BMW Group Techinfo Websites User Guide

This guide is split into three sections:

Section 1: General Website Information
Section 2: AOS Information (Online Diagnostics, Programming, and Repair Instructions)
Section 3: FAQs and Contact Information

Section 1: General Website Information

The three websites listed below are for use by persons located in the United States and Canada ONLY. For all other locations visit: https://aos.bmwgroup.com/

There are three websites available, each require a separate account and active subscription for access:
HTTPS://bmwtechinfo.bmwgroup.com Contains BMW vehicle and SAV information. Motorcycle information is not available.
HTTPS://minitechinfo.bmwgroup.com Contains MINI vehicle information.
HTTPS://rollsroycetechinfo.bmwgroup.com Contains Rolls Royce Information.

Information available with a website subscription

Service Information:

Service Bulletins – Technical Service Bulletins

Operating Fluids – Fluid types and specifications

OBD – Generic OBD information

Legacy – Limited Repair information for pre MY2000 vehicles

Training:

Mechanical and Body training manuals

Tools and Equipment:

Special tool and workshop equipment information

Videos:

Technical videos

Noise Catalog:

Audio clips used to help noise diagnosis

AOS:

ISTA/P – Programming application for older vehicles

ISTA – Diagnosis and Programming application including P code lookup

AIR – Repair manuals, wiring diagrams, parts, labor, and technical specifications

ECU Validation – application to validate control unit replacements

RDC tool – Used to calibrate the BMW TPM tool

Contact AOS Support- Used to submit a support ticket for AOS application support

AOS Ticket tracker – allows the user to track their open tickets

AOS install guide – Installation guide for AOS software

Information not available

- **Vehicle Key Codes**
  The BMW Group does not provide keycodes to locksmiths except for those located in the state of California. For locksmiths located in the state of California please email: CKL_CIC@bmwna.com
- **Motorcycle Information**

TIS Home Page

The home screen will show you the latest bulletins, new or updated, from the past 10 days. Bulletins with the NEW icon indicate a new bulletin. Bulletins with a ! icon indicate an updated bulletin.

Under the Bulletin section is the new Message area where important updates about the website will be posted.

TIS Page Tabs

- TIS uses page tabs to help you quickly see what is new.
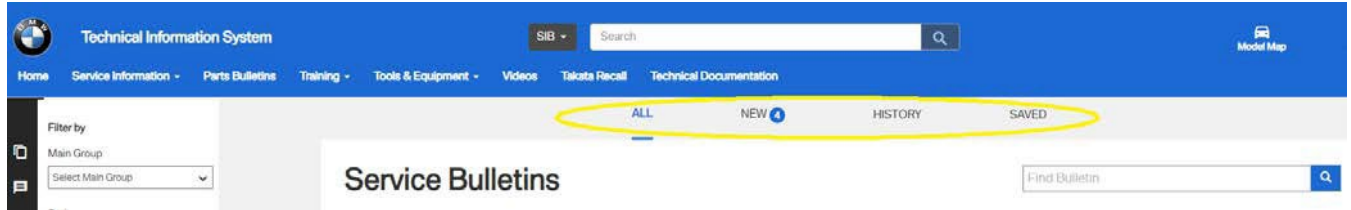
- By default, each page opens to the new tab. If you want to view all content for a section, you simply hit the all tab.
- The saved tab shows documents you have selected to save
- The history tab shows the most recent documents you have viewed in that section

TIS Search

- The search engine can be used to search specific sections of the website or the entire website.
- The Search is made by crawling the entire document, not only the Subject line.
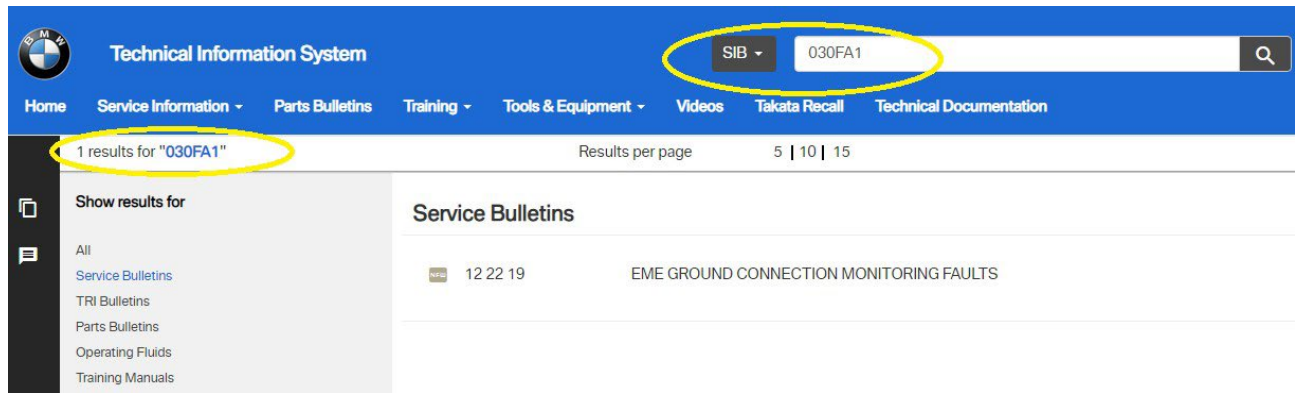- Search by keywords
  The more precise you make a keyword search the better your results will be.
  For example, a search for High Pressure Fuel Pump results in 49 bulletins.
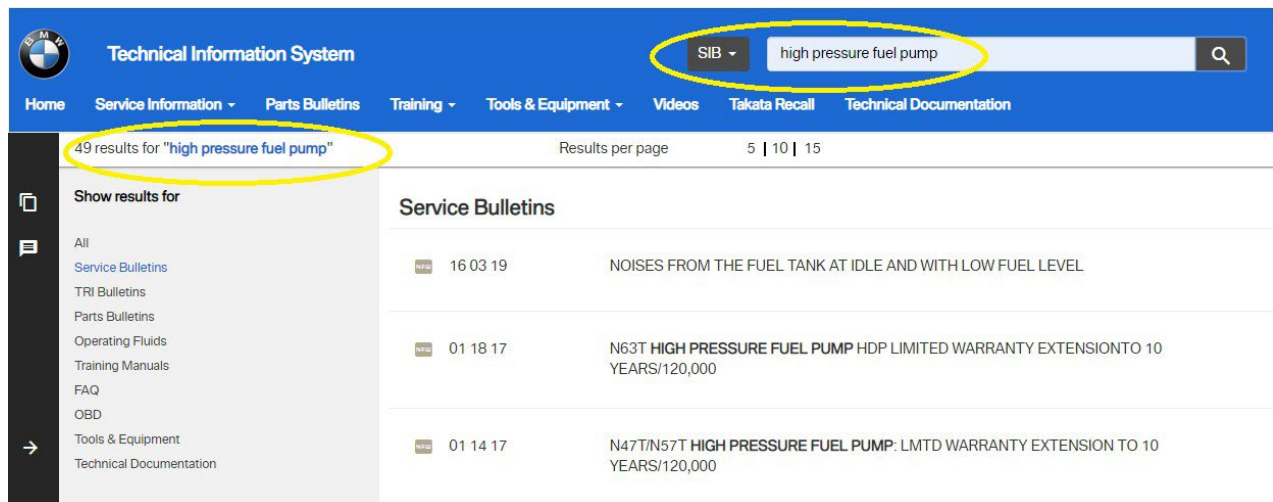
- Search by Fault code
  In the example below a search for fault code 030FA1 results in 1 bulletin with this fault code. When searching by fault code you must remove the 0x from the code read out by ISTA

Section 2: AOS Information

Introduction

The Aftersales Online System – AOS has been developed specifically for independent automotive workshops to provide an extensive range of resources. The following applications are available:

ISTA Diagnosis and Programming Application

- Fault Code Diagnosis
- Test Plans
- Repair Instructions (E30 or higher)
- Technical Data
- Wiring diagrams
- P-Code lookup

ISTA has integrated programming capabilities for F and G Series vehicles. ISTA should be used to program all F and G Series and newer vehicles.

ISTA/P Online - Control Module Reprogramming

All BMW E Series and MINI R series vehicles can be programmed with ISTA/P

AIR

The AIR application provides access to repair instructions, labor times, and parts information.

ECU Validation Tool

In certain situations, the ECU validation tool is required to complete a programming session on certain vehicles.

RDC Trigger Tool

Used to update the software of the BMW RDC tool

What is needed to diagnose and program with the BMW AOS?

The AOS consists of a desktop or laptop PC connected to BMW over the Internet. To connect to the vehicle, you can use the BMW diagnostic interface "integrated communication optical module (ICOM)" or use a J2534 "Pass Thru Tool (PTT)".

BMW ICOM Interface

The ICOM is the interface for the repair of BMW and MINI vehicles recommended by BMW. Specifically designed for BMW and MINI vehicles, the ICOM incorporates powerful processors and a high storage capacity. This allows for faster communication than with a PTT.

There are three different ICOM components available. These can handle all vehicles of the BMW Group:

- ICOM A: OBD communication
- ICOM B: in combination with the ICOM A, for MOST communication
- ICOM C: in combination with the ICOM A, for 20 PIN diagnostic connector.

J2534 Pass Thru Tool (PTT)

If a PTT is used it must meet the standard SAE J2534.

Attention

A wireless or Bluetooth connection between the PTT and PC must not be used.
A momentary interruption of traffic can cause irreparable damage to ECUs.

Working with a PTT, two drivers are required: The BMW PTT driver and the PTT manufacturer specific driver.

BMW specific Adapter and Cable

Older vehicles may require an additional adapter for vehicle diagnosis/programming. Contact your PTT device manufacturer for details.

BMW 20 Pin Adapter

Some older vehicles have a Round, 20-pin diagnostic connector located in the engine compartment. Utilization of this connector is required for proper communication.

The following vehicles need the 20-pin adapter:

- 323i Sedan from MY 1998, 323i Coupe/Cabrio from MY 1999
- 328i, 330i from MY 1998, 328i, 330i Coupe/Cabrio from MY 1999
- 528i, 530i, from MY 1998
- 540i from MY 1997

- 740i from MY 1997

- M3 Coupe/Cabrio from MY 1999

- M Roadster/Coupe from MY 2000

- Z3 Roadster 2.8/3.0 from MY 1998

- X5 from MY 2001

The 20 Pin adapter is indicated in the picture above. It can be located on the front of the engine (as shown) or near the passenger side strut tower.

BMW 7-8 Pin Adapter

Some vehicles require pins 7-8 of the OBD connector to be bridged for vehicle communication.

Power Supply

Vehicles cannot be programmed without an external power supply connected. A Power supply with following specifications and settings are required:

- Please refer to BMW Service bulletin B04 23 10 or MINI Service Bulletin M04 08 09 for more details and a listing of approved chargers required for programming.
- All approved chargers may be purchased from API International at 1-512-280-4391

Attention

Programming failures or module damage can occur without stable power supply. A battery Charger is not the same as a vehicle power supply.

PC Requirements

In order to use the Aftersales Online System - AOS, the following technical requirements must be met:

1. Network/Internet connection

- Internet access with a download bandwidth of at least 4 MBit/s and an upload bandwidth of at least 400 kBit/s is required.
- In order to carry out vehicle diagnosis, the relevant workshop systems must be connected via a LAN cable with a bandwidth of at least 100 MBit/s.
- Vehicle programming requires a LAN cable with a bandwidth of at least 100 MBit/s per programming session.
- For optimal use, a maximum latency of 100nbsp;ms to the AOS server in Munich is recommended.
- It must be ensured that the IP address does not change during the session.

2. Hardware
To install and use the BMW service tools, a device with the following prerequisites is required:

- At least a processor with the following specifications:
  - Processor with 2 cores and at least 2.1 GHz clock frequency.
  - Processor with 4 cores and at least 1.8 GHz clock frequency or
  - Processor with 8 or more cores and at least 1.5 GHz clock frequency
- At least 4 GByte of main memory
- At least 250 GByte of free hard disk space on drive C:
- A display screen resolution of at least 1280x1024
- At least USB 2.0

To diagnose and program at the vehicle, you need one of the following Vehicle Communication Interfaces (VCI):

- ICOM Next (recommended by BMW)
- A LAN cable is required to connect the ICOM to the workshop network.
- Pass-through tool (PTT), which must be compatible with SAE-J2534 (e.g. Drew Technologies, I + ME ACTIA)
- Depending on the manufacturer's specification, a free USB port and the corresponding driver are required to connect the PTT.
- PTTs must not be controlled via Bluetooth.

3. Operating system, runtime environments & port forwarding
To use the Aftersales Online System (AOS), you need one of the following operating systems:

- Microsoft Windows 10 Professional/Enterprise © (64-bit).

In addition to the operating system, the following runtime environments must be installed to use the applications:

JAVA© - The following requirements must be met:

- Java© 32-bit with runtime environment JRE 7 or higher.
- Microsoft.NET Framework from version 4.8

The ports in the Ports list may have to be manually forwarded.

4. Browser

In order to use the Aftersales Online System (AOS), you require the Google Chrome browser in its latest version.

ICOM Network Configuration

The following ports must be activated in the firewall for the network for the ICOM:

- Port 80 TCP
- Port 23011 TCP
- Port 23012 TCP
- Port 427 UDP
- Port 11352 UDP

Otherwise, the connection to the ICOM will fail.

PC Settings

To avoid problems during the vehicle session, it is necessary to make changes to "Display Properties" and "Power".

- Disable the screen saver
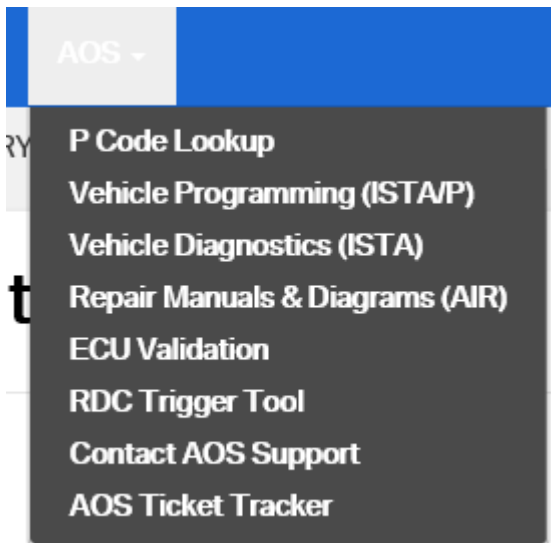- Set Power Management settings to Always on.

NOTE

Always use an A/C adapter when using a laptop. Never program the vehicle in battery mode.

AOS Software Installation

All AOS software and applications are found under the AOS menu of the website.

ISTA and ISTA/P require software to be installed on the PC before using.

AOS ▾

P Code Lookup
Vehicle Programming (ISTA/P)
Vehicle Diagnostics (ISTA)
Repair Manuals & Diagrams (AIR)
ECU Validation
RDC Trigger Tool
Contact AOS Support
AOS Ticket Tracker

NOTE

If your PC has anti-virus or firewall software installed, you must allow access to the Internet during installation and operation.

PTT Driver

If you are using a J2534 PTT device you must install the driver supplied by the device manufacturer.

BMW PassThruD Driver

The BMW PassThruD driver is required when using the PTT diagnostic interface.

The driver can be found on either the ISTA or ISTA/P Start page at the bottom of the screen.

ICOM Firmware update

If you are using a BMW ICOM vehicle interface and the status in the ISTA connection manager says "firmware" the ICOM firmware must be updated.

Download the two latest ICOM firmware packages available on the ISTA or ISTA/P pages. These are called "ICOM Firmware" and "ICOM Next Firmware".
2. Install both.msi files.
3. To update ICOM in ISTA, please ensure the following:
1. The ICOM is connected to a vehicle.
2. The ignition is "ON".
3. The ICOM and ISTA devices are on the same subnetwork and are connected via local area network.
4. Open ISTA.
5. Click on "Operations".
6. In the symbol bar at the top of the window, click on the "Connection manager" button (next to the symbol of the wrench).
7. Select the ICOM with the "Firmware" status and click on the "Configure vehicle interface" button.

8. If the ICOM is not displayed, it is possible to update the ICOM via the web interface. To do so, please contact the support via the support form.

9. The ICOM is updated.

The ICOM Next update is complete only when all LEDs glow green continuously for at least five seconds.

To avoid further issues, the ICOM Next should not be disconnected earlier.

10. After the update, the ICOM status changes to "Free". It can be used normally.

11. If the update fails although you have followed these instructions, please submit an AOS support ticket and include:

- A description of the issue
- Details of which step you reached in the solution

ISTA/P Installation

Refer to the ISTA/P AOS Installation Guide available under the Download menu on the ISTA/P page.

ISTA Installation and Application Start

Refer to the User Guide to ISTA available under the Download menu of the ISTA page.

Vehicle Diagnostics (ISTA)

4. Set the security level to "High"

5. Click "Edit site list..." and add https://onl-osmc-b2i.bmwgroup.com (for more information on the exception list, visit here)

6. Restart your browser.

Now you should be able to see the application again.

Attention: A fault message may currently appear in ISTA if the application starts with a resolution lower than 1024x768. If you are affected, please follow the steps described in the Frequently Asked Questions. The FAQs can be found in the Help section of the AOS portal.

Important information about using the ISTA workshop system in brief

- Can only be used for unmodified BMW and MINI cars
- Successful completion of vocational training as a motor mechanic/fitter and further training are necessary
- Use of the special tools listed is mandatory

A check runs to determine the applications availability status. Please wait until the status is green before continuing.

Start
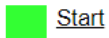
Download

- Users Guide to ISTA
- ISTA Client installation file
- ISTA programming data
- The electronic service booklet with data storage in the vehicle
- How to update ICOM Firmware
- ICOM Firmware
- ICOM Next Firmware
- BMW PTD driver

Connection of the Interface Device to Vehicle

Note

Before connecting ICOM to the vehicle switch on ignition (Terminal 15).

ICOM OBD-Connection

Connect the ICOM to the network workshop first. Then connect the ICOM to the vehicle OBD connector

ICOM MOST-Connection

Connect the ICOM to the network port on the PC first. Then use the supplied USB cable to connect the ICOM A to ICOM B. Connect the ICOM A to the vehicle OBD connector followed by connection the ICOM B to the vehicle MOST access port.

ICOM 20 Pin connection

Connect the ICOM to the workshop network first. Then connect the ICOM C to the ICOM A. Finally, connect the ICOM C to the vehicle 20 Pin diagnostic connector.

ICOM Detection by the PC

It can take up to 15 minutes before an ICOM is detected after the connection to the PC. It is advisable to connect the ICOM immediately after boot up of the PC, and then start AOS.

Connection of the PTT to the Vehicle

First connect the PTT USB cable directly to your computer and then connect the PTT to the vehicle.

Do not use a USB hub for this connection!

Vehicle not supported by PTT Use

The following vehicles cannot communicate with a PTT:

- E31
- E34
- E36 (318i)

Diagnostics/programming is possible with the AOS and ICOM.

AIR

The AIR user guide is located on the AIR Start page.

ECU Validation

Click the Start button on the ECU Validation page to start the application. This is only required when certain ECUs are replaced, and a code is requested by ISTA.

RDC Trigger Tool

For owners of the BMW Group TPM tool.
Download and install the RDC tool file from the Start page.

User guide is available on the RDC page.

Section 3: FAQs and Contact Information

Frequently Asked Questions

1. **How do I contact technical support?**

   Technical support is divided into two different support teams.

   - For AOS software installation or operation issues: Select the Contact AOS Support link found in the AOS menu to complete and submit the request form.

     Please note: This is not a vehicle repair hotline; vehicle specific repair inquiries will be rejected.

   - For general website information or subscription questions click the Contact link on the top left section of the website.

   - For Vehicle Order, Enabling Code, or IBAC code requests:

     Click the Contact link on the top left section of the website and include the following information:
       - Account Name

- Email address
- VIN number

Please note: AOS software support is not available through the contact link.

2. **What if my subscription expires while working with technical support to resolve an issue?**

   Click the Contact link on the top left section of the website to send a request for assistance.

3. **Will my programming or diagnostic session end if my subscription expires?**

   Once you begin a programming or diagnostic session it will not end if your subscription time elapses. The programming or diagnostic session will continue until completed or terminated by the user.

4. **How do I access Repair information outside the United States or Canada?**

   The three websites listed in this guide allow access for users located in the United States and Canada only.

   All other users can register for access at the following website: https://aos.bmwgroup.com

Terms and Conditions

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BMW NA shall not be liable for any programming aborts, vehicle no-start situations, control module failures that may occur while using a pass-through tool, or ICOM interface and this website, or any other unauthorized or improper use of the website or the information therein.

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