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RB340 - REVISED OPEN-CIRCUIT VOLTAGE

CHECKING AND SETTING PROCEDURE

A more reliable method of checking and setting the open-circuit voltage of RB340 Control Boxes is now recommended. Improved production techniques also permit a simplified approach to the problem, so that some of the earlier confusion over different setting and checking limits will be avoided.

Basically, a regulator checked and found to be stable at not more than $\frac{1}{2}$ volt above or below the checking limit (see Table 1) must be reset to the nearest high or low limit. Under normal circumstances if the setting is more than $\frac{1}{2}$ volt out, the regulator can be considered faulty and should be replaced.

Regulators should always be checked at normal ambient temperature (0° - 25°C), but if sufficient time for cooling is not available, settings in the higher ambient temperature range must be used.

TABLE 1 - CHECKING AND SETTING LIMITS IN SERVICE:-

AMBIENT TEMPERATURE	O.C. VOLTAGE CHECKING	IF BETWEEN	RESET TO
0° - 25°C (32° - 77°F)	$14\frac{1}{2}$ - $15\frac{1}{2}\text{V}$	14 - $14\frac{1}{4}\text{V}$ $15\frac{1}{2}$ - 16V	$14\frac{1}{2}\text{V}$ $15\frac{1}{2}\text{V}$
26° - 40°C (78° - 104°F)	$14\frac{1}{4}$ - $15\frac{1}{4}\text{V}$	$13\frac{3}{4}$ - $14\frac{1}{4}$ $15\frac{1}{4}$ - $15\frac{3}{4}$	$14\frac{1}{4}\text{V}$ $15\frac{1}{4}\text{V}$

Continued

SETTING FOR REPAIRED UNITS

If the original O.C. setting has been disturbed or if the contacts have been serviced, the regulator should be re-set 'cold' to the following figure for each corresponding ambient temperature range.

TABLE 2

AMBIENT TEMPERATURE	O.C. VOLTAGE RE-SET
0° - 25°C (32° - 77°F)	14 $\frac{3}{4}$ V
26° - 40°C (78° - 104°F)	14 $\frac{1}{2}$ V

NOTE Adjustment of regulator open-circuit voltage should be completed within 30 seconds, otherwise heating of the shunt winding will cause a false setting to be made.