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Recon PowerBoot Module Battery Packs and Chargers: Identifying

This Support Note describes how to identify the different Trimble® Recon® PowerBoot Module™ battery packs (“the battery pack”) and chargers.

Recon PowerBoot Module battery packs

Depending on where and when you bought your Recon handheld or replacement battery pack, you may have one of the following:

- A **legacy** battery pack, which had an all-black housing with a black overmold as shown in the figures below. The serial numbers began with **A, B, C, D, or E** and were 9 digits long. The cells in this battery were 3800 mAh. You may see the manufacturing P/N F-2006-02.
- An **intermediate** battery pack, between the legacy and the new battery pack. They started shipping in August 2007. The serial numbers of this model started with **RSF** or **RMG**, for example: RSF03000, or RMG01465. The only change to this revision was the cell, which was changed from 3800 mAh to 4000 mAh. These batteries performed as well as or better than the legacy Recon batteries. They generally showed a 20-60 minute improvement in battery life. You may see the manufacturing P/N F-2006-02-S.
- A **grey and black new model** battery pack that first started shipping in September 2008. This battery pack used light gray plastic housing with a black overmold as shown in the figures below. The grey and black Recon PowerBoot Module battery pack is no longer manufactured or sold by Trimble. The previous Trimble part numbers were MCS P/N ACCAA-109 or REC-Z1001, and MGIS P/N 75508-00. You may see the manufacturing P/N F-2006-03-S. They are not serialized: Instead of a serial number, they have a **date code** that is in the following form: Week/Year, for example, 2509 means that the battery pack was manufactured in the 25th week of 2009.

Note: Some versions of this battery pack manufactured before 12 January 2008 do not have this date code.

- An **all black** version of the new model Recon PowerBoot Module battery pack was released in approximately October 2009, and is currently the only model manufactured and sold by Trimble. The only change is that the housing is all black instead of gray, and it has a 4-digit date code instead of a serial number. All other features are the same. This PowerBoot Module battery pack was briefly sold as P/N ACCAA-110; the current part numbers are MCS P/N ACCAA-109 / MGIS P/N 75508-00. You may see the manufacturing P/N F-2006-04-S or F-2006-05-S.

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The following figures show the physical difference between the all black and the grey and black battery packs, and their respective part numbers. The legacy and new model all black PowerBoot Module battery packs look identical. To differentiate, look at the serial number or date code under the bar code on the right side. The manufacturing P/N is under the bar code on the left side.



- Legacy all black batteries show P/N F-2006-02 or F-2006-02-S: Serial numbers start with A,B,C,D, or E
- Intermediate all black batteries show P/N F-2006-02-S: Serial numbers start with RSF or RMG
- Newer model grey and black batteries show P/N F-2006-03-S: Serial numbers are 4-digit date codes
- Newer model all black batteries show P/N F-2006-04-S or F-2006-05-S: Serial numbers are 4-digit date codes

Recon chargers

Due to the improvements in the new Recon PowerBoot Module battery pack, the electric current requirements have changed, which affects charger compatibility. Customers must use the correct charger with their particular battery pack.

The following chargers are compatible with the new Recon PowerBoot Module battery pack:

- Recon International AC charger (output 5V DC, 1 A regulated): MCS P/N ACCAA-655 (Previous P/N REC-AEUPOWERSUP) / MGIS P/N REC-TEUPOWERSUP.
Manufacturer: Phihong; Model number PSA05R-050.

Note: This 1 A charger has been shipping with the Recon handheld since January 2008.

- Ranger™ X-Series / Nomad® / Recon AC charger (output 5 V, 5 A regulated): MCS P/N ACCAA-652 (Previous P/N ST1-Z2001)
- Recon 12 V vehicle charging cable for both old and new Recon batteries (Output: 5 V, 2 A): MCS P/N ACCAA-661 / MGIS P/N 75509-00 (Previous P/N REC-Z2004)
- Ranger X-Series / Nomad / Recon 12 V vehicle charger (output 5 V, 5 A regulated): P/N ACCAA-653 (Previous MCS P/N ACCAA-653)

Note: These chargers are also backwards-compatible with the old PowerBoot Module battery pack.

The following figures show chargers that are compatible. The Recon International charger (below left) and the Ranger/Nomad AC charger (below right).



The Recon international charger that ships with the Recon handheld comes with the multiple plugs shown below.



The following figures show car chargers that **are** compatible with the new Recon PowerBoot Module battery pack:

Nomad / Ranger X / Recon 12 V vehicle charger
(Output: 5V, 5A regulated): MCS P/N ACCAA-653
(Previous P/N ST1-Z2003)



Recon 12 V vehicle charging cable for old and new versions of the battery pack (Output: 5V, 2A):
MCS P/N ACCAA-661 (Previous P/N REC-Z2004)



Caution: The new Recon PowerBoot Module battery pack is not compatible with Recon chargers previously sold by Trimble. If you try to use these chargers, the new battery will not charge, and may damage the cells. However, this will not be obvious until you try to use the Recon handheld.

The chargers that **do not work** include:

- The legacy Recon North American AC battery charger (5 V, 550 mA unregulated): P/N REC-AN1POWERSUP
- The Recon vehicle charging cable for the legacy Recon battery: P/N REC-AAVCHRG12VCBL

The following figures show the legacy chargers that are **not** compatible.

Note: The old Recon car charger (left) looks similar to the new Recon car charger (right).

