

One-Step Banding Tool System

for M85049/128-03, /128-04, /128-07, and /128-08 bands

DMC DANIELS
MANUFACTURING
CORPORATION



DBS-2100 & DBS-2200 (M81306/1-01* & M81306/1-02*)

ONE-STEP BAND APPLICATION TOOLS

The One-Step Band Application Tools are built to M81306/1 and designed to install M85049/128-03, M85049/128-04, M85049/128-07, and M85049/128-08 "stamped 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 applied. The Cut-Off handle easily cuts, bends, and locks the shield band in one step.

DBS-2100 .250 Wide Band Application Tool M81306/1-01*:

- Size and Weight: 6.71" x 6.75" x .92", 1.02 lbs.
- Tension Range: 145–155 lbs.
- Cut-off blades replaceable with Blade Replacement Kit: DBS-2100-BRK

DBS-2200 .125 Wide Mini-Band Application Tool M81306/1-02*:

- Size and Weight: 6.71" x 6.75" x .92", 1.02 lbs.
- Tension Range: 75–85 lbs.
- Cut-off blades replaceable with Blade Replacement Kit: DBS-2200-BRK

VERIFICATION OF ONE-STEP EMI/RFI BAND TOOLS M81306/1-01C & M81306/1-01D



The tension of the DMC One-Step Band Application Tools may be easily verified to insure correct band tension.

The DBS-CG5 (M81306/1-01C) & DBS-CG6 (M81306/1-01D) Field Verification Fixtures and

G1213 Go/No-Go Gage were developed to allow

the user a quick means of checking calibration of band application tools in the field.

A band is placed into the calibration fixture and 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.

The DBS-CG4 Calibration Instrument will allow the operator to gage 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 calibration instrument. Full tension is exerted by the tool and read directly on the precision dial indicator portion of the calibration instrument.

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 calibration instrument.



One-Step Procedures

for M85049/128-03, /128-04, /128-07, and /128-08 bands

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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. To hasten the termination process on smaller adapters, pull on the end of the band to reduce the diameter of the loop.

Step 3: Insert Looped Band into Tool

Squeeze the release lever and insert the end of the band into the nose of the tool. Ensure the orientation of the band matches the graphic on the body of the tool (coil down when the tool is held upright).

Step 4: Positioning

Position the connector and the shield assembly through the band.

Step 5: Tighten Band around Braid/Connector

Repeatedly squeeze the tensioning handle until the band closes around the assembly. Once the band is close around the assembly, use half strokes of the handle until the band is tight against the braided cable. Release the tensioning handle and allow it to open fully. With one final stroke, close the tensioning handle until it locks against the tool body. This indicates that the band has been tightened to the pre-set tension.

Step 6: Cut Off

Once the tensioning handle is locked in place, squeeze the cut-off handle to finish the termination process. Both handles will open up on their own. (If shrinkable tubing is to be applied, it is recommended that the band is wrapped in tape and the excess braid folded back over the band to prevent cutting of shrinkable tubing.)

Step 7: Remove Excess Band Material

Release the tensioning handle and then squeeze the release lever. While squeezing the release lever, carefully pull on the band and slide it out of the tool and discard.



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.



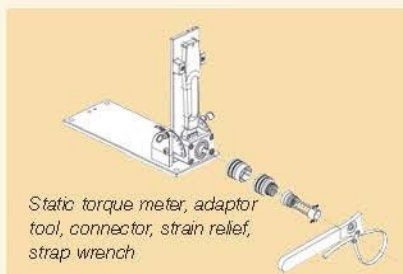
Digital torque wrench, adaptor, connector, strain relief



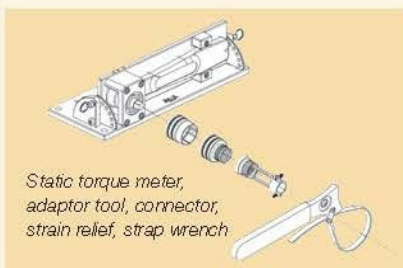
Digital torque wrench, handle-less strap wrench, connector, strain relief

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.

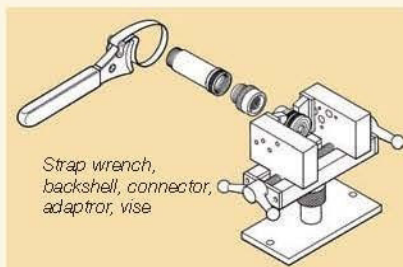


Static torque meter, adaptor tool, connector, strain relief, strap wrench



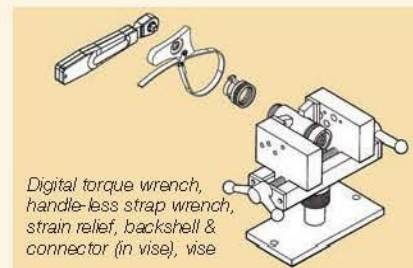
Static torque meter, adaptor tool, connector, strain relief, strap wrench

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