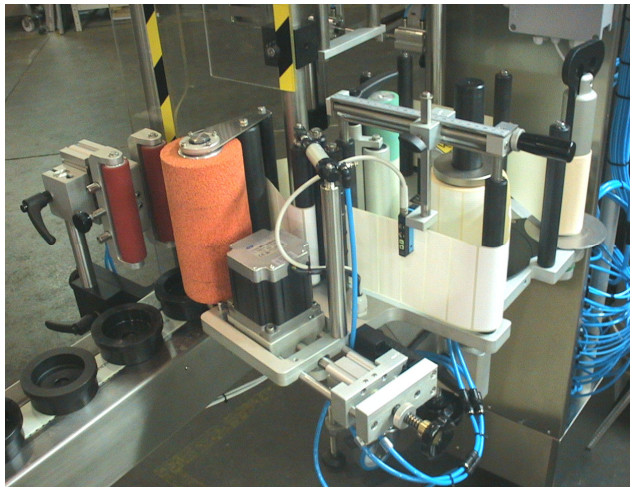
sommario

1 General description of LABELLER for CYLINDRIC bottles

The labeller single head is suitable per application of one or two labels (front and back) from single reel.
The labeller's head is easy to set for labels height and in wideness through simple systems of regulation by screws end touch screen setting; the minimum label's distance from bottle's end is about 15 mm.
Before using different labels from those agreed, you are preached to contact the building firm that will verify and eventually will approve the employment by indicating the modalities after a written communication.



2 Technical data of Labeller

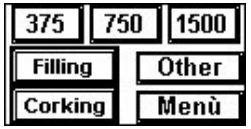
The general technical data are those reported in the manual of instruction for the use and for the maintenance of the basis machine with the exception of the data reported below.

Dimensions of occupied space without printer	Within machine measures
Dimensions of occupied space with printer	About 100 mm extra. Total Machine deep 1000 mm.
Weight equipment machine to encapsulate	55 kg approximately
Electrical alimentation	From electrical panel machine
Pneumatic alimentation	6 bar with dried air
Air Consumption	1 l/min. approximately

3 Controls for the use

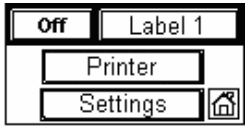
In addition to the standard touch-screen's commands for the use of base machine, are present the fallowing commands also:

Operation with Labeller



From HOME page press OTHER bottom to gain access to the LABELLER commands

Than press LABELLER bottom to gain access.



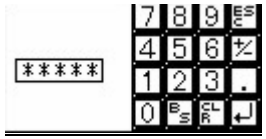
Choose now to enable or disable the LABELLER through the bottom **On/Off .**
Choose if labels to apply on the bottle are:
1 Label or **2 labels**.

Enable or not the PRINTER if present by its bottom.

To set the LABELLER data press SETTING bottom.

Insert data now in mm **.*: (millimetres)
- **Front** label wide
- **Back** label wide (if present)
- **Bot. Diam.** (mid-diameter) bottle diameter

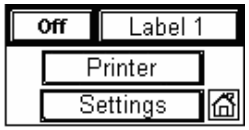
JOG function needs to trial the labeller on one bottle without use the complete machine in auto mode. Just single trials.



To insert values, press on **.* and will be showed the screen with numbers. Digit the desired number and press the bent arrow to confirm.

Operation with Hot Printer

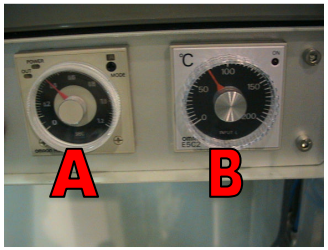
The PRINTER , if installed on labeller's body, can be enabled o not through the PRINTER bottom.



The power up of the Printer must be done through the command panel place under the main electrical panel like in the pictures below:

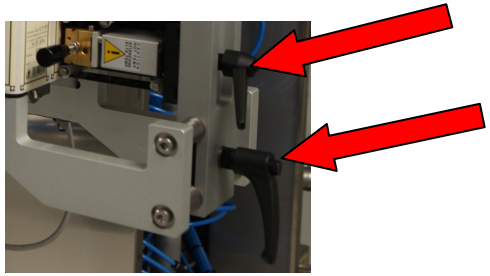
Regulation of time/temperature of printer

Stamping time is made through the rotation of the transparent plastic ring “A” and cannot be more than 1,2 seconds. This time indicates the stamp’s holding on the label for the transfer. Temperature in °C of the hot printer is made through the rotation of the transparent plastic ring “B”. (in attachment the original printer’s manual for stamps placing instruction and others)



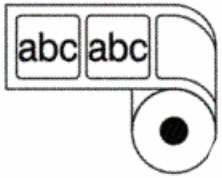
Regolazioni meccaniche di altezza e centraggio stampatore

The printer adjustment dx/sx and up/down is made through the two jaccarde like in fig 10. The lower jaccarde needs for dx/sx adjustment, the higher jaccarde needs to adjust up/down. Obviously, it is required to unloose the jaccarde before, that ad just the printer and tight the jaccarde again. Do one adjustment at the time.



Reel installation

The labels REEL should be rolled up from manufacturer like showed on picture below. Label and back label have to be placed on the same spool alternately.

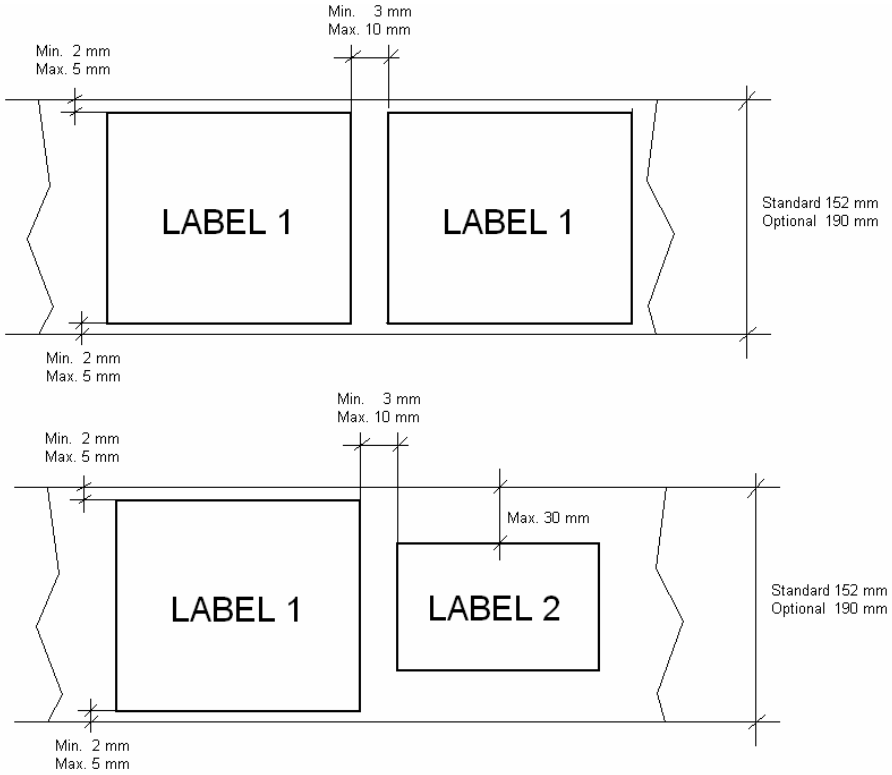


Reel dimensions:
Max. REEL external diameter: 180 mm max. (about 7 inches);
Max. CORE diameter: from 75 mm (about 2,95 inches), min. CORE diameter 50 mm (about 1,97 inches).

Labels dimensions std:
Max. height: 152 mm (about 6 inches);
Min. height 15 mm (about 0,59 inches);
Special configuration Max. height 190 mm (about 7.48 inches)

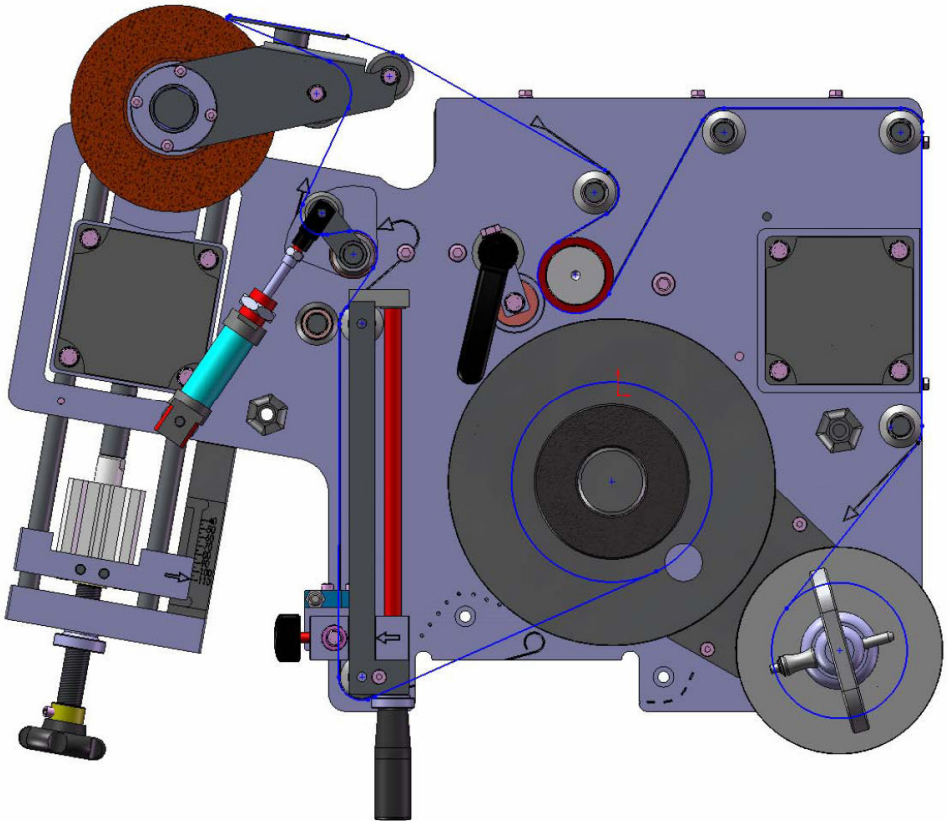
Cylindrical bottles dimensions:
Min. bottle diameter: 50 mm
Max. bottle diameter: 110 mm
Max. dimension of ribbon height and distances min. and max. between labels.

Maximum and minimum distances of labels on the ribbon:

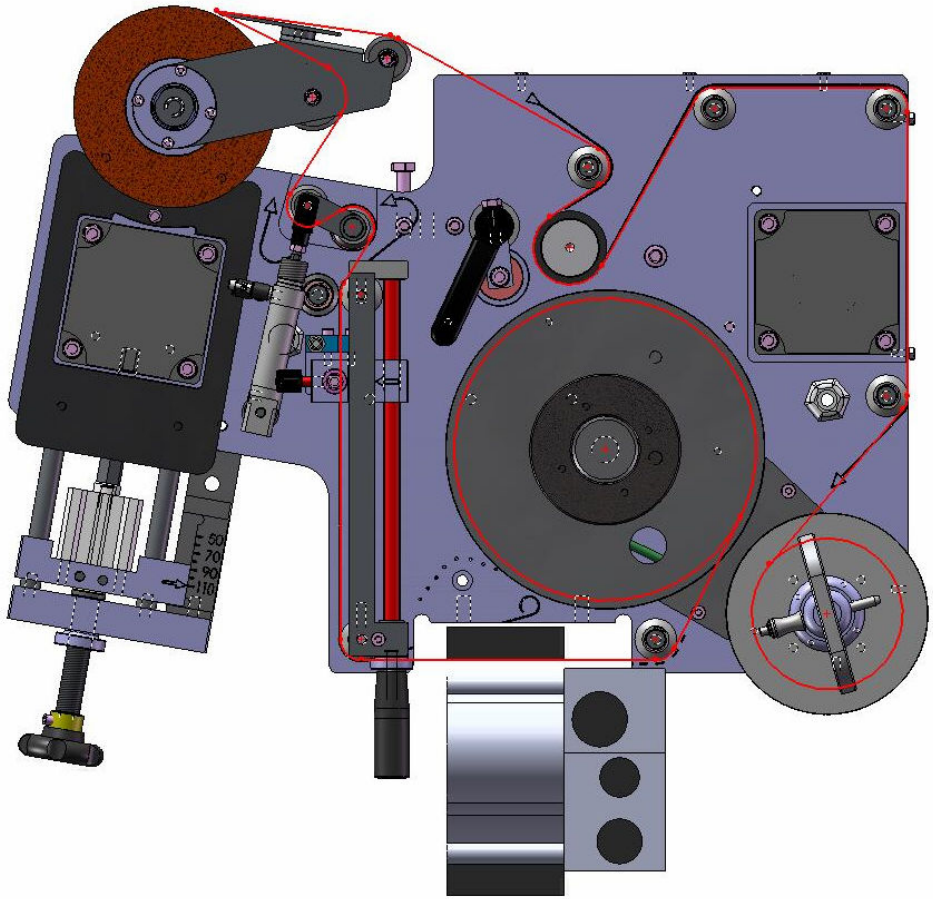


In all the cases, the REEL installation and its ribbon with labels are easy and intuitive. After having insert the REEL in the appropriate shaft, unroll about 1 meter (about 39 inches) of ribbon and do pass like in the fallowing scheme and insert the terminal ribbon side in the long pocket placed on the tractor shaft holder.

Scheme of Ribbon track on labeller head (without printer)



Scheme of Ribbon track on labeller head (with printer)



Labeller Mechanical Regulation for label's format

Every time do change the label's height or format, it is required to do some mechanical regulations and some settings through touch screen.

Mechanical regulation:

Adjustment in height the label

To adjust the label in height we must keep in mind to take the measure from end's bottle till label's base on the bottle. Use the manual hand-wheel's regulator with a reference's graduated line (fig 2), per example we would like to set 25 mm on the reference's graduated line, this means that label's base will be placed at 25 mm (approx.) of distance from the base of the bottle's older (platorel). Found the correct distance is required to lock the manual hand-wheel's regulator through the relative jaccarde fig 1 .

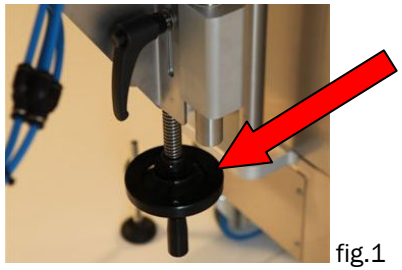


fig.1

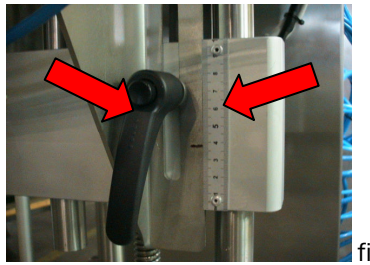


fig.2

Adjustment of tractor roll in base to the bottle's diameter:

To ad just the tractor roll who apply the labels fig.3 is required to set the register fig.4 positioning the reference mark (arrow) fig.5 on the graduated line in millimetres corresponding to the bottle's diameter. Example: with a bottle of 60 mm of diameter, the corresponding value to set will be 60.

The adjustment must be made through the little knob and relative lock ring 4 .

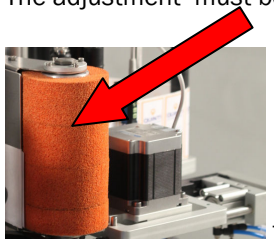


fig.3

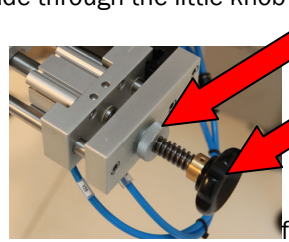


fig.4

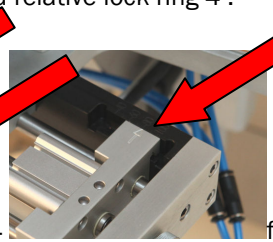


fig.5

Adjustment of contrast rolls:

First occur to set the distance between contrast rolls in function the the bottle's diameter through the little knob and relative lock ring (fig.6). About height adjustment is possibile do that though the jaccarde fig.7, adjust approx. between the label's height size fig.7 :

- per diameters from 50 up to 70 mm, set on reference mark 1 (fig 6)
- per diameters from 71 up to 110 mm, set on reference mark 2

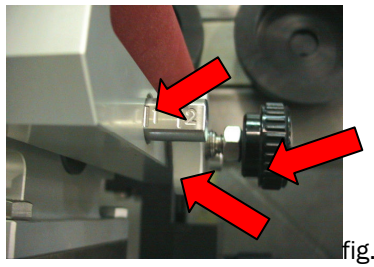


fig.6

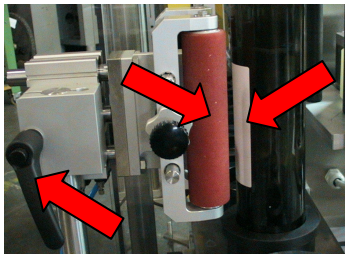


fig.7

Than, we must set the contrast roll relative to the bottle on the platorel. At machine INACTIVE, push manually the piston of the contrast roll's body at end run forward the centre of the platorel fig.8, than place the bottle on the platorel and come close carefully the contrast roll in touch to the bottle (fig.9) through the setting knob (fig.10) prior unloosing the jaccarde. Obviously, if the bottle results larger in relation to the available space, it will be required first to unloose the knob to set back all the support to make space for the bottle, push again manually the piston of the contrast roll's body at end run forward the centre of the platorel fig.8, than place the bottle on the platorel and come close carefully the contrast roll in touch to the bottle (fig.9) through the setting knob (fig.10) prior unloosing the jaccarde.

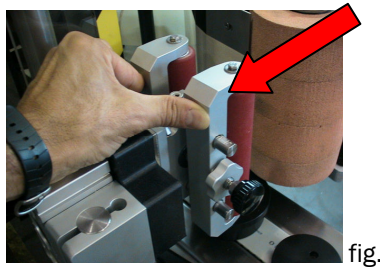


fig.8

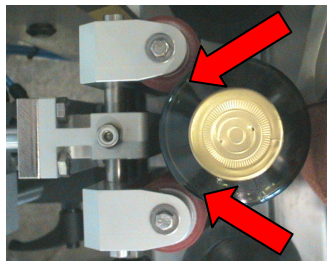


fig.9

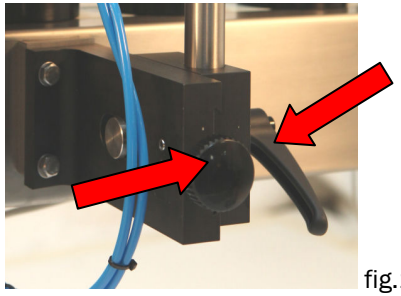


fig.10

Label adjustment on distribution blade:
During ribbon installation is important starts positioning by hands the blade approx. 0 mm from the distribution blade fig.11.


fig.11

Optical- eye adjustment of label's advance/moving back:
After correctly installed the ribbon is important to set the optical eye of labels reading at about 5/10 mm border line like showed in the fig 12 and anyway on the reference's graduated line when you found first time the correct point. This point can be used next times using the same labels fig. 13.
Warning: it is imperative to place the optical eye on the wider label in case of front and back labels respectively wider and shorter.

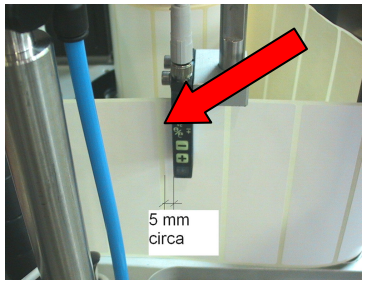


fig.12

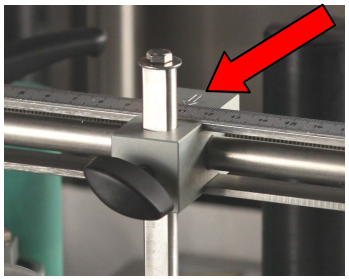


fig 13

Touch screen commands and settings:

Do select Labeller function through LABELLER bottom fig. 14, will be show the the commando page fig. 15 where is possible to enable the labeller (on/off), moreover if label is only one (1 label) per bottle or two (2 labels). If labeller is equipped with PRINTER and you want use it, select PRINTER.
The remaining command is related to SETTINGS that will show the page like in fig.16.
At this time insert the fallowing data in millimetres :
- Wideness of label 1
- Wideness of label 2 (if is present).
- Bottle Ø (it is recommended to take diameter measure of some bottles toh ave medium diameter size to set)

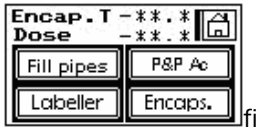


fig.14

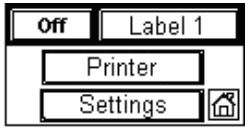


fig.15

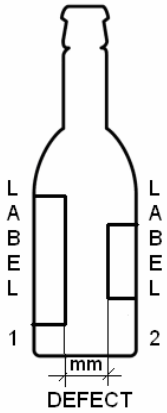
fig.16

Done mechanical and Touch screen settings, is possible to do some trials of labels application in JOG mode. Use JOG function through touch screen fig.16 or also through JOG bottom placed near the labeller like showed in fig. 17, with bottle placed on the platorel where the labeller works more precisely among the sponged roll.
JOG mode performs one cycle of labelling at the time; it is recommended to do fix the adjustment of labels placing' by trials, at least 2 times after changed value (use a bottle that is closer to the medium diameter of bottles). In case the labels is placed properly, you can stop with trials and consider the labeller set. In case the height is wrong, it will be necessary lower or have up the relative regulation device in height of required millimetres.
In case the label 1 and label 2 are applied at wrong distance, or for defect or in excess, is required to intervene from Touch Screen (fig.16) to refine the distance through the bottoms (-) negative (+) positive; between bottoms will be showed a variation number. The variation number does not correspond to an exact measure, approx 1 unit corresponds to a variation of 0,1 mm; the number is indicative and not absolute.

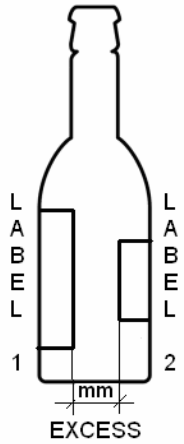
fig. 17

To use the JOG bottom near the labeller is important to set before the touch screen in the setting page like picture in fig.16.

In case the distance between Label 1 and Label 2 results in defect should be set a the desired number with positive sign (+) as needed.



On the contrary, in case the distance between Label 1 and Label 2 results in excess, will need to be set a number with negative sign (-) as needed.



IMPORTANT: it is possible that distance between label 1 and label 2 will be not always the same without change the settings on Touch screen, in this case the bottles could not have the same diameter, like mentioned before to chapter "Regulation..". To better understand, with one bottle of Ø 70 mm is enough 1 mm (example Ø 69 mm) to change the perimeter of 3,14 mm, than will result an error between label 1 and label 2 of 3,14 mm.

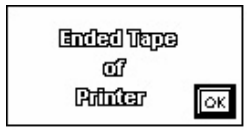
Control of the functionalities

The labeller's functionalities can be verified though the JOG mode. This operation could be required in case the labeller does not work properly in AUTO mode.

SIGNALS OF WARNING- the touch screen appears red/orange

When this warnings take place, after having removed the problem, it is necessary to push the bottom "OK" and to start again the machine with the bottom "Start" for about 3 consecutive seconds to allow the repetition of the desired operations.

The machine will STOP whenever the Labels are ended or when the label's reel is locked.
Change Label's reel or provide to get free the reel.



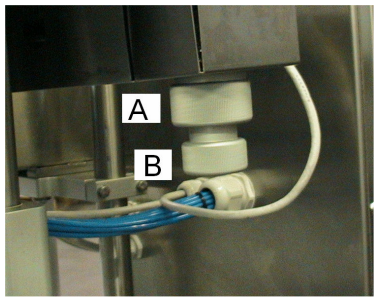
The machine will STOP whenever the Tape of printer is ended.
Change the printer's tape.

4 Damages and solutions

The machine is provided of a system of control of the functionality of labeller through JOG mode. In case of malfunction or probable failure a JOG test is required.
It is recommended to do the test of function without bottles press before START bottom on the instrumental panel than the bottom on the touch screen .
In case functions do not respond to commands is required technical support.

- The tape is not recovered well in the tape recover reel system of labeller loosing tension.

It is possible mechanical friction, under the recovery reel, needs to be adjust properly Because it could be too loose and needs to be loaded as required (see picture below).
The right recovery is when the tape is slightly loose between labeller's tractor shaft for tape movement and recovery reel; in any case it should be the tape recovery without increase the amount of tape. This adjustment is better if made with recovery reel shaft with a little bit of tape recovered because when the recovery reel will be bigger it will recover more.



To load the friction system is required to loose before the lock ring "B" by hand, than it is need to maintain stopped the adjusting ring "A" by hand. Now screw on the adjusting ring "A" a little bit (¼ of turn at the time) than lock with lock ring "B" and try the labeller in cycle. Adjust until the tape is not recovered as required.
Screwing up the adjusting ring it will obtain more friction;
Screwing down the adjusting ring it will obtain less friction.

5 List updated chapters