PISTOL .40 GC - IMBEL MD7 LX

USER'S MANUAL
OPERATION AND MAINTENANCE



WARNING !

READ THIS MANUAL CAREFULLY BEFORE HANDLING THE FIREARM.

The manufacturer reserves the right to modify this manual at any time, making any revisions deemed necessary to ensure its proper use.



Warning!!!

Using a firearm requires training and emotional stability. Store your firearm in a safe place and out of the reach of children.

IMBEL – INDÚSTRIA DE MATERIAL BÉLICO DO BRASIL
Quartel General do Exército - Bloco H - 3º Andar SMU 70.630-901 - Brasília – DF
Company affiliated with the Ministry of Defense – Brazilian Army Command
http://www.imbel.gov.br

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SAFETY RULES

Read carefully these instructions before handling the firearm.

The user must always consider the firearm loaded and ready for use until proven otherwise.

During handling, keep the firearm pointed in a safe direction and only aim it when you intend to shoot.

Use only high-quality ammunition from a known source, appropriate for the type of firearm.

The use of personal protective equipment is recommended during handling and maintenance operations.

Important for pistols with ADC:

All operations related to the assembly and disassembly of the ADC system and its operation (cocking and decocking the hammer) must be performed with your finger off the trigger to prevent unintended release of the hammer.

A. INTRODUCTION

The Indústria de Material Bélico do Brasil (IMBEL), a Brazilian federal public company affiliated with the Ministry of Defense – Brazilian Army Command, is a traditional manufacturer and supplier of pistols and rifles to the national Armed and Auxiliary Forces.

Based on the .45 M911 A1 pistols—an iconic design conceived by John Moses Browning—the IMBEL families of High-Capacity (GC) pistols were developed in the calibers .380 ACP, 9 mm Luger, .40 S&W, and .45 ACP.

The Pst .40 GC-IMBEL MD7 LX features a rail for attaching a tactical flashlight. The designation "LX" was inspired by the abbreviation for lux (lx), the unit of illuminance. It is an excellent option for both sporting and law enforcement use.

The Hammer Cocking and Decocking System (ADC System) has been approved as a parts kit, the ADC Kit. This means that any IMBEL pistol based on the design of the .45 M911 pistol can be acquired with or without the ADC System. Transitioning from one configuration to another can be accomplished simply by replacing the hammer assembly and the thumb safety devices. The ADC System allows the firearm to be ready for use with the hammer forward, which is particularly suitable when open carry is required.

This Operating Manual covers the handling and maintenance of the Pst .40 GC-IMBEL MD7 LX, both with and without the ADC System. Specific procedures for IMBEL pistols equipped with the ADC System are identified in the text, as are those for pistols without the system. Procedures that do not include such references can be performed regardless of whether the ADC System is present or not.

Manufactured under the strictest international military standards, using high-quality raw materials, the firearm ensures a long service life with minimal maintenance and reliable operation under any climatic conditions.

The Pst .40 GC-IMBEL MD7 LX is supplied—unless otherwise specified by customer request through contract—in individual packaging, along with magazines, a cleaning rod and brush, the operating manual, and the test target from the firing accuracy test.

Raw materials used in this model:

Modelo (*model*)	Armação (*frame*)	Ferrolho (*slide*)	Cano (*barrel*)	Demais Peças Metálicas (*small parts*)
MD7 LX	carbon steel, phosphated and painted	carbon steel, phosphated and painted	carbon steel, blued and polished	phosphated and/or painted

B. TECHNICAL INFORMATION



SISTEMA ADC II

Pistol:

Length	220 ± 1 mm
Operation	semiautomatic and single action
Ammunition	EXPO, ETPP, CSCV, CHPP
Capacity	16 + 1 rounds
Width	38 ± 1 mm
Height without magazine	139 ± 1 mm
Sight radius	162 ± 1 mm
Distance from sight line to barrel axis	18 ± 1 mm

Barrel:

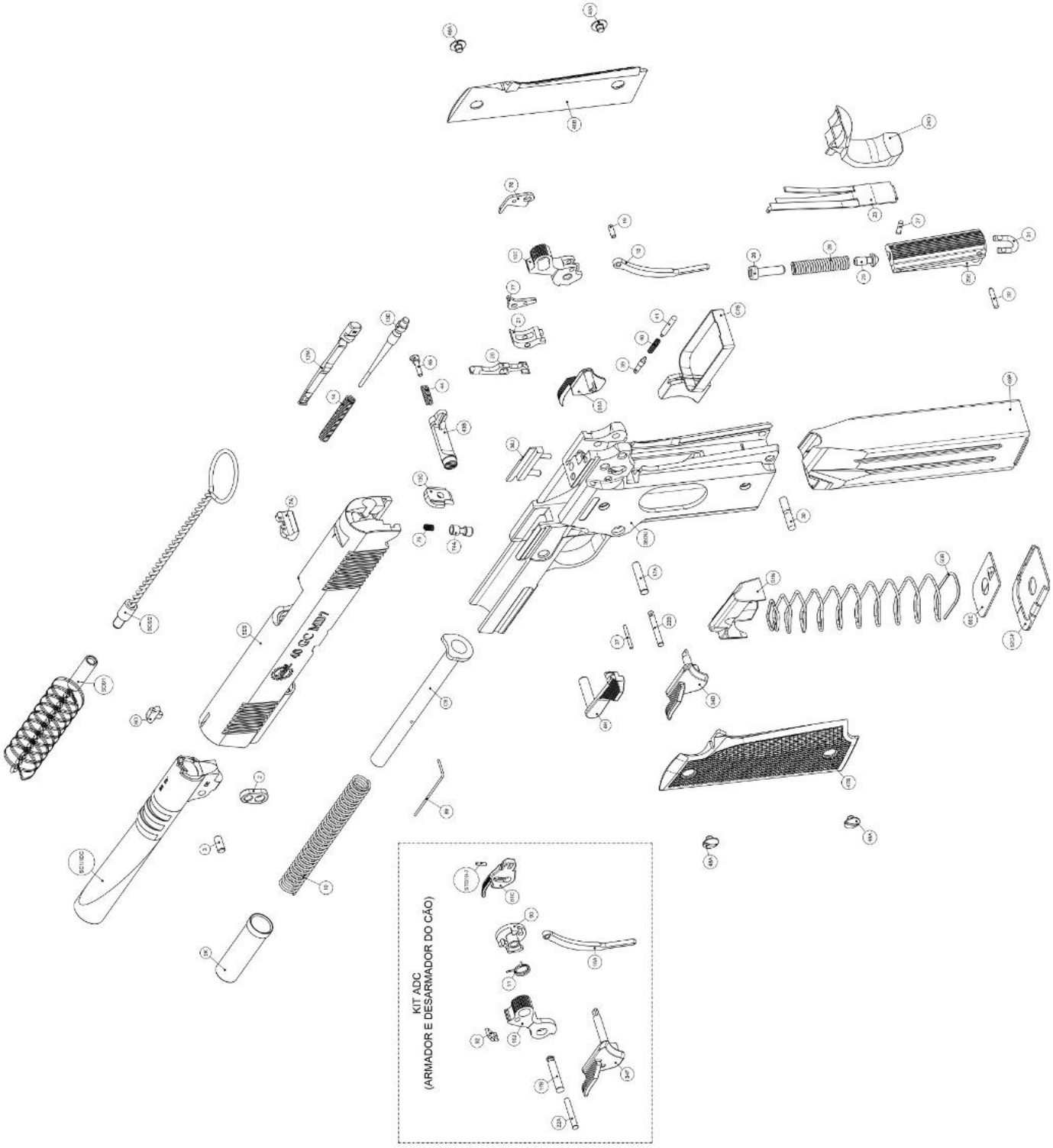
Caliber	.40 S&W
Length	128 ± 1 mm
Twist rate	16" / 406,4 mm
Number of grooves (right-hand twist)	6

Weights:

Pst .40 GC MD7 LX (1200 ± 15g)	11,77 ± 0,15 N
Empty magazine for 16 rounds .40 (95 ± 05g)	0,93 ± 0,05 N
Magazine with 16 rounds* (365 ± 05 g)	3,58 ± 0,05 N

Note: * .40 S&W full metal jacket flat-point cartridges (180 gr projectile)

C. EXPLODED VIEW



D. PARTS LIST

Ref	Designation
2	Barrel link
3	Barrel link pin
4H	Slide stop
5ES	Slide
6D	Front sight
7A	Rear sight
9K	Plug
10	Recoil spring
12M	Extractor
13D	Firing pin
14	Firing pin spring
15C	Firing pin stop plate
16J ②	Hammer
16E ①	
17A ①	Hammer pin
17B ②	
18 ①	Hammer strut
18A ②	
19 ①	Hammer strut pin
20	Disconnector
21	Sear
22A ②	Sear and disconnector pin
22B①	
23	Sear spring
24D	Grip safety
25E	Mainspring housing
26	Mainspring cap
27	Mainspring cap pin
28	Mainspring
29	Mainspring housing pin retainer
30	Mainspring housing pin
31	Lanyard loop

Ref	Designation
32	Lanyard loop pin
34D ①	Left thumb safety
34F ②	
35DU	Frame
36J	Ejector
37	Ejector pin
39	Slide stop plunger
40	Plunger spring
41	Safety catch plunger
43B	Magazine catch
44	Magazine catch spring
45	Magazine catch lock
46B	Right grip
47B	Left grip
48A	Grip screw
74A	Firing pin plunger
75	Firing pin plunger spring
76	Firing pin plunger lever
77	Trigger bar lever
81A①	Right thumb safety
81C②	
89	"L" Clip
90 ②	Hammer decocker
91 ②	Hammer return spring
92 ②	Safety plate
SC1/1 DC	Barrel
SC6/1	Cleaning brush
SC6/2	Cleaning brush rod
C4W	Magazine
C7B	Trigger
C9	Recoil spring guide

Caption: ① Specific parts for Pst •40 GC – IMBEL MD7 without ADC system

② Specific parts for Pst •40 GC – IMBEL MD7 LX with ADC system

E. ESSENTIAL OPERATIONS

IMPORTANT ! ! !

It is essential to understand these procedures before firing live ammunition.
Training in the essential operations with the pistol must only be carried out using dummy ammunition. The exercises described below follow a logical sequence of actions that ensures safe handling learning. The procedures learned through training in essential operations will ensure fast and safe use when it becomes necessary to use the pistol with live ammunition.

1. Removing the magazine
With the pistol in the position shown (Photo 01), press the magazine catch (part 43B). The magazine should be released from the firearm, propelled by its spring and the force of gravity.

2. Loading the magazine
Place three rounds or dummy cartridges into the magazine. Slightly depressing the round at the top of the magazine makes it easier to insert the next ones (Photo 02).

Note: Dummy ammunition contains no powder and no primer, consisting only of the case and projectile.

3. Inserting the magazine
Insert the magazine with dummy rounds into the pistol (Photo 03) until you hear the click indicating it has been secured by the magazine catch.



PHOTO 01



PHOTO 02



PHOTO 03

4. Chambering the round
It is the operation of placing a round into the chamber.

4.1. First process
After inserting the magazine in the pistol, whether the firearm is open or closed, pull the slide fully to the rear and release it. The slide will move forward, chambering a round.

4.2. Second process
It is used when the firearm is loaded and the slide is already locked to the rear by the slide stop. Press the slide stop downward; the slide will move forward, chambering a round.

5. Extracting and ejecting
These are the operations used to remove a round from the chamber (extract) and expel it from the firearm (eject). To extract and eject, simply pull the slide fully to the rear. If there is ammunition in the magazine, a new round will be chambered. If the magazine is empty, the firearm will remain open, with the slide held to the rear by the slide stop.

6. Decocking or disengaging the hammer
It is the operation of disabling the pistol for firing.

6.1. First process (Only for weapons with ADC)
The firearm must have the hammer held to the rear. Without touching the trigger, push the hammer forward until it rests against the safety plate (Photo 04), where it will remain retained. The ADC System has acted as a decocking mechanism.

6.2. Second process
The firearm must have the hammer held to the rear. Grip the pistol normally so that your hand applies pressure to the trigger safety device. With the thumb and index finger of the free hand, hold the hammer while simultaneously pulling the trigger (Photo 05). Keep the trigger pressed while carefully guiding the hammer forward until it rests against the rear of the firing pin.



PHOTO 04



PHOTO 05

7. Cocking or engaging the hammer
These are the operations used to make the firearm ready to fire. Immediately after chambering, the firearm will already be cocked.

7.1. First process (Only for weapons with ADC)
It is used when the firearm has been decocked by the first method (item 6.1), that is, using the advantages of the ADC System. Simply lower either of the safety levers (Photo 06), and the hammer will be driven to the rear and remain there. In this situation, the ADC System acts as a cocking mechanism. Safety, speed, and ease of operation are the main characteristics of this process.

7.2. Second process
It is used when the firearm is loaded and has been decocked by the second method (item 6.2). Simply pull the hammer fully to the rear until it is held in the rearmost position (Photo 07) by the sear.



PHOTO 06



PHOTO 07

7.3. Third process
It is used when the firearm is loaded but there is no round in the chamber. Pull the slide fully to the rear and release it.

8. Engaging the safety mechanism
These are the operations used to place the pistol in a safe condition.

8.1. First process (Only for weapons with ADC)
After cocking, push the hammer forward without pulling the trigger. The ADC System acts as a decocking mechanism and places the firearm in a safe condition by moving the safety plate and the safety levers upward.

8.2. Second process (Only for weapons without ADC)
After cocking, move either of the safety levers to its uppermost position in order to lock the pistol (Photo 08).

8.3. Third process
After cocking, hold the hammer, then pull the trigger and release it immediately after feeling the hammer release. Once the trigger is released, control the forward movement of the hammer so that it remains held at approximately one-third of its decocked position (Photo 09). This process is also known as safety through half-cocking.

Warning: Locking the firearm by guiding the hammer forward while the trigger is pressed is a critical procedure and must be performed carefully. Always verify the locked condition after completing the action to avoid a false lock situation. This process is safe when executed correctly, although it requires practice.

8.4. Fourth process
This is a variation of safety through half-cock. The firearm must have been previously decocked by the second method (Item 6.2), with the hammer resting against the rear of the firing pin. Without touching the trigger, slowly pull the hammer back until you hear the click that indicates it has been retained in the half-cock (or half-lock) position. This process is safe when executed correctly, although it requires practice and sufficient time.

9. Disengaging the safety mechanism
These are the operations used to make the pistol ready to fire.

9.1. First process (Only for weapons with ADC)
With the firearm locked by the first method (item 8.1), move either of the thumb safety devices to their lowest position; the hammer will be cocked automatically. The ADC System acts as a cocking mechanism. This is the fastest and safest method to make the firearm ready to fire.

9.2. Second process (Only for weapons without ADC)
It is used when the pistol has been locked by the second method (item 8.2). Move either of the thumb safety devices to their lowest position. This is a fast and safe way to make the firearm ready to fire.

9.3. Third process
With the firearm in the half-cock (or half-lock) safety condition, obtained through the third or fourth locking methods (items 8.3 and 8.4), pull the hammer back until it is held in the rearmost position.

10. Firing
With the pistol cocked and unlocked, press the grip safety device—this occurs naturally when properly gripping the firearm—and then pull the trigger. The hammer should move forward.

11. Last shot
After the last shot, the case is extracted and ejected, and the slide remains locked to the rear, leaving the pistol open (Photo 10).



PHOTO 08



PHOTO 09



PHOTO 10

12. Reloading
Remove the magazine from the pistol. The slide remains locked in the rear position. Insert a new magazine with one or more dummy rounds and perform the chambering operation by any method; the slide will move forward, immediately chambering a new round, and the firearm will be ready to fire.

F. DISASSEMBLY

IMPORTANT ! ! !

It is essential to wear safety glasses during disassembly and assembly operations of the pistol, as there is a potential risk of accidents caused by spring-loaded parts. It is recommended that, during disassembly, the parts be placed side by side in the order in which they are removed from the firearm. This will make reassembly much easier.

Any disassembly or assembly operations not described in this manual must be carried out by authorized gunsmiths. Failure to follow this safety rule, or performing permitted procedures out of order or incorrectly, may result in damage to the firearm and/or injury to the user

1. Preliminary measures

Remove the magazine from the firearm. Pull the slide to the rear and inspect the chamber (Photo 11). Ensure it is empty, as disassembly may only proceed if there is no cartridge in the chamber. Failure to follow this basic safety rule may result in serious injury to the person handling the pistol and/or those nearby. Once it has been confirmed that there is no cartridge in the chamber, release the slide. Engage the safety by moving either of the safety levers upward (in the case of pistols without the ADC), or by pushing the hammer forward without pulling the trigger (in the case of pistols with the ADC).

2. Slide stop

Disengage the safety. Pull the slide to the rear until its central half-moon–shaped notch aligns with the protrusion on the lug of the slide stop (Photo 12). While holding the slide in this position, push the right end of the slide stop inward and remove it from the left side of the firearm.

3. Slide and frame

With the grip of the frame facing upward and the barrel pointing forward, hold the slide with one hand and the frame with the other. Then pull the frame rearward (Photo 13), separating it from the slide. On the frame, leave the hammer in the cocked position.



PHOTO 11



PHOTO 12



PHOTO 13

Note: For firearms equipped with the ADC system: once the frame has been separated from the slide, the trigger should only be pulled if the forward movement of the hammer is carefully controlled by hand until it rests against the safety plate. If the trigger is pulled and the hammer is released freely forward, it may cause breakage or deformation of the ADC system's safety plate.

4. Recoil system

Press the recoil spring guide plate, compressing the spring, until the hole for the "L" clip appears beyond the recoil spring guide plug. Insert the "L" clip into the hole, locking the recoil system (Photo 14). Remove the recoil system through the rear of the slide. To disassemble the recoil system, press the recoil spring guide plate against the guide plug and remove the "L" clip (Photo 15). Carefully control the decompression of the recoil spring. Separate the components: guide plug, recoil spring guide, recoil spring, and "L" clip. Note that the tighter coil of the recoil spring must be in contact with the recoil spring guide plate.

5. Barrel

Swing the barrel link forward and remove the barrel through the front of the slide (Photo 16). If there is any resistance during removal, lift the rear of the barrel to disengage it from the slide and move it forward. Removing the barrel marks the end of field stripping; the firearm is now separated into its three main assemblies—frame, slide, and barrel—and is ready for maintenance.


PHOTO 14


PHOTO 15


PHOTO 16

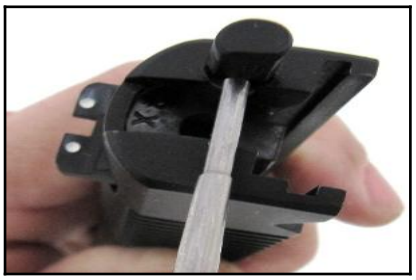
6. Firing pin stop plate and firing pin with spring

With the top of the slide facing downward, press the firing pin plunger, then use a punch to push the firing pin fully into its channel (Photo 17). Gradually release pressure on the firing pin plunger until you feel it retaining the firing pin in the forward position. The firing pin stop plate, now released, can be slid out of its slot in the slide. Remove the firing pin stop plate. While blocking the opening of the firing pin channel, press the firing pin plunger to release it. Keeping the plunger pressed, remove the firing pin and its spring, then separate

7. Extractor, firing pin plunger with spring

Push the extractor rearward until it releases the firing pin block. Remove the firing pin block and its spring. Using a punch through the ejection port, push the extractor claw inward into its seat in the slide as far as possible. Then, with the punch, pull the extractor out by its rear end from its housing in the slide (Photo 18).


PHOTO 17


PHOTO 18

8. Thumb safety mechanism

8.1 Only for weapons with ADC

Using a punch, remove the roll pin from the hole in the right safety lever (Photo 19). If the hammer is not fully held to the rear, place it in this position. Without touching the trigger, push the hammer forward until it rests against the safety plate (Photo 20). Keeping the hammer forward, remove the left safety lever (Photo 21). Release the hammer, which will return to the rear under spring action. Remove the right safety lever, aligning its groove with the relief cut on the hammer pin (Photos 22 and 23), and withdraw it from the right side. With great care (see Note in item F.3), press the trigger and manually control the forward movement of the hammer until it rests against the safety plate.

Note: If necessary, to facilitate removal of the left safety lever, use a screwdriver near the pivot, between the left safety lever and the frame (Photo 24)


PHOTO 19


PHOTO 20


PHOTO 21


PHOTO 22


PHOTO 23


PHOTO 24

8.2. Only for weapons without ADC

If the hammer is not fully held to the rear, place it in that position. Set the safety levers halfway between the "safe" and "fire" positions. From the left side of the pistol, move and pull the left safety lever until it is removed (Photo 25). Rotate the right safety lever counterclockwise until it disengages from the notch on the sear pin (Photo 26). Remove the right safety lever from the right side of the pistol. Hold the hammer, pull the trigger, and carefully control the hammer as it moves forward.

9. Plunger spring assembly

Remove from its housing, on the left side of the frame, the assembly consisting of the slide stop plunger, plunger spring and safety catch plunger (Photo 27). Note that the safety catch plunger (the larger-diameter part) is the first component to come out from the rear of the housing in the frame. Disassemble the assembly if necessary.


PHOTO 25


PHOTO 26


PHOTO 27

10. Mainspring housing assembly

If the hammer is not in its most forward position, place it in that position. Using a punch, push the retaining pin of the housing block from the left side of the frame (Photo 28) outward, and then pull the block downward, removing it from the frame (Photo 29).

11. Grip safety and sear spring

With the removal of the block, the grip safety device and the mainspring become loose. Remove them (Photo 30).


PHOTO 28


PHOTO 29


PHOTO 30

12. Hammer and firing pin plunger lever

12.1. Only for weapons with ADC

Using a punch, from the right side of the frame, push the hammer pin out of the pistol. Then remove the ADC system and the firing pin plunger lever (Photo 31). It is recommended not to disassemble the ADC system; however, if absolutely necessary, proceed as follows: while holding the decocking mechanism, remove the hammer from its axis (Photo 32). Be careful with the hammer return spring. Remove the safety plate. Remove the hammer return spring. Remove the hammer strut (Photo 33).



PHOTO 31

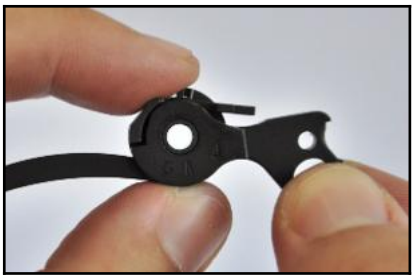


PHOTO 32



PHOTO 33

12.2. Only for weapons without ADC
Using a punch, from the right side of the frame, push the hammer pin out of the pistol and remove it from the left side. Then remove the hammer and the firing pin block lever (Photo 34).

13. Sear, disconnector and trigger bar lever
From the right side of the frame, use a punch to push the sear pin and remove it from the left side of the frame. Then remove the sear, the disconnector, and the trigger bar lever (Photo 35).

14. Right and left grips
Using a screwdriver, remove the screws that secure the grip panels to the frame (Photo 36).



PHOTO 34



PHOTO 35



PHOTO 36

15. Magazine catch
Fully depress the magazine catch from the left side of the frame and, at the same time, from the right side, use a screwdriver to rotate the magazine catch retainer counterclockwise (Photo 37) until it disengages from its notch in the frame. Remove the magazine catch from the right side of the frame. Using the screwdriver, rotate the retainer clockwise until its lug is free from the slot in the magazine catch. Carefully control the release of the retainer, as it is under spring tension. Separate the retainer from the spring, noting that the free end of the spring has the larger coil (Photo 38).

16. Trigger
Move the trigger rearward and remove it from the frame. Note that the chamfer on the trigger face is oriented upward (Photo 39).



PHOTO 37



PHOTO 38



PHOTO 39

17. Magazine
Position the magazine with the base facing upward. Using a punch, press the magazine base retainer downward and slide the metal base plate slightly outward (Photo 40). While blocking the magazine body opening, continue sliding the base plate off the magazine lips (Photo 41), removing it carefully to prevent sudden spring release. After the spring has expanded, remove the assembly consisting of the base retainer, magazine spring, and follower (Photo 42), and then separate the components.



PHOTO 40

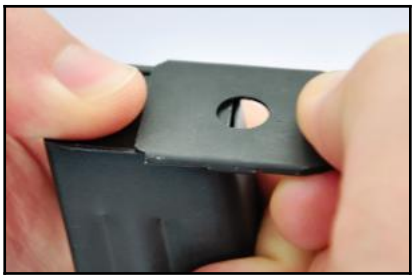


PHOTO 41

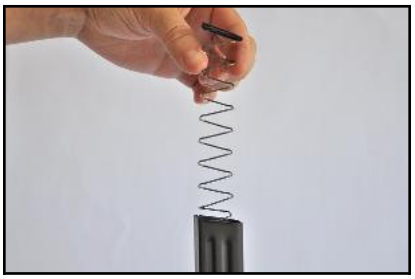


PHOTO 42

G. ASSEMBLY

IMPORTANT ! ! !

The assembly operations of this IMBEL pistol are carried out almost exactly in the reverse order of disassembly.

1. Magazine

Attach the follower and the magazine base retainer to the respective ends of the spring, ensuring correct positioning. With the lower part of the magazine body facing upward, slide this assembly into the magazine (Photo 43) until the follower becomes visible.

Press the base retainer until the entire assembly is fully contained within the magazine body. Keep the spring compressed and slide the magazine base plate along the magazine lips until you hear the characteristic click, indicating that the base retainer has locked into its final position.

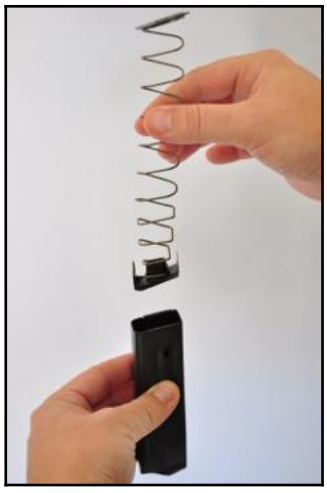


PHOTO 43

2. Trigger

Insert the trigger from the rear of the frame and slide it forward to its foremost position. Note that the chamfer on the trigger face must be oriented upward (Photo 44).

3. Magazine catch

Install the spring onto the magazine catch retainer, ensuring that the end with the smaller coil is attached to the retainer. Insert the retainer and its spring into their housing in the magazine catch. Using a screwdriver, compress it until it can be fully rotated counterclockwise into the slot in the magazine catch (Photo 45). Insert the magazine catch into its housing from the right side of the frame. Press the catch from the left side while carefully rotating the retainer clockwise with a screwdriver (Photo 46) until it engages in its notch in the frame. The click indicates that the magazine catch is properly seated in the frame.

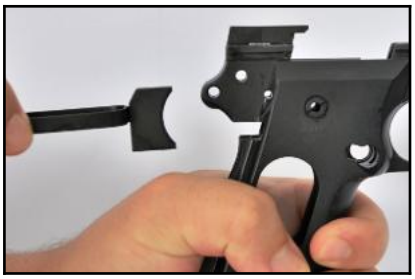


PHOTO 44

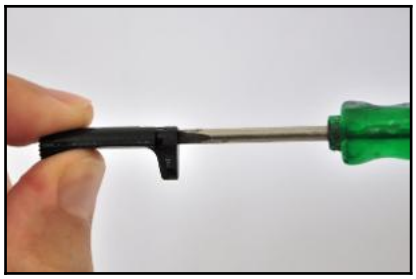


PHOTO 45



PHOTO 46

4. Right and left grips
Install the grip panels on their respective sides and secure them with two screws using a screwdriver (Photo 47).

5. Sear, disconnector and trigger bar lever
Hold the disconnector by its lower end, with the flat side facing downward. Place the sear on the disconnector, with the concave side facing upward and the two tips pointing rearward (Photo 48). Position this assembly in the disconnector housing in the frame, ensuring it rests on the rear part of the trigger and that the end of the disconnector is flush with the upper surface of the frame. Using a punch, position the sear and the disconnector so that the holes for the sear pin align with the corresponding holes in the frame. Insert the sear pin from the left side of the frame until it is flush with the right side of the sear. With your index finger supporting from inside the frame, install the trigger bar lever with the concave side facing rearward (Photo 49), with its larger end resting on the rear of the trigger, on the right side of the sear. Using a punch, position it so that its hole aligns with the sear pin holes. Complete the insertion of the sear pin from the left side of the frame. The slot near the right end of the sear pin (when present) must face rearward after assembly, allowing the passage of the right safety lever.



PHOTO 47



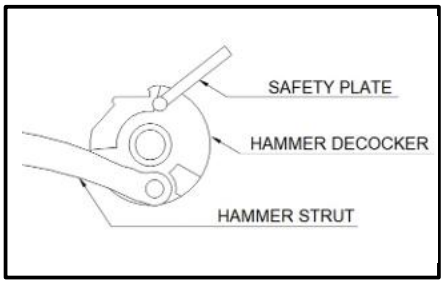
PHOTO 48



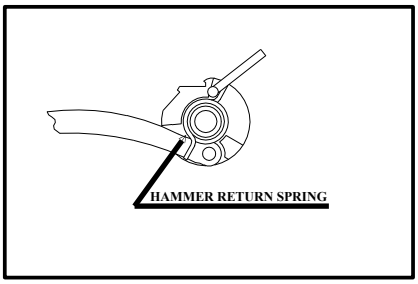
PHOTO 49

6. Hammer and firing pin plunger lever
6.1. Only for weapons with ADC
If the ADC System has been disassembled: install the safety plate and the hammer strut in their respective positions on the decocker, keeping the hammer strut in its most forward position (Drawing 01). Position the hammer return spring on the decocker axis so that one end is under the safety plate and the other rests on the hammer strut (Drawing 02). Partially install the hammer onto its axis in the decocker, ensuring that the end of the spring is positioned before its stop on the hammer (Drawing 03). Rotate the hammer while pressing it against the decocker in a counterclockwise direction, guiding the end of the return spring into its working position, indicated by a characteristic click, resulting in the configuration shown in (Drawing 04).

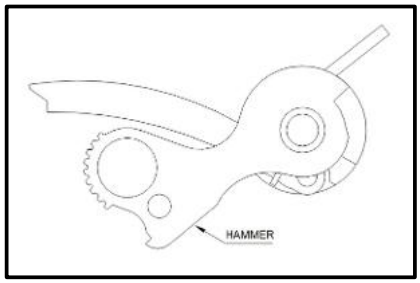
To verify the correct assembly of the ADC System, move the hammer and the hammer strut—there must be tension from the hammer return spring. Once the ADC System is assembled, position it in the frame so that the hammer pin holes are aligned. Insert the hammer pin from the left side of the frame until it is flush with the right side of the hammer. Install the firing pin plunger lever so that its hole aligns with the corresponding holes in the other components (Photo 50). Complete the insertion of the hammer pin. Press the trigger. If the firing pin block lever does not lift, there is an assembly issue and the procedure must be repeated starting from item G.5.



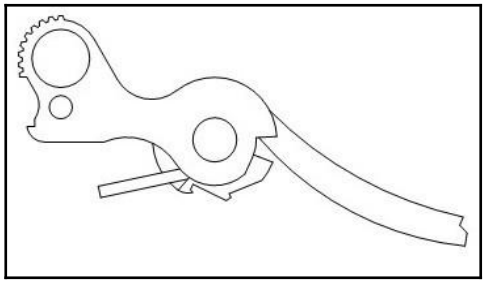
DRAWING 01



DRAWING 02



DRAWING 03



DRAWING 04

6.2. Only for weapons without ADC
Position the hammer in the frame so that the hammer pin holes are aligned. Insert the hammer pin from the left side of the frame until it is flush with the right side of the hammer. Install the firing pin plunger lever so that its hole aligns with the corresponding holes in the other components (Photo 50). Complete the insertion of the hammer pin. Press the trigger. If the firing pin plunger lever does not rise, there is an assembly issue and the procedure must be repeated starting from item G.5.

7. Sear spring
Place the hammer in the forward position and keep the hammer strut in its highest position. Seat the lower part of the sear spring into the groove in the frame, ensuring that the left leaf rests on the lower part of the sear, the center leaf rests on the disconnector, and the right leaf remains free (Photo 51).

8. Mainspring housing assembly (Phase I)
Partially insert the housing block into its guides in the frame grip, so as to keep the sear spring in the correct position during the installation of the next components. Lower the hammer strut until it is close to the sear spring (Photo 52).



PHOTO 50



PHOTO 51



PHOTO 52

9. Grip safety
Place the hammer in its most forward position. Install the grip safety device, aligning the hole for the safety lever shaft with the corresponding holes in the frame (Photo 53).

10. Mainspring housing assembly (Phase II)
Lodge the end of the hammer strut in the mainspring cap located inside the housing block. Move the housing block along its guides in the frame and slide it until the holes for the retaining pin are aligned. Insert the housing block retaining pin from the left side of the frame (Photo 54).

Note: If the pistol is equipped with the ADC System, from this stage of assembly onward—and until the slide has been installed on the frame—the trigger must only be pulled if the forward movement of the

hammer is carefully controlled by hand. If the trigger is pulled and the hammer moves freely forward under spring force, it may cause breakage or deformation of the safety plate.

11. Plunger spring assembly

Assemble the plunger spring assembly, if it has been disassembled. Insert the plunger spring assembly into its housing on the left side of the frame. Note that installation begins with the insertion of the slide stop plunger, the smaller-diameter end (Photo 55).



PHOTO 53



PHOTO 54



PHOTO 55

12. Thumb safety mechanism

12.1 Only for weapons with ADC

Cock the hammer. Install the left thumb safety until its shaft is flush with the right side of the frame (Photo 56), securing the grip safety. Install the right thumb safety so that its groove passes through the relief cut in the hammer pin. Position it properly to allow the shaft of the left thumb safety to fit into its seat (Photo 57). Using a punch, press the support head of the trigger safety into its housing, pressing both thumb safety devices toward each other. With both thumb safety devices partially engaged and compressed together, move the hammer forward—without pulling the trigger—until the shaft of the left thumb safety is fully inserted into the right thumb safety (Photo 58). If there is interference during assembly, apply light taps to the left thumb safety until it is fully seated. The thumb safety devices will automatically move into the safe position. After verifying proper operation of the ADC system, insert the roll pin into the hole in the right thumb safety from the right side of the firearm, ensuring it aligns with the relief in the hammer pin. The pin can be fully inserted using a punch (Photo 59).

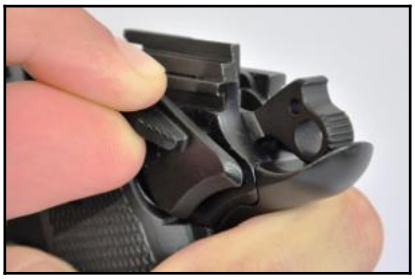


PHOTO 56



PHOTO 57



PHOTO 58



PHOTO 59

Note: For weapons with ADC: once the ADC has been installed in the frame, the trigger should only be pulled if the forward movement of the hammer is manually controlled with great care until it rests against the safety plate. If the trigger is pulled and the hammer is allowed to move freely forward under spring force, it may cause breakage or deformation of the ADC system's safety plate.

12.2. Only for weapons without ADC

Cock the hammer. Install the right thumb safety with the paddle in the vertical position (Photo 60). Rotate it downward clockwise until it passes through the groove in the sear pin, securing the thumb safety. Install the

left thumb safety, properly positioning the right thumb safety to allow engagement between the two safety devices (Photo 61). Using a punch, press the support head of the thumb safety into its housing while pressing both safety devices toward each other until the left thumb safety is fully seated.



PHOTO 60



PHOTO 61

13. Extractor, firing pin plunger with spring

Partially install the extractor into its housing, inserting it until its circular notch aligns with the hole for the firing pin plunger. Assemble the firing pin plunger with its spring. With the underside of the slide facing upward, insert this assembly into its housing in the slide body. Using a screwdriver, compress the firing pin plunger while simultaneously pushing the extractor forward until it retains the plunger in place under spring tension (Photo 62).

14. Firing pin stop plate and firing pin with spring

Assemble the firing pin and its spring, ensuring that the end with the tighter coil is inserted first onto the firing pin. With the underside of the slide facing upward, use a screwdriver to compress the firing pin plunger while, with a punch, fully insert the firing pin and spring assembly into its channel in the slide (Photo 63). Carefully release the firing pin plunger, ensuring that the firing pin remains held in the forward position. Install the firing pin stop plate into its grooves in the slide and slide it into place. Press the firing pin plunger —this will release the firing pin, whose rearward movement is then limited by the retaining plate. The insertion of the firing pin tail into the hole in the retaining plate locks it in position (Photo 64).

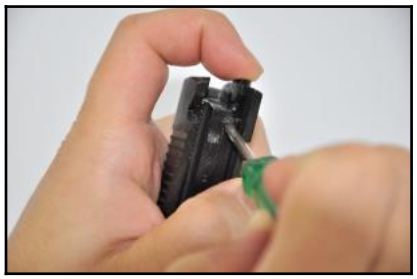


PHOTO 62

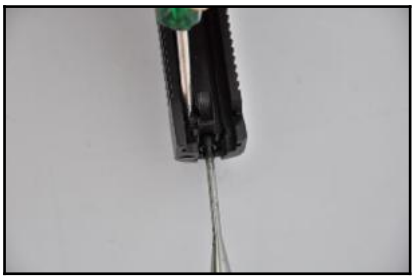


PHOTO 63



PHOTO 64

15. Barrel

With the underside of the slide facing upward, rotate the barrel link forward and insert the barrel through the front of the slide (Photo 65).

16. Recoil Spring Assembly

Assemble the recoil system by placing the more closed end of the spring against the recoil spring guide plate. Place the guide rod cap onto the free end of the spring and press it against the recoil spring guide plate until the hole for inserting the "L" clip becomes visible. Insert the "L" clip into this hole, locking the recoil system in place (Photo 66). With the underside of the slide facing upward and the link folded back, insert the recoil system into its housing. Press the recoil spring guide forward until the "L" clip can be removed (Photo 67). Remove the "L" clip and carefully control the decompression of the recoil spring.



PHOTO 65



PHOTO 66



PHOTO 67

17. Slide and frame

Position and hold the recoil spring and guide rod in their proper working positions. Hold the slide with the barrel facing forward and the underside facing downward, keeping the recoil spring firmly against the barrel with one hand. With the free hand, grip the frame with the hammer cocked and the firing pin plunger properly seated in its housing. Insert the frame into the slide (Photo 68).

18. Slide stop

Hold the firearm with its left side facing upward. Align the holes for the slide stop in the frame with the barrel link. Partially insert the slide stop until it compresses the support head into its housing and makes contact with the underside of the slide. Move the slide rearward until its half-moon notch aligns with the slide stop lug. Then fully seat the slide stop by pressing it into the slide (Photo 69). Move the slide fully forward and then engage the safety: raise either safety lever (for pistols without the ADC system), or, for pistols with the ADC system, push the hammer forward without pulling the trigger until the safety is engaged.



PHOTO 68



PHOTO 69

H. Additional measures

These are procedures intended to verify that the firearm has been correctly assembled and is in proper working condition:

a. Disengage the safety and, twice, pull the slide fully to the rear and release it. Press the trigger without engaging the grip safety device: the firearm must not fire.

b. Pull the slide back 5 to 10 mm. Press the trigger while simultaneously engaging the trigger safety device: the firearm must not fire.

c. For pistols with the ADC system: lock the firearm by pushing the hammer forward without pulling the trigger. The thumb safety devices should automatically engage. Press the trigger while simultaneously engaging the grip safety device: the firearm must not fire.

For pistols without the ADC system: lock the firearm by raising one of the thumb safety devices. Press the trigger while simultaneously engaging the grip safety device: the firearm must not fire.

d. Disengage the safety. Press the trigger while simultaneously engaging the grip safety device: the firearm should fire.

Attention!!!

If any of the expected results do not occur during these procedures, the firearm must be disassembled and reassembled in the proper order and in accordance with this Manual.

If proper functioning is still not achieved after reassembly, contact an authorized IMBEL service center to identify the causes and resolve the issue.

e. Magazine insertion

Insert the magazine into its housing in the grip of the frame until a small click is heard, indicating that it has been secured by the magazine catch.

I. SAFETY MECHANISMS

The safety system of the Pst .40 GC-IMBEL MD7 LX includes:

1. Thumb safety

1.1. Only for weapons with ADC

When activated, the ADC System raises the thumb safety devices located on both sides of the frame (Photo 70), preventing movement of the slide, while simultaneously positioning the safety plate between the hammer and the firing pin, preventing accidental discharge in the event of a drop.

1.2. Only for weapons without ADC

The thumb safety devices, located on both sides of the frame, can only operate when the firearm is cocked. When engaged, they prevent the release of the hammer (Photo 71).



PHOTO 70



PHOTO 71

2. Grip safety

The grip safety device, located at the rear of the frame, when not depressed, prevents the trigger from moving rearward and releasing the hammer (Photo 72).

3. Half-cock safety

The first retention position, at the beginning of the movement, is the half-cock position. In this position, the movement of the hammer is blocked, even if the trigger and the grip safety device are pressed simultaneously (Photo 73).



PHOTO 72



PHOTO 73

4. Firing pin locking safety

When the trigger is not pressed, the firing pin is prevented from moving forward, being blocked by the firing pin plunger. This is a safety feature to prevent accidental discharge if the firearm is dropped.

J. USER INFORMATION

VERY IMPORTANT

1. Safety first: Before performing any maintenance or handling of the pistol, always check if there is no cartridge in the chamber.

2. Maintenance: the proper functioning of any firearm depends on correct maintenance.
a. Before firing: keep the barrel and chamber dry; the mechanism must be lubricated with neutral gun oil.
b. After firing: within 24 hours, a complete cleaning and lubrication of the firearm with neutral gun oil must be carried out.

3. Useful information:
a. The use of acetone-based solvents for cleaning the firearm must be strictly avoided. These solvents attack epoxy paints such as those used on IMBEL pistols
b. Remove, as quickly as possible, incidental electrolytes such as seawater or heavily chlorinated water, accumulation of corrosive agents, excessive perspiration or perspiration from individuals with high uric acid levels, chlorine-based products, caustic soda, etc.
c. After cleaning, apply a thin layer of neutral gun oil and wipe it off with a clean cloth.
d. Avoid prolonged storage in direct contact with wood or leather.

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Indústria de Material Bélico do Brasil
Quartel General do Exército
Bloco H – 3º Andar
SMU - CEP 70830-901
Brasília/DF – Brasil
mercado@imbel.gov.br

Fábrica de Itajubá
Av Cel Aventino Ribeiro, 1099
Bairro Imbel
CEP 37501-345
Itajubá/MG – Brasil
mercado.fi@imbel.gov.br