

Taylor

Weather-Hawk* Instructions Stormoscope* Barometer

No. 6450
*TRADE MARK

The outstanding feature of the Weather-Hawk STORMOSCOPE Barometer is its adaptation of the UNI/MAG* movement (UNIversal altitude range/MAGnified pointer motion), an exclusive development by Taylor, leader in this industry since 1851.

Three of the new UNI/MAG capsules are stacked to make up the temperature compensated movement. Pen motion for a given barometric pressure change is increased by 50%. Threshold sensitivity, hysteresis error and dead band have been reduced so there is practically no observable lag in reversal of pen motion as a pressure change occurs. A new pen arm is provided to reduce pen pressure.

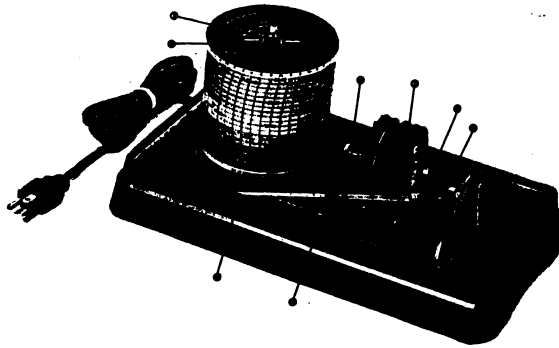
The small pressure changes which are so vitally important in making local forecasts of coming weather are readily apparent on the chart. In areas where the changes are normally small in magnitude, and not particularly obvious on the old style recording barometer chart, the trace provided by the new movement makes them easily readable.

The range of the Weather-Hawk STORMOSCOPE Recording Barometer is 29" to 31" of mercury. The chart provides a permanent weekly record of pressure changes. Corrected pressures above 31" or below 29" are extremely rare, so the new movement provides maximum utility over the greatest possible number of days.

Another tremendous advantage of the Taylor Weather-Hawk STORMOSCOPE Barometer is the fact that one single model serves for use at any altitude from sea level to 10,000 feet elevation. A simple adjustment sets the pen arm to show equivalent sea level pressure at any point between these limits.

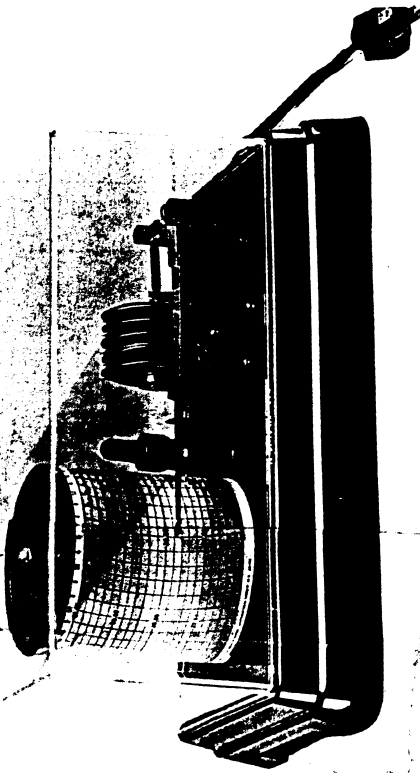
TO PREPARE THE BAROMETER FOR OPERATION

1. Determine the current barometric reading, *reduced to equivalent sea level pressure*. This may be obtained from another barometer known to be correctly adjusted, or by phoning the local Weather Bureau office, a local TV or Radio station, or the airport.
2. Remove the acorn nut (1) which holds the drum (2) in position. *This is a left hand thread, and turns in the opposite direction from a standard thread.* Raise drum and remove corrugated paper. Replace drum and nut, tightening with fingers only. *Avoid bending pen arm (3).*



3. The diaphragms (7) are disengaged from the connecting link (4) during shipment. To engage, snap the end of the connecting link (4) between the front retaining spring and the backplate of the socket (8). The position of the diaphragms was set at the factory in Arden, elevation 2250 feet above sea level. At some higher elevations, due to the normal shift in the diaphragm position caused by altitude and pressure change, it may not be possible to engage the link in the socket. In this case, turn the knurled thumb screw (6) to alter the diaphragm position so that the connecting link drops easily into the socket. Press the link forward and down so that the pin enters the hole in the

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9. In changing from the chart graduated in inches of mercury to the chart graduated in kilo-pascals or visa-versa it is necessary to re-adjust the knurled thumb screw (6) so that the pen point (5) is on the proper horizontal line as determined in 1 above.

ADJUSTMENTS AND REPAIRS

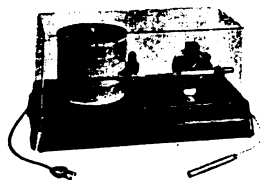
No adjustments other than those specified above should be made by the user. If other adjustment or repair is required, write to our Repair Sales Department for instructions on how to return to the factory.

REPLACEMENT SUPPLIES

Chart No. 135. Box of 52 (one year supply) 29-31 IN. HG.

Chart Ink No. 96S130, bottle.

Ask Your Dealer About the Matching WEATHER-HAWK Recording Thermometers



No. 2354 Recording Thermometer (Remote Reading), 7 day chart

Taylor.

ENVIRONMENTAL INSTRUMENTS
780 Cone Creek Road / P.O. Box 1349, Fletcher, N.C. 28732 / Tel: 704-684-5178 FAX: 704-687-1668
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FORECAST DATA FOR RECORDING BAROMETER

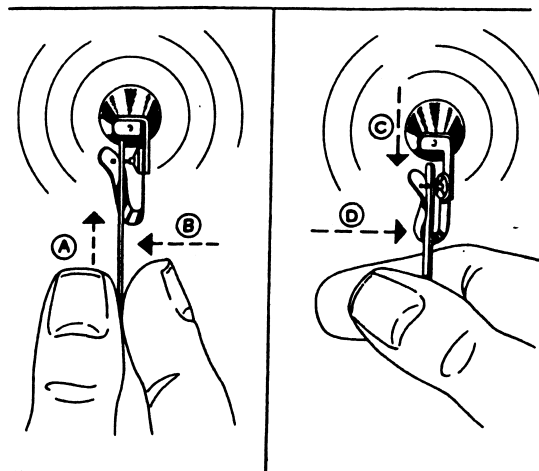
FALLING

31.0 to 30.5 104.7-103.0	Dark Yellow	Fair and warmer followed by winds and possible rain
30.5 to 30.2 103.0-102.0	Light Yellow	Storm brewing in direction of wind
30.2 to 29.8 102.0-100.6	White	Unsettled, cloudy, warmer
29.8 to 29.5 100.6-99.6	Light Gray	Increasing wind, warmer, stormy
29.5 to 29.0 99.6-97.9	Dark Gray	High winds, squalls, warm

RISING

29.0 to 29.5 97.9-99.6	Dark Gray	High winds, clearing, cooler
29.5 to 29.8 99.6-100.6	Light Gray	Fair, cool, windy
29.8 to 30.2 100.6-102.0	White	Fair, diminishing winds
30.2 to 30.5 102.0-103.0	Light Yellow	Generally fair, cool
30.5 to 31.0 103.0-104.7	Dark Yellow	Windy, possible southeast rains

link. Note that there are two "steps" on this pin. The connecting link, after it goes over the pin,



should be pressed back, away from the retaining spring, so that it rides on the rear step.

4. With the link and the diaphragms connected, adjust the knurled thumb screw (6) so that the pen point (5) is on the proper horizontal line as determined in 1 above.

5. Turn drum (2) in counter clockwise direction so pen point (5) rests at the proper day and hour position (curved vertical line on chart). Set the pen point about one quarter hour later than the actual time, to permit the necessary takeup of the gear train before the drum starts to turn.

6. Carefully fill the pen point (5) with the special ink provided. Use no other ink in this instrument. Do not overfill the pen. To start ink, draw a piece of paper through the slot in the pen point.

7. Plug into 110 volt 60 cycle outlet.

8. Pen pressure on the chart was pre-set at the factory, but may have changed in shipment or handling. If necessary to readjust, carefully bend pen arm (3) so trace is made with the least possible amount of pen pressure. Character of the trace does not depend on high pressure. Excess pressure of the pen point will cause instrument inaccuracies. Keep the pen point clean and the pressure light.

(See further instructions other side)

Section below may be cut along dotted line and Scotch Taped to inside of cover for convenience.

TO CHANGE CHART

Loosen acorn nut (1), remove drum (2), remove and replace chart. Avoid bending pen arm (3). To remove chart from drum, insert small penknife blade under chart and slice along scored line. To replace chart, wrap evenly around drum, moisten adhesive and apply overlap so that horizontal lines coincide at point of junction. Fit bottom edge of chart snugly against lower rim of drum. Return drum, replace and tighten acorn nut finger tight. If drum is turned by hand to bring proper hour line under pen point, do so in counterclockwise direction only. Allow time for takeup of gear train, as described above. Change charts at regular weekly intervals.

FORECASTS

The important factors to be considered in forecasting weather are the *trend* of pressure change, whether rising or falling; the *rate* of change, whether rapid or slow; and the *magnitude*, or amount of change. A rapid change is one in excess of 3/10 of an inch in twelve hours. A rapid change of pressure is usually connected with a more imminent or more severe change in the coming weather. Having observed the reading, consult the table.

No predetermined set of forecasts can be supplied to cover the entire continent in complete form, since weather probabilities are affected by local conditions. Experience in your own locality will enable you to amplify greatly the basic forecasts given in the tables. Remember that your barometer forecasts coming weather changes, 12 to 24 hours in advance. It does not necessarily agree with existing conditions. Read it frequently and regularly.