

DEPARTMENT OF THE ARMY SUPPLY BULLETIN

**MINE, ANTIPERSONNEL: M26 With INTEGRAL FUZE
Ammunition Surveillance Procedures**

Headquarters, Department of the Army
13 March 1981

	Paraph	Page
Purpose and scope	1	1
Errors, omissions, and recommended changes	2	1
Safety	3	1
Personnel	4	1
Size of sample	5	1
Sample selection	6	1
Surveillance test equipment	7	1
Preparation for test	8	1
Test procedure	9	2
Observations	10	2
Classification of defects	11	2
Nonfunctioning defects	12	2
Functioning defects	13	2
Evaluation	14	3
Records and reports	15	3

1. Purpose and Scope. This bulletin when used in conjunction with SB 742-1 provides a method for determining the serviceability of the subject item. The bulletin is to be used in the assessment of the serviceability of individual mines only. The provisions of this bulletin are mandatory for use by all Department of the Army organizations within CONUS and OCONUS with a receipt, storage, and distribution mission. This bulletin is not intended for use by organizations with stocks in basic loads. Additional information pertaining to frequency of tests, sample selection, defect standards, reports and records are contained in SB 742-1.

2. Errors, Omissions, and Recommended Changes. Direct reporting of errors, omissions, and recommendations for improving this bulletin by the individual user is authorized and encouraged. DA Form 2028 (Recommended Changes to Publications and Blank Forms) will be completed and forwarded to Commander, ARRCOM, ATTN: DRSAR-QAS, Rock Island, IL 61299.

3. Safety. The surveillance function testing must be conducted in accordance with the provisions set forth in appropriate safety regulations and implementing instructions with special attention devoted to technical manuals describing the item.

4. Personnel. Function testing will be conducted under the supervision of a Quality Assurance Specialist (Ammunition Surveillance) herein after referred to as QASAS.

5. Size of Sample. The number of mines required to make up a representative sample from a lot for a surveillance function test is as follows:
For check investigation - as directed.
For classification investigation - 40
For confirmation investigation - as directed

6. Sample Selection. Sample mines will be selected in accordance with the provisions of SB 742-1 with the exception that no more than four samples may be selected from any box.

7. Surveillance Test Equipment. The following equipment is to be used in testing the M26 mine in accordance with the procedures described herein.

APE 1940	Fixture for Testing Mine, APERS: M16
APE 1940E001	Kit for Function Testing Mine, APERS: M16
APE 1937	Shelter, Personnel Protection
APE 1920	Shield, Operational

8. Preparation for Test. Number the sample mines 1 through 40 and identify them as to the box from which they were drawn.

This bulletin supersedes SB 742-1345-94-457, 29 July 1980.

9. Teat Prucedure. Using APE 1940E001 performed test in two parts as follows:

a. *Vertical Force.* Sample mines 1 through 20 will be tested in this phase. The spool assembly should be removed from each mine and the mine placed securely in the test fixture. Arm and function each mine remotely by passing the weight over the top of the mine in accordance with APE 1940E001 operators manual. The torque required to rotate the mine to arm shall be recorded. The functioning of the mine shall be observed visually. If the mine fails to function on the first attempt, a second weight shall be rolled over the mine. If the mine does not function on the second roll, it shall be considered a dud and should be destroyed as outlined in the APE Operators Manual and in accordance with local safety regulations.

b. *Pull Force.* Sample mines 21 through 40 will be tested in this phase. The sample mines may be placed in the same fixture as is used for the Vertical force phase. The trip lever shall be threaded into the cam on the cover assembly of the unarmed mine. The procedure as described in the APE 1940E001 Operators Manual should then be used to arm and function the mine remotely. The torque required to rotate the mine shall be recorded. The amount of pull force (to the nearest tenth of a kilogram) needed to function the mine shall be recorded. If the mine does not function after the required force has been exerted on the trip lever, it shall be considered to be a dud and shall be destroyed.

10. Observations All observations of nonstandard conditions and malfunctions, especially those not included among the defects listed in paragraph 12 and 13 below, shall be described in full detail. Pictorial evidence of nonstandard conditions, whenever pertinent and practical, shall be included. The observations to be reported are as follows:

- a. Torque required to rotate mine to the armed position (to the nearest tenth of a newton-meter).
- b. Pull force on trip lever (to the nearest tenth of a kilogram) required to function the mine. (Pull Force Phase).
- c. Number of wheels required to function the mine. (Vertical Force Phase).
- d. Height of burst above ground (to the nearest half of a meter).
- e. All instances of any of the following:
 - (1) In nonstandard marking; state whether misleading, incomplete or unidentifiable.
 - (2) Rust or corrosion; give location and extent.
 - (3) The occurrence of any of the nonstandard conditions or malfunctions classified as defects in paragraphs 12 and 13 below.

(4) The occurrence of any nonstandard conditions or malfunctions not classified as defects in paragraphs 12 and 13 below, but which in the opinion of the responsible personnel merits consideration.

11. Classification of Defects. Defects observed during inspection and testing will be classified in accordance with paragraphs 12 and 13 and SB 742-1. Any defects observed which are not listed in paragraphs 12 and 13 will be fully described and reported with the recommendation of the QASAS as to classification.

12. Nonfunctioning Defects. a. Critical.

(1) Cotter pin improperly assembled.

(2) Arming latch fingers not seated under cam flange.

b. *Major.*

(1) Arrow on cover ring not aligned with letter "S" on body.

(2) Any of the following missing or damaged to an extent which precludes the use of the mine.

(a) Coverlocking pin

(b) Trip lever

(c) Sealing plug

(d) Arming latch handle

(3) Marking misleading, incomplete, or unidentifiable.

(4) Major rust

(5) Major corrosion

c. *Minor.*

(1) Letter "A" and its recess in body not painted or color improper.

(2) Spool retainer missing.

(3) Spool assembly damaged.

(4) Arming instructions tag missing or instructions thereon incorrect or illegible.

(5) Minor rust.

(6) Minor corrosion.

13. Functioning Defects. a. *Critical.*

(1) Mine functions upon removal of arming latch.

(2) Less than 1.4 kilograms (3 pounds) of pull on the trip lever when mine functions.

b. *Major.*

(1) More than 6.8 kilograms (15 pounds) of pull on the trip lever is required to function the mine.

(2) Ball float assembly neither ejects nor bursts.

(3) Ball float assembly ejects but fails to burst.

(4) Low order detonation.

c. *Minor.*

(1) Height of burst is greater than 3.5 meters (12 feet).

(2) Ball float assembly does not eject but bursts in place.

14. Evaluation. Functional and nonfunctional codes will be recommended in accordance with the following criteria and the interim condition code will be assigned. A lot will be classified Condition Code J and reported if one critical defect is observed.

a. Nonfunctional Codes.

(1) *Code A.* A lot not classified as Code J shall qualify for Code A if it meets the following requirements on inspection of 40 mines by attributes.

(a) Not more than 2 major defectives.

(b) Not more than 3 minor defectives.

(2) *Code B.* A lot not classified as Code J or Code A shall qualify for Code B if it meets the following requirements on inspection of 40 mines by attributes.

(a) Not more than 5 major defectives.

(b) Not more than 8 minor defectives.

(3) *Code D.* A lot not classified as Code J, Code

A, or Code B shall be Code D.

6. Functional Codes.

(1) *Code A.* A lot not classified as Code J shall qualify for Code A if it meets the following requirements in the test of 40 mines.

(a) Not more than 2 major defectives.

(b) Not more than 3 minor defectives.

(2) *Code B.* A lot not classified as Code J or Code A shall qualify for Code B if it meets the following requirements in the test of 40 mines.

(a) Not more than 5 major defectives.

(b) Not more than 8 minor defectives.

(2) *Code D.* A lot not classified as Code J, Code A, or Code B shall be Code D.

15. Records and Reports. Function test results will be recorded and reported as outlined in SB 742-I. In accordance with the current security classification guide for this item, the function test results shall be classified confidential.

By Order of the Secretary of the Army:

Official:

J. C. PENNINGTON
Major General, United States Army
The Adjutant General

E. C. MEYER
General, United States Army
Chief of Staff

Distribution:

To be distributed in accordance with DA Form 12-34B requirements for Ammunition handling, Transportation and Storage.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE
DOPE ABOUT IT ON THIS FORM.
CAREFULLY TEAR IT OUT, FOLD IT
AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE
NO.

PARA-
GRAPH

FIGURE
NO.

TABLE
NO.

IN THIS SPACE, TELL WHAT IS WRONG
AND WHAT SHOULD BE DONE ABOUT IT.

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigrams = .035 ounce
 1 dekagram = 10 grams = .35 ounce
 1 hectogram = 10 dekagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change	To	Multiply by	To change	To	Multiply by
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

°F Fahrenheit temperature 5/9 (after subtracting 32) Celsius temperature °C

PIN: 048366-000