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(Appropriate classification) *OCM 30417* ^(event)

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NOTES ON
DEVELOPMENT TYPE MATERIEL

Gun, Machine, Light, Cal. .30 T-52-E3

20 $\frac{1}{4}$ LB
2 REGRADED *Declassified* 10 Jan 1957
7 $\frac{1}{4}$ lb only
19 $\frac{1}{2}$ K, Dll only
(Appropriate classification) (event) OCM 36417

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NOTES ON
DEVELOPMENT TYPE MATERIEL

Gun, Machine, Light, Cal. .30 T-52-E3

There is no copyrighted matter contained
in this report.

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February 1952

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NOTES ON
DEVELOPMENT TYPE MATERIEL

for

GUN, MACHINE, LIGHT, CAL. .30 T-52-E-3

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CHAPTER I

INTRODUCTION

1. SCOPE

- a. These Notes on Materiel are for the purpose of describing for Ordnance and Service Personnel the source, operation, and parts of the Model of the Light, Automatic Machine Gun Cal. .30 T-52-E3, which will hereinafter be referred to as the Gun.

2. SOURCES

- a. The Gun is a progressively improved model based upon the Cal. 7.92 MM T-44 experimental gun, the further modified Cal. .30 T-52 experimental gun, and the further modified Cal. .30 T-52-E1 Experimental gun, with varying modifications as requested by the Office Chief of Ordnance, Research and Development Service, Artillery Small Arms Branch, Washington, D. C.
- b. The Gun was developed by Bridge Tool and Die Works, Engineering Division, Philadelphia, Pennsylvania, for the Office Chief of Ordnance, Research and Development Service, Artillery Small Arms Branch, Washington, D. C.

3. CHARACTERISTICS

- a. Gas Cutoff and Expansion System of Operation.
- b. Aircooled.
- c. Fast Change Barrel.
- d. Bipod Supported.
- e. Provisions made for Tripod Mount.
- f. Employs T-65 Cartridge with disintegrating Link.
- g. Cyclic rate of fire - approx. 700 per min.
- h. Total weight - 20 lbs.
- i. Light Barrel Weight bare - 3 1/2 lbs.
- j. Heavy Barrel Weight bare - 7 lbs.
- k. Length - 43 1/2" with flash suppressor.

4. REFERENCES

- a. Photographs and line drawings, taken in various positions to aid in identifying parts, are inserted throughout the book.
- b. In the appendix is listed the assemblies, detailed drawings, and spare parts of the Gun.

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CHAPTER II

DESCRIPTION AND OPERATION

5. RECEIVER GROUP

- a. The receiver body, in which the essential parts of the Gun operate, is of spot welded, sheetmetal construction, consisting of an inner and outer housing, one bridge member, and a machined socket. The forward end of the socket supports the barrel retaining pin.
- b. The inner and outer housings, spot welded together, form a channel-shaped section, which supports the operating rod and bolt. The receiver has a longitudinal opening 1/2" wide along the top side, through which the operating rod protrudes to operate the feeding cam. The 1/2" wide opening is maintained by welding the assembled housings in the machined socket and spot welding the bridge member spanning the opening.
- c. Holding the receiver in a normal firing position, on the right side is a formed metal track in the outer housing, running from the socket in the front to within 5 1/4" from the rear of the receiver housing, which contains the cocking handle. The cocking handle, on being drawn rearward, engages the operating rod and cocks the Gun. It is then free to move forward and to be held in a forward position by a spring contained in the cocking handle.
- d. The trigger mechanism group is mounted on the underneath side of the receiver and interrupts the operating rod to control firing.
- e. The sheet metal, rubber coated, forearm group is mounted on the forward end of the receiver housing and is retained in position by the same pin that locks the trigger mechanism group in its position.

6. FRONT SIGHT

- a. The muzzle end of the barrel accommodates the assembly of the front sight.
- b. The front sight is rigid and held in radial and longitudinal alignment with barrel, by taper pins.
- c. A protrusion on front loop of sight extends through bipod mount and engages slots on flash suppressor to lock it in place.

7. GAS CYLINDER GROUP

- a. The gas cylinder is tubular in appearance and is mounted beneath the forward end of the barrel. Two (2) loops are provided which slip over the barrel and retain the entire assembly. The cylinder is ported through to the barrel with a .120 diameter hole mating with an .093 diameter orifice in the barrel. On the underneath side and in the center of the gas cylinder is a row of four (4) equally spaced exhaust port openings to exhaust the gases before the action returns the piston to the firing position. There are three (3) holes located 3/8" from rear end of gas cylinder for drainage purposes.
- b. The rearward end of the gas cylinder has a small diameter pin to retain the piston when barrel is out of the Gun.

- c. The forward end of the gas cylinder is threaded for a plug, which permits assembly and the cleaning of the cylinder and piston.
- d. The piston is a true diameter for its full length, unguided and floats when in operation. It is hollowed out to reduce its weight and to provide space for gas expansion. Gas enters the piston through seven port holes connected by an annular ring
- e. The gas cylinder group receives a metered quantity of gas from the barrel into the hollow piston, which when full, moves rearward, thus cutting off the port opening between the piston and cylinder. This trapped gas then expands, imparting movement to the piston, operating rod and bolt group.

8. OPERATING ROD AND BOLT GROUP

- a. The operating rod is tubular in appearance, closed on the forward end. The rear end has two (2) projections, upward. The extreme rear projection provides for guiding the bolt and imparting motion to the feed mechanism cam. The other projection extends into the bolt, through the cam opening, to control the bolt movement and rotation. It also has a locating hole to accommodate the firing pin spring guide. The underneath side of the operating rod is machined in such a manner that the sear will either lock it and hold back, or permit it to ride over, depending upon the position of the trigger. The forward end of the operating rod is machined smaller in diameter to extend into the rear of the gas cylinder, to position the piston. The operating rod has two (2) shallow retaining ledges machined on the forward end to accommodate the cocking handle and operating rod safety lever, thus supplying the means for cocking the Gun and for preventing the operating rod and bolt assembly from going forward and damaging the feed plate when the barrel assembly is removed from the receiver, and the trigger pulled accidentally.
- b. The operating rod and bolt assembly are inserted into the rear of the receiver housing with the bolt in the top guide rails of the housing. It is positioned radially by cams, protruding from the forward end of the bolt, which ride in rectangular sections of the receiver housing, thereby permitting the bolt a guided forward movement.
- c. Motion is imparted to the bolt by inserting the operating rod projection into a cam opening through the side of the bolt, at its midsection, and by acting against this cam surface, rotates the bolt in the locking rings of the barrel. By this rotary action the protruding cams on the forward end of the bolt lock and inversely unlock in the barrel locking rings.
- d. The firing pin is retained in the forward end of the bolt. It is actuated by a hammer blow imparted to it by the projection on the operating rod. The firing pin spring is confined by the firing pin spring guide located on projection of operating rod, and the rear end of the firing pin spring is secured to the rear portion of the bolt by the bolt extension and bolt extension pin.
- e. The function of the firing pin spring is to impart energy into the firing pin. The firing pin spring causes the operating rod to move forward striking the firing pin, thus firing the primer.
- f. The extractor parts are fitted into a milled slot located on the side and forward portion of the bolt. The cartridge extractor, by spring pressure, engages the rim on the cartridge case, and as the bolt is moving rearward, withdraws the cartridge case from the barrel.

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- g. Ejection is accomplished by a spring loaded ejector, mounted on the left side of the receiver housing, riding into a slot on the side of the bolt striking the base of the cartridge case as the bolt moves rearward and forcing the fired case out an opening in the right side of the receiver housing.

9. DRIVING SPRING GROUP

- a. Insert round end of driving spring guide into driving spring, then the free end of spring into the hole in the rear of operating rod. Compress and retain driving spring within operating rod by assembling recoil buffer on rear projection of driving spring guide. Its function is to store energy, developed during the rearward travel of the bolt, to be used to drive the bolt forward, thus starting the firing cycle.

10. RECOIL BUFFER GROUP

- a. The recoil buffer group is mounted into the lower portion of the rear end of the receiver housing, its position being directly rearward of the operating rod, thereby, confining between the two, the driving spring. The recoil buffer is inserted into the receiver housing and rotated through ninety (90°) degrees to lock in position. The recoil buffer latch spring then positions itself into the receiver body, resisting any turning movement of the recoil buffer, unless the recoil buffer latch spring is, in turn, depressed.
- b. The recoil buffer body houses the driving spring guide retainer which is shouldered against the forward end of the recoil buffer body, thereby restricting its movement. The driving spring guide retainer is shouldered on its rearward end and in turn is inserted into the recoil buffer body, and retained in its forward movement by means of this shoulder.
- c. The shock from the operating rod during recoil is absorbed by the recoil buffer through its inner and outer recoil buffer springs, which are guided and retained within the recoil buffer body by means of the recoil buffer spring guide retainer, recoil buffer spring retainer, and recoil buffer retainer nut. The recoil buffer retainer nut is secured by threading it onto an external diameter of the recoil buffer body and prevented from loosening itself by a detent on the rear end of the recoil buffer latch spring. See Fig. 1, Page 5.

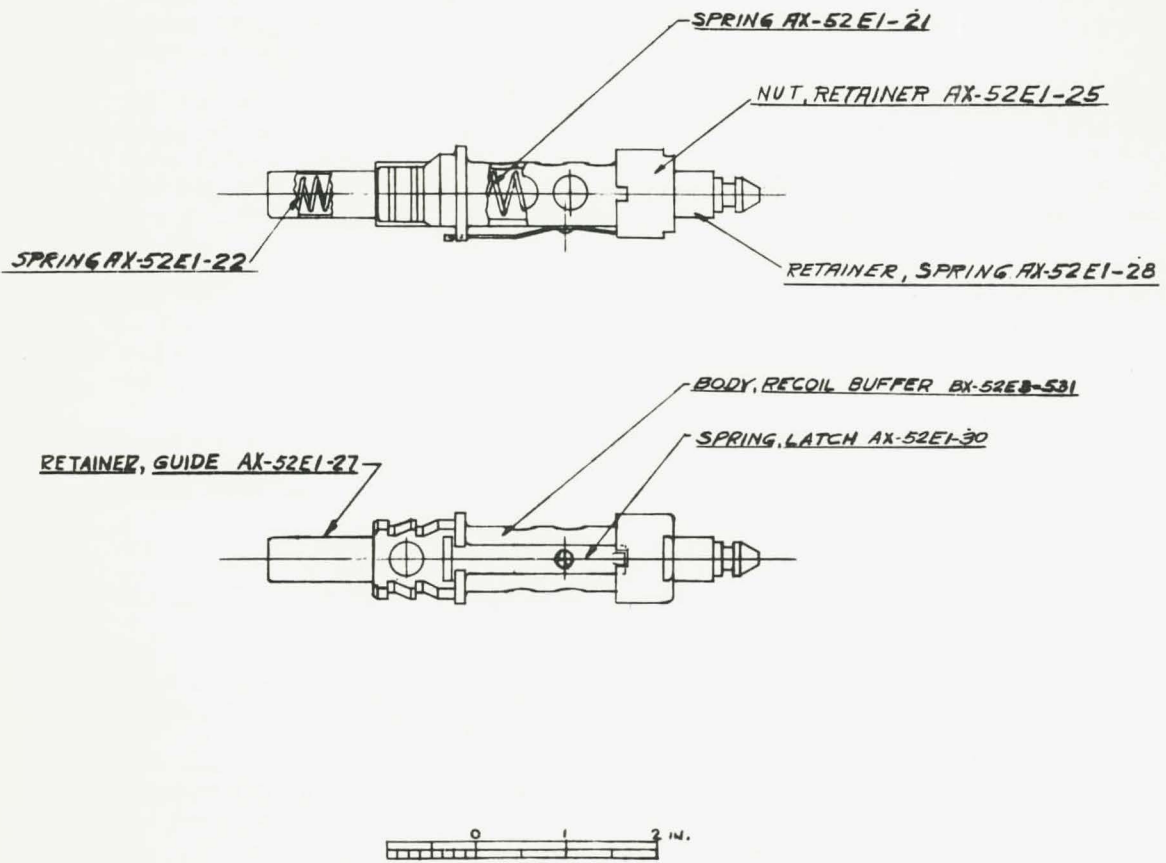


FIG. 1 - RECOIL BUFFER ASSEMBLY

11. FEEDING MECHANISM GROUP

- a. The feeding mechanism group parts are housed in, and mounted on, the cover. The cover is formed sheet metal, channel-shaped in appearance, with a hinged feed frame riveted on the front end and a spring loaded latch on the rear end. There are various studs secured to the inside of the cover, about which the various feeding mechanism parts operate. See Fig. 2 and Fig. 3, Pages 7 and 8.
- b. The entire feeding motion is a reciprocating action, developed through the movement of the operating rod against the feed mechanism cam. This motion is transferred through the feed mechanism link to the feed mechanism feeding fingers, thereby causing them to move with a reciprocating motion. This motion causes the cartridge belt to advance across the feed plate, one cartridge space, with each cycle of the bolt.
- c. The cartridge belt is guided, as it advances from left to right with each cycle of the bolt, across the feed plate, thereby positioning the cartridge in a fitted opening in the feed plate. The cartridge is held against the opening by spring loaded shell guides with sufficient pressure to permit the bolt in its forward progress to launch the cartridge from the belt and chamber it.
- d. The shell guides are hinged into the feed frame, which is riveted securely to the cover, and serve a dual purpose. They apply pressure to the cartridge and give direction to the cartridge as it is being launched from the cartridge belt by the bolt.
- e. A spring loaded link retainer is hinged to the feed frame to hold the next to last link in a belt, in position and prevent it from moving into the cartridge ramp on the feed plate.

12. TRIGGER MECHANISM GROUP

- a. The trigger housing is formed steel, machined.
- b. The trigger grip is made from sheet metal stampings, gas welded together. To this assembly the trigger housing is spot welded then machined and then the grip is rubber coated.
- c. The unit houses the sear, safety latch and trigger. The sear protruding through the receiver body acts against the underneath side of the operating rod and controls the firing cycles.
- d. The trigger housing is mounted to the receiver housing by interlocking flanges and one holding pin. These, in turn, are secured by a spring lock.

13. BARREL AND BARREL LOCK GROUP

- a. The barrel is a replaceable unit and is retained in place by the barrel lock pin. This locking device has to be turned one hundred and fifty (150°) degrees so that the barrel can be readily withdrawn. See Fig. 3, Page 8.
- b. Mounted on, and withdrawn with the barrel, are the bolt locking cams, gas cylinder, bipod, flash suppressor and the front sight.

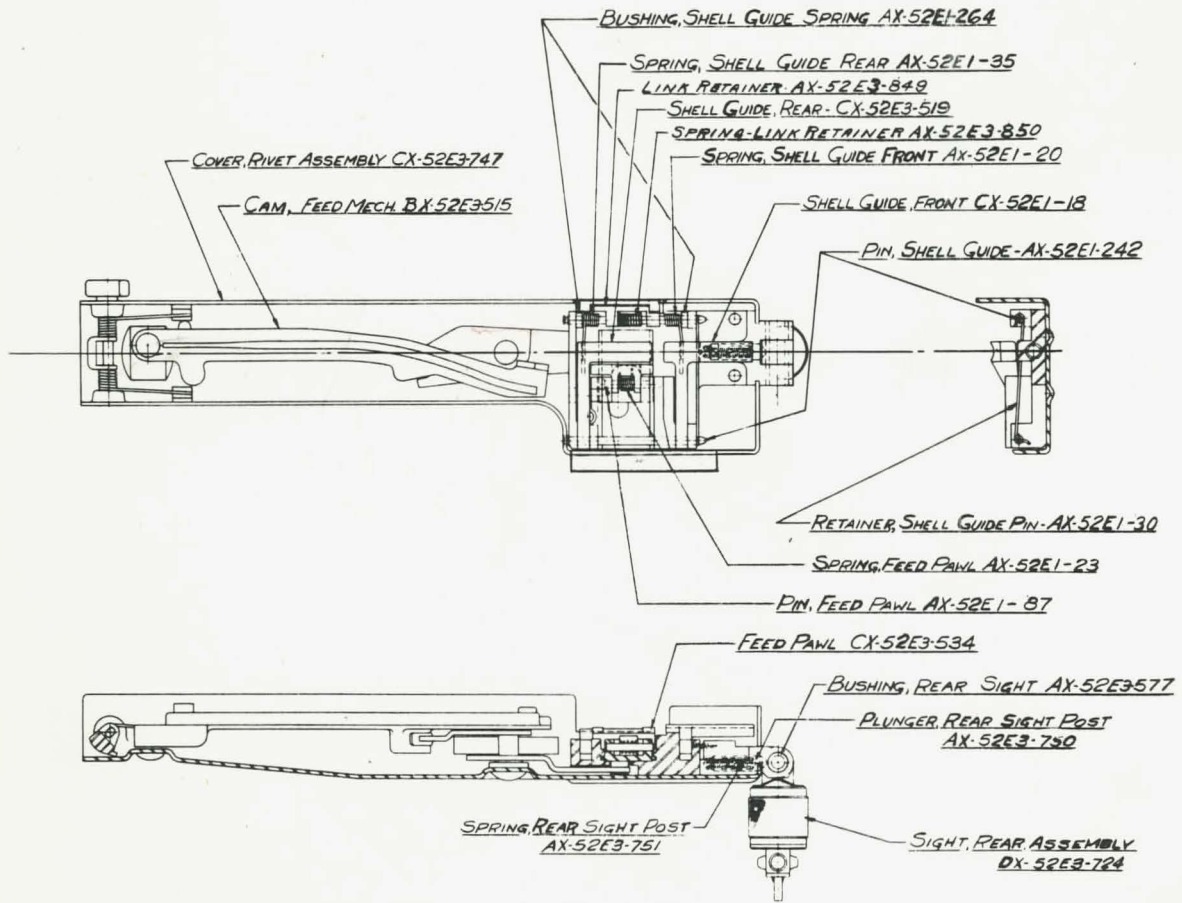


FIG. 2 - COVER ASSEMBLY



FIG. 3 - COVER OPEN AND BARREL REMOVED

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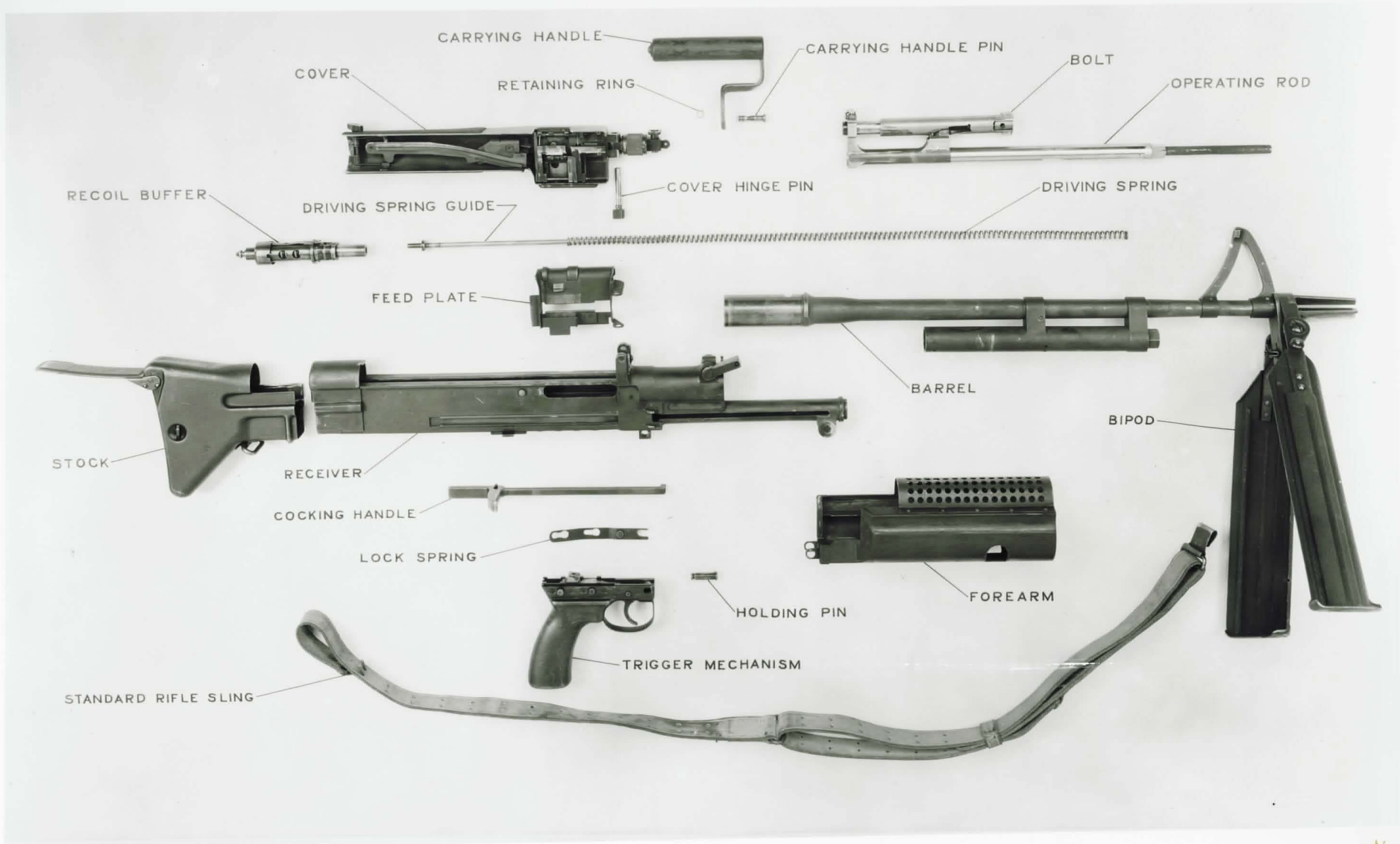


FIG. 4 - DISASSEMBLED VIEW
10

CHAPTER III

DISASSEMBLY AND ASSEMBLY

16. GENERAL

- a. To facilitate complete disassembly and assembly, the procedure as outlined in the following paragraphs should be followed.
- b. The disassemblies and assemblies have been divided into four (4) main classes.
 - 1. Disassembly into major parts and subassemblies start with Paragraph No. 18.
 - 2. Disassembly of subassemblies start with paragraph No. 30.
 - 3. Assembly of subassemblies start with paragraph No. 41.
 - 4. Gun assembly from subassemblies and major parts start with Paragraph No. 50.
- c. The construction of this Gun is such that all parts used in field stripping may be disassembled and assembled without the use of tools. See Fig. 4, Page 10.

17. DISASSEMBLY INTO MAJOR PARTS AND SUBASSEMBLIES

(Paragraphs No. 18 to 28 inclusive.)

18. COVER, FEED MECHANISM GROUP

- a. Unlock cover, containing feed mechanism, by turning the cover latch knob on right side, clockwise, and lift.
- b. Open cover ninety (90°) degrees with receiver housing and remove cover hinge pin on left side. See Fig. 3, Page 8.
- c. Breakdown of cover, feed mechanism is listed under subassemblies, Paragraph No. 33.

19. FEED PLATE REMOVAL

- a. Lift feed plate free of receiver.

20. STOCK REMOVAL

- a. Depress stock lock catch, on rear right side of stock, as far as it will go, then slide stock rearward, off the receiver housing.

21. RECOIL BUFFER GROUP

- a. Depress recoil buffer latch spring. See Fig. 1, Page 5.

- b. Apply pressure to recoil buffer, latch spring before rotating ninety (90°) degrees to remove it from receiver housing. Do not release pressure on recoil buffer at any time during above operation, or driving spring and guide will fly out.
 - c. Breakdown of recoil buffer is listed under subassemblies, Paragraph No. 35.
22. DRIVING SPRING
- a. Remove recoil buffer group. Paragraph No. 21.
 - b. Elevate forward end of Gun to permit driving spring and driving spring guide to fall free.
23. OPERATING ROD AND BOLT
- a. Draw the cocking handle to the rear for its complete stroke.
 - b. Remove the operating rod and bolt by pulling it out of the receiver housing.
 - c. Disassembly of operating rod from bolt is treated under subassemblies, Paragraph Nos. 30, 31 and 32.
24. COCKING HANDLE REMOVAL
- a. Slide cocking handle rearward to end of slot in socket, lift front end of cocking handle from slot and continue to slide handle to rear of receiver housing track until handle is free to remove from track.
25. BARREL REMOVAL GROUP
- a. Push barrel lock handle forward to opening position, and with bipod legs in closed position, grip them, then pull barrel from Gun socket. See Fig. 3, Page 8.
26. FOREARM AND CARRYING HANDLE
- a. Remove trigger mechanism locking spring by depressing spring at safety latch end and pushing spring away from the barrel toward rear of Gun until slot is free from the front holding pin. See Fig. 9. Page 20.
 - b. Remove front trigger mechanism holding pin.
 - c. Remove forearm by moving it forward until it is free of the tripod mounting lugs on front end of the Gun socket. See Fig. 12, Page 31.
 - d. To remove carrying handle from socket, first release retaining spring washer from groove on carrying handle pin, then, with barrel lock handle in locked position, the carrying handle pin can be taken out, allowing the handle to be lifted free from socket. See Fig. 12, Page 31.
27. TRIGGER MECHANISM GROUP
- a. Since the trigger mechanism locking spring and the front trigger mechanism holding pin were removed to take off the forearm, the next step in disassem-

ly of the trigger mechanism group is to push the group forward one-quarter (1/4) inch.

- b. Pull trigger group away from receiver housing.
- c. Disassembly of trigger mechanism group will be listed under subassemblies, Paragraph No. 36.

28. BARREL LOCK GROUP

- a. To remove the barrel lock group, depress barrel lock cap to permit removal of barrel lock retaining pin, then being careful, remove barrel lock cap, spring and plunger. Then, pull handle horizontally to the right, and barrel lock handle assembly will slide out of socket.

29. DISASSEMBLY OF SUBASSEMBLIES

(Paragraph Nos. 30 to 39, inclusive.)

30. OPERATING ROD AND BOLT

- a. Grip, operating rod and bolt assembly in one hand so that bolt extension can be placed against some stationary object and depressed. With bolt extension depressed, then with the nose of a cartridge, held in other hand, push bolt extension pin out of hole as far as cartridge will go, then pull pin free of bolt. Do not release pressure until taking hold of bolt extension with free hand and ease bolt extension out of bolt being careful not to allow extension and firing pin spring to fly free. See Fig. 5, Page 14.
- b. Remove firing pin spring and then turn operating rod and bolt assembly so that the rear end is downward to allow the firing pin spring guide to fall free.
- c. Grip operating rod in one hand and the bolt in the other, slide bolt forward for its full travel on operating rod projection, then lift upward and forward to free bolt of operating rod projection and guide hole on extreme rear projection of operating rod.

31. OPERATING ROD GROUP

- a. Operating rod assembly including rollers and operating rod extension, is considered a fixed assembly, and to be disassembled only to replace worn parts. See Fig. 6, Page 15.

32. BOLT GROUP

- a. Remove retainer, firing pin; elevate forward end of bolt to allow firing pin to fall free. See Fig. 7, Page 16.
- b. Remove spring loaded cartridge extractor by inserting nose of cartridge into hole in extractor. Then, apply pressure to the cartridge case in the direction of rear end of bolt to release keeper in recess of bolt. Be careful not to allow extractor spring and pin to fly free.
- c. Elevate rear end of bolt to allow extractor pin and extractor spring to fall free.

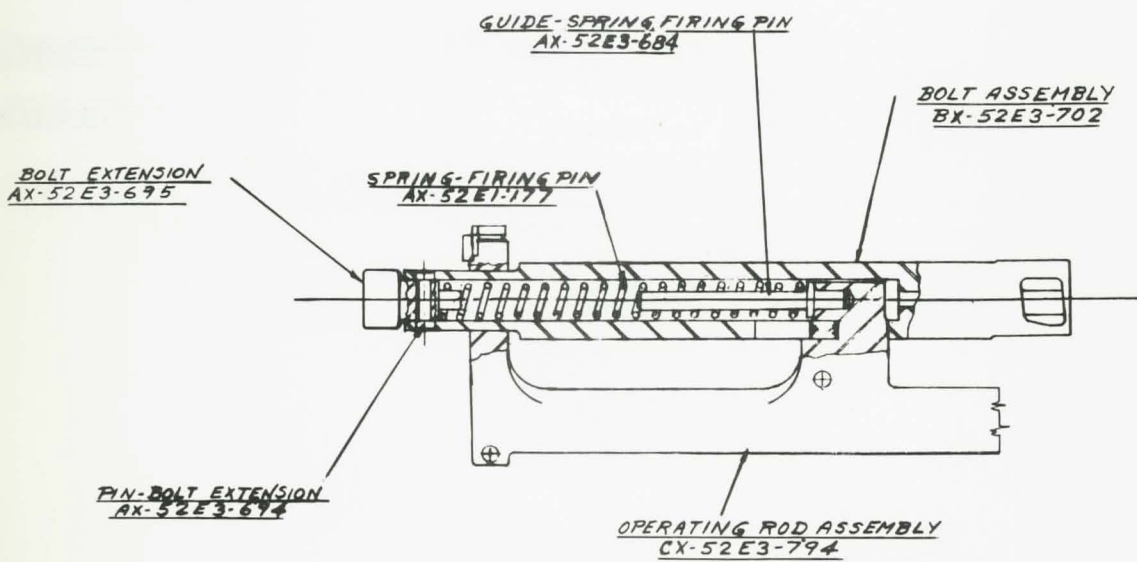


FIG 5 - OPERATING ROD AND BOLT ASSEMBLY

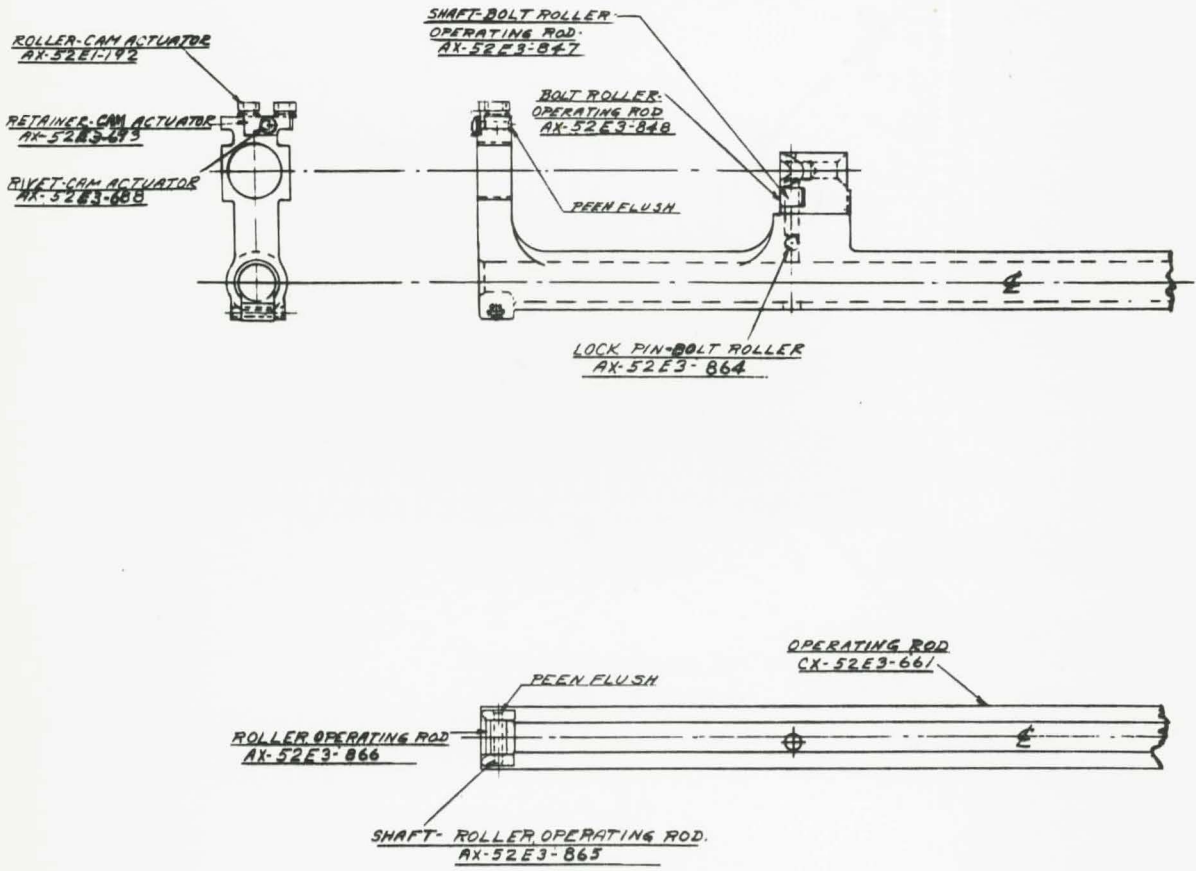


FIG. 6 - OPERATING ROD ASSEMBLY

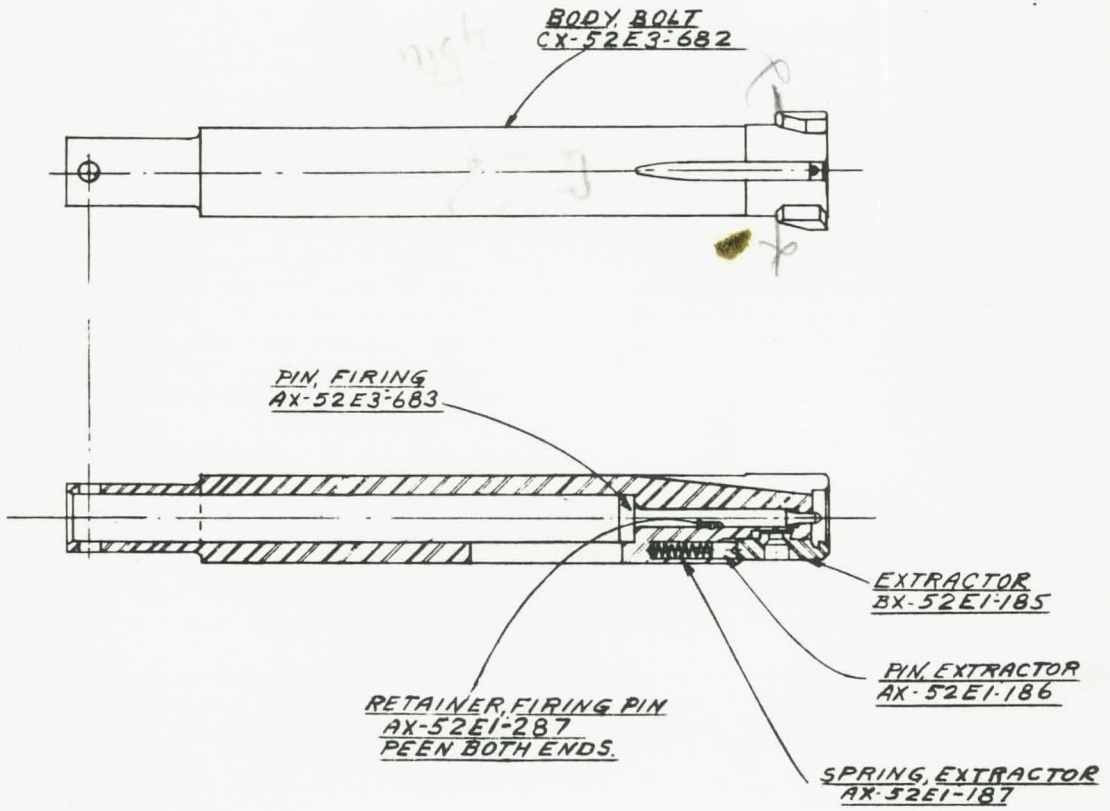


FIG 7 - BOLT ASSEMBLY

33. COVER, FEED MECHANISM GROUP

- a. Place feed mechanism cover group so that the interior is in full view and cover hinge to the right. See Fig. 2, Page 7.
- b. With feed mechanism cam against near side of cover and a cartridge held vertical in right hand, with its nose in depression on top of cam buffer, depress cam buffer toward near side; then, with another cartridge in left hand, insert its nose under lug on feed mechanism cam opposite cam buffer and pry up to free it from cam buffer retainer. Then, lift feed mechanism cam free of cover.
- c. To remove shell guides, shell guide springs, link retainer, and link retainer spring, remove retainer of shell guide pins, release shell guide springs from under shell guides, then remove shell guide pins, guides, link and springs can then be taken out.
- d. Position feed pawl slide so that feed pawl pin can be removed through hole in feed frame thus releasing feed pawl and feed pawl spring.
- e. To remove rear sight assembly from cover, hold cover and with cartridge in other hand, insert nose of cartridge into hole in bushing, rear sight, push through as far as possible, leave cartridge in cover hinge, grasp bushing on opposite side and remove. Take hold of rear sight and remove cartridge, being careful not to allow rear sight plunger, rear sight spring, and elevation knob spring to fall free of cover.

34. REAR SIGHT

- a. The rear sight is a unit assembly, to be taken apart only for repairs. See Fig. 8, Page 18.
- b. Grip knurled elevation knob and with a small open end wrench turn elevation knob retainer counter-clockwise until it is free of knob.
- c. Hold elevation knob in one hand, then with other hand, turn elevation slide and aperture assembly, counter-clockwise until it is free of knob, being careful not to drop aperture plunger out of hole in elevation slide.
- d. Turn elevation knob upside down and aperture plunger spring and rear sight post will fall free.
- e. To take elevation slide and aperture assembly apart, remove press fit windage knob retaining pin, then slide off windage knob and windage knob spring.
- f. Turn windage screw counter-clockwise until it is free of aperture, then pull it free of elevation slide.
- g. Lift aperture, then elevation knob retainer free of elevation slide.

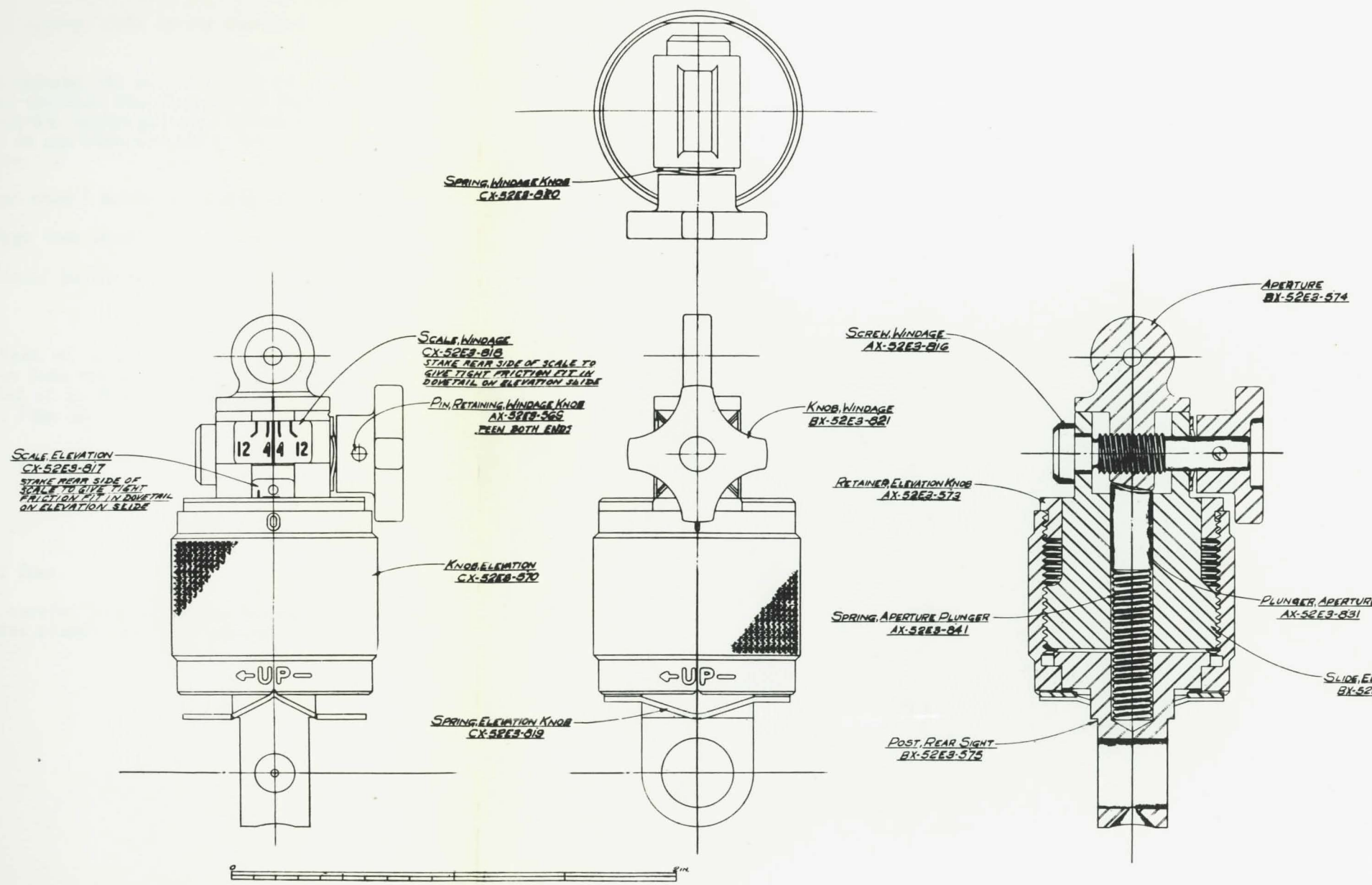


FIG. 8 - REAR SIGHT ASSEMBLY

35. RECOIL BUFFER GROUP

- a. Remove recoil buffer latch spring by revolving recoil buffer retaining nut in a counter-clockwise direction until it does not overlap the recoil buffer latch spring. See Fig. 1, Page 5.
- b. Insert fingers under recoil buffer latch spring. Lift spring and move forward approximately one-half (1/2) inch.
- c. Remove the recoil buffer retainer nut by turning the recoil buffer retainer nut counter-clockwise. Note that constant pressure must be applied when removing recoil buffer retainer nut to counteract spring pressure within recoil buffer assembly. Do not release pressure on nut when threads become free of recoil buffer body or springs will fly free.
- d. Withdraw recoil buffer spring retainer from recoil buffer retaining nut.
- e. Remove inner and outer recoil buffer springs from recoil buffer body.
- f. Slip driving spring retainer guide from recoil buffer body.

36. TRIGGER MECHANISM GROUP

- a. Depress trigger mechanism lock spring free of locking diameter on safety latch assembly, then push trigger mechanism lock spring rearward, by applying pressure to the knurled thumb button, until it is free to be removed. Remove trigger mechanism holding pin. See Fig. 9, Page 20.
- b. Pull out sear pin.
- c. Lift out sear from trigger grip.
- d. Remove trigger hinge pin.
- e. Invert trigger grip, and trigger will fall free.
- f. Remove sear plunger retaining pin, being careful to hold spring loaded sear plunger. Invert trigger grip to permit sear plunger and sear plunger spring to fall free.

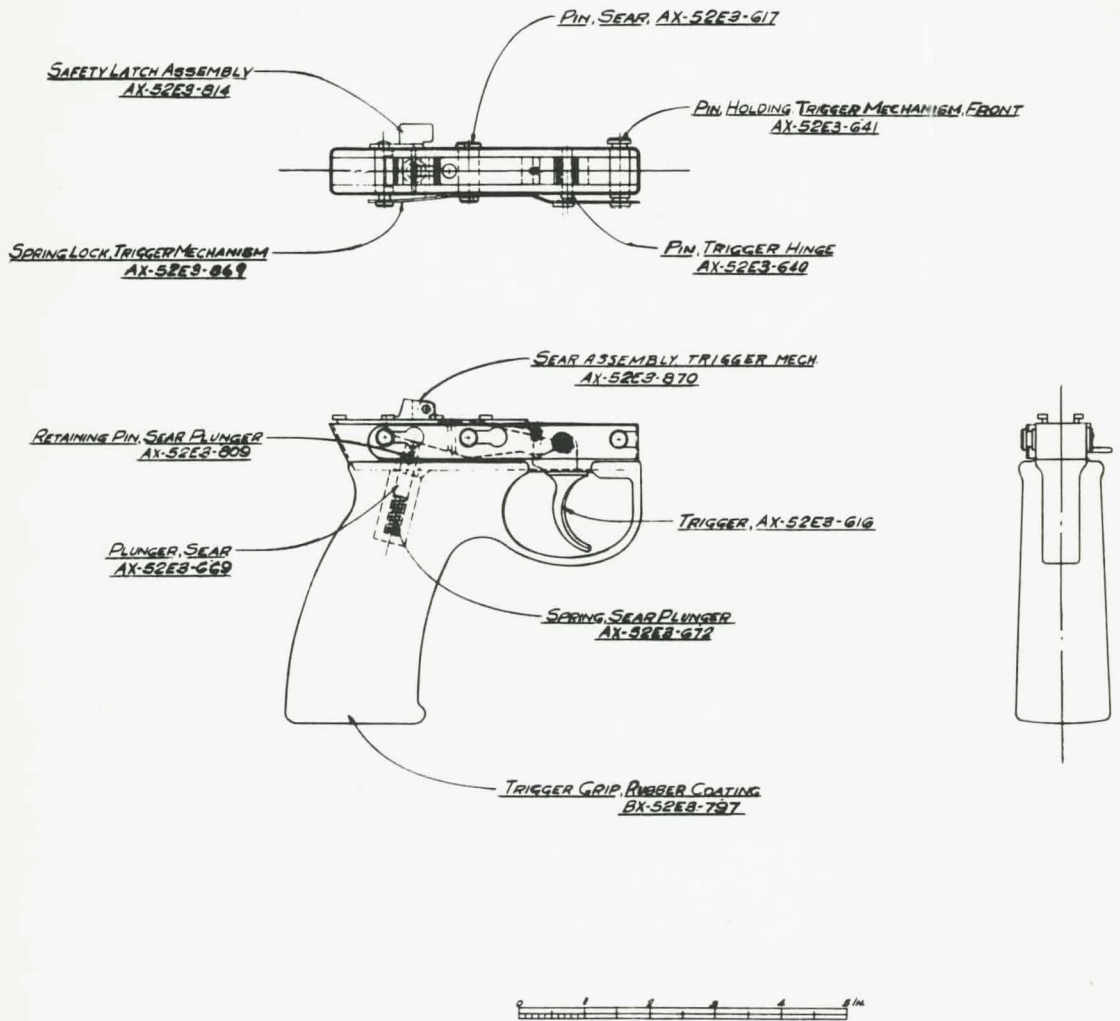


FIG. 9 - TRIGGER MECHANISM ASSEMBLY

37. BARREL GROUP

- a. The barrel group is a unit assembly, to be taken apart only for repairs. See Fig. 10, Page 22.
- b. First remove taper pins on the front sight, drive from right to left, then push sight to the rear as far as possible to disengage flash suppressor keeper.
- c. Turn flash suppressor counter-clockwise until it is free of barrel along with bipod assembly.
- d. Remove front sight.
- e. Turn gas cylinder plug counter-clockwise until it is free of gas cylinder, then raise rear end of gas cylinder and gas piston will fall free.
- f. Remove gas cylinder locating taper pin then tap gas cylinder on rear end to free it from barrel.
- g. Follow procedure 37 Barrel Group for disassembly of heavy duty barrel, except 37b. to read; first remove taper pins on front sight, drive from right to left, then push sight and the bipod locking key located in bipod locking plate top front, to the rear as far as possible to disengage flash suppressor keeper.

38. BIPOD GROUP

- a. The bipod group is a unit assembly and not to be taken apart, only for repairs. See Fig. 11, Page 23.
- b. Remove wing nut bipod support, then bipod support screw.
- c. Assembly is broken down to bipod mount and leg assemblies, lock plate bipod mount and spacer bipod mount.
- d. Remove screw bipod pivot. End of screw is staked to prevent backing out.
- e. Remove press fit bipod mount stop pin, from bipod mount.

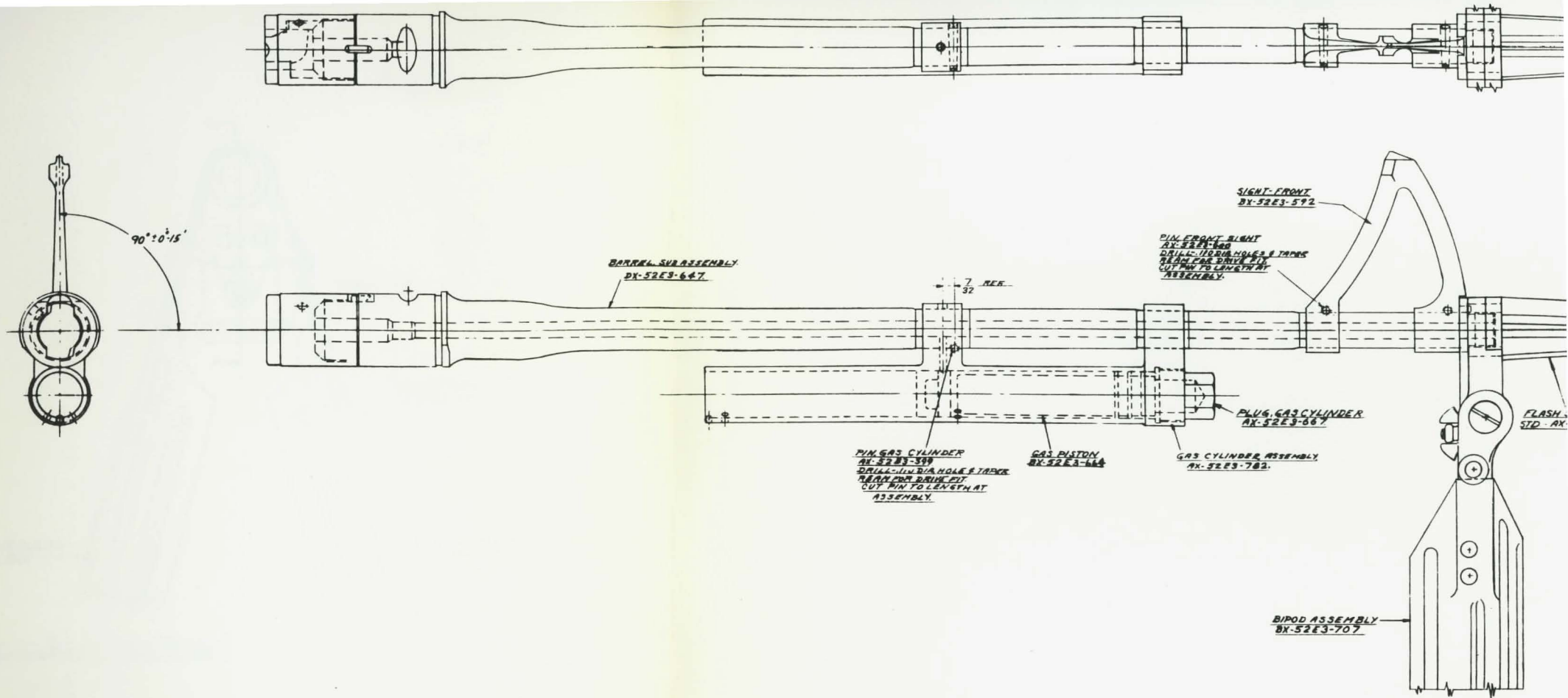


FIG. 10 - BARREL FINAL ASSEMBLY

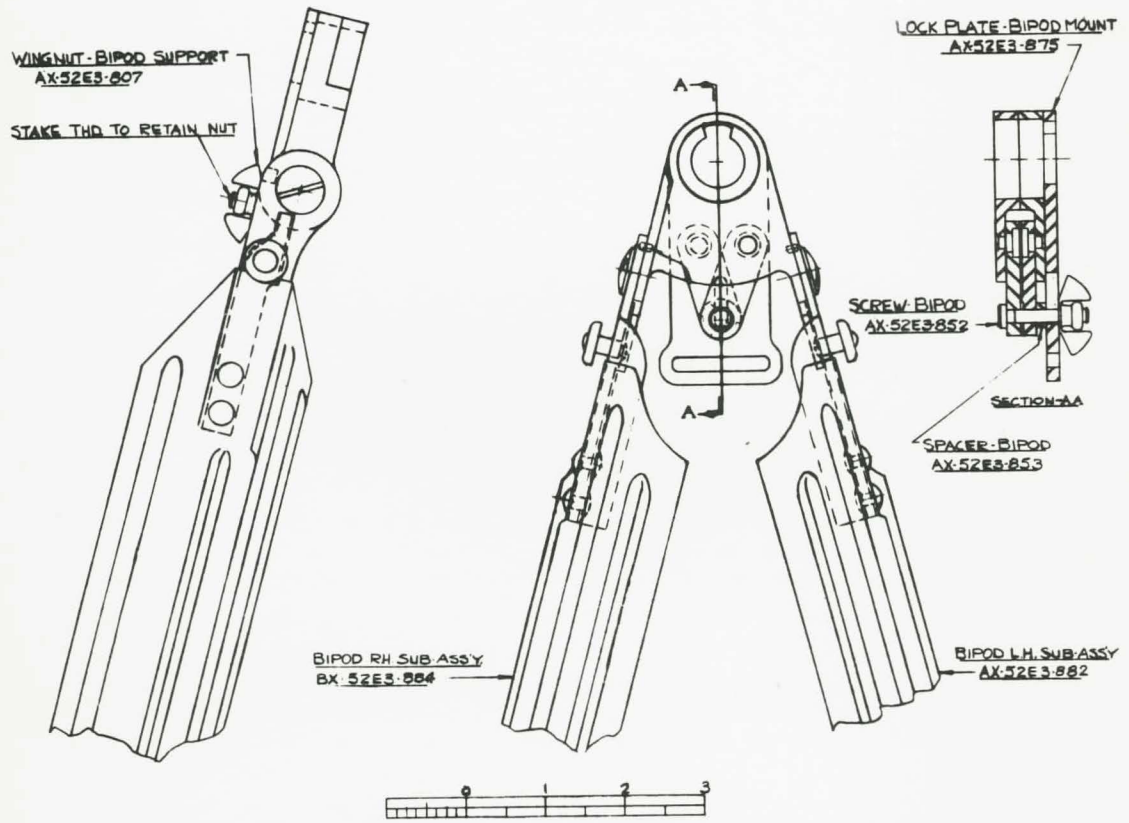


FIG. 11 - BIPOD ASSEMBLY, ST'D.

39. RECEIVER HOUSING GROUP

- a. Operating rod safety assembly to be removed only for repairs. To remove operating rod safety assembly, drive out operating rod safety pin, since the housing was staked over both ends of the pin at assembly, then raise rear end of receiver housing and the operating rod safety assembly will fall out. See Fig. 13, Page 32.
- b. To remove ejector on left side of receiver housing, first raise closed end of cartridge ejector spring out of retaining slot on ejector, then slide spring toward socket until it is free of ejector pin holes. See Fig. 13, Page 32.
- c. Remove ejector pin and lift ejector out of retaining slot in receiver housing.

40. ASSEMBLY OF SUBASSEMBLIES

(Paragraph Nos. 41 to 48, inclusive.)

- a. Prior to assembly, all parts must be free of dirt, rust, and other extraneous matter. Metal parts in contact must be covered with a light film of lubricating oil.

41. BOLT GROUP

- a. Insert extractor spring, then extractor pin, small diameter first, into hole in recess on forward end of bolt. See Fig. 7, Page 16.
- b. Place extractor into recess in bolt so that extractor pin fits groove in extractor. Apply pressure to forward end of extractor to compress extractor spring, and also press extractor down until it drops into retaining recess in bolt.
- c. Insert point of firing pin into hole, rear center of the bolt body; then rotate firing pin until retaining groove lines up with firing pin retaining hole in bolt to permit assembly of press fit firing pin retainer.

42. OPERATING ROD GROUP

- a. Insert bolt roller shaft through hole in bottom side of operating rod, and through bolt roller as far as it will go, then assemble bolt roller lock pin, in hole on side of operating rod projection, and peen both ends. See Fig. 6, Page 15.
- b. On lower rear end of operating rod, assemble operating rod roller and operating rod roller shaft, then peen both ends.
- c. On upper rear operating rod projection assemble two (2) cam actuator rollers with retaining grooves down, then cam actuator retainer with retainers in grooves on rollers, then insert cam actuator rivet through holes in retainer and operating rod and peen flush on operating rod.

43. OPERATING ROD AND BOLT GROUP

- a. Insert rear end of bolt assembly through hole on rear operating rod projection so that the cam track in bolt will drop over the other projection on the operating rod. Rotate bolt to rearmost position. See Fig. 5, Page 14.

- b. Insert firing pin spring guide, shouldered end first into hole in rear end of bolt, then firing pin spring.
- c. Holding operating rod and bolt so that bolt extension, small end inside of firing pin spring, can be placed against some stationary object to compress firing pin spring, rotate extension until holes in extension and bolt are in line, then insert bolt extension pin until the extension drops into small diameter on pin. This assembly is correct if there is a one-thirty second (1/32) of an inch gap between the extension and bolt.

44. TRIGGER MECHANISM GROUP

- a. Insert sear plunger spring, then sear plunger, flat end first and plunger slot in line with retaining pin hole in grip. Compress spring and plunger until sear plunger retaining pin can be pressed into position. See Fig. 9, Page 20.
- b. Drop trigger, small end first into trigger grip body, align trigger hinge hole with hole in grip and insert trigger hinge pin on right side of trigger grip.
- c. Drop sear assembly into trigger grip body with large end to rear of grip, align sear pin hole with hole in grip, by compressing sear plunger and holding it in position till sear pin is inserted on left side of trigger grip.
- d. Insert safety latch on left side of trigger grip with lever to the trigger end of grip.
- e. Insert trigger mechanism holding pin on left front side of trigger grip.
- f. Holding, safety latch pin, sear pin, and trigger mechanism holding pins in position, on right side of grip, assemble trigger mechanism lock spring on left side, by inserting open end of spring in groove on holding pin and dropping spring over the other pins. Next depress lock spring to clear locking diameter on safety latch and slide lock spring forward, with the aid of knurled button on trigger end of spring, until it can go no further, release spring pressure at safety latch and spring will be locked in position.

45. RECOIL BUFFER GROUP

- a. Place the small end of the driving spring guide retainer through the large bore of the recoil buffer body until it is seated against the shoulder. See Fig. 1, Page 5.
- b. Push the outer recoil buffer spring into the hole in the recoil buffer body until it contacts the driving spring guide retainer.
- c. Insert inner recoil buffer spring inside the outer recoil buffer spring until it seats against the driving spring guide retainer.
- d. Insert the recoil buffer spring retainer, with the smaller cylindrical sections entering first, through the locating hole and resting against the shoulder in the recoil buffer retaining nut.
- e. Place the recoil buffer retainer nut over the inner and outer recoil buffer springs, compressing the springs and revolving the recoil buffer retainer nut

clockwise with the recoil buffer body facing away from the operator.

- f. Retain recoil buffer nut by recoil buffer latch spring. Insert recoil buffer latch spring in slot of flange, and latch spring rivet in retaining hole, on buffer recoil body.
- g. Depress recoil buffer latch spring, end with detent adjacent to recoil buffer retainer nut, then tighten nut until the slotted retaining flange overlaps the spring detent.

46. REAR SIGHT

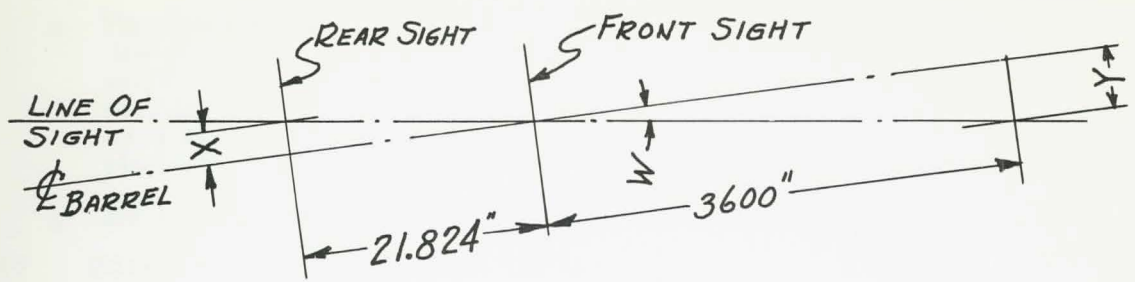
- a. Holding elevation slide with scales face up, place elevation knob retainer over scales, threaded end first, then insert, aperture threaded portion into elevation slide with witness line showing. See Fig. 8, Page 18.
- b. Hold elevation slide, scales up, insert windage screw in hole on top left side and thread into aperture as far as it will go.
- c. Hold elevation slide, scales up, assemble windage knob spring with spring detents mating with detents on elevation slide and then windage knob small end first; compress windage knob spring and align pin holes to permit driving in windage knob retaining pin, next insert aperture plunger, tapered end first, high side to the left then aperture plunger spring.
- d. Hold elevation knob, threaded end up, insert rear sight post through knob, hinge end first.
- e. Assemble parts listed in items c and d with scales and rear sight post plunger detent on elevation slide showing as in front view of rear sight assembly Fig. 8 Page 18. Turn elevation slide clockwise into elevation knob as far as it will go to assure proper mating of threads, then assemble elevation knob retainer. Grip elevation knob, and using a small open end wrench, tighten elevation knob retainer.
- f. Rear sight is now completely assembled and is ready to be assembled with cover, See Fig. 2, Page 7 along with elevation knob spring, rear sight post spring, rear sight post plunger, and rear sight bushing.
- g. The rear sight windage and elevation knobs are readily accessible to the right hand of the gunner.
- h. The windage and elevation scales are clearly defined and easily read by the gunner when in firing position.
- j. The elevation scale is graduated in 100-yard increments up to 800-yards, and is provided with a means for minutes of angle adjustment. The movement for adjustment is accompanied by an audible click, dependable and easy to feel. See Elevation Data Chart No. 1, Page 27 for elevations other than 100 yard increments.
- k. The windage scale is graduated in 4 and 12 minutes of angle, to the right and left of "0". The movement for adjustment is accompanied by an audible click dependable and easy to feel. See Windage Data Chart No. 2, Page 28 for other windage angles in minutes, and inches off target.



RANGE (EACH FIGURE IS A GRADUATION ON THE ELEVATION SCALE EXCEPT -2 CLICKS)	ANGLE OF ELEVATION	CLOSEST NO. OF EVEN CLICKS FROM 100	ACTUAL HEIGHT OF PEEP FROM THE CENTER LINE OF BARREL	THEORETICALLY CORRECT HEIGHT OF PEEP FROM CENTER LINE OF BARREL
YARDS	X MILS		Y INCHES	Y INCHES
-2 CLICKS	.0	-2	3.337	
100	.8	0	3.353	3.353
200	1.6	+ 4	3.384	3.387
300	2.5	7	3.408	3.407
400	3.5	10	3.431	3.428
450		12	3.446	
500	4.7	13	3.455	3.454
550		15	3.470	
600	6.1	17	3.486	3.484
625		18	3.494	
650		19	3.501	
675		20	3.509	
700	7.7	21	3.517	3.518
725		22	3.525	
750		24	3.541	
775		26	3.556	
800	9.7	27	3.564	3.561
+ 2 CLICKS		29	3.580	

ELEVATION DATA FOR REAR SIGHT
ON T-52E3 LIGHT MACHINE GUN

CHART #1



YARDS	ANGLE IN MINUTES OFF TARGET	NUMBER OF CLICKS OFF "0"	ACTUAL DISTANCE "X" OF PEEP FROM THE CENTER LINE OF BARREL	THEORETICALLY CORRECT DISTANCE "Y" INCHES OFF TARGET
	W		X	Y
100	0	0	0	0
	1	1	.06250	1.0309
	2	2	.01256	2.0619
	3	3	.01875	3.0928
	4	4	.02500	4.1237
	5	5	.03125	5.1547
	6	6	.03750	6.1856
	7	7	.04375	7.2165
	8	8	.05000	8.2475
	9	9	.05625	9.2784
	10	10	.06250	10.3093
	11	11	.06875	11.3403
	12	12	.07500	12.3712

WINDAGE DATA FOR REAR SIGHT
ON T-52E3 LIGHT MACHINE GUN

CHART #2

- m. The rear sight is constructed to permit the Gun to be zeroed in, by adjusting the elevation and windage scales against friction interference, to their proper locations. The 100-yard marking on the elevation scale to be aligned with the nearest elevation knob click and in line with the top of the elevation slide. The zero on the windage scale to be aligned with the nearest click of the windage knob and the witness line on the aperture.
- n. The aperture (peep) is large enough to afford clear vision in poor light.

47. COVER, FEED MECHANISM GROUP

- a. Place cover so that the interior is in full view with cover hinge to the right. See Fig. 2, Page 7.
- b. Position feed pawl slide so that feed pawl pin can be assembled through hole in left side of feed frame to retain feed pawl and feed pawl spring.
- c. To retain shell guides in feed frame, insert round end of shell guide pin through hole in near side of flange of cover, then into feed frame, to locate rear shell guide and front shell guide.
- d. To position and retain shell guide springs and link retainer, insert straight leg of springs in holes located in far side of feed frame, then insert round end of shell guide pin through pin hole supports, far side, add spacer, then rear shell guide spring, link retainer with link retainer spring between retainer hinge prongs, front shell guide spring, and another spacer.
- e. Retain shell guide pins by shell guide pin retaining spring, then locate shell guide spring ends in respective slots on underneath side of shell guides.
- f. Assemble feed mechanism cam with roller down and engaging in fork on feed link, and on feed cam stud at left end of cover, press down until cam buffer passes over retainer.
- g. To assemble rear sight to cover, first insert rear sight post spring, then rear sight post plunger in feed frame hole on hinge end of cover. Holding cover with back to view, insert hinge of rear sight, with rear sight scales showing, into fork of cover, depress rear sight post plunger until hinge holes are in line, then insert rear sight bushing until it is flush with cover hinge.

48. BARREL GROUP

- a. Assemble gas cylinder to barrel and tap front end of cylinder until it is properly located, then insert gas cylinder taper pin on left side of rear loop. See Fig. 10, Page 22.
- b. Insert gas piston, closed end first, into front end of gas cylinder then thread gas cylinder plug in and tighten.
- c. Front sight assembled to barrel with large bearing loop to the front. Do not pin in position.
- d. Assemble bipod assembly on flash suppressor with bipod mount lock plate to the outside. This assembly is then threaded on to the barrel as far as the

flash suppressor will permit. Then the front sight is pushed forward until a projection on its front bearing locates through the lock plate and into a slot on the flash suppressor. Back off flash suppressor to permit alignment of taper pin holes in front sight and barrel, then insert pins, from left to right, drive fit.

- e. Follow procedure 47 Barrel Group for assembly of heavy duty barrel, except 48 C to read; front sight assembled to barrel with large bearing loop to the front then insert bipod locking key with small extension toward muzzle of barrel and in keyway on top of barrel. Do not pin sight in position.

49. GUN ASSEMBLY FROM SUBASSEMBLIES AND MAJOR PARTS

(Paragraph Nos 50 to 59 inclusive, See Fig. 4, Page 10, Fig. 12, Page 31, and Fig. 14, Page 35.

- a. Prior to assembly, all parts must be free of dirt, rust, and other extraneous matter. Metal parts in contact must be covered with a light film of lubricating oil.

50. RECEIVER HOUSING GROUP

- a. Assemble barrel lock group to receiver housing by inserting barrel lock handle into lock locating hole on forward right side of socket. See Fig. 12, Page 31 and Fig. 14, Page 35.
- b. Insert barrel lock plunger into handle, small diameter first, and position it in groove on socket.
- c. Insert barrel lock spring into plunger.
- d. Depress spring with barrel lock cap and retain it by barrel lock retaining pin, insert tapered end first into hole on left side of barrel lock handle.
- e. Locate operating rod safety assembly in retaining socket slot as indicated on receiver assembly Fig. 13, Page 32, then insert operating rod safety pin and stake both sides of housing to retain pin. This part removed for repairs only.
- f. Locate ejector in slot on left side of housing, align pin holes and insert ejector pin, then insert cartridge ejector spring ends, into holes in ejector pin. Push spring ends toward rear of housing until spring locates in pockets on ejector housing and retaining slot on ejector.

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~~SECURITY INFORMATION~~

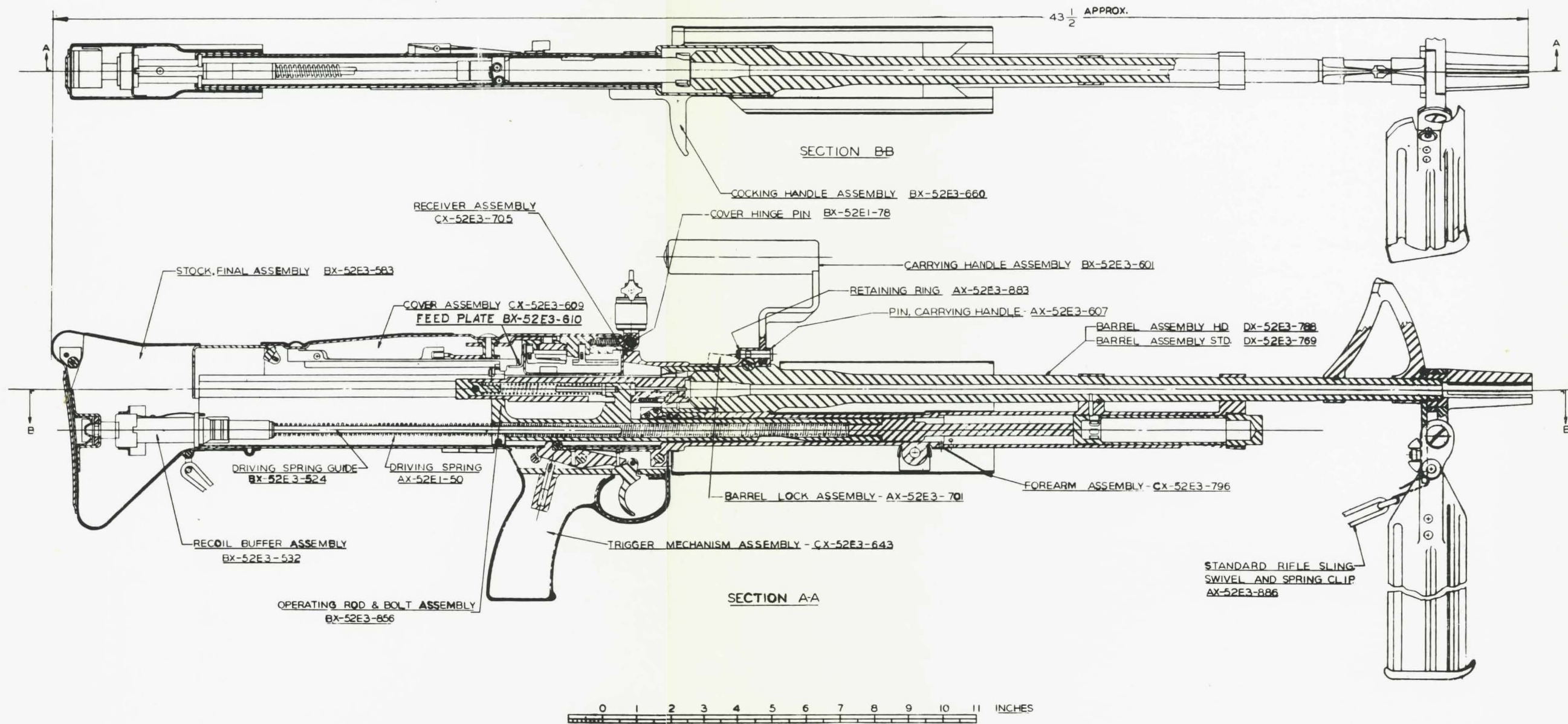


FIG 12 - GUN MAIN ASSEMBLY

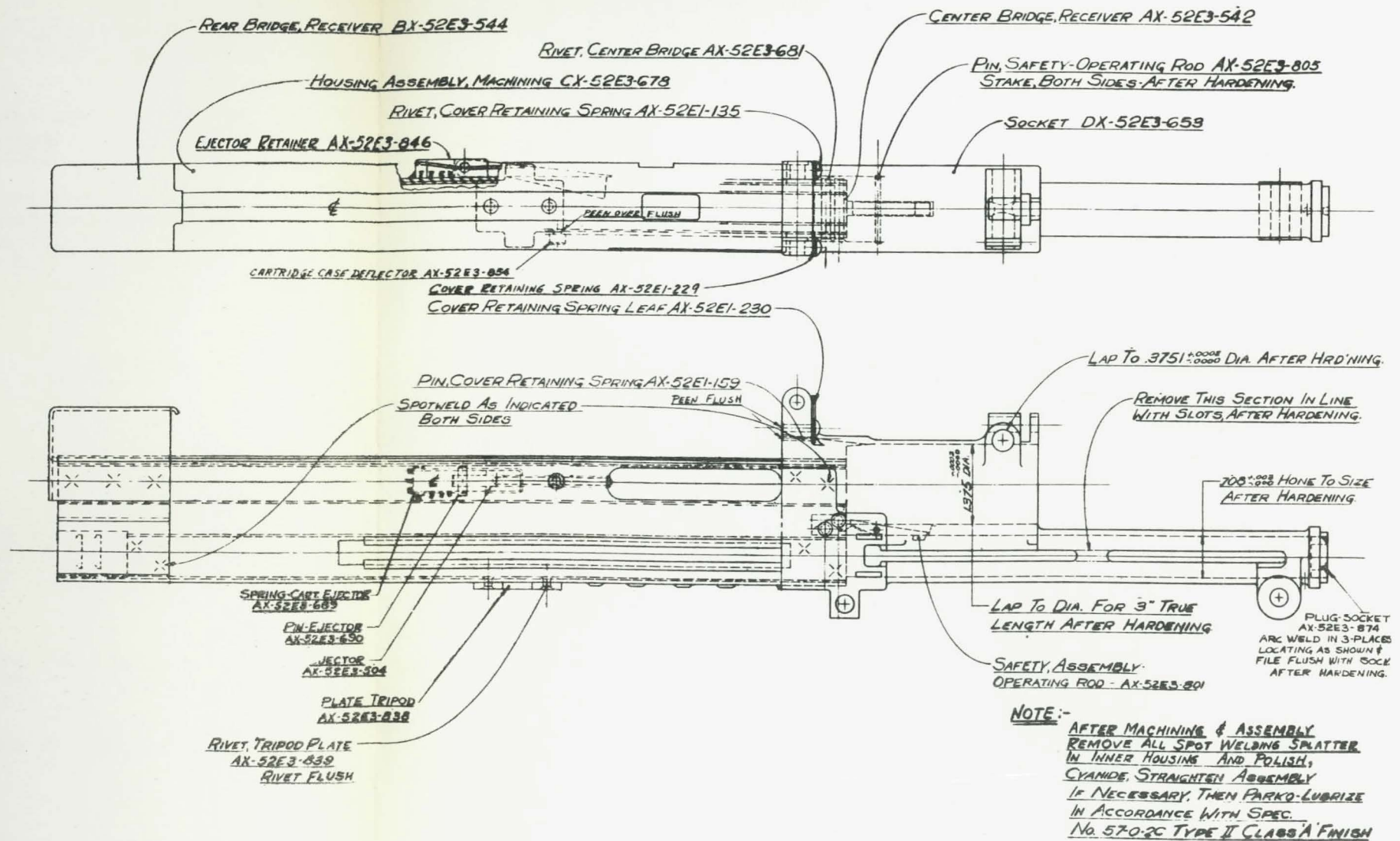


FIG. 13 - RECEIVER ASSEMBLY

51. TRIGGER, CARRYING HANDLE AND FOREARM GROUP

- a. Holding the receiver housing firmly, push the trigger mechanism grip, up into flange interlocking position and over the locating lug connected to the receiver housing, then push trigger mechanism grip rearward one-quarter (1/4) inch. See Fig. 12, Page 31.
- b. Assemble carrying handle assembly on socket, line up hole in handle arm with hole in socket, then insert carrying handle pin up to shoulder and add retaining ring. See Fig. 12, Page 31.
- c. Next assemble forearm on forward end of receiver housing until holes in yoke on forearm locate over trigger mechanism grip front mounting hole, then insert front trigger mechanism holding pin, from left to right.
- d. Retaining the trigger mechanism holding pin, and with the trigger grip to the left and hand grip pointing toward the operator, assemble the trigger mechanism lock spring so that the grooves in it slip around the recesses cut into the trigger mechanism housing locating pin, sear pin and safety latch, thus locking the assembly in position.

52. BARREL GROUP

- a. Slide subassembly of barrel into receiver housing with rearward end of gas cylinder seating over forward end of socket. See Fig. 12, Page 31.
- b. Pull barrel lock handle rearward to locking position.

53. COCKING HANDLE

- a. Assemble cocking handle on right side of Gun by locating roller end of cocking handle in track on side of receiver housing and pushing handle forward until hook end drops into opening on socket; then, push forward until cocking handle spring pin rests on retainers on socket. See Fig. 3, Page 8.

54. OPERATING ROD AND BOLT

- a. Insert bolt group, with cartridge extractor end first, and operating rod pushed rearward in bolt cam slot to position bolt locking lugs into rear end of receiver housing.
- b. Push operating rod and bolt assembly forward until bolt locking lugs engage cam locks in barrel assembly.

55. DRIVING SPRING ASSEMBLY

- a. Insert driving spring in hole in rear end of operating rod, then into the exposed end of spring, insert the driving spring guide, round end first.

56. RECOIL BUFFER GROUP

- a. Holding Gun horizontally, with the muzzle pointing to the left, and the trigger mechanism assembly pointing down, locate hole in buffer spring retainer over driving spring guide. Then, apply pressure to the rear of the recoil buffer assembly, to compress the driving spring, making sure to hold the recoil buffer assembly with the recoil buffer latch spring depressed.

- b. Shoulder recoil buffer assembly against the rear of the receiver housing and rotate so that recoil buffer latch spring is up.
- c. Locate recoil buffer latch spring in receiver housing slot used to guide operating rod.

57. STOCK ASSEMBLY

- a. Slide stock assembly onto guide rails on rearward end of receiver housing.
- b. Push stock forward until catch in butt plate assembly locates in groove on recoil buffer spring retainer.

58. FEED PLATE

- a. Slide feed plate into position, at hinge end of receiver housing.

59. COVER, FEED MECHANISM GROUP

- a. Cock Gun to full automatic position to allow closing of cover with feed mechanism cam in proper alignment with cam actuator on operating rod.
- b. With cover at ninety (90°) degrees to receiver housing, locate tongue of cover hinge on fork of socket hinge. See Fig. 3, Page 8.
- c. Grip hinge pin with flat side toward cover, and insert lead end into hinge until head on pin positions against hinge.
- d. Slam Cover shut. See Fig. 13, Page 32, and Fig. 14, Page 35.



FIG. 14 - COVER CLOSED - BIPOD MOUNTED

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60. LOADING OF GUN

- a. Use T-65 Cartridge and disintegrating link belt. See Fig. 15. Page 37.
- b. Cock Gun and push cocking handle to forward limit.
- c. Raise cover and place cartridge belt across feed plate, from left to right, with links showing and the first cartridge resting in launching opening in feed plate.
- d. Hold belt in position and close cover.
- e. Gun is now ready to operate.

61. ALTERNATE METHOD OF GUN LOADING

- a. Bolt in forward position, locked against barrel, and cover closed.
- b. With cartridge belt on left side and links showing, grasp belt in left hand to permit guiding and applying pressure to the second cartridge in belt, as it is inserted in opening between cover and feed plate until first cartridge passes over retaining pawl. Definite click is heard.
- c. Cock Gun and push cocking handle to forward limit.
- d. In cocking Gun, cartridge advances to launching position; therefore, Gun is ready to operate.

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REGRADED *Unclassified* 10 Jan 1957
(Appropriate classification) (event)
OCM 36417

FIG. 15 - HEAVY BARREL AND CARTRIDGE BELT IN PLACE

37
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(Appropriate classification) (event)
OCM 36417

APPENDIX
LIST OF DRAWINGS

Master Drawing List DX-52E3-1000

Assemblies

Barrel, Final H. D.	DX-52E3-788
Barrel, Final St'd.	DX-52E3-769
Barrel, Subassembly H. D.	DX-52E3-756
Barrel, Subassembly St'd.	DX-52E3-647
Bipod H. D.	AX-52E3-885
Bipod St'd.	BX-52E3-707
Bipod L. H. Subassembly	AX-52E3-882
Bipod R. H. Subassembly	BX-52E3-884
Bolt	BX-52E3-702
Buffer, Recoil	BX-52E3-532
Cam, Feed Mechanism	BX-52E3-515
Carrying Handle	BX-52E3-601
Cocking Handle	BX-52E3-660
Cover	CX-52E3-609
Cover, Riveting.	CX-52E3-747
Cover, Riveting and Rubber Coating	CX-52E3-790
Feed Frame	BX-52E3-631
Feed Plate	BX-52E3-610
Forearm	CX-52E3-796
Forearm Spot Welding	CX-52E3-858
Gas Cylinder H. D.	AX-52E3-784
Gas Cylinder St'd.	AX-52E3-782
Gun, Main	DX-52E3-741
Handle, Barrel Lock.	AX-52E3-760
Housing, Machining	CX-52E3-678
Leg, Bipod L. H.	AX-52E3-711
Leg, Bipod R. H.	CX-52E3-710
Lock, Barrel	AX-52E3-701
Operating Rod	CX-52E3-794
Operating Rod and Bolt	BX-52E3-856
Rivet, Spring Latch, Recoil Buffer	AX-52E1-30
Receiver, Machining	CX-52E3-705
Safety Latch	AX-52E3-814
Safety, Operating Rod	AX-52E3-801
Sear, Trigger Mechanism	AX-52E3-870
Sight, Rear	DX-52E3-724
Spring Lock, Trigger Mechanism	AX-52E3-869
Stock, Final	BX-52E3-583
Stock, Left Half, Welding	BX-52E3-843
Stock, Right Half, Welding	AX-52E3-887
Stock, Welding	BX-52E3-829
Trigger Grip, Welding and Drilling	BX-52E3-636
Trigger Mechanism	CX-52E3-643

Guard, Trigger	AX-52E3-625
Guide, Buffer	AX-52E3-845
/ Guide, Driving Spring	BX-52E3-524
/ Guide, Spring, Firing Pin	AX-52E3-684
/ Handle, Barrel Lock	AX-52E1-162
/ Hinge Pin, Cover	BX-52E1-78
/ Hinge Plate, Bipod Leg L. H.	AX-52E3-835
/ Hinge Plate, Bipod Leg R. H.	BX-52E3-828
/ Key, Front Sight H. D.	AX-52E3-881
/ Key, Locking Cam	AX-52E1-152
/ Knob, Cover Latch	AX-52E1-3
/ Knob, Elevation	CX-52E3-570
/ Knob, Windage	BX-52E3-821
/ Latch, Spring Recoil Buffer	AX-52E1-29
/ Leg, Bipod L. H.	AX-52E3-717
/ Leg, Bipod R. H.	CX-52E3-718
Link, Belt (T-65)	DX-52E1-255
/ Link, Bipod Mount L. H.	AX-52E3-878
/ Link, Bipod Mount R. H.	AX-52E3-877
/ Link Retainer	AX-52E3-849
Locater, Forearm	AX-52E3-815
/ Lock Pin, Bolt Roller	AX-52E3-864
/ Lock Plate, Bipod Mount H. D.	AX-52E3-876
Lock Plate, Bipod Mount St'd	AX-52E3-875
/ Nut, Buffer Recoil Retainer	AX-52E1-25
/ Operating Rod	CX-52E3-661
/ Pin, Barrel Lock	AX-52E3-654
Pin, Bolt Extension	AX-52E3-694
/ Pin, Cam Buffer	AX-52E1-10
/ Pin, Carrying Handle	AX-52E3-607
/ Pin, Cocking Handle	AX-52E1-157
/ Pin, Cocking Handle Spring	AX-52E1-121
/ Pin, Cover Latch	AX-52E1-90
2 Pin, Cover Retaining Spring	AX-52E1-159
/ Pin, Ejector	AX-52E3-690
/ Pin, Extractor	AX-52E1-186
/ Pin, Feed Pawl	AX-52E1-87
/ Pin, Firing	AX-52E3-683
2 Pin, Front Sight Support	AX-52E3-600
/ Pin, Gas Cylinder	AX-52E3-599
Pin, Gas Cylinder H. D.	AX-52E3-789
/ Pin, Holding, Trigger Mechanism, Front	AX-52E3-641
Pin, Locking Cams	AX-52E1-151
/ Pin, Piston Retainer	AX-52E3-792
/ Pin, Retaining Barrel Lock	AX-52E1-259
/ Pin, Retaining Pawl	AX-52E1-243
/ Pin, Retaining, Windage Knob	AX-52E3-569
/ Pin, Safety, Operating Rod	AX-52E3-805
/ Pin, Sear	AX-52E3-617
/ Pin, Shell Guide	AX-52E1-242
/ Pin, Trigger Hinge	AX-52E3-640
/ Pin, Trigger Spring	AX-52E3-873
/ Piston, Gas	BX-52E3-664
/ Plate, Tripod	AX-52E3-838
/ Plug, Gas Cylinder	AX-52E3-667
Plug, Socket	AX-52E3-874

1	Plunger, Aperture	AX-52E3-831
1	Plunger, Barrel Lock	AX-52E1-163
1	Plunger, Rear Sight Post	AX-52E3-750
1	Plunger, Sear	AX-52E3-669
1	Plunger, Shoulder Rest	AX-52E3-811
1	Post, Rear Sight	BX-52E3-575
1	Push Button, Spring Lock, Trigger Mech.	AX-52E3-868
2	Push Rod, Bipod Leg	AX-52E3-825
	Rear Bridge, Receiver	BX-52E3-544
1	Retainer, Buffer, Spring	AX-52E1-28
1	Retainer, Cam Actuator Roller	AX-52E3-693
1	Retainer, Elevation Knob	AX-52E3-573
	Retainer, Feed Cam	BX-52E1-41
-	Retainer, Firing Pin	AX-52E1-287
1	Retainer, Shell Guide Pin	AX-52E1-130
1	Retainer, Shoulder Rest Plunger	AX-52E3-808
1	Retainer, Spring Guide	AX-52E1-27
1	Retainer, Stock Lock Catch	AX-52E3-561
1	Retaining Pawl Feed Plate	BX-52E3-538
1	Retaining Pin, Sear Plunger	AX-52E3-809
+	Retaining Ring	AX-52E3-883
1	Rifle Sling St'd	AX-52E3-886
1	Rivet, Barrel Lock	AX-52E1-261
4	Rivet, Bipod Leg Spring	AX-52E3-851
1	Rivet, Cam Actuator Roller	AX-52E3-688
2	Rivet, Center Bridge	AX-52E3-681
3	Rivet, Cover Forearm	AX-52E3-863
2	Rivet, Cover, Retaining Spring	AX-52E1-135
1	Rivet, Feed Frame	AX-52E1-197
1	Rivet, Feed Pawl Slide	AX-52E1-245
2	Rivet, Feed Plate	AX-52E1-65
1	Rivet, Operating Rod	AX-52E1-293
1	Rivet, Operating Rod Safety	AX-52E3-804
1	Rivet, Recoil Buffer	AX-52E1-26
1	Rivet, Shoulder Rest	AX-52E3-567
1	Rivet, Stud Feed Cam	AX-52E1-198
1	Rivet, Stud Feed Link	AX-52E1-199
1	Rivet, Trigger Spring	AX-52E3-872
2	Rivet, Tripod Plate	AX-52E3-839
1	Roller, Cam	AX-52E1-9
2	Roller, Cam Actuator	AX-52E1-192
+	Roller, Cocking Handle	AX-52E1-156
1	Roller, Feed Pawl Slide	AX-52E1-244
1	Roller, Feed Plate	AX-52E1-276
1	Roller, Feed Plate	AX-52E1-277
1	Roller, Operating Rod	AX-52E3-866
1	Safety Latch	AX-52E3-622
1	Safety, Latch Lever	AX-52E3-620
1	Safety, Operating Rod	AX-52E3-802
1	Scale, Elevation	CX-52E3-817
1	Scale, Windage	CX-52E3-818
2	Screw, Bipod Pivot	AX-52E3-675
1	Screw, Bipod Support	AX-52E3-852
1	Screw, Windage	AX-52E3-816
1	Sear Plunger, Housing	AX-52E3-812
1	Sear, Trigger Mechanism	AX-52E3-642



Seat, Buffer	AX-52E3-844
/ Shaft, Bolt Roller Operating Rod	AX-52E3-847
/ Shaft, Cam Roller	AX-52E1-13
/ Shaft, Cover Latch	AX-52E1-5
/ Shaft, Feed Plate	AX-52E1-278
/ Shaft, Roller, Operating Rod	AX-52E3-865
/ Shaft, Sear Roller	AX-52E3-880
/ Shell Guide, Front	CX-52E1-18
/ Shell Guide, Rear	CX-52E3-519
Shield, Forearm	AX-52E3-859
/ Shoulder Rest, Stock	BX-52E3-559
/ Shoulder Rivet, Bipod Mount	AX-52E3-879
/ Sight, Front, St'd.	BX-52E3-592
Sight, Front, Heavy Barrel	BX-52E3-762
/ Slide, Elevation	EX-52E3-576
/ Slide, Feed Pawl	CX-52E1-36
Socket, Receiver	DX-52E3-653
Spacer, Beveled	AX-52E3-746
/ Spacer, Bipod Support	AX-52E3-853
/ Spacer, Cover Latch	AX-52E1-2
/ Spacer, Long	AX-52E3-748
Spacer, Short	AX-52E3-749
/ Spring, Aperture Plunger	AX-52E3-841
/ Spring, Barrel Lock	AX-52E1-176
/ Spring, Bipod Leg L. H.	AX-52E3-833
/ Spring, Cam Buffer	AX-52E1-12
/ Spring, Carrying Handle	AX-52E3-606
/ Spring, Cartridge Ejector	AX-52E3-689
/ Spring, Bipod Leg R. H.	AX-52E3-823
/ Spring, Cocking Handle	AX-52E1-158
/ Spring, Cover Latch	AX-52E1-6
/ Spring, Driving	AX-52E1-50
/ Spring, Elevation Knob	CX-52E3-819
/ Spring, Extractor	AX-52E1-187
/ Spring, Feed Link	EX-52E1-14
/ Spring, Feed Pawl	AX-52E1-23
/ Spring, Firing Pin	AX-52E1-177
/ Spring, Inner Buffer	AX-52E1-22
/ Spring, Link Retainer	AX-52E3-850
/ Spring, Lock, Trigger Mechanism	AX-52E3-645
/ Spring, Outer Buffer	AX-52E1-21
/ Spring, Rear Sight Post	AX-52E3-751
/ Spring, Safety, Operating Rod	AX-52E3-803
/ Spring, Sear Plunger	AX-52E3-672
/ Spring, Shell Guide Front	AX-52E1-20
/ Spring, Shell Guide Rear	AX-52E1-35
/ Spring, Shoulder Rest Plunger	AX-52E3-564
/ Spring, Stock Lock Catch	AX-52E3-553
/ Spring, Retaining Pawl	AX-52E1-63
/ Spring, Windage Knob	CX-52E3-820
Stock, L. H.	AX-52E3-832
Stock, R. H.	CX-52E3-830
/ Stock, Rubber Coating	BX-52E3-798
/ Stop Pin, Bipod	AX-52E3-867
Strap, Swivel Retainer	AX-52E3-810
Stud, Carrying Handle	AX-52E3-603

Stud, Feed Cam	AX-52E1-40
Stud, Feed Link	AX-52E1-8
Support, Feed Plate	AX-52E1-253
Support, Roller, Feed Plate	AX-52E1-252
Supporting Plate, Stock	AX-52E3-826
Swivel, Stock	AX-52E3-545
Trigger	AX-52E3-616
Trigger Grip L. H.	AX-52E3-840
Trigger Grip R. H.	CX-52E3-632
Trigger Housing	BX-52E3-623
Trigger Grip, Rubber Coating	BX-52E3-797
Trigger Spring	AX-52E3-871
Washer, Carrying Handle	AX-52E3-605
Wing Nut, Bipod Support	AX-52E3-807

SPARE PARTS

Bolt Roller, Operating Rod	AX-52E3-848
Lock Pin, Bolt Roller	AX-52E3-864
Retainer, Cam Actuator Roller	AX-52E3-693
Retainer, Firing Pin	AX-52E1-287
Rivet, Cam Actuator Roller	AX-52E3-688
Roller, Cam Actuator	AX-52E1-192
Shaft, Bolt Roller, Operating Rod	AX-52E3-847
Hinge Pin, Cover	BX-52E1-78
Pin, Bolt Extension	AX-52E3-694
Pin, Firing	AX-52E3-683
Pin, Holding, Trigger Mechanism, Front	AX-52E3-641
Pin, Sear	AX-52E3-617
Pin, Trigger Hinge	AX-52E3-640
Safety, Latch Assembly	AX-52E3-814