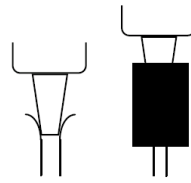


Engine Polygraph® Quick Reference Card

Setup:

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



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

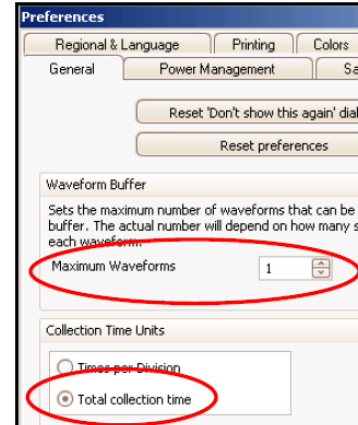


6. Connect Scope to Laptop or PC with the USB cable provided before starting scope software

7. Start Picoscope **6 Automotive** Oscilloscope software (should recognize your scope)

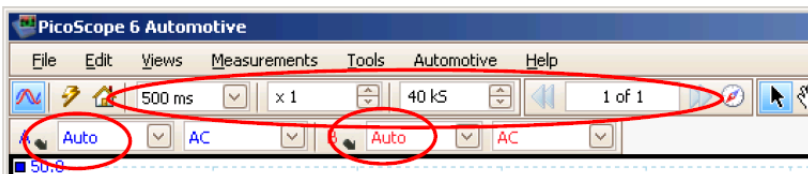
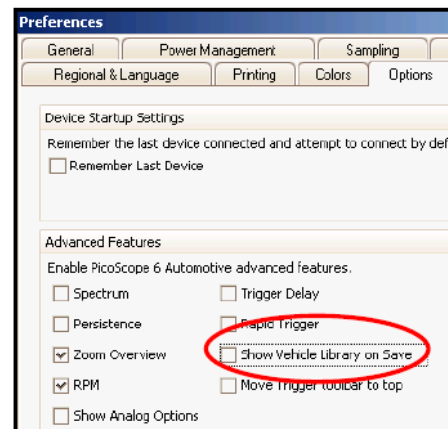
8. Ensure the following settings exist for the Oscilloscope:

- 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:
 For Load (~1500 rpm): 500 ms, x1, 40ks, 1 of 1
 For Idle: 1 s, x1, 20k, 1 of 1
 For cold-crank (c-c): 2 s, x1, 10k, 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**[®] without EPReader — Quick Reference Card

Take a Signature:

1. Start engine and confirm the oscilloscope has two waveforms moving across the screen (A and B)
2. Run the engine at RPM as appropriate to engine **Condition**:
3. Press the spacebar to “freeze” the oscilloscope trace once a steady signal appears
4. Select **File > Save As** and name the file to help identify the waveform: e.g., ‘20160118-Ford_150_1500-1’ in directory \Documents\Waveforms
 - Save the file as a **csv** file, **not** the default **psdata** file type.
5. Login to the **Engine Polygraph** (EP) application (www.enginepolygraph.com)
6. Select **Signatures > Add New Signature**
7. Fill in the data elements— RPM needs to be $\pm 15\%$ of actual RPM at time of signature
8. Select desired report (**Assessment or Diagnostic**) and verify or fill in the desired email address
9. Click on the Choose File and select the file to upload. Normally under \Documents\Waveforms\
10. Press **Save** to store the signature and the system will process your request for a Report.

Request Report (Engine Polygraph[®]):

1. Open the **Reports** screen and find the Signature you are interested in (Use **Search**, if necessary). The row will show “**Processing**” until the report is available.
2. Select that signature from the **Reports** list by clicking on the eyeball (if you want to view it online) or click on the envelope with arrow (if you want sent to an email address)
3. Enter or verify the **email address** if you selected that choice
4. If the row has “**Exception**”, click on the yellow button to see the message and take corrective action.