



Ottawa , December 3, 1979

NOTICE OF APPROVAL - AVIS D'APPROBATION

Toledo-Electronic Pre-Pak Scale - Model 8301

Manufacturer: Toledo Scales
Division of Reliance Electric Ltd.
5220 Creekbank Road
Mississauga, Ontario. L4W 1X1

Apparatus: Electronic Pre-pack scale Model 8301 and electronic label
printer Model 311 or 312.

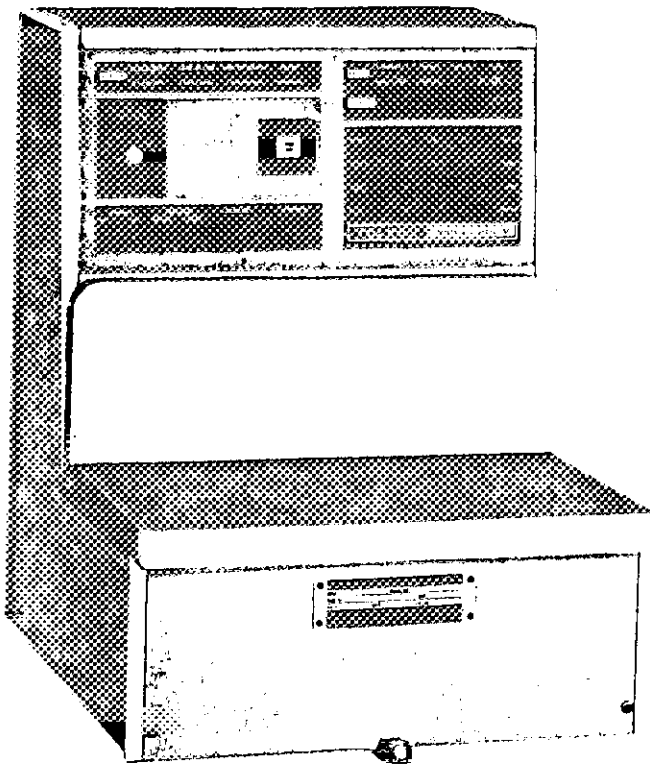
Rating: 30 x .01 lb OR 15 kg x .005 kg
6 kg x .002 kg

Description: Model 8301 Scale and 311 Printer are designed to provide
printed labels for use on prepackaged commodities such as meat,
seafood, poultry, cheese, and produce.

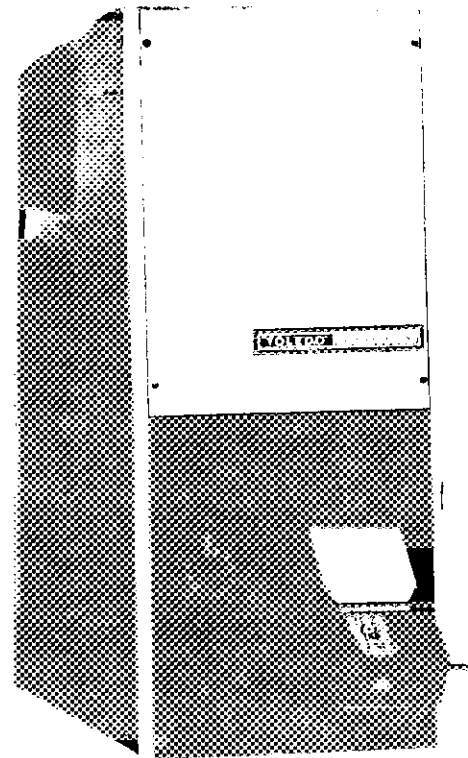
The scale uses a hermetically sealed strain gage load cell in combination with a 5 flexure scale base to provide weighing capacities of 30 lb or 15 kg. Analog weight signals from the load cell are digitized by a multislope A/D converter which provides span and zero stability with a weight conversion rate of 8 times per second. Weight data is digitized to a resolution 10 times greater than the displayed weight to provide resolution for tare weight storage, auto-zero maintenance, digital filtering, etc.

The scale electronics includes data storage for several hundred variable commodity descriptions which may be selected or entered via the keyboard. Provision is also made for storage of several hundred "Price Rite" data files which include Unit Price, Tare, Shelf Life, and Commodity I.D. number for the commodities to be used. An auxiliary data link provides means for interrogating a remote computer to obtain pricing data, and for transmitting accumulated data for each group of packages. The auxiliary output may also be used in conjunction with a magnetic tape recorder to provide recording from and reloading of data into the Price Rite file.

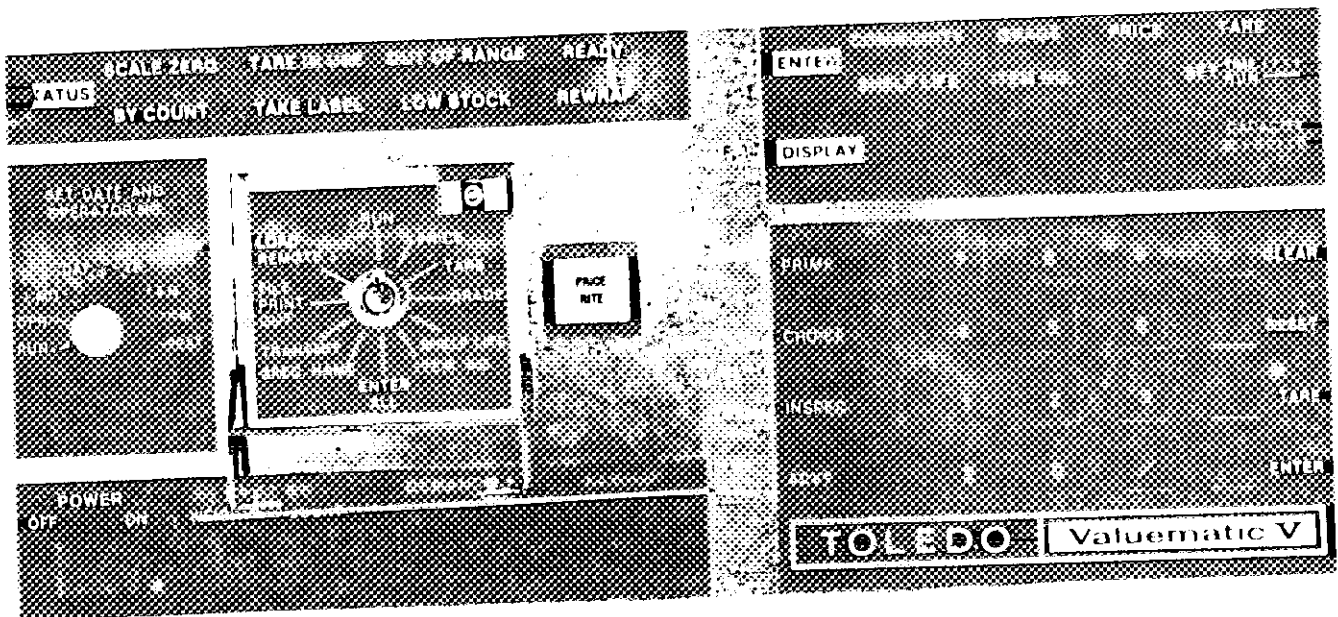
The 311 Printer provides a lable 1.5 inches high by 3 inches wide on which may be printed two 32 character lines for commodity Description, one 32 character line for Grade, Store Code, Operator Code and Date, and a fourth line showing Weight, Unit Price and Total Price.



Model 8301 Scale



Model 311 Printer



Scale - Control and Display Panel

Product description or sales message

Up to 32 alpha-numeric characters per line on 2 lines, automatically centered.

Grade or secondary description

Program 4 of your own

Up to 14 alpha-numeric characters, including date code.

Rewrap (R), Manual (M), or Rewrap Manual (RM)
Automatically identify all rewrap, manual rewrap or manual pricing operations.

The Basic Label

THANK YOU
PRE-PACKAGED FOR YOUR CONVENIENCE

BEEF CHUCK

SHOULDER STEAK BONELESS

CHOICE

NET WT. 12 12345 FEB 22 '79

R 4.97 $\frac{L}{8}$ PRICE PER LB. \$1.89 TOTAL VALUE \$9.39

Operator number

Quick reference for any particular run. Helps monitor productivity.

Store and scale number

Assign your store and scale codes for easy identification later.

Automatic dating

As the clock advances Valuematic V updates automatically.

Total price
in dollars.

Net weight - lb or kg
Plus automatic or manual tare comes with Price-Rite.

Price per lb or kg
Also allows you to select unit pricing, price per pound or multiple price by weight.

Easy, special variations

THANK YOU
PRE-PACKAGED FOR YOUR CONVENIENCE

Sales messages can be temporarily or permanently stored.

Identify **price by count** on a unit pricing basis.

Indicates "Rewrapped Manually."

1. WRITE YOUR OWN TICKET.

2. ON EITHER OR BOTH LINES.

BY COUNT

NET WT. PRICE PER LB. TOTAL VALUE

R 12 $\frac{E}{8}$ \$1.00 8.3¢ $\frac{E}{A}$ 22 FEB '79

\$1.00

Priced "By Count"

The *BEST BEFORE* or *coding* *PACK DATE CODING*

The total price is where you expect it.

And the summary of any run

THANK YOU
PRE-PACKAGED FOR YOUR CONVENIENCE

When the operator is through with the run, it can be totaled on a label.

Indicates that this is a summary ticket.

Notes that all packages summarized in this run were manually priced.

TOTALS

NET WT. PRICE PER LB. TOTAL VALUE

M 53.09 $\frac{L}{8}$ \$1.79 40

Totalizes net weight.

Establishes the pricing of \$1.79/lb was used for each package in the run.

Shows the total number of packages processed in the specific run.

INFORMATION ON 8301/311 Labels

FIGURE 2

Description (cont'd):

Data is transmitted from scale to printer using ASII code with both lateral and longitudinal parity checks. The printer uses an etched drum with photo-electric detection of drum position via windows in the drum skirt, four hammers (one per row) and a carbon ribbon to provide the printing function. Position of the label stock under the print hammer is determined by photo-detection of a precut "notch" between each label, and by a stepping motor to precisely control paper motion.

After printing, the label is cut from the supply stock by a solenoid operated knife, then is conveyed to a glue activating heater block located on the front of the printer housing.

In addition to the information as shown on figure 2 for the model 311 printer, a model 312 printer is available that will in addition print a U.P.C. bar code required for scanning.

The normal method of operation is:

- A) Power "ON"
- B) Zero scale by use of Z button if weight display not zero.
- C) Price by - WEIGHT or COUNT.

NOTE: At this time the operator should enter information as indicated on the "enter" display, For instance:

COMMODITY light "ON"; operator enters 4 digits commodity code using keyboard and "ENTER" button.

GRADE and/or PRICE light "ON"; operator enters info.

TARE light "ON"; operator enters tare, weight indicator will show a minus weight indication for tare entered.

SHELF LIFE light "ON"; operator enters info.

The "status" indicator display should now indicate "Scale Zero", "TARE in use", "READY", and "TAKE LABEL".

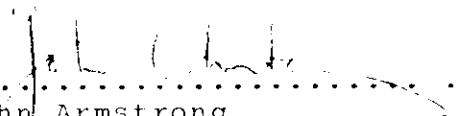
Testing: Standard tests for an electronic pre-pak scale are required. Verification of displays may be tested as follows:

Press "RESET" key then "CLEAR" key, all indicator lamps will light and the weight display will show 8's, the entire front panel will then blink until the "RESET" key is pressed.

Special Conditions: The device is exempt from SGM1/12.

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.

File No.: G6922-T170-21


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John Armstrong
Chief,
Weights and Measures Division
Legal Metrology Branch

