

AMT Instruction Manual



LIGHTNING

.22 AUTO PISTOL



ARCADIA MACHINE & TOOL, INC. - Arcadia, California 91701 U.S.A.

AMT LIGHTNING

GENERAL FEATURES AND NOMENCLATURE

HEIGHT: 5.5"

OVERALL LENGTH WITH (BARREL LENGTH)

9.25 inches	with	5"
10.75 inches	with	6½"
12.75 inches	with	8½"
14.25 inches	with	10"
16.75 inches	with	12½"

COMPLETE PISTOL WEIGHT WITH

6½"	tapered barrel	45 ounces
8½"	tapered barrel	47 ounces
10"	tapered barrel	50 ounces
12½"	tapered barrel	53 ounces

COMPLETE PISTOL WEIGHT WITH

5"	bull barrel	47 ounces
6½"	bull barrel	50 ounces
8½"	bull barrel	54 ounces
10"	bull barrel	57 ounces
12½"	bull barrel	62 ounces

STATEMENT OF LIABILITY

WARNING:

This pistol is classified as a dangerous weapon and is surrendered by AMT with the understanding that the purchaser assumes all liability resulting from unsafe handling or any action that constitutes a violation of any applicable laws or regulations. AMT shall not be liable for personal injury or loss of property or life resulting from the use of this pistol under any circumstances, including intentional, reckless, negligent or accidental discharge.

Further, AMT will not be liable for any alterations to the pistol or any parts thereof. AMT will not condone or authorize any changes to be made after the pistol has left the factory. If your AMT pistol is in need of service or adjustment, follow the instructions in this manual under the section marked "SERVICE".

Please read the warnings in this manual carefully. Be sure you understand the functions of this pistol before loading and firing it. Carefully read the "SAFETY" section of this manual. Practice safe handling of this pistol until you are thoroughly familiar with it.

PLEASE BE CAREFUL!

NOMENCLATURE

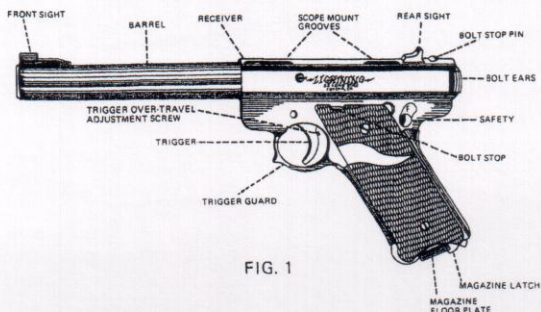


FIG. 1

SAFETY

All AMT pistols are equipped with a safety to provide maximum security against accidental discharge. However, all firearms must be used with strict attention to the basic rules of firearms safety.

These rules are fundamental to safe and responsible firearms ownership and use. They are simple and reflect good common sense. The more you handle firearms, the more faithful you should be to these elementary rules.

1. Before you shoot, read this manual completely. Be sure you understand the operation of the firearm you intend to shoot. Study the owner's manual carefully. Rehearse the functioning of the safety until you are thoroughly familiar with it. There is no excuse for unsafe firearms handling.

If you are not familiar with the basics of firearms and the handling thereof, contact your local gun dealer, police department or the NRA for assistance in acquiring this training.

2. Always be sure that the firearm is unloaded until the moment you wish to shoot it, whether in the field or on the range. Upon completion of your shooting activity, unload the firearm completely by emptying and/or removing the magazine and then visually inspecting the chamber to be sure it is empty. Never take anyone's word that a firearm is empty---CHECK IT!

3. Never point the muzzle at anything you do not intend to shoot. Always be in control of where the muzzle is pointed . . . even if you happen to fall. Pointing the muzzle in a safe direction means a direction in which an accidentally discharged round won't strike the

shooter or bystanders, even in the event that the bullet ricochets or passes through a wall or other barricade. This also applies to a deliberate shot at game or target. Be sure of the backstop before firing the shot.

4. Never drink alcoholic beverages or take medication that may impair your judgement while engaged in shooting activities. This is as criminal and dangerous as drunk driving.

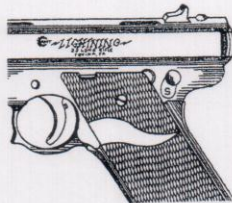
5. Always wear adequate hearing protection and safety glasses while engaged in shooting activities and encourage others near you to do likewise.

The AMT LIGHTNING .22 auto pistol is classified as a "concealed hammer" auto pistol, in that the hammer is not visible to the shooter. However, checking the position of the hammer is quite simple. The thumb safety, located above and behind the left grip panel, will not engage into the upper or "SAFE" position unless the hammer is in the cocked position. Thus the safety acts as an indicator of the hammer position. (See Fig. 2 & 3)



SAFETY IN "OFF" OR "FIRE" POSITION. SAFETY IS ALL THE WAY DOWN.

FIG. 2



SAFETY IN "ON" OR "SAFE" POSITION. SAFETY IS ALL THE WAY UP.

FIG. 3

WARNINGS

This is an auto loading pistol and is immediately loaded and ready to fire again after each shot until all cartridges in the magazine have been fired.

This pistol will fire both with and without the magazine in place. Removing the magazine does not unload the chamber or engage the safety. These operations are described elsewhere in this manual.

LOADING AND FIRING

Before performing the following operations, read this manual completely.

Prior to loading this pistol, check the bore to be sure it is free from excessive oil and unobstructed. Firing the pistol with any obstruction in the bore may cause serious injury to the shooter and damage the pistol.

To Load:

1. Place the thumb safety in the upper or "SAFE" position--remember, the hammer must be cocked. When positioned properly, the letter "S" indicating "SAFE" will be fully visible.
2. Pushing the serrated magazine latch to the rear will release the magazine for loading.
3. Carefully load the magazine, being sure that all cartridges lie evenly and parallel to the magazine tube. This can be accomplished quite easily by lowering the follower by means of thumb pressure on the follower button. **Warning: Do not pull the follower down and release it suddenly as this may cause a cartridge to discharge and cause serious injury.**

Be sure to use only CLEAN .22 long rifle ammunition. Ammunition carried in a pocket will surely collect dirt and lint that will lead to malfunction of the pistol.

This pistol is designed to function with "hyper velocity", standard velocity, and high velocity .22 long rifle ammunition. However, due to various bullet configurations available in the hyper velocity category, we do not guarantee that all brands will readily feed in this pistol. Try several brands of ammunition to determine which performs best in your pistol.

4. Insert magazine into pistol being sure that magazine latch locks magazine in place. Do not drive magazine in place forcibly as this may change the contour of the feed lips and impede feeding. If the magazine does not lock in place readily, remove the magazine and be sure that all cartridges are positioned properly in the magazine tube. Then re-insert magazine.
5. Hold the pistol in the shooting hand, being sure that you do not touch the trigger. With your other hand, pull the bolt all the way to the rear and release it quickly. Do not lower the bolt slowly as this may cause a cartridge to feed improperly and jam the pistol.
6. Moving the safety to the lower or "FIRE" position renders the pistol ready to be fired. Squeezing the trigger fires the round in the chamber, after which it is ejected and another round loaded into the chamber. If you do not intend to fire the next shot immediately, return the safety to the "SAFE" position until you are ready to fire again.

After firing the last shot, the bolt stop will hold the bolt in the open position. EXAMINE THE CHAMBER AND BE SURE IT IS EMPTY.

After reloading the magazine and inserting into the pistol, do not load the chamber by depressing the bolt stop. Pull the bolt to the rear (the bolt stop will disengage) then release the bolt quickly. Failure to follow these instructions may cause a cartridge to jam the pistol.

CLEARING A JAM

In the event that a cartridge does not feed into the chamber, (jams), do not force the bolt shut. This may cause the cartridge to fire and injure the shooter or bystanders and damage the pistol. Following is the proper procedure for clearing the jammed pistol:

1. Be sure that muzzle is pointed in a safe direction.
2. Engage the safety.
3. Carefully remove the magazine.
4. Pull the bolt to its rear-most position and lock it open by pushing up on the bolt stop. Do not look into the ejection port during this operation. If drawing the bolt all the way back does not pull the cartridge along with it, it may be necessary to use a small wood or plastic dowel, sharpened on one end, to gently remove the cartridge from the chamber and ejection port. Do not use a metal tool. This may detonate the cartridge or mar the pistol.
5. Carefully inspect the pistol to be sure that a cartridge did not become lodged in the magazine well of the grip frame.
6. Reinsert magazine and repeat the steps necessary to load the chamber and fire.

UNLOADING

After completion of the shooting session, the following procedure should be carried out exactly as described to unload the pistol.

If the last shot in the magazine has been fired, the bolt should be in the open position. Engage the safety in the uppermost position. Then remove the magazine. Carefully inspect the magazine and the chamber to be sure they are empty.

Pull the bolt all the way back to disengage the bolt stop, then slowly let it return to its forward position. Point the pistol in a safe direction, push the safety to the lower or "FIRE" position and pull the trigger to uncock the hammer. Press the empty magazine into the pistol until secured by the magazine latch.

If all the cartridges in the magazine have not been fired and a round is in the chamber, the following procedure must be followed to unload the pistol. Failure to follow this procedure may result in the chamber being inadvertently loaded. Being sure that the muzzle is pointed in a safe direction . . .

1. Push the safety to the "SAFE" position.

2. Remove the magazine and unload it.

Because the operation of this pistol is based upon recoil energy functioning, it is necessary to . . .

3. Retract the bolt forcibly to extract the cartridge from the chamber, and eject it out the ejection port. Drawing the bolt back slowly may result in the cartridge falling in the magazine well and becoming lodged in the frame of the pistol. When you are certain that the chamber is empty, lower the bolt to its forward position. Point the muzzle in a safe direction, lower the safety to the "FIRE" position and pull the trigger to uncock the hammer. Press the magazine back into the pistol until secured by the magazine latch.

TAKEDOWN FOR CLEANING

Before you start, be absolutely certain that pistol is unloaded. NEVER work on a loaded firearm.

1. Remove the magazine. Draw the bolt completely to the rear and inspect the chamber to be sure that it is empty. Release the bolt, then pull the trigger. The pistol must be uncocked before it can be disassembled.
2. For the next step, a paper clip will be most helpful, however a blunt-pointed instrument will also work. Insert the "instrument" in the oval recess of the mainspring housing. Swing the housing latch open in jackknife fashion.
3. At this point, swing the housing outward and pull downward to disengage the bolt stop pin.
4. Pointing the muzzle upward will allow the bolt to be pulled from the receiver.
5. A blow to the rear of the receiver, with a plastic hammer, will disengage receiver from the grip frame. DO NOT disassemble the grip frame. If the components within the grip frame need service for any reason, return the pistol to the factory. See "SERVICE" section of this manual for instructions.

RE-ASSEMBLY

1. Place hammer in horizontal position.
2. Place barrel on top of frame about $\frac{1}{4}$ " ahead of its final position when locked in place.
3. Press the barrel backward and downward so the lug on top of the trigger guard engages the recess on the underside of the receiver. (see diagram, Fig. 4). It may be necessary to strike the muzzle of the barrel with a plastic hammer to seat the barrel on the lug. Maintain downward pressure while tapping the muzzle or the receiver will not engage properly and both receiver and lug may be damaged. Note: Be sure that only a plastic or wood hammer is used. In order to maintain the accuracy of the barrel, the muzzle must not be damaged in any way. When the bolt stop pin holes in the frame and receiver are aligned, proceed to the next step.
4. Hammer should still be in horizontal position. If it is not, point the muzzle up and pull the trigger, making certain that the hammer strut hangs free.
5. Slide the bolt into the receiver--recoil spring on top. NOTE: Before installing bolt, make certain that the firing pin stop is in position in the bolt. Firing the pistol without this pin will damage the barrel/receiver beyond repair.
6. Point the muzzle downward and pull the trigger so that the hammer falls to the uncocked position.
7. Using the diagram (Fig. 4), position the mainspring housing and press the bolt stop pin upward through the holes in the receiver. At the same time, the pin passes through the yoke of the recoil spring guide. It may take considerable pressure to perform this step properly. A few light taps with a plastic hammer will help accomplish this step. Before tapping with a hammer, be certain that the bolt is all the way forward or damage to the recoil spring guide may result.

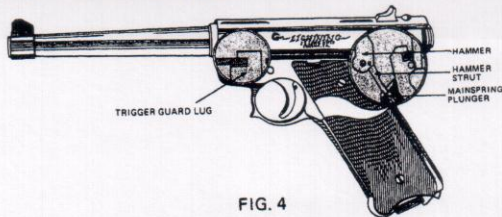


FIG. 4

Press the pin upward until the tip of the pin protrudes beyond the top of the receiver. Again, be certain the hammer is in the fired position before proceeding to the next step.

Before proceeding further, it must be understood that the hammer

strut must bear against the top of the mainspring plunger when the mainspring housing is locked in place. Study the position of these two parts in the diagram (Fig. 4) and locate each part in the pistol.

8. Before the mainspring housing can be swung into the closed position, the bolt stop pin must be fully inserted or else the mainspring housing will pull out the bolt stop pin when the mainspring housing is swung into the closed position.

9. Again, remember that the hammer must be in the uncocked position and that the hammer strut must come to bear on the mainspring plunger as the housing is pressed into place in the frame.

When the mainspring housing is fully seated in the frame, the housing latch may be snapped shut in jackknife fashion. To check if the procedure was performed properly, pull bolt to the rear. If bolt does not open fully, disassemble and repeat step 8. above.

Though the preceding description of reassembly sounds difficult, the operation is a simple one. Study the diagram (Fig. 4) of the relationship of the various parts involved in these operations before starting.

CLEANING

Frequency of cleaning depends upon the frequency of use of the pistol. Accumulation of powder fouling and bullet lubricant in the breech and chamber area may effect the functioning of the pistol causing jamming or misfiring. If either of these conditions develop, clean the pistol before assuming that something is wrong with it.

All areas of the breech, bolt, magazine, chamber and bore should be scrubbed or wiped clean with a cleaning patch wetted with a powder solvent. After all areas have been thoroughly cleaned, wipe again with an oiled cloth.

Though this pistol is made of high-quality stainless steel, a light coating of surface rust may develop over a period of time, especially in areas of high humidity. This is a very thin surface coating and can be removed with a rust preventive solvent and a clean cloth.

TRIGGER ADJUSTMENT

The trigger of your AMT LIGHTNING pistol is adjustable for overtravel. The trigger has been set at the factory, however, you may want to re-adjust it to suit your own needs.

To eliminate the overtravel is to reduce the excess distance that the trigger is pulled after the sear has released the hammer to fire the pistol. In effect, the overtravel (o.t.) adjustment screw stops the rearward movement of the trigger at the moment the pistol fires. This helps contribute to accuracy. An Allen wrench has been provided for these adjustments.

WARNING: Do not attempt to make these adjustments while the pistol is loaded.

Turning the o.t. adjustment screw clockwise eliminates overtravel. To make this adjustment properly, turn the o.t. adjustment screw clockwise until the pistol won't fire when the trigger is pulled. Then turn the adjustment screw counterclockwise in $\frac{1}{4}$ turn increments until the pistol will fire when the trigger is pulled. Turning the adjustment screw may change the position of the hammer and sear. Before pulling the trigger, pull the bolt fully to the rear to ensure proper engagement after each $\frac{1}{4}$ turn of the adjustment screw.

SIGHT ADJUSTMENTS AND SCOPE MOUNTING

Your AMT LIGHTNING pistol has been equipped with both open sights and grooves for mounting a scope sight. The adjustable rear sight (optional) is provided with elevation and windage adjustments. The adjustment screws should be turned to move the sight blade in the direction that you wish the bullet to strike. For example, turning the windage adjustment screw clockwise moves the sight blade to the left and the impact of the bullet to the left.

The fixed sights of the standard model have been set at the factory. However, should your pistol shoot low, the front sight may be reduced in height to zero the pistol with the ammunition that you will be using. Windage adjustments on the standard model may be accomplished by drifting the rear sight in the direction you wish the bullet to strike the target.

The receiver of your AMT LIGHTNING is grooved for tip-off scope mounting rings. These may be purchased from your dealer if you wish to install a scope sight. Follow the installation instructions provided with the mounting rings you purchase.

If it becomes necessary to remove the rear sight, this may be accomplished by carefully tapping the sight out of its dovetail slot. A reference mark on both the sight and receiver will enable you to realign the sights when they are placed back into the dovetail slot.

SERVICE

Prior to shipment, each LIGHTNING pistol is carefully inspected and test fired to ensure that it is in proper operating condition. Should the pistol require adjustment, repair or refinishing, we recommend that the pistol be returned directly to the factory SERVICE DEPT. There is no other way to be sure that work is performed in a properly equipped and staffed facility. Failure to use the factory services could result in voiding your warranty.

Except for guns still under warranty, all work will bear a net minimum charge of \$15.00.

All pistols returned are to be sent prepaid. All collect shipments will be refused.

For best service, always enclose a cover letter with the pistol furnishing serial number, model of pistol and the nature of the problem or work desired. A statement that the pistol is "defective" is not adequate and will only result in unneeded delays. Try to be as specific as possible.

Federal regulations control the shipment of firearms. It may be impossible for the factory to return a pistol directly to you. Check your local regulations before shipment. If this is the case, we recommend that all firearms be sent through a federally licensed dealer.

Please be sure that both the magazine and the chamber are empty before shipping. Any firearms received in a loaded condition must be reported to the federal authorities.

PARTS & ORDERING

All parts orders should be sent to the attention of the Parts Dept., California residents include 6½% sales tax. Minimum parts order is \$1.00.

When ordering parts, specify Model name, Part name and Part number. Also include the complete serial number of the firearm.

*Parts designated by an asterick must be factory fitted. The price shown does not include labor and tax, if applicable. These parts will be replaced on an exchange basis only. The replaced parts will not be returned to you.

If you wish to purchase an extra barrel/receiver assembly, you must do so through a federally licensed dealer, as this intergrated unit is serialized and classified as a "firearm" by the Federal Government.

AMT LIGHTNING .22 AUTO PISTOL PARTS & PRICE LIST

Part No.	Part Name	Retail Price
LP001	GRIP FRAME	N/A
LP002	TRIGGER W/ADJUSTMENT SCREW	15.00
LP003	TRIGGER PIN	1.25
LP004	▲ TRIGGER PIN RETAINER .....	.50
LP005	TRIGGER SPRING .....	.50
LP006	TRIGGER SPRING PLUNGER	1.00
LP007	DISCONNECTOR	2.50
LP008	*HAMMER	6.50
LP009	HAMMER PIN	1.00
LP010	HAMMER BUSHING	1.00
LP011	HAMMER STRUT	1.00
LP012	HAMMER STRUT PIN	1.00
LP013	*SAFETY (COMPLETE)	2.75

Part No.	Part Name	Retail Price
LP014	*SEAR	6.50
LP015	SEAR PIN . . . . .	.50
LP016	SEAR SPRING . . . . .	.50
LP017	SEAR SPRING STOP PIN . . . . .	.50
LP020	***BARREL/RECEIVER ASSEMBLY	***
LP021	**FRONT SIGHT BLADE	5.00
LP022	FRONT SIGHT PIN	1.00
LP023	**FRONT SIGHT (RAMP STYLE)	6.00
LP024	RAMP SIGHT SCREW	1.00
LP025	REAR SIGHT (STANDARD MODEL)	6.00
LP026	REAR SIGHT (ADJUSTABLE)	21.00
LP030	BOLT ASSEMBLY (COMPLETE)	52.50
LP031	BOLT ONLY	42.50
LP032	RECOIL SPRING ASSEMBLY	2.50
LP033	FIRING PIN	2.25
LP034	FIRING PIN STOP . . . . .	.50
LP035	FIRING PIN SPRING . . . . .	.50
LP036	FIRING PIN SPRING SUPPORT	1.00
LP037	EXTRACTOR	1.00
LP038	EXTRACTOR PLUNGER	1.00
LP039	EXTRACTOR SPRING . . . . .	.50
LP040	MAGAZINE (COMPLETE)	12.50
LP041	MAGAZINE FOLLOWER . . . . .	.50
LP042	MAGAZINE FOLLOWER BUTTON . . . . .	.50
LP043	MAGAZINE SPRING . . . . .	.50
LP044	MAGAZINE FLOOR PLATE . . . . .	.50
LP045	MAGAZINE FLOOR PLATE RETAINER . . . . .	.50
LP046	MAGAZINE BODY	9.00
LP050	MAINSRING HOUSING ASSEMBLY (COMPLETE)	18.75
LP051	MAINSRING HOUSING ONLY	9.00
LP052	MAINSRING . . . . .	.50
LP053	MAINSRING PLUNGER	1.00
LP054	DETENT BALL . . . . .	.25
LP055	HOUSING LATCH	1.50
LP056	HOUSING LATCH PIN . . . . .	.50
LP057	BOLT STOP PIN	6.00
LP058	BOLT STOP PIN PIVOT . . . . .	.50
LP060	MAGAZINE LATCH	4.00
LP061	MAGAZINE LATCH SPRING	3.50
LP062	MAGAZINE LATCH PIN . . . . .	.50
LP063	MAGAZINE LATCH STOP PIN . . . . .	.50
LP070	BOLT STOP ASSEMBLY	2.50
LP071	BOLT STOP THUMB PIECE	1.25
LP072	BOLT STOP PLUNGER	1.00
LP073	BOLT STOP PLUNGER SPRING . . . . .	.50
LP100	GRIPS (CUSTOM)	19.95
LP101	GRIP SCREWS (EACH) . . . . .	.50
LP102	TRIGGER ADJUSTMENT WRENCH . . . . .	.25

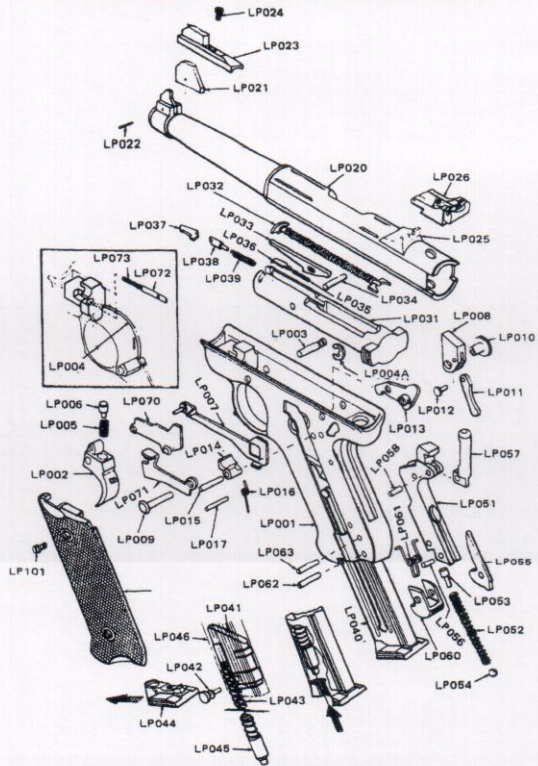
* Parts must be installed at factory

** Specify for standard or adjustable rear sight

*** Sold only to FFL dealers

▲ Use Part LP004A above Serial No. G08300.

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AMT LIGHTNING .22LR AUTO PARTS ILLUSTRATION



ARCADIA MACHINE & TOOL, INC.
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WARRANTY STATEMENT

BASED ON MAGNUSON, MOSS WARRANTY ACT, AMT offers no expressed warranty on its product line. AMT does recognize its obligation concerning implied warranty. AMT will continue to stand behind its products as it has in the past. AMT products will be serviced for a period of one year from date of retail purchase, for defects of material or workmanship, at no charge to the purchaser. Be sure to retain your sales slip as proof of purchase date when making a claim.

This instruction manual should always accompany this firearm and be transferred with it upon change of ownership.