## SEWING MACHINE FEATURES

	What it is	What it does
MACHINE PARTS	Bobbin, drop-in or vertical	Carries lower thread, drops horizontally into machine from an opening in front of needle (amount of thread in bobbin is easily visible), or is loaded into a removable metal bobbin case that is inserted vertically into front of machine. It is easier to adjust bobbin tension in a bobbin case than in a drop-in. Some machines feature a low bobbin warning.
	Adjustable feed dogs (fabric teeth)	Feed dogs in raised position move fabric under presser foot. Dropped feed dogs give sewer control over movement of fabric under the needle; useful for darning and free-motion embroidery. Some machines without adjustable feed dogs provide a cover to prevent teeth from moving the fabric.
	Foot control (foot pedal)	Supplies power to the machine like a gas pedal does to a car: starts, stops, and sets speed. Some foot controls have other features like half stitch, full stitch, and needle lift, which are activated by tapping the control.
	LCD panel	Displays stitch selections, settings, and other information applicable to the machine.
	Sewing surface, extension, and free arm	The flat area around the needle plate, which supports the fabric. It consists of a free arm (a projecting arm over which narrow, tubular items can be pulled for easier sewing), and one or more tablelike extensions that snap on around the free arm to increase surface area. Some machines do not include extensions.
	Throat plate (needle plate)	Metal plate in sewing surface, below presser foot. Contains openings for feed dogs and for needle to meet the bobbin hook below. Some machines provide a straight stitch plate (or a zigzag plate that can be changed), which has a smaller needle hole and produces a more attractive straight stitch. The throat plate often has seam guide markings.
FEATURES FOR CONVENIENCE AND SEWING ACCURACY	Variable needle position	Realigns needle to left or right of its typical position, centered within the presser foot. Provides greater control for sewing in tight situations, such as near edges.
	Needle up/down function (needle stop function)	Changes needle position from up to down or vice versa, with the push of a button or a tap on the foot pedal. Saves you from making manual adjustments with the hand wheel. A related feature allows you to set the machine always to stop automatically with the needle in an up or down position.
	Needle threader	Built-in mechanism pulls thread through eye of the needle. Some threaders are easier to use than others, so test.
	Adjustable presser foot pressure	Increases or decreases pressure of foot on fabric. Influences the ease and balance with which fabric passes between the feed dogs and the presser foot. Though not used often, this adjustment can be helpful, especially with very lightweight or heavyweight fabrics.
	Thread cutter, manual or automatic	Manual thread cutters are typically mounted on left side of machine. Pull thread through cutter (a small, partially enclosed blade) to separate sewing from machine without the need for scissors. Automatic cutters clip threads close to fabric at the touch of a button, before you remove fabric from beneath presser foot; these produce less thread waste and nearly eliminate thread clippings on the floor.
SEWING FUNCTIONS AND SETTINGS	Buttonhole function, 4-step and 1-step	Stitches a buttonhole. A 4-step buttonhole requires the sewer to execute each part (two bar tacks, two sides) individually. A 1-step buttonhole creates the entire buttonhole in a single operation. Use an auto-size foot if provided. Look for a machine that allows you to adjust stitch width and length for better results.
	Decorative stitches	Either a row of straight stitches shaped into a design/pattern or satin stitches configured into linked shapes such as scallops or diamonds. Used for special finishes, borders, and embellishment.
	Automatic fix stitch (tie-off or lock-stitch)	Push-button control that secures stitches at beginning and/or end of seam. May also cut thread.
	Stitch length setting	Controls the length of straight stitch, from very short (for fine, sturdy stitching) to very long (for machine basting). Varies length of zigzag, utility, and decorative stitch patterns as well.
	Stitch width setting	Controls the side-to-side dimension of zigzag, utility, and decorative stitch patterns. On some machines, width setting also controls needle position when straight stitching.
	Utility stitches	Pre-programmed stitch combinations designed to serve a specific purpose, such as overcasting raw edges, sewing elastics, making invisible hems, darning, and sewing stretch knits.
	Computer memory	Allows sower to store stitch combinations for future use