

NEWLONG

MODEL

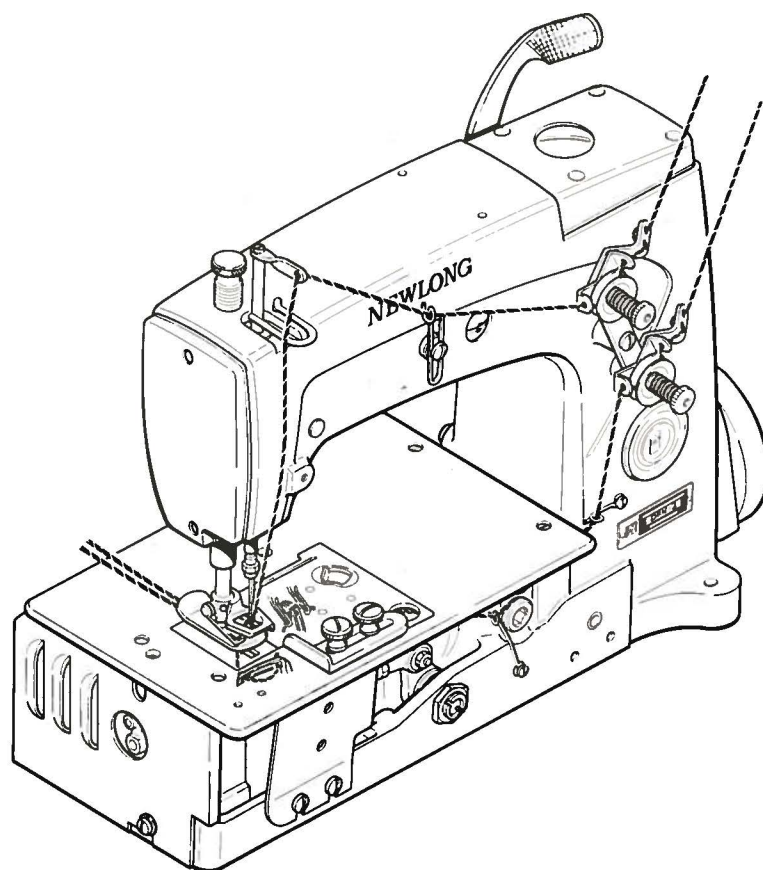
DKN-2

BAG SEWING MACHINE HEAD

INSTRUCTION MANUAL/PARTS LIST

UN. SP. 56100

MODEL
DKN-2



NZ ニューロング株式会社
NEWLONG MACHINE WORKS, LTD.

No.1

From the library of: Superior Sewing Machine & Supply LLC

Identifying and Ordering Parts

Where the construction permits, each part is stamped with its part number. On all orders, please include part number, part name and model name of machine.

Safety Rules

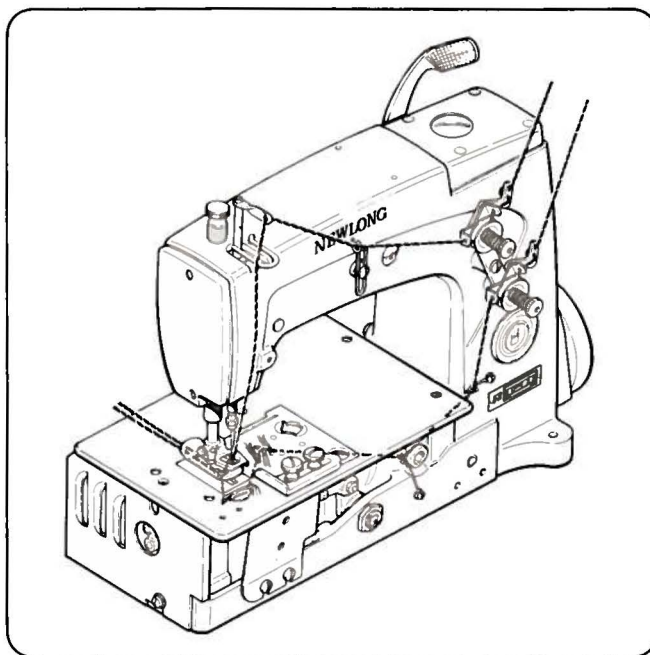
To prevent personal injury:

- All power sources to the machine must be turned off before threading, oiling, adjusting or replacing parts.
- All cover and guards must be in position before operating machine.
- Do not tamper with safety cover, guards, etc., while machine is in operation.

Maintenance

Please keep in mind to handle the machine carefully and to maintain the machine in good condition.

- Thread fuzz or dust must be cleaned with air or brush on throat plate, in the groove of feed dog or around looper after the day's work.



MODEL DKN-2

MODEL DKN-2 BAG SEWING MACHINE HEAD

CONTENTS

SPECIFICATIONS	2
1. THREADING (FIGURE 1)	2
2. LUBRICATIONS	3
3. ON SAFETY	4
4. ADJUSTMENT	4
4-1 Looper	4
4-2 Needle Mounting and Height Adjustment	5
4-3 Feed Dog	6
4-4 Change of Stitch Length (Figure refers)	7
4-5 Needle Guard (Figure 14 refers)	7
4-6 Thread Release (Figure 15 refers)	7
4-7 Thread Tension	7
4-8 Presser Bar Height (Figure 9 refers)	7
4-9 Presser Foot Pressure (Figure 9 refers)	7
4-10 Needle Thread Tension and Guide (Figure 16 refers)	8
5. TROUBLESHOOTING	8
6. TIGHTENING OF SCREWS AND NUTS	8

SPECIFICATIONS

Maximum speed:	5,000 r.p.m.
Stitch range:	3.6 – 8.0 mm
Seam:	Double thread chain stitch (type 401)
Lubrication system:	Fully automatic
Application:	For PP woven cloth bags and cotton bags
Maximum thickness of material:	4-ply gusseted kraft paper sack or equivalent
Needle:	UO x 144G-200
Thread:	Vinylon Synthetic or cotton, 20/6 or 20/9

1. THREADING (Figure 1)

Your machine is threaded in our plant before shipment and a stitch sample is attached. When a new roll of thread is to be used at your end, thread the machine correctly referring to the threading on the machine and the threading diagram.

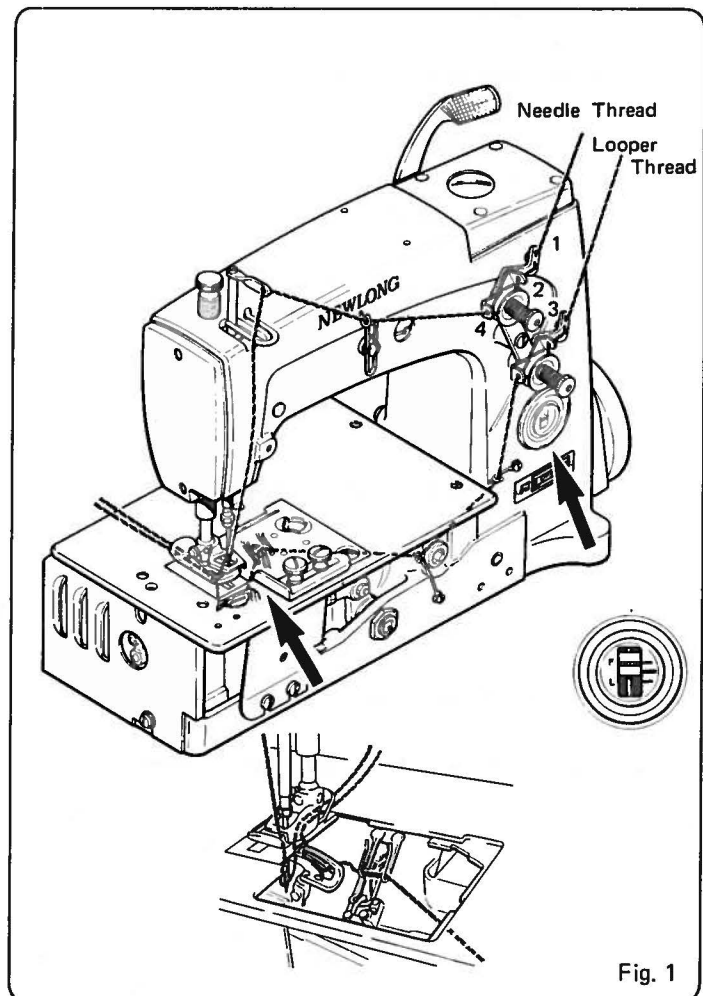


Fig. 1

2. Lubrication

Oil is completely drained from the machine in our plant before shipment. Never fail to fill oil in the oil reservoir before starting the machine. The proper procedure is as follows (Figure 2 refers):

Remove the plug screw (A), and fill oil until the indicator (E) of oil gauge (B) reaches the mark "F". Use mineral oil of 22 to 32 cst at 40°C. Example: Tellus oil #22.

Once oiled as above, no oiling is required unless the indicator (E) goes down below the mark "L". Each time the machine is to be operated, check the oil level.

To drain oil, remove the plug screw (C), or remove the cover (56382D).

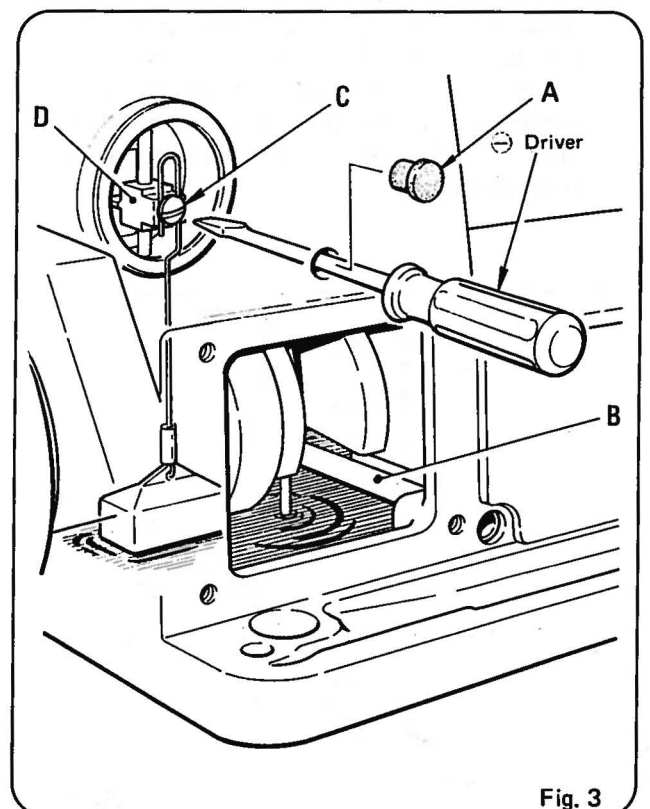
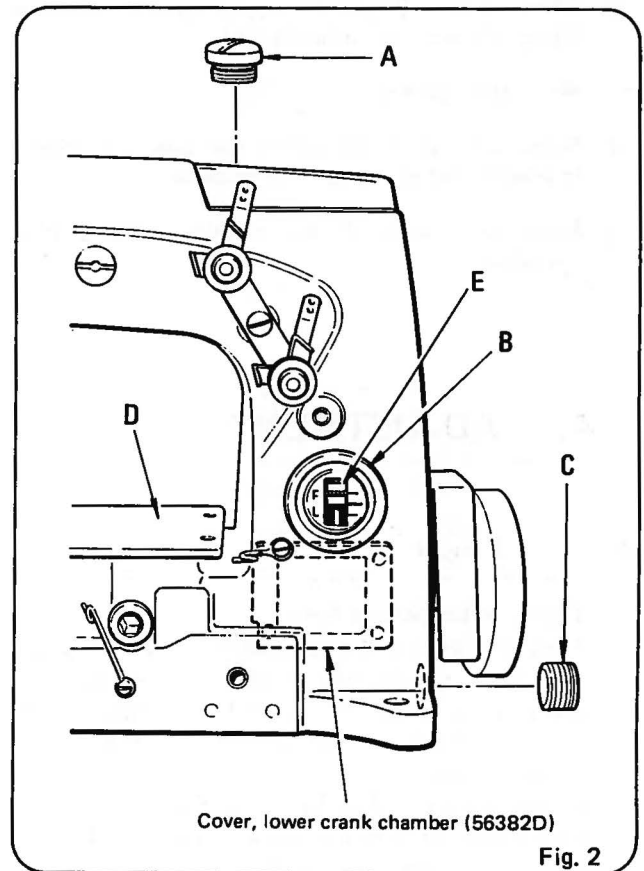
Replace oil after every 2,000 hours of operation.

A new machine, or a machine out of service for a certain period of time should be oiled as follows:

Remove the cloth plate (D), and oil the moving parts. Also oil the connecting link and the needle bar. Run the machine for about 10 minutes at a low speed to ensure that oil is distributed throughout the machine. Then proceed to the normal operation.

The adjustment of the oil level indicator is as follows (Figure 3 refers):

- ① Remove the plug screw (C, Figure 2), and tilt the machine to remove oil. Replace the plug screw.
- ② Place the machine on a level surface.
- ③ Remove the cover (56382D) at the rear of the machine, and the rubber bushing (A, Figure 3).
- ④ Fill oil in the oil reservoir until the oil level is flush with the bottom line of the bushing (B, Figure 3).
- ⑤ Apply a screw driver through the hole of the rubber bushing, and loosen the screw (C, Figure 3) of the oil gauge.
- ⑥ Align the gauge (D, Figure 3) to the black line of "L" mark, and fasten it with the screw (C, Figure 3).
- ⑦ Replace the cover (56382D) and the rubber bushing, and fill oil until the gauge shows the black line of the "F" mark.



3. ON SAFETY

- a) Always turn off power supply before threading, oiling, adjusting, or replacing parts.
- b) Wear safety glasses.
- c) Make sure that all the covers and guards are placed in position before starting the machine.
- d) Keep your hands off the machine while it is in operation.

4. ADJUSTMENT

4 - 1 Loper

a) Timing of Loper and Needle

Turn the handwheel counterclockwise (in the direction of operation), and check the crosswise movement of the looper (B, Figure 4) with regard to the needle (C, Figure 4). The looper and the needle are correctly timed if the vertical distance from the looper point (See Fig. 5) to the needle hole, measured when the looper point is in line with the left-side edge of the needle as the looper moves forward (to the left) is the same as that when measured as the looper goes back (toward the right) (See Fig. 5). Deviation of ± 0.1 mm is allowable. If the distance as measured when the looper is moving to the left is larger than that measured when the looper is moving back to the right, move back the looper drive rocker shaft (D, Figure 4), and when it is smaller, move it forward.

To adjust the position of the looper drive rocker shaft, first loosen the fastening screw (F, Figure 4) of the looper drive lever (I, Figure 4). Mount the rod .146-40 or the screw 22870A on the bell crank shaft through the thrust adjusting screw (H). Slightly tap or pull the shaft as required to obtain the required timing of needle and looper. After the adjustment, tighten the fastening screw (F).

To adjust the screw (H), loosen both the lock nut (G) and the adjusting screw (H). First tighten the adjusting screw (H) with 7 kg/cm, and then the lock nut firmly.

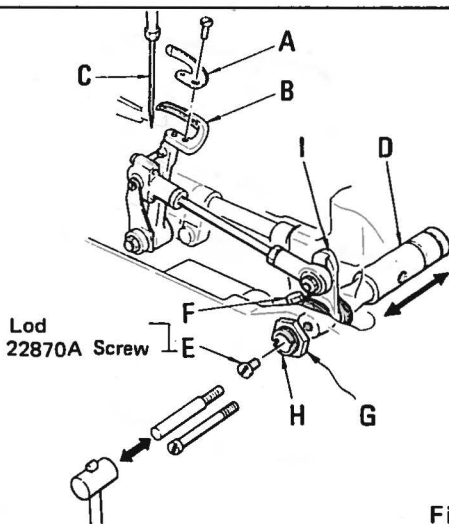


Fig. 4

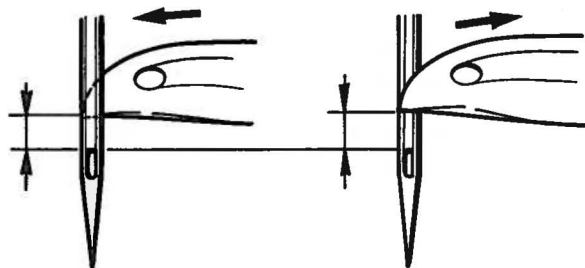


Fig. 5

b) Looper Stroke

The center distance between the bell crank stud and the looper carrier shaft should be 103.2 mm when the looper is in the farthest right position, as shown in Figure 6. Adjustment can be made after loosening the screw (B) of the bell crank. After the adjustment, tighten the screw (B).

c) Adjustment of Looper and Needle

The distance between the looper point and the needle center should be 4 mm when the looper is at the farthest right position, as shown in Figure 7. Necessary adjustments are carried out as follows:

Place a new needle of the specified type and size in the needle bar as deep as it will go. Tighten the needle with the needle bar nut. Turn the pulley until the looper reaches its extreme right-hand position. Loosen the nuts (A) and (B), and turn the joint rod (C) until the required distance is obtained. Having adjusted, tighten the nuts (A) and (B) while holding the joint rod (C).

Note: Make sure that the front face of the ball joint, left, (D) is correctly vertical, and is not in contact with the oil receiver (E) or other parts after the adjustment.

In the next place, adjust the looper so that the looper point will lightly touch the needle as it passes behind the needle. However, it should never push the needle. For this adjustment, loosen the screw (F) and turn the stop screw (G) as required. Turning it to the right will make the looper go away from you, and turning it to the left will make the looper get nearer to you.

After the adjustment, tighten the screw (F), and check the movement of the looper again (Refer to Figure 8-a).

d) Mounting of Loop Guide

Mount the loop guide so that it will lightly contact the front side of the needle as the looper moves forward (Refer to Figure 8-b).

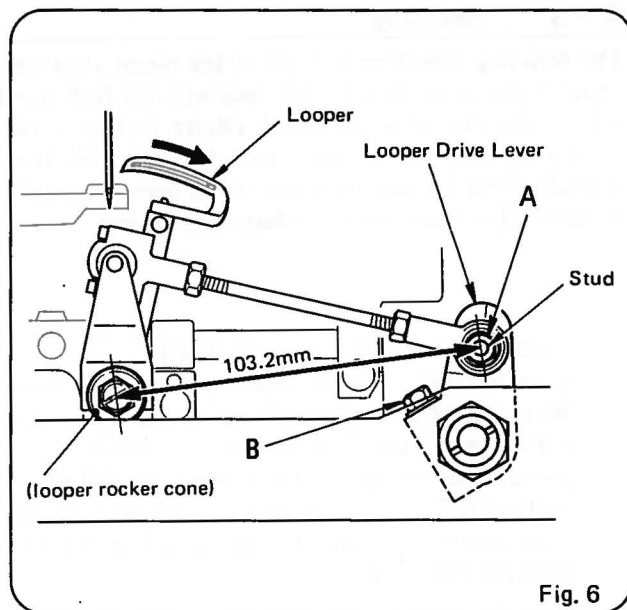


Fig. 6

4 - 2 Needle Mounting and Height Adjustment (Figure 9 refers)

A needle of the specified type and size should be inserted in the needle bar as deep as it will go. The shaved part of the needle should face away from you. Tighten the needle bar nut (C) firmly so that needle will not come off.

Adjust the height of the needle bar so that the looper point is 0.4 mm above the needle hole when the looper reaches the left edge of the needle, as shown in Figure 5. To adjust, move the needle bar in the vertical direction after loosening the screw (A) of the needle bar holder. When the proper height is obtained, check the position of the shaved part of the needle again, and tighten the screw (A).

Note: If the direction of the needle is not correct, the looper will strike against the needle and may break it. Further, thread break or damage to thread may also result.

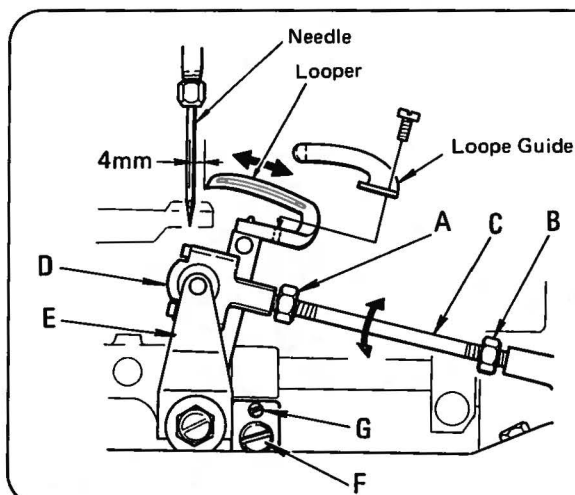


Fig. 7

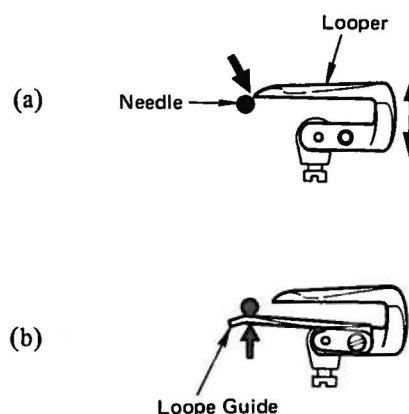
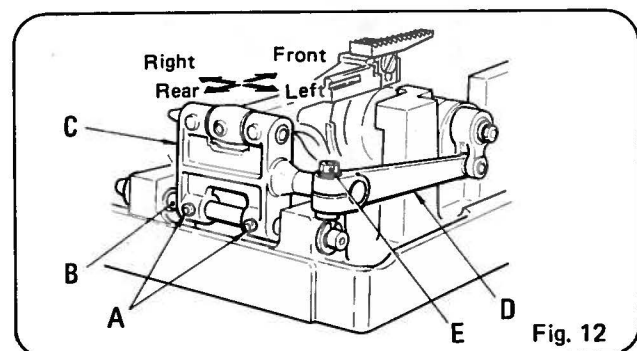
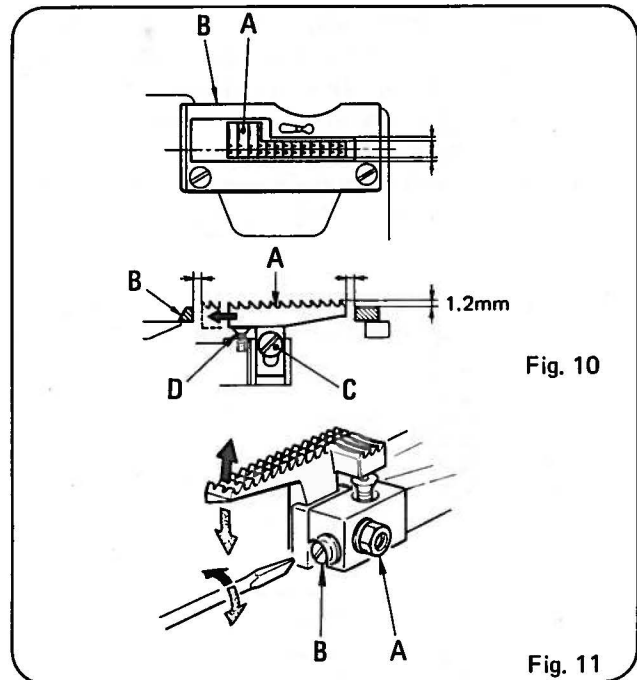
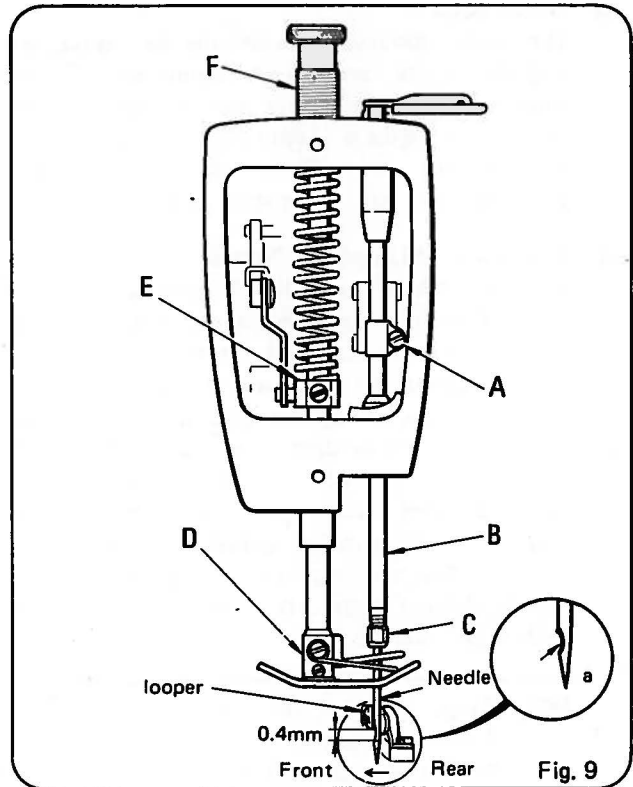


Fig. 8

4 – 3 Feed Dog

The feed dog should be centered in the throat plate with equal clearance on all sides and ends with the feed travel set to the desired stitch length (Refer to Figure 10). At the highest point of travel, tips of the feed dog teeth should extend 1.2 mm above the throat plate and parallel to same. The adjustment procedure is as follows:

- a) **Vertical Adjustment (Figure 10 refers)**
Place the feed dog in the highest position in its travel. Remove the screw (C) and adjust the feed dog so that tips of the feed dog teeth extend 1.2 mm above the throat plate. Adjust the screw (D) so that its head will hit the bottom of the feed dog and support same from below. Firmly tighten the feed dog with the screw (C).
- b) **Level Adjustment (Figure 11 refers)**
Place the feed dog in the highest position in its travel, loosen the nut (A), and turn the screw (B) to adjust the levelness of the feed dog. Turning the screw to the right will make the leading edge of the feed dog raised and turning it to the left makes it go down. When the required levelness is obtained, tighten the nut (A) firmly.
- c) **Adjustment in Longitudinal Direction (Figure 12 refers).**
Loosen the nut (E) and move the feed rocker (C) in the longitudinal direction. After the adjustment, tighten the nut (E).
- d) **Adjustment in Crosswise Direction (Figure 12 refers)**
Loosen the nut (E) and screw (A), and move the feed rocker (C) in the crosswise direction. After the adjustment, first tighten the screw (A), and then confirm that the feed rod (D) will move freely before tightening the nut (E) firmly.



4 – 4 Change of Stitch Length (Figure 13 refers)

Your machine is adjusted to the stitch length of 7 mm in our plant before shipment. You can change the stitch length in the following procedure when necessary:

Loosen the nut (B) of the feed regulating stud, and turn the screw (D) on the dial. Turning it to the right will make the stitch smaller (S), and turning it to the left larger (L). Tighten the nut (B) only by half and turn the pulley by hand to produce a length of seam to confirm whether the desired stitch length is obtained or not. After the adjustment, tighten the nut (B) firmly.

Note: Nut (B) has left-hand threads.

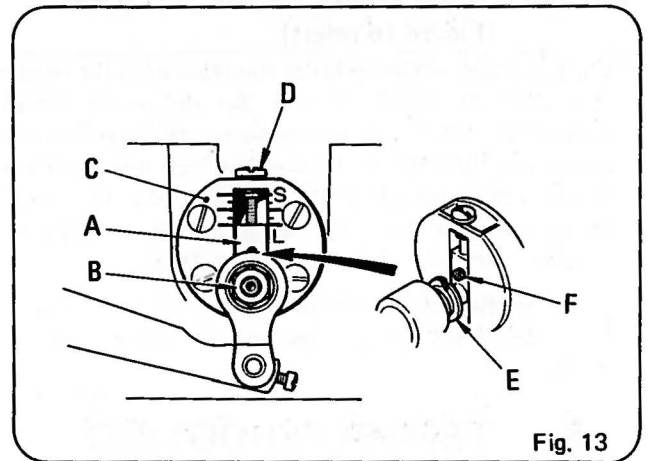


Fig. 13

4 – 5 Needle Guard (Figure 14 refers)

the upper edge of the needle hole must be even with the lower surface of the needle guard (B) when the needle (A) is in the lowest position in its travel. To adjust, loosen the screw (C) and move the needle guard (B) in the vertical direction. Make necessary adjustment so that the clearance between the needle (A) and the needle guard (B) is 0 to 0.1 mm, as shown in Figure 14. Be careful that the needle (A) will not contact the needle guard (B).

4 – 6 Thread Release (Figure 15 refers)

The thread release (B) is mounted on the thread release base (A), and adjust the amount of looper thread. Mount the thread release just in the middle of the two discs of thread release cam (F), and secure it in position with the screw (D).

4 – 7 Thread Tension

Tension on the needle thread should be only sufficient to produce uniform stitches on the under surface of the fabric. Tension on the looper thread should be just sufficient to steady the thread.

4 – 8 Presser Bar Height (Figure 9 refers)

Height of the presser bar is set correctly if the needle bar nut (C) will not contact the presser foot and if it is possible to remove the presser foot (D), when the needle bar is at the lowest position in its travel and the presser foot lifter lever, located at the far side of the machine, is fully actuated (pulled to the right). To achieve the correct setting, adjust the position of the presser bar holder (E) so that the clearance between the lower face of the presser bar holder and the main body is 8 mm when the presser foot is lying flat on the throat plate. After the adjustment, confirm that the presser foot can be removed as stated above, and other previous adjustments.

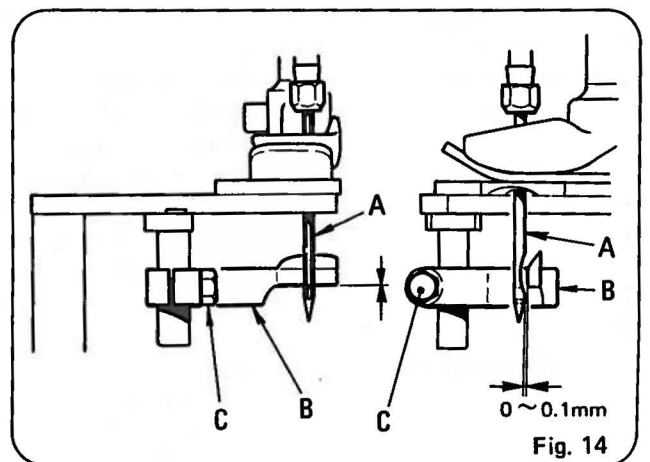


Fig. 14

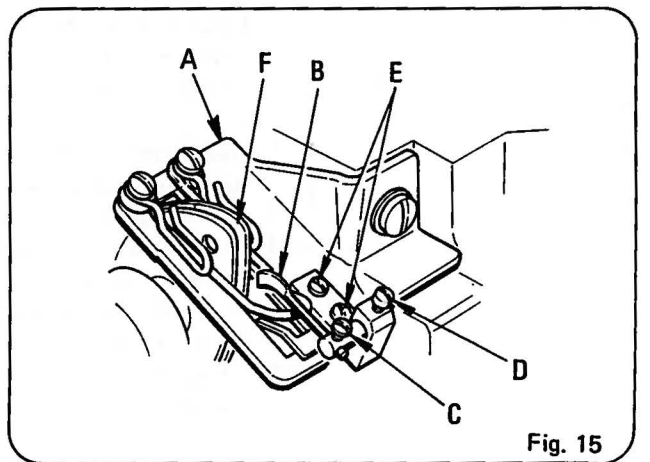


Fig. 15

4 – 9 Presser Foot Pressure (Figure 9 refers)

Adjust the pressure of the presser foot so that the work is fed uniformly. Turn the presser bar spring adjuster (F) to the right to increase the pressure, and to the left to decrease. Too much pressure will result in thread break, and too weak pressure is often responsible for unsuccessful chaining on edges of work.

4 – 10 Needle Thread Tension and Guide (Figure 16 refers)

Turn the pulley in the operating direction until the needle bar reaches its lowest position. Set the needle thread regulator so that the distance between its thread contact surface and the hole of the needle thread take-up (C) is 4.8 mm. Check the size of the loop formed as the needle goes up, and raise the needle thread regulator if the loop is smaller, and lower it when the loop is large.

Set the needle thread guide so that the distance between the center of the fixing screw and the thread eyelet is 22 mm.

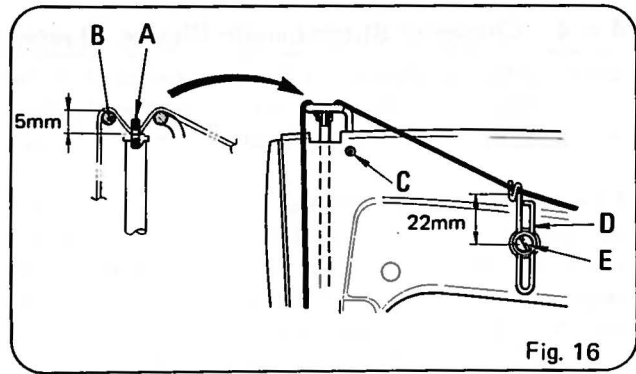


Fig. 16

5. TROUBLESHOOTING

When trouble occurs when operation the machine, refer to the following table for selecting suitable measures:

Trouble	Cause	Cure
Needle thread breaks	<ol style="list-style-type: none"> 1. Damaged looper 2. Needle thread too tight 3. Worn out feed dog causing fine stitches 4. Thread twisting or entangling between thread stand and needle 5. Improper needle setting; Bent or damaged needle 6. Needle thread too loose 	<p>Replace looper. Reduce tension. Replace feed dog. Secure correct threading.</p> <p>Set needle properly; Replace needle. Increase tension.</p>
Looper thread breaks	<ol style="list-style-type: none"> 1. Looper thread too tight or too loose 2. Damaged looper 3. Thread twisting or entangling between thread stand and looper 	<p>Adjust tension. Replace looper. Check for correct threading.</p>
No chaining on work edges	<ol style="list-style-type: none"> 1. Incorrect threading 2. Looper thread too tight 3. Improper timing of needle and looper 4. Presser foot screw loosened 	<p>Thread machine correctly. Reduce tension. Adjust timing of needle and looper. Tighten the screw.</p>
Thread skips	<ol style="list-style-type: none"> 1. Needle setting not correct; Bent or damaged needle 2. Needle thread regulator set too low. 3. Needle thread sticking on needle due to heat 4. Needle bar set too high 5. Needle thread pinched by needle guard, collapsing loop 6. Looper thread too loose, not making a good triangle 	<p>Set needle correctly. Replace needle. Raise regulator. Use lubricant on thread. Lower needle bar. Lower needle guard slightly.</p> <p>Increase looper thread tension.</p>
Needle or looper breaks	<ol style="list-style-type: none"> 1. Improper timing of needle and looper 2. Bent needle 	<p>Adjust timing of needle and looper. Replace needle.</p>
Nonuniform stitch length; seam not straight.	<ol style="list-style-type: none"> 1. Weak pressure of presser foot 2. Bent needle 3. Worn out feed dog 	<p>Increase pressure. Replace needle. Replace feed dog.</p>

6. Tightening of Screws and Nuts

The tightening torque of major parts is indicated on the catalog. Unless otherwise specified, all the parts with a slot or eccentrics should be tightened with 22

to 24 kg/cm. All other nuts, screws and bolts without the torque requirement specifications should be tightened as firmly as possible.

● 御注文上の注意事項 ORDERING PARTS

- (1) 本部品表はDKN-2の機種を兼用しますので、部品をご注文の際は、個数欄を参照して下さい。
- (2) 御注文の際は、部品番号、部品名称、個数を明記下さい。
- (3) 但し図番 (Ref. No.) の記入がない部品は、単体販売できませんので、それに該当する完備部品 (組部品) をご注文下さい。

※ 本部品表は改良のため予告なく変更することがあります。

- (1) Description of each part and its stamp number is described in this parts list. Screws and nuts for parts are shown adjacent to the relevant parts. When ordering parts, describe clearly stamp number with its name of part.
- (2) Part that has no Ref. Number can not be delivered independently; always order it as an assembly.
- (3) This part list covers parts of not only DKN-2 but also. (refer to column of Quantity.)

※ Information included in this part list is subject to change without prior notice.

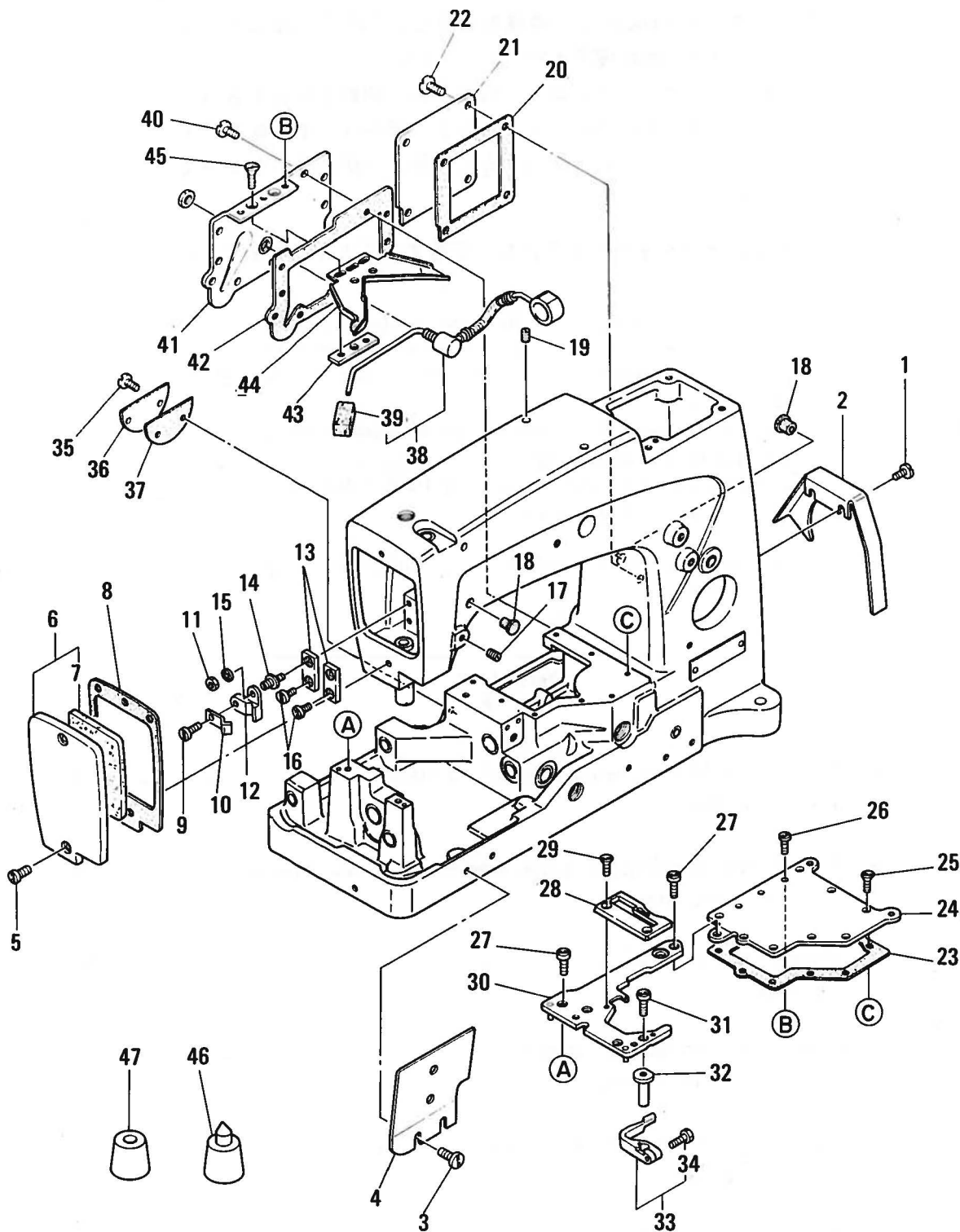
CONTENTS

目次

01 Main Frame, Miscellaneous Covers And Plates	10
本体カバー A, 関係	
02 Main Frame, Bushings, Oil Gage, And Miscellaneous Oiling Parts	12
ブッシュ 給油, カバー B 関係	
03 Thread Tension Parts	14
糸調子関係	
04 Crankshaft And Neeple, Lever Parts	16
クランクシャフト 針棒レバー関係	
05 Presser Foot And Lifter Lever Parts	18
押エ金 押エ揚ゲ関係	
06 Looper Rocker And Connecting Rod Parts	20
ルーパー揺動関係	
07 Main Shaft And Feed Driving Parts	22
下シャフト送り関係	

O I MAIN FRAME, MISCELLANEOUS COVERS AND PLATES

本体カバー A, 関係



図番 Ref. No.	部品番号 Part No.	部品名称 Description	固数 Q'ty		摘要 Remarks
				DKN-2	
1	22829	Screw	ネジ	2	
2	21375AV	Guard, V belt	ベルトカバー	1	
3	25S	Screw	ネジ	2	

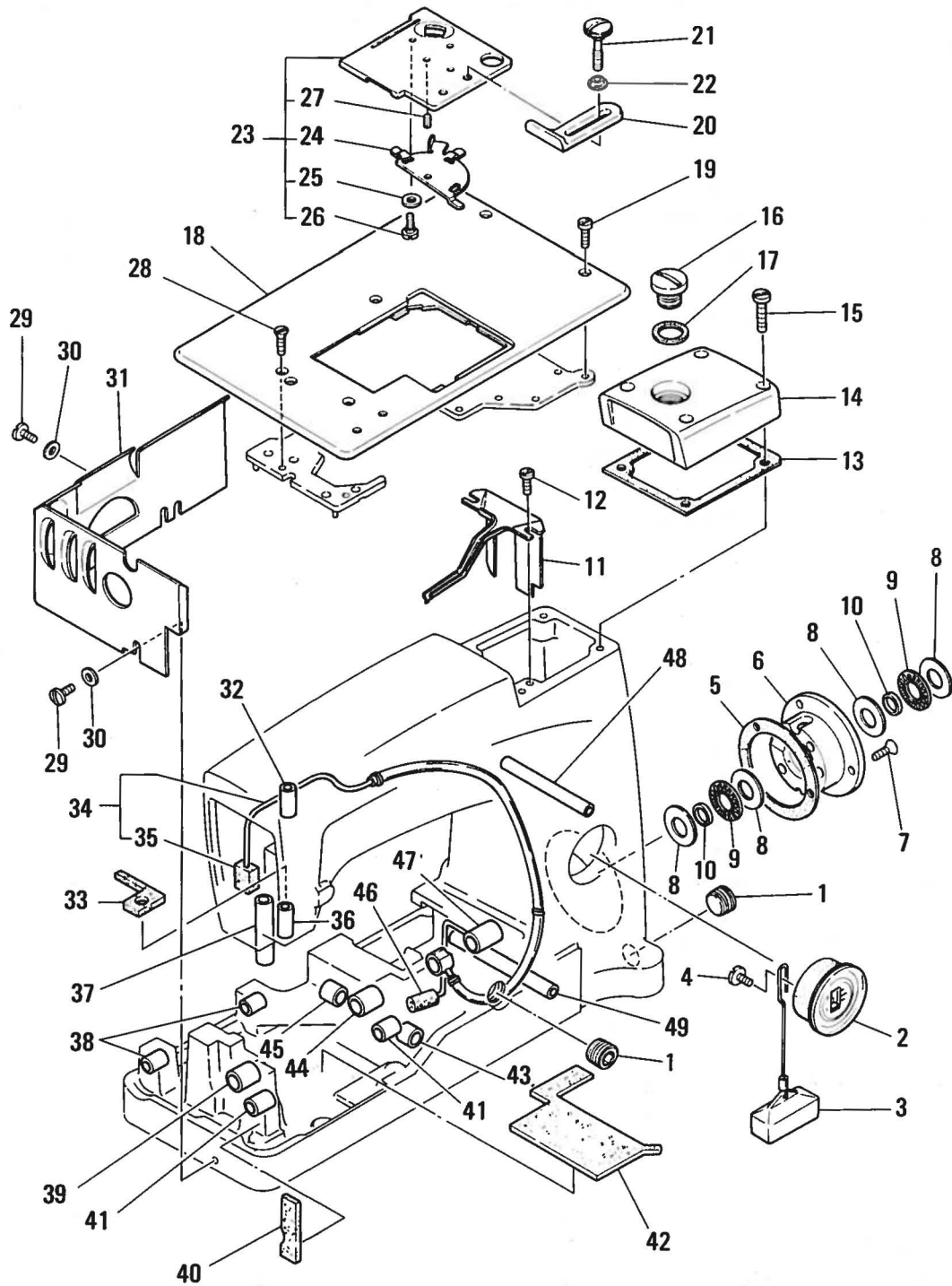
O I MAIN FRAME, MISCELLANEOUS COVERS AND PLATES

本体カバー A, 関係

図番 Ref. No.	部品番号 Part No.	部品名称 Description	固数 Q'ty		摘要 Remarks
			DKN-2		
4	51482A	Guard	面板	1	
5	22569C	Screw	ネジ	2	
6	56382	Head Cover	上面板	1	(7)
7	56382A	Felt	フェルト	1	
8	56382N	Gasket	ガスケット	1	
9	22585	Screw	ネジ	1	
10	56393D	Clamp, head oil tube	パイプ押エ	1	
11	7947	Nut	ナット	1	
12	56393C	Block, head oil tube mounting	パイプホルダー	1	
13	35731A	Guide Plate, presser bar connection	押エ棒抱キガイド	2	
14	51294R	Screw	ネジ	1	
15	660-342	Lockwasher	歯付キ座金	1	
16	22513	Screw	ネジ	3	
17	95	Screw	ネジ	1	
18	065401	Rubber Bushing	ゴムキャップ	1	
19	22894E	Screw	ネジ	2	
20	56382E	Gasket	ガスケット	1	
21	56382D	Cover, lower crank chamber	角面板	1	
22	22548	Screw	ネジ	4	
23	56382H	Gasket	ガスケット	1	
24	56382G	Cover, top oil reservoir	上面板	1	
25	22524	Screw	ネジ	8	
26	22585A	Screw	ネジ	3	
27	22839	Screw	ネジ	3	
28	51124D	Throat Plate	針板	1	
29	87	Screw	ネジ	2	
30	56180B	Support, throat plate	針板土台	1	
31	22570A	Screw	ネジ	1	
32	56168	Holder, needle guard	針ガイドホルダー	1	
33	51125E	Needle Guard	針ガード	1	(34)
34	906	Screw	ネジ	1	
35	22829	Screw	ネジ	2	
36	56382J	Cover, looper drive shaft	カバー	1	
37	56382K	Gasket	ガスケット	1	
38	59493A	Pump Assembly, oil, base	給油パイプ組(ベッド)	1	(39)
39	666-214	Felt	給油綿	1	
40	22848	Screw	ネジ	9	
41	56382AA	Cover, back, oil reservoir	側面板	1	
42	56382L	Gasket	ガスケット	1	
43	56382Y	Block, clamping	当板	1	
44	56382AB	Plate, oil drip	油受け	1	
45	22524	Screw	ネジ	2	
46	51295B	Isolator	脚	3	
47	51295A	Isolator	脚	1	

O2 MAIN FRAME, BUSHINGS, OIL GAGE, AND MISCELLANEOUS OILING PARTS

ブッシュ 給油, カバーB関係



図番 Ref. No.	部品番号 Part No.	部品名称 Description	固数 Q'ty		摘要 Remarks
				DKN-2	
1	22539R	Plug Screw	プラグ	2	
2	775082	Oil Gauge Assembly	オイルゲージ組	1	
3	775121A	Float Assembly	浮子組	1	
4	9/64S40011	Screw	ネジ	1	
5	51190D	Gasket	ガスケット	1	

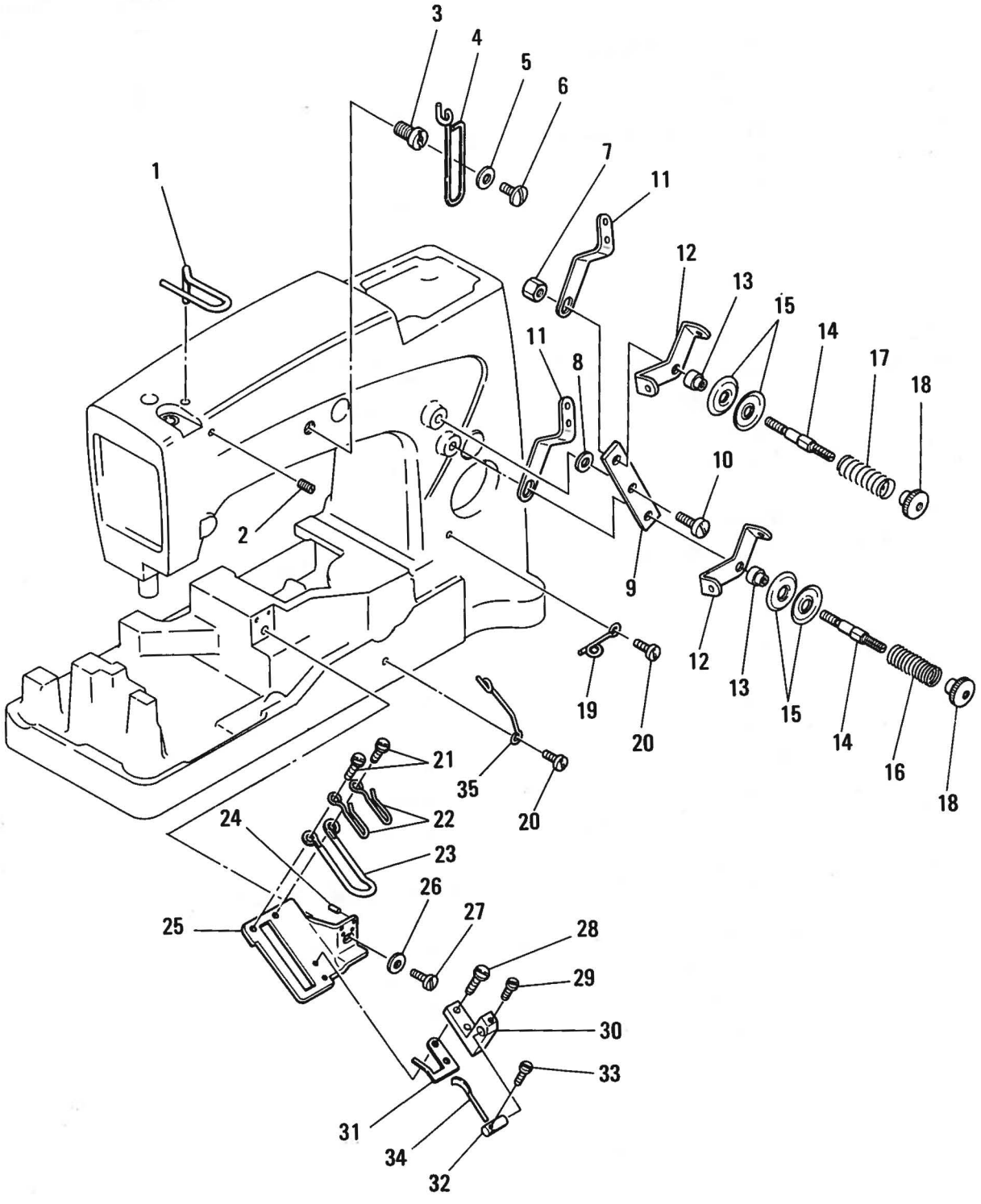
02 MAIN FRAME, BUSHINGS, OIL GAGE, AND MISCELLANEOUS OILING PARTS

ブッシュ 給油, カバーB関係

図番 Ref. No.	部品番号 Part No.	部品名称 Description		固数 Q'ty	摘 要 Remarks
				DKN-2	
6	57890B	Housing, crankshaft bushing	ブッシュハウジング	1	
7	22569B	Screw	ネジ	3	
8	56390H	Thrust Washer	スラストワッシャー	4	
9	660-665	Thrust Needle Bearing (FNNTA-1528)	スラストニードルベアリング	2	
10	56390J	Ring, pilot	リング	2	
11	56382AC	Plate, oil and baffle	油受ケ	1	
12	90	Screw	ネジ	2	
13	56382C	Gasket	ガスケット	1	
14	56382B	Upper Cover	上蓋	1	
15	22541C	Screw	ネジ	4	
16	22733E	Plug Screw	プラグ	1	
17	56382M	Gasket	ガスケット	1	
18	56301	Cloth Plate	ベースカバー	1	
19	22839C	Screw	ネジ	2	
20	24X	Edge Guide	定規	1	
21	25	Screw	ネジ	2	
22	25D	Washer and Nut	座金ナット	2	
23	56381-219	Cover, cloth plate	カバープレート組	1	(24~27)
24	51281AC	Spring	スプリング	1	
25	35772H	Spring Washer	スプリングワッシャー	3	
26	22760A	Screw	ネジ	3	
27	22845B	Screw	ネジ	1	
28	80	Screw	ネジ	3	
29	22848	Screw	ネジ	3	
30	20	Washer	座金	3	
31	51282AH	Oil Shield, end and back	下面板	1	
32	51154E	Needle Bar Bushing, upper	針棒ブッシュ上	1	
33	56393W	Pad Felt	給油綿	1	
34	56393T	Pump Assembly, oil, head	オイルポンプ組(アーム)	1	(35)
35	56393L	Felt	給油綿	1	
36	56154	Needle Bar Bushing, lower	針棒ブッシュ下	1	
37	51257AA	Presser Bar Bushing, lower	押エ棒ブッシュ下	1	
38	57836B	Feed Rocker Shaft Bushing	送り元ブッシュ	2	
39	56390	Mainshaft Bushing, front	下シャフトブッシュ前	1	
40	666-259	Felt	給油綿	1	
41	50-895Blk	Looper Rocker Shaft Bushing	ルーパーシャフトブッシュ	2	
42	56193A	Felt	フェルト	1	
43	773061	Looper Drive Lever Shaft Bushing, front	ベルクランク軸ブッシュ前	1	
44	56190	Mainshaft Bushing, intermediate	下シャフトブッシュ中前	1	
45	57842B	Looper Drive Lever Shaft Bushing, rear	ベルクランク軸ブッシュ後	1	
46	35897BV	Filter, oil intake	フィルター	1	
47	56390G	Mainshaft Bushing, inner right	下シャフトブッシュ中後	1	
48	21657X	Bushing, tension release lever shaft	テンションレバーブッシュ	1	
49	775111	Bushing	パイプブッシュ	1	

03 THREAD TENSION PARTS

糸調子関係



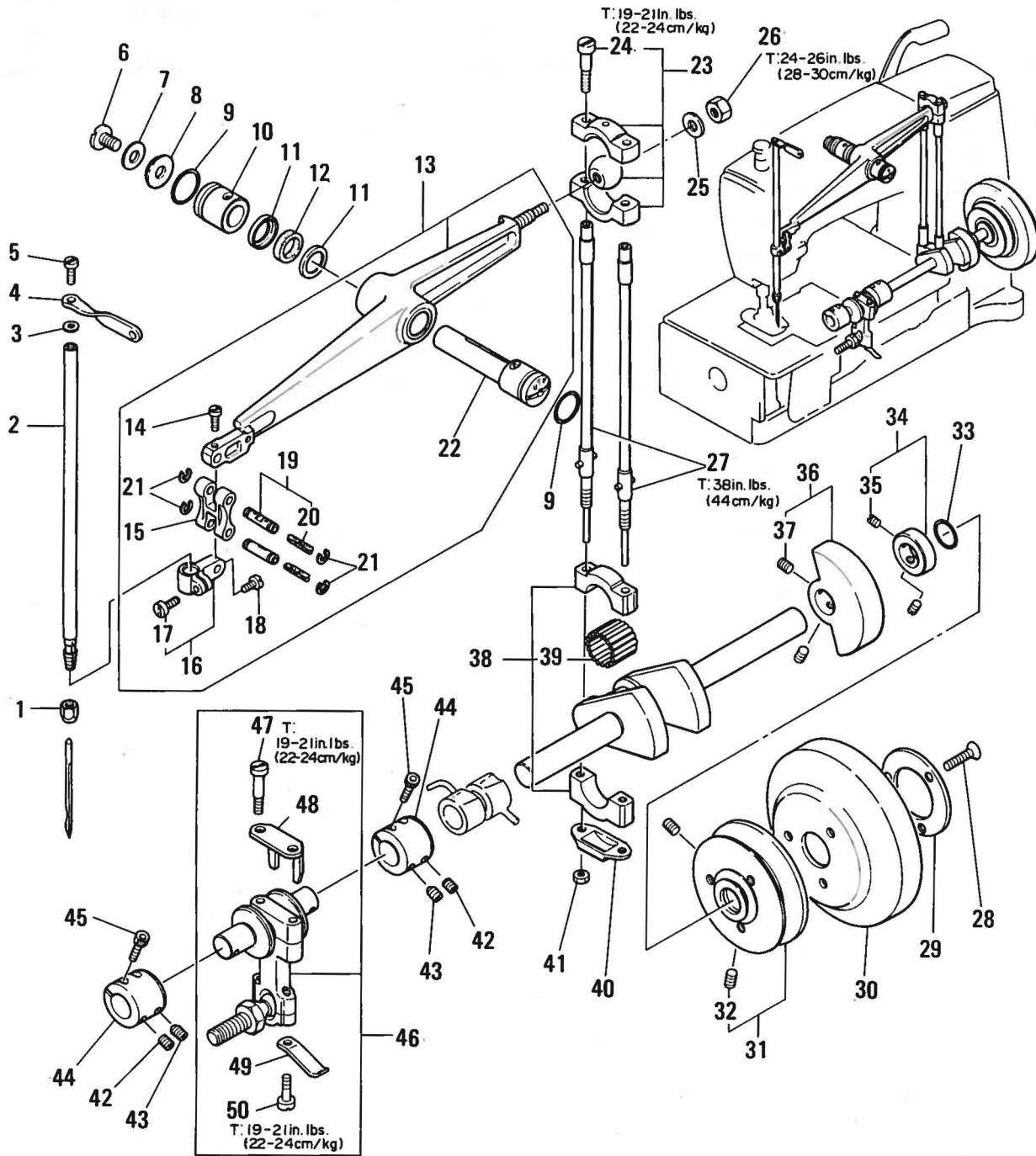
03 THREAD TENSION PARTS

糸調子関係

図番 Ref. No.	部品番号 Part No.	部品名称 Description		固数 Q'ty	摘 要 Remarks
				DKN-2	
1	56170	Wire, needle thread take-up	上糸調節	1	
2	95	Screw	ネジ	1	
3	22889A	Screw	ネジ	1	
4	539	Eyelet, frame needle thread	上糸ガイド	1	
5	20	Washer	座金	1	
6	22848	Screw	ネジ	1	
7	43266	Nut	ナット	1	
8	80557	Washer	座金	1	
9	52892	Tension Post Support	糸調子取付板	1	
10	22872	Screw	ネジ	1	
11	51491C	Lead-In Guide	糸ガイド	2	
12	51192G	Tension Post Eyelet	糸ガイド	2	
13	51192B	Tension Post Ferrule	糸調子スリーブ	2	
14	51292	Tension Post	糸調子芯棒	2	
15	109	Tension Disc	糸調子皿	4	
16	51292F-8	Needle Tension Spring	糸調子スプリング(上糸)	1	
17	51292F-2	Looper Tension Spring	糸調子スプリング(下糸)	1	
18	51292C	Tension Nut	糸調子ナット	2	
19	52A	Looper Thread Eyelet	下糸ガイド	1	
20	98A	Screw	ネジ	2	
21	22593	Screw	ネジ	2	
22	51158D	Take-Up Eyelet	糸ガイド	2	
23	51104F	Cast-Off Wire	糸放シ	1	
24	50-216Blk	Pin, dowel	ピン	2	
25	51157H	Cast-Off Wire Support	糸放シ元土台	1	
26	21657E	Washer	座金	1	
27	22528	Screw	ネジ	1	
28	J87J	Screw	ネジ	2	
29	77	Screw	ネジ	1	
30	51204C	Auxiliary Cast-Off Support	糸放シ台	1	
31	51104H	Auxiliary Cast-Off	糸放シ補助	1	
32	51204A	Cast-Off Wire Support	糸放シピン	1	
33	22798A	Screw	ネジ	1	
34	51204	Cast-Off Wire	糸放シ	1	
35	52958B	Looper Thread Eyelet	下糸ガイド	1	

04 CRANKSHAFT AND NEEDLE, LEVER PARTS

クランクシャフト 針棒レバー関係



図番 Ref. No.	部品番号 Part No.	部品名称 Description	固数 Q'ty		摘要 Remarks
			DKN-2		
1	56	Clamp Nut	針棒ナット	1	
2	51217C	Needle Bar	針棒	1	
3	27-435BIK	Washer	座金	1	
4	56358	Needle Thread Take-Up	上糸天秤	1	
5	22768	Screw	ネジ	1	
6	22586R	Screw	ネジ	1	

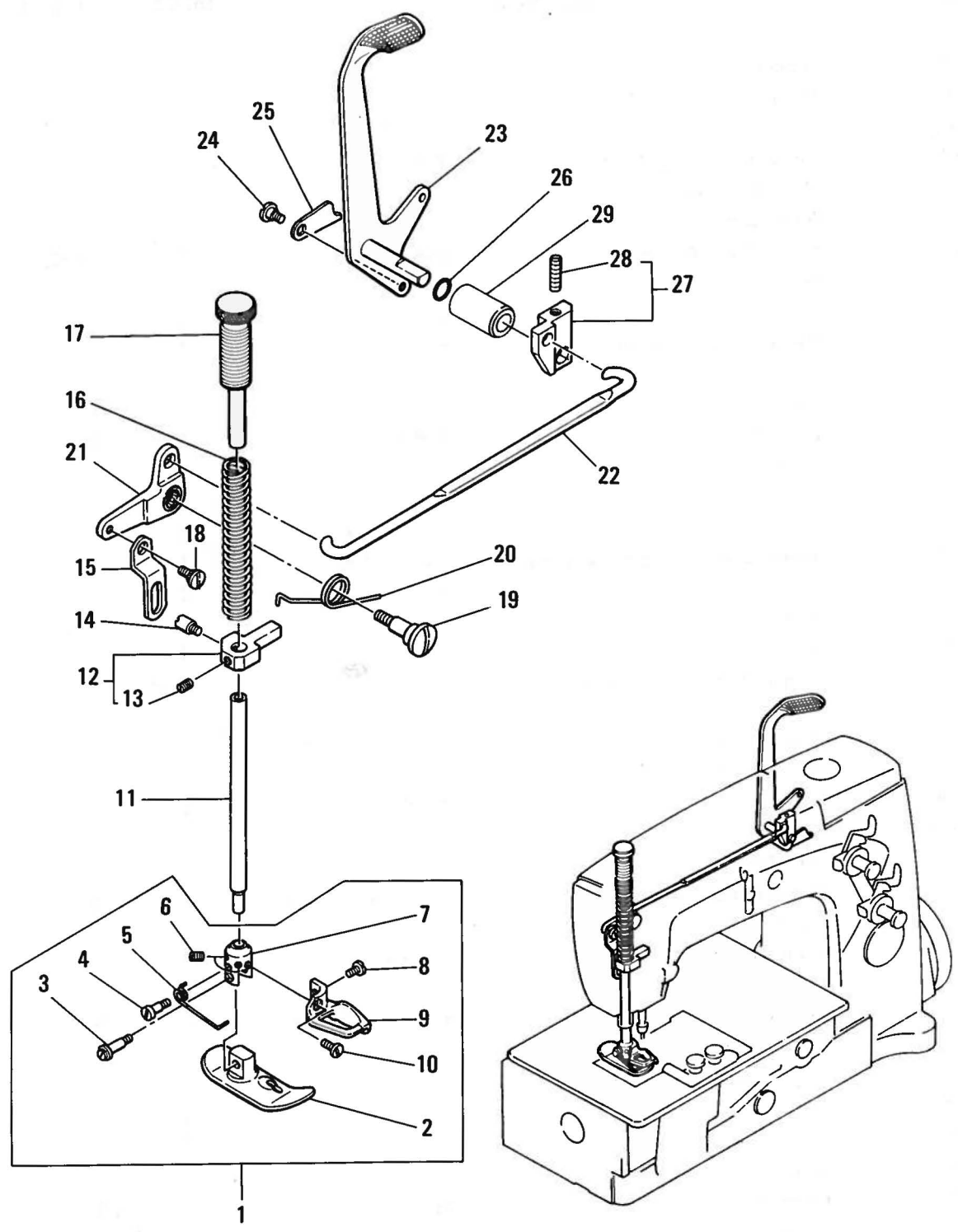
04 CRANKSHAFT AND NEEDLE, LEVER PARTS

クランクシャフト 針棒レバー関係

図番 Ref. No.	部品番号 Part No.	部品名称 Description	固数 Q'ty	摘 要 Remarks	
			DKN-2		
7	51250F	Gasket	ガスケット	1	
8	51250D	Washer	ワッシャー	1	
9	660-625	"O" Ring	"O"リング	2	
10	56350E	Collar, needle lever thrust	針棒レバーカバー	1	
11	56350F	Cup, compression	キャップ	2	
12	772051	Ring, rubber	リング	1	
13	29348AF	Needle Lever Assembly	針棒レバー組	1	(14~22)
14	77	Screw	ネジ	1	
15	56354D	Connecting Link	針棒レバーリンク	1	
16	51254K	Needle Bar Connection	針棒抱き	1	(17)
17	22562A	Screw	ネジ	1	
18	22564	Screw	ネジ	1	
19	52336A	Link Pin	針棒リンクピン	2	(20)
20	660-149	Oil Wick	オイル芯	2	
21	660-215	Retaining Ring	止メ輪	4	
22	56350D	Needle Lever Shaft	針棒レバー軸	1	
23	29066R	Needle Lever Ball Joint Ass'y(upper)	立ロッド上組	1	(24)
24	22559G	Screw	ネジ	2	
25	51216N	Washer	ワッシャー	1	
26	51216P	Nut, left thread	ナット(左ネジ)	1	
27	56316	Needle Lever Connecting Rod	立ロッド	1 set	
28	22574	Screw	ネジ	3	
29	61321L	Retaining Plate	ハンドホイール押エ	1	
30	57821	Hand Wheel	ハンドホイール	1	
31	56321N	Pulley	プーリー	1	(32)
32	22894AB	Screw	ネジ	2	
33	666-202	"O" Ring	"O"リング	1	
34	57847	Thrust Collar	スラストセットカラー	1	(35)
35	95	Screw	ネジ	2	
36	51247	Counterweight	カウンターバランス	1	(37)
37	22894J	Screw	ネジ	2	
38	29476LN	Crankshaft Assembly	クランクシャフト組	1	(39)
39	51216M	Needle Bearing	ニードルローラー	28	
40	56316C	Connecting Rod Guide	立ロッドガイド	1	
41	12934A	Nut	ナット	1	
42	22894C	Screw	ネジ	2	
43	22894D	Screw	ネジ	2	
44	56343F	Coupling	連結カラー	2	(45)
45	22653L-8	Screw	ネジ	4	
46	29105AK	Looper Driving Lever Crank Ass'y	ルーバーロッド組	1	(47~50)
47	22587K	Screw	ネジ	2	
48	56343C	Ball Joint Guide	ボールガイド	1	
49	56343E	Oil Splasher	油カキ	1	
50	22559A	Screw	ネジ	2	

05 PRESSER FOOT AND LIFTER LEVER PARTS

押工金 押工揚ゲ関係



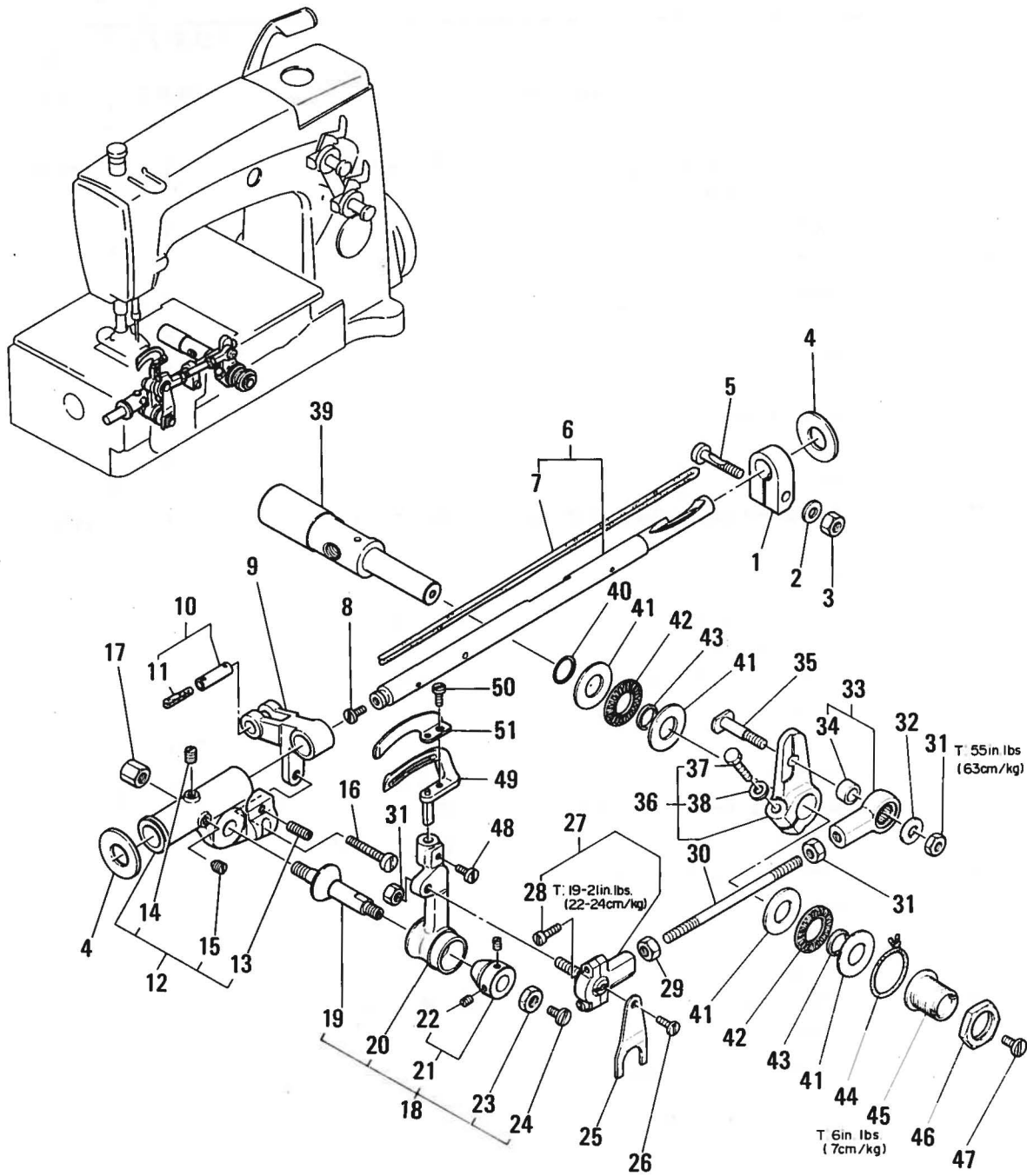
05 PRESSER FOOT AND LIFTER LEVER PARTS

押エ金 押エ揚ゲ関係

図番 Ref. No.	部品番号 Part No.	部品名称 Description		固数Q'ty	摘 要 Remarks
				DKN-2	
1	43120	Presser Foot Assembly	押エ金 (組)	1	(2~10)
2	43130	Presser Foot Bottom	押エ金	1	
3	22897	Screw	ネジ	1	
4	57WD	Screw	ネジ	1	
5	15480C	Spring	ネジ	1	
6	88	Screw	ネジ	2	
7	43130A	Shank	押エ金上	1	
8	22561	Screw	ネジ	1	
9	43130B	Finger Guard	ガード	1	
10	187A	Screw	ネジ	1	
11	51257K	Presser Bar	押エ棒	1	
12	51257M	Presser Bar Connection and Guide	押エ棒ダキ	1	(13)
13	531	Screw	ネジ	1	
14	402	Screw	ネジ	1	
15	56383A	Lifter Lever Link	押エ揚ゲリング	1	
16	53787	Presser Spring	押エ棒スプリング	1	
17	56356	Presser Spring Regulator	押エ棒スプリング調節	1	
18	22758C	Screw	ネジ	1	
19	22557G	Screw	ネジ	1	
20	56383D	Bell Crank Spring	押エ揚ゲベルクランクバネ	1	
21	56383AA	Bell Crank, presser foot lifter lever	押エ揚ゲベルクランク	1	
22	56383AB	Connecting Rod	押エ揚ゲ連結桿	1	
23	51183B	Presser Foot Lifter Lever	押エ揚ゲ	1	
24	22758C	Screw	ネジ	1	
25	51183C	Latch, lever	掛ケ金	1	
26	660-207	"O" Ring	"O"リング	1	
27	53783N	Lifter, internal	押エ揚ゲ連結桿ブラケット	1	(28)
28	22537	Screw	ネジ	1	
29	52883R	Foot Lifter Lever Bushing	押エ揚ゲレバーブッシュ	1	

06 LOOPER ROCKER AND CONNECTING ROD PARTS

ルーパー揺動関係



図番 Ref. No.	部品番号 Part No.	部品名称 Description	固数 Q'ty		摘要 Remarks
				DKN-2	
1	51244N	Collar, looper rocker shaft	割締メカラー	1	
2	51216N	Washer	座金	1	
3	18	Nut	ナット	1	
4	51244L	Thrust Washer	スラスト座金	2	
5	55244G	Screw	ネジ	1	
6	57744	Looper Rocker Shaft	ルーパー元土台シャフト	1	(7)
7	WO-3	Yarn	糸	1	

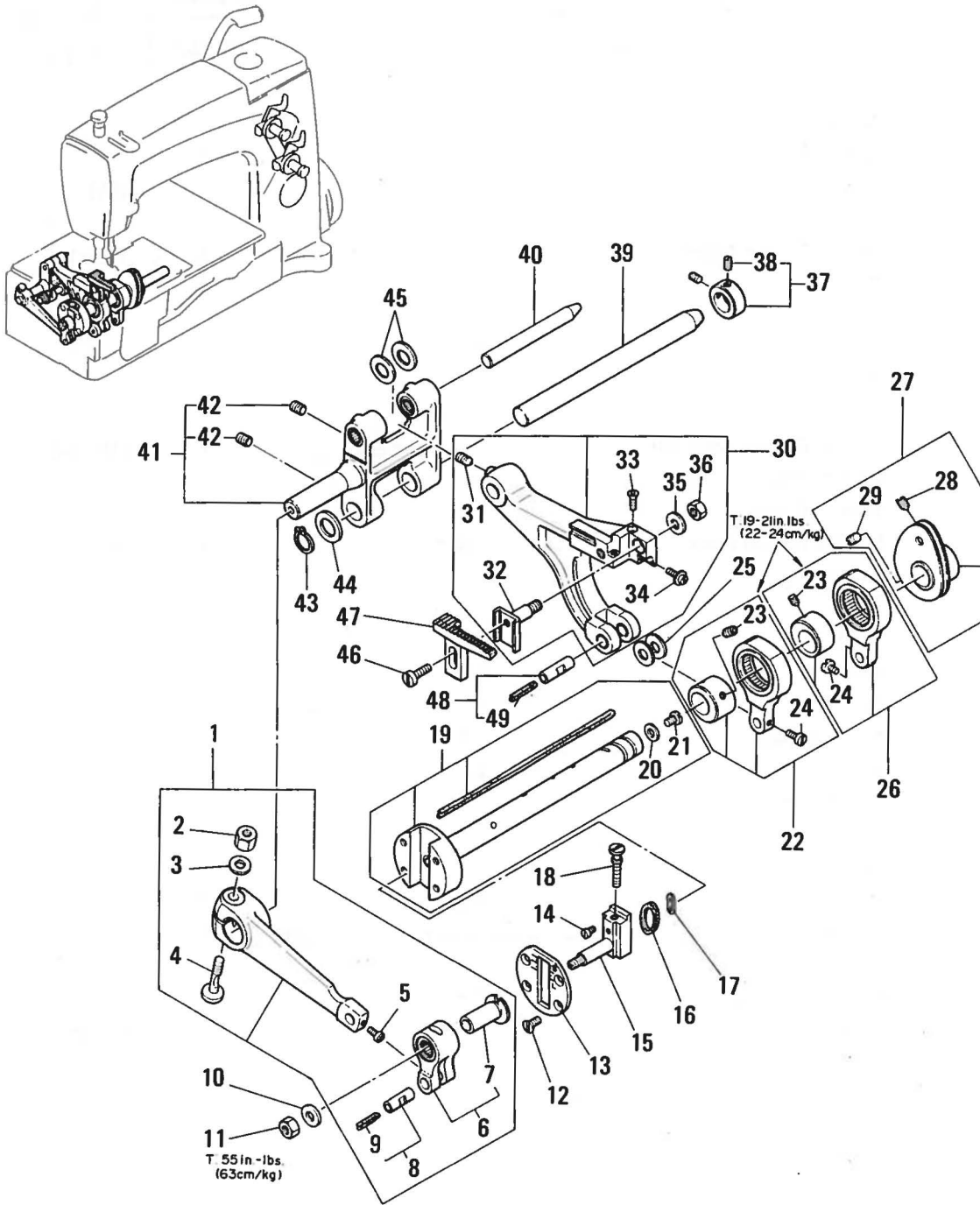
06 LOOPER ROCKER AND CONNECTING ROD PARTS

ルーパー揺動関係

図番 Ref. No.	部品番号 Part No.	部品名称 Description	固数 Q'ty		摘要 Remarks
				DKN-2	
8	22513	Screw	ネジ	1	
9	56344B	Looper Rocker Shaft Arm	ルーパー揺動アーム	1	
10	51236A	Link Pin	リンクピン	1	(11)
11	755181	Oil Wick	オイル芯	1	
12	56344C	Looper Rocker Frame	ルーパー元土台	1	(13~15)
13	719	Screw	ネジ	1	
14	98	Screw	ネジ	1	
15	96	Screw	ネジ	1	
16	22874	Screw	ネジ	1	
17	51246	Nut	ナット	1	
18	29192V	Looper Rocker Assembly	ルーパー土台組	1	(19~24)
19	51745	Looper Stud	ルーパー土台シャフト	1	
20	56313	Looper Rocker	ルーパー土台	1	
21	15465F	Looper Rocker Cone	円錐カラー	1	(22)
22	88	Screw	ネジ	2	
23	258A	Nut	ナット	1	
24	22829	Screw	ネジ	1	
25	56393J	Oiler	油受ケ	1	
26	87U	Screw	ネジ	1	
27	57841	Ball Joint, left	ボールジョイント組(左)	1	(28)
28	22729C	Screw	ネジ	2	
29	269	Nut, left hand thread	ナット(左ネジ)	1	
30	35741A	Looper Connecting Rod	ジョイントロッド	1	
31	18	Nut	ナット	3	
32	20	Washer	座金	1	
33	29476LV	Bearing Assembly, right	ルーパー連結桿ベアリングケース組	1	
34	56341F	Ferrule	カラー	1	
35	52942R	Looper Lever Stud	スタッドボルド	1	
36	56342E	Looper Driver Lever	ベルクランク	1	(37,38)
37	22882C	Screw	ネジ	1	
38	51242M	Washer	座金	1	
39	52942AA	Looper Drive Rocker Shaft	ベルクランク軸	1	
40	660-202	"O" Ring	"O"リング	1	
41	56390H	Thrust Washer	スラストワッシャー	4	
42	660-665	Thrust Needle Bearing	スラストニードルベアリング	2	
43	56390J	Ring, pilot	リング	2	
44	CL21	Oil Wick	給油芯	1	
45	52942AC	Thrust Synchronizing Adjust Screw	調節ネジ	1	
46	56342D	Nut	ナット	1	
47	22513	Screw	ネジ	1	
48	73	Screw	ネジ	1	
49	51108DA	Looper	ルーパー	1	
50	73A	Screw	ネジ	1	
51	51110D	Looper Needle Guard	ループガイド	1	

07 MAIN SHAFT AND FEED DRIVING PARTS

下シャフト送り関係



図番 Ref. No.	部品番号 Part No.	部品名称 Description	固数Q'ty	摘要 Remarks
			DKN-2	
1	29476MJ	Feed Rocker Arm and Feed Crank Link Ass'y 送りロッド組	1	(2~10)
2	55235E	Nut ナット	1	
3	6042A	Washer ワッシャー	1	
4	55235D	Screw ネジ	1	
5	77	Screw ネジ	1	

07 MAIN SHAFT AND FEED DRIVING PARTS

下シャフト送り関係

図番 Ref. No.	部品番号 Part No.	部品名称 Description	固数 Q'ty		摘要 Remarks
				DKN-2	
6	56336B	Feed Crank Link Ass'y	送りクランクリンク組	1	(7)
7	56336C	Feed Crank Link Ferrule	送り調節軸スリーブ	1	
8	51054	Feed Crank Link Pin	リンクピン	1	(9)
9	666-149	Oil Wick	オイル芯	1	
10	21657E	Washer	座金	1	
11	269	Nut, left thread	ナット	1	
12	22525A	Screw	ネジ	4	
13	56322C	Main Shaft Head Plate	目盛板	1	
14	22798C	Screw	ネジ	1	
15	56336	Feed Crank Stud	送り調節軸	1	
16	660-269B	Quad Ring	"X"リング	1	
17	56336D	Feed Crank Stud Insert	インサート	1	
18	22543B	Screw	ネジ	1	
19	56122A	Main Shaft	下シャフト	1	(20,21)
20	56322B	Gasket	ガスケット	1	
21	22891B	Screw	ネジ	1	
22	29476NM-140	Feed Lift Eccentric Ass'y	送り上下カム組	1	(23,24)
23	22894AA	Screw	ネジ	2	
24	77	Screw	ネジ	2	
25	39543N	Thrust Washer	スラスト座金	2	
26	29476NM-096	Looper Avoid Eccentric Ass'y	ルーパー倒シカム組	1	(23, 24)
27	56123	Looper Thread Take-Up	糸締メカム	1	
28	22764C	Screw	ネジ	1	
29	22580D	Screw	ネジ	1	
30	56334N	Feed Bar Ass'y	送り土台組	1	(31~36)
31	22651CB-4	Screw	ネジ	1	
32	56334L	Feed Dog Holder	送り金ホルダー	1	
33	22637P-24	Screw	ネジ	1	
34	22863C	Screw	ネジ	1	
35	6042A	Washer	ワッシャー	1	
36	258	Nut	ナット	1	
37	56335D	Feed Rocker Shaft Collar	カラー	1	(38)
38	98	Screw	ネジ	2	
39	56335L	Feed Rocker Shaft	送り元土台シャフト	1	
40	56334B	Feed Bar Shaft	送り土台シャフト	1	
41	56335G	Feed Rocker	送り元土台	1	(42)
42	22651CD-4	Screw	ネジ	2	
43	660-438	Retaining Ring	止メ輪	1	
44	41391	Washer	座金	1	
45	61341J	Feed Bar Washer	座金	2	
46	22528	Screw	ネジ	1	
47	51105G	Feed Dog	送り金	1	
48	51236A	Link Pin	リンクピン	1	(49)
49	755181	Oil Wick	オイル芯	1	

NUMERICAL INDEX OF PARTS

パーツ索引

PART NO.	PAGE	PART NO.	PAGE	PART NO.	PAGE	PART NO.	PAGE
WO-3	20	51054	23	52942AC	21	56382B	13
CL21	21	51104F	15	52958B	15	56382C	13
24X	13	51104H	15	53783N	19	56382D	11
50-216BIK	15	51105G	23	53787	19	56382E	11
50-895BIK	13	51108DA	21	56122A	23	56382G	11
52A	15	51110D	21	56123	23	56382H	11
56	16	51124D	11	56154	13	56382J	11
109	15	51125E	11	56168	11	56382K	11
539	15	51154E	13	56170	15	56382L	11
660-149	17,23	51157H	15	56180B	11	56382M	13
660-202	21	51158D	15	56190	13	56382N	11
660-207	19	51183B	19	56193A	13	56382Y	11
660-215	17	51183C	19	56301	13	56382AA	11
660-269B	23	51190D	12	56313	21	56382AB	11
660-342	11	51192B	15	56316	17	56382AC	13
660-438	23	51192G	15	56316C	17	56383A	19
660-625	17	51204	15	56321N	17	56383D	19
660-665	13,21	51204A	15	56322B	23	56383AA	19
666-202	17	51204C	15	56322C	23	56383AB	19
666-149	23	51216M	17	56334B	23	56390	13
666-214	11	51217C	16	56334L	23	56390G	13
666-259	13	51236A	21,23	56334N	23	56390J	13,21
15465F	21	51244 N	20	56335D	23	56393C	11
15480C	19	51247	17	56335G	23	56393D	11
21375AV	10	51250F	17	56335L	23	56393J	21
21657E	15,23	51254K	17	56336	23	56393L	13
21657X	13	51257K	19	56336B	23	56393T	13
22539R	12	51257M	19	56336C	23	56393W	13
22733E	13	51257AA	13	56336D	23	57744	20
29066R	17	51281AC	13	56341F	21	57821	17
29105AK	17	51282AH	13	56342E	21	57836B	13
29192V	21	51292	15	56343C	17	57841	21
29348AF	17	51292C	15	56343E	17	57842B	13
29476LN	17	51292F-2	15	56343F	17	57847	17
29476LV	21	51292F-8	15	56344B	21	57890B	13
29476MJ	22	51295A	11	56344C	21	59493A	11
29476NM-096	23	51295B	11	56350D	17	61321L	17
29476NM-140	23	51482A	11	56350E	17	065401	11
35731A	11	51491C	15	56350F	17	755181	21,23
35741A	21	51745	21	56354D	17	772051	17
35897BV	13	52336A	17	56356	19	773061	13
43120	19	52883R	19	56358	16	775082	12
43130	19	52892	15	56381-219	13	775111	13
43130A	19	52942R	21	56382	11	775121A	12
43130B	19	52942AA	21	56382A	11		

NUMERICAL INDEX OF PARTS
パーツ索引

PART NO.	PAGE	PART NO.	PAGE	PART NO.	PAGE	PART NO.	PAGE
SCREW		22587K	17	51216P	17		
		22593	15	51246	21		
25	13	22637P-24	23	56342D	21		
25S	10	22651CB-4	23				
57WD	19	22651CD-4	23				
				WASHER			
73	21	22653L-8	17	20	13,15,21		
73A	21	22729C	21	27-435BIK	16		
77	15,17,22,23	22758C	19	6042A	22,23		
80	13	22760A	13				
87	11	22764C	23				
J87J	15	22768	16	35772H	13		
87U	21	22798A	15	39543N	23		
88	19,21	22798C	23	41391	23		
90	13	22829	10,11,21	51216N	17,20		
95	11,15,17	22839	11	51242M	21		
96	21	22839C	13	51244L	20		
98	21,23	22845B	13	51250D	17		
98A	15	22848	11,13,15	55235E	22		
187A	19	22863C	23	56390H	13,21		
402	19	22872	15	61341J	23		
531	19	22874	21	80557	15		
719	21	22882C	21				
906	11	22889A	15				
22513	11,21	22891B	23				
22524	11	22894C	17				
22525A	23	22894D	17				
22528	15,23	22894E	11				
22537	19	22894J	17				
22541C	13	22894AA	23				
22543B	23	22894AB	17				
22548	11	22897	19				
22557G	19	51294R	11				
22559A	17	55235D	22				
22559G	17	55244G	20				
22561	19	9/64S40011	12				
22562A	17	NUT					
22564	17						
22569B	13	18	20,21				
22569C	11	25D	13				
22570A	11	258	23				
22574	17	258A	21				
22580D	23	269	21,23				
22585	11	7947	11				
22585A	11	12934A	17				
22586R	16	43266	15				



4-14 HIGASHI-UENO 6-CHOME, TAITO-KU TOKYO, JAPAN TEL: (843) 0269

No.1

No. IE3012A 87-04-500 ©
PRINTED IN JAPAN