3 December 1962

SUPERSEDING
MIL-STD-644
22 October 1958

### **MILITARY STANDARD**

# VISUAL INSPECTION STANDARDS AND INSPECTION PROCEDURES FOR INSPECTION OF PACKAGING, PACKING AND MARKING OF SMALL ARMS AMMUNITION



FSC 1305

Downloaded from http://www.everyspec.com

# DEPARTMENT OF DEFENSE WASHINGTON 25, D. Co

3 December 1962

Visual Inspection Standards and Inspection Procedures for Inspection of Packaging, Packing and Marking of Small Arms Ammunition

MIL-STD-644A

- 1. This standard has been approved by the Department of Defense and is mandatory for use by the Departments of the Army, the Navy and the Air Force, effective 3 December 1962.
- 2. Recommended corrections, additions or deletions should be addressed to Headquarters, DSA, Standardization Division, Washington 25, D.C.

Downloaded from http://www.everyspec.com

#### **FORWARD**

Small arms ammunition is subjected to rigid inspection during manufacture for compliance with the technical requirements of the pertinent specification. The materials used in packaging and packing operations are designed to withstand rough handling, adverse climatic conditions and long term storage and are carefully inspected for compliance with applicable specifications.

It is essential therefore, that the packaging, packing and marking of this ammunition, using approved materials and methods, be inspected to insure its arrival at various points of destination correctly identified, in proper amounts, in proper functional arrangement and in usable condition.

The use of this document by all authorized packaging and packing activities will minimize the possibility of the delivery of unusable small arms ammunition.

#### **CONTENTS**

Paragraph		Pag
1.	SCOPE	1
1.1	Intended use	1
2.		1
2.1	Supporting documents	1
3.	DEFINITIONS	1
3.1	Packaging	1
3.2	Packing	1
4.		1
4.1	OLNERAL REQUIREMENTS	1
4.1.1	Incoming materials Manufacturer's responsibility	1
4.2	Inspection procedures	1
4.2.1	Inspection procedures Sampling methods	1
4.2.2	Inspection phases	1
4.2.3	Sequence of inspection	1
4.2.4	Defective material-sampling	1
4.2.5	Defective material-process	1
5.	DETAIL DECLIDEMENTS	2
5.1		2
5.1.1	Contents of container	2
5.1.1.1		2
5.1.1.2		2
5.1.1.2.1	Defective cartridges	2
5.1.1.2.2		2
5.1.1.2.3	Damaged by process	2
5.1.2.5	Conton neakoga	2
5.1.2.1	Prior to sealing	2
5.1.2.2	Acceptable quality levels	2
5.1.2.3	Classification of defects	2
5.1.2.3.1	Visual standards	3
5.1.3	Waterproof envelopes	3
5.1.3.1	Prior to sealing	3
5.1.3.2	Acceptable quality levels	3
5.1.3.3	Classification of defects	3
5.1.3.3.1	Visual standards	3
5.1.4	Bulk package	3
5.1.4.1	Acceptable quality levels	3
5.1.4.2	Classification of defects	3
5.1.4.2.1	Visual standards	3
5.1.5	Clip package	3
5.1.5.1	Acceptable quality levels	3
5.1.5.2	Classification of defects	3
5.1.5.2.1	Visual standards	3
5.1.6	Metallic linked belt package	3
5.1.6.1	Predecessor design	3
5.1.6.2	Broken or soft links	3
5.1.6.2.1	Twist test	3
5.1.6.2.2	Pull test	3
5.1.6.2.3	Flexibility test	

#### **CONTENTS**—Continued

Paragraph		Pag
5.1.6.3	Acceptable quality levels	4
5.1.6.4	Classification of defects	4
5.1.6.4.1	Visual standards	4
5.1.7	Bandoleer package	4
5.1.7.1	Acceptable quality levels	4
5.1.7.2	Classification of defects	4
5.1.7.2.1	Visual standards	4
5.1.7.3	Additional inspection requirements	4
5.2	Packaged and sealed containers	4
5.2.1	Waterproof envelopes	4
5.2.1.1	Acceptable quality levels	4
5.2.1.2	Classification of defects	4
5.2.2	Gasket sealed ammunition boxes	4
5.2.2.1	Box leak test	4
5.2.2.1.1	Water application	5
5.2.2.1.2	Test details	5
5.2.2.1.3	Test details continued	5
5.2.2.1.4	Report of leaks	5
5.2.2.2	Acceptable quality levels	5
5.2.2.3	Classification of defects	5 5
5.3	Overpack and overpack contents	5
5.3.1	Wirebound boxes	5
5.3.1.1	Acceptable quality levels	5
5.3.1.2 5.3.2	Classification of defects	5
5.3.2.1	Metal boxes	6
5.3.2.2	Acceptable quality levels	6
3.3.2.2	Classification of defects	
6.	NOTICES	6
6.1	Interpretation	6 6
6.2	Patent	О
	APPENDIX	
10.1	Visual inspection standards	6
10.2	Cross reference listing	6
20.0	Carton package	6
30.0	Waterproof envelope package	7
40.0	Bulk package	7
50.0	Clip package	7
60.0	Metallic link package	7
70.0	Bandoleer package	7
	FIGURES	
1	Twist test	8
2	Box leak test	9
3 thru 14	Carton package 10-2	21
15 thru 16	Waterproof envelope package 22-2	23
17 thru 26	Clip package	33
27 thru 56	Metallic linked belt package 34-6	53
57 thru 69	Bandoleer package 64-7	76

Downloaded from http://www.everyspec.com

#### 1. SCOPE AND INTENDED USE

1. Scope. This standard prescribes procedures for the inspection of packaging, packing and marking of small arms ammunition. It specifies the extent of the inspection of the container contents, the containers themselves and overpacks of such containers. It also supplies classification of defects, acceptable quality levels and furnishes visual defect standards when necessary.

1.2 Intended use. This standard is intended to be used by the small arms ammunition manufacturer, by the Government for verification inspection and by any government facility engaged in the packaging and packing of small arms ammunition. It forms an integral part of the applicable cartridge specification and is to be used in conjunction with the packaging, packing and marking drawings referenced therein.

#### 2. REFERENCED DOCUMENTS

**2.1** Documents of the issue in effect at the time of packaging and packing operations that are required in support of this standard have been furnished with the applicable cartridge specification, as part of the technical data package issued with each contract or order.

#### 3. **DEFINITIONS**

For the purpose of this standard the following definitions apply:

- **3.1 Packaging.** The application or use of adequate protective measures including, as applicable, the use of protective wrapping, cushioning, interior containers and complete identification marking, up to but not including the exterior shipping container. "
- **3.2 Packing.** Application or use of exterior shipping containers, and assembling of packaged items or items not requiring packaging therein, together with necessary cushioning, exterior strapping, and marking of shipping container.

#### 4. GENERAL REQUIREMENTS

- **4.1** Incoming packaging and packing materials inspection.
- **4.1.1** The manufacturer producing small arms ammunition is responsible for the qual-

ity of packaging and packing materials used. Incoming materials shall be inspected by the ammunition I manufacturer for conformance with the technical requirements of the contract in accordance with his inspection system.

#### **4.2** General inspection procedure.

- **4.2.1** Inspection shall be performed on a class basis using the applicable sampling plans and criteria of MIL-STD-105, inspection level 1.
- **4.2.2** For sampling and inspection purposes, units of the several packaging and packing phases shall be:

Phuse I-Contents of container -A unit shall consist of the complete contents of a single packaged container shown on applicable drawings.

Phase II-Packaged and sealed container -A unit shall consist of a single packaged and sealed container; this could be a sealed envelope when used as a container.

Phase III-Overpack and overpack contents -A unit shall consist of a single overpack complete with containers, separators, fillers, etc., shown on applicable drawings. An overpack could be a wirebound wooden box or metal outer box.

- **4.3.2** Provided no destruction to the inspection unit is entailed, unless this is not feasible, the various phases may be inspected simultaneously. However, during the inspection of the several phases, the sample size for each phase may be different. Should this be the case, the required sample size shall be used for each inspecting phase.
- **4.2.4** Defective containers or overpacks, as defined in the applicable item specification, found during sampling inspection or Government verification of packaged or packed ammunition, shall be replaced by acceptable units.
- **4.2.5** Occurrence of damaged packaging and packing material attributed to the packing process shall be bought to the attention of the manufacturer with a request that the process be corrected. Continued occurrence shall be cause for discontinuance of Government acceptance.

#### 5. DETAIL REQUIREMENTS

#### 5.1 Contents of container.

#### **5.1.1** *General.*

**5.1.1.1** During the inspection of container contents, the method of packaging shall be observed necessitating the removal of contents from the container. The contents of waterproof envelopes shall be inspected prior to sealing.

#### **5.1.1.2** *Defective* cartridges.

- **5.1.1.2.1** Critically defective cartridges. as defined in applicable detail specifications, found during sampling inspection or Government verification, shall be cause for rejection of the lot of ammunition.
- **5.1.1.2.2** Major or minor defective cartridges, as defined in applicable detail specifications, found during sampling inspection or Government verification, shall be replaced by acceptable cartridges.
- **5.1.1.2.3** Occurrence of damaged cartridges attributable to linking, clipping or other packaging operations shall be brought to the attention of the manufacturer and he will be requested to correct his process. Continued occurrence of such condition shall be cause for discontinuance of Government acceptance.

#### **5.1.2** Carton package.

- **5.1.2.1** Prior to carton sealing, examination shall be performed for proper type and caliber of ammunition, location, type and number of fillers and seperators, and the arrangement of amrunition in cartons. The occurrence of the above said defects will be brought to the attention of the manufacturer and he will be requested to correct his process. Continued occurrence of defects shall be cause for discontinuance of Government accaptance.
- **5.1.2.2** The acceptable quality levels for carton package defects shall be as follows:

	Percent
Major Minor	<b>1.00</b>

#### **5.1.2.3** Classification of defects.

Carton package defects Major Minor

1. Improper packaging of carton (s) in X --container (bullet points face
primers).

- 2. Improper packaging of carton (s) in --- X container other than defect 1.
- 3. Missing or improper fillers, sepa- --- X raters, or removal tape.
- 4. Short or missing resealing tape (when --- X required).
- 5. Missing label or improperly sealed --- X carton (including label printed in wrong position on carton).
- 6. Torn or ripped carton or label . . . . . . . X
- 7. Incorrect, illegible or missing am- --- X munition lot number.
- 8. Incorrect or illegible identification of --- X carton contents (type, caliber, etc.).
- **5.1.2.3.1** Visual standards for defects 5 through 8 are illustrated in the appendix (figs. 3-14).

#### **5.1.3** *Waterproof envelopes package.*

- **5.1.3.1** Prior to envelope sealing, examination shall be performed to assure that markings on the envelope corresponds with the markings on the envelope contents. The occurrence of this defect will be brought to the attention of the manufacturer and he will be requested to correct his process. Continued occurrence of this defect will be cause for discontinuance of Government acceptance.
- **5.1.3.2** The acceptable quality levels for envelope package defects shall be as follows:

	1 erceni
Major	1.00
Minor	_ 2.5

#### **5.1.3.3** Classification of defects.

Envelope package defects Major Minor

- 1. Torn, ripped or improperly sealed X --- envelope.
- 2. Improper packaging of envelopes in --- X container.
- 3. Missing or improper fillers or sepa- --- X raters.
- 4. Incorrect or illegible identification of --- X envelope contents (type, caliber, etc.).
- 5. Incorrect, illegible or missing ammuni- --- X tion lot number.

- **5.1.3.3.1** Visual standards for defects 1, 4 and 5 are illustrated in the appendix (figs. 15 and 16).
  - **5.1.4** Bulk package.
- **5.1.4.1** The acceptable quality levels for bulk package defects shall be as follows:

	Percent
Minor	2.5

#### **5.1.4.2** Classification of defects.

Bulk package defects Minor

1. Missing or improper fillers, tubes or --- X separators.

- 2. Improper packaging of cartridges in --- X container.
- 3. Missing cartridge(s) \_ \_ \_ \_ \_ \_ --- X
- **5.1.4.2.1** There are no visual standard illustrated in the appendix for bulk package.
  - 5.1.5 Clip package.
- **5.1.5.1** The acceptable quality levels for clip package defects shall be as follows:

	Percent
Major Minor	_ 1.00
Minor	_ 2.5

#### **5.1.5.2** Classification of defects.

		Major
		or
	Clip package defects	Minor Minor
1	Missing cartridge(s)	Υ

- 1. Missing cartridge(s) \_\_\_\_\_ A --2. Rusty, excessively oiled or otherwise --- X
- defective clips.

  3. Missing or torn carton (when required) X ---
- 4. Missing or improper fillers or sepa- X --- raters.
- 5. Improper packaging of clipped ammunition in container.
- Defect is major if clip will not function as intended; otherwise minor. If questionable, functioning test shall be made in appropriate service weapon or magazine, whichever is applicable
- **5.1.5.2.1** Visual standards for defects 3 and 4 are illustrated in the appendix (figs. 17-26).
  - **5.1.6** *Metallic linked belt package.*
- **5.1.6.1** In some instances, metallic links show in the appendix are of a predecessor design but the visual standard is applicable to the present design.
- **5.1.6.2** The twist test (fig. 1) and the pull test shall be performed to detect broken or soft links in the belt of linked cartridges.

Links that fail as a result of these tests shall be dismantled and scrapped and the cartridges visually inspected prior to rebelting.

- **5.1.6.2.1** With the belt extended full length on a table, grasp one end and flip it 180 degrees to its other side. The twisting action which progressively moves along the belt to the free end has enough snap to cause failure of weak links. After the test, the belt shall be inspected for any fractured or broken links that may be present.
- **5.1.6.2.2** One end of the belt shall be attached to a suitable hook on a horizontal table and the load indicated below applied to the other end; the belt being in contact with the table during the application of the load.

Caliber	Load
.30	25 lbs.
7.62mm	25 lbs.
.50	100 lbs.
20mm	115 lbs.

In lieu of a fixed load application a testing device may be used which stretches the belts to predetermined lengths correlated with the loads prescribed above. These lengths shall be verified frequently. Subsequently to the test, inspection of the belts for broken and stretched links shall be performed.

- **5.1.6.2.3** When 20mm cartridges are belted using the M17 link, a "frozen" link shall be detected by means of a flexibility test.
- **5.1.6.2.3.1** The belt shall hinge freely and fold over smoothly without kinking when the belt is pulled over itself until belt is completely reversed. This procedure shall then be repeated after the belt has been reversed to assure full motion of the belt when flexed from either side and in either direction.
- **5.1.6.2.3.** A minimum of twenty-five (25) cartridges per belt shall be used for this test. If packing instructions require belts of greater length, the connecting links used to lengthen the belts shall be flexed after assembly in both directions to assure free hinging
- **5.1.6.2.3.3** A "frozen" M17 link detected by means of this flexibility test is critical and shall be cause for rejection of the lot.

#### 3 December 1962

**3.1.6.3** The acceptable quality level for metallic link belt package defects shall be as follows:

M-i		ercent
Major Minor		_1.00 _2.6
<b>3.1.6.4</b> Classification of defects.		
Metallic linked belt package defects Majo	r.	Minor
1. Ammunition packaged in wrong direction in box (Where applicable).		
2. Double loop of link on wrong end of X linked ammunition in container. (Where applicable).		
3. Improper packaging of belt(s) in container other than defects 1 and 2.		X
Interior mining sequence		X
5. Stretched, broken or "frozen" belt*	X	
6. Foreign material, oil or grease; other than required.		X
7. Defective protective finish or rust on link(s).		X
8. Malformed link(s)	X	
		X
10. Missing or improper fillers		X
11. Improper depth of insertion of cart-ridges in link (s).*		X
12. Missing, broken or malformed metallic belt end (when required).		X

- belt end (when required).

   Defects arc major for linked 20mm cartridges, except that a "frozen" link in MI7 linked belt is classified as critical (see
- **5.1.6.4.1** Visual standards for defects 5 through 8, 11 and 13 are illustrated in the appendix (figs. 27-56). The "frozen" belt frustrations in the appendix for defect #5 do not apply to 20mm.

#### **5.1.7** Bandoleer package.

(type, caliber, and clip).

**5.1.7.1** The acceptable quality levels for bandoleer package defects shall be as follows:

	Percent
Major	1.00
Minor	2.5
5.1.7.2 Classification of dej	fects.
	Major or
	Major Minor Minor
1. Incorrect or illegible identifica-	X
tion of bandoleer content	ts

		1	Major
	Major M	inor l	or Minor
2. Incorrect, illegible or missing ammunition lot number.		X	
3. Torn, ripped or otherwise defective bandoleer.		X	
4. Missing cartridge(s) or clip(s)		X	
5. Rusty, excessively oiled or otherwise defective clips.			X
6. Missing or torn carton		X	
7. Missing or improper fillers or separators.		X	
8. Improper packaging of clipped ammunition in bandoleer.		X	
9. Improper packaging of bando- leer(s) in container.		X	
10. Missing magazine filler (when required).		X	
11. Missing safety pin (when required).		X	
• Defect is major if clip will not function wise minor If questionable functioning test			

- Defect is major if clip will not function as intended; otherwise minor. If questionable, functioning test shall be made in appropriate service weapon or magazine, whichever is applicable.
- **5.1.7.2.1** Visual standards for defects 2 through 4 are illustrated in the appendix (figs. 57-66). Defects 6 and 7 (figs. 17-26). Defects 8 and 9 (figs. 67–69).
- **5.1.7.3** In addition to the above inspection, when linked ammunition is packaged in cartons in bandoleers, the inspection procedures shall also include those listed under 5.1.6, Metallic linked belt package.
- **5.2** Packaged and sealed container. Phase II.
  - **5.2.1** Waterproof envelopes.
- **5.2.1.1** The acceptable quality levels for envelope defects shall be as follows:

	Percent
Major	 1.0
Minor	 2.5

#### **5.2.1.2** Classification of defects.

Envelope defects Major Minor

- 1. Torn, ripped, or improperly sealed X ---- envelope.
- 2. Incorrect, illegible or missing am- X ---- munition lot number.
- 3. Other markings incorrect, missing or --- X illegible.
  - 5.2.2 Gasket sealed ammunition boxes.
- **5.2.2.1** *Box leak test.*

- 5.2.2.1.1 Tap water at ambient temperature shall be used in the bell jar for the box leak test (fig. 2).
- **5.2.2.1.2** Each box of the inspection sample shall be submerged under water in the bell jar with the cover of the box toward the inspector. The bell jar shall be closed and a pressure differential, as specified for the particular box packed, established. The cable attached to the lid shall be snapped to release trapped air bubbles on the box. When turbulence in the water has ceased, the box shall be observed for a period of 15 seconds.
- **5.2.2.1.3** Any escape of air from the interior of a box under the conditions of paragraph 5.2.2.1.2 constitutes a leaker. However, for the purpose of acceptance inspection, a leaker is one which permits the escape of a total of five or more bubbles from one or more leaking areas during the observation time of 15 seconds.
- **5.2.2.1.4** The location of the leak (s) (cover, bottom, side, side seam, or gasket), shall be reported.
- **5.2.2.2** The acceptable quality levels for gasket sealed ammunition box defects shall be as follows:

Physical characteristics, paint and markings:

	Percent
Major	- 1.0
Major Minor	- 2.5
Gasket sealing:	
Major	1.0

**5.2.2.3** Classification of defects. Gasket sealed ammunition box defects

sealed allillullition box defects.	
Physical characteristics M	ajor–Minor
1. Incorrectly closed and secured box	X
2. Severe dents, buckles, or other damage	
3. Scratches or abrasions exposing bare	X
metal.	
Markings	
4. Incorrect, illegible, or missing am-	X
munition lot number.	
5. Other markings, incorrect, missing, or	X
illegible.	
6. Incorrect pain or ink	X
Gasket sealing	
7. Leaker as defined	X

5.3 Overpacks and overpack contents Phase III.

#### **5.3.1** Wirebound boxes (crates)

**5.3.1.1** The acceptable quality levels for wirebound box (crate) defects shall be as follows:

	Percent
Major	 1.00
Minor	 2.6

**5.3.1.2** Classification of defects. Wirebound box (crate) defects

bound box (crate) defects.	
Assembly and seal Major	Minor
1. Unfastened outside binding wire X	
2. Unfastened inside binding wire	X
3. Missing end X	
4. Side, top or bottom extending beyond end cleat more than 1/8 in.	X
5. End cleat extending beyond side, top or bottom more than 1/8 in.	X
6. Gap larger than ¼ in. between end of batten and cleat.	X
7. Gap larger than ¼ in. between side of	X

- batten and cleat. 8. Gap larger than ¼ in. between --- X
- diagonal ends of more than one pair of cleats per box.
- 9. Reversed or inverted end.\_\_\_\_\_
- 10. Missing or incorrectly attached seal X ----( Box contents removable).
- 11. Incorrectly attached seal. (Box con- --- X tents not removable).
- 12. Exposed sharp edge or sliver, outside X ---surface.
- 13. FSN, DOD or LOT—all missing or X ---illegible or any incorrect.
- 14. DOD or LOT-one missin or illegible ---- X
- 15. Markings other than above incorrect, ---- X missing or illegible.
- 16. Marking touched up or repaired with ---- X non-permissible material (crayon, chalk, etc.).

#### Box contents

- 17. Missing separator -----
- 18. Incorrect, missing or illegible ammunition lot number.
- 19. Improper packing other than 17 and 18 -- X
- 20. Packed ammunition not in accordance X \_\_\_\_\_ with FSN.

#### **5.3.2** *Metal boxes.*

3 December 1962

**3.3.2.1** The acceptable quality levels for metal box defects shall be as follows:

	Percent
Major Minor	 1.00
Minor	 2.5

Minor		2.5
<b>5.3.2.2</b> Classification of defects.		
Metal box defects Marking	Major	Mino
1. FSN, DOD or Lotall missing or illegible or any incorrect.	X	
2. DOD or Lot-one missing or illegible		X
3. Markings other than above incorrect, missing or illegible.		X
4. Marking touched up or repaired with nonpermissible material (crayor chalk, etc.).	 n,	X

Workmanship and assembly

- 5. Box not properly closed and secured. X ----
- 6. Severe dents, buckles or other damage ---- X

Box contents \*

- 7. Missing separtor ----- X ---
- 8. Incorrect, missing or illegible am- X ---- munition lot number.
- 9. Improper packing other than 7 and 8 ---- X
- Packed ammunition not in accordance X ---- with FSN.

#### 6. NOTICES

- **6.1 Interpretation.** Any doubt as to the meaning of the provisions contained in this inspection document or any obscurity in its wording will be explained. All directions and explanations, necessary or proper to make definite and certain any procedure and give them due effect, will be given by the contracting officer.
- 6.2 Patent notice. When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or con-

veying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Copy Availability Notice. Copies of specifications, standards, drawings, and publications required by contractors in connection with specific procurement functions should be obtained from the procuring agency or as directed by the contracting officer. Copies of this standard for Military use may be obtained as indicated in the Foreword to the Index of Military Specifications and Standards.

Copies of this standard may be obtained for other than official use by individuals, firms, and contractors, from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Both the title and the identifying symbol number should be stipulated when requesting copies of Military Standards.

Preparing Activity: Army—MU

**Custodians:** 

Army—MU Navy—Wep

Air Force-00AMA

#### 10. APPENDIX

- 10.1 Visual inspection standards. This appendix forms an integral part of MIL–STD-644 to the extent specified therein. The illustrations shown are common packaging defects found during normal inspection of container contents, Phase I. Each defect illustrated has a legend which defines the degree or extent of the nonconformance and also whether it is acceptable or unacceptable.
- 10.2 Cross reference listing. Any packaging defect may be readily associated with the pertinent "Classification of Defects" or illustration by checking the following listing.

#### 20. CARTON PACKAGE

**20.1 Defect #5.** Missing label or improperly sealed carton, including label printed in wrong position on carton (referenced on page 3).

(a) Misplaced label
 (b) Not securely
 fastened
 (c) Improper sealing
 (d) Improper closure
 Figure 5
 Figure 5
 Figure 5
 Figure 6

**20.2 Defect #6.** Torn or ripped carton or label (referenced on page 3).

(a) Torn label Figure 7-8 (b) Torn carton Figure 9-10

<sup>\*</sup> When the metal box is the packaged and sealed container as well as the overpack, inspection of box contents shall be in accordance with the applicable contents of container paragraph outlined herein.

**20.3 Defect #7.** Incorrect, illegible or missing ammunition lot number (referenced on page 3).

Figure 11–12

**20.4 Defect #8.** Incorrect or illegible identification of carton contents—type, caliber, etc. (referenced on page 3).

(a) Smears(b) MiscellaneousFigure 13Figure 14

# 30. WATERPROOF ENVELOPE PACKAGE

**30.1 Defect #1.** Torn, ripped or improperly sealed envelope (referenced on page 4). Figure 15

**30.2 Defect #4.** Incorrect or illegible identification of envelope contents—type, caliber, etc. (referenced on page 4).

Figure 16

**30.3 Defects #5.** Incorrect, illegible or missing ammunition lot number (referenced on page 4).

Figure 16

#### 40. BULK PACKAGE

**40.1** There are no visual inspection standards illustrated in the appendix for bulk package defects.

#### 50. CLIP PACKAGE

- **50.1 Defect #3.** Rusty, excessive oiled or otherwise defective clips (referenced on page 5).
  - (a) Rust and corrosion Figure 17-18 (b) Oil or grease Figure 19-20
  - (c) Miscellaneous Figure 21–22
  - (d) Foreign matter Figure 23
- **50.2 Defect #4.** Missing or torn carton, when required (referenced on page 5).
  - (a) Carton torn edge Figure 24-25 (b) Carton torn seal Figure 26

## 60. METALLIC LINK BELT

**PACKAGE** 

**60.1 Defect #5.** Stretched, broken or frozen belt (referenced on page 7).

(a) Stretched link(b) Broken linkFigure 27–30Figure 31-34

(c) Frozen link Figure 35-38

Note. Frozen link illustrations do not apply to 20MM

- **60.2 Defect #6.** Foreign material, oil or grease, other than required (referenced on page 7).
- **60.3 Defect #7.** Defective protective finish or rust on link (referenced on page 7).
  - (a) Rust Figure 41–42
  - (b) Protective finish Figure 43–44
- **60.4 Defect #8.** Malformed links (referenced on page 7).

Figure 45-52

**60.5 Defect #11.** Improper depth of insertion of cartridges in link (referenced on page 7).

Figure 53–55

**60.6 Defect #13.** Missing, broken or malformed metallic link belt end, when required (referenced on page 7).

Figure 56

#### 70. BANDOLEER PACKAGE

**70.1 Defect #2.** Incorrect or illegibel identification of bandoleer contents-type, caliber, etc. (referenced on page 8).

(a) Single marking Figure 57

(b) Illegible identifi-

cation Figure 58–60

**70.2. Defect #4.** Torn or ripped or otherwise defective bandoleer (referenced on page 8)

(a) Torn pocket or flap Figure 61

(b) Tom strap Figure 62 (c) Sticking Figure 63

(d) Sticking type 401 Figure 64

(e) Oil, grease, dirt or

foreign matter Figure 65

(f) Miscellaneous Figure 66

**70.3 Defect #6.** Rusty, excessively oiled or otherwise defective clips (referenced on page 8).

(a) Rust and corrosion Figure 17-18

(b) Oil or grease Figure 19–20 (c) Miscellaneous Figure 21–22

(d) Foreign matter Figure 23

**70.4 Defect #7.** Missing or tom carton (referenced on page 8).

(a) Carton torn edge Figure 24–25

(b) Carton tom seal Figure 26

3 December 1962

**70.5 Defect, #8.** Missing or improper fillers or separators (referenced on page 8). Figure 67

**70.6 Defect #9.** Improper packaging of clipped ammunition in bandoleer (referenced on page 8).

Figure 68-69

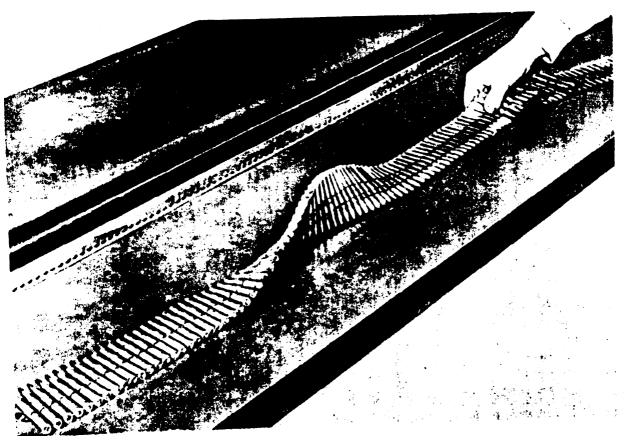


Figure 1. Twist Test

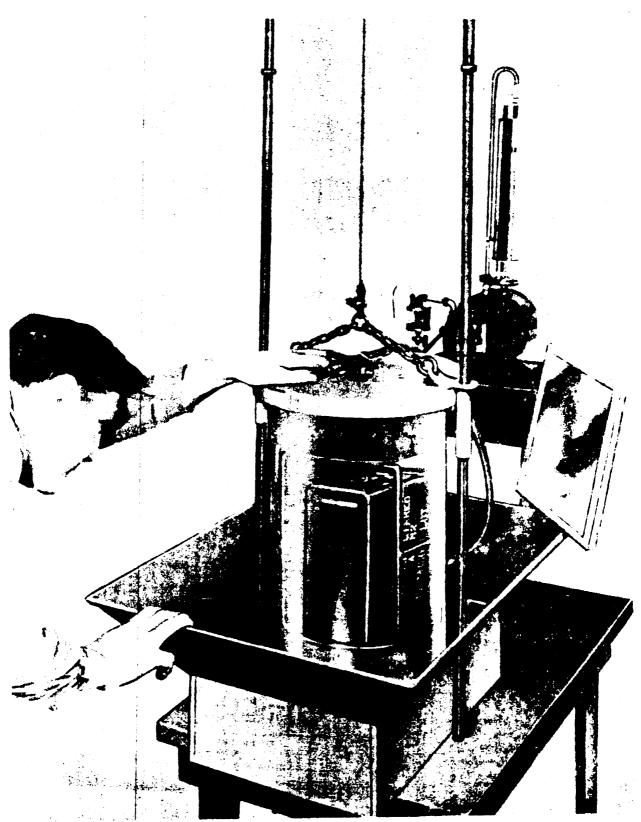
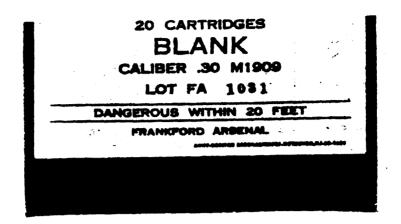


Figure 2. Leak Test

#### A-Acceptable

Misplaced label

when all identifying portions of label are on front of carton.



#### B-Acceptable-

Misplaced label

When all identifying portions of label are on front of carton and while ammunition lot number is partially illegible, it is identifiable.



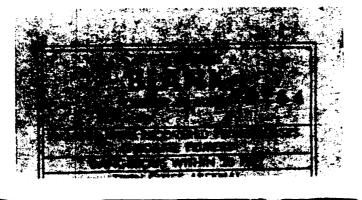
#### C-Acceptable-

Misplaced label

When all identifying portions of label are on front of carton and label is affixed to carton  $\frac{1}{16}$  inch or more from short edge as shown.



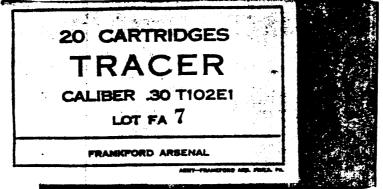
Figure 3. Carton Package Dfect No. 5-Missing Label or Improperly Sealed Carton,
Including Label Printed in Wrong Position on Carton



#### A-Unacceptable-

Misplaced label

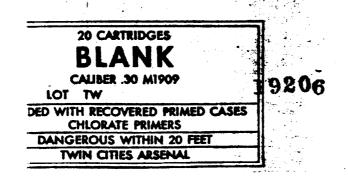
When all identifying portions of label are not on front of carton.



#### B-Unacceptable-

Misplaced label

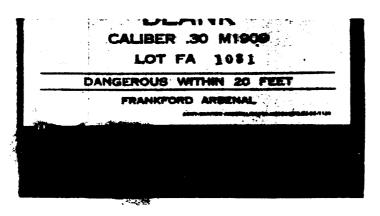
When label extends beyond edge of carton.



#### C-Unacceptable-

Misplaced label

When all identifying portions of label are not on front of carton.



#### D-Unacceptable-

Misplaced label

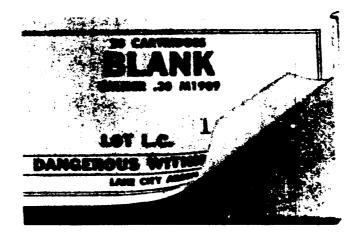
When all identifying portions of label are not on front of carton.

Figure 4. Carton Package Defect No. 5-Missing Lable or Improperly Sealed Carton, Including Label Printed in Wrong Psition on Carton.

#### 3 December 1962

#### A-Unacceptable-

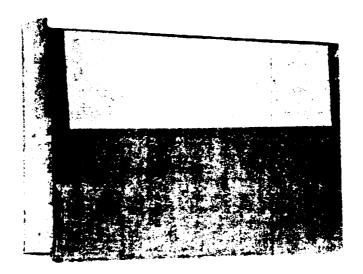
Label not securely fastened.



#### B-Unacceptable-

Improper sealing

Illustration shows back of box with improperly sealed end of box.



#### C-Unacceptable-

Improper sealing

Carton not closed and sealed securely.

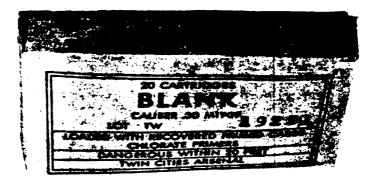
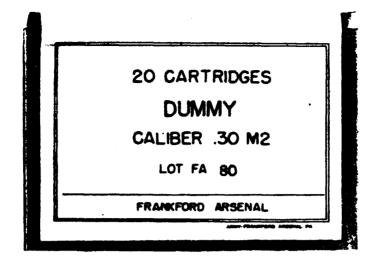
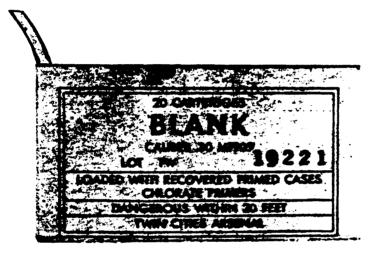


Figure 5. Carton Package Defect No. 5-Missing Label or Improperly Sealed Carton, Including Label Printed in Wrong Position



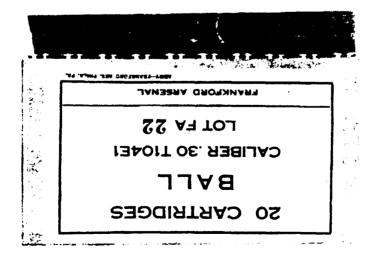
#### A-Unacceptable-

- Improper closure
- Carton not closed and sealed securely.



#### B-Unacceptable-

- Improper closure
- Carton not closed properly.



#### C-Unacceptable-

- Improper closure
- Top of carton not sealed, due to label being reversed.

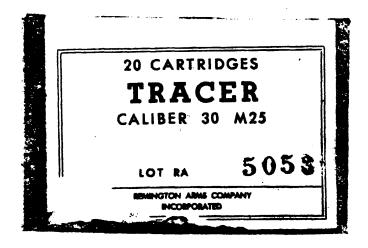
Figure 6. Carton Package Defect No. 5-Missing Label or Improperly Sealed Carton, Including label Printed in Wrong Position on Carton.

#### 3 December 1962

#### A - Acceptable -

Torn label

When all identifying portions of label are legible.



#### B-Acceptanble-

Torn label

When the torn portion of the label does not extend more than one-third the effective Sealing edge.



#### C-Acceptable-

Torn label

when one-third or less of effective sealing edge is torn.

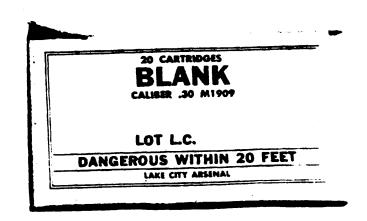
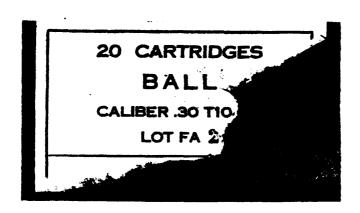


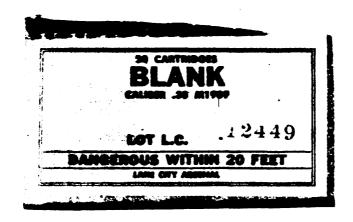
Figure 7. Carton Package Defect No. 6-Torn or Ripped Carton or Label.

#### A-Unacceptable-

Torn label

When any of the identifying portions of the label are missing.





#### B-Unacceptable-

Torn label

When tear exceeds one-third length of effective sealing edge resulting in poor seal

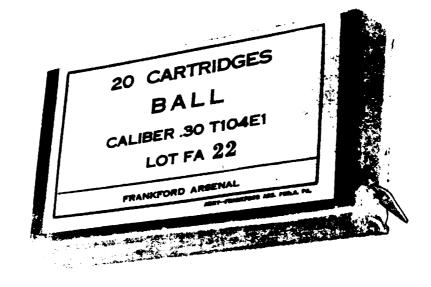
Figure 8. Carton Package Defect No. 6-Torn or Ripped Carton or Label.

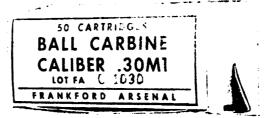
#### 3 December 1962

#### A-Acceptable-

Torn carton

When not torn greater then shown (any location).





#### B-Acceptable-

Torn carton

When not torn greater then shown (any location).



#### C-Unacceptable-

Torn carton

Torn edge exceeding one-third length of edge.

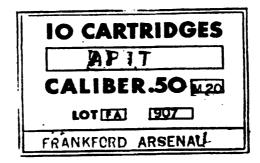
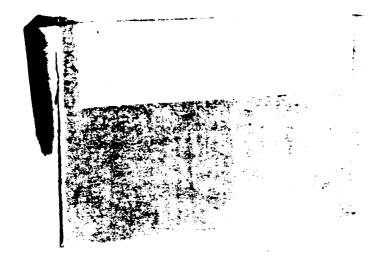


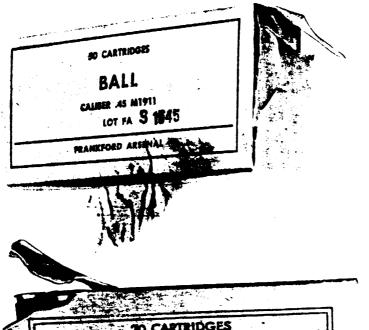
Figure 9. Carton Package Defect No. 6-Torn or Ripped Carton or Label.



#### A-Unacceptable-

Torn carton

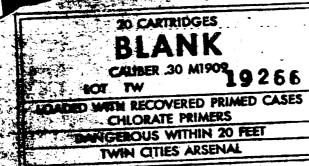
When torn to the extent shown or more.



#### B-Unacceptable-

Torn carton

When torn to the extent shown or more.



#### C-Unacceptable-

Tom carton

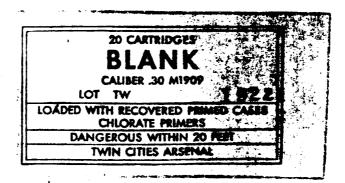
When tam to the extent shown or more.

Figure 10. Carton Package Defect No. 6-Torn or Ripped Carton or Label.

#### A-Acceptable-

Illegible lot number

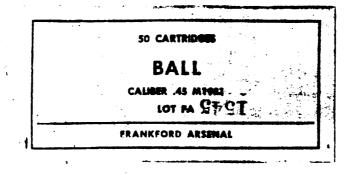
Partially illegible but identifiable.



#### B-Acceptable-

Illegible lot number

Inverted but identifiable.



#### C-Acceptable-

Illegible lot number

Smeared but identifiable.

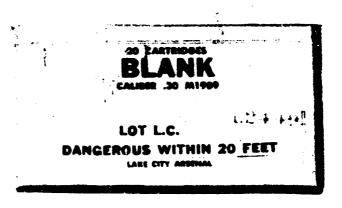
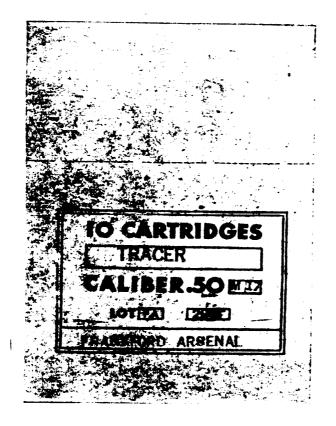


Figure 11. Carton Package Defect No. 7-Incorrect, Illegible or Missing Ammunition Lot Number.

SQ CARTRIDGES
BAID CARBINE
CALIBER .30M1
LOT FA
FRANKFORD ARSENAL

A-Unacceptable-Illegible lot number Illegible and not readily identifiable.



B-Unacceptable-Illegible lot number Smeared and not identifiable.

Figure 12. Carton Package Defect No. 7-Incorrect, Illegible or Missing Ammunition Lot Number.

#### A-Acceptable-

Smears

When partially illegible but identification of contents is positive.



#### B-Unacceptable-

Smears

When Identifying portions of label are obscured.

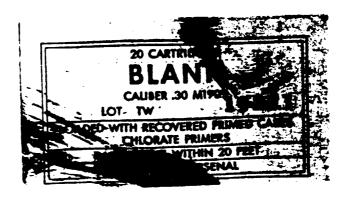
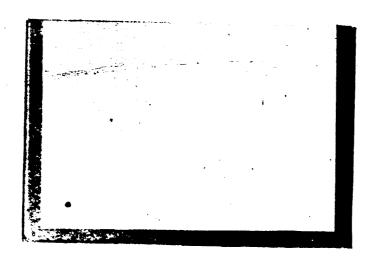
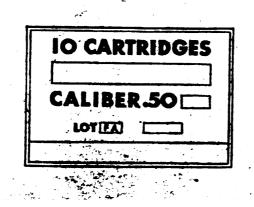


Figure 13. Carton Package Defect No. 8-Incorrect or Illegible Identification of Carton Contents (Type, Caliber, etc.).



A-Unacceptable-Miscellaneous Reversed or blank label.



B-Unacceptable-Miscellaneous Incomplete identification.

Figure 14. Carton Package Defect No. 8-Incorrect or Illegible Identification of Carton Contents (Type, Caliber, etc.).

#### A-Unacceptable-

Torn or ripped

Tear not in sealed edge.



#### B-Acceptable-

Torn or ripped

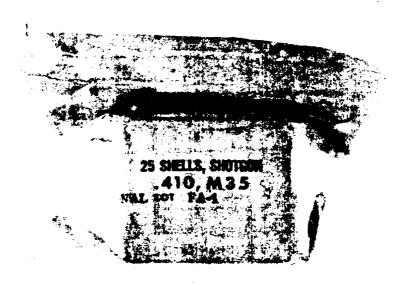
Missing portion of sealed edge, not exceeding one-tenth of sealed edge ores on one end, and confined to area between center line and outer boundry of seam



#### C-Acceptable-

Torn or ripped

Tear in sealed edge, one-fifth or less of length of edge and confined to area between center line and outer boundry of seam.



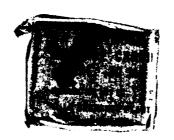
igure 15. Waterproof Envelope Package Defect No. 1-Torn, Ripped or Improperly Sealed Envelope.



#### A-Acceptable-

Smears

When partially illegible but identifiable.



#### B-Acceptable-

Smears

When partially illegible but identifiable.



#### C-Unacceptable-

Smears

When identification is not positive.



D-Unacceptable-

Smears

When illegible and not identifiable.

Figure 16. Waterproof Envelops Package Defect No. 4 and Defect No. 5-Incorrect or Illegible Identification of Envelope Contents (Type, Caliber, etc.). Incorrect, Illegible or Missing Ammunition Lot Number.

#### 3 December 1962

#### A-Acceptable-

Rust and Corrosion

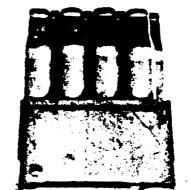
Non-defective clip shown for comparison.



Rust and corrosion

When rusted area does not exceed 0.03 square inch; eithor single spot or sum of several spats.





#### C-Unacceptable-

Rust and corrosion

When there is no protective coating.

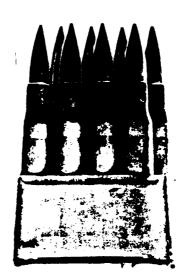


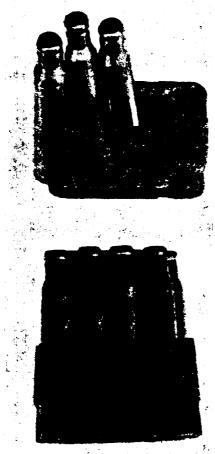
Figure 17. Clip package Defect No. 3-Rusty, Excessively Oiled or Otherwise Defective Clips.

Defect is Major if Clip Will Not Function as Intended; Otherwise Minor.

If Questionable, Functioning Test Shall Be Made.



A-Unacceptable-Rust and corrosion As illustrated.



B-Unacceptable-Rust and corrosion As illustrated.

C-Unacceptable-Rust and corrosion As illustrated.

Figure 18. Clip Package Defect No. 3-Rusty, Excessively Oiled or Otherwise Defective Clips.

Defect is Major if Clip Will Not Function as Intended; Otherwise Minor.

If Questionable, Functioning Test Shall Be Made.

A-Acceptable-

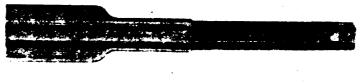
Oil or grease

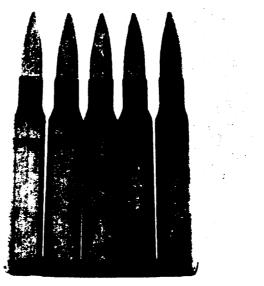
As illustrated.

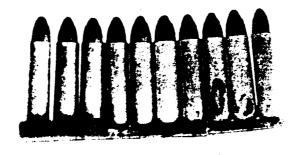
B-Unacceptable-Oil or grease As Illustrated.

C-Unacceptable-Oil or grease As Illustrated.

D-Unacceptable-Oil or grease As Illustrated







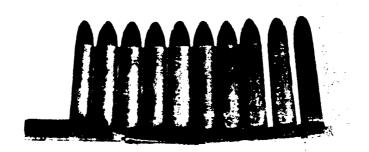
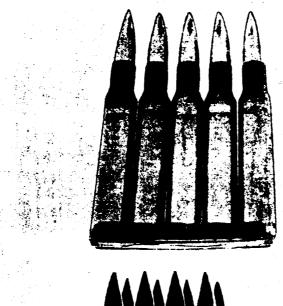


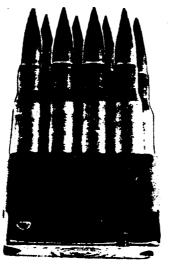
Figure 19. Clip Package Defect No. 3-Rusty, Excessively Oiled or Otherwise Defective Clips.

Defect is Major if Clip Will Not function as Intended; Otherwise Minor.

If Questionable, Functioning Test Shall Be Made.



A-Unacceptable-Oil or grease As illustrated.



B-Unacceptable-Oil or grease As illustrated.





C-Unacceptable-Oil or grease As illustrated.

Figure 20. Clip Package Defect No. 3—Rusty, Excessively Oiled or Otherwise Defective Clips.

Defect is Major if Clip Will Not Function as Intended; Otherwise Minor.

If Questionable, Functioning Test Shell Be Made.

A-Acceptable-

Miscellaneous

Malformed

B-Acceptable-

Miscellaneous

Cartridge spring tab not close



Miscellaneous

Missing cartridge spring tab

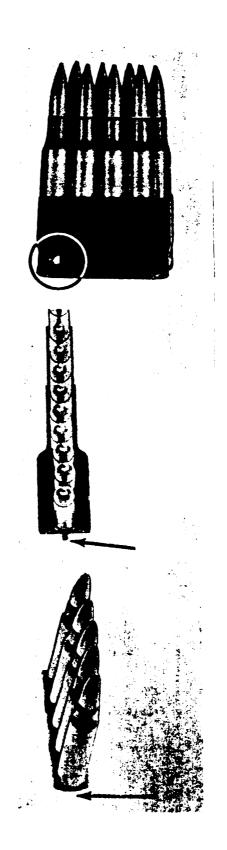


Figure 21. Clip Package Defect No. 3-Rusty, Excessively Oiled or Otherwise Defective Clips.

Defect is Major if Clip Will Not Function as Intended, Otherwise Minor.

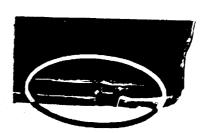
if Questionable, Functioning Test Shall Be Made.

3 December 1962

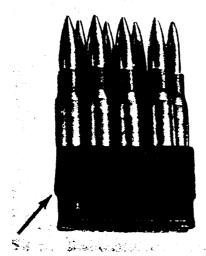


A-Unoccoptable-Miscellaneous Bent shoe.





B–Unacceptable– Miscellaneous Split clip



C-Unacceptable-Miscellaneous Bent cartridge lock tab.

Figure 22. Clip Package Defect No. 3-Rusty, Excessively Oiled or Otherwise Defective Clips.

Defect is Major if Clip Will Not Function as Intended; Otherwise Minor.

If Questionable, Functioning Test Shall Be Made.

#### A-Acceptable-

Foreign matter

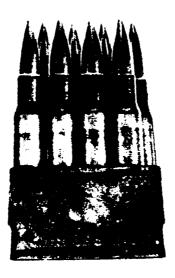
Nondefective clip shown for comparison.



#### B-Acceptable-

Foreign matter

As illustrated.



#### C-Unacceptable-

Foreign matter

As illustrated.

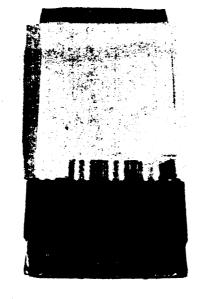


Figure 23. Clip Package Defect No. 3—Rusty, Excessively Oiled or Otherwise Defective Clips.

Defect is Major if Clip Will Not Function as Intended; Otherwise Minor.

If Questionable, Functioning Test Shall Be Made.

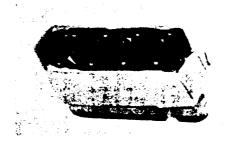
# 3 December 1962 MIL-STD-644A



A-Acceptable-Carton torn edge One-third or less of edge.



B-Acceptable-Carton torn edge One-third or less of edge.



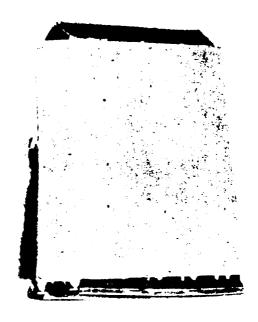
C-Unacceptable-Carton torn edge Missing top.

Figure 24. Clip Package Defect No. 4-Missing or Torn Carton (When Required)

#### A-Unacceptable-

Carton torn edge

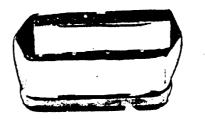
More than one-third of edge.



#### B-Unacceptable-

Carton torn edge

Edge completely torn.



#### C-Unacceptable-

Carton torn edge

More than one-third of edge.

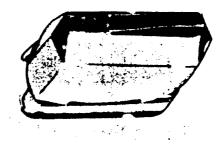
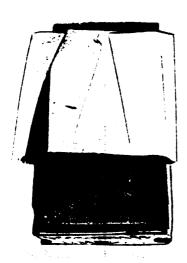


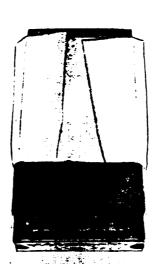
Figure 25. Clip Package Defect No. 4-Missing or Torn Carton (When Required).





A-Acceptable-Carton torn seal One-third or less of length.



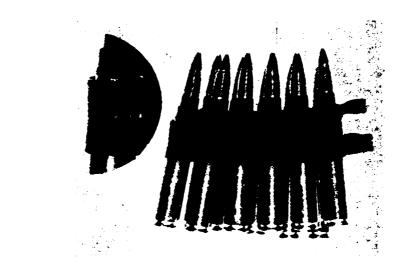


B-Unacceptable-Carton torn seal More then one-third of length.

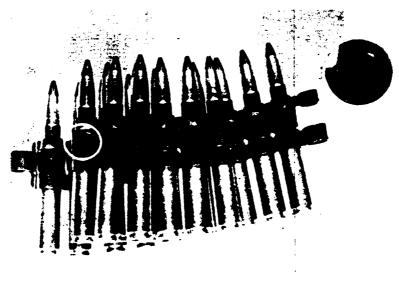
Figure 26. Clip Package Defect No. 4-Missing or Torn Carton (When Required).

3 December 1962

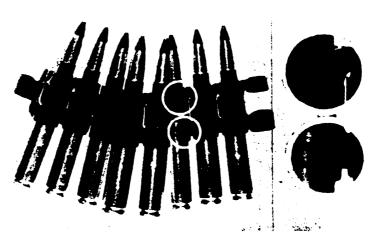
A-Acceptable-Stretched link Connecting ring.



B-Acceptable-Stretched link Connecting ring.

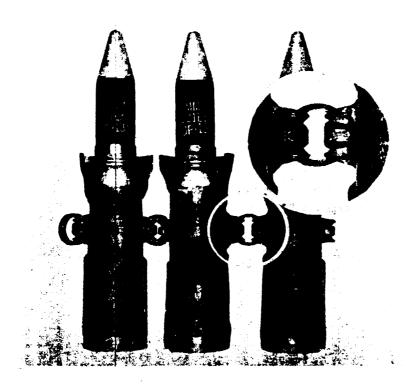


C-Acceptable-Stretched link Body and neck rings.



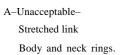


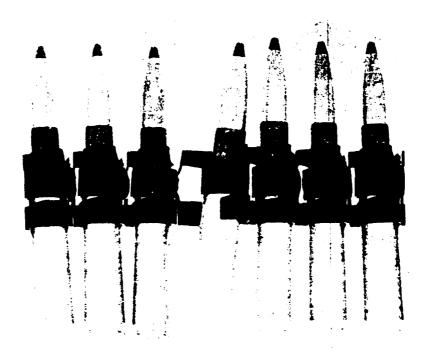
A-Acceptable-Stretched link Connecting ring.



B-Unacceptable-Stretched link Connecting ring.

Figure 28. Metallic linked Belt Package Defect No. 5-Stretched, Broken or "Frozen" Belt.





B-Unacceptable-Stretched link Connecting ring.

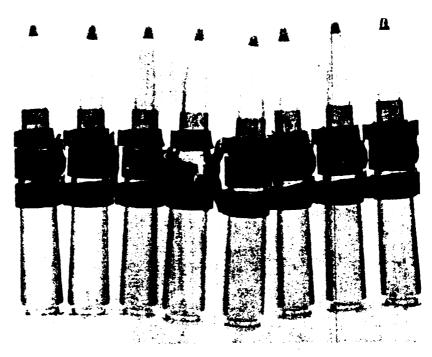
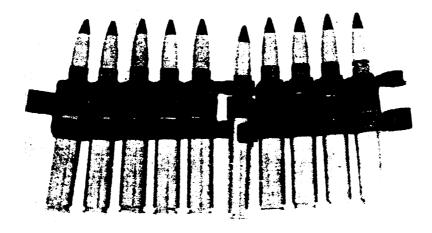


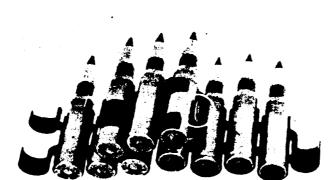
Figure 29. Metallic Linked Belt Package Defect No. 5-Stretched, Broken or "Frozen" Belt.  $\bf 36$ 



A-Unacceptable-

Stretched link

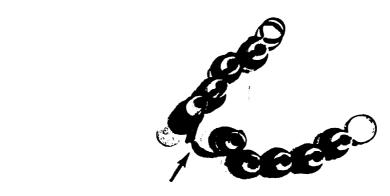
Body and neck rings.



B-Unacceptable-

Stretched link

Connecting half rings. Any visually detectable sot appearing in belt pull test not acceptable for half link.



C-Unacceptable-

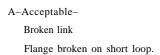
Stretched link

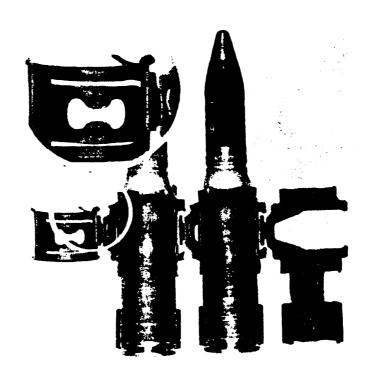
Laminated connecting ring stretched.



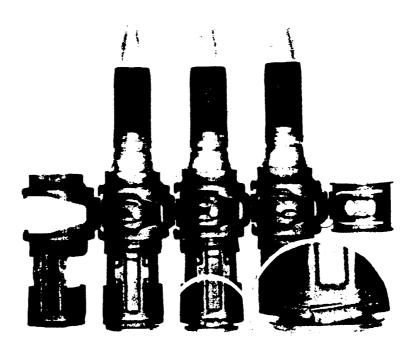
D-Unacceptable-Stretched link Connecting ring.

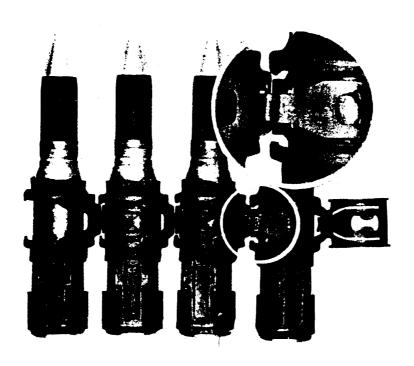
Figure 30. Metallic Linked Belt Package Defect No. 5-Stretched, Broken or "Frozen" Belt.



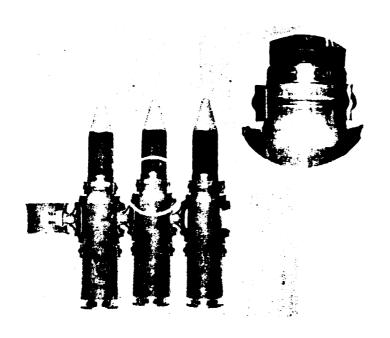


B-Unacceptable-Broken link Split or cracked long loop.





A-Unacceptable-Broken link Broken inter loop.



B-Unacceptable-Broken link Broken grip tabs.

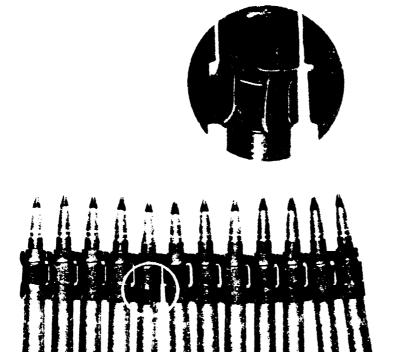
Figure 32. Metallic Linked Belt Package Defect No. 5-Stretched, Broken or "Frozen" Belt.

Unacceptable-

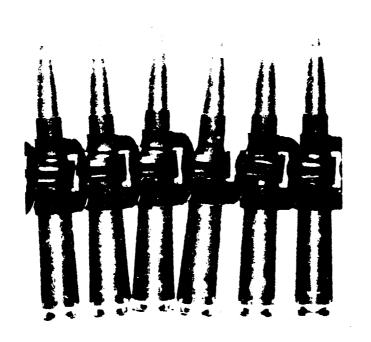
Broken link

Broken and/or missing guide tab.

Figure 33. Metallic linked Belt Package Defect No. 5-Stretched, Broken or "Frozen" Belt.



A-Unacceptable-Broken link Body ring broken



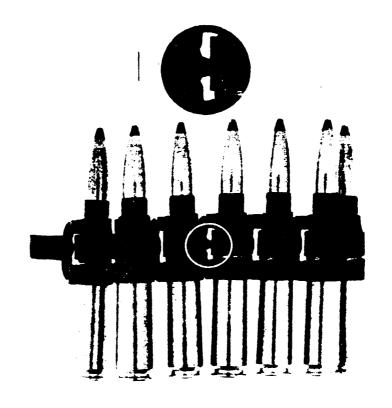
B-Unacceptable-Broken link Neck ring broken.

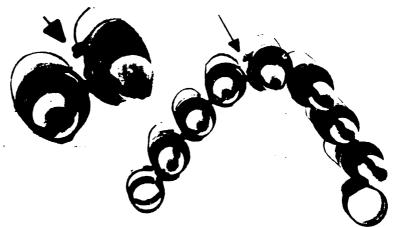
Figure 34. Metallic Linked Belt Package Defect No. 5-Stretched, Broken or "Frozen" Belt.

### A-Acceptable-

Frozen belt\*

Slight stiffness caused by malformed connecting ring.





#### B-acceptable-

Frozen belt\*

Slight stiffness caused by malformed connecting ring. Belt will not flex convexly, viewed from top.

Figure 35. Metallic Linked Belt Package Defect No. 5-Stretched, Broken or "Frozen" Belt.

\*Does not apply to 20mm.

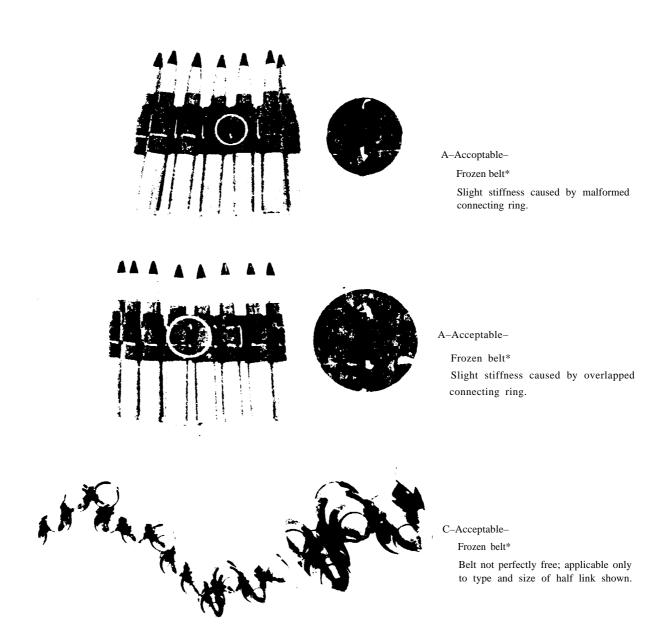


Figure 36. Metallic linked Belt Package Defect No. 5-Stretched, Broken or "Frozen" Belt.

\*Does not apply to 20mm.

#### 3 December 1962

#### A—Unacceptable—

Frozen belt\*

Caused by molformed connecting ring.

#### B-Unacceptable—

Frozen belt\*

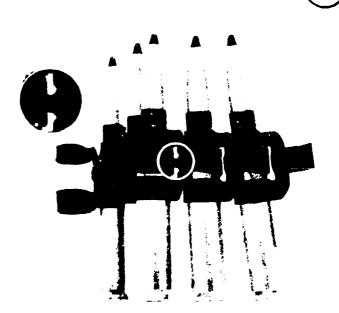
Caused by malformed neck ring.

#### C-Unacceptable-

Frozen belt\*

Caused by malformed connecting ring





#### D-Unacceptable-

Frozen belt\*

Caused by connecting ring bur. This defect may be critical depending on degree of cartridge distortion.

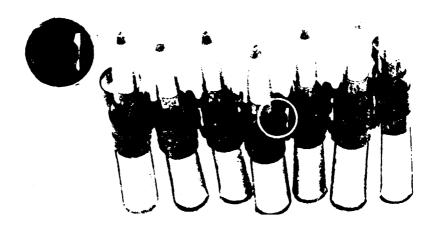
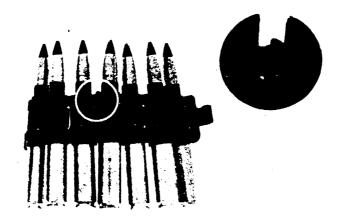


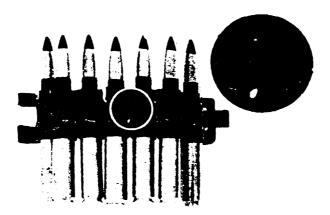
Figure 37. Metallic Linked Belt Package Defect No. 5—Stretched, Broken or "Frozen" Belt \*Does not apply to 20mm.



#### A-Unacceptable-

Frozen belt\*

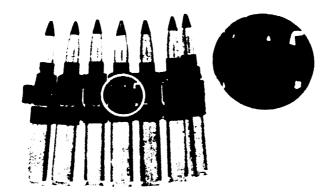
Caused by malformed neck ring



#### B-Unacceptable-

Frozen belt\*

Caused by malformed connecting ring,



#### C-Unacceptable-

Frozen belt\*

Caused by malformed connecting ring



#### D—Unacceptable—

Frozen belt\*

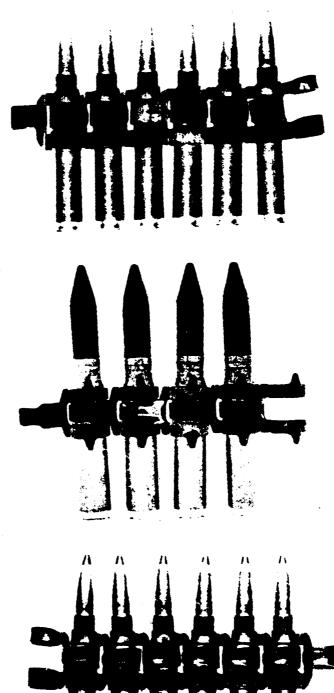
Caused by underlapped connecting ring. Disassembled belt shown.

Figure 38 Metallic Linked Belt package Detect No. 5—Stretched, Broken or "Frozen" Belt.
\*Does not apply to 20mm.

A-Acceptable — Foreign matter Discolored.

B-Acceptable-Foreign matter Discolored.

C-Acceptable-Foreign matter Light oil.



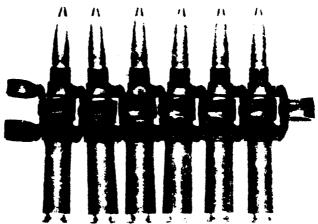
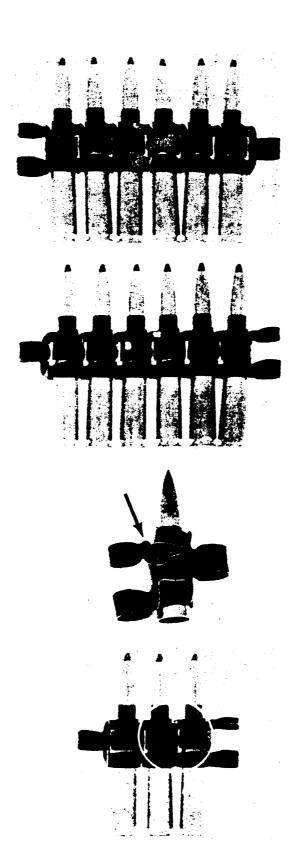


Figure 39. Metallic Linked Belt Package Defect No. 6—Foreign Material, Oil or Grease. (Other than required).



#### A-Unacceptable—

Foreign matter

Pronounced foreign material.

#### B-Unacceptable-

Foreign matter

Pronounced foreign material.

#### C-Unacceptable-

Foreign matter

Pronounced foreign material; some of cartridge body not shown.

D-Unacceptable-

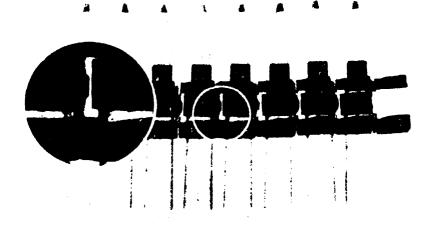
Foreign matter

Free oil or grease

Figure 40. Metallic Linked Belt Package Defect No. 6—Foreign Material, Oil or Grease. (Other than required).

#### A-Acceptable-R u s t

Rusted area on single link not exceeding 0.03 square inch, either a single spat or sum of several spots.





#### 0—Acceptable—

Rust

Rusted area on single link not exceeding 0.03 square inch, either a single spot or sum of several spots

#### C-Unacceptable-

Rust

Rusted area on single link exceeds 0.03 square inch, either a single spat or sum of several spots

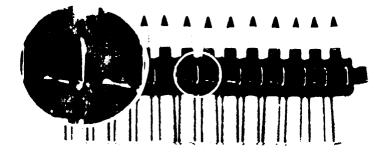
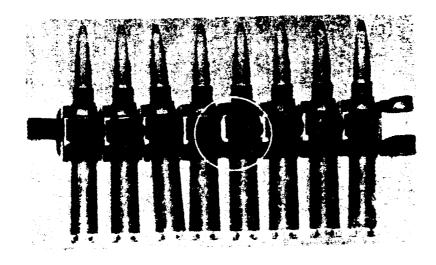


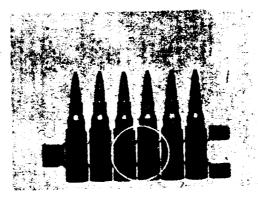
Figure 41. Metallic Linked Belt Package Defect No. 7—Defective Protective Finish.



#### A-Unacceptable—

Rust

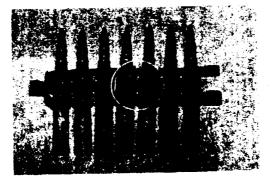
Total spots of rust on single link over 0.03 square inch in area.



#### B-Unacceptable-

Rust

Total spots of rust on single link over 0.03 square inch in area.



#### C-Unacceptable-

Rust

Total spots of rust on single link over 0.03 square inch in area.

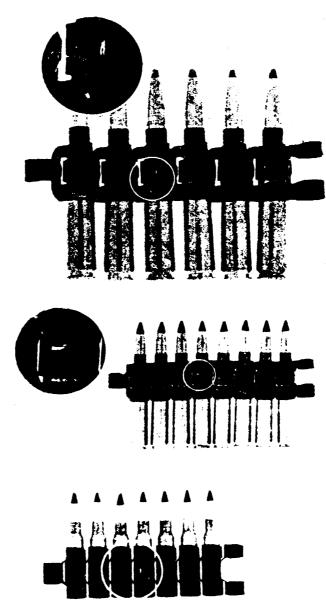
Figure 42. Metallic Linked Belt Package Defect No. 7-Defetive Protective Finish.

A-Acceptable-Protective finish Scratched.

B—Acceptable— Protective finish Scratched.

C-Acceptable-Protective finish Incomplete.

D-Unacceptable-Protective finish Missing





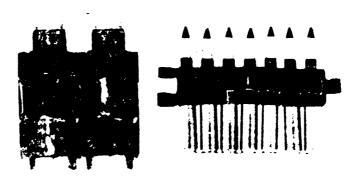
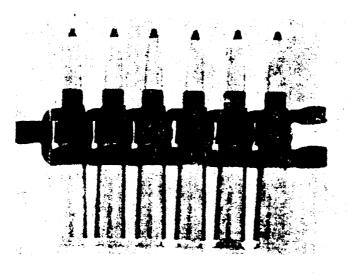
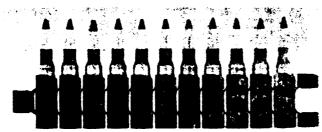


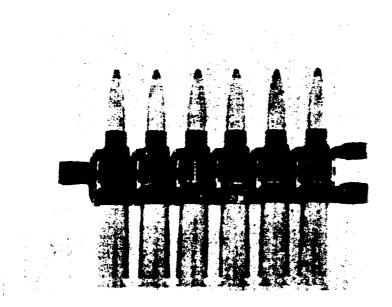
Figure 43. Metallic Linked Belt Package Defect No. 7-Defective Protective Finish.



A-Unacceptable-Protective finish Spotty.

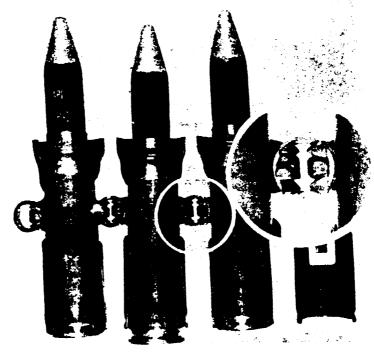


B-Unacceptable—
Protective finish
Missing.



C-Unacceptable-Protective finish Missing.

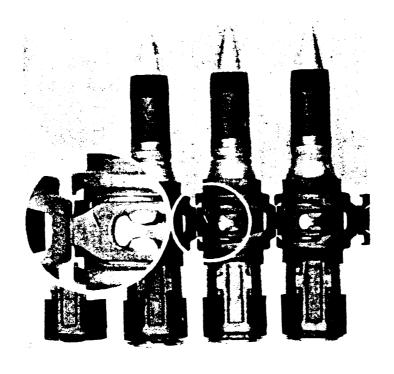
Figure 44. Metallic Linked Belt Package Defect No. 7—Defective Protective Finish.



A—Aceptable—
Pronounced Malfunction
Bent end of stress bridge.

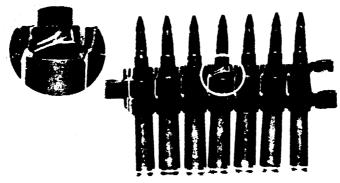


B—Acceptable—
Pronounced Malfunction
Malformed guide tab.



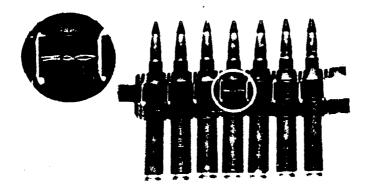
#### A-Acceptable-

Pronounced malformation Slug or die mark on link.



#### B-Acceptable-

Pronounced malformation Silver impression.



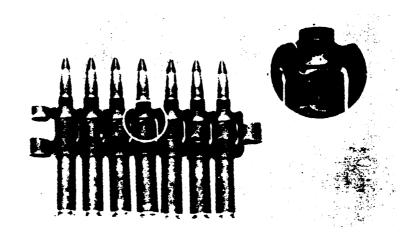
#### C-Acceptable-.

Pronounced malformation Scale or inclusions.

Figure 46. Metallic Linked Belt Package Defect No. 8—Malformed Link(s)—Pronounced.

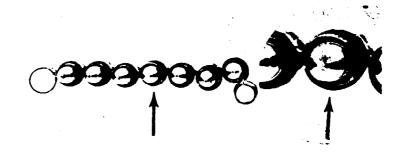
A—Acceptable—

Pronounced malformation
Scale or inclusions



B-Acceptable-

Pronounced malformation Flattened neck ring.



C-Acceptable-

Pronounced malformation Large neck ring.

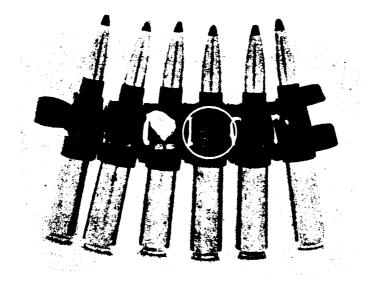


D-Acceptable-

Pronounced malformation Flattened body ring.

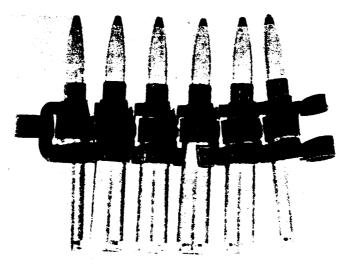


Figure 47. Metallic Linked Belt Package Defect No. 8—Malformed Link(s)—Pronounced.



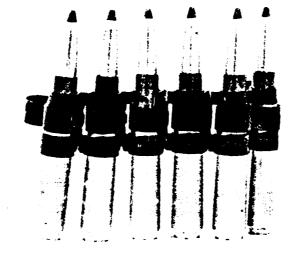
#### A—Acceptable—

Pronounced malformation Connecting ring.



#### B—Acceptable—

Pronounced malformation
Partial body ring.



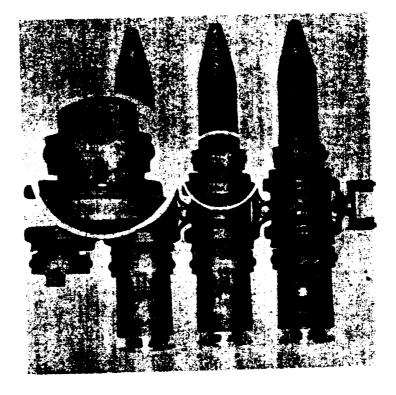
#### C-Acceptable-

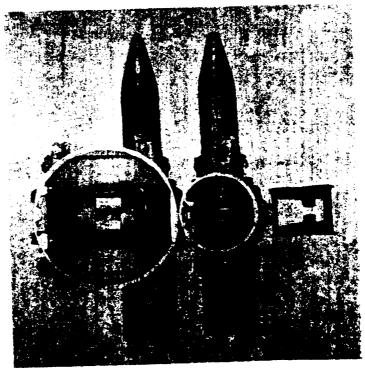
Pronounced malformation

Partial neck ring. For half ring any missing partion of half ring(s) not acceptable.

Figure 48. Metallic Linked Belt Package Defect No. 8—Malformed Link(s)—Pronounced.

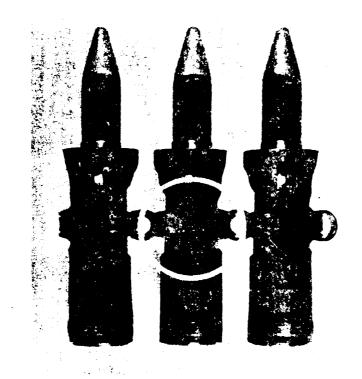
A-Unacceptable-Pronounced malformation Bent lance tab.



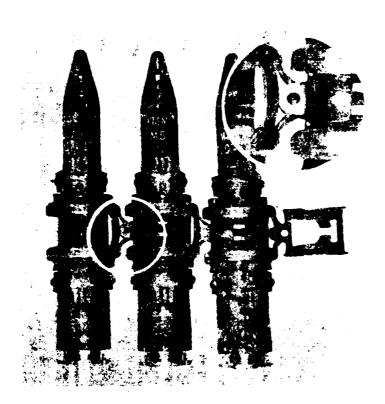


B—Unacceptable—
Pronounced malformation
Bent guide tabs.

Figure 49. Metallic Linked Belt Package Defect No. 8—Malformed Link(s)—Pronounced.



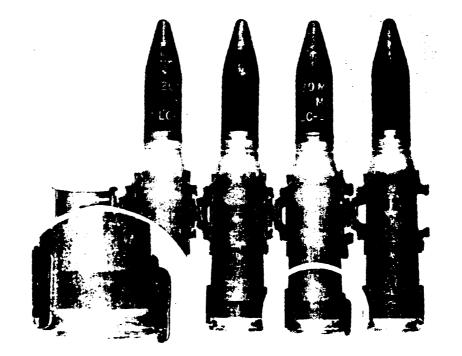
A—Unacceptable—
Pronounced malformation
Stress bridge missing



B—Unacceptable—
Pronounced malformation
Rivet not seated

Figure 50. Metallic Linked Belt Package Defect No. 8—Malformed Link(s)—Pronounced.

#### 3 December 1962



#### A-Unacceptable-

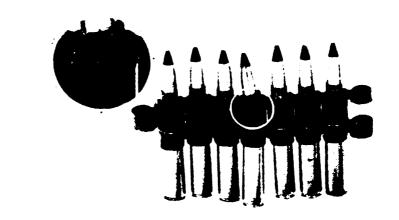
Pronounced malformation

Grip extended beyond extractor groove.

#### B-Unacceptable-

Pronounced malformation

Belt and cartridge distortion caused by presence of extra neck ring in body ring. This can be critical, depending on degree of cartridge distortion.



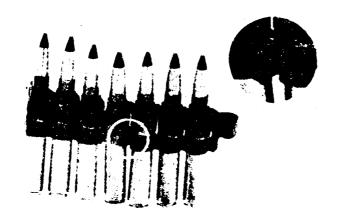
#### C-Unacceptable-

Pronounced malformation

Connecting ring.



Figure 51. Metallic Linked Belt Package Defect No. 8-Malformed Link(s)—Pronounced.



#### A-Unacceptable-

Pronounced malformation

5 malfarmed body ring. Could be critical, depending on degree of distortion.



#### B—Unacceptable—

Pronounced malformation Body ring.



#### C—Unacceptable—

Pronounced malformation

Body ring. Bent neck ring.

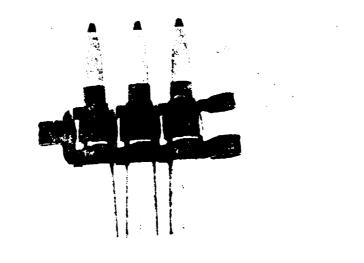
Figure 52. Metallic Linked Belt Pachage Defect No. 8—Malformed Link(s)—Pronounced.

#### 3 December 1962

#### A—Acceptable—

Improper depth

Satisfactory shouldering of cartridges shown for comparison. (See below)

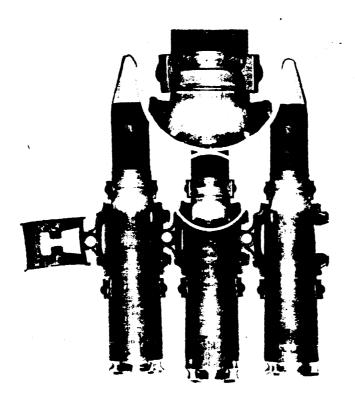


#### B-Unacceptable-

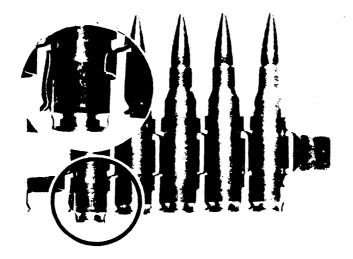
Improper depth

Cartridges not shouldered against neck ring.

Figure 53. Metallic Linked Belt Package Defect No. 11— Improper Depth of insertion of Cartridges in Link(s).



A—Unacceptable—
Improper depth
Link detent not in extractor groove.



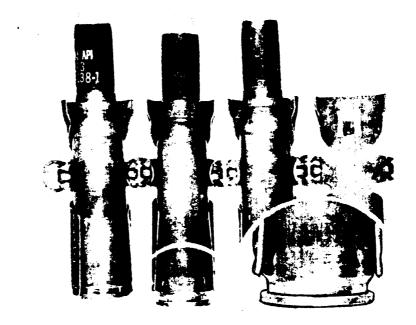
B-Unacceptable—

Improper depth

Link detent not in extractor groove.

Figure 54. Metallic Linked Belt Package Defect No. 11-Improper Depth of Insertion of Cartridges in Link(s).

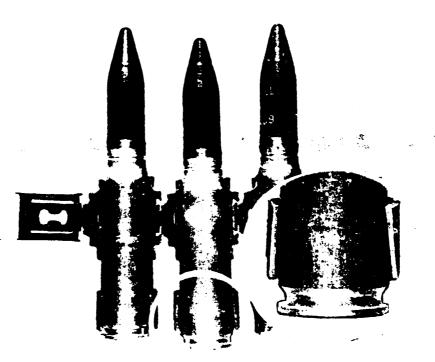
#### 3 December 1962



#### A-Unacceptable-

Improper depth

Link detent not in extractor groove

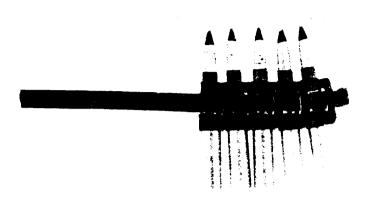


#### B-Unacceptable-

Improper depth

Link detent not in extractor groove.

Figure 55. Metallic Linked Belt Package Defect No. 11-Improper Depth of Insertion of Cartridges in Link(s).



A—Unacceptable—
Broken or malformed
Broken.



B—Unacceptoble—

Broken or malformed.

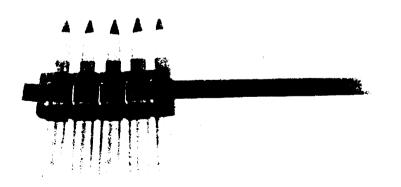
Malformed.



C—Unacceptable—

Broken or malformed

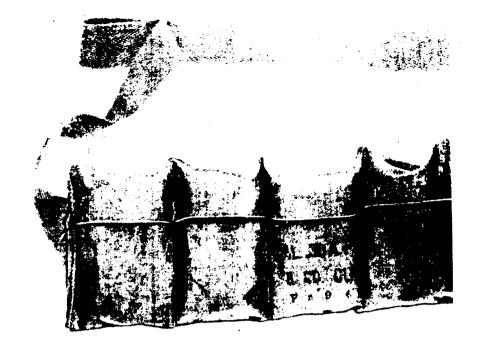
Malformed.



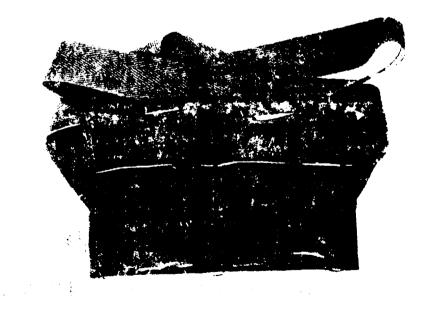
D-Unacceptable-Broken or malformed Broken.

Figure 56. Metallic Linked Belt Package Defect No. 13—Missing, Broken or Malformed Metallic Belt End (When Required).

3 December 1962



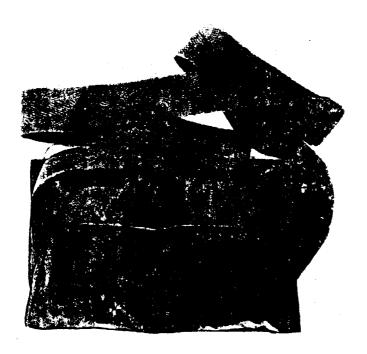
A—Acceptable— Single marking Any pocket.



Single marking Inverted identification, if legible.

B—Acceptable—

Figure 57. Bandoleer Package Detect No. 2—Incorrect or Illegible Identification.



Illegible identification

Partially illegible but identification of contents is positive.



#### B—Acceptable—

Illegible identification

Marking smeared but identification of contents is positive.

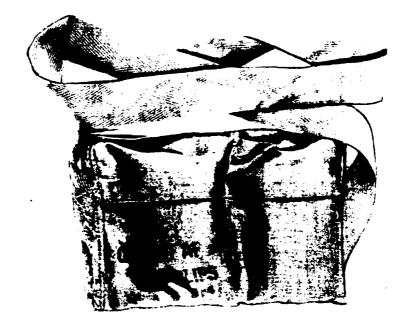
Figure 58. Bandoleer Package Defect No. 2—Incorrect or Illegible Identifications.

## A-Unacceptable-

Illegible identification

When marking pattern is not legible or identifiable on one or more pockets.



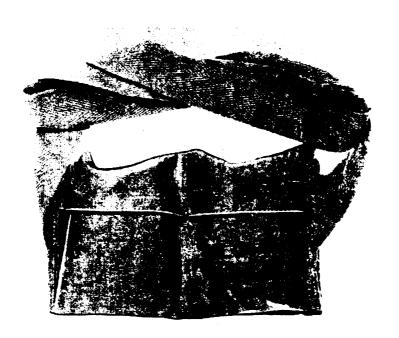


#### B—Unacceptable—

Illegible identification

Marking smeared, not identifiable.

Figure 59. Bandoleer Package Defect No. 2—Incorrect or Illegible Identification.



Illegible identification

Partially illegible but identification of contents is positive.



#### B—Unacceptable—

Illegible identification

Marking smeared, not identifiable.

Figure 60. Bandoleer Package Defect No. 3—Incorrect Illegible or Missing Ammunition Lot Number.

#### A—Acceptable—

Torn pocket or flap

When torn one-quarter inch or less in length.

#### B—Acceptable—

Torn pocket or flap

Hales front or back.

#### C—Unacceptable—

Torn pocket or flap

When more than one-quarter inch in length is torn.

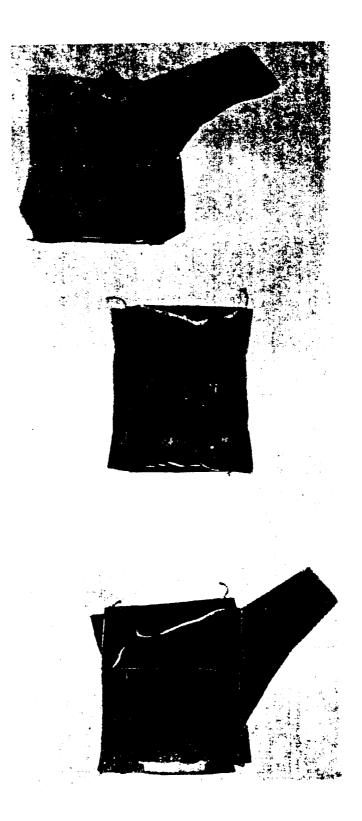
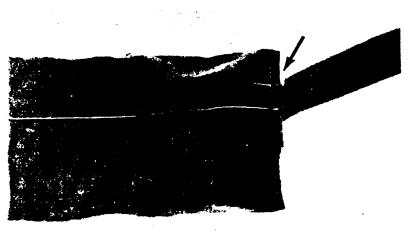
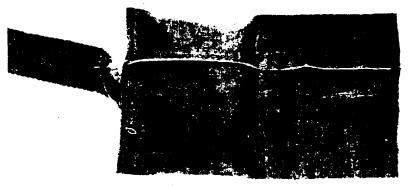


Figure 61. Bandoleer Package Defect No. 4—Torn, Ripped or Otherwise Defective Bandoleer.



Torn strap

When torn one-eight inch or less in length.



#### B—Unacceptable—

Torn strap

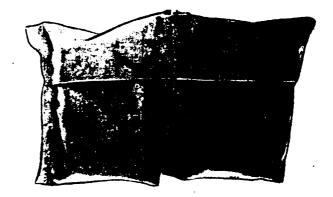
When torn more than one-eight in length

Figure 62. Bandoleer Package Defect No. 4—Torn, Ripped or Otherwise Defective Bandoleer.

#### A—Acceptable—

Stitching

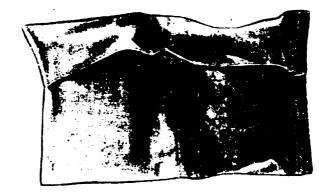
Loose thread ends.



### B—Acceptable—

Stitching

When torn out or missing not more than one-half inch.



#### C—Unacceptable—

Stitching

When torn out or missing more than one-half inch.

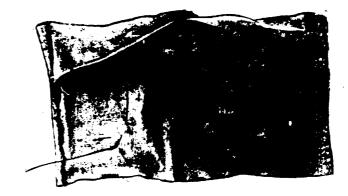
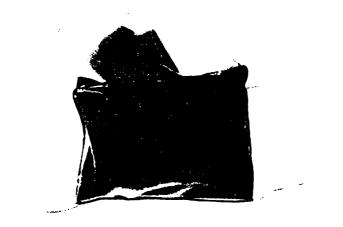
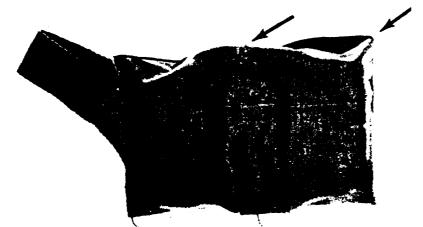


Figure 63. Bandoleer Package Defect No. 4—Torn, Ripped or Otherwise Defective Bandoleer.



Stitching extension of and or pocket Type 401 stitch.

When long or more than one-half inch.



#### B—Unacceptable—

Stitching extension of end or pocket Type 401 stitch.

When short or less than one-quarter inch.

Figure 44. Bandoleer Package Defect No. 4—Torn, Ripped or Otherwise Defective Bandoleer.

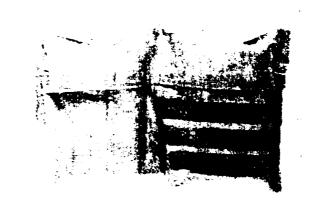
## MIL-STD-644A

#### 3 December 1962

#### A—Acceptable—

Oil, grease, dirt or other foreign material

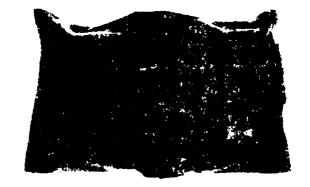
Cancelled stenciling.



#### B-Acceptable-

Oil, grease, dirt or other foreign material.

Soiled.



#### C-Unacceptable-

Oil, grease, dirt or other foreign material.

Oil or grease.

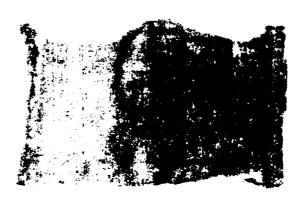
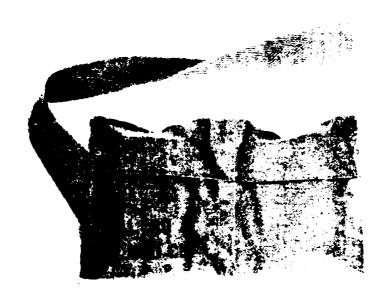


Figure 65. Bandoleer Package Defect No. 4—Torn, Ripped or Otherwise Defective Bandoleer.



#### A—Acceptable—

Miscellaneous

One-half twist

Note. Twisting exceeding one-half is

not acceptable

B—Unacceptable—
Miscellaneous
Defective weave



Figure 66. Bandoleer Package Defect No. 4—Torn, Ripped or Otherwise Defective Bandoleer

#### MIL-STD-644A

#### 3 December 1962

#### A-Acceptable-

Tom

Folded back or missing portion one square inch or less in area, outer panel.

#### B-Acceptable-

Torn

When two inch or less in length is torn on outer panel.

#### C—Unacceptable—

Tom

When folded back or missing portion exceeds one-half square inch in area, separation panel.

#### D-Unacceptable-

Tom

When torn edge exceeds one inch in length.

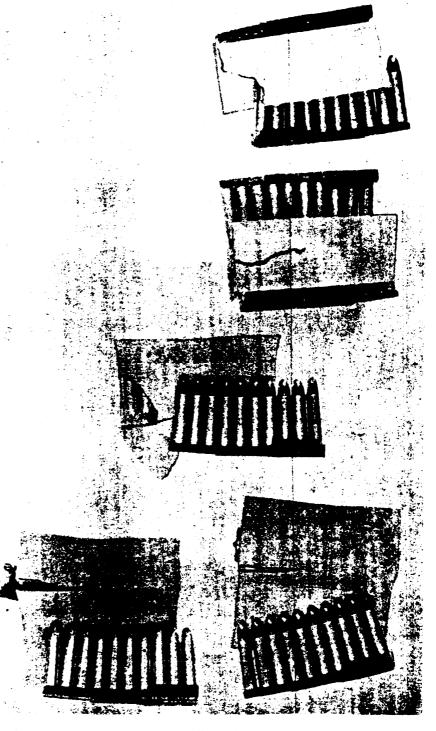
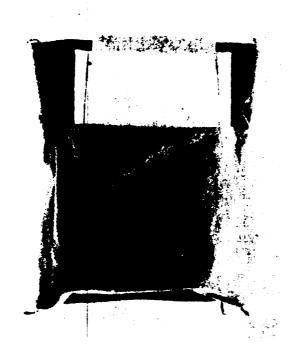


Figure 67. Bandoleer Package Defect No. 8—Missing or Improper Fillers or Separators.



A—Acceptable—
Miscellaneous
Improper insertion in packet.



B—Acceptable—
Miscellaneous
Improper insertion in pocket.

Figure 68. Bandoleer Package Defect No. 9-Improper Packaging of Clipped Ammunition in Bandoleers.

## MIL-STD-644A

3 December 1962

A—Unacceptable—

Miscellaneous

When clip shoes are alternated.



B—Unacceptable—
Miscellaneous
Improper use of filler.



Figure 69. Bandoleer Package Defect No. 9—Improper Packaging of Clipped Ammunition in Bandoleers.

INSTRUCTIONS: In a continuing effort to make our standardization documents better, the DoD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (DO NOT STAPLE), and mailed. In block 5, be as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 30 days to let you know that your comments were received and are being considered.

NOTE: This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

(Fold along this line)

(Fold along this line)

DEPARTMENT OF THE ARMY



OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

# **BUSINESS REPLY MAIL**

'FIRST CLASS PERMIT NO. 12062 WASHINGTON D. C.

POSTAGE WILL BE PAID BY THE DEPARTMENT OF THE ARMY

Commander

US Army Armement Research and Development Command

ATTN: DRDAR-TST-S Dover, NJ 07801 NO POSTAGE.
NECESSARY
IF MAILED
IN THE
UNITED STATES

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL (See Instructions – Reverse Side)		
1. DOCUMENT NUMBER	2. DOCUMENT TITLE	
36, NAME OF SUBMITTING ORGANIZATION		4. TYPE OF ORGANIZATION (Merk one)  VENDOR  USER
b. ADDRESS (Street, City, State, ZIP Code)		MANUFACTURER  OTHER (Specify):
5. PROBLEM AREAS		
, a. Paragraph Number and Wording		
à. Recommended Wording:		
c. Resson/Rationals for Recommi	endetion:	
6. REMARKS		
7a. NAME OF SUBMITTER (Last, F		WORK TELEPHONE NUMBER (Include Area Code) — Optional
c. MAILING ADDRESS (Street, City	, State, ZIP Code) — Optional	8. DATE OF SUBMISSION (YYMMDD)