



## SUBJECT

### High-voltage Battery Charging Recommendations

## MODEL

I01 (i3)

## INFORMATION

**Only properly trained personnel, who have passed all applicable technical training courses, should perform any maintenance or repairs on any Hybrid or Electric Vehicle. Work performed by unqualified persons may result in severe injury or damage to the vehicle. Additional information may be found in REP 61 00... Observe safety instructions when handling electric vehicles.**

There are several options for charging the high-voltage battery in the I01. The charging requirements vary depending on how the vehicle is being used. Refer to the following scenarios for the appropriate charging recommendations. In addition, certain precautions must be followed during charging to prevent damage to certain high-voltage components.

### Diagnosis:

- During diagnostic work on the vehicle, a charging cable must be connected via the vehicle's charge port. A level 1 (Occasional Use Cable), level 2 (Wallbox), or DC charger may be used.

### Repair work:

- During **non-electrical** or **low-voltage** repair work which is not associated with the drivetrain or any high-voltage components:
  - The vehicle must be turned off (KL0) and plugged in using an HV charging cable, i.e., Level 1 Occasional Use Cable.
- During work **on, or near high-voltage** components or any drivetrain components:
  - The high-voltage system must be shut down by properly trained personnel via Repair Instruction REP 61 25 900. If the vehicle needs to be turned on during the repair process, the vehicle should be connected to a workshop power supply at the 12V service posts on the Electric Machine Electronics (EME).

### Programming:

- During programming with ISTA/P, the high-voltage system must be shut down by properly trained personnel.
- A workshop power supply, e.g., DUETRONIC 1600, must be connected to the 12V service posts on the EME.

### External power supply (low-voltage – 12V):

- An external power supply such as a workshop or showroom power supply may be used, but certain precautions must be taken.
- The high-voltage system **must** be switched off prior to connecting a power supply.

- A power supply may be connected at either the 12V battery in the front of the vehicle (before the IBS), or to the 12V service posts on top of the EME.
- **Failure to switch off high-voltage prior to connecting the power supply may result in permanent damage to the EME.** Subsequent EME damage resulting from an incorrect charging procedure is not covered under warranty.

### Vehicle Storage:

- The BMW Battery Maintenance requirements apply to high-voltage batteries in addition to 12V batteries. For more information on this program, refer to [SI B61 18 08](#).
- If the vehicle is stored while in Transport Mode, it should be charged to the maximum allowable state of charge ( $\approx 35\%$ ) prior to storage.
- If the vehicle is stored out of Transport Mode, it should be charged to 100% prior to storage.

### Charging time chart:

- Up to three (3) different charging methods are possible with the I01, depending on vehicle options.
- NOTE: The following estimated charging times are based on the charge rate being set to “Max” in the Central Information Display. Actual charging times may vary beyond what is noted below.

### BMW i3

#### Approximate Charging Time to 100% State of Charge

Charging station	From 0% SOC	From 30% SOC	From 60% SOC
<b>Level 1 – Occasional use cable</b>	13.5 – 19 hours	9.5 – 13 hours	5 – 7.5 hours
$\approx 120$ V (up to 12 A)			
<b>Level 2 – Wall box</b>	2.5 – 3.5 hours	2 – 2.5 hours	1 – 1.5 hours
$\approx 240$ V (up to 32 A)			
<b>DC Fast Charger [SA 4U7]</b> –	1 – 1.5 hours	1 – 1.5 hours	1 – 1.25 hours
Using 50 kW DC charger	* <b>80%</b> reached	* <b>80%</b> reached in	* <b>80%</b> reached in
	<b>in 25 min</b>	<b>20 min</b>	<b>10 min</b>

### Additional Notes:

- The I01 is equipped with a relatively small 20Ah 12V battery. As a result, it can be discharged and damaged very easily if the 12V system is not properly maintained during diagnostic and repair work.
- For additional information regarding the charging strategy, methods, etc., refer to the I01 technical training manual, ST1403 – I01 Complete Vehicle and ST1403b – I01 High-voltage Battery and Maintenance, available on TIS under Service Reference/Training Information/General Search.
- Information on the accessory BMWi Charging Station is available in Aftersales Bulletin B-13-0314-6501.

### WARRANTY INFORMATION

Not applicable.

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