

## INSTRUCTIONS FOR USING THE PFAFF 6

### FOREWORD

You are now the proud owner of a PFAFF 6 straight stitching machine. The material and workmanship which it embodies are of the same high standards as used in today's modern high speed sewing machines for industrial purposes.

Your PFAFF 6 is easy to operate, requiring but little attention and service. Just follow these simple instructions and sewing will become a lasting pleasure.


G. M. PFAFF AG


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## 2. Engaging the Sewing Mechanism

Hold balance wheel and tighten thumb screw in the direction of arrow .

For winding, disengage sewing mechanism by turning screw in opposite direction .

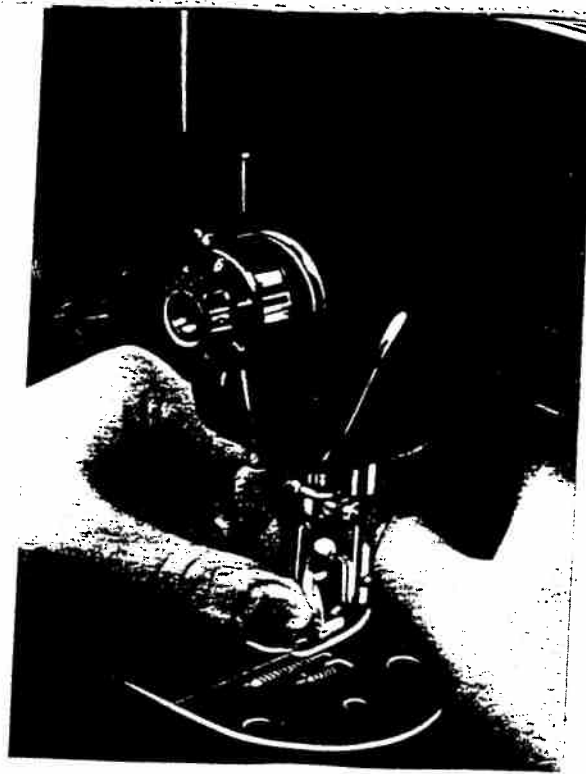
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### 3. Changing the Needle

Loosen needle clamp screw.

Insert needle into the opening of the needle bar and push it up as far as it will go. Make sure the flattened side of the shank faces to the right.

Tighten needle clamp screw.



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### 4. Needle and Thread Chart

	Cotton	Rayon	Silk, continuous fiber	Silk, staple fiber	Nylon, continuous fiber	Nylon, staple fiber	Embroidery thread	Linen	Needle Size
Extra-light linen, combrics	100/3						30/2		
Tulle, mul, organdie			130/3	130/3			30/2		
Light silk, crêpe			130/3	130/3			30/2		
Lightweight knit goods of cotton and rayon	100/3	100/3					30/2		70
Lightweight fabrics of nylon and similar fibres		(120/3)			200/3	180/3			
Medium-heavy fabrics of nylon and similar fabrics		(100/3)			150/3	120/3			
Underwear	80/3						30/3		
Silk fabrics, blouse materials				100/3			60/2		80
Lightweight taretta, muslin	80/3	(80/3)		100/3			60/2		
Bed and table linen	60/3						40/2		
Heavyweight silk fabrics				80/3			40/2		
Linen	60/3			80/3					90
Lightweight leather, plastics	60/3		80/3	80/3	80/3	80/3			
Lightweight garments	60/3			80/3					
Heavyweight garments	40/3			60/3					
Heavy linen, ticks	40/3			60/3			40/2		100
Ticking	40/3						40/3	40/3	
Heavy woolsens				50/3					110
Canvas, leather, sackings	30/3			40/3	50/3	50/3	40/3	30/3	

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## 5. Taking Out the Bobbin Case

Raise needle.

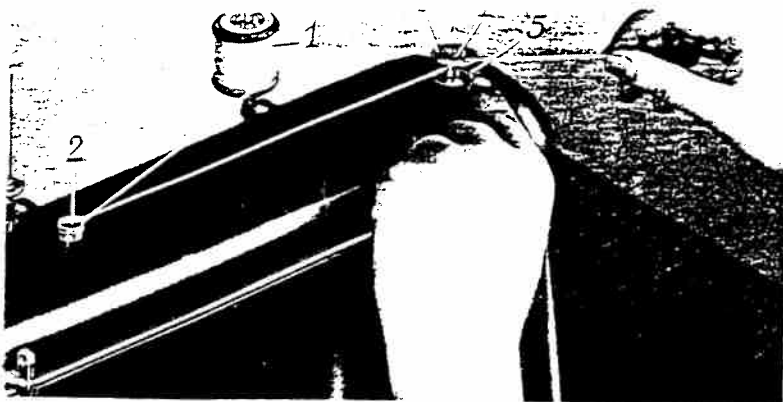
Pull out bobbin case, holding it by the latch.

While the latch remains open, the bobbin cannot fall out.



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## 6. Winding the Bobbin

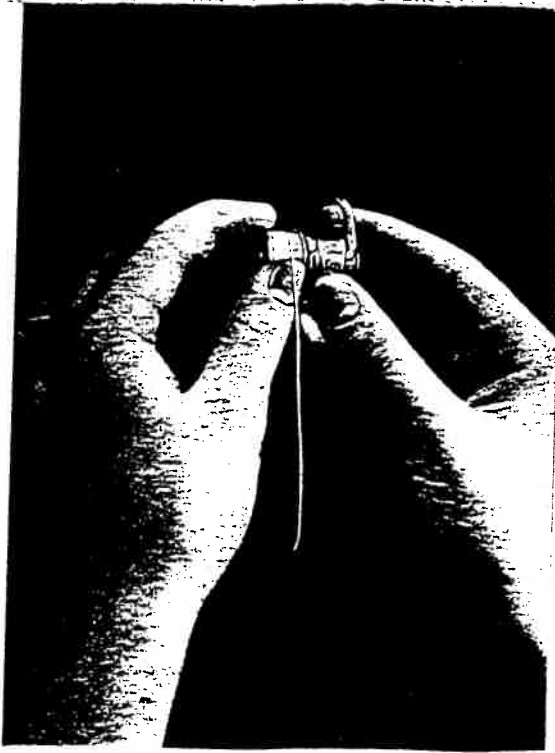
1. Disengage the sewing mechanism.
2. Place cotton reel on the right hand reel pin.
3. Pass the thread from cotton reel 1 through tension 2, as shown above.
4. Thread the end of thread inside-out through the slot in the face of the bobbin.
5. Place bobbin 3 on spindle 4.
6. Press lever 5 against bobbin. The winder will throw off automatically when bobbin is filled.

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## 7. Inserting the Bobbin



Hold bobbin as shown in the photo,  
thread unwinding toward the operator.



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Draw thread into slot, as illustrated.

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Hold bobbin in bobbin case and draw thread under the tension spring into the delivery eye.



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Hold bobbin case with thumb and middle finger of your left hand; while the index finger holds the latch open, bobbin cannot fall out.

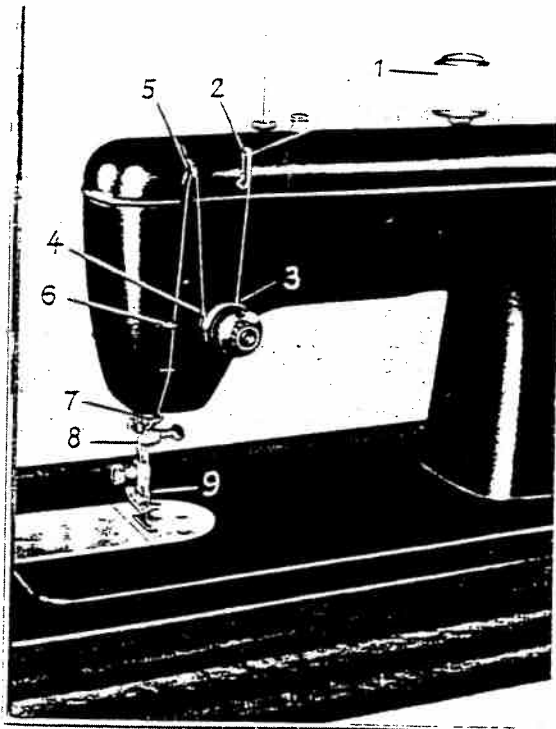
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Place bobbin case on the center stud in the shuttle and release latch.

Turn bobbin case with thumb and index finger so that bobbin case position finger H engages in the position slot.

Push till bobbin case clicks into position audibly.

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#### 8. Threading the Needle

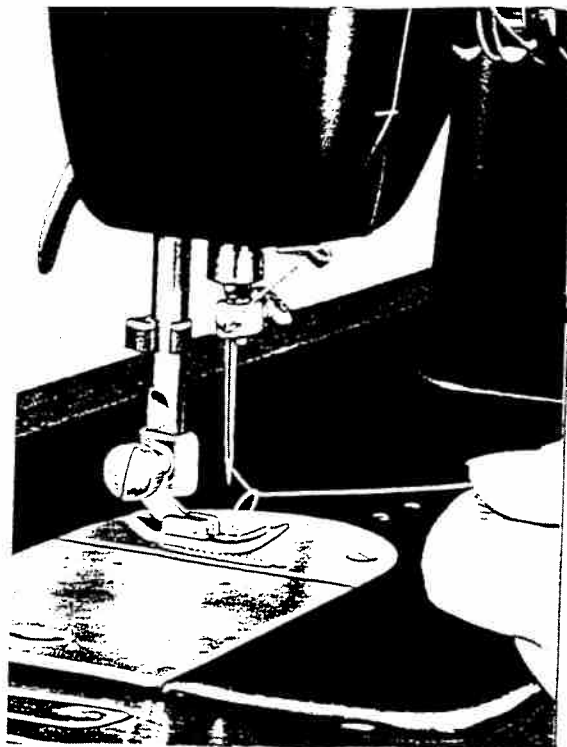
Pass the thread from reel 1 through the upper and lower holes of guide 2, between the tension discs 3, through check spring 4, then right-left through take-up lever 5, eyelets 6 and 7, and needle holder slot 8.

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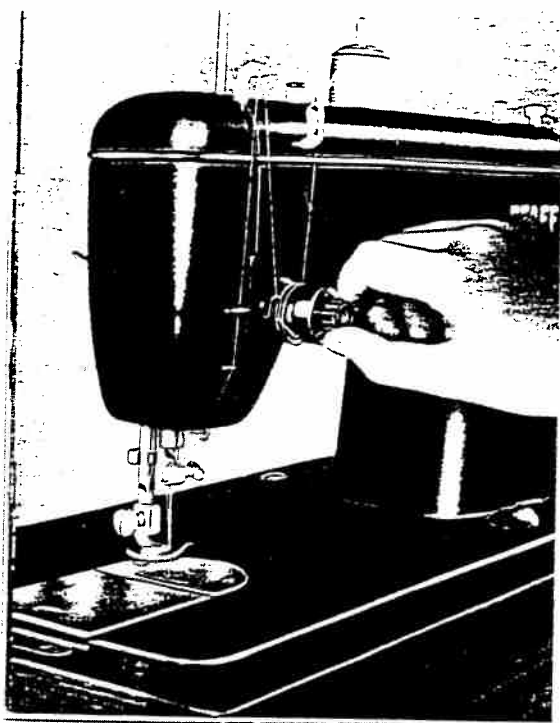
## 9. Drawing Up the Bobbin Thread

1. Hold the end of the needle thread.
2. Turn balance wheel until needle has moved down and up again.
3. By slightly drawing up the needle thread, the bobbin thread will come up in a loop through the needle hole.
4. Lay both threads back under the presser foot.

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**Important:** Make sure that the thread take-up is always in its highest position when beginning or ending a seam.

This way, you eliminate thread jamming in the shuttle and prevent the thread from slipping out of the needle eye. In this case you need not hold both threads when commencing to sew.

## 10. Regulating the Needle Thread Tension

A turn to the right  $\ggg$  will increase the tension for stitching heavier materials.

A turn to the left  $\lll$  will decrease the tension for stitching lighter fabrics.

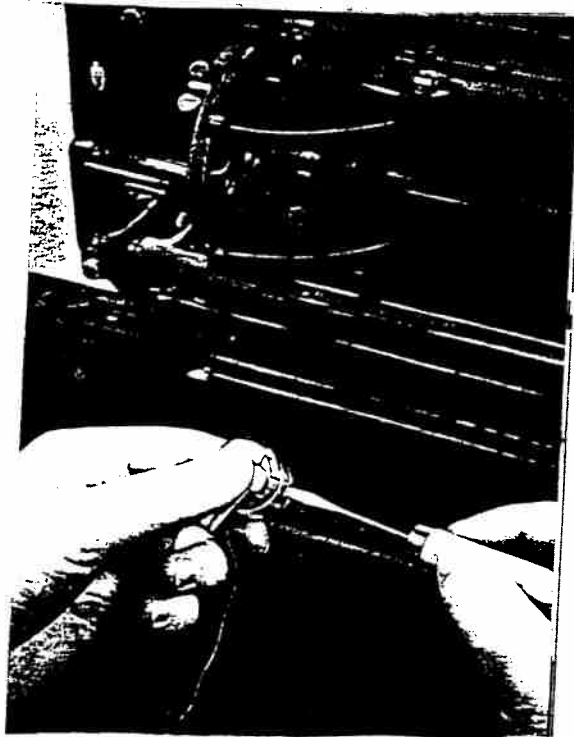
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## 11. Regulating the Bobbin Thread Tension

A lighter tension is obtained by left turns ↶ of the tension screw with the aid of the small screw driver. Right turns ↷ of that screw will increase the tension.

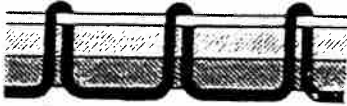


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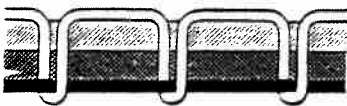
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Perfect stitch



Needle thread tension too tight or  
bobbin thread tension too weak



Needle thread tension too weak or  
bobbin thread tension too tight

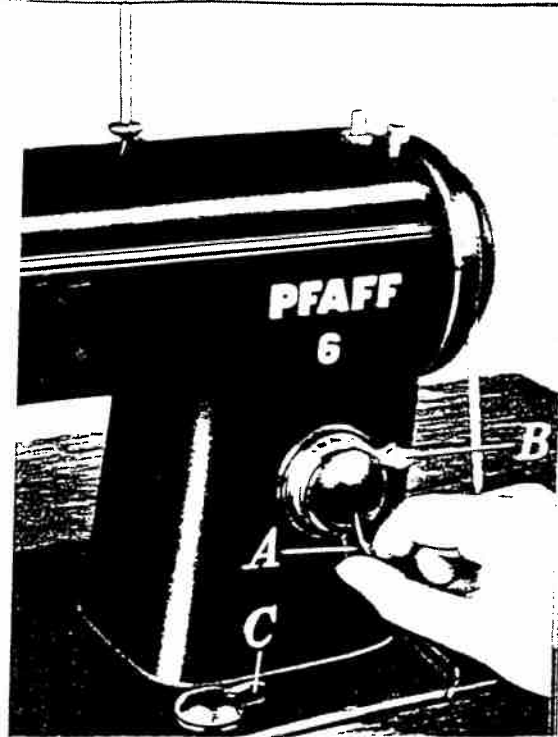
## 12. Correct Tension Regulation

with perfect locking of needle and bobbin threads in the center of the material results in neat and elastic seams.

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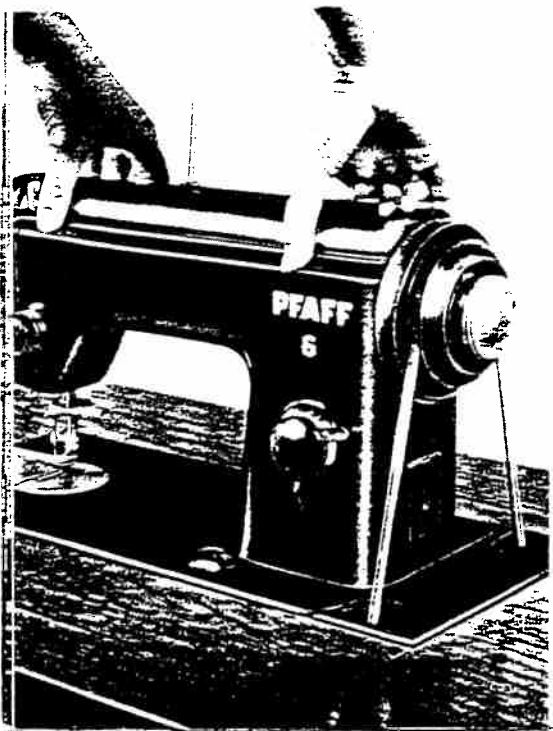
### 13. Regulating the Length of Stitch

1. Set stitch length limiting lever B at the desired stitch length indicated on the scale.
2. Push stitch length lever A to its right stop to obtain a forward stitch of the length of stitch set.
3. To shift to reverse stitching, turn lever A to its left stop.



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### 14. Removing the Top Cover

With all oiling points enclosed, there is no soiling of the material!



The full-length top cover can easily be taken off with both hands.

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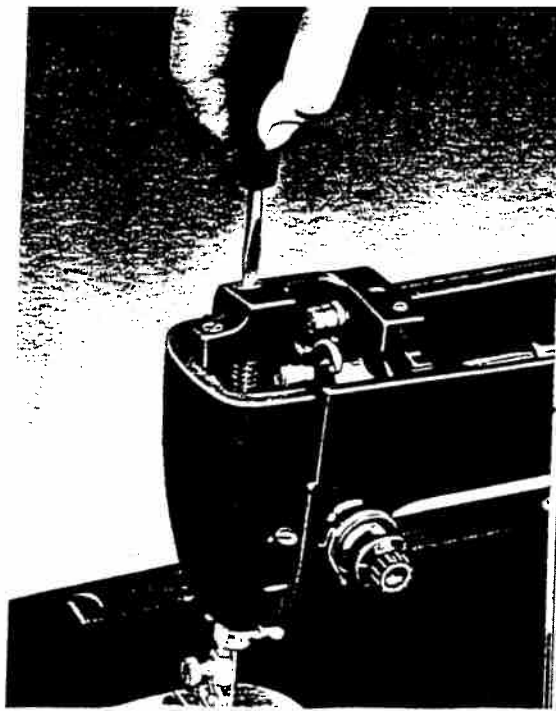
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### 15. Regulating the Pressure on the Material

assures uniformity of stitch length and prevents injury of the material by the feed dog.

A left turn  of screw V will ease the pressure for thin and flimsy fabrics; a right turn  of that screw will increase the pressure for thick and heavy materials.

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### 16. Taking Off the Balance Wheel

To remove odd thread between balance wheel and arm shaft bushing,

1. loosen screw a,
2. loosen thumb screw b, turning it to the left,

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3. Take off the friction stop washer L and the balance wheel and remove thread.

When replacing the friction stop washer, make sure that its bent-up lips face outside.

If the large thumb screw should not tighten firmly, turn the friction stop washer 180°.



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### 17. Lowering the Feed Dog

For embroidering and darning, the feed dog is to be lowered by turning lever C towards the front.

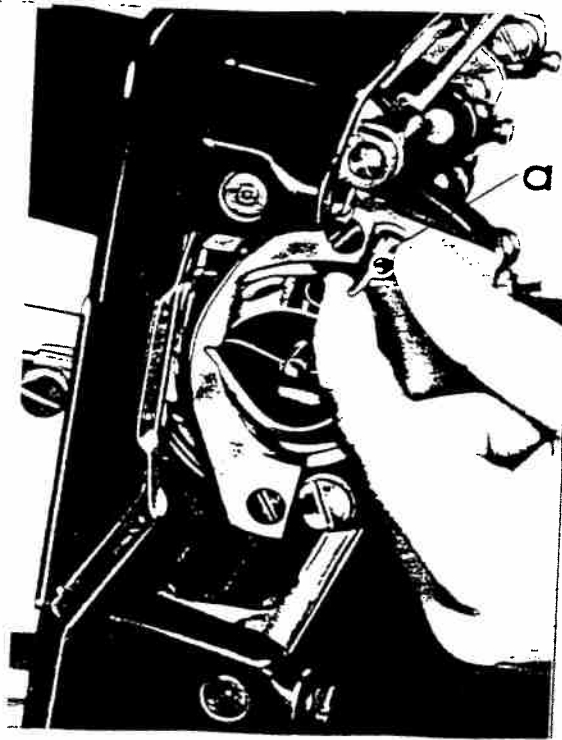
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## 18. Removing the Shuttle

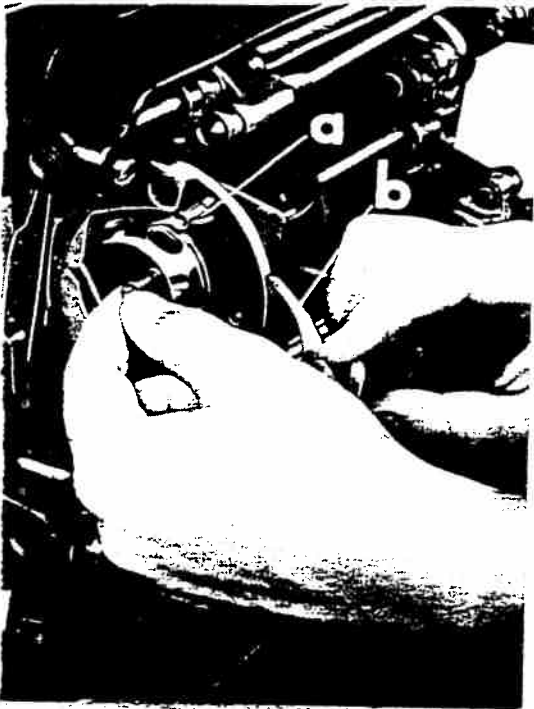
becomes necessary when thread has entered the race.

1. Loosen wing screw **a** and push gib **b** downwards.



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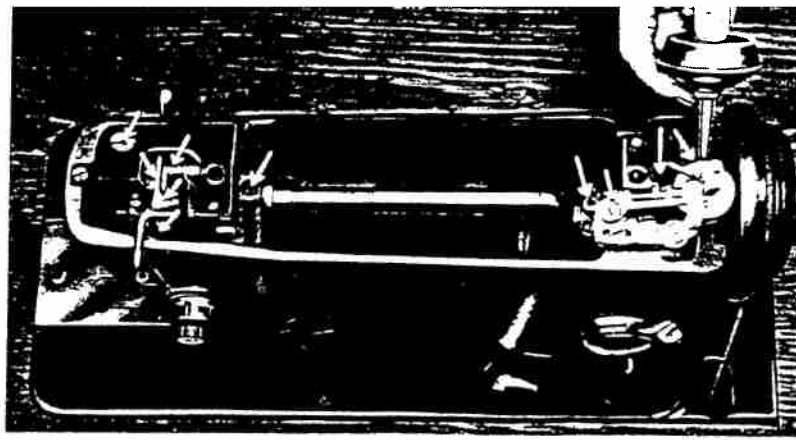


2. Turn balance wheel so that the shuttle is at the extreme right.
3. Take off shuttle, holding it by the center stud.

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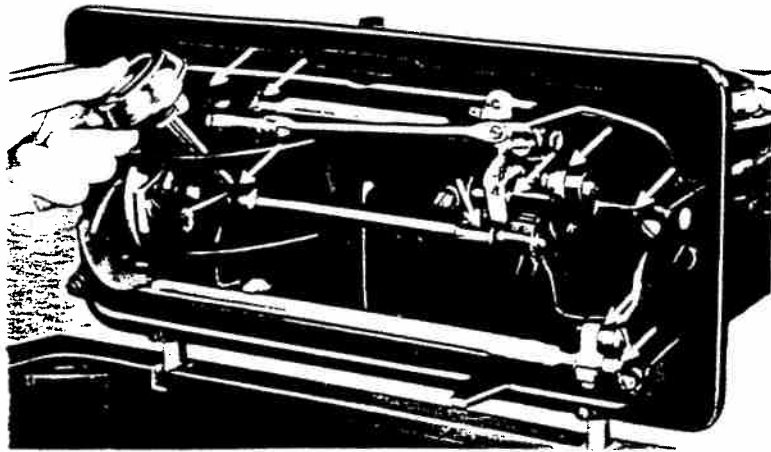
## 19. Servicing and Maintenance

Regular and proper oiling will increase the service life of your machine.

Apply oil only at the points marked by arrows.

Do not forget to oil the rear arm shaft bushing, half covered by the winder pulley in the above photo.

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The oiling points underneath the machine.

Remove accumulations of packed lint between needle plate, feed dog and shuttle regularly!

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From time to time apply a drop of oil to the shuttle race.

A dry race will wear off rapidly.



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## 20. Probable Causes of Sewing Troubles

### Skipping of Stitches:

#### Cause:

Needle improperly inserted.

Wrong needle used.

Needle bent.

Machine not properly threaded.

Needle either too thin or too thick for the thread used.

#### Remedy:

Push needle up as far as it will go with the long groove facing left.

The correct needle system is stamped on the bed plate slide.

Insert a new needle.

Check and correct threading as instructed in Section 8.

Select needle in accordance with the Chart on page 4.

**Cause:**

Thread breaking may occur for any of the aforementioned reasons.

Thread tension too tight.

Use of inferior or knotty thread.

Race dry or odd threads jamming in the race.

**Remedy:**

See preceding page.

Adjust upper and lower tensions in accordance with Sections 10 and 11.

Only first-rate sewing machine thread or a good quality of silk should be used.

Clean and oil race in accordance with Sections 18 and 19.

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**Binding of Machine****Cause:**

Driving belt too long and slips off, or too short causing excessive pressure on the bearings.

Shuttle race dry or obstructed by odd thread.

Mechanism clogged up by inferior oil.

The feed dog jams in the needle plate cutout.

Winder engaged while sewing.

Thread snarled up between balance wheel and bushing.

**Remedy:**

Shorten belt or insert a piece for lengthening. Cut the belt straight, not on the bias.

Clean and oil shuttle race.

Use only PFAFF sewing machine oil, never salad oil or glycerine.

Unscrew both feed dog and needle plate and readjust properly.

Disengage winder.

Remove and unwind thread with the aid of a thin needle.

**Needle Breakage**

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**Cause:**

Needle bent and struck by the point of the shuttle.

Needle too thin or thread too thick.

Needle thread tension too tight, thus bending needle.

Needle bent and strikes needle plate due to the material being pulled or pushed.

Bobbin case inserted improperly.

**Remedy:**

Replace needle at once to prevent more damage.

Study Needle and Thread Chart on page 4.

Either ease tension or use a thicker needle.

Do not force the feeding motion, increase pressure on thicker material and so assure better feeding.

When inserting the bobbin case, push it in until it clicks into position audibly.

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## Uneven Stitches

### Cause:

Tension regulated improperly.

Thread too heavy, knotty, or stiff.

Bobbin thread unevenly wound.

Race too dry.

Odd thread accumulated between the thread tension discs.

### Remedy:

Adjust tension in accordance with Sections 10 and 11.

Use only first-class thread.

For winding do not run the thread over your finger but over the winder thread tension.

Apply one or two drops of oil.

Loosen tension and remove thread.

## Noisy Running

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### Cause:

Lint or odd thread accumulated in the shuttle race.

Needle plate improperly inserted after removal.

Feed dog jams in needle plate cutout.

### Remedy:

Clean and oil shuttle as instructed in Sections 18 and 19.

Unscrew needle plate and, if necessary, also feed dog, then readjust.

Machine has run dry or was oiled with kerosene.

Clean and oil machine as instructed in Sections 18 and 19.

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## Inaccurate Feeding

### Cause:

Feed dog set too low so that its teeth do not come up sufficiently above needle plate level.

Lint and fluff accumulated between tooth rows.

Insufficient amount of pressure exerted on material.

### Remedy:

Adjust position of feed dog so that it shows a full tooth above the needle plate.

Take off needle plate and remove lint with a pointed instrument.

Increase pressure by tightening screw V (See Section 16).

Note: If machine does not feed at all, see whether feed dog is lowered or stitch length lever in zero position.