

INSTRUCTIONS

1. Remove socket from C. R. Tube 2 Affix adapter to picture tube. 3. Attach red lead to No. 2 Anode. 4. Insert 8 prong plug on cable into octal socket on tube tester 5 Set tube tester as indicated below **NOTE:** Tubes checking in GREEN section comparable to average new tubes—some tubes may test in RED section and still be serviceable.

ALL MAGNETIC OR ELECTROSTATIC TYPES HAVING SMALL SHELL DUO-DECAL BASE:

| | Selectors | Fil. | Bias Eng. | Press | NOTES |
|---------------------------|-------------------------------|-------|-----------|-------|---|
| Emission: | JR-3507-4 | 6.3 | 0 # | P1 | If tester has micromho Range switch, set switch on English or Shunt position. Good tube should read in GREEN. For 539A good tubes should read above line marked Rectifiers O.K. |
| #Models | 532-533-534-534A-534B-535-536 | | | | |
| | 538-538A-600. | | | | |
| | Models 533A-600A-605-605A. | | | | |
| | | | | | Set English Dial at "50". |
| | | | | | Model 539A. |
| | | | | | Set Shunt Dial on zero, use "F" range. |
| Grid Control and Gas Test | JR-5307-4 | 6.3 * | 0 | P5 | *Hold down P5 and rotate Bias Dial. Meter pointer should move up and down scale if Grid is operating. |
| | | | | | GAS TEST: Adjust Bias until meter reads one small division. Hold down P5 and press P6. If meter pointer moves up scale more than one division, tube is gassy. |
| | | | | | All models except 539A. |
| | | | | | For 539A use "C" range. |

Model 6000-6005

| | Selectors | Fil. | Bias | Func. | Press | |
|--------------|-----------|------|------|-------|-------|--|
| Emission: | HS-3508-4 | 6.3 | 0 | C75 | T.B. | *Hold down Test Button and rotate Bias dial. Meter pointer should move up and down scale if grid is operating. |
| Grid Control | | | | | | |
| and Gas Test | HS-5308-4 | 6.3 | * | F-0 | T.B. | GAS TEST: Hold down Test Button and Press Gas Button. If meter pointer moves up scale more than one division, tube is gassy. |

Model 750:

| | Selectors | Fil. | Bias | Range | Press | |
|--------------|-----------|------|------|-------|-------|---|
| Emission: | HS-3508-4 | 6.3 | 0 | B-75 | P1 | *Hold down P5 and rotate Bias dial Meter pointer should move up and down scale if grid is operating. |
| Grid Control | | | | | | |
| and Gas Test | HS-5308-4 | 6.3 | * | B-0 | P5 | GAS TEST: Adjust Bias until meter reads one small division. Hold down P5 and Press P6. If meter pointer moves up scale more than one division, tube is gassy. |

Model 539B:

| | Selectors | Fil. | Bias | Shunt Range | Press | | |
|--------------|-----------|------|-------|-------------|-------|----|---|
| Emission: | HS-3508-4 | 6.3 | ----- | 0 | G | P1 | Good tubes should read above line marked RECTIFIERS AND DIODES OK. |
| Grid Control | | | | | | | |
| and Gas Test | HS-5308-4 | 6.3 | * | ----- | D | P5 | *Hold down P5 and rotate Bias knob. Meter should move up and down scale if grid is operating. |
| | | | | | | | GAS TEST: Hold down P5 and adjust bias until meter reads one small division. While holding P5 down press P6. If meter pointer moves up scale more than one division, tube is gassy. |

NOVAL BASE TYPES

| | Selectors | Fil. | Bias | Eng. | Press | NOTES |
|-------------------------|-----------|------|------|------|-------|---|
| Emission: | JR-0507-0 | 6.3 | 0 | 50* | P1 | Good tubes should read in GREEN or above line marked Rectifiers O.K. *Model 539A use "E" range. |
| Old model tube testers. | | | | | | |
| | A B | Fil. | L | R | Press | NOTES |
| Emission: | 11 2 | 6.3 | 43 | 0 | Diode | Good tubes should read in GREEN. |

OLD MODEL TESTERS

ALL MAGNETIC OR ELECTROSTATIC TYPES HAVING SMALL SHELL DUO-DECAL BASE:

ManualsPlus.com

| | <u>A</u> | <u>B</u> | <u>Fil.</u> | <u>L</u> | <u>R</u> | <u>Press</u> | <u>NOTES</u> |
|----------------------------|----------|----------|-------------|----------|----------|--------------|--|
| Emission: | 1 | 1 | 2 | 6.3 | 43 | 0 | Diode Good tube should read in GREEN. If tester has Micro-mho Range Switch, set switch on 3000. |
| Grid Control and Gas Test: | 8 | 5 | 6.3 | 0 | * | Gas No. 1 | *Hold down Gas No. 1 Button and rotate "R" knob. Meter should move up and down scale if Grid is operating. GAS TEST: Rotate "R" knob until meter reads one small division. Hold Gas No. 1 Button down and press Gas No. 2. If meter pointer moves up scale more than one division, tube is gassy. |

In old model testers, plug adapter into "E" or black octal socket.

The Model CRT cathode ray tube adapter, when properly used with any model Hickok tube tester, will indicate emission quality on all picture tubes having a standard small duodecal or noval base (large shell duodecal based tubes excluded) It is well to consider, however, several variations in cathode structure or composition in some tube types that will produce a reading in the "RED" or "DOUBTFUL" section of the meter scale on the tube tester although the tube itself may not be defective

Brilliance, being the result of applied second anode voltage necessary to propel electrons to the tube face, does not become an emission problem until the cathode has been considerably exhausted of electrons. Through continued use of the adapter the technician or serviceman will become acquainted with an approximate meter reading for certain tube types when new, whereby a better evaluation can be determined for successively bad tubes of the same type.

An indication of life expectancy can be determined by the elapsed time required for a tube to sufficiently warm up and show at least 50% emission. Should such elapsed time extend for a period of from 3 to 5 minutes, the cathode ray tube could be considered defective

"SHORT" tests on cathode ray tubes are made in the same manner as used for conventional tubes.

RED lead must be connected to No 2 Anode for complete SHORT test.