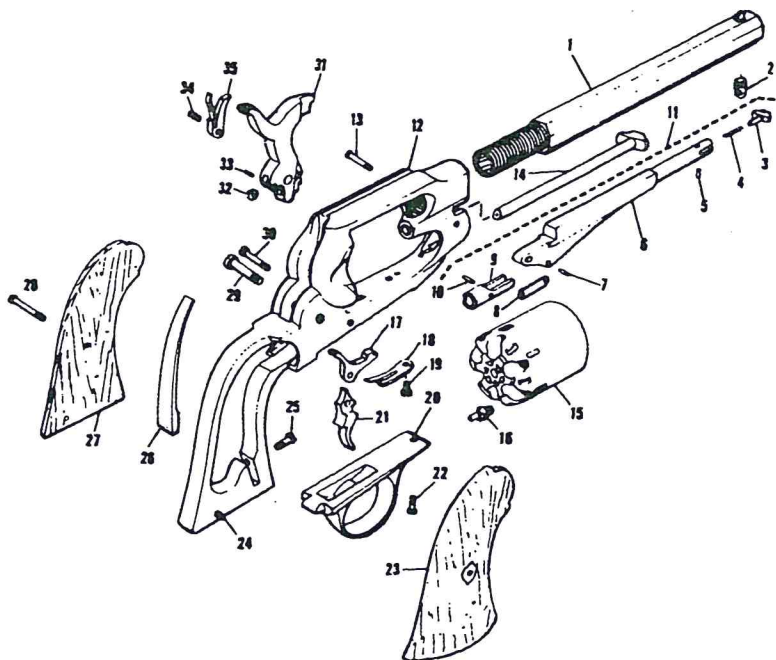


ARMY AND NAVY



Components

Dwg. Pc. Mk. Number	Part Number	Description	Dwg. Pc. Mk. Number	Part Number	Description
1*	6994002	Barrel (.36 Cal.)	16	6994020	Nipple
1a*	6994003	Barrel (.44 Cal.)	17	6994021	Cylinder Stop
2	6994004	Loading Lever Retainer	18	6994022	Trigger & Cylinder Stop Spring
3	6994005	Loading Lever Catch	19	6994023	Spring Retainer Screw
4	6994006	Catch Spring	20	6994024	Trigger Guard
5	6994007	Catch Pin	21	6994025	Trigger
6	6994008	Loading Lever (.36 Cal.)	22	6994026	Trigger Guard Screw
6a	6994009	Loading Lever (.44 Cal.)	23	6994027	Right Grip
7	6994010	Link Pin	24	6994028	Grip Pin
8	6994011	Link	25	6994029	Main Spring Screw
9	6994012	Bullet Rammer (.36 Cal.)	26	6994030	Main Spring
9a	6994013	Bullet Rammer (.44 Cal.)	27	6994031	Left Grip
10	6994014	Rear Rammer Pin	28	6994032	Grip Screw
11	6010101	Loading Lever Assembly (.36 Cal.)	29	6994033	Hammer Screw
11a	6010100	Loading Lever Assembly (.44 Cal.)	30	6994034	Trigger & Cylinder Stop Screw
12*	6994015	Frame	31	6994035	Hammer
13	6994016	Loading Lever Screw	32	6994036	Roller
14	6994017	Cylinder Pin	33	6994037	Roller Pin
15*	6994018	Cylinder (.36 Cal.)	34	6994038	Hand Screw
15a*	6994019	Cylinder (.44 Cal.)	35	6994039	Hand

*FACTORY INSTALLATION REQUIRED

HOW TO LOAD . . .


THE PERCUSSION REVOLVER: BALL AND CONICAL

For guns which dominated the firearms scene for such a short time — roughly thirty years — the caplock revolvers have proved a tremendous attraction to the American shooter. These guns appeal not only to skirmishers and other Civil War buffs but also to anyone who has ever been the least interested in the settling of the West. Replicas of the early Colt and Remington revolvers launched the current interest in modern muzzle-loaders and continue to be the most popular single type of black powder firearm.

Today these revolvers are made of modern steels and are virtually impossible to damage using sporting black powder due to their limited chamber capacity. For just a couple of pennies a shot, the plinker or target shooter can fill in a session at the range with big-bore shooting of either the .36 or .44 revolvers and obtain performance close to that of centerfire guns of the same caliber.

Unlike their centerfire counterparts the caplock revolvers are fun throughout the loading, shooting and cleaning stages of a day in the field or at the range. The successful shooter is the one who lavishes the most love and attention upon his "jewel." Now here are some tips on loading and shooting which can provide the basis for hours of enjoyable black powder shooting.

Loading: Blocked flash channels and accumulated grease or solvent are the chief causes for misfires and "weak" shots. The key to success is to ensure these factors don't interfere with your shooting. So, before pouring that first charge into a chamber, dry the bore and each chamber with clean dry patches. Hold the gun up to a strong light source and look through the nipple channels — a strong glow means a clear channel. This cleaning and examination is best done with the cylinder out of the revolver but can be accomplished without disassembly if necessary. The last step prior to loading is to snap a cap or two on each nipple to completely dry the flash channels and chamber areas. Holding the muzzle near a bit of dust, scrap of patching etc. will visibly prove the arm's readiness when the object in front of the muzzle responds to the cap's blast.

Hold the revolver upright in your left hand and pour a measured amount of black powder into each chamber. If the gun is to be fired right away at a target you may choose to load all six chambers. If, on the other hand, the pistol will be carried in the field, the safest course is to load only five chambers and let down the hammer on the  of the empty sixth.

Place a ball (sprue up and centered for uniformity) over each chamber mouth, rotate the cylinder to position the ball under the rammer and smoothly seat the ball firmly over the charge . . . and below the chamber mouth. Try to exert the same force while loading each ball. Remember — watch out for that powderless safety chamber. The chamber mouth should shave a thin ring of lead from the ball — this is your best insurance against multiple discharge.

Seal and lubricate each loaded chamber by filling the space remaining above each bullet with your favorite lubricant, such as Crisco or Hodgdon's Revolver Lubricant. These lubricants soften powder fouling and help prevent multiple discharges.

Finally, point the muzzle in a safe direction (as you should have been doing all along) and cap each loaded chamber. If the caps are a bit loose squeeze the skirts together a bit for a snug fit on the nipple — otherwise recoil will "de-cap" your pistol in one or two shots. Now, with all the loaded chambers capped, lower the hammer onto the empty chamber. Don't rely on safety pins or notches. Your pistol is ready to cock and fire. Handle it carefully — just as you would a modern cartridge revolver.

DISASSEMBLY AND CLEANING OF RIFLES AND REVOLVERS

You must clean your rifle or pistol after each shooting session to prevent rust and corrosion from damaging the metal parts. The Lyman Great Plains Rifle, Trade Rifle, Deerstalker or Plains Pistol may be easily disassembled for cleaning by removing the ramrod, driving out the barrel wedge in the forearm, drawing the hammer to full cock and lifting the barrel (muzzle first) out of stock. The hooked breech will slip right out of the tang unit with no further disassembly needed. Of course, these Lyman guns can be cleaned without any disassembly but care should be taken to prevent water and solvents from entering the stock or lock mechanism.

DISASSEMBLY OF THE 1851/1860 REVOLVER

1. Using a brass drift, drive the barrel wedge from right to left until stopped by the wedge retaining screw.
2. Draw the hammer to half-cock, release the loading lever latch and rotate the cylinder slightly until a chamber wall is directly in front of the bullet plunger.
3. Operate the loading lever as if you were seating a ball. The plunger will be stopped by the cylinder wall and continuing pressure on the loading lever will cause the Barrel Assembly to separate from the two frame alignment pins and slide off the cylinder pin.
4. Slide the cylinder off the cylinder pin.

NOTE: The pistol is now in its major components which will allow satisfactory cleaning. Detailed disassembly follows.

CLEANING TIP

Dry your revolver parts in the oven. Place all the pieces in a pie plate and "cook" them for 10 minutes at 200 degrees. This dries even the tiniest crevice.

Barrel and Lever Group: Remove the loading lever screw and draw the Lever Assembly from the Barrel Assembly. Removal of the plunger screw will separate the plunger from the loading lever proper. The 1860 Army has no loading lever screw. Removal of the plunger screw will separate the assembly from the barrel as well as the plunger from the loading lever proper. The latch assembly at the end of the loading lever usually is not dismantled.

Cylinder and Nipples Group: Removal of each nipple will completely break down this group.

Grip and Frame Group: Remove the Grip Assembly first. Undo the three backstrap screws — two rear and one lower. Now pull the one piece grips and backstrap away and separate. Next loosen the mainspring screw and lay aside the spring and screw. Unscrew the front and rear trigger guard screws and separate the trigger guard from the frame. The Grip Assembly is dismantled. Now for the Frame Assembly.

Undo the trigger and bolt spring screw and remove both screw and spring. Undo and remove the bolt screw. Remove the bolt from the frame. Undo and remove the trigger screw. Remove the trigger from the frame. Finally, undo and remove the hammer screw. Withdraw the hammer and hand downwards from the frame. The hand may be separated from the hammer but the hammer roller is seldom — if ever — removed.

Disassembly of the solid-frame Remington replicas is not as complicated as the Colt. Dropping the loading lever exposes the cylinder pin which needs only a pull to free the cylinder — after the hammer is at half-cock. This is far enough for most cleaning projects.

The Grip Assembly, with the exception of the grip panels proper, is integral with the frame. The Trigger Guard is released by removing one screw.

The bolt and trigger are hung from the same screw.

Removal of the hammer and hand follows removal of the mainspring. Push the hammer down through the frame as far as possible.

Look just below the bolt/trigger screw hole on the frame's left. You'll see a small screw holds the hand to the hammer.

Remove the small screw and lift the hammer out the top. Pull the hand out the bottom.

This completes disassembly of your revolver. Now — scrub it, flush it and dry it. Then oil and reassemble all the pieces by reversing the foregoing disassembly instructions.

TWO CLEANING TECHNIQUES:

HOT SOAPY WATER—the traditional way to clean a muzzleloader.

1. Scrub the bore with a strong solution of hot soapy water. Wipe all powder fouling from other metal parts.
2. Flush the barrel with the hottest clean water available. This not only removes the soap but also heats the steel which helps in the drying process.
3. Dry all parts.
4. Apply a good coat of oil or moisture-displacing lubricant to all metal parts and reassemble.
5. Inspect for the next few days just to be safe.

MODERN SOLVENTS — Just as effective as soapy water if properly done. Solvents designed specifically for black powder guns are now on the market and the old standbys may be used as well.

1. Scrub the bore with brass brush and lots of patches. Wipe down all metal parts.
2. Using plenty of clean patches, wipe the bore dry. Dry all metal parts.
3. Apply oil to all metal parts and reassemble.
4. Inspect for the next few days just to be safe.

MAXIMUM LOADS . . .

LYMAN BLACK POWDER GUNS

The following loads are maximum combinations of propellant and projectile for Lyman black powder guns. DO NOT EXCEED!

Revolvers	.36 —	.380" R.B.	29 Grs. G-O 3 Fg
	.44 —	.454" R.B.	27 Grs. G-O 3 Fg
Plains Pistol	.45 —	.445" R.B.	30 Grs. G-O 3 Fg (only)
	.50 —	.495" R.B.	40 Grs. G-O 3 Fg (only)
	.54 —	.535" R.B.	50 Grs. G-O 3 Fg (only)
Rifle	.45 —	.445" R.B.	80 Grs. G-O 2 Fg
			or 55 Grs. G-O 3 Fg
	.45 —	.45 Maxi	75 Grs. G-O 2 Fg
		(#454616)	or 50 Grs. G-O 3 Fg
	.50 —	.495" R.B.	90 Grs. G-O 2 Fg
			or 70 Grs. G-O 3 Fg
	.50 —	.50 Maxi	80 Grs. G-O 2 Fg
		(#504617)	or 60 Grs. G-O 3 Fg
	.54 —	.535" R.B.	100 Grs. G-O 2 Fg
			or 80 Grs. G-O 3 Fg
	.54 —	.54 Maxi	90 Grs. G-O 2 Fg
	.58 —	.562" R.B.	110 Grs. G-O 2 Fg (only)

ROUND BALL SELECTION GUIDE

.31 Revolver	—	.323"
.36 Revolver	—	.375"/.380"
.44 Revolver	—	.451"/.454"
.45 Ruger	—	.457"
.36 Rifle	—	.350"
.45 Rifle	—	.440"/.445"
.50 Rifle	—	.490"/.495"
.54 Rifle	—	.530"/.535"
.58 Rifle	—	.562"

SHOOTING TIPS . . .

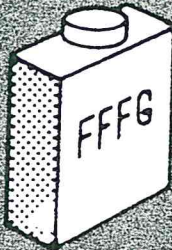
BLACK POWDER GUIDE

NOTE: This chart is intended as a guide to show the appropriate uses of Pyrodex Black Powder. It is not necessary to follow them exactly.



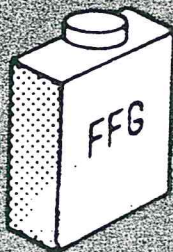
FFFFG

Commonly called "Four F", this is the finest granulation and is used for priming flintlocks. Due to its rather limited use, it is usually somewhat difficult to obtain. When necessary, FFFFG may be substituted. There is no Pyrodex equivalent.



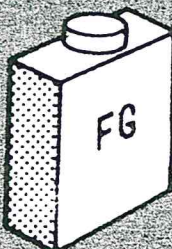
FFFG/Pyrodex "P"

Commonly called "Triple F", this powder is used in most single shot pistols and all percussion revolvers. It is also popular for all smaller caliber rifles up to and including 50 caliber. When FFFFG is not available, FFFG may be used to prime a flint lock.



FFG/Pyrodex "RS"



Commonly called "Double F", this is a popular powder for rifles over 50 caliber and up to 75 caliber. Also used in the larger caliber single shot pistols and most shotguns.



FG

Commonly called "Single F", this is the coarsest granulation used for small arms. Use is pretty much restricted to rifles over 75 caliber and large bore shotguns. There is no Pyrodex equivalent.

SOME WORDS OF CAUTION

1. All Lyman black powder revolvers, pistols and rifles are intended for use with black powder only. Use of any other propellant can cause serious injury to the shooter and damage to the firearm. Never use smokeless powder.
2.  Guard against overcharges. Follow the instructions and do not exceed suggested charges in this booklet.
3. Wear safety glasses when shooting black powder firearms. Shatterproof shooting glasses will protect the eyes from sparks, broken percussion caps, hot gases, and lead fragments.
4. Protect your hearing. Use an ear plug or muff when firing any firearm.
5. Be certain the projectile is seated firmly against the powder charge. Any gap between the projectile and powder charge could cause serious damage to the firearm and injury to the shooter. Hunters, in particular, should check the position of the projectile in the barrel at regular intervals when in the field. Decap/deprime before checking, though.
6. Use only non-synthetic cloth patching of suitable thickness when loading round balls. Do not use Poly Patches or any synthetic wad with round ball or conical bullets.
7. Never charge a muzzleloader directly from a powder flask. A sudden powder ignition from a lingering spark could cause the entire flask to explode. Instead, use an individual charge from a powder measure when loading your Lyman gun.
8. Never smoke when handling black powder.
9. Before each shooting session, check your black powder firearm carefully.
10. Before relying on the half-cock position, make sure the hammer will not fall when the trigger is pulled. Note: half-cock is not a "safety!"
11. While on the firing line, keep all black powder canisters closed.
12. Keep spectators to the rear of the shooter. Standing beside a muzzleloader is not safe enough. Flames, hot gases and percussion cap fragments may fly from the side of the firearm causing injury.
13.  Keep clear of the muzzle, particularly during loading.
14. If the gun misfires, keep the muzzle pointed down range for at least a minute before attempting to reprime it. There is always the chance a spark is smoldering in the powder charge and the gun could fire at any second.
15. Treat unprimed flintlocks as loaded weapons. Sometimes the sparks of an unprimed flintlock can fire the gun.
16. Use a non-flammable material to hold the flint in place. Cloth, cardboard or canvas could hold a lingering spark which might set off the next priming charge unexpectedly.
17. Store black powder and percussion caps in separate locations. Use their original containers when possible. Caps are sensitive to static electricity, percussion, heat and flame. Check local fire regulations before storing black powder in the home.
18. Follow the basic rules of firearms safety when handling any black powder firearms.
19. If you sell or give this Lyman black powder gun to someone else, give him this booklet too. Copies of this booklet are available from Lyman.