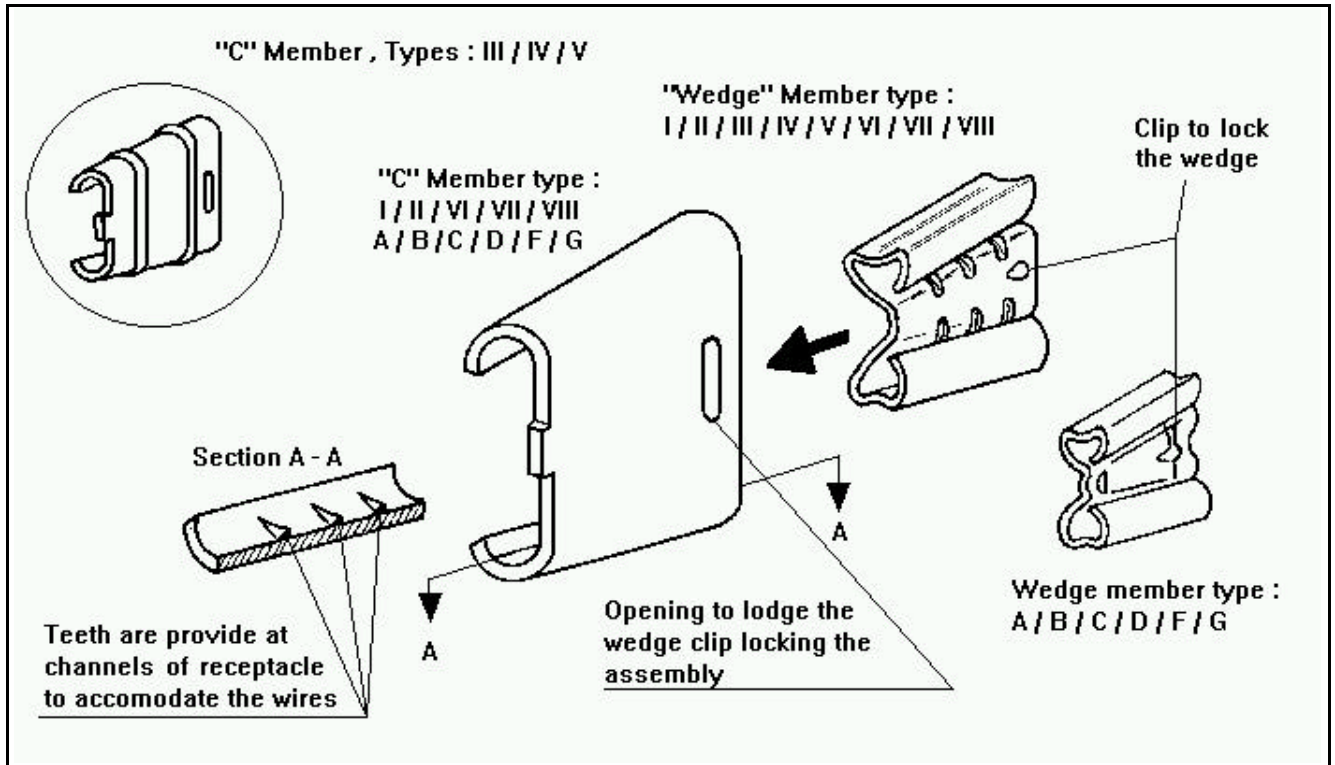


Application of Universal Distribution Connector , Reinforced



1. SCOPE

The U.D.Connector Reinforced are composed of two components : a "C" Member and a "Wedge" , both made of a tin plated copper alloy , in a configuration that exerts a spring action .
The "C" Member and "Wedge" components are supplied impregnated with anti-oxide compound .

2. UTILIZATION

Specially developed for connecting conductor of aluminum , copper and their alloys , regardless of the combination (Al x Al , Cu x Cu , Al x Cu) .
The connector model suitable for each conductor combination should be selected based on the chart below :

Prepared by : Gustavo Oliveira

Approved by : Walter Bellini

Part Number	UL Listed (Y/N)	Sum		Top Groove		Bottom Groove	
		Max.	Min.	Max.	Min.	Max.	Min.
Type I (P/N 881781-1)	Y	.552 (14,01)	.417 (10,60)	.320 (8,12)	.125 (3,17)	.292 (7,42)	.125 (3,17)
Type II (P/N 881783-1)	Y	.440 (11,18)	.347 (8,82)	.320 (8,12)	.125 (3,17)	.209 (5,30)	.125 (3,17)
Type III (P/N 881785-1)	Y	.374 (9,50)	.291 (7,40)	.258 (6,55)	.100 (2,54)	.183 (4,65)	.050 (1,27)
Type IV (P/N 881787-1)	Y	.302 (7,67)	.236 (5,99)	.258 (6,55)	.100 (2,54)	.183 (4,65)	.050 (1,27)
Type V (P/N 881789-1)	Y	.244 (6,20)	.180 (4,58)	.194 (4,93)	.100 (2,54)	.183 (4,65)	.050 (1,27)
Type VI (P/N 444031-1)	Y	.737 (18,72)	.661 (16,79)	.417 (10,61)	.315 (8,01)	.368 (9,36)	.257 (6,54)
Type VI (P/N 444031-2)	N	.737 (18,72)	.661 (16,79)	.417 (10,61)	3.15 (8,01)	.368 (9,36)	.257 (6,54)
Type VII (P/N 444033-1)	Y	.660 (16,78)	.552 (14,02)	.398 (10,11)	.183 (4,66)	.327 (8,30)	.183 (4,66)
Type VII (P/N 444033-2)	N	.660 (16,78)	.552 (14,02)	.398 (10,11)	.183 (4,66)	.327 (8,30)	.183 (4,66)
Type VIII (P/N 444385-1)	Y	.796 (20,22)	.738 (18,73)	.398 (10,11)	.315 (8,01)	.398 (10,11)	.315 (8,01)
Type VIII (P/N 444385-2)	N	.796 (20,22)	.738 (18,73)	.398 (10,11)	.315 (8,01)	.398 (10,11)	.315 (8,01)
Type A (P/N 688652-1)	Y	.431 (10,95)	.358 (9,10)	.368 (9,36)	.220 (5,60)	.201 (5,10)	.068 (1,74)
Type B (P/N 688653-1)	Y	.516 (13,11)	.431 (10,95)	.369 (9,36)	.244 (6,20)	.201 (5,10)	.068 (1,74)
Type C (P/N 688654-1)	Y	.581 (14,75)	.516 (13,11)	.501 (12,74)	.323 (8,20)	.201 (5,10)	.068 (1,74)
Type D (P/N 688655-1)	Y	.669 (17,00)	.581 (14,75)	.502 (12,74)	.374 (9,50)	.201 (5,10)	.068 (1,74)
Type F (P/N 688656-1)	Y	.358 (9,10)	.283 (7,20)	.328 (8,33)	.220 (5,60)	.201 (5,10)	.068 (1,74)
Type G (P/N 688657-1)	Y	.358 (9,10)	.283 (7,20)	.328 (8,33)	.220 (5,60)	.068 (1,73)	.054 (1,36)

Example : To make a service of a 4 AWG Al cable for a 10 AWG Cu wire , we must do :

Diameter of main (4 AWG Al) = 0.232 in. (5,89 mm)

Diameter of service entrance (10 AWG Cu wire) = 0.096 in. (2,44 mm)

Total Diameter Sum = **0.328 in. (8,33 mm)**

Conclusion : The recommended connector is TYPE III , with the red color plastic bag .

3. APPLICATION

3.1 Wire Preparation

Thoroughly clean conductors with a wire brush to eliminate existing oxide layer from conductor surface .

Insulated conductors must be stripped with sufficient length to accommodate the connector . If wire need to be performed it should be done before application . See Figure 1 .

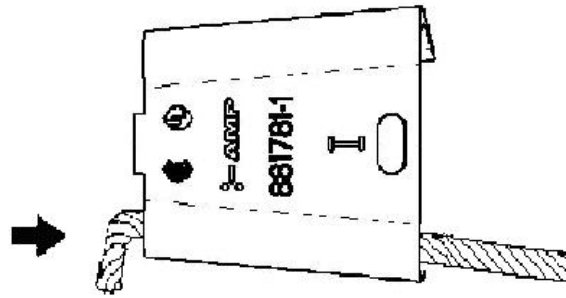


Figure 1

3.2 Connector Application

3.2.1 Be aware that the selected connector is correct for the sizes and types of conductors been used .

3.2.2 Install the main and tap conductors to the connector , using the following steps :

- a) Place the service entrance conductor in the lower channel of the "C" component . See Figure 2 .

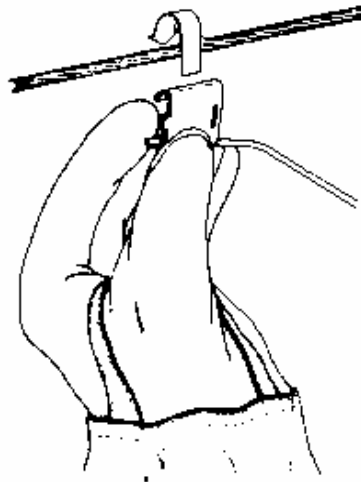


Figure 2

- b) Hook "C" component along with the service entrance conductor over the main conductor with the open side of "C" facing away from operator . See Figure 3 .

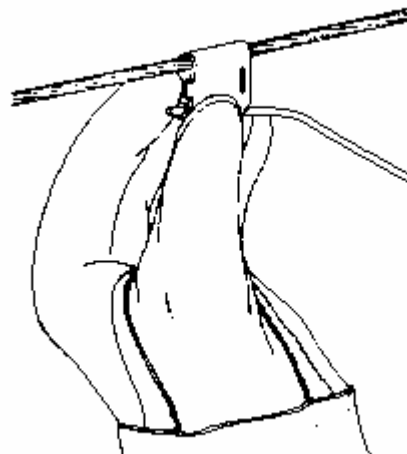


Figure 3

- c) Adjust and push the "Wedge" component between the conductors with the fingers making sure the clip is facing the right way . See Figure 4 .

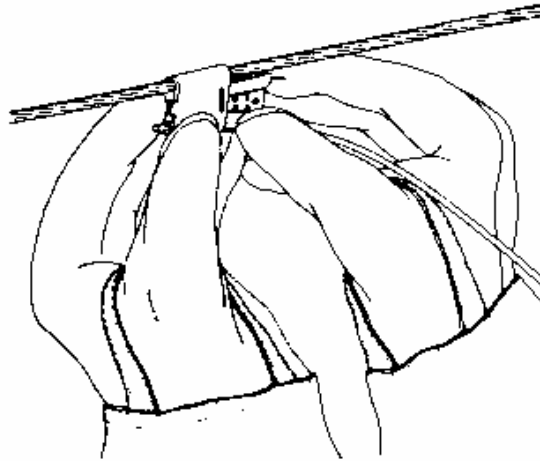


Figure 4

- d) No special tool is needed to install the connector . Only a conventional "parallel jaw" pliers (12" or 14" length) . AMP Part Number for reference : 626158-1
Complete the connection using the pliers until the wedge be fully introduced in the "C" component . See Figure 5 .

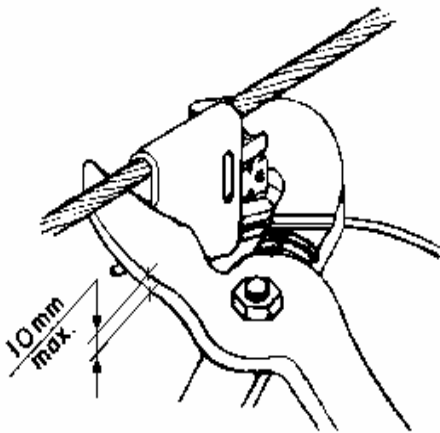


Figure 5

Note 1 : After connector application , mainly when using solid conductors , they could rotate over the conductor without any restriction for termination and tensile strength requirements .

Note 2 : Set the connector as shown , to decrease the application effort , mainly on large size types .

Note 3 : If possible , use pliers with a maximum width of 10mm for the jaw (as shown) .

- e) Be sure that installation is correct by checking to see that the clip on the "wedge" component is protruding through the opening on the "C" component . See Figure 6 .

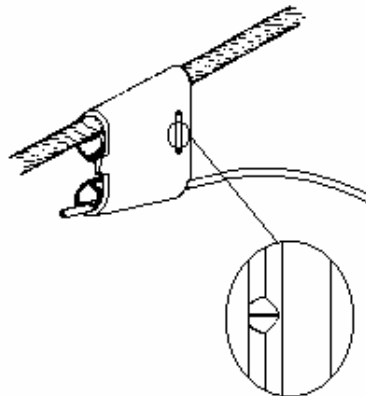


Figure 6

Note : *If necessary push the clip against the opening on the "C" component by the using of pliers as shown on Figure 7 .*

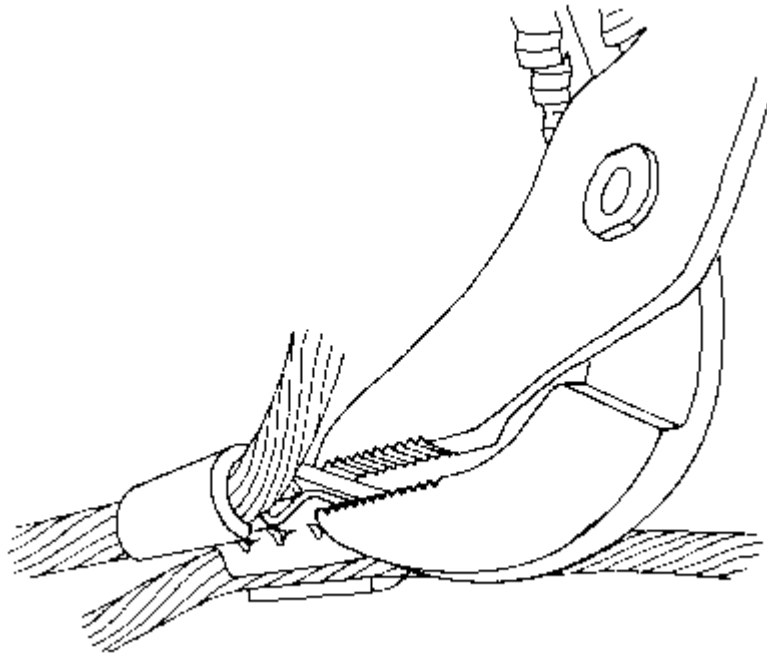


Figure 7

3.3 U.D.Connector Extraction

The use of extraction tools is mandatory for the re-utilization of the connector . The extractor was developed so that not to deform the "C" and "Wedge" components .

3.3.1 Extraction steps for U.D.Connector Reinforced Symmetrical

Reference extractor P/N 572882-1 for Types I , II , III , IV , V , VI and VII .
See Figure 8 .

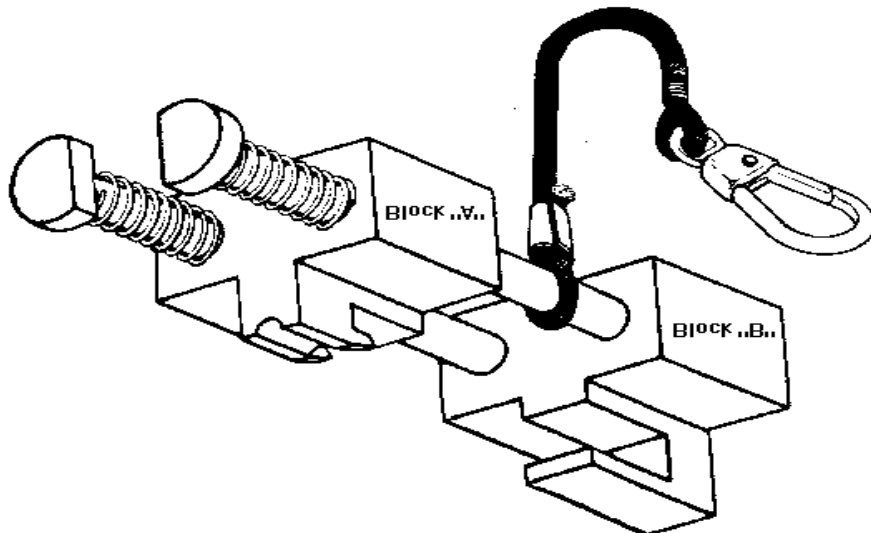


Figure 8

Step 1 *Position the extractor on the connector manually to certify that the Block "A" be positioned at the clip / opening side of the components .
The "U" side of the Block "A" must be positioned between "C" and "Wedge" components . See Figure 9 .*

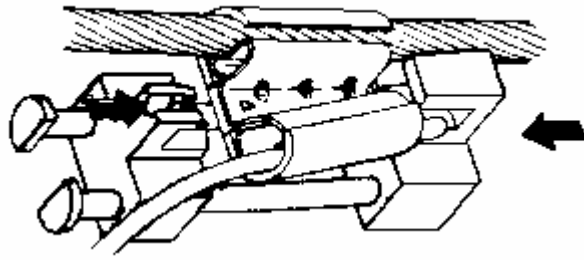


Figure 9

Step 2

After positioned the "U" side to the correct place , press the Block "A" and "B" against themselves with the pliers . At this moment , in a simultaneous movement the security clip is released and the "Wedge" moves in the opposite direction of the application . See Figure 10 .

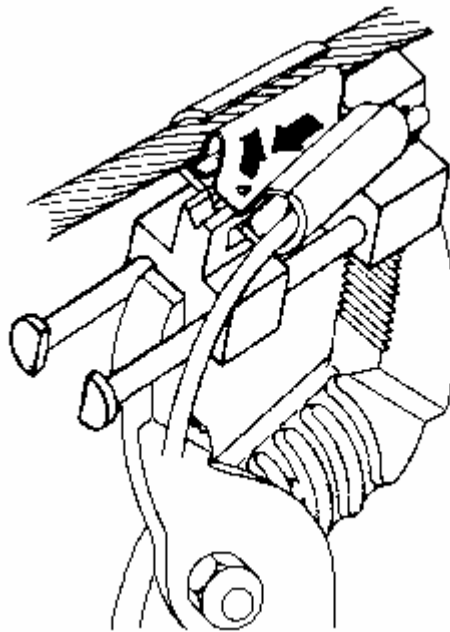


Figure 10

Step 3

With a small manual movement the operation is completed , removing the connection and conductors . See Figure 11 .

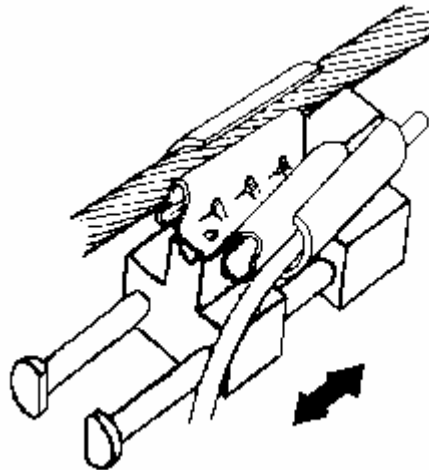


Figure 11

3.3.2 Extraction step for U.D.Connector Reinforced Asymmetrical

Reference Extractor P/N 357486-1 for Type A , B , C , D , F and G . See Figure 12 .

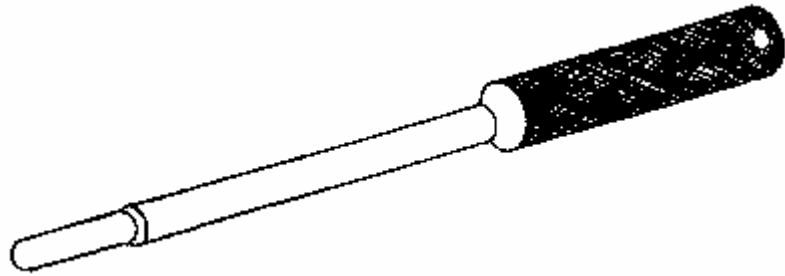


Figure 12

Step 1

Position the extractor on the applied connector in order to introduce the end of the extractor in the opening profile of the wedge near the clip . See Figure 13 .

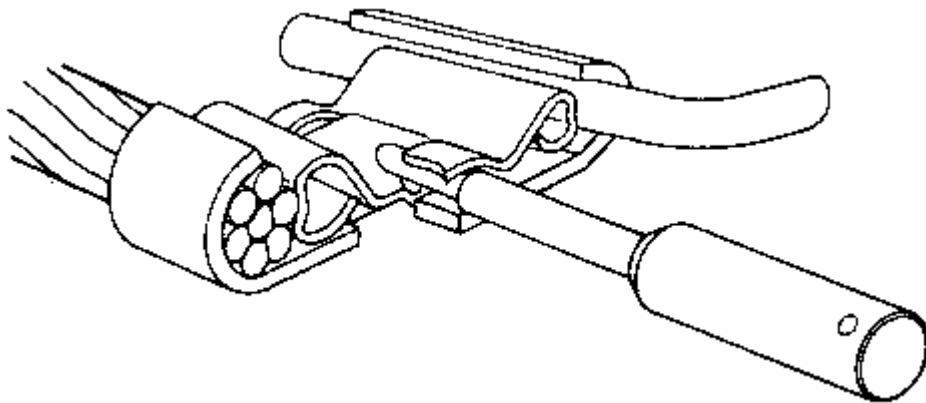


Figure 13

Step 2

Moving the extractor as a lever in the direction of the locking clip the connector is released . See Figure 14 .

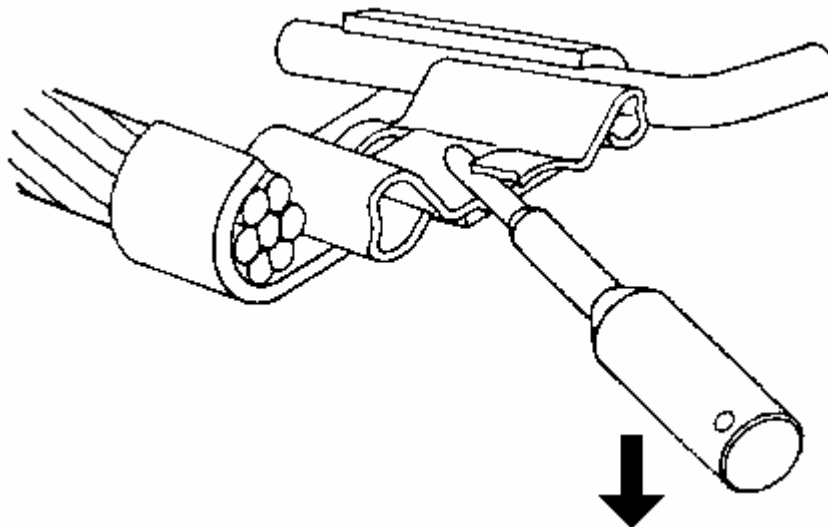


Figure 14