# TECH TALK



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NOTE: The  $\nvdash$  mark is used as a reminder, indicating an article that has been repeated from a previous issue of Tech Talk.



**GROUP 17 – Emissions** 

VROUGH IDLE, CHECK ENGINE LIGHT ON

<u>- LOOSE PCV HOSE</u> — 2014 Mirage. Tech Talk 209 advised that MMC was conducting an investigation into loose PCV hoses on 2014 Mirage. This investigation has concluded and it is no longer necessary to contact Techline if you receive a report of rough idle and/or a check engine light on and the DTCs in memory relate to a lean mixture or misfire (e.g. P0171, P0300-P0303). Diagnose and repair as you normally would.

# **GROUP 23 – Automatic Transmission**

<u>CVT WILL NOT SHIFT OUT OF P (PARK)</u> <u>POSITION</u> — 2013–2015 Outlander Sport/RVR. If the customer cannot shift the vehicle out of the park position, even intermittently, refer to Group 52A – Floor Console Assembly and perform the following procedure before replacing the shifter.

Remove the RH console side panel. While watching the movement of the shift lock solenoid, have someone apply the brake pedal to

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determine if the solenoid retracts. It the solenoid does not retract, it may be due to foreign material, identified as a sugary drink (e.g. Cola) residue built up in the solenoid plunger bore and on the solenoid plunger. This prevents the solenoid from retracting and the shifter cannot be moved from park.

Remove the solenoid for cleaning as follows:



- Remove the solenoid from the shifter assembly by GENTLY releasing TAB 1.
- Carefully wedge a small screw driver into the channel of TAB 2 to release the lower locking tab.
- Remove the solenoid by pulling it straight out.
- Unplug the electrical connector
- Remove the spring and plunger and clean them with soap and water.
- Dampen a wet paper towel or lint free rag with water and insert it into the bore of the solenoid to clean it.
- Reattach the electrical connector and re-install the solenoid to the shifter in reverse order of removal.
- Confirm solenoid and shifter operation and reinstall the console side panel.

Repairs as a result of this type of contamination cannot be claimed under warranty.



# GROUP 51 – Exterior

<u>WASHER PUMP LEAKING AT FITTINGS</u> — 2013–15 Outlander Sport/RVR. If you find leakage at the washer pump forward of the right

front tire, or the washer is inop, check if the washer pump fluid inlet/outlet assembly has become dislodged from the pump (refer to service manual Group 51 – Exterior —> Windshield Wiper and Washer for information). Confirm if the o-rings on the pump outlets are in place. If o-rings are missing, it is NOT necessary to replace the entire washer pump.

Though not available from your facing PDC, suitable replacements can be sourced locally using o-rings made of EPDM (Ethylene Propylene Diene Monomer) rubber, with in I.D. of 4.8mm and a material cross section of 1.9mm (NAPA p/n - 727-2602).



Install the new o-rings to the outlet fluid connections and reinstall the outlet to the pump. If the o-rings are simply dislodged, but not lost, and they are not cut or damaged, the can be reused. If it is necessary to replace the gasket between the fluid tank and pump, it is available separately (PNC 84233, p/n 8260A161).

# **GROUP 60 – Recalls**

ATIN-14-SC-003-A: 2012 I-MIEV UNDER-CARRIAGE RUST SERVICE CAMPAIGN — 2012 *i*-MiEV. ATIN-14-SC-003-A was emailed to dealers and states:

"A service campaign will be released today for removing and preventing undercarriage rust formation on certain 2012 i–MiEV vehicles built October 28, 2011 – July 2, 2012. This service campaign will be conducted in the U.S. and Canada. The Service Campaign Bulletin outlining the repair procedure will be available today on MEDIC and MDL.

The undercarriage on certain 2012 i-MiEV vehicles, along with the bolts securing the Main-drive Lithium Ion battery under covers and non-essential ground connections, may be susceptible to rust.

Dealers are requested to inspect the non-essential ground connection bolts and undercarriage. If the bolts are not rusted or damaged, the dealer will remove any undercarriage rust, apply anti-corrosion wax to the frame, reinstall the under covers, and replace the bolts. If the bolts are rusted or damaged, the dealer will remove any undercarriage rust, apply anti-corrosion wax to the frame, and replace the under covers with new covers that use ground bus bars.

A quick reference video can be viewed on the <u>MDL > Service > Systems > Techline > Techline</u> <u>Videos > i-MiEV > Undercarriage Rust Service</u> <u>Campaign</u> for additional information about the repair procedure.

Some dealers may be force allocated stock using a formula based on the proximity and percentage of applicable registered VINs by ZIP code. Parts shipments are processed via the 'R' order type and started shipping along with your scheduled stock order beginning today, October 23, 2014. Dealers may place additional orders via the MDL. Please refer to Parts Bulletin 42–IM–01–14 for additional information.

Notification letters will be sent to owners of affected vehicles, requesting they contact their local Certified Mitsubishi i–MiEV dealership to schedule an appointment to have this service campaign performed.

When checking for applicability of this campaign (C1411E), please check for and complete any other open campaigns. Always get the customer's approval before completing a campaign on a customer owned vehicle."

#### IMPORTANT

To maximize customer satisfaction with the quality of their vehicle, affected new or used inventory vehicles should be remedied before the vehicle is delivered. Dealers must check their inventory vehicles' VINs on the Warranty Super Screen to verify whether the vehicle is involved in this service campaign.

ATIN-14-SR-007-A: 2010-14 I-MIEV BRAKE VACUUM PUMP SAFETY RECALL — 2010-2014 *i*-MiEV. ATIN-14-SR-007-A was emailed to dealers and states:

A safety recall campaign will be released today for the brake vacuum pump on certain 2010 – 2014 i–MiEV vehicles built September 15, 2009 – March 25, 2014. **Do not deliver any affected 2010 – 2014 i–MiEV vehicles built September 15, 2009 – March 25, 2014 until this recall has been performed.** This recall campaign will be conducted in the U.S. and Canada. The Recall Bulletin outlining the repair procedure will be available today on MEDIC and MDL. The brake vacuum pump on certain 2010 – 2014 i–MiEV vehicles may become inoperable due to either of the following two reasons:

1) Improper programming of the EV-ECU, which controls the brake vacuum pump, may cause the ECU to falsely judge that the relay contact point is stuck.

2) Due to the location of the brake vacuum pump exhaust hole, mud containing road salt could enter and adhere to it, causing the exhaust hole to be blocked from corrosion.

Brake vacuum pump inoperability could result in increased stopping distances.

Dealers are requested to reprogram the EV-ECU on all affected vehicles to the latest software. If an affected vehicle is brought to your service department, you must always FIRST explain to the customer what the reprogram will do and get customer permission to reprogram the EV-ECU. Certain affected 2010 – 2012 i-MiEVs also require brake vacuum pump replacement. Please refer to SR-14-007 on MEDIC or MDL for more information.

Notification letters will be sent to owners of affected vehicles, requesting they contact their local Certified Mitsubishi i–MiEV dealership to schedule an appointment to have this recall performed.

Affected new vehicle inventory VINs can be reviewed on the Mitsubishi Dealer Link in the Most Recent: Open Campaign List available under the service section of "e-reports". Dealers must review the Warranty Superscreen to confirm if any vehicles in their new or used vehicle inventories are affected, and conduct this campaign prior to delivering them. When checking for applicability of this campaign (C1412E or C1413E), please check for and complete any other open campaigns. Always get the customer's approval before completing a campaign on a customer owned vehicle.

#### IMPORTANT

Affected new or used inventory vehicles must be repaired before the vehicle is delivered. Dealers must check their inventory vehicles' VINs on the Warranty Super Screen to verify whether the vehicle is involved in this recall campaign. It is a violation of Federal law for a dealer to 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. ATIN-14-SR-011-A: OUTLANDER SPORT FRONT PASSENGER SEAT BELT LAP END ATTACHMENT FASTENER 2013-15 *Outlander Sport/RVR*. A safety recall campaign will be released today for the front passenger seat belt lap end attachment fastener on certain 2013 - 2015 Outlander Sport vehicles built July 20, 2012 – July 23, 2014. Do not deliver any affected 2013 – 2015 Outlander Sport vehicles built July 20, 2012 – July 23, 2014 until this recall has been performed. This recall campaign will be conducted in the U.S. and Canada. The Recall Bulletin outlining the repair procedure will be available today on MEDIC and MDL.

Due to a supplier error, the front passenger seat belt lap end attachment fastener may not be torqued to specification. If the tightening torque of the fastener is too low, further loosening of the fastener due to vibrations experienced while driving cannot be excluded. If this occurs, the fastener might not withstand the required loads under all circumstances, potentially resulting in insufficient front passenger occupant restraint during a crash.

Notification letters will be sent to owners of affected vehicles, requesting they contact their local Authorized Mitsubishi dealership to schedule an appointment to have this recall performed.

Affected new vehicle inventory VINs can be reviewed on the Mitsubishi Dealer Link in the **Most Recent: Open Campaign List** available under the service section of "e-reports". Dealers must review the Warranty Superscreen to confirm if any vehicles in their new or used vehicle inventories are affected, and conduct this campaign prior to delivering them. When checking for applicability of this campaign (C1416Z), please check for and complete any other open campaigns. Always get the customer's approval before completing a campaign on a customer owned vehicle.

#### IMPORTANT

Affected new or used inventory vehicles must be repaired before the vehicle is delivered. Dealers must check their inventory vehicles' VINs on the Warranty Super Screen to verify whether the vehicle is involved in this recall campaign. It is a violation of Federal law for a dealer to 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.



# **GROUP 66 – Accessories**

<u>ACCESSORY PARK ASSIST INSTRUCTION</u> <u>VIDEO AVAILABLE ON MDL</u> — 2014-15 *Mirage.* MMNA created an installation video to supplement the written instructions for accessory park assist system installation. The video covers all aspects of installation and allows techs to view the entire procedure for better understanding. This will reduce confusion and provide a consistent level of installation quality to enhance customer satisfaction. To access the video on the MDL, navigate to "service" —> "systems" —> "Techline" —> "Techline Videos," and scroll to the Mirage park assist video.



MEDIC Information	Call the MEDIC Hotline for <u>ALL MEDIC &amp; Scan Tool hardware</u> or software issues. Call TECHLINE for vehicle technical issues. As of 11/25/14: Total Hits - 6370 Reflash Database: N14081					
<i>MEDIC</i> Hotline (800) 846-7575	MEDIC 3 Version – 3.2 MUT-III Version – 31.01 R	MEDIC 3 Update – 301 aider Scan Tool Version – 6.0				



# Technical Training Schedule December 2014 – January, 2015

Always check the MDL for schedule updates. Mobile Training does not appear on these calendars. Contact your District Parts & Service Manager for information about mobile training in your area.

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# East Zone - N.J. Tech Training Center East Zo

### East Zone - Atlanta Tech Training Center



West Zone-Dallas Tech Training Center

#### **California Technical Training Center**

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	Days	Code	Prerequisites		Days	Code	Prerequisites
Automatic Transaxles				Manual Transaxles			
40/50 Series Diagnosis & Repair	3	AT2T	ATFT1 or ATFWE or ATFB	Manual Transaxles & Transfer Cases 3			No Prerequisites
50 Series 5-speed Diagnosis & Repair	1	AT3	AT2T	Twin Clutch Sportronic Shift Transmission	2	TC-SST	AESP, ES1, ES2, STV3,
CVT Diagnosis &Repair	2	CVTT	ATFT1 or ATFWE or ATFB		MED2, MED3, ATFWE, MTT		
Brakes				Vehicle Specific			
Antilock Brakes	2	ABS2	ES1	Eclipse Spyder Convertible Top (Top Stack)	No Prerequisites		
Electrical Systems				2014 Outlander Technology	1	141	ES1, MED2, MED3, STV3
Electrical Systems 2	3	ES2	ES1	Mitsubishi Electric Vehicle Technician Training 2 MEV			AESP, ES1, ES2, STV3,
Electrical Systems 3	2	ES3	ES1				MED2, MED3, 120
Engine Performance							
Advanced Emission Diagnosis	3	AED	ES1, STV3, MFIT2	Vehicle Diagnostics			
Engine Technology & Diagnosis	3	EN1	No Prerequisites	Advanced Electronic Service Procedures	-	AESP	No Prerequisites
Multiport Fuel Injection	4	MFIT2	ES1, STV3	Advanced Safety & Convenience Features	1	ASCF	ES1, MED2, MED3, STV3
Heating & A/C Systems				MEDIC II	1	MED2	No Prerequisites
Climate Control	2	CC1	MACW, ES1, MED2, MED3, STV3	Scan Tool Viewer (MUT-III)	1	STV3	No Prerequisites

#### NEWS:

**Diamond Pro Certification for 2015 :** The finish line is in sight. How do you stand with your 2015 status? Have you completed the quarterly repair quizzes? Waiting until the last minute can cause you to miss advancing to the next level if you run out of time.



**Interstate Mitsubishi's CVIR Team: (L-R):** Tom Marcy (Service Advisor), Jake Griffith (Technician), Ben Maas (Technician), Pete Rastatter (Technician), Jeff Waddley (Service Advisor)

When the Computerized Vehicle Inspection Report was first launched, Interstate Mitsubishi's service manager Doug Smith simply added it to his box of customer service tools. He was already a devoted user of the 27 point inspection, and it just seemed natural to move over to the CVIR and provide even better service to his customers. Having a history with the 27 point inspection also made the transition to CVIR easier for his staff, who accepted it immediately.

As in the case of many dealers, every R.O. triggers a CVIR which is presented to the customer. In Doug's case, his advisors usually present the findings in person because many of Interstate's customers wait while their vehicle is worked on. Even taking this into account, a large number of them will add the repairs identified during the inspection for repair the same day. Every customer is also emailed a copy so they have an electronic record that they can print at home.

When the vehicle arrives, Interstate's service advisors start the process. They complete a walk around with the customer and pull up the last CVIR to confirm what was reported. This allows the advisor and customer to intelligently discuss what's needed before dispatching the vehicle to the technical staff. It only takes a technician about 20 minutes to complete each inspection. The ability to import data such as battery condition and DTCs makes completing the report a simple task. After the tech is finished, the service advisor accesses the web version and reviews it with customers who are waiting, or contacts those that have left their vehicle via email and/or telephone to discuss the results. Interstate's customers usually have any important repairs added to the R.O. for completion the same day.

According to Doug, many of his customers comment on the professional appearance of the report, and professionalism leads to customer trust. When the customer first arrives, they always seem to ask if they will receive an inspection report. Doug says, "They seem to realize this valuable tool exists for their benefit, and it helps them make maintenance and repair decisions." Interstate's customers are always happy when the top of the report shows there are no open recalls for their vehicle.

Interstate Mitsubishi believes that CVIR gives them a distinct advantage over generic inspection reports. First, it's factory developed and supported. Each CVIR is specific to the customer's VIN, and this helps the customer and dealer. Second, CVIR is easy to understand with the color coding clearly showing the customer, and the service staff, what's urgent, and what can be done later. Lastly, word gets around, and that's good for business. Interstate's customers let their friends and relatives know about the how much information the CVIR provides and how it helps them keep their vehicle properly maintained. Doug has seen a gradual, but noticeable increase in business over the last two years, and CVIR has helped measurably, with the biggest increases being in battery and tire sales.

Interstate Mitsubishi is another in a long list of CVIR devotees. It's helped them gain their customer's trust in the service department and, through its reputation, provided additional revenue and a even some new vehicle sales. Our thanks go to Doug Smith for sharing his experience in using the CVIR.



The following information was recently released:

Number	Title	Vehicles	Subject				
SR-14-011	Outlander Sport/RVR Front Passenger Seat Belt Lap End Attachment - Safety Recall Campaign	2013-15 Outlander Sport/RVR	Instructs dealers to retorque a fastener attaching the seat belt to the passenger's seat frame				
TSB-14-11-003	Liquid Gasket Application Procedure-SMR	1992–1999 models equipped with 4G63 turbocharged engines	Revises/adds instructions for proper application of liquid gas- ket when installing valve cover.				
TSB-14-13-004	Updated MFI Trouble Symptom Chart - SMR	2008-13 Outlander Sport/RVR	Adds "Generator output voltage is low" to the Symptom Chart.				
TSB-14-54-012	2014 "HERE" Mapcare ™ Update for MMCS ™ Navigation	2014 Lancer models, Outlander, Outlander Sport	Provides Mapcare <sup>™</sup> update information to dealers to help them assist customers.				

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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*)