

BMW i3 SERVICE MANAGERS WORKSHOP

Participant Guide



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WELCOME TO THE BMW i3 SERVICE MANAGERS WORKSHOP

This event is your chance to meet the first BMW i vehicles, the all-new BMW i3 and BMW i3 with Range Extender. The i3 was Born Electric, meaning it is the first BMW vehicle that was designed from the ground up as an electric vehicle that represents the ultimate in electric mobility and sustainability.

BMW i is more than another sub brand within the BMW portfolio—it represents a reimagined take on electric mobility that starts with the design, engineering and production of the i3 and extends throughout the ownership experience.

During this event, you will:

- Learn how the BMW i3 incorporates sustainability into every aspect of its development, design and production
- Identify the BMW brand DNA making the i3 the Ultimate Driving Machine®
- Uncover and respond to your clients' most challenging EV questions
- Identify how your service processes will change to support i3 customers

Your excitement for the BMW i3 is the key factor in a successful launch of the BMW i brand in the U.S. This event is your chance to build the knowledge you need to confidently discuss the BMW i3 with your service customers.

OPENING SESSION



EVENT OBJECTIVES

- Get under the skin of the BMW i3 and uncover its advanced technology
- Gain insight into the BMW i3 client and their service needs
- Discuss how the BMW i3 fits into your Center's service processes



BMW i3: BORN ELECTRIC



MINI E BMW Active E BMW i3

BMW i3 LIFEDRIVE ARCHITECTURE



BMW i3 LIFEDRIVE ARCHITECTURE



SUSTAINABLE LUXURY



BMW i3 WORLDS



Mega Standard

- Mega 19-inch Star Spoke Light Alloy wheels with all-season tires
- Lightweight SensaTec fabric made from recycled materials
- Instrument panel trimmed in elegant grain foil
- Grey leather steering wheel highlighted with blue BMW i accents
- 606 Navigation Business

Giga

Optional

- Giga 19-inch Light Alloy Turbine wheels with all-season tires
- Grey leather steering wheel with silver accents
- Giga Cassia Natural Leather and Carum Spice Grey Wool Cloth
- Leather-covered instrument panel
- Sustainable open-pore eucalyptus wood from certified forestry
- SIRIUS® Satellite Radio with a complementary 1-year subscription
- Universal garage door opener
- Comfort Access keyless entry with multi-function remote control
- 606 Navigation Business



TeraOptional

- Tera 19-inch Light Alloy Turbine wheels with all-season tires
- Black leather steering wheel with silver accents
- Leather-covered instrument panel
- Tera Dalbergia Brown Full Natural Leather
- SIRIUS® Satellite Radio with a complementary 1-year subscription
- Universal garage door opener
- Comfort Access keyless entry with multi-function remote control
- 606 Navigation Business

BMW i3 WORLDS PACKAGES AND OPTIONS



Mega

- Optional 2T7 Sport 20" BMW i Light Alloy Double Spoke wheels style 430
- Optional ZPK Parking Package with Rear view camera (3AG), Park Distance Control (508), Parking Assistant (5DP) and Park Assistant Package (5DU)
- Optional ZTD Technology + Driving Assistant Package with ACC Stop & Go + Active Driving Assistant (5AT), BMW Navigation Professional (609), BMW Online and BMW Apps (6AK) and Advanced Real-Time Traffic Information (6AM)
- Optional 674 Harman/Kardon premium sound
- Optional 494 Heated front seats
- Optional 4U7 DC Fast Charging (SAE)



Giga

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SERVICE MANAGERS WORKSHOP AGENDA

- Opening Session
- Connecting with Your Customers
- BMW i3 Walkaround
- BMW i3 Tech Talk
- BMW i3 Driving Displays
- 360° Electric
- BMW i3 Service Process
- Living Electric
- Closing Session



CONNECTING WITH YOUR CUSTOMER



ADDRESSING BMW i3 CUSTOMER QUESTIONS

- Identify the customer's current level of knowledge
- Respond using clear, concise language
- Incorporate the customer's experience
- Use the question as an opportunity to build value

Example:

"I don't like the idea of having to charge my car every night. It seems inconvenient."

Response:



TWO COMMON **CUSTOMER QUESTIONS**

- 1. Can the high-voltage battery be repaired or do I need to buy a new one?
- 2. What tax incentives am I eligible to receive?

Notes:			



Can the high-voltage battery be repaired or do I need to buy a new one?

Response:			



THE BMW i3 BATTERY STORY



Modular Design

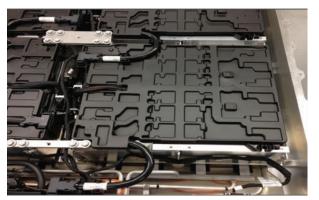
- Battery module consists of 8 individual cells, while most mass-market EVs use a single battery pack
- Cells can be replaced individually, reducing replacement costs
- Each cell weighs 55 pounds / 25 kg. for easy shipping and storage



Efficient Service Procedures

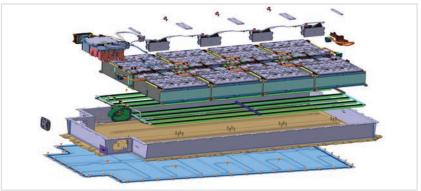
- 5-hour service time (vs. 30+ hours for Active E vehicles)
- Removal and replacement can be handled by a single technician

THE BMW i3 BATTERY STORY



Automotive-Grade Design

- Automotive-grade batteries
- Purpose-built for the BMW i3



Freon Cooled

- High-voltage batteries generate significant heat
- Freon offers more efficient cooling
- Potential safety benefits if the battery module is damaged



THE BMW i3 **BATTERY STORY**

Warranty

Notes:

- 8 years / 100,000 miles
- Battery is replaced when State of Health (SoH) is 70% (State of Health to be determined by the Diagnosis System)



What tax incentives am I eligible to receive?

Federal EV Tax Credits Explained

- Up to \$7,500 credit on BMW i3 and \$3,793 on BMW i8
 - New vehicle purchase
 - Tax credit goes to the original owner and is non-transferable
 - Primary use must be in the United States
- Both i3 models qualify for the full amount
- "Phase-out" begins after 200,000th vehicle is sold
- Tax credits are subject to change. Check <u>www.fueleconomy.gov</u> for the latest information

Notes:			



Federal EV Tax Credits: Lease vs. Purchase

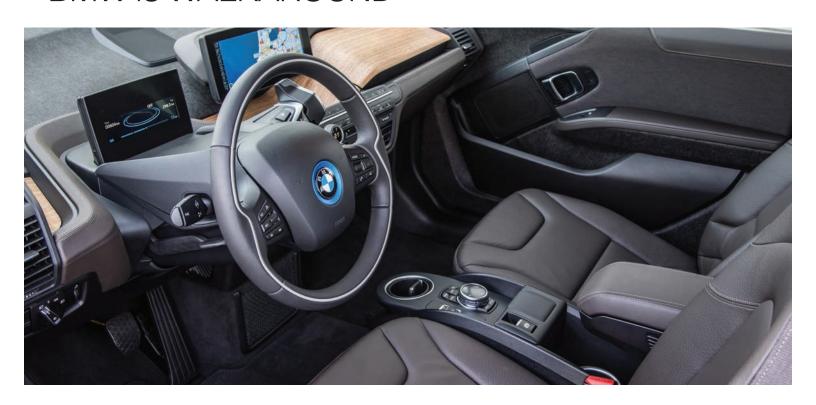
Federal EV Tax Credits Explained

- Purchase
 - Vehicle is considered owned by the client
 - Client is eligible for the full \$7,500 tax credit
- Lease

Notes:

- Vehicle is considered owned by BMW
- As a business, BMW has a lower net benefit of \$4,875
- The full \$4,875 tax credit is passed on to the client

BMW i3 WALKAROUND





BMW i3 Walkaround
Take notes on the different areas of the BMW i3. Front/Under Hood:
Side/Interior:
Rear/Motor Compartment:

BMW i3 Walkaround

BMW i3 DESIGN AND MATERIALS





- Sustainable, fast-growing plant
- Locally sourced, reducing transportation requirements
- 100% certified, responsible forestry management
- Raw, lightly finished texture



Kenaf Fiber Dash and Door Panels

- High CO₂ absorption rate
- Grown in flood plains
- Sustainable, lightweight and requires no oil-based resin



PET Recycled Materials

- 100% recycled polyester with up to 34% PET (Polyethylene terephthalate)
- Used in interior fabrics and textiles.

BMW i3 Walkaround

BMW i3 DESIGN AND MATERIALS





Olive Leaf-Dyed Leather

- Smooth, luxurious and durable finish
- Uses a previously wasted component
- Avoids harsh chemical dyes and tanning agents

New Wool

- Sustainably farmed
- Renewable and animal-friendly
- Replaces oil-based materials
- Dirt repellent, anti-static and durable

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BMW i3 Walkaround

BMW i3 HEADLINE ACTIVITY

- Work individually or with a partner
- Create a "headline" about what you learned in this session
 - Short, concise and interesting
 - Describe a BMW i3 feature or technology
- Be ready to share!



BMW i3 TECH TALK



BMW EV TIMELINE



MINI E BMW Active E BMW i3

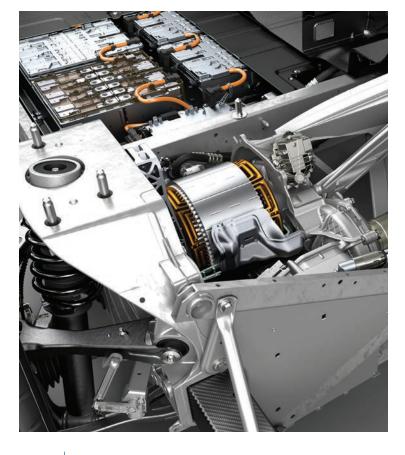
BMW EV Timeline

BMW was the first automaker to offer a fleet of more than 500 all-electric vehicles for private use. The MINI E launched in June 2009

The BMW Active E launched in 2012

The BMW i3 is the first seriesproduction electric vehicle from BMW





BMW i3 ELECTRIC **MOTOR**

- 170 horsepower / 184 lb.-ft. of instantaneous torque
- 0-60 mph in 7.0 seconds

Notes:

- 0–60 mph in 7.9 seconds (with Range Extender)
- 100% of torque available from just above 0 rpm

LIFEDRIVE ARCHITECTURE

- Low curb weight of only 2,634 pounds (2,899 with Range Extender)
- Low center of gravity
- Near 50/50 weight distribution
- Rear-wheel drive

Notes:



BMW i3 BATTERY PACK

- Positioned outside the passenger cell
- Excellent passenger protection in the event of a collision
- Protected by the Life Module

Notes:			





INTELLIGENT ENERGY MANAGEMENT

- Low energy consumption electrical components
- Interior heating system uses up to 30% less electricity compared to a conventional vehicle
- Energy-saving LEDs used in the headlights, taillights and interior illumination

IN	otes:				
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ENERGY REGENERATION

- Energy regeneration vs. regenerative braking
- Energy regeneration any time the driver lifts off of the accelerator
- Maximum energy recuperation and extended driving range
- One-pedal driving in the city and in stop-and-go traffic

NOTOS.	



BMW i3 WITH RANGE EXTENDER

- 2-cylinder gasoline engine
- 2.4-gallon fuel tank

Notoc

- Effectively doubles the driving range
- Turns on at 5-7% battery State of Charge (SOC)
- Generates electricity to maintain power to the electric motor
- Does not charge the high-voltage battery

TVOICS.			



LIFEDRIVE DEEP DIVE

• Carbon Fiber Reinforced Plastic (CFRP) Manufacturing Process and Repair

Notes:		

BODY PANEL CONSTRUCTION

- Thermoplastic composite outer body panels
- Reduces weight, which increases driving range
- Dent resistant
- Easy to replace

Notes:			





BMW i3 PRODUCTION ASSEMBLY: LEIPZIG PLANT

Notes:			



COMMON CLIENT QUESTIONS ACTIVITY

· Work with a partner

Notoc

- Create a list of the most challenging BMW i3 questions your Service Advisors will encounter
- Be ready to present your list to the group

140003.		

BMW i3 DRIVING DISPLAYS



BMW i3 INSTRUMENT CLUSTER

Notes:		



Choose between modes to achieve the perfect balance of performance and efficiency.







Comfort

Normal operation

ECO PRO

When activating ECO PRO the following settings are made:

- Reduction of heating power or switch-on time of the exterior mirror, rear window heating and seat heating
- Reduction of the cooling and heating power of the air conditioning system
- Limitation of speed to an adjustable maximum between 55 mph (90 km/h) and 80 mph (130 km/h). The driver can override this limit by applying full throttle.

ECO PRO+

When activating ECO PRO+ the following additional settings are made:

- Deactivation of the cooling and heating power of the air conditioning system
- · Deactivation of seat heating
- Deactivation of cornering light
- Limitation of speed to a maximum of 55 mph (90 km/h). The driver can override this limit by applying full throttle.

ASSISTANCE SERVICES

BMW Navigation Business and Navigation Professional



ASSISTANCE SERVICES

	Navigation Business	Navigation Professional
Dynamic Range Map with Comfort & ECO PRO+ modes	N/A	X
Hybrid routing using predictive information	N/A	X
Intermodal INFO	X	X
Intermodal routing	N/A	X
BMW i Remote App: Status, charging station list, efficiencytainment	X	X
BMW i Remote App: Static Range Map	X	X
BMW i Remote App: Dynamic Range Map	N/A	X
BMW i Remote App: Intermodal routing	N/A	X

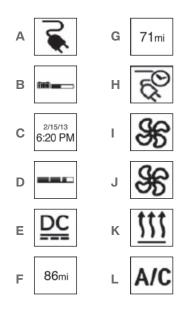
Notes:

PLANNING A ROUTE USING BMW NAVIGATION PROFESSIONAL



Notes:				

CHECK CONTROL MESSAGES ACTIVITY



Charge continuation bar
Display in blue: Charged electrical range
Flashing: Ventilation active
Flashing: Heating active
Departure time set
Display in white: Maximum electrical range
Time for end of charging or preset departure time
DC charging on DC charging station active
Plug blue: charging active; plug white: Charging interrupted
Air conditioning activated for departure time
Continuous light: Animates when charging active
Flashing: Cooling active

360° ELECTRIC



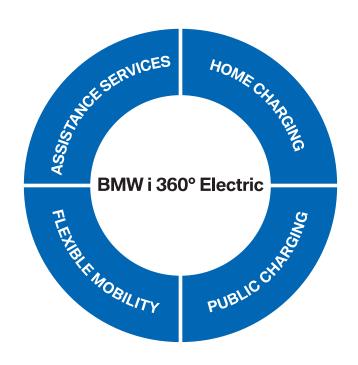
BMW i 360° ELECTRIC

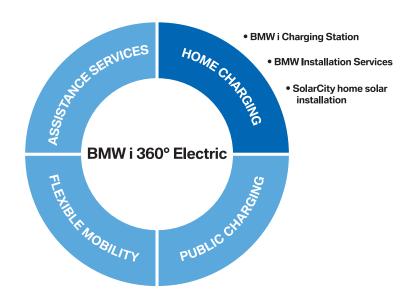
How will your Service Advisors interact with potential BMW i3 customers?

2. What questions do you anticipate your customers will have about living with the BMW i3?

Four Pillars of 360° Electric

- 1. Home Charging
- 2. Public Charging
- 3. Flexible Mobility
- 4. Assistance Services





HOME CHARGING

BMW i Charging Station
BMW Installation Services
SolarCity home solar installation

BMW i Charging Station

- Hard-wired, wall-mounted charging station
- Locking capability
- 25-foot charging cable
- Charges the BMW i3 in about 3 hours
- Compatible with all Electric Vehicles and Plug-In Hybrid Electric vehicles in the U.S.
- 36-month BMW Original Accessories warranty
- Part number: 61 90 2 346 992



BMW i3 HOME CHARGING

- BMW has partnered with Bosch to offer a convenient, turnkey solution for installing home charging stations. You can register prospects and new BMW i3 owners on the BMW i portal on BMW CenterNet, after which a Bosch representative will contact your client and schedule an appointment for a no-cost estimate.
- The quote can then be included in the financing of the vehicle through BMW Financial Services or the client can pay for the service separately.
- The Bosch representative will handle all aspects of the home charging station installation, including preparing the home site. Often the process can be completed the day your client brings their i3 home.
- There are three levels of charging stations commonly associated with electric and Plug-In Hybrid Electric vehicles:
 - Level 1 charging uses a standard household outlet and supplies 120V current. The Occasional Use cable supplied with the BMW i3 is a Level 1 charging cable and can be plugged directly into a wall outlet. A Level 1 charger will require about 24 hours to fully charge a BMW i3 from empty.
 - Level 2 charging offers 240V current and requires a dedicated 40 amp circuit (similar to large appliances such as a clothes dryer). A Level 2 charger will require about 3 hours to fully charge a BMW i3 from empty.
 - Level 3 charging is also commonly called "DC fast charging" and charges through a 480V, direct-current plug. A Level 3 charger requires just 30 minutes to restore a BMW i3 to 80% State of Charge (SOC).



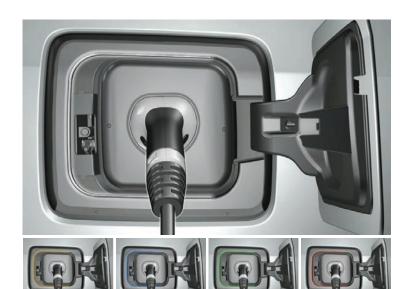
BMW INSTALLATION SERVICES: SIMPLE AND CONVENIENT

- Sign your customer up for a free quote using the 360° Electric Lead Submission Form in the BMW i Portal on BMW CenterNet
- 2. A Bosch Vehicle Charging Advisor (VCA) will provide a quote
- 3. The quote can be financed along with the vehicle through BMW Financial Services
- 4. A Bosch electrician will install the BMW i Charging Station up to 72 hours before delivery



CHARGING THE BMW i3

- Charging socket door release
- BMW i3 with Range Extender: Fuel door release
 - Slight delay to bleed off pressure



BMW i3 HOME CHARGING

Charging Indicator Colors

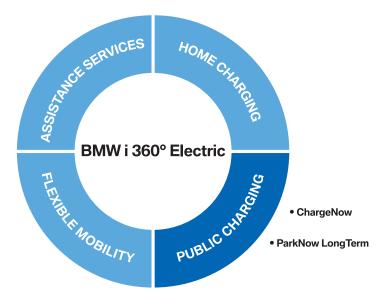
- White: The two LEDs in the charging socket door light up in white as soon as the cover is opened. This helps the driver connect the charging plug in low-light situations.
- Yellow: The charge socket indicator light changes to yellow as soon as the charging plug is connected. The yellow light indicates that charging has initialized. The initialization process may take up to 10 seconds.
- Steady Blue: As soon as the initialization phase is complete, the indicator light turns to blue. Steady blue illumination indicates that the initialization phase is complete and that the charging start is scheduled for sometime in the future (i.e., the owner has set the vehicle to charge during off-peak hours).
- Flashing Blue: The vehicle is currently charging.
- Green: Steady green LEDs indicate that the high-voltage battery is fully charged.
- Red: Error. Disconnect and reconnect. If the error continues, stop charging and contact your BMW Service Center.

HOME CHARGING

SolarCity Home Solar Installation

- Premium service provider
- Full-service home solar installation and monitoring
- No-cost estimate
- 10% discount to BMW i owners

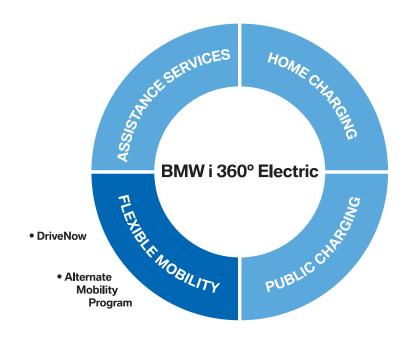




PUBLIC CHARGING

ChargeNow. BMW i has partnered with ChargePoint, Inc. to provide clients access to charging on the go. BMW i customers have the option to enroll in the ChargeNow program, giving them access to any publicly available ChargePoint-networked station.

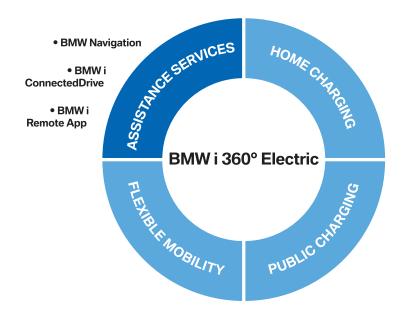
ParkNow LongTerm. For customers who don't have access to their own charging station, ParkNow LongTerm by ParkNow, LLC will connect the customer with long-term parking and charging near their residence or place of employment. ParkNow is ideal for clients who lease an apartment, rent a home or who do not have the ability to install a home charging station.



FLEXIBLE MOBILITY

Alternate Mobility Program: BMW i3 owners can have access to a traditionally-powered vehicle on certain occasions. This program is helpful for clients with the occasional need for a long-range vehicle. More details on this program to come.

DriveNow: DriveNow is a car-sharing program currently available in the U.S. only in the San Francisco area. DriveNow currently utilizes a fleet of BMW Active F vehicles.



ASSISTANCE SERVICES

- BMW Navigation Business
- BMW Navigation Professional with BMW i ConnectedDrive
- BMW i Remote App

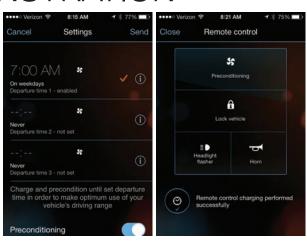
BMW I REMOTE APP DEMONSTRATION



Status Screen: The BMW i Remote app "home" screen shows vehicle status. You can view the battery status, electric range and the time when the vehicle will be fully charged.



Vehicle Status: Shows the current status of the windows and door locks. You can remotely lock or unlock your vehicle's doors, flash the lights or sound the horn.



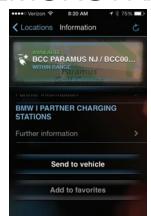
Setting Departure Time/Pre-Conditioning: Set the expected time of departure using the i Remote app. If your BMW i3 is plugged in and charging, the system will precondition the interior climate and the batteries will be in the optimal State of Charge at the scheduled departure time.

If the BMW i3 is not plugged in, the system will precondition the interior as long as the battery has sufficient State of Charge to operate the climate control system.

BMW I REMOTE DEMONSTRATION



Dynamic Range Map: Shows the minimum and maximum range of your BMW i3 in its current State of Charge. The map shows the range when driving in Comfort and ECO PRO+. In general, switching to ECO PRO increases range by up to 12%. ECO PRO+ adds an additional 12% on top of the ECO PRO range.



Navigation: Send charging station locations or other points of interest directly from your phone to the navigation system for fast, efficient navigating.



BMW i3 Community: Shows your EV driving performance compared to other BMW i3 drivers.

BMW i REMOTE APP SERVICE CONSIDERATIONS

- Advise your service customers:
- Disregard notifications from the app during service



BMW i3 SERVICE PROCESS



BMW Service Process

- 1. Service Initiation
- 2. Service Consultation
- 3. Follow-Up and Delivery



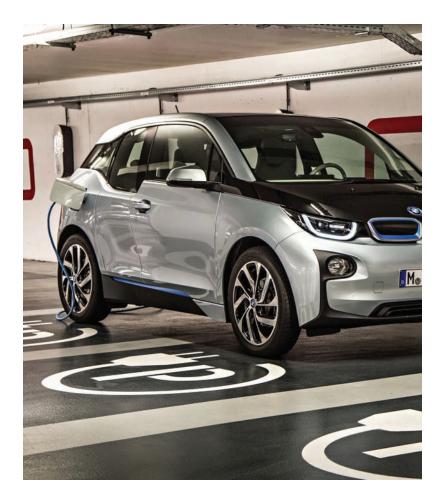
Notes:

Service Initiation Discussion

- Service appointment scheduling
- Teleservice
- Roadside Assistance
- Battery maintenance

Service Appointment Scheduling

- Conduct a thorough assessment
- Trouble charging? Three possibilities:
 - Charging station
 - Vehicle
 - Customer handling



Teleservice Battery Guard

- Monitors high-voltage battery levels
- Monitors 12V battery charge
- Low-charge notifications sent to BMW Center
- Center to reach out to customer to have vehicle brought in for service

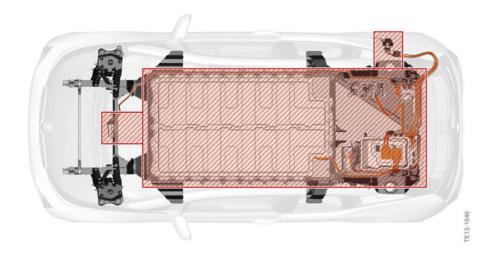
Roadside Assistance: Towing Policy

- Nearest BMW Service Center
- Optional: Nearest charging station within a 50-mile radius of the nearest BMW Center



In the Event of an Accident

- Flatbed tow to nearest BMW Center for inspection
- Routing to a BMW Certified Collision Repair Center (CCRC) for carbon fiber and aluminum repairs



Battery Maintenance Care Plan

- BMW uses maintenance-free AGM batteries (12V system)
- High-voltage battery maintenance during storage
- High-voltage charging during service or in the showroom



SERVICE INITIATION: CUSTOMER QUESTIONS

I'm having trouble charging my BMW i3. Should I bring it in?	
Why does my estimated range drop overnight?	
What should I do if my BMW i3 is in an accident and I can't see any damage?	

SERVICE CONSULTATION DISCUSSION

- BMW i Remote app
- Calculating charging time during service
- Safety
- Routing
- Tire pressure

Notes:			

BMW i Remote App

- Ask the customer to avoid using the app during service
- Disregard push notifications received during service

BMW Center Battery Care Plan

- Avoiding deep discharge
- Regularly check BMW i vehicles and document charge data
- A deep discharged battery before a BMW i3 is sold is not covered by the New Vehicle Warranty

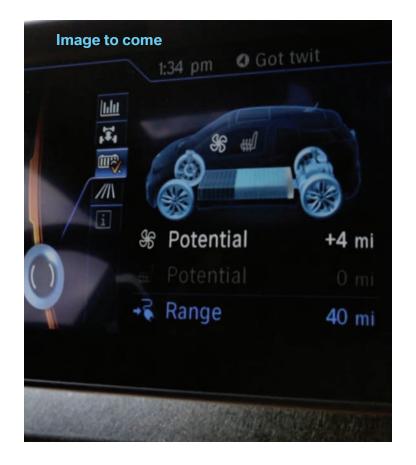


Calculating Charging Time During Service

- Vehicles must be returned to the customer with 100% State of Charge (SOC)
- Available tools:
 - Charging Time Calculator (CTC)
 - State of Charge Monitor (SoCM)

Safety

- Only High-Voltage Certified technicians may service a BMW i3
- Service disconnect before any work occurs
- High-voltage component labeling
- High-voltage cables
- What to do if damage occurs to the high-voltage system



FOLLOW-UP AND DELIVERY: **CUSTOMER QUESTIONS**

What are the maintenance requirements for my BMW i3?
What are the maintenance requirements for my BMW i3 with Range Extender?
What happens if I run out of battery while driving?

Note: Fully charge BMW i3 after service. Return full. Center absorbs the cost.

LIVING ELECTRIC



Living Electric

BMW i3 CLIENT QUESTIONS

1.	Can the Carbon Fiber Reinforced Plastic (CFRP) be repaired?					
2.	What do I do if my vehicle loses power while driving?					
3.	What are the maintenance requirements for my BMW i3?					

Living Electric

BMW i3 CLIENT QUESTIONS

4.	I am having problems charging the vehicle. Whom should I call?				
5.	Will the battery stay charged if I don't drive my BMW i3 for an extended period?				
6.	Why doesn't the BMW i3 come with run-flat tires?				
No	otes:				

CLOSING SESSION



SERVICE MANAGERS WORKSHOP AGENDA

- Opening Session
- Connecting with Your Customers
- BMW i3 Walkaround
- BMW i3 Tech Talk
- BMW i3 Driving Displays
- 360° Electric
- BMW i3 Service Process
- Living Electric
- Closing Session





Closing Session

INNOVATION DISGUISED AS A SPORTS CAR

The BMW i8 is no ordinary sports car. It's an icon of progress—an extraordinary evolution of The Ultimate Driving Machine®.





Closing Session

BMW i8

- A sports car with the efficiency of an economy car
- 0-60 mph in 4.4 seconds
- Capable of all-wheel drive

Motoor

- Powered by eDrive electric motor and TwinPower Turbo 3-cylinder engine
- Coefficient of drag (Cd) of just 0.26
- Total output of 362 horsepower with up to 420 lb.-ft. of torque
- Gasoline engine output of 154 horsepower per liter of displacement is the highest of any engine produced entirely in house by the BMW Group

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Closing Session

BMW i3 RESOURCES

- Ride and Drive event
- Web-Based Training

Nicker

- Product Knowledge on Demand (PKoD)
- Service and Technical Training

NOTES.		

HELLO FUTURE.

Name