





Istruzioni per l'uso Instructions for operation Mode d'emploi

#### **ENGLISH**

Illustrations on pages 5, 50, 51, 52

FRANCAIS page 34

Caution: read this manual carefully before handling and loading the gun.

**WARNING**: Always ensure that the safety is fully engaged until ready to fire. A safety is fully engaged only when the safety "off" red marking (ring) is completely covered and when the safety can move no further into the safe position.

# THE COMMANDMENTS OF GUN SAFETY

- 1) Treat every gun with respect and caution.
- 2) Keep your eyes on the muzzle. Keep the safety on until ready to shoot.
- 3) Unload guns when not in use; keep the actions open.
- 4) Be sure the barrel is clear of obstructions.
- Be certain of the target at which you are going to fire. Know how to recognize the game you are hunting.
- 6) Never shoot at a flat surface or water.
- Never climb a tree or fence or jump a ditch with a loaded gun. Don't take a gun by the barrel.
- Never point a gun at anything you don't want to shoot. Avoid all horseplay while handling a gun.
- Store guns and ammunition separately, beyond the reach of children. Guns should always be unloaded.
- 10) Avoid alcoholic beverages before or during shooting.

Shooting glasses and earplugs: shooting glasses are a must; chances of gas, gunpowder and dirt particle blow-back are remote but do exist. Earplugs reduce the chance of temporary or permanent loss of hearing when shooting.

Beretta has designed new special adjustable "safety" and "competition" glasses complete with interchangeable lenses, blinders and visors for optimum performance under varying light conditions.

### Warning

As the interchangeable barrel of the automatic has a serial number different from that stamped on the receiver, it may be necessary, when referring to the gun, to specify also the serial number of the barrel/s.

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# **NOMENCLATURE**

Α	Receiver
A1	Trigger
A2	Reversible safety button
A3	Trigger plate retaining pin
A4	Breech bolt release button
A5	Carrier
A6	Carrier stop push button
A7	Loading gate
A8	Breech bolt
A9	Cocking handle
A10	Extractor
A11	Breech bolt slide
A12	Connecting rod
A13	Locking block

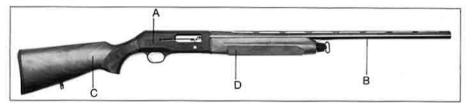
A13 Locking block A14 Firing pin A15 Ejection port A16 Cut-off

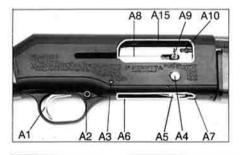
B B1 B2 B3 C C1 C2 C3 D E F G Stock
Interchangeable butt plate
Stock swivel
Drop/Cast spacer
Fore-end
Magazine tube
Magazine tube cap with shaft
Operating rod with sleeve
Fore-end cap with swivel

Barrel

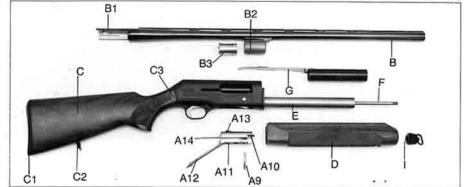
Barrel tang Gas cylinder Piston

Stock









# **DESCRIPTION**

The new ultra-light Beretta A304 semi-automatic features the traditional Beretta gas system consisting of just one moving part... a stainless steel piston: nothing to break, wear out or lubricate. Available with fixed chokes or Mobilchoke\* barrel, the A304 will fire any 12 gauge 2 3/4" shotshell without any adjustment. It introduces many new improvements.

#### **NEW RECEIVER DESIGN**

The streamlined receiver connects to the stock at a definite angle, yet the overall look is extremely harmonic. The new trigger-guard design and trigger design, the matted anti-reflection black finish of upper and lower part of the receiver standing out against the bright finish of the sides, the light scroll or the de luxe engraving, all confer to the Beretta A304 a new appearance and an undeniable character.

#### NEW CUT-OFF DEVICE

The cut-off control is now positioned on the left side of the receiver: it can be engaged when the breech bolt is in the closed position with the use of one hand only. If the cut-off is accidentally left engaged, automatic reloading after the first shot will disengage it.

#### REVERSIBLE SAFETY BUTTON

The cross-bolt safety button can be assembled for standard right-hand use or inverted for left-hand use.

#### **NEW STOCK**

The stock is designed to receive either a plastic butt-plate or a rubber recoil pad without any adjustment.

By assembling rubber recoil pads of different size it is possible to modify the length of pull.

### STOCK DROP AND CAST PLATES

The design of the technopolymer receiver-stock spacer, and of the stock metal plate allows to modify the stock drop and cast, by simply rotating them respectively on their horizontal and vertical axis.

### **CARRYING STRAP**

The Beretta A304 is provided (with the exception of some countries) with swivels. The front swivel is mounted on the fore-end cap. The rear classic type swivel is screwed into the stock.

#### WARNING

As it results from the description, the A304 is a totally new firearm and therefore, with the exception of a few items, it has no interchangeable parts with the preceeding A300 - A303 series, barrel, stock and fore-end included.

# **TECHNICAL FEATURES AND DATA**

Gauge	12		
Barrel chamber	70 mm (2³/₄")		
Operation	semi-automatic, gas operated		
Locking system	falling block		
Receiver	light alloy		
Barrel	Ni, Cr, Mo steel, inside chromium-plated		
Rib	ventilated		
Front sight	metal bead		
Safety	cross bolt, reversible for left-handed shooters		
Magazine	3 rounds (plugged to 2)		
Stock, Fore-end	selected walnut, checkered. Adjustable drop. Cast-off or cast-on		
Length of pull	368 + 382 mm		
Weight (approx.)	2.800 + 3.000 Kg. (according to model, barrel length and equipment)		

# **FUNCTIONING**

The new Beretta A304 is a gas-operated semi-automatic shotgun with a falling block locking system.

The breech bolt, when closed, is mechanically linked to the barrel by means of the falling block, held by the barrel tang locking tooth. Under the action of the recoil spring, the breech bolt pushes the shell into the cartridge chamber.

When the trigger is pulled, the hammer, released by the sear and pushed by its spring, rotates and hits the firing pin which strikes the cartridge primer causing the firing.

When firing, the expanding gases press the case walls against the chamber, thus ensuring gas-tightness, and propel the shot load towards the muzzle.

With the shot already ejected, a proportion of the gases enter the gas cylinder through the gas ports and operates the piston.

The piston in turn operates the rod sleeve which causes the breech bolt to travel backwards and consequently performs the cocking, extraction, feeding and locking operation.

When the hammer, released by the trigger, rotates to hit the firing pin, it retracts the carrier stop push-button thus allowing the carrier to rotate downward, receive a cartridge and operate the cartridge latch to free the next round from the magazine.

The breech bolt slide, pushed backward by the operating rod, drops the locking block and frees the breech bolt from the barrel.

The breech bolt travels backwards, loads the recoil spring by means of the connecting rod, cocks the hammer, and by means of the extractor extracts the empty shell case which is ejected through the ejection port.

After reaching the point of maximum retraction, the breech bolt, operated by the extending recoil spring, travels forward causing the carrier to lift the next round to the feeding position, and pushes the cartridge into the barrel.

During its final forward travel the breech bolt slide operates the falling block locking the breech bolt to the barrel and pushes downward the carrier.

The piston, pushed by the connecting rod sleeve linked to the breech bolt, re-enters the gas cylinder.

The firearm is now ready to fire again.

After the last round is fired, the breech bolt remains open, stopped by the cartridge latch body.

## **OPERATION**

#### ASSEMBLING THE BARREL

The Beretta A304 semi-automatic shotgun is factory packed with barrel separate from the stock – receiver – fore-end assembly.

Before proceeding with the assembly of the barrel to the stock – receiver – fore-end assembly, carefully read the "FUNCTIONING" chapter and check the main component parts in the "NOMENCLATURE" table.

Please note: The stock – receiver – fore-end assembly is packed with breech bolt CLOSED, hammer lowered and safety off (safety can be engaged only when hammer is cocked).

Make sure that safety is off (this happens when the red ring is visible). Check that the hammer is lowered by pulling the trigger.

If, for any reason, the breech bolt is OPEN, avoid to press the breech bolt release button and be careful to keep your fingers away from the ejection port.

Should the breech bolt release button be pressed in this condition, the breech bolt would jump forward and would stop only when the cocking handle hits the forward rim of the ejection port. This could damage both handle and receiver.

#### Assemble the barrel as follows:

- Check the barrel. Bore and cartridge chamber must be clean and free from obstructions.
- Check that magazine tube and receiver are empty by looking through the loading gate.
- Unscrew (anticlockwise) the fore-end cap from the stock receiver fore-end assembly.
- · Pull the fore-end off the magazine tube. 2
- Slide the piston off the magazine tube cap shaft.
- Insert the piston into the barrel gas cylinder.
- · Pull the cocking handle backward to bring the breech bolt in OPEN position. 5
- Slide the barrel tang into the receiver, holding the barrel and gas cylinder with the right hand to prevent dropping the piston. During this operation take care that the magazine tube cap shaft enters the piston hole as well as the gas cylinder one.
- Slide the barrel tang home into the receiver. 7
- Slide the fore-end home over the gas cylinder and magazine tube letting the magazine tube cap shaft protrude from the fore-end flange.
- Screw the fore-end cap home clockwise. Make sure that the cap is screwed up tight.
- Close the breech bolt by depressing the breech bolt release button, keeping your fingers away from the ejection port.

Warning: While depressing the breech bolt release button to close the breech bolt, make sure that the cut-off is not inadvertently engaged.

Should this occur, the breech bolt, unlocked from the cartrige lever, would be kept OPEN by the cut-off itself through the carrier.

In this case, always keeping your fingers away from the ejection port, close the breech bolt operating on the cut-off. 11

 Retract the breech bolt enough to allow a visual check of the cartridge chamber, which should be empty. Be careful where you point the firearm, even though it might not be loaded.
 Depress the trigger to lower the hammer. 12

#### LOADING THE FIREARM

Warning: Always keep your fingers away from the trigger whenever you do not intend to fire. Make sure that the gun is not already loaded by inspecting the cartridge chamber, the magazine tube and the receiver.

- Retract the breech bolt by means of the cocking handle until it hooks into OPEN position. 13
- Engage the safety by pushing the safety button until the red ring disappears (when the red ring is visible it indicates that the firearm is in FIRE position).

Please note: the safety can be engaged only when the hammer is cocked.

- Insert through the ejection port the first round into the cartridge chamber.
- Depress the breech bolt release button to lock the breech bolt, keeping fingers away from the ejection port.

Warning: Make sure not to engage the cut-off inadvertently.

 Insert through the loading gate the other rounds by placing each round on the carrier and pressing it down and forward into the magazine tube, until it engages the stop tooth.

### Warning: The FIREARM IS NOW LOADED AND READY TO BE FIRED

- To fire, disengage the safety and pull the trigger.
- When the last round has been fired, the breech bolt remains OPEN thus signalling that magazine is empty. 18
- Engage the safety and, if required, reload the firearm as indicated.

### USE OF THE CUT-OFF DEVICE

The cut-off device makes is possible to extract the live round from the cartridge chamber and lock the breech bolt OPEN, for safety reasons or to replace the round

into the chamber, while stopping at the same time the feeding of a new round from the magazine.

### Warning: THE FIREARM IS LOADED. Check that safety is engaged

- . Engage the cut-off by depressing the cut-off lever (round side). 19
- Retract the breech bolt by means of the cocking handle to extract the live round from the cartridge chamber and to eject it through the ejection port. At the end of its travel the breech bolt is hooked into OPEN position by the carrier locked by the cutoff device. Feeding from magazine is blocked.
- When safety conditions are restored, insert the extracted cartridge or another one
  of choice into the cartridge chamber.
- Keeping fingers away from the ejection port, depress the cut-off lever to lock the breech bolt.

### Warning: THE FIREARM IS LOADED AND READY TO FIRE AGAIN

To fire, disengage the safety and pull the trigger.

Please note: If the firearm is to function properly, it is recommended that the cut-off is used as described above. In particular, it must be remembered that the breech bolt, when held OPEN by the cut-off, can be closed only operating on the cut-off lever itself.

#### UNLOADING THE FIREARM

Warning: THE FIREARM IS LOADED AND READY TO FIRE. Keep your fingers away from the trigger whenever you do not intend to fire.

- · Pointing the firearm in a safe direction, check that safety is engaged.
- Engage the cut-off and retract to the end the breech bolt to extract and eject the chambered live round. 19, 20
- Keeping fingers away from the ejection port, depress the cut-off lever to lock the breech bolt.
- Pressing down the carrier and at the same time pushing against the cartridge in the magazine, depress the breech bolt release button to ease exit of the cartridges from the magazine tube.
- Check that magazine tube and receiver are empty. Then disengage the safety.
- Retract the breech bolt enough to allow a visual check of the cartridge chamber, which should be empty. Be careful where you point the firearm, even though it might not be loaded. Depress the trigger to lower the hammer.

## DISASSEMBLY

#### BARREL

Warning: Ensure that the firearm is unloaded (cartridge chamber, magazine tube and receiver empty).

If not, unload the firearm by operating as described in the chapter "UNLOADING THE FIREARM". Check that hammer is lowered.

#### Disassemble the barrel as follows:

- · Retract the breech bolt until it hooks into OPEN position. 13
- . Unscrew (anticlockwise) the fore-end cap from the firearm. 9
- With the left hand, hold down the barrel and with the right hand slide fore-end off the magazine tube.
- Grasping the barrel at the height of the gas cylinder, hold the piston inside the gas
  cylinder with the right thumb to prevent dropping it; slide barrel assembly forward
  off the stock-receiver assembly.
- · Slide the piston off the gas cylinder. 4

#### **BREECH BOLT**

- Holding the cocking handle with the index or middle finger of the left hand, depress
  the breech bolt release button and allow the breech bolt to slide slowly to a rest. 23
- . Extract the cocking handle from the breech bolt slide. 24
- Holding the stock-receiver assembly on a table with the loading gate facing upward, slide the operating rod sleeve forward off the magazine tube to extract the breech bolt assembly from the receiver.
- The breech bolt assembly, no longer held by the operating rod, will divide into: 26
  - Breech bolt with firing pin, locking block, extractor, springs and pins.
  - Breech bolt slide with connecting rod and pin.

### TRIGGER PLATE

- Engage the safety (the hammer is already cocked). Depress the carrier stop pushbutton. 27
- Detach the trigger plate retaining pin by pressing it with a drift or some other pointed object. 28
- Keeping the breech bolt release button pressed, extract the trigger plate by levering on the trigger guard with a forward and downward movement. 29 FURTHER DISASSEMBLING OF THE FIREARM IS NOT RECOMMENDED. THIS SHOULD BE CARRIED OUT BY A GUNSMITH.

# **CLEANING AND OILING**

When combustion residues, grease or dirt particles have accumulated in the action, it is recommended to disassemble, clean and lubricate the firearm.

Cleaning and lubrication of the shotgun after use is the best guarantee for protection of the parts against corrosion deriving from combustion residues and from use of the firearm in humid and saline environment.

#### BARREL

- After use, clean accurately the barrel bore by passing a swab through it to remove combustion residues.
  - If necessary use a cleaning rod with bronze brush and/or a rag soaked in Beretta gun oil or other similar oil.
  - Clean accurately also the barrel tang locking shoulder.
- · Pull a clean soft cloth through the barrel bore.
- Lightly lubricate the barrel bore by pulling through it a soft clean cloth dipped in Beretta gun oil or other similar oil.

### GAS CYLINDER, PISTON, MAGAZINE TUBE CAP SHAFT

Please note: The particular composition of some shotshells' powder can generate a strong deposit of combustion residues.

The parts of the shotgun which, coming into contact with the gases, are more affected by the combustion residues are the gas cylinder (inside) and the piston with its bushing.

The free movement of the piston inside the gas cylinder is essential to the good functioning of the firearm.

- After use, check that piston slides freely inside the gas cylinder.
   If necessary carefully clean the inner side of the gas cylinder with a bronze brush sprayed with Beretta gun oil or other equivalent oil.
- When all combustion residues are removed, clean the inside of the gas cylinder with a soft cloth.
- If necessary, carefully clean the piston and check that the piston bushing can move freely in its housing.
- . If necessary also clean the magazine tube cap shaft.

Please note: Do not oil these parts.

#### BREECH BOLT ASSEMBLY

- At the end of the hunting season or after a high number of shots (approximately 500), clean accurately these parts with a small brush and Beretta gun oil or other similar oil.
- Dry carefully with a soft cloth and lightly oil the parts with Beretta gun oil or an
  equivalent oil.

#### TRIGGER PLATE

· Operate as described for the breech bolt assembly.

#### RECEIVER

- · Operate as described for the breech bolt assembly.
- · Lightly oil also the slide guides of the breech bolt inside the receiver.

### **MAGAZINE TUBE**

- If necessary, clean the outside of the magazine tube with a soft cloth sprayed with Beretta gun oil or an equivalent one.
- . Dry carefully with a soft cloth and lightly oil the parts.

# MAGAZINE CAPACITY

The magazine tube capacity of the A 304 (wich has a three-round capacity) has been limited to two rounds by the application of a plug in order to comply with the sporting gun laws in force in Italy and in other countries.

This plug, which is factory mounted, reduce the fire capacity of the A 304 to no more than three rounds (two in the tube, one in the chamber).

In some areas shooting is allowed only with shotguns having a fire capacity of no more than two rounds.

To use the A304 in these areas, therefore, it will be necessary to limit the magazine capacity to only one round. This operation must be carried out by a gunsmith.

To reduce the magazine tube capacity to one round:

 Unscrew (anticlockwise) the magazine tube cap taking care to depress the cap locking spring with a peg or a drift at the beginning of the unscrewing operation.

Warning: the magazine tube spring, when mounted, is in a compressed condition (the spring pushes the plug against the magazine tube cap).

- Insert a second plug on the first one (the solid side into the hollow side).
- Screw on (clockwise) the magazine tube cap on the tube until the spring head is in place in its hole, so as to lock the cap.

To increase the magazine tube capacity from two to three rounds, in the countries where it is allowed, simply remove the plug.

## REASSEMBLY

#### TRIGGER PLATE

- Operate in the reverse order to what is described in the chapter "DISASSEMBLY" making sure that the hammer is cocked, the safety engaged, the carrier stop pushbutton depressed.
- Insert the trigger plate retaining pin ensuring that the trigger plate hole is centered on the receiver hole.

### **BREECH BOLT**

- . Reassemble the breech bolt slide with connecting rod to the breech bolt. 32
- . Insert the operating rod into the breech bolt slot. 33
- Depress (if it is not already depressed) the carrier stop push-botton.
- Holding the stock-receiver assembly on a table with the ejection port facing
  upward, slide the operating rod sleeve on the magazine tube (the breech bolt rests
  on the operating rod) and partially insert the breech bolt inside the receiver.
- Holding the stock-receiver vertical, slide the operating rod sleeve downward, compressing the recoil spring, until the breech bolt hooks into OPEN position.

Please note: To carry out with ease the described operation, the head of the breech bolt connecting rod must rest in the recoil spring guide housing.

This will easily easily expert when the connecting rod is perfectly easily.

This will easily occur when the connecting rod is perfectly coaxial to the breech bolt and centered in the cocking handle slideway of the receiver.

Insert the cocking handle into the breech bolt slide and push it until it clicks home.

#### BARREL

Operate as described in the chapter "ASSEMBLING THE BARREL".

# MOBILCHOKE® TUBES

Warning: Beretta Mobilchoke® SP (Steel-Proof) screw-in choke tubes have been specially designed to take the punishment of non-toxic steel shot. For best results with steel shot, Beretta recommends a modified choke. Full choke constriction when using steel shot does not increase pattern density and often times distorts normal pattern density associated with lead.

Remember that standard old type Beretta Mobilchoke® tubes were not designed for steel shot.

Before shooting steel shot cartridges check that the Beretta Mobilchoke® tubes are marked SP.

- Unscrew (anticlockwise) the choke using the multiple spanner or the Beretta knife (models 2163, 2164, 2165, 2166).
- Carefully clean the choke housing. If necessary, use a swab sprayed with Beretta gun oil or an equivalent oil.
- Insert the desired choke into the choke housing, checking that it is perfectly clean inside and outside. 36
- Manually screw on (clockwise) the choke and tighten it with the multiple spanner or the Beretta special knife. 37, 35

Please note: Under safety conditions (cartridge chamber empty, magazine empty, receiver empty), check whether the choke has worked loose while hunting.

Should this happen, the choke must be tightened to the end again.

Warning: Remember that the use of a Mobilchoke® barrel without Mobilchoke® tube inserted is not allowed. Shooting without choke tube is dangerous and can damage the barrel internal screw thread irreparably.

# STOCK DROP AND CAST MODIFICATION

The Beretta A304 semi-automatic shotgun is factory set with a heel drop of 55 or 60 mm. and cast-off (right-handed shooters).

The components which determine the drop and the cast are: 38

A Receiver-stock spacer made of technopolymer.

B Stock metal plate.

Both the spacer A and the plate B are designed to secure two different drops with cast-off or with cast-on (for left handed shooters) depending on how they are assembled.

The drop/cast they are securing can be read directly on the spacer and on the plate (with stock to barrel muzzle direction).

#### STANDARD SPACER AND PLATE

Α	В		
C 55 - DX	55 - DX	=	55 mm drop, cast-off
C 55 - SX	55 - SX	=	55 mm drop, cast-on
C 60 - DX	60 - DX	=	60 mm drop, cast-off
C 60 - SX	60 - SX	=	60 mm drop, cast-on

Letter "C" on the A spacer means "caccia" (field model).

On request, different sets of spacer (A + B) can be supplied.

Stock drop and cast modification must be carried out by a gunsmith. (Use a 13 mm hexagonal tube spanner, after removing the recoil pad with a medium sized cross-point screwdriver).

# **RECOIL PAD**

The standard plastic butt-plate can be replaced with a rubber recoil pad easily and without any adjustment. By assembling rubber recoil pads of different size it is possible to modify the length of pull.

This operation must be carried out by a gunsmith.

# REVERSIBLE SAFETY BUTTON

The safety button is factory assembled to be engaged pushing it from the left to the right side of the firearm.

This because it is easier to disengage the safety, when ready to fire, pushing it with the index finger of the right hand, from the right to the left side.

For the lef-handed shooters it will be easier to disengage the safety in the opposite way.

By assembling the safety button inverted, the safety is engaged pushing from the right to the left side of the firearm and disengaged in the opposite way by using the index finger of the left hand.

### To invert the safety button:

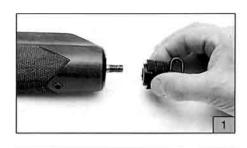
Cock the hammer.

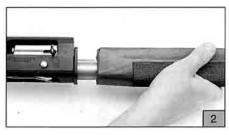
Keeping the safety plunger depressed with a drift or a little knife, push the safety out of its housing (from the right to the left side of the firearm).

**Warning:** The safety plunger spring, when mounted, is in a compressed condition. Take care not to lose the plunger and its spring.

Insert the safety inverted into its housing from the left to the right side of the firearm and click it into position keeping the safety plunger depressed.

This operation must be carried out by a gunsmith.























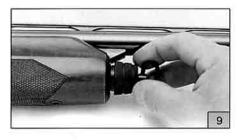








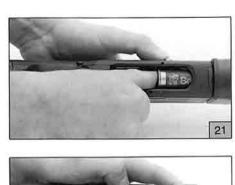


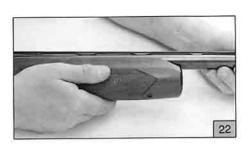


















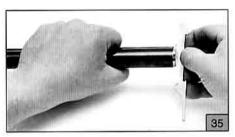




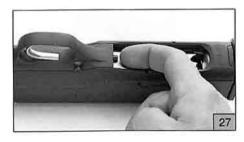






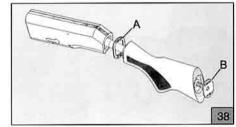




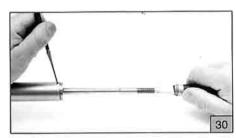












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