

IC4484 AUXILIARY PLUGGING CONTROL

(RESISTOR AND NORMALLY OPEN CONTACTOR)

Before any adjustments, servicing, parts replacement or any other act is performed requiring physical contact with the electrical working components or wiring of this equipment, DISCONNECT THE BATTERY AND DISCHARGE CAPACITOR 1C.

FUNCTION

The function of this Auxiliary Plugging Control (APC) is to insert a resistor in series with the drive motors during a plugging operation. This resistor lowers the high currents flowing through the motor during plugging thus protecting the motor armature.

OPERATION

The Auxiliary Plugging Control card is connected in the circuit as shown in Fig. 2. The timer in the APC card times and operates the APC contactor after; (1) positive is applied through the APC contactor coil to the card and, (2) the main SCR (1 REC) is pulsing. With the APC contactor picked up, the APC resistor is by-passed for normal running.

When the truck is plugged, two things happen; (1) The APC contactor loses coil voltage and is dropped out when the directional switch goes through neutral and, (2) during plugging, a signal is generated by the motor armature. The APC card senses this generated signal across 4 REC and 1RS and holds off the APC contactor until the signal drops below a level set by the adjustable trimpot. This "holding off" of the APC contactor during plugging inserts the APC resistor, thus limiting the high plugging currents. The APC card also feeds a signal to the SCR panel which prevents 1A from picking up during plugging.

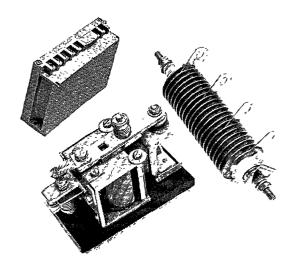


Fig. 1. IC4484 Auxiliary plugging control

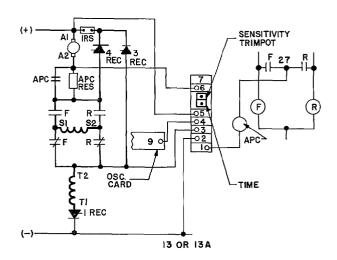


Fig. 2.

GENERAL ELECTRIC COMPANY, INDUSTRIAL CONTROL PRODUCTS DEPARTMENT, SALEM, VA. 24153

The information contained herein is intended to assist truck users and dealers in the servicing of SCR control furnished by the General Electric Company. It does not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance.

Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purpose, the matter should be referred to the truck manufacturer through his normal service channels, not directly to General Electric Company.