

# REMINGTON FIELD SERVICE MANUAL

The Remington Nylon 66 is a 22 caliber autoloading rifle. The autoloading action after firing will open, eject, cock, and reload for the next pull of the trigger. Long rifle cartridges only load and fire in this rifle. The tubular magazine, loaded through the butt of the stock, has a capacity for 14 long rifle cartridges.

The natural slip-smooth qualities of Du Pont nylon provide bearing surfaces for the action and breech parts. Light lubrication on metal surfaces for preservation only is required.



**SAFETY PRECAUTIONS BEFORE HANDLING OR SHIPPING.** With empty Magazine Tube locked properly to rifle, pull Bolt Handle repeatedly. This should eject any live rounds left in the action or in the Magazine Tube. Then check cartridge chamber in Barrel for a live round.

As a final precaution, open action. The magazine Follower should be plainly visible from ejection port.

## INDEX

	Page		Page
Bolt Handle .....	1	Cartridge Stop Spring .....	3
Receiver Cover Assembly .....	1	Cartridge Stop .....	3
Barrel Assembly .....	1	Cartridge Feed Insert .....	3
Front Sight .....	1	Trigger Complete .....	3
Ejector .....	1	Sear, Sear Spring .....	4
Barrel Bracket Assembly .....	1	Disconnecter Assembly .....	4
Bolt Assembly .....	1	Safety Assembly .....	4
Bolt Assembly — Components .....	2	Safety Detent Ball — Safety Detent Spring .....	5
Magazine Tube Assembly .....	2	Stock Assembly .....	5
Outer Magazine Tube .....	2	Rear Cover Screw Bushing .....	5
Action Spring Plunger — Action Spring .....	2	Cycle of Operation .....	5
Firing Pin Striker .....	2	Malfunctions .....	6
Firing Pin Striker Spring — Striker Spring Sleeve .....	3	Parts List .....	7
Trigger Guard .....	3	Exploded View .....	8
		Complete Reassembly .....	11

Send off guns for factory service and inquiries on  
service and parts to  
**REMINGTON ARMS COMPANY, INC.**  
Arms Service Division  
Ilion, New York 13357

All other inquiries are to be addressed to  
**REMINGTON ARMS COMPANY, INC.**  
Bridgeport, Connecticut 06602

**BOLT HANDLE**

**To Disassemble** — Cock rifle. Push safety rearward to ON SAFE position. Pull outward on bolt handle and remove. Note: A spring loaded action spring plunger locates into the shallow detent on stem of handle and holds handle assembled to bolt.

**To Reassemble** — Push bolt handle into hole in bolt until handle locates properly against action spring plunger.

**RECEIVER COVER ASSEMBLY**

**To Disassemble** — Cock rifle. Push safety ON SAFE. Pull out bolt handle. Unscrew and pull out cover screw (2). Lift up receiver cover assembly and remove from rifle.

**To Replace** — Replacement as an assembly is recommended. The receiver cover assembly is factory-listed to include: cartridge feed guide spring assembly, receiver cover shell assembly, rear sight assembly, rear sight rivet, windage screw. Special factory processes assemble the components to the receiver cover shell.

Components of the receiver cover assembly are factory processed as follows:

**Cartridge feed guide spring** is assembled first to receiver cover shell. **Cartridge feed guide rivet** is inserted from top of cover shell and staked at underside to hold cartridge feed guide spring in secure assembly to receiver cover shell.

**Rear Sight Assembly** is assembled next to receiver cover shell. **Rear sight rivet** is inserted from top of cover shell and staked at underside to hold rear sight assembly and windage screw in secure assembly to cover shell. However, before rear sight assembly is riveted to cover shell, the elevation screw must be assembled to the rear sight. Thread elevation screw to rear sight. Assemble elevation screw washer to end of elevation screw protruding from base of rear sight. Crimp end of screw over washer from bottom to hold elevation screw assembled to rear sight. Rear sight then should thread up and down freely as the elevation screw is turned.

Receiver cover screw lug (2) is inserted to the receiver cover shell. A staking operation from the inside holds the screw lug assembled to the cover shell.

**To Reassemble** — Make sure cartridge feed guide on bolt lies forward upon barrel. Make certain also that ejector (free fit), remains assembled to left side of rifle. Slide receiver cover assembly into place. Hold rear of cover down firmly in place. Assemble and tighten front and rear cover screws.

**BARREL ASSEMBLY (includes front sight)**

**To Disassemble** — Cock rifle and push safety ON SAFE. Remove bolt handle and receiver cover assembly. Reassemble bolt handle to bolt. Unscrew barrel lock screw a number of turns until nearly removable. Push upward on loosened screw until barrel bracket assembly slides upward in stock and clear of bracket slot in barrel. Pull loosened barrel forward and remove from rifle. See Fig. 1.

**To Reassemble** — Follow reverse order. Make certain barrel bracket assembly is located correctly in bracket slot of barrel and tightened down securely in stock by barrel lock screw. Make certain also that ejector remains assembled to left side under receiver cover assembly.

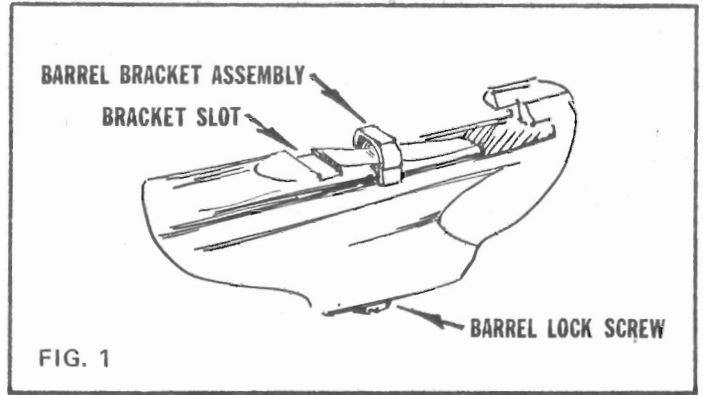


FIG. 1

**FRONT SIGHT**

**To Disassemble** — Unscrew front sight screw (2). Lift front sight from barrel. Take care that small front sight washers (2) of white nylon material, located beneath front sight screw heads, are not lost.

**To Reassemble** — Follow reverse order.

**EJECTOR**

**To Disassemble** — Remove bolt handle and receiver cover assembly. Ejector can then be easily removed from a free-fit location in exposed left side of stock. See Fig. 2.

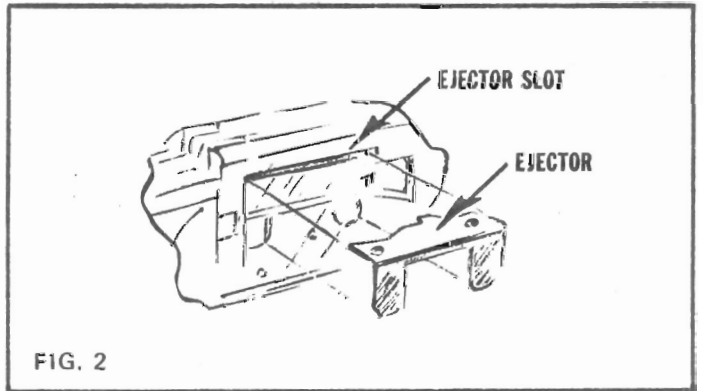


FIG. 2

**To Reassemble** — Follow reverse order.

**BARREL BRACKET ASSEMBLY**

**To Disassemble** — Remove bolt handle and receiver cover assembly. Remove barrel and barrel lock screw from rifle. Lift up and pull barrel bracket assembly from recoil position in stock. See Fig. 3.

**To Reassemble** — Follow reverse order. Make certain barrel support slides freely on stud of barrel bracket.

**BOLT ASSEMBLY**

**To Disassemble** — Cock rifle and push safety ON SAFE. Remove bolt handle, receiver cover assembly, barrel and barrel bracket assembly. Pull bolt assembly forward and remove from rifle.

**To Reassemble** — Follow reverse order.

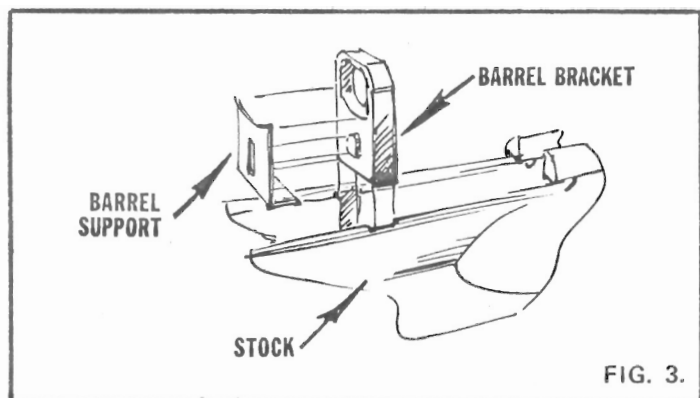


FIG. 3.

**BOLT ASSEMBLY – COMPONENTS** Includes bolt, cartridge feed guide, extractor, extractor spring, extractor plunger, firing pin, firing pin retaining pin, firing pin retractor spring, firing pin stop pin. Replacement bolt assembly or components of assembly are interchangeable. No adjustment or factory assembly required.

**To Disassemble** – Remove bolt assembly. Insert small tool between rear of extractor and head of extractor plunger. Push back extractor plunger. Force rear of extractor upward and past plunger. Rotate claw of extractor inward and remove extractor from bolt.

**Caution:** Extractor is under spring tension during removal of extractor. Hold to prevent loss. Pull out loosened extractor plunger and remove from bolt. Pull or shake out loosened extractor spring and remove from bolt.

Firing pin may or may not be disassembled. Drive out firing pin stop pin. Note split roll design of stop pin for self tightening. Remove cartridge feed guide from bolt. See Fig. 4.

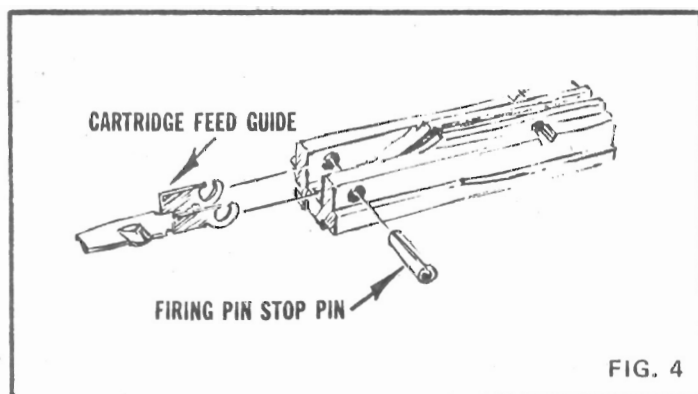


FIG. 4

Straighten firing pin retaining pin. Pull out retaining pin and remove from bolt. Firing pin stop pin need not be removed. Lift up and remove firing pin from bolt. **CAUTION:** Firing pin retractor spring is assembled in "free assembly" within oblong opening at rear of firing pin. Remove firing pin retractor spring from "free assembly" position in rear of firing pin.

**To Replace** – Check extractor for firm hook or claw tension. Use fired case. Slight adjustment to firing pin may be required to insure proper indent.

**To Reassemble** – Follow reverse order. Make certain that extractor pivots freely. Split in firing pin stop pin should face up when reassembling into bolt. When assembling firing pin retaining pin make certain firing pin retractor spring locates to rear of retaining pin. Re-bend or replace retaining pin to hold securely in bolt.

## MAGAZINE TUBE ASSEMBLY

**To Disassemble** – Reach into butt plate cavity and turn magazine plug counterclockwise 45°. Pull out and remove magazine tube assembly from rifle.

**To Replace** – Replace as an assembly. Interchangeable – no adjustment or factory assembly required. The magazine tube assembly is factory-listed to include inner magazine tube, magazine follower, magazine pin, magazine plug, magazine spring.

**To Reassemble** – Follow reverse order. Magazine plug locates crosswise in butt plate cavity when locked in rifle.

## OUTER MAGAZINE TUBE

**To Disassemble** – Cock rifle and push ON SAFE. Remove bolt handle and receiver cover assembly. Remove barrel and bolt assembly. Remove action spring and plunger. Reach into exposed action and pry up and remove magazine lock. Reach into butt plate and pull magazine tube assembly and outer magazine tube from stock. Separate outer tube from magazine tube assembly.

**To Reassemble** – Insert combined outer magazine tube and magazine tube assembly into butt end of stock. Turn outer tube, when in place, to permit assembly of magazine lock to lock slots at front end of outer magazine tube.

**NOTE:** Seam on Outer Magazine Tube, when assembled, to be visible from open top of stock.

## ACTION SPRING PLUNGER– ACTION SPRING

**To Disassemble** – Cock rifle and push safety ON SAFE. Remove bolt handle, receiver cover assembly, barrel and barrel bracket assembly. Remove bolt assembly. Pull out action spring plunger and action spring from striker sleeve and remove from rifle.

**To Reassemble** – Follow reverse order.

## FIRING PIN STRIKER

**To Disassemble** – Cock rifle and push safety ON SAFE. Remove bolt assembly. Remove action spring plunger and action spring. Push safety forward to FIRE position. Hold "cocked" firing pin striker against pressure of firing pin striker spring, then pull trigger to release cocked striker forward. Allow striker to ease forward until spring pressure is reduced. Pull striker forward and remove from rifle.

**To Reassemble** – (with sear assembled to rifle) Make certain striker spring sleeve and spring remains assembled to stock with flanged end to rear. Assemble firing pin striker to bolt rails in stock (with large hole diameter to rear). Slide striker rearward along bolt rails until striker spring re-enters spring hole at rear of striker. Continue pushing striker rearward until halted against sear – and hold. Pull trigger and hold. This will permit disconnecter to move forward and disengage sear. Press sear downward. Then push striker to rear and over sear. Release trigger. See Fig. 5. Releasing trigger permits disconnecter to move rearward again and re-engage sear. Sear in turn will then hold firing pin striker rearward and in "cocked" position.

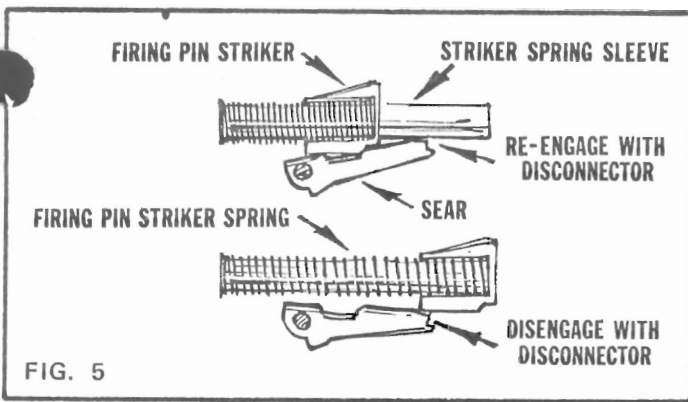


FIG. 5

Push safety rearward to ON SAFE. Firing pin striker then cannot "uncock" or be released forward.

**FIRING PIN STRIKER SPRING  
STRIKER SPRING SLEEVE**

To Disassemble — Remove bolt assembly, firing pin striker, firing pin striker spring and striker spring sleeve from rifle.

To Reassemble — Follow reverse order. Make certain flanged end of striker spring sleeve is to rear in stock.

**TRIGGER GUARD**

To Disassemble — Cock rifle and push safety ON SAFE. Remove bolt handle and receiver cover assembly. Tap out trigger guard assembly pin. Pull trigger plate from bottom of stock.

To Reassemble — Follow reverse order.

**CARTRIDGE STOP SPRING**

To Disassemble — Remove trigger guard.

NOTE: Rifle should remain bottom uppermost during servicing of cartridge stop spring. Otherwise cartridge feed insert, unsupported by removal of cartridge stop spring may dislocate from assembly position in rifle.

Reach into bottom of "open stock" with small tool. Lift rear of cartridge stop spring from detent position against bottom of cartridge stop. Slide cartridge stop spring rearward from beneath cartridge stop pin. Disassemble from rifle. See Fig. 6

To Reassemble — Position front lip end of cartridge stop spring under cartridge stop pin and against underside of assembled cartridge feed insert. Slide spring forward until detent at rear of spring locks against assembled cartridge stop. Correctly assembled spring should support cartridge feed insert at front and raise cartridge stop at proper feeding intervals.

NOTE: If cartridge feed insert has dislocated during servicing of cartridge stop spring see cartridge feed insert for proper method of reassembly.

**CARTRIDGE STOP**

To Disassemble — Remove bolt handle and receiver cover. Remove trigger guard.

Caution: Service cartridge stop and cartridge stop spring with rifle placed bottom uppermost. This will prevent dislocation of cartridge feed insert from proper assembly position.

Remove cartridge stop spring. Tap out cartridge stop pin. Disassemble cartridge stop from rifle. See Fig. 6.

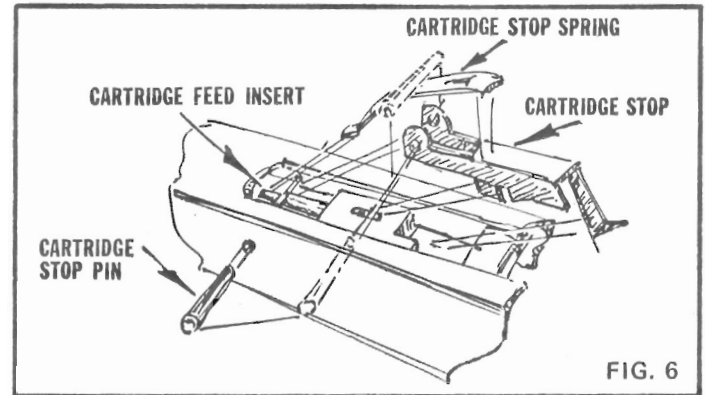


FIG. 6

To Reassemble — Follow reverse order. Make sure that cam arm channels properly to bottom of bolt

**CARTRIDGE FEED INSERT**

To Disassemble — Cock rifle and push safety ON SAFE. Remove magazine tube assembly. Remove bolt handle and receiver cover assembly. Remove barrel and bolt assembly. Remove action spring plunger and action spring. Remove trigger guard. Remove cartridge stop spring. Remove cartridge stop.

Push down from top "open stock" against front end of cartridge feed insert. Disassemble loosened insert from rifle.

To Reassemble — Cartridge feed insert can be assembled without the use of tools. However, a certain amount of trial and dexterity are required. Eraser on pencil will help.

Slide insert into position from top of "open stock". Then continue positioning by pushing insert below insert slot in stock. Keep insert level and push rear of insert up and back into assembly location. Then push front of insert up until insert levels to proper assembly location in stock.

NOTE: Additional assembly of cartridge stop and cartridge stop spring required to hold cartridge feed insert assembled to rifle. See Fig. 6.

**TRIGGER COMPLETE**

To Disassemble — Cock rifle and push safety ON SAFE. Remove trigger guard. Unhook trigger spring from forward spur on trigger. Push out trigger assembly pin. Remove trigger assembly from stock.

To Reassemble — Locate trigger with trigger cap assembled to trigger notch in disconnector bar. Check engagement through open hole in right side of stock. See Fig. 7  
Align trigger to trigger assembly pinhole in stock, and tap in trigger assembly pin. Rehook front spur on trigger to trigger spring.

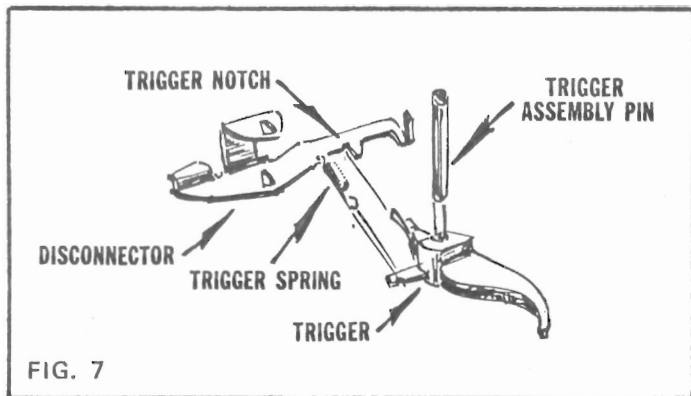


FIG. 7

**SEAR, SEAR SPRING (SEAR ASSEMBLY PIN)**

**To Disassemble** — Cock rifle and push safety ON SAFE. Remove receiver cover assembly. Remove barrel, bolt assembly, firing pin striker, striker spring and sleeve. Remove outer magazine tube, and magazine tube assembly. Remove trigger guard, trigger complete. Reach into open top of stock and hold sear down. Then reach into open bottom of stock and push disconnecter pivot rearward. This will release sear upright in stock and remove tension on sear spring. Release disconnecter pivot. Tap out sear pin assembly.

**NOTE:** Take care that sear parts do not drop in butt stock cavity. Remove sear, sear spring.

**To Reassemble** — Assemble sear upright from open top of stock, and align with sear pinhole (use drift punch). Assemble sear spring to upright sear. Make sure that short end of sear spring assembles to sear notch front and tension-wise to safety lever pin at rear. Tap in sear assembly pin.

**CAUTION:** Make sure proper pin is used. Sear assembly pin can be mistaken for other pins of smaller diameter. Other pins of smaller and same diameter include: safety lever cam pin, trigger assembly pin, trigger guard assembly pin.

To position upright sear to level assembly location, reach in open bottom of stock and push disconnecter pivot rearward. Then turn upright sear downward until front end positions under disconnecter. Release disconnecter pivot to latch sear beneath disconnecter.

**DISCONNECTOR ASSEMBLY** is designed to make the trigger assembly **inoperative** — that is, "free-swinging" and out of contact with the disconnecter. This "out of contact" continues until the action is closed completely and the safety is pushed rearward to the FIRE position. Only then is the trigger operative and able to "pull" and complete the firing cycle.

**To Disassemble** — Cock rifle and push safety ON SAFE. Remove bolt handle and receiver cover assembly. Remove barrel, bolt assembly, firing pin striker, striker spring and sleeve. Remove outer magazine tube and magazine tube assembly. Remove trigger guard and trigger complete.

Reach into open top of stock and hold against sear, then reach into open bottom of stock and push disconnecter pivot rearward. This will release sear to upright position in "open" stock. With small tool unhook front end of disconnecter pivot spring from nylon "bridge". Push in disconnecter pivot pin (2)

and disconnecter assembly will fall free and can be removed from stock. See Fig. 8.

**To Reassemble**— Follow reverse order. Make sure rear of disconnecter assembles correctly behind upright sear and below shoulder in rear of stock. After hooking front loop of disconnecter pivot spring over nylon "bridge", push disconnecter pivot rearward and assemble upright sear to latch beneath disconnecter. Disconnecter pivot pin (2) should be tapped flush only to side of stock. If tapped deeper, outer magazine tube, when reassembled, will bind on pin.

**Caution:** Take care that disconnecter pivot is not "unhinged" during assembly of pins.

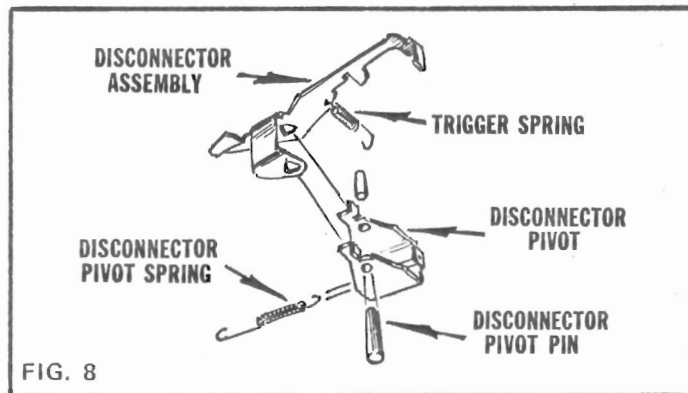


FIG. 8

**SAFETY ASSEMBLY** is designed to raise disconnecter at rear and disengage from trigger when in rear or ON SAFE position. Forward or FIRE position re-engages disconnecter to trigger (red bottom showing).

**To Disassemble** — Cock rifle and push safety ON SAFE. Remove bolt handle and receiver cover assembly. Remove barrel, barrel bracket, bolt assembly, action spring, actionspring plunger, firing pin striker, striker spring and sleeve. Remove trigger guard.

**NOTE:** Not necessary to remove safety detent retaining pin, safety detent spring, safety detent ball.

Turn rifle bottom up and tap out safety lever cam pin part way until clear of safety lever only. Cam pin should then hold sear spring under tension and in proper assembly. See Fig. 9 Safety assembly will be loosened.

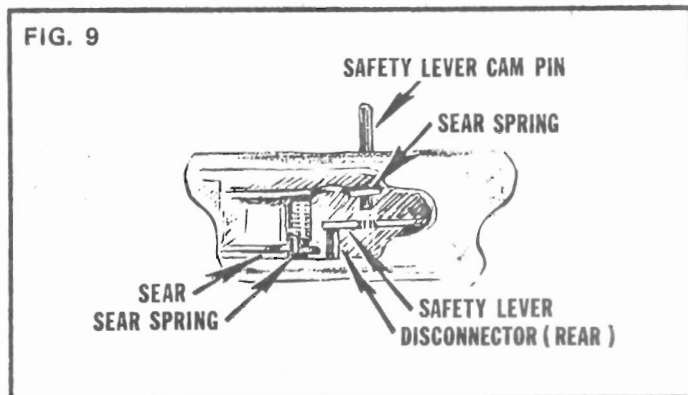


FIG. 9

Pull safety assembly and remove from top of stock.

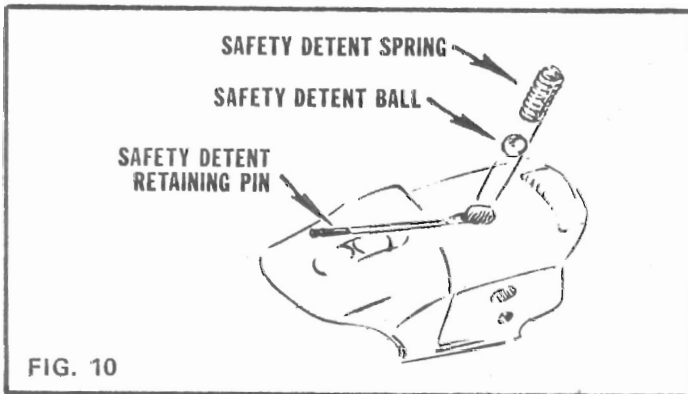
**To Replace** — Interchangeable as replacement. No adjustment or factory assembly required. Replacement as an assembly recommended. Safety assembly is factory listed to include safety lever, safety lever pin.

**To Reassemble** — Follow reverse order. Make certain front spur on safety lever assembles easily to properly lift rear of disconnecter from engagement with trigger cap. Long end of sear spring should locate to safety lever cam pin for tension purposes. See Fig. 9

**SAFETY DETENT BALL — SAFETY DETENT SPRING**

**To Disassemble** — Remove bolt handle and receiver cover assembly. Pull safety detent retaining pin rearward and remove from stock.

**CAUTION:** Safety detent spring is under tension of retaining pin. Hold spring in place during removal of pin to prevent loss. Remove safety detent spring and underlying safety detent ball. See Fig. 10



**To Reassemble** — Follow reverse order.

**STOCK ASSEMBLY** designed to contain or mount all of the rifle parts for the Nylon 66. For finishing service see STOCK FINISHING.

**To Disassemble** — Remove all rifle parts. Do not remove stock nut (3) or bolt (3) — not necessary.

**To Reassemble** — Follow reverse order for reassembly of rifle parts.

**REAR COVER SCREW BUSHING**

**To Disassemble** — Remove bolt handle and receiver cover assembly. Tap out and remove rear cover screw bushing. Note visual shoulder of small inside diameter on right end (assembly position) of bushing.

**To Reassemble** — Follow reverse order. Make certain that bushing end with small inner diameter assembles to right side of stock.

**CYCLE OF OPERATION**

**MAGAZINE LOADING**

A tubular magazine that loads from the stock has a capacity for 14 Long Rifle cartridges. Single loading can be done by rotating rifle until ejection port is up, then placing the cartridge on the bolt in the ejection port, and then rapidly pulling the bolt handle back, and release.

Unloading can be done by removing the magazine tube from the stock and allowing the cartridges to slide out. With the tube replaced, the action can be emptied by pulling the bolt handle back repeatedly. The colored magazine follower will show from the open action when the magazine is empty.

**SAFETY**

When pushed forward, the thumb operated safety places rifle in FIRE position. A red dot is visible to rear of safety. A rearward motion places safety on SAFE position. With safety in this position, red dot is not visible.

**On Safe:** Rearward motion of safety raises disconnecter (by the safety lever) from a notching contact with trigger. The trigger is then free swinging and cannot fire rifle.

**Fire:** Forward movement of safety pushes safety lever from beneath the upheld disconnecter and permits disconnecter to be drawn down by trigger spring to again connect with trigger to fire rifle.

**FIRING**

Pulling of trigger releases a spring loaded firing pin striker forward to strike against the firing pin. When struck, the firing pin will complete firing cycle by indenting and firing the round. With safety pushed forward to FIRE position (red dot showing) trigger can be pulled each time to fire round. When pulled, trigger rotates upon trigger assembly pin—pushing disconnecter forward against back pressure of spring-loaded disconnecter pivot. With disconnecter pushed forward, sear is unlatched from disconnecter. Disengaged sear is then cammed downward by spring pressure of the forward moving striker. The striker then passes swiftly over sear and strikes firing pin. The firing pin has a free limited movement within the bolt assembly. When struck by the swiftly moving striker, the firing pin transmits the blow from striker to indent and fires cartridge.

**UNLOCKING**

This rifle is operated by the so-called "blow back" system. The only unlocking that can be classed as a cycle is the build-up of a combustion force to overcome the inertia of the closed bolt and firing pin striker. Resistance is also created by the action spring against bolt and the striker spring against striker. This resistance must also be overcome by the combustion force.

**EXTRACTION**

The extraction cycle is the properly timed "blow back" of the fired cartridge case from the barrel chamber. After firing, a brief time interval exists as bullet leaves muzzle. Combustion pressures then subside, permitting cartridge case to relax from against chamber wall.

Reduced combustion pressure (or extraction forces) drives fired cartridge case rearward. This motion forces bolt assembly and firing pin striker away from barrel breech, carrying fired case with it. The fired case, securely positioned and aligned on bolt face by extractor, is thus forced from barrel chamber. These "extraction forces" are slowed as the action and striker springs are compressed. Energy from the compressed action spring is available to close action during loading cycle.

**NOTE:** Extractor grips rim of unfired cartridge to extract round from chamber.

## EJECTION

The ejector, located in the stock, intercepts rim of fired case as extraction cycle is completed. When this interception is made, the opposing grip of extractor claw pivots fired cartridge case away from bolt and out the ejection port.

## COCKING

This cycle is the combined holding back of firing pin striker by the sear and the latching upward of sear against spring-loaded striker by disconnecter.

The bolt assembly is blown back by extracting cartridge case. The firing pin striker, which is in the forward position against the bolt assembly, is also forced back. As the bolt assembly starts back, contact is made with a cam on front of disconnecter. The camming contact disengages trigger from a notched position with disconnecter. This disengagement of trigger and disconnecter prevents repeat firing until action is (1) fully closed, and (2) the trigger released to re-enter "notched" position with disconnecter for the next pull of trigger.

The sear meanwhile is pressed upward against the bottom of the rearward-moving striker. The sear continues to press against striker until the inclined engaging shoulder on striker permits sear to raise further and intercept the return travel of striker.

The disconnecter, under constant back pressure from the disconnecter pivot, then slips back and under raising sear. This under, or "latching", engagement of disconnecter with sear prevents striker from forcing sear downward again until trigger is (1) renotched to disconnecter, and (2) pulled to fire. This "renotching" of trigger cannot occur until bolt assembly is fully forward again and free of cam contact with front end of disconnecter.

The trigger spring joins trigger and disconnecter. This insures a full and complete renotching engagement of trigger and disconnecter for the next pull of trigger to fire rifle.

## FEEDING

The feeding cycle is the straight-line forward push of the next cartridge into the path of the closing stroke on the bolt assembly. During the opening stroke of the bolt assembly, a blade on the cartridge stop channels upward into the base of the bolt. This upward move permits a lower blade section of the cartridge stop to intercept the column of loaded cartridges emerging from the magazine tube. Only one cartridge is thus permitted to be in feed position before the returning bolt assembly.

## LOADING

The loading cycle is the "pick-up" by the closing bolt of the next cartridge, up the slight incline in the cartridge feed insert, and into the barrel chamber.

As the bolt urges the cartridge into the chamber the intercepting lower blade on the cartridge stop then is forced downward to release the next cartridge. This cartridge then is moved forward and into a "load" position in the cartridge feed insert. When the last cartridge is loaded into the barrel, the colored magazine follower should be visible from the empty magazine.

## LOCKING

The only locking in an action of this blow-back type is the backing up of the chambered cartridge by the weight of the closed bolt and forward position of the firing pin striker. Two springs, the action and striker spring, back up the closed bolt and forward striker.

A spring-tensed extractor, during this locking cycle, is channeled into an inclined breech cut. This inclined positioning of the extractor, over the rim of the loaded cartridge, permits the claw of the extractor to locate securely against the rim during extraction.

# MALFUNCTIONS

## Cause and Correction

### FAILS TO LOAD

- Cause:**
1. Cartridge feed guide damaged, binds.
  2. Firing pin damaged, binds.
  3. Barrel chamber fouled, rusty, damaged.
  4. Extractor cut in barrel damaged.
  5. Action fouled.
  6. Extractor damaged, binds cartridge in chamber in stemming position.

- Correction:**
1. Replace or free up.
  2. Replace or free up. Check protrusion (approximately .020") from extreme front face of bolt (firing pin held forward). Check firing pin retractor spring for damage or incorrect assembly (spring should be to rear of firing pin retaining pin). Chamfer firing pin slightly on bottom corner if necessary.
  3. Replace barrel or clean and polish, (slightly).
  4. Replace barrel or repair extractor cut.
  5. Clean action.
  6. Replace or free up extractor, plunger, and spring. Adjust tension on claw. Use fired case. Adjust space under claw (nominal) .050".

### SAFETY WORKS HARD OR TOO FREELY

- Cause:**
1. Safety assembly damaged. Assembly includes safety, safety lever, safety lever pin.
  2. Safety lever incorrectly assembled.
  3. Safety parts damaged, missing.

- Correction:**
1. Replace damaged part.
  2. Assemble correctly under rear of disconnecter.
  3. Replace safety detent ball, safety detent spring, safety detent retaining pin, safety lever cam pin.

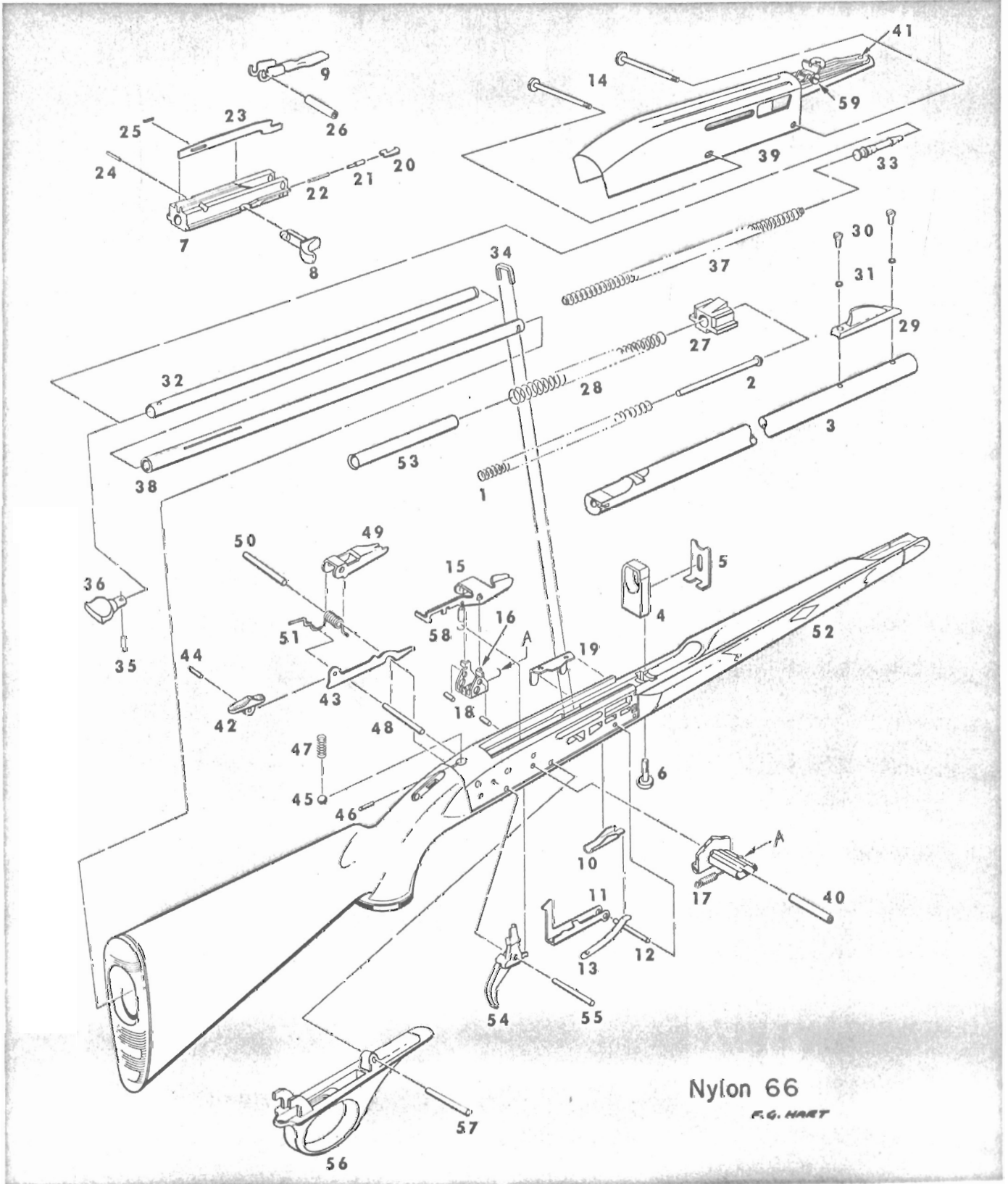
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View No.	Part No.	NAME OF PART	View No.	Part No.	NAME OF PART
1	16511	Action Spring	44	16531	Safety Lever Pin
2	16544	Action Spring Plunger	45	23224	Safety Detent Ball
3	16570	Barrel	46	16542	Safety Detent Retaining Pin
	15401	Barrel, Apache Black (not shown)	47	16533	Safety Detent Spring
4	15045	Barrel Bracket	48	16541	Safety Lever Cam Pin
	25640	Barrel Bracket Assembly (includes Barrel Bracket, Barrel Support) (not shown)	49	16567	Sear
5	15046	Barrel Support	50	16534	Sear Assembly Pin
6	16512	Barrel Lock Screw	51	16559	Sear Spring
7	16563	Bolt	52	25005	Stock Assembly, Mohawk Brown (includes Butt Plate, Butt Plate Spacer, Diamond Inlay (2), Fore-end Tip, Fore-end Tip Spacer, Grip Cap, Grip Cap Spacer, Safety Button, Stock Bolt (3), Stock, Stock Filler, Stock Nut (3))
	24390	Bolt Assembly (includes Bolt, Cartridge Feed Guide, Extractor, Extractor Plunger, Extractor Spring, Firing Pin, Firing Pin Retaining Pin, Firing Pin Extractor Spring, Firing Pin Stop Pin) (not shown)		25007	Stock Assembly, Apache Black (not shown)
8	16550	Bolt Handle	53	16540	Striker Spring Sleeve
9	16547	Cartridge Feed Guide	54	16368	Trigger Complete (includes Trigger Cap)
	25775	Cartridge Feed Guide Spring Complete (includes Cartridge Feed Guide Spring, Feed Guide Spring Rivet) (not shown)	55	16541	Trigger Assembly Pin
10	16551	Cartridge Feed Insert	56	16569	Trigger Guard
11	16552	Cartridge Stop	57	16541	Trigger Guard Assembly Pin
12	16541	Cartridge Stop Pin	58	16517	Trigger Spring
13	16553	Cartridge Stop Spring	59	16529	Windage Screw
14	16515	Cover Screw			<b>ACCESSORIES (Not Shown)</b>
	15402	Cover Screw, Apache Black (not shown)	25886		Sling Strap Assembly
15	16564	Disconnecter	15505		Sling Retaining Screw (need 4)
	25000	Disconnecter Assembly	15050		Sling Swivel Retainer (need 2)
16	16565	Disconnecter Pivot	26170		Sling Strap Assembly and Mountings Complete (includes Sling Strap Assembly, Sling Swivel Retainer (2), Swivel Retaining Screw (4))
17	16516	Disconnecter Pivot Spring			<b>NYLON 66GS "GALLERY SPECIAL"</b>
18	24477	Disconnecter Pivot Pin			<b>22 Caliber Short Only</b>
19	16519	Ejector			NOTE: For Parts Not Listed — See Nylon 66 Standard Model
	16526	Elevation Screw (not shown)	15111		Action Spring
	16527	Elevation Screw Washer (not shown)	15127		Barrel
20	18408	Extractor	15045		Barrel Bracket
21	17667	Extractor Plunger	15124		Bolt
22	15006	Extractor Spring	26035		Bolt Assembly (includes Bolt, Cartridge Feed Guide, Extractor, Extractor Plunger, Extractor Spring, Firing Pin, Firing Pin Retaining Pin, Firing Pin Retractor Spring, Firing Pin Stop Pin)
23	28185	Firing Pin	15125		Cartridge Feed Guide
24	16549	Firing Pin Retaining Pin	15119		Cartridge Feed Insert
25	16513	Firing Pin Retractor Spring	15167		Cartridge Feed Insert Spring
26	16514	Firing Pin Stop Pin	15120		Cartridge Stop
27	16554	Firing Pin Striker	15050		Counter Chain Retainer
28	16520	Firing Pin Striker Spring	15055		Counter Chain Retainer Screw
29	16545	Front Sight	15168		Deflector
30	16892	Front Sight Screw	15166		Deflector Screw
31	16968	Front Sight Washer	15217		Disconnecter
32	16555	Inner Magazine Tube	26165		Disconnecter Assembly (not shown)
33	16522	Magazine Follower	24475		Disconnecter Pivot Pin
34	16521	Magazine Lock	15126		Ejector
35	16833	Magazine Pin	15118		Extractor
36	16556	Magazine Plug	15148		Firing Pin Retaining Pin
37	16523	Magazine Spring	15113		Firing Pin Striker
	24395	Magazine Tube Assembly (includes Inner Magazine Tube, Magazine Follower, Magazine Pin, Magazine Plug, Magazine Spring) (not shown)	15114		Firing Pin Striker Spring
38	16557	Outer Magazine Tube	15121		Inner Magazine Tube
39	24410	Receiver Cover Assembly (includes Cartridge Feed Guide Spring, Cartridge Feed Guide, Spring Rivet, Receiver Cover Screw Lug (2), Receiver Cover Shell, Rear Sight, Rear Sight Rivet, Elevation Screw, Elevation Screw Washer, Windage Screw)	15123		Magazine Bushing
	24411	Receiver Cover Assembly, Apache Black (not shown)	25800		Magazine Tube Assembly (includes Inner Magazine Tube, Magazine Follower, Magazine Pin, Magazine Plug, Magazine Spring)
40	16748	Rear Cover Screw Bushing	25805		Receiver Cover Assembly (includes Cartridge Feed Guide Spring, Cartridge Feed Guide Spring Rivet, Receiver Cover Screw Lug (2), Receiver Cover Shell, Rear Sight, Elevation Screw, Elevation Screw Washer, Rear Sight Rivet, Windage Screw)
	25780	Rear Sight Assembly Complete (includes Rear Sight Assembly, Windage Screw, Rear Sight Rivet, Elevation Screw) (not shown)	25815		Stock Assembly, Mohawk Brown, Complete (includes Stock Assembly, Counter Chain Retainer, Counter Chain Retainer Screw, Magazine Bushing)
41	16528	Rear Sight Rivet			
42	16530	Safety			
	24405	Safety Assembly (includes Safety, Safety Lever, Safety Lever Pin) (not shown)			
43	16566	Safety Lever			



# REMINGTON FIELD SERVICE MANUAL



Nylon 66

F. G. HART

# MALFUNCTIONS

## CAUSE and CORRECTION

(Cont. from page 6)

### MISFIRES

- Cause:**
1. Trigger damaged (includes trigger and cap).
  2. Trigger spring damaged or disengaged.
  3. Firing pin damaged, binds, protrudes short
  4. Disconnecter damaged binds.
  5. Disconnecter pivot damaged, disengaged.
  6. Disconnecter pivot pin missing.
  7. Disconnecter pivot spring damaged, dislocated.
  8. Sear — sear spring damaged.
  9. Firing pin striker spring damaged.
  - 10 Extractor damaged, binds.
  11. Cartridge chamber in barrel damaged, fouled, rusty.
  12. Safety lever damaged, binds.
  13. Ammunition faulty.

- Correction:**
1. Replace trigger complete.
  2. Replace or assemble properly to trigger or disconnecter.
  3. Replace or free up. Check for proper and "free" assembly of firing pin retractor spring to rear of assembled firing pin retaining pin. Check protrusion — approximately .020" (nominal) (from face of bolt).
  4. Replace or free up. Check notch engagement to trigger cap through hole in right side of stock.
  5. Replace or assemble correctly to disconnecter.
  6. Replace pin.
  7. Replace spring or assemble correctly to pivot and nylon stock bridge at front.
  8. Replace.
  9. Replace.
  10. Replace or adjust.
  11. Replace barrel or clean and polish chamber lightly.
  12. Replace or free up.
  13. Replace ammunition.

### FAILS TO UNLOCK

- Cause:**
1. Cartridge chamber in barrel damaged, fouled, rusty.
  2. Action binds, damaged.
  3. Extractor damaged, out of adjustment.
  4. Ejector damaged, binds bolt
- Correction:**
1. Replace barrel or clean chamber, polish lightly.
  2. Clean action, check for damage to parts.
  3. Replace or adjust and free up.
  4. Replace or free up.

### DOUBLES (Fires automatically)

- Cause:**
1. Trigger damaged, binds.
  2. Sear notch damaged.
  3. Trigger spring damaged, missing, out of engagement.
  4. Sear spring damaged, dislocated.
  5. Disconnecter assembly damaged, dislocated.

- Correction:**
1. Replace or free up. Check notch engagement to disconnecter.
  2. Replace or repair notch. Check engagement to disconnecter.
  3. Replace or assemble to trigger and disconnecter properly. Check movement of trigger cap to disconnecter notch, engagement under tension of trigger spring.
  4. Replace or assemble properly. Short end of spring to sear and long end below safety cam pin at rear.
  5. Replace disconnecter, disconnecter pivot, disconnecter pivot spring or adjust. Check pivot pin.

### FAILS TO LOCK

- Cause:**
1. Ejector damaged.
  2. Stock broken or cracked at bolt clearance slot.
  3. Action fouled, binds.
  4. Barrel chamber damaged, rusted, fouled.
  5. Ammunition faulty.
  6. Action spring damaged.

- Correction:**
1. Replace ejector.
  2. Replace stock.
  3. Clean action, free up.
  4. Replace barrel, Repair extractor cut. Clean and polish chamber lightly.
  5. Replace ammunition.
  6. Replace.

### FAILS TO GROUP

- Cause:**
1. Barrel damaged.
  2. Barrel loose in take down.
  3. Sights loose.
- Correction:**
1. Replace barrel.
  2. Tighten barrel lock screw.
  3. Replace or tighten.

**FAILS TO FEED**

- Cause:**
1. Cartridge stop damaged, binds.
  2. Cartridge stop spring damaged, dislocated.
  3. Extractor damaged, binds.
  4. Cartridge feed insert damaged, dislocated.
  5. Magazine assembly, damaged, follower binds.

- Correction:**
1. Replace or clean and free up.
  2. Replace or assemble correctly to support cartridge stop and cartridge feed insert.
  3. Replace or free up. Check extractor for proper chamber on bottom of claw. Check extractor plunger and spring for "free" movement.
  4. Replace or assemble correctly. Check for support from beneath by cartridge stop spring.
  5. Replace magazine assembly or free up follower. Check magazine spring for damage. Clean or replace spring.

**FAILS TO EXTRACT**

- Cause:**
1. Extractor damaged, missing, out of adjustment.
  2. Extractor cut in barrel damaged.
  3. Cartridge chamber in barrel damaged, fouled, rusty.
  4. Action binds, fouled, damaged.

- Correction:**
1. Replace or free up and adjust for proper tension. Use fired case. Check extractor plunger and spring.
  2. Replace barrel or repair cut.
  3. Replace barrel or clean, polish chamber lightly.
  4. Free up action, clean and check for damaged parts.

**FAILS TO EJECT**

- Cause:**
1. Ejector damaged, missing.
  2. Extractor, extractor plunger, extractor spring damaged, binds.
  3. Firing pin damaged, binds.
  4. Cartridge chamber in barrel damaged, rusty, fouled.
  5. Extractor cut in barrel damaged.

- Correction:**
1. Replace or repair.
  2. Replace or free up and adjust for proper tension.
  3. Replace or free up and check excessive protrusion.
  4. Replace barrel or clean and polish lightly.
  5. Replace barrel or repair extractor cut.

**STOCK**

Listed below is the recommended method of restoring the finish on the Nylon's stock.

**Scratches:** Use finely powdered pumice stone and oil. Rub with felt pad. Wipe clean and dry.

**Abrasion:** Use Du Pont auto rubbing compound. Rub with cloth pad. Wipe clean and dry.

**For Polishing:** Use Du Pont Auto waxes.

**To Clean Checkering:** Use stiff tooth brush. (and Striations)

Listed below is the recommended method of servicing for butt plates, grip caps, etc.

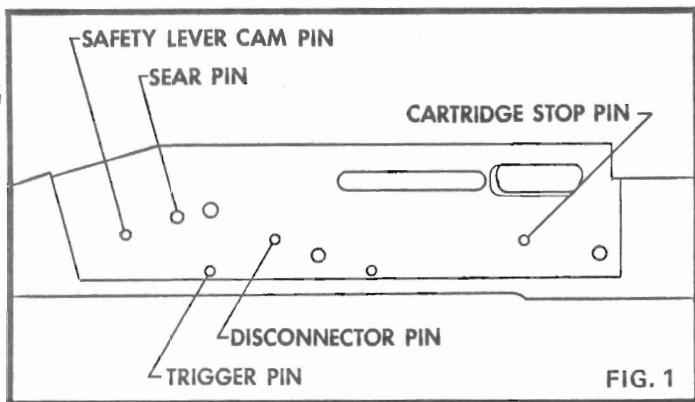
**CAUTION:** Phenol is used in the weld assembly of nylon components. Use all necessary acid handling precautions.

Follow numbered sequences:

1. Swab both joining surfaces with phenol. Take care that acid is applied to contact surfaces only.
2. Two (2) applications should be sufficient.
3. Allow swabbed surfaces to saturate thoroughly for at least five (5) minutes before joining.
4. Join saturated surfaces and hold in place. Use tape or clamps.

**NOTE:** Care should be taken that acid in excess is not applied to joining surfaces. Excess acid, squeezed or extruded from joined surfaces, must be removed immediately. Blemished areas will appear on unjoined areas if acid saturation is allowed to develop.

5. Allow at least one (1) hour for joined surfaces to weld together. Then remove tape or clamps. To remove slight abrasions or blemished in weld areas, use a good grade of auto rubbing compound.

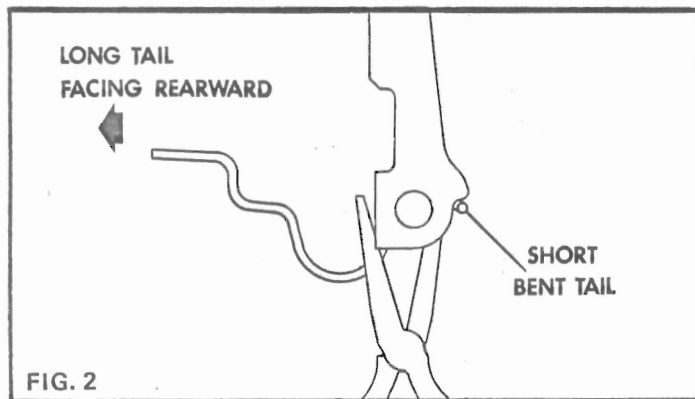


**TO COMPLETELY REASSEMBLE**

**NOTE:** For location of pins see Fig. 1. Refer to exploded view for location of parts.

Grip rear edge of cartridge feed insert with needle nose pliers and push through slot in center section of stock assembly at a 45° angle. Carefully pull upward and rearward to locate. Tilt stock assembly muzzle end upward, insert finger through trigger guard opening and carefully guide insert into position. Place rifle upside down and assemble cartridge stop and cartridge stop pin. Set bent tab of cartridge stop spring under pin and push forward until detent on spring snaps into position on cartridge stop.

Insert end of sear pin into hole in left side of stock assembly. Assemble sear spring to sear with short, bent tail of spring located against step on right rear side of sear and long tail of spring facing rearward. Grip sear and spring between jaws of flat nose pliers (Fig. 2). Insert from bottom of stock assembly. Adjust to proper location, align holes and tap sear pin through.



Insert disconnecter assembly from top of stock assembly. Rotate sear downward and position tab of disconnecter behind the sear. Make certain that the disconnecter spring is lying forward on disconnecter pivot and under nylon bridge. Align holes and tap in 3/8" long pins (Flush Only). Hook disconnecter spring to front of nylon bridge.

Insert safety assembly. Position safety lever cam pin to left side of stock assembly. Looking from bottom of stock assembly, pin will be under tail of sear spring. Depress safety lever and tap safety lever cam pin through.

To engage sear to disconnecter push disconnecter pivot rearward and rotate sear downward. When sear passes disconnecter, release pivot and disconnecter will engage in sear notch.

The trigger is assembled from bottom of stock assembly. Align holes and tap in trigger pin. Hook trigger spring to front spur on trigger. View proper engagement of trigger cap to trigger notch on disconnecter through hole on right side of stock assembly.

Assemble inner magazine to outer magazine tube. Insert assembly into butt end of stock. Push forward until magazine follower is in position above cartridge feed insert. Turn assembly so seam of outer magazine is visible from top of stock. Push magazine lock into lock slot at front end of outer magazine tube.

Insert flanged end of striker spring sleeve into hole in rear of stock. Slide striker spring over sleeve. Assemble striker to bolt rails in stock with large diameter hole to rear. Slide striker rearward until striker spring enters hole. Continue pushing rearward until stopped by sear. Pull trigger and push sear downward. Push striker past sear and release trigger. Sear will now hold striker in cocked position. Push safety rearward to On Safe.

Place action spring into striker spring sleeve. Put action spring plunger into action spring. Slide bolt rearward on bolt rails. Assemble bolt handle.

Place barrel bracket and barrel support into recoil slot in stock assembly. Slide barrel through bracket and push bracket down into bracket slot on barrel. Tighten barrel lock screw.

Assemble trigger guard. Tap in trigger guard pin.

Remove bolt handle, position ejector in left side of stock assembly. Make certain cartridge feed guide on bolt lies forward upon barrel. Slide receiver cover assembly over stock assembly and assemble front and rear cover screws. Insert bolt handle.