GMCWS Fall Rally

Manteca, California

October 1 thru 6, 2014

Tech Session – October 3, 2014
Tips & Tricks to Keep that Onan Running
By Gary Bovee

Tips & Tricks to Get that Onan Running

Electrical Trouble Shooting Demo
By Duane Simmons
gmcws.org

GMC MOTORHOME
INTERNATIONAL CLUB

GMC ONAN POWER DRAWER
ELECTRICAL TROUBLE SHOOTING
DEMO

WHEN ALL ELSE FAILS
READ THE MAINTENANCE MANUAL

GMC MOTORHOME
INTERNATIONAL CLUB

GMC ONAN POWER DRAWER
ELECTRICAL TROUBLE SHOOTING
DEMO

PREPAIRED BY: DUANE M SIMMONS
MARCH 21, 2004
SPRING CONVENTION....LAS VEGAS, NV

Onan Control Board Trouble Shooting Aid

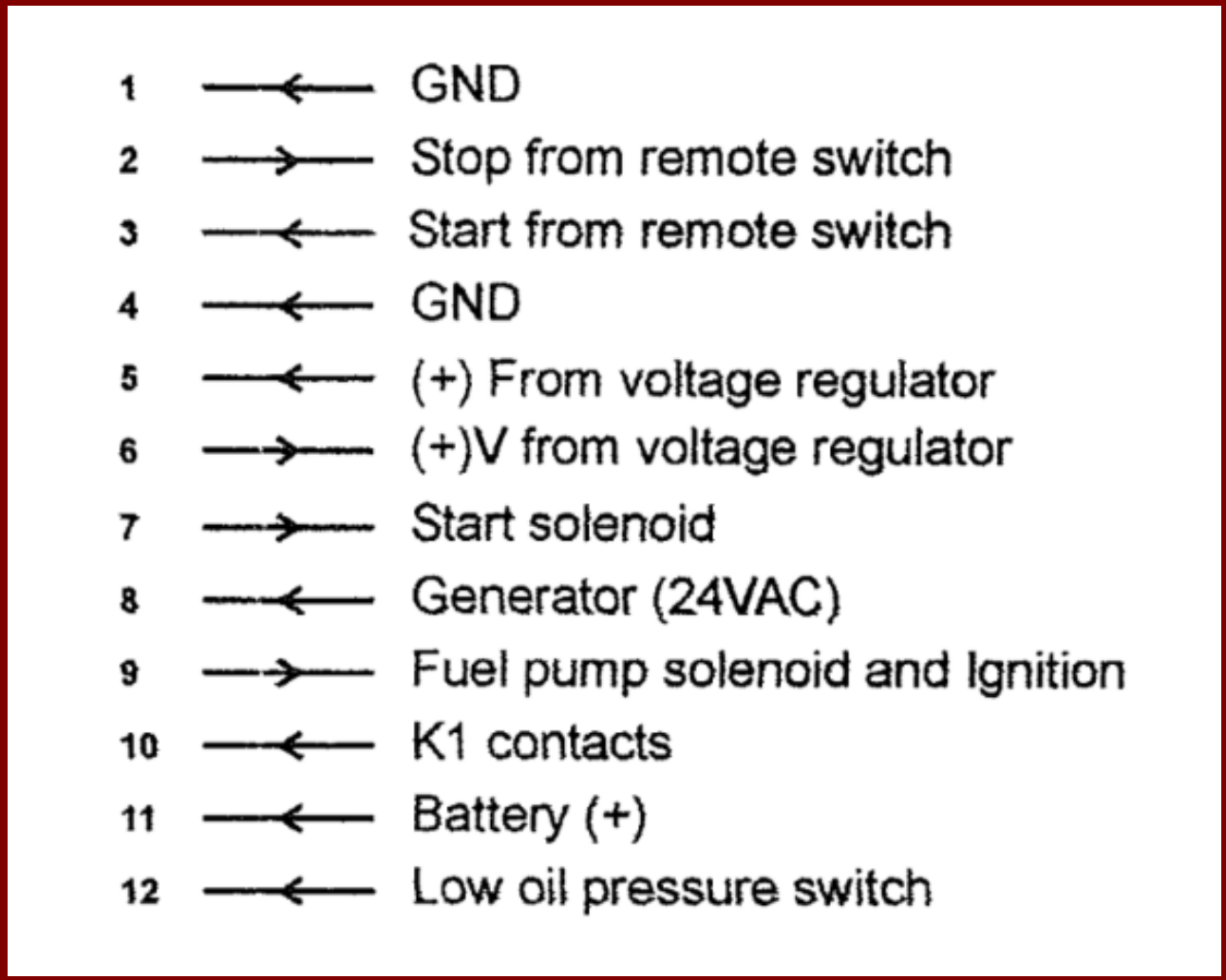
ONAN CONTROL BOARD OPERATION

DATA FORM: TROUBLE SHOOTING AID

1)	Remove Board Cover & Spray/Soak Wire Terminals with 2-26		Measured Value
2)	Measure DC Voltage between Terminals 5 & 1	(s/b ~ 12.8 v dc)	_____ v dc
3)	Measure DC Voltage between Terminals 8 & 1	(s/b ~ 12.8 v dc)	_____ v dc
4)	W/Starter engaged, measure dc voltage Term. 10 & 1	(s/b 10.5 v dc min.)	_____ v dc
5)	Jumper Terminals 9 to 5, Hear Fuel Pump & Start Onan	FUEL PUMP RUN	YES____ NO____
	NOTE: If No Start: Ignition, Fuel supply or wiring problem	START	YES____ NO____
6a)	W/Onan Running, Measure AC Voltage between Term. 8 & 11	(s/b 26 to 31 v AC)	_____ v ac
6b)	Measure DC Voltage between Term. 12 & 11	(s/b near zero)	_____ v dc
6c)	Measure DC Voltage between Upper Term. 1 &2	(s/b ~ 12 v dc)	_____ v dc
6d)	Remove the jumper.....does the Onan continue to run ????		RUN Yes____ No____
7a)	Stop Onan & measure DC Voltage between Term. 12 & 11	(s/b ~ 12.8 v dc)	_____ v dc
7b)	Pull wire from Term. 12.....Try to Start		START YES____ NO____*
8a)	Stop Onan & measure DC Voltage between Upper Term. 1 & 2	(s/b ~ zero v dc)	_____ v dc
8b)	Pull wire from UPPER Term. 1 , 2 & 3.....Try to Start		START YES____ NO____*

NOTE: 1) *If STEPS 1 THRU 6 (except 6d) is OK & Step 7 & 8 is No Start: Suspect Control Board !!!
2) "S/B~" Means "Should Be Approximate value"

Control Board Pin Connections



Common Things That Shut You Down

- Low oil level
- Low fuel level
- Bad oil pressure switch

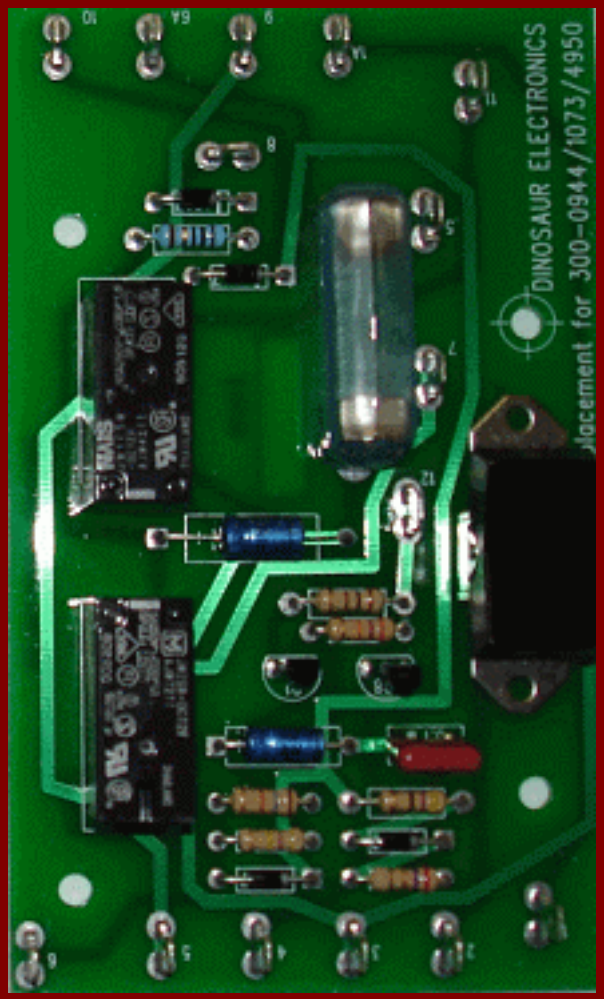
Oil Pressure Switch

Continued - Things That Shut You Down

- Control Board
- Fuel pump
- Points & condenser
- Carburetor
- Coil
- Fuel solenoid - (remove)
- Regulator - (tape wires, remove regulator)
- Internal alternator

Control Board

Dinosaur Control Board



CRC 2-26

CRC
ELECTRICAL GRADE
2-26
Plastic Safe
Multi-Purpose
Precision Lubricant
Net Wt. 5 oz. (142 g)
DANGER: FLAMMABLE. HARMFUL OR

Wiring Connector

Fuel Pump

Electronic Ignition Kit

Electronic Ignition

Fuel Solenoid

Remove Regulator

Testing The Onan's Alternator

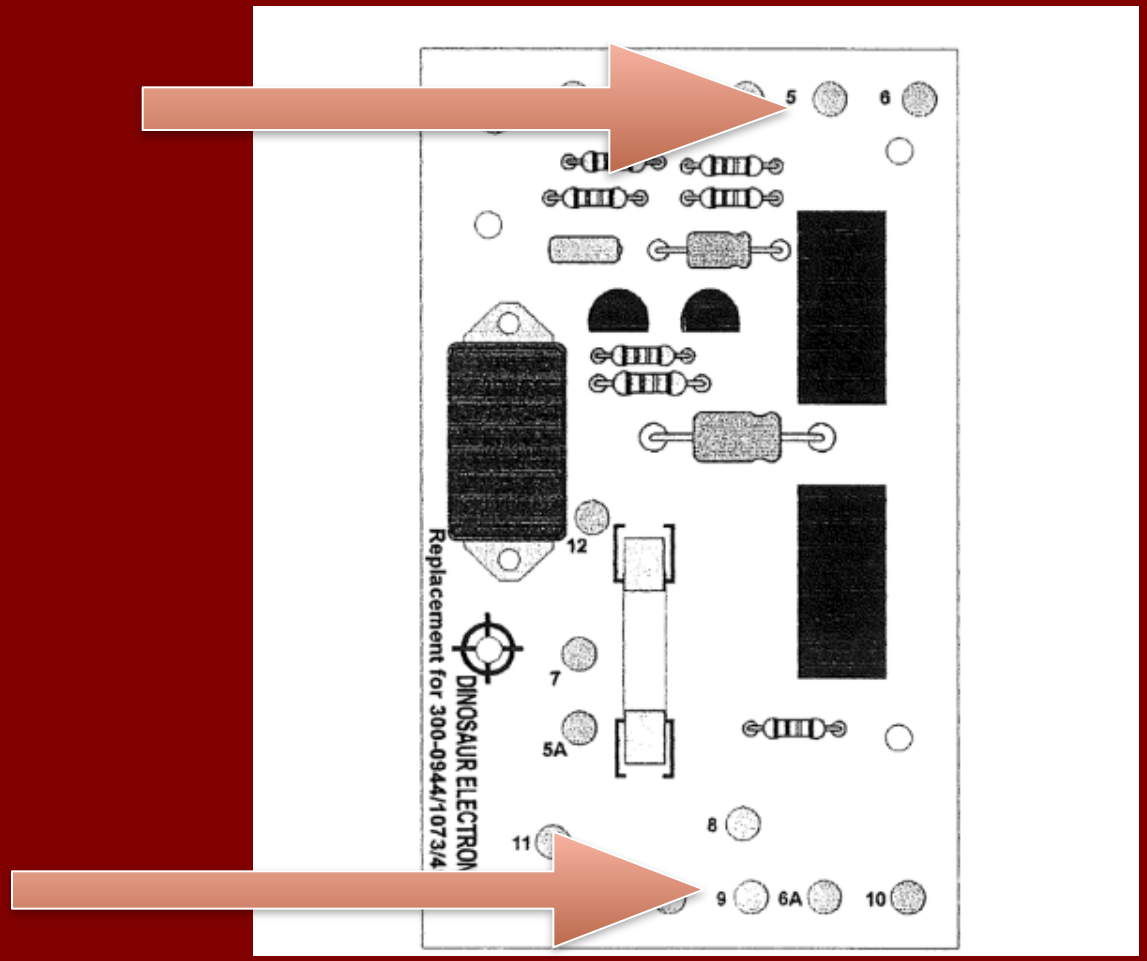
Data Form Trouble Shooting Aid

6a) W/Onan Running, Measure AC Voltage Between Terminals 8 & 11

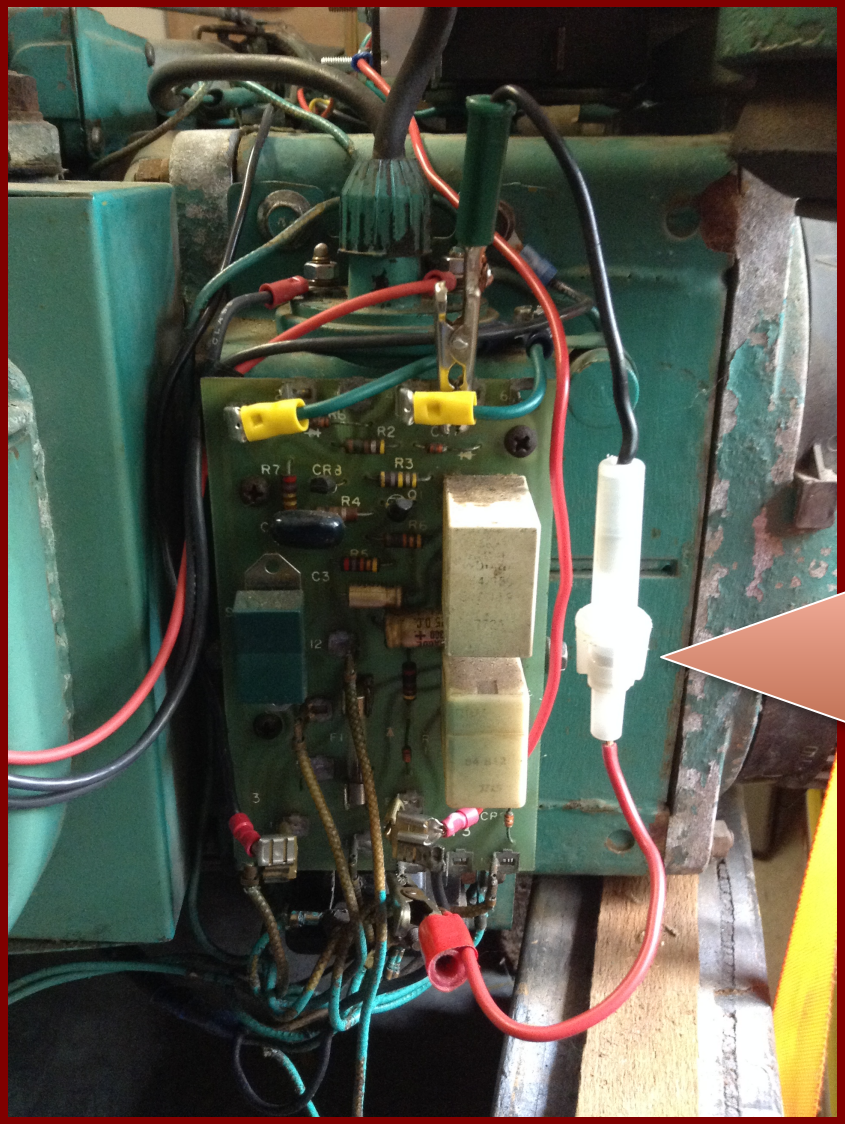
Should measure 26- 31 v AC

Control Board Test

- Jumper #5 to #9



Jumping 5 to 9



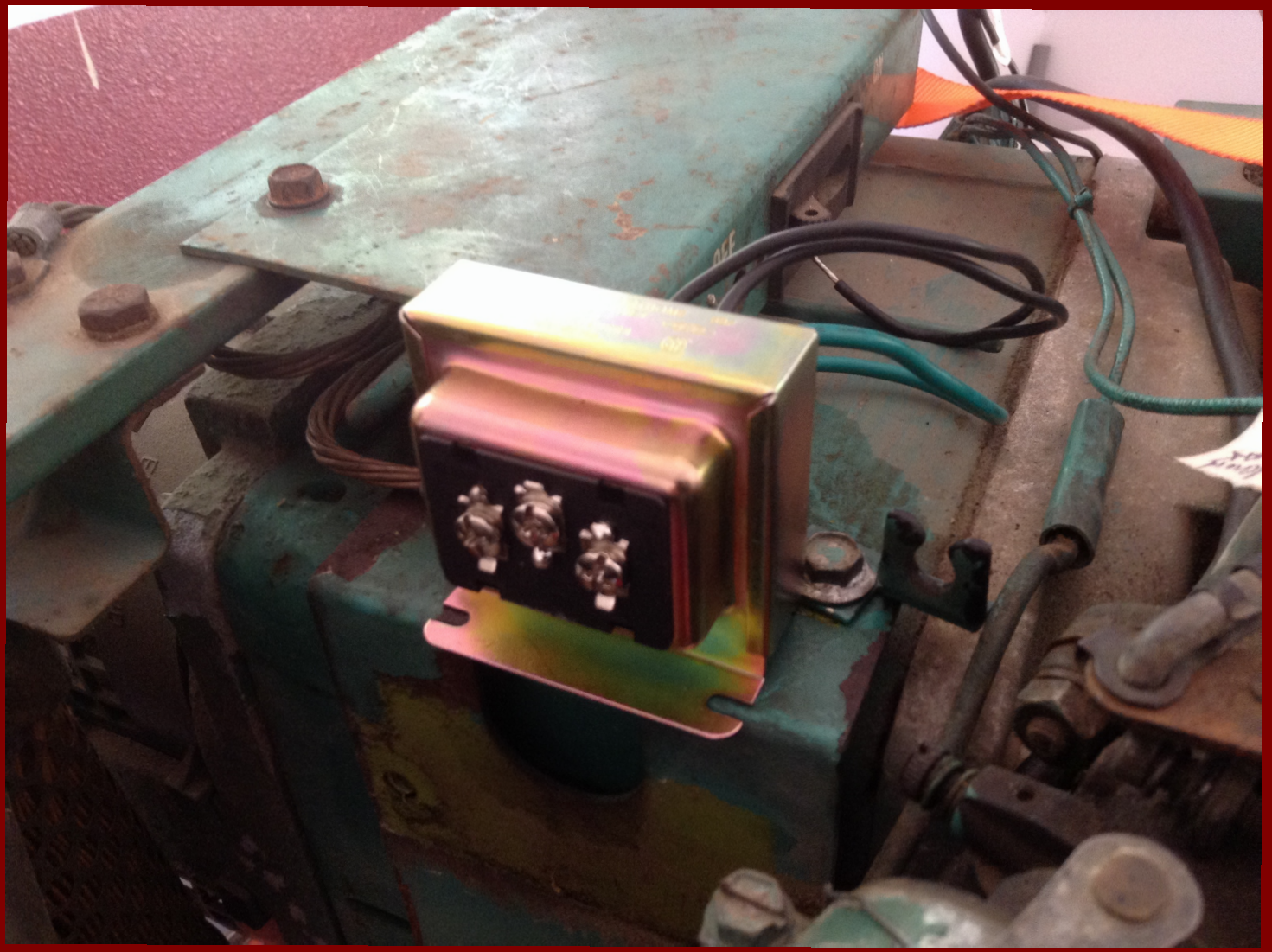
5 amp Fuse

Repairs

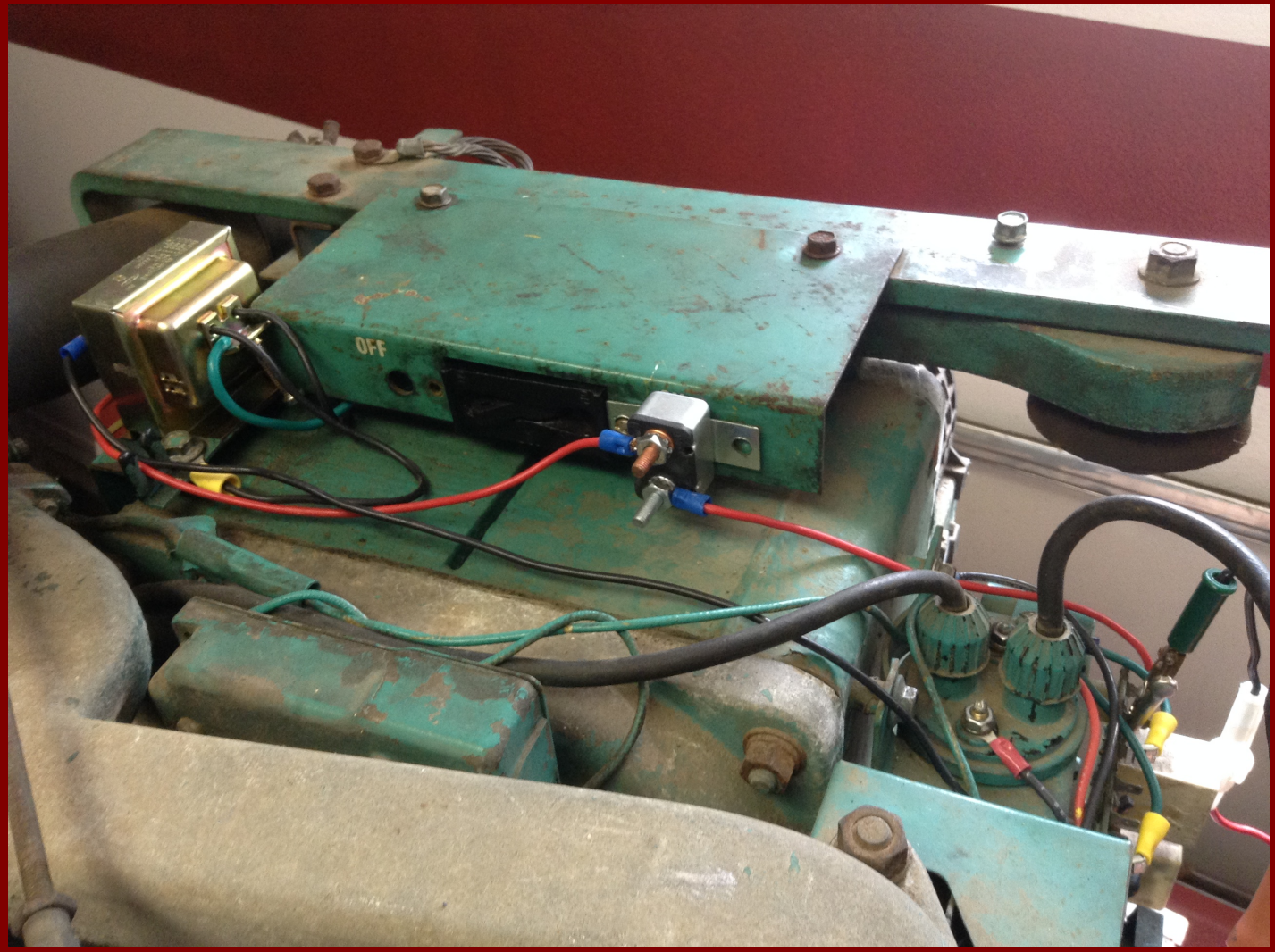
IQAmerica
IQAmerica
wired
DOORBELL PARTS
MULTI VOLTAGE TRANSFORMER
ITEM DT1624A
piezas de timbre
con cable
transformador con multivoltaje

Doorbell Alarm (24 Volt)

Doorbell Transformer Installed



Transformer Installation



Transformer Wiring Diagram

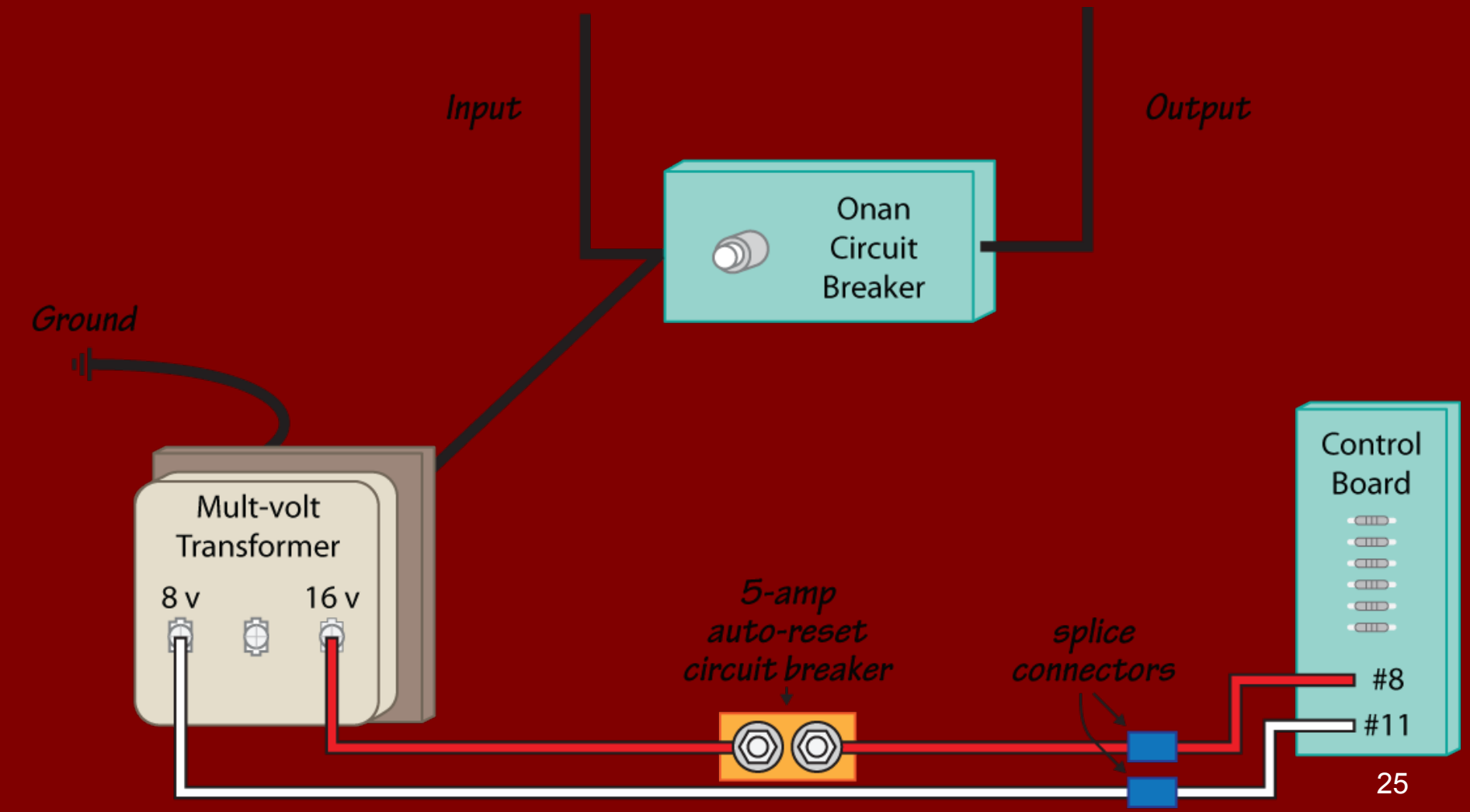
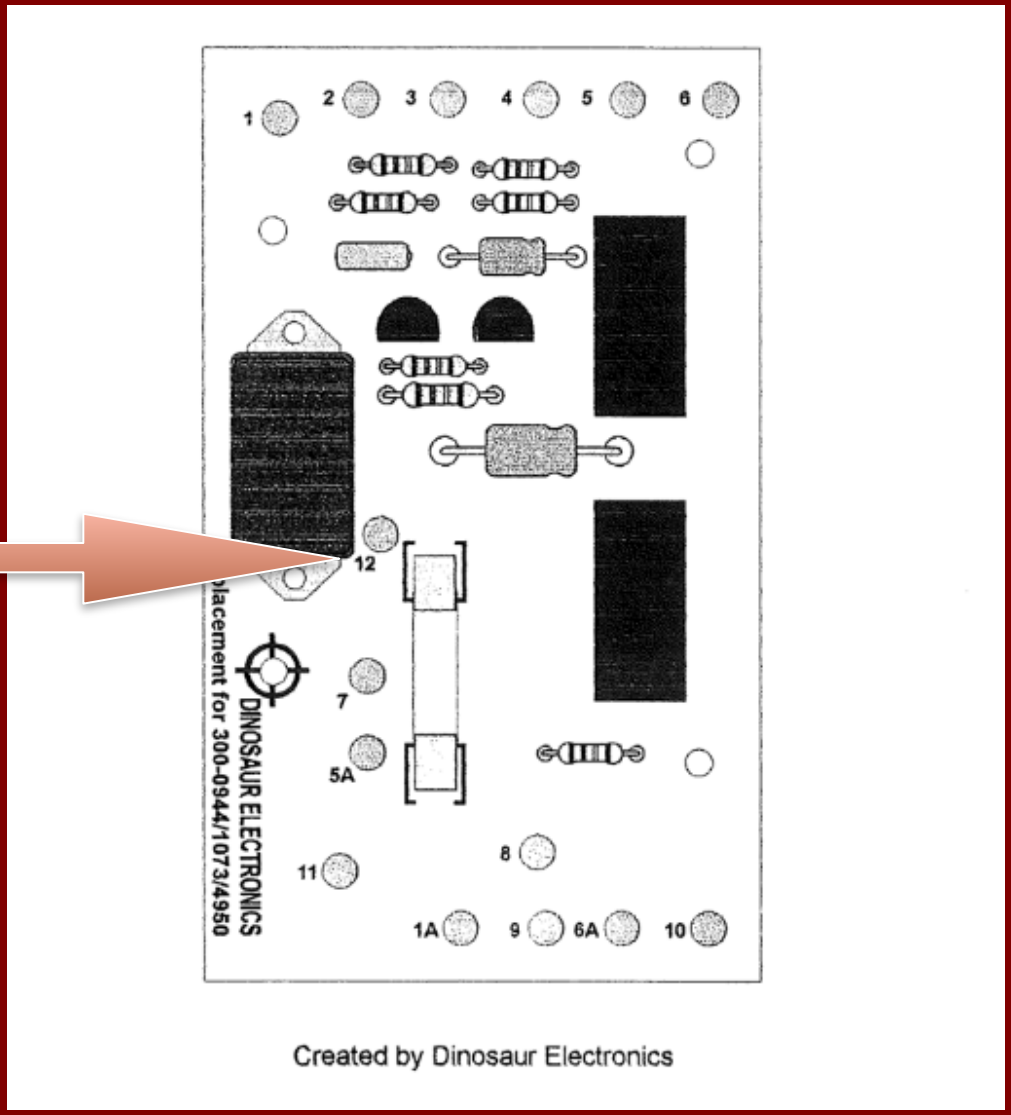


Diagram by Byron Songer

Oil Pressure Switch Test

- Control Board connection #12.



Bridge Rectifier

Circuit Breaker

Tips & Tricks to Keep that Onan Running

- Go to www.gmcidiotsguide.com and checkout Chapter 5 - Trouble Shooting the Onan

- Best advice to keep you're Onan running - Start it once month and run it.