

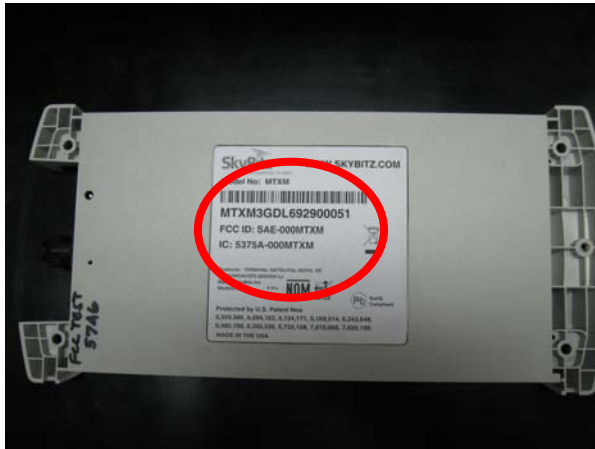


## SkyBitz GLS 400 (REV M) Mobile Terminal Battery Replacement Procedure

### Introduction

This is a procedure for removing and replacing the batteries installed in the GLS 400 (REV M) SkyBitz Mobile Terminal (MT).

The installation guide applies to REV M type mobile terminals ONLY. The type of mobile terminal may be identified by the serial number. The serial number is located on the bottom of the unit and on the end that has the I/O connector.



The fourth letter from the left indicates the REV type. For example the serial number on a SkyBitz REV M mobile terminal will look like "MTXM3GDLxyyyzzzzzz", where "xyyyzzzzzz" are numbers. The "M" after "MTX" indicates the mobile terminal REV type.

- This procedure can be performed while the MT is installed or uninstalled.
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- Installation time is approximately fifteen minutes.
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- A #10 TORX (T10) wrench or screwdriver is required to remove the battery tray assembly.
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- **The battery door screws have a torque specification of 2.5 inch pounds (+/- .1 in lbs).**
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- **You must use a T10 TORX torque driver or wrench to tighten the battery door screws to the specified torque setting. Failure to do so will invalidate your warranty.**

### IMPORTANT NOTICE

You are solely responsible for installing the new batteries in your Equipment and it is imperative that you strictly abide by the battery replacement installation procedures provided below when you are replacing the battery in your Equipment. Failure to install the replacement batteries in **full accordance** with the instructions can result in **severe damage** to your existing Equipment or **total unit failure**.

By your acceptance of this battery replacement shipment, you acknowledge and agree that SkyBitz, Inc. will not be liable for any: (i) unit damage, (ii) unit failure and (iii) warranty claims if any of the foregoing arises as a result of your failure to **fully comply** with SkyBitz's battery replacement installation procedures.



## SkyBitz GLS 400 (REV M) Mobile Terminal Battery Replacement Procedure

### Tools Required

- #10 TORX (T10) Torque Wrench or Torque Screwdriver

### Batteries Required

- Eight NEW Energizer Ultimate Lithium AA Cells

**NOTE: Do Not Use Energizer Advanced Lithium AA Cells.**

**ONLY USE ENERGIZER ULTIMATE LITHIUM AA CELLS.**



### SkyBitz Battery FAQ #1:

The status of the battery as reported on SkyBitz Insight is derived from several sources. First, the mobile terminal keeps track of the rate at which the MT uses electricity or electrical charge from a power source (in milli-Ampere hours). This includes electricity used during the sleep mode. After each scheduled event, the MT will report to the SkyBitz data center the total accumulated milli-Ampere hours consumed since the last battery change. There may be no change since the over-the-air resolution of the milli-Ampere counter is 29 milli-Ampere hours. If the battery is removed for any reason, the total accumulated milli-Ampere hours recorded in the MT is reset to zero. If that happens then the user should ALWAYS install eight NEW Energizer Ultimate Lithium AA Cells following the procedure presented in this guide.

The reset process does not happen immediately after battery power is disconnected, but may take up to two minutes. This is due to capacitors in the circuitry slowly discharging stored electrical charge. This slow rate of discharge and the low power requirements of the mobile terminal create a situation whereby the MT continues to function for up to two minutes after battery power is disconnected. This is the reason why we recommend that after removing the old batteries, the user waits for at least two minutes before installing new ones. The wait guarantees that the accumulated milli-Ampere hours will be reset to zero in the MT and SkyBitz Insight will correctly report the battery status.

SkyBitz Insight computes the number of days remaining until the next battery replacement. The battery status is reported on SkyBitz Insight using a simple indicator. The battery status is indicated as Green (greater than 365 days left) or Yellow (between 240 and 365 days remaining) or Orange (less than 240 days remaining) or Red (less than 90 days remaining; battery replacement recommended). SkyBitz Insight also reports the number of battery days in service since the last battery replacement.

The other source of information required for predicting the battery status is the capacity of the installed AA cells. The mobile terminal does not know what type of battery is installed. The capacity of the installed battery cells must be known by SkyBitz. This parameter is not available for the end user to change.

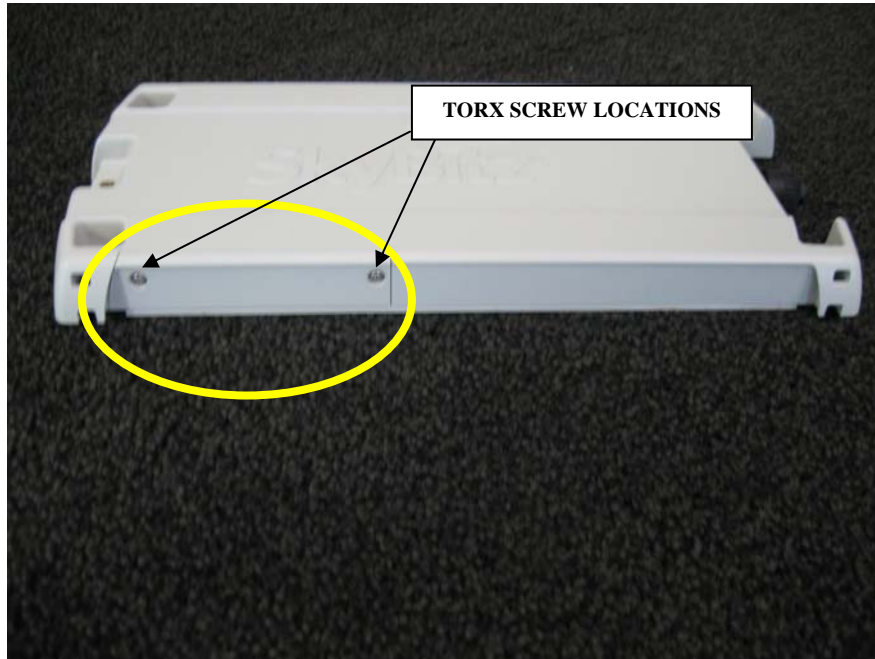
**Therefore only install Energizer Ultimate Lithium AA cells.** The Energizer Advanced Lithium AA cells have less capacity than the Ultimate Lithium AA cells. **DO NOT MIX CELLS OF DIFFERENT or UNKNOWN CAPACITY.** Mixing old or new cells of unknown capacity with new cells of known capacity does not allow SkyBitz Insight to properly predict the remaining time before battery replacement is required. Otherwise, it is possible that the battery or batteries with less capacity will drain before the others. This will create extra strain on the remaining batteries, resulting in a non-functional MT.



## SkyBitz GLS 400 (REV M) Mobile Terminal Battery Replacement Procedure

### Procedure

1. Loosen the two battery door/tray screws, using a T10 TORX screwdriver or equivalent. The screws are captive and will stay attached to the battery door/tray.



2. Using your fingers, carefully pull the battery door/tray unit out of the MT. This may be difficult due to the tight fit of the door and the dual O-ring seals. **DO NOT ATTEMPT TO PRY THE DOOR AWAY FROM THE MT HOUSING USING A SCREWDRIVER or SIMILAR OBJECT.** Set the battery door/tray aside being careful to keep the two "O" ring seals protected from dirt or other contaminants. Do not allow contaminants to get inside the MT through the battery access area.





## SkyBitz GLS 400 (REV M) Mobile Terminal Battery Replacement Procedure

3. Remove the eight (8) Energizer L91 Ultimate Lithium AA cells. Properly dispose of the used cells at a battery recycling center. **Do not re-use any of the old cells.**



4. **Caution! Before installing the new battery, wait a minimum of 2 minutes for the system to reset its battery counter.**





## SkyBitz GLS 400 (REV M) Mobile Terminal Battery Replacement Procedure

5. Place eight (8) NEW Energizer L91 Ultimate Lithium AA cells in the battery tray noting the polarity guides molded into the tray rails.

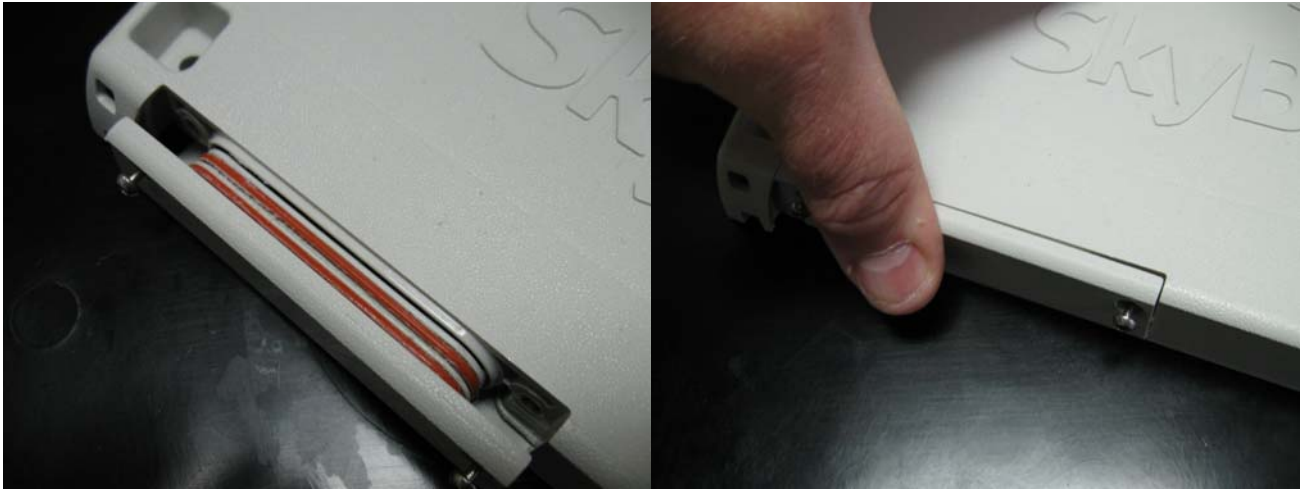
**NOTE: USE OF BATTERIES OTHER THAN THE SPECIFIED ENERGIZER L91 ULTIMATE LITHIUM AA CELLS WILL INVALIDATE THE WARRANTY AND MAY RESULT IN UNIT DAMAGE AND POOR PERFORMANCE. ALWAYS REPLACE ALL EIGHT CELLS WITH NEW ONES. DO NOT USE A MIX OF OLD AND NEW CELLS.**





## SkyBitz GLS 400 (REV M) Mobile Terminal Battery Replacement Procedure

6. Carefully install the battery door/tray unit firmly into the unit, applying even pressure to the left and right sides of the door as the o-rings engage.



7. Ensure that the battery door is now firmly seated into the MT. Tighten the battery door/tray unit screws alternately until both are fully seated. **DO NOT TIGHTEN ONE SIDE FULLY AND THEN THE OTHER. DOING SO WILL INVALIDATE THE WARRANTY.**



8. Fully tighten each TORX screw to 2.5 inch pounds. **EXCEEDING THE TORQUE SPEC WILL VOID THE MOBILE TERMINAL WARRANTY AND MAY CAUSE FAILURE OF THE MOBILE TERMINAL.**
9. After completing the above procedure please log into SkyBitz InSight and under *Manage Settings* go to *Battery Replacement* and use the asset ID or MT serial number to update the battery information. You may also contact Customer Care at 1-866-875-9248 to notify us of the replacement.

**Note: Failure to properly tighten the battery door/tray unit screws will void the warranty.**

**SkyBitz Customer Care at 1-866-875-9248**