

C.W. ELECTRONICS
350 Columbia Turnpike
Rensselaer, New York 12144
(518) 477-2569

I, Nicholas Dyer, owner, C.W. Electronics, was directed by the New York State Police to repair and test the below listed radar speed measuring instrument. Upon completion of repairs, I conducted the following tests.

Radar Instrument and Component Identification

Make: <u>ACI</u>	Model: <u>DUAL</u>	Antenna 1 S/N <u>KA-070687</u>	Tuning Fork 1 <u>FA-162059</u>
Troop <u>D</u>	Indicator S/N <u>DC-098294</u>	Antenna 2 S/N <u>KA-070689</u>	Tuning Fork 2 <u>FF-004175</u>
Property #: <u>FP-11381</u>			

1. Radar transmitter and indicator test.

- A) Measured transmitter frequency of Antenna #1 34741 megahertz and Antenna #2 34735 megahertz by means of a microwave frequency meter.
 Manufacturer's frequency tolerance of 34600 mhz to 34800 mhz.
 Transmitter input power less than 5 watts and output power less than 100 milliwatts.
- B) Light segment test of patrol window 888 and of target window 888.
- C) Internal circuitry test of the patrol speed crystal indicates 10-35-65 with a manufacturer's tolerance of 0.
 Circuitry test must display 10-35-65
- D) Internal circuitry test of the target speed crystal indicates 10-35-65 with a manufacturer's tolerance of 0.
 Circuitry test must display 10-35-65.

2. Tuning fork tests.

- A) Each tuning fork was tested independent of the radar to ascertain its true simulated MPH speed by means of a frequency counter.

SERIAL #	INDICATED MPH	FREQUENCY	TRUE MPH
<u>FA-162059</u>	<u>25</u>	<u>2615</u>	<u>25</u>
<u>FF-004175</u>	<u>55</u>	<u>5727</u>	<u>55</u>

- B) Each tuning fork was tested separately with the radar instrument so as to simulate a stationary mode of operation. Stationary mode test results are:
 The 25 MPH fork tested, displayed 25 in the target window.
 The 55 MPH fork tested, displayed 55 in the target window.
- C) Both tuning forks were tested together with the radar instrument so as to simulate a moving police vehicle and a moving target vehicle approaching each other. Moving mode test results are:
 The 25 MPH fork tested, displayed 25 in the patrol window while the 55 MPH fork tested, displayed 30 in the target window.
 The 25 MPH fork represents the police vehicle speed and the 55 MPH fork represents the closing rate speed of the two vehicles. When the police vehicle speed is subtracted from the closing rate speed, the difference of that of the target vehicle, is displayed in the target window.

- 3. As a result of all my tests, I do hereby certify that the transmitter is in compliance with the Rules and Regulations as set forth by the Federal Communications Commission. Also, the transmitter is operating within tolerance of the manufacturer's specifications. In addition to the transmitter, I have tested the tuning forks both together and independently with the radar instrument described above and find that the radar instrument accurately made speed measurements.

I do hereby certify that the radar speed measurement instrument identified above is accurate. This is a true and accurate document made and kept in the normal course of business.

Tested and certified on November 15, 2013

By: 
 FCC License # 20-2-19494