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 IC.

FUNCTION

The Pulse Monitoring Trip card (PMT) contains two functions—pulse monitor trip and static return-to-off.

The pulse monitor trip section is designed to shut down an SCR control on three types of faults as follows:

(1) 1A CONTACTOR POWER TIPS FAIL TO OPEN

Battery negative is applied to point 2 of the PMT card if 1A fails to open. If the fault does not clear within approximately 0.1 second, the PMT card operates, removing power by dropping out the F or R contactor.

(2) SCR FAILURES WHICH CAUSE FULL MOTOR TORQUE

a. Should the SCR (1 REC) turn on and stay on continuously, causing essentially battery negative to be applied to point 2 of the card, an SCR control misoperation has occurred; then the PMT card operates, removing power by dropping out the F or R contactor.

b. If 2 REC and 5 REC should remain on, battery negative will be applied to point 4 of the card. The PMT card will operate as above. To reset the PMT, open and reclose the key switch.

(3) OPERATION OF STATIC RETURN TO OFF (SRO)

The static return-to-off section (when wired per Figure 3B) will allow the operator to leave a truck and return without the truck restarting unless the operator first returns the control handle to the OFF position.

Fig. 1. Pulse monitoring trip card

SEE FIG. 3A FOR RESET

Fig. 2. Typical circuit

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.
TESTING

PULSE MONITOR TRIP

Jack the drive wheels up and operate the control in SCR range. Using an insulated tool, manually close the 1A contactor, and the PMT card should operate. If the PMT card fails to operate, check all wiring to the PMT card.

If all tests are good and the PMT section fails to operate, replace the card.

STATIC RETURN TO OFF

Open the seat switch.

Move the control handle to forward or reverse position.

Close the seat switch or late opening brake switch, and also close the accelerator start or early opening brake switch. The contactor should not close.

Return the control handle to off and then return the handle to forward or reverse position. The contactor should close.

If the SRO section fails to operate, check all the wiring to the PMT card. If all tests are good and the SRO section fails to operate, replace the card.