



### SKIPS STITCHES

#### Check points:-

1. Improper timing.
2. Needle bent or blunt.
3. Needle inserted incorrectly.
4. Incorrect size needle.
5. Improper operation of check spring.
6. Needle too low, not inserted up to stop pin.
7. Wrong needle being used.



### LENGTH OF STITCHING UNEVEN

#### Check points:-

1. Pulling material instead of allowing machine to feed normally.
2. Using a needle too fine for uneven or coarse thread.
3. Feed not high enough.
4. Not enough pressure on presser bar—thumb screw.
5. Dull feeder.
6. Loose feeder.



### LOOSE STITCHING ON BOTTOM OF MATERIAL

#### Check points:-

1. Bobbin tension too tight.
2. Upper tension too loose.
3. Not enough tension on check spring.
4. Incorrect threading.
5. Jammed tension release.

Note: Only PFAFF needles should be used in PFAFF Sewing Machines.



# PFAFF



130 - 6

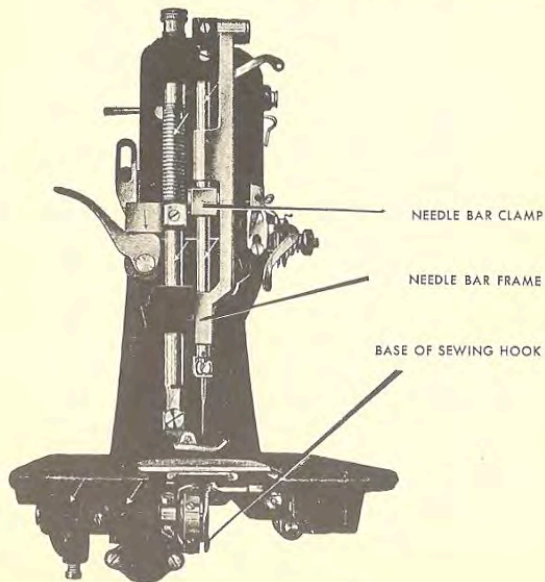


## SERVICE MANUAL



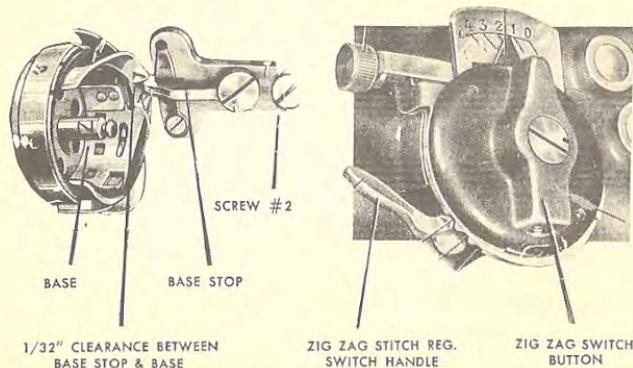
### SETTING HEIGHT OF NEEDLE BAR

1. Turn hand wheel in direction of rotation until needle bar clamp is at lowest point.
2. Reach through needle bar frame and loosen lock screw on needle bar clamp.
3. Thread needle. This is only to help you see the eye of the needle more easily.
4. Raise or lower needle bar until the thread on the back of the needle rests lightly on the base of the sewing hook.
5. Lock needle bar clamp lock screw making sure that slot in needle bar is perfectly square with front of machine.



### TIMING HOOK TO NEEDLE

1. Zig zag stitch regulator switch handle in center #2 position.
2. Zig zag switch button on #4 (widest stitch).
3. Turn hand wheel in direction of rotation until the needle bar is on the left side of zig zag stroke and at its lowest point.
4. Loosen sewing hook lock screws. Rotate sewing hook until the point meets and touches the needle.
5. Hold sewing hook with one hand and rotate hand wheel in the direction of rotation until the point of the hook is approx.  $1/32$  of an inch above the eye of the needle.
6. Slide entire hook away or toward the needle on the hook shaft until you get the hook as close to the needle as you can without hook touching the needle.
7. Lock sewing hook, lock screws to the hook shaft.
8. Install complete base stop assembly with screw #2.
9. Loosen screw #2 on the base stop assembly and move entire assembly left or right until you have at least  $1/32$  of an inch clearance between base and base stop assembly.
10. Lock base stop screw and now your hook is timed to the needle.





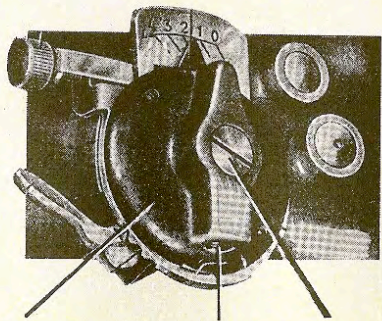
### TIMING OF FEED MOTION

1. Unlock two (2) lock screws on feed cam.
2. Turn hand wheel in direction of rotation, holding cam from moving with screw driver.
3. Turn hand wheel in direction of rotation, watching needle and feeder in plate. The feeder must drop and be flush with the needle plate as the eye of the needle reaches the top of the needle plate.
4. Keep repeating step #2 until timed correctly.



### LINING UP ZIG ZAG STITCH REGULATOR

1. Remove Face Plate.
2. Turn zig zag dial to zero and hold in position with one hand.
3. Unlock zig zag dial lock screw.
4. Run machine slowly under power.
5. Insert screw driver with free hand into slot of zig zag stitch cam. Turn either left or right watching needle bar frame.
6. When needle bar frame stops moving lock zig zag dial lock screw. The regulator is now adjusted.



ZIG ZAG DIAL

ZIG ZAG DIAL LOCK SCREW

ZIG ZAG STITCH CAM.



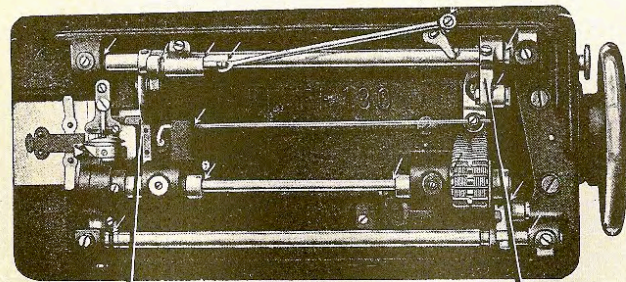
### TIMING OF ZIG ZAG MOTION

1. Turn zig zag dial indicator to four on the dial.
2. Remove the face plate.
3. Loosen two screws of the gear on the main shaft.
4. Turn hand wheel in direction of rotation holding gear from moving with a screw driver. Turn one eighth of a turn of the main shaft and lock one of the screws.
5. Turn hand wheel and watch needle bar frame to see when it starts moving. The point of the needle must be one-quarter of an inch above the needle plate when the needle bar frame starts moving.
6. Keep repeating step number four until timed correctly.



### ADJUSTING HEIGHT OF FEEDER

1. Turn hand wheel until feeder is at its highest point.
2. Loosen lock screw on left shaft crank.
3. Tap feed bar until full tooth of feeder is above needle plate.
4. Lock left shaft crank screw. Feeder is now set for height.



FEED BAR

LIFT SHAFT CRANK



### ADJUSTING LENGTH OF FEED STROKE

1. Set stitch regulator at the longest stitch.
2. Turn hand wheel in direction of rotation until feeder is all the way back.
3. Loosen rock shaft crank lock screw.
4. Push or pull feed bar until you have approx. 1/16 of an inch clearance between feeder and back of needle plate.
5. Lock crank and your stroke of the feeder is now set.



### ADJUSTING DROP FEED MECHANISM

1. Make sure that you've got clearance between set ring #8888 and free lifting rock shaft and crank.
2. Make sure that you've got a little play between the drop feed knob and bed plate.
3. Connecting rod for feed lowering device should be free.

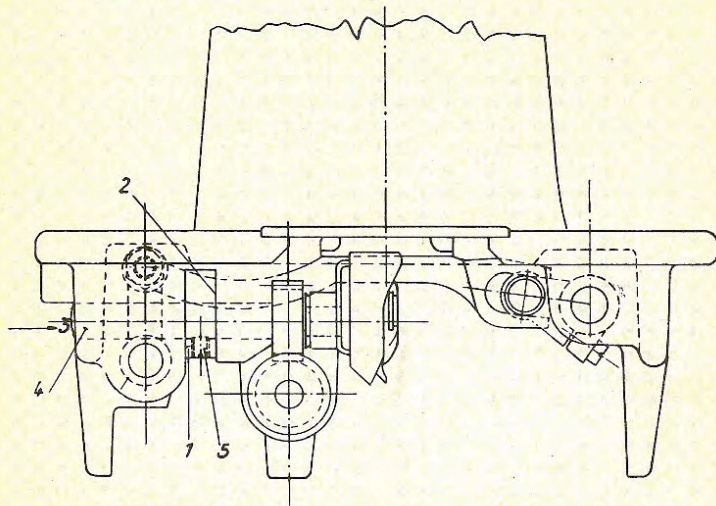


### ADJUSTING NEEDLE BAR WITH ECCENTRIC CAM PIN

1. Turn zig zag dial indicator button to the widest stitch.
2. Turn hand wheel in direction of rotation until needle bar is on the extreme right or left.
3. Unlock eccentric cam pin lock screw in needle bar frame located through a hole in the casting behind the face plate section of machine.
4. Turn eccentric screw right or left until you've got some distance between needle and end of needle hole in needle plate.
5. Turn hand wheel until needle is on opposite side and check by eye to see if distance is the same as on previous side. If so lock eccentric cam pin lock screw. If distance isn't equal on both sides repeat step #4.



### ADJUSTING HOOK SHAFT



### DIRECTIONS HOW TO ELIMINATE TIGHTNESS AT THE HOOK SHAFT ON MODEL PFAFF 130

Tightening of set ring 1 against surface 2 of the hook shaft bearing at this particular model, causes the machine to run with greater difficulty. This difficulty, however, can easily be eliminated by slightly tapping the end No. 3 of hook shaft No. 4. Screw No. 5 of set ring 1 should be tightened as soon as repair is completed. It is important, however, that the hook shaft being so freed should have but the necessary play thereafter.



### ADJUSTING PLAY IN ROCK AND LIFT SHAFTS

1. Loosen one conical pin lock screw and push in with finger to take up play.
2. Caution: You must be careful that you choose the correct pin to adjust when working on the rock shaft (shaft with feed bar). Take up of play on wrong pin may bend feeder against needle plate.
3. Check to see that you've got play on left rock and feed rod which are pinned to lift and rock shafts when adjusting these shafts for too much play.



### ADJUSTING TENSION RELEASE MECHANISM

1. Remove tension nut, tension spring and tension disconnecting plate.
2. Place tension disconnecting plate on bench and bend bar across hole down if tension doesn't release when hand lift is all the way up. Bend opposite if tension releases too much.



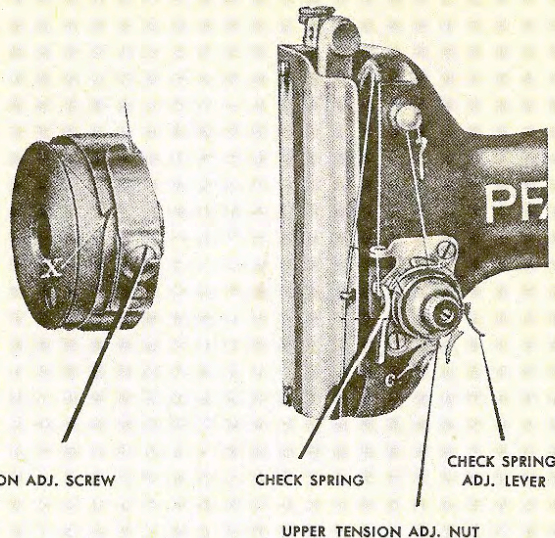
### ADJUSTING HEIGHT OF PRESSER BAR

1. Remove face plate.
2. Lift presser bar all the way up with hand lift.
3. Unlock lifter lock screw.
4. Raise or lower presser bar as necessary.
5. Line up foot on presser bar parallel to feeder and lock lifter lock screw.



### ADJUSTING UPPER AND LOWER TENSION

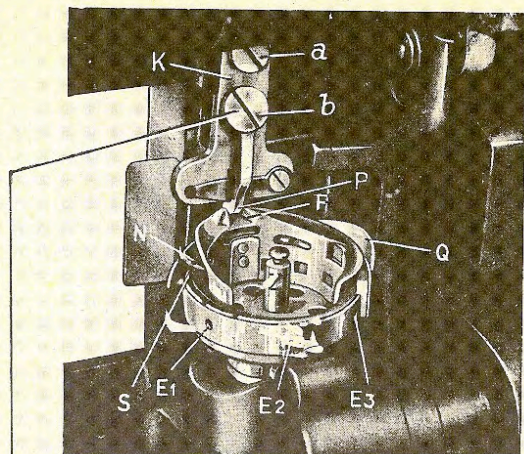
1. Lower tension is adj. by screw A on bobbin case. Turning screw to the right increases the tension and to the left decreases the tension on the lower thread.
2. To adjust upper tension turn tension adjusting nut to right to increase tension and to left to decrease tension.
3. Check spring tension is increased by pushing spring lever down.



### HOW TO DISASSEMBLE HOOK

1. Remove base stop screw A.
2. Turn hand wheel until three screws of Gib or bow are easily reached and remove these screws.
3. Adjust hook by turning hand wheel until point on outer shell (B) is lined up with sharp notch on base (C).

4. Grasp base with fingers at gib or bow section and lift base up and gently pull out.
5. Assemble by installing the last part removed first and so on till complete.



BASE STOP SCREW

## ★ GENERAL FIELD SERVICE FOR PFAFF SEWING MACHINES BREAKING OF UPPER THREAD

### Check points:-

1. Needle improperly threaded.
2. Tension of needle thread too tight.
3. Knots in thread.
4. Sharp edges in needle plate.
5. Needle bent or blunted at point.
6. Needle inserted incorrectly.
7. Needle too fine for thread in use.
8. Check spring too high.
9. Too much tension on check spring.
10. Upper tension too tight.

## ★ BREAKING OF LOWER THREAD

### Check points:-

1. Tension of bobbin thread too tight.
2. Bobbin too full and binding in case.
3. Dust or lint in bobbin case.
4. Edge of bobbin bent.
5. Sharp edges on rim of bobbin.
6. Thread caught behind latch of bobbin case.
7. Bent bobbin case.

## ★ NEEDLE BREAKS

### Check points:-

1. Needle hitting needle plate or hook.
2. Pulling fabric while sewing so that needle strikes throat plate.
3. Sewing heavy material with the wrong size needle (or too light a needle).
4. Needle too low, not inserted up to stop pin.
5. Wrong needle being used.