May 2014 Technical Service

### **SUBJECT**

### Parking Lock Cannot Be Engaged or Disengaged

#### **MODEL**

I01 (i3 and i3 REx)

#### **SITUATION**

When attempting to engage or disengage the park position in the transmission, the parking lock actuator may not respond. This condition may be intermittent or permanent.

The customer will see the position indicator on the gear selector (GWS) flashing "N" or "P," and a Check Control Message will be present stating "Drive Faulty" or "Secure vehicle against rolling away".

One or more of the following faults will be stored in the Electric Machine Electronics (EME):

- 222D25 Parking lock actuator: No change in the PS position
- 222D26 Parking lock actuator: Requested position could not be reached
- 222D29 Parking lock FUSI: Level1/level2 fault

**NOTE:** If the parking lock cannot be engaged, the vehicle must be secured against rolling by applying the parking brake.

#### **CAUSE**

1. Internal failure of the park lock actuator

or

2. Software error

#### **PROCEDURE**

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.

- 1. If FC **222D25** and **222D26** are stored in the EME, replace the parking lock module per REP 27 21 315, using the part number noted below.
- 2. If FC **222D26** and **222D29** are stored in the EME, program the vehicle with ISTA/P 2.52.2 (integration level 14-03-503) or higher.

#### PARTS INFORMATION

Part Number	Description	Quantity
27 21 7 645 837	Parking Lock Module	1 (if necessary)

#### **WARRANTY INFORMATION**

Covered under the terms of the BMW New Vehicle/SAV Limited Warranty.

Defect Code:	27 21 00 15 00	
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults)
and		
61 25 910	Refer to KSD2	Recharging high-voltage battery unit (to high-voltage charging unit)

Labor operation code 00 00 006 is a Main labor operation. If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead.

# **Procedure 1**

## **i**3

Labor Operation:	Labor Allowance:	<b>Description:</b>
27 21 816	Refer to KSD2	Replacing actuator for parking lock

or

## i3 REx

<b>Labor Operation:</b>	Labor Allowance:	Description:
27 21 821	Refer to KSD2	Replacing actuator for parking lock

or

# **Procedure 2**

<b>Labor Operation:</b>	Labor Allowance:	Description:
61 00 730	Refer to KSD2	Programming/encoding control unit(s)
and		
61 21 528	Refer to KSD2	Connect an approved battery charger/power supply (indicated in KSD2 as "Charging battery to EME")
or		
61 21 529	Refer to KSD2	Connect an approved battery charger/power supply (indicated in KSD2 as "Charging battery to EME") (luggage compartment service cap removed)

Refer to KSD2 for the corresponding flat rate unit (FRU) allowance. Enter the Chassis Number, which consists of the last 7 digits of the Vehicle Identification Number (VIN). Click on the "Search" button, and then enter the

applicable flat rate labor operation in the FR code field.

If control module(s) fail to reprogram or initializations are required, the additional work must be claimed using separate labor operations found in KSD2 under the defect code listed above.

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