

**BUREAU OF RECLAMATION**  
**FACILITIES INSTRUCTIONS, STANDARDS & TECHNIQUES**

**Volume 3-28**

**INSTALLATION OF CONNECTORS ON  
PMG WIRING**

# Installation of Connectors on PMG Wiring

The PMG (permanent magnet generator) must frequently be removed from the main generator exciter for maintenance or testing. The following suggestion was submitted by a Reclamation electrician to facilitate removal and reinstallation of the PMG.

Quick disconnect of PMG leads may be accomplished by the use of cannon or amphenol plugs. Selection of receptacles is dependent on the voltage and current ratings and the number of circuits. Also of consideration is that since the PMG is to be removed, the female receptacle should be on the PMG and the male should be attached by a panel mounting to the exciter. An example would be: for 500 VAC and 22 ampere rating with 26 contacts; amphenol No's MS3100A-28-12P, 3106A-28-12S, and 3057-16 could be used.

The receptacle connections should be made up prior to installation. A bracket for the panel mounting male receptacle may also be required. The PMG should be in place for the installation so that proper length of cable is used. Care must be exercised when drilling is done for the mounting bracket, that none of the filings drop into the exciter.

The new connectors eliminate the need for disconnecting and connecting individual leads to the terminal block, the need for taping PMG main leads and the possibility of reversing wiring during replacement of the PMG. However, since new connections are added, the pin and socket contacts should be inspected periodically for dust or corrosion build up which may weaken the electrical characteristics.