

A Complete Tool And Parts Kit To Support Your EMI/RFI Shielding Applications.



Actual Kit may vary from example shown.

The DMC60A Shielding Maintenance Repair System includes a complete complement of tools to install and remove shield termination material and specialized tapes. This travel-ready system provides the user with Tools, Verification Equipment, Accessories, a supply of Bands, and the Instructions all in one package.

The packaging materials (fiberglass case, foam inserts, and laminated instructions) are manufactured to meet the most demanding handling conditions. FOD (Foreign Object Damage) is always a concern when workers are required to use tools and small components in or around an aircraft. The “contouring” principal is a proven concept for Tool/parts control to minimize that concern.

The termination of EMI/RFI shielding materials is a specialized science in today’s aerospace wiring systems. Application tooling is a critical factor in the overall performance of the wiring system components.

DMC has worked closely with the world’s leading connector accessory manufacturers to develop the necessary tooling and accessories to meet the stringent demands of aerospace and defense system contractors.

DMC is well known throughout the aerospace industry for the quality and capability of the Tool Kits that we manufacture. If you have specific needs that cannot be covered by the Tool Kit described here, please call a DMC customer service representative for information on a Kit that will more appropriately meet your requirements.

DMC60A TOOLS AND ACCESSORY LIST		
Part Number	Quantity	Description
DBS-1100	1	Hand Operated Band Application Tool - 1/4”
DBS-BR1	1	Band Removal Tool
DBS-RO3	1	Roll-Over Tool for .250 Band Tab
DBS-CG2	1	Field Calibration Fixture for DBS-1100
G691	1	Go/No-Go Gage for DBS-CG2 Fixture
DBS-1100-7	2	Spare Cutter Blades
4-1437	100	.250 wide x 14.0” long EMI/RFI Band (Flat)*
4-1349	1	Shears (Clauss 8” Long)
4-1381	1	Shears (Clauss 194)
74003	1	1/16” Hex Wrench
74005	1	3/32” Hex Wrench
DBS-1100-32	1	Adjustment Wrench
4-1136	1	3/32” Hex Wrench w/ Short Handle
MISC.	--	Tape, Braided Shielding, Split Rings, & Hex Wrenches
<small>Patent information: Tools featured on this data sheet are covered all or in part by the following patents: 4,934,416 – 5,000,232 – 4,996,868 – 5,111,853 – 5,172,737 – 5,154,210 * Band can also be supplied curled (contact factory)</small>		

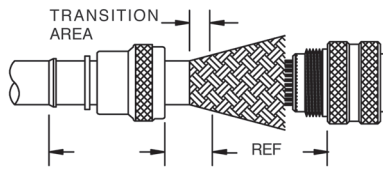
DMC60A

Tool kit supplied in 1 fiberglass case and includes:
Name Plate, Foam Pads/Inserts, Contents Charts and Instruction Sheets.

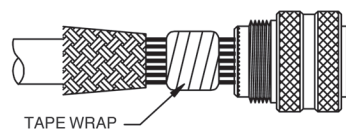
EMI/RFI BAND APPLICATION SYSTEM FOR .125 & .250 SHIELD TERMINATION BANDS



Careful measurement should be made prior to installing the backshell. The outer jacket is then uniformly removed at a distance which would allow the braid to make a comfortable transition onto the backshell termination area. This dimension will vary depending upon the differences between cable and backshell diameters or other application dependent factors.



The braid is then trimmed to a length which will allow it to extend 1 inch past the backshell termination platform. Then the braid is carefully folded rearward to expose the wires which will be inside the backshell.

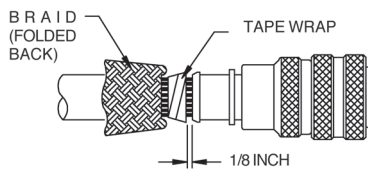
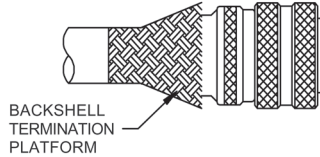


A sufficient number of wraps of self-vulcanizing tape (normally red in color) are applied over the wires to build up a diameter

slightly less than the inside diameter of the backshell. Care should be taken not to apply tension to the contacts located in the outer perimeter of the connector.

These layers of tape are followed by a minimum of one layer of Teflon tape which will prevent adhesion with the backshell and other components.

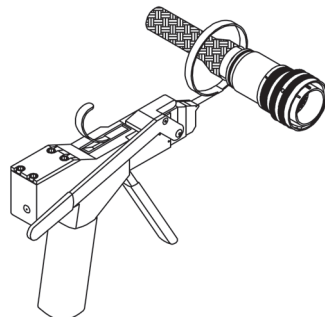
The backshell is then installed onto the connector, using a nonabrasive tool such as a strap wrench. The braid is then carefully moved from under the backshell. It is important to retain the woven characteristics of the braid during this step.



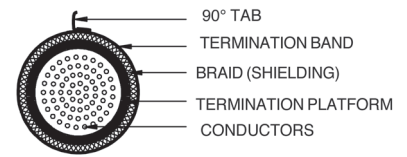
Use self-vulcanizing tape or a preformed component to build up the area behind the backshell. It is important that the braid is supported in the transition

from the backshell rear diameter to the natural diameter of the wire bundle. Leave approximately 1/8 inch spacing between the tape wrap and the backshell.

The braid is pushed into position over the backshell termination platform. Care must be taken to make sure the weave is uniform and no large "windows" are present. A shield termination band is then loaded into the tool. The band is then slid over the

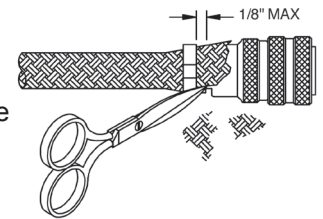


connector/backshell assembly into a position of alignment with the termination platform. Apply an adequate amount of pressure in line with the cable as it enters the backshell to allow the 1/8 inch space to be reduced to zero. The tool is then activated to the preset tension. The band is then bent sharply at the buckle approximately 90° then cut-off using the cut-off lever on the tool. If the band is uncurled for any reason, it must be double looped thru the buckle before termination.

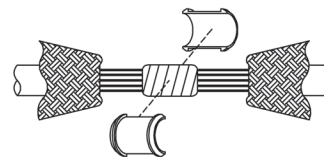


The 90° tab is then curled and folded back over the buckle using the rollover tool.

For braiding a non-jacket cable use fine point shears to trim the excess braid as close to the connector side of the bands as possible. Do not leave any unsecured braid wires longer than 1/8 inch. Do not allow the trimmed wires to fall in any areas where they may present a foreign object damage hazard.



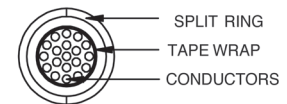
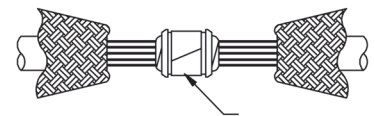
PROCEDURE FOR SPLICING



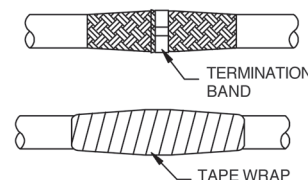
The jacket is present, and shield has been cut and separated to expose the wires requiring service. Care must be taken to avoid damaging the insulation on internal wires. The required

service is then completed.

The wire bundle is then protected by a few wraps of self-vulcanizing tape followed by 2-3 layers of teflon tape. An appropriate size split-ring set is then selected and installed. One layer of teflon tape is applied over the split ring set to hold the halves in position while the next steps are being performed.



The braid is then overlapped across the split ring set. Be sure the braid ends protrude completely under the band in both directions.



Heat-shrinkable tape is then applied over the splice. When a jacketed cable is used, be sure the tape extends onto the jacket in both directions.