

INSTALLATION STEPS SUMMARY

- A1 – Gradient Cable Information and Supplied Labels
- A2 – Cut Cables to Length and Route in Magnet Room
- A3 – Terminate Runs 982, 983, and 984 for Magnet Room
- A4 – Terminate Runs 985, 986, and 987 for Magnet Room

WARNING!

FERROUS MATERIAL HAZARD! THE RATCHETING CRIMP TOOL 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.

TOOLS REQUIRED: 2134776 – Cable Crimper/Stripper Kit

A1 – GRADIENT CABLE INFORMATION AND SUPPLIED LABELS

Nine cables have been delivered to site. All have three lead wires with terminals and attached cable labels at one end. The leads on this cable end are connected to the Twin Gradient Filter on the Penetration Panel. The other end is cut flush with no labels or terminals. The nine cables with supplied labels are as follows:

RUN	PART #	LABEL	LENGTH	SUPPLIED LABELS
979	2100948-34	PP1-A7-X	75.5 ft.	(1) RUN 976, (1) RUN 979, (2) X+, (1) X-, (1) GND, (1) XZM-, (1) XWB-
980	2100948-35	PP1-A7-Y	75.5 ft.	(1) RUN 977, (1) RUN 980, (2) Y+, (1) Y-, (1) GND, (1) YZM-, (1) YWB-
981	2100948-36	PP1-A7-Z	75.5 ft.	(1) RUN 978, (1) RUN 981, (2) Z+, (1) Z-, (1) GND, (1) ZM-, (1) ZWB-
982	2100948-42	PP1-A7-Z _M	50.5 ft.	(1) RUN 982, (1) Z _M - (1) Z _M +
983	2100948-41	PP1-A7-Y _{ZM}	50.5 ft.	(1) RUN 983, (1) Y _{ZM} - (1) Y _{ZM} +
984	2100948-40	PP1-A7-X _{ZM}	50.5 ft.	(1) RUN 984, (1) X _{ZM} - (1) X _{ZM} +
985	2100948-45	PP1-A7-Z _{WB}	50.5 ft.	(1) RUN 985, (1) Z _{WB} - (1) Z _{WB} +
986	2100948-44	PP1-A7-Y _{WB}	50.5 ft.	(1) RUN 986, (1) Y _{WB} - (1) Y _{WB} +
987	2100948-43	PP1-A7-X _{WB}	50.5 ft.	(1) RUN 987, (1) X _{WB} - (1) X _{WB} +

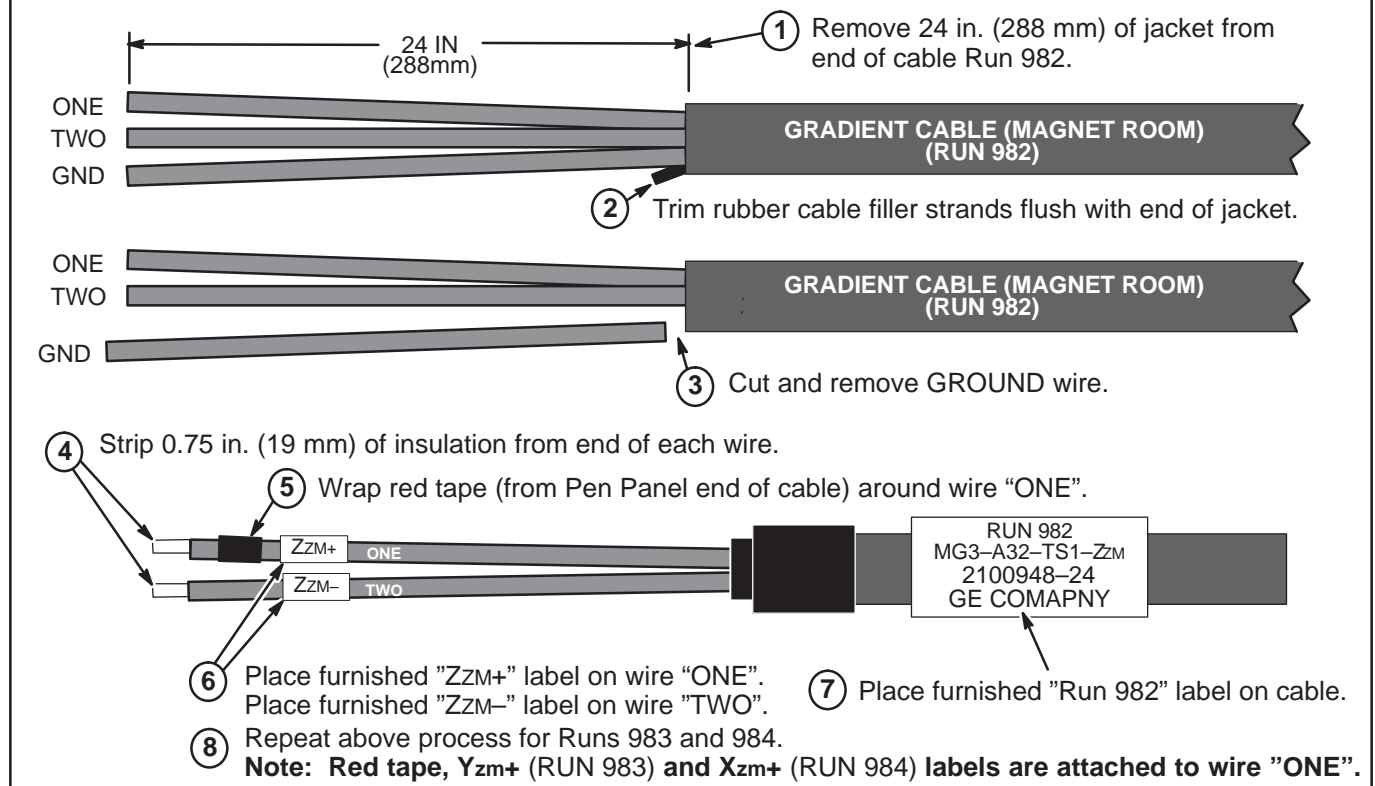
Note: Verify that 50.5 ft. (23 M) length of supplied Runs 982, 983, 984, 985, 986, and 987 cable is sufficient to route from the Penetration Panel to Body Coil Gradient Cables at rear of magnet.

A2 – CUT CABLES TO LENGTH AND ROUTE IN MAGNET ROOM

- 1 Move Run 982, 983, 984, 985, 986, and 987 cables to magnet room. Route cables from Gradient Filter of Penetration Panel to Body Coil gradient cables at rear of magnet.
- 2 Verify sufficient slack of at least two feet (610mm) is allowed for termination and connection. Mark location for cutting. Cut cables to length and label cut ends with applicable run number. **Do not cut Body Coil gradient cables.**
- 3 Locate furnished bag of parts and attach terminal and labels to each cable which was cut to length. See Procedures **A3** and **A4**.
- 4 See Procedure **B1** and **B2** for connection to Penetration Panel.
- 5 See Procedure **B3** for connection of Runs 982, 983, 984, 985, 986, and 987 to Body Coil gradient cables.

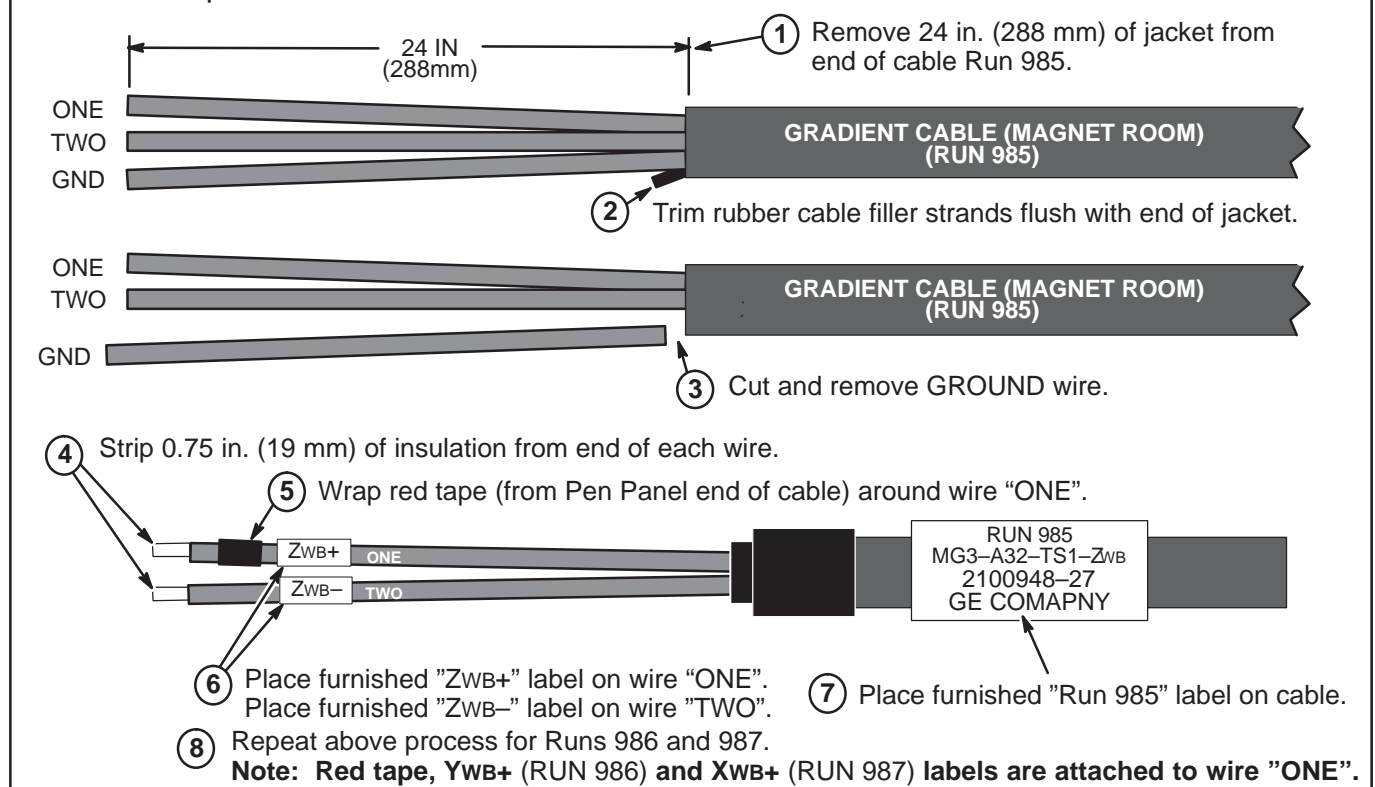
A3 – TERMINATE RUNS 982, 983, AND 984 FOR MAGNET ROOM

Note: The following steps are required to terminate the end of the cable that was cut in Step **A2**. The other end of the cable is connected to the Penetration Panel.



A4 – TERMINATE RUNS 985, 986, AND 987 FOR MAGNET ROOM

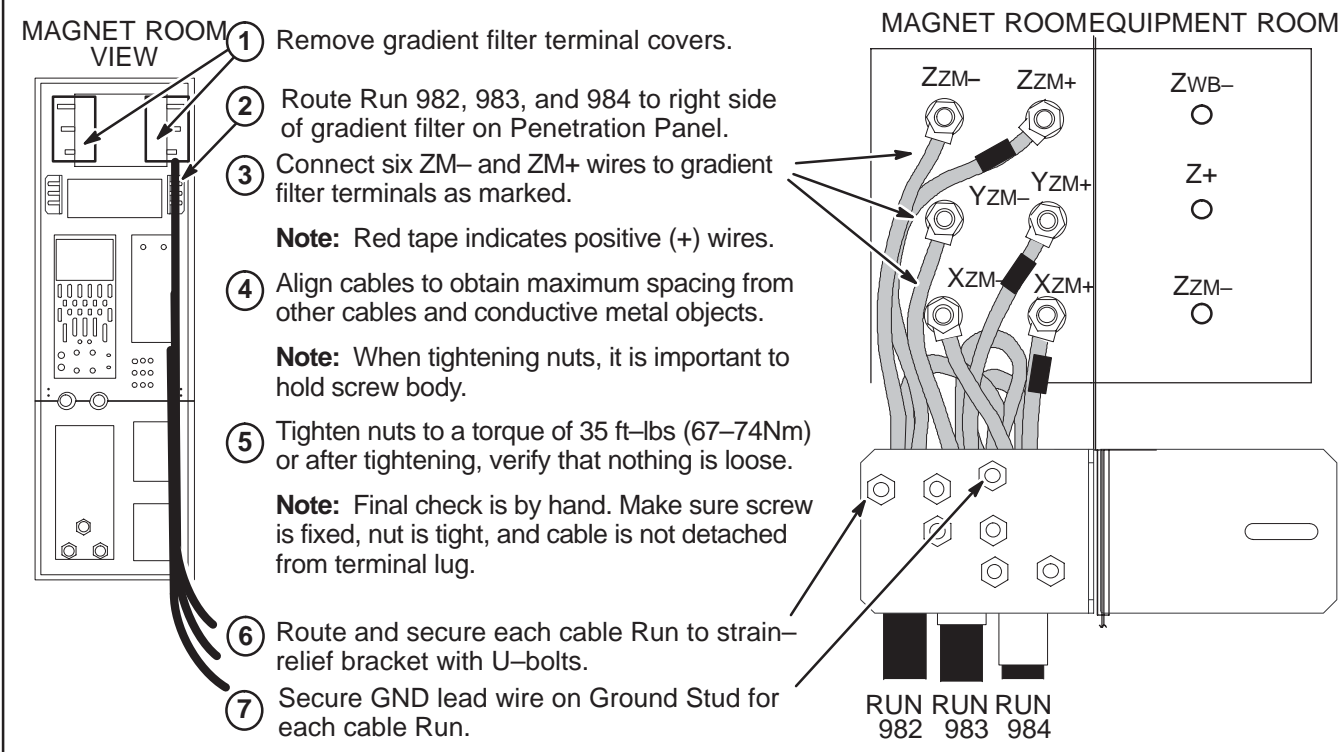
Note: The following steps are required to terminate the end of the cable that was cut in Step **A2**. The other end of the cable is connected to the Penetration Panel.



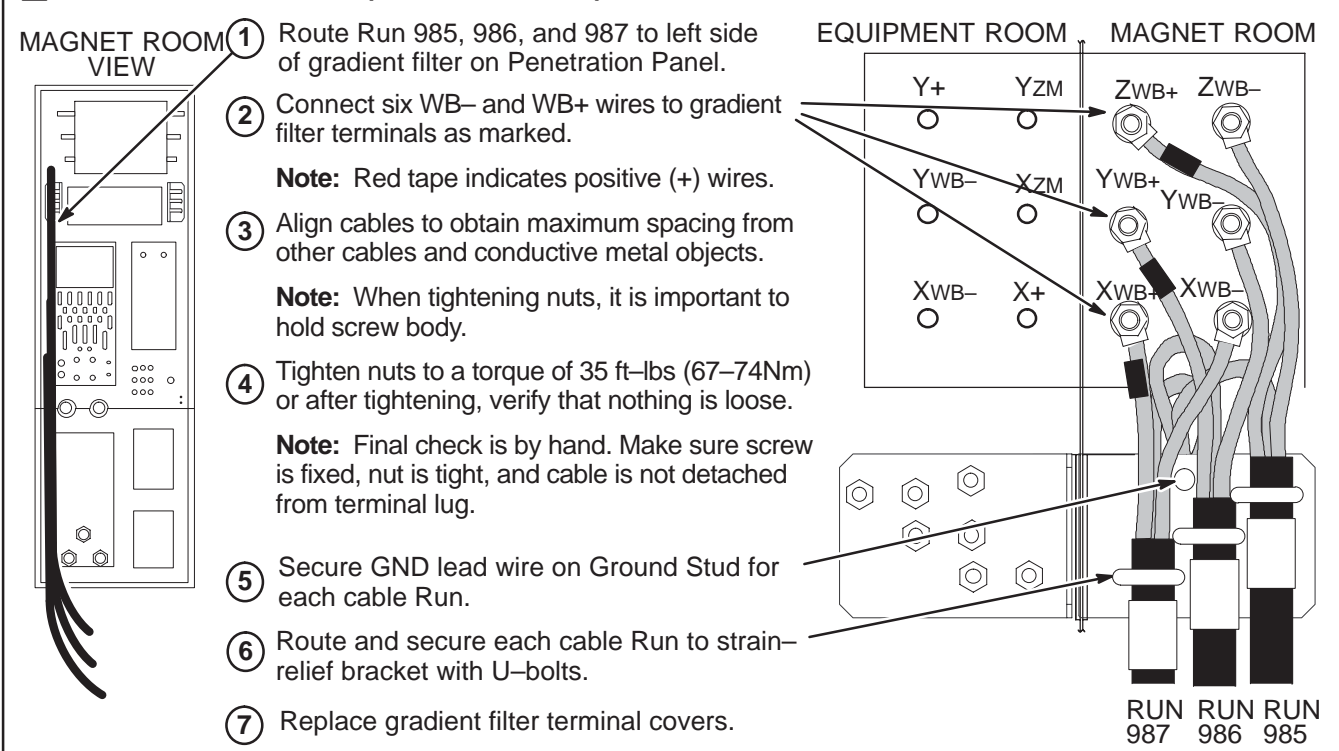
INSTALLATION STEPS SUMMARY

- ☐ B1 – Connect ZM (Zoom) Cables to Penetration Panel
- ☐ B2 – Connect WB (Whole Body) Cables to Penetration Panel
- ☐ B3 – Connection of Body Coil Gradient Cables to Runs 982, 983, 984, 985, 986, and 987

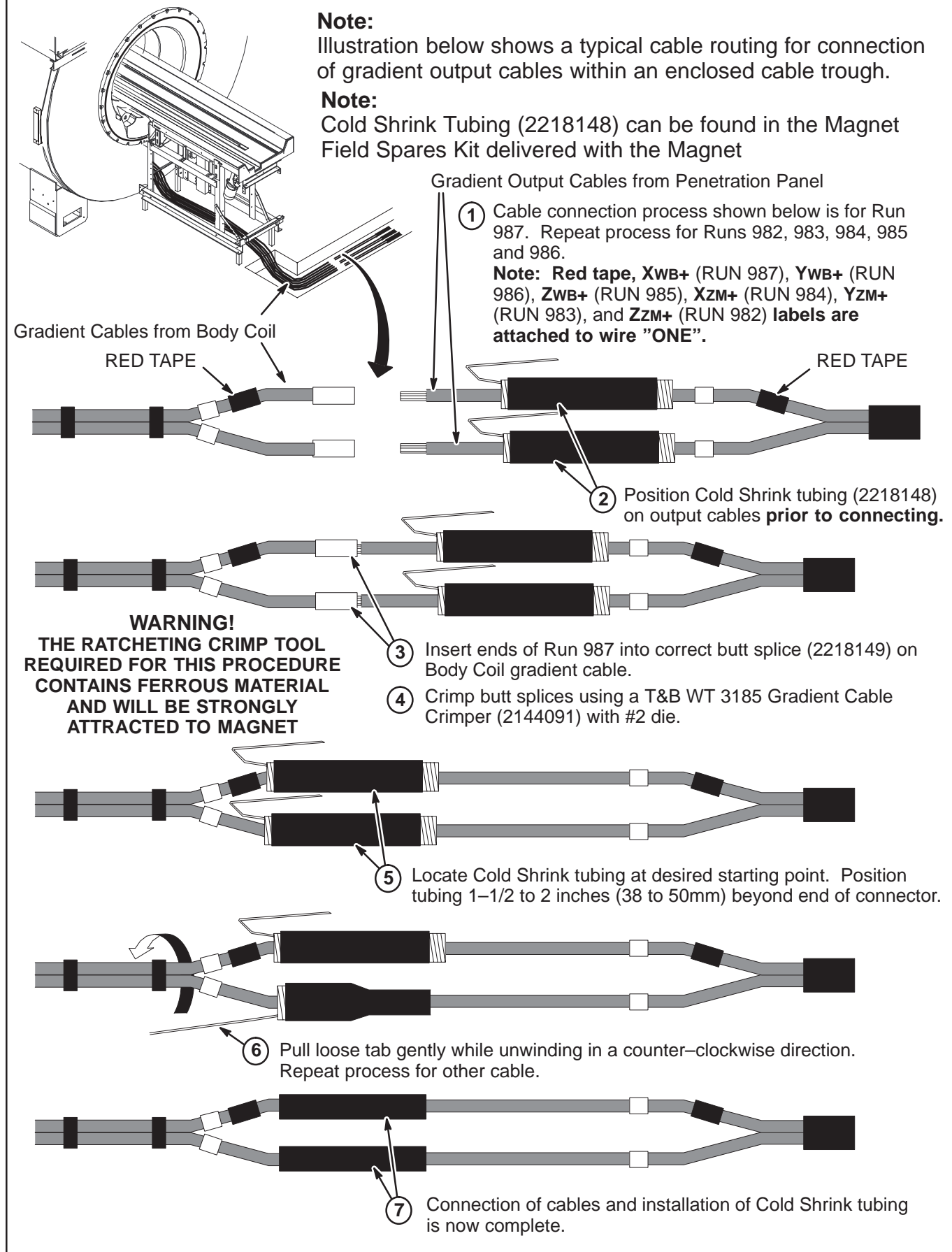
☐ B1 – CONNECT ZM (ZOOM) CABLES TO PENETRATION PANEL



☐ B2 – CONNECT WB (WHOLE BODY) CABLES TO PENETRATION PANEL



☐ B3 – CONNECTION OF BODY COIL GRADIENT CABLES



INSTALLATION STEPS SUMMARY

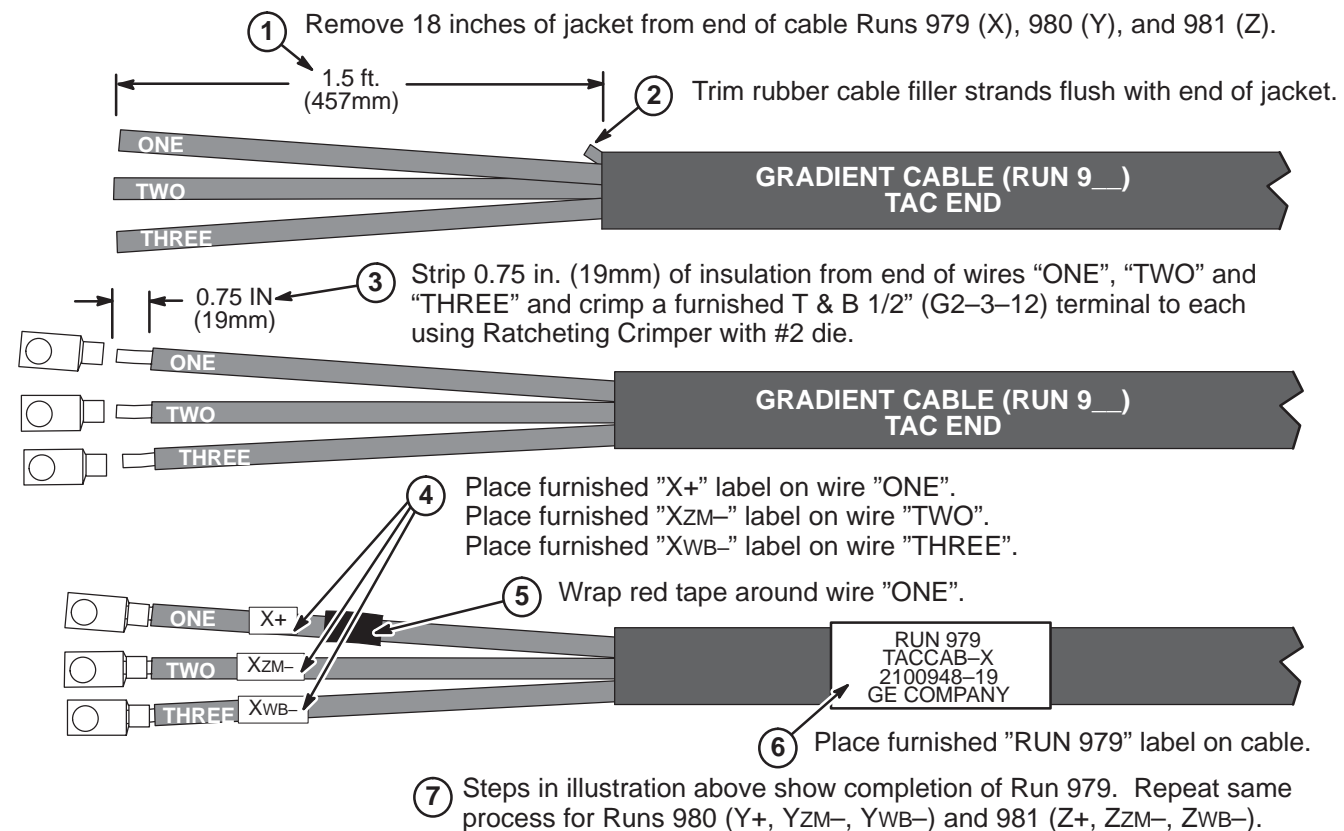
- ☐ C1 – Cut cables to length and route in Equipment Room
- ☐ C2 – Terminate Runs 979, 980, and 981 For TAC Cabinet from Penetration Panel
- ☐ C3 – Route Ground Cables to Runs 979, 980, and 981
- ☐ C4 – Connection Ground Cables and Runs 979, 980, and 981 to Penetration Panel

C1 – CUT CABLES TO LENGTH AND ROUTE IN EQUIPMENT ROOM

- 1 Move Run 979, 980, and 981 cables to equipment room. Route cables from Gradient Filter of Penetration Panel to right side of interface panel at rear of Twin Accessory Cabinet (TAC). The end of cable with terminals will be connected to Penetration Panel.
- 2 Verify sufficient slack of at least two feet (610mm) is provided for termination and connection. Mark location for cutting. Cut cables to length and label cut ends with applicable run number.
- 3 Route remainder of cables from rear of TAC to rear of ACGD/PDU cabinet. Make sure enough slack is provided for termination and connection to cabinet. Mark location for cutting. Cut cables to length.
- 4 Locate furnished bag of parts and attach terminals and labels to each cable which was cut to length. See Procedures C2 and D2a or D2b for TAC Cabinet terminations and D1 for ACGD/PDU cabinet terminations.
- 5 See Procedure C3 for routing and terminating of Run 988 ground wires.
- 6 See Procedure C4 for connection to Equipment room side of Penetration Panel.
- 7 See TAC installation instructions (DIRECTION 2308633 IN TAB 17) for connection of Runs 976, 977, 978, 979, 980, and 981 to TAC cabinet.
- 8 See ACGD/PDU Cabinet installation instructions (DIRECTION 2308653 IN TAB 15) for connection of Runs 976, 977, and 978 to ACGD/PDU cabinet.

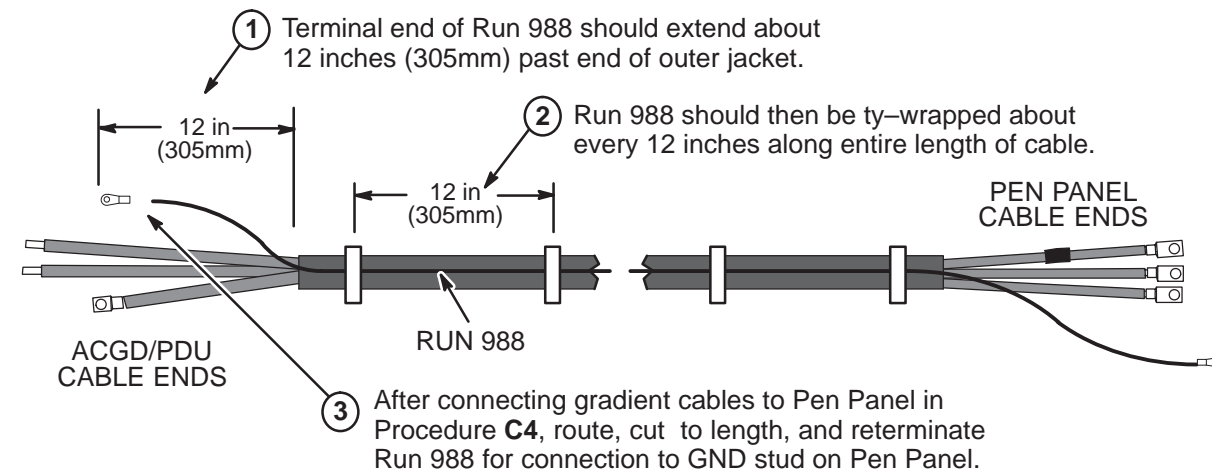
C2 – TERMINATE RUNS 979, 980, & 981 FOR TAC CABINET FROM PEN PANEL

Note: The following steps are required to terminate the end of the cable that was cut in Procedure C1, Step 2. The other end of the cable is connected to the Penetration Panel.



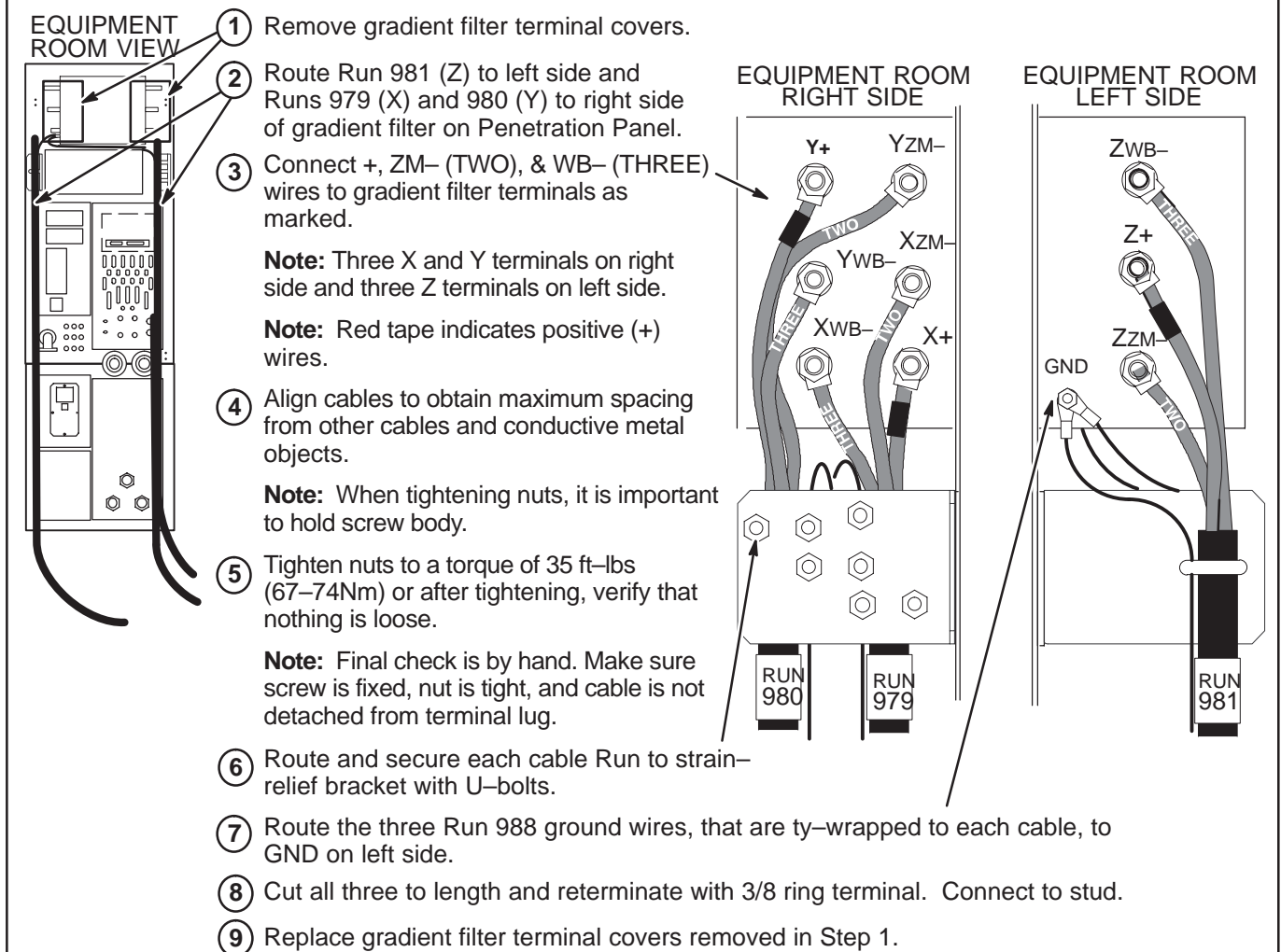
C3 – ROUTE GROUND CABLES TO RUNS 979, 980, AND 981

Note: For each gradient cable routed between the Pen Panel and TAC, a ground wire, Run 988 (2283297), has to be ty-wrapped to each cable.



Excess ground cable can not be coiled. It must be cut to length and reterminated.

C4 – CONNECT GROUND CABLES AND RUNS 979, 980, AND 981 TO PEN PANEL



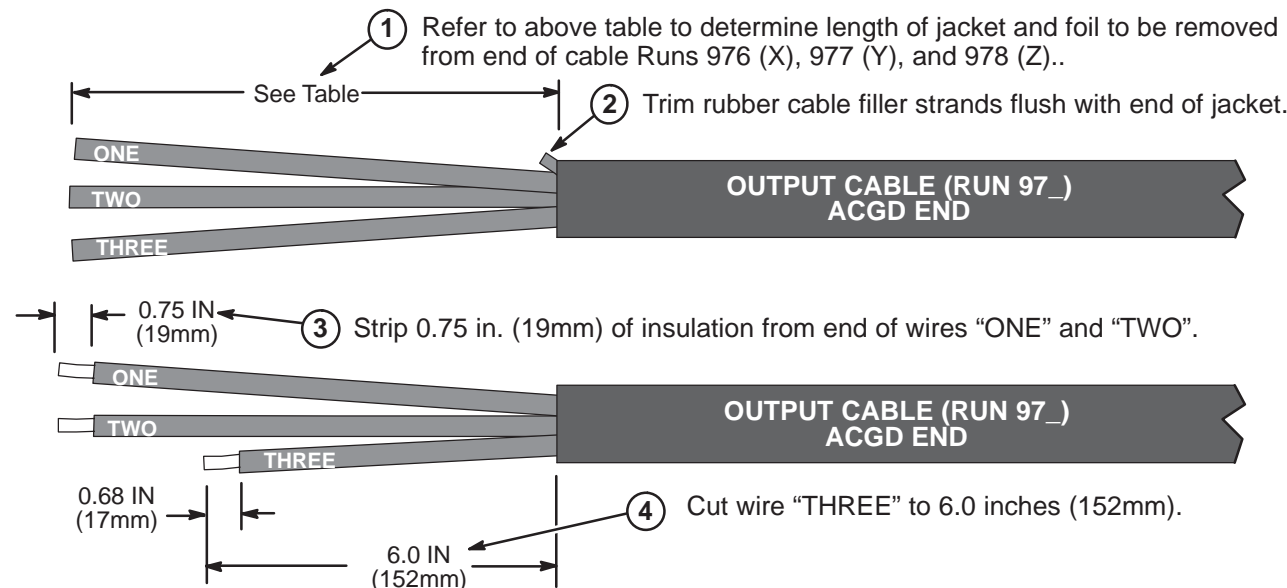
INSTALLATION STEPS SUMMARY

- D1 – Terminate Runs 976, 977, and 978 for Connection to ACGD/PDU Cabinet
- D2a – Connect Runs 976, 977, and 978 to TAC Cabinet from ACGD/PDU OR
- D2b – Terminate Runs 976, 977, and 978 for TAC Cabinet from ACGD/PDU

D1 – TERMINATE RUN 976, 977, & 978 FOR CONNECTION TO ACGD/PDU CABINET

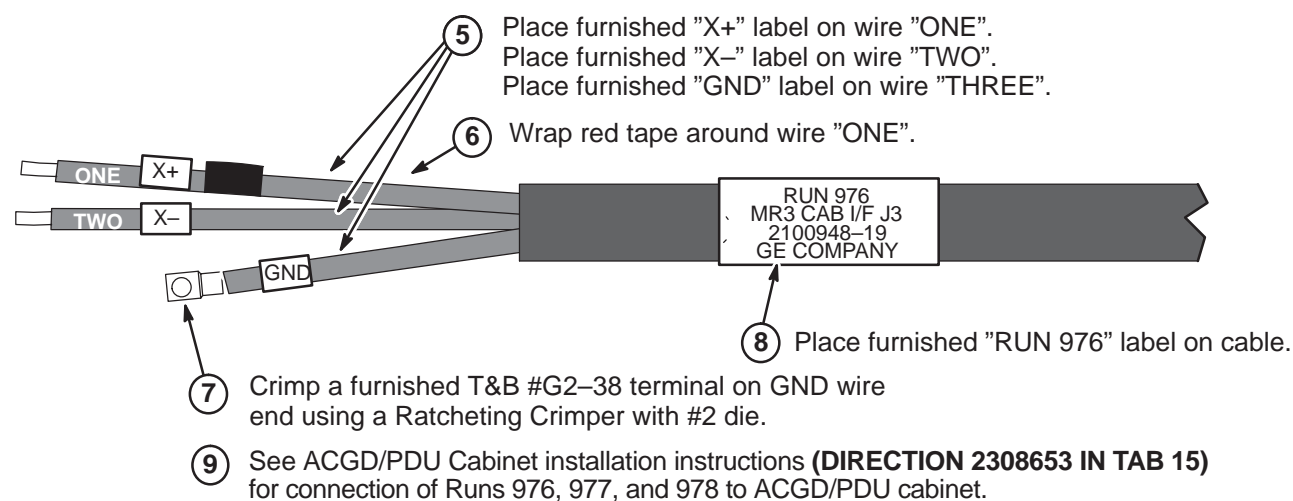
Note: The following steps are required to terminate the end of the cable that was cut in Procedure C1, Step 3. The other end of the cable is connected to the TAC Cabinet.

	Run 976	Run 977	Run 978
Jacket Length to be Removed	8.0 IN (203mm)	11.0 IN (280mm)	14.0 IN (356mm)



Note: Steps in illustration below show completion of Run 976. Repeat same process for Runs 977 (Y+, Y-) and 978 (Z+, Z-).

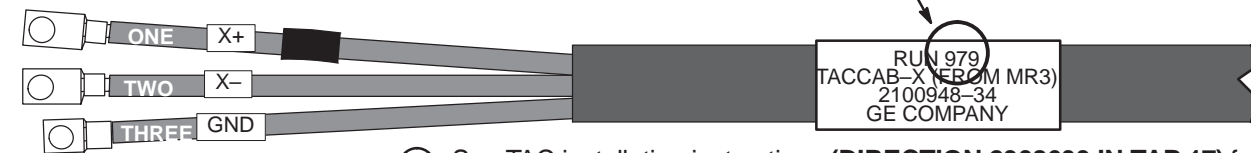
Red tape, Y+ (RUN 977) and Z+ (RUN 978) labels are attached to wire "ONE".



D2a – CONNECT RUNS 976, 977, AND 978 TO TAC CABINET FROM ACGD/PDU

A change is in process where cables delivered to site will be preterminated for the TAC Cabinet connection of Runs 976, 977, and 978. (The remainder of the cable cut in Procedure C1. If this is the cable delivered to your site, then proceed to Step 1 below.

Note: Early production cables contain an error on the label. Correct the label(s) as follows: Change Run 979 to 976, 980 to 977, and 981 to 978.

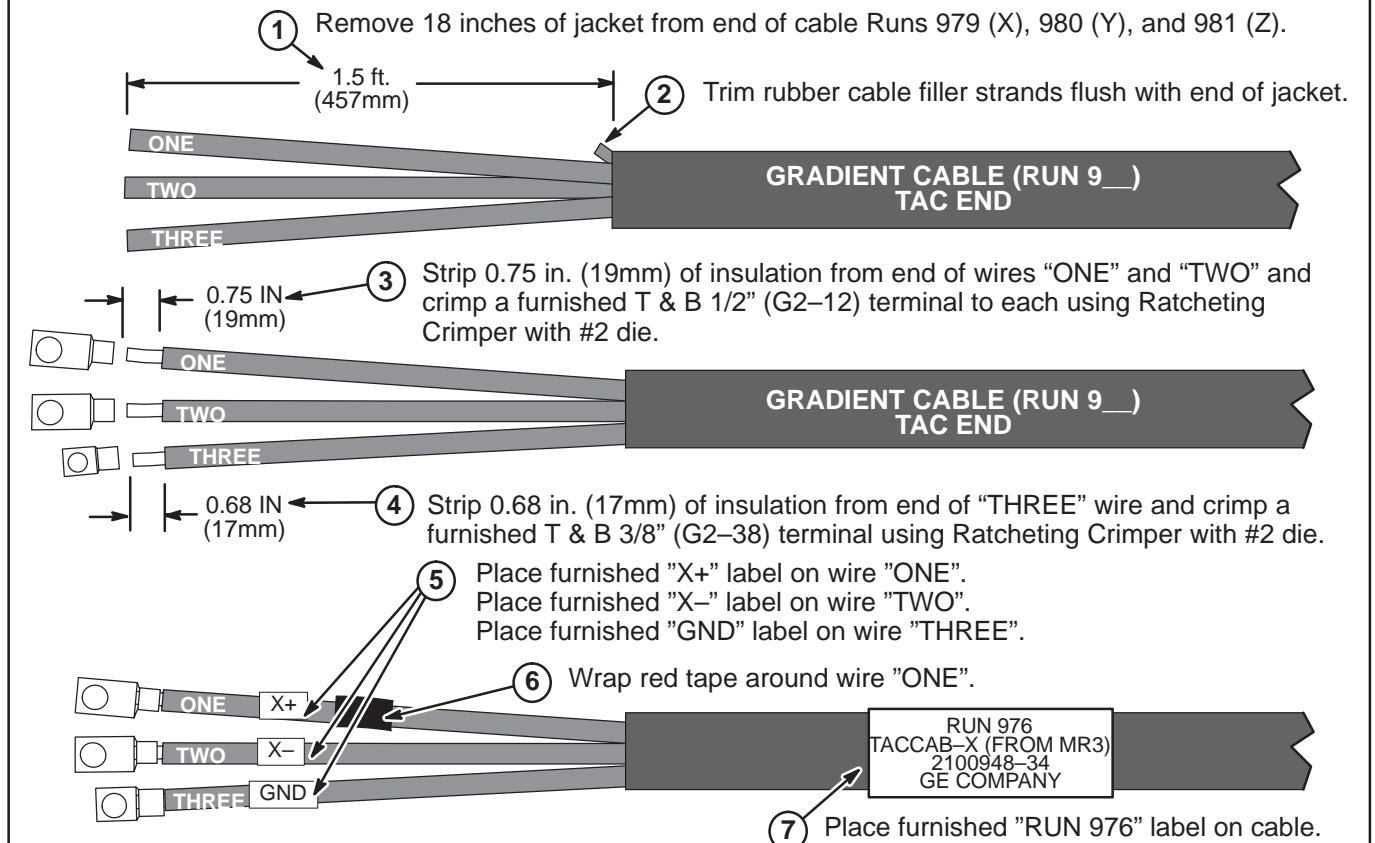


① See TAC installation instructions (DIRECTION 2308633 IN TAB 17) for connection of Runs 976, 977, 978, 979, 980, and 981 to TAC cabinet.

Note: Early versions of the gradient cables delivered to site required the cable wires to be terminated for connection to the TAC Cabinet for Runs 976, 977, and 978 as in Procedure D2b below. Complete steps 1 thru 9 in Procedure D2b below if these are the style of cables delivered to your site.

D2b – TERMINATE RUNS 976, 977, AND 978 FOR TAC CABINET FROM ACGD/PDU

Note: The following steps are required to terminate the end of the cable that was cut in Procedure C1, Step 3. The other end of the cable is connected to the ACGD/PDU Cabinet.



⑧ Steps in illustration above show completion of Run 976. Repeat same process for Runs 977 (Y+, Y-, GND) and 978 (Z+, Z-, GND).

⑨ See TAC installation instructions (DIRECTION 2308633 IN TAB 17) for connection of Runs 976, 977, 978, 979, 980, and 981 to TAC cabinet.