www.ExtraEFI.co.uk

Reflash MS1-Extra code to ECU

MS1-Extra ONLY

Generally this is not something that should be needed to do unless you have had major issues, like resets which have caused the ECU to become corrupt, etc.

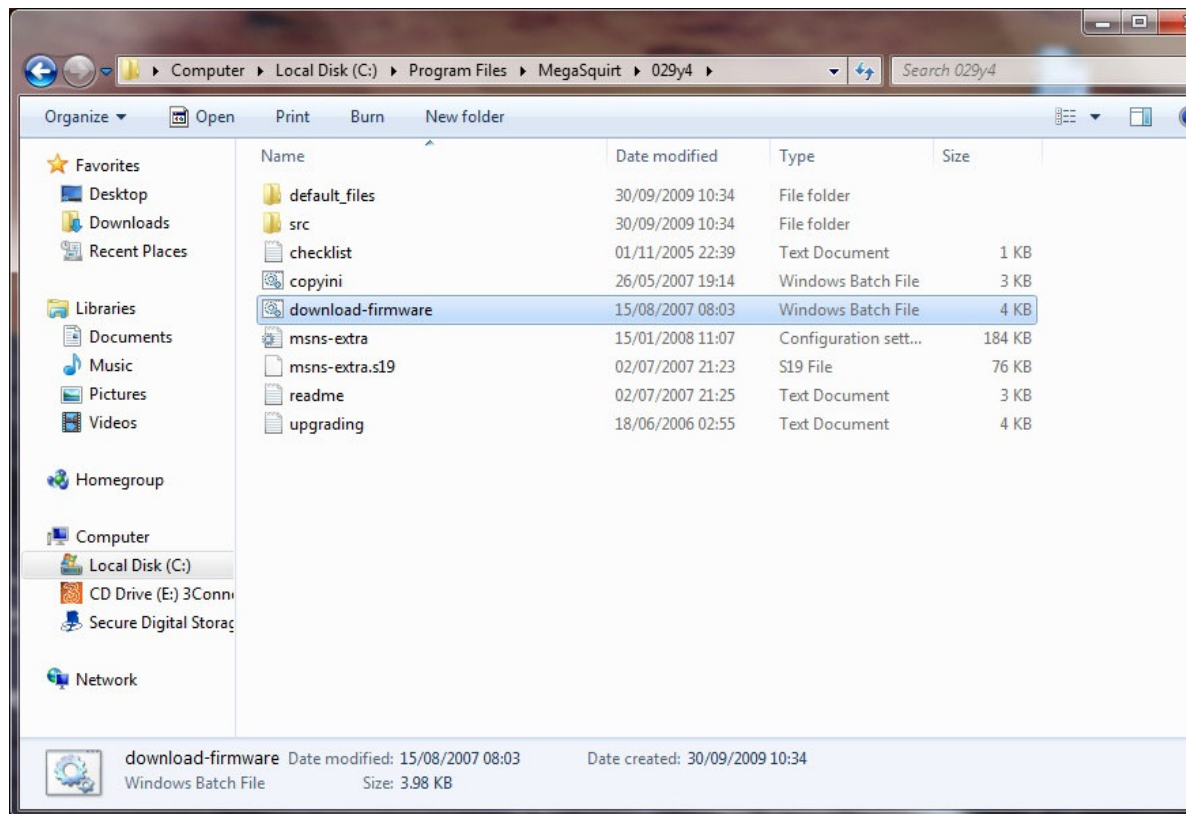Note: Hopefully you would have a copy of the msq file that worked last on your laptop.
If not then youll need to email me to get a base file before doing this as it **must** be loaded with a correctly configured file before it is plugged back into any ignition coils!!!!!!

****
# WARNING!!!
IF THE ECU IS DIRECTLY DRIVING A COIL OR COIL PACKS THEN
# UNPLUG THEM NOW!!!!!!!!
****

Stage 1:

To re-flash the MS-Extra code to your MS ECU find the dir with the code you want to use in it, e.g 029y4. If youve bought an ECU from me and installed the MegaTune software it should put the relavent code for your ECU into **c:/programfiles/megasquirt/029y4/**

The installer would also put the downloader file into the START bar of windows, so you can either go to START - PROGRAM FILES - MEGASQUIRT - Download-firmware or open the dir and double click on the "download-firmware.bat" file.

Unplug all ignition coils that are directly fired by the ECU
Turn the power on to the MS ECU
Select your Comm port (e.g. 1) then press "N" when it asks if you are
upgrading from standard megasquirt code.
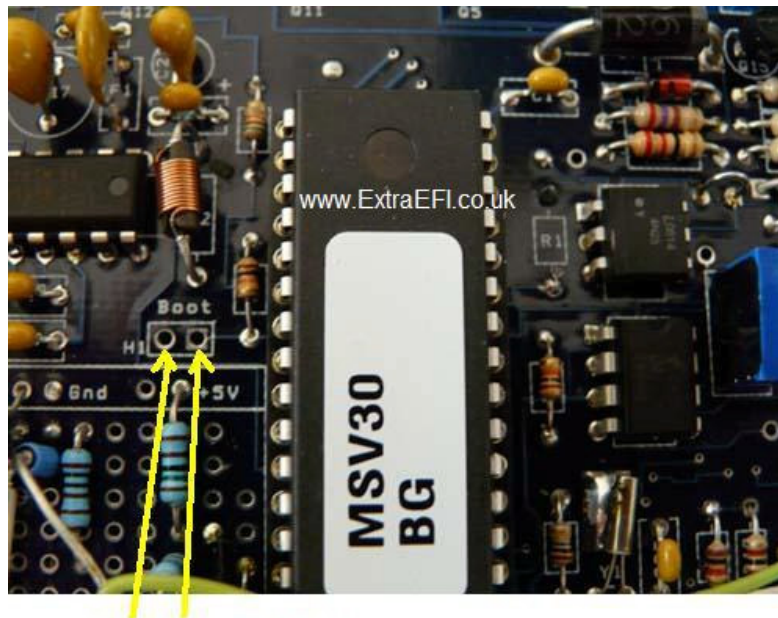It will count up to 1750 odd
You have now finished re programming the ECU goto Stage 2 below.

*If you get an error message come up on the screen then you may
have selected the wrong port or there maybe another obvious
problem.*

If it all checks out OK, then it could be that the ECU needs a full bootload.
This isnt hard to do, all it means is you'll need to remove the lid off the case and find the 2 bootloader holes on the main board:

Link these 2 holes with a bit of wire

i) Turn the power OFF to the ECU.
ii) Link the bootloader pins together.
iii) Keeping them linked together turn on the power to the ECU.
The link can then be removed, but DONT turn off the power to the ECU.
Now run the dowload-firmware program again (as above) but this time press Y when it asks if you are upgrading from standard megasquirt code.
It will count up to 1750 odd
You have now finished re programming the ECU :o)

****
IF THE ECU IS DIRECTLY DRIVING A COIL OR COIL PACKS
DO NOT PLUG THEM BACK IN YET!!!!!!!!
****

STAGE 2:

Re-load configuration file

Now run MegaTune. If you have a saved msq file then open it in now and **burn** it, if not then you must get a base config file from me then **burn** that in now.

Next ensure that the Outputs are setup for your ECU before connecting the Coils back to the ECU.

If you are driving the spark coils directly then check these settings:

Goto Spark Settings and set the Spark Inverted Output = YES

Then go to Code Config - Codebase and Output Functions:

Single Spark output MS ECU (MSD or Distributor or EDIS module, TFI, etc)
LED17 (D14) = SparkA
LED18, LED19 and Output3/SparkD must NOT be a Spark output

Two Spark output MS ECU (4 cylinder wasted spark)
LED17 (D14) = SparkA
LED18 (D15) and Output3/SparkD must NOT be a Spark output
LED19 (D16) = SparkB

Three Spark output MS ECU (6 cylinder wasted spark)
LED17 (D14) = SparkA
LED18 (D15) = SparkC
LED19 (D16) = SparkB
Output3/SparkD must NOT be a Spark output

Four Spark output MS ECU (8 cylinder wasted spark)
LED17 (D14) = SparkA
LED18 (D15) = SparkC
LED19 (D16) = SparkB
Output3/SparkD = SparkD

Now it is safe to plug the spark coils back into the MS ECU!!!!!!

www.ExtraEFI.co.uk