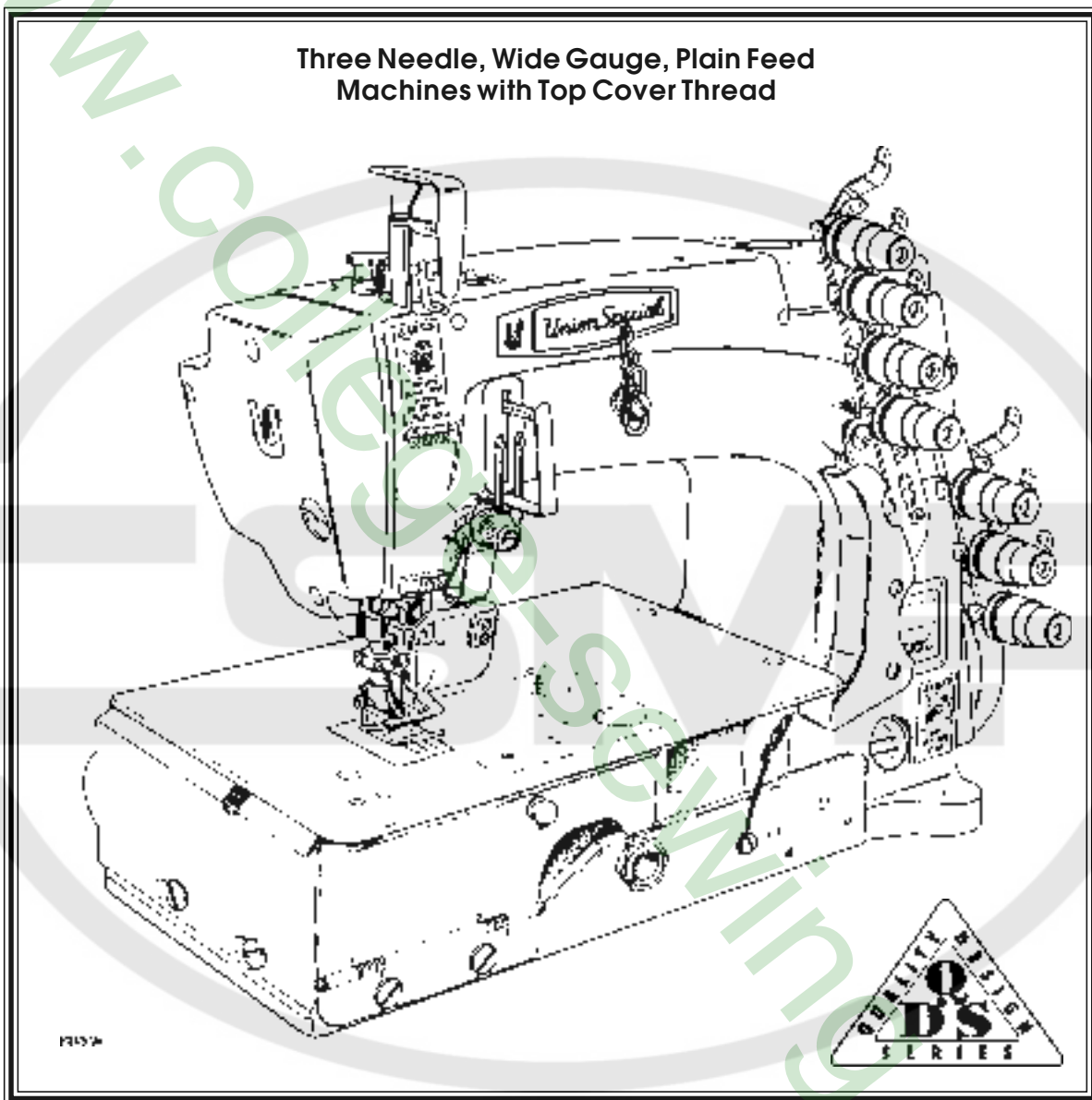


Union Special[®]

INDUSTRIAL SEWING EQUIPMENT

ILLUSTRATED PARTS LIST

Three Needle, Wide Gauge, Plain Feed
Machines with Top Cover Thread



MANUAL NO. PT9511

STYLES

FS113L100MBV096
FS113L112MBV096

Manual No. PT9511 Illustrated Parts List for FS100 Series Machines

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By

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PREFACE

This parts manual has been prepared to assist you in locating individual parts or assemblies on FS100 Series machines. It can be used in conjunction with Union Special Adjusting Manual IN9302.

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 the 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 FS100 Series machines.

SAFETY RULES



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

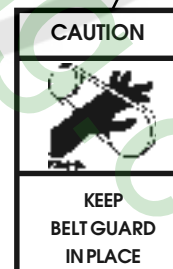
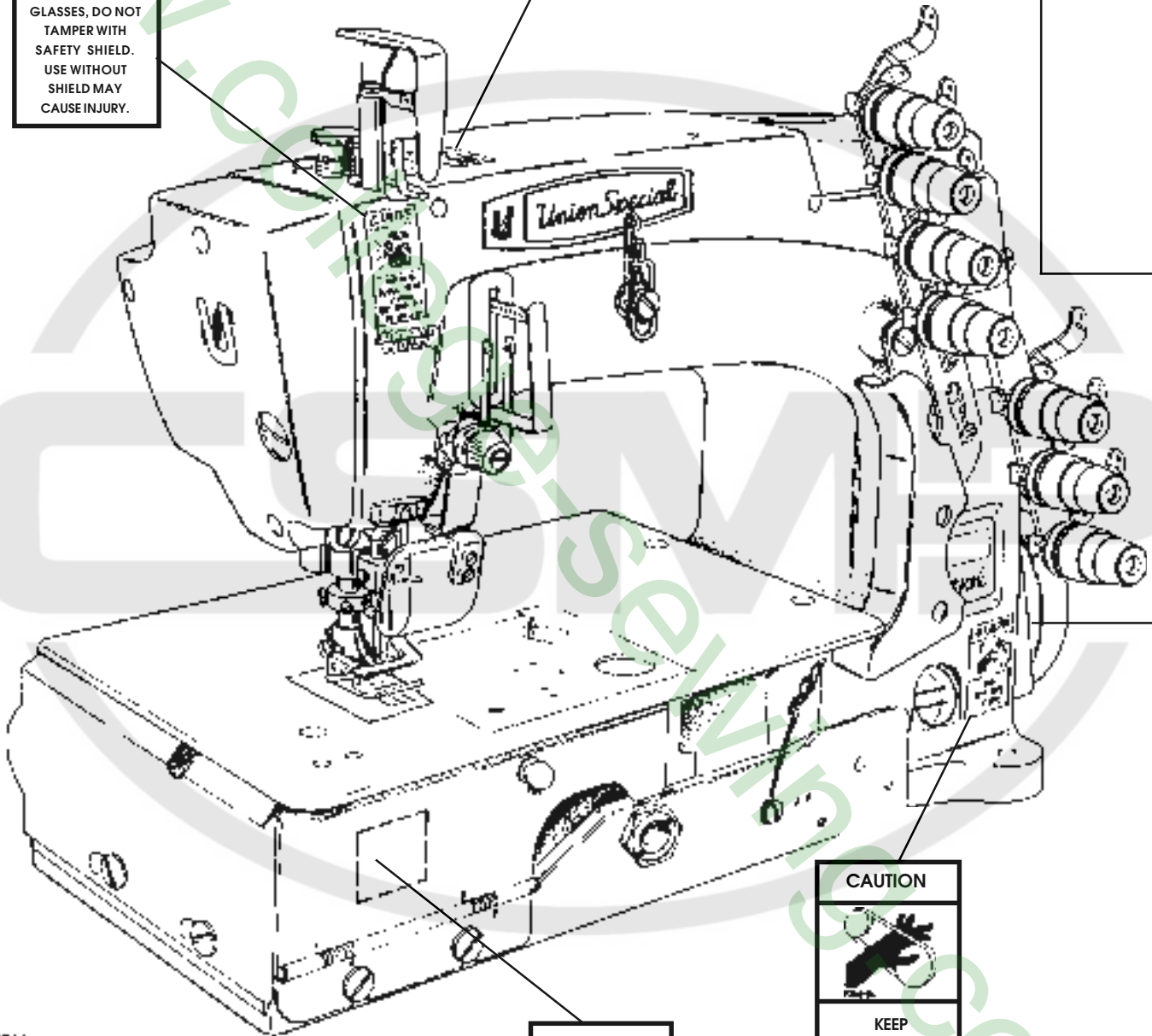
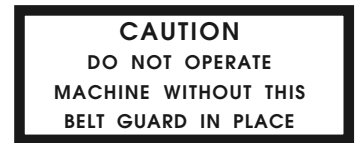
1. Before putting the machines described in this manual into service, carefully read the instructions. The starting of each machine is only permitted after taking notice of the instructions and by qualified operators.

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. 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. For 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 For threading needle(s), looper, spreader etc.
 - 8.2 For replacing sewing parts such as needle, 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 For 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 tension 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 (e.g. pneumatic equipment with air tank), the pressure has to be removed by bleeding.

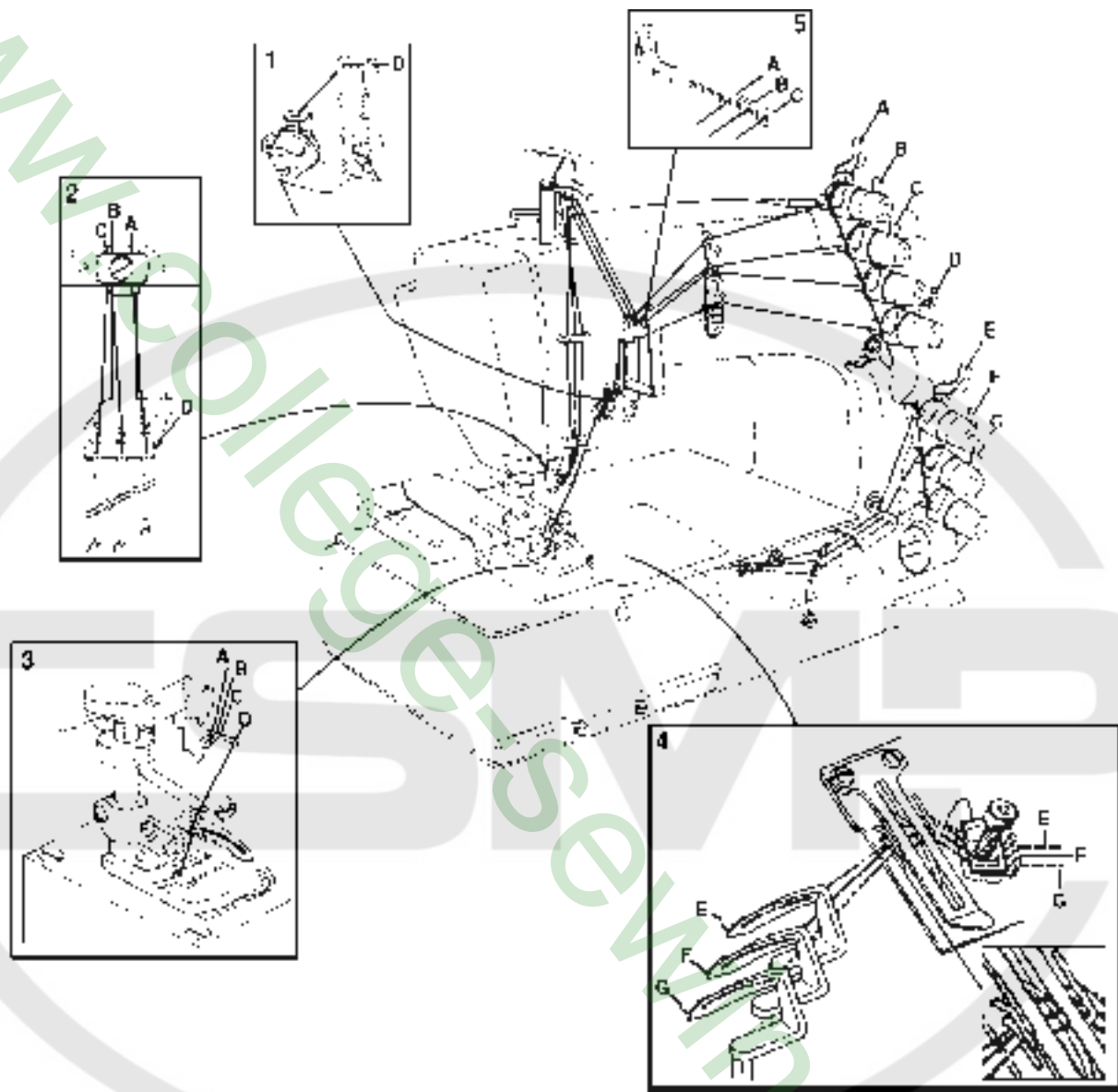
* Exceptions are only allowed for adjusting work and function checks done by special skilled personnel.

CAUTION AREAS



11243-1/0

THREADING



- A Right Needle Thread
- B Middle Needle Thread
- C Left Needle Thread
- D Spreader Thread
- E Rear/Right Looper Thread
- F Middle Looper Thread
- G Front/Left Looper Thread

- 1 Spreader Thread Take-Up & Nipper Area
- 2 Needle Head & Needle Thread Nipper Area
- 3 Sewing Area
- 4 Looper, Looper Thread Take-up & Nipper Area
- 5 Needle Lever Thread Eyelet Area

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IDENTIFICATION OF MACHINES

Each Union Special machine carries a style number, which on this class machine is stamped in the style plate affixed to the right front of the machine.

The serial number is stamped in the casting at the right rear base of machine.

MACHINE STYLES

Advanced series, heavy duty flat bed machine. Three needles, three loopers, one spreader, one auxiliary spreader, plain feed, enclosed automatic lubrication system. Maximum work space to right of needle bar 8 1/4" (210mm).

FS113L100MBV LAP-SEAMER: Three needle, top cover thread, plain feed machine - Typical application - For pocket facing applications on medium to heavy weight denim. Seam specification 408LSbj-1 (Mod.). Standard Gauge Number 096 (3/8", 9.6 mm). Maximum recommended speed depending on application is 4500 R.P.M. Recommended needle 128 GS, size 125/049.

FS113L112MBV Same as style FS113L100MBV096 except fitted with a flat action (mounted on cloth plate), compressed air operated chain cutter with venturi suction and chain disposal.

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

128 GS Short, double groove, struck groove, ball eye, spotted, undersize eye and grooves 27% of size of needle, chromium plated - Sizes Available 090/036, 100/040, 110/044, 125/049, 140/054.

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

To have needles promptly and accurately filled, an empty package, a needle sample, or the type and size number should be forwarded. Use the description on the label. A complete order should read as follows: "100 needles, type 121 GBS, size 125/049".

TERMS

Prices are net cash and subject to change without notice. All shipments are forwarded F.O.B. shipping point. A charge is made to cover postage and insurance.

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.

9.	29126EC	Upper Looper Drive Shaft Assembly	1
10.	22503F	Screw	1
11.	39543E	Cam Follower Locking Clamp	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.

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

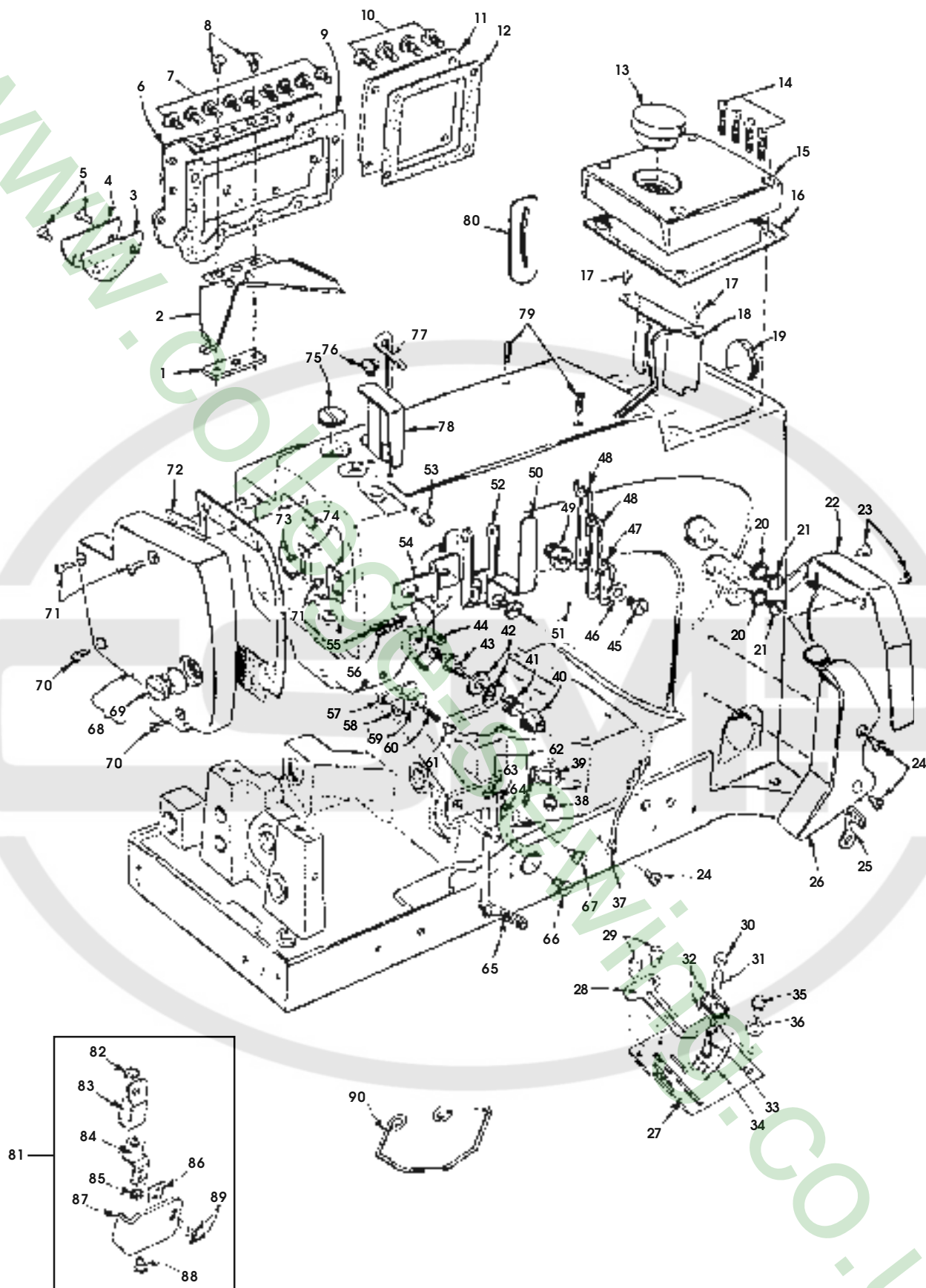
Where the construction permits, each part is stamped with its part number. On some of the smaller parts and on those where construction does not permit, an identification letter is stamped in, to distinguish the part from similar ones.

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

EXPLODED VIEWS

P249-02

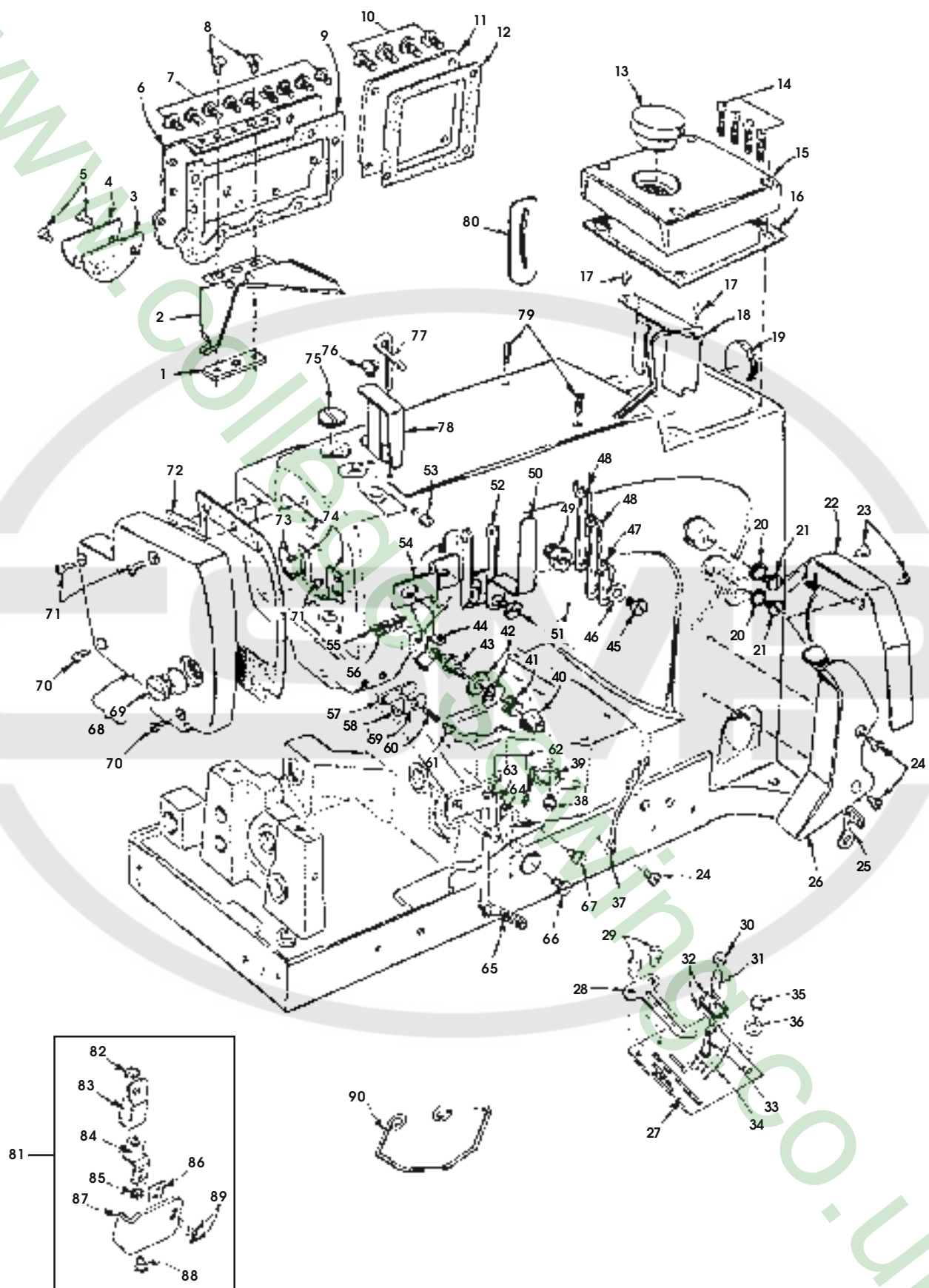


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MISCELLANEOUS COVERS, GUARDS, THREAD GUIDES & CAST-OFF PLATE

Ref. No.	Part No.	Description	Amt. Req.
1.	56382Y	Block, for oil drip plate	1
2.	56382AB	Oil Drip Plate	1
3.	56382AV	Gasket, for looper drive shaft cover	1
4.	56382J	Cover, for looper drive shaft	1
5.	22829	Screw, for looper drive shaft cover	2
6.	56382AA	Oil Reservoir Cover, back	1
7.	22848	Screw, for oil reservoir cover, back	9
8.	22524	Screw, for oil drip plate	2
9.	56382AU	Gasket, for oil reservoir cover, back	1
10.	22548	Screw, for crank chamber cover, lower	4
11.	56382D	Crank Chamber Cover, lower	1
12.	56382AX	Gasket, for crank chamber cover, lower	1
13.	660-1002	Plug, for crank chamber cover, upper	1
14.	22541C	Screw, for crank chamber cover, upper	4
15.	57782M	Crank Chamber Cover, upper	1
16.	56382AY	Gasket, for crank chamber cover, upper	1
17.	90	Screw, for bearing oiler assembly	2
18.	56382AC	Bearing Oiler Assembly	1
19.	22539S	Plug Screw, for bed	1
20.	80557	Washer, for tension assembly (see page 31)	2
21.	22839C	Screw, for tension assembly (see page 31)	2
22.	21375CE	Belt Guard	1
23.	22829	Screw, for belt guard	2
24.	98A	Screw, for looper guard thread eyelet	3
25.	158A	Looper Thread Eyelet	1
26.	56391B	Looper Thread Guard	1
27.	51457B	Cast-Off Plate	1
28.	52804A	Hold Down Plate, for looper thread	1
29.	28	Screw, for hold down plate	2
30.	51959D	Tension Nut	1
31.	51959K	Tension Spring	1
32.	51959B	Tension Disc	2
33.	51492	Tension Post	1
34.	51959J	Looper Thread Guide	1
35.	22569C	Screw, for support plate	2
36.	69H	Washer, for support plate screw	2
37.	52958G	Eyelet, for looper thread	1
38.	22585C	Screw, for eyelet	1
39.	57858C	Eyelet, looper thread	1
40.	57892H	Nut, for spreader thread post	1
41.	57892C5	Spreader Tension Spring	1
42.	80665F	Disc, for tension post	2
43.	57892J	Spreader Tension Post	1
44.	57844	Spreader Thread Guide	1
45.	22848	Screw, for thread eyelets	1
46.	20	Washer, for thread eyelets	1
47.	51758	Eyelet, spreader thread	1
48.	539	Eyelet, needle thread	2
49.	22889H	Adapter Screw	1
50.	57882J	Guard, for needle lever eyelet	1
51.	22585C	Screw, for needle lever eyelet	1

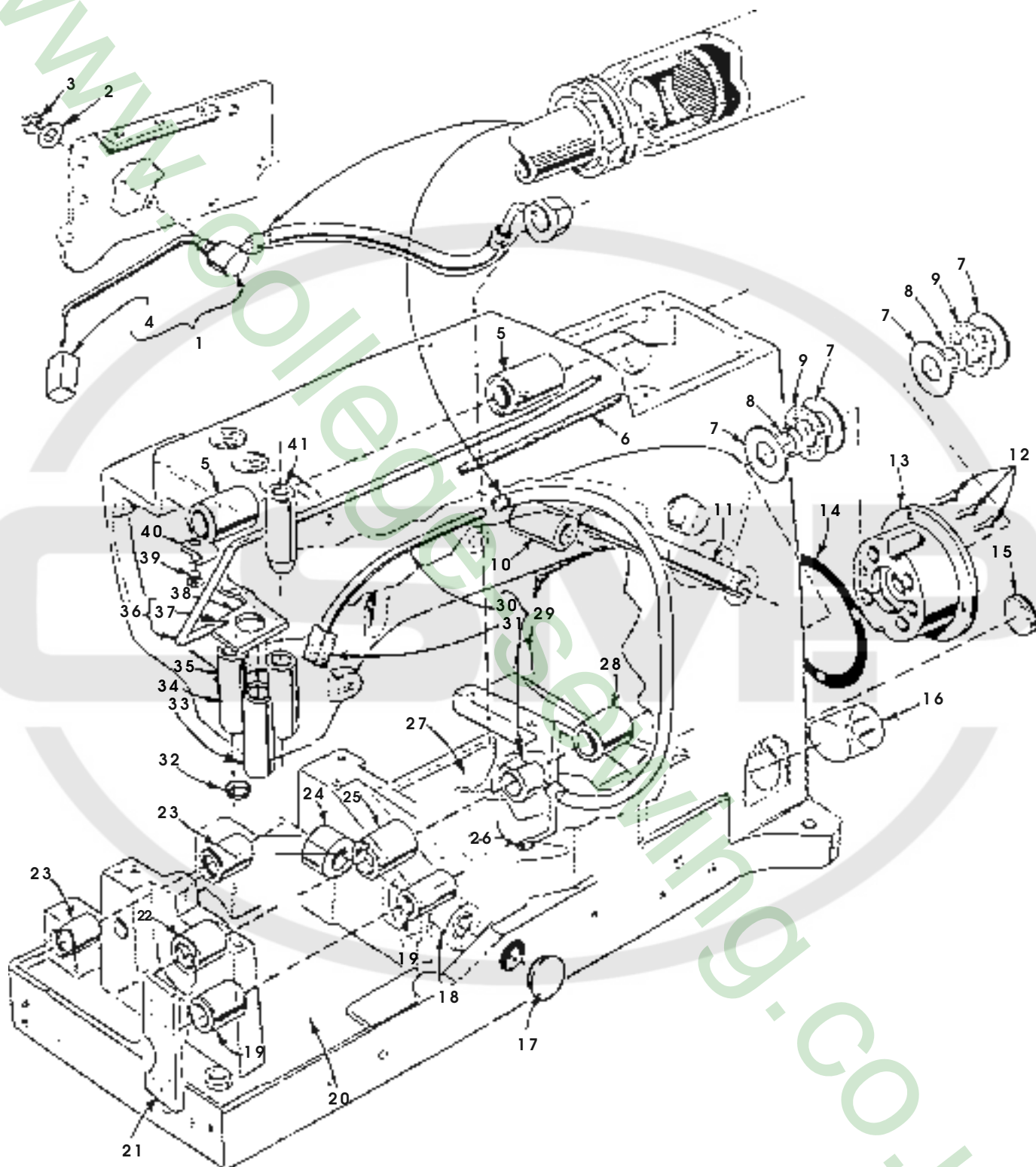
52. thru 88. See following page.



MISCELLANEOUS COVERS, GUARDS, THREAD GUIDES & CAST-OFF PLATE (CONT.)

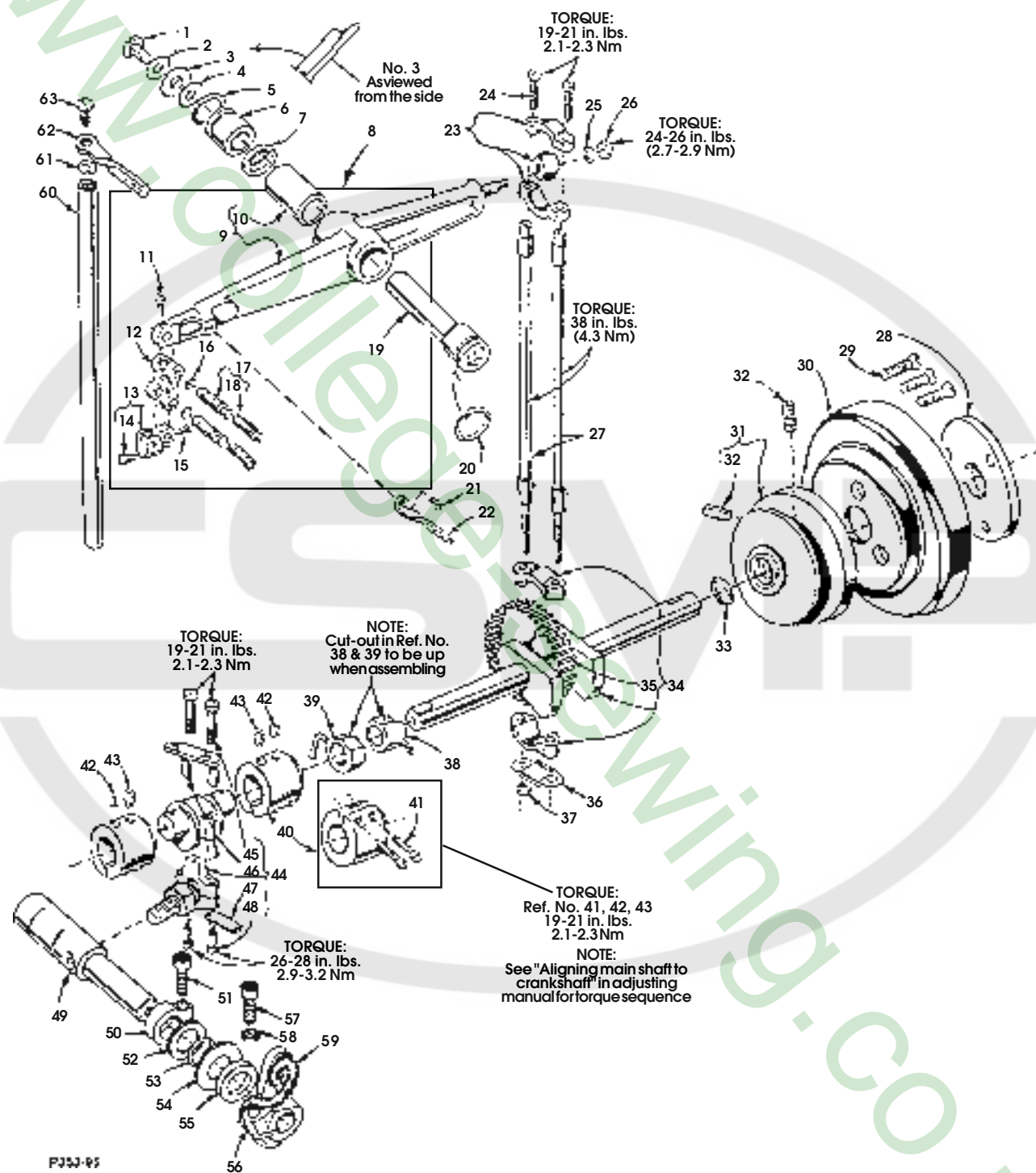
Ref. No.	Part No.	Description	Amt. Req.
1. thru 51. See preceding page.			
52.	57858B	Eyelet, spreader thread	1
53.	95	Set Screw	1
54.	57844C	Eyelet Mounting Plate	1
55.	34758	Needle Thread Guide	1
56.	57858A	Thread Guide Spring	1
57.	43296A	Base Nipper Spring	1
58.	22797	Screw	1
59.	57WB	Nipper Tension Plate	1
60.	15438C	Nipper Spring	1
61.	57WD	Screw, for nipper spring	1
62.	34844D	Spreader Thread Guide Mounting Plate	1
63.	28	Screw	1
64.	77	Screw	1
65.	57845E	Spreader Thread Guide	1
66.	22585A	Screw, for spreader thread mounting plate	1
67.	22513B	Screw, for spreader thread mounting plate	1
68.	57882K	Head Cover	1
69.	22539AB	Plug Screw, for head cover	1
70.	22541C	Screw, for head cover	2
71.	22851D	Screw, for head cover	2
72.	57882P	Gasket, for head cover	1
73.	22564B	Screw, for guide plate	4
74.	34831C	Guide Plate	2
75.	22539AA	Plug Screw, for bed	1
76.	22585A	Screw, for eyelet guard	1
77.	56470	Needle Thread Take-Up	1
78.	33795	Guard, for needle thread eyelet	1
79.	22894E	Screw, for needle lever stud	2
80.	660-617	Gasket, for needle lever eyelet	1
81.	99682XF	Needle Break Guard Assembly	1
82.	14077	Nut	1
83.	99683CN	Mounting Plate	1
84.	99682XC2	Bracket	1
85.	95978	Spring Washer	1
86.	56525F	Spacer	1
87.	99696A	Shield	1
88.	22758E	Shoulder Screw	1
89.	22766	Screw	2
90.	56525E	Sewing Guard	1

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LUBRICATION SYSTEM & BUSHINGS

Ref. No.	Part No.	Description	Amt. Req.
1.	59493A	Base Oil Pump Assembly	1
2.	660-230	Gasket	1
3.	258A	Nut	1
4.	666-214	Felt Intake	1
5.	57849	Bushing, for spreader rocker shaft	2
6.	CL21	Oil Wick	1
7.	56390H	Thrust Washer	4
8.	56390J	Pilot Ring	2
9.	660-665	Needle Thrust Bearing	2
10.	52883R	Bushing, for presser foot lifter	1
11.	21657X	Release Bushing	1
12.	22569B	Screw, for crankshaft bushing housing	3
13.	57890B	Crankshaft Bushing Housing	1
14.	56390E	Gasket, housing	1
15.	22539R	Oil Drain Plug	1
16.	51-902BLK	Oil Sight Gauge	1
17.	999-216K	Plug, for bed	1
18.	52942AB	Bushing, for looper drive lever shaft, front	2
19.	50-895BLK	Bushing, for looper rocker shaft	2
20.	56393P	Felt, base, front	1
21.	666-259	Felt	1
22.	56390	Main Shaft Bushing, left	1
23.	57836B	Bushing, for feed rocker shaft	2
24.	57842B	Bushing, for looper drive shaft, rear	1
25.	56190	Main Shaft Bushing, middle	1
26.	35897BV	Filter, for main shaft bushing	1
27.	56393Q	Felt, base, rear	1
28.	56390G	Main Shaft Bushing, right	1
29.	57893	Oil Pump Assembly, head	1
30.	57893A	Oil Tube	1
31.	666-214	Felt Intake	1
32.	660-739	Oil Seal	1
33.	51257AA	Presser Bar Bushing	1
34.	57847B	Spreader Bushing	1
35.	57854	Needle Bar Bushing, lower	1
36.	57893C	Oil Tube	1
37.	6-67-125	Felt	1
38.	56393W	Felt, Oil Attraction	1
39.	22585A	Screw, for clamp	1
40.	660-406	Clamp, for oil tube	1
41.	51154E	Needle Bar Bushing, upper	1

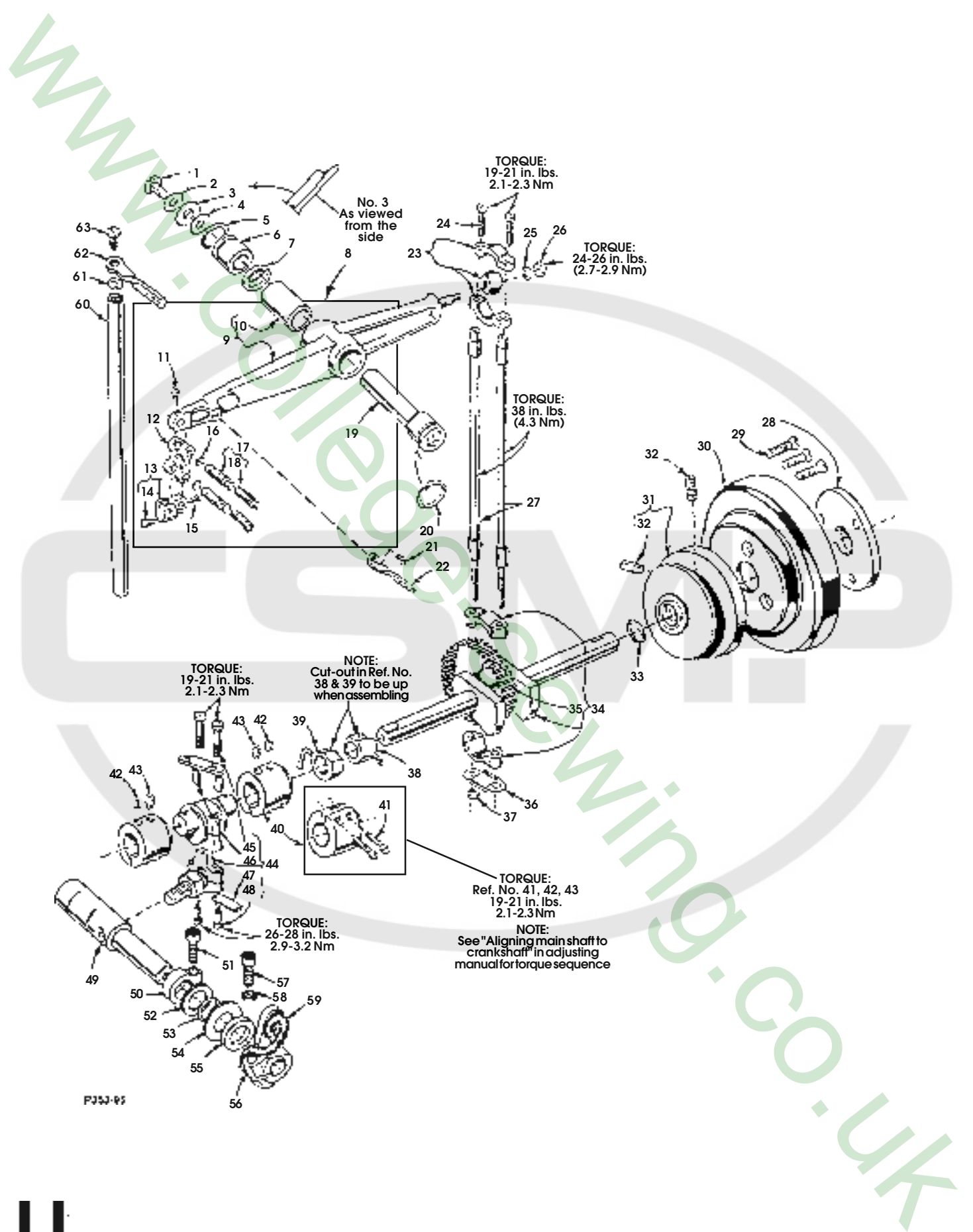


PJ53-95

CRANKSHAFT, NEEDLE LEVER, NEEDLE BAR & LOOPER DRIVE MECHANISM

Ref. No.	Part No.	Description	Amt. Req.
1.	22586R	Screw, for needle lever assembly	1
2.	51250V	Washer	1
3.	51250D	Washer	1
4.	56382AK	Gasket, for thrust collar	1
5.	660-625	"O" Ring	1
6.	56350J	Collar	1
7.	56350K	Torlon Washer	2
8.	29348AF	Needle Lever Assembly	1
9.	56315A	Needle Lever	1
10.	56350G	Bushing	1
11.	77	Screw	1
12.	56354D	Link, for needle bar	1
13.	51254K	Needle Bar Connection	1
14.	22562A	Screw	1
15.	22564	Screw	1
16.	660-215	Retaining Ring	4
17.	52336A	Link Pin	2
18.	WO3	Oil Wick	2
19.	56350D	Needle Lever Stud	1
20.	660-625	"O" Ring	1
21.	22768	Screw, for needle lever eyelet	1
22.	54458-9	Needle Lever Thread Eyelet	1
23.	29105BC	Ball Joint, for needle lever	1
24.	22559G	Screw, for ball joint	2
25.	51216N	Washer, for ball joint	1
26.	51216P	Nut, for ball joint	1
27.	56316	Needle Lever Connecting Rod	2
28.	61321L	Retaining Plate	1
29.	22574	Screw, for handwheel	3
30.	57821A	Handwheel	1

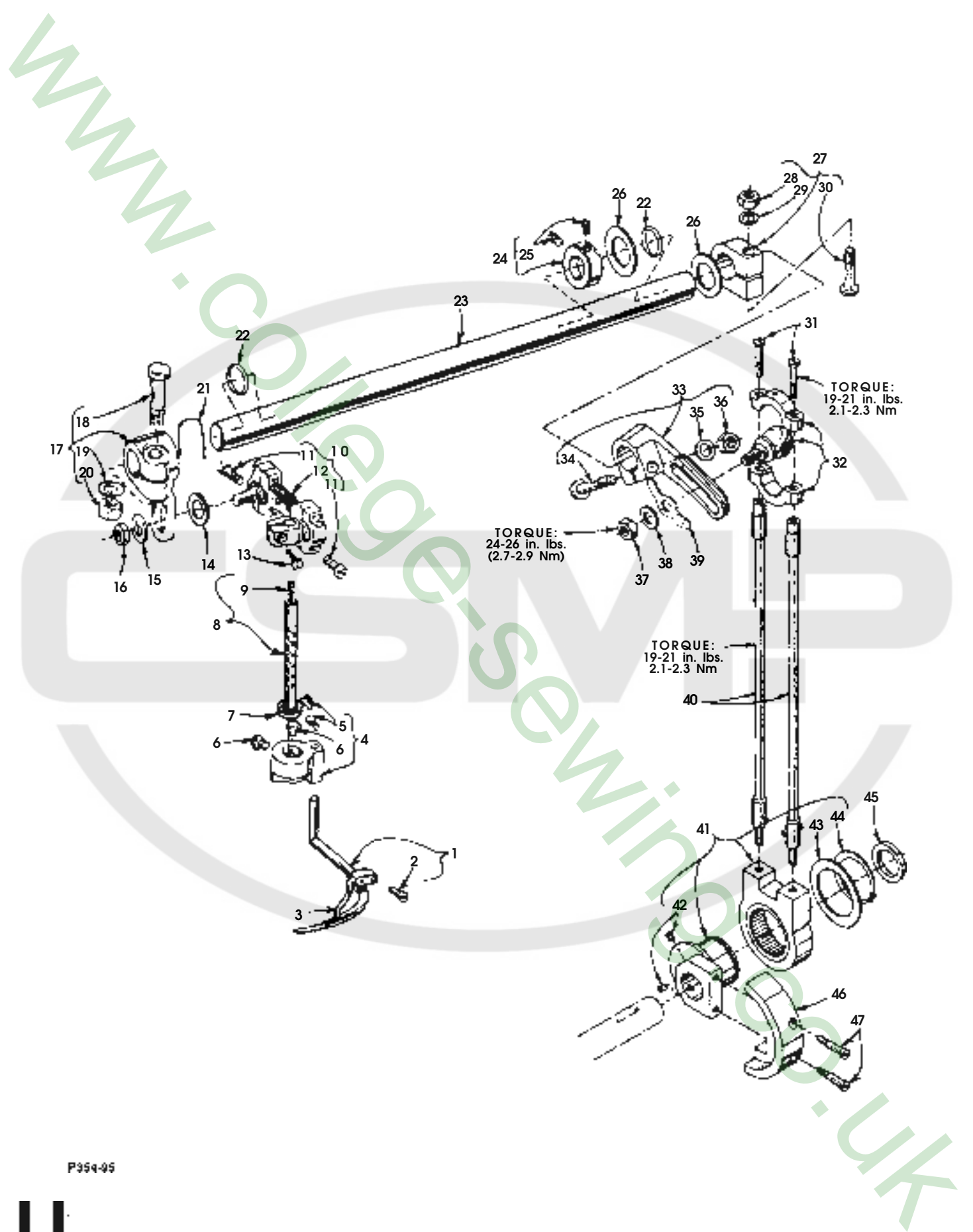
31. thru 61. See following page.



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CRANKSHAFT, NEEDLE LEVER, NEEDLE BAR & LOOPER DRIVE MECHANISM (CONT.)

Ref. No.	Part No.	Description	Amt. Req.
1. thru 30. See preceding page.			
31.	56321R	Pulley	1
32.	22894AB	Screw	2
33.	660-202	"O" Ring	1
34.	29476PC	Crankshaft Assembly	1
35.	51216M	Needle Bearing	28
36.	56316C	Connecting Rod Guide	1
37.	12934A	Nut, for connecting rod guide	1
38.	57893	Oil Pump Assembly, head (see page 15, ref. no. 29)	1
39.	59493A	Oil Pump Assembly, base (see page 15, ref. no. 1)	1
40.	56343F	Coupling, for looper drive lever	2
41.	22653L8	Screw, for looper drive lever coupling	2
42.	22894C	Set Screw, for looper drive lever coupling	2
43.	22894D	Spot Screw, for looper drive lever coupling	2
44.	29105AK	Looper Lever Crank Assembly	1
45.	22587K	Screw	2
46.	56343C	Ball Joint Guide	1
47.	56343E	Oil Splasher	1
48.	22559A	Screw	2
49.	52942AF	Looper Drive Lever Rocker Shaft	1
50.	34342J	Binder Clamp	1
51.	22652A12	Screw	1
52.	57849C	Thrust Washer	1
53.	660-202	"O" Ring	1
54.	56390H	Washer	1
55.	52951C	Thrust Washer	1
56.	56342K	Looper Drive Lever	1
57.	22882C	Screw	1
58.	51242M	Washer	1
59.	CL21	Oil Wick	1
60.	31117A	Needle Bar	1
61.	27-435BLK	Washer, for needle bar thread eyelet	1
62.	56958A	Needle Bar Thread Eyelet	1
63.	22768	Screw, for needle bar thread eyelet	1

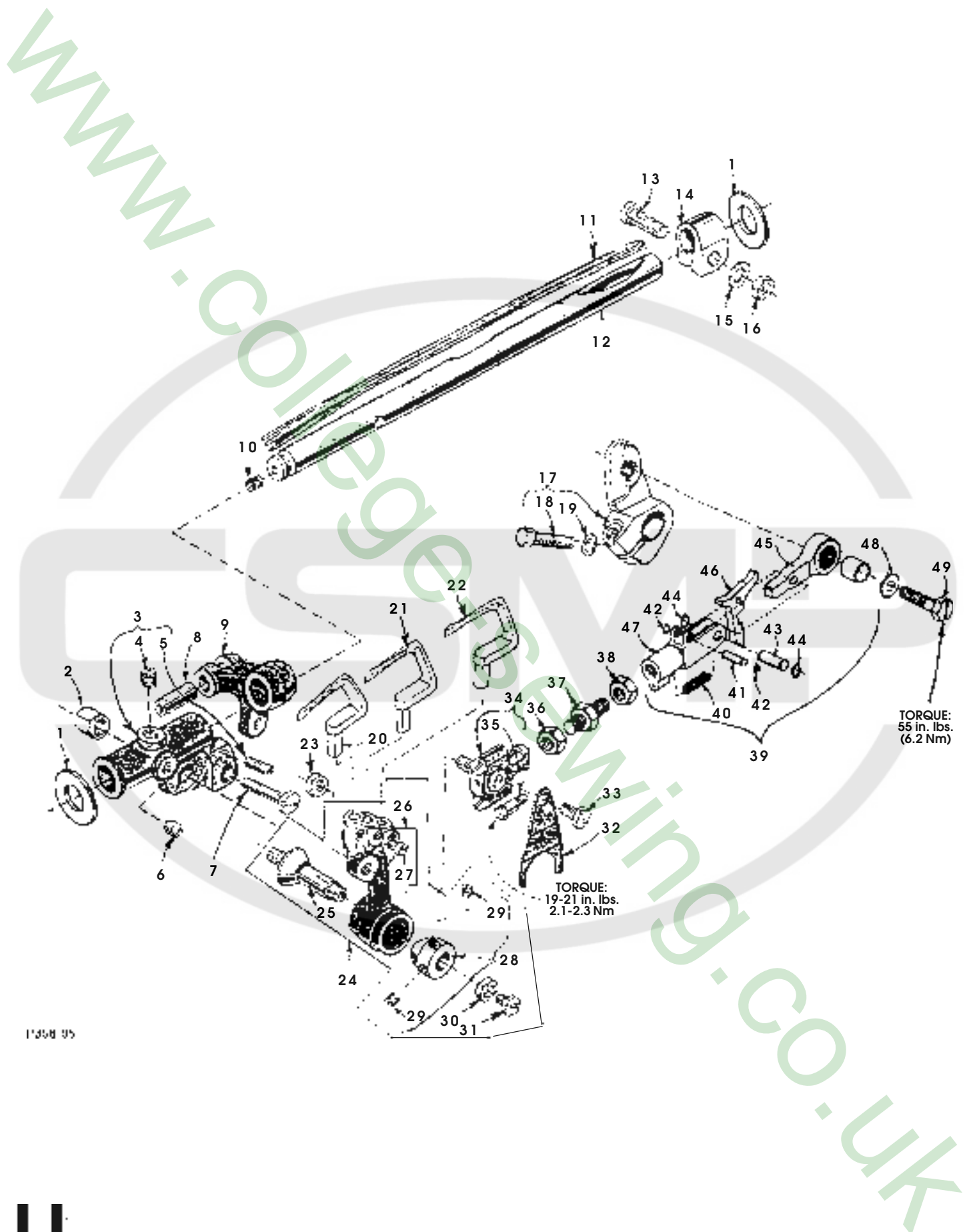


P354-05



SPREADER MECHANISM DRIVE

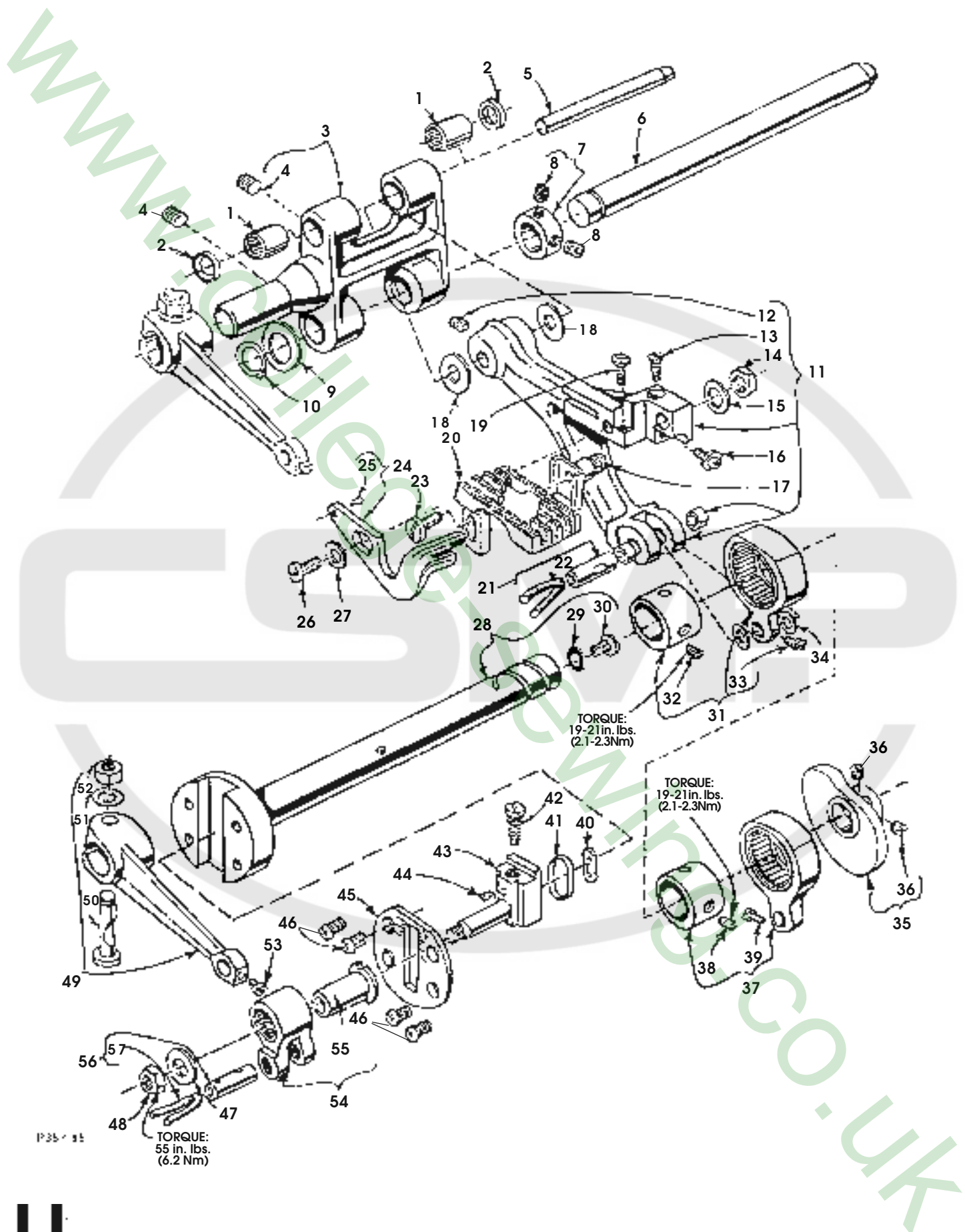
Ref. No.	Part No.	Description	Amt. Req.
1.	57845D	Spreader	1
2.	22738B	Screw	2
3.	57845F	Auxiliary Spreader	1
4.	57845G	Spreader Holder	1
5.	77	Screw	2
6.	94	Screw	2
7.	41332J	Thrust Washer	2
8.	34847A	Spreader Holder Drive Shaft	1
9.	WO3	Oil Wick	1
10.	57848E	Carrier Connecting Rod Assembly	1
11.	22729	Screw	4
12.	15430L	Oil Pad	1
-	WI30	Oil Wick	1
13.	93	Screw	1
14.	57835M	Washer, ball	1
15.	20	Washer, for carrier connecting rod assembly	1
16.	18	Nut, for carrier connecting rod assembly	1
17.	57849A	Spreader Rocker Shaft Arm	1
18.	55235D	Locking Stud	1
19.	6042A	Washer	1
20.	55235E	Nut	1
21.	CL35	Wick, for spreader rocker shaft collar	1
22.	999-232	"O" Ring, for spreader rocker shaft	2
23.	52849	Spreader Rocker Shaft	1
24.	57847	Crankshaft Thrust Collar	2
25.	95	Screw	2
26.	57849C	Washer	2
27.	57849D	Spreader Rocker Shaft Collar, inner	1
28.	55235E	Nut	1
29.	6042A	Washer	1
30.	55235D	Locking Stud	1
31.	22559G	Screw, for spreader connecting rod ball joint, upper	2
32.	29105BD	Spreader Connecting Rod Ball Joint, upper	1
33.	52952C	Segment Lever	1
34.	55235D	Locking Stud	1
35.	6042A	Washer	1
36.	55235E	Nut	1
37.	18	Nut, for spreader connecting rod ball joint	1
38.	HA20A	Washer	1
39.	57852B	Spacer	1
40.	52916	Connecting Rod	2
41.	29126CR	Spreader Drive Eccentric Assembly	1
42.	22597A	Screw	2
43.	52951B	Retaining Washer	1
44.	660-246	Retaining Ring	1
45.	52951C	Spacer Washer	1
46.	52947A	Counterweight	1
47.	22587H	Screw, for counterweight	2



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LOOPER ROCKER & CONNECTING ROD

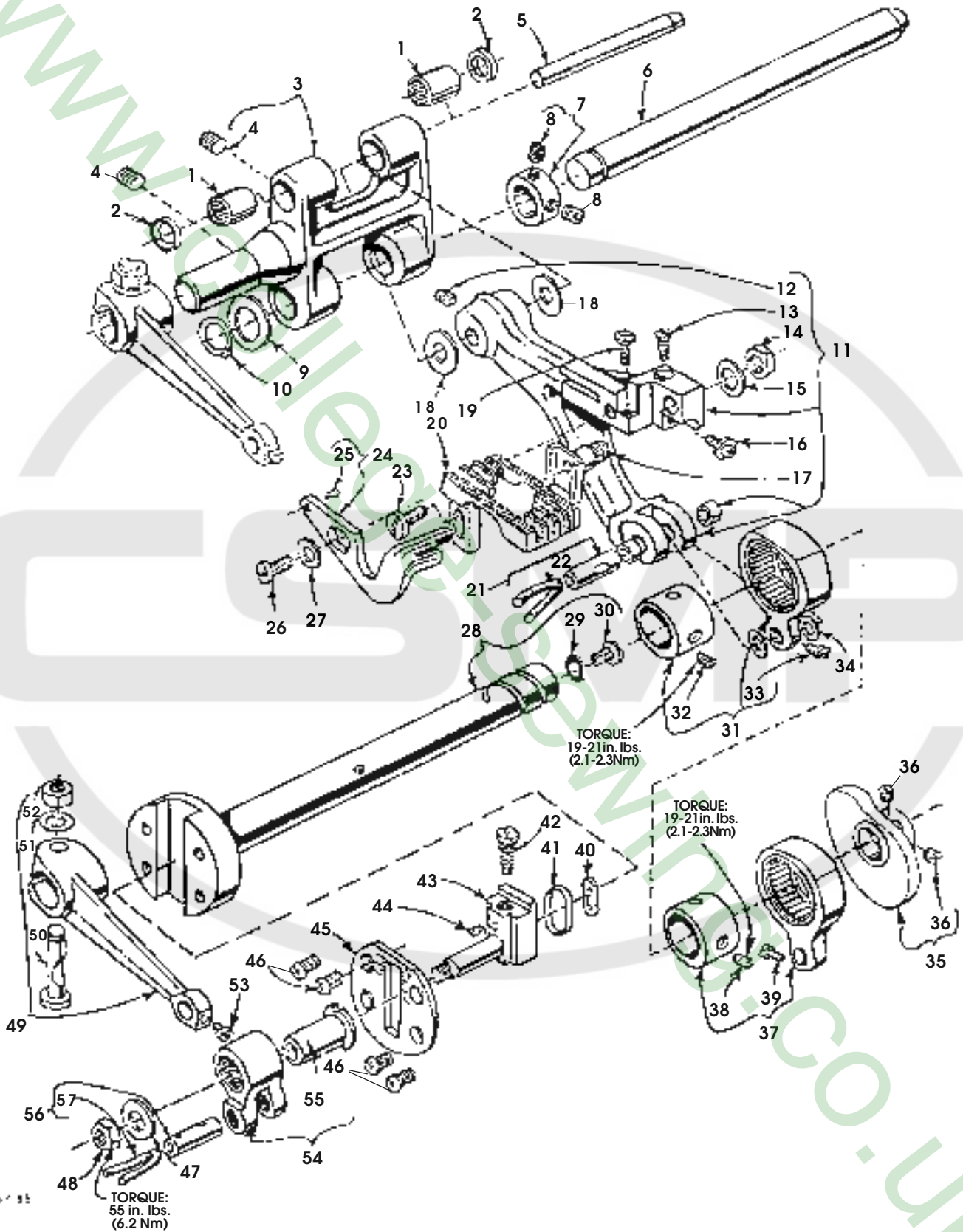
Ref. No.	Part No.	Description	Amt. Req.
1.	51244L	Thrust Washer	2
2.	51246	Nut, for looper rocker assembly	1
3.	56344C	Looper Rocker Frame	1
4.	98	Set Screw	1
5.	719	Stop Screw	1
6.	96	Spot Screw, for looper rocker frame	1
7.	22874	Lock Screw, for looper rocker frame	1
8.	51236J	Connecting Pin	1
9.	56344B	Looper Rocker Arm	1
10.	CO67E	Cork Plug, for looper rocker shaft	1
11.	WO3	Wool Yarn, for looper rocker shaft	1
12.	56344	Looper Rocker Shaft	1
13.	55244G	Stud, for looper rocker shaft collar	1
14.	51244N	Looper Rocker Shaft Collar	1
15.	51216N	Washer, for shaft stud	1
16.	18	Nut, for shaft stud	1
17.	56342K	Looper Drive Lever	1
18.	22882C	Screw	1
19.	20	Washer	1
20.	51908C24	Front Looper	1
21.	51909E24	Middle Looper	1
22.	51909F24	Rear Looper	1
23.	18	Nut	1
24.	29192AH	Looper Rocker Assembly	1
25.	51745	Stud Looper Rocker Cone	1
26.	56913B	Looper Rocker	1
27.	22565	Set Screw	3
28.	15465F	Cone	1
29.	88	Set Screw	2
30.	258	Nut	1
31.	22829	Screw	1
32.	56393J	Ball Joint Oiler	1
33.	87U	Screw , for ball joint oiler	1
34.	57841	Looper Connecting Rod Ball Joint	1
35.	22729C	Screw	2
36.	269	Nut, left hand thread	1
37.	51240D	Looper Connecting Rod	1
38.	18	Nut, right hand thread	1
39.	56341N	Looper Connecting Rod Assembly, right	1
40.	56341V	Spring	1
41.	56341T	Pin	1
42.	660-210	Retaining Ring	2
43.	56341W	Pin	1
44.	660-310	Retaining Ring	2
45.	56341P	Looper Connecting Rod	1
46.	56341S	Lever	1
47.	56341R	Housing	1
48.	20	Washer	1
49.	627	Screw	1



FEED MECHANISM, MAIN SHAFT & TAKE-UP

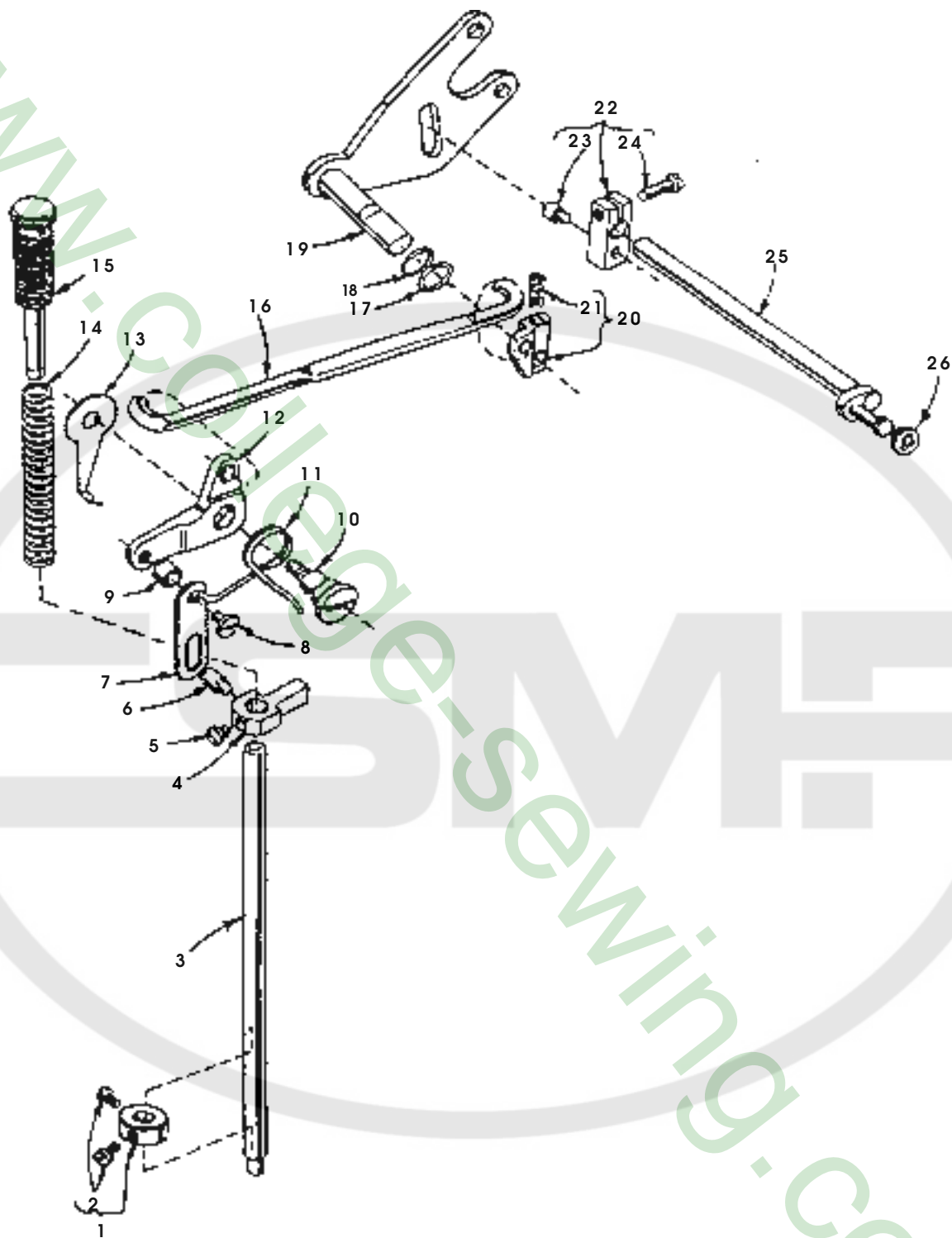
Ref. No.	Part No.	Description	Amt. Req.
1.	660-1009	Needle Bearing	2
2.	56384	Seal	2
3.	56335B	Feed Rocker	1
4.	22651CD4	Screw	2
5.	56334B	Feed Bar Shaft	1
6.	56335L	Feed Rocker Shaft	1
7.	56335D	Feed Rocker Shaft Collar	1
8.	98	Screw	2
9.	41391	Feed Rocker Shaft Thrust Washer	1
10.	660-438	Retaining Ring	1
11.	56334N	Feed Bar Assembly	1
12.	22651CB4	Screw	1
13.	22637P24	Feed Dog Height Adjusting Screw	1
14.	258A	Nut	1
15.	6042A	Washer, for feed dog holder	1
16.	22863C	Feed Dog Holder Adjusting Screw	1
17.	56334L	Feed Dog Holder	1
18.	61341J	Feed Bar Washer	2
19.	22834A	Needle Guard Adjusting Screw	2
20.	-----	Feed Dog (See Page 35)	1
21.	51236J	Link Pin	1
22.	WO3	Oil Wick	1
23.	22528	Screw, for feed dog	1
24.	56525D	Needle Guard	1
25.	22801	Screw	1
26.	22875H	Screw, for needle guard	1
27.	61434G	Washer	1
28.	56122A	Main Shaft	1
29.	56322B	Gasket	1
30.	22891B	Oil Flow Regulating Screw	1

31. thru 57. See following page.



FEED MECHANISM, MAIN SHAFT & TAKE-UP (CONT.)

Ref. No.	Part No.	Description	Amt. Req.
1. thru 30. See preceding page.			
31.	29476NM080	Feed Lift Eccentric Assembly, .080", (2.03 mm) throw	1
32.	22894AA	Set Screw	1
33.	77	Screw	1
34.	39543N	Thrust Washer, for feed bar	2
35.	56323B	Looper Thread Take-Up	1
36.	22580D	Set Screw	2
37.	29476NM062	Looper Avoid Eccentric Assembly, .062", (1.58 mm) throw	1
38.	22894AA	Set Screw	1
39.	77	Screw	1
40.	56336D	Feed Crank Stud Insert	1
41.	660-269B	Quad Ring	1
42.	22543A	Stitch Regulating Screw	1
43.	56336	Feed Crank Stud, marked "A"	1
44.	22798C	Screw	1
45.	56322C	Main Shaft Head Plate	1
46.	22525A	Screw	4
47.	21657E	Washer	1
48.	269	Nut, left thread	1
49.	56335S	Feed Rocker Arm	1
50.	55235D	Locking Stud	1
51.	6042A	Washer	1
52.	55235E	Nut	1
53.	77	Screw, for link pin	1
54.	56336K	Feed Crank Link Pin	1
55.	56336C	Feed Crank Link Ferrule	1
56.	51236J	Feed Crank Link	1
57.	WO3	Oil Wick	1



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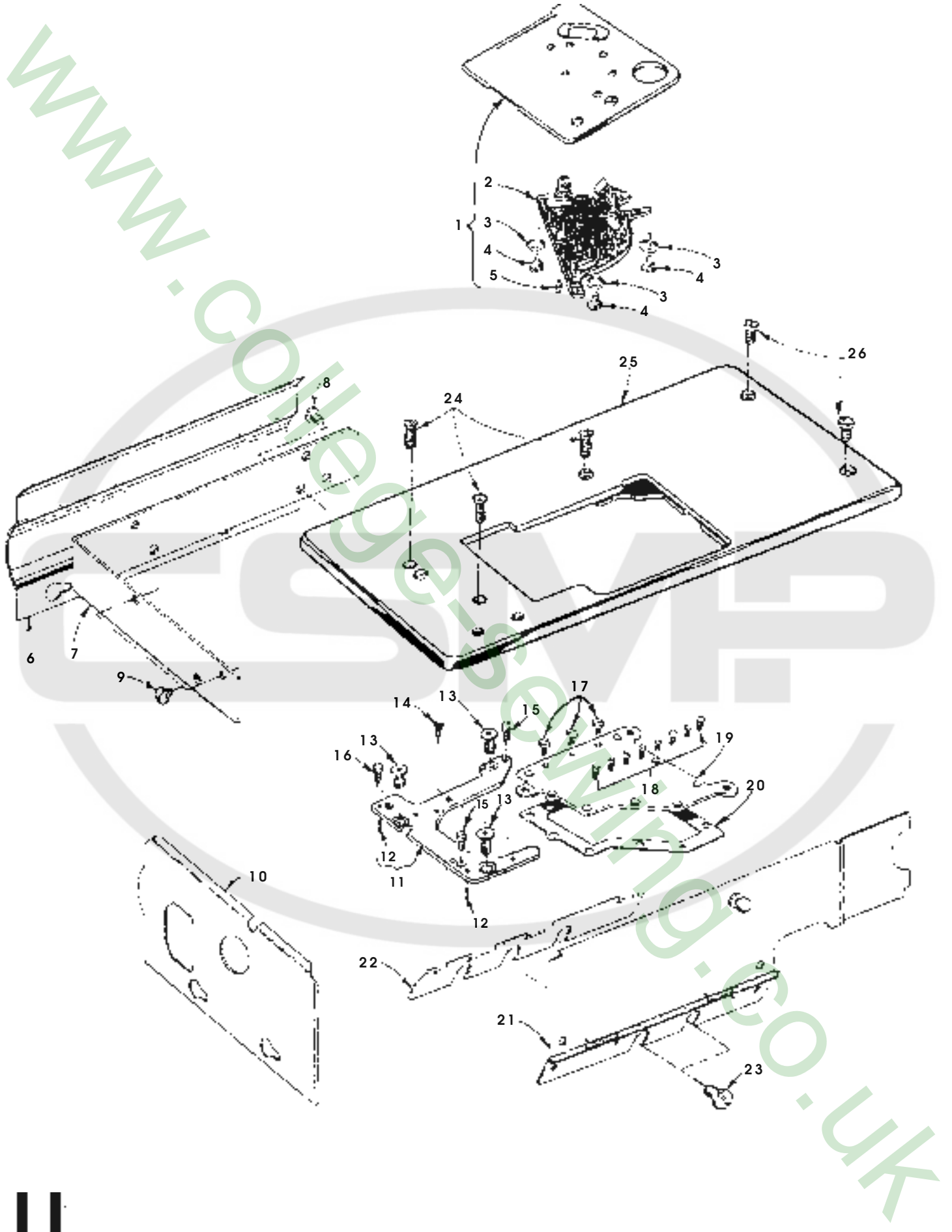
PRESSER FOOT LIFTER MECHANISM

Ref. No.	Part No.	Description	Amt. Req.
1.	50356B	Collar, for presser bar stop	1
2.	22564D	Screw, for collar	2
3.	51257K	Presser Bar	1
4.	51257M	Presser Bar Guide	1
5.	22596F	Screw	1
6.	22892E	Screw, for presser bar guide	1
7.	34883	Lifter Lever Link	1
8.	99392A	Screw, for lifter lever link	1
9.	57883	Spacer Bushing	1
10.	22557G	Screw	1
11.	56383D	Spring, for lifter lever	1
12.	34383BA	Lifter Lever	1
13.	57893B	Head Oil Tube Clamp	1
14.	51256C	Presser Bar Spring	1
15.	56356	Regulator, for presser spring	1
16.	56383AB	Lifter Rod	1
17.	39552C	Washer, for lifter lever	1
18.	660-207	"O" Ring, for lifter lever	1
19.	51283H	Lifter Lever	1
20.	53783N	Lifter Lever, internal	1
21.	22537	Screw	1
22.	21657Y	Lifter Lever Connection, tension release	1
23.	402	Screw	1
24.	22596	Screw	1
25.	21657W	Lifter Lever Shaft	1
26.	660-283A	Retainer Washer	1

INTERLEAF

THREAD TENSION ASSEMBLY

Ref. No.	Part No.	Description	Amt. Req.
1.	29477NK	Thread Tension Assembly	1
2.	NS6110420SP	Nut	7
3.	57865	Lead-In Thread Guide	7
4.	57892M	Tension Post Support	1
5.	57892K	Tension Thread Eyelet	7
6.	21657AP	Tension Disc Separator	1
7.	56392G	Tension Post	7
8.	B3120704000	Tension Disc Felt	7
9.	B3126012000	Tension Disc	14
10.	B3120352000	Tension Disc Felt	7
11.	56392H	Spring Shield	7
12.	51292F8	Spring, needle thread tension (neutral)	3
13.	B3101804000	Spring, spreader thread tension (red)	1
-	B3103804000	Spring, looper thread tension (blue)	3
14.	B3112704000	Ferrule, tension spring	7
15.	56392R	Knob, needle thread tension (neutral)	3
-	56392L	Knob, spreader thread tension (red)	1
-	56392M	Knob, looper thread tension (blue)	3



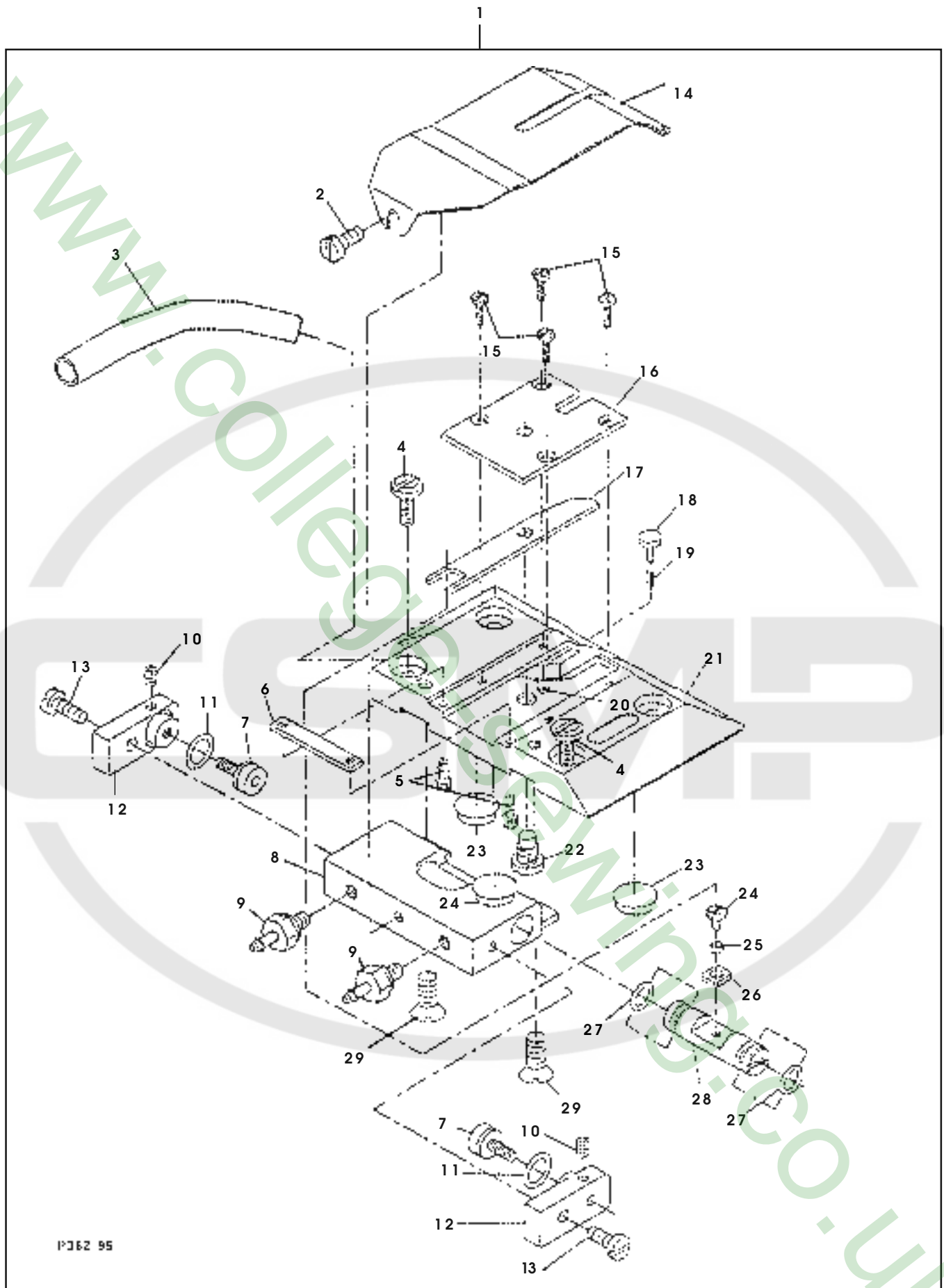
COVERS & MISCELLANEOUS PARTS

Ref. No.	Part No.	Description	Amt. Req.
1.	56381-212	Cloth Plate Cover	1
2.	51281AC	Cloth Plate Cover Spring	1
3.	35772H	Spring Washer	3
4.	22760A	Screw, for spring washer	3
5.	22845B	Screw	1
6.	G51381BD	Oil Shield, rear	1
7.	G51382BA	Bracket, for oil shield	1
8.	22848	Screw, for oil shield bracket	3
9.	99295	Screw, for oil shield, left rear.....	4
10.	G51381BA	Oil Shield, left	1
11.	56380	Throat Plate Support	1
12.	51280J	Dowel Pin	2
13.	660-313	Well Nut	3
14.	22524	Screw, for throat plate	2
15.	18-1424	Screw, for throat plate support	1
16.	22839	Screw, for throat plate support	2
17.	22585A	Screw, for oil reservoir cover, back	3
18.	22524	Screw, for oil reservoir cover, top	8
19.	56382G	Oil Reservoir Cover, top	1
20.	56382AW	Gasket	1
21.	51282AJ	Hinged Oil Shield	1
22.	52978Z	Shim	1
23.	25S	Screw, for hinged oil shield	2
24.	22526C	Screw, for cloth plate	3
25.	56301F	Cloth Plate	1
26.	22839C	Screw, for cloth plate	2

INTERLEAF

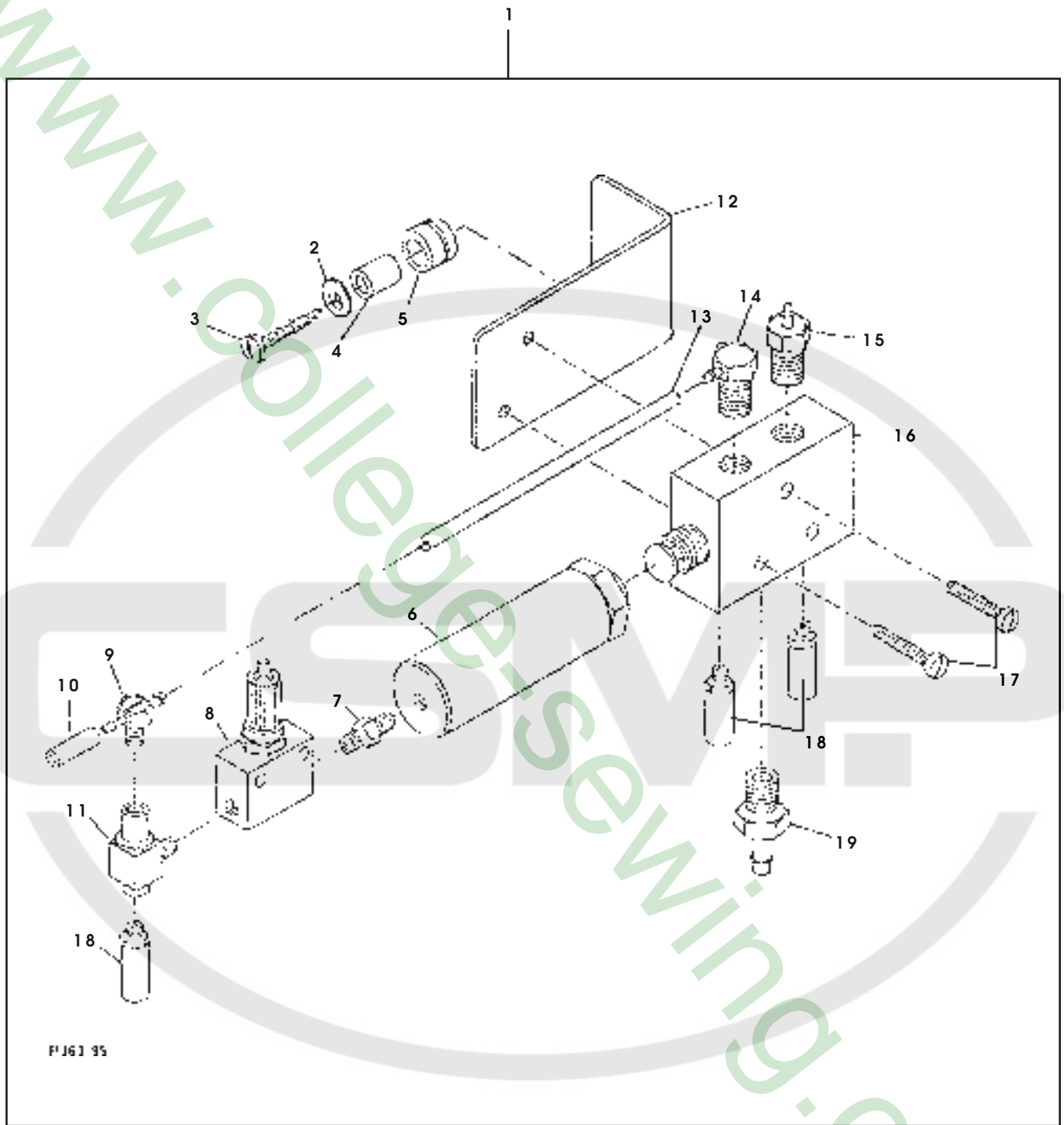
PRESSER FOOT, THROAT PLATE & FEED DOG

Ref. No.	Part No.	Description	Amt. Req.
1.	50318W24	Needle Head	1
2.	28	Screw	1
3.	28C	Set Screw	3
4.	50342BC	Thread Eyelet	1
5.	A9770S24	Presser Foot	1
6.	51390K	Presser Foot Shank	1
7.	91	Screw	1
8.	22840A	Screw	1
9.	51430F	Nut	1
10.	51930L	Presser Foot Bottom	1
11.	22779AK	Hinge Screw	1
12.	57824G24	Throat Plate	1
13.	51405AG24	Feed Dog	1



CHAIN CUTTER ASSEMBLY
FOR STYLE FS113L112MBV096

Ref. No.	Part No.	Description	Amt. Req.
1.	CL80-0511-01	Chain Cutter Assembly	1
2.	CL01-3066-41	Screw, for guard	1
3.	CL02-1689-01	Exhaust Tube	1
4.	CL01-3066-51	Screw, for main body	4
5.	CL33-3204-04	Screw, for hold-down plate	2
6.	CL02-1649-01	Plate, hold-down	1
7.	CL10-1385-01	Piston Stop Cushion	2
8.	CL02-1640-01	Body, Driver	1
9.	CL30-1133-01	Hose Fitting	2
10.	CL33-2106-03	Set Screw, for end cap.....	2
11.	CL30-2700-01	"O" Ring, for end cap	2
12.	CL02-1642-01	End Cap	2
13.	CL01-3066-11	Screw, for end cap	2
14.	CL02-1657-02	Guard	1
15.	CL01-3057-02	Screw, for stationary blade	4
16.	CL02-1647-01	Blade, stationary	1
17.	CL02-1648-01	Blade, movable	1
18.	CL02-1673-01	Pin	1
19.	CL30-2750-01	Spring	1
20.	CL02-1613-01	Bushing	1
21.	CL02-1645-01	Main Body	1
22.	CL02-1650-01	Stud	1
23.	CL30-1385-01	Rubber Mount	3
24.	CL01-6003-035	Screw, for piston	1
25.	CL01-1819-11	Bushing	1
26.	CL02-1644-01	Slide	1
27.	CL30-1280-01	"O" Ring, for piston	2
28.	CL02-1641-01	Piston	1
29.	CL33-0308-05	Screw, for driver body	2



SHUTTLE VALVE ASSEMBLY
FOR STYLE FS113L112MBV096

Ref. No.	Part No.	Description	Amt. Req.
1.	CL80-0512-01	Shuttle Air Valve Assembly	1
2.	CL33-1710-01	Washer	1
3.	CL33-2010-16	Screw	1
4.	CL01-4174-01	Spacer, for grommet	1
5.	CL30-0593-01	Grommet	1
6.	CL30-2122-01	Actuator	1
7.	CL30-1749-01	Coupling	1
8.	CL30-0819-01	Flow Control	1
9.	CL30-2145-01	Tee	1
10.	CL30-1134-01	Tubing	1
11.	CL30-1615-01	Quick Dump Valve	1
12.	CL02-1662-01	Bracket	1
13.	CL30-1540-01	Tubing	1
14.	CL30-1781-01	Elbow	1
15.	CL30-1691-01	Fitting	1
16.	CL30-2310-01	Valve	1
17.	CL33-0106-12	Screw, for bracket	2
18.	CL30-2385-01	Muffler	3
19.	CL30-1106-01	Fitting	1

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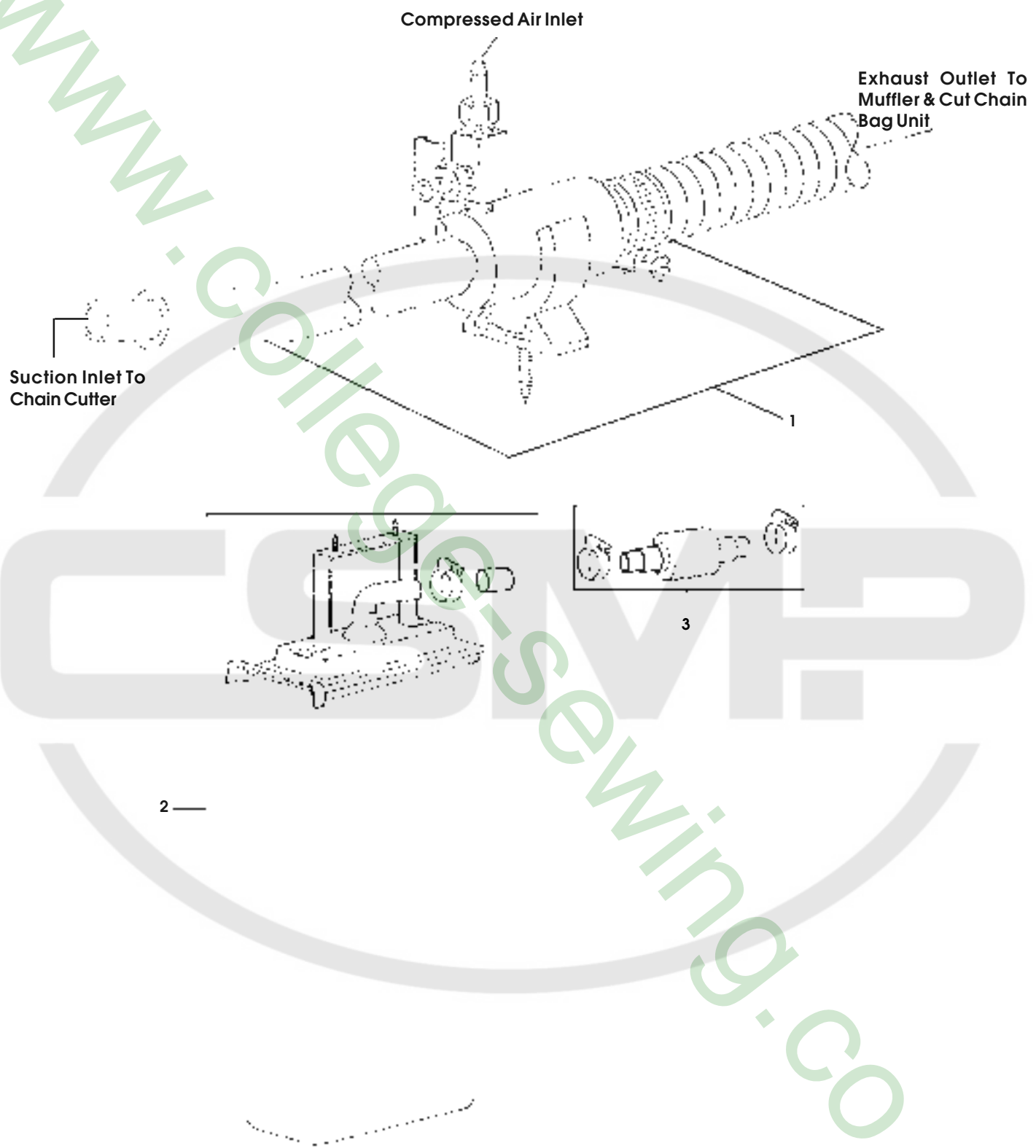
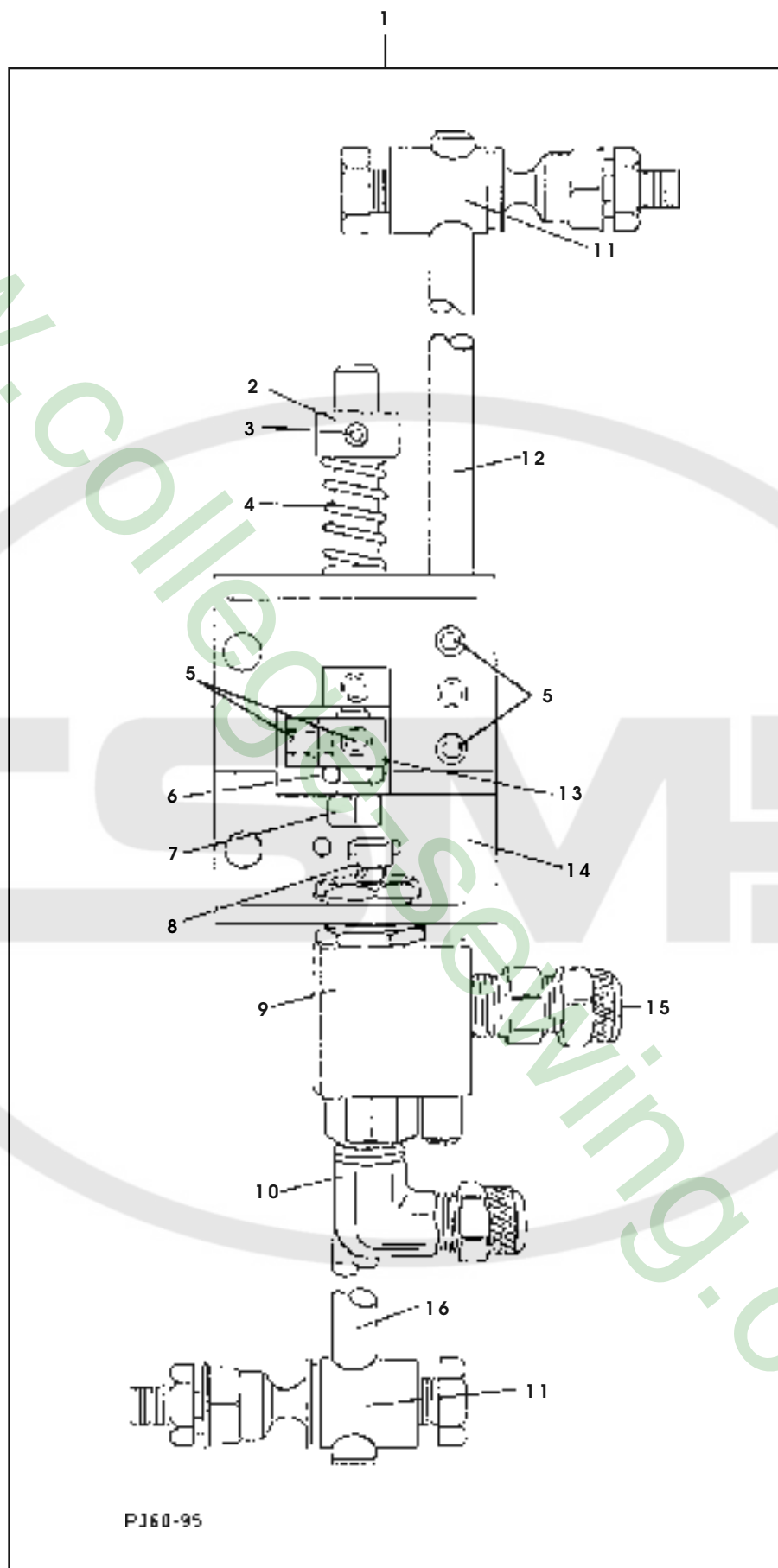


FIGURE 1

MUFFLER/ CHAIN RECOVERY SYSTEM

FOR STYLE FS113L112MBV096

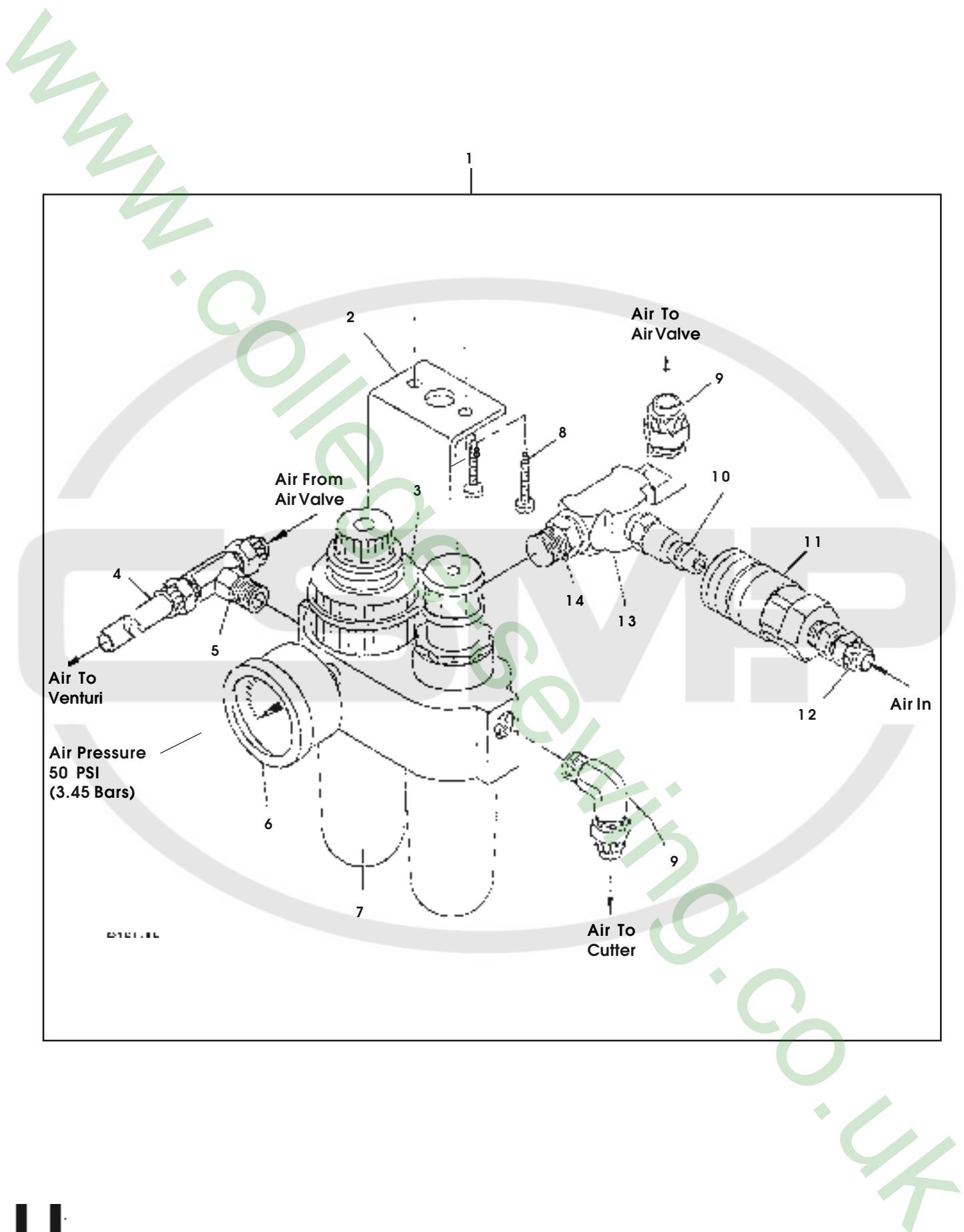
Ref. No.	Part No.	Description	Amt. Req.
1.	TBV200	Chain Removal Assembly	1
2.	671B50	Cut Chain Bag Unit	1
3.	MPL100MOD	Muffler Unit	1



TREADLE OPERATED AIR VALVE ASSEMBLY

FOR STYLE FS113L112MBV096

Ref. No.	Part No.	Description	Amt. Req.
1.	CL80-6093-02	Air Valve Assembly, treadle operated	1
2.	CL30-0148-01	Collar	1
3.	CL33-2810-04	Set Screw, for collar	1
4.	CL30-0290-01	Spring	1
5.	CL33-2210-04	Set Screw, for actuator	4
6.	CL33-1610-01	Hex Nut, for actuator	1
7.	CL33-1410-06	Screw, for actuator housing	1
8.	CL01-6930-01	Limit Button	1
9.	CL30-1132-01	Air Valve	1
10.	CL30-0284-01	Elbow	1
11.	CL30-0931-01	Ball Joint	2
12.	CL01-2491-01	Treadle Rod, upper	1
13.	CL01-5406-01	Actuator	1
14.	CL01-2488-01	Housing	1
15.	CL30-0283-01	Air Fitting	1
16.	CL01-2492-01	Treadle Rod, lower	1

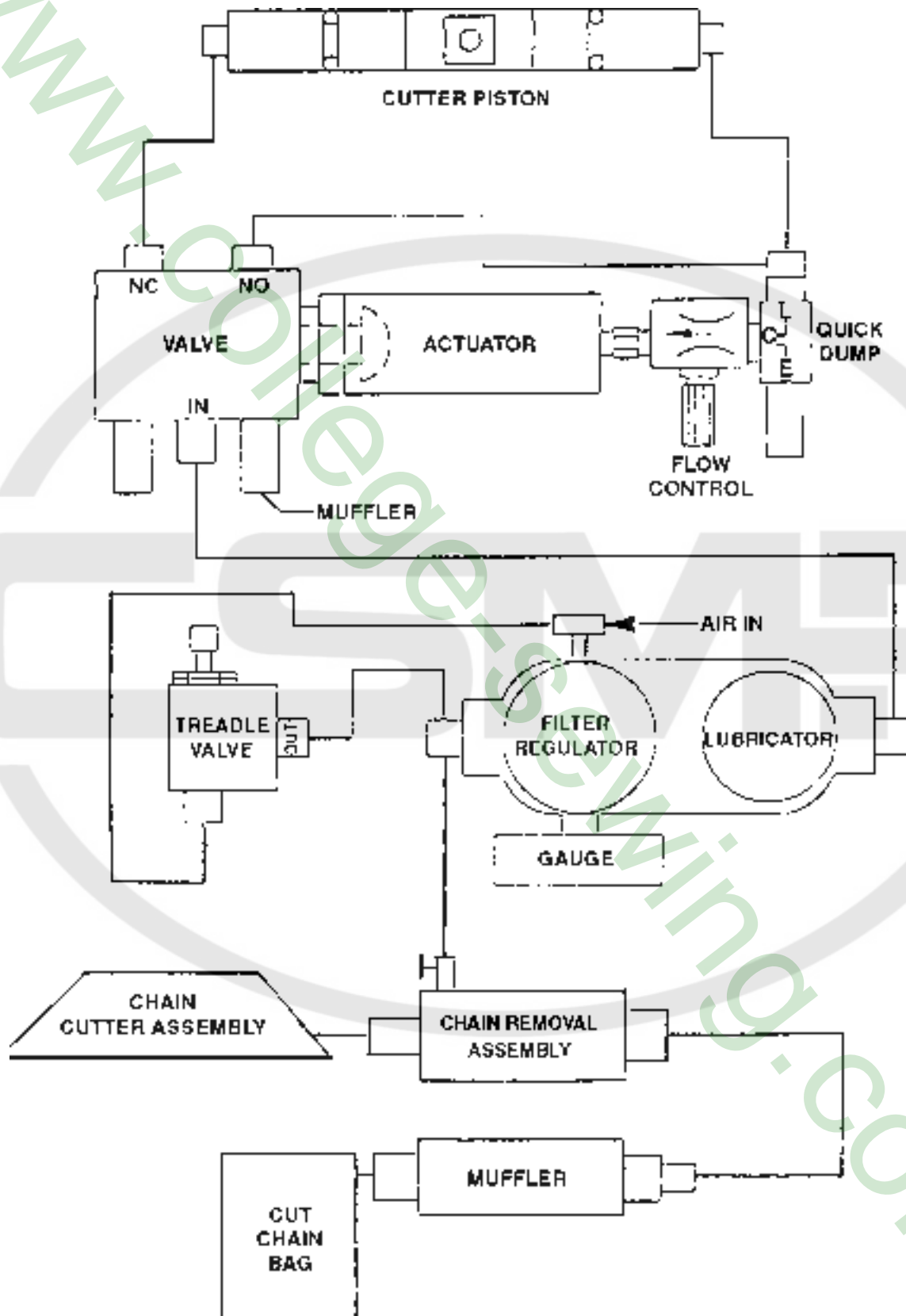


FILTER, REGULATOR, LUBRICATOR, GAUGE ASSEMBLY

FOR STYLE FS113L112MBV096

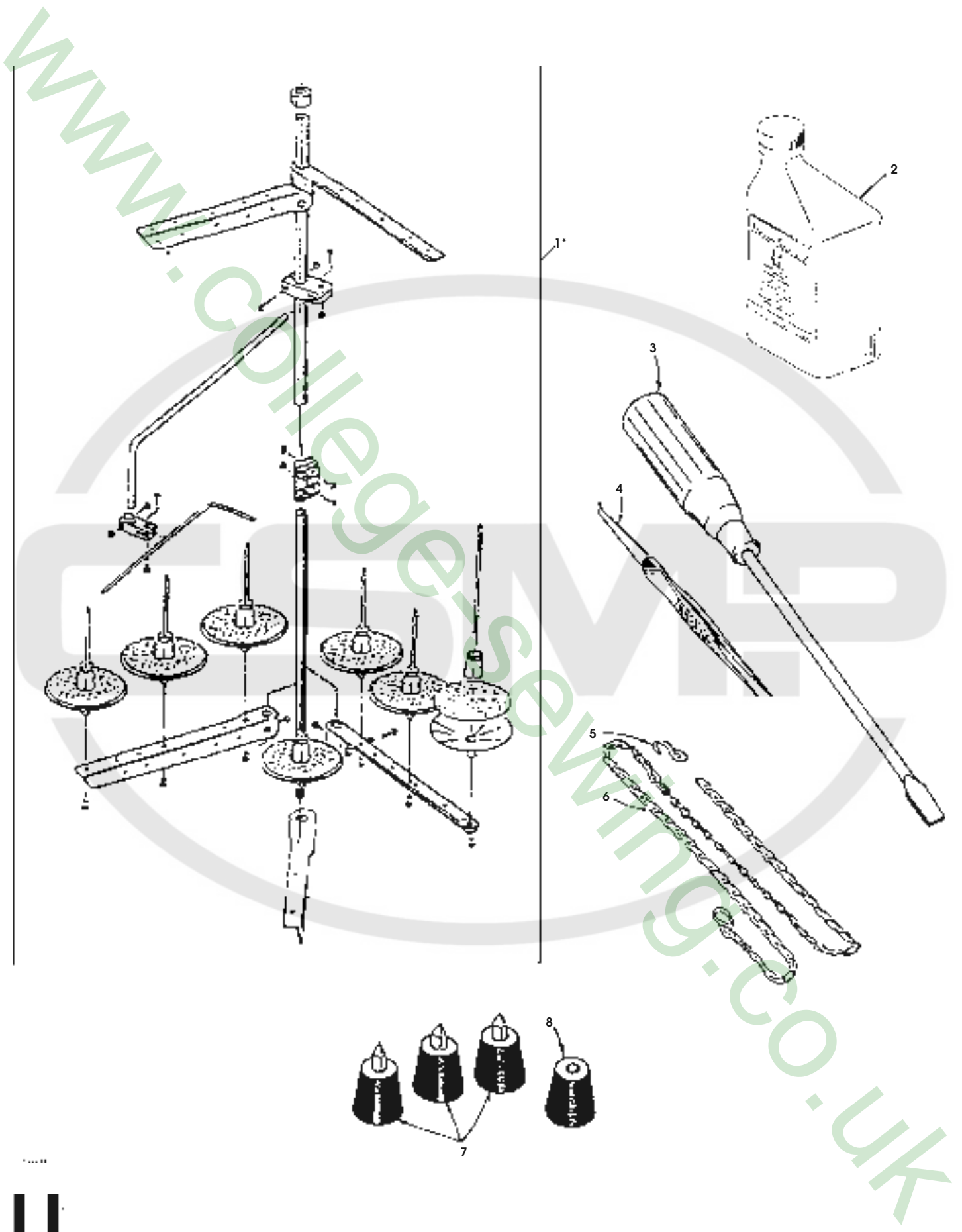
Ref. No.	Part No.	Description	Amt. Req.
1.	CL80-0415-04	Filter, Regulator, Lubricator, Gauge Assembly	1
2.	CL01-4528-01	Bracket	1
3.	CL30-0899-01	Mounting Nut	1
4.	CL30-0287-01	Tubing	1
5.	CL30-0840-01	Tee	1
6.	CL30-2146-01	Gauge	1
7.	CL30-2347-01	Filter, Regulator, Lubricator	1
8.	CL33-2010-12	Screw, for bracket	2
9.	CL30-0284-01	Elbow	2
10.	CL30-0277-01	Male Disconnect	1
11.	CL30-1048-01	Female Disconnect	1
12.	CL30-0283-01	Air Fitting	1
13.	CL30-0280-01	Tee	1
14.	CL01-6351-01	Blind Nipple	1

AIRCIRCUITDIAGRAM FOR STYLE FS113L112MBV096



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NOTES



ACCESSORIES

Ref. No.	Part No.	Description	Amt. Req.
1.	21101W8	*Thread Stand	1
2.	28604R	Container of Oil (1 pint)	1
3.	G21201	Screwdriver	1
4.	660-240	Thread Tweezers	1
5.	660-264	"S" Hook	2
6.	421D34	Chain	1
7.	51295B	Isolator	3
8.	51295A	Isolator	1
9.	660-457	Plastic Cover (not shown)	1

*Note: Thread Stand to be setup for (7) thread cones only.
 Install 7th cone support disc on second mounting hole of short support bracket.
 Also transfer one of the two plastic eyelet inserts of the thread guide bracket to the
 second hole to ensure thread is pulled off cone properly.

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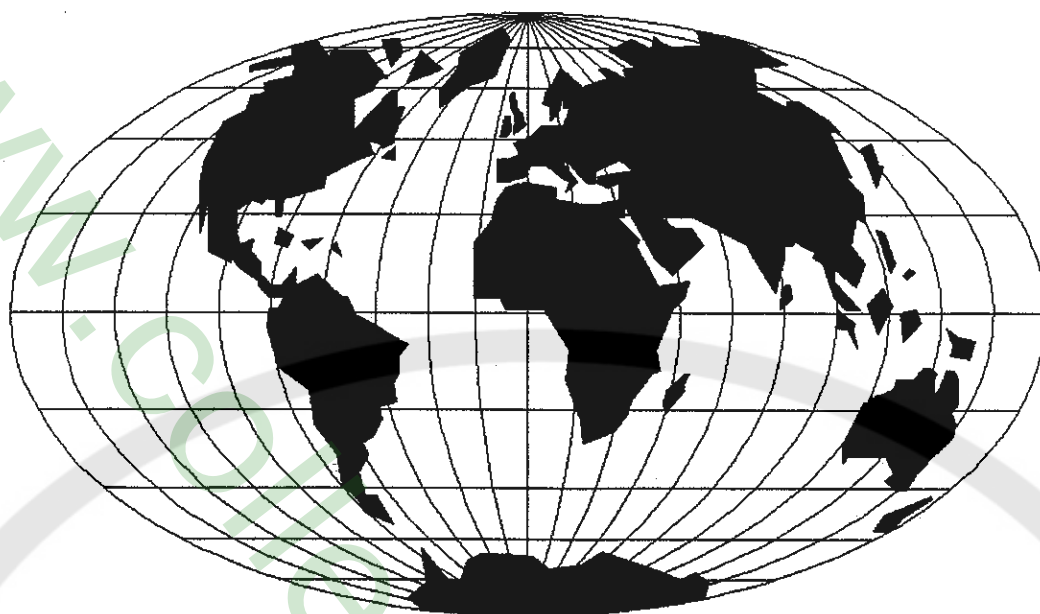
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