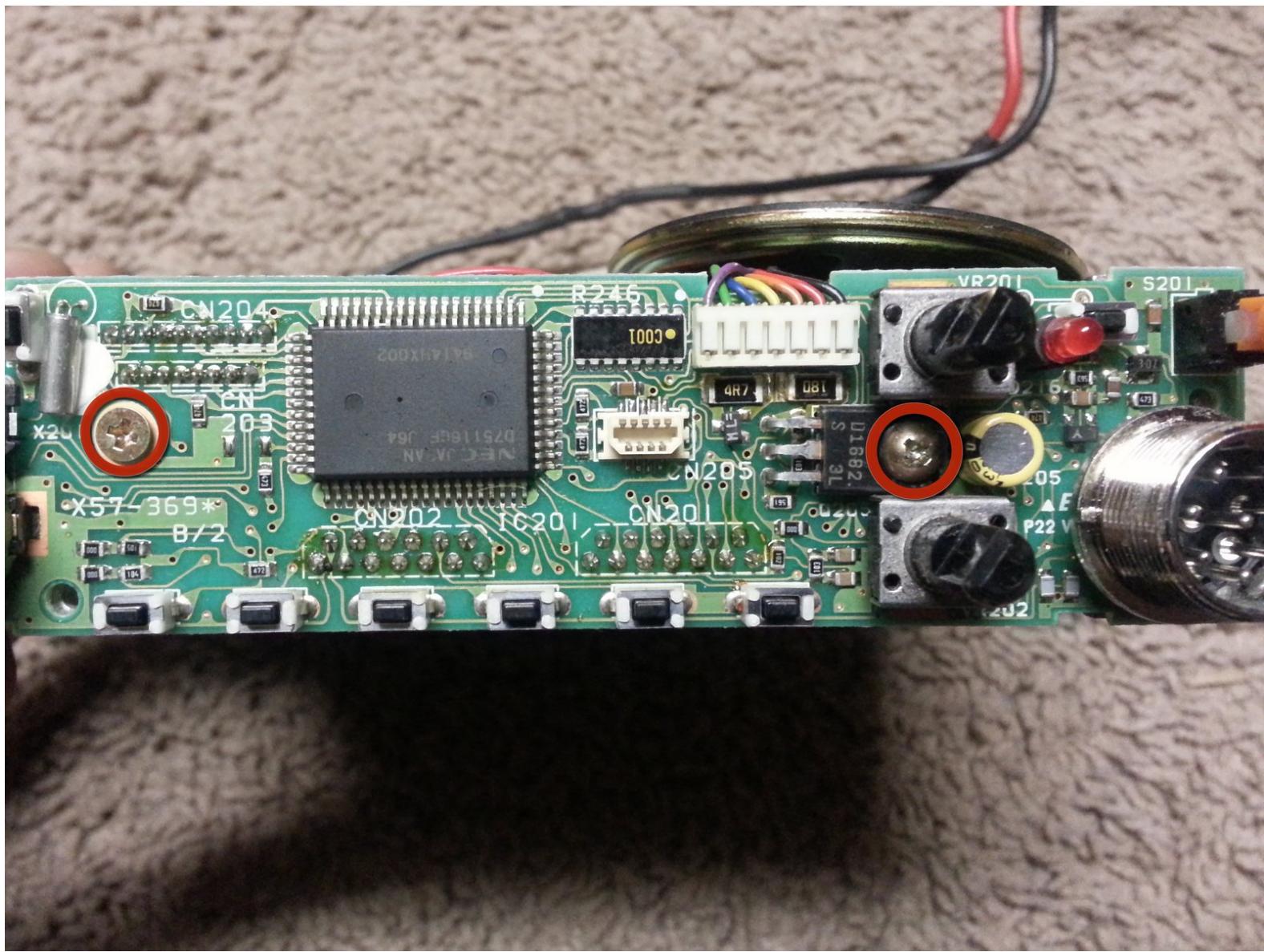




# Disassembling Kenwood TM-241a Control Board

This guide shows how to remove the control board from the body of the radio.

Written By: Josh



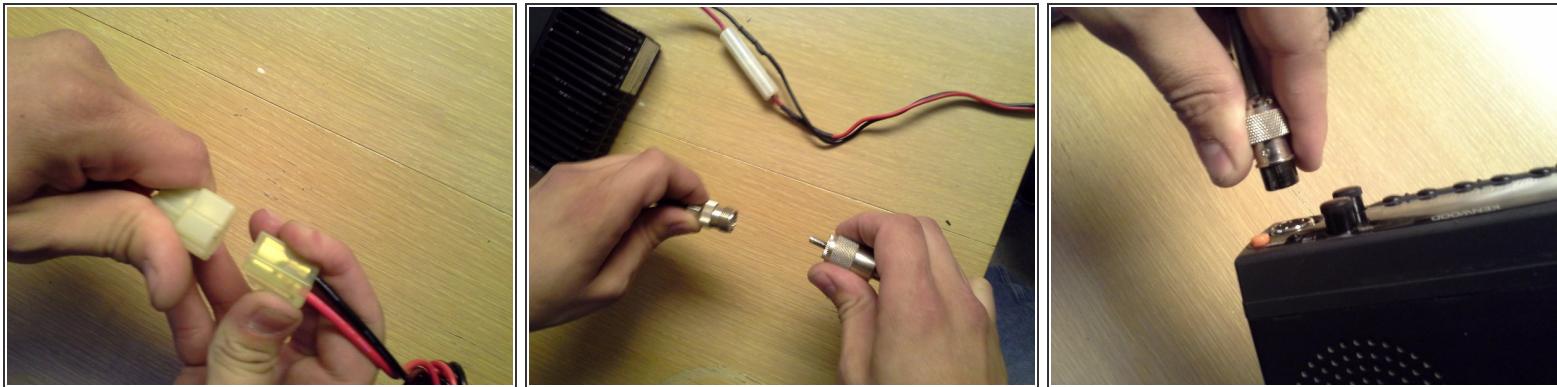
## INTRODUCTION

This guide will show which screws need to be taken out to allow the control board to be removed from the radio. The control board must be taken out to replace a dead backup battery.

### TOOLS:

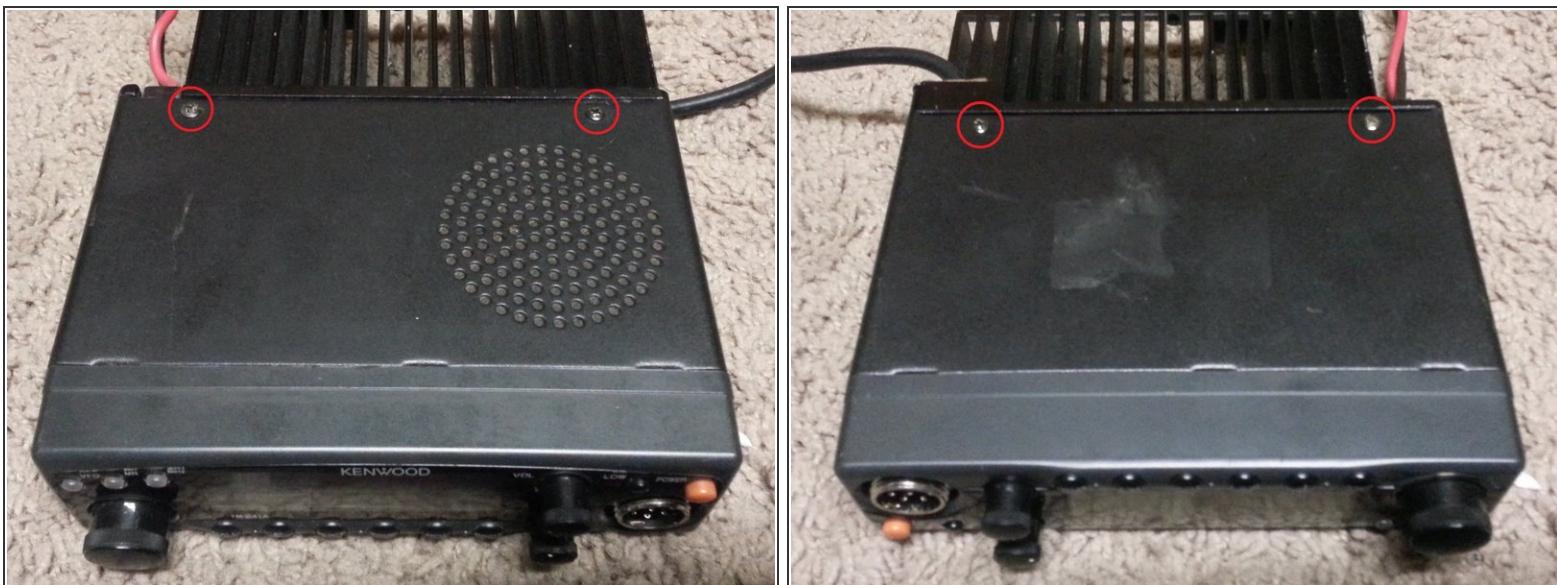
- [Phillips #000 Screwdriver](#) (1)
- [Phillips #1 Screwdriver](#) (1)
- [Snap Ring Pliers](#) (1)

## Step 1 — Main body



- Push down on the tab that locks the power connection together, and slide the two connectors apart.
- Unscrew the antenna downlead from the antenna pigtail coming out of the radio, and pull the two apart.
- Unscrew the microphone connector from the front panel of the radio, and pull it out.

## Step 2



- Using a #1 phillips screwdriver, remove the two screws that secure the top cover to the radio.
- Do the same to the two screws on the bottom.

## Step 3



- There are two tabs that sit underneath the sides of the face plate. They have a tendency to break out the plastic over top of them while removing the covers. To help prevent this, push inward on the side of the cover, just behind the face plate as you take off the covers.
- Lift up on the rear of the top cover, and slide it towards the back of the radio to disengage the three tabs at the front.
- Repeat for the bottom cover of the radio.

## Step 4 — Front Panel Assembly



- On the left side of the screen, gently pull on the tuning knob, separating it from the radio.
- The upper knob on the right is the volume. Gently pull it away from the radio to remove it.
- The lower knob on the right is the squelch knob. Remove it in the same way as the other two knobs.
- Set the three knobs aside, so they can be put back on later.

*(i)* The volume and the squelch knob are the same part and can be interchanged.

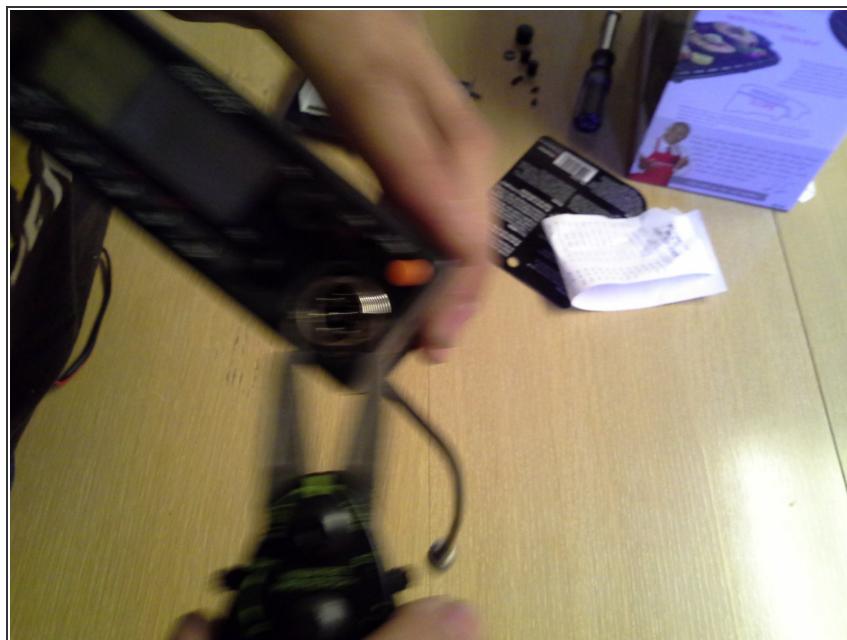
## Step 5



- Below where the tuning knob was, there is a 7/16" nut that helps to secure the face plate to the radio. This needs to be removed to allow the face plate to be taken off.

 Behind the nut is a small washer. Be sure to pull it off as well and set the two aside so they do not get lost.

## Step 6



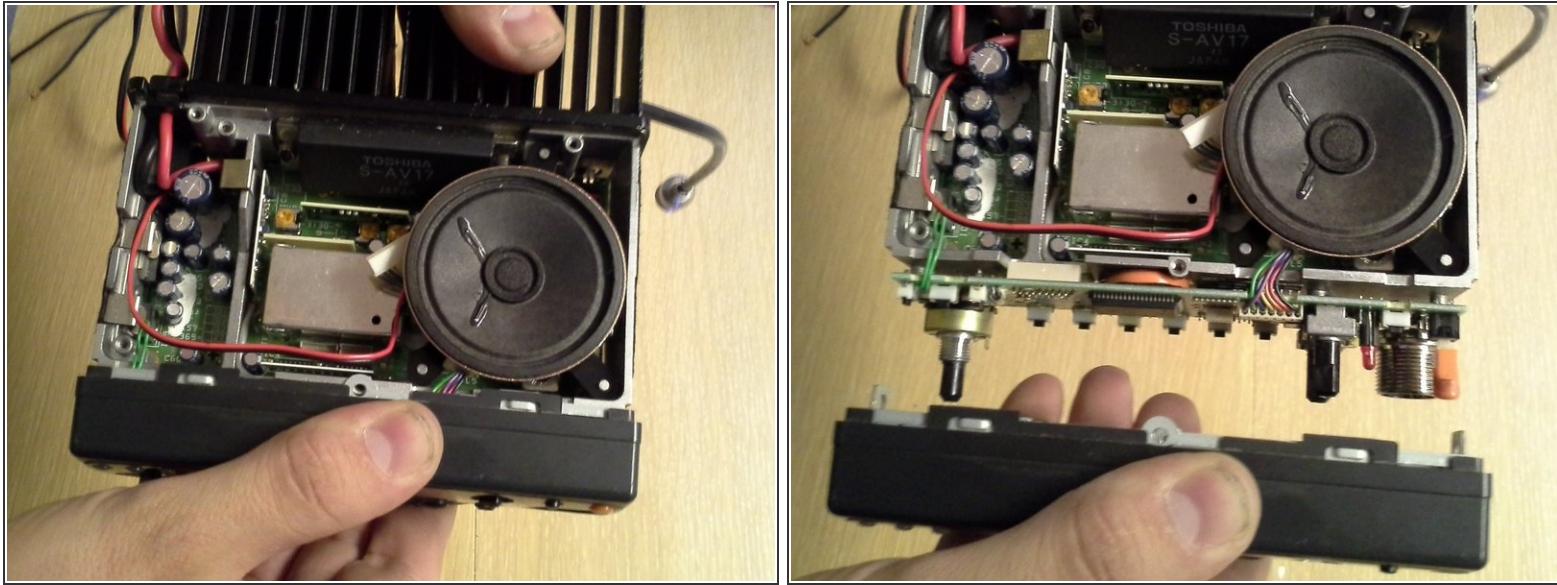
- Below the jack for the microphone, there is a nut. This is not a standard hex headed nut. It has four notches around the edge of the nut. A pair of snap ring pliers works well to engage the notches, allowing you to remove the nut.

## Step 7



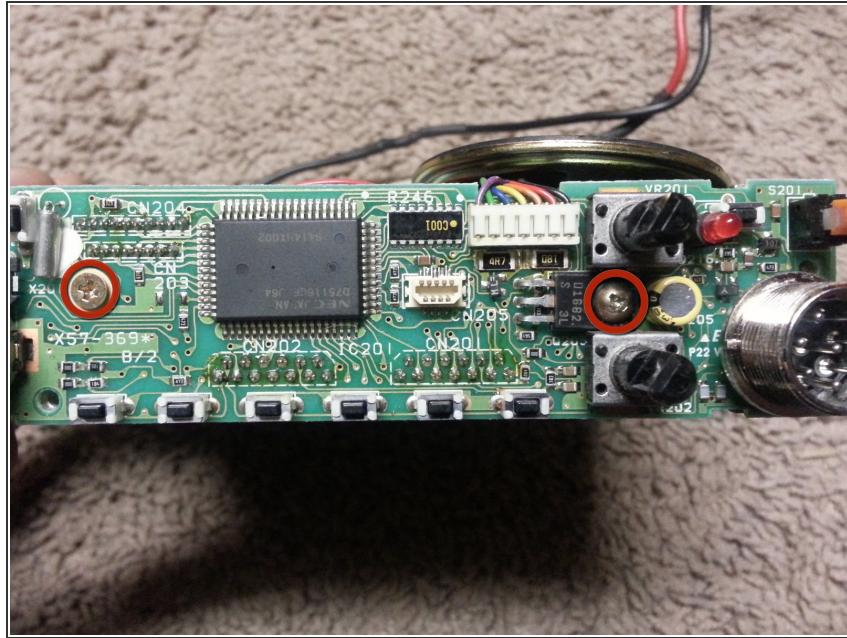
- There is a screw on each of the four sides (top, bottom, and each side) of the face plate. Removing these screws will allow the face plate to be removed from the radio body.
- *(i)* There are two types of screws used in this step. The screws on the top and bottom are different from the screws from the sides. Note which style of screw is used on each side.

## Step 8



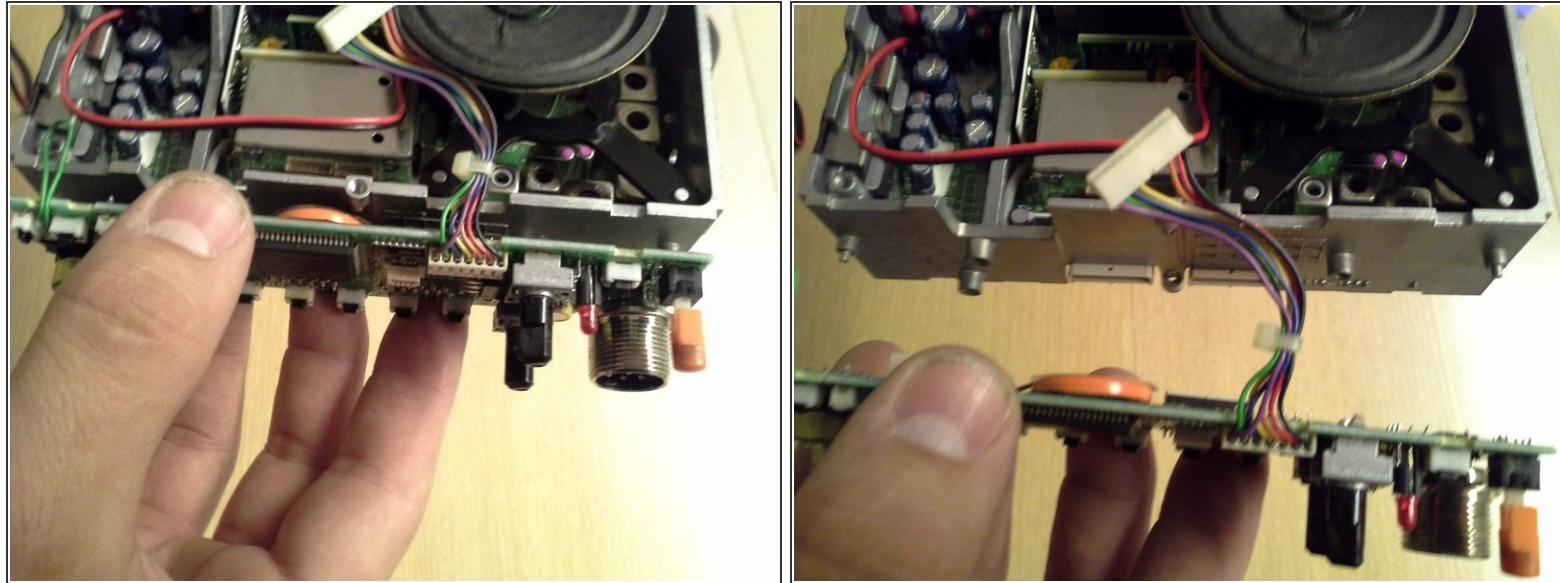
- The face plate can now be removed from the body of the radio. Gently pull on the face plate to separate it from the radio. It might require a little bit of wiggling to remove.
- **⚠** Be careful when removing the front panel. The connectors inside are known to have weak solder joints, and it is possible to pull them off of the circuit board.

## Step 9 — Control Board



- On the right side of the board, there is a screw that goes through a transistor, that secures the control board to the radio. Remove this screw, and set aside.
- Remove the screw on the left that holds the board to the radio. Set it aside.
- The two screws that are removed during this step are not the same. Note which screw comes from which side. The screw with the tapered head goes on the left. The screw with a flat mounting surface goes on the right.

## Step 10



- Pull the control board away from the radio body. It will be slightly more stubborn than the face plate was.

**⚠** There are two connectors that have to be disconnected. Pull hard enough to separate the connectors, but not hard enough to pull them off of the circuit board.

To reassemble your device, follow these instructions in reverse order.