

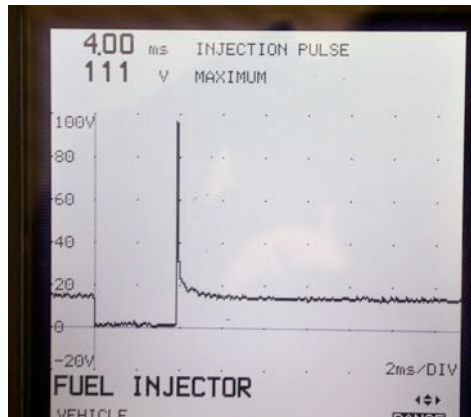
Injector Voltage Waveform Test

Meets NATEF Task: (A8-D-6) Inspect and test fuel injectors. (P-1)

Name _____ Date _____ Time on Task _____

Make/Model/Year _____ VIN _____ Evaluation: 4 3 2 1

- _____ 1. Check service information for the type of fuel injector being used.
- _____ Saturated
- _____ Peak and hold
- _____ 2. Connect a digital storage oscilloscope (DSO) or graphing multimeter (GMM) to the pulsed side of the injector. (Check service information for the color of wire used for the pulse.)
- _____ 3. Start the engine and observe the voltage waveform.



- _____ 4. Does the voltage spike (kick) exceed 30 volts? _____ Yes _____ No
- _____ 5. What is the injector pulse-width? _____ (normally between 1.5 and 3.5 ms at idle on a warm engine)
- _____ 6. Based on the test performed, what is the necessary action? _____
- _____
- _____