



AMP INCORPORATED  
HARRISBURG, PENNA.

MULTI-SPLICING  
INSTRUCTIONS

<b>IS 1173</b>	
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1. PURPOSE

This Instruction Sheet covers the selection and application of A-MP Adapter Ferrules (Part Number 327636) and A-MP Collector Ferrules (Part Number 323957) when multi-splicing wire.

2. DEFINITIONS

- (a) Wire Value.....An arbitrary Value assigned to each wire gage. See Figure 1.
- (b) Total Wire Value...The sum of the "wire values" of the wires to be inserted into one side of the Butt Splice (Multi-Splice). See Figure 1.
- (c) Collector Ferrule..The Sleeve used to tie the Conductors together before inserting wires into Splice. This Sleeve increases the Conductor area of Splice only. See Figure 3.
- (d) Adapter Ferrule....The Adapter used to increase the mass of the Conductor and Insulation areas of the Splice. See Figure 3.
- (e) Multi-Splicing.....When three (3) or more wires are to be connected into (1) Butt Splice.

3. PROCEDURE

NOTE: All Multi-Splices will be made using the A-MP Yellow (12-10 A.W.G.) Butt Splice (Part Number 320570) with either the A-MP Adapter Ferrules and/or Collector Ferrules.

3.1 Finding the Total Wire Value

- (a) Use Figure 1 to determine the Total Wire Value of the wires to be spliced.
- (b) To do this, add the Values assigned to each group of wires being spliced.

3.2 Selecting the Ferrules, Adapters and Crimping Tools

- (a) After you have found the Total Wire Value, use Figure 2 to select the Adapters, Ferrules and Crimping Tools to be used.

EXAMPLE: To join 2 #24 Wires to 2 #20 Wires, we must first find Wire Value of the #24 Wire. Using Column 2 of Figure 1, we find a Value of "4" for the #24 Wire. We have 2 #24 Wires so we add 4 plus 4 for a Total Wire Value of 8. In Column 1 of Figure 2, we find a Total Wire Value Range of 4-9. Reading across chart, we find that we must use Adapter No. 327636, Splice No. 320570 and Splice Crimping Tool No. 59239-4

Following the same method used above, we find in Figure 1 that the Total Wire Value of the 2 #20 Wires is 12, 6 plus 6. In the "Total Wire Value" Column 1 of Figure 2, we find the 10-27 Total Wire Value Range. Opposite the range, reading across the chart, we find that we must use Collector Ferrule No. 323957, Collector Ferrule Crimping Tool No. 59508. Note that the same Butt Splice and Butt Splice Crimping Tool are used.

\*Wire Values have been assigned to the Wire Gages to serve as a Guide in determining the maximum number of Wires which may be crimped in each side of the "Multi-Splice."

WIRE GAGE	WIRE VALUE*
24	4
22	5
20	6
18	9
16	13
14	17

FIG. 1

TOTAL WIRE VALUE RANGE	ADAPTER FERRULE NUMBER	COLLECTOR FERRULE NUMBER	COLLECTOR FERRULE CRIMPING TOOL NUMBER	BUTT SPLICE NUMBER	BUTT SPLICE CRIMPING TOOL NUMBER
4-9	327636	None	None	320570	59239-4
10-27	None	323957	59508		

FIG. 2

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### 3.3 Stripping the Wire and Applying the Collector Ferrules and/or Adapter Ferrules

- (a) Strip wire as shown in Figure 3.  
 (b) Apply the Collector Ferrule and/or Adapter Ferrules to the wire as shown in Figure 3.

### 3.4 Crimping Procedure

NOTE: Read A-MP Instruction Sheets No. 1128 and 1261 before crimping the Collector Ferrule or the A-MP 12-10 Yellow Butt Splice.

- (a) Crimp the Collector Ferrule as shown in Figure 4.

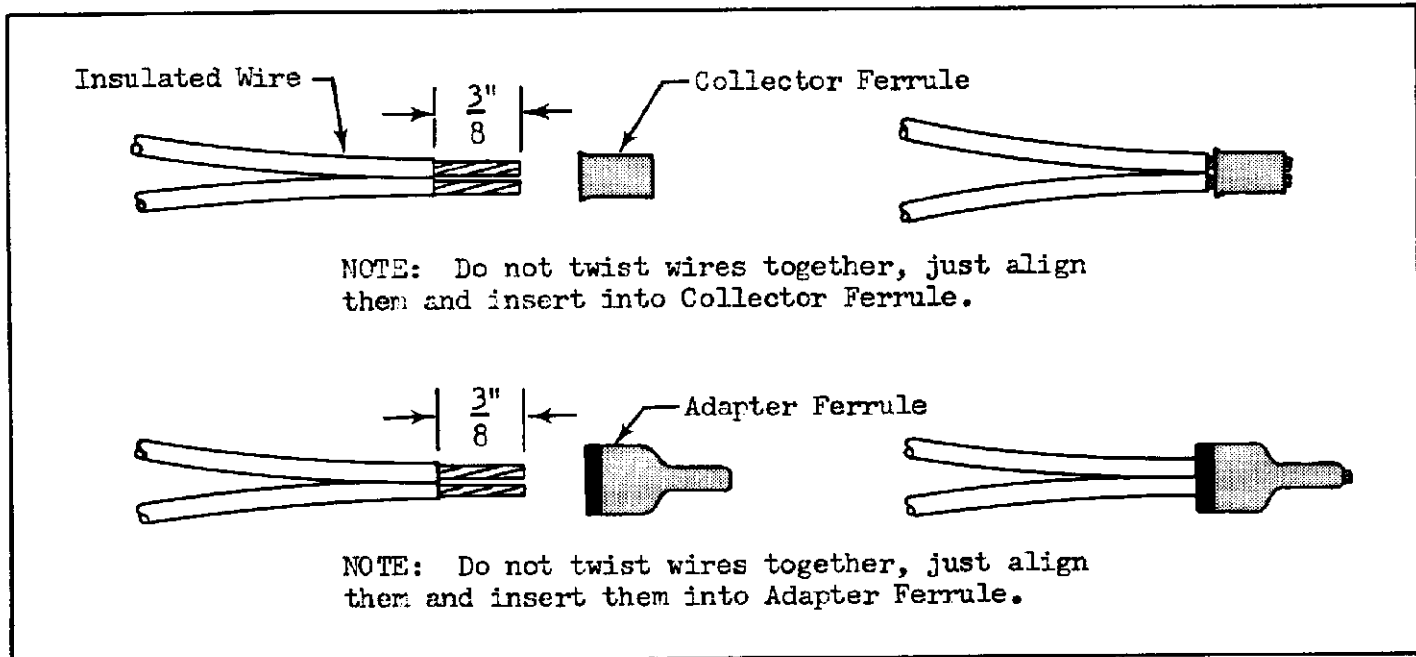


FIG. 3

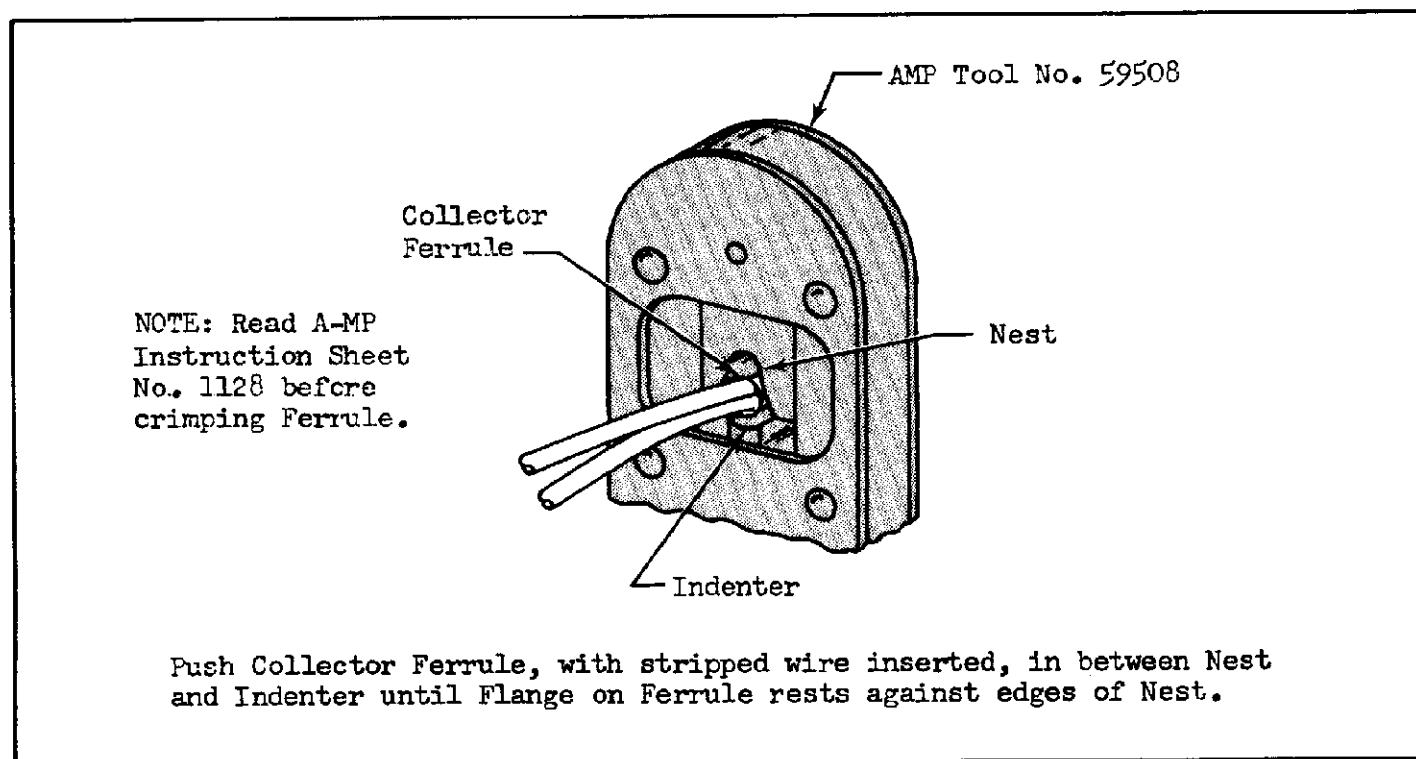


FIG. 4

(b) The crimped Collector Ferrule should now be inserted into one-half of the A-MP Yellow Butt Splice Wire Barrel and crimped as shown in Figure 5. Remove Splices and reposition uncrimped half of Splice in Splice Crimping Tool. See Figure 6.

(c) Next, push Adapter Ferrule, with stripped wire inserted, all the way into other half of A-MP Yellow Butt Splice Barrel. See Figure 6.

(d) Crimp Butt Splice

(e) Multi-Splice is now complete.

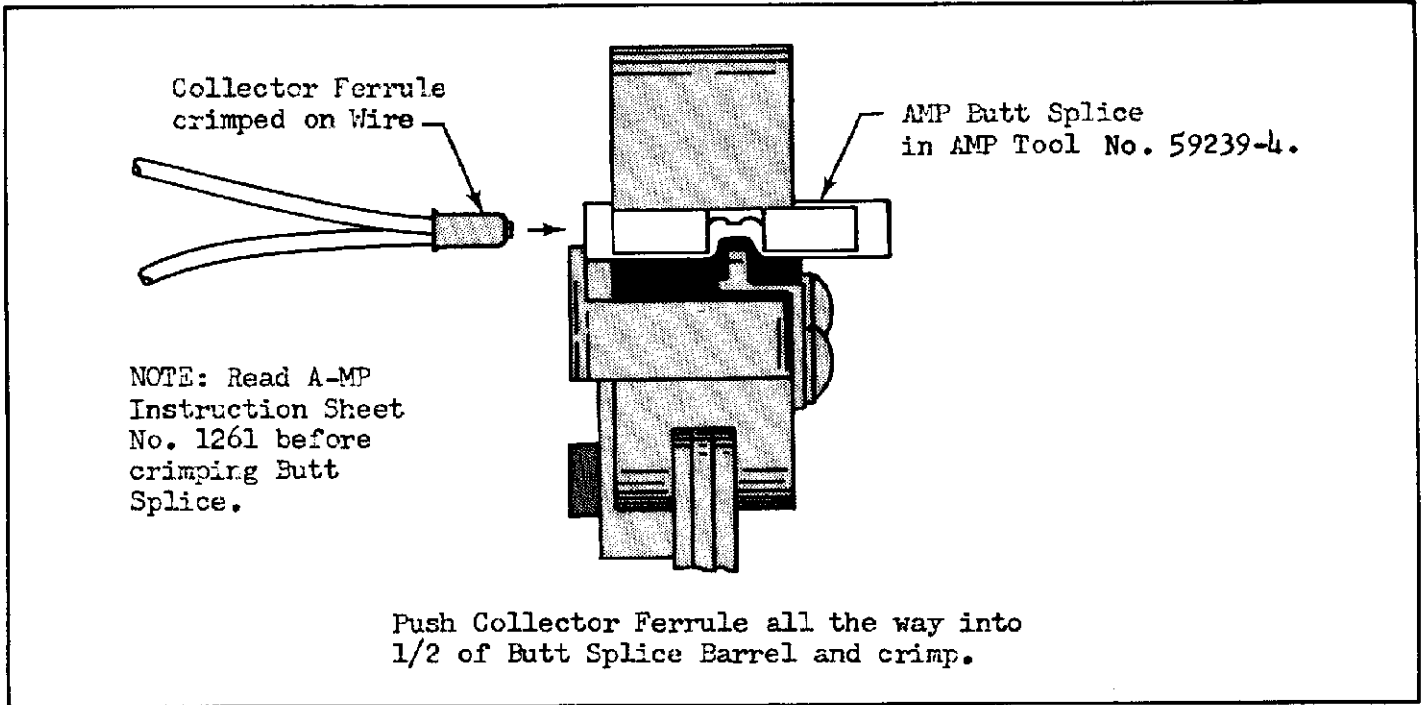


FIG. 5

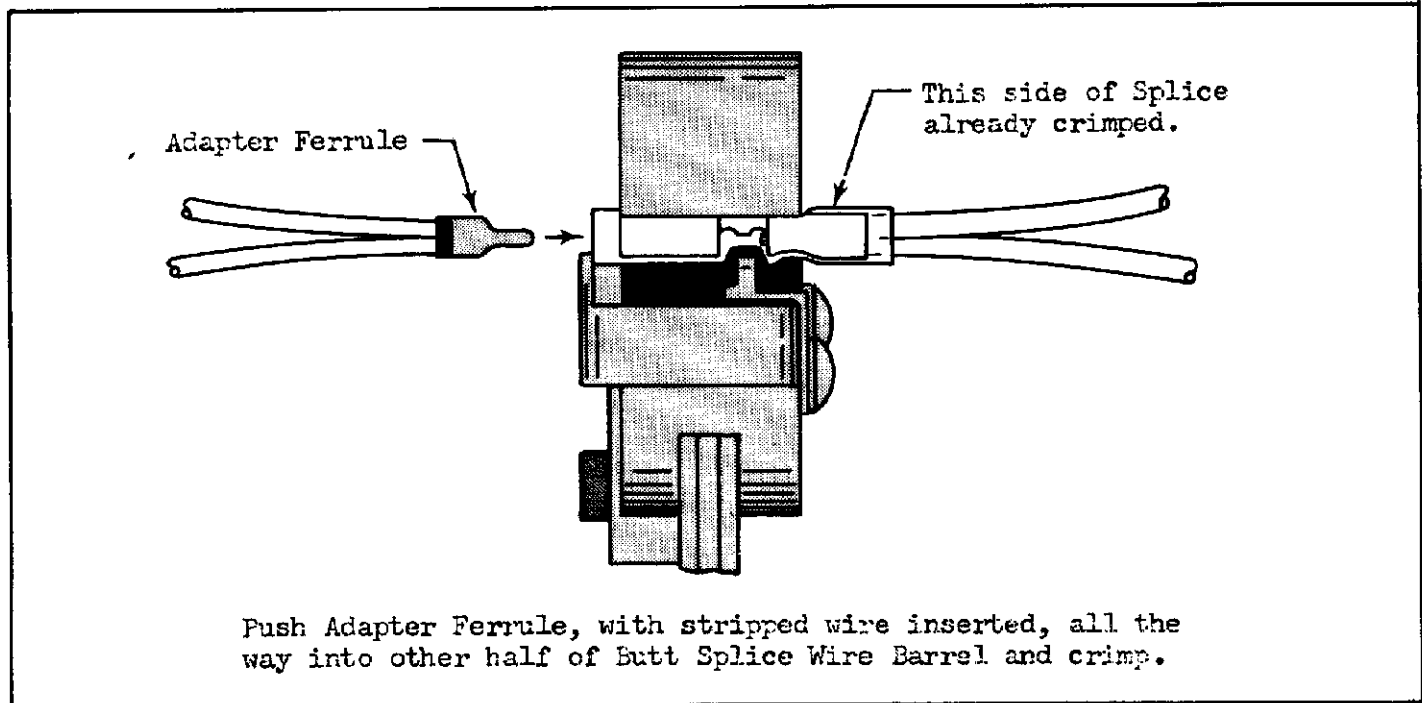


FIG. 6