# TABLE OF CONTENTS

## MODULE 1: HOW TO BUILD YOUR OWN SURVIVAL RIFLE

- how to build an ar15: INTRODUCTION ................................................................. 7
- ANATOMY OF AN AR ......................................................................................... 8
  - How the AR Works ..................................................................................... 8
- YOUR LEGAL RIGHTS FROM WRONG ................................................................ 10
  - Do No Wrong ............................................................................................. 11
- THE COMMON MAN’S AR-BUILD .................................................................... 12
  - Buying for the Build .................................................................................. 12
  - Building the Lower Receiver .................................................................... 13

## MODULE 2: AMMO INDEPENDENCE

- Why do we have an Ammo shortage? ............................................................ 19
- AN INTRODUCTION TO RELOADING ............................................................ 21
- THIS IS A CARTRIDGE .................................................................................. 24
  - The cartridge’s case ................................................................................ 24
  - What bullets can be reloaded? ................................................................. 26
  - How many times can you reload a cartridge? ....................................... 26
  - What are the Best Cartridges for Reloading? ....................................... 27
  - What should NOT be reloaded ............................................................... 27
- SETTING UP your WORKBENCH ................................................................... 29
  - Case Inspection ....................................................................................... 29
  - Case Preparation ...................................................................................... 29
  - Powder Charging ..................................................................................... 30
  - Bullet Seating ......................................................................................... 30
- LET’S LOAD ..................................................................................................... 32
  - 1. Case Inspection .................................................................................. 32
  - 2. Case Preparation ................................................................................ 33
  - 3. Powder Charging .............................................................................. 33
  - 4. Bullet Seating ..................................................................................... 33
- BUYERS GUIDE: RELOADING PRESS .............................................................. 35
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Stage Press</td>
<td>35</td>
</tr>
<tr>
<td>Turret Press</td>
<td>35</td>
</tr>
<tr>
<td>Progressive Press</td>
<td>36</td>
</tr>
<tr>
<td>BUYERS GUIDE: Reloading Dies</td>
<td>37</td>
</tr>
<tr>
<td>ECONOMICS OF RELOADING</td>
<td>39</td>
</tr>
<tr>
<td>TOTAL COST OF RELOADING 1,000 CARTRIDGES OF .223 Rem., .308 Win. and 9mm Para</td>
<td>41</td>
</tr>
<tr>
<td>SAFE RELOADING TIPS</td>
<td>43</td>
</tr>
<tr>
<td>Appendix A: Popular Reloading Kits</td>
<td>45</td>
</tr>
<tr>
<td>RCBS Rock Chucker Supreme Reloading Kit</td>
<td>45</td>
</tr>
<tr>
<td>Lee Precision II Challenger Reloading Kit</td>
<td>45</td>
</tr>
<tr>
<td>Hornady Lock N Load Classic Deluxe Reloading Kit</td>
<td>46</td>
</tr>
<tr>
<td>Lyman T-Mag Expert Kit Deluxe with 1000Xp Scale</td>
<td>46</td>
</tr>
<tr>
<td>Redding Reloading - BIG Boss Pro-Pak Reloading Kit</td>
<td>46</td>
</tr>
<tr>
<td>Appendix B: RELOADING RESOURCES</td>
<td>47</td>
</tr>
<tr>
<td>Reloading Manuals &amp; Handbook</td>
<td>47</td>
</tr>
<tr>
<td>Reloading Press &amp; Die Manufacturers</td>
<td>48</td>
</tr>
<tr>
<td>Online Supplies Retailers</td>
<td>48</td>
</tr>
<tr>
<td>Reloading Retailer Links</td>
<td>48</td>
</tr>
<tr>
<td>Bullet Manufacturer Links</td>
<td>49</td>
</tr>
<tr>
<td>Reloading Equipment Manufacturer Links</td>
<td>49</td>
</tr>
<tr>
<td>Reloading Data and Information Links</td>
<td>50</td>
</tr>
<tr>
<td>Powder Manufacturer Links</td>
<td>50</td>
</tr>
<tr>
<td>Ballistics Calculator</td>
<td>50</td>
</tr>
<tr>
<td>MODULE #3: HOW TO HIDE YOUR GUNS AND AMMO</td>
<td>51</td>
</tr>
<tr>
<td>Why Owning a gun is more important than ever</td>
<td>52</td>
</tr>
<tr>
<td>How Guns Get Taken...</td>
<td>53</td>
</tr>
<tr>
<td>Gun Education and Discussion with Children</td>
<td>56</td>
</tr>
<tr>
<td>Children Handling Guns</td>
<td>57</td>
</tr>
<tr>
<td>Common Gun Hiding Mistakes</td>
<td>59</td>
</tr>
<tr>
<td>A Word on Gun Safes...</td>
<td>60</td>
</tr>
<tr>
<td>How and where to hide your guns</td>
<td>61</td>
</tr>
<tr>
<td>Night Stands and End tables</td>
<td>62</td>
</tr>
</tbody>
</table>
Empty cereal boxes.................................................................................................................. 63
Framed pictures and paintings.................................................................................................. 63
Break down larger firearms into pieces and then hide them .................................................... 64
Hollowed out books ................................................................................................................ 64
Inside a cold air return or vent ................................................................................................ 65
Clock safe ................................................................................................................................ 65
Sinks and toilets ...................................................................................................................... 66
Bed safes .................................................................................................................................. 67
Fake electrical switch .............................................................................................................. 68
Empty paint and oil cans ......................................................................................................... 68
Basement ................................................................................................................................. 69
Inside dead spaces of your house ............................................................................................ 69
Old, broken fridge .................................................................................................................... 69
Buried coffee can ..................................................................................................................... 70
Airbag in your car ..................................................................................................................... 71
Car Seat cushions ................................................................................................................... 71
A few final words on hiding guns during a confiscation ............................................................. 73
MODULE 1: HOW TO BUILD YOUR OWN SURVIVAL RIFLE
HOW TO BUILD AN AR15: INTRODUCTION

At over 50-years of active service, it is the longest serving service rifle in the United States’ military. Besides the US armed forces, it is found the hands of military and para-military forces of over 80-countries including 15-NATO countries. It was first produced in 1959 and to date over 10-million have been manufactured – and still continue to be made in all corners of Earth.

Yes, we are talking about the M16, the second most common military assault rifle.

And if the above three facts are not enough for you to pick up an AR, the civilian version of the M16, just try swapping the AK-47 or the M1 Garand from its 7.62 mm caliber to .22LR. Not possible without resorting to some major work in the workshop. And once done, try swapping back to the original 7.62 mm caliber!

With the AR, if you can pull out a few pins, you can shoot anything from the paper punching .177 air gun pellet, to the truck killing 12.7x99 mm anti-material ammunition from a 32-inch barrel.

And that’s why you should pick up an AR – it is a modular weapon system – the one that can be any weapon that you will ever need.
ANATOMY OF AN AR

Though the modern AR is available in many shapes, sizes, calibers, and is unrecognizable to the original Colt AR-15, it is still made up of four major sections – upper receiver, lower receiver, barrel assembly and butt stock.

The **Upper Receiver** available in three different styles, houses the bolt-carrier, charging handle, forward assist device, and usually the rear sights. It’s typically made of aircraft grade aluminum.

The **Lower Receiver** holds the trigger group, magazine controls and bolt release. Also traditionally made of aluminum, though many manufacturers have now started making polymer lower receivers.

The **Barrel Assembly** consists of the barrel, front sights, gas block and tube, and hand guard.

The **Butt stock Assembly** consists of an aluminum hollow tube, recoil buffer and polymer butt stock.

In the trade, the upper receiver and barrel assembly together are referred to as a Complete Upper Receiver, while the lower receiver and butt stock assembly are called Complete Lower Receiver.

HOW THE AR WORKS

Developed in the 1960s, the AR-15 operates on the Direct Impingement system in which gases from the gunpowder is used to automatically eject, cock and reload the rifle from a box magazine.

The system works by tapping expanding gunpowder gases from the rifle’s barrel and piping it back into the bolt carrier to operate the eject-cock-reload cycle. It other words, the gases directly operate the bolt carrier hence
the name direct impingement. It is a relatively simple system compared to other gas systems in which the gases drive a piston, which in turn manipulates the bolt carrier.

This simplicity is also the reason it has earned a reputation for being unreliable in field conditions. Since the gases directly operate the bolt-carrier, unburnt gases along with dust and dirt are said to gum up the operating system. However, it is said that if the system is regularly cleaned and lightly lubricated, it is as reliable as any other military rifle in the field.

The fact that the AR-15’s military counterparts are America’s longest serving service rifle, and that they are being used by the military and para-military forces of 80 other countries indicate that latter rather than the former is true.
YOUR LEGAL RIGHTS FROM WRONG

For your information, per provisions of the Gun Control Act (GCA) of 1968, 18 U.S.C. Chapter 44, an unlicensed individual may make a “firearm” as defined in the GCA for his own personal use, but not for sale or distribution.

Bureau of Alcohol, Tobacco, Firearms and Explosives, Firearms FAQ
http://www.atf.gov/firearms/faq/firearms-technology.html

In simple words, anyone in America can legitimately build a legal firearm at home using commercially available parts kits without a license and permission, but only for personal use.

This does not mean that you can’t sell your homemade rifle – you can – provided you follow Federal, state and local laws regarding private sale. It is just that you should not build firearms at home with the intention of selling or distributing them.

Following the law also applies to the firearm you build for personal use. Since we are covering the AR-15 family of rifles in this document, we shall restrict details to rifles only.

To begin with, the Gun Control Act defines a firearm as (A) any weapon that can expel a projectile by the action of an explosive (B) the frame or receiver of any such weapon.

In other words, it is the receiver which is considered a firearm. And when this receiver is assembled or attached to other parts such as the barrel and the stock, the sum of the parts then becomes a firearm. Therefore, it is only the receiver that needs to be legally purchased through a Federal Firearm License dealer. Every other parts kit else such as the barrel, stock, trigger can be purchased from any source – either online or off-line.
Furthermore, according to the National Firearm Act (NFA), a legal rifle is a firearm with at least a 16-inch barrel, and an overall length of at least 26-inch. Beyond the NFA’s dictate, many states and localities also have their own laws on rifle caliber, barrel length, magazine capacity and so on, therefore be sure to look up local and state laws.

This means that **incomplete receivers are not a firearm**, and therefore 80-percent or less-complete receivers can be bought as parts kit. You can then assemble a fully operational firearm using the complete-at-home receiver using commercially available parts kits purchased online or offline. The now complete firearm does not have to be registered and is a legitimate legal weapon as long as its barrel is over 16-inches long with an overall length of at least 26-inches, and confirms with state and local laws.

**DO NO WRONG**

Any deviation from the above mentioned GCA, NFA and relevant state and local laws, particularly length of barrel and rifle and accessories like suppressors, amounts to breaking the law. However, this does not mean that they can’t be owned. Short barrel rifles, rifles capable of full-automatic fire and suppressors are regulated items. This means that in most cases, relevant paperwork will need to be completed and registered with the Government before you can even purchase the items.

This means that if you want to build a Short-Barrel Rifle (SBR) or attach a suppressor, you will need to first register the homebuilt rifle and complete the paperwork for a SBR or suppressor. And then, only after submitting the paperwork and getting the clearance, should you try to build the SBR or buy the suppressor.

Do not try to buy the restricted items first and then later filing the paperwork.
THE COMMON MAN’S AR-BUILD

Considering the number of gunsmiths and custom gun shops custom building the AR-family of rifles and the prices they charge, it might seem that building your own AR rifle might be a complex task. But the truth is, because of the AR rifle’s modular design and the availability of pre-assembled parts and assemblies it is simpler than it seems.

You can build an AR rifle with what is already available in your garage workshop. The best way is to buy Military Specification (or Mil-Spec) pre-assembled modules and parts kits. As the military values parts interchangeability, buying mil-spec will insure that all the parts and the four major sections will fit and function flawlessly.

The intelligent way to go about it would be to buy a complete rifle kit rather than try to build a ‘custom rifle’ by selectively buying parts. By purchasing a complete kit, you can be sure that all the parts (and often the tools) you need are in the box and that they will fit together. Since most of the kit typically includes the lower parts but not the lower receiver itself, the kit can be purchased online or offline without a FFL intermediary.

Next, to complete the parts kit, all one has to do is buy an 80-percent lower receiver along with the necessary jig. Since an incomplete receiver is not considered a firearm, again it can be purchased without a FFL intermediary.

Finally, if you don’t already have it in the garage, a drill press along with select drill bits is needed to complete the incomplete receiver.

BUYING FOR THE BUILD

While buying an AR rifle kit, it is advisable to purchase a kit which comes with an assembled complete upper receiver. This means the upper receiver,
barrel, gas system, front sights and other sub-assemblies are already assembled. This is an important because insuring correct headspace (chamber to bolt distance) is not an easy task even for experienced pros, and therefore challenging for the home builder.

Also, to assemble the complete upper, one needs extra tools such as barrel wrench, torque wrench, upper receiver vice block and go and no-go gauges. Therefore, purchasing a pre-assembled complete upper receiver saves time as well as money on extra tools.

For example, complete rifle kits are available both DPMS Panther Arms and Del-Ton Inc., but Del-Ton ships assembled upper receivers while DPMS does not. On their respective company websites, Del-Ton kit prices start at US $480 while the DPMS kits start at US $529, though both are available at other sources at lower prices.

As AR-15 rifles are interchangeable, 80-percent lower receivers, jigs and milling plates/guides from different sources are compatible with each other.

**BUILDING THE LOWER RECEIVER**

The final list of parts and tools on the workbench before cutting the lower receiver should read as follows:

- 80-percent lower receiver
- Jig
- Fire control milling and drilling adapter plates
- Trigger slot adapter plate
- Calipers
- Drills bits –1/8, 3/8, 5/8, letter L; and 1/4 and 3/8 end mill
- Cutting fluid
- 3/16 Allen Hex Wrench
The 80-percent receivers presently available typically need milling out the fire-control cavity, drilling the trigger and hammer pin and safety selector hole, and the trigger slot.

Before beginning work on the 80-percent receiver, one has to insure that the receiver is properly aligned in the jig. To do this, place the receiver in the jig, and then turn the jig upside down at the end of a flat surface. With the receiver’s buffer tower hanging out of the edge of the flat surface, insure that the top of both the receiver and jig surfaces are aligned flush and tighten the socket heads cap screws.

Insert disused drill bits or similar size tools through both the front and rear take-down pin holes’ aligned with the jig. This will insure that the receiver will not move within the jig when it’s being drilled.

When done, the finished jig-receiver should look like in the top picture, and is now ready to be drilled.

**Fire-control cavity**

Attach the drilling adapter plates on top of the jig by running the four bolts through the top. Use the caliper to insure that the distance of from the top of the jig to the drilling adapter plate is 3.41-inch. The drilling adapter plate marks the fire-control cavity.

Now spot drill the 37 1/8-inch holes through the adapter so that the holes’ positions are marked. The pictures below show the drilling, and what the receiver should look like after the drilling is complete.

While drilling the receiver, it is best to run the drill
press as its lowest speed setting so that minor errors can be safely corrected. Running the drill press at higher speeds would only accentuate any error while drilling.

After removing the drilling adapter, drill all the 37 spot drilled positions 1.249-inch deep using the 1/8-inch bit.

Now switch the drill bit to the 3/8 and drill 14-times in the marked fire-control cavity to a depth of 1.249 inch.

After all the holes are drilled, the fire-control cavity should now be clearly outlined and should look like the picture in the right. (See Image 1.0)

Now using the drill press as a mill, attach the milling adapter plate in the same manner as described before. Then attach the 3/8 end mill to the drill press and set the length to 1.9-inch from the bottom of the chuck to the bottom of the end mill as shown in the right. (See Image 1.1)

Now lower the drill press into jig-adapter assembly and take shallow cuts say 0.025-inch deep each time you lower the drill press. Keep milling deeper at deeper until the top of the chuck almost touches the top of the adapter plate.

When finished, it should look the picture in the right. (See Image 1.2)

Before removing the milling adapter plate, drill two 1/8-inch holes after which it should look like the picture in the right. (See Image 1.3)
As the end mill would not have been able to cut to the final depth of 1.249-inch with the adapter in place, after removing the adapter use the end mill to make shallow cuts until 1.249-inch depth is reached.

To mill the shelf in the fire-control cavity, reattach the drilling adapter plate to the jig. Then using the 1/4 end mill, cut in small steps to a depth of 0.63-inch.

**Safety Selector, Hammer and Trigger Pin Holes**

The jig already has holes on its side where the safety selector, hammer and trigger pin holes should be. It’s therefore a simple exercise of laying down the jig on its side and drilling the safety selector switch using the 3/8 drill bit. Similarly for the hammer and trigger pin holes, the 5/32 drill bit needs to be used to drill out the hammer and trigger pins holes.

**Trigger Slot**

As with the fire-control cavity, cutting the trigger slot calls can be made painless with the trigger slot adapter. As before, bolt the trigger adapter in the same position using the same milling adapter bolts. The adapter has to be correctly oriented by insuring that the two holes in the adapter are towards the magazine well. Using the L drill bit, drill through two holes until the drill breaks through into the fire-control cavity.

Now flip the trigger adapter around such that the two holes are now facing the buffer tower, and the slot the magazine well. Now attach the 1/4 end mill and set its length to 2.11-inch from the bottom of the chuck to the bottom of the end mill. Lower the end mill through the slot and cut in steps of 0.025-inch and in a clockwise manner until the slot appears smooth.
The completed receiver should now look like an AR lower made from silver. It can now be painted, anodized or better still, treated with spray-on protective coating like Gun-Kote which is available in many colors.

In order to apply Gun-Kote, the finished lower receiver first needs to be pre-treated. The pre-treatment is basically to insure that there is no contamination on the lower receiver, particularly cutting fluid or even body oil, which might affect the bonding between the aluminum of the lower receiver and Gun-Kote.

The first step is to clean the finished receiver properly with acetone to remove any oil or other contaminant on the surface. Next place the cleaned in an oven and pre-heat it to just over 100-degrees. Now, using the Gun-Kote aerosol can, spray an even layer of the finish on both outside and inside the receiver. Now bake the coated receiver in the oven at 300-degrees for over an hour. Baking it longer or at a higher temperature may damage the color of the finish.

The lower receiver is now ready to be assembled.

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Del-Ton complete rifle parts kit</td>
<td>$480</td>
</tr>
<tr>
<td>80-percent lower receiver</td>
<td>$80</td>
</tr>
<tr>
<td>Jig</td>
<td>$99.95</td>
</tr>
<tr>
<td>Milling and Drilling Adapter Plate</td>
<td>$124.95</td>
</tr>
<tr>
<td>Trigger Slot Adapter</td>
<td>$49.95</td>
</tr>
<tr>
<td>Gun-Kote spray can (Brownell’s)</td>
<td>$31.99</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$866.84</strong></td>
</tr>
</tbody>
</table>
MODULE 2: AMMO INDEPENDENCE
WHY DO WE HAVE AN AMMO SHORTAGE?

Our 2nd Amendment rights are still under attack. Even though the latest round of gun control legislation didn't pass, anti-gun zealots are implementing alternative plans that circumvent the power of the 2nd Amendment altogether.

To do this, they're focusing on our ammo. In 1993, the late US Senator Daniel Patrick Moynihan said that gun control was fruitless. He pointed out that even if the sale of guns was totally forbidden there were still enough guns in the supply to last 200 years.

On the contrary, he said, there's only a three year supply of ammunition in the marketplace (today it’s a lot less than that). He felt that the real way to disarm Americans was to impose a tax on bullets. He proposed that a 10,000 percent tax on ammo would essentially make bullets completely unaffordable for the average gun owner.

Senator Moynihan was quoted as saying "guns don't kill people; bullets do" and therefore bullets should be the target. Now with the recent failed attempts at new "assault weapon" bans and other gun control laws, many anti-gun combatants are listening to the late senator's message and are focusing on limiting the ammo supply.

So far, they're doing this in two ways. The first is a sneaky political trick by the Federal government. It's been reported all over the news that the
Department of Homeland Security in the process of stockpiling 20 years' worth of ammo – that's 1.6 billion rounds!

There's no really good explanation as to why they would do this beyond trying to buy up all the ammo so ordinary gun owners can't get access to them.

The second way they're planning to target our ammo is new bullet laws. In the past year or so, a handful of states have introduced new bullet taxes and laws requiring permits and background checks to buy ammo. It's only a matter of time now before more states and even the federal government decides to focus on our access to ammo.

Now I'm certainly not a lawyer or constitutional scholar, but the 2nd Amendment says "right to bear arms" not right to own bullets. That's why I fear this new focus could be more detrimental than previous gun control measures.

That's why I think it's more important than ever or every gun toting American to know how to reload their bullets. When you learn how to do this, it will limit the effects of any future taxes on bullets and it ensures you always have access to ammo even in times of shortages.

That's why I decided to put this guide together. It is by no means the ultimate guide to reloading. Rather, it's a gentle introduction to the subject so that YOU can make an informed decision about reloading. I hope you enjoy it and I hope it helps you truly gain your ammo independence!
AN INTRODUCTION TO RELOADING

Reloading by definition is the private manufacture of cartridges and shells, utilizing used cartridge and shell cases, and new bullets, shots, gunpowder and primers by simple mechanical tools.

As an activity, it has been around since the birth of metallic cartridge, and is today a well-established industry with tried and tested reloading practices.

However, despite of being around for better part of the century, for every firearm owner who reloads, there are countless more that don’t.

That’s because though there are many misconceptions about the difficulty, cost and safety of reloading ammo. Don’t get me wrong, there are definitely pros and cons to making your own ammo, both of which are depicted in the table below.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td><strong>Lower Cost:</strong> The cartridge case account for about half the cost of a cartridge. It can be reused up to 10 times or more</td>
<td><strong>Safety Issues:</strong> Gunpowder and primers are highly flammable. Poorly developed loads can be dangerous</td>
</tr>
<tr>
<td><strong>Obsolete Cartridges:</strong> Guns chambered for cartridges no longer available can still be used</td>
<td><strong>Consumes Time:</strong> Reloading is a time demanding activity (but can be a lot of fun and a great stress reliever!)</td>
</tr>
<tr>
<td><strong>Superior Performance:</strong> Better performing loads in terms of energy and accuracy can be developed</td>
<td><strong>Startup Cost:</strong> Can be high depending upon equipment selection but typically falls in the $500 to $1000 price range</td>
</tr>
<tr>
<td><strong>Independence:</strong> Free from the unavailability and limitation of</td>
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</tr>
</tbody>
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As evident from above, the advantages of reloading greatly outweigh the disadvantages, particularly economical. Typically, the cost of brass case accounts for almost 50-percent of a cartridge’s cost. Being able to reuse a brass case up to 10-times or more simply translates to substantial savings.

Furthermore, many of the disadvantages can also be negated – the initial investment in reloading equipment will be recovered as one manufactures low cost cartridges over the years. Similarly, if safe reloading practices are followed, the risk of working with flammable products is substantially reduced.

So now that we've discussed the pros and cons, what are the definitive benefits to reloading?

- You will save a lot of money in the long run. There are short term up-front costs, but over time the savings will be huge.
- You can fully customize your ammo to your firearm for greater accuracy and efficiency.
- You can stockpile ammo so that you have it for emergencies and possible disaster crisis scenarios.
- You get peace of mind knowing that you'll have ammo even if exorbitant taxes are enacted or shortages get worse (which is predicted).
- You'll have total ammo independence and won't have to rely on ammunition manufacturers or the government for your bullets.
- You'll have a unique, sought after skill that could be extremely valuable to others.
- Reloading is fun and a great stress relief after a long day at work!
So now that you know the pros and cons and the benefits to reloading, you need to ask yourself why you want to reload.

With our current nationwide ammo shortage, the most common reason is to have access to ammo when you need it.

Another common reason is to save money. With supply down and demand up, prices are soaring and new taxes could make things worse. Reloading will cut your costs significantly.

A significant reason to learn how to reload is so you have enough ammo in the event of a long term disaster or crisis situation. I don't know about you, but I always find myself asking how the heroes in all the disaster and zombie movies have so much ammo. It seems like they ought to run out at some point. In a real life situation, if you knew how to reload you could have all the ammo you need.

Maybe you've got a special firearm or antique one with a cartridge that's difficult to find ammo for. Reloading makes it easy to have exactly what you need.

As you can tell, there are a lot of reasons to reload. My guess is one or more of these reasons has already hit home with you!

In the next section, we will begin with the basics of a cartridge, its functioning and its components, before moving on to how to reload a cartridge.
THIS IS A CARTRIDGE

The self-contained metallic ammunition for any firearm is called a cartridge. And while shotgun ammunition is referred to as a shotshell or shell in America, it is still referred to as a cartridge in Europe.

A cartridge, be it for a rifle or a handgun, as depicted in the image consists of four main components – cartridge case, primer, gunpowder and bullet.

When the trigger is pulled, a firing pin strikes the cartridge to start the process. The cartridge is an assembly of the **cartridge case** which houses all the components, the **primer** which ignites when struck by the firing pin, and in turn ignites the **gunpowder**, which then burns creating large volume of gases which push the **bullet** out of the case and into the barrel.

The cartridge case is the most important of the four components, the most expensive, and the main subject of this booklet. It not only determines if the cartridge will fit the chamber of the firearm, it is also the first line of defense if an improperly reloaded cartridge malfunctions.

THE CARTRIDGE’S CASE

Traditionally, cartridge cases have been made of brass, though today they are available in nickel-plated brass, steel, aluminum and polymer.

For reloading purposes, cartridge cases made of brass is ideal because it’s strong enough to withstand high pressure gases, ductile enough to expand
and contract, and corrosion resistant. However, nickel-plated brass cases is best avoided as in some situations it may accelerate barrel erosion.

Similarly, though both steel and aluminum are cheaper than brass, they should not be used. Steel is prone to corrosion, and unlike brass does not expand when the cartridge is fired causing hot gases to flow between the chamber and case and into the action. Aluminum on the other hand easily fatigues on firing and is similarly not suitable for reloading.

In terms of case design, most popular rifle cartridges are bottleneck in shape, while handgun cartridges are straight walled. Of course, there are straight walled rifle cartridges and bottlenecked handgun cartridges, but neither is common.

After the case material and design, the key feature one needs to be aware of is the primer – the size and the kind of primer being used.

In the metallic ammunition world, there are two types of primers – Berdan and Boxer. And while both can be reloaded, Berdan are difficult to reload and require special tools while Boxer primers are easier reload using standard reloading dies. Neither is interchangeable with the other.

Since Boxer primers are commonly used in America, we will consider them through the rest of the booklet.

Primers come in two sizes – small and large – for both rifle and handguns. And though small rifle and small handgun primers; and large rifle and large handgun primers are similar in size, they are not the same and should not be interchanged. In short, we have four kinds of primers available for reloading – small rifle, large rifle, small pistol, and large pistol.
Last but not the least, we have the gunpowder. Not only do they come in different shapes, sizes, and color, they also burn at different rates. Powders designed for handguns and shotguns burn quickly, whereas rifle powders burn slowly as the bullet remains in the barrel for a longer period of time. Thus, one should not change one for the other, even if both look the same and are made by the same manufacturer.

**WHAT BULLETS CAN BE RELOADED?**

In a nutshell, you can reload any center fire ammo. This includes steel, brass and aluminum. Each has its own pros and cons especially when it comes to difficulty.

The best guns to reload are ones in common calibers that take brass cased rounds and are boxed primed. Steel cases can definitely be reloaded but sometimes isn't worth the effort. The only exception is steel pistol cases. You should check on those before deciding against it.

**HOW MANY TIMES CAN YOU RELOAD A CARTRIDGE?**

There's no definitive answer on the number of times a specific cartridge can be reloaded. It varies depending on a few factors.

Keep in mind that each time you fire off a round, the life span goes down due to wear and tear. You'll want to closely inspect each cartridge before you reuse to make sure it doesn't show signs of cracking or separation.

Typically a rifle cartridge can be reloaded 5-10 times. Often times shooters will create a self-imposed limit on the number of times that they'll reuse a cartridge. For
example, you might say you'll only reload it 4 or 5 times. That's really up to you.

With pistols you can usually reuse more than with rifles. It's not uncommon to reuse a pistol case 15 to 20 times before discarding.

**WHAT ARE THE BEST CARTRIDGES FOR RELOADING?**

When it comes to handguns, the easiest cartridges for reloading are the straight wall rimmed revolver cartridges like the .32 H&R Magnum, the .38 Special, the .357 Magnum, the .41 Magnum, the .44 Special and the .44 Magnum.

For rifle cartridges the simplest to reload are belted or rimmed straight wall cartridges intended for single shot rifles. Some examples include the .458 Winchester Magnum, .45-70 and the Ruger 1.

The most popular rifle calibers are also easy to reload like the .243 cartridges and the 6mm Remington.

This is by no means a complete list. If you have a specific cartridge you want to reload, it can probably be done!

**WHAT SHOULD NOT BE RELOADED**

While in principle all cartridges function is a similar fashion, all cartridges cannot be reloaded, or should not be reloaded. These include:

- **Rimfire cartridges** because unlike centerfire cartridges the primer in a rimfire is a part of the cartridge case itself (the rim) and is crushed while firing, this damages the case making it unsuitable for reloading.
• Steel cartridges case should not be reloaded because it may damage the reloading dies as steel is harder than brass.

In the next section, let's move on to discussing what you're going to need on your work bench to start reloading your ammo.
SETTING UP YOUR WORKBENCH

Now that we know what we are reloading, let us now understand the reloading process itself and what tools are necessary for reloading.

The reloading process can be categorized into four distinct stages – case inspection, case preparation, powder charging, and bullet seating.

**CASE INSPECTION**

In the first stage the cartridge cases are visually inspected for damage, and then measured and trimmed for proper length, and finally cleaned for reloading.

Tools needed include case cleaner (water and soap or case tumbler), vernier caliper, case trimmer, deburring tool, case lube, lube pad, primer cleaner and primer swager.

**CASE PREPARATION**

In this stage the cartridge case is resized to proper dimension and the case mouth expanded to accept the bullet. A live primer is also inserted in the case.

This stage involves the use of a reloading press, reloading dies, primers, primer decapping and loading tool, and case holder for the reloading press.
POWDER CHARGING

As suggested by its name, in this stage the gunpowder is poured into the cartridge case. Tools needed are powder measure, weighting scales, powder trickler, and funnel.

BULLET SEATING

The last stage involves seating the bullet in the cartridge case and crimping it. Tools used in the final stage include the reloading press, dies, vernier caliper and of course the bullets.

If that seems to be a lot of equipment to be purchased, go for a ‘reloading kit’ offered by major manufacturers such as Lee, Hornady, or RCBS. These kits typically include most of the above mention items including a reloading handbook and manual, but do not include reloading dies and shellholders as they are caliber specific.

Kit prices start from as low as $116 to as much as $1,250, and are defined by the kind of reloading press that is bundled with the kit (see section on reloading presses), and included accessories.

The second key components are the reloading dies and shellholders. Dies come in sets as per the cartridge, and cost from $30 a set for general use ammunition to $220 a set for loading match grade cartridges. Shellholders cost as little as $3.5 for a low-volume press, to as much as $36 for high-volume press.

For low volume reloading, the lower priced kits with simple manual presses which can reload about 50 cartridges an hour are sufficient. But for volume reloading, higher priced kits with mechanical or electrical automation are necessary which can reload 500-600 cartridges and hour.
Finally, insure that the reloading press is firmly attached to the workbench as presses leverage human power to force-fit a cartridge together.
LET’S LOAD

Since we now know all there is to know about reloading and have a reloading workbench setup, let us walk through the reloading process one step at a time.

1. **CASE INSPECTION**

1.1 Check all cases, both new and fired, for damages. Splits and any defect in the case mouth that linger after passing through resizing die should immediately be rejected.

1.2 Clean the cases to remove dirt and old gunpowder residue by either washing them in hot soapy water, or by running them through a mechanical or electronic tumbler. Don’t forget to squirt some case cleaner in the tumbler’s cleaning media.

1.3 Inspect the case again for damage which may have become visible after cleaning.

1.4 Use the caliper to measure the case and verify that it’s within maximum case length.

1.5 If the cartridge case is longer, use the case trimmer to trim it to the proper length, and then use the deburring tool to even out the sharp edges in the case mouth. The case is now ready to be reloaded.
2. **CASE PREPARATION**

2.1 In this stage, the case will be run through the sizing die attached to the press for the first time. Be sure to apply or spray case lube on the cases so that it does get stuck inside the die.

2.2 When the case is run through the sizing die, two things happen. First, the decapping pin in the die pops out the spent primer and expands the case mouth so a bullet can slip in. Second, the body of the case is squeezed by the die and resized to correct dimensions.

2.3 Next a fresh primer is inserted into the case either by the priming tool attached to the press, or by a hand priming tool.

3. **POWDER CHARGING**

3.1 In the third stage, the cartridge is loaded with a gunpowder in quantity recommended by the reloading handbook.

3.2 The powder measure is used to dispense gunpowder to a powder scale in quantity that is a fraction less than the amount to be loaded. A powder trickler is then used to measure out the exact amount.

3.3 The cartridge cases are placed on a loading block, and a funnel is used to pour the powder from the scale’s cup into the cartridge.

3.4 As a safety precaution, after charging all the cartridges in the loading block, use a powder check system die insure that a cartridge is not double charged.

4. **BULLET SEATING**

4.1 This is the final stage of reloading. In this stage, the charged cartridge is place back in the reloading press, and passed into the loading die.
4.2 The bullet is placed in the mouth of the case and then both the case and the bullet are run into the die. The die seats the bullet to the correct depth and its built-in crimping shoulder then presses in the mouth of the case into the bullet’s groove.

Congratulations, the cartridge is now reloaded and ready to be fired!
BUYERS GUIDE: RELOADING PRESS

A Reloading Press is the most important piece of equipment in a reloading kit, period.

Not only the press the biggest and most expensive among all other equipment, it also dictates the kind of reloading dies one can use, the biggest cartridge one can reload, reloading rate per hour, and it can literally last for a lifetime. A mistake in buying a reloading press can literally last a lifetime.

There are basically three types of reloading presses; single-stage, turret and progressive.

SINGLE-STAGE PRESS

The single-stage is the simplest, cheapest and the sturdiest of the three presses. It is referred to as a single-stage press because it performs one operation for every pull of the reloading lever.

Also only one type operations, say resizing, can be performed at a time. To seat the bullet, one has to remove the sizing die, install the seating dies and then it can be used for seating the bullet operation only. It is an ideal press when one is planning to reload in small numbers.

TURRET PRESS

The turret press is similar to the single-stage press with a fixed shellholder, but with a revolving turret in which
multiple dies are installed. To change operation, one simply rotates the appropriate die over the shellholder and operates the lever.

Because of the revolving turret, it is faster than a single-stage. Some single stage presses can be upgraded to a turret press. However, as with the single-stage press, only one operation is performed for every pull of the lever.

**PROGRESSIVE PRESS**

The progressive press is unlike either of the presses. In a progressive press, multiple dies are installed in a fixed position and the cartridge case(s) are mounted on a revolving shellholder referred to as a shellplate.

Each time the lever is pulled; the shellplate rotates one position and raises all the cartridges on it. In other words, multiple operations are performed for every single pull of the lever.

Compared to the single-stage and turret presses, progressive presses are complex, expensive and the fastest when it comes to reloading.

Thus, if ones reloading requirements are low, one should consider a single-stage press which can reload up to 50 cartridges and hour.

For moderate amount of reloading, say between 100 to 150 cartridges an hour, one should consider a turret press. Finally, for large volume reloading, a progressive press is the only option as it can reload between 500 to 600 cartridges an hour.
BUYERS GUIDE: RELOADING DIES

After the reloading press, the dies are the most important item in a reloading kit. Unlike the press, dies are specific to a caliber and therefore if one is reloading multiple calibers, multiple set of dies need to be purchased.

Dies are generally sold in sets of two- or three-dies, depending on the shape of the case.

A three-die set is needed for straight cases, while a two-die set is used for bottlenecked cases. The first die of either set performs the sizing and decapping operation. The middle die in a three-die set is used to expand the case mouth of straight cases, while in a two-die set the entire neck is expanded as the case is extracted from the first die. The last die in both the set seats the bullet and may apply a crimp.

As most modern dies have standardized on the 7/8-14 thread, they can be used with reloading presses across different brands. They are usually made of hardened steel which is cheaper or tungsten carbide which is more expensive.

Besides the cost and material difference, the steel dies require the use of case lube while resizing. Carbide dies are basically dies with a tungsten carbide coating. This makes it harder and slipperier that steel, which is why carbide dies don’t require case lube.

Thus, if one is considering reloading in large volume, carbide dies make a better buy as one saves time on frequent lubing of the cases – particularly
rifle cases which require lube for every operation in a steel die – and money on case lube itself.
ECONOMICS OF RELOADING

Is reloading worth the time, money and effort?

Since one cannot attach a value to other people’s time and effort, let us consider the monetary aspect of reloading to arrive at a decision.

To arrive at a realistic valuation, let us consider three cartridges, an online supplies retailer – in our case www.MidwayUSA.com – and calculate how much it cost to reload 1,000 rounds of ammunition for each.

Realistically speaking, one would carry a compact handgun for personal defense, a light accurate rifle for home defense and small game, and finally a powerful rifle for medium to large game. Considering the above, we have selected 9mm Parabellum with a 124-grain hollow-point bullet, .223 Remington with a 55-grain soft-point, and .308 Winchester with a 180-grain hunting bullet.

The rational for selecting the above three is quite simple. All three are among the most widely used military ammunition (though not completely accurate for .223) because of which there is an abundance brass cases available. Also the selected caliber cartridges fulfill the assumed requirements.

According to Nosler’s Reloading Guide #7, one would have to charge the 9mm with 5.1-grains of Unique gunpowder to get a muzzle velocity of 1,046 ft/sec. Similarly, for .223 Remington one would get 3,083 ft/sec with 24.5-grains of IMR 4895, and for .308 Winchester one would get 2,462 ft/sec with 39.5 grains of IMR 4895.
For 1,000 rounds of each, the gunpowder requirement would be 0.73 lb of Unique for 9mm, 3.5 lb of IMR 4895 for .223 Remington, and 5.7 lb of IMR 4895 for .308 Winchester. As both the rifle cartridge are going to be loaded with the same gunpowder, the total requirement works out to about 10 lb of IMR 4895.

Let us now look at reloading kits for beginners, particularly the ones with a single-stage press so that the kit is affordable. While there are many good reloading kits at different price points, for our valuation, we shall consider Hornady Lock-N-Load Classic Kit Deluxe.

This is because it comes with everything, including bullet puller, vernier caliper, and length gauge usually not available in kits. For simplicity, we shall use Hornady’s die sets for the three cartridges – the Custom Grade New Dimension die sets.

Let’s now assume that one will be able to reload the new cartridge cases at least 10 times, and that the reloading kits will last equally long. So now we have to apportion the cost by the number of times it’s being reused. Therefore –

- **Usage cost of cartridge case** = \( \frac{\text{purchase cost of cartridge case}}{10} \)
- **Usage cost of reloading equipment** = \( \frac{\text{purchase cost}}{\text{no. of cartridges reloaded (3x10,000)}} \)

Similarly, the cost of consumables, bullets, primers, gunpowder, would be –

- **Unit cost of consumables** = \( \frac{\text{purchase cost of bullets, powder and primers}}{1,000} \)
TOTAL COST OF RELOADING 1,000 CARTRIDGES OF .223 REM., .308 WIN. AND 9MM PARA.

<table>
<thead>
<tr>
<th>Description</th>
<th>.308 Win</th>
<th>.223 Rem</th>
<th>9mm Para</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>One Time Reloading Equipment Cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Cost</td>
<td>Usage</td>
<td>Cost per use</td>
</tr>
<tr>
<td>Hornady Custom Grade New Dimension 2-Die set for .223 Rem</td>
<td>$34.49</td>
<td>10,000</td>
<td>0.35 ¢</td>
</tr>
<tr>
<td>Hornady Custom Grade New Dimension 2-Die set for .308 Win</td>
<td>$34.49</td>
<td>10,000</td>
<td>0.35 ¢</td>
</tr>
<tr>
<td>Hornady Custom Grade New Dimension 3-Die set for 9mm</td>
<td>$43.99</td>
<td>10,000</td>
<td>0.44 ¢</td>
</tr>
<tr>
<td>Hornady Lock-N-Load Classic Kit Deluxe</td>
<td>$489.99</td>
<td>3x10,000</td>
<td>1.64 ¢</td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td>$602.96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>.308 Win</th>
<th>.223 Rem</th>
<th>9mm Para</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recurring cost of Reloading</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case*</td>
<td>1,000</td>
<td>$39.199</td>
<td>1,000</td>
</tr>
<tr>
<td>Powder#</td>
<td></td>
<td>IMR 4895</td>
<td>$128.24</td>
</tr>
<tr>
<td>Bullets</td>
<td>1,000</td>
<td>$227.45</td>
<td>1,000</td>
</tr>
<tr>
<td>Primer</td>
<td>1,000</td>
<td>$33.74</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>$428.63</td>
<td></td>
</tr>
<tr>
<td>Cost/cartridge</td>
<td></td>
<td>42.86 ¢</td>
<td></td>
</tr>
</tbody>
</table>

* Average cost of 1,000 cartridge cases has been divided by 10 to make up for it being reloaded 10 times
# Cost of gunpowder based on actual consumption of the powder and not cost of packaging units purchased

<table>
<thead>
<tr>
<th>Description</th>
<th>.308 Win</th>
<th>.223 Rem</th>
<th>9mm Para</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NET COST PER CARTRIDGE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reloading Kit Cost</td>
<td>1.64 ¢</td>
<td>1.64 ¢</td>
<td>1.64 ¢</td>
</tr>
<tr>
<td>Reloading Die Cost</td>
<td>0.35 ¢</td>
<td>0.35 ¢</td>
<td>0.44 ¢</td>
</tr>
<tr>
<td>Cartridge Cost</td>
<td>42.86 ¢</td>
<td>25.31 ¢</td>
<td>23.07 ¢</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>44.85 ¢</td>
<td>27.30 ¢</td>
<td>25.15 ¢</td>
</tr>
</tbody>
</table>

Besides reloading supplies, online retailer www.MidwayUSA.com also sells factory load similar to our reloads. In the store, 180-grains of Winchester Super X in .308 Winchester is available for 98 cents per cartridge, 55-grains
of Winchester Super X in .223 Remington is available for 90 cents, and 124-grain of Black Hills 9mm JHP is available for 69 cents.

As per our calculations, reloading is at least 50-percent cheaper than the cheapest comparable same caliber cartridge. In actual practice, reloaded ammunition is even cheaper than our calculations as cases can be reloaded up to 30 times and reloading equipment can function for decades.

To conclude, although through this booklet one would have become familiar with the process of reloading, in reality it’s best to practice the art of reloading under the guidance of an experienced reloader. It is after all, almost as dangerous as swimming, and like swimming you cannot learn it without the pool and an instructor.
SAFE RELOADING TIPS

As reloading involves the use of highly flammable materials, taking safety precautions should always be a top priority once you have taken a decision to reload, one should –

✓ Find a mentor who has extensive reloading experience and can guide you around pitfalls
✓ Get more knowledge on reloading through reloading manuals in the public library
✓ Never exceed recommended reloading data. Begin at the minimum and always keep powder charge below the maximum recommended
✓ Always wear eye protections
✓ Have a fire extinguisher handy
✓ Always use quality tools and reloading handbooks from reputed manufacturers
✓ Always shoot your reloads in a modern firearm in good condition
✓ Don’t use reload data from old reloading handbook
✓ Don’t substitute smokeless powder for blackpowder
✓ Don’t mix gunpowders
✓ Don’t mix rifle and pistol primers
✓ Don’t decap live primers. Fire them and then decap
✓ Don’t reload even a mildly damaged cartridge case. Discard it
✓ Maintain a clean reloading workbench, it lowers the chances of mistakes happening
✓ Stay alert while reloading. Don’t reload if you are tired, distracted or preoccupied
✓ Ensure that the reloading workspace is “No Smoking” zone
Even after all the above issues are addressed, one should always test the reloading recipe in small batches of 10-15 cartridges before manufacturing in large numbers.

That’s because while the reloading process today is a tried and tested practice, the devil lies in the details. For example, if the bullet is not correctly crimped, the cartridge may not develop enough pressure and the muzzle velocity of the bullet will be lower than what is mentioned in the manual. Similarly, if the bullet is seated a little deeper, gas pressure developed might be dangerously high and might damage the firearm.
APPENDIX A: POPULAR RELOADING KITS

If you're just getting started reloading ammo, you might be looking for tips and recommendations on the most popular reloading kits to get all of the equipment you need in one bundle.

Below are our recommendations for kits that seem to be popular among other firearm owners:

**RCBS ROCK CHUCKER SUPREME RELOADING KIT**

-> [Click here to see more information](#)

- Kit contains all the items you need to start reloading
- This kit has the updated case loading block, deburring tool and Accessory Handle
- Comes with Press, Reloading Scale, Uniflow Powder Measure, Hand Priming Tool, Case Loading Block, Debur Tool, Hex Key Set, Case Lube Kit, Powder Funnel and Reloading Manual

**LEE PRECISION II CHALLENGER RELOADING KIT**

-> [Click here to learn more](#)

- Includes the Lee Safety Scale which is very sensitive
- Has a power funnel to fill the case
- A chamfer tool covers the inside and
outside of the case mouth

**HORNADY LOCK N LOAD CLASSIC DELUXE RELOADING KIT**

-> Click here for more information

This is a great kit for the beginner who is serious about reloading

Kit includes: Lock-N-Load Classic Kit, Die Bushing 3 Pack, Sure-Loc Ring 6 Pack, Powder Measure Stand, Shellholder Pack including shell holder 1, 2, 5, 16, 35, Kinetic Bullet Puller, Lock-N-Load Overall Length Gauge, Vintage Tin Sign, Pistol Rotor and Metering Assembly, Steel Dial Caliper

**LYMAN T-MAG EXPERT KIT DELUXE WITH 1000XP SCALE**

-> Click here for more information

- Complete selection of the best reloading tools in one package
- Includes all the reloading tools to get started plus a trimmer and digital scale
- Combines both a new Digital Scale and Lyman's famous #55 Powder Measure

**REDDING RELOADING - BIG BOSS PRO-PAK RELOADING KIT**

-> Click here for more information

The "Big Boss" has all the desirable features of the "Boss" reloading press but it's built on a heavier frame
with a longer ram stroke for reloading magnum cartridges.

Includes The Boss Reloading Press; Model 2 Powder and Bullet Scale; Powder Trickler; Pad Style Case Lube Kit; plus much more!

APPENDIX B: RELOADING RESOURCES

RELOADING MANUALS & HANDBOOK

Hornady Handbook of Cartridge Reloading, 9th Edition

Nosler Reloading Guide #7

Hodgdon 2013 Annual Reloading Manual

Modern Reloading, 2nd Edition
Lyman Reloading Handbook, 49th Edition
Speer Reloading Manual #14
Barnes Reloading Manual No.4

**RELOADING PRESS & DIE MANUFACTURERS**

Hornady Manufacturing Co.
Lee Precision Inc.
RCBS Operations
Lyman Products Corp
Redding Reloading Equipment
Dillion Precision Products

**ONLINE SUPPLIES RETAILERS**

Amazon.com Reloading Supplies
MidwayUSA
Cabela’s
Bass Pro Shops
Brownell’s

**RELOADING RETAILER LINKS**

http://www.midwayusa.com/ebrowse.exe...edium=homepage
http://www.grafs.com/
http://www.midsouthshooterssupply.co...61%64%69%6E%67
http://www.natchezss.com/category.cf...TOKEN=42589740
http://www.bosesguns.com/Reloading_s/680.htm
http://www.kempfgunshop.com/products...ing/index.html
http://www.powdervalleyinc.com/
http://www.pathfindersports.com/p/pa...reek&NID=19588
http://www.fmreloading.com/

BULLET MANUFACTURER LINKS

http://www.precisionbullets.com/products.html
http://www.xtremebullets.com/index.htm
http://www.pennbullets.com/calibers.html
http://www.beartoothbullets.com/index.htm
http://www.precisiondelta.com/products_new.htm
http://www.berrysmfg.com/categories/2-0.php
http://www.swiftbullets.com/index2a.html
http://www.barnesbullets.com/
http://www.hornady.com/
http://www.sierrabullets.com/
http://www.meisterbullets.com/
http://www.nationalbullet.com/
http://www.bergerbullets.com/
http://www.speer-bullets.com/
http://www.nosler.com/index.php
http://www.magnusbullets.com/

RELOADING EQUIPMENT MANUFACTURER LINKS

http://www.leeprecision.com/
http://www.rcbs.com
http://dillonprecision.com/default.cfm
http://www.reddingreloading.com/
http://www.huntingtons.com/
http://www.forsterproducts.com/

**RELOADING DATA AND INFORMATION LINKS**

http://www.handloads.com/loaddata/default.asp
http://www.reloadammo.com/
http://www.reload-nrma.com/
http://wwwreloadbench.com/main.html
http://www.accuratereloading.com/reload.html
http://www.reloadersnest.com/
http://www.loaddata.com/

**POWDER MANUFACTURER LINKS**

http://www.alliantpowder.com/
http://www.accuratepowder.com
HTTP://alliantpowder.com

**BALLISTICS CALCULATOR**

http://www.eskimo.com/~jbm/calculations/traj/traj.html
MODULE #3: HOW TO HIDE YOUR GUNS AND AMMO
WHY OWNING A GUN IS MORE IMPORTANT THAN EVER

Always remember that guns are an important possession in a society like ours.

We like to brag about being the oldest democracy in the world. We portray ourselves as a tolerant and co-operative society served by an impeccable system.

But the bitter truth is that systems break sometimes - that's just inevitable.

And when the system breaks, anarchy prevails. We could be just a crisis away from anarchy.

Imagine a scenario when a massive terrorist attack happens or a catastrophic earthquake hits us and ransacks all vital installations such as power plants, water supply, communication channels etc.

Any such incident would lead to shortage of food, water and other basic supplies, which if sustained long enough, would in turn instigate widespread violence, looting and unrest in the society.

That might sound like a clip from some Hollywood disaster movie - but it’s not beyond the realm of possibility.

Now, would you like to be left defenseless against a horde of hungry survivors desperately trying to lay their hands on your family's food or water supply?

The bottom line is having firearms in your home (and knowing how to use them) can prevent your family from losing everything in such a crisis.
HOW GUNS GET TAKEN...

As a gun owner, you will never find a good reason not to be vigilant against gun-theft.

It’s a tragedy, and shame too, that a lot of people here in the USA lose their guns to burglars out of carelessness - ironically the same guns that they bought to scare off burglars.

Guns are easy to sell on streets, and that’s why stolen guns are seldom recovered.

According to a report by the US Bureau of Justice Statistics, nearly 1.4 million firearms were reported stolen in between 2005 and 2010 in burglary and other property crimes. That’s approximately 232,400 stolen firearms a year.

However, more frighteningly, the report suggested that four out of every five stolen guns were never recovered.

This pretty much establishes the cold hard fact that gun theft continues to be a major issue for firearms owners in the US. You have to have a plan to protect your guns from these criminals.

Another headache for gun owners is the federal government. It's no secret that many feel that increased gun control laws may someday lead to gun confiscations.

Senator Chuck Grassley, a Republican from Iowa, recently warned that a ban on assault weapons could eventually lead to gun confiscation throughout the country.

His argument that gun confiscation can not be the answer to mass shooting and other criminal offenses involving guns, seemed pretty much justifiable.
After all, criminals will always find a way around the law, and if the government gives in to the gun grabbers, the proposed crackdown will do very little to stop crimes, and instead would harm lawful gun owners.

Gun confiscation by law enforcement agencies during emergencies is not unheard of.

Remember, how the New Orleans Police and the National Guard confiscated thousands of guns from legal gun owners in the aftermath of the Hurricane Katrina?

City officials even refused to give back the seized guns to their respective owners until a lawsuit was filed by gun lobbying groups.

So, the bottom-line here is that in any case, you should always take every possible measure to ensure that you are not robbed of your firearm.

For that, the first and foremost thing you should try to do is find a safe place to hide your guns, and that is precisely what this guide is aimed to help you with.
GUN SAFETY TIPS WHEN CHILDREN ARE PRESENT

There is an old adage which states that, “curiosity killed the cat”. If you are a parent or you have had any contact with children, you will agree that they are naturally curious little beings.

This quality is in all children including toddlers, crawlers and teenagers. Their level of curiosity increases as they grow.

As a result, they can end up getting accidentally injured or even killed after handling a gun. Parents therefore ought to keep in mind that firearms are a real danger to children in the absence of a responsible adult, whether or not they own one.

If you own a firearm within the vicinity of your home, it is very important to keep it out of sight and out of reach from children.

Before parents decide to buy a firearm, they should first think about where that firearm will be stored once it is brought to the house.

Hiding a gun under the mattress is hardly considered storage, especially if that home has children. Neither is a wrapped gun in a piece of clothing placed in a shoe box on the upper shelf of a closet where parents believe their children would never look for it.

If these two are what you consider as the first best and safe hiding places for your firearm, think again. It will be wise to seek help from a trained professional on better and safer ways to hide your firearm from children.
A locked safe, a locked cabinet, a locked drawer or a locked box are safer storage places for your firearm in the case of children, as compared to under the mattress or in the closet.

It is important to talk to children about the potential dangers guns can inflict. They should also be taught on what to do if they encounter a gun, for example, by telling them that if they spot a gun that has been left lying around, they should not handle it and that the best thing to do would be to leave that area and inform an adult.

Parents can also put their young children through the gun accident prevention program known as the Eddie Eagle Gun Safety Program that was developed by the National Rifle Association (NRA) of America. The program has four basic rules that children are taught to follow. The rules include;

**STOP:** meaning that the child or children must stop whatever he/she/they is/were doing before they saw the gun

**DO NOT TOUCH:** meaning he/she/they must not handle the gun

**LEAVE THE AREA:** meaning he/she/they must immediately get away from where the gun is

**TELL AN ADULT RIGHT AWAY:** he/she/they must inform a responsible person like a parent immediately

**GUN EDUCATION AND DISCUSSION WITH CHILDREN**

Children will do what they see. How do you expect children to practice safety precautions if their parents are not doing the same?

Education on gun safety to children begins at home with parents practicing gun safety themselves. Children learn best by example and will follow the example you set, whether good or bad.
Many young children get exposed to a lot of things that touch on guns, like watching cartoons on TV, computer and video games, movies, etc.

Many questions naturally arise as a result of their exposure and they even begin to act out what they see, read or hear about guns.

It is therefore the responsibility of parents to address those questions and behaviors in as honest and open way as possible.

In the process of talking to children about guns, parents should always remember to do it in a manner the children can understand and relate to.

For instance, a parent can use a real tragedy which the children are familiar with, that happened and was as a result of unsafe or careless ways of handling a gun, to explain the dangers of a gun.

Gun talks are very important, especially when teaching children about the difference between an actual gun and a toy gun.

An actual gun and a toy gun may look the same but one is extremely dangerous than the other; this point should be highly emphasized by the parent when talking to children about guns.

The parent should go ahead to tell the child that if the trigger of an actual loaded gun is pulled, it will shoot and end up hurting or killing someone.

**CHILDREN HANDLING GUNS**

Parents may feel their children are mature enough to handle a gun. If this is the case for you, it should follow that the child is in the presence of a qualified adult and that the child has already gone through proper and extensive training in handling a gun, or is currently undergoing training.
You should never allow children to handle or use a gun unless he/she is under supervision of a responsible adult. Parents should also ensure that children handling guns adhere to gun safety rules.

The children should be constantly reminded that when handling a gun, it is best always keep the gun pointed in a safe direction and when walking, to point the gun to the ground.

Parents should always insist to their children to never point a gun at anyone, and that they should be cautious of their surroundings and the location of other people.

Most importantly, they (children) should always assume that the gun they are handling is loaded, thus their finger should always be kept off the trigger.
COMMON GUN HIDING MISTAKES

Knowing where to hide your guns is important, but knowing where to NOT hide your guns is vital!

Many criminals are actually quite smart. They know common hiding places where you could store your weapons.

This includes places like:

- Nightstand drawers
- Bedside table drawers
- Under your mattress or pillow
- Inside a gun safe
- In shoeboxes at the top of closets
- Plus many more.

In a matter of minutes, a savvy criminal can get into your house and look into these common spots.

This is why you'll want to use some of the smarter hiding spots shared later in this report.

However, if you have an old gun or broken gun, you might consider hiding it in one of these obvious hiding spots.

This is because once the criminal finds it he or she might leave your home thinking they've found your firearms. They might never look further to uncover your best gun supply.
A WORD ON GUN SAFES...

Gun safes are obvious to many gun thieves. When they see gun safes, they salivate because they know EVERY gun you own is in that safe!

All they have to do is steal the entire safe, transport it to their safe house and pry it open.

So if you have a gun safe, be sure it is bolted to the ground to make it more difficult to steal outright.
HOW AND WHERE TO HIDE YOUR GUNS

It’s a common belief that a gun safe is the most secured place to hide one’s guns in an average household - especially if you have children in the house.

But imagine a burglar broke into your house at 3 am, what then?

You would not even have the time to reach your gun safe and the take out a weapon.

Therefore, for the sake of self-defense, it's always important that you choose only those gun safes that could give you instant access during an emergency situation.

Before hiding your guns in a strategic place in your house, you need to make sure that the rest of the family are aware of where to find them. But more importantly, first you need to teach your family members how to use those guns.

Always remember, having a gun in your hands and not knowing how to use it is even worse than not having a gun and facing the same emergency.

Therefore every able person in the family should have the knowledge on how to clean, load, empty and fire the weapons in your household.

Once all your family members are trained, you should try to locate an easily accessible, yet secretive location inside your home to hide your gun.

This is to ensure that while your family knows where to look for the gun during an emergency, no stranger ever gets a clue about it.

Here are a few good places where you can safely hide your guns without raising any suspicion whatsoever:
**NIGHT STANDS AND END TABLES**

Night stands and end tables are good places to hide your guns so that you can grab them at a moment's notice when an intruder is present.

However, they're also likely spots to be checked by burglars if your home is robbed. Therefore you might want to have some sort of secret hidden drawer that is not obvious.

Creating a hidden drawer isn't all that difficult. All you need to do is measure the interior of the drawer and then cut a normal plywood board to fit. Make sure you leave approximately 1/16 inches of leeway while measuring so that it can slide down and up.

Also, have the wood properly painted and finished so it perfectly blends with the rest of the furniture. You can use a few pieces of dowel rods (or something similar) in order lay the guns flat.

If you don't want to hack your existing night stand or end table, you can purchase ready-made end tables and night stands with hidden compartments already included.

These often have normal "decoy" drawers where you can store your everyday stuff then they have a secret compartment or drawer for your firearms.

Having a hidden gun in your nightstand or end table is a good idea because they're the locations where you're most likely to be if something goes down.

If for some reason this isn't true in your household then you will want a different hiding space.
EMPTY CEREAL BOXES

The odds that a burglar would break into your house and feel like having some cereal before leaving is ridiculously low.

We can extend that assumption with law enforcement agents too - after all, what kind of police officer would ever step into your house to confiscate guns and open a box of cereal in the process?

But then, if there are children at your home, maybe you should avoid this technique. Also, it is recommended that you seal the weapon in a ziploc bag to avoid corrosion.

FRAMED PICTURES AND PAINTINGS

Large-sized pictures or paintings with thick frames can also be improvised in order to conceal smaller firearms, for example a standard Ruger GP100.

There are a number of manufacturers that sell picture frames with hidden gun compartments.

Alternatively, you can also build such frames on your own instead of spending money on a ready-to-use picture safe.

You will just require an oversized picture frame. Cut the rear end of the frame with a blade. Peel the corner neatly and then attach a Velcro to it so it can easily hold a small firearm. Once done, just reapply the peeled part and hang the picture back on where it was - simple as that!

When hiding guns in picture or painting frames, make sure you can get to them fast and easy.

For example, don't hide your gun in a picture frame next to the front door where a burglar might enter.
Instead, hide it in a frame in a bedroom where you could escape to during an invasion and access it quickly.

**BREAK DOWN LARGER FIREARMS INTO PIECES AND THEN HIDE THEM**

Hiding larger firearms such as a shotgun or a semi-automatic rifle is much harder than hiding smaller weapons.

The best way to go about that task is to disassemble the gun first and then hide the individual components amongst ordinary household stuff, such as your regular first aid kit, small luggage, food containers, etc.

The best part of disassembling and then hiding is that you don’t have to be worried about the safety factor even if you have children at home.

But be advised that this hiding tactic is not viable if you have just one gun in your household and plan to use it during emergency situations.

You simply won't be able to gather all of the various parts and re-assemble the firearm fast enough to fend off invaders.

**HOLLOWED OUT BOOKS**

You have already seen this one in movies. Even though all of us are familiar with this tactic, a book would probably be the last thing anybody would suspect to hold a gun inside it.

That’s why hollowed out books always make great gun hideouts.
Just pick a book that you really hate, and wish was never written, then cut the middle of the pages using a box cutter (depending on how big or small your gun is).

Just have your gun tucked in, and keep the book in a shelf with other books having more or less the same size.

You can also use an old cookbook, for example, an old edition of the *Joy of Cooking*. That way you can keep your gun in the kitchen too. Tuck it in amongst other newer cookbooks for better concealment.

**INSIDE A COLD AIR RETURN OR VENT**

If you have a cold air return or vent in your bedroom, it can make a perfect hideout for your gun.

The closer to your bed, the better!

It's a common knowledge that most burglaries are usually executed late at night - when you would most likely be sleeping. Therefore, by having your gun hidden somewhere near to where you sleep, you can quickly reach out for it during an emergency.

But make sure to choose a suitable spot so no one can easily see it even if the cover is pulled off.

**CLOCK SAFE**

This is another brilliant tactic that you can resort to for hiding your firearm in plain sight. A well designed clock safe would hardly raise any suspicion in the minds of a stranger.

A typical big, floor-standing grandfather clock
usually has a lot of empty space inside it - you can easily use that for concealing your firearm or ammunition.

There are more than a handful of manufacturers who sell clock safes at affordable prices. Even your nearest Walmart probably has one of these cheaper, but effective clock safes that would cost you just over $10 or so.

**SINKS AND TOILETS**

Let’s move out from hideout tactics involving your living room and bedroom for a moment - toilets and sinks also make a perfect place to hide any small firearm that you own.

It's cheaper than most other tactics too - all you would require is a waterproof plastic to prevent the gun from wetting.

Put your gun in the plastic, seal it and then place it inside the toilet tank. Since any intruder is less likely to ever peep into your toilet tank, this could well be termed as one of the stealthiest tactic we have discussed so far.

Bathroom sinks make another great hideout (one that is easily accessible too) for your guns.

These days, most sinks come with a decorative fake drawer in them in addition to a number of functional drawers on the sides. These drawers can actually be slid sideways across the entire length of the plumbing. You can easily place a shallow drawer towards the front of the sink bowl.

Such a setup leaves you with abundant space to conceal a gun in between the fake drawer and the sink. Because of its slightly awkward placement, it is much more likely to skip the eyes of even a regular visitor.
If you have women from a certain age-group in your family, then you could also use tampon boxes to hide smaller handguns.

It's very unlikely that an intruder would go through a box of tampons in search of a gun!

**BED SAFES**

If you prefer bed safes over other hideouts, then you might want to have a look at the BedBunker designed by Hercules Research Corporation.

In case you are curious, yes - this is the same bed safe that was featured in the Doomsday Preppers.

Weighing somewhere around 1,300 lb, the queen-sized variant of the product is fairly compact and does not need much space (78 x 60 x 14 inches). It is made of sturdy 10 gauge steel body, with an equally sturdy 1/4 inch thick hinged doors.

The BedBunker not only makes a great gun safe, but you can also use it hide other valuable items in your household, including important papers, jewelleries, survival foods etc. The only turndown is, it’s a bit more expensive than you would probably like.

However, if you are not planning to invest on a BedBunker anytime soon, then there are other methods too. For smaller handguns, you can place them pretty much everywhere using the previously mentioned nightstand technique.

Any typical bed usually offers abundant room to place even larger guns such as an assault rifle or a shotgun.
If you own a bed that rests on a frame with a little elevation above the ground, you could always design a short ledge that extends inwards towards the bed frame.

For better stealth, try to ensure that the ledge looks like as if it was providing some structural support to your bed.

**FAKE ELECTRICAL SWITCH**

You can also hide your handgun and/or ammunitions inside a fake electrical switch having a width of at least two or three outlets. It’s probably the best hidden location that you can cling onto a wall.

Just pick up an electrical box of suitable size and then screw it on the wall. You can unscrew the faceplate with a small screwdriver whenever you need to access your gun.

This technique can also be used to create a hidden location with a fake electrical break panel door in your home’s utility area.

**EMPTY PAINT AND OIL CANS**

You can also put your handgun inside an empty paint or oil can and then keep them in the garage.

But before you put the gun in, make sure to clean and fully dry the inside of the can.

A quick word here - if you want to hide your ammo using the same technique, then vacuum seal them so as to nullify any adverse effect of temperature fluctuation.
**BASEMENT**

Hiding your firearms becomes immensely easier if you are one of those with a utility room or a basement.

You could always install a number of fake pipes in order to conceal your guns. You could also use a normal pipe with a Y-extension attached to it - the only problem with real pipes is that in case you need to break it to access your gun, you could very well be flooding the basement.

Many responsible gun owners prefer to install a series of fake pipes near the actual pipe. However, it would be much more practical if you disassembled the gun before hiding it - because a fully assembled gun would require you to install suspiciously large-sized pipes.

**INSIDE DEAD SPACES OF YOUR HOUSE**

This tactic varies depending on how your house is constructed. But no matter what type of house you dwell in, it most likely has abundant dead spaces located on various locations - for example, beneath the stairwells.

Yes, stairwells make perfect gun hideouts. Simply, un hinge the vent-area and you will gain access to a pretty vast space inside.

This area could be utilized to hide massive amount of guns and ammunition from plain sight. Do place a real air filter behind the air vent to avoid any suspicion.

**OLD, BROKEN FRIDGE**

If you have an old, dysfunctional fridge somewhere in your backyard or garage, you could always use it as a safe location to hide your firearms.
An old, busted refrigerator standing at the backyard is less likely to draw anyone’s attention.

Much like the bathroom sink technique already discussed, you can also modify your wasted refrigerator to be a perfect firearm hiding place. All you need to do is remove all the drawers, make a hole at the bottom.

Just place your guns and ammunition there, cover the hole with duct tape and slide back the drawer to its original position.

**BURIED COFFEE CAN**

Today, you get loads of cheap garden items that you can use for marking the location of a buried coffee can. They are easy to get and convenient too.

Just put your guns and ammo inside the can, add some desiccant and then bury it in your garden.

Remember though - desiccants don’t necessarily mean water absorbing. Rather it works more as something you can use to prevent the gun from being moldy.

Desiccants are easy to find - even your average purses or shoe boxes usually contain lots of desiccants buried in them at the bottom.

Also, make sure to bury the can in a comparatively shallow ground. It is recommended that you place it approximately a foot underground. Don’t forget to mark the spot with something easily identifiable - for example a statue.

This tactic is for long-term firearm survival. It's not going to be helpful if someone has invaded your home.

Rather, this technique is so you will have a gun if anarchy has ensued and your other guns have been stolen or confiscated.
**AIRBAG IN YOUR CAR**

Airbags also make great gun hideouts - but your passengers probably won’t appreciate it much if you ever ended up in a wreck.

But then, this could prove to be an extremely helpful gun-hiding strategy during potentially dangerous situation on the road.

First you need to cautiously pry the protective layer of the airbag - be extremely careful as it is going to be an extremely tricky task. You would probably be safer with a painters mask, hand gloves and goggles.

There's also the possibility that the lubricating powder inside the airbag will come out and spoil the surrounding areas.

If you think you won’t be able to pull it off yourself, better hire professionals. It is recommended that you get the job done during a regular cleaning of the car.

Irrespective of how you choose to remove the protective layer, you will have more than enough space to safely hide your gun and ammunitions. So, it does not become suspiciously noisy, you should fill the empty space with either pieces of clothes or bubble wraps.

Also, the legality of this technique will depend greatly on where you reside. It is recommended that you check local and state laws before you hide a gun in your vehicle.

**CAR SEAT CUSHIONS**

Even though there is absolutely nothing wrong with hiding a gun beneath the seat, the safer choice would be to store it inside the seat.
You might have noticed how car seats tend to be a lot thicker than any regular household couch - this of course, is to give it a better ability to absorb shock when you are on the road.

You can exploit that added thickness in your favor and cut a slit along the width of the front end of the seat. For better concealment, bring some matching fabric or leather along with some weak Velcro.

When you sew them properly, it should look like a decor. Next, use a sharp knife (or a box cutter) to carve a hole (preferably 1 foot wide) into it.. Please note, it’s not going to be a walk in the park since these cushions are usually made of pretty tough materials.

Once you are done cutting the hole, proceed on to hollow out approximately one inch in diameter. Again, before hiding guns in your car be sure to know the law!
A FEW FINAL WORDS ON HIDING GUNS DURING A CONFISCATION

So, do you see a gun confiscation coming?

It may not happen anytime soon - but then, you never know when shit hits the fan.

This means it's probably in your best interest to go ahead and prepare now in case it happens.

Hiding a gun from agents of a government or militia is way different (and much more challenging) than hiding it from your typical neighborhood burglar.

This is because the last time we checked burglars did not bring along sniffing canines to track your firearms!

Dogs know how your hidden firearms are supposed to smell like. And it's not the plastics or metals that the dogs smell. They are trained to sniff out gun powder!

You might think that if you have never fired a single shot from your gun that a dog wouldn't be able to find it. That's not the case!

Every gun is test fired during its manufacturing - and that gives it the smell of burnt gunpowder.

So, even if you have not used the gun even once after the purchase, the leftover smell from the test fire is enough for the canine to detect.

While most dogs are inherently great at sniffing, there are others that won't be as smart or as well trained.
But you cannot leave things to be decided solely on the intelligence or training of the dog.

No matter how smart your moves are - hiding your firearms from sniffer dogs will be infinitely tougher than you anticipate.

The best you could do is confuse them and their handlers and deviate their attention from the actual hideouts.

This could include putting "decoy" guns in easy-to-find spots. These would be guns that you intend for the agents to locate so that they will think they've obtained your gun supply.

With this strategy though, you'll hide your "best" guns somewhere else. If all goes according to plan, you'll still have your preferred firearms while the government agents will walk away with your less desired guns.

Another tactic is to camouflage the smell of your guns by putting other scents on them and then wrapping them up in zip lock baggies.

There's no guarantee that this strategy will distract the dog, but it could and that's worth the risk!