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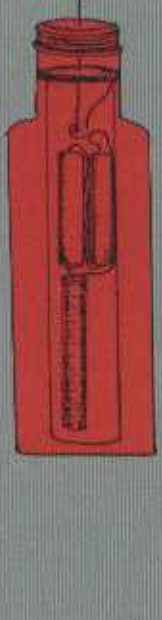

Improved Booby-Trap Devices

JO JO GONZALES

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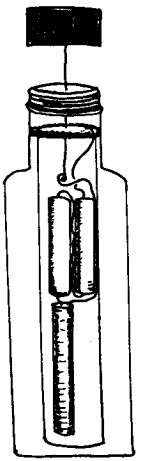
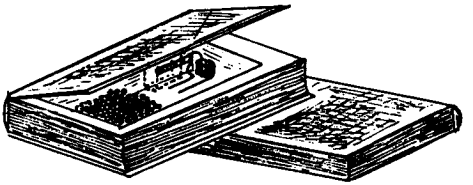


Improvised Booby-Trap Devices



JO JO GONZALES

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WARNING

The manufacture, possession, and use of explosives and explosive devices is illegal without certification from and registration with the proper authorities. It is the reader's responsibility to research and comply with all local, state, and federal laws regarding the manufacture, possession, and use of explosives and explosive devices.

The procedures described in this manual are *extremely dangerous.* Whenever dealing with explosives, special precautions must be followed in accordance with industry standards for experimentation and production of explosives. Failure to strictly follow such industry standards may result in harm to life and limb.

Therefore, the author, publisher, and distributors of this book disclaim any liability from any damages or injuries of any type that a reader or user of information contained within this book may encounter from the use of said information. Use the material presented in this manual and any end product or by-product at your own risk.

This book is *for academic study only.*

Introduction

This book describes and illustrates various booby-trap initiation devices, actions, mechanisms, and techniques. Simple mechanical, electromechanical, and straight electronic systems are covered, many of which are published here for the first time. Where electronic subsystems are utilized, the easiest route (for the nontechnician) toward rendering them suitable for use in a booby-trap role has been followed.

The devices described here may be easily made or purchased freely from any number of retail outlets, such as electronic suppliers, hobby shops, alarm distributors, and hardware stores. In a hostile operational environment, such devices may be seized from the above sources or salvaged from such existing installations as domestic dwellings, business premises, and road and rail traffic control systems.

To a small urban destabilization team, the advantages of using such devices are manifest. The systems can be purchased over the counter without attracting suspicion, and possession can easily be justified in the event of an

enemy security force search. If done properly, there is little risk, if any, of damaging one's own forces and facilities by the failure of untried and untested circuitry or mechanical actions.

Knowing how to utilize these systems will also prove of value to the counterinsurgency team member operating without extensive logistical support. These devices will also be of use to the concerned citizen who, in the future, may find himself fighting an invader with only the weapons he can make himself from everyday materials.

The systems and techniques discussed herein can effectively compensate for an absence of sophisticated weaponry and military booby-trap equipment. Thus, the aggressor can be denied free access to even larger areas and the invader's position can be rendered untenable, his will to remain severely undermined.

Basic Principles

Although the booby traps presented in this book vary widely in terms of materials, applications, configuration, and effects, they are all derived from common principles. It is important to keep these principles in mind when considering the use of any booby trap, since the strategies of how such a device is used are every bit as important as the working of the device itself.

Appearance

The booby-trap mechanism must be well concealed. Its appearance should not attract suspicion and no telltale signs of your efforts (bits of wire or discarded batteries) must be left in the area.

Bluff

Bluffing the enemy by emplacing dummy booby traps can cause him to become careless and treat all similar devices as probable duds. Similarly, a fake booby trap can be used to hide or draw attention away from a real one. When-

ever possible, make the fake device in such a way that it appears to have failed due to your incompetence. Don't always use obvious fakes.

Curiosity

Use your ingenuity to make a booby trap that appeals to the target's curiosity. Also, use articles of apparent value, food, or drink as lures. Whenever possible, trap familiar items that you know the target must use.

Deception

You can deceive the target by placing what seems to be an obvious booby trap in such a position that he must bypass it in a predictable manner, thereby entering an area more heavily booby-trapped with well-concealed devices. A device may also be constructed so that its trigger/activating mechanism seems clear upon even careful examination, but which actually employs a more sophisticated or cunning activation technique. In such a manner, the booby trap itself is actually booby-trapped.

Effectiveness

Remember that a booby trap does not have to kill to be effective. In fact, in many instances, it can be more effective to wound your target than to kill him outright. This is especially true in a conventional insurgency situation where your targets are predominantly members of military patrol teams.

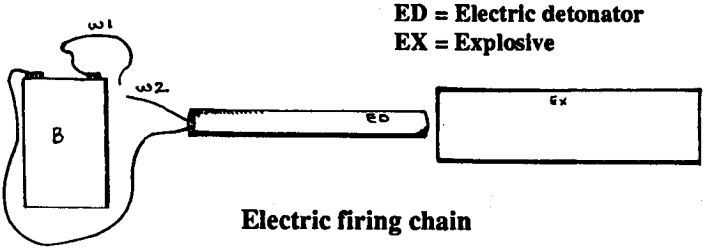
Even a relatively minor wound will usually call for the assistance of one or two people. A more serious wound will tie down several members of the target team who will have to physically attend the victim constantly and, in all probability, carry him from the scene. Under such circum-

stances, the team becomes very vulnerable to attack from other quarters. Also, a screaming, injured team member is a far greater threat to enemy morale than a dead man. Do not overlook the opportunity, therefore, to construct a device that will "only" cause the loss of an eye, foot, hand, or several pints of blood.

Firing Chain

In an explosive booby-trap configuration, the firing chain is the sequence of events, started by some apparently harmless action on the part of the target, that leads ultimately to his death or injury. Typical electric and nonelectric firing-chain principles are shown below.

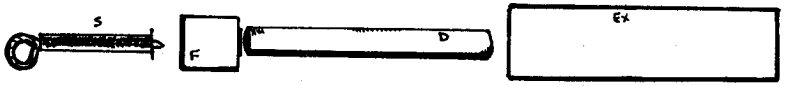
W1, W2 = Wire
B = Battery
ED = Electric detonator
EX = Explosive



Electric firing chain

The firing chain is started when wire 1 and wire 2 touch. At this stage, current from the battery is allowed to flow into the detonator, thereby producing enough concussive force to detonate the explosive.

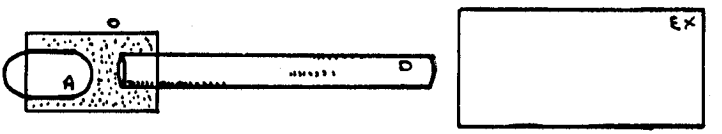
S = Spring-loaded striker pin
F = Flash initiator
D = Detonator
EX = Explosive



Nonelectric (mechanical) firing chain

In the nonelectric layout shown here, the firing chain is initiated when the spring-loaded striker pin is released. The pin hits the flash-initiator percussion cap and creates a flash, which in turn causes the nonelectric detonator to explode. This small explosion then sets off the main charge.

A = Vial of concentrated sulfuric acid
O = Oxidizer (potassium chlorate or sodium chlorate mixed with equal parts sugar)
D = Nonelectric detonator
EX = Explosive



Nonelectric (chemical) firing chain

In this acid-based initiator, the firing chain is started when the vial of acid is broken, causing it to mix with the oxidizer. The resultant ignition fires the detonator, which in turn detonates the main explosive charge.

With minor variations, the three systems mentioned above form the backbone of the majority of explosive booby-trap assemblies. It is the method whereby wires are caused to touch, the striker released, or the acid vial crushed that gives scope to the creative booby-trapper. It is clear from the schematics that there are many possibilities and permutations.

The ready availability of off-the-shelf electrical and electronic "trigger modules" in the form of intruder and area-status alarm systems means that the touching-wire type of activation can take the form of sound-, light-, heat-, moisture-, or movement-triggered devices. In the case of ready-made self-contained devices, no technical knowledge

is required to employ them in an unconventional warfare role.

In the simplest scenario, for example, the terminals on a heat-operated intruder alarm module that would normally be connected to a bell or siren would instead be taken to the wires of an electric detonator. Thus, the booby-trapper has at his disposal a veritable armory of inexpensive and highly efficient weapons.

The systems described herein should be considered examples only of what is possible, with variations and modifications becoming apparent. "Personalizing" a device by perhaps combining the features of two or more different systems will greatly improve the unit's effectiveness, making it all but impossible for the target to circumvent, destroy, or disarm the device.

Safety Considerations

It is absolutely vital that safety precautions be taken when assembling the systems described. Always check the circuit or mechanical action for proper operation *before* installing any explosive component. A multimeter or simple continuity tester must be used when electronic systems are being constructed.

It is imperative that, before the booby trap is triggered, no current flows to the detonator. Therefore, the circuit tester should be connected to the booby trap in place of the detonator, and correct and safe operation be confirmed.

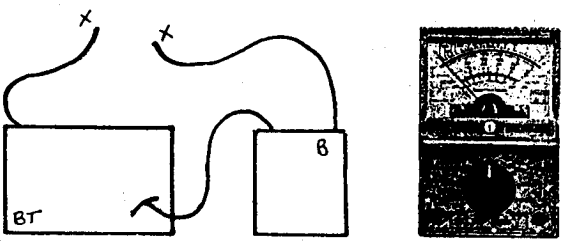
If a store-purchased multimeter is not available, a simple tester can be easily made from a vehicle light bulb and a couple of lengths of insulated wire. Ensure that the bulb is of a power rating within the limits of those available from the booby trap's power source. In other words, it should be of such a voltage and wattage that it will light (even if not

to full intensity), but will not blow or drain the power source unduly.

Always carry and store electric detonators with the connecting wires shorted. Commercial and military units will be supplied in this manner. If, however, you manufacture your own or receive supplies of such items via a circuitous route, remember that, given the right circumstances, the static electricity in your own body can set off detonators. Induced currents from power lines and radio transmitters can also be dangerous. If possible, avoid using electric detonators in areas likely to present such dangers. The obvious safety considerations concerning heat and impact apply, of course, to both electric and nonelectric detonators.

It is preferable that some single, final act be undertaken before the booby trap becomes armed; until that final act, the booby trap must be safe to handle and be incapable of detonation. This might mean that a single wire will need to be connected, a switch must be thrown, or a pin needs to be removed.

BT = Booby trap
B = Battery
X = Detonator connection points
The meter probes should be connected to "X."

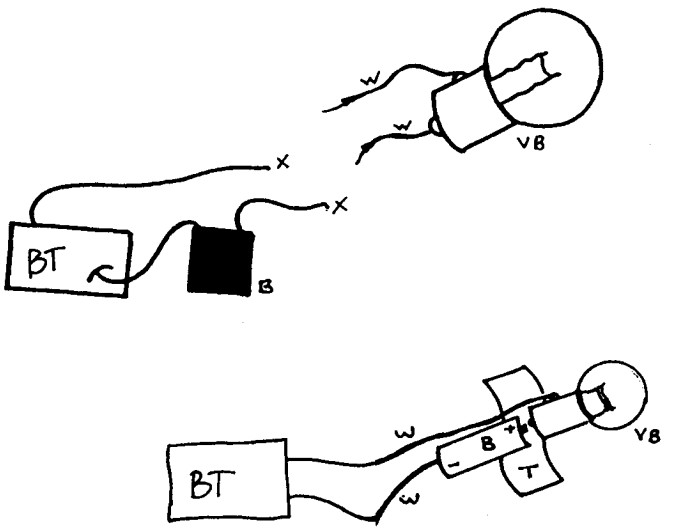


Pocket multimeter

The meter must be set to the DC volts scale and con-

nected as shown. If the booby trap is in a triggered state and the voltage reading is available from the power source, then continuity exists and the device will detonate. No reading implies a circuit fault.

VB = Vehicle bulb
B = Battery
W = Wires
BT = Booby trap
T = Insulating tape (securing battery and bulb)
X = Detonator connection points
The wire probes should be connected to "X."



Vehicle bulb continuity tester

Use as a continuity tester on circuits not connected to a power source. With the bulb tester connected as shown, the tester should light when the booby trap is activated. If it fails to light, there is no circuit continuity and a fault-finding trace should be undertaken. During final assembly, the circuit should again be tested to confirm that the booby-trap trigger is indeed in the required safe state before

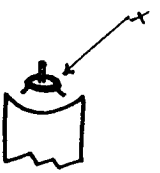
the firing battery is installed. To this end, a continuity tester is connected in place of the firing battery. If all is well, the firing battery may be fitted.

Ensure that any voltage injected into circuits containing live detonators by way of the continuity tester is insufficient to fire the detonator. Otherwise, if there is a fault, and continuity exists, the detonator may explode. If this low test of voltage requirement cannot be satisfied, substitute a wire link for the detonator. Test the circuit, and if all is well, refit the detonator and then install the battery. As a matter of prudence, always install firing batteries last whenever practicable.

Booby-Trap Devices

Aerosol Booby Trap

Step one in the construction of this device is to obtain an empty aerosol can and break it open from the nozzle end. The easiest and safest way to do this is to mount the can in a vise so that its shoulders are raised above the vise. Using a sharp screwdriver and hammer, pierce the can slightly to one side of the nozzle. This will discharge the residual gas and all future work can be undertaken without risk.



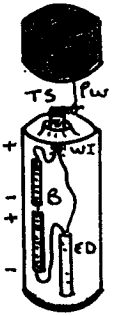
X = Can piercing point

The brass or aluminum collar surrounding the nozzle can now be pried up and off. Discard this collar and the spray insert. Drill a hole through the center of a piece of soft wood dowel of such a diameter that it fits tightly into the neck of the can. Feed two lengths of insulated wire through this hole and connect them to any available toggle switch.

Glue the toggle switch to the top of the dowel insert with epoxy (or secure it via any other expedient method). Attach a short pull wire between the toggle switch arm and the inside center of the can cap.

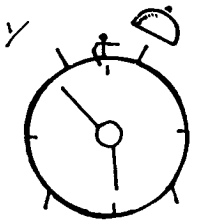
Ensuring that the switch remains in the off position, install the firing circuit components and an explosive charge in the can, as illustrated. Finally, insert the dowel piece into the neck of the can and replace the cap. When the cap is removed, the pull wire will move the switch into the on position, and the device will detonate.

B = Batteries
ED = Electric detonator (in explosive charge)
WI = Wood insert
TS = Toggle switch
PW = Pull wire

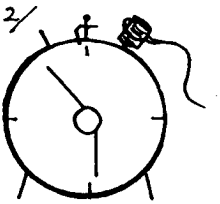


Alarm Clock Booby Trap

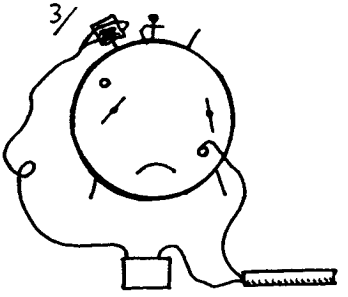
The alarm clock booby trap below may be used as a standard timed-explosion system in which the existing timer mechanism causes the alarm ringer to move at a preset time (suitable for deployment in a building to which the target force had been lured or could be relied upon to visit at a predictable time). This device can also be used as a booby trap proper in which a pull on a trip wire, for example, causes the ringer stop lever to open, thereby allowing the ringer to continue its action. In this latter case, the alarm would be triggered and then stopped via the stop lever; the trip wire would be attached and then the explosive components installed.



Typical twin-bell, metal-cased alarm clock with bells removed

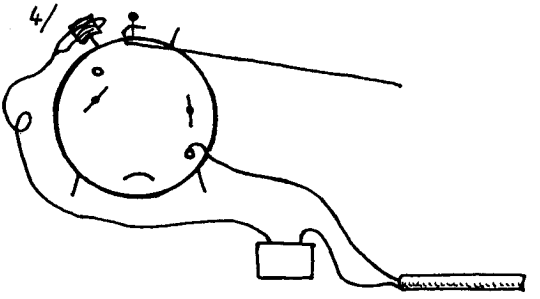


Insulating tape is wrapped around one of the bell support arms to such a depth as to ensure ringer connection when the ringer is activated. Wire contact is wrapped around the insulating tape.



Completed assembly showing connections

The detonator wire may be connected to any part of the clock case. Test first, however, for continuity between the case (or winder or adjuster knob) and the striker. Remove any paint from the case or plating from adjuster knobs, if necessary.



Booby-trap application (with the ringer activated and then stopped, and the trip wire attached)

When the trip wire is pulled, the stop lever moves away from the ringer arm, thereby allowing it to contact the wire on the insulating tape. This completes the electrical circuit and allows the detonator to fire.

If desired, the clock may be attached to a wooden base for ease of installation. In any event, the clock should be secured so that the trip wire cannot pull it over before the striker stop lever is released.

Anti-Metal-Detector Booby Trap

Many metal detectors rely on the transmission of low-power, low-frequency radio signals. If this type of detector is known to be used by the target, the Radio-Frequency-Meter device (see pages 114-116) can be buried at some appropriate location and the arrival of the search team awaited. A telephone call to the effect that an arms stash is buried at "X" place will prove useful here.

When the detector head passes over or close to the buried device, it will react as outlined in the previous section. The booby trap should be sealed in a plastic lunch box or similar case to protect it from the weather and soil moisture. It should be buried just below the surface. The hand-sized metal detector (often sold as a "nailfinder") can also be used as an antidetector trigger. This small unit has no headphone capability but outputs its reaction via a buzzer. Connecting an electric detonator in place of the buzzer and installing a battery with a higher-current capacity is all that

is required. Again, the device is packaged and buried just below the surface. Set the detector to its least-sensitive mode. For extra safety during installation, the watch-delay timer can be connected into the power-supply circuit (see pages 131-132).

Audio-Activated Booby Trap

The heart of this system is any sound-activated switch. Suitable devices are available from domestic and industrial alarm suppliers, and electronics supply shops such as Radio Shack. In the case of the VOX (voice-operated switch), contact radio-enthusiast equipment suppliers.

Typical Audio-Activated Switch

Some of these devices have a variable sensitivity feature, while others do not. Those without such a facility usually require a far louder input signal to trigger them. Such is the case with handclap-activated light switches and breaking-glass triggered devices. Do not confuse this type of device, however, with one in which the physical movement of the breaking glass causes the reaction.

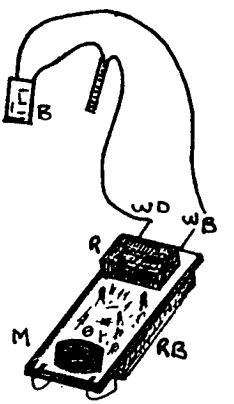
Making a booby trap out of these devices is easy. The sensor is located at some strategic point where it can be relied upon to react to the sound of enemy activity. Such

activity would include firing a rifle, shouting a command, slamming a vehicle door, or making noise when conducting a forced entry.

The explosive circuit into which the sensor is coupled may be close to the sensor itself or located some distance away and wire linked. In this way, a target's colleagues can be killed or injured as well.

To connect such devices into the booby trap's circuit, refer to the illustration below. The negative lead from the booby trap's battery to the detonator is broken, and the VOX device is installed in line. The VOX will have its own independent power source and will therefore have a finite life before it runs down and ceases to react. The greater the current capacity of the VOX power supply in relation to its current drain, the longer it will remain active.

B = Battery
M = Microphone
R = Relay
RB = Relay battery
WB = Wire from detonator battery
WD = Wire from detonator



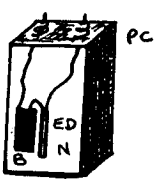
Connection details

Several makes of personal cassette recorders/players incorporate a VOX circuit and sensitivity control. When left on, the tape remains inactive until a sound input of a level determined by the sensitivity setting occurs, at which point the tape starts. It is a simple matter, then, to disassemble such cassette players and either salvage the VOX

circuit or connect an electric detonator or initiator to the VOX-switch power line. The cassette itself then functions as the trigger stage of a booby trap.

Battery Booby Trap

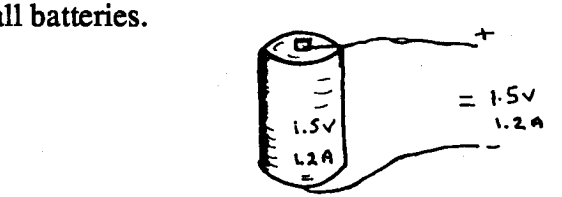
Here the larger type of plastic- or card-bodied battery is most suitable, especially the type used in flashing roadside lanterns. The principle can be applied to other types of batteries, however. Carefully pry apart the battery and disconnect the internal cell pack from the cover terminals. Install the following into a plastic case: a battery or batteries that will fire an electric detonator/flash initiator, the detonator/flash initiator itself, and an explosive/shrapnel pack. Circuit connections are shown in the illustration. Reseal the battery case and camouflage any signs of tampering. When an attempt is made to use the battery, the equipment to which it is connected will allow electrical current to flow from the hidden power source to the detonator.

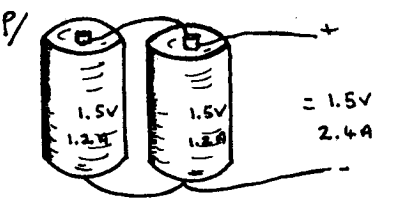


PC = Plastic or card battery case
ED = Electric detonator (in explosive charge)
B = Battery
N = Nail shrapnel

Battery Stacking

On occasion, it may be necessary to connect several batteries together so as to obtain either a higher voltage or a higher current capacity (or, indeed, both). The diagrams below (based on standard "D" cell batteries) show how the connections should be made. The connection principle applies to all batteries.

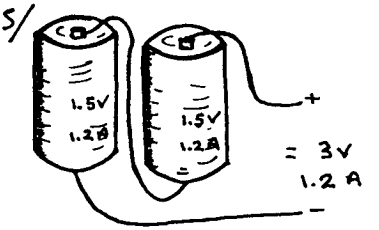




P = Parallel connection
A = Amps
V = Volts

Here we obtain twice the current capacity of the single battery, but with the same voltage. Thus, for a given current drain, the battery stack would last twice as long as would

the single battery. If, for example, three batteries were similarly connected, the current capacity would be three times that of the single battery. The available voltage, however, would remain as that of the single battery.



S = Series connection

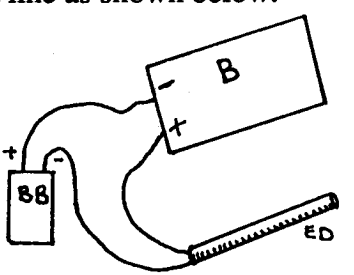
In the above illustration, we obtain twice the voltage, but the available current is that of the single battery. In this type of stack, the voltage increases in proportion to the number of batteries. The current capacity, however, always remains as that available from the single battery.

It can be seen that by using a combination of series and parallel stacking, it is possible to arrive at any required voltage and current value.

Booster Battery

The booster battery may be used when the voltage supplied from a given unit is insufficient to fire the detonator/initiator but where you do not wish to replace the initial power source with a more powerful one. The booster battery can be installed in the circuit line as shown below.

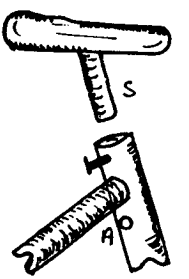
BB = Booster battery connected in series with booby-trap output
B = Booby-trap trigger module which, when triggered, outputs a voltage insufficient to fire detonator/initiator
ED = Electric detonator



Voltage/current available to detonator when module operates = initial (onboard module source) + booster battery.

Bicycle Booby Trap

In this booby trap, the explosive and an electric detonator are concealed within the tubular frame of the bicycle. Wires from a wheel-mounted dynamo are taken to the detonator as well as, or instead of, the front and rear lights. When the bicycle is moved, the dynamo produces a voltage and the detonator fires.



S = Saddle mounting stalk
A = Access hole drilled in frame

The illustration shows how a small hole is drilled in the rear of the frame, below the saddle mounting bracket, to facilitate routing the detonator wires. The explosive and the detonator can be inserted into the hole when the saddle and its mounting stalk are removed.

For movement to the target site, the dynamo is hinged away from the wheel rim. This facility is incorporated into the majority of bicycle dynamo designs. If the dynamo is earthed normally via the bicycle frame, it will only be necessary to connect one of the detonator wires to the dynamo itself. The other may be connected to the frame.

The armed booby trap should be left anywhere it can be expected to attract enemy use, such as outside a club or bar in occupied areas, especially at night just prior to closing time.

Blower Brush Trigger

Here a popular type of camera blower brush is used as a simple foundation on which to build an acid-initiated booby trap. Made of a rubber body and detachable nozzle, such a brush is available from any camera store. Attached to the front of the nozzle are fine hairs. There is also a small hole in the body of the blower that is covered by a finger when in use.

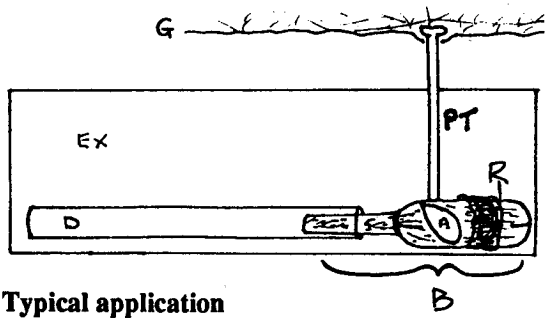
To modify the blower, pull the brush nozzle from its mounting stalk and discard it (unless it is required for subsequent camouflage purposes). Seal the end of the stalk with a piece of tape or plug it with tissue paper. Enlarge the hole in the blower body and add any acid-reactive chemical. Possibilities include match-head material, equal-part mixes of sodium peroxide and sugar, and sugar and potassium chlorate. Enough space should be left for the insertion of a small vial of concentrated sulfuric acid.

Glass vials can be improvised by heating small-diameter glass tubes over a spirit lamp flame (or similar flame) and twisting the ends to seal. Alternatively, the glass tubes may

be sealed with cut-off sections of glass stirring rod or any other type of acid-resistant material.

In use, the access hole is sealed with tape, and a non-electric detonator is installed on the mounting stalk (which is ideally configured for this purpose). A little of the acid-reactive mix or black or smokeless powder should be poured into the open end of the detonator before final installation. The assembly may now be placed in a box containing explosive and shrapnel material, and a simple pressure-transfer rod is emplaced.

B = Blower brush
EX = Explosive
A = Acid vial
R = Reactive material
D = Detonator
PT = Pressure transfer rod
G = Ground level



Typical application

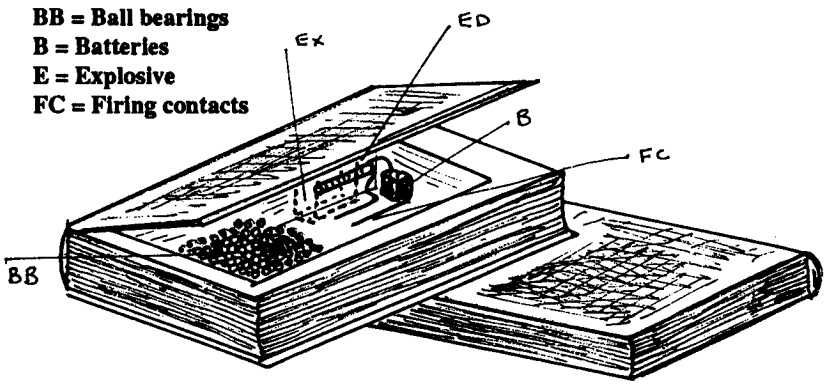
Pressure on the transfer rod breaks the acid vial and initiates the firing chain.

Book Booby Trap

This booby trap device uses several steel ball bearings and an electrical detonator circuit. When emplaced, the book has one side raised so that the ball bearings are rolled away from the firing contacts. When the book is lifted or its support removed, the ball bearings roll onto the firing contacts, shorting them out and completing the electric circuit. Before arming, check that there are enough ball bearings to cover the contacts and that they are free from grease, dirt, or corrosion.

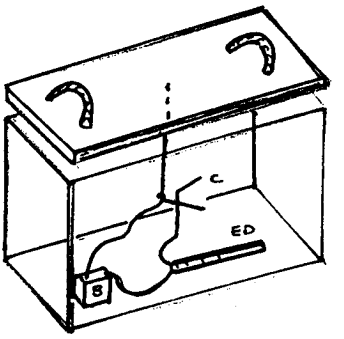
Movement of the book can be provoked by leaving it in a position that requires it to be moved in order for the target to have top access to some apparently valuable or interesting item.

ED = Electric detonator
BB = Ball bearings
B = Batteries
E = Explosive
FC = Firing contacts



Box Lid Booby Trap

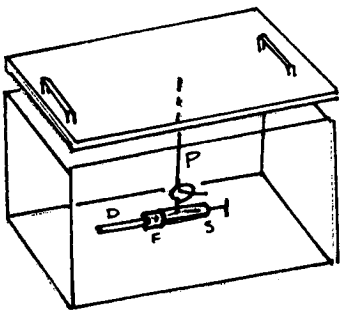
Two designs are shown based on electric and nonelectric detonators or initiators. In the first illustration, the L-shaped contact is pulled up when the lid is lifted because the contact has been fastened to the underside of the lid. A wire from this contact runs to the battery. After a small amount of travel, the lid contact pulls against the inverted L contact, which is attached to the bottom of the box. This completes the electrical circuit, and the detonator fires. Both contacts may be made of stiff wire or metal coat hanger. Emplacement of the lid contact beneath the base contact is achieved by inserting the lid at an angle. The uprights of both Ls should be insulated.



B = Battery
ED = Electric detonator
C = Improvised L-shaped contacts with insulated uprights

The nonelectric version of this booby trap uses a spring-loaded striker hooked by its safety pin to another L-shaped pull arm (made of stiff wire or metal coat hanger). When the lid is raised, the pull arm releases the safety and the striker either fires a flash initiator or bursts an acid vial, which in turn sets off the detonator. The explosive/shrapnel package surrounds the detonator and is not shown in these illustrations for the sake of clarity.

S = Spring-loaded striker
F = Flash initiator
D = Detonator (inside explosive/ shrapnel package)
P = Pull arm



Carbonated Acid Booby Trap

Suitable for use against insurgents who visit rural dwellings and steal or demand food and drink, the carbonated-acid booby trap is also useful in situations where a target will avail himself of what appears to be a tempting and refreshing drink. It should, therefore, be left in some inviting position, such as along a known patrol route or in a house that will obviously be searched.

It is necessary to use only diluted acid, which has been carbonated by means of a soda siphon or home bar machine that uses a CO_2 cartridge to make carbonated water. At shops selling such wet-bar supplies, it will also be possible to buy bottles and capping tools. The target is less likely to be suspicious if the bottles are of the crown-cap type since he will assume the bottles are store-bought and have not been tampered with.

In the absence of the correct capping tools, a large pair of pliers will suffice. Always add acid to water or other liquids—*never* add water to acid. This rule applies primarily to concentrated acids, but it should be followed in all in-

stances for the sake of safety. If you use fruit-concentrate mixes, test with a little of the acid before mixing large amounts; when bottling, allow any froth and gas caused during the initial reaction to subside before capping. Poisons may be substituted for the acid, as can liquid ammonia and the like, depending on whether you desire an immediate effect or a delayed one.

It is also possible to rig a carbonated-acid siphon in such a position that some action on the part of the target causes it to discharge into his face or the faces of others with him. A simple under-floor pressure mechanism would suffice, as would a pull wire connected to the siphon lever and a door. In such a case, a more concentrated acid mix would be used.

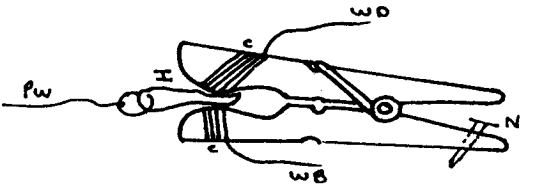
Clothespin Switches

A plastic or wooden clothespin or plastic butterfly clip can be readily adapted to act as a booby-trap switch. The following diagrams show what variations are possible.

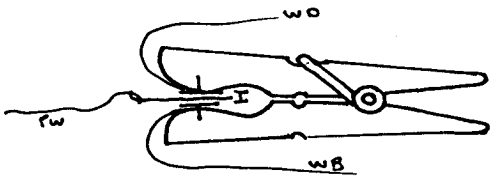
Principles of Operation

In the following devices, connect the battery last, having first confirmed that the switch is safe (contacts not touching).

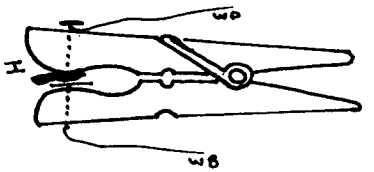
1. Simple pull-wire operation.



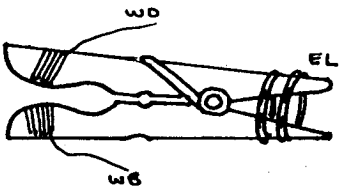
2. Pull wire and thumbtack technique.



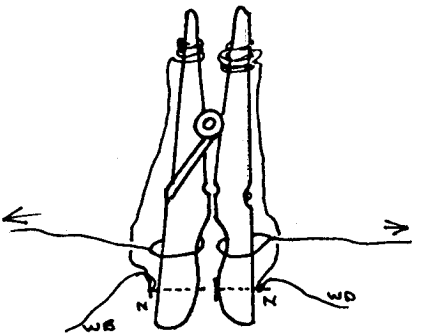
3. Pressure operation. The insulator is made of a material such as Plasticine, which will keep the nail contacts apart until pressure is exerted on the clothespin.



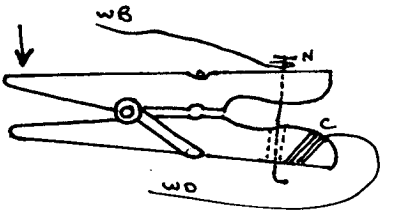
4. Pressure operation using elastic band(s) at the rear of the clothespin to keep the jaws apart.



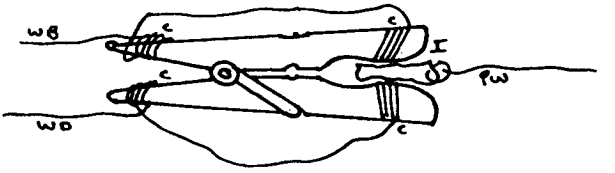
5. Tension and tension-release method. Pulling or cutting the trip wires causes one of the two pairs of contacts to meet.



6. Pressure operation. Pressure exerted at the thin end of the clothespin causes the jaws to open, thereby pulling the nail contact up and onto the wire contact. The nail is free to move through the lower clothespin jaw.



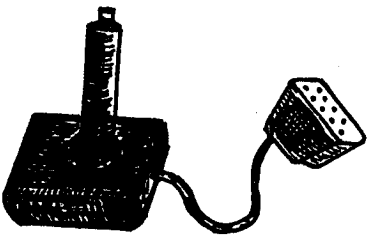
7. Pull wire and pressure operation. If the insulator is pulled free or the jaws are opened further, one of the two pairs of contacts will touch. Pressure at the thin end of the clothespin will also close the rear contacts.



I = Insulating material
C = Contacts (wire, thumbtack, tinfoil, nails)
WD = Wire to detonator
WB = Wire to battery
N = Nail
PW = Pull wire
EL = Elastic band(s)

Computer Joystick Booby Trap

The computer joystick lends itself well to being used as a booby trap. Readily available from the computer outlets, it is common in many homes and offices. Adapting a joystick to a booby-trap role consists of determining which pin connections on the plug correspond to which movement of the stick. You can determine this by applying low voltage to one of the pins and checking for continuity across the others while moving the stick. With these connections noted, it is simply a matter of substituting an electric detonator for the circuit tester.

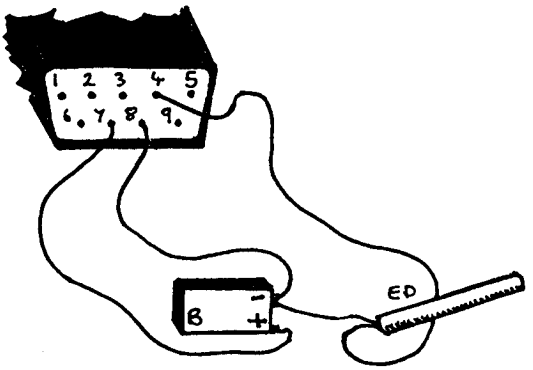


Note that one of the detonator wires connects to the negative (ground) battery terminal. Moving the stick completes the circuit. If a multiple movement trigger is required, paper clips may be used as jumper connectors between the other pins and the pin to which the negative battery terminal is attached.

Typical pin connections (may vary from one device to another):

1. **Up (stick pulled back)**
2. **Down (stick forward)**
3. **Left**
4. **Right**
5. **(not used)**
6. **Button pressed**
7. **+ve voltage**
8. **Ground**
9. **(not used)**

ED = Electric detonator
B = Battery



When connected as shown in the illustration, the detonator would fire when the stick was moved to the right.

It is also possible, of course, to apply the same principles and emplace a battery, detonator, and small charge in the body of the joystick itself. Thus, the stick may be a stand-alone booby trap, a tension/tension-release trigger, or a pressure trigger for a remotely located charge.

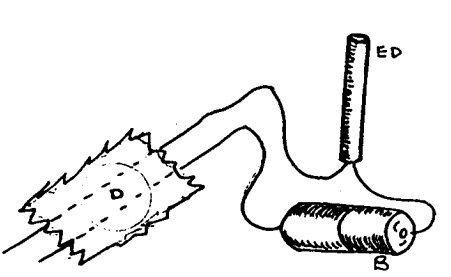
A typical application would see the joystick located in some central position in the target room with the pull wires taken from the arm to the windows. Being very lightweight, the stick should be secured so that it is not pulled over when tension is applied to the wires.

Conductive Rubber Keypads

Available from electronic supply stores, alarm distributors, and hobby shops, conductive rubber keypads are comprised of a sheet of silicone rubber preformed into a dimple pattern (the sheets can be cut to size). On the base of each dimple is a section of conductive carbon. When using the keypad, a piece of it should be laid over two wires or other conductive medium (conductive silver paint, for example, or slivers of tinfoil) so that the carbon shorts them out when depressed. This type of switch is widely used in calculators, push-button telephones, and computers.

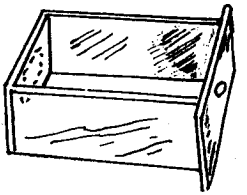
Conductive rubber keypads are useful in any number of booby-trap designs. They may be used as cheap, reliable pressure switches installed so that foot or vehicle pressure activates them, or they may be fitted into doorjambs and the like so that pressure from an opening or closing door starts the firing chain. A circuit connection schematic and a typical application are shown on the following page.

B = Battery
ED = Electric detonator
D = Dimple



Cutaway showing wires beneath pad dimple

Wires are insulated except for the section beneath the dimple(s). Double-sided tape can be used to secure the wires to the bottom of the keypad, if desired.

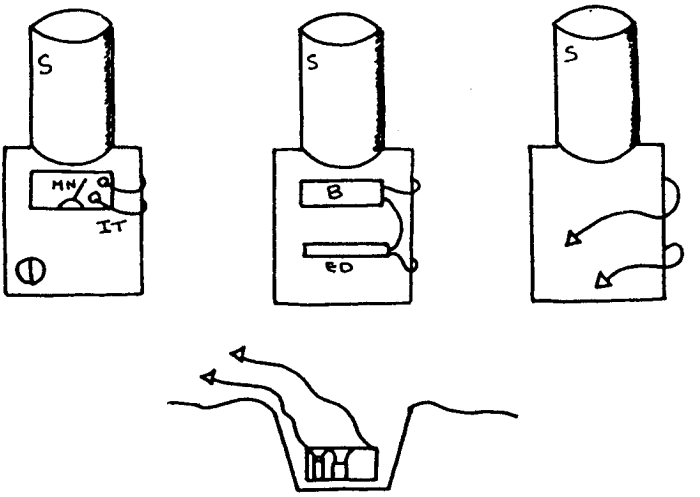


Keypad-based device concealed behind drawer

Decibel Meter Booby Trap

The decibel (db) meter shown here is available from audio equipment suppliers and electronics supply stores. Its primary use is to measure the relative level of sound in a given area. The received sound level is displayed on a meter calibrated in decibels. Before emplacement, tests should be made to determine the level of sound generated by the target. It may be found, for example, that an enemy truck generates 50 db at a distance of fifteen feet. This being the case, the meter would be modified as shown with the improvised contacts located in the 50 db position. Final arming will take place on-site in the absence of sound levels close to the predetermined range.

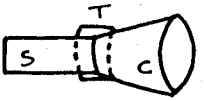
S = Sensor head
IT = Improvised terminals (thumbtacks, for example)
MN = Meter needle (edge sanded to provide a good electrical contact with terminals; or, if nonmetallic, covered with conductive material, such as cigarette foil)
B = Battery
ED = Electric detonator



The device may be used as a stand-alone system or with a remotely located explosives package. The majority of such meters have variable sensitivity controls, which render them useful in a wide variety of applications.

If sensitivity is not variable on the version to which you have access, you can improvise by covering the sensor head with layers of tissue or crepe-type paper (to reduce the sensitivity) or by fitting a card or plastic collar (shown below) to increase the sensitivity.

T = Tape
C = Card or plastic collar
S = Sensor head

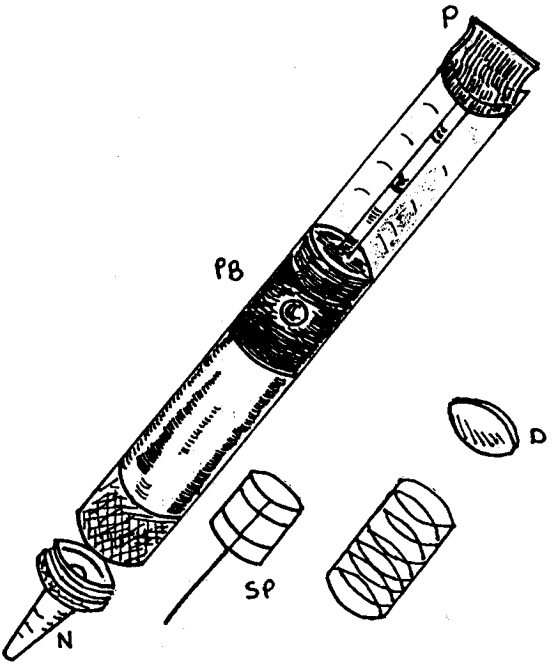


Desoldering Tool Antipersonnel Mine

The type of desoldering tool referred to here is the cylindrical-bodied type in which a spring-loaded piston is held closed while the solder is melted and then released. The solder is sucked up when a small button is pressed. You can find such a tool at an electronic supply shop or hobby store.

To render the tool suitable for use in various booby-trap applications, it is necessary to disassemble it, as if for cleaning. To this end, unscrew the nozzle and remove the spring and piston assembly. Insert a dime (or piece of metal of identical size) into the body of the unit and replace the spring. The piston is not refitted. The nozzle can now be screwed back on.

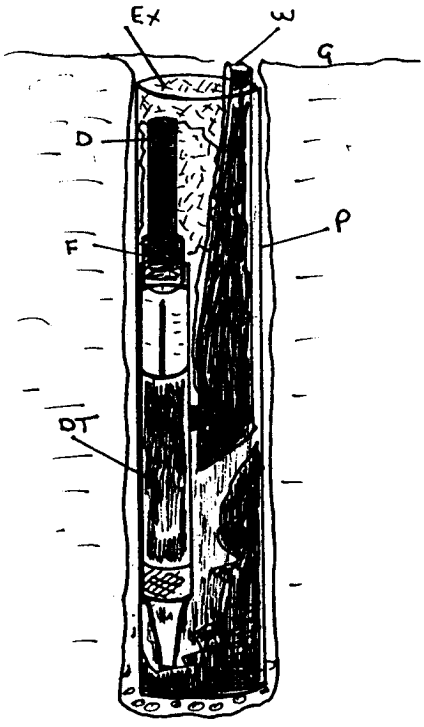
The plastic plunger that is pressed to cock the tool may now be adapted according to the user's requirements. For example, the slim stem part of the removed piston assembly may be cut and stuck to the plunger, thereby creating a firing pin. If desired, the plunger end can be removed completely and the resulting metal stem used as the firing pin.



P = Piston cocking plunger
PB = Piston release button
SP = Spring/plunger assembly
N = Nozzle
D = Dime

A flash initiator and detonator may now be taped in place so that the improvised firing pin will strike and initiate them.

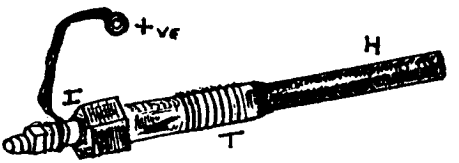
Thus modified, the tool may be concealed beneath a floorboard or buried in a box fitted with a lid which, under foot pressure, will transfer that pressure onto the release button. A design for a variation on this type of antipersonnel mine is shown on the following page.



G = Ground level
EX = Explosive and shrapnel mix
D = Detonator
F = Flash initiator
P = Plastic or metal pipe
DT = Desoldering tool (modified as mentioned above)
W = Wooden wedge (shaped so that pressure on its end causes it to move downward into the pipe and depress the plunger-release button)

Diesel Engine Heater-Plug Initiator

You can salvage a diesel engine heater plug from any diesel-engine truck or van or purchase it from a spare-parts supplier. The heater plug is a small, screw-in component that is used prior to and during start-up to heat the cylinders and fuel mixture and expedite ignition.

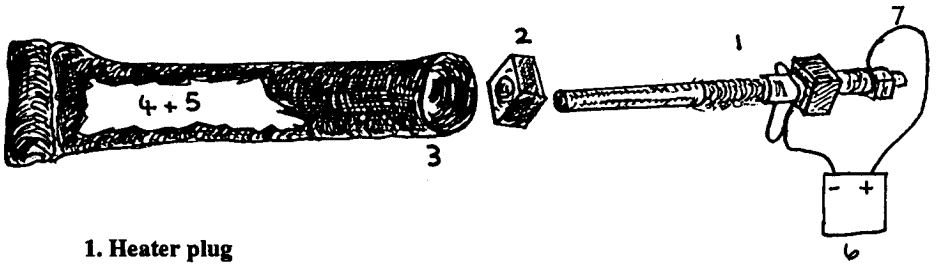


H = Heating element (in sealed tube)
T = Thread
I = Insulating washer
+ve = +ve connection
Body of component is negative (ground)
Approximate length: 3"

Diesel engine heater plug

Creating the Incendiary Initiator

There are various ways in which the heater plug may be turned into a useful incendiary/explosive initiator. A typical application is shown below. When completed, it is known by many users as the "Toothpaste Bomb."



1. Heater plug
2. Nut with same thread as heater plug
3. Metal cylinder with a diameter that permits friction fitting of nut
4. Black powder, smokeless powder, or heat-sensitive explosive
5. Pieces of razor blade
6. Vehicle battery or battery pack capable of delivering required voltage and current
7. +ve power input connection
8. -ve power input connection

For the toothpaste bomb, the tube end should be beaten flat, folded, and beaten again to seal. The tube neck should be beaten closed or welded around the nut.

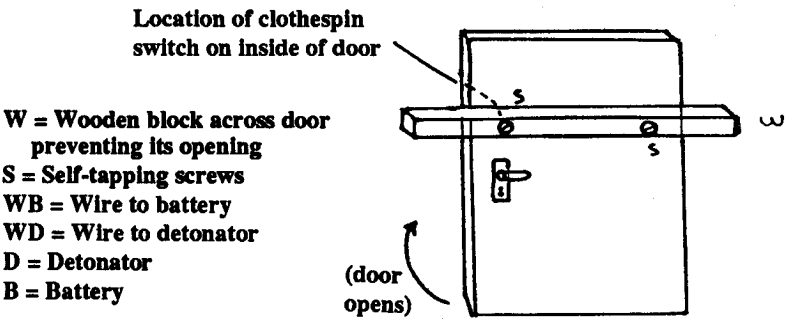
The bomb case, its contents, and the heater-plug adapter form a self-contained unit that can be conveyed to the target with ease. For a vehicular target, only a few minutes of access to the engine compartment are needed to connect the bomb into the battery circuit.

When the target is a diesel vehicle, it is possible to unscrew an existing heater plug from the engine block and reinstall it into the bomb case. There is no need, of course, to actually disconnect the plug from the vehicle's electrical system. Before commencing the operation, find out whether the target's vehicle uses the type of heater plugs you can

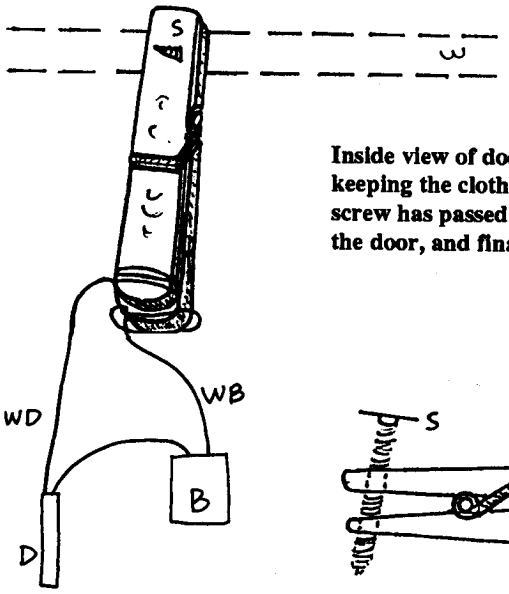
use with the bomb case. In most instances, however, even an incorrectly matched adapter will accept the heater plug if it is deliberately cross threaded.

Door and Clothespin-Switch Booby Trap

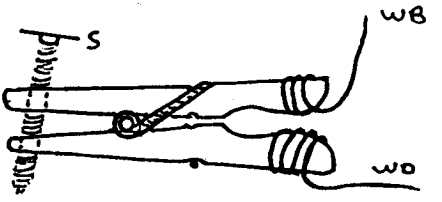
This booby trap is suitable for use on doors that open inward, but which will be approached from the outside by the target. Quite simply, a length of timber is screwed into place across the door and door frame in such a manner that it must be removed before access can be gained. One of the fixing screws also passes through the clothespin switch, thereby keeping the contacts apart. The screws must be of the self-tapping variety.



Outside view of door



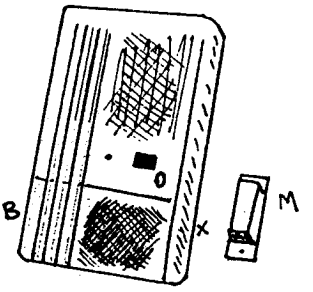
Inside view of door showing the screw keeping the clothespin jaws apart. The screw has passed through the wood block, the door, and finally, the clothespin.



Door and clothespin-switch booby trap

Door Guard Booby Trap

Sold internationally under various brand names, door guards are available from department stores, alarm suppliers, and similar outlets. Some come with an add-on magnet to further enhance their capability. The devices work by detecting even the slightest movement of the unit and/or (in the case of the add-on magnet versions) the actual opening of the door. Internally, there is a reed-type switch, triggered by the proximity of the magnet and a simple vibration detector/pendulum type of switch. The units are designed to be hung on doorknobs and are therefore completely portable.



B= Location of buzzer
O = On/off switch
M = Magnet (mounted on door frame)
X = Place reed switch beneath this point

To convert this type of device, it is necessary only to disconnect the on-board buzzer/sounder and connect an electric detonator in its place. As with all such modifications, if the existing power source is insufficient to fire the detonator, install one or more booster batteries as described in the section on battery stacking.

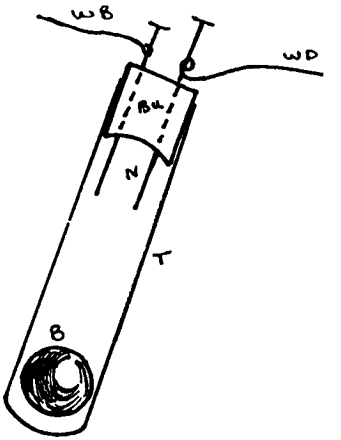
Door guards having the magnet/reed switch can frequently be turned off and on by a front-mounted switch. This version is suitable for instantly booby-trapping an entry point threatened by enemy personnel.

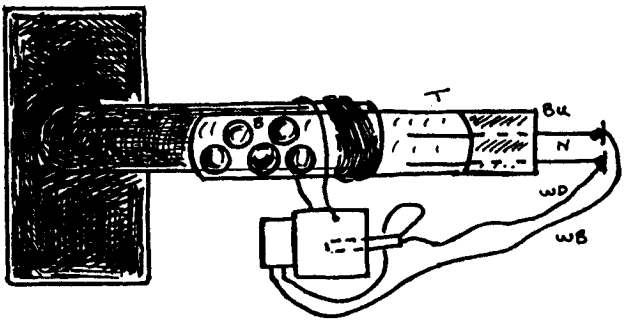
The device and its explosive additions can be safely left in situ with the arming switch off until such time as needed. It could then be armed immediately by throwing the switch. The next person to open the door would activate the trap.

Door Handle Booby Trap

Easily improvised using a glass test tube or plastic cake decoration tube, this booby trap is assembled as shown. When an attempt is made to turn the doorknob, the ball rolls onto the metal contacts and completes the electrical circuit, thereby causing the detonator to fire.

T = Test tube
B = Ball bearing or tightly rolled tinfoil
N = Nail or similar contacts
BU = Rubber or cork bung
WB = Wire to battery
WD = Wire to detonator

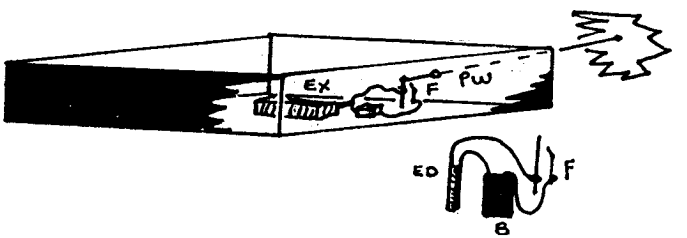




If only small ball bearings are available, they may be used in place of a large single one. Be sure you use enough of them, however, to short out the nail contacts when the handle is rotated. The completed assembly may be taped to the door handle on the opposite side of the expected approach. In the illustration above, the explosive/shrapnel package is shown hanging from a handle on a wire hook. In practice, tape would be used instead of the wire (shown here for clarity), or the wire would be additionally secured with tape.

Drawer Booby Trap

There are numerous ways in which a drawer can be booby-trapped. In this instance, a simple pull-to-make circuit is used.



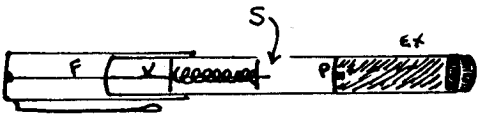
ED = Electric detonator
F = Flexible metal contacts or foil-covered plastic expedients
PW = Pull wire leading through small hole in back of drawer
EX = Explosive charge
B = Battery

Leading the pull wire through a hole to the outside back of the drawer allows the length of the wire to be set so that the slightest pull on the drawer will close the contacts.

Felt-Tip Pen Booby Trap

The construction methods described below can be applied to any type of pen, of course, but the felt-tip variety is easier to work with because it is generally larger than other pens. The "National" type of felt-tip is particularly suited to this modification, but there are many similar versions.

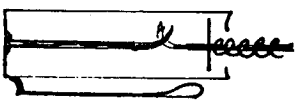
To disassemble the pen, lever out the plastic end cap and pull the ink-impregnated felt core from the pen body. Cut a section from the front of the pen and discard it. Assemble a simple spring-loaded striker pin to suit the dimensions of the pen being modified.



EX = Explosive (e.g., RDX, black powder)
P = Shotgun cartridge primer (percussion cap)
S = Spring-loaded striker
F = Firing arm

To arm the device, depress the striker with a pencil (or similar object) from its front. Hook the bent piece on the end of the striker over the bent end of the firing arm. Relax the pressure on the front of the striker and allow the spring to pull the pen cap down onto the pen body. Insert a preformed "cigarette" of black powder or flash-ignitible explosive with fitted shotgun primer, and replace the end cap. When the pen top is turned in an attempt to remove it, the striker will be released, thereby setting off the primer and initiating the explosive.

If desired, you can drill a hole through the pen body and firing arm to accept a safety pin. The hole, however, must be within the area normally covered by the pen top when it is in place.



Close-up of device in "cocked" position

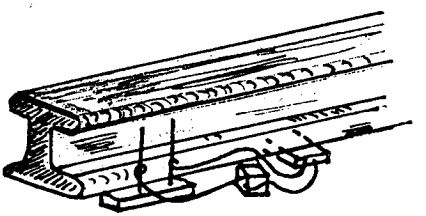
Shotgun or rifle/pistol rounds may be substituted for an explosive charge, and shrapnel (in the form of razor-blade slivers) can be added if the size of the pen permits.

Flanged/Metal-Wheel Booby Trap

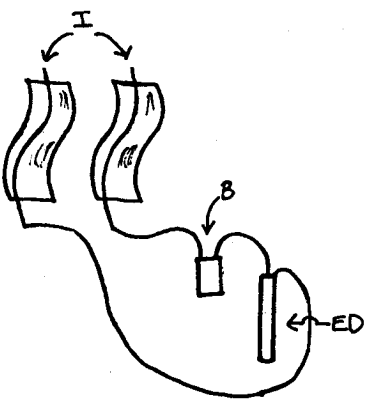
This type of booby trap is suitable for use against trains, dockyard lifting/moving equipment, cranes, and other types of transport or vehicles that run on flanged wheels. Though the two techniques described herein are also of use against any wheeled target that exposes metal areas on or around the wheels, this is especially true of the first technique. Included as targets are conventional rubber-wheeled vehicles with decorative metal hubcaps or metal-skinned and tracked vehicles. For use against such targets, the firing contacts would be disguised among fallen tree branches or roadside vegetation.

For attacks against hubcapped or metal-skinned targets, the firing contacts would be mounted horizontally. If mounted vertically, their upper parts must be angled to ensure target connection. Overhanging branches against which a target vehicle must brush to pass may be used to conceal thin wire contacts. This type of booby trap is especially suitable for strikes against Armored Fighting Vehicles (AFVs) and similar equipment.

In the first illustration, two flexible contacts are placed so that they are either forced together or shorted out by the metal flange. In either case, the result is to complete an electrical circuit. Any suitable material may be pressed into service for this application; in this instance, we have used flexible radio antennas from hand-portable sets. The insulating plastic covering was first removed with a sharp knife.



I = Improvised flexible contacts
B = Battery
ED = Electric detonator inside explosive

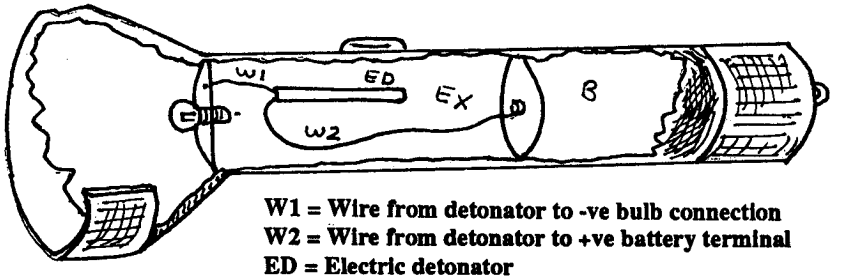


An alternative approach in which two simple wire contacts are placed over two lengths of insulating tape is shown in the illustration above. The circuit is completed when the wheel actually shorts out the two contacts.

Flashlight Booby Trap

The classic flashlight booby trap, as useful today as ever, can be constructed in a matter of minutes. The electric detonator you will use takes its power from some of the existing flashlight batteries (although these may be replaced with ones of higher power if required).

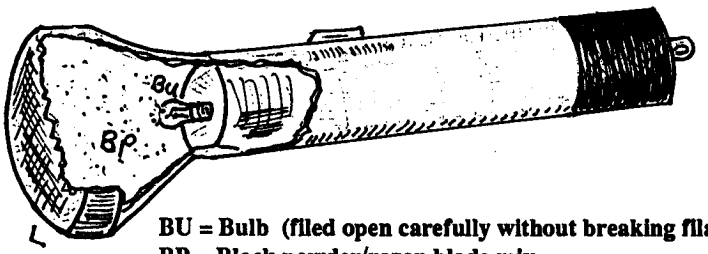
Assemble the device as shown below. Tape one detonator wire or otherwise attach it to the +ve battery terminal; attach the other wire to the bulb mounting plate/reflector body. The device fires when the switch is turned on.



Type 1

W1 = Wire from detonator to -ve bulb connection
W2 = Wire from detonator to +ve battery terminal
ED = Electric detonator
B = Batteries
EX = Explosives/shrapnel mix (shrapnel may be ball bearings or razor-blade slivers)
Note that interconnecting wires are insulated.

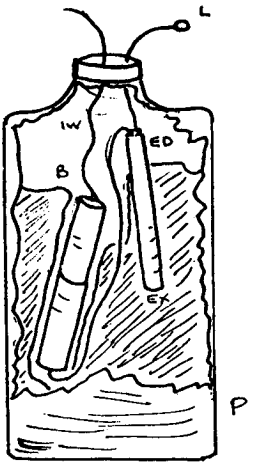
Type 2



BU = Bulb (filed open carefully without breaking filament)
BP = Black powder/razor-blade mix
L = Dark red lens/filter (to disguise head contents)

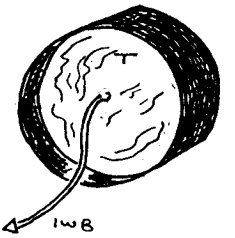
Foot-Powder Shaker Booby Trap

A military foot-powder shaker, or similar plastic container, can be converted quickly into a highly destructive booby trap. The diagram below shows the construction requirements.



L = Lead fishing weight (or similar weight; a small nut, for example)
P = Plastic shaker tin
ED = Electric detonator
EX = Explosive
B = Batteries
IW = Insulated connecting wires

T = Tinfoil is taped to the inside of the shaker lid (Small holes can be pierced through the foil from the front of the cap to lessen the risk that the foil will be seen.)
IWB = Insulated wire from battery attached to tinfoil



Cap details

Other powder shakers can also be adapted in this same way. Access to such containers is gained by levering off the end cap. Push the explosive down into the container and insert the detonator. Slim cylindrical batteries are installed, with the connecting wires already attached. When this booby trap is completed, any attempt to invert the shaker will cause the fishing weight or nut contact to fall against the tinfoil and complete the circuit.

Metal tins can be modified in a similar fashion, but the inside cap contact must be insulated from the rest of the tin body. To do this, use insulating tape; if the cap itself is plastic and care is taken concerning the size of the cap contact, there will be no problem.

Freezer Booby Trap

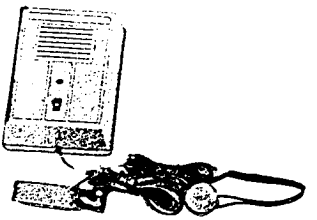
The type of booby trap discussed here can also be used with similar appliances sporting an interior light and operated by opening a door. After unplugging the freezer, remove the interior light and fit an electric detonator in its place. If only nonelectric detonators are available, or if detonators are not at all available, the existing bulb may be modified by using the glass-cutaway technique outlined elsewhere in this book (see page 75). Pack the explosive and shrapnel around the detonator, close the door, and plug the appliance back in. When the door is next opened, the booby trap will explode.

Freezer-Alarm Booby Trap

This type of device is based upon a module that gives a visual and/or audible warning once an increase in temperature has occurred that is nominally above that desirable in a refrigerator or freezer.

When connected as shown below, the freezer-alarm booby trap is suitable for installation in any area that is normally at a temperature of around minus 6.5 degrees C, but whose temperature can be expected to increase over a given period of time. If switched off, for example, a domestic freezer may take up to a day to defrost.

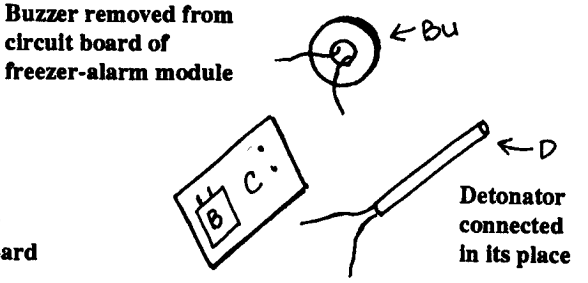
An explosive package linked to such a device and placed in a food container in a freezer in a dwelling likely to be



Typical freezer alarm

occupied by the target in the immediate future would prove very effective. The freezer would be completely disabled once the device were installed.

In this instance, the buzzer is removed from the freezer alarm, and a detonator is connected in its place. Either a higher voltage/current-rated battery is fitted or a booster battery is installed in the circuit if required.

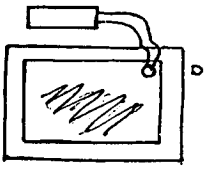


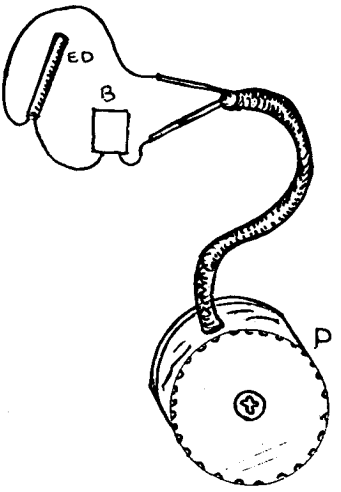
A stand-alone device may also be concealed in a cooler along with the usual ice cubes, and then abandoned at some strategic location. As the ice melts and the internal temperature of the cooler increases, the device will activate and explode. In both instances, attempts to remove the device from its cold surroundings without first disarming it would trigger the booby trap. Choose a freezer alarm that incorporates an on/off switch, and ensure that the sensor is kept below the trigger threshold temperature during all operations.

Glass-Break Detector Booby Trap

Widely available from alarm supply stores, glass-break detectors of the type shown here form the first line of defense against smash-and-grab thefts that hit many shops. When installed, they will be found affixed to the inner side of the protected window or door glass.

The glass-break detector is actually a small, variable-sensitivity vibration sensor. If the glass to which it is attached is broken or banged severely, the device reacts by closing a circuit, thereby enabling an electrical current to flow through it and on to the alarm sounder. In the case of the booby trap, the device would be connected into an explosive circuit in such a manner whereby attempts by the target to force entry into a building or vehicle would trigger the device.





D = Detector on inside of glass
B = Battery
ED = Electric detonator inside explosive/shrapnel package

Glass-break detector connection details

Headphone Booby Trap

Larger headphones with solid shells are best suited for this application. The booby-trapped headphones are used in conjunction with modified equipment into which the headphones will be plugged. First, remove the speaker insert from one of the shells to facilitate installation of an electric detonator and explosive package. Disassemble the headphones (details are shown below). Some phones disassemble easily and without force, while others need the gentle persuasion of a sharp knife or screwdriver. Damage can be rectified later by using epoxy adhesive or a type of superglue. Discard the speaker insert itself unless there is enough room for its replacement once you install the other additions. Keep the speaker cover, however, which will be replaced for camouflage purposes.

To complete step two, use a circuit tester to see which of the equipment jack-socket terminals need to be connected to a battery so that power from that source can pass into the headphone speaker wires when the headphone plug is inserted. To this end, remove the fascia/cover of the equip-

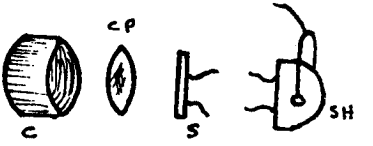
ment and access the jack socket.

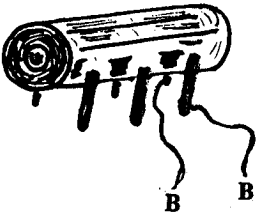
Normally, there are six terminals on the headphone sockets of most stereo equipment; on a mono setup there are four. To test for the correct connections, plug in the headphones, attach the tester to the headphone speaker wires, and attach the battery to each pair of jack-socket terminals in turn until continuity is confirmed.

Once the correct terminals are located, you can permanently attach the battery, remove the headphone plug, and install the explosive components. Then reassemble the headphone shell. When the headphones are plugged in to the modified equipment, the booby trap will explode.

It should be noted that if more time is available for testing, it is possible to find some takeoff point within the equipment itself that can supply the required voltage. Mains-powered equipment will have the internal operating voltage stepped down from a high AC voltage to a low DC one. Use insulated jumper wires and alligator clips to any suitable point.

C = Cushion
CP = Cover plate
S = Speaker insert
SH = Shell
B = Battery connection points

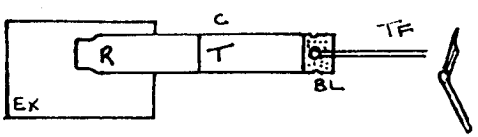




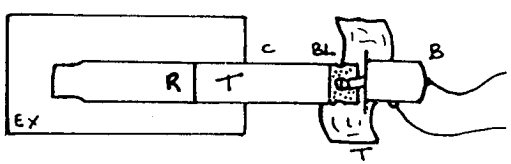
Close-up schematic of equipment jack socket and battery-connection details.

Improvised Detonators

R = 1 gram minimum RDX
T = 1 gram minimum TACC
C = Rifle cartridge
BL = Black powder
TF = Time fuse
EX = Explosive



B = Bulb (vehicle or torch)
BL = Black powder
R = 1 gram minimum RDX
T = 1 gram minimum TACC
C = Rifle cartridge
TP = Tape (securing bulb to cartridge)
EX = Explosive



TACC Improvised Explosive

The TACC, which should be firmly compressed into the

case with a wooden or glass rod that just fits into the case neck, is a primary explosive used in this context with a booster explosive, such as RDX. The essential ingredients for TACC are sodium chlorate, copper sulfate, liquid ammonia, and alcohol (95% pure). The manufacturing process is as follows:

Place 2.5 grams of sodium chlorate into a wide-mouthed jar, and add five tablespoons of alcohol. Place the jar into a pan of hot—but not boiling—water, and add one teaspoonful of copper sulfate. Stir.

Heat the mixture for half an hour or so, stirring frequently. As the mixture heats up, the alcohol tends to evaporate, so add more as required to keep the volume constant.

Remove the mixture and allow it to cool. The color will usually change from blue to green. Filter the mixture through a coffee filter into another wide-mouthed jar.

Now place 250 milliliters of ammonia into a narrow-mouthed jar or bottle. Place a length of tubing into the bottle (approximately 1.5 inches of the tube should be pushed into the bottle), and seal around the edge with plasticine or any available material.

Place the other end of the tube into the filtered chlorate/sulfate mix. Gently heat the bottle containing the ammonia for around ten to fifteen minutes. Again, do not boil.

Ammonia gas will be liberated and travel through the tube to the chlorate/sulfate solution; once there, it will bubble through. After around ten minutes, this solution will turn from light green to dark blue. Note this color change, and then continue the process for another ten minutes.

Carefully remove the tube and pour the solution into a large shallow dish. Put the dish to one side so the mixture can evaporate. After evaporation has reduced the volume of the solution by about one-third, filter the solution into a wide-mouthed jar. Take care that the filter paper is secure,

since the crystals that collect on it are extremely shock- and flame-sensitive. Wash the crystals by pouring a small amount of alcohol over them. Now put the whole thing in a safe place for twenty-four hours to dry totally. Store the resulting explosive away from heat, flame, and assembled detonators.

Reclaiming RDX from C-4 "plastic" explosive

RDX can be reclaimed from C-4 explosive simply and quite rapidly. The method is as follows:

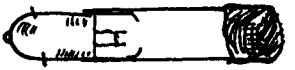
Put thirty grams of C-4 in a wide-mouthed glass jar, and add 500 milliliters of gasoline. Stir and mix the contents with a glass or wooden rod until the C-4 degrades into small pieces. Let this mixture stand for about half an hour.

After thirty minutes have elapsed, stir the mixture again until a fine white powder settles at the bottom of the jar. Carefully pour the mixture through coffee filters or a paper towel into another jar, and wash the resulting RDX crystals by pouring half a cup of gasoline over them.

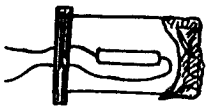
You may now dispose of the liquid. The RDX crystals should be placed in a wide dish or plate and set aside to dry for around three hours. Note that the quantities can be scaled up or down proportionately to obtain more or less RDX.

Improvised Flash Initiators

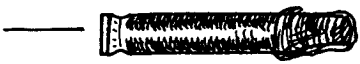
The following initiators are suitable for a variety of applications, including the firing of nonelectric detonators.



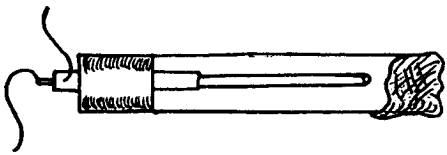
The cutaway bulb shown here is fixed into a plastic or metal tube. The tube is filled with black powder.



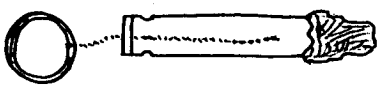
This fired shotgun cartridge has its base drilled to accommodate two insulated wires. A 10-ohm, one-eighth-watt carbon resistor is installed as shown and the case is filled with black powder or smokeless powder. This device is fired by means of 24V DC (such as flashlight batteries).



This small-arms round has its bullet removed and is fired by means of a spring-loaded striker.



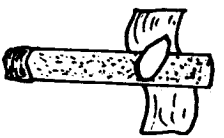
A diesel-engine heater plug is fitted into a metal tube, which is filled with black powder. A 12V DC or 24V DC battery is used, depending on the source vehicle.



This pull igniter is comprised of a fired rifle case with its primer drilled out and enlarged. A length of wire saw is threaded through from the outside, with the free end knotted. The case is filled with match heads.

A glycerine-filled syringe is installed into the tube containing potassium permanganate crystals. Depressing the syringe plunger starts the reaction, which starts rapidly at high temperatures but is not reliable at low temperatures.

A tube contains an equal-parts mixture of granulated sugar and potassium (or sodium) chlorate and is placed beneath a vial of concentrated sulfuric acid. It is fired when the acid vial breaks, thereby allowing the acid to make contact with the mixture. Concentrated sulfuric acid can be improvised by boiling battery acid until white fumes appear. Use a flameless heat source and perform the operation outside, as inhaling the fumes is hazardous. Wear goggles whenever working with acids.

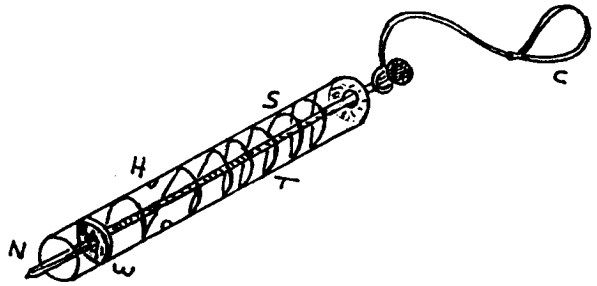


A tube containing an equal-parts mix of granulated sugar and sodium peroxide is put beneath a vial of water. It fires when the vial is broken, thereby causing water to contact the mixture. It is not suitable for prolonged storage (more than a couple of days). The tube ends are sealed with tape.

• • •

Other expedient flash-initiator designs include a filed-open fuse with black powder poured in, that is set in a bed of black/smokeless powder; a filed-open, magnesium-type camera flash cube that is set in incendiary material; and resistance wire salvaged from portable, low-DC voltage hair dryers, set in incendiary material.

Improvised Spring-Loaded Striker

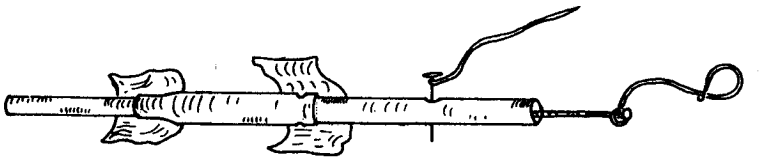


N = Nail striker
W = Washer (or a nut that's been selected for friction fit over a nail and is free running inside the tube)
H = Hole for safety pin
T = Tube
S = Spring
C = Cord (attached to nail head)

Hammer in the edges of the top of the tube in order to secure the spring, alternatively sealing with a washer or using heat-shrink tubing. This assembly can be made in minutes from commonly available parts. It may be of any convenient size, and soft wood end pieces can be shaped easily and fitted if desired.

The lower spring retaining nut may be threaded onto the nail. If a friction-fit design is selected, a small spur can be hammered into the nail just below the nut/washer in order

to negate the risk of premature slipping. Many types of nails have such a spur incorporated into their design, and forcing the nut/washer over the nail will often suffice. Plastic pen bodies can also be used as the basis of such strikers to good effect.

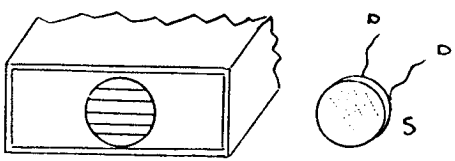


Infrared "Rifle" Booby Trap

To make this booby trap, you need a toy infrared rifle/pistol target practice game. Such systems are widely available from toy stores.

Some of these toys have an on-board speaker that produces a "shot" sound effect when the beam from the rifle transmitter strikes the receiving sensor. Such devices have a range of up to one hundred feet. In most instances, you only need to detach the sounder and connect the detonator firing wires in its place.

The explosive may be concealed within the receiver body or fastened to it externally with heavy tape. If the device does not supply enough voltage/current to fire the detonator, a booster battery may be installed (as described elsewhere in this book; see pages 24 and 25).



D = Detonator wire connecting points
S = Speaker/sounder (removed from receiver section)

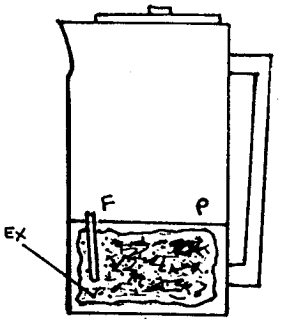
The device may be fired manually, perhaps by someone hidden across the street from the approaching target. Another possibility is that the beam-generating stages of the device may be removed from the case and reinstalled as required; it can also be connected to any type of pressure, pull, or movement switch. Provided the receiver has an unobstructed line of sight to the transmitter, almost any variation can be used.

Kettle Booby Trap

This technique is appropriate for use with spout-filled electric kettles, the lids of which are not normally removed when the kettle is being filled.

Unplug the kettle and thoroughly dry it. Install a pre-prepared plastic bag pack that contains an outer layer of shrapnel-making material and an inner core of black powder and a protruding tubular fuse (see illustration). Fit a plastic sealing disk, which may be cut from an old plastic dish.

When water is poured into the kettle, it will enter the fuse opening and react with the sugar/sodium peroxide mix, thereby generating heat and flames. This will fire the black powder and cause a low-level explosion. If a nonelectric detonator is available, attach it to the end of the fuse tube. Other explosive material may be substituted for the black powder.



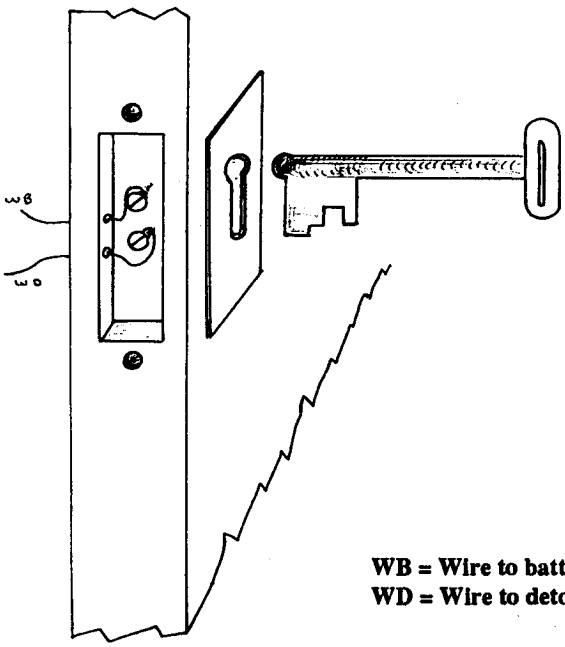
P = Plastic-dish sealing disk with tube fuse slightly raised. Fuse is a close friction fit in the sealing disk.
EX = Explosive package (surrounded with shrapnel material)
F = Fuse (length of metal tube containing a mixture of equal parts of common granulated sugar and granulated sodium peroxide*)

*** The sodium peroxide may be mixed instead with equal parts of aluminum powder or filings. In either case, mixing is achieved by gently rotating the granules in a perfectly dry container. Atmospheric moisture or sweat can ignite these mixes; in any event, they may spontaneously combust after storage periods of only a few days.**

Keyhole Booby Trap

The keyhole booby trap may be installed quickly using only basic tools. The existing door-lock mechanism is removed (access being gained via the door edge), and two improvised contacts (nails or screws) are fitted as shown in the illustration. Wires from the battery and detonator are connected to these contacts. The explosive package itself may be taped or hung on the opposite side of the door.

Wedge the door shut from the explosive side in order to give the impression that it is locked. Leave the key in an obvious position on the target's side of the door, making it look as if it had been dropped by accident. When the key is inserted into the keyhole, it will short out the contacts, and the booby trap will detonate.



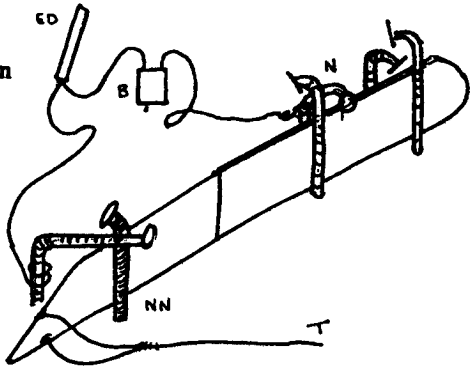
WB = Wire to battery
WD = Wire to detonator

Knife Switch

The knife switch may be improvised from any available tool or length of flexible metal. Therefore, kitchen knives and forks are suitable, as are artist palette knives and putty knives.

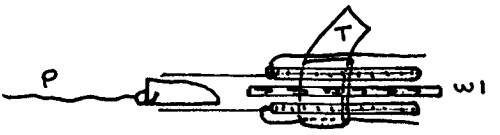
When installed as shown below, the knife becomes both a tension release and a trip/pull switch. The trip wire may be taken to a door or window, or it can be secured beneath some inviting item calculated to attract the target's interest.

N = Nails, bent over and touching knife
NN = Nails bent over as shown but NOT touching knife
T = Trip wire
B = Battery
ED = Electric detonator



The front of the knife is positioned so that extra tension on the pull wire or the release of the existing tension causes the blade to move and contact either nail, thereby completing the electrical circuit and firing the detonator. An additional trip wire can be attached to the opposite side of the knife blade, if so desired.

The knife may also be employed as a simple switch by adapting it as shown below. Removing the insulator (piece of wood or plastic) allows the blade to fall and contact the nail terminal, thereby completing the circuit and firing the device.

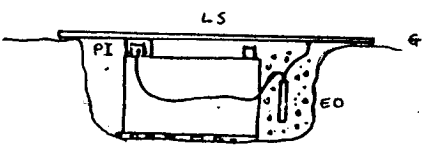


P = Pull wire connected to insulator between nail and knife
WI = Wood insulator separating knives
T = Tape securing assembly

Lead-Sheet Pressure-Plate Booby Trap

This booby trap utilizes a flexible piece of lead. If such lead is not available, several layers of tinfoil may be used in its place, as may any other expedient. The only requirement is that it be self-supporting and conductive.

The weight of a man walking on the lead sheet causes it to collapse onto the terminal of a vehicle battery. This action completes an electrical circuit and fires a detonator/ explosive package buried alongside the battery.

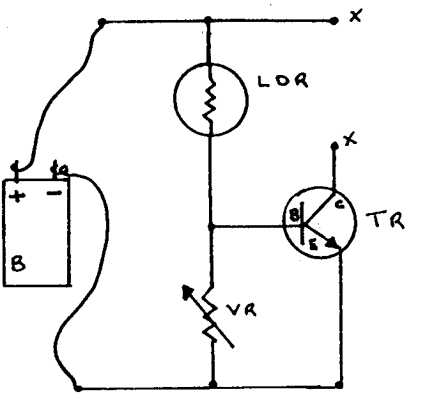


G = Ground level
LS = Lead sheeting (covered with light-debris camouflage)
PI = Plastic insulator covering one battery terminal
ED = Electric detonator (in explosive/shrapnel package)

Light-Sensitive Booby Trap

This booby-trap device can be cheaply manufactured from readily available components. The required items are an LDR (light-dependent resistor, also known as a photo-conductive cell), a variable resistor, and an NPN general-purpose transistor.

B = Battery
LDR = Light-dependent resistor
VR = Variable resistor
TR = Transistor
X = Detonator connecting points (during setup, these are bulb connection points)



The transistor can be any type of NPN general-purpose transistor, while the variable resistor can be a 2K linear one (or you can select the type upon testing).

To set up the switch, the variable resistor is adjusted until the test load (bulb) just goes out. When the beam from a flashlight is now shone onto the LDR, the bulb should light again. Note that it is the variable resistor that determines what light level is needed to trigger the switch. Therefore, tests should be made in lighting conditions similar to those under which the booby trap will actually be deployed.

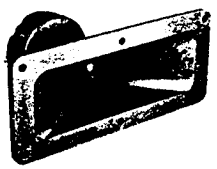
Once you are satisfied that the switch is working correctly, the device may be conveyed to the target location, installed, and armed. Since the beam from a flashlight triggers the booby trap, the device is suitable for concealment in any area likely to be searched during the hours of darkness by the target force.

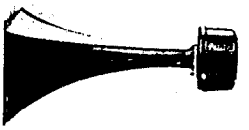
You can also hide this booby trap in any spot that is normally dark but that can be lit at a time coincidental with the target's presence. The device can be hidden behind wall posters that are anti-target (and therefore likely to be ripped down) and garbage cans in known search areas.

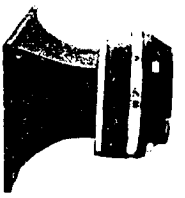
Greater safety during deployment can be obtained by installing a wristwatch delay (see pages 131-132) in the positive battery supply line. In this instance, the wire from the watch face contact should be connected to the positive battery terminal, and the wire from the watch winder or body treated as if it were the positive terminal and connected accordingly. In this manner, you can be well clear of the scene before the booby trap arms itself.

Loudspeaker Claymore/Fougasse

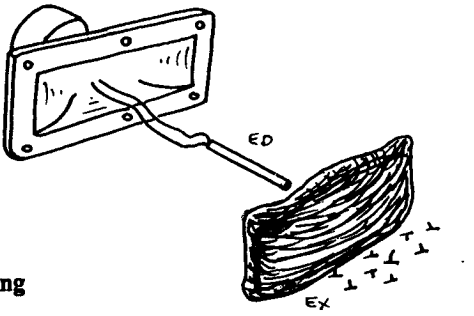
The type of speaker required for this application is a solid-bodied horn tweeter type, which can be purchased from audio stores.







Install the explosive material and shrapnel filling as shown, and fit the detonator from the rear of the unit in a central position. You can gain access from the rear of the speaker by unscrewing the rear connector block or by drilling through it. The ratio of explosive to shrapnel should be around four parts shrapnel to one part explosive.

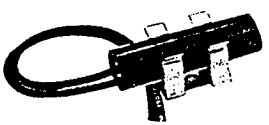


ED = Electric detonator
EX = Explosive/shrapnel covering

Note that the explosive follows the contours of the speaker. The shrapnel may be secured by pressing it into the explosive or by using tar, epoxy adhesive, wax, or solid cooking fat. When fired, the angular spread of these weapons will depend upon the precise shape of the speaker selected. Items such as cooking pans and hubcaps can be substituted for the speakers if they are more readily available. Apply the same principles, and insert the detonator from the rear in a central position.

Mercury Switch Booby Traps

Mercury switches are readily available from electronics stores and alarm suppliers. Typically, they comprise an encapsulation within which there is a pair of contacts. A ball of mercury rolls about the interior of the unit and, at some point, bridges the contacts. Whether the switch is on or off is therefore dependent on the physical attitude of the switch relative to gravity.

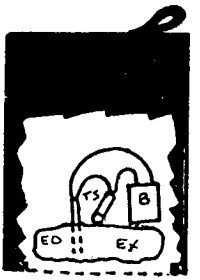


Typical tilt switch

The type of mercury tilt switch shown in the above illustration is suitable for use in a wide variety of booby-trap applications, either as a primary trigger mechanism or as an anti-handling device (a mechanism used in addition to the primary trigger mechanism that operates if an attempt is made to disarm or move the booby trap). There are count-

less ways in which the switch can be employed; any object that may be moved by the target can thus be rigged. A booby trap based on an apparently full soda can is shown below.

TS = Tilt switch
ED = Electric detonator
EX = Explosive
B = Battery

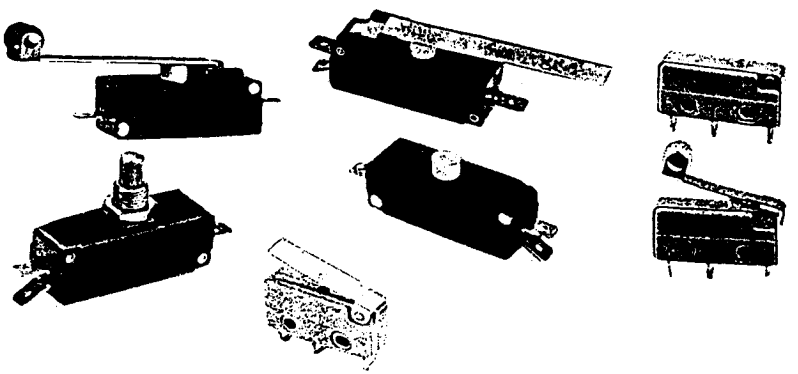


To facilitate access, remove the base of the can. Emplace the explosive package and firing chain components, place the tilt switch on top of them, and put the can over the device. The can appears unopened and will attract target personnel if left at some strategic point along a known patrol route.

Even if the target does not pick up the can, it is likely he may kick it casually aside. The principle used in this device can be applied to larger cans and other objects. The internal actions of toilets are good choices (rest the explosive package and tilt switch atop the ball cock), as are footballs. Here again, the modified football would be left in a location calculated to cause target personnel reaction. For added safety, this booby trap may incorporate a wristwatch delay mechanism (described on pages 131-132).

Microswitches

Invaluable to the booby-trapper, microswitches used in booby traps will normally be of a single-pole, double-throw configuration. This means that they can be connected so as to provide a normally open (NO) or normally closed (NC) switching action regardless of the position of the actuating arm. The three terminals visible on the switches make this possible. Connecting the first and second in a row of three will give an NO action, while connecting the second and third creates an NC action.



Typical microswitches

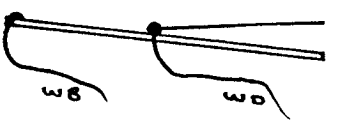
If the requirement is for a switch that is "off" when the arm is depressed, the first two connectors might be used (and the third ignored). If a switch is needed that is "off" when the arm is released, the second and third connectors would be used and the first ignored. In practice, tests should be made with a circuit tester to determine precisely which connectors provide the required action.

Mousetrap Switch

A mousetrap can be adapted to trigger electrical or non-electric detonators if modified as described below.

Electric

1. Remove the trigger plate and holding wire, if necessary.
2. Form the contact plate from removed components or improvise with tin pieces.
3. Test for circuit continuity with the striker closed and a break in continuity with it open.



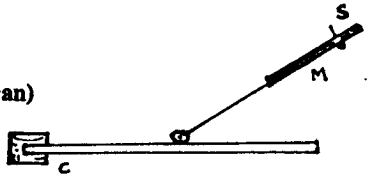
WB = Wire to battery
WD = Wire to detonator

Nonelectric

To initiate a nonelectric detonator, attach a nail, screw, or similar object to the striker by installing an improvised mounting frame, which can be made from a piece of beer

can. Cut away enough of the wooden trap body to accommodate the flash initiator, or affix an extension piece that is drilled to hold the initiator. The components are positioned so that the arm-mounted striker pin hits the percussion cap on the initiator when released.

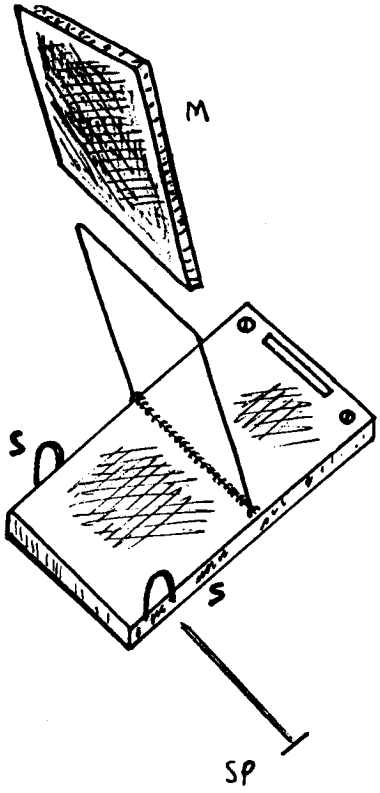
M = Mounting frame (made from beer can)
S = Improvised striker pin
C = Cutaway for flash initiator



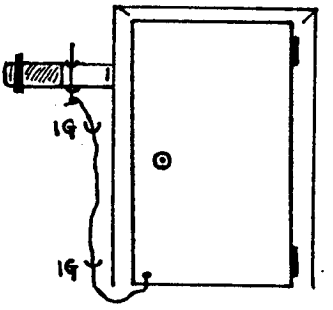
A variation is to attach a vial of water or acid to the mounting plate with double-sided tape and use a water- or acid-initiated explosive.

This type of booby trap may also be installed in such a manner as to cause a vial of acid to smash into the target's face when he opens a door.

M = Mounting plate/extender piece fabricated from beer can
S = Safety-pin retaining brackets (improvised from horseshoe tacks)
SP = Safety pin (nail)



IG = Improvised wire guides
(made from horseshoe tacks)

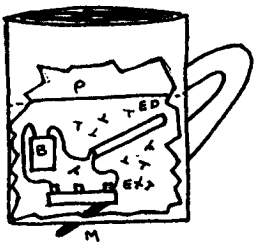


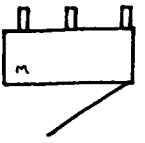
View of acid booby trap mounted alongside door

Mug Booby Trap

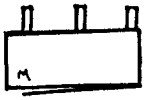
Several microswitch-based booby traps should be left in strategic locations where they can be relied upon to provoke use, or, at the least, movement. The principle can also be applied to common drinking mugs made from ceramic material and to more expensive tankards.

M = Microswitch
P = Plastic sealing disk (covered with liquid for camouflage)
B = Battery
ED = Electric detonator
EX = Explosive/shrapnel mix





"On" position = Current flows, device explodes



"Off" position = No current flows

Refer to the microswitch section for details regarding "on" and "off" connections.

To modify the mug, either remove its base or cut away enough of it to accommodate the microswitch actuating arm. The explosive/shrapnel mix, battery, and detonator are secured in place with putty, plasticine, epoxy, or any similar material. It is important that the trap package is well insulated from the ingress of liquid. To this end, friction fit or glue a plastic sealing disk just above the level of the components.

For final camouflage, add a little liquid to create the illusion of a used vessel. If the vessel itself is not likely to be used for drinking proper, it should be placed atop some other item of interest to the target.

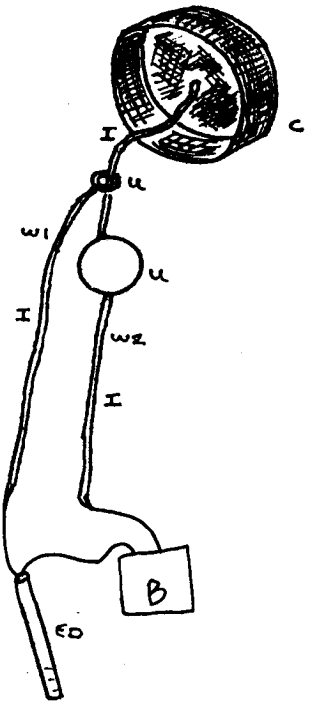
Oil Drum Booby Trap

This booby trap can also be installed in any container where access is gained by lifting a lid or cover. Refer to the illustration for details. In operation, lifting the cover pulls the stripped loop on wire 2 with it. This loop will be forced against the smaller stripped loop on wire 1. This completes an electrical circuit and causes the detonator to fire.

Secure the battery, detonator, and explosive together, if required, with heavy tape. You can tape additional shrapnel to these components as per a nail bomb. Alternatively, you can add rocks and nails to the oil drum itself. Seal the explosive package and firing-circuit components in a plastic bag. Be sure to seal the point at which the cap wire exits the bag with adhesive.

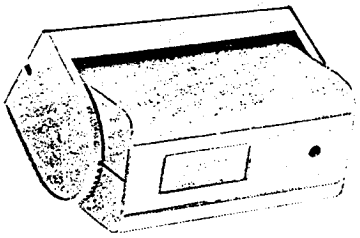
The length of the pull wire should be such that the booby trap sits comfortably on the bottom of the target container when emplaced. The bag should be weighted, as required, to ensure adequate resistance to lifting when the cap wire is pulled.

C = Cap
U = Uninsulated loop
W1 = Wire 1
W2 = Wire 2
I = Insulation
B = Battery
ED = Electric detonator (inside explosive/shrapnel package)



Passive Infrared Detectors

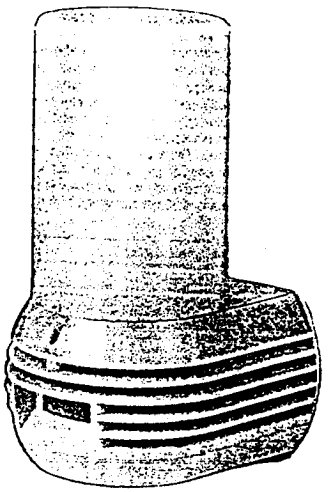
Available in many shapes and sizes from alarm suppliers, these units form the basis of many domestic and commercial intruder alarm networks. For their operation, they rely on the heat given off by all living creatures, heat which is transmitted from the body in the infrared spectrum. Upon reacting to an intruder or visitor to the protected area, the detector head switches a mechanical or electronic relay and sets off a siren or bell; it can also turn on a light. Simply replacing the siren, bell, or light will often be enough to turn the alarm station into a deadly booby trap. Be sure that power is not available to the unit



Typical infrared detector

until all modifications are complete and until all personnel are well clear of the unit.

Many infrared detectors are mains voltage-based but are actually stepped down internally to a much lower DC voltage. Such systems can therefore be readily converted to battery operation.



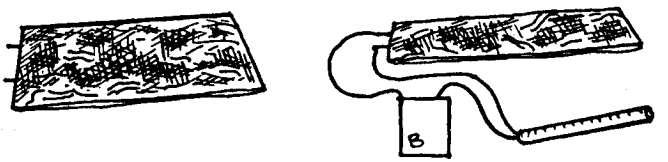
On-board light type

Modified unit with detonator connected in place of bulb, and bulb cover housing explosive and shrapnel

Several common types of infrared detectors also contain an on-board light. These devices are used as visitor-announcing systems, as well as in alarm scenarios. Removing the internal light and replacing it with an electric detonator and explosive charge will create a self-contained, portable antipersonnel/antivehicular mine device. When battery operation is selected, you should incorporate the wristwatch delay system into the battery supply line (see pages 131-132).

Pressure Mat Trigger

The pressure mat is a popular component in many domestic alarm configurations. When stepped on or driven over, it will change immediately from open to closed circuit.



B = Battery

Pressure mats and circuit connection

A pressure mat may be installed anywhere the target is likely to walk or drive. It may be laid on top of a surface and then camouflaged, or it can be placed just below the surface of an area in such a manner that pressure from above will still activate it.

By extending the connecting wires to suit, a mat may be situated at a considerable distance from the explosive package. It is thus possible to install such a system so that the

lead man of a patrol actually triggers the device, thereby causing the death of other team members some distance away. The target can be lured across the mat by placing some inviting object on its far side.

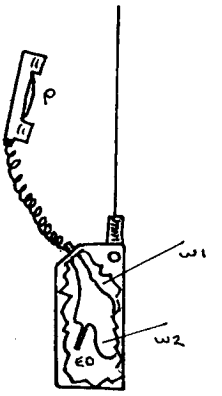
One real plus of these mats is that they are resistant enough to light pressure to make them suitable for emplacement on a road or pathway where they would be covered with road dust and small stones, depending on the surrounding terrain. Part of a flattened box may also be used in certain circumstances to conceal the mat. The wires may be led away to an explosive package located at the side of the road or buried beneath it.

Radio Booby Trap

This booby trap can be used with commercial and military field radio equipment, especially portable, hand-held, or manpack sets that can be left in strategic locations to give the impression they have been abandoned in haste by an escaping guerrilla force or have been left behind because of component failure. The units may even be "hidden" to create the illusion that the search team has hit upon a covert communications center. In the majority of cases, it is assumed that it is too costly to repair the radio set selected for conversion. If financial considerations permit, however, it may be practical to sacrifice a fully operational set. In such a case, any useful spare modules or components should be removed beforehand.

To convert the set, determine which wires from the handset become closed circuit when the PTT (push-to-talk) bar is depressed. Select any two such wires and connect them to the booby-trap circuit as shown in the illustration. When the PTT bar is pressed, the current flows from the battery through the handset and into the detonator.

P = Push-to-talk (PTT) bar
ED = Electric detonator
W1 = Wire from +ve battery terminal to PTT
W2 = Wire from -ve battery terminal to detonator

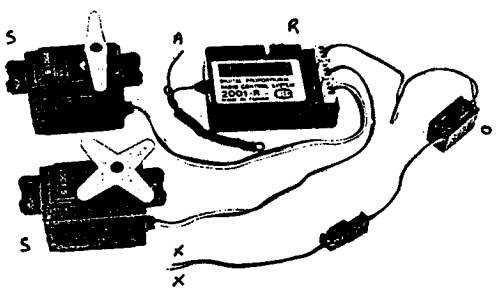


Cutaway of modified radio set

The set may generate enough voltage to fire the detonator when the PTT bar is depressed. This can be confirmed by using a multimeter/circuit tester. It is the natural reaction for someone who finds such a set to check whether it is working. Doing so in this case will trigger the booby trap. An alternative approach is to connect the detonator via the on/off switch, a procedure that is also applicable to any other item of electronic/electrical equipment.

Radio-Controlled Detonation

The components illustrated and described below are available from hobby shops and large department stores, as well as specialized model supply shops.



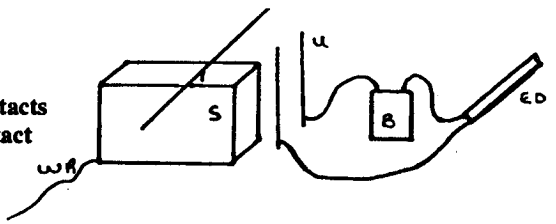
S = Solenoids
A = Antenna
O = On/off switch
R = Receiver/ decoder module
X = Power input from battery

Radio control receiver components

The receiver/decoder stages shown in the illustration will react to an incoming signal, and will switch battery

power to one or both of the solenoids. This action will cause them to move in a given direction. Remote detonation of an explosive charge is simple when this receiving/ decoding system is installed in such a manner that movement of one or both solenoid mechanisms causes an electrical contact to be made between an electrical detonator/ battery circuit.

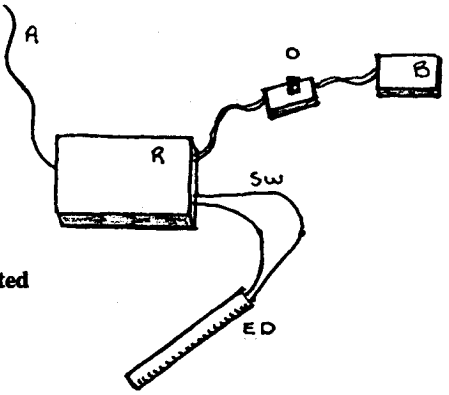
Such a system may be command-fired or triggered by the target, who unwittingly activates the "fire" signal by virtue of any type of conventional booby-trap switch. In this instance, the appropriate control lever/switch/button on the transmitter would be linked to a pressure-, pull-, or movement-activated switch.



U = Improvised upright contacts
S = Solenoid (metal foil contact attached to arm)
WR = Wire from receiver
B = Battery
ED = Electric detonator inside explosive/shrapnel package

Upon receiving the signal, the solenoid arm rotates and contacts the two uprights, completing the electrical circuit and firing the detonator. The system can be made slightly more secure by arranging the mechanical configuration so that two different signals are needed to bring the solenoid arm to the closed-circuit position.

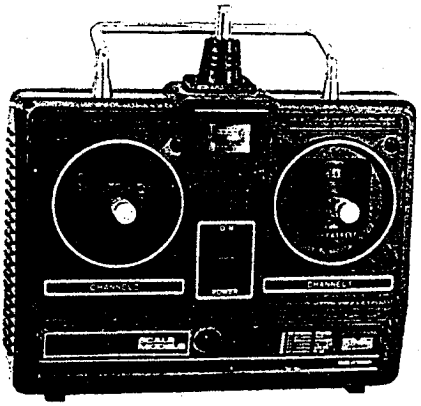
In most instances, it will be possible to obtain enough power from the solenoid supply line to fire the detonator without installing a mechanical action. If insufficient voltage/current is available, install a booster battery of the required value as shown.



A = Antenna
R = Receiver module
SW = Solenoid wires
ED = Electric detonator connected to removed solenoid wires
O = On/off switch
B = Battery

Circuit connection details

A typical radio-control transmitter is shown below. For most unconventional warfare roles, the required transmitter components will be removed from the bulky case and refitted into a more manageable package. The rigid telescopic antenna will also be replaced by a less conspicuous wire type. Note that using the antenna in a curled or twisted condition can reduce the effective range considerably. The wire antenna can, however, be taped to the operator's body and placed beneath clothing with very little loss of output signal.



Radio-control transmitter

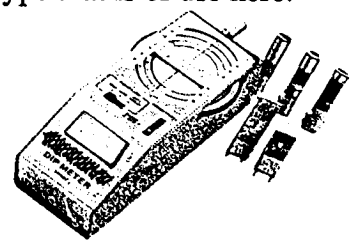
Another expedient approach to radio-control detonation involves coupling some type of tone-activated device to the firing circuit and emplacing it along with a receiver tuned to whatever frequency from which you can transmit. To fire the system, the tone-generating unit is placed close to the microphone, and the transmitter is operated. The audio from the receiver causes the device to react, and the trap then explodes.

The receiver/switch stages of a tone-operated answering machine can be utilized in this context. Determine what point on the machine's circuit board needs to be tapped into by conducting trial-and-error checks with a multimeter. Any stage that develops sufficient voltage to fire the detonator or initiator when the tones are received will do. Couple the detonator/initiator to this point.

Radio-Frequency Meter Booby Trap

Several devices are suitable for use in this type of trap: the radio-frequency (RF) meter, field-strength meter, bug detector, and the grid-dip oscillator (GDO). The latter unit can be used as a field-strength meter by effectively switching off its main operating circuit. Full instructions are supplied with all such units, which are available from amateur radio outlets, CB radio suppliers, and related stores.

The meters described react to the presence of radio signals. The relative strength of this reaction is displayed on either a digital readout dial or a simple moving-needle display. It is the latter type that is of use here.

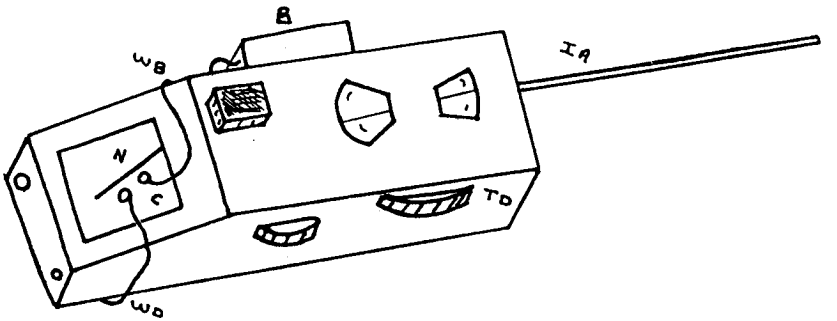


Dip meter with antenna coils

The frequency range of such devices varies according to their intended application. For the purposes of booby-trapping, we will consider the wide-band type that covers all frequencies likely to be used by an enemy patrol. The exact frequencies of the target can, of course, be determined by on-site monitoring.

Tests, using other similar devices or nonarmed examples of the unit to be modified, will reveal what levels of RF energy are present at given distances from an enemy radio operator and their frequency. If a specific frequency is known to be used by the target, the GDO device can be set to react to that frequency. If a broadband type of RF detector is to be used, the precise frequency will not matter much.

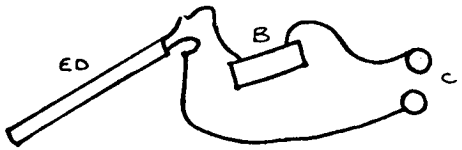
It may be found, for example, that a full-scale deflection of the meter needle occurs at a distance of twenty feet from the target. Armed with this information, it is simply a matter of modifying the meter as described.



TD = Tuning dial (secured with tape at the required setting, if applicable)
C = Contacts (improvised from thumbtacks or similar objects—they are positioned on the meter face at a point within the reaction range caused by the target operator)
N = Needle (with edge sanded to provide a good contact or conductive material such as silver foil added as required)
WD = Wire to detonator
WB = Wire to battery
IA = Improvised aerial (for greater reception range, if required—it can be fabricated from a piece of wire coat hanger)

The explosive and shrapnel can be taped to the body of the unit. The two meter-face contacts are positioned so that the rising needle contacts them, thereby closing the electrical circuit and firing the detonator.

C = Contacts
B = Battery
ED = Explosive detonator



Circuit schematic

Extra conductive material on the meter needle will not be needed if the needle itself is metal and, therefore, conductive. It should be sanded or scraped to provide a good electrical contact. Before installing explosive components, test for continuity by connecting a circuit tester in place of the detonator.

Take care that no radio-frequency energy is present in the area when the device is emplaced and armed. Powerful or close-proximity radio signals (even those caused by power lines) can cause premature detonation of the device, especially if an oversize antenna has been fitted.

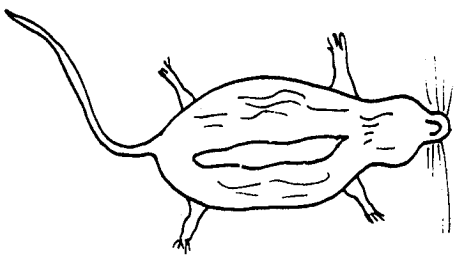
The completed device should be emplaced at some point along the target's known patrol route and adequately concealed. If it can be hidden behind or close to some obvious cover, so much the better. The target can be forced into this cover by a few well-placed shots, and this "attack" can be relied upon in the vast majority of instances to provoke use of the radio.

As mentioned before, the antenna usually supplied with this type of equipment is a small coil type. A larger antenna can increase reception range; however, note that such an antenna can also pull in stronger, unwanted signals, which can lead to premature detonation; adding the wristwatch delay to the circuit (pages 131-132) helps negate this risk.

Rat Booby Trap

This old favorite still works well. You need a dead rat or any other dead animal that is likely to provoke disgust and therefore prompt removal. If using a rat, select a large one and kill and gut it. Using plasticine or putty, recreate the creature's skeleton and form a rigid cavity. If plastic explosive is available, use it to recreate the form of the rodent.

Insert the battery and detonator in the opened underside of the rat, and link the circuit to a mercury tilt switch or microswitch. Leave the assembly in some strategic location where it can be relied upon to provoke interference. Add the wristwatch delay to the circuit to negate the risk of premature detonation (see pages 131-132).

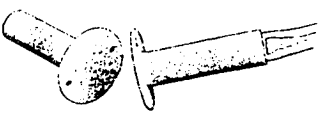


Underside view of rat showing access slit

Reed Switches

Reed switches are available from alarm and electronic component suppliers in two common styles: glass-encapsulated uncased devices and cased plastic-bodied types. The sealed plastic types are usually sold with a matching cased magnet. All types, however, can be used with any magnet.

Changeover-type reed switch



Flush-mount-type reed switch

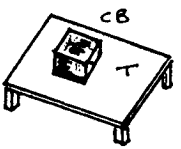
Cased-type reed switch

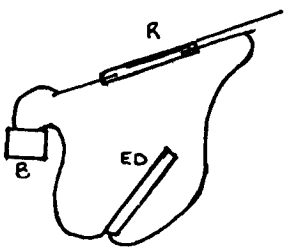
Reed switches consist of encapsulated or cased metal contacts that have overlapping ends. When a magnet is brought near the switch (or vice versa), magnetism is induced into the contacts in the same direction. Therefore, one of the overlapping ends becomes a north pole and the other a south pole. The attraction of these now opposing poles causes them to close.

In the changeover type of switch, there are two such relays. The magnetism effectively causes one of them to open and the other to close. When the magnetic field is removed, the inherent springiness of the contacts automatically allows the switch to break again. Because of the residual magnetism within the switch, there is often a slightly greater break distance than make distance required.

Reed switches can be used in booby-trap configurations in a number of ways. These range from simple magnet/switch assemblies on a door and door frame to a more cunning trap in which the magnet is hidden beneath the surface of some object upon which the reed-switch-linked explosive circuit is standing.

The latter type of system is outlined below. Many variations are possible, but the magnet must be powerful enough and the separating medium of such a type that the magnetic field does operate the switch.





Assembly A

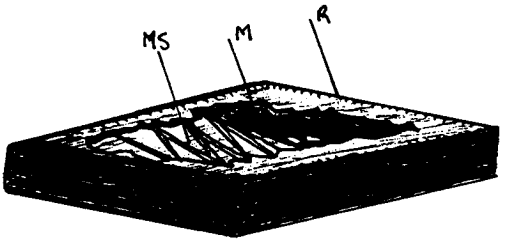
CB = Metal cash box containing Assembly A
T = Table (powerful magnet beneath surface)
R = Reed switch (changeover type)
B = Battery
ED = Electric detonator

The reed switch used here is of a changeover type that is connected in a normally open status. The normally closed leg can be cut down to avoid confusion. In the normally open connection, no current flows until the magnetic field is removed.

Rifle Magazine Booby Trap

Left in positions suggesting the recent and hasty departure of their user or indicating the presence of a poorly concealed ammunition store, rifle magazines make good booby-trap lures. These can be booby-trapped by linking them to a buried pull switch, which is itself connected to an explosive package that activates once an attempt is made to lift the magazine for examination. A variation based on a reed switch is shown on the following page.

The selected magazine is first modified by installing a magnet within it. Access is by the usual floor-plate removal method. Select a magnet that is powerful enough to operate a flush-mounting reed switch via the magazine body. Thin strip magnets may be used (these will not interfere unduly with the replacement of the magazine spring). Larger, more powerful magnets may be used. For effect, however, be sure to leave enough room for the spring to compress by at least one or two rounds.

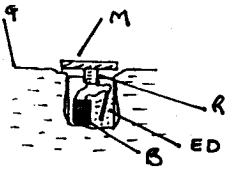


R = Rounds
MS = Magazine spring
M = Magnet

Cutaway showing magnet inside the magazine

Test the magazine for correct magnet/reed switch operation: with the magazine touching the switch, no current should flow through the switch; when the magazine is separated from the switch, current does flow. Construct a simple box assembly to house the explosive material, battery, and detonator.

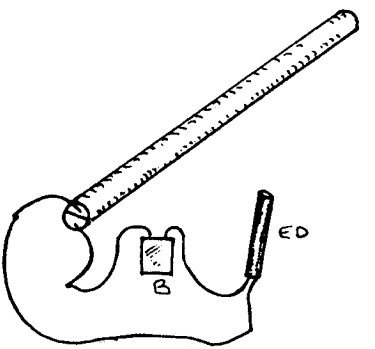
Check again to be sure the unit is functioning correctly before installing the explosive components. During emplacement, the reed switch is held firmly against the magazine while the component box is buried. Stones and other debris should be used to secure and camouflage the box.



M = Magazine with magnet installed
ED = Electric detonator
B = Battery
R = Reed switch
G = Ground level

Rubber "Snake" Pressure Switch

This flexible, rubber-covered switch is frequently the basis of the pressure-hose system that registers the arrival of vehicles in a service station by ringing a bell inside the station. Its operation is similar to that of a tubular pressure switch in that two conductive layers are kept apart inside the item by some type of springy insulating material. Pressure on the outside of the switch forces the two conductive pieces together, completing an electrical circuit. One end will often be sealed, while the other will have two visible contact terminals.



B = Battery
ED = Electric detonator

Schematic showing detonator and battery connection details

Booby traps based on this type of switch may be placed across roads and tracks and then concealed with debris. The weight of an average-sized man is not usually sufficient to trigger this type of switch. However, a man carrying a full kit, weapon, and ammunition can do so.

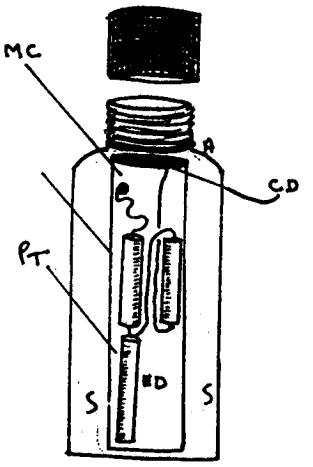
Sauce Bottle Booby Trap

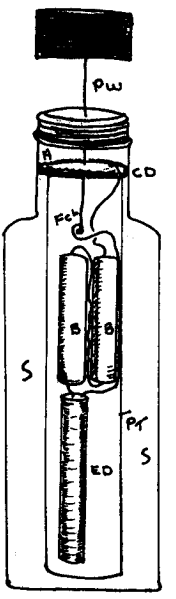
Select a full sauce bottle for this booby trap. Create a thin plastic tube and insert it into the bottle as shown. Since sauce will ooze from around the tube, take care that the sauce does not enter and contaminate the tube. The aim of this process is to trap a layer of sauce around the tube to act as camouflage. When you have cleaned away any excess sauce, seal the top edges of the tube with adhesive.

The firing chain components may now be installed. Place a piece of insulating tape over the batteries to negate the risk of premature detonation during final assembly.

The batteries are connected in series via the detonator and the contact disk, as shown in the illustration. The other detonator has its end formed into a loop and this is attached to the pull wire. The pull wire passes through the contact disk, which may be foil-covered card or any other suitable expedient, and is fastened to the inside of the bottle cap. Lifting the cap pulls the firing contact loop upward into the contact disk and completes the circuit. All wires used are insulated.

A variation is shown in which the circuit is completed by the action of a movable contact (such as a fishing weight or small nut). In this version, the space above the circular contact may be filled with sauce for camouflage. This trap fires when the bottle is inverted for use.





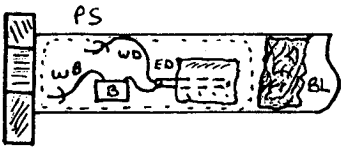
PT = Plastic tube
B = Battery
ED = Electric detonator (in explosive)
FCL = Firing contact loop
CD = Contact disk
A = Adhesive
PW = Pull wire
MC = Moving contact (fishing weight or small nut, etc)
S = Sauce

Although not shown, the batteries should be secured with insulating tape.

Sink Booby Trap

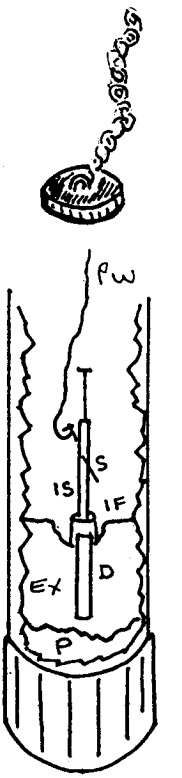
Electrical in operation, the sink booby trap relies on the presence of water to short out the two wire contacts. Apart from these contacts, seal the rest of the assembly in a plastic bag. With adhesive, seal the area where the wires leave the bag.

Having accessed a suitable length of pipe, block one end with any suitable material, such as old rags in plastic bags or putty. Insert the assembly as shown in the illustration and replace the pipe. Adding a couple of tablespoons of salt to the pipe before refitting aids in conductivity by lowering the resistance of water. The distance between the two contact wires determines the time delay before the device detonates; the greater the distance, the longer the delay.



PS = Pipe from sink
WD = Wire from detonator
WB = Wire from battery
BL = Blocking medium
B = Battery
ED = Electric detonator (inside the explosive)

One variation of this booby trap uses mechanical, rather than electrical, action to trigger the device. The flash initiator may be a small arms round with its head removed, securely taped to a blasting cap whose end has been filled with black or smokeless powder. Wooden wedge pieces may be inserted between the assembly and the waste pipe wall as needed. When an attempt is made to remove the plug, the pull wire will release the safety pin (note its angled position to aid in a smooth release action). Such an action will cause the striker to fall. To ensure that the plug will be pulled out, partly fill the sink with dirty water once the trap is installed.



PW = Pull wire attached to plug and safety pin
S = Safety pin
IF = Improvised flash initiator
IS = Improvised spring striker
D = Nonelectric detonator
EX = Explosive and shrapnel
P = Packing (cotton waste)

Soap Incendiary Booby Trap

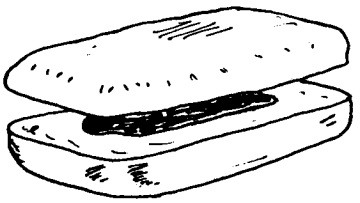
Extremely unstable and liable to ignite when even slightly wet, the soap incendiary booby trap may also spontaneously combust after a matter of days. It is vital, therefore, that new and completely dry soap be used and all operations undertaken in a dry area. Cut the soap into two halves as shown below. Hollow out one half sufficiently to hold a spoonful or two of the following mixture.

The chemicals required are common granulated sugar and granulated sodium peroxide. Carefully add equal parts of each to a dry plastic container. Fit an airtight lid to the container, and turn and rotate the entire unit to facilitate mixing.

When the chemicals are thoroughly mixed, spoon some of the material into one soap half. Replace the other half and secure it with clear adhesive. Smear the edges together with a hot knife to further disguise signs of tampering.

Place the booby trap in the washroom area frequented by the target, preferably just prior to his entering. Remove all other soap bars, thereby forcing him to use the incendiary

you've created. Placing the soap in a plastic bag is a useful way to postpone the inevitable reaction if a delay of any considerable length is likely to occur before the target uses the soap. When the bar of soap makes contact with water, the mixture will ignite and burst into flames.



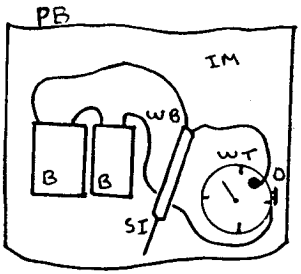
Disintegration of the bar and the soaking of its contents will occur in the majority of cases when the soap is used in a normal hand-washing action. Serious to severe burns will result, and attempts to wash off the burning material will speed the combustion of any as yet unburned parts of the mix.

Soldering-Iron Delay Incendiary Device

Portable soldering irons, designed for operation with a 12-volt DC supply, are readily available from auto-accessory shops and hardware outlets. Although intended for use with a vehicle 12V source, a pack of any available batteries can be connected to produce the required voltage and current capacity. A current capacity of a little over two amps will be needed for a typical twenty-five watt iron.

This type of portable iron comes equipped with alligator clips, which may or may not be used depending on your preference. You can also discard the soldering bit of the iron if you so desire. It is also possible to remove the remaining heating element from its plastic handle if space is at a premium. Pack any readily combustible material around the iron, and connect the input wires to the battery pack by using any of the previously mentioned booby-trap switches. A possible layout is shown on the following page.

For a delay of up to twelve hours, remove the minute hand; for delays of up to one hour, remove the hour hand. This assembly would be suitable for emplacement in a fuel



PB = Plastic lunch box (lid removed for clarity)
SI = Soldering iron
B = Batteries
IM = Incendiary material (add sand for weight, if required)
WT = Watch timer
D = Drawing pin through face to contact watch hand
WI = Wire to iron
WB = Wire to battery (from body or winder of watch)

storage tank or similar volatile area. A plastic sandwich box makes an ideal vessel in which to deploy this type of setup.

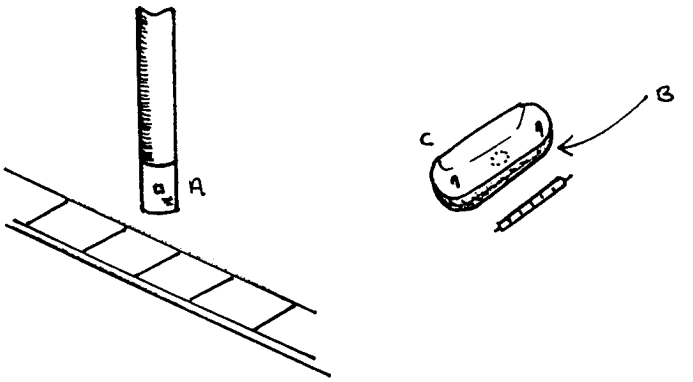
The watch timer section of this system can also be used with other electronic booby traps to facilitate a delayed arming effect. This is of use where the booby trap is particularly dangerous to the constructor during or immediately after final assembly. For use as a delayed arming mechanism, the wire from the watch face contact should be connected to the positive terminal of the booby trap power supply. The wire from the watch winder or body should now be treated as the positive terminal and connected accordingly.

Streetlight Booby Trap

The lamp selected for modification should be on the target's known patrol route; if possible, it should be one that is particularly favored as a "cover" when, for example, a patrol stops, or when an individual pauses to light a cigarette. Streetlights operate on one of two principles, either timed operation via an on-board timer module or in response to the onset of darkness via a top-mounted, light-sensitive switch. Modification requires that you have access to the lamp and that you can temporarily disable it. As shown on the following page, remove the lamp unit and connect the wires of an electric detonator in its place. Partly fill the lamp cover with explosive and shrapnel material or with an explosive/incendiary liquid. If the timer is a mechanical one, reset it to turn on the "light" at a time coincidental with the presence of the target.

If the lamp uses the light-sensitive system, remove the sensor unit and install some other timer in its place. The correct connection points will be apparent when you remove the existing sensor. An alternative is to connect the

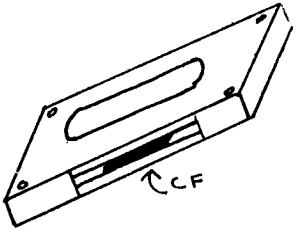
detonator as shown, but leave the lamp switched off. When a repair attempt is initiated, the first check will reveal the off status of the lamp, and it will be turned back on. The booby trap will now either fire immediately (if it is dark) or at the start of the next period of darkness.

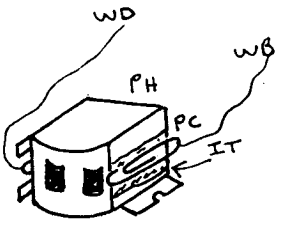


A = Location of timer module and on/off switch
B = Location of light-sensitive device (mounted on top of lamp)
C = Connection points for detonator once lamp tube/bulb is removed

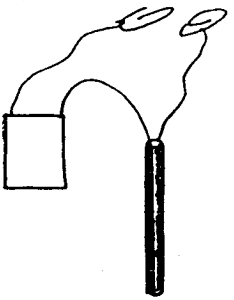
Tape Deck Booby Trap

Aside from connecting the power switch of a tape player to a detonator circuit so that the device explodes as soon as it is turned on, you can also create a delayed-action device that is much more likely to fool the target. The system described here uses a matched pair, so to speak, of trap items, these being the tape player and a specially modified tape. Without the special tape, the player can be used normally without a risk of explosion.





PH = Playback head
IT = Insulating tape (between paper clip and head)
PC = Paper clip (attached to head with any available adhesive)
WB = Wire to battery
WD = Wire to detonator
CF = Cigarette foil attached to tape



Schematic diagram

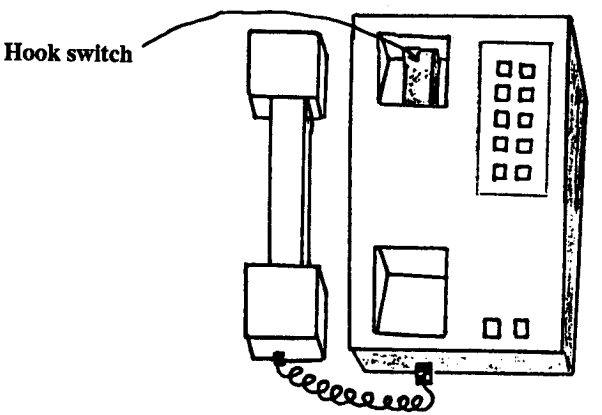
To install the booby trap, remove the unit cover and access the tape heads. Attach the paper clips as shown, using double-sided tape or adhesive. The clips should stand just raised above the head without interfering with the normal action of the cassette. Run wires from the clips ready for connection to the battery and detonator as shown.

Now affix a small piece of cigarette foil to the front of the tape in the cassette and position it so as to coincide with about five minutes of playing time. Its length should be the distance between the head contacts (paper clips) plus one quarter of an inch. Insert the tape, and check for continuity when the foil touches the contacts. If all is well, remove the cassette and install the explosive components. During operation, the metal foil on the tape will short out the paper-clip contacts, thereby causing the device to explode.

The fact that the tape will play normally for several minutes removes any suspicions the "finder" may have. The doctored tape (or, preferably, several of them) should be left near the cassette, and one should actually be in the unit, ready to be played. A selection of hand-scribbled labels implying that the tapes contain something of interest to the target will help ensure that they are played. If the tape deck head body is metallic, attach only one paper clip and tape the other circuit wire directly to the head itself.

Telephone Booby Trap

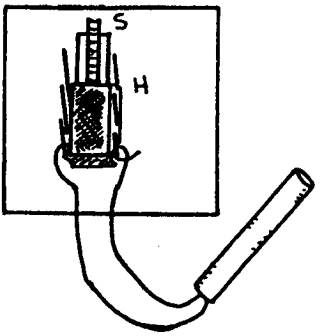
Modern desk telephones can be converted quickly into deadly booby traps. The first step is to identify the hook switch, the component that actually hangs up the phone when you replace the receiver.



Typical hook-switch position

With the cover of the phone removed, test the hook

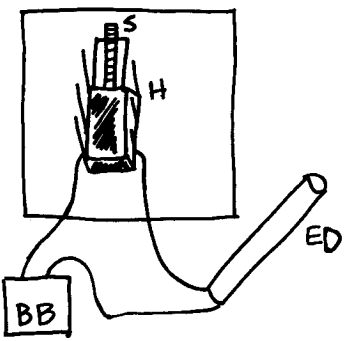
switch to see which combination of two wires provides enough voltage to fire the detonator when the handset is first lifted. Remember, there is *no* voltage when the handset is down, and there is high voltage when the handset is lifted.



S = Spring
H = Hook switch

Phone cover removed showing hook switch

Connect the detonator to the two wires after the handset has been replaced and a few minutes have elapsed to allow for voltage drop. The schematic below shows the detonator connected to two of the available terminals. If the line voltages/current values in the area in which you are operating are too low to fire the detonator, use the hook switch as a trigger and install booster batteries as required (see illustration).



H = Hook switch
ED = Electric detonator
BB = Booster battery

An alternative is to cut the wires carrying power from the phone circuit to the hook switch and to connect your own battery power source to the hook switch instead.

Check at the handset to see which hook-switch terminals you need to tap onto to generate a voltage at the handset (either at the microphone or earphone end) when the hook switch is released (i.e., when the handset is lifted from its cradle).

Having determined the required connection points, you may now reassemble the body of the phone. Keep the hook switch depressed with any available weight or tape, check once more with a tester that no voltage is present at the handset, and install an electric detonator and small charge in the handset itself. In older phone models, there will be room for a detonator in the earpiece or mouthpiece (discard the speaker/mic inserts), while in newer models there will be room in the central, hand-held area. Replace the handset on its cradle, ensuring that at no time does the hook switch rise.

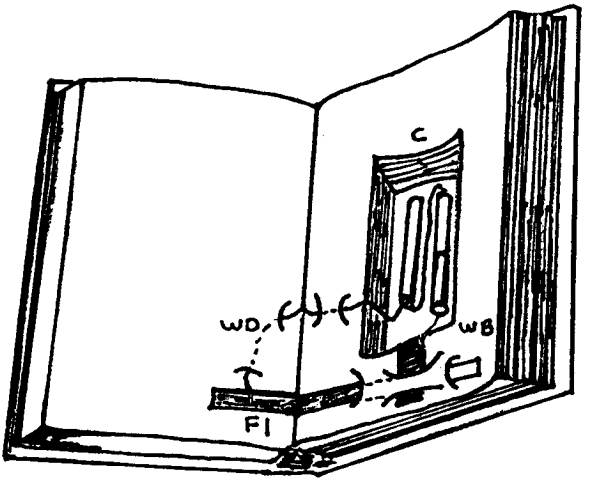
Transportable Book Booby Trap

A transportable book booby trap that may be safely carried or mailed to a target address is described below. Note that the length of foil strip 1 (F1) and the position of its uninsulated end should be calculated carefully so that the circuit is completed well before the book is fully opened. This negates the risk that the target will spot the components before the desired effect occurs.

F1 is affixed to a left-hand page but is free to slide through the slots in the right-hand page.

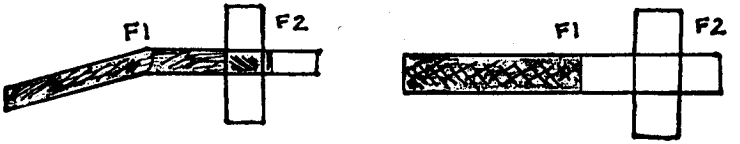
The wire is routed beneath pages, as shown, for rigidity. The schematic shows the open and closed positions of the foil strips. When opened, the left-hand page pulls the uninsulated section of F1 through the slots in the right-hand page until it contacts the uninsulated section of foil strip 2. At this point, the circuit is completed and the device explodes.

Installation of the explosive components is achieved by closing the book (after the foil strips and wiring have been attached) and working from a few pages behind the visible



C = Cutout containing batteries, detonator and explosive
WD = Ultra-thin wire from detonator
WB = Ultra-thin wire from battery
F1 = Foil strip (shaded area insulated)
F2 = Foil strip (shaded area insulated)

right-hand page. If the type of explosive used will not secure the other firing-chain components, tape or adhesive may be used. If during unarmed tests it is found that the pages tend to separate at points other than at the foil strip point, they may be secured with adhesive at a distance far enough in from the edge of the pages so as not to cause suspicion.

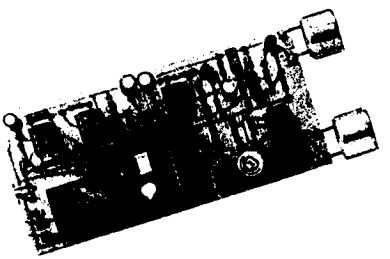


Book closed **Book open**

Shaded areas are insulated with tape.

Ultrasonic Vehicle Alarm Trigger

Designed to operate from 12 volts DC, these modules are available from the usual auto-accessory stores and electronic supply shops. They are compact units that require little or no setting up. A typical ultrasonic alarm device with its cover removed is shown below.

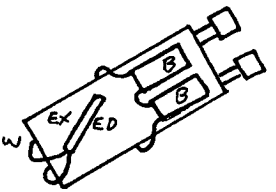


The two small microphone-type components visible at the top of the unit are the sender and receiver heads. The device operates on the Doppler shift principle, sending out and receiving a signal reflected from any object to its front. If the pattern of this reflected signal changes, the unit reacts and switches voltage to an output line.

On a vehicle, such a device would normally sound the

horn. In the booby-trap configuration, the reaction would send power to an electric detonator. These off-the-shelf units incorporate entry- and exit-delay timers, meaning that you have an added measure of safety when retiring after arming the devices. The illustration below shows the device equipped with an on-board battery pack and detonator/ explosive parcel.

Since the range of these units is limited, one ideal application is to use them as antihandling/proximity-activated booby traps. They can also prove of value if used to booby-trap doorways, tunnel entrances and, of course, vehicles.



B = Batteries
W = Wires from unit's output terminals to electric detonator
EX = Explosive/shrapnel mix taped to unit body
ED = Electric detonator

You can use insulating tape to protect the components and circuit board from accidental shorting, and then tape the explosive and shrapnel mix to this layer of insulating material.

Vehicular Booby Traps

There are, of course, numerous ways in which a vehicle may be booby-trapped. To a large extent, access availability usually dictates the precise method chosen. Where only limited access time is available, the booby trap often takes the form of a self-contained, easy-to-attach device.

Suitable underside fixing techniques include magnets, heavy tape, wire ties, and hooks fashioned from metal coat hangers. Large butterfly clips will also prove of use. Explosive packages with tilt switches installed may also rest atop wheels, exhaust silencer boxes, or suspension and steering components; they can also be concealed within cosmetic wheel-rim covers or hubcaps.

Devices taking their power from the vehicle, but still needing to be quickly attached to the underside of the vehicle, may be connected so as to fire when the doors, trunk, or hood are opened or when the lights, wipers, horn, brakes, or turn-signal indicators are operated.

Connection to these accessories is made via existing wiring, much of which can be accessed at some point from

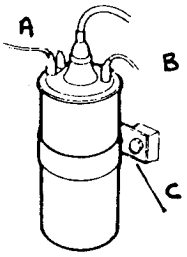
the underside of the vehicle without having to lift the hood. Connection into existing wiring is rapidly made with the use of instant snap-on connectors. In one action, these items both cut and splice the wires being joined. Since the vast majority of vehicle electrical systems is earthed via the body of the vehicle itself, it is sufficient on most occasions to attach only one detonator-linked wire into the vehicle wiring loom proper; the other may be attached to any clean, paint-free area of metal or mounting bolt.

Correct connection points can be determined by referring to an owners manual for the target vehicle or by trial-and-error tests on a similar vehicle using unarmed firing systems. Devices connected as described will detonate when the applicable wire is next energized. Some of the more common detonator connecting points are described below.

Electric Firing Circuit Connection Points (Vehicular)

As mentioned, an electric detonator or similar firing device may be connected into the wiring circuit of a vehicle in any of several ways, depending on the desired effect. Connection to the +ve terminal of the ignition coil and any good earth will cause detonation when the ignition is turned on. Connection to the starter-motor power cable will cause detonation when an attempt is made to actually start the engine.

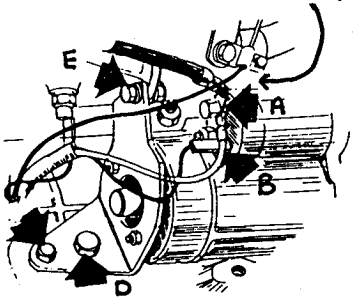
Connecting into any of the vehicle lighting or accessory circuit wires will cause the booby trap to explode when, for example, the headlights are turned on or the horn is sounded. Both these accessories can be accessed from the underside of most vehicles. Alligator clips may be used to attach the firing wires if snap connectors are not available.



A, B = Suitable detonator connection points (+ve voltage)
C = Suitable ground

Device explodes when ignition is turned on

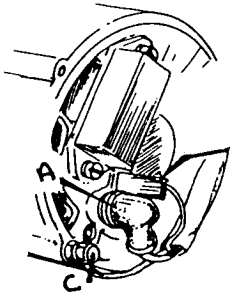
C (behind solenoid body)



A = Main battery supply (always live, do not use)
B = +ve supply via ignition switch
C = Suitable detonator connection point (+ve voltage when started is operated) *
D, E = Suitable detonator connection points (ground)

* C is the short wire connecting the solenoid to the starter motor proper.

Device explodes when starter motor is operated



A = Suitable detonator connection point (+ve voltage)
C = Suitable detonator connection point (ground)

Device explodes when alternator reaches minimum output speed (typically around 1,000 to 2,000 revolutions per minute)

A = Suitable detonator connection point (+ve voltage when reverse gear is engaged). One of the two available wires will carry voltage as soon as the ignition is energized. The other, the desirable one, will only carry voltage when the driver selects reverse. Selection of the wrong wire will simply cause the device to detonate prematurely. An alternative here is to access the reversing lights from the rear underside of the vehicle and connect them to the input wires (which will be quite apparent) or the +ve input wire and any good ground, as applicable.

B = Suitable detonator connection point (ground)

*** Body of switch**

Device explodes when reverse gear is engaged

If a dedicated vehicle booby trap is to be constructed with a view of being abandoned at some strategic location, antitamper devices, based upon the techniques outlined elsewhere in this book, may also be installed. An existing vehicle alarm system makes an ideal basis on which to build such a system. Instead of feeding the horn or sounder, the final output from the alarm triggers would be connected to the electric detonator circuit.

Crude, yet effective, vehicle booby traps may be constructed with the aid of an electric detonator or improvised flash initiator. Wires from the chosen trigger (such as door switches or a vibration sensor) are connected to the detonator, which itself is inserted in the gas tank. The wires are concealed beneath the carpets and routed via the trunk.

Access to the trunk is gained by way of the back of the rear seat upright while access to the tank is made via the filler tube itself. The detonator/flash initiator can be sealed in a plastic bag to protect it against the action of the gasoline.

When large amounts of explosive are to be hidden in a vehicle, care should be taken so that sagging springs do not give you away to enemy security-force observers. An apparently empty vehicle that has springs indicating an obvious load will attract immediate suspicion. Thus, spring assisters (available from recreational-vehicle supply stores and auto-accessory outlets) should be fitted to beef up the suspension, and greater than normal pressure should be used to inflate the tires.

The vehicle selected for a dedicated booby trap should appear normal and quite legal in every way. Circumstances permitting, it should be a newer model rather than an old wreck, and it should bear the required tax/license documents. Items of apparent value or importance should be left on the seats; signs of normal, everyday use, such as a newspaper, candy wrapper, or cigarette pack, should be in full view.

If circumstances permit, it should look as if there has been a good reason for abandoning the vehicle. For example, a note left on the windshield stating that the vehicle has broken down or run out of gas can be effective. A small card that reads "Doctor on call" can sometimes also prove to be of use.

If the booby trap is to be radio-detonated in the event it isn't triggered by a specific target, care should be given to the selection of the receiving antenna. Traditionally, a roof-mounted magnetic base antenna is used to ensure satisfactory signal reception. These items are very conspicuous, however, and quite often an antenna that resembles a standard vehicle radio antenna will perform just as well. If

trimmed to match the transmitter frequency properly, wing-mounted fiberglass whip antennas will work fine.

If the transmitter-to-receiver range is not excessive (in relation to the power of the transmitter), and assuming that no serious obstacles are in the path of the radio signal, rear-screen-mounted combination defroster/antenna elements will do the job.

Note that poor reception on normal communication transceivers is not always an indicator applicable to the transmission and reception of a simple coded signal.

Video Cassette Booby Trap

Box-type video cassette cases may be easily booby-trapped using any number of techniques already outlined. Instructions on how to create a booby trap based on a video cassette and the common slide-on card cover follow.

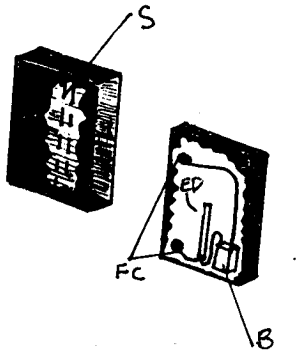
Remove the tape from the cassette body to create room for an explosive charge, shrapnel, and an electric firing circuit. Access to the innards of a video cassette is gained after releasing three to five screws. Doing so separates the cassette into halves. Discard all of the internals of the cassette.

Install the explosive chain components as shown and refit the cassette halves. Seal the holes left by the tape wheels with tape, a card, or the explosive itself. At this point, the circuit is not complete, but the device will explode if the two firing contacts are accidentally shorted.

Modify the card slipcover by attaching a strip of foil to its inside as illustrated. Position the foil, which should be about half an inch wide, about halfway in from the open end of the slipcover.

Insert a thin plastic insulator that is of the height and

B = Battery
ED = Electric detonator (set in explosive/ shrapnel package)
FC = Firing contacts (one-third of the way back from the front, or tape end, of the cassette)
S = Slipcover contact



Construction details

depth of the cassette into the slipcover so that it covers the foil strip. Push the cassette fully into the cover and withdraw the insulator.

Take great care to ensure that the cassette is not dropped or pulled accidentally from the cover.

Return the cassette to its original position, put it on a shelf with others, or place it on top of the video player, as applicable. When an attempt is made to pull the cassette from its cover, the foil will short out the wire-firing contacts, and the device will detonate.

Water-Level Indicator Booby Trap

Water-level indicators, also marketed as flood alarms, are readily available as self-contained units from alarm suppliers or electronics supply outlets. They are available in versions that react when a given water level drops, rises, or passes a set point. Reworking for booby-trap use consists of attaching electric detonator wires to the output point usually inhabited by the alarm buzzer.

A standard device that reacts when water actually touches the sensor is suitable for installation in drains, toilets, water, and oil and gas storage tanks. It should be positioned so that the next increase in fluid level causes the sensor to become wet. If so desired, the unit body (housing the battery, detonator, and explosive) can be located a considerable distance away from the actual sensor.

Window Foil Booby Traps

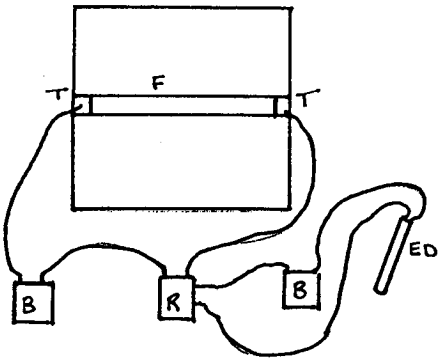
Alarm window foil is available in precut lengths or in roll form. The foil is conductive and has one adhesive side, which is used to stick the foil to the inside of windows and glass doors. Breaking the glass causes the foil to rip and break an electrical circuit. Terminal connectors are available for linking the foil strip into various circuits.

Window foil

Window-foil terminations

Apart from using the foil to booby-trap windows and the like, it can also be employed as an "electric trip wire" and in applications where a break action is required to trigger the trap.

T = Termination pieces
F = Foil strip
R = Relay
B = Battery
ED = Electric detonator



Foil circuit connection details

In the schematic, the relay battery is holding open the relay contacts that are connected to the firing circuit; when the foil is broken, however, these contacts close and current flows into the electric detonator. Two batteries are used here. It is possible, of course, to use one battery alone to both power the relay and fire the detonator.

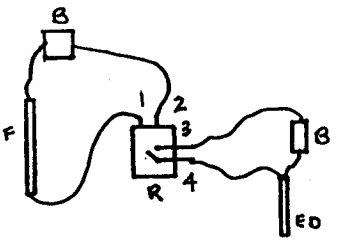
Battery drain is greater when a single battery is used, however. The life of the trap is thus limited since the battery power may be too low to fire the detonator by the time the trap is triggered.

Using one battery for the relay and one for the detonator ensures that the device will still explode even if the relay battery runs down before the trap is triggered by a target proper.

Plate Glass Booby Trap

In this setup, a plate of window glass is placed across a hole containing a firing circuit and explosive/shrapnel package. The firing circuit is linked to a relay by the foil strip. When a man steps on the glass, it will break, tearing the foil and thereby causing the relay to close and the detonator to fire.

F = Foil strip
R = Relay
B = Battery
ED = Electric detonator



Relay connection details

With power arriving at contacts 1 and 2, the relay stays open and no current passes contacts 3 and 4. When the power supply is interrupted by the breaking of the foil, the relay closes and allows current to pass. Contacts 3 and 4 go live at that point. Relay configurations vary, so select by testing before final assembly.

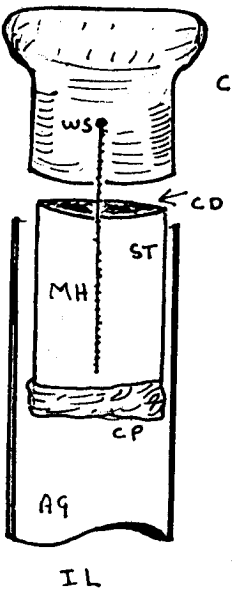
Wine Bottle Booby Trap

A dark-colored, long-necked bottle is most suited for this application. Modify the cork by piercing a hole partway into its underside; push in a length of flexible wire saw and secure it with adhesive.

Place the lower end of the protruding saw across a rectangle of sandpaper (smooth side outermost), and add match heads. Tightly wind the rectangle and its contents into a cylinder and secure it with adhesive. Seal the lower end of the cylinder with crepe paper or a few layers of tissue. Partly seal the top of the cylinder with a circle of card or plastic in such a manner that the wire saw can be pulled up through it without pulling out the match heads. Adding epoxy adhesive will help to ensure a reliable seal.

Coat the outside of the sandpaper cylinder with adhesive and insert it into the neck of a bottle containing flammable or explosive liquid. Finally, fit the cork and clean away any telltale signs of tampering. An extra label can be fastened to the bottle neck if the glass is not dark enough to camouflage the contents. When an attempt is made to pull out the

cork, the wire saw will ignite the match heads, thereby causing the bottle to "explode."



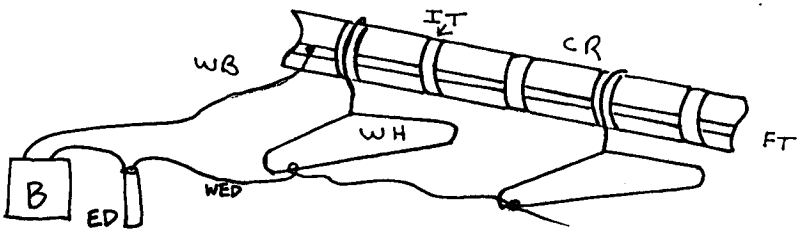
C = Cork
WS = Wire saw
CD = Card disk (secured around edge with epoxy)
ST = Sandpaper tube (coated with adhesive before fitting)
MH = Match heads
CP = Crepe paper
AG = Air gap
IL = Inflammable/explosive liquid

Wire Coat Hanger Booby Trap

Although especially applicable to wire hangers, wooden or plastic hangers that have metal hooks can be used if slightly more care is taken to conceal the circuit wires.

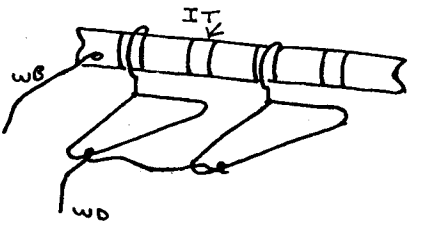
The booby trap is assembled as shown below. A wardrobe that is tightly packed with clothes will prove more effective in hiding the device. The target will activate the trap when he pushes the clothes aside to check for hidden items or as he chooses inviting items to loot. When the metal hanger contacts the concealed foil tape or wire at the rear of the rail, the circuit will be completed and current will flow to the electric detonator. If the rail itself is metal, the conducting tape or wire can be ignored and one of the two circuit wires can be connected directly to the rail instead. In this instance, however, the insulating tape sections should cover more than half of the diameter of the rail and ideally will cover it all to negate the risk of premature short circuit.

IT = Insulating tape
CR = Clothes rail
FT = Foil tape (or use wire secured with tape)
WH = Wire hangers
B = Battery
ED = Electric detonator
WB = Wire from rail to battery
WED = Wire from detonator to hangers



A view from the rear of the rail

B = Battery
ED = Electric detonator
IT = Insulating tape bands
(note their greater size)



Connection details for metal rail

Conclusion

Remember that safety should take priority over any other considerations when building a booby trap. The unintentional detonation of a booby trap that causes damage to your own forces or facilities boosts the enemy's morale and reduces the confidence that supporters of your movement may have in your ability to wage a successful offensive or counteroffensive.

If there is any likelihood at all that your own people will need to enter an area containing booby traps before the enemy does, they must be given suitable warnings. On a need-to-know basis, they should be told precise details of the traps that have been installed. In an operational area that passes to and from enemy control, a detailed diagram of the booby traps and their locations must be made as they are installed. This information must be kept in a secure place, pending the return of friendly personnel to the area.

Children who may play or forage in a booby-trapped area are at particular risk and should be warned, in general terms, of the dangers they face. Finally, if it is not possible

to completely negate the risk of killing or injuring friendly personnel, you must weigh the value of a successful strike against the enemy versus the propaganda value the enemy will attach to an event when your own people are killed by your booby traps. You must then decide whether or not to pursue the operation accordingly.

• • •

"A prudent man foreseeth the evil, and hideth himself:
But the simple pass on, and are punished."
Proverbs 23, v.3.

Creating effective booby traps is part art, part science, requiring a devious imagination, a delicate touch, and a solid knowledge of explosive devices. In this comprehensive guide to the tricks of the booby-trapper's trade, Jo Jo Gonzales presents an arsenal of devices that can be created from commonly available materials, each modified to contain a nasty surprise. Learn how to rig a booby-trapped alarm clock, flashlight, door latch, sink, telephone, tape deck, and more. A concise treatment of principles and applications, clear descriptions of more than sixty devices, and detailed illustrations and schematic diagrams make this an invaluable collection for Special Forces personnel or security professionals. Improvised detonators, microswitches, delayed-action and light-sensitive devices, and double-trapped mechanisms that defy disarming—from high-tech to quick-and-dirty, this booby-trapper's bag of tricks has it all. *For information purposes only!*

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