

Service Information Bulletin

Maintenance and General Information

March 9, 2022

B00 02 22

2022 NEW VEHICLE PREPARATION AND MAINTENANCE REQUIREMENTS

This Service Information Bulletin (Revision 1) replaces SI B00 02 22 **dated March 2022**.

What's New (Specific text highlighted):

- Note added for QC1 first HV charge to 100% and fault code

MODEL

E-Series	Model Description	Production Date
G26 BEV	4 Series Gran Coupe Battery Electric Vehicle (BEV)	As of Nov. 2021
I20	iX Sports Activity Vehicle BEV	As of Nov. 2021

Model	Production Start*	Comments
i4 eDrive40	11/2021	Fully electric version of 4 Series Gran Coupe. Single motor, rear wheel drive; rated at 335 bhp and 317 lb. ft. torque.
i4 M50	11/2021	Fully electric version of 4 Series Gran Coupe. Two motors, xDrive; rated at 536 bhp and 586 lb. ft.
iX xDrive50	11/2021	All new body design. Two motors, xDrive, rated at 516 bhp and 564 lb. ft.

*Available approx. 3 months later

17-digit Vehicle Identification Number (VIN): The 10th digit (model year identifier) utilizes the letter "N" for MY 2022.

A reference guide for 2022 BMW Group models officially communicated through 2/2022 is included for your convenience. Refer to **Attachment 4**. The guide is also found in TIS per the path **Technical Documentation - Workshop Info - New Model Initial Information**.

SITUATION

Topic	Purpose
New product information	Overall familiarization with new vehicle visual and operational features, prior to performing the QC1. Intended for all center personnel.
Quality Certification 1 (QC1)	Product details and clarifications relevant to preparing a vehicle for showroom display, test drives, or customer presentation. Intended for technicians and salespeople.
Maintenance	Overall maintenance aspects once a vehicle is retailed, especially if unusual operations are required. Details provided in an attachment. Intended for technicians.
General notes, Parts information, Warranty information	Intended for parts and warranty administrators.

Important Warning for Working on the High-Voltage (HV) systems on BMW Group vehicles:

Only properly trained personnel, who passed all applicable HV Technical Training Courses, should perform repairs which require disconnecting, or removal of High Voltage battery components on any Hybrid or Electric Vehicle. Work performed on High Voltage systems by unqualified persons may result in severe injury or damage to the vehicle. Additional safety information is found in Repair Instruction 61 00... “Observe safety instructions when handling electric vehicles”.

Additional Information:

Scheduled Maintenance, or Quality Certification 1 (Pre-Delivery Inspection) on Electric or Hybrid vehicles does not require HV technical training.

Prior to disconnecting, or the removal of any HV component, the HV system needs to be disabled and secured (by means of the HV Disconnect Switch) by a properly trained technician, who has a minimum HV Qualification level after completing the Technical Training Course ST1824 (Alternative Drive Part 1). Once the vehicle’s HV system is disabled (the “Blitz” - lightning bolt icon displayed in instrument cluster, see below), a technician without HV Certification may remove a HV component (e.g., EH Heater, EKK Compressor, EME Control Unit, et.), except for the High Voltage Battery.



High Voltage Battery removal and rework can be performed ONLY by a HV Specialist Technician (certified by the Technical Training Course ST1825 – Alternative Drive Part 2), AND with a HV Battery Certification level corresponding to a specific Electric or Hybrid vehicle (e.g., to repair GEN4 battery of G05 PHEV, certification from Technical Training Course “ST2006 – SP44 HV Battery” is required).

New product information

Both models utilize BMW’s Generation 5 (Gen5) fully electric drivetrain, lithium-ion high voltage battery, and BMW Curved Display with iDrive generation 8 controls (iD8). More product information can be obtained from-



iX press release:

<https://www.bmwusa.com/newsrelease.do?id=3732&mid=666>

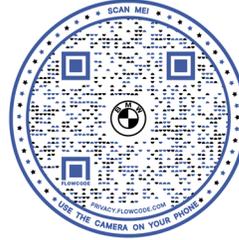




i4: Two-motor M50 shown.

Press release:

<https://www.bmwusa.com/newsrelease.do?id=3731&mid=668>



QC1

Note: The traditional 4-page QC1 checklist was discontinued with the start of the 2019 model year (refer to SI **B00 01 18**) and is not available to order via ATLAS. The showroom display, the road test; or the spot delivery **must be** successfully completed for all individual QC1 operations before submission of the warranty claim.

A single-page QC1 checklist for 2022 BMW BEV models (**Attachment 1**) is intended:

- As a reference for the various operations needed for the different possible scenarios to prepare the vehicle for customer delivery
- For Service Department supervisors to print out and train a new QC1 technician on the operations
- The customer does not need to sign the checklist, but Service Department associates may print it out for individual vehicles if requested by the customer

For Authorized BMW centers located in the State of California: Refer to **B00 05 18** for vehicle labeling requirements per California Proposition 65. The requirements went into effect as of August 30, 2018. The QC1 reference checklist (Attachment 1) has been updated to include a line for this vehicle labeling in the “Delivery Check- Salesperson” section.

Recalls or Service Actions on new BMWs:

Before delivering a vehicle to a customer, please ensure that your Sales staff check the vehicle for open Recalls or Service Actions. **Keep in mind that Recalls or Service Actions can be issued after a vehicle has been prepared for spot delivery.** Therefore, please verify with your Service Department that your vehicles have no open Recalls or Service Actions prior to customer delivery. You can check for open Recalls or Service Actions via

- DealerSpeed.net- DCSnet- Service- Vehicle History- enter the chassis#- check the section “Open Campaign Information”

Please be reminded that it is a violation of Federal law for you to sell, lease and deliver any new vehicle until all recall repairs have been performed. This means that centers may not legally deliver new motor vehicles with an open recall to a consumer until it is fixed, or use/sell replacement equipment/parts subject to a recall. Note also that substantial civil penalties apply to violations of this law.

Tips for your first drive are in the February 2022 Service Roundtable (SRT) (Courses/Roundtable/Service/2022/02 February Code: SERVICERT22-02 Title: Service Roundtable February 2022)

Comparison of vehicle HV battery charging times. Vehicle set to 48 Amps using the CID (path Vehicle Apps- Charging -).

Model	HV battery energy	0-100% charging time, Level 2 220 V wallbox	0-80% charging time, DC Fast Charger,	Driving range from 10 minute charge	Fully charged, maximum

	capacity, kWh	@ 11 kW max. charge rate	200 kW max. charge rate	on DC Fast Charger, max. miles	range, miles
i4 eDrive40	81.5	8.25 hrs	40 minutes	108	282 - 301
i4 M50	81.5	8.25 hrs	40 minutes	97	227 - 270
iX xDrive50	105.2	10.5 hrs	40 minutes	90	305 - 324

New details/clarifications on QC1 operations:

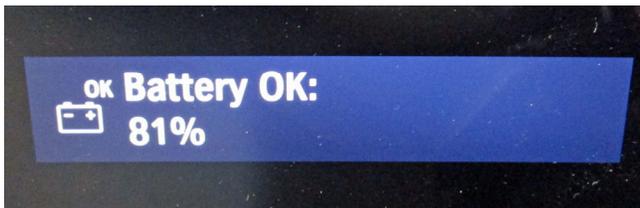


When the vehicle is in Transport Mode (TM) the maximum HV state of charge (SoC) is approx. 20%. This enables a driving distance of from 50-70 miles.



The CID shows the relative SoC of the HV battery.

- “Multiple” outlines of the battery icon
- Actual SoC is determined by dividing the indicated momentary capacity (24 kWh) by the model’s HV energy capacity. iX has 105 kWh, therefore the SoC would be 23%.



The display alternates to the 12 V battery

- “Single” outline of the battery icon



iX parking:

The transmission selector switch does not utilize a traditional “P” (Park) position. For that function, press either the START/STOP button or the electronic parking brake (EMF) (arrows).

Note:

If the vehicle is stopped while in Neutral and the driver’s door is opened, the parking brake does not automatically engage.



iX inner door release (all 4 doors):

- Press the button (circled)
- Push the door fully open to exit vehicle

An emergency handle (arrow) utilizing a mechanical release is located farther down on the door panel.



Recommended work sequence for first charging, which improves efficiency of vehicle logistics between the HV charging station and workshop:

1. Deactivate Transport Mode using the Transport Mode Switching Device (TMSD) tool (refer to **B04 22 14**); can be done away from the workshop.
2. Bring vehicle to a HV charging station.
3. Set HV controls as shown below.
4. Charge to 100%. A new message appears in the CID (shown) as a reminder. Per Step 3, change 6 A to 48 A.
5. Bring the vehicle into the workshop to perform the hand-over inspection using ISTA.



HV charging sockets in right quarter panel.

- Upper socket: 220 V AC (alternating current) wallbox, per connector SAE J1772
- Lower and upper sockets: DC (direct current) fast charger



Fully charge the HV battery with deactivated TM.

- For the fastest charging time, select the “Charging” icon in the CID menu



-
- Set the AC limit (current flow) to 48 A
- Set the Charging target to 100%

Note: The vehicle must receive a full charge to 100% prior to customer delivery, or first drive for demo service. A fault code 21F27C will remain if not charged to 100%, though it is not indicated in the instrument cluster or the CID.

This FC disappears after:

- Charging to 100%, AND
- First sleep cycle



After the road test portion of the QC1,

- Charge HV battery if needed to 100%
- Reduce the AC limit to 6 A
- Reduce the Charging target to 80%



Washer fluid access, iX:

- Keep hood closed
- Push on BMW hood emblem with vehicle unlocked
- Reservoir capacity is approx. 2 gallons
- Emblem locks when vehicle is locked



Washer fluid access, i4:
Underhood, at conventional G26 location (arrow).

- Hood release is conventional G26 design, with the lever on the driver's A-pillar requiring a double pull



The "120-volt occasional use" charging cable was the standard equipment beginning with the I01. For the 2022 G26 and I20 BEVs, the "Flexible Fast Charger" cable (aka "Flexcharger") is the standard equipment.

The Flexcharger kit Includes-

- The charge cable assembly
- 2 different charge cable adapters, one for a 120-V outlet, and the other for a 220-V outlet
- Wall mount bracket (not shown)
- Protective fabric bag (not shown)



iX: The tow hook is stowed in the underside of the Styrofoam block in the underfloor cargo bay.

The block also contains the Mobility kit pump, and sealant bottle.

i4 (not shown): The tow hook and the Mobility kit are stowed in small pouches in the trunk area.



iX: Snap the hood release loops on both sides of the instrument panel into their respective clips so that they remain out of sight from customers.

- General location of the clip shown



Retaining clip (1) and release loop (2).



iX does not have a traditional sunroof fabric sunshield. Instead, the non-opening glass is electrochromic.



Pushing the button on the ceiling switch console (FZD) dims the glass in approx. 1-2 seconds.



QC1 Road Test:

Reduce the amount of icons showing in the CID by selecting “Vehicle Apps” (circled).

The remaining icons are mostly for the actual vehicle driving functions.



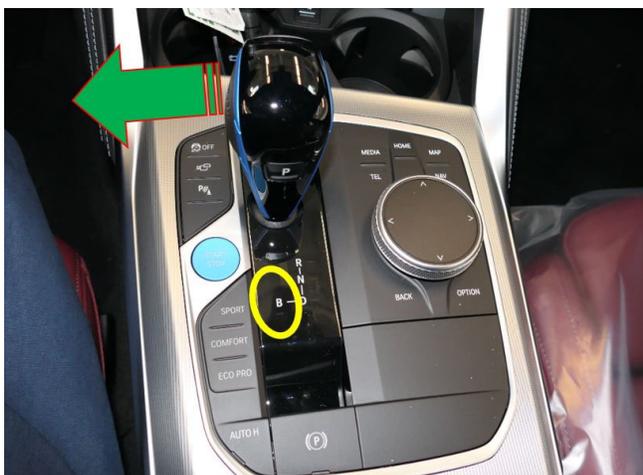
Select different instrument cluster and head-up display layouts by pressing the “Settings” switch (circled).

Press the thumbwheel to the right or left, and scroll up or down to change the appearance of the displays.



Brake energy recovery (aka recuperation/regeneration) utilizes the momentum of the vehicle to transmit electrical energy back into the HV battery. This slows down the vehicle without touching the brake pedal.

iX: Push the transmission selector switch rearwards (arrow) while in D (Drive). The B (Brake) icon illuminates (circled). This achieves the strongest regenerative braking action. To deselect B, press the selector switch rearwards again.



i4: Push the transmission selector lever to the left (arrow). To deselect B, push the lever to the right (default) position.

On both models, the energy recovery can also be set for keeping the transmission in “D”. Path: Menu- Vehicle Apps- Driving Settings- Drivetrain and Chassis- Drivetrain- Energy recovery in D



Sport mode, iX:
Push the console down at the “MY MODES” icon.



The 3 choices display on the CID.

- Touch the desired mode

Front license plate bracket, iX: Refer to **Attachment 3**.

- Note: The attachment procedure is different than for any other BMW

Maintenance

- Refer to **Attachment 2** for the Condition-Based Service (CBS) intervals and maintenance operations

The basic maintenance interval is 24 months, with no mileage counters.

The maintenance operations referenced above are available outside of the official BMW network for single vehicle owners and independent repair facilities via www.bmwtechinfo.com.

New details/clarifications on Maintenance operations:



The vehicle maintenance overview is found using the path- Menu- Vehicle Apps- Live Vehicle- Vehicle Status- Required Services



Select it to view details.



Opening the iX front hood:

- Locate the wire loop at each side of the instrument panel's bottom edge
- Firmly pull downwards once



Apply tape to both rear corners of the hood, per either of these Repair Instructions-

- 0000624 "Vehicle check service", page 9
- 4161516 "Moving the hood to the service position"

Use masking tape, or windshield replacement retaining tape (P/N 83 19 9410979).



Use special tool P/N 83 30 5A3CD29 to hold the hood open when the tools are inserted into the left and right hood hinges.



iX underhood, general orientation.

- There is no acoustic/protective cover
- Coolant reservoir (circled) for combined vehicle interior heating and drive motors
- Coolant for iX and i4 is Frostox HT12 (green) P/N 83 19 2 468 442 (1 gal. container)



iX: Check the windshield cowl area. Clear any debris from the driver and passenger side water drains.

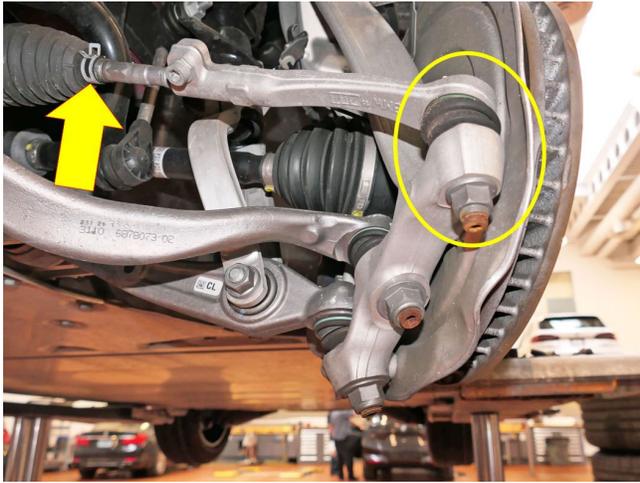


i4: Coolant system reservoir and climate valves (circled) are located under access flaps.

- The acoustic and protective cover can remain in place



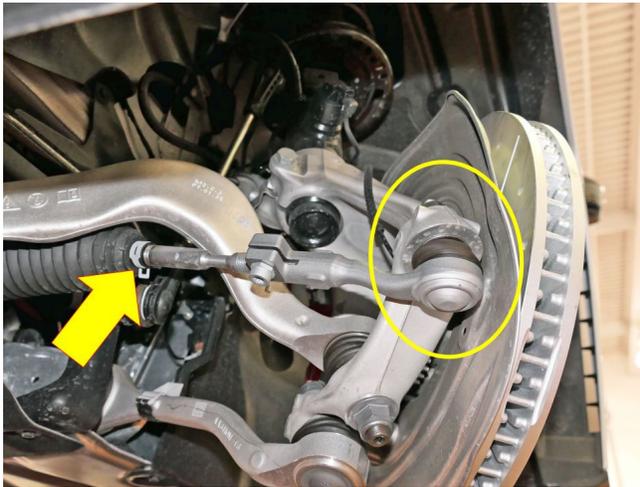
iX: Make certain the hood release loops are fastened into their holding clips (arrow shows general location).



i4, iX: At every 2nd Vehicle Check (48 months after in-service date):

Front suspension carrier (iX driver's side shown; i4 shown below):

- Turn steering wheel to full lock in each direction
- Check for lack of play in the steering tie rod ball joints (circled)
- Check that the tie rod boots, and the steering gear bellows are undamaged
- Check the steering gear bellows for missing end clamps (arrow)



i4 driver's side front suspension.

- Same components referenced as for iX above



Check the light switch cluster for proper icon/symbol illumination.

General Notes

The part numbers are shown for identification purposes only, or for ordering additional booklets if needed.

2022 i4, iX Warranty booklet	01 00 5A40C35
2022 i4, iX Maintenance booklet	01 00 5A40C34

CLAIM INFORMATION

Reimbursement of the BMW Pre-Delivery Inspection (Quality Certification 1) on 2022 BMWs is via submission of a warranty claim when the work is completed.

- If the Display and Delivery portions of the inspection are performed separately, individual claims should be submitted when those operations are performed.
- If the entire QC1 delivery inspection is performed at the same time, submit one claim for “Spot Delivery.” This is an important difference from the prior process, and claims must not reflect Display and Delivery if only the Spot Delivery was actually performed.
- All BMWs are only eligible for either the Display and Delivery Inspection, or the Spot Delivery Inspection.
- If a BMW center performs the Display Inspection and the vehicle is traded, then the second center may only perform and claim the Delivery Inspection. Check the DCS Vehicle History Report to determine whether a claim for this work had been submitted by another center.
- If a center receives a vehicle, does nothing to it and then trades it to another center, then the second center may perform the Display and Delivery Inspection or the Spot Delivery Inspection, whichever is relevant. Check the DCS Vehicle History Report to determine if a claim for this work had been submitted by another center.

BMW Company Vehicles

Reimbursement for performing the QCI on BMW company vehicles of any model year for regional employees of BMW of North America, LLC must still be requested by submitting a claim through DCS. Use the Spot Delivery codes listed below:

Defect Code:	11999977BV
Labor Operation:	00 00 012
Flat Rate Units:	Refer to AIR

Refer to AIR for the corresponding flat rate unit (FRU) allowance. Enter the Chassis Number, which consists of the last 7 digits of the VIN. Click on the “Search” button, and then enter the applicable flat rate labor operation in the FR code field.

Note: BMW company vehicles delivered to field personnel may have already received a full QCI. This should be evident upon arrival at your center by the following:

- The absence of the usual protective seat and door panel covers
- Transport mode has been deactivated (radio is operational)
- The Monroney label not being affixed to the window, etc.

Please verify that the QC1 has already been performed at a VDC on a specific vehicle by contacting your regional Distribution Manager with the chassis number.

QC1 inspections are covered under the terms of the BMW New Vehicle Limited Warranty.

Defect Code:	1100077BV	QCI – Display Inspection
Labor Operation	Description	Labor Allowance
00 00 008	Display Inspection	Refer to AIR

Or:

Defect Code:	11999977BV	QCI – Spot Delivery Inspection
Labor Operation	Description	Labor Allowance
00 00 012	BMW QCI-Spot Delivery	Refer to AIR

***IMPORTANT:**

As with all work that is reimbursed by BMW, the repair order, time recording, and record keeping requirements outlined in the Warranty Policy and Procedures Manual must be strictly observed. Quality Certification I payments are subject to audit.

QUESTIONS REGARDING THIS BULLETIN

Technical inquiries	Submit feedback at the top of this bulletin
Warranty inquiries	Please contact the Warranty department by either using the Live Chat that's available in the Warranty Documentation Portal or through IDS by selecting Coverage, Policy, Coding Questions and Mileage Corrections
Parts inquiries	Submit an IDS ticket to the Parts Department