

How to clone your ECM



# What you should receive

- You should have black programmer box, 3 cables ( 1 for obd port, one to manually place connectors on pins, and one to connect the programmer to the laptop). We will be using the cable to manually place connectors onto pins.

1 12v power adapter which provides 12v to ECM during the programming read/write steps

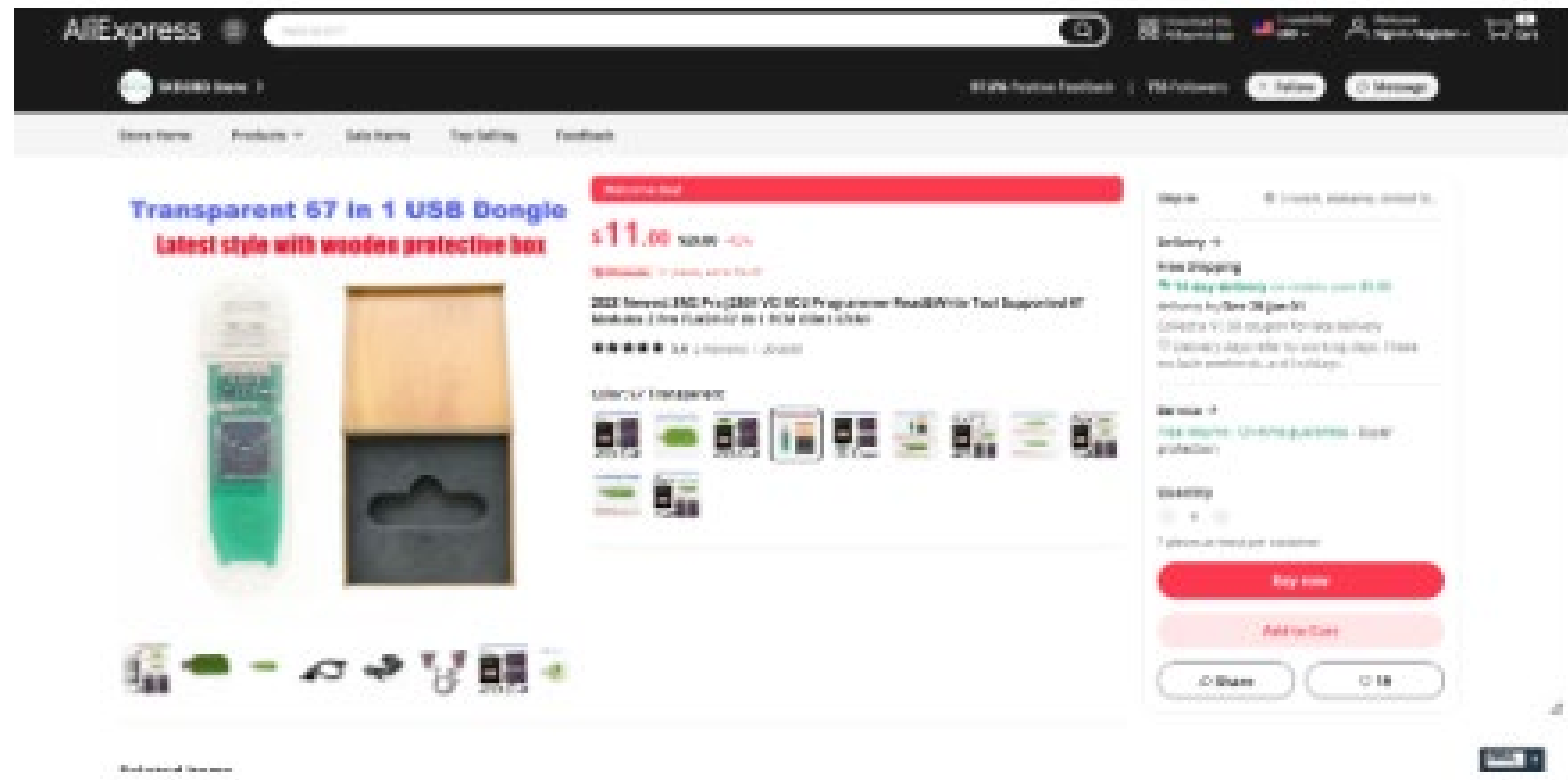
1 USB dongle

1 CD rom

The purple boards you see in the picture are of the front and back side of the board inside the black programmer box

# Newer Dongle(had to order as my kit was incomplete)

- Newer usb dongle is clear instead of green and inside a wooden box






# Programs to install

- 3 programs installed (had to disable AV during this step) using old computer so no issues if I have to wipe after this

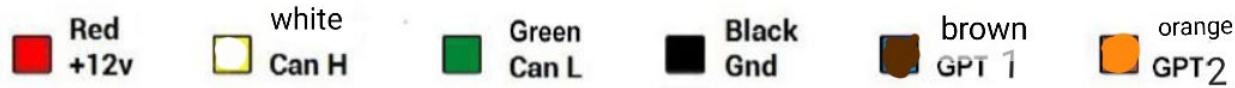
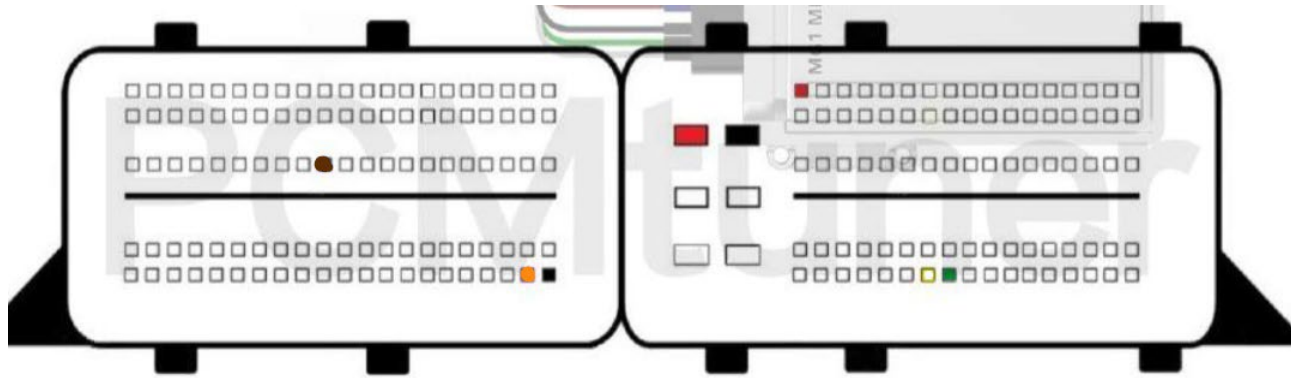
PCM flash (when installing this don't let it update when it asks)

Guardiant drivers

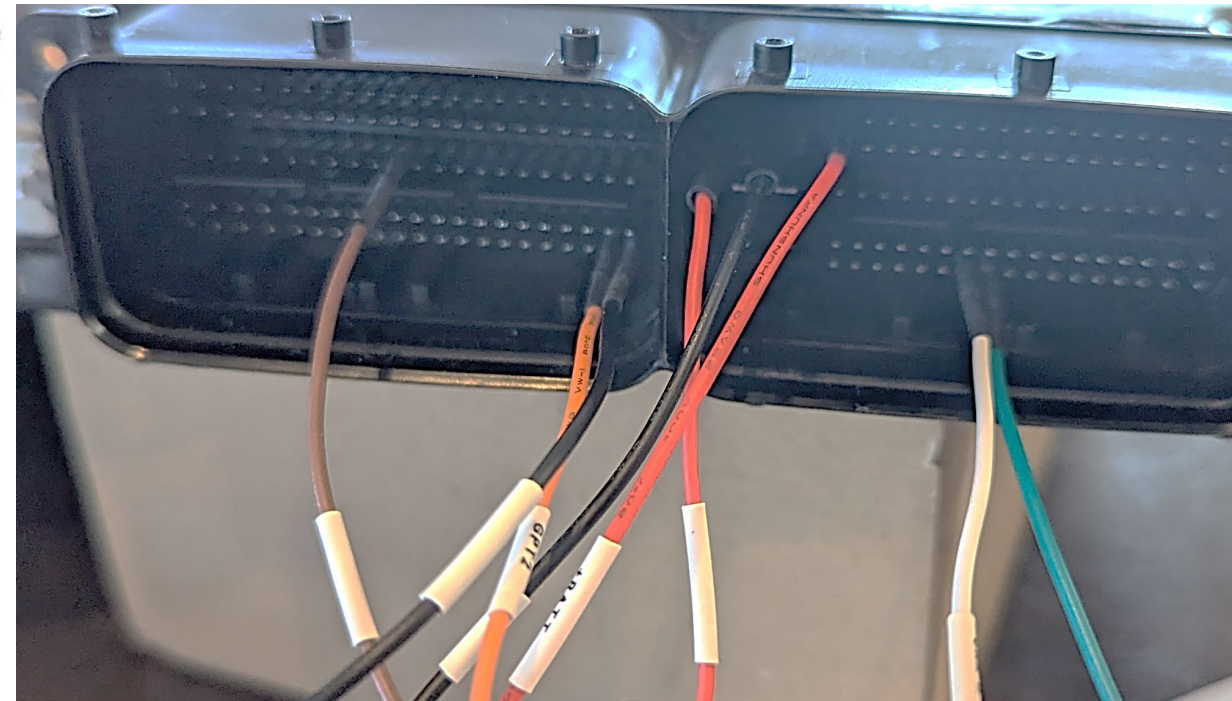
Scanmatik 2.21.22

Name	Date modified	Type	Size
∨ Last week (4)			
 GrdDrivers	12/28/2023 9:17 PM	Application	11,450 KB
 pcmflash-1.2.0	12/28/2023 9:16 PM	Application	11,773 KB
 Scanmatik_2.21.22_Setup (1)	12/28/2023 9:28 PM	Application	21,812 KB

# Pull ECM from vehicle and attach jumpers

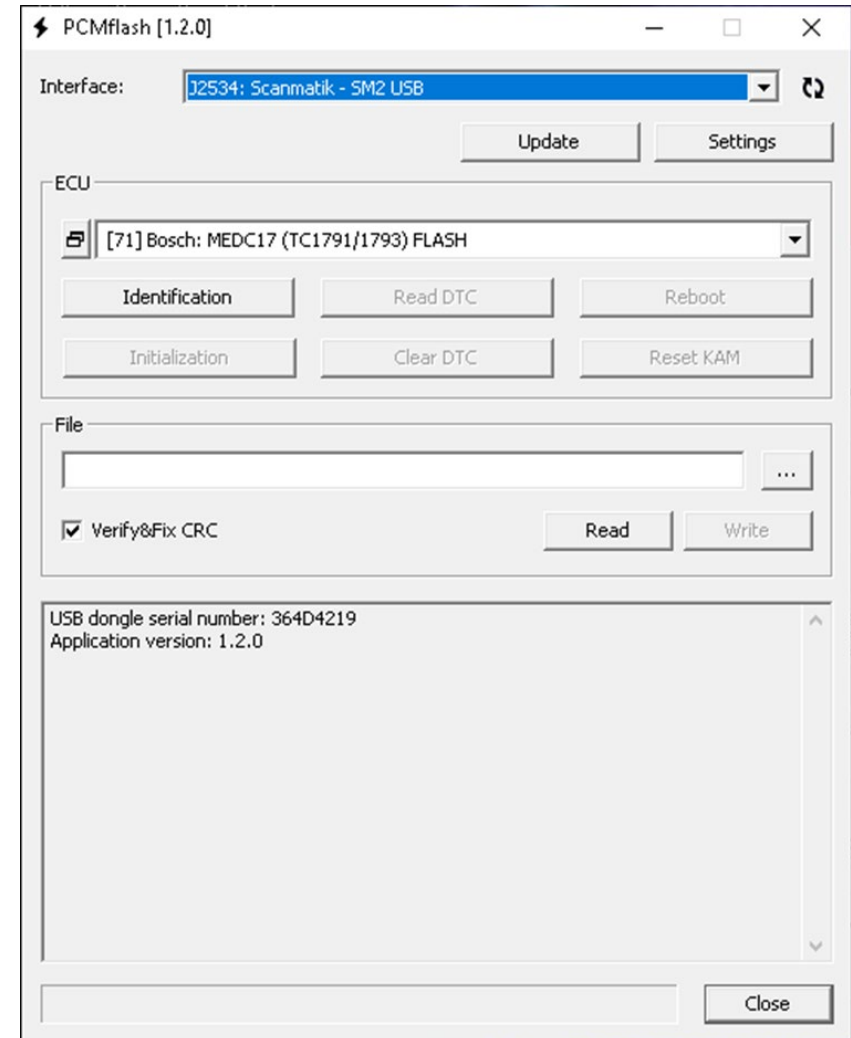


- Verify Jumpers before doing anything
  - Attach USB Dongle
  - Plug harness into SM2 Pro
  - Plug USB cable into SM2 Pro
  - Plug power adapter in but don't plug into harness yet.
- Open PCM FLash (DO Not update)



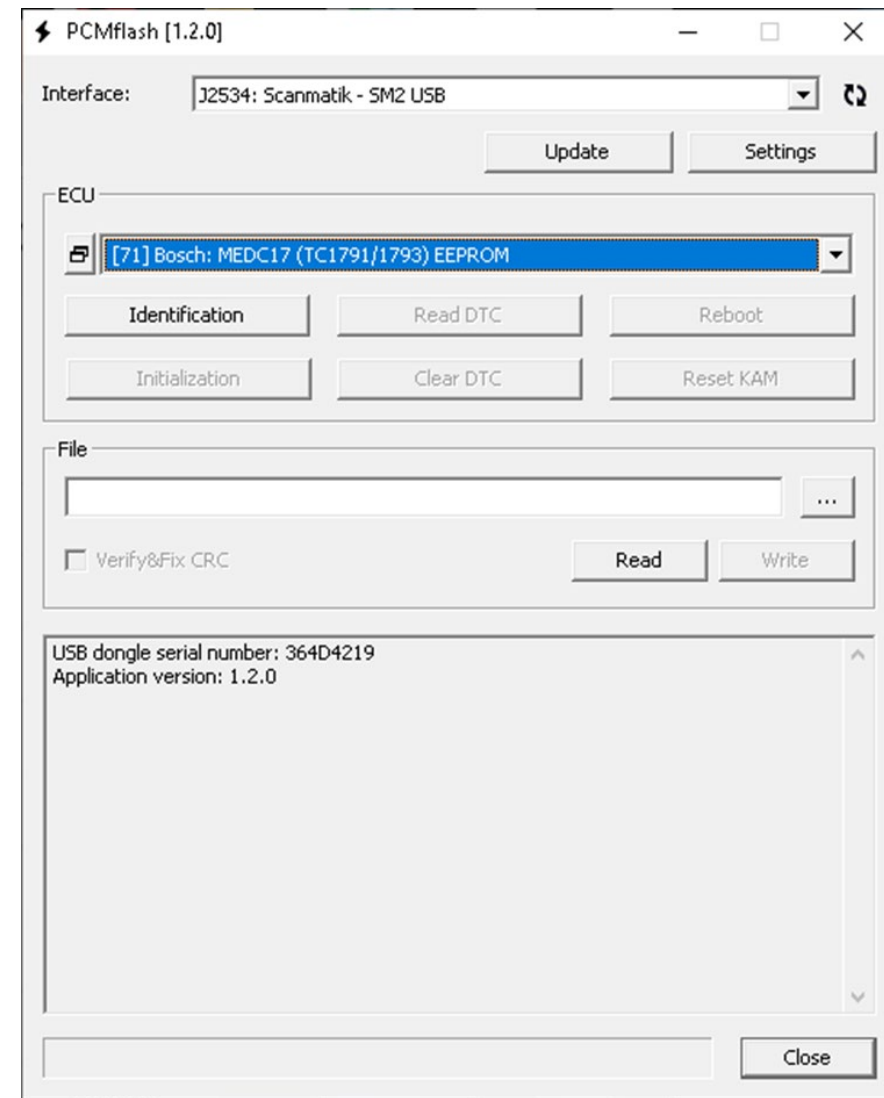
# Finding FLASH File to save

- Under ECU go to pull down menu Bosch MEDC17 (TC1791/1793) Flash
- Select Read
- Verify/Fix is optional
- When it starts to process if it starts to count but no Movement on progress bar.... Momentarily pull 12v plug from harness and plug back in
- Save file somewhere where you will remember it
- This is the larger of two files and will take a few Minutes to save



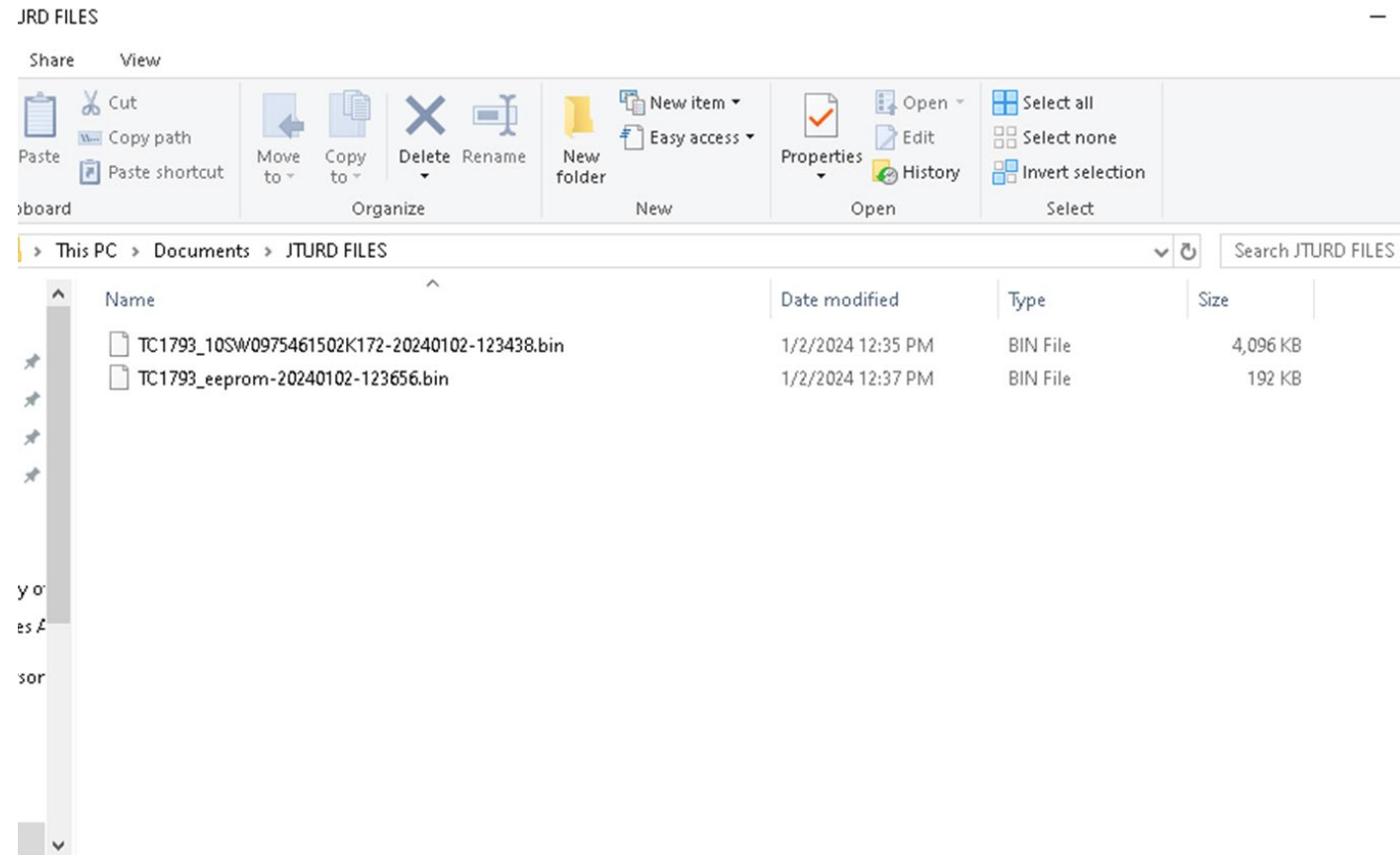
# Finding EEPROM File to save

- Under ECU go to pull down menu  
Bosch MEDC17 (TC1791/1793) EEPROM
- Select Read
- When it starts to process if it starts to count but no movement on progress bar.... Momentarily pull 12v plug from harness and plug back in
- Save file somewhere where you will remember it
- This is the smaller of the two files and will take only a few seconds to save

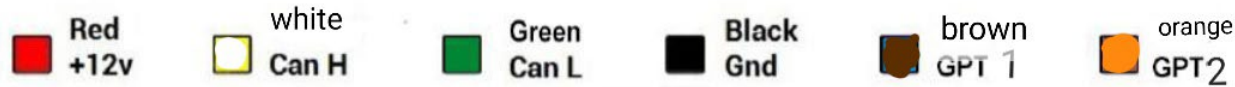
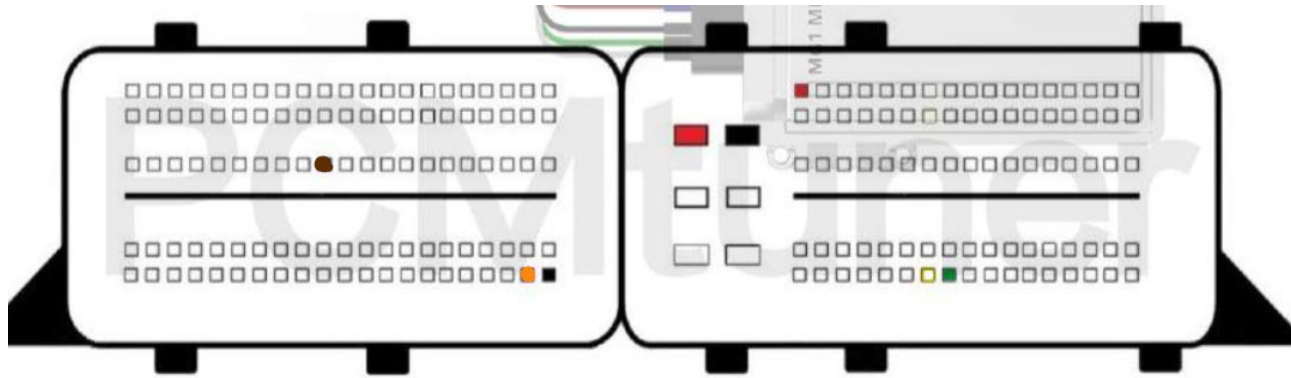


# You now have your stock ECM files saved ;)

- Remember this location
- Halfway done
- Pull 12v power and remove harness from ECM
- Now we will setup and write to the spare ECM

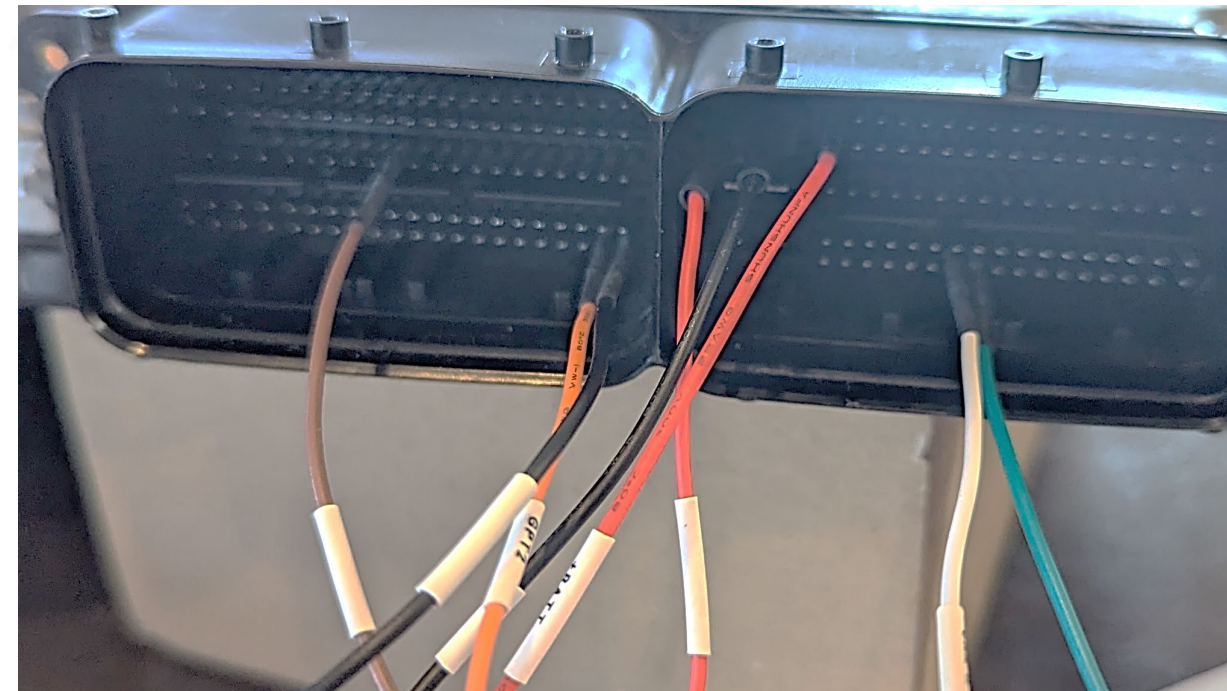


# Setup Spare ECM and attach jumpers



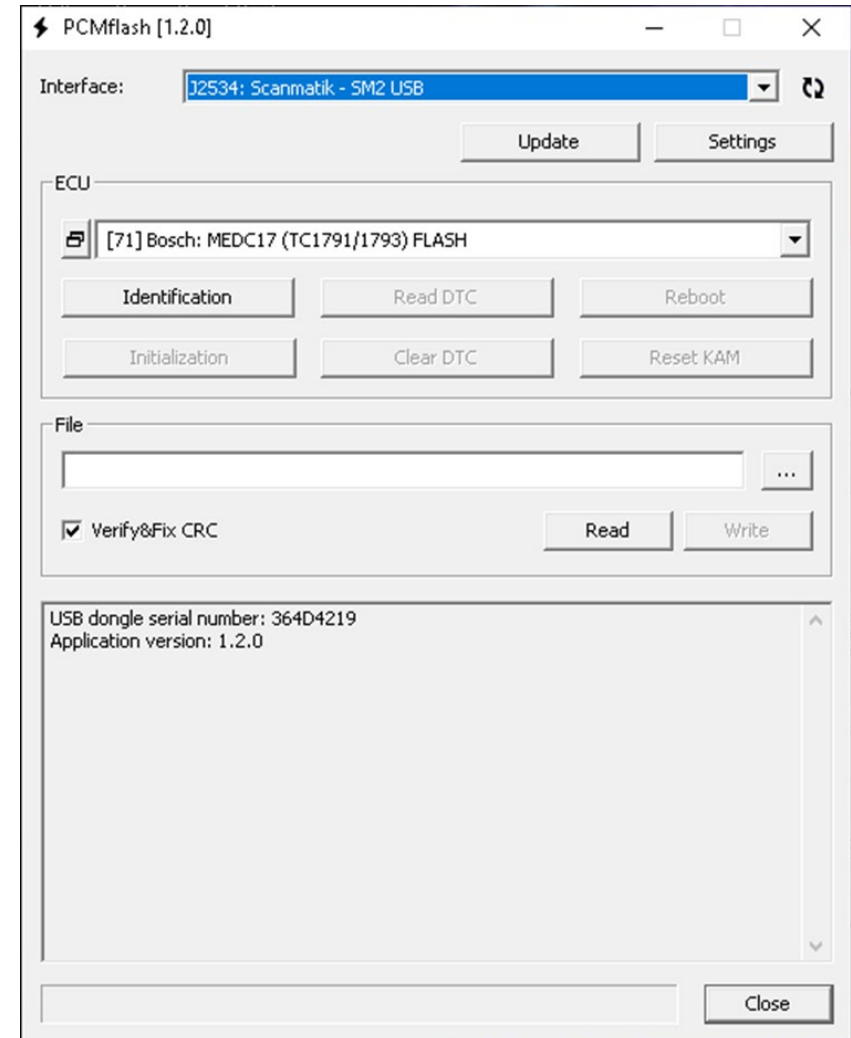
- Verify Jumpers before doing anything
- Attach USB Dongle
- Plug harness into SM2 Pro
- Plug USB cable into SM2 Pro
- Plug 12v power adapter in but don't plug into harness yet.

Open PCM Flash (DO Not update) if you closed it during last step



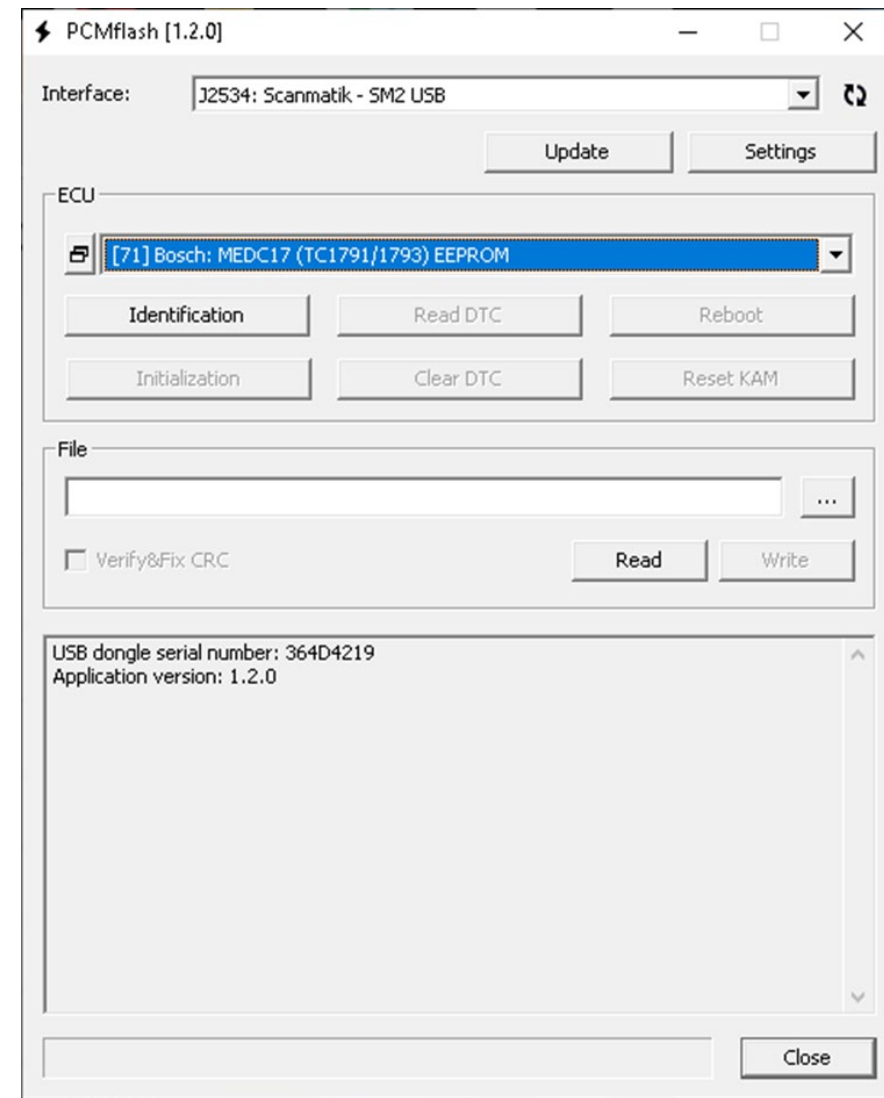
# Finding FLASH File to Write

- Under ECU go to pull down menu  
Bosch MEDC17 (TC1791/1793) Flash
- Select ... symbol and select the flash file copy you saved earlier
- Select the write button
- When it starts to process if it starts to count but no Movement on progress bar.... Momentarily pull 12v plug from harness and plug back in
- This will take several minutes to write to the ECM



# Finding EEPROM File to Write

- Under ECU go to pull down menu  
Bosch MEDC17 (TC1791/1793) EEPROM
- Select ... symbol and select the EEPROM file copy you saved earlier
- Select the write button
- When it starts to process if it starts to count but no Movement on progress bar.... Momentarily pull 12v plug from harness and plug back in
- This will take under a minute to write to the ECM



- You are done at this point
- Enjoy your spare ECM