## Model S Resetting Airbag Crash Data Instruction

## Function Introduction:

This function is used to reset airbag crash data in order to recycle airbag ECU (Electric Control Unit). (In some countries, erasing airbag crash data without changing airbag assembly is not legal. So, we highly recommend to replacing car's entire airbag assembly).

## Condition Requirements:

**Device requirements:** Android diagnostic devices, **Tesla** airbag repair designated connector

**Software requirements:** TESLA V10.02 or above version

- -. Preparation:
- 1. Disassembly airbag ECU from vehicle



Airbag ECU picture



Airbag ECU connection position

Airbag ECU wiring diagram

Wiring and pin allocation



PW: Power wiring, wire two position to write EEPROM. +12V: 12V power supply GND: Ground wire CAN\_H: CAN high CAN\_L: CAN low





. Resetting airbag crash data software operation procedure

Go into Tesla software, select 【Model S】 -> 【Special Function】-> 【Service AIRBAG】, as shown in figure 1, or select 【Model S】-> 【System Selection】 -> 【SDM Airbag】 -> 【Special Function】, as shown in figure 2, it will display the following menu.

Picture 1

■ V ✓ ⑧			k	🕩 👽 🖌 🖹 20:01
Show Menu		<b>î</b>		₽
TESLA V10.02 > Manually Select > Model S > Special Function				🖭 12.46V
Crash Data Resetting Automatically	Read EEProm			
Erase Crash Record	Write EEProm			
Clear Fault Code				

TESLA Model S			
<b>Q E</b>		r fan	
Pic	ture 2		
■ V· ✓ ⑧	-	♦ ≱ ⊕ ▼⊿ È	19:59
Show Menu		🔒 🖻 🗗	
TESLA V10.02 > Manually Select > Model S > System Selection > RCM/SDM (Su	oplementary Deployment Module - Ai	irbag) 🖽 1:	2.44V
Crash Data Resetting Automatically	Read EEProm		
Erase Crash Record	Write EEProm		
Change VIN	Reset ECU		
Read Resistance			

т	ESLA Model S						
	Q	P	思		<u>ل</u> ک	Ð	

2. Read airbag ECU memory, select [Read EEProm] menu, when reading is done, input backup file name, select backup file storage directory, data backup is done.

 $\bigotimes$ 

■ V· ✓ ⑧	՝ արի ▲ 🖬 20:03
Show Menu	A ē P
TESLA V10.02 > Manually Select > Model S > Special Function	E⊒ 12.54V
Crash Data Resetting Automatically	Read EEProm
Erase Crash Record	Write EEProm
Clear Fault Code Read	EEProm
Reading EEPROM	
	25%
TESLA Model S	
	□ ŵ ⇒
3. Input backup file name, for example "I	Vlodel_s_20210520"
	* ⊕ ▼▲ ≘ 20:04
File Save	
TESLA V10.02 > Manually Select > Model S > Special Function	🖽 12.55V
Please Input The Saved File Name Or Use the default name:	

Model\_s\_20210520

ок	CANCEL
TESLA Model S	
4. Click "OK" to backup data.	
Choose File For Save	
/storage/emulated/0//DIAGNOSTI	C/ <u>TeslaSdmData</u> /Model_s_20210520.bin
A Back to Up Page	
Home	
File S Selected File Is: /storage/emulated/0/d /DIAGN0 Model_s_20210520.bin	Save // DSTIC/TeslaSdmData/
01	ĸ
ОК	CANCEL

<u>→</u> ♥ ✓ (🛞)					* 🕕 🔽 🖥 20:	05
Choose File For Save			A		F	
/storage/emulated/0/	/DIAGNOST	IC/ <u>TeslaSdmData</u> /Model_s_20	0210520.bin			
A Back to Up Page						
Home						
	Read E	EProm				
	Reading EEPROM Done	e.				
	O	к				
ОК			CANCEL			
Q 🔹 🚇				ŵ	<b>€</b>	

## 5. Read EEPROM and backup finished

6. Erase crash record, go into **[**Erase Crash Record **]** menu, the software will run for several seconds and will automatically finish it.

<u>■</u> 歩 ✓ ⑧					≭ 🕞 🛡 ⊿ 🖹 20:07
Show Menu			<b>A</b>		P
TESLA V10.02 > Manually Select > Model S > 3	Special Function				🖽 12.57V
Crash Data Resetting Automatically Read EEProm					
Erase Crash Record		Write EEProm			
	Erase Cra	sh Record			
,	CANCEL OK				
TESLA Model S					
0				ŵ	€

7. Re-write airbag ECU battery backup data, select 【Write EEProm】 menu.

7.1 Select backup file Click "Model\_s\_20210520.bin" to select back file

<b>」 ゲ 〈 ⑧</b>		* (	🕒 🔽 🗍 20:08
Choose File			₽
/storage/emulated/0/	/DIAGNOSTIC/TeslaSdmData/Model_s_20210520.bin		
∧ Back to Up Page			
Reference Home			
Model_s_20210520.bin			



7.2 Edit backup data. Press [YES] to use default data. Press [Auto Set] to automatically modify value (recommended). Press [Memory Dump] to manually modify backup data.

<u> </u>			∦ 🕕 🔽 盲 20:08
Write EEProm		<b>^</b>	
TESLA V10.02 > Manually Select > Model S > Spe	ecial Function		🗄 12.58V
System Info			
Loaded EEPROM dump at address 0x0 REPROG mode.	000 contain value different from 0x0C. Writi	ng this dump would se	t SRS module to
Loaded EEPROM dump at address 0x0 supervisor access mode.	006 contain value different from 0x80. Writi	ng this dump would ma	ake SRS module to loose
Press [YES] To Continue Press [Auto Set] To Automatically Mod Press [Memory Dump] To Manually mo	ify Value dify the Memory Dump		
YES	Auto Set	Memo	ry Dump
TESLA Model S			
<b>Q E</b>			

7.3 If you press [Auto Set], it will skip this procedure. Press [Memory Dump], you can manually modify backup data. Start address is where the system starts to read backup data and it can be modified manually. After entering start address, press [Confirm] to write modified data, click [Restore] to recover it to old value.

<b>■ ポ × ⑧</b>	* 🕕 🔽 着 20:09
Memory Dump	
TESLA V10.02 > Manually Select > Model S > Special Function	🖽 12.58V
Address	Value
Start Address (Click To Edit)	0x0000
0x0000	0x0E
0x0001	0x01
0x0002	0x01
0x0003	0x01
0x0004	0x01
0x0005	0x00
- 000r	0.00
Comfirm	Restore
TESLA Model S	

՝ ⊮⊡⊧ ▼∠/ 🖹 20:09

**⊥** ∀ ✓ (¥)

Memory Dump						<b>f</b>			F
TESLA V10.02 > Manually Select > Model S >		Sta	art Addres	S					<u></u> 12.58∖
Address	Please Enter The Start Address, For example, hexadecima format is similar to 0x0001 Or 01.								
Start Address (Click To Edit)	0006				×				
0x0000									
0x0001	CA	NCEL		ОК					
									_
									Ŷ
1 2 3	4	5	6	7	8	9		0	
@ # £	%	&	-		+	(	)		e
	*	п	1				ı	2	~ [ <
~t< / =				•	,		:	:	~[<
ABC , _			English				/		٢
0 🖸 🕒							ŝ		$\bigtriangledown$
7.4 Write Data									
								*	· 🕩 💙 🖌 🖬 20:0
Memory Dump						A			F
TESLA V10.02 > Manually Select > Model S >	Special Functio	n							€ 12.62
Address				`	Value				
Start Address (Click To Edit)				0	0000x000				
0x0000				0	)x0E				
0x0001		Wri	te EEPror	n					
0x0002	Writing	EDDOM							
0x0002	witting t								
0x0003			30%						
0x0004	_	_	_	0	TUXUT				
0x0005				0	00x00				
0.0000						_	_	_	
Comfin									
TECHA Madel C									
							ŵ		₅

■ v × ⑧					՝ ≹ 🕩 ♥⊿ 🖹 20:10
Memory Dump			A	ē	P
TESLA V10.02 > Manually Select > Model S > S					👫 12.62V
Address		Value			
Start Address (Click To Edit)		0x0000			
0x0000		0x0E			
0x0001	Write EEProm				
0x0002	Writing EEPROM Done.				
0x0003					
	ок				
0x0004					
0x0005		0x00			
0.0007		0.00			
Comfirm					
TESLA Model S					
Q 🖪 🖽				ŝ	Ð

8. Perform 【Clear Fault Code】 function, and then put airbag ECU back on vehicle.

v <b>_</b> (\$)				\$ \$	🕩 🖍 📕 14:05
Show Menu			A		P
TESLA V10.05 > Manually Select > Model S >	<ul> <li>Special Function &gt; service AIRBAG</li> </ul>	3			🖽 12.85V
Crash Data Resetting Automatically		Read EEProm			
Erase Crash Record		Write EEProm			
Clear Fault Code	Clear F	ault Code			
	Clearing Done				
0		ок			
TESLA Model S					
<i>Q</i> 💌 🕓				<u></u>	5

9. If you find the above procedure is cumbersome, please click [Crash Data Resetting Automatically] menu, it will automatically perform all procedures.