

Kidde Aerospace

Kidde Technologies, Inc.
Wilson, North Carolina 27896-9643 U.S.A.

PN 878581-01
PIN PLUG
QTY: 1

HERMETIC CONNECTORS ASSEMBLY AND INSTALLATION

General

Hermetic connectors are used to connect aircraft wiring with aircraft fire detection system sensing elements. Four types of connectors are available: Pin Receptacle, Socket Receptacle, Pin Plug and Socket Plug. Selection of connector type is determined by the mating sensing element connector. Assembly and installation instructions for the various types of connectors are the same. Available hermetic connectors are as follows:

<u>Connector Type</u>	<u>Typical Connector Part Numbers by Wire Size</u>		
	<u>16 AWG</u>	<u>18 AWG</u>	<u>20 AWG</u>
Pin Plug Wire	878238-02	878581-01	878540
Socket Plug Wire	878239-02	878582-01	
Socket Receptacle Wire	878395-01	878583-01	878541
Pin Receptacle Wire	878454-01	878584-01	

Crimping Tools

Crimp tool frame M22520/5-01 (HX4)
for 16 and 18 gage wire Y715 Crimp Die
for 20 and 22 gage wire Y792 Crimp Die

Wire connector crimp die:
for 16 and 18 gage wire P/N 620770
for 20 gage wire P/N 620964
Backshell hex crimp die P/N 620963
Crimp tool frame P/N 612648 (MS22910/7-1,
MIL-T-22910/7)

Source

Primary Source:
Daniels Mfg. Corp.
Orlando, FL
Ph: 407-855-6161
CAGE: 11851

Alternate Source:
Astro Tool Co., Inc.
21615 Southwest Tualatin Valley Hwy
Beaverton, OR 97006
Ph: 503-642-9853

Assembly

- Using specified crimping tools, assemble hermetic connector to aircraft wiring as follows:

CAUTION: Do not cut or nick wire when stripping.

- Strip the insulation back 5/16" and thread the grommet onto the wire (Figure 1).
- For plug type connectors, place the swivel nut on the connector body, with the threads to the front. Using rotating motion, insert the stripped wire end into the crimp socket of the

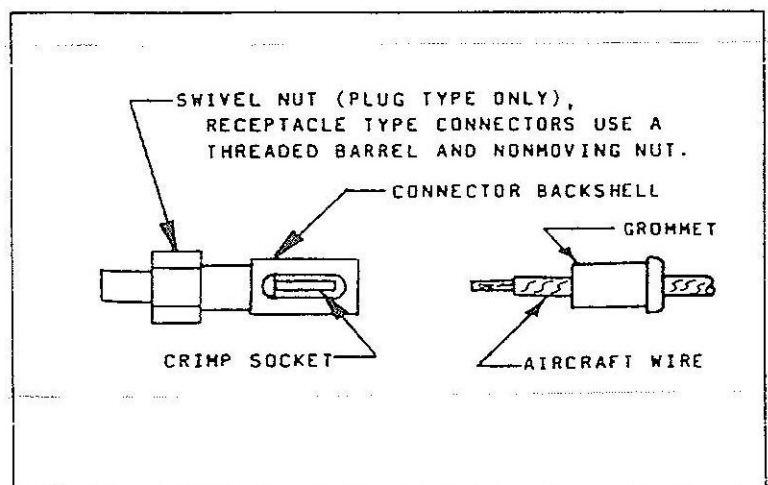


Figure 1

connector. Position the connector in the wire crimp tool with the crimp socket resting on the crimp anvil, and the die flush against the ceramic body. Squeeze the tool handles to bring the punch part of the tool into contact with the crimp socket. Be sure the wire is fully inserted in the crimp socket, then complete the crimp (Figure 2).

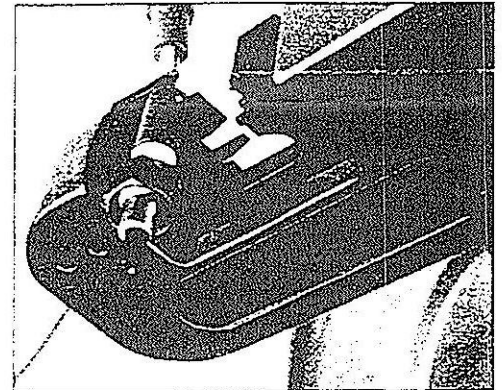


Figure 2

4. Inspect the crimp to ensure that the wire is fully inserted and no loose strands remain outside the crimp cup.
5. Slide the grommet into the backshell. Place the connector in the backshell crimp tool with the hex side of the die against the grommet flange. Rotate the connector until a slot in the backshell faces toward the moving die. Be sure the grommet is fully inserted and that its flange is tight against the end of the die, then complete the crimp (Figure 3).

NOTE: The ratchet type crimping tool will not release until crimp is completed.

Installation on Aircraft

CAUTION: Ensure mating connector is clean and dry prior to installation. If necessary, clean connector with methyl alcohol or acetone and air blow dry. **DO NOT** use a chloride based cleaner.

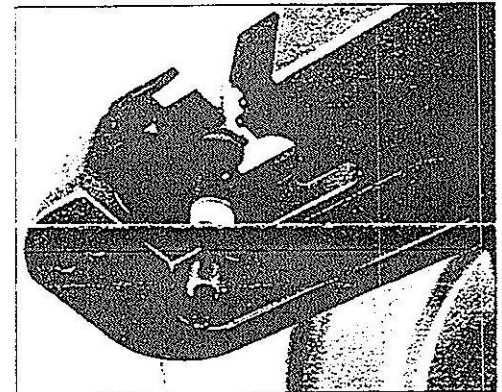


Figure 3

6. Ensure that a copper sealing gasket (P/N 209592) is installed in the connection between connector and sensing element. If missing, replace.

NOTE: A sealing gasket is permanently installed on the plug type connector. Do not attempt to remove it. Receptacle type connectors will require a separate gasket if not in place on the sensing element.

7. Apply thin film of Dow Corning DC-4 silicone grease to gasket.
8. Assemble connector swivel nut to mating sensing element connector and tighten to a torque of 50 to 70 in-lbs.
9. Lockwire, as applicable.

Change Authority Manager, Fire Detection Products
11/11/11

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