

OPERATOR'S MANUAL

**WARNING! READ THIS MANUAL
CAREFULLY BEFORE USING THESE
FIREARMS**

M96 Expeditionary® Rifle



M96 Recon™ Carbine



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WARNING!

THE M96 HAS SOME UNIQUE FEATURES THAT REQUIRE SPECIAL INSTRUCTIONS AND WARNINGS FOR SAFE USE. FAILURE TO STRICTLY FOLLOW THE INSTRUCTIONS AND WARNINGS CONTAINED IN THIS OPERATOR'S MANUAL COULD RESULT IN DEATH OR SERIOUS BODILY INJURY TO THE OPERATOR AND OTHERS, AND DAMAGE TO PROPERTY.

READ AND STUDY THIS MANUAL CAREFULLY AND RECEIVE SAFETY TRAINING FROM A COMPETANT FIREARMS INSTRUCTOR BEFORE HANDLING OR USING THIS FIREARM.

NEITHER ROBINSON ARMAMENT CO. NOR ZDF IMPORT/EXPORT, INC. SHALL BE LIABLE FOR ANY INJURY TO PERSONS OR ANY DAMAGE TO PROPERTY RESULTING FROM THE USE OF THIS FIREARM.

THIS OPERATOR'S MANUAL SHOULD ACCOMPANY THE FIREARM AT ALL TIMES AND SHOULD BE TRANSFERRED WITH POSSESSION OF THE FIREARM TO ANY SUBSEQUENT OWNER OR OPERATOR.

ALWAYS REMEMBER TO KEEP FIREARMS AND AMMUNITION LOCKED UP, OUT OF SIGHT, AND OUT OF THE REACH OF CHILDREN AND OTHER UNAUTHORIZED PERSONS. SAFETY IS YOUR RESPONSIBILITY!

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WARNING! THESE SAFETY RULES ARE OF A GENERAL NATURE ONLY. THEY ARE NOT INTENDED TO BE EXHAUSTIVE NOR ARE THEY INTENDED TO BE A SUBSTITUTE FOR PROPER FIREARMS TRAINING FROM A COMPETANT FIREARMS INSTRUCTOR.

Always keep the firearm pointed in a safe direction. Firearms must be treated as if always loaded and always firing a steady stream of bullets. Do not point the muzzle of the firearm at any thing you do not intend to kill or destroy. **Never rely on the safety mechanism.** The firearm is safe only as long as you use it safely.

Never load a round into the chamber until you are ready to fire. Only load a round into the chamber when you have assumed a stable shooting position and the muzzle is pointed in a safe direction.

Never walk with a loaded firearm, put a loaded firearm in a vehicle, store a loaded firearm, or leave a loaded firearm unattended. Firearms have been known to accidentally fire when dropped, struck, snagged, etc. Unattended firearms can be stolen or misused.

Never place your finger on the trigger or inside the trigger guard until you are ready to fire. Before placing your finger on the trigger or inside the trigger guard, make sure that you have first assumed a stable shooting position and have your intended target clearly within your sights.

Always assume a stable shooting position and clearly identify your target and backstop before you pull the trigger. Rifle cartridges are very powerful, have a lethal range of many miles, and can often penetrate hard objects such as walls and metal. Before you pull the trigger, it is vital that you clearly identify your target and have a backstop behind the target capable of stopping rifle projectiles. **Never fire at hard objects or water, which may cause**

projectiles to ricochet and kill or seriously injure persons and damage property.

Always wear adequate eye and hearing protection while shooting. Firearms, upon discharge, are extremely loud, and violently eject spent cases, hot gasses and particles. Operators and bystanders must wear adequate eye and hearing protection at all times while shooting to prevent permanent vision and hearing loss.

Never drop a firearm or allow the muzzle to strike hard objects. Sharp blows to a firearm may cause it to fire accidentally or damage it making it unsafe to fire. **Always unload the firearm and check the bore of the barrel to make sure there are no obstructions after dropping the firearm.** Never shoot a firearm which has an obstructed bore or which has been damaged. If unsure as to the condition of a firearm, have it examined by a competent gunsmith before shooting.

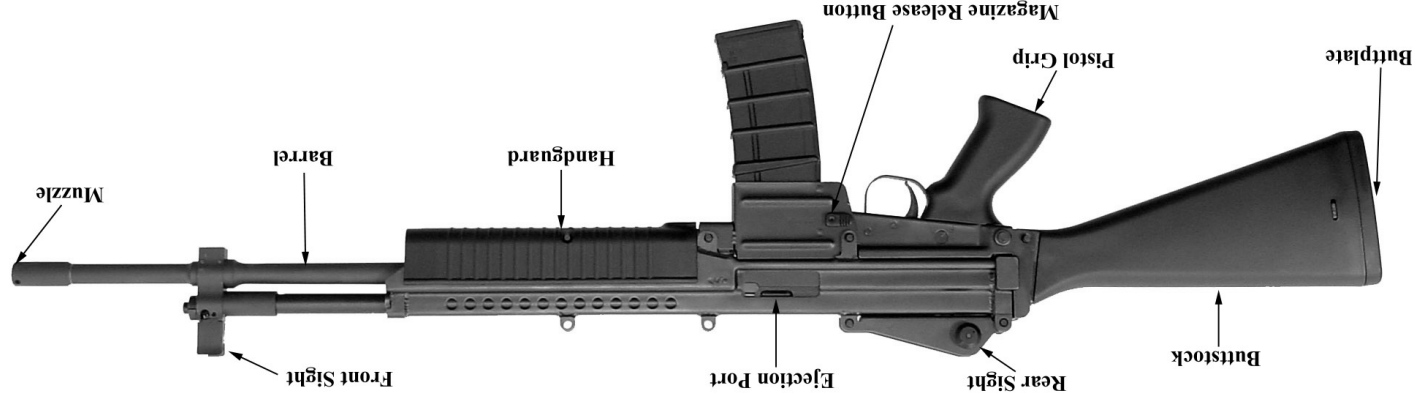
Always unload the firearm when finished shooting. While unloading, always keep the firearm pointed in a safe direction, remove the magazine, empty the chamber and visually inspect it to make sure no round is present.

Never use a firearm if you have consumed alcohol, or if you are taking drugs or medication which could alter or impair your vision, physical responses, or judgement.

Always store your firearms, unloaded, locked up, and out of the sight and out of the reach of children and other unauthorized persons. It is your responsibility to make sure that children and other unauthorized persons do not have access to your firearms and that the firearms are safely stored out of sight and in a secure place.

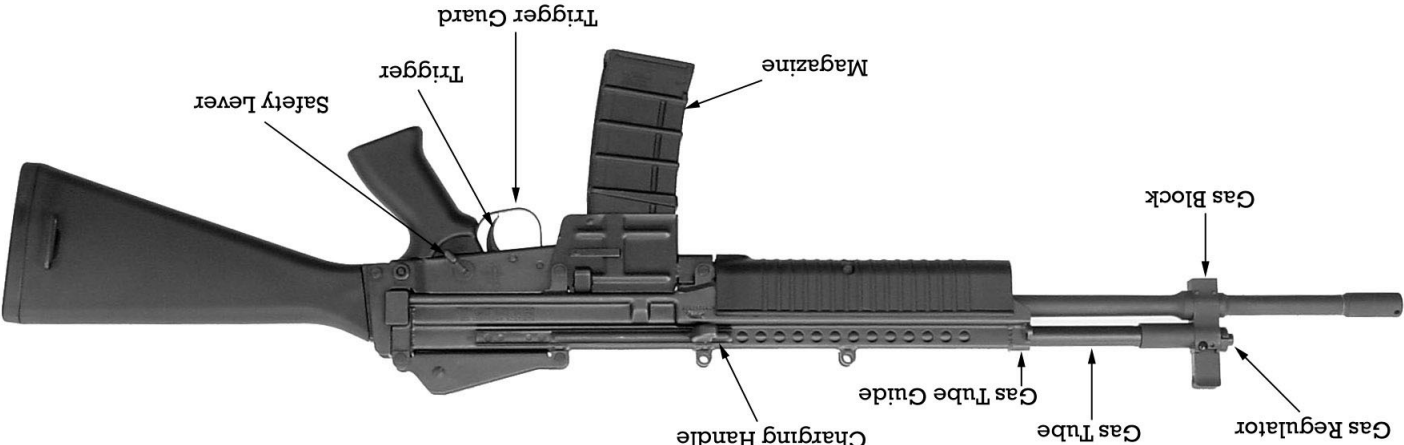
SECTION II - TERMINOLOGY

IT IS MANDATORY THAT YOU THOROUGHLY FAMILIARIZE YOURSELF WITH THE TERMS IN THIS SECTION DESCRIBING THE FEATURES AND COMPONENTS OF THE M96 AS THESE TERMS WILL BE USED THROUGHOUT THIS MANUAL.



M96 Field Stripped Major Subassemblies

- 1) Operating Rod, 2) Gas Tube, 3) Rear Sight, 4) Receiver, 5) Bolt Carrier, 6) Barrel, 7) Hand Guard, 8) Magazine Well, 9) Lower Receiver, and 10) Buttstock



SECTION III – SPECIFICATIONS

M96 Expeditionary® Rifle

Caliber:	223 Rem. (5.56 NATO)
Barrel Length:	20.25" incl. Muzzle Brake
Sight Radius:	21.9"
Rate of Twist:	1 in 9"
Overall Length:	39.75"
Weight (with empty Magazine):	8.4 Lbs.
Feeding Devices:	AR15/M16 Magazines
Operating System:	Gas Operated Piston
Bolt Type:	Multi-Lugged Proprietary
Charging Device:	Left Side, Non-Reciprocating
Front Sight:	Post, Adjustable for W & E
Rear Sight:	Peep, Adjustable for W
Receiver Construction:	Stainless Steel
Metal Finish:	Hard Matte Black
Furniture:	Fiber Reinforced Plastic

M96 Recon™ Carbine

Caliber:	223 Rem. (5.56 NATO)
Barrel Length:	16.20" incl. Muzzle Brake
Sight Radius:	19.1"
Rate of Twist:	1 in 9"
Overall Length:	35.7"
Weight (with empty Magazine):	7.82 Lbs.
Feeding Devices:	AR15/M16 Magazines
Operating System:	Gas Operated Piston
Bolt Type:	Multi-Lugged Proprietary
Charging Device:	Left Side, Non-Reciprocating
Front Sight:	Post, Adjustable for W & E
Rear Sight:	Peep, Adjustable for W
Receiver Construction:	Stainless Steel
Metal Finish:	Hard Matte Black
Furniture:	Fiber Reinforced Plastic

SECTION IV – METHOD OF OPERATION

The M96 is a gas operated, semiautomatic, sporting rifle. The action of the M96 Expeditionary® Rifle is similar to other gas operated semi-automatic rifles. The method of operation is briefly described below.

To begin the description of the operating cycle, it is assumed that the following operations have been performed: A loaded magazine has been inserted into the firearm. And a cartridge has been manually cycled (loaded) into the chamber. The hammer is held back by the trigger.

As the trigger is pulled, the hammer is released from engagement with the trigger. The hammer, under the force of its spring, rotates forward and upward into contact with the firing pin which is contained in the bolt which is itself contained in the bolt carrier.

As the hammer strikes the end of the firing pin, the tip of the firing pin is forced to strike the primer of the cartridge causing it to ignite. The ignited primer causes the powder within the cartridge case to burn. The burning powder creates gasses that expand under very high pressures to force the bullet out of the cartridge case and down the bore of the barrel.

As the bullet passes the gas port in the barrel, some of the gasses are forced through the gas port into the gas block. Some of the excess gasses are allowed to bleed from the gas bleed port. The gas block diverts most of the gasses into the gas tube allowing them to impinge upon the piston of the operating rod, forcing it and the bolt carrier assembly to the rear of the firearm against the force of the recoil spring. As the bolt carrier is forced to the rear, a camed slot in its side engages the coming lug of the bolt causing it to rotate. The rotation of the bolt causes the locking lugs of the bolt to rotate out of engagement with locking lugs of the barrel. The bolt is now unlocked and may travel to the rear of the receiver with the bolt carrier.

As the bolt carrier and bolt travel further to the rear of the firearm, the extractor which is engaging the rim of the cartridge pulls the empty cartridge from the chamber. As the Bolt carrying the empty cartridge passes the ejector, the spent case is forced out of the grip of the extractor and is ejected from the right side of the firearm through the ejection port. During the bolt carrier's rearward movement the hammer is rotated against the force of its spring into engagement with the trigger.

As the bolt carrier with its bolt reaches the rear limit of its travel, the compressed recoil spring forces the bolt carrier and bolt forward. As the bolt passes the rear of the magazine, a new cartridge is stripped from the magazine and forced into the chamber. Simultaneously, the extractor is forced over the rim of the new cartridge and the lugs of the bolt are rotated into engagement with the locking lugs of the barrel extension. The bolt carrier continues forward until it reaches its forward limit.

The disconnect of the trigger catches the hammer so that it cannot rotate forward. As the trigger is released, the disconnect disengages the hammer allowing it to be caught by the trigger sear. One complete cycle has now been completed and the rifle is ready to be fired again by pulling the trigger.

SECTION V – BEFORE LOADING

WARNING! FIRING THE FIREARM WITH ANY OBSTRUCTION IN THE BARREL MAY RESULT IN DEATH OR SERIOUS BODILY INJURY TO THE OPERATOR AND OTHERS AS WELL AS DAMAGE TO THE RIFLE AND OTHER PROPERTY.

WARNING! DO NOT LOOK DOWN THE BORE OF THE BARREL OF THE FIREARM UNLESS IT HAS BEEN UNLOADED (SEE SECTION X FOR UNLOADING INSTRUCTIONS) AND THE BOLT CARRIER OR BARREL HAVE BEEN REMOVED (SEE SECTIONS XI FOR BOLT CARRIER AND BARREL REMOVAL INSTRUCTIONS.).

WARNING! FIRING AN IMPROPERLY ASSEMBLED FIREARM MAY RESULT IN DEATH OR SERIOUS BODILY INJURY TO THE OPERATOR AND OTHERS AS WELL AS DAMAGE TO THE RIFLE AND OTHER PROPERTY.

When your M96 left the factory, it was properly assembled, cleaned, and tested. However, during shipment or in distribution, the barrel may have become obstructed or the rifle may have been disassembled and improperly assembled.

Before loading or firing the M96, inspect the bore of the barrel for any obstructions such as dirt, cleaning patches, lodged bullets, grease, moisture, etc. Also make sure the barrel and other components have been properly attached to the rifle. See SECTION XII for assembly instructions. If you have any questions consult a competent gunsmith familiar with the M96 or call our service department: Robinson Armament, Co., Salt Lake City, Utah, Phone: 801-355-0401.

SECTION VI – LOADING

WARNING! USE ONLY NEW, CLEAN, UNDAMAGED, COMMERCIAL GRADE AMMUNITION MEETING SAAMI SPECIFICATIONS OF THE PROPER CALIBER WITH THE RIFLE. DO NOT USE RELOADED OR REMANUFACTURED AMMUNITION. STEEL CASED AMMUNITION SHOULD NOT BE USED. FAILURE TO USE THE PROPER AMMUNITION COULD CAUSE DEATH OR SERIOUS BODILY INJURY TO THE OPERATOR AND OTHERS AS WELL AS DAMAGE TO THE RIFLE AND OTHER PROPERTY.

The caliber of your M96 is indicated on the bottom of the muzzle brake of the barrel. See Fig. 1.



Fig. 1

Loading the Magazine

The M96 is not issued with a magazine. The M96 rifle was designed to be used with standard AR15/M16 magazines that were manufactured to military specifications. Load the magazine by taking it in your hand, while using the thumb of your other hand to push one live



Fig. 2

cartridge at a time into the magazine as shown in Fig. 2.

Continue this process until you cannot easily load any more cartridges into the magazine. Do not overfill the magazine. If the last cartridge is difficult to push into the magazine, omit or remove it from the magazine.

Inserting the Magazine

WARNING! KEEP THE BARREL OF THE FIREARM POINTED IN A SAFE DIRECTION WHILE INSERTING A MAGAZINE INTO THE RIFLE. THE BOLT MAY CLOSE UPON INSERTION OF A MAGAZINE AND THE INERTIA FROM THE FIRING PIN MAY CAUSE A ROUND TO FIRE.

1. Move the safety lever to the safe position as indicated by the letter "S". See Fig. 3.
2. Holding the rifle by the pistol grip, insert a magazine into the magazine well as shown in Fig. 4. Push the magazine straight into the magazine well until the magazine catch engages the magazine.
3. Lightly tug on the magazine to make sure the catch has firmly engaged the magazine.



Fig. 3



Fig. 4

Loading a Round into the Chamber

WARNING! ASSUME A STABLE SHOOTING POSITION AND KEEP THE BARREL OF THE FIREARM POINTED IN A SAFE DIRECTION WHILE LOADING A CARTRIDGE INTO THE CHAMBER AS FORWARD INERTIA OF THE FIRING PIN MAY CAUSE THE FIREARM TO FIRE.

1. Move the safety lever to the fire position indicated by the letter “F” (Fig. 5).
2. Having inserted a loaded magazine into the magazine well, pull the charging handle to the rear as far as it will go.
3. Release the charging handle quickly and completely so that it has the full force of the recoil spring to carry the bolt carrier forward. The rifle now has a live cartridge in the chamber and is ready to fire.
4. Now engage the safety by moving the safety lever to the safe position as indicated by the letter “S”.



Fig. 5

NOTE: The charging handle cannot be pulled all the way to the rear if the rifle has been “dry fired” (i.e., the trigger has been pulled with no round in the chamber) and then the selector lever has been rotated to the safe position (“S”). Keeping the rifle pointed in as safe direction, rotate the safety lever to the fire position (“F”). Now the charging handle maybe pulled completely to the rear and the safety lever returned to the Safe position (“S”).

SECTION VII – AIMING & SIGHT ADJUSTMENT

Aiming the M96

Align the front sight post and its protective ears with the aperture of the rear sight as shown in Fig.6. The flat edge at the top of the front sight post should be in the middle of the rear sight aperture and the target.

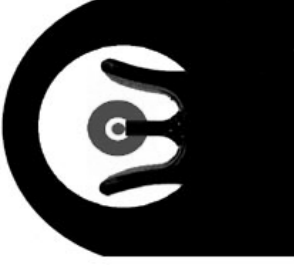


Fig. 6

Sight Adjustment

Front Sight

The barrel of the M96 contains a front sight which is adjustable for both windage and elevation. The front sight can be adjusted for elevation by depressing the front sight detent with the tip of a cartridge or similar object while turning it to clockwise (lowering it) or counter clockwise (raising it). See Fig.7.



Fig. 7

The front sight can be adjusted for windage by turning the Phillips head screws at the base of the front sight (Fig.8). To move the front sight either right or left, loosen the Phillips head screw on the side of the direction you want the sight to move and then tighten the Phillips head screw on the opposite side. This moves the sight in the direction you want to move it.



Fig. 8

Whether adjusting for windage or elevation, the movement of the bullet's point of impact will be opposite the direction you move the front sight. When the front sight is in the desired position, tighten the screws firmly but gently.

NOTE: Overtightening the screws can damage the front sight and the gas block.

Rear Sight

There are two rear sight apertures on the M96. When the aperture with the vertical mark is lying against the sight base, the 500 yard sight aperture is visible (Fig.9). When the aperture with the vertical mark is perpendicular with the sight base, the 100 yard aperture is visible.



Fig. 9 – 100 Yrd. Aperture

The rear sight aperture can be adjusted for windage with the windage adjustment knob. See Fig.10. Each click of the windage adjustment knob is equal to approximately $\frac{1}{2}$ " of movement at 100 yards.

To zero the rifle sights, use the rear aperture for 100 yards and set the vertical line of the rear sight on the middle mark of the rear sight base. See Fig.9. Next shoot a close grouping of three or more shots. Adjust only the front sight for windage and elevation until zeroed. The rear sight adjustment knob is for adjustments in the field.



Fig. 10

SECTION VIII - FIRING

WARNING! ALWAYS ASSUME A STABLE SHOOTING POSITION, CLEARLY IDENTIFY YOUR TARGET, AND HAVE AN ADEQUATE BACKSTOP BEFORE FIRING THE RIFLE.

WARNING! IF YOU EXPERIENCE A JAM OF ANY KIND, A MISSFIRE (I.E., THE TRIGGER IS PULLED AND NOTHING HAPPENS), OR THE CARTRIDGE FIRES BUT ITS REPORT IS UNUSUALLY QUIET, KEEP THE RIFLE POINTED IN A SAFE DIRECTION AND IMMEDIATELY FOLLOW THE INSTRUCTIONS IN SECTION XIII OF THIS MANUAL.

WARNING! KEEP ALL BODY PARTS AWAY FROM THE EJECTION PORT. KEEP YOUR FINGERS AND HANDS OUT OF THE EJECTION PORT. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS BODILY INJURY.

NOTE: If you are firing your rifle for the first time, you should read SECTION IX entitled Break In and Adjustment of Gas System.

Holding the rifle by the pistol grip with your finger placed completely outside the trigger guard, disengage the safety with your thumb by moving the safety lever to the fire position as indicated by the letter "F". See Fig. 5 on Page 15.

Having your sights properly aligned on the intended target, place your finger on the trigger. Keeping your sights properly aligned on the target at all times, gently and slowly squeeze the trigger until the rifle fires.

If your sights move out of alignment with the target during the trigger pull, release the trigger immediately. You may begin pulling the trigger again when your sights are properly aligned on the target.

WARNING! AFTER YOU HAVE FIRED A SHOT, THE RIFLE IS READY TO SHOOT AGAIN.

The above procedure may be repeated until the rifle is empty. Upon firing the last cartridge in a magazine, the bolt should stay open. Remove the empty magazine (See Section X). To close the bolt, pull the charging handle all the way to the rear and let go of it.

Insert another loaded magazine into the rifle, keeping the muzzle of the rifle pointed in a safe direction at all times. With the muzzle still pointed in a safe direction, pull the charging handle all the way to the rear and let go of it. This will chamber another round and allow you to resume firing.

WARNING! IF THE BARREL BECOMES TOO HOT, THE HEAT MAY CAUSE A CARTRIDGE IN THE CHAMBER TO FIRE WITHOUT THE TRIGGER BEING PULLED.

If the rifle is hot, stop firing, remove the magazine, empty the chamber, and let it cool. A good indication that the barrel is too hot is when the handguard becomes hot. Use good judgement.

SECTION IX – BREAK IN & GAS SYSTEM ADJUSTMENT

WARNING! THE GAS REGULATOR WILL BECOME EXTREMELY HOT ONCE THE RIFLE HAS BEEN FIRED. DO NOT TOUCH THE BARREL, THE GAS TUBE, OR THE FRONT SIGHT WITH ANY PART OF YOUR BODY OR YOUR CLOTHING. FAILURE TO FOLLOW THIS INSTRUCTION COULD RESULT IN SERIOUS BURNS AND OTHER INJURIES.

WARNING! MAKE SURE THE RIFLE IS POINTED IN A SAFE DIRECTION WHILE ADJUSTING THE GAS REGULATOR. DO NOT GET IN FRONT OF THE MUZZLE.

Adjustment of Gas Regulator

The M96 is equipped with a gas regulator so the operator can use the minimum amount of gas necessary to reliably cycle the action. Using more gas than is necessary to cycle the action will result in harsher recoil and more wear on the firearm than is necessary. Typically, more gas may be necessary where the temperatures are cold, the ammunition is weak, or the firearm is dirty or brand new. Less gas may be necessary when temperatures are hot, the ammunition is strong, the rifle clean, or the rifle has been previously fired.

The gas regulator works by regulating the amount of gas used to cycle the action of the firearm. The M96 uses a “gas bleed” system regulator. The gas regulator has six different positions which include five gas bleed ports (holes) of varying size and one position



with no gas bleed port. The gas bleed ports settings are located around the circumference of the gas regulator. The number visible on the top of the gas regulator indicates the setting. See Fig. 11. The higher the number visible on top, the larger the volume of gas that is bled from the system and the lower amount of energy used to cycle the action. Conversely, the smaller the number on top, the smaller the volume of gas bled from the gas system and the higher the amount of energy available to cycle the action.

To adjust the gas regulator, use the tip of a round to depress the gas regulator's detent while turning the regulator to the desired setting. Fig. 12 shows the position of the detent.

To get the gas regulator adjusted for any given ammunition or conditions, set the gas regulator so that the empty cases are consistently thrown approximately 5 to 7 feet from the rifle. This should ensure reliable functioning.

If the empty cartridge cases are not fully ejected from the receiver or are not ejected far enough from the firearm, it means that more gas is needed to cycle the action far enough to properly eject the empty cartridges. Turn the gas regulator so that a smaller number is visible on top and try again.

NOTE: If the empty cartridge case is not ejected from the firearm, the empty cartridge may be forced back into the chamber. Because empty cases swell slightly, it may be difficult to retract the charging handle. If this is the case, strike the charging handle to the rear with your hand or other soft object. This should break the empty case free of the chamber so it can be ejected. Do not strike on the charging handle with hard objects to open the bolt.

NOTE: The gas adjustment regulator can be rotated in either direction.

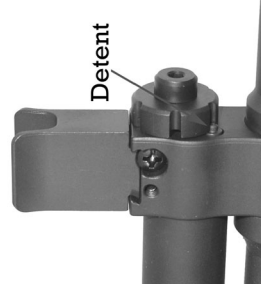


Fig. 12 – Gas Regulator Detent

Break In

Your new rifle was manufactured to exacting tolerances. Because of this, the action is somewhat tight and stiff to begin with. Though your rifle was satisfactorily test fired at the factory, it was not broken in. Proper break in of the rifle requires firing approximately 100 to 200 rounds. Without first breaking in the rifle, it may not feed properly from fully loaded 30 round magazines. It is suggested that you:

1. Set the gas regulator so that the number 2 or 3 is visible on top. (If the firearm won't cycle properly on these settings, try settings 1 or 0). And;
2. Do not fully load the magazine you are using for the first 100 to 200 rounds.

SECTION X – UNLOADING

WARNING! EVEN THOUGH THE MAGAZINE HAS BEEN REMOVED, THE RIFLE MAY STILL BE LOADED. THERE MAY STILL BE A ROUND IN THE CHAMBER WHICH COULD BE FIRED. ALWAYS KEEP THE RIFLE POINTED IN A SAFE DIRECTION WHILE UNLOADING THE FIREARM. ALWAYS VISUALLY INSPECT THE CHAMBER TO MAKE SURE NO ROUND IS PRESENT.

1. Remove the magazine from the rifle by depressing the magazine release button with your right index finger (Fig. 13). Most magazines will drop from the rifle so be ready to catch them with your other hand.
2. While keeping the rifle pointed in a safe direction, move the safety lever to the fire position as indicated by the letter "F" and



Fig. 13

retract the charging handle to its rearmost position

3. While holding the charging handle at its rearmost position, inspect the chamber to make certain that no round is present in the chamber (Fig.14).



Fig. 14

- Pulling the charging handle to the rearmost position should eject any cartridge from the chamber, however, this is not always the case.
4. After visually inspecting the chamber and finding no round is present, release the cocking handle and move the safety selector to the safe position as indicated by the letter "S".

SECTION XI – DISASSEMBLY

WARNING! MAKE SURE THE RIFLE HAS BEEN UNLOADED BEFORE ATTEMPTING TO DISASSEMBLE IT. SEE SECTION X – UNLOADING.

WARNING! ADEQUATE EYE PROTECTION SHOULD ALWAYS BE WORN WHILE DISASSEMBLING ANY FIREARM AS SPRING LOADED PARTS MAY JUMP OUT AND MAY CAUSE PERMANENT VISION DAMAGE OR OTHER SERIOUS INJURY.

The M96 was designed to be disassembled and reassembled without the use of special tools. Most of these procedures can be performed with the use of a .223 cartridge. However the cartridge used as a tool may be damaged and should not be fired.

Barrel Removal

WARNING! DO NOT ATTEMPT TO TOUCH OR REMOVE THE BARREL FROM A RIFLE WHICH HAS JUST BEEN FIRED. BARREL TEMPERATURES CAN REACH DANGEROUS LEVELS. MAKE SURE THE BARREL HAS COOLED COMPLETELY BEFORE ATTEMPTING TO TOUCH OR REMOVE IT. FAILURE TO COMPLY WITH THIS WARNING MAY RESULT IN SERIOUS BURNS AND OTHER INJURIES.

1. Set the butt of the rifle on a solid surface with the muzzle pointing upward in a safe direction.
2. Using the side of your right hand, push the charging handle down approximately three inches while simultaneously pushing in on the barrel release button with the thumb of the same hand (Fig. 15). Push the button in as far as possible.
3. While holding the charging handle down and the barrel release button in, use your left hand to grab the barrel by the gas block and twist the barrel slightly back and forth while pulling it out of the receiver (Fig. 16).



Fig. 15



Fig. 16

NOTE: If you find it difficult to push in the barrel release button while holding down the charging handle, you may first remove the bolt carrier assembly so that there is no need to push down on the charging handle while holding down the

barrel release button. The instructions for removing the bolt carrier can also be found in this SECTION.

NOTE: If the barrel has been removed, do not pull back on the charging handle and release it. Doing so may cause unnecessary wear on or damage to the parts.

Removal of Bolt Carrier Assembly

1. Move the safety lever to the fire position as indicated by the letter "F". Pull the cocking handle completely to the rear. This action is to ensure the hammer is in the cocked position. (NOTE: The hammer must be in this position to remove the bolt carrier.) Release the charging handle allowing the bolt carrier to move forward. Now move the safety lever to the safe position as indicated by the letter "S".
2. Using the rim of a cartridge, push in the left side of the takedown pin as shown in Fig.17. NOTE: If you use a punch, use it only to get the pin started. Do not force the pin all the way out. It is meant to stay attached to the lower receiver.



Fig. 17

3. Take hold of the right side of the takedown pin and pull it all the way to the right. It will not come all the way out of the lower receiver.



Fig. 18



Fig. 20



Fig. 21

6. After you have pulled the bolt carrier free of the operating rod, tip up the muzzle end of the rifle so that the bolt carrier can slide out the back of the receiver. Be ready to catch it!

NOTE: If the bolt carrier does not slide out the back of the receiver on its own, reach through the ejection port with a cleaning rod or similar object and lightly push the bolt carrier to the rear.

NOTE: Do not pull back on the charging handle and release it after the bolt carrier has been removed from the rifle. Doing so may damage the key on the operating rod.

Disassembly of the Bolt Carrier Assembly

1. Use the tip of a cartridge to push out the pin which retains the back of the bolt carrier as shown in Fig. 19.
2. Withdraw the back of the bolt carrier, firing pin, and firing pin return spring from the bolt carrier as shown in Fig. 20. Pull the cam pin out of the bolt carrier as shown in Fig. 21.
3. Pull the bolt from the bolt carrier.



Fig. 19

Disassembly of the Bolt

1. Depress the extractor very slightly straight into the bolt at its center (axis point) while simultaneously using the tip of a cartridge to push out the extractor's axis pin (Fig. 22).



Fig. 22

NOTE: The extractor's axis pin is stepped. This requires the extractor to be slightly depressed in order to push out the axis pin. The axis pin should come out easily if properly depressed. Do not use a punch and hammer or similar instruments to try to remove this pin. Doing so may damage the parts.

2. Pull the axis pin from the bolt.
3. Pull the extractor and its spring from the bolt.

Operating Rod and Gas Tube Removal

The bolt carrier assembly and barrel must be removed before the operating rod and gas tube can be removed. The operating rod should be removed before the gas tube is removed.

To remove the operating rod:

1. Hold the receiver so the front faces you.
2. Push the operating rod into the receiver about 1" and turn the operating rod $\frac{1}{4}$ turn counter clockwise so that the key of the operating rod is sticking straight up. If you look into the rear of the receiver after the $\frac{1}{4}$ turn, the operating rod with its key should appear as in Fig.

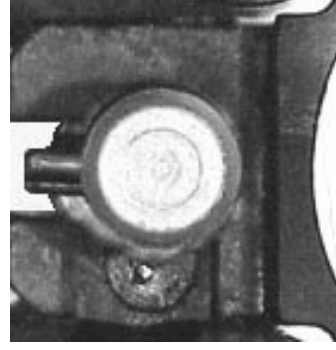


Fig. 23

23. The parts have been enlarged in this picture.

3. Pull the operating rod from the rifle.

NOTE: The operating rod may be removed before the bolt carrier assembly is removed as long as the barrel has first been removed.

To Remove the Gas Tube:

The gas tube has one large and one small hole near its end. First, insert the point of the cartridge or small bar through the two holes beginning with the larger hole. Using the cartridge, rotate the gas tube back and forth to loosen it. See Figure 24. Next, extract the gas tube from the receiver.



Fig. 24

WARNING! USING A CARTRIDGE AS A TOOL MAY DAMAGE THE CARTRIDGE AND MAKE IT UNSAFE TO FIRE. DISCARD THE CARTRIDGE AFTER USING IT AS A TOOL.

Removal of Lower Receiver, Magazine Well, Rear Sight, Buttstock, Buttplate, and Handguard

All the subassemblies mentioned in this section except the rear sight, are held to the receiver by interchangeable assembly pins. The rear sight is held to the receiver by two special assembly pins of different lengths.

NOTE: When the rifle is new, it is more difficult to disassemble and reassemble. If necessary use a brass punch and hammer to lightly tap out the assembly pins.

Removal of Lower Receiver

WARNING! DO NOT DRY FIRE THE LOWER RECEIVER WHEN IT IS REMOVED FROM THE RIFLE AS THE HAMMER WILL STRIKE THE LOWER RECEIVER AND DAMAGE IT.



Fig. 26

1. Take a empty cartridge case in your hand. Using the rim of the case, push in the lower receiver's takedown pin from the left side (Fig.26).
2. Grab the rimmed portion of the retaining pin on the right side of the pin with your hand and pull it out as far as it will go. It should not come completely out of the lower receiver.
3. Rotate the rear of the lower receiver away from the upper receiver.
4. Push in the front assembly pin of the lower receiver and pull it completely out of the rifle.
5. Pull the lower receiver from the rifle.

NOTE: The takedown pin of the lower receiver is not meant to come completely out like the other assembly pins. If you push it all the way out with a punch, you will make it so it won't stay in the lower receiver. If you must use a punch, do so only to get it moving.

Magazine Well Removal

Remove the two assembly pins shown in Fig. 27.
Pull the Magazine Well from the receiver.



Fig. 27

Buttstock Removal

1. Remove the assembly pin holding on the stock. Knock the stock down .125" to .25 as shown in Fig. 28.
2. Next, rotate the stock up and away from the lower receiver (Fig. 29).



Fig. 28

Disassembly of the Rear Sight Assembly

The rear sight is held on by two special assembly pins of different lengths. They can be pushed out with a punch or the tip of a cartridge.



Fig. 29

Disassembly of Buttplate and Rear Sling Ring.

Remove the assembly pin from the center of the buttplate as shown in Fig. 30. Pull the rear sling ring from the side of the buttstock. Now the buttplate may be removed.



Fig. 30

Further Disassembly of the Rifle

Further disassembly of the rifle should only be performed by a competent gunsmith.

SECTION XII - ASSEMBLY OF THE M96

WARNING! ADEQUATE EYE PROTECTION SHOULD ALWAYS BE WORN WHILE ASSEMBLING ANY FIREARM AS SPRING LOADED PARTS MAY JUMP FROM THE FIREARM AND MAY CAUSE PERMANENT VISION LOSS OR OTHER SERIOUS INJURY.

Assemble the rifle components in the flowing order.

Gas Tube Installation

1. Attach the gas tube assembly to the receiver by sliding its narrow end into the gas tube guide of the receiver.
2. Insert the tip of a .223 cartridge through the two holes near the top of the gas tube as shown in Fig. 31.
3. Push the gas tube into the receiver keeping it straight. The end of the gas tube needs to seat into a recess located about midpoint in the receiver (Fig. 32). Continue to push the gas tube into the receiver until it is fully seated in the recess. If necessary rotate the gas to back and forth as it is pressed into the receiver.



Fig. 31

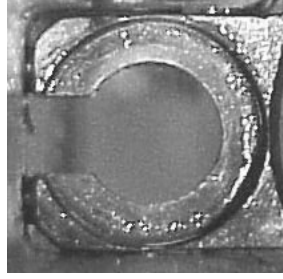


Fig. 32 Gas Tube Recess (Enlarged)

4. Once seated, rotate the gas tube so that its large holes are pointing down. See Fig. 33.

NOTE: If the barrel will not go far enough into the receiver to lock into place, the gas tube may not be seated properly.

Fig. 33

Operating Rod Installation



Fig. 34

1. Hold the receiver with the front facing you. Make sure the charging handle has been pushed completely forward. Push the operating rod into the gas tube as shown in Fig. 34. The oprod key must be oriented straight toward the top of the receiver.
2. Guide the operating rod through its hole in the receiver. This hole is located approximately midpoint inside the receiver. There is a slot on top of this hole through which the key of the operating rod must pass. See Fig. 32 for an enlarged picture of the hole and slot.
3. When you feel the washer of the operating rod hit inside the receiver, continue to push the operating rod into the receiver about one inch more and hold it there.
4. Rotate the operating rod $\frac{1}{4}$ turn clockwise and release it so that it comes out toward you.



Fig. 35 (Enlarged)

The roll pin behind the key of the operating rod should be seated on the cocking piece of the charging handle as shown in the enlarged picture in Fig.35 as viewed from the rear of the receiver. NOTE: Do not pull back on the charging handle and release it without the bolt carrier and barrel attached to the receiver. Doing may cause damage to the parts.

Installation of Barrel

WARNING! FAILURE TO INSTALL THE BARREL PROPERLY MAY RESULT IN DEATH OR SERIOUS BODILY INJURY AS WELL AS DAMAGE TO THE RIFLE AND OTHER PROPERTY FOLLOW THESE INSTRUCTIONS CAREFULLY. IF THE BARREL DOES NOT STAY IN THE FIREARM DURING FIRING, STOP SHOOTING IMMEDIATELY.

The barrel cannot be installed until the operating rod and the gas tube have first been installed.

1. Set the buttstock of the rifle on a solid surface with the front of the receiver pointing upward in a safe direction.
2. Using your thumb, push the barrel release button in as far as possible (Fig. 36).
3. Push the wide end of the barrel into the receiver, while holding in the barrel release button.
4. As the barrel is pushed into the receiver, make sure the gas block mates properly with the gas tube.
5. Continue to push the barrel into the receiver and onto the gas tube as far as it will go.
6. Release the barrel release button and rotate the barrel back and forth until the barrel release lever locks out. When properly locked, it should appear as it does in (Fig. 37).



Fig. 36

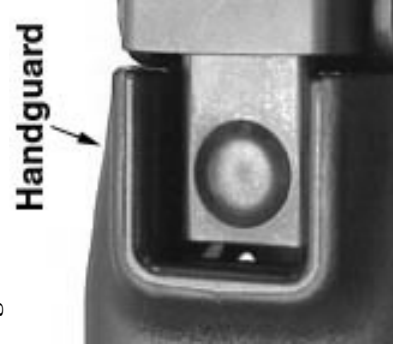
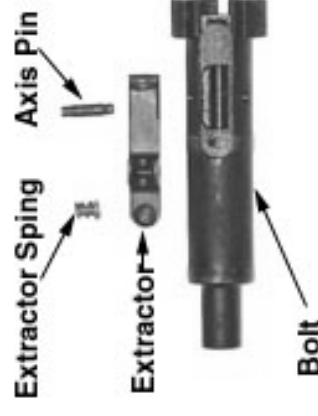


Fig. 37

NOTE: The barrel release button should be roughly parallel with the edges of the handguard nearest it (Fig.37). If it looks like Fig. 36, the barrel is **not** locked into place. Rotate the barrel slightly back and forth and push it in and pull it out slightly until the barrel release pops out. If the barrel is properly attached, the barrel release button should appear as it does in Fig. 37. If the barrel release does not pop out (lock into place), it may be that the gas tube is not seated properly. If this is the case, review the instructions on installing the gas tube on page 31. If you are still having trouble, contact the manufacturer.

Assembly of the Bolt

1. Place the wide end of the extractor spring into its hole in the extractor.
2. Place the extractor in its slot on the bolt.
3. Press down slightly on the middle point of the extractor until the hole of the bolt and extractor are aligned. While so doing, insert one end of the extractor's axis pin in the aligned holes.
4. Release pressure slightly from the extractor as you continue to push the axis pin into the bolt assembly. You should hear a little click as the axis pin locks into place.



NOTE: Do not attempt to force the axis pin into place with a hammer or similar instrument as it may damage the bolt. The axis pin should go in easily without much force.

Assembly of the Bolt Carrier

WARNING! FAILURE TO ASSEMBLE THE BOLT CARRIER CORRECTLY MAY RESULT IN DEATH OR SERIOUS BODILY INJURY AS WELL AS DAMAGE TO THE RIFLE AND OTHER PROPERTY. FOLLOW THESE INSTRUCTIONS CAREFULLY. MAKE SURE THE BOLT CARRIER IS ASSEMBLED WITH THE FIRING PIN SPRING ATTACHED TO THE FIRING PIN AND THE FIRING PIN IS HELD IN THE CARRIER TAIL BY THE ROLL PIN AS SHOW IN FIGURE 39.



Fig. 39 Carrier Tail with Firing Pin and Return Spring

1. Insert the bolt into the bolt carrier, lining up the hole in the bolt with the bottom of the cam slot of the bolt carrier.
2. Insert the cam into the bolt through the cam slot. Make sure the flat protrusion of the cam lines up with the rail of the bolt carrier (Fig. 40).

3. Examine the firing pin. If the tip looks damaged or worn, replace it.

4. Insert the Carrier Tail with the firing pin and its return spring into the rear end of the bolt carrier and into the rear end of



Fig. 40

the bolt. The firing pin return spring should be on the outside of the tail end of the bolt.

5. Slide the bolt carrier back around the firing pin and into the bolt carrier. Make sure the flat surface is at the bottom of the carrier.
6. Holding the end of the bolt carrier against the bolt, insert the pin which holds the end to the bolt carrier.

Installation of the Bolt Carrier Assembly

To install the Bolt Carrier Assembly, the operating rod and gas tube should first be installed. The lower receiver should be removed or rotated downward so that the rear of the receiver is accessible.

1. Tip the rifle so that the muzzle is pointing downward.
2. Slide the completed bolt carrier assembly into the receiver, bolt first. The operating rod should mate with its hole in the bolt carrier. The bolt carrier assembly should be slid forward as far as it will go.

NOTE: If you have trouble getting the hole in the bolt carrier to mate with the end of the operating rod, you may remove the gas tube and wiggle the operating rod around until it mates up with its hole in the bolt carrier.

3. Take the tip of a cartridge, or similar object and push down on the bolt carrier release button while pushing the bolt carrier over the end of the operating rod. Push the bolt carrier assembly as far forward as it can go.

4. Once the bolt carrier is as far forward as it will go, release the bolt carrier release button. The button should stay in (Fig. 41).

5. Grab the charging handle and pull it approximately two inches to the rear. The carrier release button

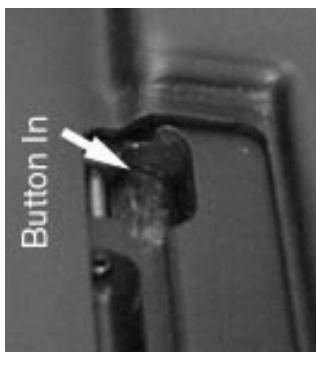


Fig. 41



Fig. 42

should pop out so that it is flush with the top part of the bolt carrier (Fig 42). It may be necessary to apply forward pressure on the bolt carrier while pulling back on the charging handle. When the carrier release button pops out, the carrier is firmly connected to the operating rod.

6.

Installation of Lower Receiver, Magazine Well, Rear Sight, Buttstock, Buttplate, and Handguard

Installation of Magazine Well Assembly

1. When installing the magazine well, be sure to align the barrel release button with the front holes of the magazine well and the corresponding holes of the receiver. Also align the holes on the back of the magazine well with the corresponding holes of the receiver. See Fig. 43.
2. Install the front assembly pin. The barrel release button pivots on this assembly pin.
3. Install the rear assembly pin.



Fig. 43

Installation of Lower Receiver Assembly

1. Slide the front of the lower receiver inside the rear of the magazine well so that its holes are aligned with the holes of the receiver and the magazine well.
2. Install the front assembly pin.
3. Rotate the back of the lower receiver up into engagement with the receiver until the holes align.
4. Push in the takedown pin of the lower receiver.

Rear Sight

Align the holes of the rear sight with the corresponding holes of the receiver. Insert the longer special assembly pin in the rear holes and the shorter special assembly pin the front holes.

XIII - MALFUNCTIONS & TROUBLE SHOOTING

WARNING! IF THE RIFLE JAMS, MISFIRES (I.E., THE TRIGGER IS PULLED AND NOTHING HAPPENS), OR THE CARTRIDGE FIRES BUT ITS REPORT IS UNUSUALLY QUIET, KEEP THE RIFLE POINTED IN A SAFE DIRECTION AND IMMEDIATELY FOLLOW THESE STEPS.

If the rifle misfires or the report is unusually quiet:

KEEPING THE RIFLE POINTED IN A SAFE DIRECTION WAIT AT LEAST THIRTY SECONDS TO SEE IF IT DISCHARGES. NOTE: SOMETIMES CARTRIDGES “HANG FIRE” WHICH MEANS THE CARTRIDGE DOES NOT GO OFF IMMEDIATELY AFTER THE TRIGGER IS PULLED. DO NOT PULL ON THE CHARGING HANDLE AND OPEN UP THE ACTION UNTIL AT LEAST THIRTY SECONDS HAVE PASSED. THE CARTRIDGE COULD EXPLODE OUTSIDE THE CHAMBER RESULTING IN DEATH OR SERIOUS BODILY INJURY AS WELL AS DAMAGE TO THE RIFLE AND OTHER PROPERTY. NEXT:

1. Remove the magazine from the rifle.
2. Pull back on the charging handle and remove any cartridge from the chamber.
3. Move the safety lever to safe as indicated by the letter “S”.

If the cartridge did not fire, the bullet will still be attached to the cartridge case. Next, look at the primer of the cartridge. If there is no dent in the primer, there may be a problem with the rifle which must be assessed by a competent gunsmith.

If there is a dent in the primer, discard the round.

DO NOT ATTEMPT TO FIRE THE RIFLE AGAIN UNTIL YOU HAVE REMOVED THE BARREL AND CHECKED IT FOR OBSTRUCTIONS. SEE THE PROCEDURE FOR CHECKING FOR OBSTRUCTIONS IN SECTION V – BEFORE LOADING.

If the barrel is clear of obstructions, insert a loaded magazine into the rifle. Pull back the charging handle and load a cartridge into the chamber and continue firing according to SECTIONS V, VI, and VIII of this manual. If the problem occurs again, unload the rifle and have it checked by a competent gunsmith.

If the rifle jams or misfeeds:

1. Completely remove the magazine from the rifle.
2. Pull back on the charging handle, remove any empty or live cartridges from the action. Discard any damaged rounds.
3. Move the safety lever to the safe position as indicated by the letter “S”.
4. Remove the barrel and check it for obstructions.

WARNING ! DO NOT ATTEMPT TO FIRE THE RIFLE AGAIN UNTIL YOU HAVE REMOVED THE BARREL AND CHECKED IT FOR OBSTRUCTIONS. SEE THE PROCEDURE FOR

CHECKING FOR OBSTRUCTIONS IN SECTION V – BEFORE LOADING.

5. Following the instructions for loading, and firing the rifle in SECTIONS VI, and VII of this manual.
6. Continue firing.
7. If the jam occurs again, unload the rifle and have it checked by a competent gunsmith.

Refer to the Charts below for answers to functioning problems. If you cannot solve the problem from this chart, see a competent gunsmith or call our service department: Robinson Armament, Co., Salt Lake City, Utah 84116, Phone: 801-355-0401.

CANNOT PULL BACK CHARGING HANDLE	
Cause	Remedy
The rifle has been dry fired and then the safety lever was moved to safe a s indicated by the letter “S” .	Move the safety lever to the fire position as indicated by the letter “F” .
The action did not cycle far enough to eject an empty cartridge case and shoved it back into the chamber	Lightly strike the charging handle with the side of your hand or soft object. Eject the empty case and turn the gas regulator so the gas bleed port is more restricted.

RIFLE DOES NOT FEED OR CHAMBER PROPERLY	
Cause	Remedy
magazine is not latched in place	make sure magazine is inserted all the way into the magazine well and latched
insufficient gas pressure (short cycling)	Set gas regulator to a more restrictive setting.
dirty chamber	clean chamber
defective, damaged or dirty ammunition	discard cartridge, inspect and clean chamber if necessary

magazine is of poor quality, worn out, or damaged	replace magazine, stretch out magazine spring
too many rounds in magazine	remove one or more rounds from magazine

POOR EXTRACTION	
Cause	Remedy
weak extractor spring	replace extractor spring
worn or damaged extractor	replace extractor
dirty chamber	clean chamber

POOR EJECTION	
Cause	Remedy
Insufficient gas pressure (short cycling)	Set gas regulator to more restrictive setting.
ejector or ejector spring dirty, damaged or worn	inspect ejector & spring, make sure it slides smoothly, replace if necessary

BOLT DOES NOT LOCK	
Cause	Remedy
bolt, barrel extension, or chamber are dirty or obstructed	clean bolt, barrel extension, and chamber and lightly oil
cartridge is dirty, damaged, or of poor quality	clean or use different ammunition as necessary
bolt, barrel extension, or chamber is damaged	replace bolt or barrel

RIFLE DOES NOT FIRE	
Cause	Remedy
firing pin broken or worn, primers are only slightly dented	replace firing pin

cartridge is defective primer is dented sufficiently to fire	use different cartridges
hammer, hammer spring, trigger, disconnect, or disconnect spring are broken or worn.	take rifle to gunsmith

RIFLE FIRES MORE THAN ONE SHOT PER TRIGGER PULL	
Cause	Remedy
disconnect or its spring are damaged or worn	take rifle to gunsmith for evaluation & repair
firing pin or return spring are damaged, or worn	replace firing pin and/or return spring.

SECTION XIV - MAINTENANCE

WARNING! MAKE SURE THE RIFLE IS COMPLETELY UNLOADED BEFORE CLEANING.

The rifle should be cleaned and lubricated after firing, long storage, or exposure to dirt and moisture. For complete cleaning the rifle should be field stripped.

Cleaning of Barrel

- Using a cleaning rod and brush, saturate the brush with a commercial gun cleaning solvent and run the brush from the chamber through the bore. Repeat this process two or three times.
- Remove the brush and run a solvent soaked patch from the chamber through the bore several times. Alternate this procedure with a dry patch until the patches look clean.
- When the patch comes out clean, use a final patch dipped in a light lubricant.

4. Cleaning of Gas Block & Gas Bleed Port

It is recommended that the carbon fouling of the inside of the gas block and gas bleed port be cleaned whenever they appear to become blocked. A reaming tool may be used as long as care is taken not to enlarge these orifices.

Chamber and Barrel Extension

1. Dip a toothbrush or similar brush into solvent then push it into the chamber and barrel extension.
2. Turn the brush around to clean the chamber and barrel extension.
3. Clean out all powder residue and brass shavings.
4. Dry with a cloth and apply lubricant lightly.

Gas Tube

1. Dip a wire brush of proper diameter into gun cleaning solvent. Some Shotgun brushes work well.
2. Force the wire brush into the gas tube.
3. Remove all carbon buildup on the narrow diameter.
4. Dry with a dry cloth or patch.
5. Lubricate with a light lubricant. Wipe out any excess lubricant.

Operating rod

1. Dip it in solvent and scrub with a brush. Remove all carbon deposits.
2. Wipe off all solvent.
3. Lightly lubricate. Wipe off all excess lubricant.

Bolt Carrier Assembly

1. Dip the parts of the bolt carrier assembly into gun cleaning solvent and scrub them with a brush to remove all powder deposits and brass shavings.
2. Wipe the parts clean with a dry cloth.

3. Put only a small amount of lubricant on the firing pin, wiping away all excess lubricant.
4. Lubricate the cylindrical portion of the bolt.
5. Lubricate lightly the lugs of the bolt, wiping away all excess lubricant.
6. Lubricate the rails of the bolt carrier generously before putting it into the receiver.

Receiver, Lower Receiver, Magazine Well, and Rear Sight Assemblies

1. These assemblies should be thoroughly cleaned with gun cleaning solvent to remove all contaminants.
2. Lightly lubricate, wiping away all excess lubricant.
3. Liberally lubricate the channels of the receiver where the rails of the bolt carrier slide.

SECTION XV - CHILD SAFETY LOCK

WARNING! USE OF THE CHILD SAFETY LOCK DOES NOT GUARANTY THAT THE FIREARM WILL NOT BE MISUSED. KEEP YOU FIREARMS LOCKED UP IN SECURE PLACE OUT OF SIGHT.

Your new rifle has been provided with a child safety lock. Install the lock as follows:

1. Pull back the charging handle to retract the bolt carrier and bolt.
2. Thread the cable of the lock through into the ejection port and



down through the magazine well as shown in Fig. 43. While holding onto the charging handle, let it go forward slowly as far as it will go.

NOTE: Allowing the bolt carrier to slam forward may damage the cable and the firearm.

3. Push the loose end of cable into the lock firmly.
4. Give the cable a tug to make sure it is locked in the lock.
5. Place the key where only you have access.

SECTION XIV – ACCESSORIES AND MODIFICATIONS.

The M96 was designed to be assembled into other configurations such as a top fed (BREN gun style) rifle and a carbine.

WARNING! THE RIFLE MUST NOT BE FIRED IN OTHER CONFIGURATIONS WITHOUT THE CORRECT PARTS PROVIDED BY THE MANUFACTURER. FAILURE TO HEED THIS WARNING COULD RESULT IN DEATH OR SERIOUS BODILY INJURY.

Kits to build the rifle in different configurations should be available from the manufacturer shortly.

WARNING! THE MODIFICATION OF ANY PART OF THE FIREARM MAY RESULT IN DEATH, OR SERIOUS BODILY INJURY AS WELL AS DAMAGE TO THE RIFLE AND OTHER PROPERTY. MODIFICATIONS MAY ALSO BE ILLEGAL.