



JUKI
Union Special

Thread Trimmer, Wiper (Pneumatic, Solenoid), and Stitch Condensing

MFC7000 Series

UT1, UT2, UT3, UT4, UT5, UT6, SC1

ADJUSTING INSTRUCTIONS & DEVICE PARTS LIST

HOW TO MAKE USE OF THIS PARTS LIST

1. Codes on the "Amt. Req." column
 - Each numeral indicates the number of parts required.
 - "0.1" and "2.5" indicate the length (in meters) of the respective parts.
2. Parentheses mean that the corresponding part is a subpart that constructs an assembly part.
3. Dotted lines on the Figures indicate assembly parts.

Adjusting Instructions and device Parts Manual PT0110 for Devices UT1, UT2, UT3, UT4, UT5, UT6, SC1

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PREFACE

This parts manual has been prepared to assist you in locating NEW individual parts or assemblies on the MFC7000 Series machines. It can be used in conjunction with Union Special Parts Manuals PT0108 & Operator's Manual OP0113.

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.

SAFETY RULES

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 instruction 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.

MFC7605A-H11-B56/PL1/UT5

| Stitch Type | Code |
|------------------------------------|------|
| 2-Needle Bottom Cover Stitch | 406 |
| 3-Needle Bottom Cover Stitch | 407 |
| 2-Needle Top & Bottom Cover Stitch | 602 |
| 3-Needle Top & Bottom Cover Stitch | 605 |

| Code | Destination Type |
|-------|--------------------|
| Blank | Japan |
| A | Western Hemisphere |
| U | South East Aisa |
| T | Europe |

| Stitch Length | | | |
|---------------|--------------------------|--------------------------|--|
| Code | 2 Needle | 3 Needle | Application |
| A | 1.6-2.1mm (12-16 SPI) | 1.6-2.1mm (12-16 SPI) | Hemmer Lapseamer |
| B | — | 1.8-2.5mm (10-14 SPI) | Hemmer Lapseamer Collarette (C02) Universal |
| C | 1.8-3.2mm (8-14 SPI) | 2.5-3.2mm (8-10 SPI) | Hemmer Lapseamer |
| D | 1.6-3.2mm (8-16 SPI) | 1.6-3.2mm (8-16 SPI) | Elastic & Coverseam |

| Application | Description of Subclass | Code |
|----------------------|--|------|
| Collarette | Converts to Hemming (U06) or coverseam (U03) | C02 |
| Elastic Applications | Fabric Undertrimmer | E11 |
| Elastic Applications | Fabric Undertrimmer, with Puller | E61 |
| Hemming | Basic Style with Hem Guide | H01 |
| Hemming | Puller with Rollers & Hem Guide | H11 |
| Hemming | Left Hand Fabric Trimmer | H21 |
| Hemming | Left Hand Fabric Trimmer with Puller | H31 |
| Coverseam | Standard Seam Guide for Light Weight Fabrics | K01 |
| Coverseam | Adjustable Seam Guides for Med to Heavy Weight Fabrics | K02 |
| Universal | Coverseaming Parts Standard | U03 |
| Universal | Hemming Parts Standard | U06 |

| Gauge | Metric | Inches | Old |
|-------|--------|--------|-----|
| 32 | 3.2mm | 1/8" | 8 |
| 40 | 4.0mm | 5/32" | 10 |
| 48 | 4.8mm | 3/16" | *12 |
| 56 | 5.6mm | 7/32" | *14 |
| 64 | 6.4mm | 1/4" | *16 |

*NOTE: Old coverstitch needle spacing for knitwear were actually 1/64" less than the gauge indicated.

| | |
|-------|--|
| Blank | Non Puller |
| PL1 | Clutch Driven Rear Puller Roller With Teeth |
| PL1S | Clutch Driven Rear Puller with Smooth Roller |

| | |
|-------|--|
| Blank | Non Device |
| UT1 | Electromagnetic type, needle thread wiper & auto presser foot lift |
| UT2 | Electromagnetic type, cover thread trim & auto presser foot lift |
| UT3 | Pneumatic type, needle thread wiper & auto presser foot lift |
| UT4 | Pneumatic type, needle thread blower & auto presser foot lift |
| UT5 | Pneumatic type, top cover thread trimmer & auto presser foot lift |
| UT6 | Electromagnetic type & auto presser foot Lift (Non Puller styles only) |
| SC1 | Stitch Condensing |

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TURN OFF MAIN POWER SWITCH BEFORE WORKING! WHEN USING CLUTCH MOTORS WITHOUT ACTUATION LOCK WAIT UNTIL THE MOTOR HAS COMPLETELY STOPPED.

TENSION RELEASE (UNDERBED THREAD TRIMMER)

Set separators (C) as close to tension discs (D) without touching them and not to bind when fully extended.

Tension discs (D) must open as soon as cutting process begins.

Tension disc separators (C) should move freely between tension discs (D) without binding.

Thread trimmer and tension release assemblies are linked together.

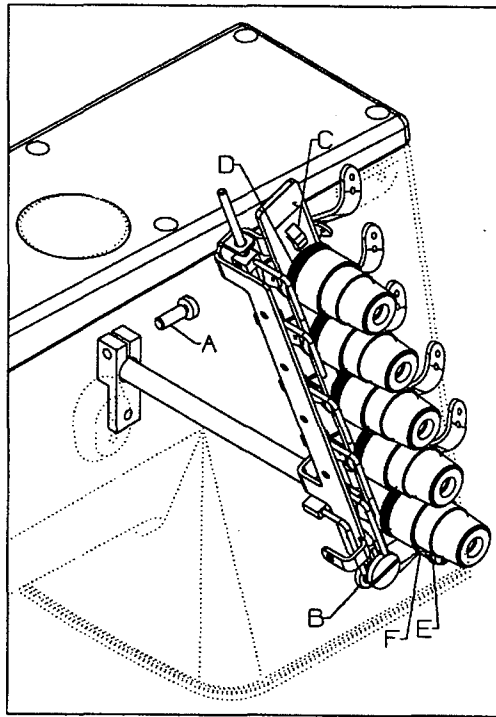


Fig 1

TO ADJUST:

Loosen screw (E).

Turn eccentric (F), located behind screw (E) to set tension release lever (B) as required.(Fig 1)

Retighten screw (E).

After adjustment there should be no binding at any point.

Adjust the tension release lever (A) to fully open the tension release and return without binding. The tension release is timed with the activation of the fabric thread trimmer.

THREAD PULL-OFF

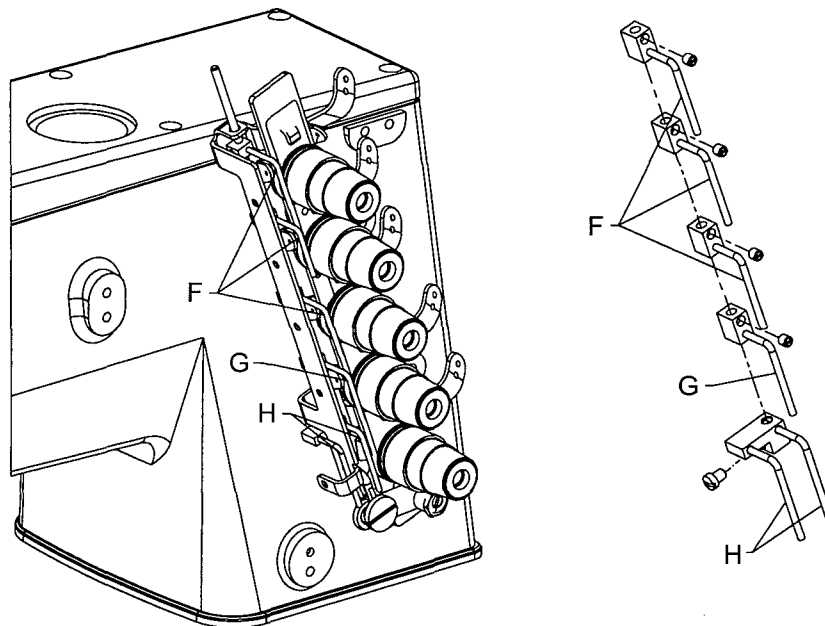
Pull-off hooks (F) for needle threads, control length of needle thread tails on a garment after trimming.

Set hooks (F) to strike-off shortest tail possible and still start sewing within the first or second stitch.

Set thread pull-off hook (G), for spreader thread so that thread is clamped securely when trimmed and starts properly when the stitch is first started. Lowering the needle thread pull off hooks will strike off more thread leaving longer tails.

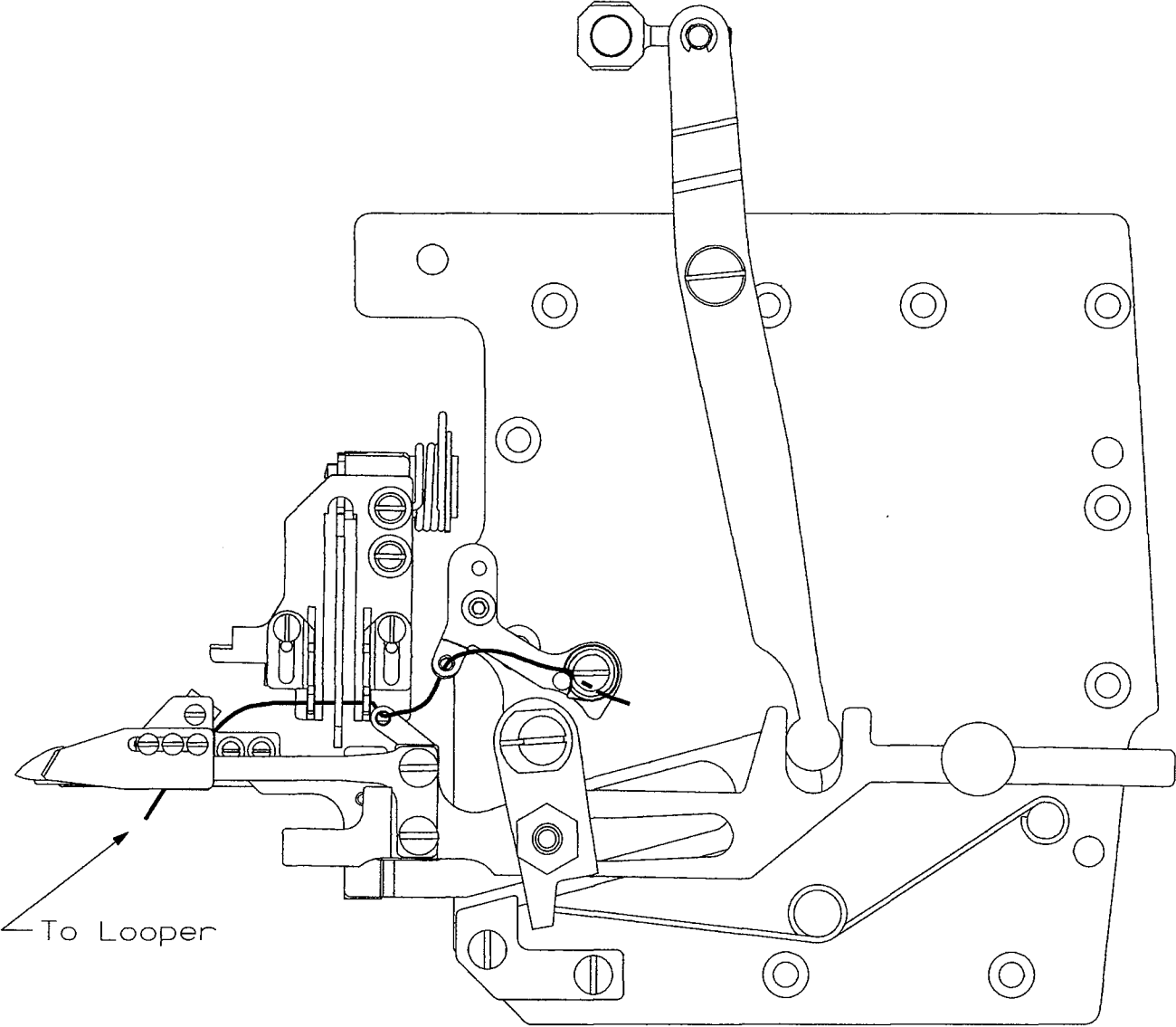
Set hook (H), for the looper thread so that the thread is clamped securely when trimmed.

NOTE: Moving strike-off hooks down strikes off more thread. Moving strike-off hooks up strikes off less thread.



THREADING DIAGRAM
Looper Thread Strike-Off

CAUTION: Improper threading may cause; looper thread wrap-ups or inconsistent start of stitches.



KLIPP-IT® THREAD TRIMMER

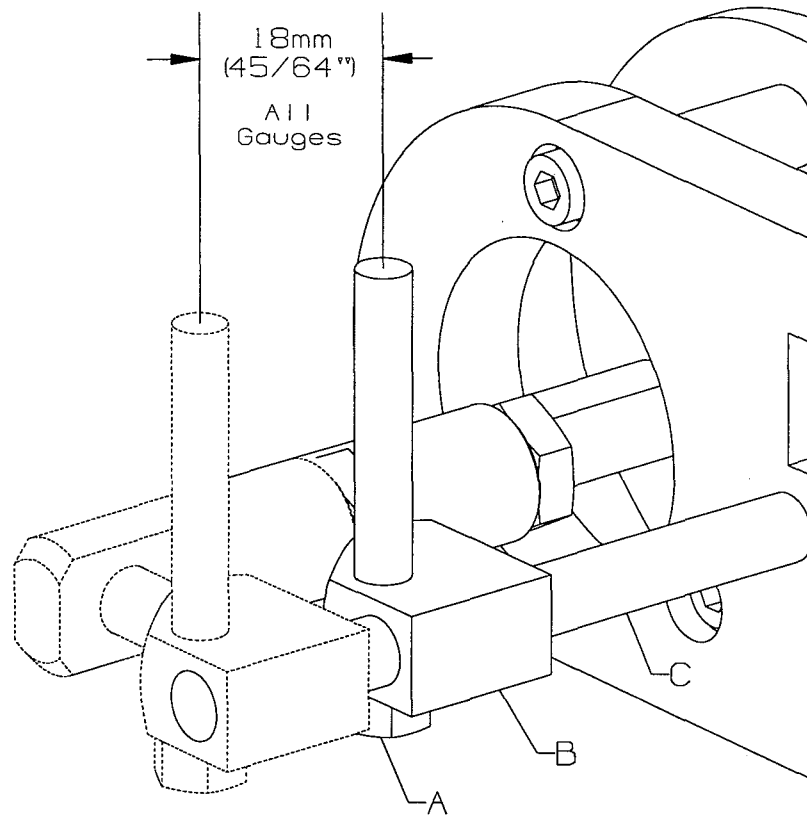
Set stroke of the knife drive to: 18mm (45/64"). All gauges.

Remove the cloth plate.

Loosen nut (A).

Move crosshead (B) on shaft (C) as required.

Retighten nut (A).



KLIPP-IT® THREAD TRIMMER ASSEMBLY

When the thread trimmer is in its home position, the distance between rear of lower knife (L) and the protruding edge of lever (D) should be: 0.4mm(1/64").

Remove retainer ring (E).

Push down on driving link (F) to remove from hole in arm (G).

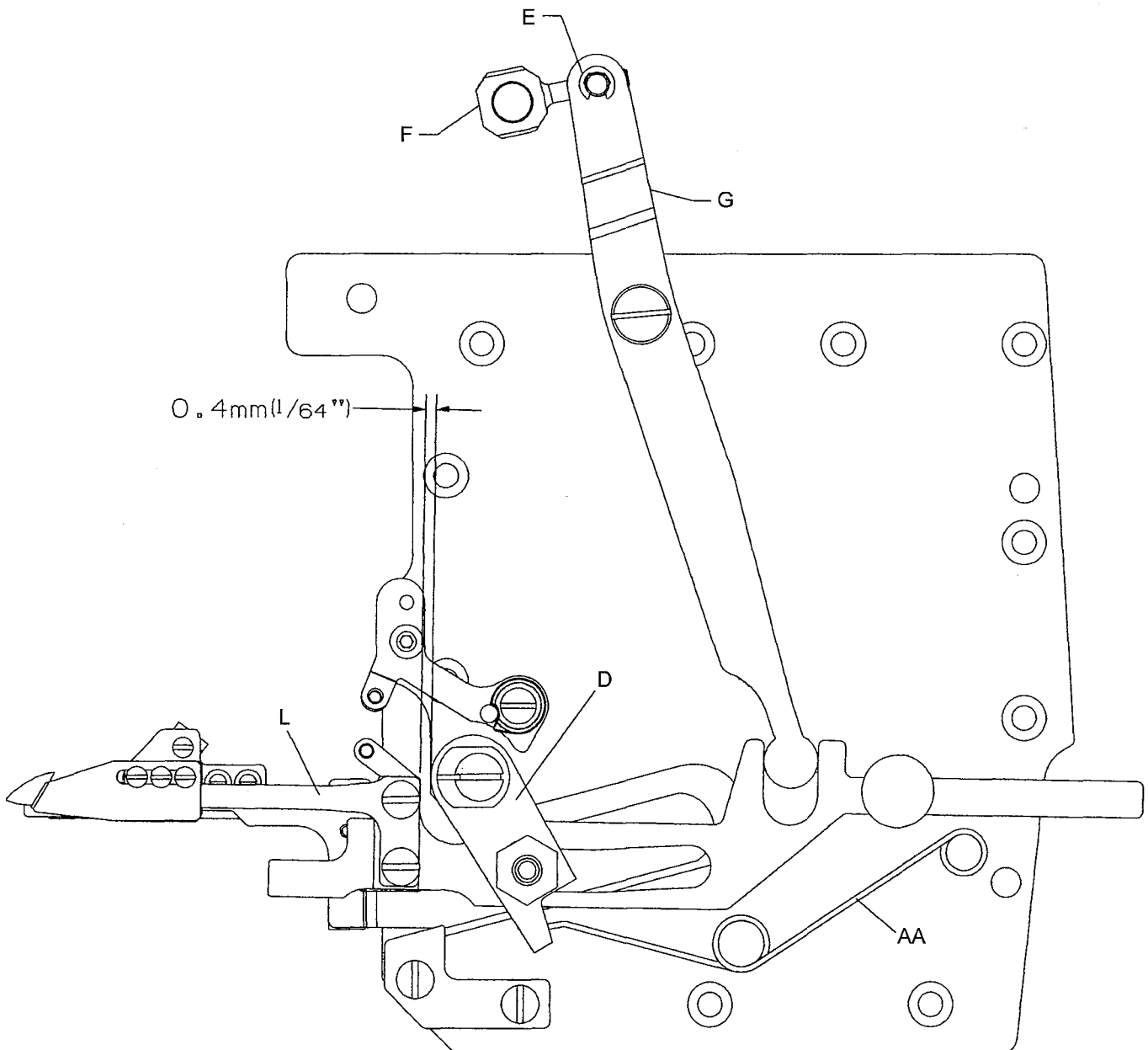
Turn driving link(F) in or out as required.

Release driving link (F) making sure pin is in hole in arm (G).

Replace retainer ring (E).



SPRING (AA) MUST BE IN POSITION AT ALL TIMES FOR PROPER FUNCTION.



KLIPP-IT® THREAD TRIMMER ASSEMBLY
Knife Adjustment

When positioning lower knife (L), eyelet (J) must be seated to the right.

Lower knife (L) must be seated to the right and all the way forward when tightened.(Fig2)

Loosen 2 screws (K).

Move eyelet (J) to the right as required.

Set lower knife as required.

Retighten screws (K).

To ensure no binds, extend knife (L) to the left and loosen upper knife screws (H,H1) at the same time.

Retighten screws (H,H1).

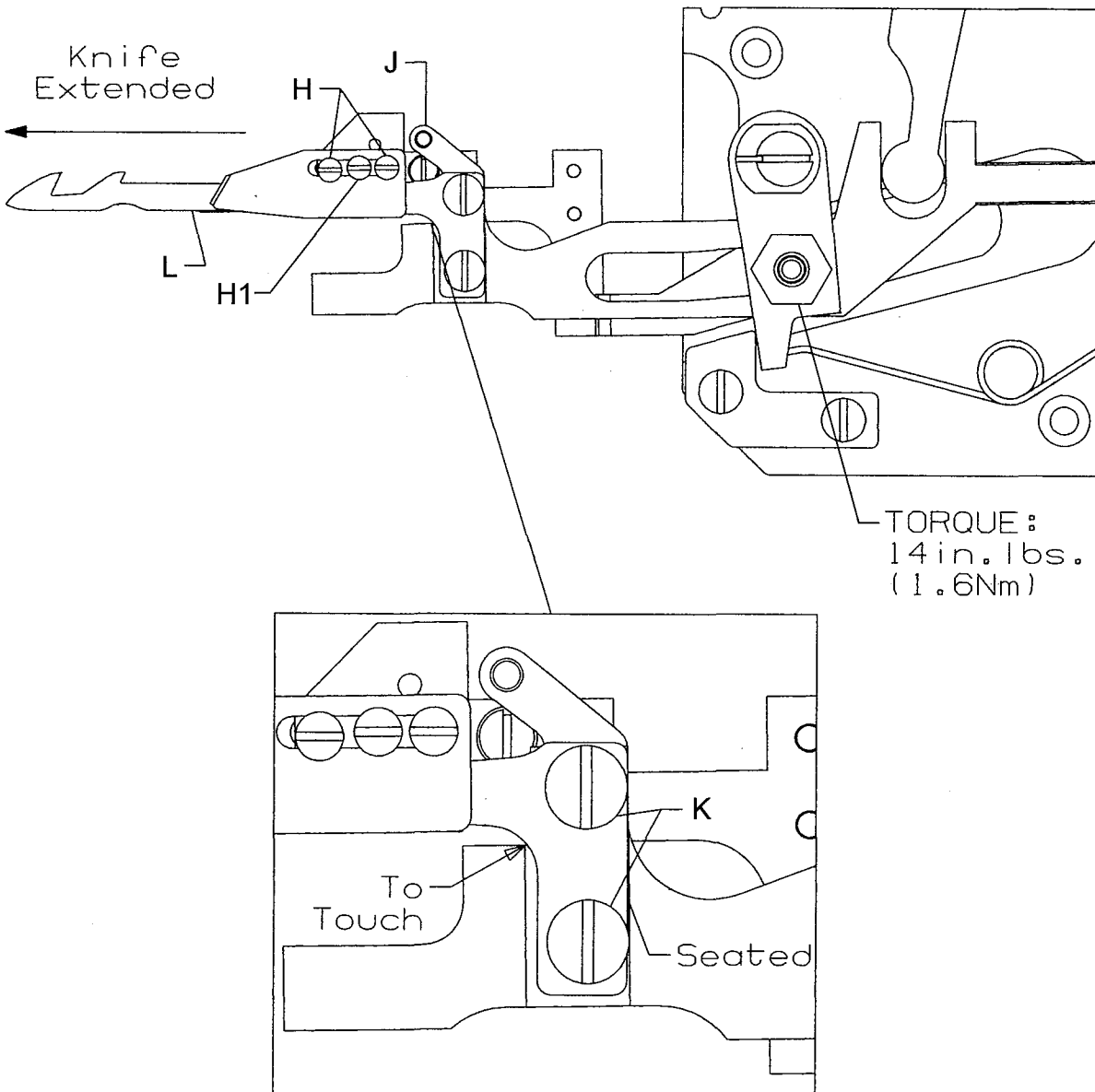


Fig 2

KLIPP-IT® THREAD TRIMMER ASSEMBLY

Upper knife (M) should overlap lower knife (L) by: 0.5mm(.020").(Fig3)

The distance from clamping leaf spring (N) to the tip of lower knife (L) should be: 3.2mm(1/8"). Clamping leaf spring (N) should be flush with knife at edge.(Fig4)(Fig5)

NOTE: The clamping leaf spring must be set to only clamp the looper thread, NOT the needle threads.

The distance from tension leaf spring (P) to the back of upper knife should be: 0.5mm(.020") to 1.0mm(.040").(Fig5)

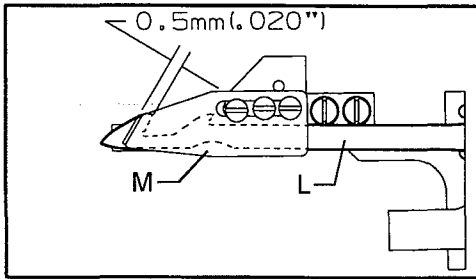


Fig 3

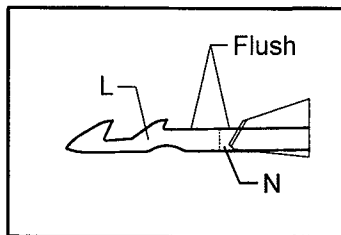


Fig 4

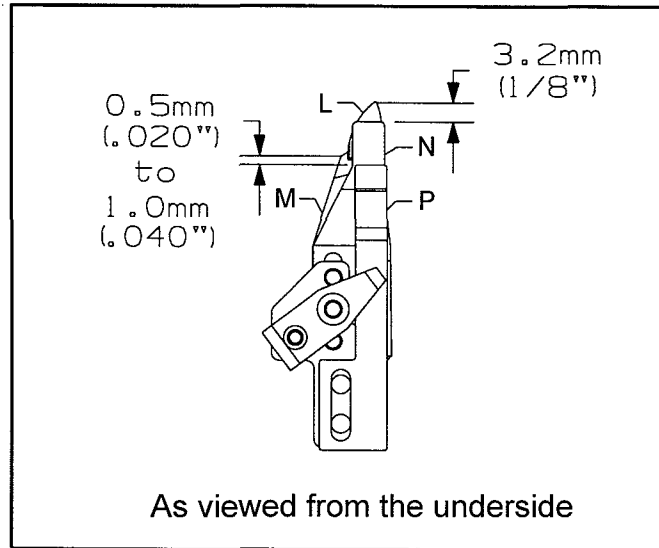


Fig 5

UPPER KNIFE AND CLAMPING SPRING

Loosen two screws (H) and screw (H1).

Move upper knife (M) and clamping leaf spring (N) as required.

Retighten screws (H) and (H1).

To increase clamping spring tension turn screw (H1) clockwise.(Fig6)

TENSION SPRING

Loosen two screws (Q).

Adjust leaf spring (P) as required.

Retighten screws (Q).

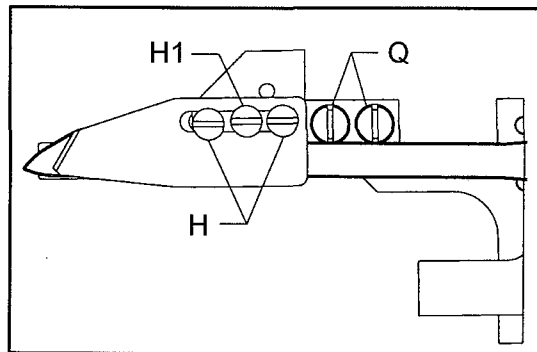


Fig 6

KLIPP-IT® THREAD TRIMMER ASSEMBLY

With the needles at top dead center: Lower knife (L) should be extended past the heel of looper (S) by: 12.0mm(15/32"), for the following adjustments.

The tip of lower knife (L) should be centered front to back, to the rear edge of the flat on top of looper (S).

Stop (R) sets the distance of the upper knife and springs to the looper, it should be centered in its slots.

Guide (X) should just contact edge (BB) of knife mechanism.

On cover stitch machines (G) should be set slightly rearward 0.13mm(.005") of the standard adjustment.

The bottom of lower knife (L) should clear looper (S) by 0.1mm(.004").

LOWER KNIFE FRONT TO BACK

Loosen screw (T).

Move eccentric (U) as required. NOTE: line on eccentric should always be on left side.

Retighten screw (T).

UPPER KNIFE STOP DISTANCE

Loosen screws (V).

Move stop (R) as required.

Retighten screws (V).

KNIFE MECHANISM

GUIDE DISTANCE

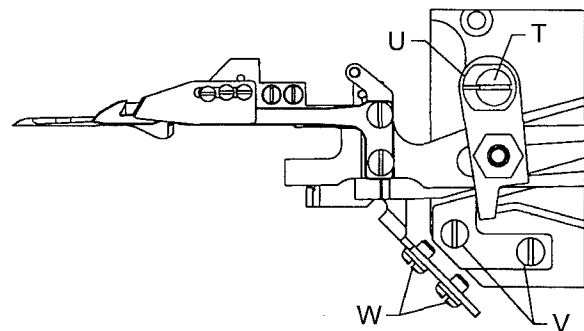
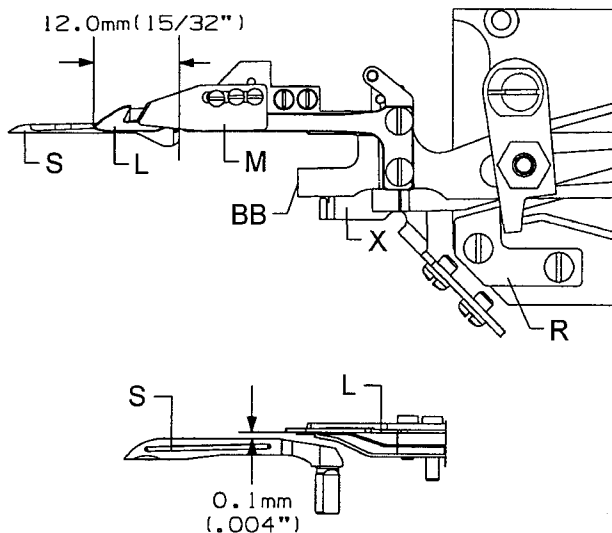
Loosen screws (W).

Move guide (X) as required to just contact edge (BB) as knife moves to the left.

Retighten screws (W).

Loosen screws (W). Move guide (X) as required to obtain 0.1mm(.004") dimension. Between (S) and (L).

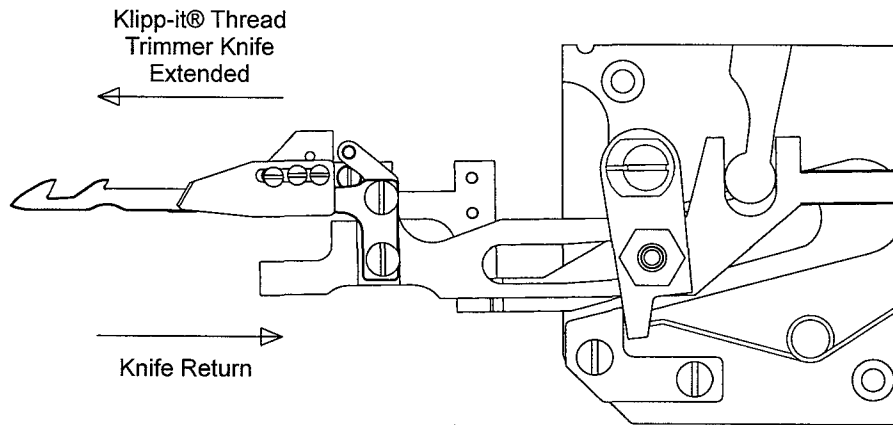
Retighten screws (W).



KLIPP-IT® THREAD TRIMMER

ELECTROPNEUMATIC DRIVE

Adjust the metering screws so that thread trimmer mechanism and knife move smoothly left to right and the threads are cleanly cut and clamped.



To increase the speed of the knife return, turn screw (Y) counterclockwise.

To decrease the speed of the knife return, turn screw (Y) clockwise.

To increase the speed of the knife extending, turn screw (Z) counterclockwise.

To decrease the speed of the knife extending, turn screw (Z) clockwise.

NOTE: For proper air pressure refer to pages 48 - 50.

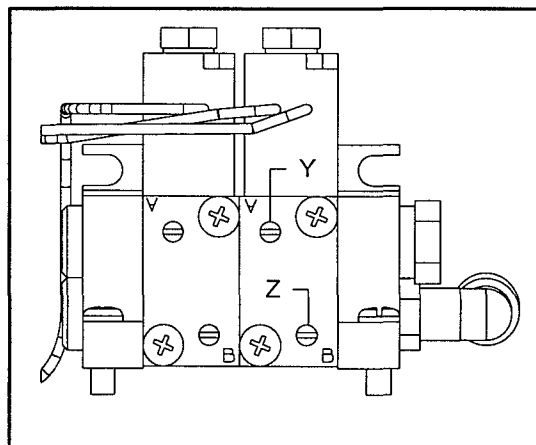


Fig 7

SETTING MICRO SWITCH FOR TRIMMER MECHANISM

The micro switch prevents the motor from running when the thread trimmer mechanism is not in the extreme right position.

Move the thread trimmer mechanism to its extreme right (end) position.

Loosen screw (A).

Adjust micro switch (B) so there is 1mm (.040") between (C) and (D).(Fig7)

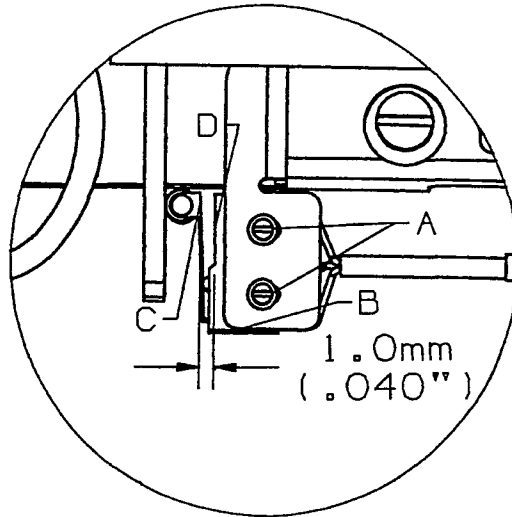
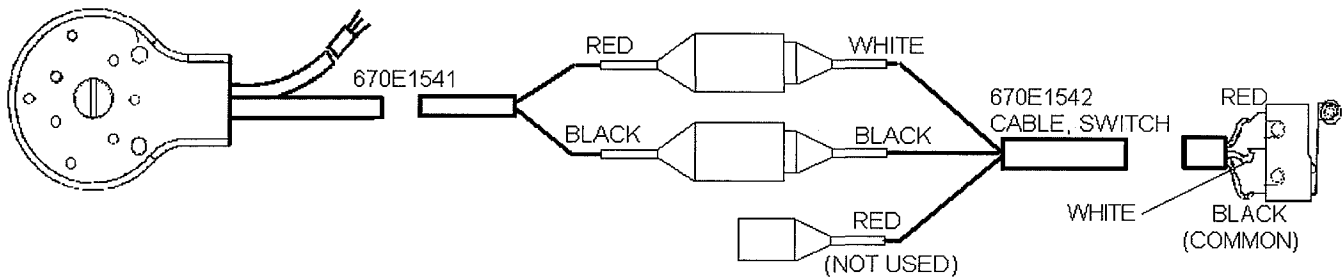


Fig 8

MICRO SAFETY SWITCH CONNECTION

JUKI SC380 MOTOR



Parameter S6L set at "Hi" (Default)

NOTE: For motors not listed, refer to the motor manufacturers manual for the proper connection of the micro safety switch. The red and black wires of cable 670E1541 are connected to pins #4 and #6 of the 10 pin hirschmann plug, this is for the motor listed, others may be different.

NEEDLE THREAD WIPER

Bracket installed at 90 angle to needles.

Wiper hook (A) must deflect needle threads to operator on downstroke, (Fig9). Point (D) of the wiper hook must pass the center of left needle by 3.2mm(1/8").(fig10)

On return, wiper hook (A) must catch all needle threads (Fig11) and draw them into leaf spring (B) to be clamped.

Wiper hook (A) and leaf spring (B) should be flush at point (C) when at rest position.

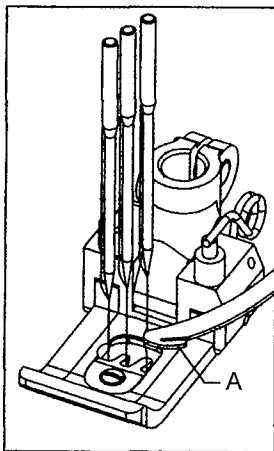
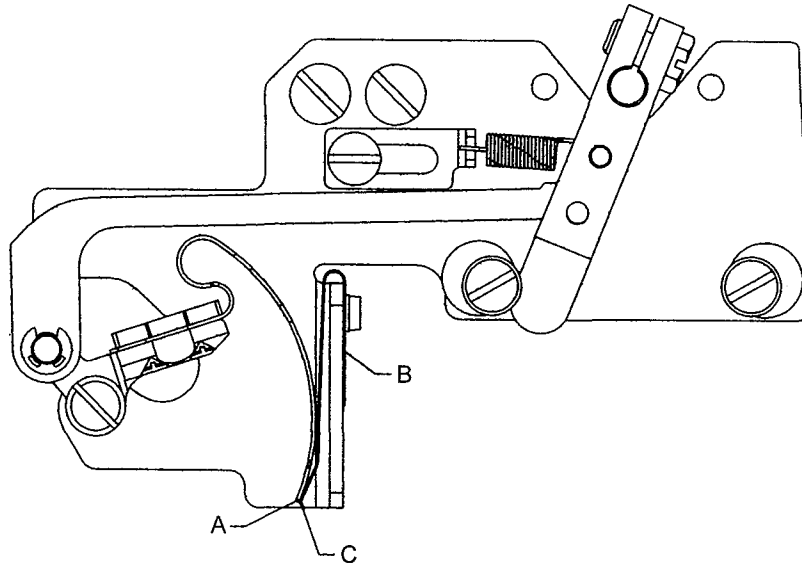


Fig 9

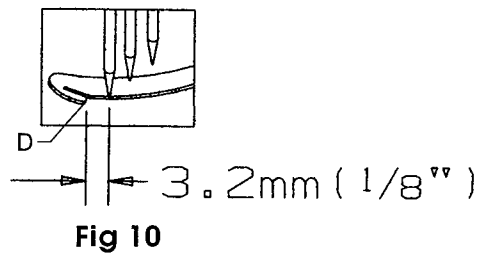


Fig 10

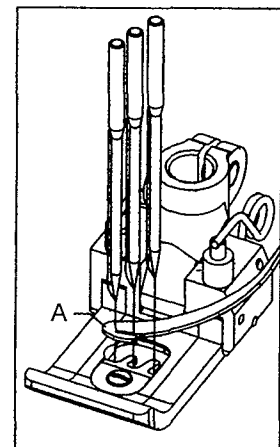


Fig 11

ADJUSTING THREAD WIPER

Disconnect power supply for thread wiper.

Loosen screws (D). Move wiper (A) left or right as necessary.

Retighten screws (D).

Operate wiper manually to check adjustment.

Loosen screw (E), move leaf spring (B) flush with wiper (A) at point (C).

Retighten screw (E).

Reconnect power supply.

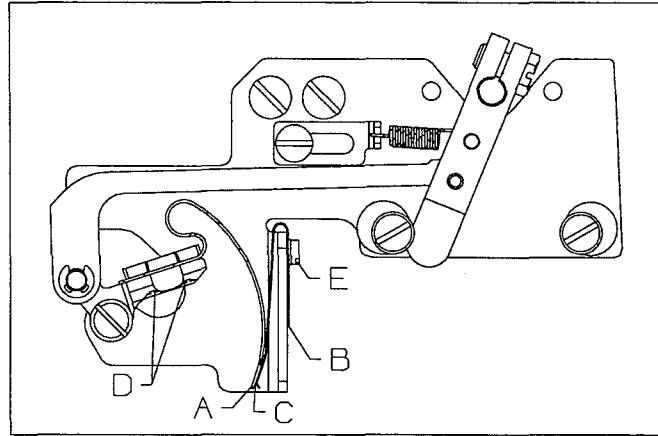


Fig 12

To lengthen travel past left needle.

Disconnect power supply to thread wiper.

Loosen stop screw (A) and rotate eccentric (B) so high lobe is further to left. Retighten stop screw (A).

To move wiper higher in leaf spring.

Loosen screw (C) and rotate eccentric (D) so high lobe is further to the right. Tighten stop screw (C).

Reconnect power supply.

NOTE: Recheck leaf spring setting to wiper.

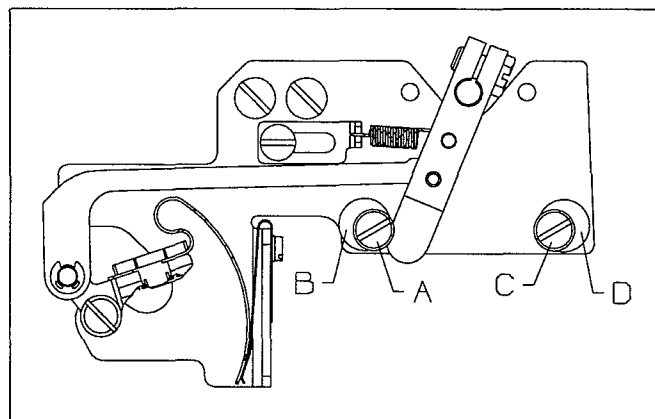


Fig 13

COVER THREAD TRIMMER

The following adjustments are made with the needles at top dead center.

Set the pressure of knife (A) to the minimum and still cut the spreader thread.(Fig14)

The trimmer activates so the hook of the knife (A) picks up the spreader thread from the underside where the thread goes from the spreader to the switch.(Fig14)

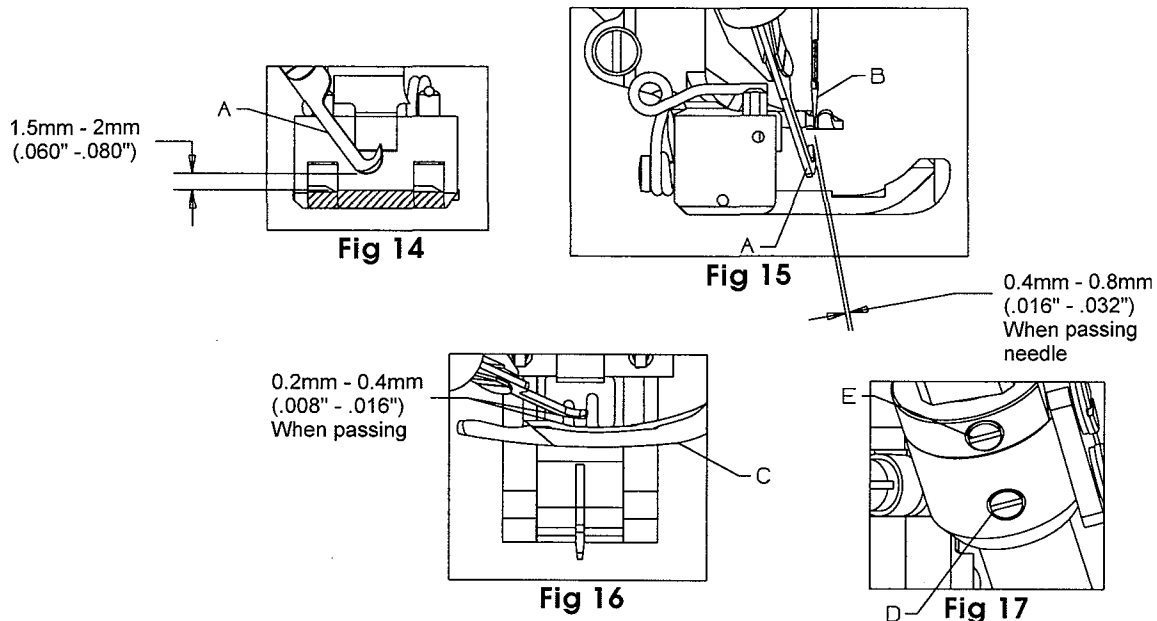
The bottom of the moving knife should be 1.5mm - 2mm(.060" - .080") above the presser foot when the moving knife is extended.(Fig14).

The clearance of the knife tip (A) should be 0.4mm to 0.8mm(.016" - .032") from the left needle (B) and 0.2mm to 0.4mm(.008" - .016") from the spreader (C). the angle should be set to pick up the spreader thread.(Fig15, Fig16)

Tighten the set screw (D) in the assembly holder and also tighten the set screw (E) in the collar with the collar against the holder.(Fig17)

The collar screw should not be removed once the trimmer is adjusted. The collar will hold the adjusted position of the trimmer if it should be removed from the holder.

NOTE: Adjust the presser foot delay so it does not interfere with the trimmer.



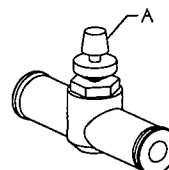
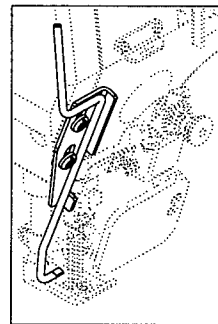
NEEDLE THREAD BLOWER ASSEMBLY

Needle threads must be blown out from under a raised presser foot after material has been removed.

AIR FLOW CONTROL

1. Turn needle valve (A) clockwise to decrease air flow.
2. Turn needle valve (A) counterclockwise to increase air flow.

NOTE: For proper air pressure refer to pages 56 - 63



THREAD TRIMMER AND WIPER DEVICE TROUBLE SHOOTING

1.Klipp-it® thread trimmer device

| Trouble | Cause | Solution | Ref. Page |
|--|--|---|-------------|
| 1) Not clamping looper thread | Position incorrect lower knife to spring | Adjust upper knife overlap to 0.5mm | P.13 (L, M) |
| | Spring alignment wrong | Adjust correctly | P.13 |
| | Tension on clamping spring to light | Adjust tension screw. | P.13 (H1) |
| | Worn out tension spring | Change new spring | P.13 (N) |
| | Pull-off eyelet threading wrong | Correct threading | P.9 |
| | Stroke over 18mm | Reset stroke to 18mm | P.10 |
| 2) Looper thread wrap up on take-up cam | Same as1), missing looper clamp | Adjust looper clamping | P.13 |
| 3) Not trimming needle thread or looper thread | Upper knife edge not sharp, worn out cutting edge. | Change new parts | P.13 |
| | Knife stroke too short | Reset 18mm stroke of drive | P.10,11 |
| | Incorrect return upper knife position | Check and adjust home position to 0.5mm overlap | P.11,13 |
| | Incorrect needle upper position | Adjust synchronizer position | |
| | Tension on clamping spring to light | Adjust tension screw. | P.13 (H1) |
| | Worn out tension spring | Change new spring | P.13 (N) |
| 4) Needle thread remain under the throat plate after trimming. | Incorrect lower knife position over looper and twice trim needle thread in same time | Adjust eccentric | P.14 (U) |
| 5) Nicks on lower knife | Hitting needles or looper | Check motor setting and Timing | |
| | | Adjust guide up or down to correct position | P.14 (X) |
| 6) Does not start thread trimmer when pedal heel back | Parts bind or incorrect air pressure | Check parts or air pressure | |
| | Connector error or wire broke | Check wiring from Klipp-it drive | |
| 7) Motor does not run | Does not work Micro switch | Adjust setting | P.16 |
| | Broke Micro switch | Change parts | P.16 |
| | Bad power switch or fuse | Check power switch and fuse | |
| | Micro switch connector wiring wrong | Set correctly | P.16 |
| | Parameter setting wrong | Check motor control box program | |

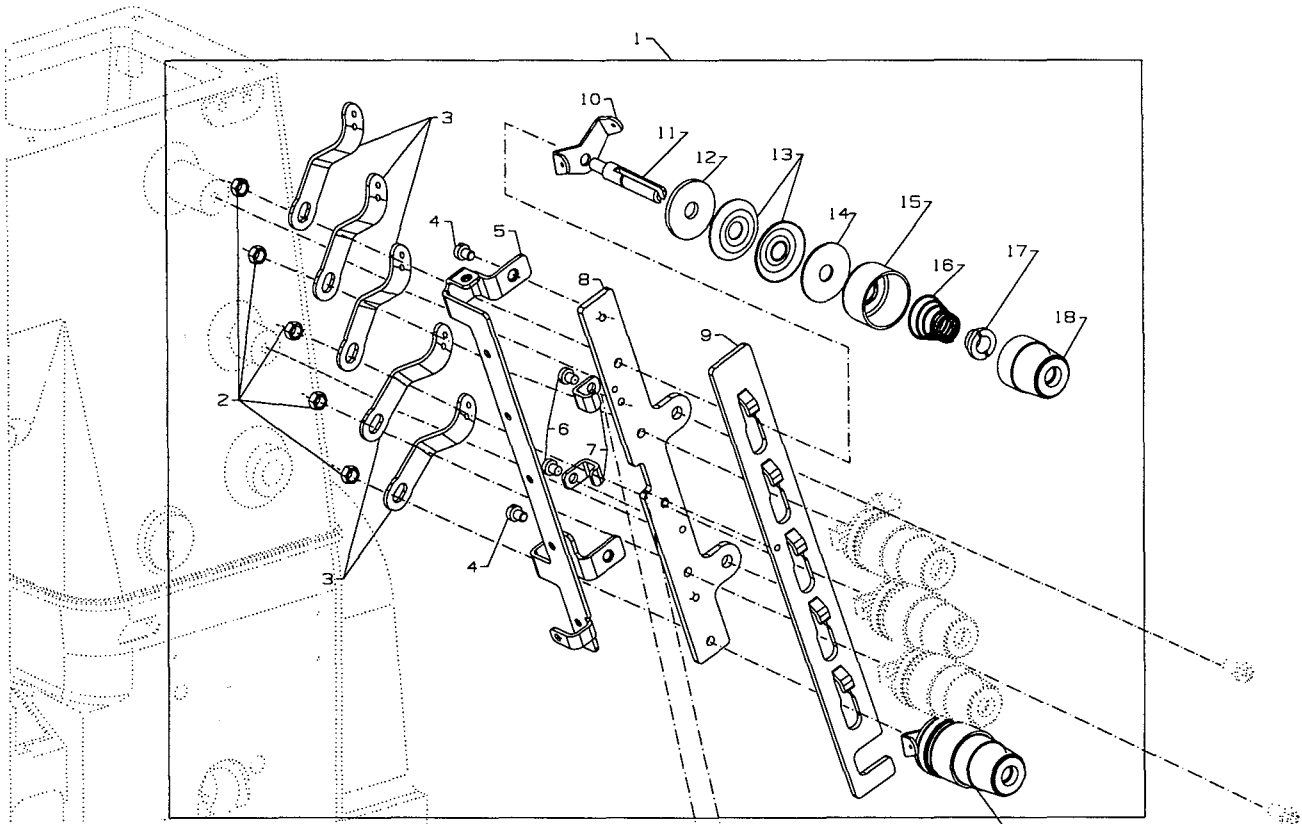
THREAD TRIMMER AND WIPER DEVICE TROUBLE SHOOTING (CONT)

2. Thread Wiper device

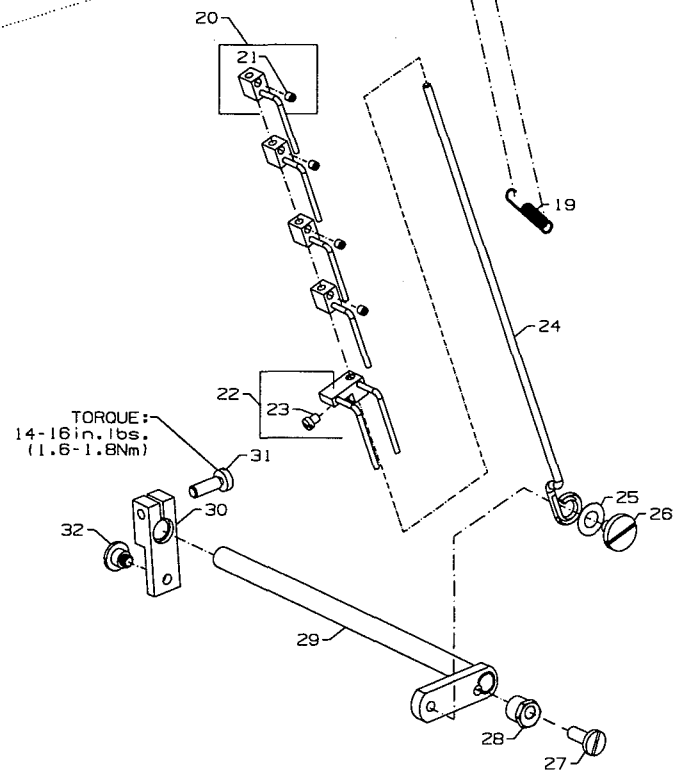
| Trouble | Cause | Solution | Ref. Page |
|-------------------------------|--------------------------------------|---------------------------|------------|
| 1) Missing needle thread | Incorrect wiper position or stroke | Re-adjust wiper or stroke | P.17 |
| 2) Not clamping needle thread | Wiper hook return position incorrect | Adjust stop eccentric | P.18 (B,D) |
| | Spring does not clamp thread | Adjust leaf spring | P18 (B) |

3. Cover thread trimmer device

| Trouble | Cause | Solution | Ref. Page |
|---------------------------------|--|-----------------------------|-----------|
| 1) Not trimming spreader thread | Upper knife edge not sharp, worn out cutting edge. | Change new parts | |
| | Tension on clamping spring to light | Adjust tension screw. | P.19 |
| | Worn out tension spring | Change new spring | P.19 |
| 2) Missing spreader thread | Moving knife set incorrect | Adjust trimmer position | P.19 |
| 3) Does not work | No air pressure | Check air pressure or valve | |
| | Incorrect wiring | Check wiring | |

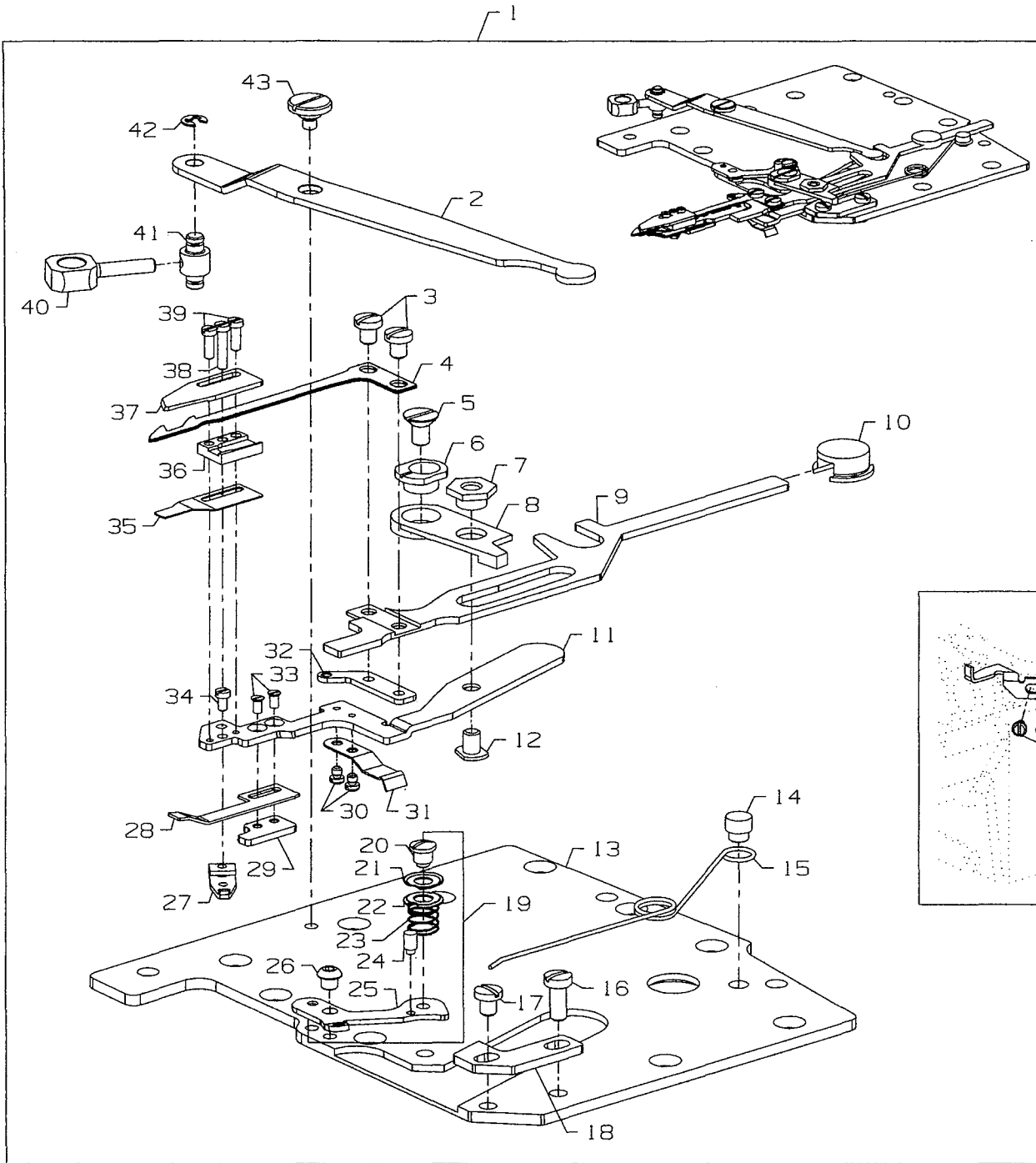


Note:
 For Looper Tension
 Details #12 And #14
 Are Reversed



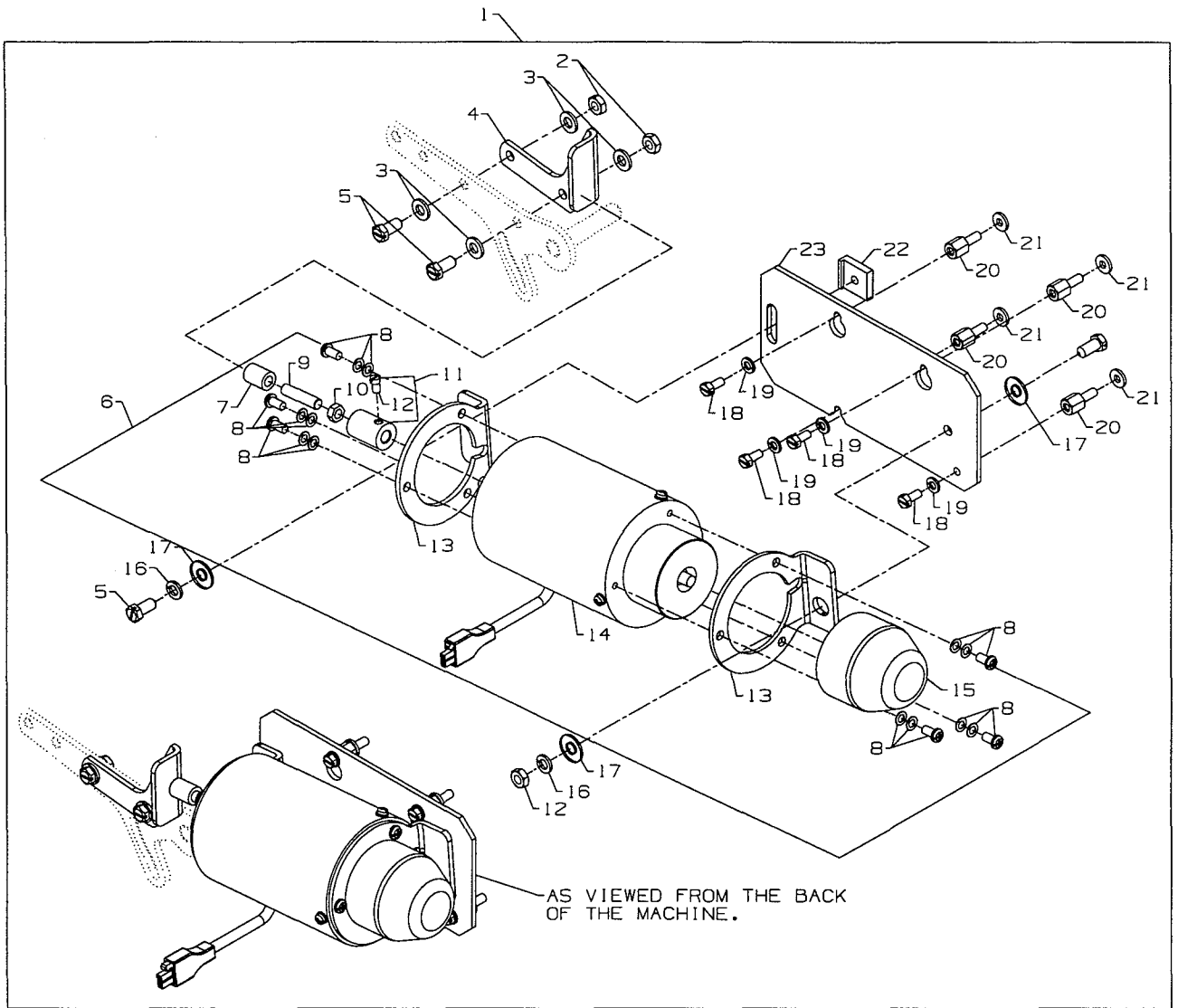
THREAD TENSION

| | | | |
|-----|-------------|---|----|
| 1. | 29477NL | 5 Thread Tension Assembly | 1 |
| 2. | NS6110420SP | Nut | 5 |
| 3. | 57865 | Lead-in Thread Guide | 5 |
| 4. | SS7090520SP | Screw | 2 |
| 5. | 50392AP | Thread Guide | 1 |
| 6. | SS7090520SP | Screw | 2 |
| 7. | 50392AV | Guide, for tension disc separator | 2 |
| 8. | 50392X | Tension Bracket | 1 |
| 9. | 50392AR | Tension Disc Separator | 1 |
| 10. | 57892K | Thread Tension Eyelet | 5 |
| 11. | 56392G | Tension Post | 5 |
| 12. | 666-330 | Tension Disc Felt | 5 |
| 13. | B3126012000 | Tension Disc | 10 |
| 14. | B3120352000 | Tension Disc Felt | 5 |
| 15. | 56392H | Spring Shield | 5 |
| 16. | B3103804000 | Spring, for spreader (blue) | 1 |
| - | B3101804000 | Spring, for needle (red) | 3 |
| - | B3121804000 | Spring, for looper (plain) | 1 |
| 17. | B3112704000 | Ferrule, for tension spring | 5 |
| 18. | 56392M | Knob, for spreader (blue) | 1 |
| - | 56392L | Knob, for needle (red) | 3 |
| - | 50392R | Knob, for looper (plain) | 1 |
| 19. | 96711 | Extension Spring | 1 |
| 20. | 50358Y | Thread Pull-off Hook | 4 |
| 21. | 28C | Screw | 4 |
| 22. | A9858 | Thread Pull-off Hook | 1 |
| 23. | 77A | Screw | 1 |
| 24. | 50392AS | Puller Rod, for thread puller | 1 |
| 25. | 50374A | Washer | 1 |
| 26. | 99296 | Shoulder Screw | 1 |
| 27. | 22757 | Screw | 1 |
| 28. | G51346KA | Tension Release Eccentric | 1 |
| 29. | 50392AN | Tension Release Assembly | 1 |
| 30. | 99620 | Tension Release Lever | 1 |
| 31. | 22596 | Screw | 1 |
| 32. | 22735 | Screw | 1 |



KLIPP-IT® THREAD TRIMMER ASSEMBLY

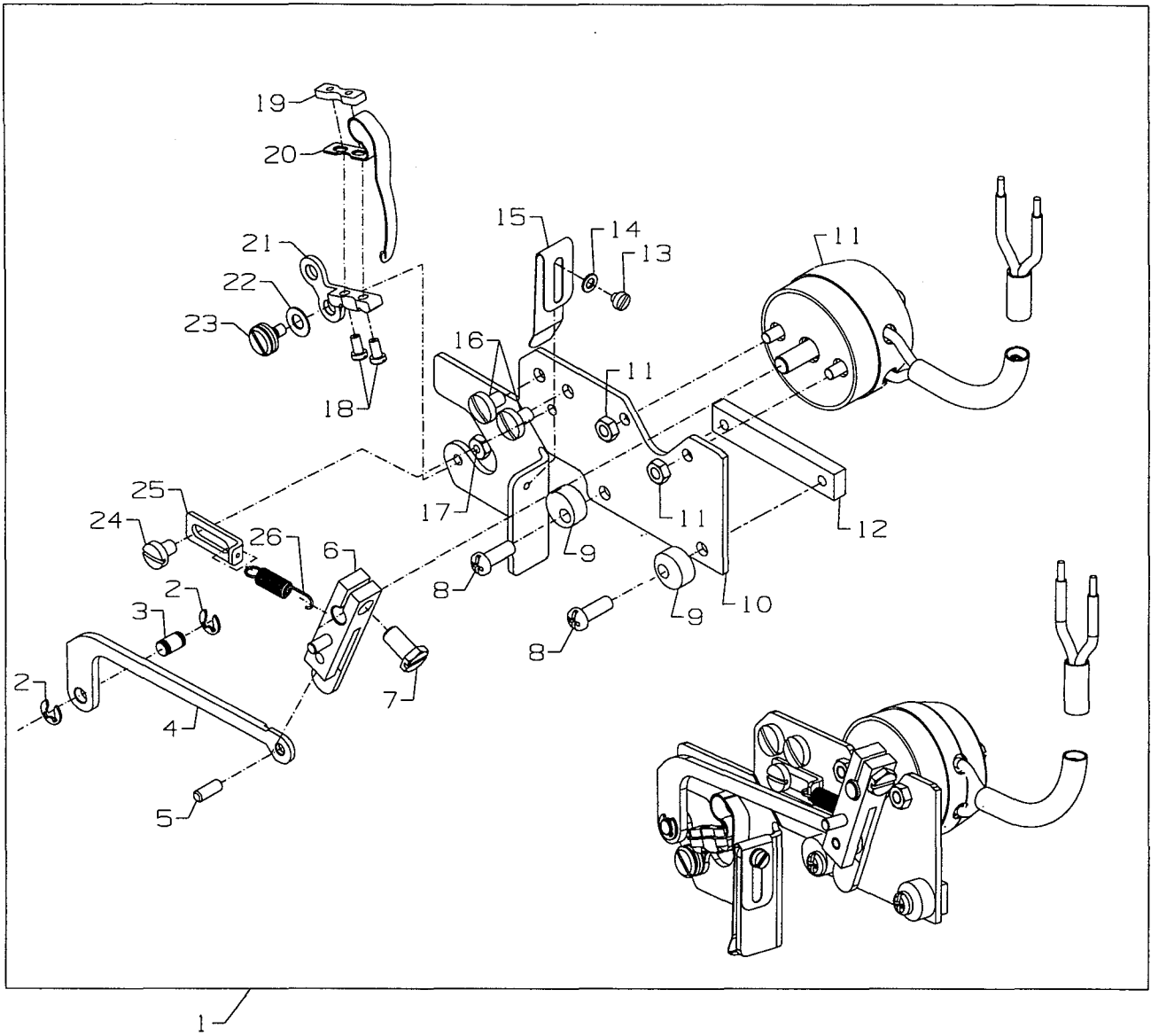
| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-------------|---|--------------|
| 1. | 29480AYH | Klipp-it® Thread Trimmer Assembly | 1 |
| 2. | 34763P | Lever | 1 |
| 3. | 18-1453 | Screw | 2 |
| 4. | 34749P | Lower Knife | 1 |
| 5. | 18C1481 | Screw | 1 |
| 6. | 34768A | Eccentric Guide | 1 |
| 7. | 34768C | Guide Washer | 1 |
| 8. | 34750R | Lever | 1 |
| 9. | 34750T | Lower Knife Holder | 1 |
| 10. | 34750U | Guide | 1 |
| 11. | 34750SA | Upper Knife Holder | 1 |
| 12. | 18-1472 | Screw | 1 |
| 13. | 34382AC | Oil Reserve Cover | 1 |
| 14. | 34751MS | Pin | 1 |
| 15. | 50332AD | Spring | 1 |
| 16. | 22585 | Screw | 1 |
| 17. | 18-1449 | Screw | 1 |
| 18. | 50337AX | Stop | 1 |
| 19. | 29480AYJ | Looper Thread Nipper Assembly | 1 |
| 20. | 50357AW | Nipper Plate Screw | 1 |
| 21. | 50357AX | Nipper Plate | 1 |
| 22. | 50357AT | Nipper Plate | 1 |
| 23. | 50357AU | Nipper Spring | 1 |
| 24. | 50357AV | Nipper Guard Post | 1 |
| 25. | 50366L | Nipper Plate Eyelet | 1 |
| 26. | SM5030355SN | Screw | 1 |
| 27. | 34751MT | Tension Lever | 1 |
| 28. | 34773D | Leaf Spring | 1 |
| 29. | 34769B | Threaded Plate | 1 |
| 30. | SM6020250TP | Screw | 2 |
| 31. | 34773E | Leaf Spring | 1 |
| 32. | 50368AE | Looper Thread Pull-off Eyelet | 1 |
| 33. | SM1020450TP | Screw | 2 |
| 34. | 18-1473 | Screw | 1 |
| 35. | 34773F | Leaf Spring | 1 |
| 36. | 34750P | Lower Knife Guide | 1 |
| 37. | 34770M | Upper Knife | 1 |
| 38. | 18-1474 | Screw | 1 |
| 39. | SM6020600TP | Screw | 2 |
| 40. | 34752M | Driving Link | 1 |
| 41. | 34752N | Carrier Bolt | 1 |
| 42. | RE025000KO | E-Ring | 1 |
| 43. | SD0600176SP | Screw | 1 |
| 44. | 34794A | Guide | 1 |
| 45. | 90 | Screw, for guide | 2 |



ELECTRIC PRESSER FOOT LIFTER ASSEMBLY

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-------------|-------------------------------|--------------|
| 1. | 29921D | Electric Drive Assembly | 1 |
| 2. | NS6150430SP | Nut | 3 |
| 3. | 95951 | Washer | 4 |
| 4. | 50367H | Lifter | 1 |
| 5. | SS9151420TP | Hex Screw | 4 |
| 6. | 670K29 | Solenoid Assembly | 1 |
| 7. | 92855A | Cap | 1 |
| 8. | SS4051281SE | Screw | 6 |
| 9. | 50395N | Stud | 1 |
| 10. | NS6660430SP | Nut | 1 |
| 11. | 50333B | Coupling | 1 |
| 12. | SS6110710TP | Screw | 1 |
| 13. | GAK33034000 | Bracket | 2 |
| 14. | GAK8403000A | Solenoid | 1 |
| 15. | GAK3303600A | Cap | 1 |
| 16. | WS0631510KP | Lock Washer | 2 |
| 17. | 53636C | Washer | 3 |
| 18. | SS9111010SP | Hex Screw | 4 |
| 19. | WS0510002KP | Lock Washer | 4 |
| 20. | 50395P | Stand-Off | 4 |
| 21. | 35032H | Washer | 4 |
| 22. | 50395R | Clamp Plate | 1 |
| 23. | 50383S | Base Plate | 1 |

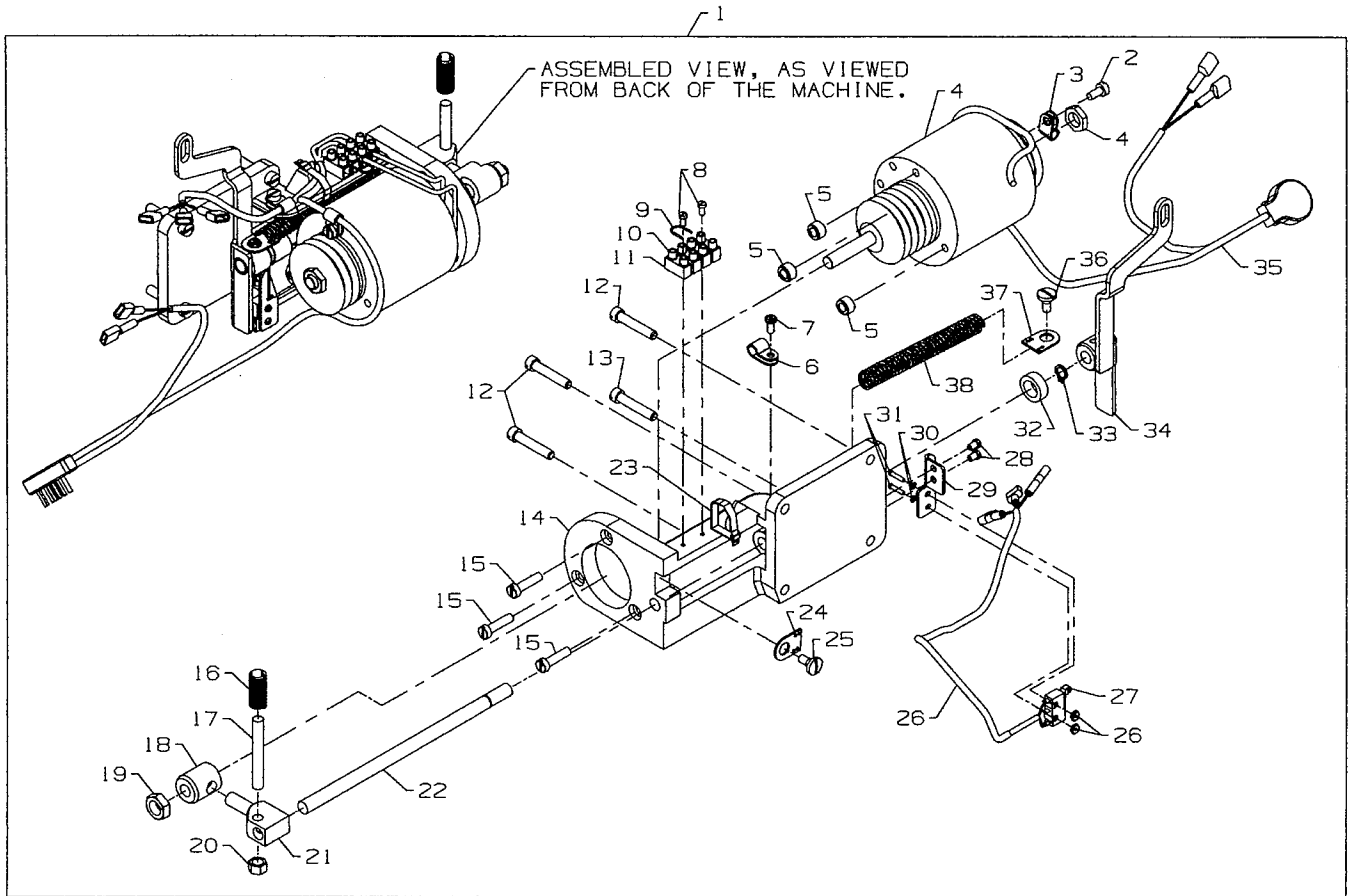
| UT COMPONENT DEVICE KEY | |
|-------------------------|-----------------------------|
| UT DEVICE | COMPONENT USED ON DEVICE |
| UT1 | ● |
| UT2 | ● |
| UT3 | |
| UT4 | |
| UT5 | |
| UT6 | ● |



ELECTRIC THREAD WIPER ASSEMBLY

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-------------|--------------------------------------|--------------|
| 1. | 29906M | Electric Thread Drive Assembly | 1 |
| 2. | 96280 | Retaining Ring | 2 |
| 3. | 99591DN | Pin | 1 |
| 4. | 99545G | Push Rod | 1 |
| 5. | PH0300083U0 | Pin | 1 |
| 6. | 99646J | Lever | 1 |
| 7. | SS9120910TP | Screw | 1 |
| 8. | SS4091015SP | Screw | 2 |
| 9. | 50363BF | Stop Eccentric | 2 |
| 10. | 99650E | Wiper Bracket | 1 |
| 11. | 670K15 | Electric Solenoid Rotary | 1 |
| 12. | 99545H | Nut Plate | 1 |
| 13. | SS6060210SP | Screw | 1 |
| 14. | 96150 | Washer | 1 |
| 15. | 99697AA | Leaf Spring | 1 |
| 16. | SS7090610SP | Screw | 2 |
| 17. | 51250C | Hex Nut | 1 |
| 18. | SS6060510TP | Screw | 2 |
| 19. | 50362B | Plate | 1 |
| 20. | 99653B | Wiper Hook | 1 |
| 21. | 99657E | Lever | 1 |
| 22. | 96161 | Washer | 1 |
| 23. | 99358 | Shoulder Screw | 1 |
| 24. | SS7090510SP | Screw | 1 |
| 25. | 99591DP | Bracket | 1 |
| 26. | 50332AB | Extension Spring | 1 |

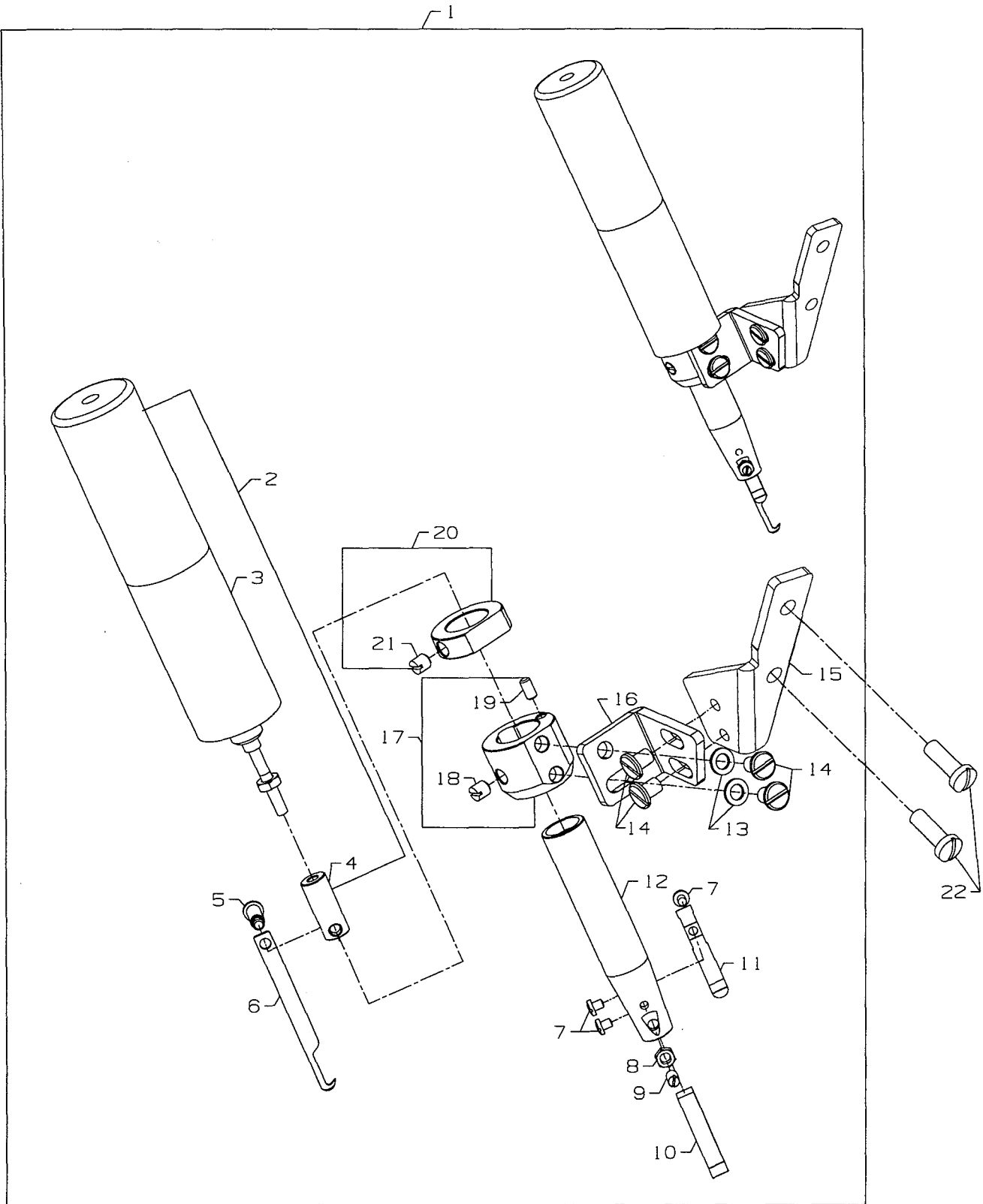
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|-------------------------|--------------------------|
| UT DEVICE | COMPONENT USED ON DEVICE |
| UT1 | ● |
| UT2 | |
| UT3 | |
| UT4 | |
| UT5 | |
| UT6 | |



ELECTRIC DRIVE ASSEMBLY

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-------------|---------------------------------|--------------|
| 1. | 670K28 | Electric Drive Assembly | 1 |
| 2. | 95169 | Screw | 1 |
| 3. | 670E1508 | Cable Clamp | 1 |
| 4. | 998-306B | Solenoid | 1 |
| 5. | 99617A | Bushing | 3 |
| 6. | 998-358E | Hose Clamp | 2 |
| 7. | SS611101OSP | Screw | 1 |
| 8. | 95179K | Screw | 2 |
| 9. | 1318001 | Wire | 1 |
| 10. | 670E1302 | Terminal Block | 1 |
| 11. | 998-297A | Cable End Plate | 2 |
| 12. | 22852A | Screw | 3 |
| 13. | 22517A | Screw | 1 |
| 14. | G52882KW | Mounting Bracket | 1 |
| 15. | 95177 | Screw | 3 |
| 16. | 51292F2 | Spring | 1 |
| 17. | 99619 | Clamping Screw | 1 |
| 18. | 99616 | Driving Connection | 1 |
| 19. | 95251 | Nut | 1 |
| 20. | 55235E | Nut | 1 |
| 21. | 99614D | Cross Head | 1 |
| 22. | 99613D | Shaft | 1 |
| 23. | RM2871B | Wire Tie | 2 |
| 24. | 80696RA | Spring Eyelet | 1 |
| 25. | 14076 | Screw | 1 |
| 26. | 60078Z | Nut | 1 |
| 27. | 670E1542 | Cable and Switch Assembly | 1 |
| 28. | 22513B | Screw | 2 |
| 29. | 50383BK | Bracket | 1 |
| 30. | 96151 | Washer | 2 |
| 31. | 22738D | Screw | 2 |
| 32. | 99615 | Washer | 1 |
| 33. | 96261 | Retaining Ring | 1 |
| 34. | 50373DG | Lever | 1 |
| 35. | 670E1541 | Cable | 1 |
| 36. | 22569B | Screw | 1 |
| 37. | 80696RA | Spring Eyelet | 1 |
| 38. | 96721 | Spring | 1 |

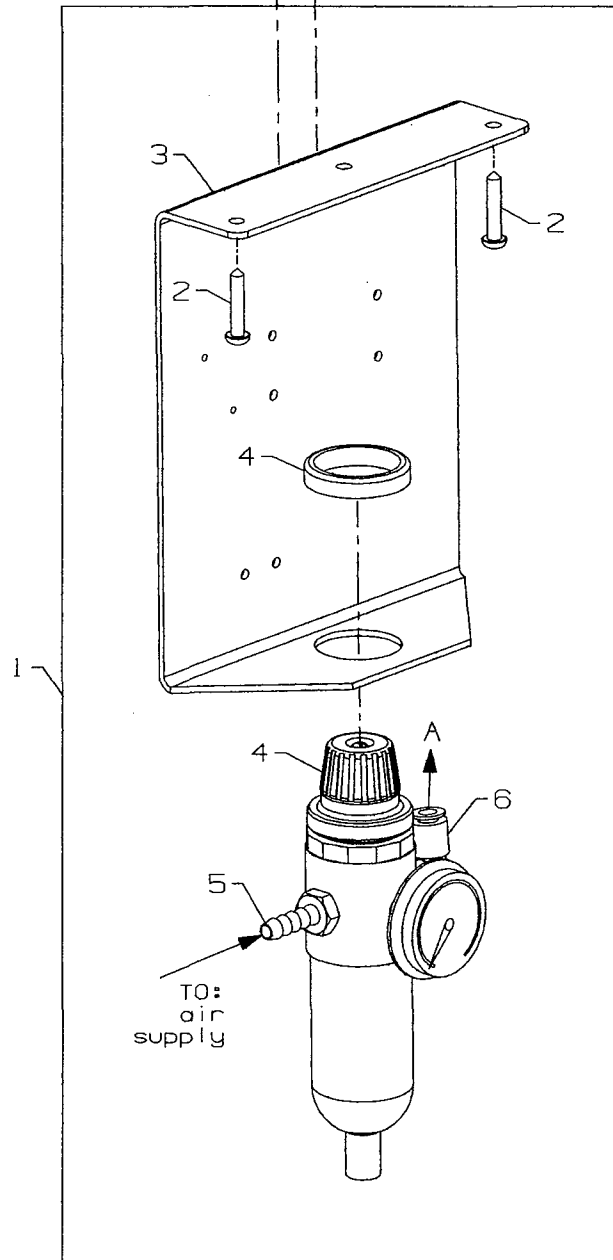
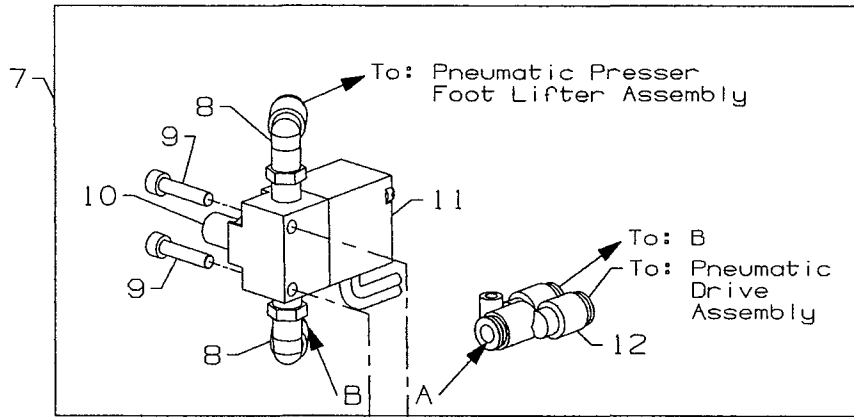
| UT COMPONENT DEVICE KEY | |
|-------------------------|--------------------------|
| UT DEVICE | COMPONENT USED ON DEVICE |
| UT1 | ● |
| UT2 | ● |
| UT3 | |
| UT4 | |
| UT5 | |
| UT6 | ● |



ELECTRIC SPREADER THREAD TRIMMER ASSEMBLY

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-------------|--|--------------|
| 1. | 29980LE | Spreader Thread Trimmer Assembly, Electric | 1 |
| 2. | 29105BR | Knife Holder Assembly | 1 |
| 3. | 670K85 | Solenoid | 1 |
| 4. | 50372D | Moving Knife Holder | 1 |
| 5. | 22731 | Screw | 1 |
| 6. | 50370H | Moving Knife | 1 |
| 7. | SS706310SP | Screw | 2 |
| 8. | NS6080210SP | Nut | 1 |
| 9. | SS8080610SP | Screw | 1 |
| 10. | 50349F | Lower Knife | 1 |
| 11. | 50332AG | Spring | 1 |
| 12. | 50372C | Knife Holder | 1 |
| 13. | WPO450846SP | Washer | 2 |
| 14. | SS6110610TP | Screw | 4 |
| 15. | 50383AT | Bracket | 1 |
| 16. | 50383AS | Bracket | 1 |
| 17. | 50333L | Collar Guide | 1 |
| 18. | SS8110520TP | Screw | 1 |
| 19. | PH0300062C0 | Pin | 1 |
| 20. | 50333K | Collar | 1 |
| 21. | SS8110520TP | Screw | 1 |
| 22. | SS4121915SP | Mounting Screws | 2 |

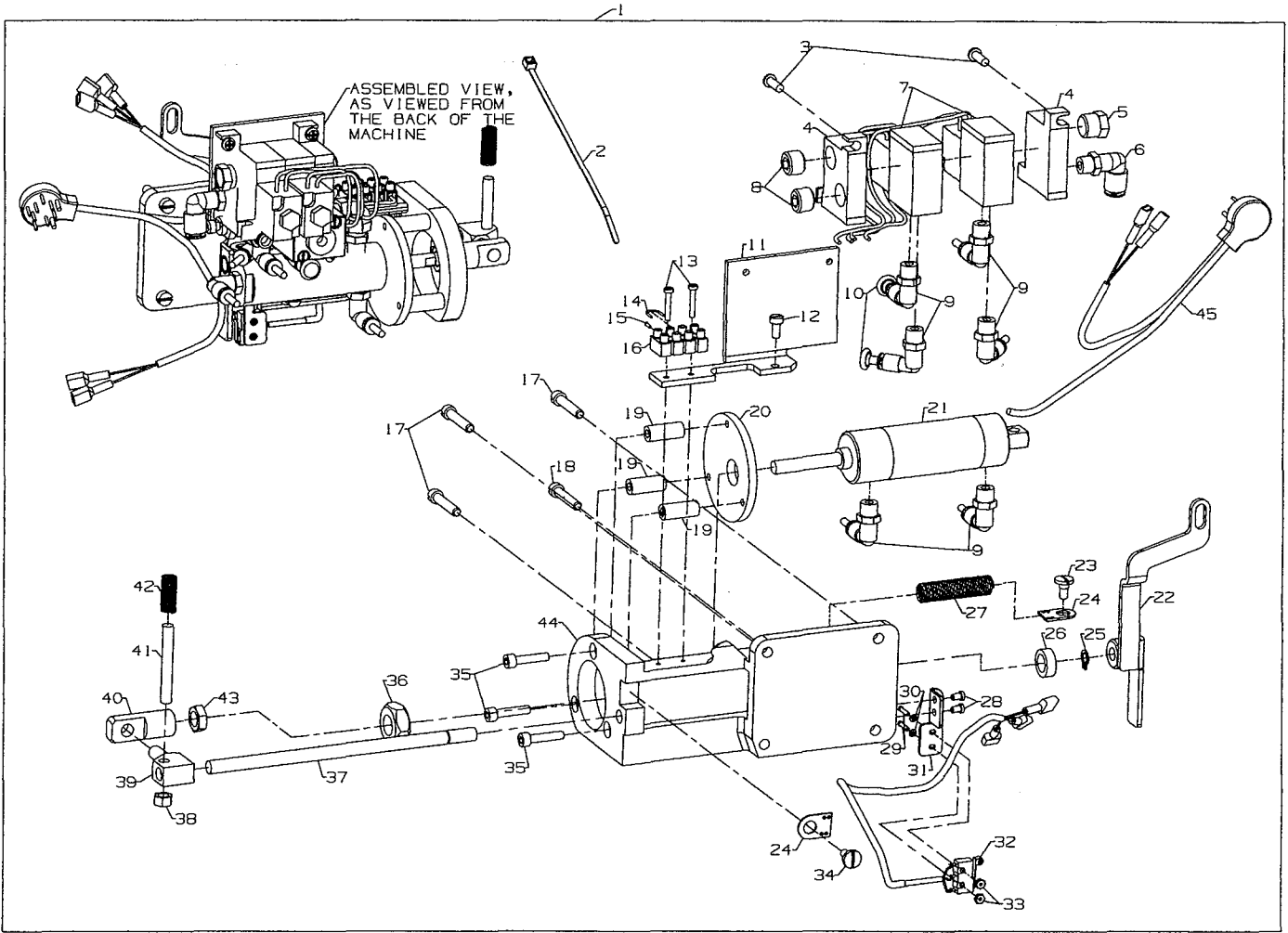
| UT COMPONENT DEVICE KEY | |
|-------------------------|-----------------------------|
| UT DEVICE | COMPONENT USED ON DEVICE |
| UT1 | |
| UT2 | ● |
| UT3 | |
| UT4 | |
| UT5 | |
| UT6 | |



PNEUMATIC CONTROL

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-------------|--|--------------|
| 1. | 29480ASU | Pneumatic Control Kit | 1 |
| 2. | 90561K | Wood Screw | 2 |
| 3. | 99683CP | Mounting Bracket | 1 |
| 4. | 671D42 | Filter/ Regulator Assembly | 1 |
| 5. | 671F88 | Barb Fitting | 1 |
| 6. | 671F81A | Elbow Fitting - 1/4" x 1/2" NPT | 1 |
| - | 671B182 | Air Tubing - 6mm O.D. x 1m (not shown) | 1 |
| 7. | 29480AWU | Presser Foot Lifter Kit | 1 |
| 8. | 671F81C | Elbow Fitting - 1/4" x 1/8" NPT | 2 |
| 9. | 95415 | Screw - 4mm | 2 |
| 10. | 660-403 | Muffler | 1 |
| 11. | 671-50 | Valve | 1 |
| 12. | 671F86B | Splitter | 1 |
| - | HK034610020 | Connection Plug (2 Pins, not shown) | 1 |
| - | HK03464000B | Terminal Pin (not shown) | 2 |
| - | 671B23 | Air Tubing - 1/4" O.D. x 1mm (not shown) | 1 |

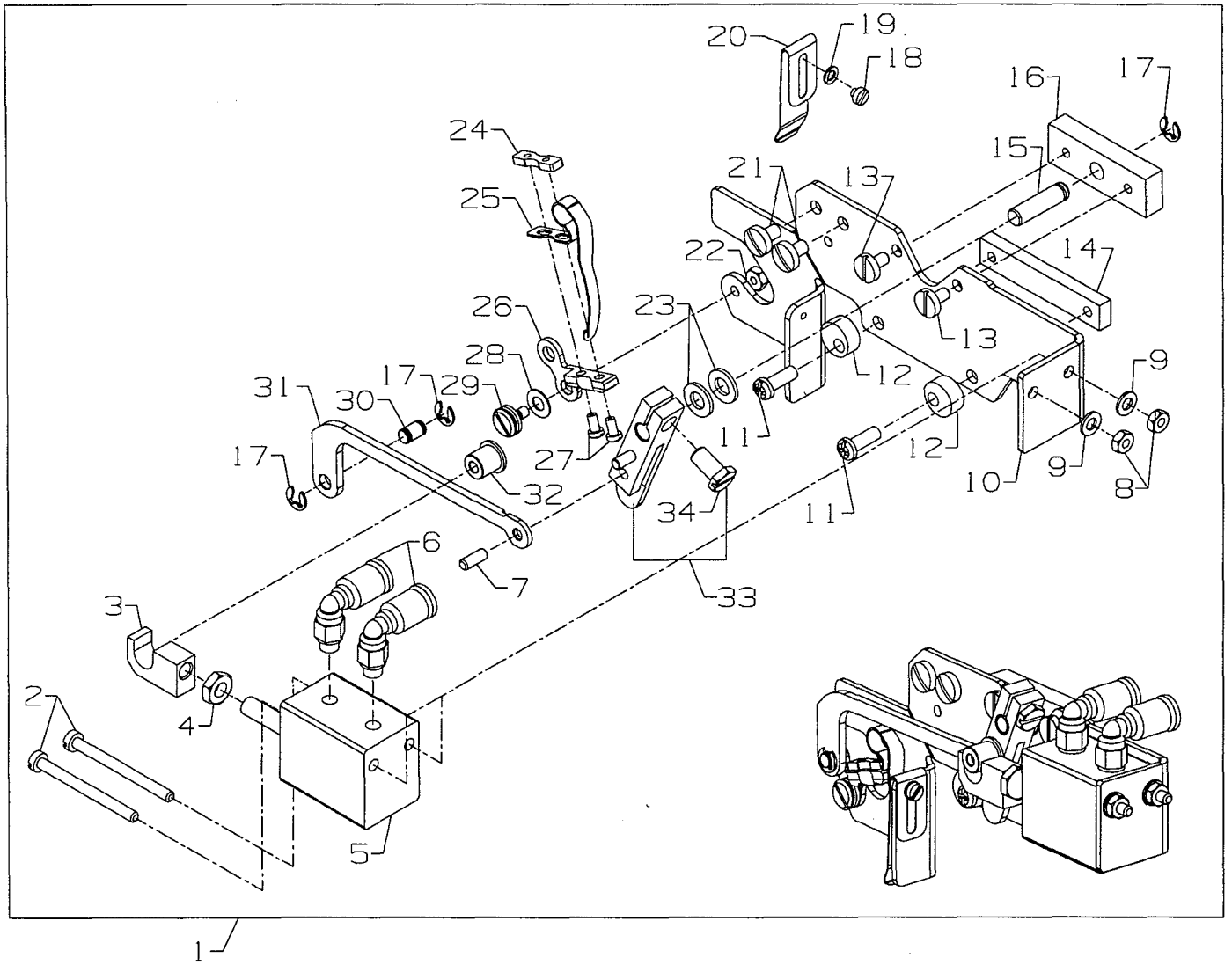
| UT COMPONENT DEVICE KEY | |
|-------------------------|--------------------------|
| UT DEVICE | COMPONENT USED ON DEVICE |
| UT1 | |
| UT2 | |
| UT3 | ● |
| UT4 | ● |
| UT5 | ● |
| UT6 | |



PNEUMATIC DRIVE DOUBLE ACTION ASSEMBLY

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-----------------|--------------------------------------|--------------|
| 1. | 29480ATW | Pneumatic Drive Assembly | 1 |
| 2. | RM2871B | Cable Tie | 2 |
| 3. | SS4121415SP | Screw | 2 |
| 4. | 671-104A | Manifold | 1 |
| 5. | 660-763 | Silencer | 1 |
| 6. | 671F81A | Elbow | 1 |
| 7. | 671-103B | Mac Valve | 2 |
| 8. | 671F87 | Plug | 2 |
| 9. | 671F82C | Elbow | 6 |
| 10. | 670G276 | Plug | 2 |
| 11. | 50383N | Bracket | 1 |
| 12. | SS6111010SP | Screw | 1 |
| 13. | 22894AX | Screw | 2 |
| 14. | 1318001 | Wire | 1 |
| 15. | 998-297A | Cable End Sleeve | 2 |
| 16. | 670E1302 | Terminal | 1 |
| 17. | 22852A | Screw | 3 |
| 18. | 22517A | Screw | 1 |
| 19. | 99617T | Spacer | 3 |
| 20. | 99591DH | Disc | 1 |
| 21. | 99694A | Air Cylinder | 1 |
| 22. | 50373DG | Lever | 1 |
| 23. | 22569B | Screw | 1 |
| 24. | 80696RA | Spring Eyelet | 1 |
| 25. | 96261 | Retaining Ring | 1 |
| 26. | 99615 | Washer | 1 |
| 27. | 96721 | Spring | 1 |
| 28. | 22513B | Screw | 2 |
| 29. | 22738D | Screw | 2 |
| 30. | 96151 | Washer | 2 |
| 31. | 50383BK | Bracket | 1 |
| 32. | 670E1542 | Cable and Switch | 1 |
| 33. | 60078Z | Nut | 2 |
| 34. | 14076 | Stud | 1 |
| 35. | 95411 | Screw | 3 |
| 36. | 99327 | Nut | 1 |
| 37. | 99613D | Shaft | 1 |
| 38. | 55235E | Nut | 1 |
| 39. | 99614D | Cross Head | 1 |
| 40. | 99616A | Connector | 1 |
| 41. | 99619 | Clamping | 1 |
| 42. | 51292F2 | Spring | 1 |
| 43. | 21233FB | Nut | 1 |
| 44. | G52882KW | Support Bracket | 1 |
| 45. | 670E1541 | Cable | 1 |
| - | 671B182 | Tubing (not shown)(1.8m) | 1 |
| - | 6-878-4mm-.65mm | Nylon Black Tubing (not shown) | 1 |
| - | 998-358E | Hose Clamp (not shown) | 1 |

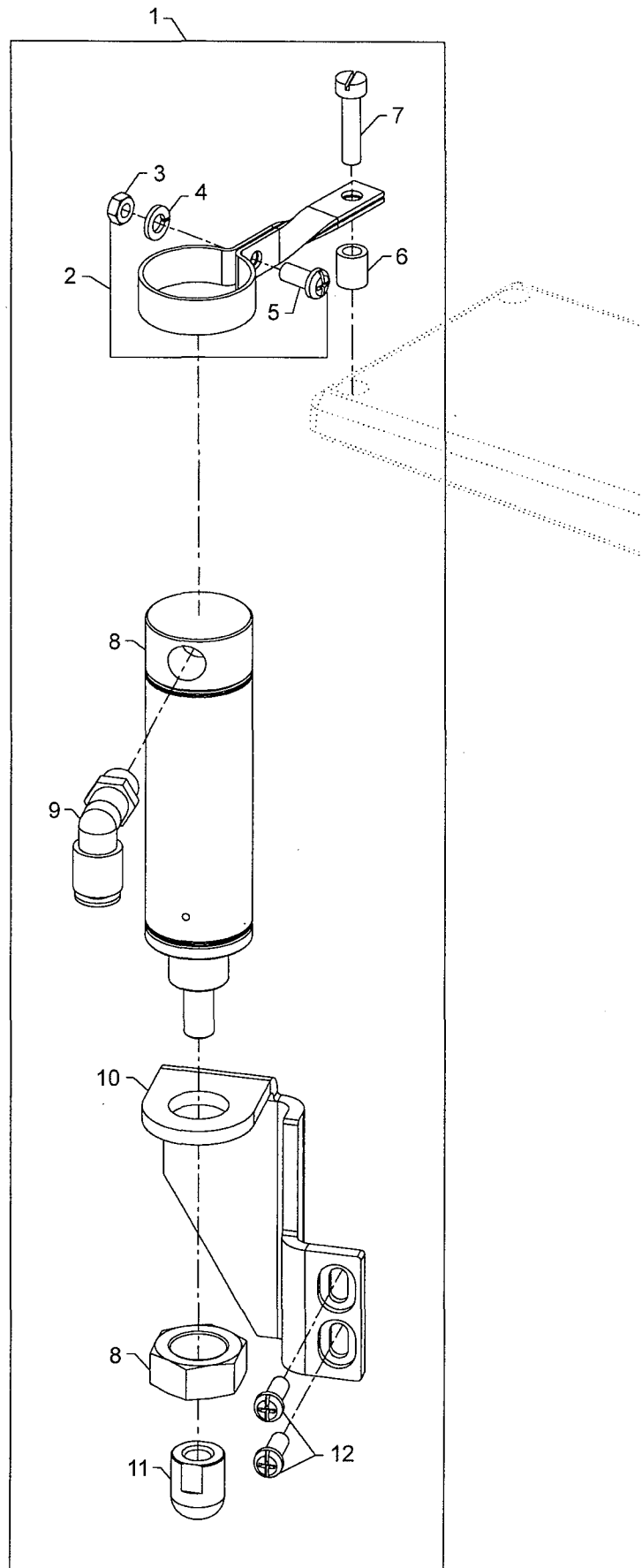
| UT COMPONENT DEVICE KEY | |
|-------------------------|--------------------------|
| UT DEVICE | COMPONENT USED ON DEVICE |
| UT1 | |
| UT2 | |
| UT3 | ● |
| UT4 | ● |
| UT5 | ● |
| UT6 | |



PNEUMATIC THREAD WIPER ASSEMBLY

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|----------------|---------------------------------------|--------------|
| 1. | 29906L | Pneumatic Thread Wiper Assembly | 1 |
| 2. | 95167CV | Screw | 2 |
| 3. | 35086BK | Clevis | 1 |
| 4. | 95294 | Hex Nut | 1 |
| 5. | 999-191H | Pneumatic Cylinder | 1 |
| 6. | 999-411M5-4 | Pneumatic Fitting | 2 |
| 7. | PH0300083U0 | Pin | 1 |
| 8. | 95259 | Hex Nut | 2 |
| 9. | 95956 | Washer | 2 |
| 10. | 99650D | Wiper Bracket | 1 |
| 11. | SS4091015SP | Screw | 2 |
| 12. | 50363BF | Stop Eccentric | 2 |
| 13. | SS6080610TP | Screw | 2 |
| 14. | 99545H | Nut Plate | 1 |
| 15. | 52336B | Pin | 1 |
| 16. | 99545F | Plate | 1 |
| 17. | 96280 | Retaining Ring | 3 |
| 18. | SS6060210SP | Screw | 1 |
| 19. | 96150 | Washer | 1 |
| 20. | 99697AA | Leaf Spring | 1 |
| 21. | SS7090610SP | Screw | 2 |
| 22. | 51250C | Hex Nut | 1 |
| 23. | 99652A | Washer | 2 |
| 24. | 50362B | Plate | 1 |
| 25. | 99653B | Wiper Hook | 1 |
| 26. | 99657E | Lever | 1 |
| 27. | SS6060510TP | Screw | 2 |
| 28. | 96161 | Washer | 1 |
| 29. | 99358 | Shoulder Screw | 1 |
| 30. | 99591DN | Pin | 1 |
| 31. | 99545G | Push Rod | 1 |
| 32. | 35086BJ | Roller | 1 |
| 33. | 99646J | Lever | 1 |
| 34. | SS9120910TP | Screw | 1 |
| - | 6-878-4mm-65mm | Tubing (not shown)(1m) | 1 |

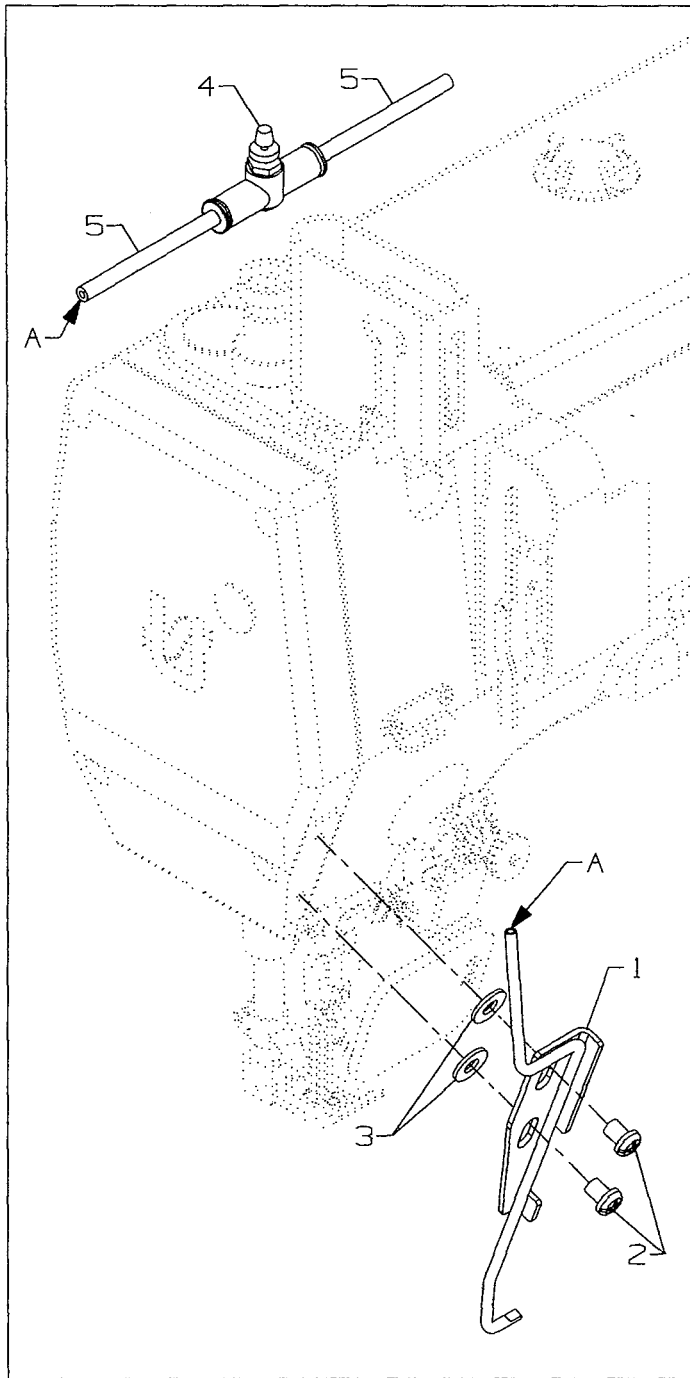
| UT COMPONENT DEVICE KEY | |
|-------------------------|--------------------------|
| UT DEVICE | COMPONENT USED ON DEVICE |
| UT1 | |
| UT2 | |
| UT3 | ● |
| UT4 | |
| UT5 | |
| UT6 | |



PRESSER FOOT LIFTER

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-------------|------------------------------------|--------------|
| 1. | 29480AXJ | Presser Foot Lifter Assembly | 1 |
| 2. | 50383AR | Cylinder Support Bracket | 1 |
| 3. | NS6120310SP | Nut | 1 |
| 4. | WS0510002KP | Washer | 1 |
| 5. | SS4121015SP | Screw | 1 |
| 6. | 50374K | Spacer | 1 |
| 7. | SS6122030SP | Screw | 1 |
| 8. | 671A360 | Air Cylinder | 1 |
| 9. | 671F81C | Fitting | 1 |
| 10. | 50383AF | Bracket | 1 |
| 11. | 660-1099 | Air Cylinder Cap | 1 |
| 12. | SS7121410TP | Screw | 2 |
| - | 671-B23 | Tubing (not shown)(1m) | 1 |

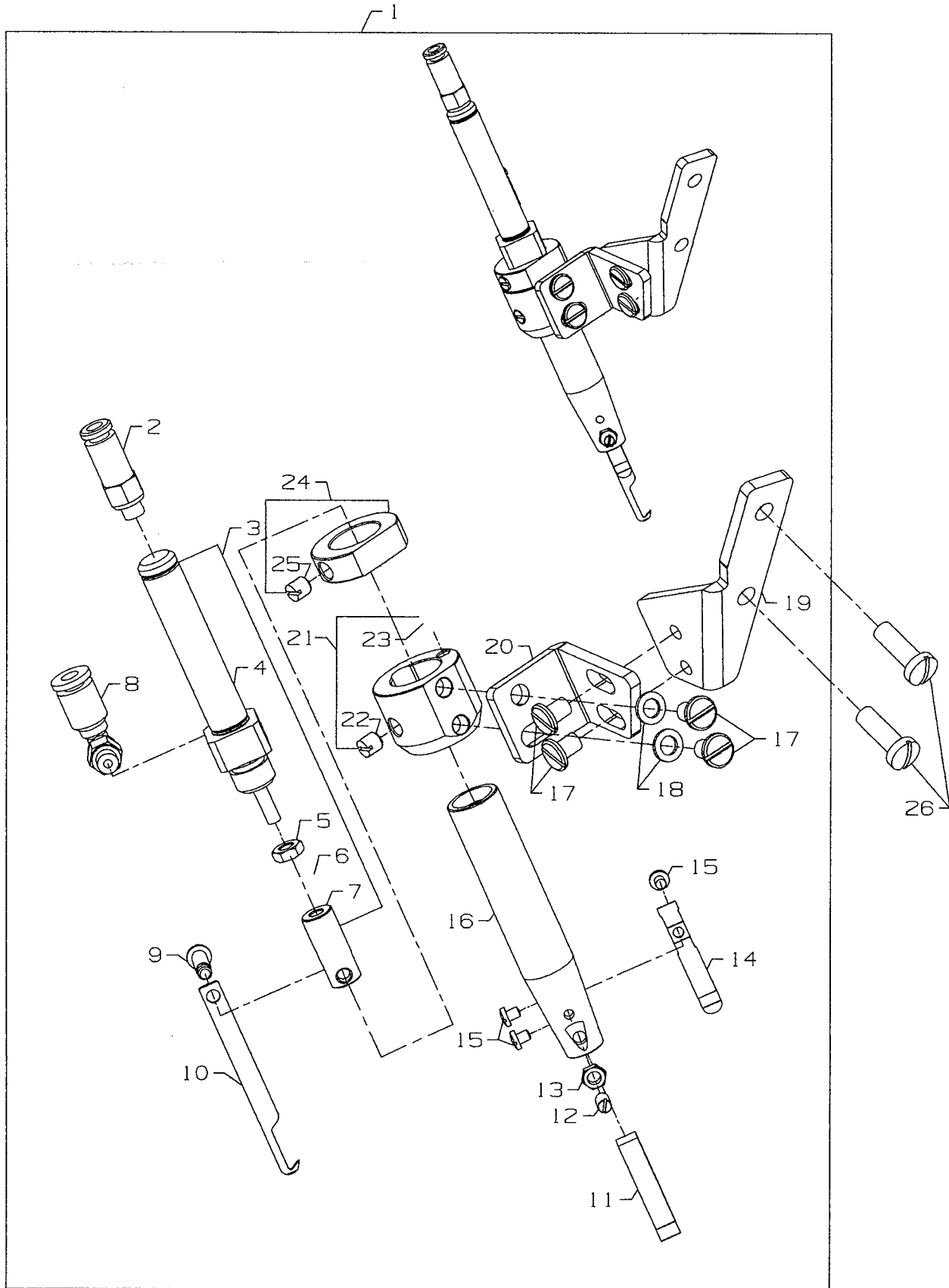
| UT COMPONENT DEVICE KEY | |
|-------------------------|-----------------------------|
| UT DEVICE | COMPONENT USED ON DEVICE |
| UT1 | |
| UT2 | |
| UT3 | ● |
| UT4 | ● |
| UT5 | ● |
| UT6 | |



NEEDLE THREAD BLOWER ASSEMBLY

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-----------------|--|--------------|
| 1. | 50394AJ | Needle Thread Blower Assembly | 1 |
| 2. | SS4120615SP | Screw, for needle thread blower assembly | 2 |
| 3. | 69H | Washer | 2 |
| 4. | 671-168 | Flow Control Valve | 1 |
| 5. | 6-878-4mm-.65mm | Tubing (1m) | 1 |

| UT COMPONENT DEVICE KEY | |
|-------------------------|-----------------------------|
| UT DEVICE | COMPONENT USED ON DEVICE |
| UT1 | |
| UT2 | |
| UT3 | |
| UT4 | ● |
| UT5 | |
| UT6 | |



PNEUMATIC SPREADER THREAD TRIMMER ASSEMBLY

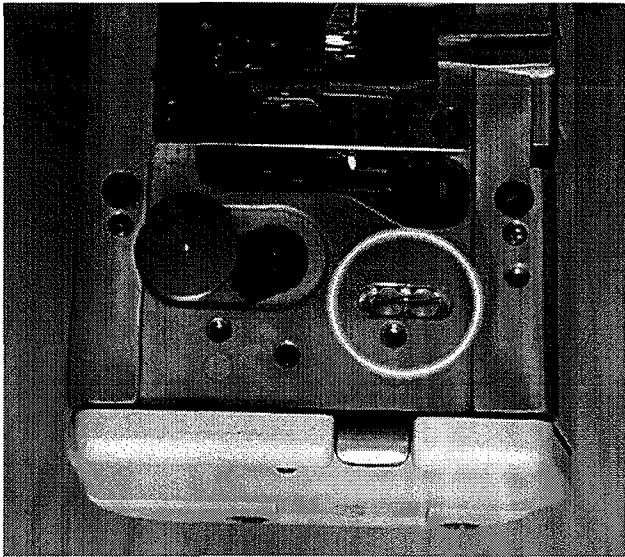
| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|--|--|--------------|
| 1. | 29980LD | Pneumatic Spreader Thread Trimmer Assembly | 1 |
| 2. | 671F82G | Male Connector | 1 |
| 3. | 29105BP | Knife Holder Assmebly | 1 |
| 4. | 671A363 | Air Cylinder | 1 |
| 5. | 660-1105 | Nut | 1 |
| 6. | WS0410002KP | Washer | 1 |
| 7. | 50372D | Moving Knife Holder | 1 |
| 8. | 671F82F | Male Elbow | 1 |
| 9. | 22731 | Screw | 1 |
| 10. | 50370H | Moving Knife | 1 |
| 11. | 50349F | Lower Knife | 1 |
| 12. | SS8080610SP | Screw | 1 |
| 13. | NS6080210SP | Nut | 1 |
| 14. | 50332AG | Spring | 1 |
| 15. | SS7060310SP | Screw | 3 |
| 16. | 50372C | Knife Holder | 1 |
| 17. | SS6110610TP | Screw | 4 |
| 18. | WP0450846SP | Washer | 2 |
| 19. | 50383AT | Bracket | 1 |
| 20. | 50383AS | Bracket | 1 |
| 21. | 50333L | Collagr, guide | 1 |
| 22. | SS8110520TP | Screw | 1 |
| 23. | PH0300062C0 | Pin | 1 |
| 24. | 50333K | Collar | 1 |
| 25. | SS8110520TP | Screw | 1 |
| 26. | SS4120915SP | Mounting Screws | 2 |
| - | 6-878-4mm-.65mm Tubing (not shown)(1m) | | 1 |

| UT COMPONENT DEVICE KEY | |
|-------------------------|--------------------------|
| UT DEVICE | COMPONENT USED ON DEVICE |
| UT1 | |
| UT2 | |
| UT3 | |
| UT4 | |
| UT5 | ● |
| UT6 | |

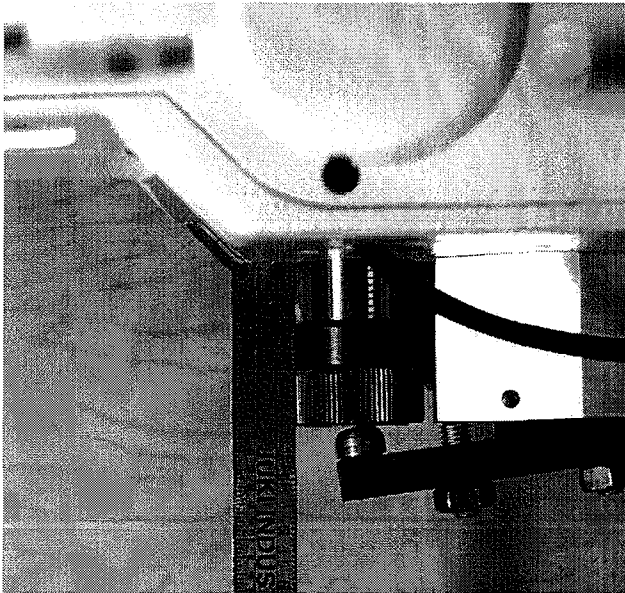
STITCH CONDENSING ADJUSTMENTS



TURN OFF MAIN POWER SWITCH BEFORE ADJUSTING! WHEN USING CLUTCH MOTORS WITHOUT ACTUATION LOCK WAIT UNTIL THE MOTOR HAS COMPLETELY STOPPED AND AIR PRESSURE TURNED OFF.



With the air turned off, 50329S air cylinder assembly should be in the center of it's adjusting slot.

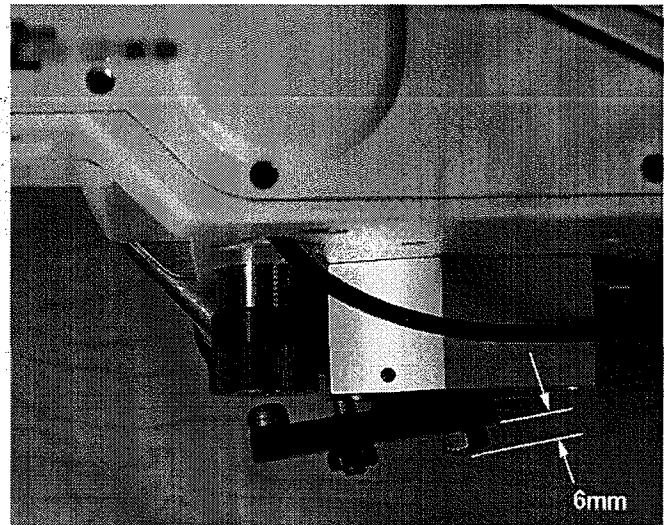


50337AP knob should be turned out so it is 11mm from the hinge plate. This is only a preliminary setting when first setting up the stitch condensing device.

CAUTION!: If turned out past 11mm it is possible for linkage in the machine to be disengaged, requiring disassembly of the bottom pan to reengage differential feed drive parts.

STITCH CONDENSING ADJUSTMENTS

Set the right toggle screw 22799AN to protrude out of the lever 50383BS by 6mm and lock in place with nut 95250.

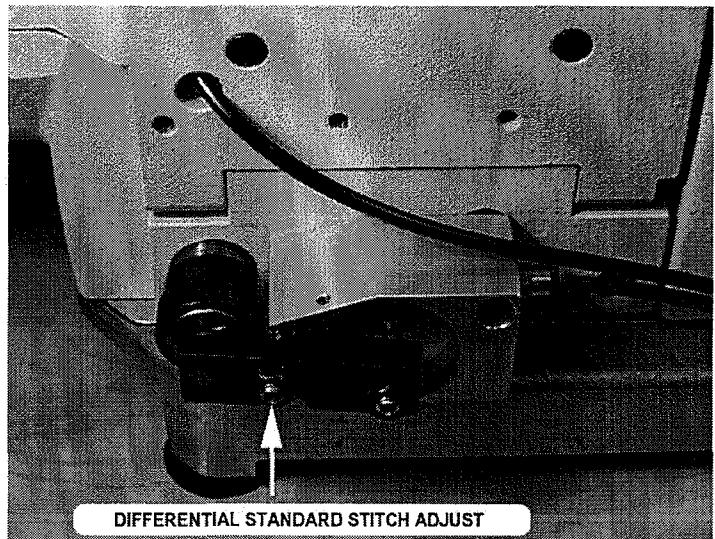


ADJUSTMENTS FOR STANDARD SEWING

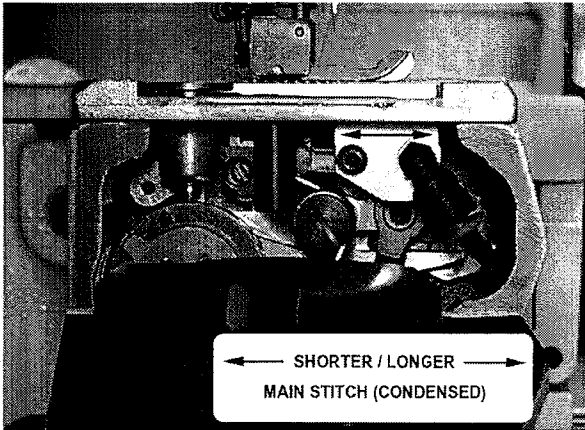
With the air turned on @ 60 psi the differential stitch condensing lever should be engaged while the main cylinder 50329S is disengaged.

The main feed stitch is adjusted as a standard machine.

To adjust the differential standard stitch, turn the left toggle screw out to get more differential feed and in to get less. Turning it out allows the clamp plunger to press in the differential feed knob which increases the differential feed. Lock the toggle screw in place with nut 95250.

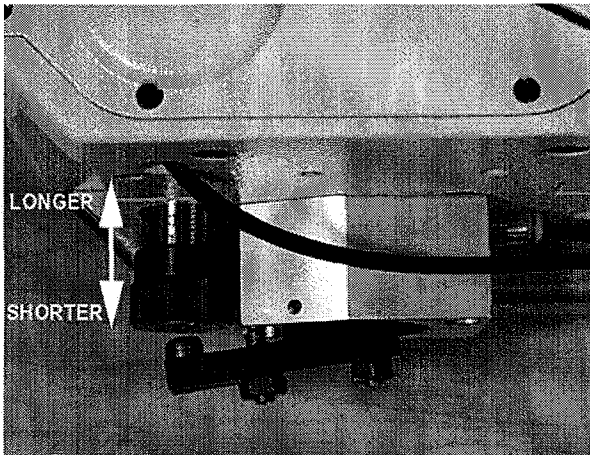


ADJUSTMENTS FOR STITCH CONDENSING STITCH



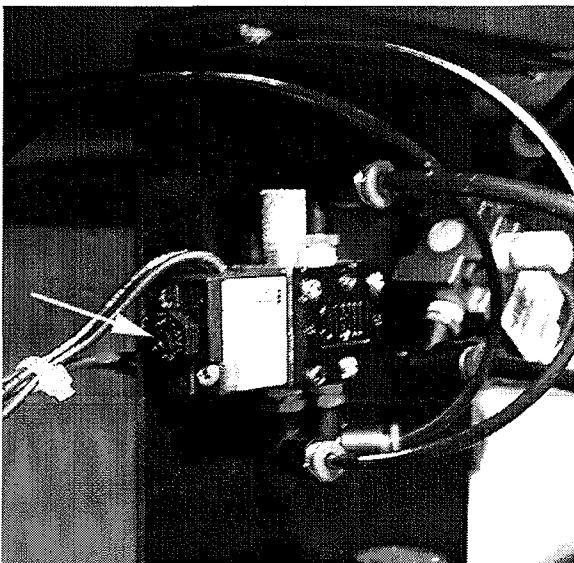
With the stitch condensing mechanism engaged, cylinder assembly 50329S is engaged while 50329T mechanism is disengaged. Make adjustments in this position.

To adjust the main feed to stitch condense at a shorter stitch range, loosen the (2) 22564 screws holding 50329S and move the cylinder. Rearward away from the operator will decrease the number of stitches.



Adjust the differential (when stitch condensing) to match the main. Adjust the knob 50337AP clockwise (in) for a longer stitch.

The recommended stitches for stitch condensing is 5 stitches in 1/4".

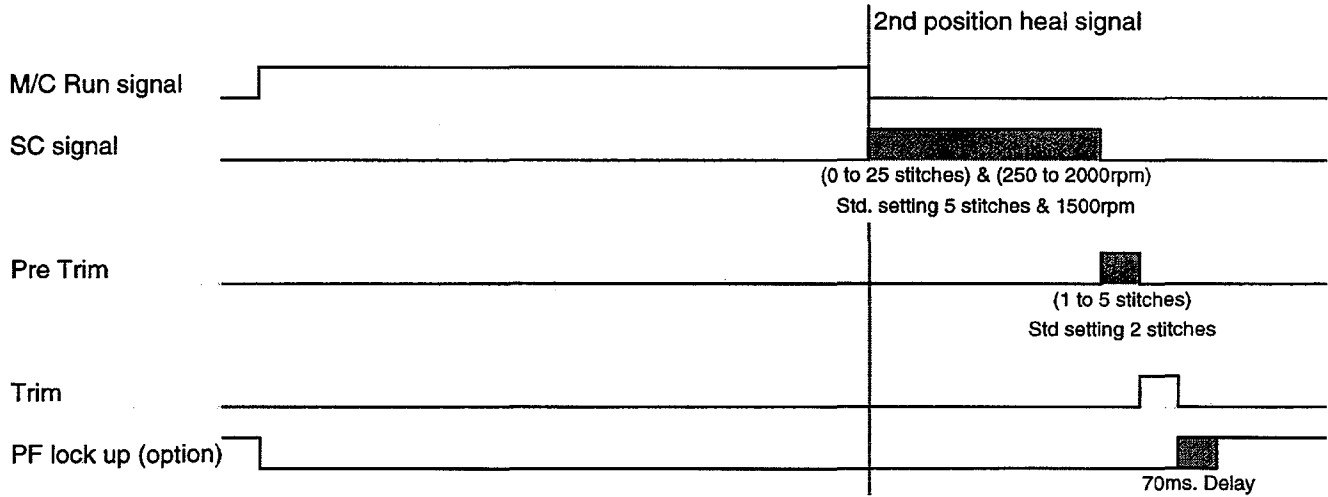


NOTE: The "MAC" valve 29480ASN that is supplied by Union Special has a manual firing button that will allow you to lock the mechanism in the engaged position for adjusting.

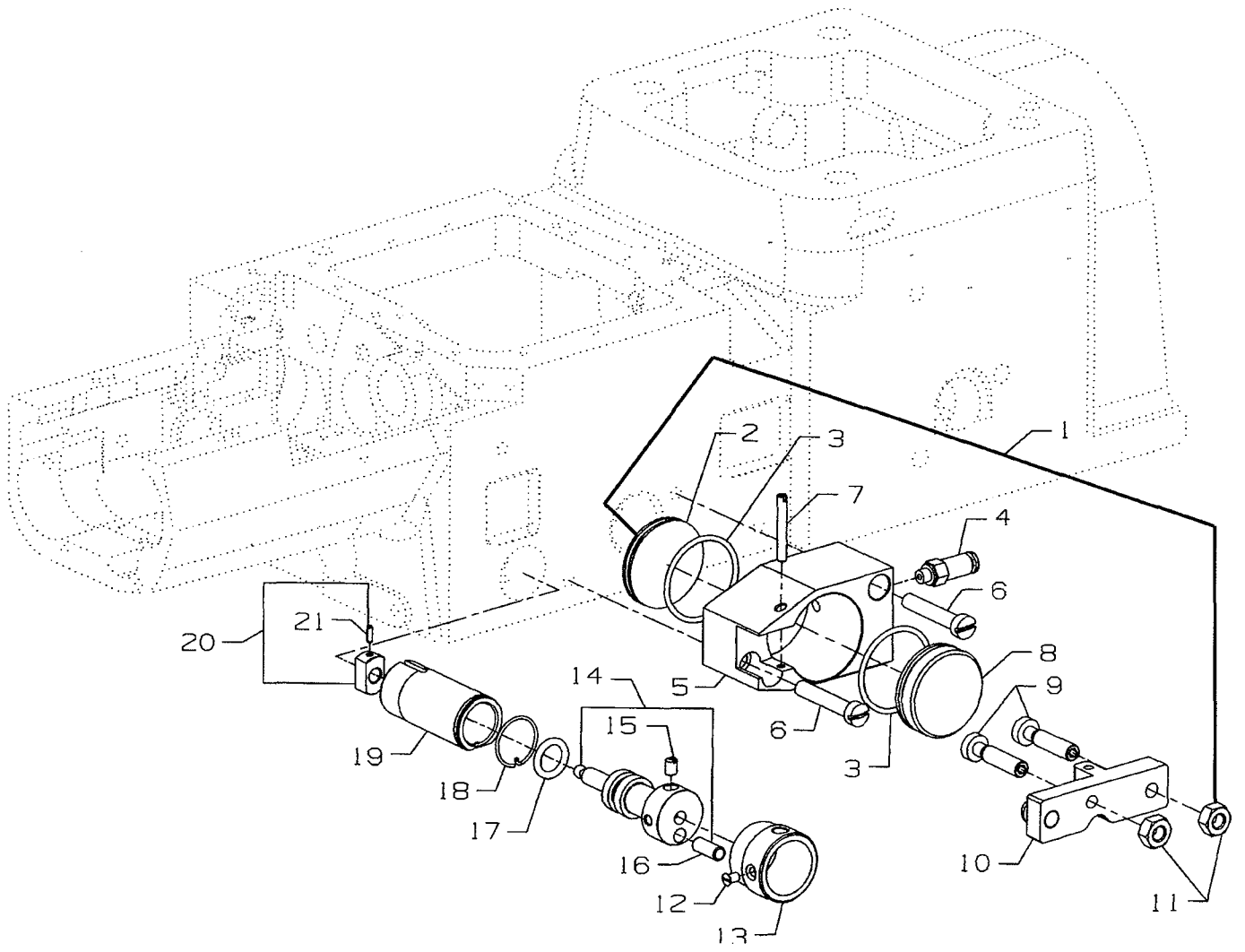
ADJUSTMENTS FOR STANDARD SEWING

For proper function of the stitch condense mechanism the motor must have the capability to do the following.

- 1) Two position needle, down/up, (optional single position up).
- 2) Two position heal, 1st. presser foot up and 2nd. end of seam stitch condensing/trim.
- 3) Motor run signal for chip disposal system. If required
- 4) Trimmer/Safety Switch/Presser Foot Lift.
- 5) Stitch Condensing
 - a) with adjustable speed (250 to 2000 rpm), standard setting 1500rpm.
 - b) with adjustable number of stitches (0 to 25 stitches), standard setting 5 stitches.
- 6) By-pass stitch condensing during sewing, (optional with trim).
- 7) Presser Foot locked up after trim (optional)

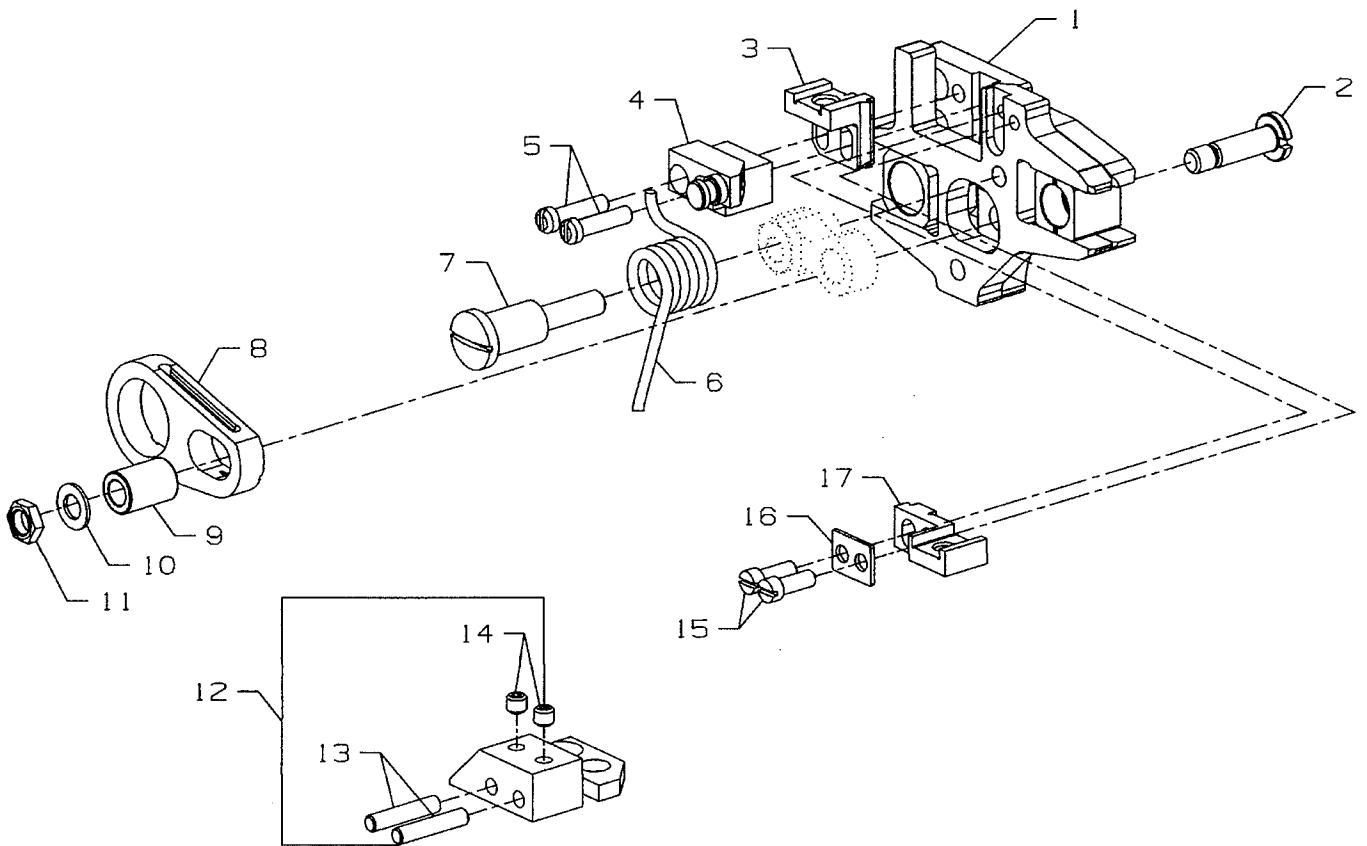


NOTE: Adjusting when the stitch condense mechanism is engaged is totally independent of when it is disengaged and will not effect the standard sewing stitch.



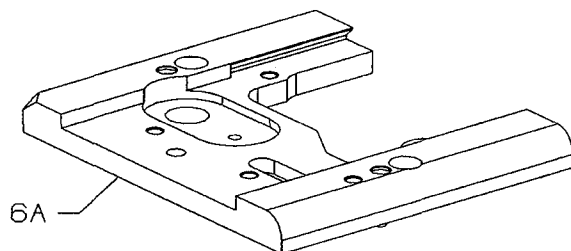
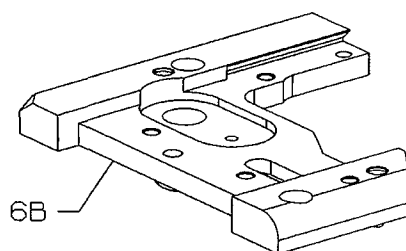
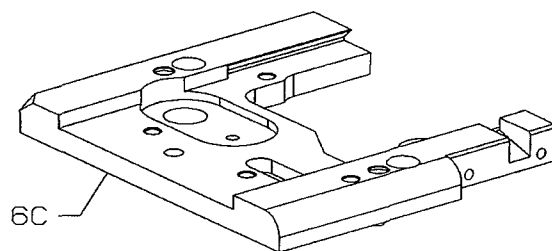
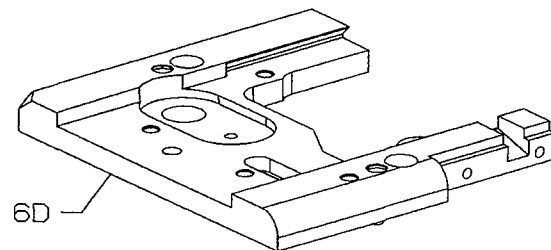
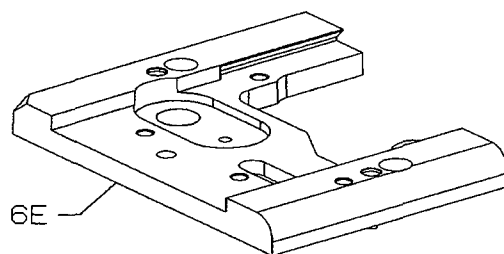
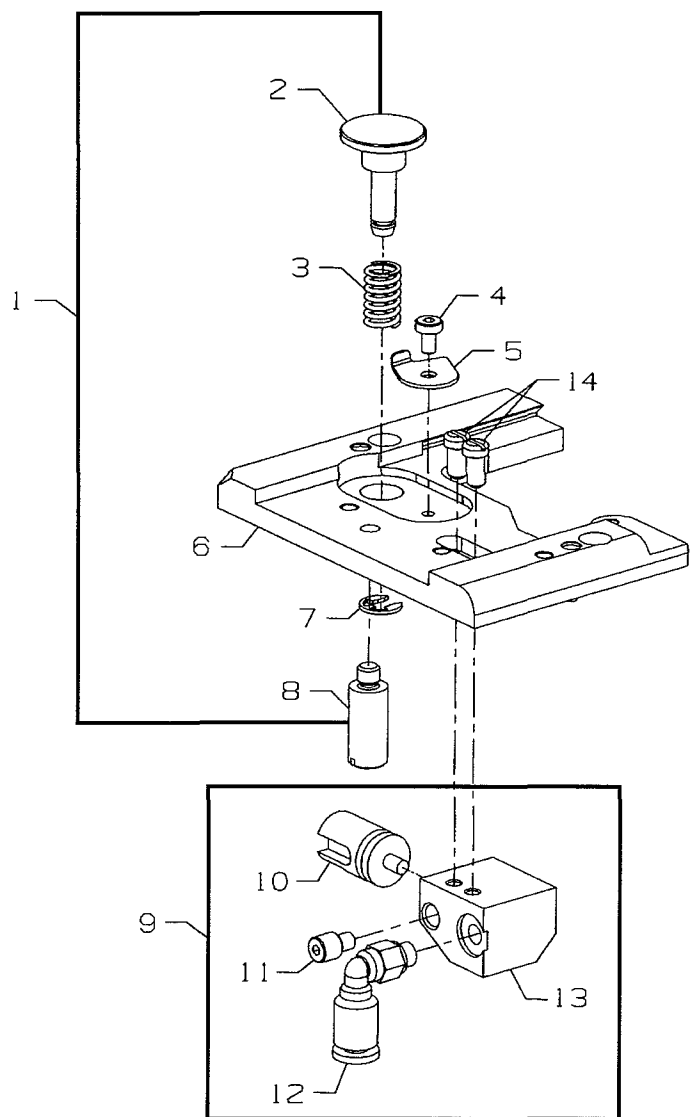
DIFFERENTIAL FEED ACTIVATE, AIR CYLINDER

| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|----------|--|--------------|
| 1. | 50329T | Differential Feed Activate, Air Cylinder | 1 |
| 2. | 99683VK3 | Plug | 1 |
| 3. | 660-969 | "O"Ring | 2 |
| 4. | 671F82G | Air Fitting | 1 |
| 5. | 50383BR | Air Cylinder Housing | 1 |
| 6. | 22517A | Screw | 1 |
| 7. | 22799K | Screw | 1 |
| 8. | 50382KH | Plunger | 1 |
| 9. | 22799AN | Toggle Screw | 2 |
| 10. | 50383BS | Clamp | 1 |
| 11. | 95250 | Nut | 2 |
| 12. | 77K | Screw | 1 |
| 13. | 34336TA | Bushing | 1 |
| 14. | 34336HB | Adjusting Screw | 1 |
| 15. | 22560B | Screw | 1 |
| 16. | 96531 | Pin | 1 |
| 17. | 999-211P | "O" Ring | 1 |
| 18. | 34336MC | Retaining Ring | 1 |
| 19. | 34336MB | Bushing | 1 |
| 20. | 34336LA | Nut | 1 |
| 21. | 96653 | Pin | 1 |



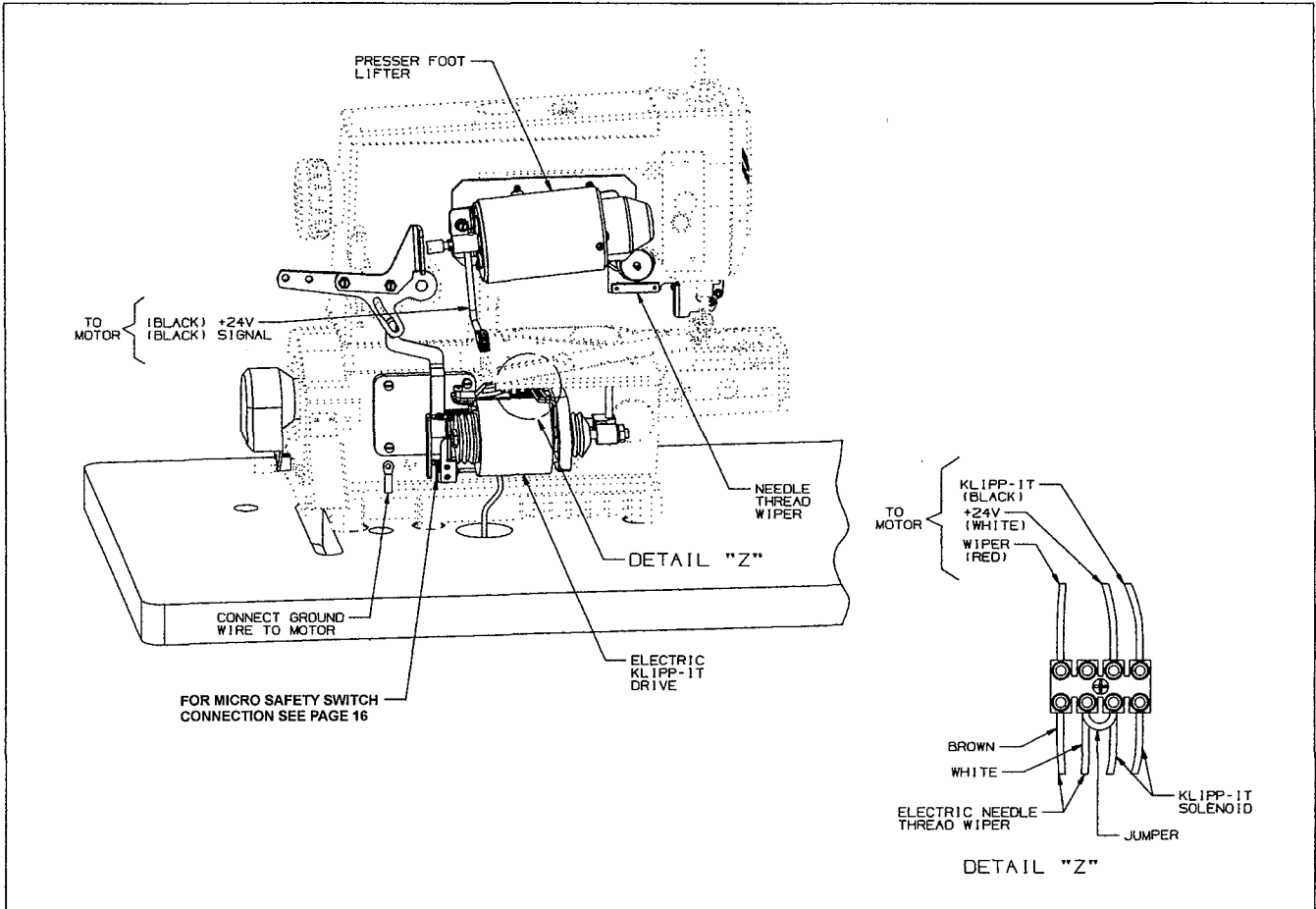
FEED BAR ASSEMBLY

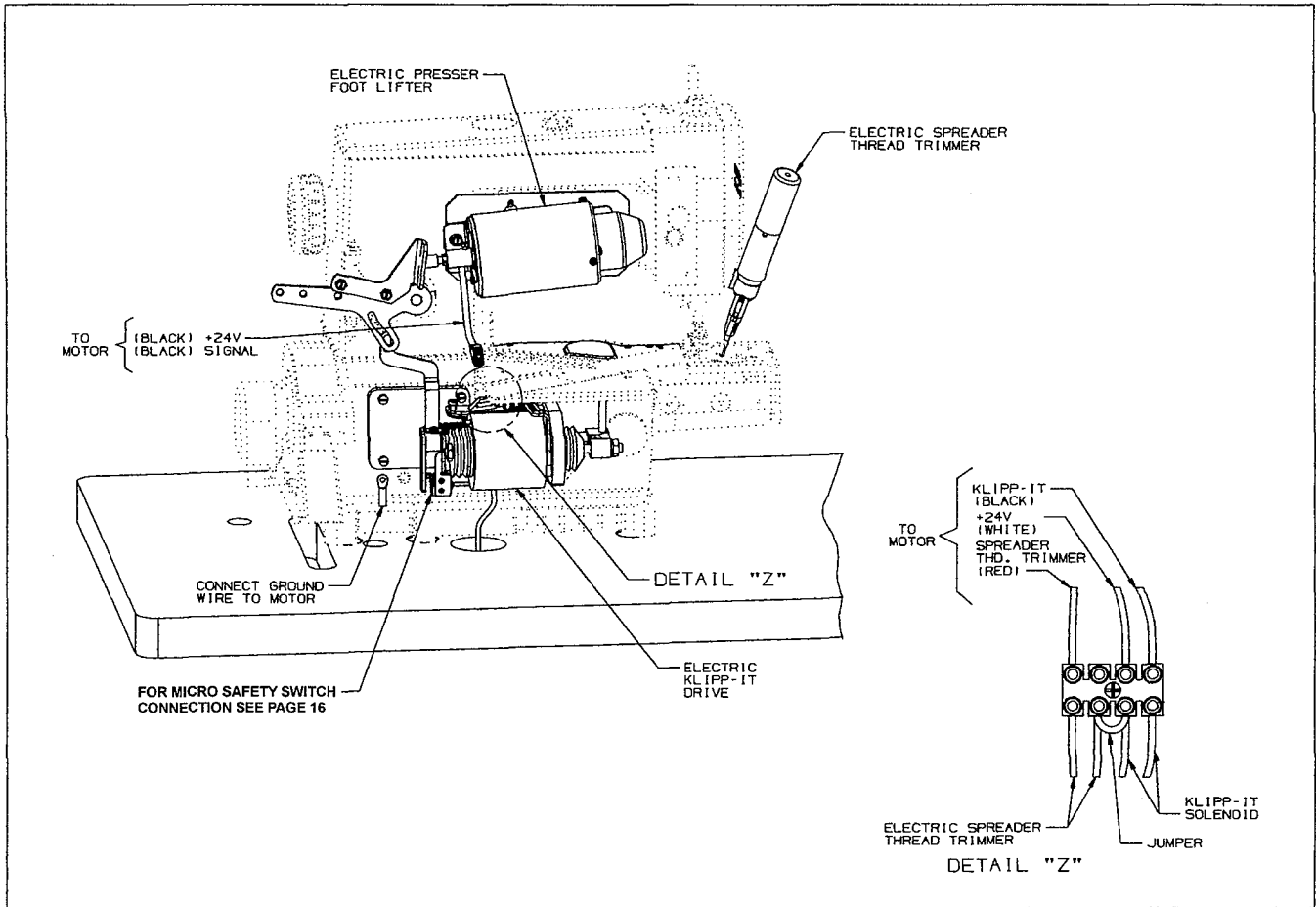
| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|----------|------------------------------------|--------------|
| 1. | 29476SH | Feed Bar Assembly | 1 |
| 2. | 50395Z | Screw | 1 |
| 3. | 34353 | Main Feed Dog Holder | 1 |
| 4. | 50383BN | Mounting Block | 1 |
| 5. | 22747B | Screw | 2 |
| 6. | 50332AW | Spring | 1 |
| 7. | 22768M | Screw | 1 |
| 8. | 50335BH | Connector | 1 |
| 9. | 39536C | Bushing | 1 |
| 10. | 1185L | Washer | 1 |
| 11. | 12934A | Nut | 1 |
| 12. | 50362Y | Retainer | 1 |
| 13. | 670B10 | Pin | 2 |
| 14. | 22894AY | Set Screw | 2 |
| 15. | 77B | Screw | 2 |
| 16. | 50386L | Washer Plate | 1 |
| 17. | 34353A | Differential Feed Dog Holder | 1 |

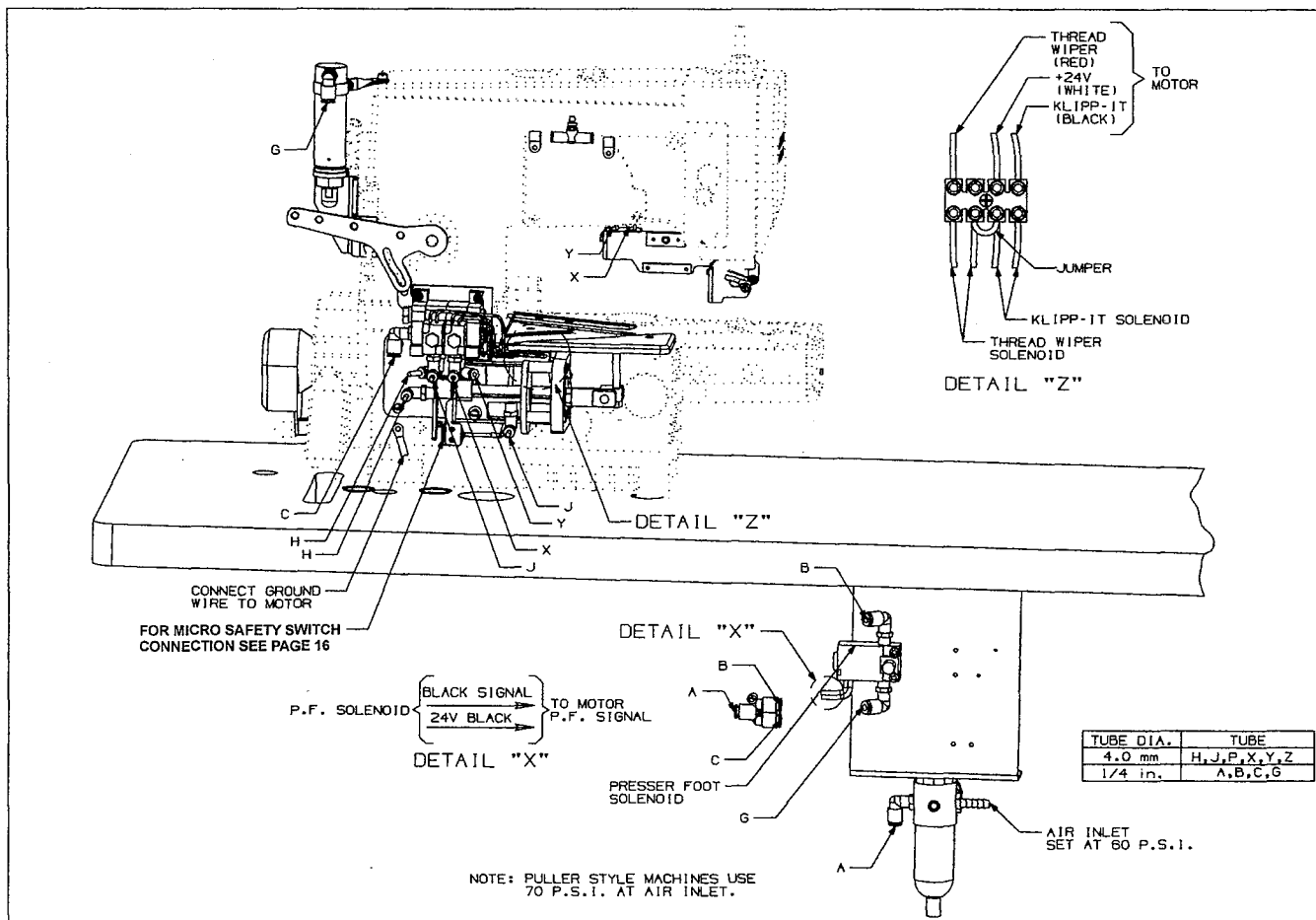


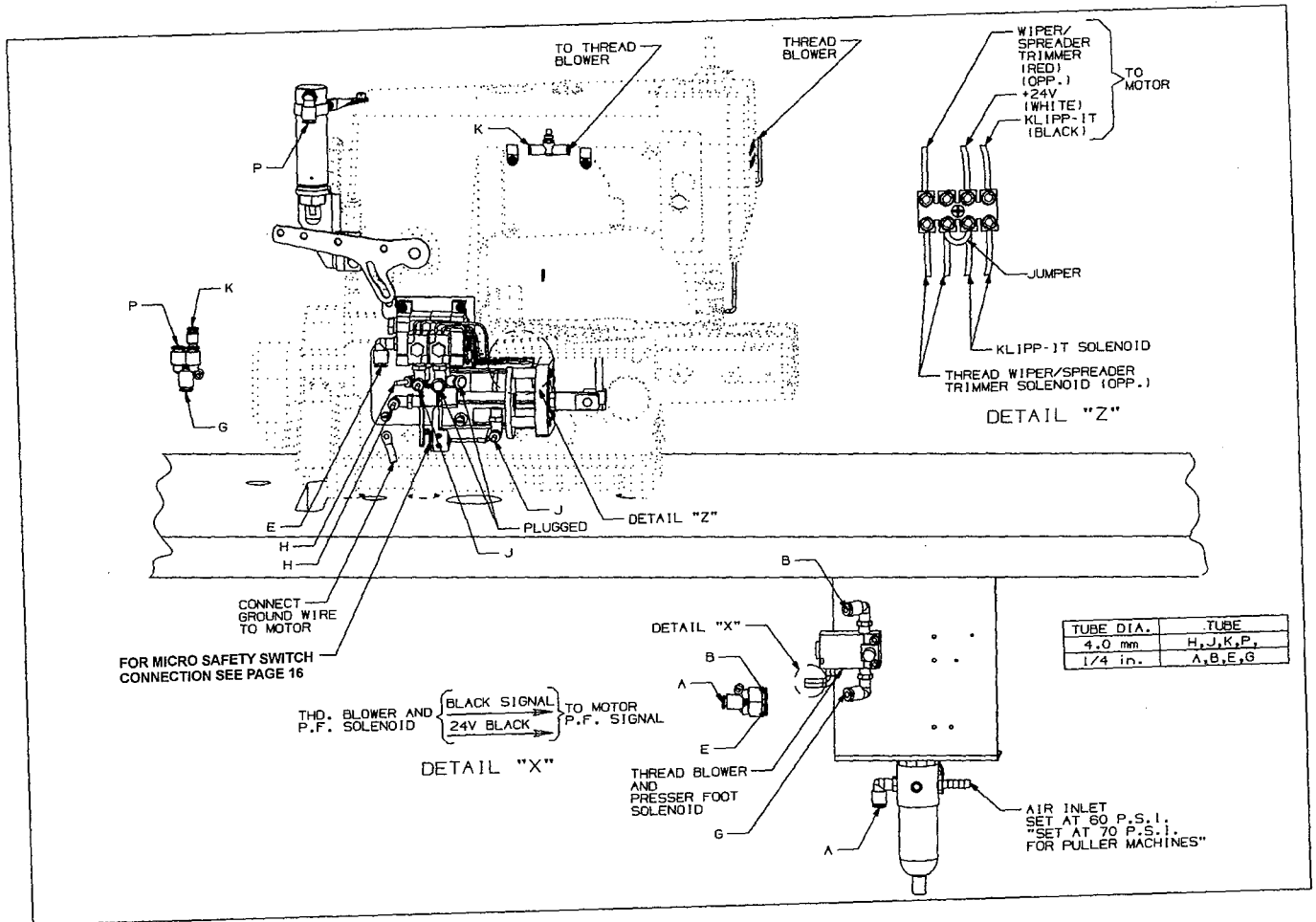
THROAT PLATE SUPPORT ASSEMBLY
&
AIR CYLINDER ASSEMBLY

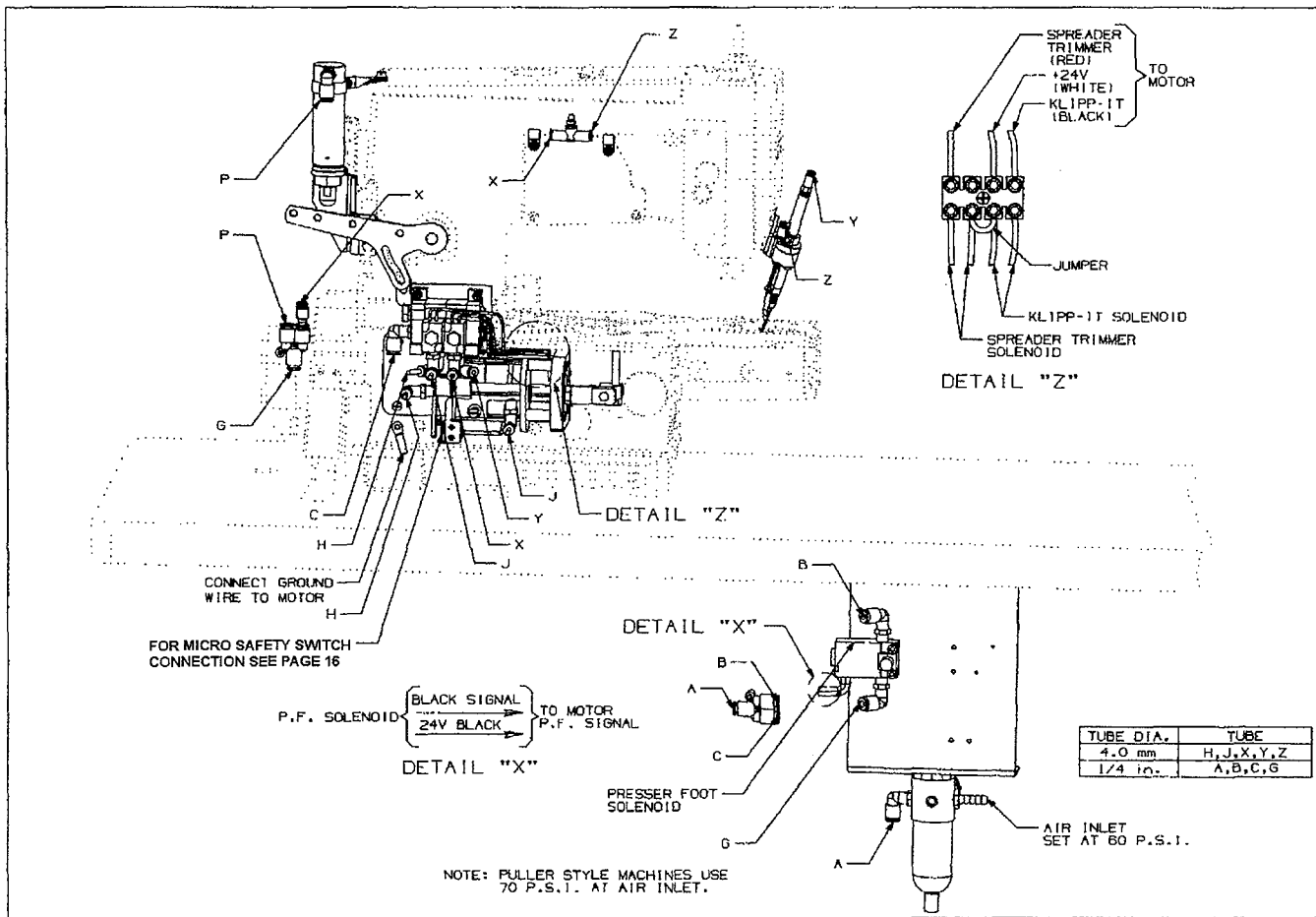
| Ref. No. | Part No. | Description | Amt. Req. |
|-------------|-----------------|---|--------------|
| 1. | 29476YM | Throat Plate Support Assembly, for styles E11 | 1 |
| - | 29476YT | Throat Plate Support Assembly, for styles H01 | 1 |
| - | 29476YU | Throat Plate Support Assembly, for styles H21 | 1 |
| - | 29476YV | Throat Plate Support Assembly, for styles K01 | 1 |
| - | 29476YW | Throat Plate Support Assembly, for styles K02 | 1 |
| - | 29476YX | Throat Plate Support Assembly, for styles U06 | 1 |
| 2. | 34367 | Stop Bolt | 1 |
| 3. | 97014 | Spring | 1 |
| 4. | 95685 | Screw | 1 |
| 5. | 34367B | Safety Catch | 1 |
| 6. | 34780K | Throat Plate Support, for styles E11 | 1 |
| 6A. | 34380V | Throat Plate Support, for styles H01 | 1 |
| 6B. | 34380U | Throat Plate Support, for styles H21 | 1 |
| 6C. | 34780L | Throat Plate Support, for styles K01 | 1 |
| 6D. | 34780M | Throat Plate Support, for styles K02 | 1 |
| 6E. | 34380W | Throat Plate Support, for styles U06 | 1 |
| 7. | 96277 | Retaining Ring | 1 |
| 8. | 99364L | Shank Screw | 1 |
| 9. | 50329S | Air Cylinder Assembly | 1 |
| 10. | 50382KJ | Plunger | 1 |
| 11. | 22894AT | Screw | 1 |
| 12. | 671F82F | Elbow Fitting | 1 |
| 13. | 50383BT | Housing | 1 |
| 14. | 22562A | Screw | 2 |
| 15. | 29480ASN | Pneumatic Control (not shown) | 1 |
| 16. | 6-878-4mm-.65mm | Tubing (1m) | 1 |

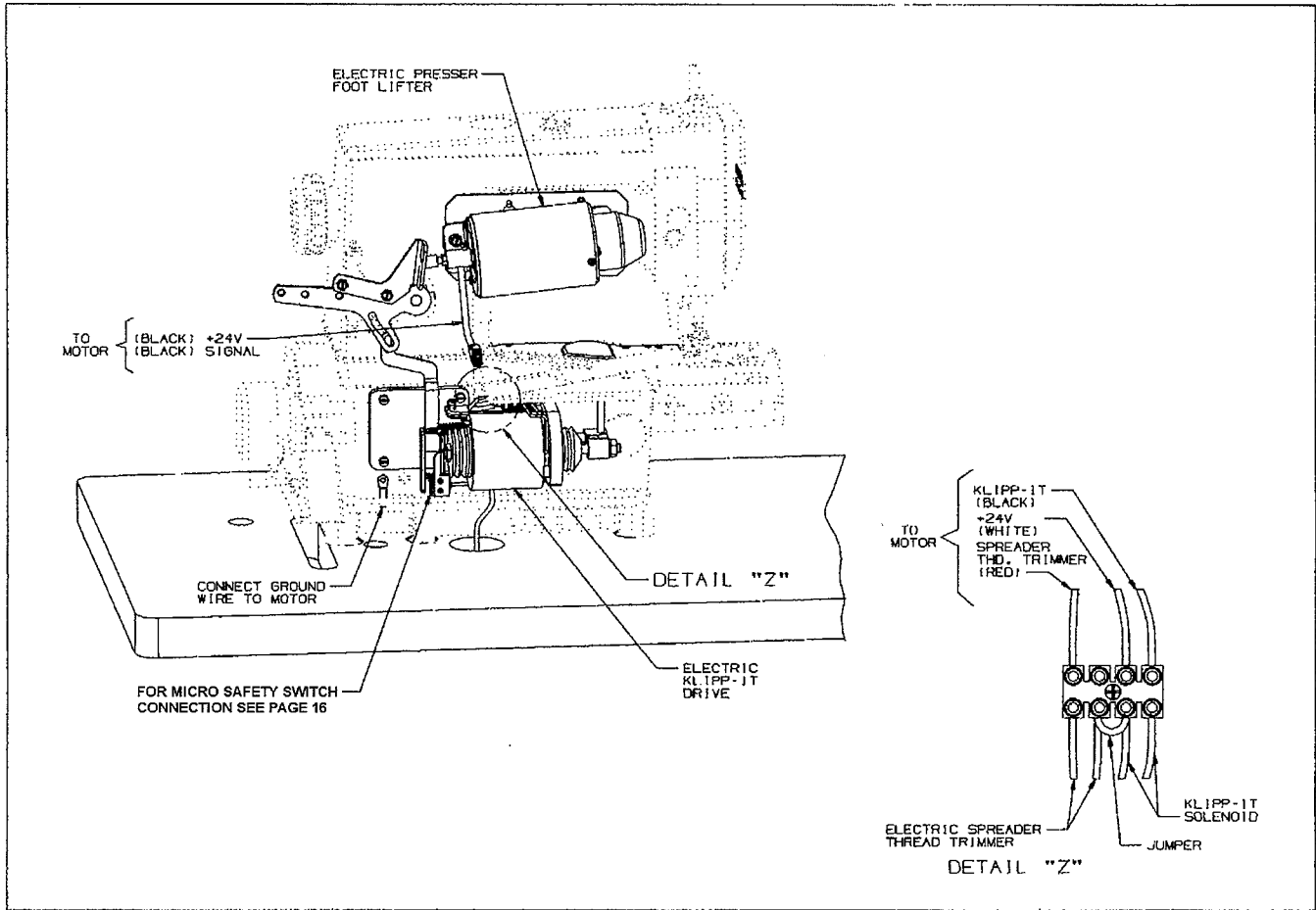


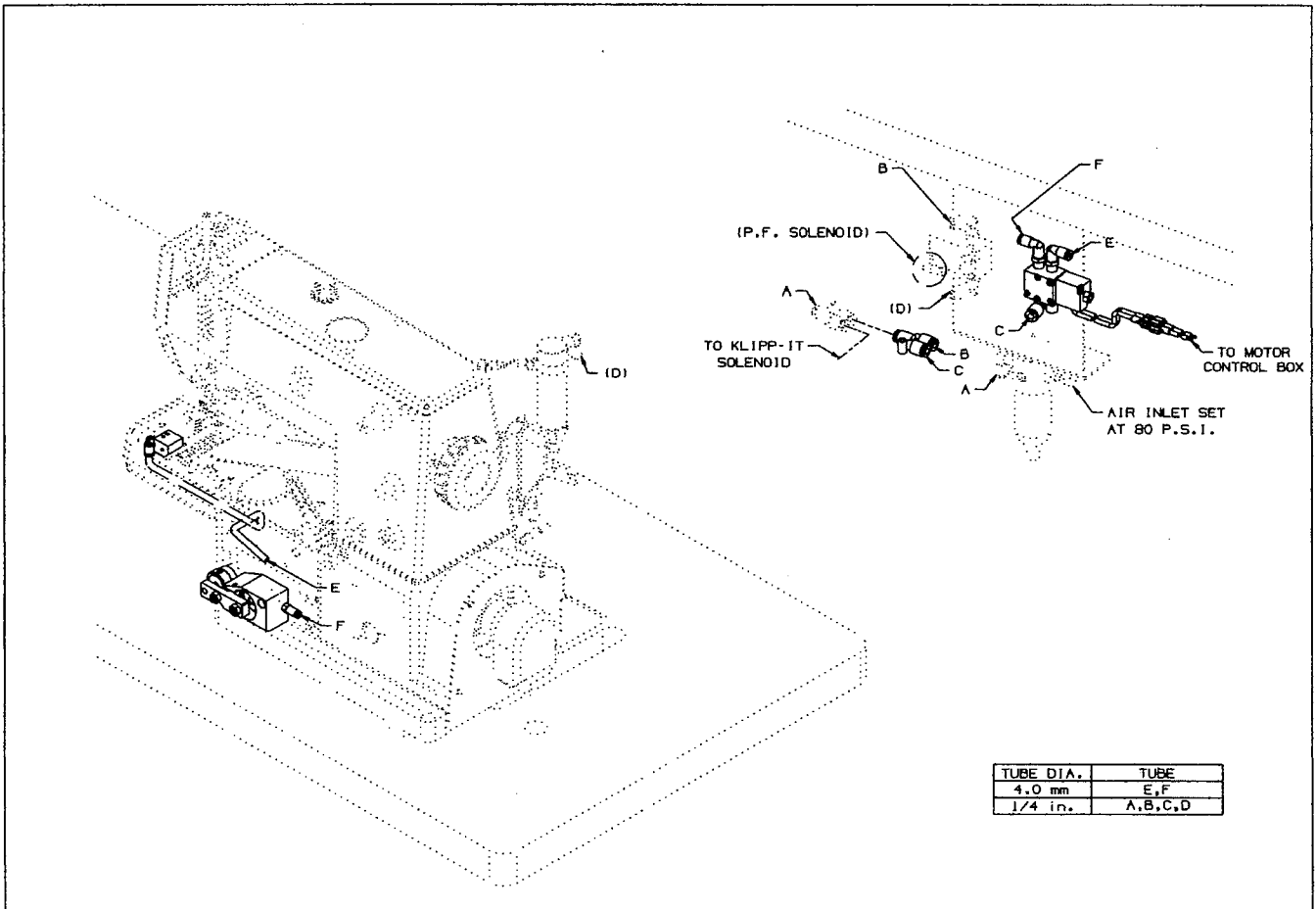












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