**Additional Notes:**

1 sheet, 1 fold

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**Revision History**

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**Material**

White Paper

**Notes**

1. printed two sides
2. printed black
3. tolerance: ± .13
4. see sheet 2 for artwork
5. printed in country may vary
6. drawings not to scale

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**Revision Description:**

B > Allegion Rebranding

**Edited By**

R. Byun

**Approved By**

M. Roberts

**EC Number**

062621

**Release Date**

05-14-2015

**Title**

S-BB-BAT, Spare Backup Battery Instruction

**Creation Date**

08-29-11

**Number**

70200-0093

**Activity**

J. Ellis

**Software:** Illustrator CS6

**Address:**

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**City:** Security

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**Company:** Allegion

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The F Series family of readers uses an internal switching regulator to obtain internal operational power via an internal lead acid battery and a power fail protection PCB or onboard circuitry. With the latter in use, switchover to battery power is automatic and occurs when the main input voltage falls to approximately 10.5 volts. At that state, the internal battery charger is disabled to save power and uninterrupted operation continues on battery power. When input power is restored, the unit switches off of battery operation and the battery charger is re-enabled to recharge the battery. A fully discharged battery requires approximately 12 hours of charge to fully recover. Additional options installed and specific configurations within the unit make it difficult to predict precisely how long battery support will last, but in general two hours of battery operation is not unreasonable. While operating on battery backup, the reader will shut down when the battery voltage reaches approximately 9.5 volts. This is done to prevent full exhaustion of the battery. A yellow indicator on the top panel illuminates to indicate that the unit is running off of battery power. This indicator extinguishes when main input power is restored.

Placement of the shunt/jumper on J7 on the main logic board enables or disables battery operation on those units equipped with an optional battery backup. To fully power down a unit equipped with battery backup, remove or reposition shunt J7 so that the two pins protruding up from the main logic board are not connected to each other. Main input power can then be removed and the unit will fully shut down. If shunt/jumper on J7 is not properly installed, the internal backup battery will not be charged, and in the event of a main input power loss, the unit will shut down.
1. Unlock the reader and rotate.
2. Disconnect the power supply from the board.
3. Remove and tag all external connections to make correct re-attachment.
4. Remove HandReader from wall by sliding it to the right, away from the wall mount. See figure 1 below.
5. Set the reader on a firm surface such as a table. Remove the four screws that secure the back plate to the HandReader. Remove the grounding screw and/or ground lug (if present). See figure 2 below.

6. Remove the back plate.

7. Install the battery into the chassis. Route the cable as shown and attach to J4 on the top panel PCB as shown in figure 3 below.

8. Reinstall the back plate onto the chassis. Reinstall grounding screw and/or ground lug (if present). Do not allow ground lug to come into contact with J7. Secure the back plate with the four screws removed in step 5.

9. Line up the slots at the bottom of the reader’s back with the four hinge pins at the bottom of the wall mount. Slide the reader to the left so the pins go in the slots. This fastens the reader to the wall and back plate and forms a hinge.

10. Reconnect cables removed in step 3.
11. If not already installed, install the J7 jumper (if applicable). See figure 4 below.

12. Power up the unit.

13. Secure the unit to wall mount with key. Upgrade is completed.