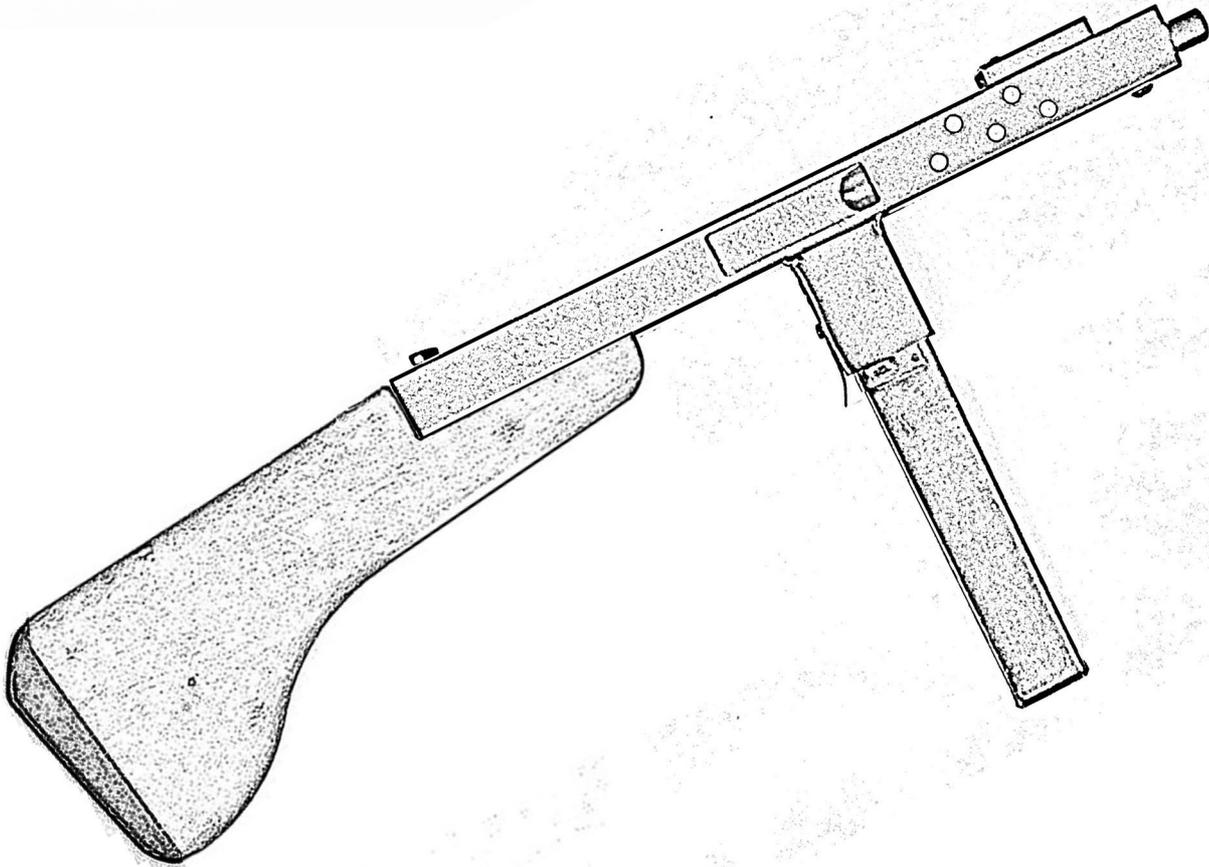
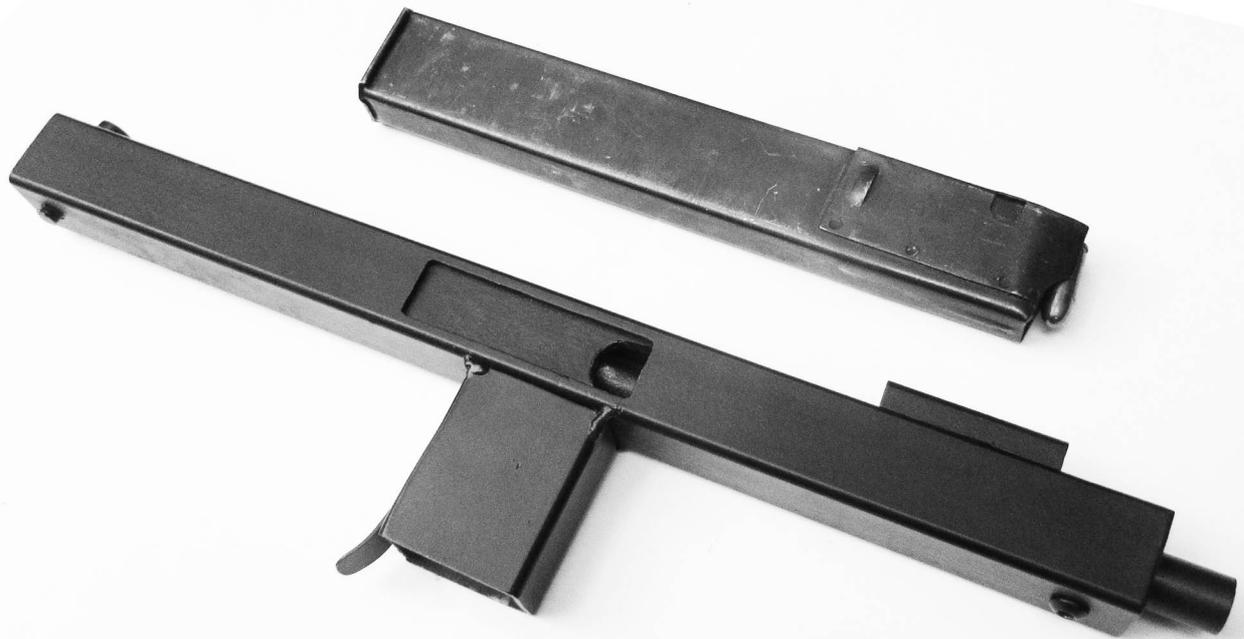


*BUILD YOUR OWN*

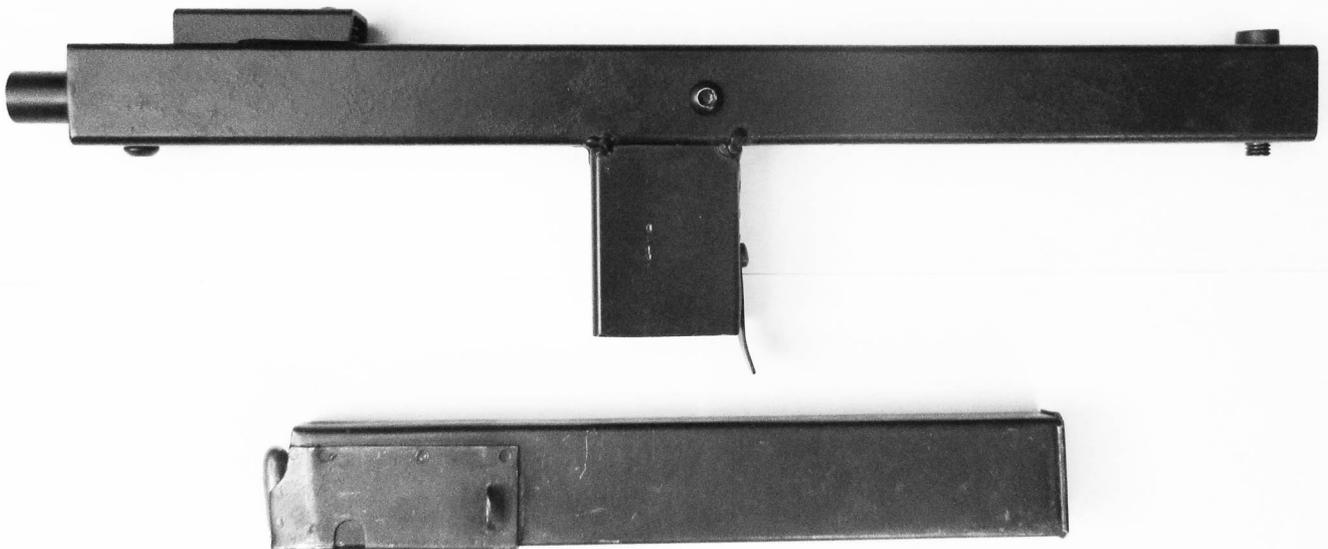
# IMPROVISED SPECIAL PURPOSE SUBMACHINE GUN



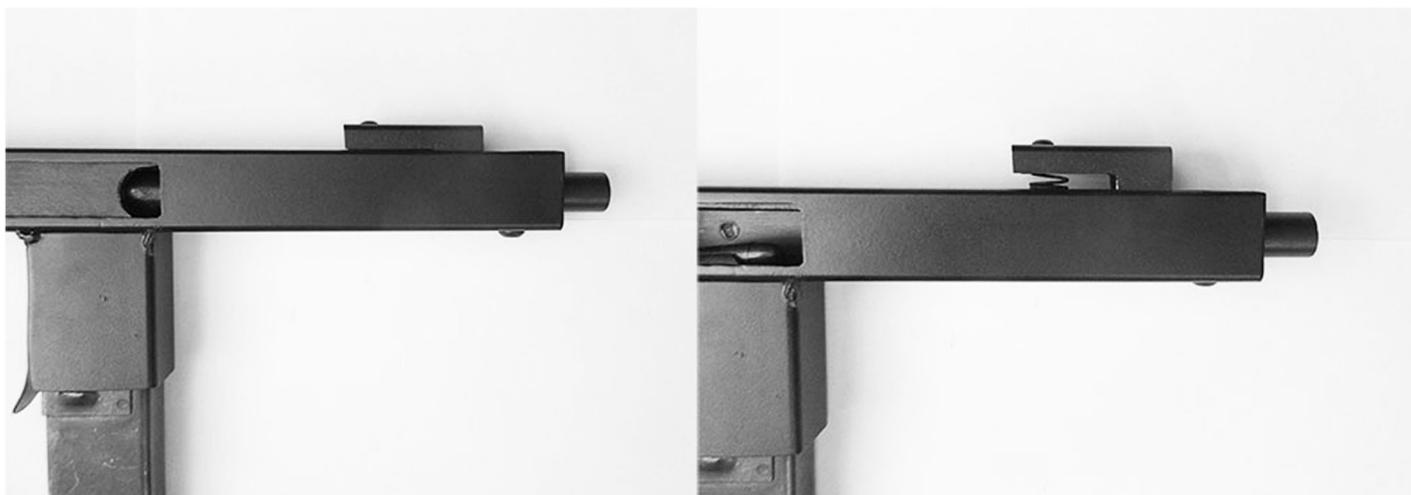
- HIGHLY CONCEALABLE
- QUICK & EASY TO BUILD
- MINIMAL NUMBER OF PARTS
- MADE FROM STANDARD SIZES OF SQUARE TUBING



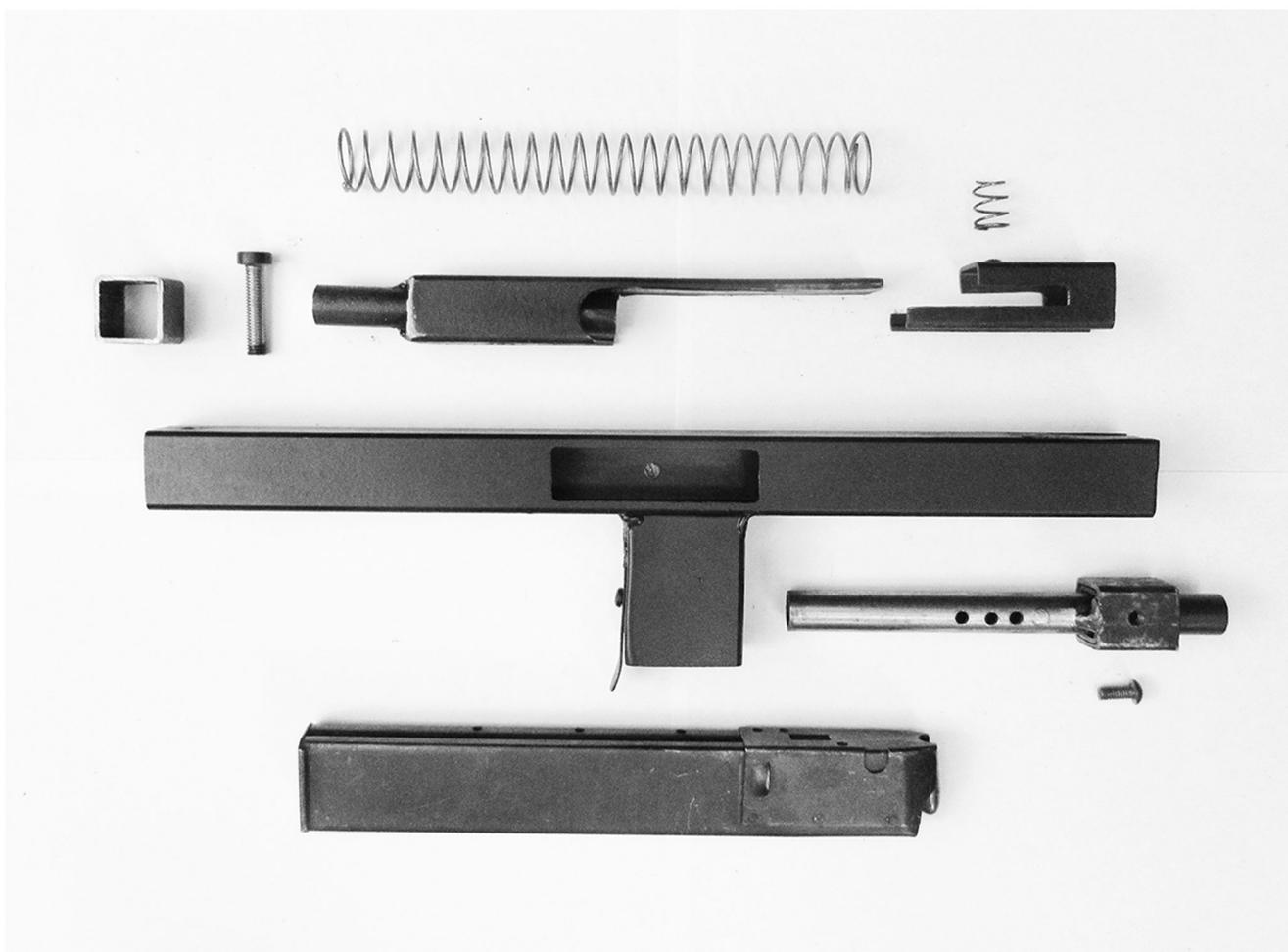
**The following DIY 9mm submachine gun design is about as simple as it gets. It is lightweight, highly compact and with a 32 round magazine packs just as much firepower as either a MAC-10 or UZI. Only basic inexpensive tools are required to construct this firearm which can be completed in a single day. Almost every part of the weapon is made using standard sizes of square section structural tubing, including its absurdly simple one-piece thumb operated trigger.**



**Operation:** To fire the weapon the bolt is first pulled back through the ejection window via the 'scallop' recess cut into the right side. The trigger / sear piece catches the top front section of the bolt and will visibly unshroud itself indicating the weapon is ready to fire. Gripping the magazine well with one hand, the trigger 'button' is either pushed down or released using the user's thumb allowing for short, controlled bursts of automatic fire.



*View of the thumb operated trigger - Left: Bolt forward. Right: Bolt cocked back and ready to fire.*



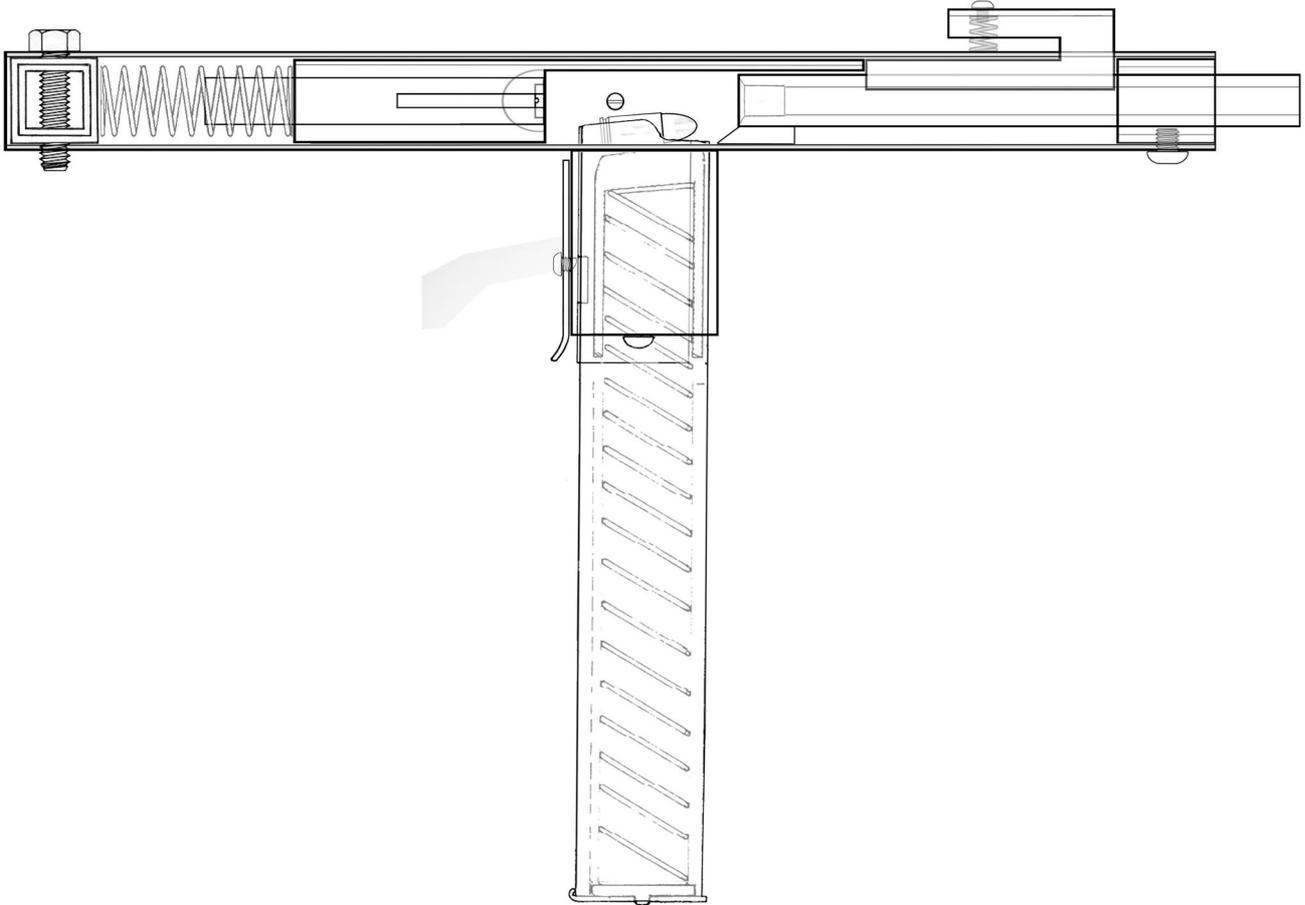
*Disassembled view revealing nine main components.*

**For legal purposes the demonstration model shown was built as a non-firing dummy replica. Its dummy barrel is permanently blocked and destroyed with its dummy bolt containing no provisions for a firing pin.**



**The information contained herein is presented purely for academic study purposes only.**

## 9MM ISPSMG



### Materials:

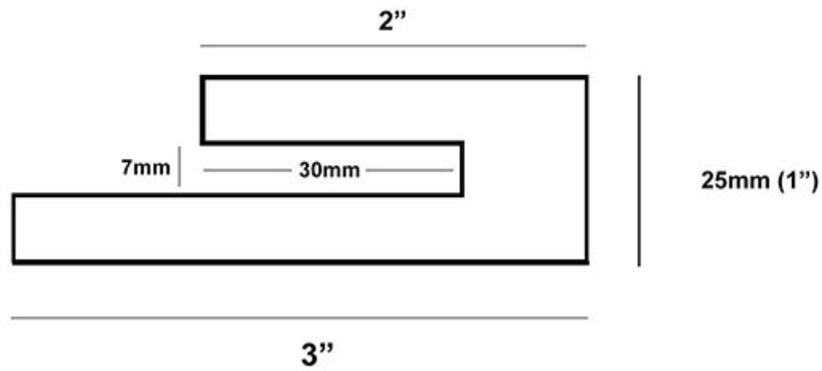
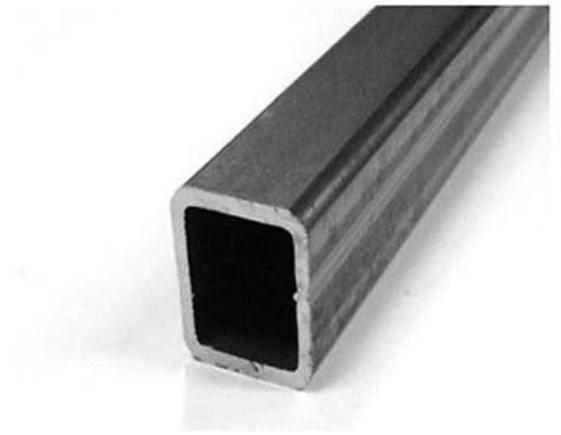
- 30mm x 30mm x 2mm steel square section tubing
- 25mm x 25mm x 2mm steel square section tubing
- 20mm x 20mm x 2mm steel square section tubing
- 50mm x 25mm x 2mm steel rectangular section tubing
- 15mm x 3mm thick seamless steel round tube
- 15mm or 16mm steel round bar
- M8 & M6 bolts
- 3/4" (19mm) wide, 8" long compression spring
- Small spring from a hand wash bottle (1/2" wide, 16mm long)

### Tools:

- Hacksaw
- Handfiles
- Drill with 4mm to 10mm bits
- Welder (Optional)

# Trigger / sear

Modified from a 3" length of 25mm (1") steel box section



1/2" wide compression spring, 15mm long  
(Can be taken from a hand sanitizer bottle)



Drill and tap a hole for an M5 allen head bolt  
10mm from front to retain spring in place



**2 inches**

---

Receiver

Side (Right)

Bottom

Top

Side (Left)

145mm

6"

3mm

47mm

183mm

Ejection port

Mag hole

5mm

Ejector hole

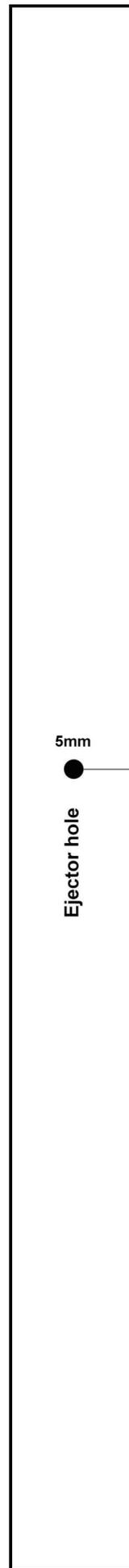
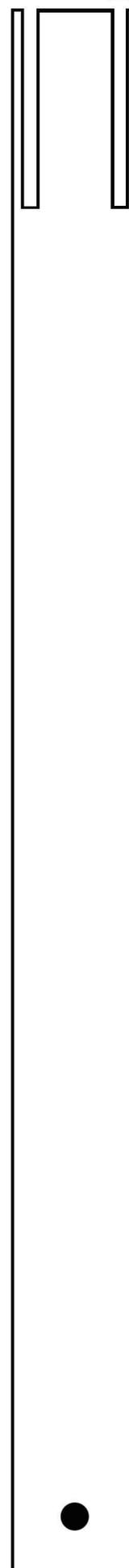
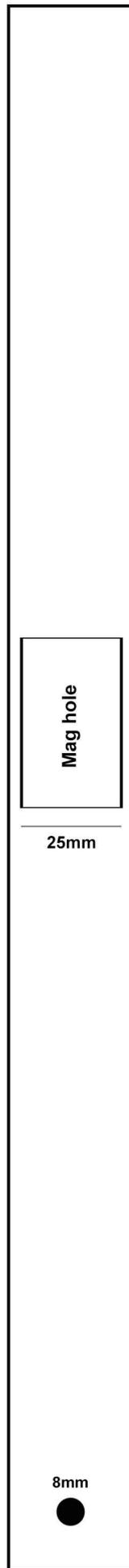
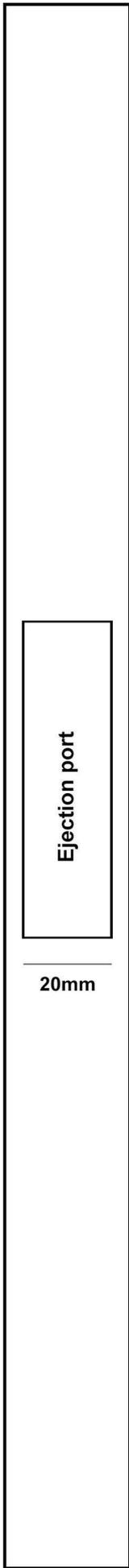
20mm

25mm

40mm

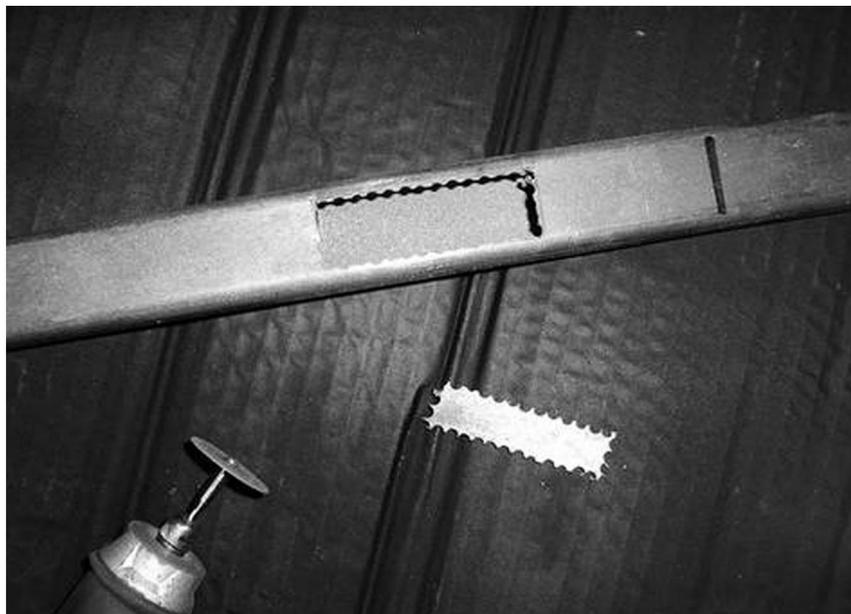
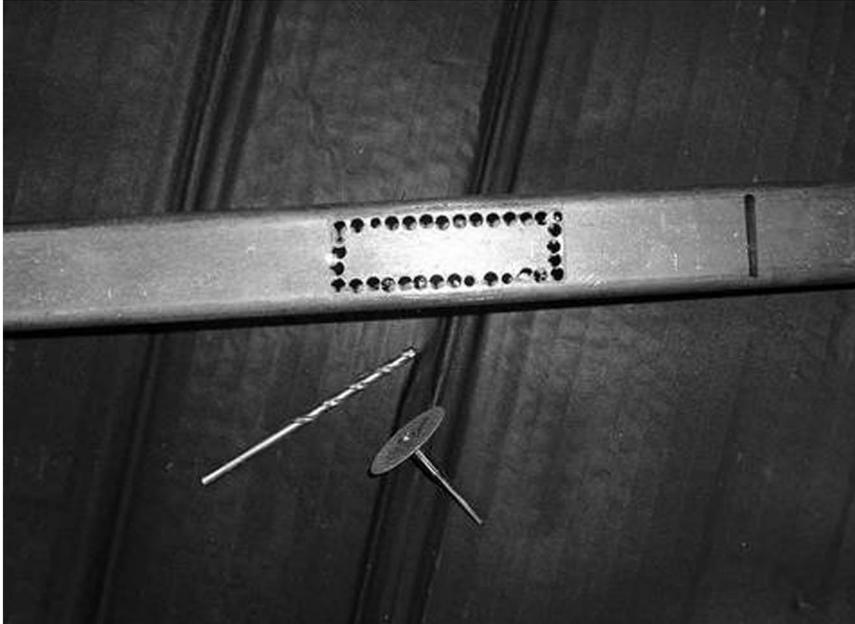
8mm

3"



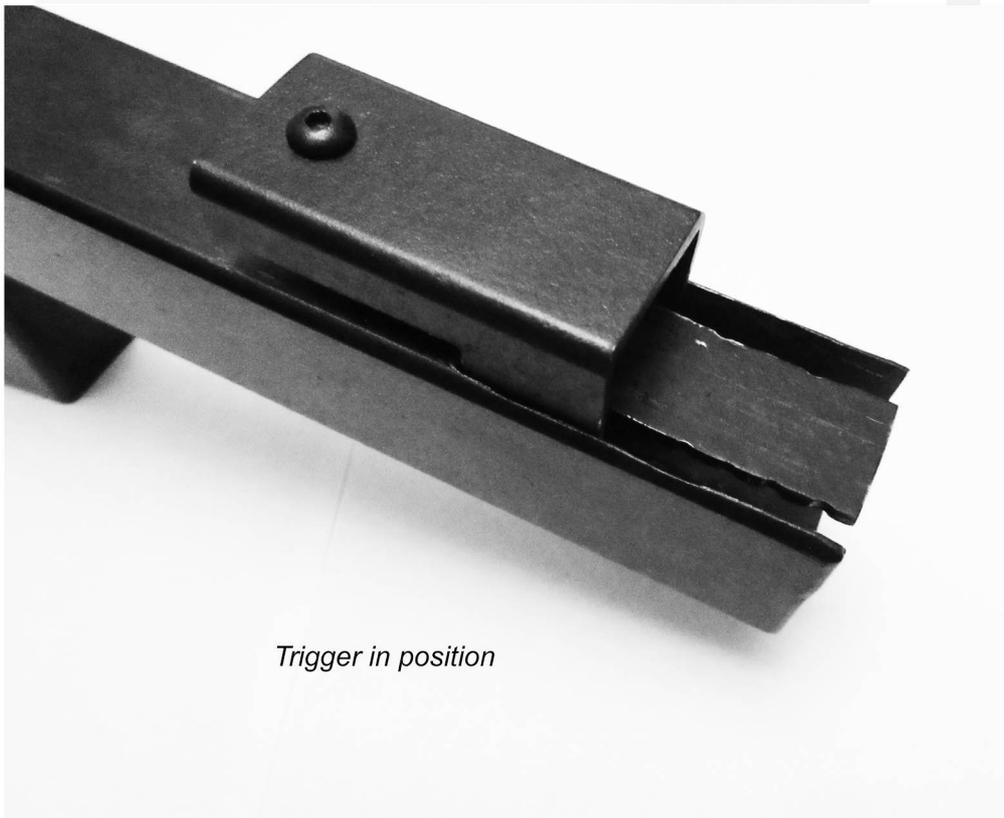
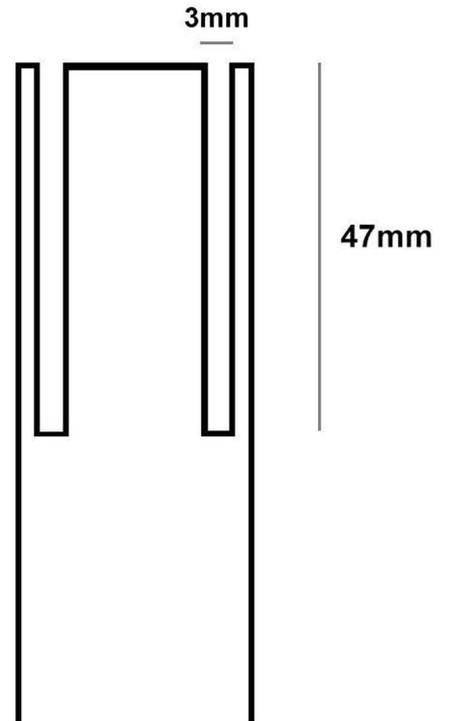
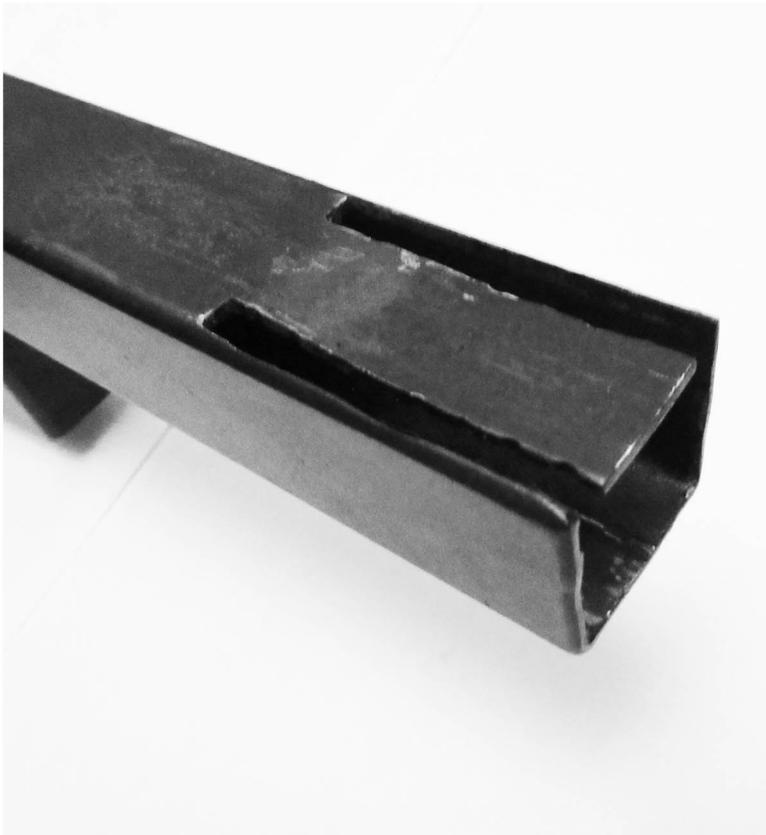
30mm x 30mm x 2mm square section tube - 370mm long

Cutting the ejection port window and magazine well hole can be achieved by 'chain drilling' a series of holes around the inner walls of each shape combined with cutting along the lines using a dremel type rotary tool fitted with a 'reinforced cutting disc'. Alternatively a hammer and screw driver can be used to chisel the pieces out after which a hand-file may be used to finish each surface.



## Slots for accepting trigger piece

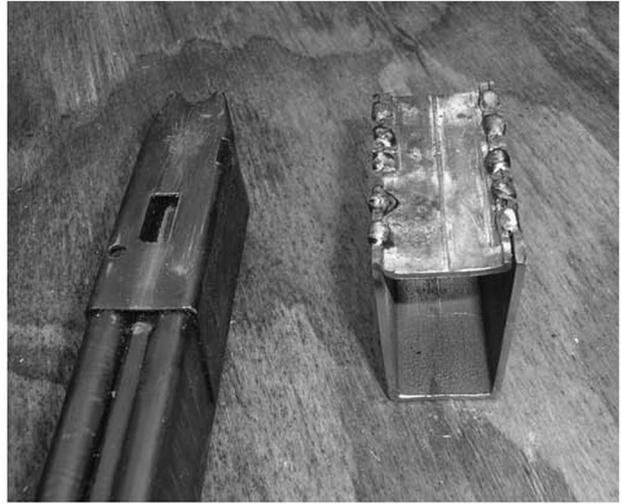
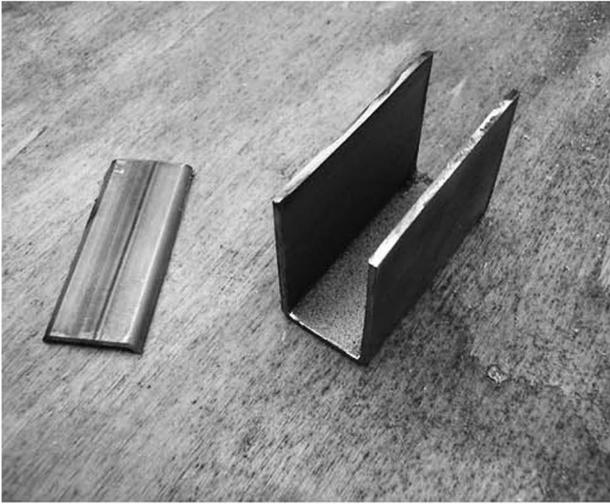
The trigger piece inserts into the receiver from the front by means of two slots cut into the top. Cutting these is best achieved by drilling a series of holes using a 3mm drill bit and cutting through & grinding smooth using a dremel + cut-off disc.



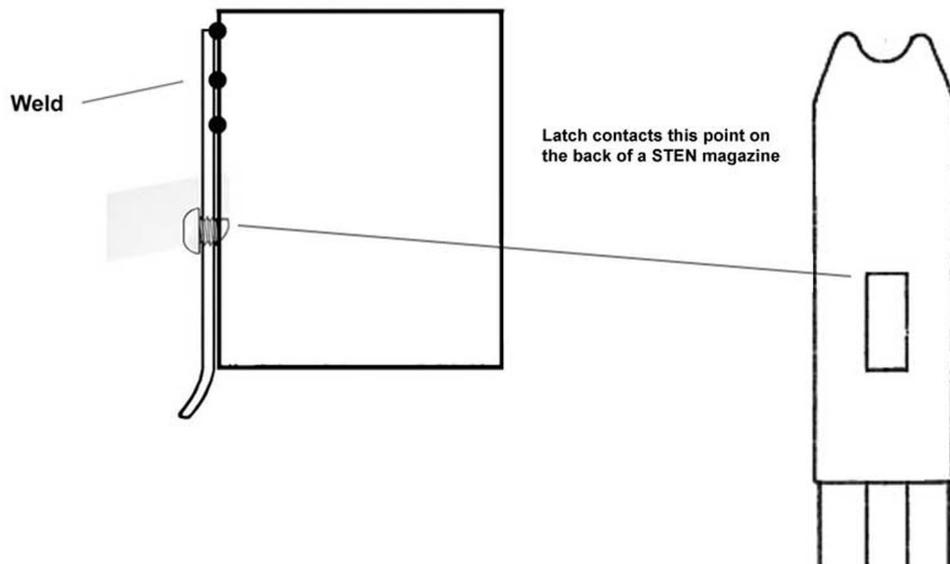
*Trigger in position*

# Magazine well

A magazine well able to accept 9mm STEN magazines may be made by cutting off one 1" side of a 57mm length of 1" x 2" (25mm x 50mm) mild steel box tube after which the sides are flared out slightly so that a STEN magazine may fit inside. This is best achieved by hammering a length of 1" steel bar into the opened end.

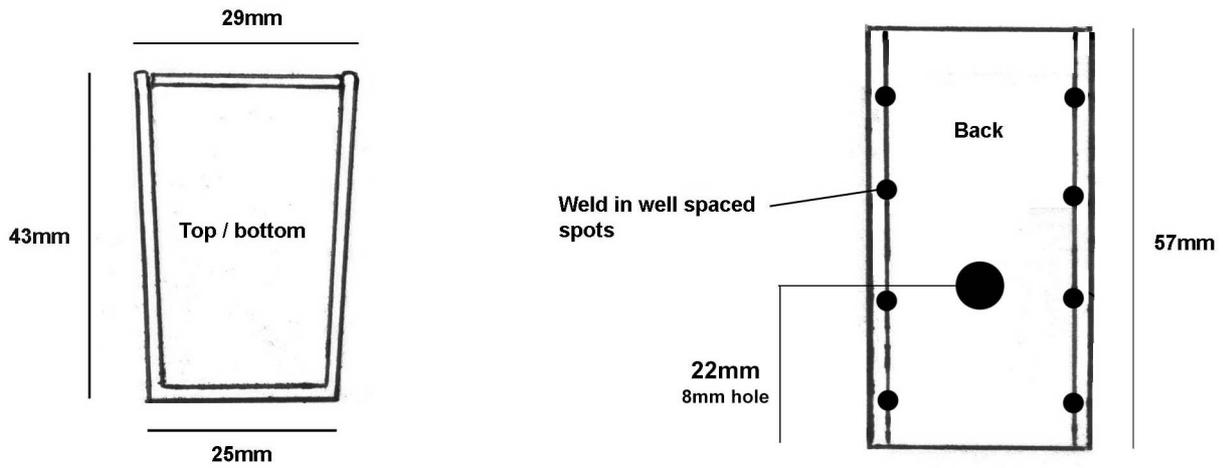


Once a magazine is able to be inserted in place, press the removed 1" side down into the now opened up space and carefully weld in spots along the edges being sure not to overheat. If excess tightness is encountered after welding, the inside may be smoothed using a hand file and sand paper. Once a magazine can be freely inserted or removed, smooth over the welds using a sanding disc. The magazine catch consists of a strip of steel cut from a handsaw blade and is drilled to accept an M6 bolt which contacts the top point of a small window present in the back of a STEN magazine. A corresponding hole is also drilled in the back of the magazine well.



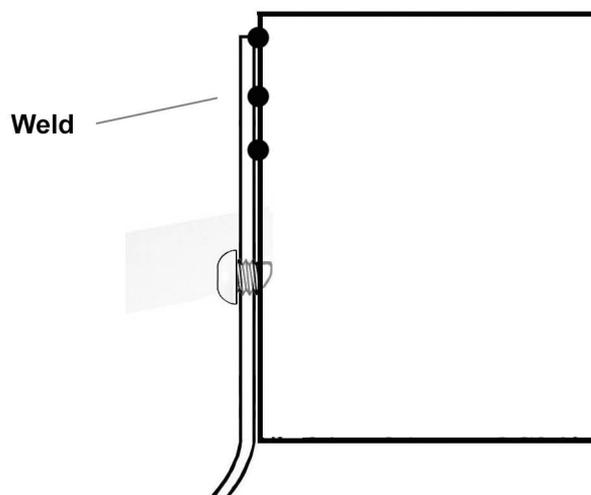
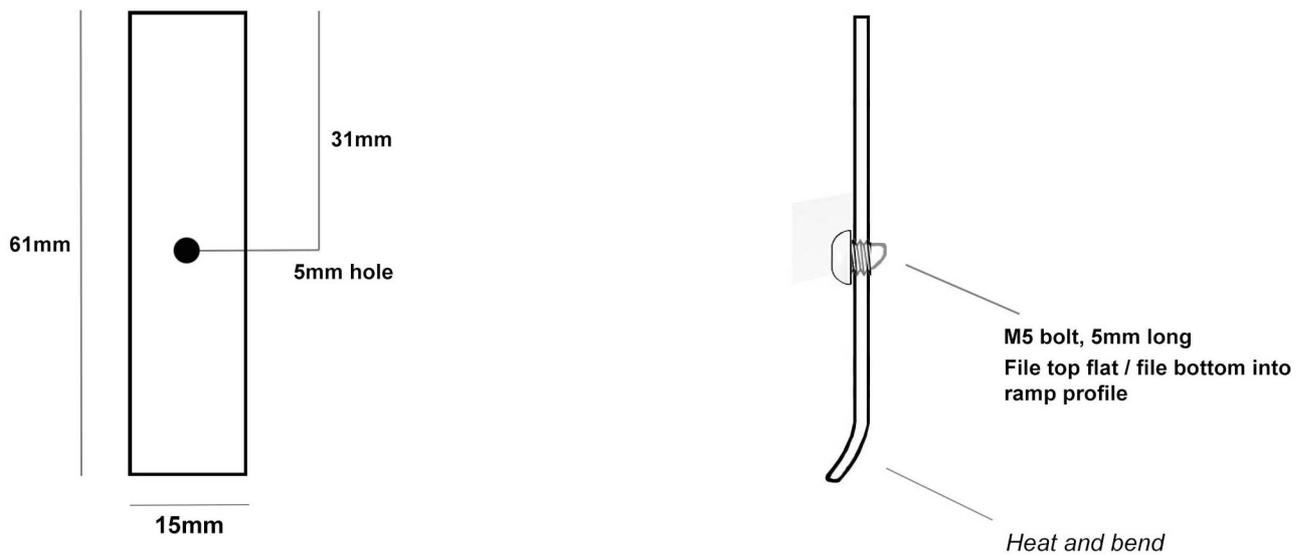
# Magazine well (For STEN magazines)

1" x 2" (25mm x 50mm) steel rectangular section



## Mag catch

Strip cut from a handsaw blade

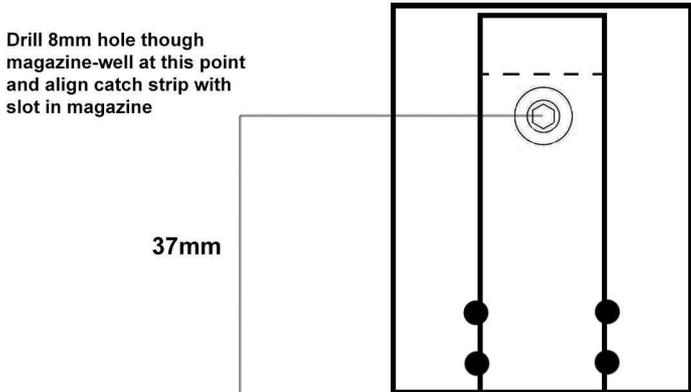


Print on A4 paper

**2 inches**

# Magazine well (For homemade magazine)

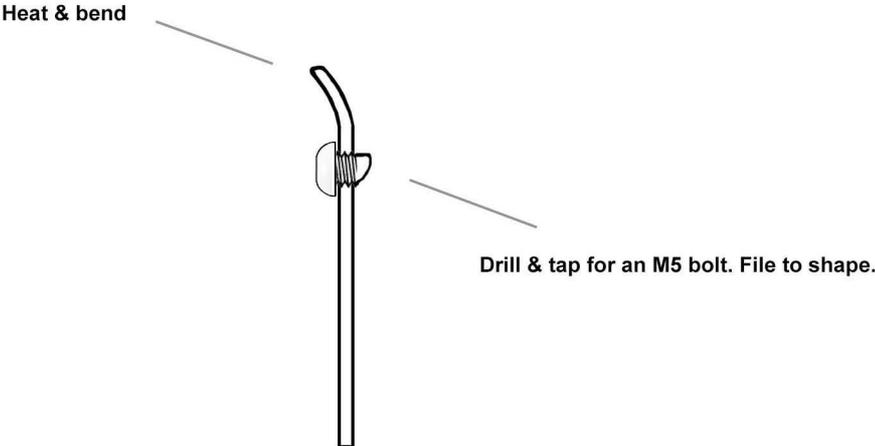
40mm x 20mm x 2mm steel rectangular section, 52mm long



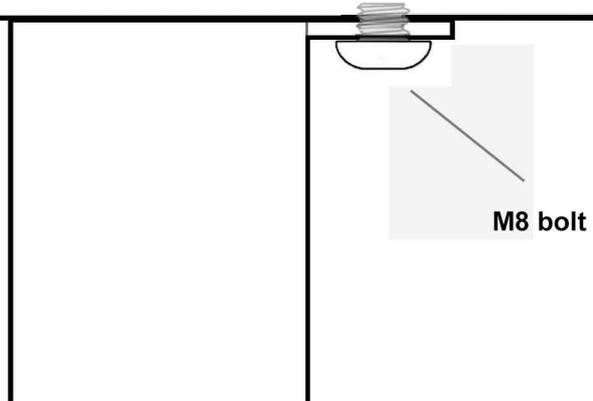
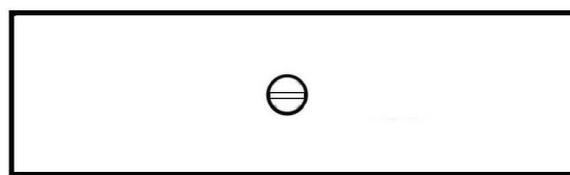
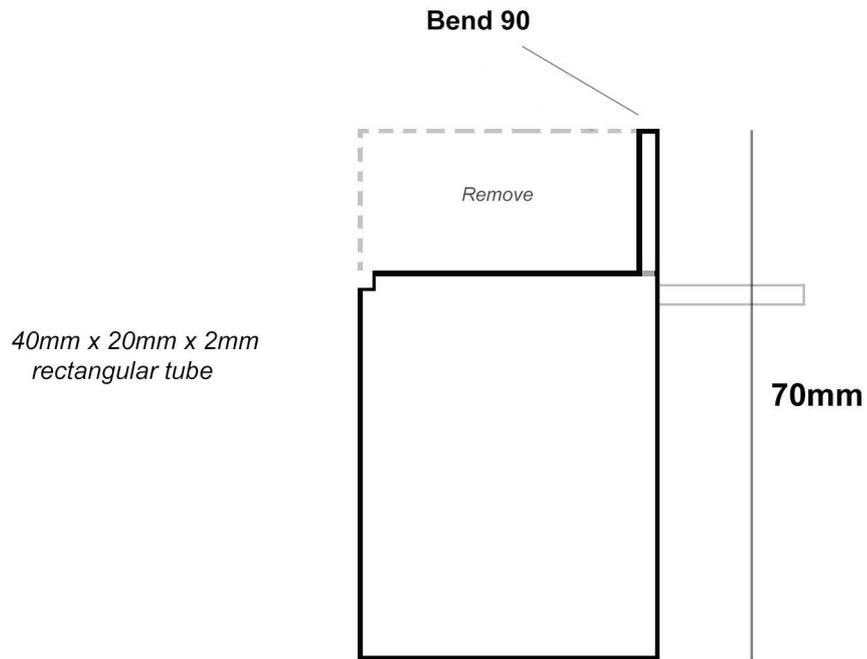
Weld or braze catch strip in place

## Magazine catch

55mm length of steel strip



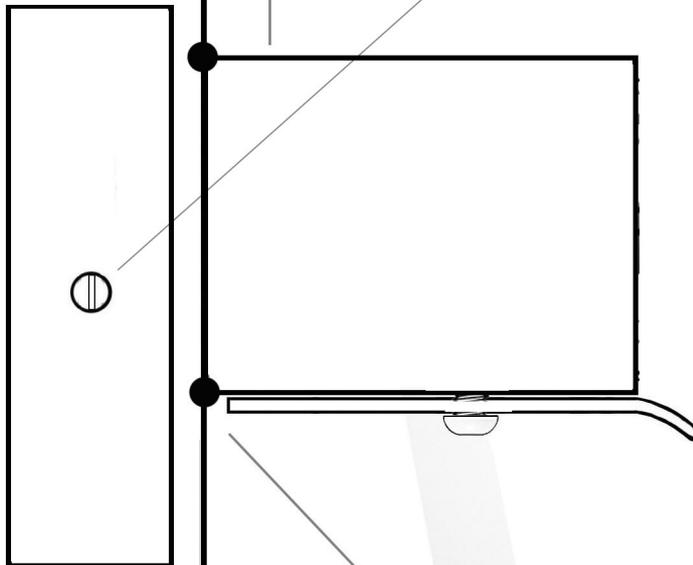
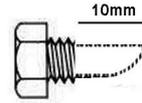
# Attaching a magazine-well via a bolt (If no welder is to hand)



## Ejector

Modify a 1/2" long m6 bolt into a blade profile. Screw tightly into the ejector hole until aligned with slot in bolt. Apply loctite to fully secure.

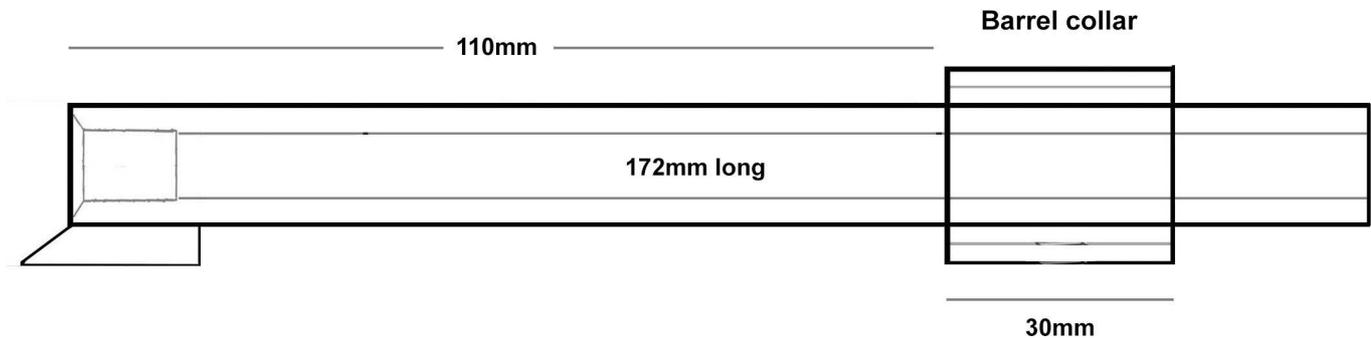
149mm



Weld

# Barrel

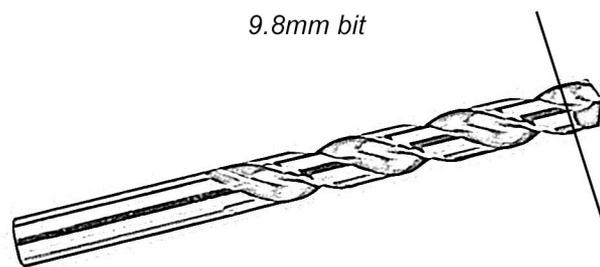
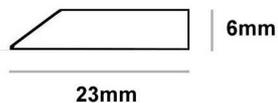
15mm x 3mm seamless steel tube, 172mm long



The barrel collar is made from 25mm x 2mm square tube sleeved with 20mm x 2mm square tube. Weld at bottom to retain to barrel.

## Feed ramp

6mm (1/4") steel plate. Weld in place.



*Improvised chamber reamer*

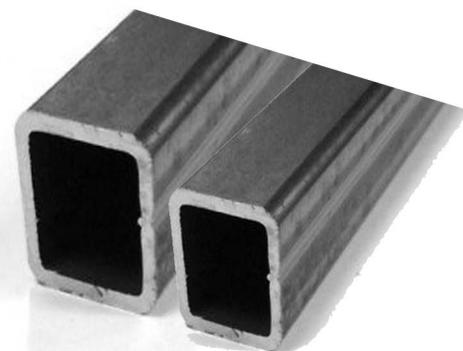
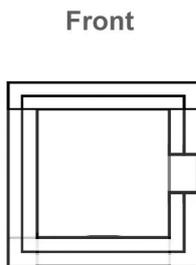
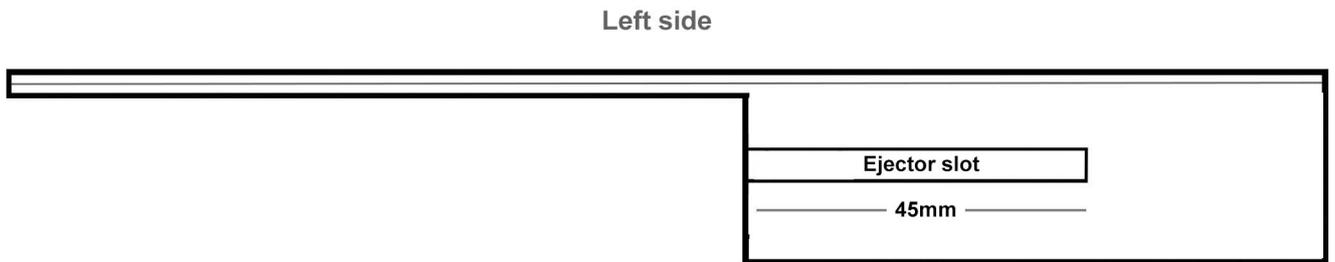
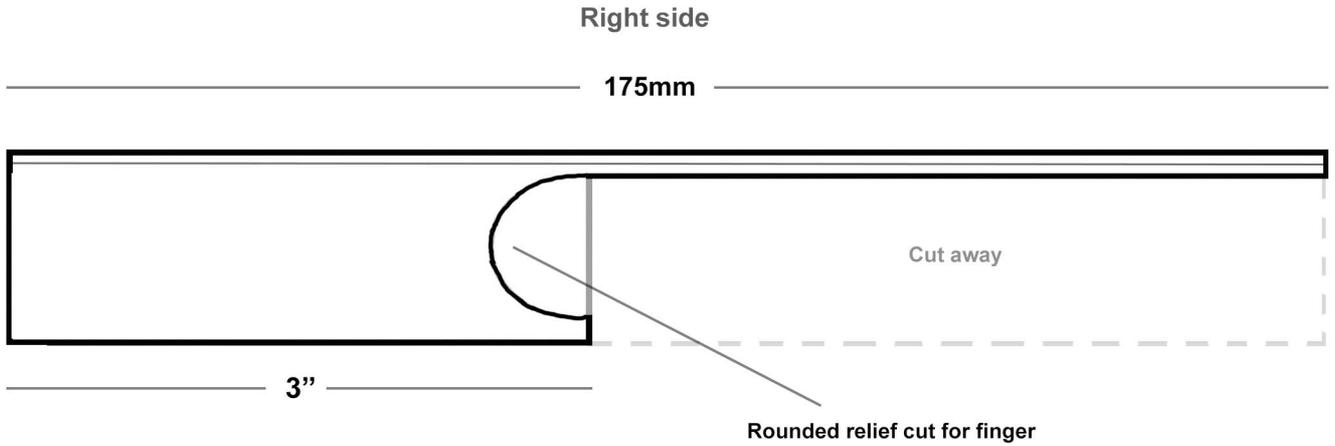
## Making a 9mm barrel on a lathe:

- Drill all the way through a 172mm length of 16mm (5/8") steel bar stock using an 8.5mm drill bit.
- Ream the bore to size using an 8.8mm Valve Guide Reamer.
- Chamber using a 9.8mm drill bit by drilling to a depth of 15mm (Until cartridge protrudes 3mm from chamber).
- Ream the chamber to a final depth of 18mm using another 9.8mm bit having been modified by removing its tip using an angle grinder.
- Bevel chamber entrance using a taper cutting tool or large dia bit + polish to ensure smooth feeding and chambering of a round.

The completed barrel is retained by four M6 bolts through holes drilled & tapped on each side of the front of the receiver.

# Bolt body

The bolt body is made from a length of **20mm x 20mm x 2mm** square steel tubing sleeved into a length of **25mm x 25mm x 2mm** square steel tubing and welded together at the rear end. The majority of the lower front section is cut away leaving the top walls to telescope over the barrel and contact the trigger / sear.



Print on A4 paper

**2 inches**

## Inner bolt piece



16mm diameter mild steel round bar, 4" long



- Drill the center with a 10mm drill bit until 3mm deep. Level the hole flat using a 10mm drill bit having had its tip removed using an angle grinder.

- Bevel the rim inwards slightly using a 16mm+ drill bit and sand smooth.

- Drill center with a 3mm bit, 10mm deep.

- The firing pin consists of an 11mm long length of 3mm dia drill bit shank epoxied in place and protruding 1mm (tip rounded).

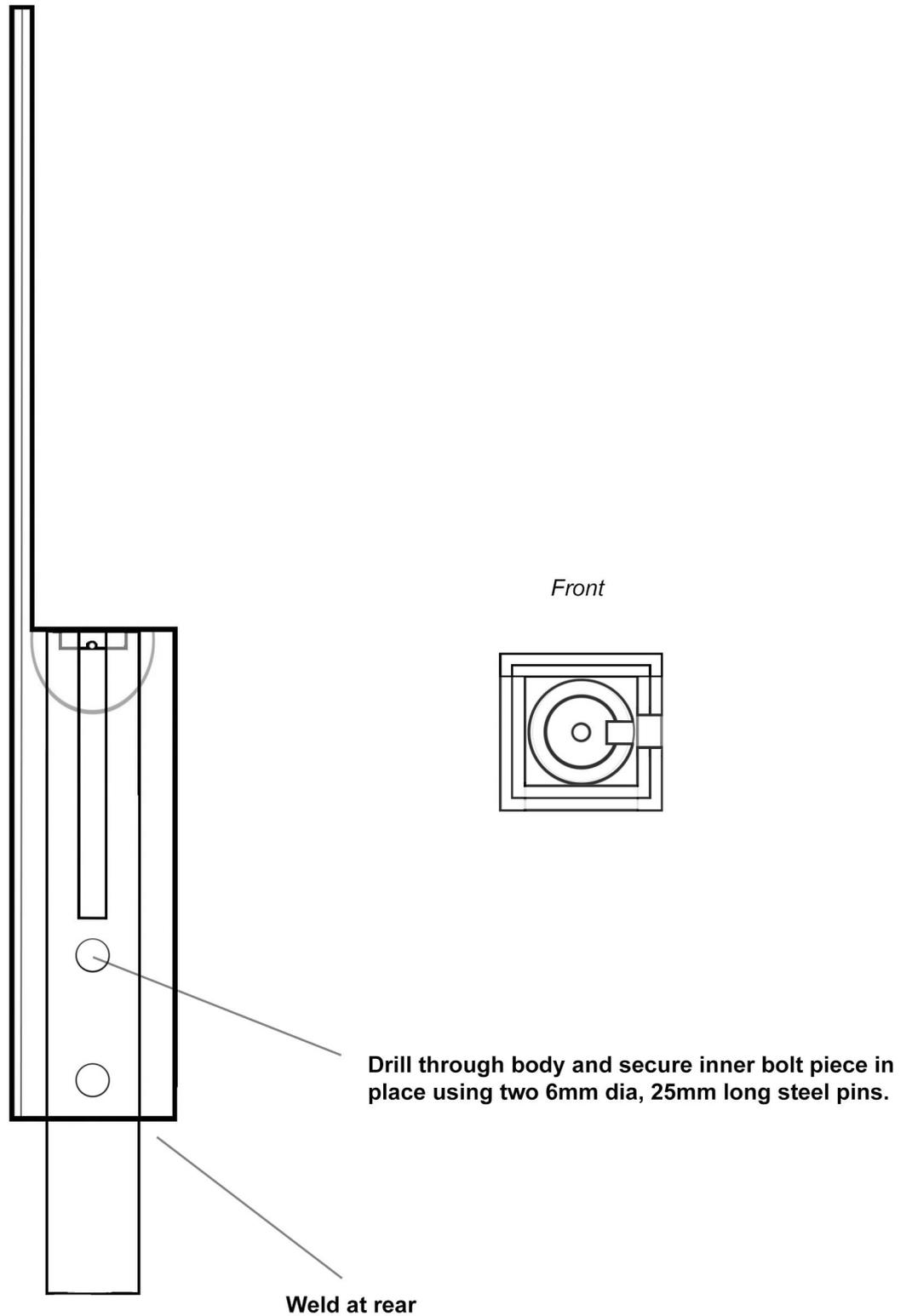


Cut 45mm long, 5mm deep slot along one side of the bolt body. This can be achieved using a combination of drilling and grinding using a 1mm slitting disc.



*The builder may choose to leave out the ejector and ejector slot in the bolt and hold the weapon with the magazine positioned to the left of the user, ejection port facing down.*

# Bolt (Complete)



**Weight: 400g**

*Optionally drill several 12mm deep, 9.5mm dia holes from above and insert into each a 3oz tungsten 'pinecar derby weight'.*

**2 inches**

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# Receiver plug and recoil spring

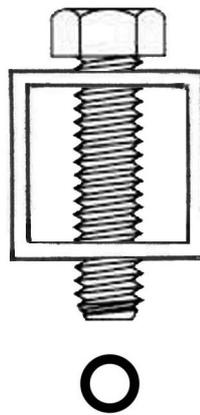
## Recoil spring

Shop purchased compression spring - 8" long, 3/4" (19mm) diameter, 1.6mm wire



## Recoil shield / receiver plug

25mm length of 25mm square box section tube



For aesthetic purposes, the bolt can be spun in a drill press while using a hand file to round off the hex head.

To field strip the gun, remove rubber washer and push plug forward against the spring while pushing up on the bottom of the bolt.

# Homemade magazine

(.380)



Made from a 7" length of 30mm x 15mm x 1.5mm steel rectangular section

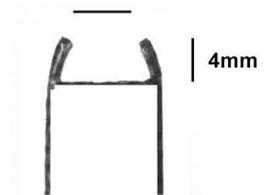
'Sculpt' catch contact point using a rotary tool.  
Alternatively position magazine catch strip to lock against depth stop.

Rear

55mm length of the same tubing  
welded in place to match magazine well ID.

Short offcut of 40mm x 20mm rectangular  
section welded in place to function as a  
magazine depth stop.

9mm



Bend lips inwards until able to  
retain a cartridge

42mm

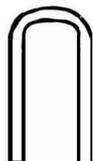
118mm

Follower

Bend from a 1" wide strip of aluminum or steel sheet



1"



Front

15mm long pins x2

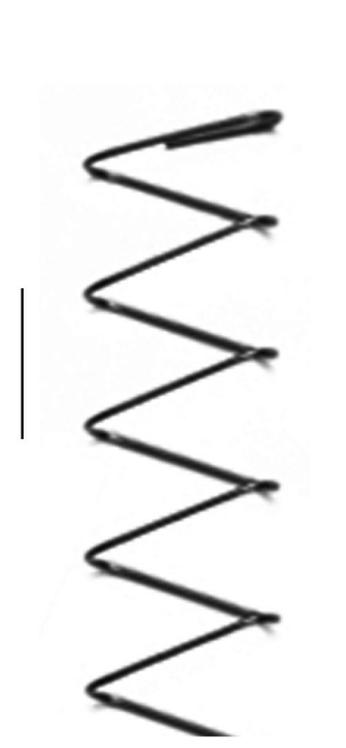
2 inches

For 9x19 Parabellum use 35mm x 15mm x 1.5mm rectangular section

## Magazine spring

Make a forming mandrel from a 20" length of 25mm wide, 8mm thick bar. Drill a 4mm hole at one end to allow the wire to be tied in place. The spring is formed by tightly winding a length of 20 gauge spring steel music wire leaving a distance of 15mm between each coil. Once complete a pair of pliers is used to form the roughly wound coils into the correct rectangular shape. The finished spring should be around 12" in length.

15mm



12" long

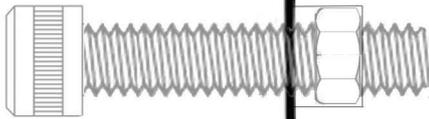


# Shoulder stock

Print on A4 paper

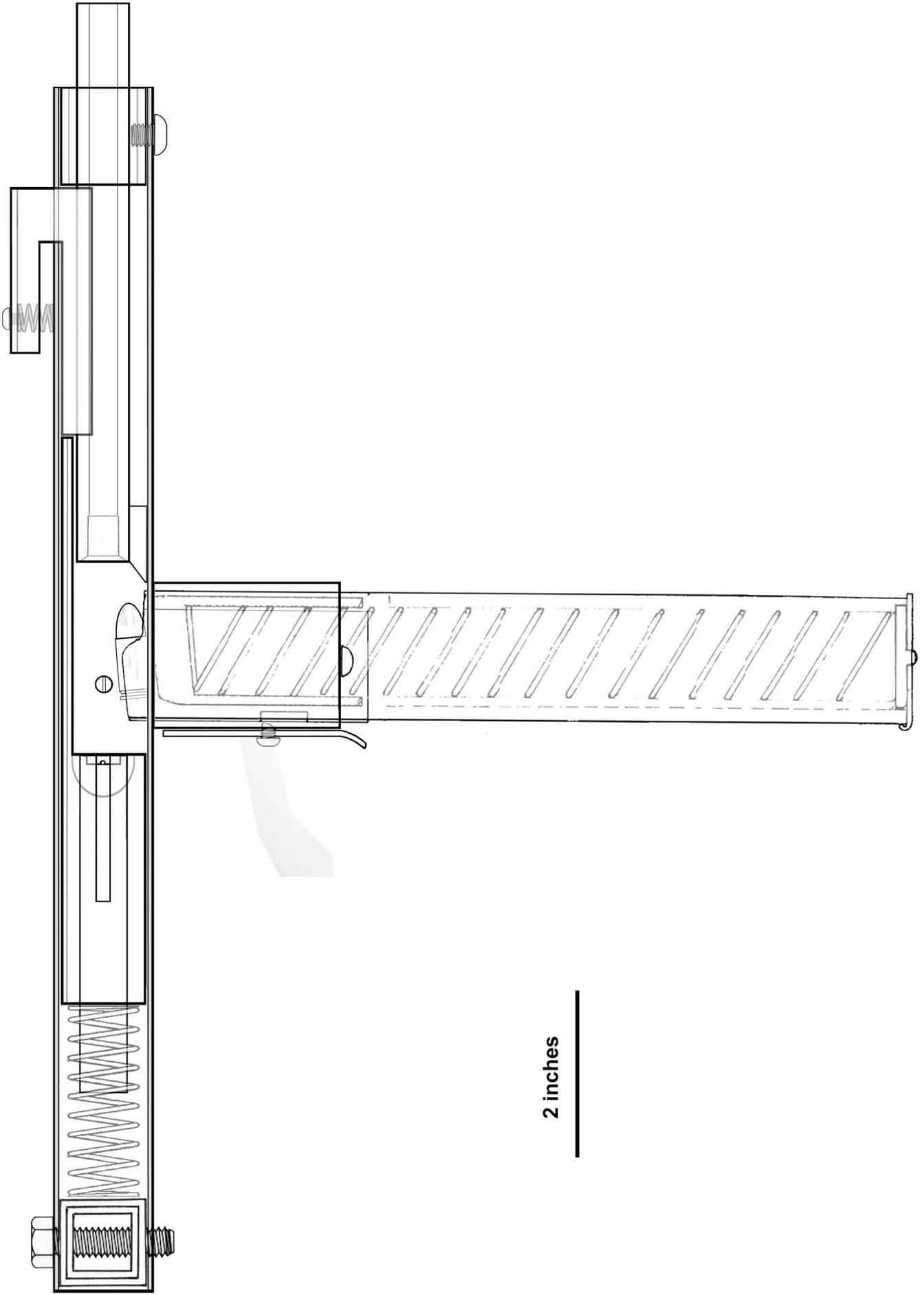
**2 inches**

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Align stock with receiver and drill a hole through the rear plug hole into stock. Enlarge hole to permanently fit an M8 nut inside. Use a 2" long M8 Allen head bolt to attach or remove stock from receiver.

1 3/4" thick hardwood or plastic



2 inches

# Homemade Break-barrel Shotgun

Construction plans

Professor Parabellum

# DIY .22 Revolver

Construction Plans



# THE TABLE LEG TYPEWRITER

DIY SUBMACHINE GUN CONSTRUCTION

Practical Scrap Metal Small Arms Vol.10

# STINGRAY MACHINE PISTOL

CONSTRUCTION PLANS

.32 / .380 / 9

# .22 Pepper-box

Construction plans

# DIY SHEET METAL SELF-LOADING PISTOL MK.3

Profess



# DO-IT-YOURSELF FULL AUTO ASSAULT SHOTGUN

CONSTRUCTION PLANS

UNPARALLELED HARDWARE STORE FIREPOWER!