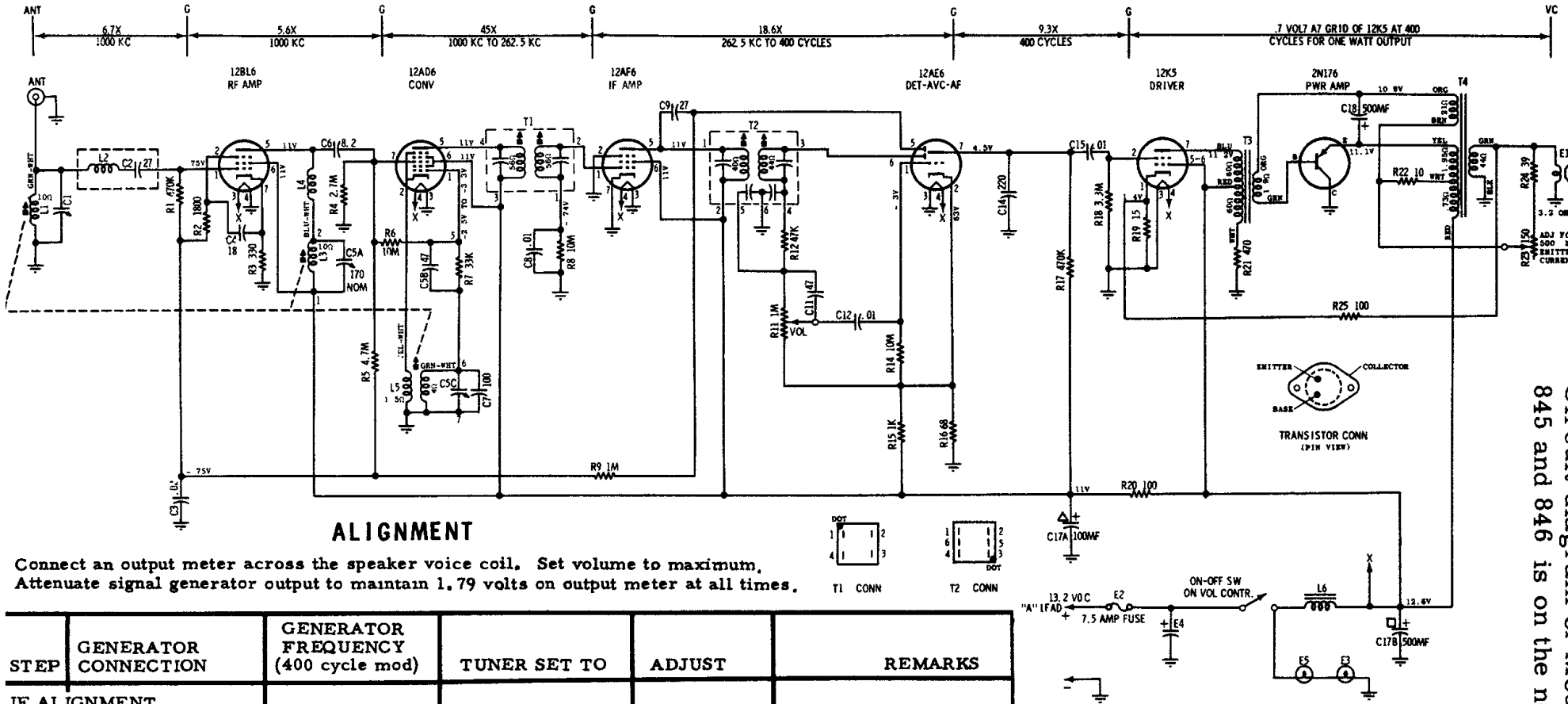
MOTOROLA INC.

MoPar Models 845, 846, and 849

Circuit diagram of Model 849 below; circuit for Models 845 and 846 is on the next page, adjacent at right. Align-



MODEL S49 SCHEMATIC DIAGRAM

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. Input voltage 13.2 VDC.

Model 845 Dodge D66, D67, D70, D71, D72
Model 846 DeSoto S25, S26, S27
Model 849 Plymouth P30, P31

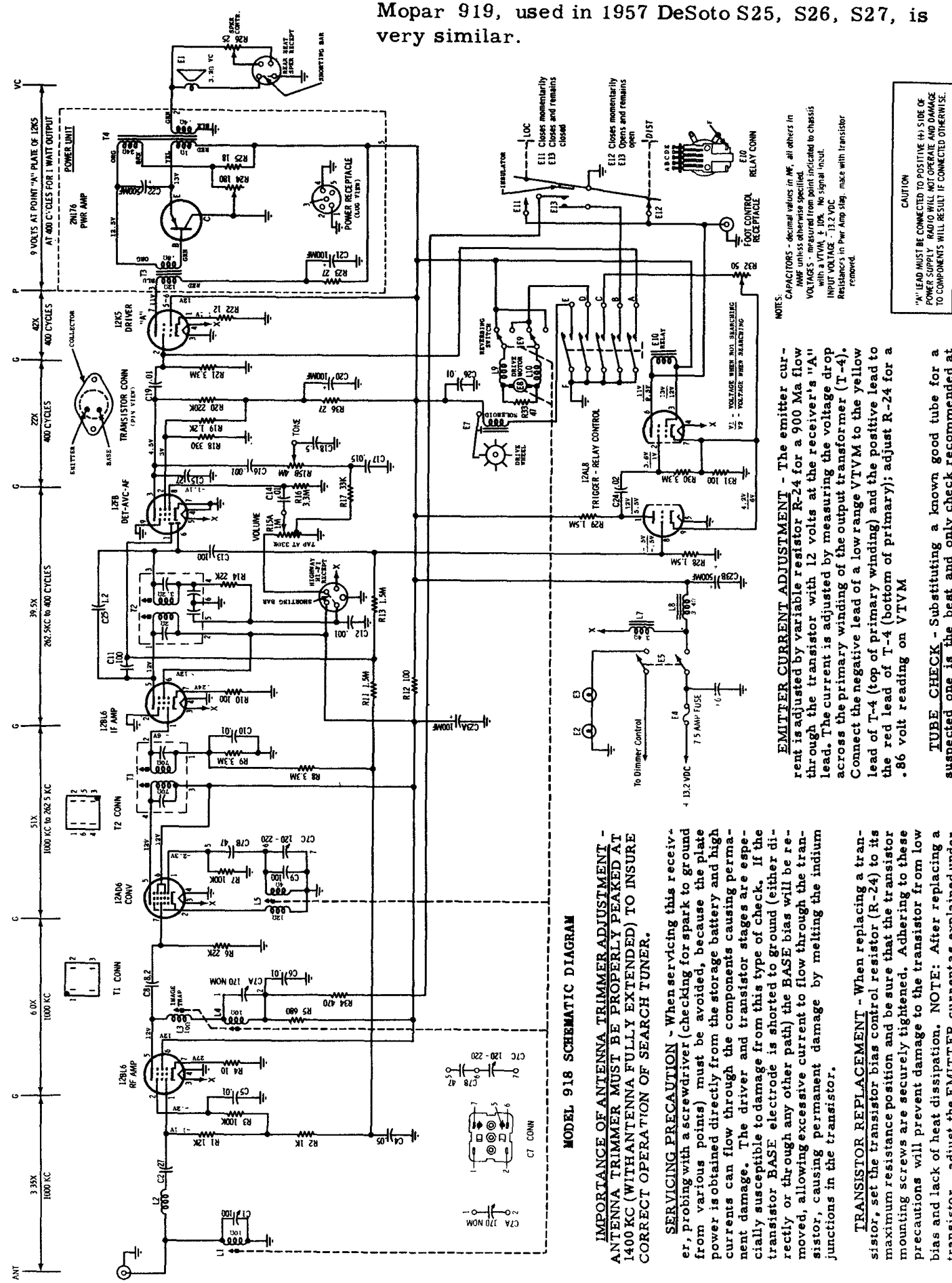
ALIGNMENT

Connect an output meter across the speaker voice coil. Set volume to maximum. Attenuate signal generator output to maintain 1.79 volts on output meter at all times.

STEP	GENERATOR CONNECTION	GENERATOR FREQUENCY (400 cycle mod)	TUNER SET TO	ADJUST	REMARKS
IF ALIGNMENT					
1.	12AD6 grid (pin 7) thru .1 mf capacitor & chassis	262.5 Kc	Hi end stop	1, 2, 3 & 4	Adjust for maximum.
RF ALIGNMENT					
2.	Ant recept thru dummy antenna (see Figure)	1610 Kc	Hi end stop	5, 6 & 7	Adjust for maximum.
NOTE: Do not perform steps 3, 4, 5 & 6 unless the tuner has been tampered with or components have been replaced. Remove escutcheon to expose tuning cores. Before proceeding with step 3, back tuning cores 1-3/8" out of coils to eliminate their effect on the trimmer adjustments.					
3.	Ant recept thru dummy antenna (see Figure)	1610 Kc	Hi end stop	5, 6 & 7	Adjust for maximum.
4.	"	1020 Kc	49/64" from hi end stop	8, 9 & 10	Adjust for maximum. Use alignment tool Part No. 66A76278.
5.	"	1610 Kc	Hi end stop	5, 6 & 7	Adjust for maximum.
6. Repeat steps 4 and 5 until no further increase; then cement cores in place. Step 5 should be the last step.					
ANTENNA TRIMMER					
7.	-		Weak station around 1400 Kc	7	With radio installed in car and antenna fully extended, peak antenna trimmer for maximum.

MOTOROLA

MoPar 918, used in 1957 Dodge D66, D67, D70, D71, D72.
Mopar 919, used in 1957 DeSoto S25, S26, S27, is very similar.



NOTES:
CAPACITORS - decimal values in MF, all others in MMF unless otherwise specified.
VOLTAGES - measured from point indicated to chassis with a VTVM, ± 10%. No signal input.
INPUT VOLTAGE - 13.2 VDC
Resistance's in Pwr Amp stag. make with transistor removed.

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.

IMPORTANCE OF ANTENNA TRIMMER ADJUSTMENT - ANTENNA TRIMMER MUST BE PROPERLY PEAKED AT 1400 KC (WITH ANTENNA FULLY EXTENDED) TO INSURE CORRECT OPERATION OF SEARCH TUNER.

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 driver and transistor stages are 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 by melting the indium junctions in the transistor.

TRANSISTOR REPLACEMENT - When replacing a transistor, set the transistor bias control resistor (R-24) to its maximum resistance position and be sure that the transistor mounting screws are securely tightened. Adhering to these precautions will prevent damage to the transistor from low bias and lack of heat dissipation. NOTE: After replacing a transistor, adjust the EMITTER current as explained under EMITTER CURRENT ADJUSTMENT.

EMITTER CURRENT ADJUSTMENT - The emitter current is adjusted by variable resistor R-24 for a 900 Ma flow through the transistor with 12 volts at the receiver's "A" lead. The current is adjusted by measuring the voltage drop across the primary winding of the output transformer (T-4). Connect the negative lead of a low range VTVM to the yellow lead of T-4 (top of primary winding) and the positive lead to the red lead of T-4 (bottom of primary); adjust R-24 for a .86 volt reading on VTVM

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