NOISE FROM ENGINE WHEN STARTING

New information provided by this revision is preceded by this symbol.

This Service Information bulletin supersedes SI B12 09 18 dated April 2018.

What's New:

• The parts information section has been updated.
• The attachment has been updated.

MODEL

| F30 PHEV (330e iPerformance) | G12 PHEV (740e xDrive iPerformance) | G30 PHEV (530e iPerformance) |

Vehicles produced from SOP to 3/14/18

SITUATION

Noise when starting the engine.

Engine making a rattling/grinding noise near the 12 volt starter motor.

The following fault has been stored in the DME fault memory:

• 21A511 - Start system, pinion starter motor: Timeout

The following faults are also possible:

• 21A504 - EGS, separation clutch: jammed open
• 21A50A - Start system, pinion starter: Timeout successively occurred multiple times
• 21A510 - Start system, EME: Timeout

Consequential damage to flywheel (Torsional vibration damper) and automatic transmission may have also occurred.

CAUSE

The starter motor is broken. It may be indicated by:

• The circlip on the pinion being broken
CORRECTION
Replace the starter motor and evaluate for consequential damage.

PROCEDURE
For conditions that are similar to the situation described:

Follow the attached Starter Motor Failure Repair procedure (B120918_Attachment.pdf).

PARTS INFORMATION

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exchange starter motor</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Automatic transmission Eh</td>
<td>1 (if required)</td>
</tr>
<tr>
<td></td>
<td>Torsional vibration damper</td>
<td>1 (if required)</td>
</tr>
</tbody>
</table>

Bulk Materials

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>83 22 2 289 720</td>
<td>ATF 3+ (1L)</td>
<td>As needed</td>
</tr>
</tbody>
</table>

WARRANTY INFORMATION
Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks or the BMW Certified Pre-Owned Program.

Defect Code: 1241900100
Completion “before” vehicle delivery to the customer or the vehicle is already in the workshop (Plus work)

<table>
<thead>
<tr>
<th>Labor Operation:</th>
<th>Labor Allowance:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>00 66 553</td>
<td>16 FRU (F30); 21 FRU (G12); 11 FRU (G30) xDrive</td>
<td>Vehicle test and replace starter motor</td>
</tr>
<tr>
<td>Or:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00 66 554</td>
<td>21 FRU (F30); 26 FRU (G12); 16 FRU (G30) xDrive</td>
<td>Vehicle test, replace starter motor, program and encode control units</td>
</tr>
<tr>
<td>Or:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00 66 555</td>
<td>60 FRU (F30); 78 FRU (G12); 61 FRU (G30) xDrive</td>
<td>Vehicle test, replace starter motor and the torsional vibration damper</td>
</tr>
<tr>
<td>Or:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00 66 556</td>
<td>64 FRU (F30); 82 FRU (G12); 65 FRU (G30) xDrive</td>
<td>Vehicle test, replace starter motor, torsional vibration damper and program and encode control units.</td>
</tr>
<tr>
<td>Or:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00 66 557</td>
<td>70 FRU (F30); 88 FRU (G12); 71 FRU (G30) xDrive</td>
<td>Vehicle test, replace starter motor, torsional vibration damper and automatic transmission.</td>
</tr>
<tr>
<td>Or:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00 66 558</td>
<td>74 FRU (F30); 92 FRU (G12); 74 FRU (G30) xDrive</td>
<td>Vehicle test, replace starter motor, torsional vibration damper, automatic transmission and program and encode control units</td>
</tr>
<tr>
<td>And, when applicable:</td>
<td></td>
<td>Associated (additional) work with “active stabilizer” for torsional vibration damper or replace automatic transmission repairs (Applicable repairs and for the G12, G30 and G38 with this option only)</td>
</tr>
</tbody>
</table>

Completion after vehicle delivery to the customer (Main work)

<table>
<thead>
<tr>
<th>Labor Operation:</th>
<th>Labor Allowance:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>00 66 038</td>
<td>16 FRU (F30); 21 FRU (G12); 11 FRU (G30) xDrive</td>
<td>Vehicle test and replace starter motor</td>
</tr>
</tbody>
</table>
Sublet reimbursement calculation for claiming repair-related bulk material (BMW part number) is at the dealer net price for the "quantities used" plus your center's handling. Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

### Vehicle Programming and Encoding (When applicable)

**A.** The programming procedure automatically reprograms and encodes all vehicle control modules which do not have the latest software i-level. If one or more control module failures occur “during” this programming procedure:

<table>
<thead>
<tr>
<th>Or:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>00 66 039</td>
<td>21 FRU (F30); 26 FRU (G12); 16 FRU (G30); 20 FRU (G30 xDrive)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Or:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>00 66 040</td>
<td>60 FRU (F30); 78 FRU (G12); 61 FRU (G30); 71 FRU (G30 xDrive)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Or:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>00 66 041</td>
<td>64 FRU (F30); 82 FRU (G12); 65 FRU (G30); 75 FRU (G30 xDrive)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Or:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>00 66 042</td>
<td>70 FRU (F30); 88 FRU (G12); 71 FRU (G30); 81 FRU (G30 xDrive)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Or:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>00 66 043</td>
<td>75 FRU (F30); 93 FRU (G12); 76 FRU (G30); 86 FRU (G30 xDrive)</td>
</tr>
</tbody>
</table>

**And, when applicable:**

<table>
<thead>
<tr>
<th>Or:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>00 66 559</td>
<td>13 FRU (G12); 11 FRU (G30, G30 xDrive)</td>
</tr>
</tbody>
</table>

**Sublet – Bulk Materials**

**Sublet Code 4**

| Sublet Code 4 | See the sublet reimbursement calculations below | Reimbursement for the repair-related bulk materials (Do not use part number for claim submission) |

Sublet reimbursement calculation for claiming repair-related bulk material (BMW part number) is at the dealer net price for the "quantities used" plus your center's handling.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.
• Please claim this “consequential” control module-related repair work under the defect code listed in this bulletin with the applicable KSD2/AIR labor operations.

Please explain this additional work (The why and what) on the repair order in the claim comments section.

B. For control module failures that occurred “prior” to performing this programming procedure:

• When “covered” under an applicable limited warranty, claim this control module-related repair work using the applicable defect code and labor operations (including diagnosis) in KSD2/AIR.

Posted: Monday, August 27, 2018

ATTACHMENTS
View PDF attachment B120918_Attachment.
## STARTER MOTOR FAILURE REPAIR

**Procedure:**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Remove the starter motor</td>
</tr>
</tbody>
</table>
| 2.   | Check transmission housing for stress cracks or visible damage (similar to shown).  
   **Were stress cracks/damage discovered on the transmission?**  
   **YES** - Replace both the flywheel and transmission as detailed in step 4.  
   **NO** - Go to next step. |
| 3.   | Check flywheel for damage (similar to shown).  
   **Was flywheel only damaged?**  
   **YES** - Replace flywheel only, as detailed in next step.  
   **NO** - Go to Step 5. |

4. Replace the damaged parts as specified in Step 2 or Step 3 above, following the appropriate repair instructions:  
   **Flywheel** - 11 22 000 - remove and install/replace flywheel  
   **Transmission** - 24 00 162 - install exchange transmission (GA8P75HZ) (B48 hybrid drive)  

5. Replace the starter following REP 12 41 020 - remove and install/replace starter motor.
6. Check the current I-Level of the vehicle.

**Does the vehicle's current I-Level conform to that specified in the following table?**

<table>
<thead>
<tr>
<th>Model</th>
<th>Required Target integration level</th>
</tr>
</thead>
<tbody>
<tr>
<td>F30 PHEV (330e iPerformance)</td>
<td>F020-18-03-510 or more recent</td>
</tr>
<tr>
<td>G12 PHEV (740e xDrive iPerformance)</td>
<td>S15A-18-03-510 or more recent</td>
</tr>
<tr>
<td>G30 PHEV (530e iPerformance)</td>
<td></td>
</tr>
</tbody>
</table>

**YES** - repair is complete

**NO** - Program the vehicle using ISTA 4.10.1x (F30) or ISTA 4.10.2x (G12, G30) or a more recent version.

Note that ISTA will automatically reprogram and code all programmable control modules that do not have the latest software.

**Always connect a BMW-approved battery charger/power supply (SI B04 23 10).**

For information on programming and coding with ISTA, refer to CenterNet / TIS / Technical Documentation / Diagnostics and Programming / Programming Documentation.