Instruction Sheet	Learning Guide #28

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

• Checking machine for correct operation in accordance with prescribed procedures

• Isolating faulty machines and using appropriate procedures and tests to locate and identify faults

• Using correct hand tools and measuring equipment to rectify problems

• Identification and reporting major problems in machine

• Identification and adjustment of minor problems

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

• Check machine for correct operation in accordance with prescribed procedures

• Isolate faulty machines and using appropriate procedures and tests to locate and identify faults

• Use correct hand tools and measuring equipment to rectify problems

• Identify and report major problems in machine

• Identify and adjust minor problems

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 7.
3. Read the information written in the “Information Sheet 1”, “Information Sheet 2”, “Information Sheet 3”, “Information Sheet 4”. Try to understand what are being discussed. Ask your teacher for assistance if you have hard time understanding them.
4. Accomplish the “Self-Check 1” in page 10, “Self-Check 2” in page 14and “Self-Check 3” in pages 19 and “self check 4” in page 24.

5. Ask your teacher to evaluate your work.

6. If you earned a satisfactory evaluation proceed to “Operation Sheet 1” in page 25-30and “Operation Sheet 2” in page30-.39 if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Instruction #3.

7. Do the “LAP Test” page 40 (if you are ready). Request your teacher to evaluate your performance and outputs. Your teacher will give you feedback and the evaluation will be either satisfactory or unsatisfactory. If unsatisfactory, your teacher shall advice you on additional work. But if satisfactory you can proceed to next Learning Guide.

Information Sheet-1	Checking machine for correct operation in accordance with prescribed procedures

Machine Maintenance

A clean, well-oiled sewing machine is essential for safety and good performance in the classroom. Generally cleanliness is the responsibility of the operators, including students who use the machines. The machines are given a quick cleaning after every eight hours of operation and a thorough cleaning once a week. When sewing materials that produce a lot of lint, the machines are cleaned more frequently. Machine maintenance is also important in preventing stitching faults. Although the material, machine, or operator can cause stitching faults, cleaning the machine, re- threading it, and/or changing the needle can correct most of the problems. In most cases, the operators do a quick cleaning once a day, but the responsibility for the more thorough cleaning varies.

Many Companies are visiting existing and potential Contractor sewing facilities and evaluating their sewing capabilities for producing quality products for their customers. In many cases they even rate the vendor and give the plant a grade based on their observations during their visit. Generally one area that is evaluated is the sewing floor and the condition of the sewing equipment. let us look at the many factors affected by poor sew ability and they include:

- Seam Quality
- Seam Appearance
- Seam Durability

SEWING MACHINE MAINTENANCE

CHECK LIST

PREVENTATIVE MAINTENANCE

- Check to see if the machines are being kept *clean*
- Machines should be blown off every day to remove lint and trash
- On lockstitch machines, the hook should be blown off regularly during the day to prevent lint or dirt from building up in the oil ports in the race of the hook
- Check to see that the machines are being *lubricated* regularly
- Oil levels should be checked daily and additional oil added if necessary
- Randomly check the oil levels in the machines
- A high quality white machine oil should be used that will not stain
- Check availability of proper machine oil in the factory
- Check to make sure the oil is not contaminated
- Check to see that oil reservoir pump filters are cleaned regularly
- If compressed air is used, make sure the air system is regulated properly and has humidity
- Dryers, filters and lubricator in the air lines.
- Check for rusted areas due to excessive moisture in production area
- Check Machines for wear on critical moving parts

- Check for shake in needle bar due to worn needle bar bushings
- Check for excessive movement in stitch forming devices, etc.
- Check condition of critical screws
- Check for missing screws
- Check for defective screws that are difficult to tighten properly
- Check condition of mechanics tools to see that they are being maintained properly.
- With buttonhole or other specialized equipment, cleaning of the machine should *not* be done
- With compressed air but with a soft bristle brush.

- Every sewing machine has three basic systems used to form and set the stitch. These three systems include:
  1) Stitch forming system;
  2) Thread handling System; and
  3) Feed System.
- We will look at each of these systems independently.

1 STITCH FORMING SYSTEM

The sewing machine needle should be inspected regularly during the day and replaced if there are signs of wear or damage. The correct type & size of needle should be used

- The correct needle size - thread size relationship should be maintained
- Check for excessive wear in the raceway which will allow excessive movement in the basket Chain stitch & Over edge machines
- Check the looper points for sharp surfaces or burrs
- Observe excessive wear of looper
- Check to make sure loopers are shaped properly according to original factory condition
- Observe method of removal of entangled thread on loopers. Sharp objects that can nick or burr the loopers should NOT be used.

2 THREAD HANDLING SYSTEM

- Check to make sure thread is being stored properly
- Cones should stored properly to insure that they are not contaminated with dirt, excessive lint, etc.
- Check to make sure wind on part cones does not affect take-off the cone
- Check to make sure the correct thread type and sizes are being used
- If thread vendor is specified, check order book and inventory to make sure the proper thread is being used

- Thread stands are in proper condition and the top eyelets are oriented properly
- Optimum distance between the top of cone & top eyelet (should be no more than one cone higher than cone size being used)
- Thread stand eyelets are smooth and not grooved or damaged
- Cone is held in a vertical stationary position
- Machine eyelets and guides are smooth and not grooved, rusted or damaged
- Machine thread tensions are as light as possible but still give balanced stitches
- Observe how much of the tension post is exposed beyond the tension nut
- Generally the more of the tension post that is visible, the more tension that is being applied to the sewing thread
- Observe the condition of the tension discs, take-up spring, etc.
- Check the bottom tension to make sure it is as loose as possible and still give a balance stitch
- **Lockstitch machines**
- Bobbin winder in good condition & making correct wind on bobbins
- Condition of bobbins & bobbin tension
- Look for nicks on edge of bobbins indicating incorrect needle height
- Look for damaged or bent bobbins
- Check bobbin tension (minimum tension recommended)
- Bobbin tension of bobbin case
- Bobbin tension with bobbin case laying on a flat surface
- Bobbin tension after bobbin thread has been pulled up through the hole in the needle plate
- **Needle thread**
- Machines are properly threaded
- Needle thread tension is as light as possible but still give a balanced stitch
- Take-up spring in proper positioned and working properly
- Proper thread size / needle size relationship is being maintained
- Proper needle thread size / bobbin thread size is being used

FEED SYSTEM

- *Needle Plates are* in good condition
- Make sure the needle hole size /needle size relationship is correct
- Generally the needle hole size should be twice the diameter of the needle being used
- Check to make sure the needle hole in the needle plate is not damaged
- Look for needle damage and sharp edges
- Check to see if the needle plate is flat and not bent down at the needle hole
- Feed Dogs are in good condition and correct for the application
- Check to make sure the feed are not broken or damaged
- Observe the teeth per inch on the feed dog
- Generally the following should be found: light weight sewing - 20 - 24 teeth per inch; medium weight sewing - 14 - 18 tpi; heavy weight sewing - 10 - 12 tpi

- Correct foot is being used for the application
- Make sure the needle hole size/needle size relation is correct & the needle has sufficient clearance
- Check to make sure the needle hole is not damaged
- Check for proper pressure both in front and in back of the needle

With the foot flat on the needle plate, you should not be able to insert a thin piece of paper between the foot and the needle plate from the front or back side of the needle

- Check presser foot for excessive wear causing side-to-side play
- The pressure on the Presser Foot should be as light as possible and give a uniform stitch length

- Check to make sure the correct stitch length is being used

OTHER SYSTEMS

STITCH & SEAM QUALITY

Lockstitch seams

- Check to see that the stitch looks the same on both the top and bottom of the seam

If back tacking is required, make sure the correct number of stitches are used in the back tack

- Make sure the proper SPI are being used

- Make sure the correct seam allowance (margin) is being maintained

Chain stitch seams

- Make sure the stitch is balanced properly
- Check for excessive seam grinning
- Looper thread should roll over

Over edge seams

- On over edge seams, check for proper stitch balance
- Check for excessive seam grinning
- Check for proper seam extensibility or stitch elongation
- Check to make sure that the purl is on the edge of the seam
- Check to make sure the knives are trimming the fabric cleanly
- Check to make sure the correct seam allowance (margin) is being maintained
- Observe operator handling for excessive trim

- If latch-tacking, make sure the chain is sewn into the seam properly

Skipped Stitches

- Check areas where frequent skips have been observed
- Observe where one seam crosses another seam
- Check if skip occurs on thickness or after thickness

Important safety instructions

- Technical service for those sewing systems is also prohibited.
- Observe the basic safety measures, including, but not limited to the following ones, whenever you use the machine.
- Read all the instructions, including, but not limited to this Instruction Manual before you use the machine.
- In addition, keep this Instruction Manual so that you may read it at anytime when necessary.
- Use the machine after it has been ascertained that it conforms to safety rules/standards valid in your Country.
- • All safety devices must be in position when the machine is ready for work or in operation. The operation without the specified safety devices is not allowed.
- Appropriately trained operators shall operate this machine.

- **For repair work.**
- When leaving the working place or when the working place is unattended.
- When using clutch motors without applying brake, it has to be waited until the motor stopped totally.
- If you should allow oil, grease, etc. used with the machine and devices to come in contact with your eyes or
- Skin or swallow any of such liquid by mistake, immediately wash the contacted areas and consult a medical doctor.
- Tampering with the live parts and devices, regardless of whether the machine is powered, is prohibited.

- Repair, remodeling and adjustment works must only be done by appropriately trained technicians or
- General maintenance and inspection works have to be done by appropriately trained personnel.

Self-Check 1	**Written Test**

Name: _____ **Date:** _____

Instructions:

Write all your answers in the provided answer sheet page

Test: Short Answer Questions

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

1 List and explain preventive maintenance actions (5points)

2 List and explain three basic systems used to form and set the stitch (3points)

3 Write down stitch seam quality during maintenance of sewing machine (2points)

4 List down five important safety instructions (5points)

Note: **Satisfactory rating - 15 points Unsatisfactory - below 15 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Short Answer Questions

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

Information Sheet-2	Isolating faulty machines and using appropriate procedures

Common sewing machine problems

1 Thread bunching -if you're seeing knots of extra thread on the underside of sewing machine there are several likely culprits. First remove your sewing from the machine. You may have to cut through all the extra thread to get it free.

2 Bent or broken needles-this is problematic issues that can be dangerous as well as annoying. Always use a new needle for a new project. This prevents needles from getting dull or hooked at the tip, which can damage your leather. Make sure using the right types of needle for your work.

3 Materials are not feed- make sure if your machines has a drop –feed setting that it has not been active.

4 Thread keeps breaking –check the type of thread that using. Top and bottom threads should also be of the same weight

5 Machines are skipping stitches –there are several possible reasons for machine to skip stitch. First check needle is installed correctly, if the top thread is not reaching the bobbin

- Bobbin tension not consistent
- Seams in stretch
- Sewing machines seizes won't sew
- Needle comes unthreaded before sewing
- Threads are bunching at the start or ends of seams
- Thread inconsistently knots, loosens, or tangles
- Thread fraying, shredding, and breaking
- Material feed is inconsistent
- Machine is making strange noise
- The machine is running, but the needle won't move
- Decorative stitch setting aren't working
- Seam are puckered and distorted

Self check 2	Written test

Name: _____ **Date:** _____

Instructions:

Write all your answers in the provided answer sheet page

Test: Short Answer Questions

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

1. List and explain common sewing machine problems in detail (5pts)

Note: **Satisfactory rating - 3points** **Unsatisfactory - below 3points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

1. _____

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_____

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_____

_____

Information Sheet-3	Identification and reporting major problems in machine

Records:

It is consist of information created, received and maintained as evidence of business activities. A record is a “recorded information produced or received in the initiation, conduct or completion of an institutional or individual activity and that comprises content, context and structure, sufficient to provide evidence of the activity.

While the definition of a record is often identified strongly with a document, a record can be either a tangible object or digital information which has value to an organization." Records often consist of documents, but they can also contain other forms of content, such as photographs, blueprints, maps, audio files or even Web pages.

Example: Birth certificates, medical x-rays, office documents, databases, application data and e-mail are all examples of records.

Recording:

• The act or process of making a record is known as recording.

• As the title indicates recording the process information is nothing but keeping the information by recording on paper, CD, pictorials etc.

• When we came to our working condition we have different working formats to do every activity of the factory for example product development recipe, leaflet, machine working procedure , different label that should be kept on the product or chemical or machine in order to understand by any concerned group and transfer the information needed.

While recording or keeping any records one should keep in mind the following point:

An accurate record should be kept of:

Date and time of incident/disclosure

Parties who were involved, including any witnesses to an event

What was said or done and by whom

Any action taken by the organization to look into the matter

Any further action taken

Where relevant, the reasons why a decision was taken not to refer those concerns to a statutory agency

Any interpretation/inference drawn from what was observed, said or alleged should be clearly recorded as such

Name of person reporting on the concern, name and designation of the person to whom the concern was reported, date and time and their contact details.
The record should be signed.

Record can be different types like:

• Video-and audio recordings
• Newspaper clippings
• Software development
• Participant observation

Information Transfer:

Information can be transferred in deferent form depending on the type and size of the information we have. Information transfer is the process of moving messages containing user information from a source to a sink via a Communication channel. In this sense, information transfer is equivalent to data transmission which highlights more practical, technical aspects.

Ways of Transfer:

• Written form example- recipes, letter, reports, manuals and different leaflets of the chemical in hard copy.
• Oral information transfer - such as talking to oneself, dialogue, discussion between two people, telephone phone calls etc.
• Electronic transfer –which is communication facilitate by an interface with a computer, modem, telephone fax, email etc .

Mode of Transfer:

This will depend upon on the situation.

• Report need to be communicated to others.

• It has to follow a daily schedule.

• But Information should be also delivered according to its Urgency. Suppose, if it is very urgent then need to act promptly, otherwise need to maintain normal flow.

Self-Check 3	**Written Test**

Name: _____ **Date:** _____

Instructions: Write all your answers in the provided answer sheet provided below .

Test: Short Answer Questions

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

1. What is a record? (3points)
2. List four types of record. (5 points)
3. List two ways of transfer of information. (2 points)

Note: **Satisfactory rating - 10 points** **Unsatisfactory - below 150points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Short Answer Questions

1 _____

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_____

_____

2 _____

_____

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3 _____

_____

_____

_____

Information Sheet-4	Identification and adjustment of minor problems

No	symptom	Checkpoint	Root cause	Corrective
			wrong position	needle.
		Ascending level of needle bar	Wrong timing of needle and hook.	Adjust the timing of needle and hook.
		Height of needle bar	Wrong timing of needle and hook.	Adjust the timing of needle and hook.
		Gap between needle and hook	Wrong timing of needle and hook.	Adjust the timing of needle and hook.
			Remaining length of upper thread is short	Adjust the thread adjusting device
		Racing-proof spring of bobbin case	Due to bobbin racing during trimming, lower Thread dropping from bobbin case becomes too	Change the racing protection spring.

			short to go up.	
		Take-up lever Spring	Unable to lift lower thread due to weak take-up lever spring.	Adjust the working capacity of take-up lever spring.
4	Upper thread does not sink.		Too tight upper thread tension.	Reduce tension of upper thread.
			Too loose lower thread tension.	Increase tension of lower thread.
5	Lower thread does not sink.		Too weak upper thread tension.	Too strong lower thread tension.
			Increase tension of upper thread.	Decrease tension of lower thread.
6	Trimming errors	Tension of fixed blade	Tension not aligned between movable and fixed blade.	Adjust tension of movable and fixed blade.
		Edge of movable and fixed blades	Abrasion in blade groove of movable.	Replace movable and fixed blade.
		Direction of needle	Wrong needle insertion.	Reinsert the needle correctly.
		Check the crossing of trimmer cam notch mark and blade	Insufficient crossing quantity of movable and fixed blade.	Adjust the stroke of movable and fixed blade

			Too strong upper thread tension.	Adjust tension of upper thread.
7	Upper thread is pulled out When sewing commences		Too thick a needle for thread.	Check thickness of needle.
		Check the Up stop position of needle	Take-up lever pulls out the upper thread because the needle up and down position is too high.	Adjust the up-stop position of needle.

Self-Check 4	Written Test

Name: _____ **Date:** _____

Instructions:

Write all your answers in the provided answer sheet page 18.

Test: Short Answer Questions

Directions: Answer all the questions listed below. Examples may be necessary to aid some explanations/answers.

1. List five sewing machine troubles? (5points)

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

1 _____

_____

_____

_____

Note: *Satisfactory rating = 5 and above; Unsatisfactory rating = below 5 points.*

You can ask your teacher to correct your work

Operation sheet -1	**Checking Machine for Correct Operation**

PURPOSE: To show how to check machines correct operation

CONDITIONS OR SITUTATIONS FOR THE OPERATION: Trainees should know the different techniques to check machine operation

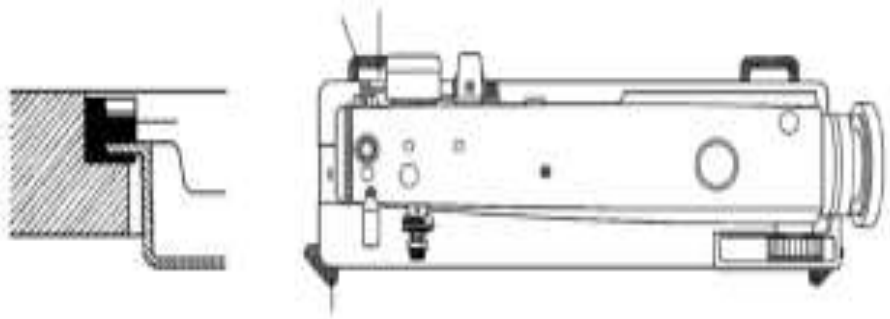
EQUIPMENT, TOOLS AND MATERIALS: use different maintenance tools if necessary

PROCEDURES:

Steps

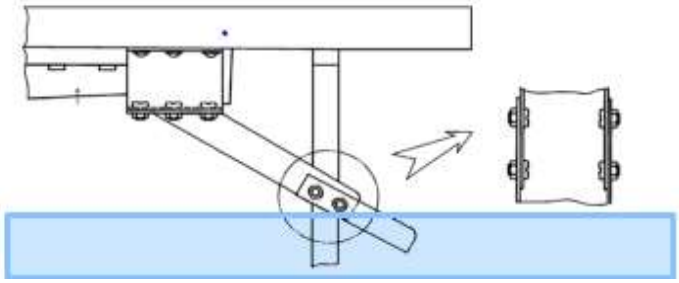
1. Machine head

Check whether the head hinge is inserted into the bed holes and is further fitted to the rubber hinge. Also check whether the head is seated on the rubber cushions properly in the four corners



2. Chip discharge plate

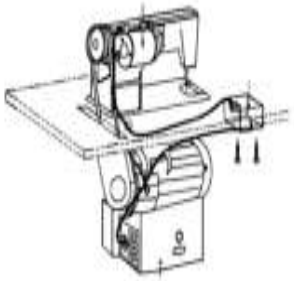
Check whether the chip discharge plate is attached to the plate to the bottom of the table as in the figure.



3. Resistance box for knee-lifting solenoid

• Check whether the resistance box is attached around the motor under the table.

• Check whether the connector is connected from the solenoid to the resistance box as shown in Fig. 3, also see whether line from the resistance box to the control box is connected.



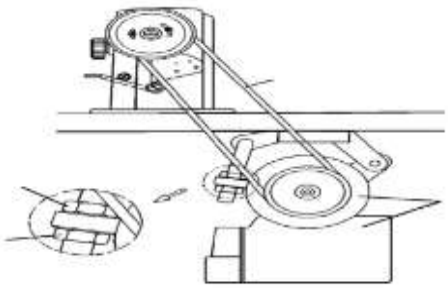
4. Lubrication

Check whether the magnetic chip remover is attached to the oil pump inside the bed.

Check whether the lubricant is filled up to the “HIGH” mark

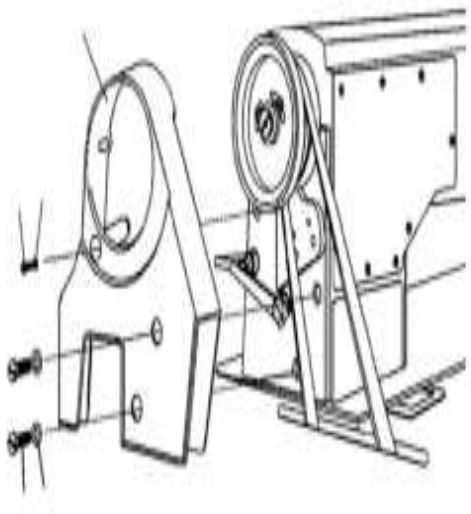
5. Belt Tension

Check whether the belt is properly mounted on the pulley and the motor. Check whether the belt has sufficient tension.

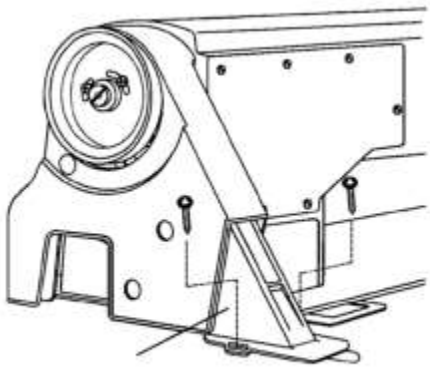


6. Belt Cover

Check whether the belt cover is fastened with clamp screw and washer



Check whether the belt cover is attached to the table



PRECAUTIONS:

- Use the right tools when required

QUALITY CRITERIA:

1. All steps were completed in the correct sequence,
2. The machine must operate correctly

Your work should be neat and accurate

Operation sheet -2	**Identification and Adjustment of Minor problems**

PURPOSE: To show how to identify adjust minor problem

CONDITIONS OR SITUTATIONS FOR THE OPERATION: Trainees should know how to identify and adjust minor problems and different tools and uses.

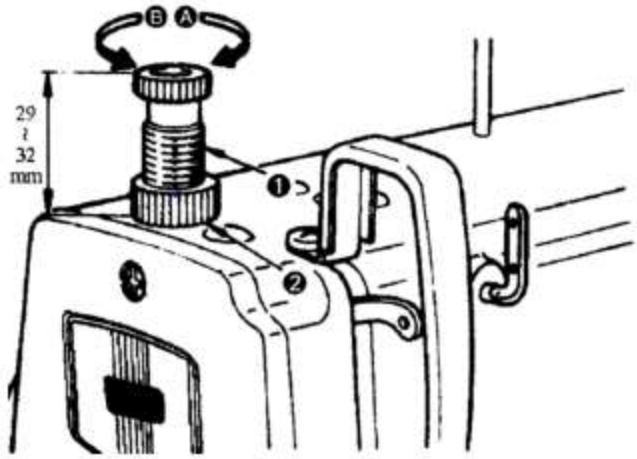
EQUIPMENT, TOOLS AND MATERIALS: use different maintenance tools if necessary

PROCEDURES:

Steps

Adjusting Presser foot pressure

1. Loosen nut (2). As you tum presser spring regulator (1) clockwise (indirection A), the presser foot pressure will be increased.
2. As you tum the presser spring regulator counterclockwise (in direction B), the pressure will be decreased.
3. After adjustment, tighten nut (2).
4. Generally, the standard height of the presser spring regulator is 29 to 32 mm.



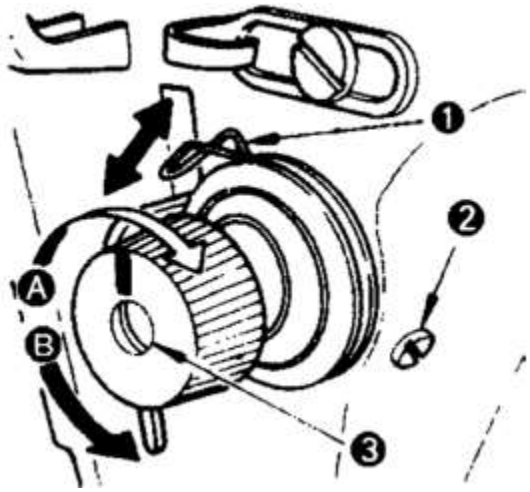
Adjusting Thread take up spring tension

1. Changing the stroke of thread take-up spring (1)

a. Loosen setscrew (2).

b. As you turn tension post (3) clockwise (in direction A), the stroke of the thread take-up spring will be increased.

c. As you turn tension post (3) counterclockwise (in direction B), the stroke will be decreased.



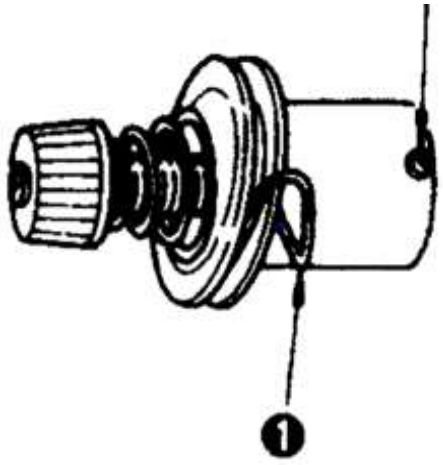
2. Changing the pressure of thread take-up spring (1)

a. Loosen setscrew (2), and remove tension assembly.

b. Loosen setscrew (4).

c. As you turn tension post (3) clockwise (in direction A), the pressure will be increased.

d. As you turn the post counterclockwise (in direction B), the pressure will be decreased



Adjusting Needle thread tension

1. As you tum thread tension No.1 nut (1) clockwise (in direction (A)), the thread remaining on the needle after thread trimming will be shorter.

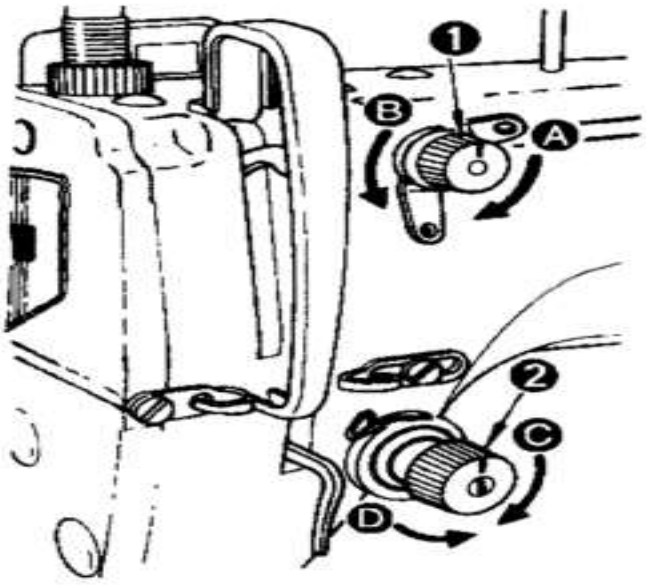
2. As you tum nut

(1) Counterclockwise (in direction

(B)), the thread length will be longer.

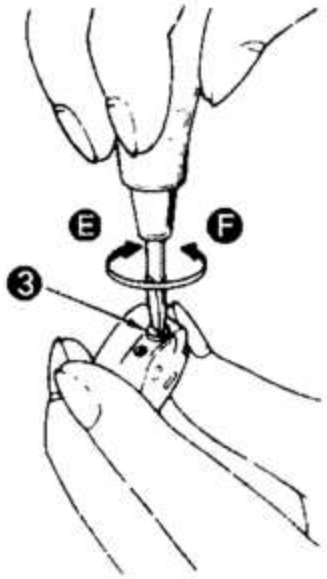
3. As you turn thread tension No.2 nut clockwise (in direction (C)), tension will be increased.

4. As you tum nut (2) counterclockwise (in direction (D)), the needle thread tension will be decreased.



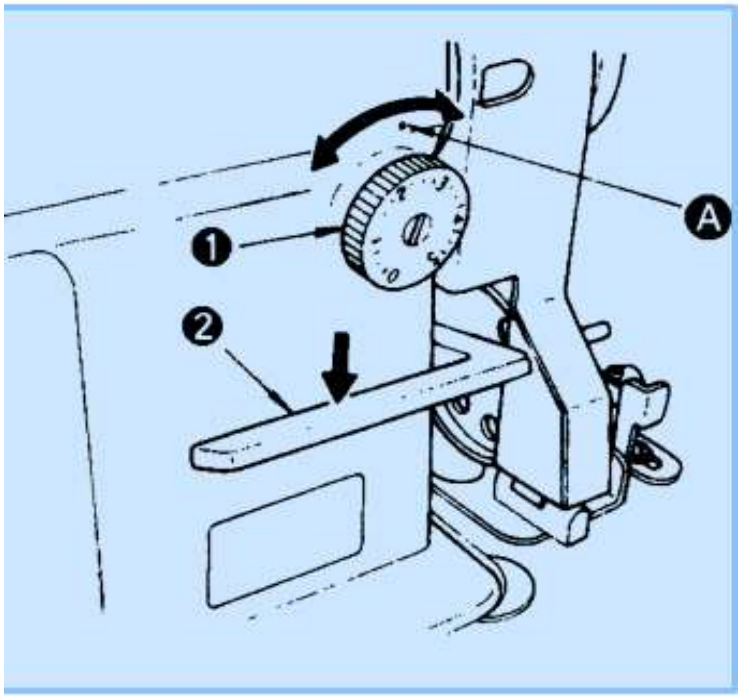
Adjusting bobbin thread tension

1. As you tum tension adjust screw (3) clockwise (in direction
(E)), the bobbin thread tension will be increased
2. As you tum screw (3) counterclockwise (in direction (F)), the bobbin thread tension will be decreased



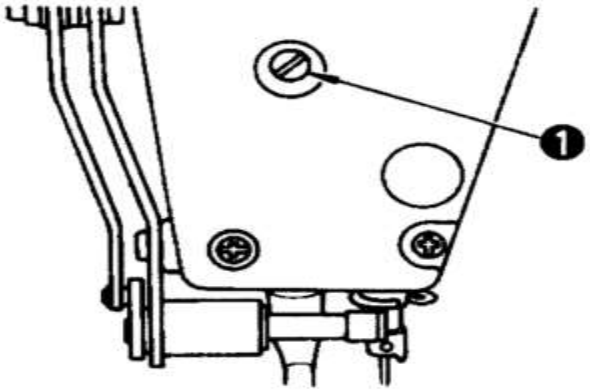
Adjusting stitch length

1. Tum stitch length dial (1) in the direction of the arrow, and alignthe desired number to marker dot A on the machine arm.
2. The dial calibration is in millimeters.
3. When you want to decrease the stitch length, turn stitch length dial
(1) while pressing feed lever (2) in the direction of the arrow.



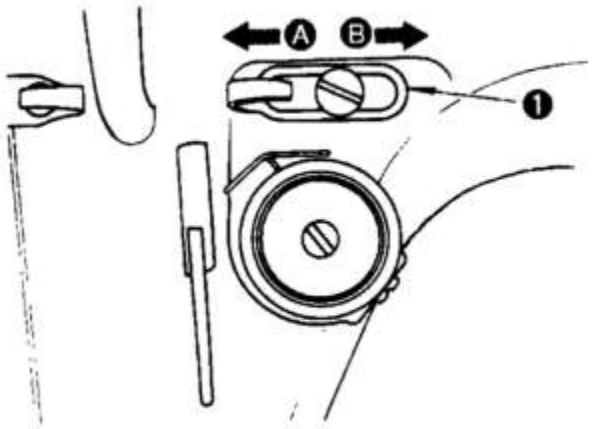
Adjusting height of pressure bar

1. Loosen setscrew (1), and adjust the pressure bar height and the angle of the presser foot.
2. After adjustment, securely tighten the setscrew.



Adjusting needle thread supply

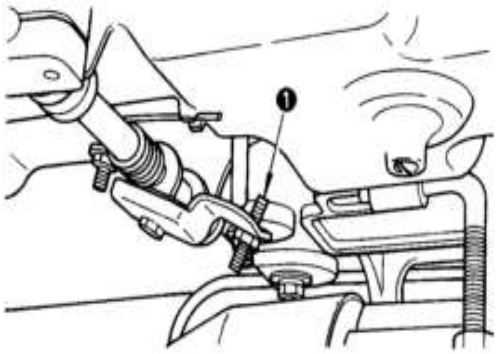
1. When sewing heavy leathers, move thread guide (1) to the left in direction A to increase the length of thread pulled out by the thread take up.
2. When sewing light leathers, move thread guide (1) to the right in direction B to decrease the length of the thread pulled out by the thread take up.

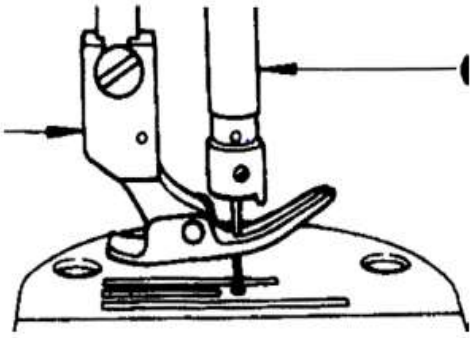


Adjusting needle thread supply

1. The standard height of the presser foot lifted using the knee lifter is 10 mm.
2. You can adjust the presser foot lift up to 13mm using knee lifter adjust screw (1)
3. When you have adjusted the presser foot lift to over 10mm , be sure

that the bottom end of needle bar (2) in its lowest position does not hit presser foot (3).





Adjusting feed timing

1 To obtain the standard feed timing, align setscrew (A) on feed eccentric cam (1) with setscrew (B) on main shaft thrust collar (2)

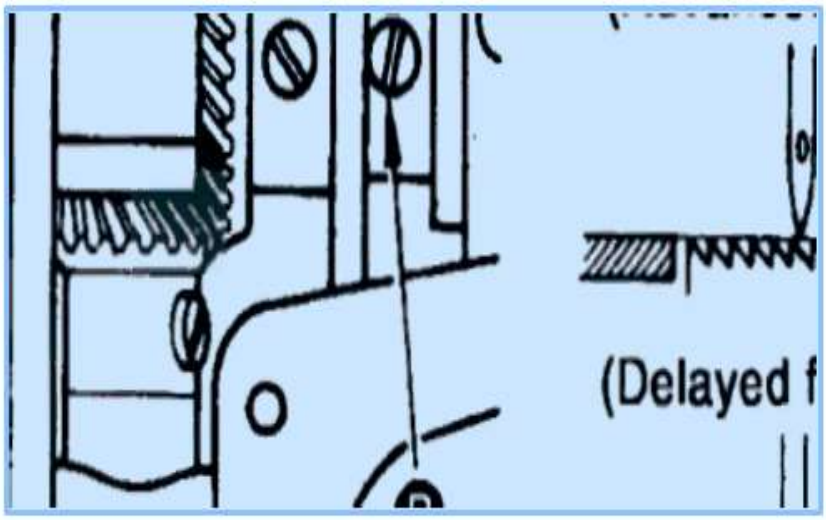
2 To make adjustment, loosen two setscrews (3) to release the feed eccentric cam,

Properly position the eccentric cam. Then retighten the setscrews.

3 To advance the feed timing in order to prevent uneven material feed, move the feed eccentric cam in the direction of the arrow

4 To delay the feed timing in order to increase stitch tightness, move the feed eccentric cam in the opposite direction from the arrow.

5 Be careful not to move the feed eccentric cam too far, or else needle breakage may result.

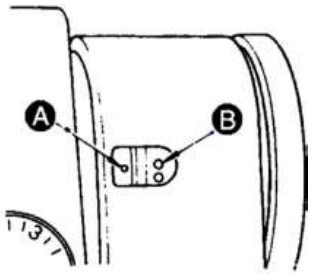


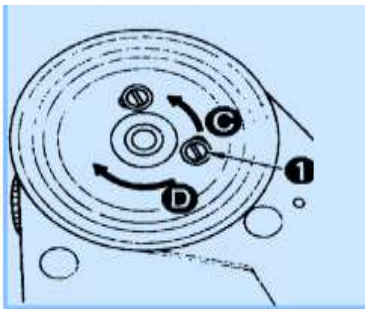
Adjusting needle stop position

Stop position after thread trimming

2. The standard needle stop position is obtained by aligning red marker dot (A) on the machine arm with white marker dot (B) on the hand wheel.
3. Stop the needle in its highest position, loosen screw (1) to perform adjustment within the slot of the screw

- The needle stop timing is advanced if you move the screw in direction(C)
- The needle stop timing is delayed if you move the screw in direction (D)





Precaution

(1) The needle stop timing is advanced if you move the screw in direction(C)

(2) The needle stop timing is delayed if you move the screw in direction (D)

Do not operate the machine with screw (1) loosened. Just loosen the screw, and do not remove it.

Lower stop position

1. The lower needle stop position when the pedal is returned to the neutral position after the front part of the pedal is depressed can be adjusted as follows:

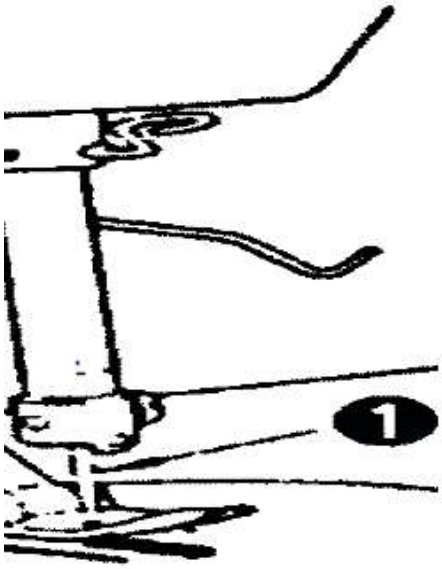
Stop needle (1) in its lowest position, loosen screw (2), and make adjustment within the slot of the screw.

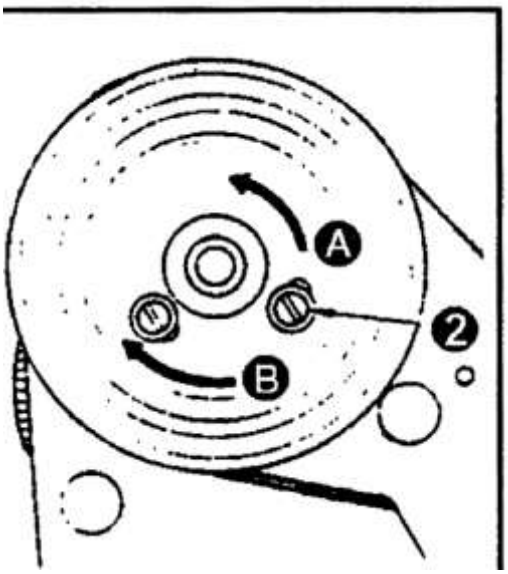
Moving the screw in direction (A) advances the needle stop timing.

Moving the screw in direction (B) delays the timing

Precaution

Do not operate the machine with screw (2) loosened. Just loosen the screw, and do not remove it.





PRECAUTIONS:

- Use the right tools when required

QUALITY CRITERIA:

1. All steps were completed in the correct sequence,
2. The machine should operate correctly

Your work should be neat and accurate

LAP Test	Particular demonstration

Name: _____ **Date:** _____

Time started: _____ **Time finished:** _____

Instructions:

Task 1.Adjust stitch length for the given sewing machine.

Task 2 Adjust bobbin threads tension for the given sewing machine.

Task 3 Adjust needle thread tension for the given sewing machine.

Task 4 Adjust Presser foot pressure for the given sewing machine.