

# SERVICE BULLETIN

SERVICE ASSISTANCE ON MODEL 10B

To assist you with service problems on the Model 10B, we are enclosing the following. Please make use of these recommendations in servicing this unit.

Should undue difficulties be encountered with you are unable to repair for any reason, it is suggested that the unit be returned to the factory service facility:

8460 San Fernando Road  
Sun Valley, California 91352

### MARANTZ MODEL 10B CHECK-OUT

#### I. To Check STEREO PHOTOSWITCH:

1. Turn the unit ON, tune in a strong stereo station.
2. Set the display switch to OUTPUT, set mode switch to NORMAL.
3. Apply forced hot air that is approximately 170° or lower (from heat gun, etc.) to the stereo photoswitch.
4. If, under these conditions, still tuned to a stereo station, the oscilloscope indicates a change to "mono" while the stereo indicator light remains lit, the switch is defective!
5. Turn the mode switch to MONO position.
6. Apply heat to mono photoswitch and observe oscilloscope display. A loss of one or both channels indicates a defective photoswitch.

#### II. Check all TUBES in the IF strip and limiter for possible "GAS" conditions (V4 thru V12):

1. Disconnect the antenna to permit tuning a "dead" spot. Turn the unit ON and select a no-signal place on the band.
2. Using a VTVM on the lowest DC scale, measure the voltage from PIN 1 (grid) to GROUND on all IF tubes and limiter (V4 thru V12). Any voltage reading under such no-signal conditions indicates a defective tube!

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## III. To check STEREO SWITCHING TUBE:

1. Tune in a strong stereo station. Slowly rotate the stereo threshold pot COUNTER-CLOCKWISE.
2. If the stereo indicator light goes OUT before the pot is rotated through about 80% of its counter-clockwise direction, V14 is defective! NOTE: In some cases the light may not go out at all. This is acceptable. Once out, CLOCKWISE rotation beyond the point of light-dimming may be necessary to restore the light. This is also normal.
3. After this test, return the pot to 95% of its CLOCKWISE rotation.

## IV. To check condition of local OSCILLATOR TUBE:

1. Turn unit ON and tune to a strong station in the upper frequencies of the bandwidth. (Above 104 MHz).
2. Using a Variac, reduce the input voltage to 95 VAC.
3. If the station "drops out" then the local oscillator tube V3 is defective.

## V. To test for FRONT END SENSITIVITY: (IHFM)

1. With unit ON and tuned to a "dead spot", connect an FM generator to the antenna. (Be certain that the antenna input impedance is correctly matched). Turn the tuner muting switch OFF.
2. Match the generator frequency to that of the "dead spot" you have selected. Adjust modulation to 100% or 75 KHZ deviation. The output should then be adjusted to the minimum, typically 2 to 3 uv.

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3. Connect a Harmonic Distortion Analyzer to the output of the tuner. Adjust the generator output and receiver tuner until you read 3% distortion on the distortion analyzer.
4. A sensitivity reading of 2 to 3 microvolts or less at 3% distortion is acceptable.

NOTE: Retouch front end calibration if necessary in order to obtain the best sensitivity possible.

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## OSCILLOSCOPE ADJUSTMENT

NOTE: In making all adjustments, be certain that the external centering controls are properly set.

### I. INTENSITY:

1. Adjust the external horizontal and vertical controls normally.
2. Turn the display switch to EXTERNAL position and dim the panel switch.
3. Adjust the INTENSITY pot on the chassis to make the trace barely perceptible.

### II. VERTICAL

1. Tune the unit to the strongest station available.
2. Adjust the vertical pot on the main chassis until the trace appears approximately 1-1/2 bars from the top line.
3. When turning the internal vertical pot, always re-align the external controls to maintain the original centering.

- III,
1. Tune across the dial and adjust the horizontal pot on the main chassis until there is adequate horizontal displacement of the trace.
  2. As in the vertical adjustments, always re-align the external centering controls to maintain the original position.