

DATE <u>3/9/56</u>	TMC SPECIFICATION NO. S- 287
SH. <u>1</u> OF <u>1</u>	
COMPILED BY <u>A.J.J.</u>	TITLE: <u>Inner Oven Thermostat Change, Model PMO & VOX</u> JOB
APPROVED <u>A. J. J.</u>	

All standard Model PMO's and Model VOX's will henceforth be manufactured with thermostat assembly A1236 (containing bi-metallic thermostat SS103-C-70) in place of mercury thermostat SS101 (schematic symbol, S301). This revision applies to all Model PMO's commencing with and including serial number 326 and all Model VOX's commencing with and including serial number 556.

The substitution of the bi-metallic unit in place of its mercury counterpart will in no way compromise the original stability specifications. The initial choice of the mercury unit was made in accordance with a policy of producing, wherever possible, electrical characteristics which are greatly superior to those called out in the published specifications. The extreme fineness of its control response was obtained, however, with some compromise in mechanical ruggedness. By changing to the bi-metallic thermostat the temperature control system is rendered mechanically more durable and a satisfactory margin of safety in the electrical specifications is still maintained.

For these reasons three courses of action will be followed hereafter:

1. All standard Model PMO's and Model VOX's will be manufactured with thermostat assembly A1236 and containing bi-metallic thermostat SS103-C-70.
2. For those installations requiring a true laboratory instrument which will receive the kind of treatment usually accorded laboratory instruments, these units may be ordered, by special request, with the original mercury thermostat (SS101). In this case the serial number will be followed by the suffix "M".
3. Units already in the field may be switched to the bi-metallic unit by ordering assembly A1236 which is directly interchangeable with SS101. It is suggested that the user inform this company of the serial number of the apparatus thus altered so that proper records may be maintained.

Where the change is made the operator must take note of the new inner oven cycling time. In normal room ambient the inner oven will now cycle ON for roughly three to five minutes and OFF for roughly eight to twelve minutes.