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Electric Blankets Selection, Use and Care

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Energy Conservation

Using an electric blanket is one way to sleep comfortably warm while saving energy and money. An electric blanket is designed to allow the room temperature to be as low as 45°F (7°C). Blanket controls are available which will automatically adjust to room temperature changes so that a person can sleep comfortably for approximately three cents per night.

Electric blankets can save energy. Rather than heat the entire house, one can heat only the bed. Energy conservation depends upon many factors such as the location of climate zone, insulation of the house, type of fuel and efficiency of the heating unit. Usually turning down the thermostat to 60°F (15°C) for eight hours will save one percent of the fuel costs for each degree lowered.¹ Turn the thermostat down ten degrees and reduce the nighttime heating costs by ten percent. When an electric blanket is used, the net savings are approximately nine percent and comfortable sleeping conditions will be maintained. The following example illustrates the annual net savings when using an electric blanket.

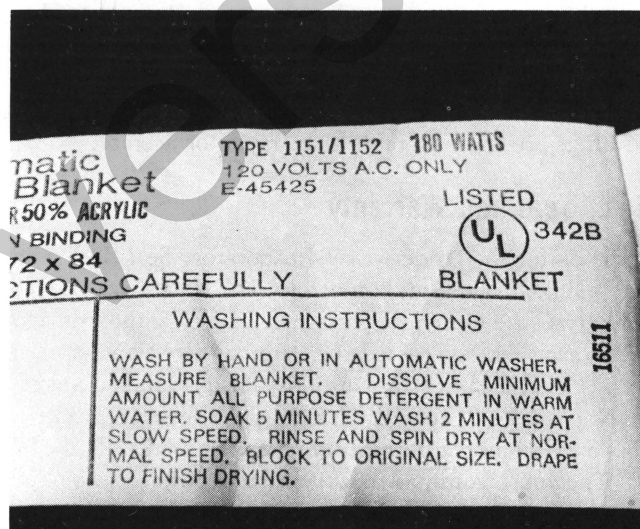
Annual House Heating Cost ²	Fuel Savings for 8 hours ³	Operating Cost of Blanket ⁴	Annual Net Savings
\$430.00	\$43.00	\$3.43	\$40.00

¹Mary Kollath, "Beating Heating Costs", *Energy Dollars and Sense of Conservation*, (University of Missouri-Columbia, 1976, EN21 p. 1)

²Average 3 bedroom house with 1350 sq. ft. (121.5m) of living space heated to 70°F (21°C) at a cost of \$.023/ KWH.

³When the temperature is lowered 70°F (21°C) to 60° (15°)

⁴150 watt blanket operating for 1000 hours (125 eight hour nights) at a cost of electricity of \$.023.



The Underwriters' Laboratory Seal indicated the electrical parts meet safety standards and the fabric has passed flammability standards. Look for specific washing instructions.

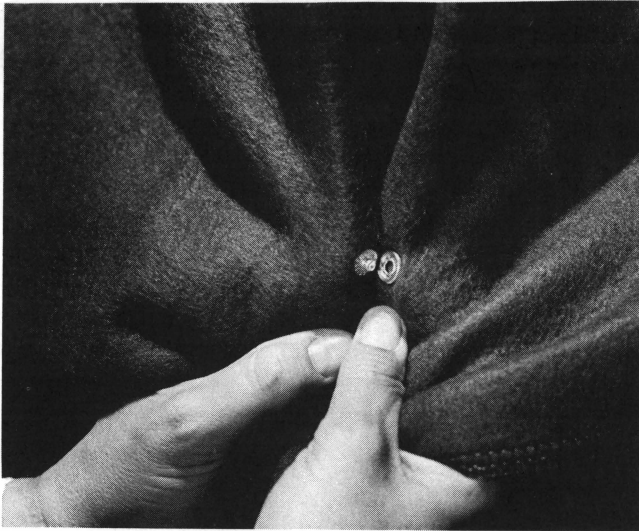
In homes where more than one bed is used, the blanket operating costs will be greater and annual net savings less.

Selection

Fiber content, size, control types and warranty conditions are factors to consider when selecting an electric blanket. Blanket selection will vary from person to person based on individual needs, color and weight preferences and available dollars.

Fiber Content

The fibers most commonly used in electric blankets are 100 percent acrylic, 100 percent polyester and blends of these two fibers. Durability, minimum shrinkage and excellent insulation are characteristics of acrylic and polyester fibers. Rayon and cotton electric blankets may still be available in some localities. Although they have a



Corner snaps are provided on electric blankets so that fabric and wires are tucked under the mattress which would cause improper heating.

desirable appearance when new, cotton and rayon tend to compact, shrink and pill in use and laundering. Fiber content of the blanket binding is important as it is generally the first point of wear. Nylon or polyester bindings are more durable than rayon or acetate.

U. L. Seal and Warranty

Look for the Underwriters' Laboratory Seal (U.L.) on the blanket label and control. The U.L. seal is an indication the electrical parts meet safety standards and the fabric shell has passed the flammability flame-spread test. Consumer testing groups have found blankets bearing this seal generally do not cause electrical hazards, nor overheat uncomfortably if properly used.

The most common electric blankets have two- and five-year warranties. Check to see if both the blanket and the control element are covered by the warranty. Notice the repair procedure. Some manufacturers require blankets be sent to the manufacturer, while others will permit local authorized service.

Control Types

Solid state and regular controls are available to consumers. The solid state control, found in more expensive blankets, have no wires, are regulated by body temperature, have no moving parts within the blanket, do not go on and off because of the location of heat sensors. This type of control offers a pre-warm feature which heats the bed and then moves to the selected setting. However, the vast majority of electric blankets on the market are the regular electric blanket rather than solid state variety.

Dual and single temperature control options are available in full and larger sized blankets. Individual preference most often is the reason for selecting a dual temperature control since the controls operate independently of one another. One control can be turned off entirely while the other is turned on. Consumers should

be certain to connect the dual control according to the manufacturer's instructions.

Blanket Sizes

Electric blankets are available in twin, full, queen and king sizes. All sizes are approximately six inches shorter than regular blanket lengths to prevent the possibility of tucking any of the wired portion under the mattress.

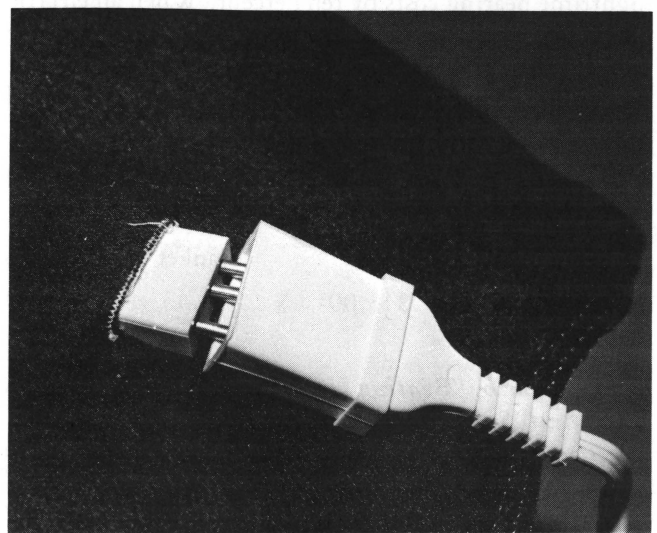
Use

With proper use and care the electric blanket can be expected to last several years. The wires used in the blanket are very fine and stitched into place so they can move without breaking as the blanket moves.

Heat is controlled by a thermostat in a control box which regulates the heat output. This thermostat is sensitive to room temperature and as the room temperature drops, more heat is supplied to maintain the conditions under the blanket. Placing the control box in such places as a window sill, next to a heater, on top or under the blanket or pillow will provide false readings and cause the blanket to heat incorrectly.

When a blanket bears a U.L. seal the possibility of over-heating is controlled by several safety thermostats distributed throughout the blanket. Any one of the thermostats can turn off the entire blanket anytime the temperature rises above a maximum safety temperature.

To reach a comfortable temperature under the blanket generally a trial and error process is necessary. Starting at a low setting and increasing the setting until the temperature reached is satisfactory seems to be the usual process used by most individuals. The heat supplied under the blanket equals the loss of a person's body heat. On most controls, a midway setting is approximately 72°F (22°C). Therefore, it probably will not feel warm to touch but would allow comfortable sleeping conditions.



Be sure electrical connections are firmly secured for safety and proper functioning of the blanket.

Weak points in the blanket are where wires enter the safety thermostats. If the blanket is bunched or folded over in these points the wires could break. Uneven heating results and the safety thermostat would turn off the entire blanket if books are left on the bed, pets lie on the bed, a spread is placed at the foot of the bed, or the wired area is tucked under the mattress. Do not use pins on the bed, as they could damage the wiring.

Safety Precautions

1. Read the manufacturer's instructions before using the blanket.
2. Do not use an electric blanket for an infant, handicapped person or one who is insensitive to heat.
3. Keep small children and pets away from the blanket. It is an electrical appliance that can be damaged.
4. Turn off the blanket when it is not in use.
5. Do not tuck-in, bunch-up, or fold over the wired area of the blanket.
6. Do not lie on top of an electric blanket with the control on because there is a possibility of getting burned or damaging the electrical wiring.
7. Do not use pins; they may damage the wiring.
8. Do not dry-clean electric blankets; follow manufacturer's care instructions.

Care and Storage

Laundering an electric blanket is as easy as laundering a regular blanket. Follow the specific manufacturer's care instructions for best results; generally manufacturers indicate electric blankets should not be dry-cleaned. Dry-cleaning solvents will cause deterioration of the wiring insulation. Consumers should select the laundering method most suitable for them.

- Machine wash for a limited period of time; generally one to five minutes is suggested. Dissolve detergent in the suggested water temperature before placing the blanket in the washer; do not use bleach. Evenly distribute the blanket in the washing machine. Use a regular cold water rinse and spin cycle. If a conventional washing machine is used, do not use a wringer to extract the water.

- Hand wash by soaking the blanket for 15 minutes in detergent and lukewarm water. Squeeze the suds through the blanket. Rinse in cold water at least twice. Do not vigorously twist or wring the blanket.

- Machine dry by preheating the dryer at medium temperature. Add the blanket and allow it to tumble dry for ten minutes. Most manufacturers suggest the blanket finish drying by draping the blanket over two parallel

clothes lines. Blanket shrinkage and damage to its thermostat could result if the blanket is dried completely in the dryer.

- Line dry by draping the blanket over two parallel lines, gently stretching it to the original length and width. Clothes pins will damage the blanket wires.

- Store electric blankets by folding and placing them where heavy objects or other blankets will be put on top of them. It is not necessary to use moth preventive sprays or materials as synthetic fibers are not consumed by moths. Also, moth preventive chemicals could cause deterioration to the wire insulation in the blankets.

Blanket Not Working?

If your electric blanket is not working properly, these are things to observe.

1. Check all connections and outlets.
2. Be sure a dual control model is connected properly. Follow the manufacturer's instructions.
3. Be sure the blanket is not bunched up, tucked under the mattress or folded over itself. This could cause one of the safety thermostats to shut off the blanket.
4. Check the position of the control unit. If it is near radiator or other warm place it would estimate the room temperature to be greater than it is, and not turn on the blanket.
5. Check the warm temperature. Most blankets are set to operate only in rooms below 72°F (22°C).
6. To check the blanket for proper heating, fold the blanket as you would to store it. Connect the controls and turn the blanket on high and wait for five to ten minutes. Place your hand between the folds and you should feel warmth.
7. The automatic blanket is not a heating pad. It should not feel hot to touch when in a normal, flat position.

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