

DIRECTIONS FOR USE OF THE SHARP EDGE TESTER MODEL SET - 50™

The following general requirement covers a test procedure to be used to determine the potential personal injury related to the sharpness of edges that are part of or associated with appliances and equipment and appears in Underwriters Laboratories "Tests for Sharpness of Edges on Equipment - U.L. Standard 1439":

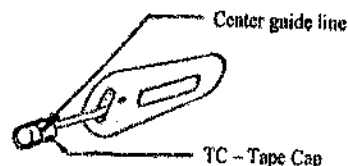
"An edge of an enclosure opening, frame, guard, knob, handle or the like of an appliance or equipment shall be smooth and rounded so as not to cause a cut-type injury when contacted during normal use or user maintenance."

The **SHARP EDGE TESTER MODEL SET - 50™** was designed and developed to provide an objective means for judging the sharpness on an edge. Consistent results may be obtained with a minimum of experience if the following procedure is carefully followed:

1. INSTALLATION OF THE TAPE CAP

The TC-3™ Tape Cap assembly meets all the latest U.L. standards incorporating three (3) layers of tape:

Bottom layer - 1/16" thick black foam
Center layer - 1/32" thick white foam
Top layer - 3 mil Teflon tape
Plus - the addition of a center guide line



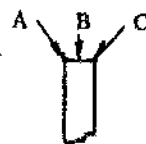
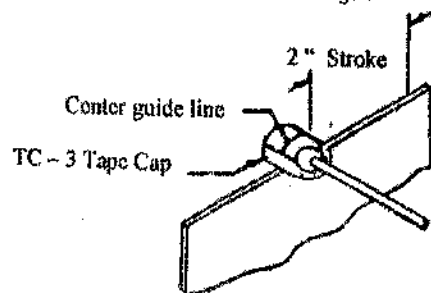
NOTE: TOOL IS IN NORMAL OPERATING POSITION

FIG. 1

Slide the Tape Cap assembly all the way onto the "pressure head" of the Tester, shown in FIG. 1, with the center guide line and the uncovered portion of the red plastic cap facing "UP." The Tester is now ready to be used.

2. APPLICATION

The tape-covered pressure head is positioned on the edge to be checked for sharpness in the manner illustrated in FIG. 2. While maintaining the arm between the stops, immediately move the pressure head 2 inches along the edge as illustrated and then back to its starting position without the removal of the tester from the edge. It is then withdrawn from the edge. The total distance of engagement between the edge and the tape covered head is, therefore, 4 inches. *Exception: An edge less than 2 inches (50.8 mm) long shall be tested for a distance of twice its length.*



SHARP EDGE TESTER MODEL SET-50™
may be applied to edges A, B, or C

FIG. 2

3. JUDGEMENT CRITERIA

Examine the Tape Cap to determine whether or not penetration has occurred through the two sensing layers. If penetration has occurred, the black tape (bottom layer) will be visible through the resulting cut.

The application of the **SHARP EDGE TESTER MODEL SET - 50™** to an accessible edge shall not result in the cutting through of the two outer layers of the sensing tape.

NOTE: Complete details are given in the U.L. Standard 1439. The information provided here is for guidance purposes only.

CAUTION!

DO NOT OPEN TESTER

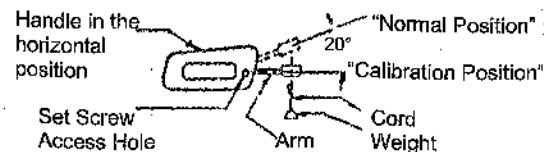
Spring inside under tension
could fly out and cause injury.

DIRECTIONS FOR CALIBRATION OF THE SHARP EDGE TESTER MODEL SET - 50™

4. CALIBRATION OF TESTER

*NOTE: ALL TOOLS ARE
CALIBRATED AT OUR FACTORY.
*U.L. REQUIRES ALL TOOLS TO BE
CALIBRATED AT LEAST ONCE A
YEAR.

Calibration is achieved by suspending a 1½ lb. weight ± 0.03 lbf (6.672 ± 0.133 N) from the center of the pressure head as shown in FIG. 3



NOTE: TOOL IS IN THE UPSIDE
DOWN POSITION

FIG. 3

To calibrate the Tester, position it as shown in FIG. 3 so that movement of the major axis of the arm between stops is in a vertical plane. Insert a 1/16" allen key (supplied) into the access hole and loosen the set screw, located inside the handle, approximately 1/4 turn. The

the arm to be slid in and out of the handle. Apply the 1½ pound weight as shown in FIG. 3 to the center of the pressure head. Adjust the length of the arm, in or out, until the arm stays in the "Calibration Position." Once the position is achieved, carefully tighten the set screw. (Do not over-tighten). Recheck this setting by moving the arm between its stops and reapply the weight. If the arm returns to the calibration position, the setting is good. If the arm does not return to the calibration position, readjust the arm length until it does.

WARRANTY:

THE SHARP EDGE TESTER MODEL SET - 50™ has a one (1) year warranty from Date of Purchase. The Tester is factory sealed. Tampering voids warranty.

NOTE: Technical Engineering Service Corporation (TESC) engineered, designed and manufactured the original **SHARP EDGE TESTER, MODEL SET - 50™**, specifically for Underwriters Laboratories (U.L.), and meets their requirements to test according to the U.L. 1439 "Standard for Determination of Sharpness of Edges". There are many companies worldwide - including several in China - that attempt to duplicate the Sharp Edge Tester, Model SET-50™. Please take note they do not provide the correct spring material which can fatigue and break.

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