

CABLE SPLICING - GENERAL
WET SECTION REPLACEMENT
76 AUXILIARY TEST SET

NOTES CONCERNING THIS ADDENDUM

This Addendum contains instructions for the replacement of wet sections of cable using the 76-Auxiliary Test Set, a locally designed test set to be used only in wet section replacements.

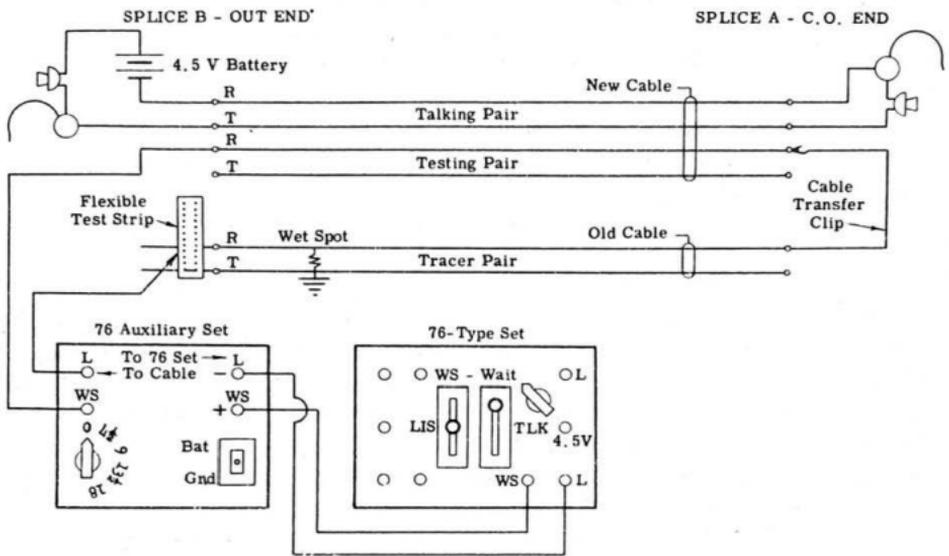
The cross-reference "See Addendum" should be written in following Part 5 to indicate the addition of new instructions. WR-Sheet G50.668.2, Issue A, is hereby canceled. The circuit diagram and instructions inside the cover of the 76 test set, pertaining to "Wire Identification - Wet Spots," shall be crossed out with a reference to see this addendum for testing instructions.

6. SECTION REPLACEMENT OF WET CABLE

6.01 Where the insulation of a cable is so wet that it is impracticable to identify the pairs using tone (or by manually tracing the pairs around the core, where a short length of cable is involved), a testing circuit may be set up using a 76-Type test set in conjunction with the 76-Auxiliary test set. The combined use of these two test sets will permit accurate identification of wet pairs in order to make a section throw of the faulty cable.

6.02 If the wet section to be replaced is layer type cable, the splicer at the C.O. end who will select the pairs to be identified, should choose adjacent pairs around each layer to facilitate rapid identification. Where unit type cable is encountered the splicer at the out end should select a color group and insert the tip wire of each pair in a flexible test strip. Approximately 1/2 inch of insulation should be removed from the wire as it is placed in the test strip, so that a contact can be made when the strip is used during the testing operation.

6.03 The circuit arrangement for identifying pairs through a wet section of cable is shown in the following diagram.



6.04 The method of identifying pairs through a wet section of cable is as follows:

- (1) Identify a pair in the new cable as prescribed in G50.213.2, and establish a talking pair between the two splices using a separate 4-1/2 volt battery as shown in the circuit diagram.
- (2) Identify a pair in the new cable to be used as a return path for the testing circuit.
- (3) Select a tracer pair in the old cable and open it in both splices. It is essential that the same tracer pair be selected at both splices.
- (4) At Splice A, connect the ring side of the testing pair in the new cable to the ring side of the tracer pair in the old cable.
- (5) At Splice B, connect the WS post of the 76 set to the +WS post of the Auxiliary set: Connect the lower L post of the 76 set to the -L post of the Auxiliary set: Connect the WS post of the Auxiliary set to the ring of the testing pair in the new cable: Connect the L post of the Auxiliary set to the ring of the tracer pair in the old cable.

- (6) Set the keys of the 76 set in the LIS and WS-WAIT position. Set the rheostat in the zero position: Turn the voltage selector switch of the Auxiliary set clockwise until the buzzer in the 76 set operates.
- (7) Turn the rheostat of the 76 set clockwise until the buzzer ceases to operate. If at the extreme position the buzzer is still operating, throw the WS-WAIT key to TLK position and after a two second pause return the key to the WS-WAIT position which should stop the operation of the buzzer.
- (8) Turn the rheostat of the 76 set counter clockwise carefully until the buzzer just operates; then continue turning 1/2 scale division beyond this point. With this setting the buzzer will operate only when the test leads are connected to both ends of a conductor of the same resistance in the old cable.
- (9) At Splice A, select a pair in the group agreed upon, open it, and place the test clip from the new cable on the tip side of the pair.
- (10) At Splice B, remove the test cord from the tracer pair in the old cable and use this cord to run the flexible test strips. When the buzzer operates stay on the conductor, and throw the Bat-Gnd key on the Auxiliary test set from one position to the other. If the buzzer operates when the key is in either position it indicates the proper conductor has been selected. The ring side of the pair is checked in the same manner and then both splicers will splice this pair to a pair in the new cable which has been previously identified.

Note: It is very important that, if the buzzer fails to operate on both sides of a conductor, that the splicer leave the key in the position where the buzzer failed to operate and continue to run the strip until a conductor is found on which the buzzer will operate with the key in both positions.