

## GC-08: USING GROUND-FAULT GROUND-CHECK MONITORS FOR LOAD DISCRIMINATION

Littelfuse Startco's SE-134C and SE-135 Ground-Fault Ground-Check (GF-GC) Monitors provide microprocessor-based ground-fault protection and ground-wire monitoring. Their groundwire-continuity circuits require an end-of-line termination to validate the ground-check loop. The SE-134C termination is an SE-TA6A; the SE-135 termination is an SE-TA12A.

An SE-134C will not accept an SE-TA12A as a valid ground-check termination and an SE-135 will not accept an SE-TA6A as a valid ground-check termination. This characteristic can be used to discriminate between loads without physically tracing the cable. Load discrimination can be used to prevent a load connected to the wrong outgoing plug from being energized.

When the loads are connected to the supply as shown in Fig. 1, the Littelfuse Startco GF-GC monitors do not accept the termination assemblies and, therefore, do not allow the loads to be energized. One use for load discrimination is to ensure loads are protected by adequate overload protection.

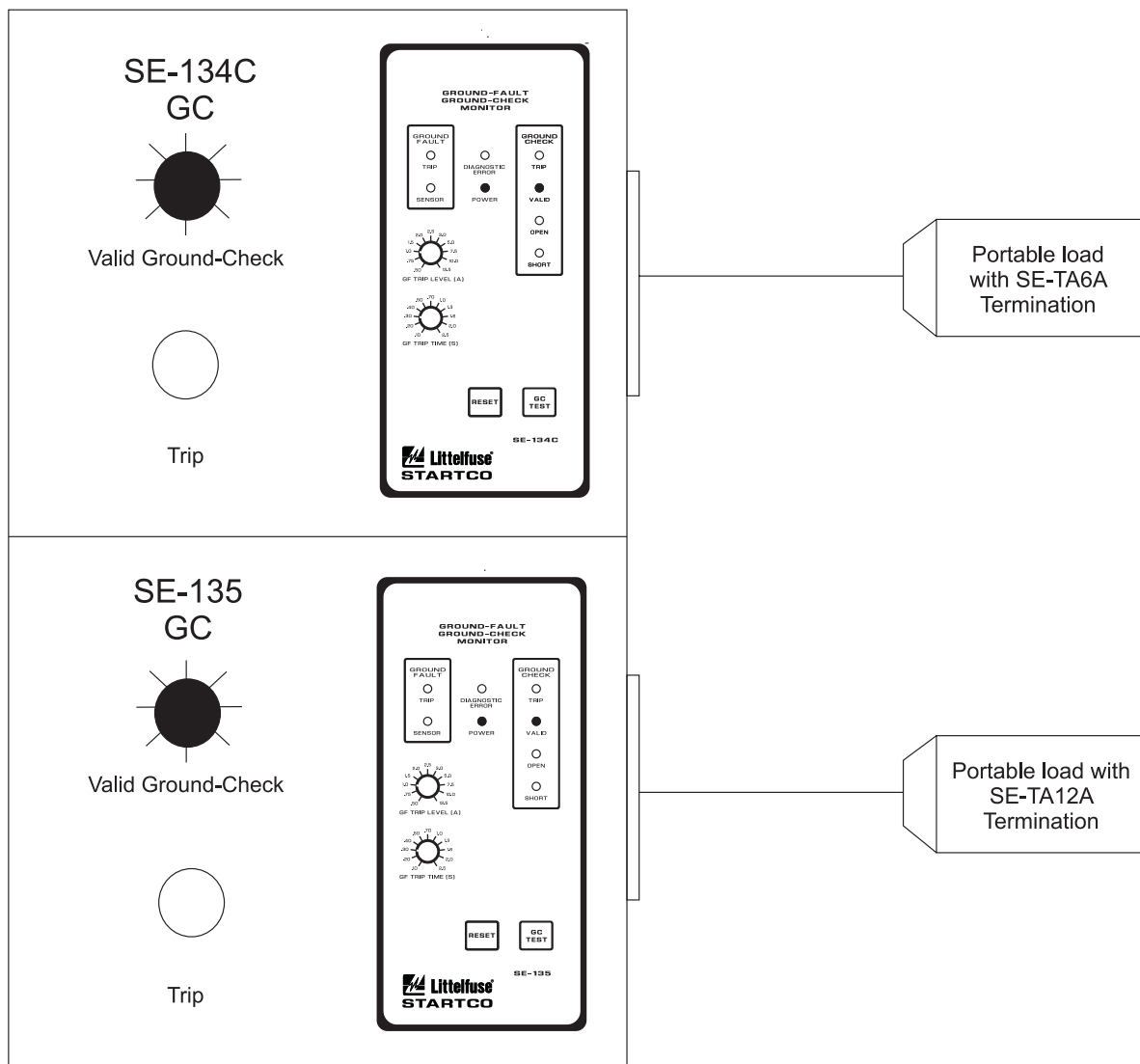


Figure 1: Ground-Check Monitors Connected to Correct Termination Assemblies

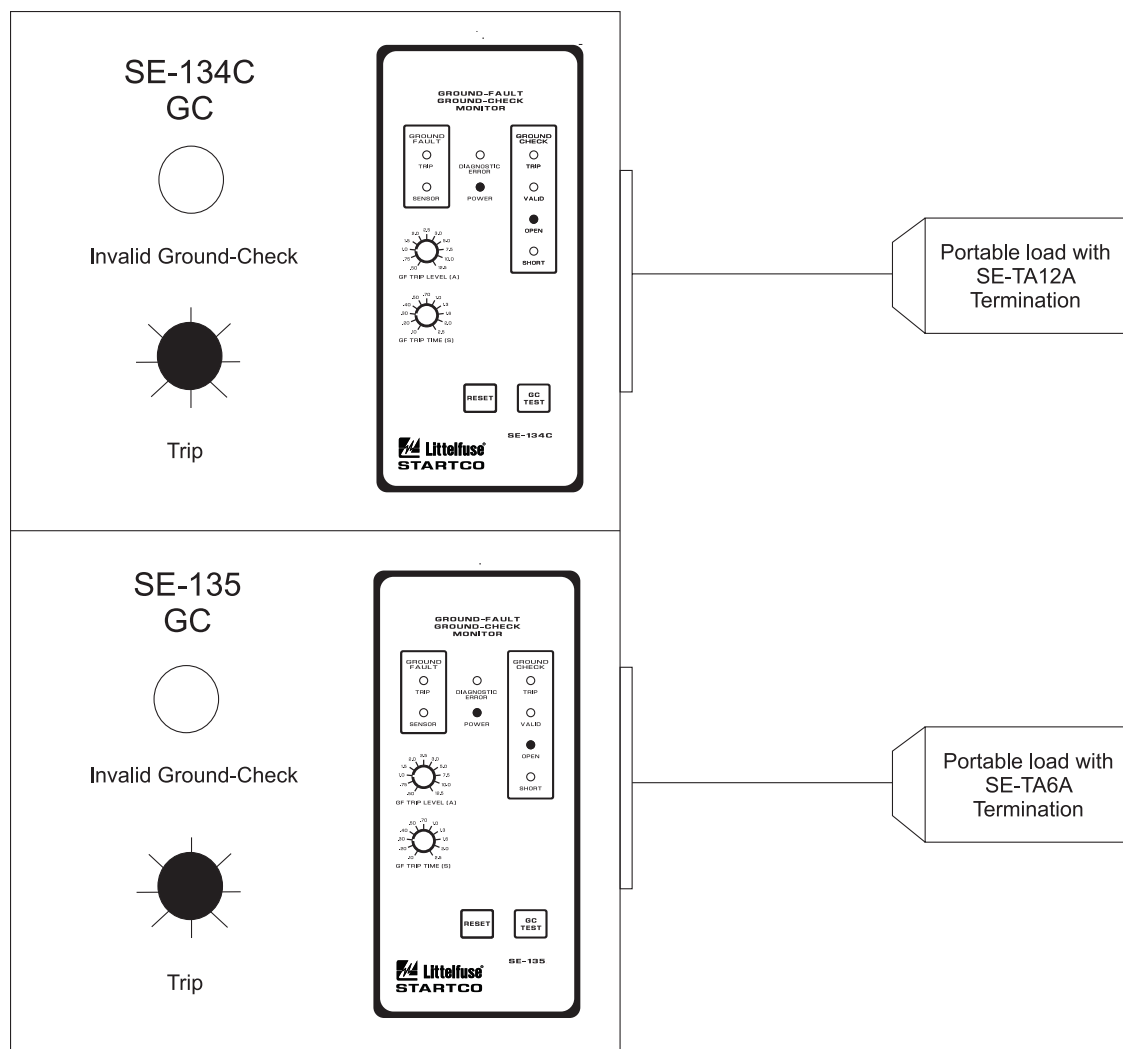


Figure 2: Ground-Check Monitors Connected to Incorrect Termination Assemblies