

PO-105, A-B Battery Supply Kit Assembly Instruction and Operating Manual

# PO-105, A-B Battery Supply Kit, Assembly and Operating Instructions:

#### Introduction:

Thank you for purchasing another fine product of: "Peebles Originals". The PO-105, A-B battery supply is just the thing to power-up those great little one and two-tube projects that require 1-1/2V or 3.0V filament voltages as well as, 27, 45, and/or 90V plate supply. Using standard "C" and 9V transistor radio batteries, this neat little supply fits our standard pine cabinet PO-201 and all voltages are accessible from the front panel. Designed to be a companion to the PO-104, PO-425 Kits, and the unit is versatile enough to power any other 1, 2 or 3 tube receivers, amplifiers, etc. This hobby is one of the most enjoyable activities I've had for the last 52 years. Have fun and gather a few tools and supplies listed below.

## Tools and Supplies Needed:

- \* Soldering Iron, Low Heat.
- \* Rosin Core Solder.
- \* Phillips Screwdriver, #2.
- \* Wire Strippers.
- \* Small Needlenose Pliers.
- \* Small Wire cutters (Side Cutters).
- \* Nut driver, Optional-use needlenose Pliers.

- \* Paper Glue.
- \* Sharp Scissors.
- \* Sharp Knife.
- \* Card Stock Material: 4-1/2" x 5"
- \* Thumbtacks, 20ea.
- \* "C"-size Batteries, 2ea.
- \* 9V.-transistor Batteries, 10ea.

#### Chassis and Front Panel Instructions:

1	See Figure #1 and mount the front and rear chassis-rails to the bottom-side of the chassis-panel. The 5/8" side of
	the rails are to the bottom-side of the chassis and are secured with 4/6-32 x 1/2" sheet-metal screws. Cut-out the
	front/dial plate and paste to the front, of the front/dial panel, centered. Mount all eight voltage terminals, with 6-32
	x 1/2" machine screws, a solder-lug on the backside and secured with a 6-32 hex-nut to the front of the panel.
	Another nut for terminating to each voltage. Attach the front- panel assembly to the front of the chassis with 2/#6
	X 1/2" sheet-metal screws, centered and flush with the bottom of the chassis assembly. Assemble the 9V battery box,
	using 4/#6 x 1/2" sheet-metal screws, as shown in Figure #2. Place the battery box in place and secure to front
	panel with 2/#6 x 1/2" sheet-metal screws, from the front-side of the panel. See Figure #2 and "flatten" and solder
	two, solder-lugs end-to-end as shown. Place the solder-lug assembly in the middle of the back-end of the 9V box and
	the middle of rear chassis-rail and secure with 2/#6 sheet-metal screws, as shown. The "C" battery holder is
	mounted to the chassis with $2/4-40 \times 1/2$ " machine screws and secured, from the bottom with $2/4-40$ hex-nuts. This
	completes this step and proceed to the next step.

## Wiring & Testing Instructions:

See Figure #3, cut-out this template and glue to a piece of card-stock material. Insert 20 thumbtacks from the bottom-side, at the mid-point of each terminal-snap. Install a corresponding battery snap at each of the 20 spots indicated. The snaps are down-ward to snap-into the batteries as shown. Solder each snap according to the pattern, allowing a slight amount of "slop"-factor by using a wire slightly larger than shown. Solder the connector wires, as show also, allowing for a little extra distance here, too.

Wire the rest of the unit as shown in Figure #1 and #4. Re-check all your work and wiring and proceed: Install all the batteries as shown and snap all the terminals to the 9V batteries.

Using a volt-meter on a 1-1/2V to 20V, DC scale, measure your voltages across each "A" battery and note at least 1-1/2V DC. Move your volt-meter's scale to 90V to 200V, DC scale and measure the +27V DC, +45V DC and +90V DC, if all is correct, then you are finished. If you have a wrong or no reading, then:

- 1) Check all your wiring.
- 2) Make certain all your batteries are OK.

Have fun and build lots of kits, projects, kits...more projects and did I mention KITS? Mike

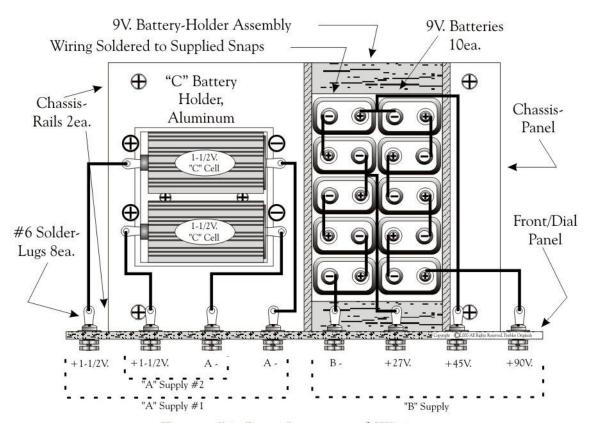


Figure #1, Parts Layout and Wiring.

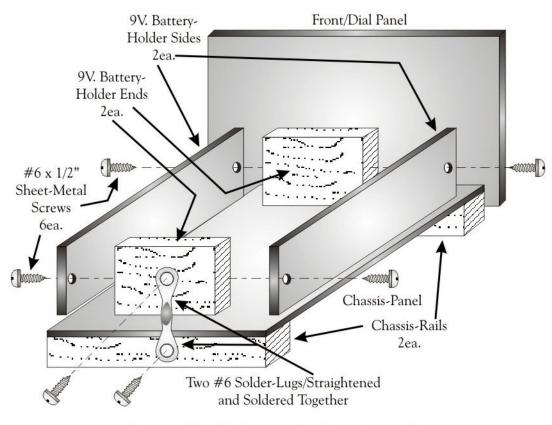
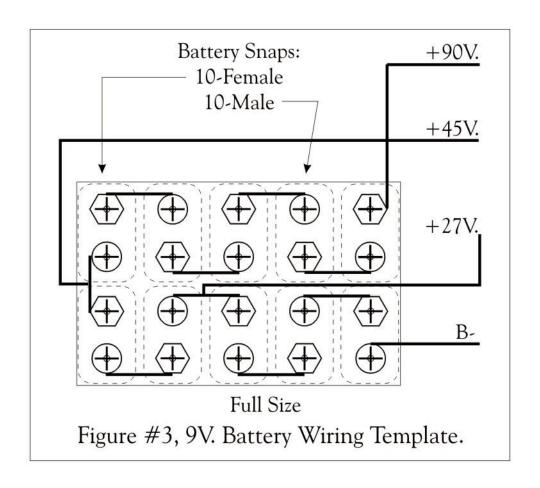


Figure #2, 9V. Battery-Holder Assembly.



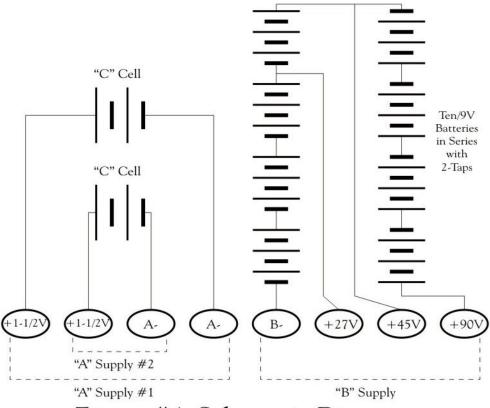


Figure #4, Schematic Diagram.

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## PO-105, A-B Battery Supply Kit, Parts List:

Qty	Description	Qty	Description
2'	Wire, Hookup	1	Battery Holder, 2-"C" Cells
10	Solder Lugs, #6	2	Battery, "C" Cells (Supplied by Customer)
14	Sheet Metal Screws, #6 x 1/2"	2	Battery Holder Sides, 1-3/4"x 4-3/8"x 1/8"
8	Machine Screws, 6-32 x 1/2"	2	Battery Holder Ends, 1-3/4"x 2-1/8"x 1/2"
16	Hex Nuts, 6-32	10	Batteries, 9V. Transistor
2	Machine Screws, 4-40 x 1/2"		(Supplied by Customer)
2	Hex Nuts, 4-40	1	Chassis Panel, 4-3/8"x 6-3/8"x 1/8"
10	Battery Snaps, 9V, Male	1	Dial Panel, 4-3/4" x 7-3/4" x 1/8"
10	Battery Snaps, 9V, Female	2	Chassis Rails, 5/8"x 3/4"x 6-3/8"

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