

*compound (COMP) transformer regulation (no A.V.R. installed).*

<b>FAULT</b>	<b>CAUSE</b>	<b>CORRECTION</b>
Correct voltage at N/L and loss of voltage as load is applied. (No loss of engine speed and hertz.)	1. Selector switch in wrong position.	1. Place selector switch in COMP position.
High voltage at N/L (125 – 135 volts) with correct voltage when loaded (115 – 120 volts).	1. Generator's engine speed (rpm) high at N/L.	1. Check N/L speed and adjust N/L voltage.
High voltage at N/L and F/L.	1. Generator's engine speed (rpm) is too high. 2. Short in compound transformer auxiliary windings D-3.	1. Check N/L rpm and adjust N/L voltage. 2. Check continuity and connections of D-3 windings.
Low voltage at N/L (0 – 5 volts) with growling noise from generator and loss of engine speed when load is applied.	1. Main stator windings shorted C-1, C-2.	1. Check continuity and resistance values of C-1, C-2 windings and connections.
Generator does not excite; voltage is 0 volts at N/L.	1. Generator's engine speed (rpm) is slow. 2. Short in the main stator windings or in transformer. 3. Shorted posi-resistor.	1. Adjust the engine's speed and adjust N/L voltage. 2. Check main stator and transformer winding resistances. Artificially excite the generator, and note the results. 3. Check resistor.
Low voltage at N/L; when load is applied, voltage drops.	1. Diodes(s) in rotating exciter (B-2). 2. Bridge rectifier defective. 3. Auxiliary windings B-1 shorted. 4. Auxiliary windings D-3 and/or C-3 open.	1. Check B-1 and B-2 in rotating exciter. 2. Follow test procedure for bridge rectifier. 3. Check the continuity and resistance values. 4. Check the continuity and resistance values of windings and connections.
Low voltage at N/L and F/L 50 – 70 volts.	1. Exciter stator windings A-1 and A-2 are open. 2. Generator's engine speed (rpm) is low.	1. Check continuity and resistance values of A1 and A-2 windings. 2. Check generator N/L rpm and adjust N/L voltage.
Voltage correct at N/L but not at F/L with loss of engine rpm (hertz)	1. Generator overload. 2. Low power factor load (motor loads).	1. Check data plate and monitor load on generator with amp-probe. 2. Check type of load applied. Consider use of optional regulator board.
Unstable voltage.	1. Engine's rpm fluctuating.	1. Check engine operation and fuel system.

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