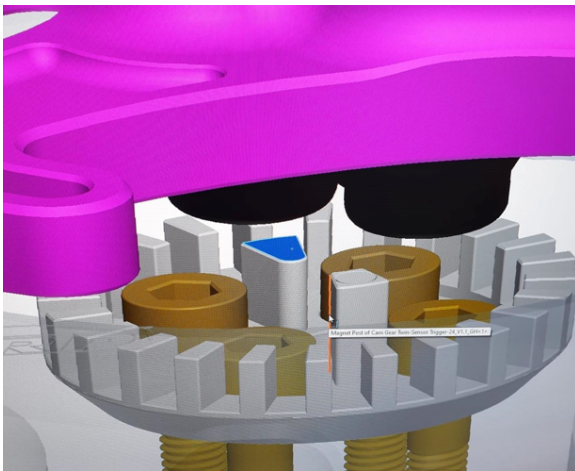


RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS

NOTE: Trouble Shooting Tips on last page



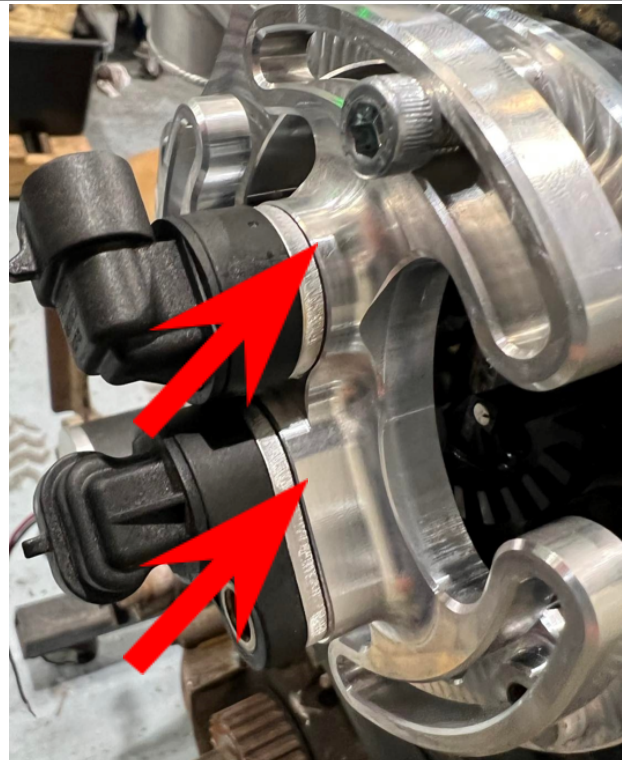
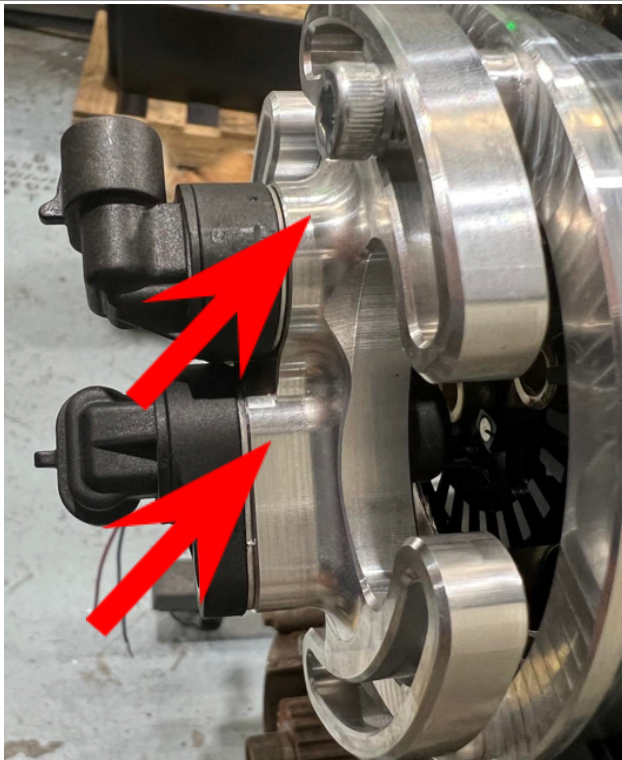
Install the CAS bracket and trigger mount. Also install the black MoTeC sensors. Measure the sensor gaps, you can do this with a feeler gauge under the sensor tabs.

Install the trigger disc on your exhaust cam gear using the titanium low magnetic interference M7 bolts provided, (you may have been supplied a GEN-1 Kit that may have the High tensile steel version as pictured) Please contact us if magnetic interference becomes an issue, but with our very specific sensor gaps you should be fine with either.



The recommended gap for your inner sensor Home (single tooth) is 2mm and for the outer sensor being RPM (Crank) the required air gap aim is 1mm. Due to the machined component already provided with a difference in height, all you need to do is shim each sensor with the same sized shim. The tolerances should then be achieved as above.

RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS



You may find you only need small spacers to hit your required air gap or close to it.

Alternatively you may need the bigger spacers as shown here.

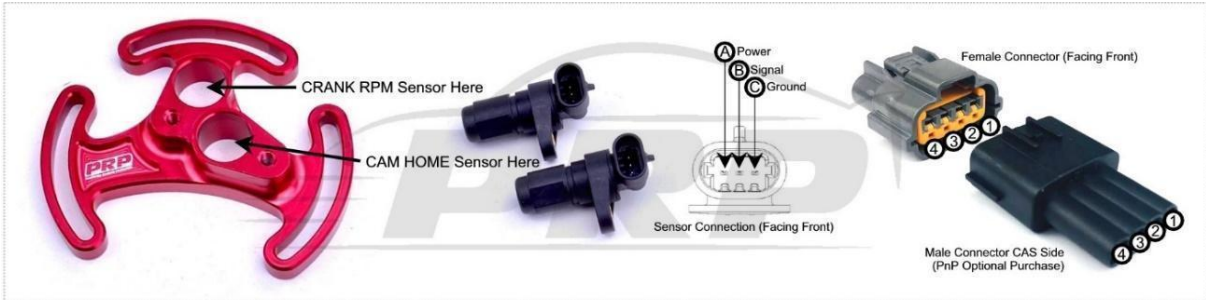
GENERAL WIRING INFORMATION

NOTE: Subsequent to electronic setup pages linked below, the MoTeC Hall effect sensor must have a supply voltage of no less than 12V DC. OEM Nissan wiring supplies ECU 12v to the CAS and is OK to use.

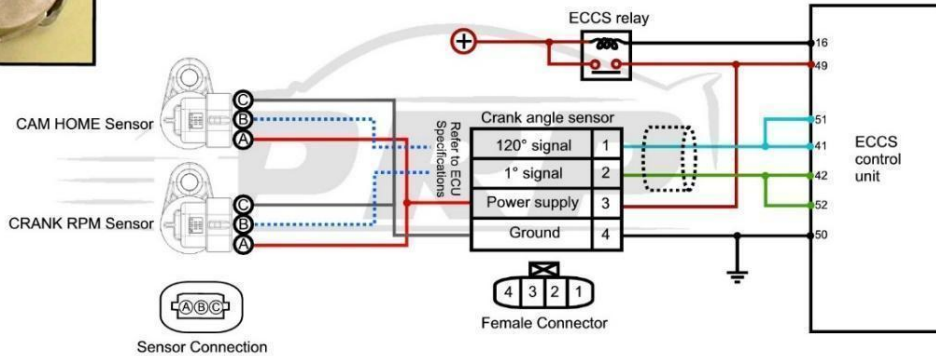


Always confirm TDC Offset Angle with a timing light!

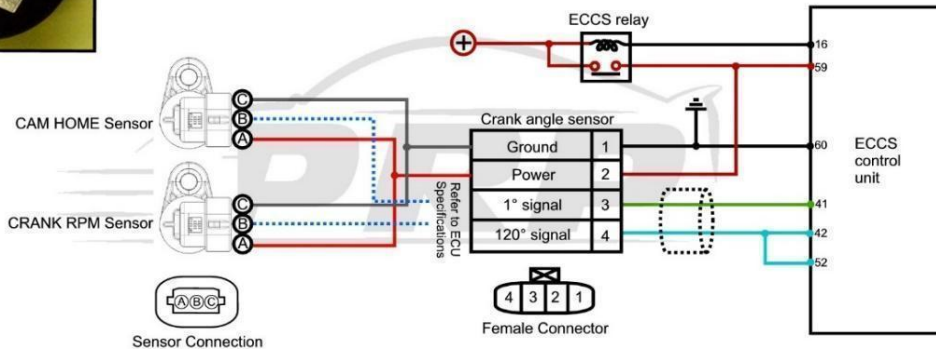
RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS



R32/33 OEM Wiring (SILVER BODY CAS):



R33/34 OEM Wiring (BLACK BODY CAS):



RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS



Sensor Connection (Facing Front)

ECU	PIN A	PIN B (outer sensor)	PIN B (inner sensor)	PIN C
Haltech Nexus	ECU 12v	B1 Trigger+	B2 Home+	Signal Ground
Haltech Elite 1xxx/2xxx	ECU 12v	B1 Trigger+	B2 Home+	Signal Ground
Haltech Elite w/ Patch	OEM CAS 12v	OEM 120° Pin	OEM 1° Pin	OEM Ground Pin
Haltech Elite 750	ECU 12v	31 Trigger+	32 Home+	Signal Ground
Haltech Sport	ECU 12v	B1 Trigger+	B2 Home+	Signal Ground
Haltech Platinum Pro	OEM CAS 12v	OEM 1° Pin	OEM 120° Pin	OEM Ground Pin
MoTeC M130	ECU 12v	B1 REF UDIG1	B2 SYNC UDIG2	Sensor 0v
MoTeC M150	ECU 12v	D1 REF UDIG1	D2 SYNC UDIG2	Sensor 0v
Motec Hundred Series	ECU 12v	B1 REF	B2 SYNC	Sensor 0v
LinkECU Plugin	OEM CAS 12v	OEM 1°	OEM 120°	OEM Ground Pin
LinkECU Universal	ECU 12v	Trigger 1	Trigger 2	Gnd Out



Platinum Racing Products

www.platinumracingproducts.com

RB Street Series CAS Replacement Rev G: 03112023

RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS

ECU SPECIFIC WIRING INFORMATION



Trigger Configuration

Trigger Type	Generic - Multi-tooth - Single Tooth Home
Trigger Signal Location	On Cam
Number Of Teeth	24
Number Of Missing Teeth	2
TDC Offset Angle	100.0 °
<input type="checkbox"/> TDC Offset Angle Table Enable	
RPM Filter Level	1
Quick Start	Disable

Trigger Signal

Sensor Type	Hall Effect
Edge	Falling Edge
Filter Level	0
Pull Up	Enabled
Ground Reference	Disable
Digital Reference	Disable
Signal Coupling	DC

Home Signal

Sensor Type	Hall Effect
Edge	Falling Edge
Filter Level	0
Pull Up	Enabled
Ground Reference	Disable
Digital Reference	Disable
Signal Coupling	DC
Minimum RPM	1000 RPM
Synchronisation Mode	Always



Platinum Racing Products

www.platinumracingproducts.com

RB Street Series CAS Replacement Rev G: 03112023

RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS

ECU SPECIFIC SETUP INFORMATION



Trigger Configuration

Trigger Type: Generic - Multi-tooth - Single Tooth Home

Trigger Signal Location: On Cam

Number Of Teeth: 24

Number Of Missing Teeth: 2

TDC Angle (0 - 719.9 degrees): 100.0 °

TDC Offset Angle Table Enable

RPM Filter: 3 ms

Quick Start: Enable

Trigger Signal

Sensor Type: Hall Effect

Edge: Falling Edge

Pull Up: Enable

Ground Reference: Disable

Home Signal

Sensor Type: Hall Effect

Edge: Falling Edge

Pull Up: Enable

Ground Reference: Disable

Minimum RPM: 1000 RPM

Synchronisation Mode: Always

Maximum RPM: 2000 RPM

Maximum Throttle Position: 0.5 %



Platinum Racing Products

www.platinumracingproducts.com

RB Street Series CAS Replacement Rev G: 03112023

RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS

ECU SPECIFIC SETUP INFORMATION



Main Setup - R32V2 ECU 1.14

Basic
Advanced
Outputs
Inputs
Devices
Data Logging

Engine Info

Model: R32
Tuning Method: VE
Fuel Load Source: TPS
Ignition Load Source: MAP
Primary MAP Sensor: Manifold Pressure Sensor 1
Engine Capacity: 2568 cc
Cranking RPM: 380 RPM
VIN:

Fuel

Injectors: Enabled
Injector Current Limit: 3 - 14 ohm
Fuel Pressure Type: MAP Reference
Base Fuel Pressure: 3.06 kg/cm²

Ignition

Ignition Mode: Direct Fire
 Lock Timing: 20.0 °

Trigger

Trigger Type: Multitooth 24 and 1
Trigger Angle: 100.0 °
Angle Offset Table: Disabled
RPM Filter Level: 5
RPM Display Max: 10000 RPM

Throttle

Zero Throttle Value: 1.0 %
Zero Throttle Hyst: 0.5 %
Full Throttle Value: 80.0 %

Lock Timing

When this setting is enabled, the ignition advance is fixed to the value set in the Lock Timing Field.

OK Cancel Apply



Platinum Racing Products

www.platinumracingproducts.com

RB Street Series CAS Replacement Rev G: 03112023

RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS

ECU SPECIFIC SETUP INFORMATION



M1XXX Series

Engine Speed Pin Hysteresis

Engine Speed Pin Hysteresis [V]

Engine Speed [rpm]

0.0	500.0	1000.0	2000.0	20000.0
0.0	0.5	1.0	2.0	2.0

Engine Speed Parameters

Engine Speed Reference Mode	Multi Tooth Four Stroke	<input type="checkbox"/>
Engine Speed Reference Start Mode	Sequential	<input type="checkbox"/>
Engine Speed Reference Tooth Count	12	
Engine Speed Reference Offset	100.0 °	
Engine Speed Reference Blank Ratio	10.0 %	
Engine Speed Reference Wide Pitch Thr...	150.0 %	
Engine Speed Reference Narrow Pitch ...	50.0 %	
Engine Speed Pin Pullup Control	On	<input type="checkbox"/>
Engine Speed Pin Active Edge	Falling Edge	<input type="checkbox"/>
Engine Speed Pin Threshold	2.5 V	

Engine Synchronisation Pin Hysteresis

Engine Synchronisation Pin Hysteresis [V]

Engine Speed [rpm]

0.0	500.0	1000.0	2000.0	20000.0
0.0	0.5	1.0	2.0	2.0

Engine Synchronisation Parameters

Engine Synchronisation Ignore Mode	Not in Use	<input checked="" type="checkbox"/>
Engine Synchronisation Pin Pullup Control	On	<input type="checkbox"/>
Engine Synchronisation Pin Active Edge	Falling Edge	<input type="checkbox"/>
Engine Synchronisation Pin Threshold	2.5 V	



Platinum Racing Products

www.platinumracingproducts.com

RB Street Series CAS Replacement Rev G: 03112023

RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS

ECU SPECIFIC SETUP INFORMATION



Trigger Setup	
Trigger Mode	Multi-Tooth
Trigger Priority	Trig 1
RPM Filtering	1 - Default

Trigger 1	
Trigger 1 Type	Optical/Hall
Trigger 1 Filtering	Level 1 (Low)
Trigger 1 Pullup	ON
Trig 1 Edge	Falling
Multi-Tooth Posn	Cam
Tooth Count	24

Trigger 2	
Trigger 2 Type	Optical/Hall
Trigger 2 Filtering	Level 1 (Low)
Trigger 2 Pullup	ON
Trig 2 Edge	Falling
Sync Mode	Cam Pulse 1x



Platinum Racing Products

www.platinumracingproducts.com

RB Street Series CAS Replacement Rev G: 03112023

RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS

ECU SPECIFIC SETUP INFORMATION



The screenshot displays the ECU MASTER software interface with the following components:

- Left Panel:** A tree view showing the software's structure, including 'Sensors setup', 'Engine start', 'Enrichments', 'Fueling', 'Ignition', 'Knock sensors', 'Idle', 'Outputs', 'Boost', 'DBW', 'Traction control', 'VVT', 'Sport', 'Nitrous', 'Flex Fuel', 'Engine protection', 'Timers', 'Automatic gearbox', 'Other', and 'CAN, Serial'.
- Top Panel:** A series of tabs for different engine states: logs, cranking, triggers, ignition, fuel, idle, boost, Extra 1, Extra 2, outputs, test, LOG, Extra 6, and Extra 7.
- Primary Trigger Settings:**
 - Sensor type: Hall / Optical sensor
 - Adaptive threshold: Low
 - Pullup/Pulldown: Pullup 1K
 - Input filter: Low
 - Trigger type: Multitooth
 - Trigger edge: Falling
 - Number of cylinders: 6
 - Num teeth (incl. missing): 12
 - First trigger tooth: 20
 - Trigger angle: 51
 - Next edge rejection angle: 0°
 - Enable CAM sync tooth window:
 - Input delay: 100 us
 - Increase precision at high RPM:
 - Enable scope:
 - Ignition angle lock:
- Secondary Trigger Settings:**
 - Sensor type: Hall / Optical sensor
 - Pullup/Pulldown: Pullup 1K
 - Input filter: Low
 - Trigger type: 1 tooth
 - Trigger edge: Falling
 - Enable sync. without camsync: Disable
 - Disable camsync above RPM: 15000 rpm
 - Enable advanced filter:
- Ignition - Ignition outputs Table:**

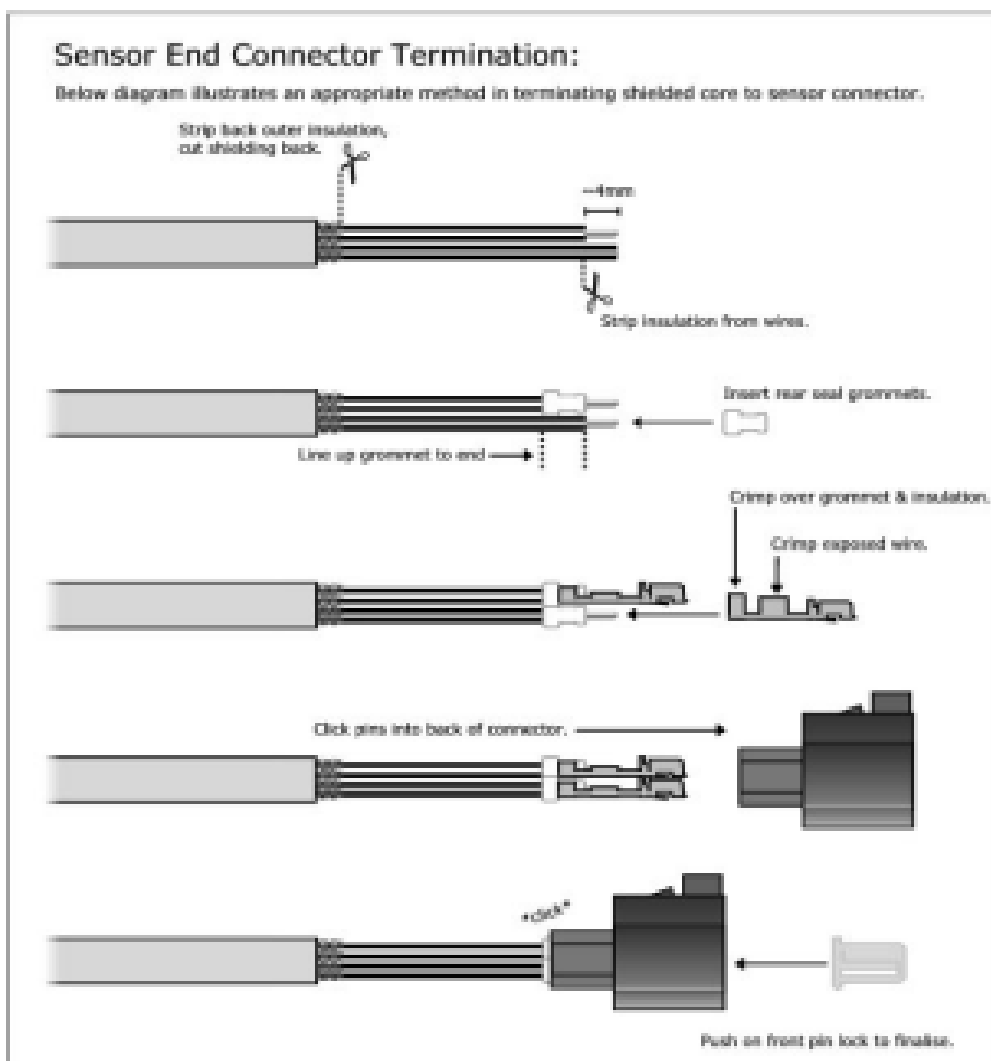
Spark distribution	Coils
Coils type	Coils with built in amplifier
Output offset	1
Ignition event 1	Ignition output 1 (15A, G8)
Ignition event 2	Ignition output 5 (15A, B1)
Ignition event 3	Ignition output 3 (15A, G9)
Ignition event 4	Ignition output 6 (15A, G1)
Ignition event 5	Ignition output 2 (15A, G16)
Ignition event 6	Ignition output 4 (15A, B14)
Ignition event 7	None
Ignition event 8	None
Ignition event 9	None
Ignition event 10	None
Ignition event 11	None
Ignition event 12	None
- Graph:** A plot titled 'Ignition - Sec. trig. sens.' showing RPM [V] on the y-axis (0.0 to 4.3) and RPM [rpm] on the x-axis (750 to 7000). The graph shows a red shaded area representing the sensor signal, which increases from approximately 0.2V at 750 rpm to about 1.9V at 7000 rpm.
- Bottom Panel:** A status bar showing system information: DISCONNECTED, IS, STATE: RUNNING, TBL SET: 1, CAN Bus, CEL, EP, LC#1, FC, SC, ALS#1, GC, KS, RAL, ID, FP, CF, OT, PO1, PO2, PO3, PO4, PO5, VO1, VO2, VO3, AC, BST, Boost table set, 0 °F, FV: 2.162.

RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS

HELPFUL INFORMATION & LINKS

[Haltech Wiring Diagrams](#)

[Haltech Pinouts, Guides, Manuals](#)



RB STREET SERIES CAS REPLACEMENT INSTRUCTIONS

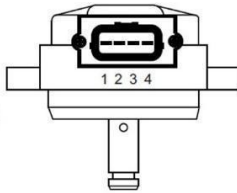
Haltech supplied documentation:



Nissan CAS Connection

R32 / R33

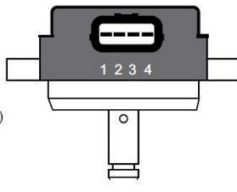
(Silver Metal Body)



Pin #	Function	Elite 1xxx/2xxx	Elite 550/750	Platinum Sport	Sprint	Platinum Pro
1	6 Pulse	Trigger (B1)	Trigger (31)	Home (B2)	Home (2)	Crank
2	360 Pulse	Home (B2)	Home (32)	Trigger (B1)	Trigger (1)	Cam
3	+12V Power	+12V (B11)	+12V (26)	+12V (B11)	+12V (10)	+12V
4	Signal Ground	Sig Gnd (B14)	Sig Gnd (11)	Sig Gnd (B14)	Sig Gnd (22)	Sig Gnd

R34 / R33 GTS-T (Series 2)

(Black Plastic Body)



Pin #	Function	Elite 1xxx/2xxx	Elite 550/750	Platinum Sport	Sprint	Platinum Pro
1	Signal Ground	Sig Gnd (B14)	Sig Gnd (11)	Sig Gnd (B14)	Sig Gnd (22)	Sig Gnd
2	+12V Power	+12V (B11)	+12V (26)	+12V (B11)	+12V (10)	+12V
3	360 Pulse	Home (B2)	Home (32)	Trigger (B1)	Trigger (1)	Cam
4	6 Pulse	Trigger (B1)	Trigger (31)	Home (B2)	Home (2)	Crank

Obtained 2020/11/26, subject to change.

Troubleshooting Notes

Compliant: 1.8mm gap is yielding double counts on the home signal. Increasing to 1.95mm still gives a trigger error. Any further gets worse and stops producing a signal.

Resolution: Home signal (which is running off the single tooth pickup) has a maximum gap of 1.3mm to be able to work. Reduce it to 1mm or less.

The crank signal needs to be 2mm or more.