

# Optical Distributor Scope Test

**Meets NATEF Task:** (A8-C-2) Inspect and test ignition primary and secondary circuit wiring and solid state components; determine necessary action. (P-1)

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

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

\_\_\_\_\_ 1. Check service information for the recommended procedures and specifications for testing the optical distributor. \_\_\_\_\_

\_\_\_\_\_ 2. Locate and carefully back probe the low resolution and high resolution signal wires at a connector near the distributor. (Refer to the service information for the correct connector and color of the wires.)

\_\_\_\_\_ 3. Connect the scope probe lead to one of the terminals and connect the probe ground lead to a good engine ground.



\_\_\_\_\_ 4. Set the scope settings as follows:  
     Volts per Division = 2 volts DC  
     Time per division = 500  $\mu$ S (500 microseconds)  
     Trigger Level = 1 V. (50%)  
     Trigger Slope = positive (+)

\_\_\_\_\_ 5. Start the engine and observe the waveform. The waveform should have vertical rising and falling edges and the ground signal (horizontal bottom portion of the waveform) should be close to zero volts. Draw the waveform here:

\_\_\_\_\_ 6. Connect the scope to the high resolution signal wire. Carefully verify that all rising and falling edges are vertical and that the ground signal should be close to zero. Draw the waveform here:

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

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