

Knock Sensor

Objective:

Check operation of the knock sensor.

Measurement:

Plot of voltage at the signal output of the knock sensor.

Preparation:

Switch off the engine and ignition.

Connections:

INPUT A	COM/TRIGGER	INPUT B
Connect the red measurement lead to pin 1 (A) of the plug connector to the knock sensor. Connect the black ground lead to pin 2 (B).		

Procedure Tech 31:

1. Download the Reference curve.
2. Use a metal object (e.g. a hammer) to strike the engine block in the vicinity of the knock sensor. Regardless of the engine type the following areas are particularly suitable. Below the bolt used to fasten the alternator to the engine block, flat surfaces on the engine block at the front or rear and the engine mounting (use a metal extension if necessary).

Note: For some cars it is difficult to connect the measurement leads to the knocksensor connector, in this case it may be easier to remove the knocksensor from the engine and connect the measurement leads directly to the knocksensor itself. Then the knocksensor can be activated by gently hitting the knocksensor on a plane surface.

Reference Curve:

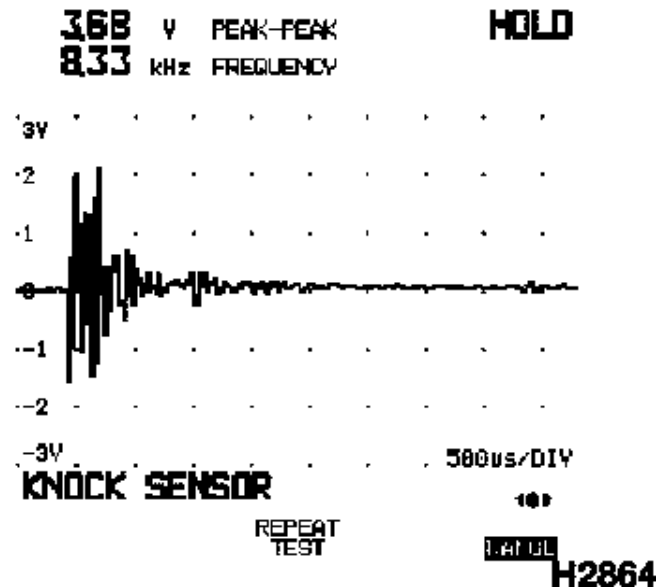


The signal frequency of the knock sensor depends on various criteria and cannot be used to assess the operation of the sensor.

It can be assumed that the knock sensor is working properly, when the signal plot is an attenuated oscillation.

The amplitude is directly dependent on the

impact magnitude and can likewise vary within broad limits.



Procedure Tech 32:

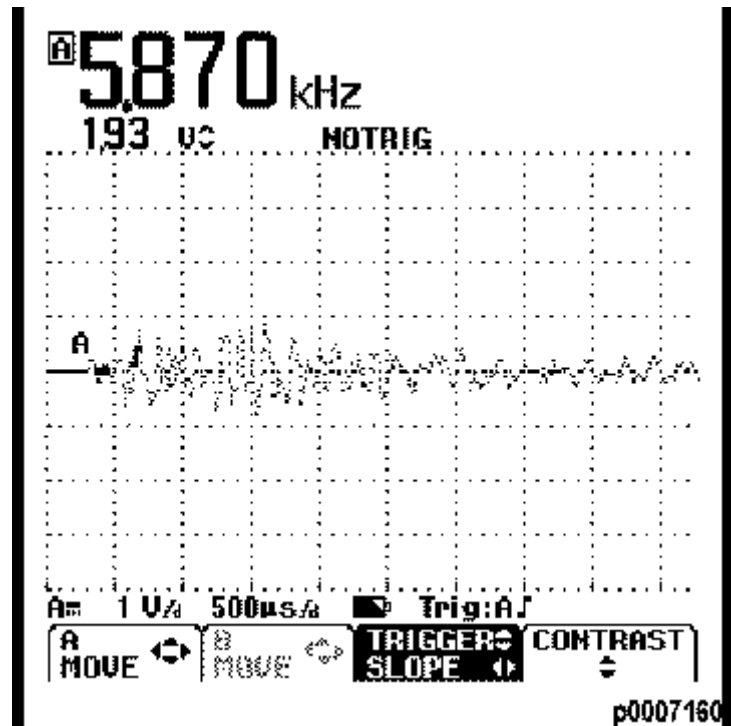
1. Download Setup file (the Tech 32 uses only Setup files, no reference curves).
2. Use a metal object (e.g. a hammer) to strike the engine block in the vicinity of the knock sensor. Regardless of the engine type the following areas are particularly suitable: Below the bolt used to fasten the alternator to the engine block, flat surfaces on the engine block at the front or rear and the engine mounting (use a metal extension if necessary).

Note: For some cars it is difficult to connect the measurement leads to the knocksensor connector, in this case it may be easier to remove the knocksensor from the engine and connect the measurement leads directly to the knocksensor itself. Then the knocksensor can be activated by gently hitting the knocksensor on a plane surface.



Setup File:

Reference Curve:



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