

# **Technical Service Bulletin**

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202	MODE	2024 Outlander PHEV		
CIRCULATE TO:	[] GENERAL MANAGER	[X] PARTS MANAGER		[ X] TECHNICIAN
[X] SERVICE ADVISOR	[X] SERVICE MANAGER	[X] WARRANTY PROCESS	SOR	[X] SALES MANAGER

# PURPOSE

This bulletin contains Pre-Delivery Inspection (PDI) procedures, both technical and detail, specific to the **2024 Mitsubishi Outlander PHEV**. Please refer to the PDI instructions in this bulletin when preparing new Outlander PHEV vehicles for sale and delivery (**in the U.S. market only**).

A Pre-Delivery Inspection form should be used for all PDIs. One is shipped to dealers inside each vehicle.

# NOTE: Items shown as underlined and/or in red text are IQS (Initial Quality Survey) sensitive items. Give extra attention to these items for improved IQS and customer satisfaction.

BACKGROUND INFORMATION	<u>ge 2</u>
TECHNICAL INSPECTION	<u>ge 3</u>
BEFORE YOU STARTPage	<u>ge 4</u>
A. Vehicle Readiness <u>Pa</u>	<u>ge 4</u>
B. Interior Function	<u>ge 7</u>
C. Walkaround <u>Pa</u>	<u>ge 12</u>
D. Under hood & BatteryPac	je 18
E. Under VehiclePao	
F. Road TestPag	ge 20
G. Final Steps for Technical Inspection	<u>je 30</u>
DETAIL INSPECTION	
A. Detailing <b>Before</b> PDIPag	
B. Detailing <u>After</u> PDI <u>Pao</u>	
CUSTOMER DELIVERY PREPARATION	
COMPLETING THE PDI FORM	<u>je 39</u>
PARTS INFORMATION	je <u>39</u>
WARRANTY INFORMATION	je 39
SAMPLE PRE-DELIVERY INSPECTION FORM	<u>ge 40</u>

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# BACKGROUND INFORMATION

The 2024Outlander PHEV requires specific steps for a thorough PDI. The processes described in this bulletin were developed to ensure a "fault-free" delivery of hybrid vehicles. As in previous PDI instruction bulletins, the Technical and Detail procedures are divided into separate sections.

This bulletin contains general descriptions of most required Technical and Detail inspection checks organized in a logical and time-efficient order. The Technical and Detail procedures are divided into separate sections. It is critical that all the steps are completed **while keeping the vehicle clean inside and out during the entire PDI process.** 

#### The PDI process is important. Remember to:

- Avoid pressure to rush through PDI.
- Never skip steps on the PDI form and always use it to confirm you have completed all steps.

#### Once you are familiar with these procedures, the PDI form acts as a guide to the process.

Complete the PDI Technical and/or Detail exams (PDI18T or PDI18D) from the Mitsubishi Academy at www.MitsubishiAcademy.com, if you haven't already done so, as well as, **all courses specific to the PHEV (Plug-in Hybrid Electric Vehicle).** 

NOTE: If any repairs are needed, ensure they are made before the customer takes delivery of the

vehicle. Any defects in materials and/or workmanship discovered during PDI should be corrected and claimed under warranty. Adjustments and repairs are not part of the PDI flat rate time.



# SPECIAL SAFETY INSTRUCTIONS

#### 

When charging the vehicle, to reduce the risk of electric shock or fire due to electric leak, always use an outlet protected by a ground fault circuit interrupter (GFCI), rated for 15A or more, that is connected to a dedicated branch circuit.

Wiring harnesses wrapped in orange plastic are high voltage (330V) circuits. Severe or fatal injury can occur if the following precautions are not followed:

- Always wear insulated Personal Protective Equipment (PPE). These are ESSENTIAL tools and are included with the new dealer tool kit. Missing or damaged tools can be ordered online through the mitsubishidealersolutions.com website, or by calling Bosch Automotive Service Solutions at (888) 727-6672.
- Ensure the ground is dry and clear of debris.
- If a high voltage connection requires attention, always refer to the Service Manual for instructions, and disconnect the high voltage plug located on top of the main drive lithium-ion battery, behind the center console in the 2<sup>nd</sup> row floorboard.
- Never directly touch any exposed high voltage wiring cables, protective covers detached from high voltage components, or high voltage components that might be damaged.
- If leakage of a clear, odorless fluid is observed under the body, it may be electrolyte leaking
  from the main drive lithium-ion battery. This electrolyte is flammable, and poisonous acid gas
  will evaporate from the electrolyte. Wear an organic mask, solvent resistant gloves (or heavy
  duty rubber gloves) and eye protection. Use an absorption mat or sand to absorb spilled
  electrolyte.
- If electrolyte comes into contact with your skin, flush with water immediately.
- If electrolyte gets into your eyes, do not rub your eyes. Immediately flush your eyes with a large quantity of water and seek medical treatment as soon as possible.

The following TSBs are quoted in this bulletin. You should be familiar with their details before beginning. All are available on MEDIC.

- TSB-92-51-001, "Paint Damage Identification and Repair Procedures"
- TSB-97-00-006, "Rap-Film and Adhesive Residue Removal Procedures"
- · TSB-21-00-010, "Rap-Film Adhesive Residue Removal"
- TSB-09-31-005, "Aluminum Alloy Wheel Cleaning Recommendations and Requirements"
- TSB-12-00-009, "Floor Mat Selection and Installation: Avoiding Pedal Entrapment and/or Interference"
- TSB-12-31-001, "General Service Information for the Tire Pressure Monitoring System"
- TSB-23-00-001, "Load Carrying Capacity Reduced Label"

Refer to the following diagram for the basic system components of the Outlander PHEV.



#### TECHNICAL INSPECTION

# The Detail Specialist should complete the "DETAILING BEFORE PDI" section before handing the vehicle off to the Technician for PDI Technical Inspection. Refer to the DETAIL INSPECTION section of this bulletin for complete detailing information for both before and after Technical Inspection.

Use the PDI form and this PDI bulletin as a guide. After completing each step, check off that procedure on the form. The sequence in which you perform the steps may vary depending on your dealership's procedures, facilities, and the vehicle itself. Be sure that all steps that apply are checked on the form. Be sure the PDI form is signed and dated, and copies filed in the "vehicle packet" and service file at your dealership. If you have questions about checking a specific feature or specifications, refer to the Service Manual, new model training guides, and/or the Owner's Manual for details.

#### **!! IMPORTANT !!**

DO NOT offer any vehicle for sale if it has an outstanding recall campaign. Doing so subjects the dealer to large fines. Check the Superscreen for possible outstanding recalls.

#### BEFORE YOU START:

Make sure the following information is recorded in the proper spaces on the PDI form.

- Repair order number
- Dealer stock number
- Model Year

- Ignition key code
- Wheel lock code (if equipped)
- Vehicle Identification Number (VIN)

NOTE: If materials shipped in the glovebox are removed and stored separate from the vehicle due to a dealer's internal procedures, they must be returned to the glovebox prior to retail delivery. This includes: 1) Owner's Manual, 2) Warranty and Maintenance Manual, 3) Tire Warranty Statements, 4) Smartphone Link Display Audio owner's manual, and any other items meant for the customer.

#### A. VEHICLE READINESS

Before you start the inspection, retrieve the wheel covers, remote transmitters, and any other shipped loose items from the cargo area and/or glovebox as applicable.

#### 1. <u>\*\*\*\* IMPORTANT \*\*\*</u> <u>RECALLS - Check the Warranty Superscreen for open Recalls or Service Campaigns. Make sure</u> <u>any open Recall or Service Campaign is performed BEFORE the vehicle is road tested.</u>

The Outlander PHEV is equipped with the One-touch Start System (OSS) (also called Push button starting), used with FAST Key (Free-hand Advanced Security Transmitter).



#### 2. Confirm the IOD connector is firmly engaged (pushed down).

#### NOTE: The IOD connector is typically engaged at the port.

<u>The POWER switch must be OFF for this step.</u> If the POWER button (also called POWER switch, ignition switch, or electric motor switch) is turned "ON" while the IOD connector is disengaged, a warning message "EV System Service Required" will be shown on the Multi Information Display (MID). This is normal. However, if the IOD connector is engaged (pushed down) with the POWER switch "ON" a DTC will be stored and must be erased before Customer Delivery. To avoid setting the DTC, make sure the IOD connector is engaged only with the POWER switch "OFF."

# **IMPORTANT !!** Do NOT remove the IOD connector once it is engaged. For PHEV vehicles, the IOD connector must remain engaged even while in storage. Also, do NOT disconnect the negative battery terminal.

NOTE: If the relay box cover is protected by RAP-film, remove it at this time.



During shipping of Mitsubishi vehicles, dark current is minimized by not connecting the IOD connector. It is positioned in the disconnected position (pulled up) and must be connected by pressing it down for the affected circuits to be completed.

The IOD is a yellow, sliding, fuse holder located in the underhood fuse box. To complete these circuits, push down firmly on the holder until it engages.



3. Start the electric motors and engine to check starting performance.

The electric motors should start quickly using all FAST keys. Confirm operation of all keys. With vehicle stationary and in the P (Park) position, press the brake pedal, then press the POWER button to the ON position. The READY indicator in the multi-information display blinks and the activation of Plug-in Hybrid EV System starts. When the READY indicator changes from blinking to constant illumination, the system is activated and the vehicle is ready to drive.

Refer to the Service Manual for diagnostic procedures and use MEDIC and/or the Mitsubishi Dealer Link (MDL) site to search for TSBs relating to immobilizer key registration policies and procedures.

# 4. Check the Main Drive Lithium-Ion Battery (traction battery) charge level on the Combination Meter Drive Battery Guage.

Press the POWER button to the ON position (blue LED). Confirm theis this right or follow page 155 of OM /get new images battery level gauge on the instrument panel displays sufficient charge to complete PDI. Charge the traction battery if necessary.

 If no segments are displayed, press the Battery Charge switch to start the engine and charge the Drive Battery until 3 segments are shown on the Drive Battery gauge (see below).



If 3 or more segments are displayed, press the POWER button to enable "READY" mode and maintain for 30 minutes. This will charge the 12V auxiliary battery.

#### Every 20 days:

- Press the Battery Charge switch and allow the engine to run for 5 minutes. This action charges the Drive Battery.
- After 5 minutes, shut the engine OFF. Press the POWER button to enable "READY" mode and leave in this position for 30 minutes. This action charges the 12V auxiliary battery.
- After 30 minutes, press the POWER button again to shut the system OFF.
- 5. Check that the integrated Mitsubishi EV charging cable is stored in a bag in the cargo area.



6. Verify Immobilizer and OSS operation.

For vehicles with FAST key and OSS, separate the transmitters and enter the vehicle with one transmitter at a time and put the vehicle into "READY" mode. If the vehicle does not display "READY" mode, confirm the IOD has been firmly connected.

- 7. Verify presence of all shipped loose items as applicable (license plate bracket, floor mats, etc.) and install.
- 8. <u>Refer to MEDIC, or the MDL for any general or model specific PDI TSBs. Be sure all instructions</u> <u>on those TSBs are performed.</u>

# B. INTERIOR FUNCTION

#### Apply the parking brake and put the vehicle into "READY" mode during these inspections.

#### NOTE: To apply the electric parking brake, pull up on the switch as shown.



#### 1. Check <u>SEAT ADJUSTMENT</u>, <u>SEAT BELTS</u>, and <u>HEAD RESTRAINTS</u>.

#### SEAT ADJUSTMENT and SEAT BELT/HEAD RESTRAINT OPERATION

- a. Confirm that manual seat track and seat back adjusters operate and lock throughout their entire travel (front seats). Leave the seat height adjuster in the lowest position for maximum head room (if equipped).
- b. Check power seat operation (if equipped) including seat back adjustments.
- c. Check power lumbar operation in driver's seat.
- d. Check heated seat operation (if equipped) in LO and HI settings.
- e. Check operation and latching of rear (second row) seats.
- f. Check HEAD RESTRAINTS Ensure all head restraints are properly installed. Inspect the height adjuster for ease of operation.
- g. Check ALL SEAT BELTS for condition and operation.
  - Inspect all seat belts to ensure they connect and hold properly.
  - Inspect operation of the shoulder height adjuster and condition of the seat belts, and anchors.
  - Inspect for proper seat belt retraction.
  - Check that safety labels regarding use of seat belts and air bags are in place.
  - Make sure the second row seat belts are properly secured in the clips on the quarter trim (if equipped).
  - Latch SECOND ROW CENTER SEAT BELT: Due to its unique arrangement, latch the center seat belt for the second row seat for display purposes (refer to TIN-13-52A-001 for details).
  - On vehicles with locations for anchoring seat belts when they are not in use, make sure the seat belt ends are properly secured in those positions.

# 2. PASSENGER AIRBAG AND SEATBELT LIGHT FUNCTIONS.

Sit in the front passenger seat and verify the passenger airbag light goes out. Verify the passenger seat belt reminder light comes on when the seat belt is unfastened and goes off when it is fastened.

#### 3. HEATED STEERING WHEEL (if equipped).

Verify proper operation.

#### 4. Check operation of all WINDOWS, including SUNROOF (if equipped).

WINDOWS: Check for proper window tracking, complete up and down travel, and proper sealing.

#### NOTE: Check the lockout and <u>AUTO-down and up functions</u>.

<u>Vehicles equipped with AUTO-up power window function:</u> Ensure the safety mechanism functions normally. Refer to Group 42A - BODY, in the Service Manual for the proper checking procedure.

<u>SUNROOF</u>: Ensure all controls work properly, including one-touch operation. Ensure the sunroof closes tightly, and the tilt-up feature works. Open and close the sunroof two times to ensure the timing of the functions work properly. Refer to the Service Manual and perform the proper test for the vehicle.

WARNING If the 12V auxiliary battery is disconnected during PDI for any reason, the learned position for the driver's window auto up will be erased, the anti-trap function cannot be activated, and injury or vehicle damage can occur. To reinitialize this position for the driver's window, follow the Learning Procedures of Power Window Fully Closed Position in Group 42A - Body of the Service Manual, then confirm proper operation.

NOTE: <u>If adjustments are required, refer to the appropriate Service Manual procedures and submit a</u> <u>warranty claim for adjustment.</u>

#### 5. MULTI-INFORMATION DISPLAY (MID)

Verify the MID screens display in English. If desired, the language can be changed to French, Spanish, Japanese, German, or Italian. Refer to the Owner's Manual for Instructions on changing the displayed language.



#### 6. INTERIOR AND INSTRUMENT PANEL LIGHTS.

Check that all interior lights operate:

- <u>Dome light(s)</u>
- Map light(s)
- Vanity mirror light(s) (if equipped)
- Instrument panel illumination and dimmer function
- Door courtesy lights
- Cargo area light (if equipped)
- Sunroof ambient lighting (if equipped)
- Accessory interior lighting (if equipped).
- Glove box light (if equipped)

NOTE: Adjust instrument panel illumination to the brightest level. Position the dome light switch so the light is on when the door is open, and off when the door is closed.

- **7. INSIDE AND OUTSIDE MIRRORS.** Ensure the inside rear view mirror holds its adjustment. Make sure the anti-glare function operates properly (if equipped). Make sure the auto-dimming function operates properly (if equipped) by pressing the POWER button (green light illuminates) and covering the front-facing light sensor on the back of the mirror with a black cloth. Press the three HomeLink® buttons (if equipped) and check if the indicator light blinks orange. Check and adjust outside mirrors. Check if power side folding mirrors (if equipped) retract and extend during the following operations:
  - Pressing the power folding side mirror switch located on the driver's door window switch panel when the POWER switch is in the "ON" or "ACC" position and for approximately 30 seconds after the POWER switch is turned to the "OFF" position
  - Extends when the driver's door is closed, and the POWER switch is turned to the "ON" position
  - Retracts when the POWER switch is turned to the "OFF" position and the driver's door is opened
  - Extends when the FAST Key transmitter is used to unlock the doors
  - Retracts when the FAST Key transmitter is used to lock the doors
  - Extends when vehicle speed exceeds approximately 18 mph (30 km/h)
- **8.** HORN. Ensure the horn sounds when the horn pad is pressed.

#### 9. AUXILIARY ACCESSORY SOCKET(S) & AC OUTLETS (if equipped).

Check the auxiliary accessory power sockets and AC outlets (if equipped) for proper operation.



a. To enable power to the 120V AC outlets on the Outlander PHEV, press the "AC 1500W" switch in the front instrument panel (below the A/C controls).



b. Verify the outlet(s) function properly when an electrical appliance (e.g., coffee maker, blender, etc.) is connected.

# 10. <u>AUDIO SYSTEM OPERATION (INCLUDING SIRIUS/XM<sup>™</sup> SATELLITE RADIO OPERATION, if equipped), SET CLOCK AND ALL RADIO STATION PRESETS, CHECK REAR ENTERTAINMENT SYSTEM (if equipped).</u>

Set the clock to the correct time. Set ALL "AM," "FM1," & "FM2" preset buttons to a variety of strong local stations (except Sirius/XM satellite radio, if equipped). Refer to the Owner's Manual for instructions.

Check **radio** and **speaker** operation for:

- Volume
- Reception of AM & FM stations and SIRIUS/XMM satellite radio (if equipped). Ensure the satellite radio operates by tuning to channel 184, Emergency/News. <u>Satellite radio reception must be checked outside with a clear view of the Southern sky.</u> NOTE: The satellite radio may not operate properly if the vehicle is in an enclosed area. This includes being surrounded by tall buildings. The default location for both units is New York, NY. If this is not your location, move the vehicle to an open area with a clear view of the Southern sky and recheck.
- Tone (bass and treble)
- Balance/Fader Controls
   NOTE: Adjust the treble, bass, balance, and fader controls to the center position after radio inspection.
- AUDIO SYSTEM BLUETOOTH® FUNCTION.

The audio systems in all 2024 Mitsubishi vehicles have built-in Bluetooth functionality. **There is no separate hands-free module for 2024 models.** Check the audio system as described below.



#### SMARTPHONE-LINK DISPLAY AUDIO SYSTEM.

Check all functions for proper operation. Refer to the audio system owner's manual to check smartphone functions, including ability to pair a phone (Apple and/or Android), Bluetooth® connection, and functionality of Apple CarPlay<sup>™</sup> and/or Android Auto<sup>™</sup>.

#### NOTE: Be sure to erase all test phone data and DELETE the paired phone (that was used for testing) before delivery to the customer.

Check function of USB ports. The USB ports vary by model and are located on the front instrument panel and center (rear) console.



Check and repair rattling or vibrating speakers

#### 11. REAR-VIEW CAMERA / MULTI-VIEW CAMERA SYSTEM (if equipped).

- Rear-view camera: Shift into reverse. Confirm the camera image is clearly displayed on the screen.
- Multi-view camera (called "Multi Around Monitor" in Service Manual): Shift into reverse. Confirm rear and side camera views are displayed. Press the switch to toggle between Bird's Eye and Right Side views. Confirm all images are clearly displayed on the screen. Press the Multi-view camera switch again to exit camera view.

#### 12. BSW/RCTA, ACC, LDW, FCM, AHB SYSTEMS (if equipped).

If vehicle is equipped with any of the following systems: Blind Spot Warning (BSW) / Rear Cross Traffic Alert (RCTA), Adaptive Cruise Control (ACC), Lane Departure Warning (LDW), Forward Collision Mitigation (FCM), Automatic High Beam headlight (AHB):

Confirm that the proper indication appears in the MID when each system is turned on. Refer to the Owner's Manual for details on each system.

#### 13. <u>WINDSHIELD WIPER DE-ICER (if equipped), REAR WINDOW DEFOGGER AND HEATED DOOR</u> <u>MIRROR (if equipped).</u>

Check with the engine running. Turn the windshield wiper de-icer (if equipped) and rear window defogger on, allow time for the windshield wiper de-icer, rear window and mirror elements to warm up and check them during the walk around inspection. Place your hand on the windshield wiper de-icer, rear window defogger and heated door mirrors (if equipped) to ensure they are heating. Be sure to turn off the windshield wiper de-icer and defogger after checking.

**14.** Turn the POWER switch to the "OFF" position (no illumination on POWER button).



### C. WALKAROUND

Before starting this section, make sure the POWER switch is set to the ACC mode and place the transaxle selector in "R" (reverse) with the electric parking brake applied.

# **MAKE SURE THE READY INDICATOR IS NOT ILLUMINATED.**

#### 1. Check EXTERIOR LIGHTS.

Ensure ALL exterior lights, including stoplights and mirror signals, function properly. <u>Check for</u> <u>chipped or cracked lenses</u>. Verify the AUTO-ON/OFF headlights function properly (refer to the Service Manual for checking procedures).

#### 2. Check Auto Headlights/Rain Light Sensor (if equipped).

- a. With the headlight switch in the AUTO position, cover the sensor with a thick material (like a fender cover) and confirm headlight operation. Uncover the rain light sensor.
- b. With the wiper switch in the AUTO position, confirm wiper operation when water is sprayed on the upper center of the windshield.

Be sure to shift to "P," turn ALL lights off, and turn the POWER switch to the "OFF" position after completing the inspection.

#### 3. CHECK SUPPLIED LEVEL 1 & 2 CHARGING CABLE CONNECTION TO CHARGING PORT.



#### Charging Port Door

Unlock the charging port door on the right rear of the vehicle using the Unlock switch on the FAST key remote. Then push the door to open it. Confirm the door opens and closes properly.

Refer to the table below for more details on charging port lock/unlock states.



Charging Lid		Charging Lid		
Initial State	Driver's Door	Shift Position	State	
Unlocked	Open	READY ON or IG-ON	Other than Park	Locked
Unlocked	Closed	READY ON	Other than Park	Unlocked
Unlocked	Open	READY ON	Park	Unlocked
Locked	Unlocked	ACC or IG-OFF	N/A	Unlocked
Locked	Unlocked	IG-ON (READY OFF)	N/A	Locked



#### Level 1 Charging (DC-DC): 120VAC Mitsubishi EV Charge Cable

• Locate the desired 120V Outlet (15A) and connect the 120V AC charge cable, confirming it is properly grounded.

#### **Charge Cable Release Button**

• Located to the left side of the steering wheel. .Check that the charge cable release button operates. Press the button located left side of the driver steering on the dash will release the charge cable.



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#### Level 2 Charging: 240V Charging Station

Connect the charger from a 240V charging station to the vehicle (ChargePoint charger pictured as an example).



# DC Fast Charging

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If your dealership is equipped with a DC fast charger (ChargePoint CHAdeMO charger pictured as an example), confirm a secure connection with the charge cable to the vehicle.

Level 1 & 2

Release Lever



## Check proper connection of cable to vehicle.

 For Level 1, 2, and 3 (if dealer-equipped), confirm the cable locks in place, and releases with moderate effort when the release lever is pressed.

NOTE: For more details on EV charging, refer to the Owner's Manual.



#### Check Charging Indicators in Multi-Information Display (MID)

- Confirm the battery level and estimated charge time display in the MID.
- Confirm the charge indicator lamp symbol displays in the power meter while charging.

NOTE: Estimated charge time will only display with the ignition set to OFF.

CAUTION

Before performing the following checks, shift transmission to "P," turn ALL lights off, and turn the ignition switch to the "OFF" position.

4. FREE-HAND ADVANCED SECURITY TRANSMITTER (FAST) SYSTEM, THEFT ALARM SYSTEM, ALL DOOR LOCKS, LATCHES, ONE-TOUCH START SYSTEM (OSS) & IMMOBILIZER.

#### **FAST Key**

- Ensure door locks operate using the buttons on the FAST key on <u>BOTH</u> transmitters.
- b. Ensure door locks operate using the lock/unlock button located on the outer driver's door handle and the outer front passenger's door handle.

NOTE: The default for the FAST Key system unlocks only the driver's door when pressing the button located on the outer driver's door handle and all doors when pressing the button located on the outer front passenger's door handle.

NOTE: Factory-installed systems can be customized for various "answerback" responses. Ensure the vehicle's answerback feature is in the full-function answerback mode, where both the horn and parking lamps signal when the doors are locked, and the parking lamps signal when the doors are unlocked. Refer to the Smartphone Link Display Audio owner's manual for programming information.

#### Theft Alarm (if equipped)

- a. Lower the driver's window. Turn the POWER switch OFF and remove transmitters from the vehicle.
- b. Exit the vehicle, close all doors and lock them using the transmitter. The security indicator on the instrument panel remains lit for about 20 seconds and then blinks slowly when armed. For FAST key equipped vehicles, the transmitter must be more than 3 ft / 1m from the vehicle.
- C. Reach through the open window, manually unlock the door, then open it (hold the transmitter at arm's length away from the vehicle). The alarm should sound, and the headlights should flash.

#### TO DEACTIVATE THE ALARM:

Press the unlock button on the transmitter or turn the POWER switch to the ACC or ON position (FAST key transmitter must be present).

- d. Repeat steps a. through c. on the front passenger's door and lock.
- Repeat steps a. through c. using the trunk remote release and trunk lock (if equipped). e.
- Repeat steps a. through c. on the hood release. f.

#### **Door Locks and Latches:**

Close each door to check the latch and lock mechanisms. If adjustments are required, refer to the Service Manual. Submit a warranty claim for any adjustment performed.

#### **Child Safety Door Lock Operation:**

Rear doors should not open from inside when the locking lever (located on the inside rear area of the door near the latch mechanism) is in the LOCK position.

#### NOTE: <u>Set the lever to the unlock or "FREE" position when you finish.</u>

#### Fuel Filler Door/Filler Cap:

The Outlander PHEV has a closed fuel tank system to reduce engine operation frequency and improve fuel economy. The internal pressure of the closed fuel tank is higher than a conventional tank. This means the internal tank pressure must be relieved before refueling.



- Push the fuel door release button on the lower dash right of the steering wheel.
  - Once the switch is pressed, the Multi-Information Display (MID) shows ready to refuel.
- Check fuel filler cap operation to make sure it can be removed and installed with moderate effort.
- Close the door and verify it latches properly.

#### 5. LIFTGATE, CARGO AREA LIGHT AND TRIM APPEARANCE.

<u>Check for liftgate closing quality (make sure it closes easily</u>). Fit should be uniform.

MARNING

#### Make sure there is sufficient clearance for the liftgate to fully open.

a. Verify cargo light (if equipped) comes on and all trim is installed properly.



b. Vehicles equipped with power remote liftgate:

- Press the liftgate master button (located in the front instrument panel below the A/C controls). Confirm the liftgate only works with the master button in the ACTIVE position.
- On the liftgate, press the button next to the license plate lamp to open it.
- When fully opened, press the CLOSE button located to the left of the latch mechanism on the liftgate to close it. Confirm the liftgate latches securely.
- Open the power liftgate. While it is opening, stop it with your hand.
- With the liftgate fully open, press the CLOSE button on the liftgate and stop its movement with your hand. It should return to its previous position (closed or open).

#### 6. EMERGENCY INSIDE LIFTGATE RELEASE HANDLE (if equipped).

Check the operation of the inside liftgate release handle. Open the liftgate and trip the latch by pushing on the catch with the shaft of a screwdriver to simulate liftgate closure. Remove the screwdriver with the latch in the closed position and verify the release handle actuates the liftgate release. For more information about the inside liftgate release, refer to the vehicle's Owner's Manual.

#### 7. TIRE REPAIR KIT, JACK & TOOLS PROPERLY SECURED.

#### <u>Tire Repair Kit</u>

The Outlander PHEV does not come with a spare tire. Instead, a tire repair kit is provided to temporarily repair a minor puncture caused by a nail, screw, or similar object. Verify the tire repair kit is complete and properly stored beneath the floor board of the cargo area (see illustration below). Contents: 12 V air compressor, puncture sealant, speed restriction sticker.

#### **Jack & Tools**

Check for jack and tools, stored beneath the floor board of the cargo area. Make sure all tools are properly secured and will not rattle or come loose. Refer to the Owner's Manual for more information.



#### Wheel Lock Key (if equipped)

Confirm the wheel lock key is stored in the wheel lock storage zipper bag.

# D. UNDER HOOD & BATTERY

#### <u><u>L</u> <u>CAUTION</u> <u>Ensure the POWER switch is in the OFF position (no illumination) when</u> inspecting the following items.</u>

!! IMPORTANT !!

**NT !!** Use MMNA approved fender covers to protect the vehicle body.





#### NOTE: The Outlander PHEV has a unique engine compartment layout due to the specialized components of this hybrid EV system. The 12V "starter" battery is accessed in the rear of the vehicle, in the back of the cargo area, as shown below.

# 1. Check 12V starter battery charge using the Midtronics Battery Tester.

Make sure that battery cable terminals, and any additional wires attached to the terminals are tight. Make sure the battery is secure.

Ensure the battery is fully charged (minimum 12.6 V). If necessary, follow Service Manual procedures and recharge it. Remove the battery maintenance tag (if equipped) and insert it into the vehicle file with other PDI documentation.

#### 2. Check ENGINE OIL.

Check and adjust engine oil level. If oil is needed, check the under hood label or Service Manual for correct oil specifications. Then add oil if necessary.

#### 3. Check BRAKE FLUID.

Check brake fluid level using the scale on the plastic reservoir of the master cylinder. The level should be at the FULL mark. Add fluid as necessary.

# NOTE: Use genuine Mitsubishi BRAKE FLUID, part number MZ311987.

#### 4. Check COOLANT AND WINDSHIELD WASHER FLUID LEVELS.

Adjust fluid if necessary.

**Coolant:** Use **only** DiaQueen Super Long Life Coolant (genuine Mitsubishi COOLANT, part number MZ320125).

Washer Fluid: Use genuine Mitsubishi Washer Fluid (reference Fluid Guide).

- 5. Check for signs of FLUID LEAKS.
- 6. Check for LOOSE ATTACHMENTS, incorrect routing, and insufficient clearances.

Check for loose parts, wiring harness and cable clips and connections, incorrectly routed hoses and harnesses, and insufficient clearance of components to moving engine parts.

7. EMISSION CONTROL EOUIPMENT. The Environmental Protection Agency (EPA) requires this inspection. Using the under hood label as a guide, verify all emission control equipment is installed. **NOTE:** The EPA requires that dealers visually inspect the emission control devices prior to delivery, or, as an alternative, inspect each vehicle for an illuminated malfunction indicator light (MIL), and if the light is illuminated, diagnose and correct the malfunction.

#### 8. Check HOOD LATCH AND SAFETY CATCH.

Make sure the hood release lever pulls evenly and the hood cannot be lifted without releasing the safety catch.

## E. UNDER VEHICLE

During PDI, every vehicle should be raised on a lift for under vehicle inspection. Refer to the appropriate Service Manual for vehicle lift points.

#### WARNING

Take extra care when working near the main drive lithium-ion battery. Electrical connections wrapped in orange plastic carry 330V. Ensure the ground is dry and clear of debris. Wear insulated gloves and boots rated at 600V AC and 750V DC when working near live electrical connections.

#### 1. Check for LOOSE ATTACHMENTS, incorrect routing, and insufficient clearances.

Make sure all wiring harness clips, brake pipe clips, heat shield fasteners and any other attachments are properly secured. Check for insufficient clearances and adjust as needed.

#### 2. Check for FLUID LEAKAGE.

Check for signs of leaks from engine components, transaxle, fuel lines, coolant hoses, power steering lines, and A/C lines (if equipped). Check lines for twists, kinks, proper routing and clearance to moving parts.

#### 3. CHECK/ADJUST TIRE PRESSURE AND INSPECT TIRES & WHEELS FOR DAMAGE.

For tire pressure specifications, refer to the Tire Pressure and Loading label on the driver's side B-pillar.

**!!** IMPORTANT **!!** On some models, the factory over-inflates the tires by 50% to prevent flat spots during shipment and storage. It is critical to adjust tire pressures to the proper specifications. Check all tires for damage such as cuts, foreign objects in the tire, or any other imperfections.

Remove any tire pressure and/or tire balance decals from each tire if present.

NOTE: Low tire pressure on vehicles equipped with a Tire Pressure Monitoring System (TPMS) will illuminate the TPMS warning light. With cold tires, adjust tire pressure on all vehicles to the specification shown on the Tire Pressure and Loading Label. If a valve stem cap is missing, refer to Mitsubishi ASA CAPS and replace it only with the part number quoted for the vehicle. Factory installed valve stem caps are designed to reduce corrosion and damage to the valve. Refer to TSB-12-31-001 for additional TPMS information.

- 4. Remove PLASTIC WHEEL PROTECTORS.
- 5. Install wheel caps (if equipped); torque wheel lugs.

# F. ROAD TEST

#### \*\*\* IMPORTANT \*\*\*

# RECALLS - Check the Warranty Superscreen for open Recalls or Service Campaigns. Make sure any open Recall or Service Campaign is performed BEFORE the vehicle is road tested.

Warning and indicator lights vary by vehicle and equipment, some samples are shown below. Refer to the Owner's Manual and Monroney Label for a complete list for the vehicle.

Warning/indicator lights (red)		Warning	g/indicator lights (yellow)	Warning/indicator lights (other)				
ĒŦ	Auxiliary battery charge warning light		Active stability control [ASC] warning light	ΞØ	Automatic High Beam [AHB] indica- tor light (if so equipped)			
BRAKE	Brake warning light (red)	OFF	Active stability control [ASC] off indicator light	Q	Brake auto hold indicator light (or- ange)			
٥	Electric shift control system warning light		Acoustic Vehicle Alerting System [AVAS] warning light	O AUTO HOLD	Brake auto hold indicator light (green)			
PARK (@)	Electric parking brake warning light	ABS	Anti-lock Braking System [ABS] warning light	<b>5</b>	Charging indicator			
9 <u>7</u> 7,	Engine oil pressure warning light	(U) <b>1</b>	Brake system warning light	4	Drive battery temperature warning light			
$\mathbf{A}$	Hands OFF warning light (if so equipped)	$\bigcirc$	Check engine warning light	EDDE	Exterior light indicator			
A	Master warning light (red)	⊘!	Electric power steering warning light	却	Front fog light indicator light (if so equipped)			
*	Seat belt warning light and chime	OFF	Forward Collision Mitigation System [FCM] OFF warning light (if so equipped)	10	High beam indicator light			
×	SRS airbag warning light	A	Hill Descent Control system ON in- dicator light	P	Innovative Pedal Operation Mode in- dicator			
		(!)	Low tire pressure warning light	READY	READY indicator			
			Master warning light (yellow)		Turn signal/hazard indicator lights			

#### **<u>BEFORE</u>** the ROAD TEST:

Vehicles should be at operating temperature prior to performing the following checks. Before beginning the road test, establish a route that you will use for <u>every</u> vehicle. Recommended road test duration is at least 15 minutes and should include a variety of road conditions.

#### Record BEGINNING mileage

Record the beginning mileage of your road test on the PDI form.

Turn OFF radio before starting the road test.

#### 1. WARNING, INDICATOR LIGHTS, AND GAUGES.

- a. Turn the ignition ON. The indicator and warning lights shown in the illustration should illuminate (as equipped).
- b. Fasten the driver's seat belt and start the engine. Verify that all indicator lights go out, except the passenger airbag light.
- c. Unfasten the driver's seat belt and verify the driver seat belt reminder light comes on.
- d. Open a door. Verify the door ajar light comes on.
- e. The brake warning light should be lit when the parking brake is applied.
- f. Verify all gauges and lights are working as equipped.
- g. Check operation of the seat belt warning buzzer and the key reminder buzzer. For vehicles with the FAST Key system and OSS, move the transmitter out of the vehicle and listen for a warning tone.
- h. For vehicles with Forward Collision Mitigation (FCM), ensure the FCM light is displayed on the MID when the engine is started. Use the FCM button to toggle the following distance and confirm the change is displayed in the MID.
- i. For vehicles with Lane Departure Warning (LDW), Blind Spot Warning (BSW), Rear Cross Traffic Alert, Auto Hold: Verify the applicable system light displays on the MID at engine start-up.



Refer to the following diagram for the unique layout of the multi-information display (labeled "1" which displays warnings and information. The following items are also displayed if the vehicle is equipped with them:

- Tachometer
- Speedometer
- Vehicle Settings
- Trip Computer Information
- Driver Assistance
- Cruise Control System Information
- MI-PILOT Assist
- FAST-key Operation Information
- Audio Information



#### Multi-Information Display (MID)



Energy Flow display is accessed by pressing the INFO button to the left of the steering column.

#### 2. Check EV MODE SWITCH, BATTERY CHARGE/SAVE MODES.

#### **EV Mode Selector Switch**

Press the "EV" priority button on the center console and check that "EV" displays on the MID when pressed and goes off when pressed again.



#### NORMAL EV, SAVE and CHARGE Modes

**NORMAL MODE -** Select this mode for normal driving. Both the electric motor and engine will be used in a well-balanced manner.

**EV MODE -** This mode helps drive the vehicle without starting the engine as frequently to minimize noise and exhaust gas emissions.

**SAVE MODE -** To save to save the remaining power in the drive battery while driving. This mode can also be used to reduce electric power consumption fromt he driver battery during high-speed driving.

#### 3. AUTOMATIC TRANSAXLE SHIFT SELECTOR (Joystick).

With the brake pedal depressed and the POWER switch in the "ON" position, cycle the shift selector into the following gears and check that they display on the MID: R (Reverse), N (Neutral), D (Drive), B3 (pull down once from "D"), B5 (pull down twice from "D").

NOTE: All Regenerative Braking (B) modes will be checked during the full road test. See step 5 for more details.



#### **CONDUCT A FULL ROAD TEST**

Drive the vehicle to identify dynamic symptoms that may need correction. Use the following instructions as a guide.

**DO NOT ATTEMPT TO TEST ANY SYSTEM THAT CANNOT BE SAFELY TESTED WHILE** DRIVING (e.g., COLLISION MITIGATION SYSTEM [if equipped] or ADAPTIVE CRUISE CONTROL FOLLOWING DISTANCE [if equipped]).

WARNING Your route should be relatively free from traffic so you can safely conduct the test and concentrate on vehicle operation and performance.

WARNING ALWAYS follow all traffic laws and safe driving practices. The PDI road test should be conducted under a variety of different operating and road conditions.

**Vehicles equipped with air conditioning:** Place a thermometer in the center vent before beginning your road test. This will be used later to check air conditioner operation.

#### 4. Check ENERGY FLOW IN MID AND SDA SCREENS.

The Outlander PHEV automatically selects the most efficient drive mode depending on driving conditions and battery charge condition. See illustrations below for descriptions of the 3 drive system modes. Perform the road test at varying speeds, as shown below, in order to test in all 3 modes and verify the Energy Flow displays in the MID and SDA screens.



#### Energy Flow Display on MID

Press the Info button to the left of the steering wheel to change the MID to the Energy Flow Display.



#### Energy Flow Display on SDA

Press the MENU button then on the SDA touchscreen select INFO, and EV to view the energy usage. For more information on all the available PHEV related display screens, refer to the Owner's Manual.



#### 5. REGENERATIVE BRAKING

Check the levels of regenerative braking strength with the shift selector and steering wheel shift paddles.

#### Regeneration Control - Shift Selector (Joystick)

Pull the selector lever towards you to activate the lower level "B3" regenerative braking. Pull the selector level again to activate the stronger "B5" level. Verify the MID display changes to show the different levels.

#### **Regeneration Control - Shift Paddles on Steering Wheel**

Pull on the "-" (down) and "+" (up) shift paddles on the steering wheel. Verify all levels display in the MID as shown as all the levels are selected. (See illustration and table below.) For more details, refer to the Owner's Manual and PHEV training materials.



Selector Position Combination Meter Display			Control						
Ρ	Electric Park Switch	Р	Electric Park Lock is engaged when this switch is pressed and released only when the selector lever is set to D, N or R (with the Power switch ON).						
R	Reverse	R	Vehicle moves in reverse by electric motor only.						
Ν	Neutral	N	No vehicle propulsion is generated.						
D	Drive	D	Regenerative braking equivalent to B2.						
в	Braking (B0 to B5) B2 B3 B4		No regenerative braking.						
			Regenerative braking is activated.						
			Stronger regeneration than B1.						
			Stronger regeneration than B2.						
			Stronger regeneration than B3.						
			Stronger regeneration than B4.						

#### 6. SUPER-ALL WHEEL CONTROL (S-AWC) DISPLAY FUNCTIONS.

Ensure the mode display changes (e.g., NORMAL, 4WD LOCK) when toggling the mode switch.



#### 7. Check ELECTRIC MOTOR PERFORMANCE.

WARNING ALWAYS follow all traffic laws and safe driving practices. Check performance under the following conditions. The throttle should respond without hesitation, and performance should be smooth in all conditions.

- Part Throttle At a constant speed of 25-35 mph (40-56 km/h).
- Under Load Accelerate to 3/4 throttle.
- At Cruise At a constant speed of 45-55 mph (75-90 km/h).

#### 8. <u>Check CRUISE CONTROL</u>.

Cruise control switches are located on the steering wheel.

#### **Control Functions**

Main Switch - Activates the system (4).

Set Switch - Sets desired cruise speed and reduces speed incrementally (2).

Res+ - Resumes set speed or increases speed incrementally (1).

Cancel - Deactivates the system without erasing the set speed (3).

Distance - Changes the vehicle following distance: long, middle, short



#### WARNING NOTE: Cruise control will not operate below 20 mph.

#### System Operation Check

- a. Accelerate to 20+ mph.
- b. Turn on the MAIN switch. Make sure the CRUISE light illuminates.
- c. Use the SET function to set the vehicle speed.
- d. Increase the vehicle speed slightly by using the RES+ button momentarily.
- e. Check each canceling function by depressing the brake and the CANCEL button.
- f. Resume the set speed by using the RES+ button.
- g. Turn the cruise control off by pressing the MAIN switch.

#### Vehicles Equipped with Adaptive Cruise Control/ACC (if equipped)

#### Perform checks h-k in addition to those for standard cruise control (above).

- h. Confirm the MID displays the screen for ACC/DISTANCE when set.
- i. Confirm the Distance Scale toggles from Near to Far when the Distance switch is pressed. The ACC system maintains the set vehicle speed, similar to standard cruise control, as long as no vehicle is detected in the lane ahead. The ACC system displays the set speed.
- j. Press the MAIN switch to turn cruise control OFF.
- k. Press and hold the MAIN switch until CRUISE displays without the distance scale. The system is now in normal cruise control mode.

Distance	Deplay	Approximate distance at 68 MPH (100 km/h) [ft (m)
Long	60 MPH	200 (60)
Middle	60 MPH	150 (45)
Short	60 MPH	90 (30)

#### 9. Check AVAS (Acoustic Vehicle Alerting System).

When driving or when the vehicle is in READY mode, the electric motors are very quiet at low speeds and an audible pedestrian alert system has been added. The alert is heard in forward and reverse gears between certain speeds.

- Check that the alert is heard while the vehicle is in gear, between approximately 0 and 22 mph (0 and 35 km/h) under the following conditions:
  - Brake pedal and parking brake released
  - Selector in D or R
- Check that the alert is not heard at speeds less than approximately 2 mph (3 km/h) with the brake pedal depressed, or above approximately 22 mph (35 km/h) while driving.
- Check that the alert is not heard with the gear selector in Park and engine running.



#### 10. SQUEAKS, RATTLES, AND WIND NOISE.

Check for any abnormal noise and vibration during your road test, including driveline, pedal, or steering wheel vibration. Listen for rattles and squeaks from interior components (e.g. glovebox, seats). Correct them as necessary.

Be sure to close all windows and sunroof and turn off the audio during this inspection.

#### 11. **STEERING OPERATION,** WHEEL ALIGNMENT, and HANDLING.

Make sure the <u>steering wheel is centered</u> when the vehicle is traveling straight ahead. The vehicle should track straight on a level surface, <u>without pulling or drifting</u>. If a problem is identified, correct it. Refer to the Service Manual for adjustment procedures.

#### 12. BRAKE PERFORMANCE AND ANTI-LOCK BRAKE SYSTEM (ABS) OPERATION.

#### **Brake Performance** (including ABS/ASC/TCL)

The vehicle should brake smoothly and in a straight line. There should be <u>no abnormal noise</u> (including squeaks) or vibration while braking. The brake pedal should feel firm, not soft or <u>mushy</u>.

#### **ABS Operation**

## WARNING Always check that no vehicles are behind you when checking ABS.

In a safe location with no other vehicles or objects around, check the operation of the ABS system. During hard braking, the vehicle should come to a controlled, straight stop. You will feel some pedal pulsation and may hear normal operating sounds from the ABS system.

#### 13. WINDSHIELD WIPER AND WASHER OPERATION (front and rear)

#### <u>Washer Aim</u> (front and rear)

- a. Check washer aim, both front and rear (if equipped).
- b. Vehicles equipped with intelligent windshield washer Pull the windshield washer lever for approximately 0.5 seconds. Confirm the washer sprays between wiper blade sweeps, for a total of 4 sprays. Refer to the Service Manual (*Group 51 Exterior*) for details of intelligent washer operation.
- c. Make any needed adjustments, referring to the Service Manual. Submit a warranty claim for adjustments performed.

#### **Wiper Operation** (including rear if equipped)

- a. Verify correct wiper operation during all speeds. If streaking occurs, clean the wiper blades with a cloth soaked in a mild detergent.
- b. Make sure the wipers park properly.

#### 14. HEATER AND AIR CONDITIONING (A/C) OPERATION.

Check for proper operation of all modes, air intake selection, <u>and temperature control. Check</u> the fan speed and check for any unusual fan noises.

Make sure the air intake control is in the RECIRC position. <u>Using the thermometer</u> placed in the center air outlet before the test drive, check for proper cooling when the air conditioner is operating. Refer to the Service Manual for temperature specifications or test conditions for the particular model. When finished, leave the air intake door in the fresh (outside air) position.



#### 15. Check PARK SWITCH function.

Place vehicle in Park by pushing the Park switch located forward of the shift lever. The MID should display "P."

Park is engaged either by pressing the Park switch or pressing the POWER switch to OFF. Park is disengaged when the shift selector is moved to the Drive or Reverse position.

#### G. FINAL STEPS FOR TECHNICAL INSPECTION (After Road Test)

#### 1. Record the ENDING mileage.

Record the ending mileage of your road test on the PDI form.

#### 2. Check ELECTRIC PARKING BRAKE & AUTO HOLD.



- a. Park the vehicle on a slight incline and leave the transaxle in NEUTRAL. Apply the electric parking brake as shown.
- b. With your foot off the service brake, the parking brake should hold the vehicle from moving.
- c. Pull up on the Auto Hold switch and verify that it holds the vehicle from moving on an incline.

#### 3. Check AUTOMATIC TRANSAXLE FLUID.

Check automatic transaxle fluid level as per the Service Manual. Add or extract fluid if necessary, to ensure fluid is at the correct level. If necessary, add DiaQueen automatic transmission fluid, ATF SPIII (part number MZ320200).



4. For California Dealers ONLY: <u>Beginning August 30,</u> 2018, a new Proposition 65 warning label must be attached to the driver's side window.

For more details, refer to the Dealer Letter that was sent out August 20, 2018, and reprinted in Tech Talk 241.

- 5. Sign and install the PDI Quality Assurance Pledge decal.
- 6. Sign and date the Technician's Signature area on the PDI form. Leave the form with the vehicle for the Detail Specialist to complete "Detailing <u>After</u> PDI."



# DETAIL INSPECTION

## A. DETAILING <u>BEFORE</u> PDI

#### BEFORE YOU START:

- Always keep your hands and uniform clean when performing a PDI.
- To protect the interior of the vehicle, be sure to remove sharp objects from your body and clothing before starting the detailing procedures.

Make sure the following information is recorded in the spaces provided on the PDI form:

- Repair order number
- Dealer stock number
- Model Year

- Ignition key code
- Wheel lock code (if equipped)
- Vehicle Identification Number (VIN)

#### 1. RAP-FILM REMOVAL (if applicable).

Before a technician can perform the Technical portion of a PDI, the protective film (RAP-film) must be removed from the **exterior body** surfaces.

#### NOTE: For easiest removal, RAP-film temperature should be between 32°F (0°C) and 122°F (50°C).



The driver entry area may be protected by a <u>clear</u> RAP-film placed on the scuff plate and/or lower door area. This is to protect the area from damage while the vehicle is available for viewing by customers or in dealer storage, improving Initial Quality Survey (IQS) scores.

THIS AREA SHOULD REMAIN PROTECTED BY THE <u>CLEAR</u> RAP-FILM UNTIL THE VEHICLE IS DELIVEREDTO THE FINAL RETAIL CUSTOMER. Please do not remove <u>clear</u> RAP-film from the lower door or sill area prior to retail delivery.

#### a. Remove the exterior RAP-film from all body surfaces.

- If the temperature of the vehicle body is higher than 122°F (50°C), the film softens, allowing more residue to remain on the body surface. For easier removal, decrease the temperature of the vehicle body surface to less than 104°F (40°C) with cool waterand/or store the vehicle inside, out of the sun.
   OR
- If the body surface temperature is lower than 32°F (0°C), increase the temperature using warm water or put the vehicle inside a heated facility until the body surface temperature rises.

Then, starting at the corners, pull up on the RAP-film, fold it back, and pull it off at an angle of 180 degrees to minimize glue residue.

#### b. Wash the vehicle with water.

#### NOTE: ALL RAP-FILM MUST BE REMOVED AFTER 5 MONTHS



#### 2. <u>!! IMPORTANT!!</u> <u>Remove RAP-FILM RESIDUE</u>

A line of adhesive residue can form at the edge of the RAP-film. As the film shrinks due to exposure to the elements, the adhesive is exposed and collects dirt and other debris. Use either of the following methods to remove RAP-film residue from the body surface.

- If there is a considerable amount of residue, remove it by wiping down the affected body surface area with isopropyl alcohol, diluted 50% with mineral spirits (petroleum benzene).
   OR
- If there is only a small amount of residue, use a very mild (white) polishing compound on the affected surface area.

For details on removing RAP-film and residue, refer to TSB-97-00-006 & TSB-22-00-001.

#### 3. Inspect for PAINT DAMAGE.

- a. Inspect the vehicle's surfaces for paint swelling (paint will have a milky appearance). This condition occurs when moisture is trapped between the RAP-film and the body panel surface.
- b. Most occurrences of paint swelling can be corrected by parking the vehicle in bright sun light for approximately one hour.



NOTE: If there is still discoloration or blotching or a "milky" color on the paint surface after RAP-Film removal and cleaning (as shown), <u>DO NOT REPAINT THE VEHICLE.</u> Submit a PRC entry with photos for DPSM review, then send the vehicle to a body shop that can use an ultraviolet heat lamp to eliminate milky color spots.

For more details, refer to TIN-18-42A-001.

NOTE: If the above repairs are not successful for correcting paint swelling, refer to the paint repair procedures in the Body Repair Manual for the model.

c. It is recommended that the Technical Inspection be completed at this time. Continue with the Detailing <u>After</u> PDI section after the Technical Inspection is finished.

Whenever possible, install all accessories and dealer-installed options BEFORE performing Detailing and Final Delivery Preparation.

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#### B. DETAILING AFTER PDI

1. Remove RAP-FILM (if not already done). Refer to previous section, "Detailing Before PDI."

#### 2. Wash ALL EXTERIOR BODY PANELS.

- a. Always make sure the windows and sunroof (if equipped) are fully closed.
- b. Wash all body panels with water, not in direct sunlight.
- c. Start washing from the roof, working downward, using a sponge and water.
- d. After washing, wipe water from body surfaces using a chamois or soft cloth.

#### NOTE: When using a high-pressure washer avoid directing high-pressure spray at weatherstrips.

#### 3. Check for WATER LEAKS immediately after washing.

In some cases, it may take 4 minutes or longer to produce any evidence of a leak.

During storage, when the vehicle has been exposed to rain with the RAP-film removed, or while washing the vehicle, note any water leaks that may require repair.

Remember, the source of the water leak is not always where the leak appears. To accurately locate and repair a leak, a thorough understanding of the conditions the leak was identified must be made known to the person making repairs.

# 4. Wash and inspect ALL WHEELS; THOROUGHLY REMOVE ALL GLUE RESIDUE; Apply TIRE DRESSING.

- a. Install any missing tire valve caps using the correct cap. TPMS equipped vehicles require specific valve caps. Your parts department can provide the correct part for the vehicle. Refer to TSB-12-31-001 for information.
- b. Wash the wheels with mild detergent and rinse with water. See TSB-09-31-005 for information.
- c. After washing, wipe water from wheels using a chamois or soft cloth.
- d. Inspect wheels and tires for nicks, scratches, and other damage.
- e. Clean off any residue or foreign material.
- f. Apply tire dressing to each tire.
- g. Wipe dry with a clean cloth.

## 5. Check DOOR AND TRUNK OPENING CLEANLINESS AND UNDERHOOD CLEANLINESS.

Wipe off any dirt with a damp cloth.

#### <u>Under hood</u>

- a. Remove any debris such as leaves, etc. from the engine compartment.
- b. Wipe up any fluid spills and note any evidence of leakage on the repair order.
- c. Wipe down the engine compartment components with a damp cloth.

#### 6. Inspect PAINT AND ALL BODY PANELS FOR DAMAGE, ALIGNMENT, AND FIT & FINISH.

- a. Check for scratches and dents. Inspect the body panels from different angles.
- b. Check the alignment of all body panels for uniform gaps and flushness. All body panels should be flush with their adjoining panels and all gaps should be uniform.
- c. Inspect painted surfaces for uniform color. Inspect from different angles.
- d. Inspect painted areas for damage. Note any discrepancies on the repair order.
- e. Inspect painted areas for environmental fallout such as acid rain and rail dust. Remove any fallout by following MMNA-approved techniques.

#### NOTE: If any paint damage is noted, refer to TSB-92-51-001 and training video #44.

#### 7. Inspect ALL GLASS FOR DAMAGE AND CLEANLINESS, INSIDE AND OUTSIDE.

Use a suitable glass cleaner and wipe dry with a soft lint-free cloth.

- a. Use an approved glass polish to remove minor scratches and imperfections.
- b. If there is a problem with any glass, follow your dealer's procedures to correct it.

#### 8. Inspect ALL MOLDING, TRIM, AND CHROME PARTS, AND REMOVE PROTECTIVE TAPE.

- a. Inspect the moldings, trim, and chrome parts for looseness, proper alignment, and cleanliness.
- b. Clean off any residue.
- c. Note any items that need corrected. Remember, repairs are not part of your PDI time. Follow warranty policy and procedures.

#### 9. Inspect ALL WEATHERSTRIPPING AND RUBBER MOLDINGS.

- a. Inspect all weatherstrips and rubber moldings for damage. Make sure they are securely attached.
- b. Clean off any residue.

#### 10. Clean the INTERIOR and check ALL INTERIOR PANELS AND TRIM FOR PROPER FIT.

- a. Wipe plastic interior components with a soft damp cloth.
- b. Remove minor stains and soil using a mild detergent, then wipe dry with a clean, soft cloth.
- c. Check alignment of all interior panels and trim for uniform gaps and flushness. All interior panels and trim should be flush with their adjoining panels, and all gaps should be uniform.

#### NOTE: DO NOT remove the protective seat covers at this time.

#### 11. Check for STAINS, DIRT, SCUFFS, OR TEARS.

If stains or soil are found on interior trim, do the following:

- a. Clean with a mild soap solution or reliable vinyl cleaner.
- b. Apply a small amount of solution with a clean cloth or sponge and work into a lather, then wipe with a damp cloth.
- c. When the lather has been removed, wipe again with a soft, clean dry cloth.
   NOTE: Damage and/or stains which cannot be removed using the above method should be noted on the repair order and corrected prior to customer delivery.

#### 12. Check that DOOR EDGE GUARDS ARE IN PLACE.

Check that door edge guards are in the proper position and securely fastened.

#### 13. Check CARGO NET installation (if applicable).

Check that the cargo net has been installed properly at the port.

#### 14. Install all accessories (if applicable).

Install any accessories listed on the Monroney label (e.g., cargo tray, cargo mat, all weather floor mats, etc.) according to the instructions in the package or vehicle Owner's Manual.

#### 15. Install license plate(s).

Install license plate on rear bumper (and front bumper, if required). For states that require front license plates, dealers should use the bracket that is shipped with the vehicle and follow the instructions included with the bracket. **Install using hand tools only. NOTE:For rear license plates, use appropriate size non-corroding fasteners.** 

#### 16. Place PAPER MATS IN ALL FLOOR AREAS.

Install paper floor mats on the driver's side and all passenger areas of the vehicle.

#### **!** CAUTION Make sure only one type of floor mat is installed at a time.

#### 17. Check HEADLINER AND SUN VISOR CLEANLINESS.

If stains or soil are found on the headliner or sun visors:

- a. Clean with a mild soap solution or reliable vinyl cleaner.
- b. Apply a small amount of solution with a clean cloth or sponge and work into a lather, then wipe with a damp cloth.
- c. When the lather has been removed, wipe again with a soft, clean dry cloth. After cleaning the headliner, use a small brush to raise the nap on the headliner material.

# **!!** IMPORTANT **!!** Do NOT remove the IOD connector once it is engaged. For PHEV vehicles, the IOD connector must remain engaged even while in storage. Also, do NOT disconnect the negative battery terminal.



# CUSTOMER DELIVERY PREPARATION

#### 1. Wash ALL EXTERIOR BODY PANELS.

- a. Always make sure the windows and sunroof (if equipped) are fully closed to prevent water entry.
- b. Wash all body panels with water, not in direct sunlight.
- c. Start washing from the roof, working downward, using a sponge and water.
- After washing, wipe water from body surfaces using a chamois or 100% cotton terry towel.
   NOTE: When using a high-pressure washer avoid directing high-pressure spray at weatherstrips.

#### 2. Wash ALL WHEELS AND APPLY TIRE DRESSING.

- a. Install any missing valve stem caps with the correct cap. TPMS equipped vehicles require specific caps. Your Parts department can provide the correct part for the vehicle.
- b. Wash the wheels with mild detergent and rinse with water. See *TSB-09-31-005* for information.
- c. After washing, wipe water from wheels using a chamois or 100% cotton terry towel.
- d. Apply tire dressing to each tire.
- e. Wipe dry with a clean cloth.
- 3. Check DOOR AND LIFTGATE OPENING, AND UNDER HOOD for CLEANLINESS.

Wipe off any dirt with a damp cloth.

#### UNDER HOOD:

- a. Remove any debris such as leaves, etc. from the engine compartment.
- b. Wipe up any fluid spills. Note any evidence of leakage on the repair order.
- c. Wipe engine compartment components with a clean damp cloth.

#### 4. Inspect ALL BODY PANELS FOR DAMAGE AND ALIGNMENT.

Check for scratches and dents. Inspect the body panels from different angles.

### 5. Inspect ALL PAINTED SURFACES FOR DAMAGE AND FINISH QUALITY.

- a. Inspect painted surfaces for uniform color. Inspect from different angles.
- b. Inspect painted areas for damage.
- c. Inspect painted areas for environmental fallout, such as acid rain and rail dust. Remove any fallout by following MMNA-approved techniques.

## NOTE: If any paint damage is noted, refer to TSB-92-51-001 and training video #44.

#### 6. Clean ALL GLASS (INSIDE AND OUT); Inspect ALL GLASS for DAMAGE.

- a. Use a suitable glass cleaner and wipe dry with a soft lint-free cloth.
- b. Clean any dirt off the wiper blades.
- c. Use an approved glass polish to remove minor scratches and imperfections.

#### 7. Inspect ALL MOLDING, TRIM, AND CHROME PARTS.

- a. Inspect the moldings, trim, and chrome parts for looseness, proper alignment, and cleanliness.
- b. Clean off any residue.

#### 8. Confirm GLOVEBOX ITEMS are complete.

Confirm the Owner's Manual and other owner booklets shipped with the vehicle (e.g., maintenance manual, warranty statements, etc.) are placed inside the Owner's Manual Portfolio and then placed in the glove box.

#### NOTE: The Owner's Manual Portfolio also contains a first aid kit, pen, and tire pressure gauge.

#### 9. Remove SEAT AND TRIM PROTECTORS.

- a. Carefully remove the protectors from all seats.
- b. Carefully remove all trim protectors.

#### 10. Latch SECOND ROW CENTER SEAT BELT.

Due to its unique arrangement, latch the center seat belt for the second row seat, showing the retail customer the proper configuration (refer to TIN-13-52A-001 for details).

#### **11.** Check HEADLINER AND SUN VISOR CLEANLINESS.

If stains or soil are found on the headliner or sun visors:

- a. Clean with a mild soap solution or reliable vinyl cleaner.
- b. Apply a small amount of solution with a clean cloth or sponge, then wipe with a damp cloth.
- c. After removing the lather, wipe again with a soft, clean cloth.

#### **12.** Check for STAINS, DIRT, SCUFFS, OR TEARS.

If the interior trim is scuffed, stained or soiled, clean as described in "Detailing <u>After</u> PDI," step 11. **NOTE: Damage and/or stains which cannot be removed using the described method should be noted on the repair order.** 

# 13. Remove PAPER MATS, FOOT PEDAL PLASTIC PROTECTORS, VACUUM ALL FLOOR CARPETS, INSTALL AND ANCHOR ALL FLOOR MATS.

- a. Remove all paper floor mats and plastic pedal protectors (if equipped).
- b. Vacuum all floor carpets.
- c. Install and anchor floor mats for all seating positions. Do not install more than one floor mat in the driver's position. Refer to TSB-12-00-009 for additional information.

#### 14. Confirm VEHICLE INSTALLED ACCESSORY WEIGHT.

Refer to TSB-23-00-001 for details. Complete and attach a "Load Carrying Capacity Reduced" label if applicable.

#### 15. Check tire pressures and adjust if necessary. Reinstall valve stem caps.

#### NOTE: Tire pressures are listed on the Tire Pressure and Loading label on the driver's side B-pillar.

16. <u>Confirm clock is set and audio system presets are set to local stations.</u>



#### 17. <u>Remote Control registration card.</u>

Confirm the remote control registration card with Wi-Fi information is securely attached to F.A.S.T. Key.

This card contains necessary ID and password information for the customer to register the smartphone Remote Control app. **Be sure customer is given this card at final delivery.** 

#### 18. Set up Wi-Fi EV Remote / Smartphone Remote Control App.

On the customer's personal smartphone or tablet, install the Wi-Fi EV Remote Control App.

- a. For more details, go to the following website: <u>http://www.mitsubishi-motors.com/en/products/outlander\_phev2/app/remote/</u>
- b. For vehicles sold in the U.S., use software version PHEV II, available from the Apple App Store and Google Play.
- c. Confirm versions for i-Phone (iOS 7.0 or later) or Android (OS 4.4 or later).
- d. Confirm all functions can be controlled remotely (e.g., preheat/cool interior, set charge times, customize vehicle settings).
- 19. Charge main drive lithium-ion battery to 100% before final delivery to customer.

#### 20. Recheck the Warranty Superscreen to confirm all recall procedures have been performed.

**IMPORTANT !!** Unless required to complete an electrical check, always make sure the **POWER** switch is in the LOCK (OFF) position and remove the FAST key from the vehicle.

# COMPLETING THE PDI FORM

When finished, make sure both the PDI Technician and the Detail Specialist have signed the PDI form. Leave the yellow (2nd copy) in the vehicle's glove box. Keep the original copy with the vehicle's service file. A sample of the PDI form appears at the end of this bulletin.

### PARTS INFORMATION

The table below lists Genuine Mitsubishi fluids which may be required during PDI:

Description	Part Number
DiaQueen Super Long Life Coolant Premium (or equivalent)	MZ320125
Brake Fluid (DOT3 or DOT4)	MZ311987
Washer Fluid (concentrate)	REF FLUID GUIDE
Automatic Transmission Fluid SP III	MZ320200
CVT Fluid J4 (for oil cooler)	MZ320185
Engine Oil OW-20 Synthetic (or equivalent)	MZ321024
Prop 65 Label (California dealers ONLY)*	PROP65WL

\* Only order if needed.

#### NOTE: Fluid additions or reductions are included as part of the PDI reimbursement labor times.

## WARRANTY INFORMATION

Only one PDI procedure will be reimbursed per vehicle. In regards to dealer trades of vehicles, the first PDI procedure claim entered and paid will be the only PDI claim allowed.

The PDI procedures described in this bulletin, as well as any fluids or shop supplies required during the PDI process, are reimbursed under a single PDI labor time allowance. Each MMNA model has an assigned PDI labor time allowance. PDI labor time allowances by model and model year are provided in a separate Warranty Bulletin. Warranty Bulletins by model year may be found on the MDL, under Service > Warranty Central > Warranty Bulletins. For 2024 Outlander PHEV, refer to WB 2020-007.

NOTE: Any additional repairs and/or needed adjustments due to issues with materials and/or workmanship that are not part of these PDI procedures should be claimed on a separate warranty claim (W) using applicable published LOTS labor times and operation numbers. Use the nearest applicable LOTS operation number as a "zero-zero" actual time operation for non-published repairs and/or adjustments.





# **Pre-Delivery Inspection**

													• •	
					Model Year:								_	
Ignition Key Code: Wheel Lock Code 1:									_					
Vehicle Identification Number														
SYMBOL KEY         The following symbols are used to indicate special items:         ' If equipped         ' Vehicles for Display/Delivery         Operations must be performed outdoors with a clear view of the southern sky         For additional details on ANY step, refer to the "General PDI Procedures"         TSB for the applicable model year.         TECHNICAL INSPECTION         Vehicle Readiness         Check Warranty Superscreen & perform open Recalls or Service Campaigns         Install IOD (Ignition Off Draw) connector (Do NOT remove once engaged)         Confirm operation of all keys         Check for charging cable						Road Test • Mileage Before: After:         Verify all open Recalls or Service Campaigns have been completed.         Turn OFF radio during road test!         Check warning, indicator lights, and gauges (inc. check engine ligh TPMS light)         Check that BSW, LDW, RCTA, Auto Hold, FCM, AHB icons display on MID         Check EV mode switch, battery charge mode, battery save mode         Check A/T shift & starter interlocks         Check regeneration control using shift paddles         Check Super All-Wheel Control functions (mode selection, etc.) <sup>1</sup> Check lectric motor performance         Check cruise control, Adaptive Cruise Control (ACC) <sup>1</sup>							light,	
<ul> <li>Check main battery is charged to 1 segment. Charge if</li> <li>Verify presence &amp; install all shipped loose items as appli bracket, floor mats, etc.)</li> <li>Refer to TSBs in Group 00 for any model specific PDI upd</li> <li>Interior Function</li> <li>Apply parking brake, set the electric motor switch in the O</li> <li>Check operation of seats (power seats<sup>1</sup>, front/rear seat rear heated seats<sup>1</sup>, power lumbar support<sup>1</sup> head restraii heated steering wheel<sup>1</sup></li> <li>Check passenger airbag light functions (with and withou Check operation of all window switches, sunroof<sup>1</sup>, &amp; wi</li> </ul>	icable lates <b>DN pos</b> tadjus intadj ut pass	e (license pl sition. stment <sup>1</sup> , fr ustment <sup>1</sup> ), senger)	 ont/		Cl     Cl	heck fo heck st heck br heck w heck he heck el un all D eset tir <b>alif. De</b>	r sque eering ake ar per op ater a s <b>st:</b> ectric TC che e pres <b>alers C</b>	eaks opport operation and A part part eck v ssum	s, ratt eration BS / ation A/C o king t with s es to <b>Y</b> : Inst	iles, a on, st ASC / and v opera orake scan pre F tall P	nd wind teering / TCL op washer ation e, Auto H tool (M PDI level prop. 65	d noi whe erat aim Hold, UT III Wari	eel alignment, and handling tion (front and rear ') , & Park switch operation	
<ul> <li>Check Multi Information Display (MID) <sup>1</sup> &amp; Heads Up Displa</li> <li>Check interior and dash lights</li> <li>Check operation/adjustment of all mirrors: inside (autor Homelink<sup>®</sup>, etc. <sup>1</sup>) and outside (inc. power folding side m</li> <li>Check horn/auxiliary accessory sockets/AC outlets<sup>1</sup></li> <li>Check hands free telephone and music streaming functii</li> <li>Check audio system operation (inc. auxiliary input, USB (Check SDA system, Apple CarPlay/ Android Auto, set cloc</li> </ul>	matic hirrors on (Bl	dimming, ) <sup>1</sup> uetooth®) , satellite r			Detai	ispect l	RAP-1 ody p fter P	film bane PDI	and r els an	remo Id pai	ove RAP int for d	-film Iama	-	
<ul> <li>Check rear view 1/ Multi-view 1 camera, BSW, FCM, ACC1, LDW, AHB</li> <li>Check windshield wiper de-icer, rear window defogger, and outside heated mirror function</li> <li>Walkaround</li> <li>Apply parking brake, set the electric motor switch to ON when checking exterior lamps. Place gear selector in Reverse.</li> </ul>						<ul> <li>Wash exterior body panels, and check for water leaks after washing</li> <li>Wash and inspect wheels, remove glue residue, and apply tire dressing</li> <li>Check door and cargo area opening and under hood cleanliness</li> <li>Inspect body panels and paint for damage, alignment, and finish quality</li> <li>Inspect all glass for damage and cleanliness inside and out</li> <li>Inspect all moldings, trim, and chrome and remove protective tape</li> <li>Inspect weatherstripping and rubber moldings</li> <li>Clean interior and check interior panel/trim fit</li> </ul>							-	
<ul> <li>Check all exterior lights (inc auto headlamp function, all tun Set the electric motor switch to the LOCK position (power</li> <li>Check charging for Level 1 &amp; 2, and Level 3 quick charge Check main battery charging port doors lock with power door</li> <li>Check supplied 110V charging cable connection to vehicle</li> <li>Check that the charging cable connection to vehicle</li> <li>Check that the charging cable charges properly</li> <li>Check "Charge" indicator on cable lights when charging</li> <li>Check "Charge" indicator on cable lights when charging</li> <li>Check "Charge" indicator on cable lights when charging</li> <li>Check door closing effort (adjust if necessary)</li> <li>Check door closing effort (adjust if necessary)</li> <li>Check liftgate latch operation (inc. release &amp; closing eff operation &amp; latching)</li> <li>Check tire repair kit contents, wheel lock key1</li> </ul>	buttc e (if de on on i lock s e ehand locks,	on) ealer-equi regular cha witch Access Se child safet	pped) arge ecurity y door	,		heck th heck ca istall p heck he <b>DRTANT</b> DD is er Vash ext heck do ispect a ispect a ispect a onfirm F emove	at all d rgo ne aper n adline <i>If For F</i> agaged <b>CUS</b> cerior t or and ody p nd cle ll mole gloveb emote seat a	loor et 1 a nats er an <i>PHE</i> <i>d, it</i> : <b>STO</b> sody ding box i an a ding box i and	redge and in s on a d sur <i>V vehil</i> <i>must</i> <b>DME</b> y pane rgo a ls for all gla gs, trir tems ntrol r	e gua stall all flo r viso cicles, <b>c</b> r rem <b>R DI</b> els, w rea c dam uss in m, an c (Own regist prote	or cleanli do NOT ra ain enga ELIVE vheels, a opening age side and d chron ner's & I ration ca ectors	in pla pries iness <b>emo</b> ageo <b>RY I</b> and a and dout ne Main	ace <sup>1</sup> s we <i>IOD</i> (Ignition Off Draw) connect d even while in storage. PREPARATION apply tire dressing l under hood cleanliness	.)
Under Hood & Cargo area (use MMNA approved fend // CAUTION // Ensure the electric motor switch is in the LOCK po	er co ositio	vers)				atch 2 <sup>nd</sup> heck he					elt or cleanli	iness	s	
<ul> <li>(powerbutton) when inspecting the following:</li> <li>Test 12V battery (w/ Midtronics tester); write code here</li> <li>Check 12V battery connections are tight</li> <li>Check all fluid levels</li> <li>Check for fluid leaks</li> <li>Check that all emissions control equipment is installed</li> <li>Check hood latch and safety catch (adjust if necessary</li> </ul>	e: suffici		nces			heck in: emove de mat emove onfirm arrying heck ar onfirm etup EV	foot p vehicl Capao d adju remo	for s ma eda e ir city l st ti s se te	stains ts, va I plas nstall Redu ire pr t, & a	, dirt, icuur tic pr led a ced la ressu udio	scuffs, a n floor o occessoi abel (TSI ure presets	and c arpe rs <sup>1</sup> ry w B-23 are	a damage et, install floor mats & anchor dri veight. Complete and attach 3-00-001) if necessary. set to local stations 100% prior to customer delivery	Load
<ul> <li><i>Refer to Service Manual for proper lifting points.</i></li> <li>Check for loose attachments, incorrectrouting, and ins</li> </ul>	Suffici	ient cleara	าตร		🗖 R	echeck	Warra	anty	y Sup	ersc	reenan	id ve	erify all open Recalls or Service	
<ul> <li>Check for fluid leakage</li> <li>Check/adjust tire pressure and inspect for tire/wheel d lug per Service Manual</li> <li>Remove plastic wheel protectors</li> <li>Install wheel caps<sup>1</sup></li> </ul>					!! II alv	MPOR	ANT ake s	‼l sure	Unles	ss re	quired	l to	ORE customer delivery complete an electrical chec h is in the LOCK position and	

Dealer Certification – I hereby certify that all items have been checked and corrected to ensure this vehicle meets our highest standards for quality and excellence.

Technician Signature<u>:</u> Detail Specialist Signature<u>:</u>

Delivered by Signature:

Pre-Delivery Detail Date: \_\_\_\_ Title: \_\_\_\_\_

Pre-Delivery Inspection Date:

\_\_\_ Date: \_\_\_