



# TUI Airline Ground Operations Instruction Notice

## EMA Safe Loading Guide

Notice: GOIN23-053R2

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To: All stations  
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**Applicability:** TUI Airways (TOM-BY) / TUIfly Nordic (BLX-6B) / TUI fly Belgium (JAF-TB) / TUI fly Netherlands (TFL-OR) / TUIfly Germany (TUI-X3)

Date of Publication: 27 DEC 2023  
Date of Revision 2: 22 JUL 2024  
Validity Period: 28 DEC 2023 – Until Further Notice

Dear partner,

The requirements for acceptance and safe loading of electric mobility aids (EMA's) is clearly documented in each airlines' ground handling Manuals.

However, recently we have received feedback and Safety Reports regarding some local alternative interpretations as to what size lithium batteries can be carried with some compliant batteries being offloaded and non-compliant batteries being carried.















The attached QRH is a simplified guide covering the basic requirements to assist you when accepting EMA's and how to identify Lithium-ION batteries watt hour (Wh), the numbers to be carried and in which location.

The changes and updates are very minor and reflect the current and latest terminology from IATA. WCBW is referred to as a "non-spillable battery" and WCBW is referred to as "wet cell battery".

Kind regards,

TUI Airline Ground Operations

## Electric Mobility Aid (EMA) Safe Loading Quick Guide.

<p><b><u>WCLB</u></b> Lithium-ion Battery.</p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Calculate Watt Hour Rating. Volts (V) x Ampere (Ah) = Watt Hour (Wh) (e.g 5V x 25A = 125Wh)</p> </div>	<p>Also Known as:</p> <p>Lithium – ION, Lithium Metal, Lithium polymer, Lithium Alloy.</p>	<p><b><u>Lithium-ion BATTERY NOT REMOVED FROM EMA</u></b></p> <p><b>CABIN = </b> <b>HOLD = </b></p> <p><u>WATT HOUR (Wh); QUANTITY RESTRICTION</u></p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>1 x Lithium-ION battery powering EMA - MAX 300Wh per PAX, Or 2 x Lithium-ION batteries powering EMA MAX 160Wh each per PAX</p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>A passenger may also carry in the cabin a maximum of 1 spare Lithium-ION battery not exceeding 300Wh or 2 spare batteries not exceeding 160Wh each.</p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>DEPENDING ON EMA DESIGN, BATTERY CAN REMAIN ATTACHED TO EMA. Immobilising the EMA: A. Power switched off and remove the key. B. Detach Cable from battery/controller's &amp; connectors and protect against short circuit. C. Insert Inhibiting plug (Air Safe Plug). D. State of the art functions of flight mode activation via an app.</p> </div>	<p><b><u>Lithium-ion BATTERY REMOVED FROM EMA</u></b></p> <p><b>CABIN = </b> <b>HOLD = </b></p> <p><u>WATT HOUR (Wh); QUANTITY RESTRICTION</u></p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>1 x Lithium-ION battery powering EMA - MAX 300Wh per PAX, Or 2 x Lithium-ION batteries powering EMA MAX 160Wh each per PAX</p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>A passenger may also carry in the cabin a maximum of 1 spare Lithium-ION battery not exceeding 300Wh or 2 spare batteries not exceeding 160Wh each.</p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Thus - maximum no. of batteries carried in the cabin per PAX can be = 2 batteries up to or &lt;300Wh each (1 from EMA removed &amp; 1 spare) OR, 4 batteries up to or &lt;160 Wh each (2 from EMA removed &amp; 2 spare)</b></p> </div>
<p><b><u>WCBD</u></b> Non-Spillable Battery.</p> 	<p>Also Known as:</p> <p>AGM Dry, Dry Cell, Gel Cell, SLA (Sealed Lead Acid), Nickel – metal, hydride,</p>	<p><b><u>WCBD. BATTERY NOT REMOVED FROM EMA</u></b></p> <p><b>CABIN = </b></p> <p><b>HOLD = </b></p>	<p><b><u>WCBD. BATTERY REMOVED FROM EMA</u></b></p> <p><b>CABIN = </b></p> <p><b>HOLD = </b></p>
<p><b><u>WCBW</u></b> Wet Cell Battery</p> 			

## Electric Mobility Aid (EMA) Safe Loading Quick Guide.

Maximum EMA Dimensions: **B737** - H86cm x W119cm x D119cm. **B787** - H150cm x W150cm x D119cm.

- The check-in agent will issue an EMA Tag which must be filled in and attached to the EMA. The EMA tag is carbonated, distribute copies to a. Flight Deck, b. Flight File, c. Fixed to EMA.
- An EMA can be immobilised at check-in, at the boarding gate, at the aircraft side. As soon as this is complete, the EMA Tag must be signed by the responsible person.
- Methods to Immobilising the EMA: A. Power switched off and remove the key. B. Detach Cable from battery/controller's/ connectors and protect against short circuit. C. Insert Inhibiting plug (Air Safe Plug). D. State of the art functions of flight mode activation via an app.
- Removal of the battery should not be necessary in most instances; this is in accordance with the regulation. If the EMA is lithium-ion powered and the battery is designed to be removed it must travel in the cabin.
- If there is no signature or it is evident that the EMA has not been made safe, it must not be loaded. The loading supervisor must contact the person who was responsible for making the device safe for carriage for them to immobilize the power supply.
- The EMA loading location must be clearly marked on the LIRF and note this on the EMA Tag.
- Multiple EMA's can be loaded in the same netted compartment however they must be secured separately.
- EMA's must be loaded upright and cannot be loaded at any other angle.
- If the planned aircraft is containerised, plan for the mobility aid to be loaded in a dedicated ULD which will be required to be loaded next to the hold door.
- Only anchor points on the floor should be used and the EMA's anchor point should not be shared with compartment nets.
- EMA's do not appear on a NOTOC but the DG regulation requires that the PIC needs to be aware of any EMA's loaded and the loading position of the battery.