

# AUTRONIC ECU CLEAR PASSWORD PROCEDURE

While an ECU is password protected, it cannot be adjusted and its calibration cannot be recovered. Back-up copies of its calibration and the chosen password should therefore be made prior to password protecting an ECU.

If the password is unknown, further adjustment or replacement of the ECU calibration is not possible. If calibration change or replacement is required and the password is unknown, the only method available to unlock the ECU is the Clear Password procedure. The Clear Password procedure will destroy the calibration and the password contained within the ECU. Engine/vehicle operation will not be possible until an ECU configuration / calibration is installed that suits the application. If you do not have a backup copy of the existing ECU calibration you will need to reconfigure the ECU and develop a new calibration to match the ECU to the application.

To do this you will need full knowledge of the hardware that the ECU is connected to in order to undertake configuration and calibration development. The information required includes details of all wiring, injection and ignition systems, variable cam, other actuators (e.g. Fuel pump/s, Fan/s, Idle motors, boost control solenoid/s), digital inputs (e.g. crankshaft and/or camshaft triggers, speed and switch Inputs) and analogue inputs (e.g. manifold absolute pressure, throttle position, air and coolant temperature inputs).

### WARNINGS

The Clear Password procedure will cause total loss of all ECU setup. All application specific setup and engine calibration will be lost. Vehicle operation will not be possible until the ECU is configured and calibrated to suit the application.

ECU outputs will assume an undefined state from the commencement of the clear password process until the ECU is suitably reconfigured. This can damage the ECU, injectors, ignition coils, ignition modules, actuators and electrical wiring. The engine cylinders could be filled with fuel and a fuel or electrical fire could occur. In order to protect against such dangers ALL INJECTORS, FUEL PUMPS, IGNITION COILS, IGNITION modules AND ACTUATORS MUST BE de-powered until the ECU is fully reconfigured. De-powering should preferably be done by disconnection of all injectors, ignition coils, ignition modules and actuators controlled by the ECU.

In all cases the calibration cannot be recovered from an ECU if the password is unknown.

In some instances it may be possible to recover a calibration file from the **ORIGINAL** PC that was used to perform the ECU calibration, provided the PC has not had its Hard Disk Drive (HDD) changed or its HDD has not been reformated since the calibration was performed.



Depending on the ECU type and PC platform used for ECU access, select from of the following methods. See <u>downloads</u> page for applicability.

#### 1. WINDOWS ONLY SOFTWARE

See AUTRONIC website "DOWNLOADS" page for ECU/PC applicability.

Close any open Autronic software. Right-click on the desktop icon and select Properties. Select the Shortcut Tab and add one space and **DUPP** to the Target text box as shown;

M4 Propertie	s	×		
Security	Details	Previous Versions		
General	Shortcut	Compatibility		
Autronic SM4				
Target type:	Application			
Target location: ECUSM4				
<u>T</u> arget:	E:\Autronic\ECUSM4\ECUCAL.exe DUPP			
<u>S</u> tart in:	E:\Autronic\ECUSM4			
Shortcut key:	None			
<u>R</u> un:	Normal window 🔻			
Comment:				
Open File Location Change Icon Advanced				
OK Cancel Apply				

Apply the changes and then close the Properties dialogue box.

Connect the communications cable, turn the ECU On and start the Autronic software from the desktop icon that you previously modified. Connection should occur automatically, if not, select "Go on line" and then fault-find the connection problem manually.



Go to "M0" menu and select "DEALER Unpassword"

Store cal in ECU	∎ <i>F4</i>	
Un-Password ECU		
DEALER uppassword		
ECU Error history		
ECU telltales		
Reset ECU specific variables/stepper		
Monitor	->	

Press the Enter key and read the warnings. Select Continue and press Enter to clear the ECU. The clearing process will take several minutes to complete.

If available, a suitable calibration file should be loaded into the ECU using the Open-cal process. Otherwise the ECU must be manually configured with initial settings, in readiness for the calibration development process.

After loading or creating the initial calibration, go to the "M0" menu. Select ECU Error History and press the R key to clear any errors caused during the clear password process.

If required go to the "Logger" menu, select ECU Logger and configure ECU logger settings.

If required continue with the development of a new calibration.

When finished close the Autronic software, right click on the desktop icon and select Properties. In the Shortcut Tab remove the **DUPP** and then Apply and OK the changes. Close the Properties Dialogue box and use the Autronic software as normal.



# 2. DOS GRAPHICS SOFTWARE

See AUTRONIC website "DOWNLOADS" page for ECU/PC applicability.

Close any open Autronic software.

Locate the file folder where the AUTRONIC ECU calibration application (.exe) resides. In this folder locate and then edit the file "ECUCAL.INI". Find the statements:-

## [OPT] DUPP=0

Modify "DUPP=0" to "DUPP=1".

ECUCAL - Notepad	- • •
<u>F</u> ile <u>E</u> dit F <u>o</u> rmat <u>V</u> iew <u>H</u> elp	
[OPT] DUPP=1 DST=0	
[COM] PORT=1	
[DATALOG] MODE=0 RPMTRIG=3000 THRTRIG=900 MANTRIG=1300 INT=0	E
[PRT] SEL=33	
[AT] CON=3 EXL=1 CPR=1	
•	E 4

Save "ECUCAL.INI" and exit the file editor.

Connect the communications cable, turn the ECU On and start the Autronic software from the desktop icon. PC to ECU communication should be established automatically within several seconds. If linkage does not occur, fault-find the connection problem and select "Go on line" manually.

Under the "General" menu select the "Enter password" item.

Follow the on-screen instructions to clear the ECU. The clearing process will take several minutes to complete.



If available, load a suitable calibration file into the ECU using the Open-cal process; otherwise the ECU must be manually configured with initial settings, in readiness for the calibration development process.

After loading a new calibration go to the "General" menu, select ECU Error History and press the "R" key to clear any errors caused during the clear password process.

If required, go to "Logger" menu, select "ECU Logger setup" and configure ECU logger settings.

If required, continue with the development of a new calibration.

When finished close the Autronic software.

Please note that the **DUPP=1** setting in the "ECUCAL.INI" file will be reset when the Autronic software is closed. If you need to clear another ECU you will have to repeat the above process from the beginning.

### 3. DOS TEXT SOFTWARE

Only applicable to early SM2 & SMC ECUs to firmware revisions v1.07.

The "LOCK.EXE" password control utility program contained in the DOS TEXT software package does not have a clear password function. If the password is unknown, the ECU cannot be unlocked by a user. Contact AUTRONIC or your nearest AUTRONIC dealer to have the ECU password and calibration cleared. Please note that some dealers do not have equipment capable of performing the clear password process on these early ECUs. Alternatively return the ECU to AUTRONIC to have it upgraded to a newer firmware revision that supports clear password functionality.