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SB 742-1375-94-4

D E P A R T M E N T O F T H E A R M Y S U P P L Y B U L L E T I N

**I G N I T I O N C Y L I N D E R , P O R T A B L E F L A M E T H R O W E R ,
M 1 A M M U N I T I O N S U R V E I L L A N C E P R O C E D U R E**

**Headquarters, Department of the Army, Washington, D.C.
12 March 1973**

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1. Purpose and Scope. *a. Purpose.* This instruction when used in conjunction with SB 742-1 provides the method of determining the serviceability of the Ignition Cylinder, Portable Flame Thrower, M1.

b. Scope. The provisions of this instruction are mandatory for use in conducting surveillance on the Ignition Cylinder, Portable Flame Thrower, M1. This instruction is not intended for use by organizations with stocks in basic loads.

2. Applicable Documents. The following Government documents referenced herein form a part of this bulletin to the extent specified.

SD 742-1-Ammunition Surveillance and Quality Evaluation Procedures.

TM 38--750--The Army Maintenance Management System.

TM 9-1300-206-Care, Handling, Preservation, and Destruction of Ammunition.

TM 3-1040-204-14-Operator's, Organizational, DS and GS, Maintenance Manual, Flame Thrower, Portable a M2A1-7.

TM 3-1040-257-12-Operator and Organizational, Maintenance Manual, Flame Thrower, Portable. M9E1-7.

3. Safety Procedures. The surveillance inspection and function testing must be conducted in accordance with the provisions set forth in appropriate fety regulations and implementing

instructions, with special attention devoted to technical manuals describing the material.

4. Surveillance. *a. Surveillance Interval.*

(1) *Initial receipt and prestorage inspection.* Initial receipt and prestorage inspection will be conducted in accordance with SB 742-1.

(2) *Periodic cycle.* Surveillance will be performed at periodic cycles of 2 years.

(3) *Preissue inspection.* Preissue inspection of the subject item will be performed in accordance with SB 742-1 and the provisions of paragraphs 5 and 6 of this bulletin when one half or less of the periodic cycle remains. A visual examination will be performed (in accordance with para 5 of this bulletin) on the subject item if more than one half of the periodic cycle remains prior to shipment of the item. If no initial cycle examination has been performed, a complete examination as specified in paragraphs 5 and 6 of this bulletin will be performed prior to shipment.

b. Basis of surveillance. Surveillance for the subject item will be conducted on the basis of manufacturer's or miscellaneous lots.

c. Formation of Surveillance Lots

(1) *Manufacturer's lot.* A manufacturer's lot consists of those items manufactured or assembled

*This bulletin supersedes SB 3-30-172 2 May 1957.

by one manufacturing or reconditioning activity and bearing the manufacturing or reconditioning agency's lot identification number.

(a) *Packing.* All item must have the same type packing and identification marking.

(b) *Storage.* All items must be stored under similar conditions at the same depot.

(c) *Serviceability lot status.* All lots must possess the same serviceability lot status; i.e., serviceability known (based upon prior surveillance) or serviceability unknown. However, when new procurement is involved, serviceability will be based upon acceptance inspection in lieu of prior surveillance.

(2) *Miscellaneous lot.* A Miscellaneous lot containing not more than 3,000 items, will be created by combining small manufacturer's lot or lot fragments possessing the same technical history; i.e., manufactured by the same technical procedure (indicated by the same lot series number).

(a) *Kind, type and model.* All items must be of the same kind, type and mode.; i.e, Ignition Cylinder, Portable Flame Thrower, M1.

(b) *Manufacturer.* Each small lot or lot fragment must be the product of the same manufacturing or reconditioning agency.

(c) *Time of fabrication.* All items must have been manufactured, fabricated, or reconditioned within a period of two years.

(d) *Packing.* All items must have the same type packing and identification marking.

(e) *Storage.* All items must be stored under similar conditions at the same depot.

(f) *Serviceability lot status.* All items must possess the same serviceability lot status; i.e., serviceability known (based upon prior surveillance) or serviceability unknown. However, when new procurement is involved, serviceability will be based upon acceptance inspection in lieu of prior surveillance.

d. *Sampling.* Sampling will It conducted as follows:

(1) *Containers.* A sample quantity of containers will be randomly selected as indicated in table 1 and a visual examination will be performed for packaging, packing, marking and preservation as specified in table 4 and SB 742-1.

(2) *End item.* From the sample obtained in 4d(1) a sample quantity of ignition cylinders will be randomly selected as indicated in table 1 and subjected to a visual examination ;is specified in table 2.

(3) *Cavities of the end item.* From the

sample obtained in 4d(2) a sample quantity of cavities (each cylinder contains 5 cavities) shall be selected as indicated in table 1 and subjected to the examination and test specified in table 3.

Table 1. Sampling Plan

Lot size	1	2	3	4	5	6	7	8
Up to 200	23	0	2	*	*	—	—	0
201 to 800	23	0	2	23	46	1	7	0
801 to 1500	38	1	5	38	76	2	13	0
1501 to 3000	51	2	8	51	102	3	18	0
3001 and over	65	3	11	65	130	4	23	0

Explanation of columns and symbols:

*Single sampling only for this lot size where sample size exceeds lot size do 100% inspection.

1 First sample size—Visual and test

2 Acceptance Number—Major defective *1st sample)

3 Acceptance Number—Minor defective (1st sample)

4 Second sample size—Visual test

5 Combined sample size—(1st and 2nd combined

5 Combined sample size—(1st and 2nd combined

6 Acceptance Number—Major defective—combined samples

7 Acceptance Number—Major defective—combined samples

8 Acceptance Number—Critical defective

(4) *Second sample size.* When the number of major defective exceeds the quantity specified in column 2, but does not exceed the quantity specified in column 6, a second sample equal in size to that specified in column 4, will be taken, and the acceptance number specified in column 6 will be used for acceptance. A second sample is never taken for minor defectives alone When the number of minor defectives exceeds that of column 3, but does not exceed that of column 7 the lot will be considered serviceable. However, should a second sample be required due to major defectives, the minor defectives will be counted and reported in accordance with section 7. Column 7 will be the acceptance number for minor defectives.

(5) *Combined sample size.* When the surveillance interval has been exceeded by 25 percent, or when the approximate date of the last inspection is unknown, the combined sample plan specified in columns 5, 6, and 7 will be used.

(6) *Critical defects.* Lots containing a critical defect will be immediately suspended from issue and use.

(7) *Visual examination.* Only a visual examination of packing for a new or reprocessed unit upon receipt at a depot storage area is required. If used units are received unprocessed at a storage area, a complete visual and functional examination shall be performed in accordance with the instructions contained in this bulletin when reprocessing and repacking.

e. *Testing.* Depots that do not possess testing and/or laboratory facilities will report material in accordance with the requirements of paragraph 7b.

5. Inspection. *a. Visual Examination.* The sample will be examined for defects listed in 5b and SB 742-1.

b. Classification of Defects. Refer to tables 2, 3, and SB 742-1 for classification of defects. Defects other than those listed in these tables and SB 742-1 will be reported. Serviceability will be withheld pending investigation by Commanding Officer, Edgewood Arsenal, ATTN: SMUEA-PA-PQ, Edgewood Arsenal, MD 21010, to determine proper defect category into which the unlisted defect belongs.

WARNING
Ignition cylinders contain hazardous incendiary material and must be handled with due care. Pressure or shock on any of the five metal

matches projecting from cylinder body may ignite an incendiary charge. When handling, hold cylinder by sides never by ends. Do not open cans containing cylinders until ready to inspect or test. Defective or damaged cylinders should be destroyed in accordance with TM 3-1040204-14 or TM 3-1040-257-12 and approved standing operating procedures.

Table 2. Ignition Cylinder, Portable Flame Thrower, M1 (Drawing D81-1-454)

Categories	Defect	Inspection Methods
Critical:	As defined in SB 742-1	Visual
Major :		
101	Match pin extending beyond edge of cylinder	Visual
102	Closure plate damaged	Visual
103	Plastic body cracked or broken	Visual
Others	As defined in SB 742-1	
Minor:	As defined in SB 742-1	

Table 3. Cavities of Ignition Cylinder, Porter Flame Thrower, M1

Categories	Defect	Inspection Methods
critical:	None defined	
Major :		
104	Match pin net protruding from body of the cylinder	Visual
105	Functioning	Paragraph 6
Minor:	None defined	

Table 4. Packaging, Packing, Marking and Preservation

Categories	Defect	Inspection Methods
Critical.		
1	Ignition cylinders packed in container with match pins not facing each other	Visual
Major:	As defined in SB 742-1	Visual
Minor:	As defined in SB 742-1	Visual

6. Functional Test

WARNING
Ignition cylinders contain hazardous incendiary material and must be handled with due care. Pressure or shock on any of the five metal matches projecting from the cylinder body may ignite an incendiary charge.

When handling, hold cylinder by sides never by ends. Do not point discharge end of cylinder toward any portion of the body or nearby personnel. Do not open cans containing cylinders until ready to inspect or test. Defective or damaged

cylinders should be destroyed in accordance with TM 3-1040-257-12 and approved standing operating procedures.

a. Requirements. Each of the cavities of the cylinder shall burn for not less than 6 seconds nor more than 15 seconds and no two cavities of the cylinder shall ignite simultaneously.

b. Equipment Required.

(1) Gun, Portable Flame Thrower, M7, FSN 1040-347-2411

(2) Stopwatch

c. Procedure. Required sample quantity of cavities as indicated in paragraph 4d(3), which have been subjected to the visual inspection of section 5 and are deemed serviceable shall be tested as follows: Load ignition cylinder into an M7 portable flame thrower gun in accordance with procedure described in TM 3-1040-204-14 or TM 3-1040-257-12. Fire the cylinder by vigorously pulling the trigger. The burning time for ignition of a cavity shall be measured from the time the first flame appears to the time that the burning of the incendiary charge is completed. The burning of residuals or nonincendiary components should not be considered in the measurement of the burning time. Allow the gun to cool after firing each cylinder. After every fourth cylinder tested, remove shield and clean interior of the shield and ignition head with a wire brush. Clean holes in shield with a wire or wooden splint, oil spring case and firing pin with a light oil.

7. Documentation. *a. Report Form.* When reporting data, the following forms will be used
DA Form 984—Munitions Surveillance Report
DA Form 986—Data Sheet for Grand Lots, Miscellaneous

Lots or Depot Late

DA Form 2415—Ammunition Condition Report

DA Form 2028—Recommended Changes DA Publication

b. Reporting.

(1) *Data.* When reporting data, forms specified in 7a will be prepared in accordance with instructions contained in SB 742-1 and TM 38-750.

(2) *Submission.* Original and two copies of the reports that are required by this document will be forwarded to the Commanding General, US Army Ammunition Procurement and Supply Agency, ATTN: SMUAP-PA-S, Joliet, IL 60436

(3) *Critical defects report.* When a critical defect is found, it will be reported immediately to Commander US Army Ammunition Procurement and Supply Agency, ATTN: SMUAP-PA-S, Joliet, IL 60436. The incident will be reported via teletype, telephone, or letter stating the nomenclature, the lot number of the item involved and the defect encountered.

8. Special Instructions. *Errors or Omissions.* Comments regarding errors or omissions will be forwarded on DA Form 2028 to Commander, Edgewood Arsenal, ATTN: SMUEA-PA-PQ Edgewood Arsenal, MD 21010 and an information copy to the Commanding General, US Army Ammunition Procurement and Supply Agency, ATTN: SMUAP-PA-S, Joliet, IL 60436.

By Order of the Secretary of the Army:

Official:

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Major General, United States Army
The Adjutant General

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