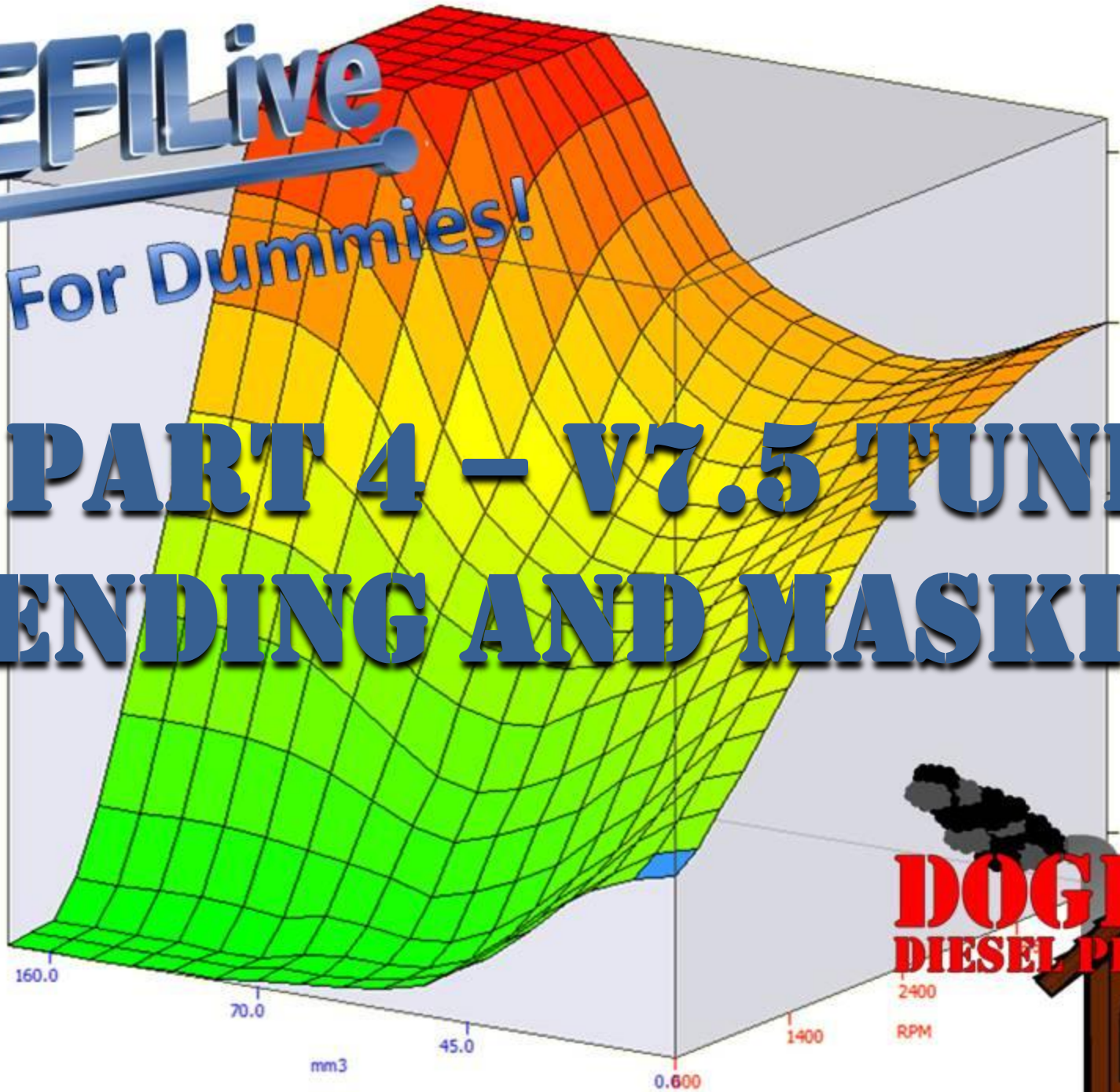




# PART 4 – V7.5 TUNE BLENDING AND MASKING











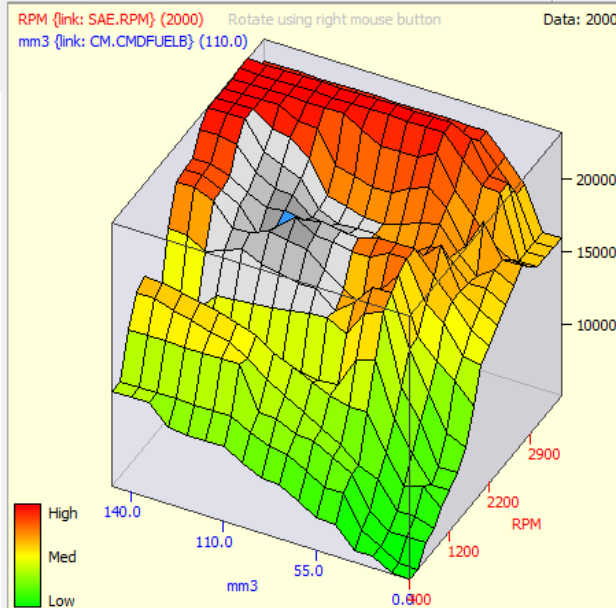
This table defines the base commanded fuel pressures which will then be further adjusted by the air density adjustment tables.

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.

[illegible]

➤ **This is using the AREA tool.**



EFILive Tune V7.5 - CMB 11352409 06 AT.ctz - [{D0782} Internal Flash, Fuel Pressure, Fuel Pressure, Base Table - modified]

File Edit View Calibration Flash Window Help

Group: (All)

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

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) (2000) Rotate using right mouse button

Data: 20000 PSI

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

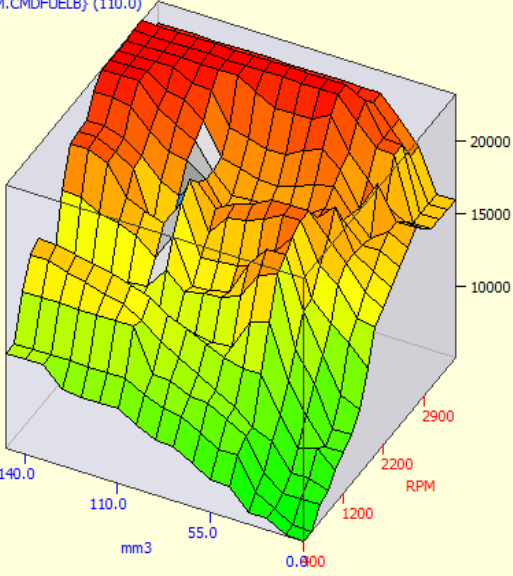
Description RTACS User notes

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

mm3 (link: CM.CMDFUELB) (110.0)



High Med 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	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	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	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

DOGHOUSE DIESEL PERFORMANCE

This is using the Column tool.

EFILive Tune V7.5 - CMB 11352409 06 AT.ctz - [{D0782}] Internal Flash, Fuel Pressure, Fuel Pressure, Base Table - modified

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:

# % \* / ~

Rotate using right mouse button

Data: 20000 PSI

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

RPM (link: SAE.RPM) (2000) mm3 (link: CM.CMDFUELB) (110.0)

20000 15000 10000

2900 2200 1200 RPM

140.0 110.0 55.0 mm3

0.900

High Med 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	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	18812	19063	19171	20000	18988	17977	19683	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

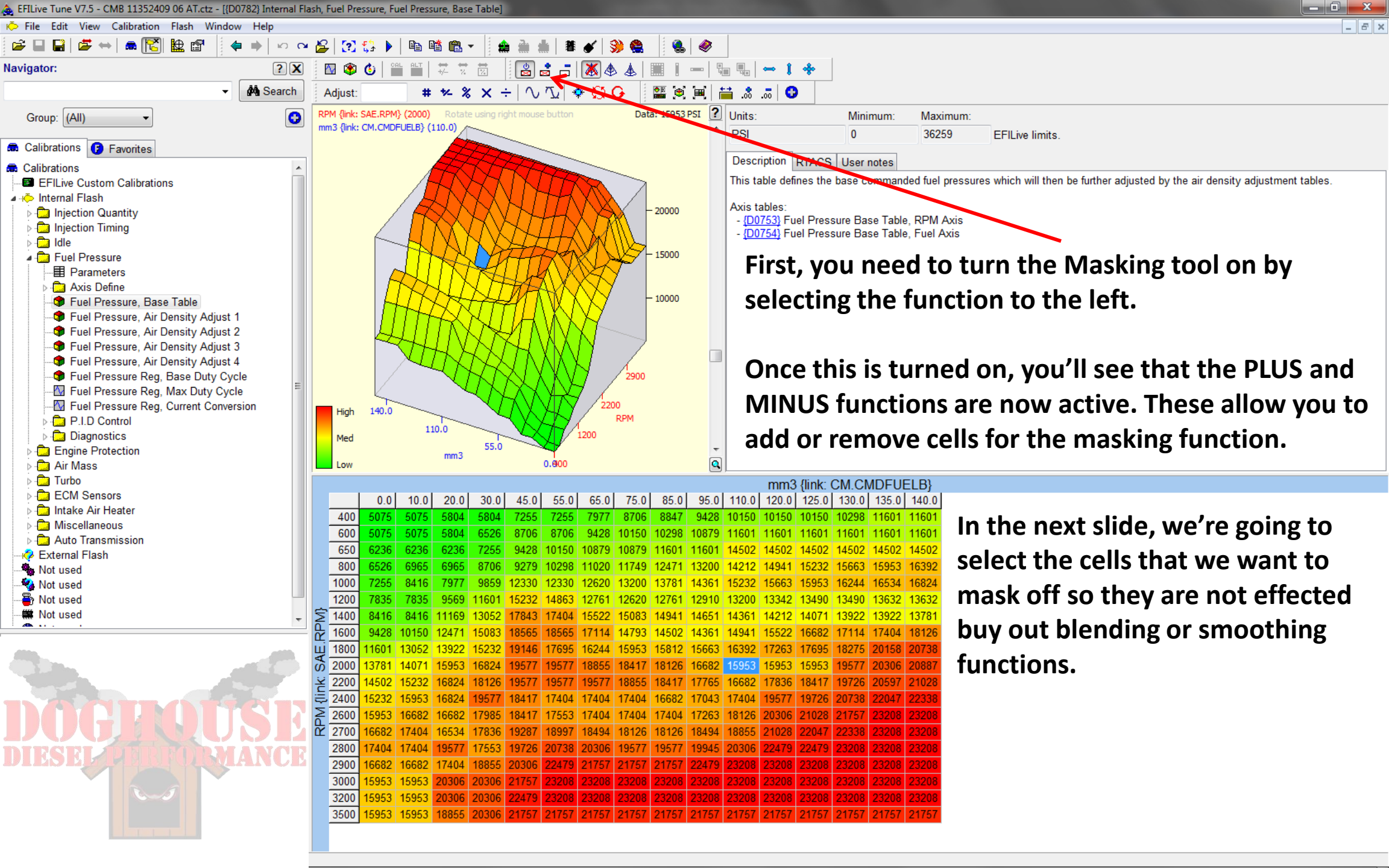
This is using the Row tool.

You can also increase or decrease the effected area.

DOGHOUSE DIESEL PERFORMANCE







EFILive Tune V7.5 - CMB 11352409 06 AT.ctz - [[D0782] Internal Flash, Fuel Pressure, Fuel Pressure, Base Table]

FileEditViewCalibrationFlashWindowHelp

Search

Adjust: # % < > X ÷ ~

Units: PSI

Minimum: 0

Maximum: 36259

EFILive limits.

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

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.

RPM (link: SAE.RPM) (2000)

mm3 (link: CM.CMDFUELB) (110.0)

Data: 15953 PSI

Units: PSI

Minimum: 0

Maximum: 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

High

Med

Low

140.0

110.0

55.0

0.000

2900

2200

1200

mm3

RPM

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	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	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

DOGHOUSE

DIESEL PERFORMANCE





EFILive Tune V7.5 - CMB 11352409 06 AT.ctz - [D0782] Internal Flash, Fuel Pressure, Fuel Pressure, Base Table

File Edit View Calibration Flash Window Help

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

Adjust: # % X ÷ ~

RPM (link: SAE.RPM) (2000) Rotate using right mouse button

Data: 15953 PSI

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

3D Surface Plot

RPM (link: SAE.RPM) (2000)

mm3 (link: CM.CMDFUEL3) (110.0)

High Med Low

140.0 110.0 55.0 0.000

20000 15000 10000

2900 2200 1200 RPM

	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	15022	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	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

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.

DOGHOUSE DIESEL PERFORMANCE

EFILive Tune V7.5 - CMB 11352409 06 AT.ctz - [{D0782}] Internal Flash, Fuel Pressure, Fuel Pressure, Base Table - modified

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 Y Z

Rotate using right mouse button

Data: 20000 PSI

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

RPM {link: SAE.RPM} (2000)

mm3 {link: CM.CMDFUELB} (110.0)

20000

15000

10000

2900

2200

1200

140.0

110.0

55.0

0.000

High

Med

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	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

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.

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.

DOGHOUSE

DIESEL PERFORMANCE









# PART 4 – V7.5 TUNE BLENDING AND MASKING

