WW-C-621G
February 7, 1990
SUPERSEDING
WW-C-621F
April 4, 1983

FEDERAL SPECIFICATION

COUPLING ASSEMBLY, HOSE (FIRE, WOVEN-JACKETED, RUBBER- OR FABRIC-LINED AND UNLINED)

This specification is approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers expansion ring couplings, screw-in expander couplings, and self-tightening couplings.

1.2 Classification. Couplings covered by this specification shall be of the types, styles, and sizes as specified (see 6.2):

	PIN
Type A - Expansion ring coupling for woven double -jacketed (DJ) and single jacketed (SJ) fire hose size in inches.	A
Style 1 (Rocker lug).	1
Size 1-1/2 SJ	A
Size 1-1/2 DJ	B
Size 2	C
Size 2-1/2 SJ	D
Size 2-1/2 DJ	E
Size 3 x 2-1/2	F
Size 3	G
Size 3-1/2	H
Size 4	I
Size 4-1/2 x 4	J

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* Beneficial comments (recommendations, additions, deletions) and any pertinent*
* data which may be of use in improving this document should be addressed to: *
* Commanding Officer (Code 156), Naval Construction Battalion Center, Port *
* Hueneme, CA 93043-5000, by using the self-addressed Standardization *
* Document Improvement Proposal (DD Form 1426) appearing at the end of this *
* document or by letter. *

FSC 4210

	PIN
Size 4-1/2	K
Size 5	L
Size 6	M
Style 2 (Pin lug)	2
Size 1-1/2 SJ	A
Size 1-1/2 DJ	B
Size 2	C
Size 2-1/2 SJ	D
Size 2-1/2 DJ	E
Style 3 (Long handle swivel female section only).	3
Size 2-1/2 SJ	D
Size 2-1/2 DJ	E
Size 3 x 2-1/2	F
Size 3	G
Size 3-1/2	H
Size 4	I
Size 4-1/2 x 4	J
Size 4-1/2	K
Size 5	L
Size 6	M
Type B - Expansion ring coupling for unlined linen fire hose.	B
Style 1 (rocker lug).	1
Size 1-1/2	A
Size 2	C
Size 2-1/2	N
Style 2 (pin lug)	2
Size 1-1/2	P
Size 2	C
Size 2-1/2	N
Type C - Screw-in expander coupling with rocker lugs for woven DJ and SJ and unlined linen fire hose.	C
No style available for type C.	O
Size 1-1/2	P
Size 2	C
Size 2-1/2	N
Size 3	G
Size 3-1/2	H
Size 4	I
Size 5	L
Size 6	M
Type D - Self-tightening coupling with rocker lugs for woven SJ and unlined fire hose.	D

	PIN
No style available for Type D.	O
Size 1-1/2	P

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

Federal Specifications:

JJ-H-571 - Hose, Fire, Linen, Unlined.
ZZ-H-451 - Hose, Fire, Woven-Jacketed, Rubber- or Latex or Rubber-Coated, Fabric-Lined, with Couplings.
WW-C-624 - Coupling Assembly, Hose (Garden, Water, and Water Suction).

Federal Standards:

FED-STD-H28 - Screw-Thread Standards for Federal Services.
FED-STD-123 - Marking for Domestic Shipment (Civil Agencies).
FED-STD-151 - Metals Test Methods.

Military Specifications:

MIL-H-775 - Hose, Rubber, or Fabric (Including Tubing), and Fittings, Nozzles, and Strainers, Packaging of.
MIL-A-8625 - Anodic Coatings for Aluminum and Aluminum Alloys.

Military Standards.

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-129 - Marking for Shipment and Storage.

(Unless otherwise indicated, copies of federal and military specifications,standards, and handbooks are available from Military Specifications and Standards, Bldg. 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.2 Non-Government publications. The following document(s) form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents which is current on the date of the solicitation (see 6.2).

ASTM:

ASTM B 16 - Free-Cutting Brass Rod, Bar, and Shapes for Use in Screw Machines.
ASTM B 135 - Seamless Brass Tube.
ASTM B 221 - Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
ASTM B 283 - Copper and Copper-Alloy Die Forgings (Hot-Pressed).
ASTM B 584 - Copper Alloy Sand Castings.
ASTM D 2240 - Rubber Property Durometer Hardness, Test.

(Applications for copies should be addressed to the ASTM, 1916 Race Street,Philadelphia, PA 19103.)

National Fire Protection Association (NFPA):

NFPA 1963 - Screw Threads and Gaskets for Fire Hose Connections

(Applications for copies should be addressed to the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.)

Underwriters Laboratories Inc. (UL):

UL 236 - Coupling for Fire Hose.

(Application for copies should be addressed to the Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062.)

(Non-Government standards and other publications are normally available from the organizations which prepare or which distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Standard commercial product. The coupling assemblies shall, as a minimum, be in accordance with the requirements of this specification and shall be the manufacturer’s standard commercial product. Additional or better features which are not specifically prohibited by this specification but which are a part of the manufacturer’s standard commercial product, shall be included in the assemblies being furnished. A standard commercial product is a product which has been sold or is being currently offered for sale on the commercial market through advertisements or manufacturer’s catalogs, or brochures, and represents the latest production model.

3.2 First article. When specified (see 6.2) in the contract or purchase order, a sample shall be subjected to first article inspection (see 4.2.1 and 6.3).

3.3 Materials. Materials used shall be free from defects which would adversely affect the performance or maintainability of individual components or of the overall assembly. Materials not specified herein shall be of the same quality used for the intended purpose in commercial practice. Unless otherwise specified herein, all equipment, material, and articles incorporated in the work covered by this specification are to be new and fabricated using materials produced from recovered materials to the maximum extent possible without jeopardizing the intended use. The term "recovered materials" means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. Unless otherwise specified, none of the preceding shall be interpreted to mean that the use of used or rebuilt products are allowed under this specification.

3.3.1 Casting brass, forging brass, brass rod, and bar. Cast coupling parts shall be made from copper alloy C83600, C83800, C84400, C84800 as specified in ASTM B 584. Forged coupling parts shall be made from copper alloy C46400 or C48500 as specified in ASTM B 283. Coupling parts made from brass rod and bar stock shall conform to copper alloy C36000 of ASTM B 16.

3.3.2 Brass tubing. Coupling parts made from tubing shall conform to copper alloy C23000, C26000, or C33000 as specified in ASTM B 135. The tube shall be annealed to a soft temper.

3.3.3 Forged or extruded aluminum. Coupling parts made from forged or extruded aluminum shall conform to aluminum alloy 6061-T6 as specified in ASTM B 221.

3.3.4 Elastomeric materials. Elastomeric material for gaskets or washers shall be made of natural or synthetic rubber, or a combination of these materials, or polyvinyl chloride having a 70 +/-5 durometer hardness.

3.4 Design and construction. Coupling assemblies shall consist of the various components specified in 3.4.1, 3.4.2, and 3.4.3 and conform to the respective figures and tables specified herein. The dimensions of couplings (except for those specified in the tables) shall be applicable for hoses conforming to JJ-H-571 and ZZ-H-451. Coupling threads shall conform to type NH (National Hose) or NPSH (National Pipe Straight Hose) of FED-STD-H28 as specified (see 6.2). All parts shall be easily assembled.

3.4.1 Components for types A and B couplings. Coupling parts shall be made of cast brass, forged brass, machined from brass bar stock (see 3.3.1) or from forged or extruded aluminum (see 3.3.3) as specified (see 6.2). Dimensions for type A and B couplings shall conform to figure 1 and table I. Coupling components shall consist of the following parts (see figure 1):

a. Hose bowl of female section.
b. Swivel nut for female section.
c. Hose bowl of male section.
d. Rubber or plastic gasket fitting the recess of swivel.
e. Expansion rings (one each for male and female section).
f. Tail gasket (one each for male and female section).

TABLE I. Types A and B coupling dimensions (inches). a/
(See figure 1)

Size of hose (min.)	Type A dimensions A (min)	B b/	C (min)	D&E	F (min)	Type B dimensions A (min)	B b/	C (min)	D&E	F
1-1/2 SJ	c/ 1-1/4	1-33/64	3/8	1		c/ 1-1/16	1-33/64	3/8	7/8	
1-1/2 DJ	c/ 1-1/2	1-33/64	3/8	1-1/4						
2	c/ 1-1/2	2-1/64	7/16	1-1/4		c/ 1-3/16	2-1/64	7/16	1	
2-1/2 SJ	c/ 1-1/2	2-33/64	9/16	1-1/4		c/ 1-7/16	2-33/64	7/16	1-1/4	
2-1/2 DJ	c/ 1-3/4	2-33/64	9/16	1-1/2		-	-	-	-	-
3x2-1/2 d/	c/ 2-1/4	2-33/64	9/16	1-7/8		-	-	-	-	-
3	c/ 2-1/4	3-1/64	9/16	1-7/8						
3-1/2	c/ 2-1/4	3-33/64	5/8	2		-	-	-	-	-
4	c/ 2-1/4	4-1/64	5/8	2		-	-	-	-	-
4-1/2x4 e/	c/ 2-1/4	4-1/64	5/8	2		-	-	-	-	-
4-1/2	c/ 2-1/4	4-33/64	5/8	2		-	-	-	-	-
5	c/ 2-1/4	5-1/64	5/8	2		-	-	-	-	-
6	c/ 2-1/4	6-1/64	5/8	2		-	-	-	-	-

a/ Threads on couplings shall be NH or NPSH as specified (see 3.4 and 6.2) A-A and B-B (see figure 1) - Pellets, ball bearing, or square piston ring attachment of female swivel and hose bowl may be used in place of still thread or interlocking groove shown on drawings.

b/ Tolerance shall be + 0.063 - 0.0 inch.

c/ Dimension to suit outside diameter (OD) of hose.

d/ On a 3 x 2-1/2 inch coupling, thread shall be 2-1/2 NH and coupling bowl shall be for a 3-inch hose.

e/ On a 4-1/2 x 4-inch coupling, thread shall be 4-1/2 inch NH and coupling bowl shall be for a 4-inch hose.

3.4.1.1 Expansion ring. Unless otherwise specified (see 6.2), expansion rings shall be made from seamless brass tubing conforming to alloy C23000 (see 3.3.2). The edges of the expansion rings shall be well rounded and free from burrs. The tube shall be annealed to a soft temper.

3.4.1.2 Rocker lugs, pin lugs, and long handle styles. Rocker lugs, pin lugs, and long handles shall be located 180 degrees (o) apart on the swivel and on the male bowl. When specified (see 6.2), three rocker lugs shall be located 120 degrees apart on the swivel and on the male bowl (see 6.9).

3.4.1.3 Combinations of styles. When specified (see 6.2 and 6.6), type A and B couplings may be furnished in any combination of styles (rocker, pin lugs, or long handle).

3.4.1.4 Tailpiece gaskets. Unless otherwise specified (see 6.2), tailpiece gaskets for type A and B couplings shall have a minimum thickness of 0.187 inch. The OD and inside diameter (ID) of gaskets shall conform to the requirements of NFPA 1963 except the OD shall be at least 0.093 inch larger than the OD of the hose.

3.4.1.5 Swivel gaskets. The size of the gaskets shall conform to NFPA 1963, table 6-1.2 and paragraph 6-2.

3.4.2 Components for type C couplings. Type C coupling parts shall be made of cast brass, machined from brass bar stock (see 3.3.1), or forged or extrude aluminum (see 3.3.3) as specified (see 6.2). Dimensions for type C couplings shall conform to the information listed in figure 2 and table II. Coupling components shall consist of the following parts (see figure 2):

a. Hose bowl of female section.
b. Screw-in expander of female section.
c. Swivel nut for female section.
d. Rubber or plastic gasket fitting the recess of swivel.
e. Hose bowl of male section.
f. Screw-in expander of male section.

TABLE II. Type coupling dimensions (inches). a/
(See figure 2)

Size of hose (inches)	Dimensions				
	A	B	C	D	F
1-1/2	b/	2-5/16	c/	1-3/8	1-7/8 or 2-1/8
2	b/	2-3/4	c/	1-1/2	2
2-1/2	b/	2-3/4	c/	1-7/8	2-3/8
3	b/	2-3/4	c/	2	2-3/8
3-1/2	b/	2-3/4	c/	2	2-3/8
4	b/	2-3/4	c/	2	2-3/8
5	b/	2-7/8	c/	2	2-1/2
6	b/	2-7/8	c/	2	2-1/2

a/ Threads on couplings shall be NH or NPSH as specified (see 3.4 and 6.2).
b/ Made to suit OD of hose.
c/ Made to Suit ID Of hose.

3.4.2.1 Screw-in expanders. Screw-in expanders shall be machined from brass seamless tubing (see 3.3.2) or from forged or extruded aluminum (see 3.3.3) as specified (see 6.2). The expanders for 1-1/2 inch size couplings shall be provided with four equally spaced slots for use with a square key. Expanders for sizes larger than 1-1/2 inches shall be provided with six equally spaced slots for use with a hexagonal key. Cylinder key-type wrenches for attaching the couplings to hose shall be furnished in the quantity specified (see 6.2).

3.4.3 Components for type D couplings. Type D couplings shall be capable of being installed on 1-1/2 inch SJ and unlined fire hose by hand without the use of special tools. The design shall be such that the coupling will not leak, slip, or blow off the hose when tested in accordance with 4.4.1.1 and 4.4.1.2. The coupling shall also be capable of being removed from the hose in the field without the use of special tools.
Coupling parts shall be made from forged brass or machined from brass bar stock

(see 3.3.1) or from forged or extruded aluminum (see 3.3.3) as specified (see 6.2). Coupling components shall consist of the following:

a. Female section.
b. Swivel nut with rocker lugs for female section.
c. Male section.
d. Rubber gasket fitting the recess of swivel.
e. Suitable device for coupling retention on hose (one each for male and female sections).

3.5 Tolerances. Unless otherwise specified (see 6.2), all machined parts shall have a tolerance of +/-0.015 inch and nonmachined parts shall have a tolerance of +/-0.063 inch.

3.6 Mechanical properties.

3.6.1 Hydrostatic pressure. Couplings shall withstand a hydrostatic pressure of 1000 pounds per square inch gage (psig) when tested as specified in 4.4.1.1.

3.6.2 Creep resistance. Couplings, when tested as specified in 4.4.1.2, shall not move or leak.

3.6.3 Pull strength. Couplings, when tested as specified in 4.4.1.3 shall not be mechanically damaged at its threaded, or swivel connections, or be separated from the hose to which it is attached when a pull load of not less than 2,000 pounds per square inch (psi) for each inch of hose diameter is applied.

3.6.4 Crush resistance. Couplings shall not distort, bind, or become inoperative when subjected to a 3,000-pound (lb) radial compressive load as specified in 4.4.1.4.

3.6.5 Torque resistance. Lugs on couplings shall be able to withstand a 250 foot-pound (ft-lb) torque without distortion or breakage when tested as specified in 4.4.1.5.

3.6.6 Rough usage resistance. Couplings shall be able to withstand a 6-foot drop onto a concrete floor without cracking, distorting, binding, or becoming inoperative when tested as specified in 4.4.1.6.

3.7 Finish. All nonmating surfaces shall be finished smooth by grinding, polishing, shot blasting, sandblasting, or wire brushing, and shall be free from burrs. All mating and gasket surfaces shall be 125 microinches root mean square finish or better. The corrugations on male and female sections and retention devices shall be left rough or machined so as to bind the hose when attached with expansion rings, screw-in expanders, or tapered expanders.

3.7.1 Aluminum surfaces. Unless otherwise specified (see 6.2), couplings made from aluminum shall be hard-coated anodized to a depth of 0.0025 inches in accordance with type III of MIL-A-8625. In addition, all threads shall be treated with solid film lubricant Molykote M-88 or equivalent (see 6.7).

3.8 Marking. The swivel, nut, or body of coupling shall be marked with the coupling manufacturer's name or trademark and thread designation, such as NH or NPSH as specified (see 6.2).

3.8.1 Labeled couplings. When specified (see 6.2), couplings shall be approved by and bear listing marks or labels of a nationally recognized testing agency or laboratory (see 6.5) adequately equipped and competent to perform testing of fire hose couplings.

3.9 Interchangeability. All assemblies of the same classification furnished with similar options under a specific contract shall be identical to the extent necessary to insure interchange ability of component parts, assemblies,accessories, and spare parts.

3.10 Workmanship. Couplings shall be produced, finished, and fitted in accordance with the requirements of this specification. The swivel nut of the female part shall turn freely by hand. All parts shall go together easily. All threaded parts shall be relieved, so that mating parts will bottom when the swivel gasket is removed.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program.

The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

4.1.2 Component and material inspection. Components and materials shall be inspected in accordance with all the requirements specified herein and inapplicable referenced documents.

4.2 Classification of inspections. The inspection requirements specified herein are classified as follows:

a. First article inspection (see 4.2.1).
b. Quality conformance inspection (see 4.2.2).

4.2.1 First article inspection. The first article inspection shall be performed on a sample assembly when a first article is required (see 3.2, 6.2, and 6.3). This inspection shall include the examination of 4.4 and tests of 4.4. The first article may be either a first production item or a standard production item from the contractor's current inventory provided item meets the requirements of the specification and is representative of the design, construction, and manufacturing technique applicable to the remaining items to be furnished under the contract.

4.2.2 Quality conformance inspection. Quality conformance inspection shall include the examination of 4.3, the tests of 4.4, and the preparation for delivery inspection of 4.5.

4.3 Examination. Each unit shall be examined to verify compliance with this specification. Defects shall be classified as specified in table III.

TABLE III. Classification of defects.

Requirements Classification	Defects	paragraph(s)
Major:		
101	Type and style not as specified.	1.2
102	Size not as specified.	1.2.1
103	Material not as specified.	3.3
104	Component parts missing.	3.4.1 through 3.4.3
105	Component parts not within tolerances.	3.5
106	Finish not as specified.	3.7
107	Workmanship not as specified.	3.10
108	Preservation-packaging, packing, and marking not as specified.	5.1 and 5.2
Minor:		
201	Marking not as specified	3.8

4.4 Tests.

4.4.1 Mechanical properties.

4.4.1.1 Hydrostatic proof pressure test. Coupling assemblies 4.3.2.1 shall be tested in accordance with UL 236.

4.4.1.2 Creep resistance test. Coupling assemblies shall be tested in accordance with UL 236. The hose shall be index marked with a pencil or others suitable device at a point immediately adjacent to the back side of each coupling. Hose with type D coupling shall be subjected to 600 psig for a maximum of 30 seconds prior to index marking of the hose.

4.4.1.3 Pull strength test. Coupling assemblies shall be tested in accordance with UL 236.

4.4.1.4 Crush resistance test. Complete coupling assemblies, shall be tested in accordance with UL 236.

4.4.1.5 Torque test. Lugs on coupling assemblies shall be subjected to a 250 ft-lb torque without distortion or breakage.

4.4.1.6 Rough usage test. Coupling assemblies selected in accordance with 4.3.2.1 shall be tested in accordance with UL 236.

4.4.2 Hardness test on gaskets. Gaskets shall be tested for hardness with a type A Shore Durometer conforming to ASTM D 2240. Failure to meet the requirements of 3.3.4 shall be cause for rejection.

4.4.3 Chemical analysis. Samples shall be drilled and the chips or drillings shall be mixed together to make at least a 2-ounce composite sample. The chemical composition of the composite sample shall be determined either by method 111.1 or method 112.1 of FED-STD-151.

4.5 Preparation for delivery inspection. An examination shall be made to determine compliance with the requirements of section 5. The sample unit shall be one unit prepared for shipment.

4.7 Sampling. Sampling shall be in accordance with MIL-STD-105.

4.7.1 Sampling for examination. Examination shall be based on inspection level II and an AQL (Acceptable Quality Level) of 2.5 percent defective for major defects and 6.5 percent defective for minor defects.

4.7.2 Sampling for tests.

4.7.2.1 Sampling for mechanical properties test. Tests shall be based on inspection level S-1 and an AQL of 1.0 percent defective.

4.7.2.2 Sampling for hardness test on gasket. Tests shall be based on inspection level S-4 and AQL of 2.5 percent defective.

4.7.2.3 Sampling for chemical analysis. Tests shall be based on inspection level S-1 and an AQL of 4.0 percent defective.

4.7.3 Sampling for delivery. Sampling shall be in accordance with MIL-STD-105. The inspection level shall be S-2 with an AQL of 4.0 percent defective.

5. PREPARATION FOR DELIVERY

5.1 Preservation-packaging and packing. Preservation-packaging and packing, shall be in accordance with the requirements of MIL-H-775 with the level of preservation-packaging and the level of packing as specified (see 6.2).

5.2 Marking.

5.2.1 Military agencies. Shipments to military agencies shall be marked in accordance with MIL-STD-129.

5.2.2 Civil agencies. Shipments to civil agencies shall be marked in accordance with FED-STD-123.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. Couplings covered by this specification are intended for use with woven-jacketed, rubber- or fabric-lined and unlined hose for fighting fires.

6.1.2 Types C and D couplings. Types C and D couplings are reusable couplings that can be installed on hose in the field.

6.2 Ordering Data.

a. Title, number, and date of this specification.
b. Type and style of coupling required (see 1.2).
c. Size of coupling required (see 1.2).
d. Issue of DODISS to be cited in the solicitation, and if required the specific issue of individual documents referenced (see 2.1.1 and 2.2).
e. If first article is required for inspection and approval (see 3.2, 4.2.1, and 6.3).
f. Type of threads required (see 3.4, 3.8, tables I and II).
g. The particular alloy required for coupling parts (see 3.4.1 through 3.4.3)
h. If expansion ring material is different (see 3.4.1.1)
i. If three rocker lugs are required (see 3.4.1.2).
j. If combinations of styles are required (see 3.4.1.3 and 6.6).
k. If tailpiece gasket thickness is different (see 3.4.1.4).
l. Quantity of cylinder-key wrenches required for type C couplings (see 3.4.2.1).
m. If different tolerances are required (see 3.5).
n. If different finish is required on aluminum couplings (see 3.7.1).
o. If labeled couplings are required (see 3.8.1 and 6.5).
p. Level of preservation-packaging and level of packing required (see 5.1).

6.3 First article. When a first article inspection is required, the item will be tested and should be a first production item consisting of one complete assembly or it may be a standard production item from the contractor’s current inventory as specified in 4.2.1. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examination, test, and approval of the first article.

6.4 Part or Identifying Number (PIN). PIN’s were developed to identify items covered by this specification for cataloging purposes. The PIN consists of this specification identifier (M621) and the PIN code number (see 1.2). The

PIN shall be designated as follows:

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                                  M621        A       1      2
      Specification number------------*        *       *      *
                                               *       *      *
      Type----------------------------------------*       *      *
                                                       *      *
      Style-------------------------------------------*      *
                                                              *
      Size--------------------------------------------------------*
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The above identifies a type A (expansion ring coupling for woven double-jacketed (DJ) and single-jacketed fire hose), style 1 (rocker pin), size 1 (size in this group is to be specified).

6.5 Recognized testing agency or laboratory. The recognized testing agency or laboratory should be one regularly engaged in the examination, testing, and evaluation of fire hose couplings; have an established factory inspection, listing, and labeling program; and have published standards for listing and labeling that are nationally recognized. For example, the Underwriters' Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062, and the Factory Mutual System, 1151 Boston Providence Turnpike, Norwood, MA 02062, are considered recognized testing agencies (see 3.8.1).

6.6 Combinations of styles. Combinations of styles on type A and B couplings are permissible when specified (see 6.2). For example, styles 1 and 2 could be ordered with long handle on swivel section and pin lug on the male section.

6.7 Solid film lubricant. Molykote M-88 may be obtained from the Dow-Corning Corporation, Midland, MI 48640 (see 3.7.1).

6.8 Hard suction hose. Couplings for hard suction hose are covered by WW-C-624.

6.9 Rocker lugs. Most forged and extruded aluminum couplings have three rocker lugs (see 3.4.1.2).

6.10 Cross-reference of classifications. The following couplings were previously classified as indicated.

WW-C-621D	WW-C-624B	WW-C-621F, WW-C-621E
Type B-1	Type B, B-1	Type A, Style 1
-	Type B, B-2	Type A, Style 2
-	Type B, B-3	Type A, Style 3
Type C-1		Type B, Style 1
-		Type B, Style 2
-		Type B, Style 3
Type D-1		Type C

MILITARY INTERESTS:

Custodians

Army - ME
Navy - YD
Air Force - 99

Review Activities

Navy - SH
DLA - CS

User Activities

Army - AR
Navy - MC, CG

CIVIL AGENCY COORDINATING ACTIVITIES:

GSA - FSS
USDA - AFS
TVA - TVA
DC GOVT - DCG
HHS - FEC

PREPARING ACTIVITY:

Navy - YD

Project 4210-0395