Chapter 7

SHOTGUNS & SHOTGUN SHOOTING



Objectives

- Identify the three major parts of a shotgun
- Identify the four types of actions found on shotguns
- Explain gauge and choke
- Explain the functions and limitations of safeties
- Identify the components of a shotshell
- Know how a shell fires.



Parts of a Shotgun

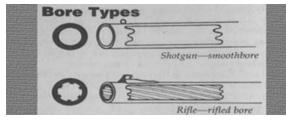


There are three major parts that make up any shotgun you pick up. These are the action (lock), stock and barrel.

- The **action** is the part of the shotgun that loads, fires and ejects the shells
- The **stock** is the part of the shotgun you hold. It helps you to hold, point and fire the gun.
- The **barrel** is the part of the gun that sends the shot pellets towards the target.

Why are Shotguns Called Smoothbores?

Shotguns generally have barrels that are smooth on the inside, much like a stove pipe. This is why they are called smoothbores. This style barrel is designed to shoot loose pellets called shot.



Some shotguns have barrels that rifled. This means there are grooves that form a twist in the

barrel which add a spin to the projectile. This style barrel is used for slugs or sabots only.

Shotgun Action Types

There are four common types of actions. They are pump-action, semi-automatic, bolt action, hinge/ break action. The types of action you use will be dictated by your personal preference.

Pump-action



These shotguns are sometimes called slide actions. You must pump, or slide, the forend back and forth to work this type of action. A pump action shotgun usually has a tubular magazine.

To open the action, pull the forend back toward the trigger guard. To close the action, push the forend away from the trigger guard. If the gun is cocked (ready to fire) you must press the action lock button or lever before the action will open. Usually the action lock button is located just in front of or just behind the trigger guard.

Semi-automatic



These are sometimes called self-loading or autoloading. Many people often mistakenly call these shotguns "automatic shotguns". Automatic firearms continue to fire as long as the trigger is depressed. Automatic

firearms are illegal to possess in New Jersey.

The semi-automatic shotgun fires and loads fresh shells into the magazine each time the trigger is pulled. The trigger must be pulled for every shot. Each time the trigger is pulled the gun will fire, eject the empty and load a fresh shell. The action usually remains open after the last round of ammunition is fired and there is no more ammunition in the magazine.

To open the semi-automatic shotgun, you pull back on the operating handle on the bolt. Usually the action will remain open if the operating handle is pulled all the way back. To close the action all you have to do is press the release button. Semi-automatics require some skill and strength to work the action. Make sure you can safely work the action before attempting to load the firearm.

Bolt action



These shotguns are simple to use. Lift the bolt handle up and pull it back to open the action. To close the action, push the bolt forward and down. When the bolt is open, the shotgun cannot fire.

After the shotgun is fired, manually working the bolt ejects the empty and loads a fresh shell from the magazine.

Hinge-action or break action



These shotguns are easy to open, close and inspect. Push the release lever and the action will open. It is easy to tell if a break action shotgun is loaded or if there are any obstructions by looking down the barrel through the chamber. To close the action, simply lift the stock upward to lock the barrel.

Hinge-action shotguns can have more then one barrel. Double-barrel shotguns can be over-and-under or side by side. Hinge-action firearms have no magazines.

Some hinge-actions shotguns are hammer guns.

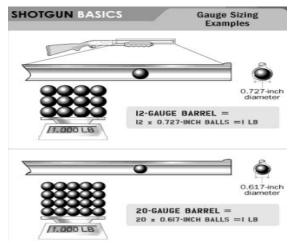


Hammer guns have an external hammer to cock the firing pin. This external hammer is generally the only safety on the gun. Hammer guns require some extra skill and strength. One must learn to cock the hammer only when the target is acquired. Once the hammer is cocked, the only way to release the hammer is to pull the trigger. To prevent the gun from firing, you must have enough strength in your thumb to control the hammer while squeezing the trigger without letting it slip from your thumb. If the hammer slips from your thumb the gun will fire. This is not the best choice of guns for the beginner shooter.

Gauge

The term gauge refers to the size of the shotgun. The gauge of the shotguns originally were determined by the number of lead balls the diameter of the gun's bore that it took to weigh a pound. Therefore, if you had lead balls the same diameter as a 12-gauge shotgun bore, it would take 12 of those balls to equal a pound. Smaller bores would take more balls to equal a pound. This is why a 28 gauge is smaller then a

10 gauge. It takes more balls of a smaller size to equal a pound. Twelve and 20 gauge shotguns are the most popular gauges you will see in the field.



The .410 is the only shotgun that is not measured this way. Notice how the size is written. It is actually a caliber because it has a (.) in front of the number. This is the same way a rifle's bore would be measured. If the .410 was to measured by gauge it would be equal to about a 67 gauge.

How Do I Know What Gauge My Shotgun Is?

Look on the side of the barrel.

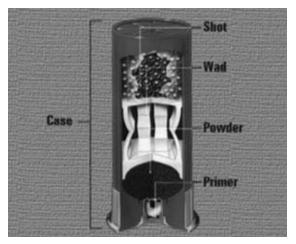


Generally, you will find the gauge and chamber length stamped on the barrel. This is called the **barrel stamp**. Some older or custom

firearms may not have this stamp. Make sure you know what the gauge of your firearm is before you attempt to shoot the gun. If you are unsure of the gauge or chamber length, take it to a reputable gun smith to check.

Shotgun Shells

Shotguns are the most versatile, hunting firearm because of the shells they fire. A shell consists of a case, primer, powder, wad, and shot.



The case is the container for all the shell's components. There are four steps to how a firearm shoots. The four steps are:

- 1. The primer creates a spark when struck by the firing pin.
- 2. This ignites the powder.
- 3. The gas pressure created by the ignited powder forces the wad and shot out of the barrel.
- 4. The wad separates the shot from the powder and keeps a tight seal on the barrel so the pressure created by the burning powder does not escape past the shot. The wad also protects the

shot from being deformed while traveling out of the barrel.



Shotgun shells come in various colors. Never assume the gauge of the gun a shell can be fired in based upon color. The only way to be sure of the size of a shotgun shell is to look at the head stamp. The head stamp is on the metal end of the shell and the stamp is found on the top of it.



Shotgun shells come in different lengths also. Shotguns can only safely fire specific length shells, depending upon the guns chamber length (chamber length can be found on the barrel stamp). If a gun has a 3-inch chamber, it can fire 3-inch or smaller shells. A 3 ½-inch shell could be placed into the action and fired but it may cause the barrel to explode.

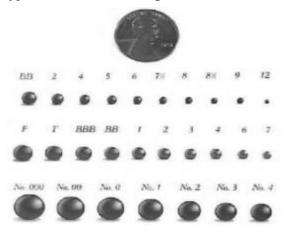
Take care to remove all shells from your pockets when you are done hunting or shooting and put them back into their proper box. By taking this precaution, mistakenly loading the

wrong ammunition into the gun will be avoided

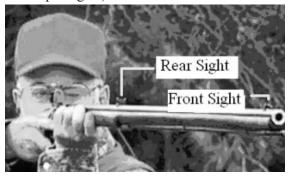


Shot

Shot comes in many different sizes. The hunting or shooting activity will determine the type and size of shot being used.



A deer hunter may use buck shot or a single projectile (when shooting a single projectile, the gun must have front and rear or telescopic sights).



The small game hunter may use fine shot in size #4 or smaller and will determine the size with the game being sought. Turkey hunters may use shot ranging from #4 to #7 1/2 fine shot.

Waterfowlers must use nontoxic shot and it cannot be larger than size T fine shot. The reason that you must use non-toxic loads when hunting ducks, rails, or geese is that the birds may accidentally ingest spent shot. Birds do so naturally, as they store small pebbles in their gizzards to help them digest their food. If they ingested spent lead pellets, they can potentially die of lead poisoning.

The only type of nontoxic shot that used to be available to waterfowlers was steel shot. Steel shot is lighter than lead and therefore loses its downrange energy more quickly. This, cuts down on waterfowlers' effective ranges. However, with today's technologies alternatives to steel have been found. They are bismuth, hevi-shot, and tungsten.

Chokes



The muzzle end of a shotgun barrel has a choke, which is used to control the spread of shot downrange. The choke is much like the nozzle on a garden hose. A full choke constricts the water into a tight stream. A cylinder choke opens the spray up to shoot a wider cone.

Newer shotguns will generally have screw-in choke tubes, giving hunters the ability to change the choke size. A grouse hunter will most likely use an improved cylinder choke, whereas a turkey hunter will use a full or extrafull choke.

Safeties

Safeties are placed on guns to protect against an accidental discharge. However, safeties are a mechanical device and can fail. The only true safety on any gun is the person holding the firearm. Become familiar with the gun by reading the manufacturers instructions. Any time you pick up a firearm, the first thing you should do is check to see if it is loaded.

When handling a firearm, the three primary safety rules should be obeyed.

- 1. Treat every firearm as if it were loaded.
- 2. Always keep the muzzle pointed in a safe direction.

3. Be sure of your target and beyond.

If these safety rules are followed each and every time you use your firearm, you will never have an accident.

Depending on the make and model of your shotgun, the safety may be located in different areas. Take note of where the safety is when reading the manufacturer's instructions. Two very common safeties are the tang and crossbolt.

Tang safeties are located on the top of the gun just to the rear of the receiver. To use this safety, simply push it forward with your thumb. To put the safety back on, push it



in the opposite direction. Usually, there will be a red dot indicating the safety is off RED = READY. Only take the safety off when you have identified your target and know it is safe beyond it.

Crossbolt safeties are found on the front or backside of the trigger guard. To operate them,

push the bolt from one side toward the other. A right-handed gun's crossbolt safety will be pushed from the right to the left. For a left-handed gun it would be pushed to the right to



the left. When the safety is off, there should be a band of red around the bolt - signifying that the gun is ready to fire.

Remember that safeties are mechanical devices and can fail. Never trust a safety, the only true safety on a firearm is you.

Loading A Shotgun

Now that you are familiar with the parts of a shotgun and the required ammunition you will need to know how to safely load and unload the firearm. The following steps are a basic guide for you to follow. Always check the manufactures directions for a guide on loading and unloading each firearm.

Loading

- Check to be sure that the firearm is unloaded.
- Always keep the muzzle pointed in a safe direction.
- Open the action.
- Choose the proper shotgun shell for the firearm.
- Place the shotgun shell into the action.
- Load the magazine with the proper size ammunition if applicable.
- Close the action.
- The firearm is now loaded and ready to fire.

Unloading

- Be sure the safety is on.
- Keep the muzzle pointed in a safe direction.
- Open the action.
- Remove the shotgun shell.
- Empty the magazine if loaded.
- Check the firearm again to be sure it is completely unloaded.

Shotgun Shooting

Before handling firearms, always be sure to check that they are unloaded. Never accept a firearm from anyone if the action is closed or you do not know how to operate it safely. Be sure to always check that no shotgun shells are in the action or magazine.



The first step in becoming a good shotgun shooter is determining your dominant eye. Just because you are right handed does not mean you are right eye dominant. To determine your dominant eye, you will need a partner. Have someone stand about 10 feet away from you. Put your hand together forming a small triangle with thumbs and index fingers.

Holding your arms straight out in front of you,

look through the hole you formed at your partners nose. They can tell you which eye (of yours) they see - this is your dominant eye.



Now that you have determined your dominant eye, you need to learn your proper stance.

Stand with your feet shoulder width apart. For a right eye dominant shooter, you will have your left foot slightly in front of your right, with the toes of your left foot



pointing in the direction of your target.

Bend your left knee slightly, this will cause you to lean forward a bit - helping to absorb the recoil from the shot (left-eye dominant shooters will use the opposite leg in previous instructions). Now raise the gun to your cheek under your dominant eye. Be sure to place the butt of the gun firmly in the crook of your shoulder. When looking down the barrel, all you should see is the front bead. If you see any part of the gun barrel, you will be shooting high or low.



Transporting and Storing Firearms

By law in NJ, when transporting a firearm in a vehicle, it must be unloaded and cased. The case can either be hard or soft. Hard cases offer more protection to the gun from being dented or having the sights being jostled. Make sure that the case is in proper working

order (i.e. the latches all work, the drawstring is intact, or the zipper still closes the case completely).

Firearms should always be stored under lock and key. Ammunition should also be stored under lock and key and in a separate area from firearms.



Another consideration is to make sure that the area where the firearms are stored stays dry. If any moisture is present, the guns will rust.

Another safety precaution is to put a trigger lock on each gun. They are simple to use and can quickly be taken on and off of a gun.