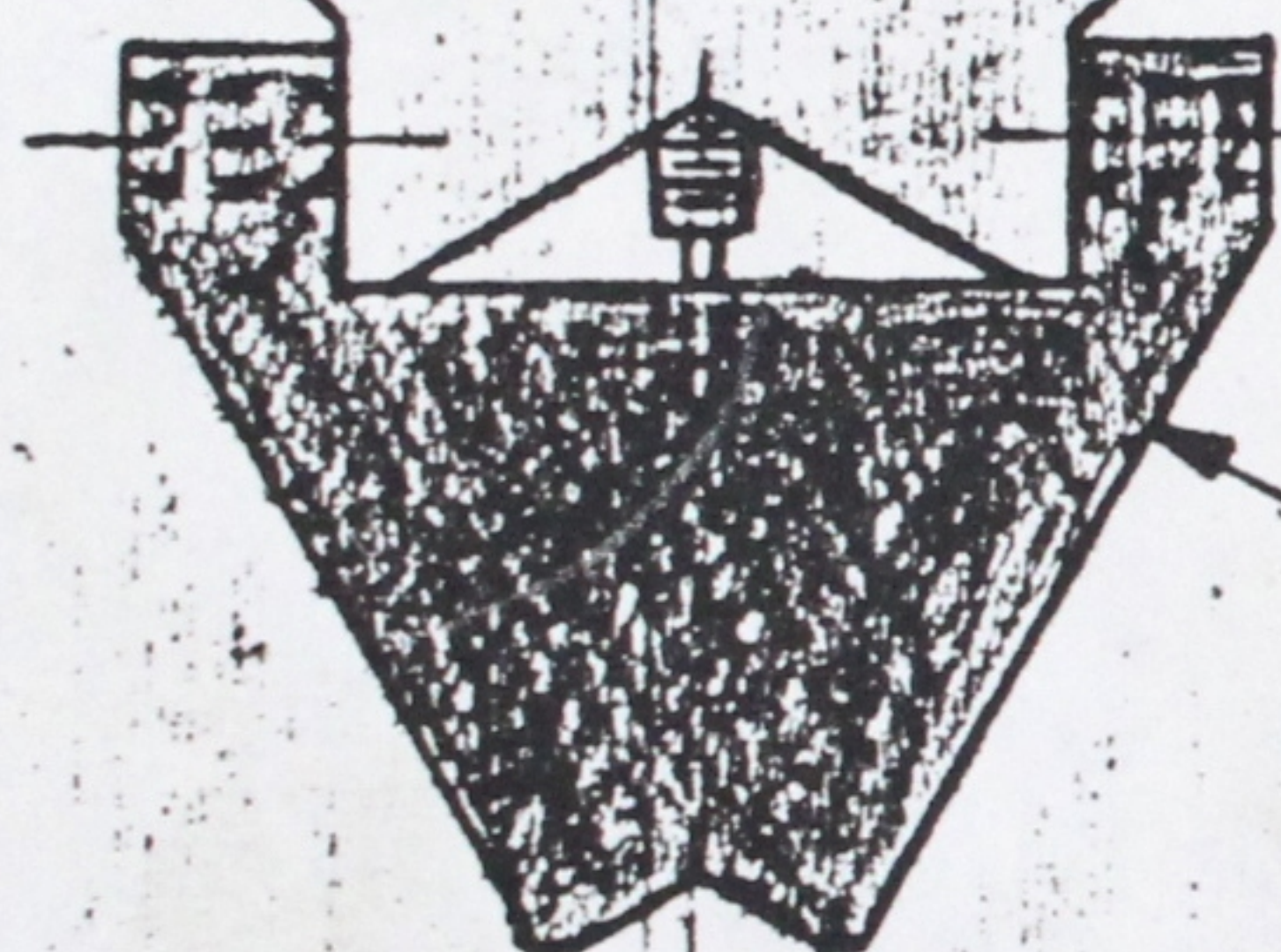
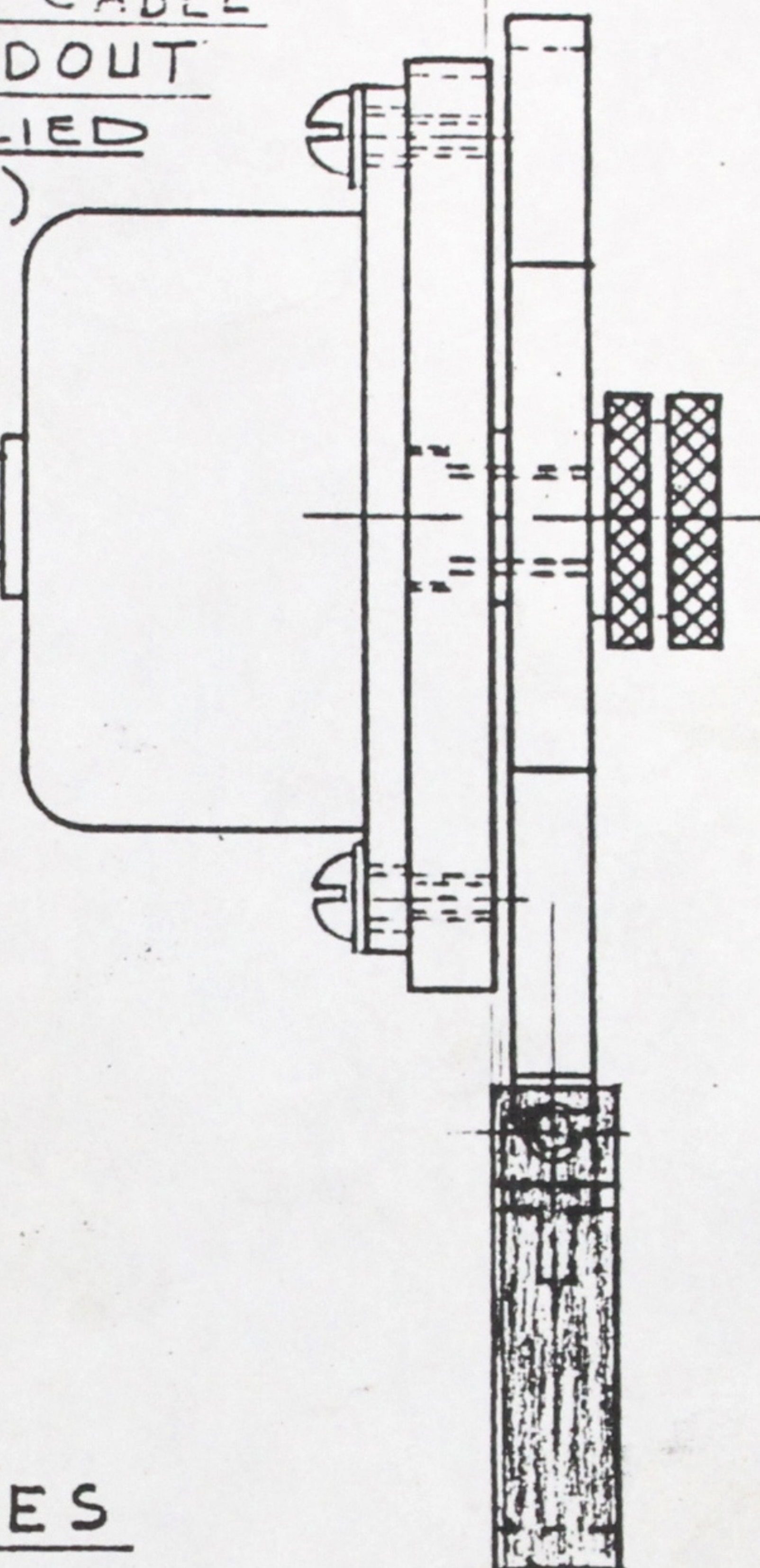
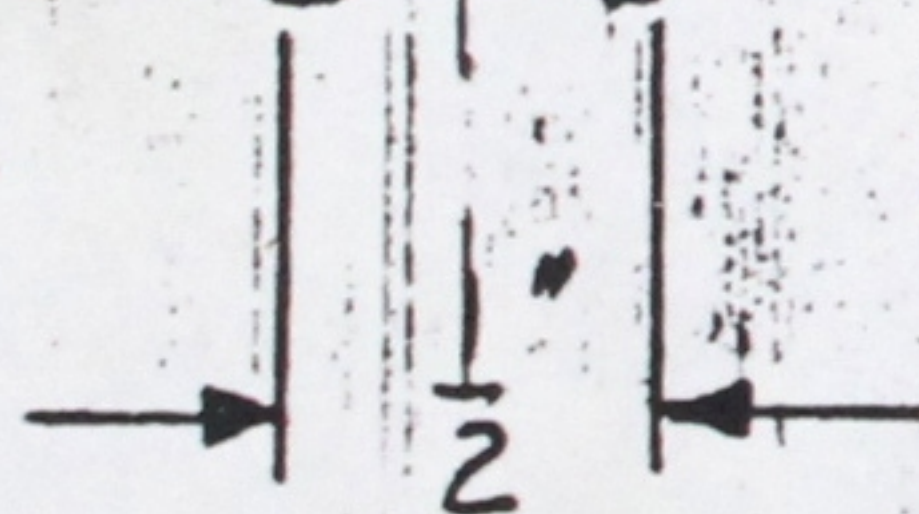



INTERCONNECT CABLE  
FROM LCD READOUT  
DEVICE (SUPPLIED  
WITH THE EDGE)

ESSCO EDGE



SPECIAL ADAPTER  
FOR CREPING BLADES



			DRAWN BY ETS	DATE 10-29-87	 <b>ESSCO INC.</b> GREEN BAY, WISCONSIN	CUST. NO.	ESSCO NO.	DRAWING NO. A-6261		
			CHECKED BY JEP	DATE 10-30-87						
			SCALE			ESSCO EDGE AND SPECIAL CREPING BLADE ADAPTER				
			FULL							
DATE	ISSUE	REVISIONS								



ESSCO INCORPORATED  
INSTRUCTIONAL AND OPERATIONAL DATA  
FOR  
"THE EDGE"

ESSCO ELECTRONIC DIGITAL DOCTOR GAUGE AND LEVEL

THE EDGE, engineered by Essco, is an easy-to-use, precision electronic instrument for setting doctors to both proper angle and level on paper machines. Accuracy to 1/10th of one degree can be obtained for any angle on any size roll. In addition to its primary doctoring applications, THE EDGE can also be used for virtually any application requiring angle readings, level determination, or establishing centering or reference points on a circular surface.

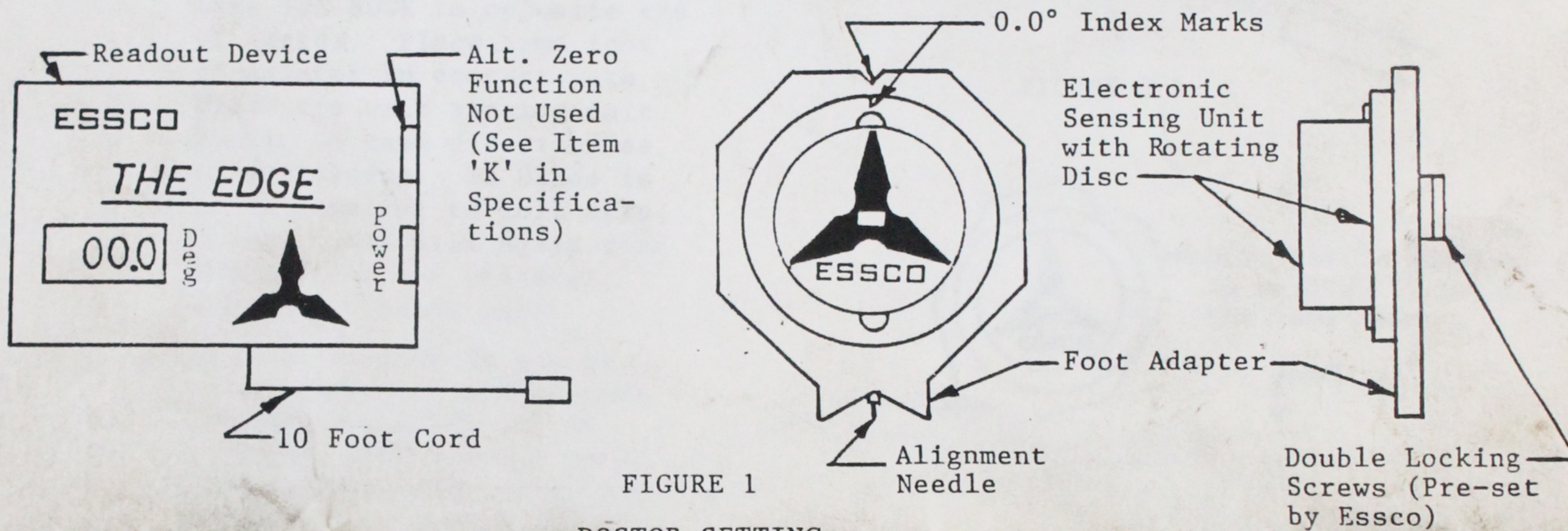


FIGURE 1  
DOCTOR SETTING

A. Blade Angle Setting or Determination (Refer to Figures 1 & 2)

1. Slide doctor blade in holder to expose about 1/2" of roll surface beyond blade end.
2. Set feet of adapter on roll with alignment needle directly in line with blade tip. Rotate sensing unit housing until readout device indicates 0.0 degrees. (Note: Pre-set, adjustable tension of double locking screws on back of unit holds sensing unit in position).
3. Without rotating sensing unit, set both adapter feet on blade. Readout device now displays exact blade angle.

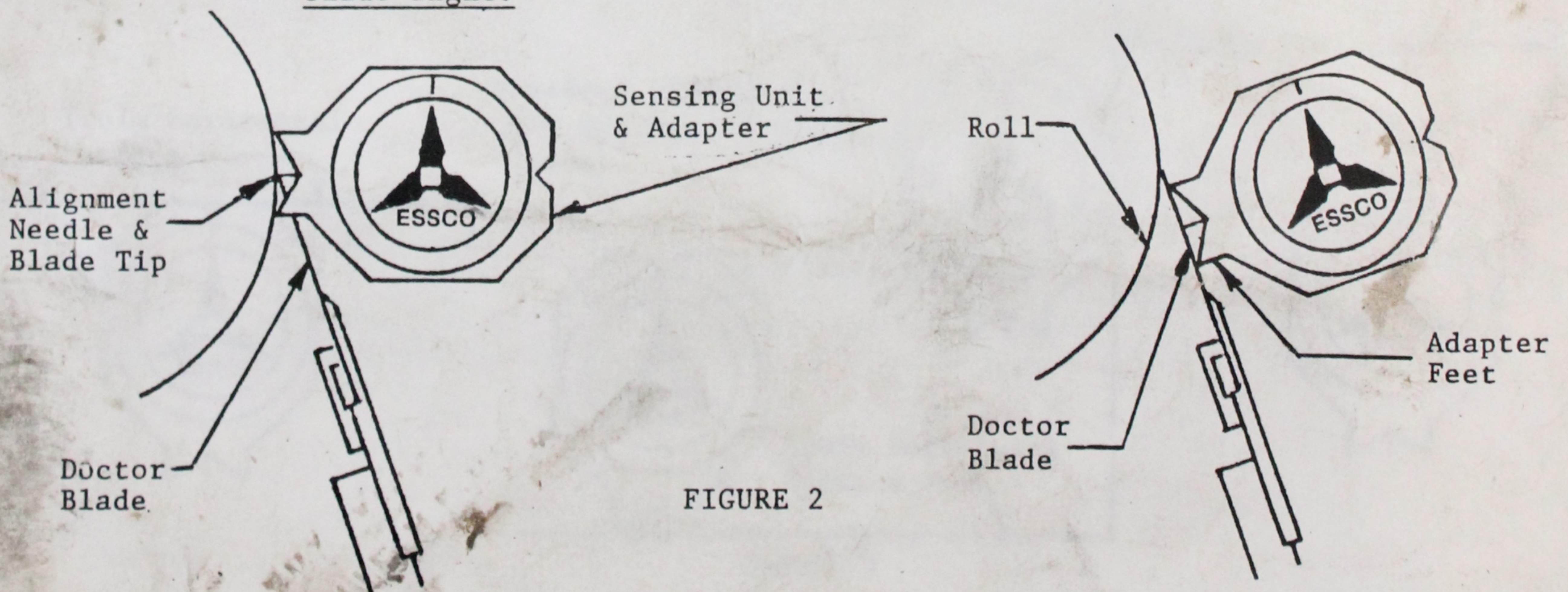


FIGURE 2



## B. Doctor Blade Level Setting or Determination

1. Place one foot of adapter against blade tip at either tending or drive side end of roll. (See Figure 3)
2. Rotate sensing unit until readout displays 0.0 degrees (an exact 0.0 degree reading is not necessary as this is only a comparative number for readout in Step 3).
3. Without rotating sensing unit, take THE EDGE to opposite end of doctor. Place same foot of adapter in contact with blade tip with sensing unit facing in same direction as first reading. If blade is truly parallel to roll axis, display unit will again read 0.0 degrees (or whatever original reading was).
4. If same reading is not obtained, move entire adapter circumferentially (up or down) on roll without rotating sensing unit until same reading is obtained. Vertical distance between blade tip and adapter foot is required amount to shim doctor to make level. (See Figure 4)

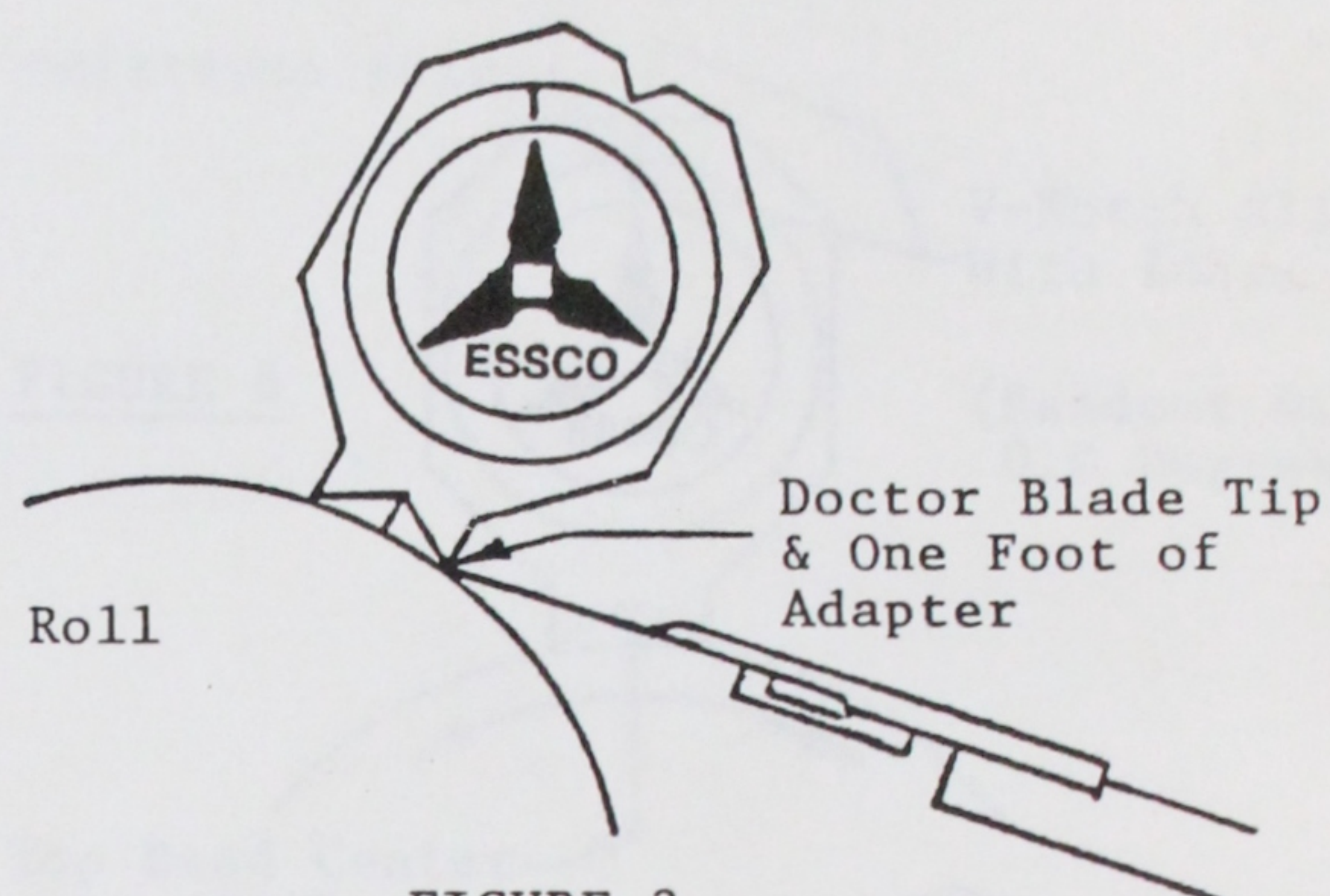


FIGURE 3

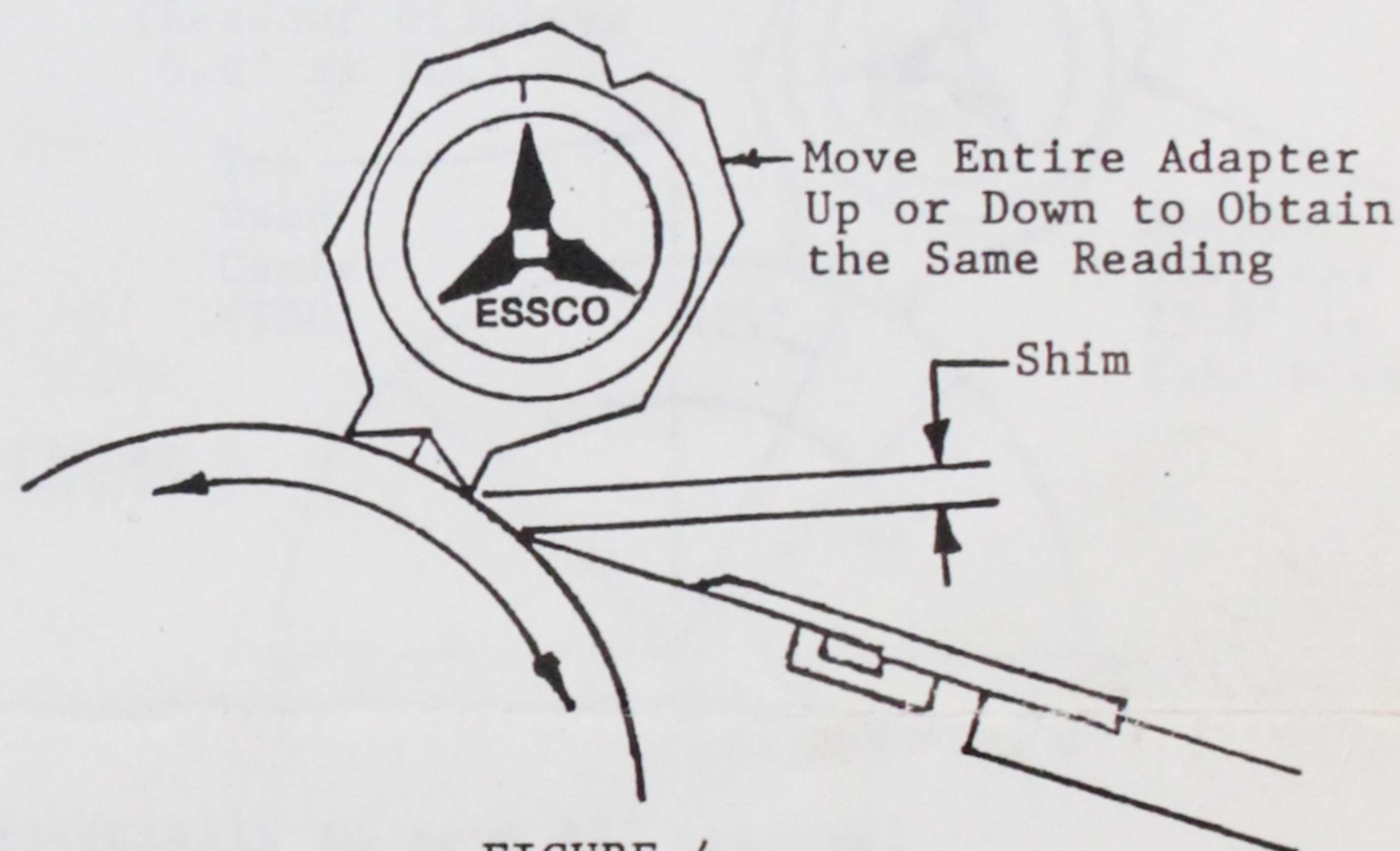


FIGURE 4

## GENERAL PURPOSE USE

### A. Use as a Level or to Establish Horizontal, Vertical, 45° Surface

By aligning adapter V-notch and sensor index line, unit will read 0.0 degrees when both adapter feet are in contact with a truly horizontal surface. Also, the unique adapter shape permits use of adapter sides (which are precision machined at 90 degrees to plane of feet) or top 45 degree surfaces, or top surface to be in contact with vertical, 45°, or horizontal surfaces for reference. (See Figure 5)

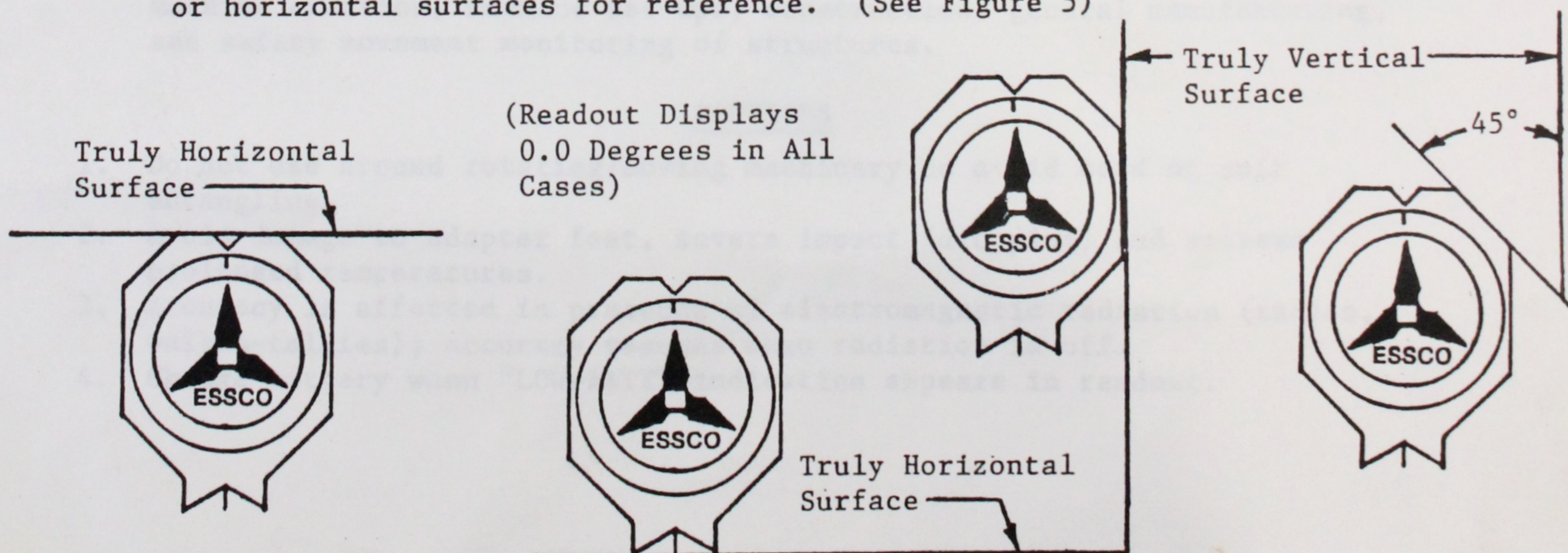


FIGURE 5

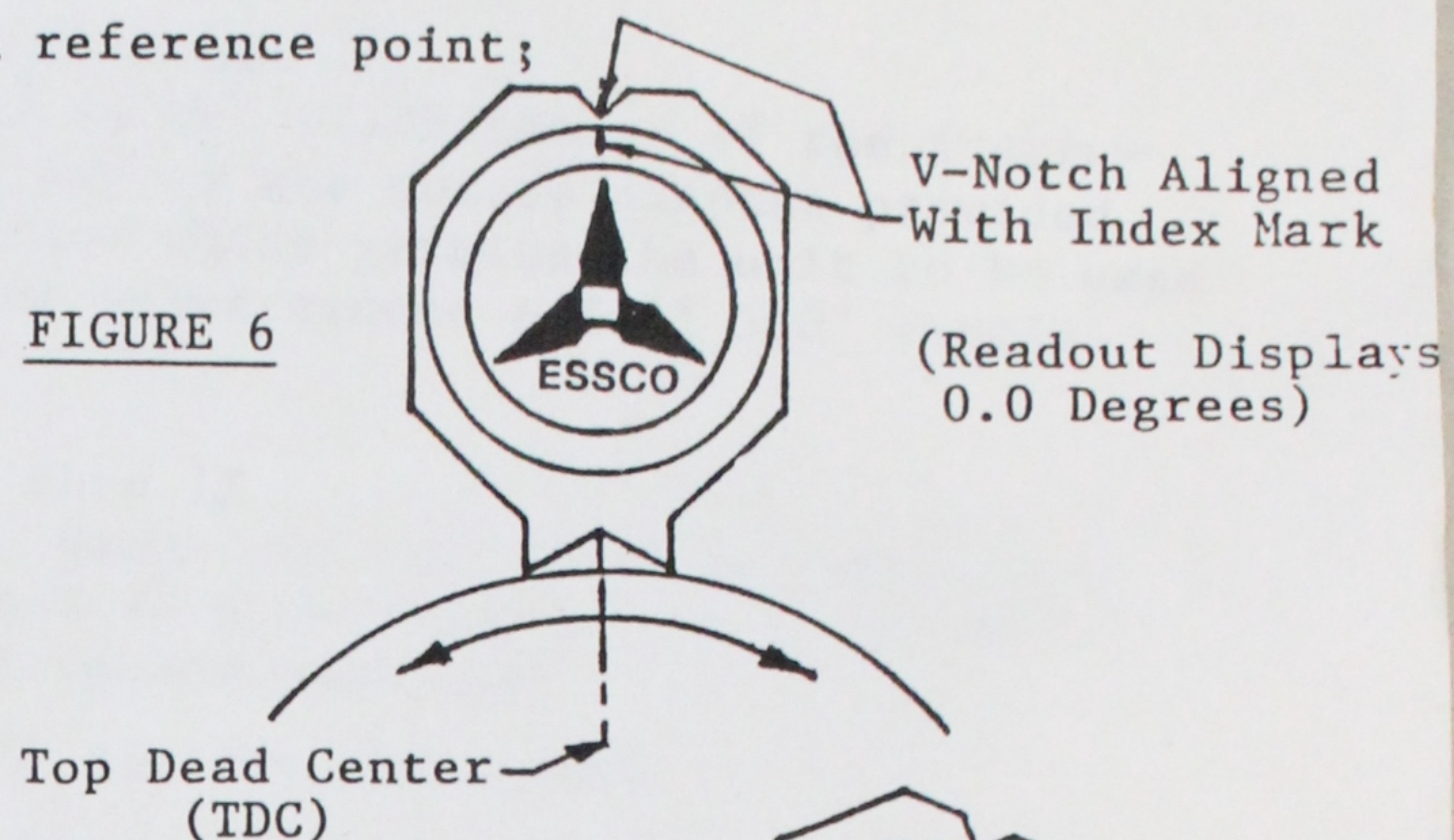


B. Establishing Angular Point on Circumference of Circle, (Pipe, Roll, Etc.) or Establishing Angular Contact Point of Doctor Blade on Roll.

[Note: Sensor has  $\pm 45$  degree limit from reference point; see specifications, note 'A' ]

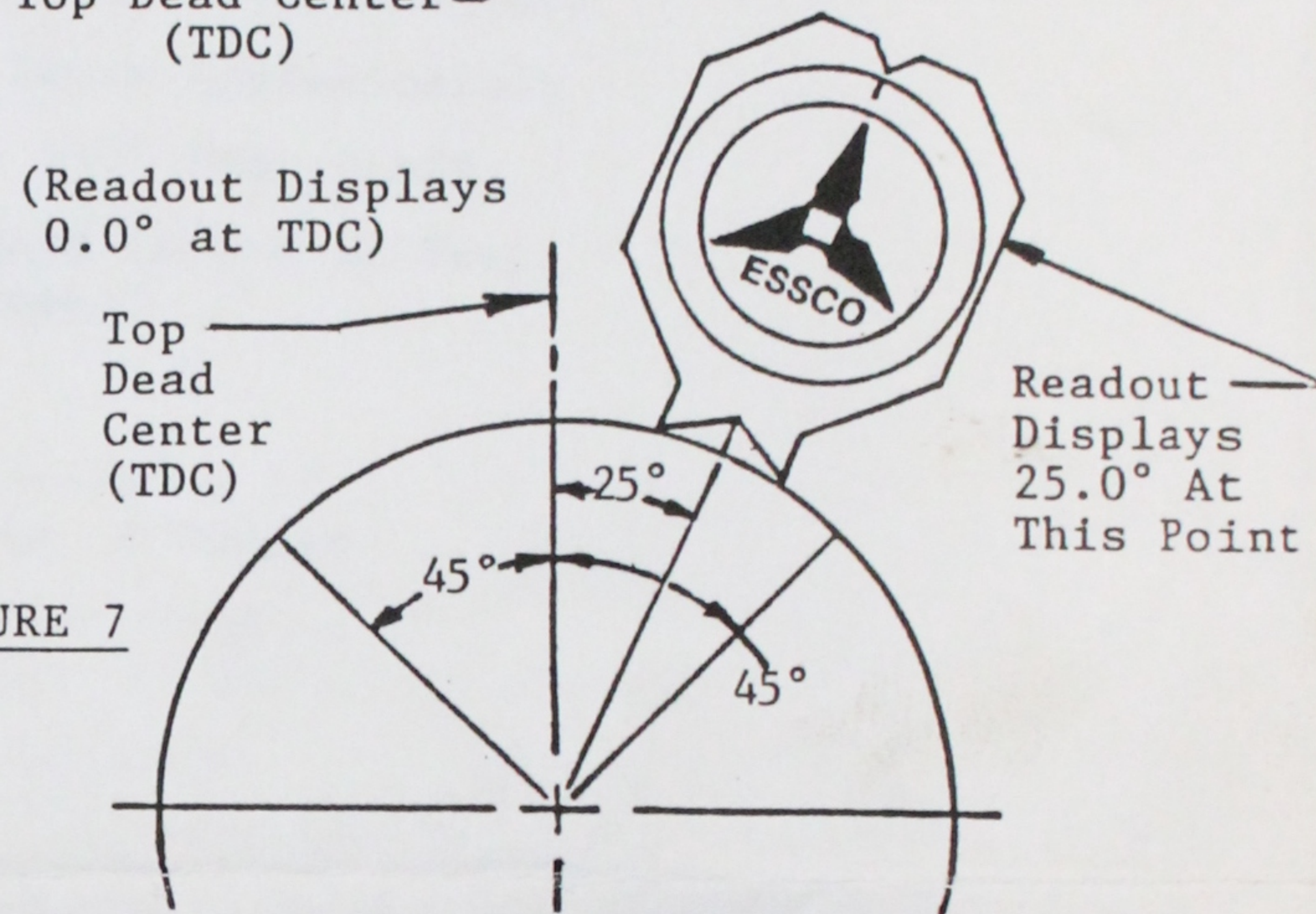
1. Finding TDC (Top Dead Center) of surface - Align indexing line of sensing unit to V-notch on adapter. Place both adapter feet in contact with surface and slide adapter around circumference until 0.0 degree readout is obtained. Alignment needle on adapter will indicate TDC. (See Figure 6)

FIGURE 6



2. Establishing circumferential point  $\pm 45^\circ$  from TDC - At TDC the readout device will display 0.0 degrees. To find an angular point from TDC (say 25.0 degrees), slide adapter circumferentially until a readout of 25.0 degrees is shown on the readout device. The alignment needle is then located at a point 25.0 degrees from TDC. (See Figure 7)

FIGURE 7



Note: By sliding the adapter circumferentially to each  $45^\circ$  interval from TDC (starting at 0.0 degrees reading at TDC) and then zeroing the readout device at that  $45^\circ$  interval (by keeping the adapter feet in position and rotating the sensing unit until a 0.0 degree reading is displayed on the readout device), the horizontal  $\bar{E}$  can be established or any point around a  $360^\circ$  circumference.

C. Other Uses

This unit can be used for virtually any application requiring angle determination or level establishment. Applications abound in pipe-fitting, machine erection, machine set-ups, construction, general manufacturing, and safety movement monitoring of structures.

CAUTIONS

1. Do not use around rotating/moving machinery to avoid cord or unit entangling.
2. Avoid damage to adapter feet, severe impact (dropping) and extreme prolonged temperatures.
3. Accuracy is affected in presence of electromagnetic radiation (radios, walkie-talkies); accuracy resumes when radiation is off.
4. Change battery when "LOW-BATT" indication appears in readout.