# REMINGTON FIELD SERVICE MANUAL

The Remington 3200 shotgun is designed to meet every requirement of the field, trap or skeet shooter. The stock and fore-end, made from select Walnut, have been beautified and protected by Du Pont RK—W finish.

Trigger pull has been factory adjusted to provide proper sear—hammer engagement. Fine checkering and stylishly marked frame panels are standard features.

The 3200 shotgun is chambered for 12 ga., 2%" shells in both standard and heavy loads, including the 2% MAGNUM.



The Owner's Manual RD 6658 is packaged with each new gun. Manuals may also be obtained from dealer or retailer. The Owner's Manual outlines the operating instructions and instructions for care and maintenance of the gun.

When handling gun for servicing or shipping, make certain gun is empty with no live shells in barrel chambers.

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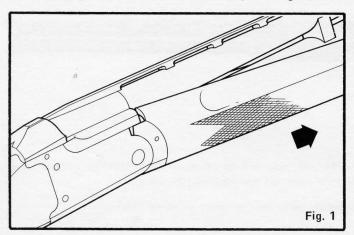
Send all guns for factory service and inquiries on service and parts to REMINGTON ARMS COMPANY, INC.

Arms Service Division Ilion, New York 13357

NOTE: The following parts are manufactured to close dimensions and carefully selected and assembled at the factory to assure proper function and fit. Should any of these parts require service or replacement, gun must be returned to factory: Frame-sear block assembly, barrel assembly, ejectors, bottom tang, fore-end iron assembly, top lock. See exploded view and parts list for identification of parts.

#### FORE-END ASSEMBLY

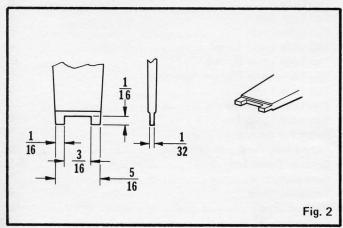
**To Disassemble** — Press fore-end latch rearward and push fore-end assembly downward slightly to disengage from barrel assembly (Fig. 1). Pull forward and away from gun.



To Reassemble — Carefully place fore-end assembly over bottom barrel at a slight angle. Adjust to fit radius on fore-end iron to matching radius on front of frame (Fig. 1). Press fore-end assembly upward to latch into place on barrel assembly.

FORE—END ASSEMBLY, COMPONENTS: includes fore-end; fore-end iron assembly, complete; fore-end screw, front; fore-end screw, rear; fore-end screw nut; fore-end latch cover.

**To Disassemble** — Remove fore-end assembly. Alter screw driver (Fig. 2) and unscrew fore-end screw nut. Unscrew front fore-end screw and remove fore-end latch cover. Pull fore-end from fore-end iron assembly, complete.



To Reassemble — Replace fore-end iron assembly, complete into fore-end. With short end of fore-end latch cover facing forward, replace rear fore-end screw into rear slot in fore-end latch cover. Replace cover into recess in bottom of fore-end and replace rear fore-end screw nut and front fore-end screw. Tighten front fore-end screw then rear fore-end screw nut.

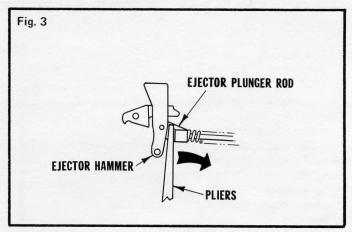
**NOTE:** Before tightening fore-end screw nut and front fore-end screw make sure fore-end iron assembly is properly located into fore-end.

# FORE-END IRON ASSEMBLY, COMPLETE

COMPONENTS: includes ejector hammer, right; ejector hammer, left; ejector hammer pin; ejector hammer pivot ring; ejector hammer spring (2); ejector plunger assembly (2); ejector sear (2); ejector sear spring (2); ejector sear pin (2); fore-end adjuster plate; fore-end adjuster plate lock nut; fore-end adjuster plate stud; fore-end latch; fore-end latch cover; fore-end latch finger piece; fore-end latch spring (2); fore-end iron assembly.

To Disassemble — Hold back ejector hammers, press downward on ejector sears and ease ejector hammers forward to release tension on ejector hammer springs. Grasp ejector plunger block ahead of ejector hammer with long sharp nosed pliers and pry ejector plunger block free from engagement with pin in ejector hammer (Fig. 3). Remove hammer plunger assembly and spring. Hammer plunger assembly is listed to include ejector plunger block and ejector plunger rod, permanently assembled at factory. Replace as a unit.

Drive out ejector hammer pin right to left and remove ejector hammers and ejector hammer pivot ring. Remove ejector sears and lift out ejector sear springs. Drive sear pins from fore-end iron assembly.

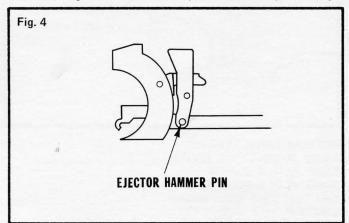


Push fore-end latch finger piece forward to remove from fore-end latch. Disengage fore-end latch springs from front of fore-end iron assembly. Slide fore-end latch rearward and out. Disengage springs from latch. Unscrew and remove fore-end adjuster plate lock nut, fore-end adjuster plate stud and fore-end adjuster plate.

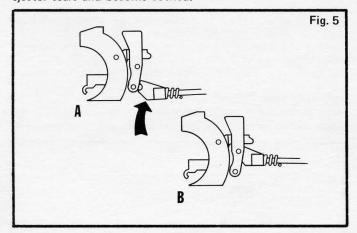
To Reassemble — Engage long hooks of fore-end latch springs into small holes in fore-end latch. Place and hold springs along sides of latch. With springs facing forward, replace latch into opening in fore-end iron assembly. Align slots in sides of latch with floor of fore-end iron assembly and slide forward as far as possible. Engage front hooks of springs to front of fore-end iron assembly.

Reassemble fore-end adjuster plate, fore-end adjuster plate stud and lock nut. **NOTE**: For adjustment, see section on fitting new parts and adjusting.

Replace ejector sear pins, ejector sears & springs. Tap pins flush with outside of fore-end iron assembly. Reassemble ejector hammer, right to ejector sear and fore-end iron assembly. Align holes and insert ejector hammer pin part way (Fig. 4). Fit ejector hammer pivot ring over inside end of hammer pin. Reassemble ejector hammer, left to ejector sear and fore-end iron, align holes and drive ejector hammer pin through.



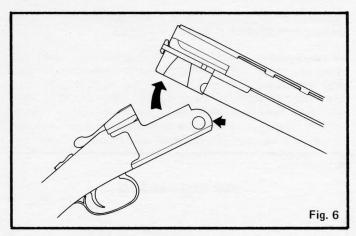
Replace ejector hammer spring to ejector plunger assembly. Fit end of ejector plunger into tab on fore-end iron assembly. Position ejector plunger block in front of ejector hammer (Fig. 5a). Push upward carefully until groove in ejector plunger block snaps over ejector drive pin in ejector hammer (Fig. 5b). Ejector hammers should be cocked before assembling fore-end iron assembly, complete into fore-end. Hook points of hammers on corner of bench, push down until hammers engage ejector sears and become cocked.



# BARREL ASSEMBLY - EJECTORS

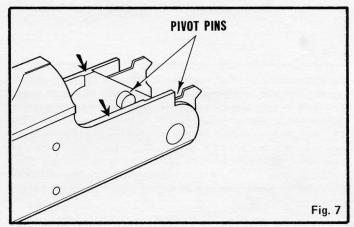
To Disassemble — Remove fore-end assembly. Rotate top lock lever counter clock-wise, camming top lock rearward, to unlock action. Rotate barrel assembly downward as far as possible and lift barrel assembly up and out of frame (Fig. 6).

To Reassemble — With top lock latched in open (rear) position, carefully fit barrel assembly into frame. Locate the two small crescent shaped cuts on sides of barrel assembly to pivot pins protruding from inside of frame (Fig. 7). Hold this engagement and rotate barrel assembly upward until action is closed and top lock latched and locked into place.



# BARREL ASSEMBLY COMPONENTS

Due to selective factory fitting of the various components that make up the barrel assembly (including ejectors), gun must be returned to factory for replacement of these parts.



# STOCK ASSEMBLY

**To Disassemble** — Unscrew and remove top butt plate screw. Loosen bottom butt plate screw and swing butt plate to clear hole in rear of stock. Insert long bladed screw driver into hole and unscrew stock bolt. Remove stock assembly, stock bolt, lock washer and washer.

To Reassemble — Follow reverse order. Use standard hand screwdriver only. NOTE: If stock assembly is to be replacement part, see section on fitting new parts and adjusting.

# STOCK ASSEMBLY, COMPONENTS

This assembly is factory listed to include stock, butt plate, butt plate screw (2), grip cap, grip cap screw (2).

**To Disassemble** — Unscrew and remove butt plate screws and remove butt plate. Unscrew and remove grip cap screws and grip cap.

To Reassemble - Follow reverse order.

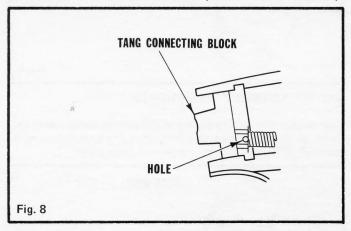
# TRIGGER GUARD

 $\begin{tabular}{ll} \textbf{To Disassemble} & - \begin{tabular}{ll} \textbf{Drive out front and rear trigger guard pins} \\ \textbf{and remove trigger guard}. \\ \end{tabular}$ 

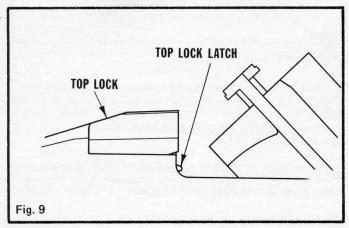
To Reassemble — Align holes, drive rear pin then front pin through.

# HAMMER PLUNGER ASSEMBLY (RIGHT) HAMMER PLUNGER ASSEMBLY (LEFT)

To Disassemble — Cock action. Remove fore-end, stock and barrel assemblies. Insert 1/16" dia. pin to a depth of 1/4" into small hole near bottom of tang connecting block (Fig. 8). Press down top lock latch to release top lock. (Fig. 9). Select hammer to be fired by moving safety switch selector to right or left.Pull trigger and remove selected hammer plunger assembly. CAUTION: Do not disturb small pin at rear of assembly.



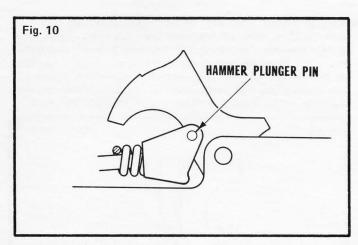
To Reassemble — With hammer in forward (fired) position, replace hammer plunger assembly. With rear of rod re-seated into hole in tang connecting block, push hammer rearward to engage slot in rear of hammer with hammer plunger pin (Fig. 10). Rotate bent end of ejector trip rod downward and push rod rearward to rear edge of slot in bottom tang. Cam top lock open and replace barrel and fore-end assemblies. Cock action, remove 1/16" dia. pin. Close action and replace stock.



# HAMMER PLUNGER ASSEMBLY, COMPONENTS

Includes hammer plunger rod, hammer plunger pin, mainspring plunger, main hammer spring.

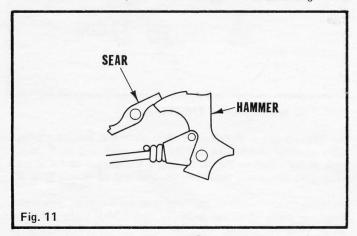
To Disassemble — Remove hammer plunger assembly from gun. CAUTION: Hammer spring is under high compression. Disassembly of this unit is not recommended unless necessary for replacement of damaged or broken parts. Suitable holding means must be used to prevent spring from flying free when 1/16" dia. pin is removed from hammer plunger rod. NOTE: Hammer plunger pin, hammer plunger rod and main hammer plunger are permanently assembled at the factory and must be replaced as a complete unit.



BOTTOM TANG ASSEMBLY TANG CONNECTING BLOCK TANG BLOCK SCREW TANG BLOCK SLOT NUT EJECTOR TRIP ROD, RIGHT EJECTOR TRIP ROD, LEFT HAMMER COCKING ROD

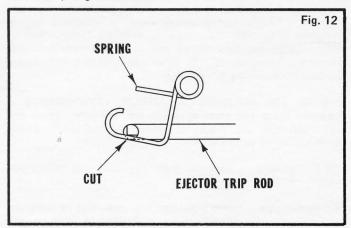
**To Disassemble** — Remove fore-end, barrel, stock and hammer plunger assemblies. Remove trigger guard. Unscrew and remove tang block screw. Shake out tang block slot nut and remove tang connecting block. Push ejector trip rods forward as far as possible, rotate bent ends outward and pull rearward out of frame. Drive out bottom tang assembly pin. Hold selector block rearward, grasp bottom tang assembly and carefully pull rearward out of frame. Remove hammer cocking rod.

To Reassemble — Place frame upside down on bench. Replace hammer cocking rod into frame and slide forward to engage tongue and grooves. Carefully replace bottom tang assembly into frame, sliding bottom tang forward to engage grooves in radius of slot. Hammers should be positioned under sears as shown in Fig. 11. Pull selector block rearward and press bottom tang until flush with bottom of frame. Align holes and drive in bottom tang assembly pin. Insert ejector trip rods into holes in frame and push forward until bent ends align with



vertical slots in bottom tang. Push hammer cocking rod rearward and push bent ends on ejector trip rods downward into slots and into space between hammer cocking cam spring and shoulder on hammer cocking cam. Continue pushing ends downward to pass under hammer cocking cam. Push rods rearward and make sure that end of springs are located in small square cuts in bottom of bent ends of ejector trip rods (Fig. 12). Reassemble tang connecting block and tang block

slot nut between top and bottom tangs. Align holes and screw in tang block screw lightly. There should be a slight movement of the tang connecting block at this time. Fit stock assembly to frame properly. Replace stock bolt, stock bolt washer and lock washer and screw stock bolt into tang connecting block snugly. Tighten tang block screw. Replace hammer plunger assemblies.



# BOTTOM TANG ASSEMBLY - COMPONENTS

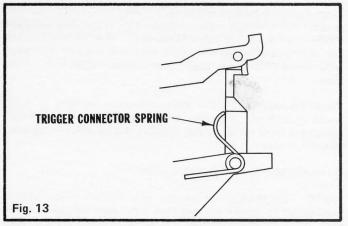
This assembly includes trigger adjusting screw nut, trigger adjusting screw, rear connector link, selector block, connector, trigger stop screw nut, trigger stop screw, hammer assemblies (right and left), hammer pin, hammer cocking cam pin, hammer cocking cam spring, hammer cocking cam, bottom tang, trigger connector spring, trigger connector spring pin, trigger, trigger pin, connector pin (3).

To Disassemble — Remove bottom tang assembly from frame, Drive out trigger pin and disassemble trigger, selector block, connector pin (3), connector, rear connector link, trigger adjusting screw and nut, trigger connector spring and pin, trigger stop screw and nut. NOTE: Disassembly of the above listed individual parts of the trigger group is not necessary unless required for replacement. If such disassembly is required proceed as follows: Drive out connector pins and trigger connector spring pin and disassemble selector block, connector, rear connector link and trigger connector spring from trigger. Unscrew and remove trigger adjusting screw and nut and trigger stop screw and nut.

Drive out hammer pin and remove hammers. Drive out hammer cocking cam pin and remove hammer cocking cam and spring.

To Reassemble — Clamp bottom tang in vise jaws. Replace hammer cocking cam spring into bottom tang with ends facing up and insert hammer cocking cam pin into left side of bottom tang and into coil of spring. Grasp ears of hammer cocking cam and with slots facing forward replace into bottom tang. Align all holes, push pin through and stake into place. Rotate cam clockwise until stopped by spring. Hook long ends of spring beneath ears on cam. Rotate cam counter clockwise until ends of spring contact floor of bottom tang. Replace hammers with tapered hubs facing inward. Push pin through and stake into place. Replace trigger adjusting screw and nut and trigger stop screw and nut into trigger.

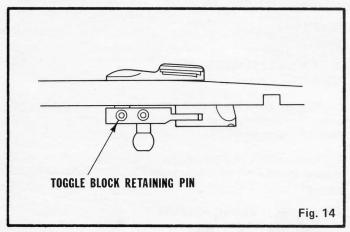
Reassemble rear connector link and connector to trigger, align holes and drive in connector pin and trigger connector spring pin. Reassemble selector block to rear connector link and connector with remaining two connector pins. Reassemble trigger connector spring (Fig. 13). Replace assembled trigger



unit into bottom tang, align holes and push trigger pin through. Stake pin into place.

## SAFETY SWITCH ASSEMBLY

To Disassemble— Remove bottom tang assembly. Provide support beneath side of toggle block and drive out toggle block retaining pin from left to right (Fig. 14). Drive safety switch selector assembly from toggle block. CAUTION: Safety switch selector detent, located between toggle block and top tang, is under compressed load of safety switch selector detent spring. Carefully slide remaining assembly from top tang.



To Reassemble - Follow reverse order.

SAFETY SWITCH ASSEMBLY, COMPONENTS (Field Grade) Includes safety switch selector assembly, toggle block, toggle block retaining pin, selector block guide, selector block guide pin, safety switch selector detent, safety switch selector detent spring, toggle link, toggle link screw, toggle slide block, toggle slide block stud.

To Disassemble— Remove safety switch selector assembly from toggle block and slide remaining parts of assembly out of top tang and carefully remove safety switch selector detent and spring. Drive out selector block guide pin from left to right and drive out selector block guide. Unscrew and remove toggle slide block stud and toggle link screw.

To Reassemble - Follow reverse order.

SAFETY SWITCH ASSEMBLY COMPONENTS — (Skeet and Trap grades) includes safety switch selector lever, safety switch selector screw, safety switch selector rod, toggle block, toggle block retaining pin, selector block guide, selector block guide pin, safety selector detent, safety switch detent spring, toggle link, toggle link screw, toggle slide block, toggle slide block stud.

**To Disassemble** — Follow same procedure as used in field grade. In addition, the safety switch selector lever may be disassembled from safety switch selector rod by unscrewing safety selector screw.

To Reassemble - Follow reverse order.

NOTE: The practice of altering any firearm safety switch mechanism to render it inoperative is not recommended. However, many competitive trap and skeet shooters do this and also lock selectors to fire a specific barrel first. Should such an alteration be desired to trap and skeet models, use following procedure: Move safety switch selector lever to desired barrel position. Unscrew and remove safety switch selector screw and lever. Retain safety switch selector lever for future use. CAUTION: Gun is now locked OFF SAFE. Removal of safety switch selector lever exposes slotted head of safety switch selector rod. A small tapped hole will also be exposed to rear of safety switch selector rod. Assemble safety switch selector screw into this hole with head of screw locked into safety switch selector rod. Gun is then locked to fire selected barrel first. CAUTION: Before using the Remington 3200 Shotgun for field hunting, make certain that safety switch selector has been converted back to normal, fully operative condition.

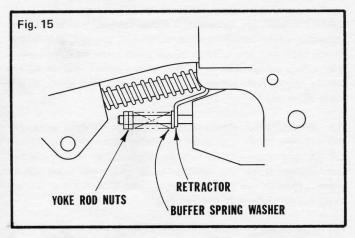
SEAR,LEFT SEAR,RIGHT SEAR SPRING (2) SEAR SPRING PLUNGER (2) SEAR PIN

To Disassemble— Remove hammer plunger assemblies and rotate hammers rearward. Drive out sear pin and remove sears, springs and plungers.

To Reassemble— Follow reverse order. Align holes and fit plunger points into conical recesses on top of sears. Drive pin through.

# FIRING PIN HOUSING ASSEMBLY

To Disassemble— Remove bottom tang assembly and sears. Make sure that top lock is latched into rear position. Drive out



firing pin housing pin. Grasp yoke rod securely and retract as far as possible and pull firing pin housing assembly from frame.

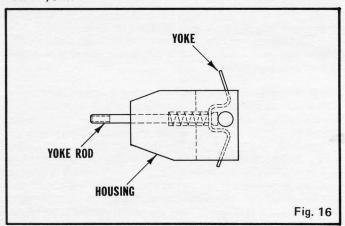
**To Reassemble**— Make sure grooves in firing pins engage slots in yoke. With small crescent shaped opening in top of housing facing upward in gun, grasp yoke rod and pull and hold rearward as far as possible. Carefully replace firing pin housing assembly into frame — fitting firing pins into respective holes and yoke rod into slot in firing pin retractor.

Yoke rod buffer spring washer should be located to rear of retractor (Fig. 15). Push housing forward against wall of frame. Latch top lock to rear position, align holes and drive housing pin through. NOTE: Yoke rod must be held rearward to clear while driving pin through.

FIRING PIN HOUSING ASSEMBLY, COMPONENTS — includes firing pin housing, firing pin (2) yoke, yoke rod, yoke rod nuts (2), yoke rod spring, yoke rod buffer spring, yoke rod buffer spring washer.

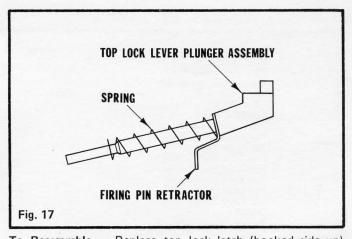
To Disassemble — Unscrew yoke rod nuts and disassemble unit.

To Reassemble - Insert yoke rod into open end of yoke and replace yoke rod spring over rod. Reassemble into housing (Fig. 16). Press rod rearward and replace yoke rod buffer spring washer, yoke rod buffer spring and yoke rod nuts. Reassemble firing pin into housing fitting grooves in pins into slots in yoke.

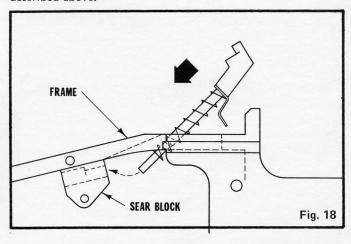


TOP LOCK
TOP LOCK SHIM
TOP LOCK LEVER
TOP LOCK LEVER SCREW
TOP LOCK LEVER SPRING
TOP LOCK LEVER PLUNGER ASSEMBLY
TOP LOCK LATCH
TOP LOCK LATCH SPRING
TOP LOCK LATCH PIN
FIRING PIN RETRACTOR

To Disassemble — Remove all parts as previously described. Release top lock forward. Unscrew and remove top lock lever screw. Using small screwdriver, pry stud on top lock lever plunger free from hole in top lock lever. Press down on top lock latch and pull top lock and top lock lever rearward from frame. Remove top lock shim. Carefully release top lock latch and lift out top lock latch spring. Pull top lock lever plunger assembly, with spring and firing pin retractor, from top of frame. Disassemble spring and retractor from plunger assembly. Drive out top lock latch pin and remove top lock latch.



To Reassemble - Replace top lock latch (hooked side up) into slot in frame, align holes and drive in pin until flush with outside of frame. Lift up latch and replace latch spring into hole. Reassemble firing pin retractor and top lock lever spring to top lock lever plunger assembly (Fig. 17). Replace this unit through slot in top of frame and fit end of plunger into small hole in sear block (Fig. 18). Push rearward and down on top lock lever plunger assembly until retained against wall of slot in top of frame. Top surface of stud should be flush with or lower than top surface of frame. Replace top lock shim. Reassemble top lock and top lock lever and slide over top of frame. Depress top lock latch and push top lock forward as far as possible. Turn gun bottom up and adjust top lock lever plunger until stud drops into hole in top lock lever. Align top lock lever screw hole (in frame) with slot on outer edge of top lock lever. Replace and tighten top lock lever screw. NOTE: Screw will not assemble to full depth unless in correct position described above.



# FITTING OF NEW PARTS AND ADJUSTING

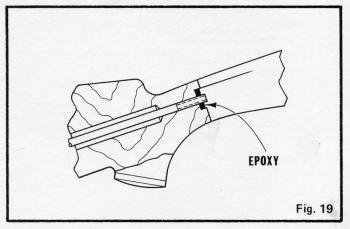
# TO TIGHTEN ACTION

After considerable use, the action (joint where barrel assembly pivots in frame) may become loose. Wear at this point may be taken up by adjusting the fore-end adjuster plate. To do this, proceed as follows: Remove fore-end and fore-end iron assemblies. Replace fore-end iron assembly to gun. Loosen

fore-end adjuster plate lock nut and rotate stud to right or left until desired tightness is obtained when action is opened. Hold stud in position and tighten lock nut.

# TO FIT REPLACEMENT STOCK ASSEMBLY

Before attempting to fit replacement stock assembly, make sure that stock properly fits frame and top and bottom tangs. There should be a slight clearance (approx. 010") around the rear radii of top and bottom tangs. Using proper release compound for type of epoxy to be used, coat rear 1 to 11/2 inch of frame surfaces and front half of stock bolt. Replace bolt, lock washer and washer into replacement stock assembly. Hold stock bolt in forward position. Place notebook page gummed reinforcement over end of stock bolt and press down into recess cut in stock (Fig. 19). This is recommended as a seal against possible seepage of epoxy into stock bolt hole. While holding stock bolt in forward position, fill recess cut in stock with epoxy to within 1/8" of end of stock bolt. (Fig. 19). Carefully fit frame into stock and tighten stock bolt snugly. Do not over tighten. Place gun in vertical position to prevent any possible seepage of epoxy into action. Allow overnight drying time. Unscrew stock bolt and remove stock assembly. Clean all release compound from parts and remove residual epoxy. Ream out threads formed in epoxy by stock bolt (approx. 9/32" - .281) Reassemble and tighten stock bolt securely. Replace butt plate or recoil pad and screws.



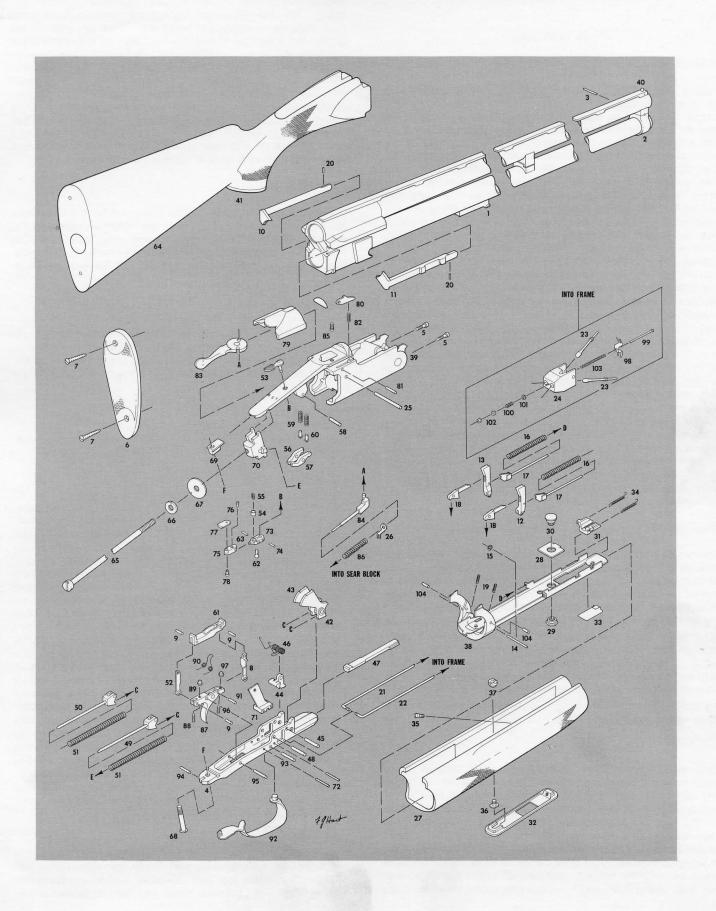
# CYCLE OF OPERATION

Gun is locked on a live round in each barrel. The safety switch selector is in a firing position, i.e. either location for top or bottom barrel, and the top lock is in closed position. The firing pins are held forward by the yoke rod spring and urged rearward by the shell primers. The hammers, urged forward by hammer springs, are engaged by sears. The top lock lever plunger is forward - out of the way of the selector block. A trigger linkage assembly, forming a parallelogram (composed of trigger, connector, rear connector link and selector block), is held in position by pins and urged forward by trigger connector spring. The ejector trip rods (right and left) are in position with turned ends protruding into bottom tang and below bottom of hammers. These rods are urged upwards by a spring load of 4 oz. Both right and left ejector hammers are held forward in cocked position against compressed ejector hammer spring by their respective sears.

# REMINGTON FIELD SERVICE MANUAL

View No.	NAME OF PART		View No.	NAME OF PART		
NOTE:	Field Grade Listed Below		78	Toggle Slide Block Stud	/D	
4	Daniel Assessed		79 80	Top Lock Top Lock Latch	(Restricted)	
1 2	Barrel Assembly Barrel Band - 26,28 in.		81	Top Lock Latch Pin		
2	Barrel Band - 30 in.		82	Top Lock Latch Spring		
3	Barrel Band Lock Pin		83	Top Lock Lever	(Restricted)	
4	Bottom Tang	(Restricted)	84	Top Lock Lever Plunger Assembly		
5	Bottom Tang Screw		85 86	Top Lock Lever Screw Top Lock Lever Spring		
6	Butt Plate Butt Plate Screw		80	Top Lock Shim (.015)		
8	Connector			Top Lock Shim (.020)		
9	Connector Pin			Top Lock Shim (.025)		
10	Ejector, Left	(Restricted)		Top Lock Shim (.030)		
11	Ejector, Right	(Restricted)		Top Lock Shim (.035) Top Lock Shim (.040)		
12 13	Ejector Hammer, Right Ejector Hammer, Left			Top Lock Shim (.045)		
14	Ejector Hammer Pin		87	Trigger		
15	Ejector Hammer Pivot Ring		88	Trigger Adjusting Screw		
16	Ejector Hammer Spring		89	Trigger Adjusting Screw Nut		
17	Ejector Plunger Assembly		90 91	Trigger Connector Spring Trigger Connector Spring Pin		
18 19	Ejector Sear Ejector Sear Spring		92	Trigger Connector Spring Fin		
20	Ejector Stop Pin		93	Trigger Guard Pin, Front		
21	Ejector Trip Rod, Left		94	Trigger Guard Pin, Rear		
22	Ejector Trip Rod, Right		95	Trigger Pin		
23	Firing Pin		96	Trigger Stop Screw		
24 25	Firing Pin Housing Firing Pin Housing Assembly Pin		97 98	Trigger Stop Screw Nut Yoke		
26	Firing Pin Retractor		99	Yoke Rod		
27	Fore-end		100	Yoke Rod Buffer Spring		
28	Fore-end Adjuster Plate		101	Yoke Rod Buffer Spring Washer		
29	Fore-end Adjuster Plate Lock Nut		102 103	Yoke Rod Nut Yoke Rod Spring		
30 31	Fore-end Adjuster Plate Stud Fore-end Latch		103	Ejector Sear Pin		
32	Fore-end Latch Cover		10.	Ejodol oda i iii		
33	Fore-end Latch Finger Piece					
34	Fore-end Latch Spring					
35	Fore-end Screw, Front					,
36 37	Fore-end Screw, Rear Fore-end Screw Nut					
38	Fore-end Iron Assembly	(Restricted)				
39	Frame - Sear Block Assembly	(Restricted)				
40	Front Sight					
44	Front Sight Pin					
41	Grip Cap Grip Cap Screw					
42	Hammer Assembly, Right					
43	Hammer Assembly, Left					
44	Hammer Cocking Cam					
45	Hammer Cocking Cam Pin					
46 47	Hammer Cocking Cam Spring Hammer Cocking Rod					
48	Hammer Pin					
49	Hammer Plunger Assembly, Right					
50	Hammer Plunger Assembly, Left					
51 52	Main Hammer Spring					
52 53	Rear Connector Link Safety Switch Selector Assembly					
54	Safety Switch Selector Detent					
55	Safety Switch Selector Detent Spring					
56	Sear, Left					
57 58	Sear, Right Sear Pin					
58 59	Sear Spring					
60	Sear Spring Plunger					
61	Selector Block					
62	Selector Block Guide					
63 64	Selector Block Guide Pin					
65	Stock Assembly (*) Stock Bolt					
66	Stock Bolt Lock Washer					
67	Stock Bolt Washer					
68	Tang Block Screw					
69 70	Tang Block Slot Nut		100			
70 71	Tang Connecting Block Tang Strut					
72	Tang Strut Pin					
73	Toggle Block					
74	Toggle Block Retaining Pin					
75						
75 76	Toggle Link Toggle Link Screw					

# REMINGTON FIELD SERVICE MANUAL



# CYCLE OF OPERATION

(Cont. from page 6)

#### FIRING

Pulling trigger rearward rotates front and rear sections of trigger down and up respectively, carrying connector and rear connector link with it. The parallelogram is rotated, dropping selector block downward but parallel to trigger until the front top section of connector engages rear section of one of the selected sears. Continued rearward movement of trigger rotates sear counterclockwise about sear pin, releasing mating hammer, which, in turn, rotates clockwise about hammer pin urged forward by compressed hammer spring. The front face of the hammer strikes against rear of selected firing pin, impinging it upon the primer. Nose of sear rides a cam on top of hammer located behind hammer notch, positioning it out of positive engagement with connector. During recoil, two 150 mating cams located on the ends of sears and on connector contact surface, force trigger rearward preventing reconnecting with the other sear - effectively preventing doubling. As hammers rotate forward, turned ends of trip rods are cammed down until they pass the camming projection of hammers and then, by force of the 4 oz. spring, resort to the original position in front of hammer cam. When connector moves downward during pulling of trigger, projecting sides just back of the center protrusion engage second sear upon release of trigger. Further forward movement of parallelogram connection mechanism is initiated by pulling trigger again, which releases second sear, releasing second hammer and firing second round. Marking of primers is caused by the inertia of moving firing pins striking a primer when a gun is dropped. This condition is prevented by spring loading the firing pins forward. Firing pin breakage usually caused by dry firing has been eliminated because firing pins are held forward by yoke rod spring beyond rear face of firing pin housing and cannot be contacted by hammer when gun is empty.

# UNLOCKING

Unlocking is initiated by manual operation of moving top lock lever from left to right. This moves top lock rearward out of engagement with barrel assembly. When top lock lever is moved counterclockwise, a camming action causes top lock lever plunger to move rearward, compressing spring and storing energy for the forward return stroke of top lock. At the same time, the top lock lever plunger protrudes far enough through sear block to restrain forward movement of selector block (a safety feature), preventing actuation of sears. Also, rearward motion of top lock lever plunger forces yoke rod retracting spring rearward, compressing yoke rod spring and pulling yoke rod rearward, retracting firing pins out of engagement with face of breech frame.

#### COCKING

Cocking is accomplished by breaking action open at hinge point between barrel and frame. This is a manual operation and cannot be performed unless top lock lever is held in the unlocked position until barrel assembly has cleared top section of top lock. At that position, the top lock latch which has been retained in a downward position by a radius on rightside of barrel assembly is released upward, latching top lock lever in an open position. Just after the initial breaking action takes place and slightly beyond clearance of barrel assembly with top lock, the cocking rod is engaged by a cam located on the

bottom rear section of fore-end iron. As breaking action continues, this cam forces cocking rod rearward, which, in turn, cams hammer cocking cam clockwise about pin and against spring. A lug on rear of hammer cocking cam engages the two hammers in a radius provided, rotating hammers in a counterclockwise motion about hammer pin and, at the same time, cocking the two hammer springs and plungers storing energy for firing. The firing hammers are rotated so their engaging notches move past mating notches in sears, assuring positive engagement during loading cycle. Also, during rotation, when breaking angle is 15°, the cam lug on bottom of hammers cams the ejector trip rods forward. This places front section of trip rods beneath nose of ejector hammer sears.

#### **EXTRACTION**

During the time action is broken open, the right and left ejector cam plates engage protrusions on respective right and left ejectors, camming them rearward and effectively unseating fired shells out of chambers in primary extraction. Both ejectors contain a hook or claw that fits just forward of rim of shells.

# **EJECTION**

Further breaking action up to 47° forces ejector sears to release from notches on ejector hammers. The ejector hammers, being released by their respective sears, rotate counter clockwise under spring load and strike ejectors, forcing shells from barrel chambers.

#### **FEEDING**

Feeding is accomplished by inserting a shell manually into either or both barrels.

# LOADING

Loading is accomplished as manual closing of action takes place. At this time, the over-cocked hammer notches are engaged by the sear notches. A cam lug, located on both right and left ejectors, is engaged by the ejector cam plates. As the closing action takes place, the gap between ejector hammer sears and ejector trip rods increases - removing load from nose of trip rod. This action allows ejector hammer sears to rotate counterclockwise under spring load, ready to engage ejector hammers. Continued closing forces ejectors forward, through camming action of ejector cam plate, rotating ejector hammers clockwise - compressing ejector hammer springs. The ejector hammers are then engaged with ejector hammer sears. Simultaneously, the front of the ejector trip rods engage cams on right and left rear section of fore-end iron - pushing ejector trip rods rearward and placing the turned ends under the lower projections of firing hammers. As closing motion progresses, the ejectors move forward in retaining slots in barrel assembly allowing shells to be seated in chambers by closing action between barrel assembly and face of frame. Loading and seating of shells tightens the space between head of shell, located in the chamber, and face of frame. This is called heading or headspace and is normal on top barrel and up to .005 additional on bottom barrel because of a slight radius on barrel face due to position of joint pins.

# LOCKING

Just prior to complete closing of action, but after top of barrel assembly clears top lock, a radius, located on right rear section of barrel assembly, cams top lock latch downward.

This releases top lock and under action of spring forces top lock forward and over top section of barrel assembly, securely locking system. As closing of action takes place a large locking lug located on each side of barrel assembly engages a mating set of lugs in frame. These lugs are so designed to withstand the thrust load during firing. The lower front section of top lock contains a cam, which, in turn, engages a mating cam on barrel assembly. These two cams effectively wedge the locking system of the top lock and barrel assembly into a tight unit and through their action tend to keep the system tight regardless of wear through continued use in this area. As top lock is released to a normal position during locking cycle, top lock lever plunger moves forward, eliminating blocking action of selector block. The yoke rod retracting spring is also released to a forward position, allowing the two firing pins to move forward so that the nose of each pin is resting on the primer of each shell with a spring force of 4 oz. This feature prevents marked primers and a jar-off condition in case gun is accidently dropped. Gun is now ready for firing.

# **MALFUNCTIONS**

# **Cause and Correction**

# 1. GUN IS HARD TO LOAD

#### Cause:

- a. Dirty chambers. Clean and oil lightly.
- Gun, feeding shells into chamber, shreds brass. Using white arkansas stone, break edge lightly where ejector cut meets chamber.

# 2. GUN FAILS TO CLOSE AND LOCK

# Cause:

- a. Dirt or debris on locking radius, water table (arrow, Fig. 7) or hinge pins. Clean carefully.
- b. Dirt beneath head of ejector.
- c. Top lock binds. Free up top lock. If binding still occurs, check top lock lever spring and top lock lever assembly for broken parts.
- d. Ejectors bind. Free up.

# 3. GUN FAILS TO FIRE

# Cause:

- a. Hammer fails to fall; Reason:
  - Trigger stop screw (front screw on trigger) incorrectly adjusted. If so, gun will normally fire one (1) barrel but will fail to fire second. Readjust screw.
  - 2. Sears bind in sear block. Free up sears. Stone lightly.
  - 3. Connecting linkage binds.
  - 4. Trigger connector spring disconnected.
  - Debris on water table and/or locking lugs. Top lock lever plunger assembly holds connector back off second sear.
  - 6. Debris under trigger.
  - 7. Trigger pin staked incorrectly.
- b. Light firing pin indent. Reason:
  - 1. Main hammer plunger rod broken.
  - 2. Wrong main hammer spring.
  - Slot in main hammer plunger block narrowed binds hammer.

- Hammer cocking cam does not return to normal position after cocking. Check for debris, binding cocking cam or deformed spring.
- 5. Firing pin binds in housing.
- 6. Broken yoke binds firing pin.
- 7. Firing pin point binds in hole in breech face. Carefully lap out hole.

# 4. GUN UNLOCKS HARD

#### Cause:

- a. Debris under locking lugs and/or on water table.
- b. Top lock binds (with barrel assembly removed). Disassemble, clean, grease and reassemble.
- c. Incorrect top lock shim. See locking system (no. 11)
- d. Locking surfaces in poor condition.

# 5. GUN OPENS TOO HARD OR TOO EASY

# Cause:

- a. Galling on radii of frame or fore-end iron assembly. See arrow, Fig. 6. Stone smooth.
- b. Fore-end adjuster stud incorrectly adjusted. See Fitting of new parts and adjusting (Page 6).
- c. Firing pins drag on shell cases. See No. 10.
- d. Burrs on bearing surfaces on side of barrel assembly and inside of frame. Stone smooth and lubricate with grease.

# 6. GUN FAILS TO EJECT

#### Cause:

- a. Dirty chambers. Clean and oil lightly.
- b. Damaged part or parts in ejection mechanism inside of fore-end assembly. Remove assembly, disassemble and check all parts. Free up, if possible or replace parts.
- Ejector trip rod binds inside of stock. Remove stock and check ejection. If gun ejects, file trip rod clearance in wood.
- d. Hammer fails to push trip rod forward when gun is opened and hammer cocked. Free up trip rod or repair or replace faulty hammer.
- e. Debris on barrel stop surface on ejector cam plate, preventing complete opening of gun. Clean thouroughly.

# 7. BOTTOM BARREL EJECTS TOO SOON

# Correction:

a. File flat on front top of left trip rod slightly. Be careful to not remove too much material. Check for function.

# 8. GUN FAILS TO COCK

## Cause:

- a. Debris on ejector cam plate barrel stop surfaces.
- b. Hammer under-cocked (gun fully open). Inspect cocking cam arm on fore-end iron assembly, cocking cam pins and hammer pins for damage.

# 9. FORE-END LATCH BINDS

#### Cause

- a. Jagged edges on fore-end iron assembly. Stone smooth.
- b. Burrs on top cam surfaces. Stone smooth.
- c. Burrs on fore-end latch slot. Stone smooth.
- d. Slide surfaces dry. Lubricate.

# 10. YOKE ROD NUT ADJUSTMENT

a. When top lock is in forward position, there should be a slight clearance between washer and firing pin retractor. The nuts should be tightened against one another and held with some type of adhesive.

# 11. LOCKING SYSTEM

- a. Clearance or play between top lock locking angle and barrel assembly locking angle may be corrected by the following:
  - Disassemble frame completely to remove top lock.
     Take shim from between top lock and frame and file thinner.
  - 2. Reassemble top lock shim, top lock, top lock lever, top lock lever plunger and spring only. Put in pivot screw and try barrel assembly for play or clearance. It is important that all debris is cleaned from inside of action to obtain correct fit. If clearance still exists remove top lock and file or surface grind shim thinner being careful not to file or grind crooked. Reassemble above parts and try again. Correct fit is obtained when there is a slight drag between the locking angles. Before reassembly, the top lock slides should be greased as well as the top lock lever boss. Reassemble gun, being careful to stake pins where required.

# 12. FIRING PIN FAILS TO RETRACT ON OPENING

# Cause:

- a. Yoke rod nut not adjusted properly. (See no. 10)
- b. Firing pins bind. Free up.

# **APPENDIX**

Design Modifications (Please read carefully)

In 1974 the 3200 Shotgun underwent design modifications to improve the function, reliability and durability of the gun. Specifically, these modifications are:

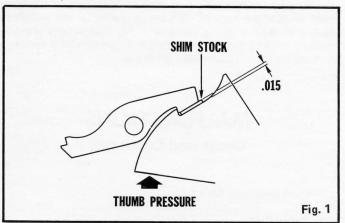
- Bottom tang assembled to frame with two (2) bottom tang screws.
- Top and bottom tangs are heat treated to increase durability.
- Newly designed tang block slot nut greatly reduces stress concentration.
- Sears have been redesigned to provide more uniform trigger pull.
- 5. A tang strut has been inserted between the top and bottom tangs and assembled with pins. This strut provides more satisfactory integrity of sear-hammer relationship. (See revised parts list and exploded view on pages 7 and 8 for proper identification and location of these parts).

These modifications will materially increase the endurance of the gun and will provide more consistent trigger pulls. For these reasons, we ask you to encourage all 3200 Shotgun owners, whose guns have any of the characteristics listed below to return their guns to the factory in Ilion, New York. These modifications will be installed on a no charge basis. Guns that are fitted out with the modifications can be identified in either of two ways.

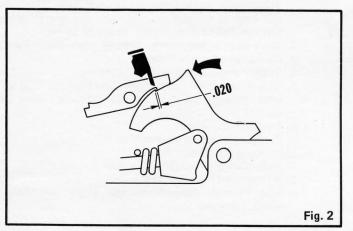
- 1. Two (2) visible bottom tang screws at bottom of breech face (with barrel assembly removed).
- 2. A dot placed between the prefix and number of the serial number (OU · 10000).

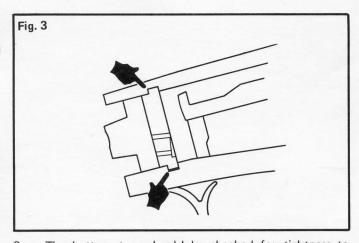
# TO SERVICE EARLY PRODUCTION 3200 SHOTGUNS

When servicing early production 3200 Shotguns with serial numbers below 30,000, there are certain characteristics which should be observed. If overlooked, they may be detrimental to the proper functioning of the gun. These characteristics are due either to excessive force used in opening or closing barrels to action or to field alterations of these parts. They are treated individually as follows:

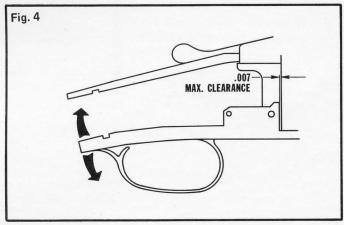


- Sear-hammer notch engagement may be improper. Measurement can be checked by removing the main hammer plunger assemblies and inserting a .015 thick feeler between the sear and hammer (see Fig. 1). Check with thumb pressure to see if the hammer can be rotated out of the sear notch. If it can, gun should be returned to Ilion for repair.
  - CAUTION: SEAR NOTCHES, HAMMER NOTCHES, SEAR SPRINGS OR HAMMER SPRINGS SHOULD NEVER BE ALTERED. Note also that there should be a minimum of .020 clearance between the sear notch and hammer notch when barrel assembly has been rotated wide open. (See Fig. 2).
- Inspect both top and bottom tangs using a bright light and a magnifying glass. Cracks, if existent, will appear at the rear sections of the tang connecting block cross slots (see Fig. 3). The top tang will show a stress mark across the top if it is nearing such a condition. Should either tang exhibit such a crack or mark, return gun to llion Plant.





3. The bottom tang should be checked for tightness to frame. If not to required tightness, this fit can affect fire control adjustment. The fit can be tested in the following manner. Remove tang connecting block. Hold frame firmly and try to rotate bottom tang about bottom tang assembly pin (see Fig. 4). If there is zero to slight movement, the tang is to required tightness. Reassemble tang connecting block. (Note: when reassembling tang connecting block, make sure that the tang block screw is torqued tightly and staked so that it will not back out. If bottom tang rotates about the pin, gun should be returned to the Ilion Plant where modifications can be installed.



When reassembling stock assembly, check epoxy seat for proper bearing. If the seat is destroyed, cut out and reapply a good grade of epoxy which has a filler, such as glass or aluminum. When assembling the stock, torque the stock bolt to 40 to 60 inch pounds.

# TO SERVICE GUNS HAVING MODIFICATIONS

Except for instructions listed below, these guns may be serviced in same manner as early production guns (prior to serial number 30,000).

Should it be necessary to disassemble bottom tang from frame, unscrew the two (2) small bottom tang screws located inside the frame (A) DO NOT attempt to remove the pins from sides of frame (B). (See Fig. 5).

# **BOTTOM TANG ASSEMBLY**

To Disassemble — Remove fore-end, barrel, stock and hammer plunger assemblies. Remove trigger guard. Unscrew and remove tang block screw. Shake out tang block slot nut and remove tang connecting block. Push ejector trip rods forward

as far as possible, rotate bent ends outward and pull rearward out of frame. Unscrew bottom tang screws (Fig. 5). Drive out sear pin. Remove sears, sear spring plungers and springs. Hold selector block rearward, grasp bottom tang assembly and carefully pull rearward out of frame.

To Reassemble — Place frame upside down on bench. Replace sear springs, plungers and sears. Retain one sear with a .125 diameter slave pin and the other with the sear pin. Do not allow either pin to protrude into center slot in sear block. Carefully replace bottom tang assembly into frame, sliding bottom tang forward to engage grooves in radius of slot in frame. Top of tang strut should fit into center slot in the sear block. Replace and lightly screw in the two bottom tang screws. Align all holes and tap sear pin through to full depth. Tighten bottom tang screws. Continue reassembly as described on pages 3 and 4 of main supplement.

