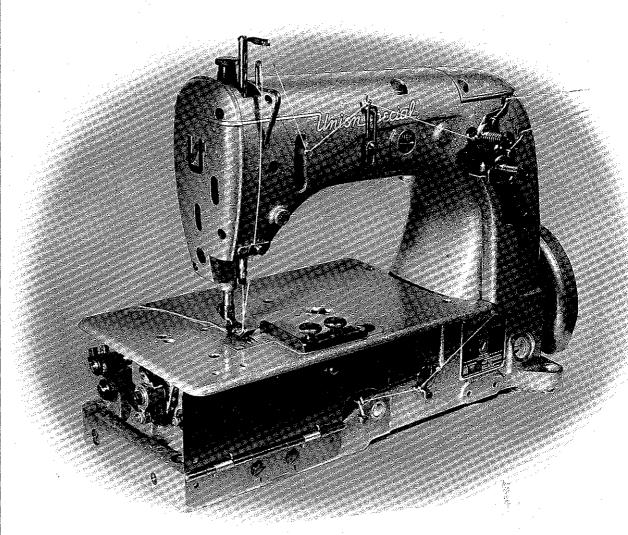


# Union Special SEWING MACHIN

**CLASS** 51300



CATALOG No. 104V

LIST OF PARTS **FOR STYLE 51300BV** 

# Union Special CORPORATION

CHICAGO

# Here are Oil Specifications for Union Special Sewing Machines

Specification 174 specifies a high quality petroleum oil, viscosity 100 seconds at 100°F. Recommended for all oiling applications on high speed machines.

Specification 175 specifies a high quality petroleum oil, viscosity 100 seconds at 100°F., water white or with a maximum A.S.T.M. color number of 1. For use where freedom from oil staining is paramount.

**Specification 87** specifies a high quality petroleum oil, viscosity 300 seconds at 100°F.

Specification 100 specifies a general purpose high quality grease for use in ball bearings and transmitters. It is similar to commercial N.L.G.I., grease No. 3. Where No. 3 grease is not obtainable, No. 2 may be used

#### **UNION SPECIAL**

OTTION SI EQUAL				
SPECIFICATION NO.	174	175	87	
Viscosity S.S.U. at 100°F	90-125	90-125	300-350	
Flash (Min.)	350	350	350	
Pour (Max.)	20	20	20	
Color A.S.T.M. (Max.)	3	1	3	
Neutralization No. (Max.)	0.10	0.10	0.10	
Viscosity Index				
(D & D Min.)	85	85	85	
Compounding	None	None	None	
Copper Corrosion (Max.)	1A	1A	1A	
*Anline No.	175-225	175-22	5 175-225	

\*Used with Buna N Rubber "O" Retainers



NOTE 1: The use of non-corrosive additives in oils meeting above classification is desirable but not essential. These may include:

- 1. Oxidation inhibitors
- 2. Rust inhibitors
- 3. Lubricity additives
- 4. Anti-oxidants
- 5. Film strength additives

These additives must be completely soluble in the oil and not removable by wick feeding nor shall they separate.

NOTE 2: Oils containing the following type additives shall not be used at any time:

- 1. Extreme pressure additives—corrosive
- 2. Tackiness or adhesive additives
- 3. Lead soap additives
- 4. Detergents



### Catalog No. 104 V (Supplement to Catalog No. 104 L)

LIST OF PARTS

**CLASS 51300** 

Style

51300 BV

First Edition

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Printed in U.S.A.

#### IDENTIFICATION OF MACHINES

Each Union Special machine is identified by a Style number which is stamped into the name plate on the machine. Style numbers are classified as standard and special. Standard Style numbers have one or more letters suffixed, but never contain the letter "Z". Example: "Style 51300 BV". Special Style numbers contain the letter "Z". When only minor changes are made in a standard machine, a "Z" is suffixed to the standard Style number. Example: "Style 51300 BVZ".

Styles of machines similar in construction are grouped under a class number which differs from the style number, in that it contains no letters. Example: "51300".

#### APPLICATION OF CATALOG

This catalog is a supplement to Catalog No. 104 L, and should be used in conjunction therewith. Only parts found on Style 51300 BV, but not on Style 51300 BG are illustrated. Opposite the illustrated page, parts are identified by detail number, part number, description and amount required. For clarity, certain 51300 BG parts are shown in phantom to help locate 51300 BV parts.

This catalog applies specifically to the Standard style of machine as listed herein. It can also be applied with discretion to some Special machines in this Class. References to direction, such as right, left, front, back, etc., are given from the operator's position while seated at the machine. Operating direction of handwheel is toward the operator.

#### STYLE OF MACHINE

Streamlined Flat Bed, Medium Throw, Single Needle, With Back Tacking Mechanism, Light Weight Presser Bar, Light Weight Needle Bar and Needle Bar Driving Mechanism, Needle Bearing Needle Bar Drive, Single Reservoir Enclosed Automatic Lubricating System, Filter Type Oil Return Pump With Base Plate, Oil Siphon Assembly, Lateral Looper Travel, Light Weight Pulley, Prepared for Oil Shields, Work Space to Right of Needle Bar 7 3/4 Inches.

51300 BV For seaming light to medium weight materials where back tacking is required. Seam Specification 401-SSa-1. Stitch range 10 to 16 per inch.

#### NEEDLES

Each Union Special needle has both a type number and a 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 blade measured in thousandths of an inch, midway between the shank and the eye. Collectively, the type number and the size number is the complete symbol.

Standard needle for Style 51300 BV is Type 130 GHS. It has a round shank, round point, short, double groove, struck groove, ball eye, spotted, government, short blade 1/8 inch less than standard, width of eye and groove undersize, one step reduction, ball point, chromium plated - sizes 032, 036, 040, 044, 049, 054.

To have needle orders promptly and accurately filled, an empty package, a sample needle, or the type and size number should be forwarded. Use description on label. A complete order would read: "1000 Needles, Type 130 GHS, Size 036".

Selection of the proper needle size should be determined by size of thread used. Thread should pass freely through needle eye in order to produce a good stitch formation.

#### USE GENUINE NEEDLES AND REPAIR PARTS

Success in the operation of these machines can be secured only with genuine Union Special Needles and Repair Parts as furnished by the Union Special Corporation, its subsidiaries and authorized distributors. They are designed according to the most approved scientific principles, and are made with utmost precision. Maximum efficiency and durability are assured.

Genuine needles are packaged with labels marked *Union Special*. Genuine repair parts are stamped with the Union Special trade mark. Each trade mark is your guarantee of the highest quality in materials and workmanship.

#### IDENTIFYING PARTS

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

Part numbers represent the same part, regardless of catalog in which they appear.

IMPORTANT! ON ALL ORDERS, PLEASE INCLUDE PART NAME AND STYLE OF MACHINE FOR WHICH PART IS ORDERED.

#### TERMS

Prices are strictly net cash and are subject to change without notice. All shipments are forwarded f.o.b. shipping point. Parcel Post shipments are insured unless otherwise directed. A charge is made to cover postage and insurance.

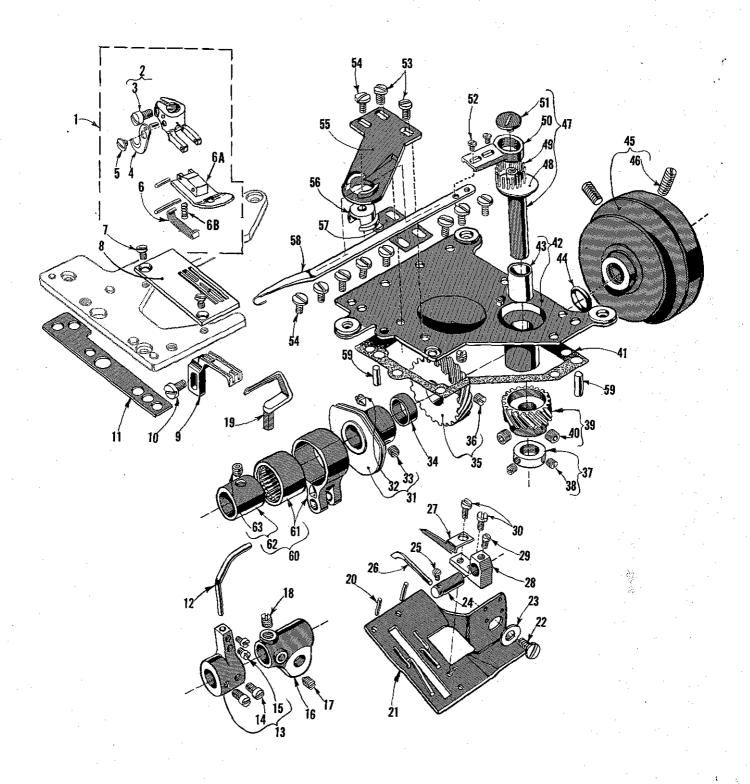
#### **OILING**

The oil has been drained from the machine before shipping, and the reservoir must be filled before beginning to operate. Use a straight mineral oil with a Saybolt viscosity of 90 to 125 seconds at  $100^{\circ}$  Fahrenheit.

Oil is filled at the spring cap in the top cover and the level is checked at the sight gauge on the front of the machine. The oil level should be maintained between the red lines on the gauge. The capacity of the oil reservoir is 12 ounces.

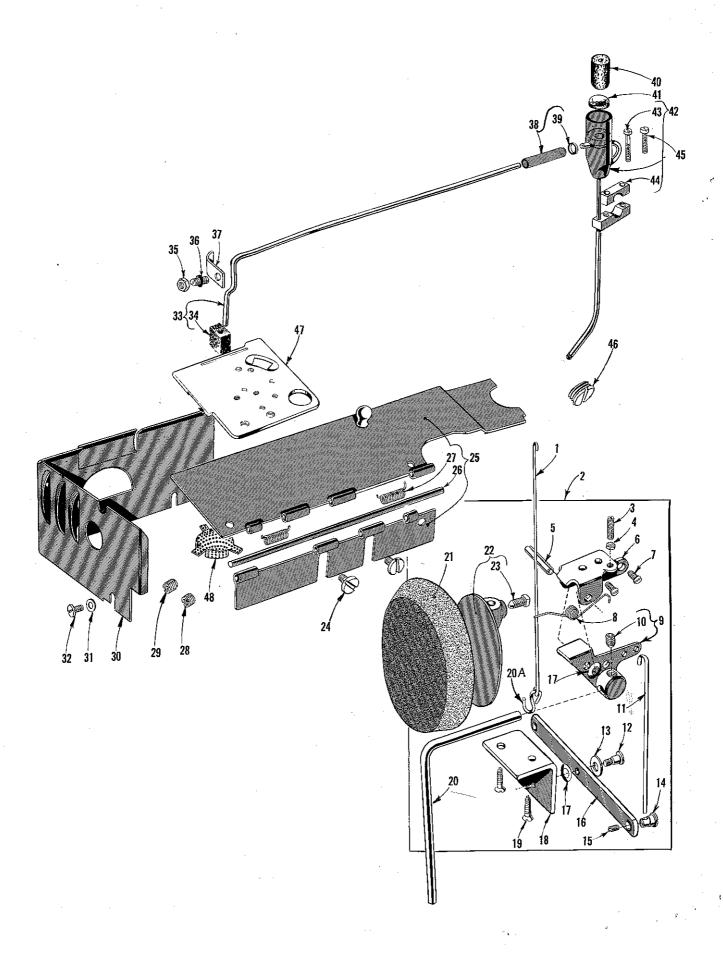
The machine is automatically lubricated and no oiling, other than keeping the main reservoir filled, is necessary.

A daily check before the morning start should be made and oil added if required. Oil which has gone through the machine is filtered and pumped back into the main reservoir, making too frequent oilings unnecessary. Excessive oil in the main reservoir may be drained at the plug screw in the main frame directly under the handwheel.



## SEWING PARTS COMBINATION, TAKE-UP, CAST-OFF PLATE AND BACK TACKING MECHANISM

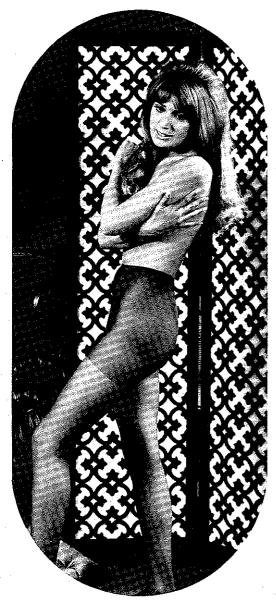
Ref. No.	Part No.	Description	Amt. Req.
		<del></del>	
$egin{array}{c} 1 \ 2 \end{array}$	51320 N 51330 AK	Presser Foot	- 1
3	91	Screw	
4	1741 B	Chain Cutting Knife	
5	187 B	Screw	
6	$51330~\mathrm{AM}$	Yielding Section	- 1 .
6A	$51330~\mathrm{AL}$	Presser Foot Bottom	
6B	51330 W	Spring	
7	87	Screw	
8	51324 H	Throat Plate	- 1
9 ·	51305 H	Feed Dog	- 1
10 11	22528 51380 B	Throat Plate Support Shim	- 1
12	51325	Looper Needle Guard	- <u>1</u>
13	52825 D	Looper Needle Guard Holder	- 1
14	33174 B	Screw	- 2
15	22563	Screw	
16	52444 B	Looper Rocker Frame	- 1
17	96	Spot Screw	- 1
18	98	Set Screw	
19	51308	Looper	
20	50-216 Blk.	Dowel Pin	- 2
21	51357 A	Cast-off Support Plate	- 1
22	22528	Screw	
23	21657 E	Washer	- <u>1</u>
24 25	51204 A 22798 A	Screw	- 1 - 1
25 26	51204	Retainer	- 1
27	51204 51204 B	Cast-off	
28	51204 C	Cast-off Support	
29	77	Screw	
30	J87 J	Screw	- 2
31	51423 C	Take-up	- 1
32	. 96	Spot Screw	- 1
33	22580 D	Set Screw	
34	51351 H	Drive Gear Spacer	• 1
35	51351	Loop Retainer Drive Gear	- 1
36 37	98 39147 D	Collar	
38	88	Screw	
39	51351 A	Loop Retainer Driven Gear	- 1
40	22580 E	Screw	- 2
41	51382 A	Oil Reservoir Top Cover Gasket	- 1
42	51382	Oil Reservoir Top Cover	- 1
43	51351 C	Crank Bushing	- 1
44	660-202	Oil Seal Ring	
45	51221 C	Pulley	- 1
46	22894 F	Screw	- 2
47	29126 DR	Crank Drive Assembly	- 1
48 49	51351 B	Loop Retainer Driving Crank	- 1
50	61451 D 51351 D	Crank Link	- 16
51	22757 F	Screw	<u> </u>
52	604	Screw	
53	22570 A	Screw	- 2
54	22585 A	Screw	- 9
55	51351 G	Fulcrum Bearing Bracket	- 1
56	51351 F	Fulcrum and Slide Block	- 1
57	51351 J	Shim (as required)	-
58	51351 E	Loop Retainer Hook	- 1
59	667 C-8	Dowel Pin	
60	29476 DV	Looper Avoid Eccentric Assembly	- 1
61	51145 A	Eccentric Bearing	· 1
62 63	51406 22894 D	Looper Avoid Eccentric, .062 inch throw	- 1 - 1
-	53183 A	Lifter Lever Link (not shown on nicture plate)	· 1



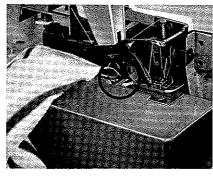
# KNEE PRESS ASSEMBLY, OIL SIPHON ASSEMBLY AND MISCELLANEOUS COVERS

Ref.	Part		$\operatorname{Amt}.$
No.	No.	Description	Req.
1	51493 BC	Lifter Link	1
$\overset{\mathtt{r}}{2}$	21660 H	Knoe Press Assembly	1
3	92201	Knee Press Assembly	1
3 4	12982	Nut =	<u>1</u>
5	660-219 G	Nut	<u>1</u> ,,
6	21664 F	Mounting Bracket	1
		Wounting Bracket	1
7	80	Screw, for attaching	2
8.	21662 V	Torsion Spring	~1
9	21662 R	Knee Press Lifter Arm	1
10	22650 CE-6	Screw	1
11	21662 T	Knee Press Link	1
12	22557 A	Screw	1
13	43137 E	Washer	1
14	21662 S	Knee Press Link Connection	1
15	531	Screw	1
16	21662 U	Knee Press Lever	1
17	39536  AD	Spring Washer	2
18	21664 C	Spring WasherBracket	1
19	SC303	Wood Screw #12 x 1 inch	9
20	21663 A	Knee Press Plate Lever	1
20A	660-264	Knee Press Plate Lever	1
21	660-168	Knee Press Plate Cushion	1
22	21664	Knee Press Plate	1
23	69 FD	Screw	1
$\frac{1}{24}$	25 S	Screw	2
25	51282 AJ	Hingod Oil Shiold	1
26	52978 G	Hinge Pin	1
27	51282 AK	Spring	2
28	22889 D	Adaptor Plug Screw left side	1
29	22889 C	Adaptor Plus Screw back	9
30	51282 AH	Adaptor Plug Screw, back	1
31	20 All	Washer	3
32	22848	Screw	3
33	51294 M	Oil Siphon Tube	1
		Tolt I int Tilton	1
34	666-214	Felt Lint Filter	
35	7947	Screw	1
36	51294 R	ocrew	1
37	51294 P	Oil Tube Clamp	1
38	51294 N	Oil Tube Connection	1
39	21212	Locking Ring, for oil siphon connection	1
40	666-201	Felt PlugFelt Plug	1
41	666-209	Felt Plug	1
42	51294 U	Oil Siphon Assembly	1
43	22729 B	Screw	1
44	51294 K	Clamp, upper	1
45	22729 A	Screw	1
46	22539 R	Plug Screw, for looper drive oil chamber	1
47	51281 AM-227	Cloth Plata Carran	1
48	51493 BK	Lint Filter Screen	1

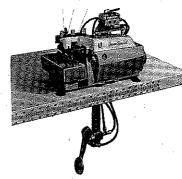
## BOOST PRODUCTION WITH THESE WORK AIDS FROM UNION SPECIAL



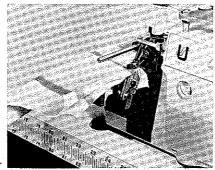
Union Special CORPORATION



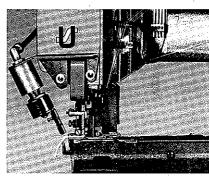
PNEUMATIC CHAIN-CUTTER—for use on conventional Class 39500 and 39600 is a durable scissor-action mechanism that makes a clean positive cut. Style 2899 A-1



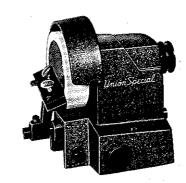
PNEUMATIC FOOT LIFTER—The airoperated foot lifter for use on Class 39500 machines allows the operator to raise the foot simply by knee-touching an actuating switch.



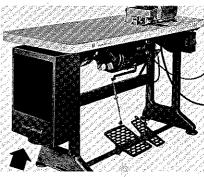
AIR FABRIC UNCURLER—This unit, designed for Class 39500 machines, uses air jets to remove curls from top and bottom plies of flat knit materials as fabric passes through sewing area. Style 2899 B-1



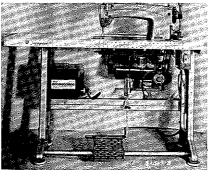
CHAIN CUTTER—The above photo shows the small pneumatic chain cutter that is available for installation as an accessory unit on Class 36200 Flatseamers. Style 2899 A-6



KNIFE GRINDER sharpens straight or angle type knives, is simple and easy to operate, eliminates defective garments caused by dull knives.



HEAT DISPELLER—Union Special's auxiliary unit (arrow) is an effective means for reducing oil temperature where heavy duty service requires it. Style 2899 E-1



AMCO ELECTRONIC NEEDLE POSITIONERS eliminate the necessity of reaching for the hand-wheel to move the needle up or down . . . this allows the operator to keep both hands on the work, insuring better control, uniform quality and increased production.

Helpful, authoritative information on the most efficient types of equipment for making virtually any machine sewed article is available from Union Special's Sales Promotion Department. Among the many interesting, illustrated bulletins that are available without obligation are the following:



No. 240, "Men's, Women's, Children's Footwear"

No. 249, "Rainwear"

No. 250, "Men's Dress Shirts"

No. 251, "Service Shirts and Pants"

No. 252, "Men's Shorts and Pajamas"

No. 253, "Overalls, Coveralls, and Dungarees"

No. 254, "Men's Knit Underwear"

No. 256, "Knit Outerwear"

No. 259, "Men's Sports Shirts"

No. 260, "Work Gloves"

No. 262, "Cotton, Burlap, Jute, and Multiwall Paper Bags"

No. 263, "Men's Clothing"

No. 264, "Men's Women's, Children's Jackets"

No. 265, "Women's Wear"

No. 266, "Women's Wear And High Fashion"

No. 267, "Corsets, Girdles, Brassieres"

No. 268, "Children's Wear"

No. 269, "Mattresses, Slip Covers, Furniture Upholstery"

No. 271, "Awnings, Canopies, Tents, Tarps"

No. 273, "Curtains & Drapes"

No. 610, "Klipp-it"

No. 710, "MCS ForMation Unit"

No. 730, "MCS Automatic Dual Underfront Shirt Hemmer"

No. 740, "MCS Automatic Rib-Knit Cuff Machine"

No. 750, "Fusing Presses"

No. 1100, "Lewis Blindstitch, Chainstitch, Lockstitch, Machines"

No. 1105, "Button Sewers-Ticket Tackers"

"Columbia Blindstitch, Saddle Stitch, and Tie Closing Machines"

No. 1500, "Alteration Department Machines"



# HERE ARE HELPFUL BULLETINS and CATALOGS TO HELP YOU SOLVE SEWING PROBLEMS







5,NCF 188

UNION SPECIAL 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 representatives and service men are factory trained and are able to serve your needs promptly and efficiently. Whatever your location, there is a Union Special Representative to serve you. Check with him today.

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