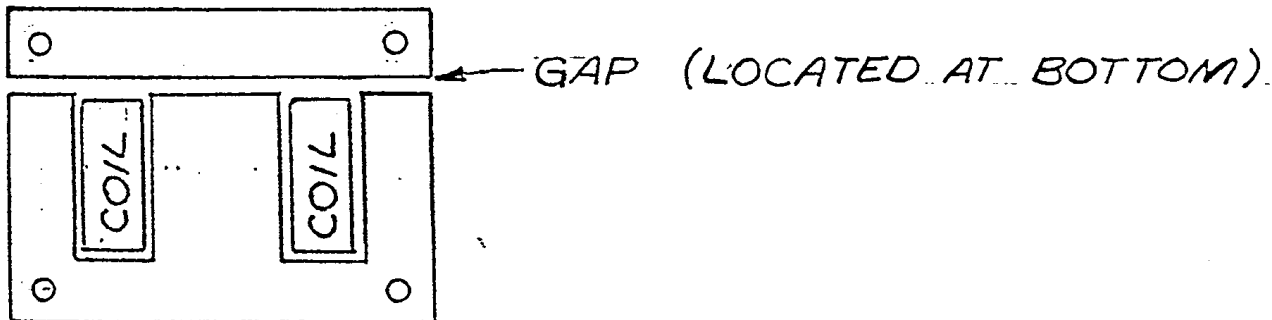


## CHOKE -- PURPOSE AND APPLICATION

The purpose of the choke is to feed the correct amount of current to the field rectifier to result in the correct voltage output (of the alternator) at no load. The choke can be adjusted by increasing or decreasing the air gap to adjust field current (and alternator output voltage). Increasing the air gap increases the field current and increases the alternator output voltage. Decreasing the field current decreases the output voltage, and can be done by decreasing the air gap in the choke. If the air gap is too small, the alternator may not "build up" voltage, or it may "build up" voltage quite slowly. An open choke will not build up voltage (of alternator) at no load at all. A shorted or grounded choke will cause the alternator to build up to an excessive voltage.

CAUTION--Do not operate too long with excessive choke gap, as this may over heat the choke and damage its insulation. Measure voltage and then stop unit if output voltage is excessive.



Changes in the air gap change reluctance of magnetic circuit and change inductance which changes current to field, which determines alternator output voltage.