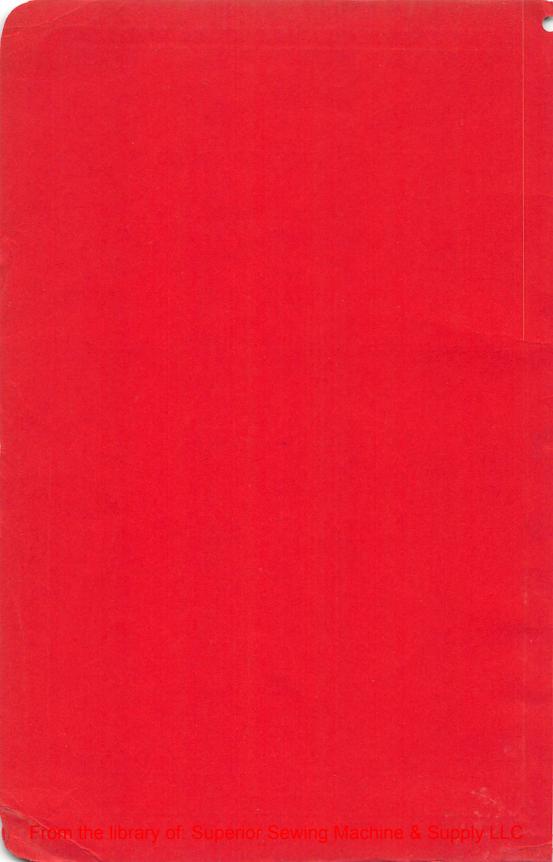
# Industrial Sewing Machines

Needle Manual for Union Specials

Catalog No. 45
Second Edition

UNION SPECIAL MACHINE COMPANY CHICAGO

From the library of: Superior Sewing Machine & Supply LLC



Catalog No. 45 Second Edition

Needle Manual

for

Union Specials

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<sup>\*</sup> Main Offices

### FOR EWORD

In issuing this needle manual, Union Special is prompted by a desire to assist the users of our machines in solving the problems encountered in the sewing of the wide variety of materials used in today's sewed articles. The type, size, and point of the needle plays an all important part in securing results from both a quality and production standpoint.

On the pages which follow will be found descriptions of the needle points, their correct application to the different grades of material being sewed, illustrations of the points, a list of the types and sizes available, the types available for the various styles of machines, and additional valuable information.

See catalog No. 45 A for needle prices.

In all manufacturing centers will be found Union Special representatives, who will co-operate with those who desire in planning and estimating their requirements.

UNION SPECIAL MACHINE COMPANY

Engineering Department

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EXPLANATION OF SYMBOLS

Needle symbols are set up in groups of 100 numbers according to the style of point, with a further subdivision segregating the round shanks from the slabbed shanks. Each needle has a type number and a size number. The former denotes the kind of shank, point, length, groove, finish, and other details. The latter denotes the diameter of the blade, measured in thousandths of an inch and is stamped in the shank. Collectively the type number and size number is the complete symbol.

### NOMENCLATURE

For the most part this is self defining. The following list shows the terms used in describing needles with the explanation set opposite.

Round Shank- As the name implies: Round. Single Slabbed Shank- Milled flat on one side. Double Slabbed Shank- Milled flat on two sides.

Single Groove- A long groove on one side only. Double Groove- A groove on both sides.

Spiral Groove- A groove extending spirally from the eye of the needle.

Double groove needles have a long and short groove. The long groove is continuous from the eye to the rim of the shank and guides the thread from the source of supply through the eye. The short groove extends from the eye usually to the base of the shank, but in some types a lesser distance. These types of needles are made three ways with respect to the short groove.

(1) A clearance is milled in the blade just above the eye.

This is described as "spotted".

(2) A land is located in the groove a short distance above the eye.

(3) The groove is continuous from its termination to the eye.

The types, with the land in the short groove, are generally used. Where the description does not include the words "spotted" or "continuous double groove", the needle has the land in the short groove.

Extra Short- Measurement 1 7/16 inches from butt to near side of eye, .080 inch diameter shank.

Short- Measurement 1 17/32 inches from butt to near side of eye, .080 inch diameter shank.

Long-Measurement 1 21/32 inches from butt to near side of eye, .080 inch diameter shank.

No. 2 Bag- Measurement 1 21/32 inches from butt to near side of eye, .080 inch diameter shank.

Class R- Measurement 1 21/64 inches from butt to near side

Class R- Measurement 1 21/64 inches from butt to near side of eye, .080 inch diameter shank.

Class X- Measurement 1 7/64 inches from butt to near side of eye, .076 inch diameter shank.

T Length- Measurement 1 21/64 inches from butt to near side of eye, .080 inch diameter shank.

Interlock- Measurement 1 7/16 inches from butt to near side
 of eye, .080 inch diameter shank.

Picoetta and Crochetta- Measurement 1 31/64 inches from butt to near side of eye. .080 inch diameter shank.

Lockstitch, Short Length- Measurement 1 11/32 inches from butt to near side of eye, .072 inch diameter shank.

Herakles and Antaeus- Measurement 2 3/32 inches from butt to near side of eye, .156 inch diameter shank.

Antaeus, Long Length- Measure 2 5/16 inches from butt to near side of eye, .156 inch diameter shank.

Short Blade- The blade is from 1/16 to 1/8 inch shorter than the standard, the shank being correspondingly longer.

Long Blade- The blade is from 1/16 to 1/8 inch longer than

the standard, the shank being correspondingly shorter.
Where the description does not include the words "short blade" or "long blade", the needle has the standard length

blade.

Ball Eye- A swell on the blade at the outside of the eye.
Uniform Blade- The blade is a uniform diameter from the eye
to the shank.

Taper Blade- The blade diameter increases from the eye to the shank.

Where the description does not include the words "ball eye" or "taper blade", the needle has a uniform blade. Flat Blade- The blade has two flat sides. Where the description does not include the words "flat blade", the needle has a round blade.

Ball Point - A blunt point secured by a small radius. Where the description does not include the words "ball point", the needle has a sharp point.

Government - A point approximately 1/16 inch longer than regular.

Long Point - A point, approximately 1/32 inch longer than regular.

Short Point- A point, approximately 1/32 inch shorter than regular.

Where the description does not include the words "government", "long point" or "short point", the needle has a standard length of point.

Right and Left- The right needle and left needle respectively of a pair of single slab shank needles, set with the flats adjacent and the long grooves in front.

Plain Finish- Polished, without any plating.

Undersize Eye and Grooves- The width of the eye and grooves is reduced a substantial amount

Where the description does not include the words "undersize eye and groove" or "oversize eye and groove", the needle has a regular width of eye and groove.

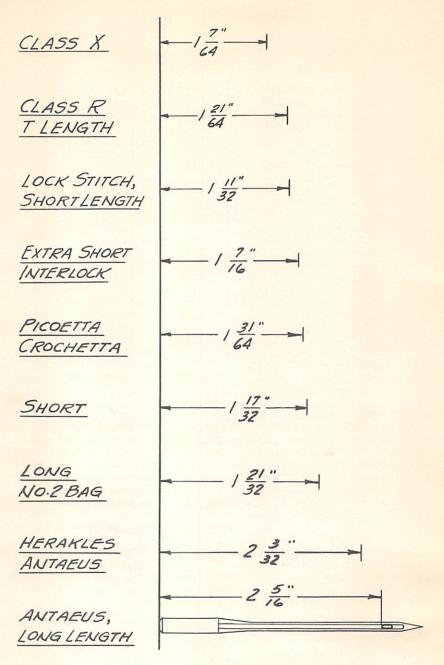


DIAGRAM SHOWING THE LENGTH OF THE VARIOUS TYPES OF NEEDLES FROM THE EXTREME BUTT END TO THE NEAR SIDE OF THE EYE.

### ABBREVIATIONS

The following list shows the abbreviations used in the descriptions on the needle packages:

ACR ACROSS	PLT PLATED
ANT ANTAEUS	PT POINT
BL BLADE	RAD RADIUS
CEN CENTERED	
CH CHROMIUM	
CL CLASS	RKD ROCKED
CLE CLEARANCE	
an anesa	CTTTT CTT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
DIA DIAMETER	SHP SHARP
D DOUBLE	SHT - SHORT
EX EXTRA FIN FINISH	S SINGLE
FIN FINISH	SL SLAB
GOV GOVERNMENT	SLD SLABBED
G GROOV E	SP SPEAR
HER HERAKLES	
INT INTERLOCK	SPRL SPIRAL
LOCK LOCKSTITCH	
NAR NARROW	SQ SQUARE
NDLE NEEDLE	STD STANDARD
NIC NICKEL	
NO NUMBER	TAP TAPER
OVL OVERALL	TRI TRIANGLE
OVZE OVER-SIZE	TW TWIST
PIC PICOETTA	UNZE UNDER-SIZE
PLN PLAIN	

### IDENTIFYING NEEDLES

Printed on the needle packages will be found the Type and Size numbers, also a description of the needles contained therein. A diagram showing the length of the various types of needles from the butt end to the near side of the eye is furnished for identification convenience when the needle is separated from its package. Place the physical needle as shown at the bottom of the diagram. The term or terms used to denote the length of the needle is shown to the left.

### SINGLE SLAB NEEDLE SPACING

To secure a variety of spacing between the rows of stitches made with single slab shank needles, they are made in five different slabs viz: .056 inch, .060 inch, .064 inch, .068 inch, and .076 inch. The space between the center lines of the needles in sewing position is viz:

```
.056 inch slab, .032 inch
.060 " " .040 "
.064 " " .048 "
.068 " " .056 "
.076 " " .072 "
```

SINGLE SLAB NEEDLE SPACING (Cont'd)

The appearance of the rows will vary slightly according to the size of thread used. The accompanying illustrations show the spacing made with B silk.



Where three equal space close rows of stitches are made with needles set abreast, one double slab shank .048 inch slab needle is located between two single slab shank needles. The variety of spacing between the rows of stitches produced is secured by substituting different slab outside needles. The spacing between the center lines of the needles in sewing position using the specified slabs of outside needles is viz:

.056 inch slab, .040 inch .060 " " .044 " .064 " " .048 "

SIZE LIMITATIONS OF SINGLE SLAB NEEDLES

The limitations of the blade sizes of single slab needles with .080 inch diameter shank with respect to slab sizes are set up below:

Slab, .056 inchSlab, .060 inchSlab, .064 inchSlab, .068 inchmaximum blade size 040
maximum blade size 046
maximum blade size 054

### OLD AND NEW SIZE NUMBERS

The size numbers in vogue prior to 1918 are omitted. The following table shows the old size numbers and equivalents under the new system of the needles listed at the time the change was made, except Class X. It also shows the millimeter equivalents.

Old Size		llimeter quivalent	Old Size	New Size No.	Millimeter Equivalent
00000- 0000 - 000 1/2 00 00 1/2 - 0 0 1/2 - 1 1/2 - 2	- 019 022 025 027 029 032 034 036 040 - 040 - 046 046 046 046	.483 .559 .635 .686 .737 .813 .864 .914 .965 1.016 1.067 1.118 1.168	3 1/2 - 4 5 8	- 052 - 054 - 060 - 067 - 080 - 100 - 120 - 140 - 156 - 172 -	- 3.048 - 3.556 - 3.962 - 4.371

The equivalents for Class X needles are:

Old Size	New Size No.	Millimeter Equivalent	Old Size	New Size No.	Millimeter Equivalent
0000000-	- 020 -	508	00	033	.838
000000 -			0	037	. 940
00000 -	- 025 -	635	1	040	1.016
0000	- 027 -	686	1 1/2	042	
000	- 030 -	762	2	047	1.194

### RELATIVE SIZES OF NEEDLES AND THREAD

The widths and lengths of the needle eye, also the widths and depths of the needle grooves are proportional with the sizes of the blades. The quality of the work desired is largely dependent on the size and point of the needle employed. On heavy work, the penetration of which requires a sturdy needle, it is advisable to use a comparatively large size needle for a given size thread.

As the needle puncture on cloth work closes to a considerable extent, upon the Withdrawal of the needle, a larger needle than is recommended for leather work can be used.

The accompanying tables show the preferred size of needle with standard widths of eye for both cloth and leather work using various kinds and sizes of threads. The choice, however, should give consideration to the factors referred to above, which may dictate the selection of a needle size

RELATIVE SIZES OF NEEDLES AND THREAD (Cont'd) slightly larger or smaller than the size specified. Too large a needle will cause skip stitches as the thread is not confined accurately in the needle eye.

CLOTH WORK

Needles	019 to 025	026 to 029	030 and 032	034 and 036	038 and 040	042 and 044	048 and 049	054 and 060	067	
Size of Cotton Thread	150 to 120	120 to 100	100 to 80	80 to 60	50	40 and 36	30 and 24	16 and 12	8	
Size of Silk	0000 to 000	00 to B	С	D	Е					
			LEAT	HER W	ORK					
Needles	027 and 028	029 and 030	032	034	036	038	040	0/1/1	048 and 049	

Thread	
Size of O B C D Silk and A	 

enough to sew a given thread is to pass the thread through the needle eye, hold the thread reasonably taut in a vertical position between your two hands, and spin the needle. If it does not slide down the thread the needle is too small to be successfully used with the thread.

A better test if the material to be sewed is available is to pass the thread through the needle eye, force the needle through the material and note if the thread can be drawn freely through the long groove of the needle.

The use of a larger needle than size 100 is not recommended unless the size or roughness of the sewing twine makes it necessary

### CUTSTANDING CHARACTERISTICS OF NEEDLES

Various features have been developed to improve the quality of the work produced also the durability of the needles. These features are described on a comparative basis.

## GOVERNMENT POINT NEEDLES

They have a long tapering point measuring approximately 7/32 inch from the point to the near side of the eye. This feature makes a very desirable needle for sewing delicate knitted and woven fabrics when needles with the standard

length point will cut holes in the fabric.

This feature also makes a very desirable needle for sewing tough closely woven fabrics such as khaki where the penetration resistance is severe. The long straight taper decreases this resistance and consequent friction.

### SHORT POINT NEEDLES

They are designed for sewing extra thick work, where it is necessary to have the maximum space under the point of the needle at high position.

### BALL EYE NEEDLES

They are designed for sewing tough woven fabrics, where the penetration resistance is severe. To decrease the friction the diameter across the eye is increased approximately .004 inch matched against the diameter midway between the eye and shank. The size numbers for machines equipped with loopers denote the diameter across the grooves midway between the eye and shank. The size numbers for lockstitch machines denote the diameter across the eye.

### SPOTTED NEEDLES

These have a spot or recess milled out on the short groove side just above the eye. They were originally designed for use in the larger sizes, so that the loop taking implement could pass closer to the center line of the needle. This construction was, however, later adopted for types made in the smaller sizes.

### PLAIN FINISH NEEDLES

These needles are polished without any plating. It is the standard on needles for sewing leather. The penetrating resistance is reduced a substantial amount matched against needles with nickel plated finish.

### NICKEL PLATED FINISH

This finish is standard for sewing cloth. The friction is reduced a substantial amount matched against needles with plain finish.

### CHROMIUM PLATED FINISH

Since 1930 when the chromium plate finish was introduced into the manufacture of needles, its popularity has increased by leaps and bounds. It makes the ideal finish for sewing tough woven fabrics. The durability of the needles is substantially increased as the heat generated by the friction has a lesser effect on the chromium plate.

This finish has also proved very efficient for sewing the tougher grades of leather.

### UNDERSIZE EYE AND GROOVES

Needles with undersize eye and grooves were developed for sewing comparatively heavy work such as overalls, where the penetrating resistance is severe and a comparatively small size thread fills the strength of seam requirements. This

UNDERSIZE EYE AND GROOVES (Cont'd) construction furnishes a more sturdy needle in a given size. A one step reduction describes a needle with a width of eye and grooves equal to that of a corresponding regular needle approximately .004 inch smaller in blade diameter. A two step reduction describes a corresponding regular needle approximately .008 inch smaller in blade diameter.

TAPER BLADE

The taper blade needles were developed for sewing ultra delicate fabrics. They have an exceptionally small blade diameter across the eye which increases in a straight taper to the shank. This construction produces a reasonably sturdy needle yet the diameter across the eye can be abnormally small.

### CRDERING

To have orders promptly and accurately filled, the type and size numbers should be given. See marks on packages. An intelligent order would read as follows "1000 Needles Type 106, Size 040. If the type and size numbers are not available, send the empty package or a sample needle.

Special needles, not listed herein, will be made to order in lots of 1000 or more. Customer is obligated to accept the proceeds of the production order even though there is an overrun or underrun of 20%. The price will be based on the quantity furnished. Full details must be submitted with the

order.

Chromium plated needles not listed herein can be furnished by converting standard needles listed. The minimum quantity is 200.

### USE GENUINE NEEDLES

Success in the operation of these machines can be secured only by the use of genuine Union Special Needles as furnished by the Union Special Machine Company, its subsidiaries and authorized distributors. Obviously, it is to our interest to maintain the reputation of Union Specials by furnishing the very best needles obtainable. They are designed according to the most approved scientific principles, and are made with the utmost precision. The maximum efficiency and durability are assured.

Genuine needles are put up in packages marked at the top "Trade 'UNION SPECIAL' mark". This trade mark is symbolic of superlative excellence. All other needles are bogus.

### T ERMS

Prices are strictly "net cash" and subject to change without notice. See Catalog No. 45 A. All shipments are forwarded at the buyer's risk f.o.b. shipping point. Parcel post shipments are insured unless otherwise directed. A charge is made to cover the postage and insurance.

### NEEDLE POINTS

The needle point must be carefully selected for the kind of material to be sewed. Its importance with respect to

producing quality plus sewing, durability of the seam produced, and durability of the needle cannot be over estimated. A large variety of points are made for penetrating leathers so that the needle thread will be embedded properly in the finished side and avoid breaking the surface adjacent to the punctures. The accompanying illustrations show the styles of points available.

The arrows show the direction of the line of stitches with respect to the needle incision, when the needle is used in machines equipped with loopers traveling across the line of feed like styles in Classes 7200, 8900, and 51400. When used in machines equipped with loopers traveling in line with the feed like styles in Classes 16800, 54100 and lockstitch machines, the same needle is turned 90° consequently the incisions will likewise be turned 90° from that shown in the illustrations.

### THE ROUND POINT

This point, sometimes called "cloth point", is almost universally used on cloth work. It has no cutting edges, consequently spreads the material as it passes through. It is not easily deflected as it has a sharp point, unless the words "ball point" are included in the description.

### THE ROUND POINT BALL POINT

This is a modification of the round point, symbolized in the round point group. Instead of the sharp point, which characterizes most of the needles in this group, it has a small radius at the point which allows it to automatically find its way between the yarns comprising the body fabric by deflecting the yarns.

### THE STAY POINT

This is a very popular point for stitching leathers of average firmness. Its incision is made across the line of stitches, 20% by cutting and the remainder by spreading the material.

An outstanding feature is its durability as this needle will continue sewing even though the point has become slightly blunted.

### THE CROSS POINT

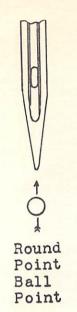
This point is designed for stitching fine leathers where the desire for a short stitch is paramount. Its incision is made across the line of stitching, 45% by cutting and the remainder by spreading the material. A firm portion of surface leather is left between the needle punctures which prevents the thread from being drawn through the surface. Thus a stitch of thirty two per inch is made possible under favorable conditions.

The cross point needle cannot be recommended for use on leathers having a hard, firm surface, nor for close row stitching with two or more needles set abreast.

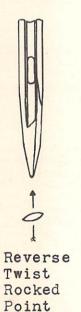
### THE NARROW CROSS TAPER POINT

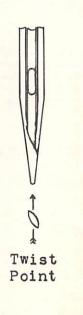
This point, as its name indicates, is similar to the cross point, but is made slightly narrower to increase its durability, and to prevent its being deflected in passing through







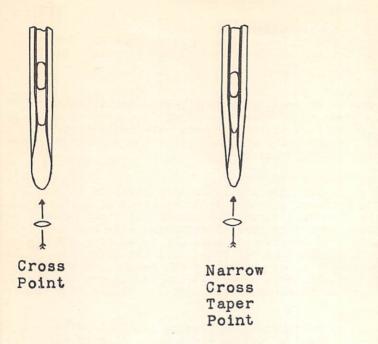








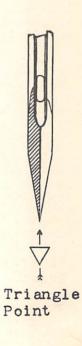
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THE NARROW CROSS TAPER POINT (Cont'd) the leather. Its incision is made across the line of stitching, 35% by cutting and the remainder by spreading the material.

THE ROCKED POINT

This point is the most extensively used for stitching fine and medium grade shoes where the needle thread is exposed on the finished surface of the leather. Its incision is made across the line of stitching, 40% by cutting and the remainder by spreading the material.

THE REVERSE TWIST ROCKED POINT

This point as its name indicates is similar to the rocked point. Its incision is made across the line of stitching but at an angle that will insure the maximum of stock between two or more close adjoining rows of stitching made with needles set abreast. The incision is made 40% by cutting and the remainder by spreading the material. All the advantages found in the rocked point are present in the reverse twist rocked point. The slight twist avoids two adjoining rows of stitches running together when made with .056 inch single slab needles.

THE TWIST POINT

This point is recommended for sewing leathers having a hard firm surface. Also for sewing tough woven fabrics where the round point needles have a tendency to heat excessively. Its incision is made diagonally with the line of stitching, as shown in the illustration, 45% by cutting and the remainder by spreading the material.

The twist point opens up the material a substantial amount, consequently it permits an abnormally free passage of the

thread.

THE TWIST CENTERED POINT

This point, as its name indicates, is similar to the twist point, but is recommended only for sewing leathers having a hard firm surface. Its incision is substantially the same as the twist point.

THE FLAT POINT

This point is recommended for sewing leathers having a hard firm surface where it is desirable to have the needle thread embedded below the surface, also for the closing operation on all grades of leather. Its incision is made parallel with the line of stitching, 35% by cutting and the remainder by spreading the material.

A stitch length shorter than 16 per inch should not be used

on leathers of average firmness.

THE SPEAR POINT

This point, sometimes called the "diamond point", is recommended for sewing leathers having a hard firm surface, tough fabrics where the round point needles heat excessively and heavy weight multi-wall type paper bags. Two of the edges cut across the line of stitching and two parallel with it.

An outstanding feature is two long and two short facets, which allows two of the edges to cut through the material a substantial distance ahead of the two opposite edges. Its incision is made 40% by cutting and the remainder by spreading the material.

### THE SQUARE POINT

This point is recommended for sewing heavy jute and other coarse fabrics, also for heavy weight multi-wall type paper bags. All four edges cut diagonally across the line of stitching. Its incision is made 40% by cutting and the remainder by spreading the material.

### THE TRIANGLE POINT

This point is designed for sewing tents, awnings and other canvas products on lockstitch machines. Its incision is made 45% by cutting and the remainder by spreading the material.

### SEWING PROBLEMS AND THEIR SOLUTION

The introduction of fabrics made from rayon and rayon mixtures, fabrics made with a percentage of rubber thread or covered rubber thread, leathers made from a variety of reptile skins, and other innovations is a constant source of worry to the manufacturer of sewed articles, who is striving to produce quality work. The needle plays an all important part in solving these problems. An excellent remedy is to use a smaller size needle and a smaller size thread provided the sewing conditions and strength of seam requirements will permit.

### SEWING PROBLEMS ON CLOTH WORK

For sewing cloth work, the round point (sometimes called "cloth point") needles are almost universally used. They are made with two kinds of points viz: "sharp point" and "ball point". The sharp point is preferred for average operations.

### NEEDLE CUTS IN MATERIAL

When a given size sharp point needle cuts holes in knitted fabrics and it is not desirable to use a smaller size needle, the same size ball point needle will usually eliminate the cutting. The sharp point needle penetrates the yarn comprising the fabric and weakens or severs it. Thus a hole will show in the body fabric when stretched across the seam. The ball point needle deflects the yarn and thus finds its way automatically between the strands.

When sewing delicate woven fabrics with sharp point needles, the strands of yarn comprising the body fabric can be weakened or severed without showing a hole. This not only exposes fuzz on the surface of the fabric but makes an inferior seam particularly after the garment has been laundered a few times.

The ball point needle will solve these problems.

### SEWING PROBLEMS ON CLOTH WORK

### SEWING SPUN RAYON FABRICS

When sewing spun rayon fabrics or any type of fabric with a large difference between the size of the warp and woof threads, the ball point needle is preferred. This applies particularly to the basting seams where the sewing thread has to be subsequently withdrawn and any defect caused by the needle punctures is exposed in the finished goods.

### SEWING FABRICS CONTAINING RUBBER THREAD

The ball point needle was originally designed for sewing fabrics made with a percentage of rubber thread or rubber covered thread. In actual practice the sharp point needle pierces the rubber thread part way and the elasticity of the thread prevents the full penetration of the needle point without creating a serious disarrangement of the body fabric and other sewing trouble. The ball point needle working under the same conditions automatically finds its way to one side of the rubber thread.

### SEWING PROBLEMS ON LEATHER WORK

For sewing leather the cutting point needles (sometimes called "leather points") are almost universally used. The several types of points are illustrated on preceding pages. Each point serves its own useful purpose in securing quality work, seam durability, or high production rates. The fitting room operations in the modern shoe factory, with its wide variety of leathers, require a careful study in needle points to make a proper selection. It is, of course, impracticable for the operators to use a different style of point for each grade of leather. However, it is possible to select the point best suited for their entire range of work.

In the suggestions which follow, it is assumed that the incisions made by the needle points with respect to the line of stitching is the same as indicated by the arrows in the illustrations. The incisions thus made are more favorable for making short stitches, as a given size needle has a smaller diameter in the direction of the stitches.

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# ABNORMALLY SHORT STITCH OPERATIONS

The demand for shorter and still shorter stitches by the quality man in the modern shoe factory has in some cases produced a condition whereby there is not sufficient stock between the needle punctures in line with the stitches to support the thread. Thus it draws through the grain of the leather and makes a weak and unsightly seam. Where an ultra short stitch is paramount and the rows of stitches are at least 1/16 inch apart, the cross point is considered the best.

### CLOSE ROWS RUNNING TOGETHER

When the rows of stitches run together in making two or more close rows of stitches with needles set abreast, the reverse twist rocked point is an effective remedy. The angle of this point leaves the maximum of stock between the rows.

### SEWING PROBLEMS ON LEATHER WORK

### GRINNING STITCHES

When the needle thread shows abnormally on the outside of closing seams (commonly called "grinning stitches") the flat point is considered the best, provided the stitch length is 16 per inch or longer. The flat point cannot be recommended for short stitch work as its incision in line with the stitching is unfavorable.

### BREAKING SURFACE OF PATENT LEATHERS

When the needle incisions break the surface of patent or enamel leathers adjacent to the needle punctures, use the rocked point. A liberal application of oil to the finished surface immediately before or during the sewing process will greatly improve sewing conditions. The rocked point needles were originally designed for these leathers.

### NEEDLE HEATING

When the needle heats quickly and turns blue in sewing leathers that offer abnormal resistance to needle penetration, like the white buck varieties, substitute the twist point. It cuts its way through these tough leathers sufficiently to avoid the friction heat and opens up the leather to permit the free passage of the thread.

# Group 100 Round Shank, Round Point

See Group 8000 for additional round shank, round point needles

Type No.	Description and Sizes Available
101	Extra short, double groove, nickel plated-sizes 019, 022, 025, 027, 029, 032, 034, 036, 038, 040, 042, 044, 046, 049, 054
101A	Same as Type 101, except plain finish- size 040
101G	Same as Type 101, except chromium plated-sizes 027, 032, 036, 040
101J	Extra short, double groove, taper blade, diameter across eye is the size number, plain finish-sizes
102	O19, O22, O27 Extra short, double groove, short blade, 1/8 inch less than standard, nickel plated- sizes O25, O27, O32, O36, O40, O44
103	Same as Type 101, except long blade- sizes 027, 032,
104	Same as Type 101, except spotted- sizes 036, 040, 042, 044, 049
104J	Extra short, double groove, spotted, short blade 1/8 inch less than standard, taper blade, diameter across eye is the size number, chromium plated-
104JC	sizes 029, 032 Extra short, double groove, spotted, ball point,
20400	short blade 1/8 inch less than standard, taper blade diameter across eye is the size number, chromium plated-size 032
104JH	Extra short, double groove, spotted, ball point, taper
204011	blade, diameter across eye is the size number, chromium plated- sizes 029, 032
105	Same as Type 101, except spotted and government point- size 036
106	Extra short, double groove, ball eye, nickel plated- sizes 025, 027, 029, 032, 034, 036, 038, 040, 042, 044, 049
106A	Same as Type 106, except short blade 1/16 inch less than standard- sizes 032, 036, 040
106G	Same as Type 106, except chromium plated- sizes 029, 032, 036, 038, 040, 044
106H	Same as Type 106, except ball point- size 040
106GH	Same as Type 106, except chromium plated, ball point- sizes 036, 040
106ZA	Same as Type 106, except under-size eye and grooves, one step reduction- size 040

# Group 100 Round Shank, Round Point

Type No.	Description and Sizes Available
107	Extra short, double groove, ball eye, short blade 1/8 inch less than standard, nickel plated- sizes 027,
107B	029, 032, 036, 040, 044 Same as Type 107, except over-size eye- sizes 032,
107G	036, 040 Same as Type 107, except chromium plated- sizes 032,
108	036, 040, 044 Extra short, double groove, ball eye, spotted, nickel
108B	plated- sizes 032, 036, 038, 040, 042, 044, 049, 054 Same as Type 108, except high spot- sizes 040, 044
108C	Same as Type 108, except short blade 1/8 inch less than standard- sizes 036, 040, 044
108 G	Same as Type 108, except chromium plated- sizes 032, 036, 040, 044, 049, 054
108H 108GC	Same as Type 108, except ball point- sizes 036, 040 Same as Type 108, except short blade 1/8 inch less
	than standard, and chromium plated-sizes 036, 040, 044
108GH	Same as Type 108, except chromium plated, ball pointsizes 036, 040, 044
108HA	Same as Type 108, except ball point, short blade 1/8 inch less than standard, chromium plated- sizes
109	040, 044 Extra short, double groove, ball eye, government,
109B	nickel plated- sizes 027, 032, 036, 040, 044 Extra short, double groove, government, nickel plated-
109G	sizes 027, 032, 036, 040, 044, 049 Same as Type 109, except chromium plated- sizes 036,
109GA	٥٤٥, ٥٤٤٤ Same as Type 109 B, except chromium plated- size 054
109HA	Same as Type 109, except ball point, chromium plated- size O40
110	Extra short, double groove, ball eye, spotted, government, nickel plated- sizes 036, 040, 044, 049
110G	Same as Type 110, except chromium plated-sizes 036, 040, 044, 049
110ZL	Same as Type 110, except ball point, chromium plated-size 040
111	Extra short, double groove, spiral groove, nickel
112	plated-sizes 032, 036, 040, 044, 049 Same as Type 111, except ball eye-sizes 032, 036, 040, 044, 049
113	Same as Type 111, except ball eye, spotted- sizes 036. 040. 044
115	Extra short, single groove, nickel plated- size 036 Extra short, single groove, ball eye, nickel plated-
117	sizes 034, 036, 040 Same as Type 111, except spotted- sizes 032, 036, 044
121	Short, double groove, nickel plated-sizes 019, 022, 025, 027, 029, 032, 036, 038, 040, 042, 044, 049,
	054, 060

	Group 100 Round Shank, Round Point
Туре	
No.	Description and Sizes Available
121G	Same as Type 121, except chromium plated-sizes 027, 029, 032, 036, 040, 044, 049
121H	Same as Type 121, except ball point- sizes 029, 032,
121J	Short, double groove, taper blade, diameter across eye is the size number, plain finish-sizes 022, 025, 027, 032
121ЈН	Short, double groove, ball point, diameter across eye is the size number, plain finish- size 027
122	Same as Type 121, except short blade 1/8 inch less than standard- sizes 032, 049
124	Short, double groove, spotted, nickel plated-sizes 038, 040, 044, 049, 060, 067, 080, 090
124A	Same as Type 124, except short point- size 080
124B	Short, double groove, spotted, over-size eye and grooves, long point, nickel plated-sizes 036, 038, 040
124G	Same as Type 124, except chromium plated- size 067
124J	Short, double groove, spotted, taper blade, diameter
	across eye is the size number, chromium plated- size 044
124GB	Same as Type 124 B, except chromium plated- size 040
125	Same as Type 124, except long blade 1/8 inch more than standard- sizes 049, 054, 060
126	Short, double groove, ball eye, nickel plated- sizes 027, 032, 036, 040, 042, 044, 049, 054
126G	Same as Type 126, except chromium plated-sizes 040, 044, 049
128	Short, double groove, ball eye, spotted, nickel plated- sizes 032, 036, 040, 044, 049, 054, 060, 067, 080
1280	Same as Type 128, except short blade 1/8 inch less than standard, width of eye and grooves under size one step reduction- sizes 040, 044, 049
128E	Same as Type 128, except over-size eye- size 044
128F	Same as Type 128, except under-size eye and grooves 27% of size of needle- sizes 044, 049, 054
128G	Same as Type 128, except chromium plated, under-size eye and grooves 27% of size of needle- sizes 044, 049, 054,
128H	Same as Type 128, except short blade 1/8 inch less than standard, width of eye and grooves under-size one
128GA	step reduction, ball point- sizes 036, 040, 044, 049 Same as Type 128, except chromium plated- sizes 032, 036, 040, 044, 049, 054
128GC	Same as Type 128, except short blade 1/8 inch less than standard, width of eye and grooves under-size one
128GH	step reduction, chromium plated- sizes 040, 044, 049 Same as Type 128, except short blade 1/8 inch less than standard, width of eye and grooves under-size one
	step reduction, ball point, chromium plated- sizes 036, 040, 044, 049

Tree o	Group 100 Round Shank, Round Point
Type No.	Description and Sizes Available
128HA	Same as Type 128, except under-size eye and grooves 27% of needle size, ball point- sizes 044, 049, 054
128HB	Same as Type 128, except under-size eye and grooves 27% of needle size, ball point, chromium plated-sizes 044, 049, 054
129	Short, double groove, government, nickel plated, diameter of shank .080 inch- sizes 027, 029, 032, 036, 040, 044, 049
1290	Same as Type 129, except diameter of shank .060 inch- sizes 032, 036
129G	Same as Type 129, except chromium plated-sizes 029, 032, 036, 040
130	Short, double groove, ball eye, spotted, government, nickel plated- sizes 032, 036, 040, 044, 049, 054, 060, 067
130A 130G	Same as Type 130, except uniform blade- size 040 Same as Type 130, except chromium plated- sizes 040, 044, 049, 054, 060
130H	Same as Type 130, except short blade 1/8 inch less than standard, width of eye and grooves under-size one step reduction, ball point- sizes 036, 040, 044, 049
130GH	Same as Type 130, except short blade 1/8 inch less than standard, width of eye and grooves under-size one step reduction, ball point, chromium plated-sizes 036, 040, 044, 049
130HA 130HB	Same as Type 130, except ball point- sizes 044, 049, 054 Same as Type 130, except ball point, chromium plated- sizes 044, 049, 054
133	Short, double groove, ball eye, spotted, spiral groove, nickel plated- sizes 049, 054
133G 135	Same as Type 133, except chromium plated-size 054 Short, single groove, nickel plated-sizes 040, 044, 049, 054
136 136A	Short, single groove, ball eye, nickel plated-size O44 Short, single groove, ball eye, spotted, diameter of shank .072 inch, over-size eye and groove, nickel plated-sizes 060, 067
140	Long, double groove, nickel plated-sizes 027, 032, 036, 040, 044, 049, 054, 060
142	Long, single groove, R.B., nickel plated-sizes 027, 032, 036, 040, 044, 049, 054, 060
143	No. 2 bag, double groove, nickel plated-sizes 054, 060, 067, 073, 080, 090, 100, 120
143G 144	Same as Type 143, except chromium plated- sizes 067, 090 No. 2 bag, short point, nickel plated- sizes 067, 080, 090
147G	Long, double groove, ball eye, spotted, short point, under-size eye and grooves one step reduction, chromium plated- sizes 044, 049, 054
147ZG	Long, double groove, ball eye, spotted, long point, chromium plated- size 054

	Group 100 Round Shank, Round Point
Type No.	Description and Sizes Available
150	Class "R" double groove, spotted, nickel plated- sizes 022, 025, 027, 029, 032, 036, 040, 044, 049, 054, 060
150A	Class "R" double groove, spotted, long blade, long point, nickel plated-sizes 025, 027, 029, 032, 036, 040, 044, 049, 054
150G	Same as Type 150, except chromium plated- sizes 032, 040, 044, 049
150H	Same as Type 150 A, except ball point- sizes 029, 032, 036
150GA 150ZM	Same as Type 150 A, except chromium plated-size 044 Same as Type 150 A, except back groove is continuous, spot is omitted and length of point is increased 1/32 inch-sizes 025, 027
151	Class "R" double groove, spotted, ball eye, nickel plated- sizes 032, 036, 040
152	Class "R" double groove, flat blade, plain finish- sizes Ol9, O22
153	Class "R" single groove, spotted, nickel plated- sizes 029, 036
153A	Class "R" single groove, spotted, long blade, long point, nickel plated- sizes 019, 022, 025, 027, 029,
155	032, 036, 040, 044 Class "X" continuous double groove, plain finish- sizes 020, 022, 025, 027, 030, 033, 037, 040, 042, 047
155A	Class "X" double groove, spotted, plain finish-sizes 022, 025, 027, 030
155H 155HA 159	Same as Type 155, except ball point- size 027 Same as Type 155 A, except ball point- size 027 "T" length, double groove, spotted, nickel plated-
160	sizes 049, 054, 060, 067 Interlock, double groove, nickel plated-sizes 022,
163	025, 027, 030, 032, 036, 040, 044, 049 Picoetta, single groove, flat blade, spotted, plain finish- sizes 025, 027, 029, 032, 034, 036, 040, 044, 049
	Note: Type 163 replaces the American made Type 8021. The replacing size numbers are set up below:
	Type 163-025 replaces 8021-027 " 163-027 " 8021-032
	" 163-029
	" 163-034 " 8021-044
173	Antaeus, double groove, spotted, plain finish-sizes 080, 100, 120
174	Antaeus, double groove, ball eye, short spot, nickel plated-sizes 067, 080, 090, 100, 120
180	Lockstitch, short length, ball eye, single groove, spotted, nickel plated-sizes 028, 032, 036, 040, 044, 048, 054, 060
180A	Lockstitch, short length, ball eye, single groove, spotted, short blade, nickel plated- sizes 032, 036, 038, 040, 044

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	Crays 100 Bound Charle Bound Boint
Туре	Group 100 Round Shank, Round Point
No.	Description and Sizes Available
180F	Same as Type 180, except under-size eye and groove two step reduction- size 060
180G	Same as Type 180, except chromium plated- sizes 032, 036, 040, 044, 048, 054, 060
180H	Same as Type 180, except ball point, length of point increased 3/64 inch, chromium plated-sizes 028, 032, 036, 040, 044, 048, 054
180GA	Same as Type 180, except chromium plated, length of point increased 3/64 inch- sizes 032, 036, 040, 044, 048
181	Lockstitch, short length, single groove, spotted, nickel plated- sizes 026, 028, 030
181A	Lockstitch, short length, single groove, spotted, short blade 1/8 inch less than standard, nickel plated-sizes 020, 022, 024, 026, 028, 030
182	Lockstitch, long length, ball eye, single groove, spotted, nickel plated sizes 040, 044, 048, 054, 060
	Group 200, Slabbed Shank, Round Point
See Gro	oup 8100 for additional slabbed shank, round point needles
Type	
No.	Description and Sizes Available
201	.056 inch single slab, extra short, right, nickel plated- sizes 022, 025, 027, 029, 032
202	.056 inch single slab, extra short, left, nickel plated- sizes 022, 025, 027, 029, 032
203	.060 inch single slab, extra short, right, nickel plated- sizes 022, 025, 027, 029, 032, 034, 036
204	.060 inch single slab, extra short, left, nickel plated- sizes 022, 025, 027, 029, 032, 034, 036
205	.064 inch single slab, extra short, right, nickel plated- sizes 032, 036, 038
206	.064 inch single slab, extra short, left, nickel plated- sizes 032, 036, 038
207	.068 inch single slab, extra short, right, nickel plated- sizes 022, 025, 027, 032, 036, 042, 044068 inch single slab, extra short, left, nickel plated-
208	sizes 022, 025, 027, 032, 036, 042, 044
211	.076 inch single slab, extra short, right, nickel plated- sizes 027, 032, 036, 040
212	.076 inch single slab, extra short, left, nickel plated- sizes 027, 032, 036, 040
215	.068 inch single slab, extra short, long blade 1/8 inch more than standard, right, nickel plated-sizes 032, 036, 040
216	.068 inch single slab, extra short, long blade 1/8 inch more than standard, left, nickel plated- sizes 032,

# Group 200, Slabbed Shank, Round Point

Type No.	Description and Sizes Available
217	.076 inch single slab, extra short, long blade 1/8 inch more than standard, right, nickel plated-size 036
218	.076 inch single slab, extra short, long blade 1/8 inch more than standard, left, nickel plated-size 036
240	.048 inch double slab, extra short, nickel plated- sizes 027, 029, 036, 038
241	.052 inch double slab, extra short, nickel plated- sizes 022, 027, 040
242	.056 inch double slab, extra short, nickel plated- size 036

# Group 300, Round Shank, Stay Point

# See Group 8300 for addition round shank stay point needles

Type No.	Description and Sizes Available
301	Extra short, double groove, plain finish- sizes 027, 029, 032, 034, 036, 038, 040, 042, 044, 046, 049, 052, 054, 060
301G	Same as Type 301, except chromium plated-sizes 032, 034, 036, 038, 040, 042, 044, 049, 054
302	Same as Type 301, except nickel plated-sizes 032, 036, 040, 044, 049
303	Extra short, double groove, long blade 1/8 inch more than standard, plain finish- sizes 040, 042
321	Short, double groove, plain finish- sizes 032, 036, 038, 040, 042, 044, 049
322	Same as Type 321, except nickel plated- sizes 036, 040, 049
350	Class "R", double groove, spotted, plain finish- sizes 036, 040, 044
360	Interlock, double groove, plain finish- sizes 036, 044
Туре	Group 400, Slabbed Shank, Stay Point
No.	Description and Sizes Available
401	.056 inch single slab, extra short, plain finish, right- sizes 027, 029, 032, 034
401G 402	Same as Type 401, except chromium plated- sizes 032,034.056 inch single slab, extra short, plain finish, left-sizes 027, 029, 032, 034
402G 403	Same as Type 402, except chromium plated- sizes 032,034.060 inch single slab, extra short, plain finish, right- sizes 027, 029, 032, 034, 036, 038, 040

# Group 400, Slabbed Shank, Stay Point

	Group 400, Slabbed Shank, Stay Point
Type	
No.	Description and Sizes Available
1	
403G	Same as Type 403, except chromium plated- sizes 032,
V cons	034, 036, 038
404	.060 inch single slab, extra short, plain finish, left-
	sizes 027, 029, 032, 034, 036, 038, 040
404G	Same as Type 404, except chromium plated- sizes 032,
	034, 036, 038
405	.064 inch single slab, extra short, plain finish, right-
	sizes 027, 029, 032, 034, 036, 038, 040, 042, 044
405G	Same as Type 405, except chromium plated- sizes 034,
1-7-	036, 038, 040, 042
406	.064 inch single slab, extra short, plain finish, left-
400	sizes 027, 029, 032, 034, 036, 038, 040, 042, 044
406G	Same as Type 406, except chromium plated- sizes 034,
4000	036, 038, 040, 042
407	.068 inch single slab, extra short, plain finish, right-
401	sizes 032, 034, 036, 038, 040, 042, 044, 046
408	.068 inch single slab, extra short, plain finish, left-
400	sizes 032, 034, 036, 038, 040, 042, 044, 046
411	.076 inch single slab, extra short, plain finish, right-
411	sizes 032, 038, 040, 042, 049
412	.076 inch single slab, extra short, plain finish, left-
412	sizes 032, 038, 040, 042, 049
1.15	.068 inch single slab, extra short, long blade 1/8 inch
415	more than standard, plain finish, right- sizes 040,
1,26	042, 044
416	.068 inch single slab, extra short, long blade 1/8 inch
	more than standard, plain finish, left- sizes 040,
1.17	042, 044 .076 inch single slab, extra short, long blade 1/8 inch
417	more than standard, plain finish, right- sizes 042,
1.10	049, 054 .076 inch single slab, extra short, long blade 1/8 inch
418	.070 Inch single state, extra short, long blade 175 Inch
	more than standard, plain finish, left- sizes 042,
105	049, 054
425	.064 inch single slab, short, plain finish, right-
1 - 1	sizes 036, 038
426	.064 inch single slab, short, plain finish, left- sizes
	036, 038
427	.068 inch single slab, short, plain finish, right-
	size 040
428	.068 inch single slab, short, plain finish, left-
	size 040
440	.048 inch double slab, extra short, plain finish-
	sizes 029, 032, 034, 036, 038, 040, 042, 044
440G	Same as Type 440, except chromium plated- sizes 032,
	034, 036, 038

	Group 500, Round Shank, Rocked Point
Type No.	Description and Sizes Available
501	Extra short, double groove, plain finish- sizes 029, 032, 034, 036, 038, 040, 042, 044, 046
501G	Same as Type 501, except chromium plated-sizes 036, 038, 040, 042
513	Extra short, double groove, ball eye, spotted, spiral groove, nickel plated, sizes- 036, 040
521	Short, double groove, plain finish- sizes 027, 029, 032, 036, 038, 040, 042
m	Group 600, Slabbed Shank, Rocked Point
Type No.	Description and Sizes Available
601	.056 inch single slab, extra short, plain finish, right-sizes 027, 029, 032, 034, 036
602	.056 inch single slab, extra short, plain finish, left-sizes 027, 029, 032, 034, 036
603	.060 inch single slab, extra short, plain finish, right- sizes 027, 029, 032, 034, 036, 038
604	.060 inch single slab, extra short, plain finish, lert- sizes 027, 029, 032, 034, 036, 038
605	.064 inch single slab, extra short, plain finish, right-
606	sizes 027, 029, 032, 034, 036, 038, 040, 042 .064 inch single slab, extra short, plain finish, left-
607	sizes 027, 029, 032, 034, 036, 038, 040, 042  .068 inch single slab, extra short, plain finish, right-
608	sizes 032, 034, 036, 038, 040, 042 .068 inch single slab, extra short, plain finish, left-
611	sizes 032, 034, 036, 038, 040, 042  .076 inch single slab, extra short, plain finish, right-
612	sizes 029, 032, 034 .076 inch single slab, extra short, plain finish, left-
	sizes 029, 032, 034
Туре	Group 700, Round Shank, Flat Point
No.	Description and Sizes Available
701	Extra short, double groove, plain finish-sizes 027, 029, 032, 034, 036, 038, 040, 042, 044, 049, 054, 060
701G	Same as Type 701, except chromium plated-size 038
703	Extra short, double groove, long blade 1/8 inch more than standard, plain finish- size 044
712	Extra short, double groove, spotted, spiral groove, nickel plated- size 036
721	Short, double groove, plain finish- size 054

	Group 800, Slabbed Shank, Flat Point
Type No.	Description and Sizes Available
801	.056 inch single slab, extra short, plain finish, right- sizes 027, 029, 032
802	.056 inch single slab, extra short, plain finish, left- sizes 027, 029, 032
803	.060 inch single slab, extra short, plain finish, right-sizes 027, 029, 032, 034, 036, 038
803G	Same as Type 803, except chromium plated- size 034
804	.060 inch single slab, extra short, plain finish, left- sizes 027, 029, 032, 034, 036, 038
804G 805	Same as Type 804, except chromium plated- size 034 .064 inch single slab, extra short, plain finish, right-
	sizes 027, 029, 032, 034, 036, 038, 040, 042 .064 inch single slab, extra short, plain finish, left-
806	sizes 027, 029, 032, 034, 036, 038, 040, 042
807	.068 inch single slab, extra short, plain finish, right- sizes 029, 034, 036, 038, 040, 042
808	sizes 029, 034, 036, 038, 040, 042  .068 inch single slab, extra short, plain finish, left-
815	sizes 029, 034, 036, 038, 040, 042 .068 inch single slab, extra short, long blade 1/8 inch
816	more than standard, plain finish, right-size 044.068 inch single slab, extra short, long blade 1/8 inch more than standard, plain finish, left-size 044.
817	more than standard, plain finish, left-size 044 .076 inch single slab, extra short, long blade 1/8 inch
818	more than standard, plain finish, right-size 054 .076 inch single slab, extra short, long blade 1/8 inch more than standard, plain finish, left-size 054
	Group 900, Round Shank, Spear Point
Type No.	Description and Sizes Available
901	Extra short, double groove, plain finish- sizes 027, 032,
	034, 036, 038, 040, 042, 044, 046, 049, 054
902	Same as Type 901, except nickel plated-sizes 036, 040, 042, 044
903	Same as Type 901, except short blade, nickel plated- sizes 040, 044
905	Same as Type 901, except spotted- size 040 Extra short, double groove, ball eye, nickel plated-
	sizes 027, 032, 034, 036, 040, 042, 044, 049
907G 908	Same as Type 907, except chromium plated—size 040 Same as Type 907, except spotted—sizes 042, 044, 049
916	Same as Type 907, except single groove- sizes 036, 040
917 921	Same as Type 907, except single groove, spotted-size 054 Short, double groove, plain finish-sizes 036, 040, 042,
924	044, 049 Short, double groove, spotted, plain finish-sizes 049,
925	054, 072, 080 Same as Type 924, except nickel plated-size 054
928	Short, double groove, ball eye, spotted, plain finish-
	sizes 049, 060

	Charles Cook Bound Charles Charles Cook Point
Туре	Group 900, Round Shank, Spear Point
No.	Description and Sizes Available
929	Same as Type 928, except nickel plated- sizes 044, 049, 054, 060, 067, 080
929G 936	Same as Type 928, except chromium plated—size 054 Short, single groove, ball eye, nickel plated—sizes 040, 049
943 943G	No. 2 bag, plain finish- sizes 067, 073, 080 Same as Type 943, except chromium plated- sizes 067, 073, 080
943ZA	Same as Type 943, except under-size eye and grooves, five step reduction- size 067
943ZB	Same as Type 943, except step-up in front groove- size 067
950	Class "R", double groove, spotted, plain finish- sizes O44, 049
974	Antaeus, double groove, ball eye, spotted, plain finish- size 090
Marso o	Group 1000, Slabbed Shank, Spear Point
No.	Description and Sizes Available
1003	.060 inch single slab, extra short, plain finish,
1004	right- sizes 029, 032, 034, 036, 038 .060 inch single slab, extra short, plain finish,
1005	left- sizes 029, 032, 034, 036, 038 .064 inch single slab, extra short, plain finish,
1006	right- sizes 032, 036, 038, 040 .064 inch single slab, extra short, plain finish,
1007	left- sizes 032, 036, 038, 040 .068 inch single slab, extra short, plain finish,
1008	right- sizes 036, 038, 040, 042, 044  .068 inch single slab, extra short, plain finish, left- sizes 036, 038, 040, 042, 044
Type No.	Group 1100, Round Shank, Cross Point  Description and Sizes Available
1101	Extra short, double groove, plain finish-sizes 029,
1102 1121	032, 034, 036, 038, 040, 042, 044, 049, 054, 060 Same as Type 1101, except nickel plated—size 044 Short, double groove, plain finish—sizes 029, 032, 034, 036, 038, 040, 042, 044, 046, 049, 054, 060, 067
	Group 1200, Slabbed Shank, Cross Point
Type No.	Description and Sizes Available
1201	.056 inch single slab, extra short, plain finish, right- sizes 027, 029, 032

LIST OF MEEDLES
Group 1200, Slabbed Shank, Cross Point
Туре
No. Description and Sizes Available
1202 .056 inch single slab, extra short, plain finish, left-sizes 027, 029, 032
1203 .060 inch single slab, extra short, plain finish, right- sizes 027, 029, 032, 036, 038
1204 .060 inch single slab, extra short, plain finish, left- sizes 027, 029, 032, 036, 038
1205 .064 inch single slab, extra short, plain finish, right- sizes 027, 029, 032, 036, 038, 040, 042
1206 .064 inch single slab, extra short, plain finish, left- sizes 027, 029, 032, 036, 038, 040, 042
1207 .068 inch single slab, extra short, plain finish, right-sizes 036, 038, 040, 042, 044
1208 .068 inch single slab, extra short, plain finish, left- sizes 036, 038, 040, 042, 044
1240 .048 inch double slab, extra short, plain finish- sizes 032, 034
Group 1300, Round Shank, Narrow Cross Taper Point
Туре
No. Description and Sizes Available
1301 Extra short, double groove, plain finish-sizes 027, 029, 032, 034, 036, 038, 040, 042, 044
1301G Same as Type 1301, except chromium plated- size 040 1321 Short, double groove, plain finish- sizes 036, 040
Group 1400, Slabbed Shank, Narrow Cross Taper Point
Туре
No. Description and Sizes Available
1401 .056 inch single slab, extra short, plain finish, right- sizes 027, 029, 032
1402 .056 inch single slab, extra short, plain finish, left-sizes 027, 029, 032
1403 .060 inch single slab, extra short, plain finish, right- sizes 027, 029, 032, 034, 036, 038
1404 .060 inch single slab, extra short, plain finish, left- sizes 027, 029, 032, 034, 036, 038
1405 .064 inch single slab, extra short, plain finish, right- sizes 027, 029, 032, 034, 036, 038, 040, 042
1405G Same as Type 1405, except chromium plated-size 034 1406 .064 inch single slab, extra short, plain finish, left- sizes 027, 029, 032, 034, 036, 038, 040, 042
1406G Same as Type 1406, except chromium plated- size 034
1407 .068 inch single slab, extra short, plain finish,
right- sizes 034, 036, 040, 042  1408 .068 inch single slab, extra short, plain finish, left- sizes 034, 036, 040, 042
1411 .076 inch single slab, extra short, plain finish,
right- size 029
-33-

Group 1400, Slabbed Shank, Narrow Cross Taper Point

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Type No.	Description and Sizes Available
1412	.076 inch single slab, extra short, plain finish, left-size 029
1440	.048 inch double slab, extra short, plain finish- sizes 027, 029, 032, 034, 036
Tune	Group 1500, Round Shank, Twist Point
Type No.	Description and Sizes Available
1501	Extra short, double groove, plain finish-sizes 027, 029, 032, 034, 036, 038, 040, 042, 044, 049, 052, 054, 060
1502 1503	Same as Type 1501, except nickel plated-sizes 036, 040 Same as Type 1501, except long blade 1/8 inch more than standard-size 044
1521	Short, double groove, plain finish- sizes 032, 038, 044, 046, 049, 054, 060
1522 1543	Same as Type 1521, except nickel plated-size 040 No. 2 bag, plain finish-sizes 067, 080
	Group 1600, Slabbed Shank, Twist Point
Type No.	Description and Sizes Available
1601	.056 inch single slab, extra short, plain finish, right- sizes 027, 029, 032
1602	.056 inch single slab, extra short, plain finish, left- sizes 027, 029, 032
1603	.060 inch single slab, extra short, plain finish, right- sizes 027, 029, 032, 034, 036, 038
1604	.060 inch single slab, extra short, plain finish, left- sizes 027, 029, 032, 034, 036, 038
1605	.064 inch single slab, extra short, plain finish, right- sizes 032, 034, 036, 038, 040, 042, 044
1606	.064 inch single slab, extra short, plain finish, left- sizes 032, 034, 036, 038, 040, 042, 044
1607	.068 inch single slab, extra short, plain finish, right-sizes 032, 036, 040, 042, 044
1608	.068 inch single slab, extra short, plain finish, left-sizes 032, 036, 040, 042, 044
1611	.076 inch single slab, extra short, plain finish, right-size 032
1612	.076 inch single slab, extra short, plain finish, left-size 032
1613	Same as Type 1605, except nickel plated- size 040
1614	Same as Type 1606, except nickel plated- size 040
1615	.068 inch single slab, extra short, long blade 1/8 inch more than standard, plain finish, right-sizes 036,
	040. 042. 049

m	Group 1600, Slabbed Shank, Twist Point
Type No.	Description and Sizes Available
1616	.068 inch single slab, extra short, long blade 1/8 inch more than standard, plain finish, left- sizes 036,
1640	040, 042, 049 .048 inch double slab, extra short, plain finish- size 034
Туре	Group 1700, Round Shank, Twist Centered Point
No.	Description and Sizes Available
1701	Extra short, double groove, plain finish- sizes 029, 032, 034, 036, 038, 040, 042, 044, 046, 049, 054, 060
1701G 1702 1703	Same as Type 1701, except chromium plated- size 038 Same as Type 1701, except nickel plated- size 046 Extra short, double groove, long blade 1/8 inch more
1721	than standard, plain finish- sizes 040, 042 Short, double groove, plain finish- sizes 040, 042, 046, 049, 052, 054
Marsa o	Group 1800, Slabbed Shank, Twist Centered Point
Type No.	Description and Sizes Available
1801	.056 inch single slab, extra short, plain finish, right- sizes 027, 032
1802	.056 inch single slab, extra short, plain finish, left- sizes 027, 032
1803	.060 inch single slab, extra short, plain finish, right- sizes 027, 029, 032, 034, 036, 038
1804	.060 inch single slab, extra short, plain finish, left- sizes 027, 029, 032, 034, 036, 038
1805	.064 inch single slab, extra short, plain finish, right- sizes 027, 029, 032, 034, 036, 038, 040
1806	.064 inch single slab, extra short, plain finish, left- sizes 027, 029, 032, 034, 036, 038, 040
1807	.068 inch single slab, extra short, plain finish, right- sizes 029, 032, 034, 036, 038, 040, 042, 044, 049
1808	.068 inch single slab, extra short, plain finish, left-sizes 029, 032, 034, 036, 038, 040, 042, 044, 049
1811	.076 inch single slab, extra short, plain finish, right- sizes 032, 036, 040
1812	.076 inch single slab, extra short, plain finish, left- sizes 032, 036, 040
1815	.068 inch single slab, extra short, long blade 1/8 inch more than standard, plain finish, right- sizes
1816	040, 042 .068 inch single slab, extra short, long blade 1/8 inch

	Group 1800, Slabbed Shank, Twist Centered Point
Type No.	Description and Sizes Available
1817	.076 inch single slab, extra short, long blade 1/8 inch more than standard, plain finish, right-sizes 040, 042, 044
1818	.076 inch single slab, extra short, long blade 1/8 inch more than standard, plain finish, left-sizes 040, 042, 044
1840	.048 inch double slab, extra short, plain finish-
1842	sizes 032, 034 .056 inch double slab, extra short, plain finish- size 049
	Group 1900, Round Shank, Square Point
See Gr	oup 9800 for additional round shank, square point needles
Type No.	Description and Sizes Available
1943 1944	No. 2 bag, plain finish- sizes 080, 090, 100, 120 Same as Type 1943, except for American Supplies
1959	Company- sizes 100, 120 "T" length, double groove, spotted, plain finish-
1965	sizes 079, 090, 100, 120, 140 Class "Y", double groove, spotted, plain finish- sizes 100, 120, 140
1970	Herakles, double groove, spotted, plain finish- sizes 080, 090, 100, 120, 140, 156, 172, 188
1973	Antaeus, double groove, spotted, plain finish- sizes 067, 080, 100, 120, 140, 156, 172, 188
1975	Long Antaeus, double groove, spotted, plain finish- sizes 080, 090, 100, 120, 140, 156
Gro	up 2100, Round Shank, Reverse Twist, Rocked Point
Type No.	Description and Sizes Available
2101	Extra short, double groove, plain finish- sizes 032, 034, 036, 038
Gro	up 2200, Slabbed Shank, Reverse Twist, Rocked Point
Type No.	Description and Sizes Available
2201	.056 inch single slab, extra short, plain finish, right- sizes 029, 032, 036
2201G 2202	Same as Type 2201, except chromium plated-size 032 .056 inch single slab, extra short, plain finish, left- sizes 029, 032, 036
2202G 2203	Same as Type 2202, except chromium plated—size 032 .060 inch single slab, extra short, plain finish, right—sizes 029, 032, 034
	7/

	roup 2200, Slabbed Shank, Reverse Twist, Rocked Point
Type No.	Description and Sizes Available
2203G	Same as Type 2203, except chromium plated- sizes 032, 034
2204	.060 inch single slab, extra short, plain finish, left- sizes 029, 032, 034
2204G	Same as Type 2204, except chromium plated- sizes 032, 034
2205	.064 inch single slab, extra short, plain finish, right- sizes 029, 032, 034, 036
2205G	Same as Type 2205, except chromium plated- sizes 034, 036
2206	.064 inch single slab, extra short, plain finish, left- sizes 029, 032, 034, 036
2206G	Same as Type 2206, except chromium plated- sizes 034,
2240	.048 inch double slab, extra short, plain finish- sizes 032, 034, 036
2240G	.048 inch double slab, extra short, chromium plated- sizes 032, 034
Tarne	Group 2300, Round Shank, Triangle Point
No.	Description and Sizes Available
2381	Lockstitch, short length, single groove, spotted, long point, nickel plated- size 060
	Group 8000, Round Shank, Round Point
See Gr	oup 100 for additional round shank, round point needles
Type No.	Description and Sizes Available
8022	Short, double groove, flat blade, nickel plated-sizes 025, 027, 032
8023	Short, double groove, 1.5 mm shank diameter, nickel plated-sizes 027, 032, 036
8024	Crochetta, double groove, flat blade, spotted, nickel plated- sizes 027, 032
8060	Interlock, double groove, flat blade, spotted, nickel plated- sizes 018, 020, 022, 025, 027, 032
	Group 8100, Slabbed Shank, Round Point
See Gr	oup 200 for additional slabbed shank, round point needles
Type No.	Description and Sizes Available
8157	.068 inch single slab, Class "R", double groove, spotted, nickel plated, right- sizes 025, 027, 032,

Group 8100, Slabbed Shank, Round Point

Type No.

Description and Sizes Available

8158 .068 inch single slab, Class "R", double groove, spotted, nickel plated, left-sizes 025, 027, 032, 036, 040, 044

Group 8300, Round Shank Stay Point

See Group 300 for additional round shank, stay point needles

Type No.

Description and Sizes Available

8301 Extra short, double groove, short point, plain finishsizes 034, 036

Group 9800, Round Shank, Square Point

See Group 1900 for additional round shank, square point needles

Type No.

Description and Sizes Available

9844 Herakles, double groove, flat blade, 11 mm length of point, plain finish- sizes 067, 090, 100, 120

9845 Antaeus, double groove, spotted, flat blade, 11 mm length of point, plain finish-sizes 060, 067, 080, 090, 100, 120

9846 Antaeus, chinking, double groove, flat blade, plain finish- sizes 080, 090, 100

#### APPLICATION OF TYPE NUMBERS TO MACHINES

The standard styles of machines furnished as of March 1, 1940 and some obsolete styles are listed herewith. Set opposite each style number is the type number or numbers of the needles generally used. Type numbers are arranged numerically, as the variety of materials sewed on each machine makes it impractical to show a preference.

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Machine
  Styles
                                             Type of Needles
1200C
                 121, 121G, 121H, 121J, 121JH, 124, 124B, 124G,
                 124GB, 129, 129G
101, 101G, 101J, 104, 104JH
1200AM
                 Same as Style 1200C
1200AP
1700A
                 121, 121G
                101, 101G, 101J, 102, 104, 104JH
101, 101G, 101J, 102, 104, 104JH
101, 101G, 101J, 102, 104, 104JH
1700F
1700G
1700H
1800A
                 143, 143G
                143, 143G
143, 143G
1800G
1800AA
                140
1800AJ
                140
1800AK
1900A
                143, 143G
                 140
1900K
                 143, 143G
1900M
                143, 143G
1900P
                143, 143G
1900AA
2600A
                101, 101G, 501, 501G, 701, 701G, 1501, 1701, 1701G,
                2101
                501, 501G, 701, 701G, 1501, 1701, 1701G, 2101
501, 501G, 701, 701G, 1501, 1701, 1701G, 2101
501, 501G, 701, 701G, 1501, 1701, 1701G, 2101
2600D
2600H
2600M
2600Q
                Same as Style 2600 A
3000A
                121, 121G, 121H, 121J, 121JH, 124, 124B, 124G, 124GB
                121, 121G, 121H, 121J, 121JH, 124, 124B, 124G, 124GB
121, 121G
121, 121G, 121H, 121J, 121JH, 124, 124B, 124G, 124GB
121, 121G, 121H, 121J, 121JH, 124, 124B, 124G, 124GB
121, 121G, 121H, 121J, 121JH, 124, 124B, 124G, 124GB
121, 121G, 121H, 121J, 121JH, 124, 124B, 124G, 124GB
121, 121G, 121H, 121J, 121JH, 124, 124B, 124G, 124GB
3000R
4400A
5000L
5100G
5100H
5100L
5400A
5400B
                121, 121G, 124, 124G
                143, 143G
5500A
                121, 121G, 124, 124G
5500B
                143, 143G
5700A
6000A
                101, 101G, 101J, 102, 104, 104ЛН
Same as Style 1200C
                101, 101G, 104, 106, 106A, 106G, 108, 108G, 301, 301G, 302, 501, 501G, 1501, 1701, 1701G 106, 106G, 108, 108G, 109, 109G, 110, 110G 106, 106G, 108, 108G, 109, 109G, 110, 110G
6200B
61.00m
6400W
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Machine
   Styles
                                                                              Type of Needles
6500B
                          121, 121G, 121H, 121J, 121JH, 124, 124G, 124J, 126,
                          126G, 128, 128F, 128G, 128H, 128GA, 128HA, 128HB, 129, 129G, 130, 130G, 130H, 130HA, 130HB, 929
126G, 126G, 128, 128GA, 129, 129G, 130, 130G
140, 143, 143G, 943, 943G, 1543
6500N
6600B
6600D
                          140, 143, 143G, 943, 943G, 1543
6600E
                           140, 143, 143G, 943, 943G, 1543
                          140, 143, 143G, 943, 943G, 1543
140, 143, 143G, 943, 943G, 1543
140, 143, 143G, 943, 943G, 1543
6600H
6600K
                         140, 143, 1436, 943, 9436, 1543

121, 1216, 121H, 121J, 121JH, 124, 124B, 124G, 124GB

121, 121G, 121H, 121J, 121JH, 124, 124B, 124G, 124GB

121, 121G, 121H, 124, 124G, 126, 126G, 128, 128H, 128GA

101, 101G, 101J, 104, 104JH

501, 501G, 1101, 1301, 1301G, 2101

501, 501G, 1101, 1301, 1301G, 2101

101, 101G, 101J, 104, 104JH

101, 101G, 101J, 104, 104JH

101, 101G, 101J, 104, 104JH

140, 143, 143G, 943, 943G, 1543

140, 156G, 1101, 1301, 1301G

501, 501G, 1101, 1301, 1301G

501, 501G, 1101, 1301, 1301G

101, 101G, 101J, 104, 104JH, 106, 106G, 106H, 108, 108G, 108H
6600L
6900A
6900G
6900H
6900SP
7200A
7200C
7200T
7400AG
7400SP
7800A
7800B
7800C
7800F
8200A
8200T
8200V
8300K
                          108G, 108H
301, 301G, 501, 501G, 1101, 1301, 1301G, 1501, 1701,
1701G, 2101
8400A
                           Same as Style 8400A
8400B
                          Same as Style 8400A
401, 401G, 402, 402G, 403, 403G, 404, 404G, 405, 405G,
406, 406G, 407, 408, 415, 416, 601, 602, 603, 604,
605, 606, 607, 608, 801, 802, 803, 803G, 804, 804G,
805, 806, 807, 808, 815, 816, 1003, 1004, 1005, 1006,
1007, 1008, 1201, 1202, 1203, 1204, 1205, 1206, 1207,
1208, 1401, 1402, 1403, 1404, 1405, 1405G, 1406G,
1407, 1408, 1601, 1602, 1603, 1604, 1605, 1606, 1607,
1608, 1615, 1616, 1801, 1802, 1803, 1804, 1805, 1806,
1807, 1808, 1815, 1816, 2201, 2201G, 2202, 2202G,
2203, 2203G, 2204, 2204G, 2205, 2205G, 2206G
Same as Style 8500A
8500A
 8500K
                           Same as Style 8500A
                          101, 101G, 104, 106, 106G, 108, 108G
101, 101G, 104, 106, 106G, 108, 108G
207, 208, 211, 212, 215, 216, 217, 218
101, 101G, 104, 106, 106G, 108, 108G
8600C
8600D
8600V
 8600Y
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Machine
  Styles
                                         Type of Needles
  A0088
                401, 401G, 402, 402G, 403, 403G, 404, 404G, 440,
                440G, 1203, 1204, 1240, 1403, 1404, 1440, 1603, 1604, 1640, 1801, 1802, 1803, 1804, 1840, 2201,
                2201G, 2202, 2202G, 2203, 2203G, 2204, 2204G, 2240, 2240G
Same as Style 8500A
  8900A
  8900B
                Same as Style 8500A
                Same as Style 8500A

401, 401G, 402, 402G, 403, 403G, 404, 404G, 405,

405G, 406, 406G, 407, 408, 440, 440G, 1203, 1204,

1205, 1206, 1207, 1208, 1240, 1401, 1402, 1403,

1404, 1405, 1405G, 1406, 1406G, 1407, 1408, 1440,

1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608,

1640, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 18

1840, 2201, 2201G, 2202, 2202G, 2203, 2203G, 2204,

2204G, 2205, 2205G, 2206, 2206G, 2240, 2240G
  8900C
                Same as Style 8500A
  8900J
  8900L
                Same as Style 89000
  9100C
                Same as Style 8500A
  9100Y
                Same as Style 8500A
                121, 121G, 121H, 124, 124G, 126, 126G, 128, 128F,
  9500D
                128G, 128H, 128GA, 128HA, 128HB, 129, 129G, 130,
                130G, 130H, 130HA, 130HB
501, 501G, 701, 701G, 1501, 1701, 1701G, 2101
104JH, 106, 106A, 106G, 106H, 108, 108G, 108H, 108GH,
109, 109G, 109HA, 110, 110G, 110ZL
  9500G
  9600B
  9700B
                Same as Style 9600B
  9800B
                Same as Style 9600B
                101, 101G, 101J, 103, 104, 104JH, 106, 106G, 106H,
  9900A
                106GH, 108, 108G, 108H, 108GH
                101, 701, 701G
101, 101G, 103, 104
130, 130G
  9900E
  99000
  9900S
  9900Y
                101, 101G, 103, 104
  9900AG
                106, 106G, 106H, 106GH, 108G, 108H, 108GH
  9900AH
                101, 101G, 103, 104
                701, 701G
101, 101G, 101J, 103, 104, 104JH
101, 101G, 101J, 103, 104, 104JH
Same as Style 9900A
  9900AK
  9900AP
  9900AQ
  9900AR
                109, 109G, 109HA
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301, 301G, 501, 501G, 701, 701G, 1101, 1301, 1301G,
1501, 1701, 1701G, 2101
  9900AS
10600L
10700A
10800A
                Same as Style 8500A
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Machine
                                                 Type of Needles
  Styles
                301, 301G, 303, 401, 401G, 402, 402G, 403, 403G, 404, 404G, 405, 405G, 406, 406G, 407, 408, 415, 416, 501, 501G, 601, 602, 603, 604, 605, 606, 607, 608, 701, 701G, 703, 801, 802, 803, 803G, 804, 804G, 805, 806, 807, 808, 815, 816, 901, 1003, 1004, 1005, 1006, 1007, 1008, 1101, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1301, 1301G, 1401, 1402, 1403, 1404, 1405, 1405G, 1406G, 1407, 1408, 1501, 1503, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1615, 1616, 1701, 1701G, 1703, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1815, 1816, 2101, 2201, 2201G, 2202, 2203G, 2203G, 2204, 2204G, 2205, 2206
11100C
11100F
                 Same as Style 11100C
                                               8500A
11200C
                                               8500A
11200D
                 121, 121G, 124, 124G, 921
121, 121G, 124, 124G, 921
126, 126G, 128, 128F, 128G, 128H, 128GA, 128HA, 128HB,
11300A
11500A
11500G
                 129, 129G, 130, 130G, 130HA, 130HB, 929
11500H
                 121, 121G, 124, 124G, 921
                 121, 121G, 124, 124G, 921
101, 101G, 101J, 104, 104JH, 106, 106G, 106H, 108,
11500J
11500K
                  108G, 108H
11700C
                  Same as Style 11500G
                              11
11700G
                                               11500G
                                               11500G
11700L
                                     11
                             11
11700M
                                               11500H
                 121, 121G, 121H, 121J, 121JH, 124, 124G
11800B
                 143, 143G, 943, 943G, 1943, 1944
143, 143G, 943, 943G, 1943, 1944
11800C
11800H
11900B
                 121, 121G, 121H, 121J, 121JH, 124, 124B, 124G, 124GB,
                 125, 128E
11900C
                 Same as Style 11900B
                      11
11900E
                                               11900B
11900K
                                               11900B
11900L
                                               11900B
12000D
                 501, 501G, 1101, 1301, 1301G, 2101
501, 501G, 1101, 1301, 1301G, 2101
12000F
12200A
                 Same as Style 8500A
12800H
                 1943, 1944
                 121, 121G, 121H, 121J, 121JH, 124
Same as Style 9600B
13100B
13100C
13100E
13100F
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9600B

9600B

13200A

13200B

13400A

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Machine
 Styles
                                Type of Needles
14100A
            121, 121G, 121H, 121J, 121JH, 124, 124G, 124J, 126,
            126G, 128, 128F, 128G, 128H, 128GA, 128HA, 128HB
126, 126G, 128, 128F, 128G, 128GA, 129, 129G, 130,
14100B
           130G
143, 143G, 943, 943G, 1543
14100C
14500D
14500F
            124, 124G
            143, 143G, 144
14500H
14500P
            143, 143G, 144
14700D
            701,
                  701G
14700E
            701, 701G
15200F
            121, 121G, 121H, 121J, 121JH, 124, 124G, 129, 129G
15400AA
            150, 150G
15400AM
            150, 150G
15600A
            150, 150G
15700A
            121, 121G, 121H, 121J, 121 JH, 124, 124B, 124G,
            124GB, 129, 129G
15700B
            Same as Style 15700A
15700C
              11
                   11
                              15700A
15700D
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                              15700A
15700E
              11
                   11
                        11
                              15700A
              11
15800A
                   11
                        11
                              9600B
15800B
                              96003
15800D
           121, 121G, 124, 124B, 124G, 124GB
121, 121G, 124, 124G
121, 121G, 124, 124G
15800E
15800G
15800H
            121, 121G, 124, 124G
           106, 106g, 106H, 108, 108g, 108H, 108GH, 108HA, 121, 121g, 121H, 121J, 121JH, 124, 124g, 129, 129G 121, 121g, 121H, 121JH, 124, 124G
15800J
15900G
16100A
            Same as Style 11500K
16100C
16600D
           143, 143G, 1543
           143, 143G, 1543
16600G
           104JH, 106, 106A, 106G, 106H, 108, 108G, 108H,
16800B
           108GH, 109, 109G, 109HA, 110, 110G, 110ZL, 112, 113, 301G, 302, 513, 907
Same as Style 16800B
16800C
            126, 126G, 128, 128F, 128G, 128H, 128GA, 128HA,
16800G
            128HB, 129, 129G, 130, 130G, 130HA, 130HB, 133,
            133G, 929
16800M
            Same as Style 16800B
16800P
                             16800G
17400C
           321, 521, 721, 921, 1121, 1321, 1521, 1721
425, 426, 427, 428
17400D
           425, 420, 421, Toog Same as Style 11500G
19100A
19100B
19200B
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                              11500G
19300A
           121, 121G, 121H, 121J, 121JH, 124, 124B, 124G
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Machine
                                  Type of Needles
 Styles
            121, 121G, 121H, 121J, 121JH, 124, 124B, 124G
121, 121G, 121H, 121J, 121JH, 124, 124B, 124G
129, 129G
            121, 121G, 121H, 121J, 121JH, 124, 124B, 124G
19300B
19300C
19300E
35500C
35500D
             129, 129G
             Same as Style 9600B
35700C
35700D
                    11
                           11
                                9600B
35700E
35700F
35700G
                     11
                           **
                                9600B
                         11
                                9600B
            104J, 104JC, 107, 107G, 108C, 108GC, 108HA
35700H
35700J
35700K
35700P
             Same as Style 9600B
35700Q
                     11
                                 9600B
35700R
35700S
                                 9600B
             104J, 104JC, 107, 107G, 108C, 108GC, 108HA
35800A
             Same as Style 11500G
35800B
             147G
             128C, 128H, 128GC, 128GH
128C, 128H, 128GC, 128GH
35800C
35800D
35800P
35800R
             Same as Style 11500G
                11 11
                                11500G
                     11
                           11
35800S
                                11500G
35800T
                           " 11500G
35800V
             128C, 128H, 128GC, 128GH
            128C, 128H, 128GC, 128GH
128C, 128H, 128GC, 128GH
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35800W
35800X
38200A
             143, 143G, 943, 943G, 1543
38200B
38200C
             174
38200D
             174
            153A
153A
153A
39100C
39100S
39100V
39200B
             150A, 150H, 150GA
150A, 150H, 150GA
39200C
             150A, 150H, 150GA
39200E
             150A, 150GA
39200F
39200G
             150A, 150H, 150GA
39200J
             150A, 150H, 150GA
39200L
             150A, 150GA
39200Q
             150A, 150H, 150GA
150A, 150H, 150GA
39200R
             150A, 150H, 150GA
39200AA
             150A, 150H, 150GA
39200AC
39200AD
             150A, 150H, 150GA
39200AE
             150A, 150H, 150GA
            150A, 150H, 150GA
150A, 150H, 150GA
39200AH
39200AJ
            150A, 150H, 150GA
39200AN
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Machine
 Styles
                                             Types of Needles
39200AR
                150A, 150H, 150GA
                150A, 150H, 150GA
39200AS
                150A, 150H, 150GA
39200AT
39200AU
                150A, 150H, 150GA
39200AV
                150A, 150H, 150GA
39200AW
                150A, 150H, 150GA
                153A
153A
155, 155H
150, 150G
39300A
39300B
41200A
41200B
                155, 155H
908
41200C
41200D
                155, 155H
155A, 155HA
155A, 155HA
155A, 155HA
41200AA
41300A
41300B
41300C
41300D
                155A, 155HA
                155A, 155HA
41300E
                155A, 155HA
155A, 155HA
155A, 155HA
155A, 155HA
41300F
41300G
41300H
41300J
                104JH, 106, 106G, 106H, 108, 108G, 108H, 108GH, 109, 109G, 109HA, 110, 110G, 110ZL
43200A
                106, 106G, 108, 108G, 109, 109G, 110, 110G, 110ZL 106, 106G, 108, 108G, 109, 109G, 110, 110G, 110ZL
43200B
43200C
                101, 101G, 101J, 102, 104, 104JH, 109B

106, 106G, 108, 108G, 109, 109G, 110, 110G, 110ZL

101, 104JH, 106, 106G, 106H, 108, 108G, 108H, 108GH,

109, 109G, 109HA, 110, 110G, 110ZL

Same as Style 11500G
43200D
43200E
43200F
43200G
43200H
                                          43200A
43400B
                109B
                106, 106G, 108, 108G, 109, 109G, 110, 110G, 110ZL
106, 106G, 108, 108G, 109, 109G, 110, 110G, 110ZL
143, 143G, 943, 943G, 1543, 1943, 1944
143, 143G, 943, 943G, 1543, 1943, 1944
43800A
43800B
51100D
51100E
                124, 124G
51100F
51100G
                143, 143G, 943, 943G, 1543, 1943, 1944
51100H
                143, 143G,
                                    943, 943G, 1543, 1943, 1944
51100J
                130, 130G
124, 124G
51100L
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104JH, 106, 106A, 106G, 106H, 108, 108G, 108H,

108GH, 109, 109G, 110, 110G, 110ZL, 302, 907

126, 126G, 128, 128F, 128G, 128GA, 130, 130G, 929

126, 126G, 128, 128F, 128G, 128GA, 130, 130G, 929
51100M
51200A
51200B
51200C
                101, 101G, 101J, 102, 104, 104JH
104JH, 106, 106A, 106G, 106H, 108, 108G, 108H,
108GH, 109, 109B, 109G, 109HA, 110, 110G, 110ZL,
51200D
51200G
                302, 907
51200H
                101, 101G, 101J, 104, 104JH, 106, 106G, 109B
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Machine
 Styles
                                     Types of Needles
51200J
             Same as Style 51200G
             " " 51200A
126, 126G, 128, 128F, 128G, 128GA, 130, 130G, 929
126, 126G, 128, 128F, 128G, 128GA, 130, 130G, 929
101, 101G, 101J, 102, 104, 104JH
51200K
51200L
51200M
51200N
              Same as Style 51200G
51200R
51200S
             101, 101G, 101J, 104, 104JH, 106, 106G, 109B
51200T
             Same as Style 51200G
             121, 121G, 121H, 121J, 121JH, 124G, 124G, 124J, 126, 126G, 128, 128F, 128G, 128H, 128GA, 128HA, 128HB, 129, 129G, 130, 130G, 130H, 130HA, 130HB, 929 140, 143, 143G, 144, 147G, 943, 943G, 1543
51300A
51300B
             Same as Style 51300A
51300C
              140, 143, 143G, 144, 147G, 943, 943G, 1543
140, 143, 143G, 144, 147G, 943, 943G, 1543
51300D
51300F
             Same as Style 51300A
140, 143, 143G, 144, 147G, 943, 943G, 1543
51300G
51300H
51300J
              Same as Style 51300A
             140, 143, 143G, 144, 147G, 943, 943G, 1543
140, 143, 143G, 144, 147G, 943, 943G, 1543
Same as Style 51200G
51300K
51300L
51400A
51400B
                                   51200G
51400C
                                   51200G
51400D
                                   51200G
             104ЛH, 106, 106A, 106G, 106H, 108, 108G, 108H, 108GH, 109, 109B, 109G, 109HA, 110, 110G
51400E
51400F
             Same as Style 51200G
51400G
              101, 101G, 101J, 104, 104JH, 109B
51400J
              Same as Style 51200G
51400K
                                   51200G
51200G
                 11
                       11
51400M
                 11
                       11
                             11
                 11
                       11
                             11
                                   51200G
51400N
                 11
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                                   51200G
51400P
                 11
                       11
                             11
                                   51200G
51400Q
                       11
                             11
51400R
                 11
                                   51200G
51400S
                                   51200G
                                   51400E
51400T
                       11
                             11
                       11
                             11
51400U
                                   51200G
51400V
              101, 101G, 101J, 104, 104JH, 106, 106G, 109B
51400W
              Same as Style 51200G
51400X
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                       11
                             11
                                   51200G
                       11
                             11
51400Y
                                   51200G
51400AA
                                   51200G
51400AB
                                   51200G
51500A
              126, 126G, 128, 128F, 128G, 128H, 128GA, 128HA,
             128HB, 129, 129G, 130, 130G, 130HA, 130HB, 929
129, 129G, 130, 130G
140, 143, 143G, 144, 147G, 943, 943G, 1543
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51500C
51500D
51500F
             129, 129G, 130, 130G
Same as Style 51500A
51500G
51500H
51500J
                      11
                             11
                                   51500A
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Machine
  Styles
                                 Type of Needles
           129, 129G, 130, 130G
51500K
           140, 143, 143G, 144, 147G, 943, 943G, 1543
51500L
51500M
           Same as Style 51500A
51500N
           129, 129G, 130, 130G
51500P
           Same as Style 51500A
51600A
                              51200G
              11
51700C
                              51200G
51700D
                               51200G
51700E
           121, 121G, 121H, 121J, 121JH, 124, 124G, 129, 129G
51700F
           Same as Style 51500A
51700G
              11
                              51200G
              Ħ
                   11
51700H
                         11
                              51200G
51700J
              11
                   11
                         11
                              51200G
51700K
                              51200G
           121, 121G, 121H, 121J, 121JH, 124, 124G, 129, 129G
51700L
51700M
           Same as Style 51500A
51700N
              11
                              51200G
              11
                   11
                         11
51700P
                              51200G
                              51500A
51800A
              **
                   Ħ
                         11
51800B
              11
                   11
                              51500A
51200G
                         11
51900A
                  11
                        #
51900B
                        **
                              51500A
51900C
              11
                  11
                         **
                              51500A
51900D
           140, 143, 143G, 144, 147G, 943, 943G, 1543
51900F
           106G, 108G, 109G, 110G
51900G
           Same as Style 51200G
                              51500A
51900H
             11
                  11
                              51500A
51900J
51900K
           140, 143, 143G, 144, 147G, 943, 943G, 1543
51900L
           106G, 108G, 109G, 110G
101, 101G, 101J, 104, 104JH
52100A
          101, 101G, 104, 106, 106G, 108, 108G

101, 101G, 104, 106, 106G, 108, 108G

121, 121G, 121H, 124, 124G, 126, 126G, 128, 128F,

128G, 128H, 128GA, 128HA, 128HB, 929
52100B
52100C
52700A
           Same as Style 52700A
52700B
52700C
           121, 121G, 121H, 121J, 121JH, 124, 124B, 124G, 124GB
121, 121G, 121H, 121J, 121JH
52700F
          121, 121G, 121H, 121J, 121JH

121, 121G, 121H, 121J, 121JH

126, 126G, 128, 128F, 128G, 128GA

Same as Style 52700A

" " 52700A
52700G
52700H
52700J
52700K
52700L
          121, 121G, 121H, 121J, 121JH
121, 121G, 121H, 121J, 121JH
52700M
52700N
52800B
           121, 121G, 121H, 121J, 121JH
52800D
           121, 121G, 121H, 121J, 121JH
52800E
          121, 121G, 121H, 121J, 121JH
          121, 121G, 121H, 121J, 121JH
121, 121G, 121H, 121J, 121JH
121, 121G, 121H, 121J, 121JH
52800F
52800G
52800H
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Machine
 Styles
                                  Type of Needles
52800K
                 121, 121G, 121H, 121J, 121JH
                 126, 126G, 128, 128F, 128G, 128GA, 929
52900A
52900B
                 121, 121G, 126, 126G, 128, 128F, 128G, 128GA, 929
                 126, 126G, 128, 128F, 128G, 128GA, 929
104JH, 106, 106A, 106G, 106H, 108, 108G, 108H,
108GH, 109, 109G, 109HA, 110, 110G, 110ZL
52900C
53500A
                 Same as Style 53500A
101, 101G, 106, 106A, 106G
101, 101G, 106, 106A, 106G
53500B
53500C
53500D
54100B
                 106, 106A, 106G, 106H, 108, 108G, 108H, 108GH,
                 302, 907
                        as Style 54100B
                 Same
541 00C
54100D
                    11
                         11
                               11
                                     54100B
                    11
                         11
                               11
54100E
                                     54100B
                                     541003
                    11
                         11
                               11
54100F
                         11
54100G
                    11
                               11
                                     54100B
54100H
                    11
                         11
                               11
                                     54100B
                                     54100B
54100J
60000A
                 136A
                 180, 180A, 180G, 180H, 180GA, 181, 181A
61200C
                 180, 180A, 180G, 180H, 180GA, 181, 181A
61200F
                 180, 180A, 180F, 180G, 180H, 180GA, 181, 181A
61300C
                 180, 180A, 180F, 180G, 180H, 180GA, 181, 181A

121, 121G, 121H, 121J, 121JH

101, 101G, 101J, 104JH

121, 121G, 121H, 121J, 121JH

121, 121G, 124H, 124B, 124G, 124GB
61300F
75000H
75200A
75200E
75200H
                 150
75400AA
75500A
76000A
                 150
                 160
76000B
76000C
                 8060
76000J
                 8060
                 163
79100A
                 163
79100B
                 163
79100E
79100F-1
                 163
                 163
163
79100F-2
79100F-3
79100G-1
                 163
79100G-2
79100G-3
                 163
79200A
                 163
79200B
                 163
79200E
                 8023
79600A
79600L-4mm
                 8023
79600L-5mm
                 121
                 121
79600M
80100B
                 9846
                 173,1973, 9845
173, 1973, 9845
80200A
80200B
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# APPLICATION OF TYPE NUMBERS TO MACHINES

Machine							
Styles				Туре	of	Needl	es
80200C 80200AA 80200AB 80200AC 80600C 80600E 80600F 80600H 80600L	173, 1975 1975 1975 1975 1975 1975 1975	1973,	9845				
80600AC 80600AD 80700A 80700B 81200A 81200H	1975 1975 9846 1975 1970,						

#### NEEDLES TO BE USED

The following pages are reserved for recording the needles best suited for the machines and operations in

customers' pi	lants.
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achine tyle No.	Onematica	Needle Type	Used
tyle No.	Operation	Туре	512
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NEEDLES TO BE USED

	NEEDLES TO BE USED	NEEDLES TO BE USED					
Machine Style No.	Operation	Needle Type	Used Size				
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NEEDLES TO BE USEL

Machine Style No.	Needle Type	Used	
	Operation	1310	0126
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