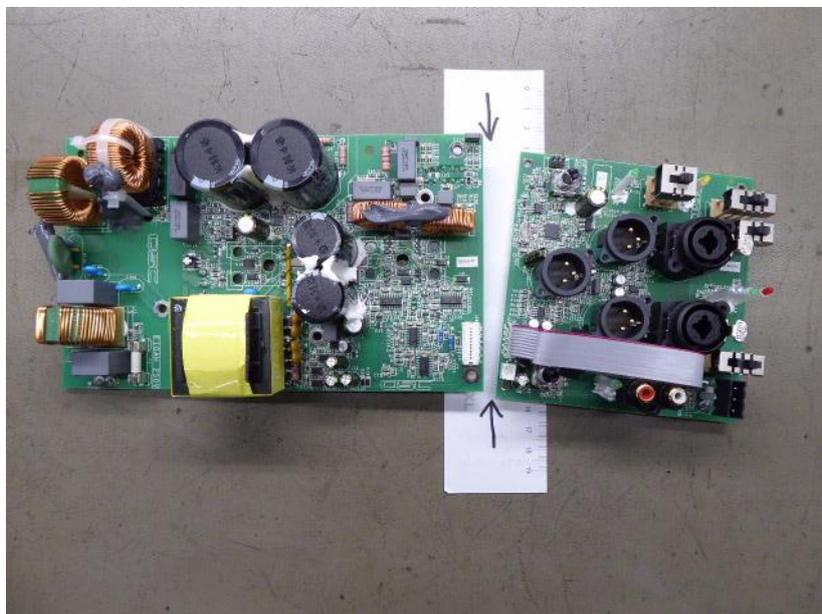
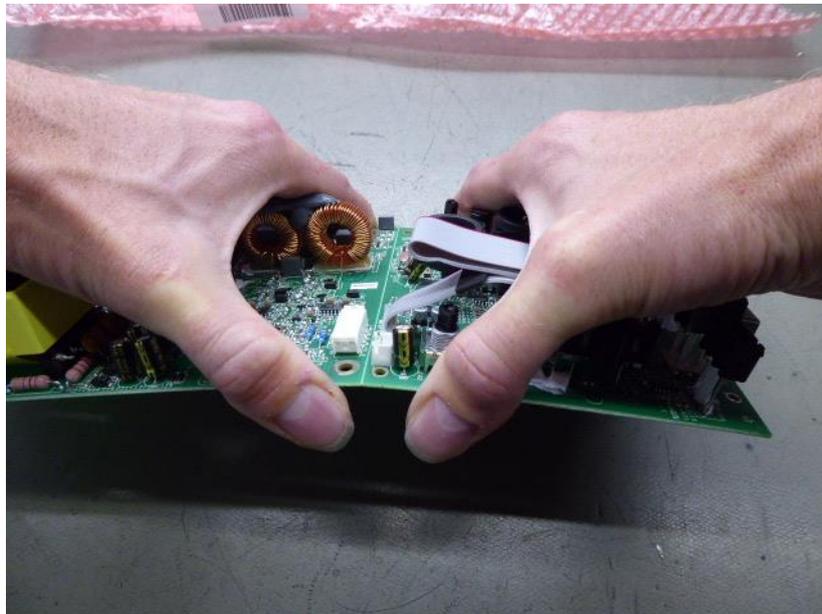
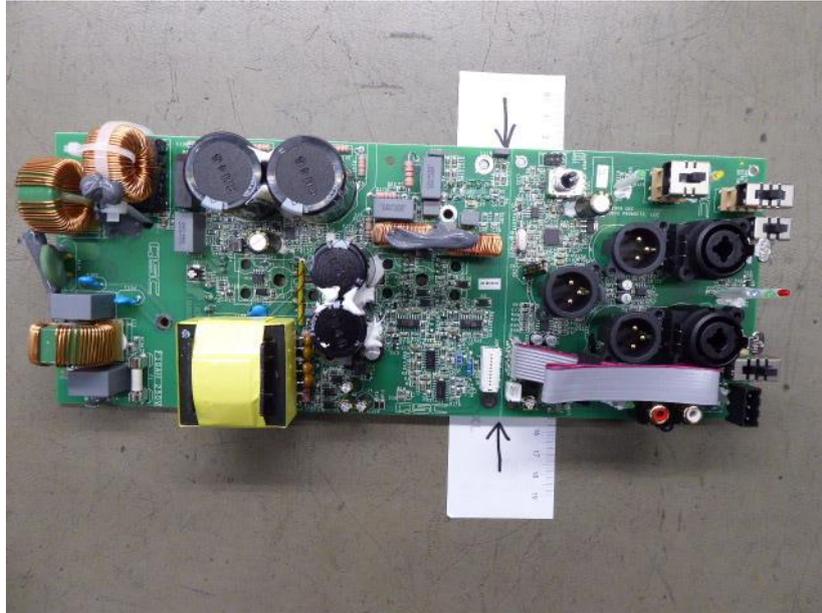


SEPERATE THE MAIN AND INPUT BOARD BEFORE INSTALLING



# 7. BOP disassembly and repair procedures

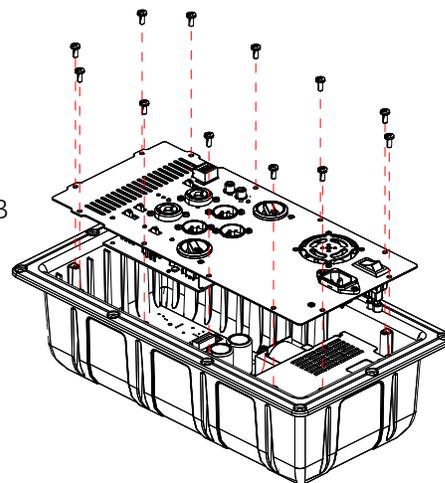
## 7.1 Faceplate

### Removal

1. Remove the 10 screws around the perimeter of the BOP. These screws secure the faceplate to the main bucket.
2. Partially lift the faceplate assembly out to gain access to the ribbon cable wire trap.
3. To release the ribbon cable, press down on the white housing of connector J2B (see Figure 7.2).

**Note:** Do not pull up forcefully on the ribbon cable. It should come out easily if the white housing is firmly being pressed down.

4. Remove the four screws that secure the EMI shield to the main bucket.
5. Remove the EMI shield from the assembly.
6. Disconnect the two AC power wires from J14 (brown wire) and J15 (blue wire).
7. Separate the faceplate assembly from the main bucket assembly. Complete.



### Installation

1. Install the input/DSP and PSU/amplifier PCBs to their original locations.
2. Connect the two AC power wires (J14 brown, J15 blue) to the PSU/amplifier PCB.
3. Install the EMI shield.
4. Fasten the 4 screws that secure the EMI shield to the main bucket.
5. Prepare the ribbon cable for insertion. Straighten and align the wires coming out of the ribbon cable.
6. Insert the ribbon cable into the wire trap.

**Note:** If the ribbon cable doesn't go in easily, press down on the white housing of connector J2B so that the cable easily goes into the wire trap.

7. Set the faceplate assembly on the main bucket and align the holes along the perimeter of the faceplate.
8. Fasten all 10 screws to complete installation.

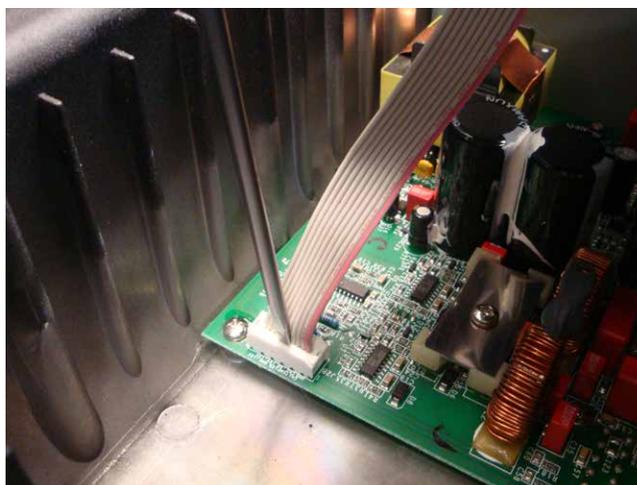


Figure 7.2 - Put pressure on the white housing to release the ribbon cable

## 7.2 PSU/amplifier board

### Removal

1. Remove the faceplate assembly to gain access to the PSU/amplifier PCB. Follow removal instructions in “7.1 Faceplate” on page 23.
2. Remove all screws that secure the PSU/amplifier PCB to the bucket chassis.
3. Remove the rectangular plate and nylon spring seat.
4. Gently lift the PSU/amplifier PCB out of the bucket.

### Installation

1. Prepare the PSU/amplifier PCB for installation. Apply new thermal grease to the large MOSFETs and thermal sensor mounted to the bottom-side of the PCB.
2. Verify that the thermal pads are clean and placed in their appropriate locations on the bottom of the bucket chassis.

**Warning:** Thermal pads are also used to isolate the body of the MOSFETs from the bucket chassis (ground). If there is any part of the MOSFET grounded to the chassis, the BOP won't power on or output audio.

3. Place the PSU/amplifier PCB in the bucket chassis and align the mounting holes.
4. Set the nylon spring seat and the rectangular plates.
5. Beginning with the corner screws, fasten all short screws to secure the PCB to the chassis.
6. Fasten the two long screws last. This will press the MOSFETs against the chassis for good heat transfer.

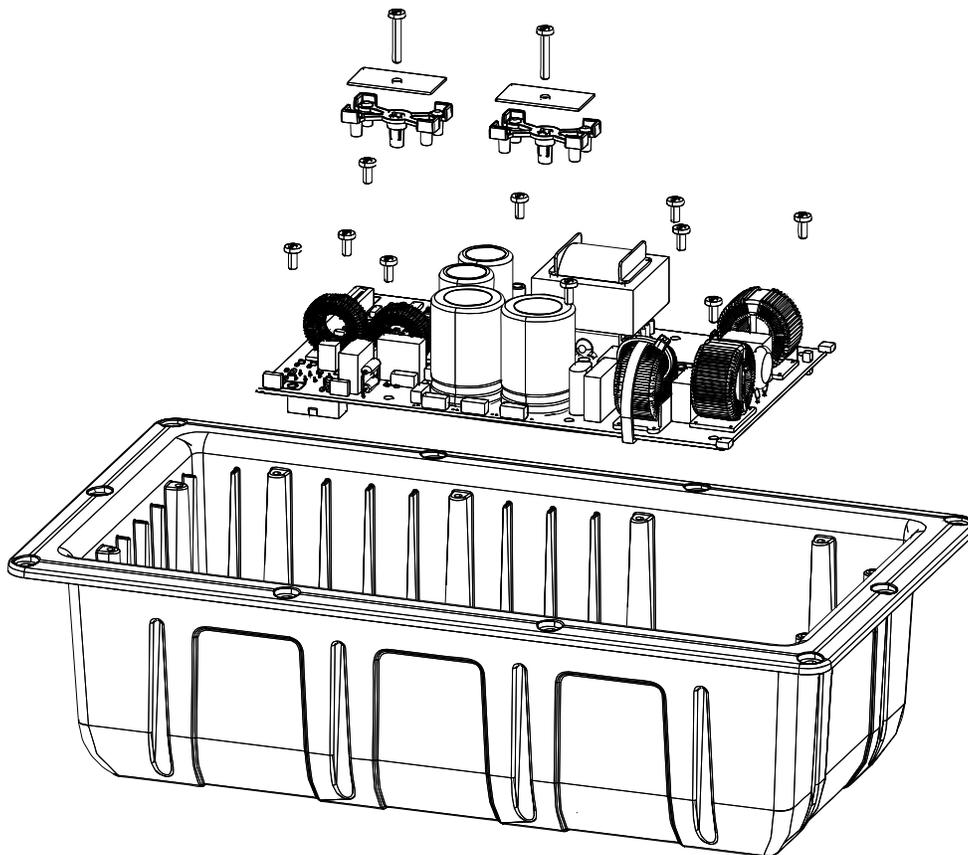


Figure 7.3 - PSU/amplifier PCB removal from the bucket chassis.

## 7.3 Input/DSP board

### Removal

1. Remove the faceplate assembly for easy access to the input/DSP PCB. Follow removal instructions in "7.1 Faceplate" on page 23.
2. Remove all screws securing the XLR and RCA connectors to the faceplate.
3. Remove all screws securing the input/DSP PCB to the faceplate's standoffs.
4. Remove the gain knob(s).
5. Disconnect the fan wiring harness.
6. Fully remove the input/DSP board from the faceplate.

### Installation

1. Connect the fan wiring harness.
2. Install the input/DSP board into the faceplate.
3. Install the gain knobs. They will temporarily hold the input board in place.
4. Fasten the screws securing the input/DSP PCB to the faceplate's standoffs.
5. Fasten the screws securing the XLR and RCA connectors to the faceplate.

## 7.4 Power inlet, power switch, and fan

### Power inlet notes:

- Soldering is required to install a new IEC power inlet
- Use the removal instructions in "7.1 Faceplate" on page 23 to gain access to the power inlet.
- Two screws secure the power inlet to the faceplate.
- Brown is line, blue is neutral, and green is ground. The power inlet has AC labels near the soldering points.

### Power switch notes

- Use the removal instructions in "7.1 Faceplate" on page 23 to gain access to the power switch.
- Fastons are connected to the power switch. If the fastons are damaged or weak, crimp on new ones.
- The power switch has two tabs holding it in place to the faceplate. Scrape off the glue to uncover these tabs.
- The easiest way to remove the power switch is to cut the tabs with a wire cutter and push the switch out.

### Fan notes

- Use the removal instructions in "7.1 Faceplate" on page 23 to gain access to the fan.
- To remove the fan, a series of nuts and washer must be removed first.
- Replace the fan if it's dirty, noisy, or not functional.
- Test the fan with a DC power supply to confirm failure.

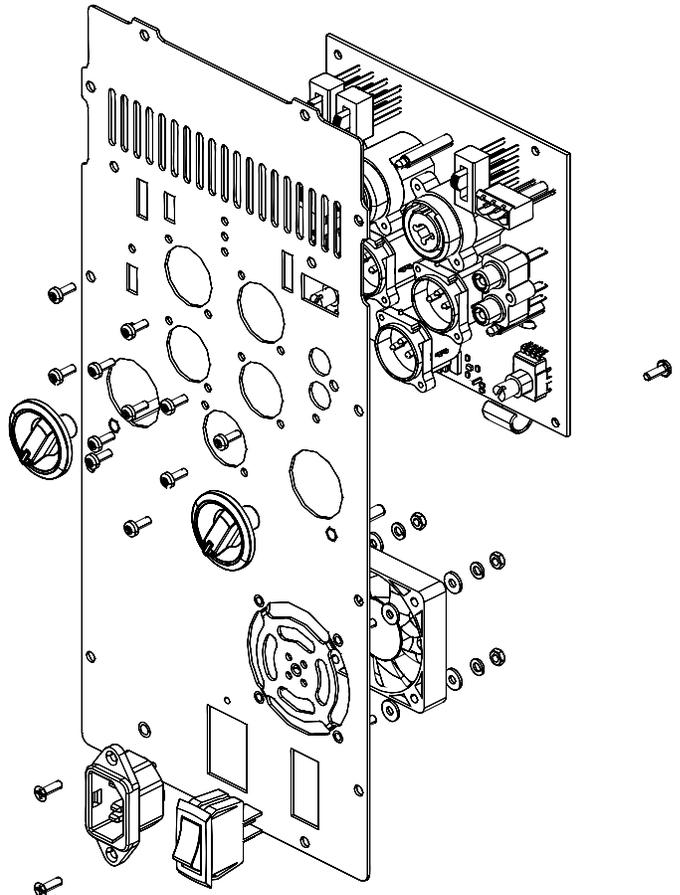


Figure 7.4 - Exploded-view of BOP faceplate assembly