

MIL-R-12329D(CR)
AMENDMENT 2

30 October 1986

SUPERSEDING
AMENDMENT 1
25 May 1972

MILITARY SPECIFICATION

REELING MACHINE, CABLE, HAND RL-31()

This Amendment forms a part of MIL-R-12329D, dated 16 March 1970, and is approved for use within the Communications-Electronics Command, Department of the Army and is available for use by all Departments and Agencies of the Department of Defense.

PAGE 2

Paragraph 2.1, delete "SC-DL-11417" and substitute "DL-SM-B-599258".

PAGE 3

Paragraph 3.2, Line 2, delete "SC-DL-11417" and substitute "DL-SM-B-599258".

PAGE 4

Paragraph 3.9, Line 2, delete "and the DR-5()".

PAGE 5

Paragraph 3.15, add "First Article. When specified, samples shall be subjected to first article inspection. (See 4.12)".

PAGE 6

Paragraph 4.2(1), delete "before preparation for delivery. (See 4.4)" and substitute, "before packaging. (See 4.4)".

AMSC: N/A

FSC 3395

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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Paragraph 4.2(2), delete in its entirety and substitute, "(2) Packaging inspection (see 4.13)."

Paragraph 4.2, add "(c) First Article Inspection. (See 4.12)."

Paragraph 4.4, Lines 1 and 2, delete "preparation for delivery" and substitute "Packaging".

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Table I, delete in its entirety and substitute:

Table I - Group A Inspection

Inspection	Requirement Para	Test Para	AQL	
			Major	Minor
Visual and Mechanical	3.14	4.11	1.0%	4.0%

Table II, delete in its entirety and substitute:

Table II - Group B Inspection

Inspection	Requirement Para	Test Para	Inspection Level	AQL
Interchangeability	3.7	4.5	S-4	1.0%
Crank GC-4()	3.8	4.6	S-3	1.0%
Brake GC-10()	3.9	4.7	S-3	1.0%

Paragraph 4.4.3, Line 7, delete "every 3 months" and substitute "every six months".

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Table III, delete in its entirety and substitute:

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Table III - Group C Inspection

Inspection	Requirement Para	Test Para
Operational	3.10	4.8
Operational Life	3.11	4.9
Moisture Resistance	3.13.1	4.10.1
Temperature	3.12.2	4.10.2
Bounce	3.12.3	4.10.3
Vibration	3.12.4	4.10.4

Table III, delete "*The Equipment Verification Review shall be performed once on the initial production lot only."

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Paragraph 4.6, Lines 2 and 3, delete "followed by one Reel DR-5() loaded with two miles of Wire WD-1/TT" and substitute "or two Kilometers of Wire WD-1A/TT".

Paragraph 4.7, Lines 2 and 3, delete "followed by Reel DR-5() having two miles of wire WD-1/TT" and substitute "or two Kilometers of Wire WD-1A/TT".

Paragraph 4.8, Lines 2 and 3, delete "shall be operated to simulate paying out wire at a speed of 1,320 feet per minute" and substitute "or 2 Kilometers of Wire WD-1A/TT shall be operated to simulate paying out wire at a speed of 1,320 feet per minute."

Paragraph 4.8.1, delete in its entirety.

Paragraph 4.9, Line 1, delete "and 2 per 4.8.1".

Paragraph 4.9, Lines 3 and 4, delete "and DR-5()".

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Paragraph 4.10.3, delete in its entirety and substitute:

"Bounce. The equipment shall be tested as follows:"

Paragraph 4.10.3.1, add:

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"Apparatus. A package tester, as shown in figure 1, capable of 1 inch (double amplitude) displacement and of suitable capacity for testing military equipment."

Paragraph 4.10.3.2, add:

"Test conditions.

a. Cover the test bed of the package tester with a panel of 1/2-inch plywood, with the grain parallel to the drive chain. Secure the plywood with six-penny nails, with top of heads flush with, or slightly below the surface. Nails shall be spaced at 3-inch intervals around all four edges of the plywood.

b. Using suitable wooden fences, constrain the simulated, adapter plate to a horizontal motion of not more than 2 inches in any lateral direction."

Paragraph 4.10.3.3, add:

"Performance of test.

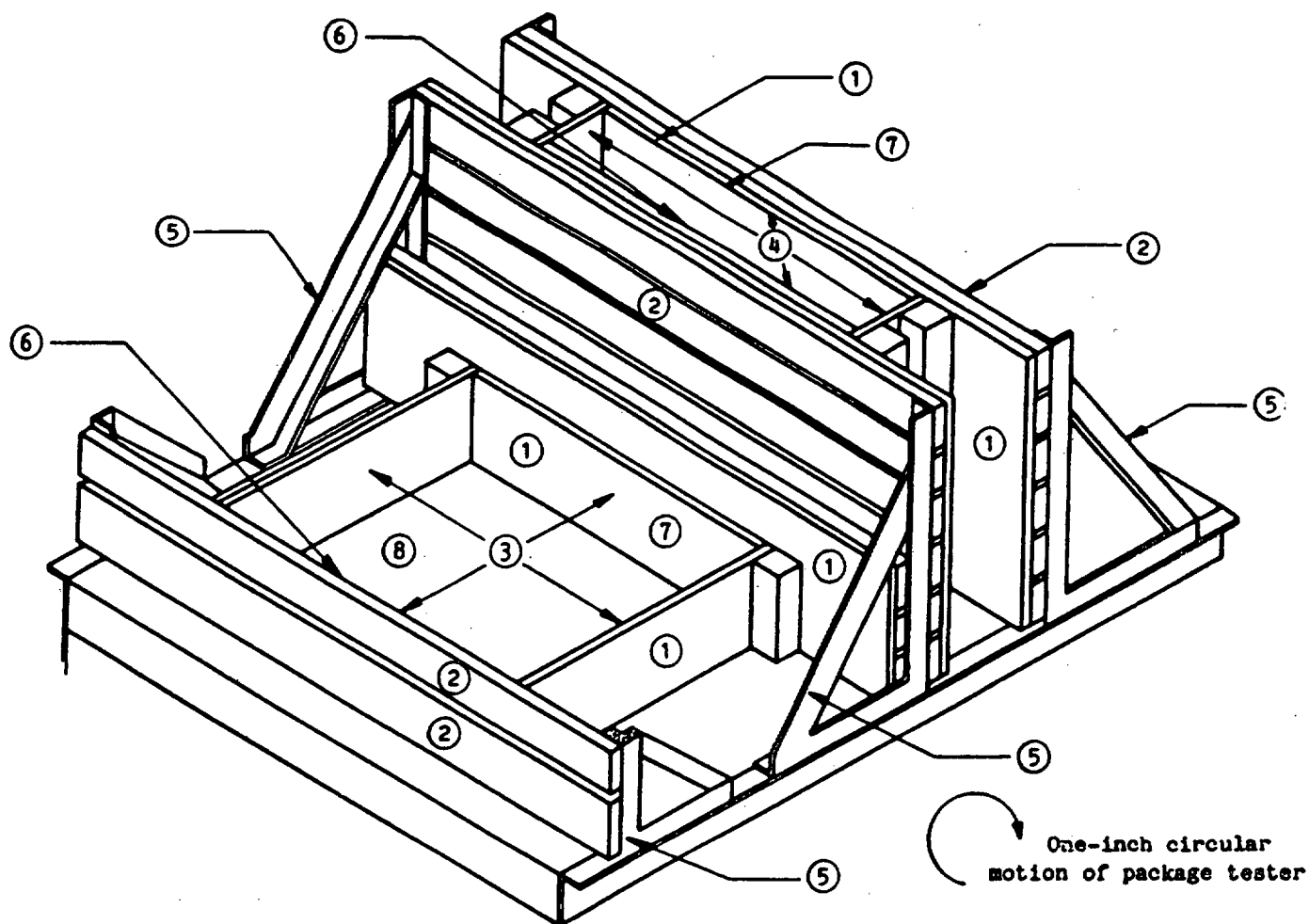
Step 1. Secure the test item loaded with two reels RL-159()/U each loaded with 1 mile of wire WD-1/TT or two kilometers of wire WD-1A/TT to simulated, adapter plate and place it on the package tester with the constraints outlined in Paragraph 4.10.3.2.

Step 2. Attach an accelerometer as close as possible to the point of test item attachment to record the shock transmitted to the test item.

Step 3. Adjust the package tester, shafts in phase and table operating in a vertical linear mode, to a speed such that the average value of the random acceleration peaks shall be 7.5 ± 2.5 g's. Measure this input with an accurate measuring or recording system at the output of a band pass filter. The filter band pass shall be 0.2 to 100 Hz and the attenuation slope shall be 12 to 18 dB per octave at the 3-dB down point. Due to the random nature of the input, pulses greater than 10 g's can be expected to occur, however, if they are infrequent, they need not be used in calculating the average. Perform the test for a total of 3 hours. At the end of each 3/4-hour period, rotate the adapter plate and test item 90 degrees each time in the same direction.

Step 4. At the end of the 3-hour period, operate and inspect the test item. Then inspect the test item for any existing damages."

Figure 1, add the following figure:



- ① One-inch plywood
- ② 2" x 6" pine
- ③ Enclosure where test items could be placed
- ④ Enclosure where test items could be placed
- ⑤ Angle iron structure support
- ⑥ Front fence (restraint)
- ⑦ Back fence (restraint)
- ⑧ Bed of package tester

FIGURE 1. Typical package tester.

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Paragraphs 4.12, 4.12.1, 4.12.2, 4.12.3, 4.12.4 and 4.13, delete in its entirety.

Paragraph 4.12, add:

"First Article Inspection. This inspection shall consist of the inspection specified in Table V and shall include, as referenced on inspection data sheets, inspection specified in subsidiary documents and the supplementary tasks, order and quantity of equipments to be subjected to First Article testing shall be as specified in Table V. (See 6.5)"

Table V, add the following table:

Table V - First Article Test Schedule

Title	Requirement Paragraph	Test Paragraph	Sequence			
			Unit	Unit	Unit	Unit
Sample			1	2	3	4
Visual and Mechanical	3.14	4.11	1	1	1	1
Crank GC-4()	3.8	4.6	3	3	3	3
Brake GC-10()	3.9	4.7	4	4	4	4
Interchangeability	3.7	4.5	2	2	2	2
Operational	3.10	4.8	5	-	5	5
Operational Life	3.11	4.9	-	5	-	-
Moisture Resistance	3.12.1	4.10.1	-	-	-	6
Temperature	3.12.2	4.10.2	6	-	-	-
Bounce	3.12.3	4.10.3	7	-	-	-
Vibration	3.12.4	4.10.4	-	-	6	-

Paragraph 4.13, add:

"Packaging Inspection. Packaging inspection requirements specified herein are classified as follows:

- a. First Article Inspection of Packaging.
- b. Quality Conformance Inspection."

Paragraph 4.13.1, add:

"First Article Inspection of Packaging. Unless otherwise specified in the contract, First Article Inspection of Packaging shall be in accordance with the Unit Pack Design Validation Requirements of MIL-P-116."

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Paragraph 4.13.2, add: "Quality Conformance Inspection of Packaging".

Paragraph 4.13.2.1, add:

"Materials Inspection. All materials to be used in packaging shall be inspected in accordance with the applicable material specification."

Paragraph 4.13.2.2, add:

"Preservation Inspection. Inspection of preservation and interior markings shall be in accordance with Group A and B Quality Conformance Inspection Requirements of MIL-P-116. Lot formation and sampling procedures shall be as specified therein."

Paragraph 4.13.2.3, add:

"Packing Inspection. Inspection of packing and the marking for shipment and storage shall consist of the examinations specified in Table VI "Packing Inspection Provisions". Lot formation shall consist of all packs made of the same materials during an identifiable period and submitted at one time for acceptance. Sampling procedures shall be in accordance with MIL-STD-105, using a single sampling plan and acceptable quality level of 4.0 percent defective."

Table VI, add the following table:

Table VI. PACKING INSPECTION PROVISIONS.

NO.	CHARACTERISTIC	METHOD OF INSPECTION
101	Intermediate container not as specified	Visual
102	Improper closure of intermediate container	Visual
103	Shipping containers not in accordance with specification	Visual
104	Excessive cube	Visual
105	Improper blocking and bracing	Visual
106	Closure not in accordance with specification	Visual
107	Weight and size exceed container limitations	Weight & Measure
108	Strapping not in accordance with specification, incorrectly applied, omitted	Visual
109	Marking omitted, incorrect, or illegible	Visual

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Paragraph 5, delete in its entirety and substitute, "5. PACKAGING".

Paragraph 5.1, delete in its entirety and substitute:

"5.1 Packaging Requirements. The requirements for packaging shall be in accordance with SPI 1G00150."

Paragraphs 5.1.1, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.4, 5.1.2, 5.2, 5.2.1, 5.2.2, 5.2.3, and 5.3, delete in its entirety.

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Table V, delete in its entirety.

PAGE 16

Figure I, delete in its entirety.

PAGE 17

Paragraph 6.2(b), delete in its entirety and substitute, "Level A or Level B preservation and packing. (See Section 5)"

Paragraph 6.2(c), delete in its entirety and substitute "when first article rough handling tests are not required".

Paragraph 6.2(d), delete in its entirety and substitute "when first article packaging inspection reports require Acquisition Activity approval prior to production unit packing."

Paragraph 6.2(g), add "when first article inspection is required".

Paragraph 6.5, add:

"First Article. When a first article inspection is required, the item will be tested and should be samples selected from the first production units. The contracting officer should include specified instructions in acquisition documents regarding arrangement for examinations and approval of the first article test documents."

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Paragraph 6.6, add:

"Level B Preservation. When Level B preservation is specified, this level of protection will only be used under known favorable conditions during transportation, storage and handling."

Paragraph 6.7, add:

"Environmental Pollution Prevention Measures. Environmental pollution prevention measures are specified in the packaging material specifications referenced herein. Refer to material specifications or preparing activity for recommended disposability methods."

Custodian:
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Preparing Activity
Army CR
Project No. 3895-A237
FSC-3895