



Release Notes Programming Passenger Cars

ISTA	4.16.2x
ISTA Service Data	4.16.22
ISTA/P	3.66.1

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1 General notes

With the launch of ISTA 4, the functionality for programming has been integrated in ISTA.

The following series can be dealt with using ISTA/P:

E Series

The following series can be dealt with using ISTA 4:

• F, G and I Series

These Release Notes contain information for both programming systems.

The Release Notes list all known faults and faults that are currently still unresolved, with possible workarounds which are important for the Retailer Organisation. Please contact Technical Support if additional faults occur on the vehicle. In particular in the following cases:

- vehicle-related programming faults / encoding faults and activation faults
- functional faults on the vehicle

With ISTA 4, it is now also possible to send feedback relating to programming directly to BMW AG. Selecting the "Feedback" symbol (envelope symbol) displays the feedback screen with input boxes.



If a new fault pattern is included in a release, this is indicated in the heading with *** NEW ***. This is no longer indicated in the follow-up release.

2 Overview of the I levels contained

I levels newly added or updated in this ISTA version are marked in **BOLD**.

F, G, I series (ISTA 4)

Series group	l level
F001 (F0x, RR4, RR5, RR6)	
	F001-19-03-509
F010 (F06, F1x)	F010-19-03-509
F020 (F2x, F3x, F80, F82, F83, F87)	
	F020-19-03-522
F025 (F15, F16, F25, F26, F85, F86)	
	F025-19-03-530
F056 (F39, F4x, F5x, F6x)	F056-19-03-530
S15A (G01, G02, G08, G1x, G3x, RR1x, RR31, F90)	
	S15A-19-03-530
S15C (G38)	S15C-19-03-530
S18A (G05, G07, G14, G15, G20, G29)	
	S18A-19-03-530
1001 (101, 112, 115)	
	1001-19-03-530

I levels correspond to the ISTA Service Data version on the front page.

E Series (ISTA/P)

Series group	l level
E065 (E65, E66)	E065-17-11-545
E060 (E60, E61, E63, E64)	E060-16-11-500

Series group	l level
E070 (E70, E71, E72)	E070-16-11-500
E89x (E81, E82, E84, E87, E88, E89, E90, E91, E92, E93)	E89x-18-07-520
R056 (R55, R56, R57, R58, R59, R60, R61)	R056-17-03-504
RR01 (RR1, RR2, RR3)	RR01-18-03-510

Info on the integration levels

1

PuMA measures or similar documents sometimes refer to an I level for the solution to a problem. In this case it is important to know which ISTA release contains the I level.

The name of the I level indicates, if it

- 1. is contained in the current ISTA release,
- 2. was already contained in a previous ISTA release or
- 3. will be provided in a future ISTA release.

<u>Series group</u> e.g. F020 - <u>year</u> 2017 - <u>month</u> (3, 7 or 11) - <u>version</u> (>= 500)

Assuming the current release contains:	S15A-17-03-506
Then the following I level is not available yet:	S15A-17-07-501
Then this I level was already contained in an older ISTA release:	S15A-16-11-503
Then this I level was already contained in an older ISTA release:	S15A-17-03-505

3 Innovations

The following interesting innovations are included, amongst others.

ISTA/P

Currently no innovations.

ISTA 4

1

New models can be dealt with

Benefit: The new vehicles F98, F97, G28 can be dealt with.

Process for deblocking component protection

The component protection is extended to the vehicles G11, G12 version as of 07/2015 and F15, F16, F85, F86 with version as of 07/2016.

As well as the HU-H2 (formerly NBT Evo), the component protection is also active since 3/2018 for the HU-B2 (formerly Entry Evo) and also in the HU-H3 MGU since 7/2018.

The process is identical for both control units and is documented in the ISTA user guide.

The user guide can be opened in ISTA using the "?" button.

New protection against tampering - control unit encoding

In G05, G15 and subsequent vehicles, the HU-H3 (formerly MGU), TCB, RSE and instrument cluster control units are linked together. This should prevent tampering with vehicles.

If one or more of the components are exchanged, the connection must then be re-established.

In order to re-establish the connection, an electronic certificate must be created in a BMW backend and imported into the vehicle.

The automatic control unit validation works as of ISTA 4.16.1x.

As a prerequisite, the necessary settings must be made in the ISPI Admin Client. These are described in the following.

This process can **take place automatically** with ISTA 4.16.1x once the affected workshop systems (ISPI Admin Client) are correctly configured and there is an online connection to the BMW backend.

The required settings for the ISPI Admin Client are described in the ISPI Administrator Manual (Application: ISPI Admin Client (administration area) / ISPI Admin Client: Functions / ISPI Admin Client: Certification management).

If the prerequisites for the automatic process do not exist, technical support can help to manually validate the control units.

The manual process is described below:

1. Select the exchanged control unit in the "After Replacement" tab and then calculate the measures plan.

Operations	Vehicle information	Vehicle management	Service plan	Favourites	Workshop/ Operating fluids	Measuring devices	
Repair/ Maintenance	Troubleshooting	Service functions	Software update	Control Unit Replacement	Vehicle modification		
Before Replacement	After Replacement						
Short name	Description	1			Replace	1	
ACSM	Crash safet	y module					•
AHM	Trailer mode	ule					
AL	Active steer	ing					
AMPT	Top HiFi am	plifier					
BDC Body Domain Controller							
CON	CON Controller						
DDE Digital diesel electronics							
DSC Dynamic Stability Control							
EDC	Vertical Dyn	amics Management					
EGS	Electronic tr	ansmission control					
FHC.	Electronic ri	de height control					•
Hint: To finalize	the replacement of the all	ready installed ECU, se	elect the corresponding) control unit.			
						Display measu plan	ires

Then ISTA will automatically include the control unit validation in the measures plan.

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Operations		Vehicle information	Vehicle management	Service plan	Favourites	Workshop/ Operating fluids	Measuring devices
Hit list		Test plan	Programming plan				
Measures plan		Final report					
Туре	Pla	nned actions				Origin	State 🤨
	Pre-/I	Postprocessing					
ABL	Dele	ete fault memory				System	0
ABL	Ethe	ernet port configuration	(ENS)			System	
ABL	Hea	d unit: Initialisation of s	tored ethernet commun	ication		System	0
ABL	Initia	alisation of component	protection for the head	unit		System	
ABL	Run	the Power-down comm	hand			System	0
ABL	Upd	ate online services				System	
ABL	Vali	dating control units afte	r control unit exchange			System	
UPD	SVT	update				System	
UPD	Writ	e of I-Level				System	O
UPD	Writ	e of vehicle order				System	
UPD	Writ	e of vehicle profile				System	•
Back		Display operations report	Execute service function	Reject measures plan		Calculate measures plan	Execute measures plan

2. If ISTA cannot carry out automatic validation, a warning about the absence of control unit validation is displayed.

trol unit validation after control unit exchange	
Warning!	

The procedure is as follows:

If the control unit validation should still be manually carried out within the framework of these measures plan , then proceed with the button 'Next' otherwise press 'Cancel'.

Cancel

Next

3. By clicking on the "Next" button, ISTA generates the required ValidationRequest_VIN_xxx.json.zip file and opens a file dialogue to save it. The file must be sent to technical support later via PuMA.

Release Notes Programming Passenger Cars, ISTA 4.16.2x

Manual generation of EC	CU Validation request file				1		\times
In order to proceed	d the ECUs have to be validate	ed online. Choose a folde	er where ECU validation	request file can be saved	i.		
 ▷ CA ▷ DA 							
Cancel	Keyboard			B	ack	Continue	

4. ISTA displays a note confirming that the file was successfully saved. At this point, you can exit the process using the "Cancel" button. After processing the measures plan, the session can be closed.

E

X

2	Notice!
	The first part of the manual control unit validation was successfully completed.
Co	mpletion of the control unit validation after control unit ex- ange is necessarily required!
fm	nanual control unit validation should be completed within the
rar	nework of these measures plan, then proceed with the buttor
Ve	xt' otherwise press 'Cancel'.

Cancel	Next
Cancel	Next

The vehicle must not be handed over to the customer without successful control unit validation. Various vehicle functions are not available without control unit validation, corresponding fault memories are set.

PuMA

A

5. Please send the saved json.zip file to technical support attached to a PuMA message.

6. Technical Support will send you back a validated version of the file as file type json for the affected vehicle. This is subsequently required by ISTA.

Start a new ISTA session

7. In order to import the json file, select "ECU Validation" in the "Additional Software" tab.

Operations	Vehicle information	Vehicle management	Service plan	Favourites	Workshop/ Operating fluids	Measuring devices	
Repair/ maintenance	Troubleshooting	Service functions	Software update	Control Unit Replacement	Vehicle modification		
Comfort	Advanced	Additional software					
Designation A						Selection	
ECU Validation							
Enabling of navigati	Enabling of navigation maps						
HDD-Update (updat	te of navigation maps /	entertainment data)					
						Display measures plan	

8. In order to import the validated file, select "Import control unit validation file manually" and confirm with

Operations	Vehicle	Workshop/	Measuring devic
Repair/ maintenance	Select an application case		
Comfort	Generate control unit validation file manually		
Decignation	Import control unit validation file manually		Coloction
HDD-Update (update			
Enabling of navigation			
Initialisation of head			
Control unit validatio			\boxtimes
		_	
	Cancel	ОК	
			Display meas
			plan

9. Select the ValidationRequest_VIN_xxx_response.json file in the file dialogue and confirm with "Continue" .



Release Notes Programming Passenger Cars, ISTA 4.16.2x

Manual import of ECU V	alidation file				
Select the validation	n response file on your computer.	selected is:			
ValidationRequest	WBACV41050H013975_42664_40626	_54_20180614_150223_response.	json		
▷ C:\ ▷ D:\					
Cancel	Keyboard			Back C	Continue

10. The file is written into the vehicle and checked.

Control unit validation		\times
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The ECU validation was successful. Proceed as follows:

- After confirmation of this message, the display will switch automatically to the 'After exchange' tab.
- Here, the exchanged control unit must be marked, then an action plan must be calculated and performed.

Details	OK
L/GLEINS	UK

11. After confirming the note, ISTA displays the tab for control unit exchange. Select the exchanged control unit and calculate and work through the measures plan.

With ISTA 4, it is possible to set an execution stop for specific series, equipment, etc. even after installation.

This make it possible to specifically prevent vehicles in the Retailer Organisation from being updated with problematic software.

From ISTA 4.13.1x, the affected vehicle can be treated in certain cases with an alternative (older) I level.

In this case, ISTA displays a note referring to the execution stop and the alternative I level:



Using the "Activating alternative I level" button, the measures plan can be calculated on the older I level.

Alternatively, the measures plan can be terminated using the "End" button.



If the vehicle is to be programmed as part of a Technical Campaign, programming with the alternative I level is generally not permitted!

alternative I level

Check for programming restrictions due to virus protection/firewall software

Before programming, ISTA checks if communication between the vehicle and ISTA is restricted due to virus protection/firewall software on the ISTA computer.

In this case, ISTA displays a pop-up with a note about blocked interfaces.

Please also observe the following Release Notes entry in this regard:

• HU-H (formerly NBT) - No programming possible (firewall, virus protection)

4 Known faults F, G, I Series

4.1 * NEW * G11, G12 PHEV - Execution stop with alternative I level

Fault description:

At the start of the programming session an execution stop occurs with a reference to the Release Notes.

ISTA offers the option of programming the vehicle with an alternative I level S15A-18-11-553.

The execution stop will also be extended to G30 PHEV if necessary.

Model series affected:

G11, G12 PHEV vehicles with version before 3/2019.

Measure / Workaround:

Carry out programming with alternative I level.

The following Technical Campaigns can also be processed with the alternative I level: 12460400, 12600400, 12660400, 61810400, 64970100

Fault corrected by:

Expected for ISTA 4.16.3x

Affected application:

4.2 * NEW * G07, G14, G15, G20, G29 - Execution stop

Fault description:

At the start of the programming session an execution stop occurs with a reference to the Release Notes.

ISTA offers the option of programming the vehicle with an alternative I level S18A-18-11-575.

Programming with I level S18A-19-03-5xx is required in the course of PuMA measure 64713440.

In this case, an IBAC can be requested from Technical Support.

Model series affected:

Vehicles G07, G14, G15, G20, G29.

Measure / Workaround:

Programming with alternative I level, request IBAC from Technical Support if necessary.

The following Technical Campaigns can also be processed with the alternative I level: 34390200, 34400200, 65130300, 34410200, 51570400.



The Technical Campaign 66310100 cannot be processed with the alternative I level .

Fault corrected by:

Expected for ISTA 4.16.3x

Affected application:

4.3 G07, G14, G15, G20, G29 - After programming, the G05 image will be displayed in the instrument cluster

Fault description:

After programming, the image of a G05 is displayed in the instrument cluster.

The fault memory 0xB7F7D6 is set.

Model series affected:

The following vehicles are affected G07, G14, G15, G20, G29.

Measure / Workaround:

- 1. Allow vehicle to go to sleep
- 2. Start new ISTA session and manually assign the instrument cluster for programming.

Ensure the correct graphic is displayed in the instrument cluster.

Fault corrected by:

Expected for ISTA 4.16.3x

Affected application:

4.4 Control unit validation using ZIP file does not work

Fault description:

As part of the control unit validation via the Additional software tab (for details, see the What's New section), you will receive a validated file of the file type json from Technical Support.

To transfer them using PuMA, it is attached as a ZIP file.

If the ZIP file is imported into ISTA, the control unit validation fails.

Model series affected:

Vehicles G05, G07, G14, G15, G20, G29 when replacing the instrument cluster, the HUH3 or the TCB ATM-02

Measure / Workaround:



Please unzip the ZIP file and import the json file into ISTA.

Fault corrected by: Expected for ISTA 4.16.3x Affected application: ISTA 4

4.5 TCB - Following programming, fault memory 0x026180 is set

Fault description:

After programming, the fault memory 0x026180 is set in the TCB ATM-02.

Model series affected:

Vehicles G20, G29, G05, G07, G14, G15, G11, G12 with TCBATM-02.

Measure / Workaround:

The control unit does not need to be replaced. However, a control unit validation must be performed.

Automatic process:

- 1. Switch to the "Control unit/After replacement" tab and select the TCB.
- 2. Calculate measures plan and carry it out.
- 3. The online provisioning of the vehicle must be carried out successfully. To do so, if necessary carry out the necessary service function several times.

Note: If automatic control unit validation fails, please perform manual process.

Manual process:

- Process as described in What's new section.
- In the "Control unit/After replacement" tab, select the TCB and carry out an action plan.



Please unzip the ZIP file from technical support and import the json file into ISTA.

• The online provisioning of the vehicle must be carried out successfully. To do so, if necessary carry out the necessary service function several times.

Fault corrected by:

Currently still open.

Affected application:

4.6 Recommendation for managing models G05, G15

Fault description:

It is recommended to use ICOM Next for programming the new BMW models.

Model series affected:

Vehicles G05, G07, G14, G15, G20, G29.

Measure / Workaround:

Use ICOM Next

Fault corrected by:

Currently open

Affected application:

4.7 F0x - programming not possible, control units are requested for installation

Fault description:

ISTA 4 instructs one or several of the specified control units for installation, although they are already fitted in the vehicle.

Model series affected:

Vehicles F01, F02, F03, F04, F07 with production date until March 2011 and the following control units:

- TEL-ULF260, TEL-ULF2HI, TEL-E15GSM
- MMC-01, MMC-01-FIRMAWARE
- AMP-HIFI01, AMP-TOP70
- SDARS-01
- LRR-01

Measure / Workaround:

The vehicle can be dealt with using ISTA/P.

AN IBAC activate code is required for this. This can be requested from technical support.

Fault corrected by:

Currently open

Affected application:

Fault description:

Coding of the LEM-01 failed repeatedly.

Model series affected:

Vehicles G1x, G3x.

Measure / Workaround:

Contact Technical Support.

Fault corrected by:

Currently still open.

Affected application:

4.9 ISTA 4 - Information on BDC exchange or programming cancellation gateway control units

The exchange of the BDC is again supported with ISTA 4.09.1x.

Fault description:

i

When carrying out the special measures plan in the event of a BDC exchange, or due to a programming abort of the gateway control unit, the following pop-ups appear repeatedly:

- Requesting that the ignition be switched on
- SYS-0012 Identification Error
- Connection to control unit Unknown interrupted

Model series affected:

Vehicles with the control units FEM or BDC.

Measure / Workaround:

Confirm pop-ups until the special measures plan has been carried out.

Fault corrected by:

Currently still open.

Affected application:

4.10 Invalid IP address for BN2020Ethernet control units

Fault description:

During vehicle management, one of the following Ethernet-capable control units should be programmed:HU-H, RSE, ATM, KOMBI, ACC, ICAM, KAFAS

At the start of the session, a note appears indicating that the IP address is invalid. The Ethernet programming can fail if the following steps are not followed:

Model series affected:

All F, G, I Series

Measure / Workaround:

- 1. End ISTA session
- 2. Carry out a battery reset
- 3. Restart the session
- 4. If fault message still appears: Check the Ethernet wiring in the vehicle using the wiring diagram in ISTA
- 5. If fault message still appears: Contact Technical Support

Fault corrected by:

Currently still open

Affected application:

5 Known faults E Series (ISTA/P)

5.1 Vehicle order import fails due to antivirus software and firewall



IMPORTANT!

In individual cases, the vehicle order-import fails because of installed security software (antivirus software or firewall). After the session starts, the vehicle identification with ISTA/P fails. (BMW-internal locations are not affected by the fault)

Measure / Workaround:

For more details, see ISPI Dealer Self Support entry 51219.

Affected application:

ISTA/P