

90BAv3 Battery Adapter

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Fig. 1. 90BAv3 Installed on PRC-90-2 (radio not included)

Background

The Civil Air Patrol asked for a functional battery adapter so that they could use the PRC-90 on the ground during a search to coordinate with military aircraft. The 90BAv2 was designed to fill this need. Version 3 is very similar with the addition of threads to hold the radio battery compartment cap.

Disclaimer

It has not been tested or certified for survival use and if used for that purpose it is at the owner's risk.

Parts List



- 90BAv3 Cap
- Insulating Tube with polarity diagram
- O-Ring
- This instruction Sheet

Fig. 2 Components

Required but not supplied

- 4 each CR123 Photo batteries
- Radio in the PRC-90 family

Applicability

For use with PRC-90 family of radios and maybe other equipment that uses the *BA-1568/U Mercury* battery or the *BA-5368/U* power supply. If you know of other equipment where the adapter works please tell me. brooke@PRC68.com

Not Included

The radio shown in Figure 1 is for illustration and is not included.

Batteries are not included.

Installation

1. See Fig 3 below. Lightly coat O-Ring and radio threads with Silicon Grease (Radio Shack Lube Gel or equivalent) and install O-Ring on radio



Fig. 3. O-Ring & Silicon Grease

2. When removing the 123 photo battery from the blister pack make note of the expiration date. The expiration date is not typically printed on the battery. The Energizer 123 Photo Battery does have the expiration date on the battery.
3. Using a pencil, write the installation date and replacement date on the insulating tube. This is important because you cannot test these batteries to determine their remaining life. The shelf life of the LiMnO_2 123 photo battery is 10 years. A typical replacement would be 5 years prior to the date from step 2 above.

See Fig 4 below.

4. Slide Insulating tube into cap with the polarity diagram visible.
5. Slide 4 each 123 photo batteries into the insulating tube, negative end first.



Fig 4 Assembled Battery Adapter

See Fig. 1 at top of page.

6. Screw assembly onto radio until snug.

7. Screw radio cap onto the 90BA. You may need to feed the strap holding the earphone to allow the cap to get past the adapter.

Testing Battery Adapter

A simple functional check is to turn function switch to a VOICE position and turn the VOL control to MAX. You should hear static or a signal.

Testing Radio

This can be done in the first 5 minutes past the hour with transmission times limited to a few seconds. Note that transmissions on 243.0 MHz are picked up by the SARSAT satellite system and the location relayed to Search And Rescue personnel. False alarms waste their time and may detract from an actual emergency.

Reorder

All my products for sale including the 90BAv3 are on this web page:

<http://www.prc68.com/P/Prod.html>

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