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

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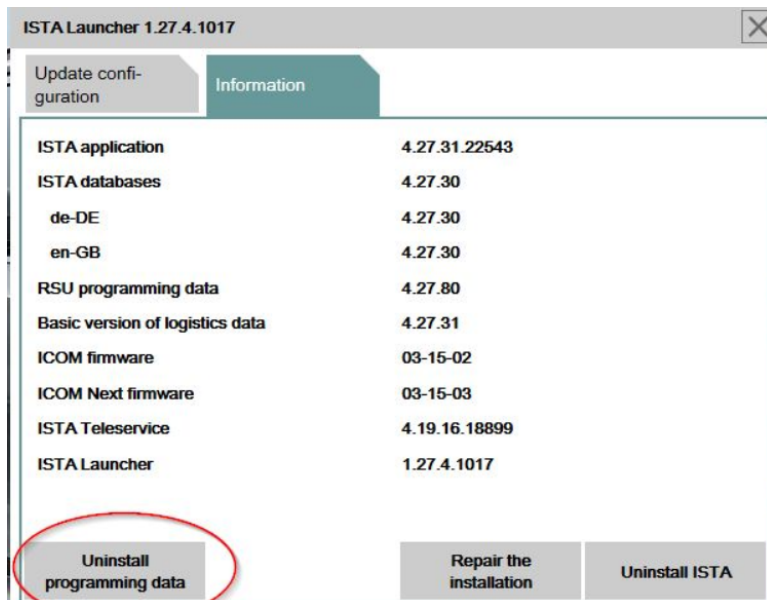
Select Programming data only for BMW Remote Software Upgrade.
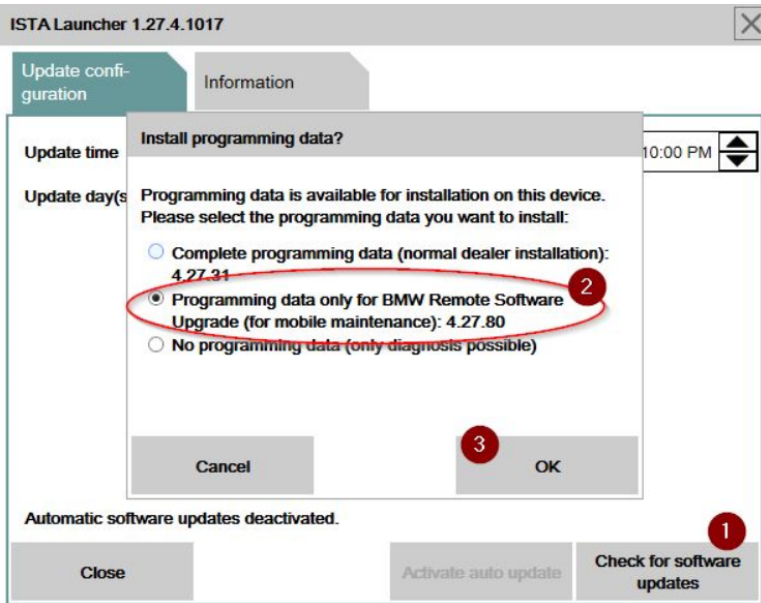
The ISTA Launcher installs ISTA for Roadside Assistance which is designed for mobile usage for Remote Software Upgrade failures only. It cannot be used in the regular Workshop environment due to its limited Programming and Diagnostic functionality.

PROCEDURE – ISTA FOR ROADSIDE ASSISTANCE

The application offers two options, "Start RSU Repair" and "Complete Identification".
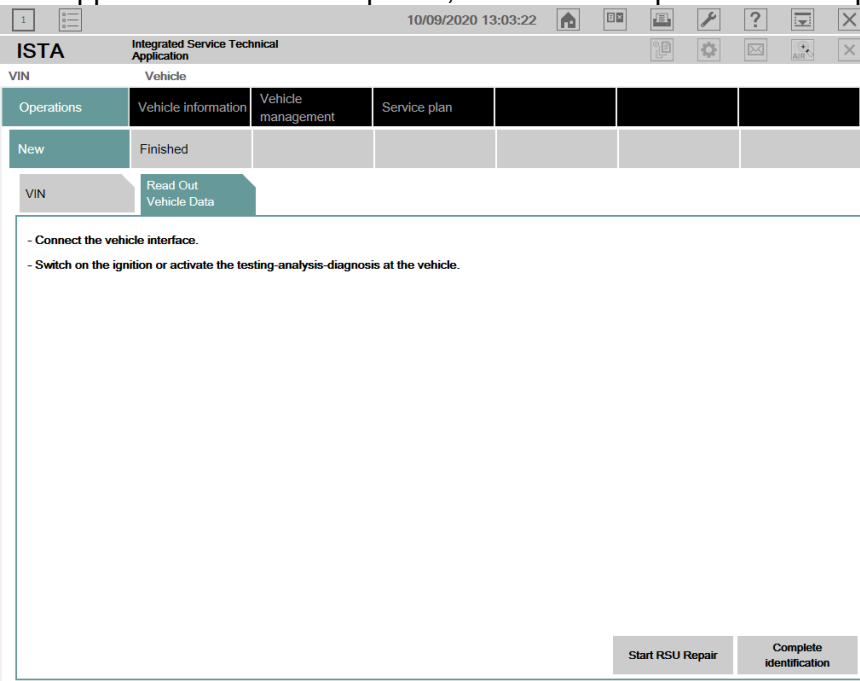
The complete identification offers limited diagnostic information. Starting the RSU Repair automatically starts the measures plan calculation. Manually switching to diagnostics is still possible.
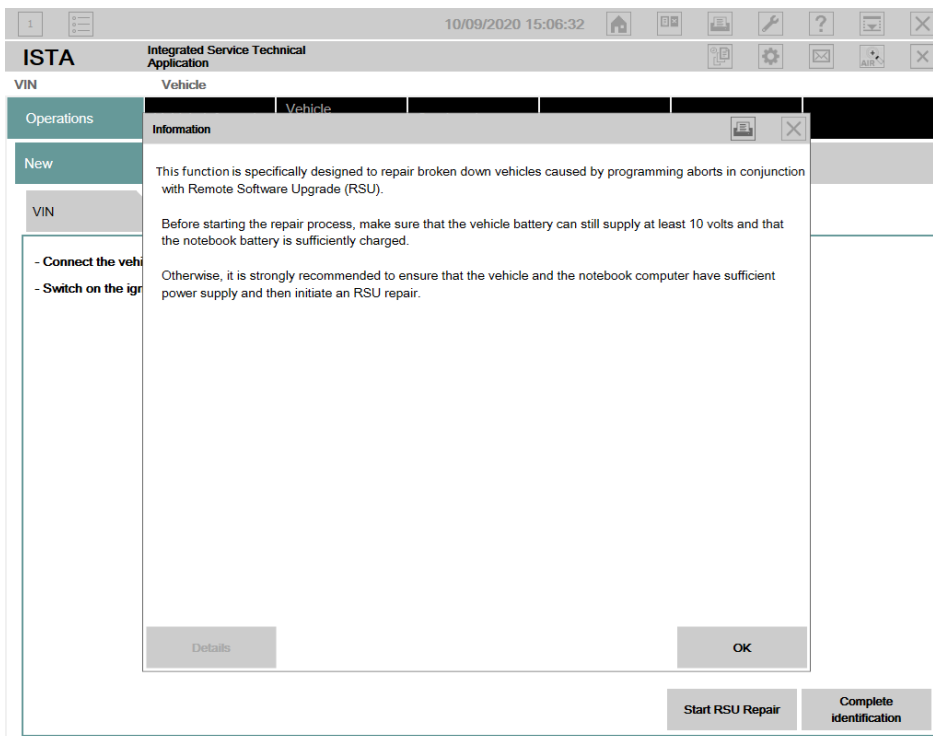
Pop-up information notifies that the programming is allowed as long as the measured battery voltage is above 10 V.

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)

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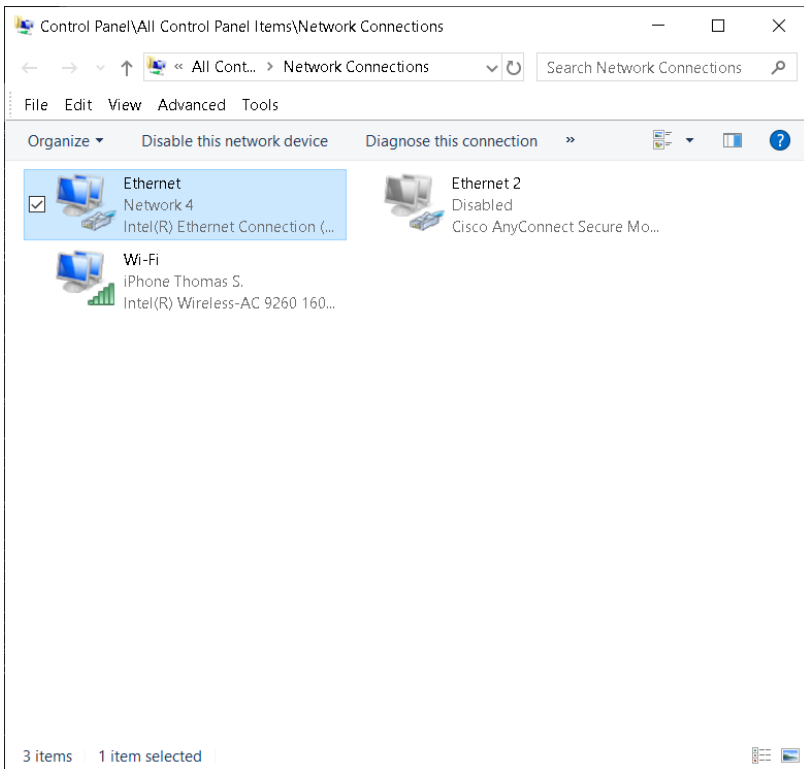
Figure 1: Mobile ISTA Network connections

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

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ISTA FOR ROADSIDE ASSISTANCE

A SPECIAL CONFIGURATION FOR RSA TO FIGHT RSU FAILURES

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DIAGNOSTICS

start screen – use case selection

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DIAGNOSTICS

controlunit tree and specific ecu functions

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DIAGNOSTICS

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

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DIAGNOSTICS

reduced troubleshooting
(„Vehicle management" menu)

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DIAGNOSTICS

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

ISTA FOR ROADSIDE ASSISTANCE

RSU REPAIR

start screen – use case selection

ISTA FOR ROADSIDE ASSISTANCE
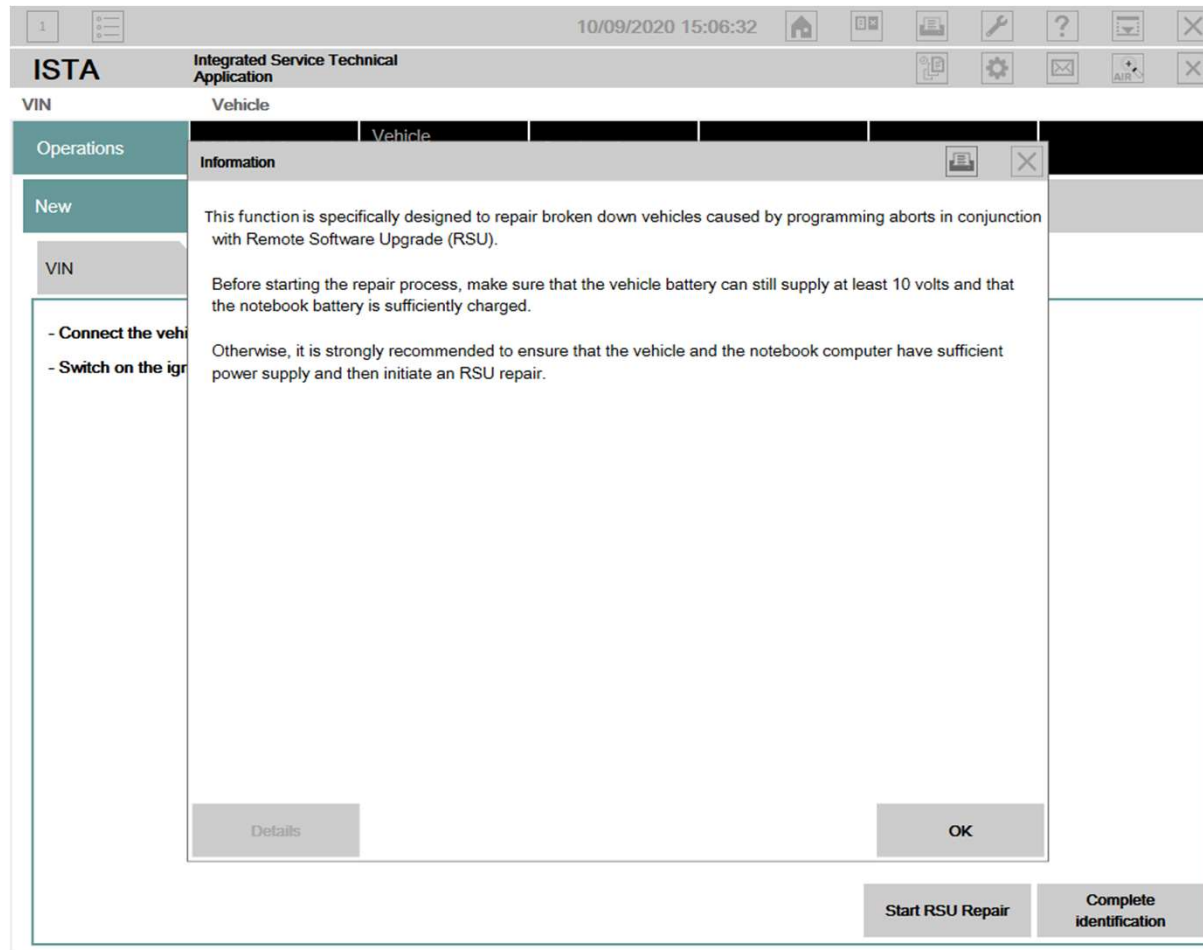
RSU REPAIR

usage and check voltage hints

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RSU REPAIR

autom. vehicle identification and measures plan calculation

ISTA FOR ROADSIDE ASSISTANCE

RSU REPAIR

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

BACKUP

ISTA RSA INSTALLATION STEPS

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