Department of consumer and corporate affairs/Ministère de la consommation et des corporations

STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL
AVIS D'APPROBATION

G-99

OTTAWA April 30, 1973.

CANADIAN METER COMPANY, TYPE AL-800 ALUMINUM CASE, STANDARD AND TEMPERATURE COMPENSATED, POSITIVE DISPLACEMENT GAS METER

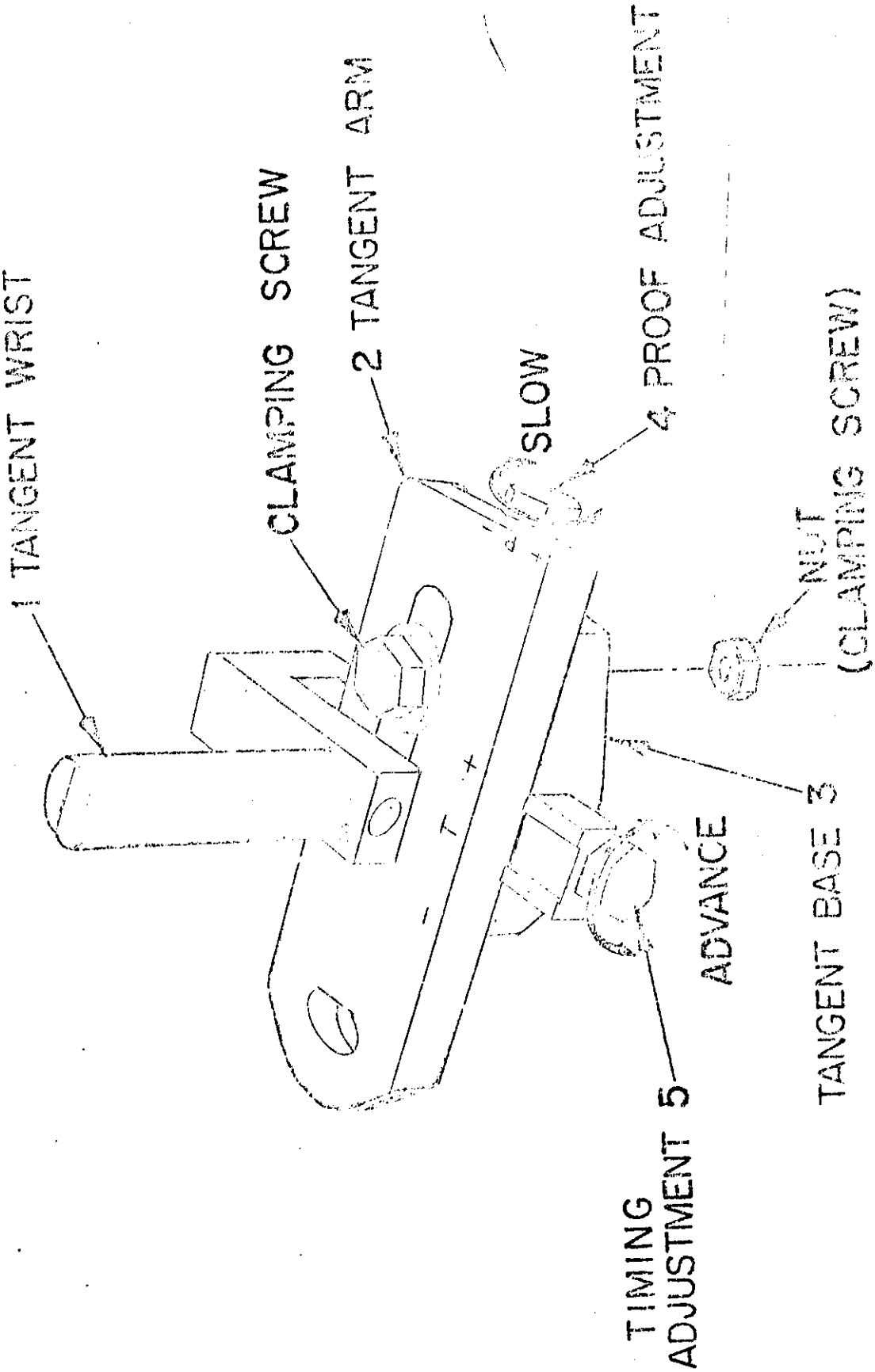
This approval supersedes Circulars SD-GA.156 dated May 26, 1959, S-GA.237 dated August 16, 1962 and S-GA.251 dated January 17, 1963.

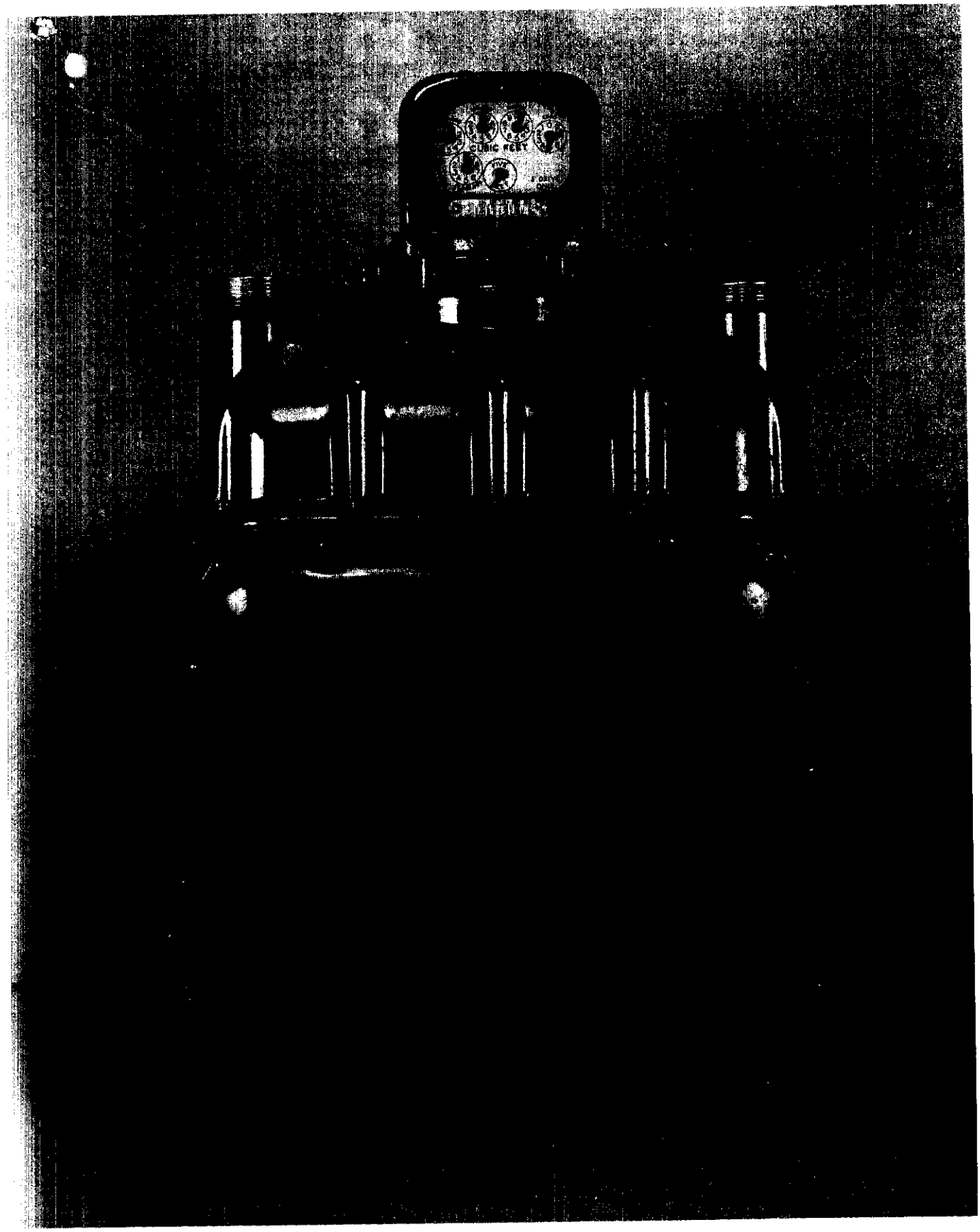
Apparatus

Badged capacity, cu. ft./hr.(air)	650
Differential pressure at badged capacity, inches, w.c.	0.5
Capacity per revolution, cu. ft.	0.385
Tangent to 5 cu. ft. test dial rev. ratio	13:1
Test dials, volume per rev., cu. ft.	5 or 10
Working pressures, psig	20, 35 and 100
Base temperature °F (T.C. meter)	60
Compensating tangent activity, inches/°F	0.00175
Meter connections:	
(I) Working pressures 20 and 35 psig	1½", male or female
(II) Working pressure 100 psig	1½", female

Description

The type AL-800 gas meter is of the conventional design. The main aluminum alloy casting, partitioned in the middle, forms the meter case with its front and back plates covering the diaphragms. White metal alloy valve seats carry plastic valves. Oil impregnated, porous bronze bushings provide self-lubricating bearings. Flag rods are sealed with suitable synthetic grommet-type seals. The meter top, covering the valve mechanism assembly, carries the meter register with the undergear assembly and incorporates the meters connections. The clock type register has five registering dials and one test dial.


1 TANGENT WRIST
CLAMPING SCREW
2 TANGENT ARM
SLOW
4 PROOF ADJUSTMENT
NUT
(CLAMPING SCREW)
TANGENT BASE 3
ADVANCE
TIMING
ADJUSTMENT 5



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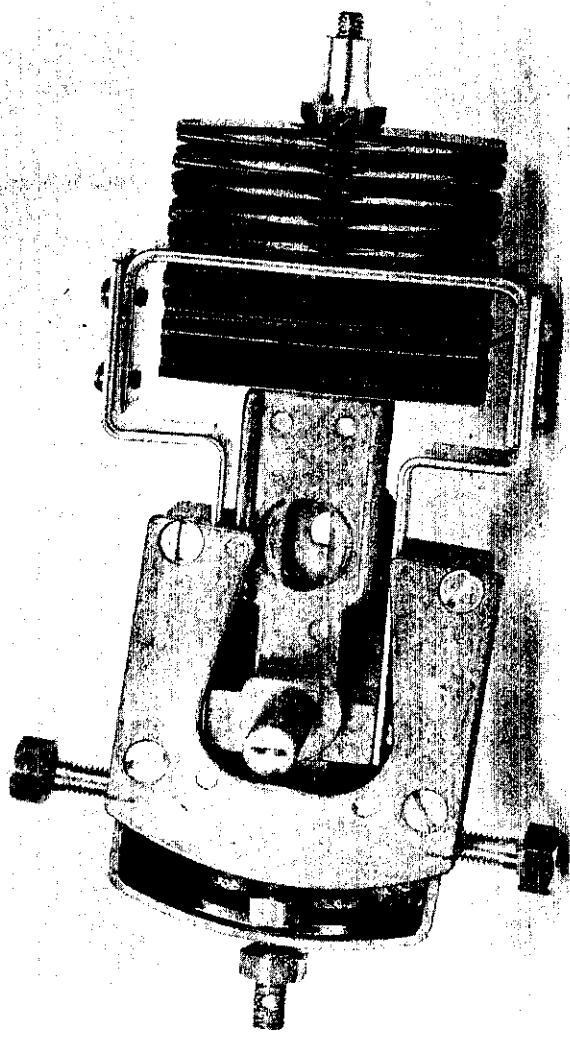

The standard meter may carry either a conventional double adjustable tangent or recently introduced 'ADT' tangent shown on the illustration. The latter has a single clamping screw for locking both proof and timing adjustments simultaneously and is claimed to provide for easier adjustments.

The temperature compensated version is identical to the standard meter except for the following alterations:

(I) The standard double adjustable tangent is replaced by the temperature compensating tangent, illustrated in this circular.

(II) A red colored badge is added with inscription: "Temperature Comp. Cu. Ft. at 60°F."

During operation of the temperature compensated meter, the tangent length changes with the temperature change of the flowing gas, thus automatically adjusting the stroke of the diaphragms. The rate of change of the tangent length with temperature is suitably chosen so that regardless of the temperature of the flowing gas, meter registration indicates the volume at 60°F. When T.C. meters are tested in field at temperatures other than 60°F., the supplied correction chart should be used in establishing the errors of these meters.

The temperature compensated meters are intended for operation in temperatures normally prevailing in outside locations across Canada.

Approval granted:

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