TECHNICAL INFORMATION

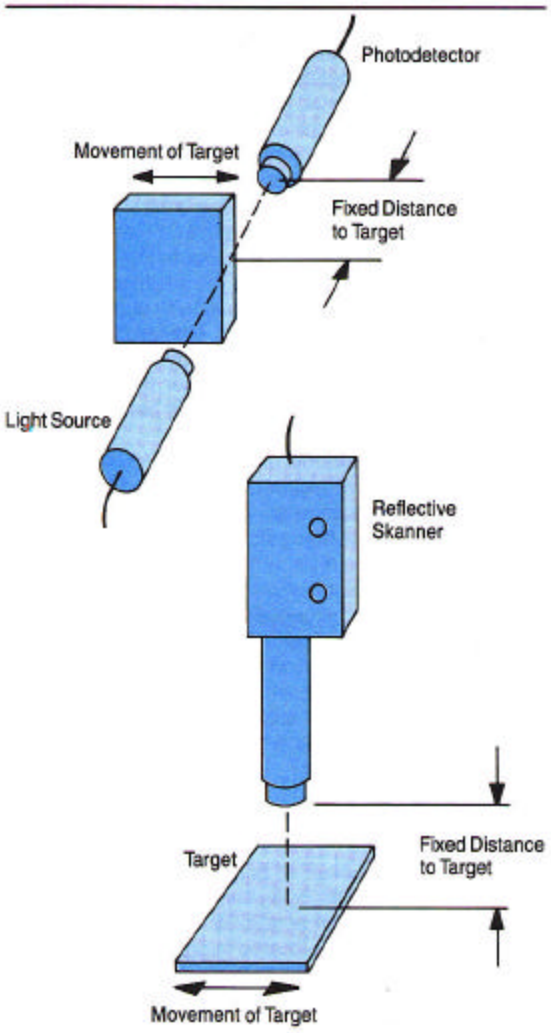

FIG. 30

Sensitivity Adjustment Procedure

- Verify that the photoelectric amplifier has been wired correctly for the desired mode of operation: light or dark energized.
- The sensitivity control is a 15 turn potentiometer with a slip clutch at each end to prevent over adjusting. Turn the sensitivity control 15 turns counter-clockwise to the absolute minimum sensitivity setting. NOTE: The R47/R48 and R60 Series controls have a 4 turn potentiometer, requiring 4 turns counter-clockwise for the minimum sensitivity setting.
- With the distance from sensor to target remaining constant, move the target in and out of the Field of View or Beam Diameter, perpendicular to the sensor axis (see Fig. 30) and observe the amplifier's output.
- Adjust the sensitivity control in a clockwise direction until the output of the amplifier changes state. Continue to move the target in and out of the field of view and to rotate the sensitivity control in a clockwise direction, counting the turns, until the output of the amplifier stops changing state.
- For optimum performance, the best setting for the sensitivity control is midway between the point at which the amplifier first detected the target and the point at which detection stopped.
- Should the output still be changing state at the end of 15 turns, set the sensitivity control midway between the point when detection started and when the end of the 15 turns was reached.
- When the sensitivity control has an adjustment range of less than one turn this means that that there is not enough margin of safety for reliable operation. In this case, the distance from sensor to target may be varied, the lamp voltage decreased or the LED current reduced.
- Time delay amplifier sensitivity may be adjusted in a similar manner by first adjusting the time delay control fully counter-clockwise in order to minimize the duration of time delay.