

SUBJECT: ENGINE DOES	No:	TSB-21-54A-001		
COMMUNICAT	DATE:	April 2021		
-				L: See Below
CIRCULATE TO: [] GENERAL MANAGER [X] PARTS MANAGER				[X] TECHNICIAN
[X] SERVICE ADVISOR	[X] SERVICE MANAGER	[X] WARRANTY PROCESSO	OR	[] SALES MANAGER

PURPOSE

This reflash is to correct a communication error that may occur between the One-Touch Start System (OSS) and Engine Control Unit (ECU) **or** the Keyless Operating System (KOS) and Engine Control Unit (ECU), resulting in a no start of the engine.

- When pressing the One-Touch Start System button (OSS), the engine will not start and a warning message "immobilizer system service required" will appear on the multi information display with the following DTCs:
 - B2417 OSS authenticate error OSS
 - B1139 KOS authenticate timeout
 - B1136 Stop light switch

This TSB instructs dealers to conduct the following repairs within the warranty period, or on a customer complaint basis to:

- 1. When "both the B2417 and B1139 DTCs" **or** all three B2417, B1139, and B1136 DTCs" are detected; reprogram the software of the OSS-ECU with the countermeasure software.
- 2. When DTC "B1157"* is detected **along with** B2417, B1139, and B1136; replace the OSS-ECU with a new one in accordance with the workshop manual.

*Check the software version of the new OSS-ECU and if it is not the latest version, reprogram the OSS-ECU with the countermeasure software.

NOTE: If the software of the new ECU is the latest version, no need to reprogram the software.

AFFECTED VEHICLES

2011 - 2021 Outlander Sport / RVR (equipped with OSS / KOS)

NOTE: The software was modified December 18, 2020 and the VIN cut off: JA4APVAU8MU014266.

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 Superscreen to verify whether the vehicle is involved in this service bulletin.

Copyright 2021, Mitsubishi Motors North America, Inc.

Page 1 of 12

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*). (5036)

REPAIR PROCEDURE

- Confirm your MUT-III SE is updated with the latest reprogramming database.
- Write down all of the electrical device settings such as A/C and radio before reprogramming. The settings should be restored after reprogramming.
- Turn off all electrical devices to minimize the vehicle's electrical load. Also use an external power source to ensure that the vehicle battery maintains the specified voltage during reprogramming.
- Make sure the USB cable and MUT-III SE main harness are not damaged.
- Connect the MUT-III SE to an AC power source to prevent internal battery discharge.
- Stay away from the under hood area during reprogramming. If the connection between the engine ECU and ETACS is lost, the cooling fan operates as fail-safe.
 NOTE: If an affected vehicle has a Malfunction Indicator Lamp (MIL) illuminated before reprogramming, and DTCs are listed in the ECU memory, diagnose and repair those DTCs per the service manual <u>before</u> reprogramming. DO NOT reprogram the ECU until the reason(s) for other DTCs being set has been corrected.

EQUIPMENT

The following equipment is needed to reprogram the ECU:

- VCI (Vehicle Communication Interface) or VCI Lite MB991824 or MB992744
- MEDIC Laptop/Tablet with A/C power adapter 520924, or FZG1MK2.
- MUT III Main Harness "A" (blue connector at the DLC end) MB991910 or MB992745.
- USB 2.0 Cable MB991827 or MB992747.
- MEDIC 3.5/4 update at 681 or higher.
- For Standalone MUT III units, MUT3-SE Reprogramming Database **N201201** or higher.

Model Year	Data Number	New HW Part Number	New SW Part Number/Version	Old HW Part Number	Old SW Part Number/Version
2011-12	8637C874	8637A633	8637A63302	8637A633	8637A63301
2013	8637C875	8637A977	8637A97701	8637A977	8637A97700
2014-21	8637C875	8637B097	8637B09701	8637B097	8637809700

ECU REPROGRAMMING CHART

Outlander Sport OSS-ECU Troubleshooting



REPAIR PROCEDURE

SOFTWARE/MEDIC VERSION VERIFICATION

1. Verify that the ECU has not already been updated to the latest S/W number in the table above. If the Engine ECU is at the latest level, reprogramming is not necessary.

NOTE: Reprogramming the Engine ECU with the latest database (e.g., **N201201**) includes all past and current reprogramming for TSBs of affected vehicles. It is not necessary to reprogram the ECU for each previous TSB.



For MEDIC 3.5/4 users only: (MUT-III SE STV users go to step 5)

2. Verify the MEDIC 3.5/4 is at version 3.5 and at update **681** or higher.

If your <u>MEDIC 3.5/4 update is at least 681</u>, continue with the Reprogramming Procedure. If your <u>MEDIC 3.5/4 update is below 681</u>, update your MEDIC as follows.

. Select the MEDIC 3.5/4 Admin tab and click on "Updates."





 If the MEDIC update screen advises updates are available, click the "Begin" button. After all updates are complete, GO TO THE REPROGRAMMING PROCEDURE.



- STANDALONE MUT-III SE SCAN TOOL VIEWER (STV) ONLY: (MEDIC 3.5 USERS - GO TO THE REPROGRAMMING PROCEDURE). Verify that your MUT3-SE has the most current version of the reprogramming database: From the MUT3-SE Main Page:
- a. Click "STV."

b. Click the "ECU Reprogramming" button.

c. Click "SDB Data List, select the reprogramming data system and press the OK button"

ECU Reprogramming			•	
ECU Reprogramming(SDB)	SOB Data List	ECU Reprogramming K-Line		
Data Selection K-Line	Data List K-Line			•
				Select the reprogramming data system by system and press the OK button.
				Ver.5EW20071-00
Ver.SEW17121-01				



- d. Confirm that the database number displayed in the upper right above the chart is **N201201 or higher**
 - If the database number displayed on your MUT3-SE is N201201 or greater, continue to the next section.
 - If the reprogramming database number displayed on your MUT3-SE is <u>lower</u> than N201201, then the MUT3-SE database needs to be updated. Once database number is confirmed, hit the Home button to go back to the System Select screen.

REPROGRAMMING PROCEDURE

To ensure that the vehicle battery maintains 12V during the procedure, hookup a battery charger to the vehicle during the procedure.

NOTE: VCI Stand-alone reprogramming is not available for this procedure. The laptop/tablet and the VCI must remain connected for the entire procedure.

1. Connect the equipment as follows:

NOTE: VCI Lite and MEDIC 4.0 Toughpad shown for illustration purposes only.



- Turn the MEDIC PC/tablet on. If the battery indicator in the lower right hand corner of the screen does not show a full charge, it is recommended that either the battery be charged prior to beginning, or be used with the A/C power adaptor connected.
- Connect the USB cable to the VCI/VCI Lite. When the laptop/tablet displays the MUT-III SE main screen, connect the USB cable to the device.
- Connect the MUT-III SE main harness with the blue DLC connection to the VCI/VCI Lite. Connect the blue connection of the MUT-III SE main harness to the vehicle's data link connector.
- For VCI only (p/n MB991824): Turn the VCI power switch ON. Verify that the indicator lamp in the upper right corner of the screen is green.

DO NOT DISTURB THE HARNESS CABLES OR CONNECTIONS DURING THE REPROGRAMMING PROCESS AS IT COULD CAUSE THE CONTROL UNIT TO LOSE DATA. IF THE USB CABLE IS DISCONNECTED DURING THIS PROCEDURE, A WARNING MESSAGE WILL DISPLAY.

2. Turn the ignition switch to the "ON" position.



3. Using MEDIC, from the main page, click the "MUT3-SE" icon at the top center of the screen to open MUT-III SE. Click the STV button.



 The System Select screen opens and populates with some basic information from the vehicle. Look at the label on the passenger side B pillar to identify the appropriate class. (See B pillar label below; class is labeled as "model"). If necessary, select the correct class from the drop-down list.

MITSUBISHI MOTO	ORS CORPORATION
MODEL GK1WXTEU	
ENGINE 4B40 TRANS AXLE W1CJC	2352 EXTP62E
COLOR, INT P62	90X EOA
Image for visual purposes only	PART NO: 7430B433

 Verify that the ECU has not already been updated to the latest S/W number shown in the "ECU Reprogramming Chart" in this TSB. If the ECU is at the latest level, reprogramming is not necessary.



a. Select "OSS" from the System List, then click on the check mark at the bottom of the screen.

System select MR		4 1
	-	
Diagnostic Trouble Code	Data List	Drive Recorder
Special Function	Readness Test	Actuator Test
Coding		
Coding		
	,	
Please select function.		
System select MFI Spec	ual Function	
spec		NL
ECU Information	Provisional DTCs	Evap Leak Montor
ECO mormation	Provisional DTL's	Evap Leax monete
Learned value n	Mode \$06	In-use Performance Tracking
Starter counter writing	Stater counter initialization	Timing chain maintenance
		1 <u>11</u>
Mode SDA		
Please select function.		
ECU Information		2020.11.16
System scleet MFI Spo	ccial Function ECU Information	
	ECU Information	
ltem	Value	
ECU Origin	04	A
Supplier ID	85	
ECU ID	00	
ECU Diag Ver.	01	
Hardware Version	0000 B56107	
Software Version Hardware Part Number	856107 1860D573	
Number of Module	1	
Software Part Number 01	1860D57301	
Chassis Number/VIN(Original)	JA4AT5AA1LZ031848	•
イク	· · · · · ·	
Ver. W20071-00 Part Number:1860D573 S	offware Part Number 1860D57301	

b. Select "Special Function."

c. Select "ECU Information."

d. If the Software Part Number listed is not at the latest level (shown in the "ECU Reprogramming Chart" in this TSB), proceed with the next step. Click the Home button to return to the System Select screen.

If the Software Part Number **is** at the latest level, then reprogramming is not necessary.

6. Before reprogramming, perform an "Erase and Read All DTCs" to clear any DTCs that may have set.



a. On the System Select screen click the "ALL DTC" button.

- Read all DTCs 1 Ê Select MFI 7. ALL ELC-AT/CVT/TC-SST IPSE CROSS ECPS/4WS ABS/ASC/ASTC/ 1WXTPUZL2M Start the All DTCs Are you sure? Air Conditi J ETACS × TPMS Select checking systems 4.3 Select MFI * ELC-AT/CVT/TC-SST Model Name ECLIPSE CROSS ECPS/4WS Model Year 2018 ABS/ASC/AST Model Code GK1WXTPUZL2M SRS-AIR BAG Air Conditioner TPMS v ect checking systems
- b. Select "Erase and Read All DTCs."

c. A window will pop up asking you to confirm DTC erasing. Click the check mark in the dialog box for DTC erasing and reading to begin.

- d. The "System List" on the left side of the screen will have all selections checked. <u>Do not</u> change these selections.
- e. Click the check mark to continue.

Erase and Read al DTC Code Select System Name Results
 Image: Multi Around Monitor

 Image: EPB
 AL DTO Gatew FCMLDW Aten ing and checks are complete Execute "Read all DTCs" if you confirm the detected DTCs, because the DTCs that are era now may be displayed in church are in Ø BSW BSW(SUB) HUD 1 TCU Now Checking! 12 188 \sim

i 1

- When DTC erasing is completed, click the check mark in the pop-up message that reads "All erasing and checks are completed."
 - a. If any DTCs return after erasing is completed, click the check mark to clear the window. Diagnose and repair per the Service Manual.

System List	t.			iagnostic trouble code(s)
Select System Name	Res	uts	Code	Name Status
MFI	0	K 🔺		
ELC-AT/CVT/TC-SST	0	к		
ECPS/4WS	0	к		
ABS/ASC/ASTC/WSS	0	к		
SRS-AIR BAG	0	к		
Air Conditioner	0	к		
ETACS	0	к		
TPMS	0	к 🔻		
and no DTC was detect	ted		Number of DTC(s	0.0
\sim				
<u>À</u>				
1 1	8			
N400000000				
System select				4
System List				Vehicle Information
System List			DESTIN	MMNA
ELC-AT/CVT/TC-SST		-9	MAKER	MITSUBISHI
CRUISE CONTROL			TYPE	GA5W
CPS/4WS			CLASS	XTMHL2M
ABS/ASC/ASTC/WSS			MODEL YEAR	2017
GRS-AIR BAG			MODEL	OUTLANDER SPORT / RVR
Air Conditioner		v	ENGINEMOTOR	4B12 (2.4, D4, MPI, MIVEC)
	at an		TRANSMISSION	F1CJA (CVT-2WD)
Loading Option S			Chassing to /Vin	Unm.
FAST/IMMO/Keyless/TPMS	Can see P/N o	_		
-A.S. Childhoo Neyness (1998)	INNE SPAS.	··· • ··		
	\$)	 ✓ 4 	
ECU Reprogramming			✓ 4	
		508.0		ECU Reprogramming K Line
ECU Reprogramming		508 (Nata List	ECU Reprogramming K.Line
ECU Reprogramming(SDB)				ECU Reprogramming K-Lite
			Nefa List	ECU Reprogramming K-Line -
ECU Reprogramming(SDB)				ECU Reprogramming K-Lite
ECU Reprogramming(SDB)				ECU Reprogramming K-Lite
ECU Reprogramming(SDB)				ECU Reprogramming X-Life
ECU Reprogramming(SDB)				ECU Reprogramming K-Life -
ECU Reprogramming(SDB)	3			ECU Reprogramming K Line
ECU Reprogramming(SDB)				ECU Reprogramming K-Line -
ECU Reprogramming(SDB)				ECU flopngramming K-Lite
ECU Reprogramming(SDB)				ECU Reprogramming X-Life
ECU Reprogramming(SDB)				ECU Reprogramming A Life -
ECU Repoprammeg(SCR) Data Selection in				ECU Reprogramming K Life
ECU Repoprammeg(SCR) Data Selection in				ECU Reprogramming K Line
ECU Reprogrammerg (506) Data Selection K				ECU Reprogramming K Life -
ECU Reprogrammeng (506) Data Selection K				ECU Reprogramming X-Life
ECU Reprogrammeng (506) Data Selection K				ECU Reprogramming A Live
ECU Reprogrammeng (506) Data Selection // SEW17121-01 ECU Reprogrammeng (508)				
ECU Reprogramming (SOI) Data Selection // SEW17121-01 ECU Reprogramming SOIP		Own U	aticune	
ECU Reprogrammeng (SOR) Data Selection K SEVIT721-04 ECU Reprogrammeng (SOR)		Own U	at K Line	Villeda.rotomatary GR997
ECU Repogrammegr(SCR) Data Selection // SEW17121.01 ECU Repogrammegr(SCR)		Own U	tikune Type CLASS	Vehicle Internation CASW X110:412M
ECU Repogrammeg(SCR) Data Selection K SEW17121-01 CU Repogrammeg(SCR) CU Repogrammeg(S		Own U	tkune Type CLASS MODEL YEAR	Velikala, internador GASW X184-12M 2017
ECU Reprogrammeng (SOR) Data Selection K SEW17/121-01 COU Reprogrammeng SOR) COU Reprogrammeng SOR Values Constancer TACS Native Samong Angle Sensor TH UMIO Keylogo TFMS		Own U	TYPE CLASS MODEL YEAR	VMPIRE INFORMATION CASH XTM-12M 2017 OUTLANDER SPORT / RVR
ECU Reprogrammeng (SDR) Data Selection // SEV17121-01 COU Reprogrammeng SDR) Constant Constan			TYPE CLASS MODEL YEAR MODEL YEAR	Vervio Internation GASW XTINHLIZM 2017 OUTLANDER SPORT / RVR JAAAPJANKIF/2010379 Mo
ECU Reprogrammeng (SOR) Data Selection // SEV17121-01 COL Reprogrammeng SOR Constanting Seytom Los Seytom Los		Own U	TYPE CLASS MODEL YEAR MODEL YEAR	Vervio Internation GASW XTINHLIZM 2017 OUTLANDER SPORT / RVR JAAAPJANKIF/2010379 Mo
ECU Reprogrammeng (SOR) Data Selection K SEVIT721-04 SEVIT721-04 ECU Reprogrammeng SOR) ECU Reprogrammeng SOR Var Canationar ECOS Selecting Angles Sensor The MMC Keyless TFMS SSS 101 Landing Apples 1	ictup		TYPE CLASS MODEL TEAR MODEL Chassis No //IN	Vervio Internation GASW XTINHLIZM 2017 OUTLANDER SPORT / RVR JAAAPJANKIF/2010379 Mo
ECU Reprogrammeng (SCR) Data Selection K SEW17121-01 ECU Reprogrammeng SCR) ECU Reprogrammeng SCR) ECU Reprogrammeng SCR ECU Reprogr			TYPE CLASS MODEL YEAR MODEL YEAR	VMPIRE INFORMATION CASH XTM-12M 2017 OUTLANDER SPORT / RVR
ECU Reprogrammeng (SCR) Data Selection K SEW17121-01 ECU Reprogrammeng (SCR) ECU Reprogrammeng (SCR) E	ictup		TYPE CLASS MODEL TEAR MODEL Chassis No //IN	Vervio Internation GASW XTINHLIZM 2017 OUTLANDER SPORT / RVR JAAAPJANKIF/2010379 Mo
ECU Reprogramming (SDI) Data Selection // SEW17121.01 COU Reprogramming (SDI) COU Reprogramming (SDI) COU Reprogramming (SDI) Stylera Loss of Canstonar TACS Samong Angla Samon Mater Barrog Angla Samon Samong Angla Samon Samong Angla Samon Samong Angla Samon	ictup Can see PiN t		TYPE CLASS MODEL TEAR MODEL Chassis No //IN	Vervio Internation GASW XTINHLIZM 2017 OUTLANDER SPORT / RVR JAAAPJANKIF/2010379 Mo
ECU Reprogrammeng (SOR) Data Selection K SEW17121-04 SEW17121-05 ECU Reprogrammeng (SOR) ECU Reprogram	ictup Can see PiN t		TYPE CLASS MODEL TEAR MODEL Chassis No //IN	Vervio Internation GASW XTINHLIZM 2017 OUTLANDER SPORT / RVR JAAAPJANKIF/2010379 Mo

b. If DTCs do not return, click the check mark to clear the window, then click the Home icon in the lower left to return to the System Select menu.

- 8. Reprogram the ECU following the steps below.
 - a. On the System Select page, click on the Reprogram button.

b. Select "ECU Reprogramming (SDB)."

c. Select "OSS" in the System List, then click the check mark.









- d. Verify that the correct data file listed in the table matches the one in the "ECU Reprogramming Chart."
- e. Click the check mark at the bottom of the page to initiate reprogramming.
- f. Click the check mark in the "Check reprogramming data" dialog box.

g. Once the reprogramming is initiated, the screen shown will indicate the reprogramming progress.

NOTE: Do NOT disturb the cables or turn off the ignition during reprogramming.

h. Once reprogramming is completed, click the check mark in the "Completed" dialog box.

Bystem Search result selection	Data No.	New HW Part No.	New SIV Part No./ Ver.	Current HW Part NO.	Carnet SW Par No./Ver.	
068 Completed	8637C875	86378097	8637869701	86378667	8637865701	A
						Ţ
					P	4
1071-00	\$					k
	pecal Function	ECUIMORTAR				
		ECU Information				
			e I Value			
<mark>еп sekc</mark> С63 S						
Nern seed. C55 S	EC					
ten seed Cos s	E0					
Ners search Cost S Ners ECLU Organ Supplier ID	E0 04 64					
en seed cos s hen ECU orga Suppier ID ECU ID	04 64 00					
Ner seec C65 S Ner seec C65 S Ner seec S ECU Orgn Suppirer ID ECU ID ECU ID ECU Dag Ver	04 04 04 00 01					
Ner seed CSS S Ikon ECU Orgin Suppler ID ECU ID ECU ID ECU ID ECU ID ECU ID	04 04 04 00 01 01 0102					
Hern serect Cos s Hern serect Cos s Cos s Cut Origin Supplier ID ECU Diag Ver Hartharter Version Software Version	04 04 00 01 0302 011400					
en seed C65 S Ilem ECU Orgin Suppier ID ECU	E0 04 04 00 01 0302 011406 80376097					

- i. Verify the correct information is listed in the table. Click the check mark at the bottom of the page, then click the Home button to return to the System Select screen.
- 9. Perform an "Erase and Read All DTCs" again to clear any DTCs that may have set. For instructions, refer to steps 6 and 7 in this TSB.
- 10. Confirm the software version has been updated. **For instructions, refer to step 5 in this TSB.**

Confirm "Software Part Number" now matches the NEW one shown in the **"ECU Reprogramming Chart"** in this TSB.

- 11. Turn off the ignition switch and disconnect the MUT-III SE. Turn off and disconnect battery charger.
- 12. Using a ball-point pen, enter the appropriate ECU part number, Software Part Number (ROM ID#), this Technical Service Bulletin number, your dealer code, and the current date on the Engine Compartment/Control Module Label (p/n MSSF024G00). The Vendor Code is not applicable. The label is available from your facing PDC.

MITSUBISHI	AUTHORIZED MODIFICATIONS	These Modifications Have P on Approved as Appropriate by EPA and M 3		
THE FOLL	OWING MODIFIC	CATIONS HAV B. EN M. JE:	MITSUP	ISHI
PART NUMBER	VENDOR		P/N	ENGLA, Inc.
1860DXXX	N/A	I VG 1860C2XXXX	Vndr Code	
TSB		A/T	тѕв	
ENG TSB-20-13-XXX		DATE DATE	Dir C, de	
A/T		99332 06/25/20	Dife	
Engine Compartment La	el 🔪		Control Module	Label

13. Test drive the vehicle to confirm proper operation.

WARRANTY INFORMATION

This bulletin is supplied as technical information only and is not an authorization to repair. If an affected vehicle is reported with the described condition diagnose the condition, repair as described in this bulletin and submit a normal warranty claim using the following information below:

Labor Op Code	Operation	Nature Code	Cause Code	Time Allowance
548509 DU	Reprogramming of OSS-ECU	02A	605	0.3 hours
548509 DZ	Replacement of OSS-ECU and Reprogramming of OSS-ECU	02A	605	0.8 hours
548509 EA	Replacement of OSS-ECU	02A	605	0.7 hours