

BA-8180/U  
NSN: 6135-01-500-0572



\$250.00

Specifications	
Weight	6lbs (2.7 kg)
Dimensions	12.2x 7.3 x 2.4 in (31 x 18.5 x 6 cm)
Capacity at C/15	56Ah
Nominal voltage	14V / 28 V
Energy density	240Wh/L
Specific energy	350Wh/kg
Connector Type	AMP 211398-2

**BA-8180/U Non-rechargeable Zinc-Air  
Battery, NSN: 6135-01-500-0572**

This BA-8180/U is a 12/24 Volt, 800 Watt-hour, 56Ah primary (non-rechargeable) zinc-air battery pack. The bottom line: One 6 lb BA-8180/U connected to a reusable interface adapter can replace up to 5 BA-5590s for extended missions. eg... 7 days in AN/PRC-119F, 20 hours in JAVELIN CLU (surveillance mode only), 5 days in older AN/PRC-119B. Re-supply is reduced, spare battery "dead" weight on your back is reduced and impact on unit's budgets is reduced. Save your BA-5590s, BB-390s or BB-2590s for shorter 12-36 hour missions. **Limitations:** The BA-8180 **cannot work while submersed** in water. Performance between 0°F and 140°F is recommended.

Interface adapters (separately purchased) provide compatibility between the BA-8180/U and various items of military equipment. They are:

- BA-5590 battery eliminator interface: NSN 5940-01-504-3217 (J-6632/U)
- AN/PRC-119, SINCGARS (non-ASIP versions): NSN 5940-01-504-5597 (J-6634/U)
- AN/PRC-119F, SINCGARS ASIP: NSN 5940-01-504-3218 (J-6633/U)

Velcro straps are provided to secure the battery to your device while tethered.

The BA-8180/U zinc-air battery consumes oxygen that it extracts from the atmosphere. Air is blown into the battery by a small fan built inside the battery case. The fan is automatically switched on when an interface adaptor is connected to the battery. To save battery power, always disconnect the battery from the adaptor **when not in use**, and **store the battery in the re-sealable plastic bag** supplied with it.

The BA-8180/U battery is made of two 12V strings, which can be wired in parallel to provide 56Ah at 12V, or in series, providing 27 Ah at 24V. Schematics printed on the battery show connector pin connections. When wiring the battery without an original interface adaptor, make sure you short pins 1 and 4 to activate the fan.

Zinc-air batteries contain no hazardous materials, and can be disposed of as normal household waste. For MSDS info go to the CECOM web site below.

Electric Fuel, 345 Industry Dr. Auburn AL 36832, info@electric-fuel.com

**US Army Communications–Electronics Command (CECOM)**, Ft. Monmouth, NJ Army Info:  
<http://lrc7.monmouth.army.mil/ipm> or call 732-532-2411, DSN 992-2411

## **Interface Adapters for BA-8180/U Batteries**

### **Model ASIP (119 Foxtrot) adapter**

Part No. 119FEI

Interface for ASIP radio, including integral P1 connector

NSN: 5940-01-504-3218

**Figure 1 PN 119FEI**  
\$100.00



This interface adaptor provides compatibility between the BA-8180/U zinc-air battery and power the AN/PRC-119F, SINGARS ASIP. The BA-8180/U is a 12/24 Volt, 800 Watt-hour, 56Ah primary (non-rechargeable) zinc-air battery pack.

The bottom line: One 6 lb BA-8180/U connected to a reusable interface adapter can replace up to 5 BA-5590s for extended missions. e.g. ... 7 days in AN/PRC-119F. Re-supply is reduced, spare battery "dead" weight on your back is reduced and impact on unit's budgets is reduced.

**Operating Instructions for J-6633/U 119 FEI ASIP (119 F) Adaptor**

1. Remove existing battery.
2. Connect the adaptor to the radio.
3. Connect black connector of the adaptor to a BA-8180/U and operate the radio.
4. To save battery power disconnect adaptor from battery when radio is not in use

**Model Direct Power Electrical Interface (BA-5590 eliminator)**

Part No. DPEI

Lightweight plastic battery eliminator for BA-5590 or equivalent

NSN: 5940-01-504-3217

Specifications:

Dimensions: 4.9 x 4.3 x 24 in (12.4 x 11 x 6.2 c)

Weight: 12.3 oz (347 gr)



**Figure 2 PN DPEI**

\$50.00

This interface adaptor provides compatibility between the BA-8180/U zinc-air battery and various items of military equipment. The BA-8180/U is a 12/24 Volt, 800 Watt-hour, 56Ah primary (non-rechargeable) zinc-air battery pack.

The J-6632 battery eliminator enables the use of the BA8180/U as an external replacement for the BA-5590/U. The bottom line: One 6 lb BA-8180/U connected to a reusable interface adapter can replace up to 5 BA-5590s for extended missions. e.g. 20 hours in JAVELIN CLU (surveillance mode only). Re-supply is reduced, spare battery "dead" weight on your back is reduced and impact on unit's budgets

**Model SINGCARS (119 Bravo) adapter**

Convenient gasket and clip adapter for SINGARS radio battery box .

NSN: 5940-01-504-5597



**Figure 3 Adapter PN 119BEI with SINGCARS**



**Figure 4 Adapter PN 119BEI  
\$50.00**

This interface adaptor provides compatibility between the BA-8180/U zinc-air battery and the AN/PRC-119, SINGGARS (non-ASIP versions) radio. The BA-8180/U is a 12/24 Volt, 800 Watt-hour, 56Ah primary (non-rechargeable) zinc-air battery pack. One 6 lb BA-8180/U connected to this reusable interface adaptor can replace up to 5 BA-5590s for extended missions, up to 5 days in AN/PRC-119B. Re-supply is reduced, spare battery "dead" weight on your back is reduced and impact on unit's budgets is reduced.

**Assembly Instructions**

1. Remove battery compartment cover and battery (if present).
2. Connect the white plug (A) to the battery connector inside the compartment (Figure 1).
3. Place rubber gasket (B) groove-side up on battery compartment (Figure 2).
4. Place battery box cover on rubber gasket. Secure cover using the center latch.
5. Use the latch extender clip (C) to close the front latch. The keeper clip on the back latch provides attachment there (Figure 3).
6. Connect black connector (D) to the BA-8180/U and operate radio.
7. To save battery power disconnect adaptor from battery when radio is not in use.



Figure 3



Figure 4