

## Exclusive DVD in Motion activation for CIC by BMWCODING.COM

Thanks to everyone who contributed to this project. I must especially thank bmwcoding.com member **karlheinz** for providing the before and after FSW & NETTODAT files. That was a breakthrough.

### Background

DVD in motion coding has been a big secret among vendors. It has remained a commercial item for a while. Some people ask for few thousand to give out the procedure, while others won't even do it for money. With many hours put into it and with the help of fellow members, we finally discovered how to activate it. We came up with **TWO** solutions.

### Summary (Technical)

By inspecting the before & after FSW & NETTODAT files shared by karlheinz, here's what we found:

- FSW (before):
  - SPEEDLOCK\_X\_KMH\_MAX\_COE = 3\_kmh
  - SPEEDLOCK\_X\_KMH\_MIN\_COE = 3\_kmh
- FSW (after):
  - SPEEDLOCK\_X\_KMH\_MAX\_COE = disappeared
  - SPEEDLOCK\_X\_KMH\_MIN\_COE = disappeared
- NETTODAT (before and after, the diff between the two files):
  - B 00300010,0010,50,81,1D,46,00,00,C0,03,03,03,03,11,11,01,01,FF
  - B 00300010,0010,50,81,1D,46,00,00,C0,FF,FF,03,03,11,11,01,01,FF

This was a breakthrough discovery. The original 03,03 correspond to 3\_kmh and 3\_kmh. Most of us probably have 00,00, which means speedlock min/max are set to "nicht\_aktiv". We want to set them as FF,FF so the two speedlock items become disabled and disappeared from the FSW, and this is when VIM is activated.

### Disclaimer

The following tutorial to activate DVD in Motion is for **testing purposes** only. It is intended for **OFF-ROAD and Experimental use ONLY**. You assume full responsibility to watch video while in motion. We are not liable for any damages to your vehicles or any bodily injuries caused from this tutorial.

### The Tutorial (Approach #1)

This tutorial assumes you have basic background and some experience on NCSexpert and coding procedure.

Before proceeding, make sure "VIDEO\_NUR\_MIT\_HANDBREMSE" (video with handbrake) is set to nicht\_aktiv.

1.) Using NCSEXPERT, read your CIC module as usual. At the end of the reading, a window will pop out named "NETTODAT.PRC". Close the window and open the NETTODAT.PRC file in the WORK directory. Your file will look like the following:

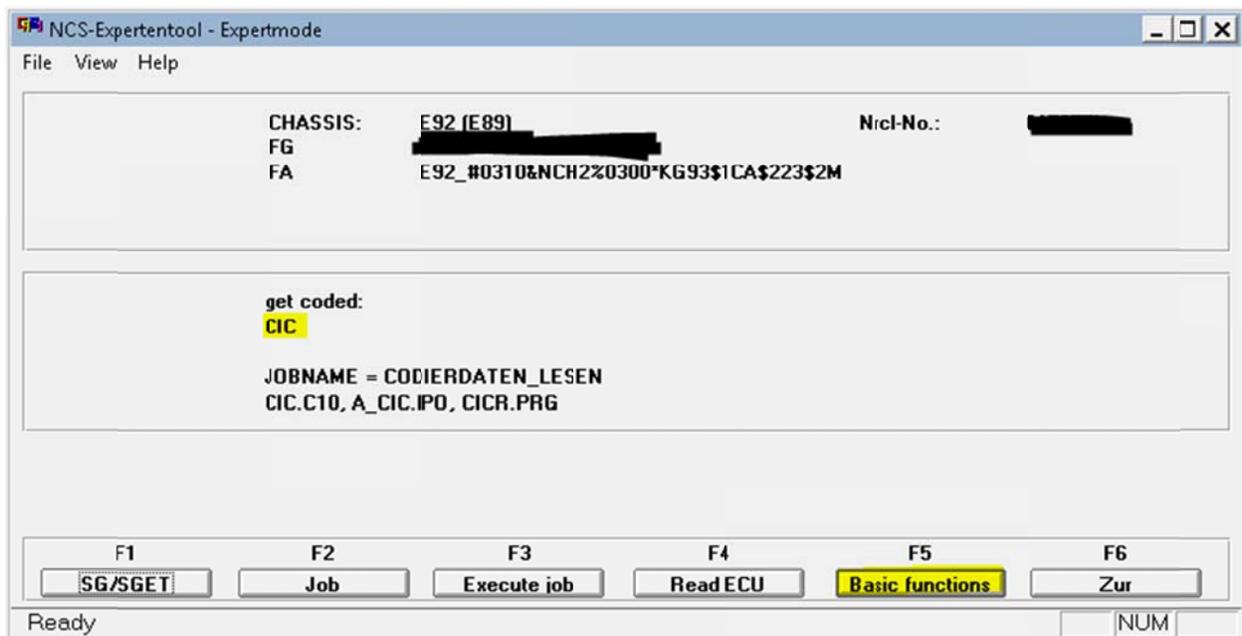
```

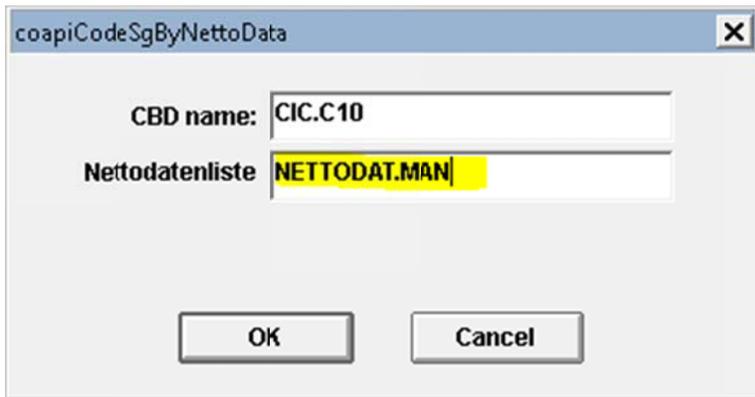
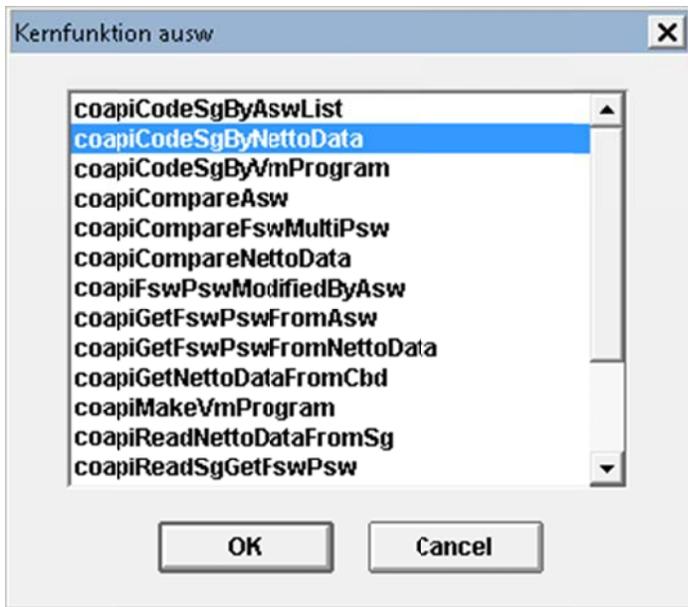
NETTODAT.MAN - Notepad
File Edit Format View Help
E 00300000,0010,78,00,F0,C1,21,C1,DC,81,01,00,03,06,04,F3,60,00
E 00300010,0010,00,81,1D,46,00,00,EO,FF,FF,03,03,11,21,01,01,FF
E 00300020,0010,FF,00,00,00,00,00,00,00,00,03,00,00,00,00,00
E 00300030,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300040,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300050,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300060,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300070,0008,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300100,0010,04,01,80,08,FF,FF,FF,FF,FF,FF,FF,FF,33,FF,FF,FF
E 00300110,0010,FF,FF,00,00,21,48,03,20,A6,02,00,00,06,06,FF,11
E 00300120,0010,00,50,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300130,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300140,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300150,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300160,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300170,0008,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300200,0010,02,E1,20,60,53,E2,00,00,00,00,00,70,7F,02,F4,00
E 00300210,0010,00,00,00,00,00,00,00,00,19,00,F5,00,F5,00,00,00,F5
E 00300220,0010,00,F5,00,00,00,00,00,00,00,05,FA,02,00,00,00,00,00
E 00300230,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300240,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300250,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300260,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300270,0008,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300300,0010,02,3C,D0,27,10,19,04,00,42,4D,57,20,36,38,31,32
E 00300310,0010,32,00,C8,81,00,F0,FF,39,00,00,00,00,00,00,59,00
E 00300320,0010,06,87,30,22,00,00,00,03,00,00,01,00,00,00,00,00
E 00300330,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
E 00300340,0010,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00
  
```

The line we are interested in is the 2<sup>nd</sup> line, starting with "00300010". If your SPEEDLOCK MIN/MAX are set to nicht\_aktiv, you should see "00,00,03,03". If you have them set as "3\_kmh", you should see "03,03,03,03".

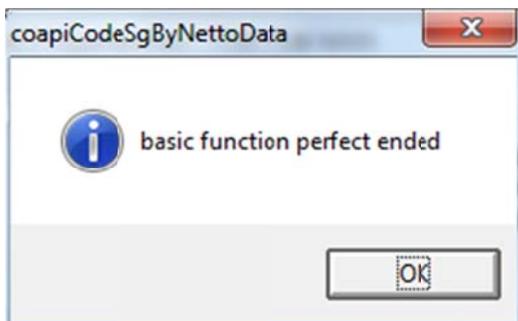
2) Change the values so they become "FF,FF,03,03" like the highlighted part of the screenshot above. Save the file as "NETTODAT.MAN".

3) Back to NCSEXPERT window, click "Basic Functions", select "coapiCodeSgByNettoData":





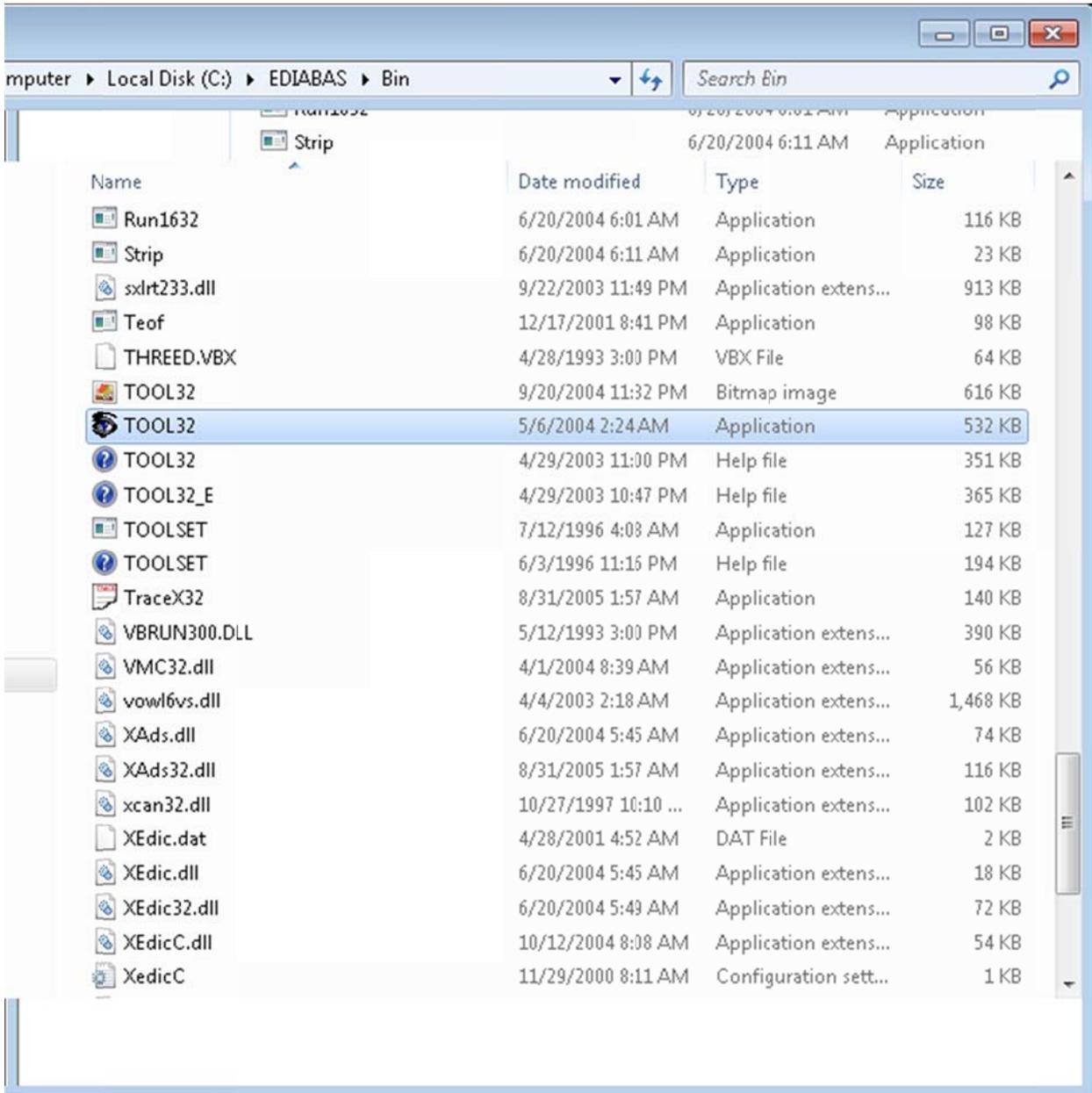
4) Type in "NETTODAT.MAN" like the highlighted part above. Leave the CBD name alone (you might have a different version). Click OK and you will see the following and your CIC will reboot. Congratulations! You have activated VIM.... not quite yet!

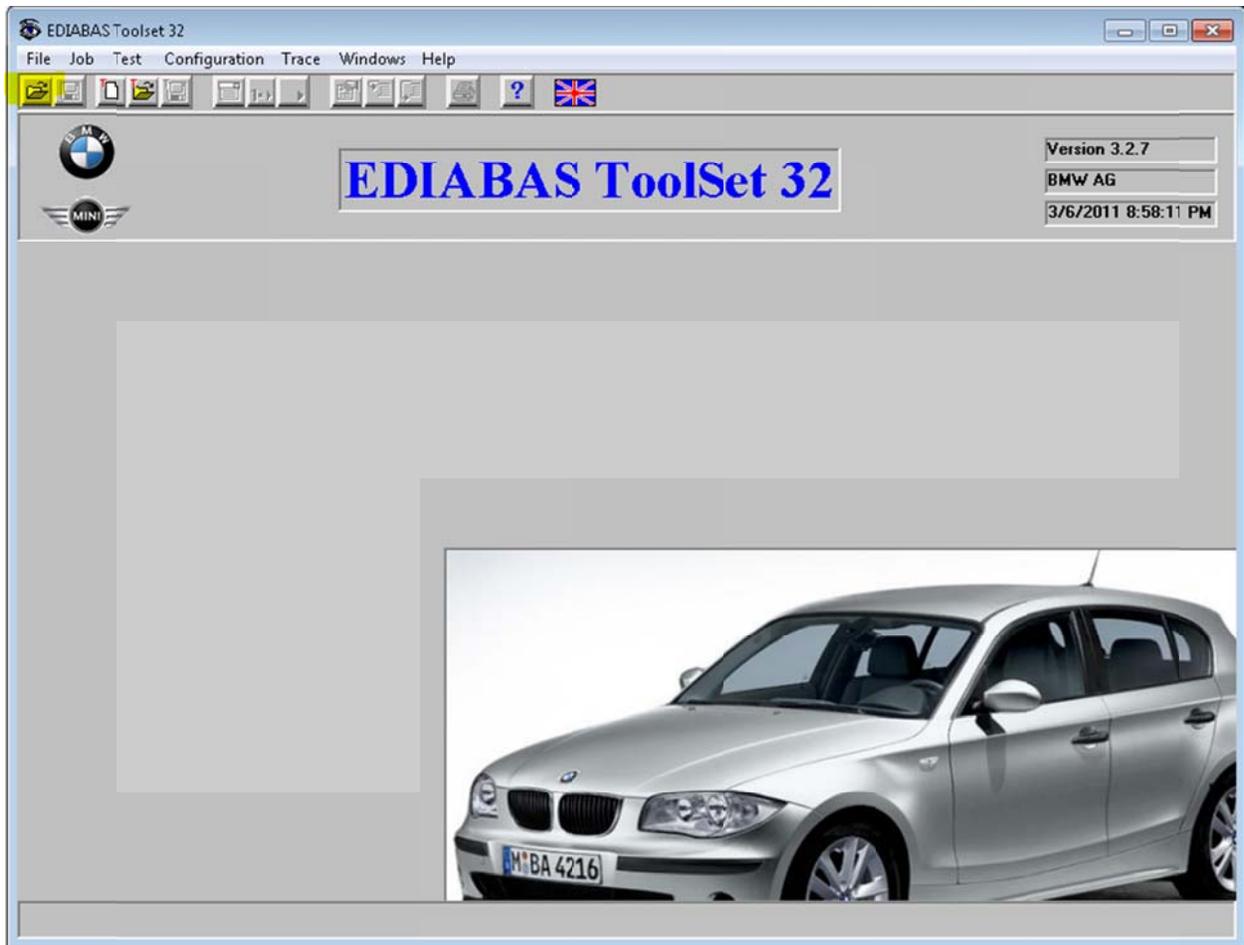


5) Now quit NCSexpert or the next steps will throw you access denied error.

Here's the challenging part (for us who originally worked on this). Apparently this coding did not "stick" to the module. If the CIC is rebooted, VIM is gone, too. So, how to make this coding permanent? Read on to find out.

6) Open your EDIABAS/bin directory, find Tool32.exe and run it as administrator.



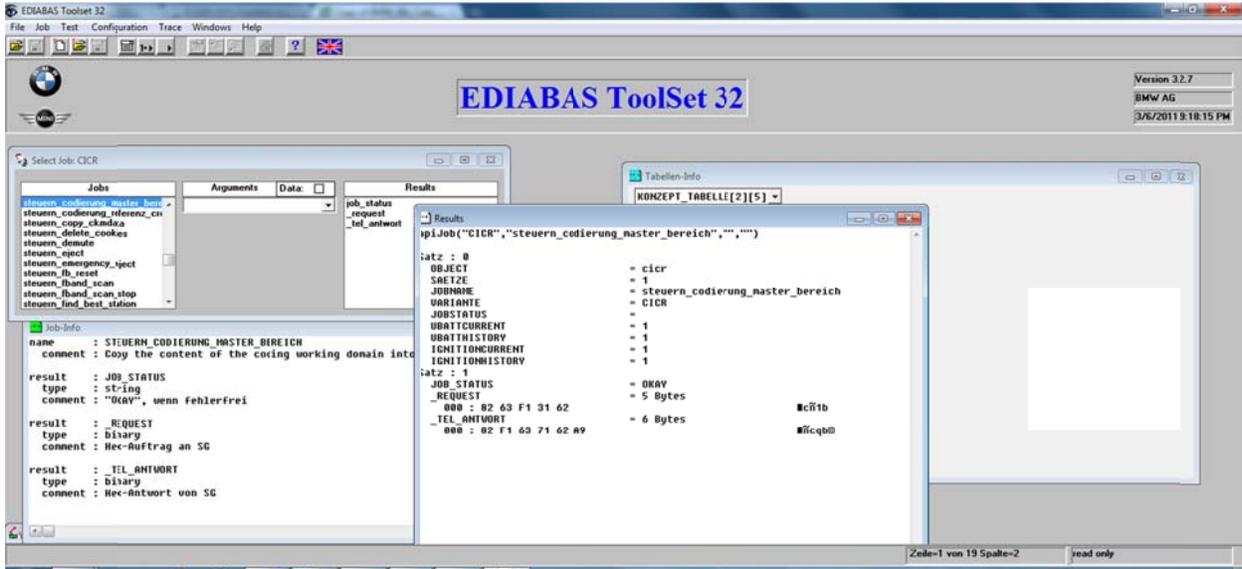


Welcome to ToolSet 32!

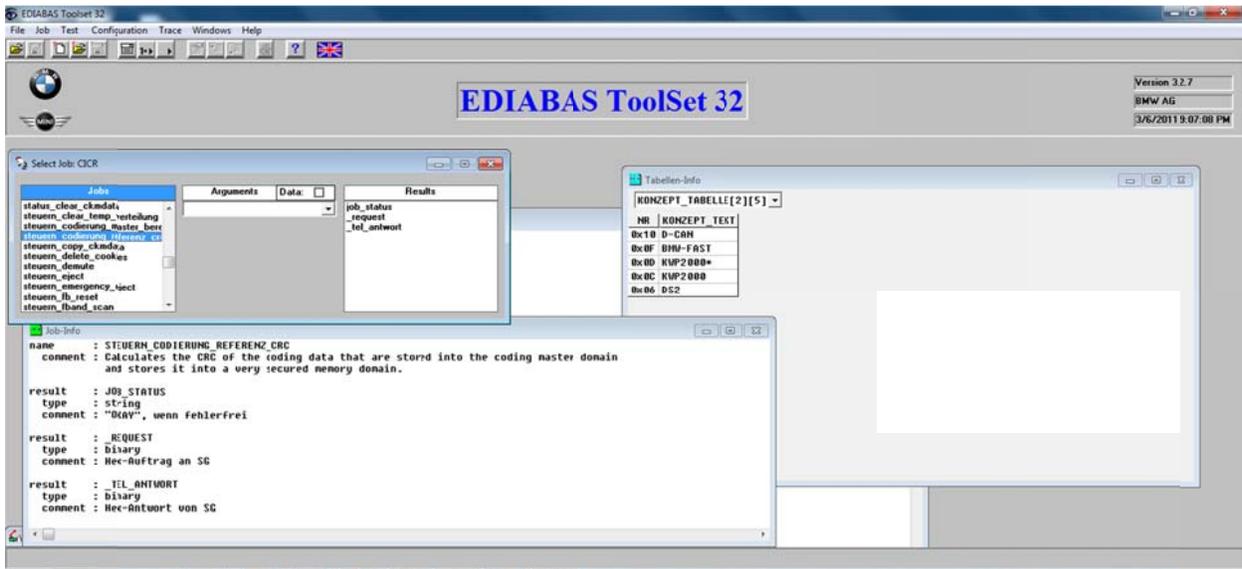
7) Make sure your cable is still plugged into the car. Click the first open folder icon as highlighted above, select "cicr.prg" in your Ecu folder like the following:

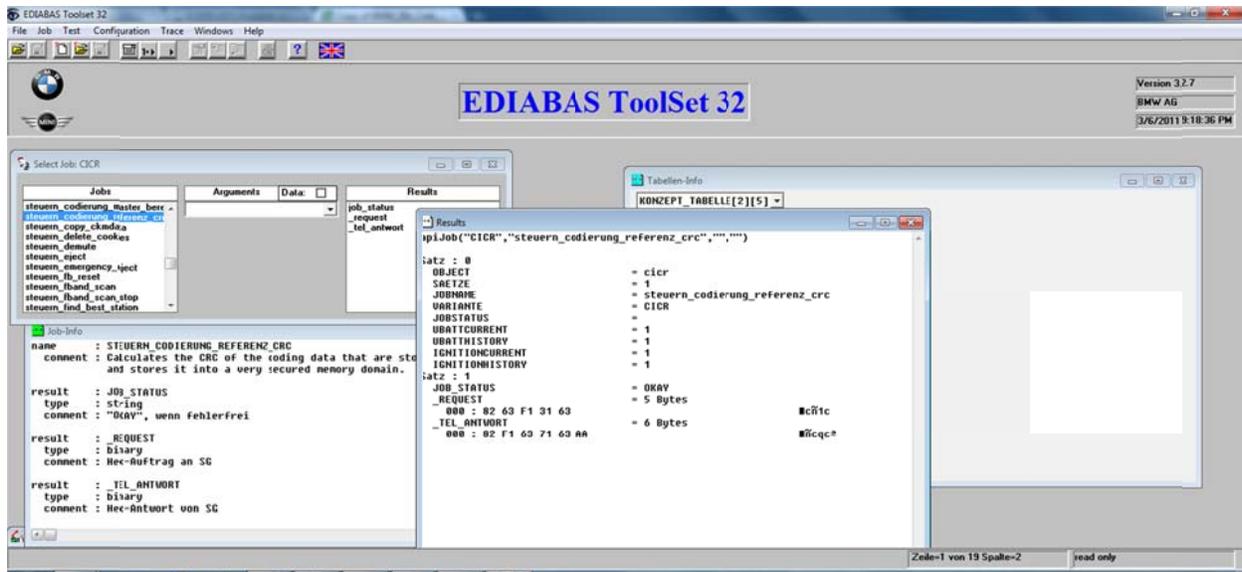


You will see the Results window showing “OKAY” next to JOB\_STATUS. This means the job has been successfully executed.



9) Repeat the same for the next job in the list, “steuern\_codierung\_referenz\_crc”:





10) Congratulations! You just made the earlier NETTODAT coding “stick”. This VIM activation will work as long as you don’t code your CIC again. If you do need to code your CIC, just repeat the same steps to re-activate VIM afterwards.

If you inspected other jobs available in Tool32, you will notice there are some very interesting jobs. Try them at **YOUR OWN RISK**. We are not responsible if you formatted the hard drive with one of the jobs!

## The Tutorial (Approach #2)

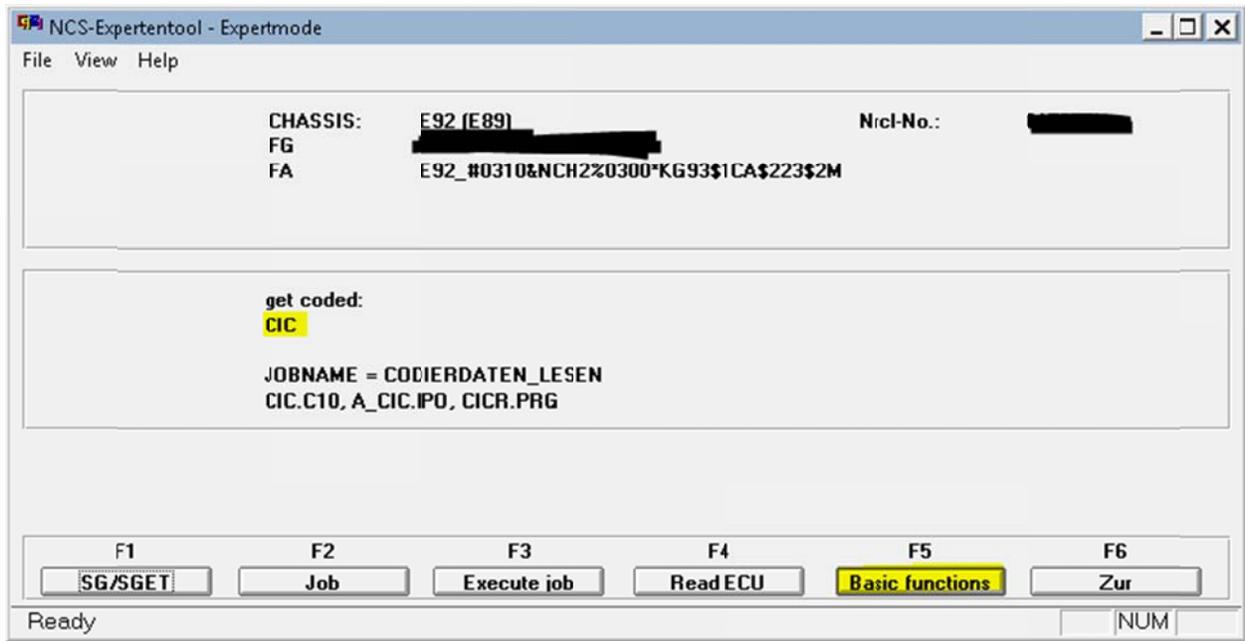
This method was discovered by bmwcoding.com member **luigi42**. He informed us that he was able to make FF,FF stay even with CIC recoding. It was actually a very clever approach. No Tool32 needed.

1) You need this updated utility data2txt from russiane39 @ bimmerforums:

<http://forums.bimmerforums.com/forum/showpost.php?p=21351240&postcount=37>

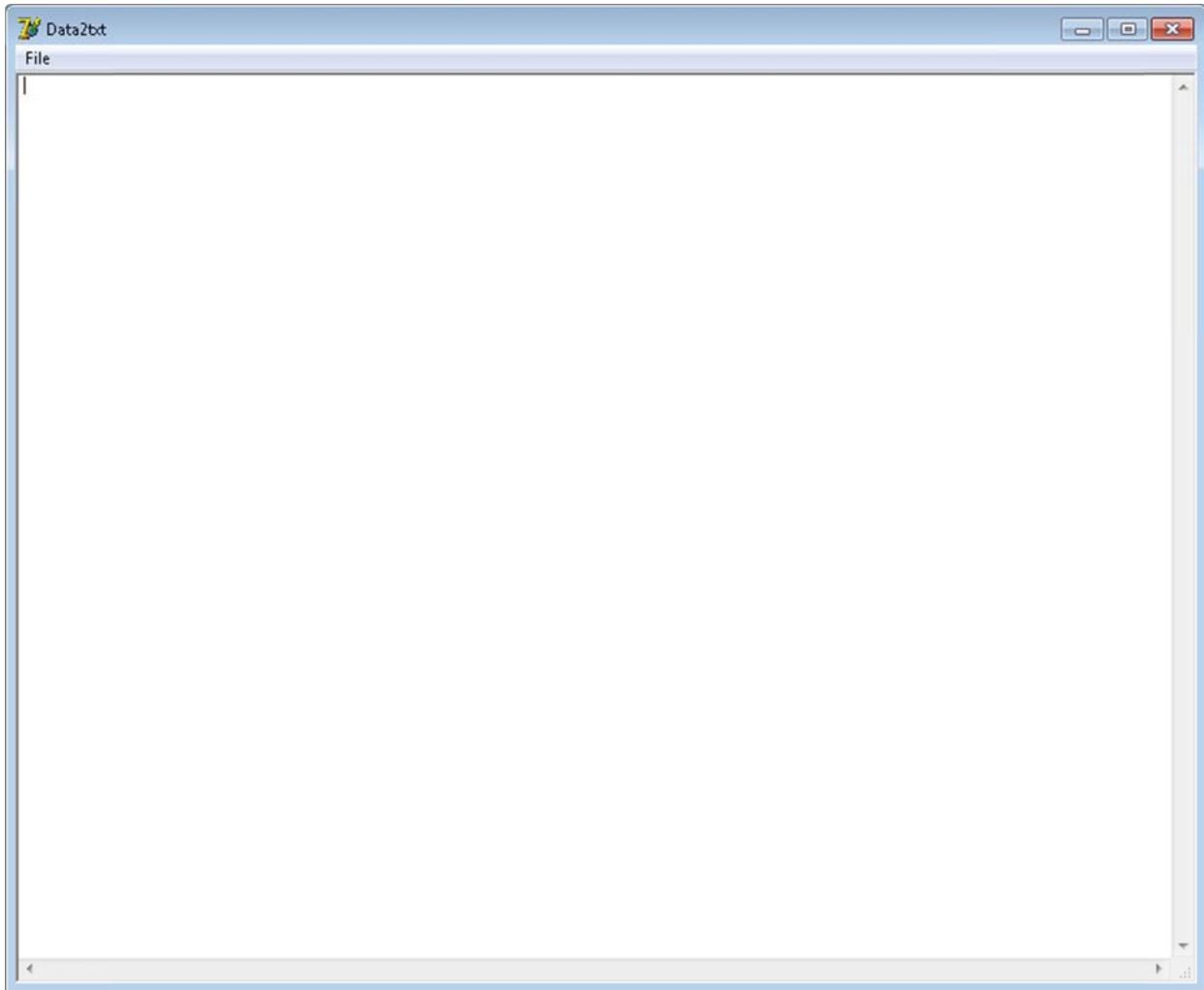
<http://storage.v12.su/data2txt14022011.rar> (direct link)

2) You need to know which CIC.CXX file your module uses. You can find out by reading your CIC module in NCSexpert. As the following image shows, my daten file is “CIC.C10”. Depending on year/build/model your CIC might have a different revision number.



3) Make a copy of your CIC.CXX file. We are going to hack the CIC.CXX file in the next steps.

4) Start the data2txt program:



5) Go to File -> Open -> Select your backup copy of CIC.CXX (original file) from the daten folder.

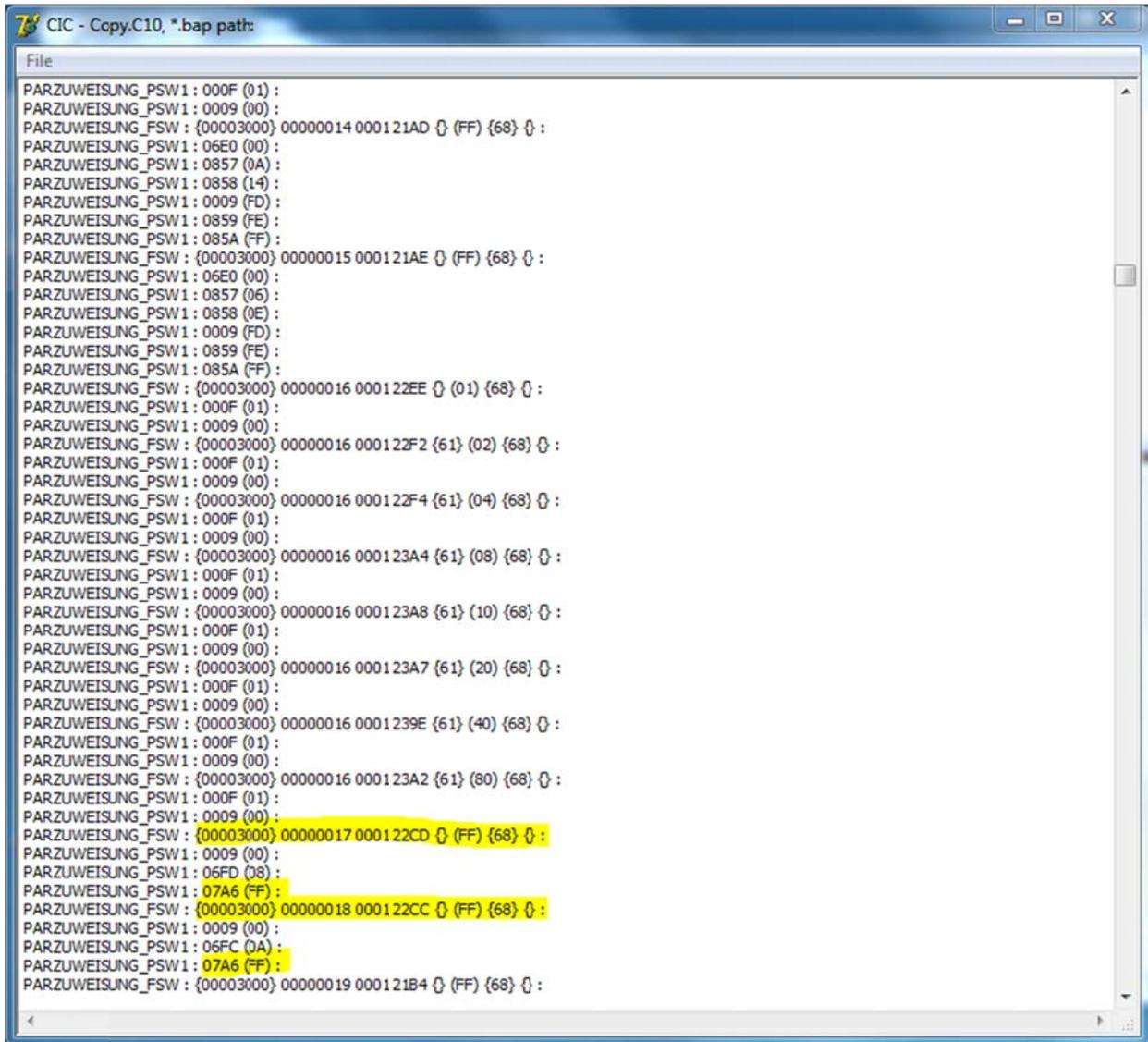
6) Locate these lines by searching:

```
PARZUWEISUNG_FSW : {00003000} 00000017 0001 22CD {} (FF) {68} {} :  
PARZUWEISUNG_PSW1 : 0009 (00) :  
PARZUWEISUNG_PSW1 : 06FD (08) :  
PARZUWEISUNG_PSW1 : 07A6 (03) :  
PARZUWEISUNG_FSW : {00003000} 00000018 0001 22CC {} (FF) {68} {} :  
PARZUWEISUNG_PSW1 : 0009 (00) :  
PARZUWEISUNG_PSW1 : 06FC (0A) :  
PARZUWEISUNG_PSW1 : 07A6 (03) :
```

Do they look familiar? They are the 2 speedlock min/max functions!

```
CIC - Copy.C10, *.bap path:
File
PARZUWEISUNG_FSW : {00003000} 00000015 0001 21AE {} (FF) {68} {} :
PARZUWEISUNG_PSW1 : 06E0 (00) :
PARZUWEISUNG_PSW1 : 0857 (06) :
PARZUWEISUNG_PSW1 : 0858 (0E) :
PARZUWEISUNG_PSW1 : 0009 (FD) :
PARZUWEISUNG_PSW1 : 0859 (FE) :
PARZUWEISUNG_PSW1 : 085A (FF) :
PARZUWEISUNG_FSW : {00003000} 00000016 0001 22EE {} (01) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW : {00003000} 00000016 0001 22F2 {61} (02) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW : {00003000} 00000016 0001 22F4 {61} (04) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW : {00003000} 00000016 0001 23A4 {61} (08) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW : {00003000} 00000016 0001 23A8 {61} (10) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW : {00003000} 00000016 0001 23A7 {61} (20) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW : {00003000} 00000016 0001 239E {61} (40) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW : {00003000} 00000016 0001 23A2 {61} (80) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW : {00003000} 00000017 0001 22CD {} (FF) {68} {} :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_PSW1 : 06FD (08) :
PARZUWEISUNG_PSW1 : 07A6 (03) :
PARZUWEISUNG_FSW : {00003000} 00000018 0001 22CC {} (FF) {68} {} :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_PSW1 : 06FC (0A) :
PARZUWEISUNG_PSW1 : 07A6 (03) :
PARZUWEISUNG_FSW : {00003000} 00000019 0001 21B4 {} (FF) {68} {} :
PARZUWEISUNG_PSW1 : 0170 (01) :
PARZUWEISUNG_PSW1 : 00ED (02) :
PARZUWEISUNG_PSW1 : 0702 (04) :
PARZUWEISUNG_PSW1 : 0703 (08) :
PARZUWEISUNG_PSW1 : 0860 (03) :
PARZUWEISUNG_FSW : {00003000} 0000001A 0001 23A9 {61} (01) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW : {00003000} 0000001A 0001 239F {61} (02) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
UNBELEGT1 : {00003000} 0000001A 0001 {} (FC)
UNBELEGT2 : (00)
PARZUWEISUNG_FSW : {00003000} 00000018 0001 1806 {} (0F) {68} {} :
PARZUWEISUNG_PSW1 : 009B (01) :
PARZUWEISUNG_PSW1 : 009A (02) :
PARZUWEISUNG_FSW : {00003000} 00000018 0001 1807 {} (FC) {68} {} :
PARZUWEISUNG_PSW1 : 009B (01) :
PARZUWEISUNG_PSW1 : 009A (02) :
PARZUWEISUNG_FSW : {00003000} 0000001C 0001 1808 {} (0F) {68} {} :
PARZUWEISUNG_PSW1 : 009B (01) :
PARZUWEISUNG_PSW1 : 009A (02) :
PARZUWEISUNG_FSW : {00003000} 0000001C 0001 1C63 {} (70) {68} {} :
PARZUWEISUNG_PSW1 : 0634 (01) :
PARZUWEISUNG_PSW1 : 0635 (02) :
PARZUWEISUNG_PSW1 : 0732 (03) :
PARZUWEISUNG_FSW : {00003000} 0000001C 0001 1C65 {} (80) {68} {} :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
```

7) The “07A6”s are mapped to “03”. In human language, “07A6” is “3\_kmh”. Very familiar isn’t it? Now change the mapped values to FF and FF like the following shows:



```
File
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW1 : {00003000} 00000014 000121AD (FF) {68} (FF) :
PARZUWEISUNG_PSW1 : 06E0 (00) :
PARZUWEISUNG_PSW1 : 0857 (0A) :
PARZUWEISUNG_PSW1 : 0858 (14) :
PARZUWEISUNG_PSW1 : 0009 (FD) :
PARZUWEISUNG_PSW1 : 0859 (FE) :
PARZUWEISUNG_PSW1 : 085A (FF) :
PARZUWEISUNG_FSW1 : {00003000} 00000015 000121AE (FF) {68} (FF) :
PARZUWEISUNG_PSW1 : 06E0 (00) :
PARZUWEISUNG_PSW1 : 0857 (06) :
PARZUWEISUNG_PSW1 : 0858 (0E) :
PARZUWEISUNG_PSW1 : 0009 (FD) :
PARZUWEISUNG_PSW1 : 0859 (FE) :
PARZUWEISUNG_PSW1 : 085A (FF) :
PARZUWEISUNG_FSW1 : {00003000} 00000016 000122EE (01) {68} (FF) :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW1 : {00003000} 00000016 000122F2 (61) (02) {68} (FF) :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW1 : {00003000} 00000016 000122F4 (61) (04) {68} (FF) :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW1 : {00003000} 00000016 000123A4 (61) (08) {68} (FF) :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW1 : {00003000} 00000016 000123A8 (61) (10) {68} (FF) :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW1 : {00003000} 00000016 000123A7 (61) (20) {68} (FF) :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW1 : {00003000} 00000016 0001239E (61) (40) {68} (FF) :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW1 : {00003000} 00000016 000123A2 (61) (80) {68} (FF) :
PARZUWEISUNG_PSW1 : 000F (01) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_FSW1 : {00003000} 00000017 000122CD (FF) {68} (FF) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_PSW1 : 06FD (18) :
PARZUWEISUNG_PSW1 : 07A6 (FF) :
PARZUWEISUNG_FSW1 : {00003000} 00000018 000122CC (FF) {68} (FF) :
PARZUWEISUNG_PSW1 : 0009 (00) :
PARZUWEISUNG_PSW1 : 06FC (1A) :
PARZUWEISUNG_PSW1 : 07A6 (FF) :
PARZUWEISUNG_FSW1 : {00003000} 00000019 000121B4 (FF) {68} (FF) :
```

We just mapped 3\_kmh as “FF” instead of “03”. Yay!

8) Go to File -> Produce cXX -> name it “CIC.CXX” where XX is your version from step3. In my case, it’s CIC.C10. Congratulations! You just hacked your CIC.CXX to set the speedlock min/max to “FF,FF” whenever you code the CIC module with 3\_kmh for the speedlocks.

9) Now just code/recode your CIC module normally with NCSexpert. Remember to set these values accordingly:

- SPEEDLOCK\_X\_KMH\_MAX\_COE = 3\_kmh
- SPEEDLOCK\_X\_KMH\_MIN\_COE = 3\_kmh

A few notes about this approach:

1. The subsequent codings on the CIC will not affect VIM as long as you are still using the hacked CIC.CXX file.
2. If you attempt to read the CIC module with an original CIC.CXX file, you will not see the speedlock functions. However, if you attempt to recode with the original CIC.CXX file, the VIM coding will be lost!
3. The data2txt program seems to work just fine for the CIC files, but it doesn't seem to work with some other modules' daten files when it comes to producing the new CXX file.

**FINAL WARNING:** VIM is for **testing purposes** only and should not be used in normal driving. It is intended for **OFF-ROAD and Experimental use ONLY**.

## Credits

Again, I need to thank **karlheinz** for his contribution. Without his files we would not have come this far in such a short period.

Thanks **miguex** for providing insight on how to code the NETTODAT file.

Thanks **spazticrecords** for doing the initial testing. It saved us a lot of time.

Thanks **luigi42** for providing an alternate approach.

Thanks **russiane39** for his cool little app.

## Donations

Donations are accepted if you appreciate what we have accomplished and if you somehow benefited from this. I spent many hours to make this available to the public.

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## Reference

Please refer to the following thread on our progress:

<http://www.bmwcoding.com/showthread.php?4-DVD-in-Motion-for-CIC>