Injector (Multi-point Fuel Injection), all except Y22YH

Objective:

Check control and operation of the injector.

Measurement:

Injector control signal.

Preparation:

Engine oil temperature **> 80°C**. Switch off all electrical loads. Switch off the engine and ignition.

Connections:

INPUT A	COM/TRIGGER	INPUT B
Connect the red measurement lead to the control wire of the connection plug of the injectors according to the table below. Connect the black ground lead to ground.		

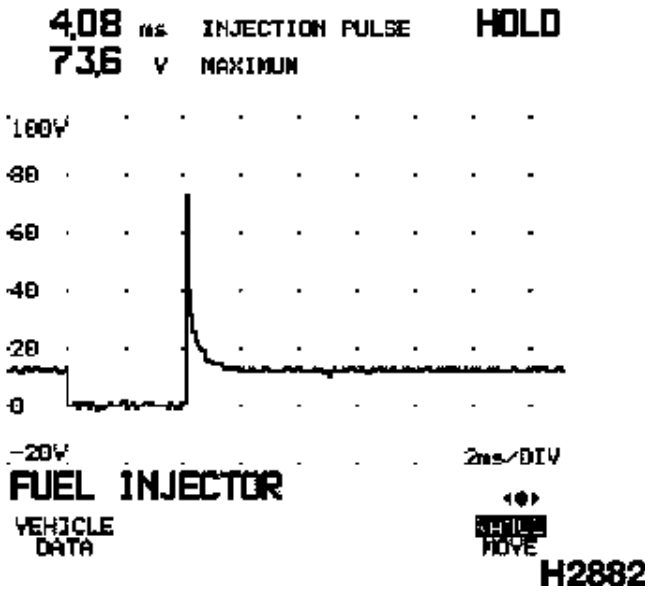
Engine	Control wire colour
F4R	Y9.1=GY, Y9.2=PK, Y9.3=BN, Y9.4=WH
Y22SE	Y9.1=GNWH, Y9.2=GNRD, Y9.3=GNOG, Y9.4=GN
Z20NET	L2A=BK, L2B=GNBK, L2C=PKBK, L2D=BUBK
6VD1	terminal A
Other engines	BNXX

Procedure Tech 31:

1. Download Reference curve.
2. Start the engine and allow it to idle.

Note: For the Z16YNG engine it is important to switch the engine to petrol mode before the measurement is started.

Reference Curve:



This multi-point fuel injection system is a conventional fuel injection system with a cut-off control system. In this case, the signal plot only has one voltage spike.

If the voltage spikes vary considerably, the horizontal scaling factor can be increased to 500 micro-seconds/DIV to stabilise the display of the signal plot.

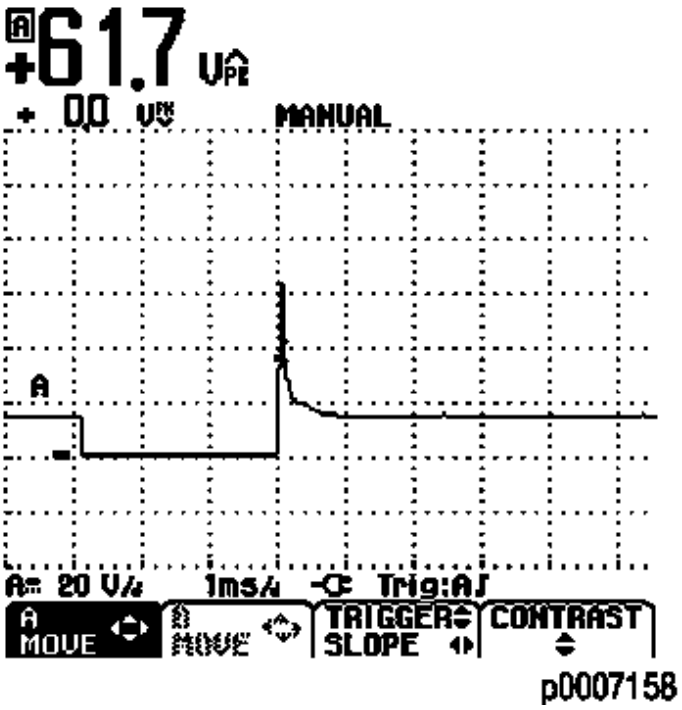
Procedure Tech 32:

1. Download Setup file (the Tech 32 uses only Setup files, no reference curves).
2. Start engine and allow it to idle.

Note: For the Z16YNG engine it is important to switch the engine to petrol mode before the measurement is started.

Setup File:

Reference Curve:



This multi-point fuel injection system is a conventional fuel injection system with a cut-off control system. In this case, the signal plot only has one voltage spike.

If the voltage spikes vary considerably, the horizontal scaling factor can be increased to 500 micro-seconds/DIV to stabilise the display of the signal plot.