



2RZ/3RZFE Trigger Information

Sensor Information

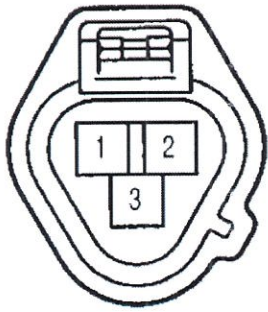
Crank/Cam Sensor

Waste-spark coilpack variants of this engine use a Crank Position Sensor in the block, and a Cam Position Sensor in the head. Distributor models do not have a cam sensor in the head - however some have the cam position sensor incorporated into the distributor housing.

Crank Sensor

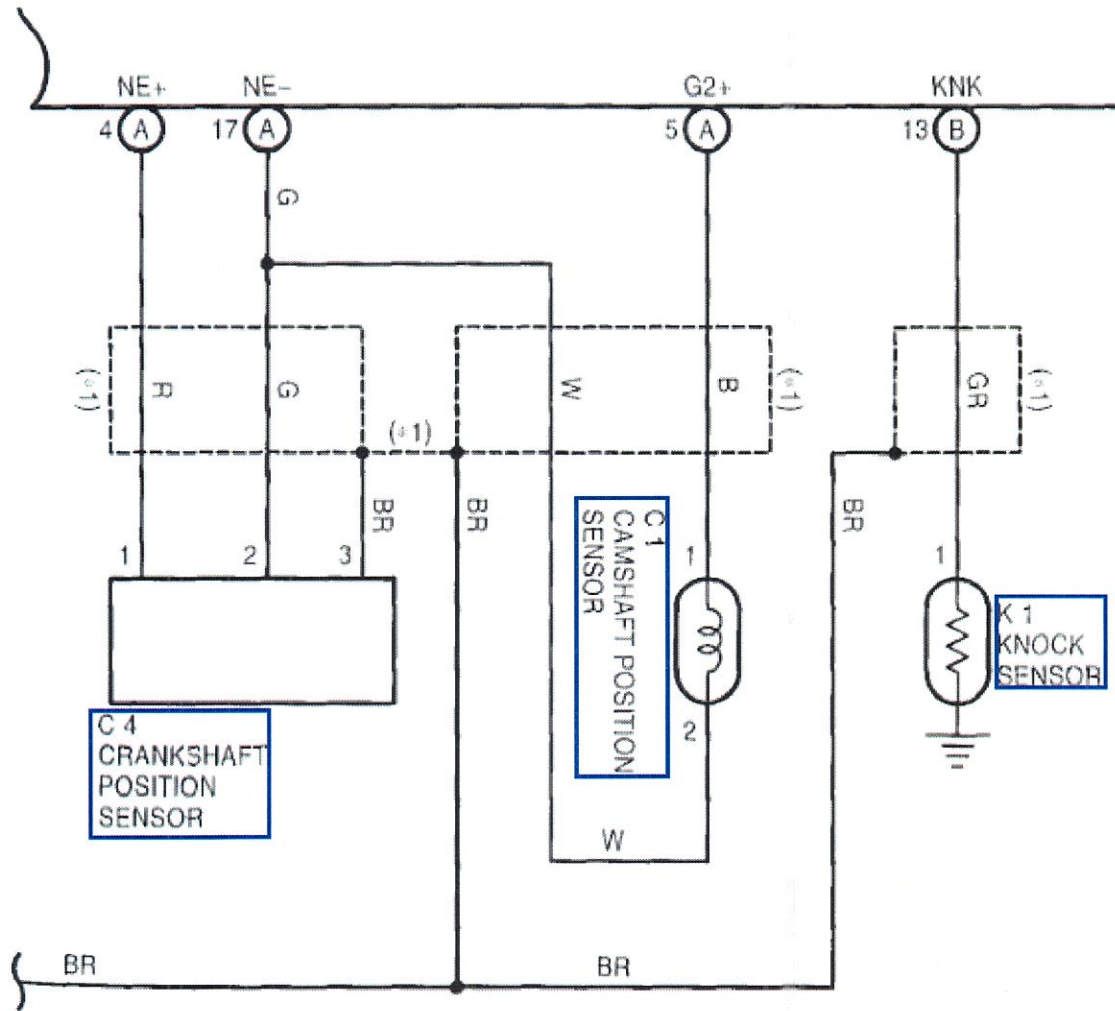
The crank trigger located behind the timing chain drive gear on the crank with the sensor near the alternator. All models have a 36-2 pattern (34 physical teeth; 36 teeth with 2 removed).





Pin	Description	Haltech Connection (Crank 4-core)
1	Crank +	Yellow
2	Crank -	Green
3	Not connected	-

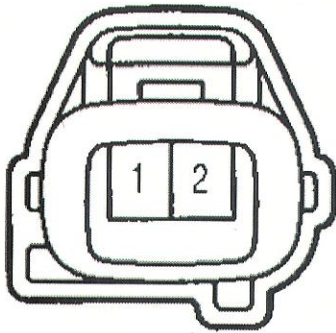
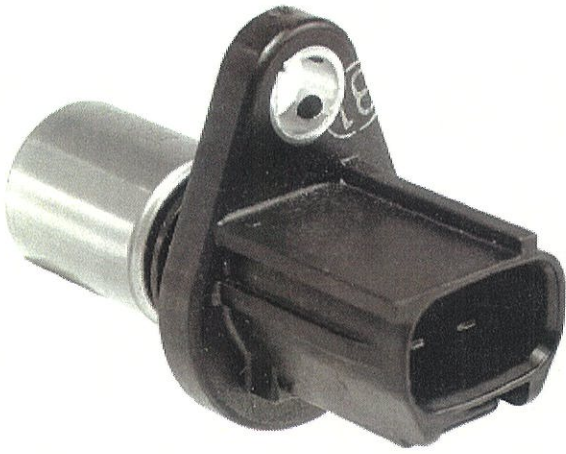
(If using OEM Toyota wiring, pin 2 should go to Signal Ground)



Cam Sensor

The cam sensor can be found in either the cylinder head (coilpack models), or distributor.

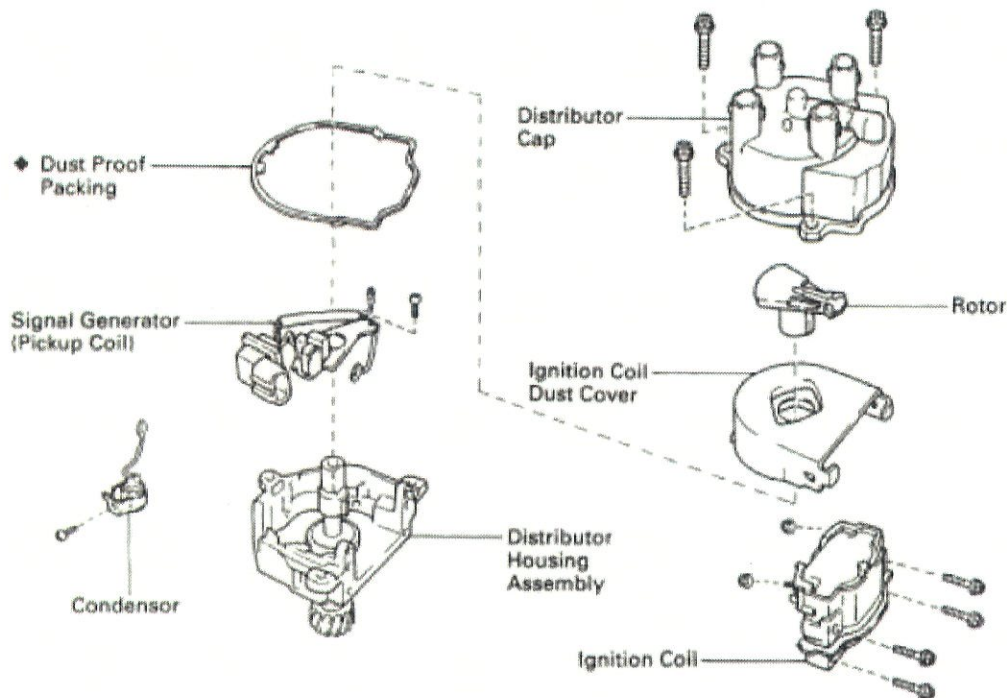
Coilpack models



Pin	Description	Haltech Connection (Home 4-core)
1	Home +	Yellow
2	Home -	Green

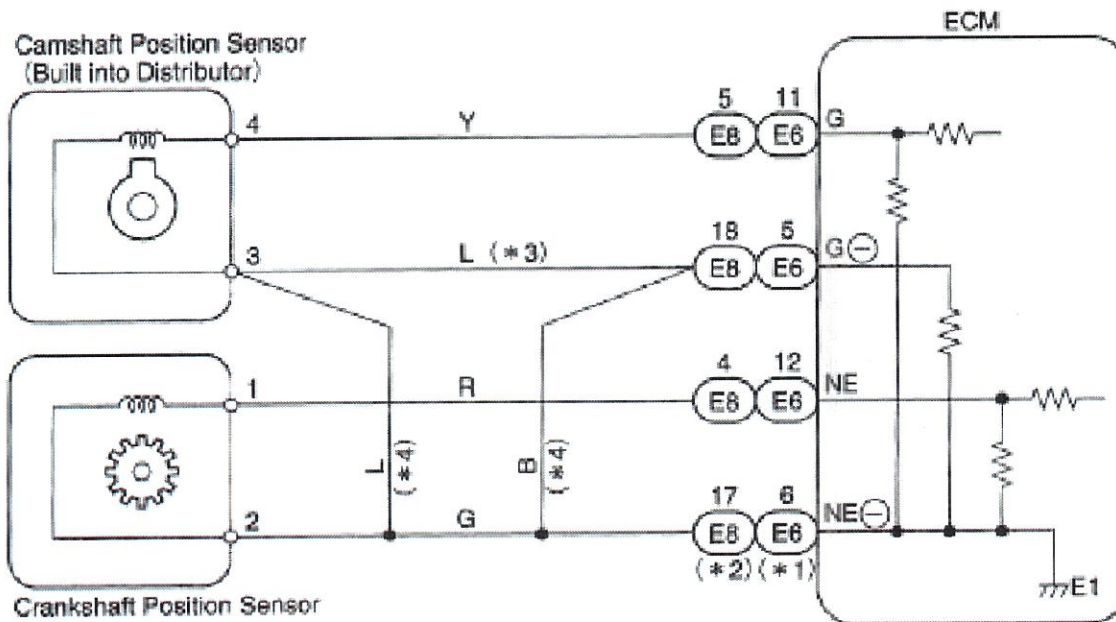
(If using OEM Toyota wiring, pin 2 should go to Signal Ground)

Distributor models (note: Not all distributors have a home sensor)



◆ Non-reusable part

P0793B



- * 1 : 3RZ-FE A/T
- * 2 : 3RZ-FE M/T, 2RZ-FE
- * 3 : 3RZ-FE, 2RZ-FE M/T
- * 4 : 2RZ-FE A/T

Pin	Description	Haltech Connection (Home 4-core)
4	Home +	Yellow
3	Home -	Green

(If using OEM Toyota wiring, pin 3 should go to Signal Ground)

Trigger Configuration

Trigger Configuration

Trigger Type

Toyota - 3RZ-FE

Trigger: On crank. 36 teeth with a 2 teeth missing gap. 34 physical teeth.
Home: 1 tooth.

Trigger Signal Location

On Crank

Number Of Teeth

60

Number Of Missing Teeth

2

☐ Custom Missing Teeth Detection Size Enable

Missing Teeth Detection Size

2.000

Tooth Count Til Start

0

TDC Angle (0 - 719.9 degrees)

95.0

°

☐ TDC Offset Angle Table Enable

RPM Filter Level

3

Quick Start

Enable

Trigger Signal

Sensor Type

Reluctor

Edge

Falling Edge

Filter Level

0

Pull Up

Enable

Ground Reference

Disable

Digital Reference

Disable

Signal Coupling

DC

Home Signal

Sensor Type

Reluctor

Edge

Falling Edge

Filter Level

0

Pull Up

Enable

Ground Reference

Disable

Digital Reference

Disable

Signal Coupling

DC

Minimum RPM

1000

RPM

Synchronisation Mode

Always

Maximum RPM

2000

RPM

Maximum Throttle Position

0.5

%

Note: If using Toyota OEM wiring, 'Ground Reference' must be set to *Enabled*.

<https://support.haltech.com/portal/en/kb/articles/2rz-3rzfe-trigger-information>

