



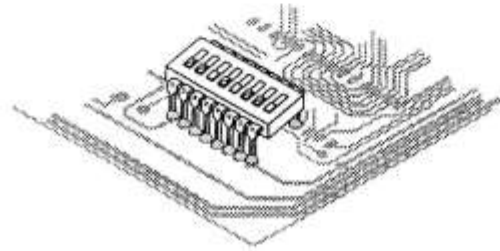
# FatMan Desk Top Enclosure

Model 9308C Assembly / Installation Supplement

9308C Packing list is on the last page of this supplement.

## DEFAULT DIP SWITCH INSTALLATION

The Default DIP Switch S2 mounts on the "solder" side of the circuit board so it will be accessible from the bottom of the case.



## LED INSTALLATION

The three, LED (light emitting diodes) will now be prepared to have extensions to their leads. #24 bare, solid wire and small plastic tubing lengths are used for the extensions. Short, 1/4" (5mm) lengths of the small tubing will be used to hold the wire extensions along-side trimmed LED leads as a lap solder connection is made. Longer lengths of the tubing will be used to cover the wire and lap-joint.

LEDs are polarized as indicated by one leg being longer than the other, and, a flat edge on the shoulder of the red plastic body of the part. The flat edge will be referenced as the part is installed -- matching the flat of the pcb graphic.

( ) Clip the leads of the three LEDs to be 1/2" (12mm).

For the lap-solder joints, it is best to "tin" the areas of the wires to be joined, in advance. Heat and flow solder for a very light coating at the LED ends and the extension wire about 3/8" in from the end. Then, as the lap-joint is made, it takes only a quick touch of the hot iron tip and maybe a tiny bit more solder to flow and bridge to each. Be mindful to avoid excess or blobbing here as tubing will slide over and cover this joint.

*A wooden clothes-pin works great for holding LEDs, wires, or other small parts during soldering and tinning operations.*

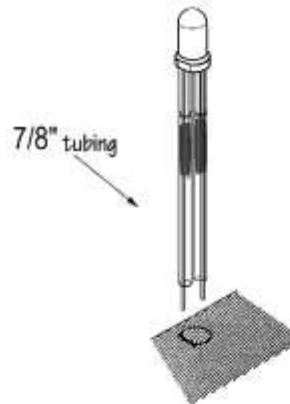
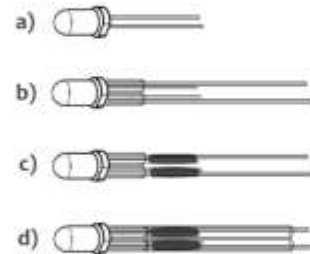
( ) For each LED leg, cut a 1/4" length of small tubing and slip it over the trimmed end, to meet the base of the LED and lightly tin the exposed end.

( ) Cut six, 1-3/4" (4.5cm) lengths of the #24 bare, solid wire and lightly tin a spot about 3/8" from the end.

( ) For each LED, and in turn, push the tinned extension wire end along-side the LED leg, into the tubing and to meet the base of the LED. Touch the hot iron tip to the tinned spots to flow the solder between them, adding a tiny bit more if needed.

( ) Cut six 7/8" sections of the small tubing and slip it over each leg and joint.

( ) In turn, install each LED on the board (designations, D2, D12, and D13) with the tubing meeting the board surface. On the solder side of the board, slightly splay the leads outward to hold the part in place and solder each joint, clipping away excess at the top of the joint.



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## CIRCUIT BOARD FLYING WIRES

PC POINT	WIRE LENGTH	PC POINT	WIRE LENGTH
( ) *A*	11"	( ) *T*	5-3/4"
( ) *B*	9"	( ) *U*	11-1/2"
( ) *C*	10"	( ) *V*	10"
( ) *D*	8-1/2"	( ) *W*	11-1/2"
( ) *E*	8"	( ) *X*	9-1/2"
( ) *F*	6-1/2"	( ) *Y*	12"
( ) *G*	6"	( ) *Z*	9-1/2"
( ) *H*	7"	( ) *AA*	10"
( ) *I*	10"	( ) *AB*	10-1/2"
( ) *J*	12-1/2"	( ) *AC*	11"
( ) *K*	9-1/2"	( ) *AD*	13"
( ) *L*	9"	( ) *AF*	11"
( ) *M*	7-1/2"	( ) *AG*	14"
( ) *N*	9-1/2"	( ) *AH*	10-1/2"
( ) *O*	8-1/2"	( ) *AI*	9"
( ) *P*	8"	( ) *AJ*	10"
( ) *R*	8"	( ) *AK*	6-1/2"
( ) *S*	8-1/2"	( ) *DG*	11-1/2"

Wire lengths from the circuit board to the panel controls change in the Desk Top Enclosure. Follow the schedule to the left rather than the one on page 11 of the 9308K assembly manual.

Fig 2. Potentiometers, switches and the Output Jack J6 mount to the inside of the case top as shown.

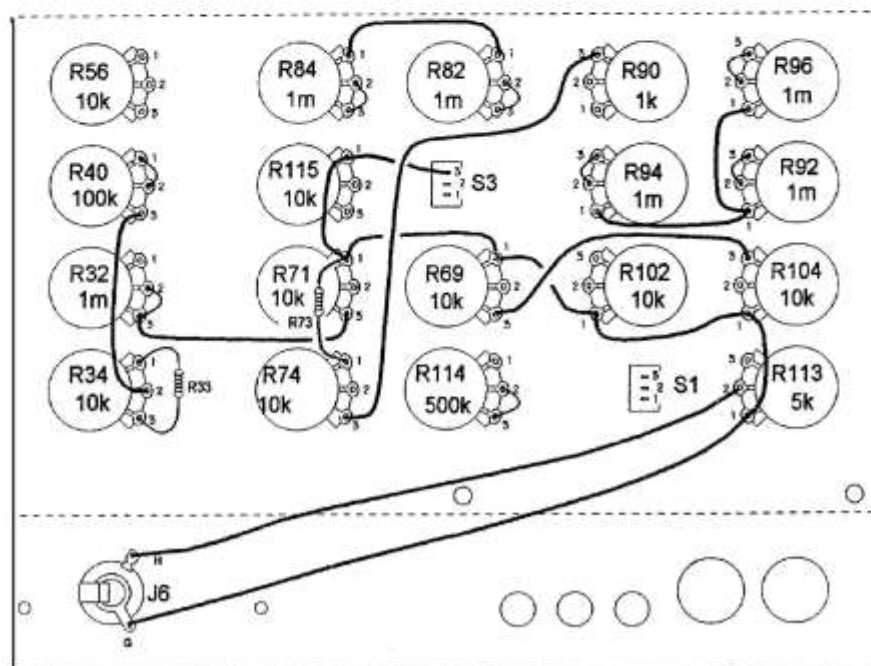
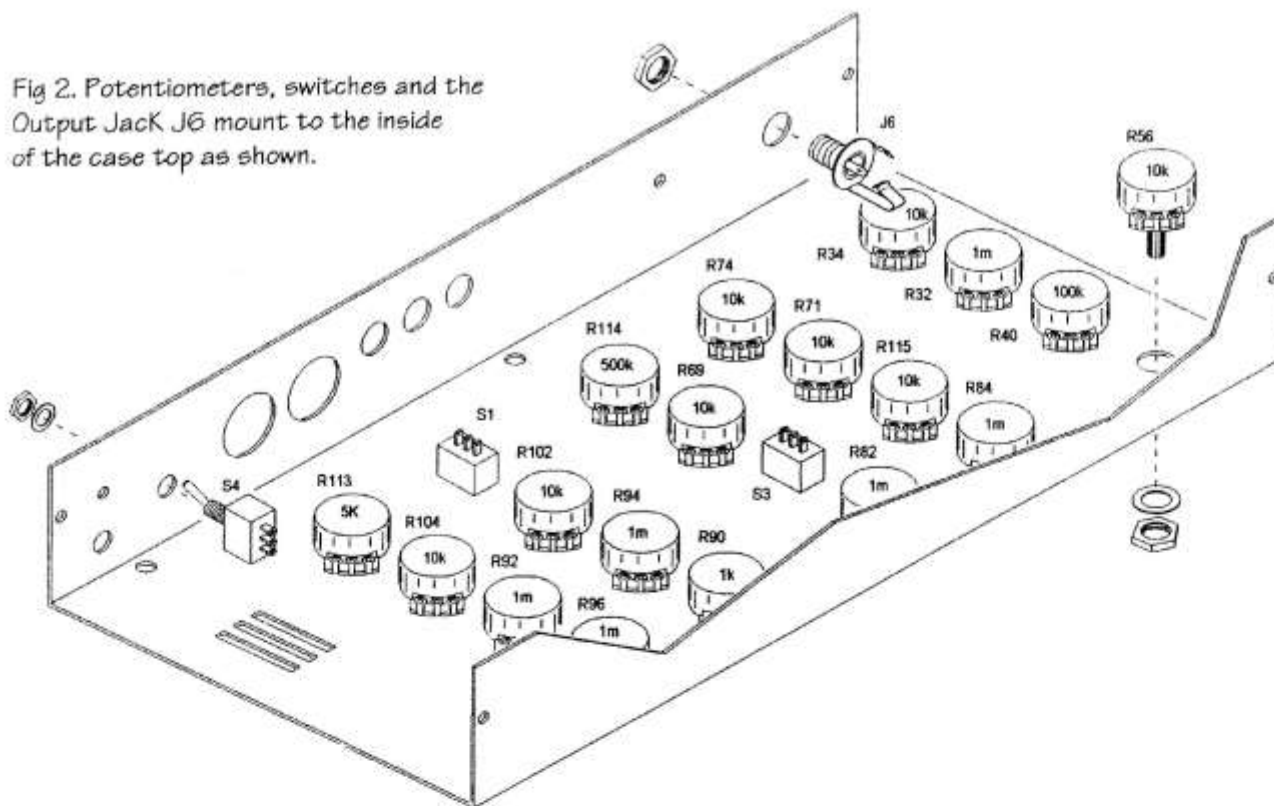
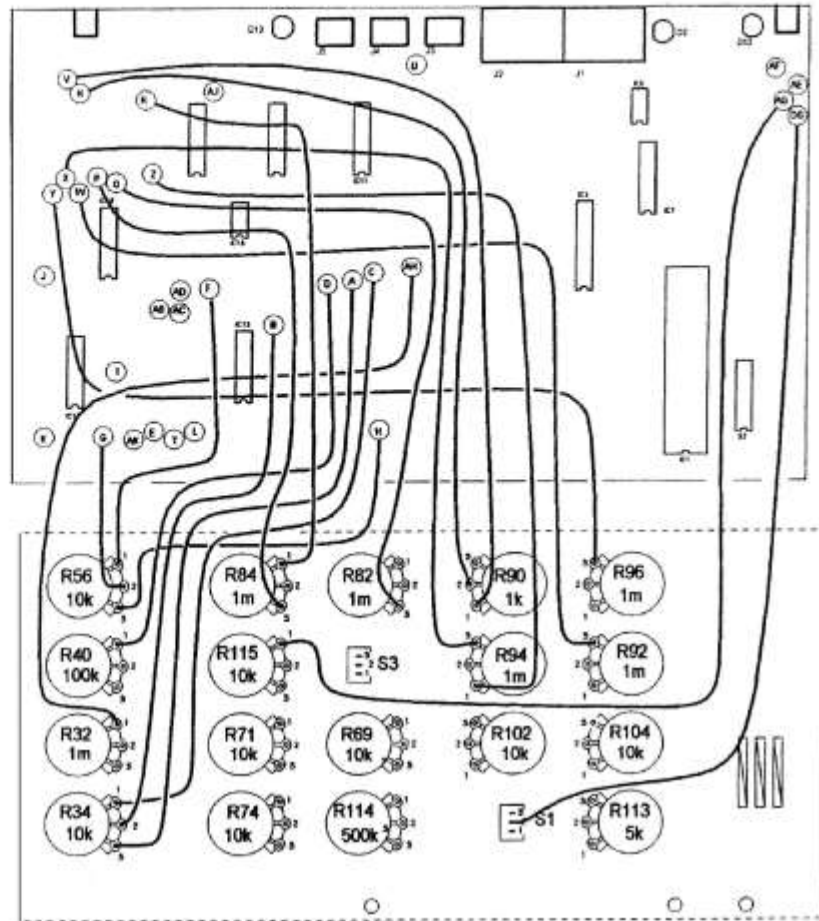


Fig 3. Point to point wiring of panel controls is done before making connections to the circuit board. Follow the wiring schedule on the facing page in place of the one on page 13 of the 9308K Assembly Manual.

Fig 4a. Wiring from controls to circuit board uses #24 stranded insulated wire. Connections are listed on pg 14 of the 9308K manual.



**Panel Wiring** (replaces schedule on page 13 of 9308K manual)

FROM	TO	LENGTH	FROM	TO	LENGTH
( ) R113-1 (ns)	J6-G (s1)	8-1/4"	( ) R114-2 (s1)	R114-3 (ns)	Clipping
( ) R113-2 (s1)	J6-H (s1)	8-1/4"	( ) R96-1 (s1)	R92-1 (ns)	2"
( ) R113-1 (s2)	R104-1 (ns)	2-1/2"	( ) R96-2 (s1)	R96-3 (ns)	Clipping
( ) R104-1 (s2)	R102-1 (ns)	2-1/2"	( ) R90-3 (s1)	R74-3 (ns)	5-1/2"
( ) R102-1 (s2)	R69-1 (ns)	2"	( ) R92-2 (s1)	R92-3 (ns)	Clipping
( ) R104-3 (s1)	R69-3 (ns)	3-3/4"	( ) R92-1 (s2)	R94-1 (ns)	2-1/2"
( ) R69-1 (s2)	R71-1 (ns)	2-3/4"	( ) R94-2 (s1)	R94-3 (ns)	Clipping
( ) S3-3 (s1)	R115-1 (ns)	2"	( ) R82-1 (s1)	R84-1 (ns)	2-1/2"
( ) R115-1 (ns)	R71-1 (ns)	2"	( ) R82-2 (s1)	R82-3 (ns)	Clipping
( ) R71-3 (ns)	R32-3 (ns)	3-1/4"	( ) R84-2 (s1)	R84-3 (ns)	Clipping
( ) R32-3 (s2)	R32-2 (s1)	Clipping	( ) R40-1 (ns)	R40-2 (s1)	Clipping
			( ) R40-3 (s1)	R34-2 (ns)	3-3/4"

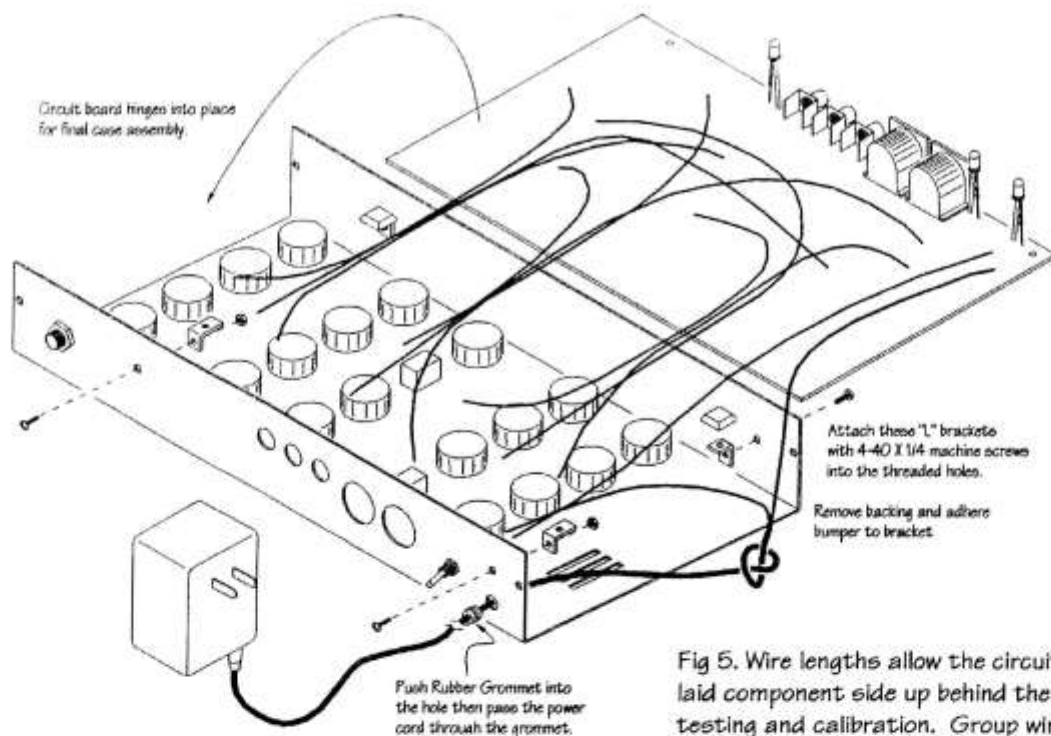


Fig 5. Wire lengths allow the circuit board to be laid component side up behind the case for testing and calibration. Group wires into 3 bundles and secure with the nylon wire ties supplied.

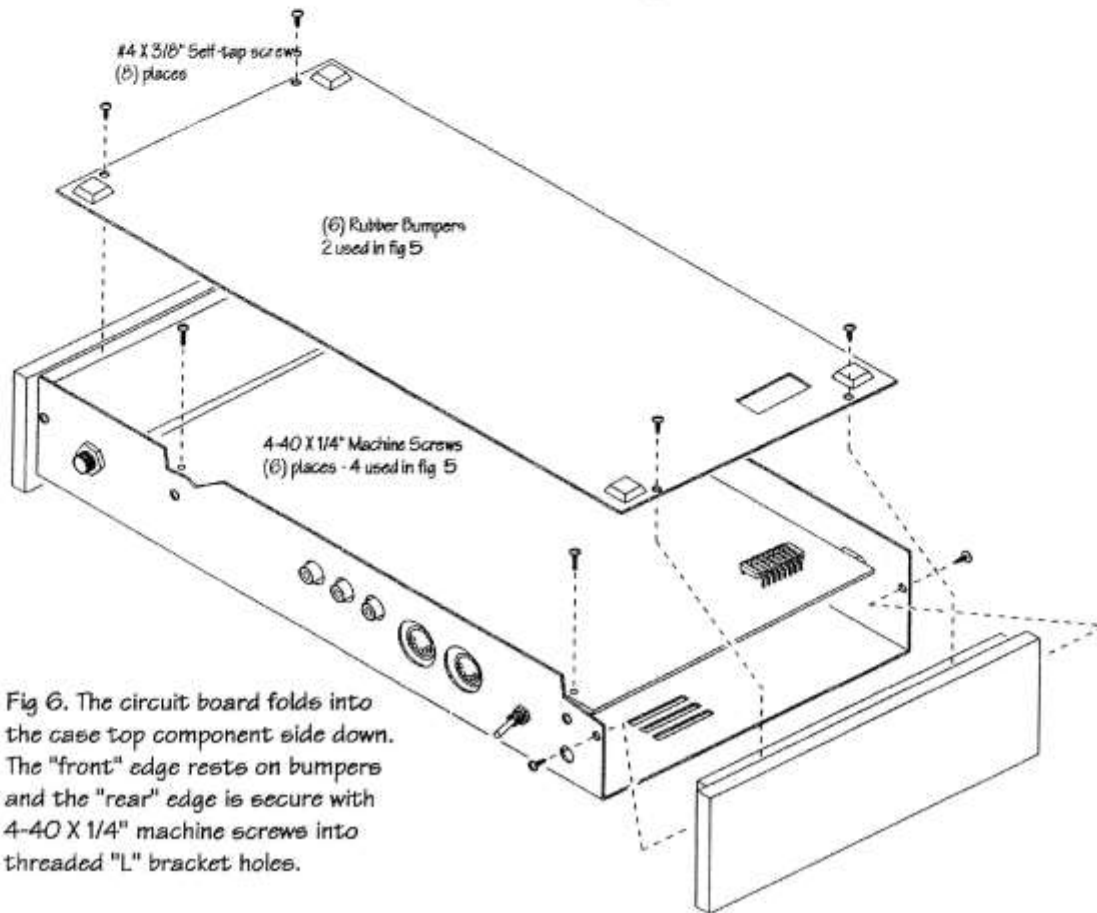


Fig 6. The circuit board folds into the case top component side down. The "front" edge rests on bumpers and the "rear" edge is secure with 4-40 X 1/4" machine screws into threaded "L" bracket holes.

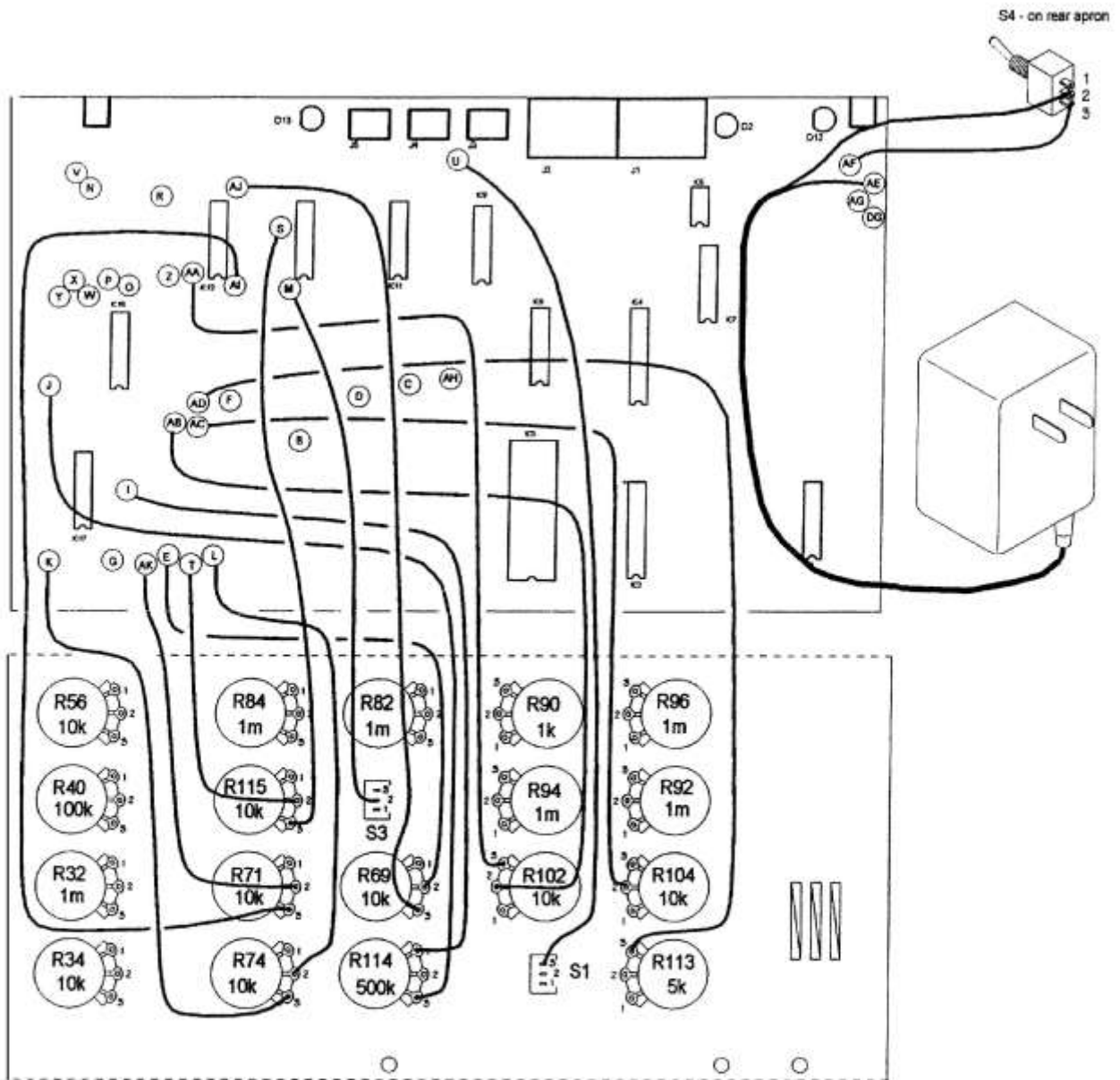
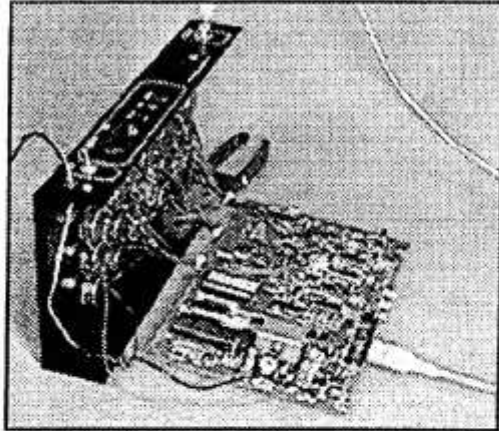


Fig 4b. Panel to circuit board wiring continues as on pg. 14 of the 9308K manual. Previous wiring has been eliminated for clarity.

## Testing and Calibration:

Testing and calibration is the same as in the 9308K Assembly and Using manual. The arrangement of FatMan circuit board and case top shown in the photo provides easy access to calibration pots and inspection of all wiring and connections. When you have thoroughly tested and calibrated the FatMan, proceed with final case assembly.



## Final Assembly

Flying wires between circuit board and front panel must be bundled using the three nylon wire ties supplied. Group the wires so that approximately the same number of wires are in each bundle. If a wire seems too short, move it to another bundle for a better fit.

When the wires have been bundled, "fold" the circuit board into the case for a trial fit. Do not worry about matching the LEDs with their panel holes yet. Encourage the bundles to bend at about the edge of the circuit board, which is about where the wire ties should be, and look for any serious clearance problems caused by components mounted too high above the circuit board. Larger disk and electrolytic capacitors can be folded over for additional clearance if necessary, but if the components have been mounted fairly close to the board in the first place there should not be problems.

At the "rear" (the apron with the access holes for MIDI and phono jacks, etc.) attach two "L" brackets by passing a 4-40 X 1/4" machine screw through the panel apron and the unthreaded hole in the "L" bracket. Fasten in place with a #4 lockwasher and nut. Orient so the face with the threaded hole is facing up but do not fully tighten in place - some adjustment may be needed when the board is mounted.

At the other, "front" edge of the case attach a pair of "L" bracket by passing a 4-40 X 1/4" machine screw through the case into the threaded hole in the bracket. Orient so the face with the unthreaded hole is up and full tighten in place. Attach a rubber bumper (supplied) to the top face of the "L" bracket.

For final fitting of the circuit board align the LEDs so their leads are straight but tilted slightly toward the edge of the circuit board. Fold the board over so the component side is facing down with the board roughly parallel to the front panel. There is just enough space between the front and rear aprons for full board clearance and installation is easiest when the board is kept more or less parallel to the panel while being lowered into the case. Align the LEDs with the holes provided for them in the case top (you should be able to see them from the open ends of the case and the panel holes themselves) and lower the board vertically into place. When you have lowered the board far enough that the phono jacks engage the holes provided for them slide the board toward you so that the mounting holes in the circuit board and the threaded holes in the "L" brackets line up then secure the board with 4-40 X 1/4" machine screws.

Loosen the screws securing the brackets to the rear edge enough to be able to move the board so that phono and MIDI jacks are approximately centered in the panel holes then retighten securely.

Install the wood ends using the #4 X 3/8" screws supplied as shown in fig 6. Fit the wood piece in place in the case top and make sure it is as flush as possible with the top and side of the case before marking the position of the case hole on the wood piece. 1/32" Pilot holes should be drilled at the locations you marked. If a drill is not available a starter hole should be pressed into the wood with an ice pick or small brad. Reinstall the ends and secure with four #4 X 3/8" screws.

Press stacked pairs of the soft rubber bumpers at the circuit board corners as shown on the following page. These will serve to prevent the circuit board soldering from contacting the metal case bottom.

Install the case bottom as shown in fig 6. Remove the vinyl protective covering from the bottom plate and orient so the switch is accessible through the cutout. Notice that there will be an opening between the edges of the bottom plate and the front and back edges of the case for air flow. Drill or press pilot holes and secure the bottom with four #4 X 3/8" screws.



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**9308C FatMan Desk Top Enclosure**  
Packing List

6	4-40 X 1/4" Machine Screws
2	#4 nuts
8	#4 X 3/8" Wood Screws
2	#4 Lockwashers
4	Self-Adhesive Bumpers (soft)
6	Self-Adhesive Bumpers
2	#4 "L" Brackets
1	7" Length Small Tubing
1	11" Length #24 Bare, Solid Wire
1	Rubber Grommet
3	Wire Ties
2	9308C Wooden Case Ends
1	9308C Case Top and Bottom

