#### Subject: Blank ECM - Technical Service Procedure for Programing and Resetting as a Service Part



REVISION 2 October, 2020

YEAR	MODEL
2020	All SSV except Commander Series
2020	All Outlander/MAX 4x4 850, 1000 and 1000R Outlander MAX 650 XT-P T category
2021	All SSV except Maverick Turbo RR
2021	All Outlander/MAX 4x4 850, 1000 and 1000R Outlander MAX 650 XT-P T category

# **PARTS REQUIRED**

Order ECM as per regular channel.

DESCRIPTION	PART NUMBER		
Blank ECM	420666064		

# **UPDATE PROCEDURE**

### **Replacing an ECM**

When programming a new ECM, recovery of the vehicle informations comes from the cluster. If the cluster is to be replaced with the ECM, replace and program the cluster first, then proceed with the ECM replacement.

Refer to shop manual for component replacement.

#### **Verifying BUDS2 Version**

Ensure that the BRP diagnostic software (BUDS2) is updated to the required version.

- 1. Start BUDS2 and logon.
- 2. In BUDS2, go to About page.



3. Validate the following:

- Application Version: 19.0.0 or newer
- ODX Version: 19.22.0 or newer
- OTX Version: 19.33.0 or newer
- EDB Dump Version: 19.27.0 or newer.
- Workspace Version: 19.32.1 or newer

If the information is different, connect the computer to Knowledge Center to update BUDS2.

# Powering the Vehicle When Using BUDS2

**NOTICE** Make sure the unit's battery is fully charged before undertaking this operation. Never use a battery charger to temporarily substitute the battery as it may cause the ECM to function erratically, or not at all.

**NOTICE** Continuous power to the computer is mandatory while performing this operation.

#### Programming a Blank ECM

-If the ECM is not the root cause of the issue, it must be reset as new within 14 days from the last programming. Afterwards, it will not be possible. -The ECM can only be reset as new if it is holding the file from the initial process. If any update is flashed into the ECM it will no longer be eligible to be reset as new.

- 1. Connect the vehicle to the BRP diagnostic software (BUDS2).
- 2. In BUDS2, go to:
  - Summary page
  - Vehicle button
  - Health tab.
- 3. Double click on Program ECM.

Control         Control         Control         Control         Factor         Fac	Image: Not and the second s	
Vci     100014992     1     Vehicle	Summary  Health Status	© ?
Cluster 2	Program ECM ECM is detected as blank and needs to be programmed properly for this vehicle	
ЕСМ	4	
tbs2020-004-001_a		

- 1. Summary page
- 2. ECM button
- 3. Health tab 4. Program ECM
- 4. Make sure the vehicle model number is good.
- 5. Engine Identification Number will have to be enter manually at the end of the procedure.
- 6. Click on Proceed.

Product SSV 1	Proceed 3	
9NI B	1. Flash ECM	
CAN-AM SSV Maverick X3 72 X Rs MY 2	2. Write Vehicle Diagnostic ID	
	3. Write Model Number	
Model exists and Vehicle Diagnostic ID f cluster is matching factory value.	4. Write VIN	
Flashfile name is specified from Vehicle ECM module will be reflashed using this	Info.    file. 5. Write Variant coding	
Click on proceed to start.	II 6. Write Logistic Programming 3	
User input required for steps: 2 - Write Engine Serial Number	7. Write ECM Speed Ratio	
	8. Write Customer Name	
	9. Reset Last Maintenance	
	10. Erase Keys	
	 11. Write Engine Serial Number	
Legend:	U	
: Pending		
☑: Done		
- · Skinned		

7. When the **Reset Service** window appears, click on **Yes**.

Product SSV	Proceed
9NLB	1. Flash ECM
CAN-AM SSV Maverick X3 72 X Rs MY 20/0	2. Write Vehicle Diagnostic ID
Model exists and Vehicle Diagnostic ID from cluster is matching factory value.	<ul> <li>3. Write Model Number</li> <li>4. Write VIN</li> </ul>
Flashfile name is specified f	vice maintenance will be reset
Click on proceed to start.	Yes No
User input required for steps: - Write Engine Serial Number	7. Write ECM Speed Ratio         Ø         8. Write Customer Name         Ø         9. Reset Last Maintenance         In         In         U         In         Write Engine Serial Number
Legend:   : Pending : Progress ID: Done ISkipped Close	

8. Close the red window if it appears.

Product detected	SSV	Proceed	
		1. Flash ECM	
	9NLB	2 Write Vehicle Disensetic ID	
CAN-AM SSV	/ Maverick X3 72 X Rs MY 20/0		
		3. Write Model Number	
Model exists a	and Vehicle Diagnostic ID from		
cluster is mate	ining factory value.	4. Write VIN	
Flashfile name	e is specified from Vehicle Info		
ECM module	Resetting last main	atenance	
Click on proce Jser input rec - Write Engin	Maintenance reset denied. T too short or if engine is runr	his may happen if the elapsed time since last servic ning.	te is
Click on proce User input rec - Write Engin	Maintenance reset denied. T too short or if engine is runr	his may happen if the elapsed time since last servic ning.	e is
Click on proce User input rec - Write Engin	Maintenance reset denied. T too short or if engine is run	his may happen if the elapsed time since last servic ning.	e is
Click on proce User input rec - Write Engin	Maintenance reset denied. T too short or if engine is run	This may happen if the elapsed time since last service ning.	e is
Click on proce User input rec - Write Engin	Maintenance reset denied. T too short or if engine is run	his may happen if the elapsed time since last service ning.	te is
Click on proce User input rec - Write Engin	Maintenance reset denied. T too short or if engine is run	his may happen if the elapsed time since last servic ning. Close 10. Erase Keys II 11. Write Engine Serial Number	te is
Click on proce User input rec - Write Engin Legend:	Maintenance reset denied. T	Close	e is
Click on proce User input rec - Write Engin Legend:   : Pending	Maintenance reset denied. T too short or if engine is run	his may happen if the elapsed time since last service ning. Close 10. Erase Keys 11. Write Engine Serial Number 	te is
Click on proce User input rec - Write Engin Legend:   : Pending : Progress	Maintenance reset denied. T	Close	te is
Click on proce User input rec - Write Engin Legend:   : Pending : Progress II: Done	Maintenance reset denied. T	his may happen if the elapsed time since last service ning. Close 10. Erase Keys I 11. Write Engine Serial Number I	te is

9. Enter the engine identification number.

Product SSV	- Proceed	
detected	1. Flash ECM	
9NLB		
CAN-AM SSV Maverick X3 72 X Rs	MY 20/0	
	3. Write Model Number	
luster is matching facto		
Click on proceed to start Jser input required for s - Write Engine Serial Nu	ter.	
	Write Close	
agand		
: Pending		
: Progress		
d: Done → Skinned		

10. Click Write, then Close.

Please enter all characters following the M character.	Engine serial number has been updated.
M- A123456	M- A123456
Write Close	Write Clipse

11. A message confirm that the engine identification number is entered. Close the window.



12. Scan the vehicle again.

- 13. Go to:
  - Summary page
  - Vehicle button
  - Summary tab.
- 14. Validate the following:
  - Vehicle Identification Number (VIN)
  - Vehicle model number
  - Engine Serial Number.

Last Service Hour and Maintenance Hour are reset to 0h00.

The Engine Total Hour and Vehicle Total Hour can NOT be reset to 0h00 and will always remain at the value before the time of resetting as new.

100012078		Identification			
CANAM SSV Massick X3 72 X Rs MY 20/0		Name	State		
		VIN	1234567	8901234567	
	1-	Vehicle Model Num	ber 9NLB		
Cluster	Ľ	Engine Serial Num	ber No State		
		Purchase / Run Tim	e		
		Name	State		
ECM		Customer Name			
LCM		Delivery Date	11/07/2019		
	2	Engine Total Hour	1h20		
General FDM	3 L>	<ul> <li>Vehicle Total Hour</li> </ul>	1h27		
		Total Distance	187.98 km		
		Last Service			
		Name		State	
		Last Service Hour		0h00	
	2	Last Service Date		11/07/2019	
	~	Last Service Diag	nostic Number	12599	
		Maintenance Hour		0h00	
		Maintenance Cour	ter	1	
		Maintenance Inter	al	100h00	
		indinite inter			

Vehicle information
 Reset hour
 Non reset hour

15. Reset fault codes. If fault codes are generated, carry out the required service actions.

16. Start the engine and make sure it operates properly throughout its full engine RPM.

### **Reset the ECM as a Service Part**

- 1. Connect the vehicle to the BRP diagnostic software (BUDS2).
- 2. In BUDS2, go to:
  - Settings page
  - ECM button
- 3. Double click on Initialization Reset the ECM as a Service Part.

Cluster Cluster Cluster Cluster Cluster 3 → Cluster	Settings Settings Settings Settings Configuration - Change Cluster Language and Units Configuration - Change Cluster Time and GPS Configuration - Change Tire Size Configuration - Change Tire Size Configuration - Cluster Brightness Initialization - Display Analog Inputs Initialization - Display Analog Inputs Initialization - Reset ECM as service part Initialization - Reset TPS Option - With Belt Protection Option - With Brant Lok Option - With Turbo	State English / Metric No State 27" No State No State No State No State No State Salse No State True True True	
USBIoCAW/2compact VIN: ASDFC	CH654RTY86HJY Key: OFF Current Voltage	9. 12.2 V	
tbs2020-004-009_a			

Settings page
 Vehicle button with vehicle description
 Initialization - Reset ECM as service part.

4. Click on Proceed.

Product detected SSV	Proceed	
	1. Reset VIN	
9NLB	2 Reset Engine Serial Number	
Model exists and Vehicle Diagnostic ID from cluster is matching factory value.	 3. Reset Model Number	
Click on proceed to start.	 4. Reset Customer Name 	
	5. Reset Last Maintenance	
	6. Erase Keys	
	7. Reset Vehicle Diagnostic ID	
	8. Clear Statistics	
	9. Reset Variant coding	
	10. Reset Logistic Programming 3	
	11. Reset ECM Speed Ratio	
Legend:   : Pending : Progress	12. Flash ECM	
Close		

5. When the Reset Service window appears, click  $\ensuremath{\textbf{Yes}}$  .

	Reset ECM as Service Part ME17		
	Product detected SSV	Proceed	
MY 2	9NLB	1. Reset VIN	
Reset Service	51120	ne Serial Number	
The last served.	vice maintenance will be reset	es No	
		5. Keset Last Maintenance	
		II	
		7. Reset Vehicle Diagnostic ID	
		<b>I</b>	
		8. Clear Statistics	
		II	
		9. Reset Variant coding	
		10 Pecet Logistic Programming 2	
		11. Reset ECM Speed Ratio	
	Legend:	12. Flash ECM	
	Progress	II.	
	I. Done		
	Skinned		
	Close		

6. Close the red window if it appears.

Product	SSV -	Proceed	
detected		1. Reset VIN	
9NLB		2. Reset Engine Serial Number	
Model exists and Vehicle Diagnostic ID from			
cluster is matching factory value.		3. Reset Model Number	
Click on proceed to start.		4. Reset Customer Name	
	Posetting last maint	ionanco	
	Resetting last maint	enance	
	Maintenance reset denied. Thi	s may happen if the elapsed time since last service is	
	Maintenance reset denied. Thi too short or if engine is runnir	s may happen if the elapsed time since last service is ng.	
	Maintenance reset denied. Thi too short or if engine is runnin	s may happen if the elapsed time since last service is ng.	
	Maintenance reset denied. Thi too short or if engine is runnir	s may happen if the elapsed time since last service is ng. Crose	
	Maintenance reset denied. Thi too short or if engine is runnir	s may happen if the elapsed time since last service is ng.  Crose II 10. Reset Logistic Programming 3	
	Maintenance reset denied. Thi too short or if engine is runnir	s may happen if the elapsed time since last service is ng.	
Legend:	Maintenance reset denied. Thi too short or if engine is runnin	s may happen if the elapsed time since last service is ng.   Cose  I 10. Reset Logistic Programming 3 I 11. Reset ECM Speed Ratio I 12. Flash ECM	
Legend:  : Pending	Maintenance reset denied. Thi too short or if engine is runnin	s may happen if the elapsed time since last service is ng.	
Legend:   : Pending : Progress ☑: Done	Maintenance reset denied. Thi too short or if engine is runnir	s may happen if the elapsed time since last service is g.   Crose	

All boxes are checked when the ECM reset is completed.

7. Close the window.

Product detected SSV	Proceed	
	1. Reset VIN	
9NLB		
Model exists and Vehicle Diagnostic ID from	2. Reset Engine Serial Number	
cluster is matching factory value.	3. Reset Model Number	
Click on proceed to start.	4. Reset Customer Name	
	5. Reset Last Maintenance	
	6. Erase Keys	
	7. Reset Vehicle Diagnostic ID	
	8. Clear Statistics	
	9. Reset Variant coding	
	10. Reset Logistic Programming 3	
	11. Reset ECM Speed Ratio	
	$\square$	
Legend:	12. Flash ECM	
: Pending		
Progress		
- Chinned		
Clipse		

- 8. Scan the vehicle again.
- 9. Go to:
  - Summary page
  - Vehicle button
  - Health tab.

Validate the following to confirm that the ECM reset has succeed:

- No vehicle description in the Vehicle button
- In the description field, ECM is detected as blank...



Vehicle button
 Description field.