#### WARNING: BEFORE USING THIS FIREARM READ AND FOLLOW THESE INSTRUCTIONS

# **ZMWEAPONS** SAFETY AND INSTRUCTION MANUAL



### **ZM WEAPONS**

#### MODELS LR 300-SR-(A/N/AXL) RIFLES MODELS LR 300-14.5-(A/N/AXL) RIFLES MODELS LR 300-ML-(A/N/AXL) RIFLES

THIS INSTRUCTION MANUAL SHOULD ALWAYS ACCOMPANY THIS FIREARM AND BE TRANSFERRED WITH IT UPON CHANGE OF OWNERSHIP. MANY OTHER GENUINE ACCESSORIES AVAILABLE



LR 300-SR-N WITH 5M1 COMPENSATOR/BRAKE AND TELE-FOLD STOCK

MANY OTHER GENUINE ACCESSORIES AVAILABLE



LR 300-14.5-AXL WITH PHANTOM FLASH HIDER AND FOLDING STOCK

Should you have any questions pertaining to this manual, contact ZM-weapons' service center at 1-877-892-6533 between the hours of 7:30 am to 4:00 pm EST Monday through Friday only.

#### CAUTION: USE ONLY ORIGINAL, HIGH QUALITY, COMMERCIALLY MANUFACTURED AMMUNITION IN GOOD CONDITION THAT IS APPROPRIATE TO THE CALIBER OF YOUR FIREARM. WE DO NOT RECOMMEND THE USE OF REMANUFACTURED OR HAND LOADED AMMUNITION.

TYPE OF FIREARM: LR 300-SR-(A/N/AXL) RIFLES LR 300-14.5-(A/N/AXL) RIFLES LR 300-ML-(A/N/AXL) RIFLES

#### AMMUNITION:

223 REMINGTON (5.56 MM)

This ZM-WEAPONS product is classified by the Alcohol, Tabacco, and Firearms division of the Internal Revenue Sevices (IRS),U.S. Treasury Department, as a firearm or dangerous weapon; it is, therefore, potentially lethal!

WARNING: IF THIS FIREARM IS CARELESSLY OR IMPROPERLY HANDLED, UNINTENTIONAL DISCHARGE COULD RESULT IN INJURY, DEATH, OR DAMAGE TO PROPERTY.

**CAUTION:** CAREFULLY READ THIS INSTRUCTION MANUAL WHICH GIVES BASIC ADVICE ON THE PROPER HANDLING AND FUNCTIONING OF THIS ZM WEAPONS FIREARM PRIOR TO LOADING AND FIRING. However, your safety and the safety of others around you (including your family) depends on your mature compliance with that advise, and your adoption, development and constant employment of safe practices. if unfamiliar with firearms, seek further advise through safe handling courses run by your local gun club, NRA appoved instructor, or similar qualified organizations.

**NOTICE:** ZM WEAPONS shall not be responsible for injury, death, or damage to property resulting from either intentional or accidental discharge of this firearm, or from its function when used for purposes or subjected to treatment for which it was not designed. ZM WEAPONS will not honor claims involving this firearm which result from carelessness or improper handling, unauthorized adjustment or parts replacement, corrosion, neglect, the use of the wrong caliber ammunition or the use of ammunition other than original high quality commercially manufactured ammunition in good working condition, or any combination of the above. ZM WEAPONS will not honor claims involving this firearm for any reason of cause when such claims are made by the second or subsequent owner.

**IMPORTANT:** Before it left the factory this firearm was tested, carfully inspected, and packaged: ZM WEAPONS cannot control product handling after it leaves the factory; therefore, please examine this firearm carefully at the time of purchase to insure that it is unloaded and undamaged. The dealer will be pleased to assist you in making this examination and endeavor to answer futher questions. this instruction manual should always accompany this firearm and be transferred with it upon change of ownership.

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## MAIN FEATURES

The ZM WEAPONS LR-300-SR-(A/N/AXL) sport rifles are lightweight, semi automatic, .223 caliber sporting arms. They have a forward assist to ensure bolt closing and the magazine capacity is limited to 10 rounds to comply to the hunting laws of most states. The barrel is threaded to accept all the most popular accessories and comes with a muzzle accessory.

### LR-300-SR-(A/N/AXL) SPORT RIFLE

Caliber Stock Finish Weight Barrel Length Overall Length Magazine Capacity Bolt Action 223 Rem. (5.56mm)
Fixed Skeleton Stock
Black
6.5 Lbs.
16 1/2 In.
37 1/4 In.
10 Rounds
Rotating lock
Gas operation

The ZM WEAPONS LR-300-14.5-(A/N/AXL) sport rifles are lightweight, semi automatic, .223 caliber sporting arms. They have a forward assist to ensure bolt closing and the magazine capacity is limited to 10 rounds to comply to the hunting laws of most states. The barrel comes with a muzzle accessory that is permanently pinned in place.

### LR-300-14.5-(A/N/AXL) SPORT RIFLE

Caliber Stock Finish Weight Barrel Length Overall Length Magazine Capacity Bolt Action 223 Rem. (5.56mm)
Fixed Skeleton Stock
Black
6.0 Lbs.
14 1/2 In.
35 1/4 In.
10 Rounds
Rotating lock
Gas operation

The ZM WEAPONS LR-300-ML-(A/N/AXL) Militray/Law rifles are lightweight, semi automatic, .223 caliber sporting/ law enforcement arms. They have a forward assist to ensure bolt closing and the magazine capacity is limited to 10 rounds to comply to the hunting laws of most states. The barrel is threaded to accept all the most popular accessories and comes with a muzzle accessory.

#### LR-300-ML-(A/N/AXL) MILITARY/LAW RIFLE

Caliber Stock Finish WeighT Barrel Length Overall Length Magazine Capacity Bolt Action 223 Rem. (5.56mm)
Fixed Skeleton Stock
Black
5.6 Lbs.
11 1/2 In.
32 1/4 In.
10 Rounds
Rotating lock
Gas operation

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### **CONVERSION KIT INSTALLATION**



#### WARNING: THIS PROCEDURE SHOULD ONLY BE PERFORMED BY A QUALIFIED GUNSMITH WHO IS FAMILIAR WITH YOUR FIREARM. FAILURE TO INSTALL CORRECTLY VOIDS ANY WARRANTIES AND REMOVES ANY LIABILITIES AGAINST THE MANUFACTURER. BE CERTAIN THE FIREARM IS UNLOADED AND ALWAYS POINTING IN A SAFE DIRECTION DURING INSTALLATION.

Should you have any questions pertaining to this procedure, contact Yankee Hill Machine Co. at 1-877-892-6533 between the hours of 7:30 AM to 4:00 PM EST.

### **ASSEMBLY INSTRUCTIONS**

- (1) On your existing firearm, Remove the magazine and be certain the chamber is clear. Make sure the bolt is forward in the battery position. Push out the rear and front receiver pins and remove the upper assembly
- (2) Place the lower receiver in a bench vise using a lower receiver clamping fixture. Tighten to hold securely.
- (3) Remove the butt plate by removing the butt plate screws, and use a wrench to remove the receiver extension. (Note: be certain not to lose the spring and detent.)

- (4) Take the LR-300, and open the stock. Remove the rubber band, and screw the stock into the lower receiver until the threaded portion comes flush with the inside surface of the lower receiver (threaded area) position the receiver plate making certain the detent spring is compressed under the plate. Next, tighten the lock nut against the receiver plate firmly. (A little general purpose loctite is recommended.)
- (5) Install your new upper receiver on the lower receiver by inserting the front pin first, then the back. Hand cycle the firearm a few times to be certain function is correct.

# **WARNING:** Before firing, refer to this instruction and safety manual.

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### **SAFETY INSTRUCTIONS**

We want you to enjoy shooting you ZM WEAPONS LR-300, but we want you to enjoy it safely. You may be an experienced safe shooter, already familiar with the procedures in this instruction manual, or you may never have handled a gun before. Either way we urge you to **READ THIS ENTIRE INSTRUCTION MANUAL CAREFULLY. YOU MUST FOLLOW THESE SAFETY INSTRUCTIONS FOR YOUR SAFETY AND THE SAFETY OF OTHERS AROUND YOU.** 

WARNING: When you squeeze the trigger, you *must* expect the gun to fire, and you *must* take full responsibility for firing it. *Your* care can avoid accidental discharge, and you will thereby avoid accidental injury or death.

**WARNING:** THIS FIREARM MAY DISCHARGE ACCIDENTALLY WHEN A ROUND IS FED INTO THE CHAMBER, IF IT IS DROPPED OR RECEIVES A BLOW TO THE MUZZLE OR FRONT OF THE GUN. (THIS CAN OCCUR REGARDLESS OF THE POSITION OF THE HAMMER OR ANY OF THE VARIOUS SAFETY DEVISES.) THEREFORE EXTRA CARE AND STRICT ADHERENCE TO THESE INSTRUCTIONS BY THE GUN USER IS MANDATORY FOR MINIMIZING THE RISK OF ACCIDENTS.

### **CAUTIONS:**

### **GENERAL HANDLING CAUTIONS**

1) ALWAYS HANDLE YOUR FIREARM AS IF IT WERE LOADED so that you never fire it accidentally when you think it is unloaded

2) NEVER POINT YOUR FIREARM AT ANYTHING YOU DO NOT PLAN TO SHOOT so that if it fires accidentally, injury, death, or damage to property will be prevented

#### GENERAL HANDLING (CONTINUED)

3. **NEVER TAKE ANYONE'S WORD THAT THE GUN IS UNLOADED;** check for yourself with your fingers off the trigger and gun pointed in a safe direction, so that you never fire the gun accidentally when you think it is unloaded.

4. ALWAYS MAKE SURE YOUR FIREARM IS NOT LOADED AND BOLT IS LATCHED OPEN BEFORE LAYING DOWN, OR HANDING IT TO ANOTHER PERSON, so that it cannot be fired when it is unsafe to do so.

5. ALWAYS KEEP AND CARRY YOUR FIREARM EMPTY WITH THE HAMMER FORWARD except when you intend to shoot, so that your firearm cannot be fired when you do not mean to do so.

6. ALWAYS BE AWARE OF THE RISK FROM DROPPING YOUR FIREARM. Some parts of the mechanism may be damaged. You may not see the damage, but if severe, the firearm may discharge and cause injury, death, or damage to property. If your firearm has been dropped, have it examined by a competent gunsmith before using it again.

7. **NEVER LEAVE A FIREARM COCKED AND READY TO FIRE** as this condition is extremely dangerous, and the firearm could easily be accidentally discharged, causing injury, death, or damage to property.

8. **NEVER LEAVE A LOADED FIREARM UNATTENDED.** Someone, especially a child, may fire it and cause injury, death, or damage to property.

9. ALWAYS TEACH OTHERS IN YOUR HOUSEHOLD TO RESPECT FIREARMS. If you teach your children to shoot, teach them or get them trained by a qualified instructor to treat and use them properly, and always supervise them closely. Always stress safety so that your children will not fire a firearm when it is unsafe to do so.

#### (8) RANGE CAUTIONS:

10. ALWAYS BE SURE YOUR BACKSTOP IS ADEQUATE to stop and contain bullets before beginning target practice so that you do not hit anything outside the shooting area.

11. ALWAYS PUT A KNOWLEDGEABLE AND RESPONSIBLE PERSON IN CHARGE TO MAINTAIN SAFETY CONTROL WHEN A GROUP IS FIRING ON A RANGE. Obey his commands so that discipline is maintained to reduce the likelihood of accidents.

#### 12. ALWAYS CARRY YOUR FIREARM EMPTY WITH BOLT LATCH OPEN WHILE ON THE RANGE until preparing to fire. Keep

it pointing towards the backstop when loading, firing, and unloading, to eliminate the risk of injury, death, or damage to property from premature discharge.

### **LOADING CAUTIONS:**

13. ALWAYS BE SURE BARREL BORE, CHAMBER, AND ACTION ARE CLEAN AND CLEAR OF OBSTRUCTIONS. Clean a wet or fouled firearm immediately so that it will function correctly and safely.

#### 14. ALWAYS USE ONLY CLEAN, DRY, ORIGINAL, HIGH QUALITY COMMERCIALLY MANUFACTURED AMMUNITION IN GOOD CONDITION WHICH IS APPROPRIATE TO THE CALIBER OF YOUR FIREARM. Gun

and ammunition manufacture's design their products within exacting engineering safety limits. Handloads and remanufactured ammunition are sometimes outside those limits and can be so unsafe as to blow up the chamber and receiver causing injury, death, or damage to property.

# 15. ALWAYS CHECK THAT AMMUNITION IS CLEAN AND UNDAMAGED BEFORE USING THE FORWARD ASSIST.

Forcing damaged ammunition into the chamber could cause damage to your rifle and could result in injury, death, or damage to property.

#### (9) SHOOTING CAUTIONS:

16. **NEVER DRINK ALOCOHOLIC BEVERAGES OR TAKE DRUGS BEFORE OR DURING SHOOTING,** as your vision and judgment could be seriously impaired making your gun handling unsafe.

17. ALWAYS SEEK A DOCTORS ADVICE IF YOU ARE TAKING MEDICATION, to be sure you are fit to shoot and handle your firearm safely.

18. ALWAYS WEAR AND ENCOURAGE OTHERS TO WEAR EAR PROTECTION WHEN SHOOTING, especially on a range. Without ear protection, the noise from your firearm and other guns close to you, could leave a ringing in your ears for some time after firing, while the cumulative long term effect could be permanent hearing loss.

19. ALWAYS WEAR AND ENCOURAGE OTHERS TO WEAR PROTECTIVE SHOOTING GLASSES. Flying particles could damage eyes and cause blindness; but protective shooting glasses prevent such injury.

20. ALWAYS KEEP SELECTOR LEVEL SET TO "SAFE" WHEN FIREARM IS LOADED AND COCKED until you are aiming at a target and intend to fire. This will reduce the risk of accidental discharge.

21. ALWAYS KEEP CLEAR AND KEEP OTHERS CLEAR OF THE EJECTION PORT. Sent cartridges are ejected with enough force to cause injury, and the ejection port must be unobstructed by your hand to insure safe ejection of live rounds. never place fingure in ejection port; they could be burned by hot metal or injured by the bolt moving forward.

22. NEVER SQUEEZE THE TRIGGER OR PUT YOUR FINGER IN THE TRIGGER GUARD UNTIL YOU ARE AIMING AT A TARGET AND READY TO SHOOT. This will prevent you from firing the firearm when it isn't pointing in a safe direction.

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#### **SHOOTING CAUTIONS (CONTINUED)** 23. ALWAYS BE ABSOLUTELY SURE OF YOUR TARGET AND THE AREA BEHIND IT BEFORE YOU SQUEEZE THE

**TRIGGER.** A bullet could travel through or past your target up to 3 miles.... If in doubt, don't shoot.

#### 24. NEVER ATTEMPT TO FIRE IF WATER IS IN THE BARREL.

Water can accumulate if your firearm is exposed to heavy rain or fog. Open bolt and allow water to drain before firing. Clean a wet firearm as soon as possible.

25. NEVER SHOOT AT A HARD SURFACE, SUCH AS A ROCK, OR AT A LIQUID, SUCH AS WATER, A bullet may ricochet and travel in any direction to strike you, or an object you cannot see, causing injury, death, or damage to property.

26. **NEVER FIRE YOUR FIREARM NEAR AN ANIMAL** unless it is trained to accept the noise; an animal's startled reaction could injure it or cause an accident

27. NEVER INDULGE IN "HORSEPLAY" WHILE HOLDING YOUR FIREARM as it may accidentally discharge.

#### 28. NEVER WALK, CLIMB, OR FOLLOW A COMPANION WITH YOUR FIREARM COCKED, READY TO FIRE (IN

**BATTERY)** to eliminate risk of accidental discharge. When hunting, hold your firearm so that you can always keep the muzzle pointed in a safe direction and keep the selector level set on "SAFE".

### **MALFUNCTION CAUTIONS:**

29. FAILURE TO FIRE: ALWAYS HOLD THE FIRE ARM, KEEPING IT POINTED AT THE TARGET OR A SAFE OPEN AREA AND WAIT 30 SECONDS WHEN IT FAILS TO FIRE. If a hangfire (slow ignition) has occurred, the round will fire within 30 seconds. If the round does not fire, remove the magazine, eject round, and examine primer; if firing pin indent on primer is light, off center, or does not exist, have your firearm examined by a competent gunsmith.

#### (11) MALFUNCTION CAUTIONS (CONTINUED)

If firing pin indent on primer appears normal (in comparison with similar previously fired rounds), assume faulty ammunition; segregate misfired round from other live ammunition and empty cases, reload and carry on firing.

NOTE 1: it is normal for light firing pin indent to appear on the primer of cartridges which have been fed into the chamber but not fired. NOTE 2: Dispose of misfired rounds in accordance with ammunition manufacturer's instructions.

#### 30. NEVER USE YOUR FIREARM IF IT FAILS TO FUNCTION PROPERLY, AND NEVER FORCE A JAMMED ACTION, as a round may explode causing serious injury, possible death, or severe damage

round may explode causing serious injury, possible death, or severe damage to your firearm

### **CLEANINGAND STORAGE CAUTIONS:**

31. ALWAYS MAKE SURE YOUR FIREARM IS NOT LOADED BEFORE CLEANING AND STORING so that it cannot be fired when it is unsafe to do so.

#### 32. ALWAYS KEEP AND STORE YOUR FIREARM AND AMMUNITION IN SEPARATE LOCKED RECEPTACLES OUT OF THE REACH AND SIGHT OF CHILDREN AND UNTRAINED PEOPLE, to minimize the risk of the firearm and

ammunition being easily available for loading and firing.

### **GUNABUSE CAUTION:**

33. **NEVER ABUSE YOUR FIREARM** by using it for any purpose other than shooting.

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#### GUN ABUSE CAUTION (CONTINUED) 34. NEVER DRY FIRE WHEN RECEIVERS ARE OPEN as level of safety could be reduced.

#### 35. NEVER ALTER PARTS as the level of safety could be reduced.

NOTE: Please note we have used the word "squeeze" in this manual instead of "pull" of "press" when the trigger movement is described; this is simply to remind you of the need for a gentle squeezing action to achieve accuracy.

### SAFETY FEATURES

#### SELECTOR LEVEL

A selector level, located on the left of the lower receiver, has two positions, "FIRE" and "SAFE". When set "FIRE" the firearm will fire a single shot each time the trigger is squeezed. When set to "SAFE", a cam bears upon the rear portion of the trigger, blocking the sear surface of the trigger and preventing the hammer from being released.

### FIRING PIN COLLAR

On the LR-300 the bolt carrier combination, located within the upper receiver, is designed to prevent the firing pin from striking a cartridge until the bolt is locked to the barrel. If the firing pin should be struck by the hammer before the bolt is locked to the barrel, the firing pin could not move forward through the face of the bolt, because the firing pin is held positively rearward by the collar on the firing pin which bears against the surface of the carrier. It is the final forward movement of the carrier which causes the bolt to rotate and lock into the barrel; this final movement also creates a space in front of the firing pin collar after the bolt and barrel are locked to permit the firing pin to move forward when struck by the hammer.

#### (13) DISCONNECT

The disconnect, which is part of the firing mechanism, prevents the firearm from firing in the full automatic mode. As the hammer is cocked after each shot by the rearward movement of the bolt carrier, the disconnect engages the hammer to hold it rearward until the trigger is released. When the trigger is released, retention of the hammer passes from disconnect to sear surface of trigger ready for next shot

### FAIL SAFE FIRING MECHANISM

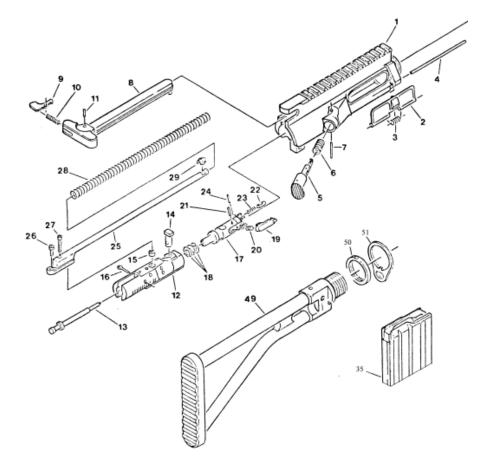
In case of any failure in the firing mechanism, the top of the hammer and underside of the carrier are machined in such a way that if the hammer was not held rearward by the disconnect or the trigger sear surface, the hammer would ride under the carrier and drop to engagement with the back of the firing pin to stop the rifle from firing.

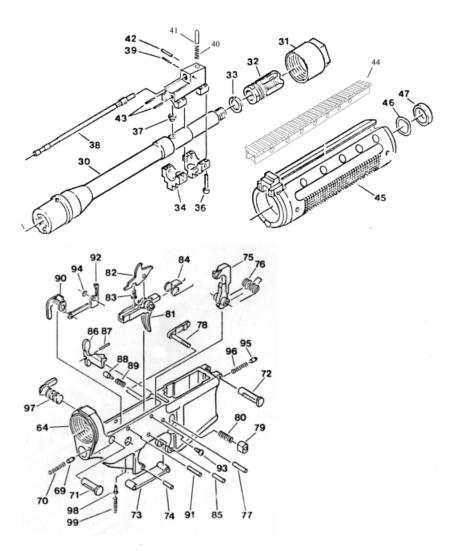
### SEPARATION OF THE UPPER AND LOWER RECEIVERS

In the event of functional problems, the lower receiver can be separated from the upper by pivoting it downwards after pushing out the take down pin. This provides access to the mechanism and separates the firing mechanism from other components so that the cocked hammer could not strike the firing pin. See CAUTION No. 29 before attempting to open the firearm in this way.

### **FUNCTION**

ZM WEAPONS LR-300 have semiautomatic action which functions as follows; with action cocked, chamber loaded, and selector level set on "FIRE" the trigger is squeezed. The trigger rotates, disengaging trigger sear surface from the hammer. The hammer spring drives the hammer forward to strike the firing pin, which in turn strikes the primer in the base of the cartridge, primer composition ignites the main powder charge. High pressure gases push the bullet down the barrel where rifling grooves impart stabilizing spin to the bullet





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#### (16) FUNCTION (CONTINUED)

As a bullet passes the gas port (a small hole in the barrel below front sight) gas is tapped off, flows through gas tube, into bolt carrier chamber driving the bolt rearward. As the bolt carrier moves to the rear, the cam track in its upper surface acts upon the bolt cam pin, causing it and the bolt through which it passes to rotate until the locking lugs of the bolt are no longer in engagement with the lugs of the barrel extension. The bolt is now unlocked and is carried rearward by the bolt carrier. The extractor extracts the spent case and holds it against the face of the bolt until the ejector throws the spent case through ejection port.

The bolt and carrier continue rearward, compressing the action spring and returning the hammer to cocked position, until the buffer assembly strikes the back of the receiver extension. The action spring then forces the bolt and the carrier forward so that the face of the bolt strips the next round of ammunition from the magazine and forces it into the chamber. Simultaneously the extractor snaps into groove of cartridge case and bolt of LR-300 locks into barrel. The hammer is now held rearward by the disconnect. When the trigger is released, the disconnect is rotated back releases the hammer. However, before the disconnect hook actually releases the hammer, the trigger sear surface has rotated in the front of the hammer notch so that the hammer is held on trigger sear surface ready for another shot.

### THIS IS A SEMIAUTOMATIC FIREARM AND IS IMMEDIATELY LOADED AND READY TO FIRE AGAIN AFTER EACH SHOT, UNTIL THE MAGAZINE IS EMPTY.

### **FORWARD ASSIST**

The forward assist allows you to help the bolt lock into the barrel, but it will only be useful on rare occasions when bolt fails to lock automatically. When you must use the forward assist, it is usually time you clean your rifle paying particular attention to the cleanliness of the chamber and bolt

### **LOADING**

CAUTION: ALWAYS CHECK THAT AMMUNITION IS CLEAN AND UNDAMAGED BEFORE USING THE FORWARD ASSIST. Forcing damaged ammunition into the chamber could damage your rifle and could result in injury, death, or damage to property.

### To Load A Magazine

#### 1. CAUTION: READ SAFETY INSTRUCTIONS

2. Use only ammunition recommended inside front cover of this instruction manual as suitable for your firearm.

3. With short end of magazine facing forward, place a round between the lips of the magazine with the bullet forward. Press the round down until it is held by the magazine lips. Place next round on top of previous round repeat until desired number of rounds is loaded



NOTE: The 223 Remington (5.56mm) caliber magazine has a capacity of 10 rounds.

CAUTION: TO MINIMIZE THE RISK OF UNITENTIONAL DAMAGE, LOAD LIVE AMMUNITION INTO YOUR RIFLE ONLY WHEN YOU ARE ABOUT TO SHOOT

### To Load The LR-300

1. CAUTION: READ SAFETY INSTRUCTIONS - KEEP YOUR FIREARM POINTING IN A SAFE DIRECTION AND DO NOT TOUCH THE TRIGGER.

2. Remove empty magazine by depressing magazine catch which is located on the lower right of the receiver, and extracting magazine from magazine well.

3.Press in on bottom of the thumb piece of bolt catch while grasping and pulling back on the charging handle, to cock the hammer and leave bolt and carrier latched open to the rear.

CAUTION: THE BOLT AND CARRIER BEING LATCHED OPEN IS NOT SAFE CONDITION WHEN A LOADED MAGAZINE IS INSTALLED.



SAFETY DEPENDS ON YOU

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4. Return charging handle fully forward until it locks and remove finger from bolt latch.

5. Set selector level to "SAFE" this will lock the trigger.

6. With bullet points forward, insert the loaded magazine into the magazine well and push it home until it stops and is locked by the magazine catch.

7. Keeping fingers away from ejection port and muzzle pointing in a safe direction, press in on the top of the thumb piece of the bolt catch. This will release the bolt and carrier to move forward and feed a round from the magazine into the chamber. THE FIREARM IS NOW LOADED WITH A ROUND IN THE CHAMBER AND THE HAMMER COCKED.

8. You may now close ejection port dust cover if you wish; it is located on right upper receiver and will open automatically when the first round is fired. CAUTION: NEVER LEAVE YOUR FIREARM COCKED AND LOCKED READY TO FIRE WITHOUT SELECTOR LEVEL SET TO "SAFE", as this is the fire condition and is extremely dangerous; the firearm could easily be accidentally discharged, causing injury, death, or damage to property.

WARNING: THIS FIREARM MAY DISCHARGE ACCIDENTALLY WHEN A ROUND IS FED INTO THE CHAMBER, IF IT IS DROPPED OR RECEIVES A BLOW TO THE MUZZLE OR FRONT OF THE GUN. (THIS CAN OCCUR REGARDLESS OF THE POSITION OF THE HAMMER OR ANY OF THE VARIOUS SAFETY DEVICES.) THEREFORE EXTRA CARE AND STRICT ADHERENCE TO THESE INSTRUCTIONS BY THE GUN USER IS MANDATORY FOR MINIMIZING THE RISK OF ACCIDENTS.

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#### **UNLOADING**

#### 1. CAUTION: ALWAYS UNLOAD YOUR FIREARM IMMEDIATELY AFTER USE AND PRIOR TO CLEANING AND STORAGE TO MINIMIZE THE RISK OF ACCIDENTAL DISCHARGE.

#### To Unload:

2. Set selector level to "SAFE".

3. Press magazine catch and remove magazine

4.Pull charging handle to rear and push in lower portion of bolt catch. If a round had been in the chamber it should have been ejected. If last round had been fired, bolt and carrier should already be held to the rear, Provided magazine is in place.

# 5.LOOK INTO THE CHAMBER THROUGH THE EJECTION PORT TO ENSURE IT IS EMPTY

6. When magazine is removed and chamber is empty, push top portion of bolt catch to allow bolt and carriage to return forward.

7. Remove remaining live rounds by sliding them forward out of the front of the magazine.

8. Collect all live ammunition for safe storage and spent cartridge cases for disposal

#### (21) **FIRING**

Before firing your ZM WEAPONS LR-300, practice your stance, aim, rhythm, and breathing for steady aim with your firearm UNLOADED. Practice firing on a range before going hunting or using your firearm for any type of shooting.

#### **CAUTIONS:**

1. ALWAYS WEAR AND ENCOURAGE OTHERS TO WEAR EAR PROTECTION WHEN SHOOTING, especially on a range. Without ear protection, the noise from your firearm and the others around you may leave a ringing in your ears for a while after a round is fired. The long term result may be permanent loss of hearing.

2. ALWAYS WEAR AND ENCOURAGE OTHERS TO WEAR EYE PROTECTION. Flying particles could damage your eyes or cause blindness. Wearing eye protection will prevent particles from entering your eyes.

To Fire

1. CAUTION: READ SAFETY INSTRUCTIONS. KEEP YOUR FIREARM POINTING IN A SAFE DIRECTION. DO NOT TOUCH TRIGGER AND KEEP HANDS AWAY FROM EJECTION PORT.

- 2. Load firearm as previously described.
- 3. Set rear sight to range required.
- 4. Grasp firearm with one hand on the hand guard and other hand on pistol grip with index finger resting along <u>outside</u> of the trigger guard. Raise firearm and pull buttstock firmly into shoulder.
- 5. Aim by aligning target with front and rear sight.
- 6. Move selector level to "FIRE".
- 7. Keeping steady aim, place index finger on trigger and squeeze gently until trigger releases hammer. Don't jerk the trigger as you will disturb your aim and accuracy. To fire the second and subsequent rounds, all that is necessary is to release the trigger and squeeze it again after every shot until you have completed firing or emptied the magazine.

#### (22) **Firing (Continued)**

#### 8. THIS IS A SEMIAUTOMATIC FIREARM AND IS IMMEDIATELY LOADED AND READY TO FIRE AGAIN AFTER EACH SHOT UNTIL THE MAGAZINE IS EMPTY.

9. Release the trigger, remove finger from trigger, and set selector level to "SAFE". If you have fired the last round from the magazine, the bolt will be held to the rear so that the firearm can quickly be reloaded by replacing the magazine, or the chamber can be inspected to insure it is empty.

10. CAUTION: IF YOUR FIREARM FAILS TO FIRE, HOLD IT POINTING IN A SAFE AREA OR TOWARDS A TARGET FOR 30 SECONDS. If a hangfire has occurred, the round will fire within the next 30 seconds. If it does not fire remove the magazine, eject the round, and examine the primer. If firing pin indent is light on primer or does not exist, have your firearm examined by a competent gunsmith. If firing pin indent appears normal, assume faulty ammunition; segregate misfired round from other live rounds and empty cases; reload and carry on firing.

NOTE 1: it is normal for the light firing pin indent to appear on cartridges which have been fed into the chamber but not fired.

NOTE 2: dispose of misfired round in accordance with the ammunition manufactures instructions

11. CAUTION: KEEP YOUR FIREARM POINTING IN A SAFE DIRECTION. UNLOAD as previously described.

IMPORTANT: If you load your firearm but do not fire it, keep selector set to "SAFE" until ready to fire. If you lose the opportunity to fire, unload as previously described.

CAUTION: NEVER LEAVE YOUR FIREARM COCKED READY TO FIRE WITHOUT SELECTOR LEVEL SET TO "SAFE" as this is the fire condition and is extremely dangerous. Your firearm could easily be accidentally discharged, causing injury, death, or damage to property.

#### (23) MAINTENANCE

Although your ZM WEAPONS LR-300 has been developed from a line of rugged reliable ZM WEAPONS firearms, it, like any other precision mechanism, will perform better, last longer and remain safer when it is properly maintained. Follow the instructions in this section to keep your firearm in good condition.

### CAUTIONS

# 1. ENSURE THAT MAGAZINE IS REMOVED AND THE FIREARM IS NOT LOADED SO THAT IT CANNOT FIRE

2. WEAR SAFETY GLASSES IN CASE YOU LOSE CONTROL OF SOME SPRING LOADED COMPONENT WHICH COULD INJURE YOUR EYES.

### **STRIPPINGAND CLEANING**

IMPORTANT: To prevent loss of small parts during stripping and cleaning, lay them out in an orderly fashion

1. Read safety instructions and cautions above.

2. Be certain to leave bolt forward in the battery position.

3. To remove the top rail above the forearm depress the spring plunger in the top of the rail using a phillips screwdriver or similar pointed object. Apply forward pressure on the rail to remove.



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4. Slide the Rail forwards to take it off to allow you to access the spring retainer clip, as shown.



5. Retract the spring to release it off the spring clip, as shown. Push the spring clip back towards the spring and lift it upwards to remove it from the op-rod. It may necessary to gently tap the spring clip to release it.



6. Gently let the spring move forward.

7. Press take down pin in from left of lower receiver and pull pin out of right of receiver until it comes to a positive stop.

8. Pivot lower receiver down and out of the way of the upper receiver.

9. If required for more convenience, remove pivot pin from front of receivers and completely separate receivers, as shown.



#### (26)

17. Pull charging handle to rear and remove bolt assembly.

12. Remove charging handle by lifting and sliding it off the op-rod tube.

13. Push the firing pin retaining pin from the right to left of bolt carrier and remove pin by pulling it out to the left. See figure 8

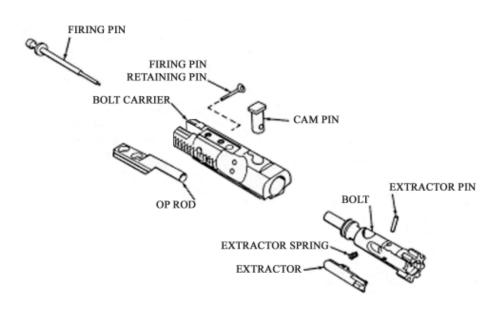
14. Tilt bolt face up and remove firing pin.

15. Push bolt in towards the carrier until bolt comes to a stop, then turn bolt cam pin through 90 degrees (I.E., at right angles to its normal position) 16. Remove cam pin by lifting it out and away from bolt and bolt carrier.

17 Pull bolt forward out of the bolt carrier

**IMPORTANT:** Before removing extractor pin, be prepared to prevent movement of extractor pin. Do not attempt to remove the extractor retaining pin which is smaller and near the front of the bolt.

18. Press extractor pin in on right of bolt and pull pin out left of bolt, then remove extractor from bolt



**IMPORTANT:** Do not strip your firearm further than previously described. If additional maintenance is required, see "Service and Repair" later in this instruction manual. Reassemble your firearm by reversing the stripping procedure already described and ensure that the cam pin is properly installed.

CAUTION: IF YOU ATTEMPT TO FIRE WITHOUT THE CAM PIN INSTALLED, DAMAGE OR INJURY MAY RESULT.

#### WHEN TO CLEAN

Before firing, check that the barrel and the chamber are clean and dry.

*After firing,* Clean your firearm as soon as possible so that the job will be easier and there will be less opportunity for corrosion to start. Check it again within a few days to make sure no further cleaning is necessary.

*Periodically,* when your firearm has not been fired, we suggest you clean it when necessary and at least once or twice a year in a temperate climate, or as often as once a week in a tropical climate. If you carry a loaded firearm UNLOAD it and clean it when necessary and at least once a month. If you get your firearm wet, clean as soon as possible.

### HOW TO CLEAN

The following cleaning procedure may be used both periodically and after firing; however, those items marked "\*" are unnecessary for a periodic cleaning.

**MATERIALS:** Cleaning rod, cotton flannel patches (cut to fit snugly into the bore), a small toothbrush, good quality light gun oil, \*gun cleaning solution, \*a brass wire bristle bore cleaning brush, and a chamber cleaning brush.

**Note:** in freezing conditions (below 32F or 0C) avoid the use of oil for lubrication; instead, apply a dry lubricant sparingly.

#### (28)

#### **Cleaning Procedure:**

#### **1. CAUTION: ENSURE THAT THE FIREARM IS NOT LOADED.**

2. Strip for cleaning as previously described.

**Note:** Avoid contact between cleaning rod and muzzle as resultant wear will reduce accuracy.

3. Attach cotton flannel patch to end of cleaning rod, insert it in chamber and pass rod and patch down through barrel. Repeat changing patches until last patch comes out clean.

4. Visually inspect the barrel; if it is clean, proceed directly with step 8, but if it remains dirty continue with step 5.

5. \*(Note: items 5&6 should be applicable only after firing.) Attach brass wire bristle brush to cleaning rod and dip brush in gun cleaning solution. Thoroughly scrub out barrel, passing the brush all the way through the barrel before reversing direction. If you change direction with brush in barrel, the brush will stick.

6. Attach the larger, chamber cleaning brush to the cleaning rod, dip the brush in bore cleaning solution, and clean the chamber. Use a minimum of five plunge strokes and three 360 degree clockwise, rotational strokes.

7. Repeat step 3 and 4 above.

8. Use bore cleaning brush, still wet with gun cleaning solution, to clean carbon and powder residue from around the gas tube in the upper receiver, bolt locking lugs, bolt ring, firing pin, bolt cam pin, lip of the extractor, and inside the bolt carrier from both front and rear.

**IMPORTANT:** Do not use a wire brush on aluminum surfaces such as receivers. If cleaning is necessary, avoid scratches and wear by using a small toothbrush or flannel patch.

#### (29)

9. Wipe all components clean and dry and inspect them for excessive wear, corrosion, or mechanical damage. If any of these faults are discovered, have them corrected before firing again. (See servicing and repair later on in this section.)

10. Lightly moisten a flannel patch with gun oil and pass it once through barrel, leaving a thin film of oil on the inside surface. Leave this film on the inside surface of firearm if it is to be stored. If it is not to be stored, or if it is being removed from storage for use, pass a dry patch through barrel and chamber and remove as much oil as possible.

11. Check that flannel or brush bristles have not become lodged in any part of firearm, then lightly lubricated the following parts. (See note on cold weather lubrication.)

- A. Ejection port cover latch
- B. Ejection port cover spring
- C. Action springs and pins
- D. Charging handle latch
- E. Charging handle latch spring
- F. Inside rear bolt
- G.Mouth of bolt key
- H. Bolt carrier
- I. Forward assist

12. Reassemble the firearm as previously described.

13. Remove any gun cleaning solution, oil, and finger prints, from the outside surfaces of the firearm. (Finger moisture, if left, could start the corrosion process.)

#### (30) CLEANING THE MAGAZINE

The magazine cannot be disassembled because the base plate is riveted in place. Therefore, cleaning the magazine is limited to wiping the external surfaces with a clean dry rag.

#### STORAGE CAUTION: ALWAYS UNLOAD YOUR LR-300 FOR STORAGE AND STORE AMMUNITION SEPARATELY.

Store your firearm and ammunition securely locked in separated locations and out of reach and sight of children. (Children are naturally curious and do not always believe the real danger of guns.)

**Note:** Do not store your firearm in an air tight container, and do not seal or attempt to seal the barrel to exclude dust, as the internal steel surface is more likely to corrode.

### SERVICING AND REPAIR

Should your firearm require adjustment of repair, make sure it is NOT LOADED and take it, or send it, to YANKEE HILL MACHINE CO. 20 LADD AVENUE, SUITE 1, FLORENCE, MA 01062. For spare parts, seek advice from the dealer who should have up-to-date information how best to obtain genuine ZM WEAPONS parts. Available parts should be installed at YANKEE HILL MACHINE CO. 20 LADD AVENUE, SUITE 1, FLORENCE, MA 01062. When ordering parts, please give part name as given on the parts list. Also give the caliber, model name, and serial number of your firearm.

**IMPORTANT:** If you make unauthorized adjustments or use unauthorized replacement parts, ZM WEAPONS will not assume responsibility for correct function of this firearm.

**Note:** various federal and state laws and local ordinances govern the transfer and transportation of firearms, so take advice of the Dealer in your state on how to send or transport your firearm to YANKEE HILL MACHINE CO. 20 LADD AVENUE, SUITE 1, FLORENCE, MA 01062. Before shipping your firearm, here are some important points to remember.

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1. CAUTION: MAKE SURE THE MAGAZINE IS EMPTY AND THE FIREARM IS NOT LOADED.

2. Write a letter explaining the problem and your requirements in as much detail as possible. Include the model name and serial number of your firearm together with your return address, then enclose the letter with the firearm in a well padded package.

Do not send presentation boxes, accessories, or explosive components.
 Do not indicate the contents, but include ZM PERFORMANCE in the address on the package, so that an inquisitive thief is not attracted to it by such information.

5. Insure the package and its contents against loss or theft.

Our ZM WEAPONS Custom shop offers a wide range of special services. Sometimes modifications, which meet our customer's special requirements, necessitate deviations from standard design and manufacturing tolerances which result in functional differences from a standard gun. Consequently, this instruction manual does not apply to a customized gun unless its applicability has been confirmed by the ZM WEAPONS custom shop. For further information, write to YANKEE HILL MACHINE CO. 20 LADD AVENUE, SUITE 1, FLORENCE, MA 01062.

### WARRANTY STATEMENT

Based on Magnuson-Moss Warranty Act, ZM WEAPONS offers no express warranty on its product line. However, ZM WEAPONS recognizes its obligations concerning implied warranty. ZM WEAPONS also stands behind its products as it has historically, and will continue to provide services to its product line as it has over the years. ZM WEAPONS products will be serviced for a period of one year from the date of purchase, for defects in materials of workmanship, at no charge to the purchaser. Be sure to retain your sales slip as proof of purchase date when making a claim.

For the latest products & accessories, visit our web site on the internet at

www.zmweapons.com and yhm.net

#### (32) <u>FOLDING STOCK</u> <u>INSTALLATION</u>

- (1) Remove the magazine and be certain the chamber is clear. Make sure the bolt is forward in the battery position. Push out the rear and front receiver pins and remove the upper assembly
- (2) Place the lower receiver in a bench vise using a lower receiver clamping fixture. Tighten to hold securely.
- (3) Remove the butt plate by removing the butt plate screws, and use a wrench to remove the receiver extension (If applicable). (Note: be certain not to lose the spring and detent.)
- (4) Take the LR-300, and open the stock. Remove the rubber band, and screw the stock into the lower receiver until the threaded portion comes flush with the inside surface of the lower receiver (threaded area) position the receiver plate making certain the detent spring is compressed under the plate. Next, tighten the lock nut against the receiver plate firmly. (A little general purpose loctite is recommended.)

#### **FUNCTION**

-To fold the stock, simply pull upward on the stock until it releases from the receiver and fold to the side.



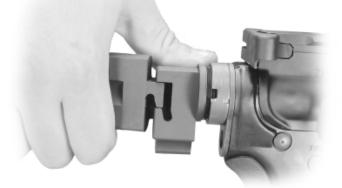
-To unfold the stock and lock into position simply unfold from the side. The stock locks into position when fully opened.

#### (33) <u>TELE-FOLD STOCK</u> <u>INSTALLATION</u>

# Installation is the same as the folding stock instructions found on page 32

#### **FUNCTION**

-To fold the stock, simply pull upward on the stock until it releases from the receiver and fold to the side.



- -To unfold the stock and lock into position simply unfold from the side. The stock locks into position when fully opened.
- -To adjust the length of the stock, squeeze the release on the bottom of the stock and slide to the desired location. Make certain the stock is locked into place and the release mechanism is fully engaged.



# **ZM WEAPONS**