



**PEGASUS®**

# MC Device

**Models: MC400**

Thank you for purchasing Pegasus' labor saving device.

Study this manual very carefully before beginning any of the procedures and then use the device correctly and safely.

Keep this manual in a convenient place for quick reference when needed.

Elastic feeder (standard type)  
with tape cutter / inserter

**INSTRUCTIONS**

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Be sure to study very carefully **for safety.**

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## 1. Introduction

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- This manual describes the instructions for using this device safely.
- Study this manual very carefully and understand fully how to operate, check, adjust and maintain the labor saving device before beginning any of the procedures.
- You always perform operations close to moving parts such as needles when using industrial sewing machines. Therefore you have to keep in mind you could easily touch them. To prevent accidents, it is essential that you use the safe products supplied by Pegasus correctly.  
All the people who will use sewing machines must study this manual and the instruction manual for sewing machines very carefully and then take necessary safety measures before beginning any of the procedures.

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## 2. Indications of dangers, warnings and cautions

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To prevent accidents, indications (symbols and/or signs) which show the degree of danger are used on our products and in this manual. Study the contents very carefully and follow the instructions.

Indication labels should be found easily.










Attach new labels when they are stained or removed.

Contact our sales office when new labels are needed.

### **Symbols, signs and/or signal words which attract users' attention**

 <b>DANGER</b>	Indicates an immediate hazard to life or limb.
 <b>WARNING</b>	Indicates a potential hazard to life or limb.
 <b>CAUTION</b>	Indicates a possible mistake that could result in injury or damage.

## Symbols and messages

	Be sure to follow the instructions when you operate the machine and/or labor saving device.
	If you use the machine and/or labor saving device incorrectly, you may get an electrical shock.
	If you use the machine and/or labor saving device incorrectly, your hands and/or fingers may be injured.
	If you use the machine and/or labor saving device incorrectly, you may cause fire.
	Never do this.
	Unplug the machine or shut off the power when checking, adjusting and/or repairing the machine and/or labor saving device, or when lightning may strike.
	Be sure to ground the machine and labor saving device securely.
	If you use the machine and/or labor saving device incorrectly, your fingers and/or hands may be caught in them or it, causing trouble.
	Indicates a danger of burn injury due to high temperature.

### 3. Safety precautions

#### ① Applications, purpose

The labor saving device is designed to increase quality and productivity according to you needs. Therefore never use the device for the applications which may defeat the above purpose.

#### ② Circumstances

Some circumstances when you are using the labor saving device may affect its life, function, performance, and safety.



For safety, do not use the labor saving device under the circumstances below.

1. Do not use the device near objects which make noise such as a high-frequency welder, etc.
2. Do not use or store the device in the air which has vapor from chemicals, or do not expose the device to chemicals.
3. Do not leave the device outside, in high temperatures or the direct sun.
4. Do not use the device in high humidity or ambient temperatures which may affect them.

5. Do not use the device on the condition that the voltage fluctuation range is more than  $\pm 10\%$  of the rated voltage.
6. Do not use the device at the place where the supply voltage specified for the control motor cannot be properly obtained.
7. Do not use the device at the place where the air supply specified for the device cannot be properly obtained.
8. Do not expose the device to the water.

#### ③ Safety measures



(1) Safety precautions when you perform maintenance on the labor saving device.

- When performing maintenance such as when checking, repairing, cleaning the labor saving device, turn off the power, disconnect the power plug from the outlet and press the machine treadle in order to make sure the machine does not run.
- If you have to perform maintenance on the machine and/or labor saving device with the power on, always be careful because the machine and/or device could start operating unexpectedly. To prevent accidents caused by incorrect operation, you should establish your own procedures for safe operation and follow them.

- Only well-trained people should perform routine daily maintenance and/or repair the machine and/or device.



- Do not modify the machine and device yourself.

※ Consult your local Pegasus' sales office or representative for modification.



(2) Before operating the device

- Before operating the device, check the machine head, machine unit and device to make sure they do not have any damage and/or defects.

Repair or replace any defective parts immediately.

- To prevent accidents, always make sure the safety covers and safety guards are properly secured.

Never remove the safety covers and safety guards.



(3) Training

- To prevent accidents, operators and service/maintenance personnel should have proper knowledge and skills for safe operation.

To ensure so, managers must design and conduct training for these people.

#### 4. Notes for each procedure



### CAUTION

#### ① Unpacking

The machine and device are packed in boxes (and plastic bags) in the factory before shipment. Unpack the boxes and bags properly and sequentially by following the instructions shown on them.

#### ② Installation, preparation



### CAUTION

#### Connecting the air lines

1. Always turn off the power first and then connect the air lines to the joints. Be sure to connect all the air lines before connecting them to the air source.
2. When connecting the air lines to the joints, be sure to insert the joints to the proper depth of the air lines and fasten securely.
3. Do not allow excessive force to be exerted on the air lines while using the device.



- 4. Do not bend the air lines too much.

5. If necessary, protect the air lines by positioning them safely and/or using the cover.

6. Do not use staples to secure the air lines. Otherwise it may cause damage.



### WARNING

#### Connecting the cords



1. When connecting the power cord, be sure to turn off the power and disconnect the power plug from the outlet.



2. Check the voltage designation to make sure the power relay cord matches the local supply voltage. The use of wrong cord may cause damage to parts and/or fire.

3. Do not allow excessive force to be exerted on the cords while using the device.



4. Do not bend the cords too much.

5. Confirm that the cord is at least 25mm away from moving part of the machine and/or the device when you connect the cord.

6. If necessary, protect the cords by positioning them safely and/or using the cover.



7. Do not use staples to secure the cords. Otherwise it may cause damage.

#### Ground

1. Connect each of the ground wires in the sewing machine system to the ground terminal. Do not connect one device's ground wire to another device's.



2. Connect the ground wires securely to the indicated ground points on the machine head.



### WARNING

#### ③ Before operation

1. Check the cords, connector and air lines to make sure they do not have any damage, disconnections or tangles and then turn on the power.



2. Do not bring your hands and/or any part of your body close to the needle and pulley when turning on the power.




3. Well-trained people who studied this manual and the instruction manual very carefully should use the machine with the labor saving device.

4. Study the contents on "2. Indications of dangers, warnings and cautions" very carefully and then provide users with safety training as required.

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## WARNING

### ④ Precautions for work and operation

1.  The area near the presser foot is very dangerous during sewing. Do not bring your hands and/or any part of your body close to the presser foot.
2. To prevent accidents, be careful that any foreign matter such as water, other liquids or metals do not get into the device.
3. Wear clothes that cannot be caught in the machine.
4.  Do not leave tools or other unnecessary objects near the device.
5. To prevent accidents, always make sure the safety cover are properly secured.
6. Drain and clean the filter regulator periodically, if the device is pneumatic. Otherwise drainage will flow into the solenoid valve and/or air cylinder, causing trouble.
7. Always turn off the power before leaving the machine table.
8. If any trouble occurs, stop using the machine and turn off the power. Check, repair and/or perform other necessary procedures immediately.
9.  Pay close attention to the knife edges not to injure your hands and/or fingers.

## Battery in the power box

The MC power box is equipped with a battery to keep the sewing data as it is.



If the following happens, the battery may be dead or the power box may be out of order.

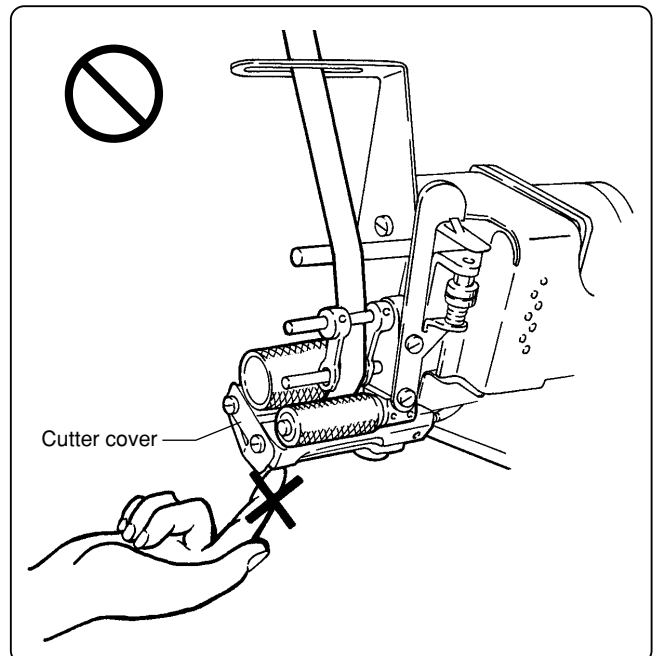
Consult your local Pegasus sales office or representative.

- (1) The sewing data which has been entered often changes.
- (2) When the power is turned on, the sewing data is initialized.

## CAUTION

### ⑤ Maintenance, check & repair

1. Well-trained people who studied this instructions very carefully should maintain, check and repair the machine and device.
  2. Perform routine daily maintenance and periodical maintenance by following this instructions.
  3. Use Pegasus' genuine parts when repairing and/or replacing parts.  
Pegasus disclaims all responsibility for accidents caused by improper repair/adjustment and/or use of parts which are not genuine.
  4.  Do not modify the device yourself.  
Pegasus disclaims all responsibility for accidents caused by modification.
  5. After maintaining, checking, and/or repairing the machine and device, always make sure that any trouble does not occur when the power is turned on.
  6. Before and after operation clean lint and any other foreign from the device not to cause trouble.
  7. Make sure to replace the safety covers when you need to remove them for checking and/or maintenance.
-  Do not put your fingers into the cutter and roller to prevent accidents. And never remove the cutter cover.



# Application and performance

## Application

For attaching elastic to waists/leg openings of leotards, swimsuits, etc.

## Performance

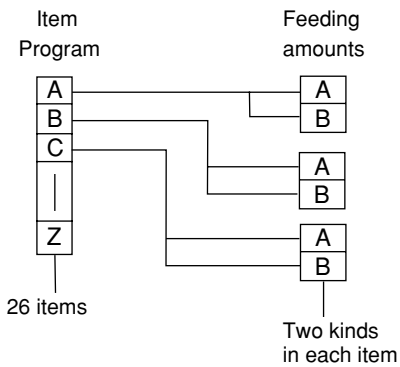
Tape width : 4.2 - 11.8 mm

(In case of using the optional presser foot for inch size tape : 12 - 26 mm)

Max. machine speed : 7000 s.p.m

26 items (types of sewn products) from A to Z can be programmed and stored in the MC device. Two kinds of feeding amounts (A and B) can be programmed and stored per one item.

In addition, A and B can be switched with the knee switch during sewing.

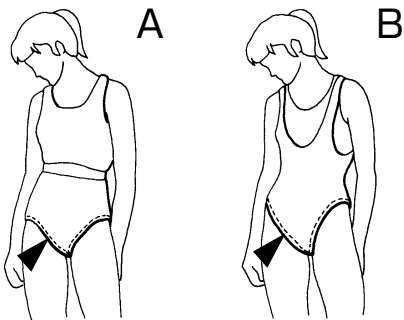


In each item two different feeding amounts (A & B) can be set.

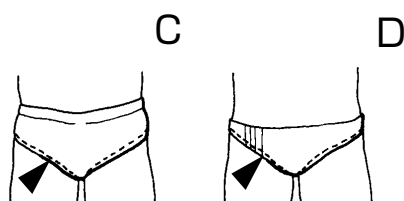
■ 26 items (types of sewn products) can be programmed with the same elastic width.

Ex.

● 2 programs for leg openings on leotards of different designs (A, B)



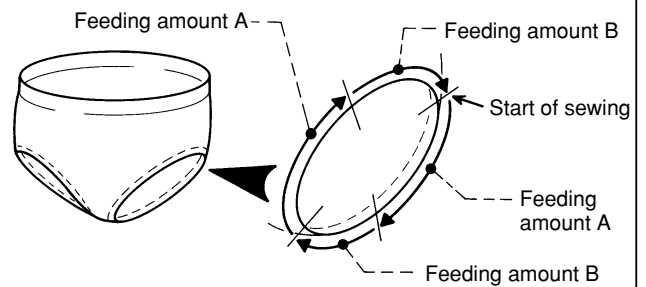
● 2 programs for leg openings on swimsuits of different designs (C, D)



■ Two kinds of feeding amounts (A, B) can be entered and saved in each of 26 programs (item) from A to Z.

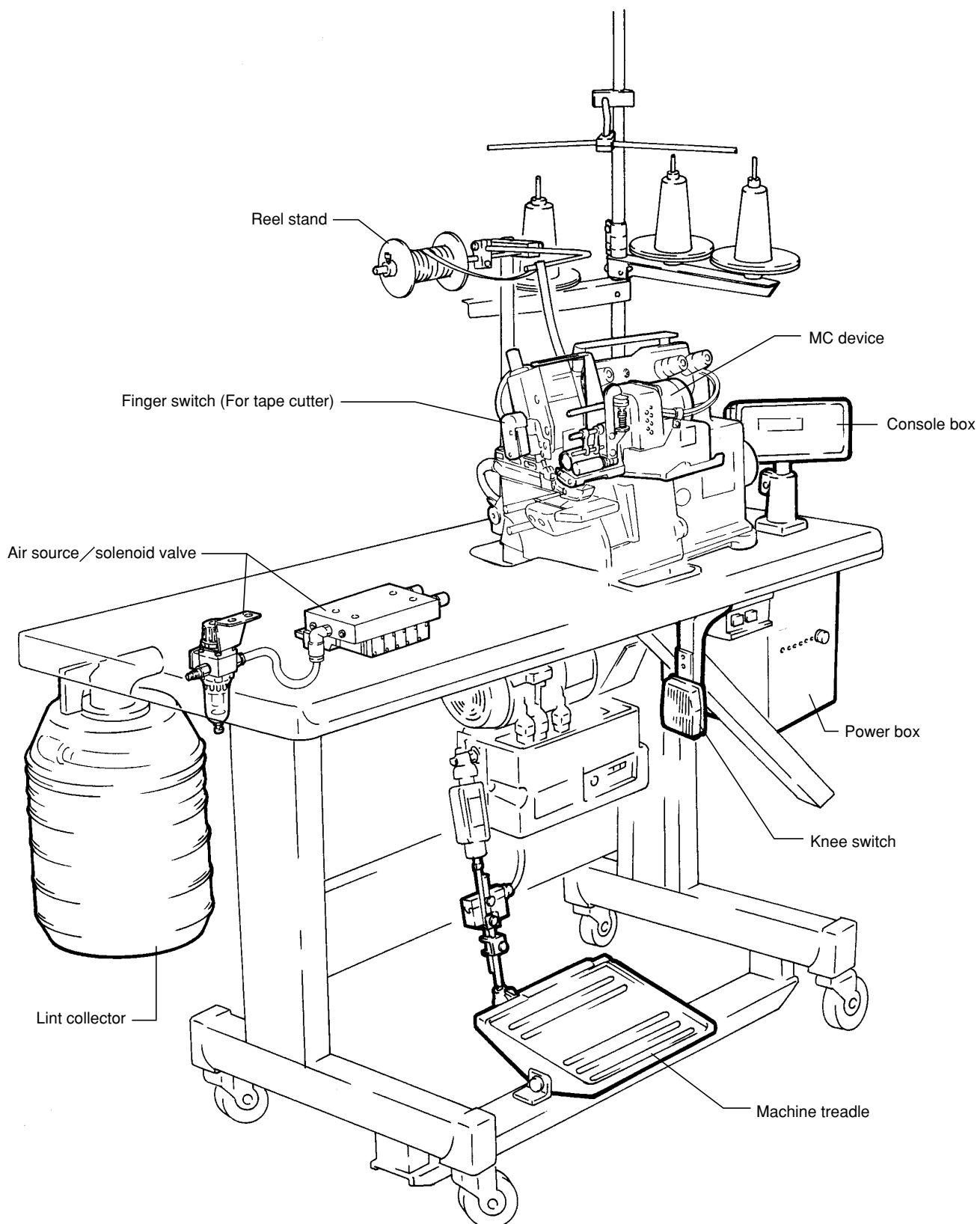
Ex.

Program A



# System construction


\* Install the knee switch, air source and solenoid valve properly according to the type of machine, usage and the shape of machine table.



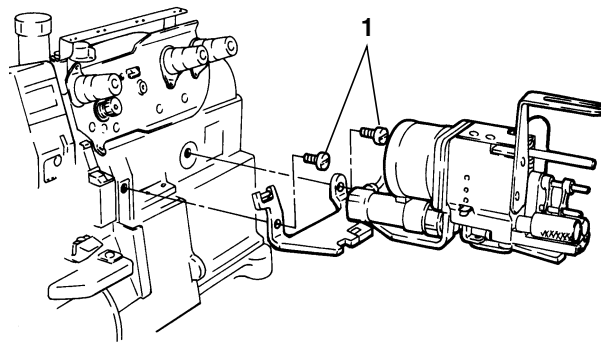
# Installing each component

## 1. Installing the MC device

### ⚠ CAUTION


 Always turn off the power, unplug the machine from the outlet and then only well-qualified technicians should install the MC device.

Install the bracket with the MC device on the machine head with screws **1** as shown in the illustration.

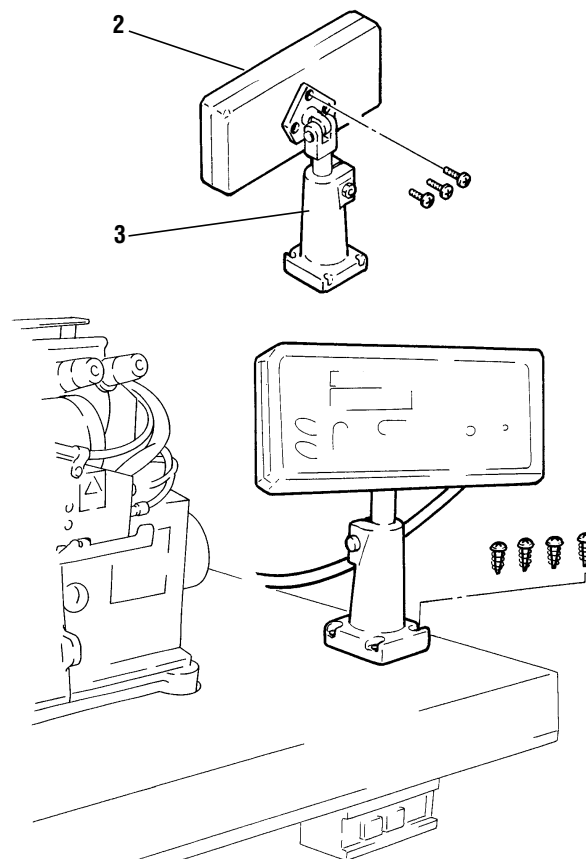


## 2. Installing the console box

### ⚠ CAUTION


 Always turn off the power, unplug the machine from the outlet and then well qualified technicians should install the console box.

1. Install console box **2** on bracket **3**.
2. Mount console box **2** and bracket **3** on the machine table.

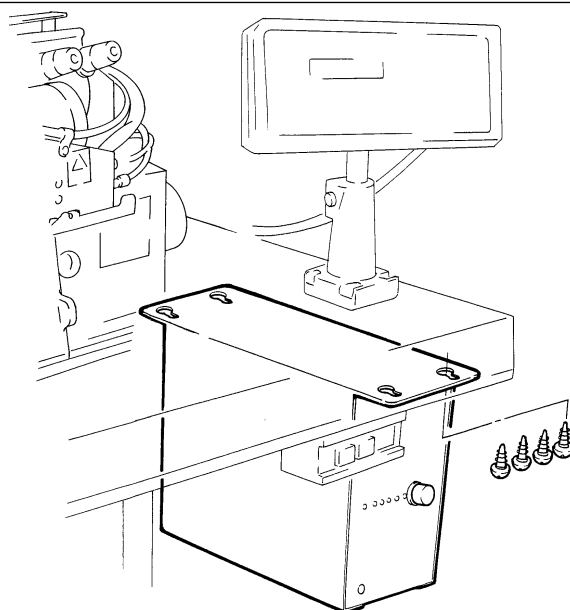


## 3. Installing the power box

### ⚠ CAUTION

 Always turn off the power, unplug the machine from the outlet and then well qualified technicians should install the power box.


Install the power box on the machine table.



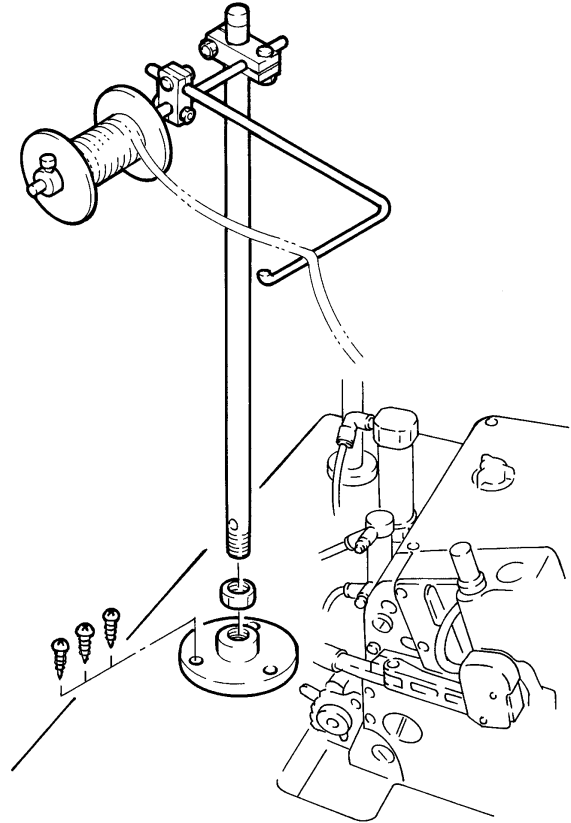
# Installing each component

## 4. Installing the reel stand

### CAUTION


 Always turn off the power, unplug the machine from the outlet and then only well-qualified technicians should install the reel stand.

Install the reel stand on the machine table.

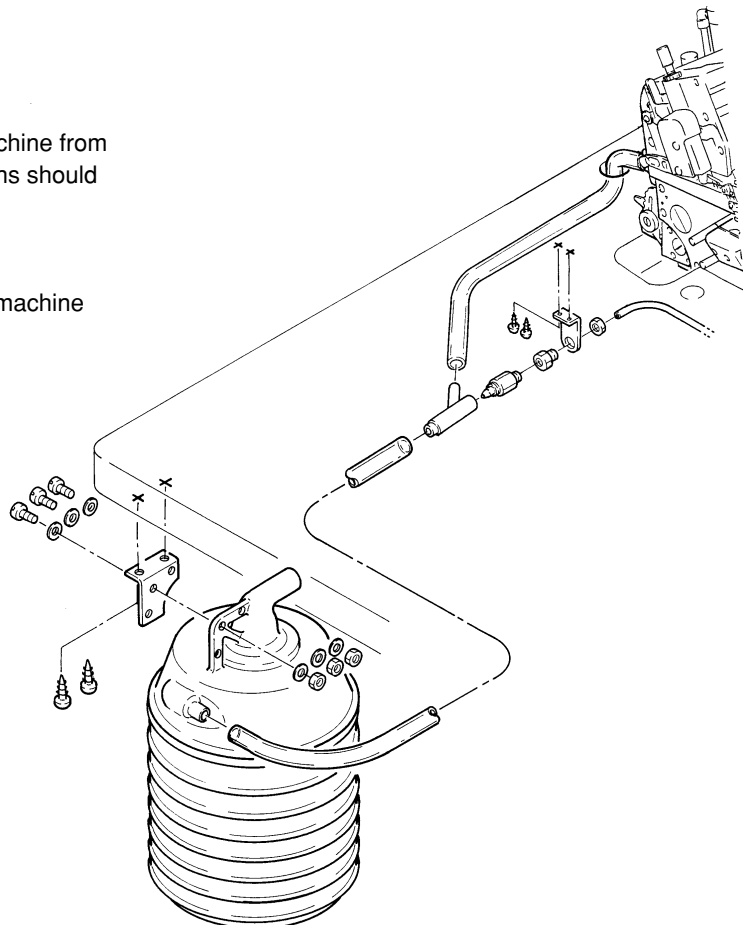


## 5. Installing the lint collector

### CAUTION

 Always turn off the power, unplug the machine from the outlet and then only well-qualified technicians should install the lint collector.


Install the lint collector on the underside of the machine table.




## Installing each component

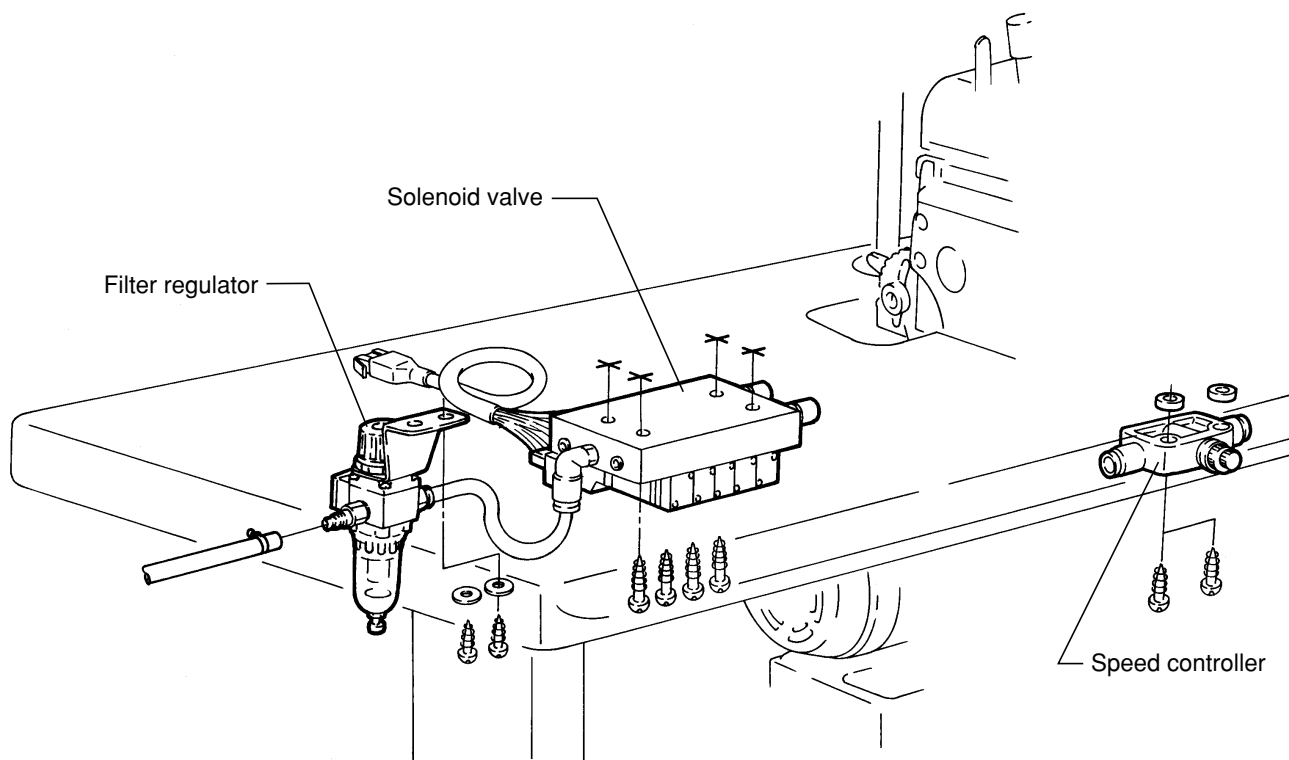
### 6. Installing the solenoid / filter regulator / speed controller

#### CAUTION

 Always turn off the power, air compressor first and then only well-qualified technicians should install the solenoid / filter regulator / speed controller.

 Connect other lines first before connecting to the air source (air compressor).


Install the solenoid / filter regulator / speed controller on the underside of the machine table.



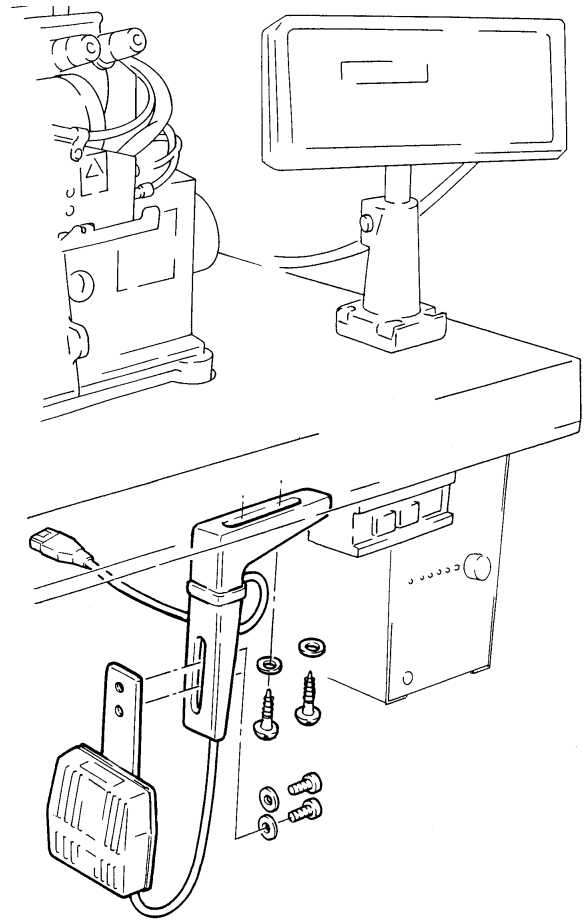
# Installing each component

## 7. Installing the knee switch

### CAUTION


 Always turn off the power, unplug the machine from the outlet and then only well-qualified technicians should install the knee switch.

Install the knee switch conveniently on the underside of the machine table.

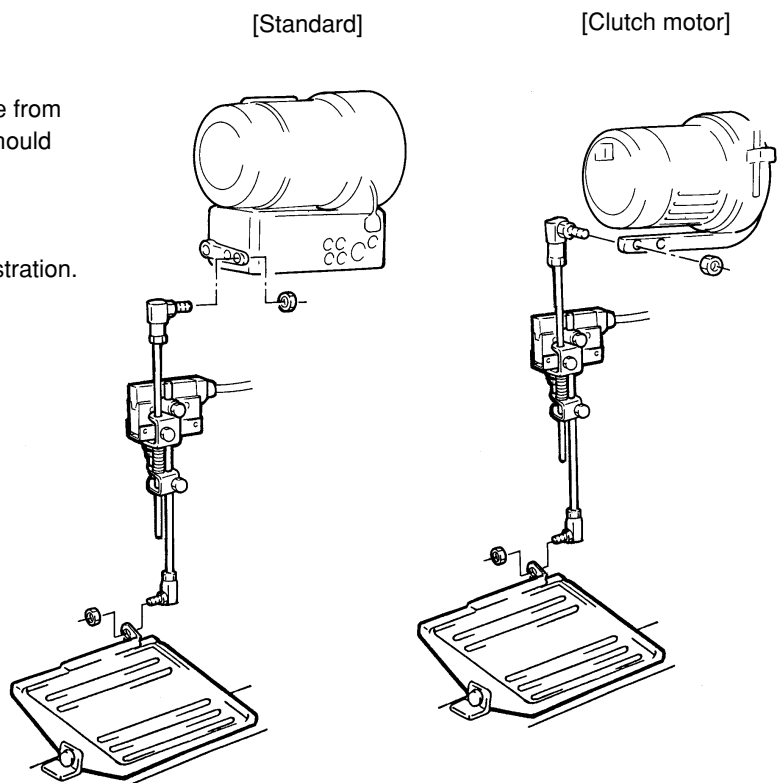


## 8. Installing the pitman rod / switch

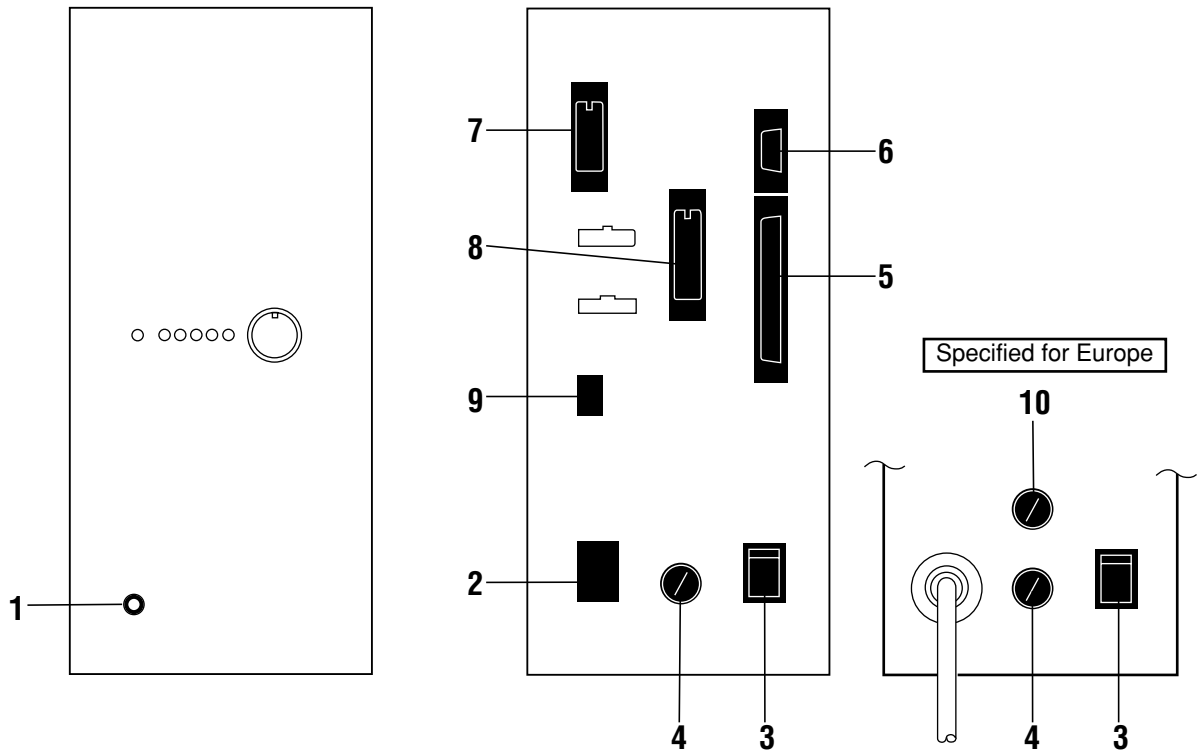
### CAUTION

 Always turn off the power, unplug the machine from the outlet and then only well-qualified technicians should install the pitman rod / switch.

Install the pitman rod / switch by referring to the illustration.



# Description of MC power box



**1** LED for power source

Indicates the power is on/off.  
Lit when the power is on.

**2** Power connector (input)

To connect the power cord.

**3** Power switch

To turn on/off the power box.

**4** Fuse holder

3A fuse is included.

**5** Console box connector (input/output)

To connect cords from the console box.

**6** Sensor connector (input)

To connect the relay cord for the rotation detector.

**7** Input switch connector (input)

To connect the relay cord of the knee switch, finger switch, treadle switch and MC device positioning safety switch.

**8** Output connector (output)

To connect the relay cord for the solenoid valve and the step indicator.

**9** Stepping motor connector (output)


To connect the tape (elastic) feed stepping motor relay cord.

**10** Fuse holder intended for users in Europe


3A fuse is included.


## Replacing the fuse for the power box

### WARNING

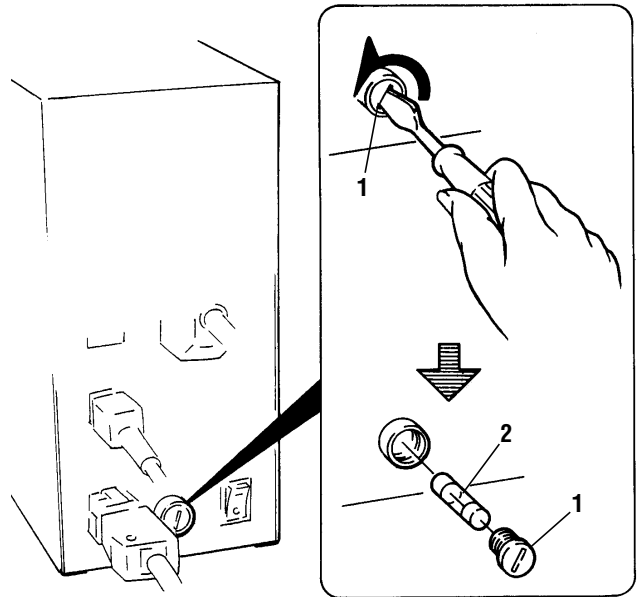
 Be sure to turn off the power and disconnect the power from the outlet, and then well-qualified technicians should replace the fuse.

### CAUTION

 The fuse for the MC power box is 3A. Do not use any other than 3A.


 If the replaced fuse is also blown out, the power box may be out of order. Stop using the MC power box and contact your local Pegasus' sales office or representative.


Remove fuse holder cap **1** with the screwdriver by turning in the direction of the arrow, and replace the fuse **2** with a new one.




# Connecting cords


## ⚠ WARNING

 Always turn off the power, unplug the machine from the outlet and then only well-qualified technicians should connect the cords.

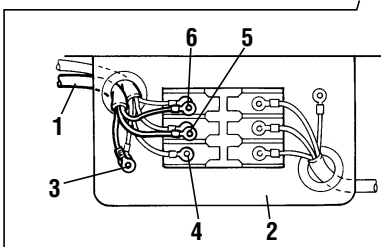
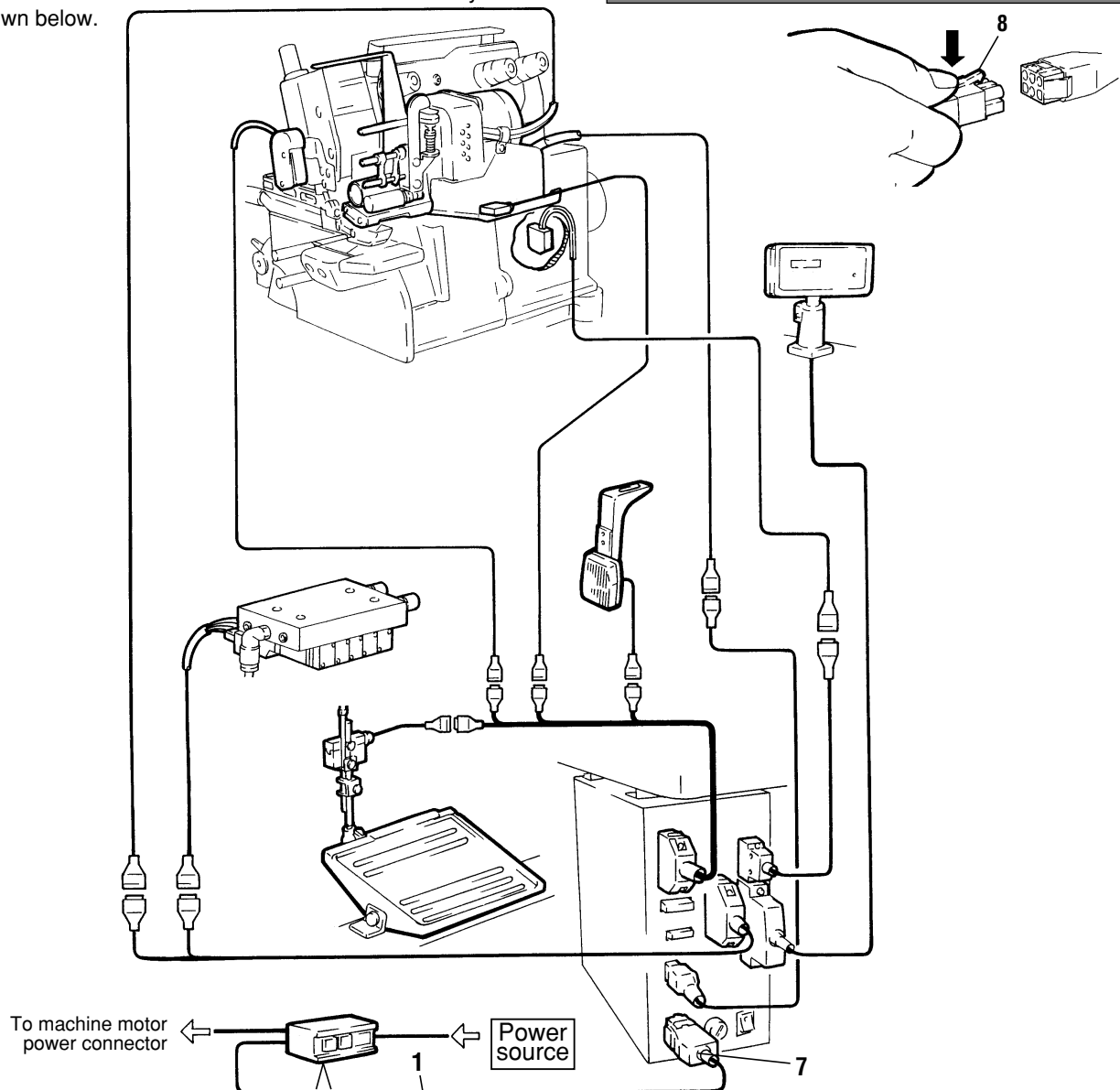
 Check the voltage designation **7** to make sure the power relay cord **1** matches the local supply voltage. The use of wrong cord may cause damage to parts and/or fire.

**1.** Each of cords and connectors is color- and shape-coded. Connect the cords to the connectors correctly as shown below.

 Connect the earth wire correctly. Otherwise you may get an electric shock when you touch the MC power box and/or the machine.

 Failure to connect properly may cause hazardous faulty operations and damage to the machine.

● To disconnect the locking connector, hold down the locking mechanism **8** with finger as you pull the connector out.



To connect the power relay cord **1** to the push-button switch **2**, connect E marked (green/yellow striped) wire to the GND terminal **3**. The other two cords must be connected to any 2 of the terminals **4**, **5**, and **6**.

**2.** Fasten the cords on the underside of the table conveniently with the provided cord clamp.

# Connecting air lines

## ⚠ CAUTION

⚠ Always turn off the power and air compressor first and then only well-qualified technicians should connect the air lines.

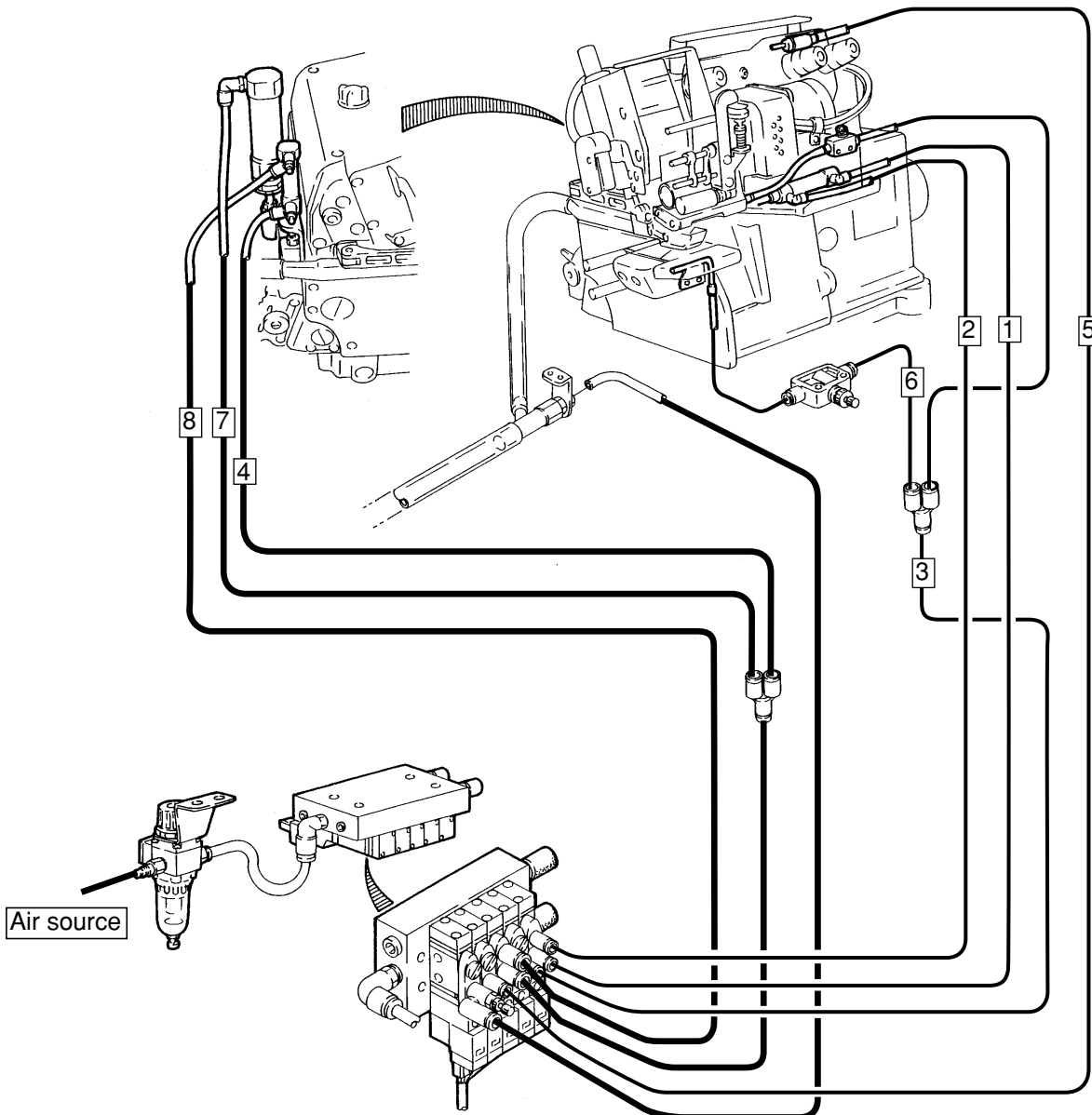
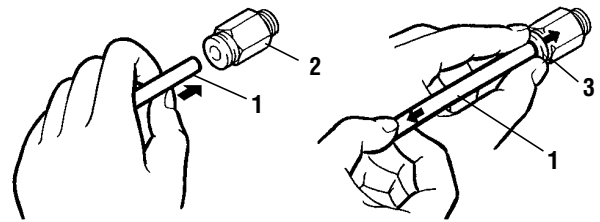
⚠ Connect other lines first before connecting to the air source (air compressor).

Connect the air lines by referring to the illustration.

## ⚠ WARNING

⚠ Failure to connect air lines properly may cause hazardous faulty operations. To prevent accidents and damage to the machine, check all the air lines for correct piping.

- To connect air tube 1 to joint 2, insert the tube completely to the inlet depth and make sure the tube can not be disconnected by pulling it.
- To disconnect air tube 1, press release ring 3 toward the arrow and pull it out.



# Adjusting the filter regulator

## 1. Adjusting air pressure


Pull up knob **1** on filter regulator until it clicks.  
Then set the air pressure at 0.5 Mpa (5 kgf/cm<sup>2</sup>).


- Turning **1** in the **(+)** direction increases the air pressure.
- Turning **1** in the **(-)** direction decreases the air pressure.

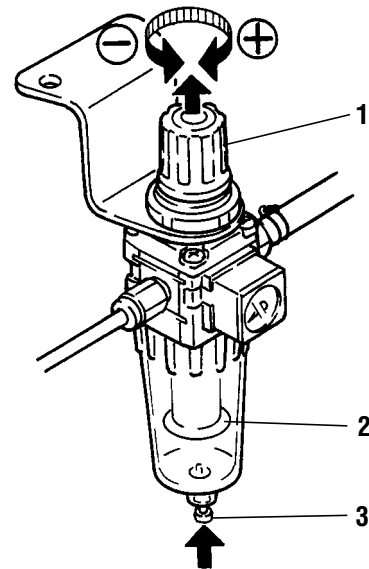
## 2. Draining the filter regulator

Drain the filter regulator before collected drainage reaches the level **2** by pressing button **3**.

### CAUTION

 Be sure to drain periodically. Otherwise, drainage will flow into the solenoid valve and/or air cylinder, causing trouble.

 Note that drainage and air spout out downward.



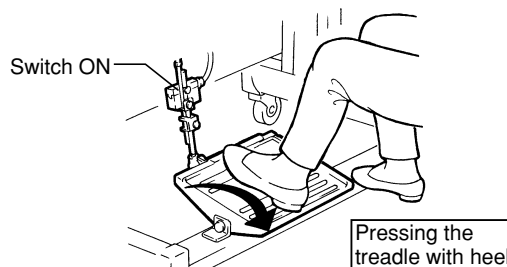
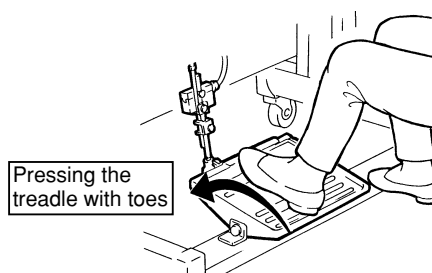
# Functions of the machine treadle / external switches

## Machine treadle

### ⚠ CAUTION

⚠ If you press the machine pedal while adjusting the device on the console box, the machine will get actuated. Be careful.

- Pressing the treadle with toes ... Starts the machine.
- Pressing the treadle with heel
  - ... Before the machine starts, the presser foot is raised and then the MC device starts to insert the tape (elastic).
  - If the treadle is pressed with heel during sewing or until the SC device gets activated, the presser foot is raised.
  - While the console box is being adjusted, the tape (elastic) is not inserted.

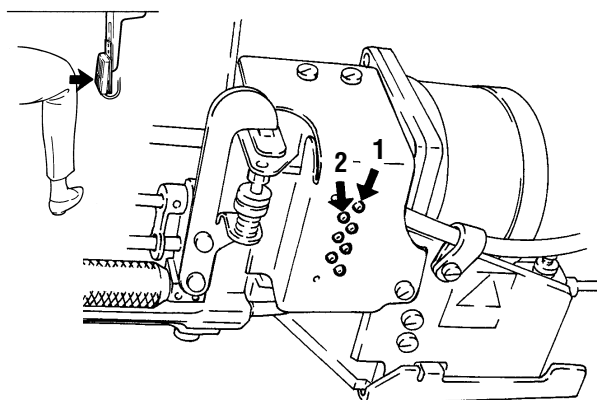


## Knee switch

Press to select feeding amount **A** or **B** alternately.

You can check to see if steps (feeding amount) are changed with indicator lights **1** & **2**.

- When the feeding amount **A** is active, lamps **1** (all of 4 green lights) are lit.
- When the feeding amount **B** is active, lamps **2** (all of 3 orange lights) are lit.

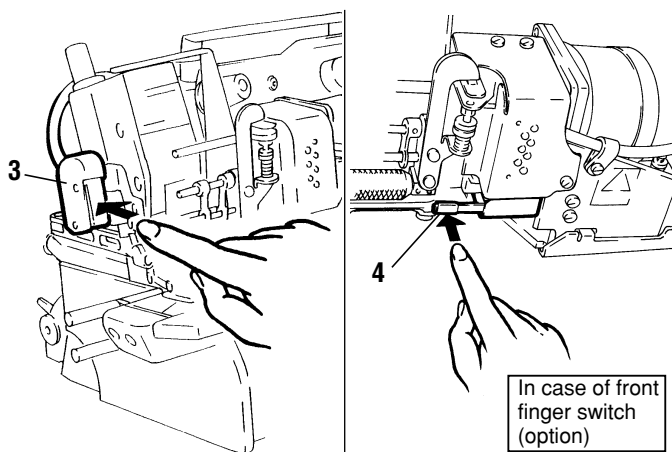


## Finger switch

### ⚠ WARNING

⚠ To prevent accidents, do not bring your fingers and/or hands close to the knives when operating them.

To activate the tape cutter, press finger switch **3** or **4**. You can cut tape as required during sewing, such as when having failed in sewing.

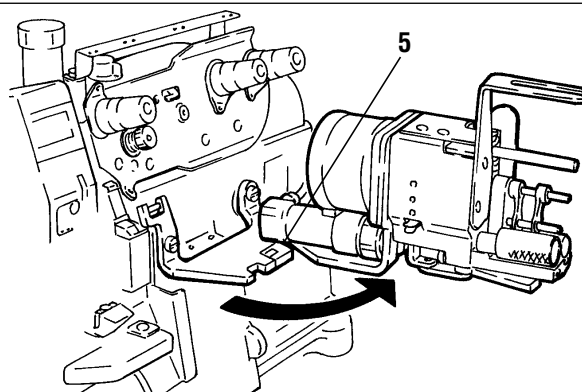


## MC device positioner switch

### ⚠ CAUTION


⚠ Note that the machine starts running by pressing the machine treadle even if the positioner switch is on.

When the MC device is swung aside, positioner switch **5** is turned on. Then you can only run the machine, and operate the chain cutter (KS device) and the presser foot lift.



## Adjusting the overlap of the knives

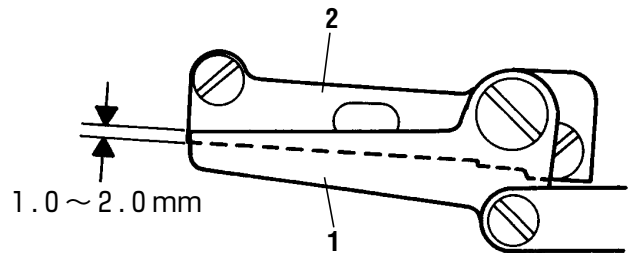
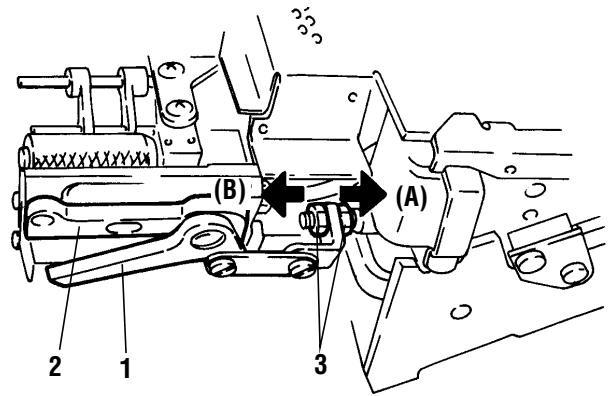
### WARNING

 Turn off the power first and then well-qualified technicians should adjust the device. Be careful not to injure any part of your fingers when handling the knives.

To obtain **1.0 - 2.0 mm** overlap of movable knife **1** and stationary knife **2**, turn nut **3** as required.


- To decrease the overlap, turn nut **3** in the direction of **(A)**.
- To increase the overlap, turn nut **3** in the direction of **(B)**.


(1.0-2.0 mm overlap is factory-set.)




## Inserting tape (elastic)

### ⚠ CAUTION

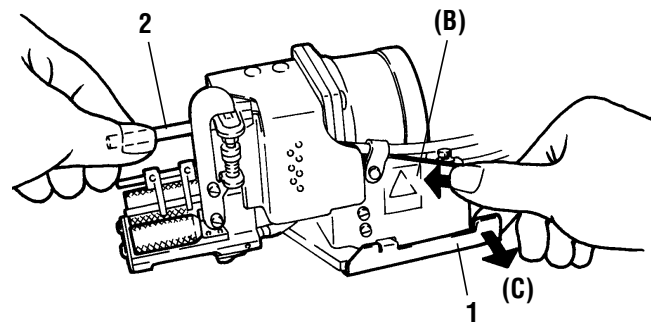
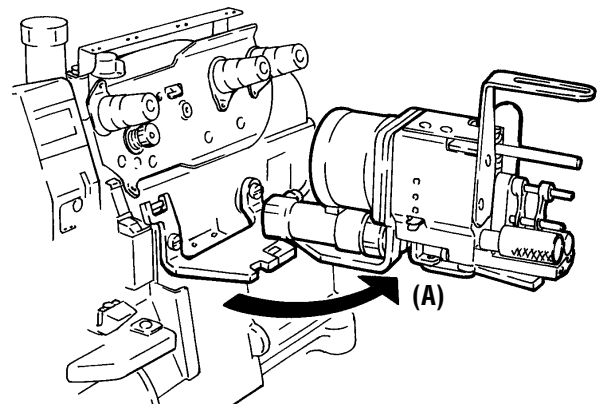
 Always turn off the power, unplug the machine from the outlet and then only well-qualified technicians should insert the tape (elastic).

 Be careful not to injure your fingers and/or hands when handling the knives.

 Turn off the air compressor, confirm air pressure is 0 (zero) and then insert the tape (elastic).

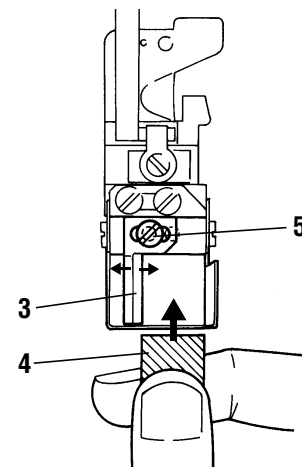
**1.** Swing the MC device aside in the direction of arrow (A).

Press and hold the side face (B) of the bracket with your thumb, pull lever 1 in the direction of arrow (C), hold shaft 2 and swing aside the MC device.



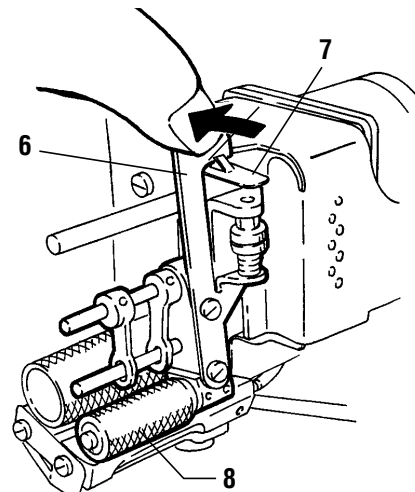
**2.** Adjust the guide 3 on the presser foot by using the tape (elastic) to be used.

Adjust guide 3 so that tape (elastic) 4 can go through the guide smoothly. Then tighten screw 5.



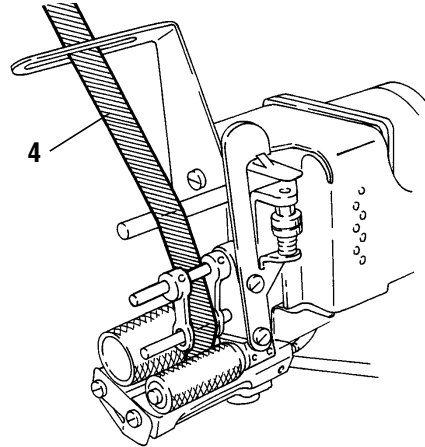
**3.** Replace the MC device.

**4.** Press lever 6 in the direction of the arrow to lock flat spring 7, and open roller 8.



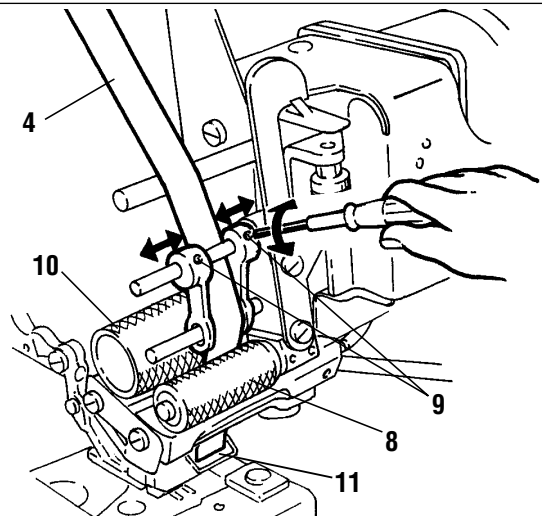
## Inserting tape (elastic)

5. Insert tape (elastic) 4 as shown in the illustration.



6. Adjust guides 9 so that tape (elastic) 4 can go along guide 9 smoothly.

7. Insert tape (elastic) 4 between roller 8 and driving roller 10 and up to presser foot guide 11.



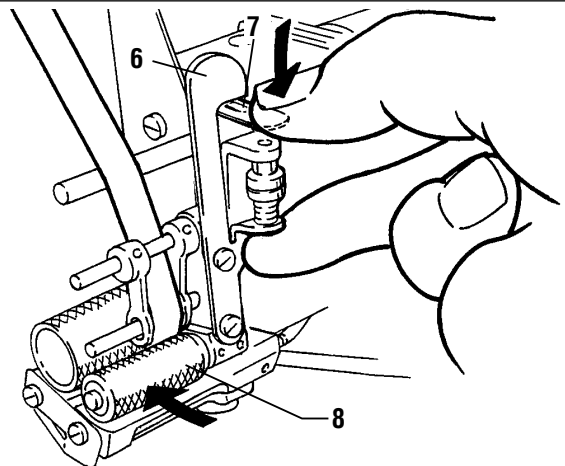
### CAUTION

⚠ When inserting the tape (elastic), be careful that your hands, fingers and/or hair is not caught in rollers 8, 10 and cut with cutter.

#### Note

The tape (elastic) should form a straight line as seen from the front of the machine.

8. Push down flat spring 7 as shown in figure to release lever 6 and close roller 8.

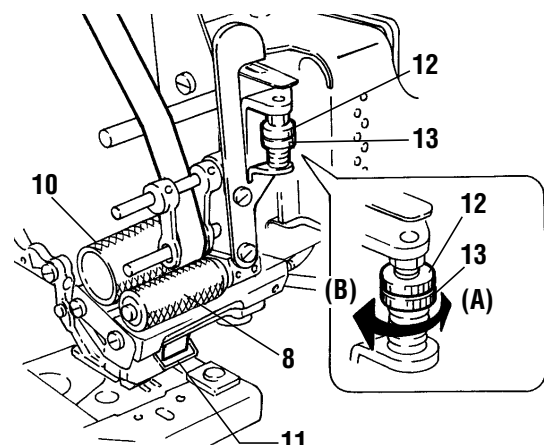


9. Loosen nut 12. Adjust roller 8 & 10 pressure to feed tape (elastic) smoothly. To make this adjustment, turn nut 13 clockwise or counterclockwise as required.

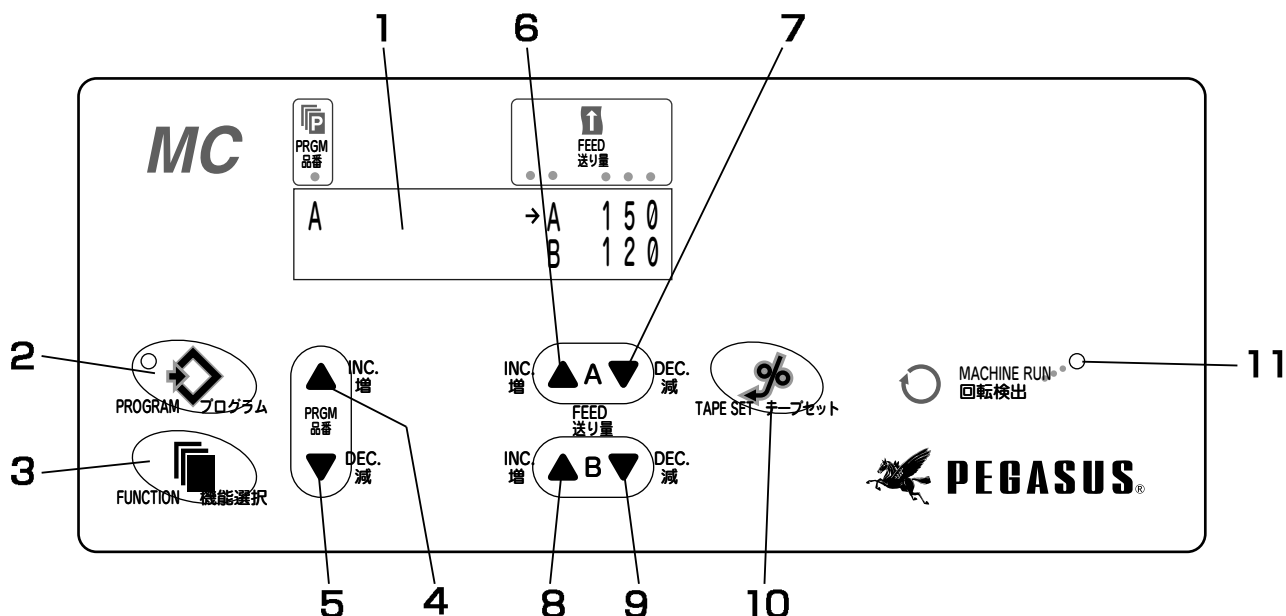
- To decrease the pressure, turn nut 13 in the direction of (A).
- To increase the pressure, turn nut 13 in the direction of (B).

10. After adjustment, tighten lock nut 12.

11. Check to see that tape (elastic) goes through rollers and up to presser foot guide 11 without being stuck.



# Description of MC console box



**1** LCD (Liquid Crystal Display) screen  
 Displays various information.  
 \*Select either Japanese or English by referring to page 21.

**2** PROGRAMMING key  
 To change the feeding amount (2 types of feeding amount per one item).

**3** FUNCTION key  
 To set the data such as the sewing check mode, the tape inserting amount, the tape length, the stitch counters and the language mode.

**4** PRGM INC. key  
 To change item ( A - Z ) in sequence.  
 [ A → B → C → … → Z ]

**5** PRGM DEC. key  
 To change item ( Z - A ) in sequence.  
 [ Z → … → C → B → A ]

**6** INC. key for the amount of feeding **A**  
 To increase the number of feeding amount **A**.

**7** DEC. key for the amount of feeding **A**  
 To decrease the number of feeding amount **A**.


**8** INC. key for the amount of feeding **B**  
 To increase the number of feeding amount **B**.

**9** DEC. key for the amount of feeding **B**  
 To decrease the number of feeding amount **B**.

**10** TAPE SET key  
 To feed out tape (elastic) manually.

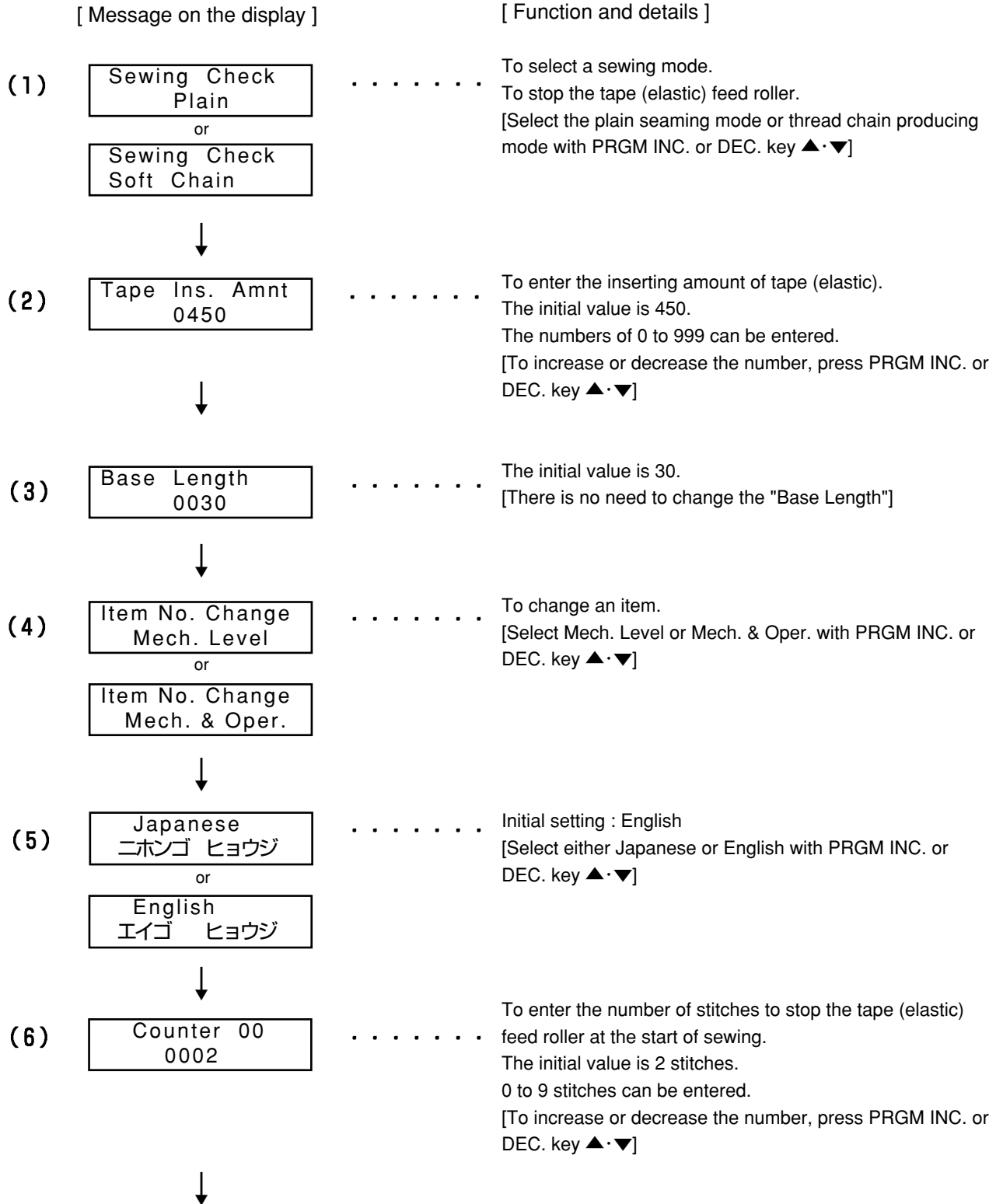
**11** Rotation detecting light  
 Lit while the machine is running.

# Function selecting mode

Every time FUNCTION key  is depressed, the display on the screen changes sequentially so that you can switch functions and set counters.

**Note :** The language mode (Japanese or English) is set to English at the factory. To change to Japanese, call up display (5) (see below) and select Japanese.

**Note :** In the operator mode, display (1) "Sewing check" to display (2) "Tape Ins. Amnt" are shown alternately on the screen.



# Function selecting mode

- |      | [ Message on the display ]                                                                                                    |           | [ Function and details ]                                                                                                                                                                                                                                                                          |
|------|-------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (7)  | <div style="border: 1px solid black; padding: 5px; display: inline-block; text-align: center;">Counter 01<br/>0002</div>      | . . . . . | To enter the number of stitches to turn the tape (elastic) feed roller in the reverse direction at the start of sewing.<br>The initial value is 2 stitches.<br>0 to 50 stitches can be entered.<br>[To increase or decrease the number, press PRGM INC. or DEC. key ▲·▼]                          |
|      | ↓                                                                                                                             |           |                                                                                                                                                                                                                                                                                                   |
| (8)  | <div style="border: 1px solid black; padding: 5px; display: inline-block; text-align: center;">Counter 02<br/>0020</div>      | . . . . . | To enter the number of stitches from the start of sewing to when the thread chain is sucked up.<br>The initial value is 20 stitches.<br>0 to 1820 stitches can be entered.<br>[To increase or decrease the number, press PRGM INC. or DEC. key ▲·▼]                                               |
|      | ↓                                                                                                                             |           |                                                                                                                                                                                                                                                                                                   |
| (9)  | <div style="border: 1px solid black; padding: 5px; display: inline-block; text-align: center;">Counter 03<br/>0030</div>      | . . . . . | To enter the number of stitches from when the tape (elastic) is cut to when the thread chain is sucked up.<br>The initial value is 30 stitches.<br>0 to 150 stitches can be entered.<br>[To increase or decrease the number, press PRGM INC. or DEC. key ▲·▼]                                     |
|      | ↓                                                                                                                             |           |                                                                                                                                                                                                                                                                                                   |
| (10) | <div style="border: 1px solid black; padding: 5px; display: inline-block; text-align: center;">Counter 04<br/>0030</div>      | . . . . . | To enter the number of stitches while the tape (elastic) is not feed and while the thread releaser is operating after the tape/elastic is cut.<br>The initial value is 30 stitches.<br>0 to 150 stitches can be entered.<br>[To increase or decrease the number, press PRGM INC. or DEC. key ▲·▼] |
|      | ↓                                                                                                                             |           |                                                                                                                                                                                                                                                                                                   |
| (11) | <div style="border: 1px solid black; padding: 5px; display: inline-block; text-align: center;">Insertion Speed<br/>0008</div> | . . . . . | To enter the feeding speed of tape (elastic) at the start of sewing.<br>Increasing the number slows down and decreasing the number speeds up.<br>The initial value is 8.<br>3 to 25 can be entered.<br>[To increase or decrease the number, press PRGM INC. or DEC. key ▲·▼]                      |

# Entering and changing the sewing data

## 1. Before entry

### Initializing the MC device

When the MC device is used for the first time, initialize the MC device first.

**Note**

It is not necessary to initialize the MC device at the start of each day.

### CAUTION

⚠ Since the power is turned on when initializing the MC device, the machine could start unexpectedly. To prevent accidents, perform the following procedures very carefully.

⚠ Make sure cords and air lines are connected properly first. Then turn on the machine.

Turn on the power box while pressing PRGM INC. and DEC. keys ▲  
· ▼ simultaneously.

The screen displays

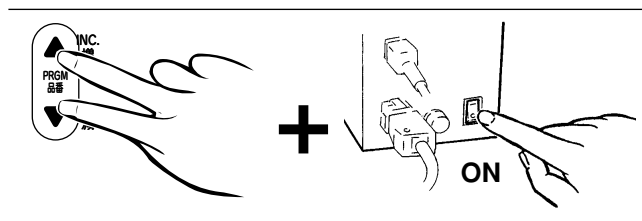
Clear All Data  
セリタータ シヨウキヨチュウ

Then all the sewing data is initialized.

(Refer to the sewing data preset at the factory before shipment.)

**Note**

Even if the MC device is initialized, the language mode is not changed.



## 2. Data entered at the factory

● The following data are entered at the factory. Change the data according to your sewing products.

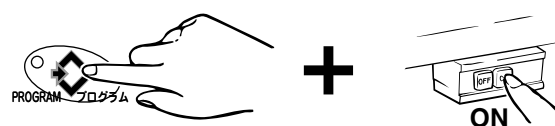
Sewing data entered at the factory	Value which can be entered
Program (item) : A	26 items from A to Z
Feeding amount A : 0	0 to 1 8 0
Feeding amount B : 0	0 to 1 8 0
Inserting amount (elastic feeding amount) : 4 5 0	0 to 9 9 9
Stitch count to turn the elastic feed roller in the reverse direction at the start of sewing : 2 stitches	0 to 5 0 stitches
Stitch count to stop the elastic feed roller at the start of sewing : 2 stitches	0 to 9 stitches
Language mode : English	Japanese or English

# Entering and changing the sewing data

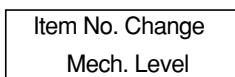
## 3. Changing PGM (items)

To change the sewing data which have been already programmed.

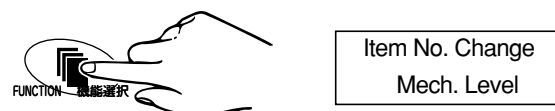
1. Turn on the machine while pressing PROGRAMMING key



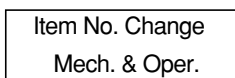
2. Press FUNCTION key  several times to call up



on the screen.

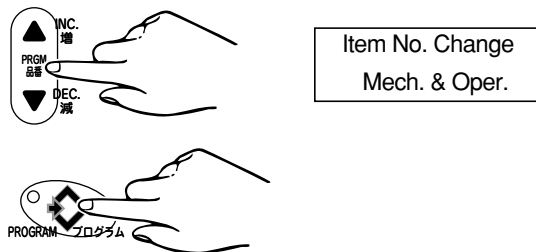


3. Press PRGM INC. or DEC. key ▲ · ▼ to call up



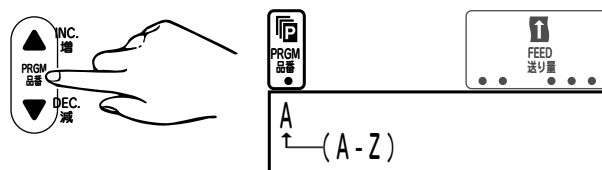
and then

press PROGRAMMING key  again.



Any of 26 items from A to Z can be selected as required in order to be programmed.

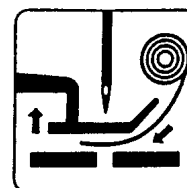
To select, press PRGM INC. or DEC. key ▲ · ▼.



## 4. Entering and checking the inserting amount of tape (elastic)

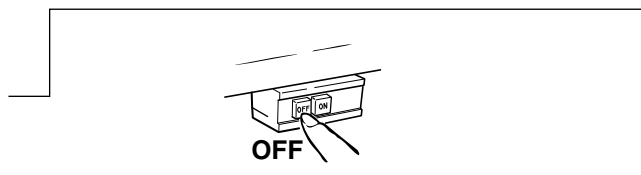
### 1. To check the inserting amount of tape (elastic)

Make sure the tape(elastic) is inserted correctly under the presser foot and reaches the needle drop.

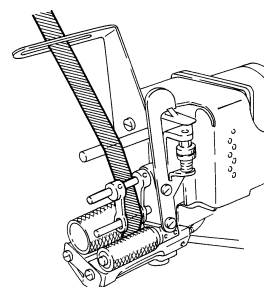


- The initial value for the inserting amount of tape(elastic) is 450. ([1] indicates 0.11 mm, so [450] is 49.5 mm.)


- (1) Turn off the machine.



- (2) Insert the tape(elastic) correctly by referring to "Inserting tape (elastic)" on page 18.

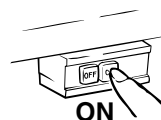


## WARNING

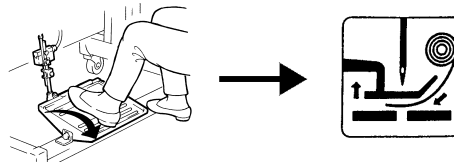
 Be careful that your hands, finger and/or hair are not caught in the roller and cut with the cutter.

# Entering and changing the sewing data

(3) Turn on the machine.



(4) Press the treadle with heel to insert the tape(elastic).



(5) Make sure the end of the tape(elastic) reaches the needle drop.

In case the end of the tape(elastic) does not reach the needledrop, adjust the inserting amount of the tape(elastic) as follows.

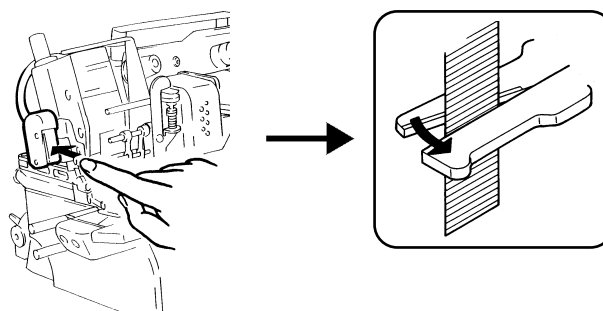
## 2 .To set the inserting amount of the tape/elastic

To change the inserting amount, follow the procedures below.

(1) Cut the tape(elastic) by pressing the finger switch.  
Remove the tape(elastic) which has been cut off.

### ! WARNING

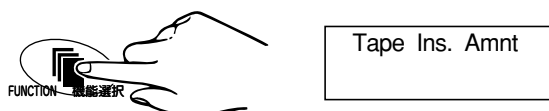
Be careful not to cut your hands and/or fingers with the cutter.



(2) Press FUNCTION key  several times to call up

Tape Ins. Amnt

on the screen.



(3) Change the number by pressing PRGM INC. or DEC. key ▲ · ▼.

- [1] indicates 0.11 mm (calculated value).
- 0 to 999 can be entered.



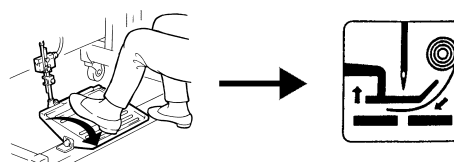
(4) After entering the new value, press PROGRAMMING key

 once.



Then the inserting amount setting is completed.

(5) Insert the tape(elastic) under the presser foot by pressing the machine treadle with heel and check to make sure the inserting amount is proper.



# Entering and changing the sewing data

## 5. Entering and checking the stitch count to turn the tape (elastic) feed roller in the reverse direction

This stitch count is entered in order to turn the roller in the reverse direction and remove the slack of tape/elastic at the start of sewing. Adjust the stitch count according to the characteristic of tape/elastic and/or tension of tape (elastic) on finished products.

- The initial value is 2 stitches.
- Check to see if this stitch count is proper at the start of the first test sewing.
- If this stitch count is not proper and the fabric is stretched/shrunken, enter the stitch count by following the procedures below.

### 1. Turn on the power while pressing PROGRAMMING key



If the power is on, turn off the power first and perform the above procedure.

### 2. Press FUNCTION key repeatedly to call up

Counter 01

on the screen.

### 3. Change the number by pressing PRGM INC. or DEC. key ▲ · ▼ ·

- [1] indicates one stitch.
- 00 to 50 stitches can be entered.
- The stepping motor does not turn in the reverse direction with 00.
- The feeding amount of the stepping motor when it turns in the reverse direction is equal to the feeding amount when the stepping motor turns in the operating direction (See to Table 1 of page 27).

### 4. After entering the new value, press PROGRAMMING key



once.

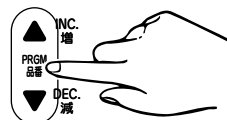
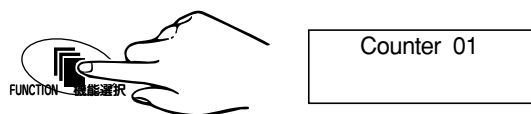
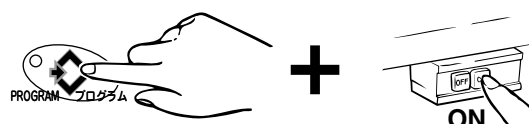
Then this stitch count setting is completed.

### 5. Check carefully to see if the fabric is stretched/shrunken at the start of sewing by test sewing.

If the fabric is stretched/shrunken, adjust this stitch count over again.

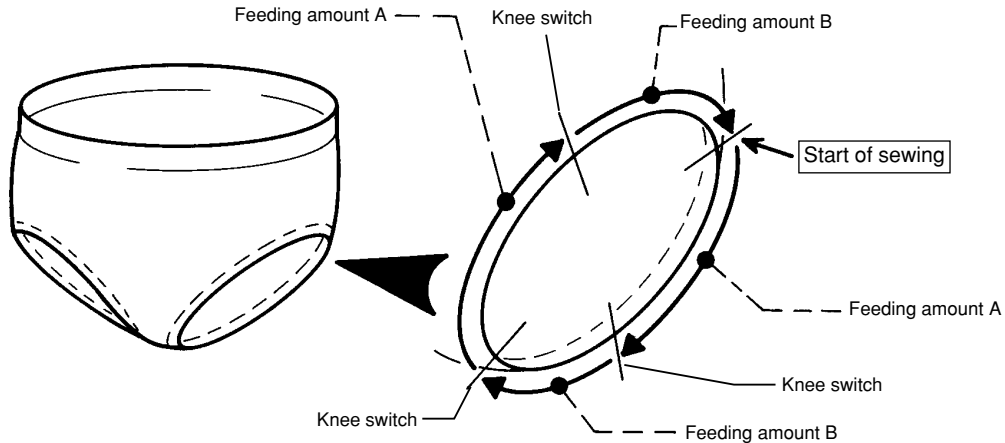
#### Note

Once this stitch count is programmed, the tape(elastic) is inserted and the feed roller turns in the reverse direction as programmed when each item is sewn.




# Entering the feeding amount

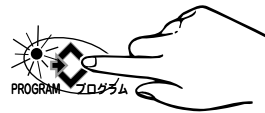
An example of entering sewing data follows.




## CAUTION

The numbers of feeding amounts below are only example for entry. Enter the numbers according to your products.

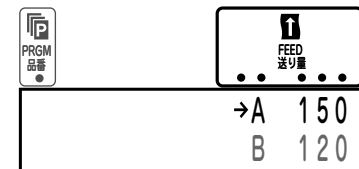
1. Press PROGRAMMING key  to turn on the PROGRAMMING indicator light. The controller is ready for entry.



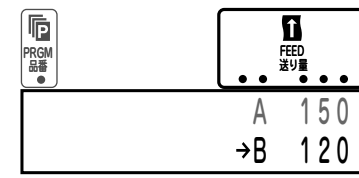
## CAUTION

 The machine and MC device will get activated if you press the pedal while entering the data. Be careful.

2. Enter the feeding amount **A** by pressing FEEDING AMOUNT A INC. or DEC. key ▲ · ▼.



3. Enter the feeding amount **B** by pressing FEEDING AMOUNT B INC. or DEC. key ▲ · ▼.



4. Perform the test sewing and adjust the amount A/B as required.

- The entry range is 0 to 180. The feeding length denotes the length of tape feed out with a cycle (stitch) of the machine and corresponds to the number of feeding amount as shown in Table 1.
- These distances are obtained by calculation, so they may vary according to the characteristics of the elastic and/or sewing manners.

Table 1

Feeding amount	Feeding distance
40	0.82 mm
50	1.02 mm
60	1.22 mm
70	1.43 mm
80	1.63 mm
90	1.84 mm
100	2.04 mm
110	2.24 mm
120	2.45 mm
130	2.65 mm
140	2.86 mm
150	3.06 mm
160	3.26 mm
170	3.47 mm
180	3.67 mm

5. Press PROGRAMMING key  again.

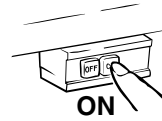
Then the feeding amount setting is completed.



# Sewing

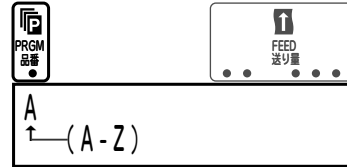
Firstly, make sure the tape (elastic) is inserted properly.  
Then perform sewing operation by following the steps below.

1. Turn on the machine.

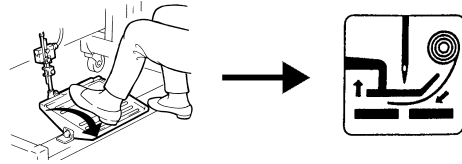


2. Call up an item (program) to be sewn.

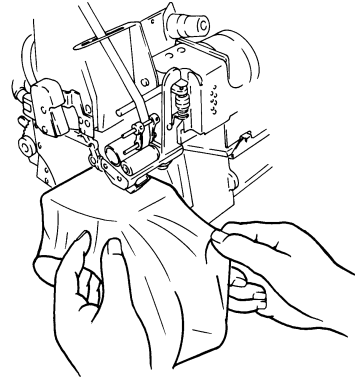
\*If required, perform the procedures 2 to 3 by referring to "Changing PGM (items)" on page 24.



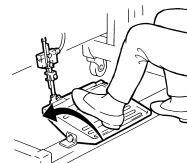
3. Lift the presser foot by pressing the machine treadle with heel and then insert the tape (elastic).



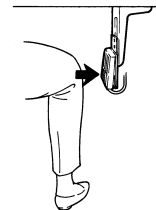
4. Position the fabric.



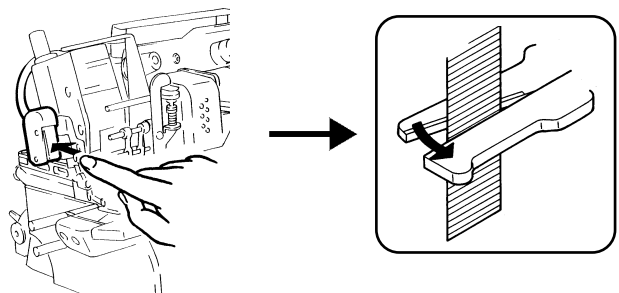
5. Press the machine treadle with toes to start sewing.



6. Press the knee switch when changing the feeding amount to A or B.



7. Cut the tape (elastic) by pressing the finger switch.



## Note

Check the first sewn product to see carefully if the machine runs properly.


Especially, check the inserting amount of the tape (elastic), each stitch count and the ruffling condition. If required, change the data.

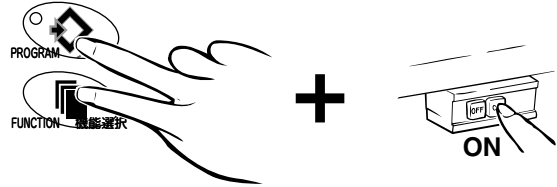
# Testing mode

## Operation test


If trouble occurs while the MC device is used, find the cause performing the test mode.

1. Turn on the power while pressing

PROGRAMMING  and FUNCTION   
keys simultaneously.  
The operation test display comes out.




## CAUTION


 Do not turn off the power until the operation test display is shown. Otherwise memory may change.

2. Proceed according to the instructions.

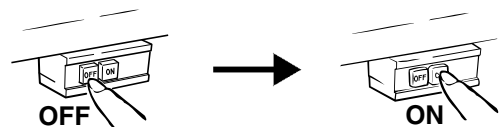
**[The instructions are displayed as shown below.]**

1. Console box → 2. Input switches → 3. Solenoid valve output (The test starts by pressing PROGRAMMING  key → 4. Stepping motor → 5. Rotation detecting sensor → 6. LED output

## CAUTION

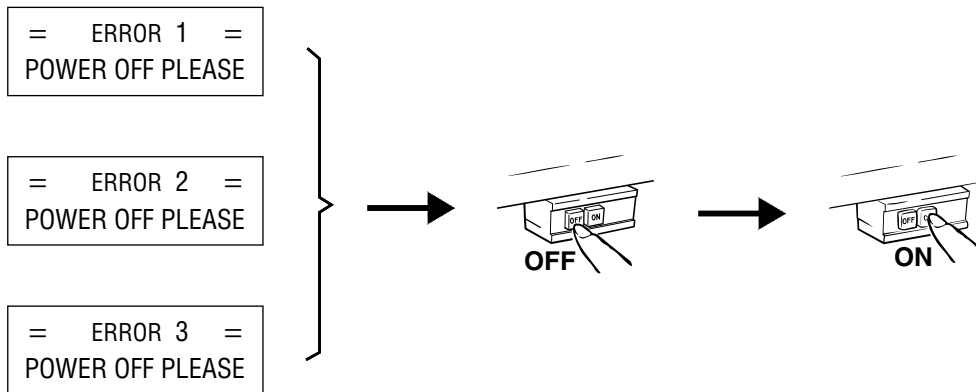
 When any error message comes out, check the connection of cords/air lines and the pressure of the filter regulator, and then perform the test again. If the error is still shown, contact your local Pegasus' sales office or representative.

3. To restart sewing, turn off the power and then turn on the power again.




## Error message

If the following instructions are displayed while the MC device is being used, turn off the power and then turn on the power again.  
If **【ERROR 3】** is displayed, turn off the power and initialize the MC device. (See page 23.)




### CAUTION

 If the above message is shown repeatedly, stop the machine immediately and turn off the power. Then only well-qualified technicians or service/maintenance personnel should check the device.


## Adjusting the KS device (chain cutter)

### CAUTION

 Always turn off the power, unplug the machine from the outlet and then only well-qualified technicians should adjust the device.

1. Remove the needle by referring to the illustrations.

### CAUTION

 Be careful your hands and/or fingers are not injured by the needle point.

2. Turn the machine pulley by hand and check to make sure the thread is cut smoothly.

3. If the thread is not cut smoothly, remove the cloth guide plate **2** by referring to the figure.

4. Remove screw **3** and then the chain cutter from the machine.

5. Loosen nut **4** and adjust cutting pressure with screw **5**.

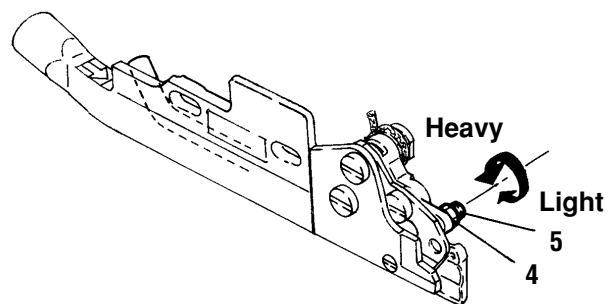
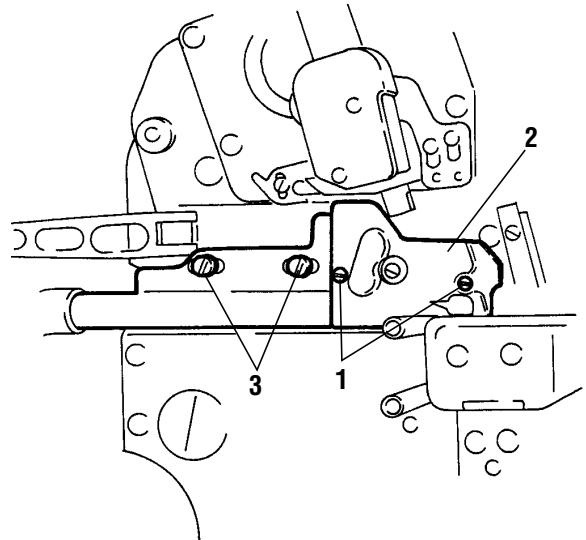
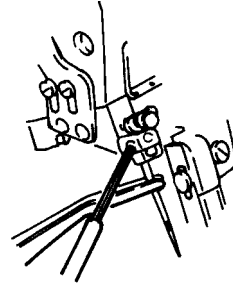
To increase the pressure, turn screw **5** clockwise.

To decrease the pressure, turn screw **5** counterclockwise.

Only enough pressure should be applied to the knives so that the thread chain can be cut smoothly.

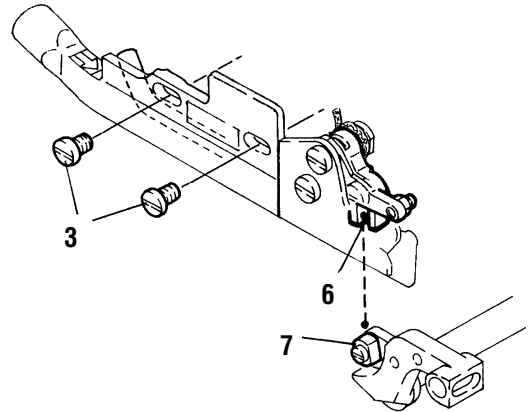
Excessive pressure will shorten life of the knives.

6. Tighten nut **4**.



## Adjusting the KS device (chain cutter)

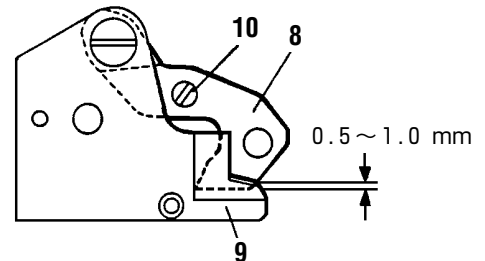
7. Install the chain cutter on the machine so that block 7 can fit in groove 6 of the lever.




8. Replace screw 3.

9. Turn the machine pulley by hand until movable knife 8 is at the bottom of its stroke.

10. Loosen screw 10 and adjust the overlap of movable knife 8 and stationary knife 9. There should be 0.5 mm - 1.0 mm overlap.

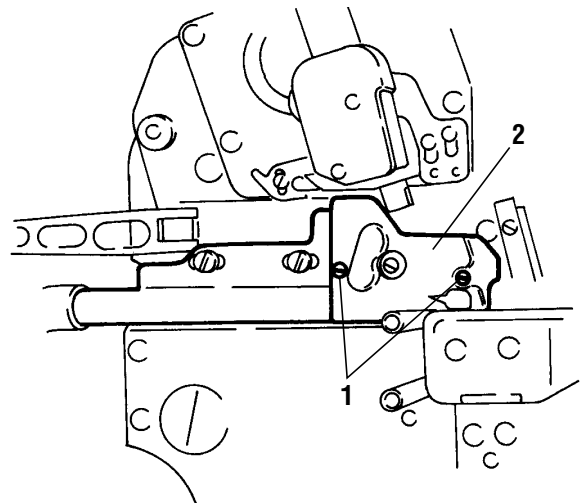


### CAUTION

 Be careful your fingers are not caught in movable knife 8 and stationary knife 9.


11. Tighten screw 10.

12. Refer to the figure and attach cloth guide plate 2 with screws 1.



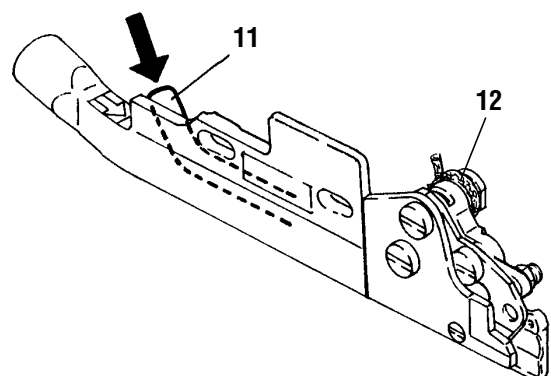
13. Replace the needle.

### CAUTION

 Be careful your hands and/or fingers are not injured by the needle point.


#### Note

To keep the chain cutter operating efficiently, lubricate from oil hole 11 and oil wick 12 periodically.



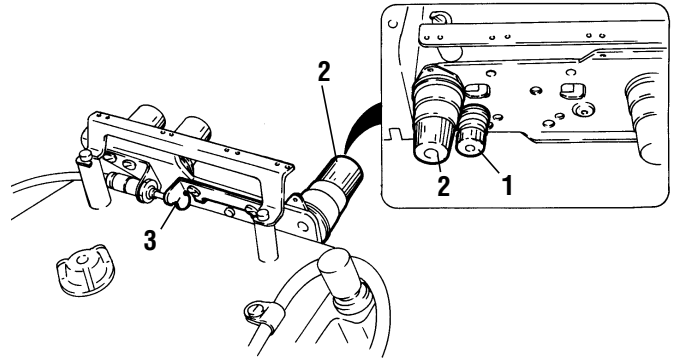
## Adjusting the needle thread tension with the thread releaser (SC)

### CAUTION

 Always turn off the power and air compressor first and then only well-qualified technicians should make the following adjustment.


Perform a sewing operation and check the needle thread tension. If required, adjust the tension according to the sewn products.

1. Turn nut **1** to adjust the needle thread tension of thread chain from when the SC device gets activated to when the machine stops.
2. Turn nut **2** to adjust the needle thread tension of plain seaming.



## Adjusting the drop feed mechanism

### CAUTION

 Always turn off the power and air compressor first and then only well-qualified technicians should make the following adjustment.

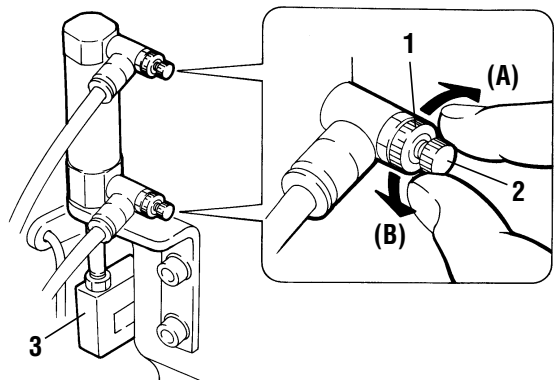
#### 1. Adjusting the speed of the air cylinder

Adjust the speed of the air cylinder so that the cylinder gets activated at the proper speed and the impact to the machine is minimized.

Loosen lock nut **1**.

- Turn knob **2** in the direction of **(A)** to activate the cylinder slowly.
- Turn knob **2** in the direction of **(B)** to activate the cylinder quickly.

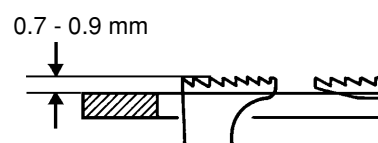
After the adjustment, tighten lock nut **1**.



#### 2. Checking the feed dog height

When the drop feed mechanism is not being actuated (the hook **3** is at its lowest position), check to see if the feed dog height is set to the accurate dimension (0.7 - 0.9 mm).

If it is not so, adjust the feed dog height.



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The description in this INSTRUCTIONS is subject to change without notice.