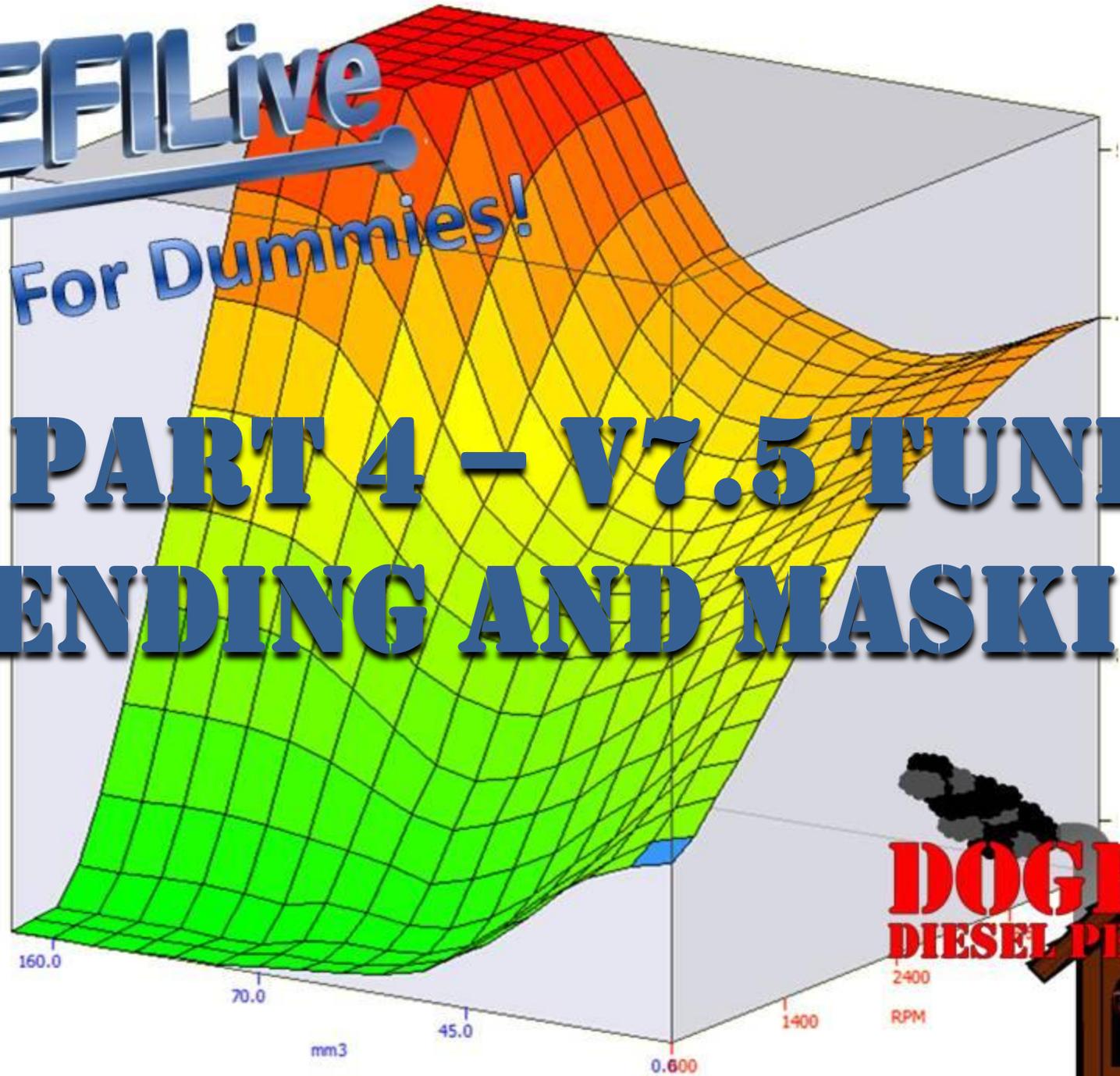


**MEFILive**

**For Dummies!**

# **PART 4 – V7.5 TUNE BLENDING AND MASKING**



File Edit View Calibration Flash Window Help

Navigator: Search

Group: (All)

Calibrations Favorites

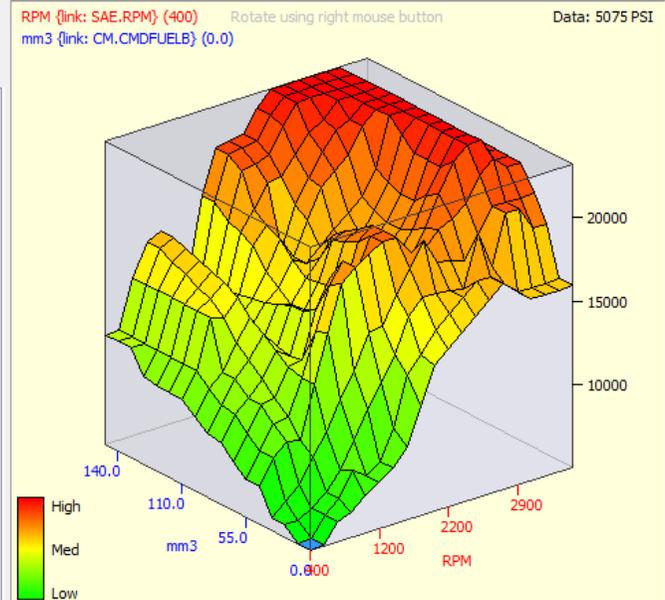
Calibrations

- EFILive Custom Calibrations
  - Internal Flash
    - Injection Quantity
    - Injection Timing
    - Idle
    - Fuel Pressure
      - Parameters
      - Axis Define
      - Fuel Pressure, Base Table
      - Fuel Pressure, Air Density Adjust 1
      - Fuel Pressure, Air Density Adjust 2
      - Fuel Pressure, Air Density Adjust 3
      - Fuel Pressure, Air Density Adjust 4
      - Fuel Pressure Reg, Base Duty Cycle
      - Fuel Pressure Reg, Max Duty Cycle
      - Fuel Pressure Reg, Current Conversion
    - P.I.D Control
    - Diagnostics
  - Engine Protection
  - Air Mass
  - Turbo
  - ECM Sensors
  - Intake Air Heater
  - Miscellaneous
  - Auto Transmission
- External Flash
- Not used
- Not used
- Not used
- Not used

Adjust: # % % X

RPM (link: SAE.RPM) (400) Rotate using right mouse button Data: 5075 PSI

mm3 (link: CM.CMDFUELB) (0.0)



Units: Minimum: Maximum: PSI 0 36259 EFLive limits.

Description RTACS User notes

This table defines the base commanded fuel pressures which will then be further adjusted by the air density adjustment tables.

Axis tables:

- [D0753] Fuel Pressure Base Table, RPM Axis
- [D0754] Fuel Pressure Base Table, Fuel Axis

**The Masking and Blending tools allow you to modify specific cells in relation to the cells around it without changing cell values in areas that you don't want modified.**

mm3 (link: CM.CMDFUELB)

	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824
1200	7835	7835	9569	11601	15232	14863	12761	12620	12761	12910	13200	13342	13490	13490	13632	13632
1400	8416	8416	11169	13052	17843	17404	15522	15083	14941	14651	14361	14212	14071	13922	13922	13781
1600	9428	10150	12471	15083	18565	18565	17114	14793	14502	14361	14941	15522	16682	17114	17404	18126
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	15663	16392	17263	17695	18275	20158	20738
2000	13781	14071	15953	16824	19577	19577	18855	18417	18126	16682	15953	15953	15953	19577	20306	20887
2200	14502	15232	16824	18126	19577	19577	18855	18417	17765	16682	16682	17836	18417	19726	20597	21028
2400	15232	15953	16824	19577	18417	17404	17404	17404	16682	17043	17404	19577	19726	20738	22047	22338
2600	15953	16682	16682	17985	18417	17553	17404	17404	17404	17263	18126	20306	21028	21757	23208	23208
2700	16682	17404	16534	17836	19287	18997	18494	18126	18494	18855	21028	22047	22338	23208	23208	23208
2800	17404	17404	19577	17553	19726	20738	20306	19577	19945	20306	22479	22479	23208	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

RPM (link: SAE.RPM)



File Edit View Calibration Flash Window Help

Navigator:

Group: (All)

Calibrations Favorites

Calibrations

- EFILive Custom Calibrations
  - Internal Flash
    - Injection Quantity
    - Injection Timing
    - Idle
    - Fuel Pressure
      - Parameters
      - Axis Define
      - Fuel Pressure, Base Table
      - Fuel Pressure, Air Density Adjust 1
      - Fuel Pressure, Air Density Adjust 2
      - Fuel Pressure, Air Density Adjust 3
      - Fuel Pressure, Air Density Adjust 4
      - Fuel Pressure Reg, Base Duty Cycle
      - Fuel Pressure Reg, Max Duty Cycle
      - Fuel Pressure Reg, Current Conversion
    - P.I.D Control
    - Diagnostics
  - Engine Protection
  - Air Mass
  - Turbo
  - ECM Sensors
  - Intake Air Heater
  - Miscellaneous
  - Auto Transmission
- External Flash
- Not used
- Not used
- Not used
- Not used

Adjust: # % X =

RPM (link: SAE.RPM) (400) Rotate using right mouse button

Data: 5075 PSI

Units: Minimum: Maximum:

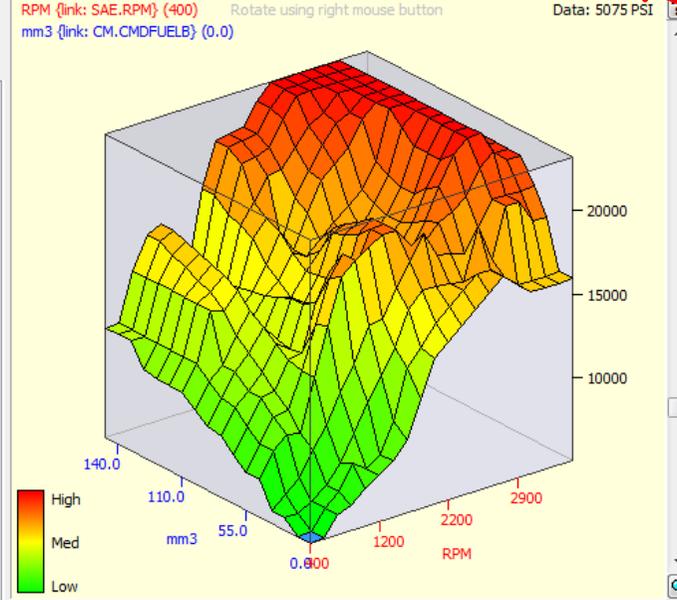
PSI 0 36259 EFLive limits.

Description RTACS User notes

This table defines the base commanded fuel pressures which will then be further adjusted by the air density adjustment tables.

Axis tables:

- [D0753] Fuel Pressure Base Table, RPM Axis
- [D0754] Fuel Pressure Base Table, Fuel Axis



First, we'll talk about the Blending tools.

Like the smoothing tool, the **blending tools** will change the values of surrounding cells, but it does from the center OUT, unlike the **smoothing** or **linear blend** which are **end to end** or **high to low**.

mm3 (link: CM.CMDFUELB)

	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534
1200	7835	7835	9569	11601	15232	14863	12761	12620	12761	12910	13200	13342	13490	13490	13632
1400	8416	8416	11169	13052	17843	17404	15522	15083	14941	14651	14361	14212	14071	13922	13922
1600	9428	10150	12471	15083	18565	18565	17114	14793	14502	14361	14941	15522	16682	17114	17404
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	15663	16392	17263	17695	18275	20158
2000	13781	14071	15953	16824	19577	19577	18855	18417	18126	16682	15953	15953	15953	19577	20306
2200	14502	15232	16824	18126	19577	19577	19577	18855	18417	17765	16682	17836	18417	19726	20597
2400	15232	15953	16824	19577	18417	17404	17404	17404	16682	17043	17404	19577	19726	20738	22047
2600	15953	16682	16682	17985	18417	17553	17404	17404	17404	17263	18126	20306	21028	21757	23208
2700	16682	17404	16534	17836	19287	18997	18494	18126	18494	18855	21028	22047	22338	23208	23208
2800	17404	17404	19577	17553	19726	20738	20306	19577	19945	20306	22479	22479	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

RPM (link: SAE.RPM)

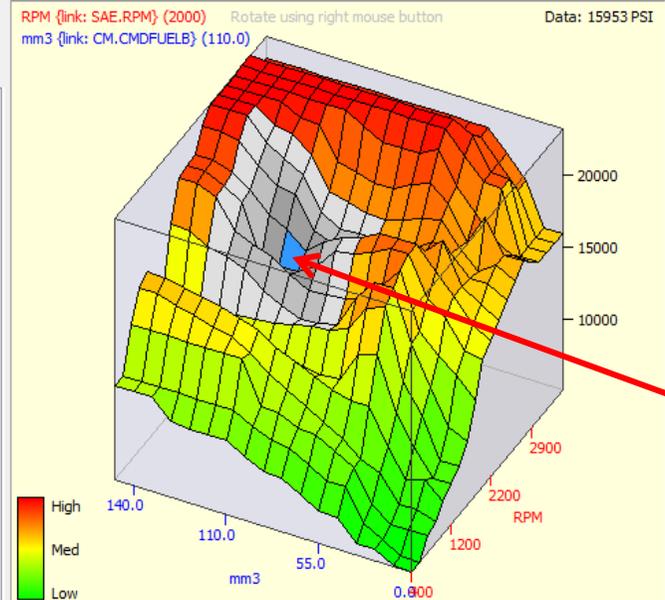


**Navigator:**

Group: (All)

Calibrations Favorites

- Calibrations
  - EFILive Custom Calibrations
    - Internal Flash
      - Injection Quantity
      - Injection Timing
      - Idle
      - Fuel Pressure
        - Parameters
        - Axis Define
        - Fuel Pressure, Base Table
        - Fuel Pressure, Air Density Adjust 1
        - Fuel Pressure, Air Density Adjust 2
        - Fuel Pressure, Air Density Adjust 3
        - Fuel Pressure, Air Density Adjust 4
        - Fuel Pressure Reg, Base Duty Cycle
        - Fuel Pressure Reg, Max Duty Cycle
        - Fuel Pressure Reg, Current Conversion
      - P.I.D Control
      - Diagnostics
    - Engine Protection
    - Air Mass
    - Turbo
    - ECM Sensors
    - Intake Air Heater
    - Miscellaneous
    - Auto Transmission
  - External Flash
    - Not used
    - Not used
    - Not used
    - Not used



Units: Minimum: Maximum:  
PSI 0 36259 EFILive limits.

Description RTACS User notes

This table defines the base commanded fuel pressures which will then be further adjusted by the air density adjustment tables.

Axis tables:  
- {D0753} Fuel Pressure Base Table, RPM Axis  
- {D0754} Fuel Pressure Base Table, Fuel Axis

**In this scenario, I've selected the cell intersecting at 110mm3 and 2000 RPM's.**

**The blending tool I'm using is selecting both the vertical and horizontal cell values surrounding it. The areas effected size can be increased or decreased.**

mm3 (link: CM.CMDFUELB)

	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	100.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10150	10298	11601	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824	16824
1200	7835	7835	9569	11601	15232	14863	12761	12620	12761	12910	13300	13342	13490	13490	13632	13632	13632
1400	8416	8416	11169	13052	17843	17404	15522	15083	14941	14651	14461	14212	14071	13922	13922	13781	13781
1600	9428	10150	12471	15083	18565	18565	17114	14793	14502	14361	14441	15522	16682	17114	17404	18126	18126
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	15663	16392	17263	17695	18275	20158	20738	20738
2000	13781	14071	15953	16824	19577	19577	18855	18417	18126	16682	15953	15953	15953	19577	20306	20887	20887
2200	14502	15232	16824	18126	19577	19577	19577	18855	18417	17765	16682	17836	18417	19726	20597	21028	21028
2400	15232	15953	16824	19577	18417	17404	17404	17404	16682	17043	17404	19577	19726	20738	22047	22338	22338
2600	15953	16682	16682	17985	18417	17553	17404	17404	17404	17263	18126	20306	21028	21757	23208	23208	23208
2700	16682	17404	16534	17836	19287	18997	18494	18126	18494	18855	21028	22047	22338	23208	23208	23208	23208
2800	17404	17404	19577	17553	19726	20738	20306	19577	19945	20306	22479	22479	23208	23208	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

RPM (link: SAE.RPM)

**On the next slide, I'm going to change the cells value from 15,953 to 20,000.**

**The selected cells around that value will adjust to this new value.**



File Edit View Calibration Flash Window Help

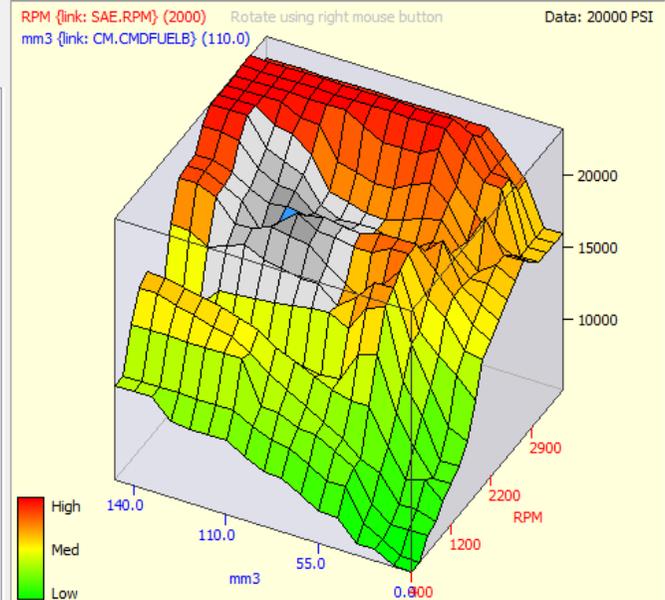
Navigator: Search

Group: (All)

Calibrations Favorites

Calibrations

- EFILive Custom Calibrations
  - Internal Flash
    - Injection Quantity
    - Injection Timing
    - Idle
    - Fuel Pressure
      - Parameters
      - Axis Define
      - Fuel Pressure, Base Table
      - Fuel Pressure, Air Density Adjust 1
      - Fuel Pressure, Air Density Adjust 2
      - Fuel Pressure, Air Density Adjust 3
      - Fuel Pressure, Air Density Adjust 4
      - Fuel Pressure Reg, Base Duty Cycle
      - Fuel Pressure Reg, Max Duty Cycle
      - Fuel Pressure Reg, Current Conversion
    - P.I.D Control
    - Diagnostics
  - Engine Protection
  - Air Mass
  - Turbo
  - ECM Sensors
  - Intake Air Heater
  - Miscellaneous
  - Auto Transmission
- External Flash
- Not used
- Not used
- Not used
- Not used



Units: Minimum: Maximum: PSI 0 36259 EFILive limits.

Description RTACS User notes

This table defines the base commanded fuel pressures which will then be further adjusted by the air density adjustment tables.

Axis tables:

- [D0753] Fuel Pressure Base Table, RPM Axis
- [D0754] Fuel Pressure Base Table, Fuel Axis

As you can see, by changing that one cells value, all of the surrounding cells were adjusted with it.

You can also do this in a vertical or horizontal only manner by selecting the appropriate tool.

mm3 (link: CM.CMDFUELB)

	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824
1200	7835	7835	9569	11601	15232	14863	12761	12620	12761	12910	13200	13342	13490	13490	13632	13632
1400	8416	8416	11169	13052	17843	17404	15522	16312	16206	15988	15771	15659	15553	15442	13922	13781
1600	9428	10150	12471	15083	18565	18565	17114	16095	17251	17180	17471	17761	18341	17836	17404	18126
1800	11601	13052	13922	15232	19146	17695	16244	16965	17906	18916	19098	19316	18847	18706	20158	20738
2000	13781	14071	15953	16824	19577	19577	18855	18812	19063	19171	20000	18988	17977	19683	20306	20887
2200	14502	15232	16824	18126	19577	19577	19577	19142	19208	19441	19171	19459	19208	19794	20597	21028
2400	15232	15953	16824	19577	18417	17404	17404	18053	18341	18522	18702	19789	19863	20554	22047	22338
2600	15953	16682	16682	17985	18417	17553	17404	18053	18053	17947	18595	20230	20771	21318	23208	23208
2700	16682	17404	16534	17836	19287	18997	18494	18126	18126	18494	18855	21028	22047	22338	23208	23208
2800	17404	17404	19577	17553	19726	20738	20306	19577	19577	19945	20306	22479	22479	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

RPM (link: SAE.RPM)

This is using the AREA tool.



File Edit View Calibration Flash Window Help

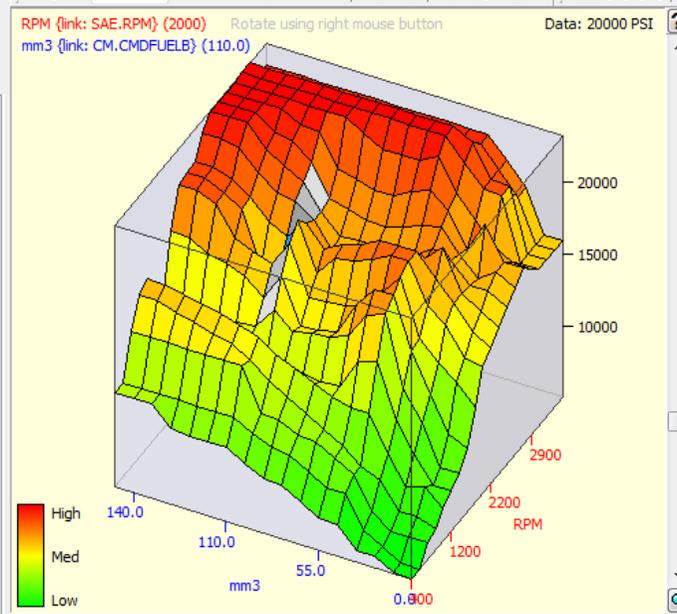
Adjust: # % \* / ~ [Icons]

Navigator:

Group: (All)

Calibrations Favorites

- EFILive Custom Calibrations
  - Internal Flash
    - Injection Quantity
    - Injection Timing
    - Idle
    - Fuel Pressure
      - Parameters
      - Axis Define
      - Fuel Pressure, Base Table
      - Fuel Pressure, Air Density Adjust 1
      - Fuel Pressure, Air Density Adjust 2
      - Fuel Pressure, Air Density Adjust 3
      - Fuel Pressure, Air Density Adjust 4
      - Fuel Pressure Reg, Base Duty Cycle
      - Fuel Pressure Reg, Max Duty Cycle
      - Fuel Pressure Reg, Current Conversion
    - P.I.D Control
    - Diagnostics
  - Engine Protection
  - Air Mass
  - Turbo
  - ECM Sensors
  - Intake Air Heater
  - Miscellaneous
  - Auto Transmission
- External Flash
  - Not used
  - Not used
  - Not used
  - Not used



Data: 20000 PSI

Units: Minimum: Maximum: EFILive limits.

PSI 0 36259

Description RTACS User notes

This table defines the base commanded fuel pressures which will then be further adjusted by the air density adjustment tables.

Axis tables:

- [D0753] Fuel Pressure Base Table, RPM Axis
- [D0754] Fuel Pressure Base Table, Fuel Axis

mm3 {link: CM.CMDFUELB}

	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10298	11601	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824
1200	7835	7835	9569	11601	15232	14863	12761	12620	12761	12910	13200	13342	13490	13490	13632	13632
1400	8416	8416	11169	13052	17843	17404	15522	15083	14941	14651	15771	14242	14071	13922	13922	13781
1600	9428	10150	12471	15083	18565	18565	17114	14793	14502	14361	17471	15522	16682	17114	17404	18126
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	15663	19098	17263	17695	18275	20158	20738
2000	13781	14071	15953	16824	19577	19577	18855	18417	18126	16682	20000	15953	15953	19577	20306	20887
2200	14502	15232	16824	18126	19577	19577	19577	18855	18417	17765	19171	17836	18417	19726	20597	21028
2400	15232	15953	16824	19577	18417	17404	17404	17404	16682	17043	18702	19577	19726	20738	22047	22338
2600	15953	16682	16682	17985	18417	17553	17404	17404	17404	17263	18595	20306	21028	21757	23208	23208
2700	16682	17404	16534	17836	19287	18997	18494	18126	18494	18855	21028	21028	22047	22338	23208	23208
2800	17404	17404	19577	17553	19726	20738	20306	19577	19577	19945	20306	22479	22479	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

This is using the Column tool.





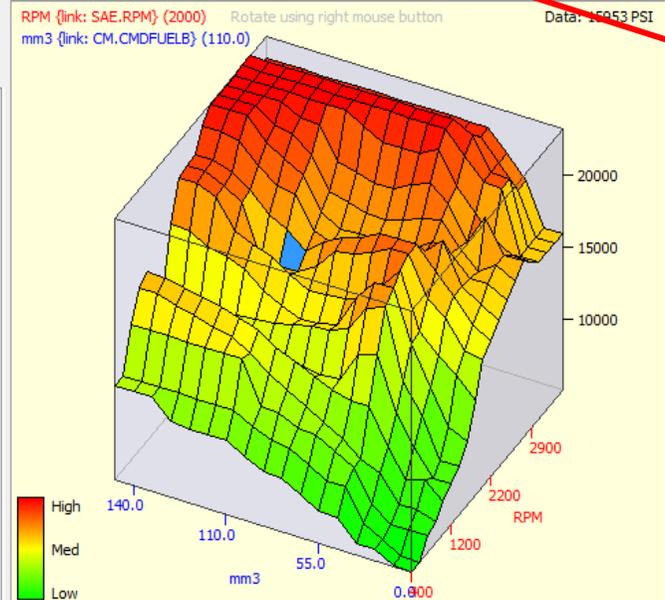
**Navigator:**

Group: (All)

Calibrations Favorites

Calibrations

- EFILive Custom Calibrations
  - Internal Flash
    - Injection Quantity
    - Injection Timing
    - Idle
    - Fuel Pressure
      - Parameters
      - Axis Define
      - Fuel Pressure, Base Table
      - Fuel Pressure, Air Density Adjust 1
      - Fuel Pressure, Air Density Adjust 2
      - Fuel Pressure, Air Density Adjust 3
      - Fuel Pressure, Air Density Adjust 4
      - Fuel Pressure Reg, Base Duty Cycle
      - Fuel Pressure Reg, Max Duty Cycle
      - Fuel Pressure Reg, Current Conversion
    - P.I.D Control
    - Diagnostics
  - Engine Protection
  - Air Mass
  - Turbo
  - ECM Sensors
  - Intake Air Heater
  - Miscellaneous
  - Auto Transmission
- External Flash
  - Not used
  - Not used
  - Not used
  - Not used



**Now we're going to use the Masking tool.**

**The masking tool allows you to prevent specific cells from being modified when you use functions like Smoothing or Blending.**

mm3 (link: CM.CMDFUELB)

	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824
1200	7835	7835	9569	11601	15232	14863	12761	12620	12761	12910	13200	13342	13490	13490	13632	13632
1400	8416	8416	11169	13052	17843	17404	15522	15083	14941	14651	14361	14212	14071	13922	13922	13781
1600	9428	10150	12471	15083	18565	18565	17114	14793	14502	14361	14941	15522	16682	17114	17404	18126
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	15663	16392	17263	17695	18275	20158	20738
2000	13781	14071	15953	16824	19577	19577	18855	18417	18126	16682	15953	15953	19577	20306	20887	20887
2200	14502	15232	16824	18126	19577	19577	18855	18417	17765	16682	17836	18417	19726	20597	21028	21028
2400	15232	15953	16824	19577	18417	17404	17404	17404	16682	17043	17404	19577	19726	20738	22047	22338
2600	15953	16682	16682	17985	18417	17553	17404	17404	17404	17263	18126	20306	21028	21757	23208	23208
2700	16682	17404	16534	17836	19287	18997	18494	18126	18126	18494	18855	21028	22047	22338	23208	23208
2800	17404	17404	19577	17553	19726	20738	20306	19577	19577	19945	20306	22479	22479	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

**This tool is helpful, for example, if you want to change a group of cells, but don't want your highest, lowest or other specific cells modified in the process.**

**In this case, we don't want our max rail pressure changed when we blend our cells.**



File Edit View Calibration Flash Window Help

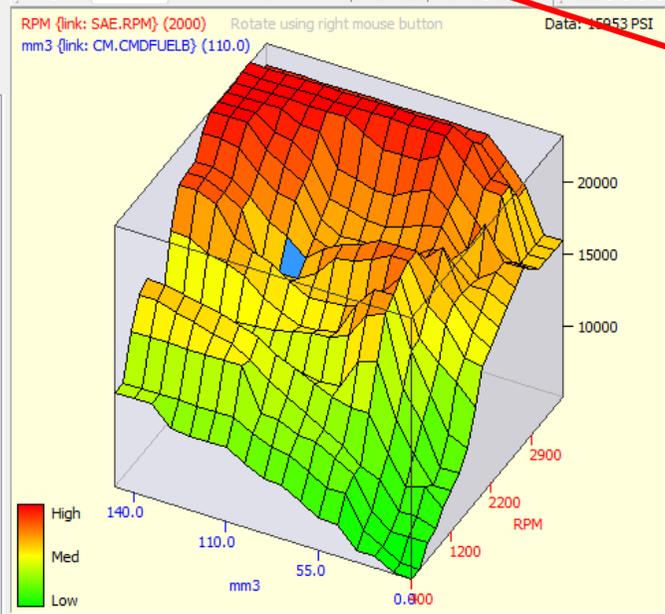
Navigator: Search

Group: (All)

Calibrations Favorites

Calibrations

- EFILive Custom Calibrations
  - Internal Flash
    - Injection Quantity
    - Injection Timing
    - Idle
    - Fuel Pressure
      - Parameters
      - Axis Define
      - Fuel Pressure, Base Table
      - Fuel Pressure, Air Density Adjust 1
      - Fuel Pressure, Air Density Adjust 2
      - Fuel Pressure, Air Density Adjust 3
      - Fuel Pressure, Air Density Adjust 4
      - Fuel Pressure Reg, Base Duty Cycle
      - Fuel Pressure Reg, Max Duty Cycle
      - Fuel Pressure Reg, Current Conversion
    - P.I.D Control
    - Diagnostics
  - Engine Protection
  - Air Mass
  - Turbo
  - ECM Sensors
  - Intake Air Heater
  - Miscellaneous
  - Auto Transmission
- External Flash
  - Not used
  - Not used
  - Not used
  - Not used



Adjust: # % X ÷

Description: RTACS User notes

This table defines the base commanded fuel pressures which will then be further adjusted by the air density adjustment tables.

Axis tables:

- [D0753] Fuel Pressure Base Table, RPM Axis
- [D0754] Fuel Pressure Base Table, Fuel Axis

First, you need to turn the Masking tool on by selecting the function to the left.

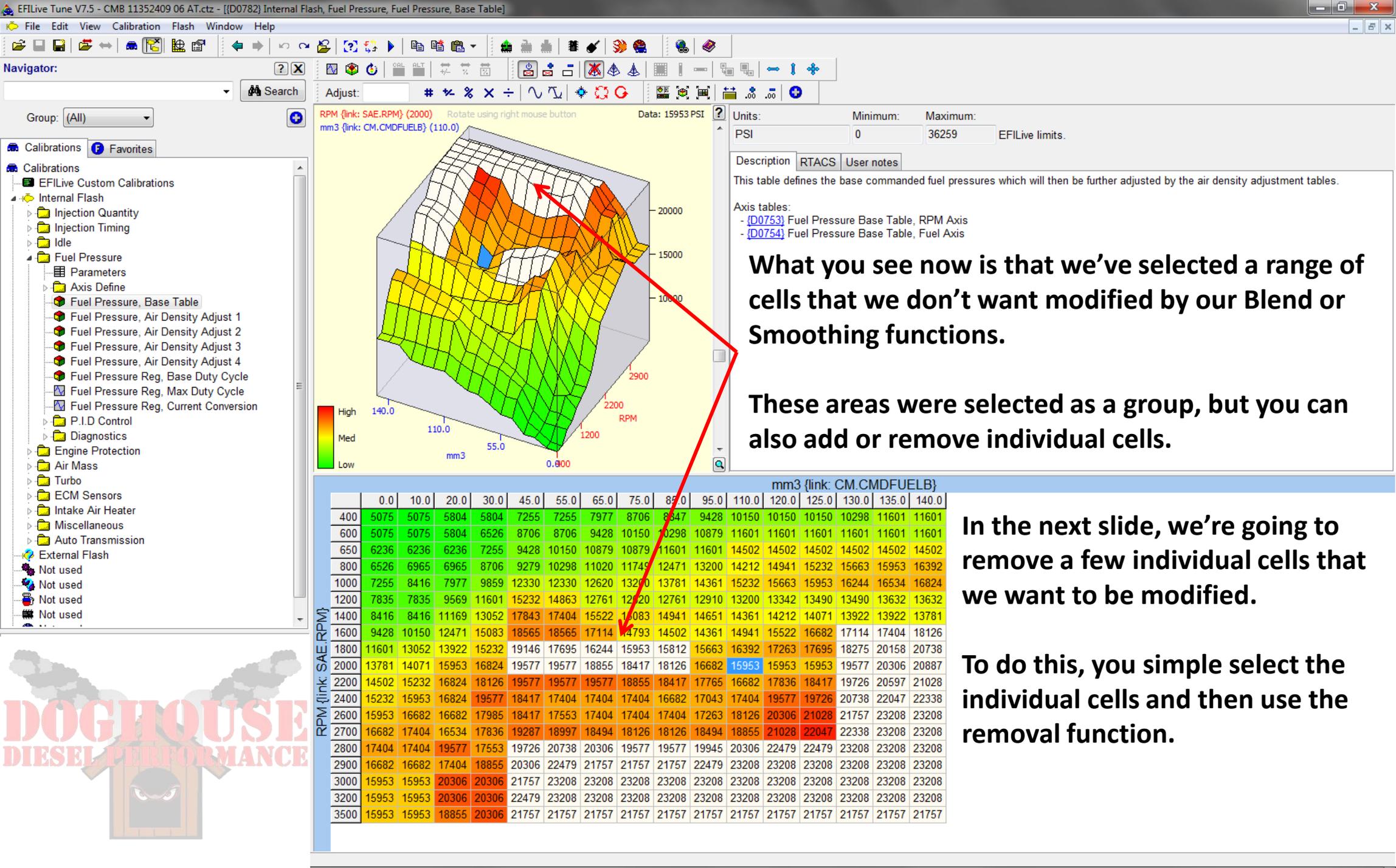
Once this is turned on, you'll see that the PLUS and MINUS functions are now active. These allow you to add or remove cells for the masking function.

mm3 (link: CM.CMDFUELB)

	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824
1200	7835	7835	9569	11601	15232	14863	12761	12620	12761	12910	13200	13342	13490	13490	13632	13632
1400	8416	8416	11169	13052	17843	17404	15522	15083	14941	14651	14361	14212	14071	13922	13922	13781
1600	9428	10150	12471	15083	18565	18565	17114	14793	14502	14361	14941	15522	16682	17114	17404	18126
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	15663	16392	17263	17695	18275	20158	20738
2000	13781	14071	15953	16824	19577	19577	18855	18417	18126	16682	15953	15953	19577	20306	20887	20887
2200	14502	15232	16824	18126	19577	19577	18855	18417	17765	16682	17836	18417	19726	20597	21028	21028
2400	15232	15953	16824	19577	18417	17404	17404	17404	16682	17043	17404	19577	19726	20738	22047	22338
2600	15953	16682	16682	17985	18417	17553	17404	17404	17404	17263	18126	20306	21028	21757	23208	23208
2700	16682	17404	16534	17836	19287	18997	18494	18126	18494	18855	21028	22047	22338	23208	23208	23208
2800	17404	17404	19577	17553	19726	20738	20306	19577	19945	20306	22479	22479	23208	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

In the next slide, we're going to select the cells that we want to mask off so they are not effected by out blending or smoothing functions.



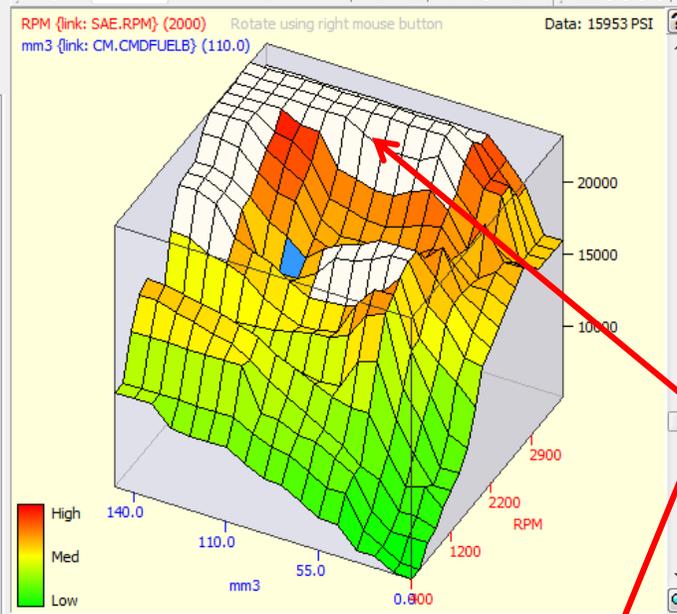


Navigator:

Group: (All)

Calibrations Favorites

- EFILive Custom Calibrations
  - Internal Flash
    - Injection Quantity
    - Injection Timing
    - Idle
    - Fuel Pressure
      - Parameters
      - Axis Define
      - Fuel Pressure, Base Table
      - Fuel Pressure, Air Density Adjust 1
      - Fuel Pressure, Air Density Adjust 2
      - Fuel Pressure, Air Density Adjust 3
      - Fuel Pressure, Air Density Adjust 4
      - Fuel Pressure Reg, Base Duty Cycle
      - Fuel Pressure Reg, Max Duty Cycle
      - Fuel Pressure Reg, Current Conversion
    - P.I.D Control
    - Diagnostics
  - Engine Protection
  - Air Mass
  - Turbo
  - ECM Sensors
  - Intake Air Heater
  - Miscellaneous
  - Auto Transmission
- External Flash
  - Not used
  - Not used
  - Not used
  - Not used



Units: Minimum: Maximum: PSI 0 36259 EFiLive limits.

Description RTACS User notes

This table defines the base commanded fuel pressures which will then be further adjusted by the air density adjustment tables.

Axis tables:  
 - [D0753] Fuel Pressure Base Table, RPM Axis  
 - [D0754] Fuel Pressure Base Table, Fuel Axis

**What you see now is that we've selected a range of cells that we don't want modified by our Blend or Smoothing functions.**

**These areas were selected as a group, but you can also add or remove individual cells.**

mm3 (link: CM.CMDFUELB)

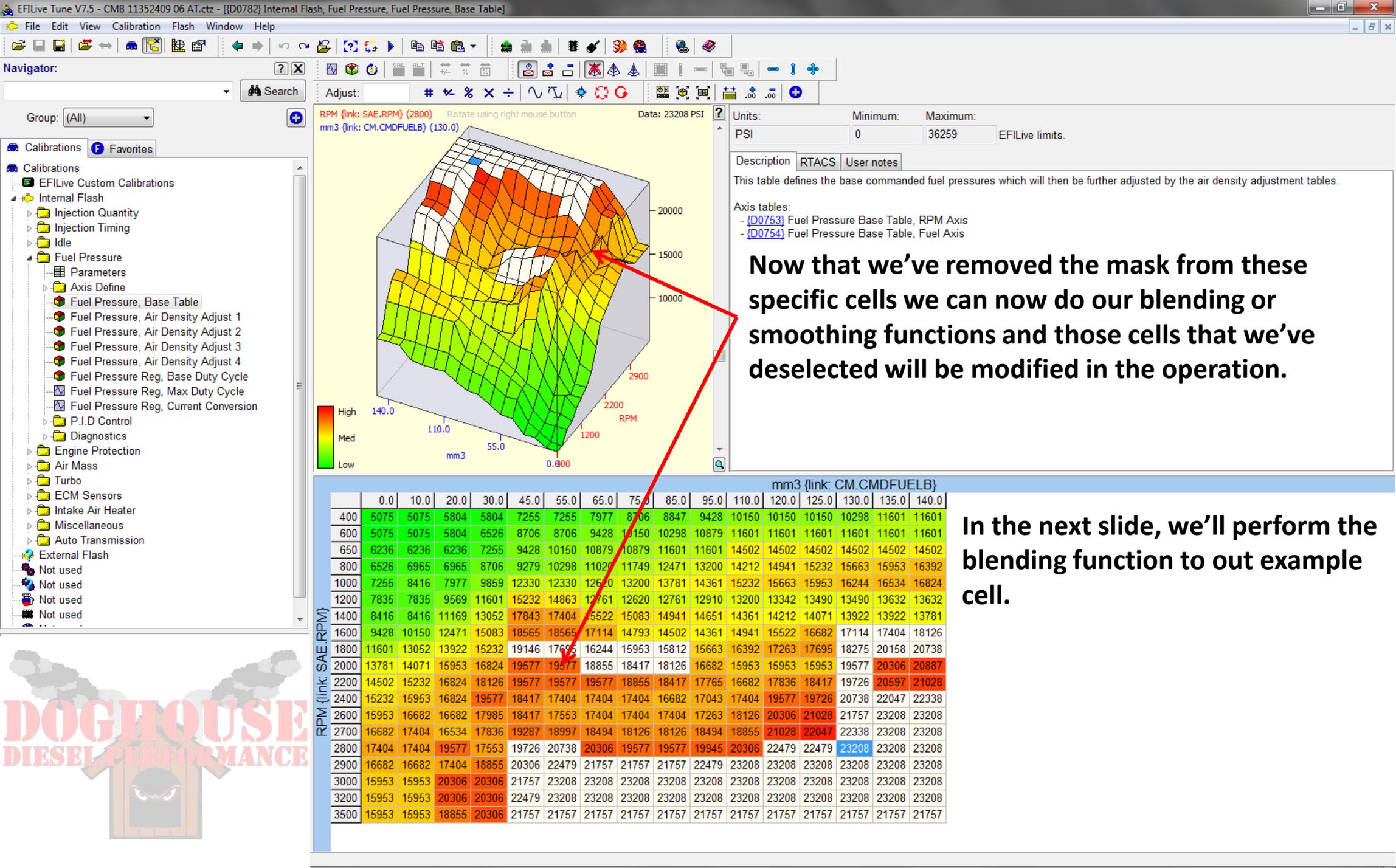
	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8347	9428	10150	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824
1200	7835	7835	9569	11601	15232	14863	12761	12020	12761	12910	13200	13342	13490	13490	13632	13632
1400	8416	8416	11169	13052	17843	17404	15522	14083	14941	14651	14361	14212	14071	13922	13922	13781
1600	9428	10150	12471	15083	18565	18565	17114	14793	14502	14361	14941	15522	16682	17114	17404	18126
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	15663	16392	17263	17695	18275	20158	20738
2000	13781	14071	15953	16824	19577	19577	18855	18417	18126	16682	15953	15953	15953	19577	20306	20887
2200	14502	15232	16824	18126	19577	19577	19577	18855	18417	17765	16682	17836	18417	19726	20597	21028
2400	15232	15953	16824	19577	18417	17404	17404	17404	16682	17043	17404	19577	19726	20738	22047	22338
2600	15953	16682	16682	17985	18417	17553	17404	17404	17404	17263	18126	20306	21028	21757	23208	23208
2700	16682	17404	16534	17836	19287	18997	18494	18126	18126	18494	18855	21028	22047	22338	23208	23208
2800	17404	17404	19577	17553	19726	20738	20306	19577	19577	19945	20306	22479	22479	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

RPM (link: SAE.RPM)

**In the next slide, we're going to remove a few individual cells that we want to be modified.**

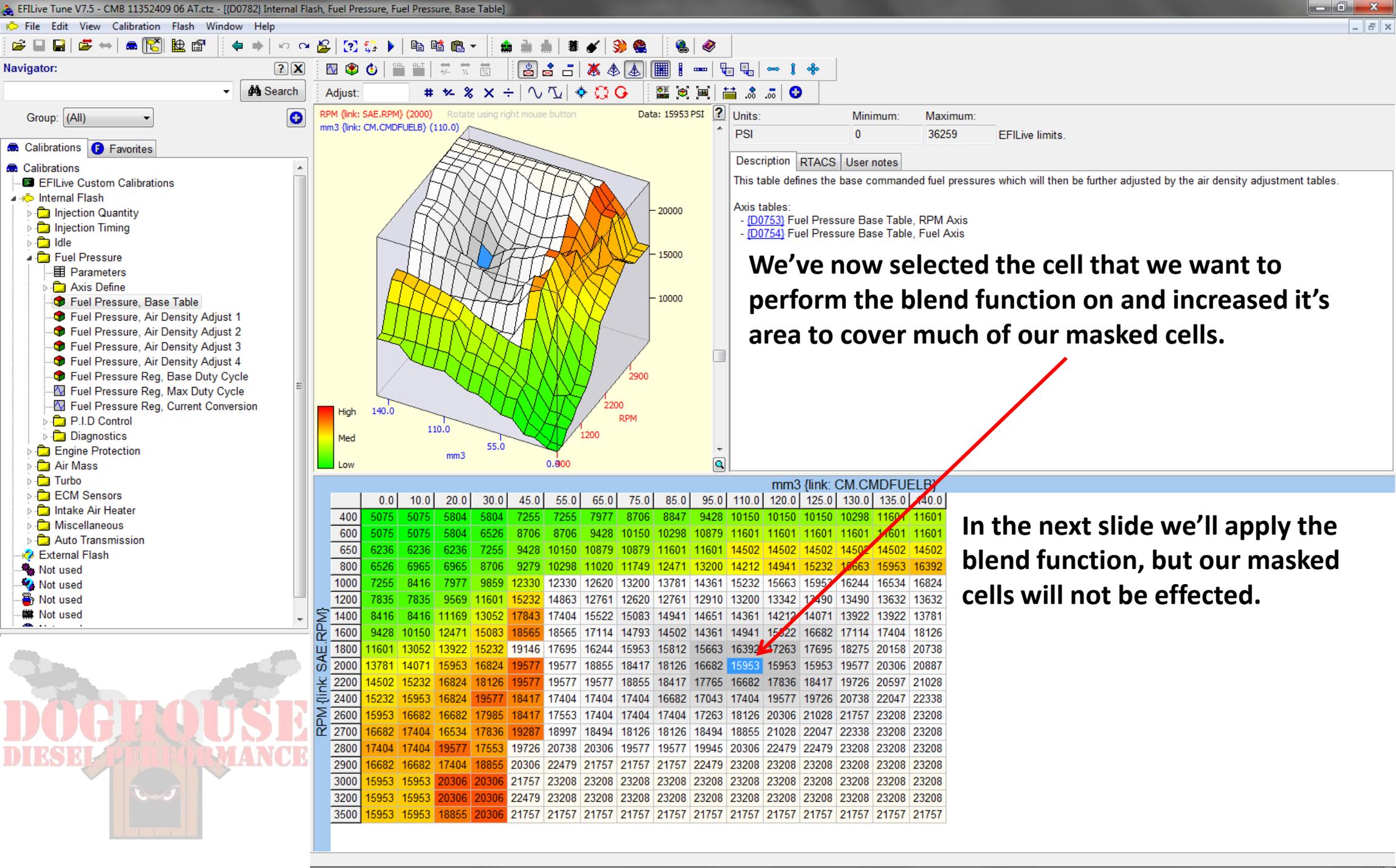
**To do this, you simple select the individual cells and then use the removal function.**





	mm3 {link: CM.CMDFUELB}															
	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11029	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824
1200	7835	7835	9569	11601	15232	14863	12761	12620	12761	12910	13200	13342	13490	13490	13632	13632
1400	8416	8416	11169	13052	17843	17404	5522	15083	14941	14651	14361	14212	14071	13922	13922	13781
1600	9428	10150	12471	15083	18565	18565	17114	14793	14502	14361	14941	15522	16682	17114	17404	18126
1800	11601	13052	13922	15232	19146	17665	16244	15953	15812	15663	16392	17263	17695	18275	20158	20738
2000	13781	14071	15953	16824	19577	19577	18855	18417	18126	16682	15953	15953	15953	19577	20306	20887
2200	14502	15232	16824	18126	19577	19577	19577	18855	18417	17765	16682	17836	18417	19726	20597	21028
2400	15232	15953	16824	19577	18417	17404	17404	17404	16682	17043	17404	19577	19726	20738	22047	22338
2600	15953	16682	16682	17985	18417	17553	17404	17404	17404	17263	18126	20306	21028	21757	23208	23208
2700	16682	17404	16534	17836	19287	18997	18494	18126	18494	18855	21028	22047	22338	23208	23208	23208
2800	17404	17404	19577	17553	19726	20738	20306	19577	19945	20306	22479	22479	23208	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757





We've now selected the cell that we want to perform the blend function on and increased it's area to cover much of our masked cells.

In the next slide we'll apply the blend function, but our masked cells will not be effected.

	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824
1200	7835	7835	9569	11601	15232	14863	12761	12620	12761	12910	13200	13342	13490	13490	13632	13632
1400	8416	8416	11169	13052	17843	17404	15522	15083	14941	14651	14361	14212	14071	13922	13922	13781
1600	9428	10150	12471	15083	18565	18565	17114	14793	14502	14361	14941	15232	16682	17114	17404	18126
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	15663	16392	17263	17695	18275	20158	20738
2000	13781	14071	15953	16824	19577	19577	18855	18417	18126	16682	15953	15953	15953	19577	20306	20887
2200	14502	15232	16824	18126	19577	19577	18855	18417	17765	16682	17836	18417	19726	20597	21028	21028
2400	15232	15953	16824	19577	18417	17404	17404	17404	16682	17043	17404	19577	19726	20738	22047	22338
2600	15953	16682	16682	17985	18417	17553	17404	17404	17404	17263	18126	20306	21028	21757	23208	23208
2700	16682	17404	16534	17836	19287	18997	18494	18126	18494	18855	21028	22047	22338	23208	23208	23208
2800	17404	17404	19577	17553	19726	20738	20306	19577	19945	20306	20306	22479	22479	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

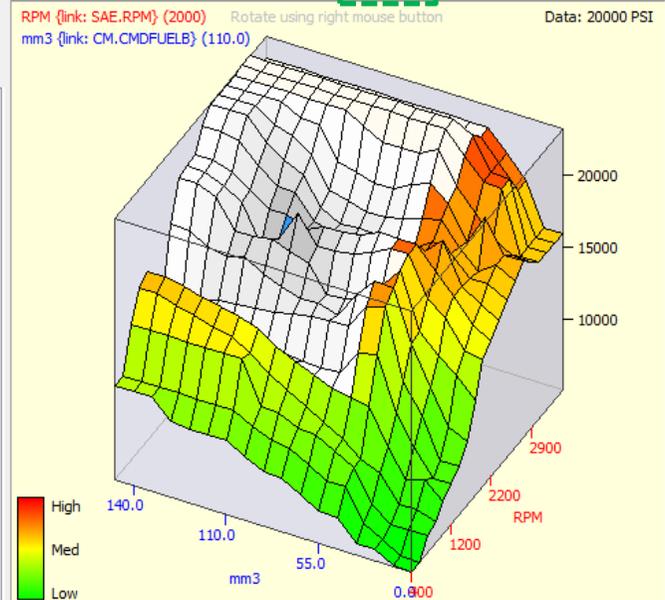


**Navigator:**

Group: (All)

Calibrations Favorites

- Calibrations
  - EFILive Custom Calibrations
    - Internal Flash
      - Injection Quantity
      - Injection Timing
      - Idle
      - Fuel Pressure
        - Parameters
        - Axis Define
        - Fuel Pressure, Base Table
        - Fuel Pressure, Air Density Adjust 1
        - Fuel Pressure, Air Density Adjust 2
        - Fuel Pressure, Air Density Adjust 3
        - Fuel Pressure, Air Density Adjust 4
        - Fuel Pressure Reg, Base Duty Cycle
        - Fuel Pressure Reg, Max Duty Cycle
        - Fuel Pressure Reg, Current Conversion
      - P.I.D Control
      - Diagnostics
    - Engine Protection
    - Air Mass
    - Turbo
    - ECM Sensors
    - Intake Air Heater
    - Miscellaneous
    - Auto Transmission
  - External Flash
    - Not used
    - Not used
    - Not used
    - Not used



Units: Minimum: Maximum:  
PSI 0 36259 EFILive limits.

Description RTACS User notes

This table defines the base commanded fuel pressures which will then be further adjusted by the air density adjustment tables.

Axis tables:  
- [D0753] Fuel Pressure Base Table, RPM Axis  
- [D0754] Fuel Pressure Base Table, Fuel Axis

**The blend function has now been applied and we changed our example cell to 20,000 again.**

**Notice that masked cells that we've selected were protected and left alone.**

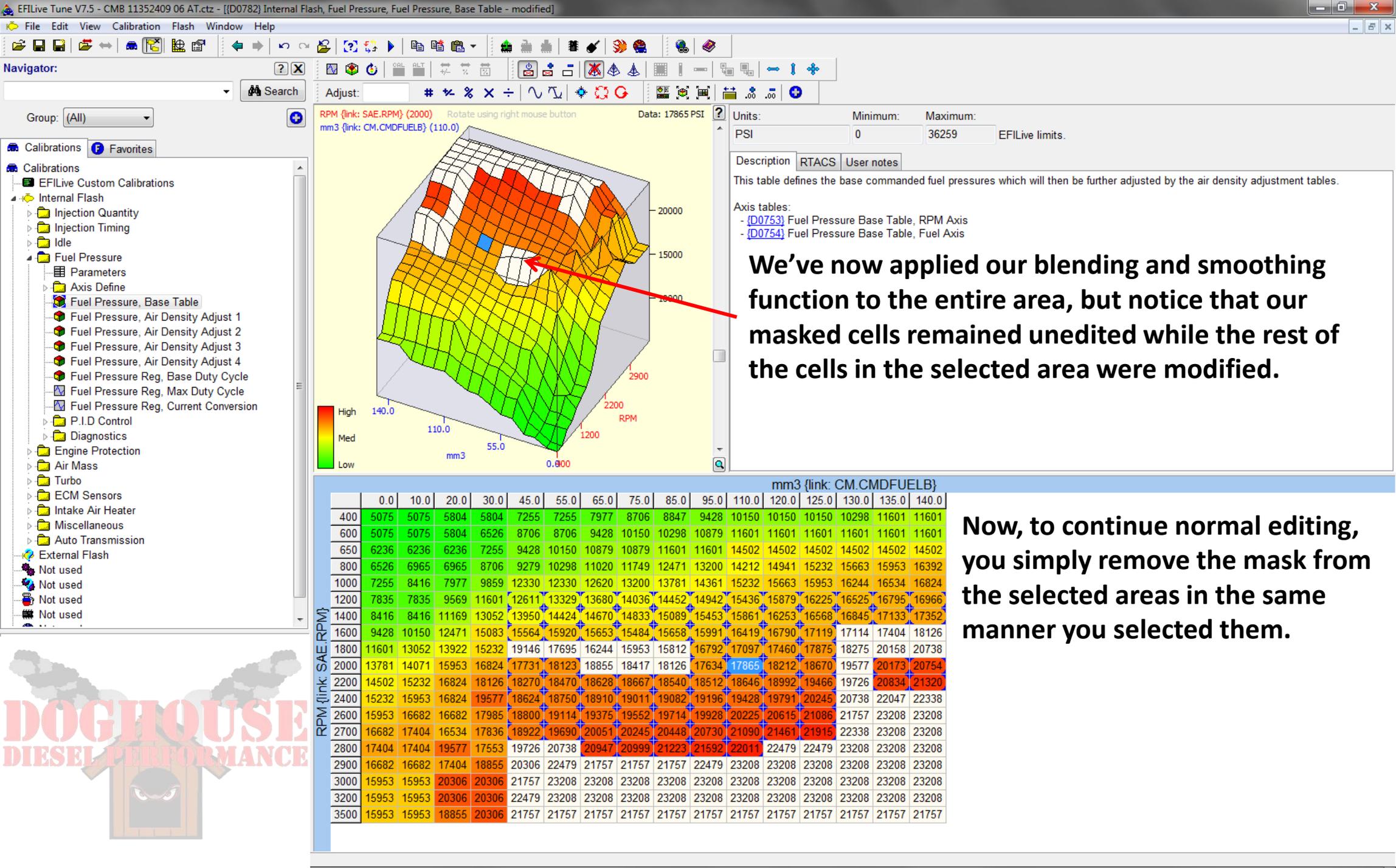
mm3 (link: CM.CMDFUELB)

	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12437	12723	13295	13868	14440	15298	15724	16010	16296	16582	16868
1200	7835	7835	9569	11601	15232	14935	13175	13042	13175	13315	13589	13723	13863	13863	13996	13721
1400	8416	8416	11169	13052	17843	17441	15778	15742	15619	15368	15116	14988	14865	14736	14270	13868
1600	9428	10150	12471	15083	18565	18585	17279	15490	15902	15797	16229	16502	17527	17114	17404	18126
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	17603	18006	18487	18282	18275	20158	20738
2000	13781	14071	15953	16824	19577	19583	18855	18417	18126	18166	20000	17763	16984	19577	20289	20874
2200	14502	15232	16824	18126	19577	19583	19601	19009	18820	18765	18166	18804	18820	19726	20562	21014
2400	15232	15953	16824	19577	18417	17441	17553	17752	17527	17796	18065	19685	19796	20738	22047	22338
2600	15953	16682	16682	17985	18417	17587	17553	17752	17752	17630	18377	20265	20891	21757	23208	23208
2700	16682	17404	16534	17836	19287	19011	18581	18234	18234	18581	18921	20969	21930	22338	23208	23208
2800	17404	17404	19577	17553	19726	20738	20302	19583	19583	19946	20302	22479	22479	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

RPM (link: SAE.RPM)

**In the next slide we're going to leave our masked areas protected, but we're going to no apply the Smoothing tool to this same area.**





We've now applied our blending and smoothing function to the entire area, but notice that our masked cells remained unedited while the rest of the cells in the selected area were modified.

	mm3 {link: CM.CMDFUELB}															
	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824
1200	7835	7835	9569	11601	12611	13329	13680	14036	14452	14942	15436	15879	16225	16525	16795	16966
1400	8416	8416	11169	13052	13950	14424	14670	14833	15089	15453	15861	16253	16568	16845	17133	17352
1600	9428	10150	12471	15083	15564	15920	15653	15484	15658	15991	16419	16790	17119	17114	17404	18126
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	16792	17097	17460	17875	18275	20158	20738
2000	13781	14071	15953	16824	17731	18123	18855	18417	18126	17634	17865	18212	18670	19577	20173	20754
2200	14502	15232	16824	18126	18270	18470	18628	18667	18540	18512	18646	18992	19466	19726	20834	21320
2400	15232	15953	16824	19577	18624	18750	18910	19011	19082	19196	19428	19791	20245	20738	22047	22338
2600	15953	16682	16682	17985	18800	19114	19375	19552	19714	19928	20225	20615	21086	21757	23208	23208
2700	16682	17404	16534	17836	18922	19690	20051	20245	20448	20730	21090	21461	21915	22338	23208	23208
2800	17404	17404	19577	17553	19726	20738	20947	20999	21223	21592	22011	22479	22479	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	22479	23208	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

Now, to continue normal editing, you simply remove the mask from the selected areas in the same manner you selected them.

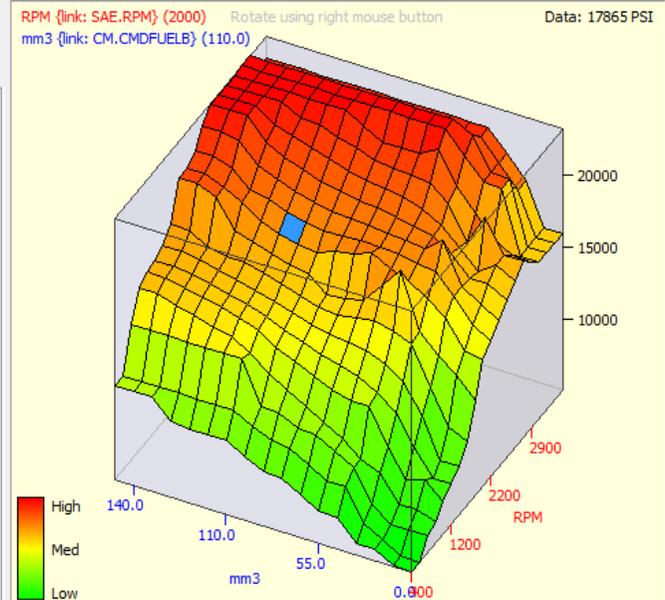


File Edit View Calibration Flash Window Help

Group: (All)

Calibrations Favorites

- EFILive Custom Calibrations
  - Internal Flash
    - Injection Quantity
    - Injection Timing
    - Idle
    - Fuel Pressure
      - Parameters
      - Axis Define
      - Fuel Pressure, Base Table
      - Fuel Pressure, Air Density Adjust 1
      - Fuel Pressure, Air Density Adjust 2
      - Fuel Pressure, Air Density Adjust 3
      - Fuel Pressure, Air Density Adjust 4
      - Fuel Pressure Reg, Base Duty Cycle
      - Fuel Pressure Reg, Max Duty Cycle
      - Fuel Pressure Reg, Current Conversion
    - P.I.D Control
    - Diagnostics
  - Engine Protection
  - Air Mass
  - Turbo
  - ECM Sensors
  - Intake Air Heater
  - Miscellaneous
  - Auto Transmission
- External Flash
  - Not used
  - Not used
  - Not used
  - Not used



Units: Minimum: Maximum: PSI 0 36259 EFiLive limits.

Description RTACS User notes

This table defines the base commanded fuel pressures which will then be further adjusted by the air density adjustment tables.

Axis tables:  
 - [D0753] Fuel Pressure Base Table, RPM Axis  
 - [D0754] Fuel Pressure Base Table, Fuel Axis

**With the masking removed, you can now see cells that were masked were left unchanged and only the unmasked cells were edited.**

**The cells have now been unmasked and you can now continue editing as needed.**

mm3 (link: CM.CMDFUELB)

	0.0	10.0	20.0	30.0	45.0	55.0	65.0	75.0	85.0	95.0	110.0	120.0	125.0	130.0	135.0	140.0
400	5075	5075	5804	5804	7255	7255	7977	8706	8847	9428	10150	10150	10150	10298	11601	11601
600	5075	5075	5804	6526	8706	8706	9428	10150	10298	10879	11601	11601	11601	11601	11601	11601
650	6236	6236	6236	7255	9428	10150	10879	10879	11601	11601	14502	14502	14502	14502	14502	14502
800	6526	6965	6965	8706	9279	10298	11020	11749	12471	13200	14212	14941	15232	15663	15953	16392
1000	7255	8416	7977	9859	12330	12330	12620	13200	13781	14361	15232	15663	15953	16244	16534	16824
1200	7835	7835	9569	11601	12611	13329	13680	14036	14452	14942	15436	15879	16225	16525	16795	16966
1400	8416	8416	11169	13052	13950	14424	14670	14833	15089	15453	15861	16253	16568	16845	17133	17352
1600	9428	10150	12471	15083	15564	15920	15653	15484	15658	15991	16419	16790	17119	17114	17404	18126
1800	11601	13052	13922	15232	19146	17695	16244	15953	15812	16792	17097	17460	17875	18275	20158	20738
2000	13781	14071	15953	16824	17731	18123	18855	18417	18126	17634	17865	18212	18670	19577	20173	20754
2200	14502	15232	16824	18126	18270	18470	18628	18667	18540	18512	18646	18992	19466	19726	20834	21320
2400	15232	15953	16824	19577	18624	18750	18910	19011	19082	19196	19428	19791	20245	20738	22047	22338
2600	15953	16682	16682	17985	18800	19114	19375	19552	19714	19928	20225	20615	21086	21757	23208	23208
2700	16682	17404	16534	17836	18922	19690	20051	20245	20448	20730	21090	21461	21915	22338	23208	23208
2800	17404	17404	19577	17553	19726	20738	20947	20999	21223	21592	22011	22479	22479	23208	23208	23208
2900	16682	16682	17404	18855	20306	22479	21757	21757	21757	21757	22479	23208	23208	23208	23208	23208
3000	15953	15953	20306	20306	21757	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3200	15953	15953	20306	20306	22479	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208	23208
3500	15953	15953	18855	20306	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757	21757

RPM (link: SAE.RPM)



**MEFILive**

**For Dummies!**

# **PART 4 – V7.5 TUNE BLENDING AND MASKING**

