

# MANUAL

## M 20

#### **SEMI-AUTOMATIC RIFLES**

## **WARNING**

READ THE INSTRUTIONS AND SAFETY PRECAUTIONS IN THIS MANUAL CAREFULLY BEFORE USING THIS FIREARMS.

DISCHARGING FIREARMS IN POORLY VENTILATED AREAS, CLEANING FIREARMS OR HANDLING AMMUNITION MAY RESULT IN EXPOSURE TO LEAD AND OTHER SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS, REPRODUCTIVE HARM AND OTHER SERIOUS PHYSICAL INJURY. HAVE ADEQUATE VENTILILATION AT ALL TIMES. WASH YOUR HANDS THOROUGHLY AFTER EXPOSURE.

## **OPERATING INSTRUCTIONS**

This rifle is shipped from the factory fully assembled and ready to shoot after removing the grease from its bore.

## **TO LOAD MAGAZINE:**

Hold the magazine box firmly with one hand with the other, place the first cartridge on the front end of the magazine follower and push it down until it can be slid in under the feed lips of the magazine. Place the second cartridge on the top of the first and force it down in the same way as with the first one. Repeat this procedure until the magazine contains the number of cartridges you intend to load. The magazine is available in ten (10) or fifteen (15) rounds capacity.

#### TO LOAD RIFLE:

Insert the loaded magazine into the magazine box clearance of the trigger guard housing and push it up until it is locked in by the magazine catch.

## TO DETACH MAGAZINE:

Press the magazine catch and remove the magazine.

#### TO MAKE GUN SAFE:

Safety lever is at the right side of the receiver and rearward of the bolt operating handle. Pull safety latch toward the "S" mark engraved on the receiver. Trigger is locked up in the process and gun no longer be fired.

## TO LOAD CHAMBER:

Draw safety on and insert a loaded magazine into the rifle. Retract bolt handle fully to the rear of the receiver slot and release. Allow the bolt to be snapped back under the full force of the operating springs. Bolt automatically picks up a cartridge from the magazine and feeds into the chamber. Draw safety on if not ready to fire.

#### TO FIRE:

Be sure gun is pointed at a safe target. Release safety and pull the trigger. Pressure from the burning powder opens up bolt, ejects empty shell, and reloads the chamber for the next shot. Pull trigger again. Gun fires as trigger is pulled until magazine is empty.

## TO UNLOAD WITHOUT FIRING:

Draw safety on and remove the magazine from the Guard. Draw safety off and with the trigger finger outside the trigger guard work action several times to remove any cartridge left inside the chamber. Slide bolt handle rearward and lock piece. Inspect the chamber to make sure no cartridge is left. Empty magazine can be placed back if desired.

#### 1. DISASSEMBLY

#### A. STOCK AND TRIGGER GUARD

- 1. Remove the magazine by depressing the magazine catch.
- Loosen the barrel band screw and pull the barrel band from the stock.
   (M20C)
- 3. Remove the barrel hold down screw and detach barrel receiver assembly from the stock.

# **B. TRIGGER GROUP**

- 1. Remove the trigger by punching out trigger stop pin and pivot.
- 2. Remove trigger spring and spring follower at the end of the housing.
- 3. Remove the rear and front trigger housing hold down screws to disengage the trigger housing from the receiver. (This step is advisable unless necessary).

## C. BOLT DISASSEMBLY

- 1. Loosen the receiver cap lock screw and unscrew the receiver cap. Be careful as spring inside are under compression.
- 2. Pull out the unit assembly (recoil spring, recoil spring retainer and guide sleeve, firing pin spring, and firing pin spring guide head and stem). Keep all of this in order together with receiver cap to avoid confusion in reassembly.
- 3. With muzzle pointing in an upward direction retract bolt handle fully to the rear of the receiver slot.
- 4. Push firing pin forward so as to align its tail end approximately even with the receiver cap lock screw. (Firing pin is visible and is even with the rear end of the bolt).
- 5. Pull out bolt handle and operating stud and remove bolt from the receiver.

#### 11. ASSEMBLY

# A. BOLT ASSEMBLY

1. Place firing pin at the rear end of firing pin slot of the bolt.

- 2. Push bolt and firing pin into the receiver slot to the bolt handle can be inserted though it past the bolt and firing stud clearance. Slide bolt forward with bolt handle and stud already inserted into it stops against the rebound lever.
- 3. While holding the trigger back with one hand use a nail or any pointed object to trip the rebound lever by moving it to the rear away from the sear in the direction indicated by an arrow on the rebound lever. (See small sketch engraved on the trigger housing).
- 4. Push bolt handle forward sliding the bolt over the rebound lever.
  Release the trigger.
- 5. Insert recoil spring guide sleeve and retainer sleeve in opposite ends of the recoil spring.

**NOTE:** Steps nos. 5 6 and 7 can be by passed as long as you followed the instruction step C-2 for Bolt Disassembly, keeping the components together and in order

- 6. Insert firing pin spring guide into the firing pin spring.
- 7. Insert assembly no.6, spring end first, into the recoil spring through the guide sleeve (shorter sleeve).
- 8. Insert the entire unit inside the receiver, shorter sleeve resting against the bolt. Place the receiver cap at the rear en of the unit assembly and compress the spring carefully to return receiver cap into its original position. Tighten the receiver cap lock screw.
- 9. Pull bolt handle and forth several times to check the action of the bolt and trigger assembly.

## B. TRIGGER ASSEMBLY

- 1. With the gun in upside down position, insert trigger spring follower into the trigger spring and mount it onto the spring hole.
- 2. Insert trigger, locating the catch of the rebound lever with the rear catch.
- 3. Insert trigger stop pin and pivot pin into their respective holes.

4. Squeeze trigger several time to check the action of trigger spring.

(Pull bolt handle back and forth several times to check if trigger will release cocked firing pin)

## C. STOCK ASSEMBLY

- 1. Fit the barrel-receiver and trigger housing assembly on the stock such that the barrel take down stud freely fits into the hole provided for it in the gunstock. Tighten the screw to nest the barrel on the stock.
- 2. Fit barrel band and tighten the screw. (M20C)

# **CAUTION:**

The safety in your firearms is correctly designed, fitted, and tested. However, any mechanical device can fail. Never point your firearms at anything but a safe target and never rely upon the safety to justify careless handling. **USE HIGH VELOCITY .22 CALIBER LONG RIFLE CARTRIDGES ONLY.** 

When loading, pull bolt handle full rearward and allow it to snap forward sharply/

Breech area and magazine should be cleaned thoroughly

## **SPECIFICATIONS**

Caliber .22LR

Action Semi-Automatic

Safety Positive Thumb Operated

Magazine Capacity 10 / 15

Barrel Length 21"

Overall length 41"

Weight (Empty) 6.5 lbs.

Sights Hooded Ramp Front Sight

Leaf Type Rear Sight

Stock Philippines Mohogany

Part Name		Part Number.
A.	Barrel with Receiver Assembly	
	Barrel Hold Down Stud	2001
	Barrel	2002
	Barrel Hold Down Stud	2003
	Barrel Hold Down Screw	2004
	Barrel Hold Down Screw Washer	2005
	Ejector	2006
	Front Sight Hood	2007
	Front Sight Ramp	2008
	Front Sight Screw	2009
	Rear Sight Elevator	2010
	Rear Sight Leaf	2011
	Flash Deflector	2013
	Flash Deflector Screw	2014
	Receiver	2015
	Receiver Cap	2016
	Receiver Cap Lock Screw	2017
B.	Bolt Assembly Bolt	2018
	Bolt Operating Handle Assembly	2018
	a.) Bolt Operating Handle	2019
	b.) Bolt Operating Stud	2020
	c.) Bolt Handle Locating Bearing	2021
	d.) Bolt Locating Spring	2022
	Extractor	2023
	Extractor Plunger	2024
	Extractor Spring	2025
	Firing Pin	2026
	Firing Pin Spring	2027
		2021

	Firing Pin Spring Guide Assembly	
	a.) Firing Pin Spring Guide Stem	2028
	b.) Firing Pin Spring Guide Head Insert	2028A
	Recoil Spring	2029
	Recoil Spring Guide Sleeve	2030
	Recoil Spring Retainer Sleeve	2031
C.	Trigger Housing Assembly	
	Magazine Catch Assembly	
	a.) Magazine Catch	2032
	b.) Magazine Catch Button	2033
	Magazine Catch Pivot Pin	2034
	Magazine Catch Stop Pin	2035
	Safety Latch assembly	
	a.) Magazine Latch	2037
	b.) Safety Latch Button	2038
	Safety Latch Bearing	2039
	Safety Latch Spring	2040
	Safety Latch Screw	2041
	Sear	2042
	Sear Pivot Pin	2043
	Sear Stop Pin	2044
	Sear Spring	2045
	Sear Spring Pin	2046
	Trigger Pivot Pin	2048
	Trigger Stop Pin	2049
	Trigger Spring	2050
	Trigger Spring Follower	2051
	Trigger Housing	2056

# **Trigger Assembly** a.) Trigger 2047 b.) Rebound Lever 2052 c.) Rebound Lever Pivot Pin 2053 d.) Rebound Lever Spring 2054 e.) Rebound Lever Spring Bearing 2055 Trigger Housing Hold Down Screw Front 2057 2057-A Trigger Housing Hold Down Screw Front Washer Trigger Housing Hold Down Screw Rear 2048 Trigger Housing Hold down Screw Rear Washer 2058-A D. Magazine Box Assembly Magazine Box 2059 Magazine Box Inner Strip 2060 Magazine Spring 2061 Magazine Spring Retainer 2062 Magazine Spring Retainer Pin 2063 Magazine Follower 2064 **Gunstock Assembly Butt Plate** 2065 **Butt Plate Retainer Screws** 2067 Gunstock 2072 Trigger Guard 2074 Trigger Guard Screw, Front 2075

2076

Trigger Guard Screw, Rear

