

Revision No. 0		Document No. Date:
	Generator Inspection Data Sheet	9-12-11

GENERATOR INSPECTION DATA SHEET

CUSTOMER: _____

DATE: 01/16/18

TECHNICIAN(S): _____

TEST LOCATION: _____

EQUIPMENT ID: _____

FIELD LOCATION: _____

PROJECT NAME: 400kW Load Test

Information in this box should be filled unless new unit Load Test Form is being used.

GENERATOR DATA		ENGINE DATA	
MAKE: <u>Caterpillar</u>	KVA <u>500</u> KW <u>400</u>	MAKE: <u>Caterpillar</u>	
MODEL: <u>SR4</u>	SERIAL NO. <u>6FA04237</u>	MODEL: <u>G3412 SITA</u>	
FRAME: <u>580</u>	PHASE: <u>3</u> PWR FACTOR: <u>1</u>	SERIAL NO: <u>7DB0XXXX</u>	FUEL: <u>N.G.</u>
RPM: <u>1800</u>	VOLTAGE: <u>480</u> AMPERAGE: <u>721</u>	COMPRESSION RATIO: <u>10:01</u>	
No. OF LEADS: <u>12</u>	EXCITER FIELD OHMS: <u>7.3</u>	INJECTION TYPE: <u>Carb</u>	
EXCITER VOLTS(MAX): <u>2.6</u>	EXCITER AMPS (MAX): <u>7.3</u>	IGNITION TYPE: <u>Altronic</u>	
EXCITER FIELD PART No: <u>1500</u>		PROJECTED HP: <u>400kW @ 1800</u> RPM	
VOLTAGE REGULATOR: <u>McPherson</u>	SENSING VOLTAGE <u>220</u>	GOVERNOR MANUF.: <u>Woodward</u>	
MODEL: <u>SS-15-A-2</u>		GOV. MODEL No: <u>E8250-501</u>	

MEG AND RECORD THE FOLLOWING

NOTE: DISCONNECT: F+ F-, VOLTAGE REGULATOR POWER INPUT, AND SENSING LEADS ON VOLTAGE REGULATOR BEFORE MEGGING GENERATOR.

NEVER MEG REVOLVING RECTIFIER ASSEMBLY!

Tech. Initials

		RESISTANCE IN OHMS = (RATED MACHINE VOLT. + 1000) / 1000)
1.)	<u>IA</u> A PHASE TO GROUND <u>18 M.Ω</u>	DITTO
2.)	<u>IA</u> B PHASE TO GROUND <u>18 M.Ω</u>	DITTO
3.)	<u>IA</u> C PHASE TO GROUND <u>18 M.Ω</u>	DITTO
* 4.)	<u>IA</u> EXCITER STATOR TO GROUND <u>∞</u>	500 VOLT SCALE $R_{stator} = 3.4 \Omega$
* 5.)	<u>IA</u> EXCITER ARMATURE TO GROUND <u>586 M.Ω AVG.</u>	DITTO
* 6.)	<u>IA</u> PMG STATOR TO GROUND <u>N/A</u>	DITTO
* 7.)	<u>IA</u> GENERATOR ROTOR TO SHAFT <u>2.05 M.Ω AVG.</u>	DITTO

* TAKE READING AFTER (1) MINUTE OF VOLTAGE APPLIED WITH MEGGER. SHORT LEADS TO THE MACHINE FRAME FOR (1) MINUTE AFTER MEGGER HAS BEEN DISCONNECTED. THIS WILL DISCHARGE THE VOLTAGE BUILD-UP.

8.) IA GREASE GENERATOR BEARING(S) 4-5 SHOTS.

9.) IA VISUALLY INSPECT GENERATOR BEARING(S), SEAL(S), ETC.

ALL OK

10.) IA CHECK THE CLEARANCE BETWEEN EXCITER STATOR AND ARMATURE. IT SHOULD BE EVEN IN ALL QUADRANTS, IF NOT, CHECK ALIGNMENT; TOO MUCH CLEARANCE ON TOP WITH NO CHANGE INDICATES WORN BEARING.

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OK

11.) IA VISUALLY INSPECT COILS AND CONNECTION TAPS FOR PUFFINESS OR SWELLING, GREEN OXIDATION, CRACKING, OR OIL INTRUSION.
All OK

12.) IA VISUALLY INSPECT STATOR OUTPUT LEADS FOR CRACKING OR DAMAGE DUE TO VIBRATION.
OK

13.) IA CHECK THE SPACE HEATERS FOR PROPER OPERATION AND CONDITION.
OK

14.) IA CHECK ALL GENERATOR OUTLET BOX ELECTRICAL CONNECTIONS FOR CORROSION AND TIGHTNESS.
OK

15.) IA CHECK EXCITER FIELD VOLTAGE AT NO LOAD WITH GENERATOR AT CORRECT RPM AND VOLTAGE SETTING.
OK

16.) IA CHECK REVOLVING RECTIFIER ASSEMBLY DIODES, SURGE SUPPRESSORS, AND VISUALLY INSPECT ASSEMBLY FOR CORROSION
All OK

	Completed By	Accepted By	Inspected By
Company			
Signature			
Print			
Date	01/16/18	1/16/18	