

INSTALLATION STEPS SUMMARY

- A - Cut cables to length and route in Equipment and Magnet Rooms
- B - Connect Cables at Penetration Panel
- C - Terminate Runs 762, 763, and 764 for Power Cabinet Gradients
- D - Terminate Runs 762, 763, and 764 in Magnet Room

WARNING!

FERROUS MATERIAL HAZARD! THE RATCHETING CRIMP TOOL, 46-306755G1, REQUIRED FOR THIS PROCEDURE CONTAINS FERROUS MATERIAL AND WILL BE STRONGLY ATTRACTED TO MAGNET AND MAY BECOME A DANGEROUS PROJECTILE. KEEP ALL FERROUS TOOLS AT LEAST 10 FEET AWAY FROM THE MAGNET.

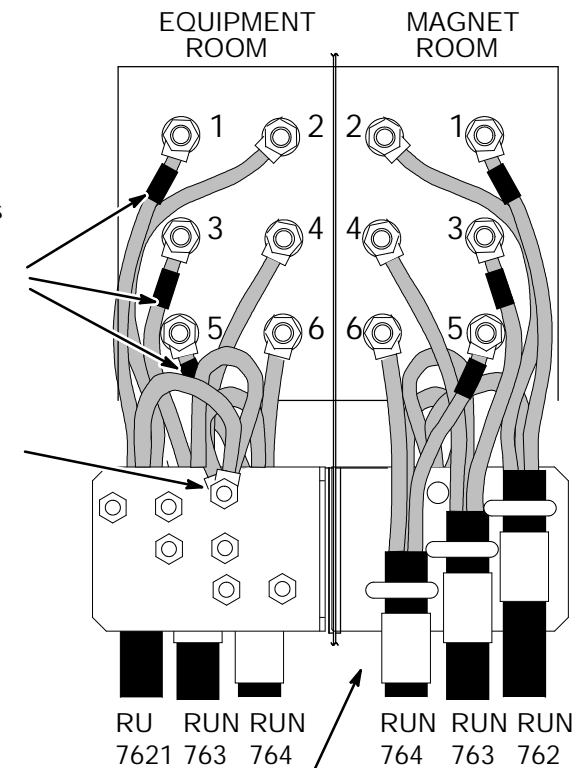
IF MAGNET IS AT FULL FIELD - CUT GRADIENT CABLE TO LENGTH AND REMOVE FROM MAGNET ROOM TO PERFORM CABLE TERMINATION PROCEDURES.

- A - CUT CABLES TO LENGTH AND ROUTE IN EQUIPMENT AND MAGNET ROOMS

- ① Verify that 100 ft. (30.5 M) length of supplied Run 762, 763, and 764 cable is sufficient to route from Power Cabinet to Penetration Panel and Penetration Panel to Magnet Gradient Cable Terminal Block. This cable has identical ring terminals at each end. These ring terminals are to be connected to both sides of the Penetration Panel Gradient Filter.
- ② Unroll each cable. Measure length from each end for magnet room and equipment room routes. Verify sufficient slack is allowed for termination and connection and then mark location to cut cables to length.
- ③ Cut cables to length for magnet room and equipment room.
- ④ Label cut ends with applicable run number. Locate furnished bag of parts and attach terminals, shrink tubing, and labels to each cable which was cut to length. See Procedures C and D.
- ⑤ Route Run 762, 763, and 764 from magnet room side of Penetration Panel to Power cabinet. See Procedures C for connection to Penetration Panel.
- ⑥ See TAB 5 for connection of Runs 762, 763, and 764 to Power cabinet.
- ⑦ Route Run 762, 763, and 764 from equipment room side of Penetration Panel to Magnet Gradient Cable Terminal Block. See Procedures D for connection to Penetration Panel.
- ⑧ See TAB 2 for connection of Runs 762, 763, and 764 to Magnet Gradient Cable Terminal Block.

- B - CONNECT CABLES AT PENETRATION PANEL

- ① Remove gradient filter terminal covers.
- ② Route Run 762, 763, and 764 to gradient filter on Penetration Panel.
- ③ Secure each cable to strain-relief bracket with U-bolts.
- ④ Connect wires to gradient filter terminals as marked. Align terminals to obtain maximum spacing from other terminals and conductive metal objects. Tighten nuts with a torque wrench to 35 ft-lbs.
Note: Red tape indicates positive (+) wires #1, #3, and #5.
- ⑤ Secure GND lead wire on Ground Stud for each cable Run.

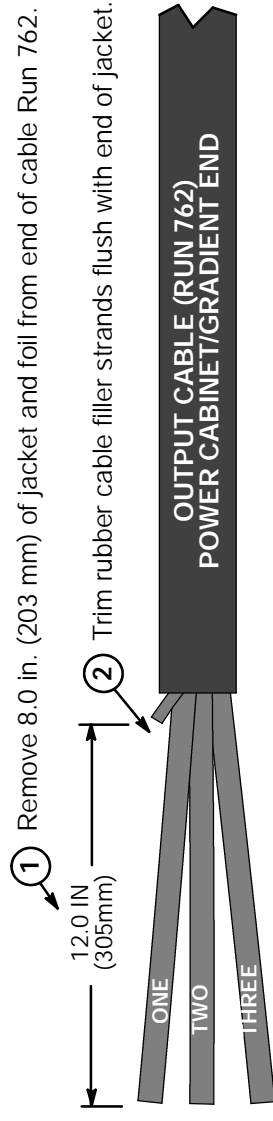


- ⑥ Repeat procedure and connect cables to Gradient Filter on other side of Penetration Panel.
- ⑦ Replace gradient filter terminal covers.

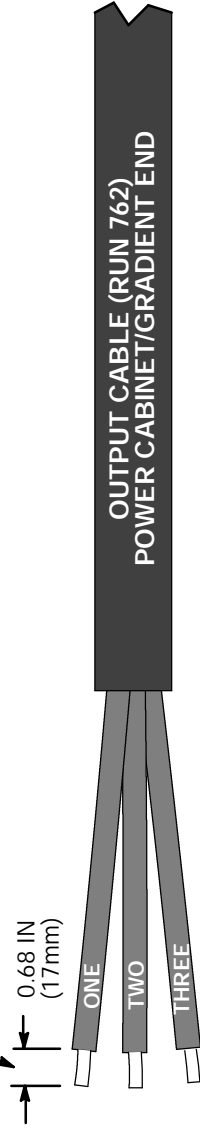
TOOLS REQUIRED: 2135776 - Cable Crimper/Stripper Kit

- C - TERMINATE RUNS 762, 763, AND 764 FOR POWER CABINET GRADIENTS

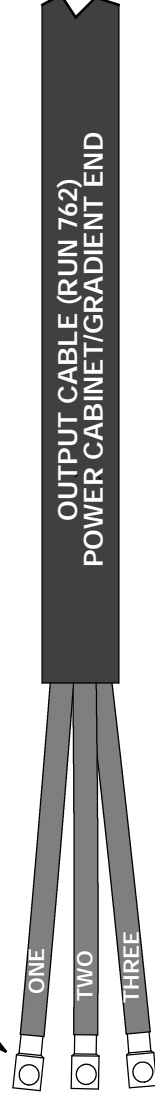
Note: The following steps are required to terminate the end of the cable that was cut in Step A3. The other end of the cable is connected to the Penetration Panel.



③ Strip 0.68 in. (17mm) of insulation from end of "THREE" wire.

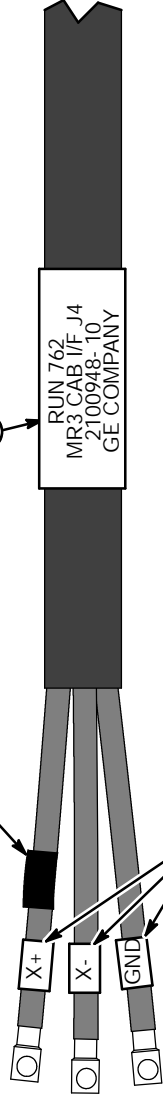


④ Crimp a furnished T&B #G2- 14 terminal on GND wire end using a Ratcheting Crimper with #2 die.



⑤ Wrap red tape around wire "ONE".

⑥ Place furnished "RUN 762" label on cable.

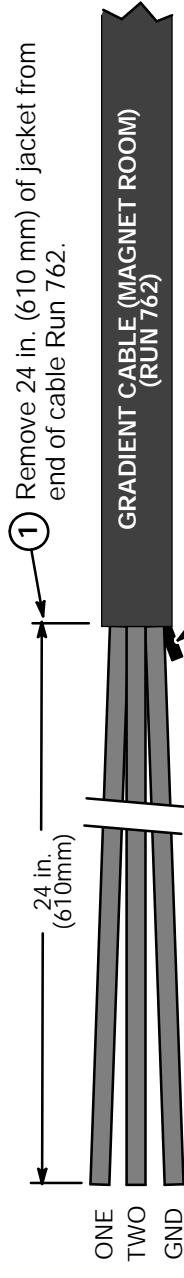


⑦ Place furnished "X+" label on wire "ONE".
Place furnished "X-" label on wire "TWO".
Place furnished "GND" label on wire "THREE".

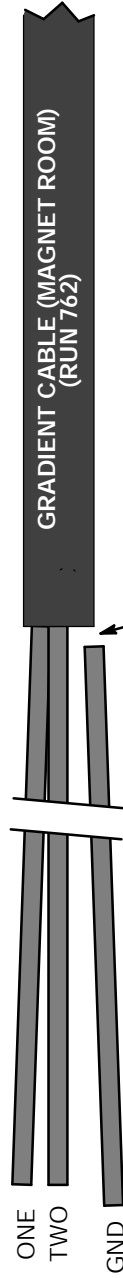
⑧ Repeat above process for Runs 763 (Y+, Y-) and 764 (Z+, Z-).
Note: Red tape, Y+ (RUN 763) and Z+ (RUN 764) labels are attached to wire "ONE".

- D - TERMINATE RUNS 762, 763, AND 764 FOR MAGNET ROOM

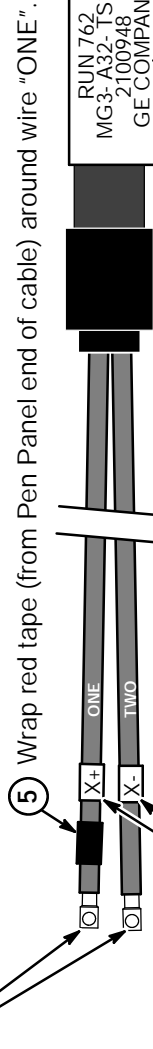
Note: The following steps are required to terminate the end of the cable that was cut in Step A4. The other end of the cable is connected to the Penetration Panel.



② Trim rubber cable filler strands flush with end of jacket.



④ Strip 0.68 in. (17 mm) of insulation from end of each wire and crimp a furnished T&B #G2- 38 terminal on each wire end using a Ratcheting Crimper with #2 die.



⑥ Place furnished "X+" label on wire "ONE".
Place furnished "X-" label on wire "TWO".

⑧ Repeat above process for Runs 763 and 764.

Note: Red tape, Y+ (RUN 763) and Z+ (RUN 764) labels are attached to wire "ONE".