## Electric range is reduced after brief period

Topic number LI54.10-P-069831

Version

Function group 54.10 Battery, power supply, voltage converter

Date 05-21-2019

Validity Model 205 with code ME06 (Plug In Hybrid)

Model 213 with code ME06 (Plug In Hybrid) Model 253 with code ME05 (Plug In Hybrid) Model 166 with code ME05 (Plug In Hybrid) Model 222 with code ME05 (Plug In Hybrid)

Reason for change Reason for block

### Complaint:

The electric range (display in instrument cluster) is reduced after a brief period.

#### Cause:

The aging of the lithium-ion high-voltage battery is more apparent because of unfavorable vehicle usage. Naturally, the high-voltage battery exhibits a reduction in useful capacity throughout its overall service life.

### Remedy:

Assessment of "residual capacity":

First, determine the remaining battery capacity (%) from read out in the BMS control unit record.

If the value of remaining battery capacity is between 70% and 100%:

Recommend following measures to the customer:

- 1. Avoid lengthy non-operational times with a high SOC (a SOC of approx. 40% is recommended for a lengthy immobilization period).
- 2. Regular idle phases for the high-voltage battery (e.g. park vehicle once a week overnight or over the weekend at an SOC of 20% 30%).
- 3. Charge as needed and when required (charge high-voltage battery fully just immediately prior to using it).

NOTE: In addition to measures above and for further clarification reference SI47.70-P-0070A.

Alternatively, if the value of remaining battery capacity is between 0% and 69%:

1. Replace the high-voltage battery

#### **Symptoms**

# XENTRY TIPS

Overall vehicle / Power supply / High-voltage on-board electrical system / High-voltage battery / Malfunction

Operation numbers/damage codes						
Op. no.	Operation text	Time	Damage code	Note		
			54719 B9	High-voltage battery - remaining battery capacity below limit		

WIS-References							
Document number	Title	Note	Allocation				
SI47.70-P-0070A	Service information: High- voltage battery	Note chapter on "Instructions for Use or Care of Lithium-Ion Batteries".	Remedy				