Taylor Instrument Consumer Products Division, Arden, N. C. 28704

SYBRON Taylor

CUSTOMER SERVICE DEPT.
LOCATED AT
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INSTRUCTIONS



Taylor WEATHER - HAWK* RECORDING THERMOMETER (REMOTE READING) NO. 2354 OR 2354C

The Weather-Hark Remote Reading Recording Thermometer is an instrument which senses the *outdoor* temperature and transmits this information to a chart conveniently located *indoors*, in such a form that a permanent record of the temperature variations, hour by hour, is available for future inspection.

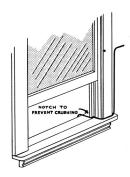
The system consists of a Bourdon spring, connected by an 8 foot armored capillary tube to the temperature sensing bulb. This system is liquid filled. Movement of the Bourdon spring, caused by expansion or contraction of the liquid, actuates a pen *Trade Mark

arm which traces the record of the temperature changes on the chart.

The chart, mounted on an electrically driven drum, records a seven day period of temperature changes. It is divided horizontally into five significant temperature zones, distinguished by color bands for convenience in reading.

The record traced by the pen will show at any time the present temperature, as well as all changes which have occurred during the week to date and the hours at which the changes took place.

TO INSTALL: Select a location where the bulb and the capillary tube may be led to the outdoors, as through a window opening. This capillary tubing must not be cut, sharply bent or crimped in any manner which will constrict the movement of the liquid filling. To provide for clearance, where necessary, a small groove or channel may be made in frame or sash. 12" of tubing, including the length of the bulb, should be exposed to the outside



temperature. The location selected should be one where the bulb will not be exposed to direct sunlight or to any source of heat which would cause high temperature readings. Attach the bulb and tubing by means of the bracket and clips provided.

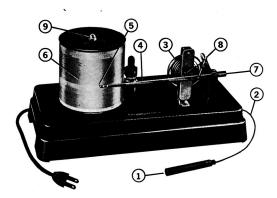
TO PREPARE THE RECORDER FOR OPERATION:

- 1. Remove acorn nut (9) which holds the drum in position. This is a left hand thread, and turns in the oppostie direction from a standard thread. Raise drum (6) and remove the corrugated shipping pad. Avoid bending pen arm (4). Replace nut, tightening with the fingers only. Whenever it is desired to make any manual change in the position of the drum, always loosen the acorn nut first.
- 2. The pen arm (4), which is intentionally left loose in shipment, must now be brought into calibration. To do this, prepare a bath which will provide a temperature of exactly 32°F or 0°C. Crush enough ice cubes to fill a one quart Mason jar or Thermos bottle. Do *not* use the cubes without breaking or crushing. A standard refrigerator tray will usually provide a sufficient amount of ice. Add about 1½ cups of cold water, until the water

level is just below the upper layer of crushed ice. Do not cover the ice completely. Stir well. Immerse 12" of capillary (including the bulb) in the ice slush. Allow to remain in the ice for about five minutes.

After this time, the bulb will be at a temperature of 32°F or 0°C, and will be left immersed. Now, move the pen arm (4) so that the pen point (5) rests approximately on the 32°F or 0°C line on the chart, and lock it into position by tightening securely the hexagonal counterweight nut (7). Next, turn the micrometer adjusting screw (8) so that the pen point rests *exactly* on the 32°F or 0°C line on the chart. The instrument is now in calibration.

3. Turn drum so that the pen point rests at the proper day and hour position (curved vertical line). It is advised that the pen point be set at approximately 15 minutes later than the actual time, to permit the necessary takeup of the gear train before the drum starts to turn. Whenever it is desired to make any manual change in the position of the drum, *always* loosen the acorn nut first.



- 4. Carefully fill the pen point with the special ink provided. Do not overfill. Use no other ink in this instrument. To start ink, draw a fine piece of paper through the slot in the pen point.
- 5. The adjustment of the pen arm (4), to provide proper pressure of the pen point on the chart, has been carefully pre-set at the factory. When correctly set, it makes a satisfactory trace with the least possible pressure. While it is possible that the pen arm may have been bent in shipment, it is advised that no change in the adjustment be made by the user unless obviously necessary.
- 6. Plug into 110 volt 60 cycle outlet.

TO CHANGE CHART: Loosen acorn nut (left hand thread), remove drum, remove and replace chart. To remove chart from drum, insert small penknife blade under chart, and slice along scored line. To replace chart, wrap around drum evenly, moisten adhesive and apply overlap so that horizontal lines coincide at point of junction. Apply so bottom edge of chart is against lower rim of drum. Return drum and tighten acorn nut with fingers. If drum is turned by hand to bring proper hour line under pen point, do so in *counter-clockwise* direction only. Allow approximately fifteen minutes for takeup of gear train, as described above. It is recommended that the chart be changed at regular weekly intervals.

ADJUSTMENTS AND REPAIRS: No adjustments other than those specified above should be made by the owner. If other adjustment or repair is required, write to our Repair Sales Department for instructions or return to the factory.

REPLACEMENT SUPPLIES:

Chart No. 32, Fahrenheit Chart, 52 per box (one year supply) Chart No. 32C, Celsius Chart, 52 per box (one year supply) Chart Ink No. 96S130 — one bottle

Order from your dealer or directly from us.