

Two-Step Banding Tools System

for M85049/128-01, /128-02, /128-05, and /128-06 bands

DMC DANIELS
MANUFACTURING
CORPORATION



DBS-1100 & DBS-1200
(M81306/2-01A* & M81306/2-02B*)

TWO STEP BAND APPLICATION TOOLS

The Two-Step Band Application Tools are built to M81306/2 and designed to apply M85049/128-01, M85049/128-02, M85049/128-05, and M85049/128-06 "welded buckle" bands. These tools are constructed to survive the demands of production and maintenance use, and remain precisely adjusted to provide a quality band termination.

The tension-lock system gives the operator a positive indication when the precise tension has been reached.

DBS-1100 (M81306/2-01A*).250 Wide Band Tool:

- Size and Weight: 1.38" x 5.5" x 7.5", 1.4 lbs.
- Tension Range: 140–160 lbs.
- Cut-off blade: replaceable with DBS-1100-7

DBS-1200 (M81306/2-02B*).125 Wide Mini-Band Tool:

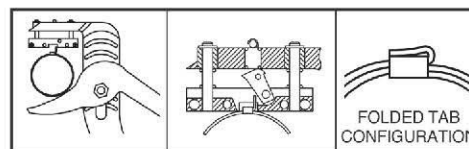
- Size and Weight: 1.38" x 5.5" x 7.5", 1.4 lbs.
- Tension Range: 80–100 lbs.
- Cut-off blade: replaceable with DBS-1100-7



DBS-RO3 & DBS-RO5
(M81306/2-01C* & M81306/2-02D*)

TAB ROLL-OVER APPLICATION TOOLS

The DMC Roll-Over Tools are used to fold the extended band tab securely over the buckle. Experts agree that the "folded tab" method assures maximum strength and reliability.



The **DBS-RO3** (M81306/2-01C*) Roll-Over tool is used with the .250 wide bands.

The **DBS-RO5** (M81306/2-01D*) Roll-Over Tool is used with .125 wide Mini-Bands.

VERIFICATION OF TWO-STEP EMI/RFI BAND TOOLS

DMC's Two-Step Band Application Tools may be calibrated to insure correct band tension. The DBS-CG1 Laboratory Calibration Instrument will allow the operator to measure the exact tension produced by the tool.

A short piece of unused band material is fed into the tool far enough to fully engage the tool's gripping mechanism. The other end is then inserted and latched into the DBS-CG1. Full tension is exerted by the tool and read directly on the precision dial indicator portion of the DBS-CG1. Simple adjustments can be made to the tool as needed. A quick release mechanism is provided to allow the operator to easily remove the tool from the DBS-CG1. A free standing holding fixture is available (DBS-CG1-F) to aid the calibration

process by securing the DBS-CG1 and banding tool in place.

Field Verification Fixtures and Go/No-Go

Gages were developed to allow the user a quick means of tool tension in the field. A band is placed into the calibration fixture. The band is drawn through the tool until the nose of the banding tool is firmly against the field verification fixture. Once the full banding pressure has been applied, insert the "GO" side of the Gage into the verification slot of the field verification fixture. If it does not insert freely, the tool is exerting excessive force. Likewise, if the NO-GO probe freely enters the verification slot, the tool requires adjustment.



AWM Weidner
Kettnerstr. 25
70794 Filderstadt
Tel.: 0049 711 7009503
Fax: 0049 711 7009504
info@awm-weidner.de
www.awm-weidner.de

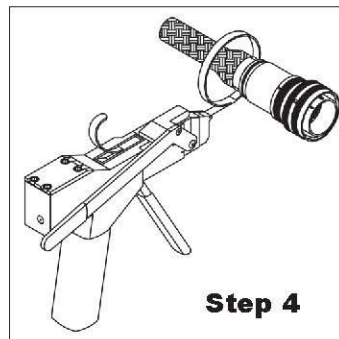
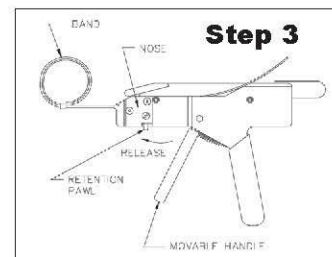
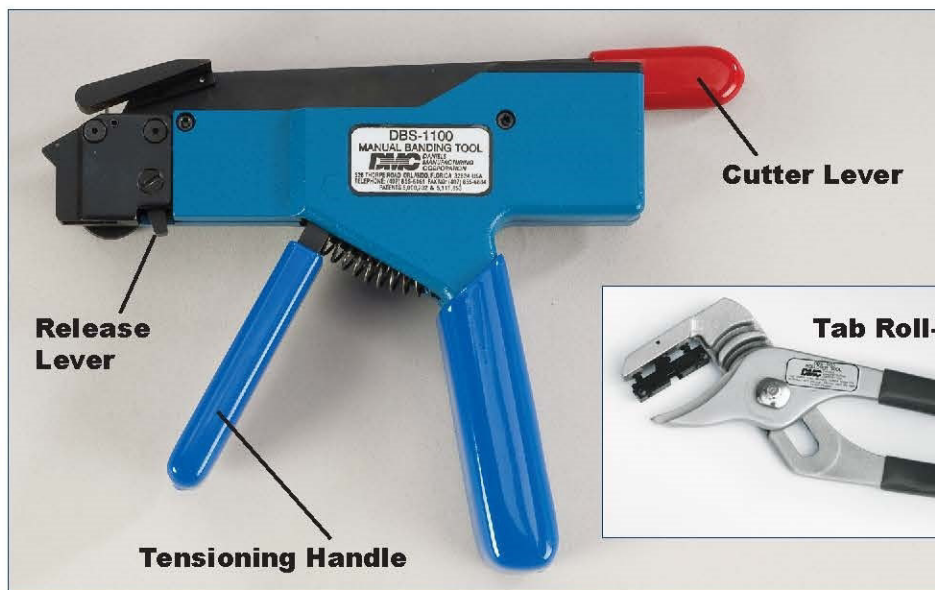
*Pending Qualification

AWM
ALL WIRE MATERIAL
BY WEIDNER

Two-Step Procedures

for M85049/128-01, /128-02, /128-05, and /128-06 bands

DANIELS MANUFACTURING CORPORATION



Step 1: Prepare the Connector and Cable Braid

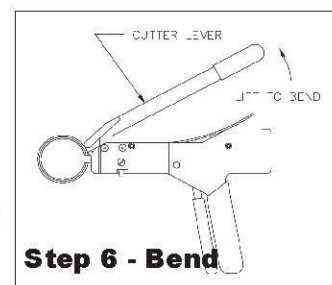
Prepare the connector and cable braid for band termination process.

Step 2: Prepare Band

Using an appropriate size band, feed the end of the band through the narrow slot on the buckle twice. This will create a double-looped band. Never use a single-looped band. Pull on the end of the band to reduce the diameter of the loop.

Step 3: Insert Looped Band into Tool

Insert the band into the banding tool at least 1.75 inches, the band loop should be orientated on the upper side of the tool's nose. Actuate the movable tensioning handle of the tool one complete stroke to insure that the band has been captured by the gripping mechanism.

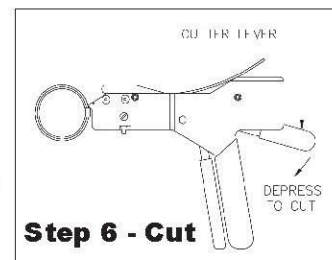


Step 4: Positioning

Position the connector and the shield assembly through the band.

Step 5: Tighten Band around Braid/Connector

Actuate the movable tensioning handle of the tool until the band is snug and tool resistance is felt, then release the movable handle and actuate the handle one full stroke thus locking the movable handle (locking occurs at the pre-set tension).



Step 6: Bend and Cut Band

To complete the termination, the band must be bent 90° by lifting the cutter lever upwards, and cut by depressing the cutter lever downwards.

Note: Sometimes the movable handle will open during the bend or cut operation. This is normal.

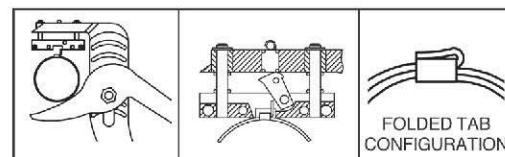
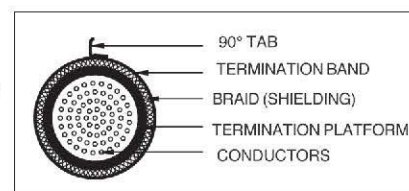
Step 7: Remove Excess Band Material

Remove excess band material from the tool by pulling out toward rear of tool.

Step 8: Roll Over Tab

The cutoff tab must be rolled over 180° in a manner which will prevent slippage. Use the Tab Roll-Over Tool to perform the rollover. NOTE: Slippage may occur if rollover exceeds 180°.

AWM Weidner
Kettnerstr. 25
70794 Filderstadt
Germany
Tel.: 0711 7009503
Fax: 0711 7009504
info@awm-weidner.de
www.awm-weidner.de



AWM
ALL WIRE MATERIAL
BY WEIDNER

AS85049/128 TOOL IDENTIFICATION CHART

TOOL MIL P/N*	DESCRIPTION	WIDTH	DMC P/N*	APPLICATION
M81306/1-01	Set: One-Step Tool, Gage, and Tension Key	.250	DBS-2102	M85049/128-3 & -4
M81306/1-02	Set: One-Step Tool, Gage, and Tension Key	.125	DBS-2202	M85049/128-7 & -8
M81306/1-01A	One-Step Band Tool	.250	DBS-2100	M85049/128-3 & -4
M81306/1-02B	One-Step Band Tool	.125	DBS-2200	M85049/128-7 & -8
M81306/1-01C	Set: Verification Gage & Compression Fixture	.250	DBS-CG5 & G1213	DBS-2100
M81306/1-02D	Set: Verification Gage & Compression Fixture	.125	DBS-CG6 & G1213	DBS-2200
M81306/1-01E	Tension Adjustment Key	.250	DBS-2100-32	DBS-2100 & DBS-2200
M81306/1-02E	Tension Adjustment Key	.125	DBS-2100-32	DBS-2100 & DBS-2200
M81306/2-01	Set: Two-Step Tool and Roll-Over Tool	.250	DBS-1101	M85049/128-1 & -2
M81306/2-02	Set: Two-Step Tool and Roll-Over Tool	.125	DBS-1201	M85049/128-5 & -6
M81306/2-01A	Two-Step Band Tool	.250	DBS-1100	M85049/128-1 & -2
M81306/2-02B	Two-Step Band Tool	.125	DBS-1200	M85049/128-5 & -6
M81306/2-01C	Roll Over Tool	.250	DBS-R03	M85049/128-1 & -2
M81306/2-02D	Roll Over Tool	.125	DBS-R05	M85049/128-5 & -6
M81306/2-01E	Set: Verification Gage & Compression Fixture	.250	DBS-CG2A & G691	DBS-1100
M81306/2-02F	Set: Verification Gage & Compression Fixture	.125	DBS-CG3A & G752	DBS-1200

*Pending Qualification

AS85049/128 BAND IDENTIFICATION CHART AND BAND ACCESSORIES

BAND MIL P/N	CONFIGURATION	WIDTH	DMC P/N	TERMINATE WITH
M85049/128-1	Welded Buckle, Flat, .250 wide x 14.25" long	.250	DBS-128-1	Two-Step Only
M85049/128-2	Welded Buckle, Pre-Coiled, .250 wide x 14.25" long	.250	DBS-128-2	Two-Step Only
M85049/128-3	Stamped Buckle, Flat, .250 wide x 14.25" long	.250	DBS-128-3	One-Step Only
M85049/128-4	Stamped Buckle, Pre-Coiled, .250 wide x 14.25" long	.250	DBS-128-4	One-Step Only
M85049/128-5	Welded Buckle, Flat, .125 wide x 9" long	.125	DBS-128-5	Two-Step Only
M85049/128-6	Welded Buckle, Pre-Coiled, .125 wide x 9" long	.125	DBS-128-6	Two-Step Only
M85049/128-7	Stamped Buckle, Flat, .125 wide x 8.52" long	.125	DBS-128-7	One-Step Only
M85049/128-8	Stamped Buckle, Pre-Coiled, .125 wide x 8.52" long	.125	DBS-128-8	One-Step Only
--	Band Removal Tool	--	DBS-BR1	--
--	.500 Dia. Split Ring Set (Ref: AS85049/93)	--	4-1376	--
--	.750 Dia. Split Ring Set (Ref: AS85049/93)	--	4-1377	--
--	1.00 Dia. Split Ring Set (Ref: AS85049/93)	--	4-1378	--
--	1.50 Dia. Split Ring Set (Ref: AS85049/93)	--	4-1379	--

M85049/128 Band Application System

DMC Part Numbers



ONE-STEP APPLICATION TOOLS, ACCESSORIES AND COMPONENTS

.250 STANDARD WIDTH BAND TOOLS

DBS-2100	M81306/1-01A* Hand Operated Band Tool
DBS-2102	Hand Operated Band Tool Set (includes DBS-2100, DBS-2100-32, DBS-CG5) (M81306/1-01)
DBS-2100-32	Tension Adjustment Key (M81306/1-01E & 02E)
DBS-2100-SB	Replacement Stationary Blade for .250 Band Tools
DBS-2100-MB	Replacement Movable Blade for .250 Band Tools

.125 WIDTH MINI-BAND TOOLS

DBS-2200	M81306/1-02B* Hand Operated Mini Band Tool
DBS-2202	Hand Operated Mini Band Tool Set (includes DBS-1200, DBS-2100-32, DBS-CG6) (M81306/1-02)
DBS-2100-32	Tension Adjustment Key (M81306/1-01E & 02E)
DBS-2200-SB	Replacement Stationary Blade for .125 Band Tools
DBS-2200-MB	Replacement Movable Blade for .125 Band Tools

TOOL VERIFICATION INSTRUMENTATION

DBS-CG4	Laboratory Verification Instrument for DBS-2100 & DBS-2200 series band tools
DBS-CG5 & G1213	Field Verification Inspection Gage for DBS-2100, M81306/1-01C*
DBS-CG6 & G1213	Field Verification Inspection Gage for DBS-2200, M81306/1-02D*

BANDS & RINGS

DMC P/N	DESCRIPTION
DBS-128-1	M85049/128-1 .250 wide x 14.25" long (Welded Flat)
DBS-128-2	M85049/128-2 .250 wide x 14.25" long (Welded Pre-Coiled)
DBS-128-3	M85049/128-3 .250 wide x 14.25" long (Stamped Flat)
DBS-128-4	M85049/128-4 .250 wide x 14.25" long (Stamped Pre-Coiled)
DBS-128-5	M85049/128-5 .125 wide x 9" long (Welded Flat)
DBS-128-6	M85049/128-6 .125 wide x 9" long (Welded Pre-Coiled)
DBS-128-7	M85049/128-7 .125 wide x 8.52" long (Stamped Flat)
DBS-128-8	M85049/128-8 .125 wide x 8.52" long (Stamped Pre-Coiled)
DBS-BR1	Band Removal Tool
4-1376	.500 Dia. Split Ring Set (Ref: AS85049/93)
4-1377	.750 Dia. Split Ring Set (Ref: AS85049/93)
4-1378	1.00 Dia. Split Ring Set (Ref: AS85049/93)
4-1379	1.50 Dia. Split Ring Set (Ref: AS85049/93)

TWO-STEP APPLICATION TOOLS, ACCESSORIES AND COMPONENTS

.250 STANDARD WIDTH BAND TOOLS

DBS-1100	M81306/2-01A* Hand Operated Band Tool
DBS-1101	Hand Operated Band Application Tool Set M81306/2-01* (includes DBS-1100, DBS-R03)
DBS-1102	Hand Operated Band Application Tool Set (includes DBS-1100, DBS-R03, DBS-CG2 & G691)
DBS-1100-32	Tension Adjustment Key
DBS-1100-7	Replacement Blade for .250 Band Tools
DBS-R03	Roll-Over Tool for .250 Band Tab, M81306/2-01C*

.125 WIDTH MINI-BAND TOOLS

DBS-1200	M81306/2-02B* Hand Operated Mini Band Tool
DBS-1201	Hand Operated Mini Band Application Tool Set M81306/2-02* (includes DBS-1200, DBS-R05)
DBS-1202	Hand Operated Mini Band Application Tool Set (includes DBS-1200, DBS-R05, DBS-CG3 & G752)
DBS-1100-7	Replacement Blade for .125 Band Tools
DBS-R05	Roll-Over Tool for .125 Band Tab, M81306/2-02D*

PNEUMATIC BAND TOOLS FOR .250 WIDTH BANDS

PBT1100	Pneumatic Band Application Tool
---------	---------------------------------

PNEUMATIC BAND TOOLS FOR .125 WIDTH BANDS

PMBT1200	Pneumatic Band Application Tool
----------	---------------------------------

TOOL VERIFICATION INSTRUMENTATION

DBS-CG1	Laboratory Verification Instrument for DBS-1100 & DBS-1200 series band tools
DBS-CG1-F	DBS-CG1 Holding Fixture (Banding tool & DBS-CG1 not included)
DBS-CG2	Field Verification Fixture for DBS-1100
G691	Go/No-Go Gage for DBS-CG2 Fixture
DBS-CG2A	M81306/2-01E* Verification Set which includes DBS-CG2 & G691
DBS-CG3	Field Verification Fixture for DBS-1200
G752	Go/No-Go Gage for DBS-CG3 Fixture
DBS-CG3A	M81306/2-02F* Verification Set which includes DBS-CG3 & G752

BANDING APPLICATION KIT

DMC1379	.250 Banding Tool Kit
DMC60A	Complete EMI/RFI Shielding Maintenance/Repair System (M81306/2-01* tool and .250 bands)

*Pending Qualification

M85049/128

Band Configurations



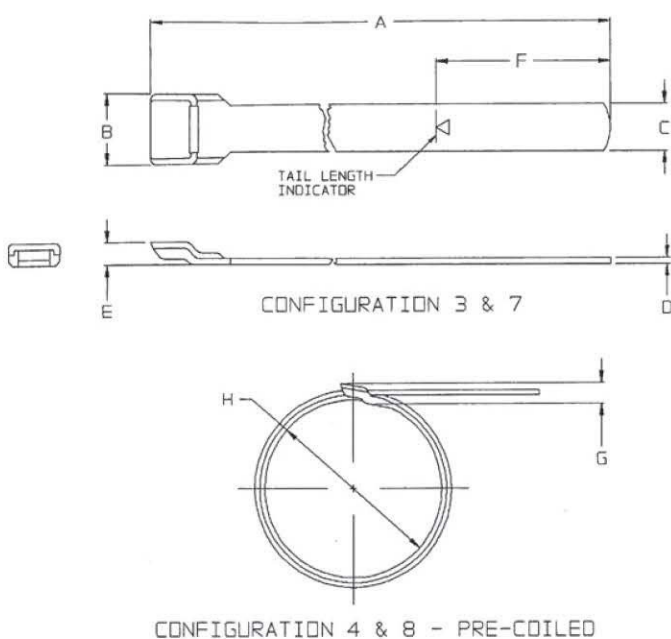
M85049/128 Shield Termination Bands are available in two distinct configurations, Stamped and Welded Buckles, and two different widths, .250 in. (6.350 mm) and .125 in. (3.175 mm). The bands come flat as they're manufactured or pre-coiled and ready for use.

The buckle for the M85049/128-03, M85049/128-04, M85049/128-07, and M85049/128-08 bands is a STAMPED buckle. This configuration is low-profile style with a slot for the other end of the band to pass through.

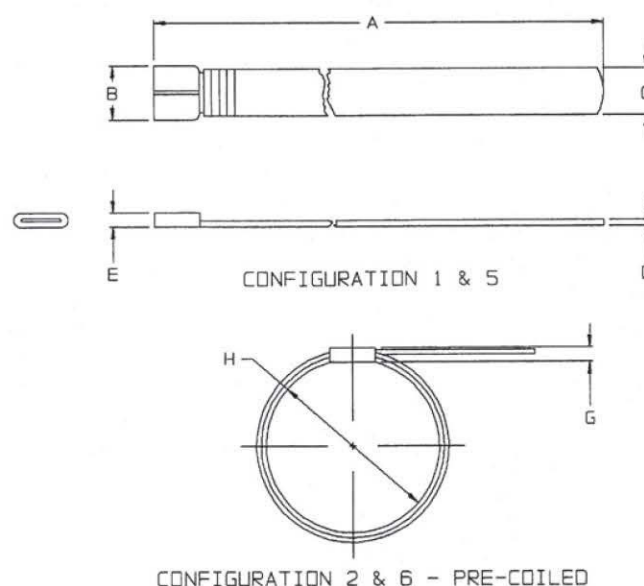
The buckle for the M85049/128-01, M85049/128-02, M85049/128-05, and M85049/128-06 bands is a WELDED buckle. This configuration is folded style with a loop for the other end of the band to pass through.



M85049/128-03, M85049/128-04, M85049/128-07, and M85049/128-08 Stamped Buckle Bands



M85049/128-01, M85049/128-02, M85049/128-05, and M85049/128-06 Welded Buckle Bands



PRODUCTION STATION APPLICATIONS

When the measurement of torque is a requirement of a particular cable assembly operation, this can be easily accomplished with the use of the digital torque wrench.



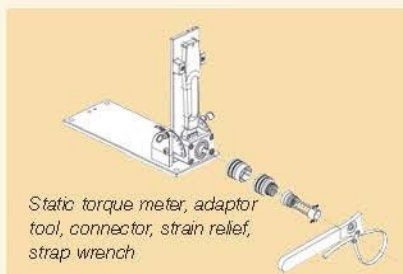
Digital torque wrench, adaptor, connector, strain relief



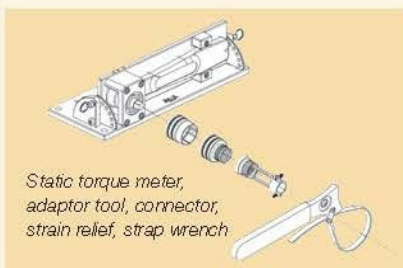
Digital torque wrench, handle-less strap wrench, connector, strain relief

If a static torque meter is needed, the digital torque wrench can be placed in a static mount base. The adaptor is then attached to the square drive on the torque meter, and this arrangement holds the connector while the backshell accessory is torqued onto the connector, with a strap wrench.

When the torque reaches the pre-set value, a signal light advises the operator that the desired torque value has been applied.

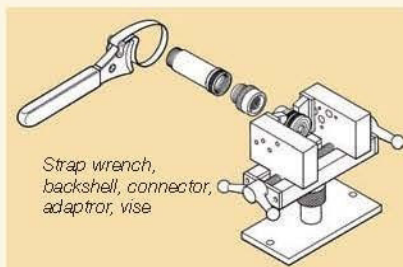


Static torque meter, adaptor tool, connector, strain relief, strap wrench



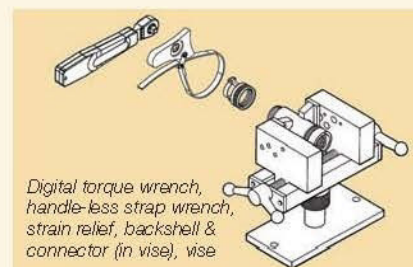
Static torque meter, adaptor tool, connector, strain relief, strap wrench

When optimum repeatability and production efficiency demand, the assembly station vise can be used to complement the ability of adaptor tools to stabilize the connector. As shown, the vise is being used to firmly hold the adaptor tool, while a strap wrench is being used to tighten the backshell onto the connector.



Strap wrench, backshell, connector, adaptor, vise

On multi-piece backshells, the correct torque on each accessory can only be achieved by efficiently holding adjacent parts. In the example shown, the assembly station vise is being used to hold the backshell segment already torqued onto the connector, while the strain relief is tightened with a strap wrench and a torque meter. Thus, the correct torque can be applied to the backshell segments without affecting the torque value already applied to prior connector/ accessory components.



Digital torque wrench, handle-less strap wrench, strain relief, backshell & connector (in vise), vise



Handle-less strap wrench, digital torque wrench, strain relief, backshell (in vise jaws), connector, vise