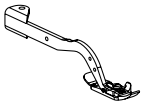
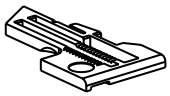
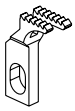
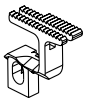
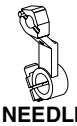
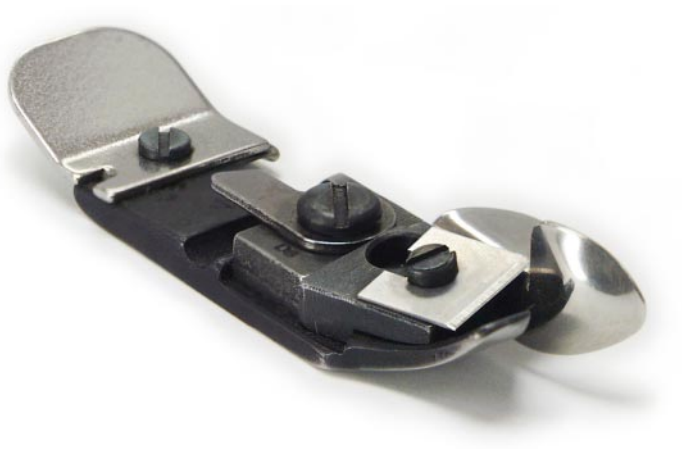
SEWING PARTS

This chart lists part numbers for 39500 sewing parts.

39500 Overedge Spare Parts Matrix STYLE	 PRESSER FOOT ASSEMBLY	 THROAT PLATE	 FEED DOG	 DIFFERENTIAL FEED DOG	 CHAINING FEED DOG	 NEEDLE DRIVING ARM
39500QB1/8	39520A	C39524B1/8	39505B	39526B	39505E	39552Z
39500QB5/32	39520A	C39524B5/32	39505B	39526B	39505E	39552Z
39500CQB1/8	39520A	C39524B1/8	39505B	39526B	39505E	39552Z
39500CQB5/32	39520A	C39524B5/32	39505B	39526B	39505E	39552Z
39500XEQB1/8	39520A	C39524B1/8	39505B	39526B	39505E	39552Z
39500XEQB5/32	39520A	C39524B5/32	39505B	39526B	39505E	39552Z
39500CXEQB1/8	39520A	C39524B1/8	39505B	39526B	39505E	39552Z
39500CXEQB5/32	39520A	C39524B5/32	39505B	39526B	39505E	39552Z
39500QJ	39520L	C39524J	39505J	—	39505K	39552Z
39500QL	39520L	C39524L	39505J	—	39505K	39552Z
39500QN	39520N	39524N	39505N	—	—	39552Z
39500QP	39520P	C39524P	39505P	39526P	—	39552Z
39500QW	39520W	C39524W	39505W	39526W	—	39552AC
39500QX	39520FX	39524FX	39505FX	—	39505M	39552Z
39500RA	39520AA	39524AA	39505P	39526AA	39505E	39552Z
39500RB1/8	39520AB	C39524AB1/8	39505AB	39526AB	—	39552AA
39500XERB1/8	39520AB	C39524AB1/8	39505AB	39526AB	—	39552AA
39500RC060	39520AC	39528AH	39505AC	39526AC	39505E	39552AB
39500CRC045	39520AC	C39524AC	39505AC	39526AC	39505E	39552AA
39500CRC060	39520AC	39528AH	39505AC	39526AC	39505E	39552AB
39500XERC060	39520AC	39528AH	39505AC	39526AC	39505E	39552AB
39500RF3/32	39520A	C39524B3/32	39505B	39526B	39505E	39552Z
39500RF1/8	39520A	C39524B1/8	39505B	39526B	39505E	39552Z
39500CRF1/8	39520A	C39524B1/8	39505B	39526B	39505E	39552Z
39500XERF1/8	39520A	C39524B1/8	39505B	39526B	39505E	39552Z
39500RN	39520BH	C39524D	39505BH	39526H	39505AL	39552Z
39500XERN	39520BH	C39524D	39505BH	39526H	39505AL	39552Z
39500RU	39520AU	C39524AU	39505AU	—	39505K	39552Z
39500CRU	39520AU	C39524AU	39505AU	—	39505K	39552Z
39500SD1/8	39520H	C39524D	39505F	39526H	39505H	39552Z
39500CSD1/8	39520H	C39524D	39505F	39526H	—	39552Z
39500XESD1/8	39520H	C39524D	39505F	39526H	39505E	39552Z
39500CXESD1/8	39520H	C39524D	39505F	39526H	—	39552Z
39500SE1/8	39527AD	C39524AD	39505AC	39526AC	39505E	39552Z
39500ST	G39520JS	GA39524JS	G39505JT	G39526JS	—	39552Z
39500TA	39520AS	C39524AV	39505AB	39526AB	—	39552Z
39500XETA	39520AS	C39524AV	39505AB	39526AB	—	39552Z
39500TM	39520M	C39524T	39505MM	39526MM	39505AW	39552Z
39500TT	39520M	C39524T	39505MM	39526BH	39505AW	39552Z
39500HUGC	39520BA	C39524BA1/8	39505AB	39526AB	—	39552AW
39500RBAC	39520BW	39524BV	39505BV	39526BU	—	39552AA
39500UEZ196A	39520AC	39528AH	39505AC	39526AC	39505E	39552AB

DEVICES & ATTACHMENTS

Latch Tacking Presser Foot



Presser foot number 39520CB is available for latch tacking seams when overedging with 39500 machines. The operator chains off after sewing, lifts the presser foot, brings the chain around to the front of the foot and pulls it into the knife and clamp. The next garment piece can be loaded and sewn so that the remaining chain is sewn into the seam. Seams are consistently latch tacked closed with clean finish at start.

This presser foot is easily attached to most single needle, three thread 39500 machines used to close sleeves and side seams on men's and women's knits shirts, children's clothes and similar garments requiring a latch tacking at the beginning.

INSTALLATIONS

Use this chart to choose the correct table top for 39500 machines.
Table top dimensions are 51cm x 122cm.

Model No.	Table Board Part Number	Table Board Description
39500 all styles	21371RD48	Non-Submerged
	21371WL48	Fully-Submerged
39500 Mark IV styles	21371RL48	Semi-Submerged
39500 9M styles	21371WZ48	Semi-Submerged

39500 MATERIAL TRIMMING KNIVES

Most 39500 machines use knives to trim the edge of the material just before it is sewn. The knives generally operate as a pair, one in the lower position and one in the upper position. They come in a variety of shapes, widths, edge configurations and materials. Here are some guidelines to follow when choosing knives for your 39500.

Knife width

Most lower and upper knives for the 39500 are available in a narrow or wide width. The narrow width is used for general seaming of light to medium weight fabrics. The wide width is used for general seaming of medium to heavy weight fabrics as well as serging with a long stitch length. The width of each series of knife is:

- Narrow lower 11/32" (8.7mm)
- Wide lower 13/32" (10.3mm)
- Narrow upper 1/4" (6.4mm)
- Wide upper 11/32" (8.7mm)
- Straight upper 5/16" (7.9mm)

Knife edges

The knife edges can be of a plain or corrugated edge. The plain edge is used for general seaming and serging of standard knit and woven fabrics. The corrugated edge is used for hard-to-cut knit and woven fabrics, and helps to keep the fabric from being pushed towards the operator during the trimming function.

Material types

The knives are generally made of a high-carbon steel and are hardened to keep the edges sharp longer. Carbide tipped knives are also available to reduce the wear and increase the life of the knife. When using carbide knives, it is recommended to use one (1) carbide and one (1) steel knife, rather than two carbide knives. Using two carbide knives increases the chance of chipping each of the knives and reducing the life expectancy of both.

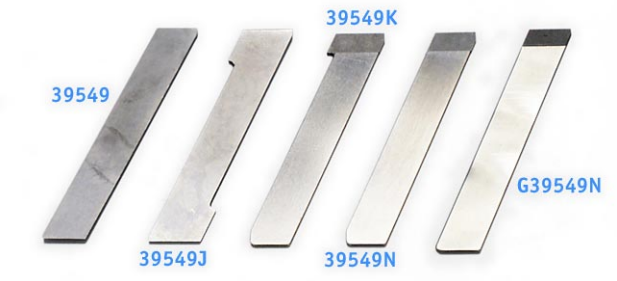
Upper Knife type

The upper knife can be an angled type, which crosses the lower knife at a 45° angle, or a straight type, which crosses parallel to the lower knife. The angled type is the most common, and is used for most types of material trimming. The straight type is used when heavy or bulky material needs to be trimmed, where a corrugated-edge knife cannot be used because it would damage the fabric. (Note: the straight upper knife requires a different knife holder than an angled knife.)

Knife sharpening

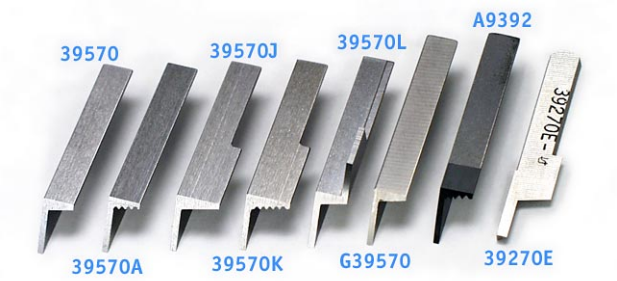
Steel knives can be sharpened using a standard knife grinding wheel, whereas carbide knives require the use of a diamond-impregnated wheel to sharpen them.

LOWER KNIVES



Part Number	Edge Type/Size	Material	Grinding Wheel	For Use with Knife
39549	Plain/Narrow	Steel	Standard	39570, 39570A, 39570L, G39570
39549J	Plain/Wide	Steel	Standard	39570J, 39570K
39549K	Plain/Wide	Carbide Tip	Diamond	39570J, 39570K
39549N	Plain/Narrow	Carbide Tip	Diamond	39570, 39570A, 39570L, G39570
G39549N	Plain/Narrow	Carbide Edge	Diamond	G39570, 39570, 39570A, 39570L

UPPER KNIVES



Part Number	Edge Type/Size	Material	Grinding Wheel	For Use with Knife
39570	Plain/Narrow	Steel	Standard	39549, 39549N, G39549N
39570A	Corrugated/Narrow	Steel	Standard	39549, 39549N, G39549N
39570J	Plain/Wide	Steel	Standard	39549J, 39549K
39570K	Corrugated/Wide	Steel	Standard	39549J, 39549K
39570L	Plain/Narrow with guard	Steel	Standard	39549, 39549N, G39549N
G39570	Plain/Narrow	Steel	Standard	G39549N, 39549, 39549N
A9392	Corrugated/Narrow	Carbide Tip	Diamond	39549
39270E	Straight Plain/ Narrow	Steel	Standard	39549, 39549N

Setting Things Straight with Curved Needles

The needle is generally considered the heart of the sewing machine - if you don't have one, it won't sew. And when it comes to the Union Special® 39500 Series machines, that heart is a curved 154 series needle instead of the usual straight needle.

Image courtesy of Groz-Beckert. All rights reserved.

When using a curved needle on an overedge like the 39500, or even on a chainstitch machine, it is mistakenly assumed that when the needle descends and penetrates the material it is entering at an angle, therefore causing needle deflection, easy needle breakage or skipped stitches, especially on seams or heavier materials. In reality, the design of the needle is such that it actually enters the material in a relatively vertical position, therefore virtually eliminating the needle deflection because of material. In addition, as the needle finishes its descent and starts back up, the curvature of the needle makes a natural needle loop for the looper to enter.

On the other hand, the overedge machines that utilize a straight needle actually will deflect more as the needle enters the material. This is because the design of these machines has the needle entering the material at an approximate 20° angle. Therefore the chance for needle deflection is increased considerably.

Union Special decided over fifty years ago to take advantage of the curved needle features for its overedge class and pursue it many steps further. The curvature of the needle when forming a needle loop allowed the timing of both the upper and lower loopers to be changed so that the stitch could be formed and set much quicker and easier. The timing changes also allowed for designing a new patented upper looper movement not found on any other machine. This new upper looper movement, combined with the timing changes, new loopers, throat plate and needle holder designs, meant that the stitch could be formed and set with less tension and more flexibility. This is why Union Special 39500 class machines produce the best overedge stitch formations with the best stretch and flexibility in the industry.

For additional information on curved needles for overedge machines, see the Groz-Beckert website at www.groz-beckert.com for an article on curved needles for overedge (also called overlock) machines, as well as articles on many other types of needles.

Also, see the Schmetz website at www.schmetz.com for information on their needles.