

Glenair Assembly Tools Help Prevent Distortion and False Tightening Problems

Backshell tightening tools are available which provide virtually a full 360° gripping surface on backshell coupling nuts. These innovative tools minimize the possibility of coupling nut distortion and false tightening problems which can be caused by soft-jaw pliers or strap wrenches.

Reliable Installation of Glenair Backshells on Circular Connectors

When used with the appropriate connector holders and torque wrenches, Glenair Backshell Assembly Tools provide the user with consistent, repeatable backshell installations. Designed primarily for production assembly use, the tools can also be used equally well for successful field maintenance operations.

Glenair Backshell Assembly Tools may also be utilized effectively with backshell rotatable couplers produced by other manufacturers, providing the "B" reference diameters are consistent with those shown within this catalog.

Recommended Tightening Procedures

Recommended tightening procedures, tools and torque values offered by Glenair are intended as an aid to properly fasten the backshell to the connector interface threads.

Glenair offers a variety of tools to accomplish proper tightening; our 600-091 Hex Wrench is configured to make provide support to each spe-

cific coupling nut to be tightened, our TG70 strap wrench (page J-5) is intended for general use on cable clamps. Hand-held and bench-mount torque wrenches accommodate our 600-005 plug or receptacle connector holders (see *Backshell Assembly Tool* catalog).

When tightening backshell onto connectors, it is important to follow Glenair's recommended procedures for each tool being used.

When tightening backshells with rotatable coupling nuts, Glenair recommends the backshell to be hand tightened to engage the connectors interlocking teeth or spline features, making sure the teeth are fully engaged before fully torquing with our tools. We also suggest retorquing by removing the tool and reinstalling the tool approximately 90° away from the initial position and tightening to the connector manufacturer's recommended value.

Composite backshells should be tightened to 80% of the values shown for MIL-C-85049 light and medium duty torque. Secondary components such as: Glenair's cable clamps, gland sealing nuts, sleeves or adapters, not directly fastened to the connector should be tightened 40 to 60 inch pounds to insure proper performance.

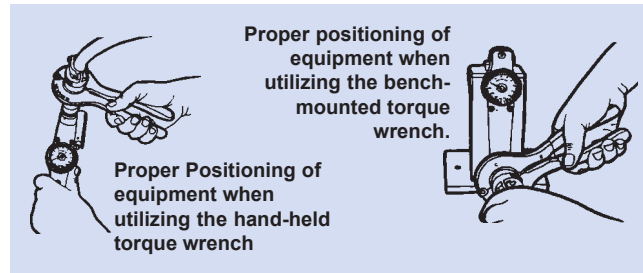
Four Easy Steps for Proper Backshell Assembly

1. Select plug or receptacle holder (most holder series provide "universal polarization", but a few connector series require specific polarization for each alternate keying arrangement).
2. Set desired torque on torque wrench.
3. Mount holder on square drive of torque wrench. Carefully mate with connector, and hand-tighten Glenair backshell coupling. To assure proper mating, anti-rotation teeth must be fully engaged.
4. Tighten rotatable coupler with assembly tool. Do not use excessive grip on handles. When coupler begins to tighten, relax grip and rotate assembly tool back 90°, then resume grip and continue to tighten; repeating this sequence until desired torque level is reached.

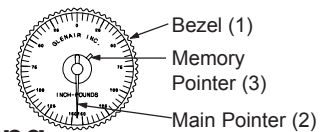
CAUTION: Do not apply torque in excess of signal setting. Excess torque will cause signal pointer to reset and give erroneous readings.

Setting Torque Levels

To verify proper backshell installation values, electrical signals are built into bench-mounted (audio) and hand-held (light) torque wrenches. The procedure for setting torque levels is the same for both units.



Setting Desired Torque for Right-Hand Thread Tightening



To set torque, turn Bezel (1) clockwise until signal is on. Continue to turn Bezel until Main Pointer (2) is at desired torque level on scale. You may cover the audio signal during this procedure to minimize noise level when setting the bench-mounted unit.

The Memory Pointer (3) is set by the above procedure. With this accomplished, turn Bezel counter-clockwise until the Main Pointer is aligned with zero on the scale. Your torque wrench is not ready for operation.

Resetting the Memory Pointer

When you wish to change torque levels, rotate the Bezel counter-clockwise until the signal is on. Continue to rotate Bezel until Memory Pointer is aligned with zero on the scale. now repeat the above procedure for setting torque.

Setting Desired Torque for Left-Handed Thread Tightening

Simply reverse the above procedure for setting the desired torque for left-hand thread tightening.