



Consumer and
Corporate Affairs

Consommation et
corporations

Legal Metrology

Métrieologie Légale

Long Form

S.WA-1175

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Ottawa July 15, 1980

NOTICE OF APPROVAL – AVIS D'APPROBATION

PITNEY BOWES MODEL 5046 ELECTRONIC MAILING SCALE/TOLEDO MODEL 8150

COMPANY REQUESTING APPROVAL: Toledo Scale Division of
Reliance Electric Limited
5220 Creekbank Road
Mississauga, Ontario
L4W 1X1

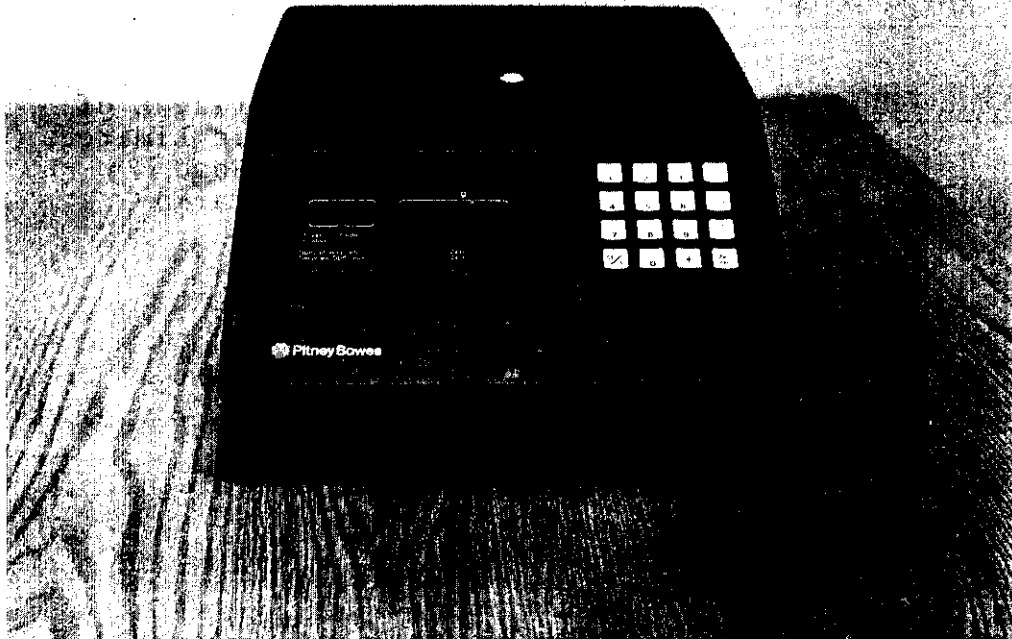
MANUFACTURED BY: Toledo Scale Division of
Reliance Electric Limited
Windsor, Ontario

TYPE OF SCALE: Electronic Postal Computing Scale.

<u>Model Number(s)</u>	<u>Capacity</u>	<u>Load Cell</u>
Pitney Bowes 5046/Toledo 8150	5000 x 5 grams	Berrylium Copper (Toledo Make)

APPLICATION: For use in the mailing room.

DESCRIPTION: This device is a self-indicating, postage computing counter scale designed to be used in a mail room. Digital Display of the weight or postage is by an array of 7 segment Light Emitting Diode Displays visible through a filter screen in the front panel. The value currently being displayed is indicated by legends and associated Light Emitting Diodes. The operator may at his option display either the postal weight, indicated by the illumination of a Light Emitting Diode labeled "g" over the leftmost four digits, or the Total Computed Postage, indicated by the illumination of a backlit "\$" to the left of the rightmost four digits. The leftmost two digits of the display are separated from the rightmost four and always display the operator entered Postal Class and Code digits. The leftmost digit displays the Postal Class entered by the operator while the Light Emitting Diode below it with the legend "Class/Classe" is illuminated if a class has been entered or blinks if no class or an invalid class is entered. The rightmost of the two leftmost digits displays the postal code entered by the operator while the Light Emitting Diode below it with the legend "Code" is illuminated if a valid code has been entered and blinks if no code or an invalid code is entered.



DESCRIPTION: (Cont'd)

A Light Emitting Diode in the lower left of the screen with the legend "Special Services/Services Spéciaux" lights when a postal rate is displayed that includes an added fee for a special postal service. A Light Emitting Diode in the lower right corner of the display with the legend "Zero/Zéro" is illuminated whenever the weight measured by the device is within the postal zero increment of $\pm 1.9g$.

A 16 button keyboard allows the operator to enter Postal Class, Postal Code, Special Services desired and added money amounts. Buttons are provided to electronically zero the device and to clear from the Postal Computation mode to the weight display mode.

The display may be turned off by a switch under the right front edge of the device. A display test mode is actuated when the display is turned on so that the operator may verify that all displays turn on and all turn off.

DESCRIPTION: (Cont'd)

An operator changeable Postal Rate Memory located beneath the platter contains information for computation of current postal rates.

The platter is attached to the load bearing system by two fasteners that are removable by hand with a quarter coin. A bubble level is recessed into the platter surface.

Figure 2 is a functional block diagram.

DEVICE OPTIONS OR VARIATIONS: Five operational functions are provided, each selected independently by an internal switch.

- (1) Load cell input sensitivity of either 2.0 or 1.5 millivolts per volt.
- (2) Automatic zeroing of the scale when power on if within range.
- (3) Expand mode displays the weight mode when the load is removed.
- (4) Automatic clearing of part of the operator entered postal information (code) when the load is removed.

There is one optional feature: The plug-in rate memory may be removed for operation in a postal weight mode only.

COMPONENT IDENTIFICATION:

Figure three(3) (Attached)

- (1) Scale Printed Circuit Board
- (2) Load Cell Cable
- (3) Load Cell
- (4) Platter Support
- (5) Flexure System
- (6) Base Casting
- (7) Power Supply
- (8) A.C. Line Filter
- (9) Rate ROM

Device Description: (Cont'd)

Functional Block Diagram

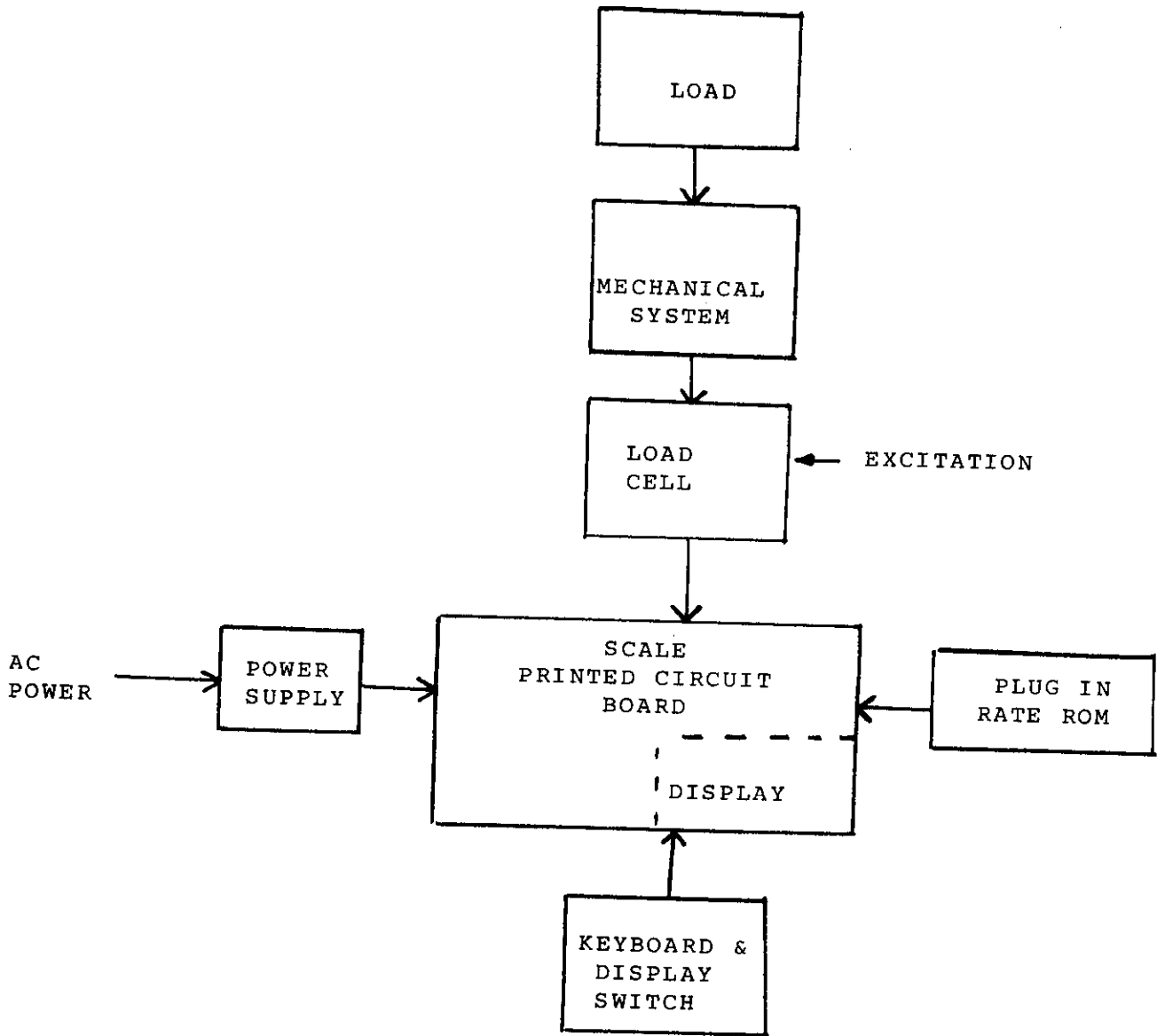


Figure 2

DESCRIPTION: (Con'd)

The scale has three modes of operation.

- (A) Test Mode
- (B) Weight Mode
- (C) Postal Mode

The keyboard consists of 16 multi use keys divided into four specific modes as follows:

- (A) Numerical Keys: Used to enter codes or to add a special charge to a computed total.
- (B) Class Subject: These keys are used to enter classes as follows:
 - "(1)" First Class
 - "(2)" International Air Mail Letter
 - "(3)" Third/Fourth Class Mail
 - "(4)" U.S. First Class, or
 - "(5)" U.S. Fourth Class.
- (C) Special Service Keys: Used to enter the following services:
 - "(6)" Special Delivery
 - "(7)" C.O.D.
 - "(8)" Return Receipt
 - "(9)" Insurance
 - "(10)" Registered Mail
- (D) Function Keys: Used to enter the functions as follows:
 - "Class" enter class selected
 - "Spec. Serv." enters special service fees selected
 - "Zero" key will manually zero scale when necessary, if held for two seconds with no weight on platter.
 - "Plus (+)" key enters additional dollar value to base postage rate for services not calculated by the scale.
 - "CE/C" (Clear Error/Clear). First push of the key clears the last numeric entry. The second push clears all the entered data and returns the scale to the weight mode.

TESTING:

- (1) The displays can be verified with the "ON/OFF" switch. When switched on "8's" will be displayed, then the weight display will indicate 0.000.

TESTING: (Cont'd)

(2) To verify rate computation accuracy, consult the latest Post Office Rate Schedule and check various weight and rate class combinations.

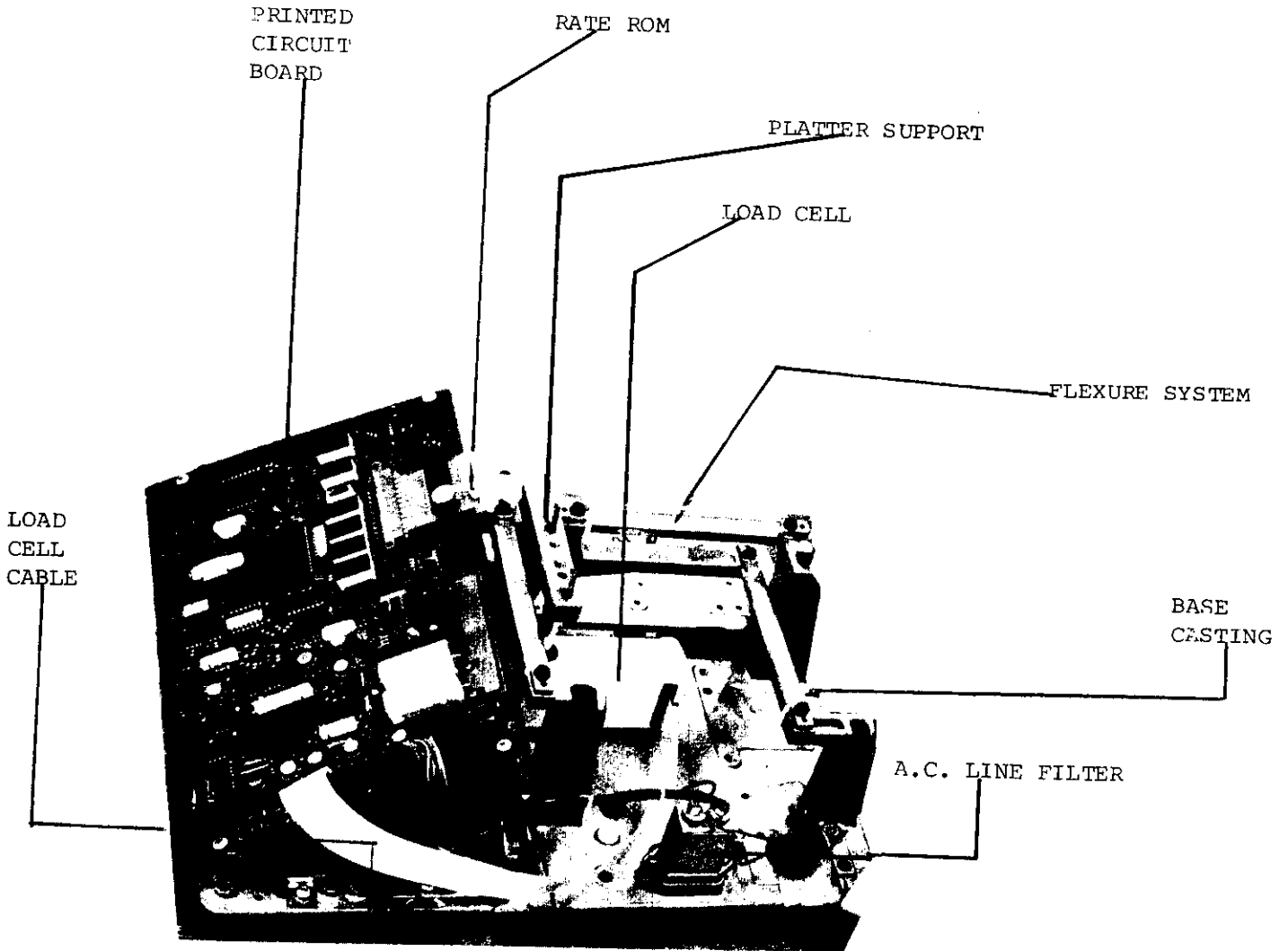


Figure 3

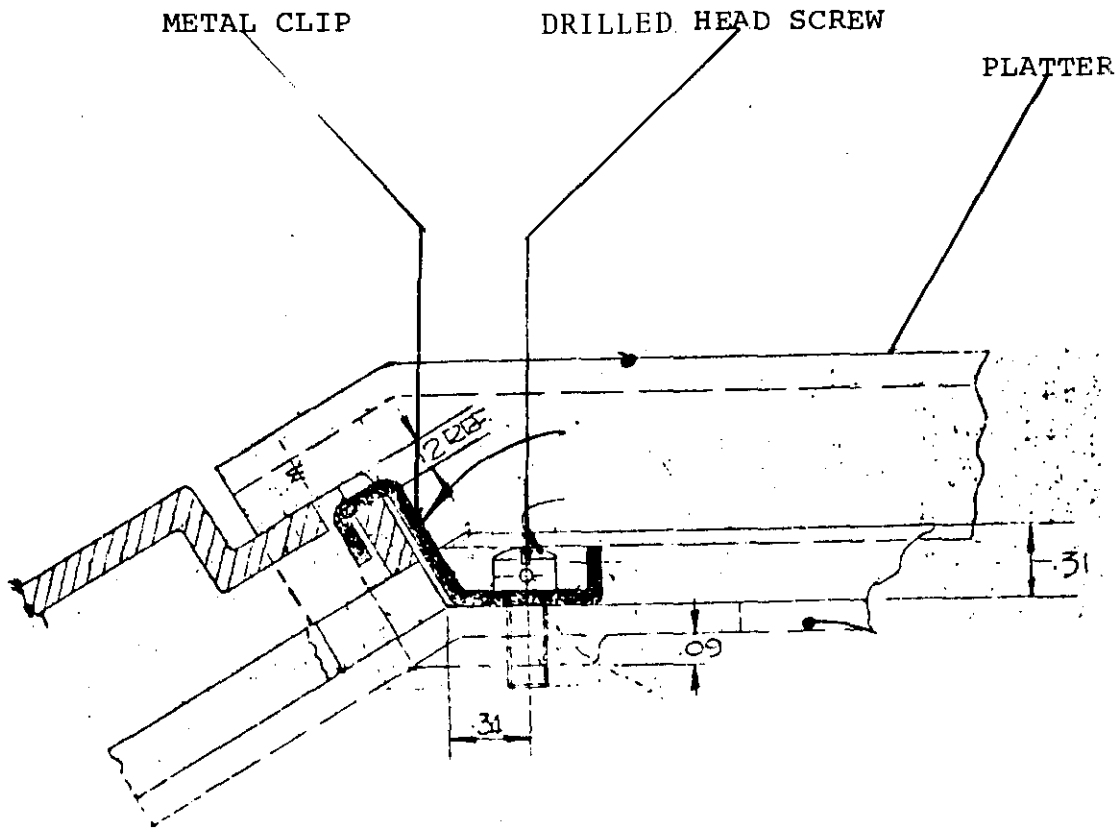


Figure 4

PROVISION FOR SEALING: The span and coarse adjustments are located under the front cover which is retained independently by a metal clip and screw with head drilled for lead and wire seal. This screw is accessible under the platter which can be removed using a quarter coin. Alternatively self destructing paper seals may be used over the screws that retain the front panel. See Figure 4 attached.

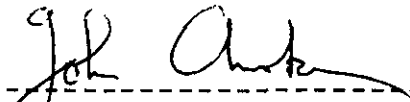
DEVICE ACCESSORIES: There are no accessories.

CONDITIONS OF APPROVAL: (1) The use of this scale is restricted to internal postage determination and is not permitted in direct sales to the public.

(2) The sealing means is exempted from providing ready access to other components and adjustments as per SGM3/10.

Approval is granted under the Weights and Measures Act, S.C. 1970-71-72, Chapter 36, and the Weights and Measures Regulations C.R.C.c., 1605 for use in Canada under the general conditions of the said Regulations, and under any special conditions listed above.

REFERENCE: G6922-T170-20



John Armstrong
Chief
Weights and Measures Division
Legal Metrology Branch