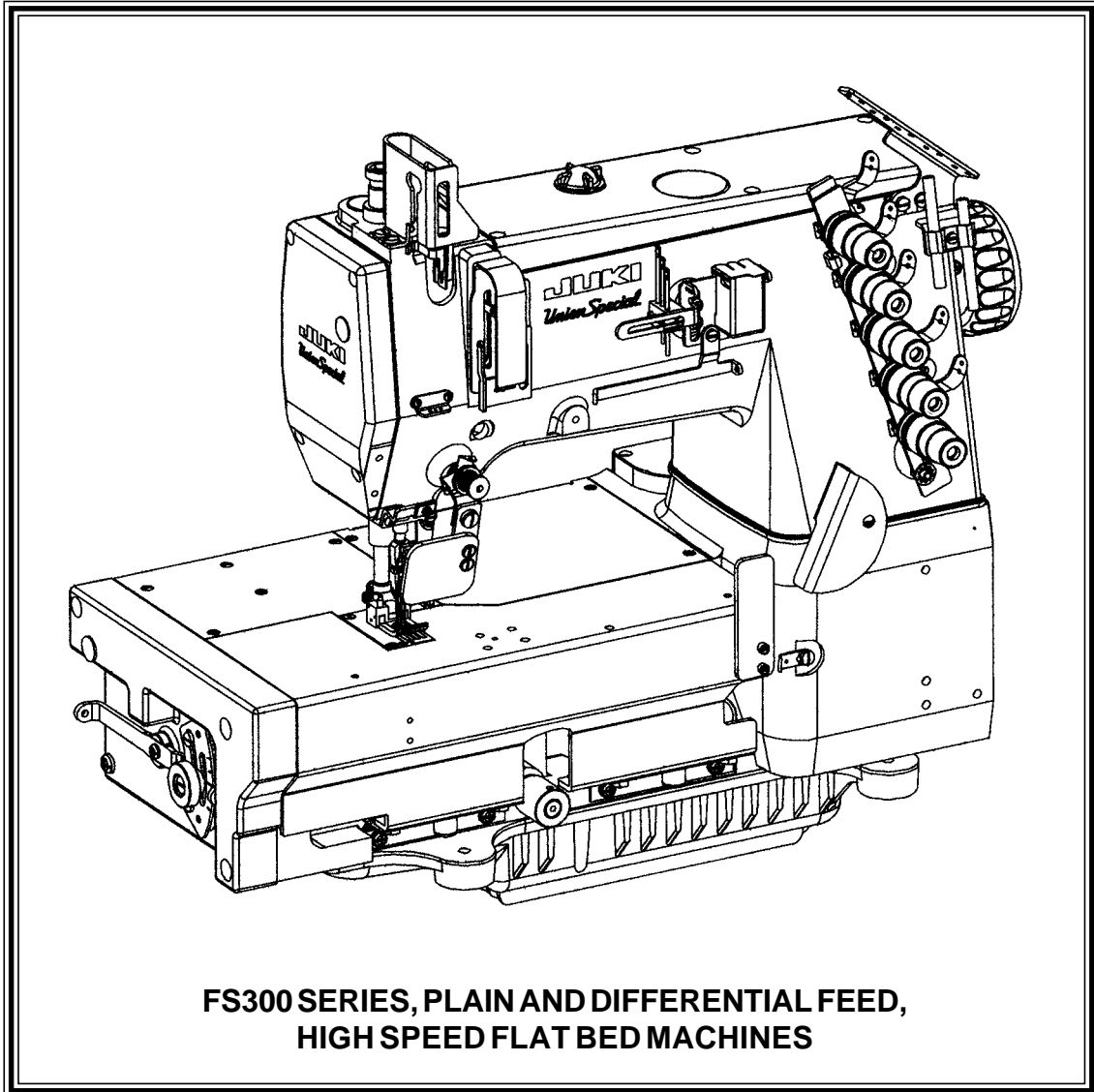




# JUKI

*Union Special*

## ILLUSTRATED PARTS MANUAL



**FS300 SERIES, PLAIN AND DIFFERENTIAL FEED,  
HIGH SPEED FLAT BED MACHINES**

**MANUAL NO. PT9800  
FOR STYLES**

|          |          |
|----------|----------|
| FS322C01 | FS335E42 |
| FS332C01 | FS322H01 |
| FS322E12 | FS332H01 |
| FS332E12 | FS322L01 |
| FS335E41 | FS332L21 |

**USE IN CONJUNCTION WITH MACHINE SERIAL NUMBER PREFIX (BG) AND LATER**

# Manual No. PT9800 Illustrated Parts List for FS300 Series Machines

---

---

First Edition Copyright 2000

By

Union Special Corporation Rights Reserved In All Countries

Printed in U.S.A. May 2000

---

---

## PREFACE

This parts manual has been prepared to assist you in locating individual parts or assemblies on FS300 Series machines. It can be used in conjunction with Union Special Operator's Manual OP9614 and Engineer's Manual EN9424.

It is the desire of Union Special that each machine run at its optimum performance. Parts listed in this manual are designed specifically for your machine and are manufactured with utmost precision to assure long lasting service.

This manual has been comprised on the basis of available information. Changes in design and/or improvements may incorporate a slight modification of configuration in illustrations or part numbers.

On the following pages are illustrations and terminology used in describing the parts used on FS300 Series machines.

Please include part number, name and style of machine for which the part was ordered.

For optimum performance use only genuine Union Special replacement parts.



## CONTENTS

|                                                                                          |    |
|------------------------------------------------------------------------------------------|----|
| PREFACE .....                                                                            | 2  |
| IDENTIFICATION OF MACHINES .....                                                         | 4  |
| STYLE OF MACHINES .....                                                                  | 4  |
| ILLUSTRATIONS .....                                                                      | 5  |
| IDENTIFYING PARTS .....                                                                  | 5  |
| NEEDLES .....                                                                            | 5  |
| SAFETY RULES .....                                                                       | 6  |
| BUSHINGS .....                                                                           | 9  |
| NEEDLE BAR .....                                                                         | 11 |
| UPPER MAIN SHAFT .....                                                                   | 13 |
| SPREADER .....                                                                           | 15 |
| THREAD GUIDE .....                                                                       | 17 |
| TENSION RELEASE & THREAD TENSION .....                                                   | 19 |
| PRESSER FOOT LIFT .....                                                                  | 21 |
| COVERS, UPPER ARM .....                                                                  | 23 |
| LOWER MAIN SHAFT .....                                                                   | 25 |
| LUBRICATION, OIL TUBING & OIL PUMP .....                                                 | 27 |
| LOOPER DRIVE .....                                                                       | 29 |
| NEEDLE GUARD .....                                                                       | 31 |
| LOOPER THREAD TAKE-UP .....                                                              | 33 |
| FEED DRIVE MECHANISM                                                                     |    |
| FOR FS322C01, FS332CO1, FS322H01, FS332H01, FS332L01, FS332L21 .....                     | 35 |
| FEED DRIVE MECHANISM                                                                     |    |
| FOR FS322E12 & FS332E12 .....                                                            | 37 |
| FEED DRIVE MECHANISM .....                                                               | 39 |
| COVERS, LOWER BED .....                                                                  | 41 |
| COVERS, LOWER BED .....                                                                  | 43 |
| FRONT COVER ASSEMBLY                                                                     |    |
| FOR FS322C01, FS332C01 .....                                                             | 45 |
| SEWING PARTS                                                                             |    |
| FOR FS322C01 & FS332C01 .....                                                            | 47 |
| SEWING PARTS                                                                             |    |
| FOR FS322E12 & FS332E12 .....                                                            | 51 |
| SEWING PARTS                                                                             |    |
| FOR FS335E41 & FS335E42 .....                                                            | 53 |
| SEWING PARTS                                                                             |    |
| FOR FS322H01, FS332H01, FS332L01, FS332L21 .....                                         | 57 |
| TABLING AND NEEDLE DIPPER ASSEMBLY (EXTRA SEND CHARGE)                                   |    |
| FOR FS322C01, FS332CO1, FS335E41, FS335E42, FS322H01, FS332H01, FS332L01, FS332L21 ..... | 59 |
| TABLING (EXTRA SEND CHARGE)                                                              |    |
| FOR FS322E12 & FS332E12 .....                                                            | 61 |
| ACCESSORIES .....                                                                        | 63 |
| VACUUM TUBE ASSEMBLY AND PNEUMATIC CONTROL (EXTRA SEND CHARGE)                           |    |
| FOR FS322E12 & FS332E12 .....                                                            | 65 |
| UNDER BED THREAD TRIMMER                                                                 |    |
| FOR FS322E12 & FS332E12 .....                                                            | 67 |
| LOWER ROLLER ASSEMBLY                                                                    |    |
| FOR FS335E41 & FS335E42 .....                                                            | 69 |
| UPPER ROLLER ASSEMBLY                                                                    |    |
| FOR FS335E41 & FS335E42 .....                                                            | 71 |
| PULLER LIFTER ASSEMBLY                                                                   |    |
| FOR FS335E41 & FS335E42 .....                                                            | 73 |
| PULLER DRIVE ASSEMBLY                                                                    |    |
| FOR FS335E41 & FS335E42 .....                                                            | 75 |
| NUMERICAL INDEX OF PARTS .....                                                           | 76 |
| NUMERICAL INDEX OF PARTS .....                                                           | 77 |
| NUMERICAL INDEX OF PARTS .....                                                           | 78 |
| NUMERICAL INDEX OF PARTS .....                                                           | 79 |



## IDENTIFICATION OF MACHINES

Each UNION SPECIAL machine is identified by a style number, which is stamped into the style plate affixed to the middle of the machine under the tension assembly. The serial number is stamped into the serial number plate affixed to the right rear base of the machine.

### STYLE OF MACHINES

- FS322C01- COLLARETTE - Two or three needle, bottom coverstitch. Typical application - For attaching flat of ribbed knit split tube borders to knit garments. Seam specification for two needle 406BSb-1, three needle 407BSb-1. Standard gauges for two needle 32, (1/8", 3.2mm), 40, (5/32", 4.0mm), 48, (3/16", 4.8mm), for three needle 48, (3/16", 4.8mm), 56, (7/32" 5.6mm), 64, (1/4", 6.4mm). Maximum recommended speed, depending on application is up to 6500 R.P.M.
- FS332C01- COLLARETTE - Same as style FS322C01 except top and bottom coverstitch. Seam specification for two needle 602BSb-1, for three needle 605BSb-1.
- FS322E12- ELASTIC - Two or three needle, bottom coverstitch with fabric trimmer. Typical application - For attaching elastic to briefs or lace to lingerie. Seam specification for two needle 406LSa-1, for three needle 407LSa-1. Standard gauges for two needle 32, (1/8", 3.2mm), 40, (5/32", 4.0mm), 48, (3/16", 4.8mm), for three needle 48, (3/16", 4.8mm), 56, (7/32", 5.6mm), 64, (1/4", 6.4mm). Maximum recommended speed, depending on application is up to 6500 R.P.M.
- FS332E12- ELASTIC - Same as Style FS322E12 except top and bottom coverstitch with fabric trimmer. Seam specification for two needle 602LSa-1, for three needle 605LSa-1.
- FS335E41- ELASTIC - Three needle, top and bottom coverstitch, differential feed and rear puller with tooth roller. Typical application - for attaching tunnel elastic to briefs or lace to lingerie. Seam specification 605EFg-1. Standard gauges 56, (7/32", 5.6mm), 64, (1/4", 6.4mm). Maximum recommended speed, depending on application is up to 6000 R.P.M.
- FS335E42- ELASTIC - Same as style FS335E41 except puller with smooth roller.
- FS322H01- HEMMING - Two of three needle, bottom coverstitch. Typical application - for hemming on light to medium weight knit fabrics. Seam specifications for two needle 406EFa-1 (inv.), for three needle 407EFa-1 (inv.). Standard gauge for two needle 40, (5/32" 4.0mm), 48, (3/16", 4.8mm), for three needle 48, (3/16", 4.8mm), 56, (7/32", 5.6mm), 64, (1/4", 6.4mm). Maximum recommended speed, depending on application is up to 6500 R.P.M.
- FS332H01- HEMMING - Same as style FS322H01 except top and bottom coverstitch. Seam specification for two needle 602EFa-1 (inv.), for three needle 605EFa-1 (inv.).
- FS332L01- LAP SEAMING - Two or three needle, top and bottom coverstitch, tandem differential feed. Typical application - for general seaming on fleece and knit garments. Seam specification for two needle 602LSa-1, for three needle 605LSa-1. Standard gauges for two needle 32, (1/8", 3.2mm), 40, (5/32", 4.0mm), for three needle 48, (3/16" 4.8mm), 56, (7/32", 5.6mm), 64, (1/4", 6.4mm). Maximum recommended speed, depending on application is up to 6500 R.P.M.
- FS332L21- LAP SEAMING - Same as style FS332L01 except three needle, off set differential feeds. Standard gauges 56, (7/32", 5.6mm), 64, (1/4"6.4mm).



## ILLUSTRATIONS

This manual has been arranged to simplify ordering repair parts. Exploded views of various sections of the mechanism are shown so that the parts may be seen in their actual position in the machine. On the page opposite the illustration will be found a listing of the parts with their part numbers, description and the number of pieces required in the particular view being shown.

Numbers in the first column are reference numbers only, and merely indicate the position of the part in the illustration. The reference number should never be used in ordering parts. Always use the part number listed in the second column.

Component parts of sub-assemblies which can be furnished for repairs are indicated by indenting their descriptions under the description of the main sub-assembly. As an example refer to the following text.

|    |             |                                         |   |
|----|-------------|-----------------------------------------|---|
| 5. | 50366B      | Needle Thread Strike-Off Assembly ..... | 1 |
| 6. | 50358V      | Needle Thread Strike-Off .....          | 1 |
| 7. | 50370F      | Thread Strike-Off Component .....       | 1 |
| 8. | SS7060310SP | Screw, for plate strike-off .....       | 1 |

When a part is common to all machines covered in this manual, no specific usage will be mentioned in the description. However, when the parts for the various machines are not the same, the specific usage will be mentioned in the description and, if necessary, the difference will be shown in the illustration.

\*Ref. No. showing no Part No. is for location only. Part is not for sale separately.

A numerical index of all the parts shown in this manual is located at the back. This will facilitate locating the illustration and description when only a part number is known.

## IDENTIFYING PARTS

Where construction permits, each part is stamped with its part number. On some of the smaller parts and on those where construction does not permit, an identification letter is stamped in to distinguish the part from similar ones.

PLEASE NOTE: Part numbers represent the same part, regardless of which manual they appear. On all orders

## NEEDLES

Each needle has both a type and size number. The type number denotes the kind of shank, point, length, groove, finish and other details. The size number, stamped on the needle shank, denotes the largest diameter of the blade measured between the shank and the eye. Collectively, the type number and size number represent the complete symbol which is given on the label of all needles packed and sold by Union Special.

### TYPE

### DESCRIPTION

128GBS Short, double groove, struck groove, ball eye, spotted, ball point, chromium plated-  
Sizes available 065/025, 070/027, 075/029, 080/032, 090/036.

When changing the needle, make sure it is fully inserted in the needle holder before the screw is tightened.

When ordering needles, please use the complete type and size numbers as printed on the package to ensure prompt and accurate processing of your order. A complete order should read as follows: "100 needles, type 128 GBS, size 075/029".



## SAFETYRULES

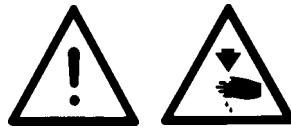
1. Before putting the machines described in this manual into service, carefully read the instructions. The starting of each machine is only permitted after taking notice of the instructions and by qualified operators.

**IMPORTANT!** Before putting the machine into service, also read the safety rules and instructions from the motor supplier.

2. Observe the national safety rules valid for your country.
3. The sewing machines described in this instruction manual are prohibited from being put into service until it has been ascertained that the sewing units which these sewing machines will be built into, have conformed with the EC Council Directives (89/392/EEC, Annex II B).

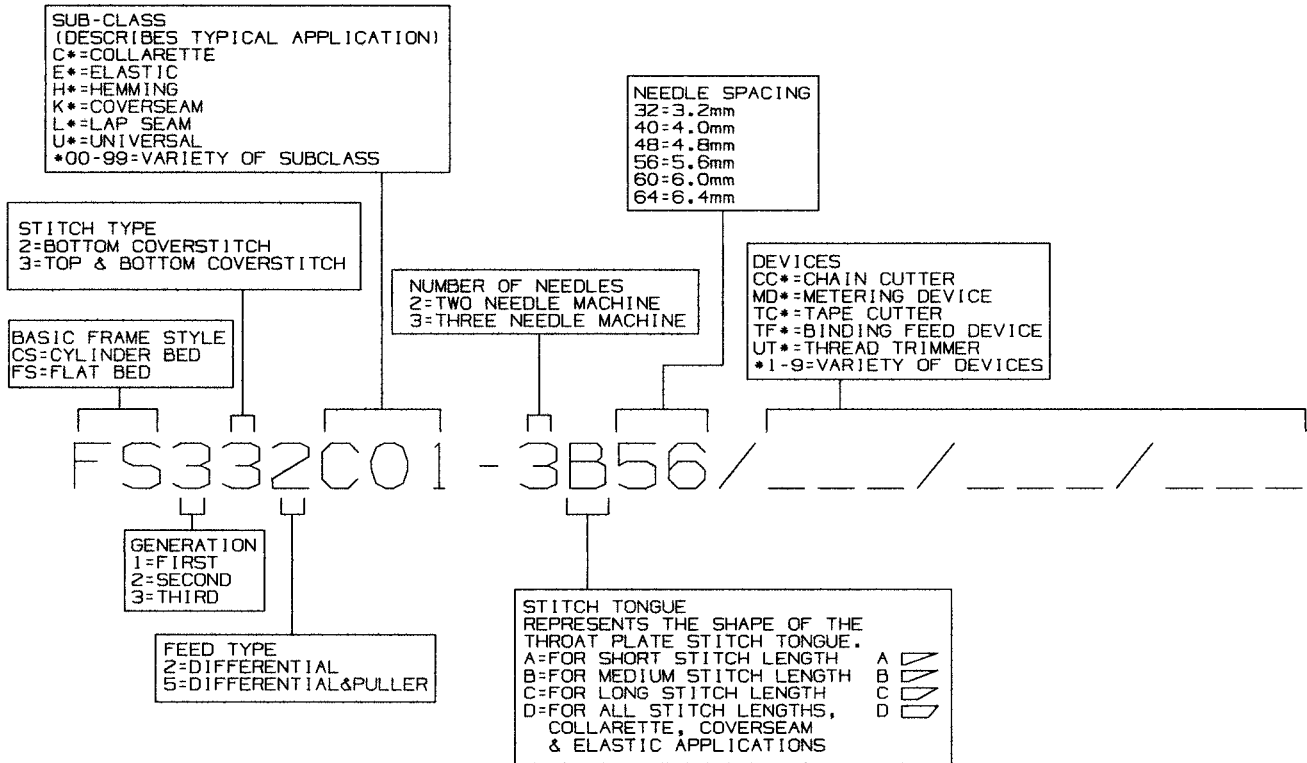
Each machine is only allowed to be used as foreseen. The foreseen use of the particular machine is described in paragraph "STYLES OF MACHINES" of this instruction manual. Another use, going beyond the description, is not as foreseen.

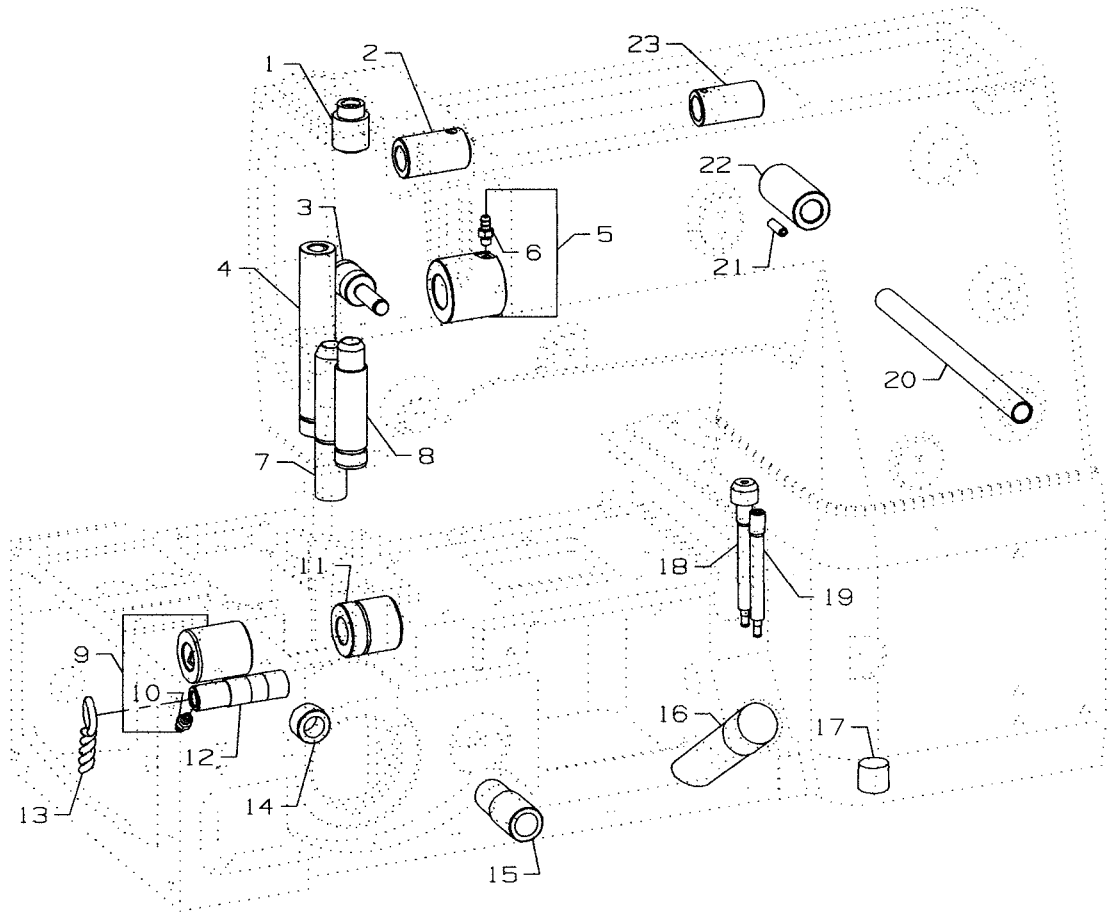
4. All safety devices must be in position when the machine is ready for work or in operation. Operation of the machine without the appertaining safety devices is prohibited.
5. Wear safety glasses.
6. In case of machine conversions and changes all valid safety rules must be considered. Conversions and changes are made at your own risk.
7. The warning hints in the instructions are marked with one of these two symbols:



8. When doing the following the machine has to be disconnected from the power supply by turning off the main switch or by pulling out the main plug:
  - 8.1 When threading needle(s), looper, spreader etc.
  - 8.2 When replacing any parts such as needle(s), presser foot, throat plate, looper, spreader, feed dog, needle guard, folder, fabric guide etc.
  - 8.3 When leaving the workplace and when the workplace is unattended.
  - 8.4 When doing maintenance work.
  - 8.5 When using clutch motors without actuation lock, wait until the motor is stopped totally.
9. Maintenance, repair and conversion work (see item 8) must be done only by trained technicians or special skilled personnel under consideration of the instructions.
10. Any work on the electrical equipment must be done by an electrician or under direction and supervision of special skilled personnel.
11. Work on parts and equipment under electrical power is not permitted. Permissible exceptions are described in the applicable sections of standard sheet DIN VDE 0105.
12. Before doing maintenance and repair work on the pneumatic equipment, the machine has to be disconnected from the compressed air supply. In case of existing residual air pressure, after disconnecting from compressed air supply (i.e. pneumatic equipment with air tank), the pressure has to be removed by bleeding.

# FS300 SERIES BUILDING BLOCK STYLE DESIGNATION SYSTEM



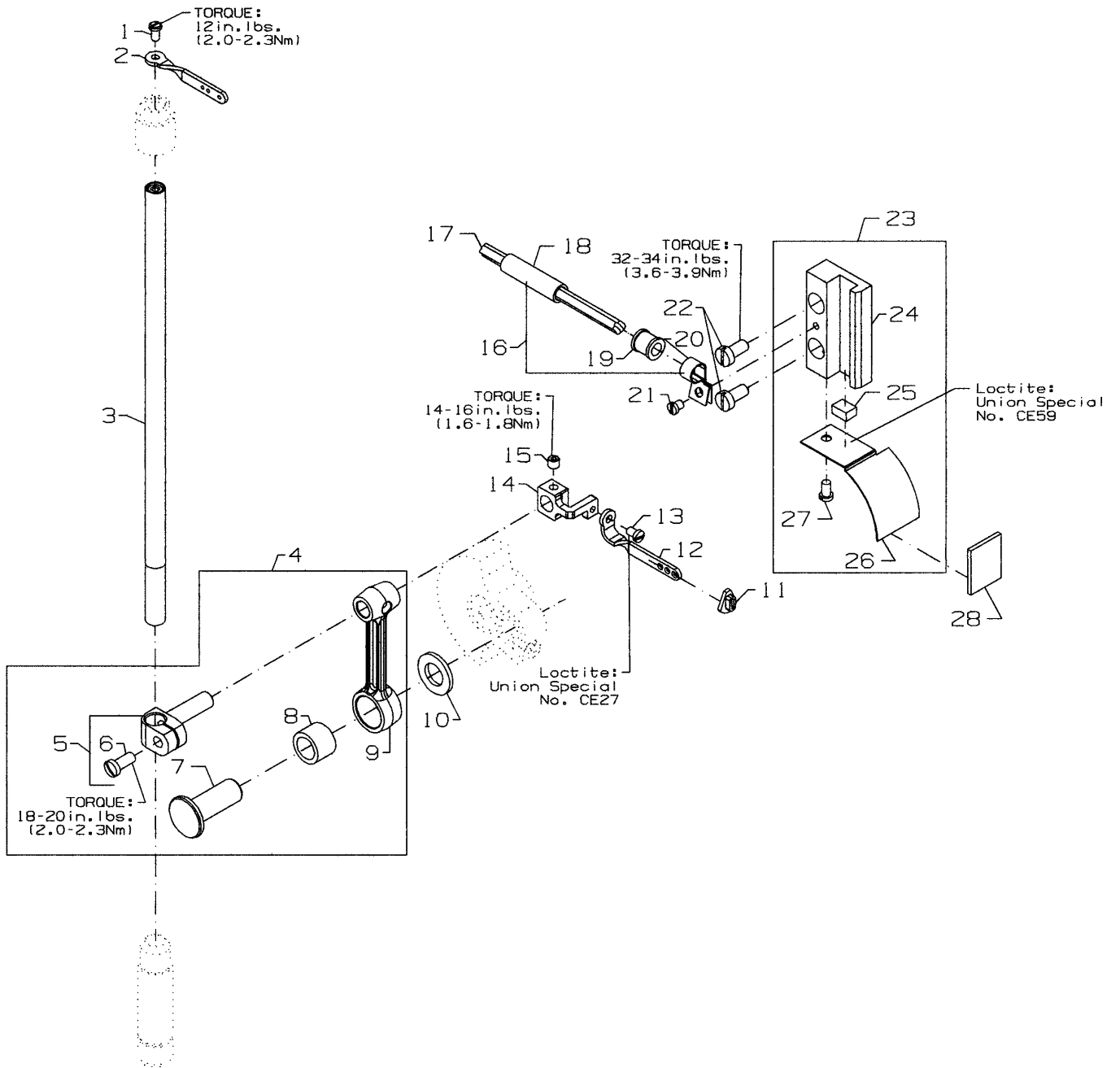




## BUSHINGS

| Ref.<br>No. | Part No.    | Description                               | Amt.<br>Req. |
|-------------|-------------|-------------------------------------------|--------------|
| 1.          | 50354J      | Bushing, for needle bar, upper .....      | 1            |
| 2.          | 50347F      | Bushing, for spreader, front .....        | 1            |
| 3.          | 50332U      | Pin, for front lifter lever .....         | 1            |
| 4.          | 50347L      | Bushing, for spreader drive .....         | 1            |
| 5.          | 50344BU     | Bushing, front .....                      | 1            |
| 6.          | SQ1110401MZ | Fitting .....                             | 1            |
| 7.          | 50330CZ     | Bushing, for presser bar .....            | 1            |
| 8.          | 50354H      | Bushing, for needle bar, lower .....      | 1            |
| 9.          | 50344BE     | Bushing, for lower mainshaft, left .....  | 1            |
| 10.         | SQ1110401MZ | Fitting .....                             | 1            |
| 11.         | 50344BF     | Bushing, for lower mainshaft, right ..... | 1            |
| 12.         | 50344BC     | Bushing, for needle lever .....           | 1            |
| 13.         | CL21A       | Oil Wick .....                            | 1            |
| 14.         | 50344E      | Bushing .....                             | 1            |
| 15.         | 35036AB     | Stitch Regulator Bushing .....            | 1            |
| 16.         | 50393GE     | Oil Sight Gauge .....                     | 1            |
| 17.         | 22571L      | Screw, for drain plug .....               | 1            |
| 18.         | 50393EY     | Fitting, filter .....                     | 1            |
| 19.         | 50393FU     | Fitting, oil tube .....                   | 1            |
| 20.         | 50392AB     | Bushing, for tension release .....        | 1            |
| 21.         | PS0400142KH | Pin .....                                 | 1            |
| 22.         | 50381E      | Bushing, for lifter lever, back .....     | 1            |
| 23.         | 50347E      | Bushing, for spreader, rear .....         | 1            |

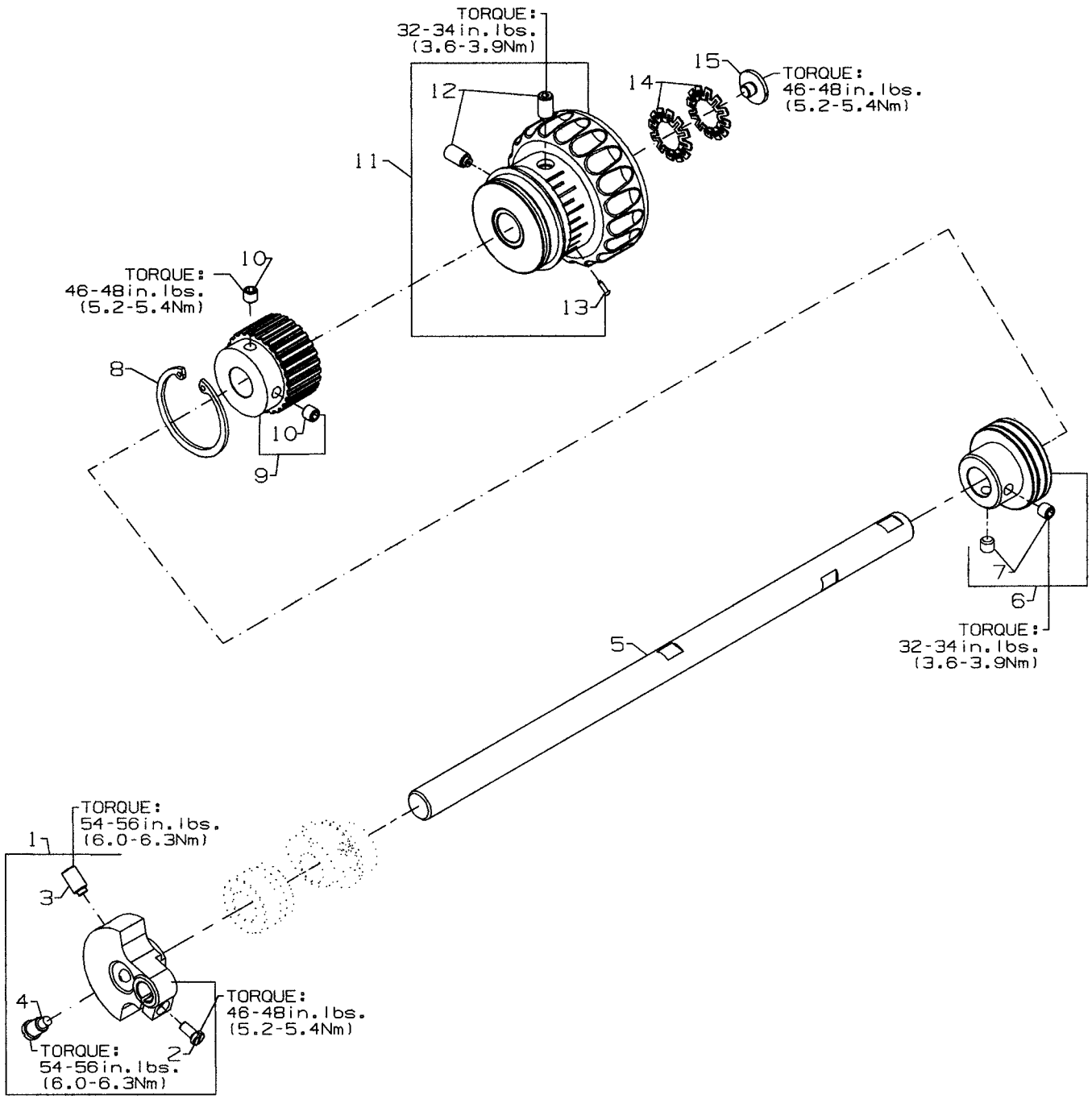




## NEEDLE BAR

| Ref.<br>No. | Part No.    | Description                                             | Amt.<br>Req. |
|-------------|-------------|---------------------------------------------------------|--------------|
| 1.          | SS4080620TP | Screw .....                                             | 1            |
| 2.          | 50323P      | Needle Bar Eyelet .....                                 | 1            |
| 3.          | 50317B      | Needle Bar .....                                        | 1            |
| 4.          | 50345W      | 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.          | 50355AN     | 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.         | CQ25220000  | Cable .....                                             | 1            |
| 18.         | 50393JY     | Oil Tube .....                                          | 1            |
| 19.         | 50393JZ     | Oil Tube .....                                          | 1            |
| 20.         | 50393JW     | Hose Clamp .....                                        | 1            |
| 21.         | SS6090440SP | Screw, for support bracket .....                        | 1            |
| 22.         | SS6121010SP | Screw .....                                             | 2            |
| 23.         | 50354G      | Slide Block Guide .....                                 | 1            |
| 24.         | 50393HS     | Sponge .....                                            | 1            |
| -           | CE59        | Loctite Adhesive, (not shown), for sponge .....         | -            |
| 25.         | 50394AF     | Slide Block Guide Cover .....                           | 1            |
| 26.         | SS6090620SP | Screw .....                                             | 1            |

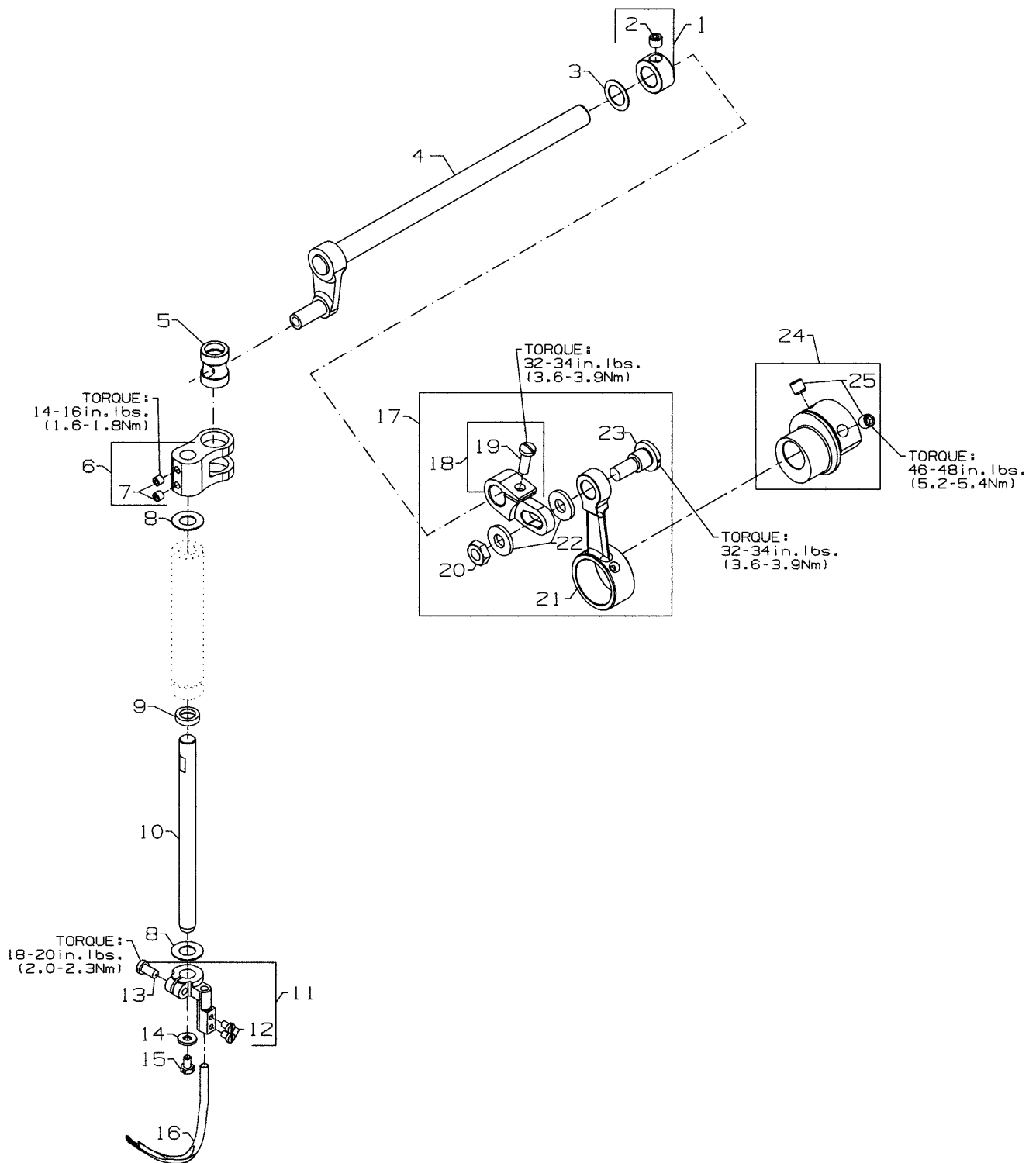




## UPPER MAIN SHAFT

| Ref.<br>No. | Part No.    | Description                           | Amt.<br>Req. |
|-------------|-------------|---------------------------------------|--------------|
| 1.          | 50391       | Counter Weight .....                  | 1            |
| 2.          | SS7111120TP | Screw, for counter weight .....       | 1            |
| 3.          | SS8681412TP | Screw, for counter weight .....       | 1            |
| 4.          | SS7681410TP | Screw, for counter weight .....       | 1            |
| 5.          | 50322AF     | Upper Main Shaft .....                | 1            |
| 6.          | 50335BD     | Bearing Adapter Assembly .....        | 1            |
| 7.          | SS8660612TP | Screw, for bearing adapter .....      | 2            |
| 8.          | 661-262     | Retaining Ring .....                  | 1            |
| 9.          | 50342BE     | Sprocket, for upper main shaft .....  | 1            |
| 10.         | SS8661012TP | Set Screw, for sprocket .....         | 2            |
| 11.         | 50321M      | Handwheel .....                       | 1            |
| 12.         | SS8681412TP | Set Screw, for handwheel .....        | 2            |
| 13.         | 660-1043    | Tack Pin, for handwheel .....         | 1            |
| 14.         | 661-261     | Load Ring, for lower main shaft ..... | 2            |
| 15.         | SS7660520SP | Screw, for handwheel preload .....    | 1            |

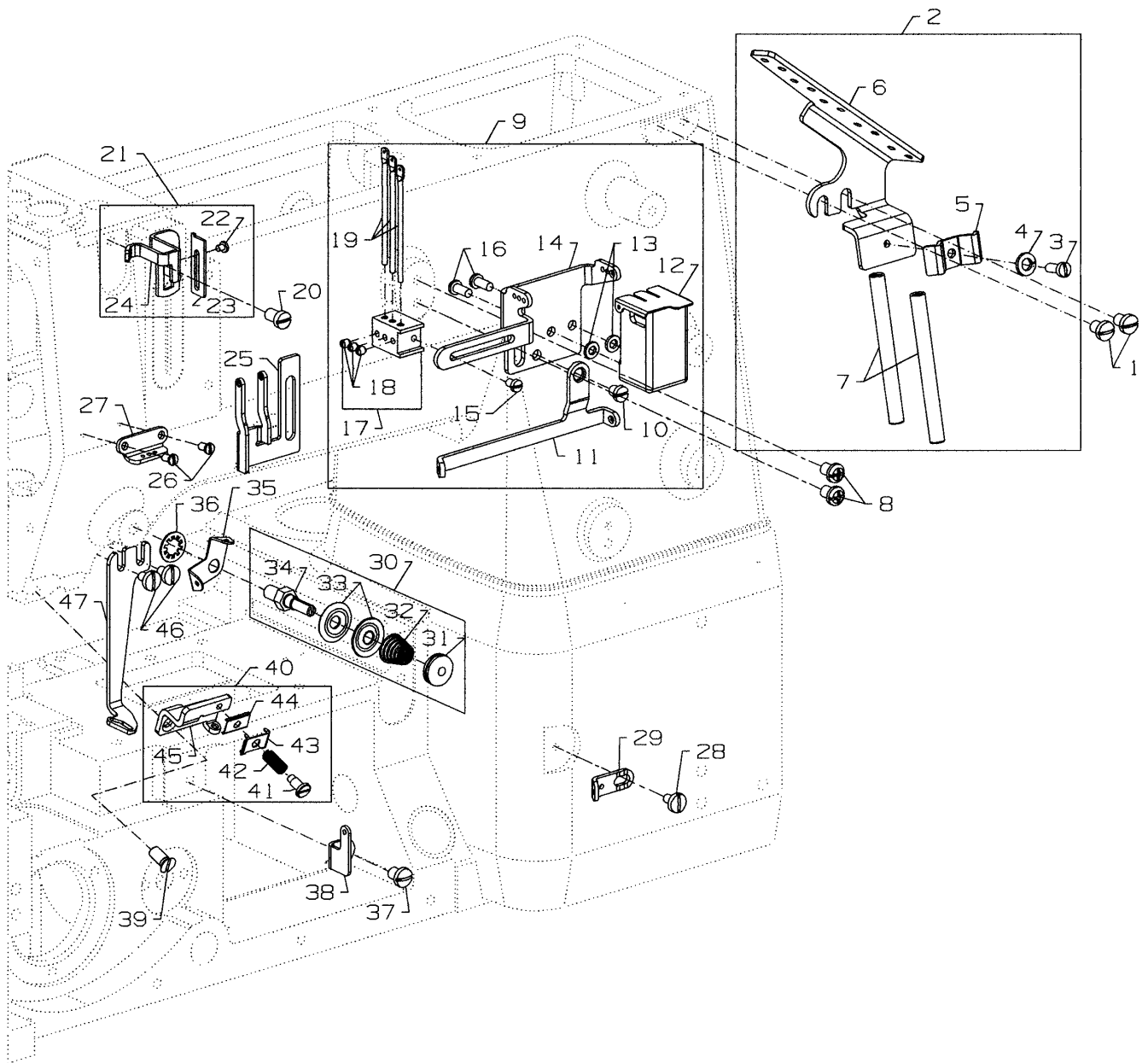




## SPREADER

| Ref.<br>No. | Part No.    | Description                              | Amt.<br>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.          | 660-739     | Oil Seal .....                           | 1            |
| 10.         | 50347G      | Shaft, for spreader, vertical .....      | 1            |
| 11.         | 50346A      | Spreader Holder .....                    | 1            |
| 12.         | SS7080510TP | Screw .....                              | 2            |
| 13.         | SS7110910TP | Screw .....                              | 1            |
| 14.         | 53678N      | Washer .....                             | 1            |
| 15.         | SS9090640SP | Hex Screw, for vertical shaft .....      | 1            |
| 16.         | 50360H      | Spreader .....                           | 1            |
| 17.         | 29126FW     | Spreader Crank Rod Assembly .....        | 1            |
| 18.         | 50360G      | Spreader Shaft Driving Arm .....         | 1            |
| 19.         | SS7121410TP | Screw .....                              | 1            |
| 20.         | NS6680410SP | Hex Nut, for spreader drive .....        | 1            |
| 21.         | 50360F      | Connecting Rod, for spreader drive ..... | 1            |
| 22.         | WP0742016SP | Collar, for spreader driving arm .....   | 2            |
| 23.         | SD1000801SH | Stud .....                               | 1            |
| 24.         | 50360       | Eccentric, for spreader drive .....      | 1            |
| 25.         | SS8660612TP | Screw .....                              | 2            |



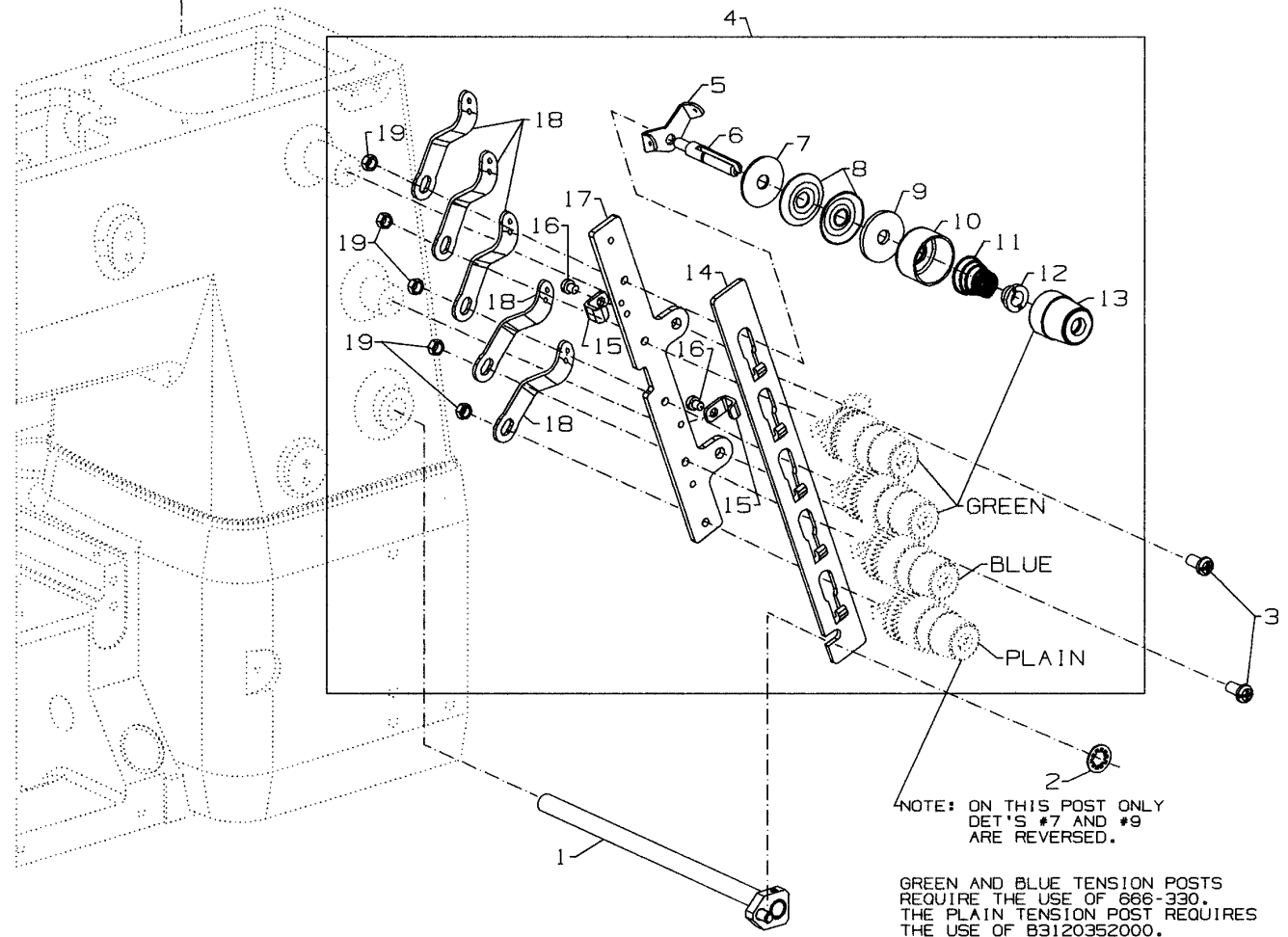
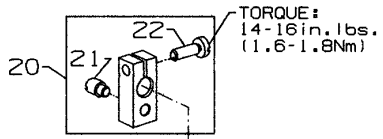




## THREAD GUIDE

| Ref.<br>No. | Part No.    | Description                                       | Amt.<br>Req. |
|-------------|-------------|---------------------------------------------------|--------------|
| 1.          | SS7120640SP | Screw, for lead-in eyelet .....                   | 2            |
| 2.          | 50392AU     | Thread Eyelet Assembly .....                      | 1            |
| 3.          | SS7090910TP | Screw .....                                       | 1            |
| 4.          | WS0510002KP | Split Washer .....                                | 1            |
| 5.          | 50366A      | Thread Eyelet Tube Bracket .....                  | 1            |
| 6.          | 50392S      | Lead-In Tension Eyelet .....                      | 1            |
| 7.          | 50366       | Thread Eyelet Tube .....                          | 2            |
| 8.          | SS4120615SP | Screw, for needle thread guide .....              | 2            |
| 9.          | 50363CK     | Needle Thread Guide and Lubricator Assembly ..... | 1            |
| 10.         | SS7110410SP | Screw, for spreader thread guide .....            | 1            |
| 11.         | 50358U      | Thread Guide, for spreader .....                  | 1            |
| 12.         | 50393HH     | Silicone Thread Lubricator .....                  | 1            |
| 13.         | WP0371026SD | Washer .....                                      | 2            |
| 14.         | 50366J      | Needle Thread Guide .....                         | 1            |
| 15.         | SS7080510TP | Screw, for holder eyelet .....                    | 1            |
| 16.         | SS4090815SP | Screw, for silicone tank .....                    | 2            |
| 17.         | 50358W      | Holder, for needle thread eyelet .....            | 1            |
| 18.         | SS8080410TP | Screw .....                                       | 3            |
| 19.         | 36271A      | Adjusting Needle Thread Eyelet .....              | 3            |
| 20.         | SS7120710SP | Screw, for strike-off .....                       | 1            |
| 21.         | 50366B      | Needle Thread Strike-Off Assembly .....           | 1            |
| 22.         | SS7060310SP | Screw, for plate strike-off .....                 | 1            |
| 23.         | 50370F      | Thread Strike-Off Component .....                 | 1            |
| 24.         | 50358V      | Needle Thread Strike-Off .....                    | 1            |
| 25.         | 50392T      | Eyelet .....                                      | 1            |
| 26.         | 605A        | Screw, for needle thread guide .....              | 2            |
| 27.         | C50044E     | Needle Thread Guide .....                         | 1            |
| 28.         | SS7090610SP | Screw .....                                       | 1            |
| 29.         | 12124202    | Looper Frame Eyelet .....                         | 1            |
| 30.         | 29475CG     | Spreader Thread Tension Assembly .....            | 1            |
| 31.         | 50392AZ     | Tension Nut .....                                 | 1            |
| 32.         | 50392AY     | Tension Spring .....                              | 1            |
| 33.         | 50392AX     | Tension Disc .....                                | 2            |
| 34.         | 50392AW     | Tension Post .....                                | 1            |
| 35.         | 57844       | Eyelet .....                                      | 1            |
| 36.         | 652C16      | Star Washer .....                                 | 1            |
| 37.         | SS7120640SP | Screw .....                                       | 1            |
| 38.         | 50392AE     | Looper Frame Eyelet .....                         | 1            |
| 39.         | SS1121010SP | Screw, for thread guide .....                     | 1            |
| 40.         | 50357AR     | Nipper Plate Assembly .....                       | 1            |
| 41.         | SD0380551SL | Screw .....                                       | 1            |
| 42.         | 50357AS     | Nipper Spring .....                               | 1            |
| 43.         | 50357Y      | Nipper Spring Plate .....                         | 1            |
| 44.         | 50357V      | Nipper Plate .....                                | 1            |
| 45.         | 50366G      | Thread Guide .....                                | 1            |
| 46.         | SS7090610SP | Screw, for spreader thread guide .....            | 2            |
| 47.         | 50346       | Thread Guide Spreader .....                       | 1            |

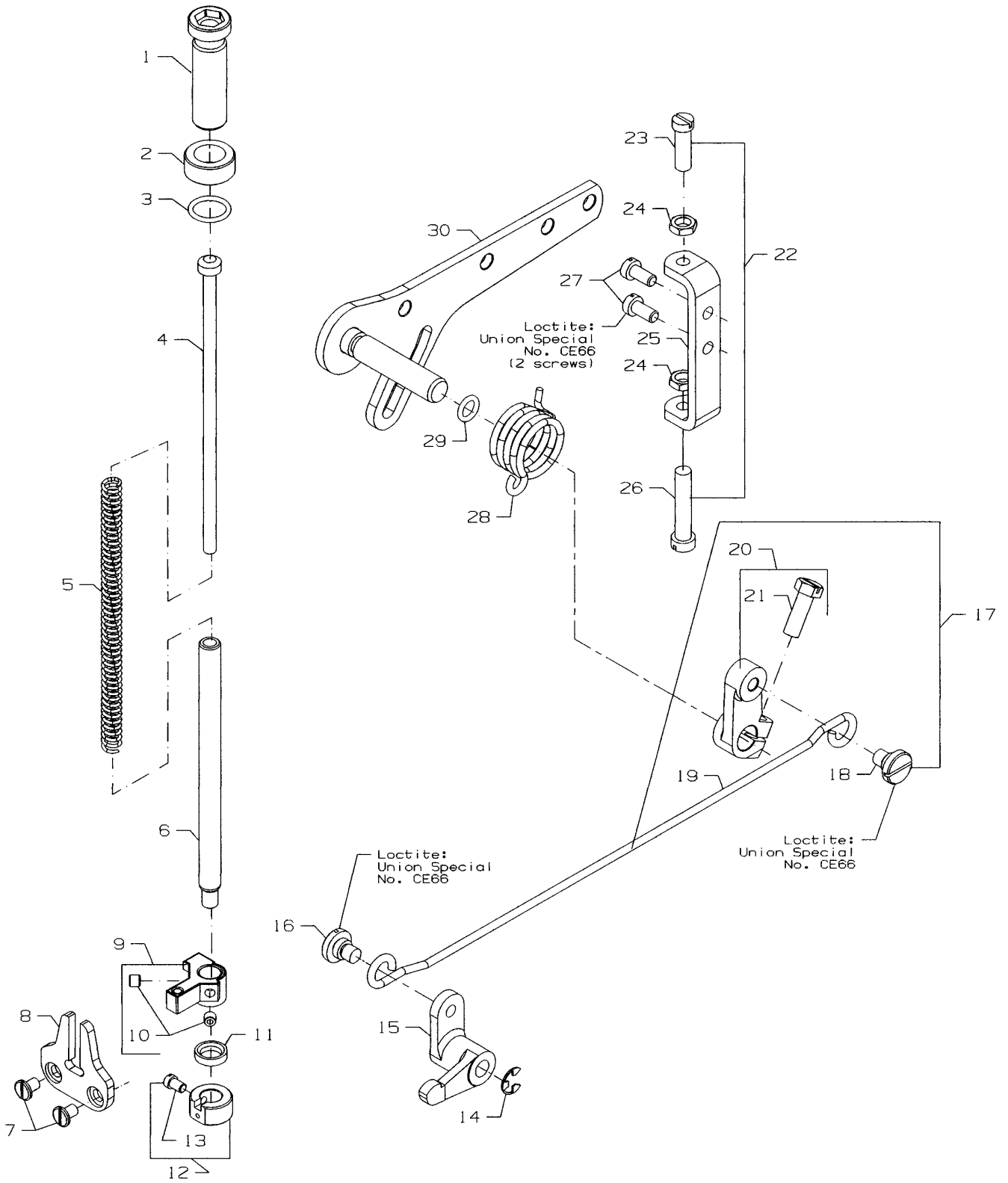




## TENSION RELEASE & THREAD TENSION

| Ref.<br>No. | Part No.    | Description                                  | Amt.<br>Req. |
|-------------|-------------|----------------------------------------------|--------------|
| 1.          | 50392Z      | Tension Needle Lever Assembly .....          | 1            |
| 2.          | 660-283A    | Retainer Washer .....                        | 1            |
| 3.          | SS4120915SP | Screw, for tension assembly .....            | 2            |
| 4.          | 50392Y      | 5 Thread Tension Assembly .....              | 1            |
| 5.          | 57892K      | Thread Tension Eyelet .....                  | 5            |
| 6.          | 56392G      | Tension Post .....                           | 5            |
| 7.          | B3120352000 | Tension Disc Felt .....                      | 1            |
| -           | 666-330     | Disc Felt .....                              | 4            |
| 8.          | B3126012000 | Tension Disc .....                           | 10           |
| 9.          | B3120704000 | Tension Disc Felt .....                      | 5            |
| 10.         | 56392H      | Spring Shield .....                          | 5            |
| 11.         | 11550209    | Spring, needle (green) .....                 | 3            |
| -           | B3103804000 | Spring, spreader (blue) .....                | 1            |
| -           | B3121804000 | Spring, looper (plain) .....                 | 1            |
| 12.         | B3112704000 | Ferrule, tension spring .....                | 5            |
| 13.         | 50692G      | Knob, needle (green) .....                   | 3            |
| -           | 56392M      | Knob, spreader (blue) .....                  | 1            |
| -           | 56392R      | Knob, looper (plain) .....                   | 1            |
| 14.         | 50392W      | Tension Disc Separator .....                 | 1            |
| 15.         | 50392AV     | Guide, for tension disc separator .....      | 2            |
| 16.         | SS7090520SP | Screw, for guide .....                       | 2            |
| 17.         | 50392X      | Tension Bracket .....                        | 1            |
| 18.         | 57865       | Lead-In Thread Guide .....                   | 5            |
| 19.         | NS6110420SP | Nut .....                                    | 5            |
| 20.         | 50392BC     | Tension Release Lever Shaft Connection ..... | 1            |
| 21.         | 22875N      | Base Spring Screw .....                      | 1            |
| 22.         | SS7121410TP | Binder Screw .....                           | 1            |

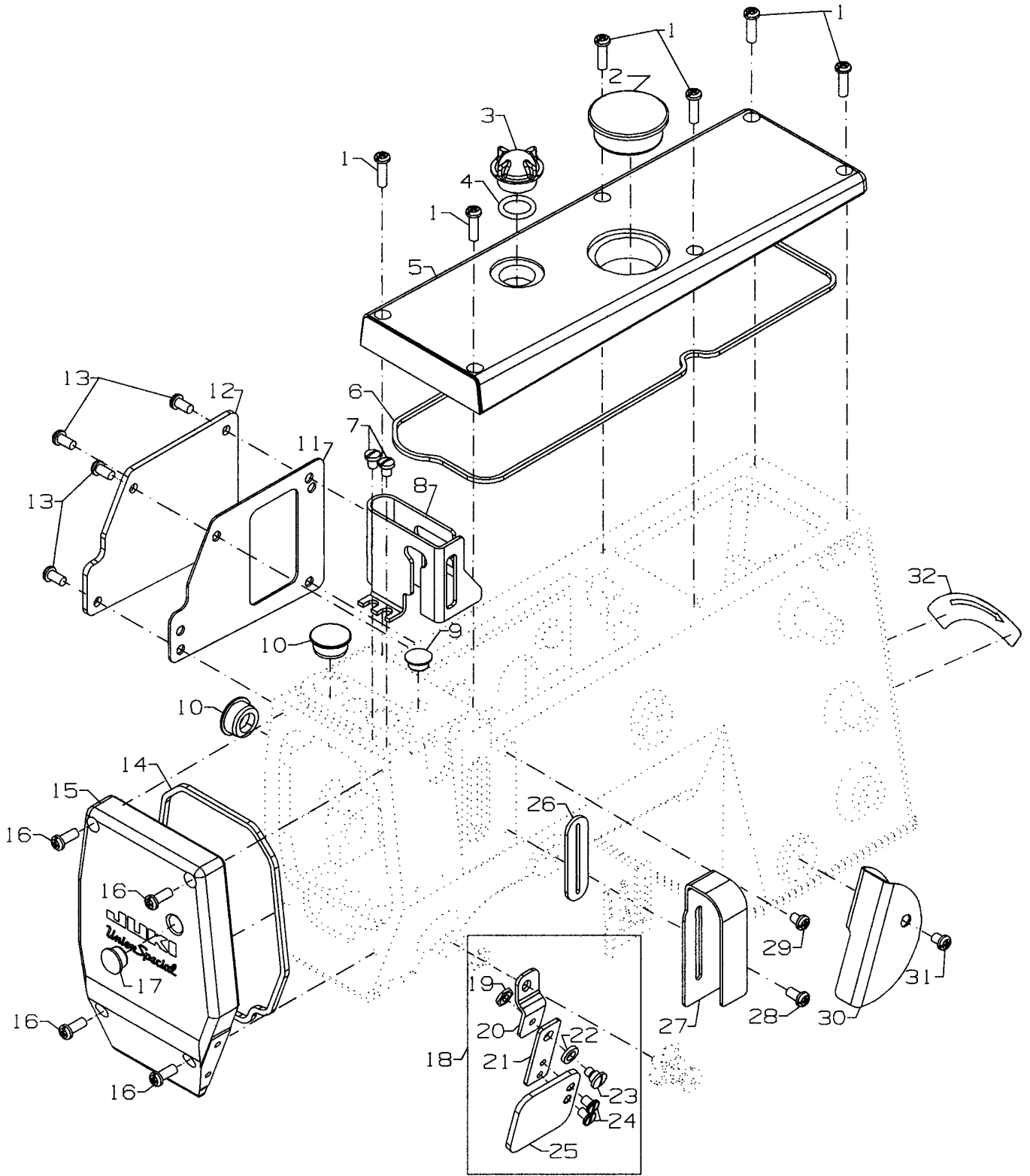




## PRESSERFOOTLIFT

| Ref.<br>No. | Part No.    | Description                                    | Amt.<br>Req. |
|-------------|-------------|------------------------------------------------|--------------|
| 1.          | 11071602    | Adjusting Screw, for spring .....              | 1            |
| 2.          | 11071701    | Locking Nut .....                              | 1            |
| 3.          | 660-1014    | "O" Ring .....                                 | 1            |
| 4.          | C50056B     | Spring Rod .....                               | 1            |
| 5.          | 50357AP     | Spring, for presser bar .....                  | 1            |
| 6.          | 50335AF     | Presser Bar .....                              | 1            |
| 7.          | SS6110610TP | Screw, for guide plate .....                   | 2            |
| 8.          | 50335AG     | Guide Plate, for presser bar .....             | 1            |
| 9.          | 50335AH     | Presser Bar Guide .....                        | 1            |
| 10.         | SS8110422TP | Set Screw .....                                | 2            |
| 11.         | 660-739     | Oil Seal .....                                 | 1            |
| 12.         | 50333P      | Collar .....                                   | 1            |
| 13.         | 22562       | Screw .....                                    | 2            |
| 14.         | RE0500000K0 | E Ring, for pin .....                          | 1            |
| 15.         | 50381F      | Lever, for lifter, front .....                 | 1            |
| 16.         | SD0790303SP | Screw, for wire connector .....                | 1            |
| -           | CE66        | Loctite Adhesive, (not shown), for screw ..... | -            |
| 17.         | 29476TK     | Rear Lifter Lever Assembly .....               | 1            |
| 18.         | SD0790303SP | Screw .....                                    | 1            |
| 19.         | 50355AR     | Wire Connector .....                           | 1            |
| 20.         | 50381G      | Lifter Lever, rear .....                       | 1            |
| 21.         | SS9151740CP | Hex Screw .....                                | 1            |
| 22.         | 29476TT     | Stop Assembly .....                            | 1            |
| 23.         | SS6121010SP | Screw, for stopper .....                       | 1            |
| 24.         | NS6150310SP | Hex Nut .....                                  | 2            |
| 25.         | 50332V      | Stopper, for lifter lever .....                | 1            |
| 26.         | SS6153040SP | Screw, for adjusting stopper .....             | 1            |
| 27.         | SS6151920SP | Screw, for adjusting stopper .....             | 2            |
| -           | CE66        | Loctite Adhesive, (not shown), for screw ..... | -            |
| 28.         | 50381       | Spring, for lifter lever .....                 | 1            |
| 29.         | RO068190100 | "O" Ring .....                                 | 1            |
| 30.         | 50381B      | Lifter Lever Assembly .....                    | 1            |

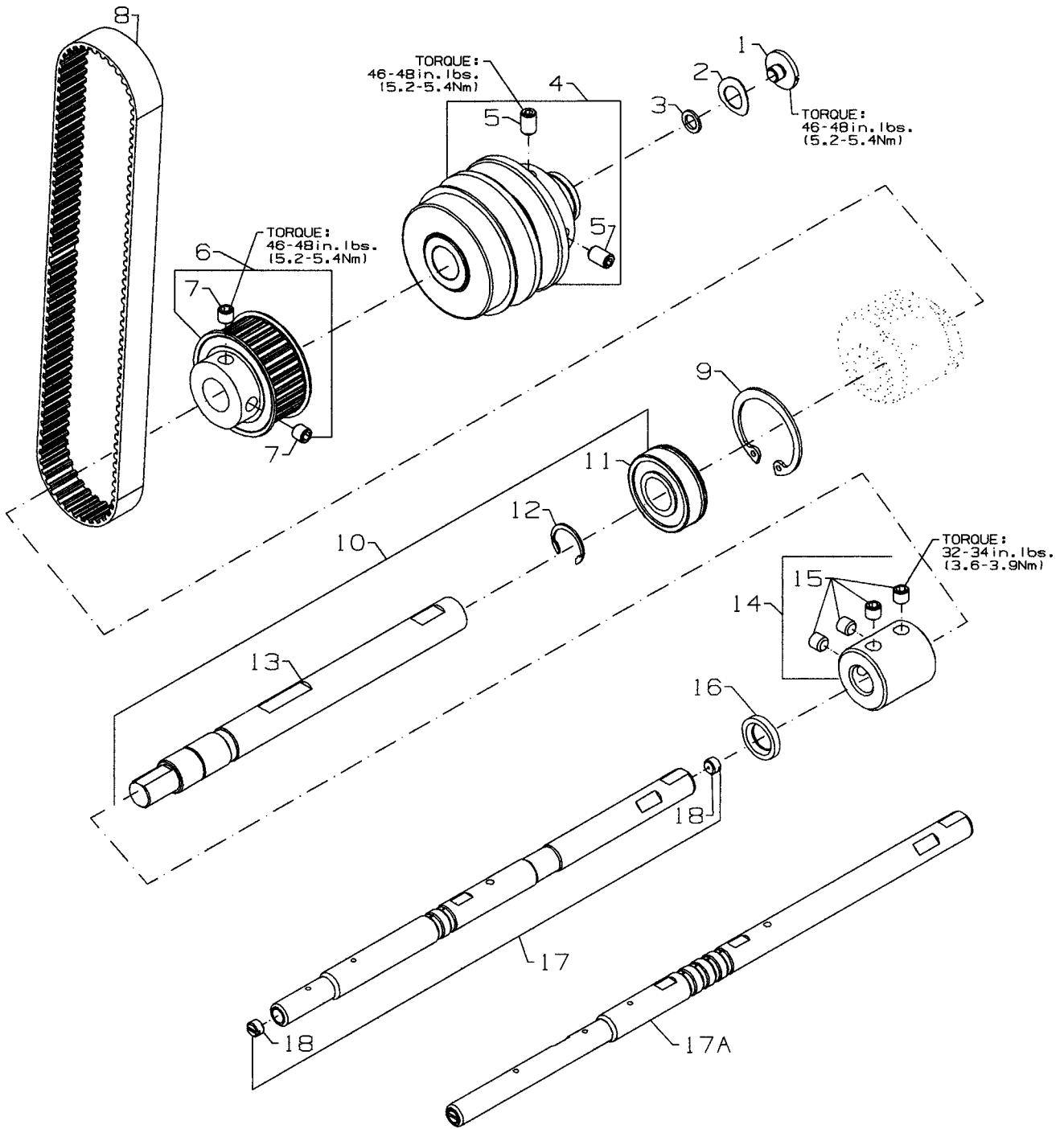




## COVERS, UPPER ARM

| Ref.<br>No. | Part No.    | Description                                                                | Amt.<br>Req. |
|-------------|-------------|----------------------------------------------------------------------------|--------------|
| 1.          | SS4121615SP | Screw, for top cover .....                                                 | 6            |
| 2.          | 50393EU     | Plug, for top cover .....                                                  | 1            |
| 3.          | B3530555000 | Oil Sight Gauge, top .....                                                 | 1            |
| 4.          | 660-212     | "O" Ring, for oil sight gauge .....                                        | 1            |
| 5.          | 50382FW     | Top Cover .....                                                            | 1            |
| 6.          | 50382FZ     | Quad Ring, for top cover .....                                             | 1            |
| 7.          | SS7120640SP | Screw, for needle bar guard .....                                          | 2            |
| 8.          | 50317C      | Needle Bar Guard .....                                                     | 1            |
| 9.          | TA1050504R0 | Plug, for bed .....                                                        | 1            |
| 10.         | 50393HB     | Plug, for bed .....                                                        | 2            |
| 11.         | 50384L      | Gasket, for puller drive cover .....                                       | 1            |
| 12.         | 50382GB     | Puller Drive Cover .....                                                   | 1            |
| 13.         | SS4120915SP | Screw, for puller drive cover .....                                        | 4            |
| 14.         | 50382FY     | Quad Ring, for head cover .....                                            | 1            |
| 15.         | 50382FX     | Head Cover .....                                                           | 1            |
| 16.         | SS4121215SP | Screw, for head cover .....                                                | 4            |
| 17.         | TA1100604R0 | Plug, for head cover .....                                                 | 1            |
| 18.         | 99682XCB    | Protection Shield Assembly, for all styles except FS322E12 & FS332E12 .... | 1            |
| 19.         | NS6620320SP | Nut .....                                                                  | 1            |
| 20.         | 50383AE     | Bracket Holder .....                                                       | 1            |
| 21.         | 50383AD     | Bracket .....                                                              | 1            |
| 22.         | WZ0641510KP | Spring Washer .....                                                        | 1            |
| 23.         | SD0640323TP | Shoulder Screw .....                                                       | 1            |
| 24.         | SS6110610SL | Counter Sunk Head Screw .....                                              | 2            |
| 25.         | 99682XC3    | Protection Shield .....                                                    | 1            |
| 26.         | 50393EW     | Rubber Gasket, for needle lever .....                                      | 1            |
| 27.         | 50382GA     | Cover, for thread take-up .....                                            | 1            |
| 28.         | SS4120915SP | Screw, for thread take-up cover .....                                      | 1            |
| 29.         | SS4120615SP | Screw, for thread cover .....                                              | 1            |
| 30.         | 50382GM     | Thread Cover .....                                                         | 1            |
| 31.         | SS4120615SP | Screw, for thread take-up cover .....                                      | 1            |
| 32.         | LA452       | Label, direction of rotation .....                                         | 1            |



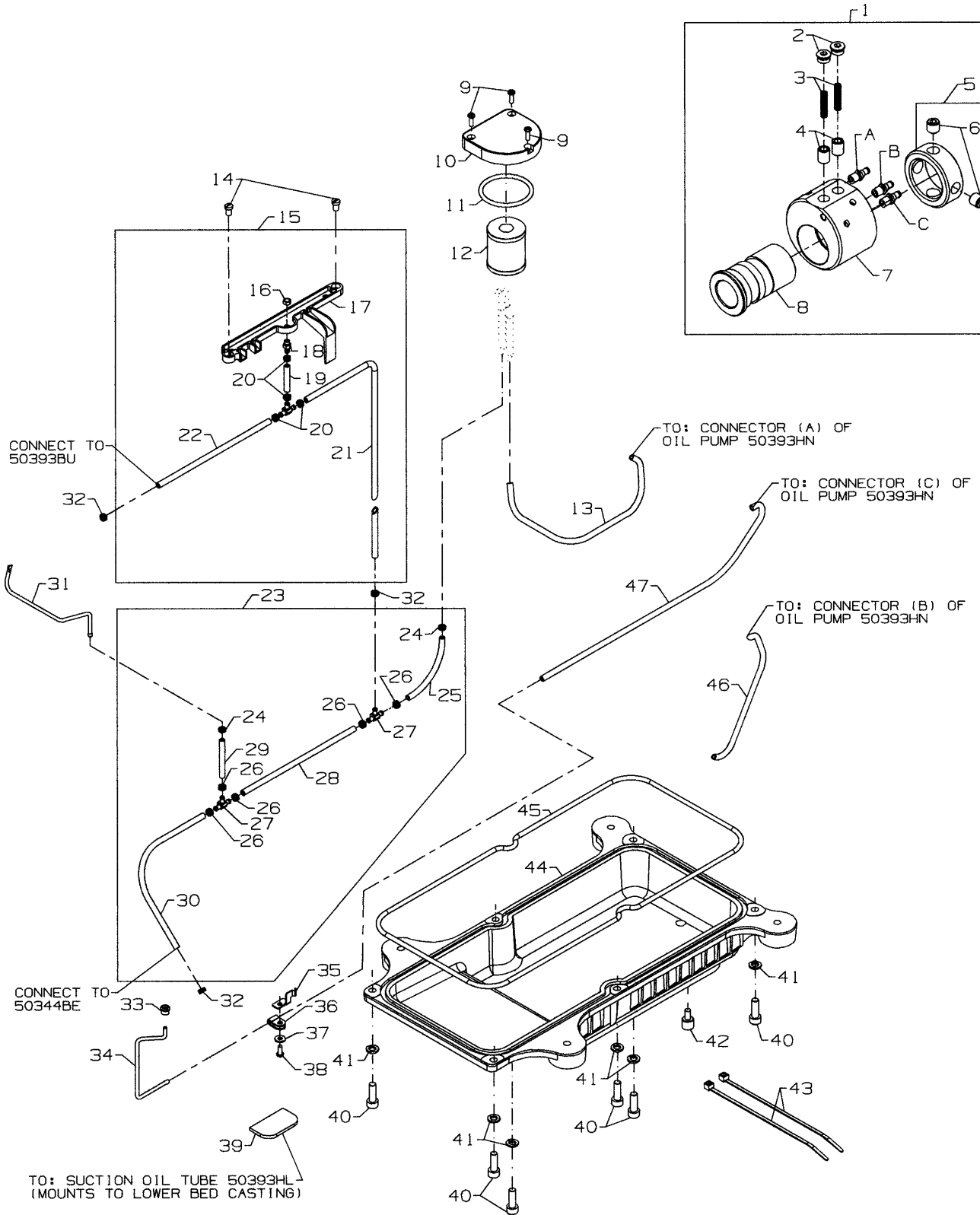




## LOWER MAIN SHAFT

| Ref.<br>No. | Part No.    | Description                                          | Amt.<br>Req. |
|-------------|-------------|------------------------------------------------------|--------------|
| 1.          | SS7660520SP | Shoulder Screw, for lower main shaft, right .....    | 1            |
| 2.          | 660-1062    | Spring Washer .....                                  | 1            |
| 3.          | 50374       | Spacer, for pulley assembly .....                    | 1            |
| 4.          | 50321G      | Pulley Assembly .....                                | 1            |
| 5.          | SS8661012TP | Set Screw .....                                      | 2            |
| 6.          | 50342AX     | Sprocket, for lower main shaft .....                 | 1            |
| 7.          | SS8660612TP | Screw .....                                          | 2            |
| 8.          | 50342BS     | Timing Belt .....                                    | 1            |
| 9.          | 50335AK     | Retaining Ring, for ball bearing .....               | 1            |
| 10.         | 29476UH     | Mainshaft Assembly, lower right .....                | 1            |
| 11.         | 50322AL     | Ball Bearing, for lower main shaft .....             | 1            |
| 12.         | 50335BB     | Retaining Ring .....                                 | 1            |
| 13.         | 50322AG     | Lower Main Shaft, right .....                        | 1            |
| 14.         | 50333A      | Coupling, for lower main shafts .....                | 1            |
| 15.         | SS8660612TP | Screw .....                                          | 4            |
| 16.         | 660-934     | Oil Seal .....                                       | 1            |
| 17.         | 50322AU     | Lower Main Shaft, left .....                         | 1            |
| 17A.        | 50322AT     | Lower Main Shaft, left, for FS322E12, FS332E12 ..... | 1            |
| 18.         | SS8660410SP | Screw .....                                          | 2            |

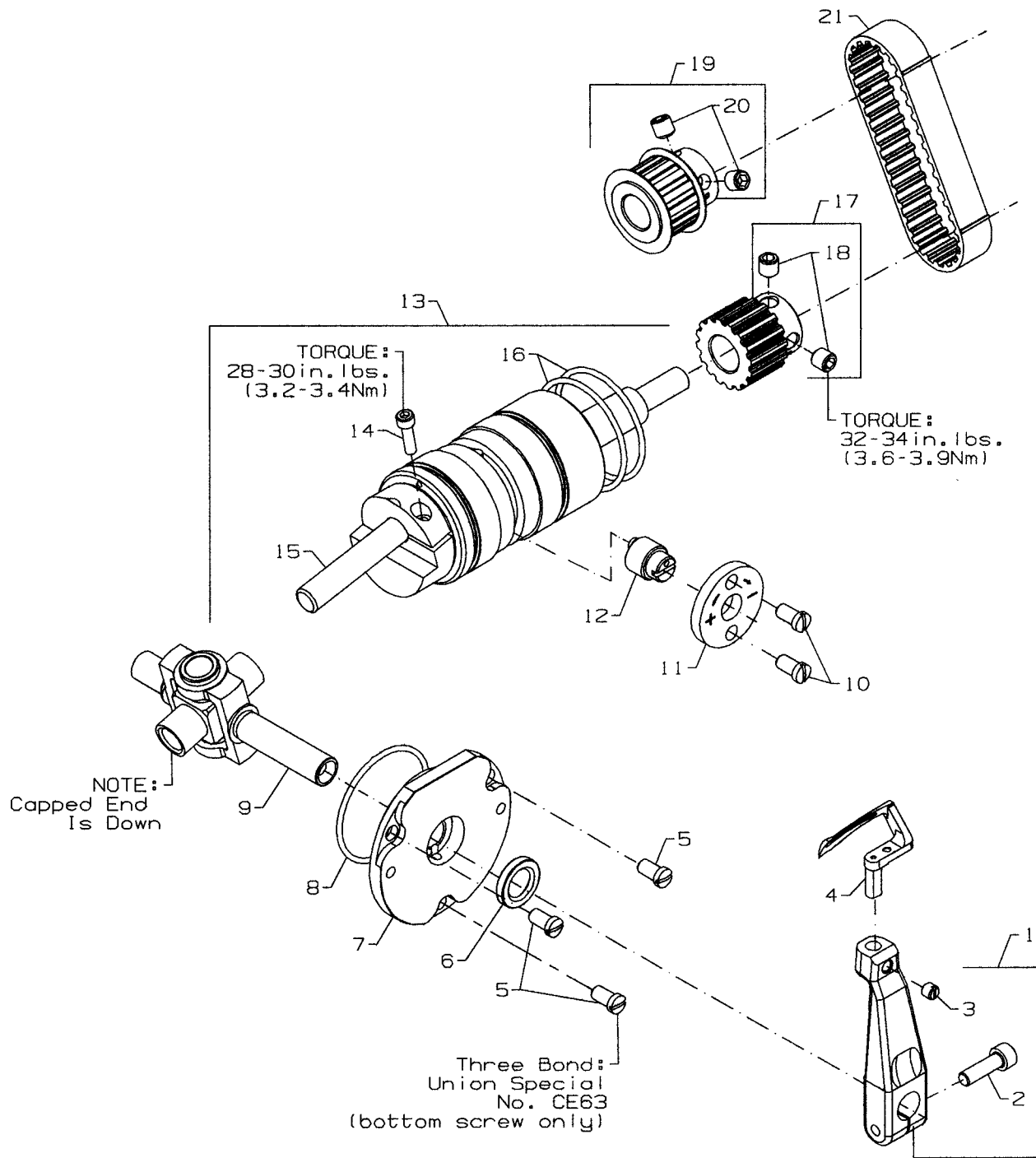




## LUBRICATION, OIL TUBING & OIL PUMP

| Ref.<br>No. | Part No.    | Description                         | Amt.<br>Req. |
|-------------|-------------|-------------------------------------|--------------|
| 1.          | 50393HN     | Oil Pump Assembly, 2-stage .....    | 1            |
| 2.          | 18-1470     | Screw .....                         | 2            |
| 3.          | 50332S      | Spring, for plunger.....            | 2            |
| 4.          | 34393D      | Plunger .....                       | 2            |
| 5.          | 50393EX     | Collar, for oil pump .....          | 1            |
| 6.          | SS8660612TP | Screw .....                         | 2            |
| 7.          | 50393GB     | Oil Pump Housing, 2 Stage.....      | 1            |
| 8.          | 50393GD     | Oil Pump Housing, 2 Stage.....      | 1            |
| 9.          | SS4091015SP | Screw, for oil filter cover.....    | 3            |
| 10.         | 50393FR     | Cover, for oil filter.....          | 1            |
| 11.         | 50384       | "O" Ring, for oil filter cover..... | 1            |
| 12.         | 11843208    | Oil Filter.....                     | 1            |
| 13.         | 50393FV     | Oil Tube, for supply (1) .....      | 1            |
| 14.         | SS7120710SP | Screw .....                         | 2            |
| 15.         | 29476US     | Oil Supply Assembly, upper .....    | 1            |
| 16.         | NS6110310SP | Nut .....                           | 1            |
| 17.         | 50393KC     | Oil Gutter .....                    | 1            |
| 18.         | SQ1110402MZ | Fitting .....                       | 1            |
| 19.         | 50393-27    | Oil Tube .....                      | 1            |
| 20.         | 50393KM     | Tube Retaining, spring .....        | 4            |
| 21.         | 50393-407   | Oil Tube .....                      | 1            |
| 22.         | 50393-140   | Oil Tube .....                      | 1            |
| 23.         | 29476UT     | Oil Supply Assembly, lower .....    | 1            |
| 24.         | 50393KH     | Tube Retaining, spring .....        | 2            |
| 25.         | 50393-70    | Oil Tube .....                      | 1            |
| 26.         | 50393KM     | Tube Retaining, spring .....        | 5            |
| 27.         | 13765607    | "T" Connector .....                 | 2            |
| 28.         | 50393-140   | Oil Tube .....                      | 1            |
| 29.         | 50393-40    | Oil Tube .....                      | 1            |
| 30.         | 50393-170   | Oil Tube .....                      | 1            |
| 31.         | 50393KF     | Oil Tube .....                      | 1            |
| 32.         | 50393KM     | Tube Retaining, spring .....        | 3            |
| 33.         | 50393HR     | Plug, for feed chamber .....        | 1            |
| 34.         | 50393HL     | Oil Tube, for suction .....         | 1            |
| 35.         | 50393FS     | Oil Tube Holder .....               | 1            |
| 36.         | 998-358F    | Plastic Clip .....                  | 1            |
| 37.         | 53678N      | Washer .....                        | 1            |
| 38.         | SS4090815SP | Screw, for oil tube holder .....    | 1            |
| 39.         | 50393HK     | Felt .....                          | 1            |
| 40.         | SS6151812TP | Screw, for oil pan .....            | 6            |
| 41.         | WS0631510KP | Spring Washer .....                 | 6            |
| 42.         | 22571E      | Screw, for oil drain plug .....     | 1            |
| 43.         | RM2871B     | Cable Tie .....                     | 2            |
| 44.         | 50393EB     | Oil Pan .....                       | 1            |
| 45.         | 50384A      | "O" Ring .....                      | 1            |
| 46.         | 50393FT     | Oil Tube, for suction .....         | 1            |
| 47.         | 50393HJ     | Oil Tube, for suction .....         | 1            |

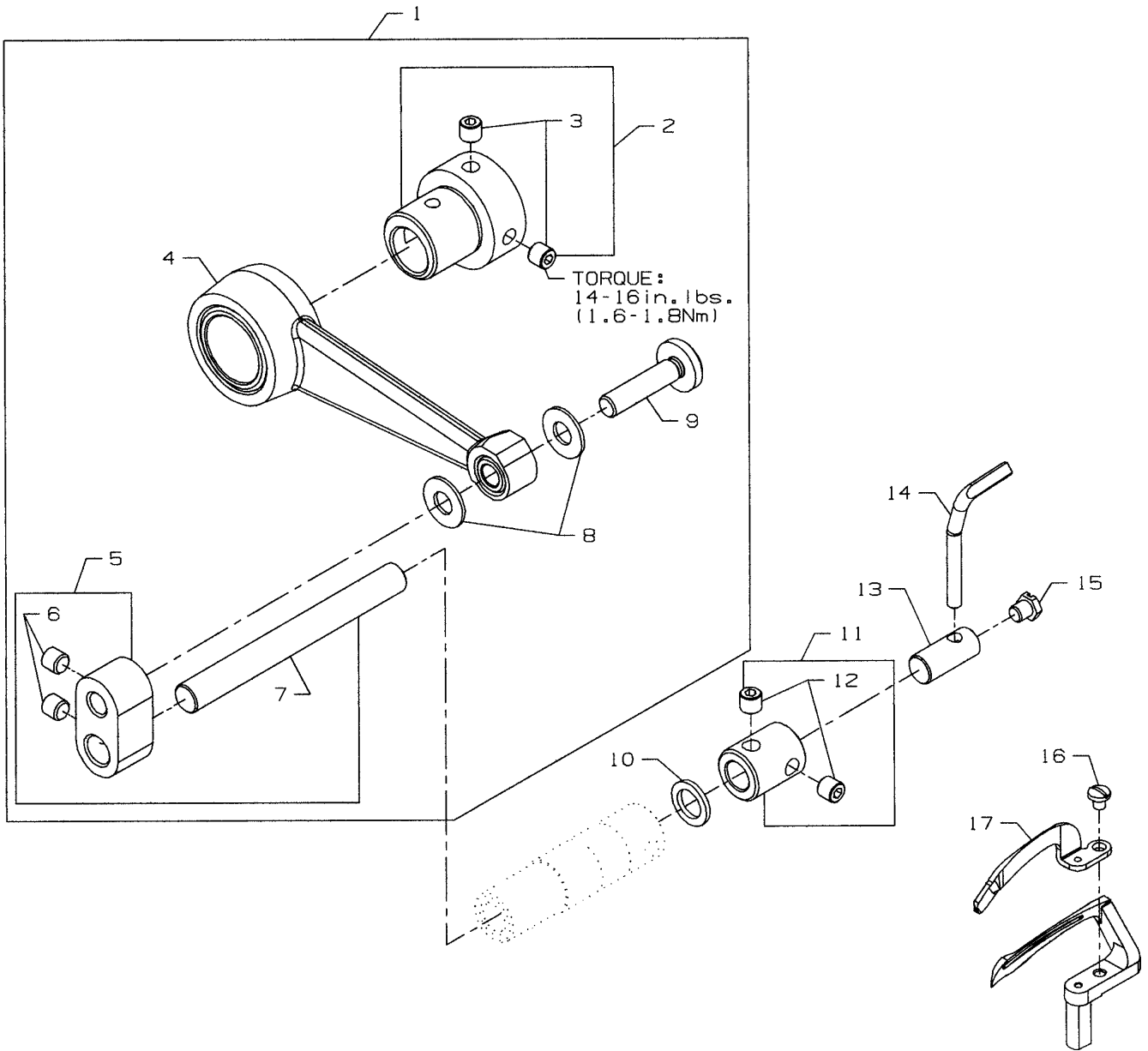




## LOOPER DRIVE

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

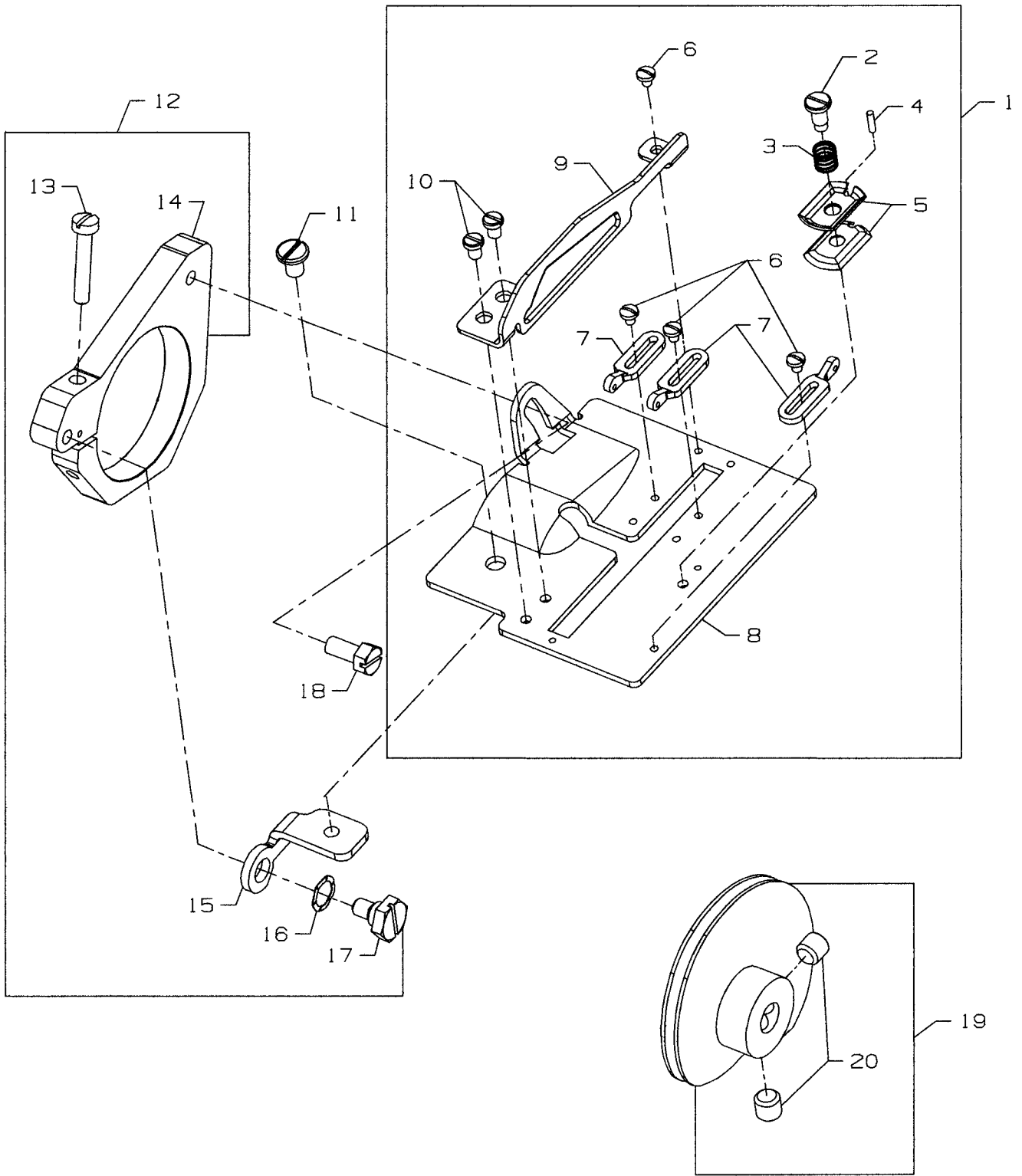




## NEEDLE GUARD

| Ref.<br>No. | Part No.    | Description                                     | Amt.<br>Req. |
|-------------|-------------|-------------------------------------------------|--------------|
| 1.          | 29476UJ     | Rear Needle Guard Drive Assembly .....          | 1            |
| 2.          | 50373DA     | Needle Guard Eccentric .....                    | 1            |
| 3.          | SS8110422TP | Screw, for needle guard eccentric .....         | 2            |
| 4.          | 50368W      | Connecting Rod Assembly, for needle guard ..... | 1            |
| 5.          | 50368T      | Pivot Link .....                                | 1            |
| 6.          | SS8110422TP | Screw .....                                     | 2            |
| 7.          | 50368V      | Shaft, for needle guard .....                   | 1            |
| 8.          | 50368E      | Washer .....                                    | 2            |
| 9.          | 50368A      | Pivot Pin .....                                 | 1            |
| 10.         | 50374       | Washer .....                                    | 1            |
| 11.         | 50354L      | Coupling, for needle guard .....                | 1            |
| 12.         | SS8110422TP | Screw .....                                     | 2            |
| 13.         | 50325AF     | Holder, for needle guard .....                  | 1            |
| 14.         | 50325AE     | Needle Guard, rear .....                        | 1            |
| 15.         | SS9090420TP | Screw, for rear needle guard .....              | 1            |
| 16.         | SS7060310SP | Screw, for front needle guard .....             | 1            |
| 17.         | 50325AJ     | Needle Guard, front .....                       | 1            |



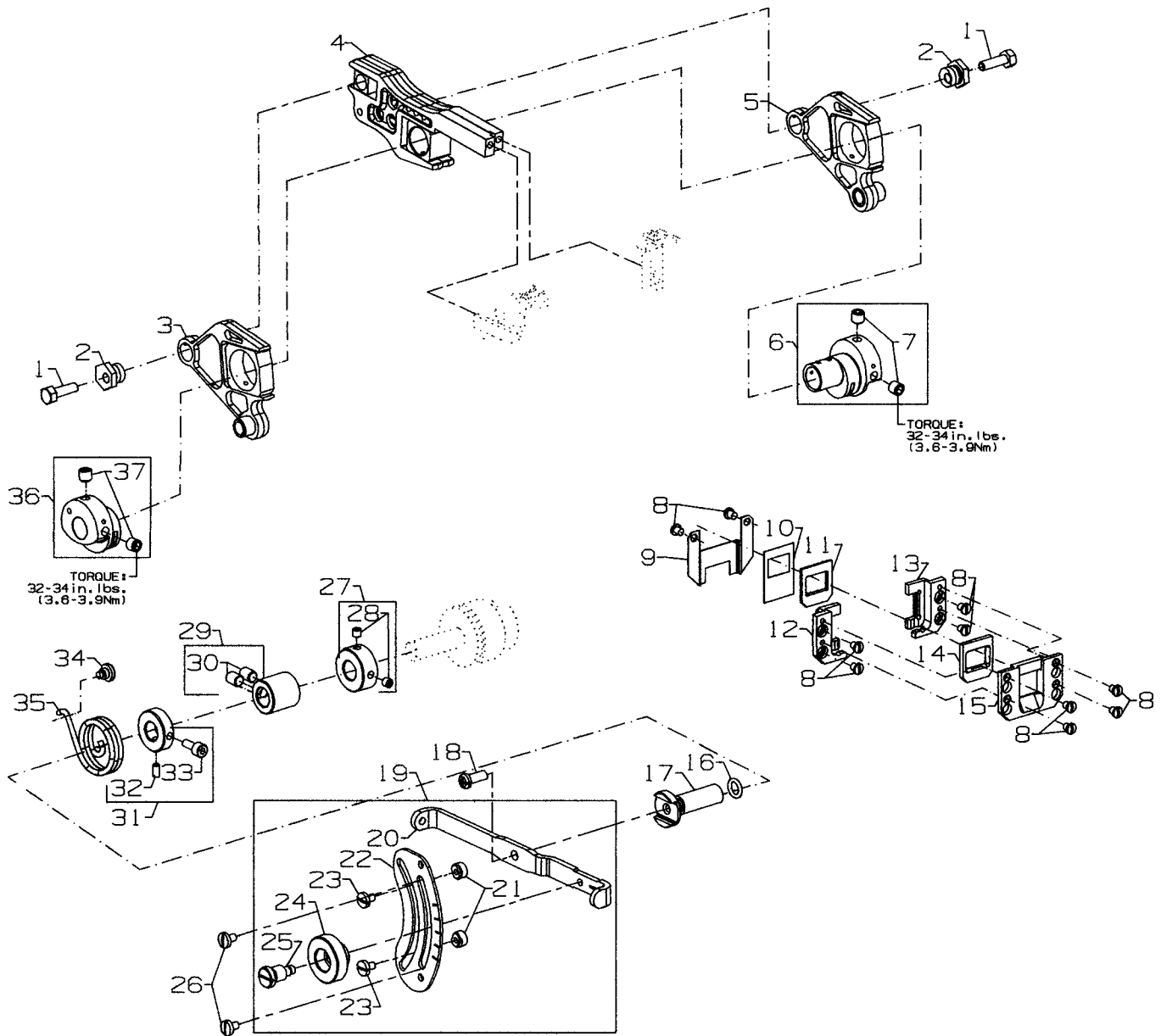




## LOOPER THREAD TAKE-UP

| Ref.<br>No. | Part No.    | Description                                     | Amt.<br>Req. |
|-------------|-------------|-------------------------------------------------|--------------|
| 1.          | 50357AM     | Cast-Off Plate Assembly .....                   | 1            |
| 2.          | SD0380551SL | Knurled Nut .....                               | 1            |
| 3.          | 50332AC     | Tension Spring .....                            | 1            |
| 4.          | 50347R      | Roll Pin .....                                  | 1            |
| 5.          | 51959B      | Tension Disc .....                              | 2            |
| 6.          | SS7060310SP | Screw .....                                     | 4            |
| 7.          | 52958D      | Take-up Eyelet .....                            | 3            |
| 8.          | 50357AN     | Cast-off Plate .....                            | 1            |
| 9.          | 50304N      | Retaining Finger .....                          | 1            |
| 10.         | SS6080410SP | Screw .....                                     | 2            |
| 11.         | SS6110610TP | Screw, for cast-off holder .....                | 1            |
| 12.         | 29476UK     | Cast-Off Plate Holder Assembly .....            | 1            |
| 13.         | SS9111010SP | Screw, for collar bracket .....                 | 1            |
| 14.         | 50383F      | Take-up Collar Bracket .....                    | 1            |
| 15.         | 50304K      | Cast-Off Plate Holder .....                     | 1            |
| 16.         | 50386J      | Washer .....                                    | 1            |
| 17.         | SD0630275SP | Shoulder Screw, for cast-off plate holder ..... | 1            |
| 18.         | SS9111010SP | Screw, for collar bracket .....                 | 1            |
| 19.         | 50323R      | Take-up Assembly .....                          | 1            |
| 20.         | SS8660612TP | Set Screw .....                                 | 2            |

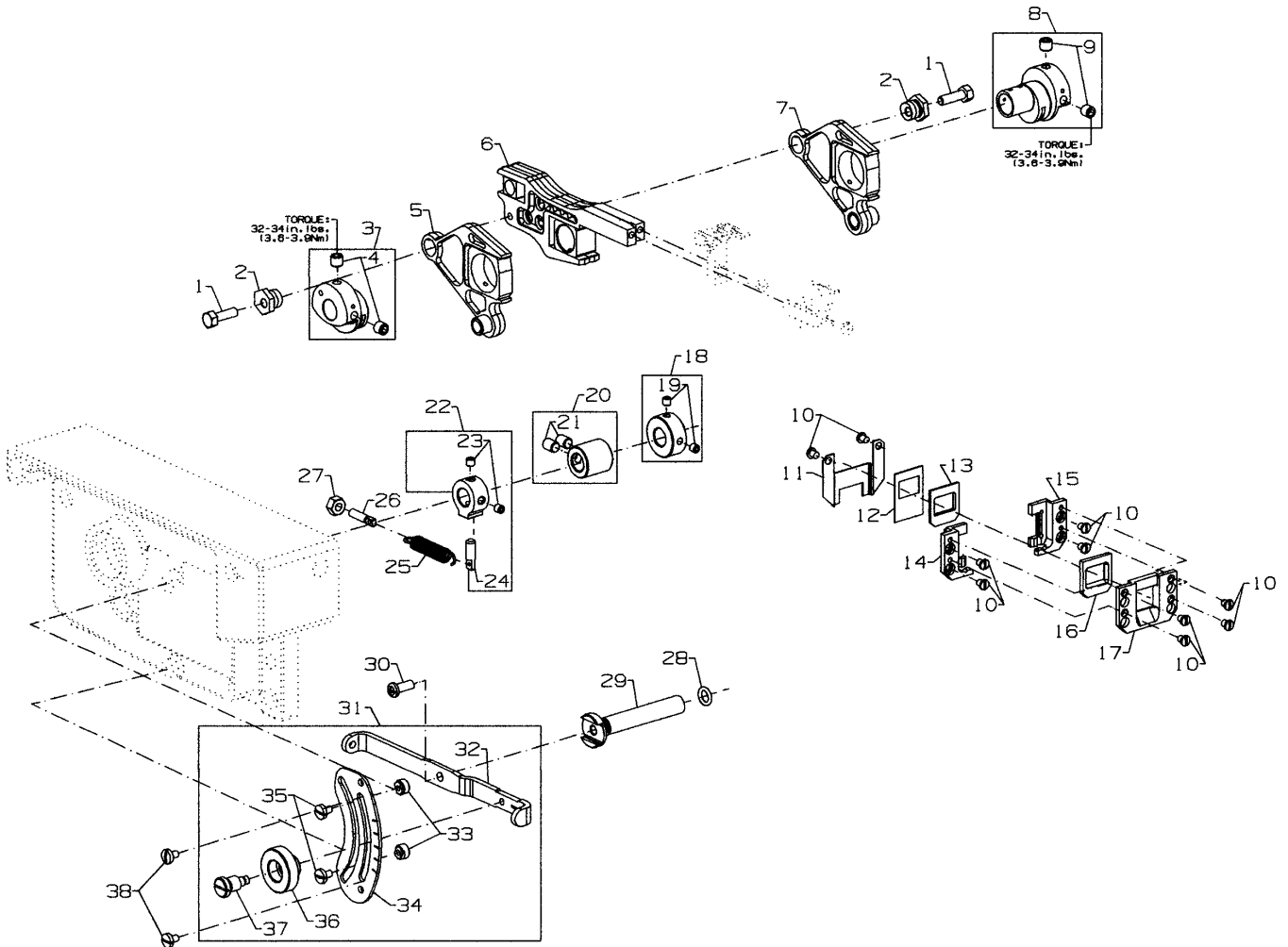




FEED DRIVE MECHANISM  
FOR  
FS322C01, FS332C01, FS335E41, FS335E42  
FS322H01, FS332H01, FS332L01, FS332L21

| Ref.<br>No. | Part No.     | Description                                 | Amt.<br>Req. |
|-------------|--------------|---------------------------------------------|--------------|
| 1.          | 18-1432      | Screw .....                                 | 2            |
| 2.          | 50334BD      | Hex Eccentric Stud .....                    | 2            |
| 3.          | 50334AW      | Drive Fork Assembly .....                   | 1            |
| 4.          | 50334BE      | Feed Bar Assembly .....                     | 1            |
| 5.          | 50334AX      | Drive Fork Assembly, right .....            | 1            |
| 6.          | 50340D       | Feed Eccentric, main .....                  | 1            |
| 7.          | SS8660612TP  | Screw .....                                 | 2            |
| 8.          | SS7090530SP  | Screw .....                                 | 10           |
| 9.          | 50334Y       | Oil Shield .....                            | 1            |
| 10.         | 50334V       | Oil Scraper .....                           | 1            |
| 11.         | 50334BH      | Feed Bar Seal .....                         | 1            |
| 12.         | 50335AM      | Guide Plate, left, rear .....               | 1            |
| 13.         | 50335BA      | Guide Plate, right, rear .....              | 1            |
| 14.         | 50334BJ      | Feed Bar Seal .....                         | 1            |
| 15.         | 50335AN      | Guide Plate, front .....                    | 1            |
| 16.         | RO0681190100 | "O" Ring .....                              | 1            |
| 17.         | 50337J       | Stem, for differential feed lever .....     | 1            |
| 18.         | SS4121215SP  | Screw, for stem .....                       | 1            |
| 19.         | 29476YH      | Differential Feed Lever Assembly .....      | 1            |
| 20.         | 50337H       | Differential Feed Lever .....               | 1            |
| 21.         | 50337U       | Stop .....                                  | 2            |
| 22.         | 50337BD      | Plate, for differential feed lever .....    | 1            |
| 23.         | SS7090610SP  | Screw .....                                 | 2            |
| 24.         | B1647704000A | Knob, for differential feed lever .....     | 1            |
| 25.         | 50387        | Screw .....                                 | 1            |
| 26.         | SS7090610SP  | Screw .....                                 | 2            |
| 27.         | 50337S       | Collar .....                                | 1            |
| 28.         | SS8110422TP  | Screw .....                                 | 2            |
| 29.         | 50337L       | Coupling, for differential feed lever ..... | 1            |
| 30.         | SS6110650TP  | Screw .....                                 | 2            |
| 31.         | 50337R       | Collar, for differential feed lever .....   | 1            |
| 32.         | SS8090710SP  | Screw .....                                 | 1            |
| 33.         | SS6091022TP  | Screw .....                                 | 1            |
| 34.         | SP0550271TP  | Screw, for spring .....                     | 1            |
| 35.         | 50337M       | Spring, for differential feed lever .....   | 1            |
| 36.         | 50340F       | Feed Eccentric, differential .....          | 1            |
| 37.         | SS8660612TP  | Screw .....                                 | 2            |

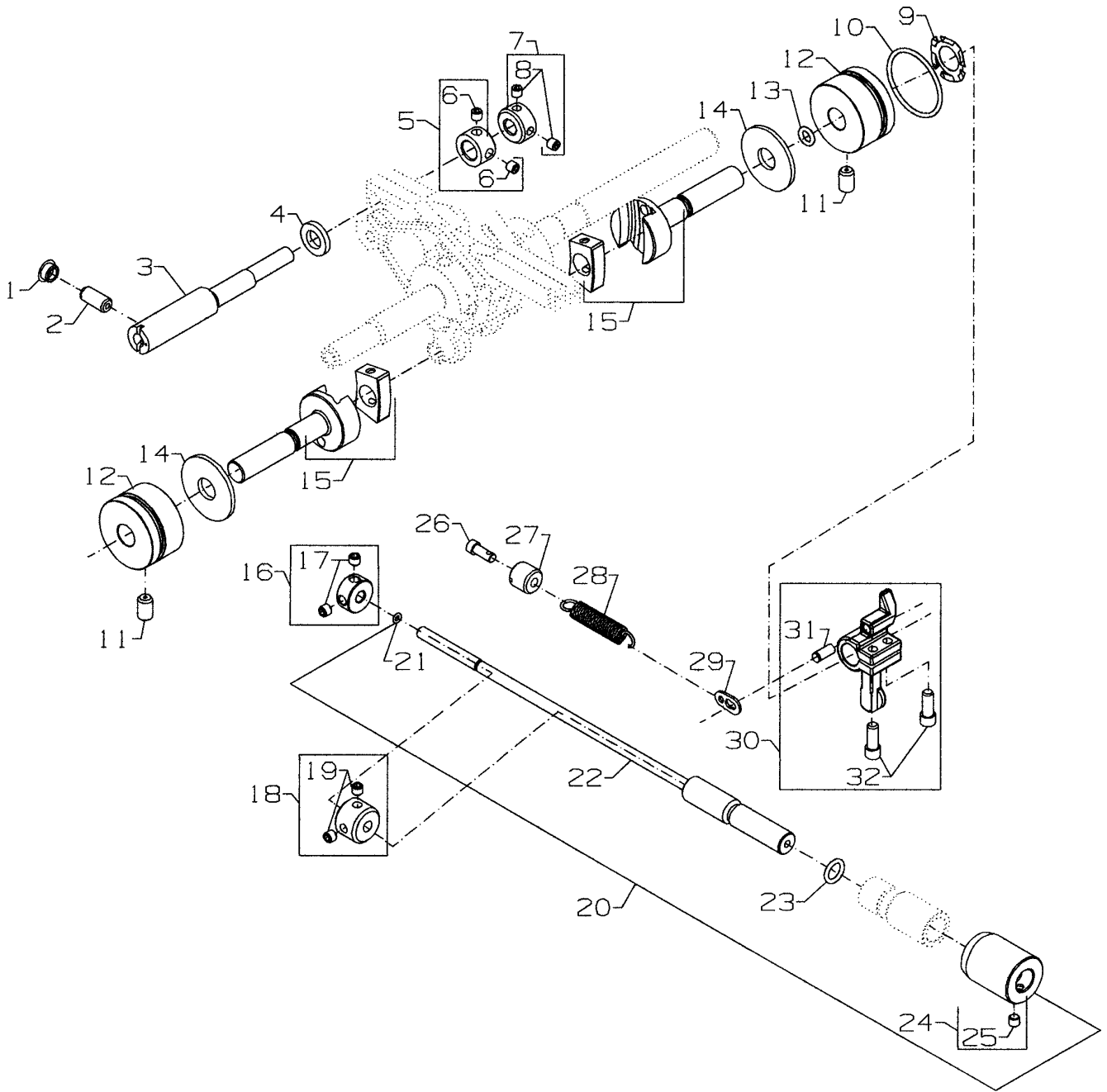




FEED DRIVE MECHANISM  
FOR  
FS322E12 & FS332E12

| Ref.<br>No. | Part No.     | Description                                  | Amt.<br>Req. |
|-------------|--------------|----------------------------------------------|--------------|
| 1.          | 18-1432      | Screw .....                                  | 2            |
| 2.          | 50334BD      | Hex Eccentric Stud .....                     | 2            |
| 3.          | 50340F       | Feed Eccentric, differential .....           | 1            |
| 4.          | SS8660612TP  | Screw, for Feed Eccentric, differential..... | 2            |
| 5.          | 50334AW      | Drive Fork Assembly, left .....              | 1            |
| 6.          | 50334BE      | Feed Bar Assembly .....                      | 1            |
| 7.          | 50334AX      | Drive Fork Assembly, right .....             | 1            |
| 8.          | 50340D       | Feed Eccentric, main .....                   | 1            |
| 9.          | SS8660612TP  | Screw .....                                  | 2            |
| 10.         | SS7090530SP  | Screw .....                                  | 10           |
| 11.         | 50334Y       | Oil Shield .....                             | 1            |
| 12.         | 50334V       | Oil Scraper, front .....                     | 1            |
| 13.         | 50334BH      | Feed Bar Seal .....                          | 1            |
| 14.         | 50335AM      | Guide Plate, left, rear .....                | 1            |
| 15.         | 50335BA      | Guide Plate, right, rear .....               | 1            |
| 16.         | 50334BJ      | Feed Bar Seal .....                          | 1            |
| 17.         | 50335AN      | Guide Plate, front .....                     | 1            |
| 18.         | 50337S       | Collar .....                                 | 1            |
| 19.         | SS8110422TP  | Screw .....                                  | 2            |
| 20.         | 50337L       | Coupling, for differential feed lever .....  | 1            |
| 21.         | SS6110650TP  | Screw .....                                  | 1            |
| 22.         | 50335AS      | Collar, for differential feed lever .....    | 1            |
| 23.         | SS8110422TP  | Screw .....                                  | 2            |
| 24.         | 50336V       | Pin, for differential feed lever .....       | 1            |
| 25.         | 50332W       | Spring .....                                 | 1            |
| 26.         | 18-1445      | Spring Latch Screw .....                     | 1            |
| 27.         | NS6110530SP  | Nut .....                                    | 1            |
| 28.         | RO068190100  | "O" Ring .....                               | 1            |
| 29.         | 50337Y       | Stem, for differential feed lever .....      | 1            |
| 30.         | SS4121215SP  | Screw, for Stem .....                        | 1            |
| 31.         | 29476YH      | Differential Feed Lever Assembly .....       | 1            |
| 32.         | 50337H       | Differential Feed Lever .....                | 1            |
| 33.         | 50337U       | Stop .....                                   | 2            |
| 34.         | 50337BD      | Plate, for differential feed lever .....     | 1            |
| 35.         | SS7090610SP  | Screw .....                                  | 2            |
| 36.         | B1647704000A | Knob, for differential feed lever .....      | 1            |
| 37.         | 50387        | Screw .....                                  | 1            |
| 38.         | SS7090610SP  | Screw .....                                  | 2            |

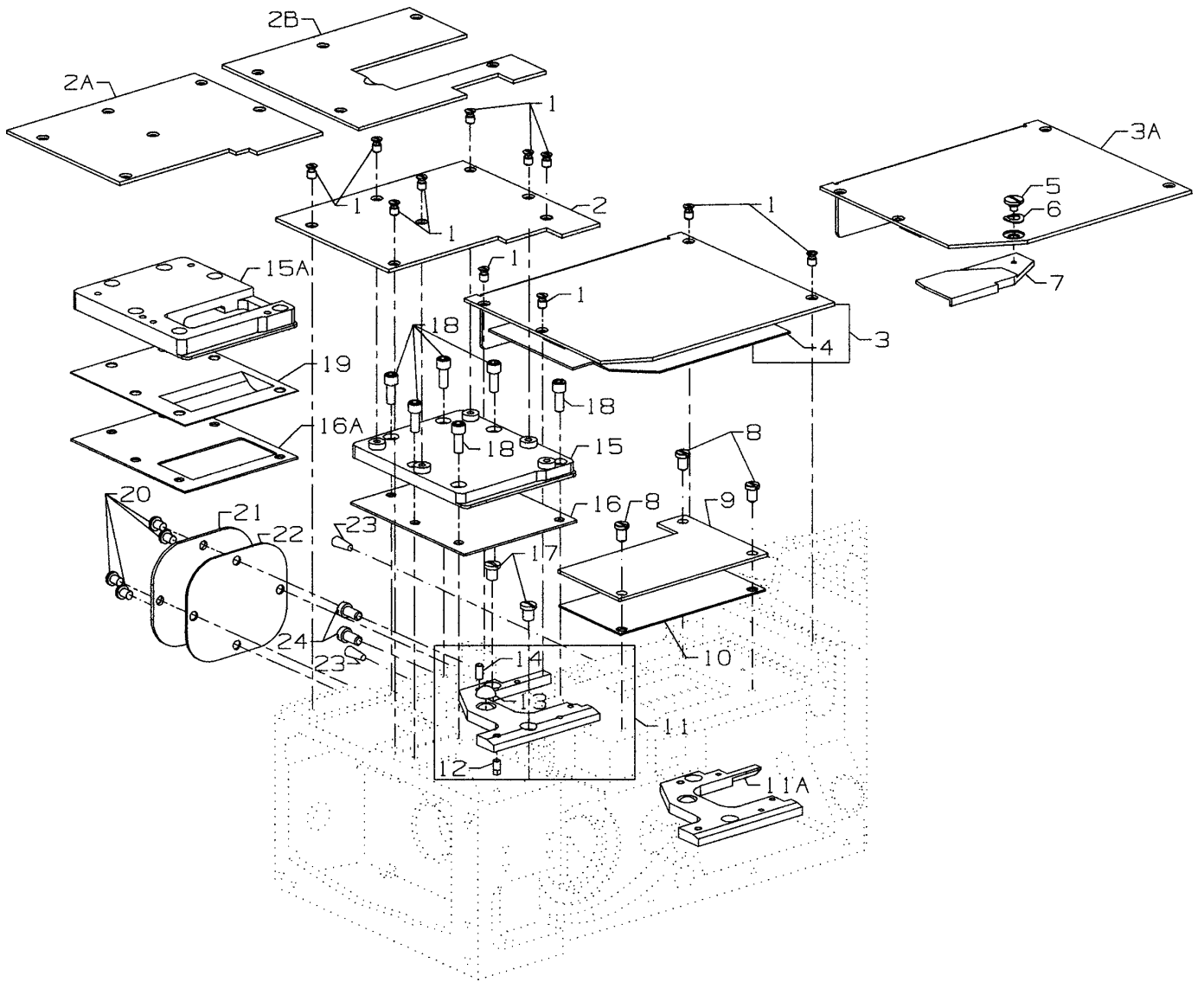




## FEED DRIVE MECHANISM

| Ref.<br>No. | Part No.    | Description                                | Amt.<br>Req. |
|-------------|-------------|--------------------------------------------|--------------|
| 1.          | TA0750404R0 | Plug, for eccentric shaft .....            | 1            |
| 2.          | 22591A      | Screw, for eccentric shaft .....           | 1            |
| 3.          | 50334BC     | Eccentric Shaft .....                      | 1            |
| 4.          | 50368AD     | Washer, for eccentric shaft .....          | 1            |
| 5.          | 50334BB     | Collar, for eccentric shaft .....          | 1            |
| 6.          | SS8110422TP | Screw, for collar .....                    | 2            |
| 7.          | 50337T      | Collar, for eccentric shaft .....          | 1            |
| 8.          | SS8110422TP | Screw, for collar .....                    | 2            |
| 9.          | 661-96      | Spring Washer .....                        | 1            |
| 10.         | 660-695     | "O" Ring, for bushing .....                | 1            |
| 11.         | SS8661012TP | Screw, for bushing .....                   | 1            |
| 12.         | 35036F      | Bushing, for stitch adjusting shaft .....  | 1            |
| 13.         | 660-220     | "O" Ring, for stitch adjusting shaft ..... | 1            |
| 14.         | 35036AZ     | Brake Pad .....                            | 1            |
| 15.         | 50634G      | Stitch Adjusting Shaft Assembly .....      | 1            |
| 16.         | 50335D      | Collar .....                               | 1            |
| 17.         | 22894P      | Screw .....                                | 2            |
| 18.         | 50333T      | Collar .....                               | 1            |
| 19.         | 22894P      | Screw .....                                | 2            |
| 20.         | 29476UF     | Stitch Length Adjusting Rod Assembly ..... | 1            |
| 21.         | 660-980     | "O" Ring, stitch control shaft .....       | 1            |
| 22.         | 50322AR     | Shaft, for stitch control .....            | 1            |
| 23.         | 660-206     | "O" Ring, for stitch control shaft .....   | 1            |
| 24.         | 50336Y      | Stitch Knob, indicator .....               | 1            |
| 25.         | SS8110422TP | Screw .....                                | 1            |
| 26.         | 50335       | Spring Retainer .....                      | 1            |
| 27.         | 22714C      | Screw, for spring retainer .....           | 1            |
| 28.         | 50355       | Spring .....                               | 1            |
| 29.         | 50335A      | Spring Holder .....                        | 1            |
| 30.         | 50336S      | Stitch Control Lever .....                 | 1            |
| 31.         | 661-35      | Pin .....                                  | 1            |
| 32.         | 22596H      | Screw .....                                | 2            |



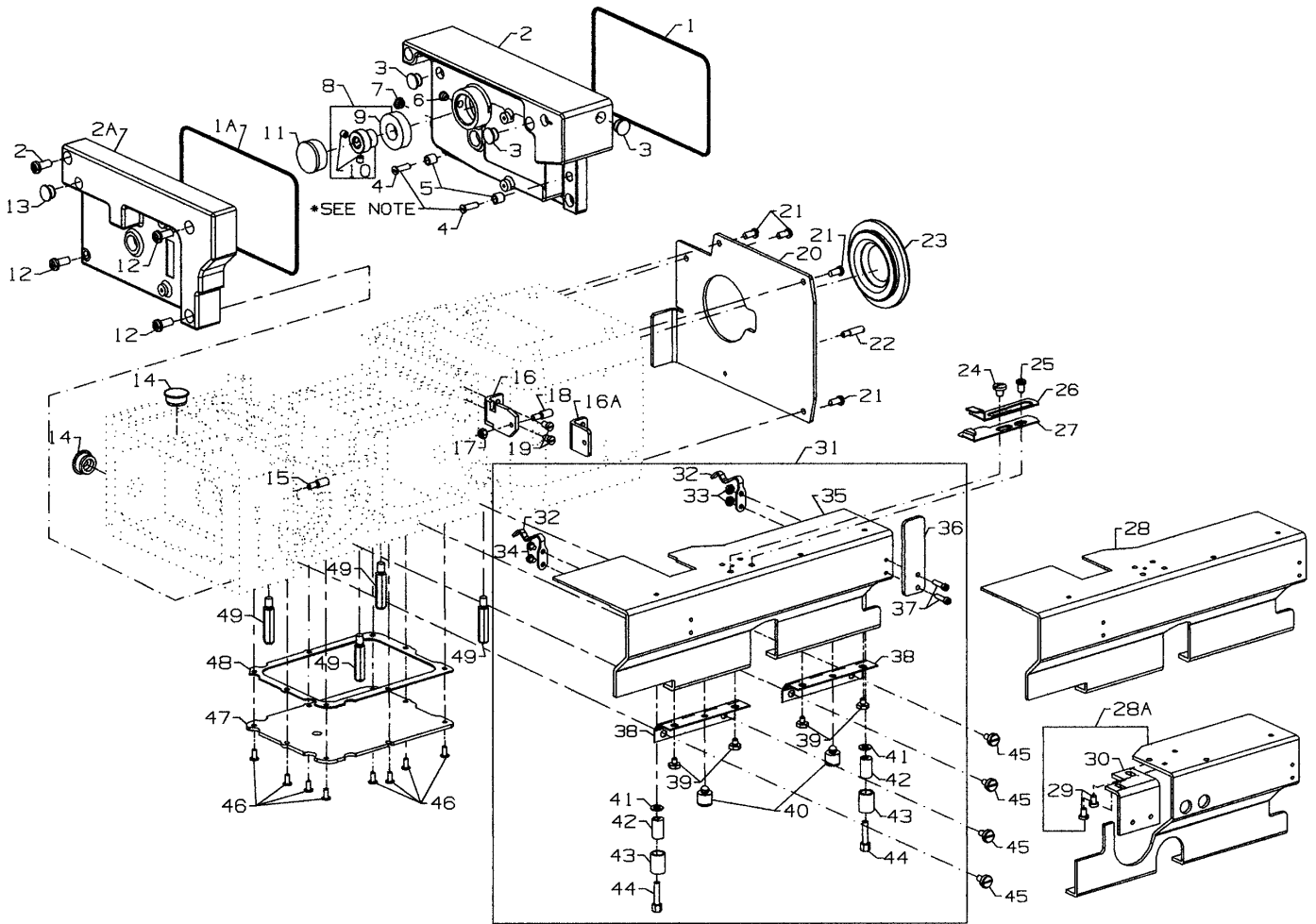




COVERS, LOWER BED

| Ref. No. | Part No.    | Description                                                                                                       | Amt. Req. |
|----------|-------------|-------------------------------------------------------------------------------------------------------------------|-----------|
| 1.       | 18-1448     | Screw .....                                                                                                       | 9-11      |
| 2.       | 50301BH     | Cloth Plate, left, for FS332L01, FS332L21, FS322H01, FS332H01 .....                                               | 1         |
| 2A.      | 50301BA     | Cloth Plate, left, for FS322C01, FS332C01, FS322E12, FS332E12 .....                                               | 1         |
| 2B.      | 50301CH     | Cloth Plate, left, for FS335E41, FS332E42 .....                                                                   | 1         |
| 3.       | 50301BF     | Cloth Plate, right, for FS322H01, FS332H01, FS332L01, FS332L21, FS335E41, FS335E42 .....                          | 1         |
| 3A.      | 50301AZ     | Cloth Plate, right, for FS322C01, FS332C01, FS322E12, FS332E12 .....                                              | 1         |
| 4.       | 50303B      | Accoustic Pad .....                                                                                               | 1         |
| 5.       | 22726       | Screw for Swing Plate, for FS332C01, FS332C01, FS335E41, FS335E42 .....                                           | 1         |
| 6.       | 95978       | Spring Washer, for FS332C01, FS332C01, FS335E41, FS335E42.....                                                    | 1         |
| 7.       | 50345U      | Swing Plate, for FS332C01, FS332C01, FS335E41, FS335E42 .....                                                     | 1         |
| 8.       | 22839C      | Screw, for FS322H01, FS332H01, FS332L01, FS332L21 .....                                                           | 3         |
| 9.       | 50382JR     | Cover, for FS322H01, FS332H01, FS332L01, FS332L21 .....                                                           | 1         |
| 10.      | 50384K      | Gasket, for FS322H01, FS332H01, FS332L01, FS332L21 .....                                                          | 1         |
| 11.      | 50380KA     | Throat Plate Support Complete, for FS335E41, FS335E42, FS322H01, FS332H01, FS332L01, FS332L21, .....              | 1         |
| 11A.     | 50380LA     | Throat Plate Support Complete, for FS322C01, FS332C01, FS322E12, FS332E12 .....                                   | 1         |
| 12.      | 50328       | Diamond Pin .....                                                                                                 | 1         |
| 13.      | 660-939     | Rubber Bumper, for throat plate support .....                                                                     | 1         |
| 14.      | 50336W      | Dowel Pin, for throat plate support .....                                                                         | 1         |
| 15.      | 50382CP     | Cover for Feed Chamber, for FS322C01, FS332C01, FS322E12, FS332E12, FS322H01, FS332H01, FS322L01, FS332L21, ..... | 1         |
| 15A.     | 50382CT     | Cover for Feed Chamber, for FS335E41, FS335E42 .....                                                              | 1         |
| 16.      | 50382CS     | Gasket for FS322H01, FS332H01, FS332L01, FS332L21, FS322E12, FS332E12, FS322C01, FS332C01 .....                   | 1         |
| 16A.     | 50384E      | Gasket, for FS335E41, FS335E42 .....                                                                              | 1         |
| 17.      | SS7150740SP | Screw .....                                                                                                       | 2         |
| 18.      | SS6121212TP | Screw, for feed chamber cover .....                                                                               | 6         |
| 19.      | 37-70BLK    | Cover Blank, for FS335E41, FS335E42 .....                                                                         | 1         |
| 20.      | SS4120615SP | Screw .....                                                                                                       | 4         |
| 21.      | 50382CL     | Cover, rear, for feed chamber .....                                                                               | 1         |
| 22.      | 50382CR     | Gasket .....                                                                                                      | 1         |
| -        | CE63        | Three Bond Adhesive (not shown), for screw .....                                                                  | -         |
| 23.      | CO67D       | Cork .....                                                                                                        | 2         |
| 24.      | 22517       | Screw, for bed .....                                                                                              | 2         |





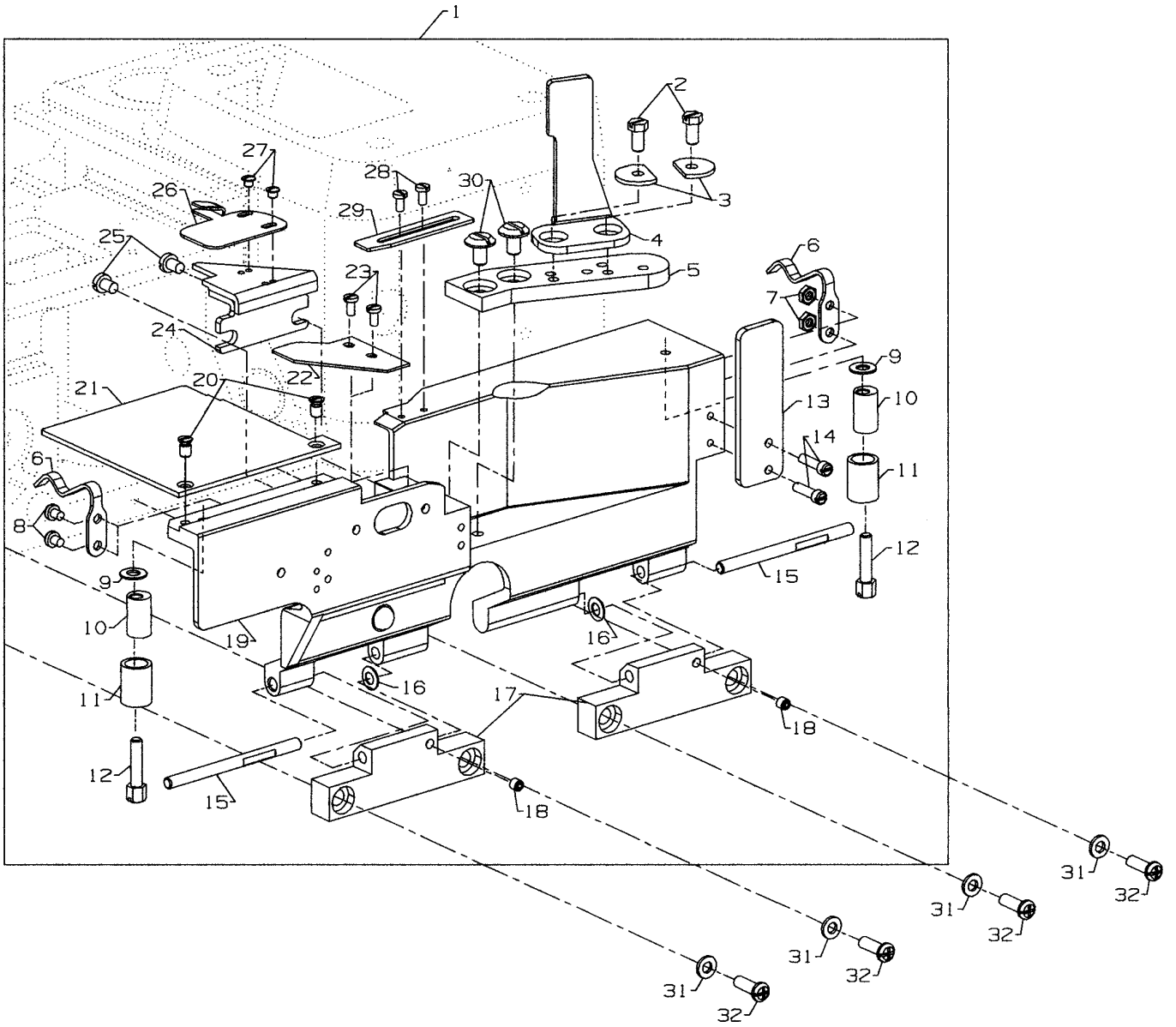
\*THESE SCREWS SHOULD NOT BE LOOSENED WHEN TAKING APART.



COVERS, LOWER BED

| Ref. No. | Part No.    | Description                                                                                                       | Amt. Req. |
|----------|-------------|-------------------------------------------------------------------------------------------------------------------|-----------|
| 1.       | 50382GK     | Quad Ring for end cover, for FS322E12, FS332E12 .....                                                             | 1         |
| 1A.      | 50382CM     | Quad Ring for end cover, for FS335E41, FS335E42, FS322H01, FS332H01, FS332L01, FS332L21 .....                     | 1         |
| 2.       | 50382KF     | Left End Cover, for FS322E12, FS332E12 .....                                                                      | 1         |
| 2A.      | 50382KE     | Left End Cover, for FS335E41, FS335E42, FS322H01, FS332H01, FS332L01, FS332L21, .....                             | 1         |
| 3.       | TA1100604R0 | Plug, for FS322C01, FS332C01, FS322E12, FS332E12, .....                                                           | 1/3       |
| 4.       | 22541A      | Screw, for FS322E12, FS332E12 .....                                                                               | 2         |
| 5.       | 50336L      | Ferrule, for FS322E12, FS332E12 .....                                                                             | 2         |
| 6.       | TA0620504R0 | Plug for Left End Cover, for FS322E12, FS332E12 .....                                                             | 1         |
| 7.       | TA0750404R0 | Plug, for FS322E12, FS332E12 .....                                                                                | 2         |
| 8.       | 50336       | Bearing Thrust Collar, for FS322E12, FS332E12 .....                                                               | 1         |
| 9.       | 660-974     | Bearing, FS322E12, FS332E12 .....                                                                                 | 1         |
| 10.      | 22894C      | Screw .....                                                                                                       | 2         |
| 11.      | 999-216C    | Plug, for FS322E12, FS332E12 .....                                                                                | 1         |
| 12.      | SS4151415SP | Screw .....                                                                                                       | 4         |
| 13.      | TA1100604R0 | Plug, for FS335E41, FS335E42, FS322H01, FS332H01, FS332L01, FS332L21.                                             | 1         |
| 14.      | 50393HB     | Plug .....                                                                                                        | 1         |
| 15.      | 22799AH     | Spring Latch Stud, for FS322C01, FS332C01, FS335E41, FS335E42, FS322H01, FS332H01, FS322L01, FS332L21, .....      | 2         |
| 16.      | 50332B      | Support Block, for FS332L21, FS322E12, FS332E12, FS335E41, FS335E42, FS322H01, FS332H01, FS332L01, FS332L21 ..... | 1         |
| 16A.     | 50357AC     | Support Block, for FS322C01, FS332C01.....                                                                        | 1         |
| 17.      | 35569J      | Nut .....                                                                                                         | 1         |
| 18.      | 22799AH     | Spring Latch Stud .....                                                                                           | 1         |
| 19.      | SS7120710SP | Screw .....                                                                                                       | 2         |
| 20.      | 50382CJ     | Cover, for drive belt .....                                                                                       | 1         |
| 21.      | SS4121015SP | Screw .....                                                                                                       | 4         |
| 22.      | 22799M      | Stop Stud (used only with synchronizer).....                                                                      | 1         |
| 23.      | 50393HU     | Plug for right end non-synchronizer .....                                                                         | 1         |
| 24.      | 25S         | Screw, for FS322H01, FS332H01.....                                                                                | 1         |
| 25.      | 22839C      | Screw, for FS322H01, FS332H01.....                                                                                | 1         |
| 26.      | 34703F2     | Holder, upper, for FS322H01, FS332H01.....                                                                        | 1         |
| 27.      | 34703E1     | Hemmer, lower, for FS322H01, FS332H01 .....                                                                       | 1         |
| 28.      | 50382JB     | Swing Down Cover, for FS335E41, FS335E42 .....                                                                    | 1         |
| 28A.     | 50382FS     | Front Cover Assembly, for FS322E12, FS332E12 .....                                                                | 1         |
| 29.      | 94          | Screw .....                                                                                                       | 2         |
| 30.      | 50332F      | Bracket .....                                                                                                     | 1         |
| 31.      | 29476VX     | Front Cover Assembly, for FS322H01, FS332H01, FS332L01, FS332L21.....                                             | 1         |
| 32.      | 50332A      | Latch Spring .....                                                                                                | 1/2       |
| 33.      | 41071G      | Nut .....                                                                                                         | 2         |
| 34.      | 22513D      | Screw .....                                                                                                       | 2         |
| 35.      | 50382CK     | Swing Down Cover .....                                                                                            | 1         |
| 36.      | 50363CH     | Lever .....                                                                                                       | 1         |
| 37.      | 22729D      | Screw .....                                                                                                       | 2         |
| 38.      | 50378S      | Hinge .....                                                                                                       | 2         |
| 39.      | SS9110543CP | Screw .....                                                                                                       | 4         |
| 40.      | 660-1020    | Rubber Bumper .....                                                                                               | 2         |
| 41.      | 20          | Washer .....                                                                                                      | 2         |
| 42.      | 50382T      | Stop, for front cover .....                                                                                       | 2         |
| 43.      | 50393W      | Rubber Bumper .....                                                                                               | 2         |
| 44.      | 22519J      | Screw .....                                                                                                       | 2         |
| 45.      | SS6120930TP | Screw .....                                                                                                       | 4         |
| 46.      | SS7090850SP | Screw .....                                                                                                       | 8         |
| 47.      | 50382CG     | Dry Chamber Cover .....                                                                                           | 1         |
| 48.      | 50383G      | Gasket, for chamber cover .....                                                                                   | 1         |
| 49.      | 22841U      | Machine Support Stud .....                                                                                        | 4         |



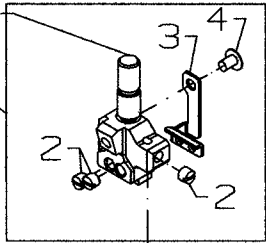


FRONT COVER ASSEMBLY  
FOR  
FS322C01, FS332C01

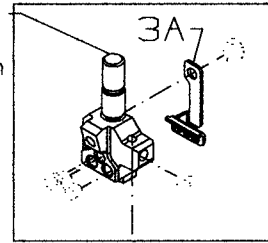
| Ref.<br>No. | Part No.    | Description                  | Amt.<br>Req. |
|-------------|-------------|------------------------------|--------------|
| 1.          | 29476VY     | Front Cover Assembly .....   | 1            |
| 2.          | 22882E      | Hex Head Screw .....         | 2            |
| 3.          | 50368H      | Washer .....                 | 2            |
| 4.          | 52864W      | Folder Support Bracket ..... | 1            |
| 5.          | 50364M      | Mounting Bracket .....       | 1            |
| 6.          | 50332A      | Latch Spring .....           | 2            |
| 7.          | 41071G      | Nut .....                    | 2            |
| 8.          | 22513D      | Screw .....                  | 2            |
| 9.          | 20          | Washer .....                 | 2            |
| 10.         | 50382T      | Front Cover Stop .....       | 2            |
| 11.         | 50393W      | Rubber Bumper .....          | 2            |
| 12.         | 22519J      | Screw .....                  | 2            |
| 13.         | 50363CH     | Lever, front cover .....     | 1            |
| 14.         | 22729D      | Screw .....                  | 2            |
| 15.         | 50347P      | Hinge Pin .....              | 2            |
| 16.         | 97127       | Spring Washer .....          | 2            |
| 17.         | 50378T      | Hinge .....                  | 2            |
| 18.         | 22894W      | Set Screw .....              | 1            |
| 19.         | 50382FT     | Swing Down Cover .....       | 1            |
| 20.         | 22525A      | Screw .....                  | 2            |
| 21.         | 50301AY     | Cloth Plate .....            | 1            |
| 22.         | 50382BB     | Looper Shield .....          | 1            |
| 23.         | 77L         | Screw .....                  | 2            |
| 24.         | 50364P      | Platform .....               | 1            |
| 25.         | 94          | Screw .....                  | 2            |
| 26.         | 50303C      | Edge Guide .....             | 1            |
| 27.         | 77F         | Screw .....                  | 2            |
| 28.         | 77L         | Screw .....                  | 2            |
| 29.         | 50343A      | Plate, for folder .....      | 1            |
| 30.         | 22517B      | Screw .....                  | 2            |
| 31.         | 8372A       | Washer .....                 | 4            |
| 32.         | SS4121415SP | Screw .....                  | 4            |



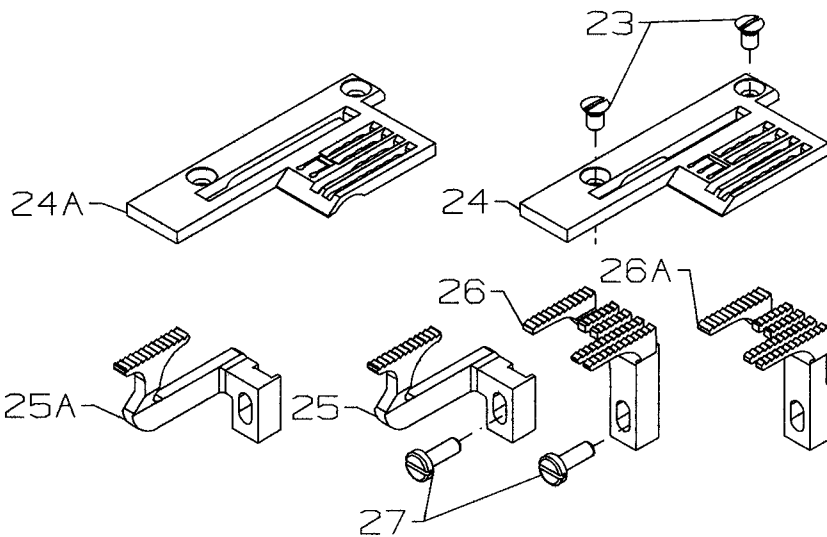
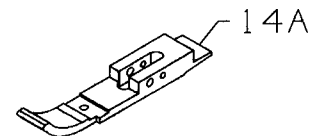
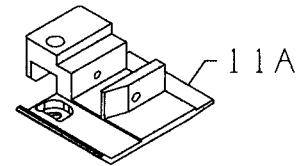
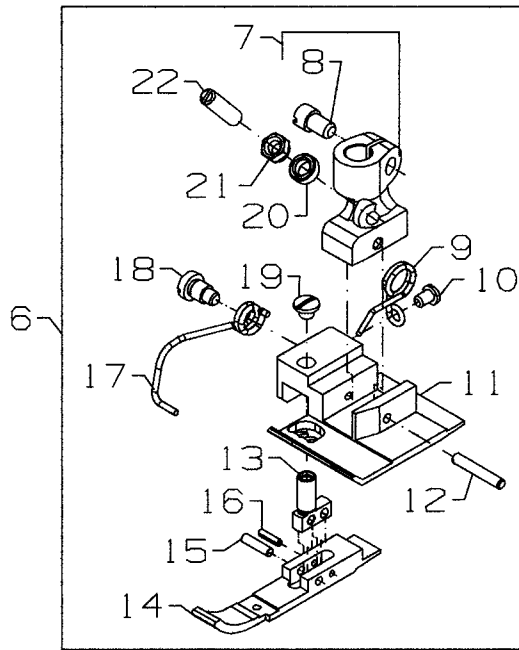
TORQUE:  
14-16 in. lbs.  
(1.6-1.8 Nm)



TORQUE:  
14-16 in. lbs.  
(1.6-1.8 Nm)



1A



**SEWING PARTS  
FOR  
FS322C01 & FS332C01**

| Ref.<br>No. | Part No.    | Description                                                | Amt.<br>Req. |
|-------------|-------------|------------------------------------------------------------|--------------|
| 1.          | -----       | Needle Head, for 2 needle sewing comb., (see chart) .....  | 1            |
| 1A.         | -----       | Needle Head, for 3 needle sewing comb., (see chart) .....  | 1            |
| 2.          | SS8080310TP | Screw, for Needle Head .....                               | 3/4          |
| 3.          | 50318AE40   | Eyelet, per Needle Head, for 2 needle sewing comb. ....    | 1            |
| 3A.         | 50318AE56   | Eyelet, per Needle Head, for 3 needle sewing comb. ....    | 1            |
| 4.          | SS6060440TP | Screw, for Eyelet .....                                    | 1            |
| 5.          | 50392G      | Needle Thread Eyelet .....                                 | 1            |
| 6.          | -----       | Presser Foot Assembly, for sewing comb., (see chart) ..... | 1            |
| 7.          | 34730H      | Presser Foot Shank .....                                   | 1            |
| 8.          | 91          | Screw .....                                                | 1            |
| 9.          | 97109       | Torsion Spring .....                                       | 1            |
| 10.         | 605         | Screw .....                                                | 1            |
| 11.         | 50330BN48   | Presser Foot Bottom, for 50320V48 .....                    | 1            |
| -           | 50330BN16   | Presser Foot Bottom, for 50320V16 .....                    | 1            |
| 11A.        | 50330BN12   | Presser Foot Bottom, for 50320U12 .....                    | 1            |
| -           | 50330BN8    | Presser Foot Bottom, for 50320U8 .....                     | 1            |
| 12.         | 22799B      | Screw, for hinge .....                                     | 1            |
| 13.         | G65-181     | Plunger .....                                              | 1            |
| 14.         | 50330BP16   | Presser Foot Yielding Section .....                        | 1            |
| 15.         | 96532       | Roll Pin .....                                             | 1            |
| 16.         | 96671       | Roll Pin .....                                             | 1            |
| 17.         | 52830G      | Spring .....                                               | 1            |
| 18.         | 57WD        | Screw, for spring .....                                    | 1            |
| 19.         | 187A        | Screw, for plunger .....                                   | 1            |
| 20.         | 51959E      | Collar .....                                               | 1            |
| 21.         | 51430F      | Nut .....                                                  | 1            |
| 22.         | 22565E      | Screw .....                                                | 1            |
| 23.         | 87          | Screw, for throat plate .....                              | 2            |
| 24.         | -----       | Throat Plate, for 3 needle sewing comb., (see chart) ..... | 1            |
| 24A.        | -----       | Throat Plate, for 2 needle sewing comb., (see chart) ..... | 1            |
| 25.         | -----       | Differential Feed Dog, for sewing comb., (see chart) ..... | 1            |
| 26.         | -----       | Main Feed Dog, for sewing comb., (see chart) .....         | 1            |
| 27.         | SS7091110TP | Screw, for feed dogs .....                                 | 2            |

| MODEL         | NEEDLE HEAD | PRESSER FOOT ASSEMBLY | THROAT PLATE | FEED DOG MAIN | FEED DOG DIFFERENTIAL |
|---------------|-------------|-----------------------|--------------|---------------|-----------------------|
| FS322C01-2D32 | 50318AM32   | 50320U8               | 34724XX8     | 50305AZ       | 50326AZ               |
| FS322C01-2D40 | 50318AM40   | 50320U12              | 34724XX10    |               |                       |
| FS322C01-2D48 | 50318AM48   | 50320V48              | 50324XX48    | 50305AU       | 50326AG               |
| FS322C01-3D48 |             |                       | 34724XX48    |               |                       |
| FS322C01-3D56 | 50318AM56   | 50320V16              | 34724XX56    |               |                       |
| FS322C01-3D64 | 50318AM64   |                       | 34724XX64    |               |                       |
| FS332C01-2D32 | 50318AM32   | 50320U8               | 34724XX8     | 50305AZ       | 50326AZ               |
| FS332C01-2D40 | 50318AM40   | 50320U12              | 34724XX10    |               |                       |
| FS332C01-2D48 | 50318AM48   | 50320V48              | 50324XX48    | 50305AU       | 50326AG               |
| FS332C01-3D48 |             |                       | 34724XX48    |               |                       |
| FS332C01-3D56 | 50318AM56   | 50320V16              | 34724XX56    |               |                       |
| FS332C01-3D64 | 50318AM64   |                       | 34724XX64    |               |                       |



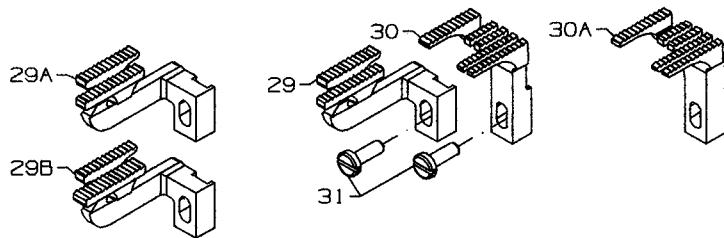
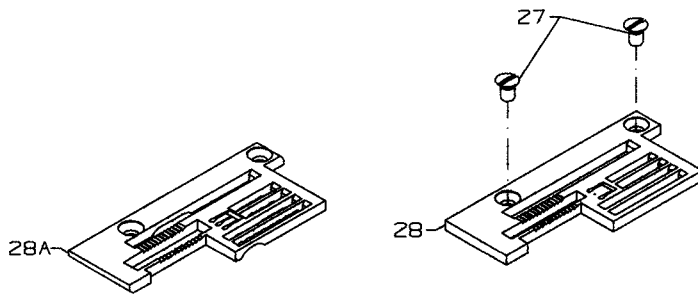
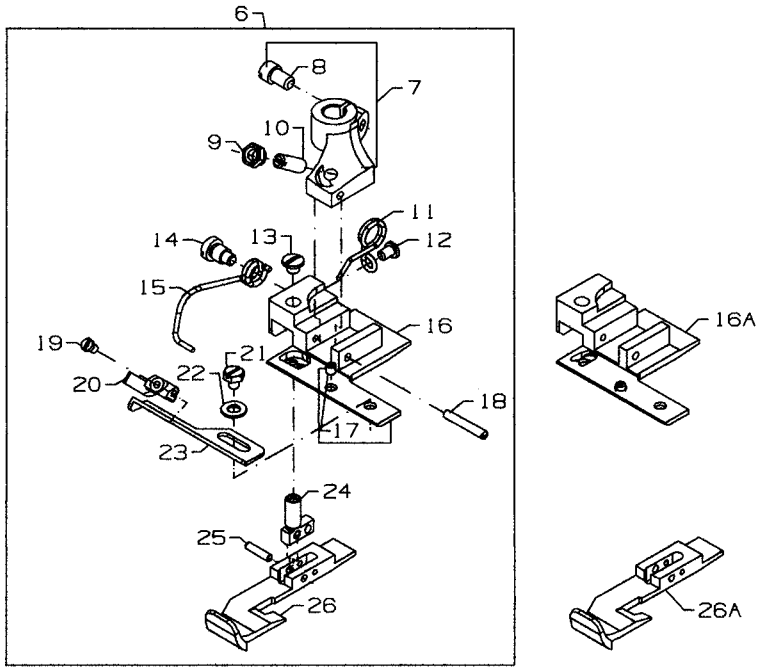
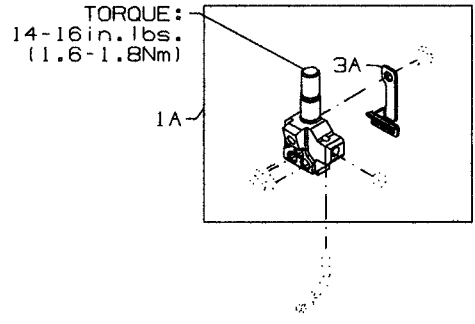
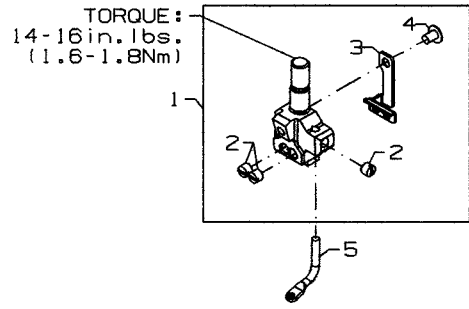
| <b>MODEL</b>  | <b>NEEDLE HEAD</b> | <b>PRESSER FOOT ASSEMBLY</b> | <b>THROAT PLATE</b> | <b>FEED DOG MAIN</b> | <b>FEED DOG DIFFERENTIAL</b> |
|---------------|--------------------|------------------------------|---------------------|----------------------|------------------------------|
| FS322E12-2D32 | 50318AM32          | 50320W8                      | 34824TD8            | 50305AZ              | 50326BA                      |
| FS322E12-2D40 | 50318AM40          | 50320W12                     | 34824TD10           |                      | 50326BB                      |
| FS322E12-2D48 | 50318AM48          | 50320X48                     | 34824TD48           | 50305AU              | 50326AF                      |
| FS322E12-3D48 |                    |                              |                     |                      |                              |
| FS322E12-3D56 | 50318AM56          | 50320X16                     | 34824TD56           |                      |                              |
| FS322E12-3D64 | 50318AM64          |                              | 34824TD64           |                      |                              |





| <b>MODEL</b>  | <b>NEEDLE HEAD</b> | <b>PRESSER FOOT ASSEMBLY</b> | <b>THROAT PLATE</b> | <b>FEED DOG MAIN</b> | <b>FEED DOG DIFFERENTIAL</b> |
|---------------|--------------------|------------------------------|---------------------|----------------------|------------------------------|
| FS332E12-2D32 | 50318AM32          | 50320W8                      | 34824TD8            | 50305AZ              | 50326BA                      |
| FS332E12-2D40 | 50318AM40          | 50320W12                     | 34824TD10           |                      | 50326BB                      |
| FS332E12-2D48 | 50318AM48          | 50320X48                     | 34824TD48           | 50305AU              | 50326AF                      |
| FS332E12-3D48 |                    |                              |                     |                      |                              |
| FS332E12-3D56 | 50318AM56          | 50320X16                     | 34824TD56           |                      |                              |
| FS332E12-3D64 | 50318AM64          |                              | 34824TD64           |                      |                              |

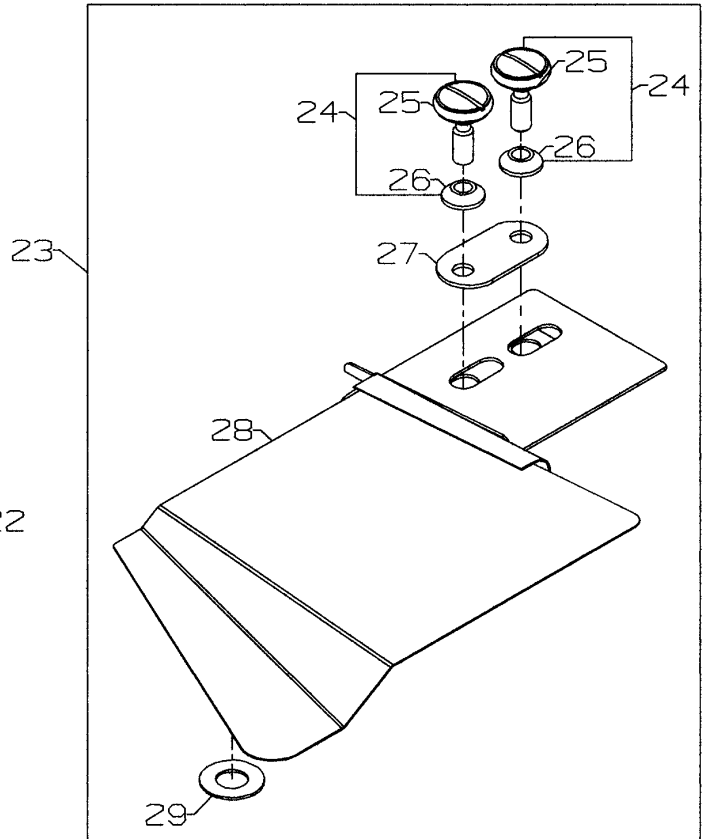
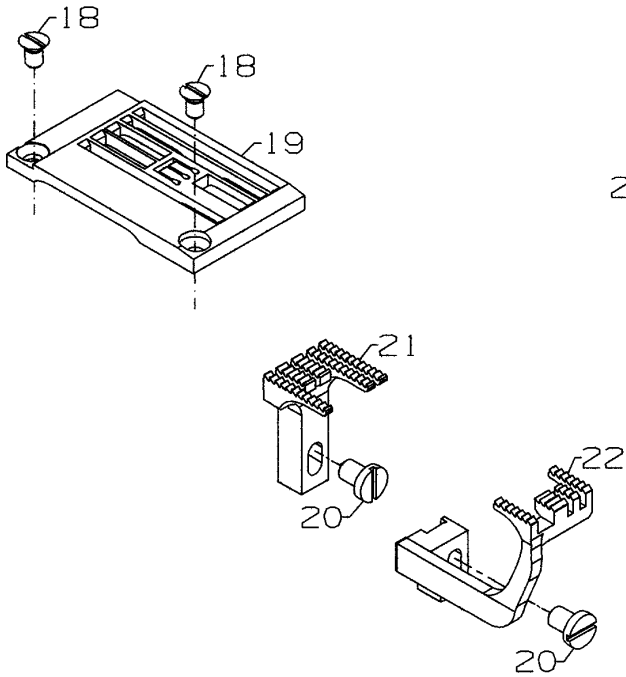
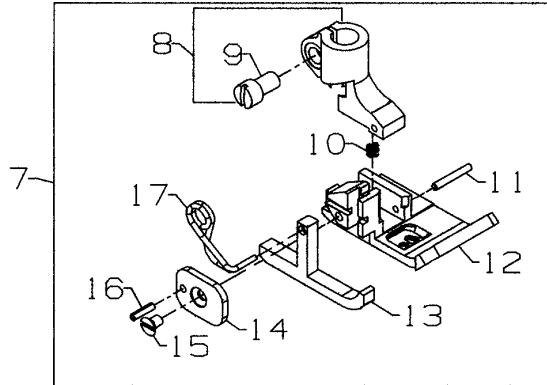
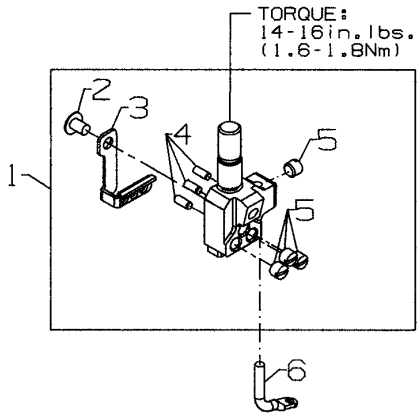




SEWING PARTS  
FOR  
FS322E12 & FS332E12

| Ref.<br>No. | Part No.    | Description                                                                                        | Amt.<br>Req. |
|-------------|-------------|----------------------------------------------------------------------------------------------------|--------------|
| 1.          | -----       | Needle Head, for sewing comb., (see chart) .....                                                   | 1            |
| 2.          | SS5060410SP | Screw .....                                                                                        | 4-6          |
| 3.          | 50318AE40   | Eyelet, per needle head, for FE12-2D32, FE12-2D40 .....                                            | 1            |
| 3a.         | 50318AE56   | Eyelet, per needle head, for FE12-2D48, FE12-3D48, FE12-3D56,<br>FE12-3D64 .....                   | 1            |
| 4.          | SS6060440TP | Screw, for eyelet .....                                                                            | 1            |
| 5.          | 50392G      | Needle Thread Eyelet .....                                                                         | 1            |
| 6.          | -----       | Presser Foot Assembly, for sewing comb., (see chart) .....                                         | 1            |
| 7.          | 52730T      | Presser Foot Shank .....                                                                           | 1            |
| 8.          | 91          | Screw .....                                                                                        | 1            |
| 9.          | 51430F      | Nut .....                                                                                          | 1            |
| 10.         | 22840A      | Screw .....                                                                                        | 1            |
| 11.         | 97109       | Spring .....                                                                                       | 1            |
| 12.         | 605         | Screw .....                                                                                        | 1            |
| 13.         | 187A        | Screw .....                                                                                        | 1            |
| 14.         | 57WD        | Screw .....                                                                                        | 1            |
| 15.         | 52830G      | Spring .....                                                                                       | 1            |
| 16.         | 50330CE16   | Presser Foot Bottom, per presser foot, for FE12-3D56, FE12-3D64 .....                              | 1            |
| -           | 50330CE48   | Presser Foot Bottom, per presser foot for, FE12-2D48, FE12-3D48 .....                              | 1            |
| 16A.        | 50330CC8    | Presser Foot Bottom, per presser foot for, FE12-2D32 .....                                         | 1            |
| -           | 50330CC12   | Presser Foot Bottom, per presser foot for, FE12-2D40 .....                                         | 1            |
| 17.         | 73B         | Screw .....                                                                                        | 1            |
| 18.         | 22799B      | Screw .....                                                                                        | 1            |
| 19.         | 22738B      | Screw .....                                                                                        | 1            |
| 20.         | 34830MA     | Tape Margin .....                                                                                  | 1            |
| 21.         | 99373A      | Screw .....                                                                                        | 1            |
| 22.         | 95956       | Washer .....                                                                                       | 1            |
| 23.         | 34830LA     | Tape Guide .....                                                                                   | 1            |
| 24.         | G65-181     | Plunger .....                                                                                      | 1            |
| 25.         | 96532       | Roll Pin .....                                                                                     | 1            |
| 26.         | 50330CF     | Yielding Section, for sewing comb., FE12-2D48, FE12-3D48, FE12-3D56,<br>FE12-3D60, FE12-3D64 ..... | 1            |
| 26A.        | 50330CD     | Yielding Section, for sewing comb., FE12-2D32, FE12-2D40 .....                                     | 1            |
| 27.         | 87          | Screw, for throat plate .....                                                                      | 2            |
| 28.         | -----       | Throat Plate, for sewing comb., (see chart).....                                                   | 1            |
| 28A.        | -----       | Throat Plate, for sewing comb., (see chart) .....                                                  | 1            |
| 29.         | -----       | Differential Feed Dog, for sewing comb., (see chart).....                                          | 1            |
| 29A.        | -----       | Differential Feed Dog, for sewing comb., (see chart).....                                          | 1            |
| 29B.        | -----       | Differential Feed Dog, for sewing comb., (see chart) .....                                         | 1            |
| 30.         | -----       | Main Feed Dog, for sewing comb., (see chart) .....                                                 | 1            |
| 30A.        | -----       | Main Feed Dog, for sewing comb., (see chart) .....                                                 | 1            |
| 31.         | SS7091110TP | Screw, for feed dogs .....                                                                         | 2            |





SEWING PARTS  
FOR  
FS335E41 & FS335E42

| Ref.<br>No. | Part No.    | Description                                             | Amt.<br>Req. |
|-------------|-------------|---------------------------------------------------------|--------------|
| 1.          | 50318AA56   | Needle Head, for sewing comb., (see chart) .....        | 1            |
| -           | 50318AA64   | Needle Head, for sewing comb., (see chart) .....        | 1            |
| 2.          | SS5060410SP | Round Head Screw .....                                  | 1            |
| 3.          | 50318AE56   | Eyelet, needle head, for sewing comb. (see chart) ..... | 1            |
| 4.          | 660-1046    | Pin .....                                               | 3            |
| 5.          | SS8080310TP | Screw .....                                             | 4            |
| 6.          | 50392G      | Eyelet .....                                            | 1            |
| 7.          | 50320BF64   | Presser Foot Assembly .....                             | 1            |
| 8.          | G57730GB    | Shank .....                                             | 1            |
| 9.          | 91          | Screw .....                                             | 1            |
| 10.         | G57730GD    | Torsion Spring .....                                    | 1            |
| 11.         | 6-25-55     | Pin (01.5 x 10.5) .....                                 | 1            |
| 12.         | 50330BH64   | Presser Foot Bottom .....                               | 1            |
| 13.         | 34730A      | Yielding Section .....                                  | 1            |
| 14.         | G57730GC    | Plate .....                                             | 1            |
| 15.         | 22716       | Screw .....                                             | 1            |
| 16.         | 96651       | Roll Pin .....                                          | 1            |
| 17.         | 39568J      | Pressure Spring .....                                   | 1            |
| 18.         | 87          | Screw, for throat plate .....                           | 2            |
| 19.         | 50324DB56   | Throat Plate, for sewing comb., (see chart) .....       | 1            |
| -           | 50324DC64   | Throat Plate, for sewing comb., (see chart) .....       | 1            |
| 20.         | SS7091110TP | Screw, for feed dogs .....                              | 2            |
| 21.         | 50305BS     | Main Feed Dog .....                                     | 1            |
| 22.         | 50326BL     | Differential Feed Dog .....                             | 1            |
| 23.         | 29480AWR    | Folder Kit .....                                        | 1            |
| 24.         | 25          | Gauge Screw Assembly .....                              | 2            |
| 25.         | 201C        | Gauge Screw .....                                       | 2            |
| 26.         | 25D         | Washer .....                                            | 2            |
| 27.         | 57864B      | Washer Plate .....                                      | 1            |
| 28.         | 50389B      | Folder .....                                            | 1            |
| -           | 21210       | Looper Collar (not shown) .....                         | 1            |
| 29.         | 51493AF     | Isolator .....                                          | 1            |

| MODEL         | NEEDLE HEAD | PRESSER FOOT ASSEMBLY | THROAT PLATE | FEED DOG MAIN | FEED DOG DIFFERENTIAL |
|---------------|-------------|-----------------------|--------------|---------------|-----------------------|
| FS332E12-2D32 | 50318AM32   | 50320W8               | 34824TD8     | 50305AZ       | 50326BA               |
| FS332E12-2D40 | 50318AM40   | 50320W12              | 34824TD10    |               | 50326BB               |
| FS332E12-2D48 | 50318AM48   | 50320X48              | 34824TD48    | 50305AU       | 50326AF               |
| FS332E12-3D48 |             |                       | 34824TD56    |               |                       |
| FS332E12-3D56 | 50318AM56   | 50320X16              | 34824TD56    |               |                       |
| FS332E12-3D64 | 50318AM64   |                       | 34824TD64    |               |                       |



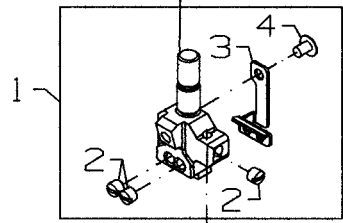
| MODEL         | NEEDLE HEAD | PRESSER FOOT ASSEMBLY | THROAT PLATE | FEED DOG MAIN | FEED DOG DIFFERENTIAL |
|---------------|-------------|-----------------------|--------------|---------------|-----------------------|
| FS322H01-2A32 | 50318AM32   | 50320AH               | 50324BL32    | 50305BM       | 50326AY               |
| FS322H01-2C32 |             |                       | 34724F8      |               |                       |
| FS322H01-2A40 | 50318AM40   |                       | 50324BL40    |               |                       |
| FS322H01-2C40 |             |                       | 34724F10     |               |                       |
| FS322H01-2A48 | 50318AM48   | 50320T48              | 50324BL48    |               |                       |
| FS322H01-2C48 |             |                       | 34724F48     |               |                       |
| FS322H01-3A48 |             |                       | 50324BL48    |               |                       |
| FS322H01-3B48 |             |                       | 50324BS48    |               |                       |
| FS322H01-3C48 |             |                       | 34724F48     |               |                       |
| FS322H01-3A56 | 50318AM56   | 50320T60              | 50324BL56    |               |                       |
| FS322H01-3B56 |             |                       | 50324BS56    |               |                       |
| FS322H01-3C56 |             |                       | 34724F56     |               |                       |
| FS322H01-3A64 | 50318AM64   |                       | 50324BL64    |               |                       |
| FS322H01-3B64 |             |                       | 50324BS64    |               |                       |
| FS322H01-3C64 |             |                       | 34724F64     |               |                       |
| FS332H01-2A32 | 50318AM32   | 50320AH               | 50324BL32    |               |                       |
| FS332H01-2C32 |             |                       | 34724F8      |               |                       |
| FS332H01-2A40 | 50318AM40   |                       | 50324BL40    |               |                       |
| FS332H01-2C40 |             |                       | 34724F10     |               |                       |
| FS332H01-2A48 | 50318AM48   | 50320T48              | 50324BL48    |               |                       |
| FS332H01-2C48 |             |                       | 34724F48     |               |                       |
| FS332H01-3A48 |             |                       | 50324BL48    |               |                       |
| FS332H01-3B48 |             |                       | 50324BS48    |               |                       |
| FS332H01-3C48 |             |                       | 34724F48     |               |                       |
| FS332H01-3A56 | 50318AM56   | 50320T60              | 50324BL56    |               |                       |
| FS332H01-3B56 |             |                       | 50324BS56    |               |                       |
| FS332H01-3C56 |             |                       | 34724F56     |               |                       |
| FS332H01-3A64 | 50318AM64   |                       | 50324BL64    |               |                       |
| FS332H01-3B64 |             |                       | 50324BS64    |               |                       |
| FS332H01-3C64 |             |                       | 34724F64     |               |                       |



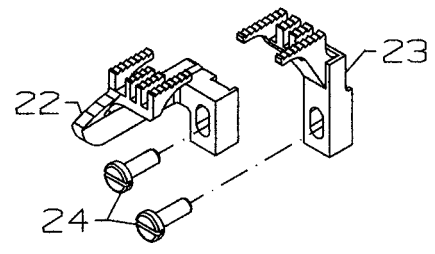
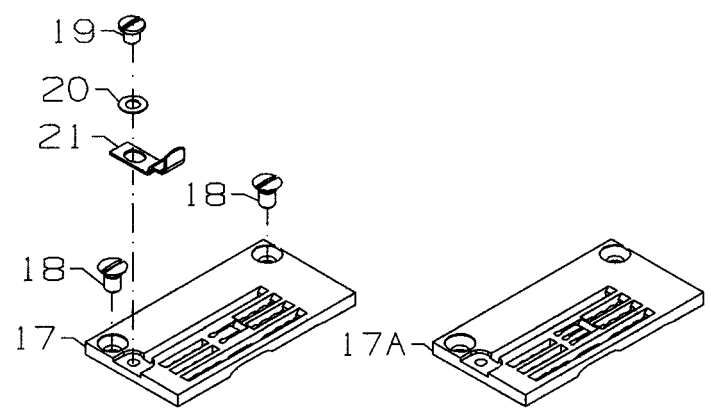
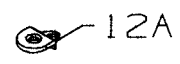
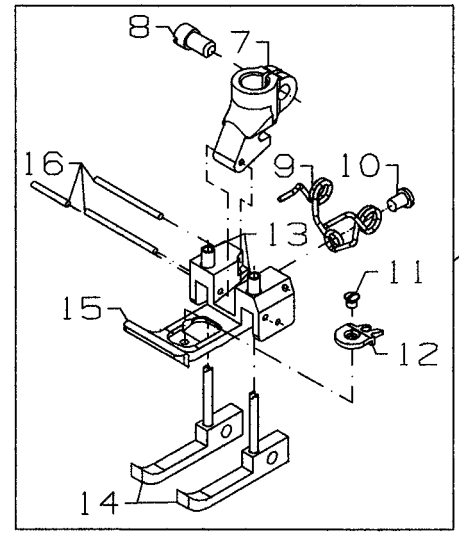
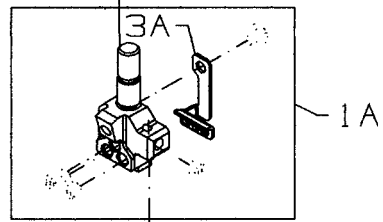
| MODEL         | NEEDLE HEAD | PRESSER FOOT ASSEMBLY | THROAT PLATE | FEED DOG MAIN | FEED DOG DIFFERENTIAL |
|---------------|-------------|-----------------------|--------------|---------------|-----------------------|
| FS332L01-2A32 | 50318AM32   | 50320AH               | 50324BN32    | 50305AN       | 50326AE               |
| FS332L01-2C32 |             |                       | 50324BM32    |               |                       |
| FS332L01-2A40 | 50318AM40   |                       | 50324BK40    |               |                       |
| FS332L01-2C40 |             |                       | 50324BJ40    |               |                       |
| FS332L01-3A48 | 50318AM48   | 50320T48              | 50324BN48    |               |                       |
| FS332L01-3B48 |             |                       | 50324BR48    |               |                       |
| FS332L01-3C48 |             |                       | 50324BM48    |               |                       |
| FS332L01-3A56 | 50318AM56   | 50320T60              | 50324BN56    |               |                       |
| FS332L01-3B56 |             |                       | 50324BR56    |               |                       |
| FS332L01-3C56 |             |                       | 50324BM56    |               |                       |
| FS332L01-3A64 | 50318AM64   |                       | 50324BN64    |               |                       |
| FS332L01-3B64 |             |                       | 50324BR64    |               |                       |
| FS332L01-3C64 |             |                       | 50324BM64    |               |                       |
| FS332L21-3A56 | 50318AM56   |                       | 50324BN56    | 50305AV       | 50326AX               |
| FS332L21-3B56 |             |                       | 50324BR56    |               |                       |
| FS332L21-3C56 |             |                       | 50324BM56    |               |                       |
| FS332L21-3A64 | 50318AM64   |                       | 50324BN64    |               |                       |
| FS332L21-3B64 |             |                       | 50324BR64    |               |                       |
| FS332L21-3C64 |             |                       | 50324BM64    |               |                       |



TORQUE:  
14-16 in. lbs.  
(1.6-1.8 Nm)



TORQUE:  
14-16 in. lbs.  
(1.6-1.8 Nm)

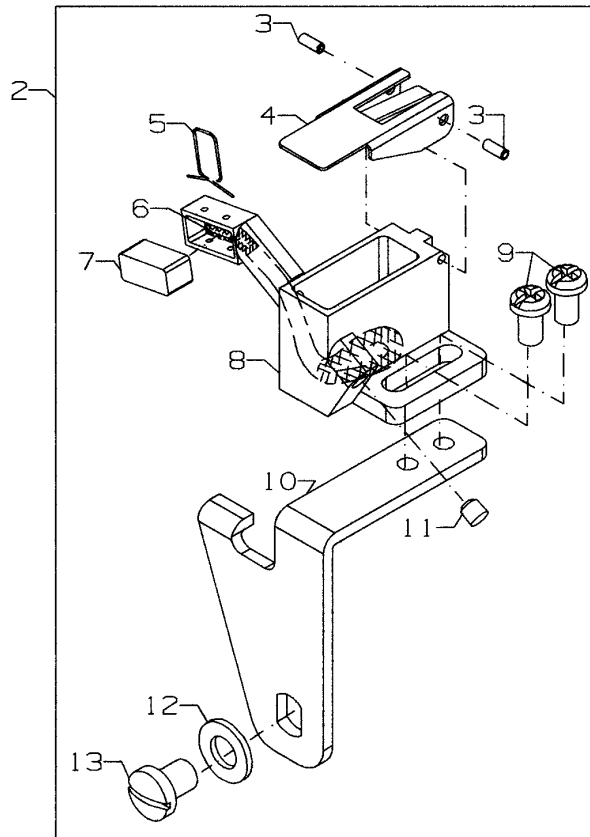
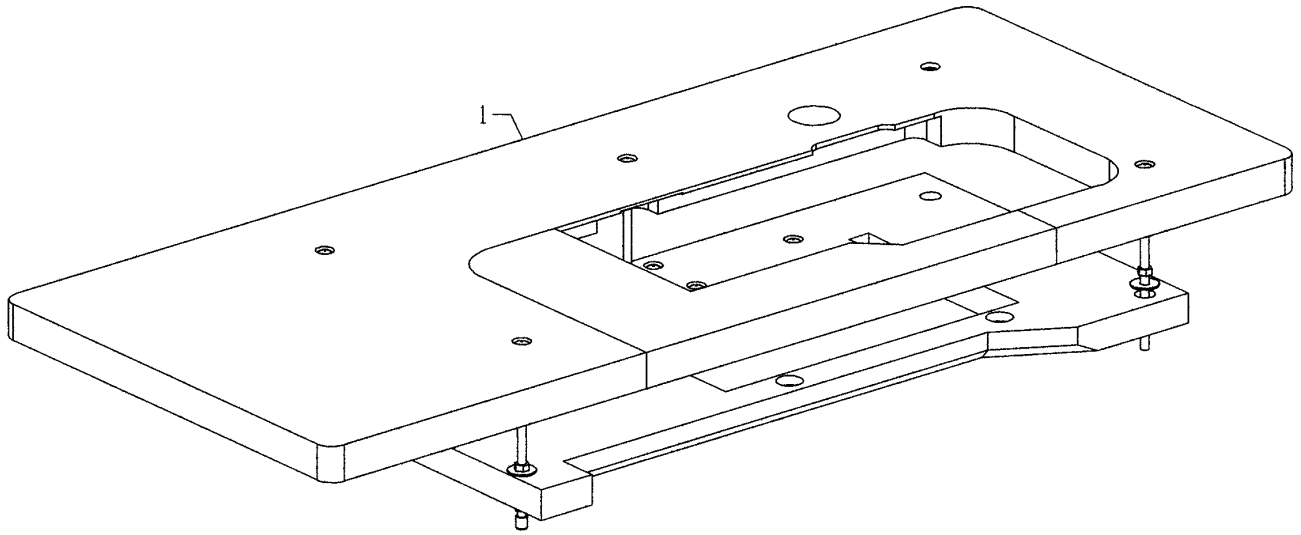




SEWING PARTS  
FOR  
FS322H01, FS332H01, FS332L01, FS332L21

| Ref.<br>No. | Part No.    | Description                                                | Amt.<br>Req. |
|-------------|-------------|------------------------------------------------------------|--------------|
| 1.          | -----       | Needle Head, for two needle machines (see chart) .....     | 1            |
| 1A.         | -----       | Needle Head, for three needle machines (see chart) .....   | 1            |
| 2.          | SS8080310TP | Screw .....                                                | 3/4          |
| 3.          | 50318AE40   | Eyelet, per needle head, for sewing comb., .....           | 1            |
| 3A.         | 50318AE56   | Eyelet, per needle head, for sewing comb., .....           | 1            |
| 4.          | S5060410TP  | Screw .....                                                | 1            |
| 5.          | 50392G      | Needle Thread Eyelet .....                                 | 1            |
| 6.          | -----       | Presser Foot, for sewing comb., (see chart) .....          | 1            |
| 7.          | G65-134     | Presser Foot Shank .....                                   | 1            |
| 8.          | 91          | Screw .....                                                | 1            |
| 9.          | 79633       | Spring .....                                               | 1            |
| 10.         | 605         | Screw .....                                                | 1            |
| 11.         | 22716A      | Screw .....                                                | 1            |
| 12.         | 50397A16    | Stitch Tongue, per presser foot, for gauges 5.6, 6.4 ..... | 1            |
| -           | 50397A48    | Stitch Tongue, per presser foot, for gauge 4.8 .....       | 1            |
| 12A.        | 50397C      | Stitch Tongue, per presser foot, for gauges 3.2, 4.0 ..... | 1            |
| 13.         | G50-266     | Bushing .....                                              | 2            |
| 14.         | 57830A      | Yielding Section .....                                     | 1            |
| 15.         | 50330BL16   | Presser Foot Bottom .....                                  | 2            |
| 16.         | 6-25-55     | Drill Rod .....                                            | 3            |
| 17.         | -----       | Throat Plate, for sewing comb., (see chart) .....          | 1            |
| 17A.        | -----       | Throat Plate, for sewing comb., (see chart) .....          | 1            |
| 18.         | 87          | Screw, for throat plate .....                              | 2            |
| 19.         | 22561       | Screw, for guide .....                                     | 1            |
| 20.         | 27-435BLK   | Washer, for screw .....                                    | 2            |
| 21.         | 23195       | Guide .....                                                | 1            |
| 22.         | -----       | Differential Feed Dog, for sewing comb., (see chart) ..... | 1            |
| 23.         | -----       | Main Feed Dog, for sewing comb., (see chart) .....         | 1            |
| 24.         | SS7091110TP | Screw, for feed dogs .....                                 | 2            |





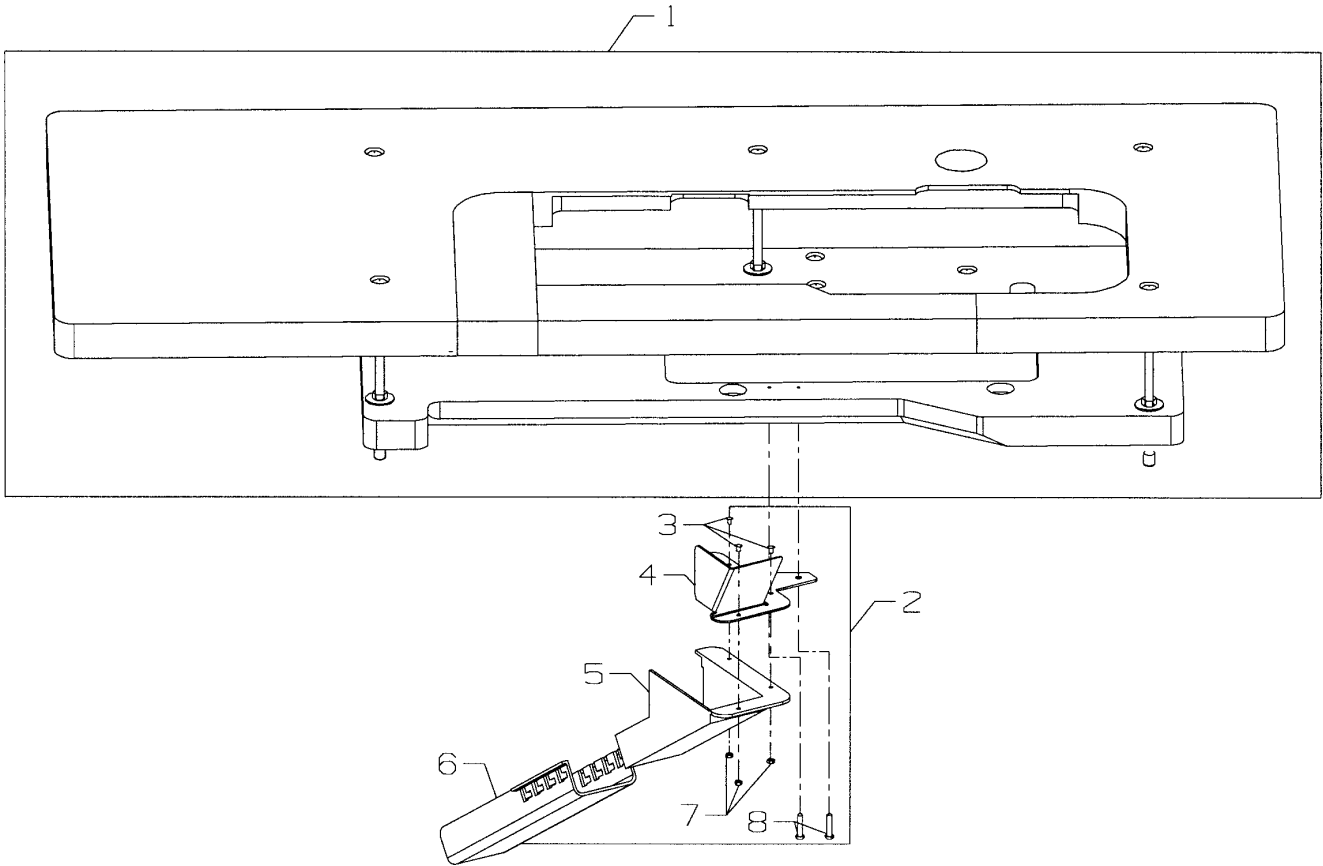
TABLING AND NEEDLE DIPPER ASSEMBLY  
(EXTRA SEND CHARGE)

FOR

FS322C01, FS332CO1, FS335E41, FS335E42  
FS322H01, FS332H01, FS332L01, FS332L21

| Ref.<br>No. | Part No.    | Description                          | Amt.<br>Req. |
|-------------|-------------|--------------------------------------|--------------|
| 1.          | 21371AAE48  | Table Board .....                    | 1            |
| 2.          | 29476RZ     | Needle Dipper Assembly .....         | 1            |
| 3.          | PS0160042KH | Roll Pin .....                       | 2            |
| 4.          | 50393JD     | Needle Dipper Cover .....            | 1            |
| 5.          | 50393GS     | Wire, for needle dipper .....        | 1            |
| 6.          | CQ202000000 | Oil Wick, for needle dipper .....    | 1            |
| 7.          | 50393GK     | Felt, for needle dipper .....        | 1            |
| 8.          | 50393JC     | Needle Dipper .....                  | 1            |
| 9.          | SS4090615SP | Screw, for needle dipper .....       | 2            |
| 10.         | 50393GP     | Silicone Oil Tank Holder .....       | 1            |
| 11.         | 50393GG     | Plug .....                           | 1            |
| 12.         | WP0531000SD | Washer .....                         | 1            |
| 13.         | SS4120615SP | Screw, for needle dipper holder..... | 1            |

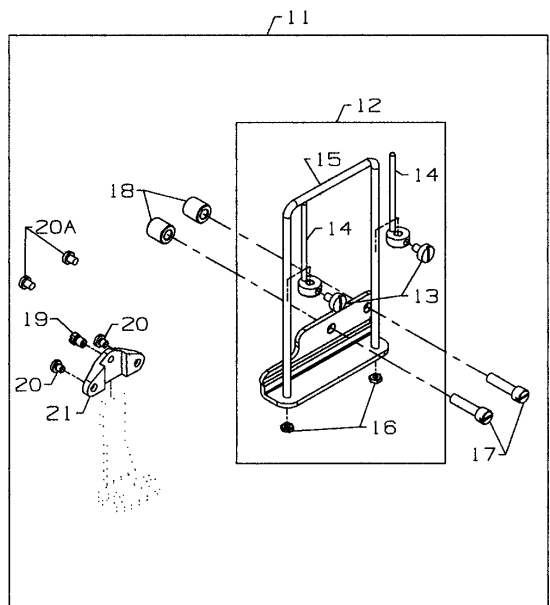
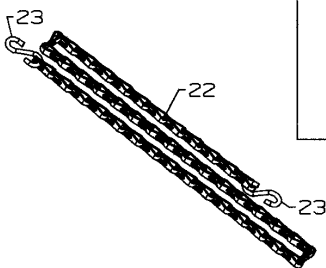
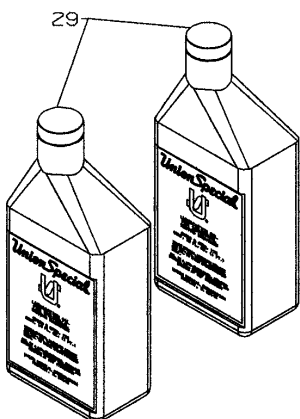
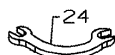
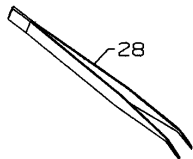
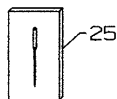
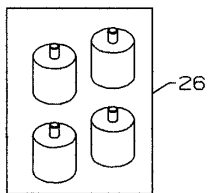
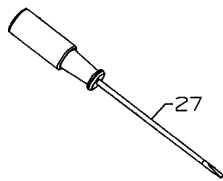
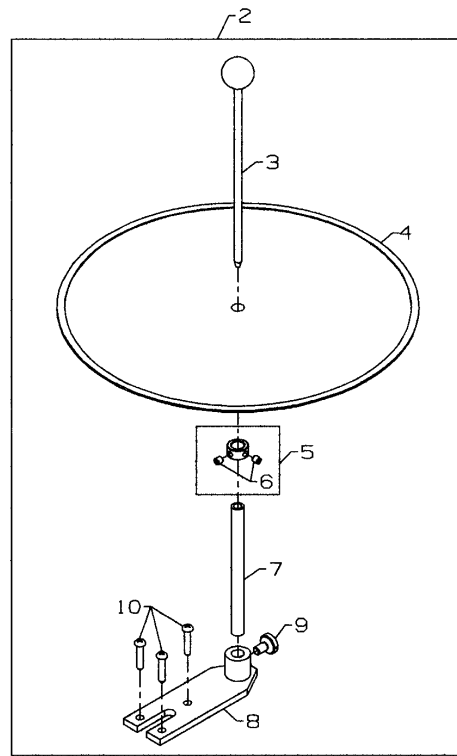
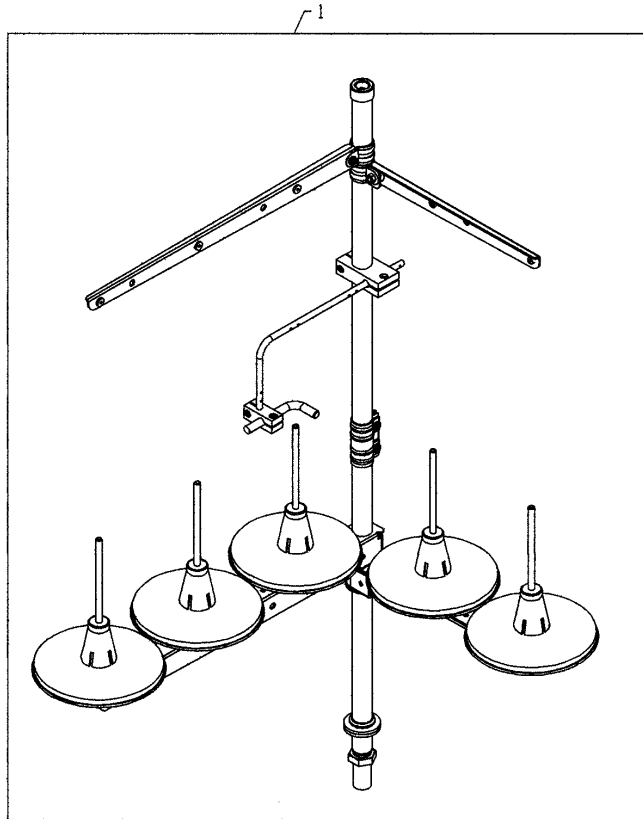




TABLING (EXTRA SEND CHARGE)  
FOR  
FS322E12 & FS332E12

| Ref.<br>No. | Part No.    | Description             | Amt.<br>Req. |
|-------------|-------------|-------------------------|--------------|
| 1.          | 21371AAG48  | Table Board .....       | 1            |
| 2.          | 29480WR1    | Waste Removal Kit ..... | 1            |
| 3.          | SS5091020SP | Screw .....             | 3            |
| 4.          | 50383AC     | Bracket .....           | 1            |
| 5.          | 11960101    | Waste Chute .....       | 1            |
| 6.          | 11960002    | Chute Extension .....   | 1            |
| 7.          | NS6090310SP | Nut .....               | 3            |
| 8.          | 90561K      | Wood Screw .....        | 2            |

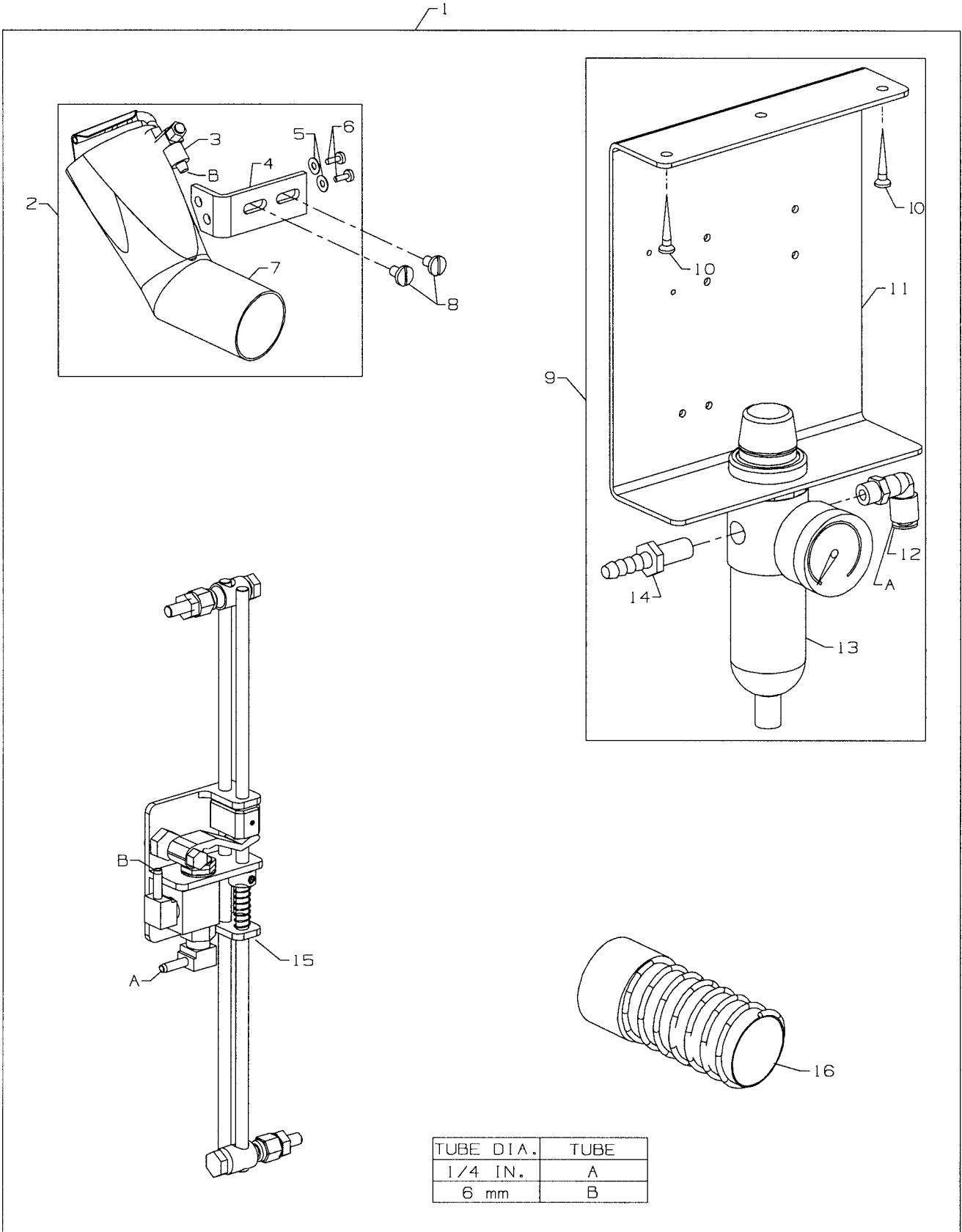




## ACCESSORIES

| Ref.<br>No. | Part No.      | Description                                             | Amt.<br>Req. |
|-------------|---------------|---------------------------------------------------------|--------------|
| 1.          | 11969557      | Thread Stand .....                                      | 1            |
| 2.          | 29480AHU      | Tape Reel Assembly, for FS322C01, FS332C01 .....        | 1            |
| 3.          | 50322L        | Support Shaft .....                                     | 1            |
| 4.          | 50392C        | Tape Disc .....                                         | 1            |
| 5.          | 482C          | Collar .....                                            | 1            |
| 6.          | 22894C        | Screw .....                                             | 2            |
| 7.          | 50322H        | Shaft .....                                             | 1            |
| 8.          | 50364A        | Holder .....                                            | 1            |
| 9.          | 22728         | Thumb Screw .....                                       | 1            |
| 10.         | 90561K        | Wood Screw .....                                        | 3            |
| 11.         | 29480ASR      | Strip Tension Kit, for FS322C01, FS332C01 .....         | 1            |
| 12.         | 23439L        | Tension Assembly .....                                  | 1            |
| 13.         | 188D          | Screw .....                                             | 2            |
| 14.         | 23439F        | Adjustable Pin .....                                    | 2            |
| 15.         | 51-651BLK     | Guide .....                                             | 1            |
| 16.         | 907           | Nut .....                                               | 2            |
| 17.         | SS6151920SP   | Screw .....                                             | 2            |
| 18.         | 50392D        | Spacer .....                                            | 2            |
| 19.         | 22852G        | Screw .....                                             | 1            |
| 20.         | SS7110510SP   | Screw .....                                             | 2            |
| 20A.        | 25CC          | Screw .....                                             | 2            |
| 21.         | 23432B        | Folder Clamp .....                                      | 1            |
| 22.         | 421D34        | Chain .....                                             | 1            |
| 23.         | 660-264       | S-Hook .....                                            | 2            |
| 24.         | TT17          | Wrench, for FS322E12, FS332E12, FS335E41, FS335E42..... | 1            |
| 25.         | 128GBS075/029 | Needles (package of 10) .....                           | 1            |
| 26.         | 35095B        | Isolator .....                                          | 4            |
| 27.         | G21201        | Screw Driver, for needle head .....                     | 1            |
| 28.         | 660-240       | Thread Tweezer .....                                    | 1            |
| 29.         | 28604R        | Oil (1 pint) .....                                      | 2            |



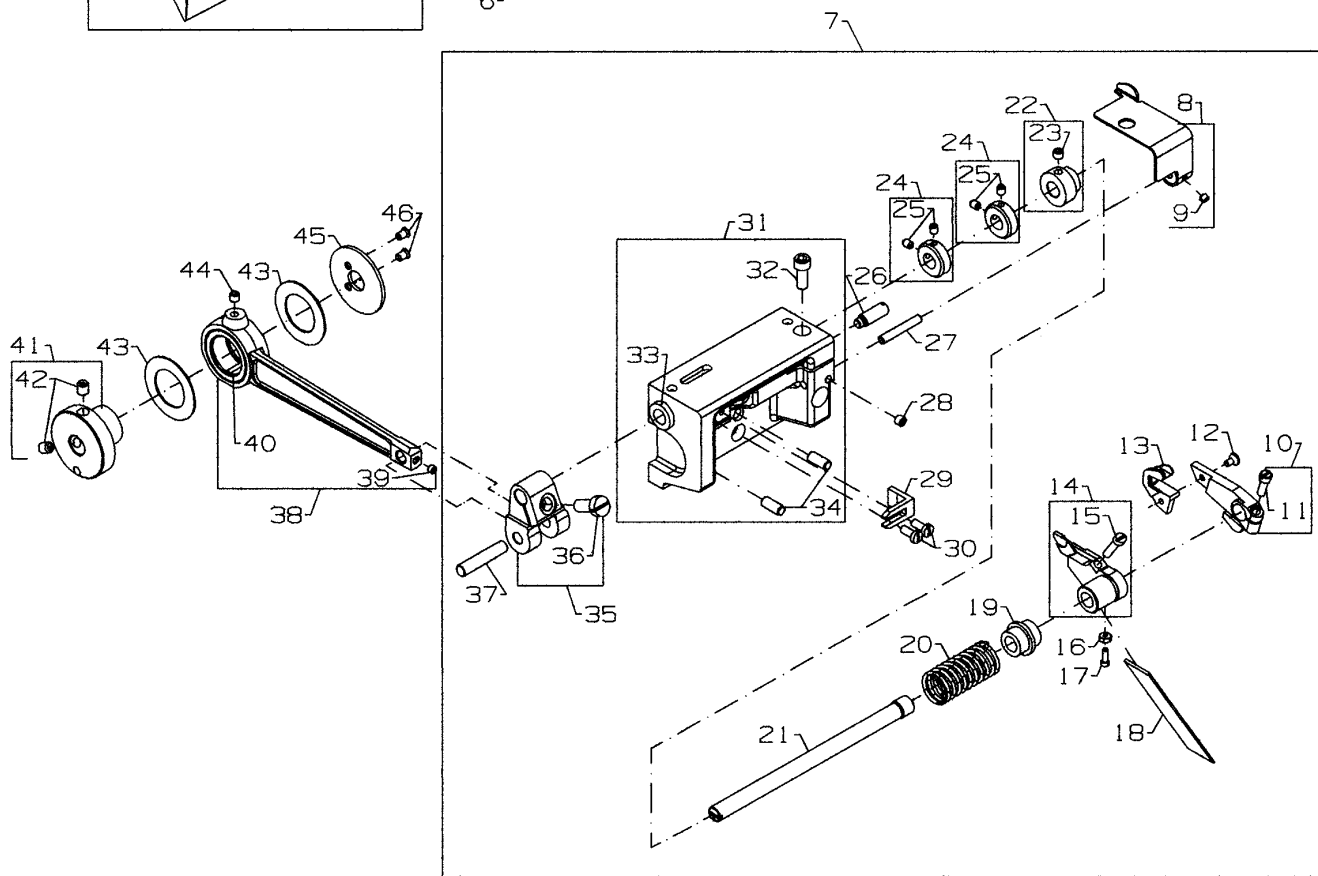
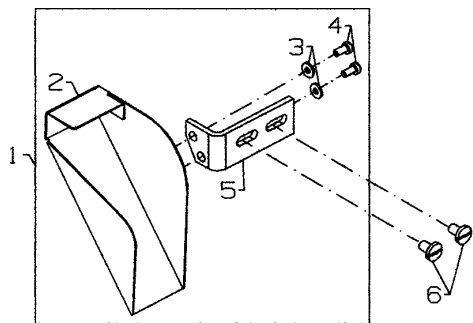




VACUUM TUBE ASSEMBLY AND PNEUMATIC CONTROL (EXTRA SEND CHARGE)  
FOR  
FS322E12 & FS332E12

| Ref.<br>No. | Part No.   | Description                          | Amt.<br>Req. |
|-------------|------------|--------------------------------------|--------------|
| 1.          | 29480WR2   | Pneumatic Waste Removal Kit .....    | 1            |
| 2.          | 50394AH    | Vacuum Tube Assembly .....           | 1            |
| 3.          | 999-175DA  | Fitting .....                        | 1            |
| 4.          | 50373CR1   | Bracket .....                        | 1            |
| 5.          | 41358      | Washer .....                         | 2            |
| 6.          | J87J       | Screw .....                          | 2            |
| 7.          | 50373DJ    | Tube, for vacuum .....               | 1            |
| 8.          | 88D        | Screw .....                          | 2            |
| 9.          | 29480ASU   | Pneumatic Control Kit .....          | 1            |
| 10.         | 90561K     | Wood Screw .....                     | 2            |
| 11.         | 99683CP    | Mounting Bracket .....               | 1            |
| 12.         | 671F81A    | Elbow Fitting - 6mm x 1/2" NPT ..... | 1            |
| 13.         | 671FD42    | Filter/Regulator Assembly .....      | 1            |
| 14.         | 671F88     | Barb Fitting .....                   | 1            |
| 15.         | 29480ARN   | Treadle Switch Assembly .....        | 1            |
| 16.         | 99675QB800 | Spiral Plastic Hose .....            | 1            |

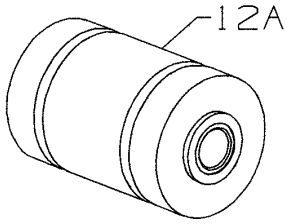
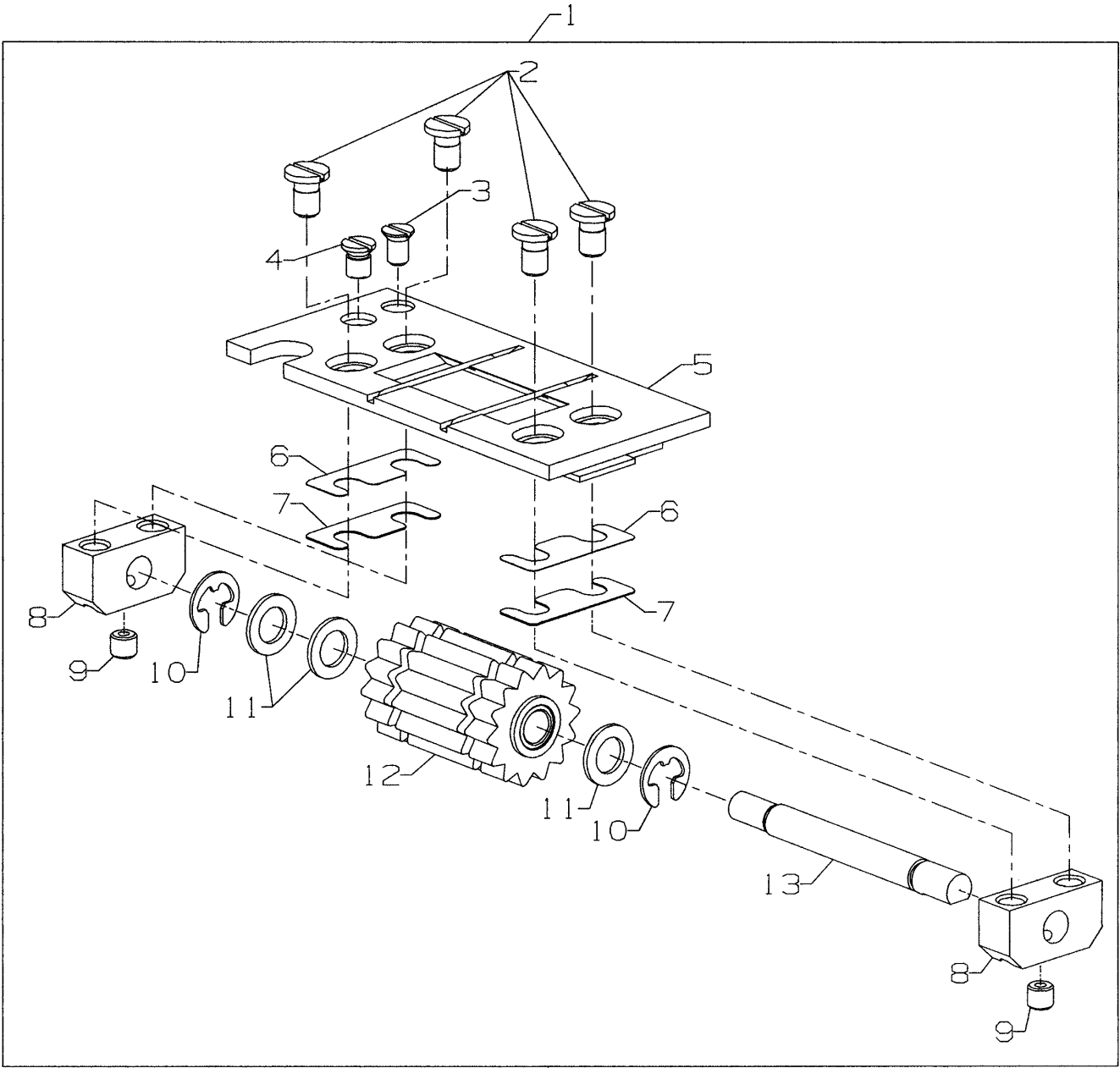




UNDER BED THREAD TRIMMER  
FOR  
FS322E12 & FS332E12

| Ref.<br>No. | Part No. | Description                           | Amt.<br>Req. |
|-------------|----------|---------------------------------------|--------------|
| 1.          | 50394AK  | Chip Chute Assembly .....             | 1            |
| 2.          | 50378U   | Chip Chute .....                      | 1            |
| 3.          | 41358    | Washer .....                          | 2            |
| 4.          | J87J     | Screw .....                           | 2            |
| 5.          | 50373CR1 | Bracket .....                         | 1            |
| 6.          | 88D      | Screw .....                           | 2            |
| 7.          | 50349B   | Undertrimmer Assembly .....           | 1            |
| 8.          | 50373DF  | Edge Guide .....                      | 1            |
| 9.          | 22743    | Screw .....                           | 1            |
| 10.         | 34771PA  | Upper Knife Holder .....              | 1            |
| 11.         | 22729    | Screw .....                           | 1            |
| 12.         | 99316G   | Screw .....                           | 1            |
| 13.         | 34770AH  | Upper Knife .....                     | 1            |
| 14.         | 34750CA  | Lower Knife Holder .....              | 1            |
| 15.         | 22729E   | Screw .....                           | 1            |
| 16.         | 51250C   | Nut .....                             | 1            |
| 17.         | 22797    | Screw .....                           | 1            |
| 18.         | 34749A   | Lower Knife .....                     | 1            |
| 19.         | 50373D   | Collar .....                          | 1            |
| 20.         | 97010D   | Spring .....                          | 1            |
| 21.         | 50373B   | Shaft .....                           | 1            |
| 22.         | 50373E   | Collar .....                          | 1            |
| 23.         | 22894W   | Screw .....                           | 1            |
| 24.         | 34334D   | Thrust Collar .....                   | 2            |
| 25.         | 22565C   | Screw .....                           | 4            |
| 26.         | 99364    | Screw .....                           | 1            |
| 27.         | 50373DE  | Undertrimmer Housing .....            | 1            |
| 28.         | 96531    | Pin .....                             | 2            |
| 29.         | 99371G   | Screw .....                           | 1            |
| 30.         | 50373A   | Bushing, left .....                   | 1            |
| 31.         | 50373G   | Bracket .....                         | 2            |
| 32.         | 22585    | Screw .....                           | 1            |
| 33.         | 136      | Screw .....                           | 1            |
| 34.         | 50373DH  | Lever Clamp .....                     | 1            |
| 35.         | 50373K   | Link Pin .....                        | 1            |
| 36.         | 999-313N | Needle Bearing .....                  | 2            |
| 37.         | 22894E   | Screw .....                           | 1            |
| 38.         | 22894Y   | Screw .....                           | 1            |
| 39.         | 99371G   | Screw .....                           | 1            |
| 40.         | 50373CB  | Eccentric, for knife drive .....      | 1            |
| 41.         | 22894AD  | Screw .....                           | 2            |
| 42.         | 50373CD  | Washer .....                          | 2            |
| 43.         | 50368AA  | Connecting Arm, for knife drive ..... | 1            |
| 44.         | 999-313F | Needle Bearing .....                  | 1            |
| 45.         | 22894W   | Screw .....                           | 1            |
| 46.         | 50373CC  | Retaining Plate .....                 | 1            |
| 47.         | 22766    | Screw .....                           | 2            |

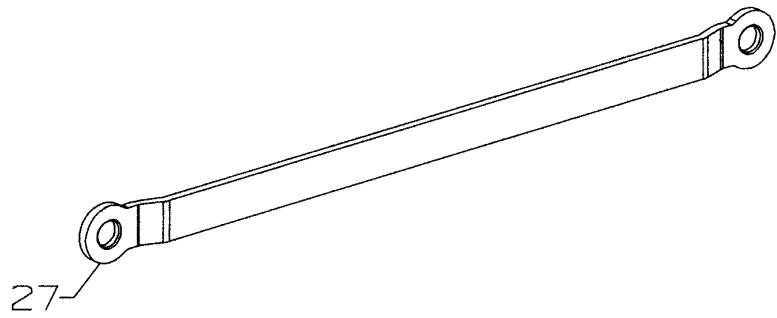
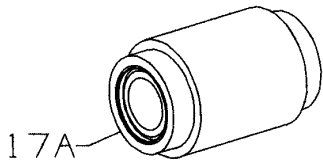
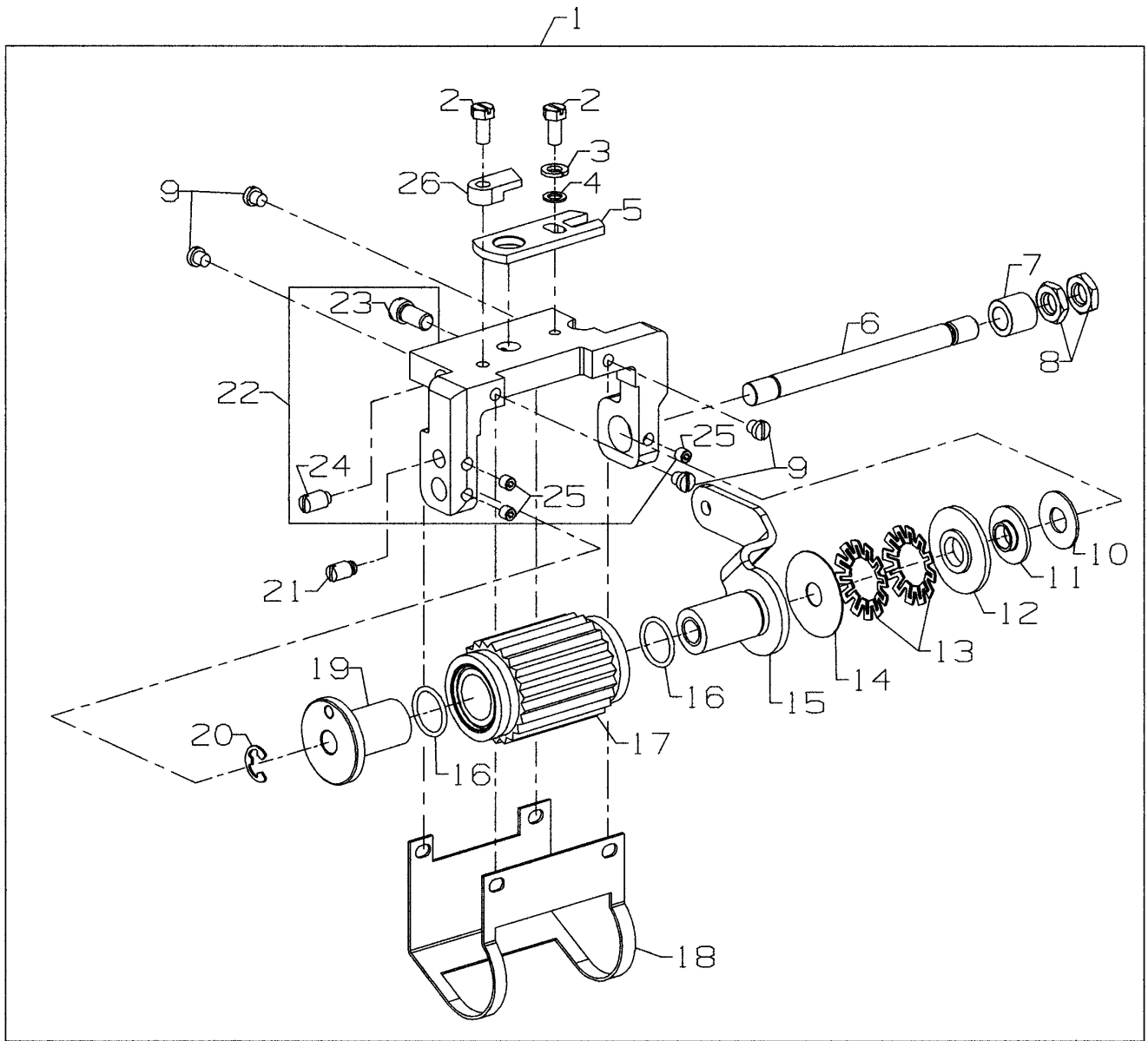




LOWER ROLLER ASSEMBLY  
FOR  
FS335E41 & FS335E42

| Ref.<br>No. | Part No.    | Description                                      | Amt.<br>Req. |
|-------------|-------------|--------------------------------------------------|--------------|
| 1.          | 29476PV     | Lower Roller Assembly, for styles FS335E41 ..... | 1            |
| -           | 29476PJ     | Lower Roller Assembly, for styles FS335E42 ..... | 1            |
| 2.          | 376         | Screw .....                                      | 4            |
| 3.          | AS22D       | Screw .....                                      | 1            |
| 4.          | SS1110710SP | Screw .....                                      | 1            |
| 5.          | 50378E      | Feed Plate .....                                 | 1            |
| 6.          | C50078AF5   | Shim .....                                       | 2            |
| 7.          | C50078AF10  | Shim .....                                       | 2            |
| 8.          | C50078U     | Bearing Block .....                              | 2            |
| 9.          | 22894W      | Set Screw .....                                  | 2            |
| 10.         | 660-330     | Retaining Ring .....                             | 2            |
| 11.         | 6042A       | Washer .....                                     | 3            |
| 12.         | 50375D      | Puller Roller, for styles FS335E41 .....         | 1            |
| 12A.        | C50076      | Lower Roller (smooth), for styles FS335E42.....  | 1            |
| 13.         | C50074      | Pin .....                                        | 1            |

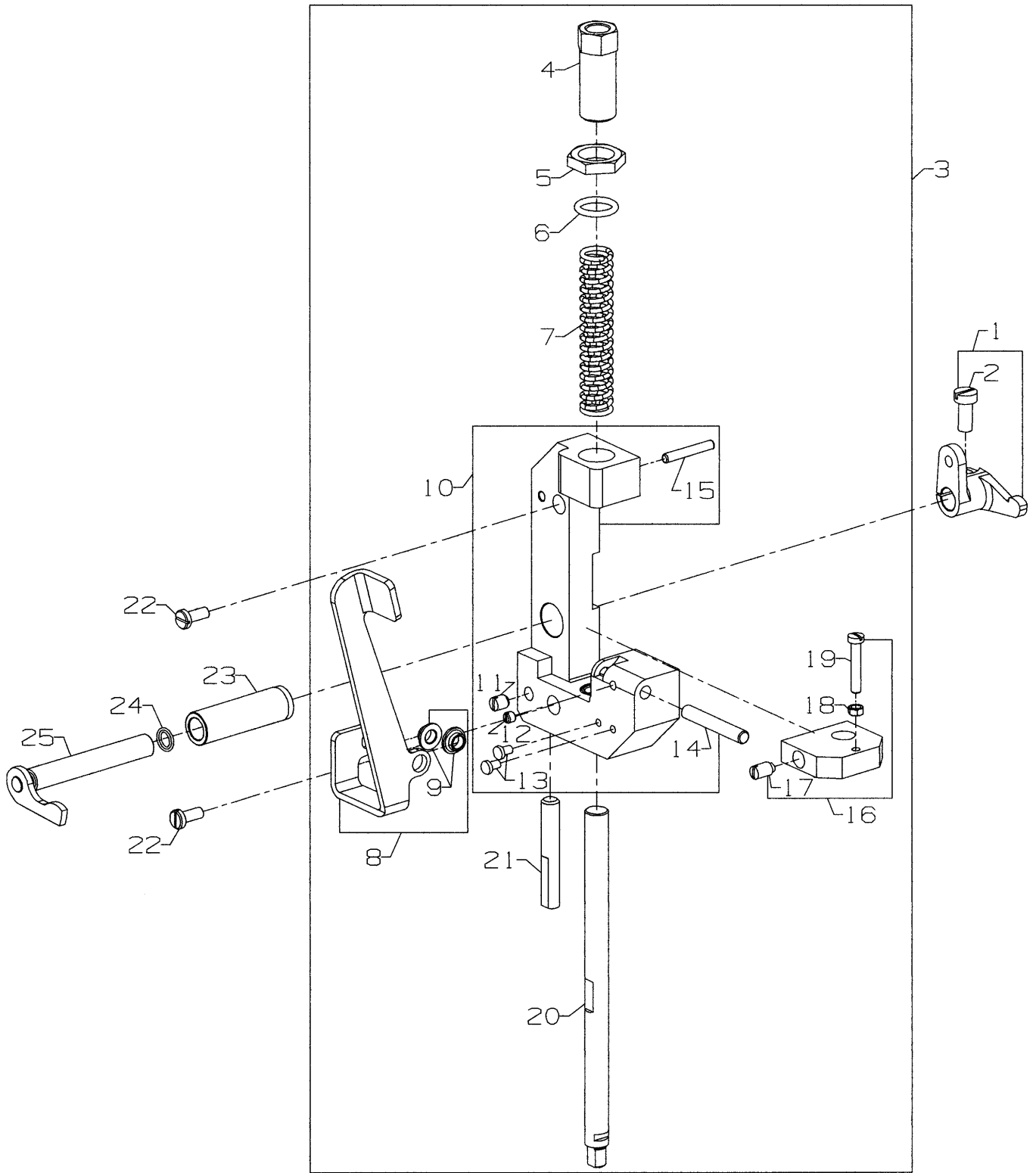




UPPER ROLLER ASSEMBLY  
FOR  
FS335E41 & FS335E42

| Ref.<br>No. | Part No.    | Description                                         | Amt.<br>Req. |
|-------------|-------------|-----------------------------------------------------|--------------|
| 1.          | 29476UW     | Upper Roller Assembly, for styles FS335E41 .....    | 1            |
| -           | 29476ST     | Upper Roller Assembly, for styles FS335E42 .....    | 1            |
| 2.          | SS9111010SP | Hex Screw .....                                     | 2            |
| 3.          | WS0510002KP | Lock Washer .....                                   | 1            |
| 4.          | 53634C      | Washer .....                                        | 1            |
| 5.          | 34778D      | Guide Plate .....                                   | 1            |
| 6.          | 34774       | Shaft .....                                         | 1            |
| 7.          | 34778A      | Bushing .....                                       | 1            |
| 8.          | 11638M      | Stud Nut .....                                      | 2            |
| 9.          | SS7110410SP | Screw .....                                         | 4            |
| 10.         | C50077K     | Washer .....                                        | 1            |
| 11.         | 34778C      | Bushing .....                                       | 1            |
| 12.         | 50377AE     | Disc .....                                          | 1            |
| 13.         | 661-261     | Cup Spring .....                                    | 2            |
| 14.         | 50386B      | Washer .....                                        | 1            |
| 15.         | 50377H      | Lever Assembly .....                                | 1            |
| 16.         | 661-149     | "O" Ring .....                                      | 2            |
| 17.         | 50375Y      | Roller Assembly, for styles FS335E41 .....          | 1            |
| 17A.        | 50375V      | Roller Assembly (smooth), for styles FS335E42 ..... | 1            |
| 18.         | 50377AC     | Roller Guard .....                                  | 1            |
| 19.         | 50377AD     | Bushing .....                                       | 1            |
| 20.         | 96278       | "E" Ring .....                                      | 1            |
| 21.         | 22892C      | Shoulder Screw .....                                | 1            |
| 22.         | 50377AJ     | Feed Roller Yolk Assembly .....                     | 1            |
| 23.         | SS6151220SP | Screw .....                                         | 1            |
| 24.         | SS8151150SP | Screw .....                                         | 1            |
| 25.         | SS8110422TP | Set Screw .....                                     | 3            |
| 26.         | 50377AL     | Stop Lever .....                                    | 1            |
| 27.         | 50355AS     | Connector, for Presser Foot Lift .....              | 1            |



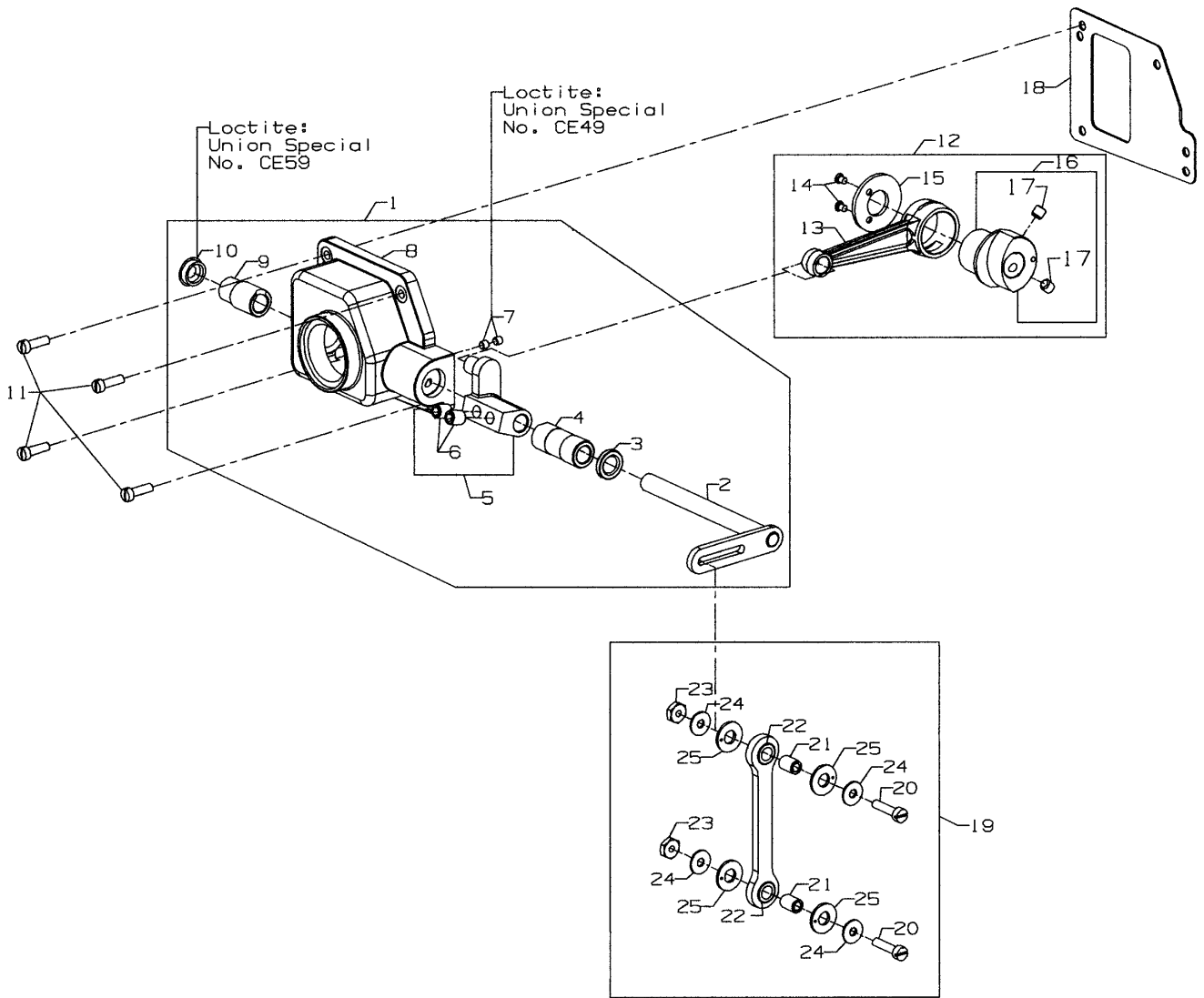




PULLER LIFTER ASSEMBLY  
FOR  
FS335E41 & FS335E42

| Ref.<br>No. | Part No.    | Description                      | Amt.<br>Req. |
|-------------|-------------|----------------------------------|--------------|
| 1.          | 50377VA     | Lever, lifter front .....        | 1            |
| 2.          | SS6151440SP | Screw .....                      | 1            |
| 3.          | 29476UX     | Puller Lifter Assembly .....     | 1            |
| 4.          | 59477       | Regulator .....                  | 1            |
| 5.          | 35733G      | Nut .....                        | 1            |
| 6.          | 660-212     | "O" Ring .....                   | 1            |
| 7.          | 50377L      | Spring .....                     | 1            |
| 8.          | 50377C      | Lever, lifter .....              | 1            |
| 9.          | 50344AT     | Bushing .....                    | 2            |
| 10.         | 50377D      | Bracket, for roller lifter ..... | 1            |
| 11.         | SS8150710SP | Set Screw .....                  | 1            |
| 12.         | SS8120410SP | Set Screw .....                  | 1            |
| 13.         | 50337AM     | Bumper .....                     | 2            |
| 14.         | 50377AF     | Pin .....                        | 1            |
| 15.         | 96529       | Pin .....                        | 1            |
| 16.         | 50377M      | Lifter .....                     | 1            |
| 17.         | SS8151150SP | Screw .....                      | 1            |
| 18.         | NS6110310SP | Nut .....                        | 1            |
| 19.         | SS7112420SP | Screw .....                      | 1            |
| 20.         | 50377AM     | Bar, roller presser .....        | 1            |
| 21.         | 50377Y      | Guide Pin .....                  | 1            |
| 22.         | SS6121220TP | Screw .....                      | 2            |
| 23.         | 50377T      | Bushing, lifter link .....       | 1            |
| 24.         | RO068190100 | "O" Ring .....                   | 1            |
| 25.         | 50377G      | Lever, Puller Lifter .....       | 1            |





PULLER DRIVE ASSEMBLY  
FOR  
FS335E41 & FS335E42

| Ref.<br>No. | Part No.    | Description                             | Amt.<br>Req. |
|-------------|-------------|-----------------------------------------|--------------|
| 1.          | 29476SP     | Puller Drive Assembly .....             | 1            |
| 2.          | 50377F      | Roller Driving Arm .....                | 1            |
| 3.          | 660-893     | Seal .....                              | 1            |
| 4.          | 50377S      | Bushing .....                           | 1            |
| 5.          | 50377E      | Lever, puller drive .....               | 1            |
| 6.          | SS8110510SP | Set Screw .....                         | 1            |
| 7.          | 50377U      | Housing, puller drive .....             | 1            |
| 8.          | 50377P      | Bushing .....                           | 1            |
| 9.          | TA1450404R0 | Rubber Plug .....                       | 1            |
| 10.         | SS7121610SP | Screw .....                             | 4            |
| 11.         | 50377Z      | Connecting Rod Eccentric Assembly ..... | 1            |
| 12.         | 50377AA     | Connecting Rod .....                    | 1            |
| 13.         | SS2090620SP | Screw .....                             | 2            |
| 14.         | 50386       | Washer .....                            | 1            |
| 15.         | 50377AB     | Eccentric .....                         | 1            |
| 16.         | SS8660612TP | Screw .....                             | 2            |
| 17.         | 660-1090    | Quad Ring .....                         | 1            |
| 18.         | 50377J      | Roller Drive Link Assembly .....        | 1            |
| 19.         | SS6122030SP | Screw .....                             | 2            |
| 20.         | 50344AP     | Bushing, link .....                     | 2            |
| 21.         | 660-303     | Bearing .....                           | 2            |
| 22.         | NS6120480SP | Nut .....                               | 2            |
| 23.         | WP0501046SC | Washer .....                            | 4            |
| 24.         | 660-1089    | Thrust Washer .....                     | 4            |



## NUMERICAL INDEX OF PARTS

| <u>Part No.</u> | <u>Page No.</u> | <u>Part No.</u> | <u>Page No.</u> | <u>Part No.</u> | <u>Page No.</u> | <u>Part No.</u> | <u>Page No.</u> |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 11071602        | 21              | 22839C          | 41, 43          | 34730H          | 47              | 50320T60        | 57              |
| 11071701        | 21              | 22840A          | 51              | 34749A          | 67              | 50321F          | 13              |
| 11550209        | 19              | 22841U          | 43              | 34750CA         | 67              | 50321G          | 25              |
| 11638M          | 71              | 22852G          | 63              | 34770AH         | 67              | 50322AF         | 13              |
| 11843208        | 27              | 22875N          | 19              | 34771PA         | 67              | 50322AG         | 25              |
| 11960002        | 61              | 22882E          | 45              | 34774           | 71              | 50322AJ         | 25              |
| 11960101        | 61              | 22892C          | 71              | 34778A          | 71              | 50322AK         | 25              |
| 11969557        | 63              | 22894AD         | 67              | 34778C          | 71              | 50322AL         | 25              |
| 12124202        | 17              | 22894C          | 33, 43, 63      | 34778D          | 71              | 50322AR         | 39              |
| 128GBS075/029   | 63              | 22894E          | 67              | 34830LA         | 51              | 50322AT         | 25              |
| 136             | 67              | 22894P          | 39              | 34830MA         | 51              | 50322AU         | 25              |
| 13765607        | 27              | 22894W          | 45, 67, 69      | 35036AB         | 9               | 50322H          | 63              |
| 18-1432         | 35, 37          | 22894Y          | 67              | 35036AZ         | 39              | 50322L          | 63              |
| 18-1445         | 37              | 23195           | 57              | 35036F          | 39              | 50323B          | 33              |
| 18-1448         | 41              | 23432B          | 63              | 35095B          | 63              | 50323P          | 11              |
| 18-1470         | 27              | 23439F          | 63              | 35569J          | 43              | 50323R          | 33              |
| 187A            | 45, 47, 51      | 23439L          | 63              | 35733G          | 73              | 50324DB56       | 53              |
| 188D            | 63              | 25              | 53              | 36271A          | 17              | 50324DC64       | 53              |
| 20              | 43, 45          | 25CC            | 63              | 37-70BLK        | 41              | 50325AD         | 31              |
| 201C            | 53              | 25D             | 53              | 376             | 69              | 50325AE         | 31              |
| 21210           | 53              | 25S             | 43              | 39568J          | 53              | 50325AF         | 31              |
| 21371AAE48      | 59              | 27-435BLK       | 57              | 402             | 19              | 50325AJ         | 31              |
| 21371AAG48      | 61              | 28604R          | 63              | 41071G          | 43, 45          | 50326AY         | 57              |
| 22513D          | 43, 45          | 29126FW         | 15              | 41358           | 65, 67          | 50326BL         | 53              |
| 22517           | 41              | 29475CG         | 17              | 421D34          | 63              | 50328           | 41              |
| 22519J          | 43, 45          | 29476PJ         | 69              | 482C            | 63              | 50330BH64       | 53              |
| 22525A          | 45              | 29476PV         | 69              | 50301AY         | 45              | 50330BL16       | 57              |
| 22541A          | 43              | 29476RZ         | 59              | 50301AZ         | 41              | 50330BN12       | 47              |
| 22561           | 57              | 29476SP         | 75              | 50301BA         | 41              | 50330BN16       | 47              |
| 22562           | 21              | 29476ST         | 71              | 50301BF         | 41              | 50330BN48       | 47              |
| 22565           | 29              | 29476TC         | 11              | 50301BH         | 41              | 50330BN8        | 47              |
| 22565C          | 67              | 29476TK         | 21              | 50301CH         | 41              | 50330BP16       | 47              |
| 22565E          | 47              | 29476TT         | 21              | 50303A          | 45              | 50330CC12       | 51              |
| 22571E          | 27              | 29476UF         | 39              | 50303B          | 41              | 50330CC8        | 51              |
| 22571L          | 9               | 29476UH         | 25              | 50304K          | 33              | 50330CD         | 51              |
| 22585           | 67              | 29476UJ         | 31              | 50304N          | 33              | 50330CE16       | 51              |
| 22591A          | 39              | 29476UM         | 35, 37          | 50305BM         | 57              | 50330CF         | 51              |
| 22596H          | 39              | 29476US         | 27              | 50305BS         | 53              | 50330CZ         | 9               |
| 22652B10        | 29              | 29476UT         | 27              | 50309F          | 29              | 50330EE48       | 51              |
| 22653J8         | 29              | 29476UW         | 71              | 50309K          | 29              | 50332A          | 43, 45          |
| 22704           | 45              | 29476UX         | 73              | 50313           | 29              | 50332AC         | 33              |
| 22714C          | 39              | 29476VX         | 43              | 50313J          | 29              | 50332B          | 43              |
| 22716           | 53              | 29476VY         | 45              | 50313M          | 29              | 50332F          | 43              |
| 22716A          | 57              | 29480AHU        | 63              | 50313P          | 29              | 50332S          | 27              |
| 22726           | 41              | 29480ARN        | 65              | 50314E          | 29              | 50332U          | 9               |
| 22728           | 63              | 29480ASR        | 63              | 50314F          | 29              | 50332V          | 21              |
| 22729           | 67              | 29480ASU        | 65              | 50317B          | 11              | 50332W          | 37              |
| 22729D          | 43, 45          | 29480AWR        | 53              | 50317C          | 23              | 50333A          | 25              |
| 22729E          | 67              | 29480WR1        | 61              | 50318AA56       | 53, 57          | 50334AW         | 35, 37          |
| 22738B          | 51              | 29480WR2        | 65              | 50318AA64       | 53              | 50334AX         | 35, 37          |
| 22743           | 67              | 34334D          | 67              | 50318AE40       | 47, 51, 57      | 50334BB         | 39              |
| 22766           | 67              | 34393D          | 27              | 50318AE56       | 47, 51, 53, 57  | 50334BC         | 39              |
| 22799AH         | 43              | 34703E1         | 43              | 50318Z40        | 57              | 50334BD         | 35, 37          |
| 22799B          | 47, 51          | 34703F2         | 43              | 50320AT         | 57              | 50334BE         | 35, 37          |
| 22799M          | 43              | 34730A          | 53              | 50320BF64       | 53              | 50334BH         | 35, 37          |



## NUMERICAL INDEX OF PARTS

| <u>Part No.</u> | <u>Page No.</u> | <u>Part No.</u> | <u>Page No.</u> | <u>Part No.</u> | <u>Page No.</u> | <u>Part No.</u> | <u>Page No.</u> |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 50334BJ         | 35, 37          | 50344E          | 9               | 50368T          | 31              | 50381B          | 21              |
| 50334J          | 35              | 50345U          | 41              | 50368V          | 31              | 50381E          | 9               |
| 50334V          | 35, 37          | 50345W          | 11              | 50368W          | 31              | 50381F          | 21              |
| 50334Y          | 35, 37          | 50346           | 17              | 50370F          | 17              | 50381G          | 21              |
| 50335           | 39              | 50346A          | 15              | 50373A          | 67              | 50382BB         | 45              |
| 50335A          | 21, 39          | 50347C          | 15              | 50373B          | 67              | 50382CG         | 43              |
| 50335AF         | 21              | 50347E          | 9               | 50373CB         | 67              | 50382CH         | 43              |
| 50335AG         | 21              | 50347F          | 9               | 50373CC         | 67              | 50382CJ         | 43              |
| 50335AH         | 21              | 50347G          | 15              | 50373CD         | 67              | 50382CK         | 41, 43          |
| 50335AK         | 25              | 50347J          | 15              | 50373CR1        | 65, 67          | 50382CL         | 41              |
| 50335AM         | 35, 37          | 50347L          | 9               | 50373D          | 67              | 50382CM         | 43              |
| 50335AN         | 35, 37          | 50347P          | 45              | 50373DA         | 31              | 50382CP         | 41              |
| 50335AS         | 37              | 50347R          | 33              | 50373DE         | 67              | 50382CR         | 41              |
| 50335AW         | 15              | 50349B          | 67              | 50373DF         | 67              | 50382CS         | 41              |
| 50335BA         | 35, 37          | 50351A          | 11              | 50373DH         | 67              | 50382CT         | 41              |
| 50335BB         | 25              | 50352           | 11              | 50373DJ         | 65              | 50382FS         | 43              |
| 50335BD         | 13              | 50354F          | 11              | 50373E          | 67              | 50382FT         | 45              |
| 50335D          | 39              | 50354G          | 11              | 50373G          | 67              | 50382FW         | 23              |
| 50336           | 43              | 50354H          | 9               | 50373K          | 67              | 50382FX         | 23              |
| 50336L          | 43              | 50354J          | 9               | 50374           | 25              | 50382FY         | 23              |
| 50336S          | 39              | 50354L          | 31              | 50375D          | 69              | 50382FZ         | 23              |
| 50336V          | 37              | 50355           | 39              | 50375V          | 71              | 50382GA         | 23              |
| 50336W          | 41              | 50355AM         | 11              | 50375Y          | 71              | 50382GB         | 23              |
| 50336Y          | 39              | 50355AN         | 11              | 50377AA         | 75              | 50382GC         | 23              |
| 50337AM         | 73              | 50355AR         | 21              | 50377AB         | 75              | 50382GK         | 43              |
| 50337H          | 35, 37          | 50355AS         | 71              | 50377AC         | 71              | 50382GL         | 43              |
| 50337J          | 35              | 50357AC         | 43              | 50377AD         | 71              | 50382GM         | 23              |
| 50337K          | 35              | 50357AE         | 17              | 50377AE         | 71              | 50382JB         | 43              |
| 50337L          | 35, 37          | 50357AM         | 33              | 50377AF         | 73              | 50382JR         | 41              |
| 50337M          | 35              | 50357AN         | 33              | 50377AJ         | 71              | 50382T          | 43, 45          |
| 50337P          | 37              | 50357AP         | 21              | 50377AL         | 71              | 50383AC         | 61              |
| 50337R          | 35              | 50358U          | 17              | 50377AM         | 73              | 50383AD         | 23              |
| 50337S          | 35, 37          | 50358V          | 17              | 50377C          | 73              | 50383AE         | 23              |
| 50337T          | 39              | 50358W          | 17              | 50377D          | 73              | 50383F          | 33              |
| 50337U          | 35, 37          | 50358X          | 11              | 50377E          | 75              | 50383G          | 43              |
| 50337Y          | 37              | 50360           | 15              | 50377F          | 75              | 50383L          | 11              |
| 50340D          | 35, 37          | 50360B          | 15              | 50377G          | 73              | 50383M          | 11              |
| 50340E          | 35, 37          | 50360E          | 15              | 50377H          | 71              | 50384           | 27              |
| 50342AX         | 25              | 50360F          | 15              | 50377J          | 75              | 50384A          | 27              |
| 50342BE         | 13              | 50360G          | 15              | 50377L          | 73              | 50384E          | 41              |
| 50342BJ         | 29              | 50360H          | 15              | 50377M          | 73              | 50384K          | 41              |
| 50342BK         | 29              | 50363CH         | 43, 45          | 50377P          | 75              | 50384L          | 23              |
| 50342BP         | 29              | 50363CJ         | 17              | 50377R          | 33              | 50386           | 75              |
| 50342BS         | 25              | 50363CK         | 17              | 50377S          | 75              | 50386B          | 71              |
| 50343A          | 45              | 50364A          | 63              | 50377T          | 73              | 50387           | 35, 37          |
| 50344AH         | 9               | 50364M          | 45              | 50377U          | 75              | 50387S          | 43              |
| 50344AJ         | 9               | 50364P          | 45              | 50377VA         | 73              | 50389B          | 53              |
| 50344AM         | 29              | 50366           | 17              | 50377Y          | 73              | 50391           | 13              |
| 50344AP         | 75              | 50366A          | 17              | 50377Z          | 75              | 50392AB         | 9               |
| 50344AS         | 9               | 50366B          | 17              | 50378E          | 69              | 50392AE         | 17              |
| 50344AT         | 73              | 50368A          | 31              | 50378T          | 45              | 50392AU         | 17              |
| 50344ABC        | 9               | 50368AA         | 67              | 50378U          | 67              | 50392AV         | 19              |
| 50344BE         | 9               | 50368AB         | 9               | 50380KA         | 41              | 50392AW         | 17              |
| 50344BF         | 9               | 50368E          | 31              | 50380LA         | 41              | 50392AX         | 17              |
| 50344BU         | 9               | 50368H          | 45              | 50381           | 21              | 50392AY         | 17              |



## NUMERICAL INDEX OF PARTS

| <u>Part No.</u> | <u>Page No.</u> | <u>Part No.</u> | <u>Page No.</u> | <u>Part No.</u> | <u>Page No.</u> | <u>Part No.</u> | <u>Page No.</u> |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 50392AZ         | 17              | 50393JY         | 11              | 660-1046        | 53              | 96671           | 47              |
| 50392BC         | 19              | 50393JZ         | 11              | 660-1062        | 25              | 97010D          | 67              |
| 50392C          | 63              | 50393KF         | 27              | 660-1087        | 13              | 97109           | 47, 51          |
| 50392D          | 63              | 50393KH         | 27              | 660-1089        | 75              | 97127           | 45              |
| 50392G          | 47, 51          | 50393KM         | 27              | 660-1090        | 75              | 99316G          | 67              |
| 50392G          | 53, 57          | 50393W          | 43, 45          | 660-206         | 39              | 99364           | 67              |
| 50392S          | 17              | 50394AF         | 11              | 660-212         | 23, 73          | 99371G          | 67              |
| 50392T          | 17              | 50394AH         | 65              | 660-220         | 39              | 99373A          | 51              |
| 50392V          | 17              | 50394AK         | 67              | 660-240         | 63              | 99675QB800      | 65              |
| 50392W          | 19              | 50397A16        | 57              | 660-264         | 63              | 99682XC         | 23              |
| 50392X          | 19              | 50397A48        | 57              | 660-283A        | 19              | 99682XCA        | 23              |
| 50392Y          | 19              | 50397C          | 57              | 660-303         | 75              | 99682XCB        | 23              |
| 50392Z          | 19              | 50634G          | 39              | 660-330         | 69              | 99683CP         | 65              |
| 50393-120       | 27              | 50642           | 29              | 660-455         | 29              | 998-358F        | 27              |
| 50393-140       | 27              | 50674           | 39              | 660-739         | 15, 21          | 999-175DA       | 65              |
| 50393-170       | 27              | 50692G          | 19              | 660-893         | 29, 75          | 999-216C        | 43              |
| 50393-27        | 27              | 51-651BLK       | 63              | 660-934         | 25              | 999-313F        | 67              |
| 50393-40        | 27              | 51250C          | 67              | 660-939         | 41              | 999-313N        | 67              |
| 50393-407       | 27              | 51430F          | 47, 51          | 660-969         | 39              | AS22D           | 69              |
| 50393-447       | 27              | 51492           | 33              | 660-974         | 43              | B1647704000A    | 35              |
| 50393-70        | 27              | 51493AF         | 53              | 660-979         | 29              | B1647704000A    | 37              |
| 50393EB         | 27              | 51959B          | 33              | 660-980         | 11, 39          | B3101804000     | 19              |
| 50393EU         | 23              | 51959D          | 33              | 661-149         | 71              | B3103804000     | 19              |
| 50393EW         | 23              | 51959E          | 47              | 661-259B        | 11              | B3112704000     | 19              |
| 50393EX         | 27              | 51959L          | 33              | 661-261         | 13, 71          | B3120352000     | 19              |
| 50393EY         | 9               | 52730T          | 51              | 661-262         | 13              | B3120704000     | 19              |
| 50393FR         | 27              | 52830G          | 47, 51          | 661-35          | 39              | B3121804000     | 19              |
| 50393FS         | 27              | 52864W          | 45              | 661-96          | 39              | B3126012000     | 19              |
| 50393FT         | 27              | 52888B          | 21              | 666-330         | 19              | B3530555000     | 23              |
| 50393FU         | 9               | 52958D          | 33              | 667J33          | 29              | C50044E         | 17              |
| 50393FV         | 27              | 53634C          | 71              | 671D41          | 65              | C50056B         | 21              |
| 50393GB         | 27              | 53678N          | 15              | 671D42          | 65              | C50074          | 69              |
| 50393GD         | 27              | 56392G          | 19              | 671F81A         | 65              | C50076          | 69              |
| 50393GE         | 9               | 56392H          | 19              | 671F88          | 65              | C50077K         | 71              |
| 50393GG         | 59              | 56392L          | 19              | 671FD42         | 65              | C50078AF10      | 69              |
| 50393GK         | 59              | 56392M          | 19              | 73B             | 51              | C50078AF5       | 69              |
| 50393GP         | 59              | 56392R          | 19              | 77L             | 45              | C50078U         | 69              |
| 50393GS         | 59              | 57830A          | 57              | 79633           | 57              | CE27            | 11              |
| 50393H          | 43              | 57844           | 17              | 80              | 45              | CE49            | 21              |
| 50393HB         | 23, 43          | 57864B          | 53              | 87              | 47, 51, 53, 57  | CE59            | 11              |
| 50393HH         | 17              | 57865           | 19              | 88D             | 65, 67          | CE63            | 11, 29, 41      |
| 50393HJ         | 27              | 57892K          | 19              | 90561K          | 61, 63, 65      | CE66            | 21              |
| 50393HK         | 27              | 57WD            | 47, 51          | 907             | 63              | CL21A           | 9               |
| 50393HL         | 27              | 59477           | 73              | 91              | 47, 51, 53, 57  | CO67D           | 41              |
| 50393HN         | 27              | 6-25-55         | 53, 57          | 94              | 43, 45          | CQ202000000     | 59              |
| 50393HR         | 27              | 6042A           | 69              | 95956           | 51              | CQ25220000      | 11              |
| 50393HS         | 11              | 605             | 47, 51, 57      | 95978           | 41              | G21201          | 63              |
| 50393HU         | 43              | 605A            | 17              | 96162B          | 15              | G50-266         | 57              |
| 50393HW         | 11              | 61351C          | 15              | 96278           | 71              | G57730GB        | 53              |
| 50393JC         | 59              | 652C16          | 17              | 96529           | 73              | G57730GC        | 53              |
| 50393JD         | 59              | 660-1014        | 21              | 96531           | 67              | G57730GD        | 53              |
| 50393JP         | 11              | 660-1020        | 43              | 96532           | 47, 51          | G65-134         | 57              |
| 50393JW         | 11              | 660-1043        | 13              | 96651           | 53              | G65-181         | 47, 51          |



NUMERICAL INDEX OF PARTS

| <u>Part No.</u>         | <u>Page No.</u>    | <u>Part No.</u>        | <u>Page No.</u>    | <u>Part No.</u>       | <u>Page No.</u>   |
|-------------------------|--------------------|------------------------|--------------------|-----------------------|-------------------|
| J 8 7 J . . . . .       | <b>6 5 , 6 7</b>   | SS6110610TP . . . . .  | <b>21, 33</b>      | SS8660612TP . . . . . | <b>27, 29,</b>    |
| L A 4 5 2 . . . . .     | <b>2 3</b>         | SS6110650TP . . . . .  | <b>35, 37</b>      | SS8660612TP . . . . . | <b>33, 35,</b>    |
| NS1160420SP . . . . .   | <b>19</b>          | SS6120930TP . . . . .  | <b>43</b>          | SS8660612TP . . . . . | <b>37, 75</b>     |
| NS6090310SP . . . . .   | <b>61</b>          | SS6121010SP . . . . .  | <b>11, 21</b>      | SS8661012TP . . . . . | <b>13, 25, 39</b> |
| NS6110310SP . . . . .   | <b>27, 73</b>      | SS6121212TP . . . . .  | <b>41</b>          | SS8681412TP . . . . . | <b>13</b>         |
| NS6110420SP . . . . .   | <b>19</b>          | SS6121220TP . . . . .  | <b>73</b>          | SS9090410TP . . . . . | <b>31</b>         |
| NS6110530SP . . . . .   | <b>37</b>          | SS6122030SP . . . . .  | <b>75</b>          | SS9090420TP . . . . . | <b>31</b>         |
| NS6120480SP . . . . .   | <b>75</b>          | SS6151220SP . . . . .  | <b>71</b>          | SS9090640SP . . . . . | <b>15</b>         |
| NS6150310SP . . . . .   | <b>21</b>          | SS6151440SP . . . . .  | <b>73</b>          | SS9111010SP . . . . . | <b>33, 71</b>     |
| NS6620320SP . . . . .   | <b>23</b>          | SS6151812TP . . . . .  | <b>27</b>          | SS9151740CP . . . . . | <b>21</b>         |
| NS6680410SP . . . . .   | <b>15</b>          | SS6151920SP . . . . .  | <b>21, 63</b>      | TA0620504R0 . . . . . | <b>43</b>         |
| PS0160042KH . . . . .   | <b>59</b>          | SS6153040SP . . . . .  | <b>21</b>          | TA0750404R0 . . . . . | <b>43</b>         |
| PS0400142KH . . . . .   | <b>9</b>           | SS7060310SP . . . . .  | <b>17, 31,</b>     | TA0750404RO . . . . . | <b>43</b>         |
| RE0500000K0 . . . . .   | <b>21</b>          | SS7060310SP . . . . .  | <b>33</b>          | TA075404R0 . . . . .  | <b>39</b>         |
| R M 2 8 7 1 B . . . . . | <b>2 7</b>         | SS7080510TP . . . . .  | <b>15, 17</b>      | TA1050504R0 . . . . . | <b>23</b>         |
| RO0681190100 . . . . .  | <b>35</b>          | SS7080520SP . . . . .  | <b>11</b>          | TA1050504RO . . . . . | <b>23</b>         |
| RO068190100 . . . . .   | <b>21,</b>         | SS7090520SP . . . . .  | <b>19</b>          | TA1100604R0 . . . . . | <b>23, 43</b>     |
| RO068190100 . . . . .   | <b>37, 73</b>      | SS7090530SP . . . . .  | <b>35, 37</b>      | TA1450404R0 . . . . . | <b>75</b>         |
| RO681190100 . . . . .   | <b>35</b>          | SS70906105SP . . . . . | <b>17</b>          | T T 1 7 . . . . .     | <b>6 3</b>        |
| S5060410TP . . . . .    | <b>57</b>          | SS7090610SP . . . . .  | <b>17, 35,</b>     | WP0330501SP . . . . . | <b>33</b>         |
| SD0380551SL . . . . .   | <b>33</b>          | SS7090610SP . . . . .  | <b>37</b>          | WP0501046SC . . . . . | <b>75</b>         |
| SD0630275SP . . . . .   | <b>33</b>          | SS7090850SP . . . . .  | <b>43</b>          | WP0531000SD . . . . . | <b>59</b>         |
| SD0640323TP . . . . .   | <b>23</b>          | SS7090910TP . . . . .  | <b>17</b>          | WP0742016SP . . . . . | <b>15</b>         |
| SD0790303SP . . . . .   | <b>21</b>          | SS7091110TP . . . . .  | <b>47, 51,</b>     | WS0510002KP . . . . . | <b>17, 71</b>     |
| SD1000801SH . . . . .   | <b>15</b>          | SS7091110TP . . . . .  | <b>53, 57</b>      | WS0631510KP . . . . . | <b>27</b>         |
| SP0550271TP . . . . .   | <b>35</b>          | SS7092110TP . . . . .  | <b>33</b>          | WZ0640200KP . . . . . | <b>33</b>         |
| SQ1110401MZ . . . . .   | <b>9</b>           | SS7110410SP . . . . .  | <b>71</b>          | WZ0641510KP . . . . . | <b>23</b>         |
| SQ1110402MZ . . . . .   | <b>27</b>          | SS7110510SP . . . . .  | <b>63</b>          |                       |                   |
| SS1110640SL . . . . .   | <b>23</b>          | SS7110910TP . . . . .  | <b>15</b>          |                       |                   |
| SS1110710SP . . . . .   | <b>69</b>          | SS7111120TP . . . . .  | <b>11, 13</b>      |                       |                   |
| SS1121010SP . . . . .   | <b>17</b>          | SS7112420SP . . . . .  | <b>73</b>          |                       |                   |
| SS2090620SP . . . . .   | <b>75</b>          | SS7120640SP . . . . .  | <b>17, 23</b>      |                       |                   |
| SS4080620TP . . . . .   | <b>11</b>          | SS7120710SP . . . . .  | <b>17, 27, 43</b>  |                       |                   |
| SS4090615SP . . . . .   | <b>59</b>          | SS7120910SP . . . . .  | <b>29</b>          |                       |                   |
| SS4090815SP . . . . .   | <b>17, 27</b>      | SS7121410TP . . . . .  | <b>15, 19</b>      |                       |                   |
| SS4091015SP . . . . .   | <b>27</b>          | SS7121610SP . . . . .  | <b>75</b>          |                       |                   |
| SS4120615SP . . . . .   | <b>17, 19, 23,</b> | SS7150740SP . . . . .  | <b>41</b>          |                       |                   |
| SS4120615SP . . . . .   | <b>41, 59</b>      | SS7660520SP . . . . .  | <b>13, 25</b>      |                       |                   |
| SS4120915SP . . . . .   | <b>17, 19, 23</b>  | SS7681410TP . . . . .  | <b>13</b>          |                       |                   |
| SS4121015SP . . . . .   | <b>43</b>          | SS8080310TP . . . . .  | <b>47, 53, 57</b>  |                       |                   |
| SS4121215SP . . . . .   | <b>23, 35</b>      | SS8080410TP . . . . .  | <b>17</b>          |                       |                   |
| SS4121615SP . . . . .   | <b>23</b>          | SS8090710SP . . . . .  | <b>9, 35</b>       |                       |                   |
| SS4151415SP . . . . .   | <b>43</b>          | SS8110422TP . . . . .  | <b>11, 15,</b>     |                       |                   |
| SS5060410SP . . . . .   | <b>51, 53</b>      | SS8110422TP . . . . .  | <b>21, 31,</b>     |                       |                   |
| SS5060410TP . . . . .   | <b>57</b>          | SS8110422TP . . . . .  | <b>35, 37,</b>     |                       |                   |
| SS5090610SP . . . . .   | <b>37</b>          | SS8110422TP . . . . .  | <b>39, 71</b>      |                       |                   |
| SS5091020SP . . . . .   | <b>61</b>          | SS8110510SP . . . . .  | <b>75</b>          |                       |                   |
| SS6060440TP . . . . .   | <b>33, 47,</b>     | SS8120410SP . . . . .  | <b>73</b>          |                       |                   |
| SS6060440TP . . . . .   | <b>51</b>          | SS8150710SP . . . . .  | <b>73</b>          |                       |                   |
| SS6080410SP . . . . .   | <b>33</b>          | SS8151150SP . . . . .  | <b>71, 73</b>      |                       |                   |
| SS6090440SP . . . . .   | <b>11</b>          | SS8660410SP . . . . .  | <b>25</b>          |                       |                   |
| SS6090620SP . . . . .   | <b>11</b>          | SS8660512TP . . . . .  | <b>15</b>          |                       |                   |
| SS6091022TP . . . . .   | <b>35</b>          | SS8660612TP . . . . .  | <b>13, 15, 25,</b> |                       |                   |





**JUKI**  
*Union Special*