

PREFATORY NOTE

1. Military Training Pamphlet No. 40, Mines and Booby Traps, will consist of the following parts:—

Part I (All Arms)—How to deal with individual mechanisms.

Part II (All Arms)—Laying and recording of British mines.

Part III (All Arms)—The breaching of minefields.

Part IV.—(In preparation).

2. The above-mentioned pamphlets should be studied by all commanders, i.e. battalion and upwards.

3. Blank pages are included in Part I for pasting in amendments which will be issued when new devices are taken into use.

DISTRIBUTION (Part I)

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ALLIED MINES

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BRITISH MINE MK V.



CHAPTER I

SECTION I.—ANTI-TANK MINE

BRITISH MK V

Size.—Circular, 8 ins diameter, 4 ins high.

Weight.—About 12 lb (containing about 8 lb explosive).

Safety device.—Safety pin in the top of the fuze.

Description.—The fuze sits in a pocket in the centre of the top of the mine; over it sits a tin cap on a rubber-washer to keep moisture out of the fuze pocket. The fuze is operated by a spider frame which fits over the top of the mine and is held in place by studs which fit into slotted straps on the side of the mine.

To arm

- i. Check that the shear wire of fuze is not damaged (if it is—discard the fuze).
- ii. Put the fuze in the mine and remove the safety pin with a horizontal pull using pliers.
- iii. Place the rubber washer and tin cap over it and replace spider cover.

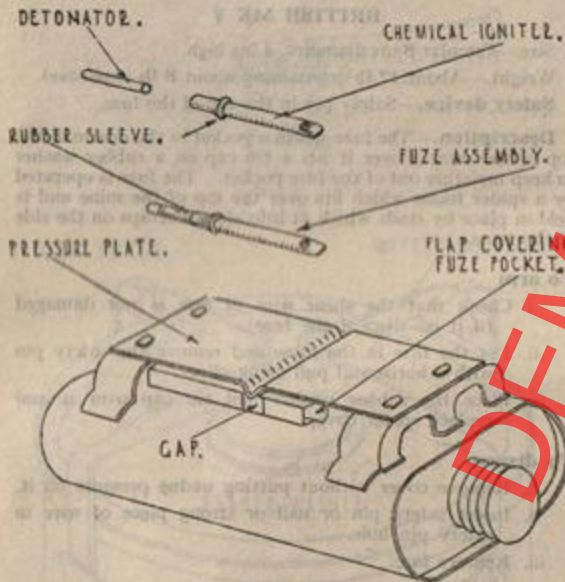
To disarm

- i. Remove cover without putting undue pressure on it.
- ii. Insert safety pin or nail or strong piece of wire in safety pin hole.
- iii. Remove fuze.

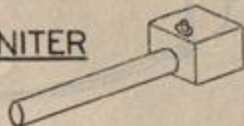
Note.—You may meet British Mk IV mines. They are similar to the Mk V but have an overall solid cover in place of the spider frame, and no waterproof cap.



BRITISH No 75 GRENADE MINE. MK. I.



(MK II) IGNITER



ANTI-TANK MINE

BRITISH No. 75 GRENADE MINE, MK I

Size.—7 ins by 4 ins

Weight.—About 3 lb (containing about 1½ lb explosive).

Safety device.—Nil

Description.—The mine is operated by the V-shaped indent on the pressure plate crushing the chemical igniters of the fuze.

To arm

- i. Assemble the fuze by inserting detonator into igniter (putting the open ends together) and fasten with the rubber sleeve on the igniter.
- ii. Insert a fuze into each of the two pockets under the pressure plate, pushing the detonator end in first, and ensure that the RED paint is visible in the gap.
- iii. Close the flaps at the ends of the pockets to prevent the fuzes falling out.

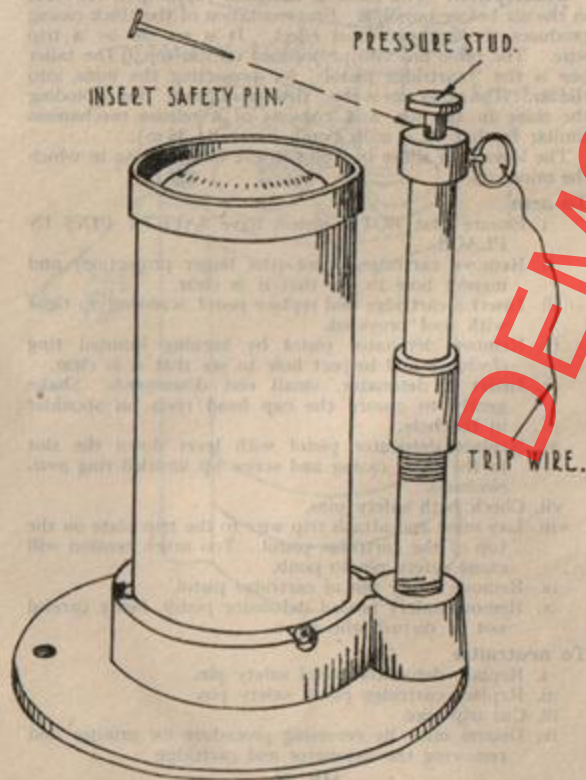
To disarm

Open the flaps and remove both fuzes. The igniter and detonator must be taken apart and stored separately.

Note.—There is a Mk II edition of this mine with the following alterations:—

- i. The fuze is in one piece and is operated by a pressure pin. (See sketch).
- ii. The two pockets for the fuzes are inclined at an angle to allow for easier insertion.

AMERICAN MINE M2



ANTI-PERSONNEL MINE

AMERICAN MK 2

Size.—About 7 ins by 4 ins.

Weight.—About 8 lb (containing about 1 lb of explosive).

Safety device.—Safety pin in the igniter.

Description.—This mine is similar in action to the British Shrapnel mine.

The firing device can be operated either by pulling on a trip wire or by pressure on the knob.

To neutralize

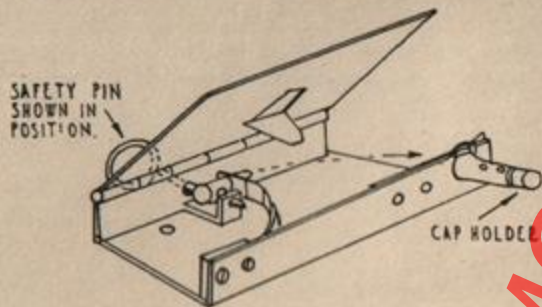
- i. Place a nail or piece of strong wire in the safety pin hole in the igniter.
- ii. Cut the trip wire or remove pressure knob (whichever applies).
- iii. Unscrew the igniter.

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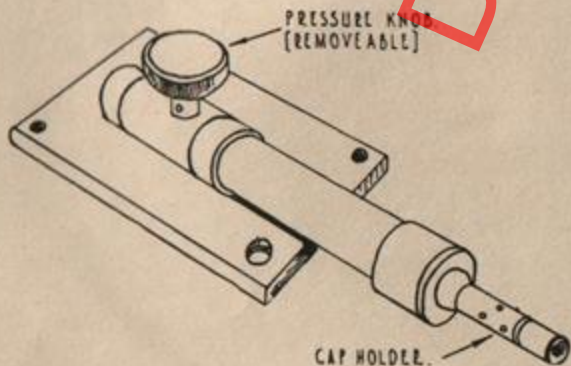
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BRITISH RELEASE SWITCH.



BRITISH PRESS SWITCH



SECTION 3.—BOOBY TRAP SWITCHES

British RELEASE switch

This operates rather like a book opening.

A tapered tongue projects inside the lid and bears against the spring when the switch is armed. The pressure of the spring tends to force the lid up. The lid is kept down by a weight—its removal will release the striker which fires a cap. Used under packing-cases and similar objects likely to be moved. Only a slight movement is necessary to fire it.

To disarm

- i. Insert a safety pin or nail or piece of strong wire in the hole. The pin **MUST** go through both casing and striker head (as in sketch).
- ii. Disconnect the cap holder.

Note.—If you cannot get at the switch to insert a safety pin you may be able to cut the fuze coming from it.

British PRESS switch

This switch is operated by pressure on the knob which releases a spring-loaded striker. It may be used under boards, mats, etc., and is fired by a weight of about 30 lb.

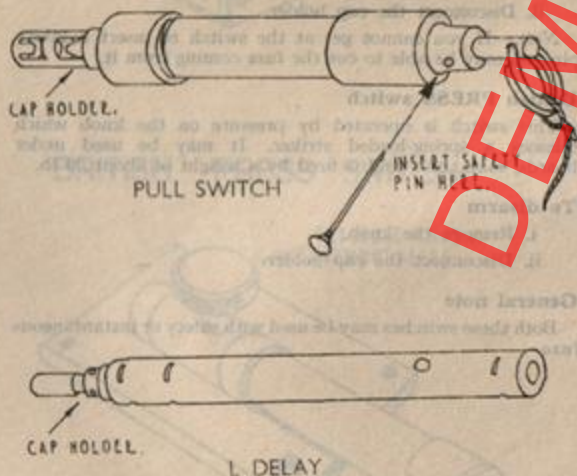
To disarm

- i. Remove the knob.
- ii. Disconnect the cap holder.

General note

Both these switches may be used with safety or instantaneous fuze.

BRITISH IGNITERS.



BOOBY TRAP SWITCHES

British PULL switch

This switch is used with a trip wire, which releases the striker when pulled.

To disarm

- i. Insert safety pin or nail or piece of strong wire in the hole.
- ii. Cut trip wire.
- iii. Disconnect the cap holder.

British L delay (lead break)

This igniter contains a spring-loaded striker, held back by a lead strip which stretches and eventually breaks under the action of the spring. Initially the striker is held in place by a safety pin.

There are various delays from 1 hour to 28 days. The igniter can be fitted direct to a detonator or safety fuze (using an adaptor).

To disarm

- i. It is no use trying to insert a safety pin as the striker will have moved.
- ii. There is no means of telling the delay remaining—therefore, gently remove by (a) cutting safety fuze, (b) if fitted to a detonator, by removal of igniter and detonator which should be put in a safe place. No attempt should be made to disconnect the detonator from the igniter.

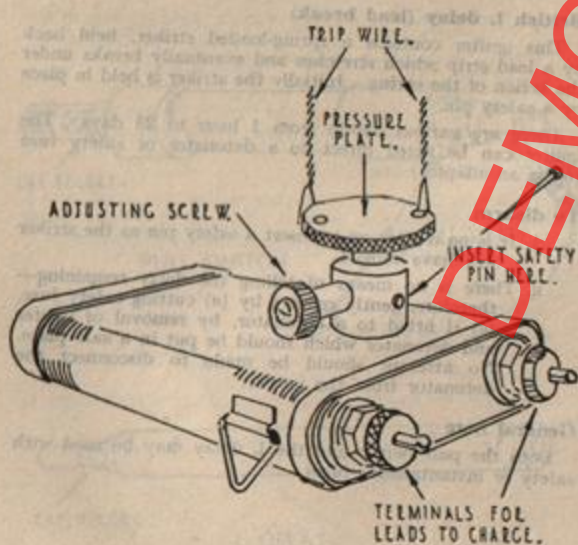
General note

Both the pull switch and the L delay may be used with safety or instantaneous fuzes.

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BRITISH PRESSURE/PULL SWITCH.
ELECTRIC.



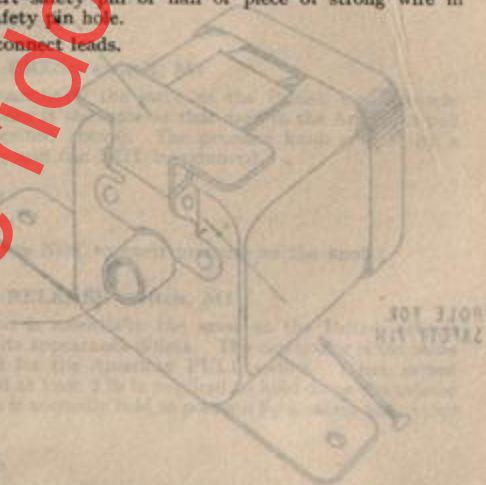
AMERICAN BOOBY TRAP SWITCHES

British PRESSURE/PULL Switch (Electric)

This switch contains a small battery and is designed to fire an electric detonator when either a trip wire is pulled or pressure is put on the plate. The pressure required to actuate the switch can be varied. The lightest pressure required is about 5 lb.

To neutralize

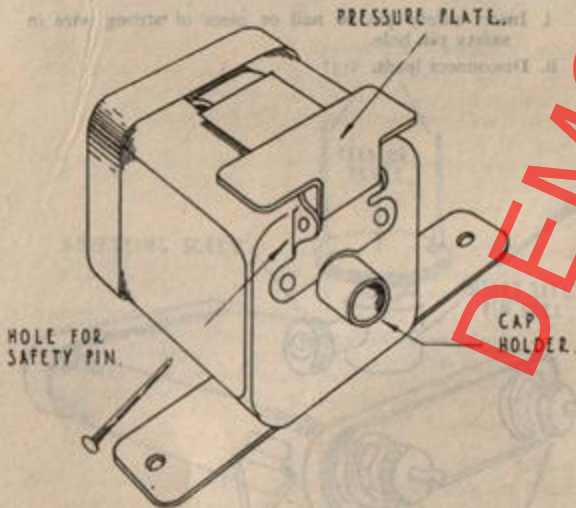
- i. Insert safety pin or nail or piece of strong wire in safety pin hole.
- ii. Disconnect leads.



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AMERICAN RELEASE SWITCH M1.



BOOBY TRAP SWITCHES

American PULL switch, M1

This is essentially the same as the British pull switch, with one main modification - the cap holder is threaded to fit the American hand grenade and it can also be fitted to a detonator in addition to safety or instantaneous fuze.

To disarm

- i. Insert safety pin or nail or piece of strong wire in safety pin hole.
- ii. Disconnect.

American PRESS switch, M1

This is essentially the same as the British press switch. The cap holder is the same as that used in the American pull switch (described above). The pressure knob is held by a small spring and can NOT be removed.

To disarm

Disconnect.

(Taking care NOT to exert pressure on the knob.)

American RELEASE switch, M1

The action is essentially the same as the British release switch but its appearance differs. The cap holder is the same as described for the American PULL switch. When armed a pressure of at least 2 lb is required to hold down the release plate, which is normally held in position by a safety pin. (See sketch.)

To disarm

Replace safety pin or nail and disconnect.

GERMAN TELLERMINE 35 (No. 1)



CHAPTER II SECTION 4.—ANTI-TANK MINE

GERMAN TELLERMINE 35 (No. 1)

Size.—Circular, about 13 ins diameter.

Weight.—About 20 lb (containing about 12 lb of explosive).

Safety device.—Safety bolt and safety screw in the fuze.

Description.—The mine has a dome-shaped cover plate in the centre of which is screwed a brass fuze.

Pressure on any part of the cover plate will fire the mine. It is fitted with a carrying handle.

Anti handling device.—There are TWO holes in the body of the mine threaded to take the standard German igniters (described on pages 63, 65). These holes are situated:—

- i. One opposite the handle in the side of the mine.
- ii. One in the bottom about half way between the handle and the centre of the mine.

Anti handling igniters when fitted are almost invariably pull igniters.

To neutralize

(a) IF HAND LIFTING IS ORDERED

i. SEARCH FOR AND NEUTRALIZE BOOBY TRAPS

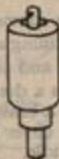
which will almost certainly be present with this mine (see page 3).

- ii. Unscrew the main fuze.
- iii. Point the fuze away from you, and turn the screw so that the RED DOT is opposite the slot marked SICHER which may be coloured GREEN or WHITE.
- iv. Push home the safety bolt.
- v. Replace the fuze (which is now safe) in the mine.
- vi. Lift the mine and unscrew any anti-handling igniters.
- vii. Remove the detonators from the anti-handling holes.

(b) IF PULLING CLEAR WITHOUT SEARCHING FOR BOOBY TRAPS IS ORDERED

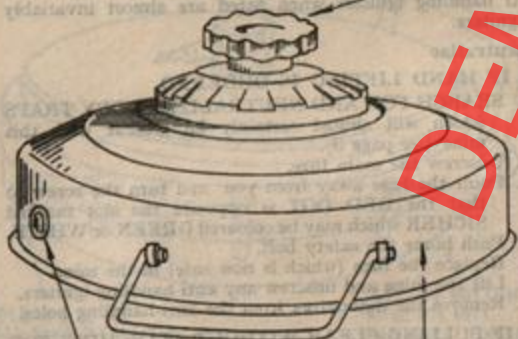
- i. Drop a loop on the end of about 50 yards of signal cable or strong cord over the fuze, or if you cannot do this, tie it to the handle. Do NOT move the mine or handle while doing this as it may be booby trapped.
- ii. Take cover at full length of the cable and pull the mine clear.
- iii. If the mine has not detonated, unscrew the main fuze and make it safe by carrying out iii and iv as for hand lifting.
- iv. Replace the fuze.

GERMAN TELLERMINE 42 (No 2)



FUZE

HEXAGONAL CAP



HOLE FOR ANTI HANDLING IGNITER.

HOLE IN BASE FOR ANTI HANDLING IGNITER.

VIEW OF BASE OF MINE



ANTI-TANK MINE

GERMAN TELLERMINE 42 (No. 2)

In general appearance this mine is similar to the Tellermine 35 (No. 1) with the following important differences:—

- i. The fuze is quite different. It is much smaller, has a detonator screwed on to the bottom of it, SLIDES into the fuze box and works on the same principle as our own Mk V mine fuze, but has no safety device.
- When in position a hexagonal cap screws over it into the cover.
- ii. The holes for anti-handling igniters are in a different position in relation to the handle. (See sketch.)
- iii. The pressure plate is fluted and extends over only about half of the top of the mine.

To neutralize

(a) IF HAND LIFTING IS ORDERED

- i. SEARCH FOR AND NEUTRALIZE BOOBY TRAPS which will almost certainly be present with this mine. (See page 3.)
- ii. Unscrew hexagonal cap.
- iii. Remove fuze and replace hexagonal cap.
- iv. Unscrew anti-handling igniters and remove detonators.

(b) IF PULLING CLEAR IS ORDERED

- i. Drop a loop on the end of about 50 yards of signal cable or strong cord over the fuze, or if you cannot do this, tie it to the handle. Do NOT move the mine or handle while doing this, as it may be booby trapped.
- ii. Take cover at full length of the cable and pull the mine clear.
- iii. If the mine has not detonated, unscrew hexagonal cap.
- iv. Remove fuze and replace hexagonal cap.

ANTI-TANK MINE

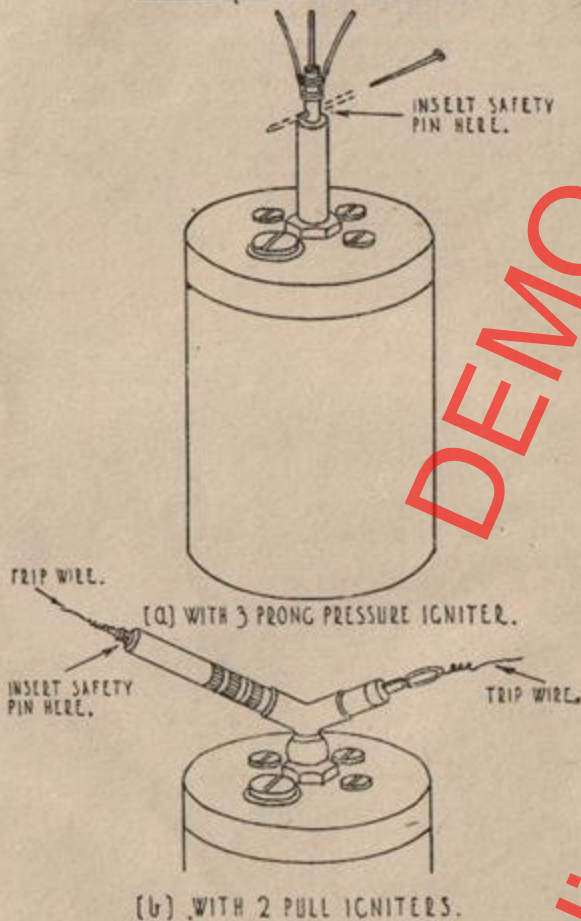
GERMAN TELLERMINE No. 3

This mine is really the Tellermine No. 1 with a fluted cover plate. It may also be found with a Tellermine No. 2 (type) fuze, in which case a screwed plug with a milled head screws into the hole in the cover plate over the fuze in the same way as the hexagonal cap in the Tellermine No. 2.

To neutralize

Follow the instructions for Tellermine No. 1 or 2 according to the type of fuze.

GERMAN 'S' MINE



SECTION 5.—ANTI-PERSONNEL MINE

GERMAN 'S' MINE

This is a small cylindrical mine about 4 ins diameter and 5 ins high. On firing, the mine is projected about 3 ft into the air where it explodes scattering steel balls in all directions. It is purely an anti-PERSONNEL mine. Up to date there are three normal methods of operation.

1. THE MOST COMMON method is using the *standard 3-prong pressure igniter* (see page 63).

To neutralize

Insert nail into safety pin hole and unscrew igniter.

2. ANOTHER METHOD is using *one or two standard pull igniters*. An adaptor is used when pull igniters are fitted (see page 65).

To neutralize

- i. Insert nail, etc., in safety pin hole and cut trip wires.
- ii. Unscrew igniters.
- iii. Inspect other end of all trip wires for other "S" mines or booby traps.

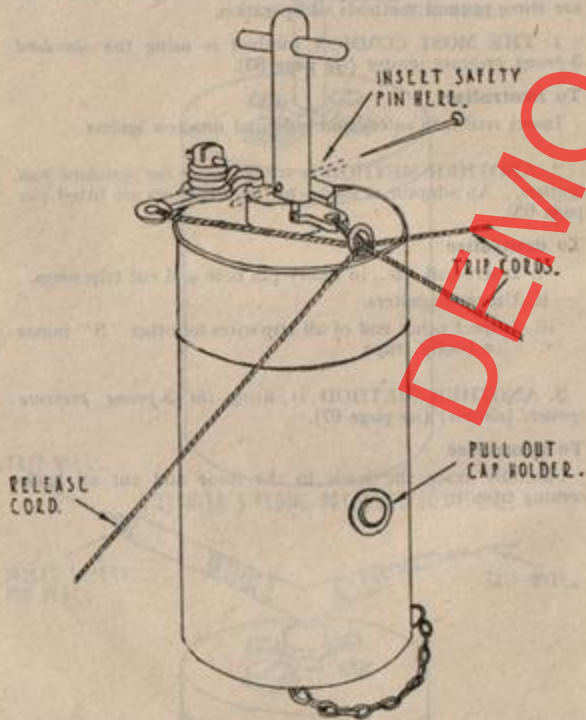
3. ANOTHER METHOD is using the *3-prong pressure igniter (electric)* (see page 67).

To neutralize

Carefully trace the leads to the mine and cut all leads coming from it.

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ITALIAN MINE B.4.



ANTI-PERSONNEL MINE

ITALIAN B4

This is a shrapnel mine and on discharge scatters scrap metal. It is usually fixed above the ground to a tree or post as it has no "jack-in-the-box" effect like the British and German types, but has been used buried. It is fired by pulling a trip wire or by cutting a tension wire.

To neutralize

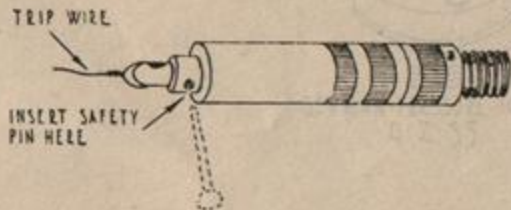
- i. Withdraw cap holder.
- ii. Insert stout wire or nail in safety pin hole in striker.
- iii. Release cords, checking other ends for booby traps.

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GERMAN PULL IGNITER
ZDSCHN ANZ 29 (FRICTION).



GERMAN PULL IGNITER ZZ.35.



GERMAN IGNITERS
(FOR MINES OR BOOBY TRAPS)

German pull igniter (friction) ZDSCHN ANZ29

This igniter can be recognized by the large ring attached to the end, and may be found with "S" mines and in booby traps.

To neutralize

Cut wire carefully and unscrew igniter.
 N.B.—This igniter has no safety pin.

German pull igniter ZZ35

Action is very similar to our pull switch and it is used with trip wire in the same way. Used with "S" mines either singly or in pairs, and in booby traps.

To neutralize

- i. Place a nail or strong wire in the safety pin hole.
- ii. Unscrew.

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GERMAN 3 PRONG PRESSURE IGNITER

ELECTRIC TYPE.



IGNITER.



S. MINE
FITTED FOR USE WITH THIS IGNITER.

GERMAN IGNITERS

(FOR MINES OR BOOBY TRAPS)

German 3-prong pressure igniter (electric), EM MI 240

Used with the "S" mine, this is a variation of the standard 3-prong pressure igniter which fires an electric detonator in the mine. This set up is usually found with one mine operated by any of 18 igniters used in two chains of 9, thus increasing the radius of action of the mine.

To neutralize

Trace leads to mine and cut all leads coming from mine.

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