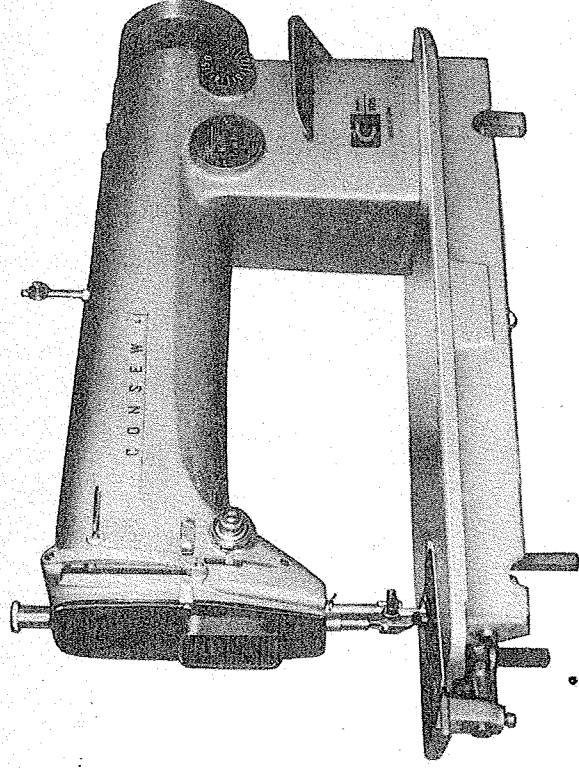


INDUSTRIAL SEWING MACHINE

USER'S HAND BOOK

CONSEW
MODEL 105



Description:

1. Stitch Regulator
2. Tacking Lever
3. Needle Plate
4. Slide Plate
5. Presser Foot
6. Needle Bar
7. Tension Regulator (upper thread)
8. Thread Take-up Lever
9. Pressure Regulator
10. Thread Guide
11. Spool Pin
12. Pin & Needle Holder

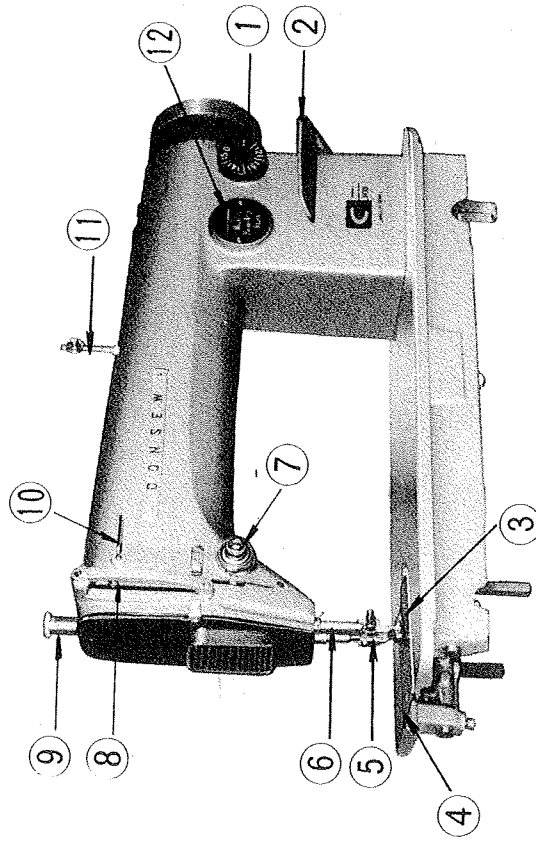


Fig. 1

NEEDLE

Model 105 uses standard needles 16 x 257. (catalog 2270)

THREAD

Left twist thread should be used in the needle. Either right or left twist thread can be used in the bobbin.

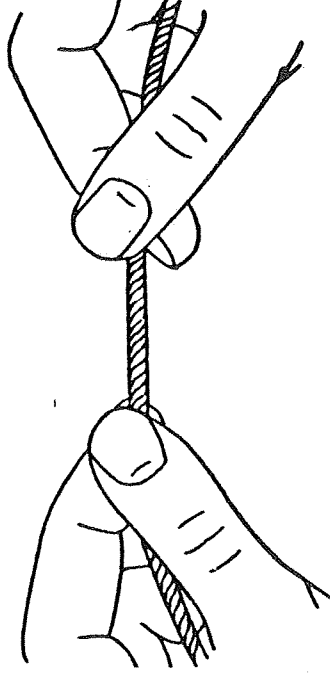


Fig. 2

How to Determine the twist of the thread

Hold the thread as shown above. Twist it between the thumb and forefinger of your hands. If left twist, the strands will wind tighter, if right twist, the strands will unwind.

THREADING THE MACHINE

- 1) Turn the handwheel toward you until the needle (10) reaches its highest point and take-up lever (7) is near the end of its upward travel, as shown in Fig. 3.
- 2) Lead the thread through the hole (1) of the spool pin and the three holes of the arm thread guide (2) starting from the top hole.
- 3) Run the thread downward between and around the tension discs (3) from right to left.
- 4) Run the thread upward into the crook of the thread take-up spring (4) and down again under the slack thread regulator (5) from right to left.
- 5) Lead the thread up through the guard (6).
- 6) Pull the thread up, running its end through the eye of the take-up lever (7) from right to left.
- 7) Now run the thread downward through the thread guides (8) & (9).
- 8) Lead the thread through the needle bar thread guide (10).
- 9) Now run the end of the thread through the eye of the needle from left to right, pulling it out two or three inches.

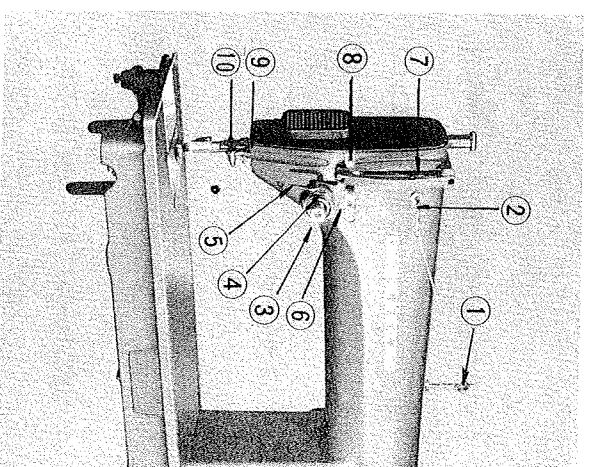


Fig. 3

REMOVING THE BOBBIN CASE

- 1) Turn the handwheel toward you until the needle reaches its highest point.
- 2) Open the slide plate by pulling it to the left.
- 3) With the left thumb and forefinger placed under the bed, open the hinged latch (L) (Fig. 5) at the front of the bobbin case.
- 4) Grasp the latch and pull the bobbin case and the bobbin from the rotary hook.
- 5) While the latch is held open, the bobbin will be retained in the bobbin case. Release of the latch and turning of the open side of the bobbin case downward will cause the bobbin to drop out.

WINDING THE BOBBIN

- 1) Push the bobbin on the bobbin winder spindle (1) as far as it will go. (Fig. 4)
- 2) Pass the thread from the thread stand downward through the eye of the tension bracket (2), then between and around the back of the tension discs (3).
- 3) Bring the thread forward toward the bobbin and wind from below in clockwise direction several times around the bobbin.
- 4) Push the bobbin winder lever (4) downward until the wheel (5) contacts the drive belt.
- 5) Start the machine and the thread will be wound up on the bobbin. After the bobbin is filled with thread, release will cause the wheel to disengage from the belt and winding will stop.
- 6) Cut the thread and remove the bobbin from the bobbin winder spindle.
- 7) Adjustment screw (6) can be turned in or out to increase or decrease the amount of the thread wound on the bobbin.
- 8) If the thread does not wind evenly on the bobbin, adjust the position of the tension bracket by moving it to the right or left after loosening the screw.
- 9) When fine thread is wound on the bobbins, loosen the tension by turning the knurled nut on the tension bracket in counterclockwise direction.

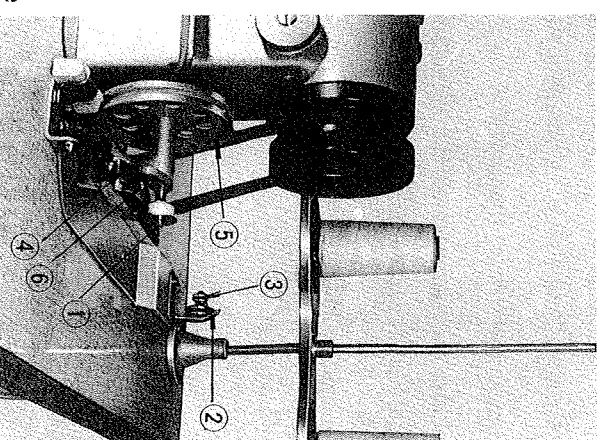


Fig. 4

THREADING THE BOBBIN CASE

- 1) Hold the bobbin between the thumb and forefinger of your right hand and pull out a length of two or three inches of thread.
- 2) Holding the bobbin case in your left hand, turn the open side up and place the threaded bobbin into it. (Fig. 5-1)
- 3) With the right hand guide the thread into the slot in the edge of the bobbin case. (Fig. 5-2)
- 4) Then pull the thread to the left, under the tension spring and into the delivery eye. (Fig. 5-3)

In order to keep the bobbin from dropping out of the case when it is turned with the open side down, always hold the hinged latch at the front of the bobbin case open.

INSERTING THE BOBBIN CASE

- 1) Take the thread bobbin case by the latch (L) and place it on the center stud (C) (Fig. 6) of the bobbin case holder.
- 2) Release the latch and press the bobbin case onto the center stud until the latch catches the undercut thereon with a click that can be heard.
- 3) Permit two to three inches of the bobbin thread to hang down freely.

Be sure to push the slide plate to the right before starting to sew.

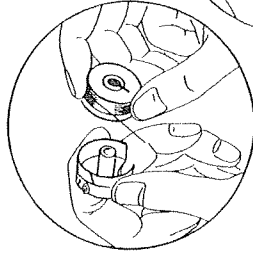


Fig. 5-1

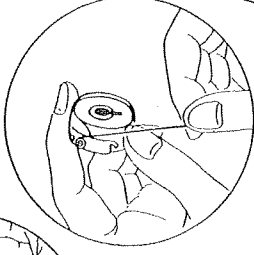


Fig. 5-2

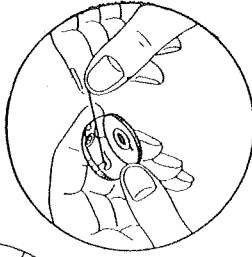


Fig. 5-3

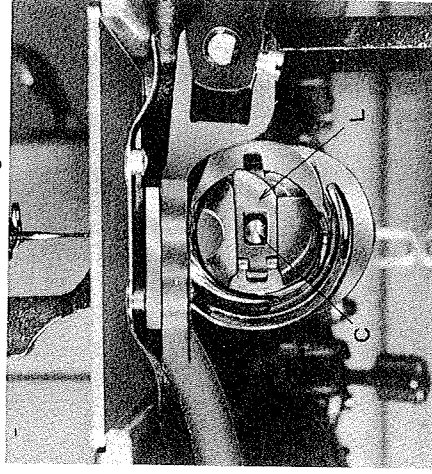


Fig. 6

INSERTING A NEW NEEDLE

- 1) Turn the handwheel toward you until the needle bar reaches its highest point.
- 2) Loosen the set screw in the needle clamp at the bottom end of the needle bar remove old needle and push a new needle up into bar as far as it will go.
- 3) Tighten the needle set screw securely.

Long groove in the needle must face toward the left and the eye must be in line with the arm of the machine.

TO COMMENCE SEWING

- 1) Holding the loose end of the upper (needle) thread in your left hand, turn, the handwheel toward you with the right hand until the needle moves down and up again to its highest point, thus catching the lower (bobbin) thread.
- 2) Now pull the end of the upper thread you are holding and the bobbin thread will be brought up with it through the needle hole in the needle plate, as shown in Fig. 7.
- 3) Place both ends of the thread back under the presser foot.
- 4) Place the fabric to be sewn beneath the presser foot and lower the foot upon it.
- 5) Then start the machine.

TO REMOVE THE WORK

- 1) Raise the needle bar to its highest point, lift the presser foot and draw the fabric back and to the left.
- 2) Cut the ends of the threads a few inches long from the needle.

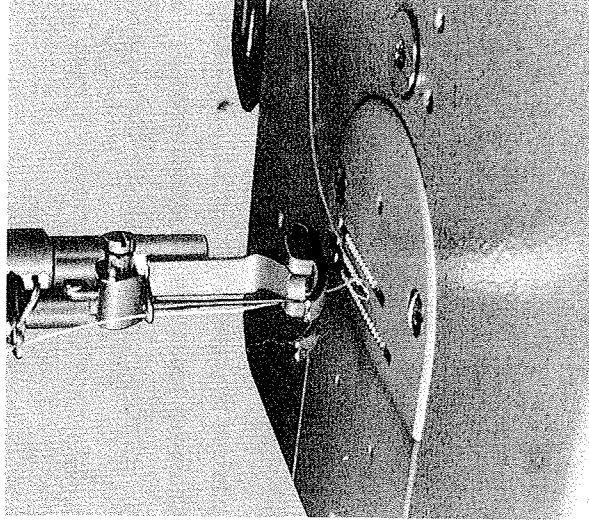


Fig. 7

REGULATING THE TENSION

For ordinary stitching, the tension on the upper and lower threads should be equal so as to lock both threads in the center of the fabric,

Thus:



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 greater than on the lower thread, it will lie straight along the upper surface of the fabric,

Thus:



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

Thus:



A. Tension of the upper (needle) thread

Before adjusting the tension of the upper thread, be certain that the presser foot is let down and not in lifted position.

- 1) Turn serrated nut (N) (Fig. 8) on the tension device to the right to increase tension and to the left, if you desire to decrease it.
- 2) Turn the tension stud (S) to the right to make the check spring (C) more tight and to the left, if you desire to make it more loose.

The machine is correctly adjusted before leaving the factory to make a perfect stitch.

B. Tension of the lower (bobbin) thread

The tension of the lower thread is regulated by the screw on the bobbin case tension spring (see Fig. 9). Use the small driver to tighten the screw slightly to increase the tension, or loosen it to slacken the tension.

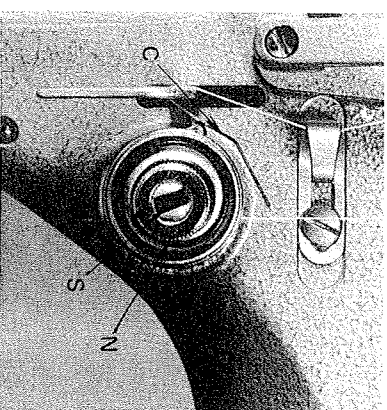


Fig. 8

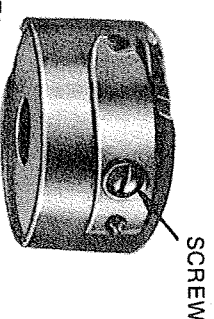


Fig. 9

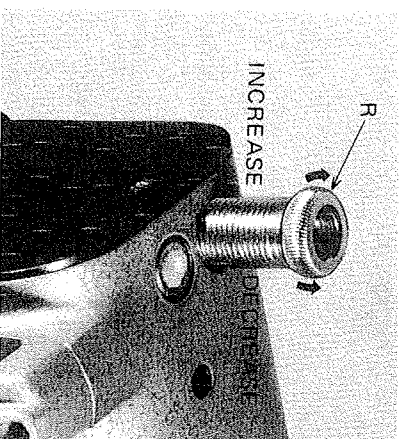


Fig. 10

REGULATING THE PRESSURE OF THE PRESSER FOOT

The pressure of the presser foot should be adjusted according to the type of material to be sewn. The heavier the material, the heavier the pressure; the lighter the material the lighter the pressure. The pressure of the presser foot on the material is regulated by the Regulator Screw (R) (Fig. 10) on the top of the machine. Turn this regulator to the left to decrease it. Do not employ more foot pressure than is require to feed the material properly.

HOW TO ADJUST THE LENGTH OF STITCH AND TO DO TACKING

The stitch length is regulated by the turning dial (D) at the front of the machine (Fig. 11).

- 1) When number "0" on the dial appears uppermost, the machine does not feed.
- 2) Turning the dial counterclockwise will gradually increase the stitch length until the maximum is reached when number "5" is on top. As the stitch length is increased, it can be noticed that the tacking lever (T) slowly moves in upward direction.
- 3) When shortening the stitch length, it will be found of advantage to depress the lever (T) slightly as the dial (D) is being turned clockwise.
- 4) To do tacking for the purpose of locking the ends of seams, rapidly depress and release the lever (T) as the needle approaches the edge of the material.

PIN AND NEEDLE HOLDER

The pin and needle holder (H) (Fig. 11) contains a magnet. It is convenient to retain spare needles or pins.

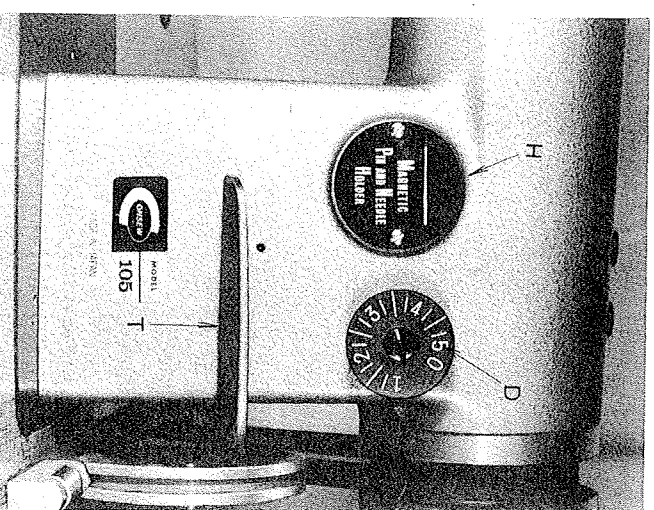


Fig. 11

ADJUSTING THE HEIGHT OF THE NEEDLE BAR

The needle bar should be set to proper height for perfect sewing performance.

1. Remove the face plate by loosening the face plate screws and raise the presser foot, lifting the presser bar lifting lever. Lower the needle bar to its lowest point by turning the hand wheel.
2. Loosen the screw (S) (Fig. 12) and adjust the needle bar so that the upper marking line of the needle bar is set in line with the lower end (E) of the needle bar bushing.
3. Tighten the screw (S) and replace the face plate.

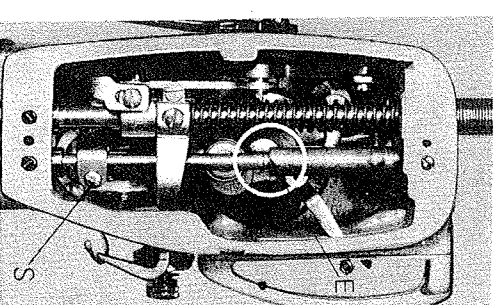


Fig. 12

ADJUSTING THE HEIGHT OF THE PRESSER BAR

When the height of the presser bar needs to be adjusted.

To accomplish this:

- 1) Loosen the regulator screw (R) (Fig. 13-1) until the pressure of the spring is completely released.
- 2) Remove cover (A) from the face plate, Loosen screw (B) (Fig. 13-2) and adjust the height of the presser bar.
- 3) After adjustment tighten screw (B) and replace cover (A).

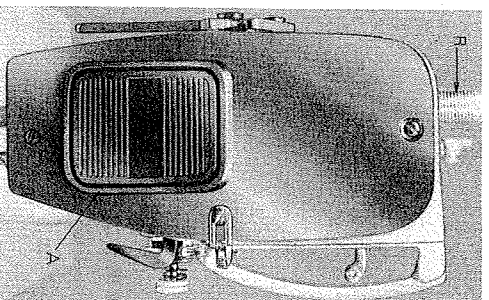


Fig. 13-1

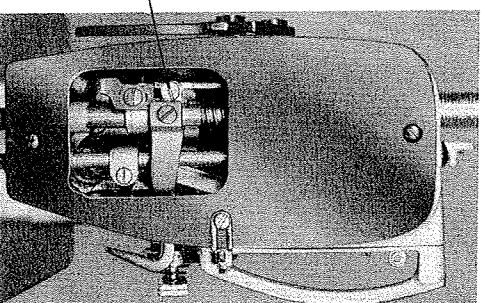


Fig. 13-2

MOUNTING AND REMOVING THE HOOK

- 1) Remove the needle plate, bobbin case and needle.
- 2) Remove the hook retainer (2) by loosening the screw (1).
- 3) Loosen set screws (3).
- 4) Raise the feed bar (4) to its highest position by turning the hand wheel.
- 5) Turn the hook to place it in the position as shown in Fig. 14.
- 6) Pull out the hook, turning it back and forth until it becomes free from its shaft.
- 7) To assemble the hook to the machine follow the above-steps in reverse order.

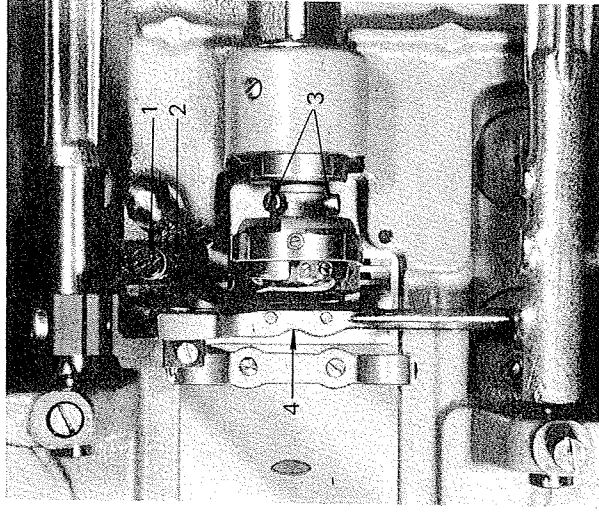


Fig. 14

TIMING THE HOOK

- 1) Remove the face plate, needle plate, feed dog and slide plate.
- 2) Insert new needle.
- 3) Turn the handwheel towards you until the needle reaches the lowest point of its travel. Continue until on its rise the lower one of the timing marks on the needle bar reaches the bottom end (E) of the needle bar bushing. (Fig. 15)
- 4) When the needle bar is in this position, point (P) of the rotating hook (Fig. 16) should be at the center of the needle.

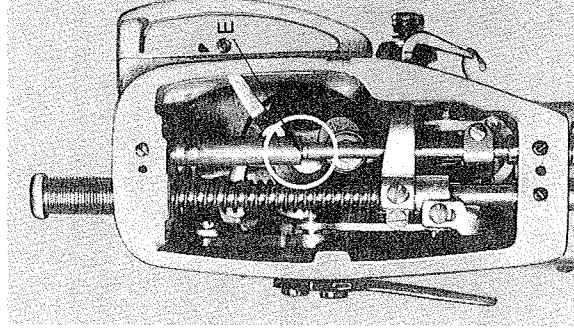


Fig. 15

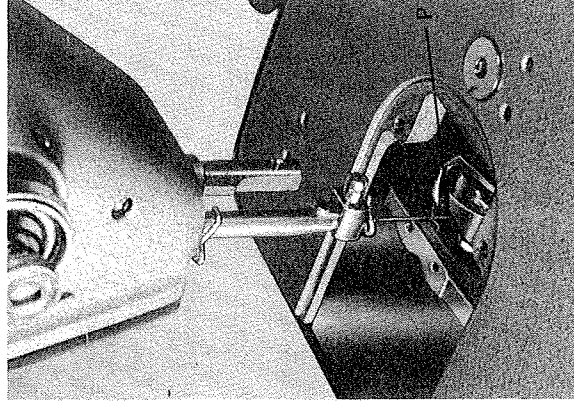


Fig. 16

In case the hook should not be timed accurately, loosen its set screws (3) (Fig. 14), adjust until the point of the hook is at the center of the needle. Be sure to tighten the three set screws. Furthermore, the hook should be set as close as possible to the needle, but must never touch it. Clearance between the hook point and the needle should be equal to the thickness of a postal card.

TO OIL THE MACHINE

- 1) To assure smooth operation and durability make sure of cleaning and oiling the main parts of the machine.
- 2) Use sewing machine oil only.
- 3) The parts to be oiled are marked with the arrows as shown in Fig. 17. In the arm of the machine part needs not to be oiled because of a centralized lubricating system.

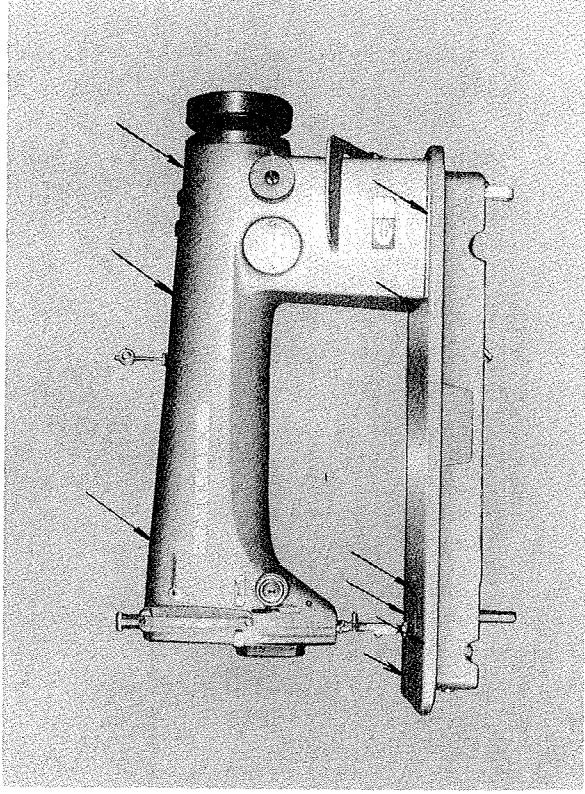
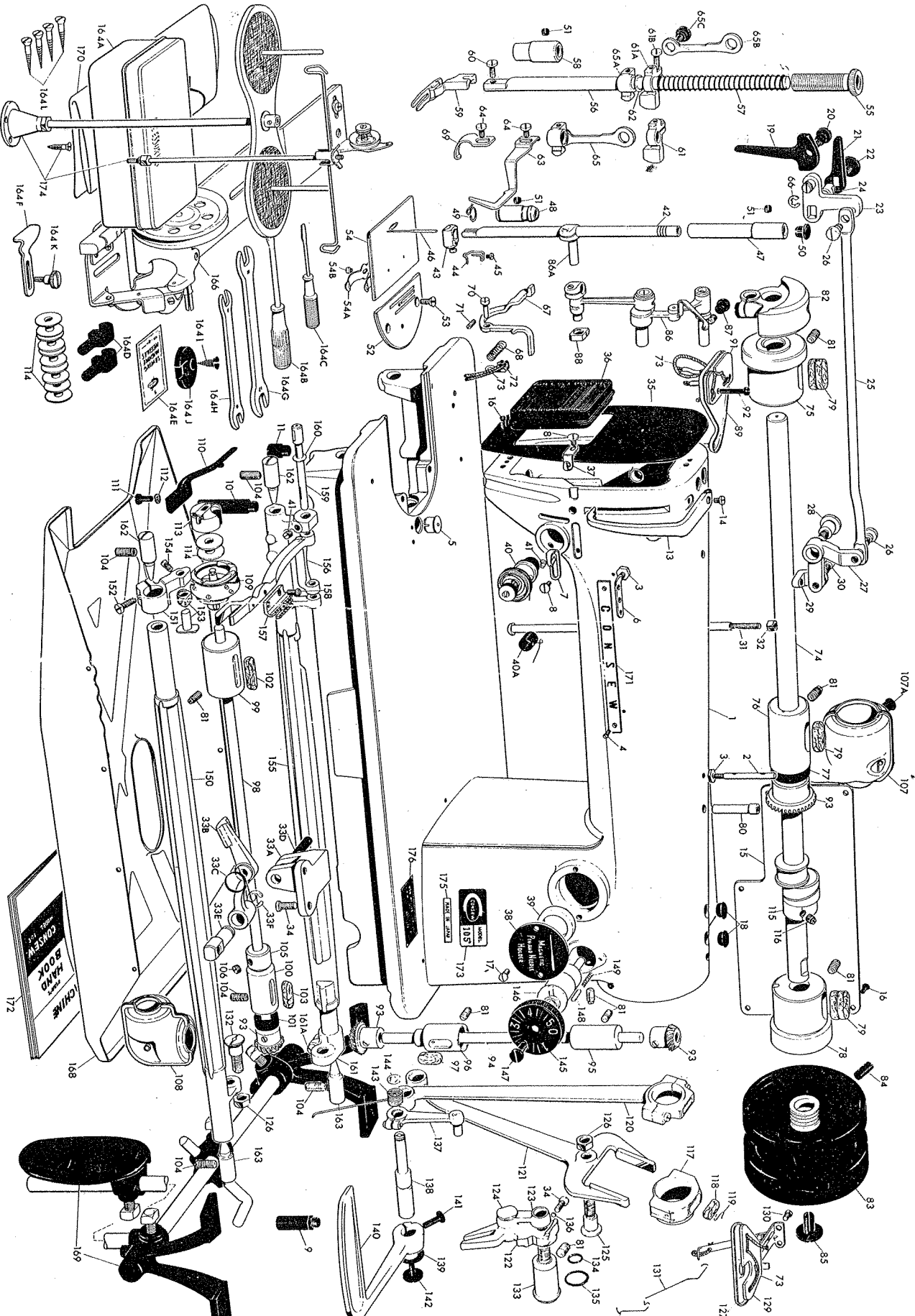


Fig. 17

[illegible]

CONSEW MODEL 105

PART NO.	PART NAME	PART NO.	PART NAME	PART NO.	PART NAME
1	ARM BED ASSEMBLY	60	SCREW FOR 59	121	FEED FORK
2	SPool PIN	61	PRESSER BAR GUIDE BRACKET COMPLETE	122	FEED REGULATOR FORK
3	NUT FOR 2 & 6	61A	PRESSER BAR GUIDE BRACKET	123	FEED REGULATOR LINK COMPLETE
4	SCREW FOR 171	61B	SCREW FOR 61A	124	CAP SCREW FOR 123
5	OIL CAP	62	THREAD WASHER FOR 61	125	JOINT SCREW FOR 123
6	THREAD GUIDE WITH THREE HOLES	63	SCREW FOR 63 & 69	126	NUT FOR 125 & 132
7	THREAD GUIDE, RIGHT	64	SCREW FOR 63 & 69	127	OIL TRAY, REAR
8	SCREW FOR 7	65	SCREW FOR 63 & 69	129	FELT FOR 127
9	BED LEG, RIGHT	65A	PRESSER BAR LIFTER COMPLETE	130	SCREW FOR 127
10	BED LEG, FRONT	65B	PRESSER BAR LIFTER	131	OIL SEAL, OUTER FOR 133
11	BED LEG, REAR	65C	KNEE LIFTER PLATE	132	SOFT PLUG FOR 133
12	GUARD FOR TAKE UP LEVER	66	JOINT SCREW FOR 65B	133	FEED REGULATOR ARM
13	SCREW FOR 13	67	STOP RING FOR 65	134	WASHER FOR 142
14	BACK COVER PLATE	68	THREAD TENSION RELEASE	135	FEED REGULATOR HAND LEVER
15	SCREW FOR 15 & 35	69	ADJUST PLATE FOR TENSION RELEASE	136	CLAMP SCREW FOR 140
16	SCREW FOR 38	70	ADJUST PLATE FOR TENSION RELEASE	137	CAP SCREW FOR 140
17	SCREW FOR 38	71	SET SCREW FOR 70	138	SPRING FOR 138
18	OIL STOP PLUG	72	OIL WICK RETAINER	139	STOP RING FOR 143
19	PRESSER BAR LIFTER LEVER	73	OIL WICK	140	FEED REGULATOR DIAL
20	HINGE SCREW FOR 19	74	TOP SHAFT ONLY	141	FEED REGULATOR BUSHING COMPLETE
21	PRESSER BAR LIFTER CRANK ARM	75	TOP SHAFT FRONT BUSHING	142	LOCK SCREW FOR 145
22	SCREW FOR 21	76	TOP SHAFT CENTER BUSHING	143	STOP PIN FOR 145
23	KNEE LIFTER BELL CRANK, LEFT	77	PACKING FOR 37	144	SPRING FOR 148
24	SHAFT FOR 23	78	TOP SHAFT REAR BUSHING	145	FEED LIFTING SHAFT
25	KNEE LIFTER ROD	79	OIL FELT FOR TOP SHAFT BUSHING	146	FEED LIFTING BELL ARM
26	JOINT SCREW FOR 25	80	SET SCREW 75, 76, ETC	147	CLAMP SCREW FOR 151
27	KNEE LIFTER BELL CRANK, RIGHT	81	OIL PIPE	148	SLIDING BLOCK & SHAFT FOR 151
28	HINGE SCREW FOR 27	82	SET SCREW 75, 76, ETC	149	FEED ROCK SHAFT
29	KNEE LIFTER BELL CRANK, LINK	83	TAKE UP LEVER CRANK COMPLETE	150	FEED ROCK ARM COMPLETE
30	HINGE SCREW FOR 29	84	HAND WHEEL	151	CLAMP SCREW FOR 161
31	KNEE LIFTER PULL ROD	85	SET SCREW FOR 83	152	CENTER FOR FEED SHAFT, FRONT
32	NUT FOR 31	86	SCREW FOR 83	153	CENTER FOR FEED SHAFT, REAR
33	KNEE LIFTER RELEASE LEVER COMPLETE	87	TAKE UP LEVER CRANK COMPLETE	154	ACCESSORIES COMPLETE
33A	BRACKET FOR 33B	88	NEEDLE BAR BRACKET COMPLETE	155	SCREW DRIVER, LARGE
33B	KNEE LIFTER RELEASE LEVER	89	NEEDLE BAR BRACKET COMPLETE	156	SCREW DRIVER, SMALL
33C	SPRING FOR 33B	90	SLIDING BLOCK FOR 86A	157	WRENCH, LARGE
33D	HINGE SHAFT FOR 33B	91	OIL TRAY, FRONT	158	WRENCH, SMALL
33E	JOINT FOR 31	92	OIL FELT FOR 89	159	WOOD SCREW FOR 164J
33F	STOP RING FOR 33A & 136	93	SCREW FOR 89	160	BED HINGE SEAT
34	FACE COVER PLATE	94	GEAR COMPLETE	161	CLOTH GUIDE
35	WINDOW FOR ADJUSTMENT	95	VERTICAL SHAFT ONLY	162	CLOTH GUIDE THUMB SCREW
36	THREAD GUIDE, LEFT	96	VERTICAL SHAFT UPPER BUSHING	163	ROBBIN WINDER ASSEMBLY
37	PIN & NEEDLE HOLDER	97	VERTICAL SHAFT LOWER BUSHING	164	OIL DRIP PAN
38	MAGNET FOR 38	98	OIL FELT FOR 96	165	KNEE LIFTER COMPLETE
39	TENSION COMPLETE	99	HOOK SHAFT ONLY	166	MACHINE HEAD COVER
40	CHECK SPRING	100	HOOK SHAFT REAR BUSHING	167	NAME PLATE
41	SET SCREW FOR 40 & 159	101	PACKING FOR 108	168	USERS HAND BOOK
42	NEEDLE BAR ONLY	102	PACKING FOR 108	169	MODEL NUMBER PLATE
43	NEEDLE CLAMP COMPLETE	103	OIL FELT FOR 99	170	COTTON STAND
44	THREAD GUIDE FOR 43	104	OIL FELT FOR 100	171	EXPORT MARK
45	SCREW FOR 44	105	SET SCREW FOR 100, 162, ETC	172	NEEDLE SIZE PLATE
46	NEEDLE #14	106	SET SCREW FOR 105		
47	NEEDLE BAR UPPER BUSHING	107	GEAR CASE, UPPER		
48	NEEDLE BAR LOWER BUSHING	107A	GEAR CASE, LOWER		
49	THREAD GUIDE FOR 48	108	PLUG FOR 107		
50	RUBBER CAP FOR 47	109	GEAR CASE, LOWER		
51	SCREW FOR 47, 48, ETC	110	ROTATING HOOK ASSEMBLY		
52	NEEDLE PLATE	111	HOOK RETAINER		
53	SCREW FOR 52	112	SCREW FOR 110		
54	SLIDE PLATE COMPLETE	113	WASHER FOR 111		
54A	SLIDE PLATE SPRING	114	BOBBIN CASE COMPLETE		
54B	SCREW FOR 54A	115	BOBBIN		
55	2110403-271-A PRESSURE REGULATOR SCREW	116	FEED CAM		
56	2110103-211-A PRESSER BAR ONLY	117	SET SCREW FOR 115		
57	2110803-213 PRESSER BAR SPRING	118	GUIDE FOR FEED FORK		
58	2110403-215 BUSHING FOR 56	119	OIL FELT FOR 117		
59	2110103-220-C HINGED FOOT COMPLETE	120	SPRING FOR 118		
			CRANK ROD COMPLETE		

Use only exact parts number for ordering. Be sure indicate all digits and letters as indicated in listing.
Do not use position number from illustration for ordering.