

25 OCTOBER 1963

## MILITARY SPECIFICATION

# CONNECTORS, PLUGS AND RECEPTACLES, ELECTRICAL, QUICK CONNECT AND DISCONNECT, 12 CONTACTS, MEDIUM POWER

## 1. SCOPE

**1.1 Scope.** This specification covers quick connect and disconnect, medium power, twelve contacts, electrical connectors (plugs and receptacles) designated as follows: (see 6.2).

Connector, Receptacle, Electrical,  
U-288( )/U (Male contacts).

Connector, Plug, Electrical,  
U-289( )/U (Male contacts).

Connector, Plug, Electrical,  
U-290( )/U (Female contacts).

Connector, Receptacle, Electrical,  
U-291( )/U (Female contacts).

## 2. APPLICABLE DOCUMENTS

**2.1 Documents.** The following documents, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

## SPECIFICATIONS

## FEDERAL

- PPP-B-621 — Boxes, Wood, Nailed and Lock-Corner.
- PPP-B-636 — Box, Fiberboard.
- PPP-P-291 — Paperboard, Wrapping, Cushioning.
- PPP-T-76 — Tape, Pressure-Sensitive Adhesive, Paper, Water Resistant.

## MILITARY

- MIL-P-116 — Preservation, Methods of.
- MIL-M-13231 — Marking of Electronic Items.
- MIL-F-14072 — Finishes for Ground Signal Equipment.

## STANDARDS

## MILITARY

- MIL-STD-105 — Sampling Procedures and Tables for Inspection by Attributes.
- MIL-STD-129 — Marking for Shipment and Storage.
- MIL-STD-170 — Moisture-Resistance Test Cycle for Ground Signal Equipment.
- MIL-STD-202 — Test Methods for Electronic and Electrical Component Parts.

## DRAWINGS

## SIGNAL CORPS

- SC-A-46439 — List of Accessories for Package Tester.
- SC-DL-349379 — Connector, Plug, Electrical.

**SC-DL-349380 — Connector, Plug, Electrical.**

**SM-C-454807 — Connector, Electrical (Antenna).**

(Copies of specifications, standards, and drawings, required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer. Both the title and number or symbol should be stipulated when requesting copies.)

**3. REQUIREMENTS**

**3.1 Construction.** The connectors shall be constructed in accordance with the following:

Connector, Plug, Electrical,  
U-289( )/U SC-DL-349380.

Connector, Plug, Electrical,  
U-290( )/U SC-DL-349379.

Connector, Receptacle, Electrical.  
U-291( )/U SM-C-454807.

**3.1.1 Connector, Receptacle, Electrical, U-288( )/U.** Connector, Receptacle, Electrical, U-288( )/U shall be similar to Connector, Receptacle, Electrical, U-291( )/U except shall have male contacts and shall be capable of mating with Connector, Plug, Electrical U-290( )/U.

**3.2 Preproduction samples.** The contractor shall furnish the following preproduction samples for each type of connector on order for approval, if required by the invitation for bids and contract (see 4.3):

- 18 assembled connectors.
- 1 unassembled connector.
- 6 applicable mating connectors.

**3.3 Castings.** Castings shall be of uniform quality and condition and free from cracks, harmful shrinkage, porosity, gas holes, foreign matter, and other injurious defects. The surface of the castings shall be free from pits, parting lines, porous areas, fins, ridges, modules, raised metal, and scale. All

castings shall be completely cleaned prior to presentation for inspection. Castings shall not be plugged or welded, nor shall imperfections be filled in.

**3.4 Cleaning.**

**3.4.1 Parts.** After fabrication, parts shall be cleaned in accordance with good commercial practice, or as specified in an applicable document. Cleaning processes shall have no deleterious effect. Corrosive material shall be removed completely.

**3.4.2 Connectors.** After assembly, connectors shall be cleaned thoroughly and shall be free from particles of solder, flux, and other foreign material. In addition, when necessary, such cleaning shall also be performed before final assembly of the connectors.

**3.5 Finish.** Connectors shall be finished in accordance with Specification MIL-F-14072 and the connector drawing (see 4.4). The final paint film on type I surfaces shall be a dull olive drab finish.

**3.6 Marking.** Marking shall conform to Specification MIL-M-13231 (see 4.4).

**3.7 Interchangeability.** Like connectors and subassemblies of like connectors shall be physically and functionally interchangeable without modification of such items (see 4.6). Individual parts shall not be hand-picked for fit.

**3.8 Contact retention.** Individual contacts shall be capable of withstanding an axial load of 10 pounds minimum uniformly applied at a rate of 1 pound per second (see 4.7).

**3.9 Insert retention.** The inserts of the connectors shall be capable of withstanding an axial load of 100 pounds for a period of 5 seconds without being dislocated from their normal position in the connector shell. The load shall be applied at a rate of 10 pounds per second (see 4.8).

**3.10 Contact resistance.** The voltage drop across mating contact terminals shall not exceed 20 millivolts when a current of 7.5 amperes is applied (see 4.9).

**3.11 Dielectric strength.** The connectors shall show no evidence of breakdown when subjected to a potential of 1500 volts rms, 60 cycles per second, for a minimum of one minute (see 4.10).

**3.11.1 Dielectric strength at high altitude.** When tested as specified in paragraph 4.10.1 the connectors shall show no evidence of breakdown when subjected to a potential of 500 volts rms, 60 cycles per second for a minimum of one minute.

**3.12 Insulation resistance.** The insulation resistance shall be not less than 1000 megohms except for unmated connectors following the immersion test when it shall be not less than 100 megohms (see 4.11).

**3.13 Air pressure.** The connector shall show no leakage when subjected to pressure of 2.5 psi gage applied to the contact face and then to the rear of the connector (see 4.12).

**3.14 Bounce.** After being tested as specified in paragraph 4.13, there shall be no evidence of loose parts or physical damage other than surface abrasions.

**3.15 Drop.** After being tested as specified in paragraph 4.14, the connectors shall show no evidence of physical damage which affects matability nor shall there be any loose parts.

**3.16 Durability.** Connectors shall show no mechanical damage and shall meet the requirements specified for contact resistance, dielectric strength, and air pressure after being tested as specified in paragraph 4.15.

**3.17 Immersion.** Following immersion as specified in paragraph 4.16, there shall be no evidence of leakage into the body of unmated connectors or on the contact face area of mated connectors and the connectors shall

meet the requirements specified for insulation resistance.

**3.18 Moisture resistance.** After being tested as specified in paragraph 4.17, connectors shall have an insulation resistance of not less than 100 megohms.

**3.19 Pull.** Mated connectors shall withstand an axial pull of not less than 40 pounds applied to the shell and 25 pounds applied to the cable. The force shall be applied abruptly (see 4.18).

**3.20 Salt spray.** There shall be no evidence of base metal corrosion when the connectors are tested as specified in paragraph 4.19.

**3.21 Temperature cycling.** At the extreme temperatures during the test specified in paragraph 4.20, the connectors shall be capable of being mated and unmated.

**3.22 Vibration.** When mated connectors are tested as specified in 4.21, there shall be no evidence of cracking, breaking, or loosening of parts, and the plug shall not become disengaged from the receptacle. The connectors shall meet the requirements specified for contact resistance, dielectric strength and insulation resistance following the test.

**3.23 Workmanship.** The connectors shall be manufactured and assembled in accordance with the applicable portions of the following paragraphs herein:

3.3 Castings.

3.4 Cleaning.

## 4. QUALITY ASSURANCE PROVISIONS

**4.1 Responsibility for inspection.** Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. The Govern-

ment reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

**4.2 Classification of inspection.** Inspection shall be classified as follows:

- (a) Preproduction inspection (does not include preparation for delivery) (see 4.3).
- (b) Inspection covered by subsidiary documents (see 4.4).
- (c) Quality conformance inspection.
  - (1) Quality conformance inspection of equipment before preparation for delivery (see 4.5).
  - (2) Quality conformance inspection of preparation for delivery (see 4.23).

**4.3 Preproduction inspection.** This inspection will be performed by the Government unless otherwise specified in the contract. It shall consist of the preproduction inspection specified in table I, the inspection specified in the subsidiary documents covering the items listed in 4.4, and the inspection specified for group A, group B, and group C (see tables II, III and IV, respectively). The preproduction inspection will normally be performed in this order: (1) vibration, (2) bounce, (3) shock, drop, and (4) immersion; other preproduction inspection may precede, follow, or be interspersed between the foregoing.

TABLE I. *Preproduction inspection*

Inspection (For additional preproduction inspection see 4.3)	Requirement paragraph	Inspection paragraph
Bounce.....	3.14	4.13
Drop.....	3.15	4.14
Moisture resistance.....	3.18	4.17
Temperature cycling....	3.21	4.20

**4.4 Inspection covered by subsidiary documents.** The following shall be inspected under

the applicable subsidiary documents as part of the inspection of equipment before preparation for delivery:

Item	Where required
Finish .....	3.5
Marking .....	3.6

**4.5 Quality conformance inspection of equipment before preparation for delivery.** The contractor shall perform the inspection specified in 4.4 and 4.5.1 through 4.5.4. This does not relieve the contractor of his responsibility for performing any additional inspection which is necessary to control the quality of the product and to assure compliance with all specification requirements. The Government will review and evaluate the contractor's inspection procedures and examine the contractor's inspection records. In addition, the Government—at its discretion—may perform all or any part of the specified inspection, to verify the contractor's compliance with specified requirements (see 6.4). Test equipment for Government verification inspection shall be made available by the contractor.

**4.5.1 Group A inspection.** This inspection, including sampling, shall conform to table II and the ordinary inspection procedures of Standard MIL-STD-105. Group A inspection shall be performed in any order which is satisfactory to the Government.

TABLE II. *Group A inspection*

Inspection	Requirement para- graph	Inspection para- graph	AQL	
			Major	Minor
Visual and mechanical.	3.23	4.22	1.0%	4.0%
Interchangeability	3.7	4.6	1.0%	(*)
Electrical:				
Dielectric strength.	3.11	4.10	1.0%	(*)
Insulation resistance.	3.12	4.11		
Air pressure .....	3.13	4.12	1.0%	(*)

\* All interchangeability, electrical and air pressure defects are considered major.

**4.5.2 Group B inspection.** This inspection, including sampling, shall conform to table III and to the special procedures for small-sample inspection of Standard MIL-STD-105. The inspection level shall be L-7 for normal and tightened inspection and L-5 for reduced inspection. The reduced inspection procedure shall be R-1. Group B inspection shall normally be performed on inspection lots that have passed group A inspection and on samples selected from units that have been subjected to and met group A inspection.

TABLE III. *Group B inspection*

Inspection	Requirement paragraph	Inspection paragraph	AQL
Contact retention .....	3.8	4.7	} 6.5% for the group combined.
Insert retention .....	3.9	4.8	
Contact resistance.....	3.10	4.9	
Dielectric-high altitude.	3.11.1	4.10.1	
Pull .....	3.19	4.18	

**4.5.3 Group C inspection.** This inspection shall be listed in table IV, and shall normally be performed on sample units that have been subjected to and met group A and group B inspection.

TABLE IV. *Group C inspection*

Inspection	Requirement paragraph	Inspection paragraph
Durability .....	3.16	*4.15
Immersion .....	3.17	4.16
Salt spray .....	3.20	*4.19
Vibration .....	3.22	4.21

\* Sample units subjected to this inspection shall not be furnished on contract.

**4.5.3.1 Sampling for inspection of equipment.** Four connectors of each type on order shall be selected from the first quantities produced, thereafter, four connectors of each type from every 50,000 or fraction thereof produced or four connectors of each type from each month's production, whichever occurs first.

**4.5.3.2 Noncompliance.** If a sample unit fails group C inspection, the contractor shall immediately investigate the cause of failure and shall report to the Government inspector the results thereof and details of the corrective action taken on the process and all units of product which were manufactured with the same conditions, materials, processes, etc. If the Government inspector does not consider that the corrective action will enable the product to meet specified requirements, or if the contractor cannot determine the cause of failure, the matter shall be referred to the contracting officer (see 6.3).

**4.5.4 Reinspection of conforming group B and group C sample units.** Unless otherwise specified, sample units which have been subjected to and passed group B or group C inspection, or both, may be accepted on contract, provided that they are resubjected to and pass group A inspection after repair of all visible damage.

**4.6 Interchangeability.** The dimensions listed below shall be gaged or measured to determine conformance to the physical interchangeability requirement of 3.7. When a listed dimension is not within specified or design limits, it shall be considered a major defect.

*Plugs:*

- (a) Inside diameters of the housing and concentricity of those diameters.
- (b) Diameter and width of the two O-ring grooves inside of the housing and their location.
- (c) Diameter, height, and location of the key which locates the insert.
- (d) Width and length of the keyway slot in the front of the housing.
- (e) Relationship between the key of the insert and the keyway slot in the front of the housing.
- (f) Outside diameter and length of the front portion of the housing which contains the keyway slot.

- (g) Inside diameter and length of the locking ring which contains the bayonet pins.
- (h) Diameter and height of the bayonet pins.
- (i) Angular location of the bayonet pins with respect to each other and location of the group of pins from the face of the locking ring.
- (j) Thread dimensions of all male and female threads.
- (k) Inside and outside diameters of the retaining sleeve.
- (l) Length of thread on the outside to the chamfered end and overall length.
- (m) Inside dimensions of the threaded packing gland collar.
- (n) Dimensions of the compressing bushing.
- (o) Dimensions for the two outside diameters of the insert.
- (p) Distance from the shoulder on the insert to the end of the contact pins.
- (q) Distance from the shoulder on the insert to the back of the insert.
- (r) Diameter of the contacts and the relationship of each contact to the other contacts.
- (s) Dimensions for the key slot in the insert and the relationship between the key slot and the group of contacts.
- (t) Relationship between the group of contacts and the keyway slot in the front of the housing when the insert is assembled in the housing.
- (b) Width and depth of bayonet pin grooves.
- (c) Distance from leading edge of connector shell to insert.
- (d) Inside or outside diameter of contacts.
- (e) Location of all contacts with respect to each other.
- (f) Concentricity of insert with shell.
- (g) Inside diameter of shell.
- (h) Location of contacts to shell key.
- (i) Diameter and depth of O-ring groove.
- (j) Thread dimensions of jam nut and shell.
- (k) Distance from leading edge of shell to retend position of bayonet pin slot.
- (l) Outside diameter of shell.
- (m) Dimensions of O-rings.

**4.7 Contact retention.** A ten pound  $\pm$  one-ounce load shall be applied uniformly at a rate of one pound per second to each individual contact with all other contacts in place and the insert installed in a shell to determine compliance with the requirements specified in paragraph 3.8.

**4.8 Insert retention.** The insert of the connector shall be subjected to an axial load of  $100 \pm 5$  pounds applied at a rate of 10 pounds per second in both directions. The 100-pound load shall be maintained for  $5 \pm 1$  seconds and then decreased at the same rate as above to determine compliance with the requirements in 3.9.

**4.9 Contact resistance.** The contact resistance of mated connectors shall be measured with a Kelvin Bridge or other approved method to determine compliance with the requirement specified in 3.10.

*Receptacles:*

- (a) Angular location of bayonet pin grooves.

**4.10 Dielectric strength.** A potential of 1500 volts  $\pm$  10 volts rms shall be applied between each contact of the connector and the remaining contacts connected together and to the shell. The voltage shall be increased gradually from zero to 1500 volts within 5 seconds and shall be maintained at 1500 volts for approximately but not less than one minute (see 3.11).

**4.10.1 Dielectric strength-high altitude.** The connector shall be placed in an altitude chamber and the barometric pressure reduced to  $3.4 \pm 0.1$  inches of mercury (simulated 50,000 feet above sea level). After temperature and pressure stabilization, a potential of 500  $\pm$  10 volts rms shall be applied as specified in 4.10 (see 3.11.1).

**4.11 Insulation resistance.** The insulation resistance shall be measured between each contact of the connector and the remaining contacts connected together and to the shell (see 3.12).

**4.12 Air-pressure.** A pressure of 2.5 pounds per square inch (psi) shall be applied to the contact face and then to the rear of the connector, using the differential leakage tester described in Figure 1, or an equivalent method approved by the Government, to detect leakage.

**4.12.1 Test method.** The connector shall be attached to the leakage tester with its face against the appropriate jig of the leakage tester. With valve No. 2 open, valve No. 1 and regulator shall be adjusted to supply 2.5 psi pressure to the connector face. After at least 15 seconds, valve No. 1 shall be closed. Then valve No. 2 shall be closed and the gage observed at least 30 seconds for a continuous change in the level of the two columns (a small momentary change when valve No. 2 is closed is not evidence of leakage). Valve No. 2 shall then be opened before removal of the connector. The above procedure shall be repeated with the rear of the connector attached to the proper jig of the tester.

**4.13 Bounce test (see 3.14).** The connectors shall be tested on the package tester, type 1000-SC, as made by the L.A.B. Corporation, Skaneateles, New York, or equal. Accessories shall be selected from those listed on Drawing SC-A-46439. The test shall be as follows:

- (a) Cover the tester bed with a panel of  $\frac{1}{2}$ -inch plywood, with the grain parallel to the drive chain. Space sixpenny nails, with the heads below the surface, at 6-inch intervals around all four edges and at 3-inch intervals in a 6-inch square in the center.
- (b) Place the connectors on the bed of the package tester. Limit the lateral motion, by wooden fences, to not more than 3 inches and not less than 1 inch.
- (c) Operate the package tester, shafts in phase, for a total of 3 hours at  $284 \pm 2$  rpm.
- (d) Following the above procedure, the connectors shall be tested for contact resistance, (4.9), insulation resistance (4.11), dielectric strength (4.10) and air pressure (4.12).

**4.14 Drop (see 3.15).** The connectors shall be dropped at random six times from a height of six feet onto a 2-inch fir floor or barrier backed by a concrete or rigid steel frame. The connectors shall then be subjected to the tests specified for contact resistance (4.9), dielectric strength (4.10), insulation resistance (4.11) and air pressure (4.12).

**4.15 Durability.** The connector shall be subjected to 1500 cycles of mating and unmating (a cycle consisting of mating, locking, unlocking, and complete separation of the connectors) at the rate of not more than 30 cycles per minute (see 3.16). The connector shall be examined for mechanical damage and then subjected to the tests specified for contact resistance (4.9), dielectric strength (4.10) and air pressure (4.12). Failure of any of these tests shall constitute failure of the durability test.

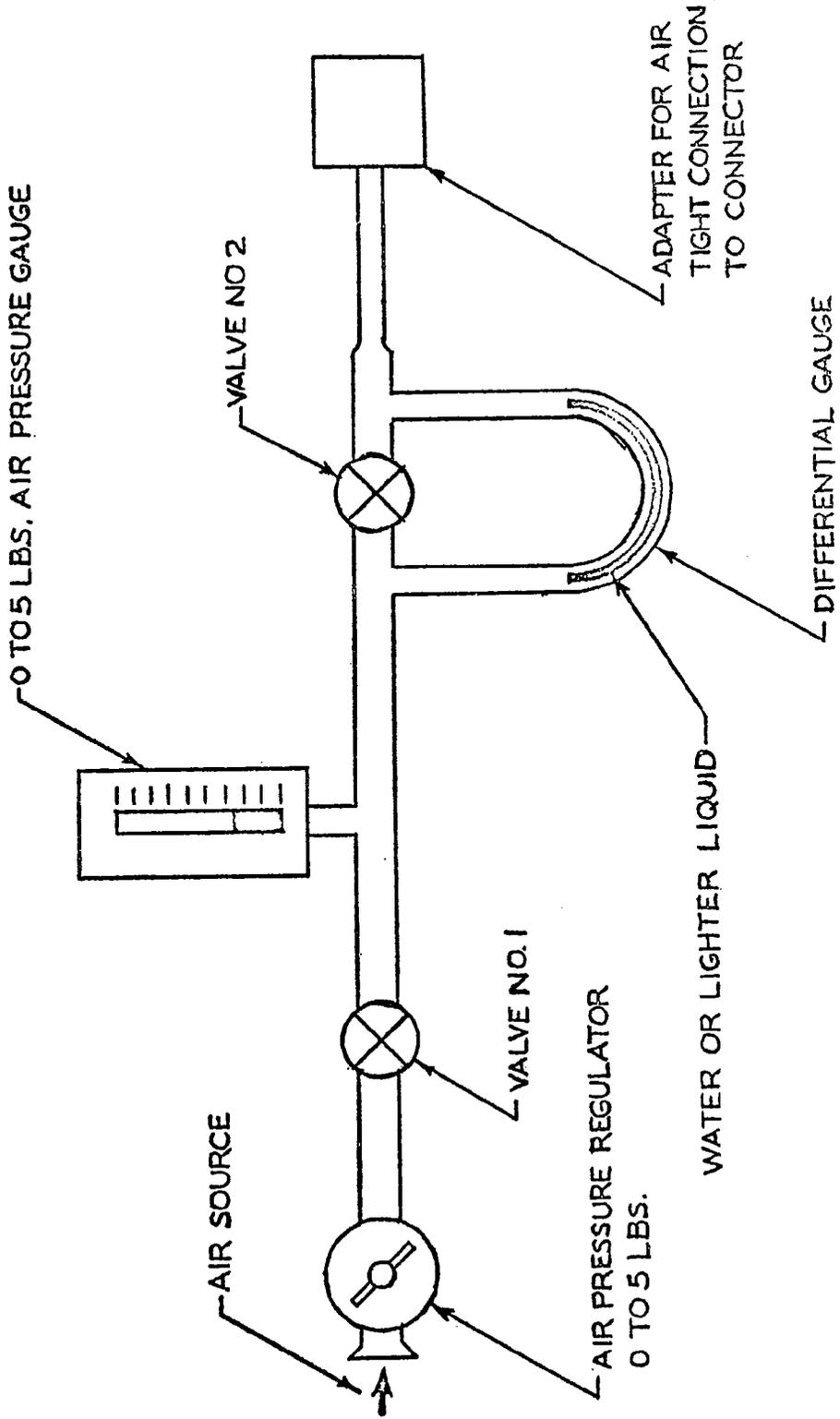


FIGURE 1. Diagram of air pressure test set-up.

**4.16 Immersion.** To determine compliance with the requirements specified in paragraph 3.17, the connectors shall be immersed in tap water to a depth of six (6) feet for a period of 48 hours in accordance with the following:

- (a) Connectors, plug shall be assembled to test cables having a diameter of approximately  $\frac{3}{8}$  inch. The length of cable shall be such that the cable extends a few feet outside of the tank.
- (b) Connectors, Receptacles shall be sealed completely against leakage or shall be mounted by their normal means to the wall of the tank so that the terminal end of the shell is outside of the tank.
- (c) Fifty (50) percent of the connectors shall be mated. Insulation resistance (see 4.11) of the still mated connectors shall be measured at the end of the test and shall meet the requirement specified in 3.12.
- (d) Fifty (50) percent of the connectors tested shall be unmated. Upon completion of the test, all excess moisture shall be removed and the connector dried by room temperature compressed air for a period of 5 minutes. Insulation resistance (see 4.11) shall be measured within  $\frac{1}{2}$  hour after the connector is removed from the water and shall meet the requirement specified in paragraph 3.12.
- (e) All connectors shall be inspected for internal leakage after being removed from the water.

**4.17 Moisture resistance.** Connectors shall be subjected to continuous cycling for five 48-hour cycles. Temperature, relative humidity, and period of time shall conform to Standard MIL-STD-170. The connectors shall then be removed from the humidity

chamber and allowed to dry for a period of approximately 24 hours at  $25^{\circ} \pm 5^{\circ} \text{C}$ ; with the relative humidity controlled at  $50 \pm 5$  percent. The connectors shall be then subjected to the test specified for insulation resistance in paragraph 4.11 (see 3.18).

**4.18 Pull (see 3.19).** The receptacle shall be mounted rigidly in the vertical axis with the mating face downward. The plug, assembled to cable specified in 4.16(a) with a device such as a sling or harness affixed to the plug, shall be mated with the receptacle. A dead weight of 40 pounds shall be placed abruptly on the device. Another device shall be attached to the cable and 25 pounds shall be placed abruptly on it.

**4.19 Salt spray.** The connectors shall be subjected to salt spray (corrosion) in accordance with Method 101. Test condition B, of Standard MIL-STD-202 (see 3.20).

**4.20 Temperature cycling.** Connectors shall be subjected to temperature cycling in accordance with Method 102A, Test Condition D, of Standard MIL-STD-202. Half of the connectors tested shall be mated. At the extreme temperatures, the connector shall be mated and unmated.

**4.21 Vibration (see 3.22).** Mated connectors shall be tested in accordance with Method 201 of Standard MIL-STD-202. The following details and exceptions shall apply:

- (a) Method of mounting — Receptacles shall be mounted securely to a plate mounted on the vibration table. The corresponding mating plugs shall then be mated to the receptacles.
- (b) Duration and direction of motion — Two hours in each of three mutually perpendicular directions. One direction shall be with the contact axis in a horizontal plane.
- (c) Test and measurements after vibration — Contact resistance (4.9), Dielectric strength (4.10) and Insulation resistance (4.11).

## MIL-C-55243 (EL)

4.22 Visual and mechanical. Connectors shall be examined for the defects listed in Table V.

TABLE V. Classification of visual and mechanical defects

Classification	Defects
Major.....	Parts missing. Misalignment or distortion of parts. Broken contact. Crack or hole in housing. Cracked insert.
Minor.....	Poor finish. Burr or foreign material remaining on connectors. Marking missing.

4.23 Quality conformance inspection of preparation for delivery. Preparation for delivery shall be inspected in accordance with Specification MIL-P-116 to determine conformance to the requirements of section 5.

### 5. PREPARATION FOR DELIVERY

#### 5.1 Packaging.

5.1.1 *Level A.* Connectors, Plug and Receptacle, shall be preserved, packaged and tested in accordance with the procedures specified for the designated method as prescribed in Specification MIL-P-116 and as described herein.

5.1.2 Connectors, Plug and Receptacle, shall be packaged Method III as follows: Cushion each connector by wrapping in flexible corrugated paperboard, Type II, Class 2, conforming to Specification PPP-P-291. Secure cushioning with pressure sensitive tape, conforming to Specification PPP-T-76. Place each cushioned connector individually within a close-fitting Type A, Class a, folding paperboard box. Box closure shall be in accordance with the appendix of the box specification.

5.1.2.1 *Intermediate container.* A quantity of connectors, packaged as specified in 5.1.2

and bearing the name stock number shall be placed together within a regular slotted style class 2, W6C fiber box conforming to Specification PPP-B-636. Fabricate the box to fit the content snugly. The gross weight of any box with contents shall not exceed 30 pounds. Box closure shall be in accordance with the referenced box specification.

5.1.3 *Level C.* Connectors, Plug and receptacle, shall be preserved and packaged in accordance with commercial practice and in a manner that will afford protection against corrosion, deterioration and physical damage during direct shipment to the first receiving activity.

#### 5.2 Packing.

5.2.1 *Level A.* A quantity of connectors plug and receptacle, packaged as specified in 5.1.2.1 shall be packed for shipment within a Class 2, style 4, nailed wood box conforming to Specification PPP-B-621. The gross weight of any shipping container shall not exceed 200 pounds. Fabricate the box to fit the contents snugly. Box closure shall be in accordance with the referenced box specification.

5.2.1.1 *Metal strapping.* Shipping containers shall be strapped in conformance with the requirements of the appendix of the referenced container specification only for direct shipment to ports.

5.2.2 *Level B.* Connectors, Plug and Receptacle, shall be packed for shipment as specified in 5.2.1 except that the nailed wood box shall be Class 1, Style 2.

5.2.3 *Level C.* The pack shall be as specified in 5.2.2.

5.3 *Marking.* Interior packages and exterior shipping containers shall be marked in accordance with Military Standard MIL-STD-129.

### 6. NOTES

**6.1 Ordering data.** Procurement documents should specify the following:

- (a) Title, number, and date of this specification and any amendment thereto.
- (b) Type required.
- (c) Level of packaging and level of packing required for shipment (Level A, Level B, or Level C).
- (d) Preproduction pack(s) as follows:
  - Makeup of pack(s).
  - Number of each kind of pack to be submitted.
  - Inspection to be performed thereon.
- (e) Marking and shipment of samples.
- (f) Place of final inspection.

**6.2 Nomenclature.** The parentheses in the nomenclature will be deleted or replaced by a letter identifying the particular design; for example: U-288W/U. The contractor should apply for nomenclature in accordance

with the applicable clause in the contract (see 1.1).

**6.3 Group C inspection.** Approval to ship may be withheld, at the discretion of the Government, pending the decision from the contracting officer on the adequacy of corrective action (see 4.5.3.2).

**6.4 Verification inspection.** Verification by the Government will be limited to the amount deemed necessary to determine compliance with the contract and will be limited in severity to the definitive quality assurance provisions established in this specification and the contract. The amount of verification inspection by the Government will be adjusted to make maximum utilization of the contractor's quality control system and the quality history of the product.

**Preparing activity:**

Army—EL

**Custodian:**

Army—EL

**Project No. 5935-A059**