

flow of a-c shaft currents through the bearing oil film, pitting the bearing journals. It is important that this brush be inspected on a regular basis and replaced when worn down to flush with the top of the box. Operation without this brush may produce a-c shaft currents which can cause excessive bearing wear and possibly a bearing wipe; which in turn may damage the motor shaft. It is suggested that an inspection interval of once very month of operation be instituted until such time as a wear rate can be established. The usual long-wear cycle of these brushes suggests that an experience interval will be arrived at of approximately bi-yearly inspections.

Bypass links, as shown on the diagram of connections (58D143306) and the outline (58E151016), have been provided within the machine terminal box to allow bypassing the machine armature in the case of emergency. As is the case for any connections, these connections should be kept tight to prevent arcing in whatever position they are secured. When an armature is bypassed, its shunt field power should be removed to prevent voltage buildup on the open circuited terminals.

WARNING

RECONNECTION OF THE MACHINES SHOULD NEVER BE MADE WITH THE MACHINES ROTATING OR EXCITED. ALL POWER SHOULD BE REMOVED AND A TEST OF THE CONNECTION POTENTIALS MADE TO BE CERTAIN THAT IT IS SAFE TO HANDLE THE CONNECTION STRAPS.

When working in the connection box or any other part of the machine, it should be remembered that heater circuits and commutator compartment lights are separate from the usual machine power circuits and should be de-energized.