INSIDE THIS ISSUE:

UPCOMING HOLIDAYS

Labor Day - September 2

2024 3rd Quarter Technician Quiz - TQ032024

Available from **July 1 - September 30, 2024**

Dealer personnel must successfully complete the quiz **no later than: September 30, 2024**

MITSUBISHI MOTORS

TECH TALK - VOLUME 281
JULY/AUGUST 2024

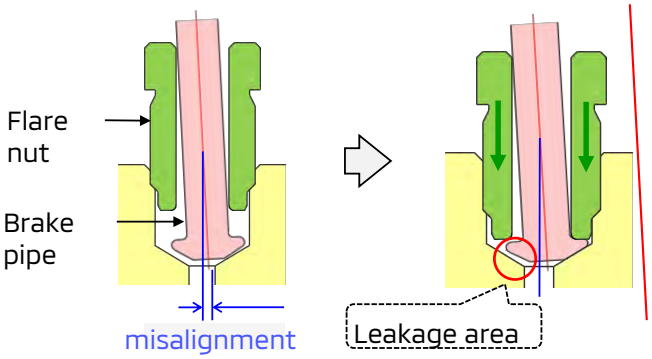
TECHNICAL INFORMATION

PROPER TIGHTENING PROCEDURE FOR BRAKE PIPE FLARE

AFFECTED VEHICLES
ALL

CONCERN
If the flare nut is tightened when the brake pipe is misaligned, the tip of the brake pipe may not be sealed properly, resulting in brake fluid leakage. This article introduces the proper tightening procedure for the brake pipe flare nut.

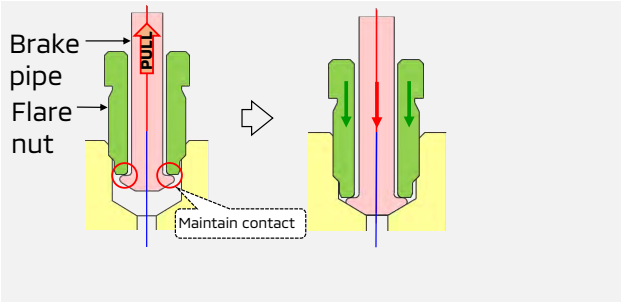
Incorrect Tightening Procedure
The flare nut tightening with the brake pipe misaligned.



Correct Tightening Procedure

1. Pull the brake pipe towards the flare nut.
2. While maintaining the brake pipe and flare nut contact, tighten the flare nut by hand until the brake pipe and the flare nut are seated.
3. Be sure to tighten the flare nut to the specified torque.

Note: Use an appropriate tool, such as a flare nut wrench, to remove/refit the flare nut.



CAUTION WHEN ASSEMBLING FRONT COIL SPRING AND STRUT

AFFECTED VEHICLES

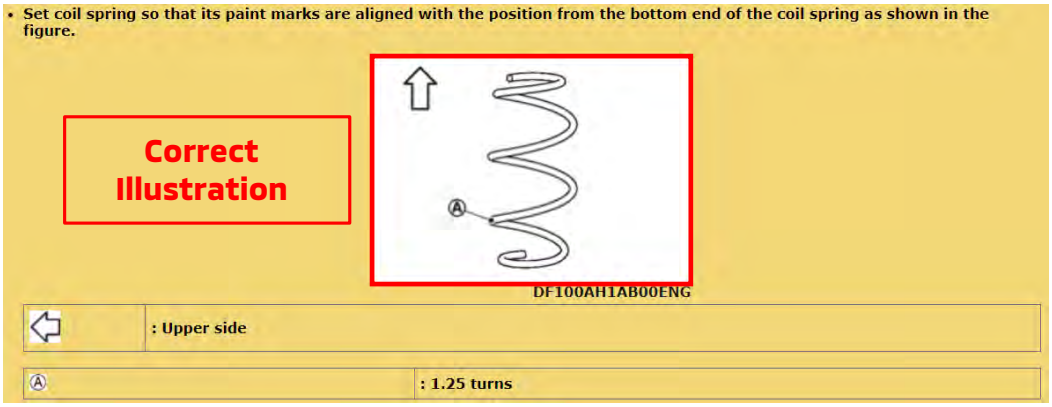
2022-2024 Outlander

CONCERN

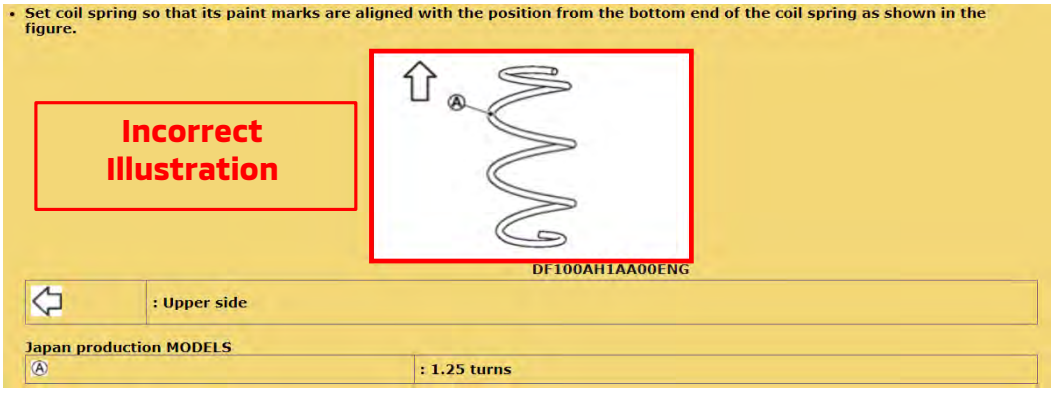
There is an inaccurate illustration for front coil spring installation in the service manual (Assembly > Suspension - Front Suspension - Removal and Installation - Front Coil Spring and Strut. The service manual will be revised after July 2024.

Please note that the front coil spring must be set so that the paint mark is 1.25 turns from the bottom end, not from the upper end.

Correct illustration to install coil springs:



Incorrect illustration currently shown in the service manual:



CHARGING PROCEDURES FOR 12V AUXILIARY BATTERY

AFFECTED VEHICLES
All

CONCERN
Insufficient battery charge may cause the battery to be dead, and may affect battery life. Overcharging the battery may cause battery failure.

This article describes charging information for 12V auxiliary batteries.

Follow the procedures in the service manual and operation manual attached to the charger.

1. Remove the battery from the vehicle and then remove the plugs.
   - Caution 1: While the battery is in use (charging), flammable gas is generated, so the use of fire is strictly prohibited.
   - Caution 2: Failure to this operation may cause the on-vehicle electronics to be damaged by excessive current flow.

2. Check the battery fluid level before charging. If the liquid level decrease to near LOWER LEVEL, replenish the battery liquid to UPPER LEVEL.

3. Estimated charging time is 5 to 12 hours. The time required to complete charging depends on the degree of discharge.

4. After charging is completed, wait about 30 minutes for the gas to escape, and then install the plugs.

Charging Current and Charging Time

In principle, the battery is charged with a current of 10% of the battery capacity (normal charging). Charging time is about 12 hours from 0% to 100% charge completion.

If battery capacity is unknown, refer the table below as a guide for charging current. (JIS standard)

<Estimated Charging Current>

Size	Capacity (5HR)	Normal Charge
B19	28-30	3-4A
B24	36-40	4-5A
D20	40	4-5A
D23	48-52	5-6A
D26	52-55	5-6A
D31	60-72	6-7A

<Estimated Charging Time>

Specific Gravity (20°C)	State of Charge	Estimated Charging Time(Normal Charge)
1.280	100%	-
1.240	75%	3 hours
1.200	50%	6 hours
1.160	25%	9 hours
1.120	0%	12 hours

REGISTERING MORE THAN ONE KOS KEY

AFFECTED VEHICLES
All

CONCERN
When registering more than one KOS (Keyless Operation System) key, if other keys are brought into the vehicle, they may not be registered correctly, and the vehicle may not recognize the key. In this case, the following issues may occur:

- The engine cannot be started
- The keyless operation (locking/unlocking the doors) does not work
- The error message "Key not found" appears

Note: The same event occurs with no batteries in the KOS key.

KOS key

CAUSE
When registering more than one KOS key, if other keys are present in the vehicle, radio interference may cause communication between the vehicle and the KOS key to fail, resulting in registration as an "Emergency key" which cannot communicate wirelessly.

Also, when commercial electric appliances are attached to the key, the communication with the KOS key will be disturbed, resulting in key registration failure.

Precautions:

- ✓ When registering more than one KOS key, always be sure to bring one key at a time into the vehicle
- ✓ After registering the key, take it out of the vehicle and then bring the next KOS key into the vehicle and register it
- ✓ When registering the key, remove all the commercial electric appliances
- ✓ After the keyless operation keys are registered, check that each of the keyless operation keys starts the engine and that the keyless operation function and keyless entry operates normally

Excerpt from ID Registration Procedure Manual:

⚠ CAUTION
- Do not register the keyless operation key registered to another vehicle.
- When registering more than one keyless operation key, always be sure to bring one key at a time into the vehicle. After registering the key, take it out of the vehicle and then bring the next keyless operation key into the vehicle and register it.

BLIND SPOT WARNING (BSW)

AFFECTED VEHICLES
2022-2024 Outlander

CONCERN
One or more of the following DTCs may set in either of the side radars. These DTCs are not listed in the 2022-2024 Outlander Service Manuals.

SIDE RADAR LEFT (SIDE RADAR LH):
- U1B26-11 Circuit (Short/Open) 2
- U1B26-15 Circuit (Short/Open) 1

SIDE RADAR RIGHT (SIDE RADAR RH)

- U1B26-11 Circuit (Short/Open) 2
- U1B46-15 Circuit (Short/Open) 1

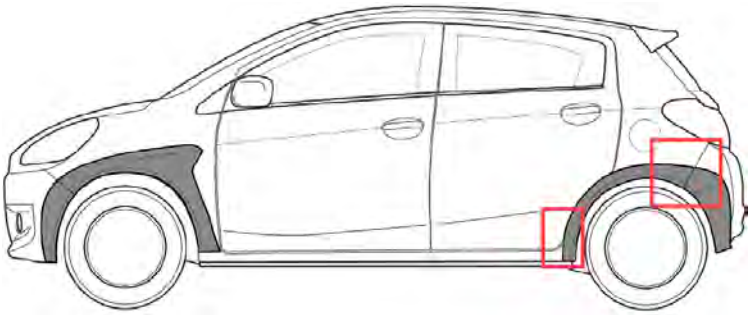
CAUSE
The listed DTCs are typically caused by a concern with the Blind Spot Warning (BSW) indicator in the applicable side miorr or the BSW indicator circuit between the mirror and side radar.

FENDER EFFECTS SEPARATING FROM VEHICLE

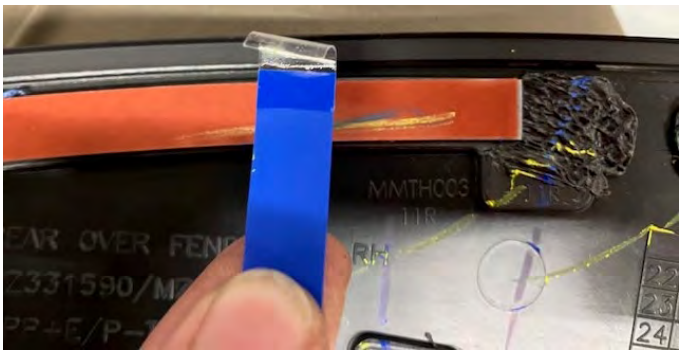
AFFECTED VEHICLES
2020-2024 Mirage

PARTS INFORMATION
MZ331590 – Fender Effects (Black Edition)
MZ331591 – Fender Effects (RalliArt Edition)

CONCERN
Mirage Fender Effects are separating from the vehicle along the rearward section of the quarter panels. When repairing or installing the fender effects, please take note of the key points below.

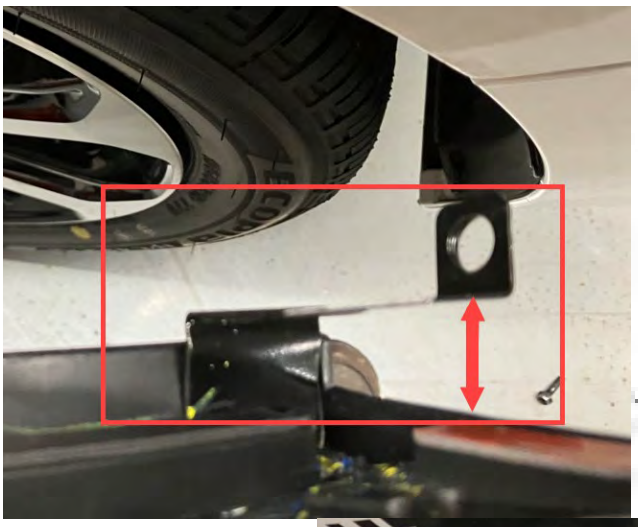


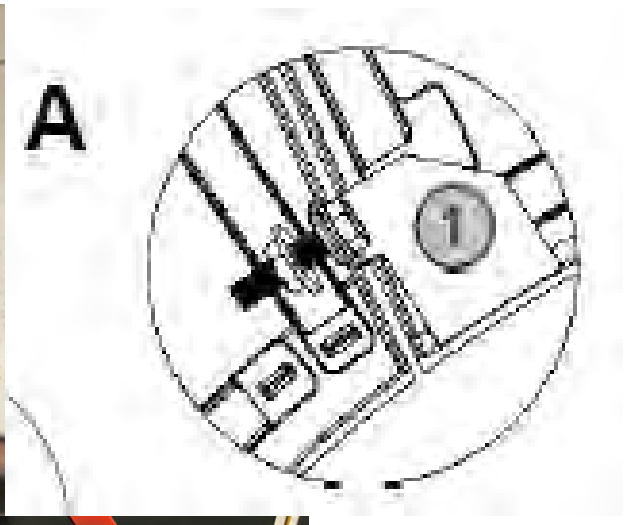
1) This accessory comes with blue "starting" tape to assist in peeling off the tape's red release paper. At times when pulled, this blue section will separate before peeling up part of the red release paper. If an installer does not notice the red release paper did not peel off the tape, that section will not adhere proper to the vehicle.

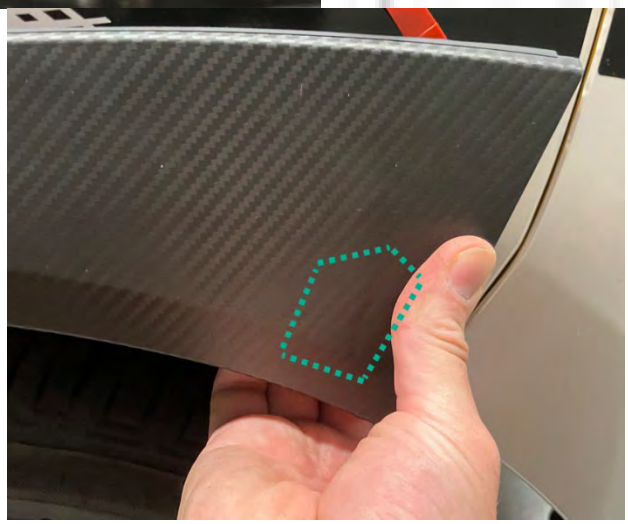


FENDER EFFECTS SEPARATING FROM VEHICLE (Continued)

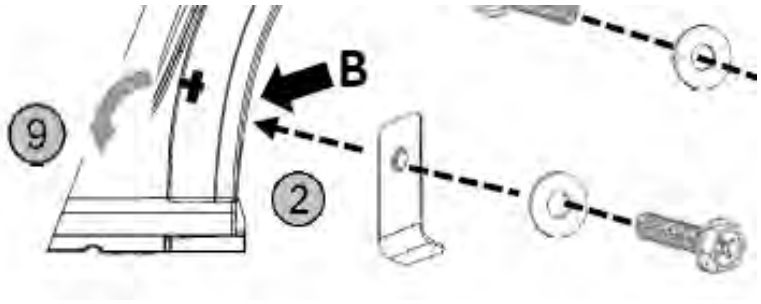
2) When positioning the quarter panel effect into the wheel well, it is possible to flex and deform the bracket. If not corrected, the enlarged gap can cause the quarter panel effect to separate from the vehicle. To realign the bracket, gently squeeze the bracket, quarter panel, and quarter panel effect together before securing bolt.





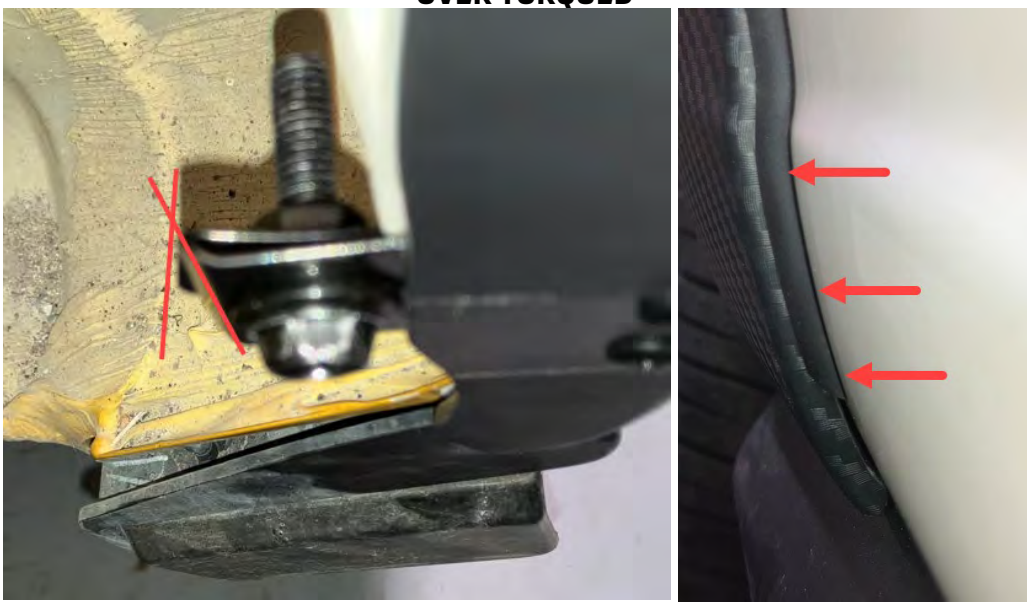


3) When tightening the front bracket on the quarter panel effect, do not over torque the bolt. Over torquing will be deform and misalign the bracket. This deformation pulls the quarter panel effect and separates it from the vehicle. Ensure the bracket is properly aligned and torqued to the 3 Nm, per the IM.

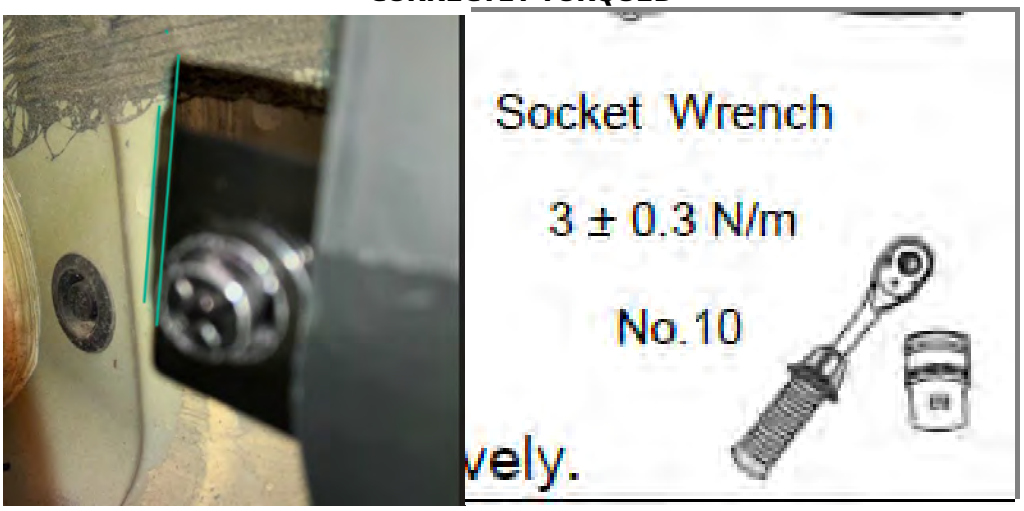


FENDER EFFECTS SEPARATING FROM VEHICLE (Continued)

OVER TORQUED



CORRECTLY TORQUED

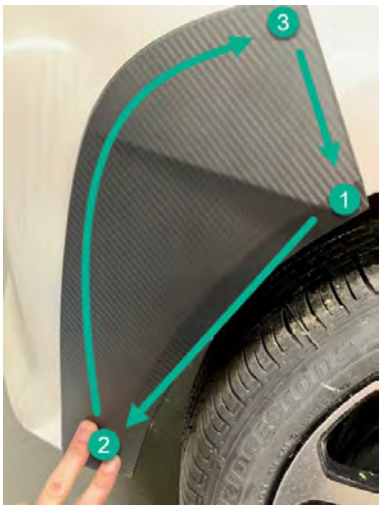


4) When aligning the rear bumper affect, position these points below, in order, to achieve the proper gap and maximum adhesion.

a) Align corner of rear bumper effect to bottom corner of bumper.

b) Align bottom of rear bumper effect tight to inner wheel well and bottom of bumper.

c) Align top corner of rear bumper effect to the top corner of bumper.



FENDER EFFECTS SEPARATING FROM VEHICLE (Continued)

Vehicle accessory fitment

- Check that all bolts are securely torqued, and all clips are fastened securely in place.
- Make sure that double-sided tape is securely attached, and the trim is flushed with vehicle surface.

DISCHARGED 12V ACCESSORY BATTERY

AFFECTED VEHICLES

2023-2024 Outlander Plug-in Hybrid

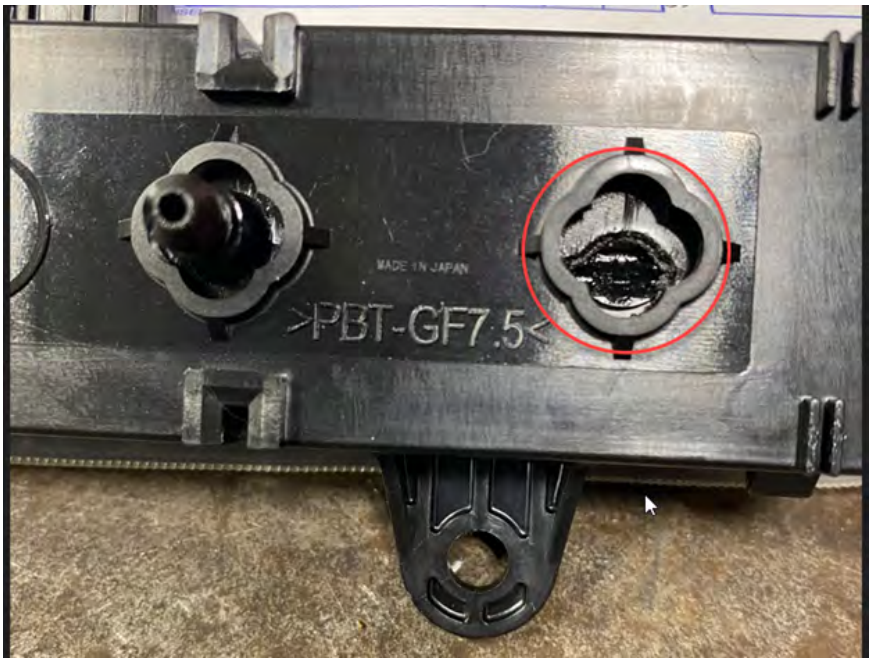
CONCERN

Vehicle is determined to have a discharged 12V accessory battery. After either charging or replacing the 12V battery, the battery quickly discharges and the technician identifies an abnormal draw on the battery.

The technician should disconnect the front passenger seat model and recheck. If the draw diminishes, then inspect the passenger seat switch (refer to image below).

CAUSE

The passenger seat switch may get stuck causing a draw to the 12V system. The solution recommended is to replace PN-6922A242 which should resolve the draw on the battery.



Mitsubishi Motors North America would like to acknowledge John Skill from Bertera Mitsubishi for submitting this informative article. Thank you!

A/C COOLING PERFORMANCE

AFFECTED VEHICLES
2022-2024 Outlander

CONCERN
In the past weeks, Techline has seen an increase in questions about A/C cooling performance. Below is a pressure chart which may be useful to determine what, if any, diagnostic steps may be necessary.

If the system pressure is not within specs, refer to the Symptom Diagnosis section in the Service Manual which provides possible causes and corrections to help technicians restore proper A/C operation.

TEST CONDITION

Item		Settings
Environmental condition	Measurement location	In a shade or indoors
	Temperature	20°C - 50°C (68°F - 122°F)
	Humidity	Relative humidity 30 - 80%
Vehicle body condition	Hood	Fully opened
	Door	Fully open for door, window, and liftgate
Air conditioning condition	Air conditioning switch	ON
	Air volume	Maximum air volume
	Temperature control	MAX COOL
	Air outlet	FACE
	Outside/inside air selection	Air recirculation position
Engine speed		Specified idle speed after warming up
Transmission		N or P

Garage ambient temperature °C (°F)	20 (68)	25 (77)	30 (86)	35 (95)	40 (104)	45 (113)	50 (122)
Compressor high pressure kPa (psi)	788 - 1,402 (114 - 203)	942 - 1,567 (137 - 226)	1,097 - 1,711 (159 - 248)	1,251 - 1,866 (181 - 271)	1,406 - 2,021 (204 - 293)	1,560 - 2,175 (226 - 315)	1,715 - 2,330 (249 - 338)
Compressor low pressure kPa (psi)	128 - 353 (19 - 51)	169 - 394 (24 - 57)	210 - 434 (30 - 63)	250 - 475 (36 - 69)	291 - 516 (42 - 75)	332 - 557 (48 - 81)	373 - 598 (54 - 87)

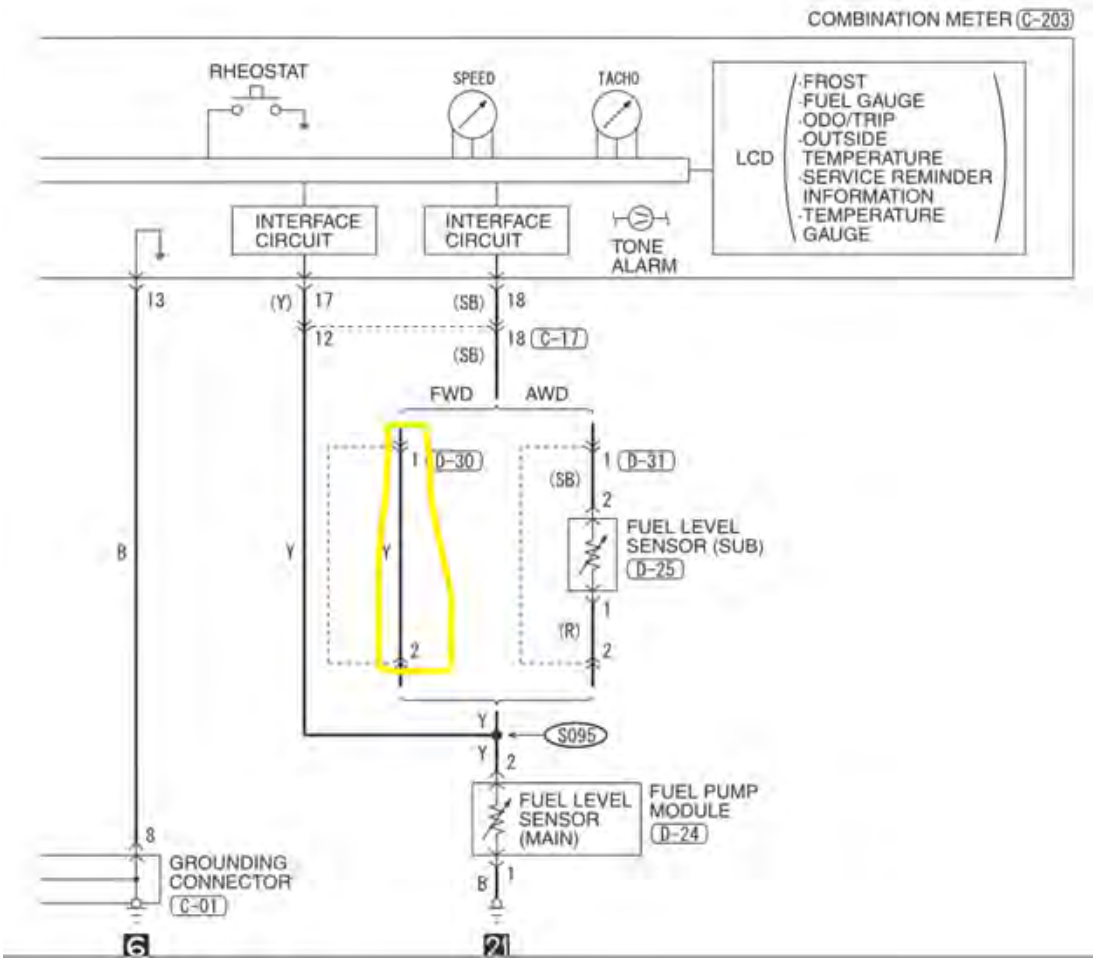
FUEL GAUGE INOPERABLE

AFFECTED VEHICLES
2011-2024 Outlander Sport

CONCERN
Customers may report the fuel gauge does not properly register, if at all.

The Outlander Sport has two separate circuits for the Fuel Level Sensors. If one has been compromised by rodent damage, the gauge will not operate properly.

The FWD model has a jumper in place of the sender that is used on the AWD models (see diagram below). Rodents may get to the connector, chew the wires, causing the gauge failure.



INOPERABLE CAMERA

AFFECTED VEHICLES
2022-2024 Outlander (equipped with Multi Around Monitor)

CONCERN
Customers may complain that the Multi Around View camera on 2022-2024 Outlander is inoperable. The technician should:

- Duplicate the concern
- If duplicated, press the camera button on the IVI until to check all cameras
- Once concern is verified and all DTC scan has been performed, the technician may find no related DTCs and may also find "**Non-equipped System or Communication error "**when viewing printed all DTC list (shown below).
- A "**NC"** may also be seen when viewing the system list
- After duplication and DTC scan, technician should proceeed to the service manual and follow the Symptom Diagnosis found on **page 321** of the **AUDIO, VISUAL & NAVIGATION SYSTEM** in the applicable Service and Owners Publications.
- The technician can also reference **page 319** for the Multi Around Monitor Control Unit **POWER SUPPLY AND GROUND CIRCUIT**.

All DTCs 2024.07.18

System Name	SCC or DVC or Diagnosis database ID	Diagnosis trouble code(s)	Name
ENGINE	ECM_N0000002		No DTCs
TRANSMISSION	CVT_N0000002		No DTCs
SHIFT	PSW_N0000001		No DTCs
EPS / DAST 3	EPS_N0000002		No DTCs
CHASSIS CONTROL	CCM_N0000001		No DTCs
AIR BAG	ACU_N0000001		No DTCs
HVAC	HVAC_A_N0000002		No DTCs
BCM	BCM_N0000004		No DTCs
IPDM E/R	USM_N0000002		No DTCs
METER / M&A (7 inch)	MTR_L_N0000001		No DTCs
HANDS FREE MODULE	HFM_N0000002		No DTCs
Multi Around Monitor (Not equipment)	OPLESS		Non-equipped System or Communication Error
Power liftgate	PBD_N0000001		No DTCs
8ch CAN GATEWAY	CGW_N0000001		No DTCs
OCCUPANT DETECTION	ODS_N0000001		Non-target System
AUDIO AMP.	AUDIO_AMP_N0000001		Non-equipped System or Communication Error
MULTI AV	A_IVI_N0000001		No DTCs
IVC	IVC_N0000001		No DTCs
Wireless charger	WCBS_N0000001		Non-equipped System or Communication Error
ICC/ADAS 2	ADAS_N0000004		No DTCs
LASER/RADAR	RADAR_N0000001		No DTCs
Side radar (Rear left)	SIDE_RADAR_L_N0000001		No DTCs

2/8

TSB/TIN/ATIN/SC/SR REVIEW

Since Tech Talk 280, the following bulletins have been published:

PUBLISH DATE	TSB/ATIN/TIN #	SUBJECT	MODELS
5/31/2024	TIN-24-00-005	CALIFORNIA DEPARTMENT OF MOTOR VEHICLES (DMV) - TAKATA RECALLS	CERTAIN 2004-2007 LANER, 2006-2009 RAIDER, AND 2012-2017 i-MiEV
6/3/2024	TSB-24-37-002	REAR SUSPENSION REMOVAL/INSTALLATION - SERVICE MANUAL REVISION	2023-2024 OUTLANDER PLUG-IN YBRID
	TSB-24-23-004	SPECIAL TOOLS FOR AUTOMATIC TRANSAXLE - SERVICE MANUAL REVISION	2012-2017 LANCER, 2007-2012 AND 2014-2020 OUTLANDER, 2011-2024 OUTLANDER SPORT AND 20182024 ECLIPSE CROSS
	TSB-24-11-002	SPECIAL TOOLS FOR DRIVE BELT REMOVAL - SERVICE MANUAL REVISION	2009-2012 OUTLANDER
6/17/2024	TSB-24-00-003	GENERAL PDI PROCEDURES FOR 2025 OUTLANDER PLUG-IN HYBRID	2025 OUTLANDER PLUG-IN HYBRID
	TSB-24-00-004	TECHNICAL SPECIFICATIONS - 2025 OUTLANDER PLUG-IN HYBRID	2025 OUTLANDER PLUG-IN HYBRID
	TSB-24-00-005	NEW MODEL FEATURES AND SERVICE INFORMATION - 2025 OUTLANDER PLUG-IN HYBRID	2025 OUTLANDER PLUG-IN HYBRID
6/21/2024	TSB-23-33-002REV	STRUT BEARING NOISE - REVISED	2022 OUTLANDER
7/3/2024	SC-24-001REV	LANE KEEP ASSIST REPROGRAM FOR ADAS ECU - SERVICE CAMPAIGN - REVISED	CERTAIN 2022-2023 OUTLANDER
	TIN-24-SC-001REV	LANE KEEP ASSIST REPROGRAM FOR ADAS ECU - SERVICE CAMPAIGN - REVISED	CERTAIN 2022-2023 OUTLANDER
7/15/2024	TIN-24-00-006	NEW YORK DEPARTMENT OF MOTOR VEHICLES (DMV) - TAKATA RECALLS	CERTAIN 2004-2007 LANCER, 2006-2009 RAIDER, AND 2012-2017 i-MiEV
	TIN-24-66-002	FUNCTION SETTING OF FOG LAMPS ON MIRAGE & MIRAGE G4	2021-2024 MIRAGE AND 2021-2024 MIRAGE G4

IMPORTANT

Affected new or used vehicle inventory must be repaired before the vehicle is sold or delivered. Dealers must check their vehicle inventory VINs on the Warranty Superscreen to verify whether the vehicle is involved in a recall campaign.

It is a violation of Federal Law for a dealer to sell or deliver a new motor vehicle or any new / used motor vehicle equipment (including a tire) covered by the notification under a sale or lease until the defect or non-compliance is remedied.

TECHNICAL TRAINING COURSE SCHEDULE

Atlanta Technical Training Center - Southeast Region
801 Interstate West Parkway, Lithia Spring, GA 30122
(770) 732-3000 Airport: Atlanta (ATL)

August '24				
Monday	Tuesday	Wednesday	Thursday	Friday
29	30	31	1	2
	PHEVG2TT	PHEVG2TT	CES	CES
5	6	7	8	9
	EECS	EECS	EECS	EECS
12	13	14	15	16
	ER1	ER1	ER1	CVT F2F
19	20	21	22	23
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
26	27	28	29	30
	ADAS	ADAS	CES	CES

September '24				
Monday	Tuesday	Wednesday	Thursday	Friday
2	3	4	5	6
	CES	CES	ADAS	ADAS
9	10	11	12	13
	ER1	ER1	ER1	CVT F2F
16	17	18	19	20
	EECS	EECS	EECS	EECS
23	24	25	26	27
	PHEVG2TT V-ILT	PHEVG2TT V-ILT	CVT V-ILT	CVT V-ILT
30	1	2	3	4

New Jersey Technical Training Center - Northeast Region
516 Heron Drive, Swedesboro NJ 08085
(856) 467-7100 Airport: Philadelphia (PHL)

August '24				
Monday	Tuesday	Wednesday	Thursday	Friday
29	30	31	1	2
	PHEVG2TT	PHEVG2TT	CES	CES
5	6	7	8	9
	EECS	EECS	EECS	EECS
12	13	14	15	16
	ER1	ER1	ER1	CVT F2F
19	20	21	22	23
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
26	27	28	29	30
	ADAS	ADAS	CES	CES

September '24				
Monday	Tuesday	Wednesday	Thursday	Friday
2	3	4	5	6
	CES	CES	ADAS	ADAS
9	10	11	12	13
	ER1	ER1	ER1	CVT F2F
16	17	18	19	20
	EECS	EECS	EECS	EECS
23	24	25	26	27
	PHEVG2TT V-ILT	PHEVG2TT V-ILT	CVT V-ILT	CVT V-ILT
30	1	2	3	4

Franklin Technical Training Center
1552 Columbia Avenue, Franklin TN 37064
(657) 238-2891 Airport: Nashville (BNA)

August '24				
Monday	Tuesday	Wednesday	Thursday	Friday
29	30	31	1	2
5	6	7	8	9
12	13	14	15	16
19	20	21	22	23
26	27	28	29	30

September '24				
Monday	Tuesday	Wednesday	Thursday	Friday
2	3	4	5	6
	MED4	STV4	EL1	EL1
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27
30	1	2	3	4

Course Title	Days	Code	Prerequisites
Engine & Emission Control Systems (ILT)	4	EECS	ES1W, EL1, STV4, MED4, ME3W
Engine Repair (ILT)	3	ER1	ES1W, EL1, STV4, MED4, ME3W
Climate Control (ILT)	2	CC1	ES1W, EL1, STV4, MED4, ME3W
Plug-In Hybrid Electric Vehicle (Virtual)	2	PHEVG2TT	EL1, STV4, MED4, DCPHEVWT
MEDIC4 (Virtual)	1	MED4	ME3W
STV4 (Virtual)	1	STV4	No Prerequisites
Electrical Systems 1 (Virtual)	2	EL1	ES1W
Advanced Driver Assistance Systems (ILT)	2	ADAS21TT	ES1W, EL1, STV4, MED4, ME3W
Chassis Electrical Systems	2	CES22TT	EL1, STV4, MED4, ME3W, ES1W
CVT OVERHAUL PROCEDURES	1	CVT	STV4, MED4, EL1, ATFW

Classes shaded in Green are (V-ILT) Virtual Instructor Led Training

MMNA technical on site training is not shaded

CVT Overhaul Procedures will be offered in two training formats.
1. CVT V-ILT online instructor-led.
2. CVT F2F in center training.

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Public Relations Department
4031 Aspen Grove Drive, Suite 650
Franklin, TN 37068

www.mitsubishicars.com

MITSUBISHI MOTORS ANNOUNCES MOMENTUM 2030, NORTH AMERICAN FIVE-YEAR BUSINESS PLAN

- Momentum 2030 North America plan defined by four key points:
  - Electrification will advance with a blend of powertrains – hybrid, plug-in hybrid, battery electric
  - One new or completely refreshed vehicle to debut each year between fiscal 2026 and fiscal 2030; new vehicles to be introduced across more segments
  - Dealer-count to increase to cover more sales markets across the U.S.; new-design dealerships to be introduced
  - Technology and innovation will be the hallmark of MMNA's sales, marketing, and customer satisfaction processes
- MMNA reconfirms commitment to its dealer partners and the dealership sales model

FRANKLIN, Tenn., May 16, 2024 – Mitsubishi Motors North America, Inc. (MMNA) today announced details of its forward-looking North American business plan, dubbed "Mitsubishi Motors Momentum 2030", outlining business and product plans that start immediately and run through fiscal-year 2030. The plan was first revealed to the company's dealer partners in a national dealer meeting in Nashville, Tenn., on May 14, and was met with considerable enthusiasm and excitement.

"Mitsubishi Motors is at a pivotal point in North America, charting a bold, clear and attainable plan for our future success in the United States," said Mark Chaffin, MMNA president and CEO, of the plan. "Back in 2018, we started to consider our path forward, and that plan brought us a new headquarters location in Tennessee; new vehicle launches that led to record Internet search results, sales records and brand successes; and outstanding dealer partners winning customer satisfaction awards. Momentum 2030 will build on that, setting the stage for new powertrains and vehicles being introduced, new dealerships being opened, and new technologies being developed to make the shopping and ownership experience faster, easier and more enjoyable."

The path to Momentum 2030 is defined by four key points:

- A path to electrification
- A path to a renewed and expanded product line-up that will strengthen Mitsubishi Motors in North America
- A path to a modernized retail sales model
- A path to network expansion and sales growth

In revealing Momentum 2030 to the company's dealer partners, Mark Chaffin discussed how MMNA will continue its move toward vehicle electrification between now and fiscal 2030, with a vehicle lineup powered by a selection of advanced-technology internal combustion engines, hybrids, plug-in hybrids and battery electrics.

Additionally, Chaffin announced the product highlights that will define the company's showroom lineup going forward: two all-new vehicles to debut into segments in which the company does not currently compete, as well

as a new or completely refreshed vehicle to debut each year between fiscal 2026 and fiscal 2030. By fiscal 2030, MMNA's vehicle lineup in the U.S. will nearly double from today's four vehicles.

A further benefit of Momentum 2030 also will be the boost to Mitsubishi Motors' investment across North America in both people and production, as some vehicles will be produced locally utilizing Alliance assets.

MMNA will be a leader in industry change and evolution. The modernized sales and service model is highlighted by future developments that will see more technology introduced into the sales process, as the brand's new customers skew younger and more tech-savvy.

Looking to the future of the company's retail model, MMNA will expand into new markets around the U.S. in which it does not currently have a retail footprint, in order to make the company's vehicles more accessible to more customers. This is expected to bring an increase in the company's sales numbers between now and 2030. New retail concepts will define the future look and feel of these new facilities.

Chaffin closed the recent dealer meeting by saying, "The next 10 years will be great for this brand. MMC is making a significant investment to ensure our collective future. Momentum 2030 will drive more sales, more service, more Mitsubishi vehicles on the road and more Mitsubishi dealer partners around the country. Yes, this *is* our time, Team Mitsubishi."