



# TITAN BARATTO CORNELY

## CORNELY LG3 English OPERATOR'S MANUAL



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## CHAPTER 1 : INSTALLATION

### FLY WHEEL ROTATION

While sitting in front of the machine and you put your hand on the top of the Fly Wheel you have to push the flying wheel away from you (backwards).  
The Fly Wheel must turn clockwise. NEVER PULL !!

### TRAINING

To use the Cornely LG3 is not that difficult, the only thing you have to do is practising.  
You have to begin to sew on the piece of paper on which the design is drawn.  
You have to follow this design by operating the crank.  
The so called hook (=needle) will punch along this pre-traced design together with the movements of the Crank C.00797 (Fig. 1B).  
After a while you can handle it perfectly.

### TO START SEWING

You have to start the motor by pressing the pedal and the motor starts running.  
The harder you push the faster the motor will run.  
To stop the motor you have to release the pedal so the speed will decrease.

## CHAPTER 2 : MECHANICAL ADJUSTMENT

### 1. NEEDLE SETTING

Select carefully the needle according the thickness of the thread.  
Screw tightly the needle into the needle holder C.01120 by means of the flat tweezer delivered with the accessories. The needle should be positioned in the flat opening of the needle holder. (Fig. A)

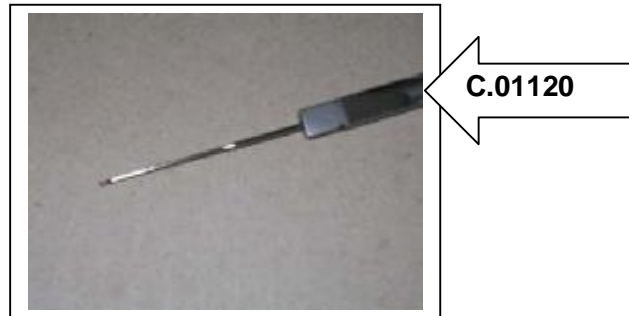


FIG. A

The needle holder is passing through the tube C.10273 and should be placed in the correct position with the screw C.10298 by hand and adjust the height so that the material can slide under the needle without touching it. (Fig. B)

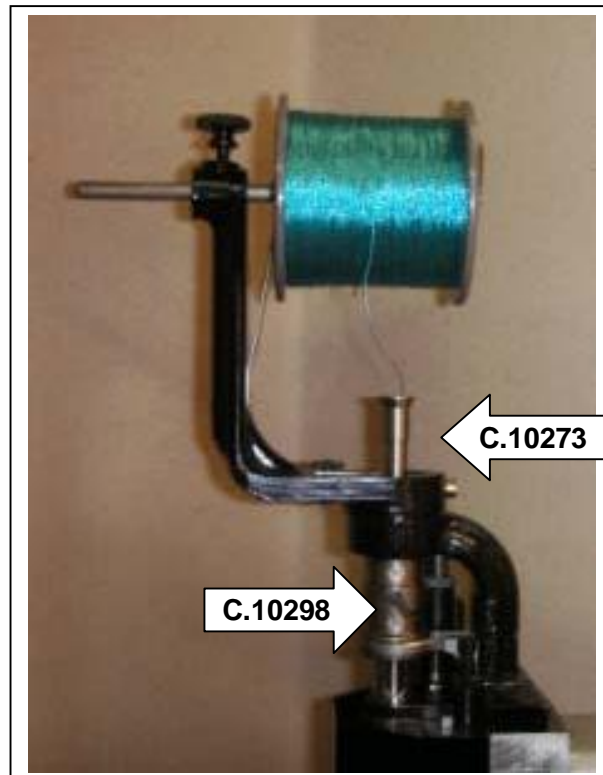


FIG. B

The needles have different sizes and named as :

Hook N° 1 : Part n° : C.0253SC070  
Hook N° 2 : Part n° : C.0253SC080  
Etc. C.0253SC090  
C.0253SC100  
C.0253SC110  
C.0253SC120

The lower side of this hook is guide into C.00601. You have to adjust the lower guide so that the material can slide under needle without touching it.

You have different kind of guides according to the thickness of the hooks.

Guide Part n° : C.00601C01 for hook : C.0253SC070  
C.00601C02 for hook : C.0253SC080  
C.00601C03 for hook : C.0253SC090  
C.00601C04 for hook : C.0253SC100  
C.00601C05 for hook : C.0253SC110  
C.00601C06 for hook : C.0253SC120

## 2. NEEDLE BAR ORIENTATION

The crank C.00797 and the hook and the cone lever C.10033 must be placed in the same direction. (Fig. 1A-1B)

This means for the **Chain-stitch** at 6 o'clock.



FIG. 1A

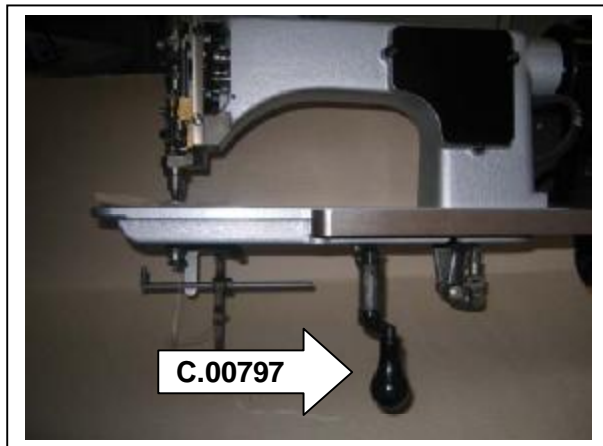


FIG. 1B

If you are sewing the **Moss-stitch**, you have to turn the hook 180 °.  
This means : the hook at 12 o'clock and the crank at 6 o'clock and pulling the part C.10063 to the left and turning backwards. (Fig. 2)  
The hook must be exactly in the opposite position as it was during the chain stitch work.

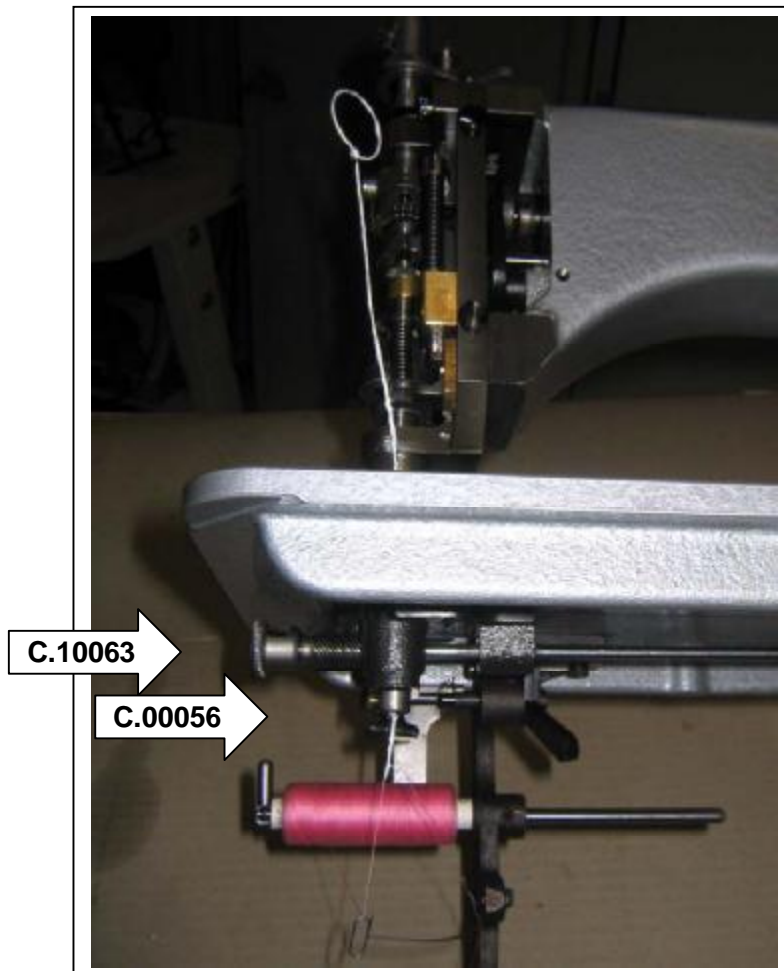


FIG. 2

### **3. NEEDLE PLATE SETTING**

The needle should pass the needle plate in one of the 12 foreseen holes. Use the hole just in front from where the threaded needle is coming out of the needle plate.

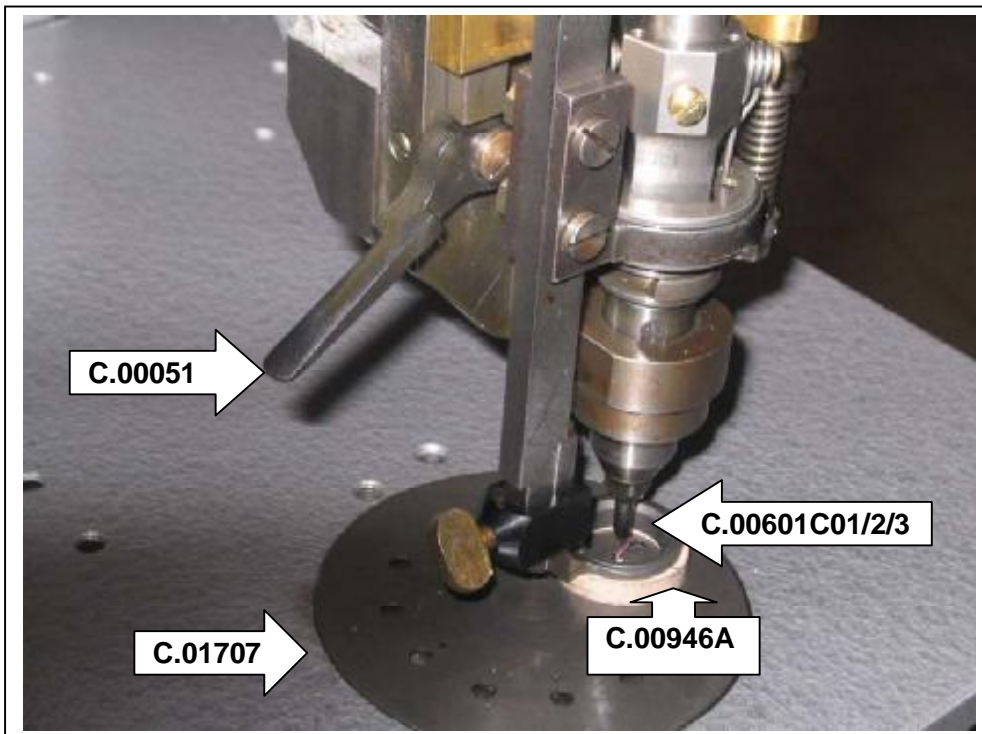
Choose a convenient hole so that the needle can pass freely through the hole. The needle must be exactly in the middle of the hole.

Don't use too large holes, especially with thin material.

If this is not the case, do the following :

To turn the plate : C.01707 (Fig. 3), unscrew part C.00056 (Fig. 2) and use the curved point knife.

If the hole is correctly placed, screw part C.00056 again. (Fig.2)



**FIG. 3**

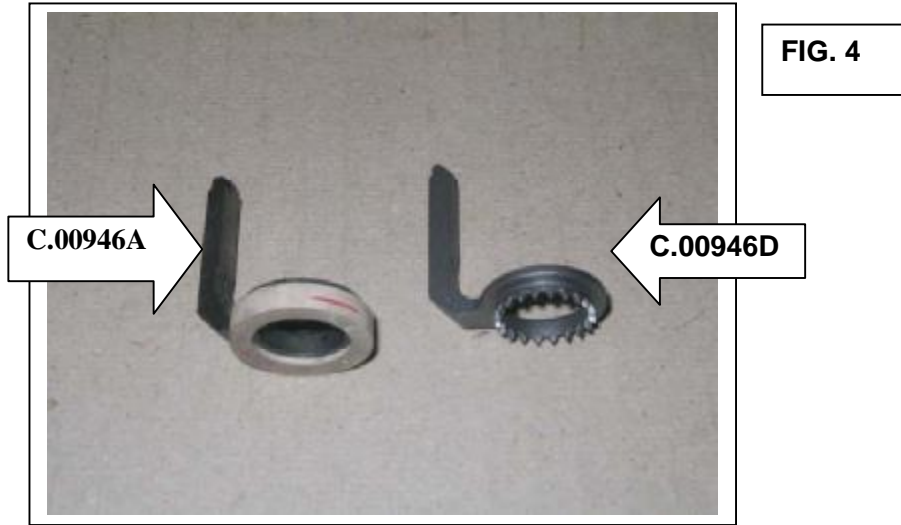
### **4.FEEDDOG SETTING**

The Cornely LG3 is normally equipped with 1 rubber feeddog : C.00946A.

We are using the feeddog with teeth C.00946D when using hard fabric. The other feeddog is used for fine fabric. (Fig. 4)

By raising lever C.00051 (Fig. 3), you are moving the feeddog upwards.

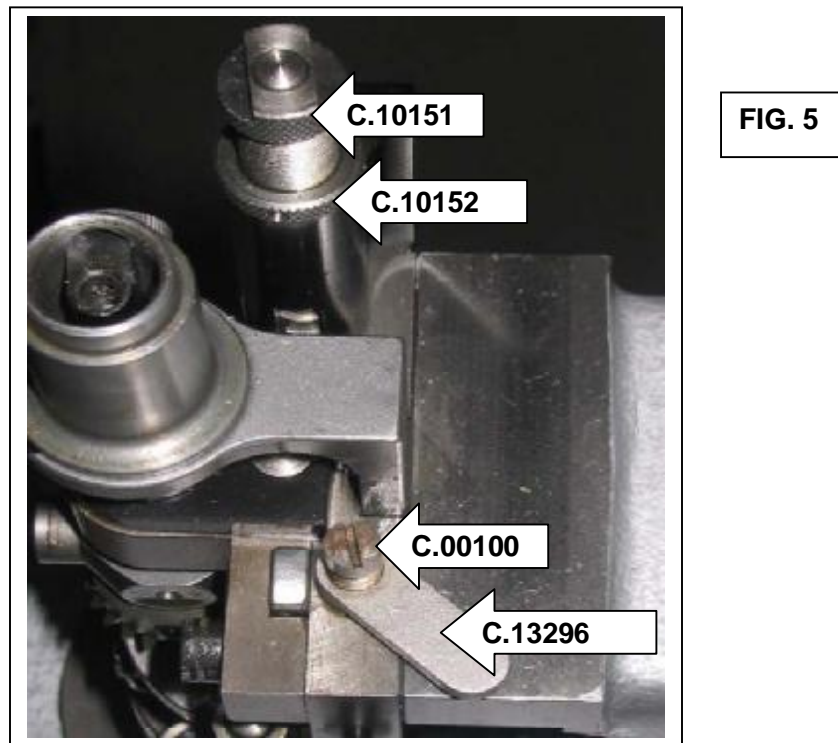
<b>FEEDDOG</b>	<b>RUBBER</b>
C.00946A	C.CA-26
C.00946D	
C.00946L	C.CA-28
C.01133	C.CA-33
C.01133D	



### **5. FOOT PRESSURE ADJUSTMENT**

By unscrewing the nut : C.10152, you are regulating the tension in the C.10151, regulating bushing. (Fig. 5)

For very high speed, ask for the spring C.10154 instead of the spring C.10171 to increase the tension of the pressure foot



## CHAPTER 3 : THREADING

The machine is supplied with spoolholder C.10011 (Fig. 6), which requires cylindrical spools.

We also have spoolholders for conical spools.

- a. The machine threading with a cylindrical spoolholder is the following :

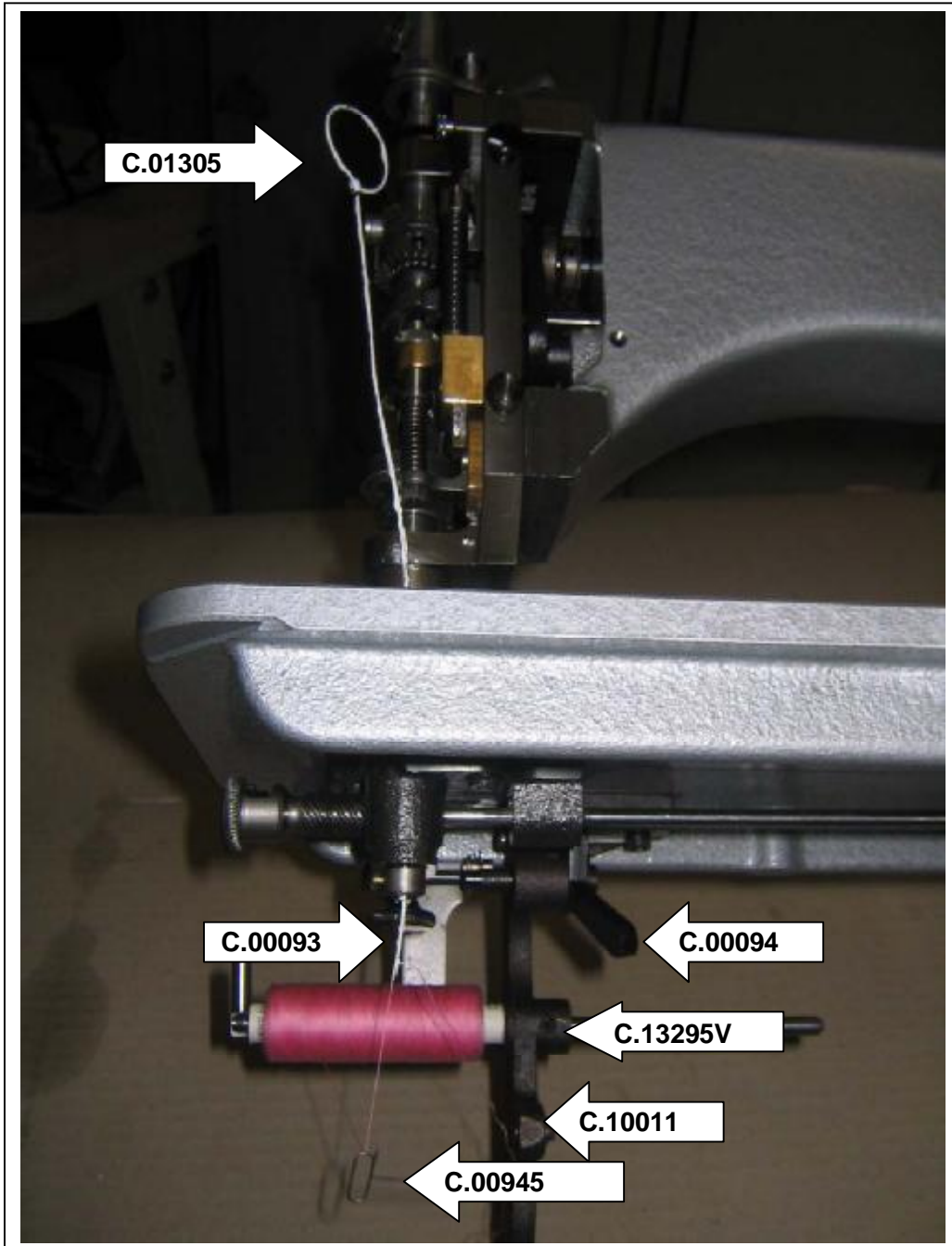
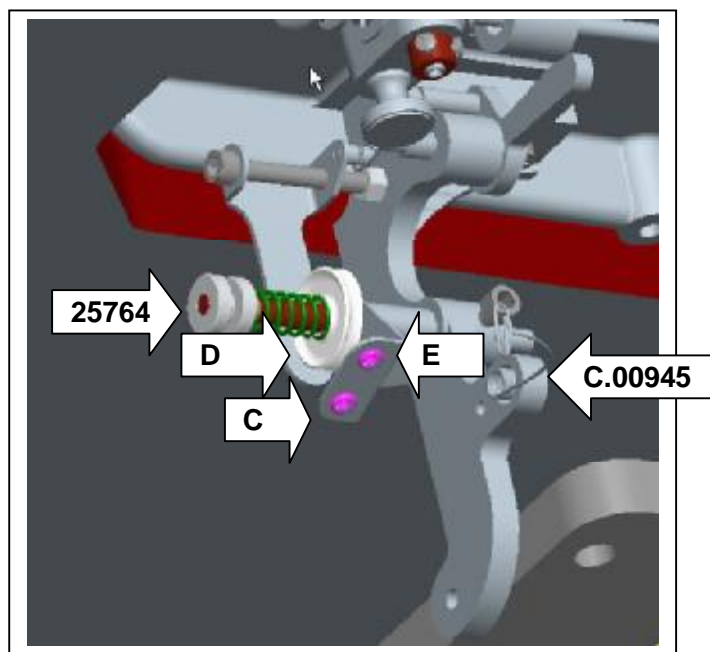


FIG. 6

Raise the pad, C.00093 (Fig. 6) insert the spool on the shaft and adjust nut screw C.13295V. Pull the thread through the eye of the tension spring C.00945. The thread must come from below the spool.  
 Pass the thread hook C.01305 through the big hole of the needleplate C.01707 which is in front of the needle hole.  
 Catch the thread and pull it up under the needleplate C.01707.  
 Pass the thread under foot C.00946A which has been raised beforehand.  
 The thread must be laying towards you.  
 Start the motor while holding the thread on the table with your left hand as instructed above just the time to do one stitch so that the needle catches the thread and let it pass through the plate.  
 Now, remove the thread from the needle with the curved knife and lay the thread on the table.  
 The thread tension is adjusted by pad pressure.  
 The spool tension can be regulated by raising the lever C.00094 (Fig. 6) or lower the lever C.00094.

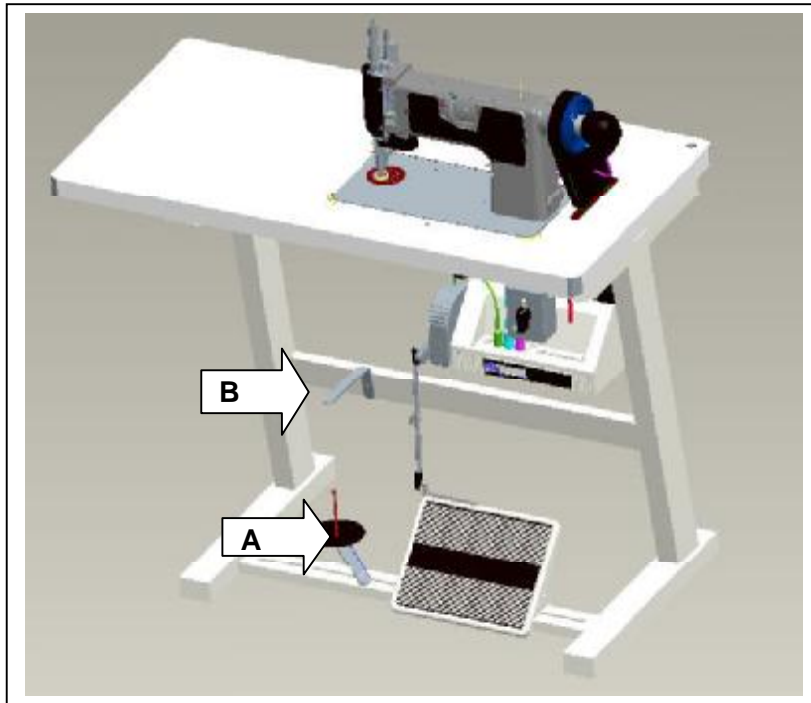
b. The machine threading with a conical spoolholder is the following :



**FIG. 7**

Put the conical Bobbin on the spoolholder A.,(Fig. 8 ), put the yarn through the eye B (Fig. 8), pass through eye C (Fig. 7) between the tension disc D (Fig. 7) then pass through the eye E to pass afterwards through the tensionspring C.00945.

Follow now the instruction as for the cylindrical spoolholder.



**FIG. 8**

**C The machine threading for braiding.**

The machine CORNELLY LG3 makes every kind of braiding (flat, raised, side sewn of center sewn) with any braid, cord, ribbon, strung beads, silk, cotton, tergal, terylene, cellophane, plastics, metal threads etc.

Work with a chain stitch and check that the hook point of the needle is in the same place as the flat edge of needle tube. Then set the braiding attachment C.10288W complete .(Fig. 10)

Place the braid, cord or ribbon, etc. on the spool L (Fig. 9) above the head of the machine. Use small ball chaplet to pass the braid through the needle tube, entering top opening, going out of the needle tube through the botton opening, then passing through the suitable guide or nipple. (See Chapter 7.)

Nipple must be in the same direction as the hollow part of the needle tube

The nipple is composed of four parts :

- small tube tightened in the needle tube
- screw.
- Small spring for cloth pressure (if taping)
- guide

The braid must slide freely in the nipple but reasonable. When you ask for a new guide, never forget to send us a small sample of the braid or cord.

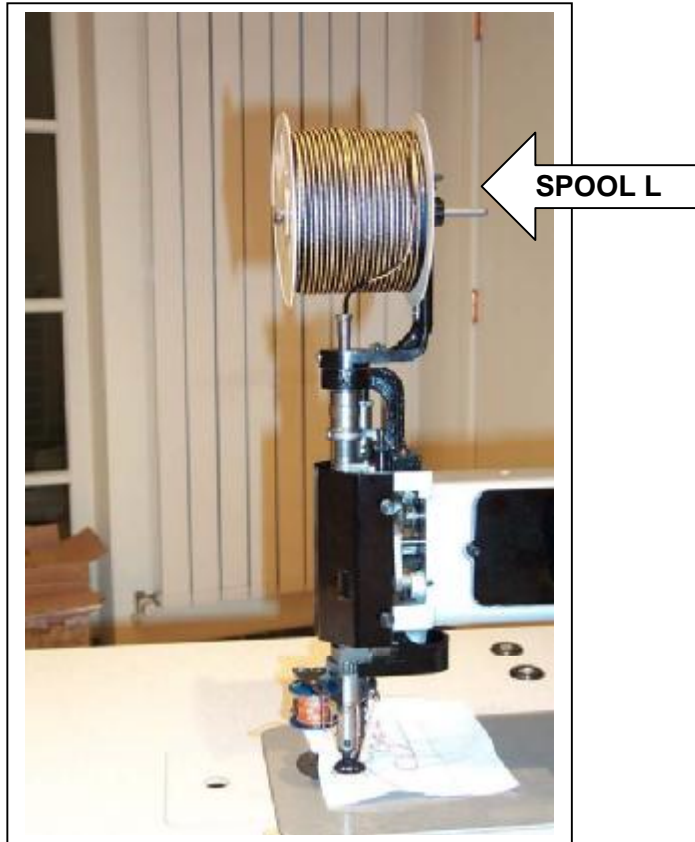


FIG. 9

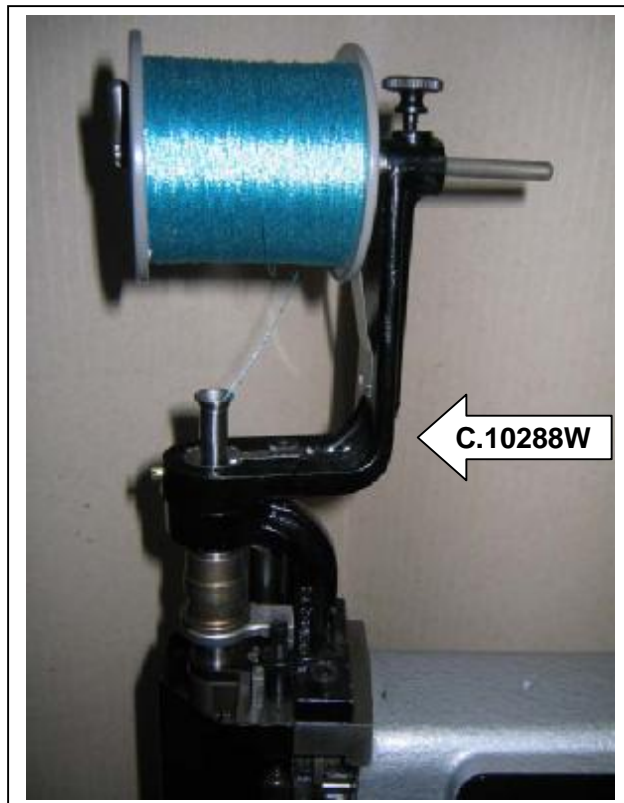


FIG. 10

## **SEVERAL THREAD WORKS**

Accessories are mounted on weaving gear C.10294 and are marked A & C , as well as on the gear. (Fig. 11)

Two threads works are made by braid curling around the chainstitch row which sews it on the cloth.

Three threads works are made with additional stuffing between coiling and chain stitch.

### **a. Two threads works**

Use the following parts :

- Spoolholder C.10632W mounted on the weaving gear C.10294
- Weaver C.10300W
- Nipple C.00601C...for 2 threads screwed in lower tube (according thickness)

(Fig. 11).

The thread comes from spool C.00635M, passes through the hole of the weaver holder C.10302 through the eyelet C.00619 then into the thread guide C.10304/1.7 or C.10304/3, according to the thickness.

Let the lace pass under the pressure foot. The thread tension is adjusted by the screw which is under the spoolholder.

The weaver height settings will be made when the machine is disclutched and the nipple is in upper position. Release the weaver assembly holding screw and set the lining with lower part of nipple.

Since in two threads works, the chain stitch is completely coated by the coiling thread, machine must be set with a rather short stitch.

### **b. Three threads works**

Use the following parts :

- Spoolholder C.10632W complete
- Weaver C.10300W complete
- Nipple C.01127A... for three threads, size according to cord thickness
- Braiding attachment C.10288W complete

(Fig. 10 & 11)

Same works as with two threads, plus a "Stuffing" thread which must come through the hook needle holder. It is better to use a rather flexible material.

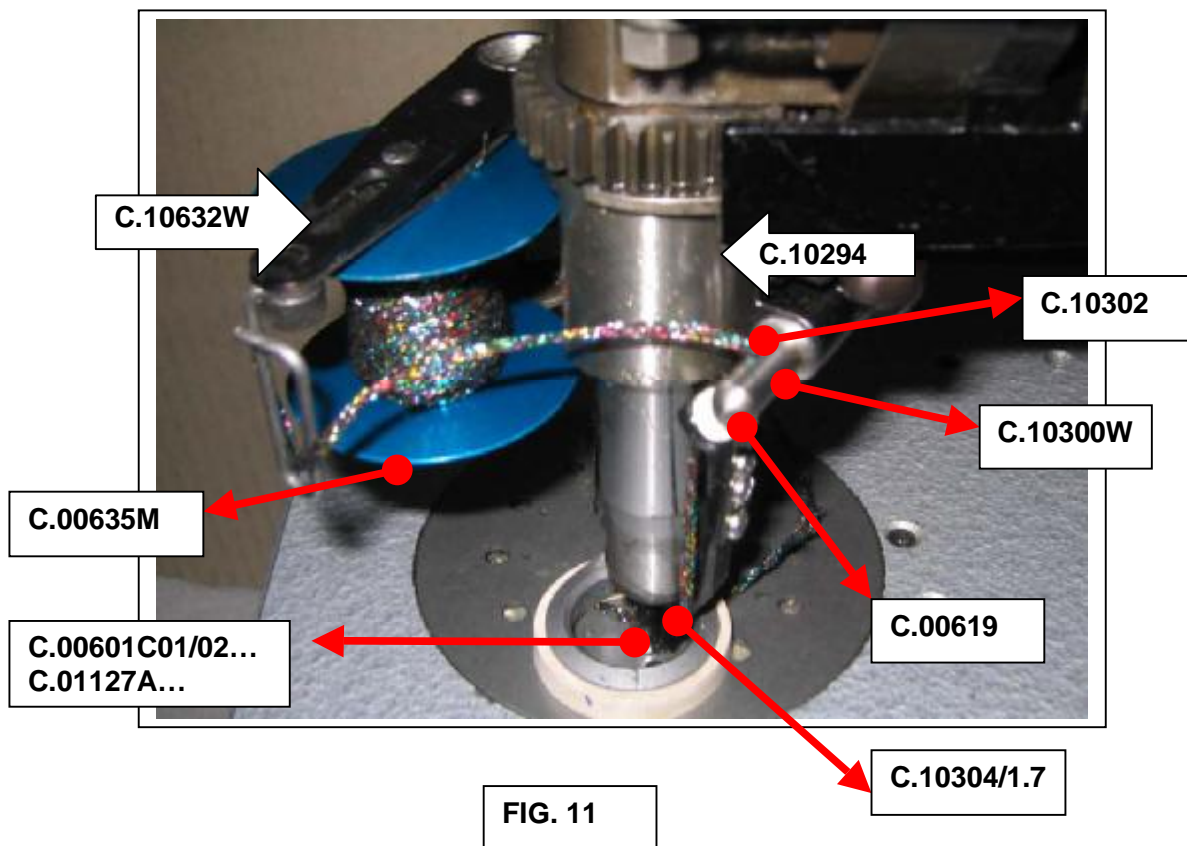
Put the crank towards the operator, the stuffing thread passage hole must be on the opposite side. The hook needle will be screwed so that its hook will be on the opposite side of the flat part of the needle holder. The coiling thread comes from spool C.00635M and passes through holes. Follow the instructions as for 2 threads. The stuffing thread comes from the braiding attachment C.10288W complete and passes through the needle holder and the guide and comes upon material. The hook needle is set rather close to the material to obtain a short chain stitch.

**c. Spine or Picot works**

The thread is coming from the braid spool, passes through the hook holder and the nipple. Adjust very strong then tension and increase the hook height. The chain stitch thread tension must be practically zero. This spine stitch happens only when working on circles or curves.

**WARNING :**

For all those kinds of works, make sure that the weaving gear is correctly set. To check this, run the machine at full speed to be sure the declutching is correct. Turn the crank to the left, hole A on the weaving gear must be just in front of the operator.



## CHAPTER 4 : ADJUSTING THE STITCH LENGTH.

To adjust the stitch length, you have to unscrew the nut : C.13296 (fig. 5), then turn the screw C.00100 (Fig. 5). Screw downwards to shorten the stitch and screw upwards to lengthen the stitch. If you want to have very big stitches or the fabric has to pass fluently the feeddog without braking the thread you have to unscrew C.00106 and raise part : C.10015 (Fig. 12)

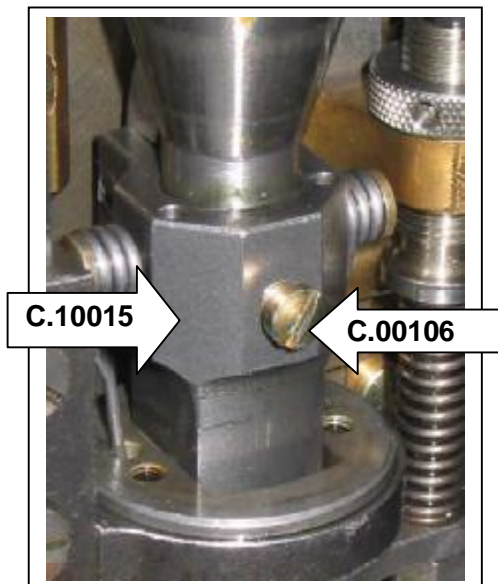


FIG. 12

## CHAPTER 5 : ADJUSTING THE THREAD TENSION

The thread tension can be regulated by

1. adjusting the needle height
2. adjusting the thread tension

a. Adjusting the needle height

If you want a very thin stitch you have to lower the needle.

If you want a very large stitch you have to upper the needle but not TOO high because this can cause lack of stitches.

b. Adjusting the thread tension

There is also here a difference in adjusting the thread tension depending from the Cylindrical or Conical spoolholder.

The tension cannot be too high or too less.

For the cylindrical spoolholder you can regulate the tension by the lever C.00094 (Fig. 6)

For the conical spoolholder you can regulate the tension by screw 25764 (Fig 13).

If you are missing some stitches : increase the tension

If the thread is breaking : decrease the tension.

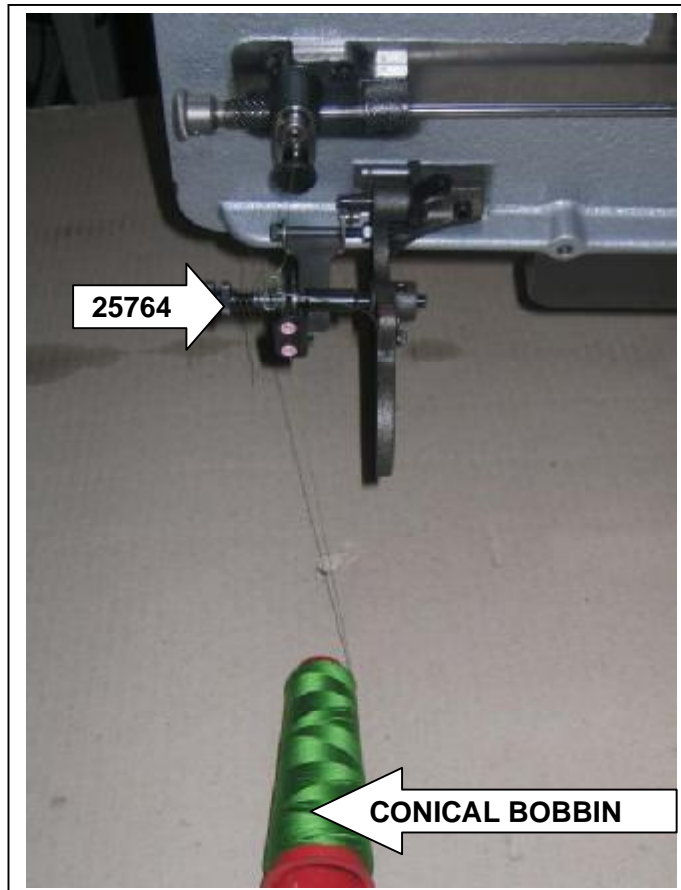


FIG. 13

The Cornely machine is probably the most durable piece of machinery ever made. This could be due to the care they are given by the operator.

## CHAPTER 6 : LUBRICATION

When you oil the machine, do it sparingly.

If you get too much oil, the machine will spit the oil back onto the fabric.

Every moving part needs oil on it.

### OIL TYPE

- ARAL VITAN G F 22
- BP ENERGOL HLP 22
- FINA HYDRAN 22
- MOBIL D.T.E. 22
- SHELL TELLUS C.22

### REMARKS

The machine Cornely LG3 has a special equipment situated in front of the head with which you can change the speed when curling around the chainstitch row. You can choose to curl around every 2/3/4/5 or 6 stitches according the work. This is a very easy operation. For the simple chainstitch work you have to put the speed on O. (Fig 14).

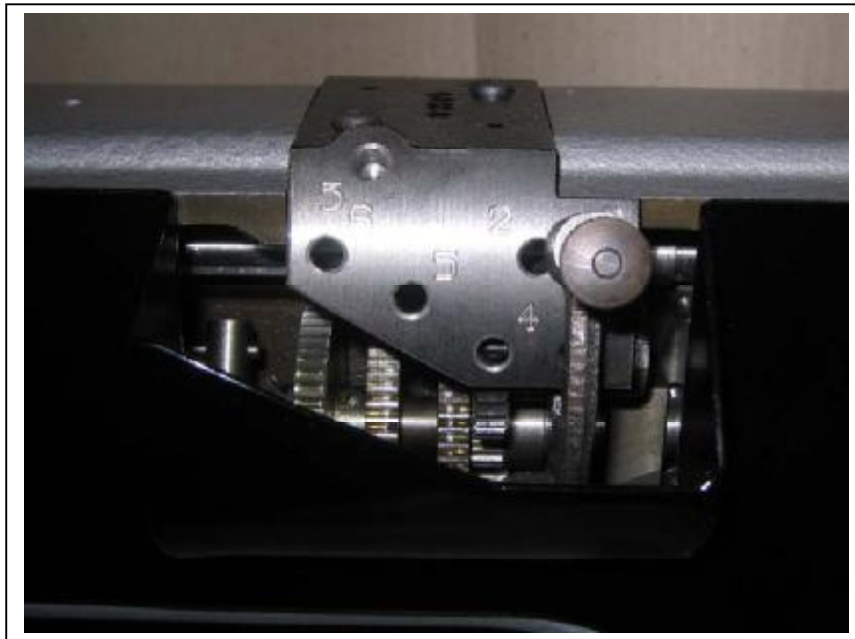
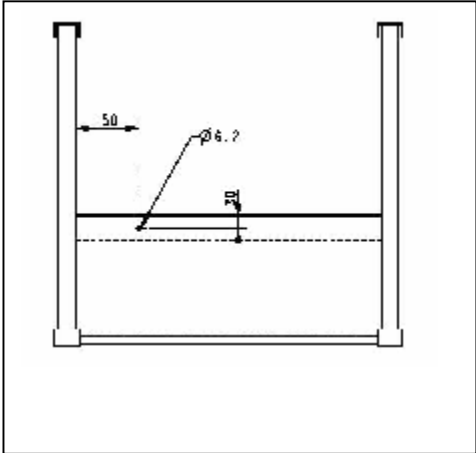
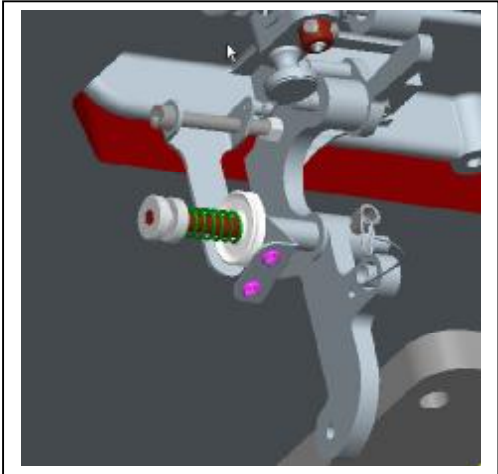
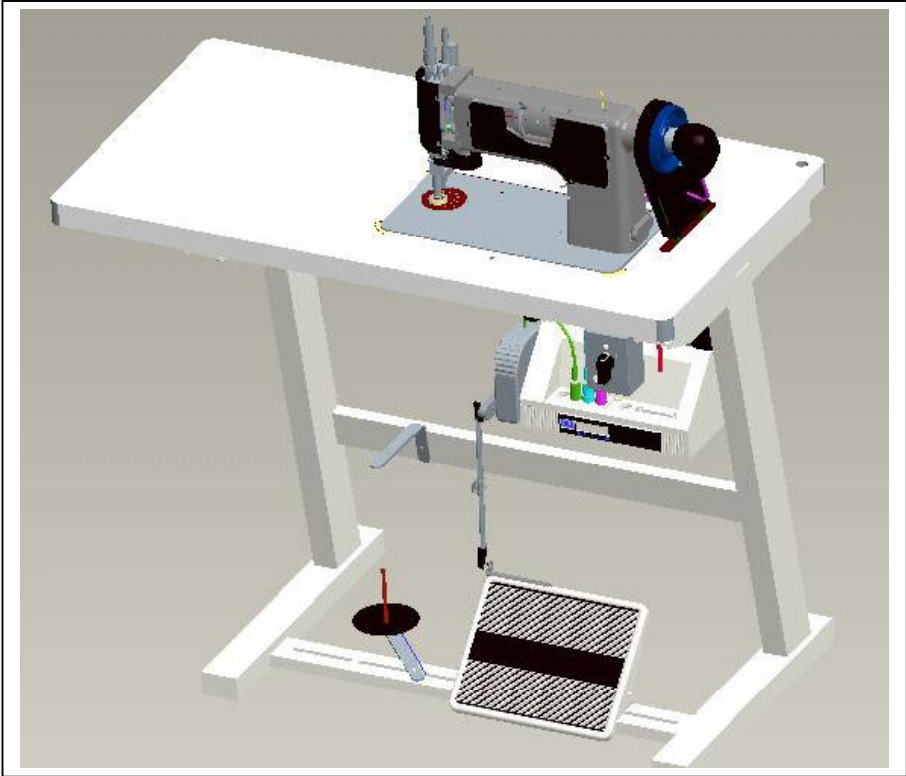


FIG 14

**CHAPTER 7 : INSTALLATION OF THE BOBIN STAND**



**CHAPTER 8 : INSTALLATION OF THE EURAMOT MOTOR**

