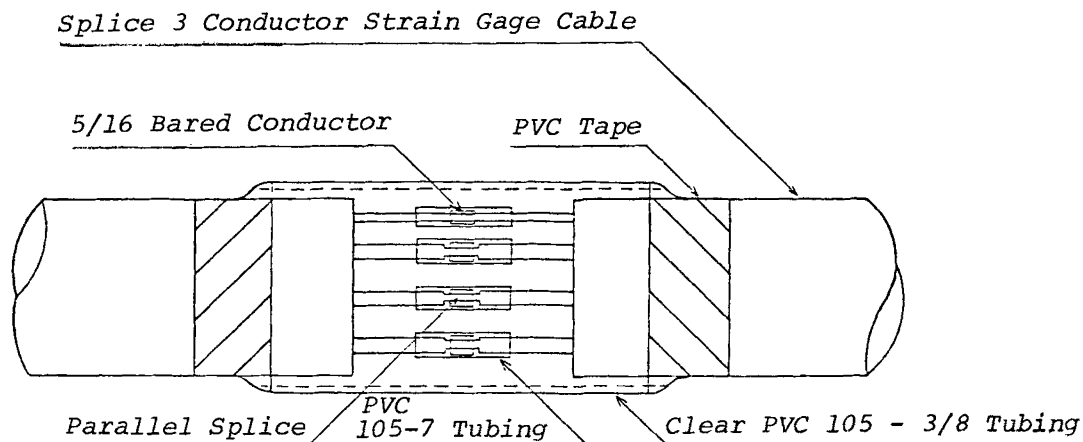


SPLICING OF STRAIN GAGE LEADS

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A method used to splice strain gage leads, either to lengthen or repair damaged leads, is described and illustrated in the figure below.



If the overall diameter of the splice is of concern (i.e., for installing in conduit, etc.) the parallel splices may be staggered, reducing the overall diameter but increasing the splices' length.

The procedure for making the splice is as follows:

1. Strip jacket on both ends of cable approximately 1 inch.
2. Strip cable insulation on both ends approximately 5/16 inch.
3. Slide a 3 1/2 inch long piece of PVC plastic tubing on one end of the cable (Alpha PVC 105-3/8).
4. Slide on one end of each individual conductor a 3/4 inch length of #7 PVC tubing (Alpha PVC 105-7).
5. Crimp and solder each conductor with a parallel splice (T&B Type A1A).
6. Slide the previously installed PVC tubing (Step 4) over the parallel splices.
7. Center the previously installed PVC tubing (Step 3) over the splice.
8. Fold and tape one end of the PVC tubing.
9. Hold vertical and fill with electrical grade potting compound. (Scotchcast No. 12 resin).
10. Fold and tape the remaining end of the PVC tubing.
11. Allow potting compound to cure.

This method has been used successfully in a number of applications, including long-term direct burial in concrete.