NORTHROP CORPORATION NORAIR DIVISION

EL-4.3.19

PROCESS SPECIFICATION

20 May 1968 RELEASE EO D30887

CODE IDENT, NO. 76823

TITLE:

CONNECTORS, WINCHESTER JF SERIES

INTRODUCTION 1.

1.1 This specification covers a series of two and four-contact connectors designed for side mounting. Side mounting means that each mating half of a connector is secured to a mounting surface by a screw through the connector body. There is no other locking mechanism.

ASSOCIATED DOCUMENTS

2.1 EL-1.2 Wire and Cable Preparation

2.2 EL-5.1 Potting Connectors and Small Assemblies

with Polysulfide Compound

2.3 EL-7.2 Heat Shrinkable Irradiated Polyolefin

2.4 EL-10.1 Soldering in Electrical and Electronic Applications

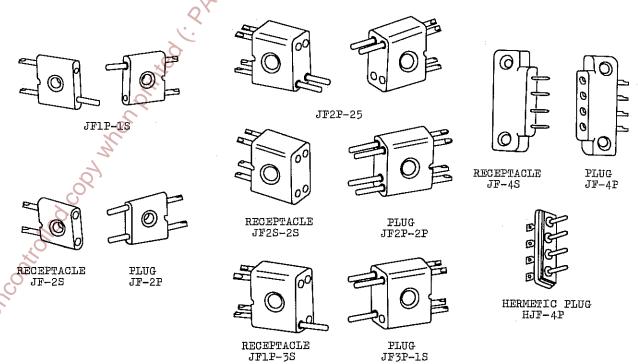
MATERIALS

1,1,1 Trichloroethane

0-T-620 or MIL-T-81533

CONNECTOR TYPES

Figure 1 illustrates the connectors of the JF series in their actual sizes. As shown, all of the connectors are of the solder type. All employ solder cups except the hermetic plug which is equipped with solder tabs. The contacts are housed in melamine



THE JF SIDE-MOUNTING SERIES FIGURE 1.

NORTHROP CORPORATION NORAIR DIVISION

	· · · · · · · · · · · · · · · · · · ·
ATE 20	May 1968

PROCEDURES

5.1 Wire Preparation

5.1.1 Strip wires by a method specified in EL-1.2. Strip length should be such that when the conductor is bottomed in the solder cup, the cut end of the insulation is approximately 1/32 inch from the end of the cup.

5.2 Soldering

5.2.1 Solder as specified in EL-10.1.

5.3 Polarity

5.3.1 The Engineering drawing will usually specify that the "line" side of a grounded circuit be connected to a socket contact, rather than a pin. Some connectors are polarized and can be connected only one way. When a non-polarized connector is specified, it may be assumed that wires may be connected without regard to polarity.

5.4 Insulation of Contacts

- 5.4.1 Cover all contacts with shrinkable polyolefin tubing unless potting of the connector is specified. Use 3/16 inch tubing of such length that when placed over the soldered connection and butted against the body of the connector, the tubing covers approximately 1/2 inch of the wire insulation. Shrink as specified in EL-7.2.
- 5.4.2 If potting is specified, clean the contacts and rear surface of the connector with 1,1,1 trichloroethane. Make a potting mold by wrapping masking tape or the equivalent around the connector. Use tape wide enough to form a mold about 5/8 inch deep. Pot as specified in EL-5.1. Remove the tape after the compound has cured.

INSPECTION

- 6.1 Check the polarity of the wires if polarity is specified.
- 6.2 Require that tubing or potting be employed to cover contacts at the rear of the connectors.
- 6.3 After connector halves are mated and screwed to the mounting surface, determine that the connector halves fit as close together as this method of mounting permits.

7. NOTES

- 7.1 Information pertaining to this specification may be obtained from Chemical Engineering (3962/32), Northrop Norair.
- 7.2 Vendors may obtain information pertaining to, or additional copies of, this specification from the Materiel Section, (6000/71), Northrop Norair, 2031 E. Mariposa, El Segundo, California 90246.