## INSTALLATION GUIDE FOR 90° AND 45° ABK CONNECTOR BACKFITTING

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There are 2 Methods of installing Amphenol® 90° and 45° ABK Backshells to connectors, as follows:

- METHOD 1: For installation with pre-installed adhesive on "J" end of molded part. (See front of this sheet)
- METHOD 2: For installation without pre-installed adhesive on "J" end of molded part. (See back of this sheet)

## METHOD 1: FOR ALL SCREENED AND UNSCREENED ASSEMBLIES <u>WITH</u> PRE-INSTALLED ADHESIVE AT THE "J" END OF THE BOOT

Follow steps relevant to the type of ABK assembly, either screened or unscreened.

SCREENED	*UNSCREENED *
~	V

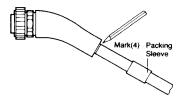
- 1. Slide the ABK and heat-shrinkable packing sleeve onto the cable.
- Cut back the cable and braid sufficiently to terminate the conductors to the connector. The recommended dimensions depend on the size of the boot and are given in TABLE 1 (dimension L). Allow an extra 20mm for service loops if required.

TABLE 1

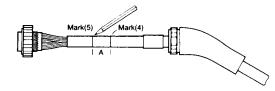
Boot Size	L (mm)	A (mm)
222K132	37	10
222K142	40	10
222K152	41	12
222K163	53	18
222K174	75	18

Boot Size	L (mm)	A (mm)
2228121	38	10
222\$132	40	10
222S142	45	10
222S152	50	12
222S163	65	20
222S174	80	20

- 3. Pin the conductors to the connector in the appropriate way.
- Slide the ABK assembly along the cable and temporarily secure it to the connector. Mark the cable where the boot ends.

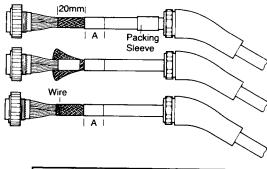


5. Release the ABK and slide it back along the cable. Make a second mark, distance "A" toward the connector, from that made in step (4). This distance depends on the size of the boot and is given in TABLE 1 (dimension A). Cut back the cable jacket to this mark.



SCREENED	UNSCREENED
~	

- Cut back the cable braid leaving 20mm exposed from the end of the cable jacket.
- 7. Position the heat-shrinkable packing sleeve under the 20mm of exposed braid and recover down. Secure the ends of the braid with the tinned copper wire, ensuring that the twisted ends are folded flat against the braid. The braid and the cable are now of similar diameter.



SCREENED	UNSCREENED
V	· VIVI

- Degrease area "A" and the cable braid with the cleaning tissue provided. Thoroughly abrade area "A" with the emery cloth and then remove any loose particles with a dry tissue.
- With the major keyway in the correct position, secure the ABK to the connector using the appropriate mating half and tighten to the specified torque value given in TABLE 2 below.
- 10. Using a CV-1981\* Heat Gun set at 7-8 with a PR-24\* or PR-26\* reflector, shrink the rear of the boot onto the cable. Remove the excess adhesive which extrudes from the end of the molded part, leaving a small fillet. The post heat times shown in TABLE 3 should be adhered to in order to give sufficient bonding.

TABLE 2

Shell Size (Nm) (lb. Ins) 4.0 35 10 4.5 40 12 5.0 45 14 5.5 50 16 6.5 60 18 8.0 70 20 9.0 80 22 10.0 90 24 11.5 100

TABLE 3

Boot Size	Approx. Recovery Time (secs)	Post Heat Time (secs)
222\$121	30	90
222S132	30	120
222S142	45	135
2228153	45	150
222S163	60	165
222S174	60	180

Allow to cool at room temperature before flexing.

\* CV-1981, PR-24 and PR-26 are trademarks of Raychem Corporation.

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## METHOD 2: FOR ALL SCREENED AND UNSCREENED ASSEMBLIES <u>WITHOUT</u> PRE-INSTALLED ADHESIVE AT THE "J" END OF THE BOOT

Follow steps relevant to the type of ABK assembly, either screened or unscreened.

SCREENED	UNSCREENED
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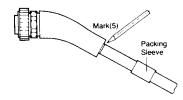
- Degrease the unplated "J" end of the boot and abrade with 100 grade emery paper. Remove any loose particles with a dry tissue.
- 2. Slide the ABK and heat-shrinkable packing sleeve onto the cable.
- Cut back the cable and braid sufficiently to terminate the conductors to the connector. The recommended dimensions depend on the size of the boot and are given in TABLE 1 (dimension L). Allow an extra 20mm for service loops if required.

TABLE 1

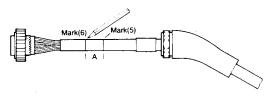
Boot Size	L (mm)	A (mm)
222K132	37	10
222K142	40	10
222K152	41	12
222K163	53	18
222K174	75	18

Boot Size	L (mm)	A (mm)
222S121	38	10
222S132	40	10
222S142	45	10
222S152	50	12
222S163	65	20
222S174	80	20

- 4. Pin the conductors to the connector in the appropriate way.
- Slide the ABK assembly along the cable and temporarily secure it to the connector. Mark the cable where the boot ends.

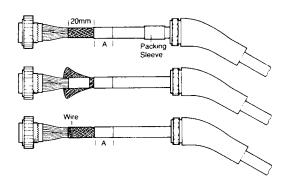


6. Release the ABK and slide it back along the cable. Make a second mark, distance "A" toward the connector, from that made in step (5). Distance "A" depends on the size of the boot and is given in TABLE 1 (dimension A). Cut back the cable jacket to this mark.



SCREENED	UNSCREENED
V	

- Cut back the cable braid leaving 20mm exposed from the end of the cable lacket.
- 8. Position the heat-shrinkable packing sleeve under the 20mm of exposed braid and recover down. Secure the ends of the braid with the tinned copper wire, ensuring that the twisted ends are folded flat against the braid. The braid and the cable are now of similar diameter.



SCREENED	UNSCREENED
<b>V</b>	V

Degrease area "A" and the cable braid with the cleaning tissue provided. Thoroughly abrade area "A" with the emery cloth and then remove any loose particles with a dry tissue.

SCREENED	UNSCREENED
V	

10. Mix the S1125\* adhesive, noting the 60 minute pot life.

SCREENED	UNSCREENED
<b>V</b>	4.3

 Mix the S1184\* adhesive and work into the braid for a length of 20mm and thickness 2mm.

SCREENED	*UNSCREENED*
~	* 17 / 12 %

- 12. With the major keyway in the correct position, secure the ABK to the connector using the appropriate mating half and tighten to the specified torque value given in TABLE 2 below.
- 13. Apply S1125 adhesive to area "A" on the cable jacket and to the unplated area of the "J" end of the molded part.
- 14. Using a CV-1981\* Heat Gun set at 7-8 with a PR-24\* or PR-26\* reflector, shrink the rear of the boot onto the cable. Remove the excess adhesive which extrudes from the end of the molded part, leaving a small fillet. The post heat times shown in TABLE 3 should be adhered to in order to give sufficient bonding.

TABLE 2

Shell Size	(Nm)	(lb. ins)
08	4.0	35
10	4.5	40
12	5.0	45
14	5.5	50
16	6.5	60
18	8.0	70
20	9.0	80
22	10.0	90
24	11.5	100

TABLE 3

Boot Size	Approx. Recovery Time (secs)	Post Heat Time (secs)		
222S121	30	90		
222\$132	30	120		
222S142	45	135		
222\$153	45	150		
222\$163	60	165		
222S174	60	180		

15. Allow to cool at room temperature before flexing.

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For further information contact:

Amphenol Corporation, Amphenol Aerospace 40-60 Delaware Avenue, Sidney, NY 13838-1395 Phone: 607-563-5011 Fax: 607-563-5351