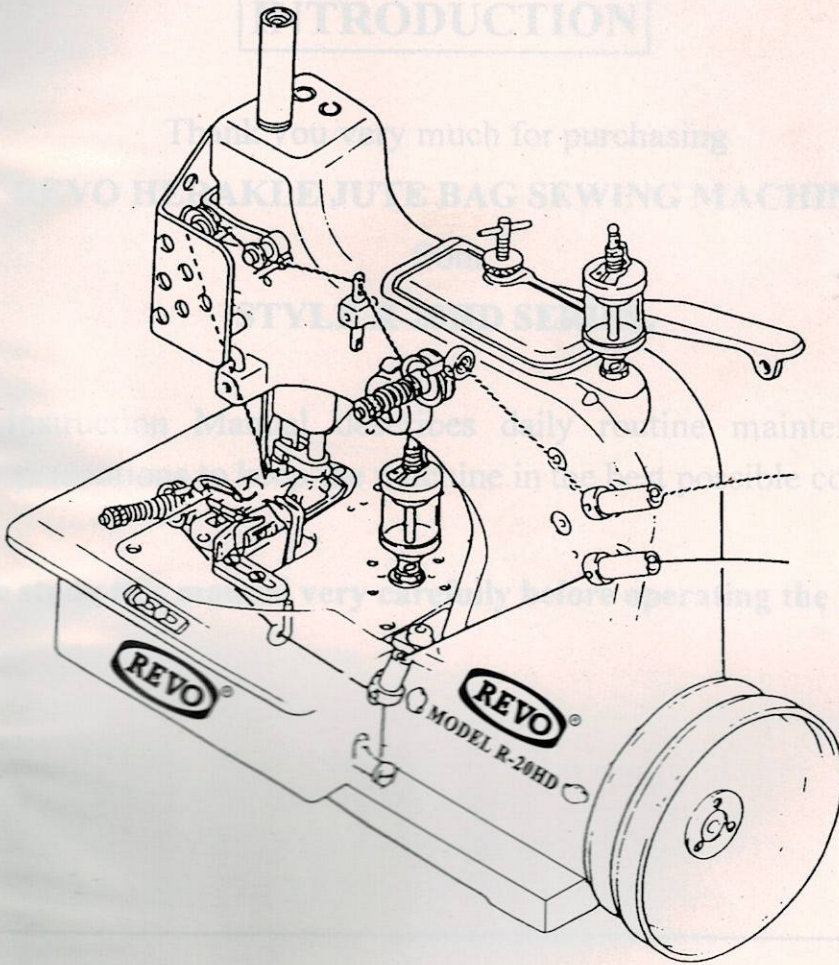




Makers of Industrial Sewing Machines

JUTE BAG OVEREDGING SEWING MACHINE MODEL R-20HD

INSTRUCTION MANUAL / PARTS LIST



SWARUP MECHANICAL WORKS

Overlock Buildings, Overlock Road, LUDHIANA-141 003. (India)

Ph. : 2530774, 2530472, 5005940, 2673874 Fax : 91-161-2533751

Web : www.sewingnet.com, www.sewingmaker.com

www.revoindia.com E-mail : sales@revoindia.com

INDEX

CONTENTS

PAGE NO.

DESCRIPTION

APPLICATION

SPECIFICATIONS

SAFETY RULES

MAINTENANCE

STARTING

THREADING

TEST OPERATION

ADJUSTING

9-1

REVO HERAKLE JUTE BAG SEWING MACHINE

9-2

9-3

9-4

9-5

9-6

9-7

9-8

9-9

9-10

9-11

9-12

9-13

9-14

9-15

9-16

9-17

9-18

9-19

9-20

9-21

9-22

9-23

9-24

INTRODUCTION

Thank you very much for purchasing

from

STYLE R-20HD SERIES.

This Instruction Manual describes daily routine maintenance & safety precautions to keep the machine in the best possible conditions.

Please study this manual very carefully before operating the machine.

1. CHANGING NEEDLE SIZE

2. ORDERING PARTS

3. PARTS LIST

4. PUSHING OILER & COVER PARTS

5. MISC. THREAD GUIDE & THREAD TENSION PARTS

6. NEEDLE LEVER, PULLEY & CRANK SHAFT PARTS

18. LOOPER DRIVE PARTS

19. FEEL LIFT & FEED DRIVING PARTS

20. NUMERICAL INDEX OF PARTS

21. SCREW, NUT & WASHER DIAGRAMS

INDEX

CONTENTS

PAGE NO.

1. DESCRIPTION.....	1
2. APPLICATION.....	1
3. SPECIFICATIONS.....	1
4. SAFETY RULES.....	1
5. MAINTENANCE.....	2
6. STARTING.....	2
7. THREADING.....	2
8. TEST OPERATION.....	3
9. ADJUSTING INSTRUCTIONS.....	3
9-1 Setting Needle.....	3
9-2 Adjusting Looper.....	3
9-3 Adjusting Spreader.....	4-5
9-4 Setting Height of Needle Bar.....	6
9-5 Adjusting Thread Retainer.....	6
9-6 Adjusting Feed Dog.....	6
9-7 Adjusting Stitch Length.....	7
9-8 Adjusting Needle Guard.....	7
9-9 Adjusting Rolling Needle Thread Guide Assembly.....	8
9-10 Mounting Presser Bar & Adjusting Pressure of Presser Foot.....	8
10. LUBRICATION.....	9
11. CHANGING NEEDLE SIZE	9
12. ORDERING PARTS.....	9
13. PARTS LIST.....	10-21
14. BUSHING, OILER & COVER PARTS.....	10-11
15. MISC. THREAD GUIDE & THREAD TENSION PARTS.....	12-13
16. NEEDLE LEVER, PULLEY & CRANK SHAFT PARTS.....	14-15
17. PRESSER FOOT LIFTER & PRESSER FOOT PARTS.....	16-17
18. LOOPER DRIVE PARTS.....	18-19
19. FEED LIFT & FEED DRIVING PARTS.....	20-21
20. NUMERICAL INDEX OF PARTS.....	22-23
21. SCREW, NUT & WASHER DIAGRAMS.....	24

1. DESCRIPTION

Single needle, plain feed, flat bed, double thread overedging (over seaming) sewing machine.

2. APPLICATION

For overedging (over seaming) of light weight to heavy weight jute or PP/PE woven cloth bags.

3. SPECIFICATIONS

Seam specification and stitch type:	Overseaming stitch
Stitch range:	7 to 15mm
Standard setting of range:	10mm
Overseam width:	10mm (15mm available with special order)

Maximum thickness of material:	16mm
Feed:	Plain feed
Needle type and size:	UO X 1970-400
Thread:	Cotton or jute
Maximum speed:	2,100 rpm
Working speed:	1,850 rpm (50 Hz);
Motor speed:	2,850 rpm (50 Hz);
Motor pulley diameter:	Ø 100mm
V-belt type and size:	FHP 2420

4. SAFETY RULES

To avoid personal injury:

- Always disconnect the machine from power before threading, oiling, adjusting or replacing parts.
- Ensure covers and guards must be in position before operating machine.
- Do not tamper with safety covers, guards etc., while machine is in operation.

5. MAINTENANCE

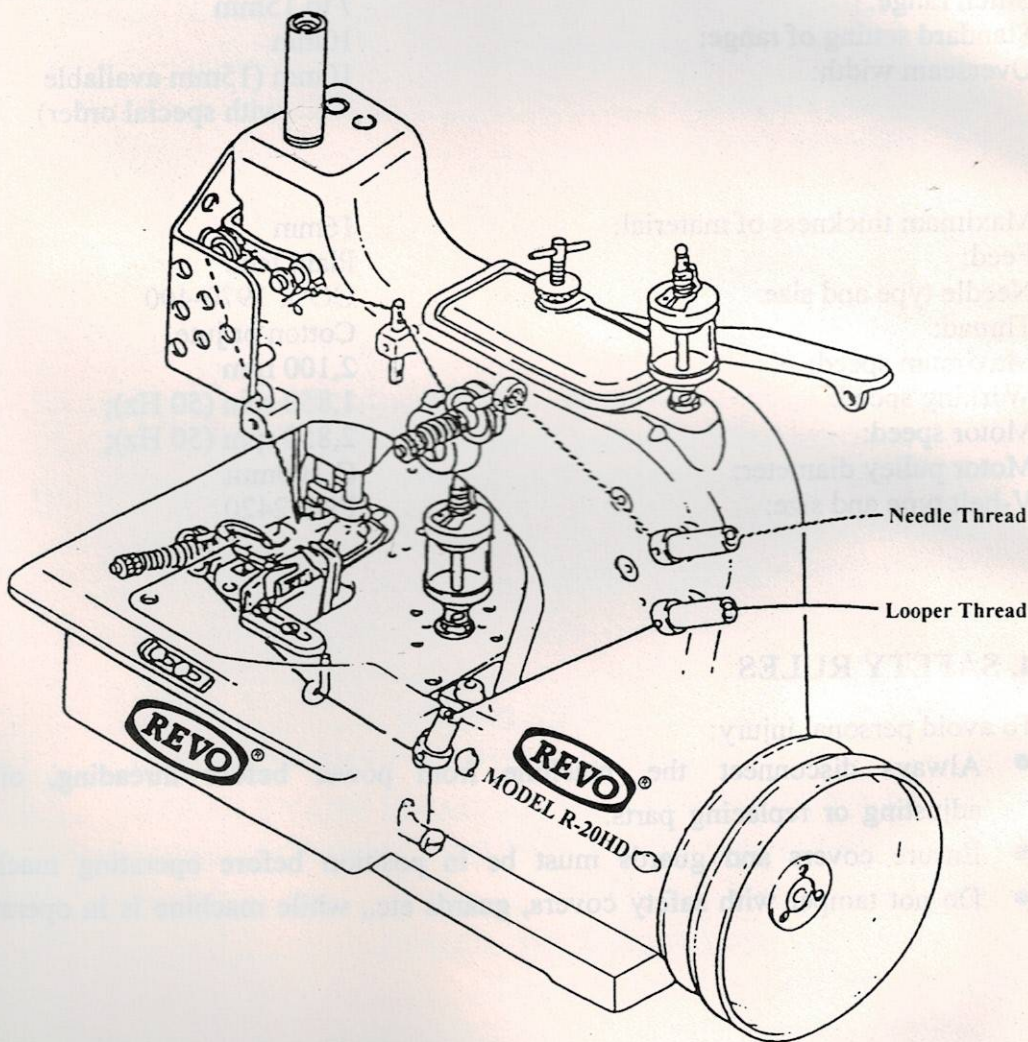
Please keep in mind to handle the machine carefully and to maintain the machine in good condition.

- 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.

6. STARTING

Before starting the machine, open the hinged front plate and remove the covers on the front and top sides. Oil the machine according to the oiling diagram. Lubricate all the eccentrics on the main shaft carefully. Fill the sight oil glasses. Turn the machine by hand and confirm the smooth run. Run the machine slowly for about 10 minutes to allow the wicks absorb oil. Fill oil in all the oil spots and run the machine at full speed. Thread the machine according to the threading diagram.

7. THREADING



8. TEST OPERATION

Start the machine and run it at high speed for a short time, to check if satisfactory chaining is obtainable with or without fabric. Regulate thread tension to obtain proper seam. Generally, there should be a tighter tension on the needle thread than on the looper thread. Should the fabric and the thread chain be damaged by the teeth of the feed dog, the teeth may be slightly blunted with an oil stone.

9. ADJUSTING INSTRUCTIONS

9-1 Setting Needle

Before adjusting the machine, insert a new needle into the needle bar as deep as it may go. Ensure the long groove of the needle should face the operator. Tighten the needle bar nut (HA56) firmly.

Note : Improper needle setting, a crooked needle and worn out needle point and hole are possible causes of thread breaking and skipping.

9-2 Adjusting Looper

For convenient access, remove the presser foot, throat plate and feed dog. Insert a looper (81208) into the looper rocker (81213). Turn the pulley clockwise, and check the distance between the needle center and the looper point in the lowest position of the needle bar just before moving upwards. The distance should be 6mm as shown in (Figure 1). If it is larger or smaller than 6mm, carry out necessary adjustments after loosening the nut (9937) which holds the looper rocker (81213) and the ball joint (15442K) in position, until the required distance is obtained. Setting the looper rocker and the ball joint in the directions S will cause the looper get nearer to the needle (S'), while setting them in the direction L will make the looper go away from the needle (L'). Never fail to tighten the nut (9937) after the adjustment.

Turn the pulley clockwise, and adjust the looper rocker so that the clearance between the looper point and the needle is 0.1mm when the looper moves to the right and passes behind the needle. For this adjustment, the looper rocker can be moved in the axial direction when the set screw (98) of the looper rocker is loosened.

Note :

- (1) If the distance between the needle center and the looper point is shorter than 6mm, "double stitching" will be caused while the thread may skip if it is larger.
- (2) If there is no clearance between the needle and the looper, with the needle contacting the looper, the former will be damaged and thread break will occur. Thread may skip if the clearance is too large.

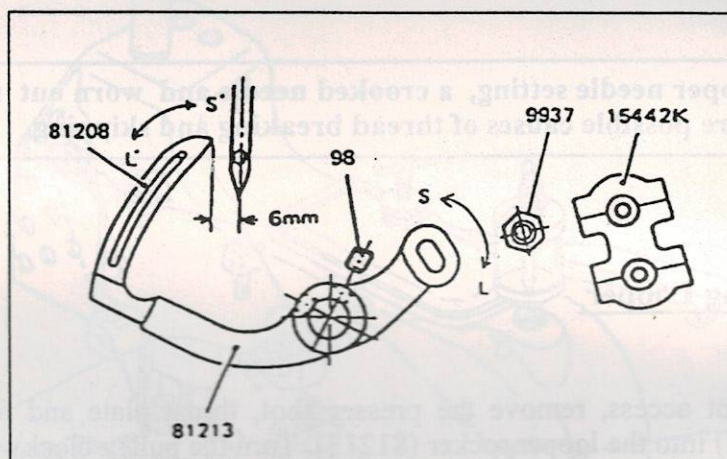


Fig. 1

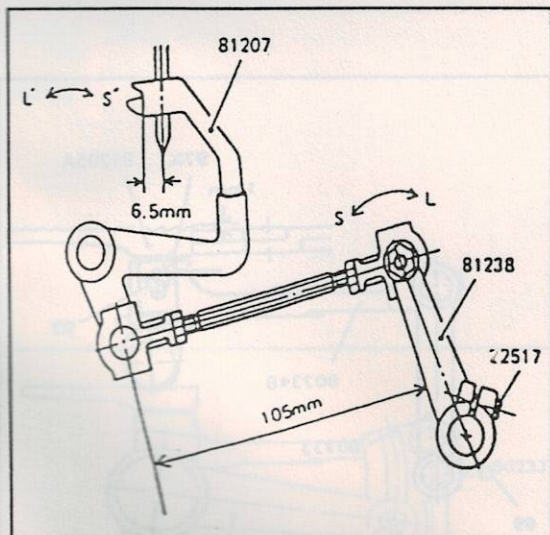
9-3 Adjusting Spreader

Turn the pulley clockwise, and check the distance between the needle center and the concave part of the spreader (81207) at the time when the spreader is at the farthest in the left. The distance must be 6.5mm as shown in (Figure2). If the distance is larger or smaller than 6.5mm, carry out necessary adjustments as follows: loosen the set screw (22517) of the spreader lever (81238), and turn the lever down (direction S'), to move the spreader to the right (direction S'), or turn it up (direction L) to move the spreader to the left (direction L'). Never fail to tighten the set screw (22517) after the adjustment. Turn the pulley clockwise further; and you will see the looper moves to the right while

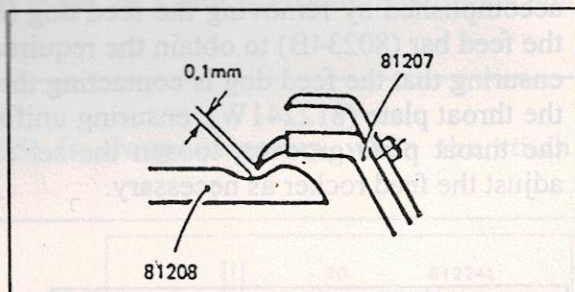
the spreader goes to the left. In this case, note that the spreader point passes the concave part of the looper (on the far side), as shown in (Figure 3). Check the clearance between the concave part of the looper and the spreader point. The clearance should be 0 to 0.1mm. If the clearance does not fall within the specified range, loosen the set screw (318) of the spreader bearing (81255), as shown in (Figure 4), and move up the spreader bearing (in the direction S) to make the clearance smaller or move it down (in the direction L) to make the clearance larger. Firmly tighten the set screw of the spreader bearing after the adjustment. Confirm that the clearance between the needle and the spreader is 0 to 0.5mm at the time when the needle is coming in between the spreader and the loop guide (81210), while turning the pulley clockwise.

(Note)

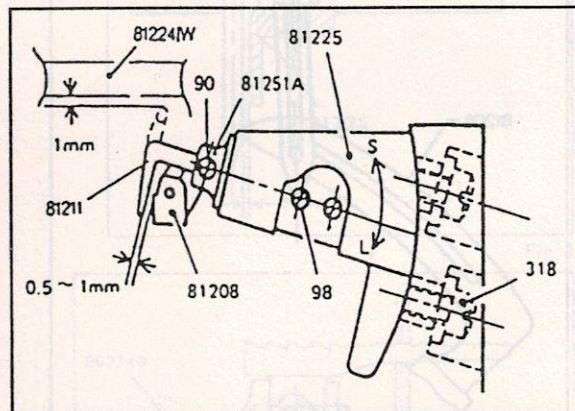
The center distance of the ball joint connecting the spreader lever (81238) and the spreader rocker (81213AW) is fixed at 105mm. Keep this dimension, otherwise timing of the looper and the spreader will get out of order.



< Fig. 2 >



< Fig. 3 >



< Fig. 4 >

9-4 Setting Height Of Needle Bar

Adjust the height of the needle bar (80617) so that the upper part of the needle hole coincides with the looper hole, as shown in (Figure 5), when the looper goes to the right and the looper hole aligns with the needle center. For this adjustment, loosen the set screw (BP108) of the needle bar holder (80659) and move the needle bar vertically. After the adjustment, always tighten the set screw.

9-5 Adjusting Thread Retainer

The thread retainer (81211) has to catch the lower thread before the looper (81208) enters the needle thread loop. It is to be adjusted so that the clearance between the thread retainer and the looper is 0.5 to 1 mm when the retainer begins its upward movement and the looper is at its farthest right position. For this adjustment, loosen the set screw (90) of the retainer move the retainer as necessary (Figure 4 refers). Loosen the set screw (98) of the spreader rocker (81213AW) and turn the spreader rocker shaft (81251A) as necessary, so that the clearance between the point of the retainer and the throat plate (812241W) is 1mm at the time when the retainer is facing upwards to its full extent.

9-6 Adjusting Feed Dog

The height of the feed dog is correct when, at its highest point of travel, the rearmost teeth project above the throat plate by 1mm as shown in (Figure 6). This can be accomplished by removing the feed dog (81205A), then adjusting the screw (97X) of the feed bar (80234B) to obtain the required height. Fasten the feed set screw (93) after ensuring that the feed dog is contacting the screw (97X). To adjust the feed dog within the throat plate (812241W), ensuring uniform clearance between the rows of teeth and the throat plate grooves, loosen the set screw (89) of the feed rocker (80233), and adjust the feed rocker as necessary.

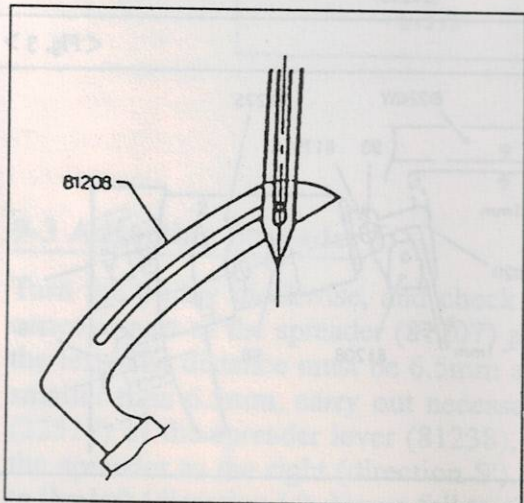


Fig. 5

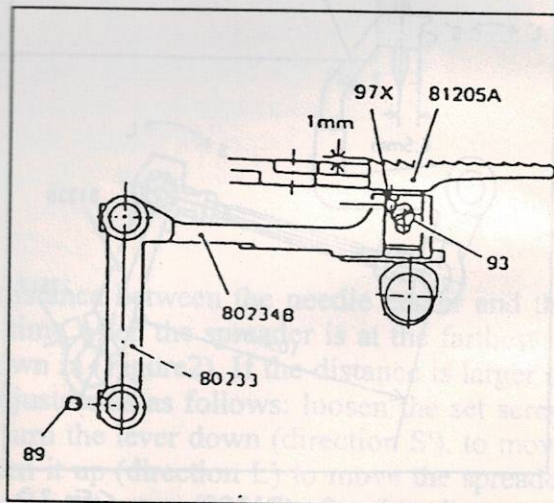


Fig. 6

9-7 Adjusting Stitch Length

The stitch length adjustable in the range of 7 to 15 mm. The machine is set at the standard stitch length of 10 mm. To adjust, loosen the nut (HA18A) of the feed regulating stud (80696) which connects the feed rocker (80233) and the feed rod (80651), and move the feed regulating stud vertically, as shown in (Figure 7). Bringing down the feed regulating stud makes the stitch longer and moving it up shorter. After the adjusting, never forget to tighten the nut.

(Note)

Any change in the stitch length will necessitate a corresponding change in the setting of the needle guard (80255).

9-8 Adjusting Needle Guard

Mount the needle guard (81255) in the groove on the throat plate (812241W), as shown in (Figure 8), and adjust its position so that the clearance between the needle and the guard is 1 mm. Hold the guard in position by means of the screw (90).

Mount another needle guard (80255) on the feed bar (80234B), as shown in (Figure 9), and adjust its position in the groove of the feed bar, so that it will just contact the needle as the needle goes up. Hold the guard in position securely by tightening the screw (93A). To confirm the proper adjustment, turn the pulley counter clockwise to check if the needle clicks on the guard. If it does, the guard is pushing the needle and readjustment is necessary.

(Note)

Readjustment of the needle guard (80255) is always necessary when the stitch length is changed.

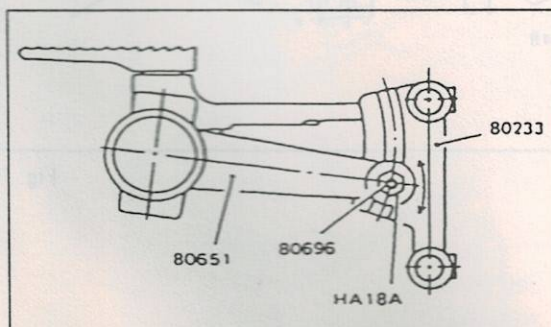


Fig. 7

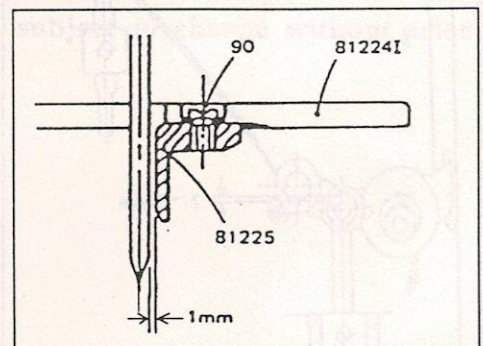


Fig. 8

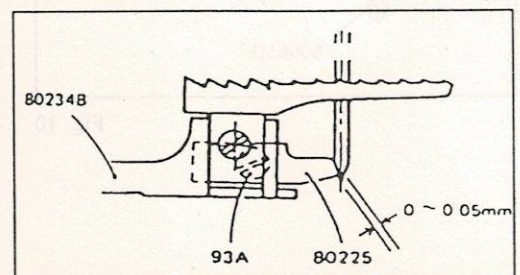


Fig. 9

9-9 Adjusting Rolling Needle Thread Guide Assembly

Adjust the rolling needle thread guide assembly (80665D) so that the needle thread is raised by 2 to 3mm, as shown in (Figure 10), when the needle is low.

9-10 Mounting Presser Bar & Adjusting Pressure of Presser Foot

The Presser bar must move freely. Remove the face cover (80887A) and determine the position of the set collar (482C), as follows :

1. Adjust and set the presser bar holder (80632) so that the clearance between the presser lifter lever (80648) and the presser lifter pin (22870) is 1mm, as shown in (Figure 11).
2. Make the clearance between the presser bar holder and the set collar "A" 1.5 mm.
3. Make the clearance between the set collars "A" and "B" 7mm.
4. Place the set collar "C" in the middle of the presser bar bushing, upper and the presser bar holder.
5. There must be a sufficient clearance between the presser foot (in the highest position) and the needle bar nut (in the lowest position). A sufficient clearance is also required between the spreader in the upward movement and the presser foot finger in the lifted position. Adjust the set collar "D" so that the spreader in its upward movement will not hit the presser foot is lifted by the lifter lever (80648).
6. Now that the position of the set collars "A" to "D" has been determined, and they are properly set, adjust the spring pressure properly by means of the presser foot plate spring adjusting screw (64Y) located on the top cover (80688). After the adjustment, firmly lock the adjusting screw using the lock nut (35733B), to prevent its loosening.

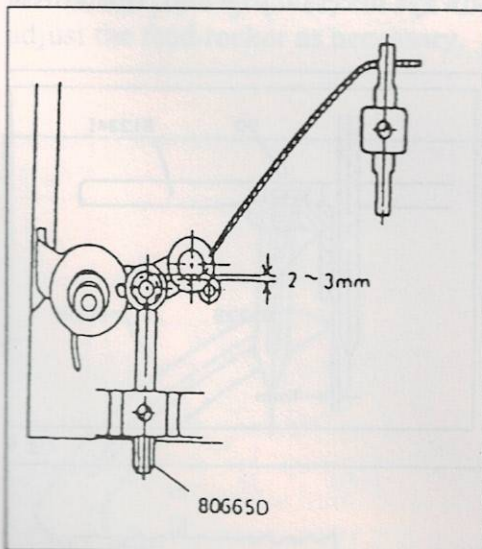


Fig. 10

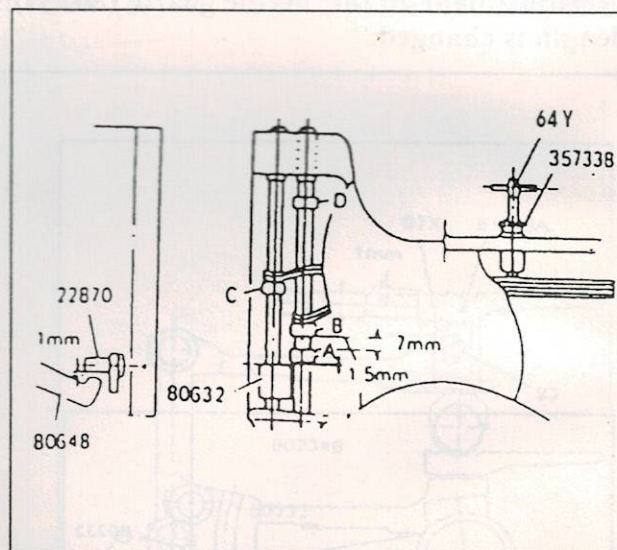


Fig. 11

10. LUBRICATION

Lubrication is performed everyday to ensure a long serving life of the machine. Each oiling part is marked with a red cap.

Before starting operation, please make sure that an oil cup is sufficiently filled with oil, and please supplement oil if it found not enough.

PLEASE OBSERVE THE OILING WITHOUT FAIL, AS AN UNSUFFICIENT OILING COULD HAVE THE MACHINE BURNT OR CAUSE OTHER TROUBLE.

For lubrication, we recommended **WHITE SPINDLE # 60** or equivalent. (Viscosity : 8-12 cst at 40°C) As an example, **SHELL TERACE OIL C10**.

11. CHANGING NEEDLE SIZE

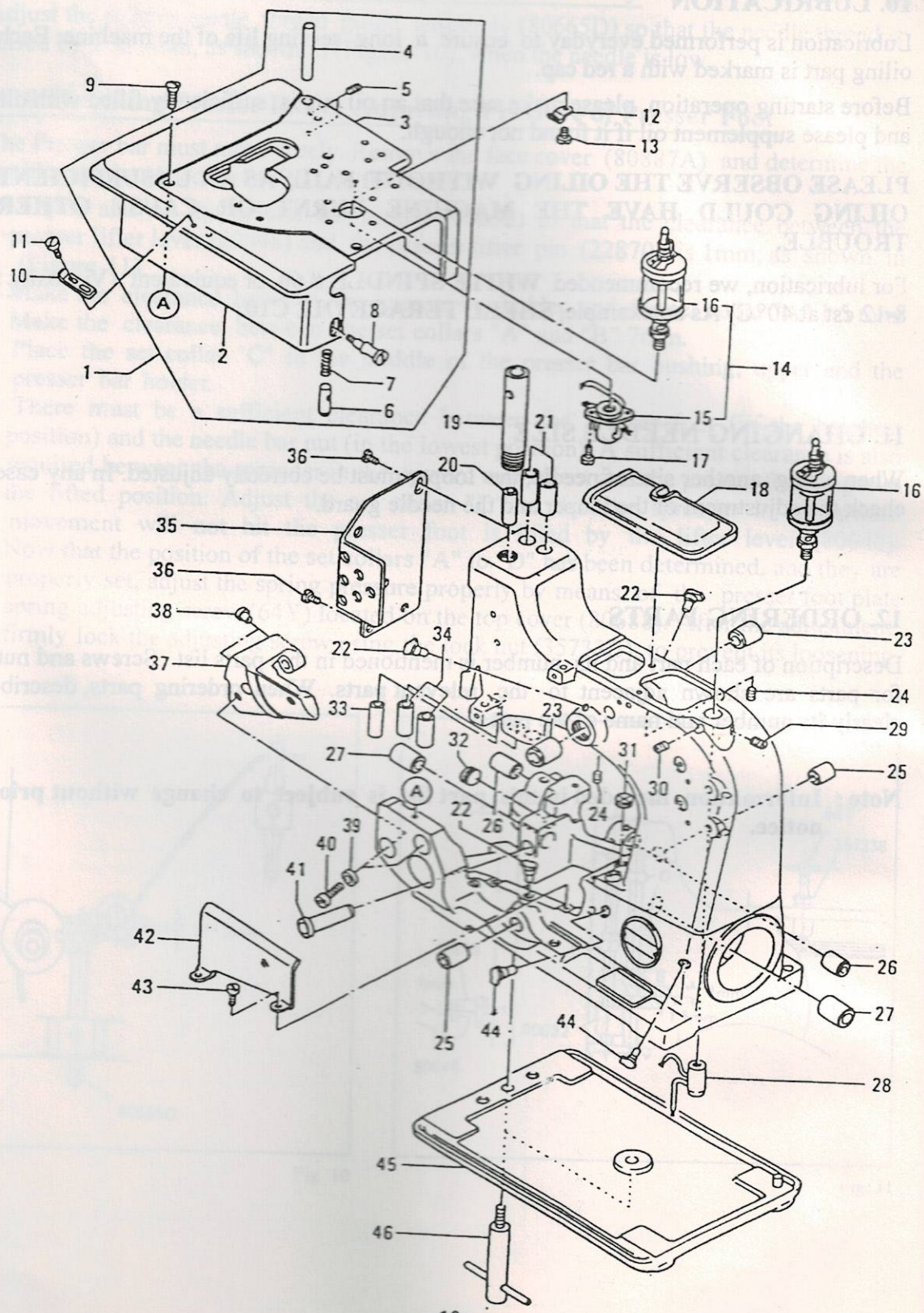
When using another size of needle, the looper must be correctly adjusted. In any case, check the adjustment of the looper and the needle guard.

12. ORDERING PARTS

Description of each part and its number is mentioned in this parts list. Screws and nuts for parts are shown adjacent to the relevant parts. When ordering parts, describe clearly its number and name of the part.

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

01 BUSHING, OILER & COVER PARTS

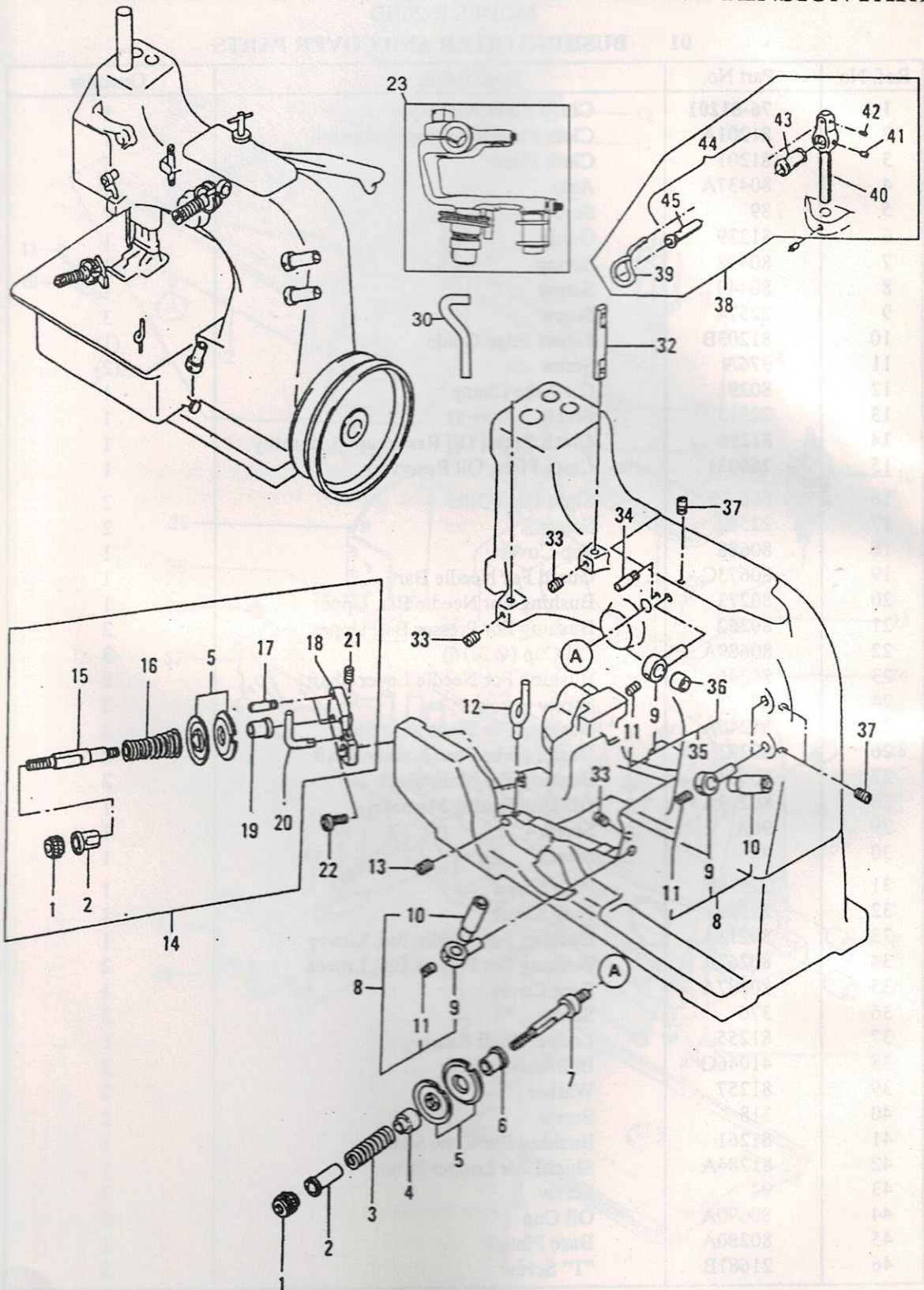


SPARE PARTS LIST FOR HERAKLE JUTE BAG SEWING MACHINE
MODEL R-20HD

01 BUSHING OILER AND COVER PARTS

Ref. No.	Part No.	Description	Quantity
1-1	76-81201	Cloth Plate Assembly	1
2	81201A	Cloth Plate Swinging Extension	1
3	81201	Cloth Plate	1
4	80437A	Axle	1
5	89	Screw	2
6	81239	Guide	1
7	80438	Spring	1
8	80440	Screw	1
9	22574	Screw	3
10	81203B	Fabric Edge Guide	(1)
11	376A	Screw	(2)
12	80291	Oil Tube Clamp	1
13	22513	Screw	1
14	81290	Cloth Plate, Oil Reservoir Assembly	1
15	765021	Cloth Plate, Oil Reservoir	1
16	666-79	Sight Feed Oiler	2
17	22562	Screw	2
18	80688	Top Cover	1
19	80673C	Guard For Needle Bar	1
20	80273	Bushing For Needle Bar, Upper	1
21	80262	Bushing For Presser Bar, Upper	2
22	80689A	Oil Cup (Ø 3/16)	3
23	80246	Bushing For Needle Lever Shaft	2
24	89	Screw	2
25	81240A	Bushing For Transverse Shaft	2
26	80292	Bushing For Feed Rocker Shaft	2
27	80694	Bushing For Main Shaft	2
28	80293A	Oil Distributing Member	1
29	96A	Screw	1
30	95	Screw	1
31	22539F	Plug Screw	1
32	22539	Plug Screw	1
33	80273A	Bushing For Needle Bar, Lower	1
34	80262A	Bushing For Presser Bar, Lower	2
35	80887A	Face Cover	1
36	376	Screw	2
37	81255	Looper Shaft Bearing	1
38	41046G	Ball Valve Oiler	2
39	81257	Washer	2
40	318	Screw	2
41	81261	Bushing For Cone Shaft	1
42	81284A	Shield For Looper Drive	1
43	94	Screw	2
44	80690A	Oil Cup	2
45	80280A	Base Plate	1
46	21681B	"T" Screw	2

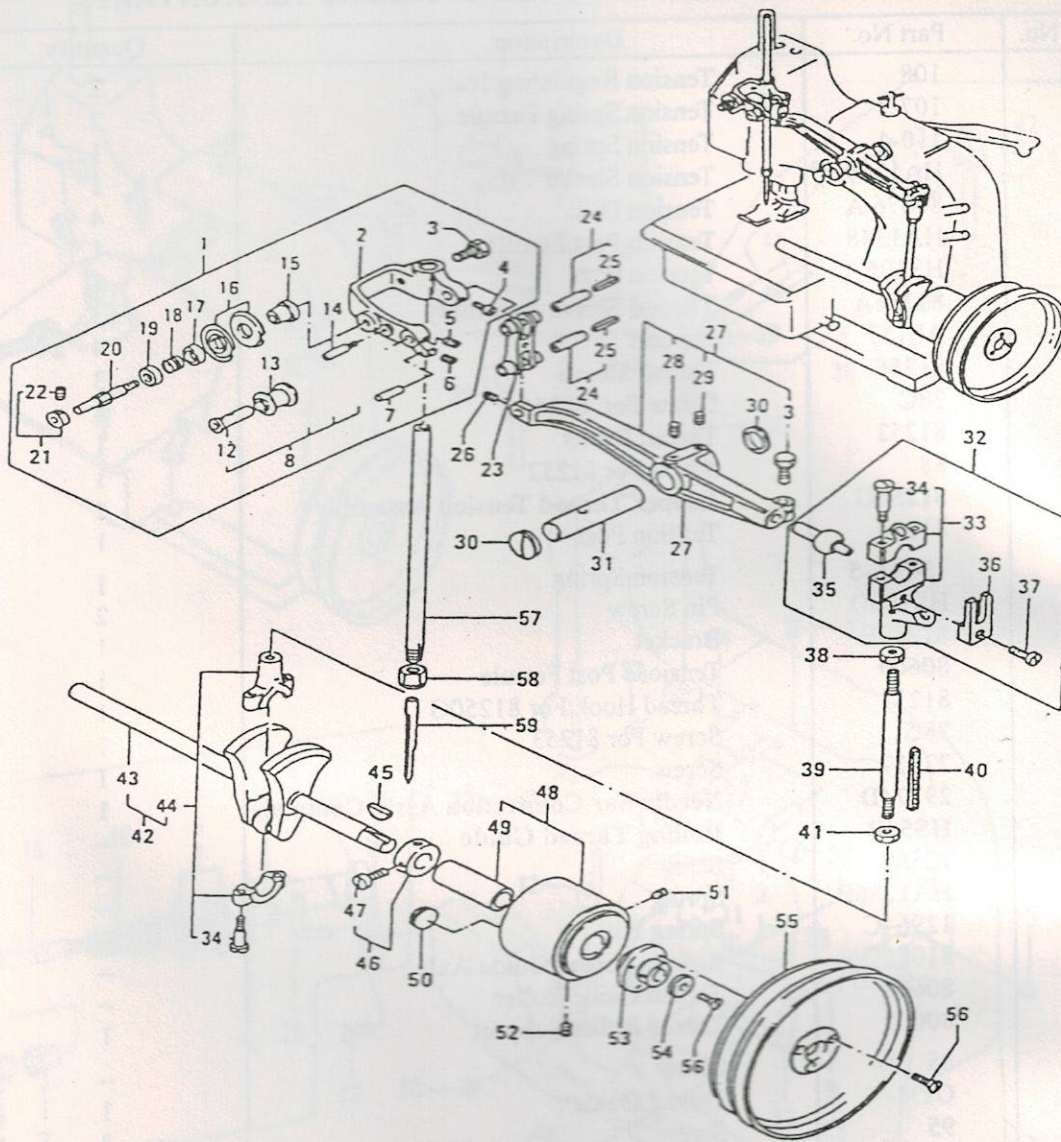
02 MISCELLANEOUS THREAD GUIDE & THREAD TENSION PARTS



02 MISCELLANEOUS THREAD GUIDE & THREAD TENSION PARTS

Ref. No.	Part No.	Description	Quantity
2-1	108	Tension Regulating Nut	2
2	107	Tension Spring Ferrule	2
3	110-4	Tension Spring	1
4	HA1349	Tension Sleeve	1
5	80676 A	Tension Disc	4
6	HA1348	Tension Post Ferrule	1
7	HS106	Tension Post	1
8	81256A	Thread Sleeve Assembly	3
9	AS137	Support	4
10	81256	Thread Sleeve	3
11	28C	Screw For 81256	4
12	81252	Thread Eyelet	1
13	88	Screw For 81252	1
14	81250G	Looper Thread Tension Assembly	1
15	81292	Tension Post	1
16	1349A-5	Tension Spring	1
17	HS100D	Pin Screw	2
18	81250E	Bracket	1
19	80669	Tensions Post Ferrule	1
20	81253	Thread Hook For 81250G	1
21	28C	Screw For 81253	1
22	22517	Screw	1
23	29774D	Needle Bar Connection Ass'y Complete	1
24	HS53B	Rolling Thread Guide	--
25	22560	Screw	--
26	HA1286B	Spring	--
27	12964C	Spring Ball	--
28	81086G	Rolling Thread Guide Axle	--
29	80668	Thread Guide Roller	--
30	80665	Thread Roller Support	1
31	88	Screw	--
32	G111	Thread Guide	1
33	95	Screw	3
34	80667	Tension Disc Stop Pin	1
35	AS137A	Thread Eyelet With Support Assembly	1
36	HA103B	Thread Eyelet	1
37	22560B	Screw	3
38	80250	Rolling Thread Guide Assembly	1
39	80250B	Rolling Thread Guide Wire	1
40	80250A	Holder	1
41	88	Screw	1
42	22743	Screw	1
43	80668	Thread Guide Roller	1
44	HS52B	Rolling Thread Guide	1
45	81086C	Rolling Thread Guide Axle	1
46	12964	Spring Ball	--
47	HA1286B	Spring	--
48	22560	Screw	--

03 NEEDLE LEVER, PULLEY & CRANK SHAFT PARTS

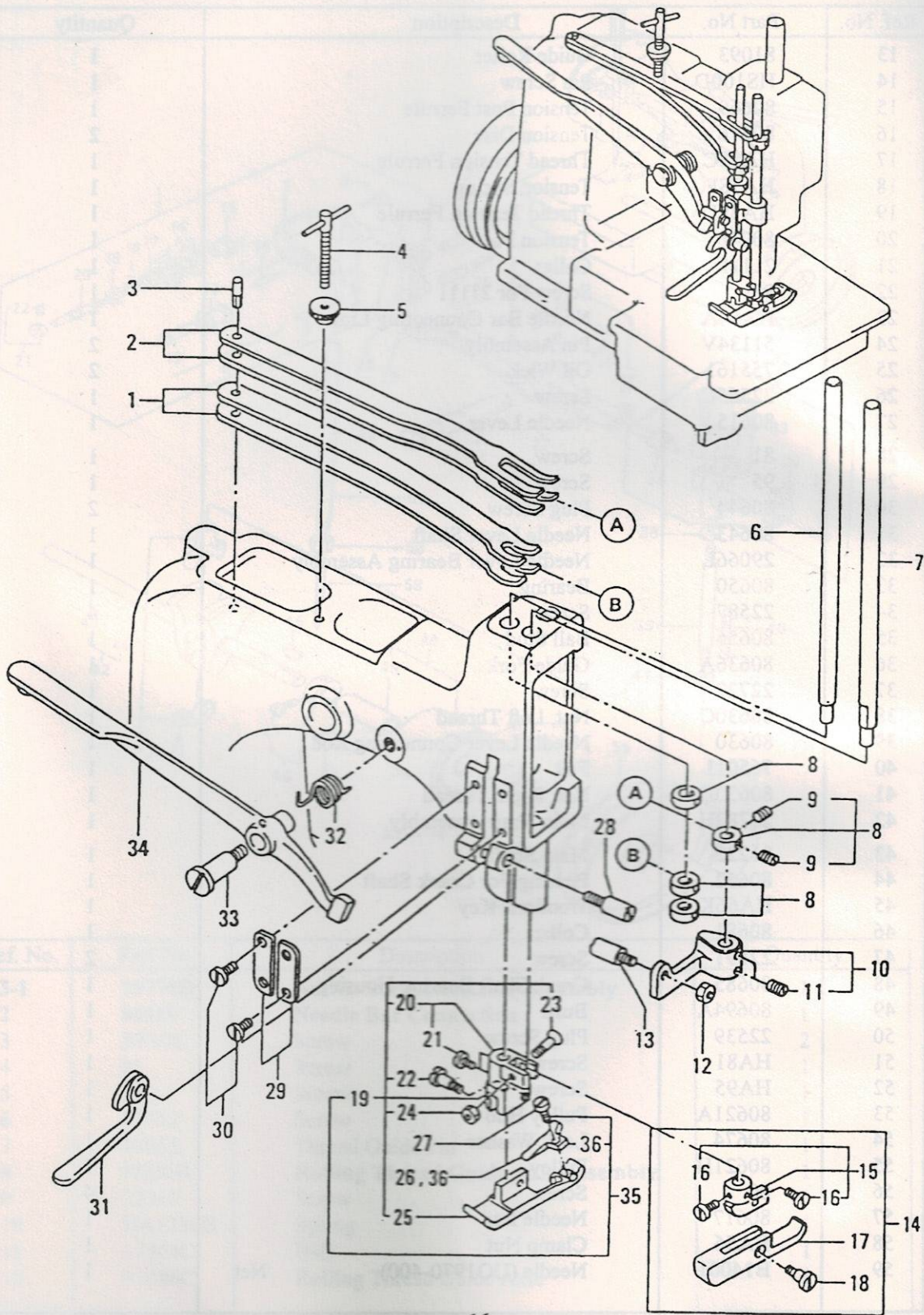


Ref. No.	Part No.	Description	Quantity
3-1	29774D	Needle Bar Connection Assembly	1
2	80659	Needle Bar Connection	1
3	BP108	Screw	2
4	91	Screw	1
5	88	Screw	1
6	22743	Screw	1
7	80655	Thread Guide Pin	1
8	HS52B	Rolling Thread Guide Axle Assembly	1
9	22560	Screw	1
10	HA1286B	Spring	1
11	12964C	Ball	1
12	81086C	Rolling Thread Guide Axle	1

03 NEEDLE LEVER, PULLEY & CRANK SHAFT PARTS

Ref. No.	Part No.	Description	Quantity
13	81093	Guide Roller	1
14	HS100D	Pin Screw	1
15	80669	Tension Post Ferrule	1
16	80676	Tension Disc	2
17	HA58C	Thread Tension Ferrule	1
18	HA58F	Tension Spring	1
19	HA58D	Thread Tension Ferrule	1
20	80046	Tension Post	1
21	21111	Collar	1
22	88	Screw For 21111	1
23	HA54A	Needle Bar Connecting Link	1
24	51134V	Pin Assembly	2
25	755161	Oil Wick	2
26	22565C	Screw	1
27	80615	Needle Lever	1
28	81	Screw	1
29	95	Screw	1
30	80644	Plug Screw	2
31	80643	Needle Lever Shaft	1
32	29066L	Needle Lever Bearing Assembly	1
33	80650	Bearing	1
34	22587	Screw	4
35	80656	Ball Stud	1
36	80636A	Guide Fork	1
37	22729	Screw	1
38	80630C	Nut, Left Thread	1
39	80630	Needle Lever Connecting Rod	1
40	765011	Felt	1
41	80630D	Nut, Right Thread	1
42	29782H	Main Shaft Assembly	1
43	81222	Main Shaft	1
44	80652	Bearing For Crank Shaft	1
45	HA66K	Woodruff Key	1
46	80681	Collar	1
47	22891	Screw	2
48	80685	Crank Shaft Bearing Housing	1
49	80694A	Bush	1
50	22539	Plug Screw	1
51	HA81	Screw	1
52	HA95	Screw	1
53	80621A	Pulley Hub	1
54	80674	Lock Washer	1
55	80621H	Pulley	1
56	80	Screw	4
57	80617	Needle Bar	1
58	HA56	Clamp Nut	1
59	B14001	Needle (UO1970-400) Net	1

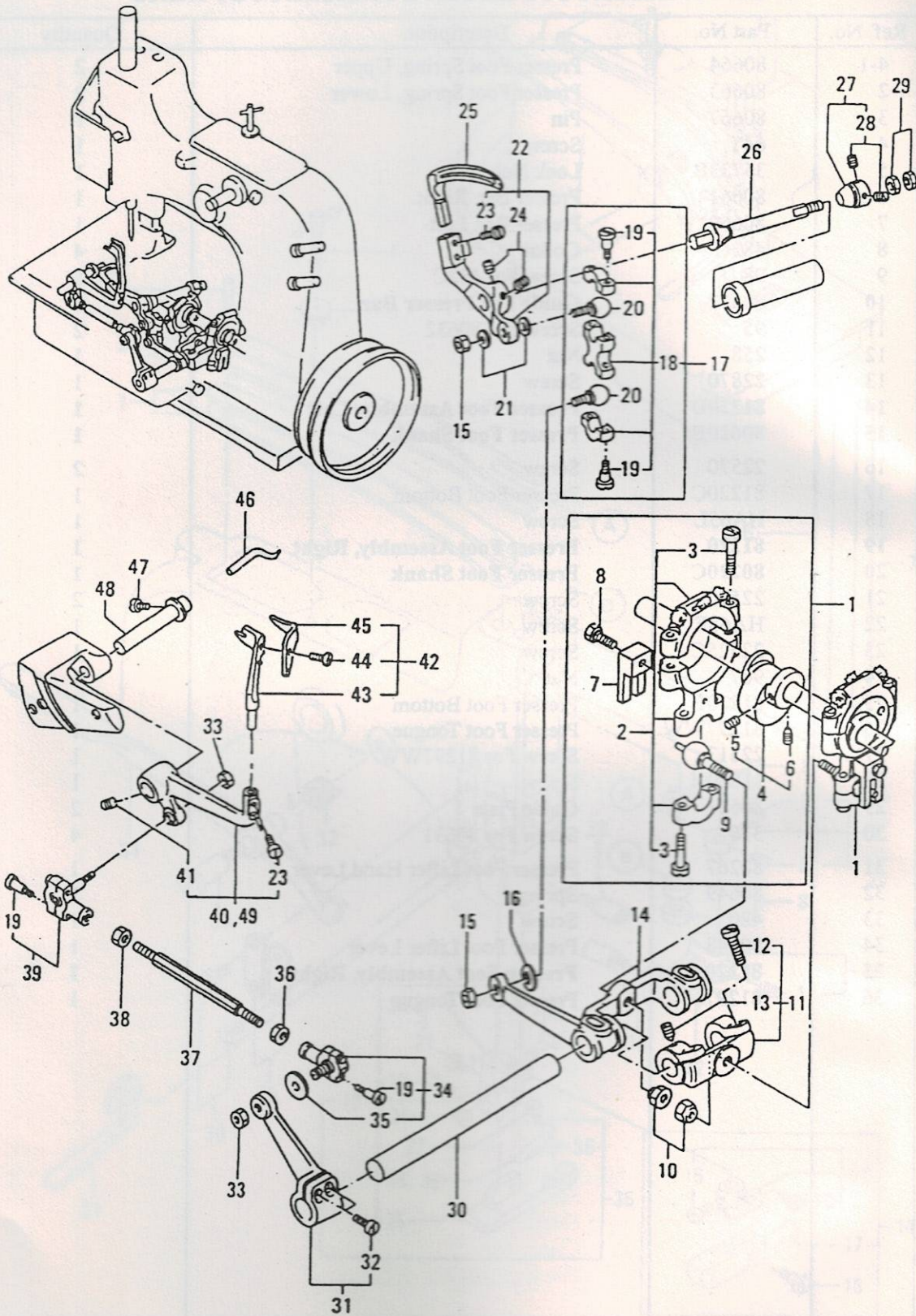
04 PRESSER FOOT LIFTER & PRESSER FOOT PARTS



04 PRESSER FOOT LIFTER & PRESSER FOOT PARTS

Ref. No.	Part No.	Description	Quantity
4-1	80664	Presser Foot Spring, Upper	2
2	80663	Presser Foot Spring, Lower	2
3	80667	Pin	1
4	64Y	Screw	1
5	35733B	Lock Nut	1
6	80661	Presser Bar, Right	1
7	80660	Presser Bar, Left	1
8	482C	Collar	4
9	98	Screw For 482C	8
10	80632	Guide For Presser Bar	1
11	95	Screw For 80632	2
12	258	Nut	1
13	22870	Screw	1
14	81220D	Presser Foot Assembly, Left	1
15	80620E	Presser Foot Shank	1
16	22570	Screw	2
17	81220C	Presser Foot Bottom	1
18	HA65L	Screw	1
19	81220	Presser Foot Assembly, Right	1
20	80220C	Presser Foot Shank	1
21	22570	Screw	2
22	HA65E	Screw	1
23	22525C	Screw	1
24	907	Nut	1
25	81220B	Presser Foot Bottom	1
26	81297WW	Presser Foot Tongue	1
27	22513	Screw For 81297WW	1
28	11639H	Screw	1
29	80631	Guide Plate	2
30	376	Screw For 80631	4
31	80267	Presser Foot Lifter Hand Lever	1
32	80649	Spring	1
33	420	Screw	1
34	80648	Presser Foot Lifter Lever	1
35	81220A	Presser Foot Assembly, Right	1
36	81297	Presser Foot Tongue	1

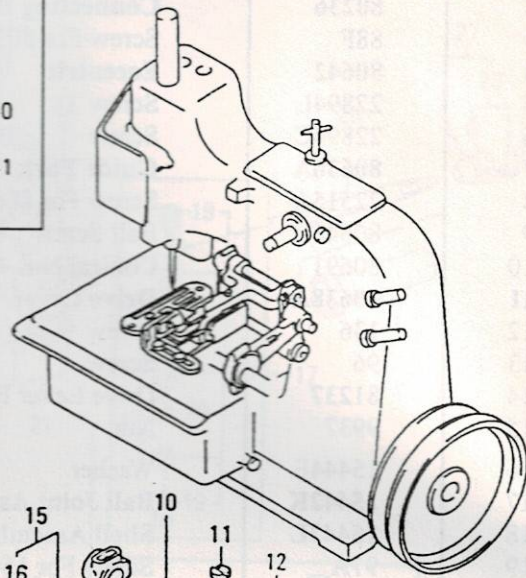
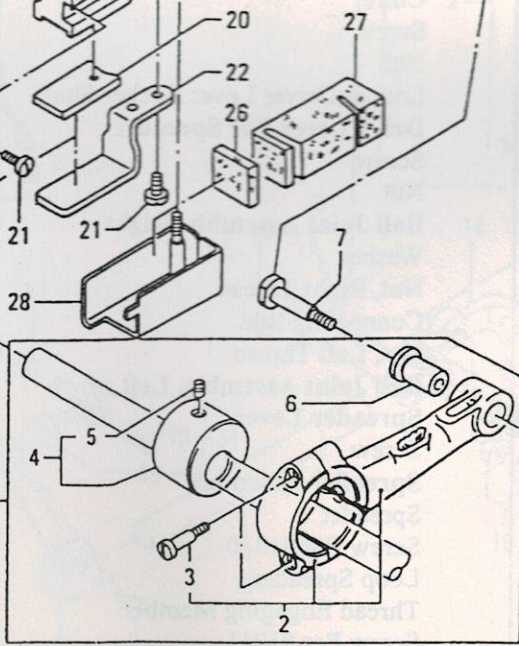
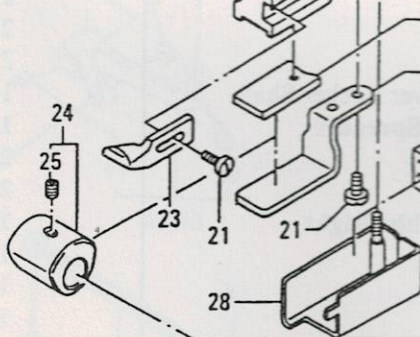
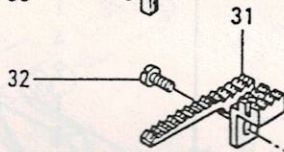
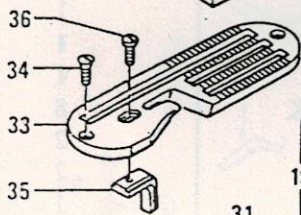
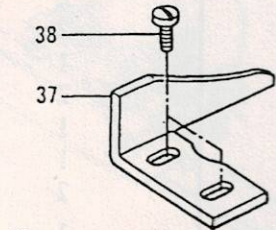
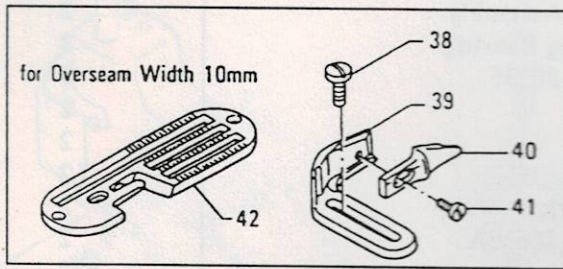
05 LOOPER DRIVE PARTS



05 LOOPER DRIVE PARTS

Ref. No.	Part No.	Description	Quantity
5-1	29442N	Eccentric Assembly	2
2	80236	Connecting Bearing	2
3	88F	Screw For 80236	8
4	80642	Eccentric	2
5	22894L	Screw	2
6	22894C	Screw	2
7	80636A	Guide Fork	2
8	22515A	Screw For 80636A	2
9	80645	Ball Screw	2
10	80691	Conical Nut	2
11	80638A	Drive Lever	1
12	136	Screw	2
13	96	Screw	1
14	81237	Drive Lever For Looper	1
15	9937	Nut	2
16	15444F	Washer	1
17	15442K	Ball Joint Assembly	1
18	15442L	Shell Assembly	1
19	97A	Screw For 15442L, 6038K, 6039K	8
20	11354	Ball Stud	2
21	69H	Washer	2
22	81213	Looper Lever	1
23	73X	Screw For 81208, 81207	4
24	95	Screw	2
25	81208	Looper, Lower	1
26	81260	Cone Stud	1
27	15465F	Cone	1
28	88	Screw	2
29	12987A	Nut	2
30	81240	Looper Driver Lever Rocker Shaft	1
31	81238	Drive Lever For Spreader	1
32	22517	Screw	2
33	18	Nut	2
34	6039K	Ball Joint Assembly, Right	1
35	HS36K	Washer	1
36	18	Nut, Right Thread	1
37	81241	Connecting Rod	1
38	269	Nut, Left Thread	1
39	6038K	Ball Joint Assembly, Left	1
40	81213AW	Spreader Lever	1
41	98	Screw	2
42	81207	Spreader Assembly	1
43	81208A	Spreader	1
44	22KH	Screw For 81210	1
45	81210	Loop Spreader	1
46	81211	Thread Engaging Member	1
47	90	Screw For 81211	1
48	81251A	Spreader Lever Shaft	1
49	81213A	Spreader Lever	1

06 FEED LIFT & FEED DRIVING PARTS



06 FEED LIFT & FEED DRIVING PARTS

Ref. No.	Part No.	Description	Quantity
6-1	29099V	Feed Drive Eccentric Assembly	1
2	80651	Feed Rocker Eccentric Connection	1
3	22587	Screw	2
4	HS15A	Feed Rocker Eccentric	1
5	81	Screw	1
6	80654	Bushing	1
7	80696	Stitch Regulating Stud	1
8	HA20A	Washer	1
9	HA18A	Nut	1
10	80233	Feed Rocker	1
11	T26	Screw	2
12	89	Screw	2
13	11	Feed Bar Shaft	1
14	8A	Feed Rocker Shaft	1
15	482C	Collar	2
16	98	Screw For 482C	4
17	80234	Feed Bar	1
18	88	Screw	2
19	97X	Screw	1
20	HA23	Feed Bar Shoe	1
21	93A	Screw	2
22	HA10	Feed Bar Prong	1
23	80225	Needle Guard	1
24	HA43X	Feed Lift Eccentric	1
25	22894D	Screw	1
26	765032	Oil Felt	1
27	HS70A	Oil Felt	1
28	AS70A	Holder For Felt	1
29	20	Washer	1
30	18	Nut	1
31	81205A	Feed Dog	1
32	93	Screw	1
33	812241W	Throat Plate	1
34	22526	Screw	2
35	81225	Needle Guard	1
36	90	Screw	1
37	81203WW	Edge Guide	1
38	22514	Screw	2
39	81203	Edge Guide	1
40	81203C	Tongue	1
41	HS24C	Screw	1
42	812241	Throat Plate	1

NUMERICAL INDEX OF PARTS

PART NO.	PAGE	PART NO.	PAGE	PART NO.	PAGE	PART NO.	PAGE
8A	21-14	22870	17-13	80648	17-34	81210	19-45
HA10	21-22	29066L	15-32	80649	17-32	81211	19-46
11	21-13	29099V	21-1	80650	15-33	81213	19-22
HS15A	21-4	29442N	19-1	80651	21-2	81213A	19-49
HA23	21-20	29774D	14-1,13-23	80652	15-44	81213AW	19-40
HA43X	21-24	29782H	15-42	80654	21-6	81220	17-19
HS52B	13-44,14-8	35733B	17-5	80655	14-7	81220A	17-35
HS53B	13-24	41046G	11-38	80656	15-35	81220B	17-25
HA54A	15-23	51134V	15-24	80659	14-2	81220C	17-17
HA56	15-58	80046	15-20	80660	17-7	81220D	17-14
HA58C	15-17	80220C	17-20	80661	17-6	81222	15-43
HA58D	15-19	80225	21-23	80663	17-2	812241	21-42
HA58F	15-18	80233	21-10	80664	17-1	812241W	21-33
64Y	17-4	80234B	21-17	80665	13-30	81225	21-35
HA66K	15-45	80236	19-2	29774D	13-23,14-1	81237	19-14
AS70A	21-28	80246	11-23	80667	13-34,17-3	81238	19-31
HS70A	21-27	80250	13-38	80668	13-29,13-43	81239	11-6
HS100D	13-17,15-14	80250A	13-40	80669	13-19,15-15	81240	19-30
HA103B	13-36	80250B	13-39	80673C	11-19	81240A	11-25
HS106	13-7	80262	11-21	80674	15-54	81241	19-37
107	13-2	80262A	11-34	80676	15-16	81250E	13-18
108	13-1	80267	17-31	80676A	13-5	81250G	13-14
110-4	13-3	80273	11-20	80681	15-46	81251A	19-48
G111	13-32	80273A	11-33	80685	15-48	81252	13-12
AS137	13-9	80280A	11-45	80688	11-18	81253	13-20
AS137A	13-35	80291	11-12	80689A	11-22	81255	11-37
420	17-33	80292	11-26	80690A	11-44	81256	13-10
482C	17-8,21-15	80293A	11-28	80694	11-27	81256A	13-8
666-79	11-16	80437A	11-4	80694A	15-49	81257	11-39
HA1286B	13-26,13-47 14-10	80438	11-7	80696	21-7	81260	19-26
HA1348	13-6	80440	11-8	80887A	11-35	81261	11-41
HA1349	13-4	80615	15-27	81086C	13-45,12-12	81284A	11-42
1349A-5	13-16	80617	15-57	81086G	13-28	81290	11-14
6038K	29-39	80620E	27-15	81093	15-13	81292	13-15
6039K	19-34	80621A	15-53	76-81201	11-1	81297	17-36
11354	19-20	80621H	15-55	81201	11-3	81297WW	17-26
11639H	17-28	80630	15-39	81201A	11-2	755161	15-25
12964C	13-27,13-46 14-11	80631	17-29	81203	21-39	765011	15-40
15442K	19-17	80632	17-10	81203B	11-10	765021	11-15
15442L	19-18	80636A	13-36,19-7	81203C	21-40	765032	21-26
15465F	19-27	80638A	19-11	81203WW	21-37		
21111	15-21	80642	19-4	81205A	21-31		
21681B	11-46	80643	15-31	81207	21-42		
22570	17-16,17-21	80644	15-30	81208	19-25		
		80645	19-9	81208A	19-43		

NUMERICAL INDEX OF PARTS

PART NO.	PAGE	PART NO.	PAGE	PART NO.	PAGE	PART NO.	PAGE
SCREW		22560	13-25,13-48 14-9	OTHER PARTS			
22KH	19-44	22560B	13-37	B14001	15-59		
HS24C	21-41	22562	11-17				
T26	21-11	22565C	15-26				
28C	13-11,13-21	22574	11-9				
HA65E	17-22	22587	15-34,21-3				
HA65L	17-18	22729	15-37				
73X	19-23	22743	13-42,14-6				
80	15-56	22891	15-47				
81	15-28,21-5	22894C	19-6				
HA81	15-51	22894D	21-25				
88	13-13,13-31 13-41,14-5 15-22,19-28 21-28	22894L	19-5				
88F	19-3						
89	11-5,11-24 21-12						
90	19-47,21-36						
91	14-4						
93	21-32	NUT					
93A	21-21	18	19-33,19-36 21-30				
94	11-43	HA18A	21-9				
95	11-30,13-33 15-29,17-11 19-24	258	17-12				
HA95	15-52	269	19-38				
96	19-13	907	17-24				
96A	11-29	9937	19-15				
97A	19-19	12987A	19-29				
97X	21-19						
98	17-9,19-41 21-16	80630C	15-38				
BP108	14-3	80630D	15-41				
136	19-12	80691	19-10				
318	11-40						
376	11-36,17-30	WASHER					
376A	11-11	20	21-29				
22513	11-13,17-27	HA20A	21-8				
22514	21-38	HS36K	19-35				
22515A	19-8						
22517	13-22,19-32	69H	19-21				
22525C	17-23	15444F	19-16				
22526	21-34	81257	11-39				
22539	11-32,15-50						
22539F	11-31						

HR-2A
 HR-4A/4B
 DR-3A

SCREW, NUT & WASHER

FULL SIZE

HR-2A

