



# Eaton's "H" Fittings are the quick, permanent repair fittings that get military and commercial aircraft off the ground fast!

- Immediate in-field repair capabilities
- · Permanent connectivity
- Saves time and money
- No special tooling required for installation
- Accommodates all tubing materials
- Design in accordance with Boeing BACC42W
- Installs within envelope dimensions similar to those of standard flared and flareless union assemblies
- FAA approved
- Passes pressure impulse, fatigue, and burst test requirements of MIL-F-18280 flareless fitting specification
- Also meets or exceeds joint tensile strength of in-line flareless fitting installations

Remove burrs from tube ends. Maximum allowable gap between ends is .250" (6.35 mm). Position arrow on template in center of gap. Wrap tape opposite shaded area. Mark dot on tube opposite template dot.

# **Position Components**

Position fitting components onto tube ends with union against tape.

#### **Tighten Assembly**

Start nut onto coupling and tighten with union against tape.
Continue tightening until great torque increase is felt as the slide and coupling bottom against union. Check for visibility of mark.

#### **Inspect Joint**

Back off nut and assure that slide and coupling are bottomed against shoulder of union. Union must contact tape, and edge of coupling must intersect tube mark.

#### Retighten

Retighten assembly.

**Prepare Tubes** 



"H"Fitting Assembly

#### **Available Repair Kit Options**

Dimensions: inches (mm)

| Kit Part<br>Number<br>HRK 100 | Fitting<br>Quantity<br>4<br>4<br>4   | Tube<br>Sizes<br>1/4 (6.3)<br>3/8 (9.5)<br>1/2 (12.7)                                 | Boeing<br>Part NO.<br>BACC42W04T<br>BACC42W06T<br>BACC42W08T                                   |
|-------------------------------|--------------------------------------|---|--|
| HRK 101                       | 4                                    | 1/4 (6.3)   | BACC42W04T   |
|                               | 4                                    | 5/16 (7.9)  | BACC42W05T   |
|                               | 4                                    | 3/8 (9.5)   | BACC42W06T   |
|                               | 4                                    | 1/2 (12.7)  | BACC42W08T   |
| HRK 102                       | 4                                    | 1/4 (6.3)   | BACC42W04T   |
|                               | 4                                    | 3/8 (9.5)   | BACC42W06T   |
|                               | 4                                    | 1/2 (12.7)  | BACC42W08T   |
|                               | 2                                    | 5/8 (15.8)  | BACC42W10T   |
|                               | 2                                    | 3/4 (19.0)  | BACC42W12T   |
| HRK 103                       | 4                                    | 1/4 (6.3)   | BACC42W04T   |
|                               | 4                                    | 5/16"   | BACC42W05T   |
|                               | 4                                    | 3/8 (9.5)   | BACC42W06T   |
|                               | 4                                    | 1/2 (12.7)  | BACC42W08T   |
|                               | 2                                    | 5/8 (15.8)  | BACC42W10T   |
|                               | 2                                    | 3/4 (19.0)  | BACC42W12T   |
| HRK 104                       | 4                                    | 1/4 (6.3)   | BACC42W04T   |
|                               | 4                                    | 3/8 (9.5)   | BACC42W06T   |
|                               | 4                                    | 1/2 (12.7)  | BACC42W08T   |
|                               | 2                                    | 5/8 (15.8)  | BACC42W10T   |
|                               | 2                                    | 3/4 (19.0)  | BACC42W12T   |
|                               | 2                                    | 1 (25.4)  | BACC42W16T   |
| HRK 105                       | 4<br>4<br>4<br>4<br>2<br>2<br>2<br>2 | 1/4 (6.3)<br>5/16"<br>3/8 (9.5)<br>1/2 (12.7)<br>5/8 (15.8)<br>3/4 (19.0)<br>1 (25.4) | BACC42W04T<br>BACC42W05T<br>BACC42W06T<br>BACC42W08T<br>BACC42W10T<br>BACC42W12T<br>BACC42W16T |

HRK 099

THIS KIT CONTAINS:

- Tubing Lengths
- Tube Cutter
- Deburring Tool
- Installation Templates
- Instruction Manual

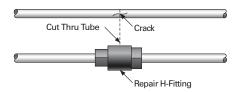
# **Qualified Tube Combinations**

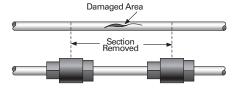
# **Tube Material**

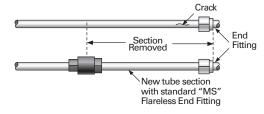
| Size | Cres<br>304<br>1/8 Hard | Cres<br>21-6-9 | Cres<br>304<br>Annealed | Aluminum<br>6061 -T6 | Titanium<br>3AL - 2.5V |
|------|-------------------------|----------------|-------------------------|----------------------|------------------------|
| 04   | X                       | X              | X                       | X                    | X                      |
| 05   | X                       | X              |                         |                      |                        |
| 06   | X                       | X              | Х                       | Х                    | X                      |
| 08   | X                       | Χ              | X                       | X                    | X                      |
| 10   | X                       | Х              | X                       | Х                    | X                      |
| 12   | X                       | Х              | Х                       | Х                    |                        |
| 16   | X                       | Х              | X                       | X                    |                        |

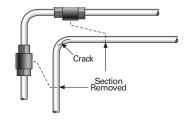
Qualified to MIL F-18280 and BPS-F-142. The BACC42W "H" Repair Fitting is qualified for repair of 3000 psi (20685 kPa) hydraulic pressure and return lines.

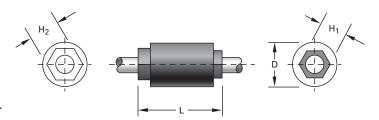
# **Typical Repair Installation**









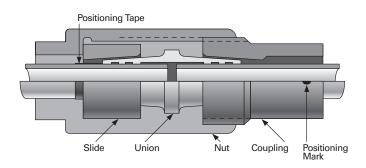


### **Part Number and Dimensions**

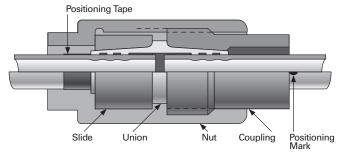
Dimensions: inches/mm

| Part No. | Tube O.D.  | "D" Dia.   | "H1"       | "H2"<br>Len | Assembled<br>gth |
|----------|------------|------------|------------|-------------|------------------|
| 36011V04 | .250/6.35  | .780/19.8  | .438/11.1  | .688/17.4   | 2.35/59.6        |
| 36011V05 | .312/7.9   | .900/22.8  | .500/12.7  | .750/19.0   | 2.35/59.6        |
| 36011V06 | .375/9.5   | .950/24.1  | .625/15.8  | .750/19.0   | 2.35/59.9        |
| 36011V08 | .500/12.7  | 1.125/28.5 | .750/19.0  | .875/22.2   | 2.35/59.6        |
| 36011V10 | .625/15.8  | 1.300/33.0 | .875/22.2  | 1.063/27.0  | 2.35/59.6        |
| 36011V12 | .750/19.0  | 1.420/36.0 | .938/23.8  | 1.250/31.7  | 2.95/59.6        |
| 36011V16 | 1.000/25.4 | 1.700/43.1 | 1.187/47.4 | 1.500/38.0  | 2.95/59.6        |

# "H" Fitting Before and After Installation



When the nut, slide, union, and coupling are in position on the tube, the gap between the cut tube ends is in the center of the union. One end of the union rests against the tape.



Once the "H" Fitting has been tightened, the slide and the coupling have "bottomed" onto the union, making a permanent seal. The union still rests against the tape, and the dot is now intersected by the hex-end of the coupling.

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