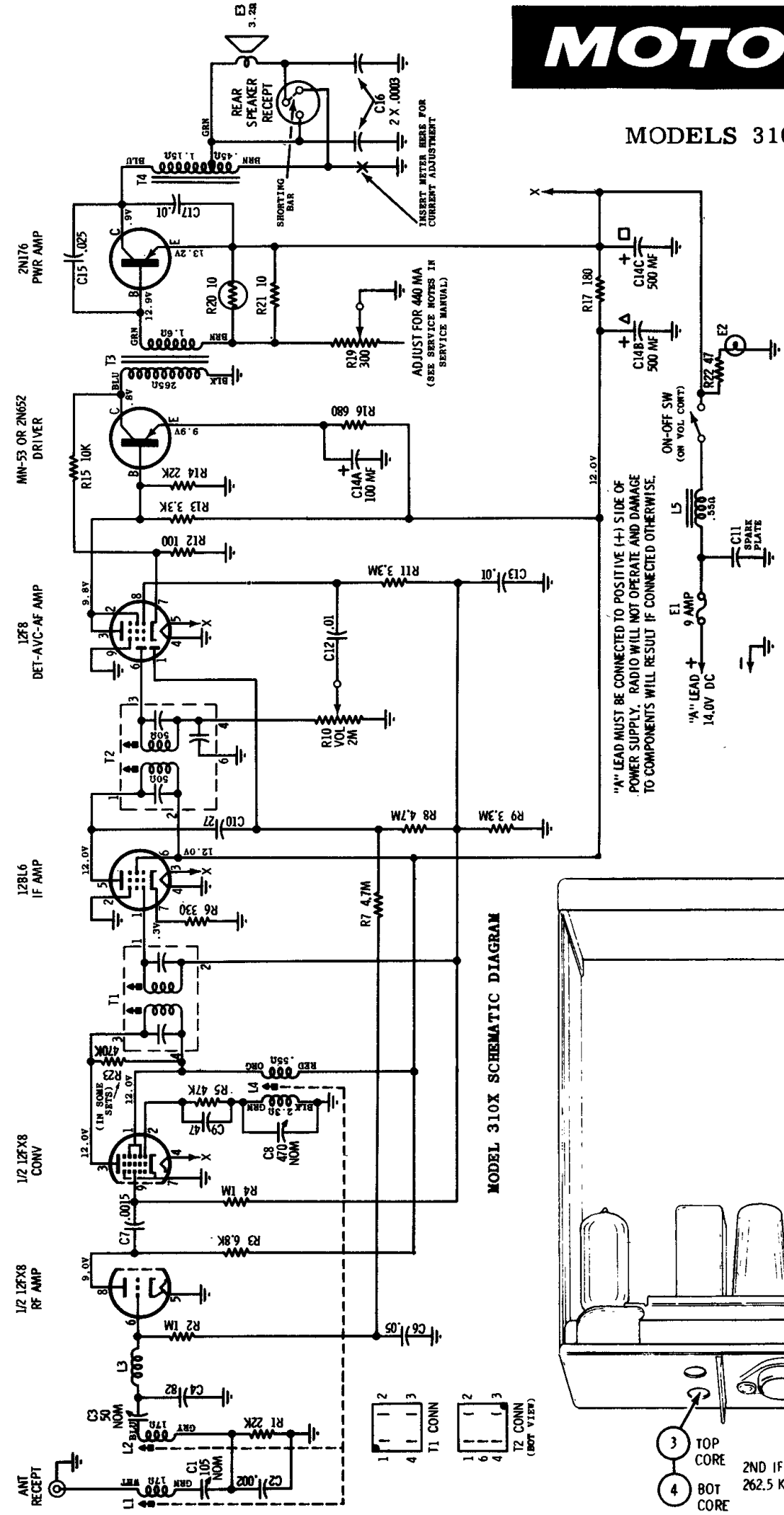
MOTOROLA

MODELS 310X and 311X



MODEL 310X SCHEMATIC DIAGRAM

POWER TRANSISTOR INSULATOR - When replacing a power transistor or power transistor insulator, be sure to coat both sides of insulator with DC-4 grease (Motorola Part No. 11M490487) to insure proper heat dissipation.

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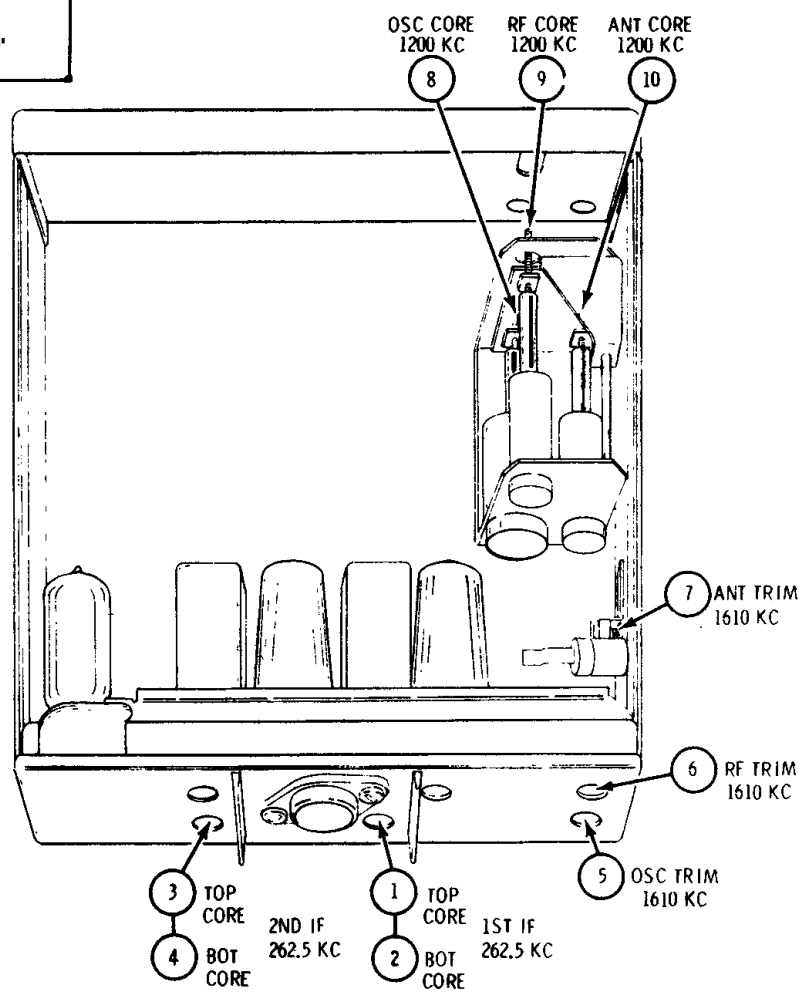
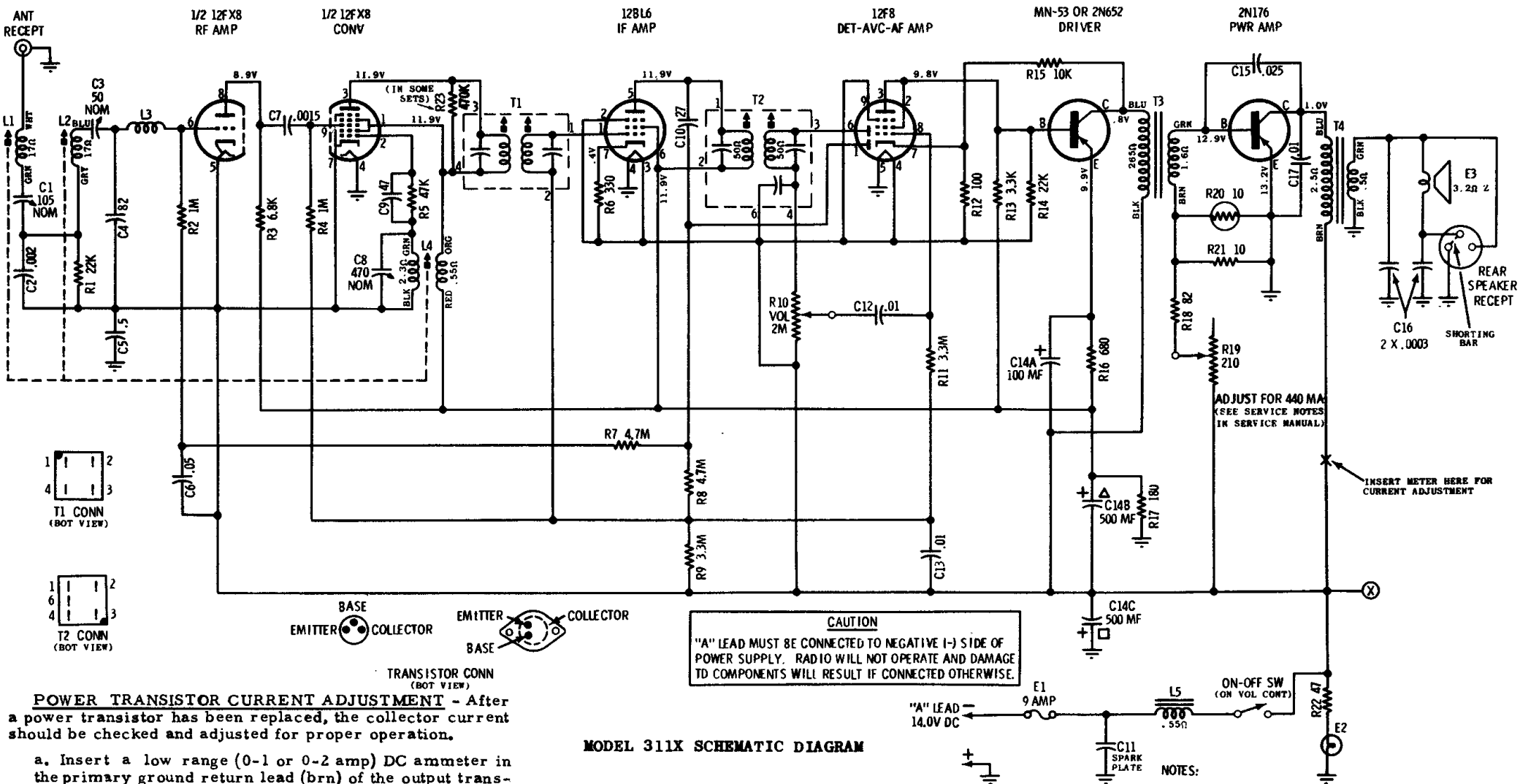
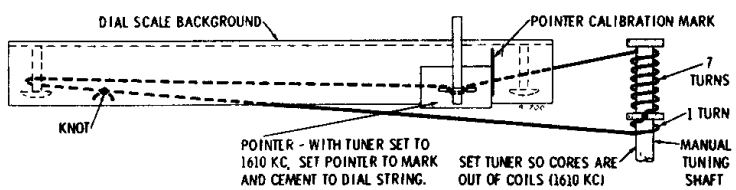
MODELS 310X and 311X



ALIGNMENT POINTS LOCATION



MODEL 311X SCHEMATIC DIAGRAM



DIAL CORD STRINGING DETAIL

NOTES:

CAPACITORS - Decimal values in MF, all others in MMF unless otherwise specified.
VOLTAGES - Measured from point indicated to (X) with a VTVM. No signal input. Tolerance ± 10%.
INPUT VOLTAGE - 14.0V DC.
TUNING RANGE - 540 KC to 1610 KC.
IF FREQ. - 262.5 KC.

POWER TRANSISTOR CURRENT ADJUSTMENT - After a power transistor has been replaced, the collector current should be checked and adjusted for proper operation.

a. Insert a low range (0-1 or 0-2 amp) DC ammeter in the primary ground return lead (brn) of the output transformer (T4). See Schematic.
NOTE: In model 310X, connect both the transformer and speaker ground leads to the positive terminal of the meter; connect the negative meter terminal to chassis.

In model 311X, connect the positive meter terminal to the brown transformer lead and negative meter terminal to the ON-OFF switch terminal.

b. Turn the radio on and allow it to heat up for about 15 minutes.

c. Adjust R19 for a reading of 360 ma with 12.6 volts input to the radio "A" lead.

NOTE: Two values of radio input voltage are given as a convenience to service personnel in order to accomodate different power sources. The current value stated on the Schematic Diagram is for 14 volts input to the radio "A" lead.

MOTOROLA INC.

MODELS
310X & 311X

Automotive type 12 volt superheterodyne receivers designed for universal underdash installation in most cars. Model 310X is for use with cars having a negative ground electrical system. Model 311X is for use with cars having a positive ground electrical system.