GRENADE HAND No. 75 ANTI-TANK

This grenade looks nothing like a grenade and was intended to be an anti-tank mine able to be thrown like a grenade. It could also be connected together in chains to make ad-hoc demolition charges. Introduced in June 1942 it shows a certain desperation in its conception.

The grenade was made from the body of a commercially available liquid polish tin of approximately 1 pint (600mls) capacity. Originally it was fitted with a screwed lid that was cemented in place after filling. In later models this screwed lid was replaced by a press fitted version.

The No. 75 was filled with a variety of explosives:

NOBELS No. 704B
BURROWITE
66% BURROWITE & 33% 704B
MILITARY AMMONAL

In addition the body contained 4 exploders to give an added boost to the explosives fillings as they are in effect commercial explosives used in a military setting. The exploders were:

POLAR DYNAMITE (25% NG)
OR
NOBELS 673

BURROWITE
50% AMMATOL
50% ALUMINIUM

AMMONAL
65% AMMONIUM NITRATE
15% TNT
17% ALUMINIUM
3% CHARCOAL

POLAR DYNAMITE
25% NG
75% DIATOMACEOUS EARTH

NOBELS 704B
15% TNT
67.5% AMMONIUM NITRATE
16% ALUMINIUM POWDER
.5% CALCIUM STEARATE
1% PARAFFIN WAX

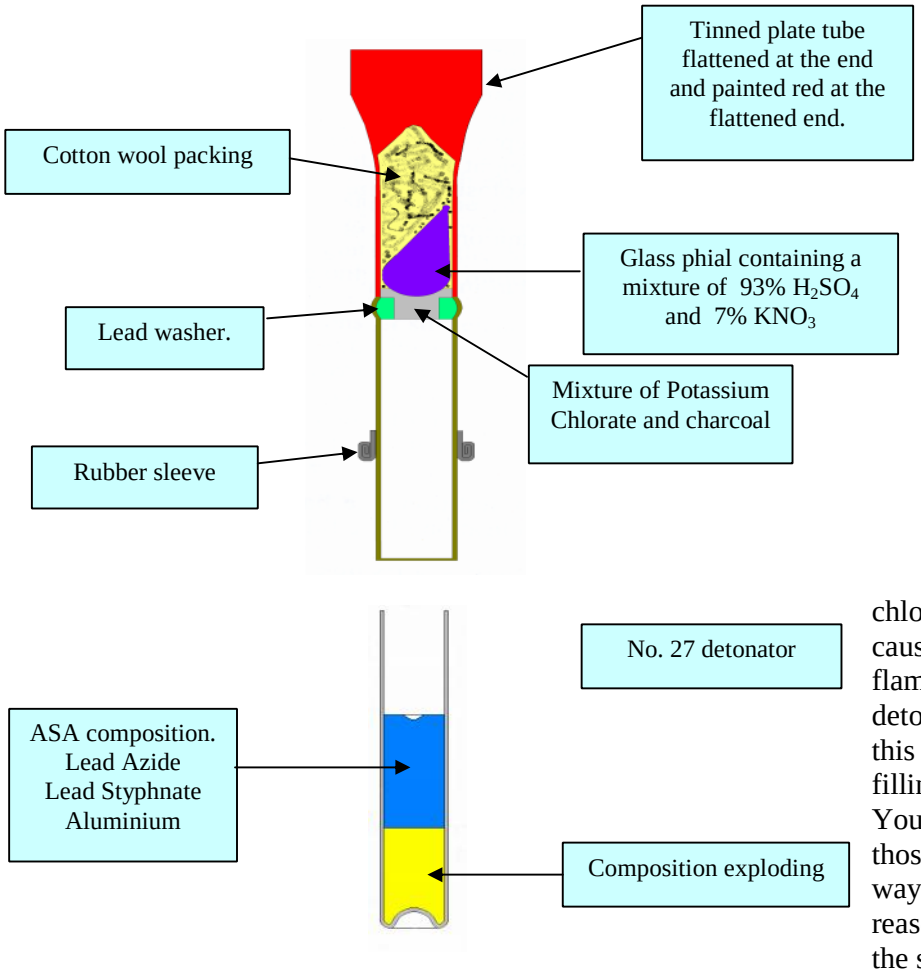
NOBELS 673
?

This looks very much like a repaint job to represent a Mk II.

The use of commercial explosives to perform a military task is sending a boy to do a mans job. They have neither the violence nor the brisance to adequately smash an armoured vehicle.

The grenade was initiated by a system that could best be described as amateurish. It consisted of a tinned plate framework soldered to the outside of the body, a pair of chemical igniters attached to a pair of No. 27 detonators. The theory being that the contraption was to be thrown under the tracks of a tank and the crushing action would break the chemical igniters causing the detonators to function.

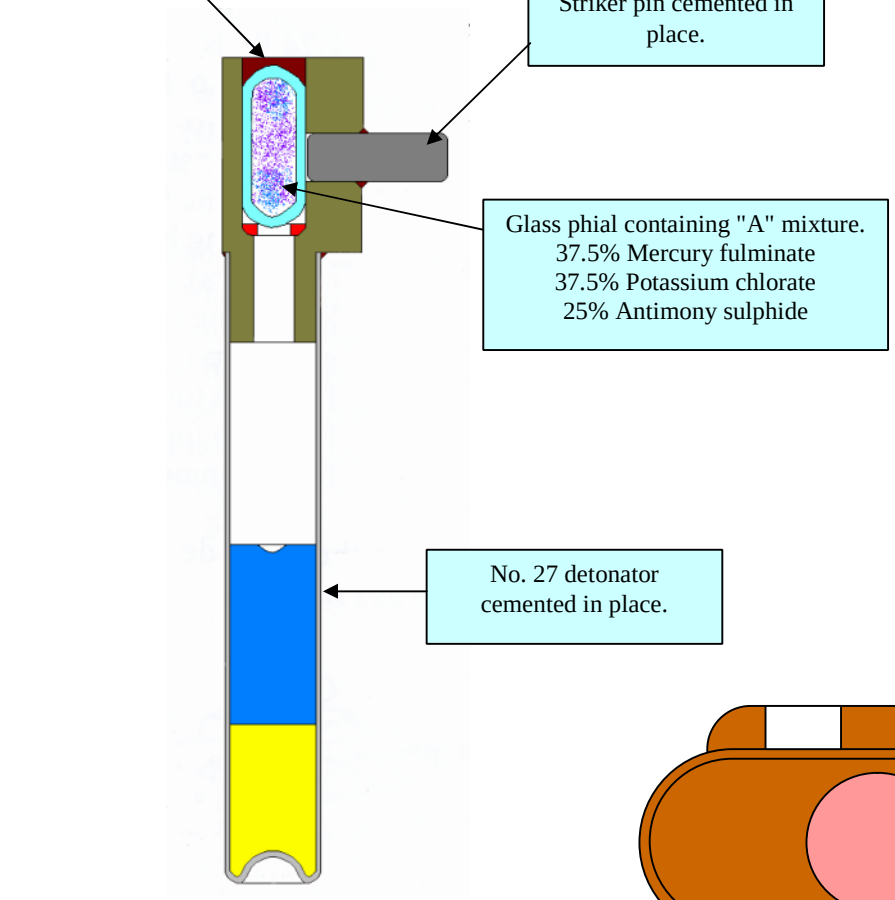
This is where the difficulty comes in, placing a detonator system on the outside of an explosive device is asking for the rate of failure to be somewhat high. Your exploder system should always be inside the explosives. This makes for good detonation. In addition the idea of carrying around explosive devices fitted with glass tubes of chemicals in a battle zone is not conducive to peace of mind.

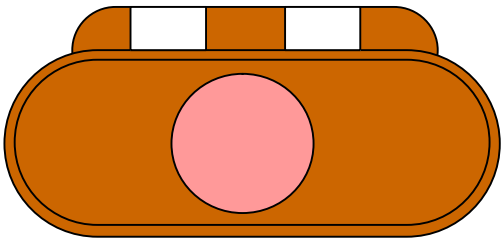


The system was arranged thus: the number 27 detonator was slid into the hollow end of the tube until it butted up against the lead washer, then the rubber sleeve was rolled down holding the detonator in place. On being crushed the two acids in the tube reacted with the potassium chlorate and charcoal causing a flame. The flame causes the detonator to explode and this in turn explodes the filling inside the tin can. You can see that with all those bits of metal in the way there is a reasonable chance for the system to go awry.

The British soon woke up to the basic drawbacks of this style of igniter and modified it to some extent. But they still retained the basic crush system although they used a detonating compound in lieu of the chemical buck igniter style.

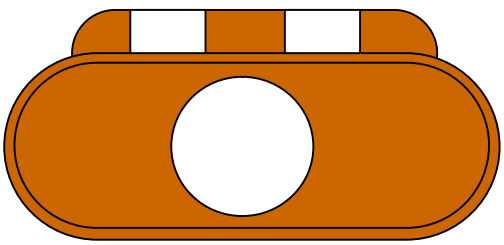
Clearly shown here is the method by which the plate would crush the glass capsules held in place in the detonator holders.



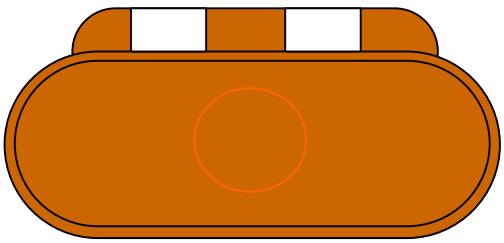


Cap is coloured pink when the filling is BURROWITE or MILITARY AMMONAL.

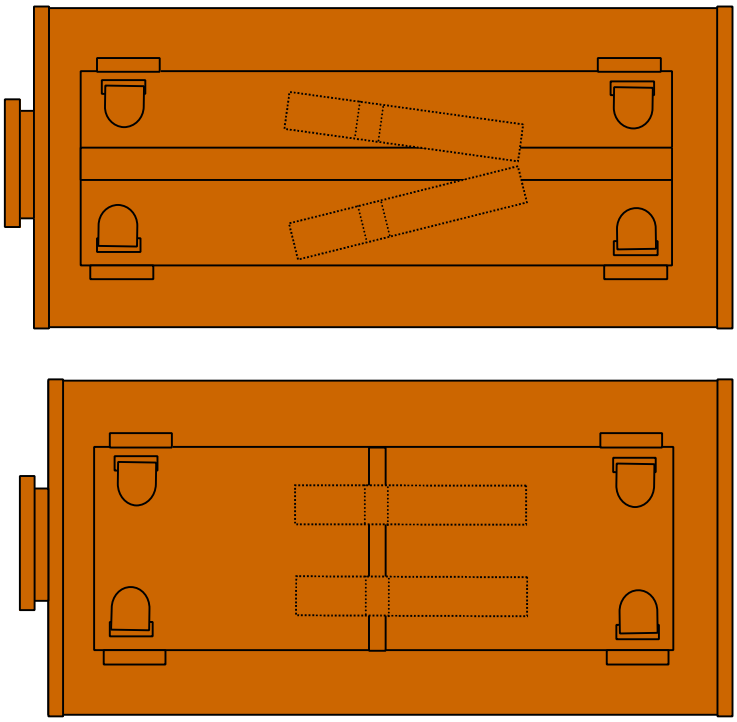
Shown here is the way in which the detonator holders were angled to put the two detonators closer together. This is a replica



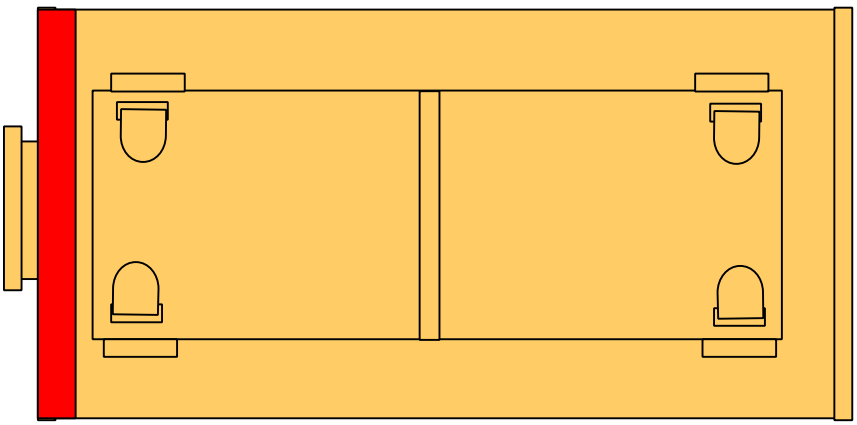
Cap is coloured white for drill versions.



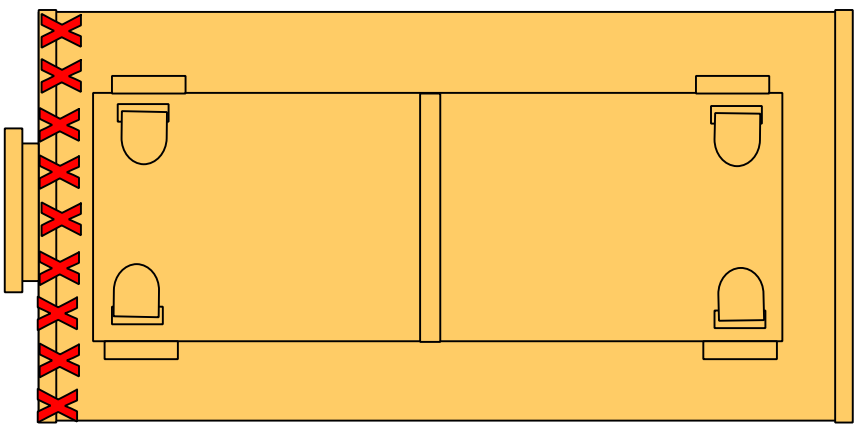
Mk III has no filling cap and is sealed with a press fitted plate.



Shown here is the way in which Mk I differed from Mk II. MkI had the detonator holders running parallel to each other and Mk II had them angled to get the detonators to boost each other. Mk II also had the groove running lengthwise.

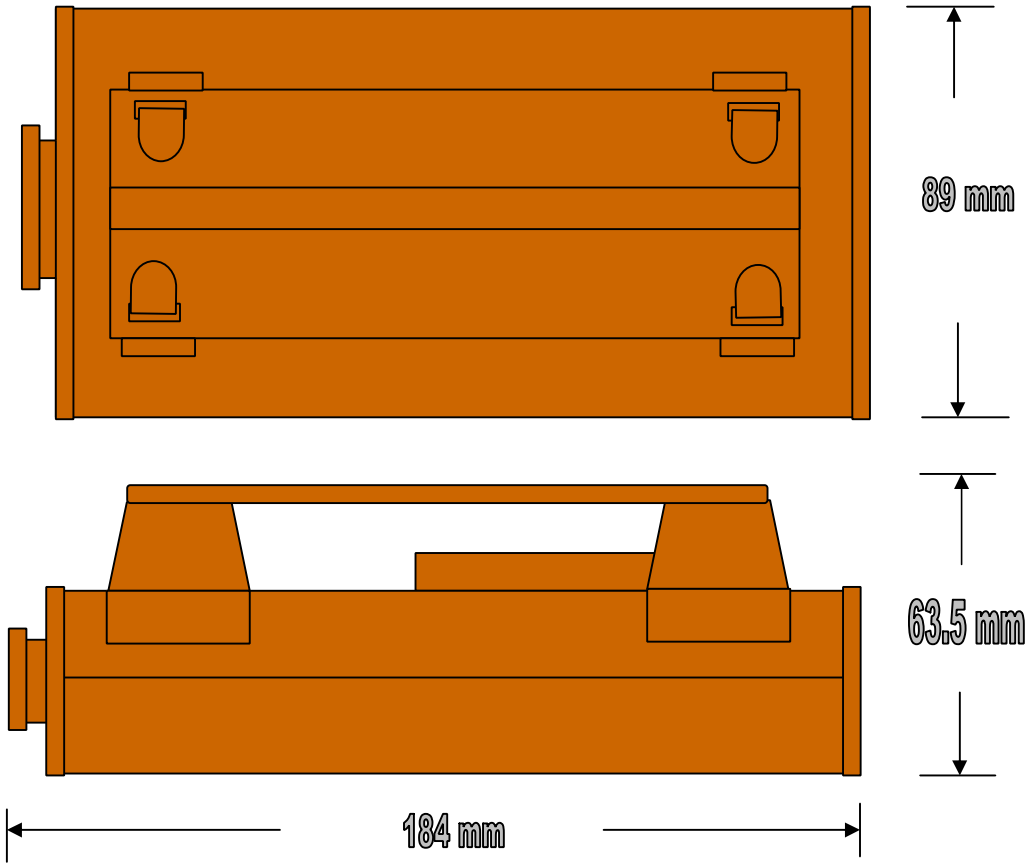


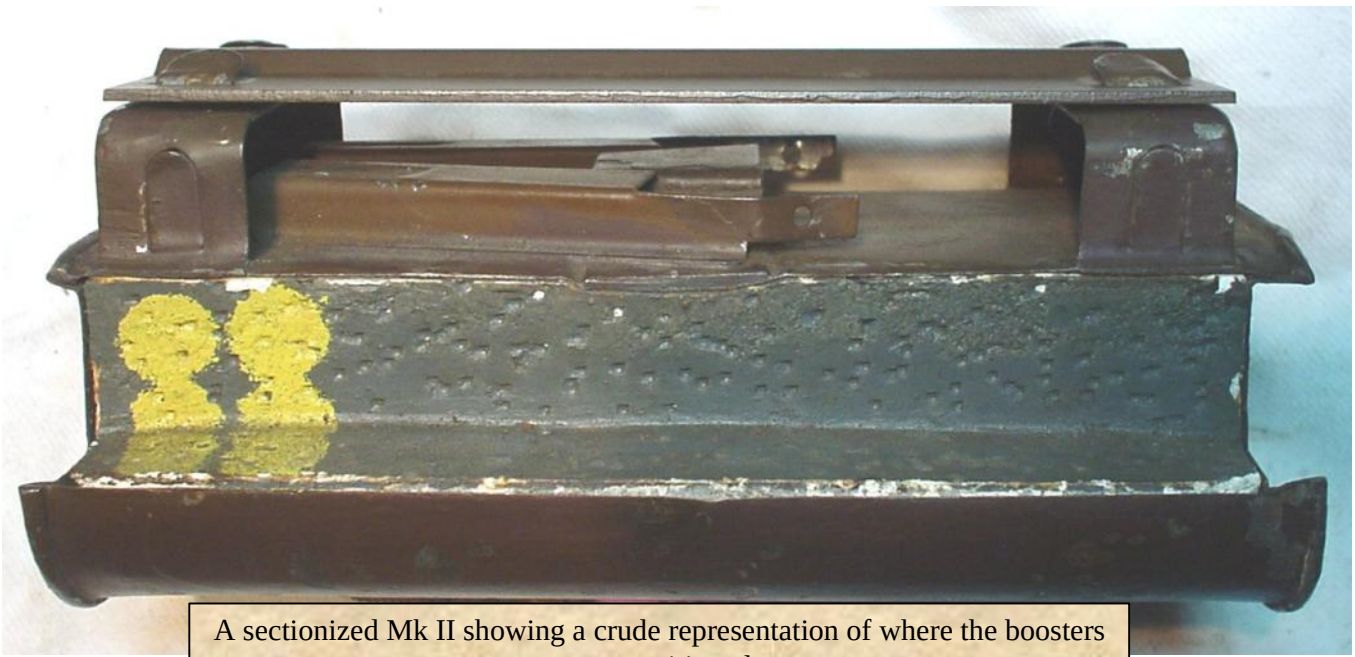
Red filling ring to indicate filled with Victor powder or Nobels No. 673.



Red filling ring to indicate filled with Victor powder or Nobels No. 673.

DIMENSIONS





A sectionized Mk II showing a crude representation of where the boosters were positioned.

Stencilling found on the body of the 75 grenade was as follows:

BUR = BURROWITE

A = MILITARY AMMONAL (THIS WAS ADDED TO THE NUMBER EG 75A)

= Filled with TNT.

& 4 EXP = INDICATES THAT THE GRENADE HAS FOUR EXPLODERS FITTED INSIDE.

1/3 BUR 2/3 704B = INDICATES THAT THE FILLING IS A BLEND OF THE TWO EXPLOSIVES

Stamped into the body of the case will be the Model number, the mark number , the manufacturers code letters and the date of manufacture. This is not strictly accurate as many bodies were used from old stock with Mk I stampings and made into Mk IIs.

Mk II introduced June 1943 and had the igniter pockets set obliquely.
There was no Mk III
The Mk II was reinstated in March 1949 because there was no other anti-tank grenade available. It was also applied to Naval service in November 1953.
Finally the veteran was declared obsolete in July 1955.