



JUKI
Union Special

STYLES

ILLUSTRATED PARTS LIST

FS311L41

FS300 SERIES, DIFFERENTIAL FEED,
HIGH SPEED FLAT BED MACHINES

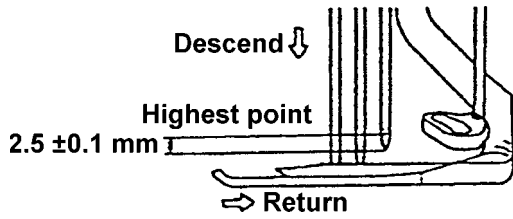
CATALOG NO.
PT0105

FIRST EDITION
SUPPLEMENT TO
PT9808

03/22/05

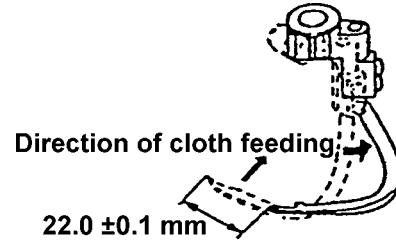
SPREADER ADJUSTMENTS

1) Timing

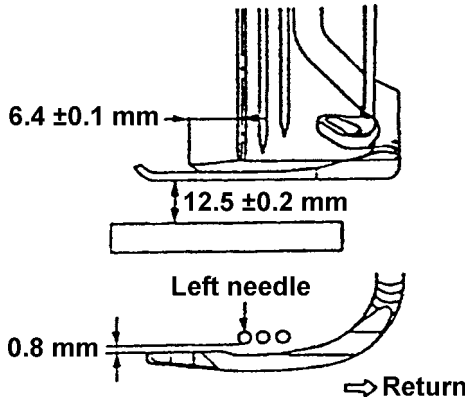


Just when the needle descends 2.5 mm from the highest point of the needle bar, the spreader begins to return from its extreme left position.

2) Stroke

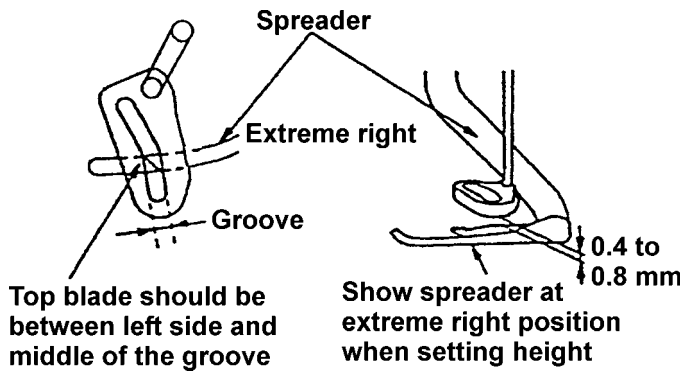


3) Position of spreader



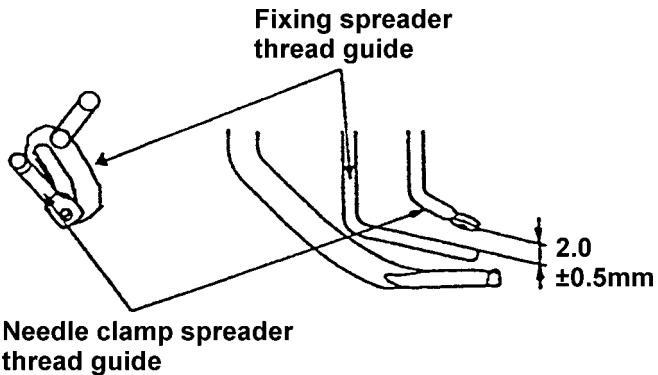
- The height is 12.5 ± 0.2 mm
- When the spreader is in the extreme left position, the distance between the center of the left needle and the top blade of the spreader is 6.4 ± 0.1 mm.
- When the spreader returns to the right, the clearance between the spreader and the left needle is 0.8 mm.

4) Fixing spreader thread guide

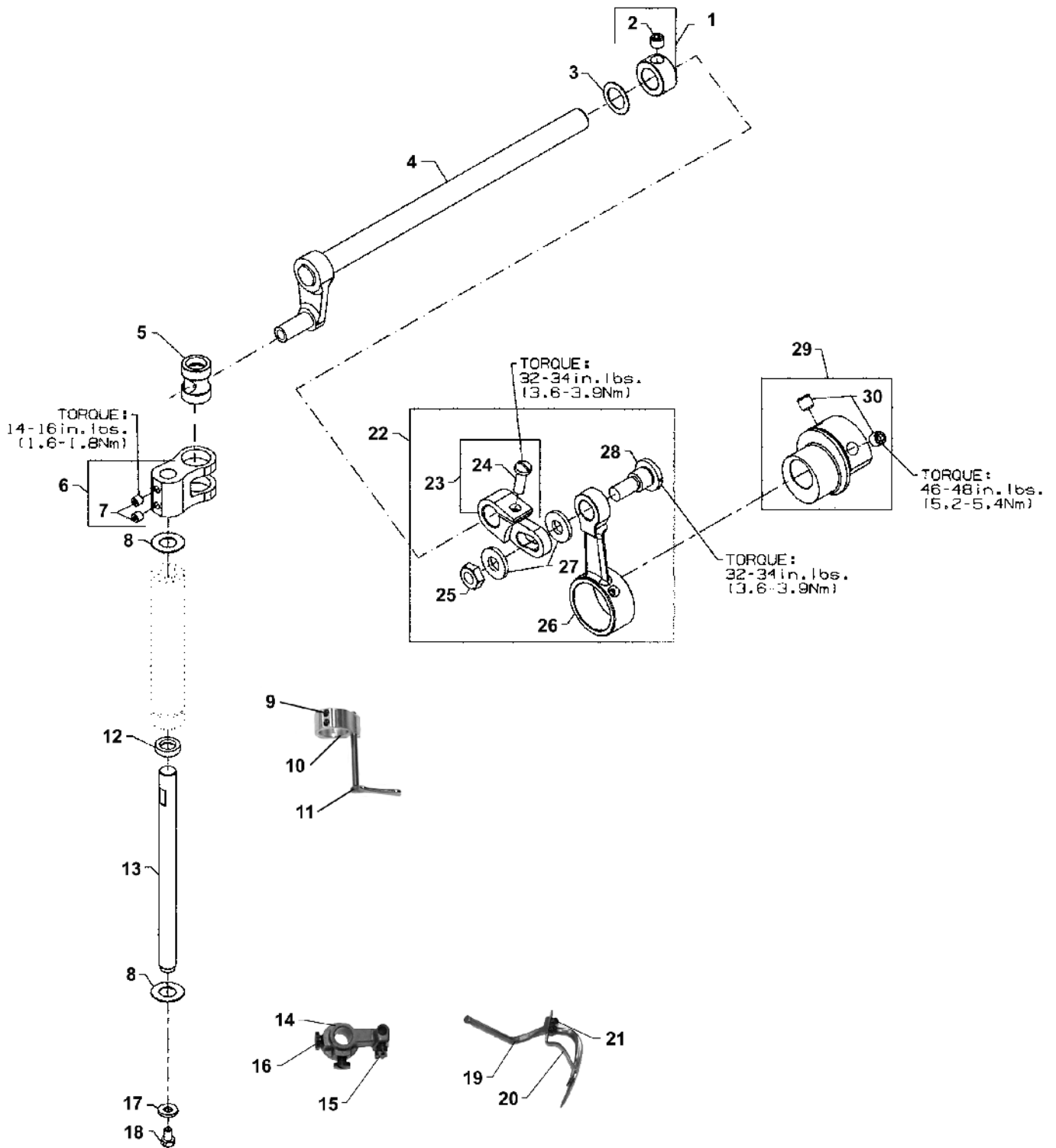


- When the spreader is in the extreme right position, the top blade of the spreader should be between the left side and middle of the spreader thread guide groove.
- The height is 0.4 to 0.8 mm from the surface of the spreader.

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 ± 0.5 mm.
- The center of the hole of the thread guide aligns with the left side of the fixing spreader thread guide groove.

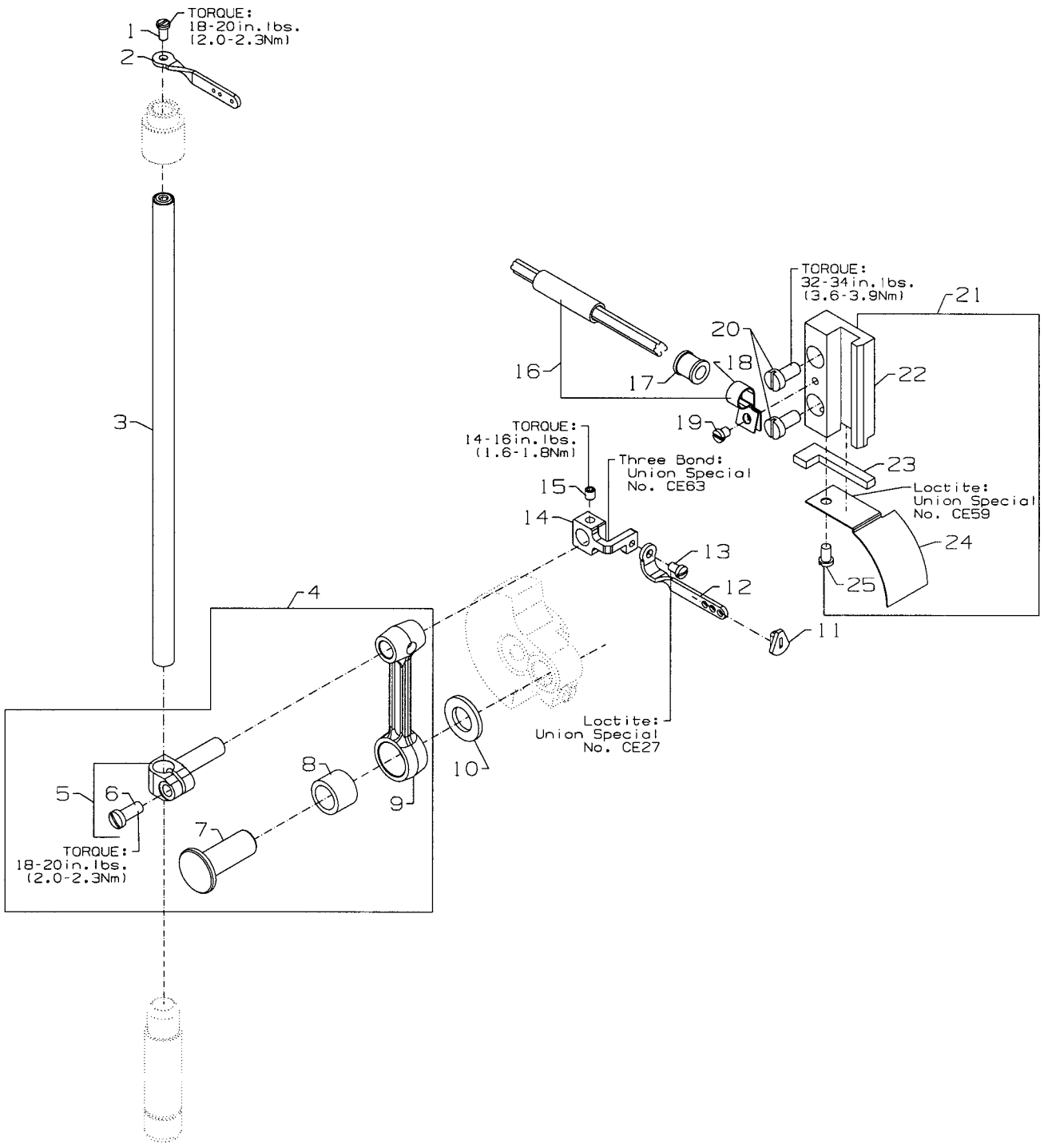


SPREADER

| 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 PICTORIALLY CORRECT**



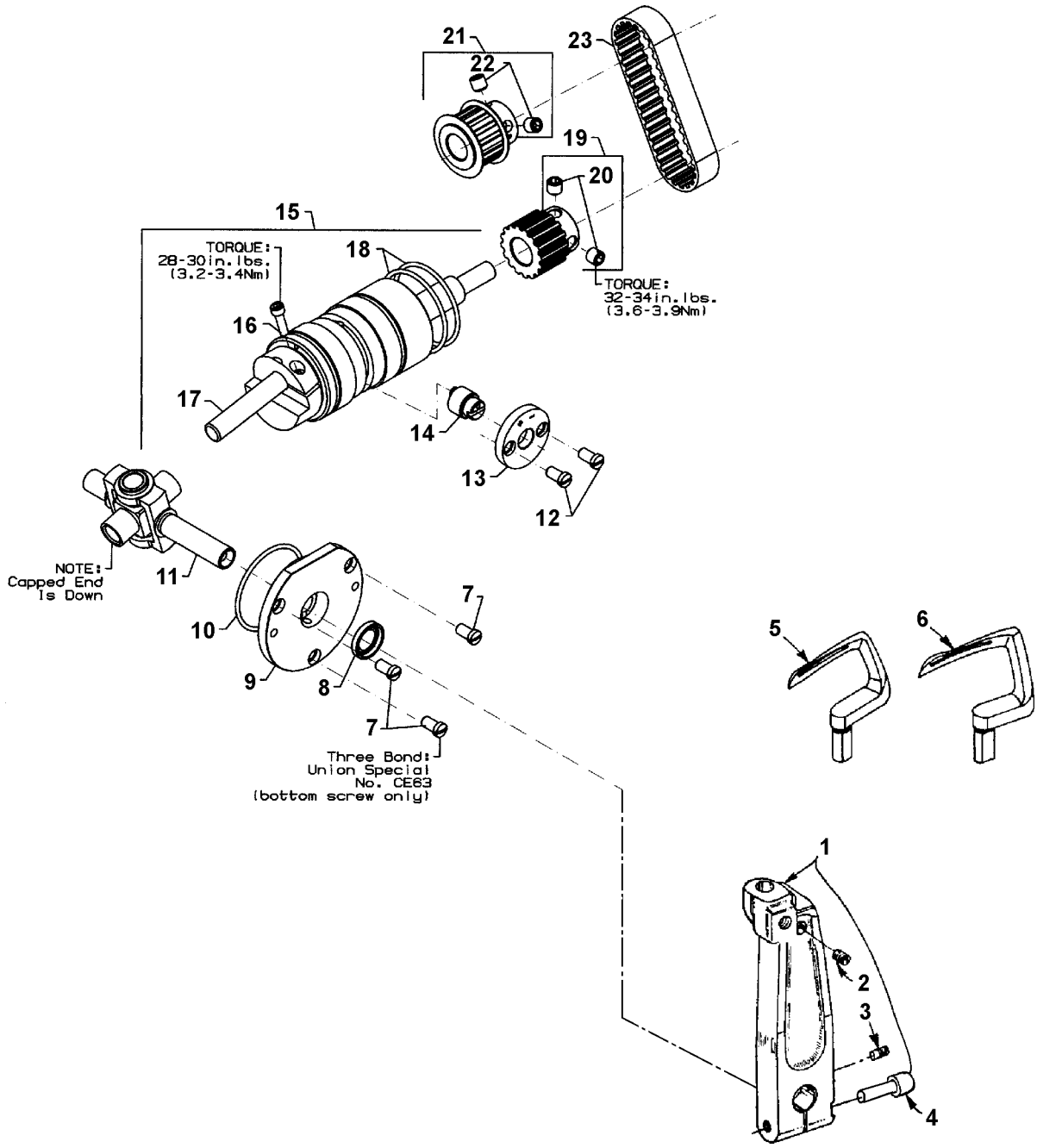


NEEDLE BAR

| 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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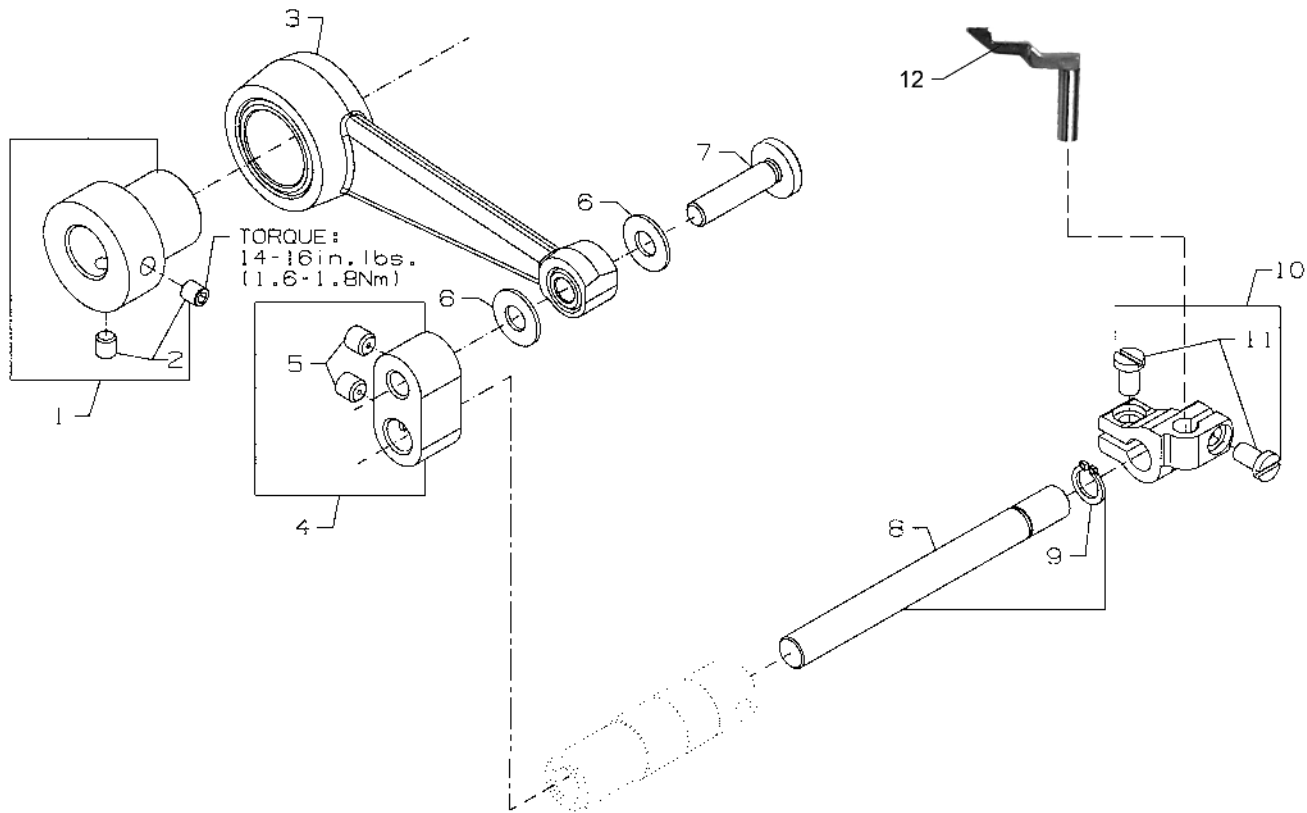


LOOPER DRIVE

| 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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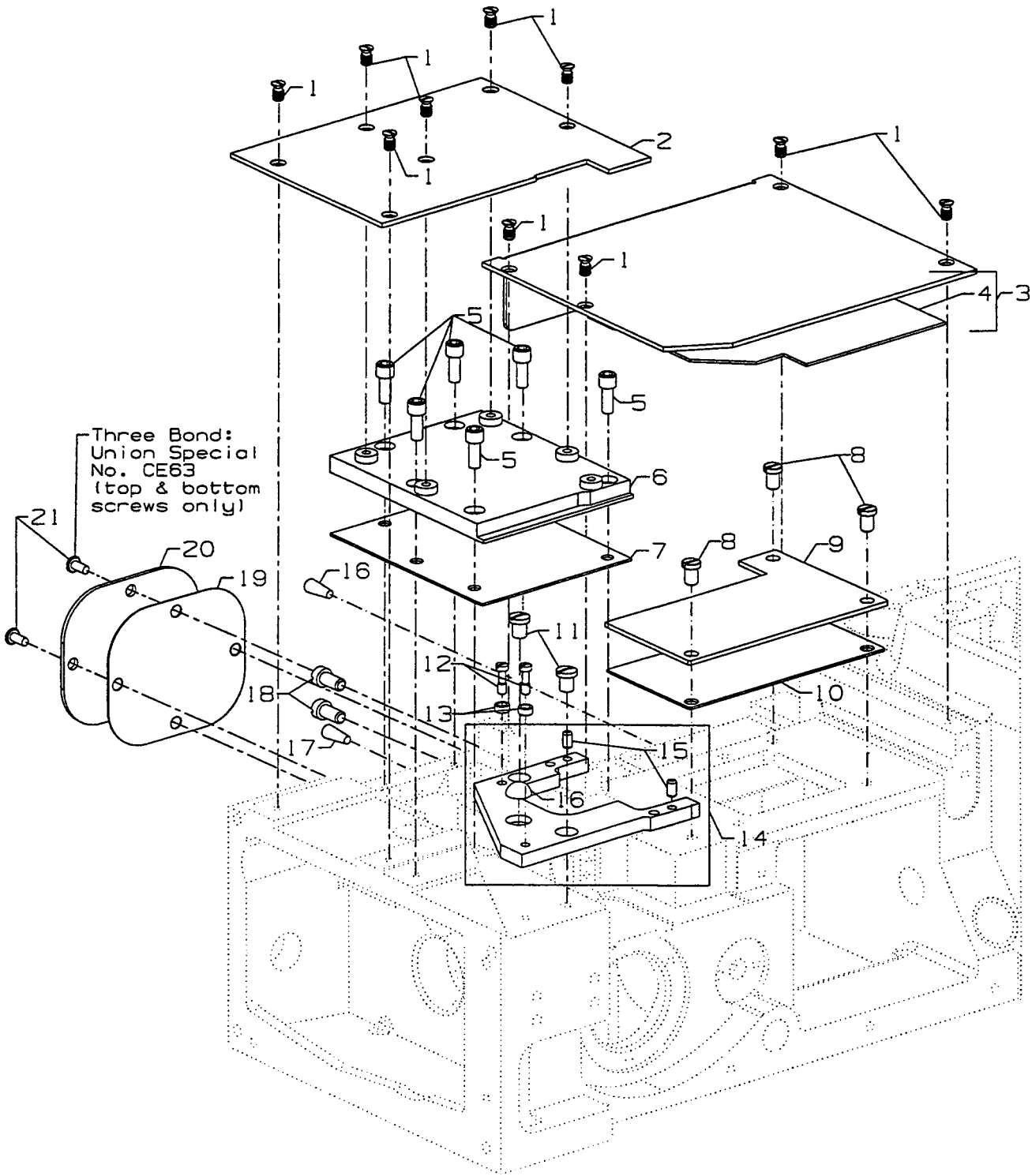


NEEDLE GUARD

| 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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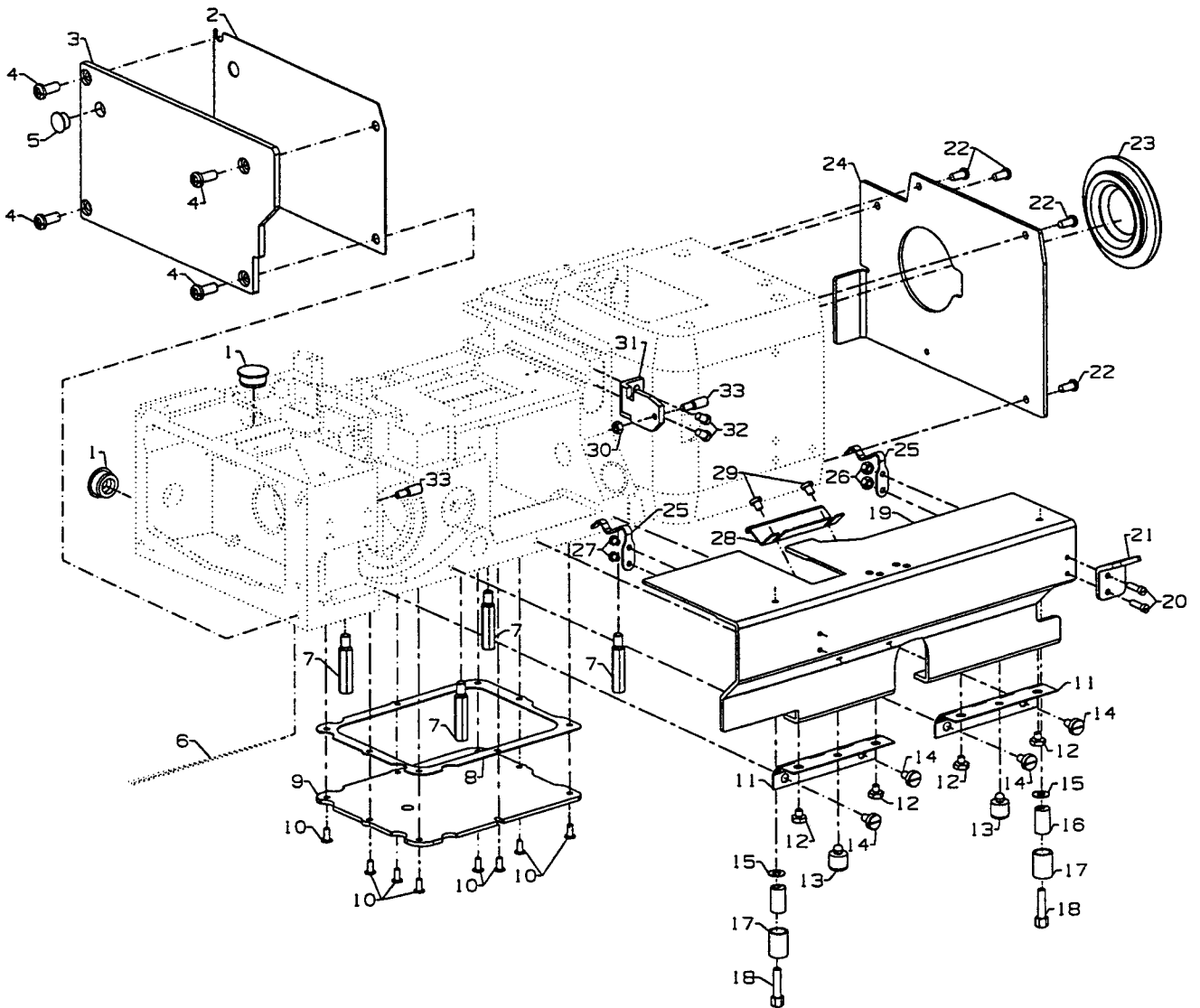


COVERS, LOWER BED

| 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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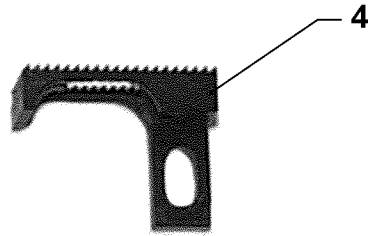
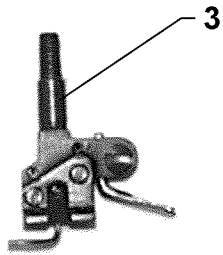
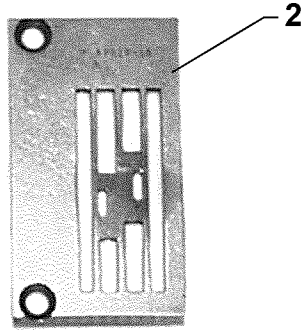
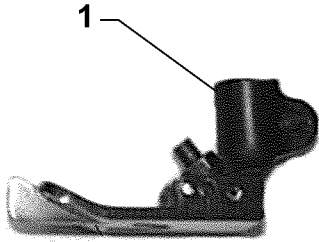


COVERS, LOWER BED

| 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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