DMAX Automotive Diagnostic Tool

User's Guide Rev 4

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1. PREFACE

This manual will guide you through the installation and operation of the DMAX Automotive Diagnostic Tool. The DMAX-Tool has been designed not only to work with Chrysler vehicles via the OBD II connector but also to direct the EEPROM programming via the programming clip.

The DMAX-Tool supports either J1850 or CAN communication interfaces the same way as 24Cxx series EEPROM or 95xxx EEPROM series.

IMPORTANT NOTE ABOUT THE DMAX PLEASE READ

This tool is a security tool. It works on used security modules. This tool "DOES NOT" edit or program PCM's or BCM's of vehicle's. This tool will edit VIN's on select used SKIMS and WCM's. This tool will not allow you to change the pin code in the SKIM and WCM It will not program a VIN to a PCM or BCM.

If you are looking to program a PCM or BCM, the "AE Z Flasher" is available for PCM VIN Writing & Programming. Also AE Tools & Computers can Reset SKIM in all PCM's & change PCM Part numbers.

On some vehicles the dmax tool reset the 60 minute lockout counter.

For more information on this please give us a call at, (913) 856-6678

2. CHECKLIST AND REQUIREMENTS

The following checklist describes what items are supplied with the DMAX-Tool and the system requirements if it is used by a PC.

DMAX Interface–supplied OBD II Cable–supplied USB cable–supplied SOIC-8 EEPROM Clip with cable–supplied Skim Popper Tool –supplied DMAX-Tool User guide CD-ROM–supplied

Power supply 12 Volt/500 mA is used for working out of a car. (*Note: Using a 12 Volt Power Supply is optional*)

Recommended System Requirements

Windows XP Pro, Windows 7 Pro, Windows 8 Pro
Dual Core Possessor
4 gig of Ram
32Bit or 64Bit OS
Windows (XP/Vista/7/8) with the preinstalled Microsoft .NET Framework Ver. 3.5

NOTE: You will need Microsoft .NET Framework 3.5 or higher. To download, please use the link below. http://www.microsoft.com/en-us/download/details.aspx?id=21

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3. DEVICE DESCRIPTION

The DMAX-Tool USB device includes four connectors and two LEDs (See Figure 3). 12V. PC USB connector is intended for communication with the PC (See Figure 1). Ext. 12 V connector is used when you work on the bench, out of a car. Apply the 12 Volt/ 500 mA external power sources to Ext. 12 V connector paying attention to the polarity. Also, there are two status LEDs:

USB is not ready – blinking orange.

USB is ready – permanent orange.

OBD II status shows that the OBD II cable is plugged into the OBD II plug in vehiclegreen.

OBD II communication is in progress - orange or blinking.



Figure1. The DMAX-Tool USB device front panel

At the rear panel there are two connectors, OBD II and PROG (See Figure 2). The OBD II connector goes to the vehicle OBD II plug through the OBD II cable. The PROG connector supports the programming of EEPROM memory. Use the SOIC-8 EEPROM Clip for programming the EEPROM in-circuit.

Note: Pay attention to the EEPROM 1-st pin. It should be connected to the first pin of the SOIC-8 EEPROM Clip. Please see detailed pictures in the DMAX-Tool software.



Figure 2. The DMAX-Tool USB device rear panel.



Figure 3. The DMAX-Tool USB device.

4. SOFTWARE INSTALLATION

To operate with the DMAX-Tool a user has to install the control software on the Personal Computer. The DMAX-Tool software requires not only the preinstalled .NET Framework Ver. 3.5 package but also the installed USB device driver. Please follow next steps to complete the installation.

Check if the.NET Framework Ver. 3.5 package is installed on your PC. If you use the Win. XP, you should go to Start>Setting>Control Panel>Add Remove Programs (See Figure 3)

- 1	🕮 Microsoft .NET Framework 1.1		
Add <u>N</u> ew	🔀 Microsoft .NET Framework 2.0 Service Pack 1	Size	185.00MB
Programs	髎 Microsoft .NET Framework 3.0 Service Pack 1	Size	245.00MB
5	읡 Microsoft .NET Framework 3.5	Size	<u>25.88MB</u>
Add/Remove	Click here for support information.	Used	<u>rarely</u>
<u>W</u> indows Components	\searrow	Last Used On	10/3/2008
	To change this program or remove it from your computer, click Change/Remove.	Chang	ge/Remove

Figure 3. Microsoft .NET Framework 3.5

If there is no Microsoft .NET Framework 3.5, please download the Microsoft .NET Framework Version 3.5 Redistributable Package (x86) from this

address: http://www.microsoft.com/en-us/download/details.aspx?id=21 and install it.

Execute Setup.exe to install the DMAX-Tool software. Follow the instructions to select installation options.

After installation of this software, the USB driver Setup Wizard will start working (Se Figure 4.)





If the Error message: "There is 1 currently connected device..." appears (See Figure 4) you should disconnect all USB devices from the PC and press the "Retry" button.



Figure 4. USB Driver Setup Wizard Error

After the message box: "Please Connect USB Device to PC" appears (See Figure 5), connect the DMAX-Tool USB device to the Personal Computer and make sure that it is powered up (USB status LED is lit). Press the "OK" button.

OMAX USB Driver 1.3 Setup	×
Please Connect USB Device to PC and Press	: OK Button.
	ОК

Figure 5. USB Driver Setup Wizard message box

If the USB Driver was installed successfully the USB Status LED should light up orange. To check the driver version and the operation status on the PC with Win XP operating system go to:

Start>Setting>Control Panel>System>Hardware>Device Manager>Human Interface Device>DMAX USB Device (See Figure 6).

🗄 🎱 DVD/CD-R	OM drives	
🗄 🚍 Floppy dis	< controllers	
🖻 🌆 Human Int	erface Devices	
- 🖾 DMAX	USB Device	
- 🖾 HID-co	mpliant consumer control device	
🔤 HID-co	mpliant device	
- 🖾 HID-co	mpliant device	
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	mpliant device	

Figure 6. DMAX USB device driver location

Note: If the USB driver is not installed, reinstall it by using the USB Driver Setup Wizard.

🔎 Chrysler SKIM	🖬 Chrysler SKIM	0
📀 Install USB Driver	¥	

Figure 7. USB driver Setup Wizard

5. THE USB DEVICE SERIAL NUMBER AND SOFTWARE UPDATE

To get the DMAX USB Device serial number, the DMAX USB Device has to be connected to the PC and the software has to be installed on the PC. See section 4. SOFTWARE INSTALLATION for more details.

Start Chrysler SKIM software (see Figure 8).

Wait until the USB icon stops blinking.

Select the "About" menu item.

Now you can read the USB Module Serial Number and copy it to the clip board.

#ChalaM	-101-
	Help Update About
Select Vehicle	
	USB Device is Conversed
	About (X)
	CriSKIM Car Disprosite Teel Software Version 20
	Firetures Versaux 01.03
	USB Model SM 0900644552952433
1	

Figure 8. Chrysler SKIM software

You can download new software form our web site: <u>http://www.aerenewal.com/</u> Downloading is available for registered users only. To get the password you have to provide the valid USB Device serial number and your Email address. Once registration process is completed you will receive a password by Email. Then you can log-in to your account using the password.

To check if the new software is available: Start Chrysler SKIM software (see Figure 8). Select the "Update" menu item. Click "Check" link (see Figure 8.1).

ChSKIM				
			Help	Update Abc
Select Vehicle	_			
Jelect Vehicle		USB Device is Connected.		
	Update	_ 🗆 🗙		
	WEB Site: http://www.autoellools.	com/		
	New Version: Check			
	NZ OK			
		USB		

Figure 8.1. Chrysler SKIM software

6. IN-CIRCUIT SKIM READING BY THE CLIP

In-Circuit reading interface is implemented to work with modules, which do not support a diagnostic way to work with the target module. Usually, this is the first generation of J1850 modules. This section describes step by step operation with the Chrysler SKIM module (part number 56042298AD) installed in a 2000 Jeep Grand Cherokee. Other similar modules could be done in the same manner. The new Skim Popper tool allows you to gain access and read the Skim Chip. Refer to the section 13, the Skim Popper tool. If you do not have this tool please do next steps very precise to prevent damaging of a SKIM module.

Gently remove the SKIM module from a car paying special attention to RF coil (see Figure 9).



Figure 9. SKIM module P56042298AD

Remove the top plastic cover and unsolder two pins (see Figure 10).



Figure 9. Unsoldering the pins

Locate 24LC02 memory and remove the varnish from the pins by knife or by another appropriate tool (see Figure 10).



Figure 10. Removing the varnish from the pins

Apply the External 12 Volt to the D-MAX USB module then connect the SOIC-8 EEPROM Clip cable to the "PROG" connector (see Figure 11).



Figure 11. Required connections for the In-circuit EEPROM programming

Start the Chrysler SKIM software, select the Jeep Grand Cherokee Limited. (2000) and press the "Read SKIM" button (see Figure 12).

Vehicle 4	Year	Part No	SKIM Read	KEY Program/Erase	SKIM/VIN Edit	DTC Read/Clear
Dodge Nitro	2008	05026074AP	CAN	CAN	CAN	CAN
Dodge Nitro	2007	05026071AP	CAN	CAN	CAN	CAN
Dodge Pickup	2002	56045275AB	J1850	J1850	J1850	J1850
Dodge RAM 1500	2006	56040659AJ	CAN	CAN		CAN
Dodge RAM 1500	2006	56040546AK	CAN	CAN		CAN
Dodge RAM 1500	2007	05026221AM	CAN	CAN	CAN	CAN
Dodge RAM 2500	2005	56045275AC	J1850	J1850	J1850	J1850
Dodge Stratus	2000	04671243AC	24C02 Prog	1.2023		0.00000
Jeep Commander	2006	56053016AQ	CAN	CAN		CAN
Jeep Commander	2007	05026189AG	CAN	CAN	CAN	CAN
Jeep Grand Cherokee	2007	05026187AG	CAN	CAN	CAN	CAN
Jeep Grand Cherokee	2005	56053016AP	CAN	CAN		CAN
Jeep Grand Cherokee	2006	05026185AF		CAN	CAN	CAN
Jeep Grand Cherokee Lim	2000	56042298AD	24C02 Prog	J1850	J1850	J1850
Jeep Liberty	2008	05026071A0		CAN	CAN	CAN
Jeep Liberty Sport	2004	56010209AD	J1850	J1850	J1850	J1850
Jeep Liberty Sport	2005	56053020AE	95080 Prog	J1850		J1850
Jeep Liberty Sport	2007	56053020AF	95080 Prog	J1850		J1850
Jeep Wrangler	2008	05026070A0	CAN	CAN	CAN	CAN
Jeep Wrangler Rubicon	2004	56010209AD	J1850	J1850	J1850	J1850
Plymouth Neon Highline	2001	04671722AC	J1850	J1850	J1850	J1850
Plymouth Neon Highline	2000	05269985AC	24C02 Prog	J1850	J1850	J1850
Al conceditor between the	ок 💦	1		ancel	- 1	

Figure 12. The SKIM reading procedure

After the message "Put Programmer clip on to Memory" appears (see Figure 13), put the SOIC-8 EEPROM Clip on to the memory, as it is shown in the picture. Pay extra attention to the 1st pin. Both first pins on the memory and on the clip should match (see Figure 14). Otherwise, there is a risk of damage to the memory and the D-MAX USB module. First pin is marked by red color on the SOIC-8 clip.

Note: On the SOIC-8 clip the first pin is marked by red color.

SOIC-8 clip supplied with the D-MAX USB module may look different from what shown on the picture.

Note: On the EEPROM memory, the 1st pin is usually marked by the round groove.

Z ChSKIM	.0
Jeep Grand Chevakov Las. (2000) Part Russber: 56042238AD	Help Update Abo
Salace Vyrische	
Module Info	Put Programmer Clip on to Memory. Press Continue Operation Button
Read SKIM	
Read D1Cs	Concession of the local division of the loca
Clear DTCs	
SKIM/WCM/VIN Edit	
Einne Keys	
Program a Key	
Continue Operation	
F	Dat

Figure 13. The Connection Help Screen



Figure 14. The Connection Help Screen, detailed view

Press the "Continue Operation" button. If there is a poor contact between the clip and the memory, the "Pin Tester Error" screen will appear (see Figure 15). Pins with a bad connection are marked by red color. A couple of reasons could lead to this problem. For example, the varnish cover was not removed completely from the pins or the SOIC-8 Clip was not mounted well on the memory. When the poor contact problem is resolved, the SKIM number would be read automatically (see Figure 16).



Figure 15. Pin Tester Error Screen

ChSKIM			- 0 >
eep Grand Cherokee Lim. (2000) 'art Number: 56042298AD	SKIM Number: 0057	Help V	pdate Abou
Select Vehicle			
Module Info			
Read SKIM			
Read DTC:			
Clear DTCs			
SKIM/WCM/VIN Edit			
Erase Keys			
Program a Key			
	USB		

Figure 16. SKIM number screen

7. SKIM NUMBER READING VIA OBDII-J1850 BUS

The SKIM reading via the OBD II connector is implemented to work with second generation modules which support the diagnostic way to work with the target module. As the J1850 protocol is used, the communication speed with the target module may take couple minutes on each procedure. To work with the J1850 SKIM module the additional two keys are needed. The first key is the "VALET" Key and the second key is "EMPTY" Key. The "VALET" Key does not have the RF-ID chip inside; it is just a piece of metal. The "EMPTY" Key is the brand new key, which was never programmed to any vehicle.

This section describes step by step operation with the Chrysler SKIM module (part number P56010209AD), installed in a 2004 Jeep Wrangler Rubicon. Other similar modules could be done in the same manner.

Plug-In the ODB II Cable and the USB Cable in to the DMAX-Tool device (see Figure 17). Another side of the ODB II Cable has to be connected to the vehicles ODB II connector. Make sure that the ODB II LED lights up green. Otherwise, check the integrity of the OBD II Cable and the OBD II connector.



Figure 17. Connection of DMAX-Tool to vehicle

Start the Chrysler SKIM software, select Jeep Wrangler Rubicon 2004 and press the "Read SKIM" button (see Figure 18).



Figure 18. The SKIM number reading via OBD II

Turn Ignition On and press the "Continue Operation" button (see Figure 19).



Figure 19. The SKIM number reading via OBD II

Approximately in one minute the software shows the VIN number, the SKIM module part number and the firmware version of the SKIM module. If the progress bar stays in the "marquee" mode for more than one minute it means that there is no SKIM module on the J1850-bus detected. In this case, check if the ignition is on and the OBD II cable is connected to the vehicle.

🖉 ChSKIM					- 🗆 ×
Jeep Wranglet Rubicon (2004) Part Number: 56010209AD Select Vehicle	VIN Number: Part Number: 56010209AD Version: 14.1 Country Code: 00 (U.S.A.)		Help	Update	About
Module Info	Ī	Turn Ignition Off. Turn Ignition On using VALET key.			
Read SKIM					
Read DTC:					
Clear DTCs					
SKIM/WCM/VIN Edit	1				
Erase Keys					
Program a Key		VALET			
Cancel Operation					
		USB 31850			

Figure 22. The SKIM number reading, step 3 Turn the ignition off.

Turn the ignition on. In one minute next screen will appear:

🖊 ChSKIM					
Jeep Wrangler Rubicon (2004) Part Number: 56010209AD	VIN Number: Part Number: 56010203AD Version: 14.1		Help	Update	About
Select Vehicle	Country Code: 00 (U.S.A.)				
Module Info	1	Turn Ignition Off. Turn Ignition On using EMPTY key.			
Read SKIM					
Read DTC:	1				
Clear DTCs	1				
SKIM/WCM/VIN Edit]				
Erase Keys	1	A			
Program a Key	1				
Cancel Operation]	T			
		USB 31850			

Figure 21. The SKIM number reading, step 2

Turn the ignition off. Insert the "EMPTY" Key then turn the ignition on. Approximately in one minute the next screen will appear:



Figure 22. The SKIM number reading, step 3

Turn the ignition off. Turn the ignition on. In one minute next screen will appear:

ChSKIM	THE R. LEWIS CO., LANSING MICH.	_ 🗆 🗙
Jeep Wrangler Rubicon (2004) Part Number: 56010209AD Select Vehicle	VIN Number: Part Number: 56010209AD Version: 14.1 County Code: 00(1, S.A.) SKIM Number: 6221	Help Update About
Module Info		
Read SKIM]	
Read DTCs		
Clear DTCs		
SKIM/WCM/VIN Edit		1
Erase Keys		
Program a Key		
	058	

Figure 23. The SKIM number reading, step 4

Note: If you get an error message during the operation, try to redo everything from the beginning. This time do it faster, Do it exactly when the software instructs you to.

8. THE SKIM NUMBER READING VIA THE OBDII-CAN BUS

The SKIM reading via the OBD II connector is implemented to work with third generation modules, which support a diagnostic way to work with the target module via the CAN protocol.

This section describes step by step operation with the Chrysler WCM module (part number 56040542AN), installed in a 2005 Dodge Durango. Other similar modules could be done in the same manner.

- Plug-In the ODB II Cable and the USB Cable in to the DMAX-Tool device (see Figure 17). Another side of the ODB II Cable has to be connected to the vehicles ODB II connector. Make sure that the ODB II LED lights up green. Otherwise, check the integrity of the OBD II Cable and the OBD II connector.
- Start the Chrysler SKIM software, select Dodge Durango 2005 Adv./SLT (2005) and press the "Read SKIM" button (see Figure 24).

ChSKIM				1	- I X
Dodge Durango Adv /SLT (2005)			Help	Update	About
Dodge Durango Adv./SLT (2005) Part Number: 56040542AN					
Select Vehicle					
Module Info					
Read SKIM	1				
Read DTC:					
Clear DTCs					
SKIM/WCM/VIN Edit			5		
Erase Keys					
Program a Key					
		USB			

Figure 24. The SKIM number reading via OBD II-CAN

Turn the ignition on and press the "Continue Operation" button. In couple seconds the next screen will appear:

ChSKIM					- O ×
Dodge Durango Adv./SLT (2005) Part Number: 56040542AN Select Vehicle	VIN Number: Part Number: 56040542AN Software Version : 10.00.05 Hardware Version : 41.45 Country Code: 04 (Canada)	SKIM Number: 7777	Help	Update	About
Module Info					
Read SKIM					
Read DTC:					
Clear DTCs					
SKIM/WCM/VIN Edit			1		
Erase Keys					
Program a Key					
		USB			

Figure 25. The SKIM number reading via OBD II, step 1

9. THE VIN NUMBER EDIT VIA THE OBDII

The VIN number edit function is useful if you have replaced the SKIM module or the PCM module. After the used module has been installed, the VIN number in the SKIM module and the VIN number in the PCM module have to be matched. To edit the VIN number in the SKIM module the SKIM number is required. Thus, read the SKIM number first as described in Sections 6, 7. Also, the Country Code edit function is implemented.

This section describes step by step the operation with the Chrysler SKIM module (part number 56042298AD), installed in a 2000 Jeep Grand Cherokee Lim. Other similar modules could be done in the same manner.

Plug-In the ODB II Cable and the USB Cable into the DMAX-Tool device (see Figure 17). Another side of the ODB II Cable has to be connected to the vehicles ODB II connector. Make sure that the ODB II LED lights up green. Otherwise, check the integrity of the OBD II Cable and the OBD II connector.

Start the Chrysler SKIM software, select Jeep Grand Cherokee Lim. 2000 and press the "SKIM/WCM/VIN Edit" button (see Figure 26).

[®] ChSKIM		×
Jeep Grand Cherokee Lim. (2000) Part Number: 56042298AD	Help Update Ab	out
Select Vehicle		
Module Info		
Read SKIM		
Read DTCs		
Clear DTCs		
Erase Keys		
Program a Key		
	USB	+

Figure 26. The SKIM/WCM/VIN edit via OBD II

Turn Ignition On and press the "Continue Operation" button (see Figure 19). Enter the SKIM number. If the SKIM number is incorrect, it will lock the module for 60 minutes. Any secured diagnostic operations such as a "Read SKIM", "SKIM/WCM/VIN Edit", "Erase Keys" or "Program a Key" will be disabled for 60 minutes. (*Note: On some vehicles the dmax tool reset the 60 minute lockout counter*)

Enter a new VIN number. It must be the same as a PCM module. If you want to bring the module to the unprogramed state leave the VIN field blank. The blank VIN number allows you using the Chrysler diagnostic tool to program the VIN number. Enter a new Country Code.



Press the "Validate Data" button to continue operation (see Figure 27).

Figure 27. The VIN number and the Country Code fields edit

In couple minutes you will see the next screen (see Figure 28).

ChSKIM				Help	Update Abou
leep Grand Cherokee Lim. (2000) Part Number: 56042298AD	SKIM Number	VIN Number	Country Code	1	
Part Number: 36042238AD	0057	1J4GW12N3YC456789	00	10	
Select Vehicle					
Module Info			odule Replace Successfu	>	
Read SKIM					
Read DTCs		N. S. S.			
Clear DTCs					
SKIM/WCM/VIN Edit					
Erase Keys					
Program a Key					
		USB			

Figure 28. SKIM/WCM/VIN Edit procedure is completed

To make sure that the VIN number has changed, read the module info. Press the "Module info" Button (see Figure 29).



Figure 29. Verifying the VIN Edit procedure

10. KEY PROGRAMMING VIA THE OBDII

The Key Programming function is to be used to program a new Key. To add a new key the SKIM number is required. Thus, read the SKIM number first as described in Sections 6, 7.

This section describes step by step an operation with the Chrysler SKIM module (part number 56042298AD), installed in a 2000 Jeep Grand Cherokee Lim. Other similar modules could be done in the same manner.

Plug-In the ODB II Cable and the USB Cable into the DMAX-Tool device. (see Figure 17). Another side of the ODB II Cable has to be connected to the vehicles ODB II connector. Make sure that the ODB II LED lights up green. Otherwise, check the integrity of the OBD II Cable and the OBD II connector.

Start the Chrysler SKIM software, select the Jeep Grand Cherokee Lim. 2000 and press the "Program a Key" button (see Figure 30).

^e ChSKIM			-0>
leep Grand Cherokee Lim. (2000) Part Number: 56042298AD	н	elp Update	Abour
Select Vehicle			
Module Info			
Read SKIM			
Read DTC:			
Clear DTCs			
Erase Keys			
Program & Key			
13			

Figure 30. Program a Key

Turn Ignition On and press the "Continue Operation" button (see Figure 19).

Enter the SKIM number. If the SKIM number is incorrect, it will lock the module at least for 60 minutes. Any secured diagnostic operations as a "Read SKIM", "SKIM/WCM/VIN Edit", "Erase Keys", or "Program a Key" will be disabled for 60 minutes.

Press the "Validate Data" button to continue an operation (see Figure 31).

ChSKIM		- 🗆 🗙
	Help Update	About
Jeep Grand Cherokee Lim. [2000] Part Number: 56042298AD	SKIM Number 0057	
Select Vehicle		
Module Info	This function is to be used to program a New Key. Enter the SKIM number. If the SKIM number is incorrect, it will lock the module.	
Read SKIM	Press Cancel Operation Button to Cancel operation. Press Validate Data Button to Start operation.	
Read DTCs		
Clear DTCs		
SKIM/WCM/VIN Edit		
Erase Keys		
Program a Key		2
Cancel Operation		2
Validate Data		8 1
4		
		26
	SKIM	
	US8 J1850	

Figure 31. Enter the SKIM Number

Shortly thereafter you will see the next screen (see Figure 32).

ChSKIM				1	- 0
			Help	Update	Abou
eep Grand Cherokee Lim. (2000) Part Number: 56042298AD	SKIM Number				
ar rumber. 3004223040	0057				
Select Vehicle					
Module Info		Programming New Key Success	ful		
Read SKIM					
Read DTC:					
Clear DTCs					
SKIM/WCM/VIN Edit					
Erase Keys					
Program a Key					
		USB			

Figure 32. Programming New Key is Successful

11. KEY ERASING VIA THE OBDII

This function is to be used if the owner lost a key and wants to disable all current ignition keys for security reasons. This means that all ignition keys not only current but also new ones have to be programmed. To erase all keys the SKIM number is required. Thus, read the SKIM number first as described in the Sections 6 and 7.

The section 11 describes the operation with the Chrysler SKIM module (part number P56010209AD) step by step, installed in a 2004 Jeep Wrangler Rubicon. Other similar modules could be done in the same manner.

Plug-In the ODB II Cable and the USB Cable into the DMAX-Tool device (see Figure 17). Another side of the ODB II Cable has to be connected to the vehicles ODB II connector. Make sure that the ODB II LED lights up green. Otherwise, check the integrity of the OBD II Cable and the OBD II connector.

Start the Chrysler SKIM software, select Auto ID, read SKIM and then press the "Program a Key" button (see Figure 33).

[®] ChSKIM			_ 🗆 ×
Jeep Wrangler Rubicon (2004) Part Number: 56010209AD		Help U	pdate About
Select Vehicle			
Module Info			
Read SKIM			
Read DTCs			
Clear DTCs			
SKIM/WCM/VIN Edit		1	
Erase Keys			
Program a Key			
	USB		đ

Figure 33. Erase Keys

Turn Ignition On and press the "Continue Operation" button (see Figure 19).

Enter the SKIM number. If the SKIM number is incorrect, it will lock the module at least for 60 minutes. Any secured diagnostic operations such as a "Read SKIM", "SKIM/WCM/VIN Edit", "Erase Keys" or "Program a Key" will be disabled for 60 minutes.

Press the "Validate Data" button to continue the operation (see Figure 34).

⁹ ChSKIM		_ 🗆 🗙
		Help Update About
Jeep Wrangler Rubicon (2004) Part Number: 56010209AD	SKIM Number	
Select Vehicle	() <u>() () () () () () () () () () () () () (</u>	
Module Info	This function is ONLY to be used if the Owner lost a Ign Keys for security reasons. This means that All Ign Keys, N	lew and Current, will have to be programmed.
Read SKIM	Enter the SKIM number. If the SKIM number is i Press Cancel Operation Button to Press Validate Data Button to	Cancel operation.
Read DTC:		
Clear DTCs		1 m m
SKIM/WCM/VIN Edit	1	
Erase Keys		1
Program a Key		
Cancel Operation		
Validate Data	No.	
43		and a second of the
	USB 31850	đ

Figure 34. Enter the SKIM Number

Shortly thereafter you will see the next screen (see Figure 35).

[®] ChSKIM					- = ×
Jeep Wrangler Rubicon (2004) Part Number: 56010209AD	SKIM Number		Help	Update	About
Select Vehicle	6221				
Module Info		Erase All Keys Successful			
Read SKIM	1				
Read DTC:					
Clear DTCs]				
SKIM/WCM/VIN Edit					
Erase Keys					
Program a Key					
		USB			

Figure 35. Erase All Keys Successful

12. READ/CLEAR DIAGNOSTIC TROUBLE CODES (DTC)

This function is implemented to read the diagnostic trouble codes. After successful reading the description of every trouble the code displays. Also, all active and stored trouble codes could be erased. This section describes the operation with the Chrysler SKIM module (part number 56042298AD step by step, installed in a 2000 Jeep Grand Cherokee Lim. Other similar modules could be done in the same manner.

- Plug-In the ODB II Cable and the USB Cable into the DMAX-Tool device (see Figure 17). Another side of the ODB II Cable has to be connected to the vehicles ODB II connector. Make sure that the ODB II LED lights up green. Otherwise, check the integrity of the OBD II Cable and the OBD II connector.
- Start the Chrysler SKIM software; select the Jeep Grand Cherokee Lim. 2000 and press the "Read DTCs" button (see Figure 36).

^e ChSKIM			_0,
leep Grand Cherokee Lim. (2000) Part Number: 56042298AD		Help	Update Abou
Select Vehicle			
Module Info			
Read SKIM			
Read DTC:			
Clear DTCs			
SKIM/WCM/VIN Edit			
Erase Keys			
Program a Key			
	USB		

Figure 36. Read Diagnostic Trouble Codes

Turn Ignition On and press the "Continue Operation" button (see Figure 19). Shortly thereafter the Number of DTCs and DTCs description will appear (see Figure 37).



Figure 37. Number of DTCs and DTCs Description

To erase all diagnostic trouble codes use the "Clear DTCs" button (see Figure 38).

[®] ChSKIM			- 🗆 ×
Jeep Grand Cherokee Lim. (2000) Part Number: 56042298AD	Number of DTCs: 1	Help Update	About
Select Vehicle			
Module Info	DTC: ANTENNA FAILURE		
Read SKIM			
Read DTCs			
Clear DTCs			
SKIM/WCM/VIN Edit			
Erase Keys			
Program a Key			
	USB		i

Figure 38. Clear All DTCs

Note: After the "Clear DTCs" procedure is completed, the software reads DTCs automatically.

13. WRONG PART NUMBER USAGE

First you will open up the DMAX Software like normal Then use the auto identify feature. It will advise you that it cannot find the part number.



Click Select Vehicle

Now select Auto Identify

Vehicle	Year	Part No	SKIM Read	Lockout Reset	KEY Program/Era	SKIM/VIN Edit	DTC Read/C
AUTO IDENTIFY							
Chrysler 300M	2000	226AE	24C02 Prog	24C02 Prog	J1850	J1850	J1850
Dodge Intrepid	2002-2003	046. 22	J1850	J1850	J1850	J1850	J1850
Chrysler 300M	2004	04602273	J1850	J1850	J1850	J1850	J1850
Dodge Stratus	2000	046712 AC	24C02 Prog	24C02 Prog		 8	
Chrysler Sebring LXi	2001	04671676AD	J1850	J1850	J1850	J1850	J1850
Chrysler PT Cruiser	2001	04671676AD	J1850	J1850	J1850	J1850	J1850
Chrysler Sebring	2002-2003	04671676AE	J1850	J1850	J1850	J1850	J1850
Plymouth Neon Highline	2001	04671722AC	J1850	J1850	J1850	J1850	J1850
Dodge Neon	2002-2003	04671722AD	J1850	J1850	J1850	J1850	J1850
Chrysler Town and Country	2001	04686665AB	J1850	J1850	J1850	J1850	J1850
Dodge Grand Caravan Limited	2001	04686665AB	J1850	J1850	J1850	J1850	J1850
Dodge Grand Caravan Sport	2002	04686665AC	J1850	J1850	J1850	J1850	J1850
Dodge Caravan	2002-2003	04686665AC	J1850	J1850	J1850	J1850	J1850
Jeep Grand Cherokee	2002	04686665AC	J1850	J1850	J1850	J1850	J1850
Dodge Caravan	2003	04686665AD	J1850	J1850	J1850	J1850	J1850
Jeep Grand Cherokee	2004	04686665AD	J1850	J1850	J1850	J1850	J1850
Chrysler Pacifica	2004	04686961AC	95040 Prog	95040 Prog	J1850	J1850	J1850
Dodge Caravan SE	2004	04727295AD	95040 Prog	95040 Prog	J1850	J1850	J1850
Chrysler Town and Country	2005	04727295AE	95040 Prog	95040 Prog	J1850	J1850	J1850
Dodge Grand Caravan	2005	04727295AE	95080V2	95080V2	J1850	J1850	J1850
Chrysler Town and Country	2006	04727295AF	95040 Prog	95040 Prog	J1850	J1850	J1850
Dedee Caravan	2000	0472720540	95040 Prog	95040 Prog	11050	11950	11050

You will then see the Error of the part number not found.



Click part no, now what you want to do is, find the part number that matches the closest, the part number the dmax was reading was (68172580AB) we will find the part number closest to that in the list of part numbers.

Vehicle	Year	Part No	Bead	Lockout Reset	KEY Program/Era	SKIM/VIN Edit	DTC Read/Cle
Jeep Grand Cherokee	2005	56053016AO	CAN2		CAN2		CAN2
Jeep Grand Cherokee	2005	56053016AP	CAN2	1	CAN2		CAN2
Jeep Commander	2006	56053016AQ	CAN9		CAN9		CAN9
eep Cor mander	2006	56053016AR	CAN9		CAN9		CAN9
Jeep Grind Merokre	2006	56053016AS	CAN9		CAN9		CAN9
Jeep Liberty Sport	2005	56053020AE	95080 Prog		J1850	J1850	J1850
Jeep Liberty	2006	56053020AF	95080 Prog	and the second s	J1850	J1850	J1850
Jeep Liberty Sport	2007	56053020AF	95080 Prog	1	J1850	J1850	J1850
Dodge Durango	2008	68014273AE	CAN3	i ntere :	CAN3	CAN3	CAN3
Dodge Durango	2008	68014275AF	CAN3	1	CAN3	CAN3	CAN3
Dodge Durango	2008	68018274AF	CAN3		CAN3	CAN3	CAN3
Chrysler Aspen	2009	68018274AG	CAN3		CAN3	CAN3	CAN3
Dodge RAM	2010	68064789AC	CAN12		CAN12	CAN12	CAN12
Dodge RAM	2010	68064789AD	CAN12	1	CAN12	CAN12	CAN12
Fouge Charger	2010	68064789AE	CAN12		CAN12	CAN12	CAN12
Double Chall no	2011	68064790AE	CAN12		CAN12	CAN12	CAN12
Codge MAM	2012	68066563AH	CAN12		CAN12	CAN12	CAN12
Chrysler Town and Country	2010	68066727AB	CAN12	C0172	580AA	CAN12	CAN12
Dodge Journey	2010	68066729AB	CAN12	001/2	MNUOC	CAN12	CAN12
Dodge Grand Caravan	2010	68066729AB	CAN12		CAN12	CAN12	CAN12
Dodge Journey	1013	68172580AA	CAN13	CAN13	CAN13		CAN13
Dodge Charger	2013	68172580AA	CAN13	CAN13	CAN13		CAN13

Just select the part number on that screen. Most of the time the software will find the part number that is closest to what you are looking for. For this you will go up or down to the part number. So if your part number is, 68172580AB, then you will look for 68172580AA or 68172580AC and chose that part number to read the SKIM code.

For questions or issues with this call Support at, 913-856-6678

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14. Programming with a Fobic/Prox Key

To program a car that has a Fobix/Prox key is a little different. Below you will find the information on how to program the key for that type of car. First you need to remove the button that you press to start the car with your finger.

Remove the Start button cover on the car. This will show a hole that you can insert the new keys in. Once that is done you can use the Dmax as normal. You will pull the Skim code and program the key. Now you will need to program the Prox part of the key. This is where it is a little different.

Vehicle	Year 🔺	Part No	SKIM Read	Lockout Reset	KEY Program/Era	SKIM/VIN Edit	DTC Read/Cle
Dodge Caliber	2010	05026218AN	CAN4		CAN4	CAN4	CAN4
Chrysler Town and Country	2010	68066727AB	CAN12	577776A	CAN12	CAN12	CAN12
Chrysler 300	2010	05026366AL	CAN12		CAN12	CAN12	CAN12
Volkswagen Routan	2010	05026874AE	CAN7		CAN7	CAN7	CAN7
Chrysler Town and Country	2010	05026875AE	CAN7		CAN7	CAN7	CAN7
Dodge Caravan	2011	05026534AH	CAN12		CAN12	CAN12	CAN12
Chrysler Town and Country	2011	05026535AG	CAN12		CAN12	CAN12	CAN12
Dodge Challenger	2011	68064790AE	CAN12	0.000	CAN12	CAN12	CAN12
Dodge Journey	2011	05026796AF	CAN13	CAN13	CAN13		CAN13
Jeep Grand Cherokee	2011	05026535AG	CAN12		CAN12	CAN12	CAN12
Chrysler Town and Country	2011	05026534AG	CAN12		CAN12	CAN12	CAN12
Chrysler Town and Country	2011	05026533AK	CAN12		CAN12	CAN12	CAN12
Dodge Durango	2011	05026535AH	CAN12	0500	CEDENE	CAN12	CAN12
Dodge Journey	2011	05026794AE	CAN13	0002	6535AF	7.00	CAN13
Dodge Journey	2011	05026796AE	CAN13	CAN13	CAN13		CAN13
Dodge Journey	2011	05026794AD	CAN13	CAN13	CAN13		CAN13
Jeep Grand Cherokee	2011	05026535AF	CAN12		CAN12	CAN12	CAN12
Dodge Avenger	2012	05026165AR	CAN4		CAN4		CAN4
Dodge RAM	2012	68066563AH	CAN12		CAN12	CAN12	CAN12
Jeep Grand Cherokee	2012	05026535AI	CAN12		CAN12	CAN12	CAN12
Dodge Journey	2013	68172580AA	CAN13	CAN13	CAN13		CAN13
Dodge Charger	2013	68172580AA	CAN13	CAN13	CAN13		CAN13

First chose 2011 Jeep Grand Cherokee Part number (05026535AF) Click "OK"

Now you will see a new button on the screen. (PEM Replace) You will click on that PEM Replace button and follow the on screen instructions. This will program the remote for you.

ChSKIM					x
eep Grand Cherokee (2011) art Number: 05026535AF		About	Reporting Form	Update	Help
Select Vehicle					
Module Info					
Read SKIM					
Read DTCs					
Clear DTCs					
Erase VIN					
Erase Keys			1		
Program a Key					
PEM Replace					

Once you have done this it will program the Prox part of the Key, You can now put the cover back on the start button.

Tip: Make sure you cycle the key between, transponder programming and PEM Programming. PEM Stands for, Passive Entry Module

15. PROGRAMMING WITH A R.F. HUB SYSTEM

Programming Keys to a RF Hub is easy. The hardest part of this is finding where the antenna is located. They are generally in the center consoled of the car, all the way to the bottom back. When programming you will have to put your hand in the center console and click the LOCK and UNLOCK buttons back and forth. You will hear a horn chirp, and then the hazards will flash during the programming process.

1.) You have to wake up the bus on the car so you can get the dmax to communicate to the car. Turn on the hazards lights, and open the passenger door.

Hold the new Key up to "Start" Button. Then press the start button.

2.) Next you will need to pull the skim code with the Dmax.

(Note: If you are having issues reading the skim code. Try changing the vehicle into shipping mode. Then try to read again.

🤗 ChSKIM			×
	About Reporting Form	Update .	Help
Dodge Journey (2011) Part Number: 05026794AE	VIN Number: 3C4PDCBG2CT15 Part Number: 05026794AF Software Version : 10.03.00		
Select Vehicle	Hardware Version : 140202 Number Of Keys Programmed : 1		
Module Info			
Read SKIM			-
Reset Lockout			
Read DTCs			
Clear DTCs			
Erase Keys			
Program a Key			8
Shipping Mode Change			2
			1
			9
	CIVINA		
	SKIM		
	USB		

3.) After you have the skim code, you will need to find the appropriate key programming location.

(This will usually be in the center console to the bottom back.)

- 4.) Click to program key, and then follow on screen instructions.
- 5.) Make sure when programming to click the "LOCK" and "UNLOCK" keys on the fob.

Screen Shots of this is below.



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15. PROGRAMMING WITH A TYPE 2 SYSTEM

1.) Start the Chrysler SKIM software, select Auto-Detect and press the continue button and then Turn Ignition On and press the "Continue Operation" button again.

2.) The software will show the VIN number, the SKIM module part number and the firmware version of the SKIM module. If the progress bar stays in the "marquee" mode for more than one minute it means that there is no SKIM module on the J1850-bus detected. In this case, check if the ignition is on and the OBD II cable is connected to the vehicle, does the car have a Skim module. Also are the fuses good?

3.) Turn the ignition off. Insert the Steel / Brass Key and turn the ignition on. Approximately in one minute the next screen will appear

TIP: You can hold a new Y-160 key up backwards and use the same key over and over to read the pin. If you're not a locksmith and you need a steal key wrap the customer key in tin foil to keep the car from detecting the transponder.

ChSKIM	_ D X
Chrysler PT Cruiser (2004) Part Number: 05107054AA Select Vehicle	About Reporting Form Update Help VIN Number: 666666666666666 Part Number: 05107054AA Version: 14.1 Country Code: 00 (U.S.A.) Number Of Keys Programmed : 0
Module Info	Tum Ignition Off. Tum Ignition On using VALET key.
Read SKIM	NOTE: YOU WILL NEED TO
Verify SKIM	HOE A BRACE / STEEL HEM
Reset Lockout	USE A BRADD / STEEL KEY
Read DTCs	
Clear DTCs	
SKIM/WCM/VIN Edit	VALET
Erase Keys	ALL I
Program a Key	
Cancel Operation	
Select Vehicle Module Info Read SKIM Verify SKIM Reset Lockout Read DTCs Clear DTCs SKIM/WCM/VIN Edit Erase Keys Program a Key Cancel Operation	
-	USB J1850

Not reading the pin code, Are the fuses good?Tech Tips:Does this car even have skim?Does the dash show a security light?

4.) Then turn the ignition off. Insert the "**EMPTY**" (*NOTE: THIS WILL HAVE TO BE A NON-PROGRAMED, BRAND NEW KEY*) Key then turns the ignition on. Approximately in one minute the next screen will appear:

ChSKIM	
	About Reporting Form Update Help
Chrysler PT Cruiser (2004) Part Number: 05107054AA	VIN Number: 666666666666666666666666666666666666
Select Vehicle	Country Code: 00 (U.S.A.) Number Of Keys Programmed : 0
Module Info	Tum Ignition Off. Tum Ignition On using EMPTY key.
Read SKIM	
Verify SKIM	
Reset Lockout	
Read DTCs	
Clear DTCs	
SKIM/WCM/VIN Edit	
Erase Keys	
Program a Key	
Cancel Operation	
	USB 11850

5.) Turn the ignition off and then turn the ignition back on again. In one minute next screen will appear: This Procedure is timed and must be preformed exactly when the software tells you to do so. You can validate a skim number prior to key programming by selecting verify skim.

	About	Reporting Form	Update	Help
Part Number: 05107054AA Version: 14.1	SKIM Number: 1212			
Country Code: 00 (U.S.A.) Number Of Keys Programmed : 0				
	Part Number: 05107054AA Version: 14.1 Country Code: 00 (U.S.A.)	VIN Number: 666666666666666666666666666666666666	VIN Number: 666666666666666666666666666666666666	VIN Number: 666666666666666666666666666666666666

17.ERRORS AND TROUBLESHOOTING

This section describes most recently encountered problems, errors and repair solutions.

Causes: This not Solutions: Dow Mic Problem: USI Causes: This Solutions: Che	gram will not install or run. s problem can appear if Microsoft .NET Framework Version 3.5 or higher is installed. vnload Microsoft .NET Framework Version 3.5 or higher from rosoft.com. 3 status LED (see Figure 1) is dark. s problem can appear if there is no power applied to the USB connector. ck the USB Cable. Try to connect the DMAX-Tool USB device to another aputer.
Problem: Causes:	OBD II status LED (see Figure 1) is dark. This problem can appear if there is no power applied to the OBD II
Causes.	connector or to the Ext. 12V connector.
Solutions:	Check the connection between the DMAX-Tool USB device and a vehicle.
	Apply +12 Volt to the Ext. 12V connector.
Error Message	: No External +12 Volt OBDII Power Supply Error Programmer
	Power Supply Error
Causes:	This message can appear if there is no power applied to the OBD II
	connector or to the Ext. 12V connector.
Solutions:	Check the connection between the DMAX-Tool USB device and a vehicle.
	Apply +12 Volt to the Ext. 12V connector.
	11950 Output driven Ernen
Causes:	: J1850 Output driver Error This message can appear if the J1850 Driver cannot pass the test.
Solutions:	Disconnect the USB cable to reset the DMAX-Tool USB device and
bolutions.	connect it again. If the error message does not disappear, please contact the
	tool distributor for repairing.
Error Message	: J1850 Bus Busy J1850 Bus Emer
	J1850 Bus Error J1850 Check Sum Error
	J1850 Data Error
	J1850 Frame Data Error
Causes:	This message can appear if in time of communication the J1850 protocol
	error is detected. Also, the error message could appear if the wrong vehicle
	type is selected.
Solutions:	Try to initiate the communication procedure again. If the error message does
	not disappear, check the DMAX-Tool USB device on another
	Vehicle.

Error Message:	CAN Initialization Error
	CAN Reception Error
Causes:	This message can appear if in time of communication the CAN protocol
	error is detected. Also, the error message could appear if the wrong vehicle
	type is selected.
Solutions:	Check the vehicle selection in the vehicle list. Try to initiate the
bonutions.	communication procedure again. Check the DMAX-Tool USB device on
	another vehicle.
	another ventere.
Error Message	Security pass failed
Causes:	This message can appear if in time of communication the wrong
Causes.	• • • •
	request/answer command is issued. Also, the error message can appear if the
0.1.4	wrong vehicle type is selected.
Solutions:	Check the vehicle selection in the vehicle list. Try to initiate
	communication procedure again. Check the DMAX-Tool USB device on
	another vehicle.
Error Message:	Memory Line is Busy
	No Response from Memory
	Memory Reading Error
Causes:	This message can appear if in time of in-circuit work via the memory clip,
	the clip was mounted in the wrong direction (See Section 6) or the wrong
	vehicle type was selected.
Solutions:	Pay attention to the 1st pin location; see Section 6 for more details. Check
	the vehicle selection in the vehicle list. Try to initiate in-circuit procedure
	again. Check the DMAX-Tool USB device on another memory.
Error Message:	Pin Tester Error(s)
Causes:	This message can appear if in time of in-circuit work via the memory clip,
	the clip was mounted in the wrong direction or pins were not cleaned; see
	section 6.
Solutions:	Pay attention to the 1st pin location; see Section 6 for more details.
Error Message:	SKIM Read Error
Causes:	This message can appear if in time of communication the
Cuuses.	J1850/CAN/In- circuit protocol error is detected. Also, the error message
	can appear if the wrong vehicle type is selected.
Solutions:	Check the vehicle selection in the vehicle list. Try to initiate the
Solutions.	
	communication procedure again. Check the DMAX-Tool USB device on
	another vehicle.

18. THE SKIM POPPER TOOL

Skim Solder Gun with unique tip to access the on board chip.

Includes: Solder Gun, Skim Tip and 20 Black Dot Plugs

The PERFECT Add-On for the ACI ChSKIM Code Reader



Finally....easy access to the Skim Chip!

Simply heat the solder gun Gently press against the casing Create the perfect access hole Clip to chip to read skim module Cover hole with Black Dot Plug...done!





119 N. Parker St. #347 Olathe, KS 66061 Ph, 913-856-6678 www.getskim.com