Australian Government
Department of Defence

DEFENCE UNEXPLODED ORDNANCE WEBSITE
ORDNANCE INFORMATION SHEET

ALL UXO MAY BE HAZARDOUS IF DISTURBED
DO NOT TOUCH – TAKE A PHOTO – MARK THE LOCATION – CALL THE POLICE

GRENADE - NO. 36M

Description

- The No. 36M Grenade was a hand-thrown or rifle-projected grenade that was used extensively by Australian forces during and after WWII. The 36M's origins date back to WWI when the original Mill's Bomb (No. 5) was developed. The No. 5 was modified to the No. 23 which could take a rifle rod enabling it to also be fired from a rifle. The No. 23 was further modified in 1917, as No. 36, to be capable of being fired from the Rifle Discharger 2 inch. The No. 36M emerged from the No. 36 when the filling Baratol and a new waterproofing (shellac) were first used for grenades in Mesopotamia (hence the 'M' in the designation).
- The No. 36M grenade (along with some earlier models such as the No. 5) was manufactured throughout Australia and widely used by infantry units as well as many other units of the Army, Navy and Air Force.
- The 36M (and other hand grenades) is one of the most common UXO found in Australia with many being found by the public each year. Unexploded items of this type may be found in numerous areas throughout Australia – typically on or just below the ground surface.

Technical Data

Despite many earlier variations of the 36M grenade, they were all very similar in appearance and composition as described below.

- Munition length : approx. 95 mm
- Diameter : maximum diameter 60-61mm
- Total weight : 680-770 grams
- Fuse/Burster : Contains a simple time fuse
- Filling : approx 65-75 g high explosive (Baratol, Amatol, Trotyl/TNT or Ammonal)
- Identification :
  - The body of the munition is usually made of cast iron and serrated to assist fragmentation.
  - The body of the High Explosive variant is usually dark brown, black in colour or varnished. Red, pink and/or green marks may be around top of body.
  - Practice and inert (drill) variants were usually painted white, gray-white, blue or bronze but may also be unpainted.
  - Other colours may have been used or colours may have faded over time. **Treat all found munitions as dangerous**.
  - Many other types of grenades were used in Australia – treat all objects that look like grenades or other suspicious objects as if they were live munitions.

Images

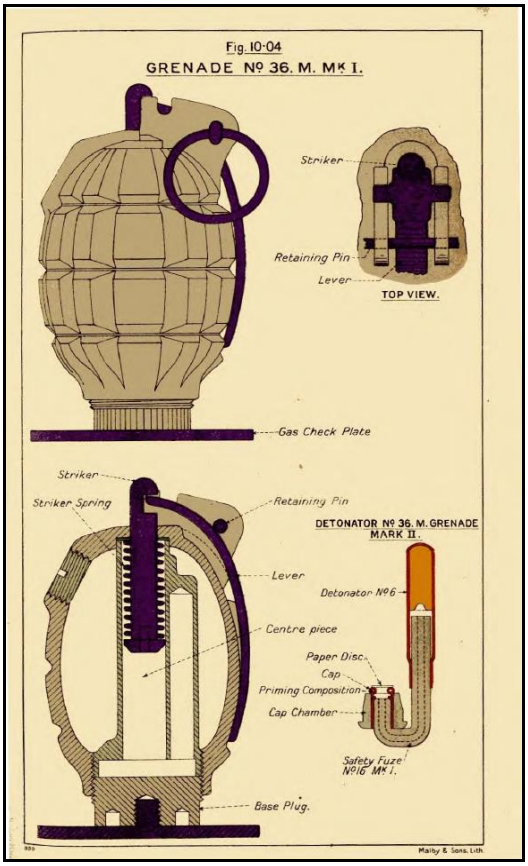

Figure 1 - 36M Grenade design

Figure 2 - 36M grenades in good condition. Note the gas-check plate on the middle grenade.

Figure 3 - Unexploded 36M grenades found at Clear Mountain, SE Qld

Figure 4 - Figure 4 - An Australian soldier throwing a 36M grenade during training - Randwick, NSW - 1936 (AWM ID number P00989.013)

Figure 5 - Shallow-buried 36M grenade found at Canungra, Qld

Australian Government
Department of Defence

DEFENCE UNEXPLODED ORDNANCE WEBSITE
ORDNANCE INFORMATION SHEET

ALL UXO MAY BE HAZARDOUS IF DISTURBED
DO NOT TOUCH – TAKE A PHOTO – MARK THE LOCATION – CALL THE POLICE

GRENADE - US MARK II

Description

- The Mark II (Mk II) grenade is a US hand-thrown or rifle-fired (using an adaptor) high explosive fragmentation grenade that was introduced in 1918. It was widely used during WWII until the 1970s when it was replaced by the M26, and later M26A1, grenade. It is commonly referred to as the "pineapple" because of its shape and external serration.
- A practice variant of the Mk II was also available containing a reduced charge of black powder.
- The Mk II grenade was primarily used by US forces stationed or training in Australia during WWII (mainly Qld and to a lesser extent NSW, VIC & NT) however some stocks of these grenades may have also been used by Australian units during or after WWII. These grenades were also often souvenired and therefore may be found in homes around Australia.
- Unlike earlier types of US grenades, the Mk II was shipped fully fuzed – any Mk II grenades that have the safety pin removed should be assumed to fully armed.
- Unexploded items of this type may be found in many areas throughout Australia but more likely to be found in QLD – typically on or just below the ground surface.

Technical Data

- Munition length : approx. 110-115 mm
- Diameter : approx maximum 57-59mm
- Total weight : approx 590-600 grams
- Fuse/Burster : Contains a simple time fuse
- Filling : HE - approx 55-60 grams of flaked/granular TNT or EC blank fire powder
- Identification :
  - The body of the munition is usually made of cast iron and serrated to assist fragmentation.
  - The body of the High Explosive variant is usually olive drab with a single or double yellow band at the top (some repainted grenades may not have the yellow band); the whole body of earlier models may be painted yellow.
  - Low Explosive grenades were made of blackened iron or were painted grey or black.
  - A red (and later blue) body was mostly used to indicate 'practice'. Bronze, gold, or brass usually denoted 'inert'.
  - Other colours may denote different types of dangerous filling (e.g. grey, dark green, light green – smoke or chemical; red – incendiary or riot control; violet – incapacitating).
  - ***Caution*** – US colours have changed over the past 70+ years and colours may have faded over time. **Treat all found munitions as dangerous**.
  - Many other types of grenades were used in Australia – treat all objects that look like grenades or other suspicious objects as if they were live munitions.

Images

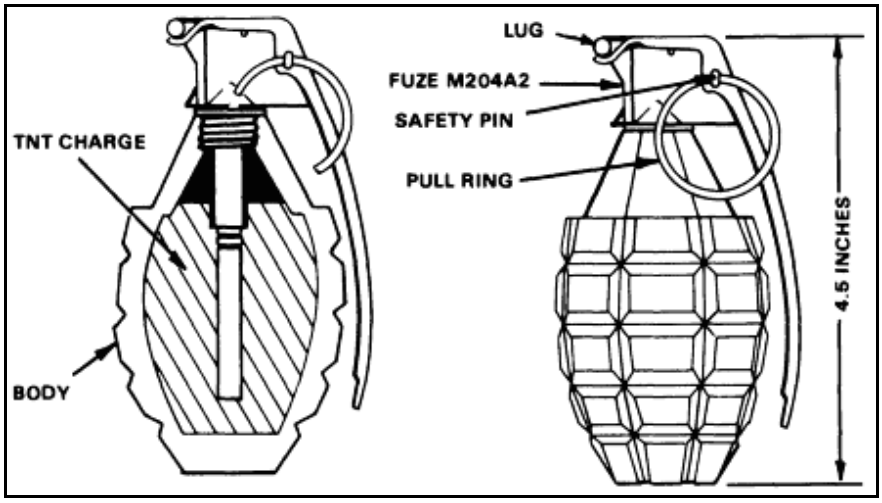

Figure 1 - Typical construction of US Mk II grenade

Figure 2 - Common colour/markings of Mk II grenade (HE)

Figure 3 - Early model of the MK II (HE) painted yellow

Figure 4 - US soldier throwing a Mk II grenade

Australian Government
Department of Defence

DEFENCE UNEXPLODED ORDNANCE WEBSITE
ORDNANCE INFORMATION SHEET

ALL UXO MAY BE HAZARDOUS IF DISTURBED
DO NOT TOUCH – TAKE A PHOTO – MARK THE LOCATION – CALL THE POLICE

GRENADE - NO. 69

Description

- The No. 69 Grenade was a WWII-era hand-thrown grenade. The No. 69 was introduced into Australian service during WWII and used primarily by Australian infantry units. In 1944 cast iron jackets were fitted to improve lethality, but proved to be less effective than other fragmentation grenades. Due to its low lethality (Bakelite/plastic case), the munition was not as widely used as other grenades and eventually withdrawn from service.
- Unlike many other WWII-era grenades that used a time fuse, the No. 69 was a percussion-type grenade (explodes on impact). Once armed, the sensitivity of the 'All Ways' fuse makes unexploded No. 69 grenades potentially very dangerous and liable to explode with any sudden knock.
- This munition was used by numerous military units and was also occasionally used to simulate artillery during training. As such, unexploded items of this type may be found in many areas throughout Australia – typically on or just below the ground surface.

Technical Data

- Munition length : approx. 115-140 mm
- Diameter : maximum diameter 60-61mm
- Total weight : 310-385 grams
- Fuse/Burster : Contains a simple percussion fuse which can be easily detonated
- Filling : approx 90-95 g high explosive (e.g. Baratol, Amatol or Lyddite)
- Identification :
  - The body of the munition is usually made of Bakelite (a hard plastic-like material).
  - The body of the High Explosive variant is usually black or reddish with either a band coloured green, red and/or red crosses around the top - the green band indicated that the grenade was filled with Amatol or Baratol; no coloured band (or "LYD") indicated Lyddite-filled and red crosses indicated that the explosive filling was suitable for use in hot climates.
  - Practice variants were usually painted white.
  - Other colours may have been used or colours may have faded over time. **Treat all found munitions as dangerous**.
  - The No. 69's small size, light weight and rather innocuous shape could result in this munition being easily mistaken for a harmless household item. The sensitivity of the 'All Ways' fuse makes unexploded No. 69 grenades potentially very dangerous and liable to explode with any sudden knock.
  - Lyddite (Picric Acid)-filled grenades may deteriorate over time and become increasing sensitive to shock.

Images

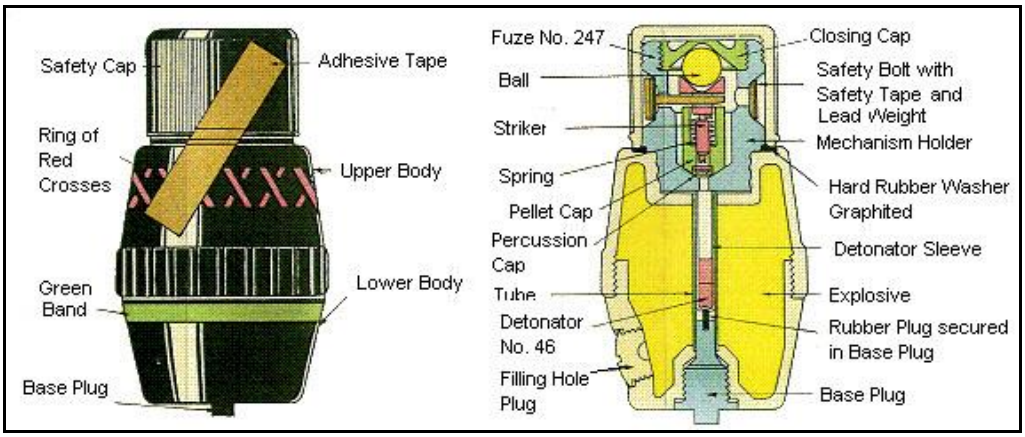

Figure 1 - No 69 Grenade - appearance and construction
(Note: The ring of red crosses on HE grenades indicated that the filling was suitable for use in hot climates)

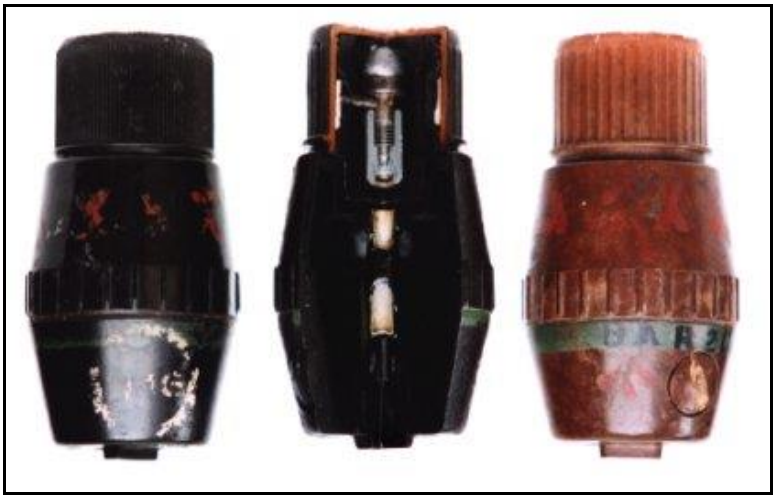

Figure 2 - Various No 69 grenades

Figure 3 – Australian No 69 HE grenade

Figure 4 - An Australian Volunteer Defence Corps soldier throwing a No 69 grenade during training - Victoria, 1943 (AWM ID number 138077)