

Starting and Charging Tests Meets NATEF Task: (A6-A-7) Demonstrate proper use of electrical test equipment.

(P-1)

ame	Date	Time on Task
/lake/Model/Year	VIN	Evaluation: 4 3 2 1
1. General Voltmet	ter Test	
a. battery vob. cranking vc. charging v	Itage= (Remove the voltage)voltage= (Should be)voltage= (Should be)	ne surface charge.) above 9.6 volts.) 13.5=15.0 volts.)
2. Voltage-Drop Te	esting	
Connect the r Connect the b Crank the eng Voltage drop Voltage drop	red voltmeter lead to the most po plack voltmeter lead to the most gine. (Voltage drop should not e across the positive (+) cable(s) across the negative (-) cable	<pre>bositive (+). negative (-). exceed .2 volt.) = =</pre>
voltage drop	across the solehold	=
3. Battery Load Te	st Load the battery to 1/2 CCA	for 15 seconds.
CCA = Terminal volt	st Load the battery to $1/2$ CCA Load to = tage at the end of 15 seconds =	= for 15 seconds. (should be above 9.6 volts)
CCA = 4. Starter Amperage	st Load the battery to $1/2$ CCA Load to = tage at the end of 15 seconds =	= for 15 seconds. (should be above 9.6 volts)
3. Battery Load Te CCA = Terminal volt 4. Starter Amperage 4 and 6 cyline GM V-8 = 25	st Load the battery to $1/2$ CCA Load to = tage at the end of 15 seconds = e Test ders = 150 A. maximum. V-6 at 50 A. maximum.	= for 15 seconds. (should be above 9.6 volts) nd V-8 = 200 A. maximum.
3. Battery Load Te CCA = Terminal volt 4. Starter Amperage 4 and 6 cyline GM V-8 = 25 Cranking amp	st Load the battery to $1/2$ CCA Load to = tage at the end of 15 seconds = e Test ders = 150 A. maximum. V-6 a 50 A. maximum. ps =	= for 15 seconds. (should be above 9.6 volts) nd V-8 = 200 A. maximum. OK NOT OK
3. Battery Load Te CCA =	st Load the battery to $1/2$ CCA Load to = tage at the end of 15 seconds = e Test ders = 150 A. maximum. V-6 at 50 A. maximum. ps = ut Test At 2,000 engine RPM:	= for 15 seconds. (should be above 9.6 volts) nd V-8 = 200 A. maximum. OK NOT OK
3. Battery Load Te CCA =	st Load the battery to $1/2$ CCA Load to = tage at the end of 15 seconds = e Test ders = 150 A. maximum. V-6 a 50 A. maximum. ps = ut Test At 2,000 engine RPM: estedamps specifications ild be within 10% of specifications	<pre>= for 15 seconds (should be above 9.6 volts) nd V-8 = 200 A. maximum. OK NOT OK OK NOT OK ons.)</pre>
3. Battery Load Te CCA = Terminal volt 4. Starter Amperage 4 and 6 cyline GM V-8 = 25 Cranking amp 5. Generator Output amps to (Results shout) 6. Charging System	st Load the battery to $1/2$ CCA Load to = tage at the end of 15 seconds = e Test ders = 150 A. maximum. V-6 a 50 A. maximum. ps = ut Test At 2,000 engine RPM: estedamps specifications ild be within 10% of specifications in Requirement Test	= for 15 seconds. (should be above 9.6 volts) nd V-8 = 200 A. maximum. OK NOT OK OK NOT OK