

TROUBLE SHOOTING CHART

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TROUBLE INDICATION	PROBABLE CAUSE
<u>BATTERY DISCHARGED</u>	<ol style="list-style-type: none"> 1. Loose drive belt. 2. Charging circuit resistance. 3. Voltage limiter malfunction or low setting. 4. Accessory load too high for alternator rating. 5. Corroded or loose battery cable connector clamps. 6. Metal chips in field relay core gap.
<u>BATTERY OVERCHARGED</u>	<ol style="list-style-type: none"> 1. Voltage limiter set too high for aircraft operating conditions. 2. Voltage limiter coil open, 14.0 or 0.04 ohm resistor open, broken coil lead wire or bad solder connection in regulator. 3. Voltage limiter upper contacts stuck closed. 4. Ground wire loose or broken between regulator and alternator. 5. Shorted cell in battery causing other cells to use water excessively.
<u>VOLTAGE LIMITER CONTACTS BURNED</u>	<ol style="list-style-type: none"> 1. Shorted or grounded field coil or circuit. 2. Brush pig-tail wires touching each other at times.
<u>NOISY ALTERNATOR</u>	<ol style="list-style-type: none"> 1. Defective bearing. 2. Shorted rectifier (magnetic noise). 3. Loose, worn, or frayed drive belts. 4. Bent fan. 5. Loose rear housing or improperly installed stator. 6. Loose pulley or pulley not seated against bearing. 7. Loose mounting bolts.
<u>AMMETER POINTER OR LIGHTS FLICKER</u>	<ol style="list-style-type: none"> 1. Dirty or oxidized regulator contacts. 2. Loose connections in charging system or damaged wiring harness. 3. Worn brushes.
<u>BURNED CONNECTOR WIRE IN REGULATOR</u>	<ol style="list-style-type: none"> 1. Field terminal on alternator accidentally grounded. 2. Rotor coil shorted to ground or has a "flying short" to ground. 3. Brush retracting wire not removed from alternator.