GALKIN AUTOMATED PRODUCTS

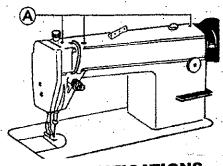
QR-30DNB QUILT REPAIR MACHINE

OPERATIONS MANUA L PARTS LIST

131 Zapletal Way Carthage, MO 64836 417-237-6254



Before putting a new machine into operation, remove the plugs (A) on the top of the arm and replenish the oil supply. Lift the presser foot and run the machine at a low speed of 2000 spm to check that the oil is being distributed correctly by inspecting the window on the oil reservoir. When lubrication is normal, keep the machine running at this speed for 30 minutes, and then increase the running speed gradually. After a month of running, the machine can be run at maximum speed assuming normal working conditions.



FEATURES & SPECIFICATIONS

CLEARANCE:

30.0" space neck to needle

BOBBIN:

Large Capacity Type

FOOT LIFT:

3.0 Inches / 75 mm

STITCH TYPE:

Lockstitch

SPEED:

1500 stitches per minute

NEEDLE SIZE:

135 X 17 Size 21-22

MATERIAL RANGE:

Flat goods to 6" (150mm) thick

MOTOR:

Electronic Needle Positioning

LUBRICATON:

Automatic Resevoir Type

OPTIONS:

Ergonomic Table Stand

FILLING THE OIL RESERVOIR

The amount of oil in the reservoir is controlled through the reference marks A and B shown in Fig 2. A indicates the maximum oil level, the mark B is the minimum oil level. If the oil level is below the mark B refill the oil reservoir.

When filling the reservoir, loosen the oil draining screw (c), drain off the remaining oil reservoir completely, clean the reservoir and re-tighten the oil draining screw (c) and fill the oil reservoir with fresh sewing machine oil.

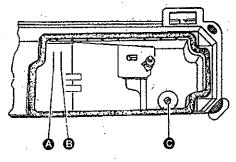


Fig 1

REGULATING OIL DISTRIBUTION ON THE ROTATING HOOK

Adjust the amount of oil used to lubricate the rotating hook by turning the oil flow adjusting screw (A). Turn the screw (A) clockwise (in the direction of the + sign) to increase the oil flow; turn it counter-clockwise (in the direction of the - sign) to decrease the oil flow.

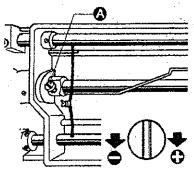


Fig. 2

OIL PUMP ADJUSTMENT

During everyday operation, adjusting the oil pump is not usually necessary. If the oil level doesn't fluctuate in the oil reservoir window when the machine runs at a low speed, close the clearance on the oil bypass hole.

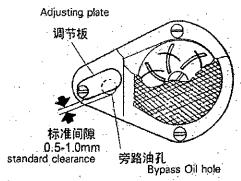
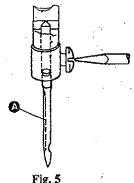


Fig. 4

NEEDLE INSTALLATION

Turn the balance wheel to lift the needle bar to the upper end of its stroke. Loosen the needle clamp screw while keeping the long groove of the needle facing left; insert the needle shank up to the bottom of the needle socket, then tighten the needle clamp screw.



CONNECTING THE CLUTCH LEVER TO THE PEDAL

The optimum tilt angle of the pedal is approximately 15 degrees.

Adjust the clutch so that the clutch lever (c) aligns with the draw bar (B) as shown in Fig. 6. The machine pulley should rotate counter clockwise when viewed from the outside of it. The rotating direction of motor pulley can be reversed by turning the plug of the motor 180 degrees.

Adjust the tension of 0-Belt (F) by moving the motor up and down; the proper tension on the 0-belt is a slack of 10-20 mm when the belt is depressed at the center of the belt.

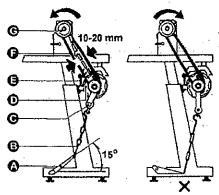
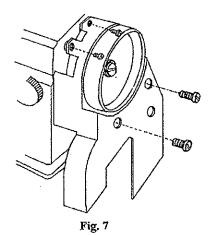


Fig. 6

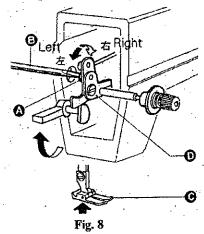
BELT COVER INSTALLATION

Install the belt cover for the sake of safety.



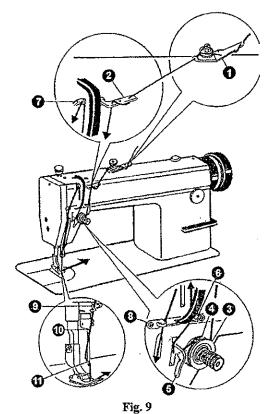
ADJUSTING THE TIMING OF THE TENSION DISCS

Within the presser foot lift range, the timing of the tension discs can be adjusted as follows: Remove the rubber plug from the back of the arm and loosen the screw (A) of the knee lift lever (left). Move the tension releasing cam (D) to the left for earlier opening or to the right for later opening. It will facilitate the adjustment if a block is put under the presser foot lift.



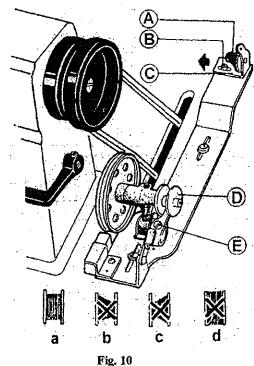
THREADING

To thread the needle, raise the needle bar to the upper end of its stroke. Lead the thread from the spool and follow the progression as shown in Fig. 9. To draw the bobbin thread, hold the end of the needle thread and turn the balance wheel to lower the needle bar and then lift it to its highest position. Pull the ends of needle thread and bobbin thread toward the front and under the presser foot.



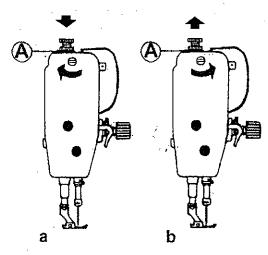
BOBBIN WINDER INSTALLATION AND ADJUSTMENT

The bobbin winder pulley should align with the V belt and there should be some clearance between them. When the bobbin winder stop latch lever is depressed, the V belt should be in contact with the bobbin winder pulley so that the bobbin winder pulley can be driven by the V belt. The thread on the bobbin should be uniform and tight. If not, turn the tension stud nut (A) on the bobbin winder tension bracket to adjust the tension. First, loosen the set screw (B) on the bobbin winder tension bracket and move the bracket (C) either left or right as needed. For instance, if the thread is wound as illustrated by figure (b), move the bracket left. If it is wound as in figure (c) move it right. After adjusting the tension make sure to tighten set screw (B). Don not overfill the bobbin, figure (d). For best results, fill to about 80% capacity. This can be adjusted by using screw (E).



ADJUSTING THE PRESSURE ON THE PRESSER FOOT

Adjusting the pressure on the presser foot is dependent upon the thickness of the material being sewn. First, loosen lock nut (A). For heavy materials turn the pressure regulating thumb screw in the direction indicated in Fig. 11 (a) to increase the pressure. For light materials turn the thumb screw in the opposite direction as shown in Fig. 11 (b) to decrease the pressure. Once the appropriate pressure has been set tighten lock nut (A)



THREAD TENSION ADJUSTMENT

Thread tension should be determined in tandem with the stitch obtained by adjusting the tension on the bobbin thread and the needle tension Fig. 12. The tension of the bobbin thread should be adjusted by turning the tension spring regulating screw on the bobbin case. Once it is adjusted, insert the bobbin into the bobbin case and hold the end of the thread from the case and let it hang. If the bobbin rotates slowly downward the tension is correct. The tension on the needle thread is adjusted by turning the thumb nut.

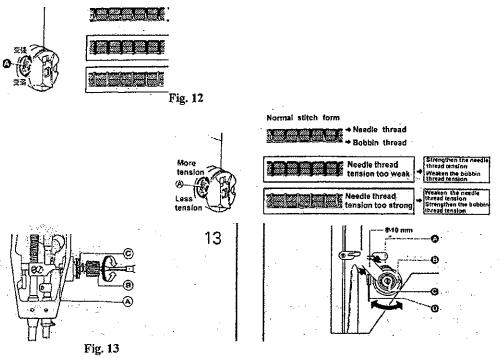


Fig. 14

The stroke of the thread take-up spring runs from 8mm to 10mm. When sewing very thin fabrics, reduce the thread take-up spring tension and increase the thread take-up spring stroke. Conversely increase the thread take-up spring tension and reduce the thread take-up stroke when sewing very thick fabrics. To adjust the thread take-up spring tension: (Fig. 13), first loosen the set screw (A) then turn the tension stud (B) counter clockwise to decrease the tension of the thread take-up spring (C) to zero. then turn the tension stud (B) clockwise till the spring (C) comes to the notch of the tension regulating bushing, and again turn the tension stud (B) halfway back (counter clockwise), After the adjustment, tighten the set screw (A). Adjusting the thread take-up spring stroke: (Fig. 14) loosen the set screw (B) turn the stud (C) clockwise to increase the stroke or turn stud (C) counter clockwise to decrease the stroke. After making the adjustment, tighten set screw (B).

SYNCHRONIZING THE NEEDLE WITH THE ROTATING HOOK

When the needle bar is raised from its lowest position the gap should equal that illustrated by (A) in Fig. 15. The hook point (D, Fig. 16) of the bobbin should align with the center line of the needle and be 1-1.5 mm above upper end of the needle eye (Fig 15).

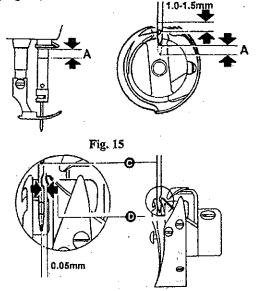
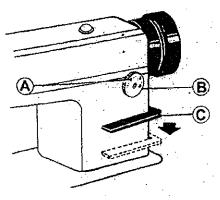


Fig. 16

The clearance between the bottom of the needle notch and the hook point should be approximately 0.05 mm (Fig. 16).

ADJUSTING STITCH LENGTH AND REVERSE FEEDING

The stitch length can be adjusted by turning dial (A). The figures on the face (B) of the dial show the stitch length in mm. The reverse feed lever must be depressed while adjusting the stitch length. Reverse feeding starts when the reverse feed lever (c) is depressed, the machine will feed forward again when the reverse feed lever is released.



ADJUSTING SYNCHRONIZATION OF THE NEEDLE WITH THE FEED MOTION

To adjust the feed dog position (G), first should release the two set screw (F) and turn around the balance wheel by hand. When the needle (A) point reaches the surface of the throat plate (B), the top of the feed dog (C) should be flush with the throat plate surface.

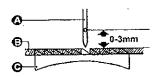


Fig. 18

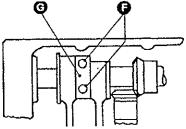


Fig. 19

STITCH LENGTH ADJUSTMENT

Loosen Screw (A) to adjust Stitch Length Adjusting Cam (B). Turn it to the right to narrow the stitch length for forward stitches, and widen it for reverse; turn it left to widen the stitch length for forward stitches, and narrow it for reverse.

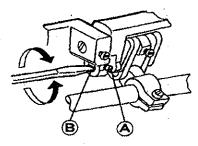


Fig. 20

HORIZONTAL ADJUSTMENT OF THE FEED DOG

Lift the front of the feed dog to prevent the fabric from puckering. Lower the front of the feed dog to prevent the fabric from tearing or the bobbin thread breaking.

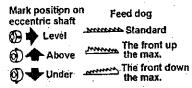


Fig. 21

THREAD TAKE UP LEVER OIL SUPPLY ADJUSTMENT

Before the machine leaves the factory, the thread take-up lever oil supply adjusting pin has already been adjusted to the proper level and the user doesn't need to readjust it. If the amount of oil supplied to the thread take up lever is too much or too little, then an adjustment is needed. Adjust as follows: When the mark on the oil adjusting pin is the upper position, the oil is at the maximum level. (Fig. a) When the dot mark on the oil adjusting pin is the lower position, the oil is at the minimum level. (Fig. b) Using a screwdriver, turn the adjusting pin to either increase or decrease the oil being supplied as illustrated in Fig. c.

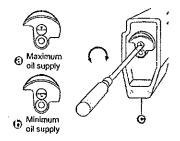
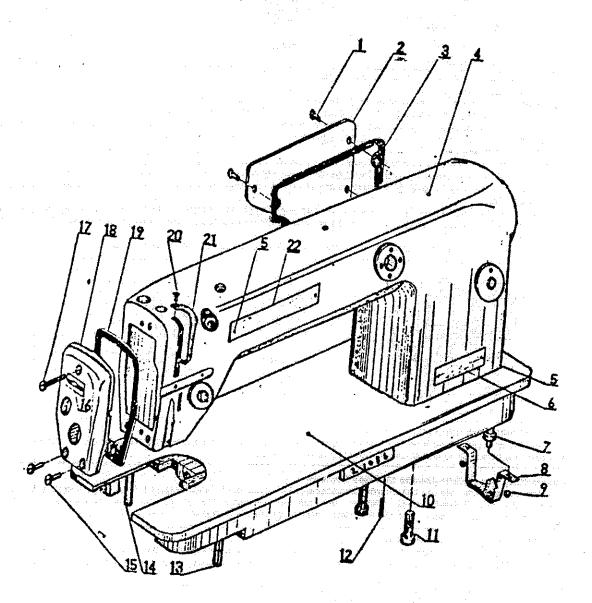


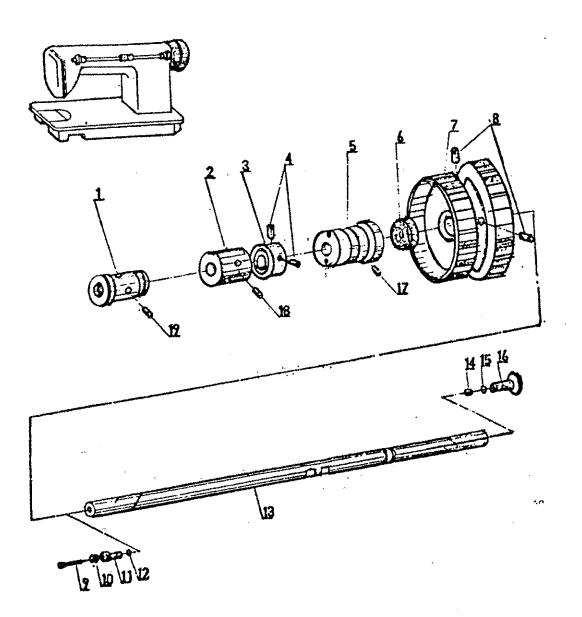
Fig. 22

PARTS CATALOG



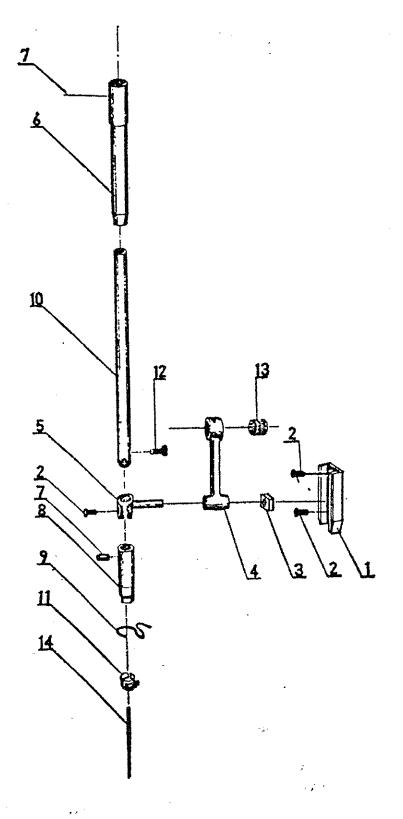
MACHINE HEAD

ILLUSTRATION NO.	PART NO.	PART DESCRIPTION
1	1 - 15	Screw
2	1 - 13	Rear Cover Plate
.3	1 - 14	Rubber Gasket for Rear Cover Plate
. 4	1-01-1	Arm
5	1 - 19	Rivet-round Head
6	1 - 21	Model Plate on Machine Body
7	1 - 3	M10 Clamp Screw (long) for Bed
8	1 - 8	Supporting Bracket
9	1 - 9	M6 Nut for Supporting Bracket
10	1-01-2	Bed
11	1 - 4	M12x35 Clamp Screw (short) for Bed
12	1 - 5	Dowel Pin for Bed
13	1 - 6	Long Support for Bed
14	1 - 7	Short Support for Bed
15	5 - 25	Screw -round Head
16	1 - 20	Name Plate on Face Plate
17	1 - 12	Face Plate Screw-long
18	1 - 10	Face Plate
19	1 - 11	Rubber Gasket for Face Plate
20	1 - 17	Screw-round Head
21	1 - 16	Guard for Take-up Lever
22	1 - 18	Name Plate



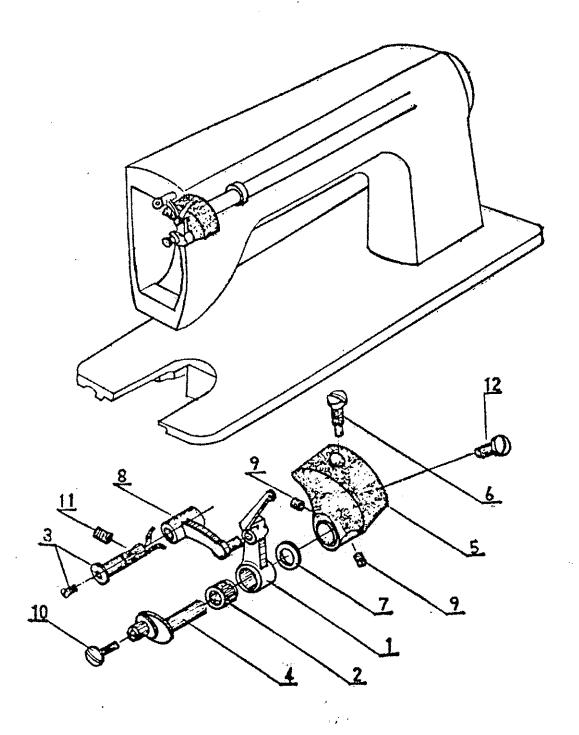
MAIN SHAFT AND COMPONENTS

ILLUSTRATION NO.	PART NO.	PART DESCRIPTION
1	2 - 1	Main Shaft Front Bushing
2	2 - 3	Main Shaft Center Bushing
3	2 - 10	Main Shaft Collar
4	5 - 4	Set Screw
5	2 - 4	Main Shaft Rear Bushing
6	2 - 02	Oil Seal for Main Shaft Rear Bushing
7	2 - 15	Hand Wheel
8	2 - 16	Set Screw for Hand Wheel
9	2 - 12	Oil Adjusting Valve Pin for Main Shaft
10	2 - 13	Rubber Ring for Oil Adjusting Valve
11	2 - 11	Oil Adjusting Valve for Main Shaft
12	2 - 14	Rubber Ring for Regulating Valve
13	2 - 9	Main Shaft
14	2 - 19	Oil Plug for Main Shaft Hand Wheel End
15	2 - 18	Rubber Ring for Hand Wheel Cap Screw
16	2 - 16	Cap Screw for Hand Wheel
17	2 - 2	Set Screw
18	2 - 2	Set Screw
19	2 - 2	Rubber Ring for Hand Wheel Cap Screw Cap Screw for Hand Wheel Set Screw Set Screw Set Screw
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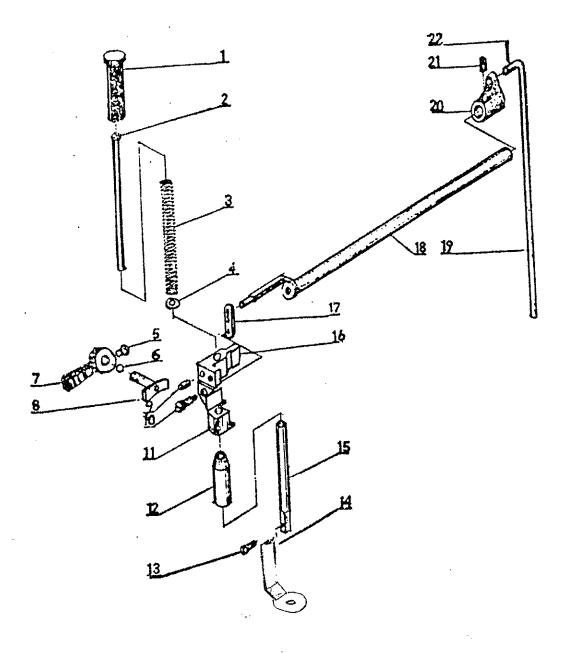
NEEDLE BAR

ILLUSTRATION NO.	PART NO.	PART DESCRIPTION
1	4 - 1	Slide Block Guide for Needle Bar Connecting Link
2	4 - 2	Screw for 4 - 1
3	4 - 3	Slide Block for Needle Bar Connecting Link
4	4 - 4	Needle Bar Connecting Link
5	4 - 5	Needle Bar Connection
6	4 - 6	Needle Bar Upper Bushing
7	4 - 7	Set Screw
8	4 - 8	Needle Bar Lower Bushing
9	4 - 9	Thread Guide
10	4 - 10	Needle Bar
11	4 - 11	Thread Guard
12	4 - 12	Clamp Screw for Needle
13	3 - 02	Needle Bar Connecting Link Bearing
1.4		Needle



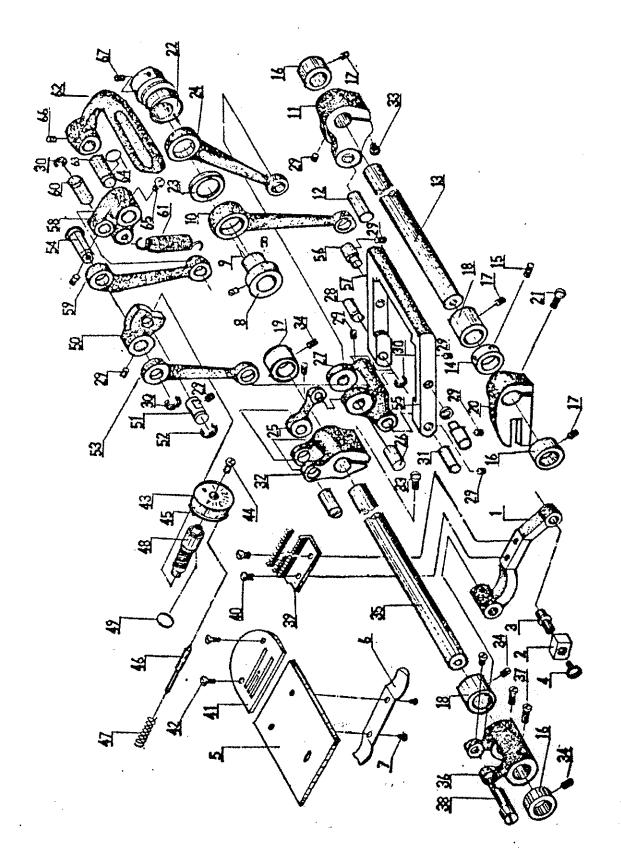
TAKE-UP MECHANISM

ILLUSTRATION NO.	PART NO.	PART DESCRIPTION
1	3 - 3	Take-up Lever
2	3 - 02	Take-up Lever Bearing
3	3 - 03	Oil Wick Complete for Take-up Link
4	3 - 12	Needle Bar Crank
5	3 - 1	Take-up Cam
6	3 - 2	Set Screw for Take-up Cam
7	3 - 4	Washer for Take-up Lever
8	3 - 8	Take-up Lever Link
9	3 - 13	1/4" - 40x7 Set Screw
10	3 - 14	L.H. Screw for Needle Bar Crank
11	2 - 2	Set Screw
12	3 - 16	Set Screw



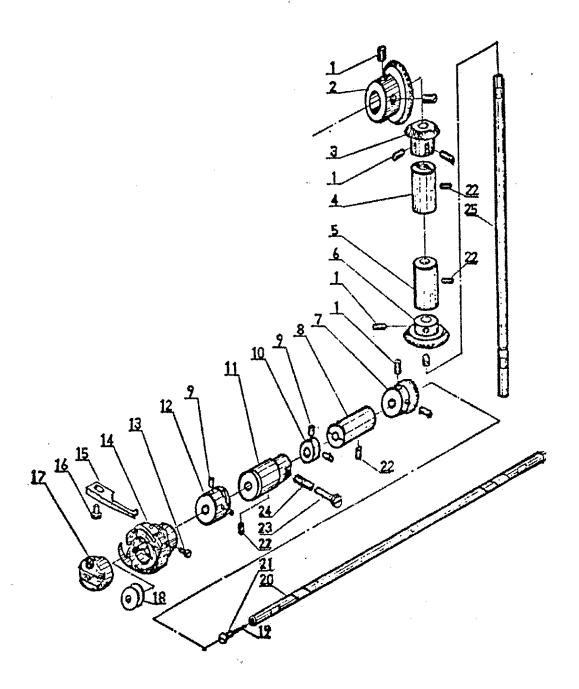
PRESSER BAR MECHANISM

ILLUSTRATION NO.	PART NO.	PART DESCRIPTION
1	5 - 19	Pressure Regulating Screw
2	5 - 20	Pressure Regulating Bar
3	5 - 21	Pressure Regulating Spring
	5 - 22	Washer for Pressure Regulating Spring
4 5	5 - 7	Presser Bar Lifter Screw
	-	Rubber Ring
6	5 - 6	Presser Bar Lifting Lever
7	5 - 01	Presser Bar Eifting Rocker
8	5 - 4	Set Screw
9	5 - 12	Screw for Lifting Connection Plate
10	5 - 5	Presser Bar Lifting & Release Bracket
11	5 - 1	Presser Bar Lower Bushing
12	-	Presser Foot Screw
13	5 - 28	Presser Foot
1.4	5 - GAL1	
15	5 - 2	Presser Bar
16	5 - 3	Guide Bracket for Presser Bar
17	5 - 11	Connection Link for Lifting Bar
18	5 - 02	Lifting Connection Shaft
19	5 - 17	Lifting Rod
20	5 - 16	Lifting Crank
21	7 - 5	Set Screw
22	5 - 18	Cotter Pin
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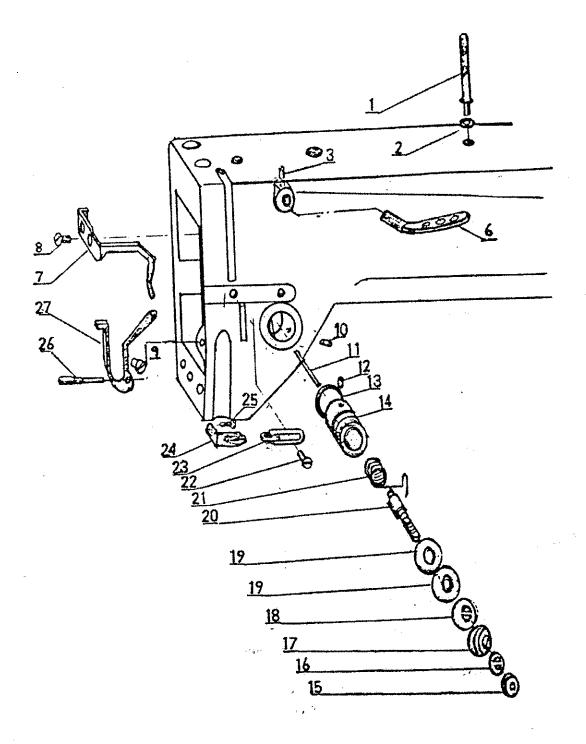
PEEDING ME CHANISM

	PART DESCRIPTION	Feed Nock Shaft	geed Bar Driving Shaft Bushing	\$0 tt 6 t	Eccentric Shaft for Feed Bar	Feed Dog	Screw for Feed Dog	Mendle Plate	Sorew for Needle Plate	Stitch Dial	Screw for Stitch-Dial	Stop Pin for Stitch-Dial	~	-Dial Position	Stitch Regulator Screw	Rubber Sealing Ring	Stitch Support	Fin	pin	Stitch Link	stitch-Link Pin		Fulcrum Pin for 6 - 59			Stitch Regulator Link	Stitch Regulator Link Pin	Stitch Regulator Spring	Stitch Regulator Lever	stitch megulator Shaft	Mubber Sealing Ring	Set Screw Fox 6 - 60	Sat Scraw For 6 - 64	Set Screv For 6 = 35	,	
(Cont.)	PART NO.	6 - 28	6 - 39	6 - 30	6 - 31	6 - 37	. 38	. 39	9 + 40	6 - 45	9 - 4	6 - 47	8 - 9	6. 16 16 16	9 - 50	6 - 51	6 - 52	6 - 53	6 - 54	6 - 55	95 ~ 9	6 - 57	6 - 58	6 - 9	09 - 9	6 - 61	6 - 62	6 - 63	6 - 64	6 - 65	9 + 9	6 - 67	2 - 2	3 - 13		
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	PART DESCRIPTION	प्रकारी क्षित्र	Feed Bar Block	Feed Bar Block Stud	Screw for Feed Bar Block Stud	Slide Plate	Spring for Slide Plate	Screw for Spring	reed Lifting Mocentric	Dowel Pin	reed Lifting Link	Bell Crank for reed Lifting Link	Crank Pin	Paed Lifting Shaft	Collar for reed Lifting Shaft	Set Screw	Front Bushing	Sat Sorew	Center Bushing	Rear Bushing	reed Lifting Crank	Screw for Feed Lifting Crank	Weed Cas	Space for Feed Cas	reed Link (long)	Feed Link (short)	Feed Link Pin	手をお込っ切けをひとまた	Pasd Bracket Win (large)	Sat Mores	** Ring	Feed Bracket Pin	reed Lifting Crank	Screw for Feed Lifting Grank 6 - 2	get Screw for 6 -9	
	PART NO.	6 - 33		19 19	96 - 36	1 40	6 - 43	6 - 44	, 19	: 5	м •		101 1 100	1 1 2	6 - 7	8 . 9	6. 1	6 - 10	0 - 11	. 6 - 12	6 - 13	6 - 14	- 15		6 - 17	1 49	6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 - 20	6 - 21	6 - 22	6 = 23	6 - 24	10 10 10 10	6 + 14	6 - 27	
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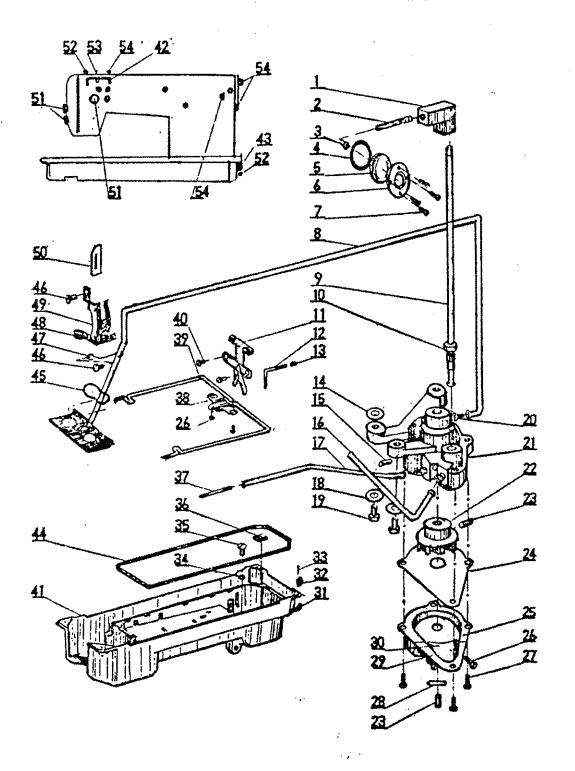
ROTATING HOOK AND ITS DRIVE

ILLUSTRATION NO.	PART NO.	PART DESCRIPTION
1	7 - 5	Set Screw for 7-4,7-6, 7-7 and 7-
2	7 - 4	Spiral Bevel Gear for Main Shaft
3	7 - 6	Spiral Bevel Gear (upper) for Vertical Shaft
4 ,	7 - 1	Upper Bushing for Vertical Shaft
5	7 - 2	Lower Bushing for Vertical Shaft
6	7 - 7	Spiral Bevel Gear (lower) for Vertical Shaft
7	7 - 8	Spiral Bevel Gear for Hook Shaft
8	7 - 10	Rear Bushing for Hook Shaft
9	6 - 22	Set Screw for 7-13
10	7 - 13	Collar for Hook Shaft
11	7 - 9	Front Bushing for Hook Shaft
12	7 - 12	Oil Deflector Ring for Hook Shaf
13	7 - 23	Hook Set Screw
14	7 - 19	Rotary Hook Hook Position Bracket Screw for 7-17 Bobbin Case
15	7 - 17	Hook Position Bracket
16	7 - 18	Screw for 7-17
17	7 - 20	Bobbin Case
18	7 - 21	Bobbin
19	Jaje 22	Bobbin Oil Wick for Hook Shaft Hook Shaft Oil Stop Screw for Hook Shaft
20	7 - 11	Hook Shaft
21	7 - 14	Oil Stop Screw for Hook Shaft
22	2 - 2	Set Screw for 7-1,7-2,7+9 and 7-
23	7 - 15	Oil Adjusting Screw for Hook Shaf
24	7 - 16	Oil Adjusting Spring for Hook-Sha
25	7 - 3	Vertical Shaft



UPPER THREAD TENSION SYSTEM

<u> </u>	· · · · · · · · · · · · · · · · · · ·	
ILLUSTRATION NO.	PART NO.	PART DESCRIPTION
1	01-8-2	2-Hole Thread Guide Pin
2	2-14	Rubber Washer
3	01-8-4	Set Screw for Upper Thread Tension
4	01-8-9	Tension Disc for Upper Thread Tension
5 5	01-8-5	Spring Washer for Upper Tension Thread
6 ·	1W/10-01 -8-2	Thread Retainer (Three Holes)
7	0.1-8-12	Slack Thread Regulator
8	01-8-13	Screw for 01-8-12
9	01-8-27	Spring for Tension Release
10	01-8-15	Set Screw for Tension Device
11	01-8-24	Tension Release Pin
12	01-8-18	Set Screw for Tension Stud
13	01-8-16	Rubber Sealing Ring for Tension Barrel
14	01-8-14	Tension Barrel
15	01-8-19	Tension Nut
16	01-8-20	Tension Thread Protection Washer
17	01-8-22	Tension Spring
18	01-8-23	Tension Release Washer
19	01-8-21	Tension Disc
20	01-8-17	Tension Stud
21	01-8-28	Thread Take-up Spring
22	01-8-11	Screw for Thread Guide 01-8-10
23	01-8-10	Thread Guide
24	01-8-29	Face Plate Thread Guide
25	01-9-22	Screw for 01-8-29
26	01-8-26	Screw for Tension Release
27	01-8-25	Tension Release



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