

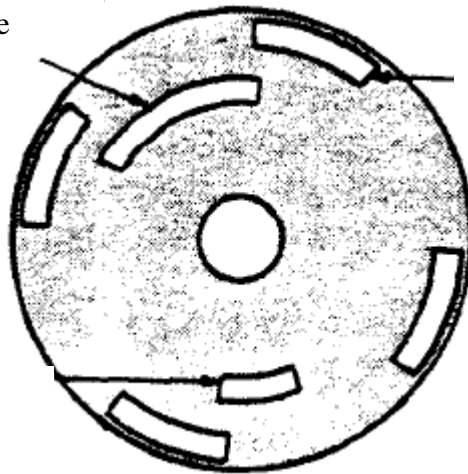


Kiggly Racing 12-Tooth Crank Trigger AEM Setup

Cam Angle Sensor Required Modification

The 12-tooth trigger setup requires modifying the cam angle sensor so it creates one pulse per revolution. Remove the cover from your optical CAS and cover the large slot with aluminum tape. This tape can be purchased at hardware stores in the heating and cooling department. It is a thin, durable, high temperature tape that sticks well long-term.

Cover This Slot With
Aluminum Tape



Optical CAS – Eliminate the Larger Slot by Covering With Aluminum Tape

With the later 1g hall effect cam angle sensor you can remove one trigger leg to get this same signal.

Kiggly Racing

AEM Settings

The 12-tooth signal requires changes to several AEM settings. The settings in the following image can be found under:

Setup > Sensors > Cam/Crank Sensor > Options – Cam/Crank Setup

Setup > Sensors > Manifold Pressure Sensor > Options – MAP Sensor

Ignition > Advanced Ign > Ignition Phasing > Options – Ign Phasing

Ignition > Advanced Ign > Coil Dwell Setup > Options – Coil Dwell

Fuel > Advanced Fuel > Injector Phasing > Options – Injector Phasing

Setup > Advanced Setup > Tach/Speedo Control > Options – Tach/Speedo

The screenshot displays the AEMPro software interface with the following settings visible:

- Options - Cam/Crank Sensor:** Fuel Teeth: 24, Spark Teeth: 24, Ign Range: 3.00 teeth, Tooth Time min: 50 mS, Crank Alt Fire: , Crank Alt Invert: , Ign +1/4 Tooth: , Eng Cycle = 1 Rev:
- Options - Sync Se...:** Sync Early: , Crank Sync Skip: , Missing: 0 teeth, MX Sync Test: 24 tooth, MX Time: 0 %, Sync Teeth: 1, Sync Err R/S: 11, Sync Ignore: 0 rpm
- Options - Ign Phasing:** Ignition Sync: 6.73 teeth, Pickup Delay Comp: 48.00 uSec, Ign Tooth #01-10: 0.00 teeth
- Options - Injector...:** Injector Phase: 15.05 teeth, Inject Tooth #01-10: 0.00 teeth
- Options - MAP Sensor:** Speed Density: , MAP Min Voltage: 0.50 Volts, MAP Max Voltage: 4.50 Volts, MAP Filter: 12 Teeth, Load Offset: 0.00
- Options - Tach/Speedo:** TP1 Frequency Out: , Frequency M: 0.00, Frequency Spd: None, Tacho: 3 teeth
- Options - Coil Dwell:** Coil Dwell Factor: 30, Dwell Max: 6.50 teeth, Dwell Min: 0.70 teeth

The **Tooth Control table (Graphical view)** shows a graph with the following data points:

Tooth Position	Control Value
0 - 23	5
24	3
25 - 59	0

The Tooth control table should have:

Positions 0-23 set as '5'

Position 24 set as '3'

Positions 25-59 set as '0'