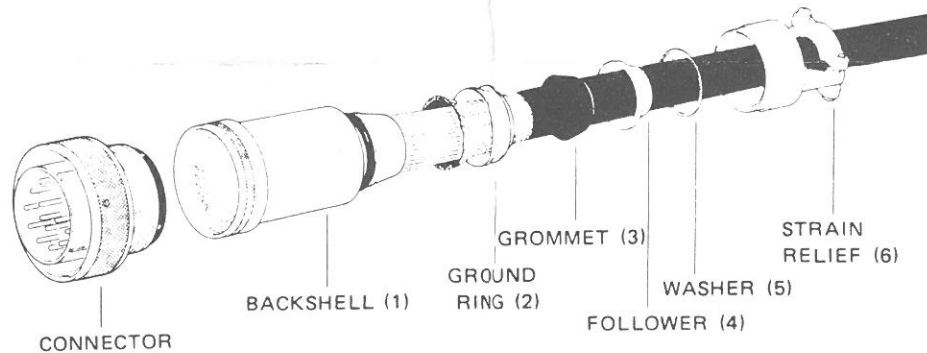


EMI/RFI Environment Resisting Backshells

GLENAIR ASSEMBLY INSTRUCTIONS 39-3

M85049/17 M38999/5 390*S011
M85049/18 390*S012



The following suggested procedure serves as a guide for proper assembly and installation of Glenair EMI/RFI Environment Resisting Backshells (Type C shield termination). It is recommended that trial samples of appropriate cables be used to determine proper trim dimensions of the cable jacket, shield and individual conductors.

(a) Temporarily assemble backshell (1) to connector.

(b) Place remaining backshell assembly components (2 thru 6) on cable in sequence shown. Keep these components at a convenient distance from end of cable, so they will not interfere with subsequent assembly steps.

(c) Insert cable into backshell (1) and bottom against connector. Hold cable in position and mark cable jacket at rear end of backshell (1).

CAUTION: If cable conductors are to have service loops, or if conductors will have cross-overs, etc., allow sufficient added length to cable to compensate for these factors.

(d) Remove backshell (1) from connector and place on cable with components in step (b) above.

(e) Trim cable jacket and shield at mark made in

step (c) above, allowing for service loops and cross-overs.

(f) Strip jacket 1/4-inch back from trim point in step (e) to expose over-all shield.

(g) Prepare and terminate cable conductors in accordance with established practices.

(h) Assemble backshell (1) to connector and tighten securely.

(i) Flare shield over tapered end of backshell (1) and slide ground ring (2) into place over shield. Hold ring in position and trim any exposed shield strands adjacent to rear threads on backshell.

(j) Slide grommet (3), follower (4) and washer (5) against ground ring (2).

(k) Engage strain relief (6) with backshell and tighten securely. Tighten strain relief saddles on cable jacket.

NOTE: As with any electrical connector assembly procedure, be sure to use the proper tools. For convenient, reliable assembly of the connector and backshell, it is suggested that Glenair's connector holding tools, strap wrenches and connector pliers be used.

AS85049/18 Straight EMI/RFI Environmental Backshell



CONNECTOR DESIGNATOR:

H MIL-DTL-38999, Series III and IV
EN3645

Finish
N = Electroless Nickel *X* = Aluminum, Nickel Fluorocarbon Polymer
W = 1,000 Hr. Cadmium Olive Drab over Electroless Nickel *Z* = Aluminum, Zinc-Nickel, Black

M85049/18

11

N

03

A

**Basic
Part Number**

**Shell Size
(Table I)**

**Clamp Size
(Table III)**

**Length Code
(Table IV)
Omit for Standard**

TABLE I: Shell Size, Thread and Dimensions

Shell Size	A Thread Class 2B	B Dia Max
9	M12 X 1 - 6H	.750 (19.1)
11	M15 X 1 - 6H	.850 (21.6)
13	M18 X 1 - 6H	1.000 (25.4)
15	M22 X 1 - 6H	1.150 (29.2)
17	M25 X 1 - 6H	1.250 (31.8)
19	M28 X 1 - 6H	1.400 (35.6)
21	M31 X 1 - 6H	1.550 (39.4)
23	M34 X 1 - 6H	1.650 (41.9)
25	M37 X 1 - 6H	1.850 (47.0)

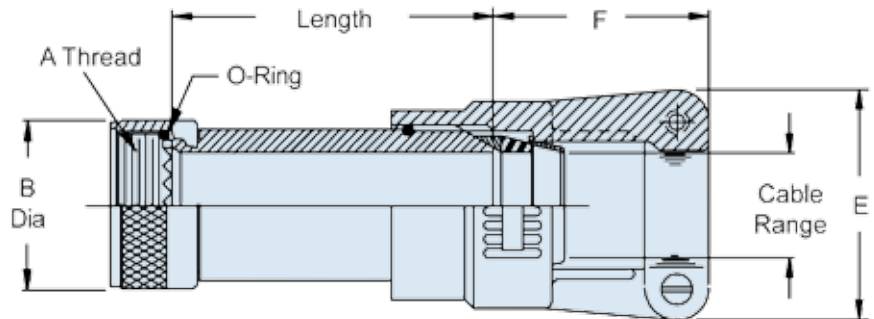


TABLE II: Shell Size and Clamp Size

Shell Size	Clamp Size	
	Min	Max
9	01	02
11	01	03
13	02	04
15	02	05
17	02	06
19	03	07
21	03	08
23	03	09
25	04	10

TABLE III: Clamp Size, Cable Range and Dimensions

Clamp Size	Cable Range		E Max	F Max
	Min	Max		
01	.062 (1.6)	.125 (3.2)	.781 (19.8)	1.250 (31.8)
02	.125 (3.2)	.250 (6.4)	.969 (24.6)	1.250 (31.8)
03	.250 (6.4)	.375 (9.5)	1.062 (27.0)	1.250 (31.8)
04	.375 (9.5)	.500 (12.7)	1.156 (29.4)	1.250 (31.8)
05	.500 (12.7)	.625 (15.9)	1.250 (31.8)	1.312 (33.3)
06	.625 (15.9)	.750 (19.1)	1.375 (34.9)	1.375 (34.9)
07	.750 (19.1)	.875 (22.2)	1.500 (38.1)	1.500 (38.1)
08	.875 (22.2)	1.000 (25.4)	1.625 (41.3)	1.625 (41.3)
09	1.000 (25.4)	1.125 (28.6)	1.750 (44.5)	1.625 (41.3)
10	1.125 (28.6)	1.250 (31.8)	1.875 (47.6)	1.625 (41.3)

TABLE IV: Length Code

Length Code	Available Shell Sizes	Length
Standard	9 - 25	1.500 (38.1)
A	9 - 25	2.500 (63.5)
B	9 - 25	3.500 (88.9)
C	9 - 25	4.500 (114.3)

APPLICATION NOTES

- For complete dimensions see the applicable Military Specification.
- Metric dimensions (mm) are in parentheses.
- Cable Range is defined as the accommodation range for the wire bundle or cable. Dimensions shown are not intended for inspection criteria.

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