INSTRUCTIONS FOR ELECTRONIC READOUT

[illegible] meter has been equipped with an electronic readout in addition to our conventional optic system.

To obtain a gravity reading electrically the gravity meter [illegible], the arrestment knob turned counter clockwise to [illegible] and the dial turned in the proper direction to center [illegible] the galvanometer.

The inexperienced operator should first read the instructions [illegible] reading the gravity meter by the eyepiece [illegible] in this manual to familiarize himself with the gravity meter.

[illegible] the galvanometer does not show the full [illegible] as observed in the eyepiece. The galvanometer [illegible] indicate 2 or 3 eyepiece divisions each side of zero. The [illegible] between one galvanometer division and one [illegible] scale [illegible] on or near the reading line is about one to one.

After a brief practice period the operator should be able to [illegible] gravity readings quite rapidly and accurately with the electronic [illegible].

In the event of a component failure the gravity meter can be [illegible] standard optic system.

[illegible] ELECTRONIC READOUT

[illegible] polarity when connecting meter to 12 volt [illegible]

[illegible] the [illegible] series:

[illegible] and [illegible] gravity meter connected to 12 volt [illegible]

[illegible] is [illegible] in proper adjustment.

[illegible] ([illegible] proper reading line is being [illegible].)

[illegible] galvo needle to reading line (Center of galvo). This is the potentiometer labeled "zero adjust". Turning the Zero pot clockwise [illegible] the galvo needle to move to the right.

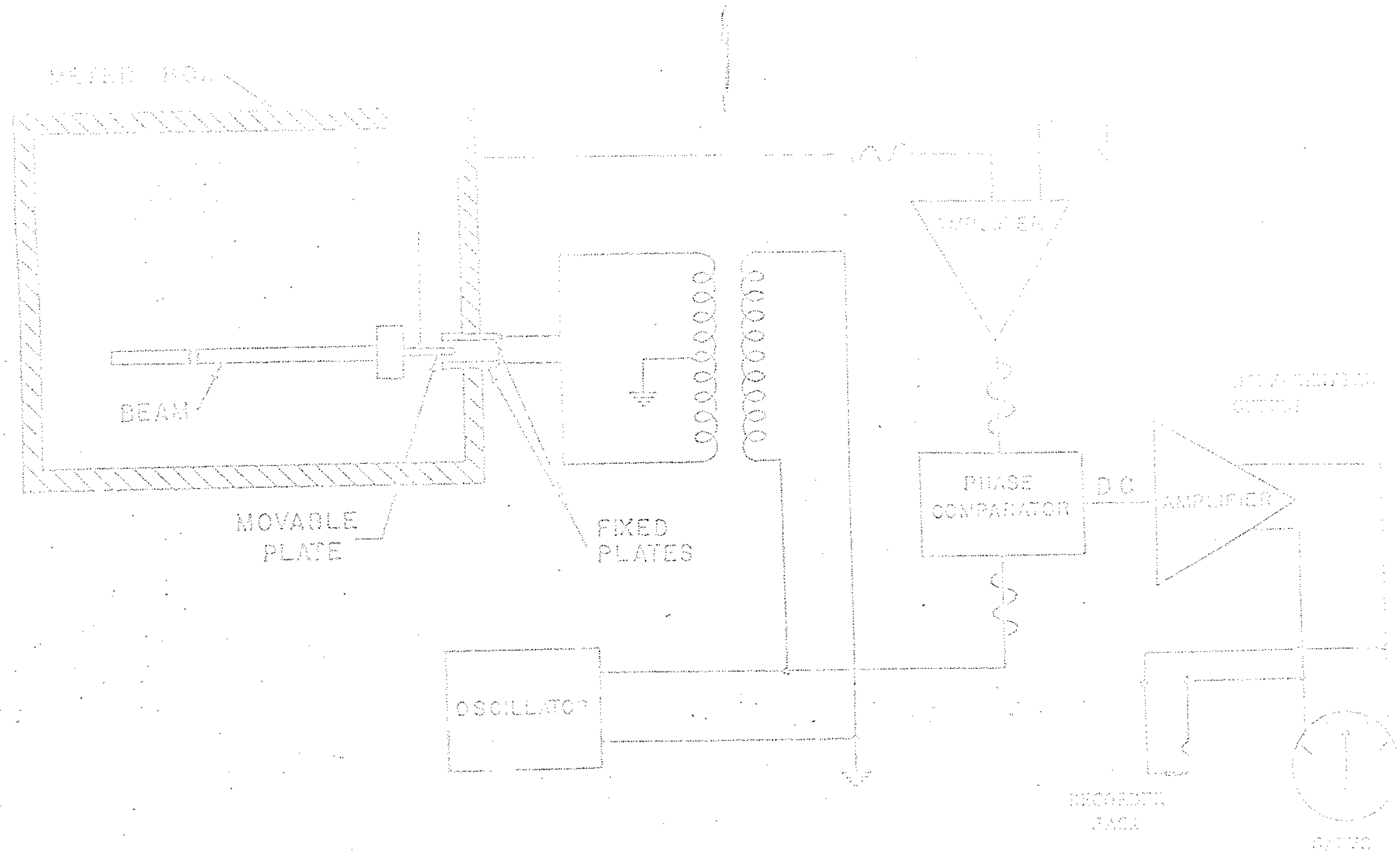
[illegible] dial clockwise one tenth milligal (10 small dial units). [illegible] position of galvo needle. Turn sensitivity adjust pot [illegible] galvo reads one division for one tenth milligal dial change.

[illegible] clockwise adjustment will increase sensitivity.

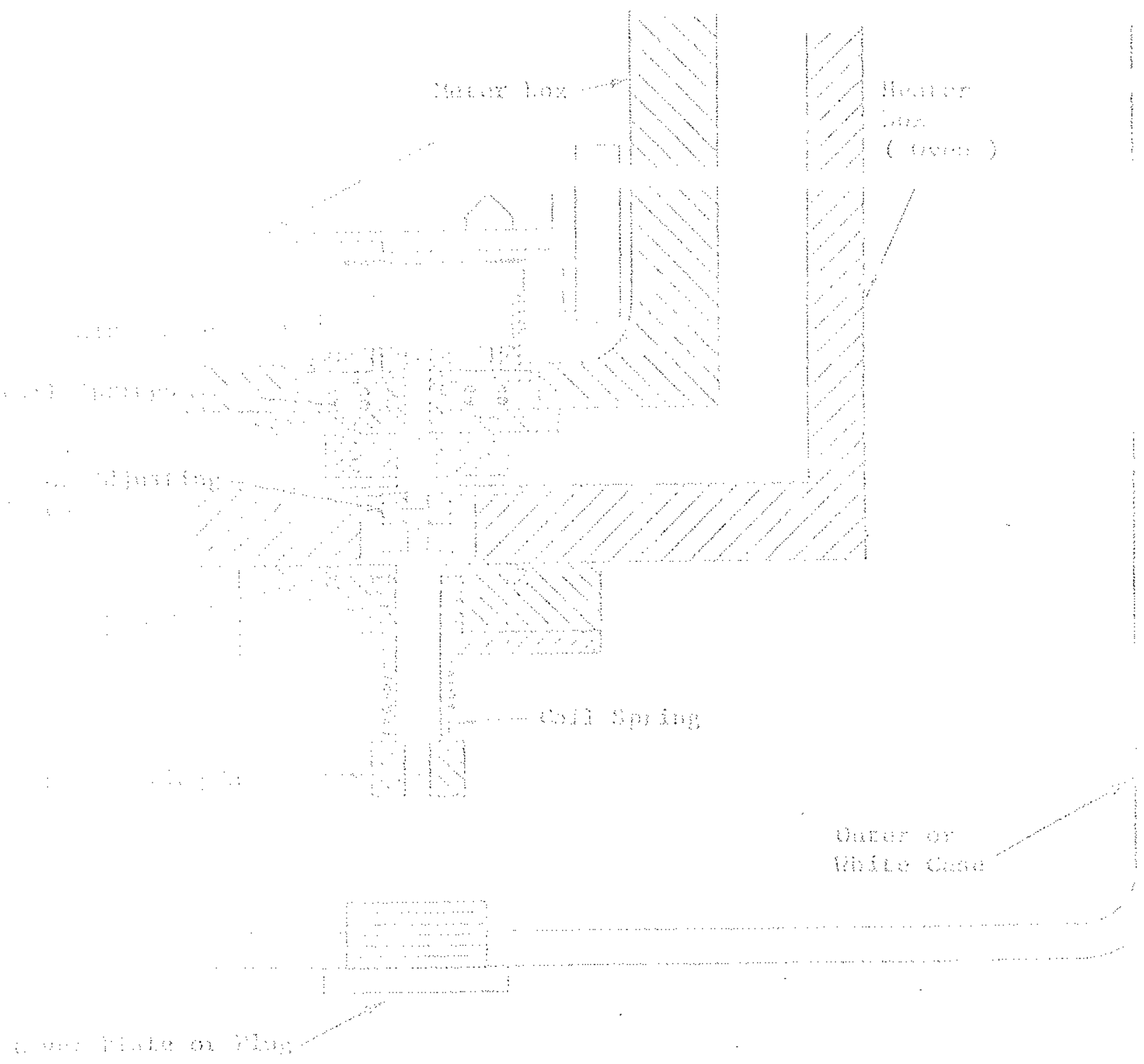
[illegible] Repeat steps (4) and (5) several times and tune if necessary.

[illegible] electronic readout [illegible] shooting will [illegible] limited to checking for broken wires, low voltage or [illegible]. If failure does occur, the gravity meter will probably [illegible] returned to the manufacturer for repair.

[illegible] added in the power line to the electronics to prevent damage [illegible] polarity is not observed when connecting gravity meter [illegible]. However, it is a good safety practice to always observe [illegible].



SIMPLIFIED DIAGRAM OF
CONDENSER READOUT CIRCUIT


Heater
(Oven)
Coil Spring
Outer or
White Case

Special Instructions for the Variable Damped
LaCoste & Romberg Model G Gravity Meter

[illegible] variable damped Model G gravity meter is identical to the standard [illegible] except for the variable damping feature.

[illegible] cross sectional side view of the variable damping design is [illegible] following page.

[illegible] adjust the damping the aluminum cover plate or nylon screw on the [illegible] is removed. (It will probably be easier [illegible] the [illegible] is placed on its side.)

[illegible] slot of the lower adjusting screw will then be visible. [illegible] keeps this screw in the downward position. [illegible] in the slot push inward and engage the slot of the upper [illegible] maximum damping the screw is turned counter clockwise [illegible] revolutions. A very minimum of torque will be [illegible] adjusting screw and a positive stop will be felt. [illegible] removed the coil spring should force the lower adjusting screw [illegible]

[illegible] approximately that of a standard Model G [illegible] reversed.

[illegible] approximately 50 [illegible] meter.

[illegible] readings [illegible] obtained when maximum damping is [illegible] is provided. The beam positioner switches [illegible] gravity meter. To [illegible] the switch on the light is pressed and down [illegible] the switch [illegible] positioner will also operate when the meter is in [illegible]

[illegible] power supply provides the [illegible]

[illegible] positioner it is important to keep in mind that [illegible] overcome approximately 75 milligals of spring [illegible] be necessary to use the spring tension adjustment [illegible] in conjunction with the beam positioner to initially [illegible] reading. It may be a good practice to gently tap the [illegible] if the beam is slightly sticking on a stop, an excessive amount of [illegible] can be avoided.

[illegible] the gravity meter to operate properly it is important that the screw [illegible] adjusting screw") is forced out and away from the "upper adjusting screw" [illegible] sectional view of damper design.

[illegible] 1/2 TURN C.C.W. PROVIDES MAX. DAMPING

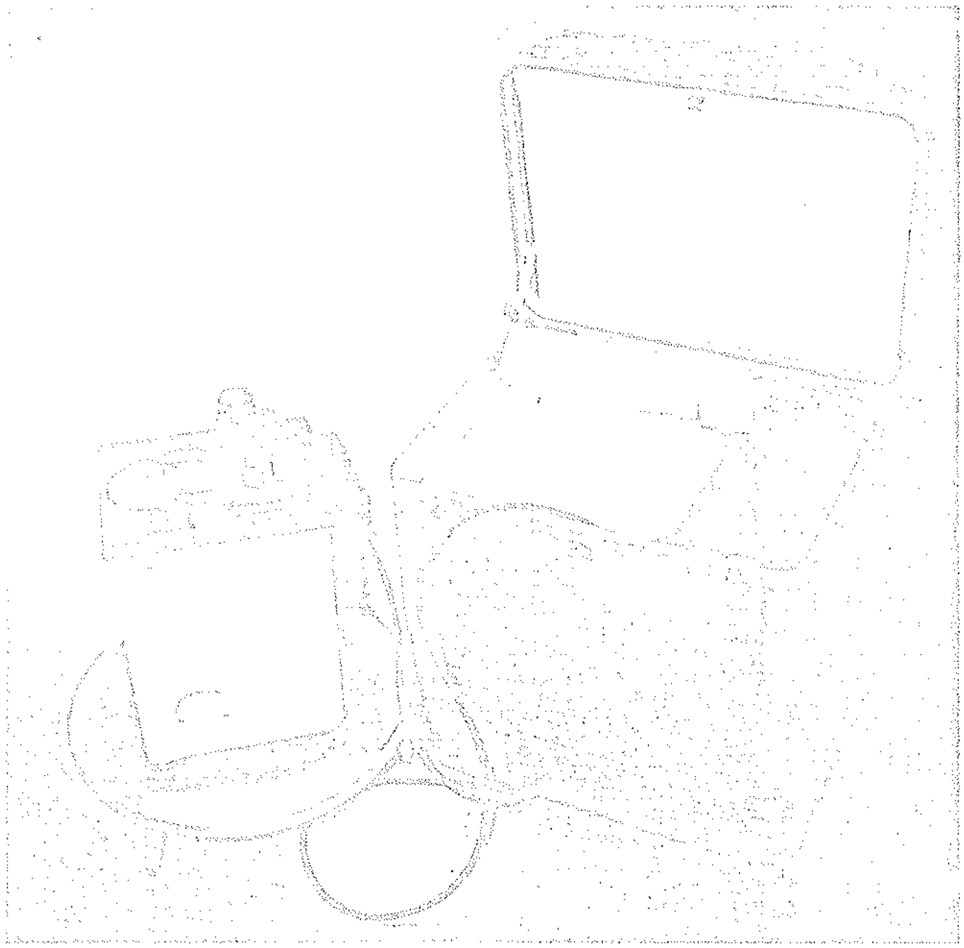
[illegible] Model G Geodetic Gravity [illegible]

The LaCoste and [illegible], Model G Gravity Meter and the accessories that are [illegible] supplied with the gravity meter are shown in Figures [illegible]. [illegible] Gravity Meters have a range of over 7000 Milligals, a reading accuracy [illegible] rate of less than 1 mgl. per month.

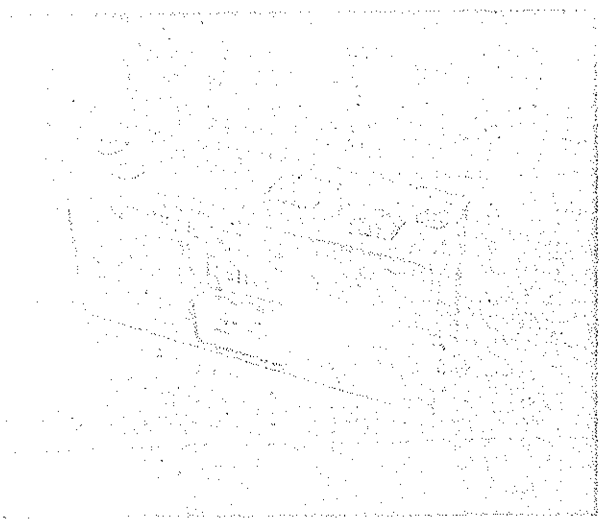
[illegible] Gravity Meters are sealed to eliminate any [illegible] atmospheric pressure. As a safety precaution, they are [illegible] pressure compensated. The sensor is completely demagnetized and [illegible] within [illegible] shield.

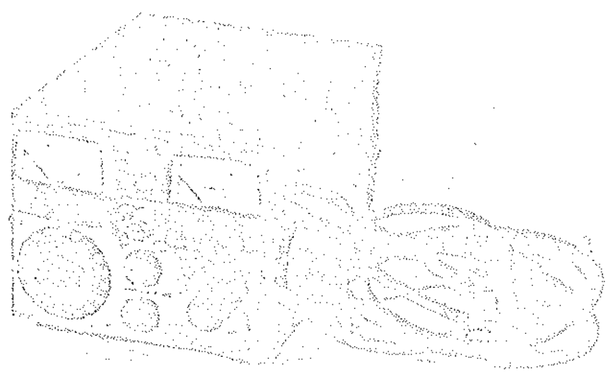
The gravity meter, carrying case and battery weigh about 19 pounds. The battery charger and levelling disc weigh an additional 8 pounds.

FIG. 1



MODEL G GRAVITY METER, CONCAVE LEVELING DISC
AND ALUMINUM CARRYING-SHIPPING CASE





[illegible]

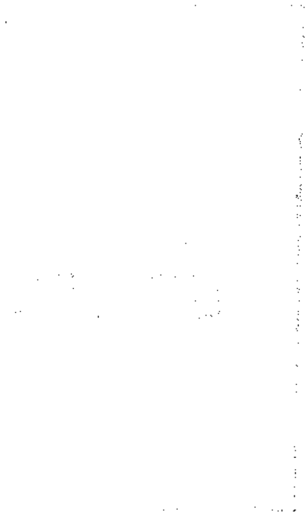


FIG. [illegible]

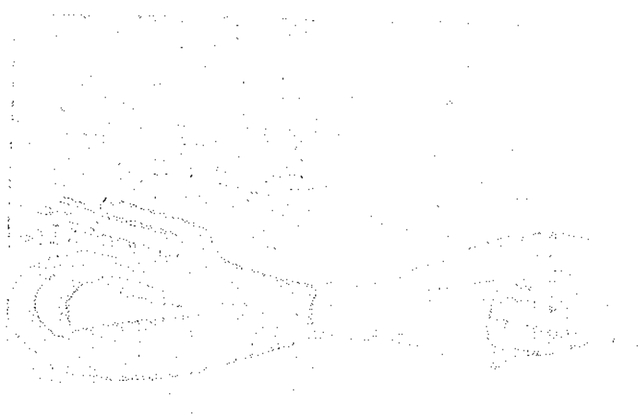
[illegible]-ADAPTER

ALLEN WRENCH

FIG. [illegible]

BATTERY CHARGER

CABLE



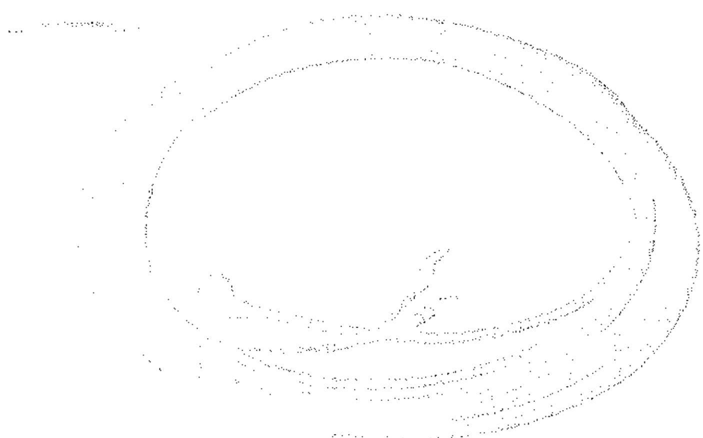
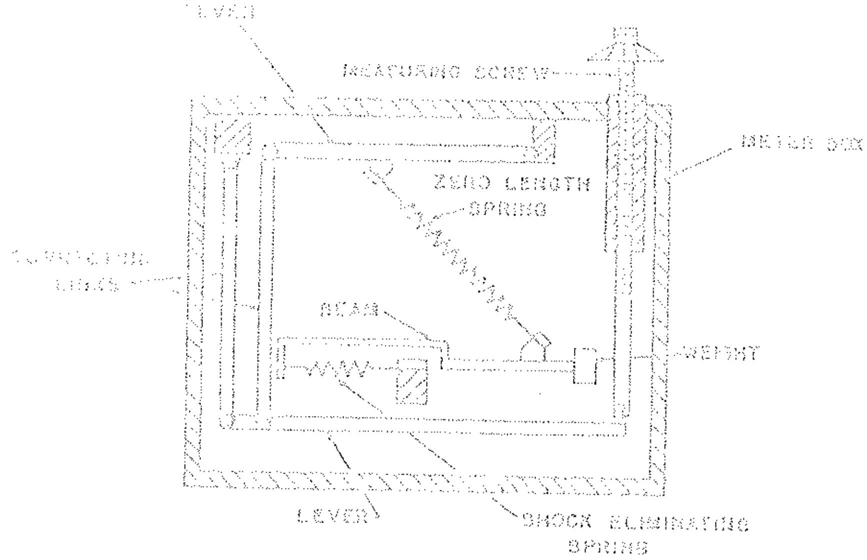


FIG. 4

AUXILIARY BATTERY

CABLE

[illegible] NOS. 2,293,437 - 2,377,889



PRINCIPLE OF OPERATION

Principle of Operation of LaCoste and Romberg Gravity Meter

A simplified diagram of the basic LaCoste and Romberg gravity meter is shown [illegible]. The gravity response system consists of a weight on the end of a horizontal [illegible] supported by a zero - length spring as shown in the diagram. The shock [illegible] floating pivot, thus eliminating any friction in the moving [illegible]. Thus the gravity response system is completely suspended by springs. It [illegible] withstand nearly any shock that will not damage the housing which supports it.

The lever system and measuring screw shown in the diagram are accurately [illegible] over their entire range. Calibration factors depend only on the quality of [illegible] measuring screw and the lever system, not upon any type of weak auxiliary springs. [illegible] reason, the calibration factors of LaCoste and Romberg meters do not change [illegible] with time. This eliminates any need for frequent checks of calibration.

Operating Instructions

The gravity meter is usually shipped unthermostatted. Since the temperature of the LaCoste and Romberg instrument is thermostatically controlled, the first step is to bring the instrument to its operating temperature (shown on the cover page of this manual). The meter should automatically thermostat at this temperature. Connect the [illegible] cord from the meter to:

1. The battery eliminator unit (see section "Battery Eliminator-[illegible] [illegible] Unit") OR

2. The battery supplied with the gravity m[illegible]

3. Any 12 volt battery source.

The nickel-cadmium battery normally supplied with the meter has a capacity of [illegible] ampere hours. The red tag tied to the battery indicates the state of charge. Usually the battery is shipped in a discharged state and must be fully charged before [illegible] the meter from it. See section on battery before charging.

A cable, referred to as an auxiliary battery cable, is supplied [illegible] connecting [illegible] to a 12-volt d.c. power source other than the battery supplied with the [illegible]. Polarity must be observed when connecting this cable.

The gravity meter should be allowed to stabilize at its operating temperature [illegible] of two hours prior to use. This is necessary if reliable gravity readings [illegible] obtained.

The following is a general procedure for obtaining a gravity reading:

1. Place the meter on the concave levelling disc [illegible] with the meter. (If conditions permit, the operator may prefer not to use the disc.)

2. Turn on the light [illegible] levels and optical system by means of the switch located on top of the gravity meter.

3. Level the meter using the levelling screws located beneath the meter. Some models in larger cases are leveled by means of [illegible] on top of the gravity meter.

4. Release the beam of the gravity meter by turning the arrestment knob [illegible] clockwise to its limit.

5. The position of the beam can be determined by observing the shadow, or crosshair, in the telescope. This crosshair is actually the [illegible] of a very fine wire attached to the beam. This image is magnified [illegible] then [illegible] through the reticule, or scale, for a reading reference. The total [illegible] of the crosshair is usually about 14 to 16 scale divisi[illegible] [illegible] See illustration.

[illegible]

(3) The downscale side of the crosshair is brought to the reading line (as given on the meter) by turning the measuring screw.

To move the crosshair upscale, the measuring screw is turned clockwise, and to move the crosshair downscale the measuring screw is turned counterclockwise. The reading line should be approached by turning the measuring screw in the same direction each time to avoid any possible backlash. (Always recheck the levels before the final reading is taken.)

([illegible]) Obtain the meter reading from the counter and the dial. The last digit on the counter and the numbers on the dial should correspond [illegible] tenths of units. The dial is [illegible] [illegible] can be read from it.

[illegible] (Note [illegible] the last digit on the counter, [illegible]. This can be accomplished by loosening [illegible] measuring screw [illegible] into agreement with the last digit on the counter [illegible])

[illegible] of Counter Reading to Milligals

To obtain [illegible] milligals from the reading of the counter [illegible] dial [illegible], Table 1. In Table 1, the value of gravity in milligals is given for each 100 [illegible] of the counter (the last digit on the counter indicates tenths). By using this [illegible], and the corresponding factor, the value of gravity for any reading of the counter [illegible] be obtained in the following manner:

1. [illegible] (Example: 2654.3).

2. [illegible] (Example: .36) The reading is then 2654.36.

3. [illegible] Table 1 [illegible] "Counter Reading" column use the counter reading [illegible] reading (2654.36) but less than it. For this example [illegible] would be 2600. Observe the "Value in Milligals" [illegible] counter reading of 2600 is 2731.10 Mgls.

4. Obtain the difference in the original Counter-dial reading and the [illegible] from Table 1 in Step 3.

   2654.36 – 2600 = 54.36

5. Multiply this difference (54.36) by the interval factor given in the table for a counter reading of 2600.

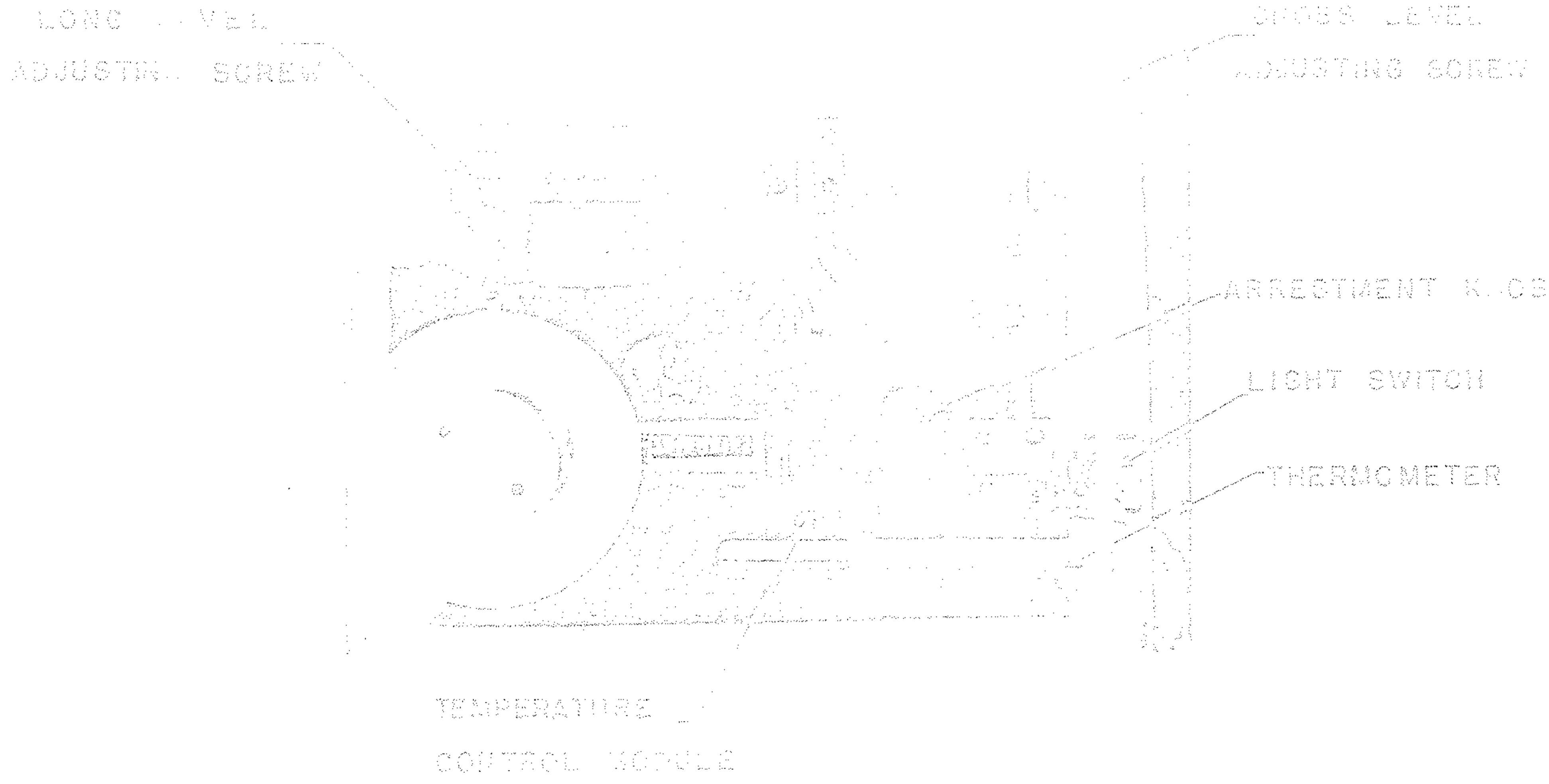
   54.36 X 1.05239 = 57.21

6. And the product obtained in Step 5 to the Milligal value observed in Step 3. The sum thus obtained is the milligal value for the gravity station.

   2731.10 + 57.21 = 2788.31

Example Table I

COUNTER READING	VALUE IN MILLIGALS	FACTOR FOR INTERVAL
2500	2625.98	1.0521[illegible]
	2731.10	1.05239
	2836.34	1.0526[illegible]



METER L.S.J MO ED

[illegible] Checking the Gravity Meter

[illegible] ly reliable [illegible] [illegible] [illegible] in the field [illegible] is prob[illegible] [illegible] [illegible] a month under normal use [illegible].

[illegible] as follows.

1. Checking the Displacement Sensitivity (Adjustment of the Long Level, [illegible] the level that is parallel to the longest dimension [illegible])

[illegible]

[illegible]

(3) [illegible] light.

[illegible] of crosshair.

(5) [illegible] (measuring screw) to locate upper and lower stops ([illegible] limits of crosshair).

(7) [illegible] crosshair by means of measuring screw about one [illegible] above lower stop.

(8) Turn measuring screw dial clockwise one revolution, which is [illegible] units on the counter, or approximately 1 Milligal.

(10) Observe the number of units the crosshair moves in the eyepiece.

(11) The correct displacement sensitivity should be approximately one eyepiece division for one counter unit.

[illegible] displacement sensitivity check shows a sensitivity of approximately [illegible] eyepiece divisions for 10 counter units then a long level adjustment is [illegible].

If the displacement sensitivity is low it means a slight loss in reading [illegible]. (The crosshair responds to a dial change but the amount is less. [illegible], it is more difficult to detect crosshair [illegible].)

[illegible], if the displacement sensitivity is high, more accurate readings [illegible] obtainable but the response is slower. Actually on certain specialized [illegible], the displacement sensitivity has been doubled to increase reading accuracy. [illegible] of increased sensitivity, however, the meter becomes unstable and [illegible]

2. Setting the Displacement Sensitivity (Long Level)

Adjustment to both the [illegible] level and cross level may be made externally [illegible] holes in the black phenolic top of the gravity meter located near the end of each level. These access holes are covered by two small black anodized plates. Loosen the small screw holding the plate and rotate the plate to give access to an Allen-head cap screw directly below. After determining the proper level position for the gravity meter as described below, adjust the level by turning the cap screw with the Allen wrench furnished to bring the level bubble into a centered position. After a final [illegible] replace the cover plates.

On some models it may be necessary to remove the phenolic top from the gravity [illegible] level adjustments.

[illegible] the case, remove the dial and top. Remove the [illegible] [illegible] and insert it in the telescope tube adapter supplied with the [illegible] which is also supplied for making adjustment to the level [illegible].

[illegible] should be made in small [illegible] [illegible] division is all that will be required.

[illegible] gravity meter [illegible] [illegible] leveling screw [illegible] [illegible] way from eyepiece stalk). [illegible] [illegible] above to determine [illegible] [illegible] needed. [illegible] adjust [illegible] [illegible] position. The [illegible] gravity should then be [illegible]. (Although [illegible] [illegible] it is usually done [illegible] [illegible] operator several attempts [illegible] [illegible])

[illegible] is the level position when the [illegible] [illegible] adjustment.

[illegible] sensitivity is high, the gravity meter is tilted so the [illegible] with one levelling screw is raised. (Bubble [illegible] [illegible] eyepiece stalk.) Then the same procedure outlined [illegible] [illegible] followed.

3. [illegible] correct reading line.

(i) [illegible] carefully

(ii) Set crosshair on reading line as specified for the meter. If this is not known, choose a position approximately midway between the stops.

(iii) Keeping the cross-level in the level position, tilt the long level one division, first one direction and then in the other and record the eyepiece reading. Repeat several times to be sure of the reading.

[illegible] the eyepiece moves upscale [illegible], then the chosen reading line is correct.

[illegible] moves up appreciably more when the meter is [illegible] the end with the single leveling screw, the [illegible] line is too high. If the crosshair goes down for this tilt, [illegible] reading line is too low.

(E) [illegible] reading line was not chosen in Step (D), then [illegible] be shifted one eyepiece division with the dial [illegible] up or down depending on results of Step (E) and the [illegible] procedure repeated.

[illegible] should be checked whenever the long level (displacement sensitivity) [illegible].

[illegible] After tilting the meter off-level wait approximately 30 seconds for the [illegible] to [illegible].

[illegible] Level

The correct setting of the cross levels is the setting which gives the minimum [illegible] to tilt. It can be checked by moving the cross level one division off-level, first in one direction and then in the other. If the cross level setting is correct, the crosshair should move upscale approximately an equal amount for each tilt [illegible] the long level is in the level position each time the meter is read. If the cross [illegible] is out of adjustment proceed as follows:

(A) Level meter so that the cross level is off center approximately half of a division in the direction which gave the lo[illegible] eyepiece reading in the above experiment.

[illegible] the level wrench supplied with meter, adjust the cross level [illegible] in the center position and repeat the [illegible] described above.

On [illegible] models where it is necessary to remove the [illegible] top, the [illegible] is made by adjusting the nuts on the level vial mounting [illegible] with the [illegible] supplied. A very small nut rotation is usually all that is required. [illegible] the top is replaced and the dial is installed remember to phase the numbers [illegible] with the corresponding last numbers on the counter.

It has been assumed that only minor adjustments were [illegible] into proper adjustment. In this case the steps 1 through 4 [illegible]. However, if one or both of the levels is off several bubble divisions, [illegible] adjustment of each level the other level should be rechecked.

[illegible] Temperature Control Circuitry

All components associated with the temperature control system are solid [illegible] temperature-sensing thermistor bridge operates an amplifier and power transistor to [illegible] to the heating element. The components are of high quality with [illegible] factor. A circuit diagram is included in this [illegible].

[illegible] meter fails to heat properly the trouble is most likely to be caused by [illegible] wire in the power cable, a bad plug connection, improper battery voltage (polarity also must be observed), or bad connections to the battery.

If the trouble is not found in these areas, the instrument will probabl[illegible] have to be returned to our laboratory.

The op[illegible] should familiarize himself with the best operating temperature for the meter and be alert for detectable changes in the temperature. Except in [illegible] weather conditions when the outside temperature [illegible] the stem of the [illegible]mometer, there should be no visible change in the thermometer reading.

[illegible] Reading Light and Level Lights

[illegible] reading light on the Model G gravity [illegible] #330 14-volt aircraft [illegible]. The level lights, directly beneath the level [illegible], are #3[illegible] 28-volt aircraft [illegible]. Since the level lamps are operating on less than one half of their rated [illegible], they will have an extremely long life.

Although the reading lamp operates at 12 volts, it too has a very long life. ([illegible]ally 2 spare reading lamps are furnished). Access to this lamp is [illegible] by removing the aluminum disc on the side of the meter. To [illegible] the [illegible] lamp loosen the screw securing the copper contact [illegible] lamp is [illegible] removed from the bakelite tube. It will be necessary to adjust [illegible] new lamp [illegible] optimum brightness and clarity. Be sure the screw holding the lamp is well [illegible] after replacing or adjusting the reading lamp.

NOTE: As a matter of good field practice the level lights and reading [illegible] should be turned off between readings to prolong lamp life, reduce drift, [illegible] power consumption and excessive heat around the level vials.

7. The Battery

[illegible] charging instructions and other pertinent [illegible] on applying [illegible] battery supplied with this meter is included in this manual.

8. General Information

(A) Temperature control

About two hours are required to heat the meter to its operating temperature. Since the meter must be stabilized at this temperature for a least two additional hours prior to obtaining gravity readings, we recommend the meter be maintained at its operating temperature constantly. This is good field practice even though the meter is used intermittently. To keep the meter at its operating temperatures when it is not in use, either the battery eliminator or the battery charger may be use[illegible] battery charger is used, leave the gravity meter [illegible] to the battery and set the battery charger for about .2 ampere charging current. For idle periods of more than [illegible] [illegible] charger alone.

NOTE: [illegible] usually result from storing the meter off [illegible].

(B) [illegible] or clamping mechanism. The [illegible] the gravity [illegible] should [illegible] clamped between [illegible] to avoid any [illegible] in [illegible] length which might result in errors due to [illegible].

[illegible] Although much improvement has been made over the years, occasionally the beam (crosshair) will stick on [illegible] bottom, [illegible] sometimes both stops. Usually a gentle tap on the case will free the beam. Although this can be somewhat annoying, the accuracy is not normally affected. Generally, sticking does not occur until the meter has been in use for several years. It is necessary to return the meter to our laboratory for cleaning of the stops to eliminate the sticking.

(D) Frequently customers ask how often a meter [illegible] returned to the laboratory for a routine cleaning and check out. Probably the best criteria for this is the results that are being obtained. If good gravity ties are being obtained and no major problems are obvious, then there is no need to return the meter to the laboratory for a check up.

When meters are sent in for servicing we suggest that the bat- battery charger, and all cables be included. [illegible] ually about a week to ten days is required for a general cleaning and check out.

(E) Gravity meter unstable. On a few occasi[illegible] [illegible] long level on a gravity meter has gotten out of adjustment enough so that the meter becomes unstable. When this condition exists it is dif- ficult or impossible to balance the beam on the reading line. The crosshair can not be controlled with the measuring screw. The operator can duplicate this condition by tilt[illegible] the meter two or three bubble divisions in the sensitive direction (See Section - Setting the Displacement Sensitivity) and observing; the cor- rection of course is to adjust the long level as outlined earlier.

Battery Eliminator - Battery Charger Unit

[illegible] Battery Eliminator-Battery Charger Unit.

[illegible] ttery Eliminator-Battery Charger Unit is designed to operate on line [illegible] volts to 250 volts, 50-60 Hz, AC only.

[illegible] unit serves two purposes:

[illegible] when the gravity meter is [illegible]

[illegible]

[illegible] Eliminator/Battery Charger Unit

1. Battery Eliminator

Put Eliminator-Charger Switch in Eliminator position. (Switch up). Turn voltage Selector Switch counterclockwise to the #1 position. In this position the unit is capable of receiving a maximum of 250 VAC. Connect power plug to line voltage. Rotate voltage Selector Switch clockwise until the AC Voltmeter indicates about 110 volts.

Connect the power cable from the gravity meter to the Eliminator Plug on the Eliminator-Charger Unit. The gravity meter is now being [illegible] even though the battery is removed from the circuit. [illegible] will indicate the amount of current being consumed.

[illegible]

[illegible] battery are_charged_from the_carrying [illegible] for ventilation.

[illegible] battery. ([illegible]) [illegible] to avoid [illegible]

[illegible]

[illegible] Reduce the Voltage [illegible] indicates approximately 110 volts. [illegible] be operated with the AC voltmeter [illegible] should never be operated with [illegible] the Ampere Adjusting [illegible] recommended by the manufacturer.

[illegible] leave battery on charge longer than [illegible] might result to the [illegible]

[illegible] unit can be used to charge one or two batteries [illegible] provided the same charging rate can be used for both. [illegible] This is determined by the manufacturer's recommendation [illegible] of each battery.

[illegible] the charger has the capability of charging 2 batteries [illegible], the manufacturer does not recommend this procedure unless absolutely necessary. This is because minor differences in internal resistance of cells after cycling may result in extreme variations in their status of charge, causing an overcharge in some cells and polarity reversal in others.

If two batteries are being charged simultaneously [illegible] charging rate or the charing time must be doubled. This [illegible] the batteries are being charged in parallel and the [illegible] indicates only the total current flow in the charger circuit. If either of the batteries are removed from the charger individually, then the charging rate or charging time of the remaining battery should be adjusted accordingly.

See instructions on battery charging in this manual.

The battery may be charged with the gravity meter [illegible] to the battery [illegible] 0.2 - 0.3 amps to the charging [illegible] compensate for the average current being drawn by the meter [illegible].

[illegible] the Battery Eliminator Battery Charger Unit.

This unit is designed and constructed so that with reasonable care a long service life can be expected. All components are used well within their safe working limits.

[illegible] section is protected by a 4-amp circuit breaker and is [illegible] trouble free. If the circuit breaker is engaged and the charger does not operate, check for broken wires in the charger [illegible] between the battery terminals.

In addition to the circuit breaker a fuse has been placed in the [illegible]. A spare fuse is attached inside and chassis.

[illegible] this unit is supplied with a 3-wire power cable. The [illegible]

[illegible] for Gulton [illegible]

[illegible]

[illegible]

[illegible] is determined the battery requires about 7.5 [illegible] from the graph it can be observed the maximum [illegible] 400 milliamperes (MA) (.4 [illegible]) [illegible]

[illegible] charging rate is selected. Then 7.5 ampere-hours [illegible] equal about 19 hours. This is the number of hours [illegible] discharged battery.

[illegible] left connected to the battery during the charging [illegible] rate should be increased by about .2 ampere, [illegible] required to keep the gravity meter "on heat" at [illegible] about 80° F.

DATA SHEET

[illegible]

Battery Type [illegible] Drawing No. [illegible]

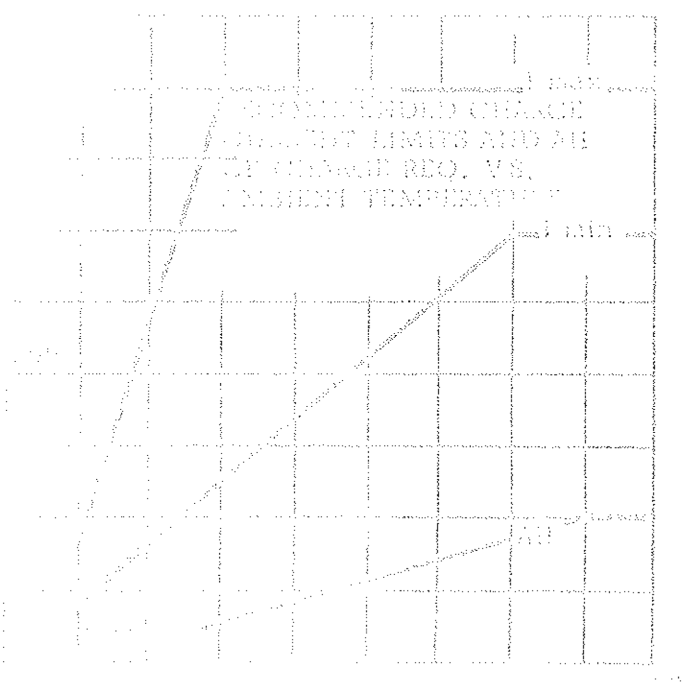
Capacity ___4___ AH at the 5 hour rate

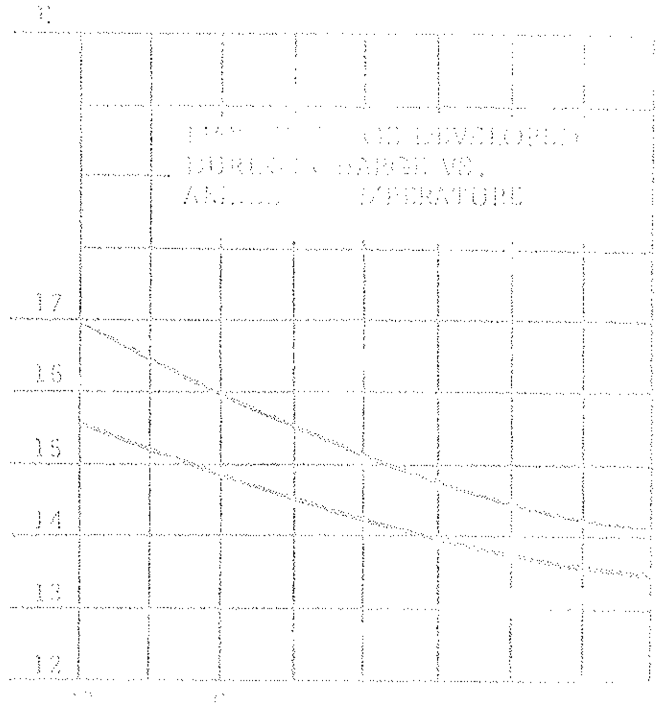
Number of Series Connected Cells ___10___ Nominal Voltage ___12___

OCV: Fully Charged ___13___ Volts or more.

Fully Discharged ___12.5___ Volts or less.

CHARGE DATA





[illegible]

[illegible]

Perhaps the most frequently asked question concerning the Nickel Cadmium battery is how to determine the state of charge.

The true state of charge of a sealed Ni-Cad battery is very difficult to [illegible] voltmeter readings do not give reliable results. If the time [illegible] or the amount discharged since the battery was last charged is unknown, it is recommended the battery be given a charge prior to use as outlined above. That is, treated as a discharged battery.

If the battery has been only partially discharged and the approximate ampere-hour discharge is known, the battery may be restored to a fully charged condition by recharging only [illegible] the amount of ampere-hours [illegible] instead of the [illegible].

Continuous overcharge is NOT recommended. The elevated battery temperature [illegible] will be a contributing factor in reducing battery life. [illegible] [illegible] charging rate is [illegible] recommended. [illegible] be maintained in a fully charged state at room temperature [illegible] [illegible] on [illegible] Sheet.

[illegible] may be discharged at quite [illegible] rates. However, they [illegible] be discharged below the end voltage indicated on the [illegible] to [illegible] the risk of a cell reversal. Cell reversal can be caused by reversed [illegible] to the charger or by overdischarge of the battery. While this may [illegible] detrimental to the battery if it happens only occasionally, deep discharging [illegible] should be avoided. Normally cell reversal is corrected by recharging at [illegible] rate.

As with most storage batteries self-discharge will occur. [illegible] temperature sensitive. At 75° F a loss of up to 20% of the charge [illegible] in two [illegible] at 120° F this loss will occur in two or three days, while at 0° F it will [illegible] year. Note that this is a loss in state of charge, recoverable by [illegible] a permanent loss of capacity.

The [illegible] 16V6-RM battery requires no usual battery maintenance. It is [illegible] electrolyte and sealed at the factory.

[illegible] clean and tight.

[illegible] attempt to add electrolyte or distilled water.

[illegible] not place intermediate [illegible] taps on the battery.

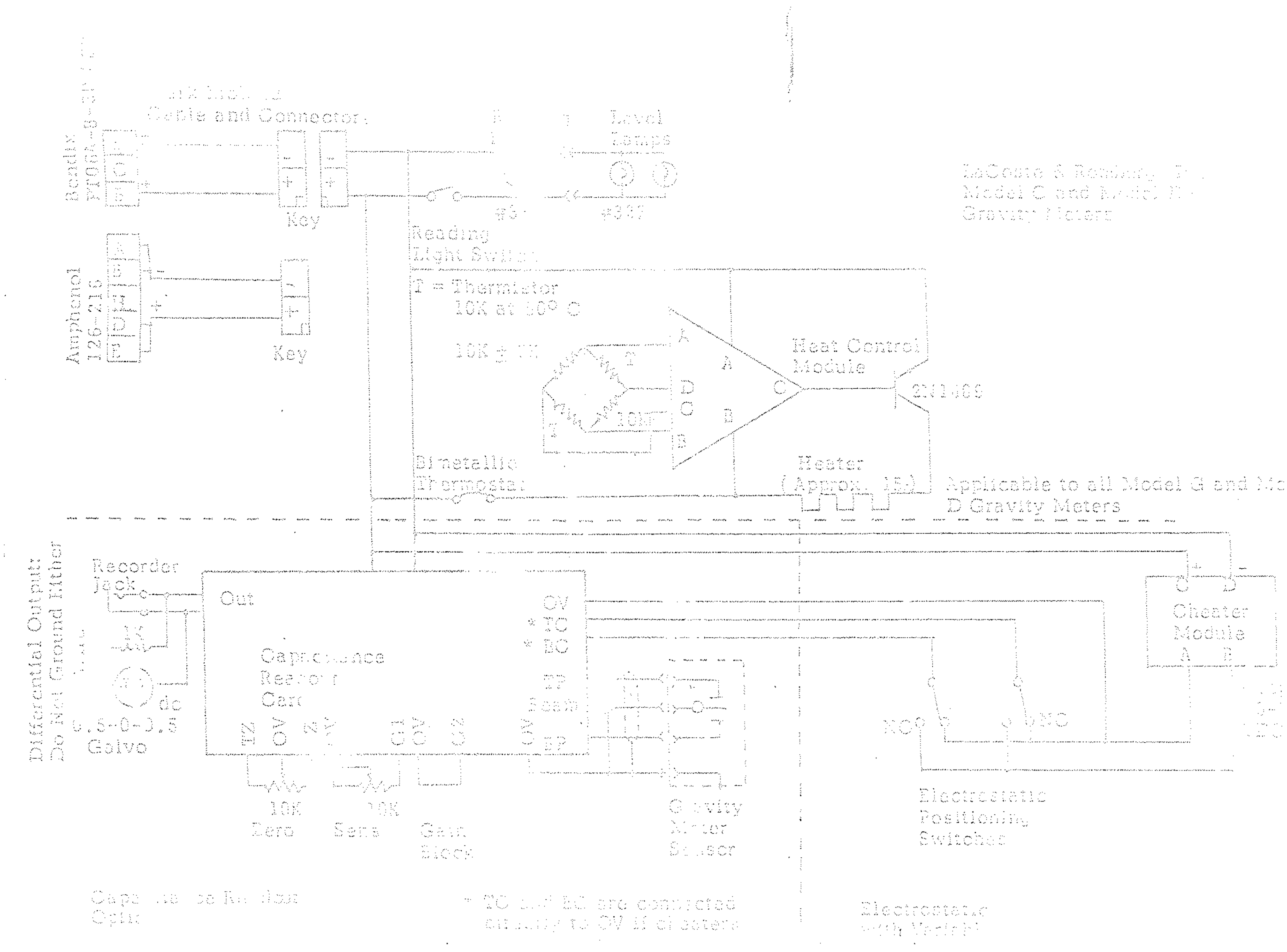

Cable and Connector
Bendix
Key
Amphenol
126-215
Key
Level
Lamps
#6
#327
Reading
T = Thermistor
10K at 50° C
10K ± 1%
10K
Heat Control
Module
Bimetallic
Thermostat
Heater
(Approx. 15Ω)
Applicable to all Model G and
D Gravity Meters
LaCoste & Romberg
Gravity Meters
Differential Output:
Do Not Ground Either
Recorder
Jack
1K
dc
0.5-0-0.5
Galvo
Out
Capacitance
Car
OV
* TC
* BC
OV
EP
10K
Zero
Sens
Gain
Block
Gravity
Sensor
Cheater
Module
Electrostatic
Positioning
Switches
* TC and BC are connected
Electrostatic

TABLE 1

MILLIGAL VALUES FOR LACOSTE & ROMBERG, INC. MODEL G GRAVITY METER NO. 524

COUNTER READING	VALUE IN MILLIGALS	FACTOR FOR INTERVAL	COUNTER READING	VALUE IN MILLIGALS	FACTOR FOR INTERVAL
000	000.00	1.02727	3600	369[illegible]	1.02706
100	102.73	1.02711	3700	3801.70	[illegible]
200	205.44	1.02696	3800	3904.31	[illegible]
300	308.13	1.02686	3900	4006.32	1.02[illegible]15
400	410.82	1.02679	4000	4109.[illegible]	1.02[illegible]18
500	513.50	1.02676	4100	[illegible]	1.02[illegible]19
600	616.18	1.02672	4200	[illegible]	[illegible]21
700	718.85	1.02671	4300	[illegible]	[illegible]22
800	821.52	1.02671	4400	4520.62	1.02[illegible]23
900	924.19	1.02673	4500	4623.24	1.02[illegible]23
1000	1026.86	1.02675	4600	4725.6[illegible]	1.02[illegible]20
1100	1129.54	1.02677	4700	4828.[illegible]	1.02[illegible]17
1200	1232.21	1.02680	4800	4931.70	1.02[illegible]
1300	1334.89	1.02682	4900	5034.[illegible]	1.02[illegible]07
1400	1437.58	1.02686	5000	5137.32	1.02[illegible]03
1500	1540.26	1.02690	5100	5240.[illegible]2	1.02795
1600	1642.95	1.0269[illegible]	5200	[illegible]	1.02790
1700	1745.65	1.02698	5300	[illegible]	1.02783
1800	1848.35	1.02703	5400	[illegible]	1.02774
1900	1951.05	1.02708	5500	[illegible]	1.02763
2000	2053.76	[illegible]13	5600	5754.[illegible]	1.02751
2100	2156.47	1.02720	5700	5856.78	1.02738
2200	2259.19	1.02726	5800	5959.52	1.02722
2300	2361.91	1.02731	5900	6062.24	1.02704
2400	2464.64	1.02736	6000	6164.94	1.02684
2500	2567.38	1.02741	6100	6267.63	1.02661
2600	2670.12	1.02748	6200	6370.29	1.02637
2700	2772.87	1.02755	6300	6472.93	1.02611
2800	2875.62	1.02763	6400	6575.54	1.02585
2900	2978.39	1.02770	6500	6678.12	1.02557
3000	3081.16	1.02775	6600	6780.68	1.02529
3100	3183.93	1.02781	6700	6883.21	1.02501
3200	3286.71	1.02788	6800	6985.71	1.02471
3300	3389.50	1.02793	6900	7088.16	1.02442
3400	3492.29	1.02798	7000	7190.62	

[illegible] mounting [illegible]