

In This Issue

• Vehicle Technical Info	page 1
• Spotlight on CSI	page 10
• Training News	page 11
• Techline Information	page 12
MEDIC Information	page 12
• Bulletin Review	page 12

Vehicle Technical Info

NOTE: The $\not\sim$ mark indicates an article is being repeated from a previous issue of Tech Talk due to the subject's importance.

WANTED!! TIPS FOR TECHNICIANS -**BY TECHNICIANS**

Have you as a technician learned something new while fixing a customer vehicle? Or found a solution to a perplexing problem? If you **have**, and think it would be helpful to other technicians, MMNA would like to hear from you! Send your tips, along with any pertinent vehicle details, your name, job title, and dealer name, to: **servicesupport@mmsa.com**.

We may publish your advice in Tech Talk, and give you credit for your tip! Together, we can help each other achieve the highest customer satisfaction by sharing our knowledge with other technicians.

REMINDER: 2019 AFTERSALES DEALER RECOGNITION PROGRAM ENDS 12/31/2019

MMNA would like to remind all dealer aftersales personnel and technicians that the 2019 Aftersales Dealer Recognition Program will be coming to a close at the end of the year.

In order to receive certification for 2019, all participating dealer personnel must schedule and complete their required Instructor Led Training (ILT) and Web-Based Training (WBT) courses before December 31, 2019.

IMPORTANT: Please note that in order for MMNA to receive Technician ASE certification status, technicians must access their ASE profile and grant permission to allow MMNA visibility of accomplishments.

For more details, refer to the "2019 Aftersales Certification Program & Rules" on the MDL, under service / tech training / Dealer Recognition Programs. Or contact your District Parts and Service Manager.

GROUP 00 - General

<u>DTC, FREEZE FRAME, AND SUPERSCREEN</u> <u>DOCUMENTATION REQUIREMENTS</u> – All Models and Years.

As a reminder, **ALL** repairs that involve an illuminated Service Light for any vehicle system require supporting documentation of the DTC(s) and Freeze Frame data (if available) from the Multi-Use Tester (MUT), as well as a print-out of the Vehicle Information Screen (Superscreen). Refer to Warranty Bulletin WB 2019-003 for additional details. This bulletin is available on MDL, under: **service / warranty central / 12. Warranty Bulletins.**

It is also reprinted later in this Tech Talk.



GROUP 23 - Automatic Transmission

<u>CVT WILL NOT SHIFT OUT OF PARK, DTC</u> <u>P0705, ETACS FUSE #18 (7.5A) BLOWN, SRS</u> <u>LIGHT ON</u> – 2012 & newer Outlander Sport/RVR.

Customers may complain that they cannot shift out of "P" (PARK), transmission warning light is ON, selector lever indication (P, R, N, D) is not displayed on the instrument panel screen, and reverse camera is ON (even though selector lever is in "P"). This condition may be occurring intermittently or may be present all the time. Upon diagnosis, you may find DTC PO705 present in the TCM, and C1747 present in the FCM (for 18MY and newer vehicles with FCM).







In other cases, you might have additionally the SRS warning light ON due to DTC B1477 in the SRS ECU, audio display inoperative (black screen), ETACS fuse #18 (7.5A) blown and/or fuse #16 blown (10A).

The above symptoms could occur on vehicles equipped with auto-dimming (anti-dazzling) inside rearview mirror due to a short in its electrical connector. The auto-dimming mirror is using the reverse signal from the CVT to disable the dimming in the mirror when the driver is backing up. The short circuit in the connector might occur due to various reasons:

1) Connector damage after windshield or inside mirror replacement.



2) Pins are backed out due to objects hanging on the mirror and pulling the wiring harness

3) Metal parts or strands from objects such as necklaces, beads, etc., that are suspended on the mirror, are getting in the connector.



Depending on the trim level the inside mirror connectors will vary. Some vehicles will have a universal garage door opener integrated into the mirror and will have the connector shown below.



Others will only have the auto-dimming function and will have this connector below.



When working on vehicles showing some of the above symptoms, be sure to inspect the inside mirror connector. Use the electrical circuit diagram in the Service Manual for the automatic anti-dazzling mirror, Group 90, for further details.

MMNA has seen cases where multiple parts, such as: TCM, ETACS, Inhibitor (range) switch, and others were replaced unnecessarily.

TT-246-23-001 also talks about the selector lever not coming out of park. However, the root cause is a sticking shift lock solenoid, usually due to a spilled sugary drink.



<u>GROUP 35 - Brake AND</u> <u>GROUP 42A - Body</u>

<u>STOPLIGHT SWITCH RELATED DTCs (C1000,</u> <u>B1136, P0703)</u> – 2011 & newer Outlander Sport/RVR.

If you should encounter stoplight switch related DTCs (C1000, B1136, P0703), make sure you check the following items BEFORE following the relevant DTC diagnostic tree in the Service Manual.

1) Check CAN-Bus line operation.

NOTE: The CAN Bus line check is essential. It is the first step when diagnosing all electrical concerns.



2) Check stoplight switch adjustment.

(An out of adjustment stoplight switch can cause other concerns and DTCs.) Refer to Group 35A, Brake Pedal inspection in the Service Manual. (See the following illustrations.)



For stoplight switch Continuity No continuity $3.6 \pm 0.4 \text{ mm}$ $(0.14 \pm 0.01 \text{ in})$ For cruise control No continuity Continuity $4.5 \pm 0.5 \text{ mm}$ $(0.18 \pm 0.01 \text{ in})$ 3) Make sure the LH and RH rear combination lamp assemblies are genuine parts and not aftermarket. (Only Genuine Mitsubishi parts guarantee that the LED circuitry has the correct specifications and electrical parameters. In addition, aftermarket parts are not covered under warranty)

The original parts are made by "Stanley" (see following examples).





Some aftermarket parts are made by TYC and Seanlty (see example below of a "TYC" part).



GROUP 35C - Active Stability Control

TT =

DTC C1752: FCM MODULE TEMPERATURE

<u>OUT OF RANGE</u> – 2018 & newer Outlander Sport/RVR.

When the Forward Collision Mitigation (FCM) module behind the windshield becomes too hot or too cold due to weather conditions, it might become temporarily disabled. This is not a malfunction, but a designed characteristic of the FCM system. When FCM temperature is out of range*, the following happens:

1) The system will turn off.

2) The indicator shown below will illuminate.



3) The message, "CAMERA TEMPORARILY NOT AVAILABLE" will display on the instrument panel.



4) DTC C1752 will be set in the FCM module to mark the event and not to indicate a malfunction.

When the FCM temperature goes back in range, the system will automatically return to operation and DTC C1752 will remain stored in the FCM module.

There is no need to replace the FCM module for DTC C1752 if the system is operational when temperature is in range**.

* Out of range FCM temperature is below -40°F and above 212°F (see Group 35C > diagnostic trouble code chart > C1752 in the Service Manual)

** FCM current temperature could be checked in FCM/LDW/AHB > Data List > Item #2 (ECU temperature)



GROUP 42A - Body

TIN-19-42A-001: TEMPORARY PROCESS REVISION FOR 2020 OUTLANDER SPORT TAILGATE STRUT POPPING NOISE TSB – 2020 Outlander Sport/RVR.

TIN-19-42A-001 was released recently and states:

"Effective on your next transport or delivery of new 2020 MY Outlander Sport vehicles, it is no longer necessary to complete bracket adjustment for the tailgate strut popping noise, and/or to check for the grease pen mark on the brackets.

All units in future shipments to dealers will have been countermeasured at the POE or at the manufacturing plant.

Nevertheless, when completing PDI on any new 2020 MY Outlander Sport, listen for any popping noise when opening or closing the tailgate. If you encounter a vehicle that exhibits the noise, please contact Techline at 800-446-6064.

MMNA will be revising TSB-19-42A-008 in the near future to reflect the latest information."



<u>GROUP 52B - Supplemental Restraint</u> System (SRS)

<u>SRS LIGHT ON - B1558 & B1BBC FOR</u> <u>NEGATIVE WEIGHT ON FRONT PASSENGER</u> <u>SEAT</u> – 2011-18 Outlander Sport/RVR.

NOTE ON OCM DTC LOGIC: Both passenger-seat and driver-seat related SRS DTCs are set in the Occupant Classification Module (OCM) under the passenger seat. Each passenger seat DTC set in the OCM sets an additional, generic DTC in the SRS ECU – B1558. Each driver seat DTC set in the OCM sets two additional generic DTCs in the SRS ECU – B1556 and B1558.

B1BBC is one of the possible DTCs that could set in the OCM. It sets when a negative weight is being detected on the passenger seat sensors for 10 minutes or more. (B1BBC will cause B1558 to set in the SRS ECU). Below are some situations in which the passenger seat could be pushed upwards, resulting in a negative weight detection and B1BBC.

1) Large object is placed under the front passenger seat and is pushing it upwards.



2) Reclined front passenger seat back interferes with the rear seat cushion.



3) Reclined front passenger seat back interferes with the rear seat back (folded flat position).



4) Front passenger seat back interferes with passenger in back seat.



5) Front passenger seat back interferes with child safety seat installed in rear seat.



TT =

<u> GROUP 54 - Chassis Electrical</u>

DEW CONDENSATION IN HEADLIGHTS AND TAILLIGHTS – All models and Years.

Headlights and tailights have been replaced under warranty with reports of moisture or fogging inside the lights. In many cases, no abnormality was found in the returned parts.

MMNA would like to remind dealers to review TSB-15-54-005, "Dew Condensation in Headlights and Taillights" for a detailed explanation of normal dew condensation in headlights and taillights, which is a natural occurrence. Then, a part should **only** be replaced after determining there is an issue beyond normal dew condensation.

GROUP 60 - Recalls

ATIN-19-SR-002-A: I-MIEV BRAKE VACUUM PUMP SAFETY RECALL CAMPAIGN – 2012-2017 i-MiEV.

ATIN-19-SR-002-A was released recently and states:

"On November 8, 2019, MMNA submitted to the National Highway Traffic Safety Administration (NHTSA) a Defect Information Report regarding certain 2012-2017 i-MiEV vehicles.

Due to the design of the brake vacuum pump, water may penetrate the brake vacuum pump, causing corrosion. If sufficient corrosion occurs, the brake vacuum pump may become inoperable. If the brake vacuum pump becomes inoperable, this may result in increased stopping distances, which can increase the risk of a crash.

You will be notified again when additional updates become available. In the event you receive any direct customer inquiries regarding this issue, please refer them to the MMNA Customer Relations Hotline at (888) 648-7820. We appreciate your patience while we make the necessary preparations to launch this recall."

IMPORTANT

Affected new or used inventory vehicles must be repaired before the vehicle is sold/delivered. Dealers must check their inventory vehicles' VINs on the Warranty Superscreen to verify whether the vehicle is involved in this recall campaign. It is a violation of Federal law for a dealer to sell/deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by the notification under a sale or lease until the defect or noncompliance is remedied.

_____ *TT* =



2019 MITSUBISHI MOTORS LAS VEGAS BOWL: December 21, 2019

Save the date for the 2019 Mitsubishi Motors Las Vegas Bowl!

December 21, 2019 4:30 pm PST Sam Boyd Stadium, Las Vegas, NV

Catch the televised game during primetime on ABC, featuring opponents from the Pac-12 and Mountain West Conferences.

2018 Mitsubishi Las Vegas Bowl Sweepstakes Winner:

Below: In 2018, Andy Fidler of New Jersey was the winner of Mitsubishi's Ultimate Vegas Tailgate Sweepstakes. He and his 3 children attended the game on an all-expenses paid trip to watch last year's match between the Fresno State Bulldogs and Arizona State Sun Devils.



The Warranty Bulletin below is referenced in an article on page 1 of this Tech Talk.



WARRANTY BULLETIN

DTC France France and Comer	Warranty Bulletin Application				
DTC, Freeze Frame, and Super	USA	Canada	P. Rico		
Screen Documentation	x		x		
Requirements	Issue Date	Aug	. 21, 2018		
Star 1 San Child	Bulletin Numbe	r WB2	2019 - 003		

As a reminder, ALL repairs that involve an illuminated Service Light for any vehicle system require supporting documentation of the **DTC(s)** and **Freeze Frame** data (if available) from the Multi-Use Tester (MUT), as well as a printout of the Vehicle Information Screen (Superscreen).

DTC/Freeze Frame Screen Print Out

After the Technician scans the vehicle and retrieves diagnostic trouble codes, the DTCs and Freeze Frame data must be printed and attached to the Repair Order.

Both the DTCs and Freeze Frame data are crucial in determining the root cause of certain failures.

Superscreen Print

A printout of the Vehicle Information Screen must also be attached to the Repair Order.

From Service > Systems, select Vehicle Information, and enter the VIN to inquire and print the Superscreen information.





Important Note:

Warranty claims for related repairs that are not supported by DTC/Freeze Frame data and the Superscreen print-out documentation are subject to possible debit action.

If you have any questions, please call the Warranty Information Line @ 1.800.380.2324. You may also E-mail us at <u>WarrantyWebHotline@mmsa.com.</u>

MMNA WARRANTY DEPARTMENT





Don Robinson Mitsubishi, St Cloud, MN

This column spotlights a different high scoring CSI dealer every quarter.



Don Robinson Mitsubishi in St. Cloud, Minnesota has been one of the top service CSI dealers for several years running. "Our key to success with CSI is that we treat everyone how we would like to be treated," says Keith Novak, Service Manager at Don Robinson Mitsubishi. Keith and his team try to greet every customer by name when they arrive at the dealership. It's a personal touch that really does make a difference. They also truly value the opinion of their customers and ask each one if there was anything they could have done better regarding their service experience.

The journey to becoming a successful Mitsubishi dealership began in 1996, by Don Robinson. A career "car guy," Don would buy and sell used cars in high school, eventually working at a used car lot. After years of experience working for others, Don ventured out on his own and started Don Robinson Motors, on a small dirt lot in North St. Cloud, with only 12 used cars for sale. After years of success, they joined the Mitsubishi family in August 2013, and now have over 200 vehicles. In fact, "Don is an integral part of the team at Don Robinson Mitsubishi, and you can find him in the store working along-side the other employees," says Keith.

According to Don, "Customer satisfaction doesn't happen by accident." With a year-to-date overall CSI score of 994, Don knows the secret starts with treating your employees well and they will treat the customers the same way. With employees like Service Advisors Amy Dethlefs and Trudy Maus, and Parts manager Mitch Keller (all Triple Diamond Certified), who have been with the dealership since the doors opened in 2013, Don Robinson Mitsubishi has built a family-type atmosphere where customers are greeted with smiles and sometimes even hugs. Each employee takes a personal interest in making sure each guest is satisfied.

While treating customers well is vital to their satisfaction score, so is fixing the vehicle right the first time. Dylan Roth, Mitsubishi Master Elite Technician and ASE Master, leads a group of technicians who have a 99.1% "Fixed Right First Time" score for 2019. Everyone knows that comebacks can be a major cause of dissatisfaction and eventually defection. Dylan takes these matters seriously and takes the time to speak directly with customers about a condition on their vehicle.

Per Keith, "Customer satisfaction is the foundation for the values of our dealership. We strive to be a place that our customers are proud to tell their friends, neighbors, and relatives about." Everyone at Don Robinson enjoys giving back to the town that helped them grow to become the successful dealership you see today. Because of their humble beginnings and the support of the St. Cloud, MN community, Don Robinson Mitsubishi is a true success story, homegrown and run in the same hometown that built it.



Technical Training Schedule

December 2019 - January 2020

Always check MDL for schedule updates. Since Mobile Training does not appear on the calendars below, contact your District Parts & Service Manager for information about Mobile Training in your area.



<u>WEST REGION</u> California Technical Training Center

	December					January				
М	т	W	Th	F	M	т	W	Th	F	
2	3	4	5	6	30 H	H	H	2	3	
9	10	11	12	13	6	7	8	9	10	
16	17	18	19	20	13	14	15	16	17	
23	24 H	25 H	26 H	27 H	20 H	21	22	23	24	
30 H	H	н	2	2	27	28	29	30	31	



CENTRAL REGION Dallas Technical Training Center



Course Title	DAYS	CODE	PREREQUISITES	Course Title	DAYS	CODE	PREREQUISITES
Automatic Transaxles	2000 N			Manual Transaxles			2. 2.
40/50 Series Diagnosis & Repair	3	AT2T	ATFT1 or ATFWE or ATFB	Manual Transaxles & Transfer Cases	3	MTT2	MTFW, ES1W, ME3W, MED4, STV4
50 Series 5-speed Diagnosis & Repair	1	AT3	AT2T	Twin Clutch Sportronic Shift Transmission	2	TC-SST	AESP, ES1W, EL1 or ES2, STV4,
CVT Diagnosis &Repair	2	CVTT	ATFT1 or ATFWE or ATFB				ME3W, MED4, ATFWE, MTT2
Brakes				Vehicle Specific			
Antilock Brakes	2	ABS2	ES1W	Eclipse Cross	1	181N	AESP, ES1W, ME3W, MED4, NMNS, STV4
Electrical Systems				Plug-In Hybrid Electric Vehicle	2	PHEV	AESP, ES1W, EL1 or ES2, STV4, ME3W,
Electrical 1	2	EL1	ES1W				120, MED4, PHEVW, R1234W
Electrical Systems 2	3	ES2	ES1W				
Electrical Systems 3	2	ES3	ES1W	Vehicle Diagnostics			
Engine Performance				Electronic Service Procedures (1-5)	-	ESP 1-5	No Prereguisites
Engine & Emission Control Systems	4	EECS	ES1W, STV4	Advanced Safety & Convenience Features	1	ASCF	ES1W, ME3W, MED4, STV4
Engine Repair	3	ER1	ERFW, ES1W, ME3W, MED4, STV4	Advanced Safety & Convenience Features 2	1	ASCF2	ASCF, ES1W, ME3W, MED4, STV4
Heating & A/C Systems	c		4	MEDIC4	1	MED4	ME3W
Climate Control	2	CC1	MACW, ES1W, ME3W, MED4, STV4	Scan Tool Viewer 4	1	STV4	No Prerequisites



The **fourth quarter technical quiz** (TQ0419) is still available and will continue through midnight 12/31/2019. Successful completion of the technical quizzes are <u>required</u> for Service Technicians who wish to obtain or maintain DiamondPro Certification.

_____ *TT* _____



HOURS OF OPERATION:

Monday — Friday 6:30 am - 3:30 pm Pacific Time

Techline is closed every **<u>other</u>** THURSDAY 9:30 - 10:30 A.M. (PST) for a staff meeting.







MEDIC Hotline will assist with MEDIC & Scan Tool hardware or software issues.





Since Tech Talk 252 the following bulletins have been released.

2019 Technical Service Bulletins, Safety Recalls, & Service Campaigns						
Date Posted Publication Number		Publication Title	Applicable Models			
10/18/2019	TSB-19-00-017	Technical Specifications - 2020 Mirage G4	2020 Mirage G4			
10/18/2019	TSB-19-00-018	New Model Features & Service Information - 2020 Mirage G4	2020 Mirage G4			
10/18/2019	TSB-19-34-004	Abnormal Noise From Rear Shock Absorber	2014-16 Outlander			
10/18/2019	TSB-19-42A-002REV	Power Window Auto Open/Close Function Inoperative - Revised	2019-20 Eclipse Cross, Outlander, Outlander PHEV			
10/24/2019	TSB-19-42A-008REV	Popping Noise When Opening or Closing Tailgate - Revised	2020 Outlander Sport			
10/24/2019	TSB-19-52A-004	Excessive Intermittent Movement in Driver's Power Seat - Revised	2007-19 Outlander, 2018-19 Outlander PHEV, 2011-19 Outlander Sport/RVR			
11/6/2019	TSB-19-00-019	Technical Specifications - 2020 Mirage	2020 Mirage			
11/6/2019	TSB-19-00-020	New Model Features & Service Information - 2020 Mirage	2020 Mirage			



Since Tech Talk 252 the following TINs/ATINs have been released.

2019 Technical Information Notices, Advance Technical Information Notices						
Date Posted Publication Number		Publication Title	Applicable Models			
10/11/2019	TIN-19-00-015	Florida Highway Safety and Motor Vehicles Letterhead – Takata Recalls	2004-07 Lancer, 2006-09 Raider, and 2012-17 i-MiEV			
10/14/2019	TIN-19-42A-001	Temporary Process Revision for 2020 Outlander Sport Tailgate Strut Popping Noise TSB	2020 Outlander Sport			
11/1/2019	TIN-19-00-016	Houston Department of Neighborhoods Letterhead – Takata Recalls	2004-07 Lancer, 2006-09 Raider, and 2012-17 i-MiEV			
11/15/2019	TIN-19-00-017	Pennsylvania Department of Transportation Letterhead – Takata Recalls	2004-07 Lancer, 2006-09 Raider, and 2012-17 i-MiEV			
11/22/2019	TIN-19-00-018	Arkansas Department of Motor Vehicles Letterhead – Takata Recalls	2004-07 Lancer, 2006-09 Raider, and 2012-17 i-MiEV			
11/22/2019	ATIN-19-SR-002-A	i-MiEV Brake Vacuum Pump Safety Recall Campaign	2012-17 i-MiEV			

_____ *TT* _____



© 2019 Mitsubishi Motors North America, Inc.

The information contained in this bulletin is subject to change. For the latest version of this document, go to the Mitsubishi Dealer Link, MEDIC, or the Mitsubishi Service Information website (www.mitsubishitechinfo.com).