COLLINS

Cedar Rapids, Iowa 52406   telephone : area code 319, 365-8411   cable : COLINRAD

AMATEUR SERVICE AGENCY BULLETIN   NO. 1012   DATE: 10-10-63
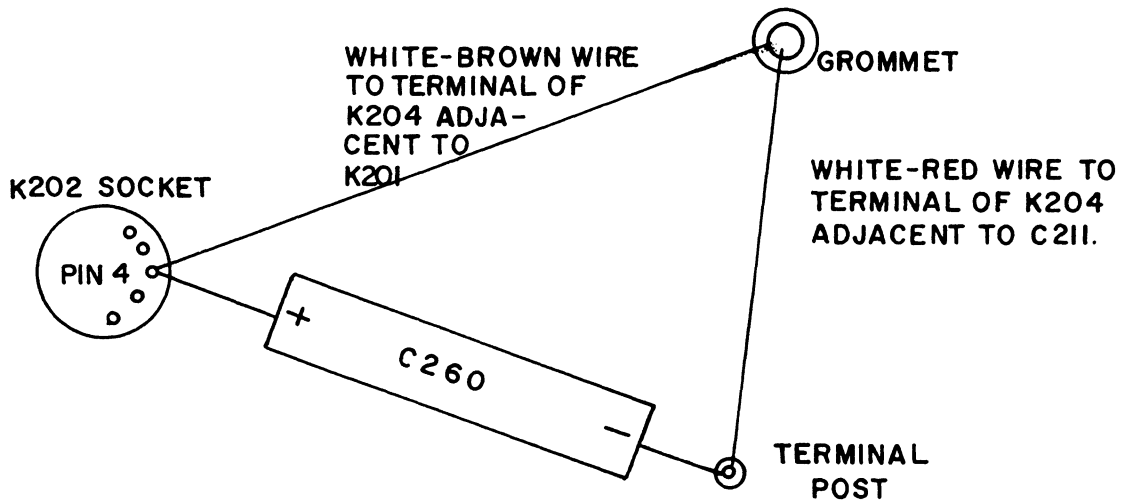   Page 1 of 2
                                                        Revised 11-20-63
EQUIPMENT TYPE: 30S-1

SUBJECT: INTERMITTENT DROPOUT OF PLATE OVERLOAD RELAY

Some linear amplifier owners have experienced trouble with the plate over-
load relay, K204, occasionally dropping out during SSB operation. Sharp,
fast rising voice characteristics that are passed before the exciter alc can
respond, cause peak instantaneous plate currents in excess of one ampere in
the amplifier tube, 4CX1000A. These peaks do not harm the tube but do
occasionally cause the plate overload relay to energize which cuts off the
plate high voltage.

If this phenomenon is encountered, we suggest installing a capacitor, 2000
uf, 6 volt electrolytic, across the coil of relay K204. This capacitor may be
installed on the under side of the relay shelf and mounted between an unused
terminal of socket for relay K202 and an insulated terminal post. The added
wires are approximately 10 inches long.

The addition of this capacitor makes the overload circuit a very low impedance
to audio frequency changes in plate current while still providing the desired
overload protection for the PA tube. The change has been made in current
production of 30S-1's.

WHITE-BROWN WIRE
TO TERMINAL OF
K204 ADJA-
CENT TO
K201

GROMMET

WHITE-RED WIRE TO
TERMINAL OF K204
ADJACENT TO C211.

K202 SOCKET

PIN 4

C260

+

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TERMINAL
POST

Units may be modified as follows:

1. Remove and turn relay shelf so as to gain access to lower side of shelf.

2. Remove and replace mounting nut for relay, K204, with terminal post, 306-0978-00.

3. Install capacitor and add wires per diagram.

PARTS REQUIRED:

Qty	Description	Collins Part Number
1	Capacitor, electrolytic, 2000 uf, 6 vdc, C260, Sprague type DEE	183-1311-00
1	Terminal post, 5/8 long, 6-32 threads, Armel Electro, Inc. RTMT-12-6M	306-0978-00