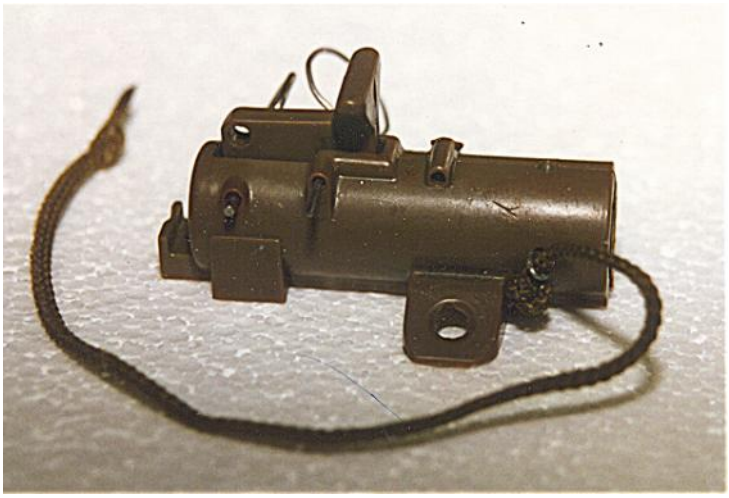
FIRING DEVICE DEMOLITION F1A1 COMBINATION BOOBY TRAP

This device is a modern Australian version of an old WWII switch. The original was developed in response to demands made by troops operating in PNG during that war. The old “Murray switch “ as it was known had several drawbacks in that it was not compatible with American demolition charges and was considered to be too large. Shown here is the modified version.
The device is operated by spring actuated plate withdrawal.



Firing device demolition F1A1 combination booby trap
The square and round pins can be clearly seen and the safety pin has the piece of cord attached to it.

The firing device is capable of operating by:

PRESSURE	TENSION RELEASE
PULL	PRESSURE RELEASE

The Coupling Base Firing device permits the switch to be used in conjunction with any munition fitted with a 9/16” UNC thread. For example:

US DEMOLITION BLOCKS
M26 GRENADE
M34 WP grenade.
11/4OZ CE PRIMER.
CHGE DEMO BLOCK 1.25 LB.

The firing device comes complete in its tin and is provided with a set of instructions, nails, screws, a length of trip wire and a Coupling Base Firing Device F4 Flash Initiator. The original versions of this switch were provided with a No. 27 detonator already attached. Obviously this worried the powers at the time and this is no longer the case.

The practice version of the F1A1 firing device. This particular example is incorrectly marked with the yellow band indicating an HE filling. In the foreground is the tension release device.

DIMENSIONS

Length- 59.5mm
Width over feet-41.7mm
Diameter of body 17.6mm
Height-29.5mm
Weight- 25 g
Length of tripwire- 16m

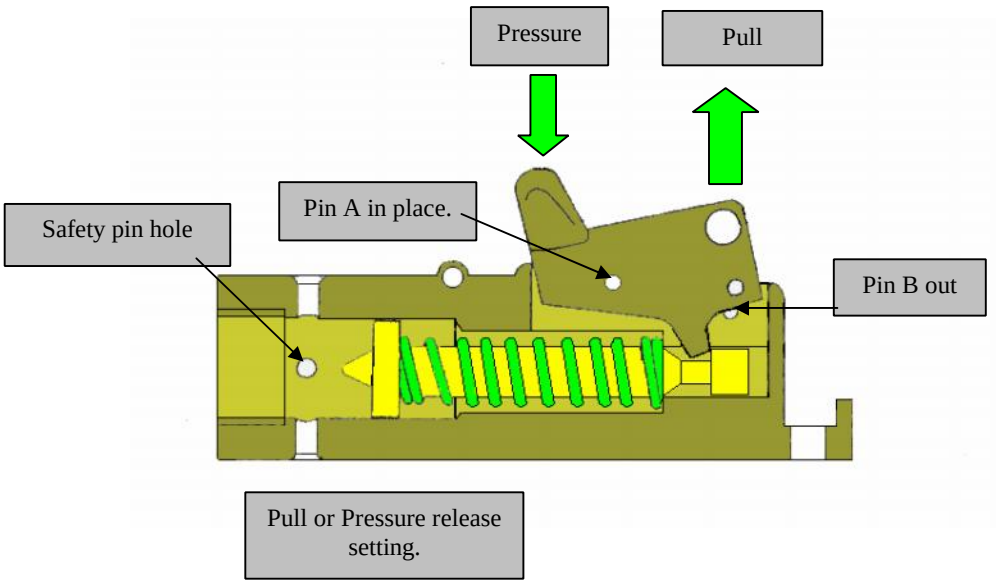
The booby trap switch is made from plastic and is coloured an Olive drab. Inert and practice versions are provided for training purposes.

The sear plate is designed to pivot on either of two pins. When both pins are in position the sear plate locked and the sear is engaged in the detent of the firing pin that keeps the firing pin spring under tension.

OPERATION

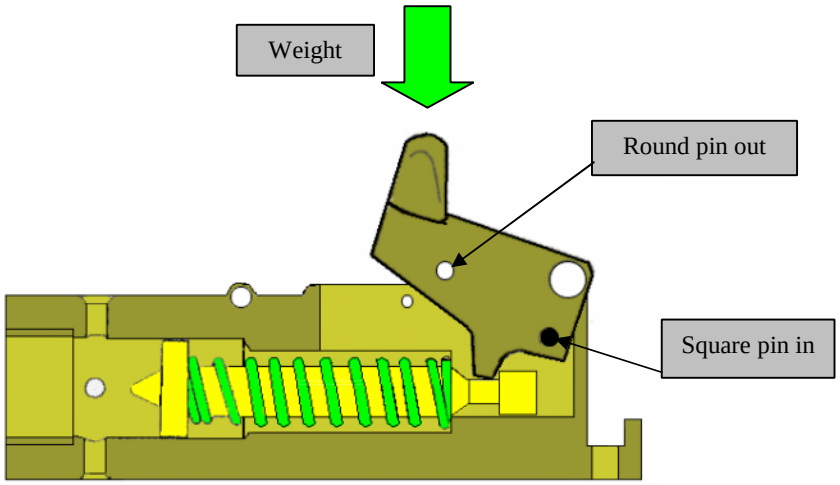
By pull or pressure.

When the square pin is removed, a pressure of 25 pounds on the sear platform, or a pull of seven pounds at the other end will cause the sear plate to pivot on the round pin. This action disengages the sear allowing the firing pin to fly forward and fire the percussion cap in the Coupling Base Firing Device.



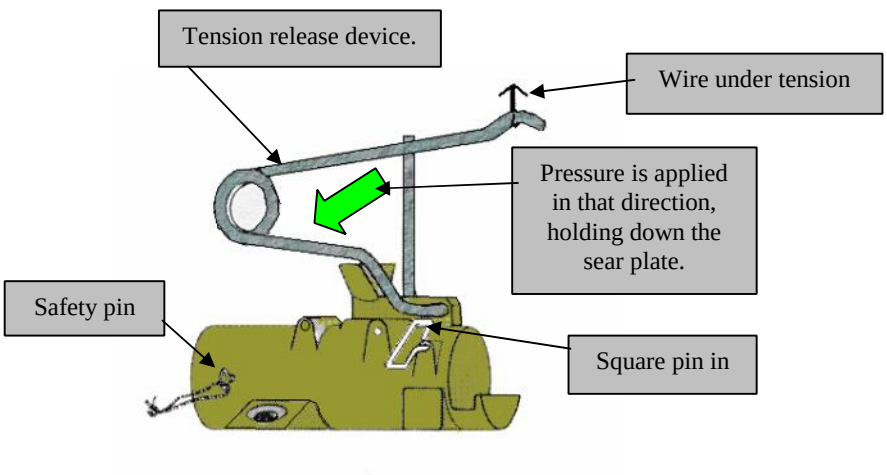
By release of pressure

When the round pin is removed the sear plate is free to pivot on the square pin and it will do so unless the platform is held down by a weight of more than 1kg. When the weight is removed the firing pin spring exerts pressure on the sear and thus causes the platform to rise and release the firing pin.



By tension release

By fitting the tension release device as shown and removing the round pin after applying pressure to the tension device via a trip wire the, when the tension is removed from the wire the platform is free to move under the pressure of the firing pin spring.



NOTES.

The length of trip wire provided is 16m.
The square and round pins are different diameters.