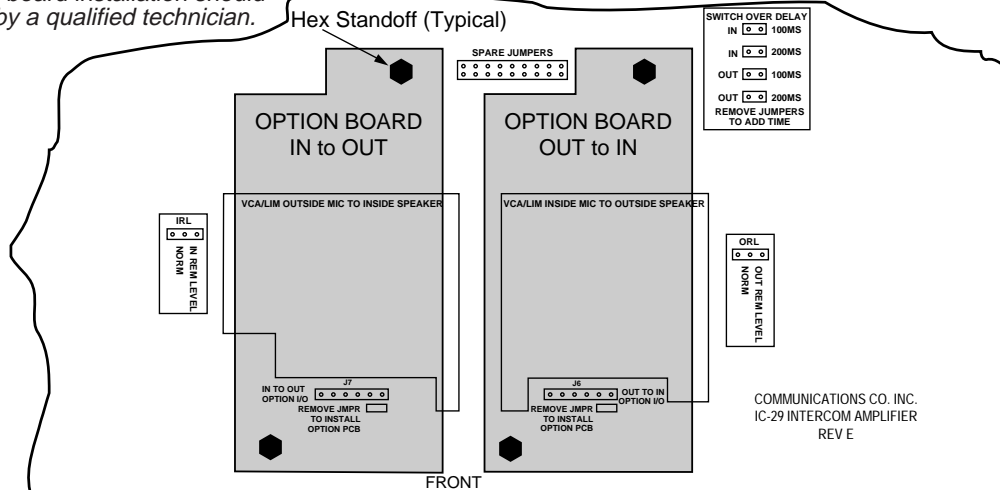




## INSTALLING AN OPTION BOARD

NOTE: Option board installation should only be done by a qualified technician.



Installation requires a 1/4" nutdriver or pliers, and a small phillips screwdriver.

1. Unplug the IC-29.
2. Remove the cover.
3. Locate the option board connector pins. They are in the center, toward the front of the IC-29.
4. Decide on which side you need to install the option board:
  - IN to OUT. Affects the inside microphone and the outside speaker.
  - OUT to IN. Affects the outside microphone and inside speaker.(Usually a Delay Board is installed on the IN to OUT side only.)
5. Install the standoffs supplied with the option boards.
  - a. Unscrew and save the two phillips-head screws in the IC-29 that will be replaced by the standoffs. (See figure)
  - b. Using the 1/4" nutdriver or pliers, screw in the standoffs where you unscrewed the phillips-head screws.
6. Remove the black jumper on the pins on the right side of the option board connector.
7. Line up the two standoffs and the holes in the option board, and carefully install the option board on the connector pins, taking care not to bend the pins.
8. Take the two screws you removed earlier and screw them into the standoffs, securing the option board to the IC-29 assembly.
9. Install the cover back on the IC-29.

## OPTIONAL NOTCH FILTER SETUP

Turn both notch filters maximum clockwise (highest frequency).

Advance the inside level to maximum.

If there is feedback, reduce the level to the threshold of feedback, allowing feed-back to barely take place. Adjust one notch filter until the feedback stops. Advance the level control clockwise until feedback returns (if possible) and adjust the notch filter for minimum level.

Sometimes, when the level is advanced, the system will now feedback at a different frequency. Repeat the procedure above with the second notch without affecting the adjustment of the first.

Sometimes there is no feedback. However, the sound has a poor quality. Again, the use of a radio or assistant is useful. Even better is a noise source and a real-time analyzer.

Advance the inside level to maximum. Adjust one notch at a time to remove the peaky sound.

Since the notch filters have different ranges with some overlap, it is desirable to know at which frequency the feedback occurs. This can be accomplished by connecting a frequency counter between common and one side of the inside speaker.