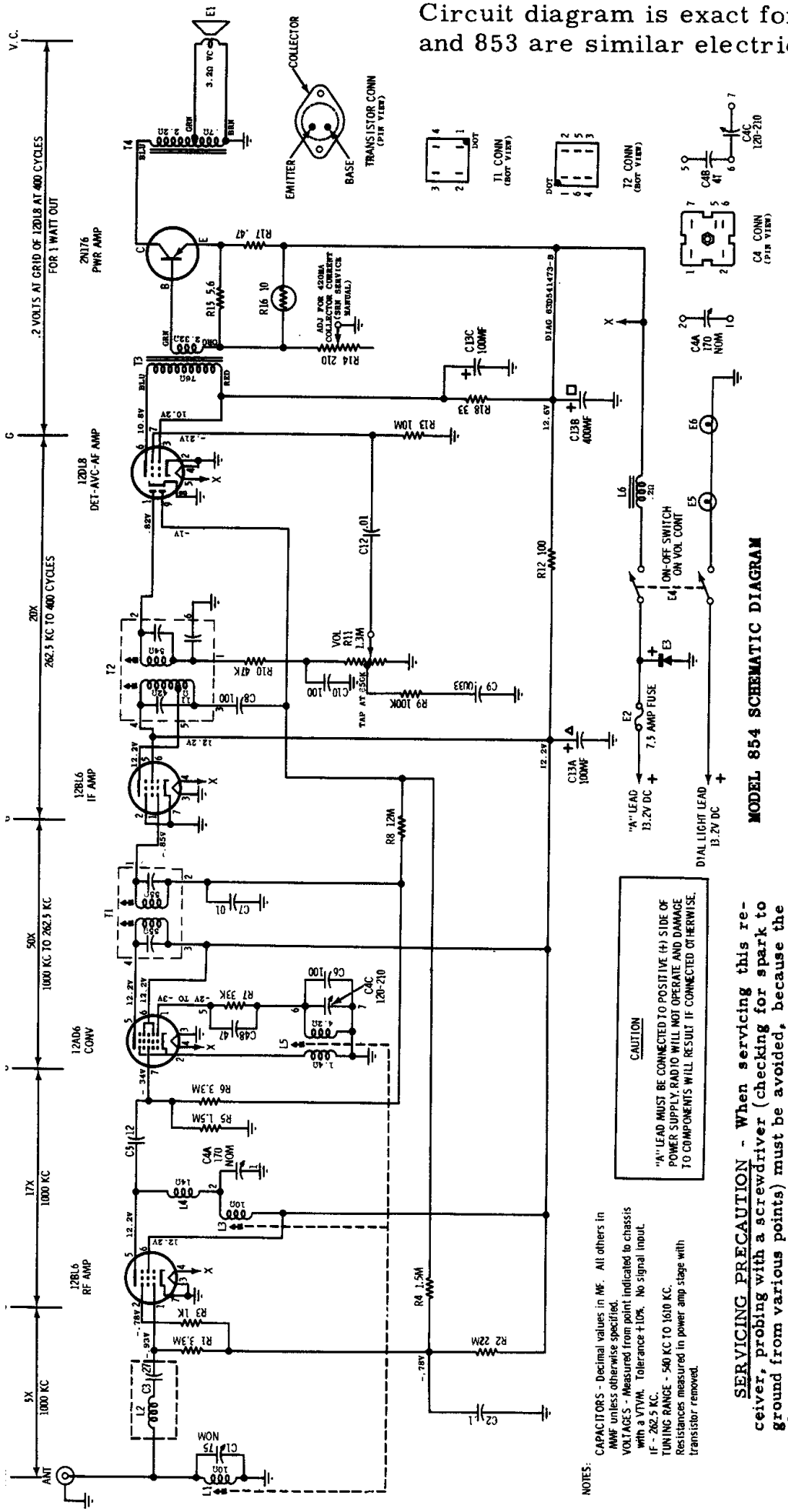
MOTOROLA

Model 852, used in Dodge cars
Model 853, used in DeSoto cars
Model 854, used in Plymouth cars

Circuit diagram is exact for Model 854. Models 852 and 853 are similar electrically to Model 854.



MODEL 854 SCHEMATIC DIAGRAM

Model 852	Dodge	LD1, LD2, LD3
Model 853	DeSoto	LS1, LS2, LS3
Model 854	Plymouth	LP1, LP2

a. Connect a VTVM from collector electrode (transistor shell) to chassis.

b. Adjust R-14 for .85 volts on VTVM. (this corresponds to a collector current of 425 Ma.)

c. Repeat step b after a half-hour.

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

TRANSISTOR CHECK - Substituting a known good transistor for a suspected one is the simplest and most positive method of checking transistors. NOTE: When checking, be sure transistor insulator is in place (see SERVICE NOTE 6).

TUBE CHECK - Substituting a known good tube for a suspected one is the best and only check recommended at this time.

SERVICING PRECAUTION - When servicing this receiver, probing with a screwdriver (checking for spark to ground from various points) must be avoided, because the plate power is obtained directly from the storage battery and high currents can flow through the components causing permanent damage. The transistor stage is especially susceptible to damage from this type of check. If the transistor BASE electrode is shorted to ground (either directly or through any other path) the BASE bias will be removed allowing excessive current to flow through the transistor causing permanent damage.

TRANSISTOR REPLACEMENT - When replacing a transistor, be sure that the transistor insulator is in place and that the mounting screws are securely tightened. If insulator is not in place the transistor will be shorted to chassis and set will not operate. If mounting screws are not tight, the transistor will be damaged due to a lack of proper heat dissipation.

TRANSISTOR CURRENT ADJUSTMENT - After replacing transistor and before connecting radio to power supply, set the transistor bias control (R-14) to the maximum (fully counterclockwise) position to prevent excessive current from damaging the transistor. Allow about 15 minutes warm-up time before proceeding with the following:

CAUTION

"A" LEAD MUST BE CONNECTED TO POSITIVE (+) SIDE OF POWER SUPPLY. RADIO WILL NOT OPERATE AND DAMAGE TO COMPONENTS WILL RESULT IF CONNECTED OTHERWISE.

NOTES:
CAPACITORS - Decimal values in MF. All others in MMF unless otherwise specified.
VOLTAGES - Measured from point indicated to chassis with a VTVM. Tolerance ±10%. No signal input.
IF - 262.5 KC.
TUNING RANGE - 540 KC TO 1610 KC.
Resistances measured in power amp stage with transistor removed.