

the dial assembly E841 to the differential is accomplished through the bevel pinions MP904 and MP905 which are pinned to the shaft from E841. Gear MP903, which is locked by gear MP894, is bored oversize to permit the shaft to turn. Thus, capacitor C837 and coil L805 are tuned from P.A. COUPLING (H) while the tuning components, C836, L803 and L805, are locked.

(I) The turning limit of gear MP890 (P.A. TUNING (G) control) is fixed by the eighteen turn stop assembly attached to gear MP891. Gear MP890 may be turned clockwise or counterclockwise until stopped through gear MP891 by the stop assembly. The rotation of gear MP898 (P.A. COUPLING (H) control) is limited in a similar manner by the twelve turn stop assembly of gear MP899. An additional stop assembly is geared to coil L805 through gears MP1007 and MP994 to limit the rotation of the coil to twelve turns. When gear MP994 is locked by the stop assembly, the differential functions to permit transfer of motion to other tuning components even though MP906 is not free to turn.

#### (6) ANTENNA TUNER.

(a) Radio Frequency Tuner TN-342/WRT-2 is provided in order that the power amplifiers may deliver maximum power at minimum standing wave ratio to a fixed antenna for any frequency within the range of operation of Transmitter Group OA-2175/WRT-2. Maximum power is delivered and a minimum standing wave ratio exists when the antenna appears as a purely resistive 50 ohm load. Since the physical dimensions of the antenna itself are fixed, the electrical length must be changed as the frequency of operation of the transmitter is changed.

(b) Radio Frequency Tuner TN-342/WRT-2 increases or decreases the effective physical length of the antenna by removing or inserting inductance in series with the antenna. As shown in figure 6-30, drive motor B3301 and 2 speed drive MP3301 drive a sliding short up and down the main coil L3302 which is in series with the antenna. ANTENNA TUNER-UP and ANTENNA TUNER-DOWN switches, S808 and S809, located on the front panel of Radio Frequency Amplifier AM-2121/WRT-2 determine the direction of the motor drive and SLOW READ SWR SWITCH, S807, enables the operator to select a reduced motor speed when reading the standing wave ratio. Limit switches S3303 and S3304 limit, respectively, the upper and lower limits of travel of the coil shorting arm. The arm of potentiometer R3301 is geared to the mechanical drive mechanism and an electrical contact is made to POSITION INDICATOR meter M806 on the front panel of Radio Frequency Amplifier AM-2121/WRT-2. The meter indicates the relative position of the sliding short on the main coil.

(c) Fixed capacitance may also be inserted in series or in parallel with the antenna for tuning pur-

poses. Switches S3307 and S3301, driven by motor B3303, place capacitors C3302 and C3303 in parallel with the antenna when COUPLER ANTENNA (J) switch S806 on the front panel of Radio Frequency Amplifier AM-2121/WRT-2 is in the B position. Capacitor C3301 is placed in series with the antenna when S806 is in the A position. When S806 is in the DIRECT position, only coil L3302 is in series with the antenna. The setting of COUPLER ANTENNA (J) switch S806 depends on the operating frequency of the transmitter and is shown in the table of paragraph 3-2b(1)(a). If the transfer switch control relay, K3302, is energized, switches S3307 and S3301 automatically return to position 5 and the tuner is bypassed. The setting of TUNER CONTROL switch S810 on the front panel of Radio Frequency Amplifier AM-2121/WRT-2 determines the operation of K3302. When the switch is in the BYPASS position, relay K3302 is deenergized; when it is on the TUNER IN position, the relay is energized. The AUTOMATIC position of switch S810 is provided in order that the antenna may be switched between the transmitter and a receiver for break-in CW operation, and in this case, the relay is keyed by contacts in Antenna Control C-1670/U (GFE). Relay K3301, the r-f keying interlock, removes the r-f input when S3301 is operating and thus prevents burning of the switch contacts.

(d) High temperature regions in Radio Frequency Tuner TN-342/WRT-2 are cooled by forced-air ventilation from blower B3302. When the blower fails to operate properly, centrifugal switch S3306 removes the plate power from the r-f amplifiers. Thermostatic switch S3305 opens, accomplishing the same result, if the internal temperature of the tuner rises above 110°C (230°F). All electrical and mechanical components of the tuner are contained in a shockmounted, pressurized cylinder filled with nitrogen at a pressure of 20 psi. A pressure gauge, a relief valve and a valve for attaching pressurizing equipment are provided in the front plate of the cylinder.

#### (7) TUNER GEAR TRAIN.

(a) Figure 4-29 is a simplified schematic diagram of the tuner gear train. As shown in figure 4-29, the r-f section of Radio Frequency Tuner TN-342/WRT-2 consists of L3302 which is adjustable by means of a sliding short, and a coupling loop (L3301) which feeds the unshorted section. The coupling loop is fixed to the sliding short support plate fed from a slide wire contact. The control section of the r-f tuner consists of the necessary gears, switches and motors required for the operation of the unit.

(b) The inside surface of the cylindrical shell housing covering the coil provides the outer conductor for the adjustable coil. Coil L3302 consists of a 5.65 inch diameter fiberglass tube wound with .064 inch diameter silver plated copper wire for a total length

NOTE:  
COMPONENTS ARE SHOWN SCHEMATICALLY  
AND DO NOT NECESSARILY DUPLICATE PHYSICAL  
POSITIONS.

GEAR SYMBOL	PITCH	PITCH DIAMETER	NO. OF TEETH
MP3304	20	1.200	24
MP3305	20	1.200	24
MP3306	20	.900	18
MP3307	20	.900	18
MP3308	32	.438	FOUR THREAD
MP3309	32	3.125	100
MP3310	32	1.250	40
MP3311	32	.438	SINGLE THREAD
MP3339	20	∞	120
MP3340	20	∞	120

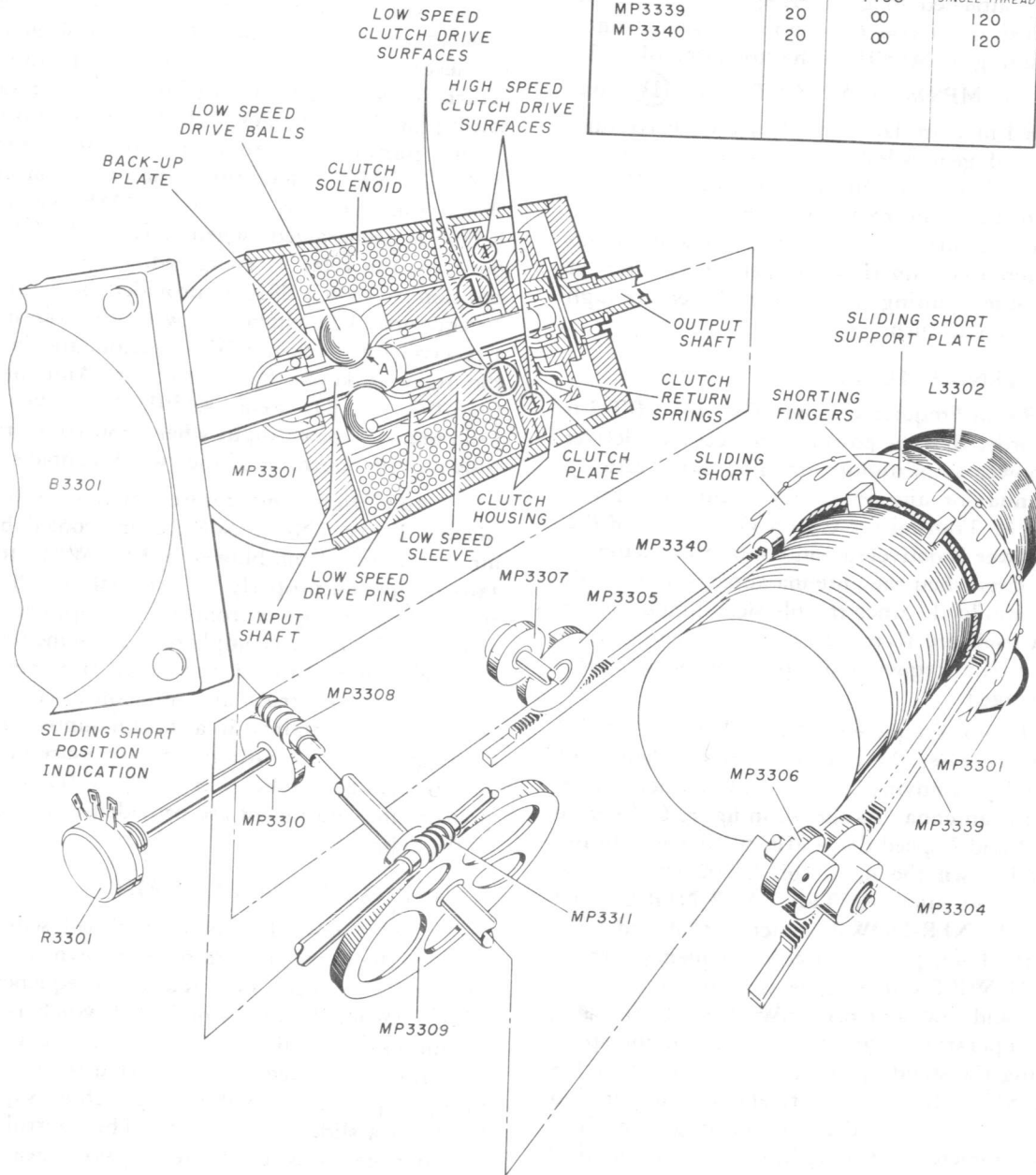


Figure 4-29. Tuner Gear Train, Simplified Schematic Diagram

of 16 inches. The initial 12 inch is wound at a pitch of 10 turns per inch, with the remaining four inches wound at a pitch of five turns per inch.

(c) The sliding short consists of a circular support plate completely encircling the main coil, and carrying a corrugated band of silver alloy with bosses contacting the main coil about every half inch around the circumference. The outer edge of the circular plate carries button-type housing contact fingers E3301 and E3302 which slide on the inside of the housing. Guide shoes extend from the plate to insure alignment with the axis of the main coil, particularly under shock conditions. Single-turn coupling coil L3301 is formed of 0.140-inch silver plated copper wire. It is secured to the plate and extends toward the unshorted part of the coil supported by insulators E3306 and E3307. Also mounted on the plate are the sliding contacts to a feed wire which extends along the total length of the main coil.

(d) The sliding short and coupling coil are driven by a servo-type, two-phase, 115-volt, 60-cycle motor B3301, (see figure 4-30). The motor is equipped with a two-speed drive which provides fine tuning at reduced speed. With nominal load, the motor speed is about 1500 rpm. Referring to the two-speed drive shown in figure 4-30, operation is as follows:

1. *High speed.*—In high speed operation, rotation of the input shaft is applied to the clutch plate. With the clutch solenoid deenergized, the clutch return

springs hold the clutch housing against the clutch plate and rotation is transferred directly to the clutch housing. The clutch housing is pinned to the output shaft in such a manner that the housing will slide a small amount axially and yet it transfers rotation to the output shaft. This is accomplished by means of a pin that is fitted into a tight hole in the housing and passes through a larger hole in the output shaft. Thus the input shaft rotation is transferred to the output shaft with no reduction in speed.

2. *Low speed.*—In low speed drive, rotation is still applied to the high speed shaft and thus to the clutch plate. In low speed operation, however, the clutch solenoid is energized and the clutch housing is pulled to the left, away from the clutch plate. Rotation cannot be transferred from the clutch plate to the clutch housing. The low speed drive balls roll on the high speed input shaft and the outer race which is part of the clutch solenoid. Because of the ratio of diameter of the input shaft to the outer race, the speed of the low speed drive balls is reduced approximately 8.4 to 1. Pins extend into the path of the low speed balls from the low speed sleeve so that the low speed sleeve is carried around with the balls. With the clutch housing held against the low speed sleeve by the clutch solenoid the input shaft is moved slightly to the left. This brings low speed driving balls against the back-up plate which starts them up the input shaft radius at A

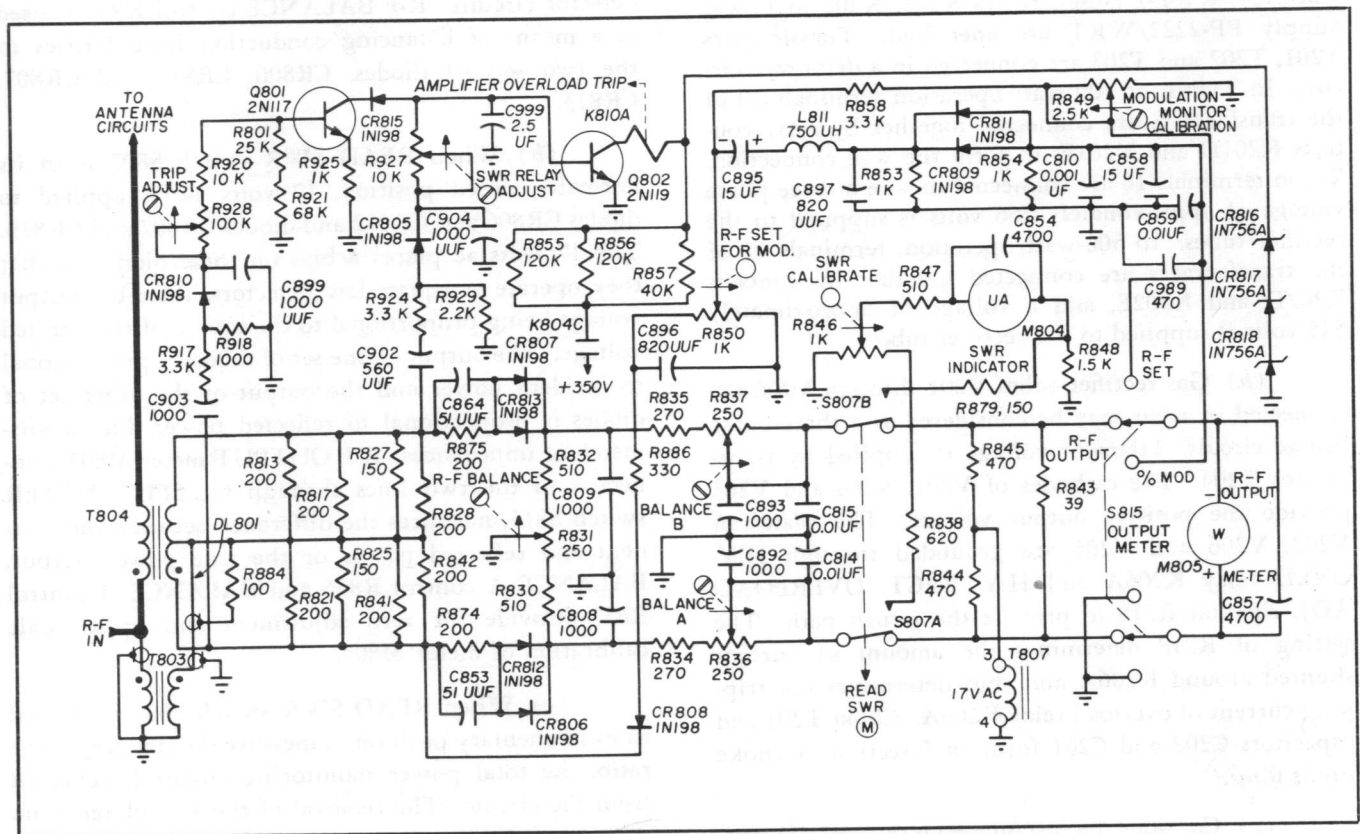


Figure 4-30. R-F Monitoring Circuit, Simplified Schematic Diagram, Sets Serials 1 to 263

and thus presses them against the outer race. This establishes a positive drive and the output shaft speed is reduced in a ratio of 8.4 to 1 to provide low speed operation. A worm wheel and worm MP3309 and MP3311 (figure 4-30) follows the two-speed drive providing a 100:1 step-down ratio to spur gears MP3304, MP3305, MP3306 and MP3307 which drive sliding racks MP3339 and MP3340 attached to the sliding short and coupling coil L3301. Limit switches control drive motor B3301 at the limits of travel of the sliding short along main coil, L3302.

3. Blower motor B3302, which is equipped with ducts, provides circulation within the r-f tuner. The blower motor is equipped with a centrifugal switch which deenergizes Radio Transmitting Set AN/WRT-2 in the event of blower failure. A thermal cutout switch performs the same function in the event of excessive temperature within the unit. The thermal cutout is set to trip above 110°C (230°F).

#### (8) HIGH VOLTAGE RECTIFIERS.

(a) D-C plate voltage for the power amplifier tubes is supplied from Power Supply PP-2222/WRT. Primarily, the power supply circuits consist of transformers T201, T202 and T203 and gas rectifiers V201 through V206 as shown in the functional schematic diagram of the power amplifier section, figure 5-51. When the equipment is energized and air interlock switch S805 in Radio Frequency Amplifier AM-2121/WRT-2 closes, relays K201, K202 in Power Supply PP-2222/WRT are energized. Transformers T201, T202 and T203 are connected in a delta-wye circuit. In TUNE or 100 watt operation terminals 10 of the transformers are connected together by relay contacts K201D and K201E, to form the wye connection. When terminals 10 are connected in wye a three-phase voltage of approximately 266 volts is supplied to the rectifier tubes. In 500-watt operation, terminals 11 of the transformers are connected together by contacts K202D and K202E, and a voltage of approximately 545 volts is supplied to the rectifier tubes.

(b) Gas rectifier tubes V201 through V206 are connected in what may be considered as a three-phase bridge circuit. Filament voltage is supplied by transformer T204. The cathodes of V201, V204 and V203 provide the positive output voltage. The plates of V202, V206 and V205 are grounded through H.V. OVL relay K206A and H.V. RECT. OVERLOAD ADJ. rheostat R218 to provide the return path. The setting of R218 determines the amount of current shunted around K206A and thus determines the tripping current of overload relay K206A. Choke L201 and capacitors C202 and C201 form an L-section or choke input filter.

(c) Consider the instantaneous outputs of transformers T201, T202 and T203. When terminal 9 of

T201 is positive with respect to terminal 9 of T202, current is conducted through V206, the overload circuit, the r-f amplifier load and back through L201 and V203. On the opposite half cycle, V204 and V205 conduct thereby forming one bridge rectifier circuit. When terminal 9 of T201 is positive with respect to terminal 9 of T203, V202 and V203 conduct and on the opposite half cycle, V205 and V201 conduct, forming another bridge circuit. When terminal 9 of T202 is positive with respect to terminal 9 of T203, V202 and V204 conduct and on the opposite half cycle V206 and V201 conduct, forming the third bridge rectifier circuit.

#### (9) R-F MONITOR CIRCUIT.

(a) The r-f monitoring circuit contains a modulation monitor circuit which indicates percentage of modulation and a reflectometer circuit which measures the power output of the transmitter and the voltage-standing-wave ratio of the line to the antenna circuit. Figure 4-30 is a simplified schematic diagram of the r-f monitor circuit. As shown in figure 4-30 the primary winding of transformer T803 is connected between the antenna line and ground. The voltage induced in the secondary winding of T803 is of the same phase as the output voltage. The primary winding of transformer T804 is connected in series with the antenna line. The voltage induced in the secondary winding of T804 is of the same phase as the output current. The vector sums of these voltages are applied to the detector circuits. R-F BALANCE control R831 is used as a means of balancing conduction irregularities in the two sets of diodes, CR806, CR812 and CR807, CR813.

(b) When READ SWR switch S807 is in its normally closed position, 17 volts a-c is applied to diodes CR806 and CR812 and diodes CR807 and CR813. The 17 volts ac places a bias on these diodes so that they operate as square-law detectors, their d-c output voltage being proportional to the square of the applied voltage. The output of one set of diodes is proportional to incident power and the output of the other set of diodes is proportional to reflected power due to mismatch of impedances. R-F OUTPUT meter M805, connected to the two lines through OUTPUT METER switch S815, measures the difference between the incident and reflected power or the true power output. BALANCE A control R836 and BALANCE B control R837 provide for zero adjustment and upper scale calibration of meter M805.

(c) When READ SWR switch S807 is pushed to its momentary position to measure the standing wave ratio, the total power monitoring circuit is removed from the circuit. The removal of the a-c voltage from the sets of diodes permits the diodes to become linear detectors. SWR INDICATOR meter M804 is connected

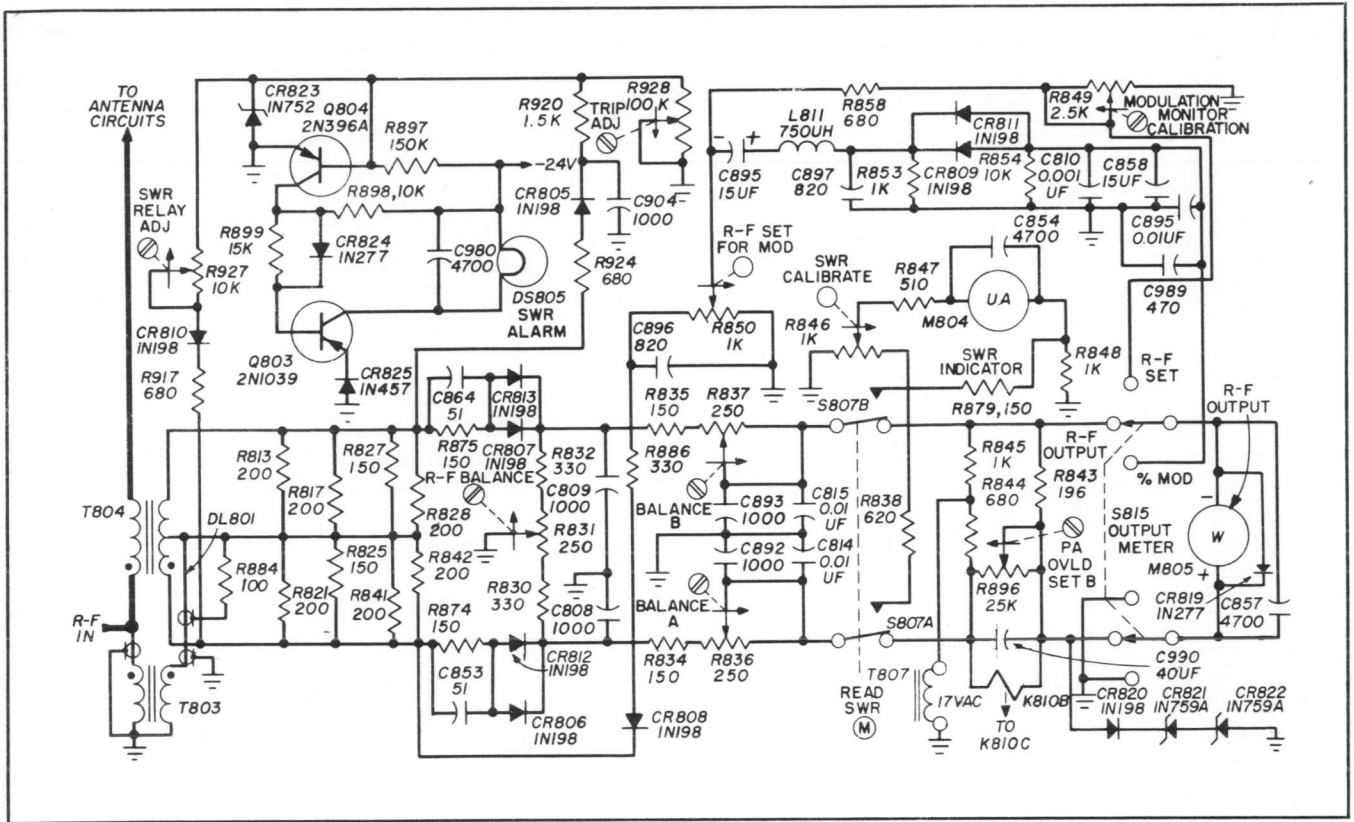


Figure 4-30A. R-F Monitoring Circuit, Simplified Schematic Diagram, Sets Serials 264 and up

into the monitor circuit when switch S807 is closed and the standing-wave-ratio is indicated opposite the pointer for SWR CALIBRATE control R846 when it is positioned to have SWR INDICATOR meter M804 read zero.

(d) For monitoring modulation, an r-f sample of the transmitter output is obtained through transformer T804 and applied to diode CR808. A negative d-c voltage is developed across R-F SET FOR MOD. control R850. When OUTPUT METER switch S815 is in R-F SET position a portion of the d-c voltage across R850 is applied to OUTPUT METER M805 and R850 is adjusted so that meter M805 deflects to its R-F SET marker. When switch S815 is in % MOD position, a d-c voltage is applied from resistor R850 to meter M805. The d-c voltage from R850 is further detected by parallel diodes CR809 and CR811 and filtered to remove the r-f and permit an a-f signal to be applied to meter M805. When a known modulation percentage is applied to a carrier, OUTPUT METER switch S815 is placed in R-F SET position and MOD. CAL. potentiometer is adjusted to indicate the known modulation percentage. Thereafter, when switch S815 is placed in % MOD position, meter M805 indicates percentage of modulation when the transmitter emission is of the A3 type.

(e) In sets serials 1 to 263 to avoid possible equipment damage, SWR alarm circuitry is provided to remove the high voltage from the power amplifier when the standing wave ratio becomes excessive. When there is a phase difference between the antenna feeder line current and voltage, a voltage exists across resistor R926. As shown in figure 4-30, diode CR805, filter capacitor C904, resistor R927 and the collector resistance of Q801 provide positive d-c bias for the base of transistor Q802. The voltage across R926 increases as the antenna feeder line standing-wave-ratio increases, and when the ratio becomes greater than 4:1, the collector current of Q802 is sufficiently large to energize relay K810. The setting of SWR RELAY ADJUST potentiometer R927 determines the amount of voltage across R926 necessary to energize the overload relay. Transistor Q801 is provided in order that the overload circuit may still function properly at low power levels. The collector resistance of Q801 is a function of the base bias developed across resistors R801 and R921. When operating at low power levels, the base bias of Q801 decreases and therefore its collector resistance increases. At the same time the voltage across R926 has decreased but the base bias for Q802 does not decrease substantially due to the increased collector resistance of Q801. Thus an excessive standing-wave-ratio will still cause relay K810 to energize even when the power output level is reduced. The setting of SWR ALARM TRIP ADJUST potentiometer R928 determines the amount of base bias applied to Q801.

(f) In sets serials 264 and up, as shown in figures 4-30A, the SWR ALARM lamp DS805 glows whenever the standing wave ratio becomes greater than 4:1. Diode CR823 maintains a negative d-c bias across transistor Q804. When there is a phase difference between the antenna feeder line current and voltage, a voltage exists across resistor R920. When this phase difference is excessive, transistor Q804 conducts and reduces the bias on transistor Q803 causing it to conduct and allows current to flow through lamp SWR ALARM DS805. SWR RELAY ADJUST potentiometer R927 and TRIP ADJUST potentiometer R928 determine the amount of bias applied to Q804 by an incoming voltage. To avoid possible equipment damage in sets 264 and up, input relay coil K810A and output coil K810B are connected so that they remove all d-c voltage when the difference between input and output power exceeds a predetermined level of 1.02 kw. The level of 1.02 kw is set by the adjustment of potentiometers R864, R895, and R896. When S807 is in the SWR indicate position, diodes CR820, CR821, and CR822 conduct as the AC voltage increases, maintaining a current flow through relay coil K810B so that relay K810 does not trip.

#### 4-5. LOW VOLTAGE POWER SUPPLY FUNCTIONAL SECTION.

##### a. GENERAL.

(1) The low voltage power supply functional section supplies all the d-c voltages needed for the proper operation of Radio Transmitting Set AN/WRT-2.

(2) Figure 4-31 is a functional block diagram of the low voltage power supply section. As shown in figure 4-31, the circuits of the +350-volts, -350-volts, -24-volts, 12-volts positive and 12-volts negative power supplies are located in the drawer containing Amplifier-Power Supply AM-2122/WRT-2. The circuits of the +250-volt regulator are located in the drawer containing Radio Frequency Oscillator O-581/WRT-2. The circuits of the +24-volt and -6-volt regulator are located in the drawer containing Electrical Frequency Control C-2764/WRT-2.

(3) The primary power input of 115 volts, 220 volts or 440 volts, depending upon the ship's supply, is applied to the primary windings of transformer T501 as shown in figure 4-31. Transformer T501 is tapped so as to give an output of 220 volts and 115 volts. The output of T501 is applied to the circuits of the low voltage power supply section through FILAMENT POWER switch S502. The 220 volts is applied to the primary of transformers T502 and T503 while the 115 volts is applied to transformer T617 in the Electrical Frequency Control C-2764/WRT-2. The output of transformer T502 is rectified by the +350-volt and -350-volt rectifiers, and applied to the circuits of Radio Frequency Amplifier AM-2121/WRT-2 and Radio Frequency Oscillator O-581/WRT-2. Part of the output

Step 4. Remove the two screws B in the bracket above the motor B101.

Step 5. Remove screws C (four) and remove blower B101. Do not disturb screws (1) or the gasket (2).

Step 6. Install the new blower B101 by reversing the procedure given in steps 1 through 5.

b. RADIO FREQUENCY TUNER TN-342/WRT-2.

(1) GENERAL.—The first step in disassembly of the r-f tuner is to remove it from the permanently mounted shockmount supports so that the case may be removed. It is mandatory that the inside of the r-f tuner be kept clean and absolutely free from any moisture. In order to perform maintenance properly the unit must be taken to a clean, enclosed work area. If the motor and control circuitry is operative, depress DOWN switch S809 on Radio Frequency Amplifier AM-2121/WRT-2 until POSITION INDICATOR M806 indicates zero. If these circuits are inoperative, the position of the shorting disc in the tuner assembly will have to be set manually as directed in the appropriate paragraph. Remove the grounding strap and all interconnection cabling.

### CAUTION

THE R-F TUNER WEIGHS APPROXIMATELY 135 POUNDS. BLOCK THE UNIT AS CAREFULLY AS POSSIBLE BEFORE REMOVING THE SHOCKMOUNT BOLTS.

Remove the four bolts which secure each shockmount to its support. Remove the r-f tuner from the supports. Do not dent the case or strike the receptacles, valves, etc., which protrude from the ends of the case. Refer to figures 6-23 and 6-24 during removal and disassembly.

(2) REMOVAL OF R-F TUNER FROM CASE.—To remove the r-f tuner from its case, refer to figure 6-23 and proceed as follows:

Step 1. Discharge the dry nitrogen from the unit by removing the cap from the tank valve MP3342 and depressing the valve stem to release the gas. Discharge gas until gauge M3301 indicates zero pounds pressure.

Step 2. Remove the hex head bolts from both end plates and from the center flanges.

### Note

If the motor or control circuitry was inoperative and the position of the sliding short could not be set to zero electrically as directed in the preceding paragraph, proceed as follows: Remove the case half next to the pressure gauge end of the r-f tuner. Refer to figure 6-24 and rotate worm MP3311 until racks MP3339 and MP3340 press against the end plate which mounts the pressure gauge. Proceed with step 3.

Step 3. Carefully withdraw the case halves axially. Withdraw them as nearly along the axis of the tuner

as possible. Block the tuner assembly so that it cannot roll and keep it blocked during disassembly and assembly.

(3) DISASSEMBLY OF R-F TUNER.—The majority of parts in the r-f tuner require no special procedures or techniques for replacement. The unit should be kept clean and dry during all servicing. The racks MP3339 and MP3340, and their driving gears are identical on opposite sides of the r-f tuner so only one side will be discussed. To disassemble the r-f tuner, refer to figure 6-24 and proceed as follows:

(a) MOTOR B3301.—Remove motor B3301 in the following steps:

Step 1. Identify and disconnect the motor leads at the side of the motor. Disconnect the two leads on the two-speed drive circuit attached to the motor.

Step 2. Remove the set screws in the output shaft of the two-speed drive at worm MP3311.

Step 3. Remove the mounting screws in the plate at the end of motor B3301 opposite the two-speed drive and the two screws in the back mounting flange of the motor B3301. Work the plate away from the drive motor as far as necessary to slip the drive motor B3301 and the two-speed drive MP3301 out of the r-f tuner.

Step 4. Remove the two-speed drive unit, MP3301, by removing the four screws which secure it to the motor, B3301.

(b) GEARS MP3306 OR MP3307.—To remove either of these gears, remove the set screw and pin from the gear and pull the gear from its shaft. Only one of the gears should be removed at a time to avoid upsetting the mechanical relationship between the driving shaft and the racks. If this relationship is disturbed the setting of position potentiometer R3301 will no longer be accurate.

(c) GEARS MP3304 OR MP3305.—To remove either of these gears, remove the nut, lockwasher and plain washer from the face of the gear. Pull the gear and its bearings from the stud. Remove the bearings and the separating spacer from the gear. Remove only one gear at a time and replace it before removing the opposite one.

(d) ROLLERS MP3337 OR MP3338.—To remove either of these rollers, remove the nut, lockwasher and plain washer from the face of the roller. Press the stud through the roller and lift the roller from its counterbore in the mounting plate. Lift the edge of the roller which is away from the rack to get the inner flange away from the rack.

(e) WORM WHEEL MP3309.—To remove this worm wheel, first remove the mounting screws for both the two-speed drive MP3301 and the motor B3301. Remove the pin from worm wheel MP3309. Remove gears MP3306 and MP3307 by removing the set screw and pin from each and pulling them from the shaft. Carefully block the motor and two-speed assembly away from the axial center line of the tuner just enough to permit the worm wheel MP3309 to slip side ways

under the worm MP3311. Push the shaft of worm wheel MP3309 out of the tuner toward the side where potentiometer R3301 is mounted.

(4) REASSEMBLY OF R-F TUNER.—All replaceable parts and subassemblies of the r-f tuner are reassembled in reverse order from the disassembly procedure outlined in the preceding paragraphs. If the setting of potentiometer R3301 has been disturbed with respect to the position of racks MP3339 and MP3340, the potentiometer must be reset. Connect an ohmmeter across terminals 4 and 5 of TB3302. Rotate the worm MP3311 until the sliding short is centered on coil L3302. Loosen the mounting unit for potentiometer R3301 and rotate the potentiometer until the meter

indicates 5000 ohms. Tighten the mounting nut. When replacing the case halves, every seal ring must be checked to be certain that they are properly sealed and that there is no foreign material on them to permit a gas leak. Pressurize the r-f tuner after reassembly as directed in paragraph 2-4c(2)(b) in Section 2.

i. Mounting MT-2170/WRT.—Disassembly and assembly of Mounting MT-2170/WRT requires no special instructions. Remove Radio Set AN/WRT-2 and anchor it securely before attempting to service the mounting. Refer to figure 6-22A for Mounting MT-2170/WRT or to figure 6-22B for Mounting MT-2170A/WRT when assembling or disassembling the mounting.

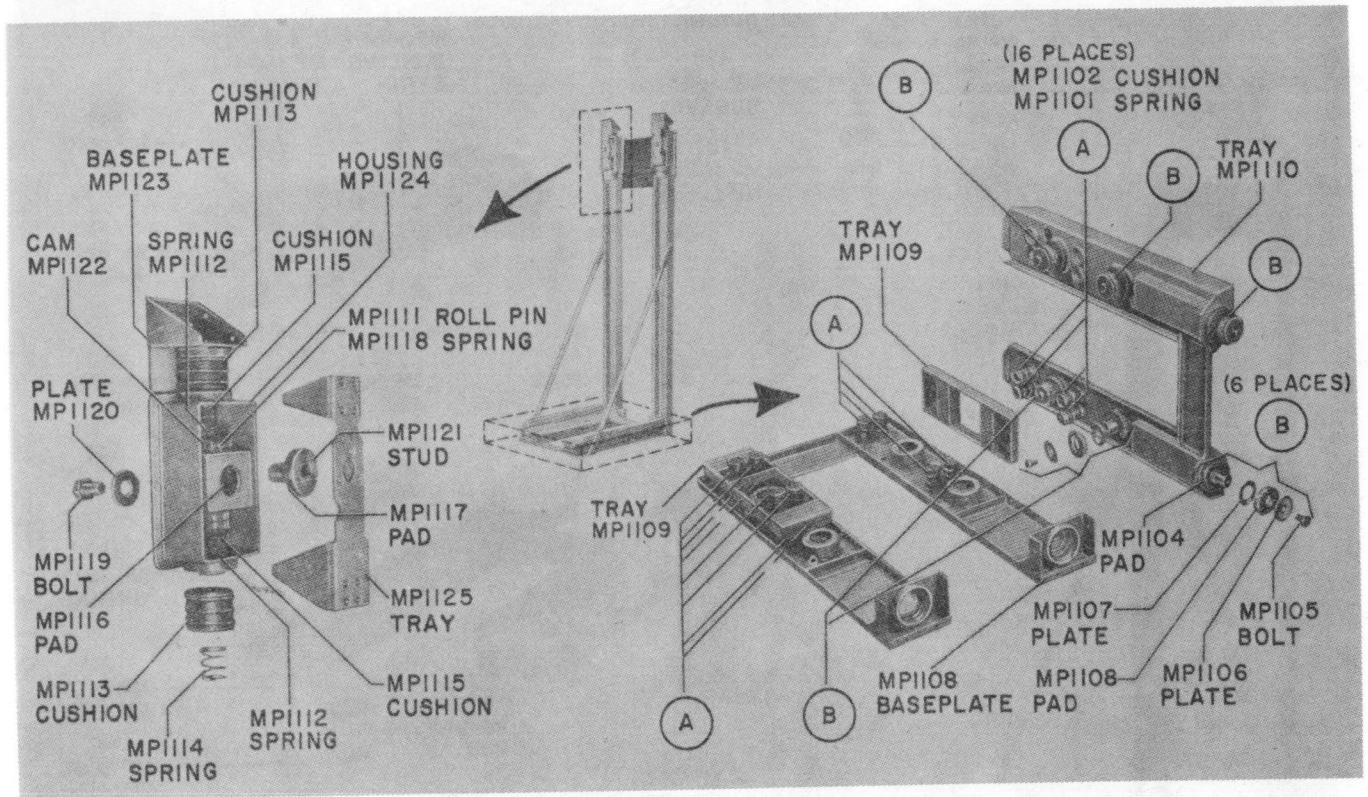


Figure 6-22A. Mounting MT-2170/WRT, Replacement of Parts



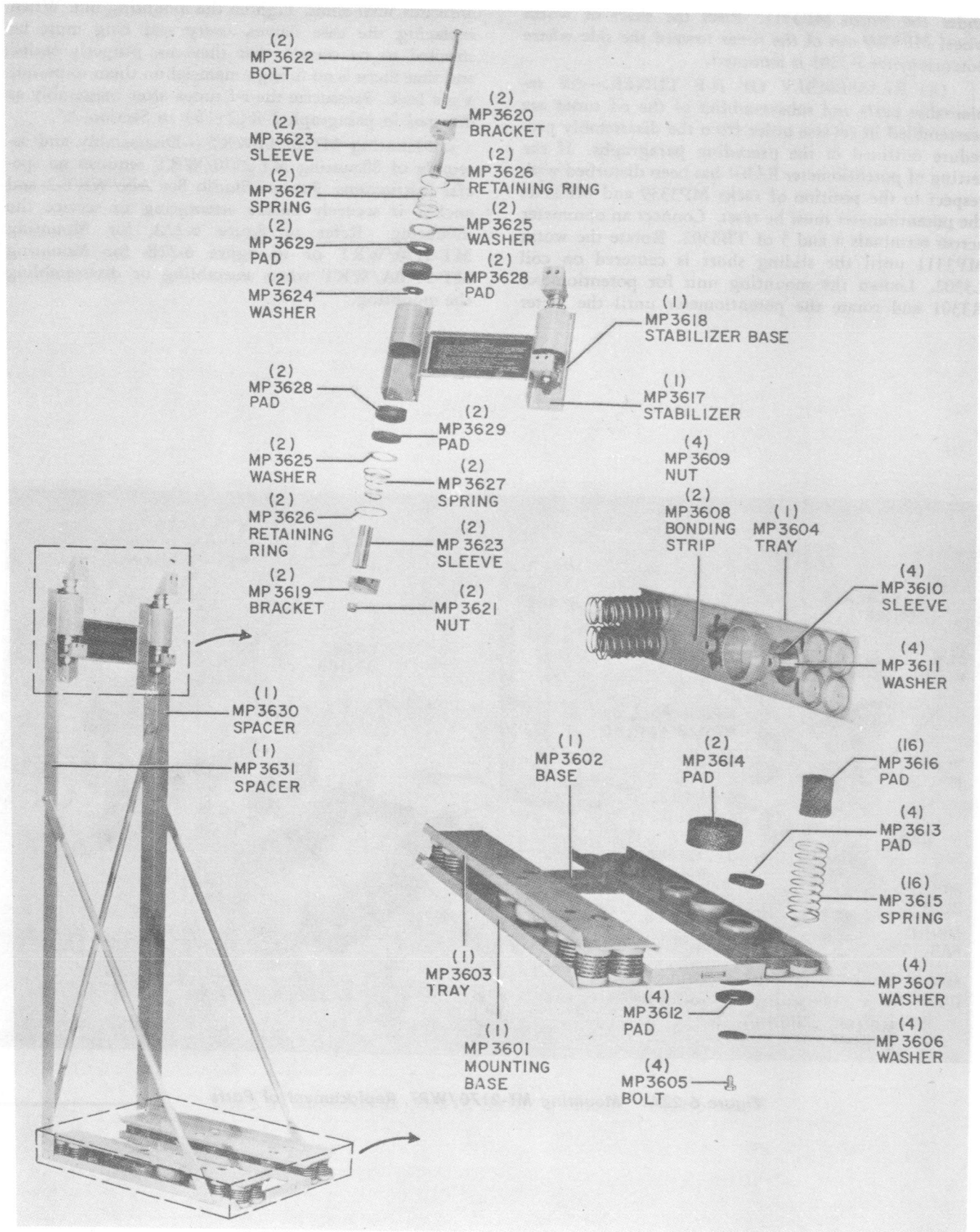


Figure 6-22B. Mounting MT-2170A/WRT, Replacement of Parts

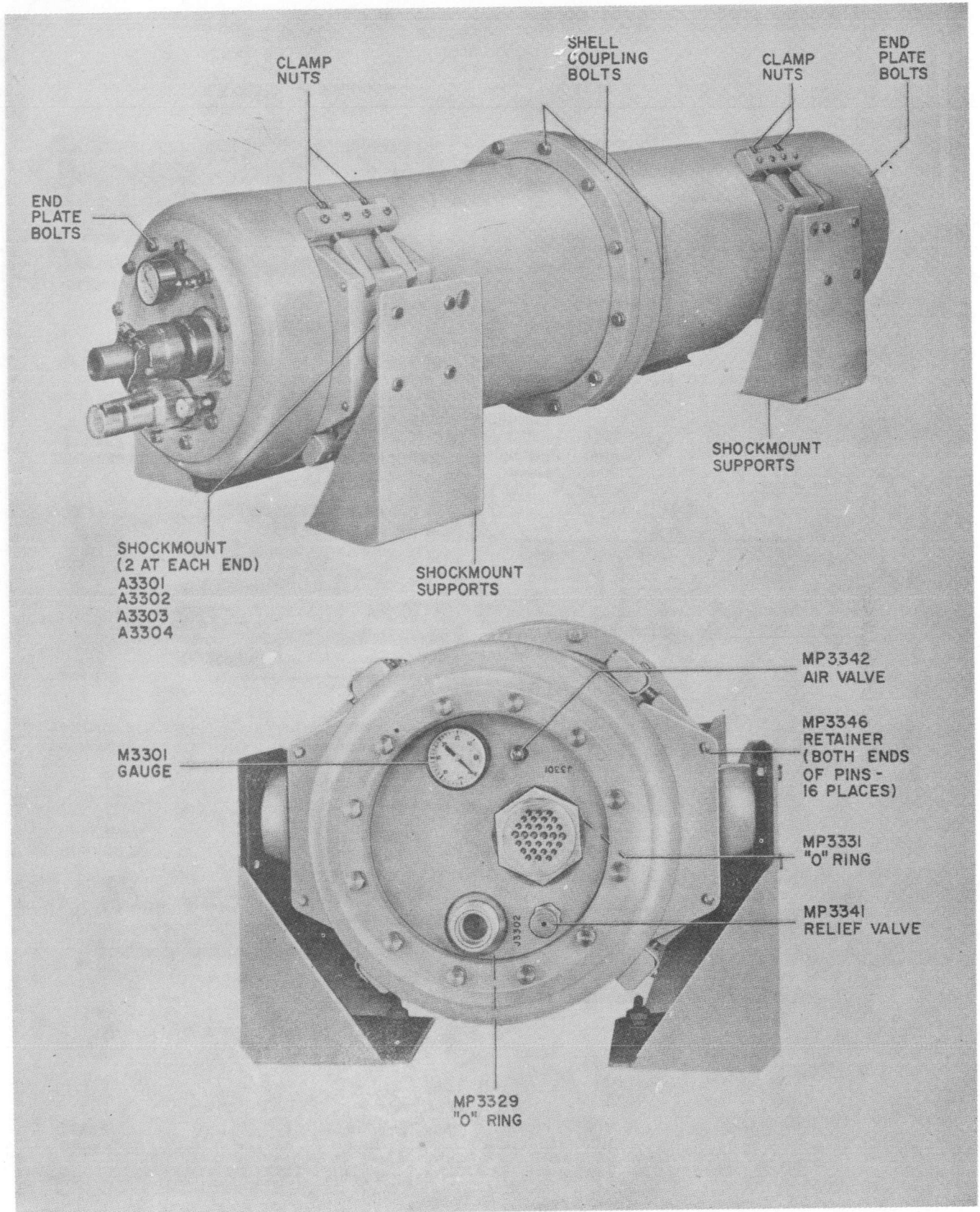


Figure 6-23. Radio Frequency Tuner TN-342/WRT-2, Removal of Case

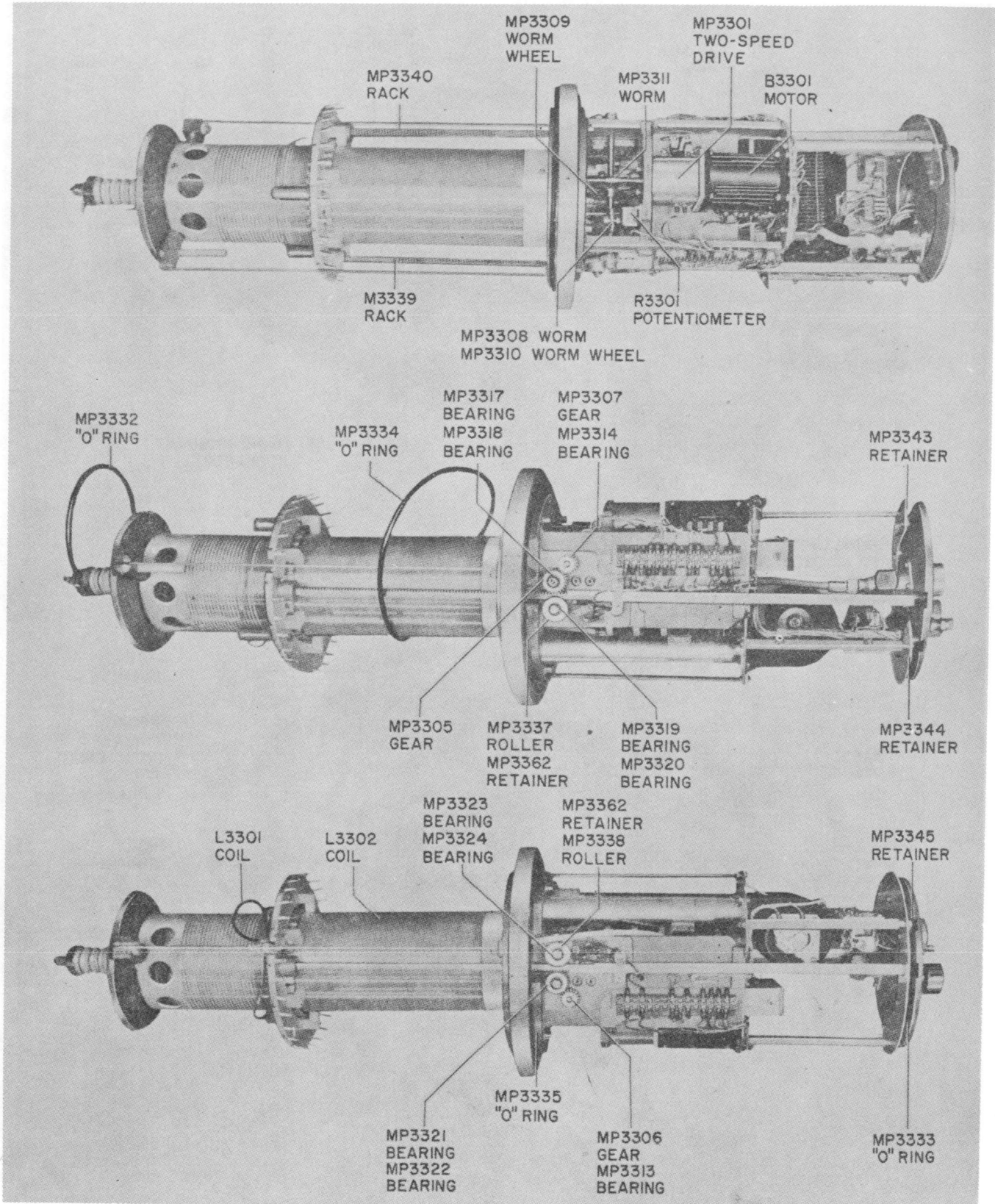


Figure 6-24. Radio Frequency Tuner TN-342/WRT-2, Replacement of Internal Parts

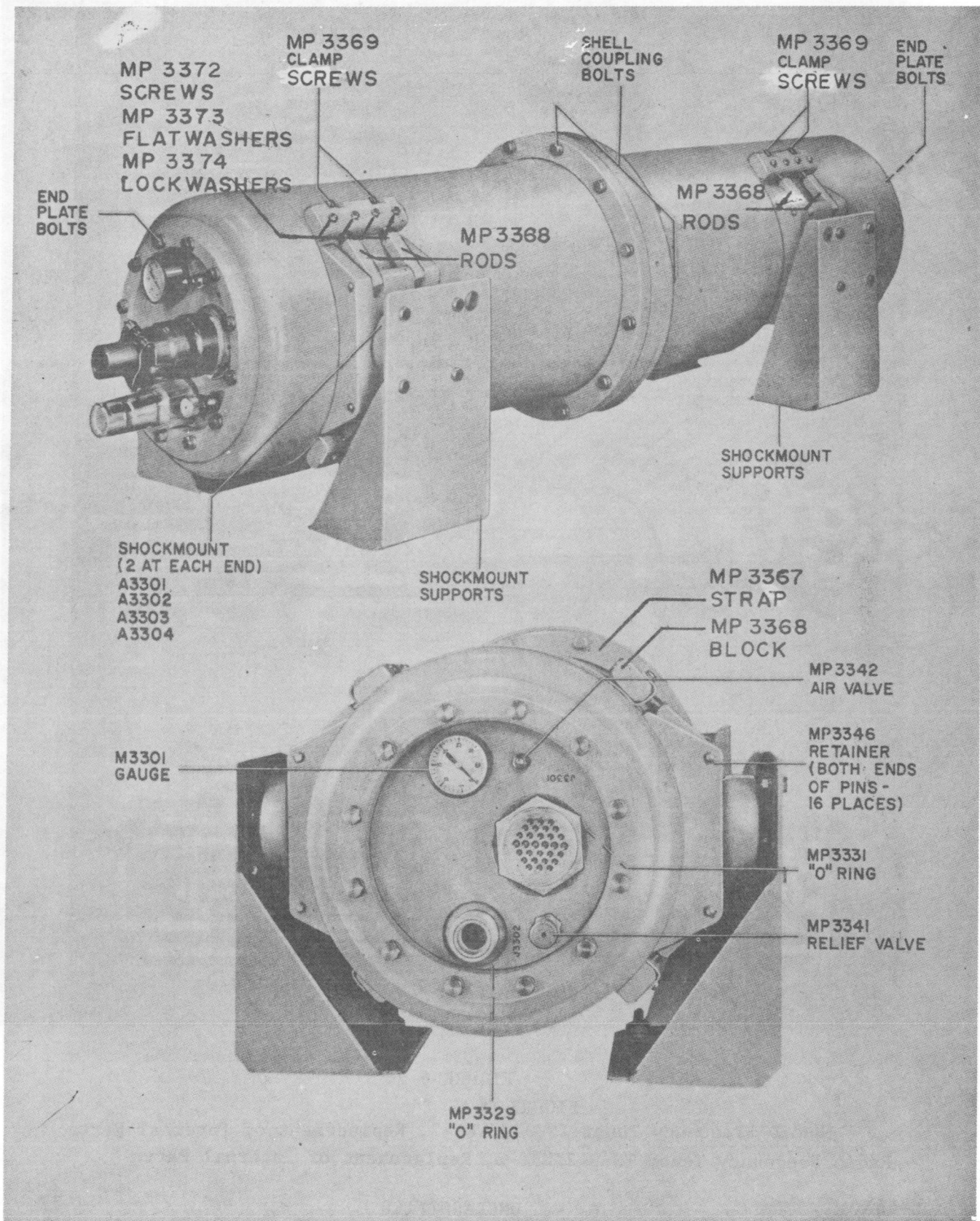


Figure 6-23A Radio Frequency Tuner TN-342/WRT-2, Removal of Case

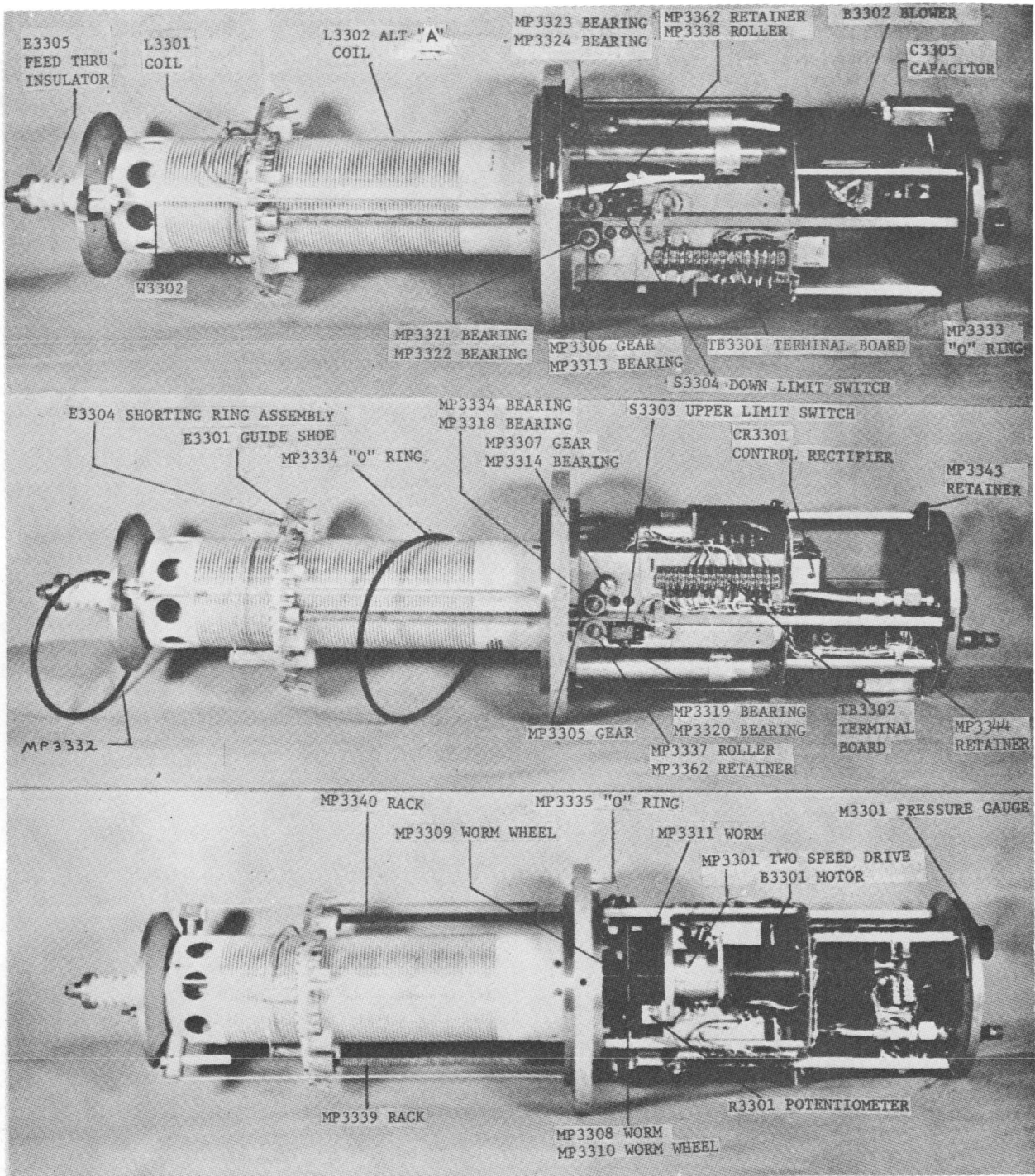


FIGURE 6-24

Radio Frequency Tuner TN-342/WRT-2, Replacement of Internal Parts

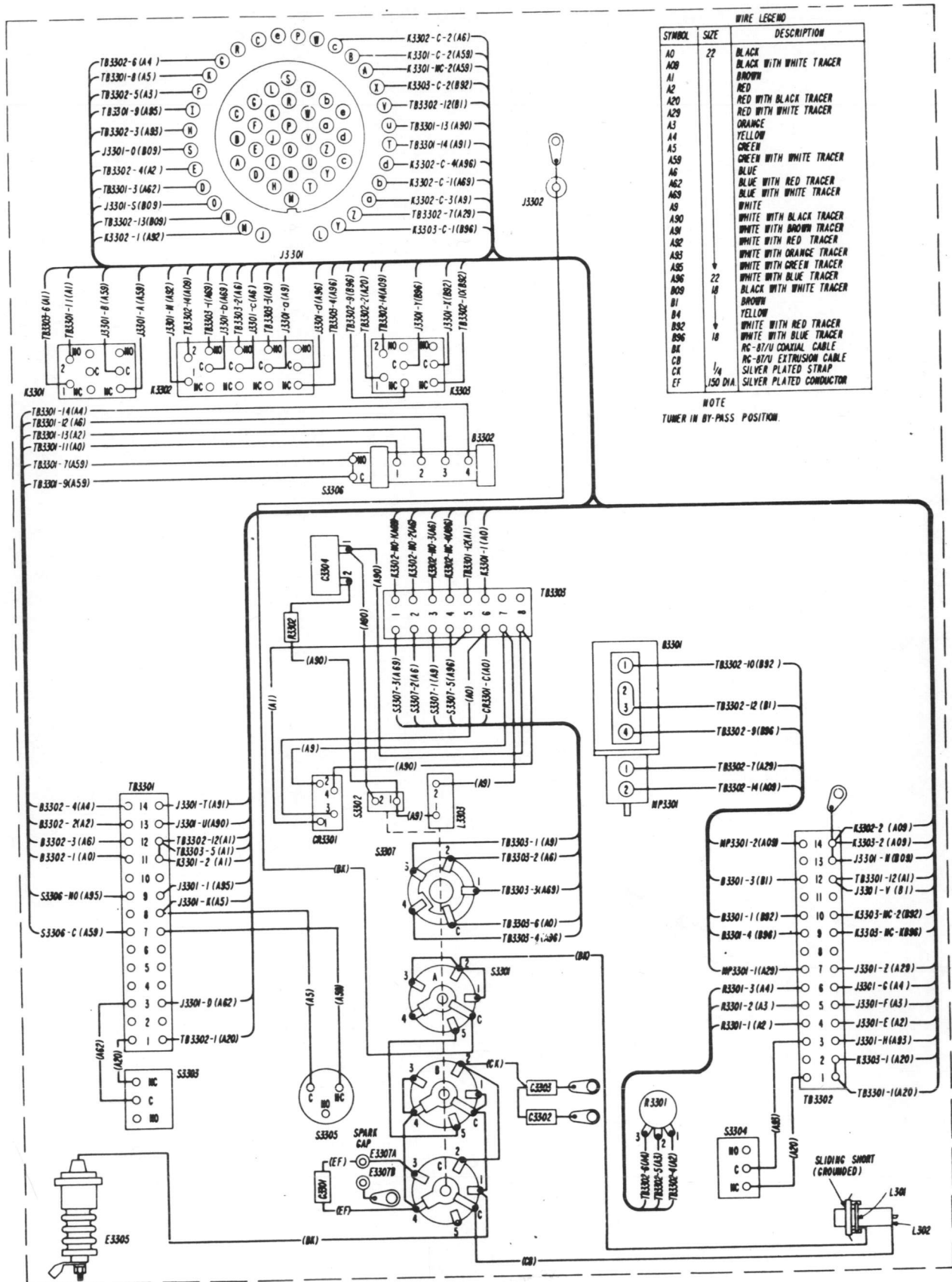
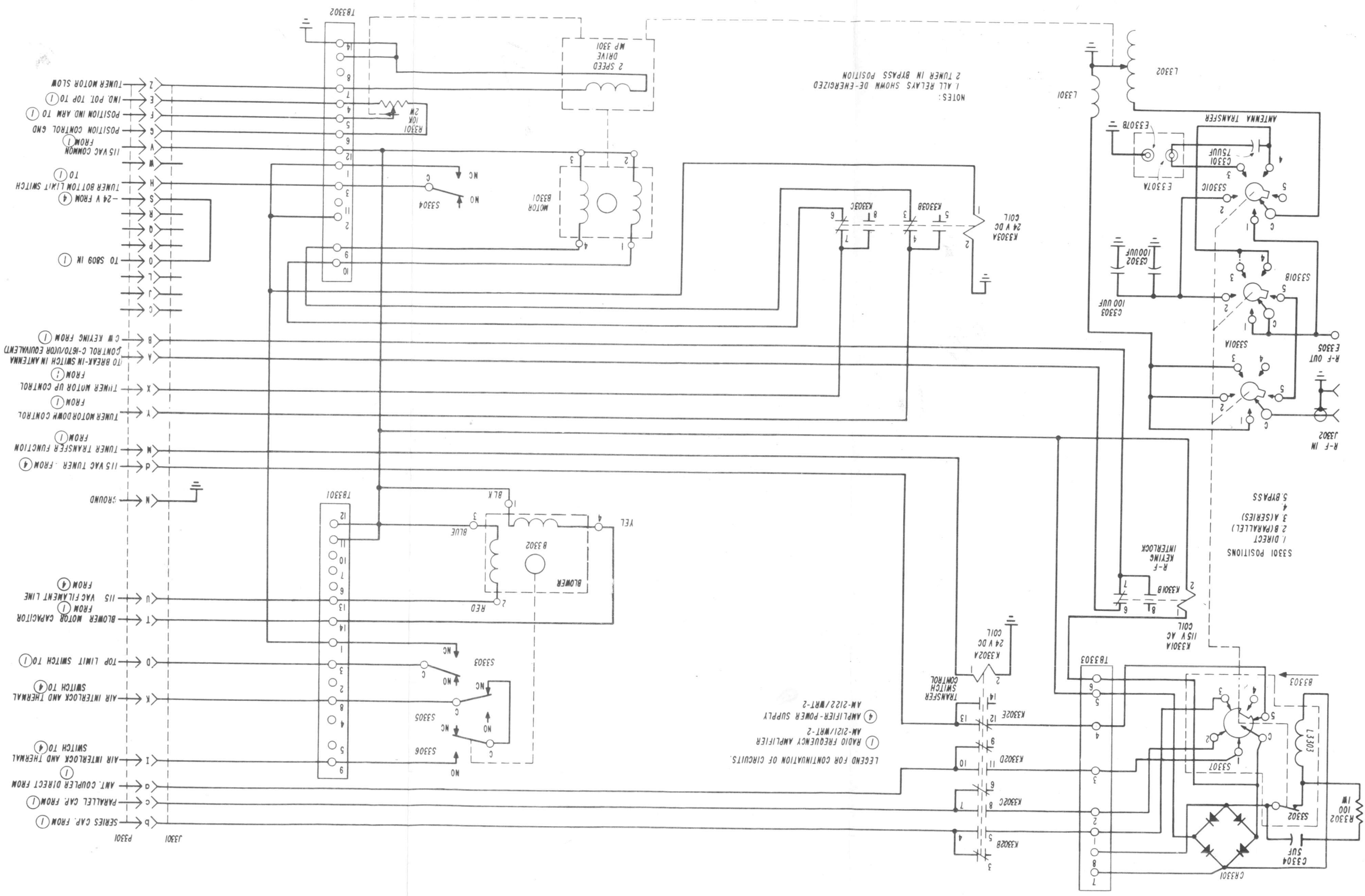


Figure 6-48. Radio Frequency Tuner TN-342/WRT-2, Wiring Diagram



LEGEND FOR CONTINUATION OF CIRCUITS.  
 ① RADIO FREQUENCY AMPLIFIER  
 ② AM-2121/WRT-2  
 ③ AMPLIFIER-POWER SUPPLY  
 ④ AM-2122/WRT-2

NOTES:  
 1. ALL RELAYS SHOWN DE-ENERGIZED  
 2. TUNER IN BYPASS POSITION

Figure 6-30. Radio Frequency Tuner TN-342/WRT-2, Schematic Diagram

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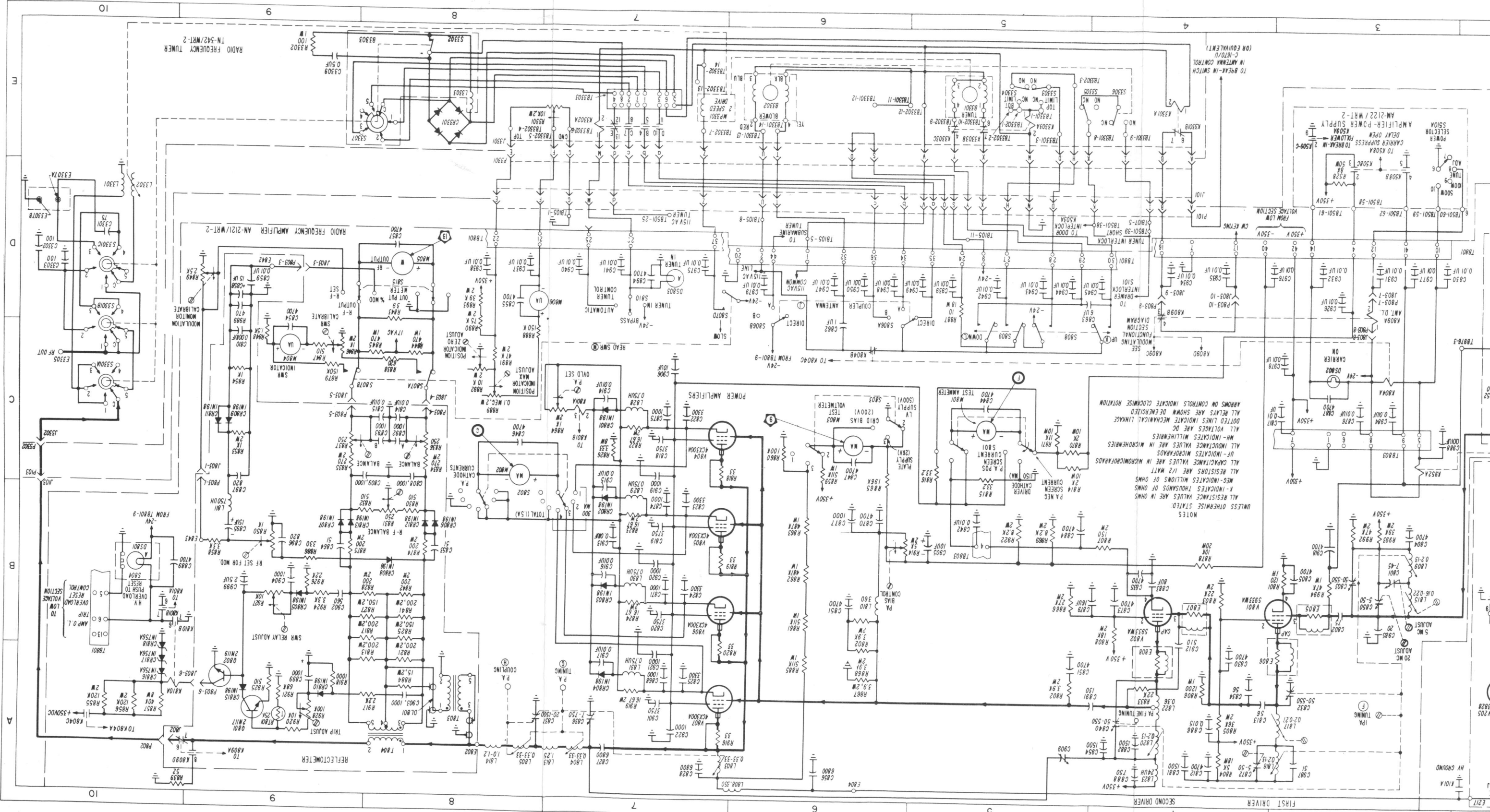


Figure 5-51. Radio Transmitting Set AN/WRT-2, Power Amplifier Circuits, Functional Schematic Diagram, Sets Serials 1 to 263