



# Ignition Scope Analysis

Meets NATEF Task: (A8-C-1) Diagnose ignition system-related problems; determine necessary action (P-2)

Name \_\_\_\_\_ Date \_\_\_\_\_ Time on Task \_\_\_\_\_

Make/Model/Year \_\_\_\_\_ VIN \_\_\_\_\_ Evaluation: 4 3 2 1

\_\_\_\_\_ 1. Check service information regarding the specified method for attaching and using a secondary circuit oscilloscope.

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ 2. Type of ignition:

- \_\_\_\_\_ Distributor
- \_\_\_\_\_ Waste spark
- \_\_\_\_\_ Coil-on-plug

\_\_\_\_\_ 3. Connect the ignition scope to the system as per the scope manufacturer's instructions.

\_\_\_\_\_ 4. Brand of scope used: \_\_\_\_\_

\_\_\_\_\_ 5. Describe the hookup procedure. \_\_\_\_\_

\_\_\_\_\_ 6. Start the engine and observe the secondary ignition waveform.

	<b>Firing Voltage (KV)</b> (voltage should be 5-15 KV)	<b>Spark Line Length (ms)</b> (length should be 1-2 ms)
<b>Cylinder #1</b>	_____	_____
<b>Cylinder #2</b>	_____	_____
<b>Cylinder #3</b>	_____	_____
<b>Cylinder #4</b>	_____	_____
<b>Cylinder #5</b>	_____	_____
<b>Cylinder #6</b>	_____	_____
<b>Cylinder #7</b>	_____	_____
<b>Cylinder #8</b>	_____	_____

\_\_\_\_\_ 7. Based on the test results, what is the necessary action? \_\_\_\_\_