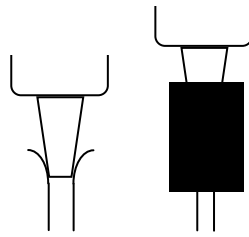


Engine Polygraph® Quick Reference Card

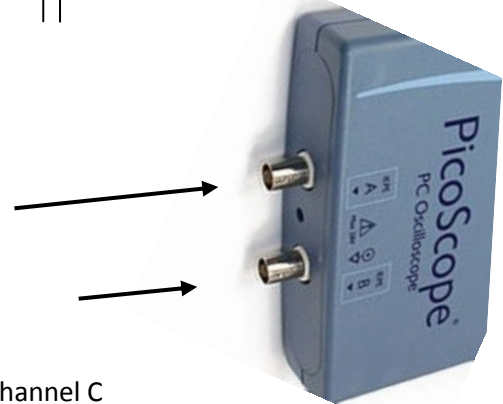
Setup:

1. Engine is warmed up
2. Oil dipstick tube sensor fits snugly



Use a section of rubber hose to go over small diameter tubes

3. Exhaust sensor is attached to Channel A (default)
4. Oil dipstick tube sensor is attached to Channel B (default)
5. If using a trigger and 4-Channel scope, attach the probe to Channel C
6. Connect Scope to Laptop or PC with the USB cable provided before starting scope software
7. Start PicoScope Automotive Oscilloscope software (should recognize your scope)
8. Ensure the following settings exist for the Oscilloscope:

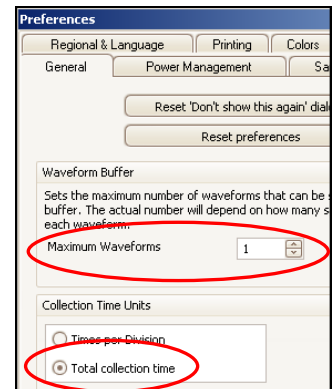


A. Under **Tools | Preferences** -

Set **Maximum Waveforms** to 1

Collection Time Units select **Total collection time**

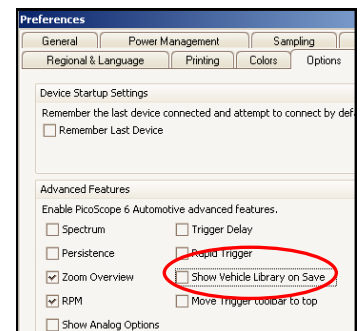
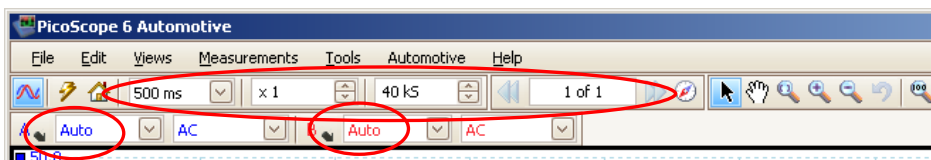
B. Under **Tools | Options** **deselect Show Vehicle Library on Save**



C. Use **Views | Auto-Arrange Axes** to separate the channels

D. Set Collection time to 500 ms, x1, 40ks, 1 of 1

E. Start with **Auto** on Channel A and **Auto** on Channel B



9. Under **File | Start-up Settings** select **Save User Default Settings** to bring these up in the future

You should now be prepared to administer an engine polygraph (see reverse side).

Administer an **Engine Polygraph®** — Quick Reference Card

Take a Signature:

1. Login to the SenX Signature Manager (SSM) application (www.senxsm.com)
2. Select **Signatures > Add New Signature**
3. Fill in the data elements— RPM needs to be $\pm 10\%$ of actual RPM at time of signature
4. If requesting an Assessment (**Engine Polygraph®**), set **Condition** to **Load**
5. Start engine and confirm the oscilloscope has two waveforms moving across the screen (A and B)
6. Run the engine at 1,500 rpm
6. Press the spacebar to “freeze” the oscilloscope trace once a steady signal appears
7. Select **File > Save As** and name the file to help identify the waveform: 20160118-Ford_150_1500-1 in directory \Documents\Waveforms
8. Switch back to the SSM application and select the file to upload. Normally under \Documents\Waveforms\
9. Check **Yes** for **Engine Angel Assessment?** (You will see the email field appear)
10. Press **Save** to store the signature and request the Assessment.

Request an Assessment (**Engine Polygraph®**):

1. Select an existing signature or at the time you store a new signature with **Condition** of **Load**
2. Select **Yes** for an Assessment
3. Enter an **email address** if you would like to have the result sent via email
4. Select the file (if using an existing signature, then the file upload will remain empty).
5. Select **Save**
6. Open the Assessments screen and find the Assessment you are interested in (Use **Search**, if necessary). The row will show “**Processing**” until the report is available.
7. If the row has “**Exception**”, click on the yellow button to see the message and take corrective action.
8. Click on View if you wish to visually verify your selection.
9. Click **Email** if you wish to email the report to someone.
10. Enter the email address.
11. Click on **Send Email**.