



Tech Tips

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Replacement batteries for PHI Model 78 Sample Bias Box

It has become difficult if not impossible to find replacement batteries for the bias box used on many PHI systems. When the 90 volt battery wears out, the target current measurement becomes inaccurate.

An easy solution is to install two 45 volt batteries in series. This involves replacing the battery snaps in the bias box with standard 9 volt types. Make a note of the polarity of the original battery before replacing it. Some soldering is required.

The description and part numbers are listed in the table below. You need two of each item to replace the defective 90 volt battery.

Description	EVEREADY PN	Newark PN
45 volt battery	Type 415 NEDA 213	49F1001CEVER
9 volt battery strap	Type 2241 vinyl 4" leads	16F436

Note: To reduce leakage current, you should wrap the battery in electrical tape.