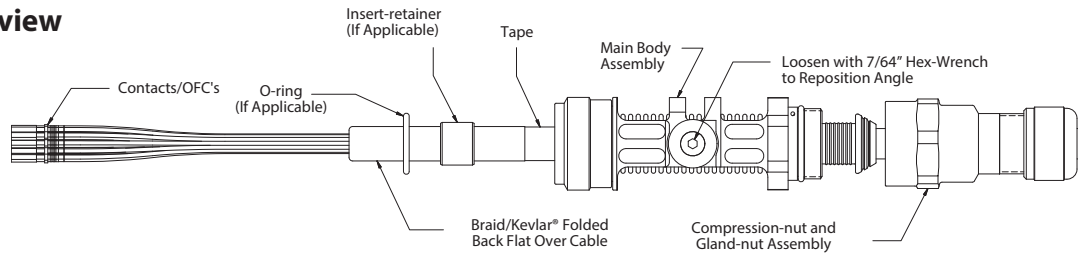


## Assembly Instructions

### Assembly Overview



The Following suggested assembly procedure serves as a guide for proper assembly and installation of Glenair P/N 390G084

#### Step 1

Cut cable to desired length, making sure to include contact termination length and desired service loop length (Note: service loop not applicable for fiber termination.)

#### Step 2

Slide BacNav OFS backshell assembly onto cable-end being terminated. Slide insert-retainer and o-ring or adapter (as applicable) onto cable following the backshell. (Note: Adapter may be coupled to backshell.) Unscrew and separate intermediate compression nut and gland assembly from main body assembly. (See figure 1)



Fig. 1

#### Step 3

Prepare cable end for termination.

- Determine cable jacket strip length. For precise determination, it is recommended to terminate a connector using a minimum strip length, then mark the cable jacket at the required distance behind the main body assembly. Length will include contact termination length, desired service loop length (not applicable for fiber) and effective main body assembly length (includes installed adapter length if present). (See figure 2)
- Remove outer cable jacket exposing cable-shield (braid) or Kevlar® strength members (fiber-optic applications).
- Shielded electrical cable applications:** Remove any water-block material from cable-shield. Trim cable shield to 3-4 inch length (optional) then fold back flat over outer cable jacket and tape down.

**Fiber-optic applications:** Leave Kevlar® strength members long, fold back over outer cable jacket and tape down (See figure 3)

Fig. 2

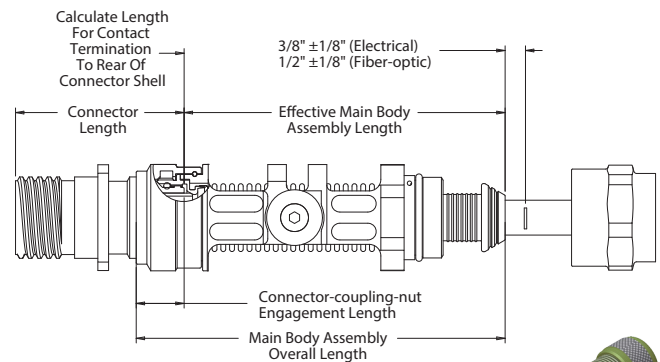
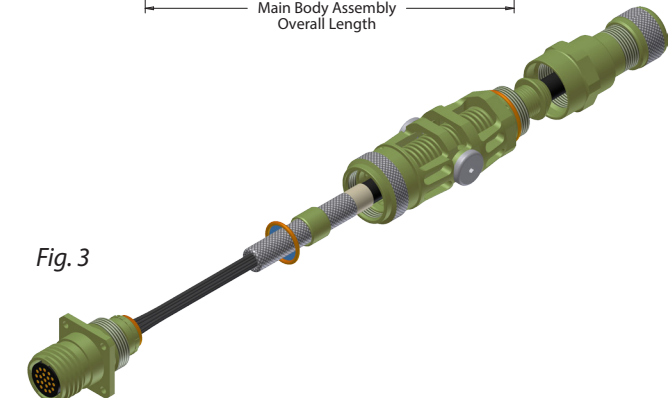


Fig. 3



**Step 4**

Prepare conductor/fibers and terminate contacts/OFCs according to specific connector requirements.

**Step 5**

Insert contacts/OFCs into connector according to specific connector requirements.

**Step 6**

Move backshell main body assembly (with adapter if present, or insert-retainer/o-ring if present) towards cable end to mate with connector. Position insert-retainer and o-ring if applicable, then thread backshell/adapter-to-connector coupling nut onto connector ensuring proper alignment/orientation with respect to connector master-key, and verifying proper engagement of clocking teeth or splines as the coupling nut is hand tightened. **(See Figure 4)**

**Step 7**

Verify cable jacket strip length, and terminate cable-shield/Kevlar® strength members. (Refer to banding tool instructions for additional details).

**Shielded electrical cable applications:** End of cable jacket should measure  $\frac{3}{8}'' \pm \frac{1}{8}''$  from conical end of main backshell body assembly to cable jacket (with service loop length contained inside backshell). **(See figure 2)** Un-tape cable-shield and fold forward over conical end and banding platform, ensuring even 360° distribution. Prepare termination-band and installation tool, positioning over shield in the center of the banding platform. **(See figure 5)** Complete band termination, ensuring cable jacket end remains  $\frac{3}{8}'' \pm \frac{1}{8}''$  from conical end of main backshell body. **(See figure 6)**

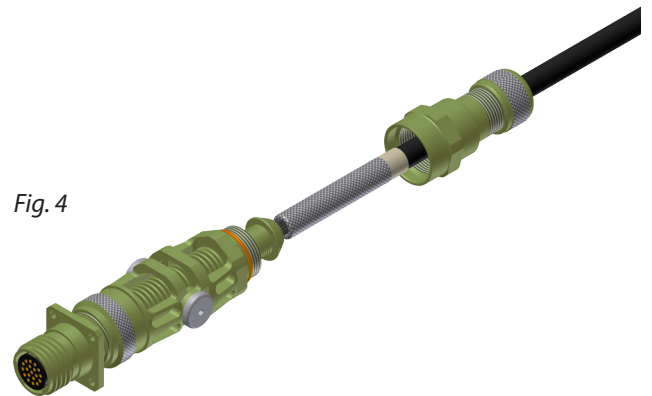


Fig. 4

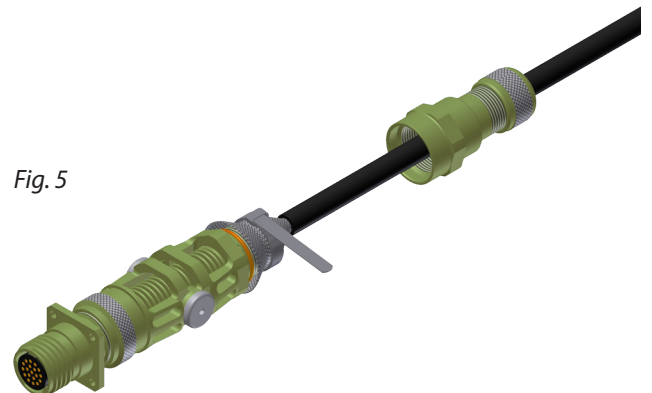


Fig. 5

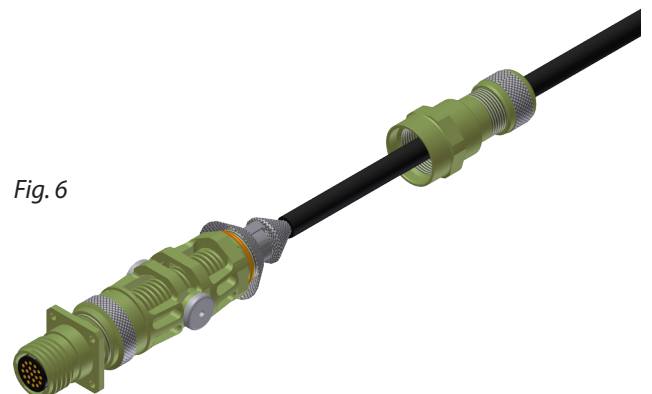


Fig. 6

## Assembly Instructions

**Fiber-optic applications:** End of cable jacket should measure  $\frac{1}{2}'' \pm \frac{1}{8}''$  with fiber-optic conductors pulled taut (*See figure 2*). Un-tape Kevlar® strength members and fold forward over conical end and banding platform, ensuring even 360° distribution. Prepare termination-band and installation tool, positioning over cable jacket. Ensuring fibers are pulled taut, remove all slack from Kevlar® strength members as they are dressed forward over the main backshell body intermediate compression-nut threads. Holding Kevlar® strength members tightly around the main backshell body intermediate compression-nut threads, move band and tool into position over banding platform (*See figure 7*). Tighten termination band allowing the Kevlar® to pull the cable jacket end towards the conical end of main backshell body a minimum of  $\frac{1}{4}''$  when the band is fully tightened (*See figure 8*).

**IMPORTANT!** This procedure ensures the Kevlar® strength member is pre-loaded and adequate fiber slack is provided inside the backshell. (*See figures 7 and 8*)

### Step 8

Trim cable-shield or Kevlar® strength members to the end of the intermediate compression-nut threads. Note: If desired, some extra length of cable-shield or strength members may be tucked away in the pocket behind banding platform under the intermediate compression-nut threads. (*See figure 8*)

### Step 9

Move intermediate compression nut and gland assembly into place and thread onto main body assembly. Tighten all threaded couplings including connector to adapter/backshell coupling nut, adapter to backshell coupling nut (if applicable), intermediate compression-nut, gland nut and cable clamps (if applicable) to appropriate torque values, refer to SAE AIR6151 for appropriate torque values. (*See figure 9*)

Fig. 7

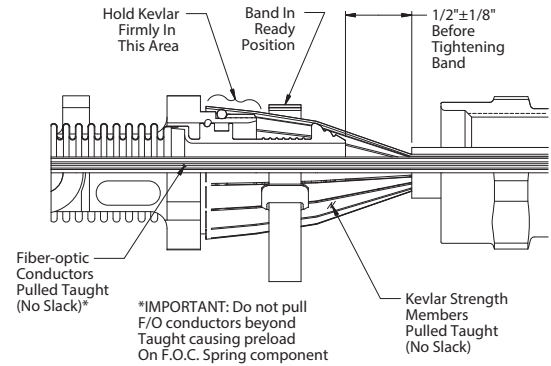


Fig. 8

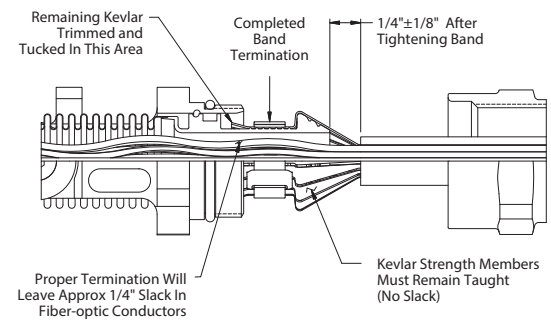


Fig. 9

