



Tenco Srl  
Via Arbora 1  
16036 Avegno

## SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556  
E.mail [info@tenco.it](mailto:info@tenco.it)  
Web [www.tenco.it](http://www.tenco.it)

# MAINTENANCE AND INSTRUCTION MANUAL



**Tenco - s. r. l.**

*Via Arbora, 1*

*16030 Avegno (GE) - ITALY*

*Tel. +39 0185 79556 - Fax +39 0185 79412 - E-mail: [info@tenco.it](mailto:info@tenco.it)*

*Language: english*





## Table of contents

DICHIARAZIONE DI CONFORMITA' .....	3
CHAPTER 1 – GENERAL INFORMATION .....	4
1.1 USE AND PRESERVATION OF THE INSTRUCTION MANUAL .....	4
1.2 RESPONSIBILITY OF THE MANUFACTURER.....	4
1.3 GENERAL SAFETY REGULATIONS .....	5
1.4 GENERAL SAFETY RECOMMENDATIONS .....	5
1.5 NORMAL USE OF THE MACHINE.....	6
1.6 ENVIRONMENTAL CONDITIONS FOR INSTALLATION .....	6
1.7 EMERGENCY STOP .....	7
1.8 WARRANTY .....	7
1.9 RISKS ANALYSIS.....	8
CHAPTER 2 – INSTRUCTIONS OF USE .....	9
2.1 POSITIONING AND PLUG IN.....	9
2.2 WORKING SEQUENCES .....	9
2.3 CAPPING TURRET – IMAGE 1.....	10
2.4 FRONT VIEW – IMAGE 2 .....	12
2.5 WORK POSITION .....	13
CHAPTER 3 – 4 ROLLERS NO-CAP NO-ROLL ROPP CLOSING HEAD.....	15
3.7 CAPPING HEAD CHANGE OF FORMAT .....	28
CHAPTER 4 – ELECTRICAL WIRING DIAGRAM.....	29



Tenco Srl  
Via Arbora 1  
16036 Avegno

SEMIAUTOMATIC  
ROPP CAPPER

Tel. +39 0185 79556  
E.mail [info@tenco.it](mailto:info@tenco.it)  
Web [www.tenco.it](http://www.tenco.it)

## DICHIARAZIONE DI CONFORMITA'

---

*EC DECLARATION OF CONFORMITY*



Noi / We

**Tenco s.r.l.-Unipersonale**

*VIA ARBORA, 1 - 16030 AVEGNO (GE) - ITALY*

**dichiariamo sotto la ns. responsabilità che: / declare under our own responsibility that:**

Avvitatrice pilferproof a testa  
discendente

*Semiautomatic ROPP capper*

Avvitatrice semiautomatica

N. di serie 15/...

È conforme alla direttiva europea

*Complies with the european directive*

2006/42/CE

2004/108/CE

2006/95/CE

Data: / Date:

\_\_\_\_\_

Firma / Signature

Il Direttore / The  
Managing Director

\_\_\_\_\_



Tenco Srl  
Via Arbora 1  
16036 Avegno

## SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556  
E.mail [info@tenco.it](mailto:info@tenco.it)  
Web [www.tenco.it](http://www.tenco.it)

## CHAPTER 1 – GENERAL INFORMATION

---

### 1.1 USE AND PRESERVATION OF THE INSTRUCTION MANUAL

This instruction manual is directed to the user, owner and maintenance person responsible, that are obliged to read this instruction manual.

The instruction manual serves to describe the use of the machine, its technical features, to give instruction for installation, adjustment and use.

The instruction manual has to be considered as part of the machine and it has to be preserved up to the dismantling of the machine.

The company TENCO S.r.l. Unipersonale reserves the right to update the production and the instruction manual without being obliged to update the previous production and instruction manual, except for those cases that TENCO S.r.l. Unipersonale considers proper.

If necessary, the User can contact the manufacturer in order to receive information.

In case of machine sale, the User has to enclose the relevant instruction manual.

### 1.2 RESPONSIBILITY OF THE MANUFACTURER

Modifications or removal of the safety doors and of the safety devices foreseen for the system cause a sudden loss of the warranty.

Tenco S.r.l. Unipersonale is not responsible for the injuries occurred to person, damages to material or other things caused by:

- incorrect use or misuse of the machine
- tampering of the safety doors and of the safety devices of the TENCO machine
- introduction of the upper limbs or of the other body parts in the working area during the working phases with the machine turned on.



## 1.3 GENERAL SAFETY REGULATIONS

The machine can be cause of risk if used:

- in incorrect way
- without respecting the warnings and the instructions for use, described in this instruction manual
- by not skilled and trained personnel.

If you have to carry our repair or maintenance works by removing the safety devices, always be sure that the power sources have been de-activated.

For this reason cut off the electric system by turning the main electric switch placed on the electric panel to "0".

Once the works have been accomplished, it's strictly important to fit the safety devices again in their places.

Every modification or alteration introduced on the machine by the operator or/and by the maintenance person responsible is forbidden for safety reasons. The company Tenco S.r.l. Unipersonale disclaims all responsibility in case of not authorized modifications.

## 1.4 GENERAL SAFETY RECOMMENDATIONS

The machine has to be used by a skilled operator.

He has to be able to:

- operate with the machine in normal conditions, by means of the foreseen operating commands
- carry out set-up and adjustment operations and some ordinary maintenance works.

The working area has to be cleaned with machine stopped and turned on.

The maintenance and repair works have to be carried out by skilled personnel, in particular:

- the mechanical interventions have to be carried out by the mechanical maintenance operators, that absolutely have not to operate on the electric system; the interventions on the electric installation have to be carried out by the electrical maintenance operators and not under tension.



Tenco Srl  
Via Arbora 1  
16036 Avegno

## SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556

E.mail [info@tenco.it](mailto:info@tenco.it)

Web [www.tenco.it](http://www.tenco.it)

During normal use of the machine is strictly forbidden to remove the safety devices and/or the safety doors. Once the maintenance and repair works have been accomplished, the removed safety devices or the opened safety doors have to be brought in their original position.

Do not put any tool, container or other material on the movable parts or on the moving parts.

We advise the operator to wear suitable clothes according the working environment and to use protective goggles and gloves in case of accidental breaking of glass containers, due to malformations or to adjustment errors caused by the operator.

### 1.5 NORMAL USE OF THE MACHINE

The machine is a semiautomatic capping machine for closing of glass or plastic containers with screw caps, after adjustments according to the change of size.

The capping machine cannot work if :

- there are outsiders in the working area
- the emergency button is pressed
- the safety devices are modified, tampered with, disconnected or removed.

The machine has not designed to be used on a production line with other machines.

### 1.6 ENVIRONMENTAL CONDITIONS FOR INSTALLATION

In the place where the machine will be installed there have not to be jets of water or workings foreseeing liquid jets. The recommended ambient temperature is from 10°C to 25°C; besides the machine has to be positioned on a stable workbench or holding structure, having an height of min. 1 meter.



## 1.7 EMERGENCY STOP

The emergency stop red button is placed on the machine base

Press this push button in order to:

- Avoid injures to person;
- Reduce damages to the machine or to the production in progress.

Disengaging the button, after an emergency stop, does not start the machine.

After an emergency stop, proceed as follows:

- Eliminate the cause of emergency stop;
- Pull the emergency button;
- Press the start push buttons to start the production cycle.

## 1.8 WARRANTY

The Manufacturer guarantees that the equipment to which these documents refer has been tested and that the established test results have been achieved. The warranty period shall last 12 months, beginning on the date of delivery of the equipment (as indicated in the transport document), except as otherwise agreed upon between the Parties.

The Manufacturer guarantees the equipment to be free from defects in materials and workmanship. Damage deriving from transport not carried out by transport means of the Manufacturer, from improper maintenance, failure of electrical equipment, improper use or negligence, or adjustments/repairs carried out by service personnel not duly authorized by the Manufacturer or in any case beyond the control of the Manufacturer shall NOT be covered by this warranty.

The warranty cannot be transferred by the initial owner of the product to third parties.

During the applicable warranty period, the Manufacturer will repair or replace free of charge any warranted parts that prove defective. For these operations to be carried out, the equipment shall have to be transported to the Manufacturer, who shall not be responsible for any transport charges. The Manufacturer shall not



Tenco Srl  
Via Arbora 1  
16036 Avegno

## SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556

E.mail [info@tenco.it](mailto:info@tenco.it)

Web [www.tenco.it](http://www.tenco.it)

repair the equipment during the warranty period at the Customer's premises, except as otherwise agreed upon between the Parties.

After the above specified period, this warranty shall expire

The Manufacturer shall in no event be liable for any direct, consequential, incidental, indirect or special damages caused to people or property by original defects of the equipment, equipment failure, or subsequent forced stoppage in the use of the equipment.

The Manufacturer shall not be liable for filling defects if, at the time of equipment construction, the Client has failed to provide a full sampling of containers and caps required in order to carry out the necessary tests.

### 1.9 RISKS ANALYSIS

The security and the reliability of the control system is assured by the certification of the used components.

The working cycle foresees carrying out of precise operative sequences, described in the instruction manual.

The shape and the supporting points facilitate the positioning and assure stability, avoiding risks of fall. The moving parts of the machine, driven by a motor, are isolated and protected, thanks to metal sheet and polycarbonate safety guards.

The machine start is possible by means of no. 2 push buttons placed as to constrain the operator to use both hands, avoiding to introduce them in dangerous zones where there are moving parts. The starting of the machine can be only voluntary.

The machine has not noise pollution and the noise degree survey is not necessary.

The machine parts must have smoothed profile and must not have cutting edges.



Tenco Srl  
Via Arbora 1  
16036 Avegno

## SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556  
E.mail [info@tenco.it](mailto:info@tenco.it)  
Web [www.tenco.it](http://www.tenco.it)

## CHAPTER 2 – INSTRUCTIONS OF USE

---

### 2.1 POSITIONING AND PLUG IN

Position the capping machine on a stable and fixed surface. The capping machine has to be levelled, using the adjustable feet of the machine.

Connect the machine to the power mains of the workshop, 220 V 50 Hz with a plug CEE 17. Power on the machine, by turning the main electric switch to "I". Press at the same time both push buttons (item 32) and check if the head rotates properly; if the rotation direction is clockwise the machine is correctly connected, otherwise cut out the electric tension and reverse the phases.

The capping machine is supplied already set-up and adjusted for a certain type of container or cap as requested by customer (in case the customer sent samples of bottle and cap).

### 2.2 WORKING SEQUENCES

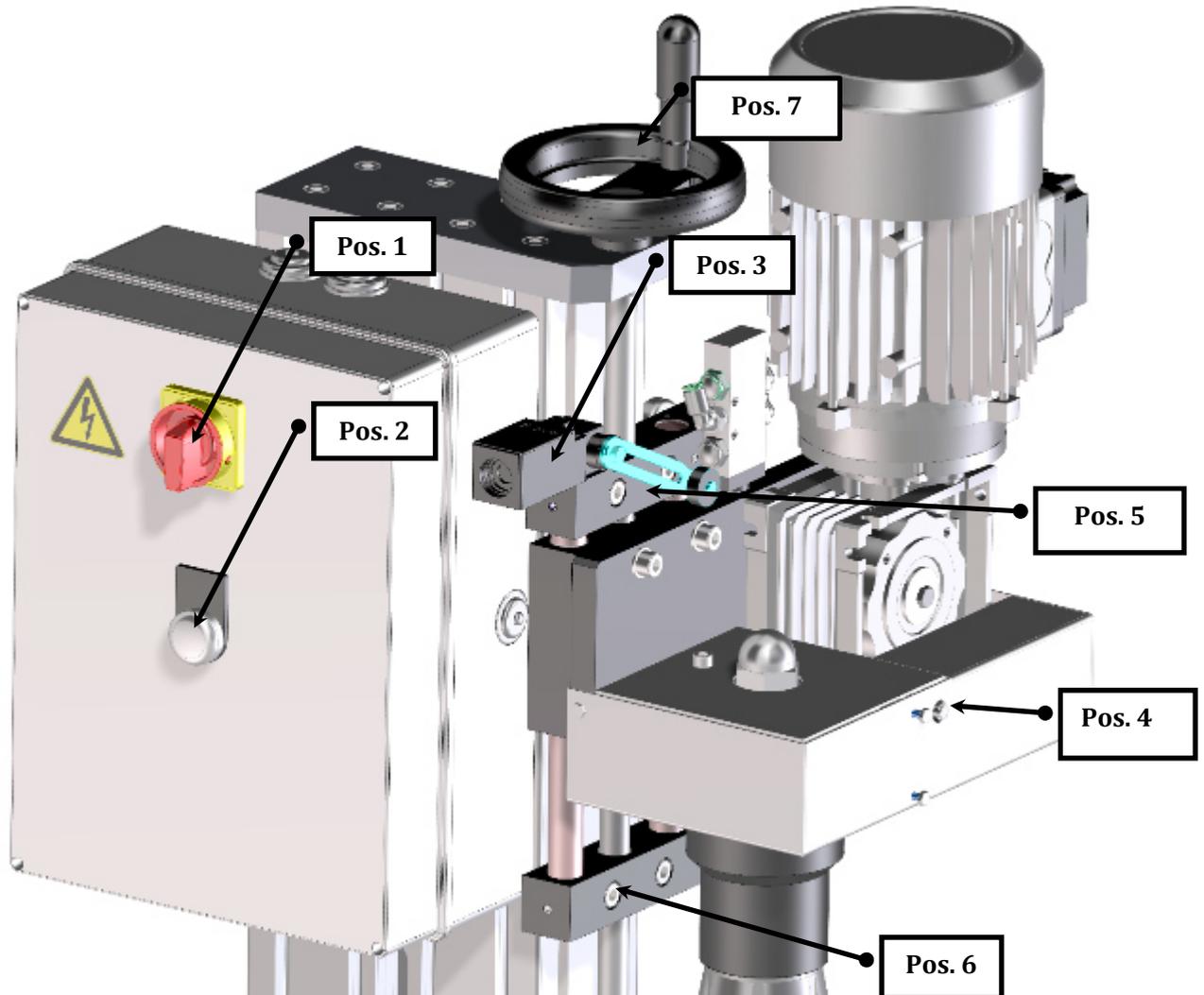
Put the container to be processed on the centering device and put the ROPP cap on the bottle neck, press at the same time both electric push buttons. The whole capping assembly goes down towards the container and perform the cap closure. The operator must maintain the pressure of both buttons during the cycle. At the release, the machine stops.

At the end of the cycle, the capping assembly lifts up and stops automatically by means of the limit switch. During the whole cycle the operator must press the buttons at the left / right base sides. Remove the already processed container and position the next one, by repeating the above listed working sequences.

The capping machine is supplied with an adjustment system in order to fit the capping head according to the different dimensions of the containers to be processed.



### 2.3 CAPPING TURRET – IMAGE 1





Tenco Srl  
Via Arbora 1  
16036 Avegno

## SEMIAUTOMATIC ROPP CAPPER

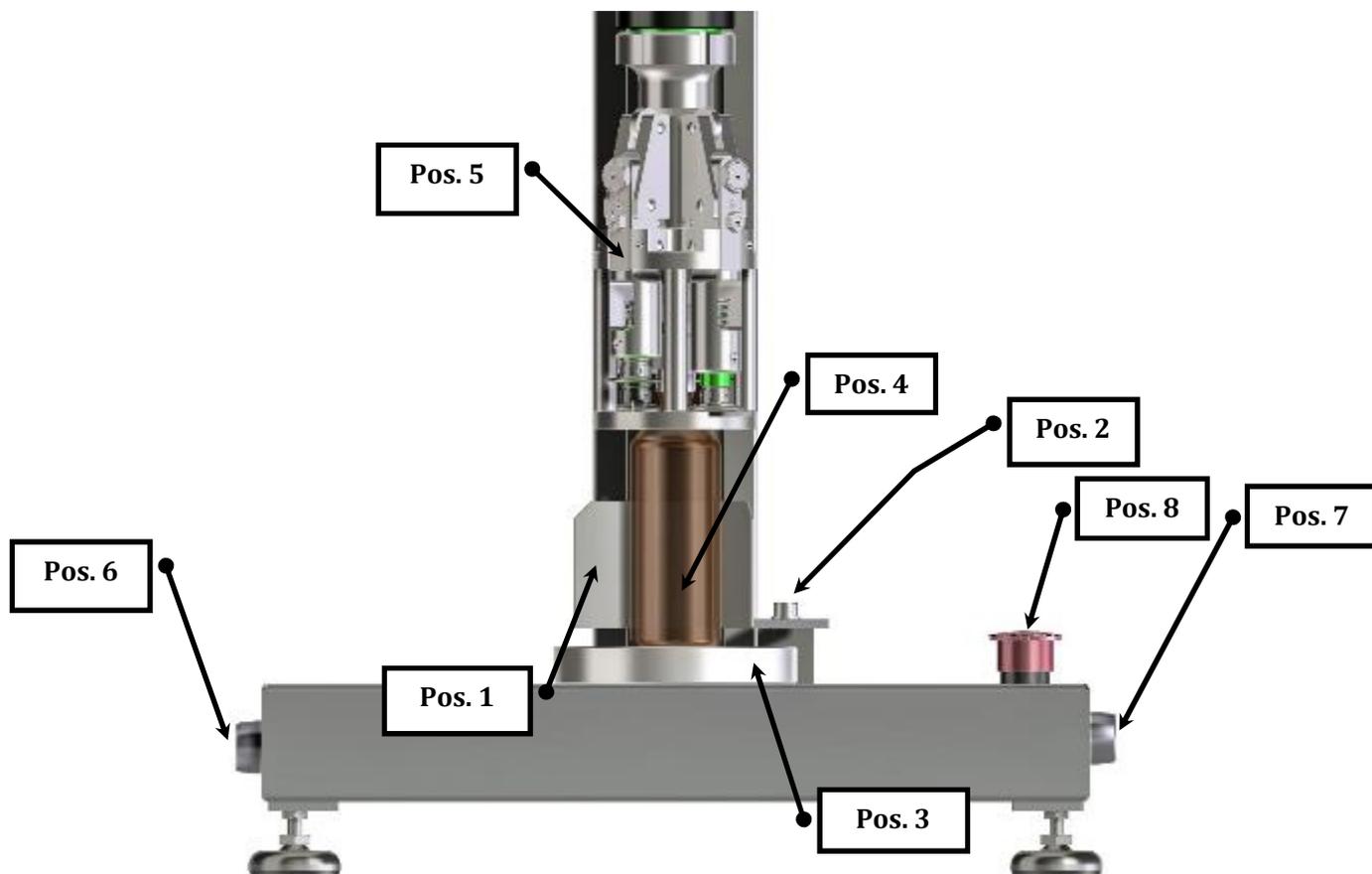
Tel. +39 0185 79556

E.mail [info@tenco.it](mailto:info@tenco.it)

Web [www.tenco.it](http://www.tenco.it)

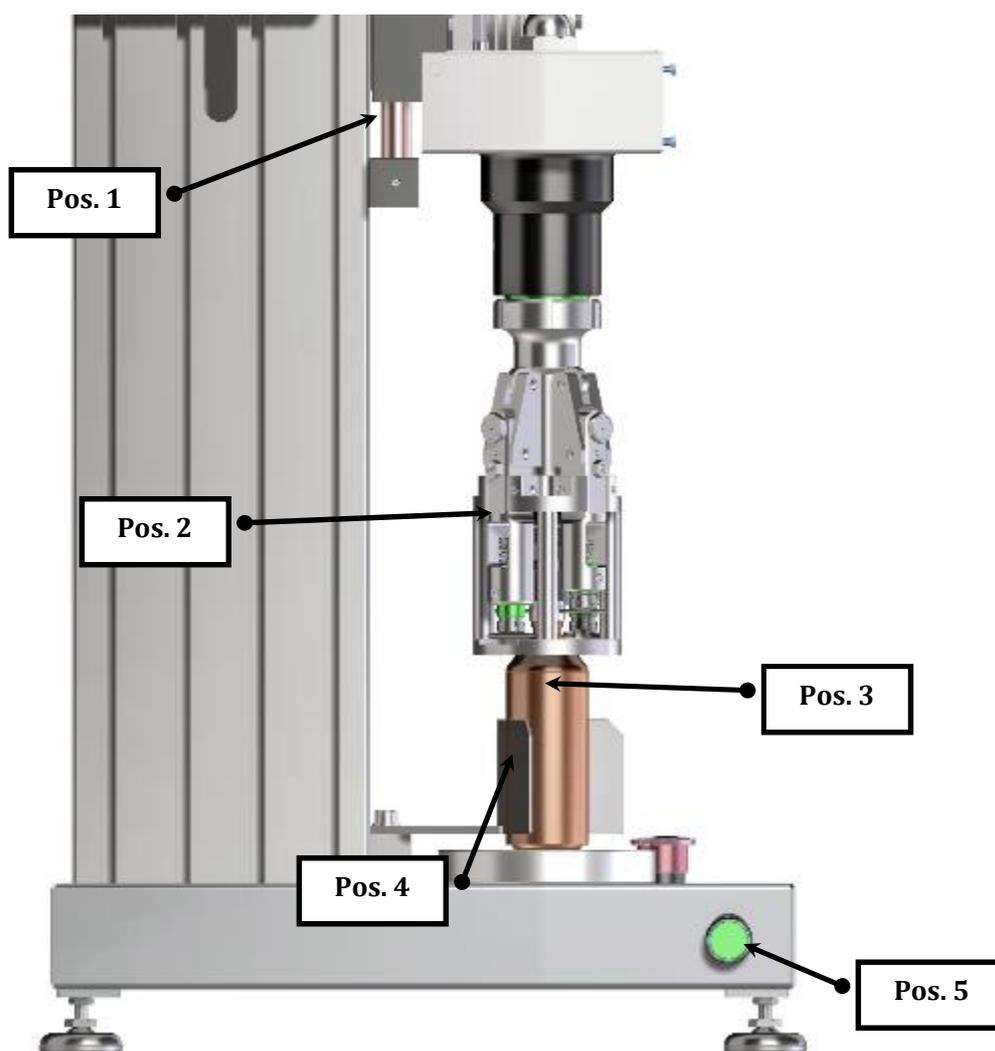
POSITION	DESCRIPTION
1	ON / OFF main switch.
2	VOLTAGE PRESENCE led.
3	MICROSWITCH (end of cycle). The microswitch stops the machine at the end of the cycle, once the closing head has returned to the upper position.
4	SAFETY MICROSWITCH. The microswitch is activated only if the plexiglass safety screen is mounted.
5	UPPER PLATE. Loose the two M8 screws with hexagonal head in case of height regulation. Tighten before starting production.
6	LOWER PLATE. Loose the two M8 screws with hexagonal head in case of height regulation. Tighten before starting production.
7	REGULATION WHEEL. Loose the four M8 screws at the positions 5 and 6 before turning the wheel clockwise or anticlockwise for adjusting the height of the capping system.

## 2.4 FRONT VIEW – IMAGE 2



POSITION	DESCRIPTION
1	Container centring device
2	Screw M6 with hexagonal head
3	Bottle PVC support plate
4	Bottle
5	ROPP closing head
6	Left button
7	Right button
8	Emergency button

## 2.5 WORK POSITION

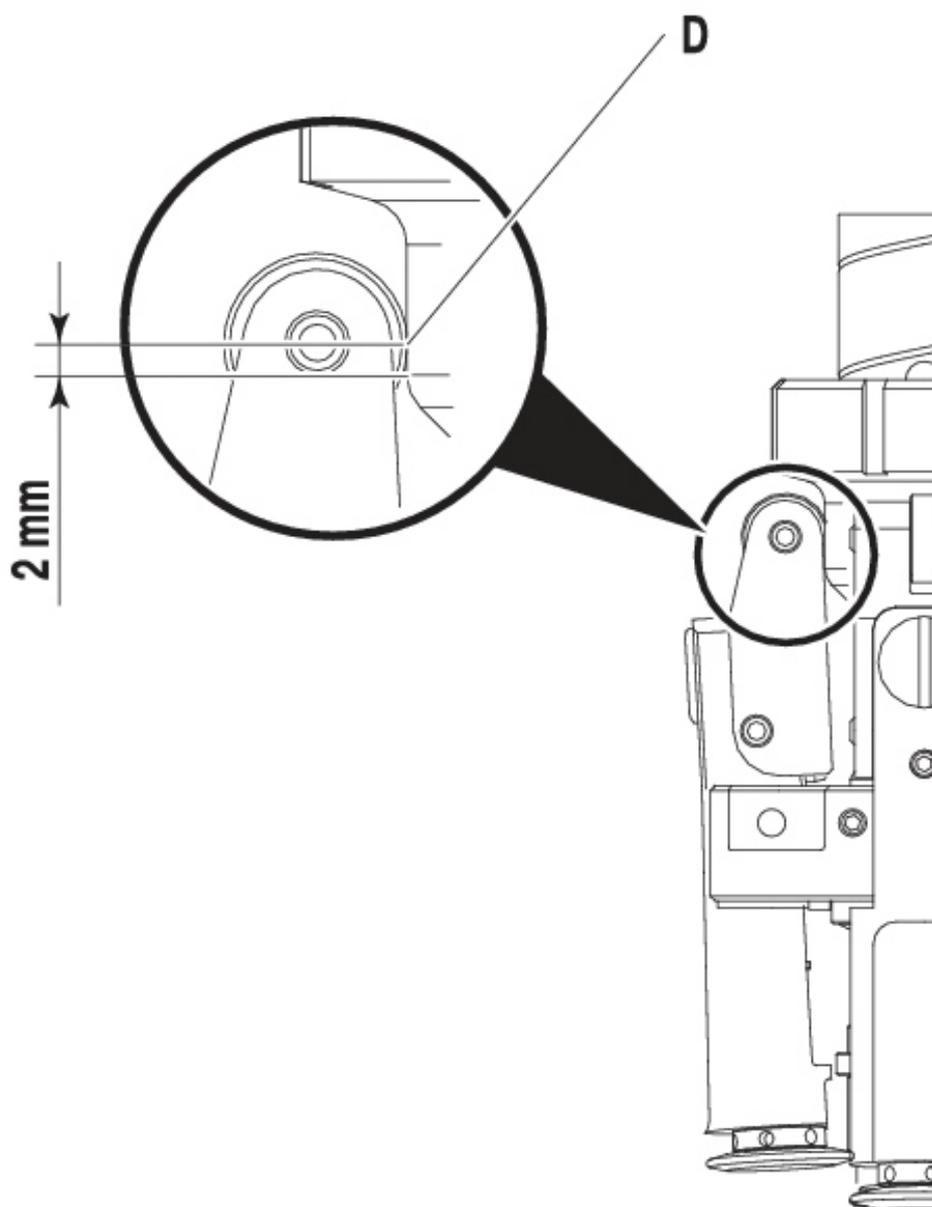


By pressing contemporarily both stat buttons at the sides of the base (Pos. 5), the capping unit performs a descending / ascending movement. During the descending movement, the closing head (Pos. 2) goes in contact with the container (Pos. 3). **NOTE.: The ROPP capper must be manually positioned on the bottle neck. The bottle must be on the closing head axis. Use the centering device (Pos. 4) to achieve a correct positioning.**



## SEMIAUTOMATIC ROPP CAPPER

Once the head goes in contact with the cap the vertical load spring, inside the capping head assembly, is compressed and the rollers start moving toward the cap. When the capping turret reaches the lower position (Pos. 1), the closing head must be in the condition shown below:





Tenco Srl  
Via Arbora 1  
16036 Avegno

## SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556  
E.mail [info@tenco.it](mailto:info@tenco.it)  
Web [www.tenco.it](http://www.tenco.it)

### CHAPTER 3 – 4 ROLLERS NO-CAP NO-ROLL ROPP CLOSING HEAD

---





## SETTING AND ADJUSTMENT OF THE CAPPING HEAD

To achieve the correct performance of the capping head M2000 a periodic maintenance as well as its accurate setting is indispensable.

A first and complete setting is given at the time of the final test of the capping head according to the the specific characteristics of the cap to be applied or according to specific Customer requirements.

Read this Manual accurately and carefully observe the instructions therein in order to guarantee the optimal efficiency of the equipment.

---

### WARNING

*Any modification not in line with the following instructions could lead to serious troubles.  
Our Company declines all responsibilities deriving from the non-observance of the following instructions.*

---

## 1 GENERAL DESCRIPTION

The capping head is a compact group entirely made from stainless steel and mountable on the capping machine turret. The chuck diameter and ring nut to fix the capping head to the turret conform to the existing standards (M52x1.5) Some elements of the capping head vary dimensionally according to the size and type of cap to be applied, so that the full range of caps from 18mm dia to 43mm dia can be applied as well as some special caps:

- diameter 18 + 25mm miniature series
- diameter 25 + 35mm standard series
- diameter 38 + 43mm large series

To reduce to a minimum the maintenance operations, the free running shaft is mounted on roller bearings.

The capping head is mounted at the end of a vertical shaft and is completed at its lower end by a particular pressure-block.

This pressure block is fitted with a "NO-CAP NO-ROLL" device which stops the threading and tuck-under operation in the absence of the cap.

On the vertical shaft is mounted the cross piece which carry the four arms: two for the threading rollers and two for the tuck-under rollers.

The arms which carry the rollers are centrally balanced between two springs and are fitted in the upper end with cam-followers.

The cam followers, under the push of a conical cam, transmit through the arms, the radial load to the threading and tuck-under rollers.

The pressure or radial load of the threading and tuck-under rollers is adjustable by acting by means of a threaded bush, on the load of the springs situated at the extremities of the threading and tuck-under arms.

The lower end of the capping head carries, fixed by four columns, a centering plate which guides the capped bottle under the pressure-block to execute the application of the cap on the bottle finish.

## 2 MOUNTING/DISMOUNTING THE HEAD ON THE CAPPING MACHINE (Fig.1)

### Mounting

- Place yourself with the capping head vertically in line with the head carrier shaft **B**.
- Thread the ring nut **D** thus fixing the head to the head carrier shaft **B**.
- Then, with the special key **E** tighten and firmly lock the ring nut **D**.

### Dismounting

- Loosen the ring nut **D** with the key **E** supplied with the tool-kit.
- Completely unscrew the ring nut **D** by hand and remove the capping head.



Lift the machine so that the load on the capping inner spring is now released.  
By operating intermittently the machine, turn the capping head intermittently and turning by hand the bottle bring the second thread rollers in line with the reference mark on the bottle.

Lower the machine thus bringing the arms in the closed position and repeat the above described operations.

#### 5 HEIGHT ADJUSTMENT OF THE TUCK-UNDER ROLLERS(Fig.3)

With the capping head mounted on the machine, insert the bottle with on top the part of the cap **A** previously cut and bring the center **C** of the tuck-under roller in line with the the reference mark on the bottle (Fig.3)

Lower the machine so that the roller arms close. In this position the cam follower **D** must be 2[mm] upward on the cylindrical profile of the cam. At this point the capping inner spring is completely loaded and its load should not allow the bottle to rotate or even be removed.

Also at this point, verify that the tuck-under roller is 0.2-0.3 [mm] below the neck of the bottle finish **H** (tuck-under line). Actually, this gap is the thickness of the skirt of the cap and therefore can vary according to the type of the cap to be applied.

In the case of caps with a shaped skirt or with particular metal thickness, it is in any case necessary to check this dimension by trial and error (capping a few bottles and observing the final tuck-under results).

To carry out any adjustments it will be necessary to loosen the safety grub screw **I** thus freeing the bush of the tuck-under rollers. Screw (clockwise) or unscrew (anti-clockwise) by introducing a long pin in the cavities **L**.

Once the adjustments are completed firmly lock the safety grub screw **I**.

---

#### WARNING

*Make sure that before putting back safety grub screw **I** it is dipped in medium density "loctite" yellow paste.*

---

#### 6 ADJUSTMENT OF ARMS RADIAL LOAD

Normally the radial loads of the arms are set according to the technical datas supplied by the manufacturers of the caps. However, if there should be anomalies in the formation of the thread on the cap on application, it is possible to carry out further adjustments.

First of all it is necessary to check that the load on the spring of each arm is the same.

To measure this load it is necessary to hook the dynamometer to the arm at **M** (fig.3) and putting one hand on the fulcrum **N** of the lever to detect any small movement of the arm itself.

Pull hard on the dynamometer thus moving the arm towards yourself and read on the dynamometer the load of the spring the moment you feel any movement of the arm.

To adjust the radial load act on the screw **O**. Pay particular attention when screwing or unscrewing this screw because any little variation means a big load variation of the spring.

After verifying that all the arms are adjusted to the same load, carry out a few applications of the cap on the bottle thus verifying that it conforms to the technical specification.

If the quality of the application is acceptable, then it means that the loads on the arms are correct. If negative, repeat the above described adjustments.

At this stage, by means of a "torquetester" verify that the effort to unscrew the cap is according to one's own requirements.



If this does not correspond modify the radial load of the arms bearing in mind that too much load can deform the cap (cut thread and/or irregular tuck-under) during the application of the cap on the bottle.

It is therefore necessary to carry out several trial and error applications until the right compromise is obtained which agrees with Customer's requirements.

#### 7 REPLACEMENT OF THE ROLLER (Fig.4)

Prior to removing the roller to be replaced check with a caliber the dimension **X (Fig.4)** between the arm and the flat part of the roller to be replaced.

Remove the centering plate **A (Fig.4)** by unscrewing the four screws **B**.

Remove the safety grub screw **C** and completely unscrew the bush **D** thus freeing from the arm the whole roller group.

After this, compress the spring and remove the washer (spring retainer).

Now it is possible to remove the spring **E**, the bush **D** and the roller **G**.

Replace the roller, assemble the bush and retain the spring by means of its washer and screw the whole group into the arm respecting the distance **X** previously taken between this and the flat part of the roller.

Once this operation has been completed firmly lock the safety grub screw **C**.

---

#### WARNING

*Make sure that before putting back safety grub screw **C** it is dipped in medium density "loctite" yellow paste.*

---

#### CHARACTERISTIC DATAS

##### MAIN SPRING VERTICAL LOAD

---

###### Non-Carbonated liquids

80 + 120 kg (  $\varnothing = 22 + 25$  mm)

110 + 140 kg (  $\varnothing = 28 + 31.5$  mm)

---

###### Carbonated liquids

180 + 220 Kg (  $\varnothing = 25 + 35$  mm)

---

##### MAIN SPRING STRENGTH

---

Load Wire $\varnothing$	Kg mm
30	4
80	4.5
100	5
140	5.5
180	6*
200	6.2*

\*Values for pressure holding sealing with mobile pressure-block.

##### ROLLERS RADIAL LOAD

---

###### Threading Rollers

8 + 13 [Kg]

---

###### Tuck-under rollers

6 + 10 [Kg]

---

These values are starting values and can be varied according to the results to be achieved.



## 9 PRESSURE-BLOCK DESCRIPTION

The pressure-blocks are divided into two categories:

- Fixed pressure-block.
- Mobile pressure-block

### Assemble/disassemble the pressure-block.

Remove the capping head from the turret of the capping machine.

Unscrew the two locking screws **A** (Fig 6) situated on the cross piece and remove the centering plate together with the columns **B** by pushing downwards.

Loosen the grub screw **C**.

Position the special key **D** in the holes **E** provided in the pressure-block.

Insert a long pin in the hole provided on the shaft so as to impede its rotation.

Unscrew the pressure-block by turning clockwise the special key **D**.

Screw in the new pressure-block by turning anticlockwise the special key **D**.

Remove the long pin from the shaft and tighten the grub screw which had been previously loosened.

Reassemble the centering plate, taking care of the location direction when mounting it, pushing it slowly upwards, and screw in the two locking screws situated on the cross piece.

### Fixed pressure-block.

This is used to apply caps to seal flat liquids -non carbonated (Fig. 6 E).

The shape of the inner profile can be flat or concave.

Normally a concave profile of 5° is used.

### Mobile pressure-block.

This is used to apply caps to seal carbonated liquids or with STELVIN caps (Fig. 6 G).

Each individual cap manufacturer tests the cap's inner liner pressure holding characteristics on the bottle with its own pressure-block profile.

With equal characteristics of the cap, a change of cap supplier lack of holding pressure can be experienced. To a different type of inner liner corresponds a different profile of application.

It is therefore necessary to know the profile details of the pressure block used by the cap supplier when testing the cap to assess its pressure holding characteristics.

## 10 ROLLERS DESCRIPTION

The rollers are divided into two categories:

- Threading rollers.
- Tuck-under rollers.

### THREADING ROLLER

The standard threading roller **A** (Fig. 7) has a profile radius **B** of 0.8mm.

In certain instances, a radius **B** of 0.6 [mm] can be used, or for caps with a diameter above 35 [mm] a radius **B** of 1.2[mm] can be used.

### TUCK-UNDER ROLLER

There are two types of tuck-under rollers:

- Tuck-under forming roller
- Tuck-under finishing roller

The standard tuck-under forming roller **C** (Fig.7) has a radius **D** of 0.8 [mm]



# SEMIAUTOMATIC ROPP CAPPER

There are more than one version of the tuck-under finishing roller:

- The standard version E with a step F between the outside diameter and the shoulder (for side tucking) of 2 [mm]
- The version for STELCAP caps G with a step H between the outside diameter and the shoulder (for side tucking) which varies according to the cap diameter.

Cap Ø(mm)	H (mm)
22 + 25	1.25
28 + 36	1.5

Special version for STELCAP caps I with the step L between the outside diameter and the shoulder (for side tucking) which can vary according to the diameter of the cap.

Cap Ø (mm)	L(mm)
22 + 25	1.25
28 + 36	1.5

## 11 POSSIBLE TROUBLES

### INSUFFICIENT STEP ON TOP OF CAP

Not enough axial load.  
Diameter of the pressure-block not adequate for the type of cap. (too big)

### CUT ON THE UPPER PART OF THE CAP

Step on top of the cap too deep.  
Diameter of the pressure-block too small, making sure that the axial load is the right one to form the step.

### IRREGULAR STEP ON TOP OF CAP

Incorrect adjustment of the pressure-block.  
Inclined bottle or inclined bottle neck.  
Bottle too tight in the center star of the capping machine.  
Center star of the capping machine too low.

### SCARCE DEPTH OF THREAD

Verify the radial load of the rollers.  
Roller arms incorrectly adjusted.  
Rollers too wide apart.

### THE THREAD ROLLERS MAKE A GROOVE ON THE CAP WITHOUT ENTERING THE START OF THE THREAD OF THE GLASS FINISH.

Gripped rollers.  
Rollers adjusted too high.  
Pressure-block incorrectly adjusted (unscrewed).  
Cap material of poor quality.

### THE THREAD ROLLERS CUT THE CAP AT THE START OF THREAD.

Rollers set too high.



---

**THE THREAD ROLLERS CUT THE CAP AFTER THE START OF THREAD**

---

Rollers set too low.  
Rollers radial load too high.  
Partially gripped rollers.

---

**THE THREAD ROLLERS START TO THREAD THE CAP TOO LOW THUS  
DOWNWARD DEFORMING IT.**

---

Roller springs worn out or broken.  
Rollers out of phase.  
Tendency of the rollers to grip.  
Bushes locking grub screws loosened.

---

**THREAD TOO WEAK**

---

Not enough radial load.

---

**TUCK-UNDER NOT FORMED**

---

Insufficient tuck-under bead on the cap.

---

**BREAKAGE OF THE CAP BRIDGES**

---

Gripped rollers.  
Rollers set too high.  
Very high radial load.  
Bridges too weak.  
Diameter of the tuck-under bead too small.  
Tuck-under bead too low.  
Bottle finish too high or too low.

---

**DENTED OR MARKED CAP BELOW THE KNURL.**

---

Thread rollers too low.  
Very high radial load.

---

**CUT CAP**

---

Very high radial load.  
Thread rollers too high.

## **12 SPECIAL APPLICATION FOR "MIGNON" CAPPING HEADS**

The reduced dimensions of the bottle and consequently those of the cap, require reduced structural dimensions of the capping head as well as the application of a particular device **A** (Fig. 9) to stop the pressure-block from rotating.

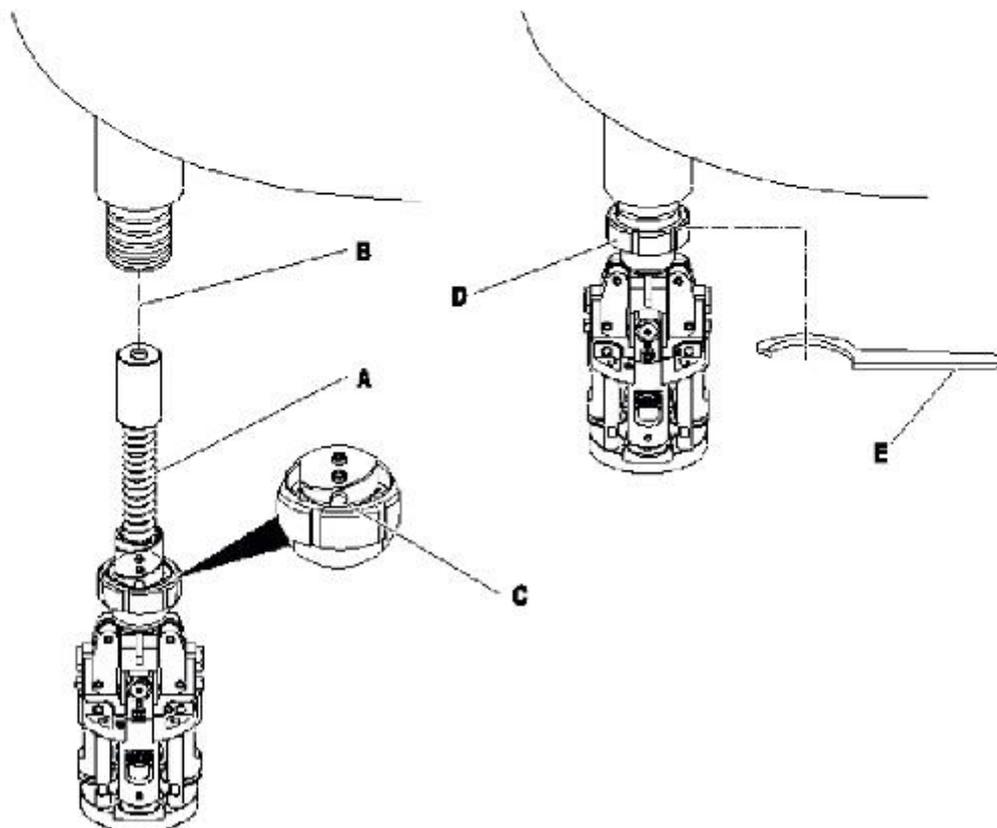
As there is a very low vertical load on the cap (about 30 Kg) the pressure-block does not sufficiently block the cap at the moment when the cap is being threaded by the rollers on the finish of the bottle. Practically the rollers mark very lightly the thread as the cap rotates with the bottle. By applying to the capping head the above mentioned device **A** it is possible to stop the rotation of the pressure-block thus allowing the rollers to form a good thread.

## 13 MAINTENANCE

- Lubrication of the thread rollers: weekly.
- Lubrication of the tuck-under rollers: weekly.
- Check that the grub screws are well tightened: Half yearly.

For a trouble free working of the capping head we advice to observe the following recommendations:

- Monthly: Inject grease (for food machinery) compatible with the FDA norms, using the grease gun **A** (Fig 5) for the lubrication of the inner ball bearings of the capping head.
- At regular intervals oil the outer parts of the capping head.
- Wash with warm water and lubricate after drying, the thread rollers and the tuck-under rollers .
- Lubricate at least once a week the rollers using oil spray. The oil must be for food machinery compatible with FDA norms.





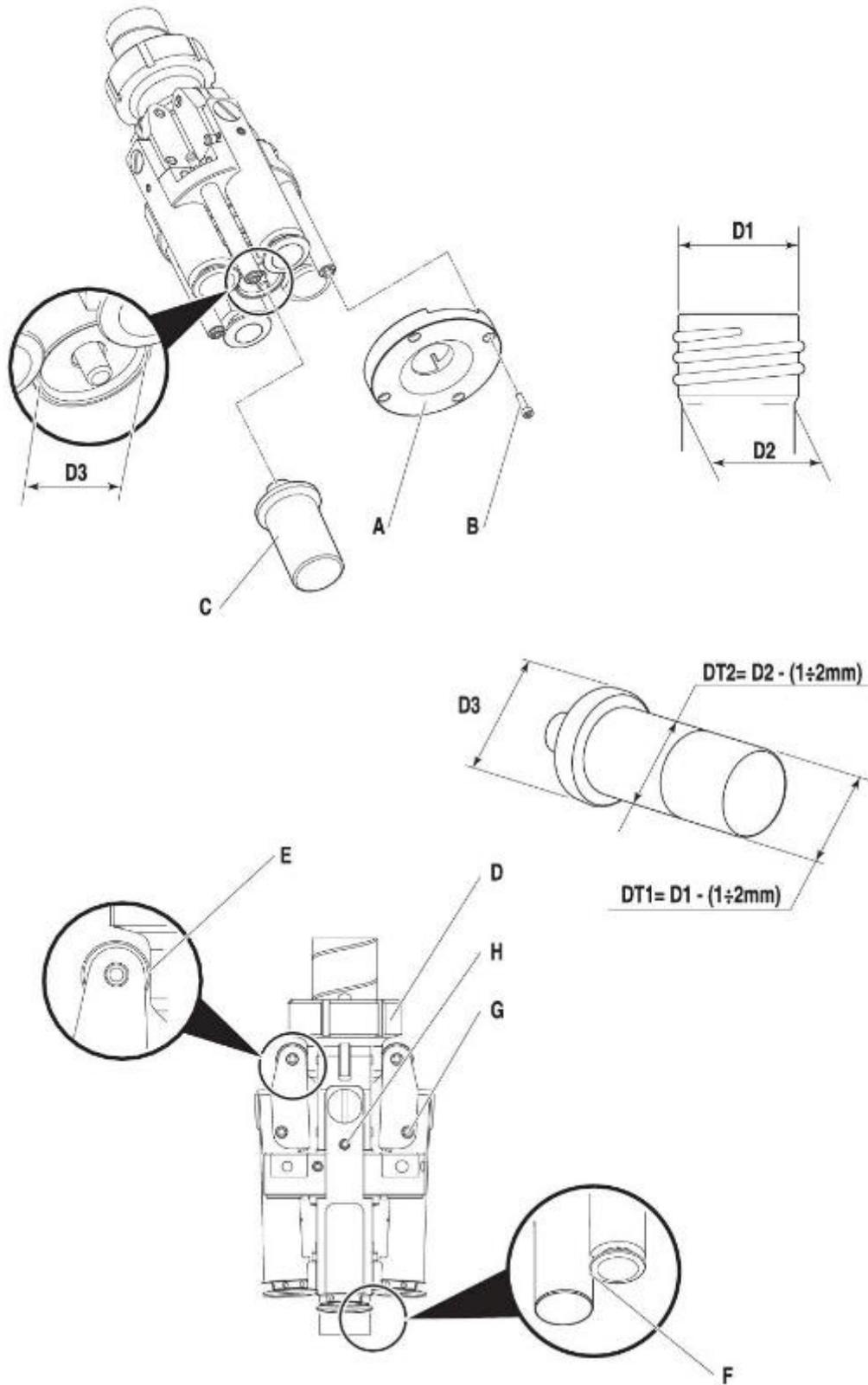
Tenco Srl  
Via Arbora 1  
16036 Avegno

# SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556

E.mail [info@tenco.it](mailto:info@tenco.it)

Web [www.tenco.it](http://www.tenco.it)





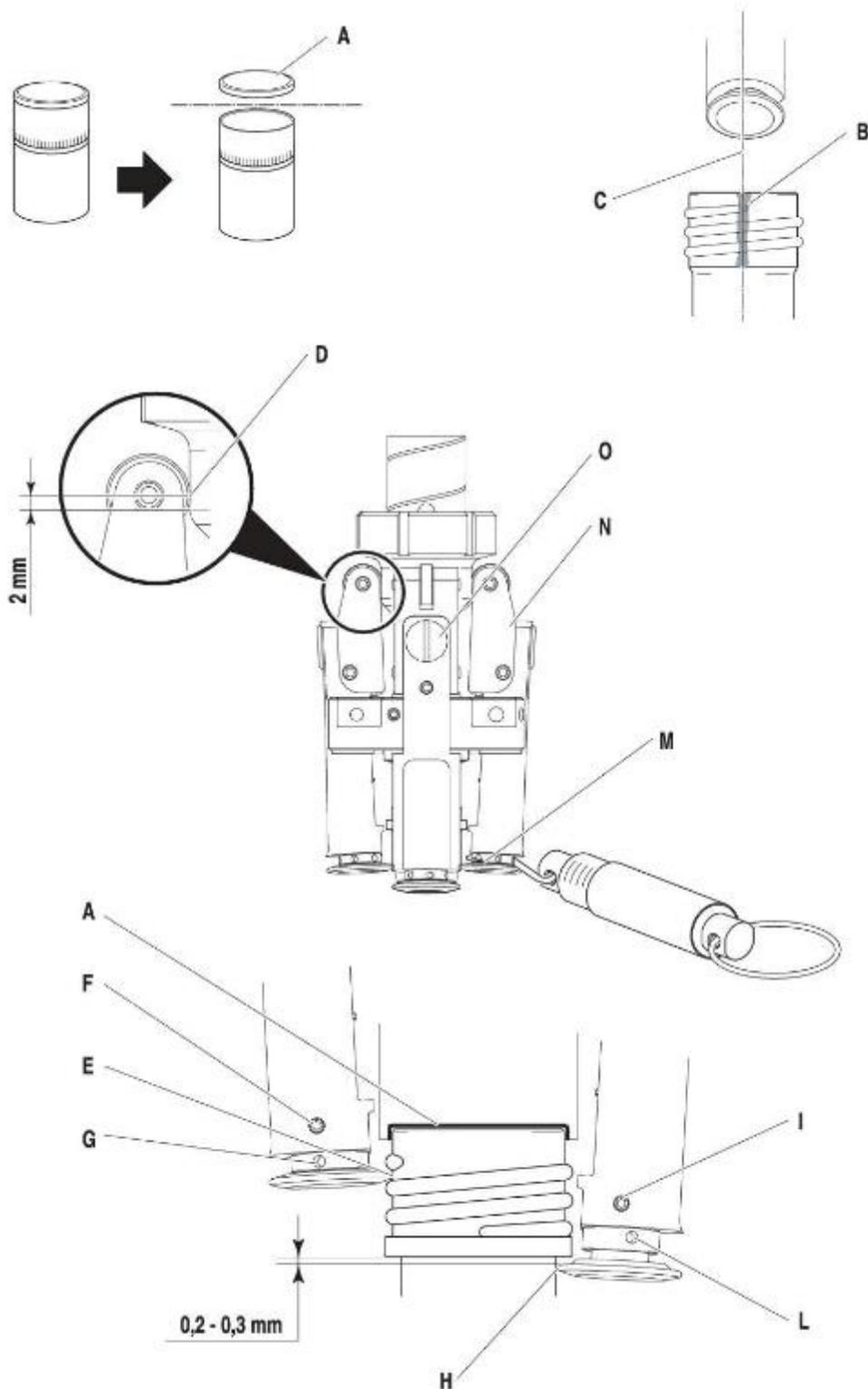
Tenco Srl  
Via Arbora 1  
16036 Avegno

# SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556

E.mail [info@tenco.it](mailto:info@tenco.it)

Web [www.tenco.it](http://www.tenco.it)





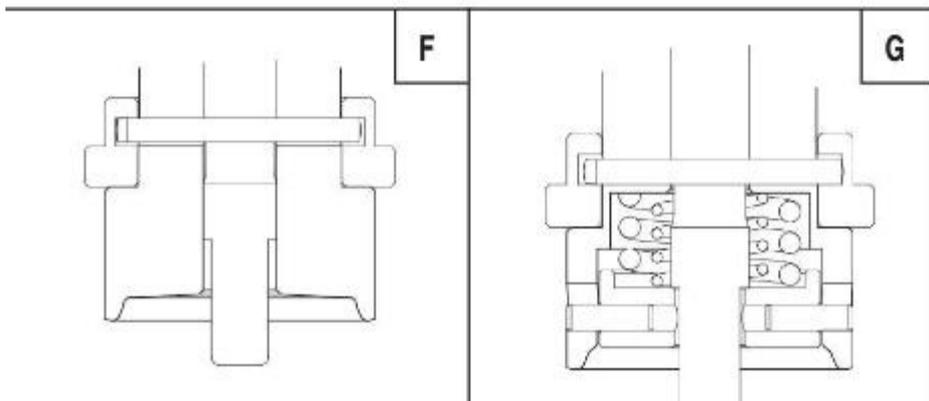
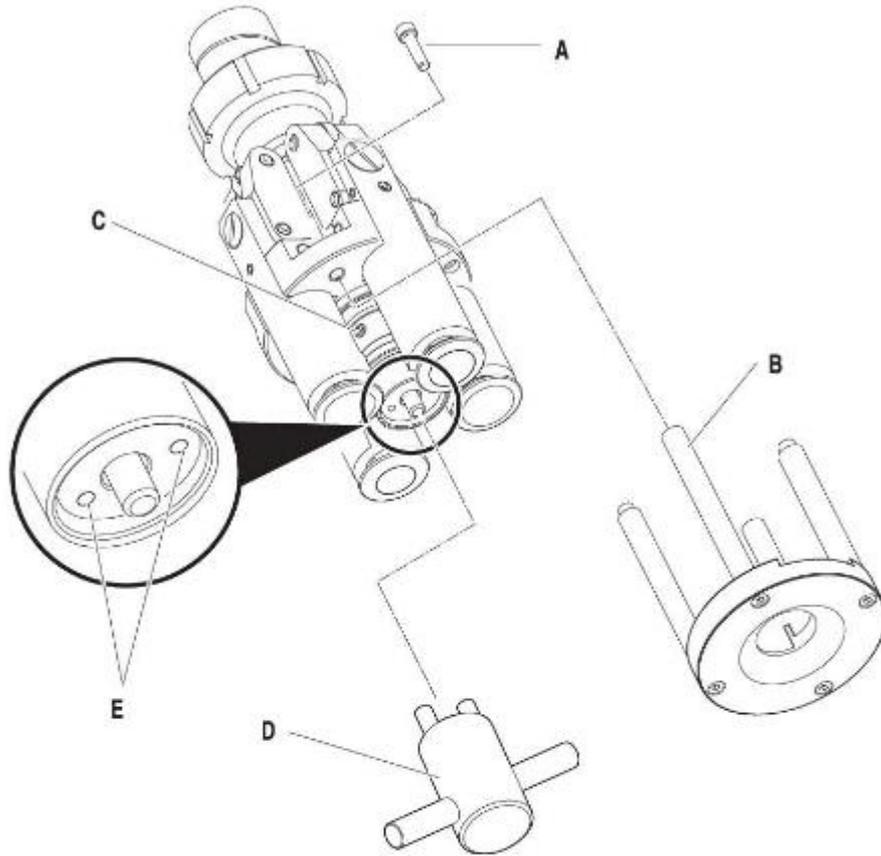
Tenco Srl  
Via Arbora 1  
16036 Avegno

# SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556

E.mail [info@tenco.it](mailto:info@tenco.it)

Web [www.tenco.it](http://www.tenco.it)





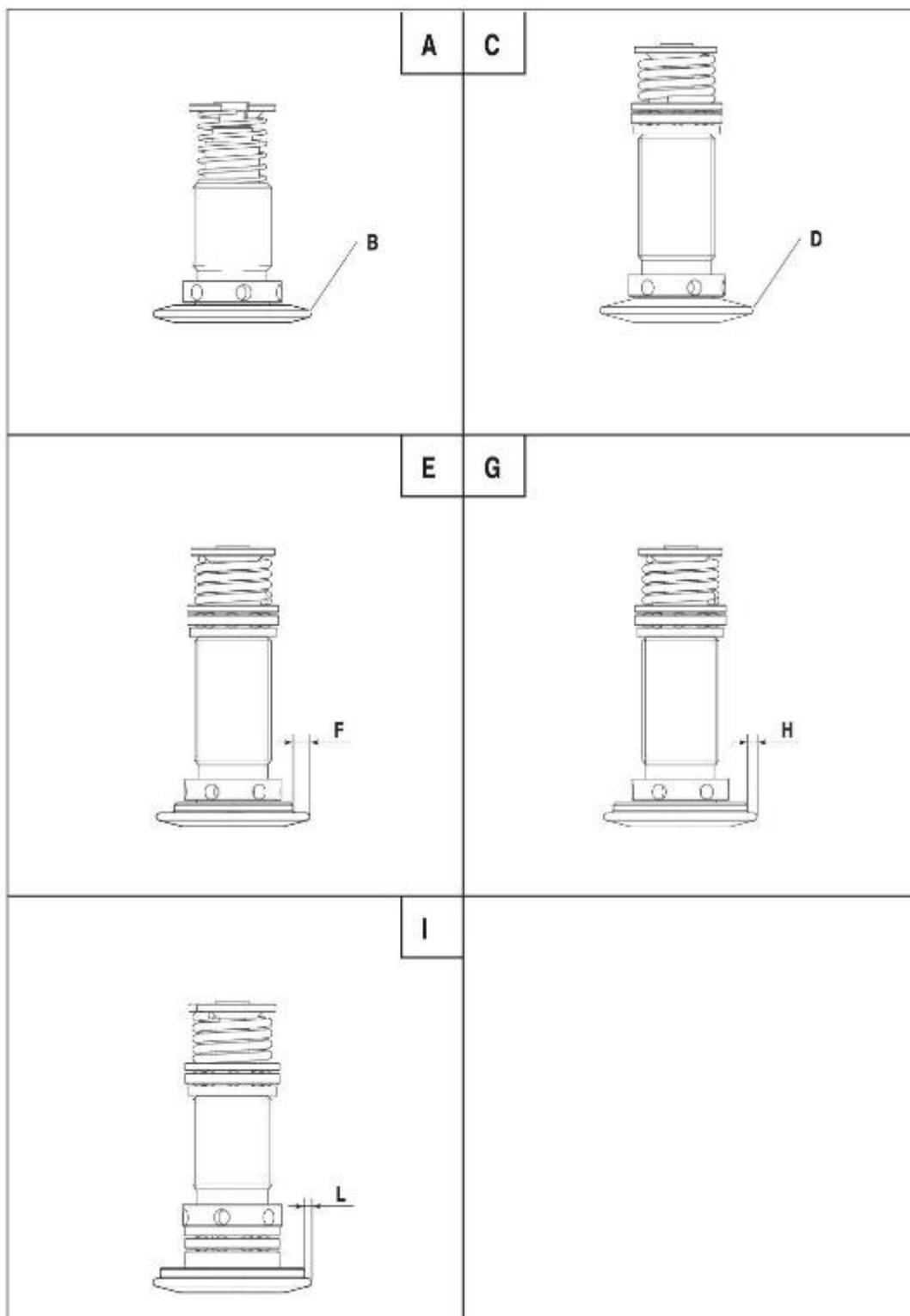
Tenco Srl  
Via Arbora 1  
16036 Avegno

# SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556

E.mail [info@tenco.it](mailto:info@tenco.it)

Web [www.tenco.it](http://www.tenco.it)





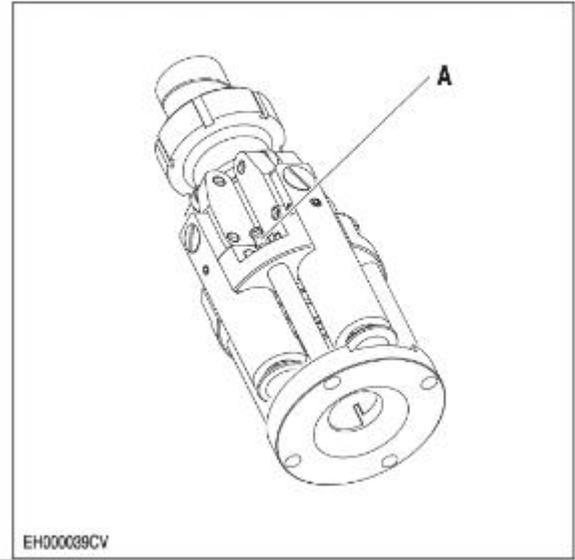
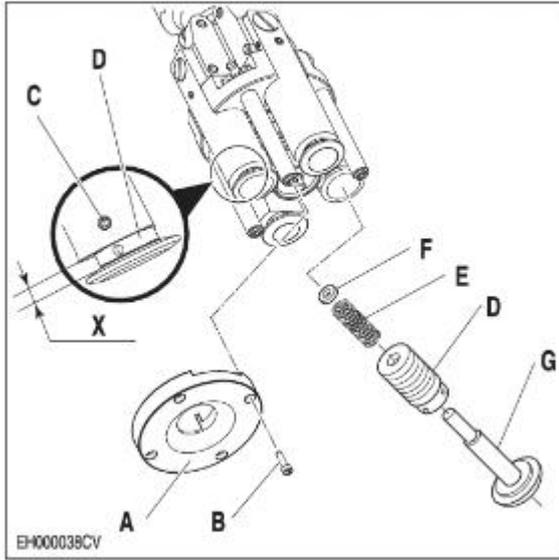
Tenco Srl  
Via Arbora 1  
16036 Avegno

# SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556

E.mail [info@tenco.it](mailto:info@tenco.it)

Web [www.tenco.it](http://www.tenco.it)





Tenco Srl  
Via Arbora 1  
16036 Avegno

## SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556

E.mail [info@tenco.it](mailto:info@tenco.it)

Web [www.tenco.it](http://www.tenco.it)

### 3.7 CAPPING HEAD CHANGE OF FORMAT

To replace the capping head act as follows:

- Cut out the power supply
- Remove the lexan safety door
- Loosen the head from the support
- Place the head according to the cap format, being careful to lock it strongly
- To adjust the capping head, please consult the capping head instruction manual
- Install the lexan safety protection
- Insert power supply

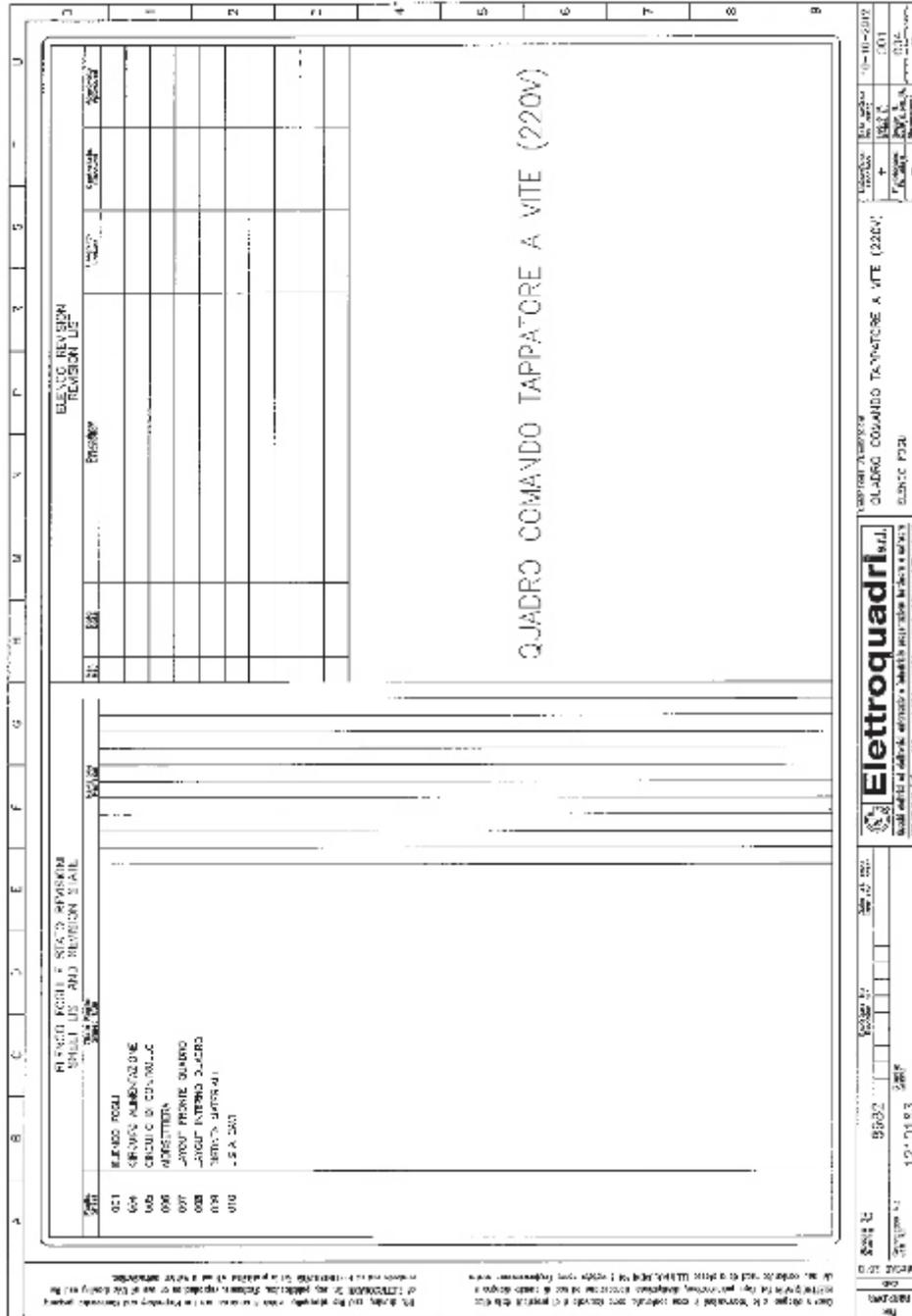


Tenco Srl  
Via Arbora 1  
16036 Avegno

# SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556  
E.mail [info@tenco.it](mailto:info@tenco.it)  
Web [www.tenco.it](http://www.tenco.it)

## CHAPTER 4 – ELECTRICAL WIRING DIAGRAM















Tenco Srl  
Via Arbora 1  
16036 Avegno

# SEMI-AUTOMATIC ROPP CAPPER

Tel. +39 0185 79556  
E.mail [info@tenco.it](mailto:info@tenco.it)  
Web [www.tenco.it](http://www.tenco.it)

SIGLA		MARCA	DESCRIZIONE	Q.TA'
01	SCHNEIDER	3P+N 2P+1	DESCRIZIONE	1
02	SCHNEIDER	2P+N 13	REGOLATORE IMPULSIVO 12A	1
03	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
04	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
05	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
06	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
07	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
08	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
09	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
10	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
11	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
12	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
13	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
14	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
15	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
16	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
17	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
18	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
19	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
20	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
21	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
22	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
23	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
24	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
25	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
26	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
27	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
28	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
29	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
30	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
31	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
32	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
33	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
34	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
35	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
36	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
37	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
38	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
39	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1
40	SCHNEIDER	2P+N 12	REGOLATORE IMPULSIVO 12A	1



Tenco Srl  
Via Arbora 1  
16036 Avegno

# SEMI-AUTOMATIC ROPP CAPPER

Tel. +39 0185 79556  
E.mail [info@tenco.it](mailto:info@tenco.it)  
Web [www.tenco.it](http://www.tenco.it)

SIGLA		TPO	N.L.M. x SEZ. (m <sup>2</sup> )	LUNGHEZZA (m)
CPI1				
CPI2				
CSI1			2X0.50	
CSI2			2X0.50	
CSI3			2X0.50	
CSI4			2X0.50	
CSI5			2X0.50	

<p>Il Cliente, con la presente, dichiara di aver ricevuto in consegna il materiale di cui è composto il presente ordine e di averne preso visione e di averne verificato la quantità e la qualità.</p> <p>Il Cliente, con la presente, dichiara di aver ricevuto in consegna il materiale di cui è composto il presente ordine e di averne preso visione e di averne verificato la quantità e la qualità.</p>		<p>5922</p> <p>210133</p>	<p>10 TO 2012</p> <p>0°C</p> <p>100%</p> <p>100%</p> <p>100%</p>
---	--	---------------------------	--

<p><b>Elettroquadri</b> S.p.A.</p> <p>Via S. Maria 10 - 10121 TORINO</p> <p>TEL. 011 512111 - FAX 011 512112</p>	<p>QUADRO COMANDO TAPPETONE A VITE (220V)</p> <p>LISTA CAVI</p>
--	---



Tenco Srl  
Via Arbora 1  
16036 Avegno

## SEMIAUTOMATIC ROPP CAPPER

Tel. +39 0185 79556

E.mail [info@tenco.it](mailto:info@tenco.it)

Web [www.tenco.it](http://www.tenco.it)



### **DIRECTIVE 2002/96/EC (RAEE): INFORMATION FOR USERS**

This product is compliant with the European directive EU 2002/96/EC.

The crossed waste bin symbol showed on the appliance indicates that the product, by the end of its lifetime, must be thrown out separately from usual domestic garbage, it has to be consigned to a waste differentiation centre equipped for electronic and electric appliances or to the company a similar item is to be bought from.

The user is responsible of the appliances consignment to an appropriate structure, by the end of its lifetime. The proper differentiated waste collection for the proceeding of the treatment and the recycling of the appliance, environmentally compliant, contributes to avoiding possible negative effects on the environment and health, and favours the recycle of the compounds.

For more detailed information regarding waste collection systems available, please refer to your local recycling centre, or to the appliance retailer.