

MIL-STD-651

18 October 1962

**SUPERSEDING
ORD-SIP-S315**

1 January 1952
(In Part)

**MILITARY STANDARD
VISUAL INSPECTION STANDARDS
FOR
20MM AMMUNITION AND
COMPONENTS**



FOREWORD

This standard was prepared under the direction of the Department of Defense, United States Army Materiel Command, to be used to supplement detail specifications for 20MM ammunition and components. It replaces those parts of ORD-SIP-S315, 1 January 1952, which cover 20MM ammunition.

This publication serves to create a military standard which evaluates and illustrates a practical majority of visual defects, assembled as a result of extensive surveys covering 20MM ammunition and component manufacturing facilities in this country.

In general, the format retains most of the features of ORD-SIP-S315. New features include listings and illustrations of defects relative to 20MM ammunition components and sub-assemblies. Electric primers and primer components used in 20MM ammunition are not included.

Component sectioning and photographic enlargement have been employed to better illustrate some cavity defects, and certain defects of small components. Appropriate visual inspection aids are recommended for use whenever they are helpful to cavity inspection, to determine the presence of metal etching in stained areas, or to assist personnel in grading "borderline" defects for penalty.

In the interest of economy, certain defects which are common to two or more models or types of ammunition or components are referenced for comparison to a common basic illustration.

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1. SCOPE AND PURPOSE

1.1 Scope. This standard provides a comparative basis for judging and evaluating visual defects in 20mm ammunition and components, M50 and M90 Series, and shall be used as a supplement to pertinent detail specifications.

1.2 Purpose. The purpose of this standard is to—

- (a) Provide a standard basis for the inspection of 20mm ammunition and

components at the various manufacturing facilities.

- (b) Serve as an instruction manual in the training of personnel engaged in the manufacture and inspection of 20mm ammunition and components.
- (c) Provide a basis for inspection and evaluation of 20mm ammunition or components subjected to extremes of environmental storage, linking or delinking operations, or removal from aircraft for reuse after a mission.

2. APPLICABLE DOCUMENTS

2.1 Standards.

MIL-STD-105 —Sampling Procedures and Tables for Inspection by Attributes

2.2 Handbooks.

ORD-M608-11 —Procedures and Tables for Continuous Sampling by Attributes

3. DEFINITIONS

3.1 General. Definitions of Standard MIL-STD-105 or Handbook ORD-M608-11, as pertinent, are applicable.

3.2 Specific. For the purpose of this standard, the following definitions shall apply:

3.2.1 Acceptable defect. A condition which, though not desirable from an appearance standpoint, may be permitted for reasons of economy. Photographic illustrations of this condition are intended to depict the minimum degree of defect acceptable without penalty to the lot.

3.2.2 Nonacceptable defect. A condition indicative of substandard workmanship or material; possessing a real or potential hazard to personnel or equipment, or presenting a hazard to normal assembling, functioning,

or life expectancy of the end item. Defects so identified are Critical, Major, or Minor, as classified for penalty against the lot by pertinent detail specifications.

3.2.3 Stain. A visible discoloration or contamination of certain metal surfaces or coatings as a result of exposure to acid, salt, or alkali base products, moisture, and oxygen. Any discernible degree of etching appearing in a stained area will be reclassified and penalized as corrosion.

3.2.4 Foreign matter. A discernible contamination or surface condition more specifically identifiable as oil, grease, dirt, chips, stain, corrosion, or other substance alien to the unfinished or finished item. Unless otherwise indicated, the term "foreign matter" applies equally to the exterior and interior surfaces of cavity type components, where only exterior surfaces are illustrated.

4. GENERAL REQUIREMENTS

4.1 General. The descriptions and definitions of defects established in this standard are of those commonly occurring. Unlisted defects which are found during the acceptance inspection of a presented lot shall be reported. If, in the opinion of the Government inspector, such defects affect product quality, complete information, recommendations and request for disposition shall be submitted through proper channels.

5. DETAIL REQUIREMENTS

referencing, the defect lists and defect photographs are grouped as follows:

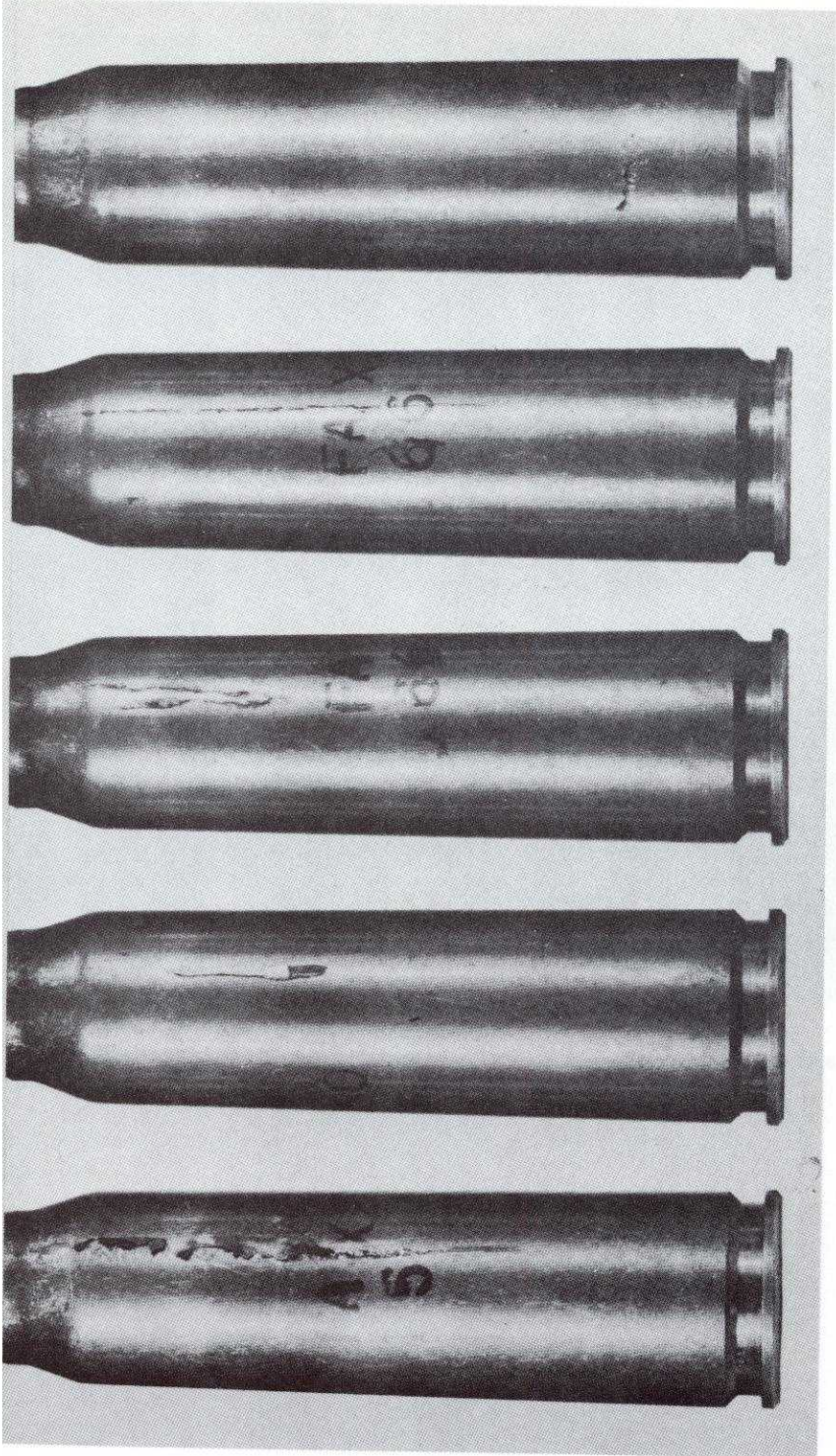
5.1 Defect grouping. For convenience in

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LIST OF DEFECTS

CARTRIDGES, 20mm, M50 SERIES
(M103 Case)

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3. Draw scratch	7
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5. Scratch, other than draw scratch (case)	9
6. Fold	10
7. Bulge	11
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26. Crack, split, or dent in fuze cover	24
27. Marking incorrect or unidentifiable (except Dummy, M51)	25
28. Plating missing or damaged (Dummy, M51)	27

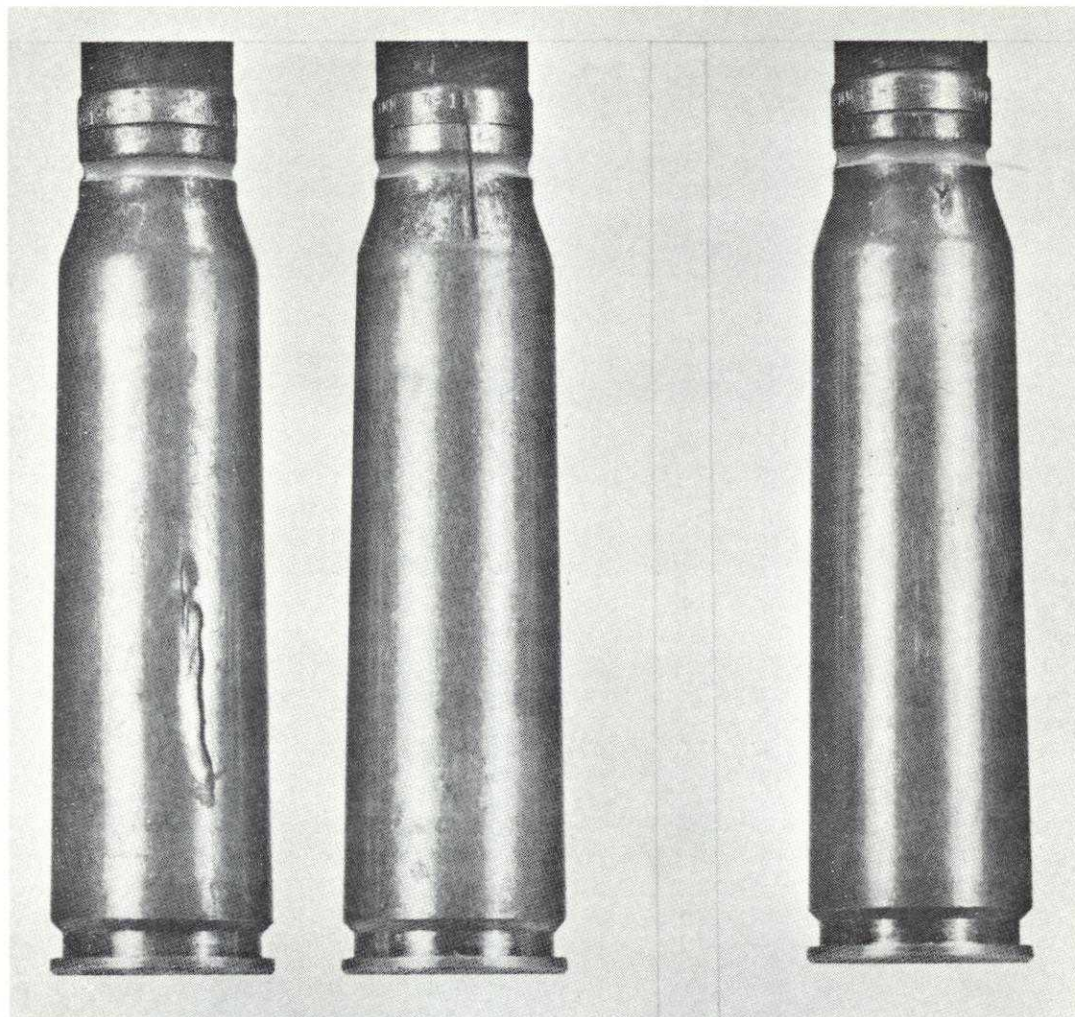


[..... Nonacceptable] [..... Acceptable]

(Scaly surface)

(Also refer to No's. 2, 3 and 4 for other applicable metal conditions)

No. 1. Metal defective

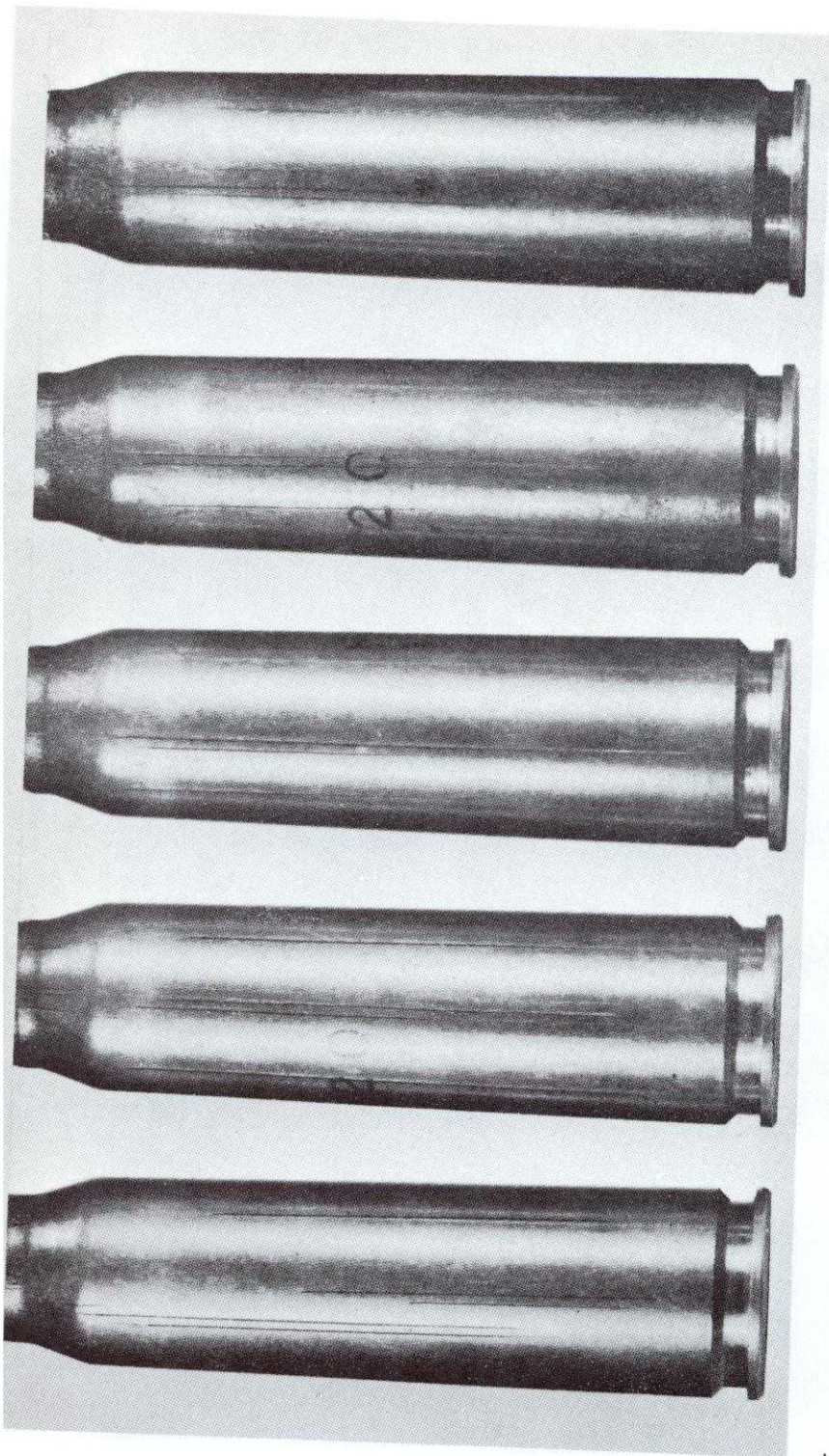


[..... Nonacceptable]

(Split case)

(perforated case)

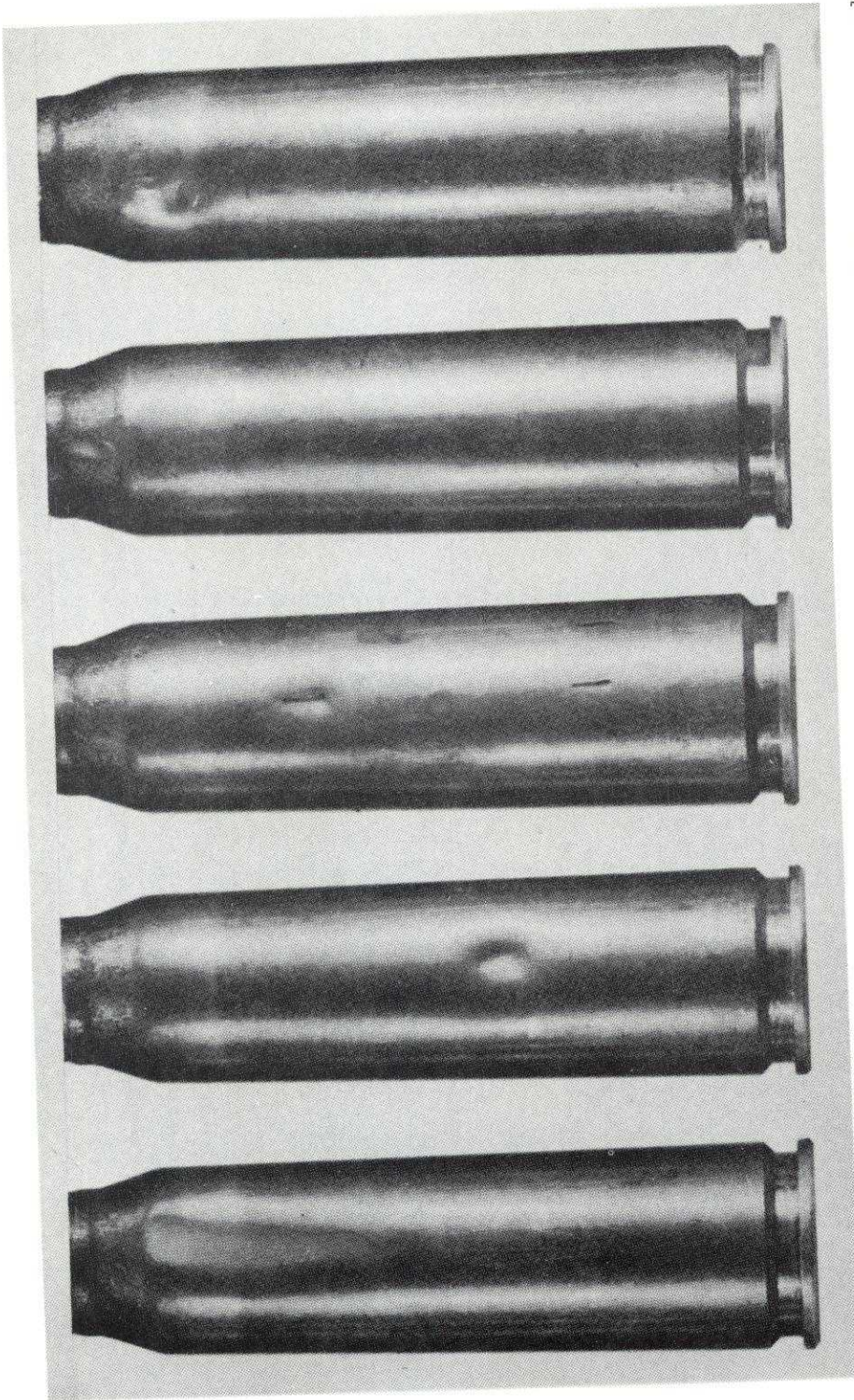
No. 2. Split, or perforated case.



[..... Nonacceptable] [..... Acceptable]

(The seriousness of a draw scratch will primarily be judged by its depth. Those which cannot be detected by the fingernail are acceptable. Draw scratches which CAN be detected by the fingernail will be classed as nonacceptable).

No. 3. Draw scratch



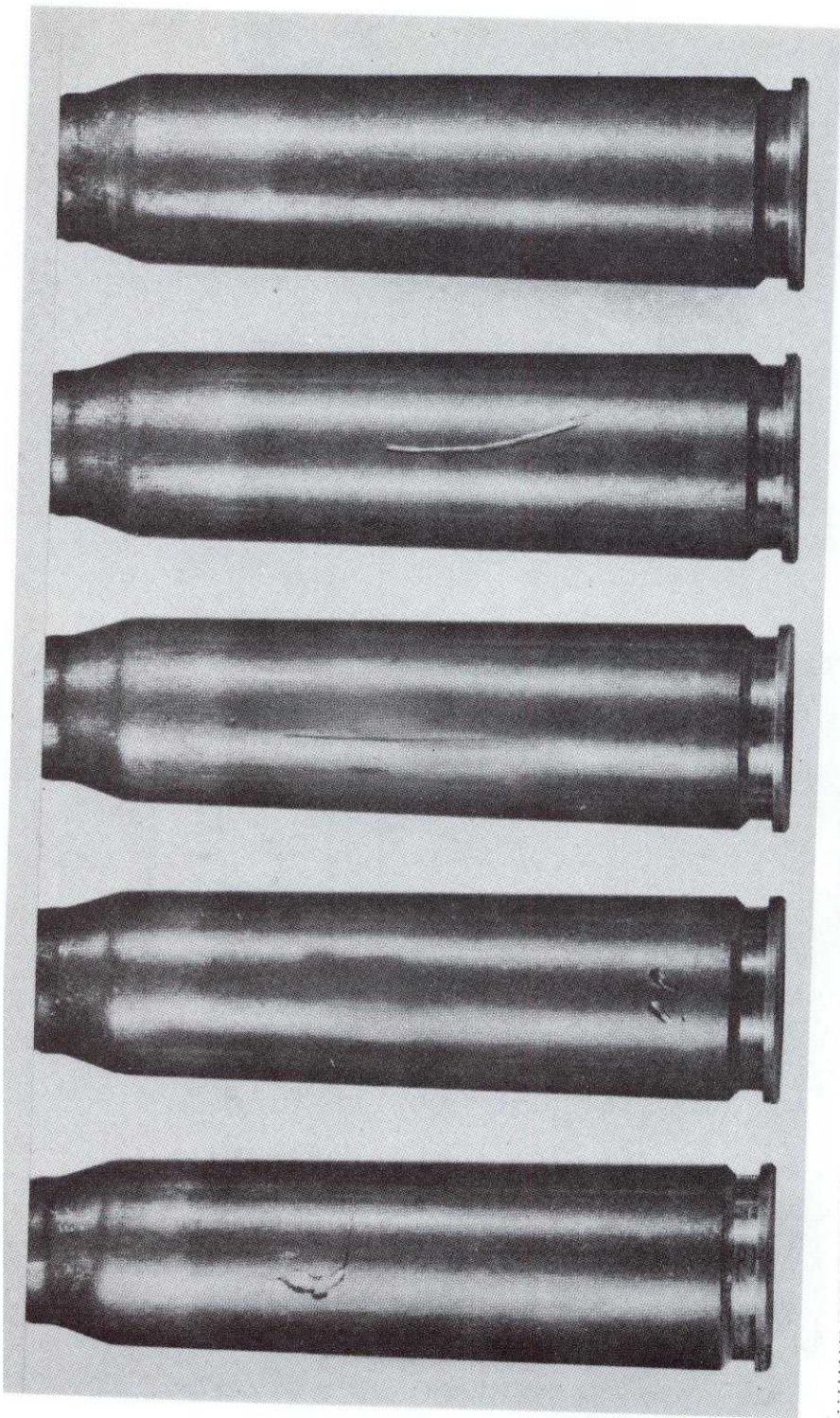
Acceptable

[

Nonacceptable

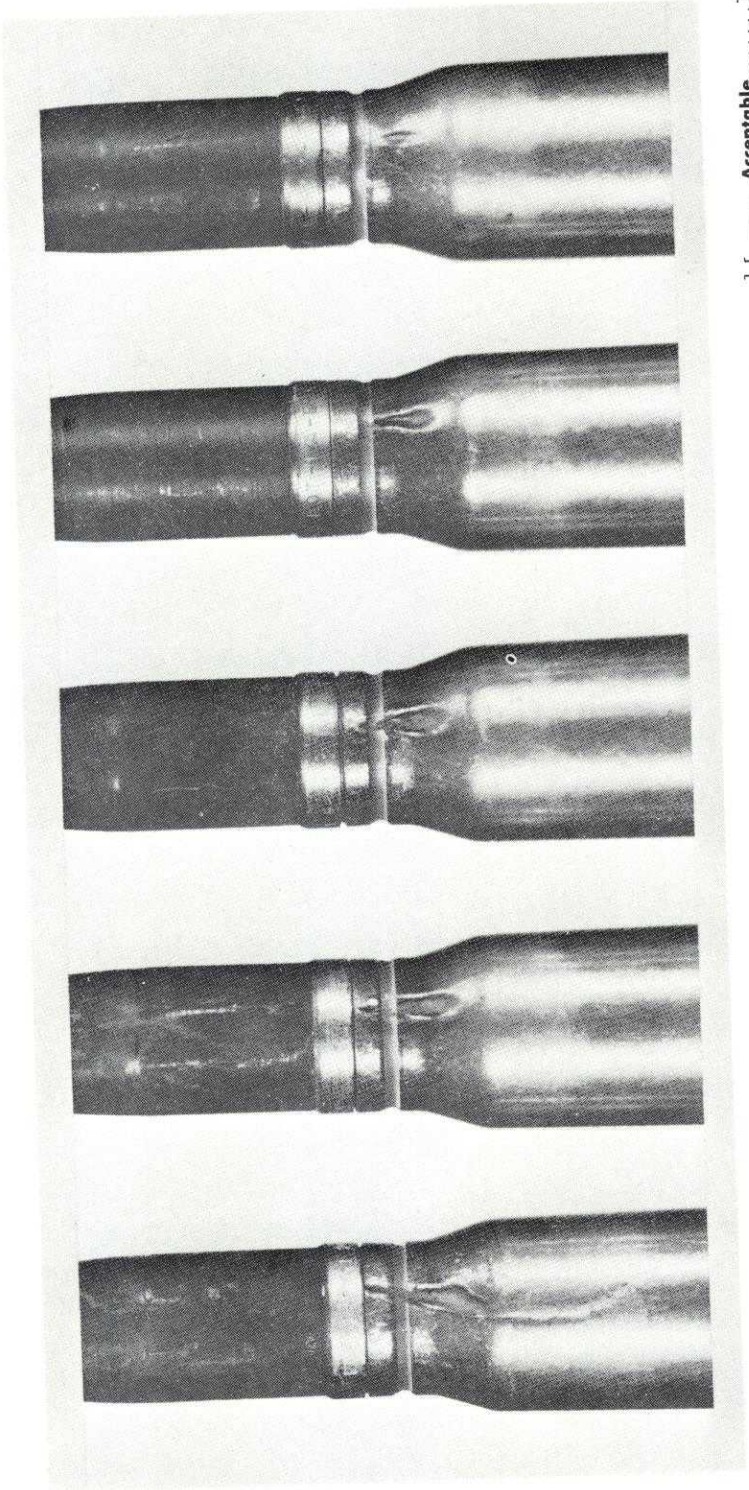
]

No. 4. Dent (case)



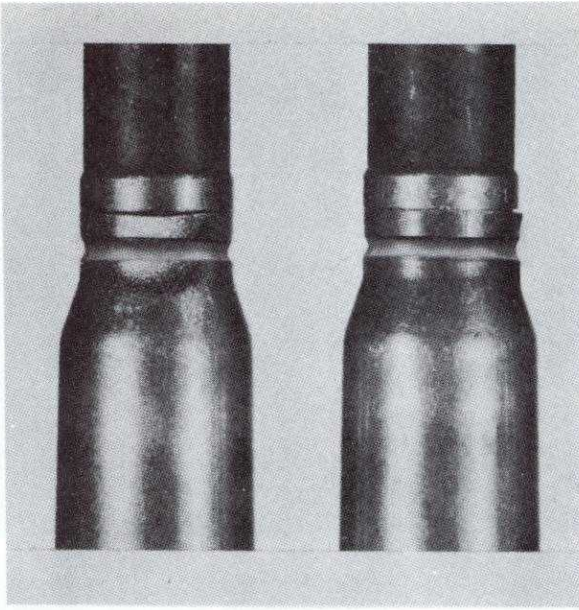
[..... Nonacceptable] [..... Acceptable]

No. 5. Scratch, other than draw scratch (case)



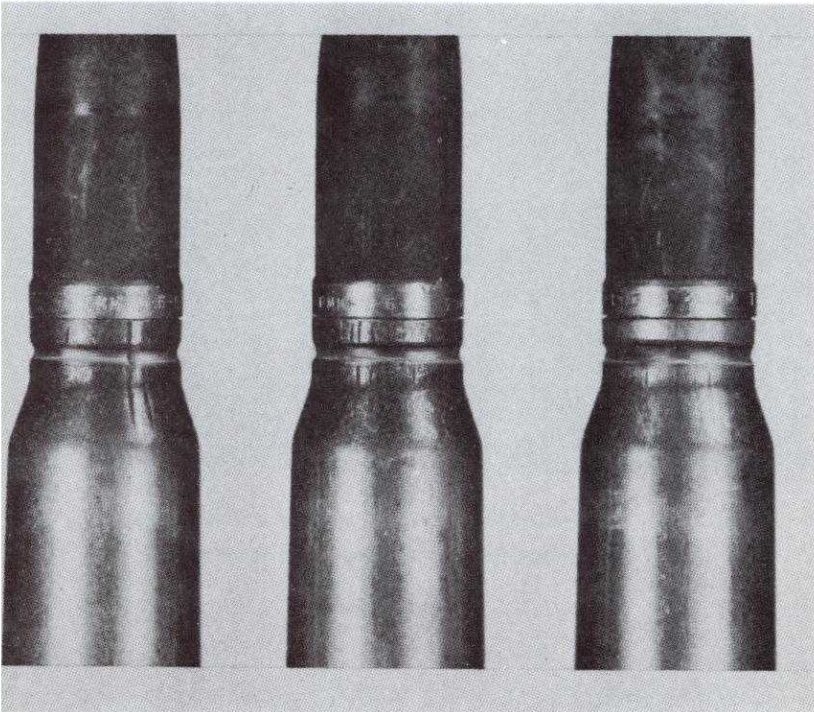
Nonacceptable [..... Acceptable]

No. 6. Fold



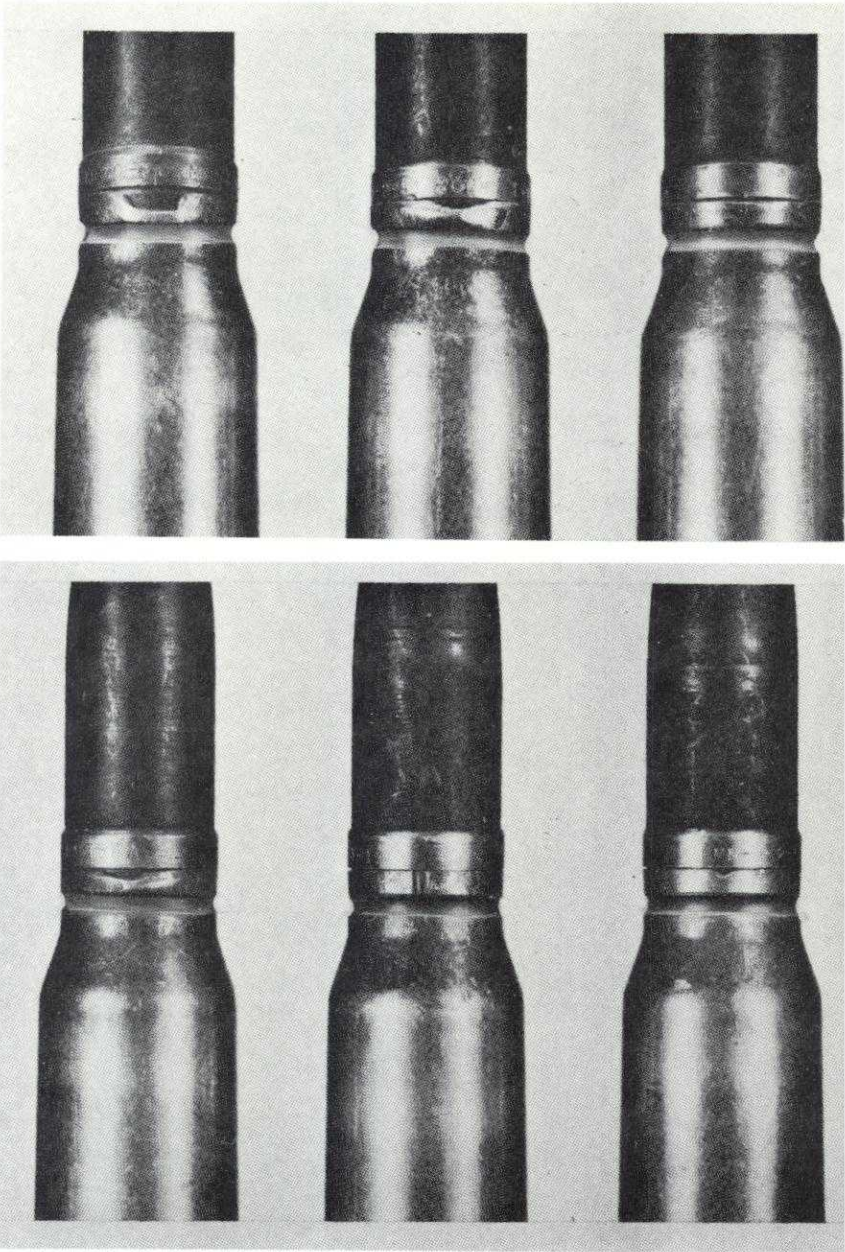
[.....Acceptable.....]

No. 7. Bulge



[.....Nonacceptable.....] [.....Acceptable.....]

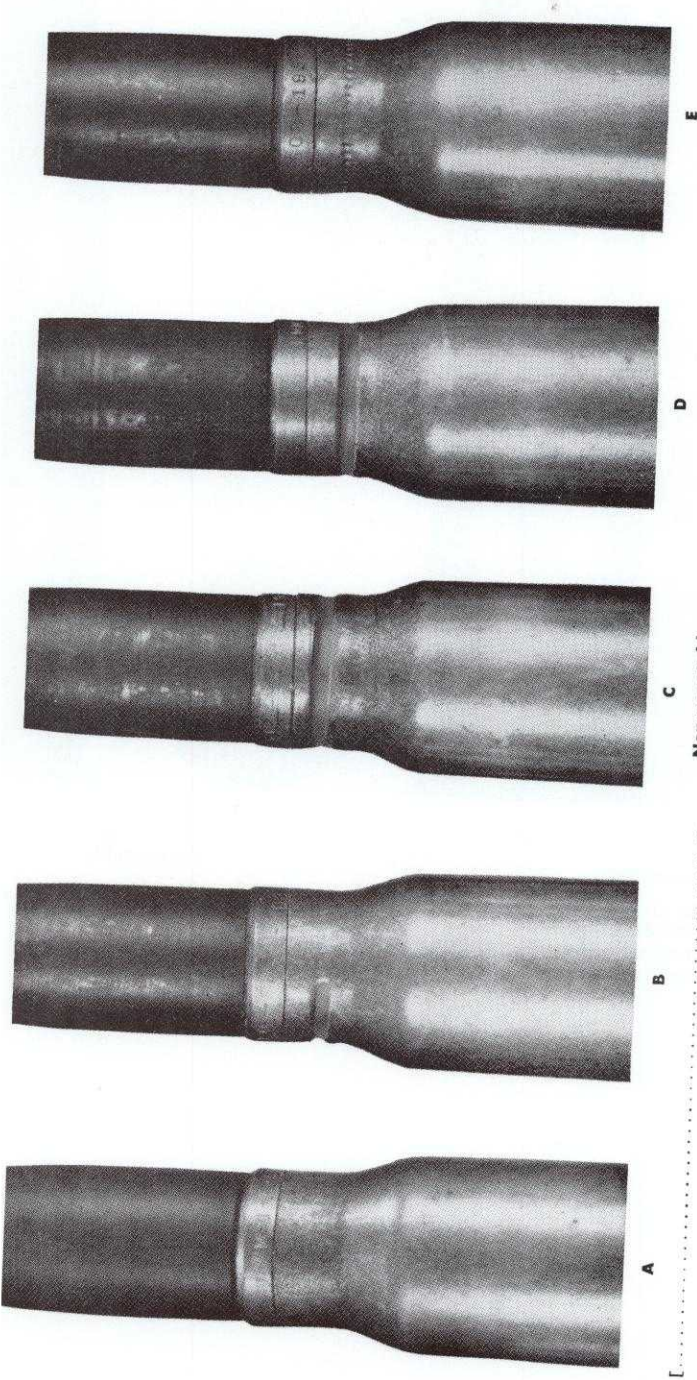
No. 8. Wrinkle



[..... Nonacceptable] [..... Acceptable]

(Classification terms apply to columns)

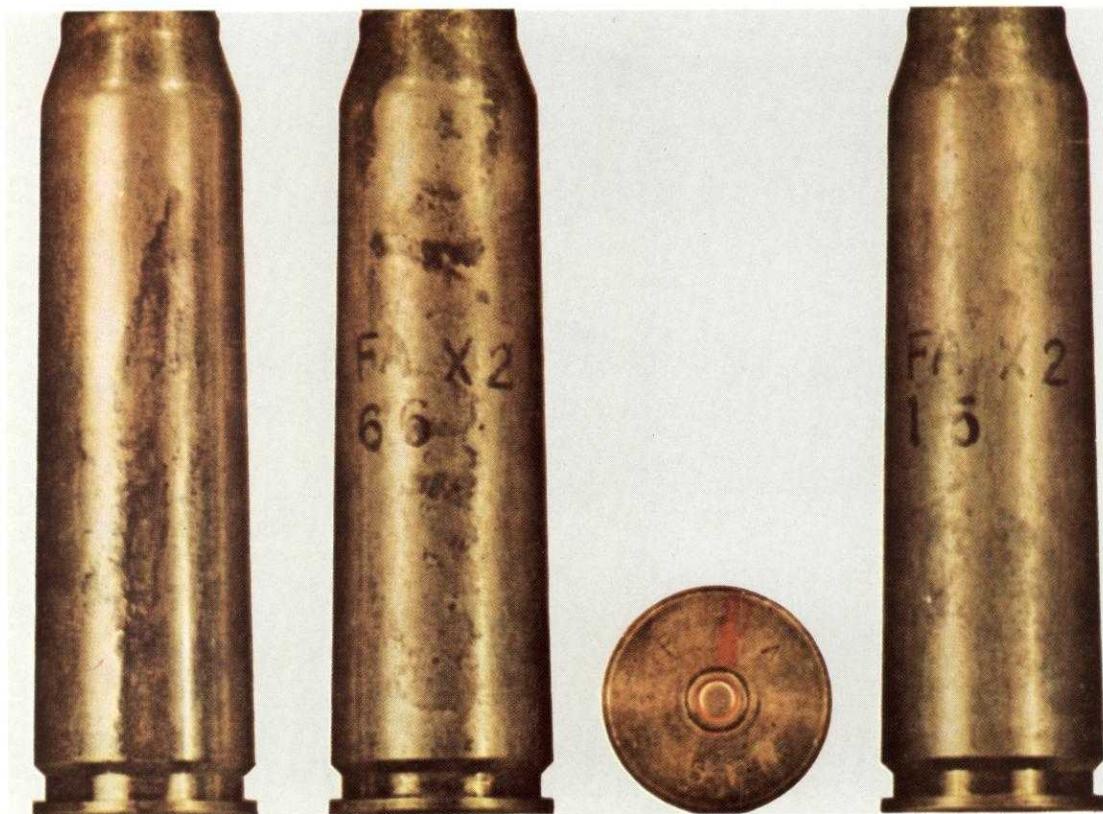
No. 9. Buckle



- A. Crimp missing
- B. Crimp incomplete
- C. Crimp mislocated
- D. Crimp shallow or cocked
- E. Crimp incorrect type

Nonacceptable

No. 10. Improper or missing crimp (case-projectile)



A

B

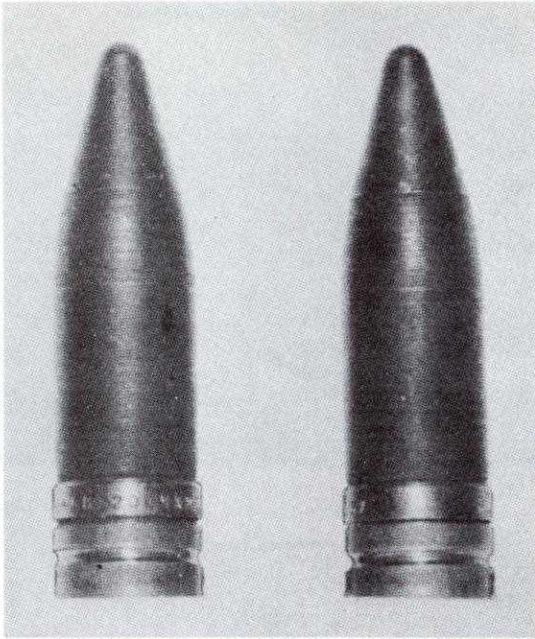
C

D

[..... Nonacceptable] [..... Acceptable] [.....]

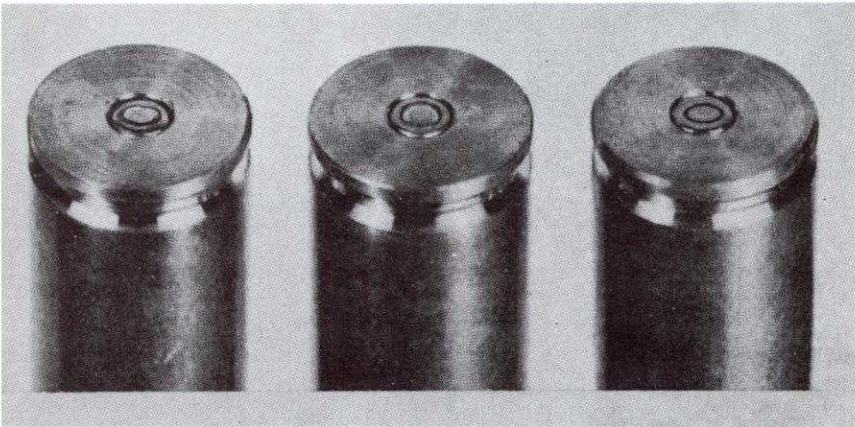
- A. Oil, or grease
- B. Dirt, discoloration
- C. Smeared waterproofing (except on primer button)
- D. Discoloration

No. 11. Foreign matter (except corrosion)



[..... Nonacceptable] [..... Acceptable]
 if gap is 1/32 inch or greater

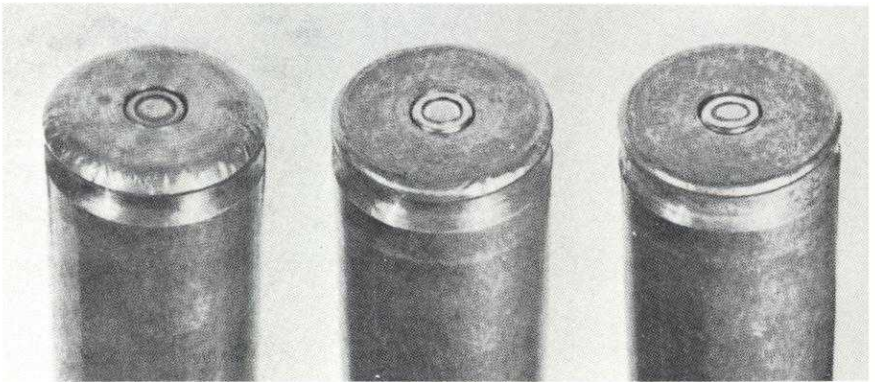
No. 12. Gap between case and rotating band



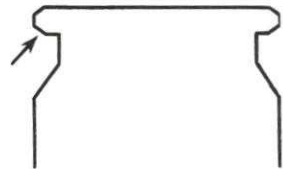
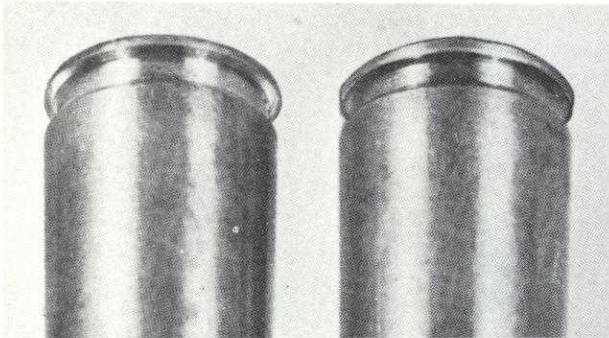
[..... Nonacceptable] [..... Acceptable]

No. 13. Chamfer, head rim missing

No. 14. Head configuration

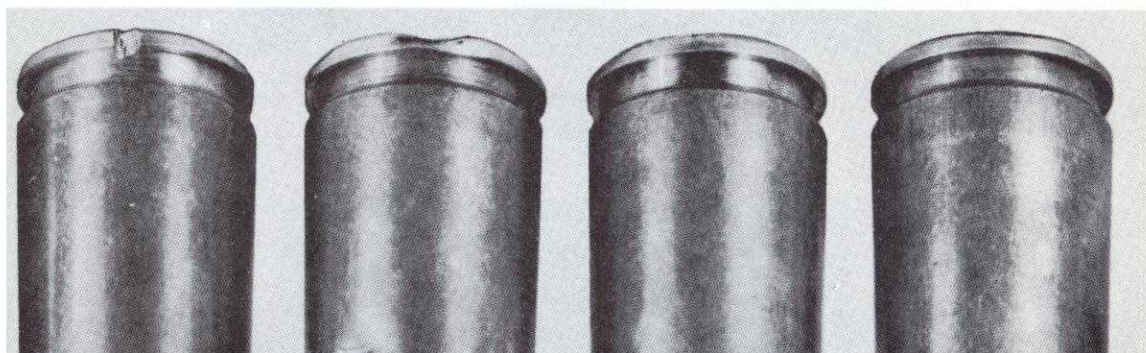
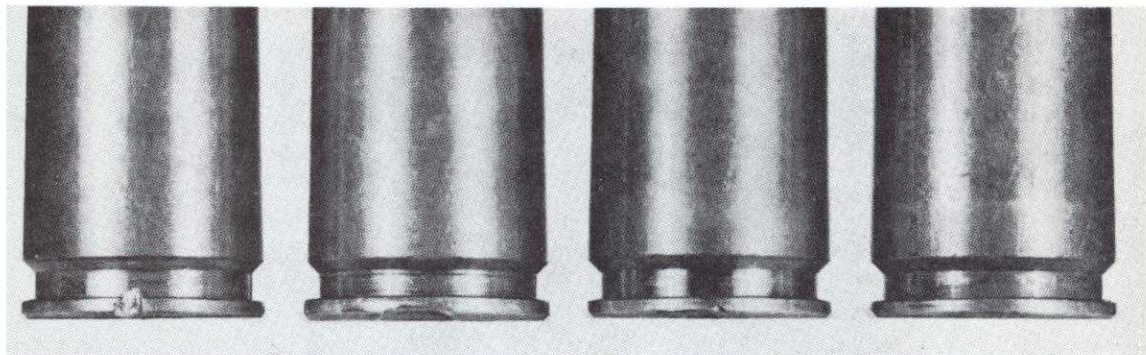


[..... Nonacceptable] [..... Acceptable]
(round head)



[..... Nonacceptable] [..... Acceptable]
(beveled underside of head)

No. 14. Head configuration—Continued

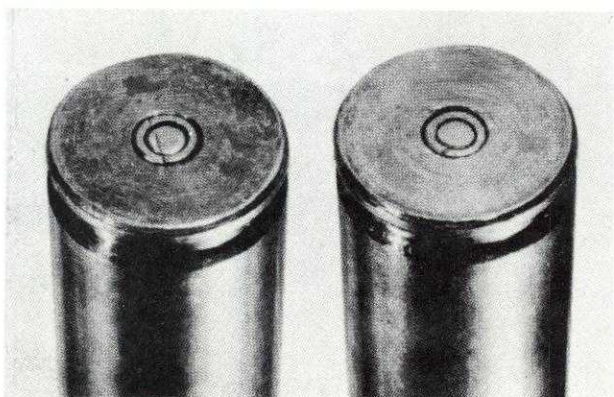


[..... Nonacceptable] [..... Acceptable.....]

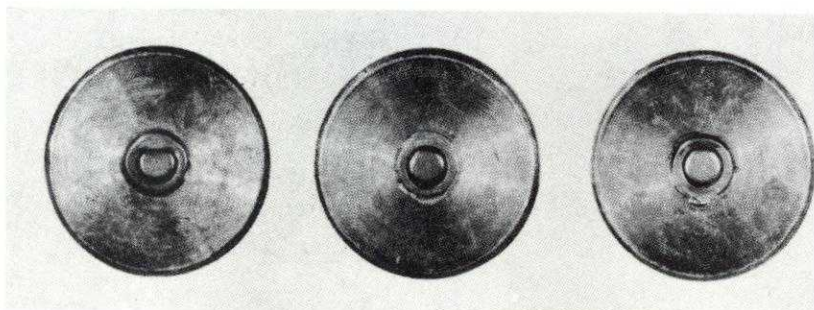
(Cut or dented head)

Three views each of four different conditions.
Classification terms apply to columns.

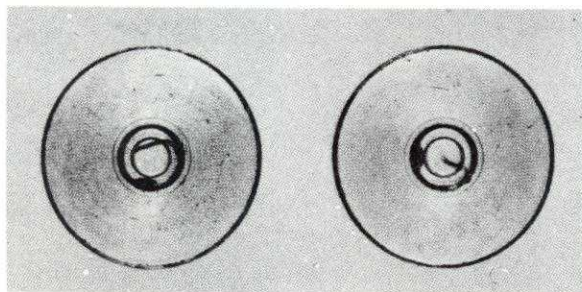
No. 14. Head configuration—Continued



[..... Nonacceptable] [..... Acceptable]
(nicked or dented primer)

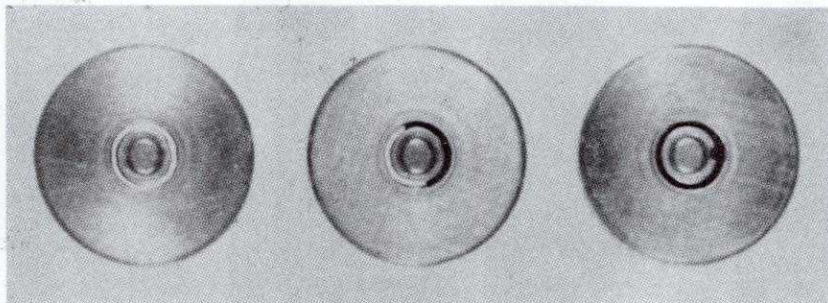


[..... Nonacceptable]
(crushed primer)



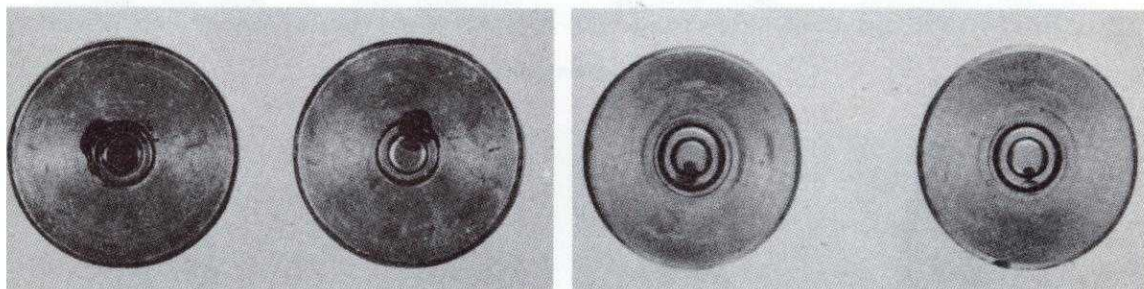
[..... Nonacceptable]

No. 15. Metal slivers on case head face



[..... Nonacceptable] [..... Acceptable] [..... Normal]

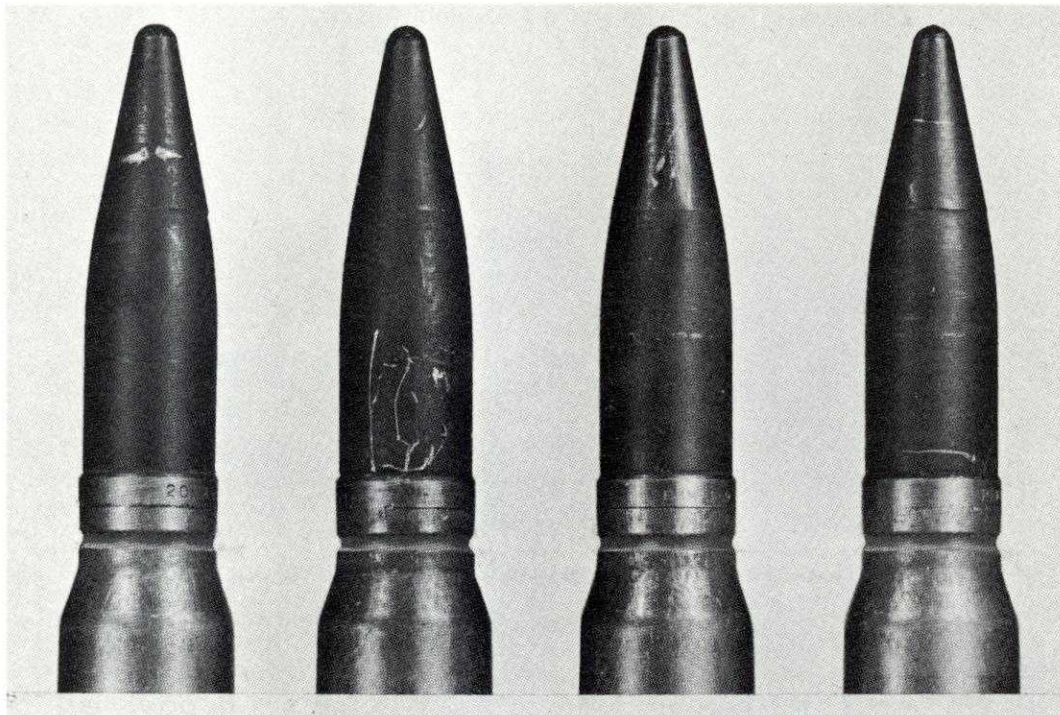
No. 16. Waterproofing missing around primer



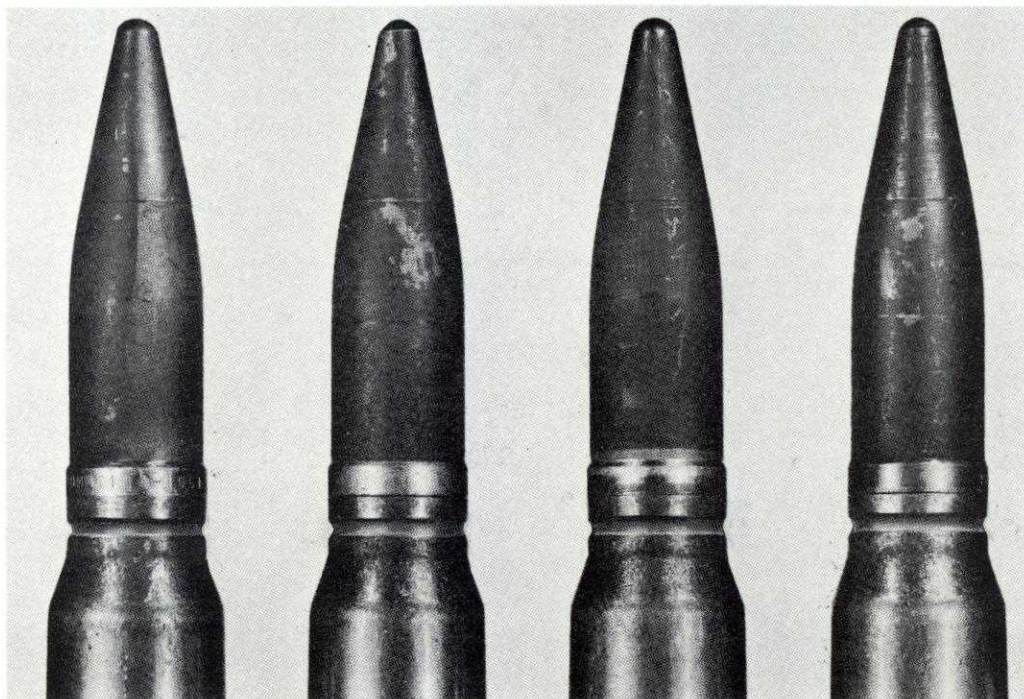
[..... Nonacceptable]

[..... Acceptable]

No. 17. Lacquer on primer button



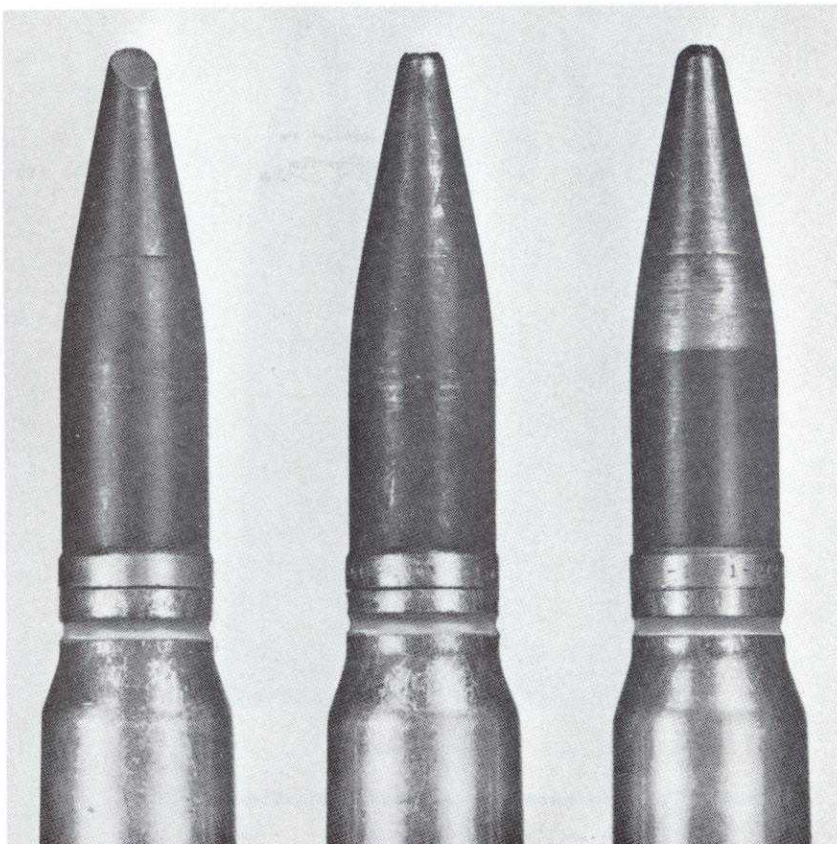
(Damaged)



[..... Nonacceptable] [..... Acceptable]

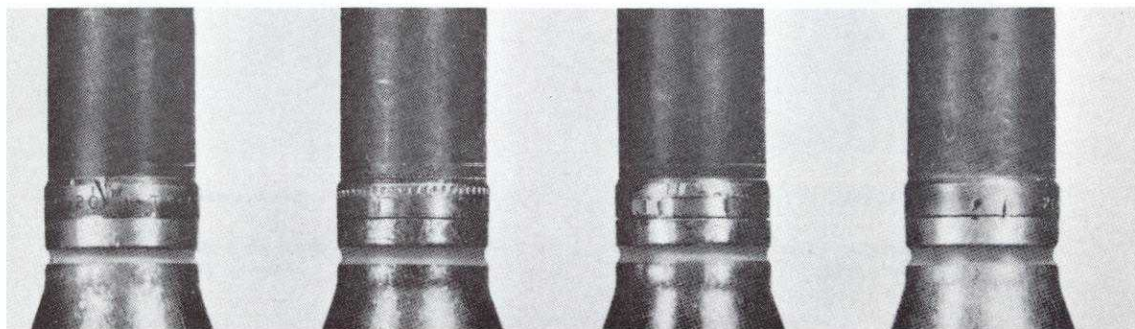
(Incomplete coverage)
(Classification terms apply to columns)

No. 18. Protective coating damaged or incomplete



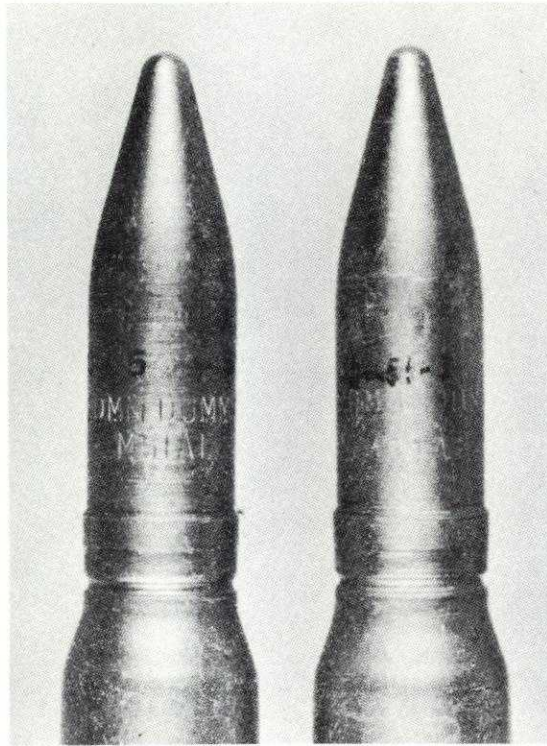
[..... Nonacceptable] [..... Acceptable]

No. 19. Upset (crooked) or deformed nose (Target Practice only)



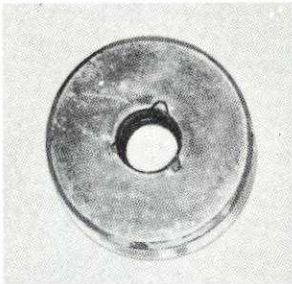
[..... Nonacceptable] [..... Acceptable]

No. 20. Rotating band damaged



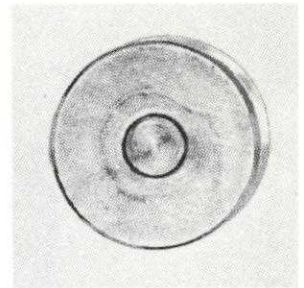
[..... Nonacceptable]

No. 21. Marking incomplete or unidentifiable (Dummy, M51)



[..... Nonacceptable]

**No. 22. Case plug missing
(Dummy, M51)**



[..... Nonacceptable]

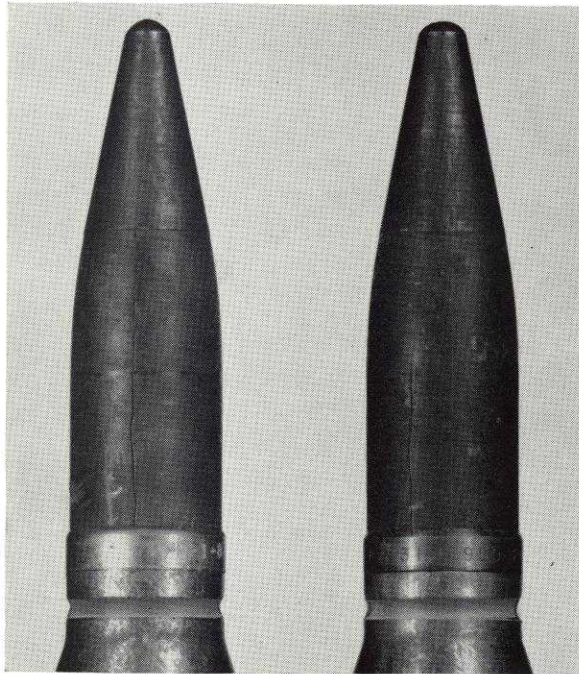
**No. 23. Case plug stake(s) missing
(Dummy, M51)**



..... Nonacceptable]

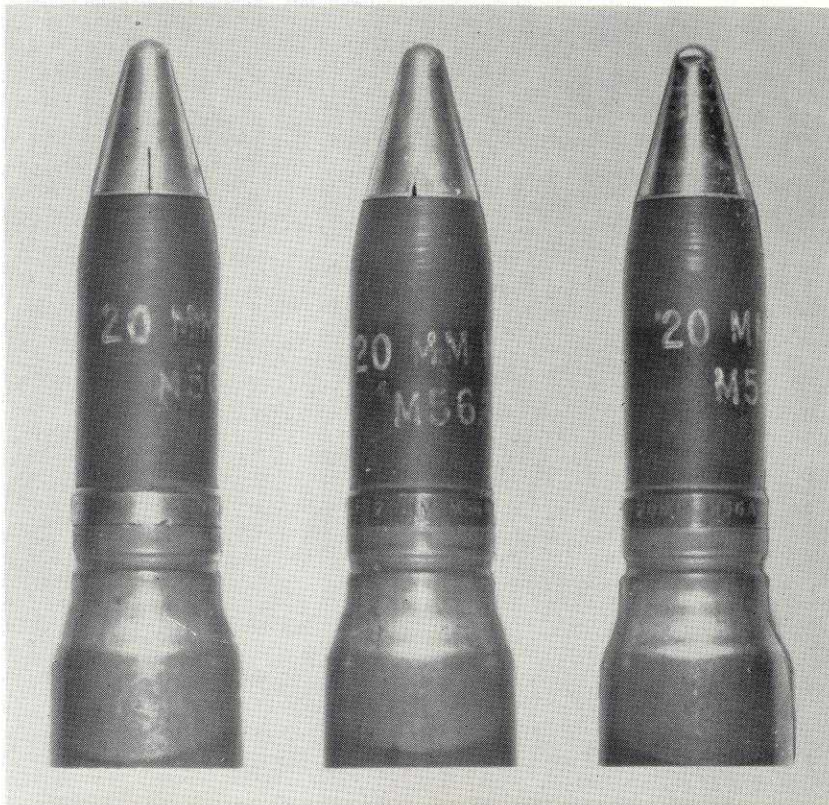
(Any degree of discernible corrosion is unacceptable. See also 3.2.3)

No. 24. Corrosion



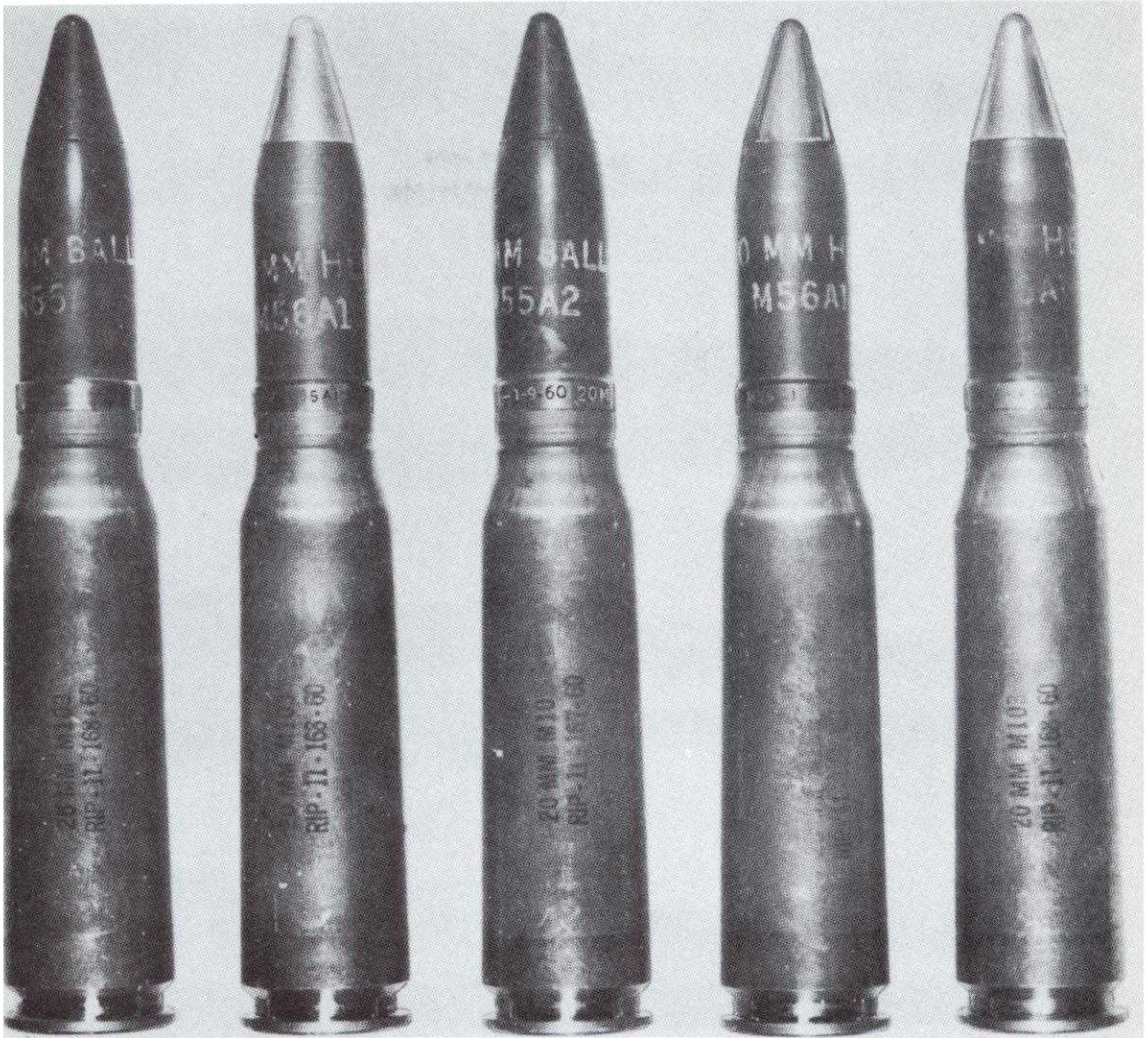
[..... Nonacceptable]

No. 25. Crack, or split in projectile (except fuze cover)



[..... Nonacceptable]

No. 26. Crack, split, or dent in fuze cover



A

B

C

D

E

Nonacceptable

A. Projectile marking incomplete

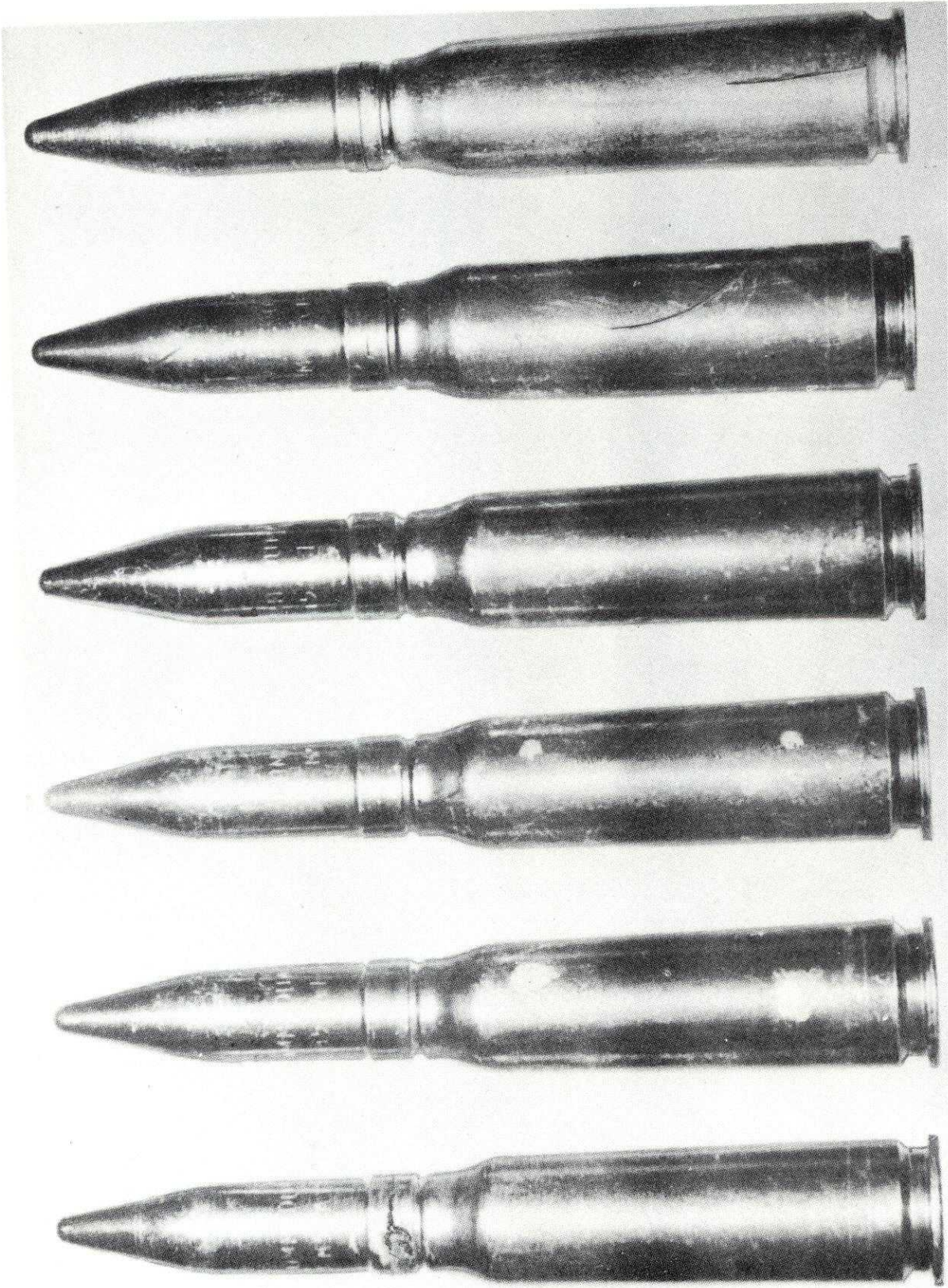
C. Case lot number incorrect

B. Projectile model incorrect (band)

D. Case marking illegible

E. Projectile marking illegible

No. 27. Marking incorrect or unidentifiable (except Dummy, M51)



A B Nonacceptable C D Acceptable E Nonacceptable F Acceptable
 A. Corroded
 B. Blistered or scaly
 C. Spotty or *stained
 *(See 3.2.3)

(Plating missing—not illustrated)

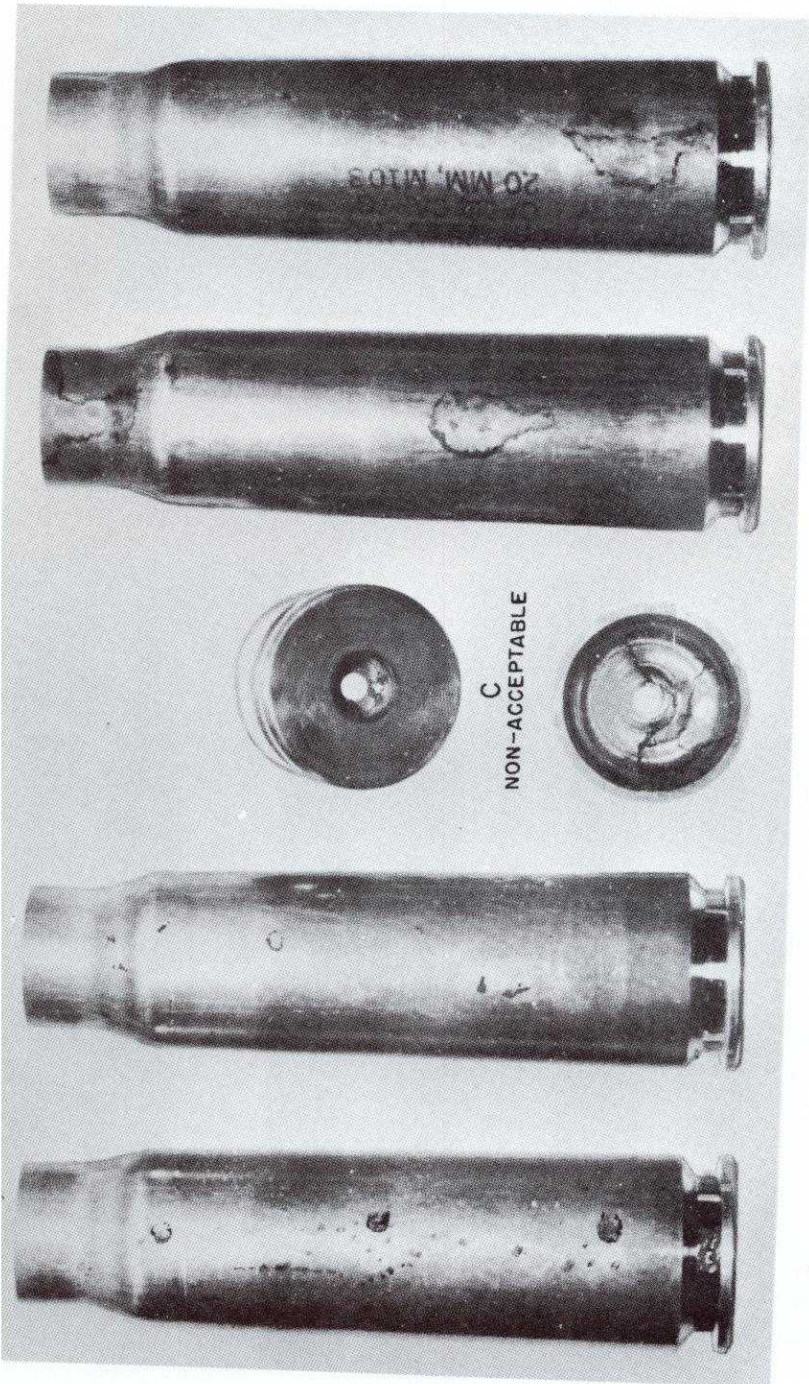
No. 28. Plating missing or damaged (Dummy, M51)

**CASE, CARTRIDGE, 20mm, M103
(for M50 Series Cartridges)**

No.	Page
29. Metal defective	30
30. Scratch, other than draw scratch	30
31. Fold	30
32. Wrinkle	30
33. Buckle	30
34. Oil, or grease	30
35. Chamfer, head rim, missing	30
36. Head configuration	30
37. Corrosion	30
38. Foreign matter, other than oil, grease, or corrosion	31
39. Flash hole missing, or obstructed	32
40. Marking missing, incorrect, or unidentifiable	32
41. Radius at mouth of primer pocket missing or not tangent to pocket side wall	33

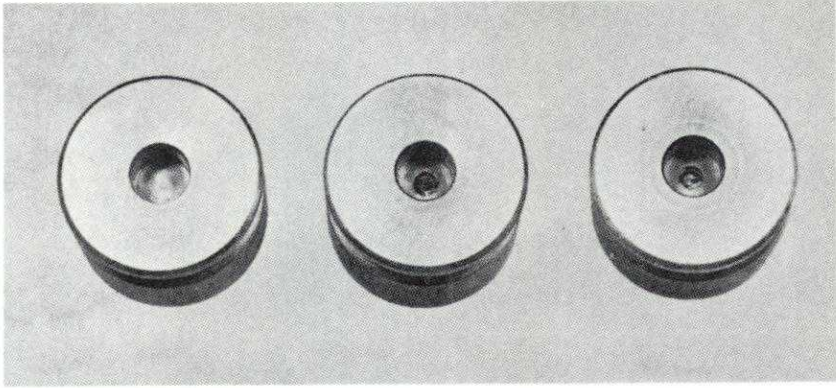
MIL-STD-651

- No. 29. Metal defective (For comparison, refer to illustration No. 1)
- No. 30. Scratch, other than draw scratch (For comparison, refer to illustration No. 5)
- No. 31. Fold (For comparison, refer to illustration No. 6)
- No. 32. Wrinkle (For comparison, refer to illustration No. 8)
- No. 33. Buckle (For comparison, refer to illustration No. 9)
- No. 34. Oil, or grease (For comparison, as applicable, refer to illustration No. 11)
- No. 35. Chamfer, head rim, missing (For comparison, refer to illustration No. 13)
- No. 36. Head configuration (For comparison, refer to illustration No. 14)
- No. 37. Corrosion (For comparison, refer to illustration No. 24)



A [..... Nonacceptable] [..... Acceptable] **B** [..... Acceptable] **D** [..... Nonacceptable] **E** [..... Acceptable] **F** [..... Acceptable]
A. Dirt, chips, spots
B. Dirt, spots
C. Dirt or chips in pocket
D. *Dirt, chips, or stain on interior
E. *Stain, discoloration
F. Stain, discoloration
 *(See 3.2.3)

No. 38. Foreign matter other than oil, grease, or corrosion



A

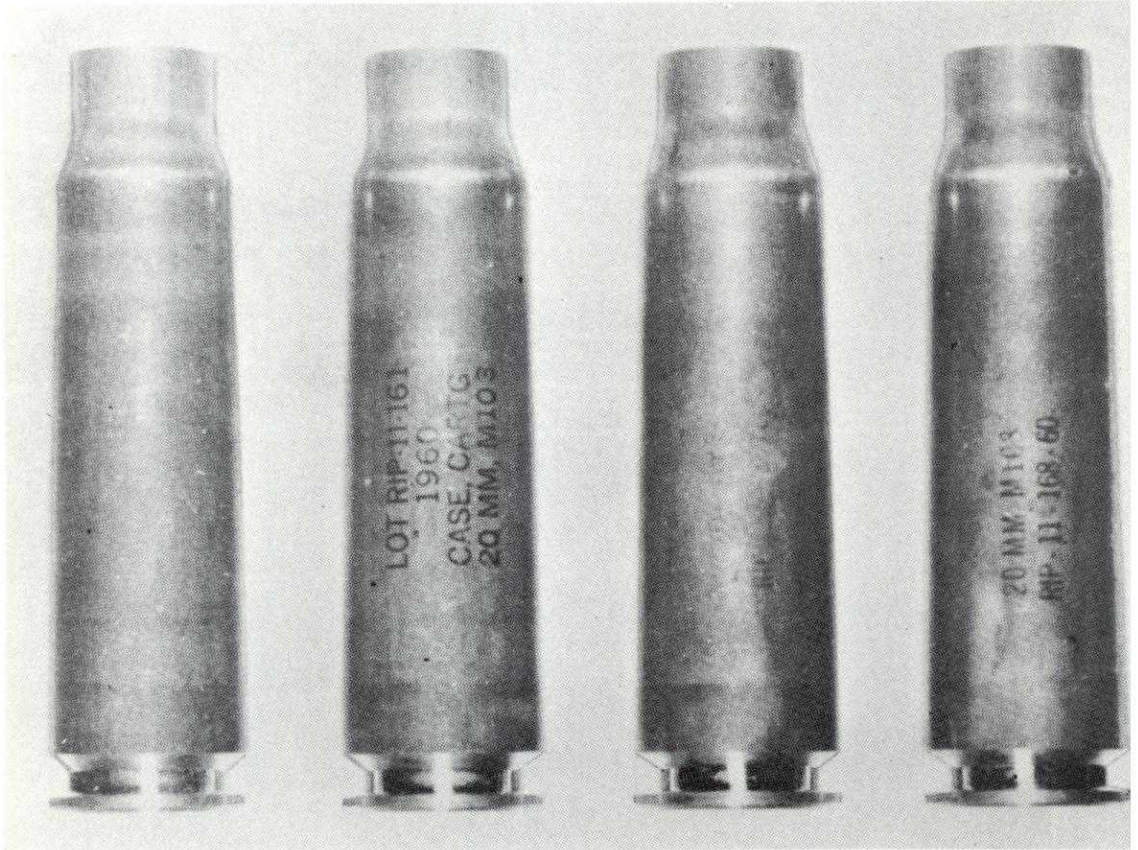
B

C

Nonacceptable

- A. Missing
- B. Obstructed (complete)
- C. Obstructed (partial)

No. 39. Flash hole missing or obstructed



A

B

C

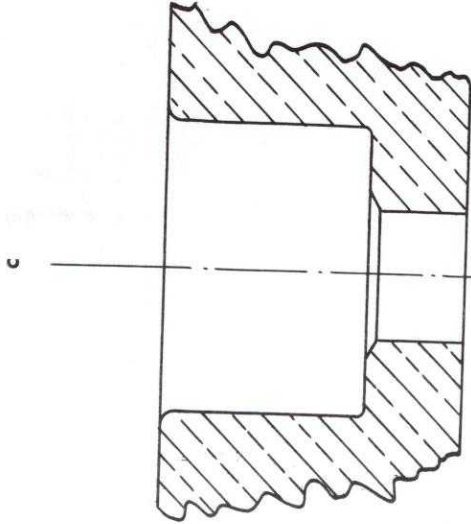
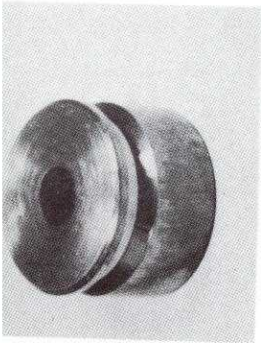
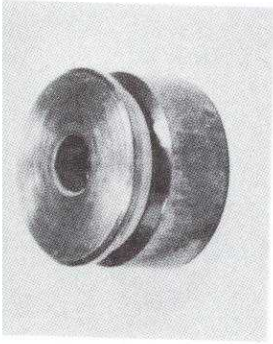
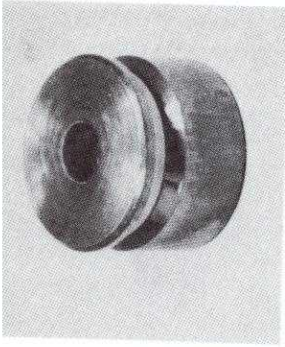
D

Nonacceptable

Normal

- A. Missing
- B. Incorrect
- C. Unidentifiable
- D. Normal

No. 40. Marking missing, incorrect, or unidentifiable

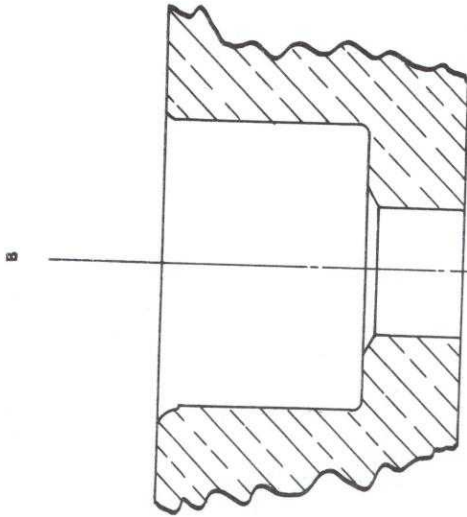


C

C

[..... Normal]]

C. Radius normal

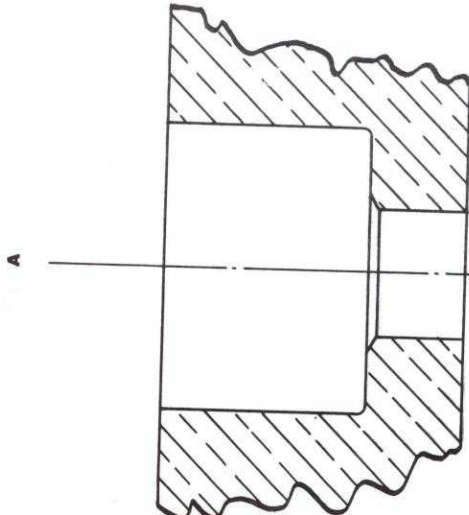


B

B

[..... Nonacceptable]]

B. Radius not tangent



A

A

[..... Nonacceptable]]

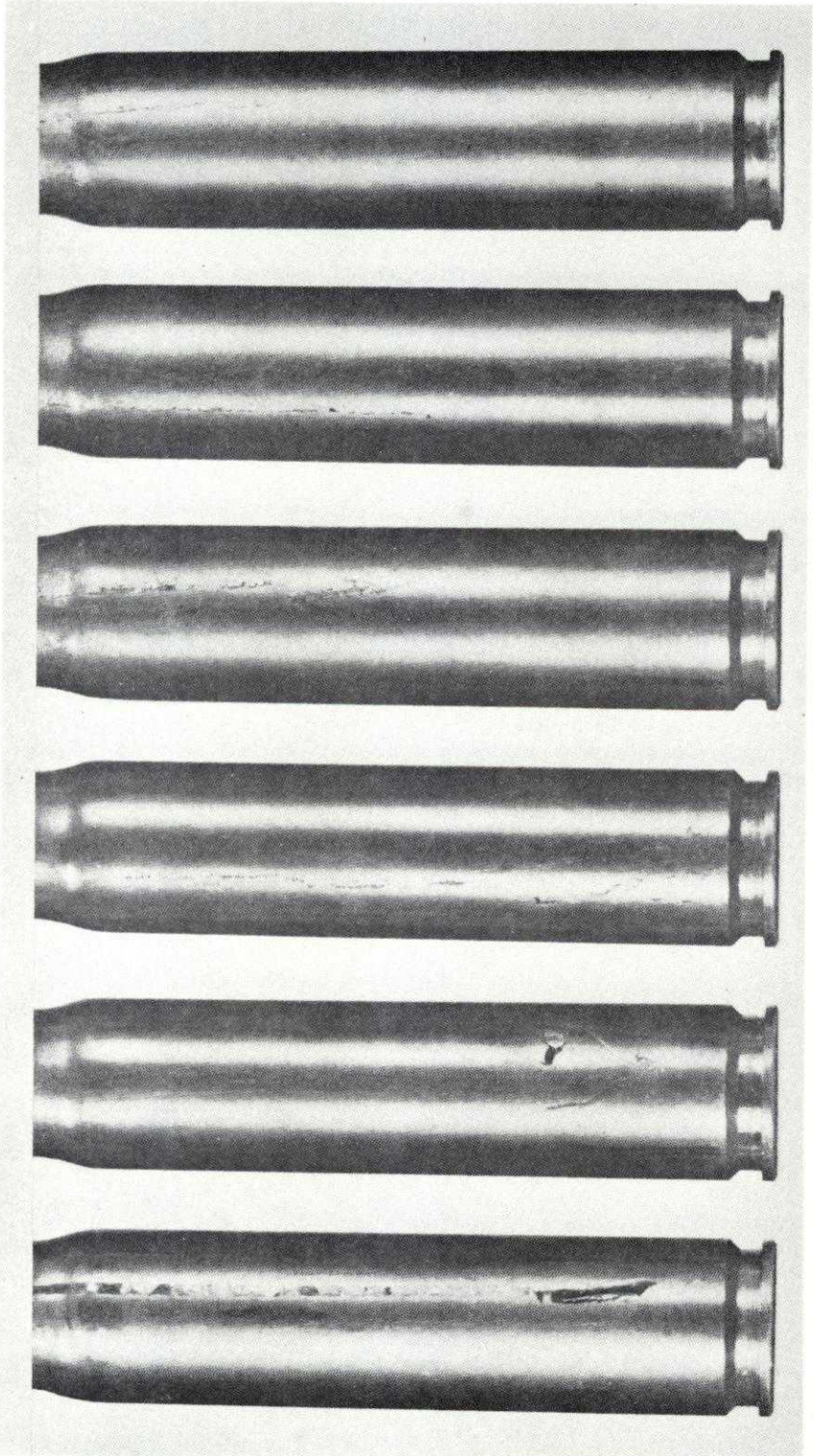
A. Radius missing

No. 41. Radius at mouth of primer pocket missing, or not tangent to pocket side wall

LIST OF DEFECTS

CARTRIDGES, 20mm, M90 SERIES

No.	Page
42. Metal defective	36
43. Split or perforated case	37
44. Draw scratch	38
45. Dent	39
46. Scratch, other than draw scratch (case)	40
47. Fold	41
48. Bulge	41
49. Wrinkle	41
50. Buckle	42
51. Gap between case and rotating band	42
52. Foreign matter (except corrosion)	43
53. Chamfer, head rim, missing	45
54. Improper, or missing crimp (case—projectile)	45
55. Head configuration	46-48
56. Metal slivers on case head	48
57. Lacquer on primer button	48
58. Waterproofing missing around primer	48
59. Protective coating damaged or incomplete	48
60. Rotating band damaged	48
61. Upset (crooked) or deformed nose (target practice)	48
62. Marking incorrect or unidentifiable	49
63. Corrosion	50
64. Crack or split in projectile	50
65. Wax coating missing or incomplete	51
66. Wax coating flaky or otherwise unsatisfactory	52
67. Wax coating on projectile	53

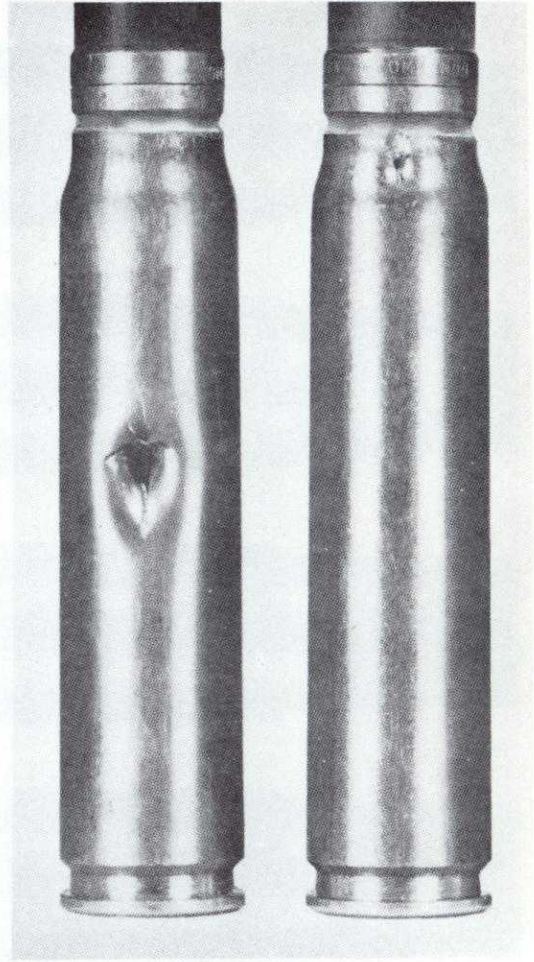
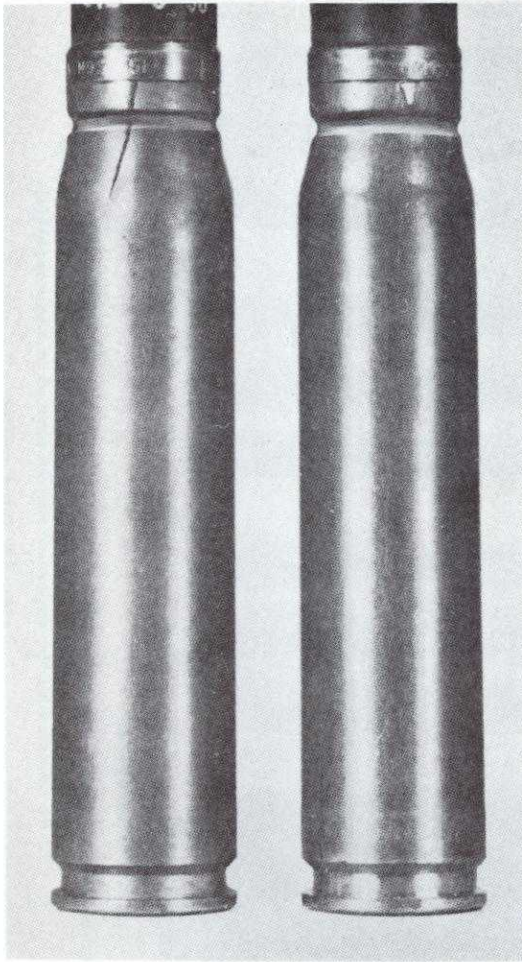


[..... Nonacceptable] [..... Acceptable]

(Scaly surface)

(Also refer to No's. 43 and 44 for other applicable metal conditions)

No. 42. Metal defective



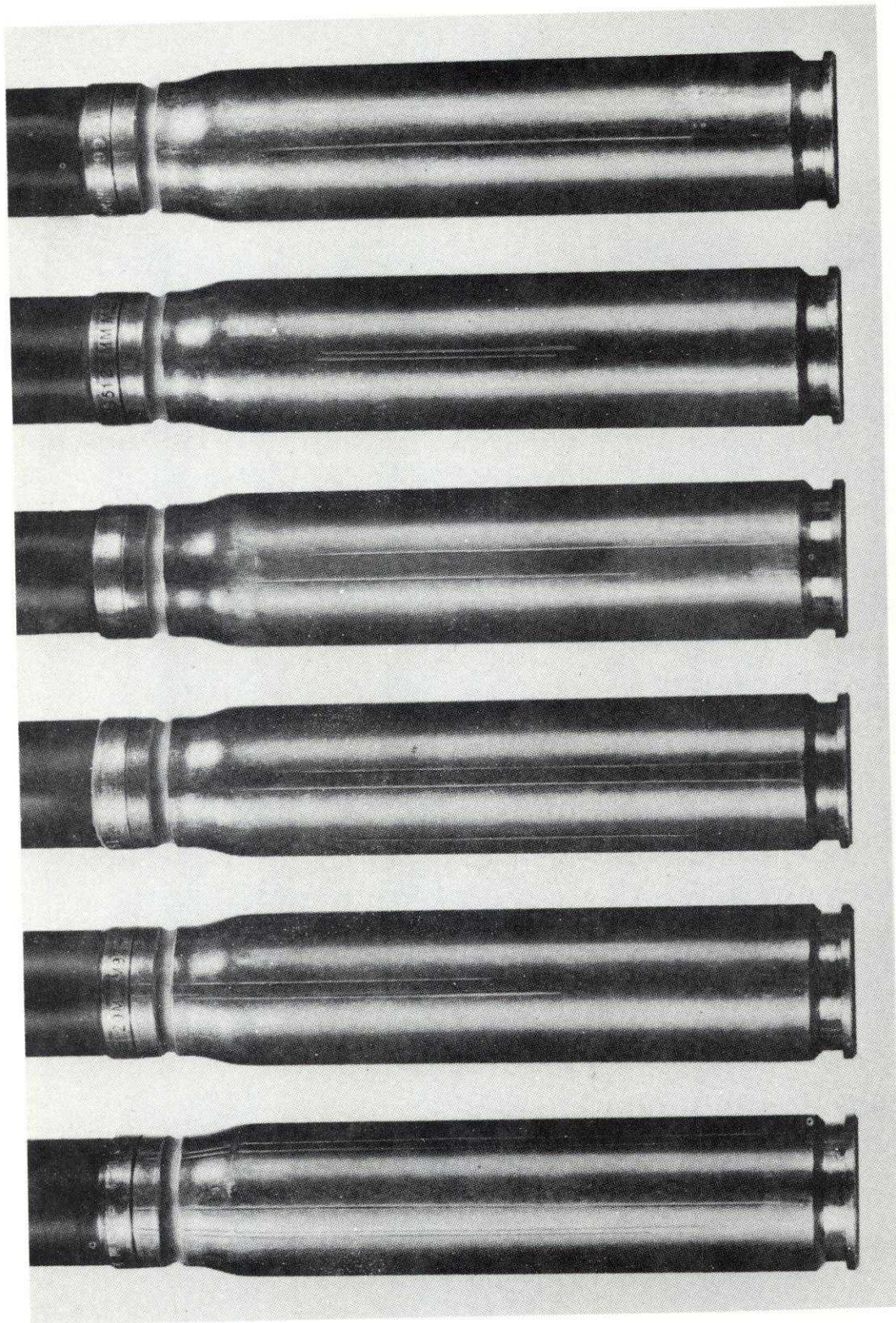
[..... Nonacceptable]

(Split case)

[..... Nonacceptable]

(Perforated case)

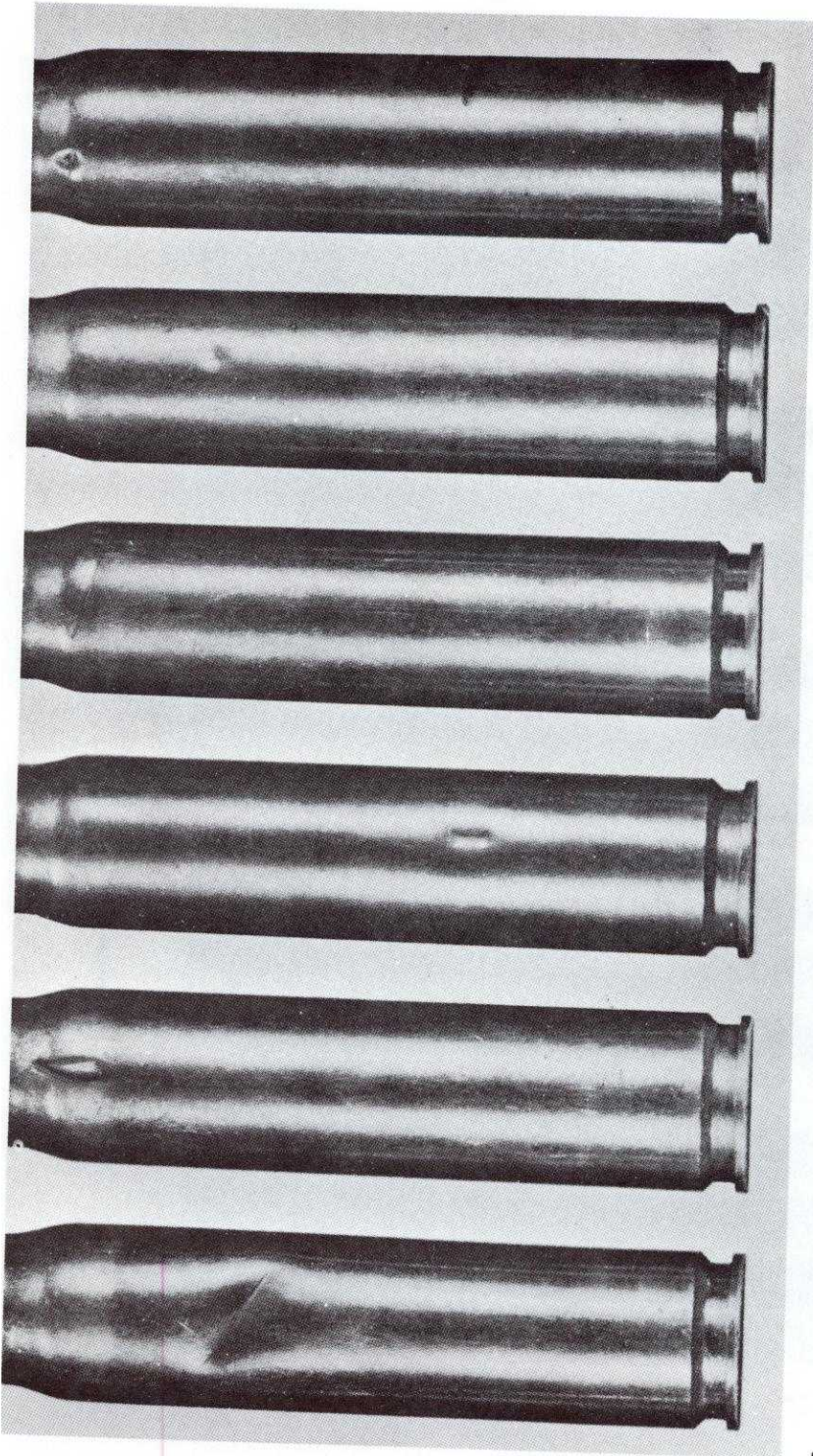
No. 43. Split or perforated case



[..... Nonacceptable] [..... Acceptable.....]

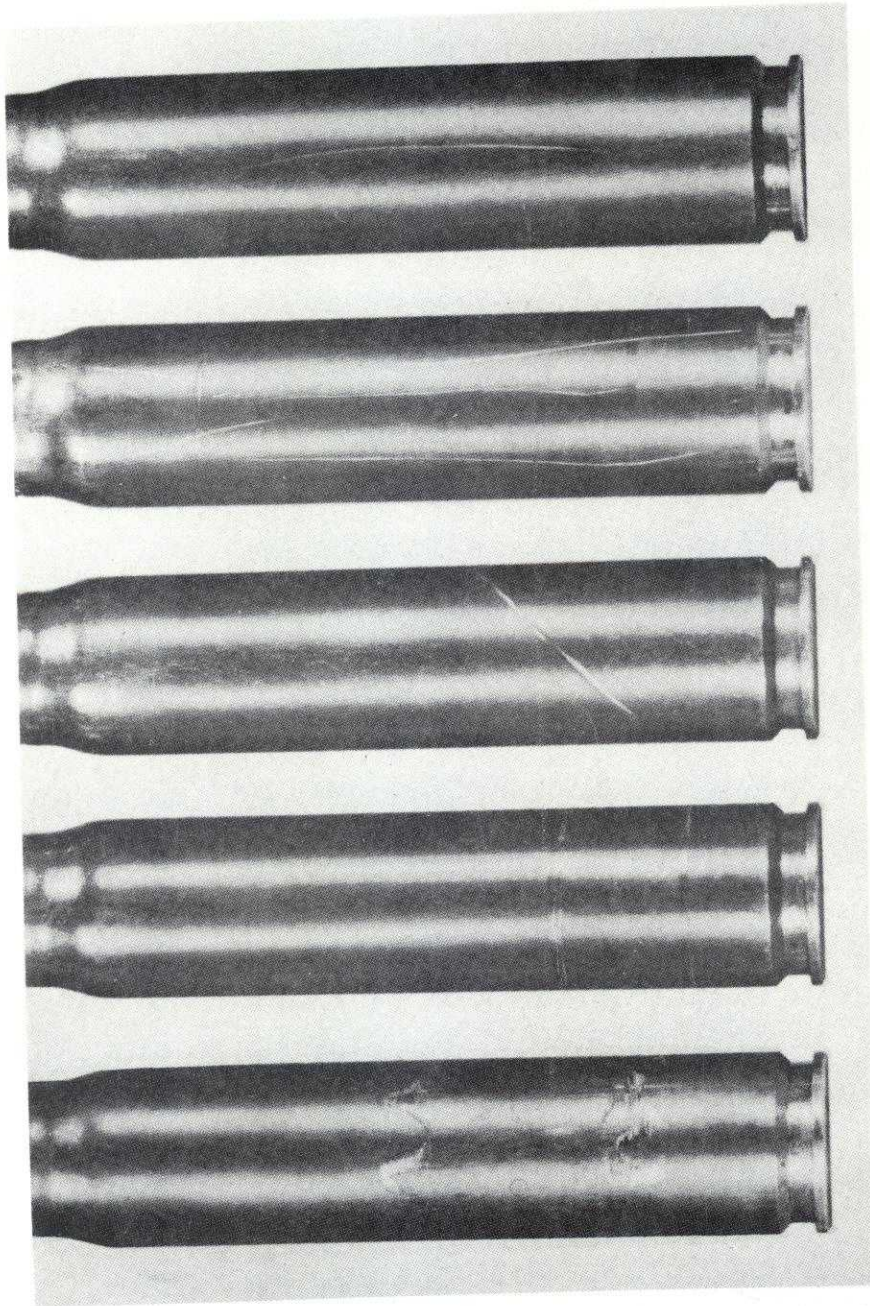
(The seriousness of a draw scratch will primarily be judged by its depth. Those which cannot be detected by the fingernail are acceptable. Draw scratches which CAN be detected by the fingernail will be classed as nonacceptable).

No. 44. Draw scratch



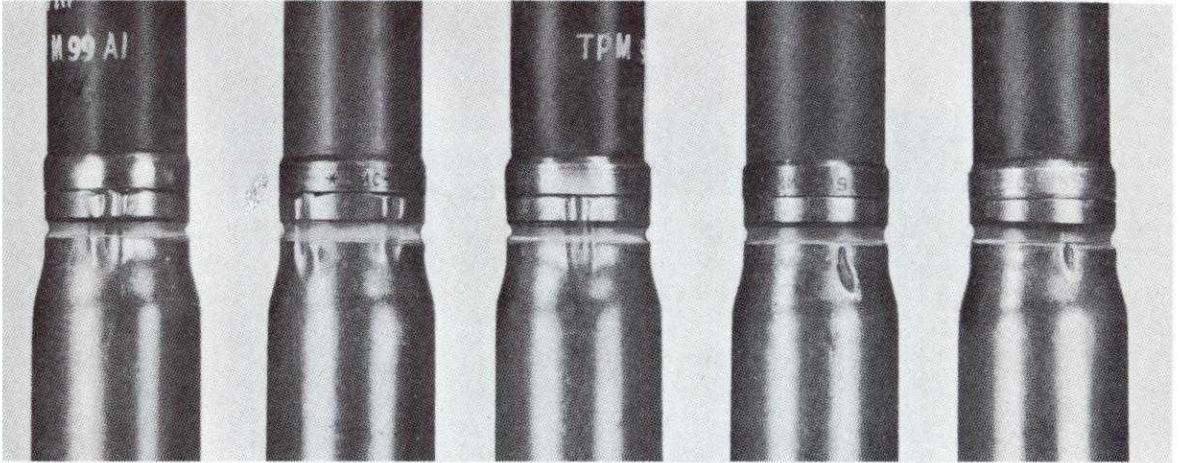
[..... Nonacceptable] [..... Acceptable]

No. 45. Dent (case)



[..... Nonacceptable] [..... Acceptable]

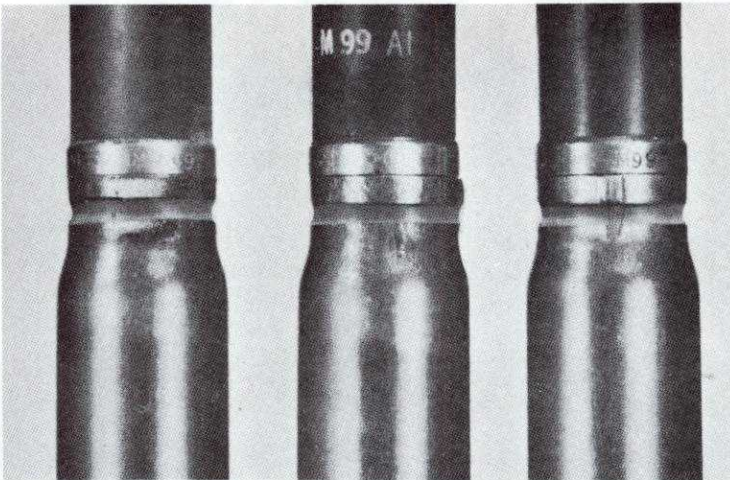
No. 46. Scratch, other than draw scratch (case)



[..... Nonacceptable] [..... Acceptable]]

[..... Acceptable]]

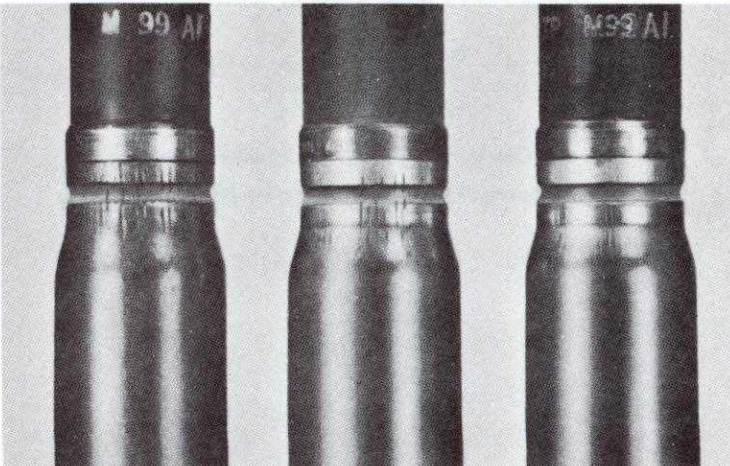
No. 47. Fold



[..... Nonacceptable] [..... Acceptable]]

[..... Acceptable]]

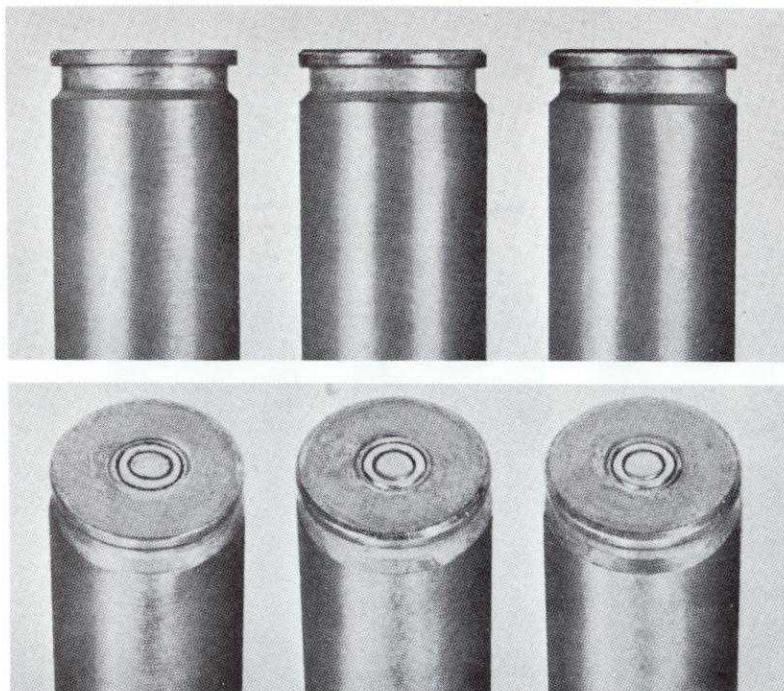
No. 48. Bulge



[..... Nonacceptable] [..... Acceptable]]

[..... Acceptable]]

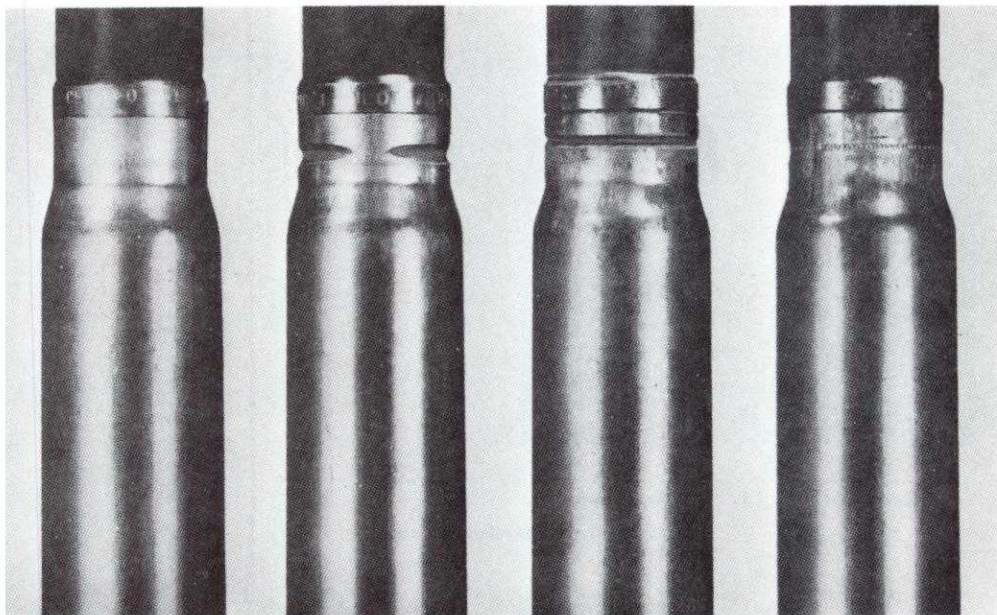
No. 49. Wrinkle



[... Nonacceptable ...] [.... Acceptable] [..... Normal]

(Two views each of three different conditions. Classification terms apply to columns)

No. 53. Chamfer, head rim, missing



A

B

C

D

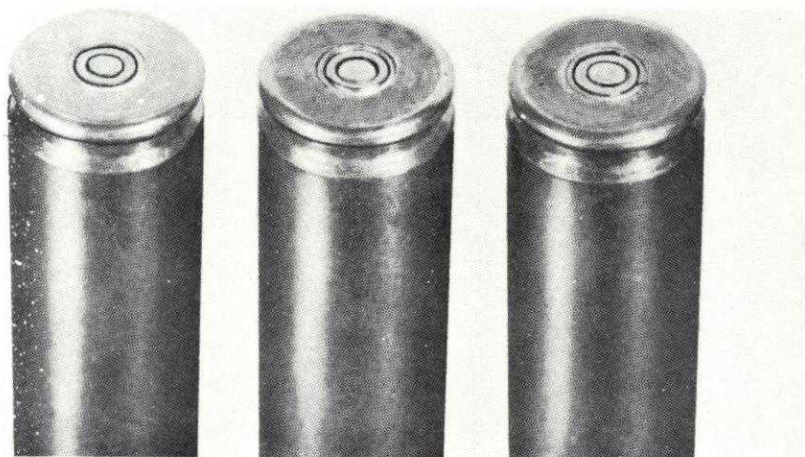
[..... Nonacceptable]

A. Missing
B. Incomplete

C. Mislocated, or shallow
D. Incorrect type

No. 54. Improper, or missing crimp (case-projectile)

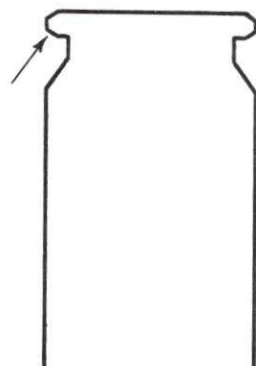
No. 55. Head configuration



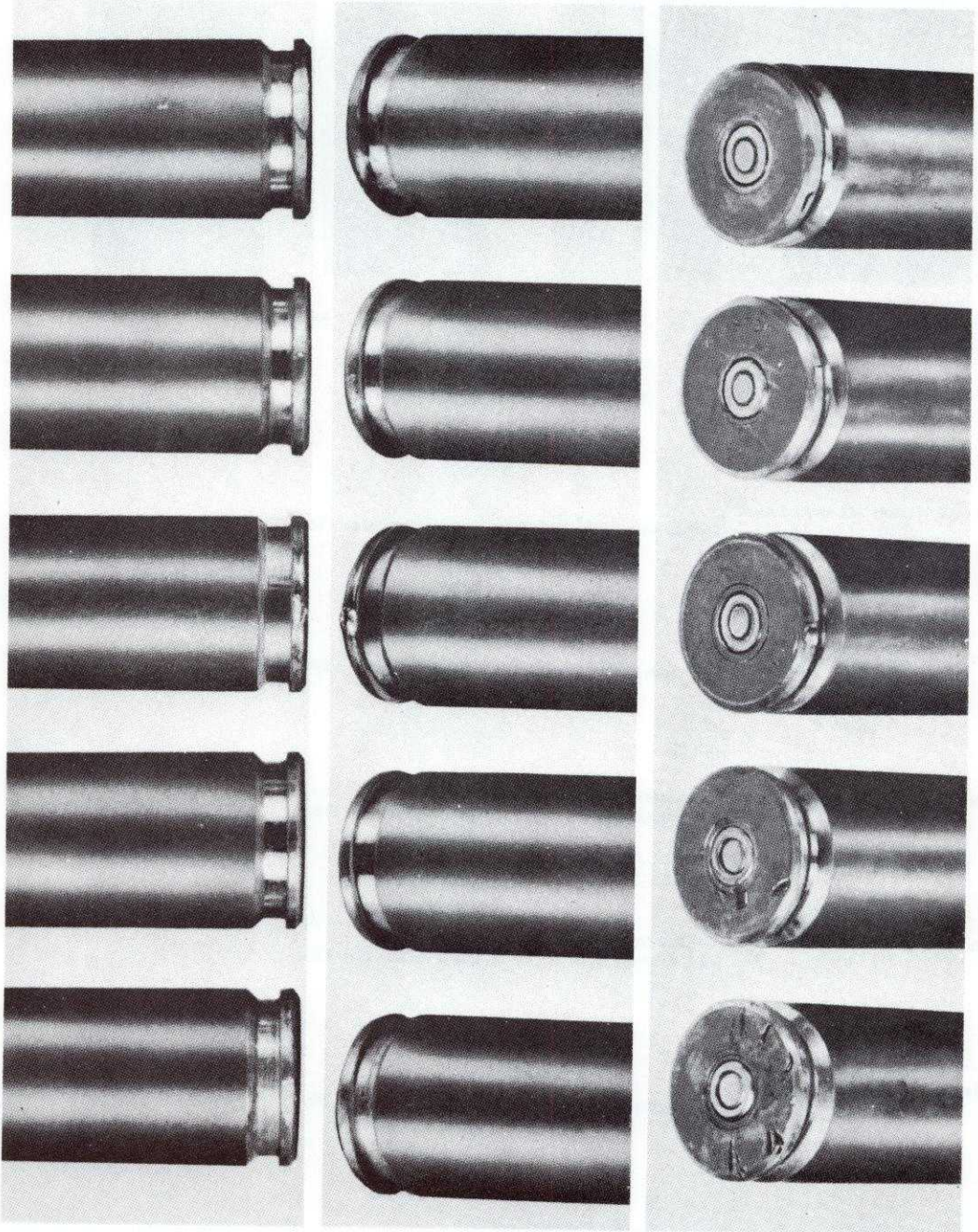
[..... Nonacceptable] [..... Acceptable]
(Round head)



[..... Nonacceptable] [..... Acceptable]
(Beveled underside of head)



No. 55. Head configuration—Continued

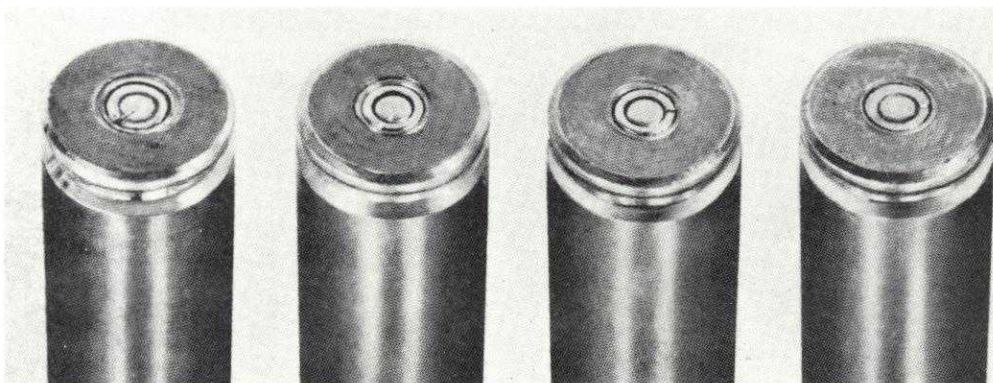


..... Acceptable

..... Nonacceptable

(Cut or dented head)
(Three views each of five conditions. Classification terms apply to columns)

No. 55. Head configuration—Continued



[Illustration of two cases with damaged primers] **Nonacceptable** [Illustration of two cases with smooth primers]

[Illustration of two cases with smooth primers] **Acceptable** [Illustration of two cases with damaged primers]

(Nicked, or dented primer)

No. 56. Metal slivers on case head

(For comparison, refer to illustration No. 15)

No. 57. Lacquer on primer button

(For comparison, refer to illustration No. 17)

No. 58. Waterproofing missing around primer

(For comparison, refer to illustration No. 16)

No. 59. Protective coating damaged or incomplete

(For comparison, refer to illustration No. 18)

No. 60. Rotating band damaged

(For comparison, refer to illustration No. 20)

No. 61. Upset (crooked) or deformed nose (Target Practice only)

(For comparison, refer to illustration No. 19)



A

B

C

D

E

[..... Nonacceptable] [..... Normal]

- A. Cartridge model incomplete
- B. Case data unidentifiable

- C. Cartridge data unidentifiable
- D. Year of manufacture unidentifiable
- E. Normal

No. 62. Marking incorrect or unidentifiable

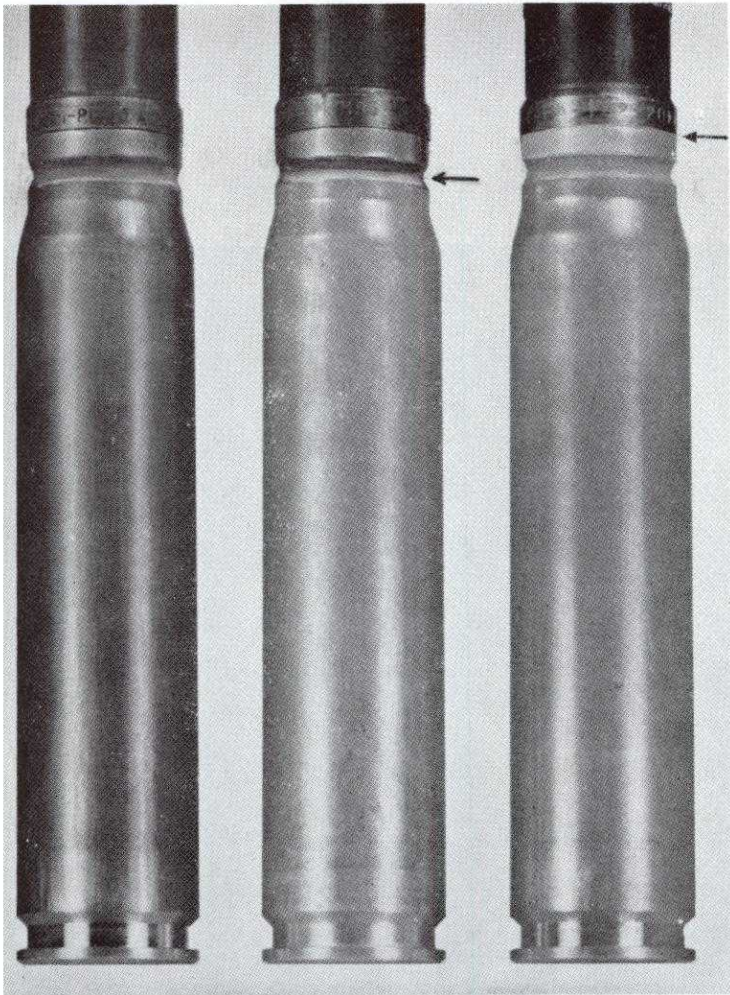


[..... Nonacceptable]]

(For corrosion appearing on other surfaces of the cartridge, refer to illustrations No.'s 90, 96, or 204, as pertinent to the cartridge type. See also 3.2.3).

No. 63. Corrosion (case)

No. 64. Crack or split in projectile
(For comparison, refer to illustration No. 25)



A

B

C

Nonacceptable

Acceptable

Normal

- A. Missing
- B. Missing above crimp groove (arrow)
- C. Normal (complete case coverage)

No. 65. Wax coating missing or incomplete



[.....] **Nonacceptable** [.....] **Acceptable** [.....]

No. 66. Wax coating flaky or otherwise unsatisfactory



A

B

C

[. . . . Nonacceptable] [. Acceptable] [. Normal]

- A. On bourrelet**
- B. Overlap onto rotating band**
- C. Normal (none on projectile)**

No. 67. Wax coating on projectile

LIST OF DEFECTS

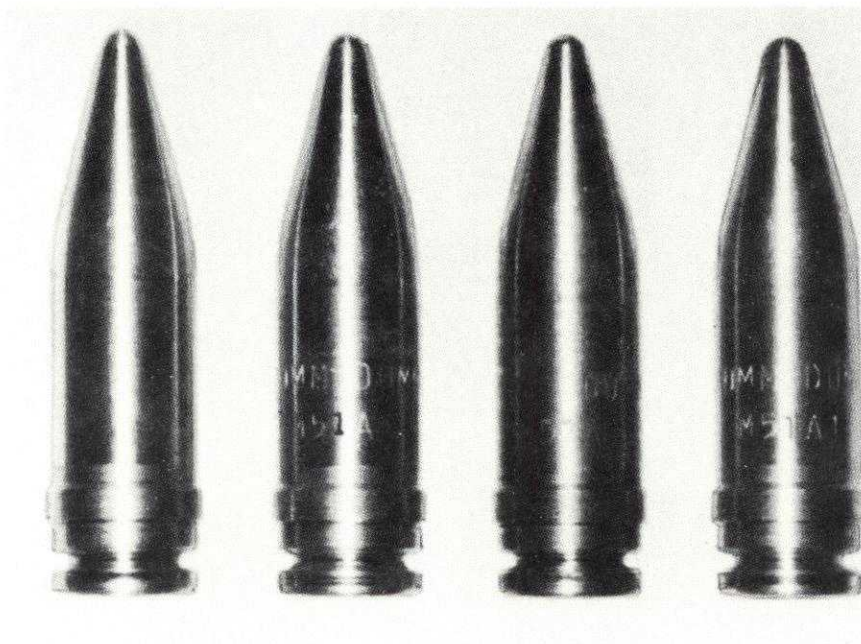
CASE, CARTRIDGE, 20mm, M21A1
(for M90 Series Cartridges)

No.	Page
68. Metal defective	55
69. Scratch, other than draw scratch	55
70. Fold	55
71. Wrinkle	55
72. Buckle	55
73. Oil, or grease	55
74. Chamfer, head rim, missing	55
75. Head configuration	55
76. Foreign matter other than oil, grease, or corrosion.....	55
77. Flash hole missing or obstructed	55
78. Marking incorrect, incomplete, or unidentifiable	56
79. Corrosion	56
80. Radius at mouth of primer pocket missing or not tangent to pocket side wall	56

LIST OF DEFECTS

PROJECTILE, 20mm, DUMMY, M51

No.	Page
81. Marking incomplete, or unidentifiable	58
82. Surface finish	58



A

B

C

D

[..... Nonacceptable] [..... Normal]

A. Missing
B. Incomplete

C. Unidentifiable
D. Normal

No. 81. Marking incomplete or unidentifiable (Dummy, M51)

No. 82. Surface finish

(Not illustrated—refer to drawing)

LIST OF DEFECTS

PROJECTILE, 20MM, ARMOR-PIERCING-INCENDIARY (API),M53,
METAL PARTS

Body

No.		Page
83.	Rotating band seat knurling missing or incomplete	60
84.	Adapter seat grooving missing or incomplete	60

Closure Disc

85.	Finish in nose seat radius	60
86.	Finish (except in nose seat radius)	60
87.	Foreign matter	60

Nose

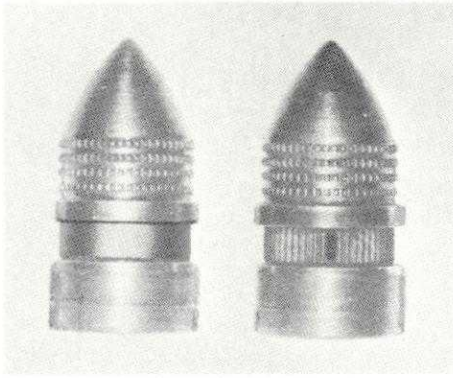
88.	Metal defective	61
89.	Foreign matter on interior	61
90.	Foreign matter other than interior	62
91.	Finish	62

Body, Adapter, and Rotating Band Assembly Prior to Painting

92.	Serrations in nose end of adapter missing or incomplete	62
93.	Surface finish	63
94.	Foreign matter	63

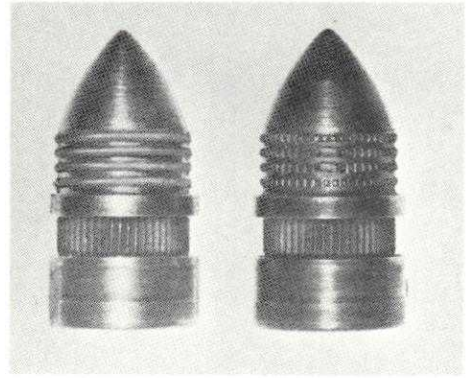
Body, Adapter, and Rotating Band Assembly

95.	Marking missing, incorrect, or unidentifiable	64
96.	Foreign matter	96
97.	Paint on rotating band	64



[..... Nonacceptable]]

No. 83. Rotating band seat knurling missing or incomplete
 (Mismatched overrun of four knurls is acceptable).

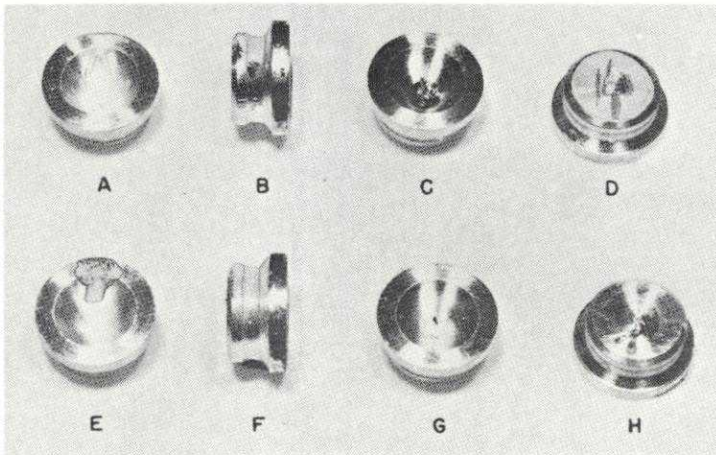


[..... Nonacceptable]]

No. 84. Adapter seat grooving missing or incomplete
 (Only defective scoring is illustrated. Absence of, or incomplete grooving also is nonacceptable).

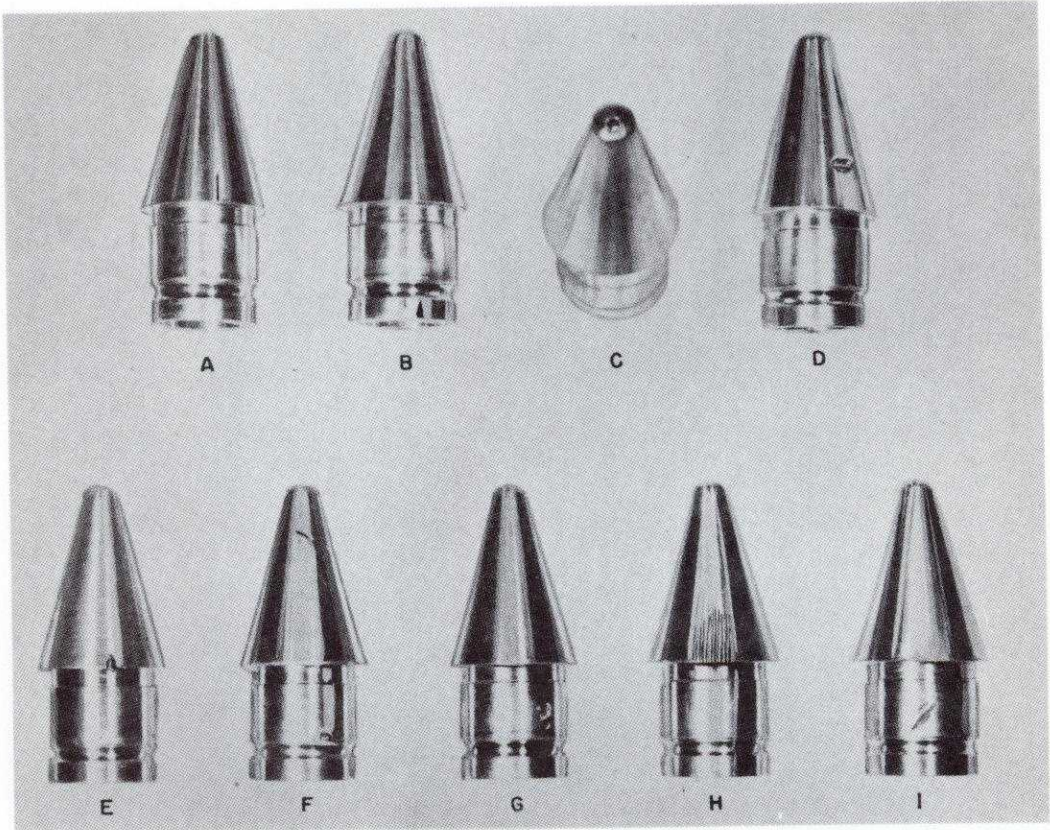
No. 85. Finish in nose seat radius. (Not illustrated—refer to drawing)

No. 86. Finish (except in nose seat radius). (Not illustrated—refer to drawing)



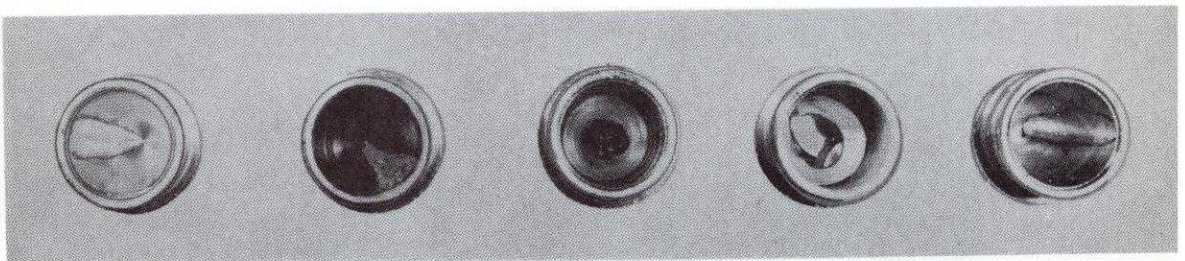
- | | | | | | |
|--------------------------|------------------------|---------------------|------------------------|----------------|---------------------|
| A. Oil, or grease | (Nonacceptable) | D. Dirt | (Nonacceptable) | G. Dirt | (Acceptable) |
| B. Dirt, chips | (Nonacceptable) | E. Corrosion | (Nonacceptable) | H. Dirt | (Acceptable) |
| C. Dirt, chips | (Nonacceptable) | F. Dirt | (Acceptable) | | |

No. 87. Foreign matter



- | | | | | | |
|--------------------|------------------------|---------------------|------------------------|---------------------|------------------------|
| A. Crack | (Nonacceptable) | D. Dent | (Nonacceptable) | G. Nick, cut | (Acceptable) |
| B. Split | (Nonacceptable) | E. Dent | (Acceptable) | H. Score | (Nonacceptable) |
| C. Porosity | (Nonacceptable) | F. Nick, cut | (Nonacceptable) | I. Score | (Acceptable) |

No. 88. Metal defective

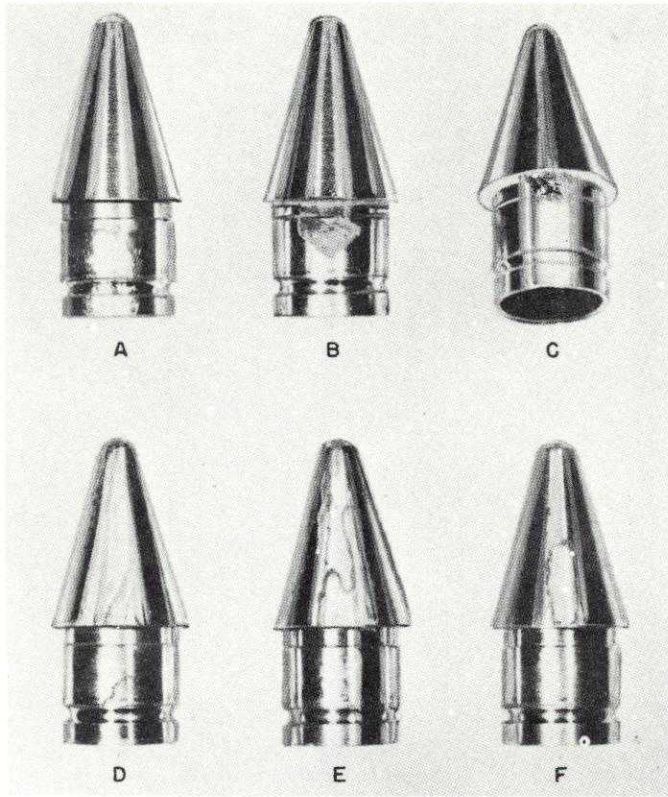


[..... Nonacceptable]

- | | |
|-------------------------|-----------------|
| A. Oil or grease | C. Dirt |
| B. Corrosion | D. Chips |
| E. *Stain | |

(Discoloration resulting from approved cleaning or heat treating processes is acceptable)
 *(See 3.2.3)

No. 89. Foreign matter on interior

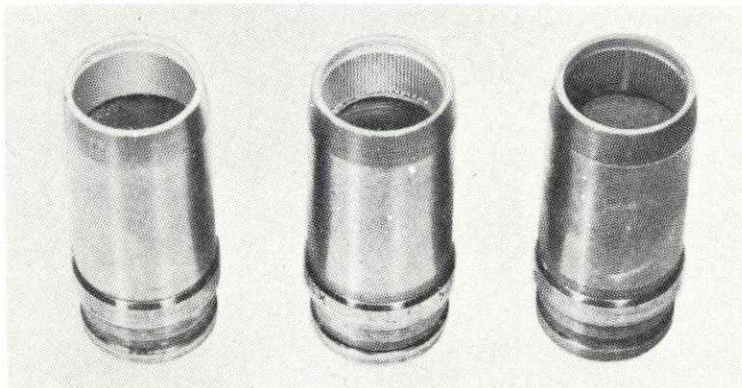


- | | | | | | |
|-------------------|-----------------|----------------|-----------------|-----------|-----------------|
| A. Oil, or grease | (Nonacceptable) | C. Dirt, chips | (Nonacceptable) | E. *Stain | (Nonacceptable) |
| B. Corrosion | (Nonacceptable) | D. Dirt | (Acceptable) | F. Stain | (Acceptable) |

*(See 3.2.3)

No. 90. Foreign matter, other than interior

No. 91. Finish (Not illustrated—refer to drawing)

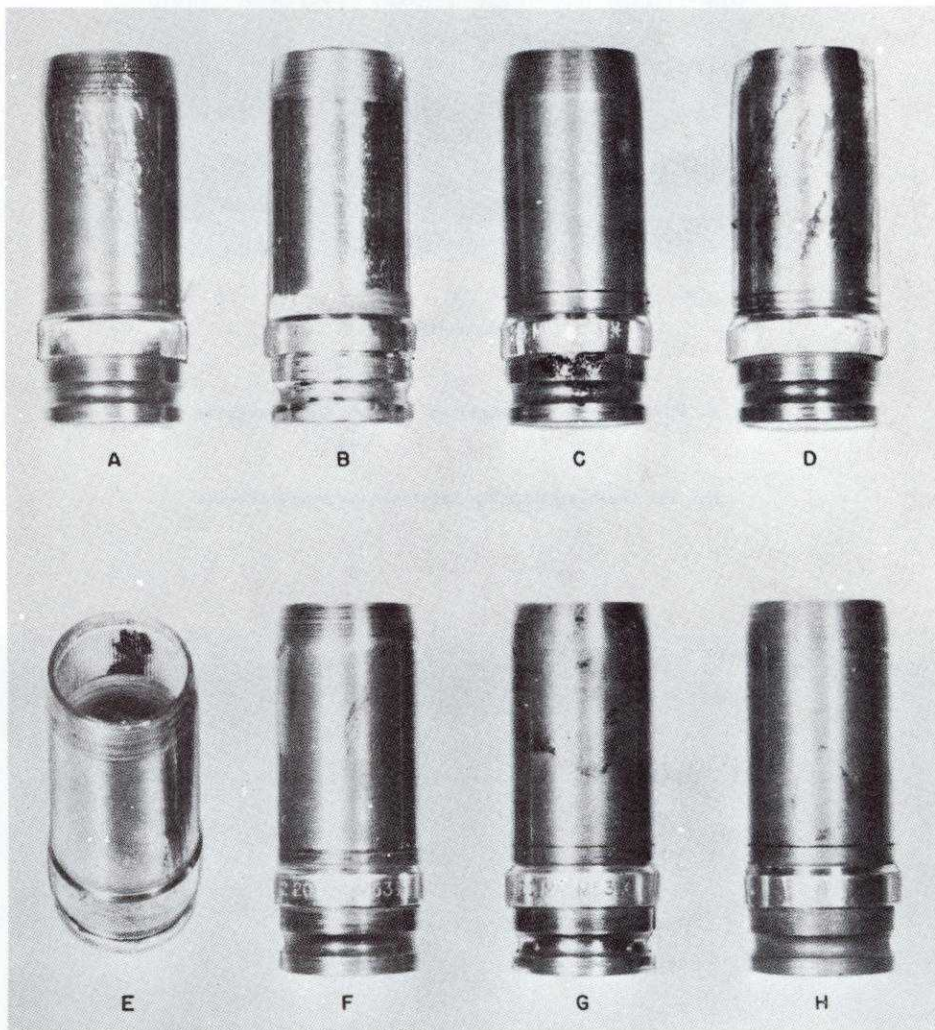


- | | | |
|-------------------------------|---|------------------------|
| A | B | C |
| [..... Nonacceptable]] | | [.... Acceptable] |

- | | | |
|------------|---------------|---------------|
| A. Missing | B. Incomplete | C. Incomplete |
|------------|---------------|---------------|

No. 92. Serrations in nose end of adapter missing or incomplete

No. 93. Surface finish (Not illustrated—refer to drawing)

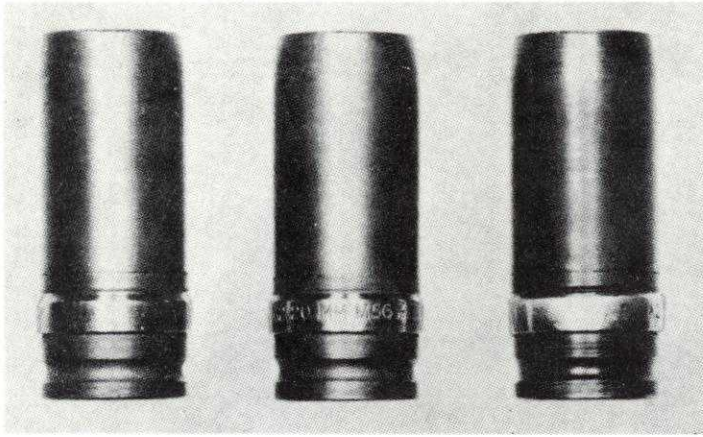


- | | | | | | |
|--------------------------|------------------------|----------------|------------------------|---------------------------------|------------------------|
| A. Oil, or grease | (Nonacceptable) | D. Dirt | (Nonacceptable) | G. *Stain, discoloration | (Nonacceptable) |
| B. Corrosion | (Nonacceptable) | E. Dirt | (Nonacceptable) | H. Stain, discoloration | (Acceptable) |
| C. Dirt, chips | (Nonacceptable) | F. Dirt | (Acceptable) | | |

(Small chips acceptable at interior junction of adapter and body)

*(See 3.2.3)

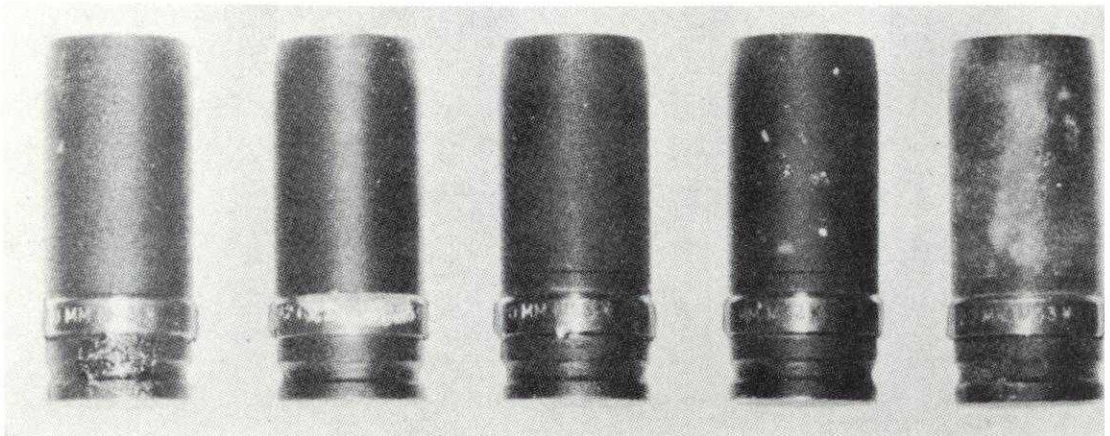
No. 94. Foreign matter



A B C
[..... Nonacceptable]

- A. Missing
- B. Incorrect
- C. Unidentifiable

No. 95. Marking missing, incorrect, or unidentifiable



A B C D E
[..... Nonacceptable]

- A. Oil, or grease
- B. Corrosion
- C. Dirt, chips
- D. Grit in protective coating
- E. Dirt

No. 96. Foreign matter

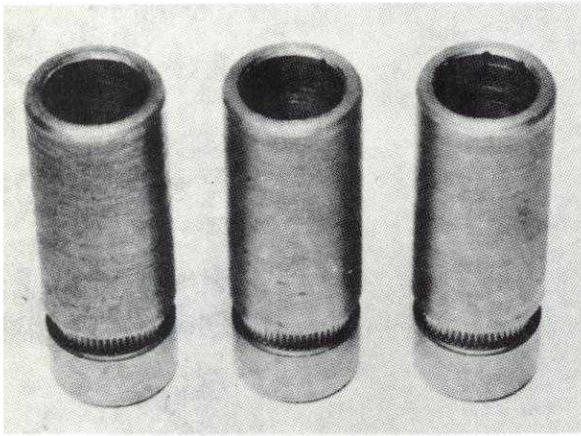
No. 97. Paint on rotating band

(For comparison, refer to illustration No. 130)

LIST OF DEFECTS

PROJECTILES, 20MM, TARGET PRACTICE, (TP), M55 and M99

No.	Body	Page
98.	Indents missing in nose	66
99.	Knurling missing in rotating band seat	66
100.	Finish	66
101.	Chamfer, inside of mouth, missing	66
102.	Foreign matter on interior	66
Nose		
103.	Metal defective	67
104.	Taper on mating surfaces missing	67
105.	Finish	67
106.	Foreign matter on mating surface	67
Body and Rotating Band Assembly		
107.	Radius at base missing	68
108.	Finish, rear of rotating band, improper	68
109.	Foreign matter	68
Assembly Prior to Painting		
110.	Rotating band damaged	69
111.	Body not flush or below at junction with nose	69
112.	Metal defective (TP, M99)	69
Assembly After Painting		
113.	Paint inadequate	70
114.	Paint on rotating band	70
115.	Marking incorrect, incomplete, illegible, or missing	70

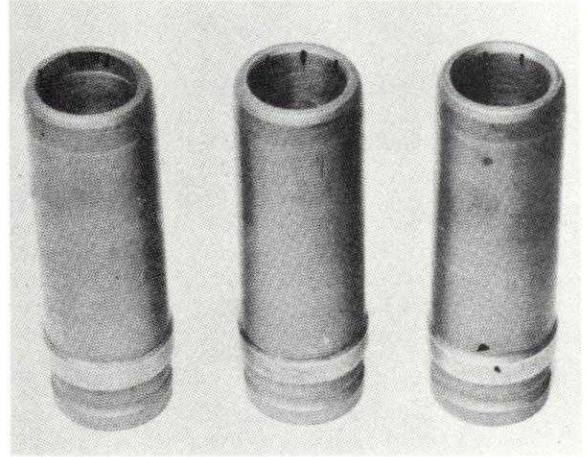


No. 99. Knurling missing in rotating band seat. (For comparison, refer to illustration No. 116)

A [.. Nonacceptable ..] [.... Acceptable] [... Normal ...]

- A. Indents missing
- B. One indent missing
- C. Normal

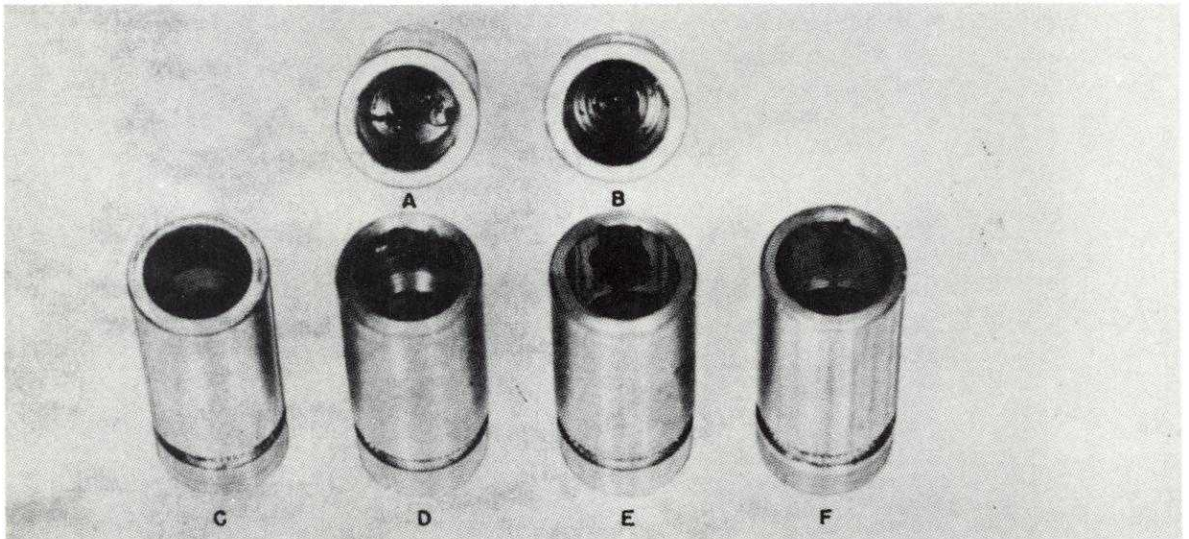
No. 98. Indents missing in nose



[.. Nonacceptable ..] [.... Acceptable] [... Normal ...]

No. 101. Chamfer, inside of mouth, missing

No. 100. Finish
(Not illustrated—refer to drawing)



- A. Chips, shavings
- B. Chips, minute particles
- C. Corrosion

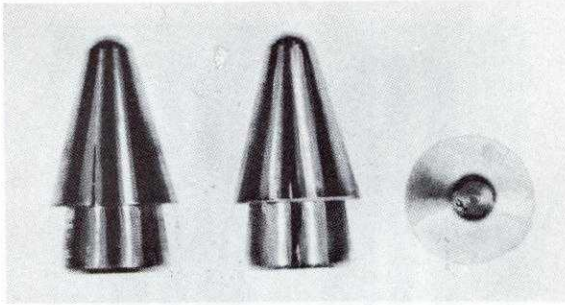
- (Nonacceptable)
- (Acceptable)
- (Nonacceptable)

- D. Oil, or grease
- E. Dirt, *Stain
- F. Stain, superficial

- (Nonacceptable)
- (Nonacceptable)
- (Acceptable)

*(See 3.2.3)

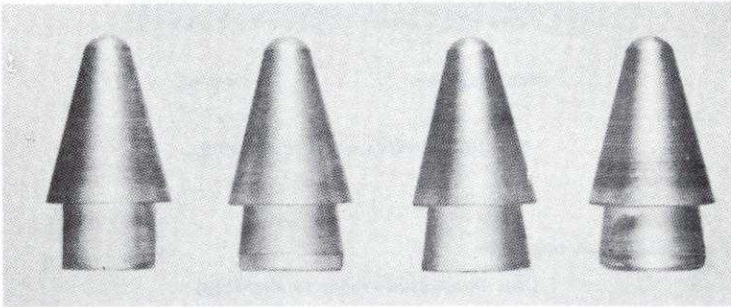
No. 102. Foreign matter on interior



A B C
[..... Nonacceptable]

A. Crack B. Split C. Porosity

No. 103. Metal defective (Seam not illustrated)



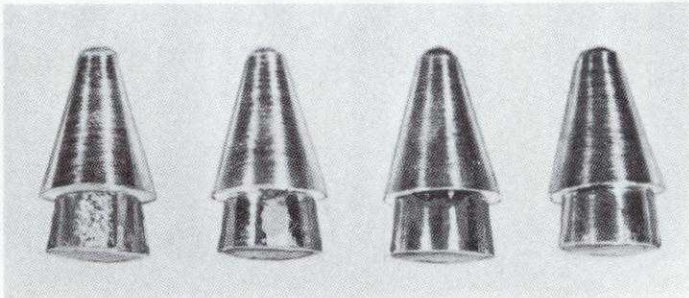
A B C D
[..... Nonacceptable] [..... Normal]

A. Taper missing
B. Corner break missing

C. Flat and corner break missing
D. Normal

No. 104. Taper on mating surfaces missing

No. 105. Finish (Not illustrated—refer to drawing)



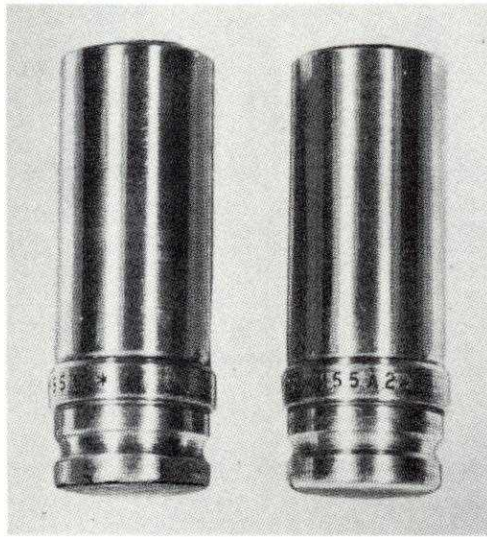
A B C D
[..... Nonacceptable] [..... Acceptable]

A. Oil, or grease
B. Corrosion

C. Dirt, chips
D. *Stain

*(See 3.2.3)

No. 106. Foreign matter on mating surface

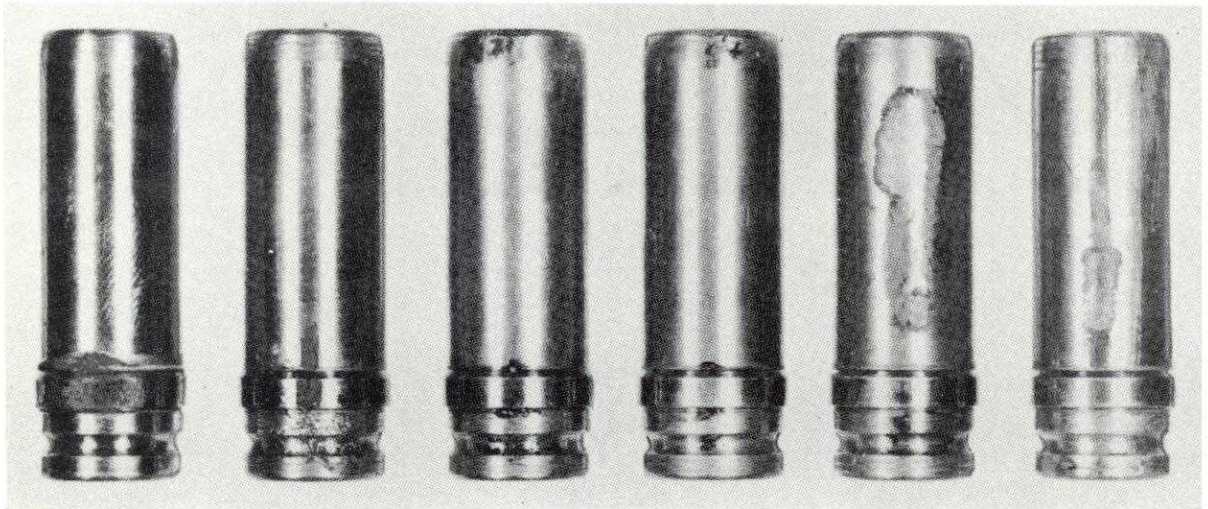


[..... Nonacceptable] [..... Normal]

No. 107. Radius at base missing

No. 108. Finish, rear of rotating band, improper

(Not illustrated—refer to drawing)



A B C D E F

[..... Nonacceptable] [..... Acceptable] [.. Nonacceptable ..] [..... Acceptable]

A. Corrosion
B. Oil, or grease

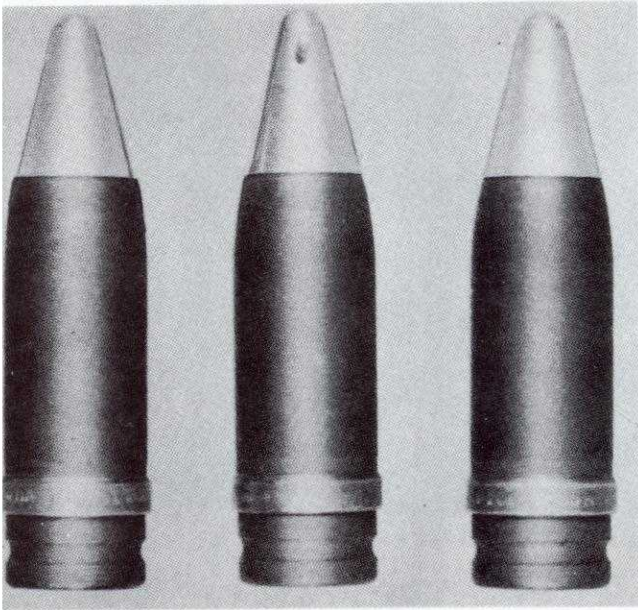
C. Dirt, chips
D. Dirt

*(See 3.2.3)

E. *Stain, discoloration
F. Stain, discoloration

No. 109. Foreign matter

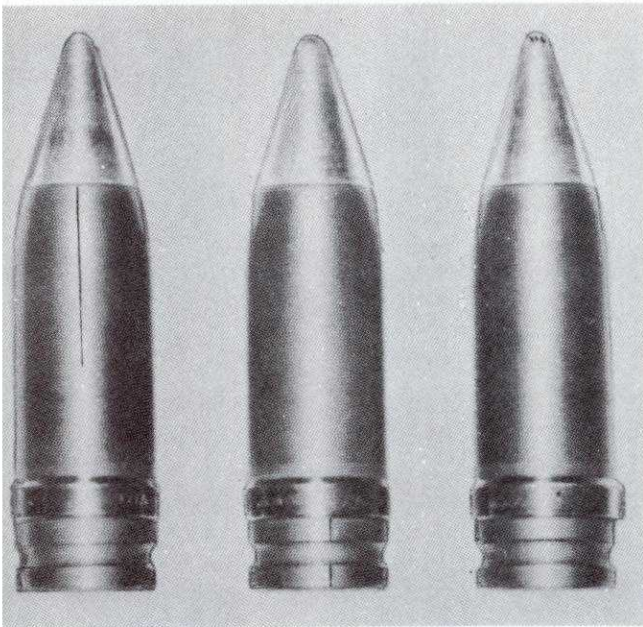
No. 110. Rotating band damaged
 (For comparison, refer to illustration No. 20)



..... Nonacceptable

[..... Normal]]

No. 111. Body not flush or below at junction with nose



A

B

C

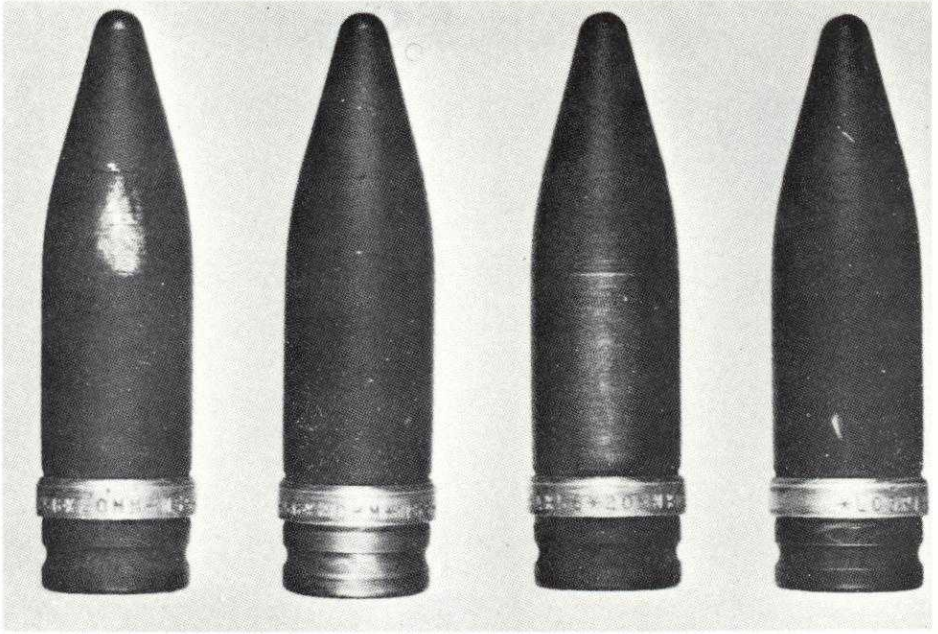
..... Nonacceptable

A. Crack

B. Seam

C. Porosity

No. 112. Metal defective (TP, M99 only)



A

B

C

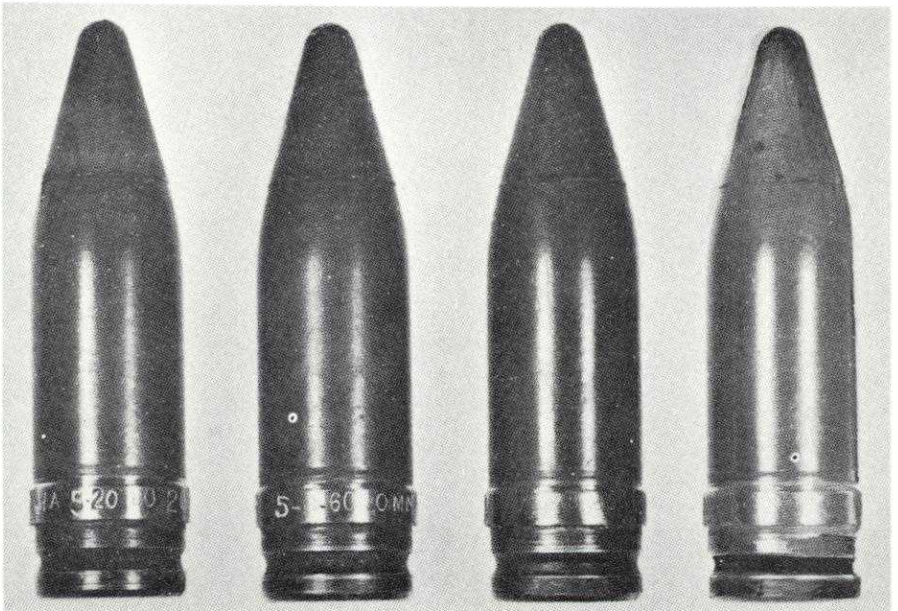
D

[..... Nonacceptable] [..... Acceptable]

A. Bare spot
B. Bare spot

C. Porous coating
D. Nick, scratch

No. 113. Paint inadequate
No. 114. Paint on rotating band
(For comparison, refer to illustration No. 130)



A

B

C

D

[..... Nonacceptable]

A. Incorrect
B. Incomplete

C. Illegible
D. Missing

No. 115. Marking incorrect, incomplete, illegible, or missing

LIST OF DEFECTS

PROJECTILE, 20MM, HEI, M56, METAL PARTS

Body, Prior to Crimping Base Cover

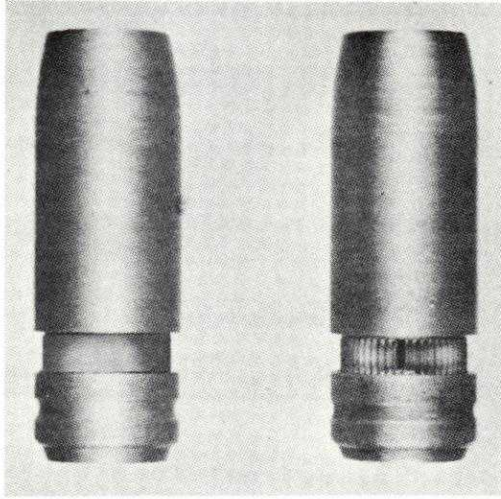
No.	Page
116. Knurling missing or incomplete	72
117. Foreign matter in base cover recess or rotating band seat	72

Base Cover

118. Foreign matter	73
119. Crimp not full 360 degrees	73
120. Threads not full	73
121. Base radius missing	74
122. Foreign matter	74
123. Rotating band damaged	74
124. Finish improper	74

Body Assembly After Painting

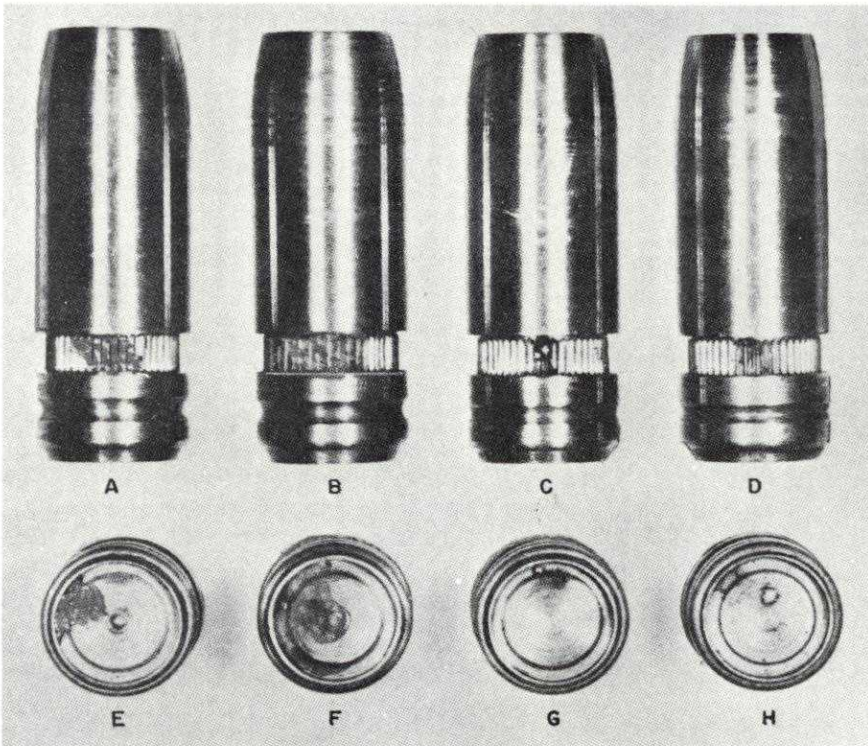
125. Corner not sharp, mouth end	75
126. Paint on threads	75
127. Mutilated	75
128. Pool of paint in bottom of cavity	76
129. Base cover missing, or incomplete	76
130. Paint on rotating band	76
131. Marking incorrect, incomplete, illegible, or missing	77
132. Interior or exterior paint inadequate	77
133. Crimp protruding above base cover	77



[..... Nonacceptable]

(Mismatched overrun of four knurls is acceptable)

No. 116. Knurling missing or incomplete



- A. Oil, or grease
- B. Corrosion
- C. Dirt, chips
- D. Stain

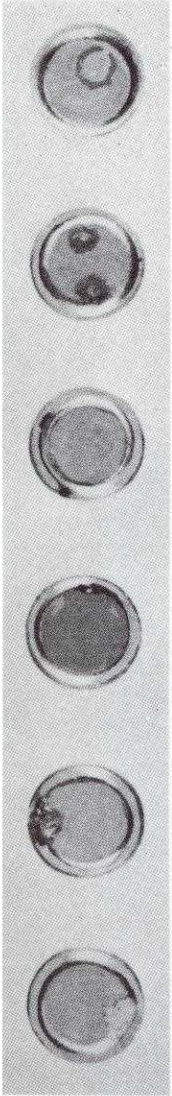
- (Nonacceptable)
- (Nonacceptable)
- (Nonacceptable)
- (Trace, acceptable)

- E. Dirt, chips
- F. Dirt
- G. *Stain
- H. Stain

- (Nonacceptable)
- (Trace, acceptable)
- (Nonacceptable)
- (Acceptable)

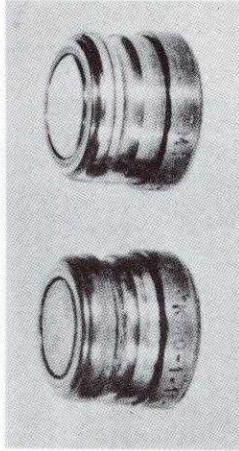
*(See 3.2.3)

No. 117. Foreign matter in base cover recess, or rotating band seat



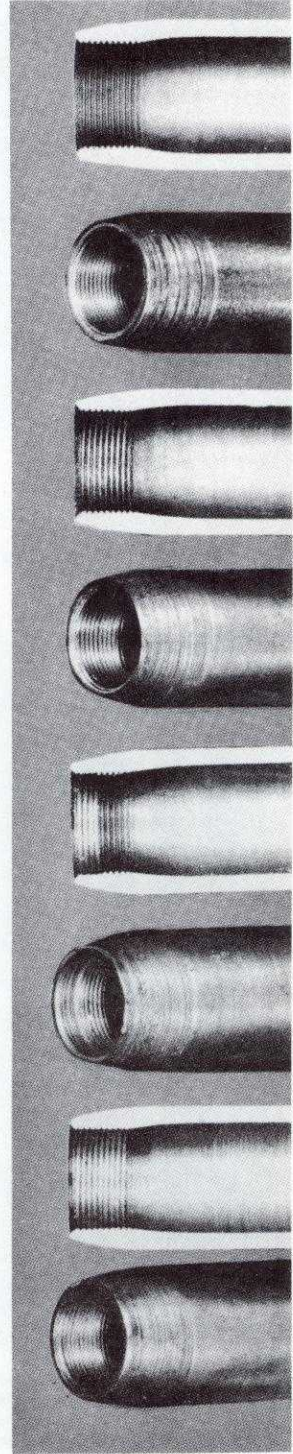
- A** **A. Corrosion**
(Nonacceptable)
- B** **B. Oil, or grease**
(Nonacceptable)
- C** **C. Dirt, chips**
(Nonacceptable)
* (See 3.2.3)
- D** **D. Dirt**
- E** **E. * Stain**
- F** **F. Stain**
(Acceptable)

No. 118. Foreign matter



[..... Nonacceptable] [..... Normal]

No. 119. Crimp not full 360 degrees
(Crimp must be tight around entire periphery)



[..... Nonacceptable] [..... Acceptable] [..... Normal]

No. 120. Threads not full

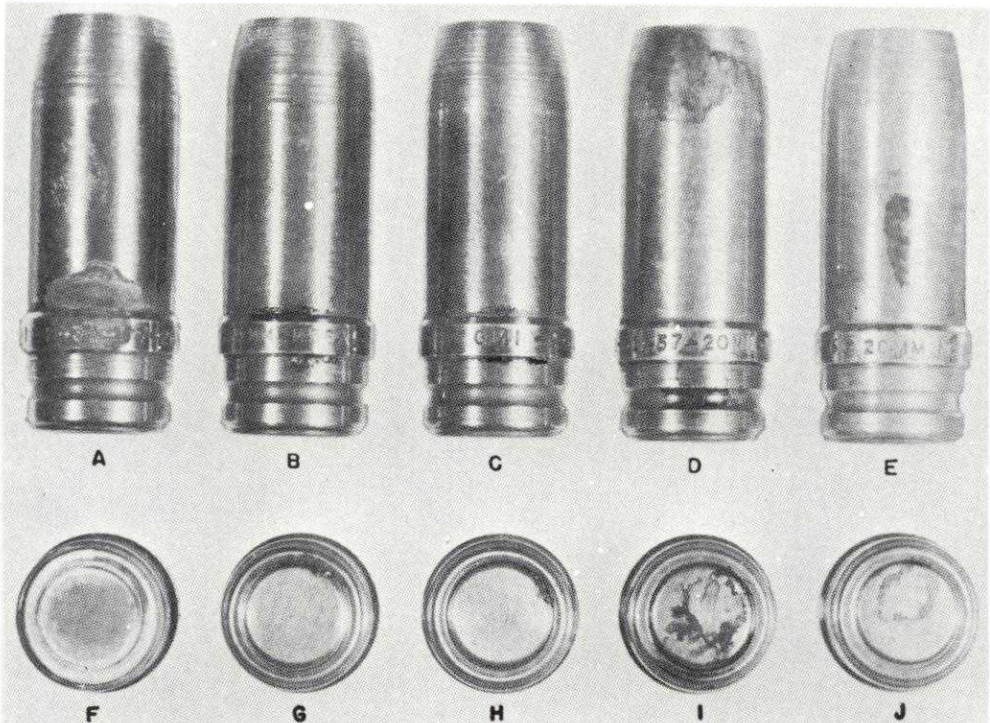


A [..... Nonacceptable] B [..... Normal]

A. Base radius missing

B. Base radius normal

No. 121. Base radius missing



- A. Corrosion (Nonacceptable)
- B. Dirt, chips (Nonacceptable)
- C. Dirt (Nonacceptable)
- D. Stain (Nonacceptable)
- E. Stain (Acceptable)

- F. Corrosion (Nonacceptable)
- G. Dirt, chips (Nonacceptable)
- H. Dirt (Acceptable)
- I. *Stain (Nonacceptable)
- J. Stain (Acceptable)

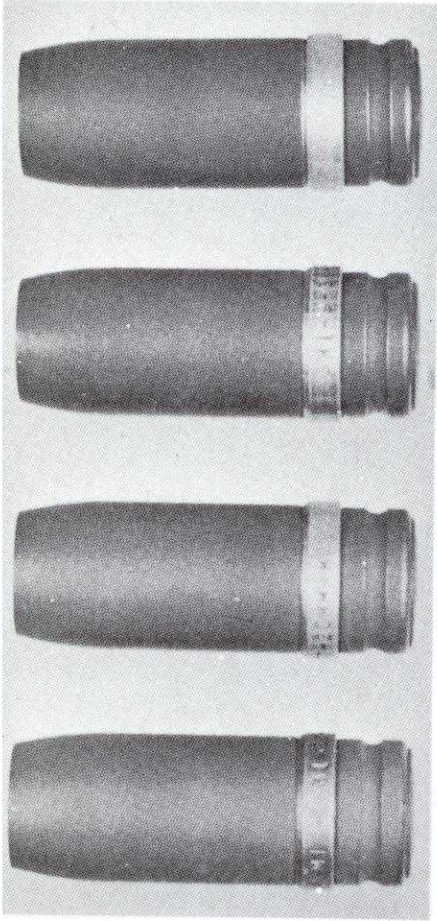
*(See 3.2.3)

No. 122. Foreign matter

No. 123. Rotating band damaged

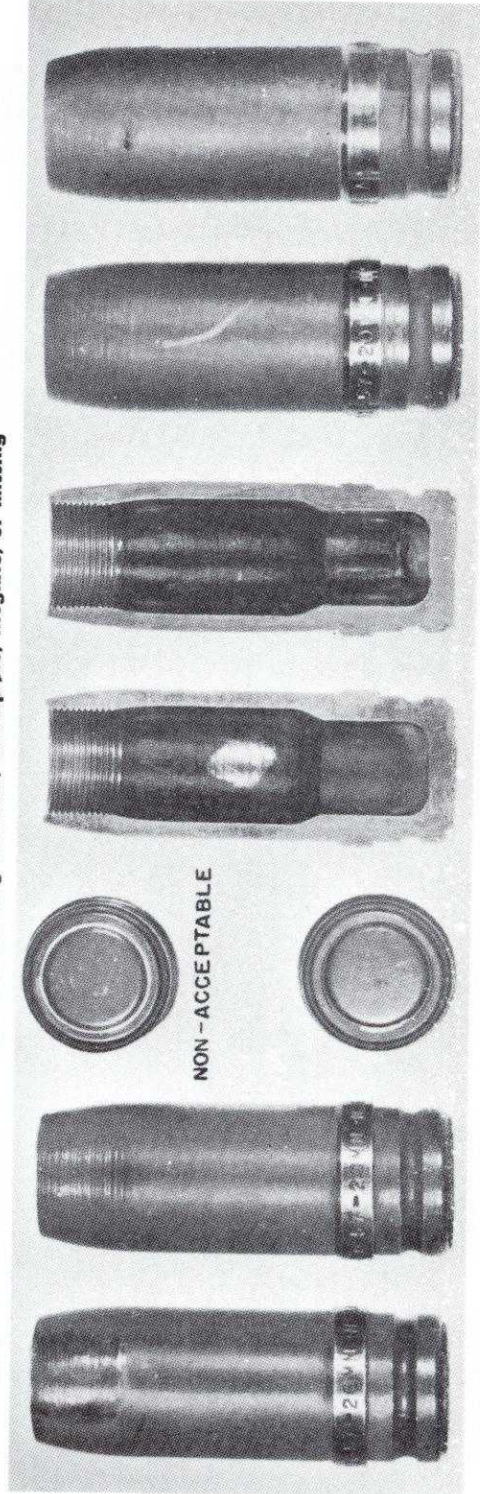
(For comparison, refer to illustration No. 20)

No. 124. Finish improper (Not illustrated—refer to drawing)



A Nonacceptable D
 B Nonacceptable C
 A. Incorrect B. Incomplete C. Illegible D. Missing

No. 131. Marking incorrect, incomplete, illegible, or missing



..... Nonacceptable [..... Acceptable] [..... Nonacceptable] [..... Acceptable] [..... Nonacceptable] [..... Acceptable]

**No. 132. Interior or exterior paint inadequate
 (Scratches not penetrating to basis metal are permissible)**

**No. 133. Crimp protruding above base cover
 (Nonacceptable) (Not illustrated. Determine visually, using straight edge)**

LIST OF DEFECTS

FUZE, PD, M505, PARTS FOR

Booster Holder

No.		Page
134.	Foreign matter	80
135.	Crimping groove missing	80
136.	Burr	80
137.	Protective coating damaged or missing	80
138.	Damage	80
139.	Finish, except spherical radius	80

Rotor

140.	Finish	81
141.	Foreign matter	81
142.	Burr above spherical surface	81
143.	Burr, except above spherical surface	81

Rotor Safety Spring

144.	Burrs	81
145.	Foreign matter	82

Cover

146.	Burrs	83
147.	Cracked, split, or deformed	83
148.	Foreign matter	83
149.	Protective coating or cladding damaged or missing	83

Body

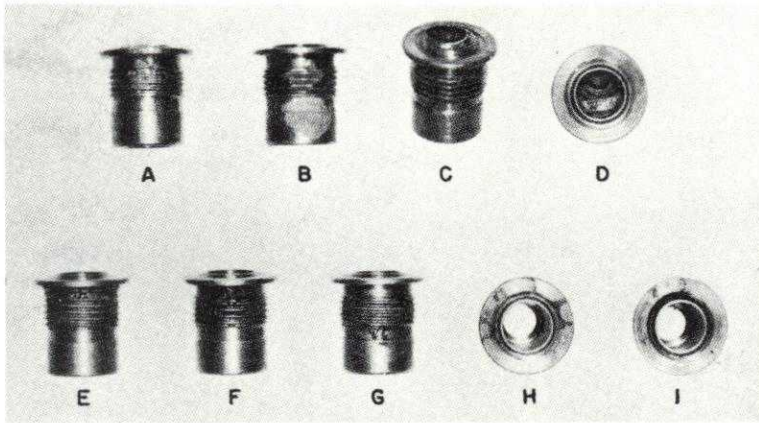
150.	Finish, except firing pin hole and rotor seat	84
151.	Knurl missing or incomplete	84
152.	Foreign matter in rotor seat or spring slot	84
153.	Protective coating or cladding damaged or missing	84
154.	Burr	85

Body, Spring, and Spring Retainer Assembly

155.	Foreign matter	85
156.	Loose or missing rotor safety spring retainer	85
157.	Crack in rotor safety spring retainer	85
158.	Burr	85

Firing Pin

159.	Flange missing	86
160.	Arming spring locking shoulder missing, or improper	86
161.	Finish	86



- | | | | |
|-----------------------------|------------------|-----------------------------|-----------------|
| A. Oil, or grease | (Nonacceptable) | E,F. Dirt, chips (exterior) | (Nonacceptable) |
| B. Corrosion | (Nonacceptable) | G. Dirt (exterior) | (Acceptable) |
| C,D. Dirt, chips (Interior) | (Nonacceptable) | H. *Stain | (Nonacceptable) |
| | I. Stain (trace) | | (Acceptable) |

No. 134. Foreign matter (*See 3.2.3)

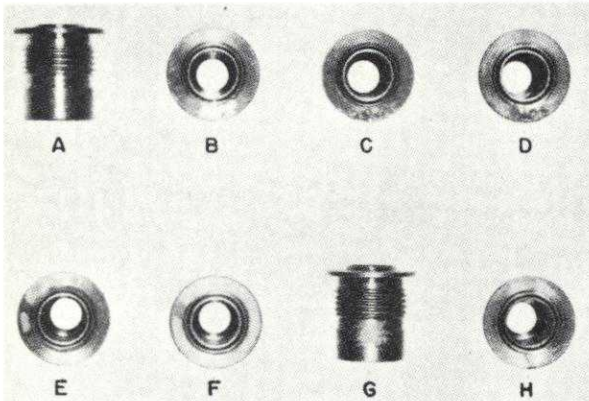


- | | |
|-------------------|-----------------|
| A. Groove missing | (Nonacceptable) |
| B. Groove normal | |

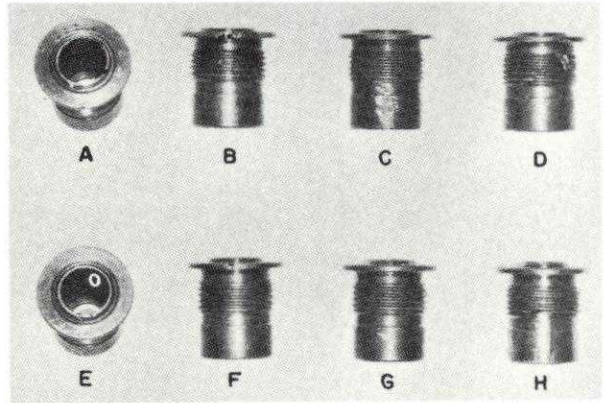
[... Nonacceptable ...]

No. 135. Crimping groove missing

No. 136. Burr



- | | |
|--|-----------------|
| A. Missing | (Nonacceptable) |
| B. Bare spot | (Nonacceptable) |
| C. Blistered | (Nonacceptable) |
| D. Scaly | (Nonacceptable) |
| E. Spotty | (Nonacceptable) |
| F. Spotty | (Acceptable) |
| G. Cut, nick, scratch or score (basis metal exposed) | (Nonacceptable) |
| H. Scratch, dent (basis metal not exposed) | (Acceptable) |



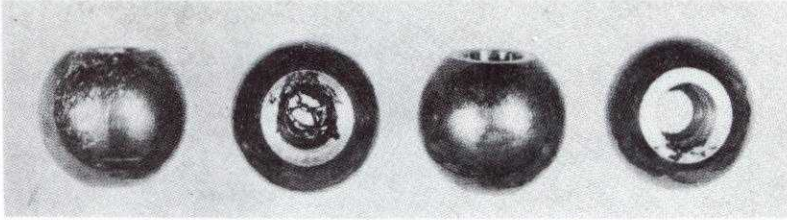
- | | |
|--------------------------|-----------------|
| A. Dent, crimping lip | (Nonacceptable) |
| B. Dent, or nick, flange | (Nonacceptable) |
| C. Scratch, score | (Nonacceptable) |
| D. Crushed thread | (Nonacceptable) |
| E. Dent, crimping lip | (Acceptable) |
| F. Cut or nick, flange | (Acceptable) |
| G. Scratch, score | (Acceptable) |
| H. Crushed thread | (Nonacceptable) |

No. 137. Protective coating damaged or missing

No. 138. Damaged

No. 139. Finish, except spherical surface (not illustrated—refer to drawing)

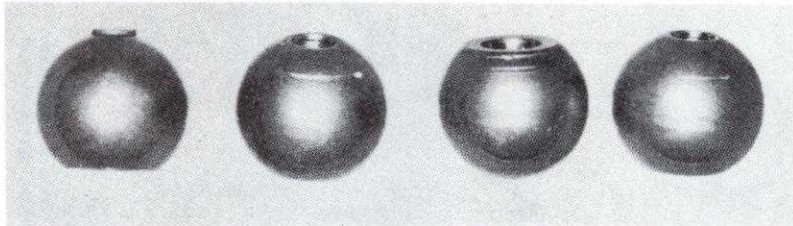
No. 140. Finish (not illustrated—refer to drawing)



A B C D
[..... Nonacceptable]]

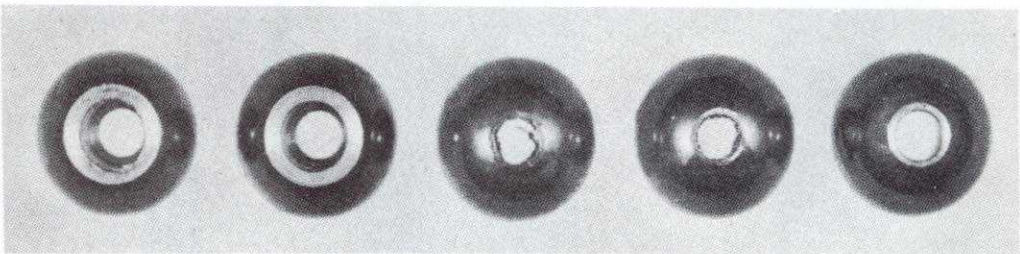
- A. Oil or grease
- B. Dirt, chips
- C. Dirt (exterior)
- D. Dirt (interior)

No. 141. Foreign matter



[..... Nonacceptable] [..... Acceptable]]

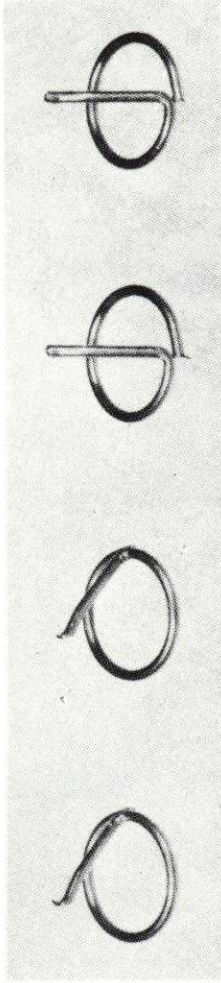
No. 142. Burr, above spherical surface
(Superficial scratch without burr is acceptable)



A B C D E
[..... Nonacceptable] [..... Normal] [..... Nonacceptable] [..... Normal]]

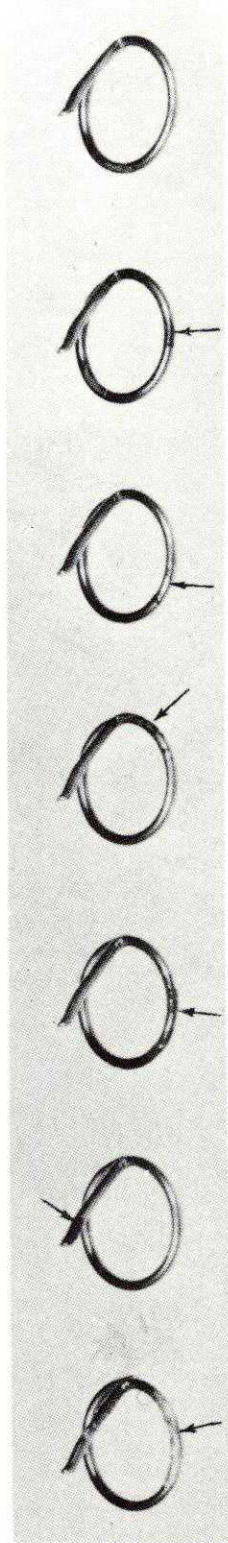
- A. Perimeter of cavity
- B. Normal
- C. Perimeter of vent
- D. Bottom of vent
- E. Normal

No. 143. Burr, except above spherical surface



[..... Nonacceptable] [..... Acceptable]

No. 144. Burrs



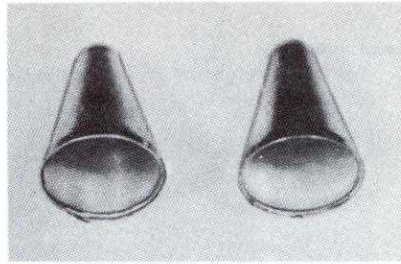
A [..... Nonacceptable] B [..... Acceptable] C [..... Nonacceptable] D [..... Nonacceptable] E [..... Acceptable] F [..... Nonacceptable] G [..... Acceptable]

- A. Oil, grease, or corrosion
- B. Paint, varnish, lacquer, or shellac (angle end)
- C. Paint, varnish, lacquer, or shellac (radial portion)
- Will not impair correct spring seating

- D. Dirt
- E. Dirt
- F. *Stain, discoloration
- G. Stain, discoloration

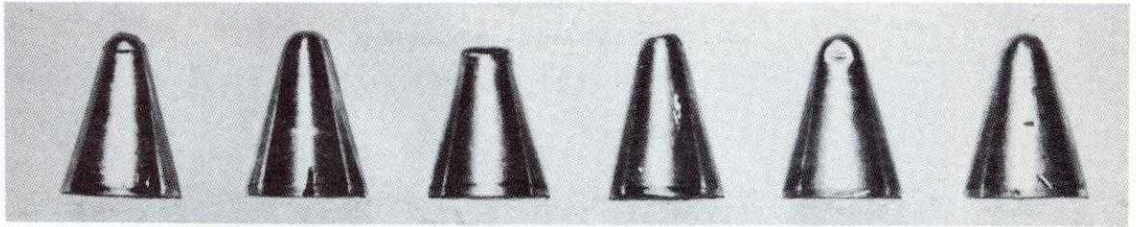
*(See 3.2.3)

No. 145. Foreign matter



[... Nonacceptable ...] [... Acceptable ...]

No. 146. Burrs

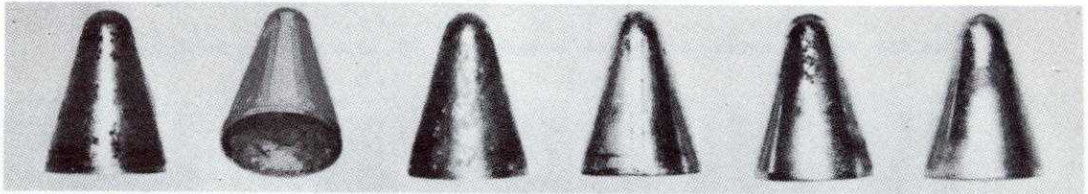


A B C D E F

[..... Nonacceptable]

- | | |
|------------|-----------------|
| A. Cracked | D. Bent, dented |
| B. Split | E. Dented |
| C. Crushed | F. Dented, cut |

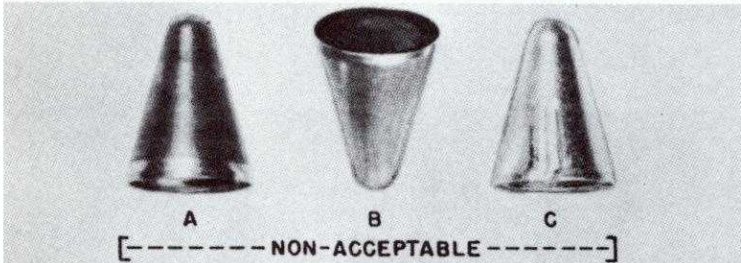
No. 147. Cracked, split, or deformed



A B C D E F

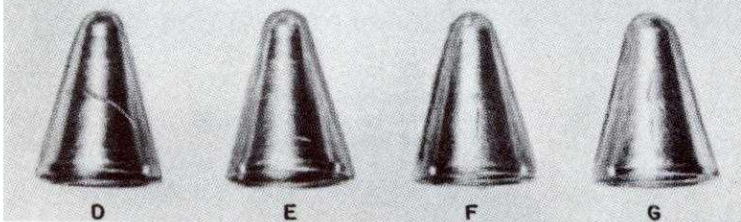
- | | | | |
|-------------------------|-----------------|------------------------|-----------------|
| A. Corrosion (exterior) | (Nonacceptable) | D. Dirty, discolored | (Acceptable) |
| B. Corrosion (interior) | (Nonacceptable) | E. *Stained | (Nonacceptable) |
| C. Dirty, discolored | (Nonacceptable) | F. Stained, discolored | (Acceptable) |

No. 148. Foreign matter *(See 3.2.3)



A B C

- A. Missing, partial or complete
- B. Missing, partial or complete
- C. Scored (basis metal exposed)
- D. Cut (basis metal exposed)
- E. Cut (basis metal not exposed)
- F. Scratch (basis metal exposed)
- G. Scratch (basis metal not exposed)



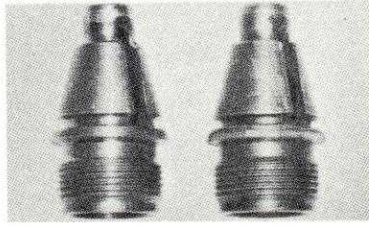
D E F G

No. 149. Protective coating or cladding damaged or missing

[... Nonacceptable ...] [... Acceptable ...] [... Nonacceptable ...] [... Acceptable ...]

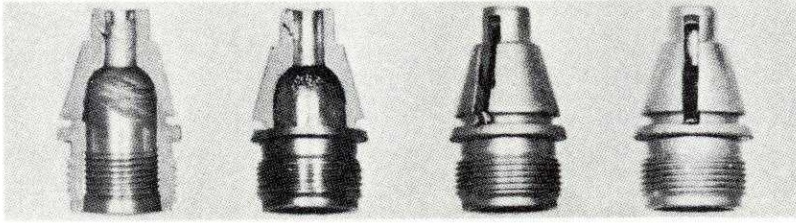
No. 150. Finish, except firing pin hole and rotor seat

(Not illustrated—refer to Drawing)



[-----Nonacceptable-----]

No. 151. Knurl missing or incomplete

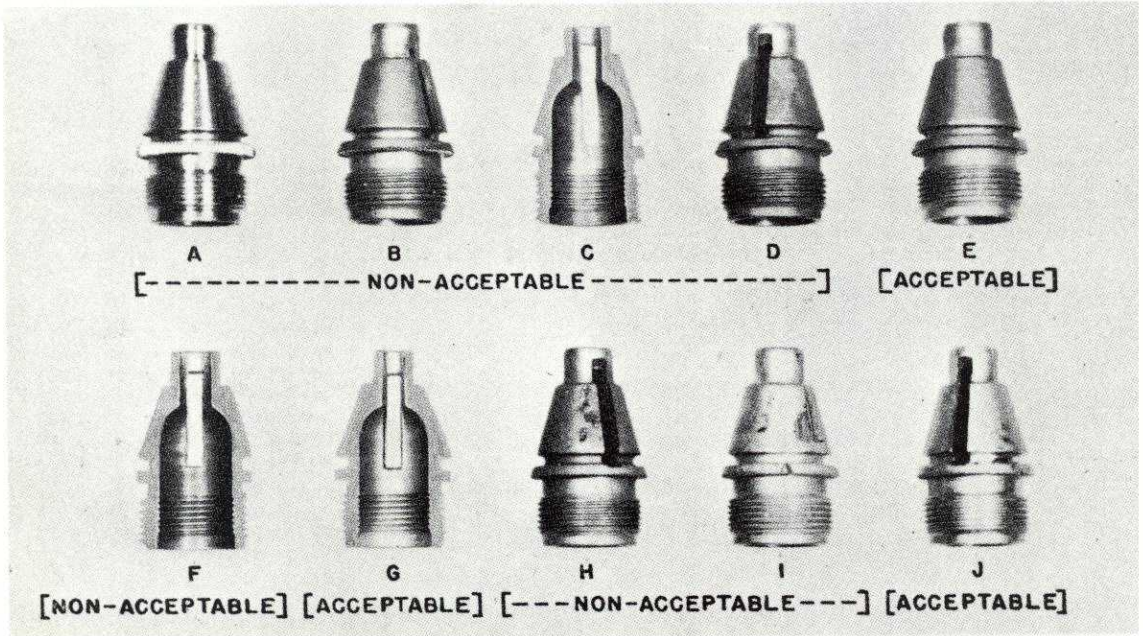


A B C D

[-----Nonacceptable-----]

- A. Corrosion (either surface)
- B. Dirt, or chips (rotor seat)
- C. Dirt, or chips (spring slot walls)
- D. Dirt, or chips (spring slot ends)

No. 152. Foreign matter in rotor seat or spring slot (Oil, or grease, not illustrated)

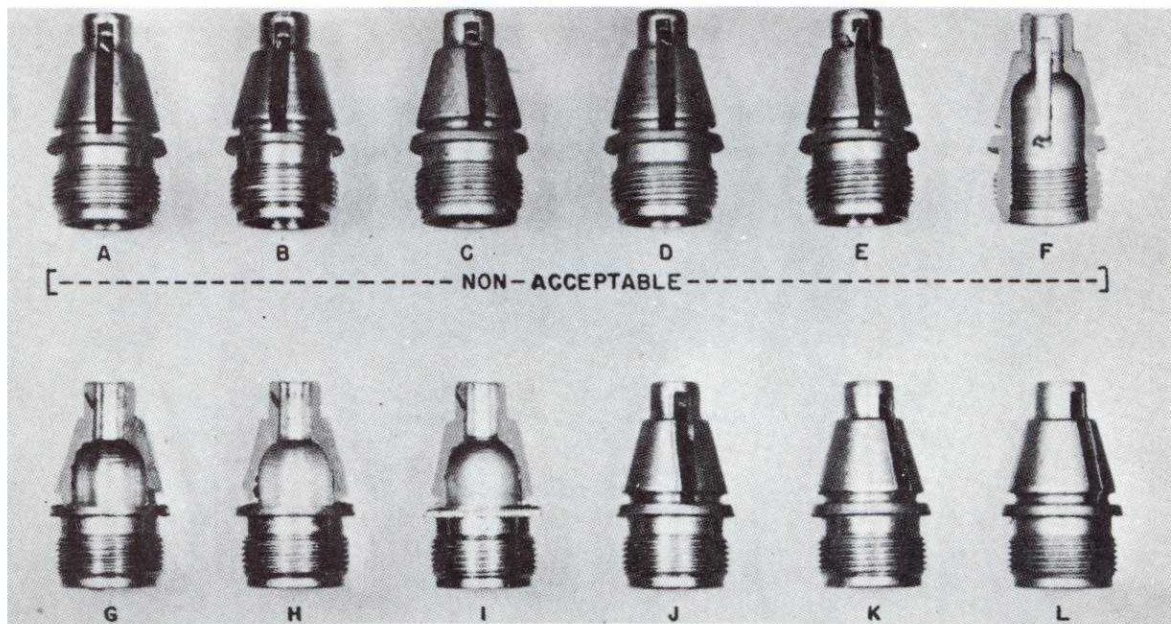


A B C D E
[-----NON-ACCEPTABLE-----] [ACCEPTABLE]

F G H I J
[NON-ACCEPTABLE] [ACCEPTABLE] [---NON-ACCEPTABLE---] [ACCEPTABLE]

- A. Missing (complete)
- B. Missing (partial, exterior)
- C. Missing (partial, interior)
- D. Porous or bare spot (exterior)
- E. Porous spot (exterior)
- F. Porous spot (interior)
- G. Porous or bare spot (interior)
- H. Blistered (any surface)
- I. Cut, dented, scored (basis metal exposed)
- J. Dented, scratched (basis metal not exposed)

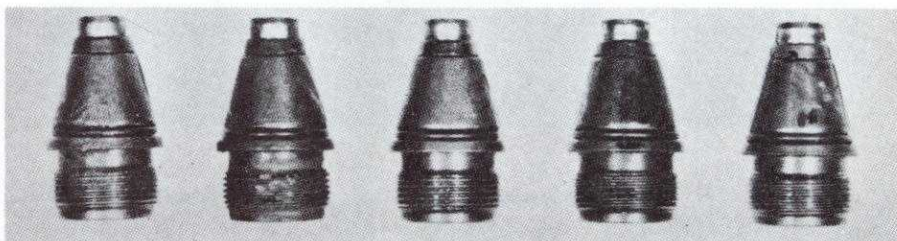
No. 153. Protective coating damaged or missing



[..... Nonacceptable] [..... Acceptable] [..... Nonacceptable.....] [..... Acceptable.....] [..... Normal.....]

- A, B, C, D, and E. Spring slot, top
- F. Spring slot, bottom
- G, H, and I. Spring slot, inside edges
- J and K. Spring slot, outside edges
- L. Spring slot, normal

No. 154. Burr

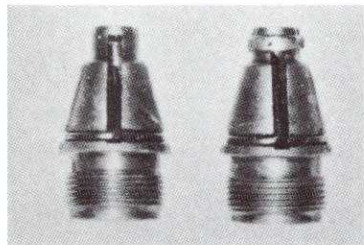


A B C D E

[..... Nonacceptable] [..... Acceptable.....]

- A. Oil or grease
- B. Corrosion
- C. Dirt, chips (threads)
- D. Dirt (exterior)
- E. Dirt (exterior)

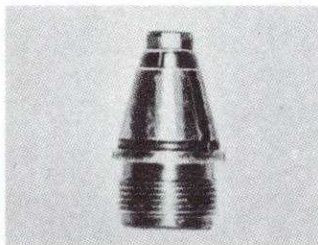
No. 155. Foreign matter



A B

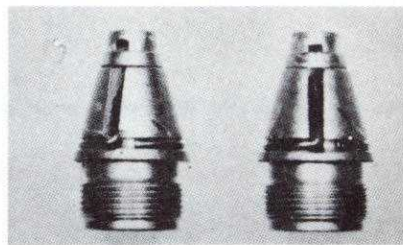
- A. Missing
- B. Loose (manual, or indicated by incorrect seating)

No. 156. Loose or missing rotor safety spring retainer



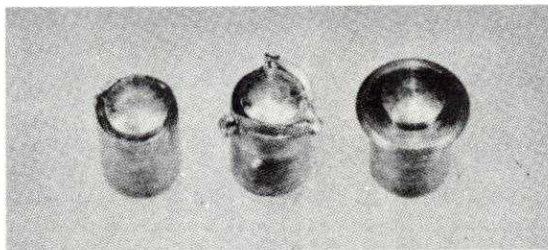
[..... Nonacceptable.....]

No. 157. Crack in rotor safety spring retainer



[..... Acceptable.....]

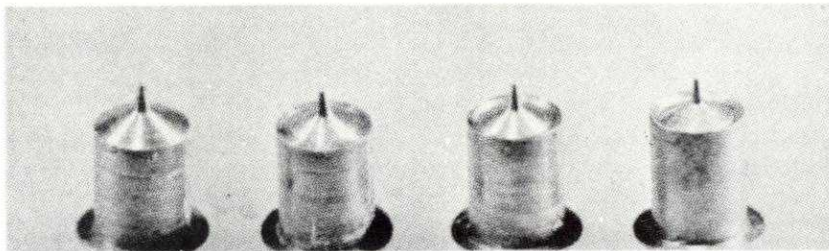
No. 158. Burr (Defect shown results from parts assembly)



A B C
[..... Nonacceptable] [..... Normal.....]

- A. Missing
- B. Distorted, or incomplete
- C. Normal

No. 159. Flange missing



A B C D
[..... Nonacceptable] [..... Normal.....]

- A. Missing
- B. Missing
- C. Improper (short height)
- D. Normal

No. 160. Arming spring locking shoulder missing or improper

No. 161. Finish (Not illustrated—refer to drawing)

LIST OF DEFECTS

DETONATOR, STAB, M57

Detonator Cup

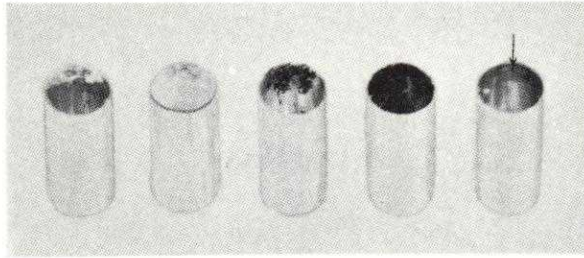
No.		Page
162.	Foreign matter inside	88
163.	Outside radius, base end	88
164.	Metal defective	88
165.	Burr inside	88
166.	Burr, other than inside	88

Detonator Assembly Prior to Application of Lacquer

167.	Disc missing	89
168.	Burr	89
169.	Disc wrinkled with a definite fold	89
170.	Crimp turnover at any point less than 1/2 of turnover at widest point	89
171.	Explosive exposed or on exterior	89
172.	Metal defective	89
173.	Distorted	90
174.	Crimp not pressed firmly on inner edge for 360 degrees	90

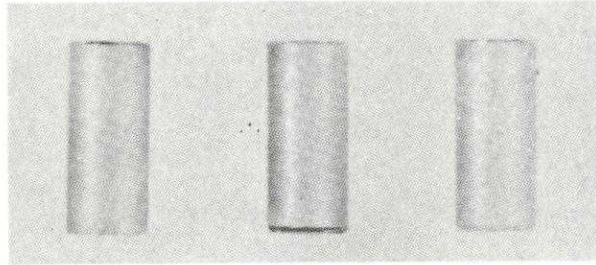
Detonator Assembly After Application of Lacquer

175.	Lacquer on diameter	90
176.	Identification color missing or incorrect	90
177.	Detonator distorted	90



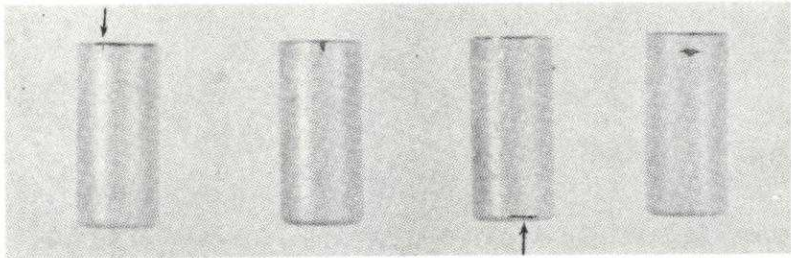
- | | | | |
|-------------------|-------------------------------------|--------------------------|-----------------|
| A. Oil, or grease | (Nonacceptable) | C. Dirt, chips | (Nonacceptable) |
| B. Corrosion | (Nonacceptable) | D. *Stain, discoloration | (Nonacceptable) |
| | E. Discoloration (trace acceptable) | | |

No. 162. Foreign matter inside *(See 3.2.3)



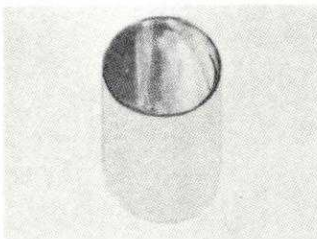
- | |
|--|
| [..... Nonacceptable] [..... Normal] |
| A. Radius missing B. Radius excessive C. Radius normal |

No. 163. Outside radius, base end



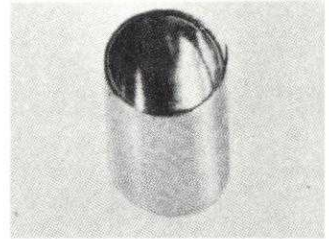
- | |
|--|
| [..... Nonacceptable] [..... Nonacceptable] |
| A. Crack B. Split C. Rupture D. Perforation |

No. 164. Metal defective



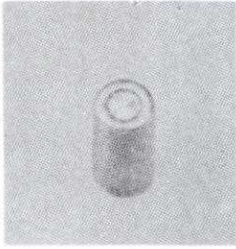
[..... Nonacceptable] [..... Nonacceptable]

No. 165. Burr inside
(Primer end not illustrated)



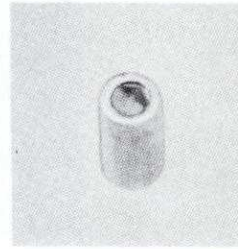
[..... Nonacceptable] [..... Nonacceptable]

No. 166. Burr, other than inside
(Primer end not illustrated)



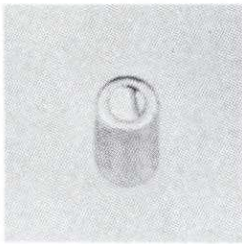
[..... Nonacceptable]

No. 167. Disc missing
(Compare with No. 168 for normal appearance of disc)



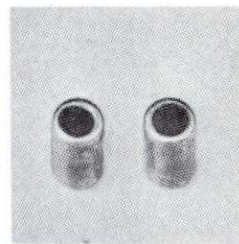
[..... Nonacceptable]

No. 168. Burr



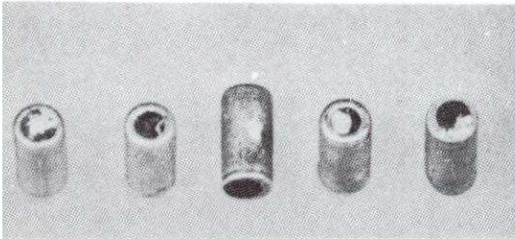
[..... Nonacceptable]

No. 169. Disc wrinkled with a definite fold



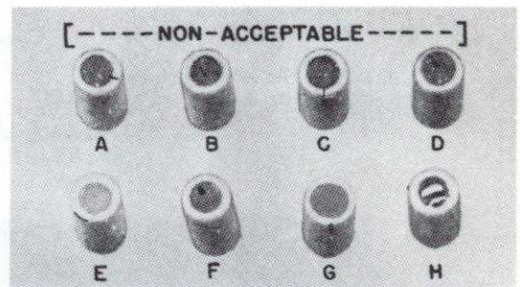
[..... Nonacceptable] [..... Acceptable]

No. 170. Crimp turnover at any point less than 1/2 of turnover at widest point



[..... Nonacceptable]

No. 171. Explosive exposed or on exterior

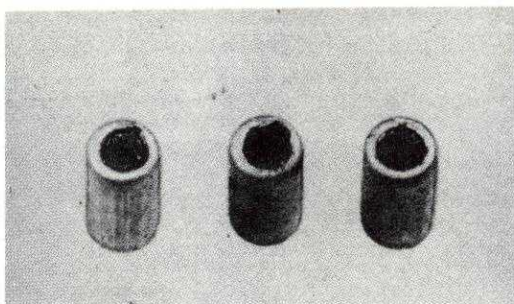


[..... Nonacceptable]

- A. Crack in cup
- B. Crack in disc
- C. Split in cup
- D. Split in disc
- E. Rupture in cup
- F. Rupture in disc
- G. Perforation in cup
- H. Perforation in disc

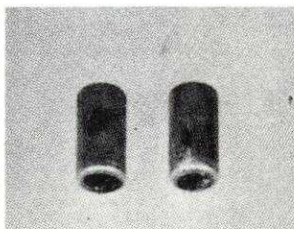
No. 172. Metal defective

No. 173. Distorted (For comparison refer to illustration No. 177)



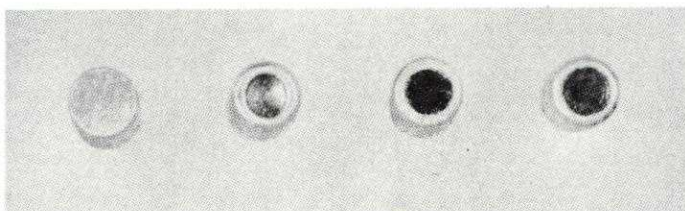
[..... Nonacceptable.....]

No. 174. Crimp not pressed firmly on inner edge for 360 degrees



[..... Nonacceptable.....]

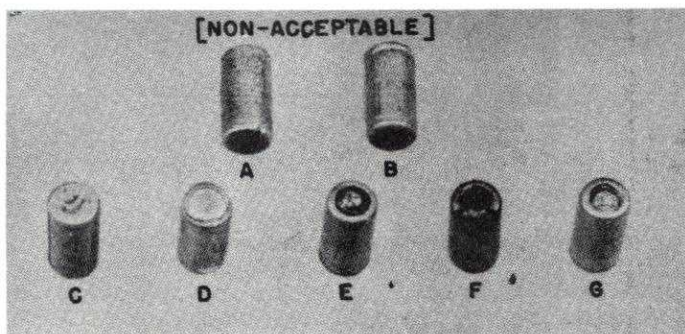
No. 175. Lacquer on diameter



[..... Nonacceptable.....]

- A. Color code missing (base end)
- B. Color code missing (crimped end)
- C. Incorrect (base end green)
- D. Incorrect (crimped end red)

No. 176. Identification color missing or incorrect (Closed end cup, only, illustrated)



[..... Nonacceptable.....]

- A. Dent shoulder
- B. Buckled
- C. Pitted, or dimpled base (solid end cup)
- D. Base Countersunk
- E. Disc protrudes above outer surface of cup
- F. Crushed
- G. Dent, crimp area

No. 177. Detonator distorted (Closed end cup, only, illustrated) (Conditions of type E are to be verified by measurement)

LIST OF DEFECTS

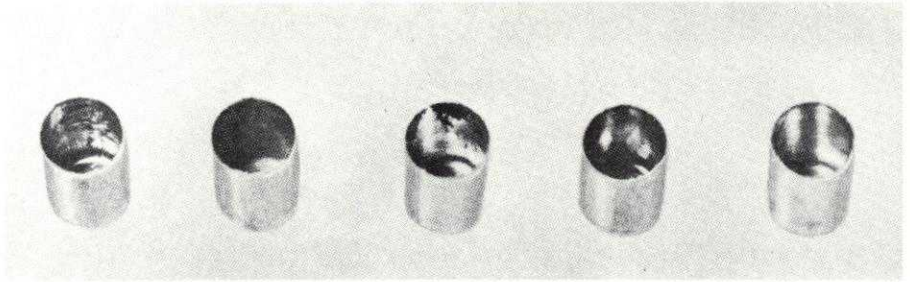
BOOSTER, M123

Booster Cup

No.	Page
178. Foreign matter inside	92

Booster Assembly

179. Explosive exposed or on exterior	92
180. Metal defective	92
181. Disc missing	93
182. Identification color missing or misplaced	93
183. Crimp_not pressed firmly on inner edge for 360 degrees	- 93

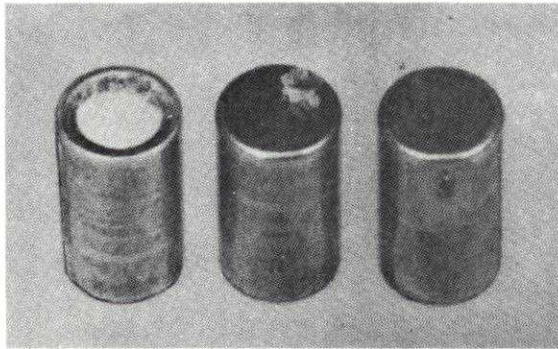


A B C D E

[..... Nonacceptable] [..... Acceptable]

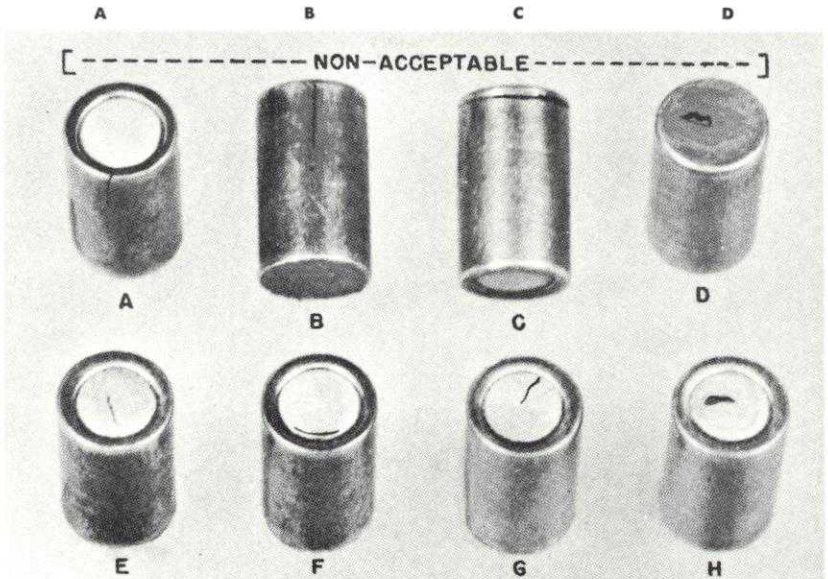
- A. Oil, or grease
- B. Corrosion
- C. Dirt, chips, slivers
- D. *Stain, discoloration
- E. Discoloration (trace)

No. 178. Foreign matter inside *(See 3.2.3)



[..... Nonacceptable]

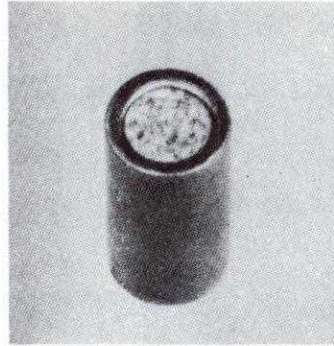
No. 179. Explosive exposed, or on exterior



[..... Nonacceptable]

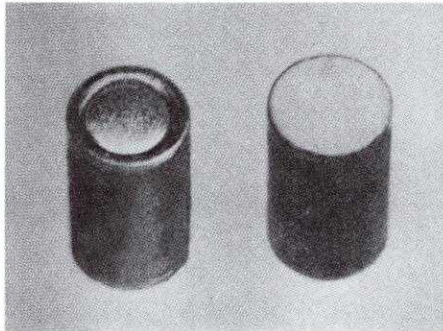
- A. Crack in cup
- B. Split in cup
- C. Rupture in cup
- D. Perforation in cup
- E. Crack in disc
- F. Split in disc
- G. Rupture in disc
- H. Perforation in disc

No. 180. Metal defective



[..... Nonacceptable]

No. 181. Disc missing

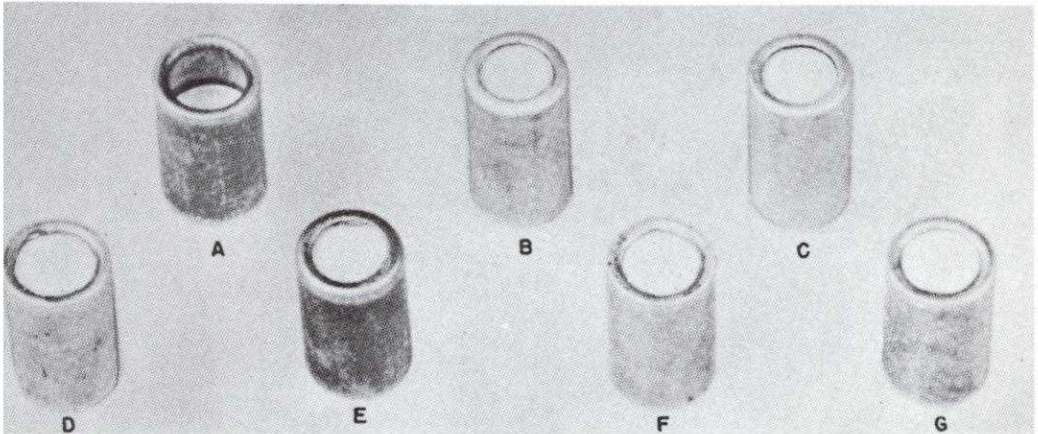


A B

[..... Nonacceptable]

- A. Identification color missing
- B. Identification color on closed end

No. 182. Identification color missing or misplaced



- | | |
|-------------------------------------|-----------------|
| A. Low charge | (Nonacceptable) |
| B. Cocked crimp | (Nonacceptable) |
| C. Crimp incomplete | (Nonacceptable) |
| D. Disc edge exposed | (Nonacceptable) |
| E. Trapped sliver | (Nonacceptable) |
| F. Crimp tight, but not symmetrical | (Acceptable) |
| G. Normal | |

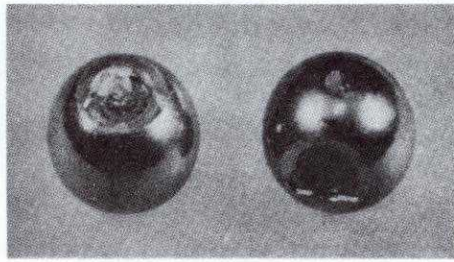
No. 183. Crimp not pressed firmly on inner edge for 360 degrees

LIST OF DEFECTS

FUZE, PD, M505, LOADING AND ASSEMBLY (Closed end detonator cup illustrated; however, standards also are applicable to open end cup)

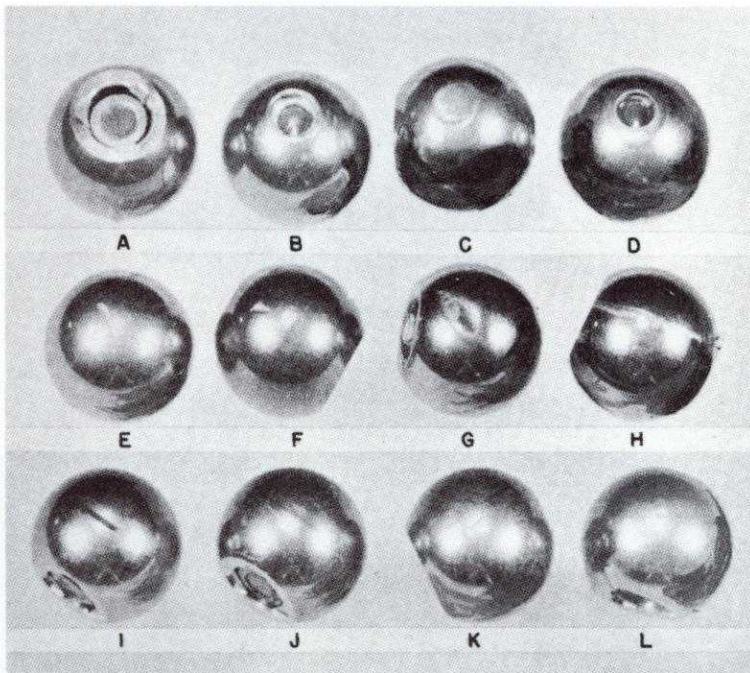
Rotor Assembly

No.	Page
184. Sealant on sensitive end of detonator, or on exterior surface of rotor	95
185. Spherical surface of rotor distorted	95
186. Detonator stake missing or improper	96
187. Detonator missing	96
188. Detonator inverted	96
189. Detonator disc or base ruptured	96



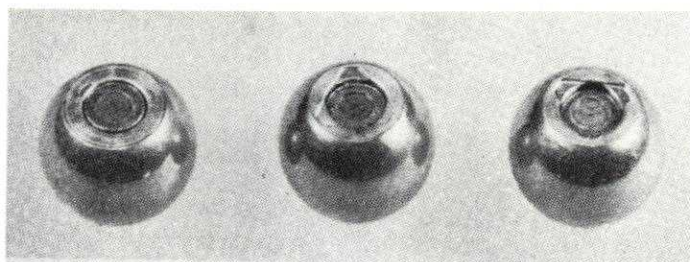
[.....Nonacceptable.....]

No. 184. Sealant on sensitive end of detonator, or on exterior surface of rotor



- | | | | |
|---------------------------------|-----------------|------------------|-----------------|
| A. Symetrical deformity | (Nonacceptable) | G. Fold | (Nonacceptable) |
| B. Symetrical deformity | (Nonacceptable) | H. Score | (Nonacceptable) |
| C. Flat spot | (Nonacceptable) | I. Chucking flat | (Nonacceptable) |
| D. Burr above spherical surface | (Nonacceptable) | J. Chucking flat | (Acceptable) |
| E. Cut | (Nonacceptable) | K. Nick | (Nonacceptable) |
| F. Dent | (Nonacceptable) | L. Dent | (Acceptable) |

No. 185. Spherical surface of rotor distorted



A

B

C

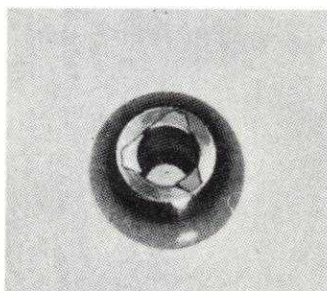
[..... Nonacceptable] [..... Normal]

A. Stake missing

B. Stake shallow (ineffective)

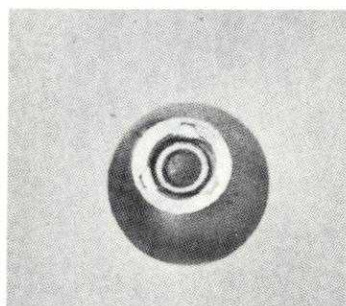
C. Stake normal

No. 186. Detonator stake missing or improper



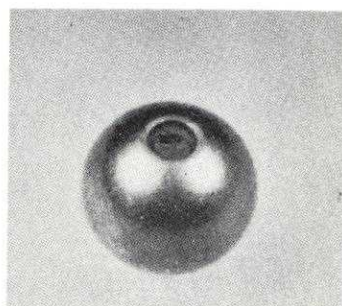
[..... Nonacceptable]

No. 187. Detonator missing



[..... Nonacceptable]

**No. 188. Detonator inverted
(Solid end detonator cup)**



[..... Nonacceptable]

**No. 189. Detonator disc or base ruptured
(Ruptured base, solid end detonator cup,
not illustrated)**

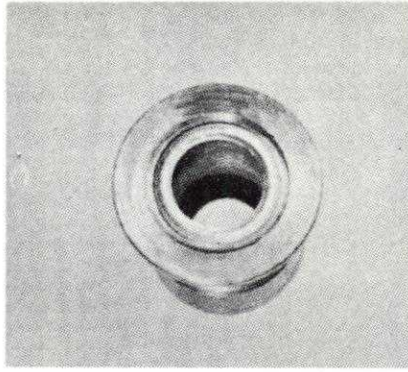
LIST OF DEFECTS

FUZE, PD, M505, LOADING AND ASSEMBLY

BOOSTER HOLDER ASSEMBLY

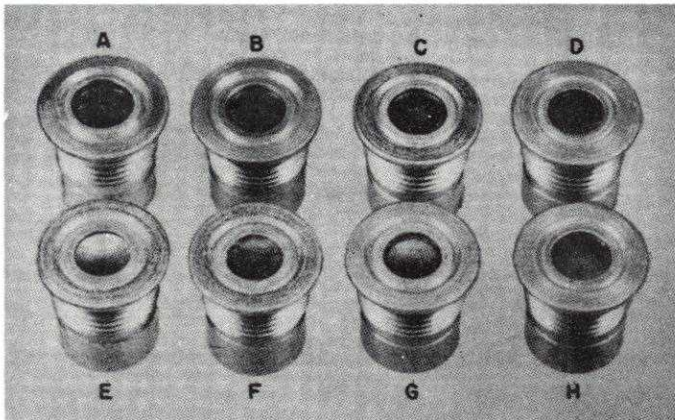
(Solid end, direct charged booster holder, not illustrated)

No.		Page
190.	Booster missing	98
191.	Crimp not full 360 degrees	98
192.	Distortion of rotor seat	98
193.	Booster inverted	98
194.	Booster disc or cup ruptured	99
195.	Foreign matter	99



[..... Nonacceptable]]

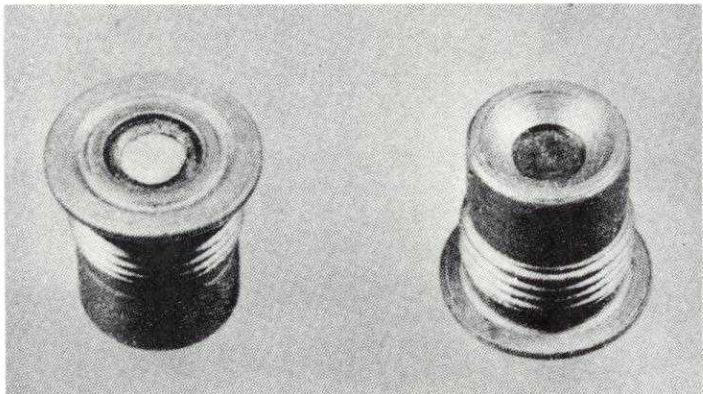
No. 190. Booster missing



A, B, C and D. Incomplete (Nonacceptable) (Crimp not tightly seated against booster)
E, F and G. Incomplete (Nonacceptable) (Pronounced concavity in base of booster)
H. Normal

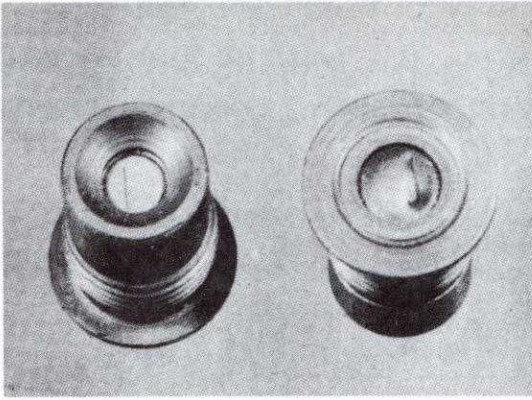
No. 191. Crimp not full 360 degrees

No. 192. Distortion of rotor seat (Nonacceptable) (not illustrated)



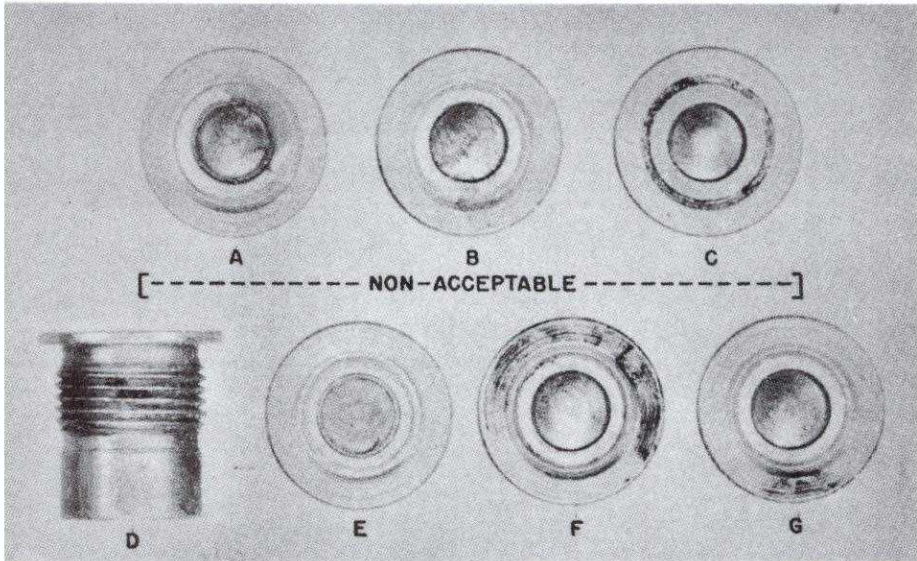
[..... Nonacceptable]]

No. 193. Booster inverted



[..... Nonacceptable]

No. 194. Booster disc or cup ruptured



[... Acceptable ...]

[..... Nonacceptable] [..... Acceptable]

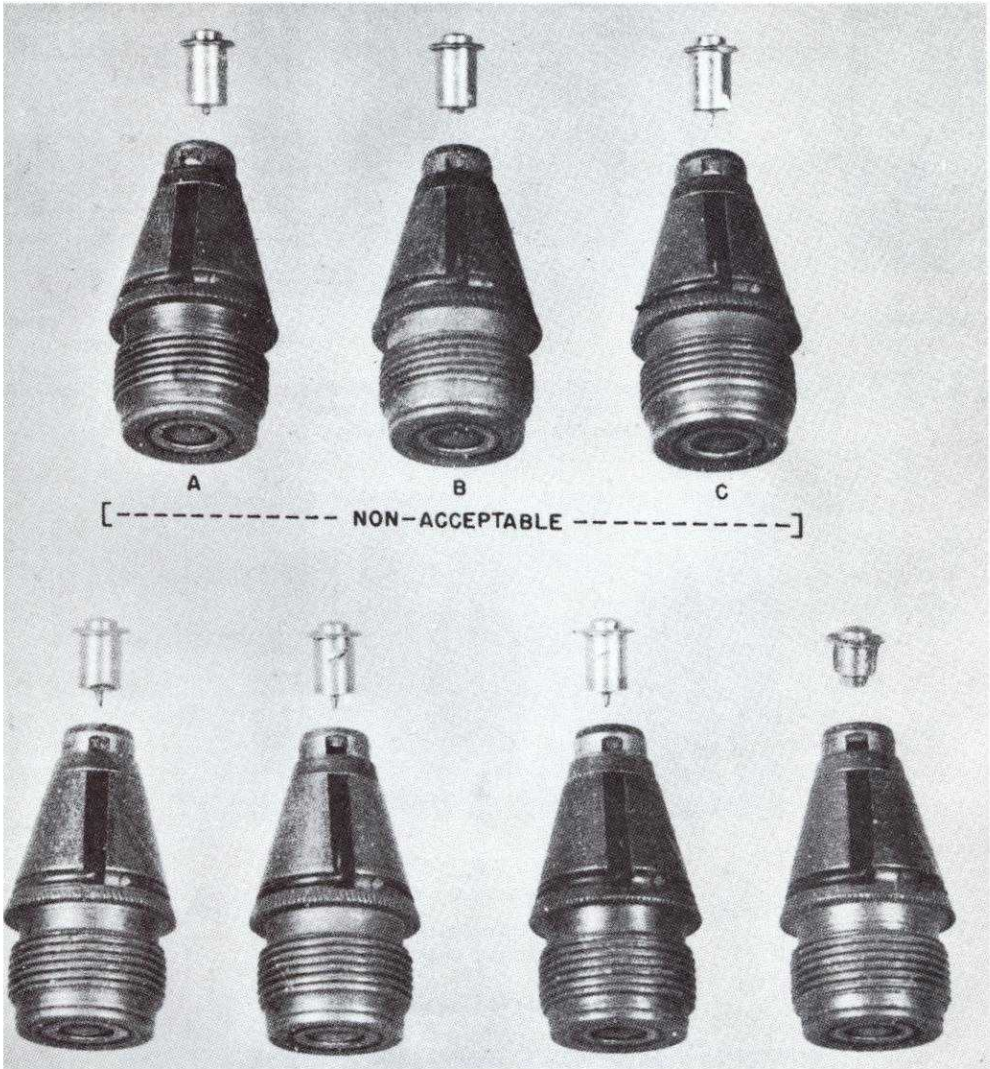
- A. Corrosion
- B. Oil, or grease
- C. Dirt
- D. Dirt
- *(See 3.2.3)

- E. Chips, slivers
- F. *Stain, discoloration
- G. Stain, discoloration

No. 195. Foreign matter

LIST OF DEFECTS**FUZE, PD, M505, LOADING AND ASSEMBLY
ASSEMBLY, PRIOR TO ASSEMBLY OF COVER**

No.		Page
196.	Firing pin damaged or improperly formed	101
197.	Firing pin missing	102
198.	Firing pin flange missing or incomplete	102
199.	Spring retainer missing	102
200.	Rotor improperly positioned	102
201.	Spring missing or distorted	102



[----- NON-ACCEPTABLE -----]

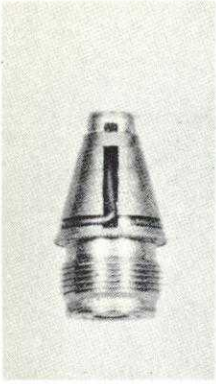
D
E
F
G
 Nonacceptable [... Acceptable ...] [..... Nonacceptable]

- A. Blunt point
- B. Point missing
- C. Deformed flange or body

- D. Deformed locking shoulder
- E. Cut, or scratch
- F. Cut, or scratch

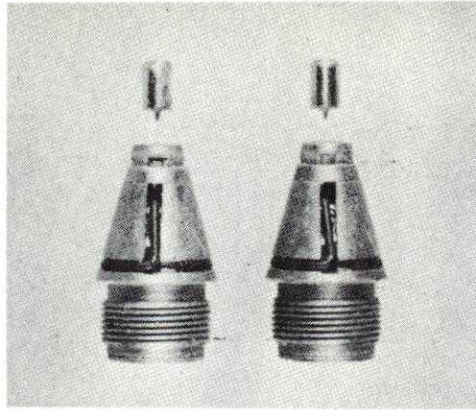
G. Improperly formed

No. 196. Firing pin damaged or improperly formed



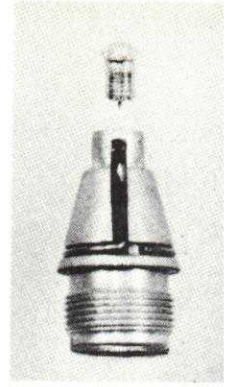
[.. Nonacceptable ..]

No. 197. Firing pin missing



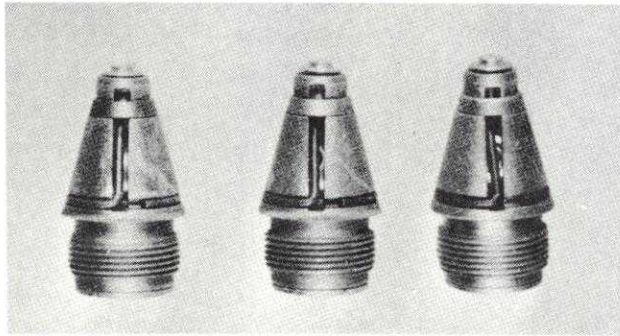
[..... Nonacceptable

No. 198. Firing pin flange missing or incomplete (refer to illustration No. 159 for incomplete flange)



[.. Nonacceptable ..]

No. 199. Spring retainer missing

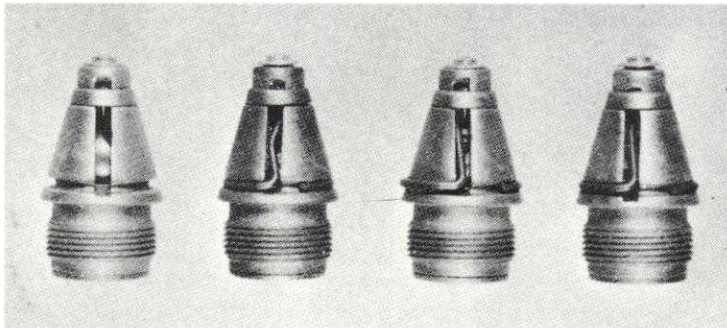


A B C

[..... Nonacceptable.....] [..... Normal.....]

A and B. Improperly positioned
C. Properly positioned

No. 200. Rotor improperly positioned



A B C D

[..... Nonacceptable.....]

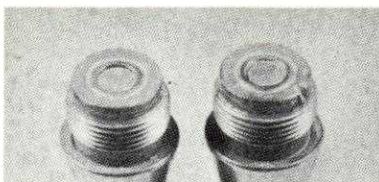
A. Spring missing
B, C and D. Spring distorted
No. 201. Spring missing or distorted

LIST OF DEFECTS

FUZE, PD, M505, LOADING AND ASSEMBLY

Assembly

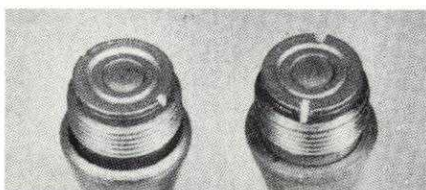
No.	Page
202. Booster holder stake mark(s) missing	104
203. Cover crimp not full 360 degrees	104
204. Plating rusted or discolored	104
205. External thread damaged	104
206. Sealing missing or improper	105
207. Cracked, split, or deformed cover	105



A B
[..... Nonacceptable.....]

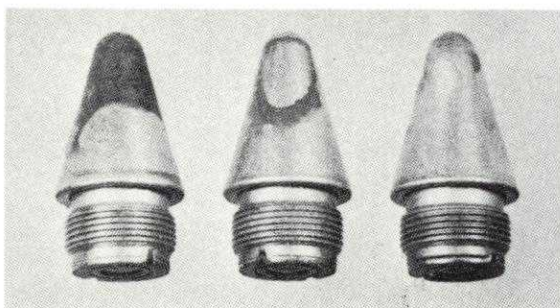
A. Both marks missing
B. One mark missing

No. 202. Booster holder stake mark(s) missing



[..... Nonacceptable.....] [..... Normal.....]

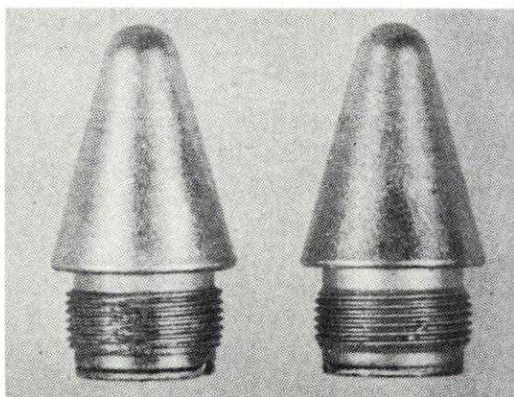
No. 203. Cover crimp not full 360 degrees



A B C
[..... Nonacceptable.....] [..... Acceptable.....]

A. Rusted B. Discolored C. Discolored

No. 204. Planting rusted or discolored

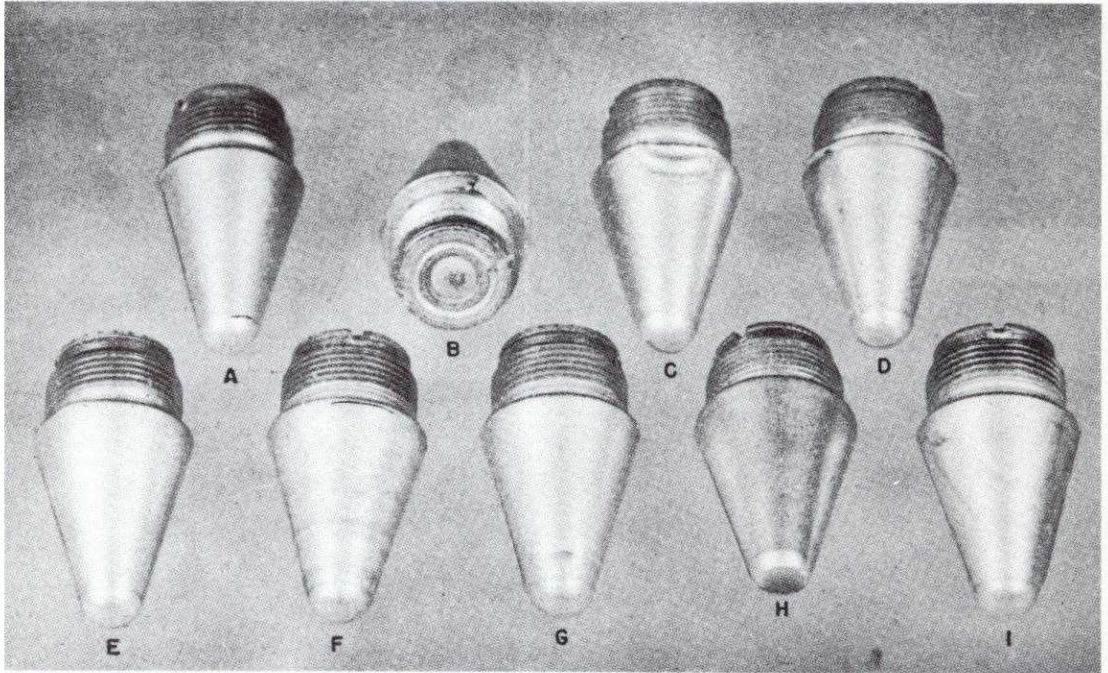


A B
[..... Nonacceptable.....] [..... Acceptable.....]

A. Will not accept "Go" thread gage
B. Will accept "Go" thread gage

No. 205. External thread damaged

No. 206. Sealing missing or improper (Nonacceptable)
 (Not illustrated). (Sealant is required around the entire periphery of the cover crimp and on edges of two booster assembly stake marks to effect a moisture-proof seal)



- | | |
|---------------------------------|-----------------------|
| A. Cracked | E. Distorted shoulder |
| B. Split | F. Ruptured |
| C. Buckled | G. Perforated |
| D. Flanged at shoulder | H. Deformed apex |
| I. Wrinkled, or stretched metal | |

No. 207. Cracked, split, or deformed cover (Nonacceptable)
 (Superficial nicks or scratches not penetrating to the basis metal will be considered permissible)

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