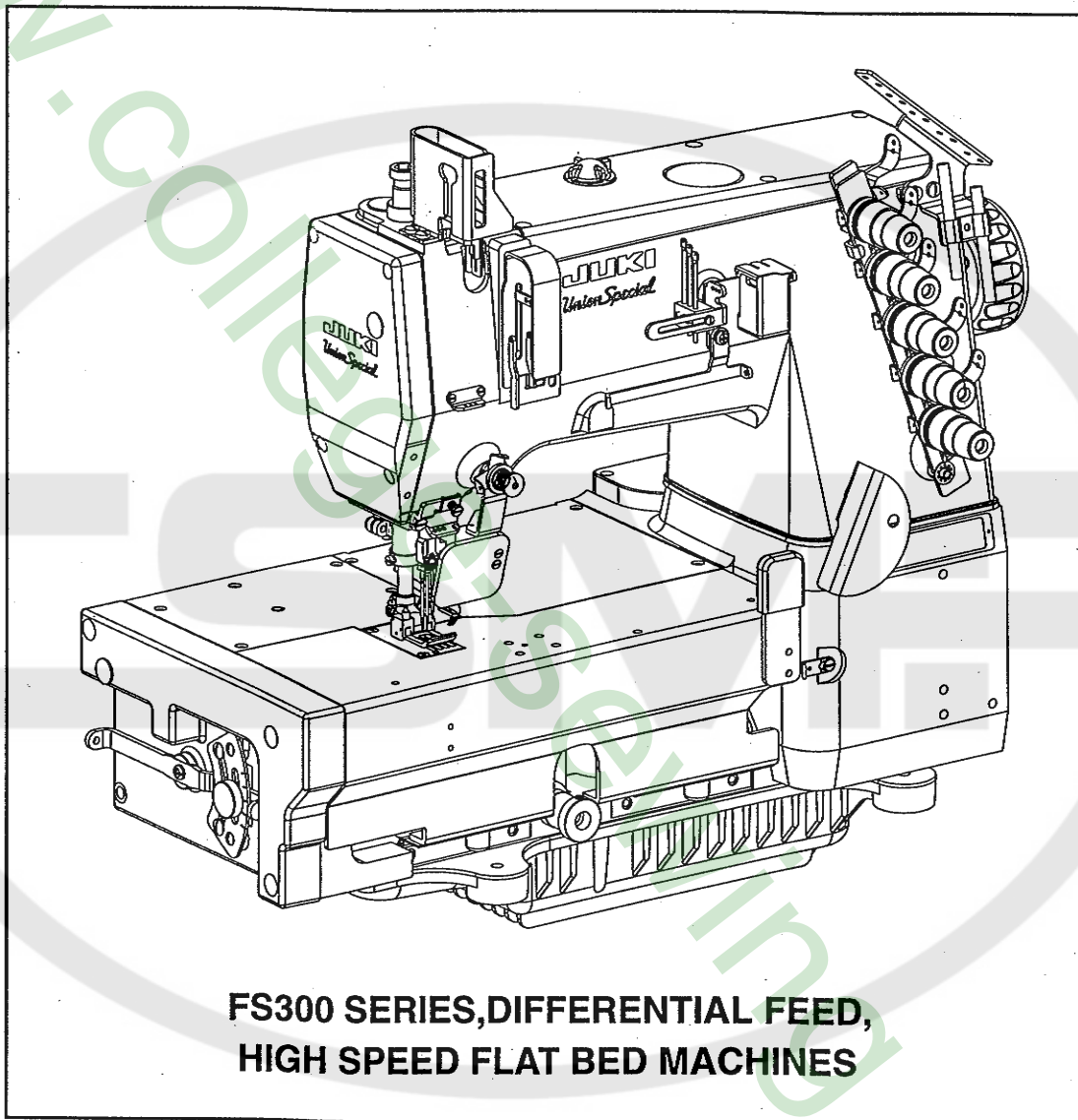




# Union Special

INDUSTRIAL SEWING EQUIPMENT

## ADJUSTING INSTRUCTIONS/ ILLUSTRATED PARTS LIST



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

**MANUAL NO. PT9623**

**FOR DEVICE**

**CC1FS3**

**CC2FS3**

**CC2AFS3**

MAY 5 2004

[www.college-sewing.co.uk](http://www.college-sewing.co.uk)

The logo for College Sewing Machine Project (CSMP) features the letters 'CSMP' in a bold, sans-serif font. The letters are white and are centered within a large, light gray circle. The circle is composed of two concentric arcs, with the top arc above the letters and the bottom arc below them, leaving a gap in the middle where the letters are located.

# Parts Manual PT9623 for Devices CC1FS3, CC2FS3

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## PREFACE

This parts manual has been prepared to assist you in locating individual parts or assemblies on FS300 Machines. It can be used in conjunction with Union Special Parts Manual's PT9605, PT9635, Operator's Manuals OP9606, OP9614 and Engineer's Manual EN9424. Depending on application.

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.

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## 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 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.

## CHAIN CUTTER ADJUSTMENTS

### KNIFE SHARPENING

Remove suction cover, filter cover plate and the inlets. Remove the upper knife (A, Fig. 1) by loosening two screws (B) sharpen if necessary. Remove the lower knife (F) by unhooking the knife spring (E) and sliding the lower knife forward and up, sharpen if necessary. Replace the knives in the reverse manner.

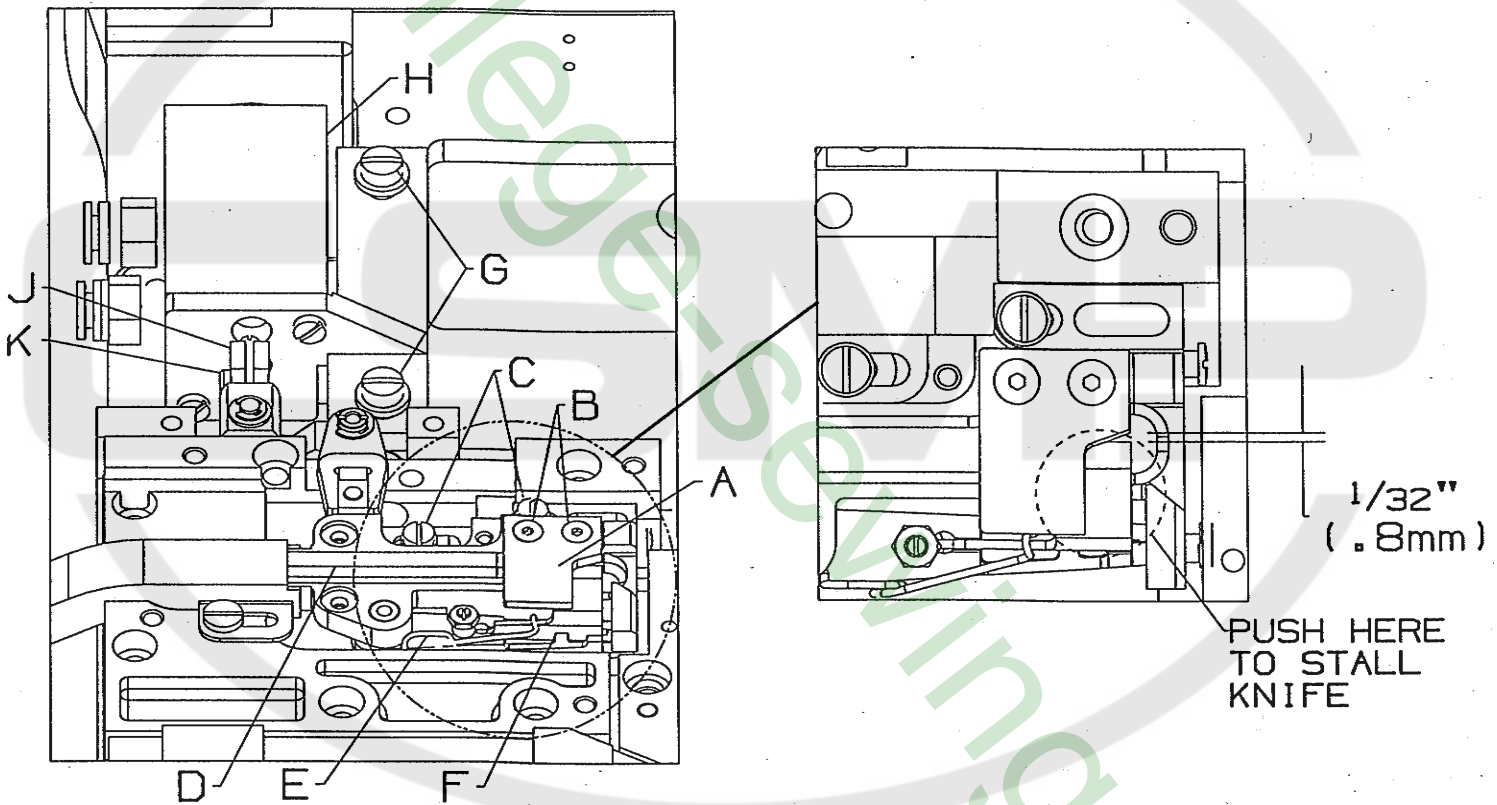
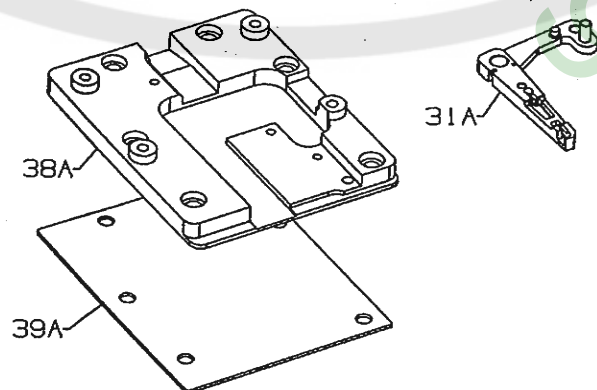
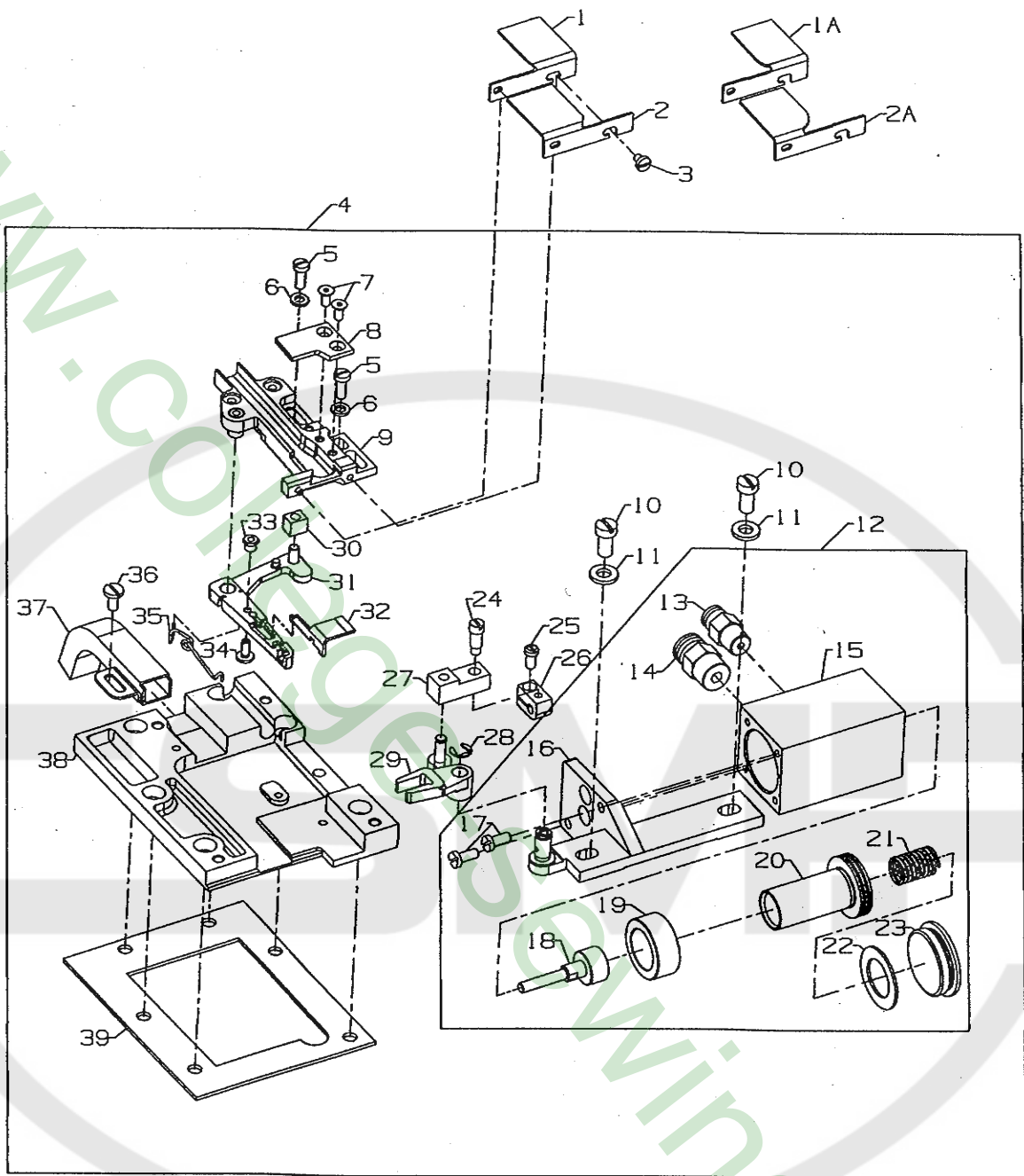


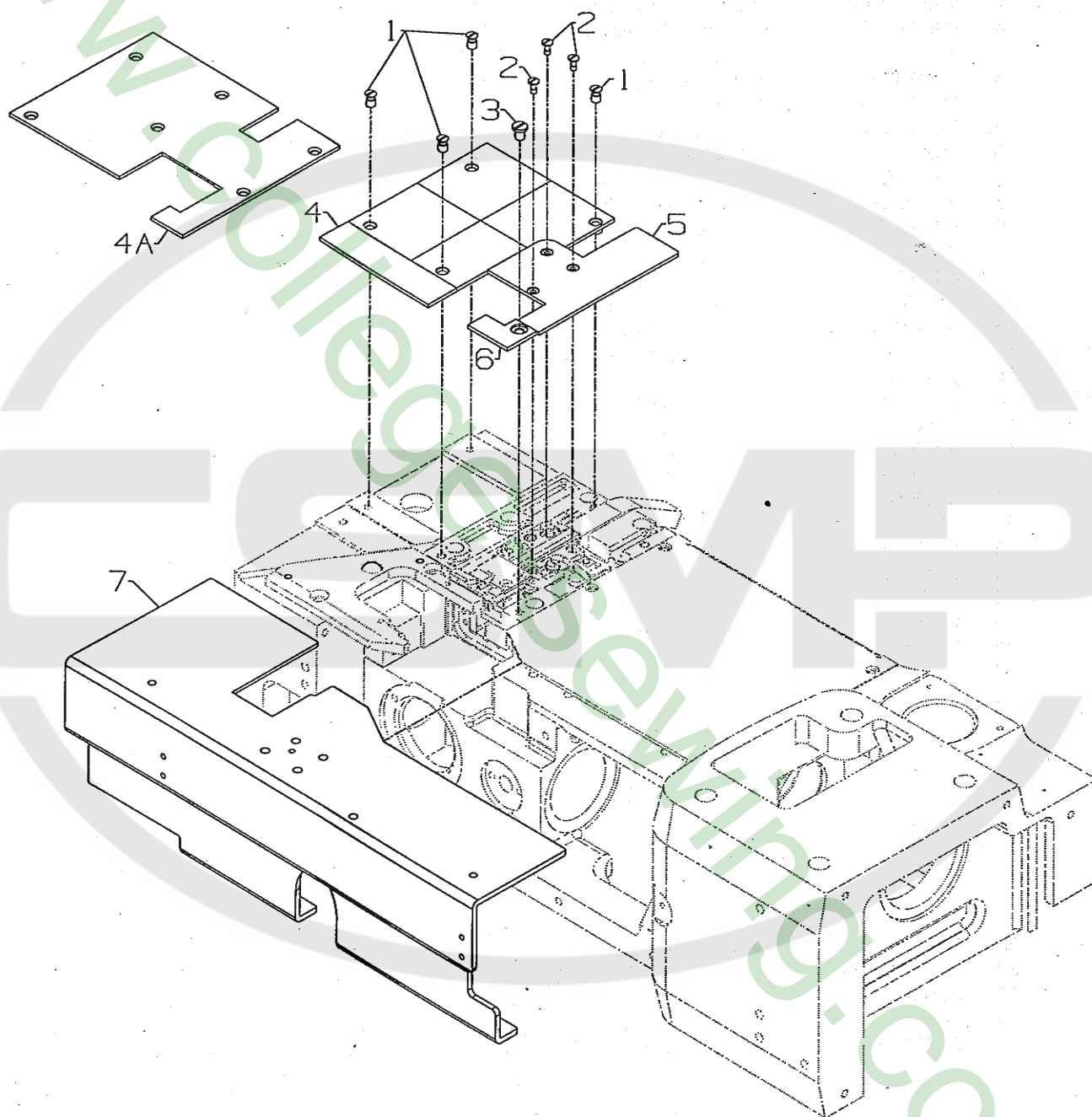
FIG 1



# PNEUMATIC CHAIN CUTTER ASSEMBLY

| Ref.<br>No. | Part No. | Description                                              | Amt.<br>Req. |
|-------------|----------|----------------------------------------------------------|--------------|
| 1.          | 99677TCB | Inlet For single needle machines .....                   | 1            |
| 1A.         | 99677TCD | Inlet For multi needle machines .....                    | 1            |
| 2.          | 99677TCC | Adjustable inlet For single needle machines .....        | 1            |
| 2A.         | 99677TCE | Adjustable inlet For multi needle machines .....         | 1            |
| 3.          | 28       | Screw .....                                              | 1            |
| 4.          | V29944F  | Pneumatic Chain Cutter Assembly, for CC1FS3 device ..... | 1            |
| -           | 29941AAL | Pneumatic Chain Cutter Assembly, for CC2FS3 device ..... | 1            |
| 5.          | 22729J   | Screw .....                                              | 2            |
| 6.          | 80265    | Washer .....                                             | 2            |
| 7.          | 95435A   | Screw .....                                              | 2            |
| 8.          | 99670TH  | Stationary Knife .....                                   | 1            |
| 9.          | 99691TA  | Air Clip Housing .....                                   | 1            |
| 10.         | 22517    | Screw .....                                              | 2            |
| 11.         | 80557    | Washer .....                                             | 2            |
| 12.         | 671H4    | Air Motor Assembly .....                                 | 1            |
| 13.         | 671F82A  | Male Connection .....                                    | 1            |
| 14.         | 671F78   | Straight Fitting .....                                   | 1            |
| 15.         | 671H2A   | Housing .....                                            | 1            |
| 16.         | 671H4A   | Bracket, Housing .....                                   | 1            |
| 17.         | 22585    | Screw .....                                              | 2            |
| 18.         | 50322BP  | Shaft, Air Motor .....                                   | 1            |
| 19.         | 50335BK  | Air Motor Spacer .....                                   | 1            |
| 20.         | 671H1A   | Piston .....                                             | 1            |
| 21.         | 660-753  | Spring .....                                             | 1            |
| 22.         | 671H1F   | Washer, Bumper .....                                     | 1            |
| 23.         | 671H1D   | Screw, Plug .....                                        | 1            |
| 24.         | 86X      | Screw .....                                              | 1            |
| 25.         | 22562A   | Screw .....                                              | 1            |
| 26.         | 50355AT  | Binder, Air Motor .....                                  | 1            |
| 27.         | 50335BJ  | Link, Air Motor .....                                    | 1            |
| 28.         | 96275    | Retaining Ring .....                                     | 1            |
| 29.         | 99672UD  | Drive Lever .....                                        | 1            |
| 30.         | 99672UE  | Slider Block .....                                       | 1            |
| 31.         | 99666TA  | Knife Lever, for CC1FS3 device .....                     | 1            |
| 31A.        | 99666TB  | Knife Lever, for CC2FS3 device .....                     | 1            |
| 32.         | 99669TH  | Moving Knife .....                                       | 1            |
| 33.         | 99322A   | Adjusting Knife .....                                    | 1            |
| 34.         | 99372A   | Adjusting Screw .....                                    | 1            |
| 35.         | 99697TA  | Spring .....                                             | 1            |
| 36.         | 22585A   | Screw .....                                              | 1            |
| 37.         | 99676UA  | Suction Tube .....                                       | 1            |
| 38.         | 50382HN  | Cover, for CC1FS3 device .....                           | 1            |
| 38A.        | 50682C   | Cover, for CC2FS3 device .....                           | 1            |
| 39.         | 50684    | Gasket, for CC1FS3 device .....                          | 1            |
| 39A.        | 50382CS  | Gasket, for CC2FS3 device .....                          | 1            |

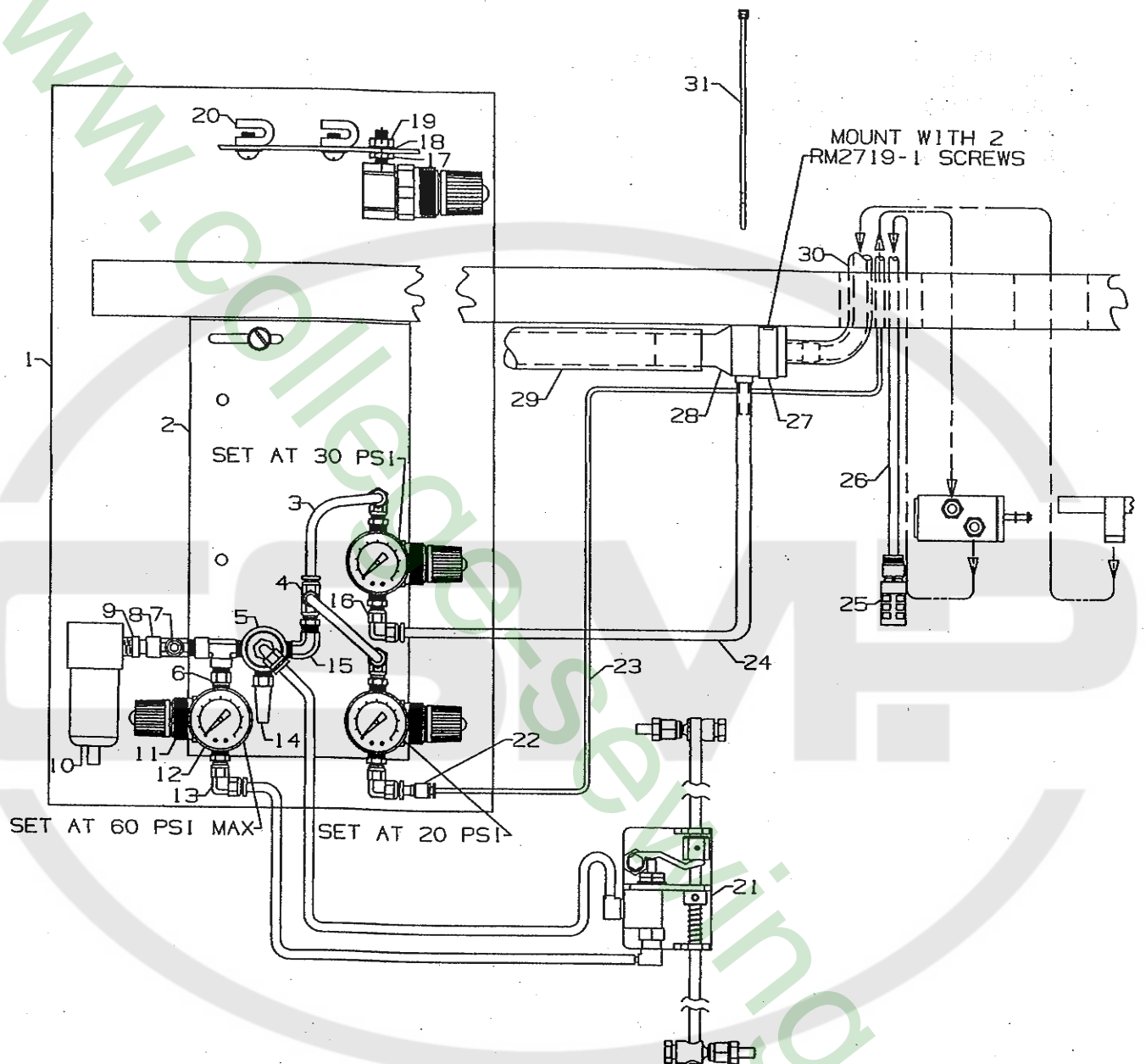




# MISCELLANEOUS COVERS

| Ref.<br>No. | Part No.    | Description                                 | Amt.<br>Req. |
|-------------|-------------|---------------------------------------------|--------------|
| 1.          | 18-1448     | Screw, for covers .....                     | 4/6          |
| 2.          | 99312A      | Screw, for chain cover .....                | 3            |
| 3.          | SS6120620TP | Screw .....                                 | 1            |
| 4.          | 50301BV     | Cloth Plate, for CC1FS3 device .....        | 1            |
| 4A.         | 50601G      | Cloth Plate, for CC2FS3 device .....        | 1            |
| 5.          | 50382JC     | Suction Cover, for CC1FS3 device .....      | 1            |
| 6.          | 50382HB     | Cover Filler Plate, for CC1FS3 device ..... | 1            |
| 7.          | 50382CK     | Front Cover, for CC1FS3 device .....        | 1            |

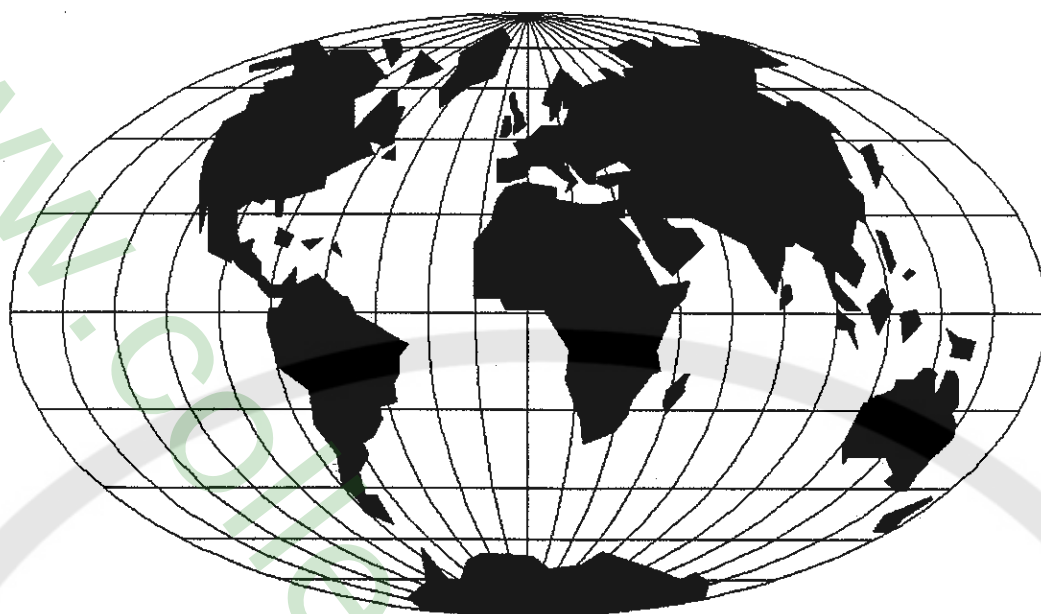




# PNEUMATIC CONTROL ASSEMBLY

| Ref.<br>No. | Part No. | Description                      | Amt.<br>Req. |
|-------------|----------|----------------------------------|--------------|
| 1.          | 29480ADM | Pneumatic Control Assembly ..... | 1            |
| 2.          | 35032R   | Mounting Bracket .....           | 1            |
| 3.          | 660-392  | Tubing .....                     | 2            |
| 4.          | 671F94   | Tubing .....                     | 1            |
| 5.          | RM4098-1 | Pilot Valve .....                | 1            |
| 6.          | RM3287-2 | Hex Nipple .....                 | 1            |
| 7.          | 22571F   | Plug Screw .....                 | 1            |
| 8.          | RM2850D  | Pipe Tee .....                   | 2            |
| 9.          | RM3320-1 | Reducer .....                    | 1            |
| 10.         | 671D5    | Filter .....                     | 1            |
| 11.         | 671D9    | Regulator .....                  | 3            |
| 12.         | 671D15   | Gauge .....                      | 3            |
| 13.         | 671F69   | Tube Fitting .....               | 5            |
| 14.         | 660-403  | Muffler .....                    | 1            |
| 15.         | RM2881-1 | Elbow .....                      | 1            |
| 16.         | 671F3    | Male Elbow .....                 | 1            |
| 17.         | 671C16   | Mounting Stud .....              | 3            |
| 18.         | 652B20   | Washer .....                     | 3            |
| 19.         | 11635B   | Nut .....                        | 3            |
| 20.         | 661-3    | Mounting Clamp .....             | 2            |
| 21.         | 29480ARN | Treadle Valve Assembly .....     | 1            |
| 22.         | 671F82H  | Reducer .....                    | 1            |
| 23.         | 671B37A  | Tubing .....                     | 1            |
| 24.         | 671B3    | Venturi Supply Tube .....        | 1            |
| 25.         | 671F242  | Silencer .....                   | 1            |
| 26.         | 671B120  | Tubing .....                     | 1            |
| 27.         | 998-332  | Venturi Holder .....             | 1            |
| 28.         | 671D2    | Venturi .....                    | 1            |
| 29.         | 671B11   | Discharge Tube .....             | 1            |
| 30.         | 671B12   | Suction Tube .....               | 1            |
| 31.         | RM2871B  | Wire Ties .....                  | 4            |





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Union Special Corporation maintains sales and service facilities throughout the world. These offices will aid you in the selection of the right sewing equipment for your particular operation. Union Special Corporation representatives and service technicians are factory trained and are able to serve your needs promptly and efficiently. Whatever your location, there is a qualified representative to serve you.

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