



**JUKI**  
*Union Special*

STYLES

ILLUSTRATED PARTS LIST

FS311L41

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FS300 SERIES, DIFFERENTIAL FEED,  
HIGH SPEED FLAT BED MACHINES

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CATALOG NO.  
PT0105

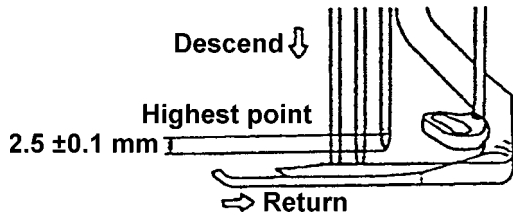
FIRST EDITION  
SUPPLEMENT TO  
PT9808

03/22/05



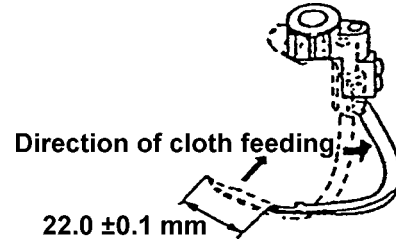
## SPREADER ADJUSTMENTS

### 1) Timing

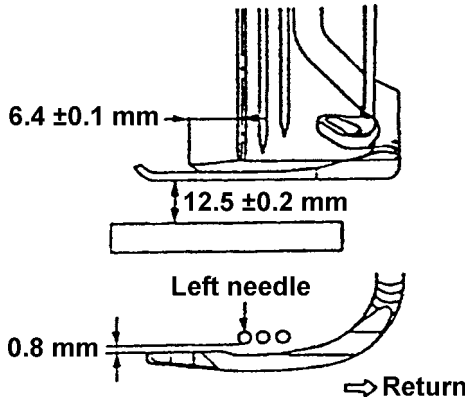


Just when the needle descends 2.5 mm from the highest point of the needle bar, the spreader begins to return from its extreme left position.

### 2) Stroke

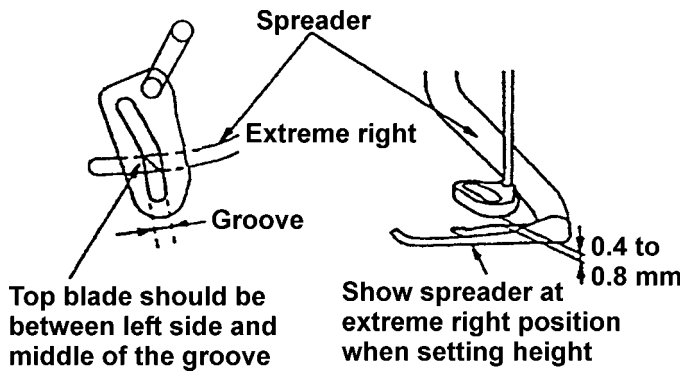


### 3) Position of spreader



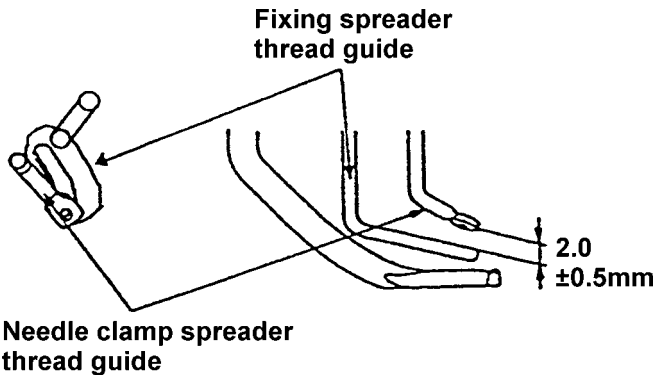
- The height is  $12.5 \pm 0.2$  mm
- When the spreader is in the extreme left position, the distance between the center of the left needle and the top blade of the spreader is  $6.4 \pm 0.1$  mm.
- When the spreader returns to the right, the clearance between the spreader and the left needle is 0.8 mm.

### 4) Fixing spreader thread guide

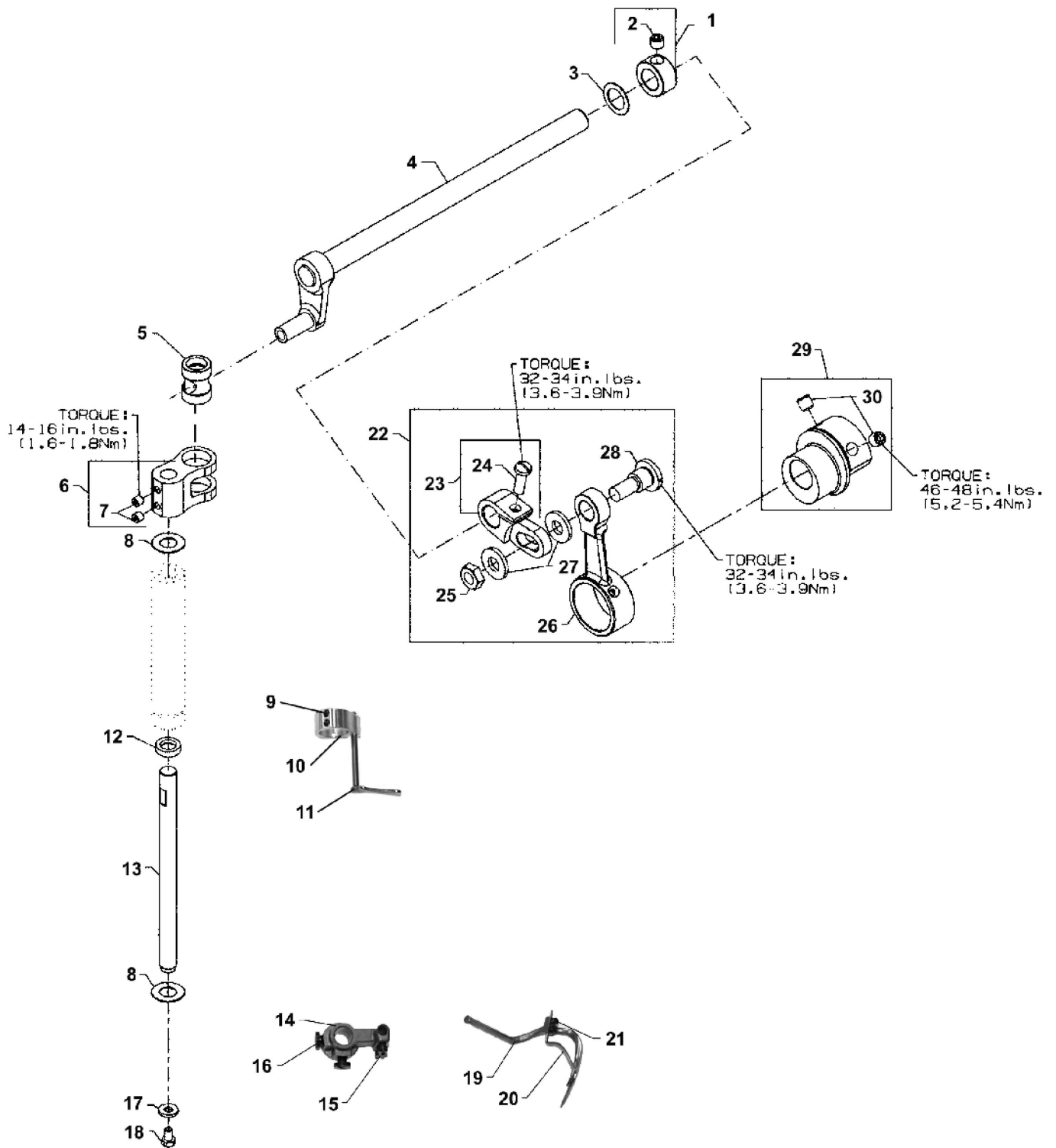


- When the spreader is in the extreme right position, the top blade of the spreader should be between the left side and middle of the spreader thread guide groove.
- The height is 0.4 to 0.8 mm from the surface of the spreader.

### 5) Needle clamp spreader thread guide



- When the needle bar is in the lowest position, the clearance between the needle clamp spreader thread guide and the upper face of the fixing spreader thread guide is  $2.0 \pm 0.5$  mm.
- The center of the hole of the thread guide aligns with the left side of the fixing spreader thread guide groove.

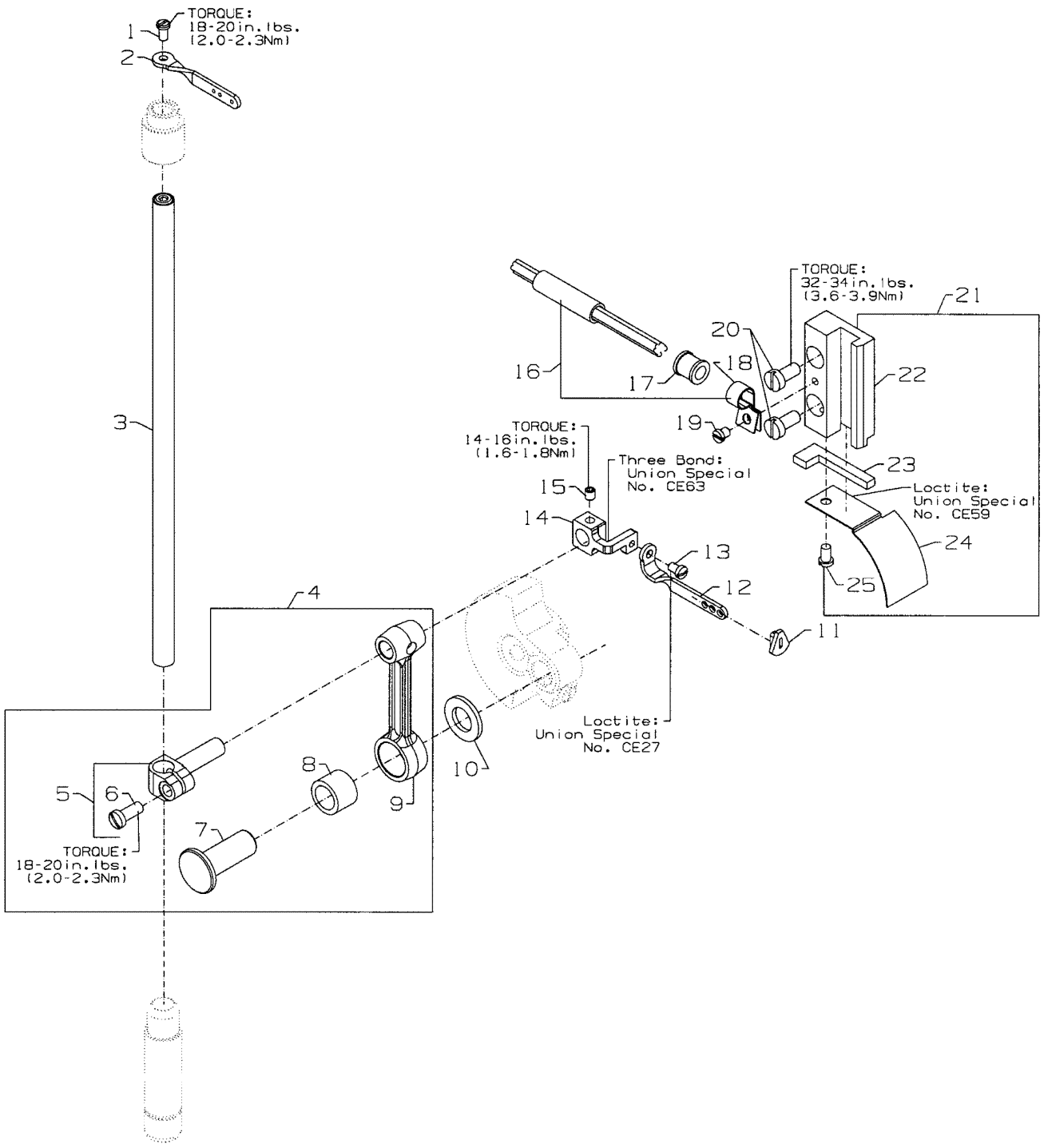


## SPREADER

Ref. No.	Part No.	Description	Amt. Req.
1.	50335AW	Collar, for spreader shaft .....	1
2.	SS8660512TP	Set Screw .....	1
3.	96162B	Washer .....	1
4.	50360B	Crankshaft, for spreader assembly .....	1
5.	50347J	Pin, for spreader rocker .....	1
6.	50347C	Lever, for spreader holder shaft .....	1
7.	SS8110422TP	Screw .....	2
8.	61351C	Washer .....	2
9.	SS8080310TP	Screw .....	3
10.	K74382	Collar .....	1
11.	57845E	Spreader Thread Guide .....	1
12.	660-739	Oil Seal .....	1
13.	50347G	Shaft, for spreader, vertical .....	1
14.	57845G	Spreader Holder .....	1
15.	77	Screw .....	2
16.	94	Screw .....	2
17.	53678N	Washer .....	1
18.	SS9090640SP	Hex Screw, for vertical shaft .....	1
19.	K74383	Spreader .....	1
20.	57845F	Auxiliary Spreader .....	1
21.	22738B	Screw .....	2
22.	29126FW	Spreader Crank Rod Assembly .....	1
23.	50360G	Spreader Shaft Driving Arm .....	1
24.	SS7121410TP	Screw .....	1
25.	NS6680410SP	Hex Nut, for spreader drive .....	1
26.	50360F	Connecting Rod, for spreader drive .....	1
27.	WP0742016SP	Collar, for spreader driving arm .....	2
28.	SD1000801SH	Stud .....	1
29.	50360	Eccentric, for spreader drive .....	1
30.	SS8660612TP	Screw .....	2

**\*NOTE: SOME "K" PARTS SHOWN ARE NOT PICTORIALY CORRECT**



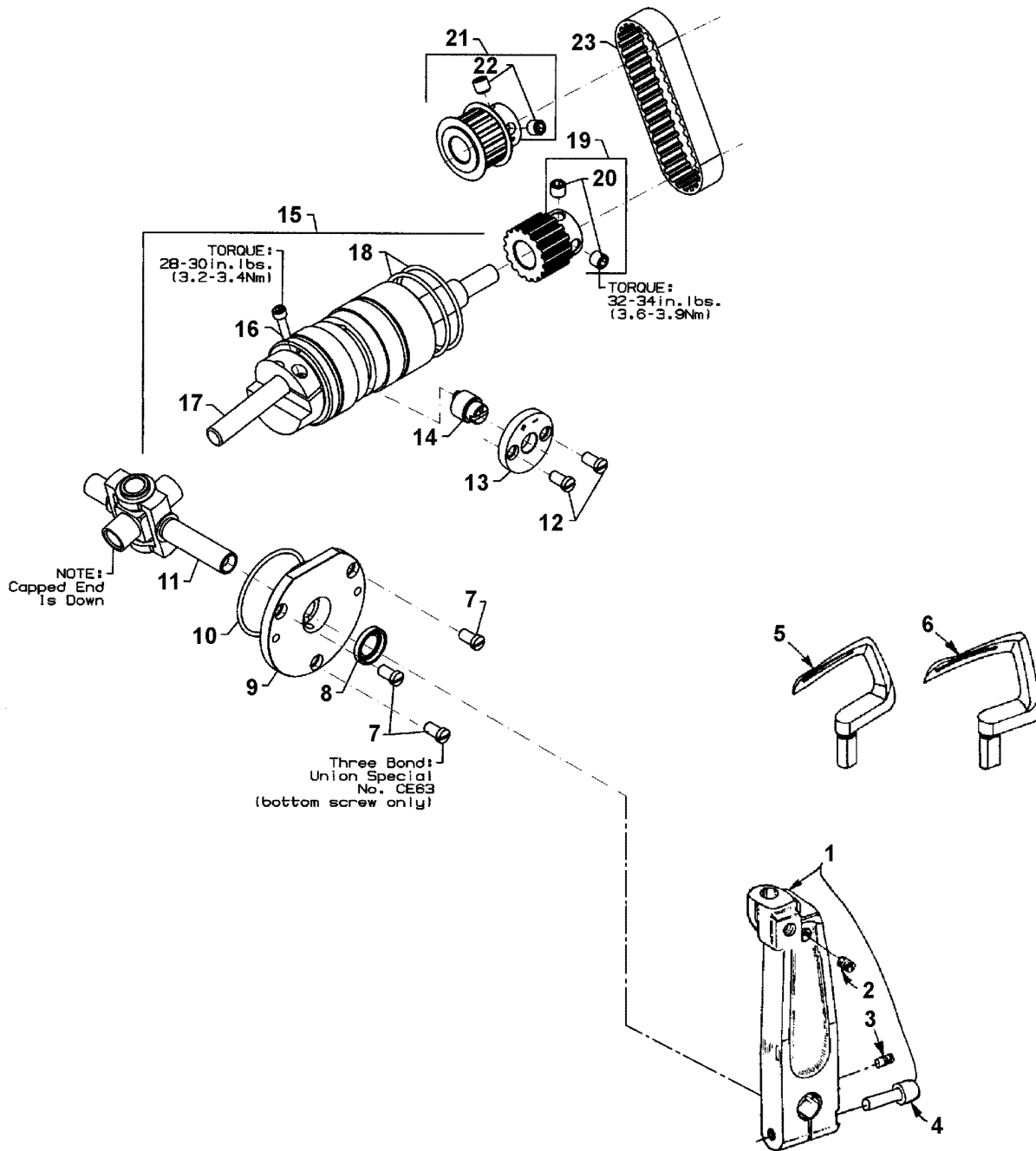


## NEEDLE BAR

Ref. No.	Part No.	Description	Amt. Req.
1.	SS4080620TP	Screw .....	1
2.	50323P	Needle Bar Eyelet .....	1
3.	K74313	Needle Bar .....	1
4.	50645A	Connecting Rod Assembly .....	1
5.	50355AM	Needle Bar Clamp .....	1
6.	SS7111120TP	Screw .....	1
7.	50352	Pivot Pin .....	1
8.	661-259B	Needle Bearing Cage .....	1
9.	50645	Connecting Rod .....	1
10.	50351A	Washer .....	1
11.	50393JP	Eyelet Seal .....	1
12.	50358X	Needle Thread Eyelet .....	1
13.	SS7080520SP	Screw .....	1
-	CE27	Loctite Adhesive, (not shown), for screw .....	-
14.	50354F	Slide Block .....	1
-	CE63	Three Bond Adhesive, (not shown), for slide block .....	-
15.	SS8110422TP	Screw .....	1
16.	29476TC	Oil Tube Assembly .....	1
17.	50393JZ	Oil Tube .....	1
18.	50393JW	Hose Clamp .....	1
19.	SS6090440SP	Screw, for oil tube assembly .....	1
20.	SS6121010SP	Screw .....	2
21.	29476VN	Slide Block Guide and Cover Assembly .....	1
22.	50338	Guide, for slide block .....	1
23.	666-328	Felt, for slide block .....	1
-	CE59	Loctite Adhesive, (not shown), for felt .....	-
24.	50338A	Cover, for guide .....	1
25.	SS6090620SP	Screw .....	1

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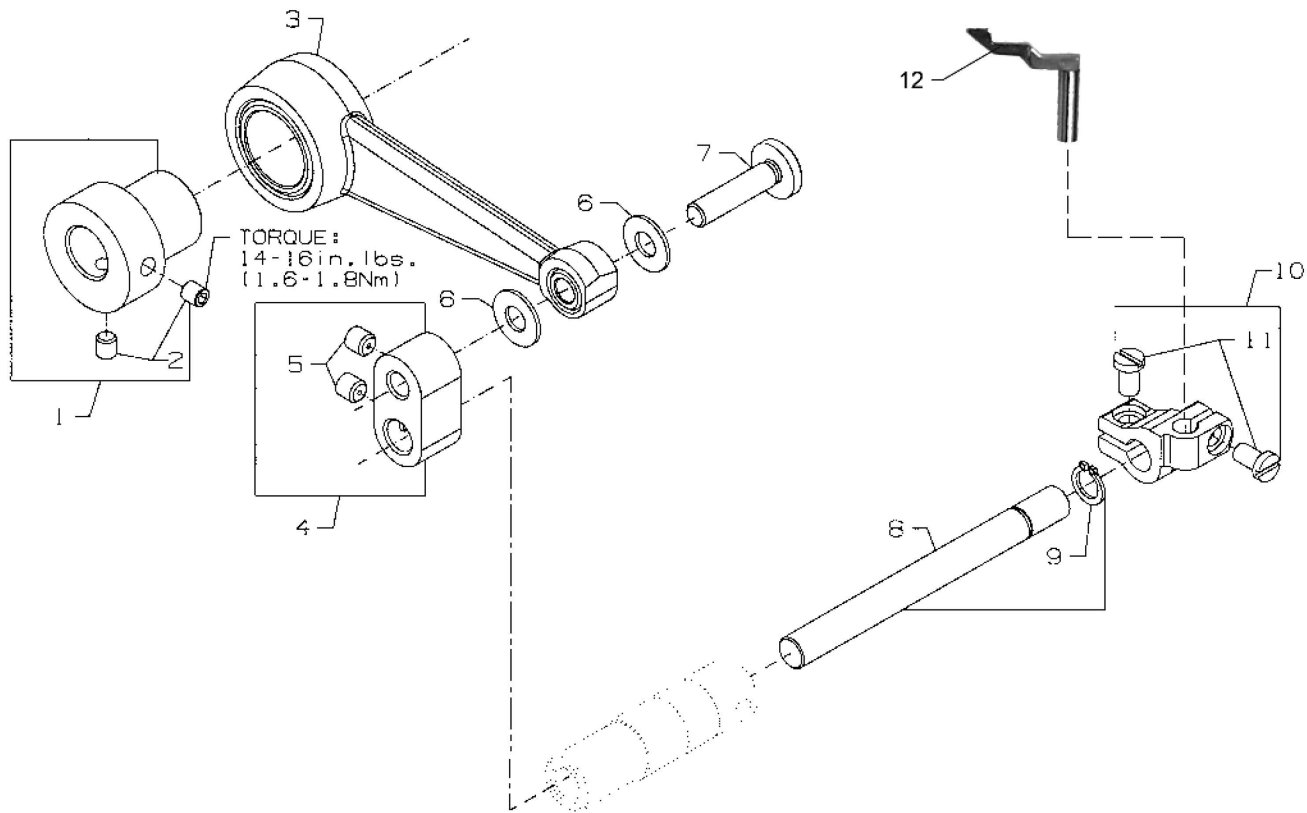


## LOOPER DRIVE

Ref. No.	Part No.	Description	Amt. Req.
1.	50313F	Looper Holder .....	1
2.	22565X	Screw, for looper holder .....	1
3.	22575B	Screw, for looper holder .....	2
4.	22652B10	Screw, for looper holder .....	1
5.	50309H	Looper, Rear .....	1
6.	51508BV16	Looper, Front .....	1
7.	SS7120910SP	Screw, for bearing housing .....	3
-	CE63	Three Bond Adhesive, (not shown), for screw .....	-
8.	660-893	Oil Seal, looper .....	1
9.	50344AM	Bearing Housing Assembly, for looper drive .....	1
10.	660-455	"O" Ring, for bearing housing assembly .....	1
11.	50313J	Looper Rocker Assembly .....	1
12.	SS7120910SP	Screw, for retaining plate .....	2
13.	50314F	Eccentric Retaining Plate .....	1
14.	50314E	Looper Avoid Adjusting Eccentric .....	1
15.	50642	Looper Drive Assembly .....	1
16.	22653J8	Screw .....	1
17.	667J33	Crank Pin .....	1
18.	660-979	"O" Ring .....	2
19.	50342BJ	Sprocket, for looper driven .....	1
20.	SS8660612TP	Screw .....	2
21.	50342BK	Sprocket, for looper drive .....	1
22.	SS8660612TP	Screw .....	2
23.	50324BP	Looper Drive Belt .....	1

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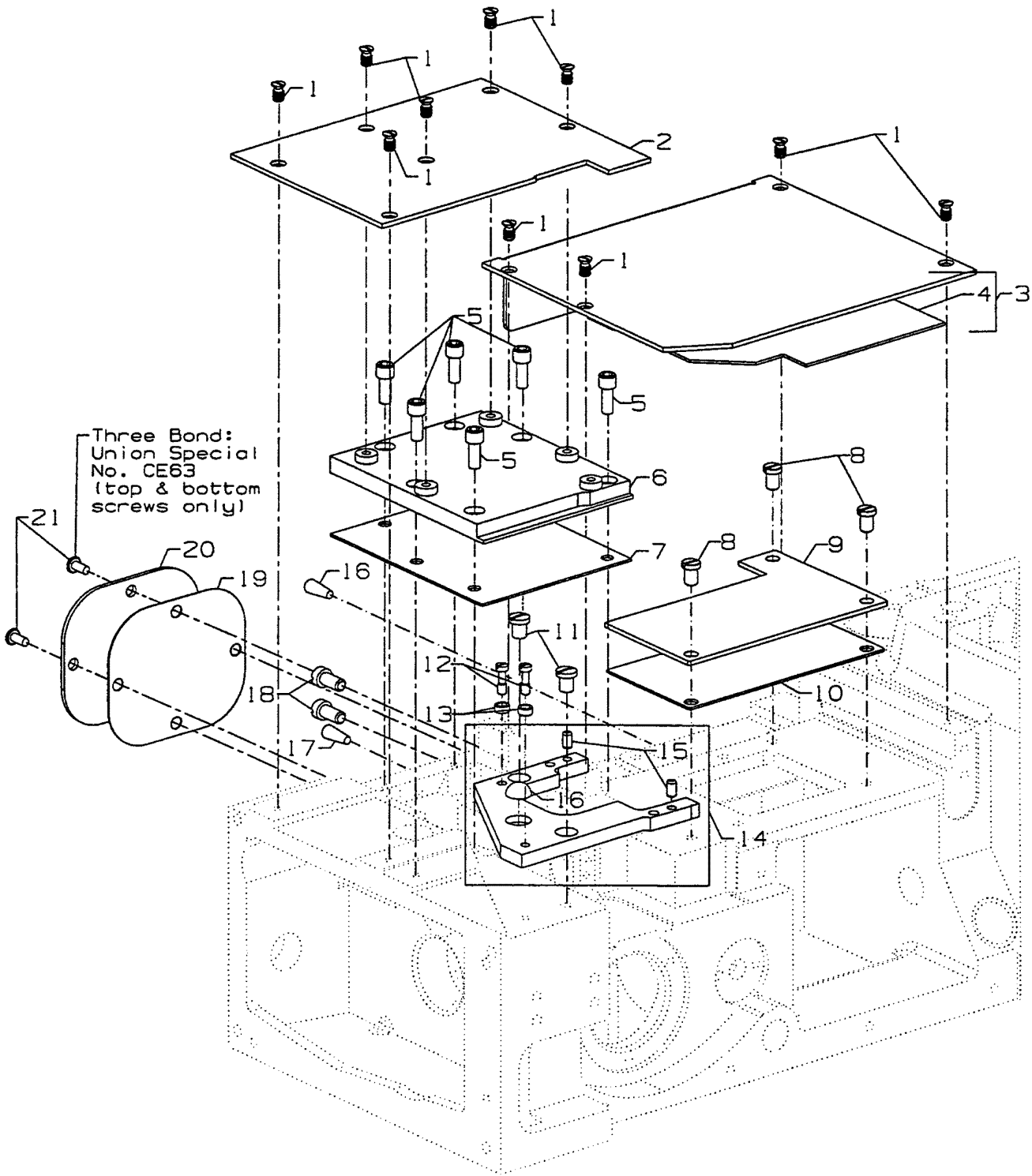


## NEEDLE GUARD

Ref. No.	Part No.	Description	Amt. Req.
1.	50373DA	Needle Guard Eccentric .....	1
2.	SS8110422TP	Screw, for needle guard eccentric .....	1
3.	50368W	Connecting Rod Assembly, for needle guard .....	2
4.	50668	Pivot Link .....	1
5.	SS8110422TP	Screw .....	1
6.	50368E	Washer .....	2
7.	50368A	Pivot Pin .....	2
8.	50622C	Shaft, for needle guard .....	1
9.	RC0560711KP	Retaining Ring .....	1
10.	50625	Holder, for needle guard .....	1
11.	SS6090620SP	Screw .....	2
12.	50325L	Needle Guard, Rear .....	1

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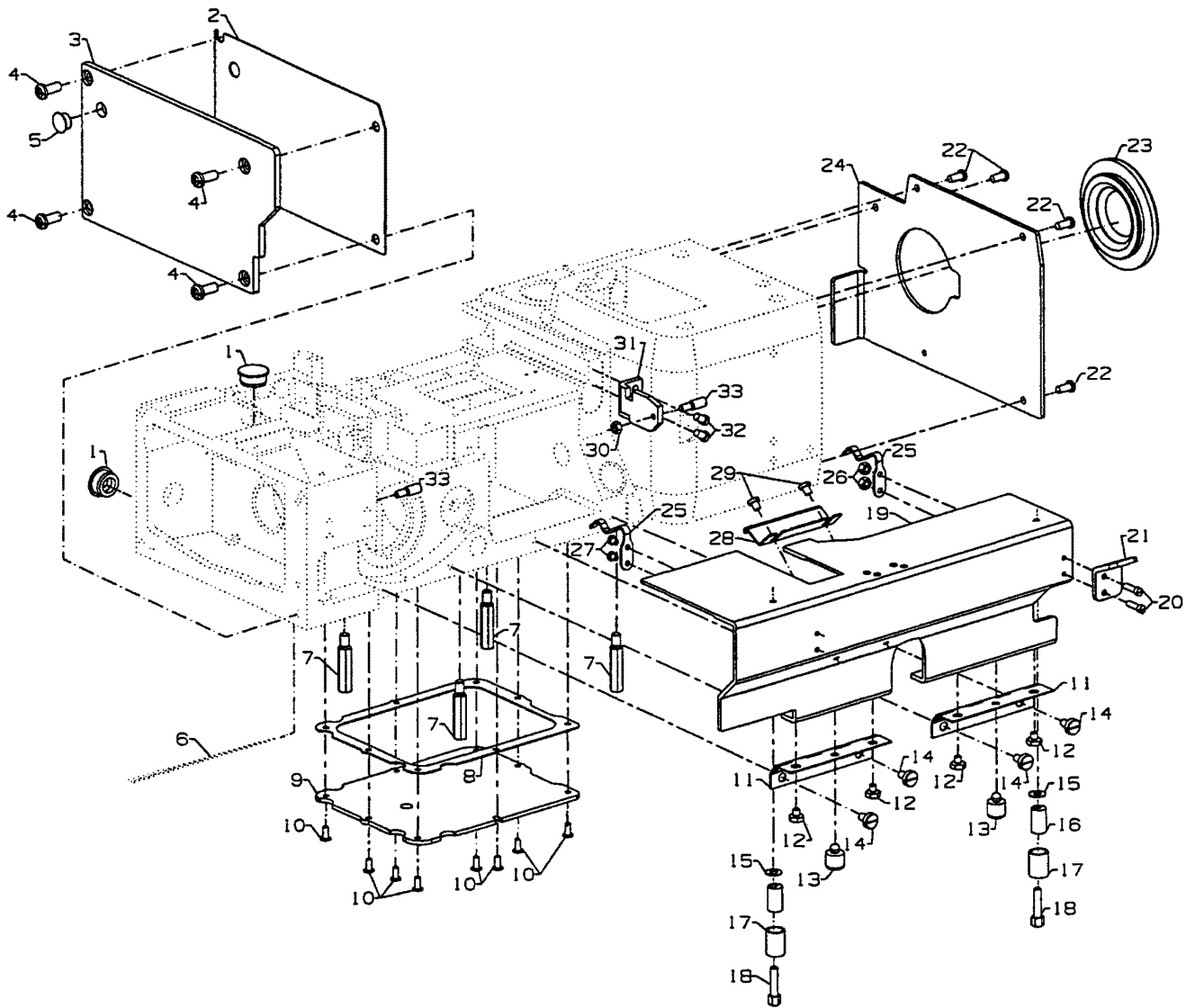


## COVERS, LOWER BED

Ref. No.	Part No.	Description	Amt. Req.
1.	18-1448	Screw .....	11
2.	K74380	Cloth Plate, left .....	1
3.	50601E	Cloth Plate, right .....	1
4.	50303B	Acoustic Pad .....	1
5.	SS6121212TP	Screw, for cover .....	6
6.	50382CL	Cover, for feed chamber .....	1
7.	50382CS	Gasket .....	1
8.	22839C	Screw, for cover .....	3
9.	50382CG	Cover, for dry chamber .....	1
10.	50382CR	Gasket, for dry chamber cover .....	1
11.	SS7150740SP	Screw .....	2
12.	22587N	Screw .....	2
13.	35036AE	Ferrule, Locating .....	2
14.	K74391	Throat Plate Support, complete .....	1
15.	51280K	Pin .....	1
16.	660-939	Rubber Bumper, for Throat Plate Support .....	1
17.	C067D	Cork .....	2
18.	22517	Screw, for bed .....	2
19.	50382CR	Gasket .....	1
20.	50382CL	Cover, rear, for feed chamber, .....	1
21.	SS4120615SP	Screw, for cover .....	2
-	CE63	Three Bond Adhesive, (not shown), for screw .....	-

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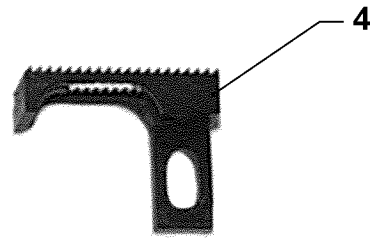
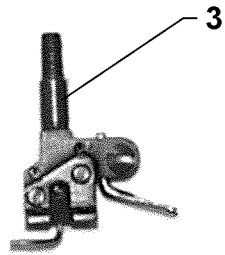
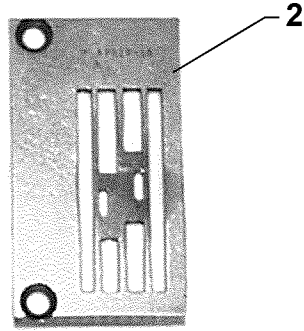
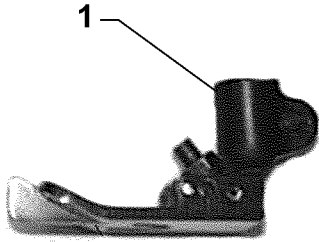


## COVERS, LOWER BED

Ref. No.	Part No.	Description	Amt. Req.
1.	50393HB	Plug, for bed .....	2
2.	50684A	Quad Ring, for left end cover .....	1
3.	50682B	Left End Cover .....	1
4.	SS4151415SP	Screw .....	4
5.	50393HA	Plug .....	1
6.	WO3	Oil Wick, for needle guard .....	1
7.	22841U	Machine Support Stud .....	4
8.	50383G	Gasket, for chamber cover .....	1
9.	50382CG	Dry Chamber Cover .....	1
10.	SS7090850SP	Screw .....	8
11.	50378S	Hinge .....	2
12.	SS9110543CP	Screw .....	4
13.	660-1020	Rubber Bumper .....	2
14.	SS6120930TP	Screw .....	4
15.	20	Washer .....	2
16.	50382T	Stop, for front cover .....	2
17.	50393W	Rubber Bumper .....	2
18.	22519J	Screw .....	2
19.	K74379	Swing Down Cover .....	1
20.	22729D	Screw .....	2
21.	50667	Lever .....	1
22.	SS4121015SP	Screw .....	4
23.	50393HU	Plug, right end, non-synchronizer .....	1
24.	50382CJ	Cover, for drive belt .....	1
25.	50332A	Latch Spring .....	2
26.	39250J	Nut .....	2
27.	22513D	Screw .....	2
28.	50382FP	Latch, looper throw-out safety .....	1
29.	25CC	Screw .....	2
30.	35569J	Nut .....	1
31.	50332B	Support Block .....	1
32.	SS7120710SP	Screw .....	2
33.	22799AH	Spring Latch Stud .....	2

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MODEL	NEEDLE HEAD	PRESSER FOOT ASSEMBLY	THROAT PLATE	FEED DOG
FS311L41-2H64Z4	K74395	50620PF64	A9820-16	51405AD12
FS311L41-2H64CC1Z3				



## SEWING PARTS

Ref. No.	Part No.	Description	Amt. Req.
1.	50620PF64	Presser Foot .....	1
-	SS6060440TP	Screw .....	1
-	50630PF	Presser Foot Shank .....	1
-	91	Screw .....	1
-	51430F	Nut .....	1
-	22840A	Screw .....	1
-	50630PF64	Presser Foot Bottom .....	1
-	50630PF1	Guide .....	1
-	51430F	Nut .....	1
-	96651	Roll Pin .....	1
-	61330B44	Presser Foot Hinge Pin .....	1
2.	A9820-16	Throat Plate .....	1
3.	K74395	Needle Head .....	1
-	22KH	Screw .....	1
-	K74314	Thread Eyelet .....	1
-	28C	Set Screw .....	2
-	1096	Set Screw .....	1
-	50342Z	Needle Thread Guide .....	1
-	660-219AH	Roll Pin .....	2
4.	51405AD12	Feed Dog .....	1

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## NOTES

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