

Derived from Collins Archives -- December 1997 (#228)

The following mod was passed on to me by Floyd (W8RO) who received it from

Dennis Brothers (WA0CBK) who is featured in the Hi-Res video series produced by Floyd. This fix was never issued as an official Collin's mod

but was one used in the field, notably Vietnam. The following is a description of how I performed the mod in my rig.

Unit: Collins KWM-2\2A

Problem: Audible frequency shift between Rx and Tx.

Parts Required:

CR12 -- 150V\10watt Zener diode. Part no. 1N3011 or NTE5161A (5 watts).

L42 -- 2-4 uh

C278 -- .05 uf\500V

C279 -- .02 uf\500V

Working in the area of J17 and Turret E60 just in front of the PA cage. The Original circuit has C204 (.01) to ground from Pin 2 on J17, R73 (15K\2watts) to tie point A on E60 from Pin 2 on J17, R131 (33k\2watts)

to ground from tie point A on E60 and the red and white B+ to PTO from tie point A on E60.

Modification:

- 1.Remove and discard R131
- 2.Disconnect one end of R73 from tie point A on E60. (C204 and other end of R73 remain attached to pin 2 on J17.)
- 3.Mount Zener CR12 on rear of chassis by removing spare RCA jack, J26.
- 4.Connect Zener lead*, R73 lead and one end of L42 together. At this same junction install C278 to ground. Note:I left this junction free-floating although a terminal strip can be installed and the four leads attached to a non-grounded terminal. (I couldn't find a convenient spot to install a terminal strip.)
- 5.Attach the other end of L-42 to tie point A on E60 where the red and white PTO line remains attached. Attach C279 from tie point A on E60 to ground. **

*I used a spare piece of Collins Teflon wire and ran it alongside the PA cage to J17 area.

**Alternately, tie point A on E60 could be used as the tie point for step

4. In that case a new tie point would be required for the other end of
L42,
the red and white PTO line and C279.

This mod stabilizes the voltage to the PTO at 150V in both rx and tx.
Thanks to Floyd,W8RO, Dennis,WA0CBK and Jim,VE3DSR for all their help.
The

fix\mod works great!

(Peter, VE3URO)

Dave, W3BJZ, informs me that this mod was issued by Collins in the late
70's as number 11B.

There never was a SB11b. From Dave Harmon:

Service Bulletin 11b does not exist.

The 'Vietnam Mod' is SCED 11b (Schematic Changes & Equipment Differences) located on page 7-6 of
the 9th Edition KWM-2 Manual.

It also appears in other later editions.

The SCED mods are generally referred to on the schematic by an arrow with the SCED number inside.

In this case sheet 1 of the schematic on the far left side.

Service Bulletins and ASAB are not identified on the schematic but may be included in later editions
after the SB or ASAB has been implemented.