SUMMIT Stat Panel Replacement (Page 1 of 13)

Replacement Accessories (included):

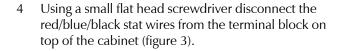
Stat Panel

Tools required (not included):

5/64" Allen Tool 6" piece of insulated wire stripped at both ends. Small Flathead Screwdriver 1/8" Allen Tool 6mm Allen Tool 3/16" Wrench (open ended) 5/32" Allen Tool

Note: This procedure requires 2 people.

- 1 Turn off amp. Unplug the power cord(s). Disconnect all signal cables from the speaker. Prepare a surface with padding and blankets to protect the speaker as you work on it.
- 2 Use a 5/64" Allen Tool to remove 2 screws at the top of the backplate. Lift and remove cabinet top plate (figure 1).
- 3 Using a short piece of insulated wire stripped on both ends, discharge the stat panel by touching the ends of the wire to the red and blue terminals on top of the cabinet (figure 2).



Stat Panel Terminal block wiring configuration: Red stat wire to Red wire Blue stat wire in middle terminal Black stat wire in remaining terminal



Figure 1

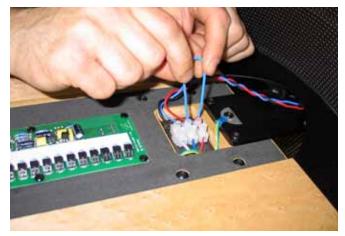


Figure 2

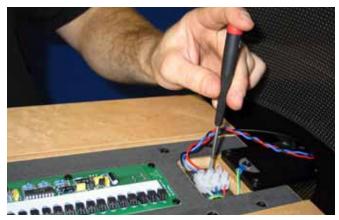


Figure 3



SUMMIT Stat Panel Replacement (Page 2 of 13)

- 5 Inspect the work surface to assure that it is clean and free of debris. Carefully lay the Summit on its side.
- 6 Using a 1/8" Allen Tool, remove 3 screws from the stat frame top mounting-bracket. Note the grounding wire and lock washer connected to the center screw (figure 4).

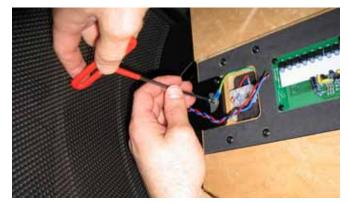


Figure 4

7 Using a 1/8" Allen Tool, remove 3 screws from the stat frame bottom mounting-bracket (figure 5).

NOTE: There are 6 screws in this bracket. Do not remove the 3 screws that attach this bracket to the cabinet. Only remove the 3 screws that attach the stat frame to this bracket.

NOTE: After removing these screws the stat frame is no longer connected to the cabinet. Continue to hold it in place.



Figure 5

While holding the stat panel in place, have someone else gently lift the front of the cabinet. Pull the stat frame away from the cabinet (figure 6).

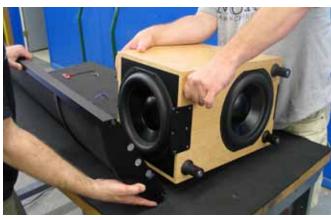
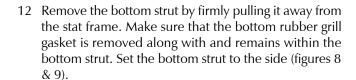


Figure 6

Stat Panel Replacement (Page 3 of 13)

- 9 Move the woofer cabinet to a safe location away from the work surface. Clear the work surface of any loose parts or tools.
- 10 Carefully lay down the stat frame with the front of the panel in contact with the table.
- 11 Using a 6mm Allen Tool remove 2 cap nuts from the bottom strut at the bottom of the stat frame (figure 7).



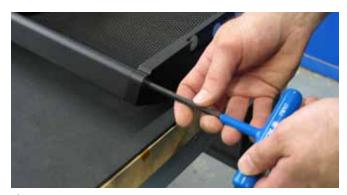


Figure 7



Figure 8



Figure 9

Stat Panel Replacement (Page 4 of 13)

13 Gently slide the woofer grill out of the stat frame and remove the top rubber grill gasket (figures 10 & 11).

NOTE: Keep the gaskets separated—the top grill gasket is intentionally 1/2" shorter than the bottom grill gasket.



Figure 10



Figure 11

14 Note the threaded rods sticking out of the bottom of the stat frame side rails. Grab the stat frame by the side rails and lift it upright. Using firm pressure pull the stat frame down, causing the threaded rod ends to push into the work surface. Continue to pull down until the top strut disengages from the side rails and the bottom of the side rails meet the work surface (figures 12 & 13).



Figure 12



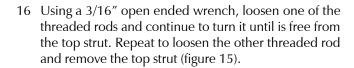
Figure 13



Stat Panel Replacement (Page 5 of 13)

15 Lay the stat frame back down on the work surface. Gently pull one side of the top strut away from the side rail a fraction of an inch. Gently pull the other side of the top strut away from other side rail a fraction of an inch. Continue back and forth, gently pulling the top strut until it is 2 inches away from the side rails.

NOTE: In this step you may have to firmly pull at the top strut, but DO NOT use excessive force to move the top strut.



NOTE: There is a flat area on the threaded rod itself where the wrench is to be used.

NOTE: DO NOT PULL EITHER OF THE THREADED RODS OUT OF THE SIDE RAILS.

NOTE: DO NOT MOVE OR REMOVE THE TAPERED BUSHINGS LOCATED NEAR THE TOP OF EACH THREADED RODS.

17 Move the top strut to a safe location away from the work surface (figure 16).



Figure 14



Figure 15

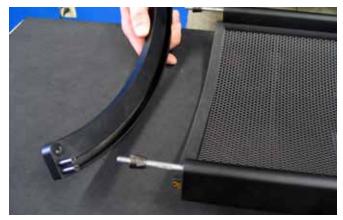


Figure 16



Stat Panel Replacement (Page 6 of 13)

18 Using a 5/32" Allen Tool, loosen and remove two screws from one side of the middle strut (figure 17).



Figure 17

- 19 Gently pivot the loose side rail away from the middle strut. Shift one hand towards the top of the loose side rail and pull the side rail free from the stat panel (figures 18 & 19).
 - NOTE: Take care not to twist the side rail or otherwise apply torque to the stat panel.
- 20 Move the loose side rail away from the work surface.
- 21 Repeat steps 18-20 to remove the other side rail.



Figure 18

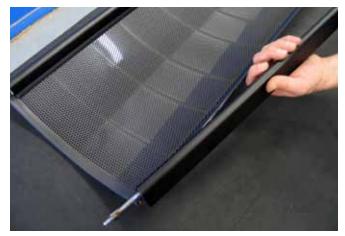


Figure 19

SUMMIT Stat Panel Replacement (Page 7 of 13)

22 Using a 1/8" Allen Tool, remove two screws from the mounting-bracket attached to the middle strut. Move the mounting-bracket away from the work surface (figure 20).

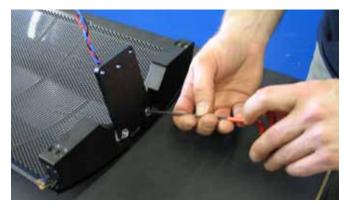


Figure 20

- 23 Gently pull one side of the middle strut away from the stat panel a fraction of an inch. Gently pull the other side of the middle strut away from the stat panel. Continue to alternate, gently pulling each side of the middle strut until is free from the stat panel (figure 21).
- 24 Remove old stat panel from work surface and prepare to install the replacement panel.
 - NOTE: When installing the new panel, do not bend, twist, or squeeze the panel in any way—be careful to maintain the original curve of the stat panel.
- 25 Feed the stat panel wires through the hole in the middle strut (figure 22).



Figure 21

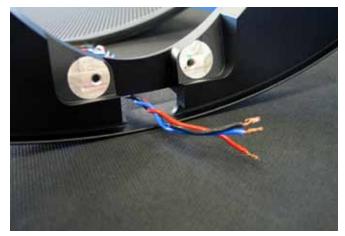


Figure 22

SUMMIT Stat Panel Replacement (Page 8 of 13)

26 Centering the middle strut on the stat panel, push the bottom of the stat into the groove on the middle strut. The edge of the stat perforation and the edge of the middle strut should align (figures 23 & 24).

NOTE: If you are having trouble installing the stat into the middle strut groove you may need to use an extremely small amount of lubricant. We recommend a small drop of dish soap applied to the bottom stat rubber gasket with your finger. DO NOT get dish soap on the stat panel itself.



Figure 23



Figure 24

27 Gently, bend the stat wires up. Using a 1/8" Allen Tool and 2 screws, reinstall the middle strut mounting-bracket. Firmly hand tighten the screws (figures 25 & 26).

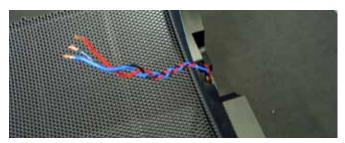


Figure 25

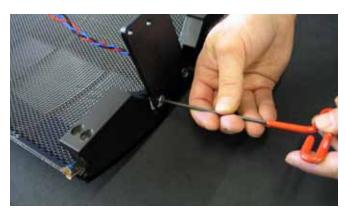


Figure 26

Stat Panel Replacement (Page 9 of 13)

28 Reinstall one of the side rails. Line up the side rail and middle strut screw holes. Using a 5/32" Allen Tool and 2 screws attach the side rail. Reattach the other side rail (figures 27 & 28).



Figure 27



Figure 28

29 Using a 3/16" open ended wrench screw one of the threaded rods back into the top strut until the tapered bushing is flush with the top strut. DO NOT overtighten. Repeat to attach other threaded rod to the top strut (figure 29).

NOTE: There is a flat area on the threaded rod itself where the wrench is to be used.



Figure 29

SUMMIT Stat Panel Replacement (Page 10 of 13)

30 Applying firm but even pressure, push both sides of the top strut into place. To flush the top strut to the side rails it may be necessary to gently hit the top strut with a padded rubber mallet or the side of your fist.

NOTE: If you are having trouble installing the stat into the top strut groove you may need to use an extremely small amount of lubricant. We recommend a small drop of dish soap applied to the stat rubber gasket with your finger. DO NOT get dish soap on the stat panel itself.

31 Place the shorter grill gasket on the woofer grill. Reinstall the woofer grill into the stat frame (figures 31 & 32).

NOTE: The top and bottom of the woofer grill are identical. The placement of the top grill gasket (the shorter one) determines which side should be placed at the top.



Figure 30

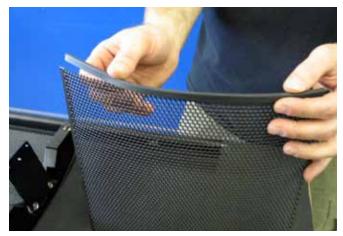


Figure 31

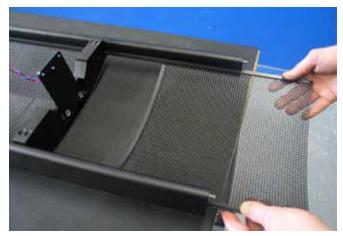


Figure 32

SUMMIT Stat Panel Replacement (Page 11 of 13)

32 Center and install the longer grill gasket on the bottom of the woofer grill (figure 33).



Figure 33

33 Carefully reinstall the bottom strut. Using a 6mm Allen Tool attach 2 cap nuts to the ends of the threaded rod. Hand-tighten, but DO NOT over-tighten (figures 34 & 35).



Figure 34



Figure 35

SUMMIT Stat Panel Replacement (Page 12 of 13)

34 Move the stat frame assembly away from the work surface. At this point, make sure that are NO small screws, tools or any sort of debris on the work surface. Move the Summit cabinet onto the work surface and lay it on its side (figure 36).



Figure 36

- 35 Move the stat frame assembly into place aligning the top and bottom mounting-brackets with the cabinet.
- 36 While an assistant helps fit the stat frame assembly to the cabinet, use a 1/8" Allen Tool and 3 screws to attach the bottom mounting-bracket to the bottom of the cabinet (figure 37).



Figure 37

37 Using a 1/8" Allen Tool, attach the center screw to the top mounting-bracket. Do not fully tighten the screw. Make sure to reinstall the grounding wire on the screw. (figure 38)

NOTE: Make sure to install a lock washer on the screw between the grounding wire and the mounting-bracket. (figure 38)

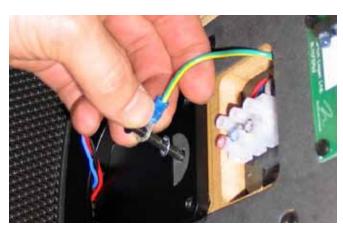
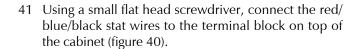


Figure 38

SUMMIT Stat Panel Replacement (Page 13 of 13)

- 38 Upright the speaker.
- 39 Using a 1/8" Allen Tool, reinstall the two remaining screws into the top mounting-bracket. Do not fully tighten the screws (figure 39).
- 40 Make sure that the middle strut and front of the cabinet are flush. To close any gap that may occur, you may need to apply pressure to the middle strut while tightening the three top mounting-bracket screws. DO NOT apply pressure to the woofer grill or stat panel. Hand-tighten all three screws.



Stat Panel Terminal block wiring configuration: Red stat wire to Red wire Blue stat wire in middle terminal Black stat wire in remaining terminal

42 Reinstall top cover, making sure that the two tabs at the front of the cover slide underneath the stat frame middle strut. Use a 5/64" Allen Tool to install 2 screws at the top of the backplate (figure 42).

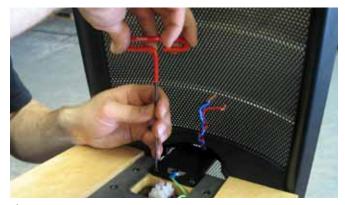


Figure 39

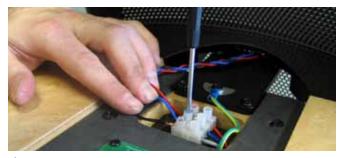


Figure 40



Figure 41



Figure 42



SUMMIT Power Supply Circuit Board Replacement (Page 1 of 12)

Replacement Accessories (included):

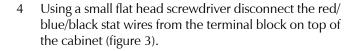
Power Supply Circuit Board Zip Tie S2 Square Drive Bit

Tools required (not included):

5/64" Allen Tool 6" piece of insulated wire stripped at both ends. Small Flat head Screwdriver 1/8" Allen Tool Wire Cutters S2 Square Driver

Note: This procedure requires 2 people.

- 1 Turn off amp. Unplug the power cord(s). Disconnect all signal cables from the speaker. Prepare a surface with padding and blankets to protect the speaker as you work on it.
- 2 Use a 5/64" Allen Tool to remove 2 screws at the top of the backplate. Lift and remove cabinet top plate (figure 1).
- 3 Using a short piece of insulated wire stripped on both ends, discharge the stat panel by touching the ends of the wire to the red and blue terminals on top of the cabinet (figure 2).



Stat Panel Terminal block wiring configuration: Red stat wire to Red wire Blue stat wire in middle terminal Black stat wire in remaining terminal



Figure 1

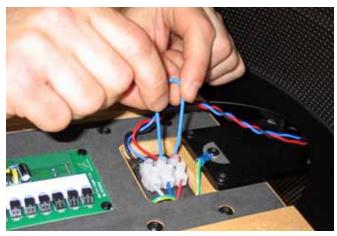


Figure 2

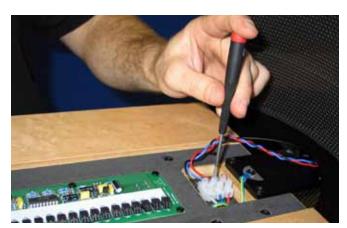


Figure 3

SUMMIT Power Supply Circuit Board Replacement (Page 2 of 12)

- Inspect the work surface to assure that it is clean and free of debris. Carefully lay the Summit on its side.
- 6 Using a 1/8" Allen Tool, remove 3 screws from the stat frame top mounting-bracket. Note the grounding wire and lock washer connected to the center screw (figure 4).

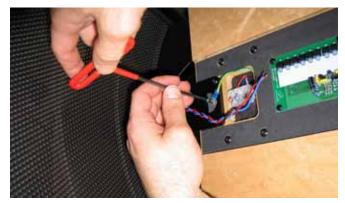


Figure 4

7 Using a 1/8" Allen Tool, remove 3 screws from the stat frame bottom mounting-bracket (figure 5).

NOTE: There are 6 screws in this bracket. Do not remove the 3 screws that attach this bracket to the cabinet. Only remove the 3 screws that attach the stat frame to this bracket.

NOTE: After removing these screws the stat frame is no longer connected to the cabinet. Continue to hold it in place.



Figure 5

While holding the stat panel in place, have someone else gently lift the front of the cabinet. Pull the stat frame away from the cabinet (figure 6).

Move the stat frame assembly away from the work surface.

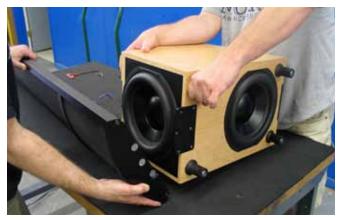


Figure 6

SUMMIT Power Supply Circuit Board Replacement (Page 3 of 12)

9 Using a 1/8" Allen Tool, remove 8 screws from the front woofer. After the 8 screws have been removed the woofer will be loose. Be prepared to support the woofer before removing the last screws (figure 8).



Figure 7

10 Disconnect the red and the black wires from the woofer terminals (figure 8).



Figure 8

11 Push cabinet stuffing out of the way (figure 9).



Figure 9

SUMMIT Power Supply Circuit Board Replacement (Page 4 of 12)

12 Using a small flat head screwdriver loosen and disconnect the following 4 wires from the inside terminal block (figure 10):

Thick green wire Thick black wire Thick red wire Thin green/yellow wire

NOTE: Record the order of the wires in the terminal block. Only disconnect the 4 wires closest to the woofer hole.

13 Disconnect the 2 identical red/black wiring harnesses from the power supply board (figure 11).



Figure 10



Figure 11

14 NOTE: This step applies to only a few early Summit's.

Check to see if any of the following wires are bound to to the power supply wire bundle by a wire tie:

red/black wiring harnesses green/yellow wire green, black and red wires from the terminal

If so, being careful not to cut or gouge any of the wires, carefully cut the wire tie that holds the wires to the main wire bundle (figure 12).

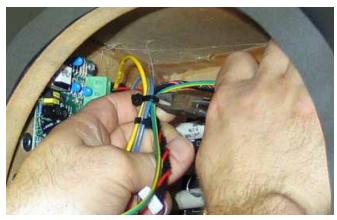


Figure 12

SUMMIT Power Supply Circuit Board Replacement (Page 5 of 12)

15 Using a 1/8" Allen Tool, remove 4 screws from the top of the cabinet (the 4 screws surrounding the cabinet top terminal block). As you remove the last screw, reach inside of the cabinet and support the power supply board which will now be free (figure 13).

NOTE: As you remove the screws, be careful not to misplace the washers that are on the screws.



Figure 13

16 Through the woofer hole, remove the power supply board (figure 14).



Figure 14

17 Gently pull loose the blue and grey wires from CON1 and CON2.

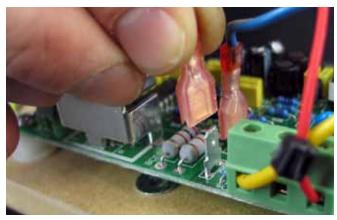


Figure 15

SUMMIT Power Supply Circuit Board Replacement (Page 6 of 12)

18 Using a small flat head screwdriver, disconnect the yellow and red wires from the CON7 terminal block (figure 15).

Red wire from HVOUT of CON7 terminal Yellow wire from other end of CON7 terminal (The middle of CON7 terminal is unused)

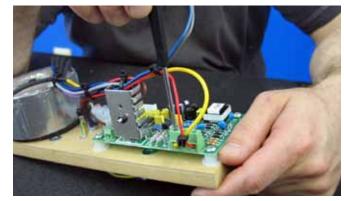


Figure 16

19 Using an S2 square head screwdriver, remove 4 screws from the corners of the power supply circuit board. Move the old power supply circuit board away from the work surface (figure 17).

NOTE: As you remove the 4 screws be careful not to misplace the 4 stand-offs under the power supply circuit board.

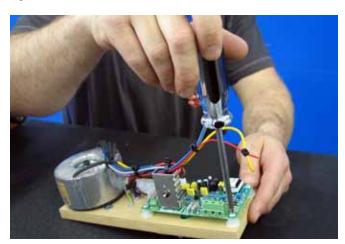


Figure 17

20 Set the 4 stand-off's into position (figure 18).

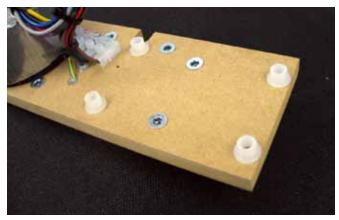


Figure 18

SUMMIT Power Supply Circuit Board Replacement (Page 7 of 12)

21 Using an S2 square drive tool, insert 4 screws into the corners of the new power supply circuit board (figure 19).



Figure 19

22 Reconnect the following wires to the power supply circuit board (figure 20):

Blue and Gray wires to CON1 and CON2

NOTE: Polarity is not an issue with these wires. If these wires are reversed they will not effect performance.

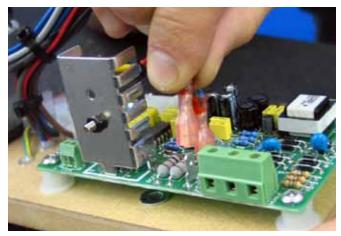


Figure 20

23 Using a small flat head screwdriver reconnect the following wires (figure 21):

Red wire to HVOUT of CON7 terminal Yellow wire to other end of CON7 terminal The middle of CON7 terminal is unused)

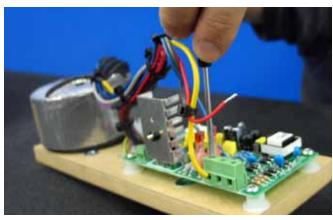


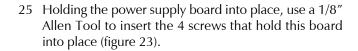
Figure 21

SUMMIT Power Supply Circuit Board Replacement (Page 8 of 12)

24 Move the power supply board into place by inserting it through the woofer hole. See photo for proper placement of board (figure 22).

NOTE: Looking at the top of the cabinet, when properly aligned, there should be 7 screw holes through which you can see to the inside of the cabinet.

IMPORTANT: MAKE SURE YOU INSTALL THIS BOARD CORRECTLY. IF YOU DON'T YOU WILL NOT BE ABLE TO ATTACH THE STAT FRAME ASSEMBLY LATER.



NOTE: When mounting this board, make sure that no wires are trapped under the board.



Figure 22



Figure 23

26 Reconnect the two wire harnesses to the power supply circuit board. Either harness can go to either connection (figure 24).

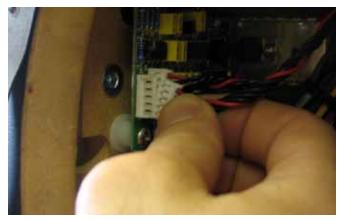


Figure 24

SUMMIT Power Supply Circuit Board Replacement (Page 9 of 12)

27 Using a small flat head screw driver, reconnect 4 wires to the inside terminal block (figure 25).

Thick green wire in terminal closest to power supply circuit board.

Thick black wire in next terminal

Thick red wire in next terminal

Thin green/yellow wire in last terminal

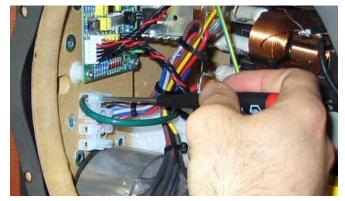


Figure 25

28 Using a wire tie, reattach one wire harness and the green/yellow wire to the wire bundle. Using the wire cutters, trim off the excess part of the wire tie (figure 26).



Figure 26

29 Redistribute white stuffing material inside of the cabinet. Do not push stuffing material around the white resistors (figure 27).



Figure 27

SUMMIT Power Supply Circuit Board Replacement (Page 10 of 12)

30 Reattach the red and black woofer wires. Be careful to attach the red wire to the woofer terminal with the red dot. If the woofer does not have a red dot notating the positive terminal you can determine the positive (red) terminal by looking at the woofer from behind. When the terminals are on the bottom of the woofer, the positive is on the right.

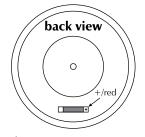




Figure 28

31 Place the woofer back in the woofer hole. Make sure that the zig logo of the woofer is right side up (figures 29 & 30).

NOTE: When placing the woofer into the cabinet it is important that the wires not touch the woofer or woofer magnet. Place a good amount of white stuffing material between the woofer and the woofer wires (figure 29).



Figure 29



Figure 29

32 Using a 1/8" Allen Tool insert 8 screws to attach the woofer (figure 31).



Figure 31

SUMMITPower Supply Circuit Board Replacement (Page 11 of 12)

33 At this point, make sure that are NO small screws, tools or any sort of debris on the work surface. Make sure the Summit cabinet is on its side (figure 32).

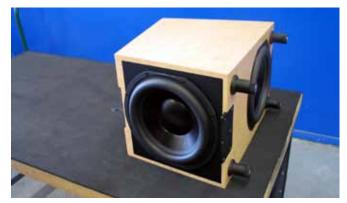


Figure 32

- 34 Move the stat frame assembly into place aligning the top and bottom mounting-brackets with the cabinet.
- 35 While an assistant helps fit the stat frame assembly to the cabinet, use a 1/8" Allen Tool and 3 screws to attach the bottom mounting-bracket to the bottom of the cabinet (figure 33).



Figure 33

36 Using a 1/8" Allen Tool, attach the center screw to the top mounting-bracket. Do not fully tighten the screw. Make sure to reinstall the grounding wire on the screw. (figure 34)

NOTE: Make sure to install a lock washer on the screw between the grounding wire and the mounting-bracket. (figure 34)

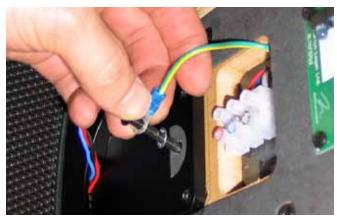
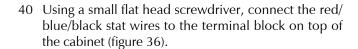


Figure 34

SUMMIT Power Supply Circuit Board Replacement (Page 12 of 12)

- 37 Upright the speaker.
- 38 Using a 1/8" Allen Tool, reinstall the two remaining screws into the top mounting-bracket. Do not fully tighten the screws (figure 35).
- 39 Make sure that the middle strut and front of the cabinet are flush. To close any gap that may occur, you may need to apply pressure to the middle strut while tightening the three top mounting-bracket screws. DO NOT apply pressure to the woofer grill or stat panel. Hand-tighten all three screws.



Stat Panel Terminal block wiring configuration: Red stat wire to Red wire Blue stat wire in middle terminal Black stat wire in remaining terminal

41 Reinstall top cover, making sure that the two tabs at the front of the cover slide underneath the stat frame middle strut. Use a 5/64" Allen Tool to install 2 screws at the top of the backplate (figure 37 & 38).

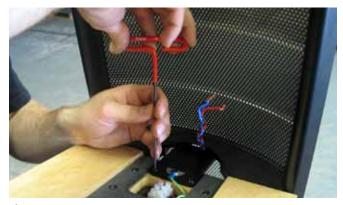


Figure 35



Figure 36



Figure 37



Figure 38



SUMMIT Back Plate Replacement (Page 1 of 1)

Replacement Accessories (included):

Back Plate Assembly

Tools required (not included):

5/64" Allen Tool 1/8" Allen Tool

- 1 Turn off amp. Unplug the power cord(s). Disconnect all signal cables from the speaker. Allow the speaker to 'rest' for about 4 hours to discharge the stored charge from the capacitors. Prepare a surface with padding and blankets to protect the speaker as you work on it.
- 2 Remove the top 2 screws from the back-plate using a 5/64 Allen tool. It may help to place gentle pressure on the curved top light display while loosen and later re-installing these two screws (figure 1).
- 3 Next remove the 6 larger Allen screws on out outer edge of the Summit back-plate using a 1/8 inch size Allen tool (figure 2).
- 4 Gently lift the back-plate out of the rear of the cabinet. Unplug the wires that are still attached to free the backplate. There are several connectors and for the most part, they cannot be hooked back up wrong. The only connections that could be reversed are the woofer wires. The longer set goes to the bottom woofer. This set plugs in to the bottom of the two amp boards. The shorter set of wires goes to the upper (front woofer) and it plugs into the very top amp board (figures 3 & 4).
- 5 Re-assembly is reverse.



Figure 3



Figure 1



Figure 2

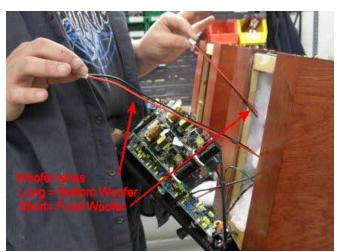


Figure 4