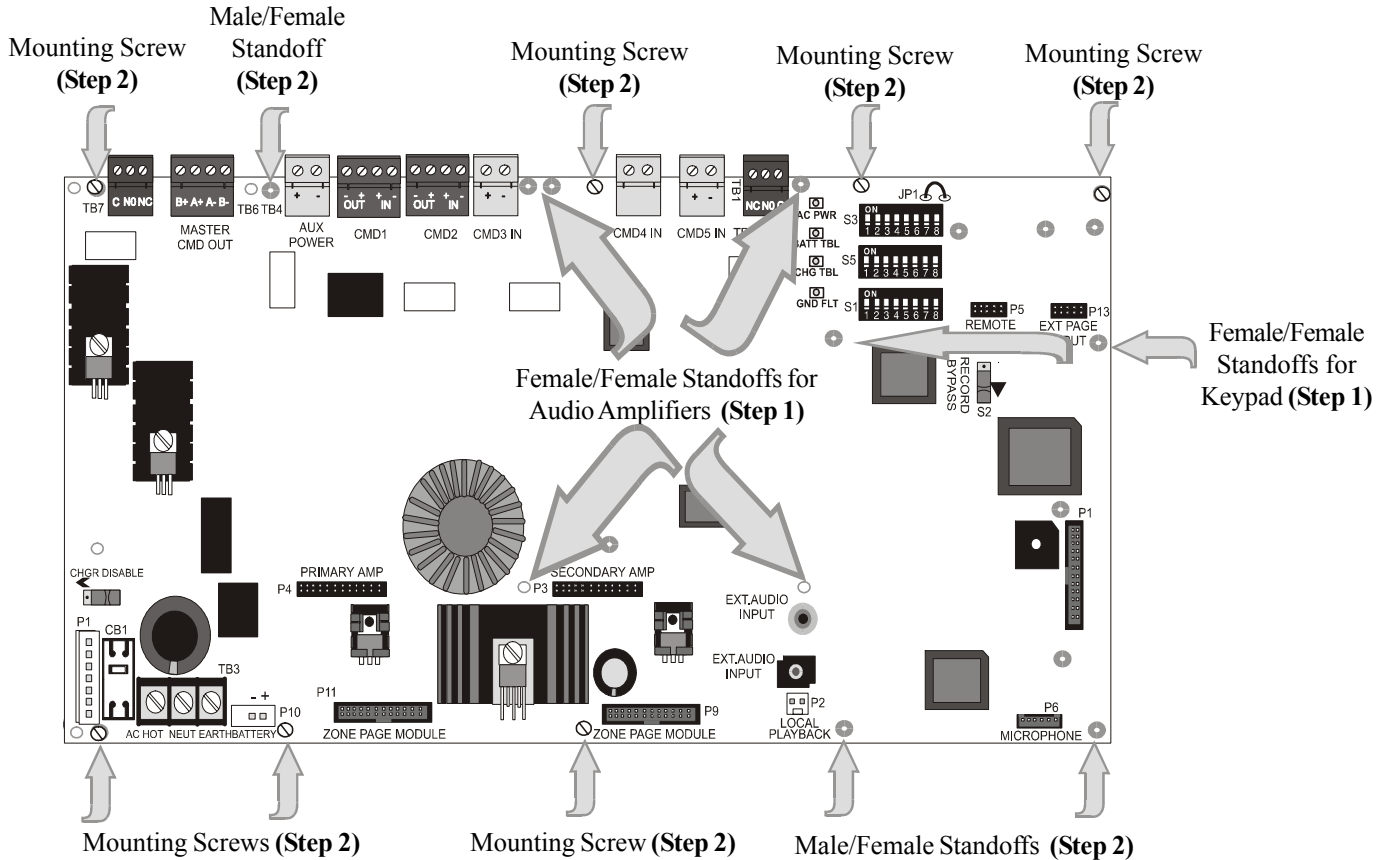
Main Circuit Board Installation

Note that the following steps assume that all modules are to be reinstalled. If the optional audio amplifier module is not reinstalled, skip the corresponding step(s) and proceed to the next step.

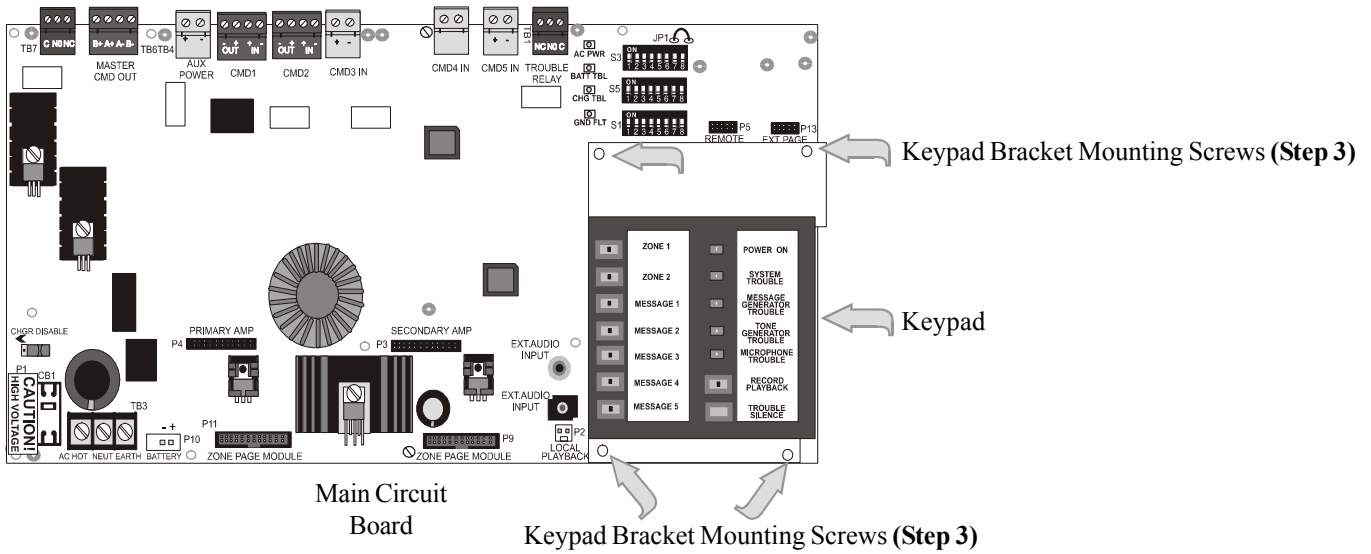
1. Install the standoffs with two female ends, which are used to secure the upper corners of the keypad mounting bracket and the audio amplifiers (except for the upper left corner of the standard amplifier), on the main circuit board by positioning the standoffs over the mounting holes and securing in place with screws through the back of the Main Circuit Board.

Note that there are two different lengths of screws. The shorter screws are used to secure the main circuit board directly to the back box and the longer screws are used to attach standoffs to the main circuit board and option modules to the standoffs. Be certain to use the correct length screw.

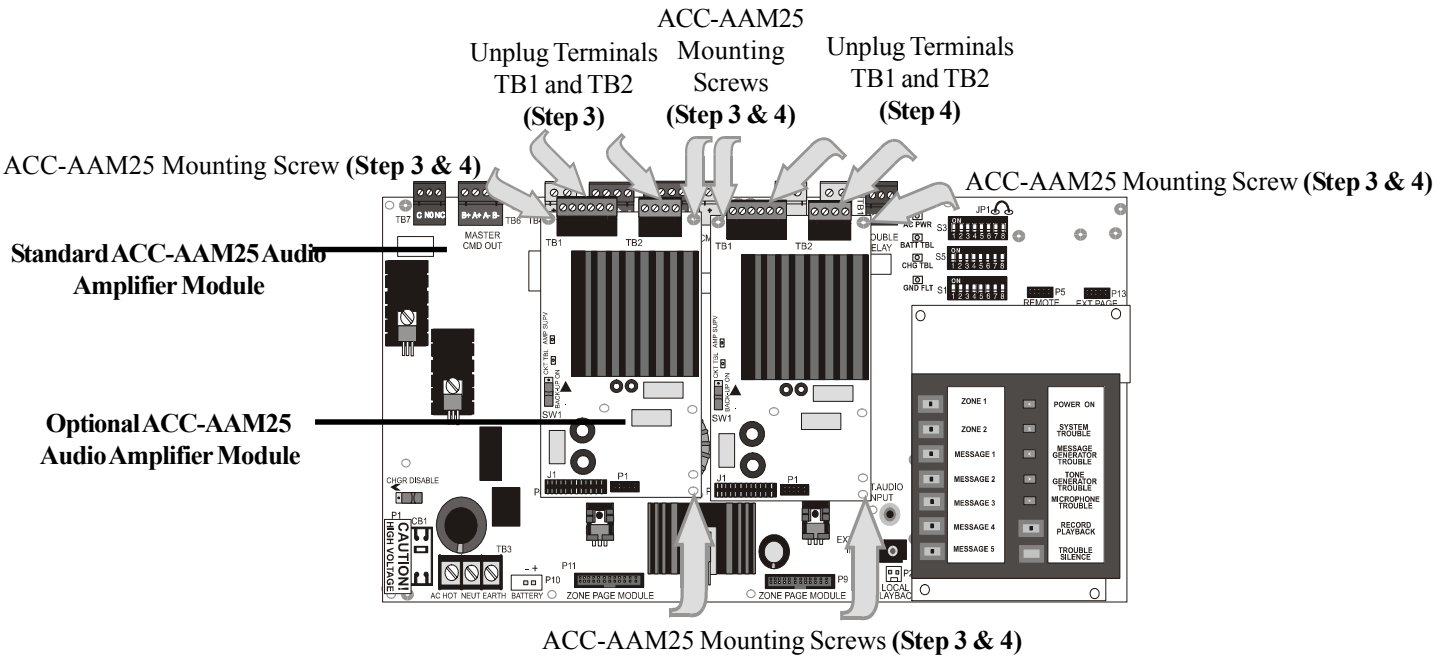
2. Install the new main circuit board into the cabinet using the 7 screws and 3 standoffs (with one male end and one female end) which were retained during removal of the old board.



- Carefully plug the keypad cable into connector P1 of the main circuit board and position the keypad assembly over the mounting standoffs. Secure the keypad assembly to the standoffs with the screws which were previously removed.



- Carefully plug the standard ACC-AAM25 Audio Amplifier Module into P4 of the main circuit board and secure to the mounting standoffs with the previously removed screws. Plug in the field wiring terminal blocks previously removed from TB1 and TB2 of the amplifier module.
- Carefully plug the optional ACC-AAM25 Audio Amplifier Module into P3 of the main circuit board and secure to the mounting standoffs with the previously removed screws. Plug in the field wiring terminal blocks previously removed from TB1 and TB2 of the amplifier module.



5. Plug the field wiring terminal blocks into connectors TB7, TB6, TB4, TB2, TB5, TB8, TB10 and TB1 on the main circuit board. Reconnect the AC wiring from TB3 (circuit breaker was turned off in Step 1 of removal) and reconnect the transformer cable to connector P1 on the main circuit board. Reconnect all remaining external connections such as Remote Microphone into P5, Local Microphone into P6 and External Audio Inputs.
6. After checking all connections and ensuring that there are no shorts between wires, reapply AC power by turning on the main service circuit breaker.
7. Reconnect the battery cable to connector P10 on the main circuit board.
8. Test system completely to confirm proper operation.

Terminal Blocks TB7, TB6, TB4, TB2, TB5, TB8, TB10 and TB1 (Step 5)

