

352100 – COBB Mitsubishi 4B11T 1000cc Fuel Injector Kit 352130 – COBB Mitsubishi 4B11T 1300cc Fuel Injector Kit

2008+ Mitsubishi Lancer Evolution X and Ralliart





## **WARNING**

A vehicle modified with COBB products will not always meet the legal requirements for operation on public roads and highways. It is the purchaser's responsibility to check and comply with all local, state and federal laws prior to operating vehicle. Installation and use of performance products may also affect and void warranty and insurance policies. In general, COBB performance products carry no warranty. COBB Tuning Products, LLC shall not be liable for direct, indirect, incidental or consequential damage or injury to persons or property that might be claimed as a result from the installation, improper installation, and failure of part including claims.

## **DISCLAIMER**

We recommend the COBB fuel injectors are installed by a knowledgeable and experienced certified mechanic. If attempting the installation yourself, please refer to the factory service manual for the correct removal and installation instructions. Be sure to release any pressure in the fuel system before disassembly. After installation, be sure to check for fuel leaks by priming the fuel system BEFORE STARTING THE ENGINE. Be sure not to use matches, lighters, or any other source of fire or spark when working with fuel. If working on a car within a residential garage, be sure to turn off gas water heater or gas drying machine pilots before any fuel spills occur. COBB is not responsible for any damages, injuries, or any other accidents during the installation of or as a result of the installation of these fuel injectors.

COBB has teamed up with Injector Dynamics to supply these injectors that are precision matched to work specifically with the COBB Accessport and the COBB OTS maps for COBB Staged Power Packs. Of course the injectors can be used with any other ECU solution as well. Please review the data on the following page for suggested map changes in Accesstuner Race and Pro. COBB's OTS maps for the Accessport are available for download at <a href="cobbtuning.com">cobbtuning.com</a>. Choose the appropriate OTS map for your COBB Power Package and flash the map in before starting the vehicle (and after checking for fuel leaks of course). Or visit your local COBB Tuning Retail Store or a certified COBB Pro-Tuner for custom dyno tuning. Thanks for the purchase and happy tuning!



# Suggested changes for COBB Accesstuner Pro software @ 3 bar fuel pressure: for 1000 cc injectors

Fuel Injector Scale for E10	812
Fuel Injector Scale for E85	636

Voltage (V)	4.69	7.04	9.38	11.73	14.08	16.42	18.70
Fuel Injector Latency (ms)	3.825	3.270	1.680	1.245	0.990	0.810	0.660

### Cranking Enrichment IPW Adder E10

Coolant Temp	-26	-4	10	14	45	68	122	171	180
Injector Pulsewidth	35.3	20.0	13.1	7.7	5.4	3.8	2.7	1.5	1.5

#### Cranking Enrichment IPW Adder E85

Coolant Temp	-26	-4	10	14	45	68	122	171	180
Injector Pulsewidth	58.0	33.0	23.5	14.5	8.4	6.0	4.2	2.4	2.4

# Injector latency values for other voltage and fuel pressures:

Fuel Pressure(PSI)	8 volts	10 volts	12 volts	14 volts	16 volts	Flow Rate @ 100% Duty(cc/min)
40	2.485	1.630	1.210	0.970	0.800	980
(factory) 43.5	2.600	1.675	1.240	0.990	0.805	1015
45	2.720	1.705	1.295	1.000	0.810	1035
50	2.855	1.750	1.355	1.025	0.815	1085
55	3.015	1.815	1.400	1.055	0.820	1135
60	3.195	1.880	1.440	1.080	0.845	1180
65	3.370	1.960	1.485	1.100	0.880	1225
70	3.550	2.050	1.530	1.125	0.925	1265
75		2.155	1.580	1.155	0.975	1305
80		2.280	1.625	1.195	1.020	1345
85		2.435	1.675	1.245	1.060	1390
90		2.610	1.725	1.305	1.095	1435
95		2.800	1.775	1.370	1.125	1485
100		2.995	1.855	1.440	1.155	1530



# Suggested changes for COBB Accesstuner Pro software @ 3 bar fuel pressure: for 1300 cc injectors

Fuel Injector Scale for E10	1044
Fuel Injector Scale for E85	731

Voltage (V)	6	8	10	12	14	16	18
Fuel Injector Latency (ms)	3.517	2.624	1.519	1	0.782	0.598	0.447

#### Cranking Enrichment IPW Adder F10

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Coolant Temp	-26	-4	10	14	45	68	122	171	180
Injector Pulsewidth	35.3	20.0	13.1	7.7	5.4	3.8	2.7	1.5	1.5

#### Cranking Enrichment IPW Adder E85

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Coolant Temp	-26	-4	10	14	45	68	122	171	180
Injector Pulsewidth	58.0	33.0	23.5	14.5	8.4	6.0	4.2	2.4	2.4

For E10 fuel the following tables will need to be decreased by 55%

- Tip In Fuel Enrichment
- Tip Out Fuel Enleanment
- Low Pulse Width Adder
- Minimum IPW
- Cranking Enrichment IPW Adder (Main)

## For E85 fuel the following tables will need to be decreased

- Tip In Fuel Enrichment
- Tip Out Fuel Enleanment
- Minimum IPW
- Cranking Enrichment IPW Adder (Main)

Also the following tables will need to be decrease by 55%

Low Pulse Width Adder

If you have any questions on injector scaling, please do not hesitate to contact the COBB Mitsubishi Expert Group at <a href="mitsubishi.experts@cobbtuning.com">mitsubishi.experts@cobbtuning.com</a> or contact our Customer Service Representatives at 866.922.3059 between the hours of 9AM and 6PM Monday through Friday.