

STANDARDS BRANCH

G-43

OTTAWA, March 5, 1969

NOTICE OF APPROVAL

FOR

SPRAGUE METER DIVISION, TYPES 175, 240 and 250
 STANDARD AND TEMPERATURE COMPENSATED
POSITIVE DISPLACEMENT GAS METER

Apparatus

	<u>Type 175</u>	<u>Type 240</u>	<u>Type 250</u>
Badged capacity, cu. ft./hr. (air)	140	192	200
Differential pressure at badged capacity	0.5 w.g.	0.5 w.g.	0.5 w.g.
Capacity per revolution, cu. ft.	0.111	0.111	0.111
Maximum working pressure, psig	5	5	5
Diaphragm designation	G-4	G-4	G-4
Temperature compensator activity (T.C. Meters)	0.00315"/°F	0.00315"/°F	0.00315"/°F
Base temperature (T.C. Meters)	60°F	60°F	60°F
Tangent to 2 cu. ft. test dial rev. ratio	18:1	18:1	18:1
Meter connections, top, male	1"	1"	1"

Description

The Sprague meters are of a unique, three-compartment design, with one circular valve cover rotating on a single, sectionalized valve seat.

The main centre casting of the meter carries one centrally located, vertically positioned main movement assembly which transmits the motion of the diaphragms to the tangent. The post of the tangent engages directly with the molded epoxy-resinated graphite valve-cover and produces its rotating motion.

At the lower end of the main movement assembly two links connect to the diaphragm carrier brackets. The length of one diaphragm link is adjustable to correct meter displacement. Separate adjustment is provided for varying valve timing. The access to these adjustments is from the side of the meter and the manufacturer provides a special adjustment screw finder and wrench for use with these meters.

The diaphragms are held between the centre casting and its two covers, and they are supported by two carrier wires which attach, through suitable brackets, to the centre casting at one end, and to the diaphragm plates at the other.

The top casting of the meter carries an index box assembly and two meter connections. A nylon worm and gear index driving movement transfers rotational motion from the valve cover to the meter index.

The three types of the meter approved herein are of identical design, made of cast aluminum, and have the same outside dimensions. The valve seats and covers of these meters are of different dimensions resulting in different badged capacities.

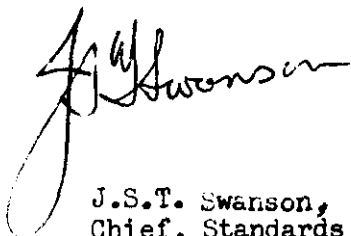
In temperature compensated meters the lower end of the main movement assembly is replaced by a temperature compensator which employs a pair of co-operating bi-metals. As the gas temperature changes the bi-metals alter the stroke of the diaphragms so that irrespective of the temperature of the flowing gas, meter registration indicates the equivalent volume passed at 60°F. The index of the temperature compensated meter contains an inscription in red letters "Temperature Compensated 60°F Base".

Each meter shall have a nameplate which contains the name of the manufacturer, meter's type designation, its capacity in cubic feet per revolution and cubic feet per hour, air at $\frac{1}{2}$ " w.c., meter's working pressure in psi, and serial number of the meter. Temperature compensated meters shall also have our inscription "Temp. Comp. 60°F Base".

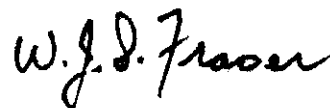
Each meter shall be sealed according to the attached drawing.

Approval granted to:

Sprague Meter Division of
Textron Canada Ltd.,
Hamilton, Ontario.



J.S.T. Swanson,
Chief, Standards Laboratory,
Standards Branch.



W. J. S. Fraser,
Chief, Electricity & Gas Division,
Standards Branch.

Ref: SL-100-597 H-1

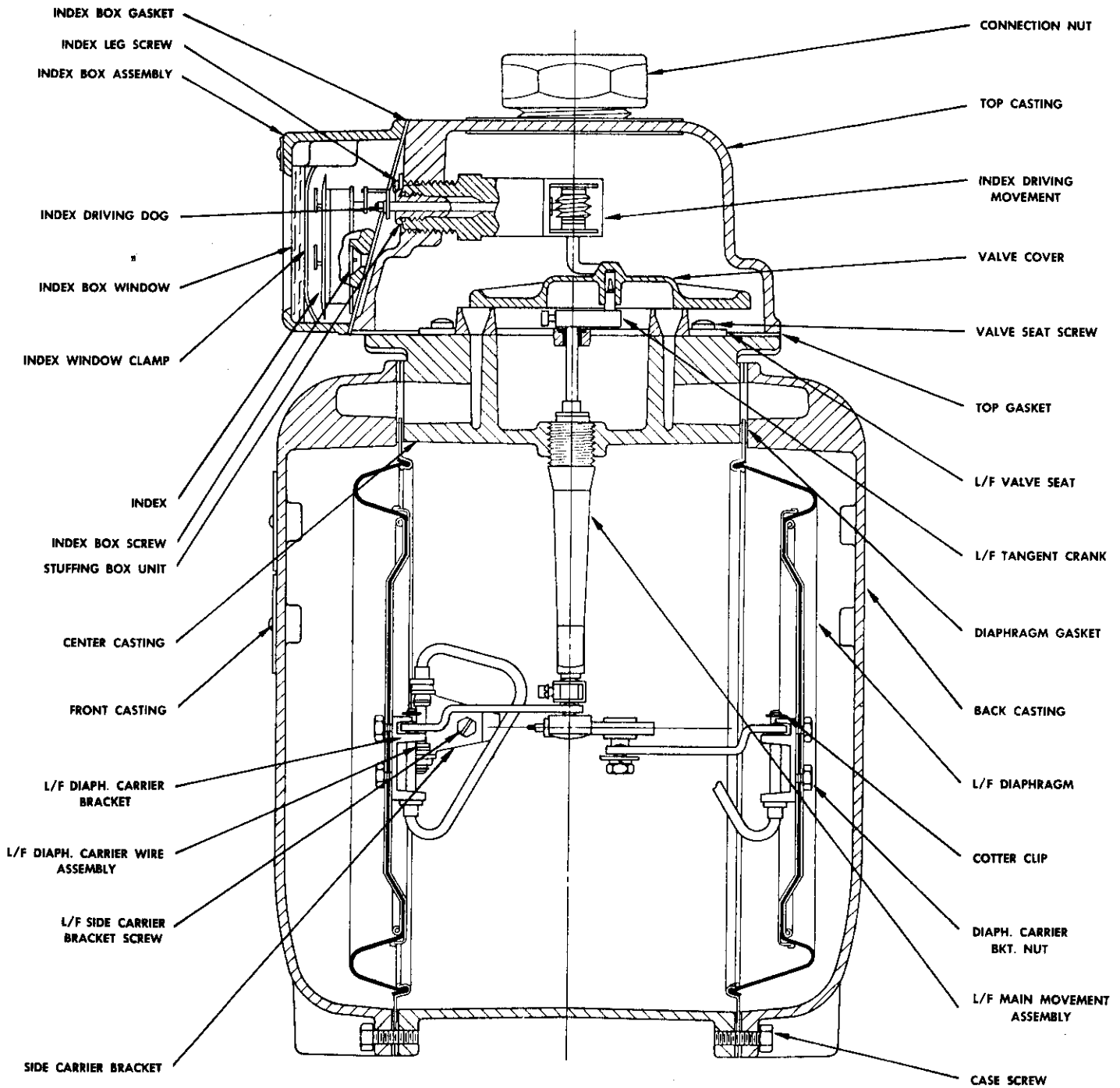
Sprague®

**CONVERSION KITS
AND METER PARTS
PRICE LIST**

175

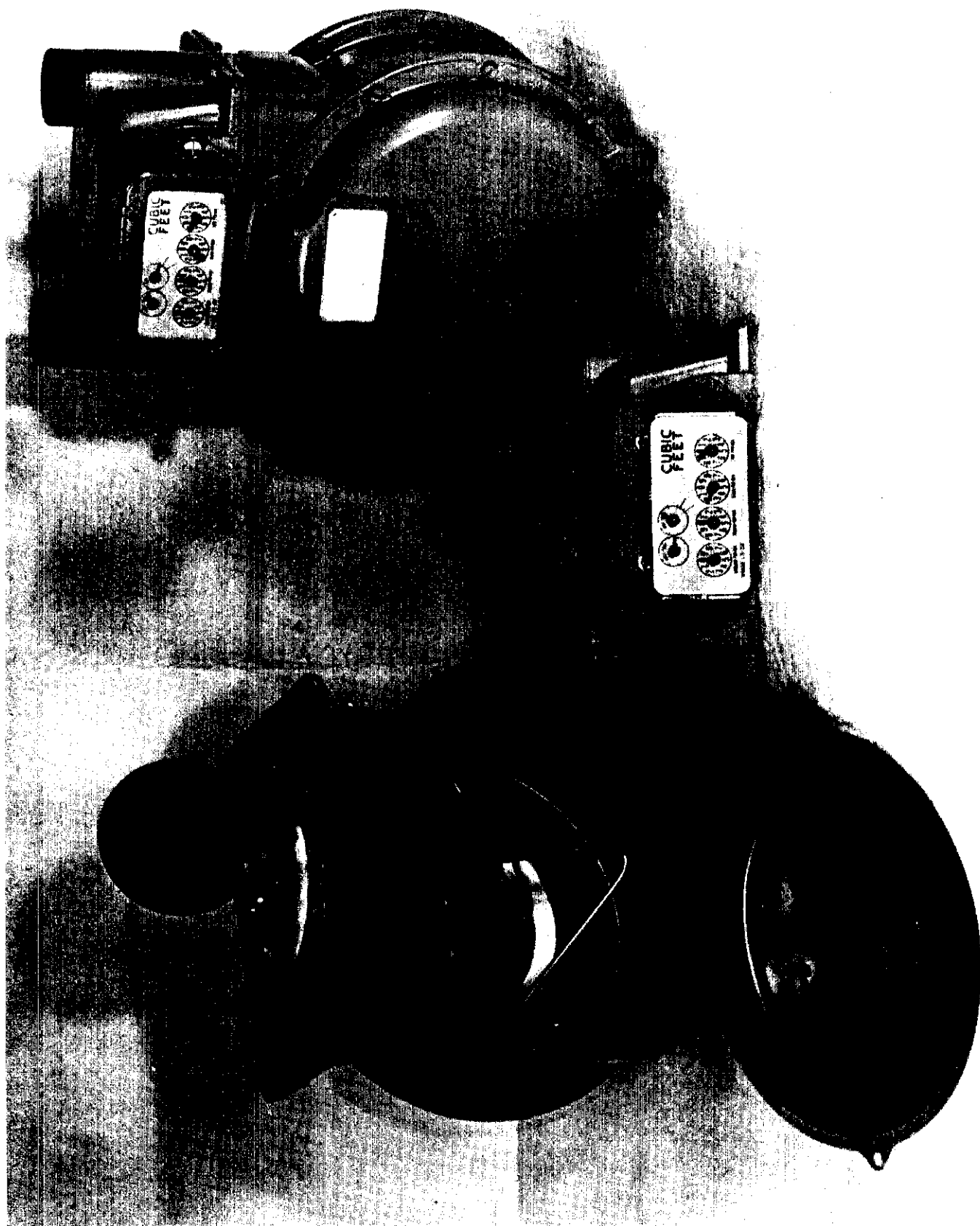
240

250

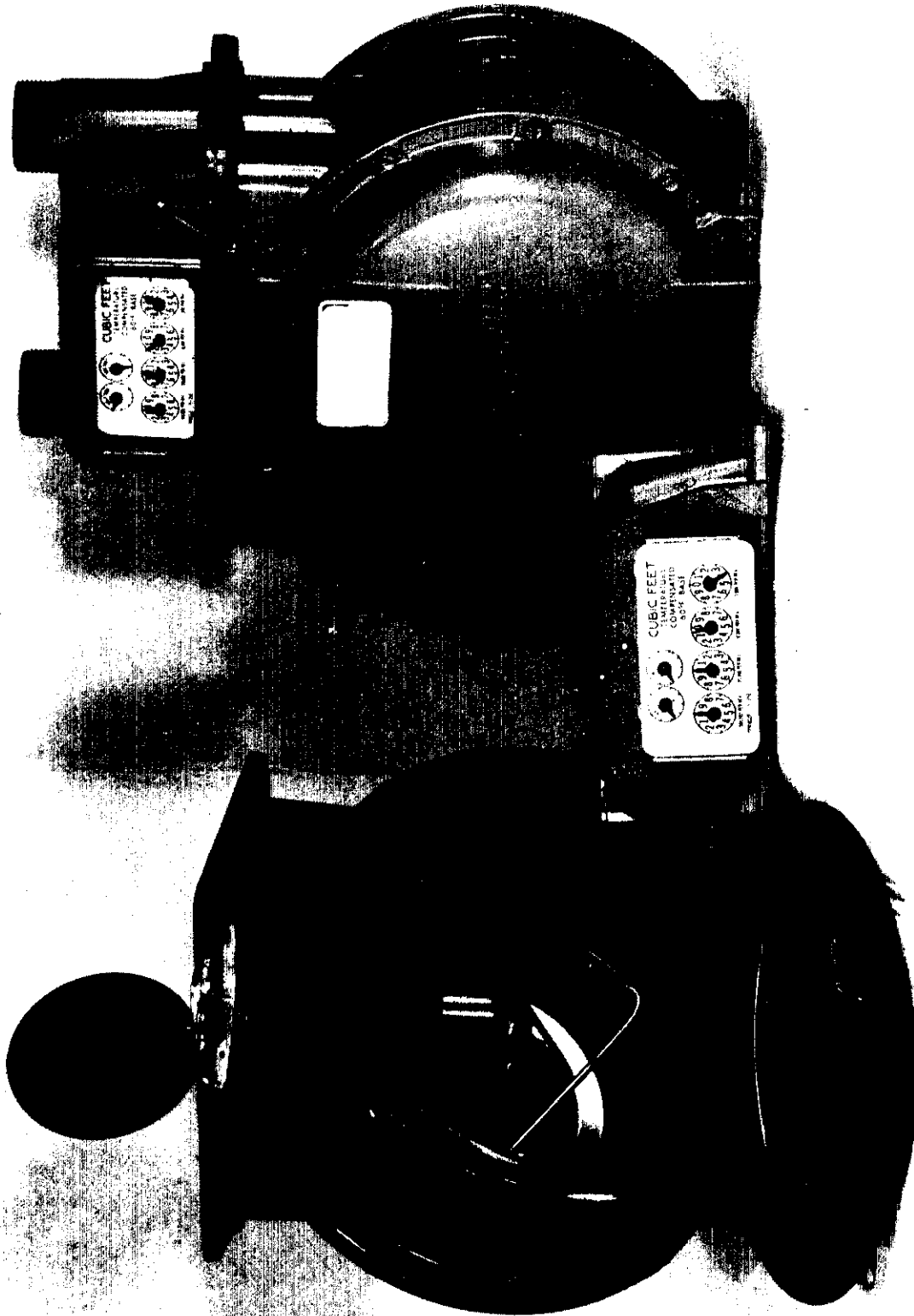


L/F = Lubrication-Free

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STANDARD AND TEMPERATURE COMPENSATED POSITIVE DISPLACEMENT GAS METER

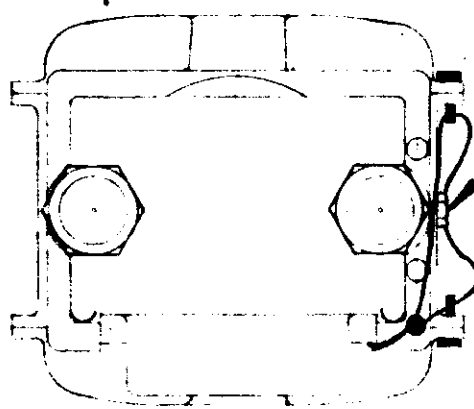
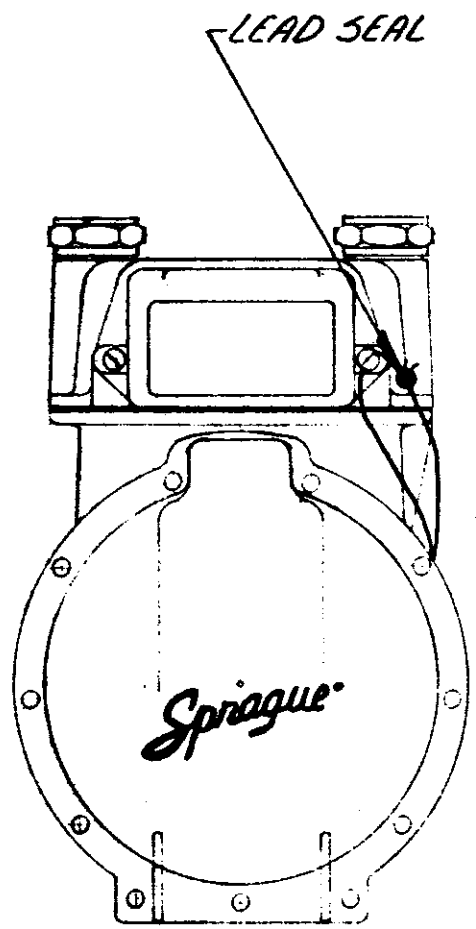


SPRAGUE METER DIVISION, TYPES 175, 240 and 250
STANDARD AND TEMPERATURE COMPENSATED POSITIVE DISPLACEMENT GAS METER



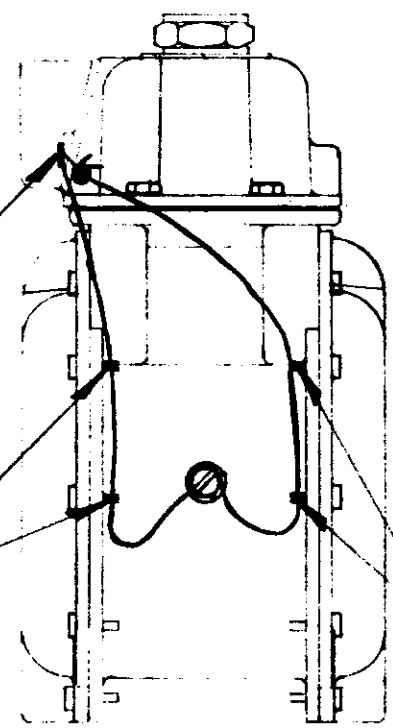
SPRAGUE METER DIVISION, TYPES 175, 240 and 250
STANDARD AND TEMPERATURE COMPENSATED, POSITIVE DISPLACEMENT GAS METER





INDEX BOX
SCREW, S.I.

SCREW, DRILLED
SHANK



METER SEALING DEVICE



Legal Metrology Laboratories
Standards Building
Tunney's Pasture, Holland Avenue
Ottawa, Ontario
K1A 0C9
Telephone: (613) 995-0930

Voire référence Your file

Notre référence Our file

G-6635-S6-23
AML-G-5
March 19, 1984

Sprague Meter Division of Textron Canada Ltd.
85 Burford Rd.
Stoney Creek, Ontario
L8E 3C6

Attn: C. Kasnierski
Plant Manager

Re: Application to Modify Approved Sprague Size 240 Diaphragm Gas Meters

Dear Mr. Kasnierski:

This letter is in response to your letter dated March 15, 1984, regarding a modification to the type/models of meters described above, which are currently approved in Notices of Approval G-43-1, -2, -3, -4 and -5. I am advised that the Gas Laboratory has evaluated the modification, of incorporating a loop at the top of the metal diaphragm flange to encircle the front and back chamber ports. The conclusion is that it may be regarded as insignificant, in relation to the approval provisions of the Gas Inspection Act.

Accordingly, pursuant to the authority delegated to me by the Director under section 7 of the Gas Inspection Regulations;

1. your letter is hereby acknowledged as satisfying the notification requirements of subsection 7(2) of the regulations; and
2. the proposed alteration is hereby accepted, in accordance with subsection 7(3) of the Regulations, as being an immaterial one and hence included within the approval.

All recipients of Notices of Approval under the Gas Inspection Act are being informed of this decision by copy of this letter. For our records you are requested to advise us of the starting serial number when the change is initiated in production.

Yours truly

W.R. Virtue
Chief,
Legal Metrology Laboratories

cc: Mailing List (Gas Approvals)

