

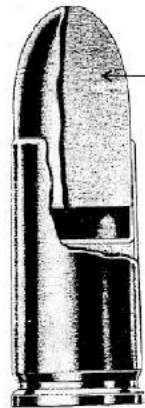
7.92 - mm Aircraft Machine Gun



LEAD

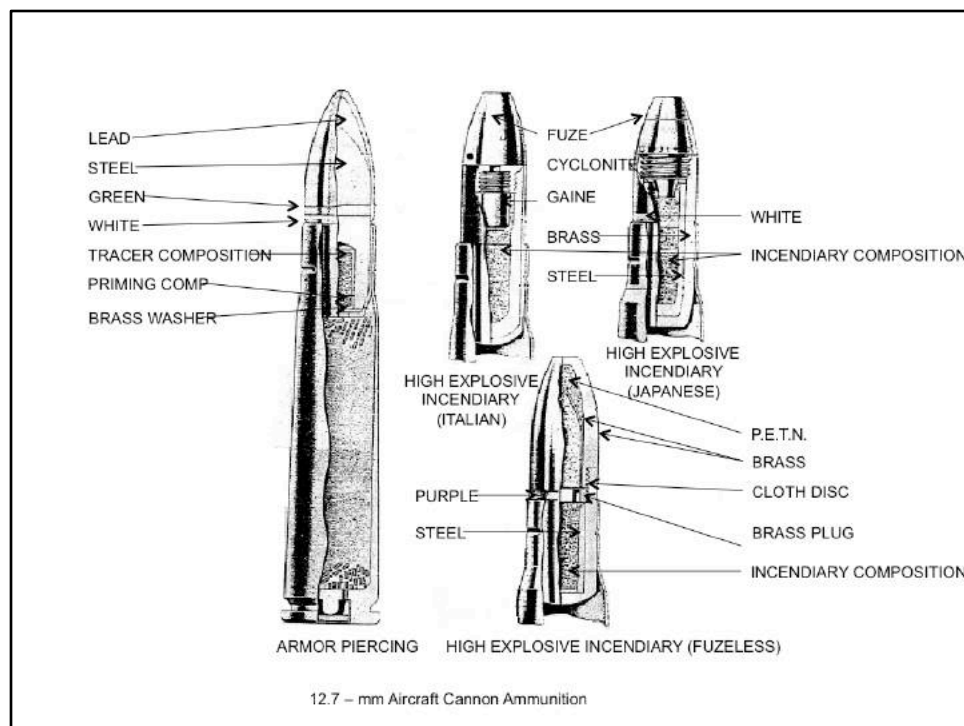
CUPRO-NICKEL

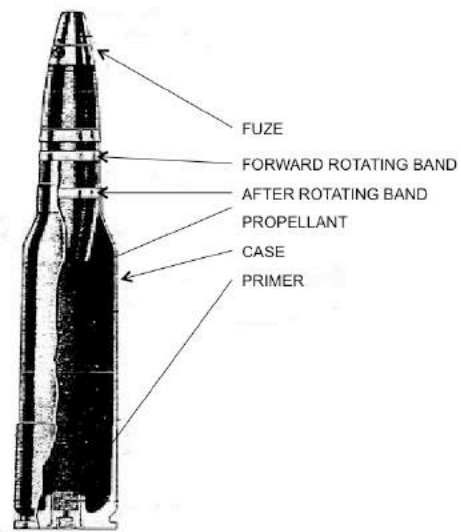
8 – mm Pistol Ammunition



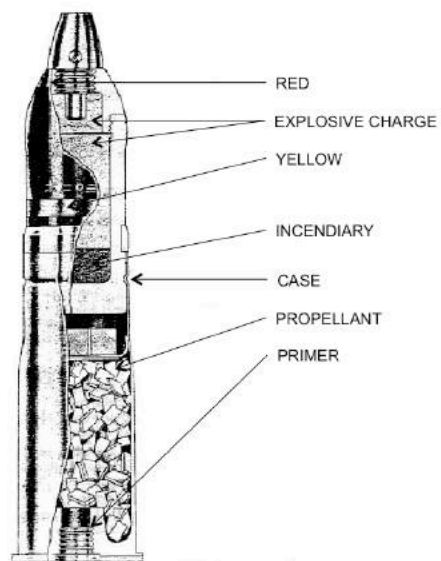
LEAD

9 – mm Pistol Ammunition

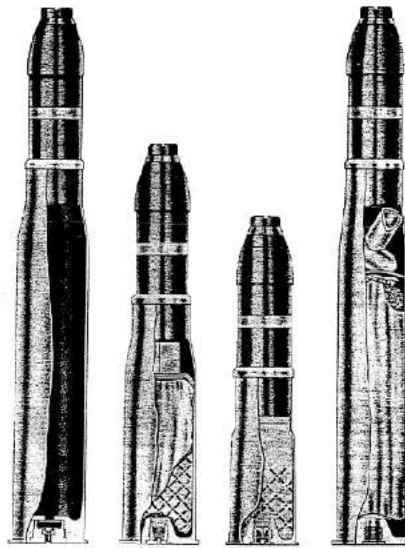




25 - mm Ammunition

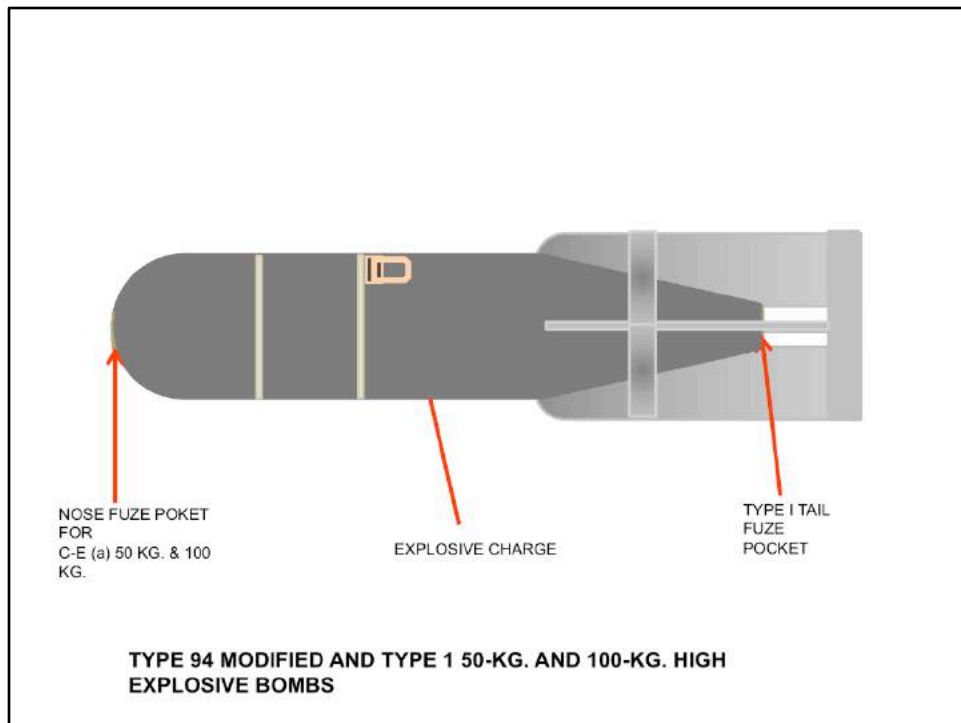


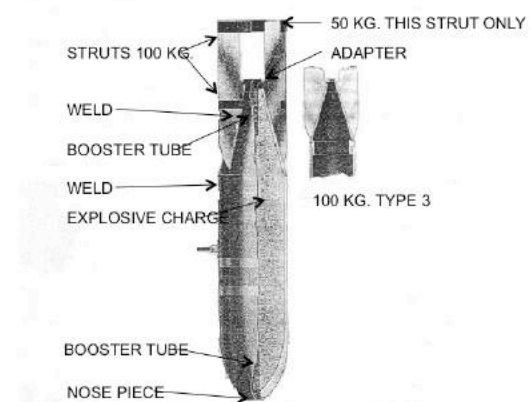
37 – mm High-Explosive Incendiary Projectile



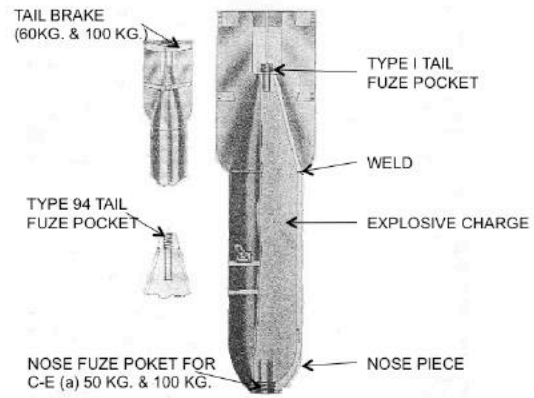
TYPE I ANTI-TANK GUN TYPE 94 ANTI-TANK GUN TYPE 94 TANK GUN TYPE 97 ANTI-TANK GUN

37 - mm Ammunition

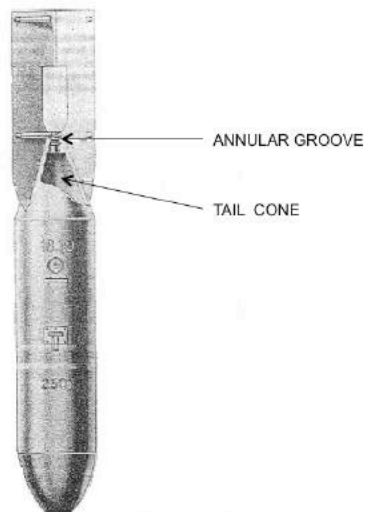




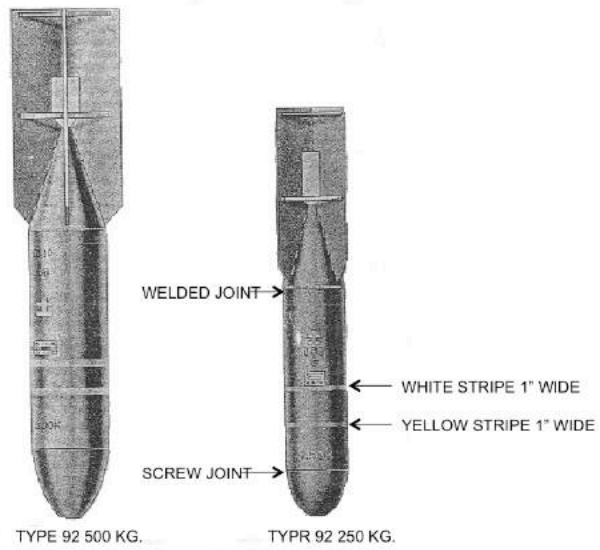
TYPE 94 50 KG., TYPE 94 AND TYPE 3 100 KG. HIGH-EXPLOSIVE BOMB



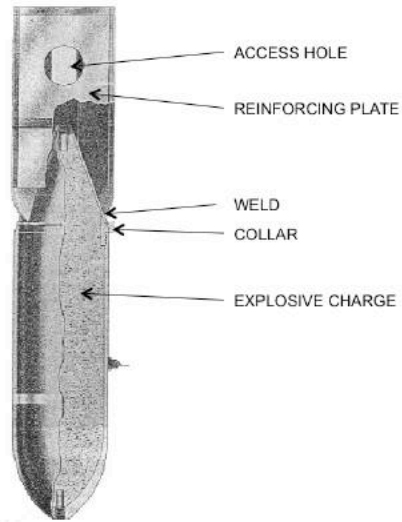
TYPE 94 MODIFIED AND TYPE 1 50-KG. AND 100-KG. HIGH EXPLOSIVE BOMBS



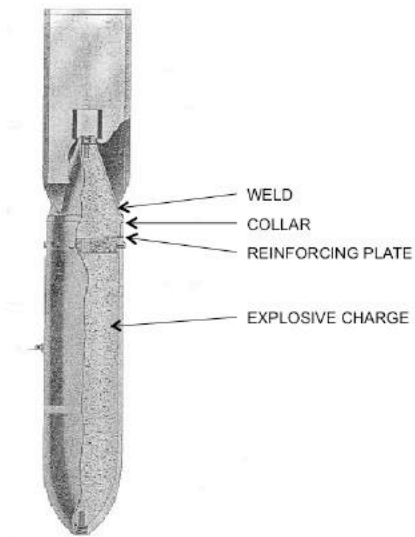
TYPE 1 250-KG HIGH EXPLOSIVE



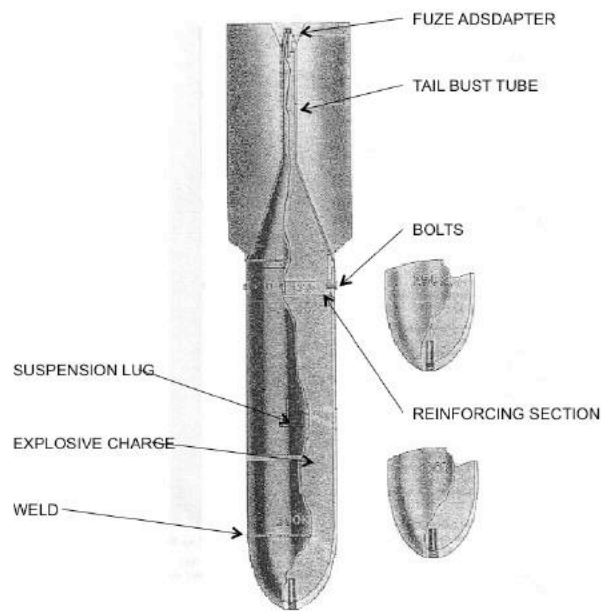
TYPE 92 250-KG. AND 500-KG. HIGH-EXPLOSIVE BOMBS



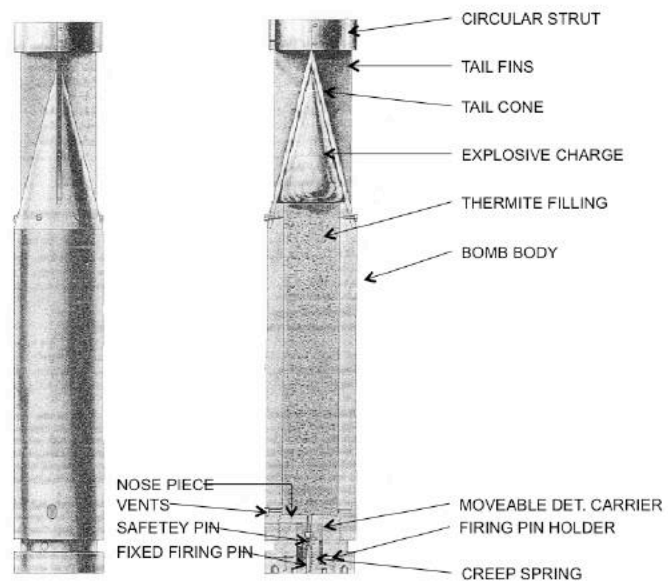
TYPE 3 100-KG.SKIPPING MODEL BOMB



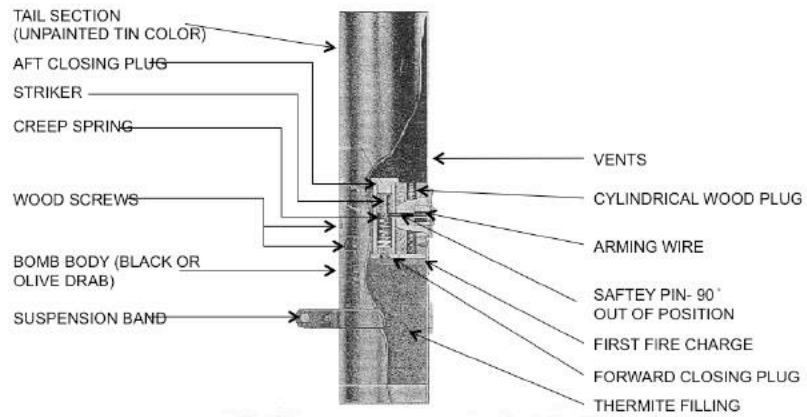
TYPE3 250-KG. SKIPPING MODEL BOMB



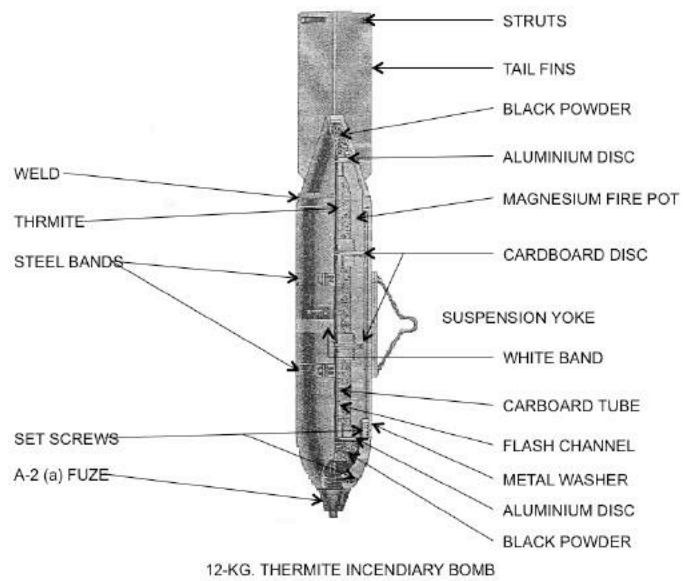
TYPE 4 100-KG., 250-KG., AND 500-KG. ANTISHIPPING BOMBS

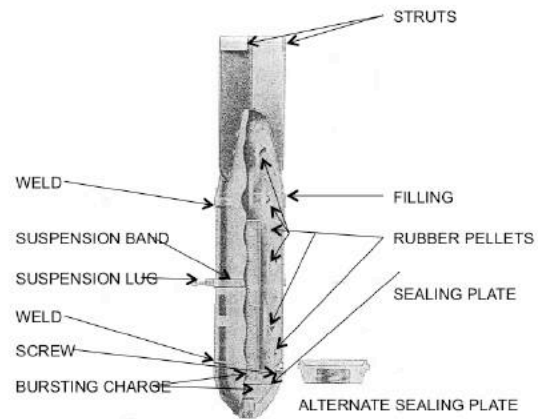


1- KG. THERMITE INCENDIARY BOMB

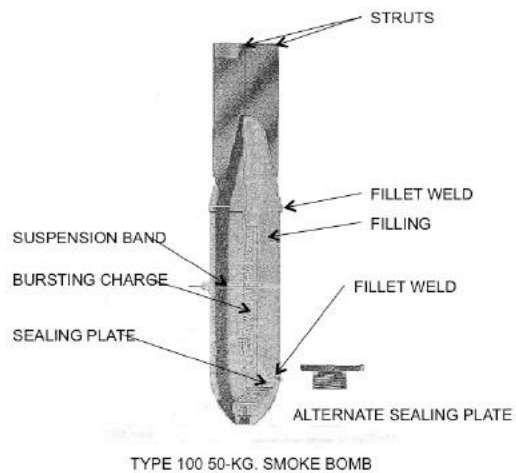


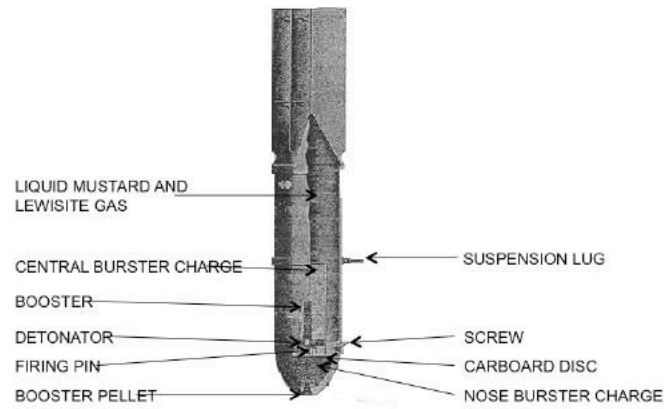
5-KG. THERMITE INCENDIARY BOMB



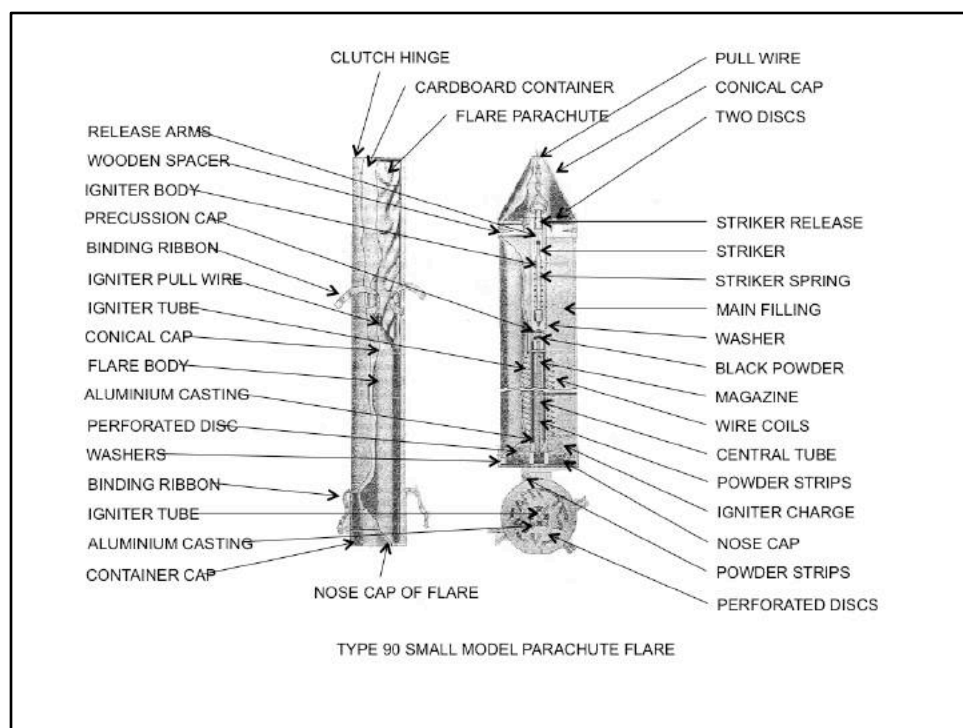


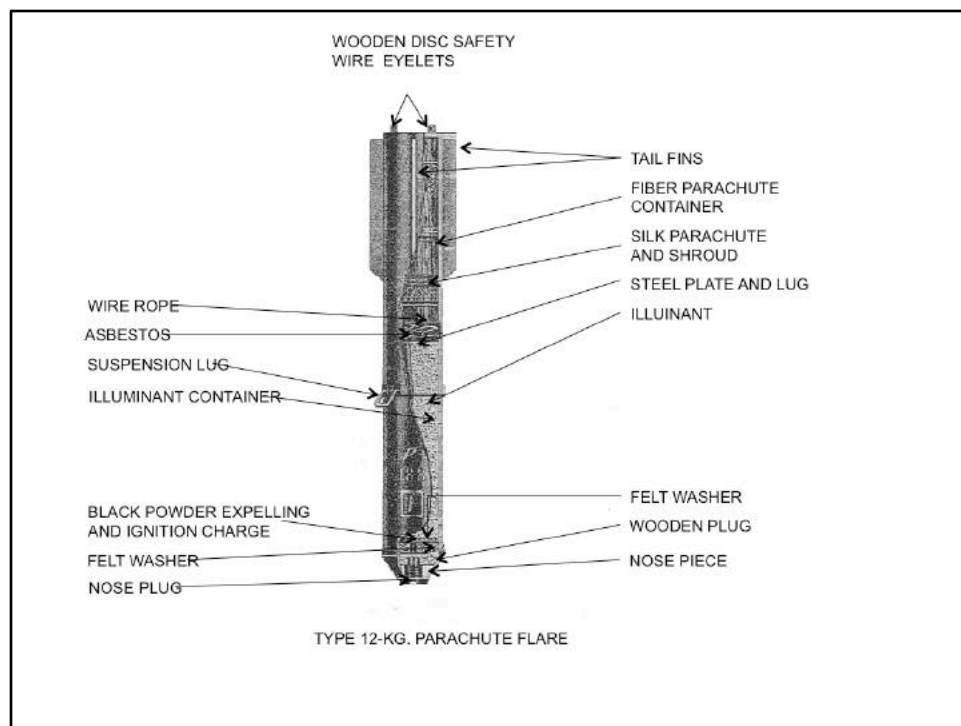
TYPE 100 50-KG. INCENDIARY BOMB

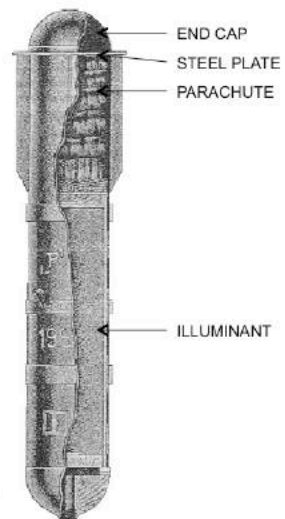




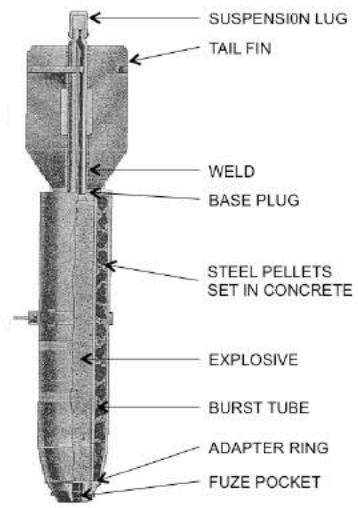
TYPE 92 50-KG. GAS BOMB



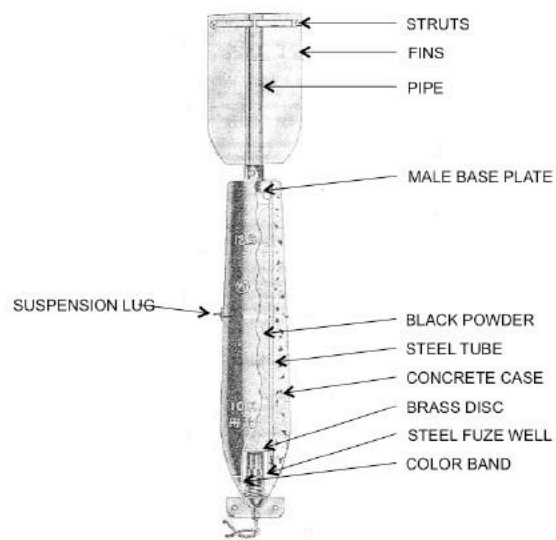




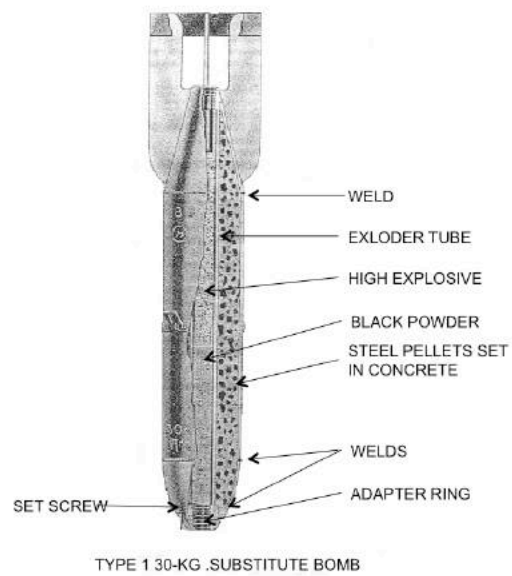
TYPE 3 PARACHUTE FLARE

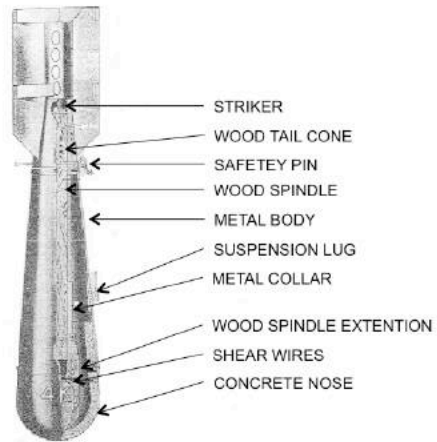


TYPE 97 15-KG. CONCRETE BOMB

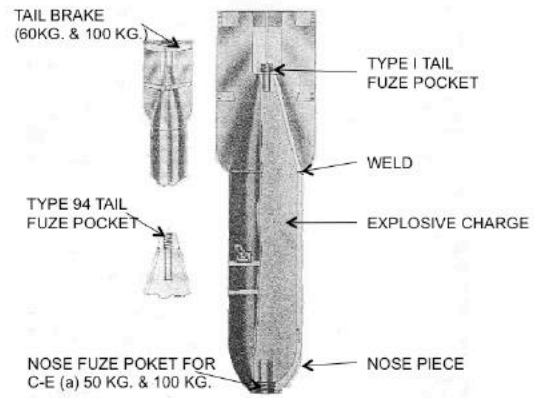


TYPE 94 10-KG. SUBSTITUTE BOMB

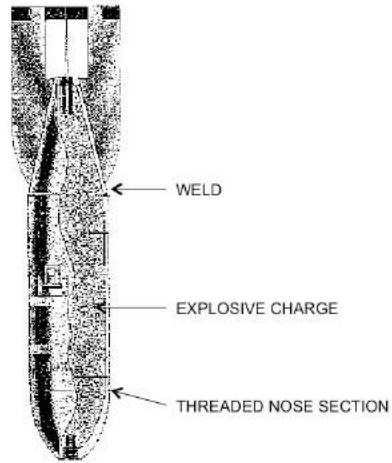




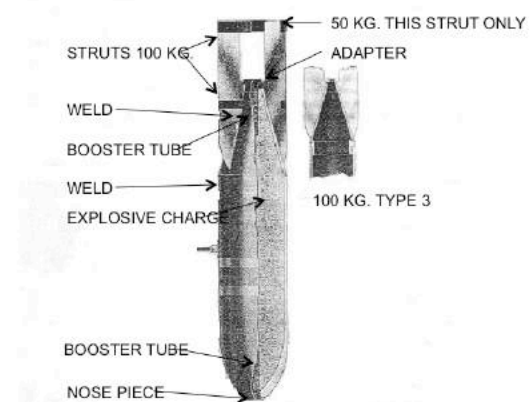
TYPE 95 4-KG. PRACTICE BOMB



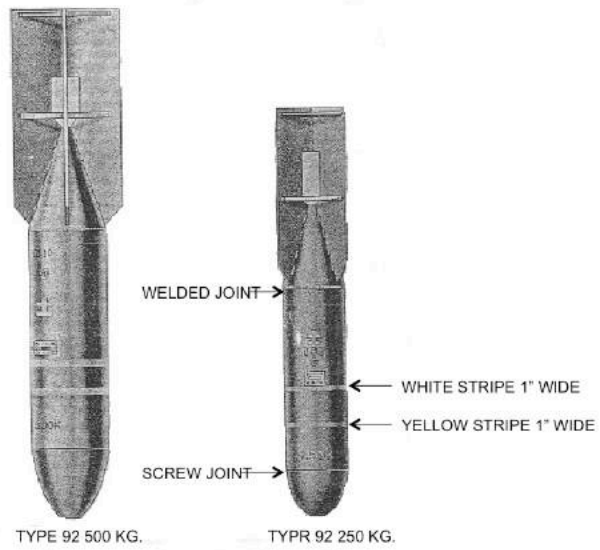
TYPE 94 MODIFIED AND TYPE 1 50-KG. AND 100-KG. HIGH EXPLOSIVE BOMBS



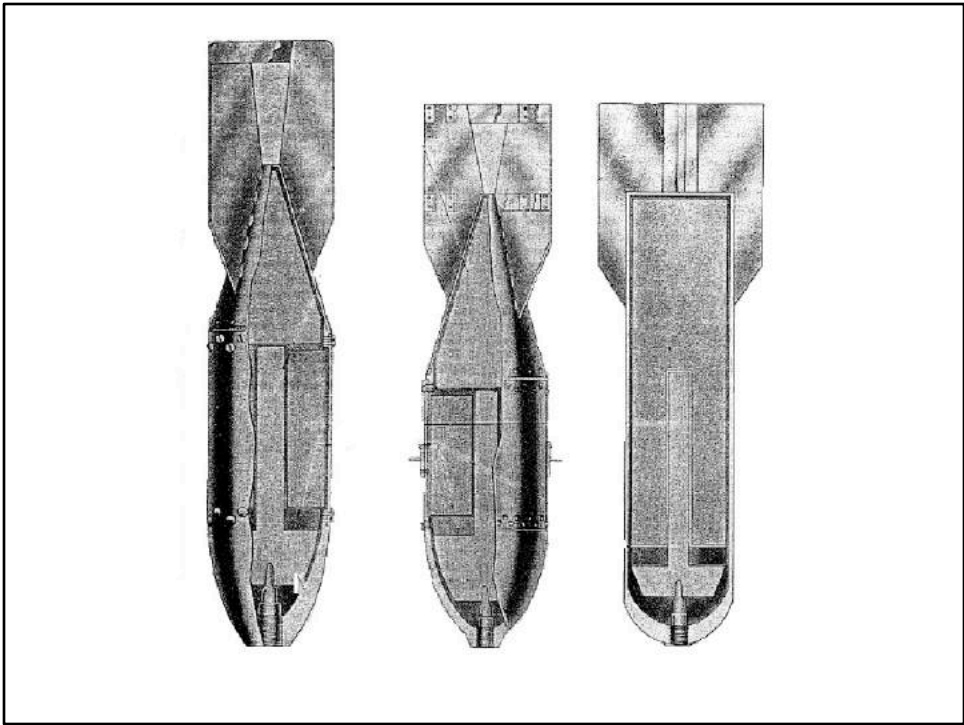
TYPE 99 30 KG. HIGH-EXPLOSIVE BOMB

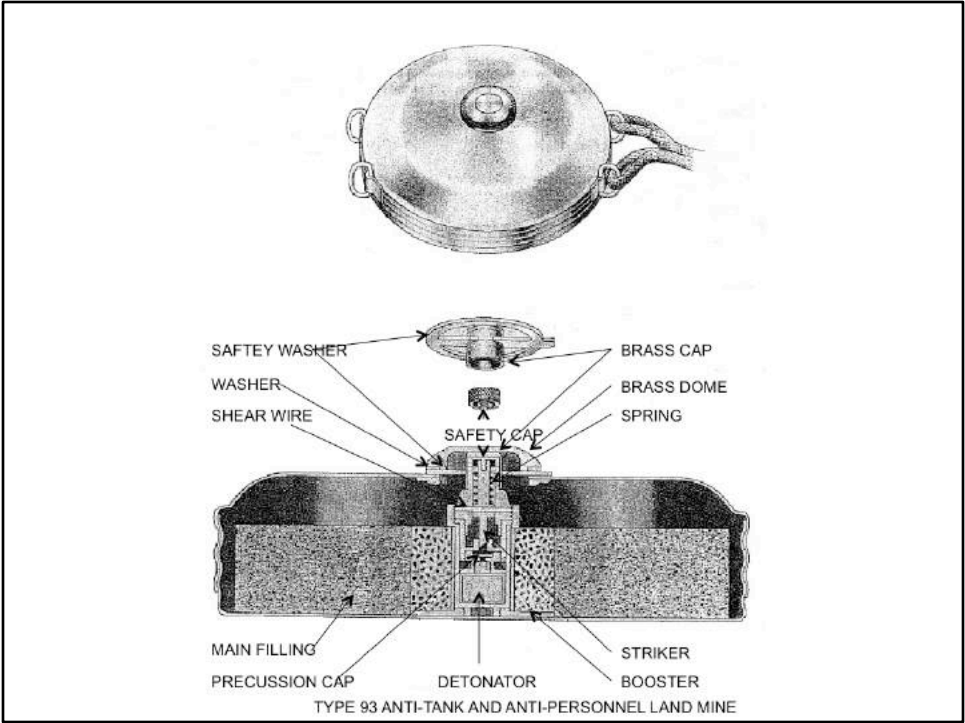


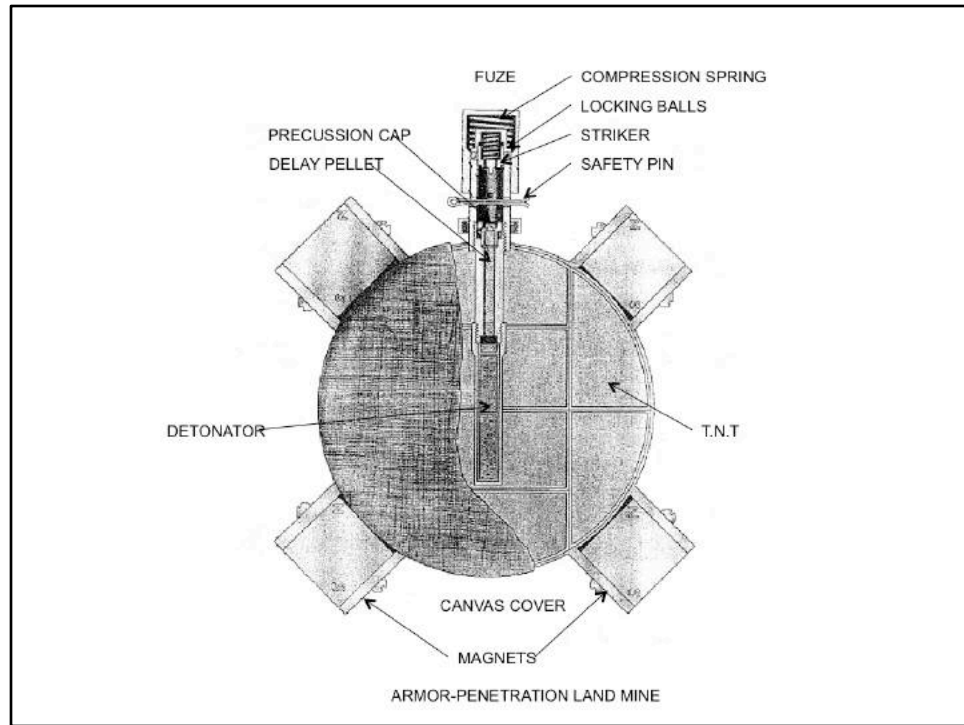
TYPE 94 50 KG., TYPE 94 AND TYPE 3 100 KG. HIGH-EXPLOSIVE BOMB

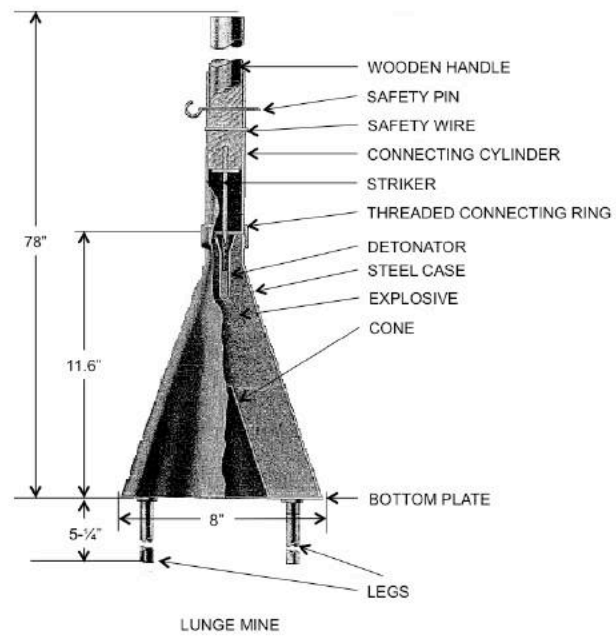


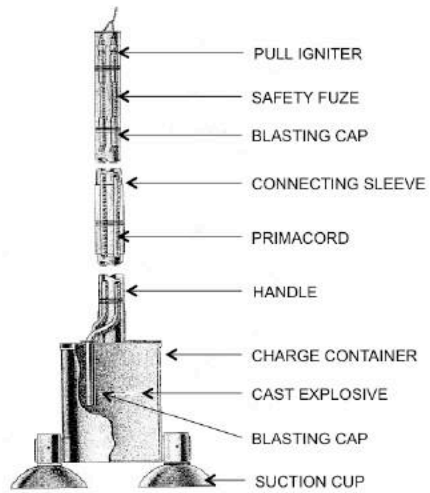
TYPE 92 250-KG. AND 500-KG. HIGH-EXPLOSIVE BOMBS



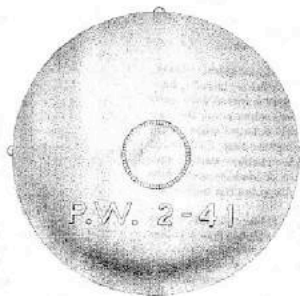
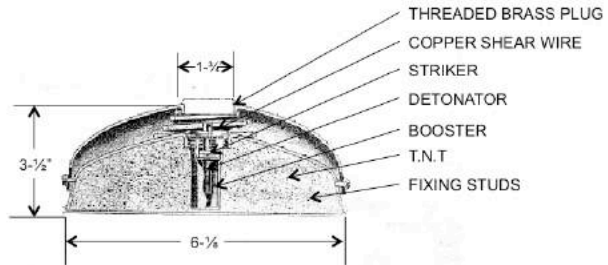




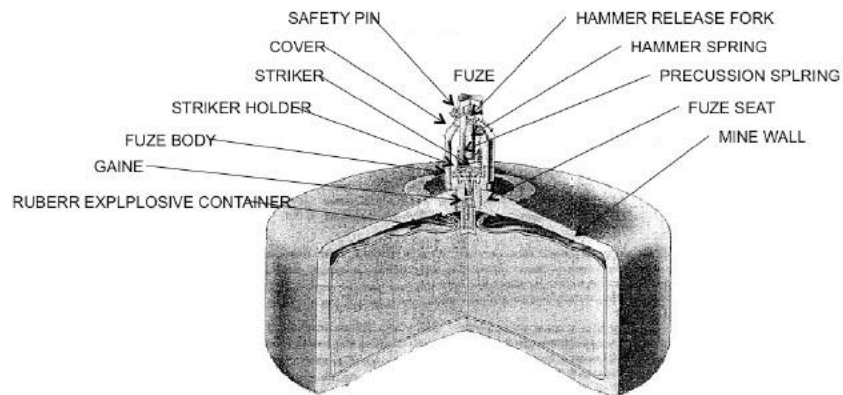




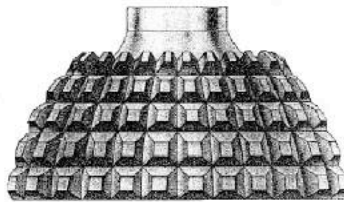
SUCTION CUP MINE



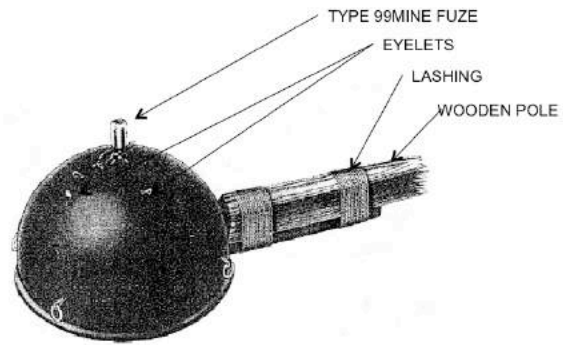
DUTCH ANTITANK AND ANTIPERSONNEL LAND MINE



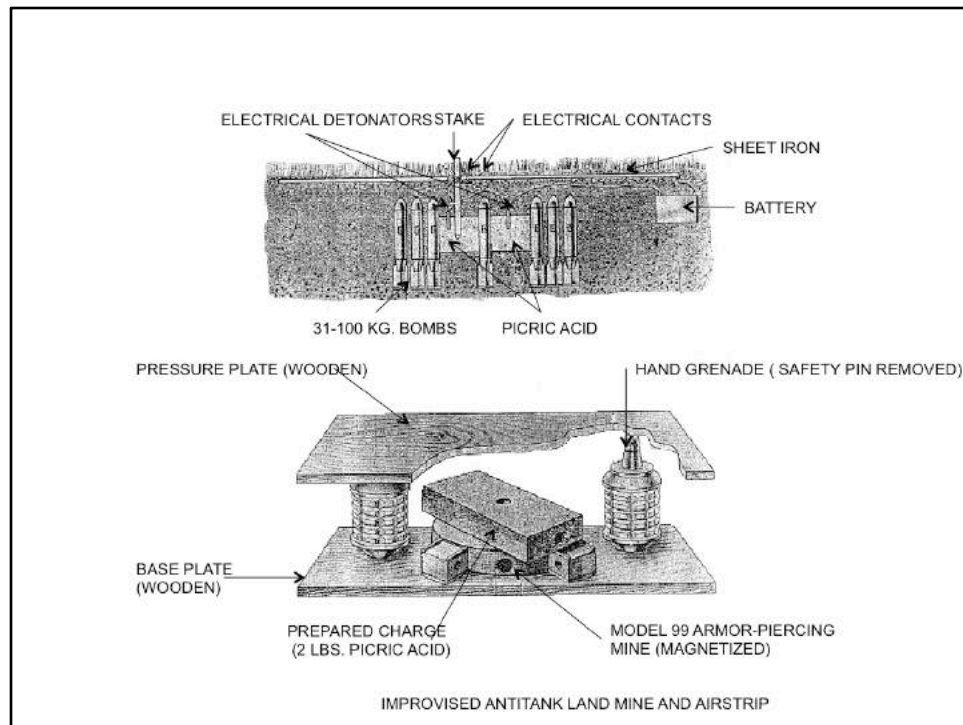
ANTIVEHICULAR AND ANTI PERSONNEL LAND MINE

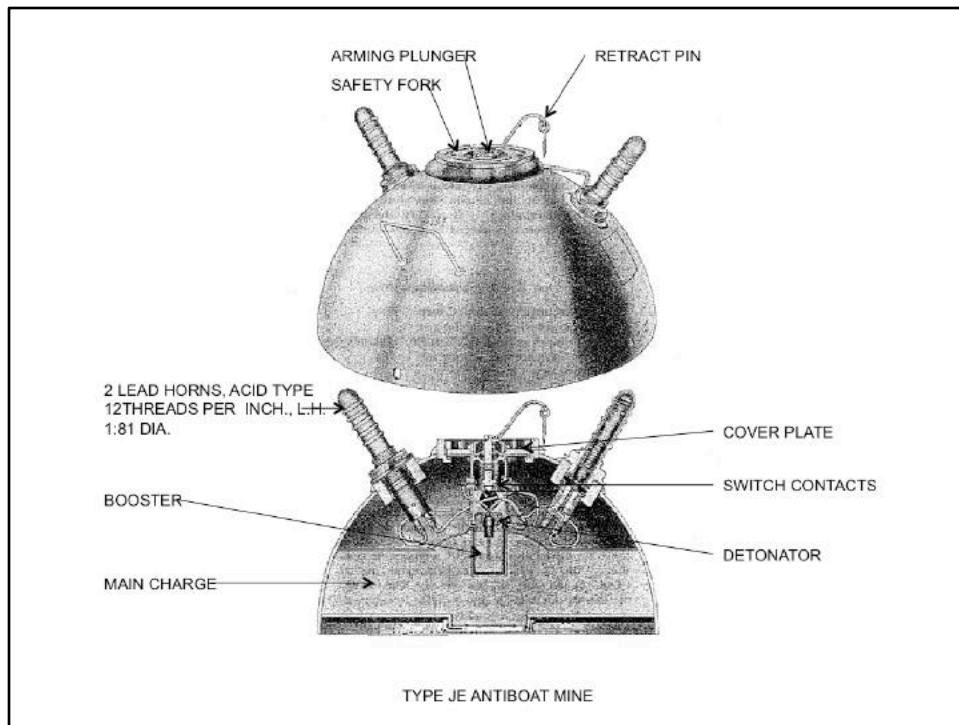


BEEHIVE ANTIPERSONNEL LAND MINE



HEMISPHERICAL ANTITANK LAND MINE





#### **Type JE Antiboat Mine**

Diameter: 20 ¼ inches

Height: 10.62 inches

Thickness of wall: 3/16 inch

Material of wall: Steel

Weight: 106.5 pounds (not including horns detonator, booster, and wiring)

Weight of filling: 46.5 pounds

Type of filling: Type 98 explosive (HND/TNTN 40/60) with picric acid booster and tetryl detonator.

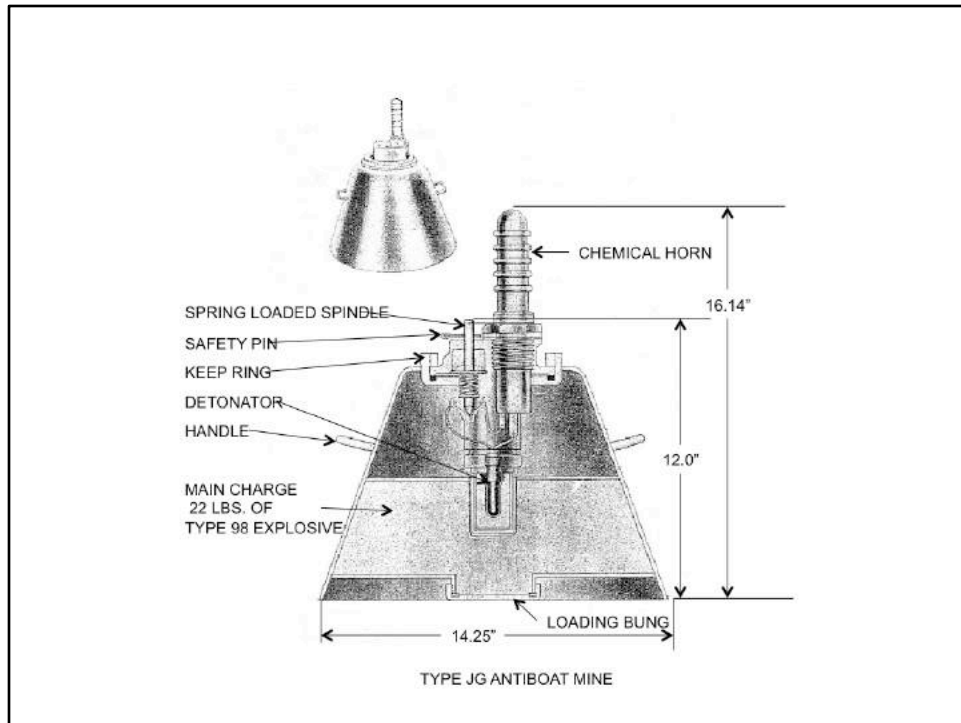
#### **See Page 221 for Figure 167-Type Antiboat Mine**

1. Arming Plunger
2. Safety Fork
3. Retracting Pin
4. 2 Lead Horns, Acid Type 12 Threads Per in. Lh
5. Booster
6. Main Charge
7. Cover Plate
8. Switch Contacts
9. Detonator

**Description:** This is a hemispherical, chemical horned, all-welded mine. The outer body forms a hemisphere and has two handles on its upper portion, a central opening on top to take the booster and safety switch, and two horn openings 180degrees apart. The mine is divided internally into an explosive chamber and a chamber containing booster, wiring, safety switch, and horn electrodes. The division is made by a shallow, saucer-shaped steel section, which forms less than a hemisphere which is pressed into the outer body from the bottom and welded in place. A plate is then fitted into the bottom of the mine and is also welded in place. This last mentioned plate carries a filling plug in its center and is inset 13/16 of an inch to allow clearance for the plug. The horns, two in number, appear to be standard lead-acid mine horns. They are set at an angle of 65 degrees and project above the level of the mine top; threads are left hand. In the firing circuit is a spring loaded plunger whose upper end projects through the safety switch cover. A rubber diaphragm in the top of the cover insures water tightness but allows the plunger to move. There is a tapered, threaded hole in the center of the top of the plunger and a groove around the plunger near the top. Until the mine is in position a safety fork engages this groove and holds the plunger up against its spring. The inner end of the plunger is thus withdrawn from between two contacts in the electrical firing circuit and the circuit is incomplete.

**Employment:** Used on beaches as an antiboat mine. It can also be used on land as an antitank mine by burying or otherwise concealing it.

**Operation:** After the mine is laid the safety fork is removed. The contact plunger moves down under



### **Type JE Antiboat Mine**

Diameter: 20 ¼ inches

Height: 10.62 inches

Thickness of wall: 3/16 inch

Material of wall: Steel

Weight: 106.5 pounds (not including horns detonator, booster, and wiring)

Weight of filling: 46.5 pounds

Type of filling: Type 98 explosive (HND/TNTN 40/60) with picric acid booster and tetryl detonator.

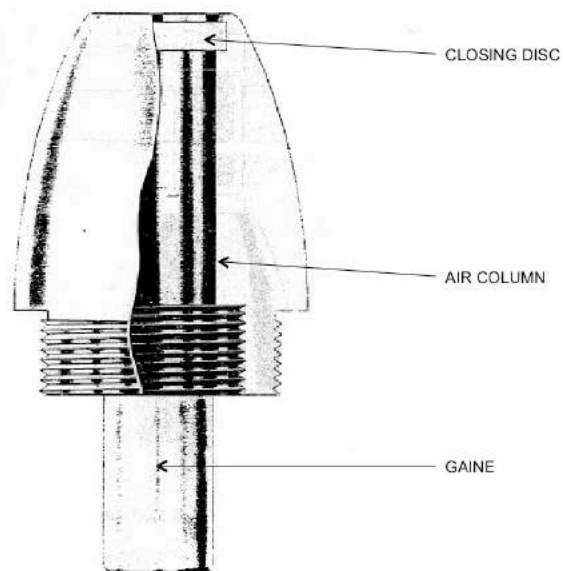
### **See Page 221 for Figure 167-Type Antiboat Mine**

1. Arming Plunger
2. Safety Fork
3. Retracting Pin
4. 2 Lead Horns, Acid Type 12 Threads Per in. Lh
5. Booster
6. Main Charge
7. Cover Plate
8. Switch Contacts
9. Detonator

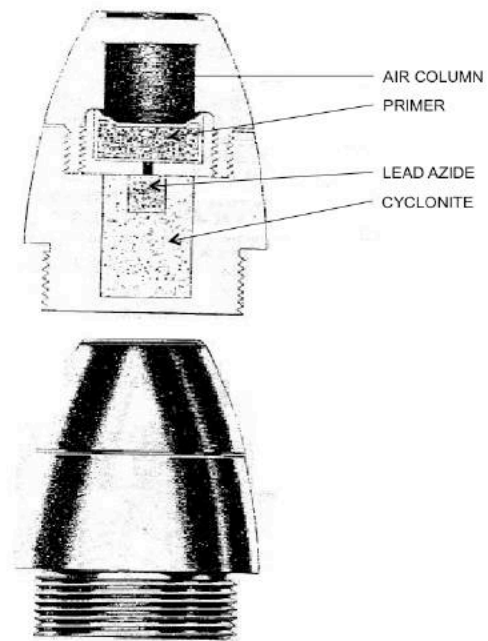
Description: This is a hemispherical, chemical horned, all-welded mine. The outer body forms a hemisphere and has two handles on its upper portion, a central opening on top to take the booster and safety switch, and two horn openings 180degrees apart. The mine is divided internally into an explosive chamber and a chamber containing booster, wiring, safety switch, and horn electrodes. The division is made by a shallow, saucer-shaped steel section, which forms less than a hemisphere which is pressed into the outer body from the bottom and welded in place. A plate is then fitted into the bottom of the

迫撃砲信管

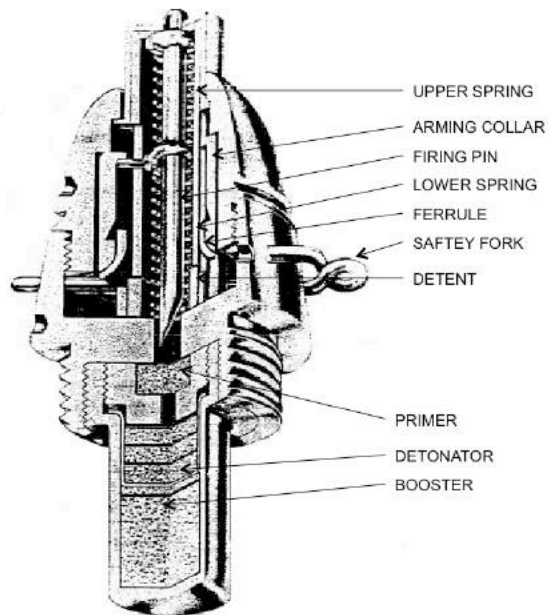
HO 301 Impact Fuze



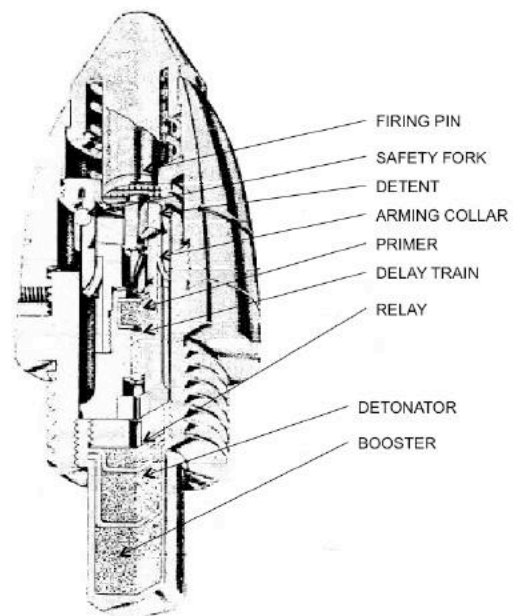
Type 2 Modified Small Instantaneous Fuze



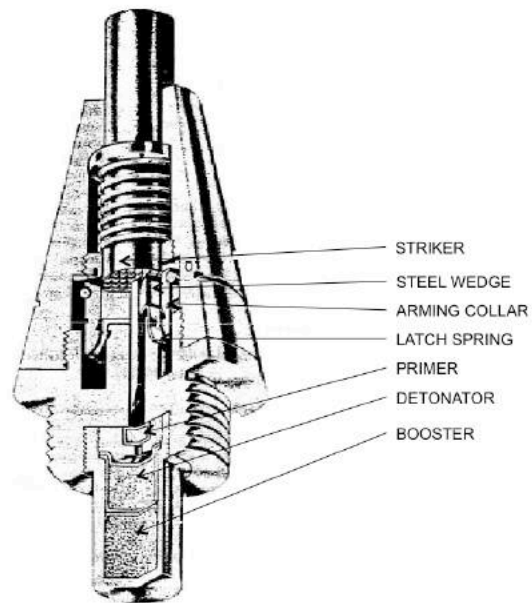
Type 4 Super Detonating Fuze



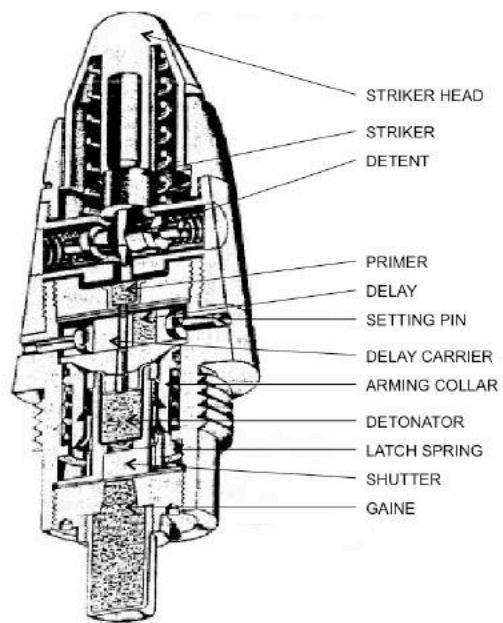
Type 88 Small Instantaneous Fuze



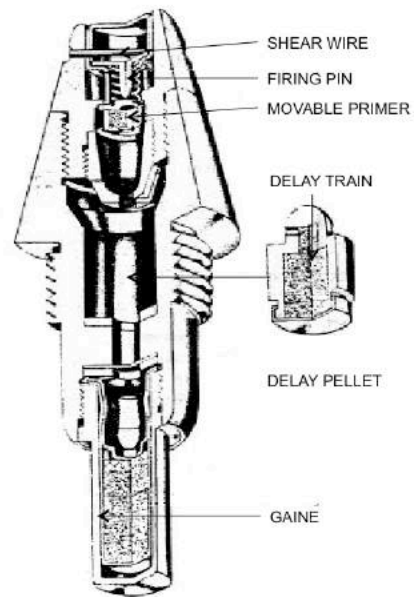
Type 88 Short-Delay (Gun and Howitzer-Mortar) Fuze



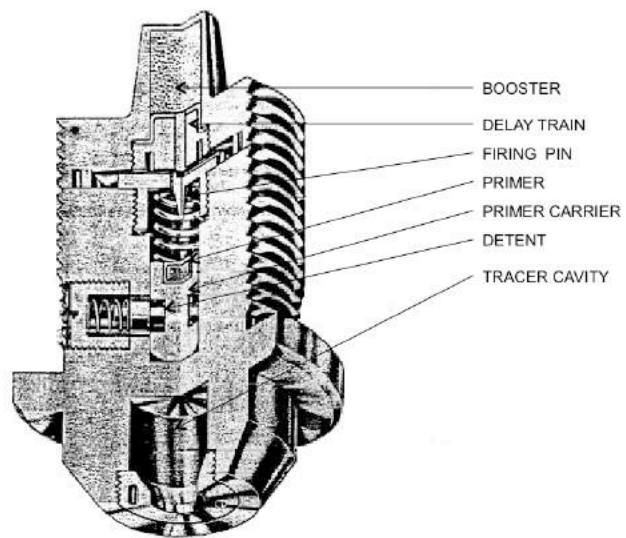
Type 88 Instantaneous (Gun and Howitzer-Mortar) Fuze



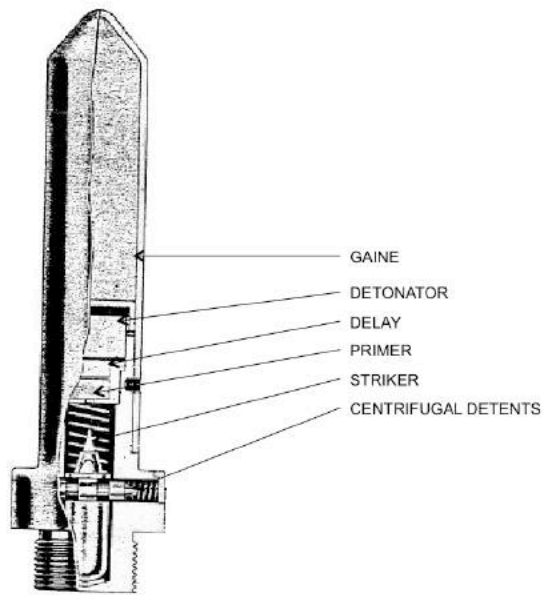
Type 90 Instantaneous-Short-Delay Fuze



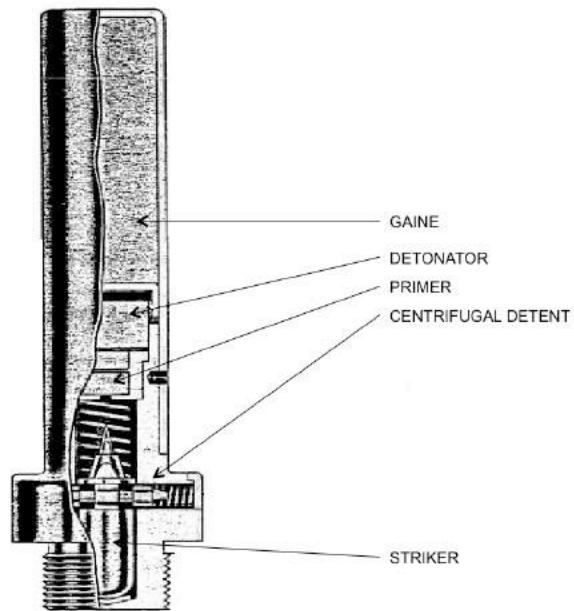
Type 93 Instantaneous fuze



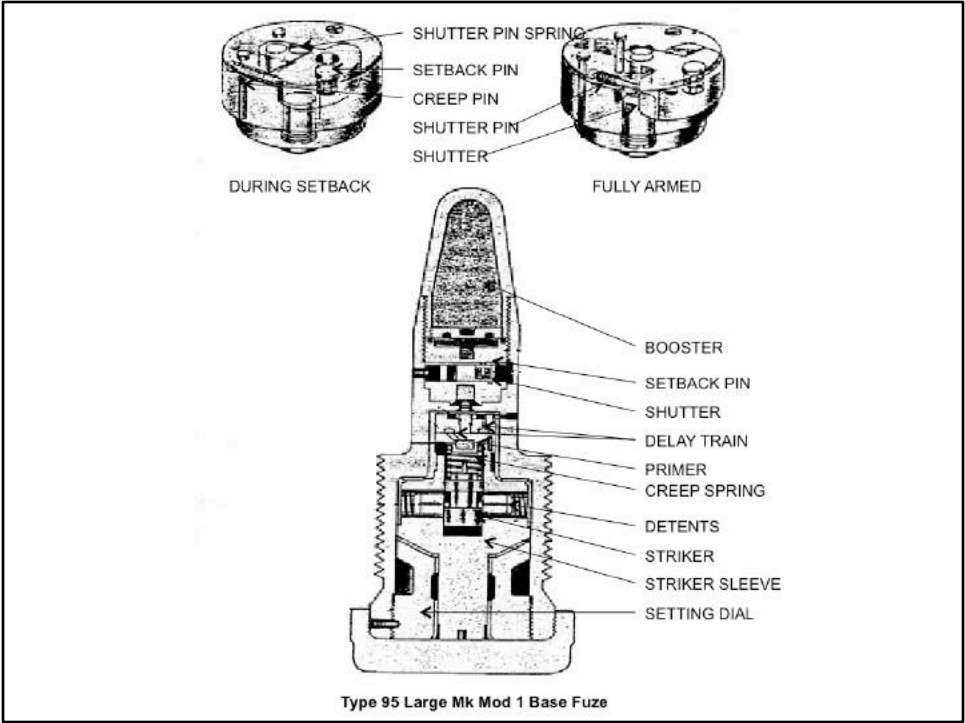
Mk 1 Medium Impact Base Fuze



Type 88 Small (Howitzer-Mortar) Base Fuze

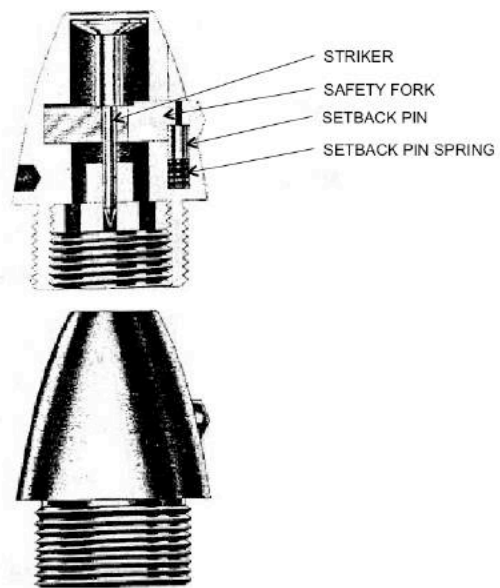


Type 88 Small (Gun) Base Fuze

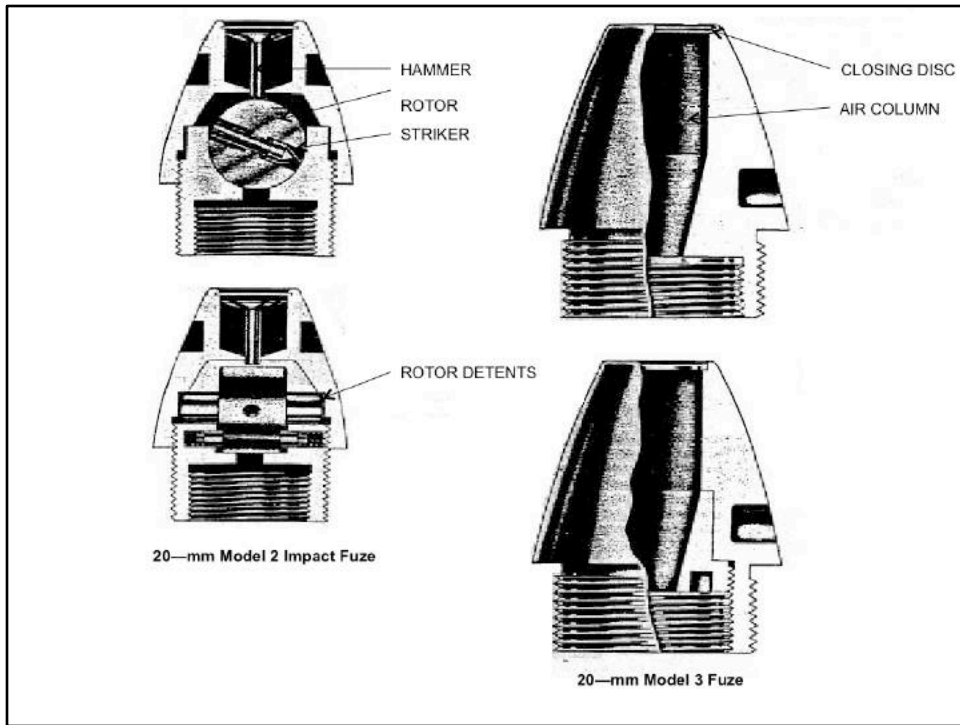


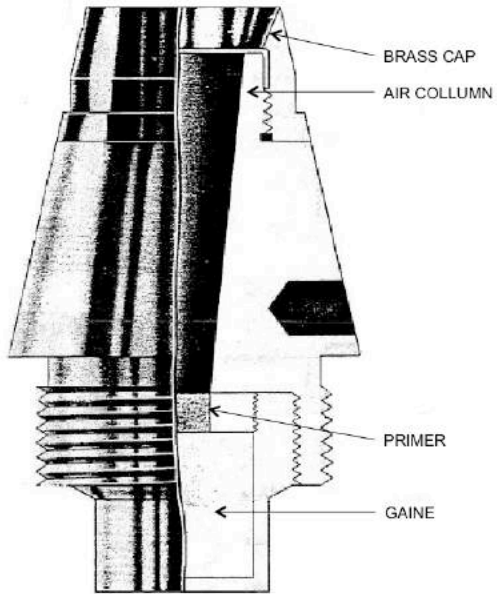
炮弹信管

HO 301 Impact Fuze

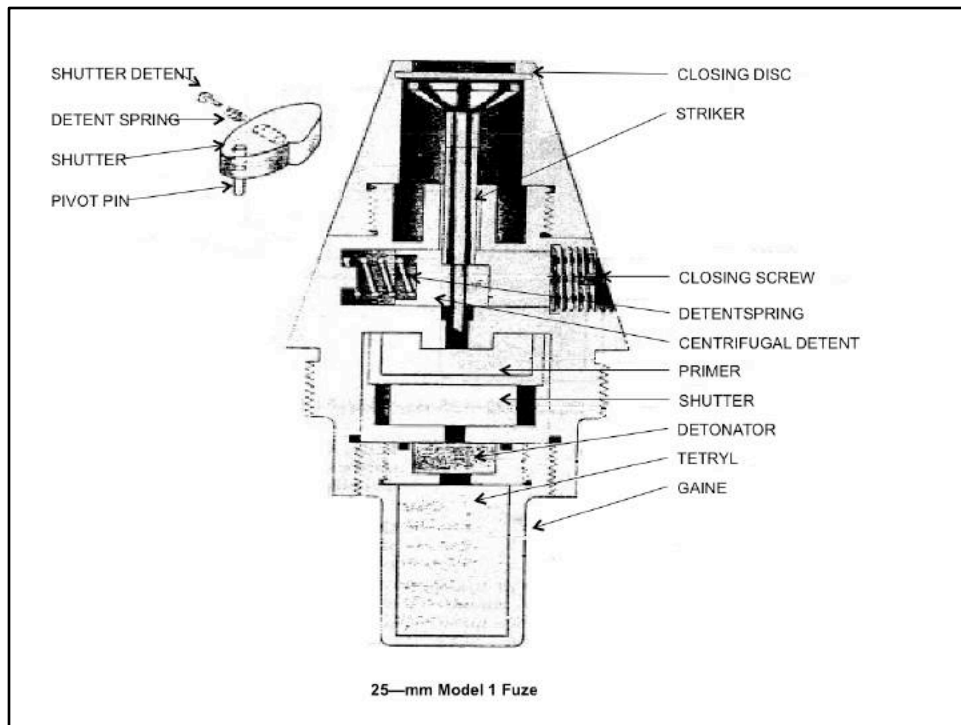


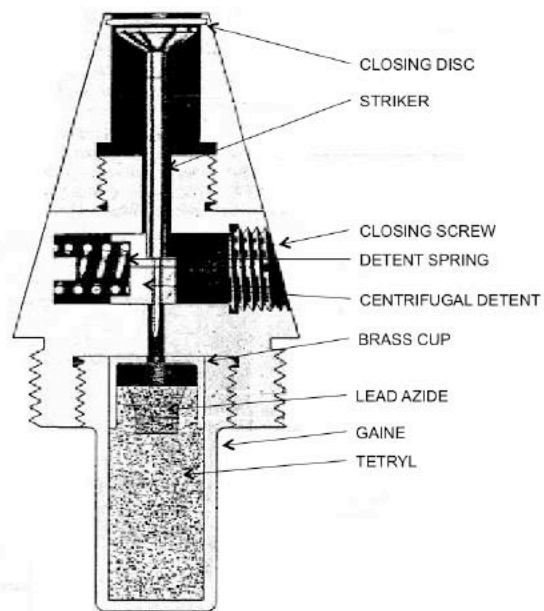
20—mm Model 1 Fuze



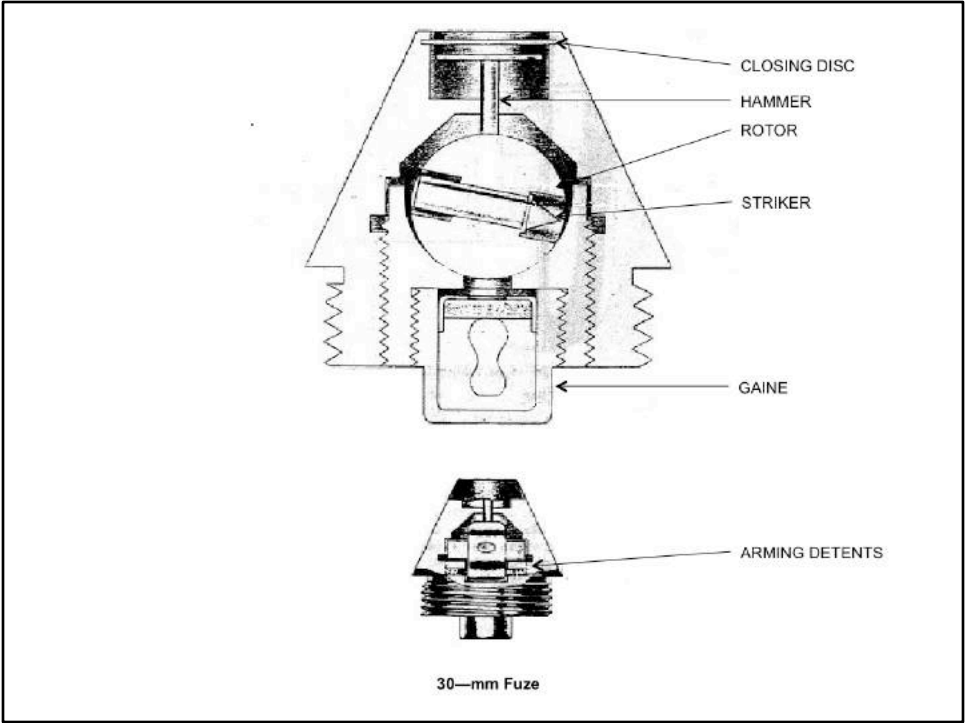


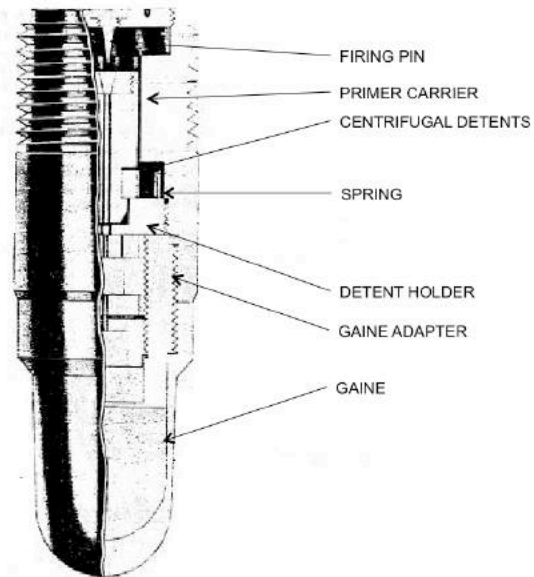
20—mm Two-Piece Fuze



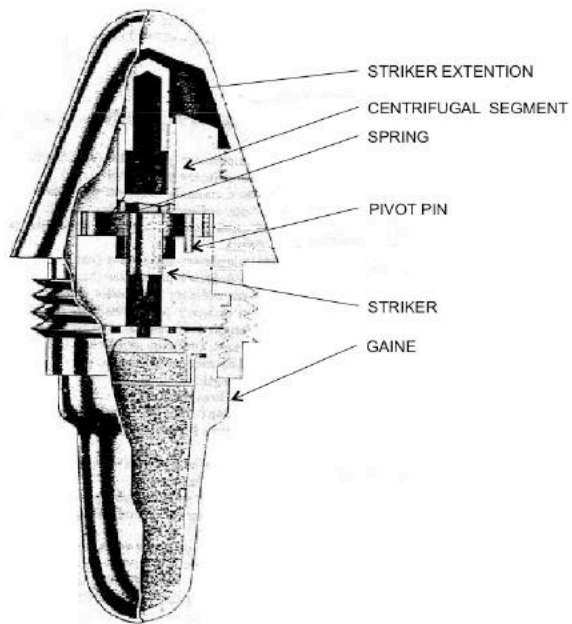


25—mm Model 4 fuze

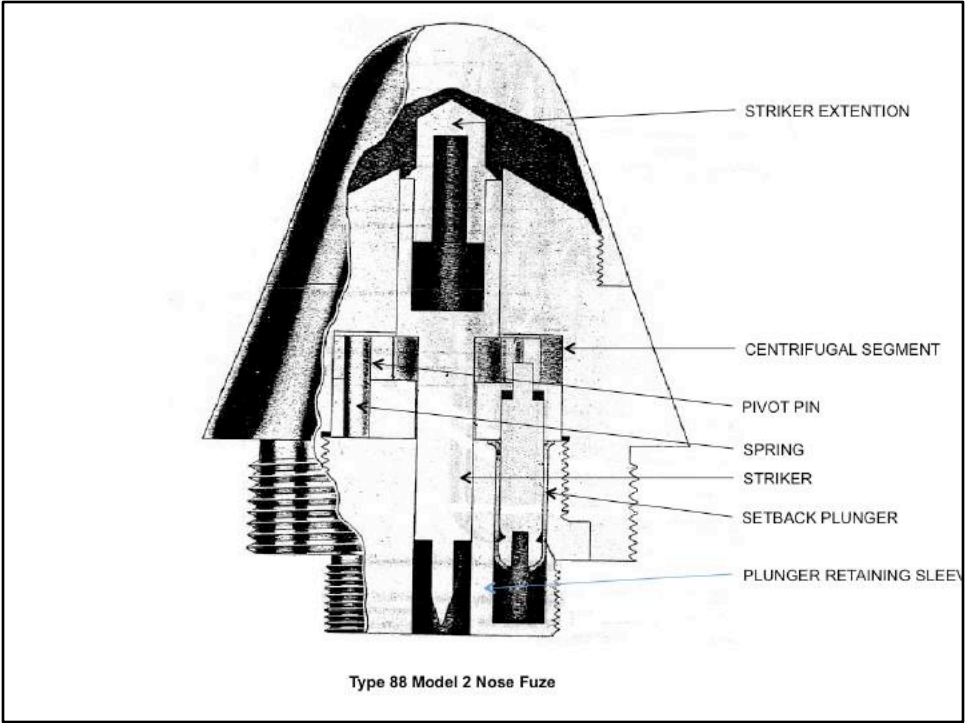


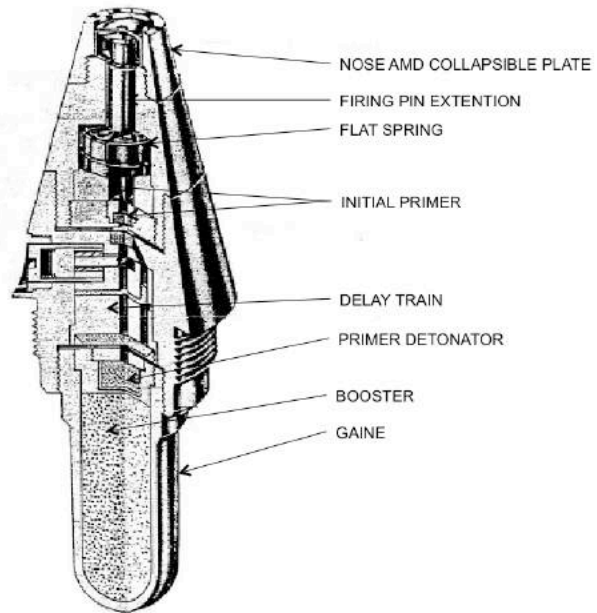


Type 1 Short-Delay Impact Fuze



Type 88 and Type 88 Modification 1 Nose Fuze

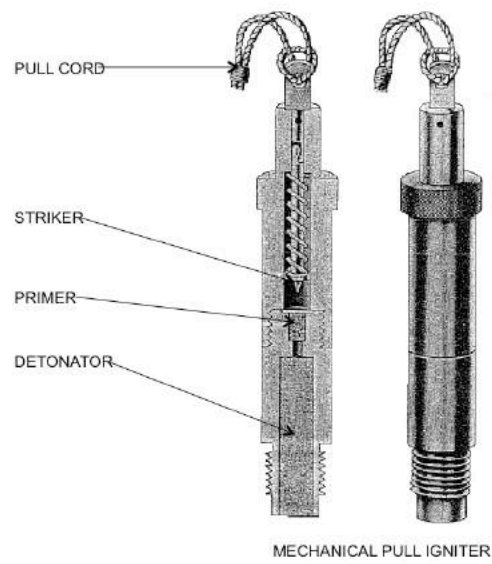


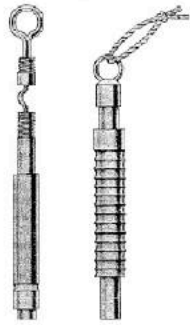


Type 88 Model 4 Instantaneous-Delay Fuze

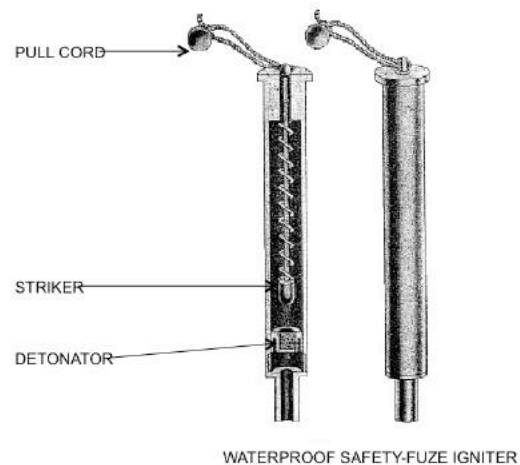
手榴彈信管

HO 301 Impact Fuze





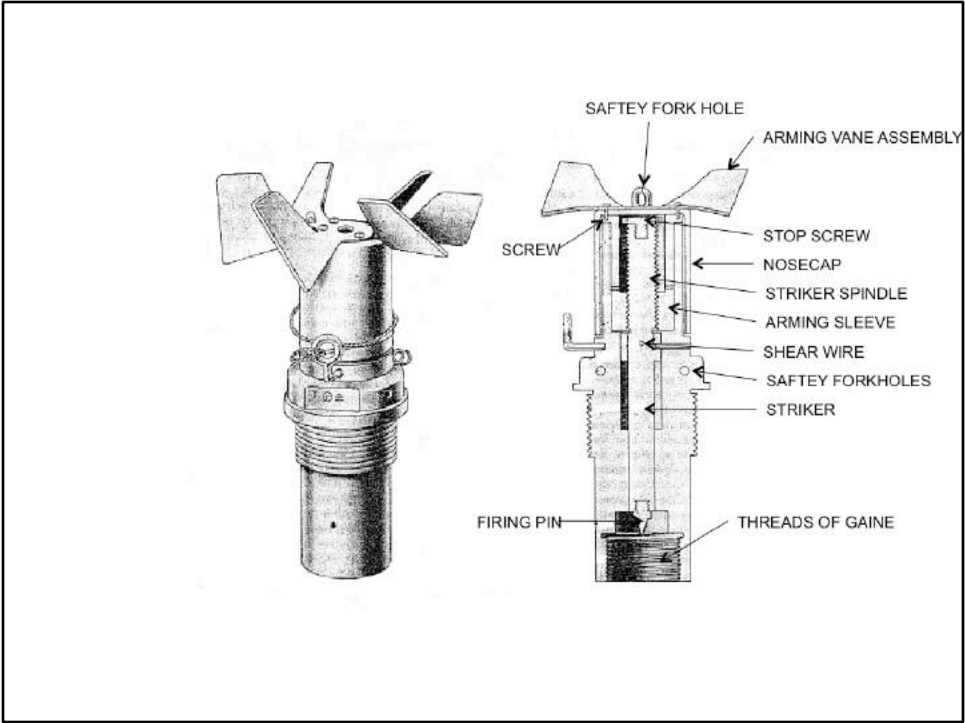
RED TYPE BLACK TYPE

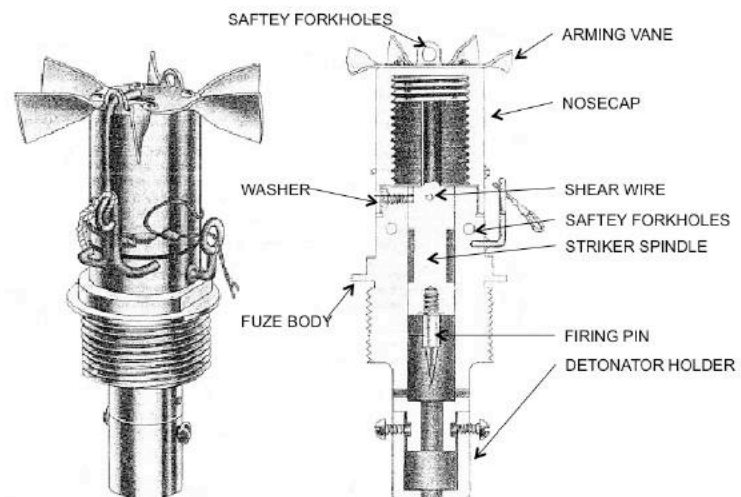


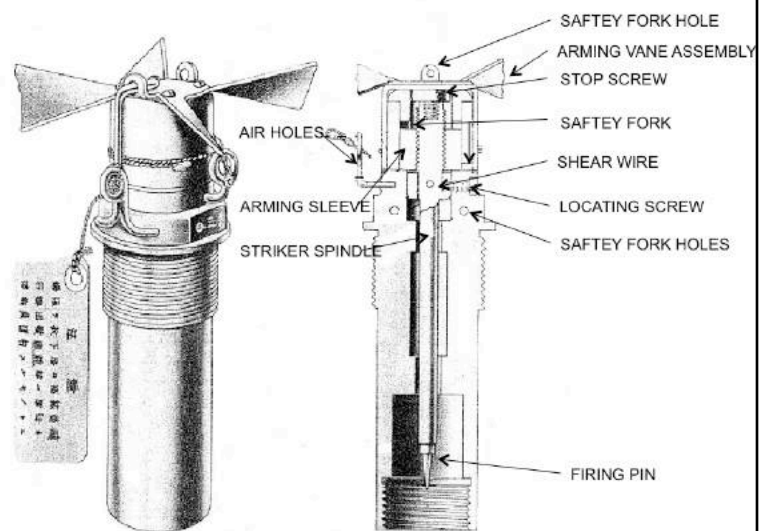
WATERPROOF SAFETY-FUZE IGNITER

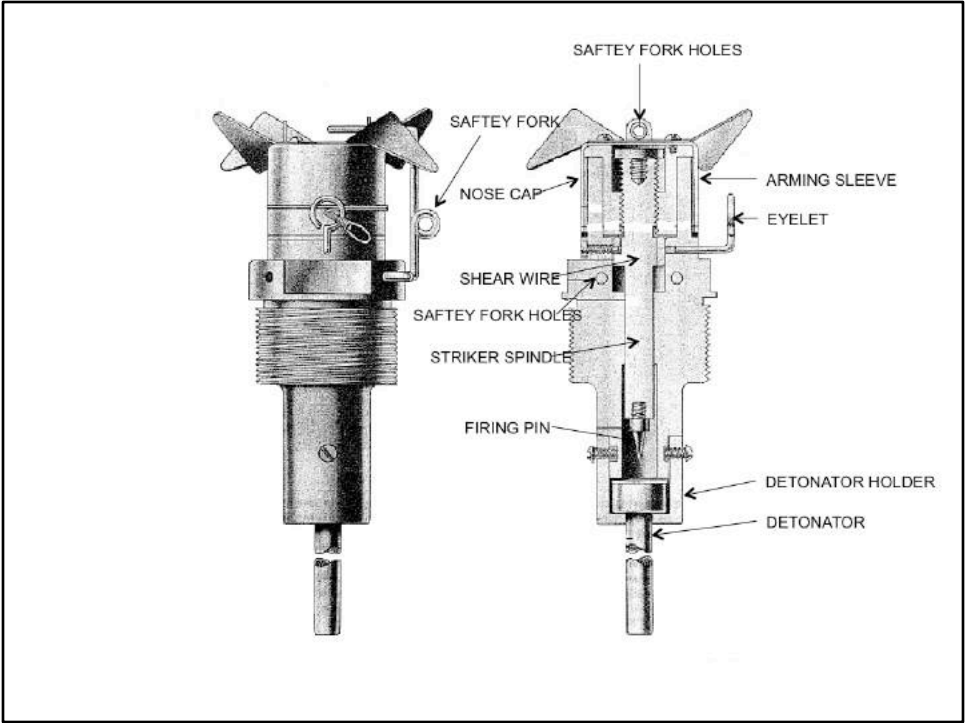
炸弹信管

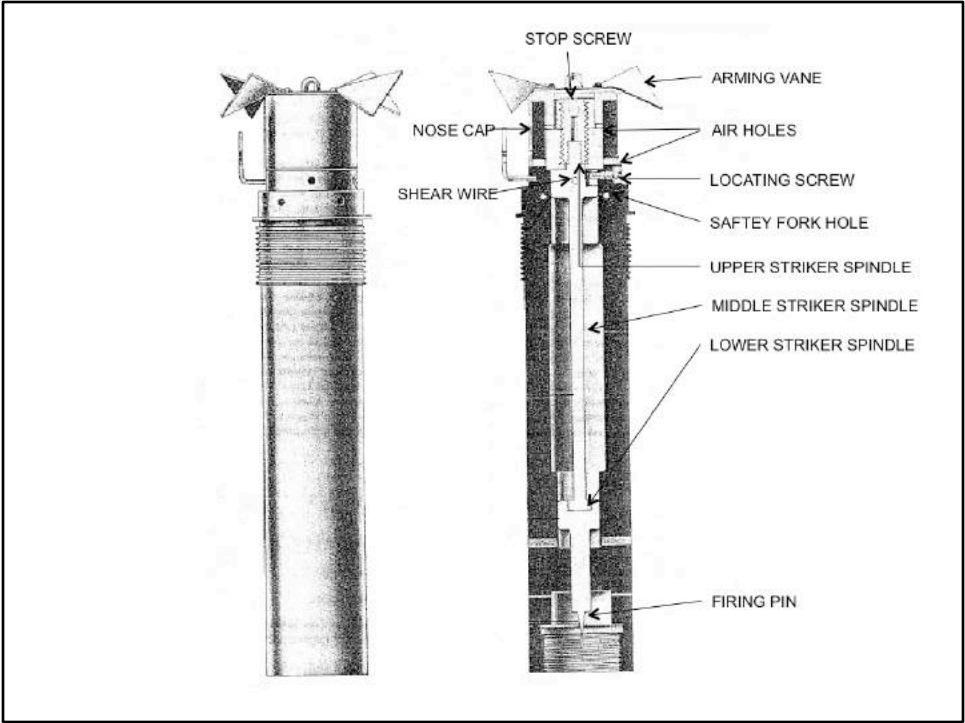
HO 301 Impact Fuze

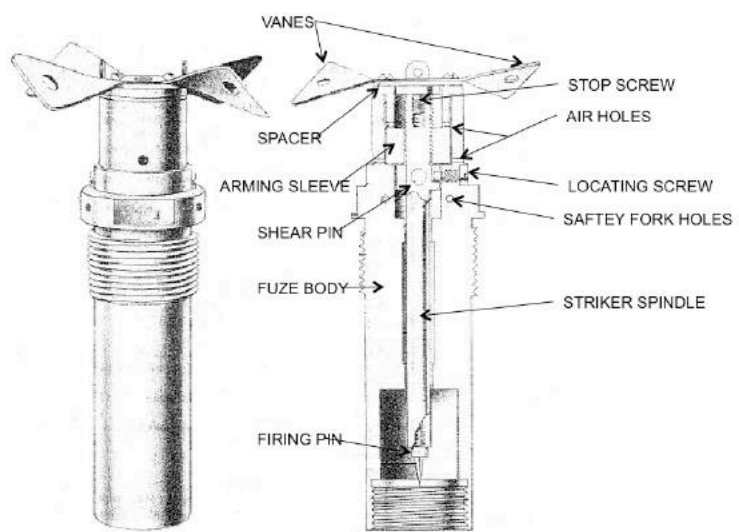


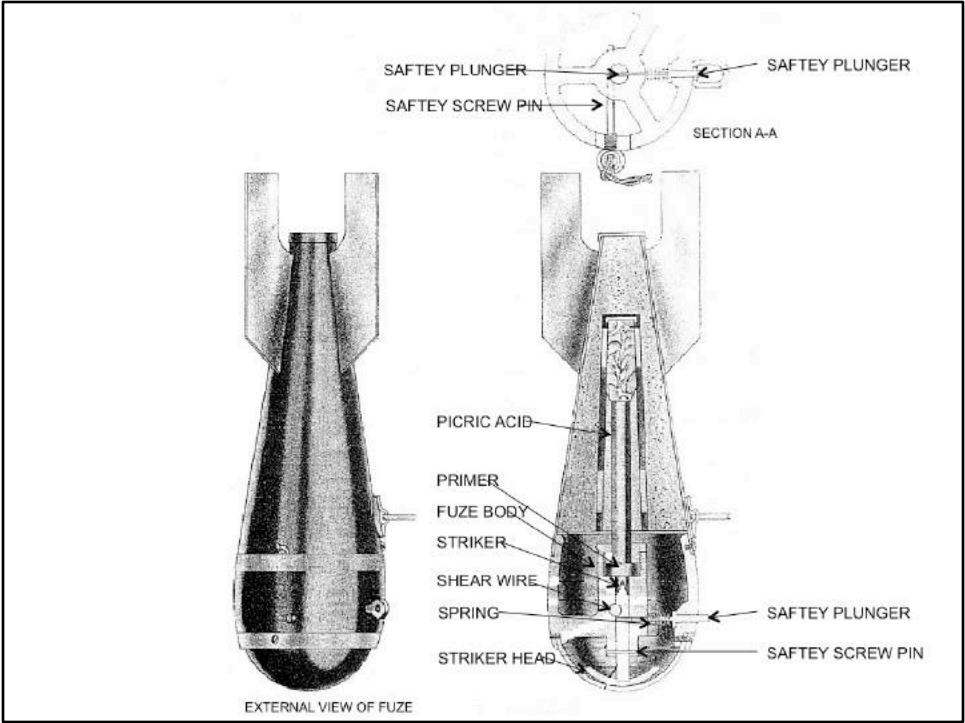


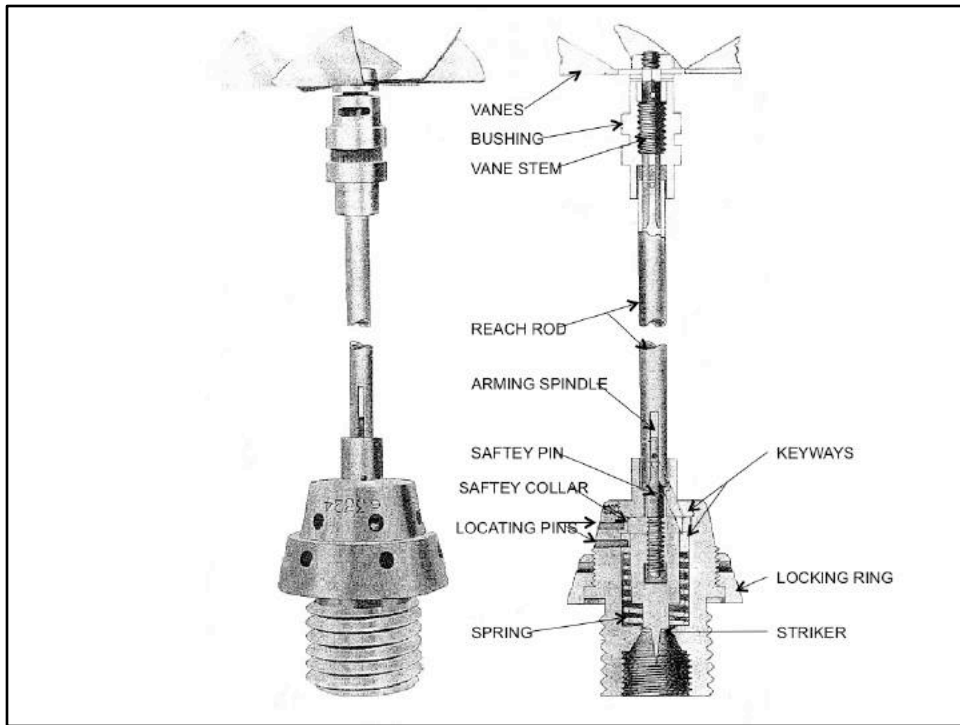


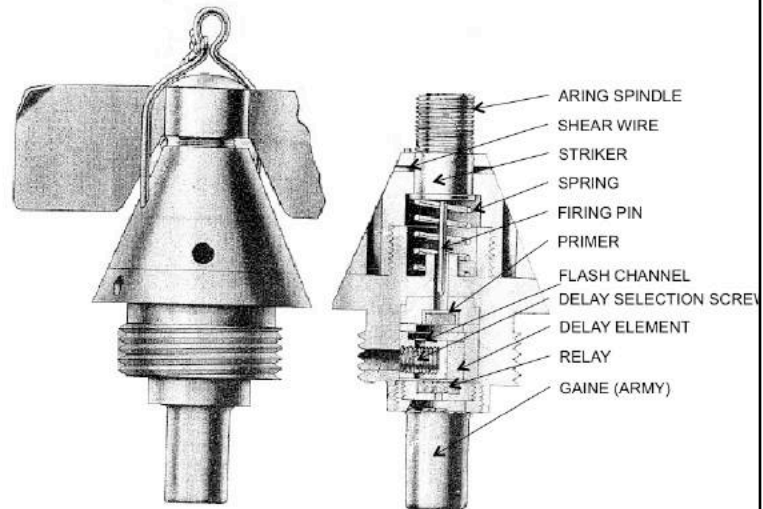


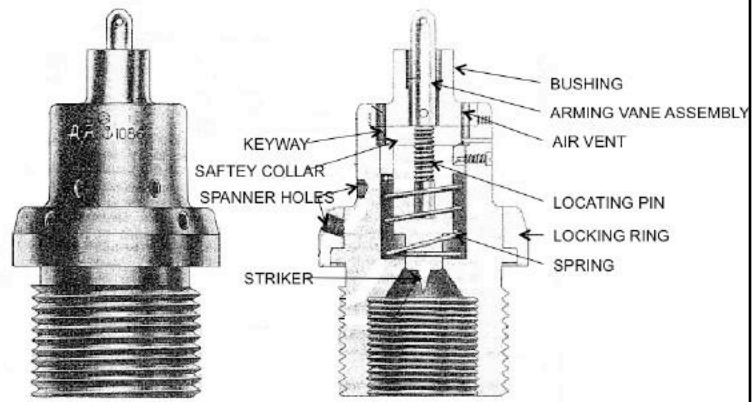






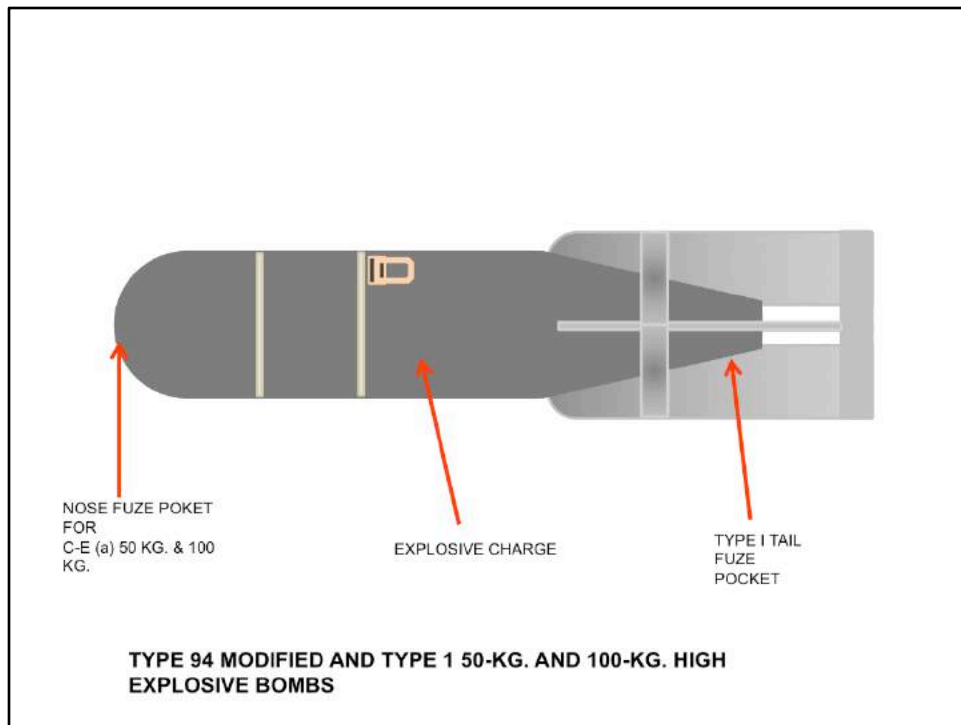


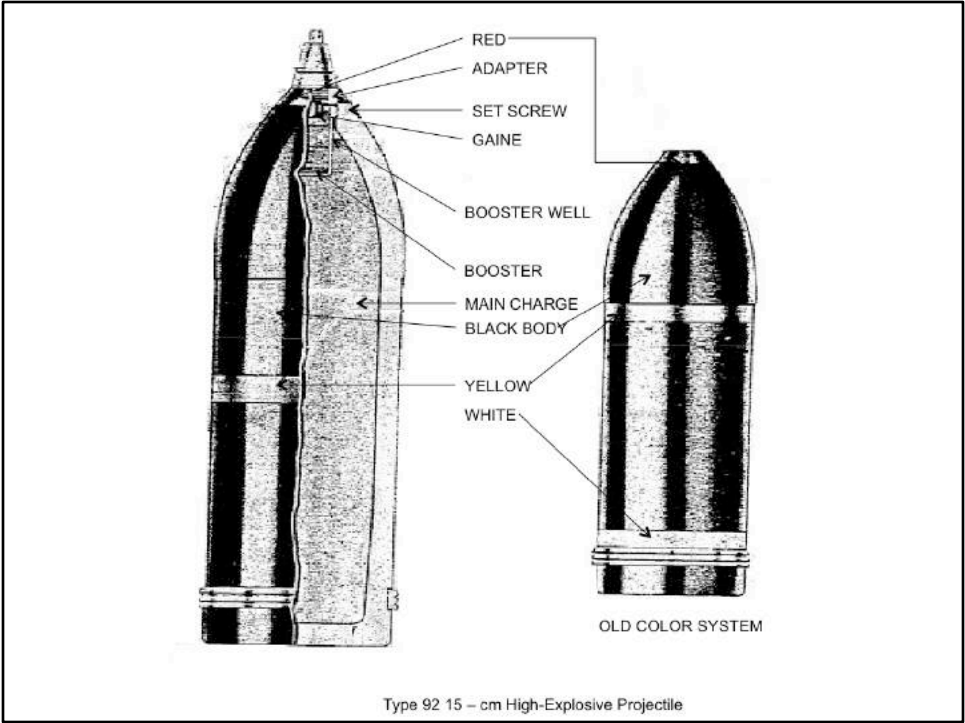


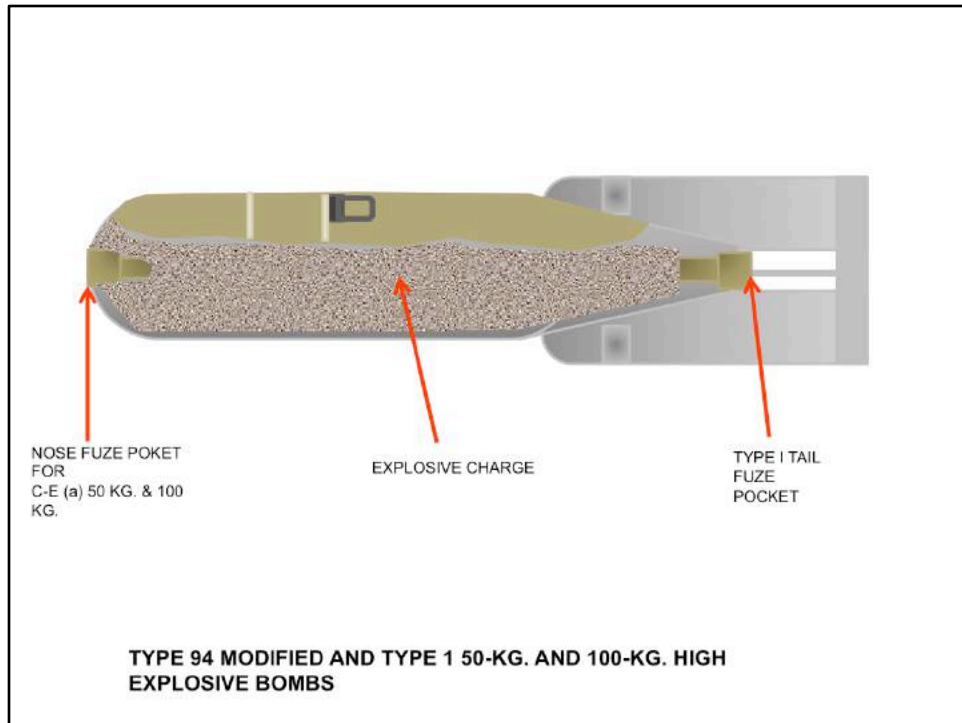


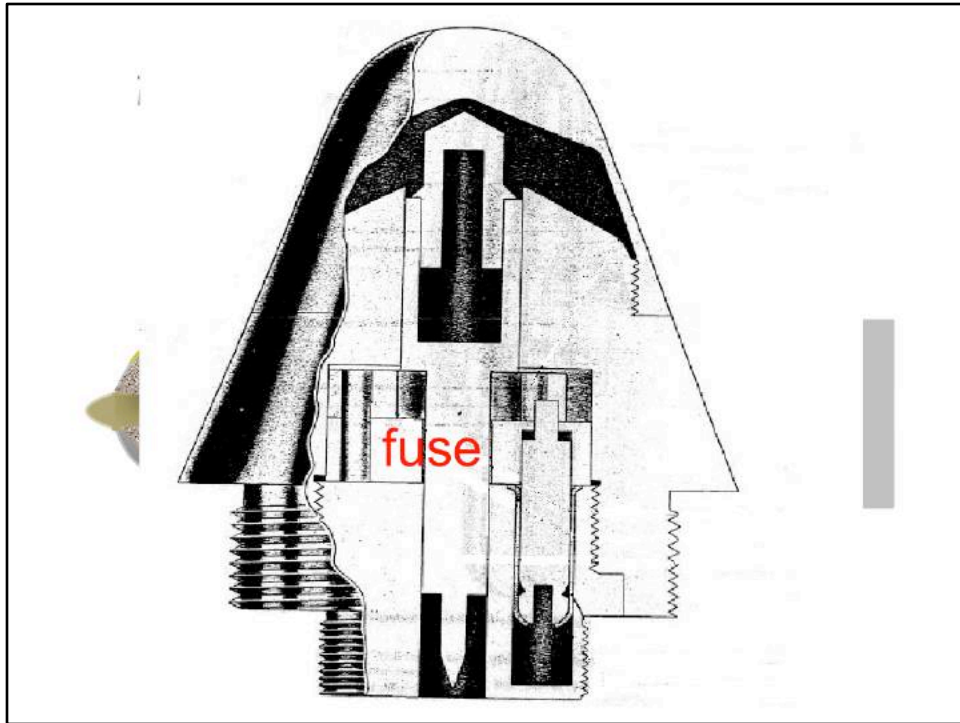
旧日本軍の弾薬類  
**JAPANESE EXPLOSIVE  
ORDNANCE**

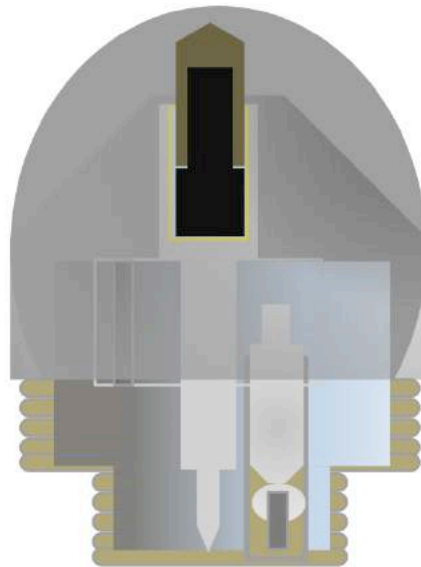












STRIKER EXTENTION

CENTRIFUGAL SEGMENT

PIVOT PIN

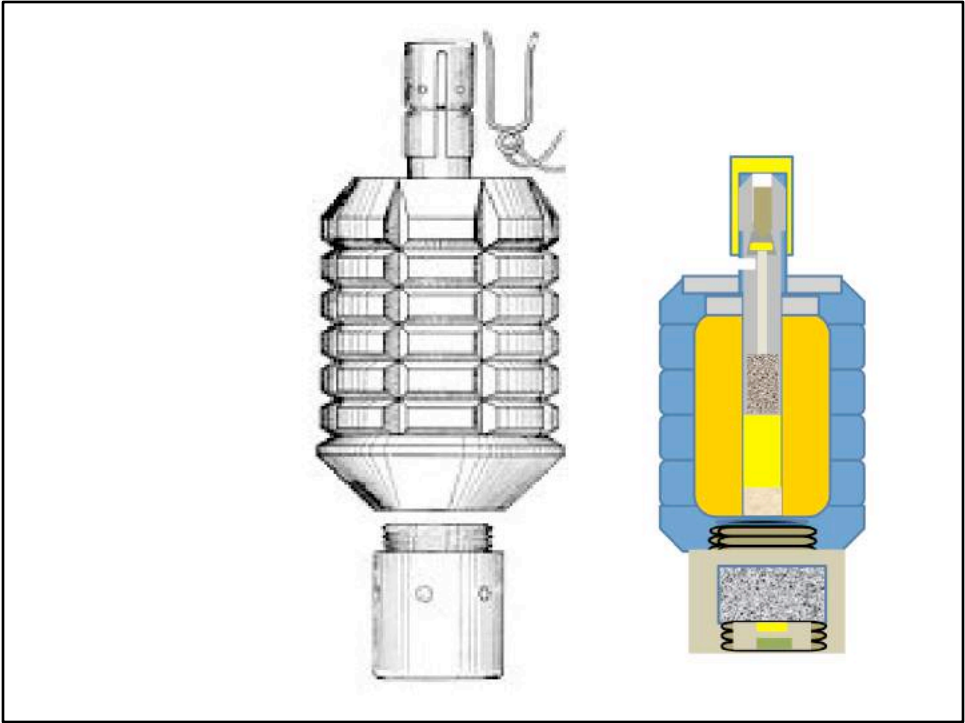
SPRING

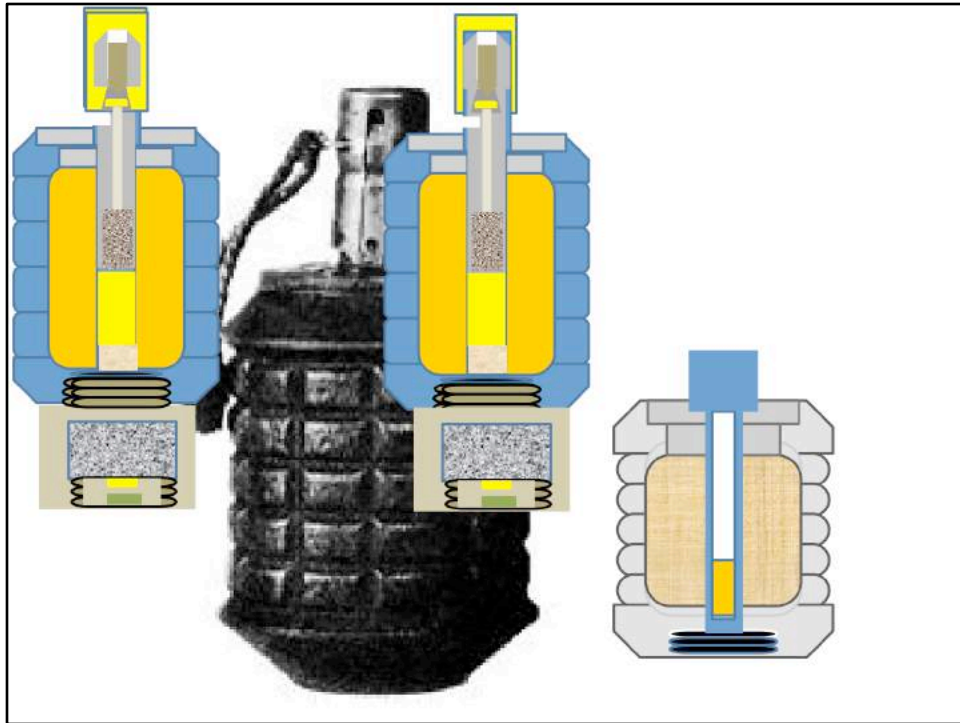
STRIKER

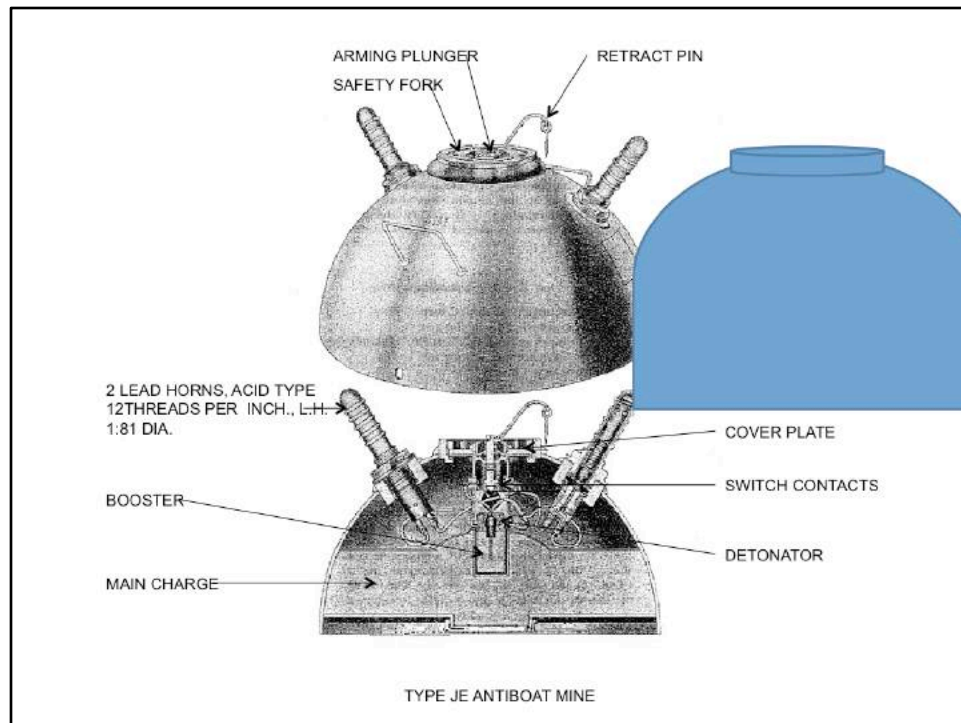
SETBACK PLUNGER

PLUNGER RETAINING SLEEVE

Type 88 Model 2 Nose Fuze







### Type JE Antiboat Mine

Diameter: 20 ¼ inches

Height: 10.62 inches

Thickness of wall: 3/16 inch

Material of wall: Steel

Weight: 106.5 pounds (not including horns detonator, booster, and wiring)

Weight of filling: 46.5 pounds

Type of filling: Type 98 explosive (HND/TNTN 40/60) with picric acid booster and tetryl detonator.

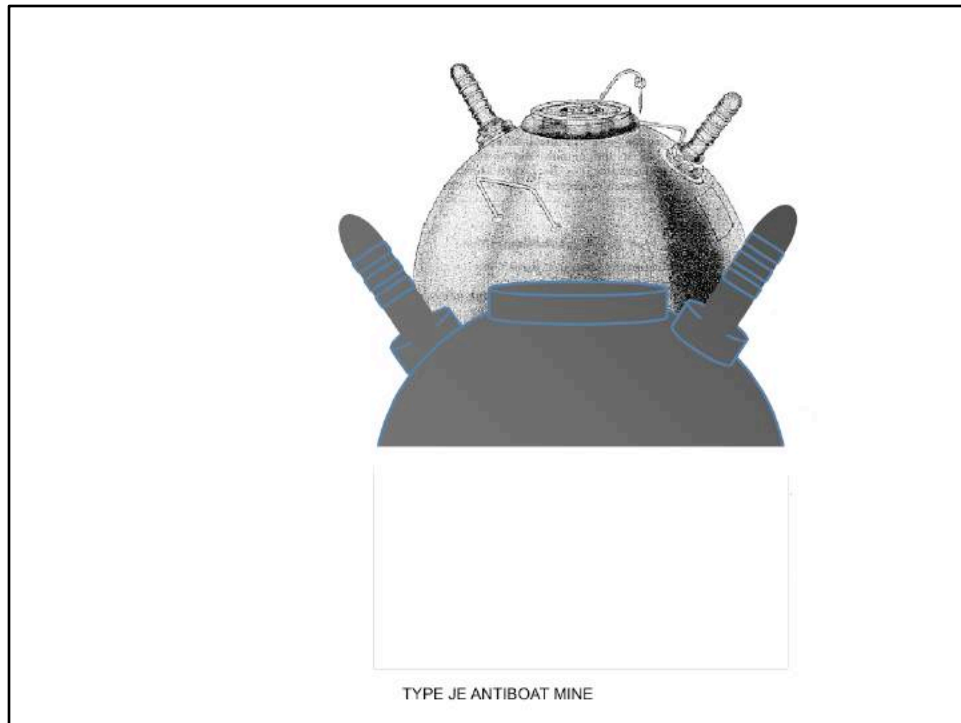
### See Page 221 for Figure 167-Type Antiboat Mine

1. Arming Plunger
2. Safety Fork
3. Retracting Pin
4. 2 Lead Horns, Acid Type 12 Threads Per in. Lh
5. Booster
6. Main Charge
7. Cover Plate
8. Switch Contacts
9. Detonator

**Description:** This is a hemispherical, chemical horned, all-welded mine. The outer body forms a hemisphere and has two handles on its upper portion, a central opening on top to take the booster and safety switch, and two horn openings 180degrees apart. The mine is divided internally into an explosive chamber and a chamber containing booster, wiring, safety switch, and horn electrodes. The division is made by a shallow, saucer-shaped steel section, which forms less than a hemisphere which is pressed into the outer body from the bottom and welded in place. A plate is then fitted into the bottom of the mine and is also welded in place. This last mentioned plate carries a filling plug in its center and is inset 13/16 of an inch to allow clearance for the plug. The horns, two in number, appear to be standard lead-acid mine horns. They are set at an angle of 65 degrees and project above the level of the mine top; threads are left hand. In the firing circuit is a spring loaded plunger whose upper end projects through the safety switch cover. A rubber diaphragm in the top of the cover insures water tightness but allows the plunger to move. There is a tapered, threaded hole in the center of the top of the plunger and a groove around the plunger near the top. Until the mine is in position a safety fork engages this groove and holds the plunger up against its spring. The inner end of the plunger is thus withdrawn from between two contacts in the electrical firing circuit and the circuit is incomplete.

**Employment:** Used on beaches as an antiboat mine. It can also be used on land as an antitank mine by burying or otherwise concealing it.

**Operation:** After the mine is laid the safety fork is removed. The contact plunger moves down under



#### **Type JE Antiboat Mine**

Diameter: 20 ¼ inches

Height: 10.62 inches

Thickness of wall: 3/16 inch

Material of wall: Steel

Weight: 106.5 pounds (not including horns detonator, booster, and wiring)

Weight of filling: 46.5 pounds

Type of filling: Type 98 explosive (HND/TNTN 40/60) with picric acid booster and tetryl detonator.

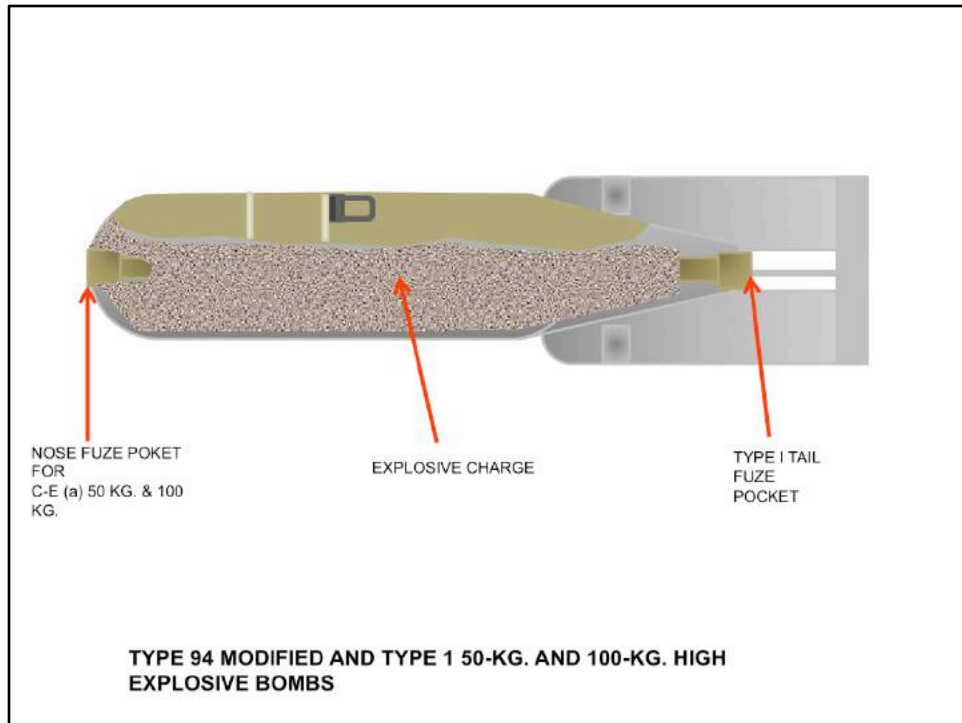
#### **See Page 221 for Figure 167-Type Antiboat Mine**

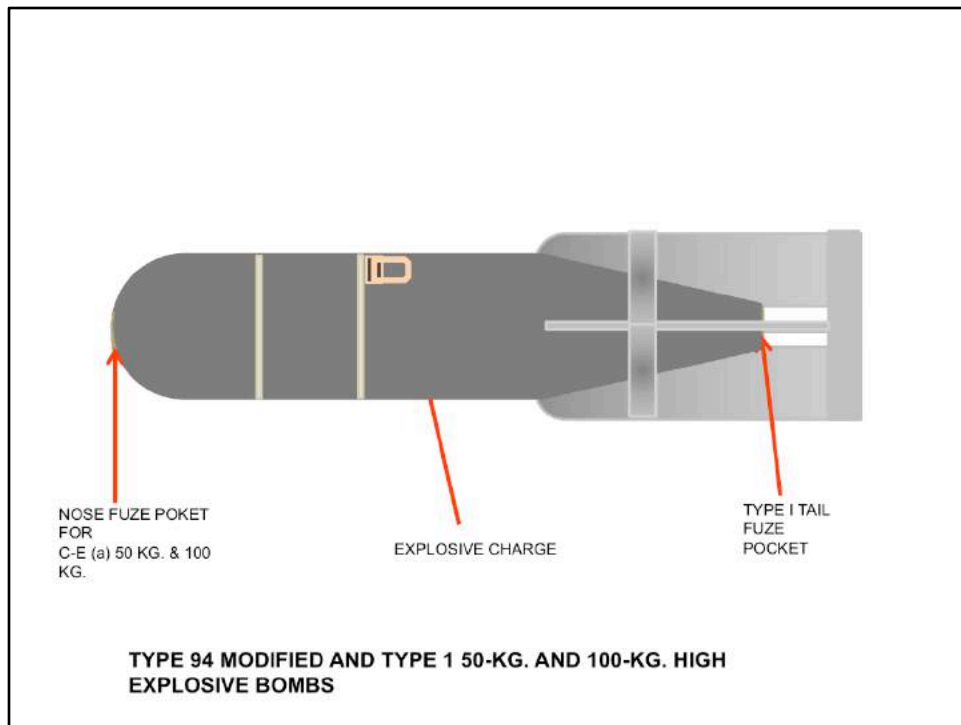
1. Arming Plunger
2. Safety Fork
3. Retracting Pin
4. 2 Lead Horns, Acid Type 12 Threads Per in. Lh
5. Booster
6. Main Charge
7. Cover Plate
8. Switch Contacts
9. Detonator

**Description:** This is a hemispherical, chemical horned, all-welded mine. The outer body forms a hemisphere and has two handles on its upper portion, a central opening on top to take the booster and safety switch, and two horn openings 180 degrees apart. The mine is divided internally into an explosive chamber and a chamber containing booster, wiring, safety switch, and horn electrodes. The division is made by a shallow, saucer-shaped steel section, which forms less than a hemisphere which is pressed into the outer body from the bottom and welded in place. A plate is then fitted into the bottom of the mine and is also welded in place. This last mentioned plate carries a filling plug in its center and is inset 13/16 of an inch to allow clearance for the plug. The horns, two in number, appear to be standard lead-acid mine horns. They are set at an angle of 65 degrees and project above the level of the mine top; threads are left hand. In the firing circuit is a spring loaded plunger whose upper end projects through the safety switch cover. A rubber diaphragm in the top of the cover insures water tightness but allows the plunger to move. There is a tapered, threaded hole in the center of the top of the plunger and a groove around the plunger near the top. Until the mine is in position a safety fork engages this groove and holds the plunger up against its spring. The inner end of the plunger is thus withdrawn from between two contacts in the electrical firing circuit and the circuit is incomplete.

**Employment:** Used on beaches as an antiboat mine. It can also be used on land as an antitank mine by burying or otherwise concealing it.

**Operation:** After the mine is laid the safety fork is removed. The contact plunger moves down under





## 弾薬類の構造・機能・識別

- 火砲弾薬Bomb ammunition
- 擲弾・手榴弾Grenade
- 小火器弾Firearmile
- 爆弾bomb
- 地雷・機雷Mine
- 信管fuse

