

**Procedure to check and/or repair the DME wiring harness connector A368\*1B.**

Warning: Working on 12 V vehicle electrical systems.

Risk of short circuits! Risk of fire!

For additional information see:

- 61 00 ... Safety information on handling the vehicle battery
- 61 00 / 12 00 ... Notes on disconnecting and connecting the vehicle battery
- 61 12 ... Notes on the intelligent battery sensor (IBS)

**1. Check connector:**



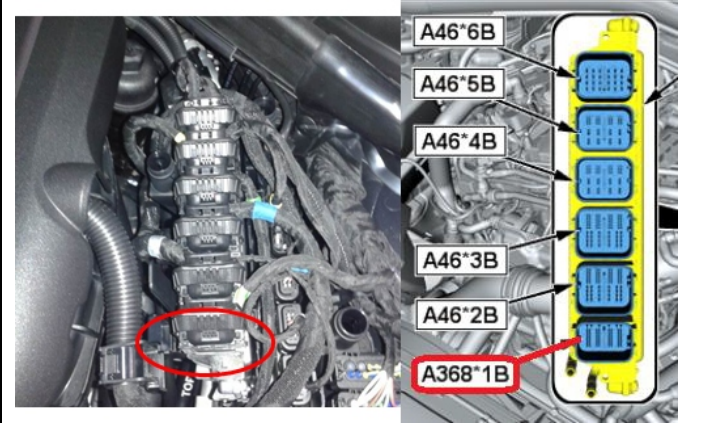


1a. Slacken nut (1) and detach battery earth lead from battery.

Note: Do not pry off using a tool.

For an auxiliary battery: Disconnect battery earth lead of auxiliary battery.

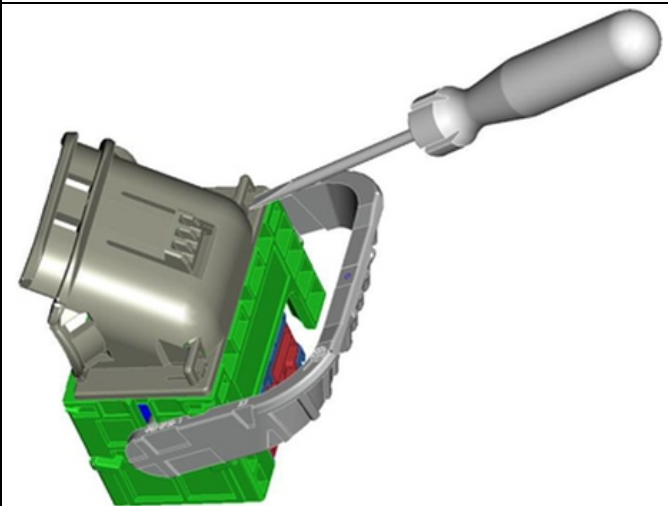


1b. Remove the cover of the DME control unit (circled, shown on B58 engine).

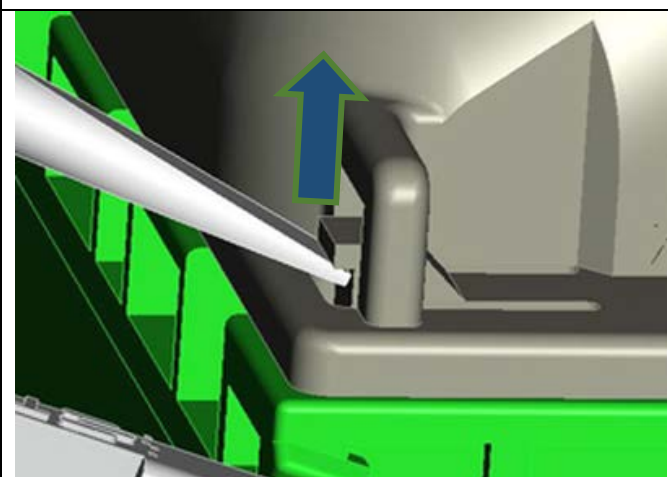
	<p>1c. Locate connector A368*1B and remove it from the DME.</p>
	<p>1d. Check for water residue or corrosion in the connector and in the connector chamber of the DME control unit (photo below).</p>
	<p>1e. Evaluation:</p> <p>If <u>no</u> water residue can be found on either component, proceed to <b>"2. Rework the connector"</b>.</p> <p>If <u>water residue or corrosion</u> is observed in the connector, proceed to <b>"3. Replace partial wiring harness and DME control unit"</b>.</p>
<p><b>2. Rework the connector:</b></p>	



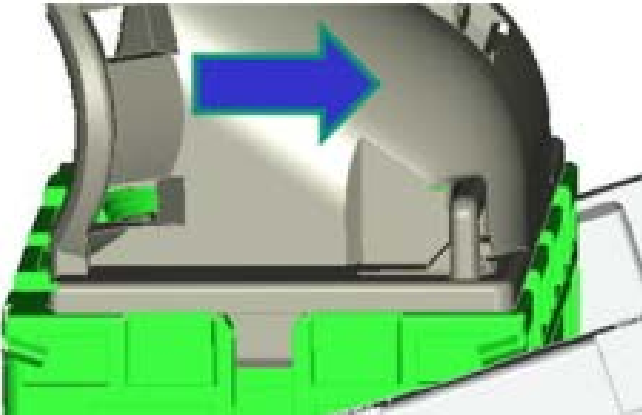
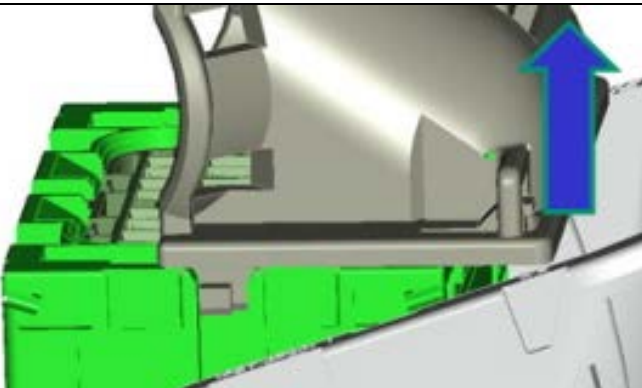

2a. Remove the cable strap (arrow) on connector A368\*1B.

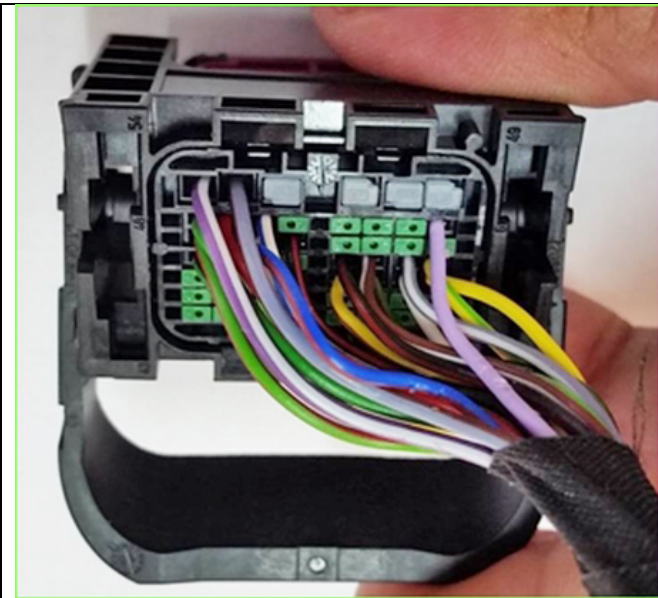


2b. Carefully remove the protective cap from the connector using a suitable tool.

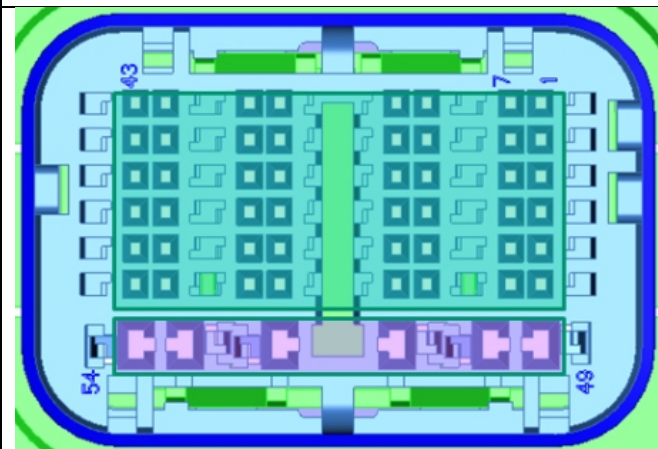


Lift the two locking tabs up

	<p>Slide the protective cap in the direction of the lock lever</p>
	<p>Lift the protective cap off the connector</p>
	<p>2c. Remove approximately 4" of the insulating tape on the wiring harness from connector A368*1B</p>



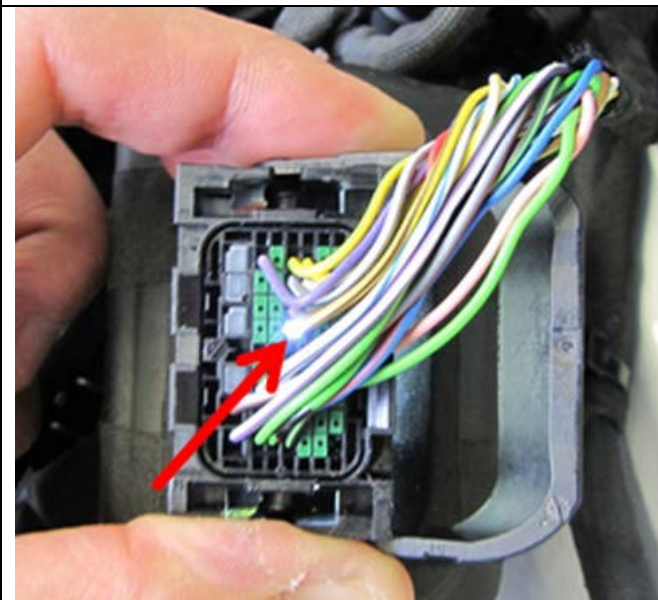
2d. All slots in the connector must be occupied with a wire or sealing plug.



2e. Install suitable sealing plugs (Repair kit P/N 61 12 8 794 765) into all of the open chambers.

Fit green sealing plugs into the open chambers in positions 1 thru 48 on connector A368\*1B

Fit "natural colored" sealing plugs into the open chambers in positions 49 thru 54

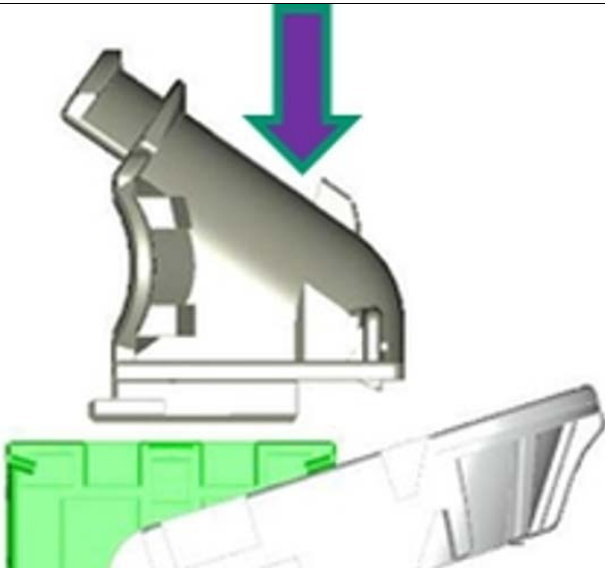


2f. Assembly verification:


Shine a flashlight from the front of the connector to locate any open chambers (arrow).

The best viewing perspective is vertically downwards from above the housing.

Install any remaining sealing plugs.

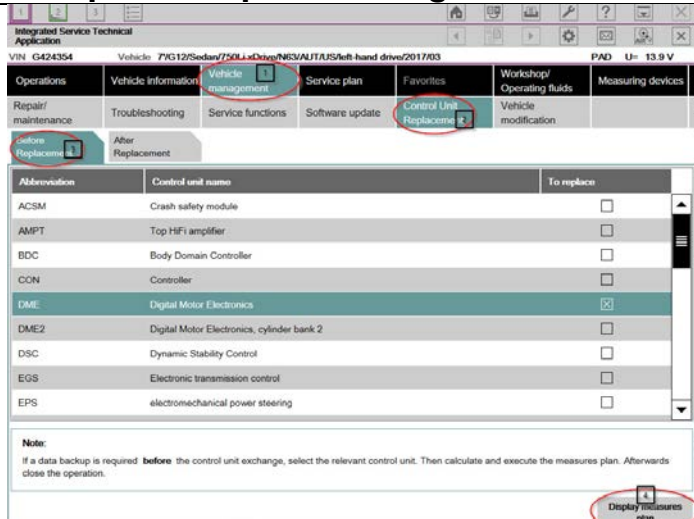


2g. Attach protective cap and replace cable strap



2h. Wrap the wiring harness with repair tape (P/N 61 13 6 920 760) up to the connector and reassemble.

### 3. Replace the partial wiring harness and the DME control module



Abbreviation	Control unit name	To replace
ACSM	Crash safety module	<input type="checkbox"/>
AMPT	Top HiFi amplifier	<input type="checkbox"/>
BDC	Body Domain Controller	<input type="checkbox"/>
CCN	Controller	<input type="checkbox"/>
DME	Digital Motor Electronics	<input checked="" type="checkbox"/>
DME2	Digital Motor Electronics, cylinder bank 2	<input type="checkbox"/>
DSC	Dynamic Stability Control	<input type="checkbox"/>
EGS	Electronic transmission control	<input type="checkbox"/>
EPS	electromechanical power steering	<input type="checkbox"/>

**Note:**  
If a data backup is required before the control unit exchange, select the relevant control unit. Then calculate and execute the measures plan. Afterwards close the operation.

3a.Reconnect A368\*1B and 12V battery.

Connect a BMW-approved battery/power supply (SI B04 23 10).

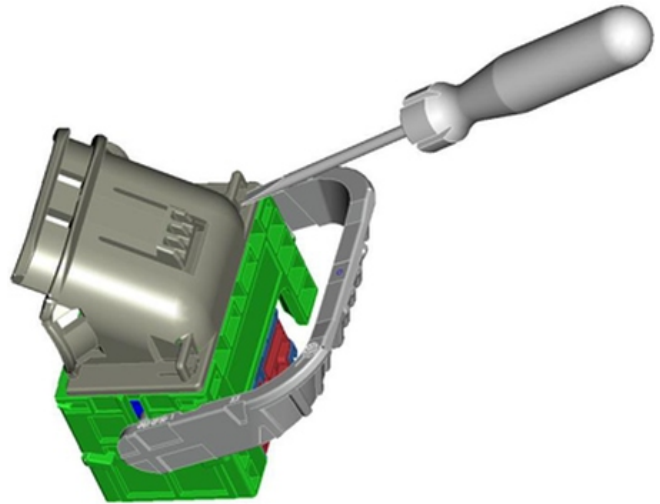
Begin guided ECU replacement of the DME control unit using the latest version of ISTA Next.

Disconnect Battery charger, 12V battery, and A358\*1B.

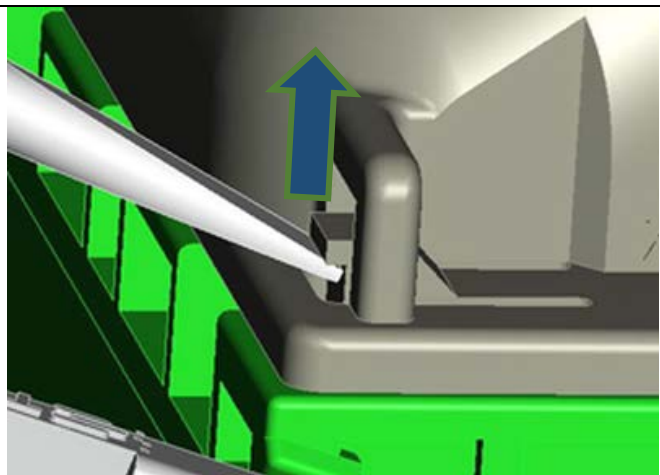
For an auxiliary battery: Reconnection and disconnect battery earth lead of auxiliary battery will be required.



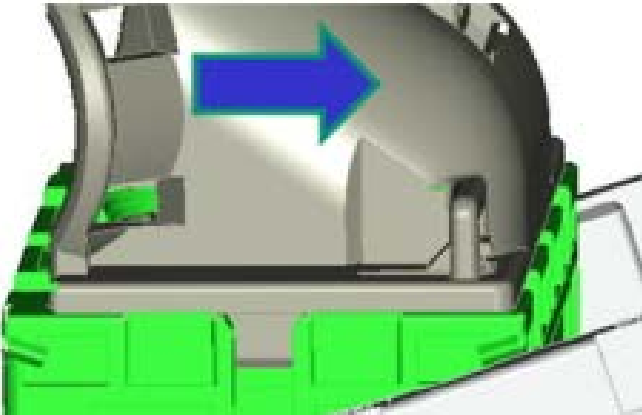
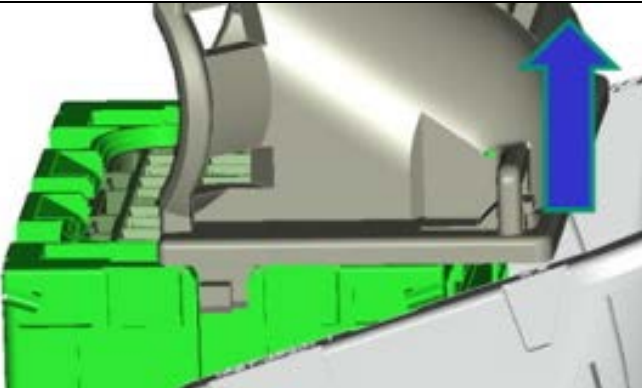
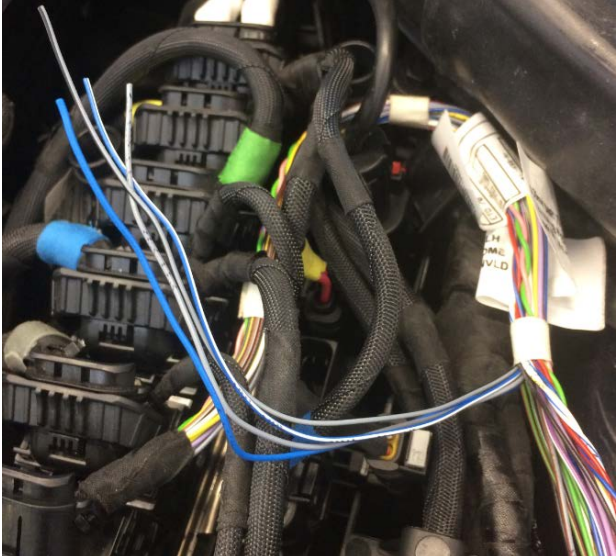
3b. Remove the cable strap (arrow) on both connector A368\*1B and the repair harness.



3c. Carefully remove the protective cap from the connector using a suitable tool on both connector A368\*1B and the repair harness.



Lift the two locking tabs up

	<p>Slide the protective cap in the direction of the lock lever</p>
	<p>Lift the protective cap off the connector</p>
	<p>3d. Route the repair harness in the installation position (Repair Kit 61 12 8 793 506).</p> <p>Compare the wire positions and colors of connector A368*1B and the repair harness.</p> <p>Separate and insulate the individual wires which are not required in the new wiring harness section with the “natural colored” shrink tubing.</p>





3e. Using the supplied butt connectors, splice in the replacement wiring harness, one wire at a time, using the black shrink tubing.

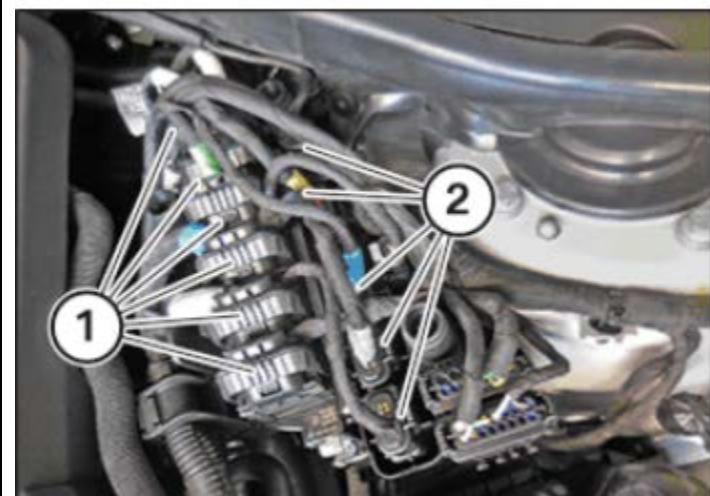
The splices should be staggered over a 4" area as shown.

Caution: Wire colors may be duplicated in the wire harness. Verify the correct circuits are connected by comparing pin locations.

Hint:  
 NanoMQS Wire stripping tool SI B04 30 15  
 Universal Crimping Die SI B04 32 06

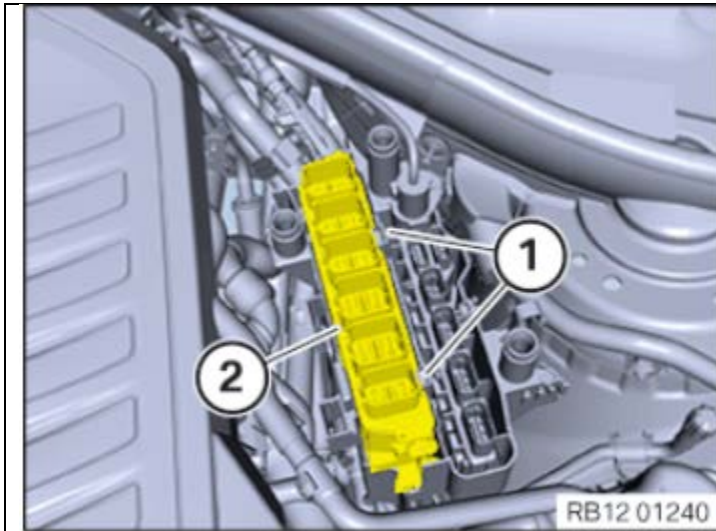


3f. Wrap the wiring harness with repair tape (P/N 61 13 6 920 760) up to the connector.



3g. Unlock all connectors (1) from front to back and unplug them from the DME control unit.

Unlock and pull all connectors (2) off the power distribution box (PDM).



3h.Unlock clamps (1) and remove the DME control unit (2) towards the top.

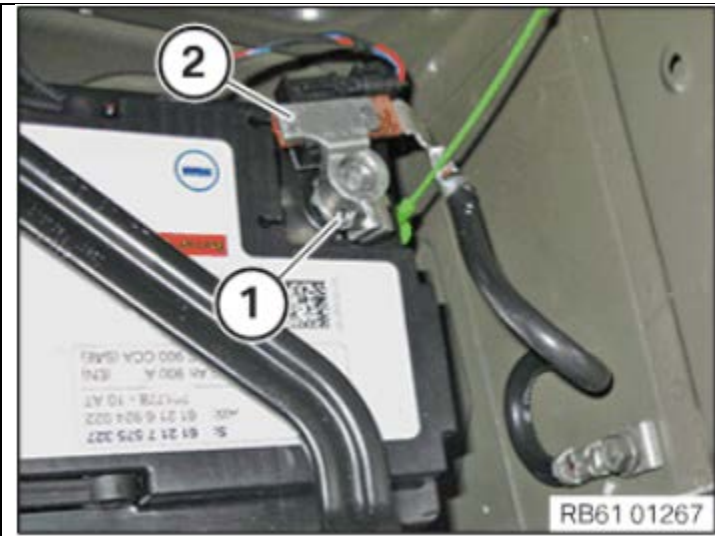
Slide the replacement DME control unit (2) into the holder for the DME control unit and lock with the clamps (1).



3i.Rout the repaired harness as shown and connect A368\*1B.

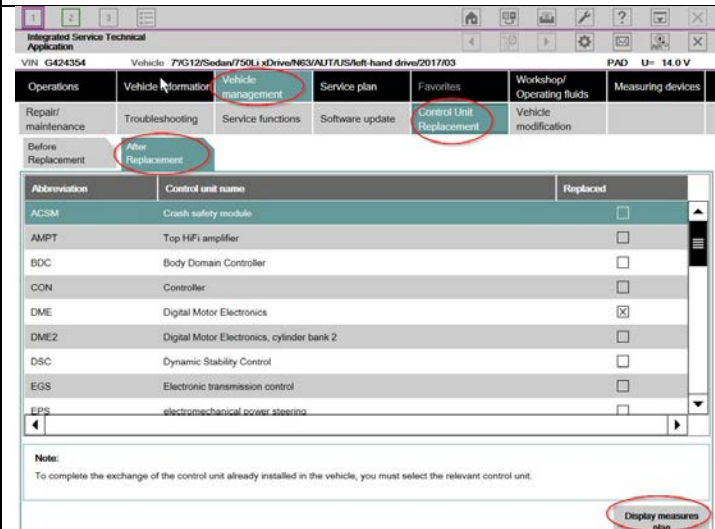


3j.Replace the cover of the DME control unit. Ensure the repaired harness is not pinched, rubbing on a sharp edge, and is fully covered by the DME control unit cover.



3k. Connect battery earth lead with intelligent battery sensor (IBS) (2) to negative battery terminal.

Tighten nut (1) to 5Nm.



3l. Complete the guided replacement of the DME control module using the latest version of ISTA Next.

Note: Always connect a BMW-approved battery/power supply (SI B04 23 10)