

## Wiring Schematics for the T1 Cam Trigger Setup to the AEM ECU:



### The wiring as follows:

For **OBD1** AEM ecus the pinout are as follows:

Cam Sensor – B11 – Hook the Green wire from the T1 Cam Trigger harness here.

Crank Signal – B15 – Hook the Yellow wire from the T1 Cam Trigger harness here.

Power – A25 – Hook the Red wire from the T1 Cam Trigger harness here.

Ground – A23 – Hook the Blue wire from the T1 Cam Trigger harness here.

For **OBD2** AEM ecus the pinout are as follows:

Cam Signal – C4 – Hook the Green wire from the T1 Cam Trigger harness here.

Crank Signal – C2 – Hook the Yellow wire from the T1 Cam Trigger harness here.

Power – A11 – Hook the Red wire from the T1 Cam Trigger harness here.

Ground – A10 – Hook the Blue wire from the T1 Cam Trigger harness here.

**Note:**

If you get the crank and cam signals backwards, you'll see around 20 cranking RPM, when it is correctly wired you will see 180-250 cranking RPM.

Set the air gap on the sensor to around .075" - this is the clearance between the face of the sensor and the face of the magnet.

**AEM ECU Changes:**

You must make several changes in order for the AEM ECU to recognize the signal properly.

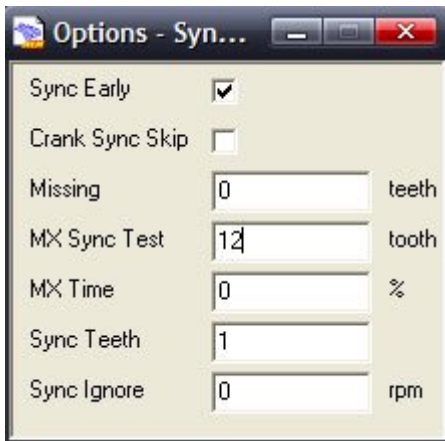
1. Open your AEM Calibration file
2. Goto Setup » Sensors » Cam/Crank Sensor » Options Cam/Crank Setup

Make the following Changes:



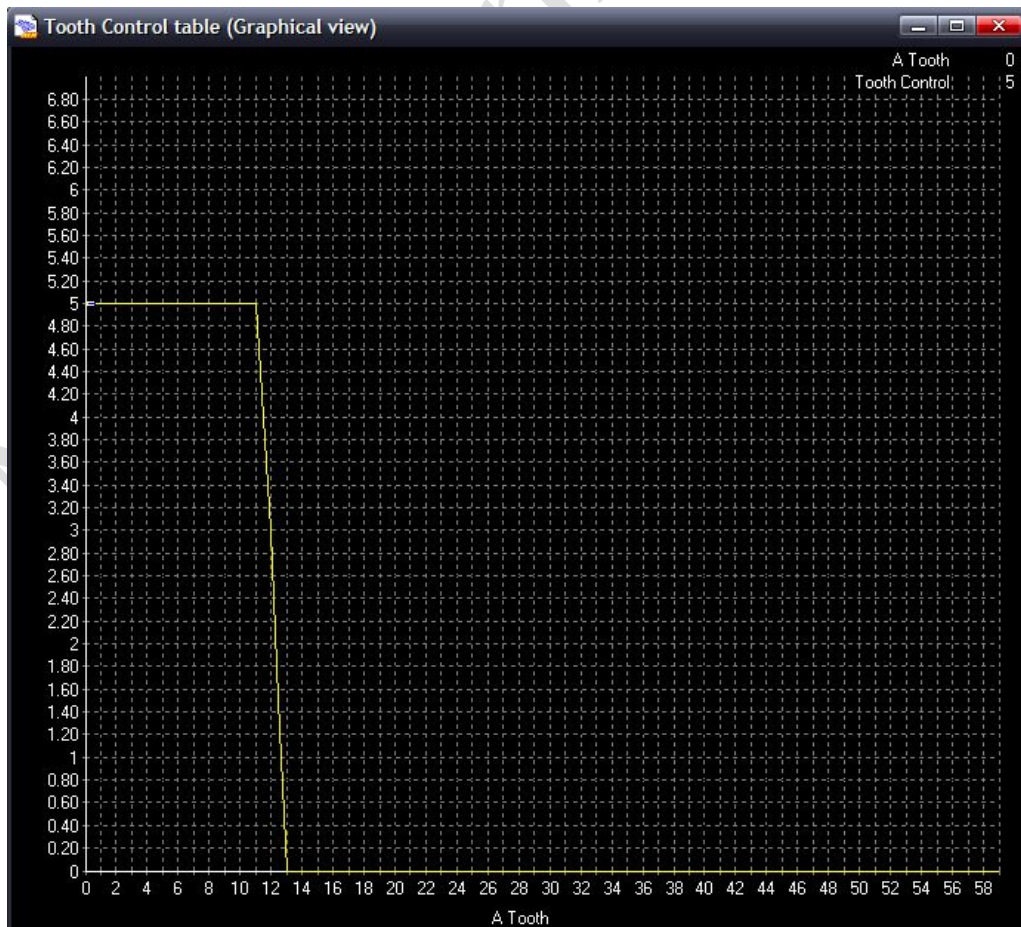
3. Goto Setup » Sensors » Cam/Crank Sensor » Advanced Cam/Crank Setup  
» Options - Sync Setup

Make the following Changes:



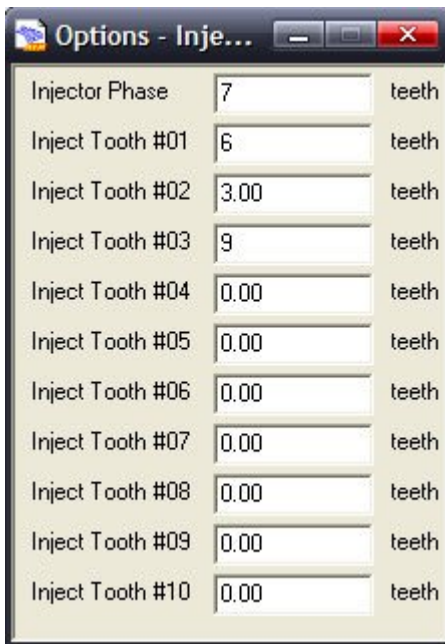
4. Goto Setup » Sensors » Cam/Crank Sensor » Advanced Cam/Crank Setup  
» Tooth Control Table

Set Tooth Control at 5 from 0 to 11<sup>th</sup> Position, 3 on 12, and 0 for the remaining table.



5. Goto Fuel » Advanced Fuel » Injector Phasing » Options – Injection Phasing

Make the following Changes:



The screenshot shows a dialog box titled "Options - Inje...". It contains a list of settings for injector phasing. The "Injector Phase" is set to 7 teeth. The "Inject Tooth #01" is set to 6 teeth. The "Inject Tooth #02" is set to 3.00 teeth. The "Inject Tooth #03" is set to 9 teeth. The "Inject Tooth #04" through "Inject Tooth #10" are all set to 0.00 teeth.

Parameter	Value	Unit
Injector Phase	7	teeth
Inject Tooth #01	6	teeth
Inject Tooth #02	3.00	teeth
Inject Tooth #03	9	teeth
Inject Tooth #04	0.00	teeth
Inject Tooth #05	0.00	teeth
Inject Tooth #06	0.00	teeth
Inject Tooth #07	0.00	teeth
Inject Tooth #08	0.00	teeth
Inject Tooth #09	0.00	teeth
Inject Tooth #10	0.00	teeth

6. Goto Ignition » Advanced Ignition » Ign Phasing » Options – Ign Phasing

Make the following Changes:

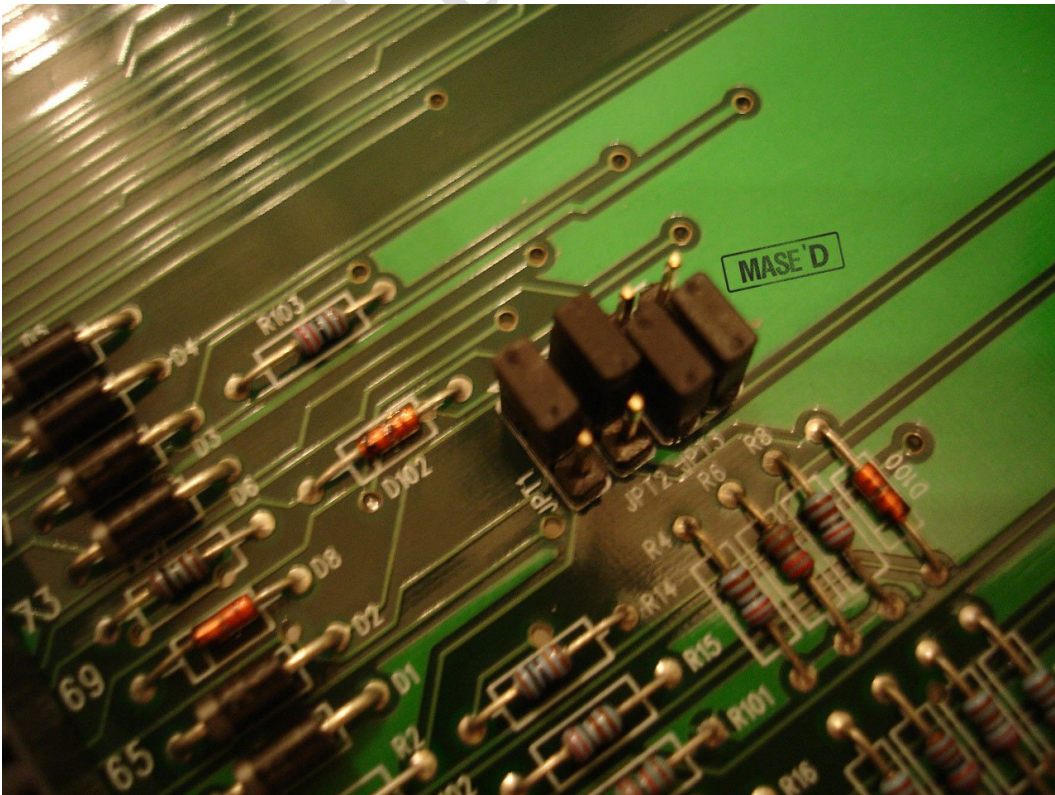
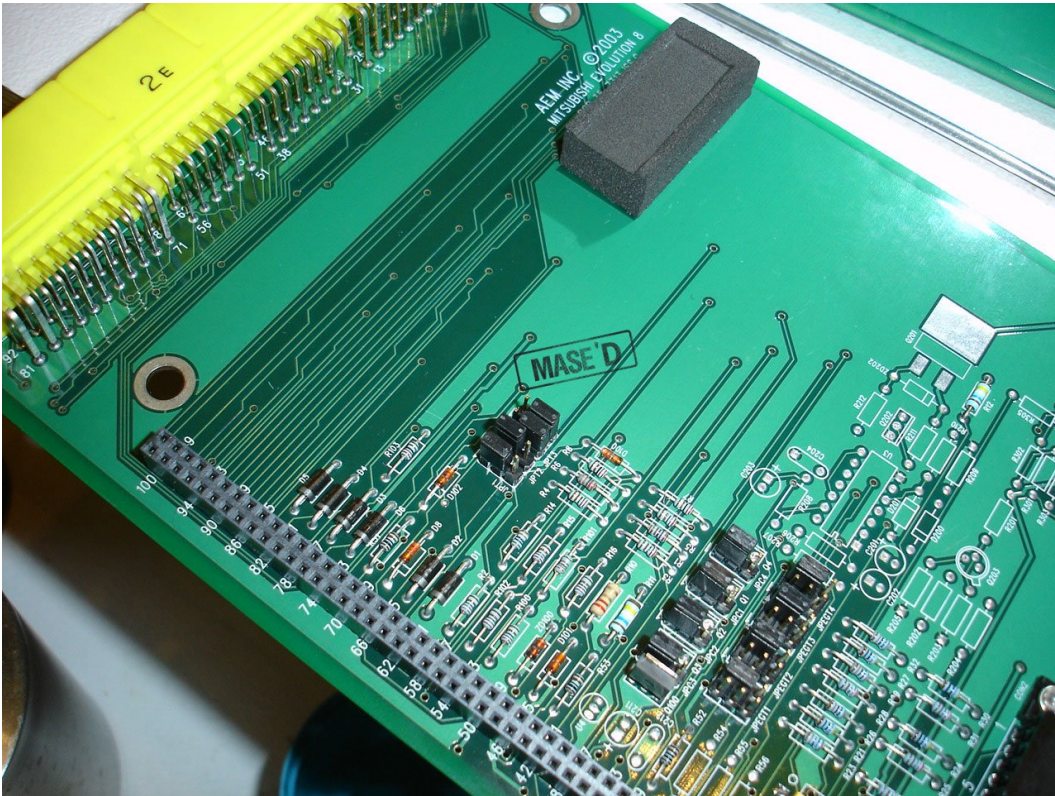


The screenshot shows a dialog box titled "Options - Ign Ph...". It contains a list of settings for ignition phasing. The "Ignition Sync" is set to 0.43 teeth. The "Pickup Delay Comp" is set to 150 uSec. The "Ign Tooth #01" is set to 6.00 teeth. The "Ign Tooth #02" is set to 3.00 teeth. The "Ign Tooth #03" is set to 9.00 teeth. The "Ign Tooth #04" through "Ign Tooth #10" are all set to 0.00 teeth.

Parameter	Value	Unit
Ignition Sync	0.43	teeth
Pickup Delay Comp	150	uSec
Ign Tooth #01	6.00	teeth
Ign Tooth #02	3.00	teeth
Ign Tooth #03	9.00	teeth
Ign Tooth #04	0.00	teeth
Ign Tooth #05	0.00	teeth
Ign Tooth #06	0.00	teeth
Ign Tooth #07	0.00	teeth
Ign Tooth #08	0.00	teeth
Ign Tooth #09	0.00	teeth
Ign Tooth #10	0.00	teeth

Note: the Ignition sync may change when you calibrate the base ignition timing.

7. The most difficult part. You must open your AEM ECU and change two jumpers. If you are not capable, please send in your ECU to AEM, and they will gladly do it for you. If you know how to open your ecu, change the JPT1 and JPT2 jumpers to look like the following:



Now you are ready to fire up the vehicle. Be sure to re-sync the ignition base timing. It's vitally important.

If you are having trouble firing up the car, triple check the wiring is correct, that the T1 Cam Trigger setup is getting the correct Power and Ground.

Also watch your Stat Sync'd parameters, it should turn on while you are cranking the engine over.

Good Luck!

Mase

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