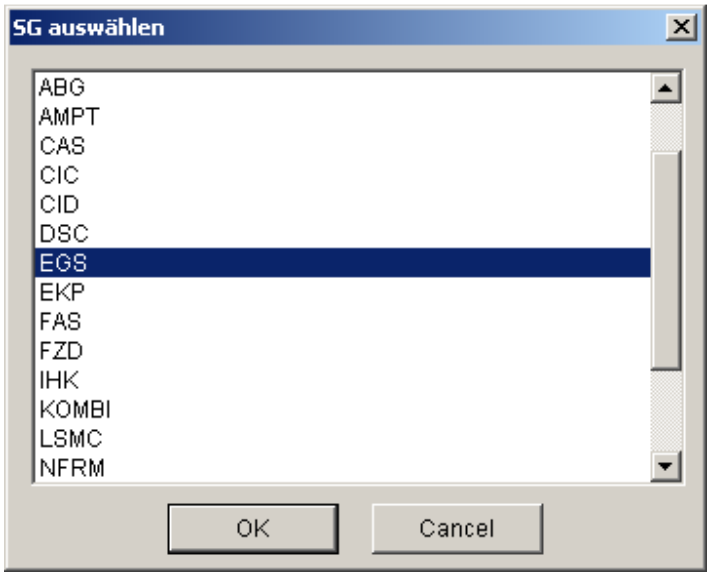
Flashing a new calibration for the E90 EGS with WinKFP V5.3.1

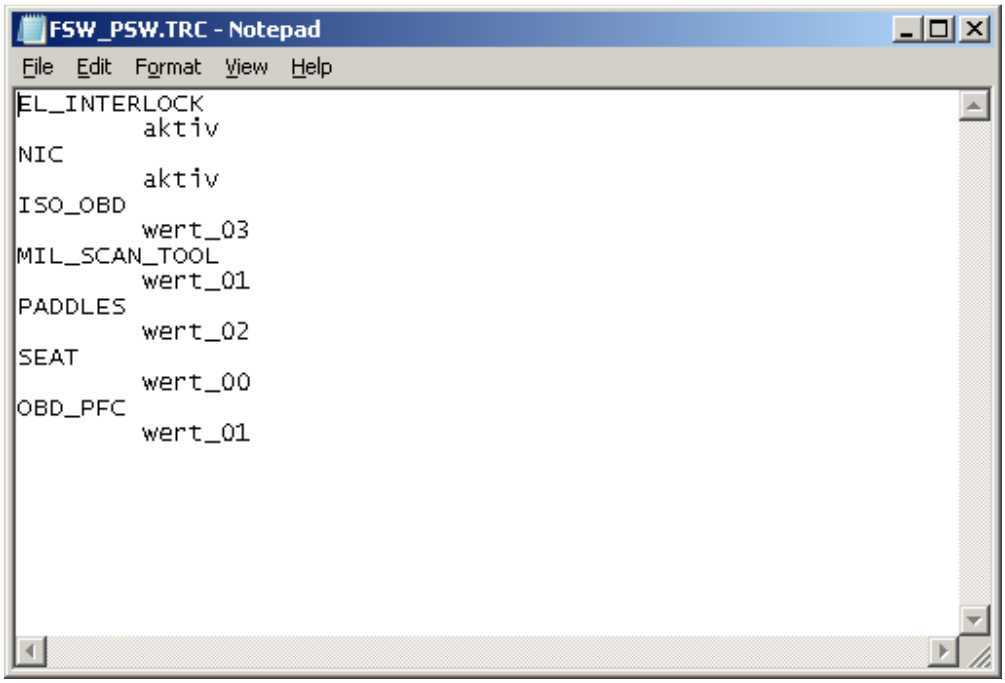
Warning: Do not attempt this without connecting a good battery charger (at least 5A-10A) and good battery health. BMW recommends power supplies that can deliver 40A.
If this fails it can make the flashed component permanently unusable.

Disclaimer: The author or poster of this document cannot be held liable for damage to or loss of function of any component of a vehicle by following this documentation. Neither can the author or poster of this document be held liable for any effect resulting from updating the SW and/or calibration of any component of a vehicle by following this documentation.

First, you'll have to save the current coding of your EGS with NCS-expert. Flashing a new calibration and/or SW will reset all coding data of the EGS. This means, if your car has paddle shifters behind the wheel, they will not work after flashing with WinKFP until you have restored the coding of the EGS.
Go to http://forums.bimmerforums.com/forum/showthread.php?t=1553779 and learn how to use NCS-expert and NCS dummy. Select the EGS

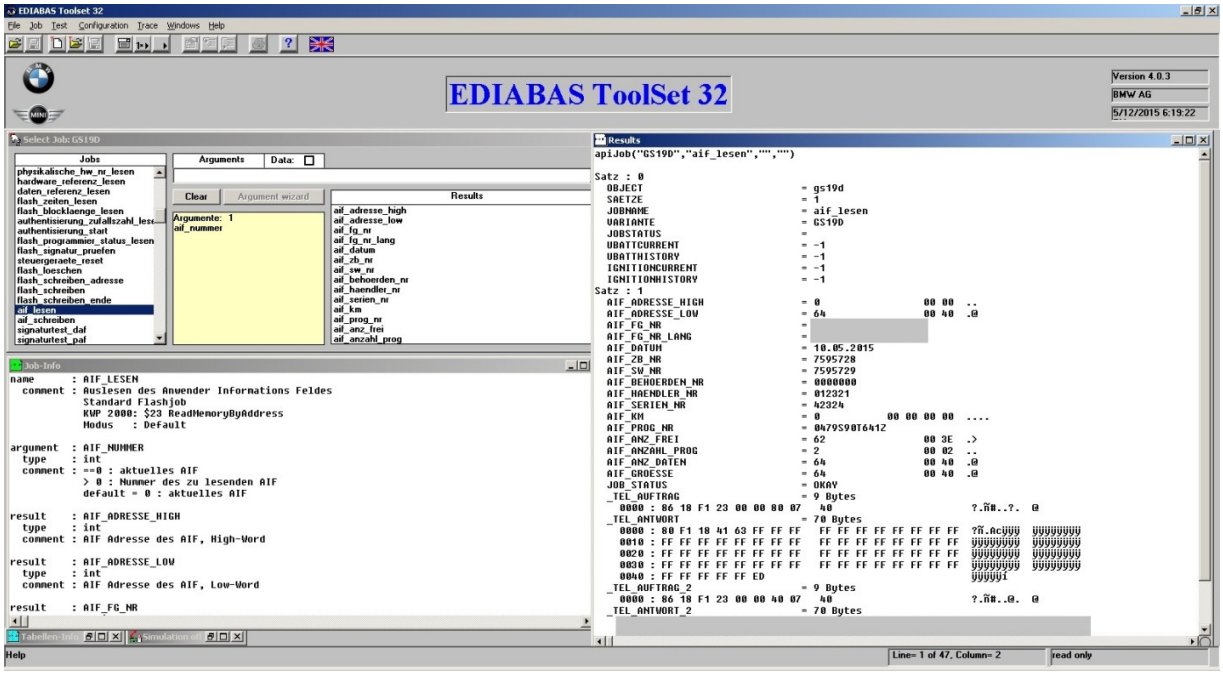


and save the original FSW_PSW.TRC of your EGS. If you have paddle shifters, it should look something like this:

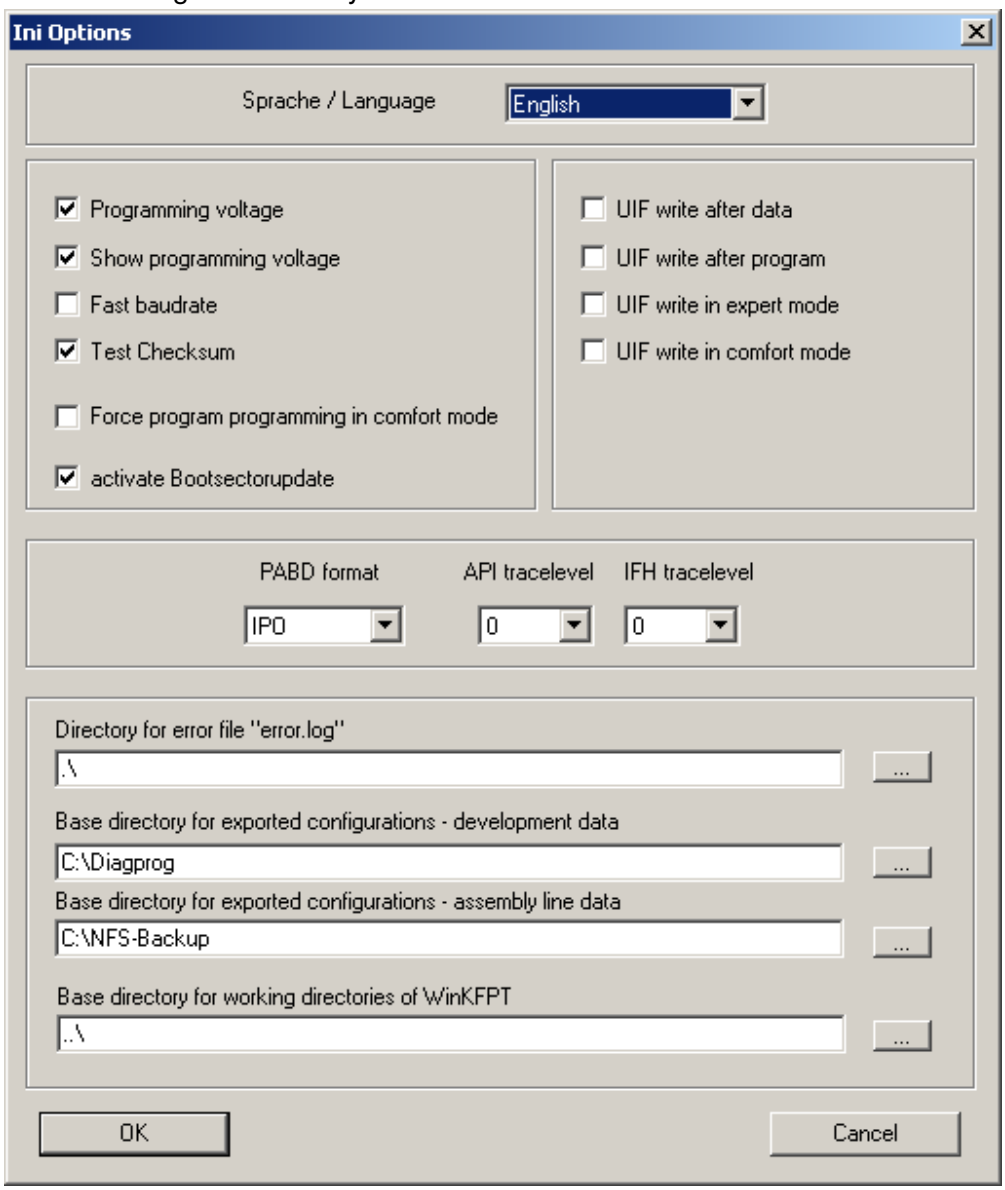


Save this file under a different file name as it will be overwritten the next time you read the coding parameters of an ECU.

Before starting WinKFP, open EDIABAS, load GS19D and execute the job aif_lesen. Copy the results into a text file. That makes it easier to copy the VIN (FG_NR) and ZB number into WinKFP later.

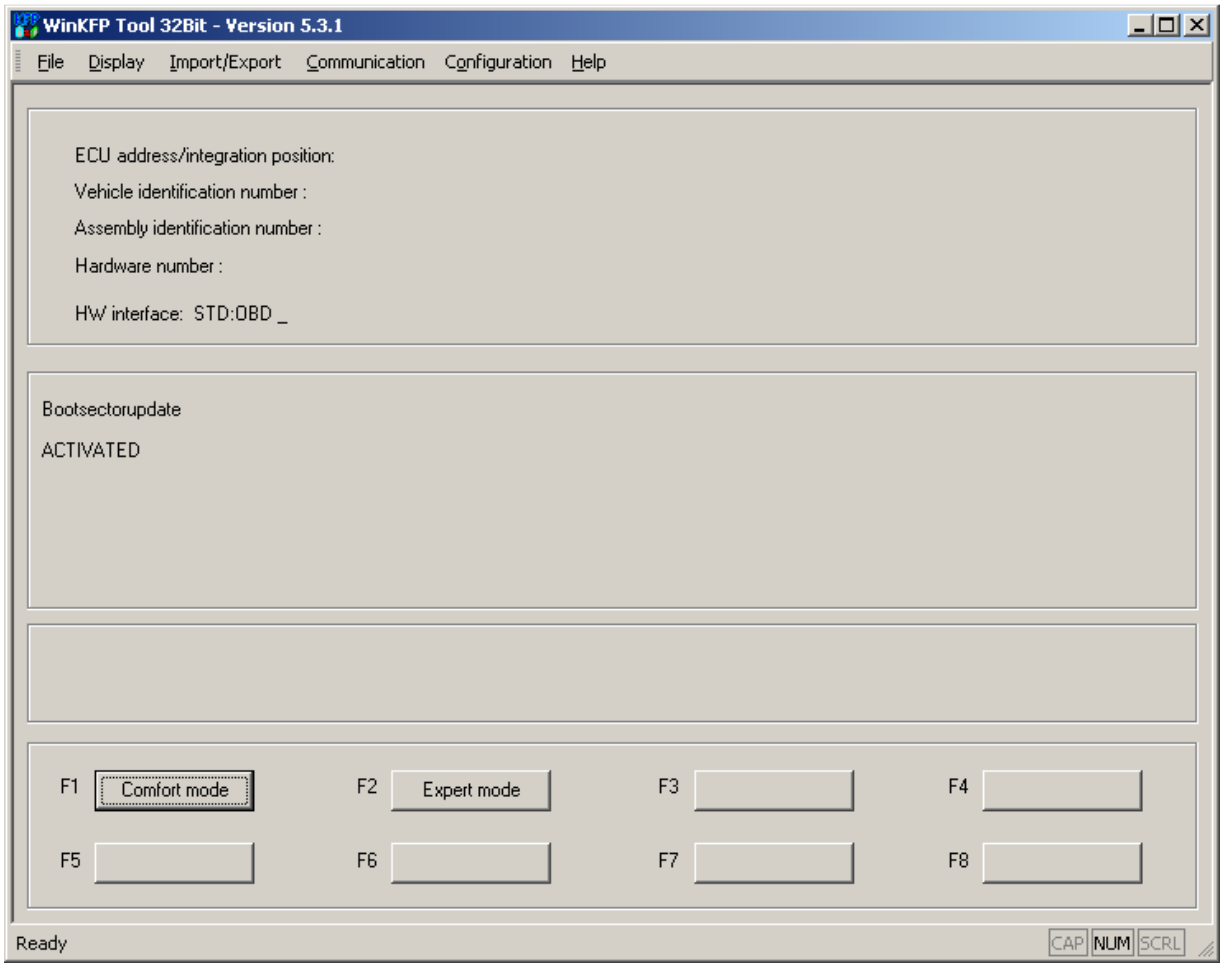


After installing and importing the correct data (separate documentation), make sure to have WinKFP configured correctly:

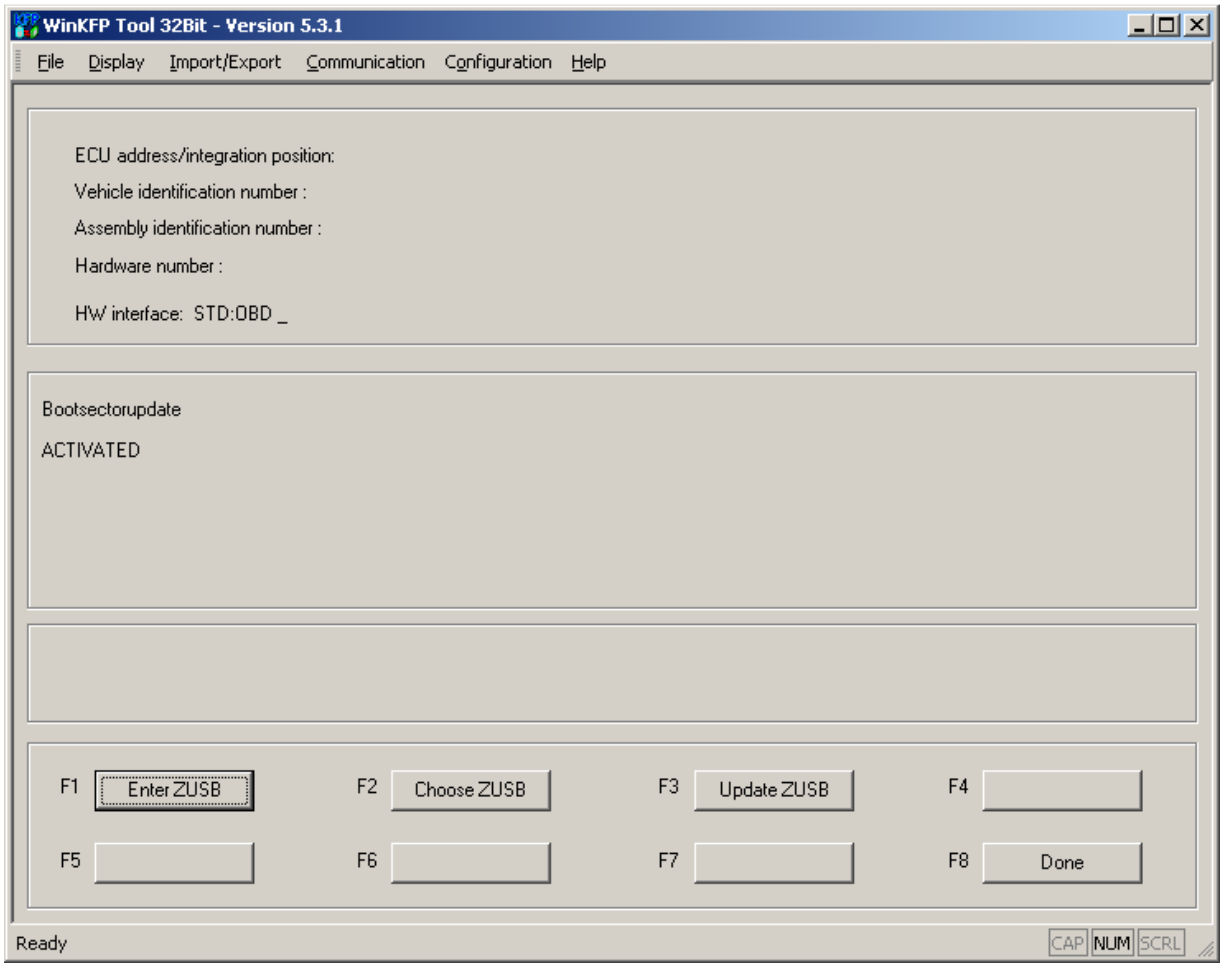


If the UIF fields stay checked, you'll need to input the complete VIN during the flash preparation stage. The User Information field (UIF) can only be updated 62 times.

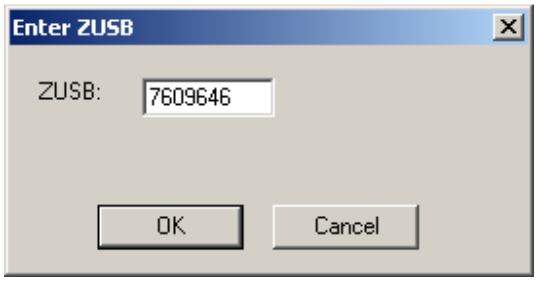
Turn on Ignition, do not start the engine. Turn off all unnecessary loads (lights, ventilation, radio, etc.).
On the main screen select "Comfort mode":



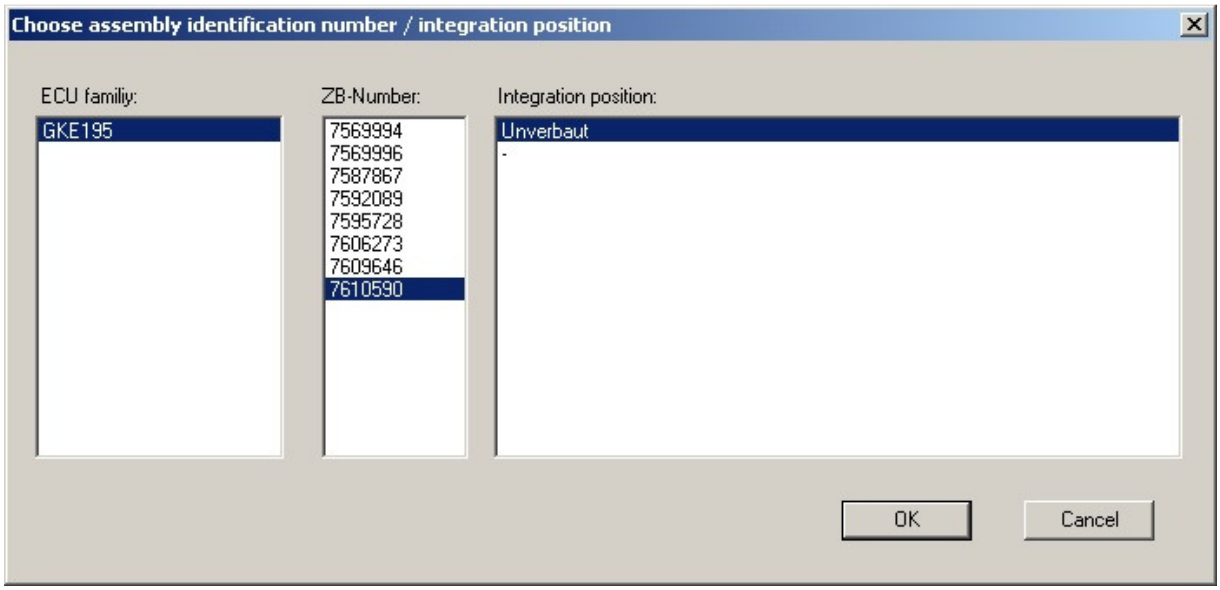
Then “Enter ZUSB”



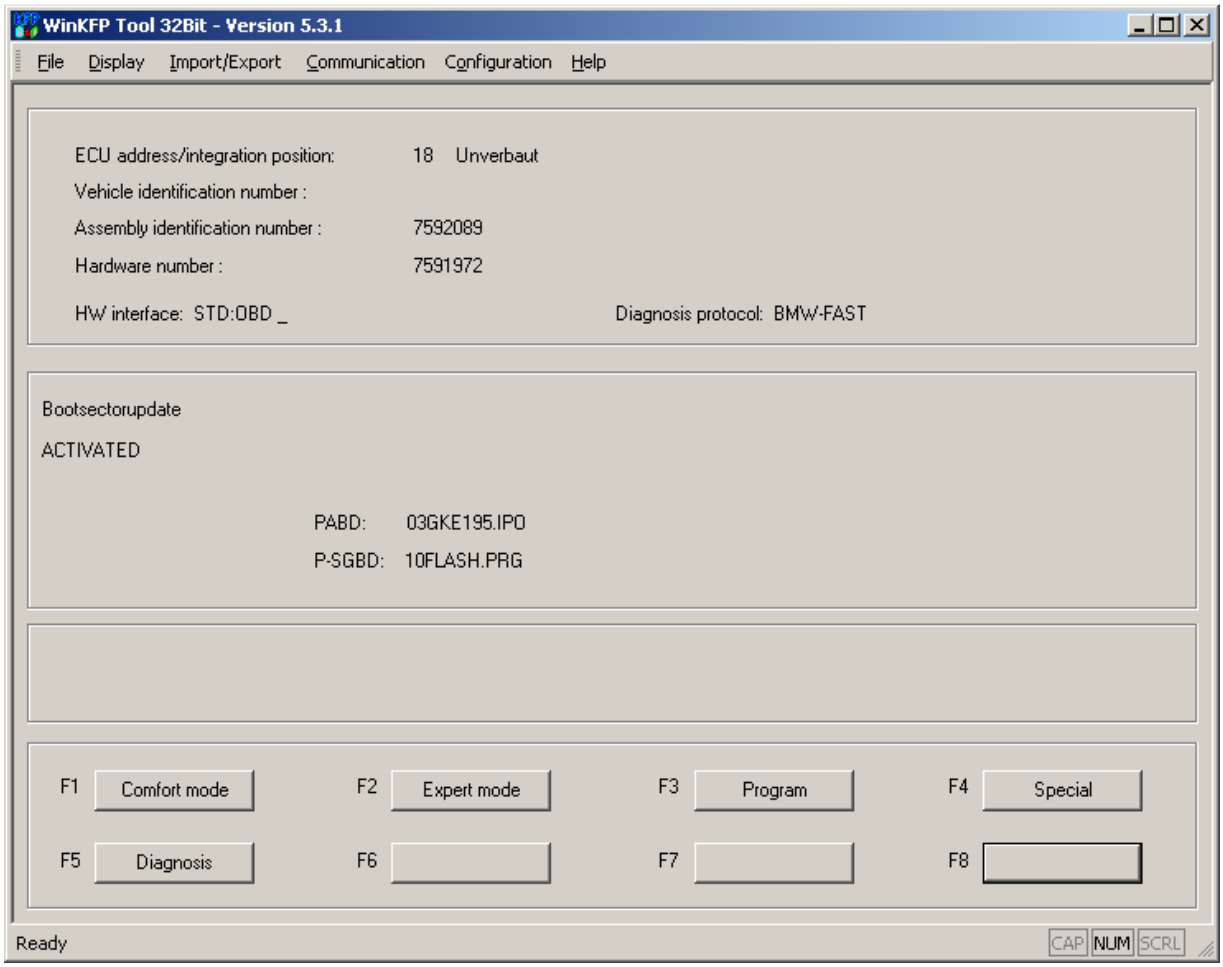
Copy and paste the current ZB_NR from the Ediabas AIF_lesen job into the following screen.



After that you'll be presented with the available ZB numbers for the selected ECU family (GKE195): Choose the ZB number of the SW to be flashed:

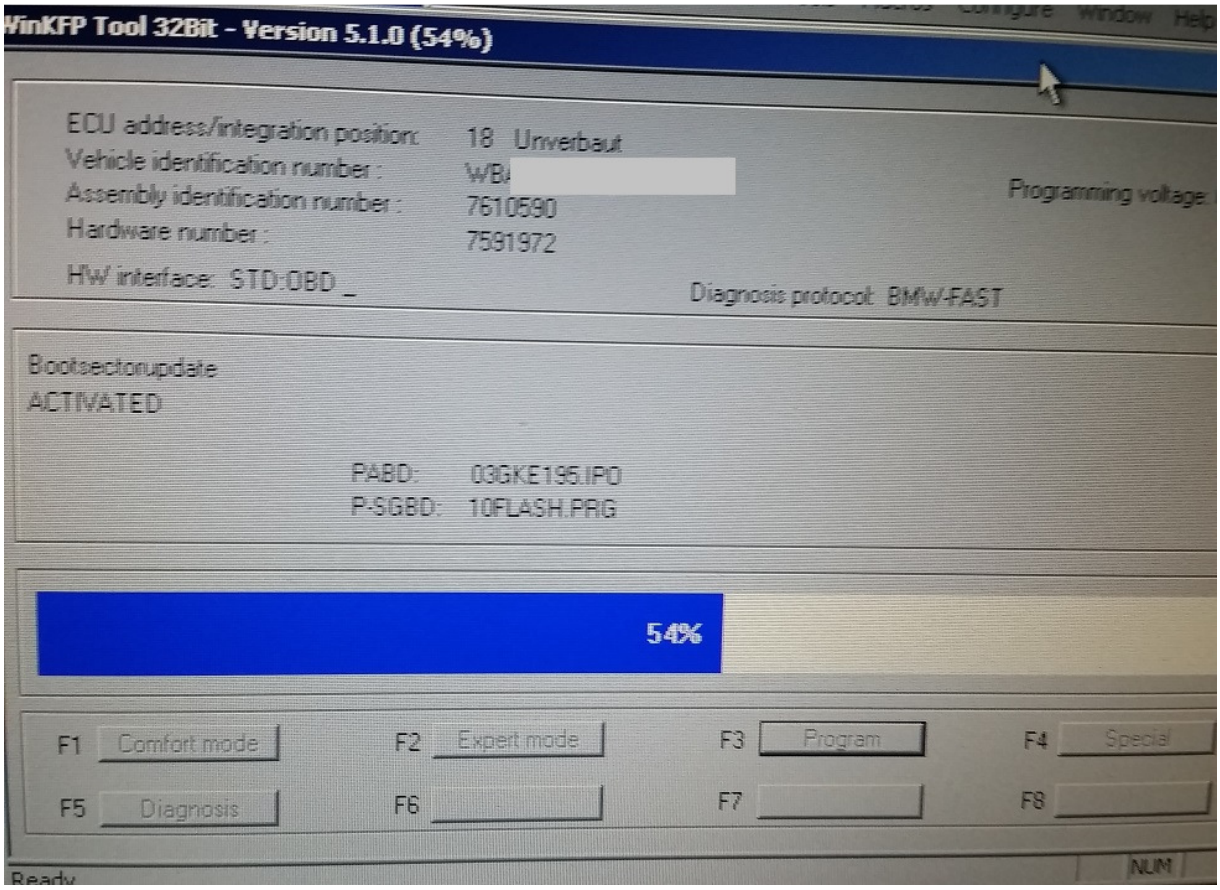


Hit OK then Done (F8).
The screen should look like this now:

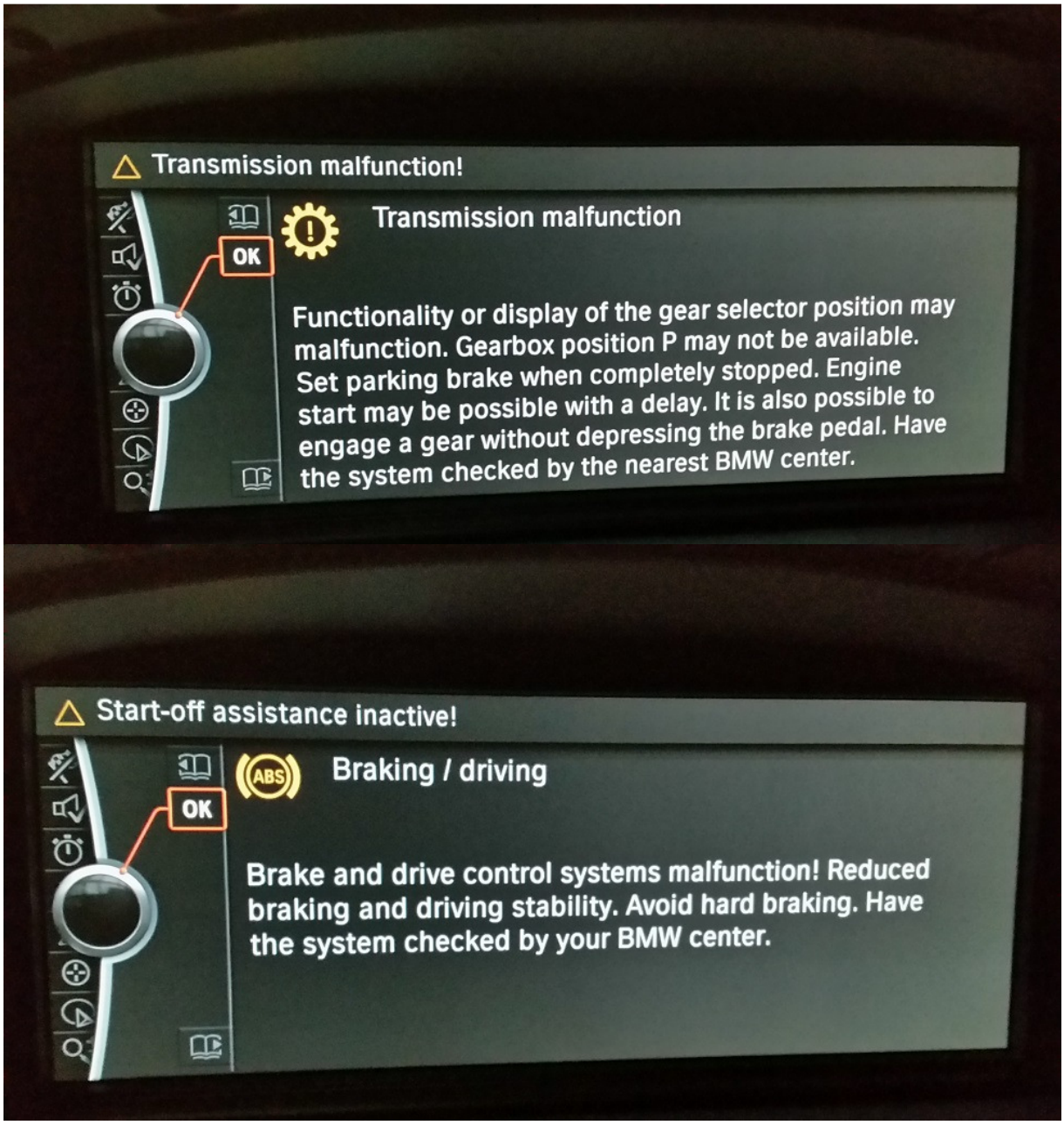


Next, hit Program (F3). This will start the update - no further warnings.

While flashing WinKFP shows a progress bar. Updating the Daten file should only take about 2 minutes. If the field “Force program programming in comfort mode” was selected, there will be two flashing sessions: First the Program which takes about 5-6 minutes and then the calibration file. However, updating the SW is not necessary as we are just updating the calibration.



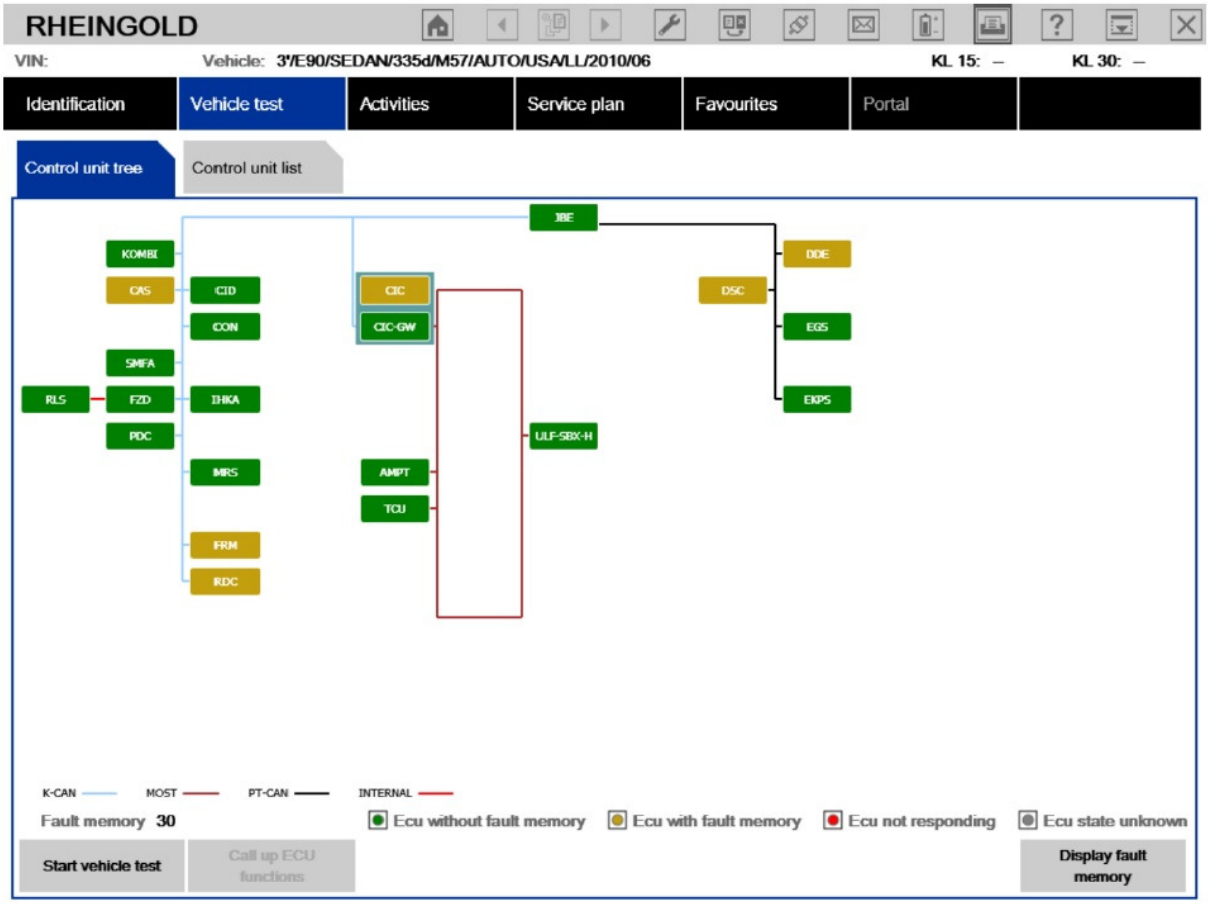
Also, there may be a couple of chimes and error messages popping up on the CIC. That is normal as the other ECUs can’t communicate with the transmission when it is being flashed.



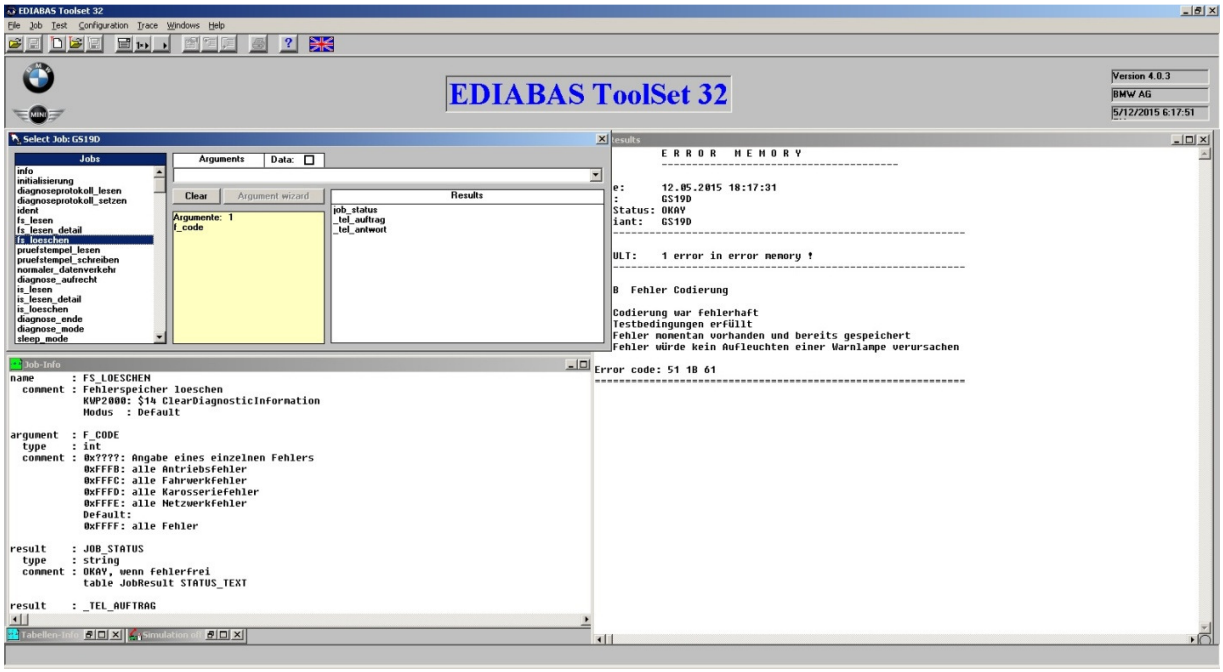
If everything went fine, you'll get this message:

Close WinKFP and restore the coding of the EGS with NCS-expert.

Now it's time to clear all faults: Either with Rheingold which can query all ECUs and clear all faults at once:



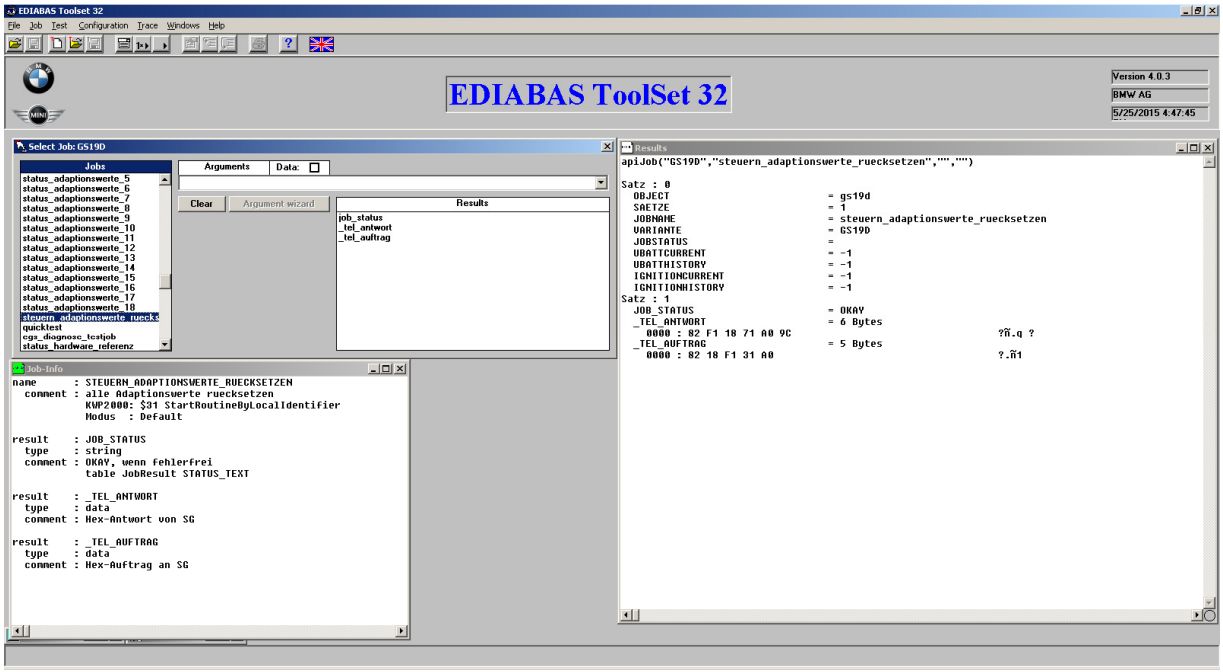
Or with Ediabas, one by one:
Load GS19D.prg and execute fs_lesen, then fs_loeschen.



Then repeat the same for:

- D73N57C0.prg (DDE)
- DSC_87.prg (Dynamic stability control)
- CID_90.prg (Car information display)
- CAS.prg (Car access system)
- FRM_70.prg (Drivers side Footwell module)
- RDCKWP.prg (Tire pressure monitor)

Lastly, perform a reset of transmission adaptations with Ediabas:
Load GS19D.prg and double click “steuern_adaptionswerte_ruecksetzen”:


EDIABAS Toolset 32
File Job Test Configuration Trace Windows Help
EDIABAS ToolSet 32
Version 4.0.3
BMW AG
5/25/2015 4:47:45
Select Job: GS19D
Jobs
status_adaptionswerte_5
status_adaptionswerte_6
status_adaptionswerte_7
status_adaptionswerte_8
status_adaptionswerte_9
status_adaptionswerte_10
status_adaptionswerte_11
status_adaptionswerte_12
status_adaptionswerte_13
status_adaptionswerte_14
status_adaptionswerte_15
status_adaptionswerte_16
status_adaptionswerte_17
status_adaptionswerte_18
steuern_adaptionswerte_ruecks
quicktest
cgs_diagnose_testjob
status_hardware_referenz
Arguments
Data:
Clear
Argument wizard
Results
job_status
_tel_antwort
_tel_auftrag
Job-Info
name : STEUERN_ADAPTIONSWERTE_RUECKSETZEN
comment : alle Adaptionswerte ruecksetzen
KWP2000: $31 StartRoutineByLocalIdentifier
Modus : Default
result : JOB_STATUS
type : string
comment : OKAY, wenn fehlerfrei
table JobResult STATUS_TEXT
result : _TEL_ANTWORT
type : data
comment : Hex-Antwort von SG
result : _TEL_AUFTRAG
type : data
comment : Hex-Auftrag an SG
Results
apiJob("GS19D","steuern_adaptionswerte_ruecksetzen","","")
Satz : 0
OBJECT = gs19d
SAETZE = 1
JOBNAME = steuern_adaptionswerte_ruecksetzen
VARIANTE = GS19D
JOBSTATUS =
UBATTCURRENT = -1
UBATTHISTORY = -1
IGNITIONCURRENT = -1
IGNITIONHISTORY = -1
Satz : 1
JOB_STATUS = OKAY
_TEL_ANTWORT = 6 Bytes
0000 : 82 F1 18 71 A0 9C ?ñ.q ?
_TEL_AUFTRAG = 5 Bytes
0000 : 82 18 F1 31 A0 ?.ñ1