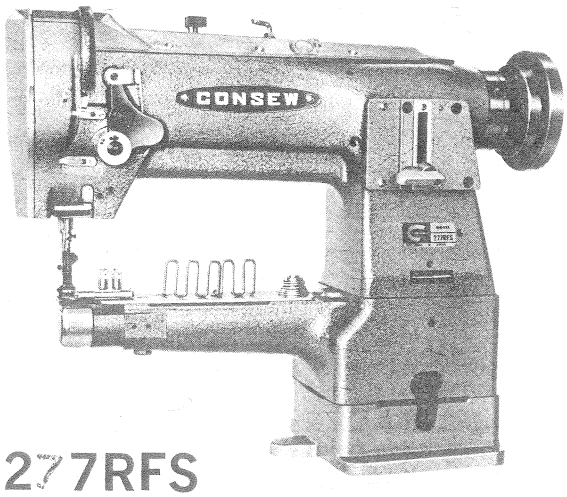
CONSEW

OPERATING INSTRUCTIONS

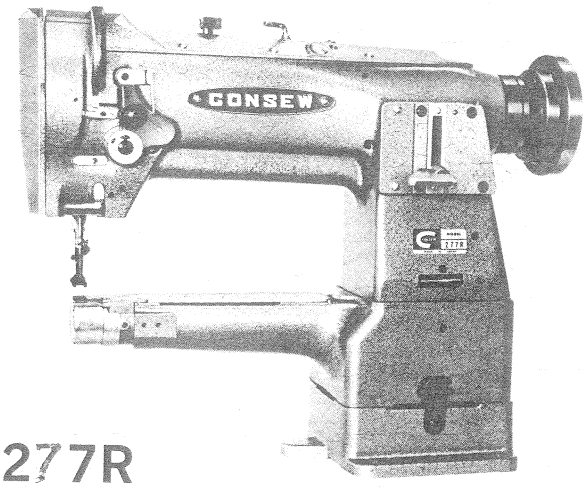
FOR

277RFS

277R



277RFS



277R

CONSOLIDATED SEWING MACHINE CORP.

INSTRUCTIONS FOR CONSEW MODEL 277 TYPE INDUSTRIAL SEWING MACHINES

This is a guide to use of CONSEW model 277 type industrial sewing machines under the best condition.

CONSEW 277 series are a single needle, lock-stitching, compound feed & walking foot, semi-automatic lubrication system, narrow (46ϕ) cylinder bed sewing machine.

Please read this guide thoroughly so that you may expect good performance.

SPECIFICATIONS

MAXIMUM SPEED: 3,000 s.p.m. (277RFS)
2,400 s.p.m. (277R)
NEEDLE: DPx17, #11-#23 Standard Needle #16 (277RFS)
#18 (277R)
NEEDLE POSITION: 9 mm (available 7 mm on order) from the left end of cylinder bed. . . 277RFS
7 mm from the left end of cylinder bed . . . 277R
NEEDLE BAR STROKE: 33.2 mm
HOOK & BOBBIN: Rotating hook, 22ϕ x 8.9 mm
STITCH LENGTH: Maximum 5 mm
FEED MECHANISM: Drop and Needle feed, and walking foot. With reverse stitch.
PRESSER FOOT: Alternating pressers
PRESSER BAR STROKE: 7 mm (by hand), 10 mm (by knee lifter)
THREAD TAKE UP: Slide motion type
DIAMETER OF CYLINDER BED: 46ϕ
LUBRICATION: Semi-automatic lubrication
LUBRICATION OIL: White spindle oil
WORKING SPACE: 258 mm x 110 mm
WEIGHT: 29 KGS. (with BASE)
MOTOR: 1/3 HP or 1/2 HP Clutch motor. 2P
THREAD: Synthetic #50-#8
USE: All kinds of work in the clothing, footwear, upholstery, leather industry such as shoe, canvas products, dress shields, sleeve, sandals, gloves, sports goods, especially, Model 277RFS is suitable for various kinds of tape stitching with a edge binder which is interchangeable without having any alteration to any other parts.

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* When starting the machine initially and after kept away for a long time without using at all, make sure the oil volume through oil level indicator (B), and oil sufficiently to respective necessary parts before starting operation and try pre-running.

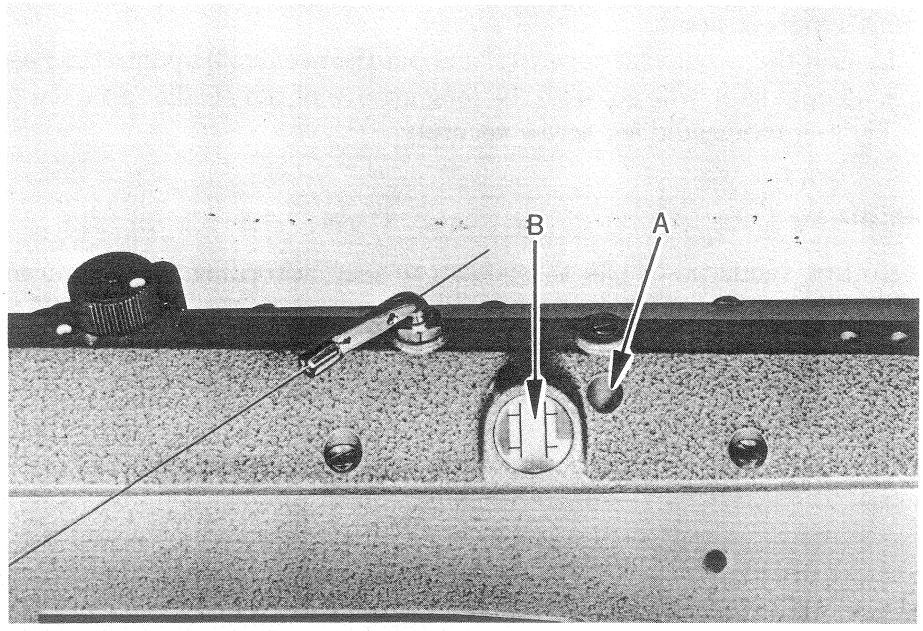
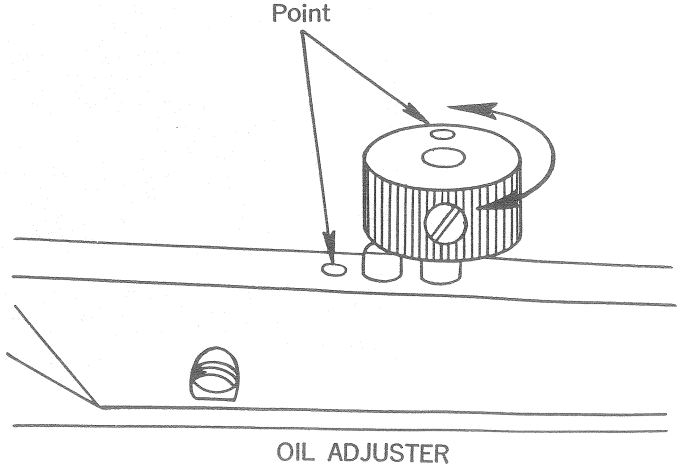


Fig. 2

OIL ADJUSTMENT

* While operating the machine, the lubrications to each spot of the machine are made.

When the machine is in continuous operation, stop oiling for a while at your option. In that case, turn the dial until two points fit together as per the following picture, then the dial comes down and the lubrications are stopped perfectly.



WINDING THE LOWER THREAD ON THE BOBBIN (Fig. 4)

1. Push a bobbin on the bobbin winder spindle (1) as far as it will go.
2. Pass the thread from the thread stand downward through the eye (7) in the tension bracket, then between and around the back of the tension disc.
3. Bring the thread forward toward the bobbin and wind from below in clock-wise direction several times around the bobbin.
4. Push the lever (3) toward the other side so that the pulley (2) and V belt (9, Fig. 1) will engage and then start the machine.
5. The pulley (2) will automatically be free from the belt and stopped after the bobbin is filled with thread.

THE ABOVE OPERATION CAN BE DONE WHILE SEWING.

ADJUSTMENT OF THE BOBBIN WINDER (Fig. 4)

* IN CASE OF UNEVEN WINDING

If the thread does not wind evenly on the bobbin, loosen the screw (4) in the tension bracket and move the bracket to the right or left as may be required, then tighten the screw.

* WINDING AMOUNT OF THREAD

Adjustment screw (5) can be turned in or out to increase or decrease the amount of thread wound on the bobbin.

* WINDING STRENGTH

Strength of the winding can be adjusted with nut (6).

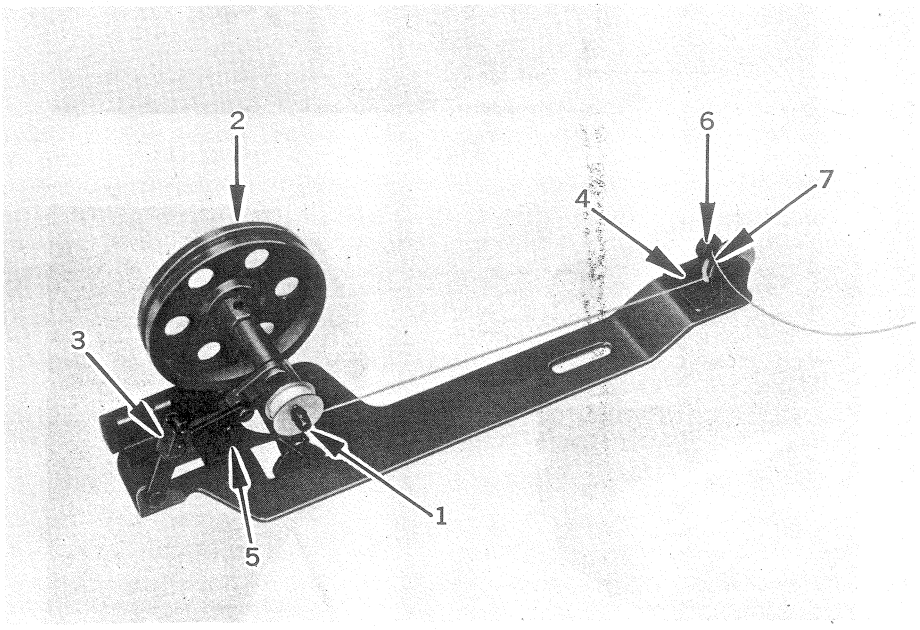


Fig. 4

THREADING THE MACHINE (Fig. 7)

1. Raise the needle bar to its highest point and lead the thread from the thread stand the following order:

From the thread stand, lead the thread to the thread guide (1) on the top of the machine arm, down to the upper guide hole of the thread guide (2) from right to left. Pass the thread in weaving fashion through the other two holes in (2) and from right to left over and between the tension discs (3). Now pull the thread downward from right to left beneath and around thread controller (4), continue to pull the thread upward through the fork in the thread controller and against the check spring (5) and through the thread guide (6), pull the thread upward through the eye in the take-up lever (7) down through the thread guide (6) again and then through the thread guide (8), (9) and (10), and from left to right through the eye of the needle.

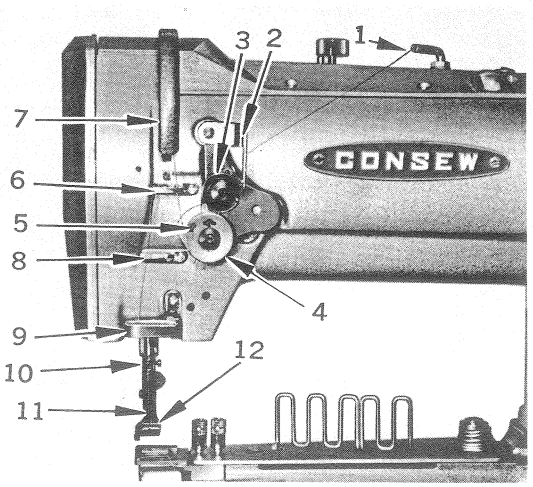


Fig. 7

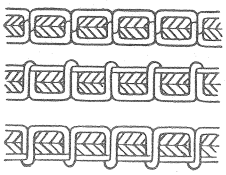
2. After the above threading, hold the end of thread with your left hand, and turn the pulley with your right hand so that bobbin thread may be picked up by needle thread. And put their ends of thread on the other side bed through under the presser foot for starting operation.

REGULATING THE THREAD TENSIONS

* For ordinary stitching, the tension of the upper and lower threads should be equal so as to lock both threads in the center of the fabric. If the tension on either thread is stronger than on the other, imperfect stitching will be the result.

* If the tension on the upper thread is stronger than that on the lower thread, it will be straight along the upper surface of the fabric.

* If the tension on the lower thread is stronger than that on the upper thread, the lower thread will lie straight along the underside of the fabric.



----- Perfect stitching

----- Tight tension of needle thread

----- Loose tension of needle thread

Fig. 8

ADJUSTING THE STITCH LENGTH (Fig. 11)

Stitch length is adjusted by turning the serrated nut (11) so that the reference mark on the collar (3) comes in line with the desire number of stitch length on the plate (2).

* If you desire to decrease the stitch length, turn the serrated nut to the right.

* When you desire reverse stitch, push the lever (4) up as far as it will go.

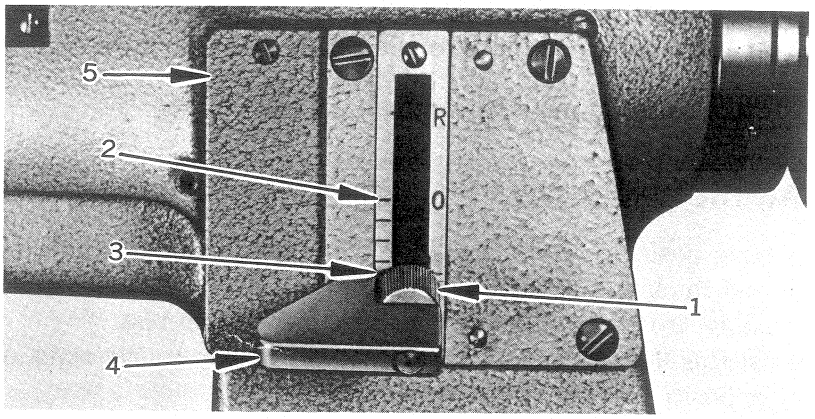


Fig. 11

ADJUSTING THE LIFT OF THE ALTERNATING PRESSER FEET (Fig. 12)

The thickness of the material sewn should control the height of the lift of the alternating presser feet.

It should normally be just high enough for clearance of the material. With normal adjustment both feet lift to equal height.

* To adjust the lift, loosen the wing nut (1), move up the nut to raise the lift, and push down this nut to lower the lift.

* When altering the lift of the lifting presser foot (4, Fig. 3) unequally against that of the vibrating presser foot (5, Fig. 3) or vice versa, see the instructions "ADJUSTING THE HEIGHT OF THE PRESSER FEET".

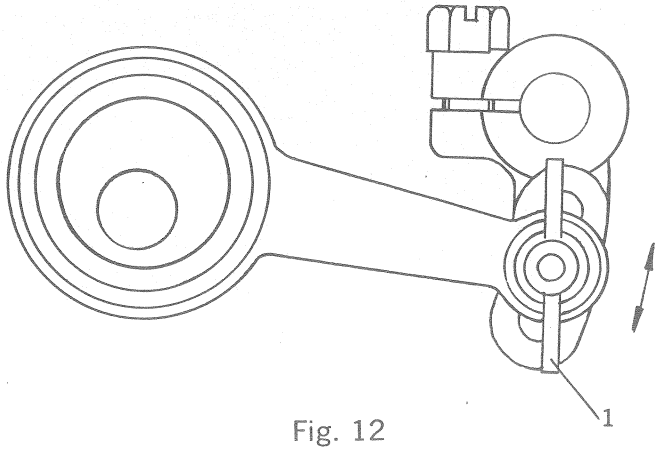


Fig. 12

ADJUSTING THE HEIGHT OF THE FEED DOG (only Model 277R)

The maximum height of the feed dog (1, Fig. 15) from the surface of the needle plate (2, Fig. 15) is normally 1 mm.

* To adjust this height;

1. Lay down the machine head toward the other side, and turn the hand wheel so as to raise the feed dog to its highest point.
2. Loosen the set screw (1, Fig. 14)
3. Adjust the height of the feeder by raising or lowering it.
4. Securely tighten the screw.

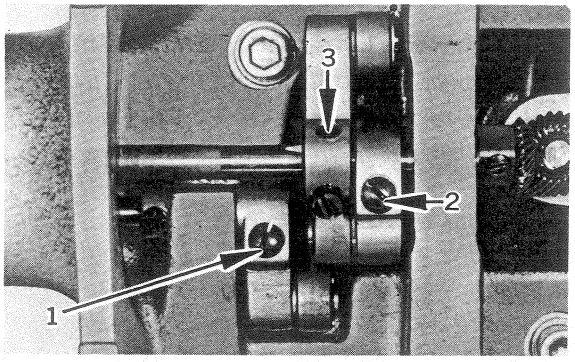


Fig. 14 277R

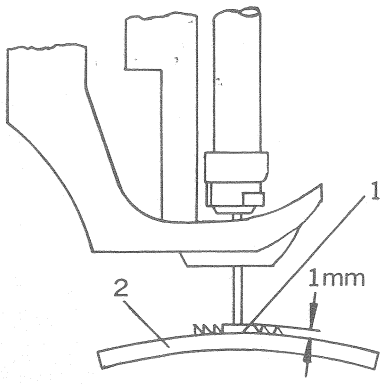


Fig. 15

ADJUSTING THE TIMING OF THE NEEDLE PLATE, NEEDLE AND FEEDER

1) RELATIVE POSITION OF THE FEEDER TO NEEDLE PLATE

(277RFS)

1. Lay down the machine head toward the other side, and check that the screw (2, Fig. 16) is securely tightened on the V ditch (1, Fig. 16).
2. Adjust the feed motion to the maximum and loosen the screw (2, Fig. 19) with a hexagon wrench (standard accessories).
3. Set the position of the feeder so that both clearances between feeder and needle plate are equal before starting feed motion and after finishing the feed.
4. Securely tighten the screw (2, Fig. 19)

(277R)

1. Lay down the machine head toward the other side, and loosen the screw (2, Fig. 14)
2. Adjust the feed motion to the maximum and set the position of the feeder so that both clearances between feeder and needle plate are equal before starting feed motion and after finishing the feed.
3. Securely tighten the screw.

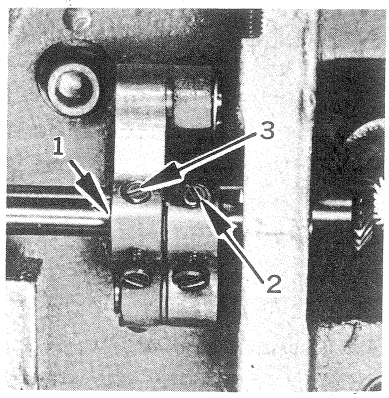


Fig. 16 277RFS

TIMING BETWEEN THE HOOK AND THE NEEDLE

* After setting the needle bar height, confirm as follows:

Set the stitch length to 0, turn the hand wheel to lower the needle bar to its lowest point, turn the hand wheel toward you.

When the needle raises 2 mm from the lowest point of its travel, normally the hook point comes at the center line of the needle and the measurement between the hook point and the upper end of the needle eye should be 2 mm, further the clearance between the hook point and the needle hollow should be about 0.05 to 0.1 mm.

* TIMING AND THE CLEARANCE ADJUSTMENT (Fig. 19)

1. Loosen the two screws (1).
2. Adjust the timing. If require earlier, turn the hook toward the direction of its revolution.
3. Also adjust the clearance by means of movement of the hook to the right or to the left as may require.
4. After adjustment, securely tighten the screws.

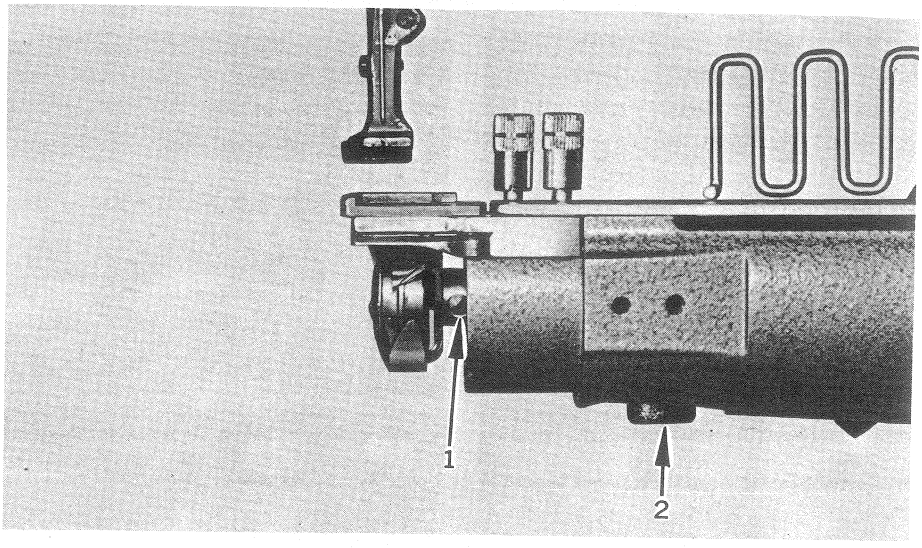


Fig. 19

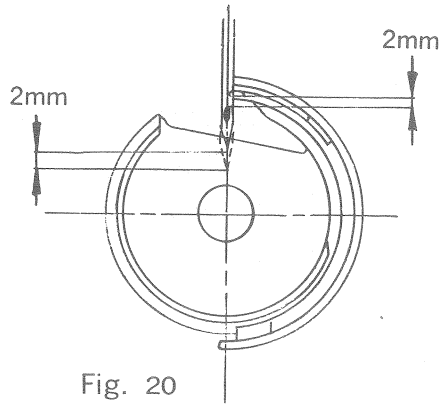


Fig. 20

* ADJUSTING THE LIFT OF ALTERNATING PRESSER FEET

If the height of the lifting presser foot changes, the momentums of the lifting and vibrating presser foot vary, thus the height of the vibrating presser foot must be adjusted.

HOW TO ADJUST:

1. Lower the presser bar lifter, holding the vibrating presser foot (5, Fig. 3)
2. Loosen the hexagon screw (2, Fig. 22) and move the presser foot up or down as may be required.
3. After setting the position, tighten the screw.

TIMING OF THE VIBRATING PRESSER FOOT

* This is the normal timing when, turn the hand wheel toward you, after lowering the presser bar lifter, the vibrating presser foot should reach the feeder earlier than the needle eye comes to, and when the needle raises, the vibrating presser foot should leave the feeder after the needle eye has left the feeder.

This is due to the reason that the vibrating presser foot must tightly hold the goods while the needle is passing the goods for avoiding irregular stitches.

* To adjust this,

1. Set the lift of the alternating presser feet to equal.
2. Loosen the two screws (3, Fig. 22) and adjust the rotating position of the cam (4, Fig. 22) faster or slower as may be desired.
3. Tighten the screws.

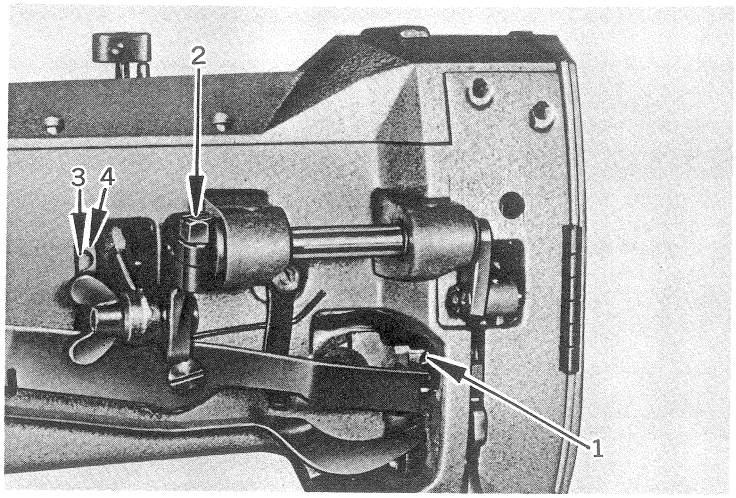


Fig. 22