

E9x References

230312 Revision

I. BMW Sites:

BMW Owner's Manual (Searchable pdf) for Vehicle:

<https://www.bmwusa.com/owners-manuals.html>

BMWUSA.com Register as New Owner (Get Recall Info):

<https://www.bmwusa.com/secured/content/forms/Register.aspx>

Open Recalls on Your BMW:

<https://www.bmwusa.com/safety-and-emission-recalls.html>

NHTSA Recall Info:

<https://www.nhtsa.gov/recalls>

II. BMW Training Manuals:

BMW Training Manuals, 47 pdf files for download from e90post.com:

<https://www.e90post.com/forums/showthread.php?t=1360573>

BMW Training Manuals, Internet Archive: How BMW Systems work, range of models;

<https://archive.org/details/BMWTechnicalTrainingDocuments/ST034%20E46%20Complete%20Vehicle/1%20models/>

You can Download any one, or ALL, of 718 pdf's to your HD (~ 1 GB) following procedure discussed in posts 50 – 54 of this thread:

<https://www.e90post.com/forums/showthread.php?t=501479&highlight=BMW+Training+Manual&page=3>

III. Shop Manuals, Maintenance:

Bentley Service Manual: General information on vehicle systems. Functional descriptions of systems; Routine Maintenance; Repair Procedures; Torque/Fluid specs; Fuse & Bulb Charts; Wiring diagrams: Conventions/Symbols; Fault Code Definitions; **Searchable pdf**, 1265 pages, FREE download:

<http://www.georgebelton.com/335i.tech/bentley.php>

*Download Link disabled in 2022; Account suspended as of March, 2023; PM me for questions.

Bentley Publishers: Bentley Manual (Paper ONLY); also Sold by Parts Suppliers listed below:

<http://www.bentleypublishers.com/>

*ISTA as Shop Manual: See below. View ISTA Documents without being connected to vehicle. **BEST**

Mike Miller's Lifetime Maintenance Schedule:

<http://www.dslreports.com/r0/download/2294029~a7ccced57c514756e4c445baa2542b06/Lifetime%20Maintenance%20Schedule%20v03.13.pdf>

IV. Diagnostics:

A. Software:

BMW-Specific Software for PC, Downloads from MEGA:

INPA: Download BOTH 1) BMW Standard Tools & 2) E89 Datens from MEGA links found at:

<https://www.bimmergeeks.net/downloads>

1) BMW Standard Tools: contains (1) INPA (Diagnostics), (2) NCS (Coding), (3) WinKFP (Programming), (4) Tool32 (?); Download from BG Link above; 129.3 MB 7z compressed file. ‘Install Instruction.txt’ appears when UnZip. INPA/ Datens install. requires ~ 2.5GB HD space.

2) E89 Datens: Data files for EDIABAS: INPA/ISTA; download “E89.rar” file, 4.51 GB

INPA has MOST DETAILS/Data: (1) Fault Codes & Definitions, ALL Modules; (2) Fault Details & Freeze Frame Data (‘Snapshot’ of system conditions); (3) Live Data/Parameters; (4) Activate Motors/Solenoids/Lights; English Menus; most Technical terms/ labels in German; Use Google Translate: <https://translate.google.com/#view=home&op=translate&sl=de&tl=en>

3) Rheingold (ISTA+): View Reference DOCUMENTS WITHOUT vehicle connection:

(1) Diagnostic Software, Flow Chart Troubleshooting, in English; (2) Interactive Wiring Diagrams with component locations, connector views, Overview: Component & Line ID; (3) Repair Procedures; (4) Functional Descriptions – HOW systems work; (5) Torque & Fluid specs;

NOTE: Installation Instructions appear as txt file when UNZip the 9.98 GB 7z compressed Download Folder; **MUST have a functioning BMW Standard Tools Installation FIRST**, per (1) above; 21.4 GB disk space used by Rheingold:

https://mega.nz/file/a1wUmYCD#G0C3_Hsg9qFvrqQwC764h4CQML7ECo9uQ4EpxjI8oZs

B. Hardware:

K+DCAN Cable: Connects Laptop USB Port to OBD II Socket of vehicle

BimmerGeeks Pro Cable: slide switch bridge (on/off) of pins 7-8, models (1) <2007 & (2) 2007 & Later:

<https://www.bimmergeeks.net/product-page/bimmergeeks-pro-cable>

Amazon K+DCAN:

https://www.amazon.com/s?k=k%2Bdcan+cable+bmw&crd=JJUH5QENJQC1&srefix=K%2BDCAN%2Cap s%2C184&ref=nb_sb_ss_ts-doa-p_1_6

C. Tutorials (by George ;-): How to Use INPA & ISTA:

PDF Downloads, INPA & ISTA Tutorials: can be found at the following Forum Thread:

<https://www.bimmerfest.com/threads/tutorials-inpa-ista-e9x-references-pdfs.1449540/>

D. VIN Decoder:

See What Options YOUR Vehicle Has;

ISTA connected to your vehicle provides “Vehicle Information/ Vehicle Details/ Optional Equipment”:

<https://www.mdecoder.com/>

<https://bimmertool.com/Account/Login?ReturnUrl=%2F>

E. OBD II, General Info:

Fault Code Types: INPA shows Fault Codes in following 3 types, where applicable:

1) Decimal; 2) Hexadecimal; 3) P-code. See following Links for Conversion or Definition:

<https://www.rapidtables.com/convert/number/hex-to-decimal.html>

Above site ALSO has conversions of many “Units”: Length, Temp, Weight, Power... Another Conversion site:

<https://www.onlineconversion.com/>

2) **P-Code & Mfr.Codes by Brand:** Definitions: <https://www.troublecodes.net/pcodes/>

F. BMW Hexadecimal Codes (Hex-codes):

BMW Fault Code Definitions: Enter Hex-code, get Definition/ Description, Fault Information for SOME, with “Service Notes”: or testing steps when click “View” in Definition (Many codes do NOT have "View Link");

NOTE that Definition for specific Code Number varies depending upon Module SGBD/Variant. INPA provides SGBD/Variant: 4th column (SGBD) of Functional Jobs > F2 Identification: www.bmwfault.codes

G. Check Control, CC-ID Codes & Warning Lights:

Check Control Codes: Use Check Control Procedure in Owner's Manual to View "CC-ID" Code(s);

CC-ID Code Definitions: Found in Bentley Manual, page 020-55;

Complete List in ISTA: Filter: FUB ONLY; Search String: "check control message"; Lists codes 0 - 965

<http://www.endtuning.com/ccidcodes.html>

<http://mr-fix.info/bmw-cc-id-codes-fault-warning-messages/>

H. Hidden Menu Activation: Display Voltage, Temp...

<https://www.carsaddiction.com/articles/2018/01/bmw-e90-e91-e92-e93-on-board-computer-hidden-menu>

V. Parts:

A. RealOEM.com Parts Catalog:

Lookup 11-digit BMW part# for YOUR vehicle; also parts diagram by system.

Enter VIN "Last 7" & Bookmark/Save resulting page; Lookup 11-digit BMW Part#: enter that in Parts Supplier Search Box to quickly check availability, price comparisons; BMW Part# ALSO on part/label, at least Last-7 digits, or some variation, perhaps with "suffix" number/letter.

<https://www.realoem.com/bmw/enUS/select>

B. Genuine BMW Parts, Discounted/Shipped:

<https://www.getbmwparts.com>

C. OE, OEM Parts, Tech Info, DIY procedures (Pelican):

<https://www.ecstuning.com/>

<https://www.autohausaz.com/catalog/c/bmw/>

<https://www.pelicanparts.com/BMW/index-SC.htm>

<https://www.fcpeuro.com/>

D. Amazon for BMW Parts: <https://www.amazon.com/>

Amazon may be quickest/cheapest source, if Prime; Find BMW 11-digit part# in RealOEM.com; enter 'BMW xxxxxxxxxxx' (BMW followed by 11-digit-part#) in search box; compare w/other Suppliers; filter for Fitment.

Don't dismiss Carparts.com or RockAuto; **Do "Trust BUT VERIFY"**; Remember: IF the parts guy is in as big a hurry as YOU are, the OUTCOME MAY SUFFER ☺

VI. DIY / Maintenance Links:

<https://www.bimmerdiy.com/dir/e90>

<https://bmwrepairguide.com/category/bmw-e9x/>

https://www.pelicanparts.com/BMW/techarticles/tech_main_e90.htm

Suggested DIY Reference: ISTA as Shop Manual for REP Repair Instructions, SSP Wiring Diagrams...

See PDF, "ISTA as Shop Manual" for HOW to view REP, SSP & OTHER ISTA Documents

A. Tools:

Harbor Freight Tools & Amazon. UNLESS you're a Pro, better to have MORE Cheap Tools than a FEW \$\$\$ ones. ☺ MUST have Multimeter, Electrical Diagnosis: \$7 HFT; \$10 Amazon: <https://www.harborfreight.com/>

<https://www.amazon.com/>

Please advise of: 1) any errors, 2) inoperative Links, 3) suggestions/ additions. George