



SERVICE BULLETIN

from: TRIO-KENWOOD COMMUNICATIONS, INC.

NO-9

SUBJECT: TS-820 Speech Processor Alignment

DATE 11/17/76

The following alignment procedure may be used in lieu of the one in the Service Manual.

Test equipment required:
Audio signal generator
Audio VTVM
Oscilloscope or RF VTVM

1. Preliminary control settings:

Screen grid switch off
Mode switch to USB
Comp level to Max (CW)
Processor sw to Pull "on"
Meter switch to "Comp"

Send/Rec switch to "Send" as required when making adjustments.

2. Apply 1500Hz audio signal to the mic jack at 10 mv level. Connect RF VTVM or scope to TP-2. Adjust T-11, 12, 13, for maximum level on the S-meter. Adjust T-14 for maximum level on scope or VTVM at TP-2.
3. Turn compression level to min, (CCW)
Reduce audio sig at mic jack to 0.3 mv
Adjust TC-4 (freq response for speech processor) so that level at TP-2 is not changed when changing audio gen from 400Hz to 2000Hz.
4. Turn compression level to max, (CW)
Set audio gen to 1500Hz at 0.3 mv.
Adjust TC-3 and VR-6 (carrier bal for speech proc) for maximum level at TP-2.
5. Set audio gen to 10 mv 1500Hz
Send/Rec switch to send
Adjust VR-7 (comp level for speech processor) so that the level at TP-2 is not changed when turning the processor on and off. VR-7 should be adjusted for the particular microphone the customer will be using with his TS-820.
6. Finally check for non distortion of signal, and that comp level of 20 to db can be obtained at full comp on.