



SIB 09 01 21

2022-05-20

ISTA FOR ROADSIDE ASSISTANCE / MOBILE TECHNICIAN

This Service Information Bulletin (Revision 2) replaces SIB B09 01 21 **dated November 2021**.

This bulletin is information only; no claim information intended.

What's New (Specific text highlighted):

- Chapter added for complete on-site vehicle programming with a regular ISTA installation

MODEL

E-Series	Model Description	Production Date
F44	2 Series Gran Coupe	Up to February 1, 2020
F90	M5 Sedan	As of July 2020
F91	M8 Convertible	All
F92	M8 Coupe	All
F93	M8 Gran Coupe	All
F95	X5 M Sport Activity Vehicle	All
F96	X6 M Sport Activity Coupe	All
G01	X3 (LCI)	As of July 2021
G02	X4 (LCI)	As of July 2021
G05	X5 Sport Activity Vehicle	All
G06	X6 Sport Activity Vehicle	All
G07	X7 Sport Activity Vehicle	All
G12	7 Series Sedan (LCI)	As of March 2019
G14	8 Series Convertible	All
G15	8 Series Coupe	All
G16	8 Series Gran Coupe	All
G20	3 Series Sedan	All
G22	4 Series Coupe	All
G23	4 Series Convertible	All
G29	Z4 Roadster	All
G30	5 Series	As of July 2020
G42	2 Series Coupe	All

SITUATION

BMW offers a new special ISTA Installation made available for Roadside Assistance / Mobile Service technicians. The new ISTA Version is also able to be used in case of a Remote Software Upgrade (RSU) programming failure to get the customer's car reprogrammed on site.

In case of a Remote Software Upgrade failure, the engine start is prevented for safety reasons until the vehicle is programmed correctly. Most of the errors occur when only one control unit fails to program correctly.

The new ISTA Version is designed as an easy-to-use solution to quickly program (aka "flash") the vehicle on site to its currently planned Remote Software Upgrade I-Level. For that purpose, the following modifications have been performed to the regular ISTA Application:

1. It only contains the latest released I-Level that is currently available for the Rollout
2. It has simplified diagnostics capabilities
3. It allows programming of ECUs without the need of an external power supply. Only 10 V battery voltage is required to perform a programming of the faulty ECU.
4. It needs to be installed on dedicated machines; a parallel use of regular ISTA and ISTA for Roadside Assistance on the same device is not possible
5. New ICOM Firmware (3-15-06 or higher) required to perform a stable programming while using a direct connection

The vehicle update should take approximately 20 minutes. Once the vehicle flashing is completed without errors, the vehicle can be handed over to the customer.

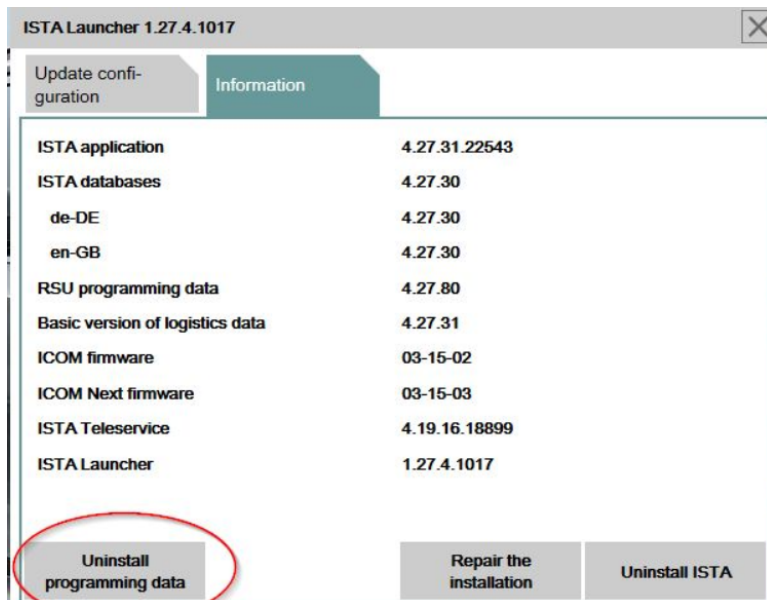
Hint: To prevent a further programming abort due to a discharged vehicle battery, it is recommended to perform the programming as quickly as possible or to provide an external power supply to the vehicle battery if possible.

In addition, this SIB describes how to use a regular ISTA Version on a mobile device (laptop or IMIB Tablet) to perform a full vehicle Software Update on site. This option can be used i.e., for performing Software Recalls in the customer's driveway.

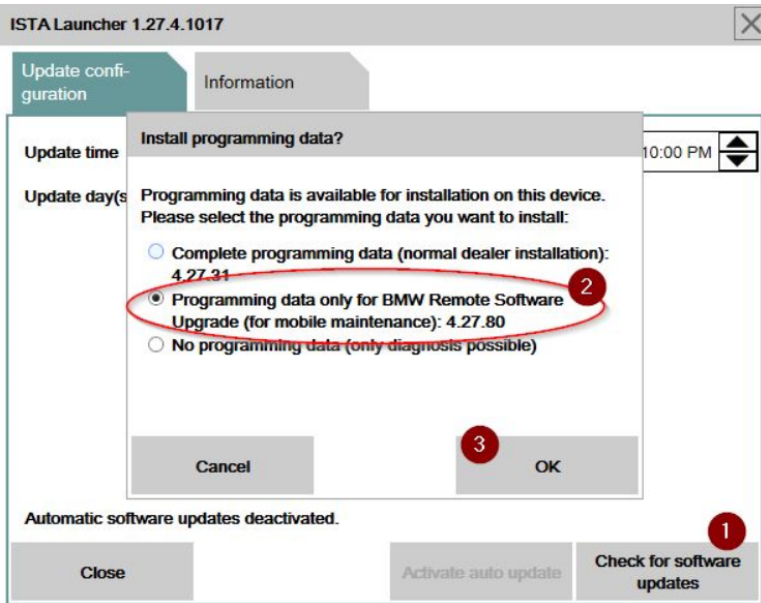
For the full ISTA usage please see the second INSTALLATION & PROCEDURE chapter below.

INSTALLATION – ISTA FOR ROADSIDE ASSISTANCE

The ISTA Launcher (Version 1.28.06 or higher) offers the following additional ISTA Installation type. If updating an existing ISTA installation, the programming data needs to be uninstalled prior to the installation. The ISTA Launcher (Version 1.28.06 or higher) offers the following additional ISTA Installation type. If updating an existing ISTA installation, the programming data needs to be uninstalled prior to the installation.



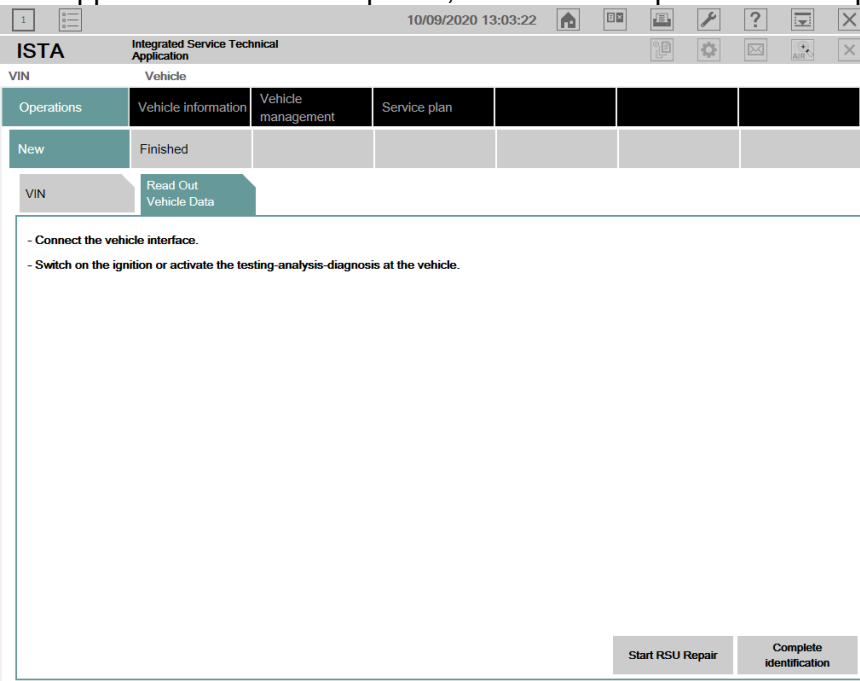
Select Programming data only for BMW Remote Software Upgrade.



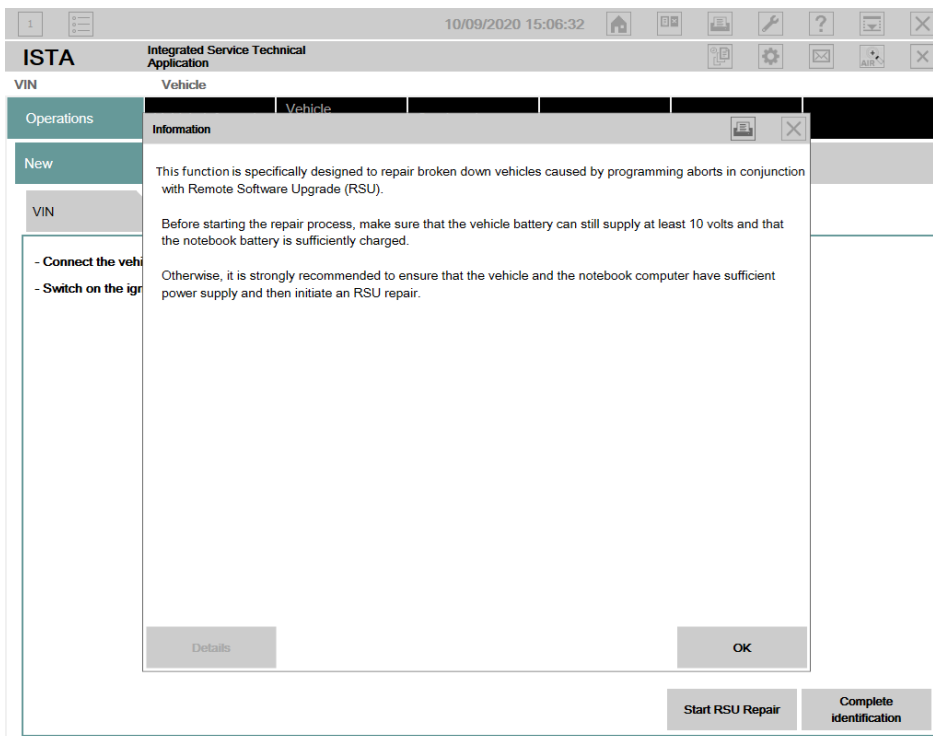
The ISTA Launcher installs ISTA for Roadside Assistance which is designed for mobile usage for Remote Software Upgrade failures only. It cannot be used in the regular Workshop environment due to its limited Programming and Diagnostic functionality.

PROCEDURE – ISTA FOR ROADSIDE ASSISTANCE

The application offers two options, “Start RSU Repair” and “Complete Identification”.



The complete identification offers limited diagnostic information. Starting the RSU Repair automatically starts the measures plan calculation. Manually switching to diagnostics is still possible.



Pop-up information notifies that the programming is allowed as long as the measured battery voltage is above 10 V.

INSTALLATION – REGULAR ISTA FOR MOBILE USAGE

There are no special requirements for the ISTA Installation. The following information needs to be considered:

1. The following equipment is essential for the mobile vehicle update:
 - a. ICOM with Ethernet cable
 - b. Battery charger for the vehicle (regular ISTA always requires a battery charger)
 - c. ISTA Installation on a portable device / Power supply required
 - d. Portable device needs also internet connection (i.e. Smartphone Hotspot via Wifi connection) to be able to receive certificates, etc.
2. The ICOM should be configured to DHCP client and receive the correct IP Address from ISTA when connection is established.
3. Always connect the ICOM to ISTA first and then to the vehicle (to assure a correct IP configuration).

PROCEDURE – REGULAR ISTA FOR MOBILE USAGE

The regular vehicle Software update may take up to 60 minutes. Clarify with the customer that there is enough time, and that a power supply is available on site so that the vehicle battery and the ISTA PC can be charged.

On site, the same preparations need to be performed as in the workshop (connect a battery charger to the vehicle, put vehicle into diagnostic mode (PAD), connect the ICOM to the PC, then to the vehicle).

ISTA also may need internet connection to perform ECU validations or download certificates, etc. Therefore the device needs to be connected (i.e. via Wifi and Smartphone Hotspot) to the internet. Before first usage the device should be tested that Ethernet and Wifi can be used in parallel.

- The screenshot below shows a configuration within the network settings where Ethernet and Wi-Fi are both active and in use (works with GETAC Toughbook, setting: Obtain IP address automatically)

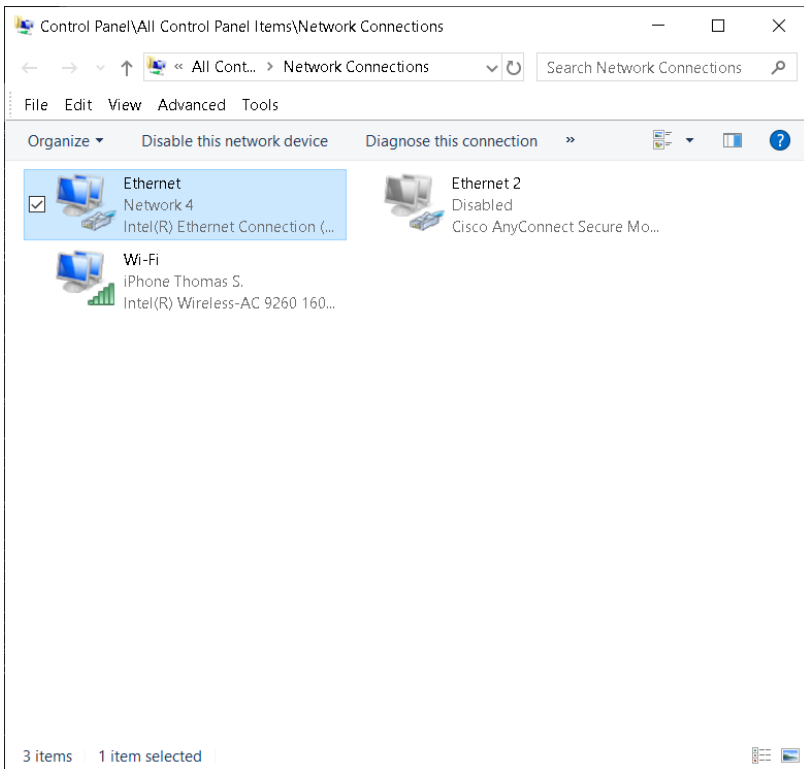


Figure 1: Mobile ISTA Network connections

FEEDBACK REGARDING THIS BULLETIN

Technical Feedback	To submit feedback for the technical topics of this bulletin: Submit your feedback in the rating box at the top of this bulletin
Warranty Feedback	To submit feedback for the CLAIMS section of this bulletin: Submit an IDS ticket to the Warranty Department, or use the chat available in the Warranty Documentation Portal
Parts Feedback	To submit feedback for the PARTS section of this bulletin: Submit an IDS ticket to the Parts Department

Supporting Materials

[picture_as_pdf B09 01 21 Attachment.pdf](#)



ISTA FOR ROADSIDE ASSISTANCE

A SPECIAL CONFIGURATION FOR RSA TO FIGHT RSU FAILURES

ISTA FOR ROADSIDE ASSISTANCE

1 10/09/2020 13:03:22

ISTA Integrated Service Technical Application

VIN Vehicle

Operations Vehicle information Vehicle management Service plan

New Finished

VIN Read Out Vehicle Data

- Connect the vehicle interface.
- Switch on the ignition or activate the testing-analysis-diagnosis at the vehicle.

Start RSU Repair Complete identification

DIAGNOSTICS

start screen – use case selection

ISTA FOR ROADSIDE ASSISTANCE

1 10/09/2020 14:34:44

ISTA Integrated Service Technical Application

VIN AE78297 PAD U= 11.7 V

Operations Vehicle information Vehicle management Service plan

Vehicle details Vehicle equipment Control unit tree Operations report

K-CAN2 ETHERNET K-CAN4 PT-CAN2 FLEXRAY PT-CAN K-CAN6 K-CAN3

Fault memory **Existent** Ecu responding Ecu not responding Ecu with programming abort Control unit not fitted

Start vehicle test Call up ECU functions Display fault memory

DIAGNOSTICS

controlunit tree and specific ecu functions

ISTA FOR ROADSIDE ASSISTANCE

DIAGNOSTICS
service functions
(now default start screen in
„Vehicle management“ menu)

10/09/2020 14:43:36

ISTA Integrated Service Technical Application

VIN AE78297 PAD U= 11.7 V

Operations	Vehicle information	Vehicle management	Service plan
Troubleshooting	Service functions	Software update	

Service Functions

Collapse all

Type	Title
------	-------

Hits: 0/0 Filter: Default

not called performed minimized canceled suspected

Filters Repair overviews (Parts, ...)

Add to test plan Display

ISTA FOR ROADSIDE ASSISTANCE

10/09/2020 14:44:53

ISTA Integrated Service Technical Application

VIN AE78297 PAD U= 11.7 V

Operations Vehicle information Vehicle management Service plan

Troubleshooting Service functions Software update

Fault memory Fault pattern Function Structure Text Search

Code	Description	Mileage	Existent	Class
1F0549	Check Control message (ID 2064): Service requires engine oil!	0	yes	
804415	Radio remote control: Battery undervoltage	0	yes	
804855	NFC reader, outside TAGE, driver's side: Hardware defect	0	No	

Number of fault memories: 3/3 No. fault patterns: 0 Filter: Default

Show fault code Delete fault memory Filter fault memory Delete filter Show completely PuMA measures Calculate test plan

DIAGNOSTICS

reduced troubleshooting
(„Vehicle management“ menu)

ISTA FOR ROADSIDE ASSISTANCE

DIAGNOSTICS

test plan
(reduced „Service plan“ menu –
programming not available)

1 10/09/2020 17:09:29

ISTA Integrated Service Technical Application

VIN AE78297 Vehicle 3/G20/SEDAN / - /B48, - /AUTO/ECE/LL/2018/11 PAD U= 10.0 V

Operations	Vehicle information	Vehicle management	Service plan			
Hit list	Test plan	Programming plan				

Type	Title	State	Priority ▲
	Energy diagnosis		3
ABL	Energy diagnosis	<input checked="" type="checkbox"/>	3
	Information memory		4
ABL	Displaying info. memory entries	<input checked="" type="checkbox"/>	4
	Remote control and receiver		4
ABL	Remote control and receiver	<input checked="" type="checkbox"/>	4

Hits: 3 / 13 Filter: Default not called performed minimized canceled suspected

Back Filters Show symptoms Collapse / expand Set standard filter Repair overviews (Parts, ...) Display

ISTA FOR ROADSIDE ASSISTANCE

1 10/09/2020 13:03:22

ISTA Integrated Service Technical Application

VIN Vehicle

Operations Vehicle information Vehicle management Service plan

New Finished

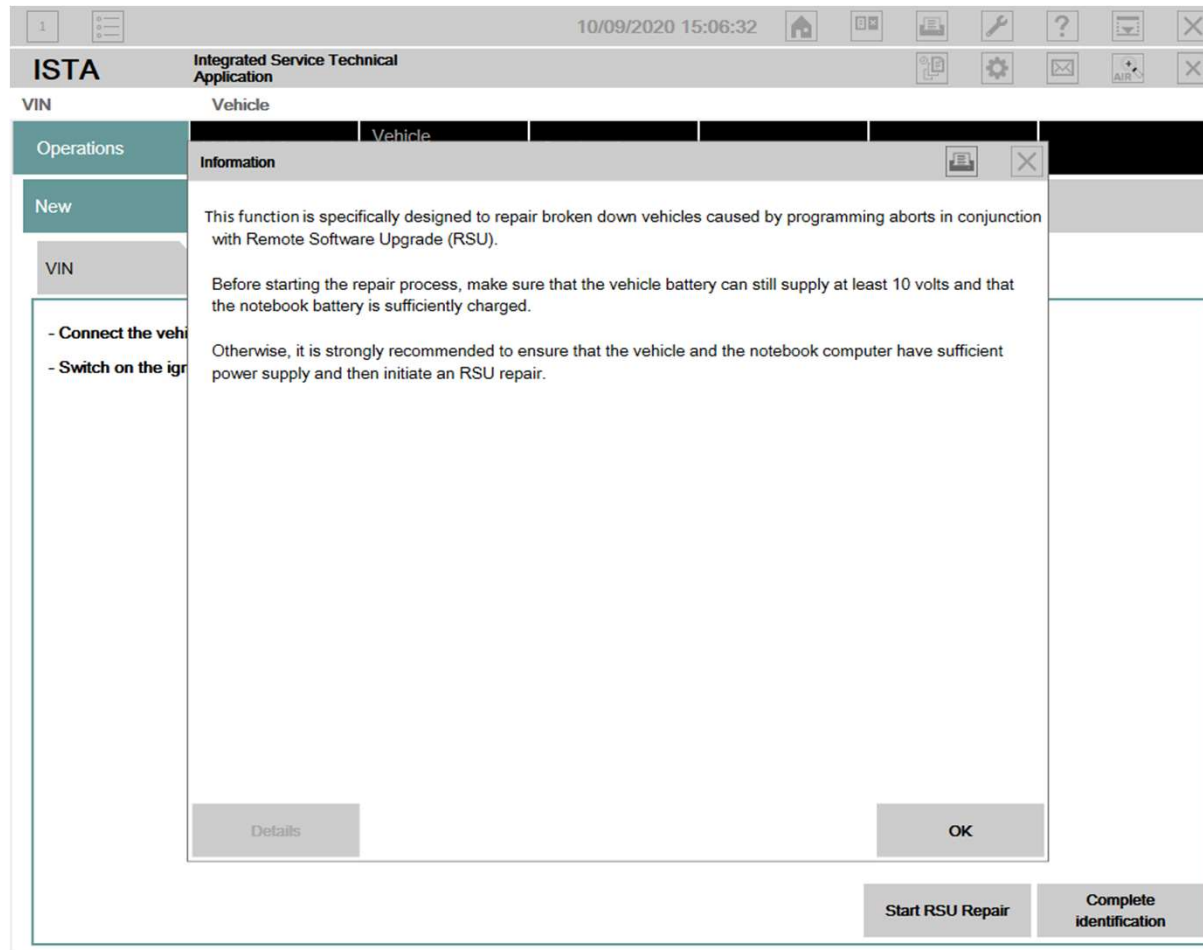
VIN Read Out Vehicle Data

- Connect the vehicle interface.
- Switch on the ignition or activate the testing-analysis-diagnosis at the vehicle.

Start RSU Repair Complete identification

RSU REPAIR
start screen – use case selection

ISTA FOR ROADSIDE ASSISTANCE



RSU REPAIR
usage and check voltage hints

ISTA FOR ROADSIDE ASSISTANCE

1 10/09/2020 14:34:44

ISTA Integrated Service Technical Application

VIN AE78297 Calculating measures plan PAD U= 11.7 V

Operations Vehicle information Vehicle management Service plan

Vehicle details Vehicle equip- ment Control unit tree Operations report

K-CAN2 — ETHERNET — K-CAN4 — PT-CAN2 — FLEXRAY — PT-CAN — K-CAN6 — K-CAN3

Fault memory **Existent**

Ecu responding
 Ecu not responding
 Ecu with programming abort
 Control unit not fitted

Start vehicle test Call up ECU functions Display fault memory

RSU REPAIR
 autom. vehicle identification
 and measures plan
 calculation

ISTA FOR ROADSIDE ASSISTANCE

1 10/09/2020 15:42:11

ISTA Integrated Service Technical Application

VIN AE78297 Vehicle 3/G20/SEDAN/ - /B48,-/AUTO/ECE/LL/2018/11 PAD U= 11.6 V

Operations	Vehicle information	Vehicle management	Service plan		
Hit list	Test plan	Programming plan			
Measures plan	Final report				

Type	Planned actions	Origin	State
Software version Integr. level (actual): S18A-20-07-540 Integr. level (target): S18A-20-07-540			
Software actions			
COD	Encoding ACSM	Logistics	<input type="checkbox"/>
COD	Encoding BDC	Logistics	<input type="checkbox"/>
COD	Encoding DCS	Logistics	<input type="checkbox"/>
COD	Encoding DME	Logistics	<input type="checkbox"/>
COD	Encoding DSC	Logistics	<input type="checkbox"/>
COD	Encoding EGS	Logistics	<input type="checkbox"/>
COD	Encoding EPS	Logistics	<input type="checkbox"/>
COD	Encoding FLEL	Logistics	<input type="checkbox"/>
COD	Encoding FLER	Logistics	<input type="checkbox"/>
COD	Encoding FRSF	Logistics	<input type="checkbox"/>

Back Display operations report Execute service function Reject measures plan Calculate measures plan Execute measures plan

RSU REPAIR

autom. switch to the calculated measures plan ready for execution; manual switch to diagnostics also possible

BACKUP

ISTA RSA INSTALLATION STEPS

ISTA Launcher 1.28.06

ISTA application	4.27.31.22543
ISTA databases	4.27.30
de-DE	4.27.30
en-GB	
RSU programming data	
Basic version of logistics data	
ICOM firmware	
ICOM Next firmware	
ISTA Teleservice	
ISTA Launcher	

Removing programming data

This process uninstalls the existing programming data. Would you really like to permanently delete the programming data?

Cancel Start

Uninstall programming data Repair the installation Uninstall

ISTA Launcher 1.28.06

ISTA application	4.27.31.22543
ISTA databases	4.27.30
de-DE	4.27.30
en-GB	4.27.30
Programming data	not available
Basic version of logistics data	4.27.31
ICOM firmware	03-15-02
ICOM Next firmware	03-15-03
ISTA Teleservice	4.19.16.18899
ISTA Launcher	1.27.4.1017

Install programming data Repair the installation Uninstall ISTA

ISTA Launcher 1.28.06

Update configuration Information

Update time 10:00 PM

Update day(s)

Install programming data?

Programming data is available for installation on this device. Please select the programming data you want to install:

- Complete programming data (normal dealer installation): 4.27.31
- Programming data only for BMW Remote Software Upgrade (for mobile maintenance): 4.27.80
- No programming data (only diagnosis possible)

Cancel OK

Automatic software updates deactivated.

Close Activate auto update Check for software updates

This slide shows generic installation information. Please see details on page 4 for the correct ISTA version.