

# GAP-070 Installation of Series 77 Shrink Boots on Composite Shells



## PROCEDURE

The following general instructions are applicable when incorporating Glenair heatshrink boots on composite backshells or connectors.

### APPLICATION NOTE

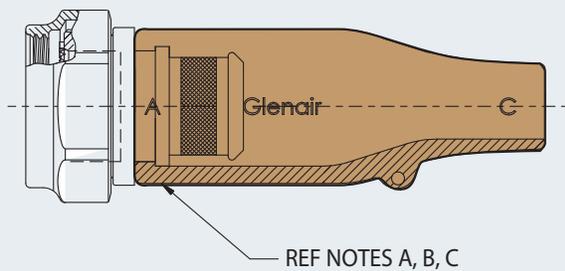
Attention is required to set the heat gun to the proper heat level when incorporating a shrink boot on a composite backshell or connector. **DO NOT PREHEAT COMPOSITE PARTS.**

### STEP 1: HEAT HOT AIR GUN

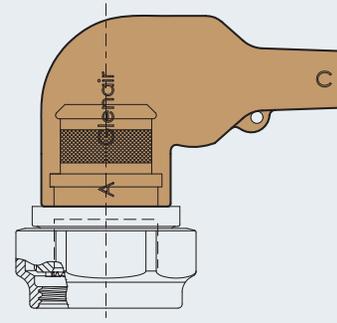
Set dial to low if you do not have the means to measure the temperature of the hot air gun.

### STEP 2: ADJUST TEMPERATURE

Gradually increase the temperature of the hot air gun until the shrink boot begins to show the first subtle sign of recovery. Use the lowest temperature setting that will shrink the boot. A good nominal temperature to start the shrink recovery process is 100° C (212°F).



**Straight**



**Right Angle**

### BENEFITS OF SLOWING THE RECOVERY OF THE SHRINK BOOT

Slowing the recovery of the shrink boot is beneficial for several reasons:

- A) Allows time for proper placement and orientation of the shrink boot as it begins to recover.
- B) Allows for a controlled shrink, starting at the A end progressing to the C end of the boot.
- C) Eliminates potential for heat damage to the composite material or to the plating. (Heat gun settings should never exceed surface temperatures of 150°C)

### CAUTION

**The recovered parts will remain hot for some time and will be capable of burning skin if touched. Molten adhesive may also cause burns and adhere to exposed skin.**

Dimensions in inches (millimeters) and are subject to change without notice.



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### GENERAL INSTALLATION GUIDES FOR GLENAIR HEAT SHRINK BOOTS

#### METHODS FOR SHRINKING PARTS

These application guides are to support operators who have been trained in the installation of heat shrinkable products, the use of adhesives and product evaluation. Operators will have been made aware of all health and safety issues and is aware of the relevant MSDSs for heat shrink materials, specified adhesives and cleaning materials. **Material Safety Data Sheets (MSDS) are available at [www.glenair.com/html/compliance.htm](http://www.glenair.com/html/compliance.htm)**

#### CAUTION

The use of heat shrinkable products entails the potential exposure of people to heat, solvents and gases. Every precaution is to be taken against harmful effects by the use of protective gloves, safety glasses and good ventilation. All local health and safety regulations should be adhered to and operators should follow designated safe working practices. The use of protective gloves and barrier creams are recommended when using solvents and adhesives. Repeated skin contact should be avoided and care should be taken to wear safety glasses when handling these materials. Attention should be taken of the recommendations of the relevant MSDS sheets for the materials being used.

#### APPLICATION EQUIPMENT

##### Heat Source

A suitable Leister or Steinel hot air gun is recommended. Other heat guns may be used but these must be able to deliver hot air at the temperatures recommended in these installation guides. Reflectors can assist in the process of recovering parts. Always ensure the air vent on the rear of the hot air gun is open and free of dust and or other materials. Always allow the hot air gun to reach the required temperature and to stabilize before starting to shrink parts. It is recommended that the Heat Gun is calibrated daily by the use of a thermocouple positioned 25mm from the end of the nozzle.

#### CAUTION

The surfaces of the nozzles and reflectors reach high temperatures and will cause burns if touched. Great care should be taken when handling these tools especially after use since they take a considerable time to cool.

##### Cleaning Materials

100 grit Emery Cloth is recommended for cleaning and abrading surfaces to be adhered to. Isopropyl alcohol (IPA) is recommended for degreasing either as a liquid or an impregnated tissue. (Note safety issues on the use of solvents documented in the Glenair Series 77 Shrink Boot Catalog.)

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