



## TECH TALK - VOLUME 270 September - October 2022

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### UPCOMING DATES TO

#### REMEMBER:

- Boss's Day - Oct 17**
- Halloween - Oct 31**
- Thanksgiving - Nov 24**



**Nov 6th: remember to set your clocks back 1 hour.**

### WATCH LIVE AS WE DEBUT THE 2023 OUTLANDER PHEV

Tune in live on October 12 at 4 p.m. PST / 6 p.m. CST / 7 p.m. EST for the exclusive YouTube debut of the most anticipated PHEV SUV of the year. Watch accomplished power, audacious style, and bold capability come together so you can go all out.

#### CONFIDENCE WHEREVER YOU GO

Experience all the energy of our rally origins, harnessed in "ready-for-anything" Super All-Wheel Control<sup>2</sup> (S-AWC) for effortless handling. Plus, exceptional safety features and class-leading limited powertrain warranty.

#### BOLD AND PREMIUM DESIGN

Redesigned powerful proportions, with horizontal accents and chiseled lines, conjure an audacious image with a dash of dramatic flair. Inside, endlessly refined comfort and intuitive technology await.

#### ELECTRIFY YOUR RIDE

Pairing the range of a combustion engine with the low carbon footprint of innovative twin electric motors for electric-fueled 64 MPGe,<sup>3</sup> you'll stay ahead of the energy curve while you out-pace the competition.

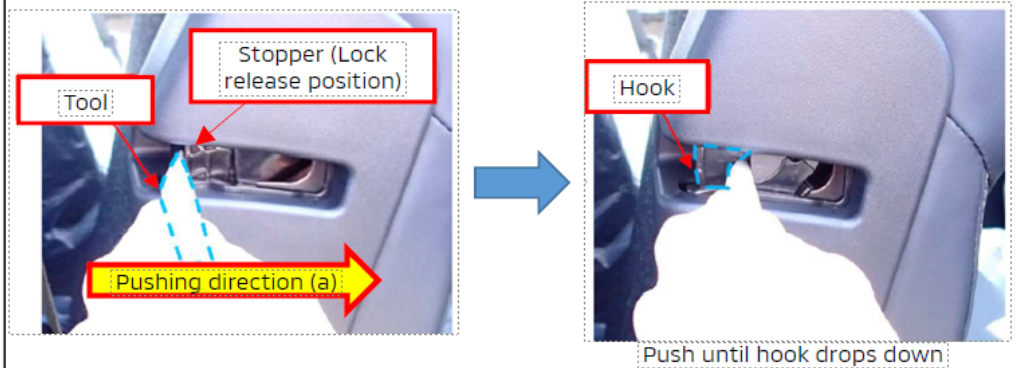
## TECHNICAL INFORMATION

### Rattle Noise from 2nd Row Seat Back Latch -Outlander & Outlander PHEV

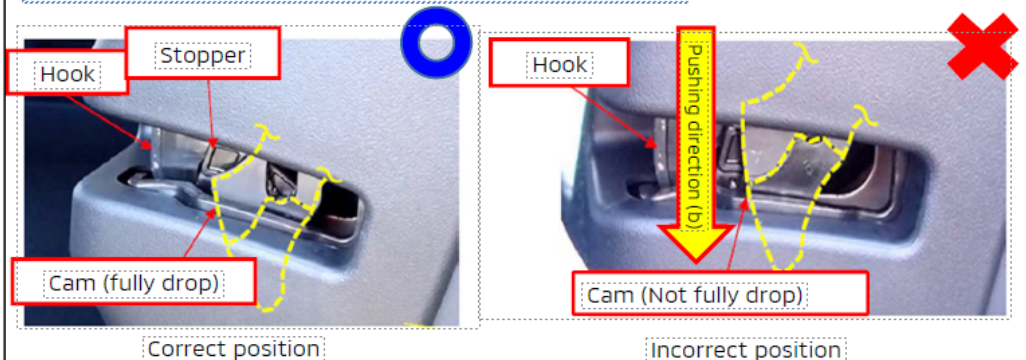
When you hear a rattle noise from 2nd row seat back of the 5 seat Outlander or Outlander PHEV, there might be a free play of seat back latch. In this case, the symptom can be improved by following the procedure below.



Step 1. Use a tool to push the stopper to direction (a) until the hook drops into the bottom.

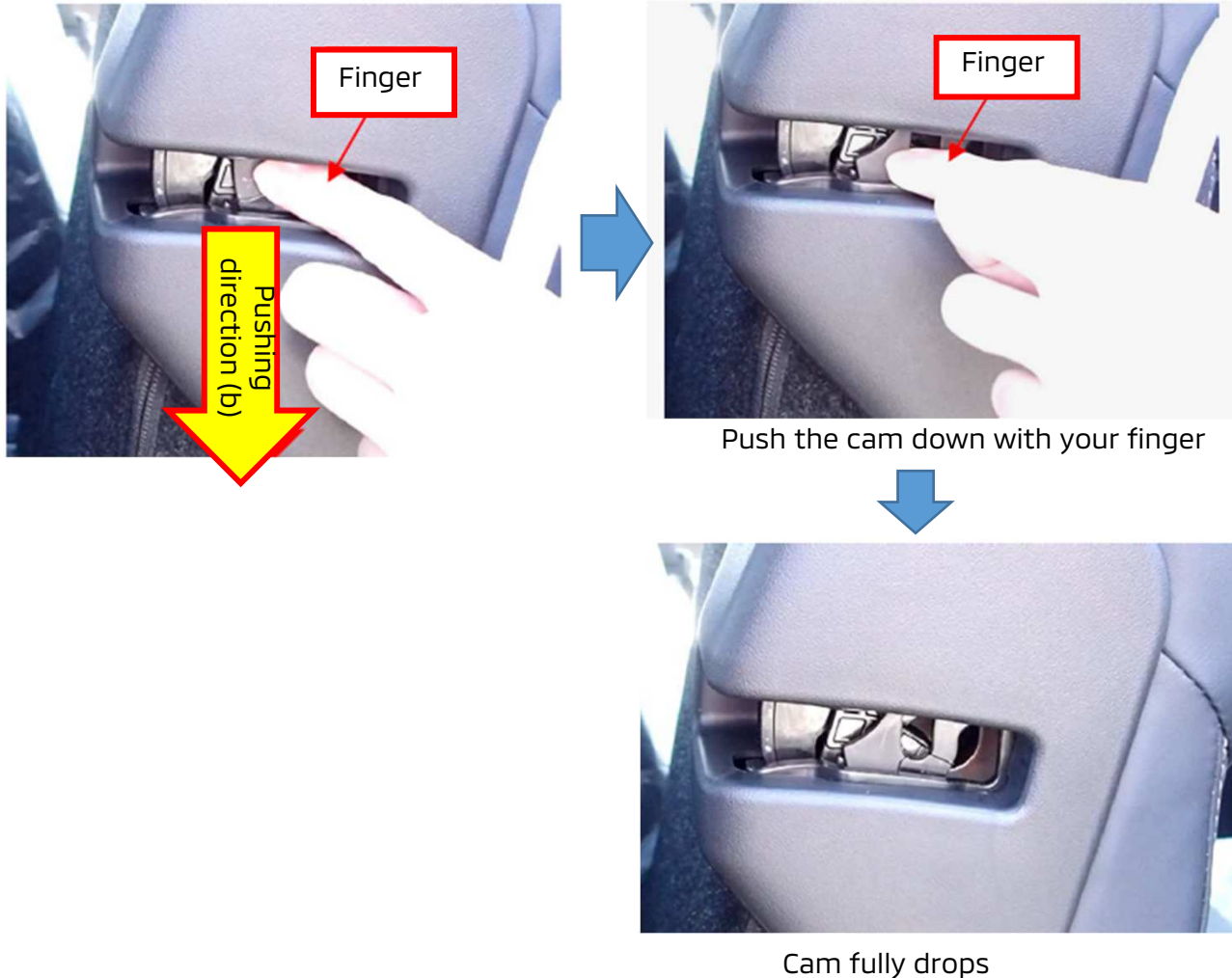


Step 2. Check if the cam fully drops into the correct position.



### Rattle Noise from 2nd Row Seat Back Latch -Outlander & Outlander PHEV (Continued)

Step 3. If the cam does not drop into the correct position, push the cam to direction (b) using your finger until the cam fully drops.



Step 4. Unlock the seat lever on the seat shoulder.

After repeating Step 1~4 approximately 10 times, check to confirm that the cam drops into the correct position by conducting Step 1 for each side of seat back latch.

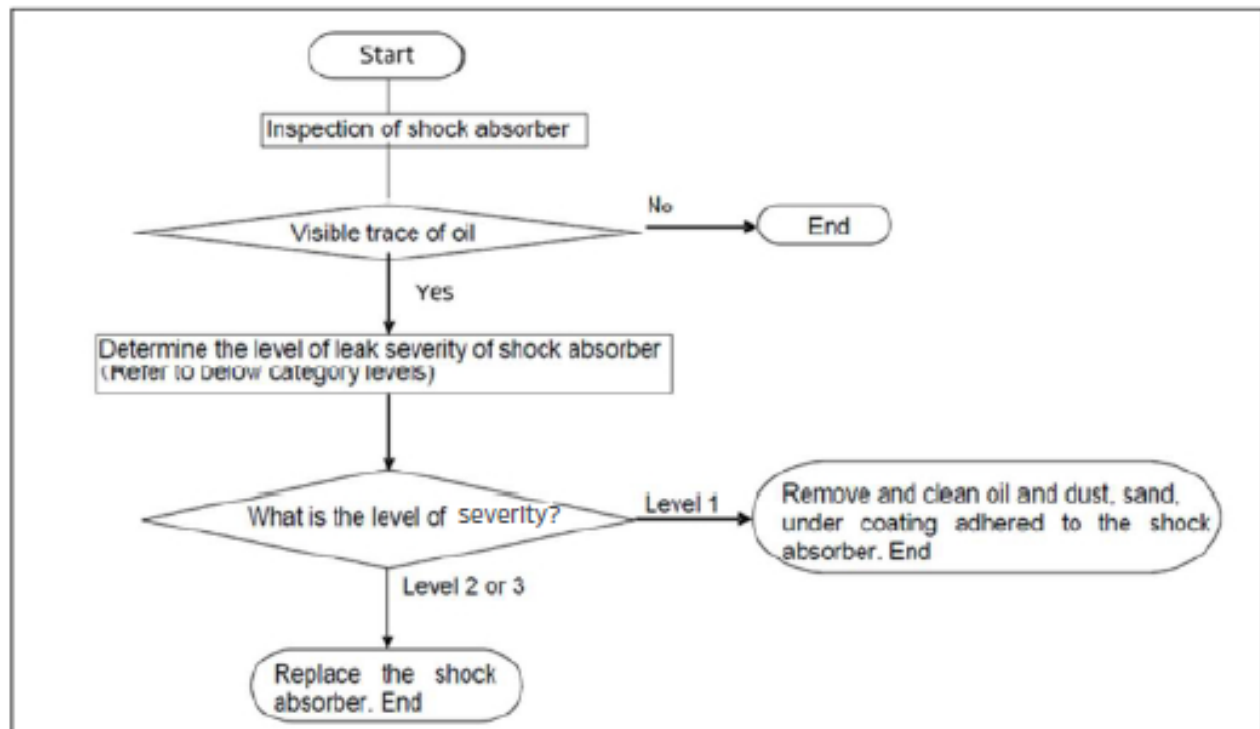
When you return the seat to its initial position after finishing this procedure, do not forget to unlock the seat lever on the seat shoulder.

## Guideline for Inspection of Shock Absorber Oil Leak Complaint - All Models

Shock absorber oil leak is a known issue in some markets. However, during the investigation of returned parts, it was found that approximately one third of all returned shock absorbers showed no functional defects. This fact shows that a good number of healthy shock absorbers are mistakenly replaced under warranty due to the lack of clear judgment criteria for the oil leak. This article introduces the criteria judgment of oil leakage from a shock absorber.


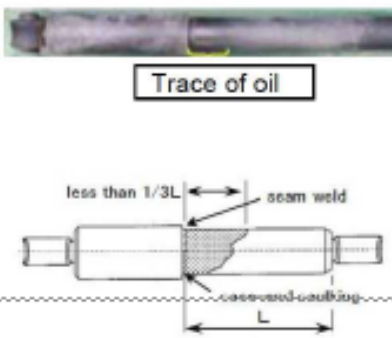
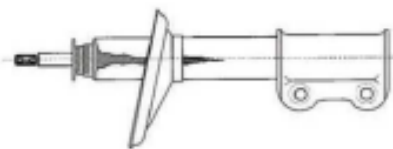

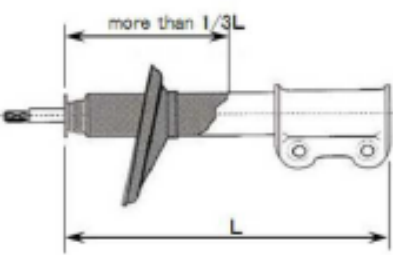
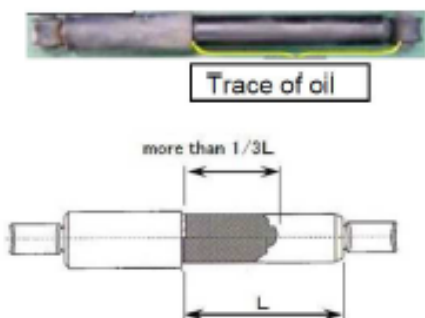
Inspection Guideline:

The diagnostic flowchart (below) along with guidelines will help to perform a proper shock absorber oil leak judgment. When inspecting the shock absorbers, follow the flowchart below, and determine the level of severity according to the visible oil adhesion. (See next page for the guideline of level 1, 2, 3 of oil leak severity)



### Guideline for Inspection of Shock Absorber Oil Leak Complaint - All Models (Continued)

Guideline for categorization of oil leak severity:

	Shock absorber with spring sheet	Shock absorber without spring sheet	Remarks
Level 1, No Problem			<p>Trace of oil is less than 1/3 of case length, and generally seen all around the tube.</p> <p><b>This level of oil trace pattern is as can be expected, and does not suggest progressive oil leak.</b></p>
Level 2		 <p>Note: Less severe oil drip can also be seen on new vehicles, in such case it is likely assembly oil (low mileage).</p>	<p>Clear Oil drippage. (Irrelevant to length)</p> <p><b>Trace of oil of this pattern suggests a starting leak in a short span.</b></p>
Level 3			<p>Trace of oil is more than 1/3 of case length.</p> <p><b>Trace of oil of this level clearly indicating leak is progressing and the seal is faulty.</b></p>

## Inspection Method and Standard for Wheel Cylinder (Drum Brakes) Leakage

This article introduces the inspection method and standard for wheel cylinder leakage.

Affected Models: Vehicles fitted with drum brakes (leading/trailing brake).

### Inspection Method

- ✓ After wiping off any oil/fluid around the wheel cylinder, re-assemble the drum brake.
- ✓ Next, depress the brake pedal 5 times with 50kgf (kilograms of force)/110.23 pound-force) while idling.
- ✓ Finally, remove the drum brake again and check for the presence of oil/fluid around the wheel cylinder using the below Inspection Standard.

#### <Inspection Standard>

1. The normal condition is that the wheel cylinder should be "dry" and without leaks.

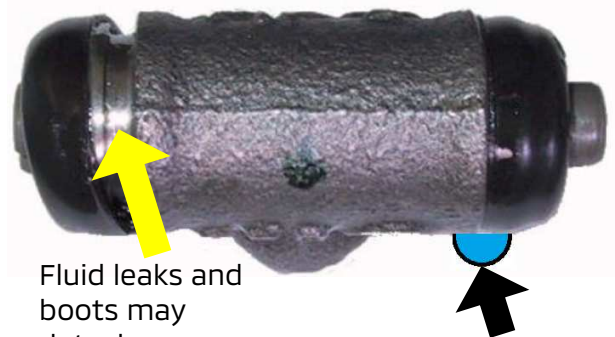
- Rubber Boots should be dry.
- However, in some cases there may be a presence of rust preventing grease around the mating surface between the boots and the wheel cylinder.



There may be bleeding of the rust prevention grease.

2. The wheel cylinder has leaked and needs to be replaced.

- In this case brake fluid will be present, the boots and/or wheel cylinder will be wet.
- In some cases the boots may even detach from the wheel cylinder due to brake fluid leakage.



Fluid leaks and boots may detach.

Drops of fluid will be present.

#### <Notice Information>

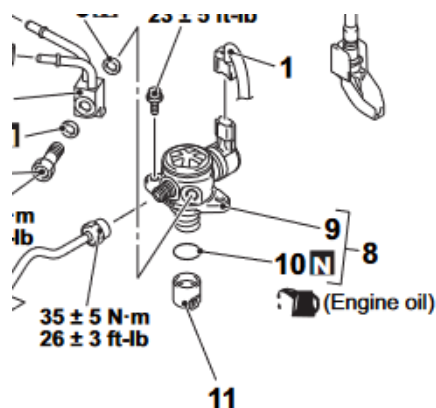
- When you flip the boots, there may be rust-preventing grease inside, this is normal and not a leak.
- If the brake fluid is leaking, there will be a large amount and the grease may also flow.
- Please refer to the maintenance manual together with this inspection procedure and replace as required.

## Data List Reference Table as a Diagnostic Tool - All Models

It can be difficult to diagnose some concerns when DTCs are not present, or when the diagnostic steps in the service manual for a given DTC hasn't led to a diagnostic conclusion. The ECU data lists available in MUT 3 SE can be a valuable tool in diagnosing those concerns. The Service Manual provides Data List Reference Tables for most ECUs which can be used for comparison against the live data viewed with MUT 3 SE. Any values that fall outside of parameters given in the Data List Reference Tables in the service manual should be investigated by the technician. A like equipped known good vehicle in a like environment under the same operating conditions can also be used for comparison against the data seen on an incident vehicle. The lists in the Service Manual provides the Item Number (as seen on the scan tool), the Check Item (the name of the item), the Check Condition (required operation to perform a check), and the Normal Condition (the status for the item seen on the scan tool). Comparing the ECU Data List on the Scan Tool against the Data List Reference Table in the Service Manual, or a known good vehicle, is perhaps one of the most useful and under-utilized diagnostic tools in our industry.

## Reminder During Engine Replacement - Eclipse Cross (Group 13 FUEL)

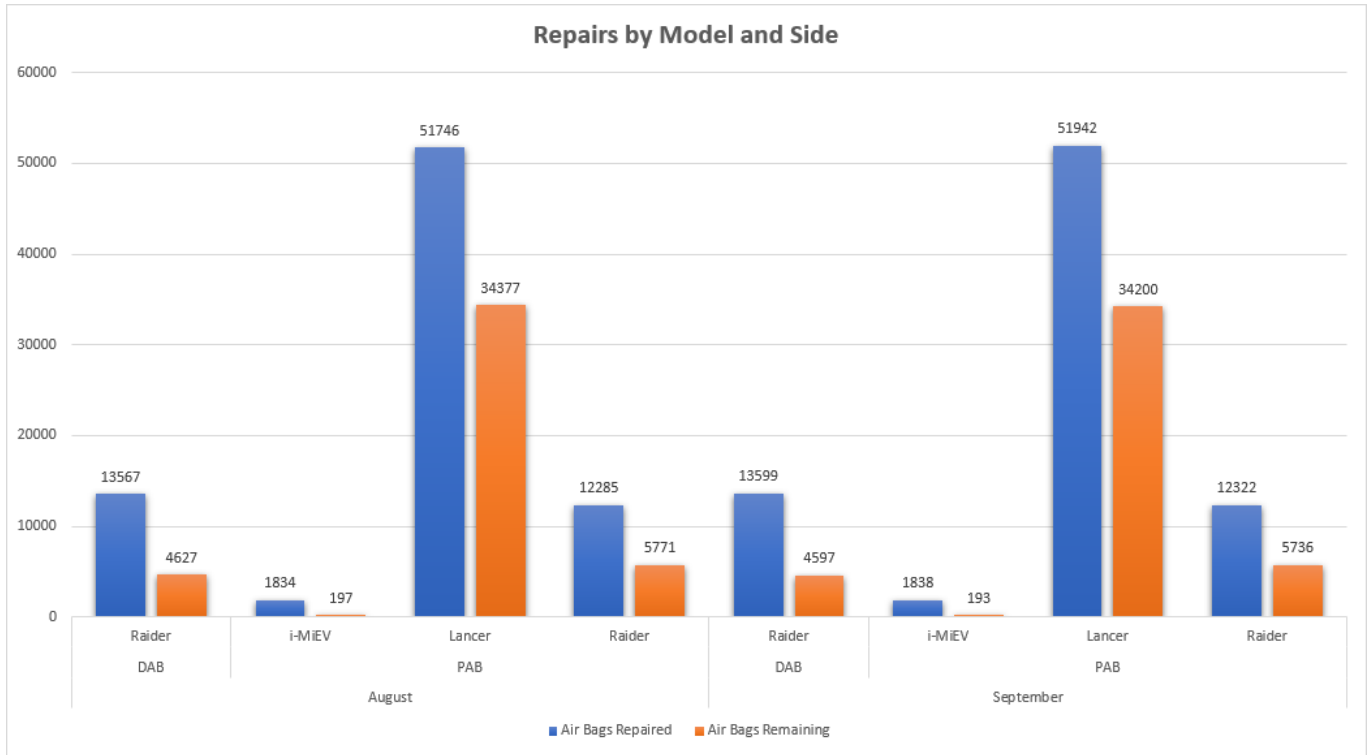
When replacing an engine in an Eclipse Cross with the high pressure fuel pump, be sure to move the tappet to the new engine when swapping parts from the old engine, if not removed from the old engine, the tech will get a P0087 low fuel pressure code. See attached photo.



11. Fuel pump (high pressure) tappet



## TAKATA RECALL KEY STATISTICS



Month	DAB Remaining	PAB Remaining
August	4,627	40,345
September	4,597	40,129
<b>Repaired</b>	<b>30</b>	<b>216</b>

### TOP TWO DEALERS FOR TAKATA RECALL COMPLETION:

**SUNSET MITSUBISHI  
and  
WEST HOUSTON MITSUBISHI**

***CONGRATULATIONS!***





## Atlanta Technical Training Center - Southeast Region

801 Interstate West Parkway, Lithia Spring, GA 30122  
(770) 732-3000 Airport: Atlanta (ATL)

October '22				
Monday	Tuesday	Wednesday	Thursday	Friday
3	4	5	6	7
10	11	12	13	14
17	18	19	20	21
24	25	26	27	28
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
31	1	2	3	4
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT

November '22				
Monday	Tuesday	Wednesday	Thursday	Friday
31	1	2	3	4
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
7	8	9	10	11
			PHEVG2TT	PHEVG2TT
14	15	16	17	18
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
21	22	23	24	25
28	29	30	1	2
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT

## Dallas Technical Training Center - Central/West Region

8100 Mesquite Bend Drive, Irving TX 75063  
(972) 401-5930 Airport: Dallas-Fort Worth (DFW)

October '22				
Monday	Tuesday	Wednesday	Thursday	Friday
3	4	5	6	7
10	11	12	13	14
			ADASTT	ADASTT
17	18	19	20	21
24	25	26	27	28
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
31	1	2	3	4
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT

November '22				
Monday	Tuesday	Wednesday	Thursday	Friday
31	1	2	3	4
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
7	8	9	10	11
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
14	15	16	17	18
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
21	22	23	24	25
28	29	30	1	2
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT

## New Jersey Technical Training Center - Northeast Region

516 Heron Drive, Swedesboro NJ 08085  
(856) 467-7100 Airport: Philadelphia (PHL)

October '22				
Monday	Tuesday	Wednesday	Thursday	Friday
3	4	5	6	7
10	11	12	13	14
			ADASTT	ADASTT
17	18	19	20	21
			ADASTT	ADASTT
24	25	26	27	28
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
31	1	2	3	4
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT

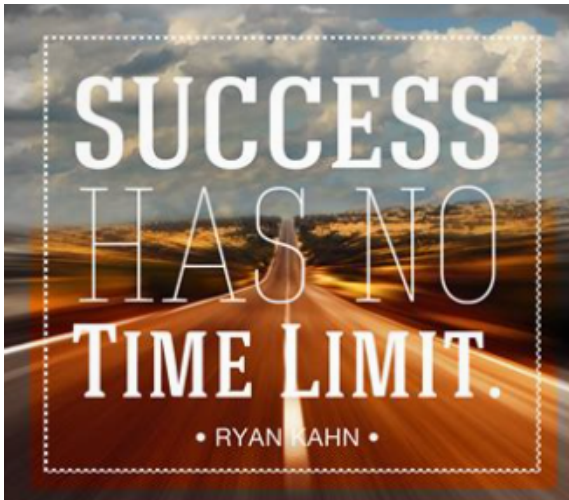
November '22				
Monday	Tuesday	Wednesday	Thursday	Friday
31	1	2	3	4
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
7	8	9	10	11
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
14	15	16	17	18
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT
21	22	23	24	25
28	29	30	1	2
	PHEVG2TT	PHEVG2TT	PHEVG2TT	PHEVG2TT

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
Manual Transaxles & Transfer Cases (ILT)	3	MTT2	ES1W, EL1, STV4, MED4, ME3W
Plug-In Hybrid Electric Vehicle (Virtual)	2	PHEVG2TT	EL1, STV4, MED4, DGPHEVWT
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
New Model Training 2022 Outlander (Virtual)	1	NM221TT	NM221W

**Note: Green = Virtual Course / White = Face to Face Instructor Led Training**



## QUOTES



## MMNA WOULD LIKE TO HEAR FROM YOU

If you have technical information or an idea to share, please let us know. Send an email to: [Servicesupport@mmsa.com](mailto:Servicesupport@mmsa.com). Be sure to include: Your name, title, and dealer name.





## TSB/TIN/ATIN REVIEW

Since Tech Talk 269, the following bulletins have been published:

PUBLISH DATE	TSB/ATIN/TIN #	SUBJECT	MODELS
7/21/2022	<a href="#">TIN-22-00-013</a>	VIRGINIA DEPARTMENT OF MOTOR VEHICLES LETTERHEAD - TAKATA RECALLS	Certain 2004-07 Lancer, 2006-09 Raider, and 2012-17 i-MiEV
7/29/2022	<a href="#">TSB-22-51-001</a>	UPDATE TO EXTERIOR CONTENT - SERVICE MANUAL REVISION	All
	<a href="#">TSB-22-13-003</a>	ECM REPLACEMENT PROCEDURE - SERVICE MANUAL REVISION	2022 Outlander
	<a href="#">TSB-22-16-003</a>	UPDATE TO ENGINE ELECTRICAL CONTENT - SERVICE MANUAL REVISION	2018-22 Eclipse Cross
	<a href="#">TSB-22-42B-001</a>	UPDATE TO KEYLESS OPERATION SYSTEM (KOS) CONTENT - SERVICE MANUAL REVISION	2022 Eclipse Cross
8/1/2022	<a href="#">TIN-22-SR-003A</a>	IMPROPER OPERATION OF AUDIO UNIT - SAFETY RECALL CAMPAIGN	Certain 2022 Outlander
8/10/2022	<a href="#">TIN-22-SR-004</a>	INAPPROPRIATE CVT ECU SOFTWARE PROGRAMMING - SAFETY RECALL CAMPAIGN	Certain 2019-22 Outlander Sport vehicles with a CVT and mechanical key
	<a href="#">SR-22-004</a>	INAPPROPRIATE CVT ECU SOFTWARE PROGRAMMING - SAFETY RECALL CAMPAIGN	Certain 2019-2022 Outlander Sport vehicles built between 7/31/2018 - 5/11/2022 equipped with CVT and mechanical key ignition system
8/19/2022	<a href="#">TSB-22-51-002</a>	CRACK ON REAR (AIR) SPOILER	2021-22 Mirage and Mirage G4
	<a href="#">TIN-22-54-005</a>	ACCESSORY PARTS PRECAUTION DURING HANDLING PRIOR AND DURING INSTALLATION	Outlander and Eclipse Cross
	<a href="#">TIN-22-SR-004A</a>	INAPPROPRIATE CVT ECU SOFTWARE PROGRAMMING - SAFETY RECALL CAMPAIGN	Certain 2019-22 Outlander Sport
8/31/2022	<a href="#">TSB-22-52A-004</a>	WHEEL VIBRATION INVESTIGATION - REVISED	2022 Outlander and Eclipse Cross
	<a href="#">TIN-22-13-001</a>	PHOTO REQUIRED CONDITION (PRC) FOR OIL CONTROL VALVE REPLACEMENT (PN 1028A34)	2018-23 Eclipse Cross
9/9/2022	<a href="#">TSB-22-55-002</a>	A/C UNINTENTIONALLY TURNS OFF	2022 Outlander
9/19/2022	<a href="#">TIN-22-00-014</a>	SOUTH CAROLINA DEPARTMENT OF PUBLIC SAFETY LETTERHEAD - TAKATA RECALLS	Certain 2004-07 Lancer, 2006-09 Raider, and 2012-17 i-MiEV

### 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.



## NEWS & NOTES



Click the image to read full article.

**What's New for 2023:** click the image to find out.



As people evolve, so does technology to fit their needs. It's what's led Mitsubishi Motors to stand for innovative change for over **40 years in North America**. Inspired to look beyond the obvious, we create technology that breaks new ground to keep us all moving forward, so you can be ready for the road ahead. Want to learn more about where we've been? Click the image above.



### History of Daylight Savings Time

On the first Sunday in November millions of Americans turn their clocks back 1 hour to mark the end of Daylight Savings Time (DST), an annual practice that has its roots in transportation. Despite DST's more than 50 years of nearly uniform observance since 1966, 29 states introduced legislation between 2015 and 2019 to abolish the twice-yearly switching of clocks. In May 2019, for example, Tennessee and Washington's governors signed bills to extend DST year round. Several states in New England made similar proposals with one additional condition: they will only change to year-round DST if their neighboring states do the same, thereby avoiding the economic and transportation repercussions of neighboring states having different local times. The authority to change DST, however, ultimately lies with the Department of Transportation, a power it has held since its foundation in 1966.

Learn more at: <https://www.bts.gov/geospatial/daylight-savings-time>

