

TONE CONTROL  
VOLUME CONTROL

ON-OFF SWITCH

TUNING CONTROL

MOPAR MODEL 805

|                               |   |
|-------------------------------|---|
| <b>TRADE NAME</b>             | Mopar, Model 805 (Philco, C-4908)   |
| <b>SUPPLIER</b>               | Chrysler Corp., Detroit 31, Michigan.   |
| <b>TYPE SET</b>               | Battery Operated Custom Built Automotive Superheterodyne Receiver.  |
| <b>TUBES (EIGHT)</b>          | Types 6BA6 RF Amp., 6BE6 Converter, 6BA6 IF Amp., 6AU6 DET-AVC-AF, 6C4 AF-Phase Inv., (2) 6AQ5 Power Output, 6X4 Rectifier. |
| <b>POWER SUPPLY</b>           | 6 Volt Storage Battery  |
| <b>TUNING RANGE—BROADCAST</b> | 535-1605KC  |
|                               | RATING 7.8 Amp. @ 6 Volts DC  |

**ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT**

To set dial pointer, turn tuner fully closed and set pointer to the last reference mark at the low frequency end of the dial.

The dummy antenna used consists of a 40MMF capacitor in series with the high side of the signal generator and the antenna receptacle. Another 40MMF capacitor is connected from the antenna receptacle to chassis. Failure to use this correct dummy will result in misalignment of the receiver.

The bottom case cover should be on the receiver during alignment.

Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.

| DUMMY ANTENNA             | SIGNAL GENERATOR COUPLING                                    | SIGNAL GENERATOR FREQUENCY | DEPRESS PUSH BUTTON | RADIO DIAL SETTING      | OUTPUT METER       | ADJUST           | REMARKS   |
|---------------------------|--|----------------------------|---------------------|-------------------------|--------------------|------------------|---|
| .05MFD                    | High side to Pin 7 (Grid) of 6BE6 (V2). Low side to chassis. | 455KC                      | Manual              | High freq. end of dial. | Across voice coil. | A1, A2<br>A3, A4 | Adjust for maximum output   |
| Dummy Antenna (See Above) | High side to antenna receptacle<br>Low side to chassis.      | 455KC                      | PB#1                |                         | "                  | A5               | Adjust for minimum output   |
| Dummy Antenna (See Above) | "  | 1605KC                     | Manual              | High freq. end of dial. | "                  | A6               | Adjust for maximum output   |
| Dummy Antenna (See Above) | "  | 1400KC                     | Manual              | Tune for max signal.    | "                  | A7, A8           | Adjust for maximum output   |
| Dummy Antenna (See Above) | "  | 580KC                      | Manual              | "                       | "                  | A9               | Adjust for maximum output<br>Repeat steps 3, 4, and 5 until no further improvement can be made. |
| Dummy Antenna (See Above) | "  | 1200KC                     | PB#5                | 1200KC                  | "                  | A10              | Adjust for maximum output   |

Install receiver in car. Depress manual button and tune in a weak station near 1400KC. Adjust A7 for maximum volume. Depress PB#5 and tune it to a station near 1200KC. Readjust A10 for maximum volume.

**HOWARD W. SAMS & CO., INC. • Indianapolis 7, Indiana**

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DATE 10/49 SET #71 FOLDER #11

MOPAR MODEL 805  
(PHILCO C-4908)

# PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

| ITEM No. | USE                 | REPLACEMENT DATA      |                      | RMA BASE TYPE | INSTALLATION NOTES |
|----------|---------------------|-----------------------|----------------------|---------------|--------------------|
|          |                     | MOPAR-PHILCO PART No. | STANDARD REPLACEMENT |               |                    |
| V1       | RF Amp.             | 6B8A                  | 6B8A                 | 7B8           |                    |
| V2       | Converter           | 6BE6                  | 6BE6                 | 7C8           |                    |
| V3       | IF Amp.             | 6B8A                  | 6B8A                 | 7B8           |                    |
| V4       | DET.-AVC-1st AF Inv | 6AV6                  | 6AV6                 | 7B1           |                    |
| V5       | 2nd AF-Phase Inv    | 6C4                   | 6C4                  | 6B3           |                    |
| V6       | Power Output        | 6AQ5                  | 6AQ5                 | 7B2           |                    |
| V7       | Power Output        | 6AQ5                  | 6AQ5                 | 7B2           |                    |
| V8       | Rectifier           | 6X4                   | 6X4                  | SBS           |                    |

## CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

| ITEM No. | RATING CAP. VOLT | REPLACEMENT DATA      |                  |                           |               | IDENTIFICATION CODES AND INSTALLATION NOTES |
|----------|------------------|-----------------------|------------------|---------------------------|---------------|---|
|          |                  | MOPAR-PHILCO PART No. | AEROVOX PART No. | CORNELL-DUBILIER PART No. | ERIE PART No. |   |
| C1A      | 20               | 61-0150               | AP22222*         | UP 111145*                | BL-415        | Filter                                      |
| B        | 10               |                       | PR385/10         | BR102A                    |               | Filter                                      |
| C        | 10               |                       |                  |                           |               | Filter                                      |
| D        | 10               |                       |                  |                           |               | Filter                                      |
| C2       | .047             | 61-0122               | P288-047         | GT285                     | TM-15         | Filter                                      |
| C3       | .047             | 61-0122               | P288-047         | GT285                     | TM-15         | Output Cath. Bypass                         |
| C4       | 180              | 30-1220-3             | 1468-0002        | SM5M2                     | TM-32         | Decoupling                                  |
| C5       | .047             | 61-0122               | P288-047         | GT285                     | TM-15         | RF Coupling                                 |
| C6       | .047             | 61-0149               | 1468-0001        | 5M5T1                     | TM-31         | Fixed Trimmer                               |
| C7       | 100              | 60-10106407           | 1468-0001        | 5M5T1                     | TM-31         | Osc. Grid Cap                               |
| C8       | .047             | 61-0122               | P288-047         | GT285                     | TM-15         | IF Cath. Bypass                             |
| C9       | .0047            | 60-10106407           | 1468-0001        | 5M5T1                     | TM-31         | Audio Coupling                              |
| C10      | 100              | 61-0120               | P288-01          | GT481                     | TM-11         | AF Plate Bypass                             |
| C11      | .01              | 61-0120               | P288-01          | GT481                     | TM-11         | Tone Compensation                           |
| C12      | .1               | 200                   | P288-1           | GT2P1                     | TM-1          | Ar Feedback                                 |
| C13      | .25              | 100                   | P488-25          | GT2P25                    | TM-2          | Tone Compensation                           |
| C14      | .330             | 60-10335407           | 1468-0003        | 5M5T3                     | TM-335        | RF Bypass                                   |
| C15      | .0047            | 600                   | P688-0047        | GT6D5                     | TM-25         | Audio Coupling                              |
| C16      | .01              | 400                   | P488-01          | GT481                     | TM-11         | Audio Coupling                              |
| C17      | .01              | 400                   | 61-0120          | GT481                     | TM-11         | Audio Coupling                              |
| C18      | .0068            | 1000                  | 45-3500-7        | PT088-0068                | MB-26         | Output Plate Bypass                         |
| C19      | .0033            | 1600                  | 60-0109          | F1688-0033                | MB-28         | Butter.                                     |
| C20      | .330             | 500                   | 60-10335407      | 5M5T3                     | TM-335        | RF Bypass                                   |
| C21      | .5               | 100                   | 61-0137          | P288-5                    | 68P20         | Hash Filter                                 |
| C22      | .330             | 500                   | 60-10335407      | 5M5T3                     | TM-335        | RF Bypass                                   |
| C23      | .330             | 500                   | 60-10335407      | 5M5T3                     | TM-335        | Filament Bypass                             |

\* Parallel Sections To Obtain Desired Capacity.

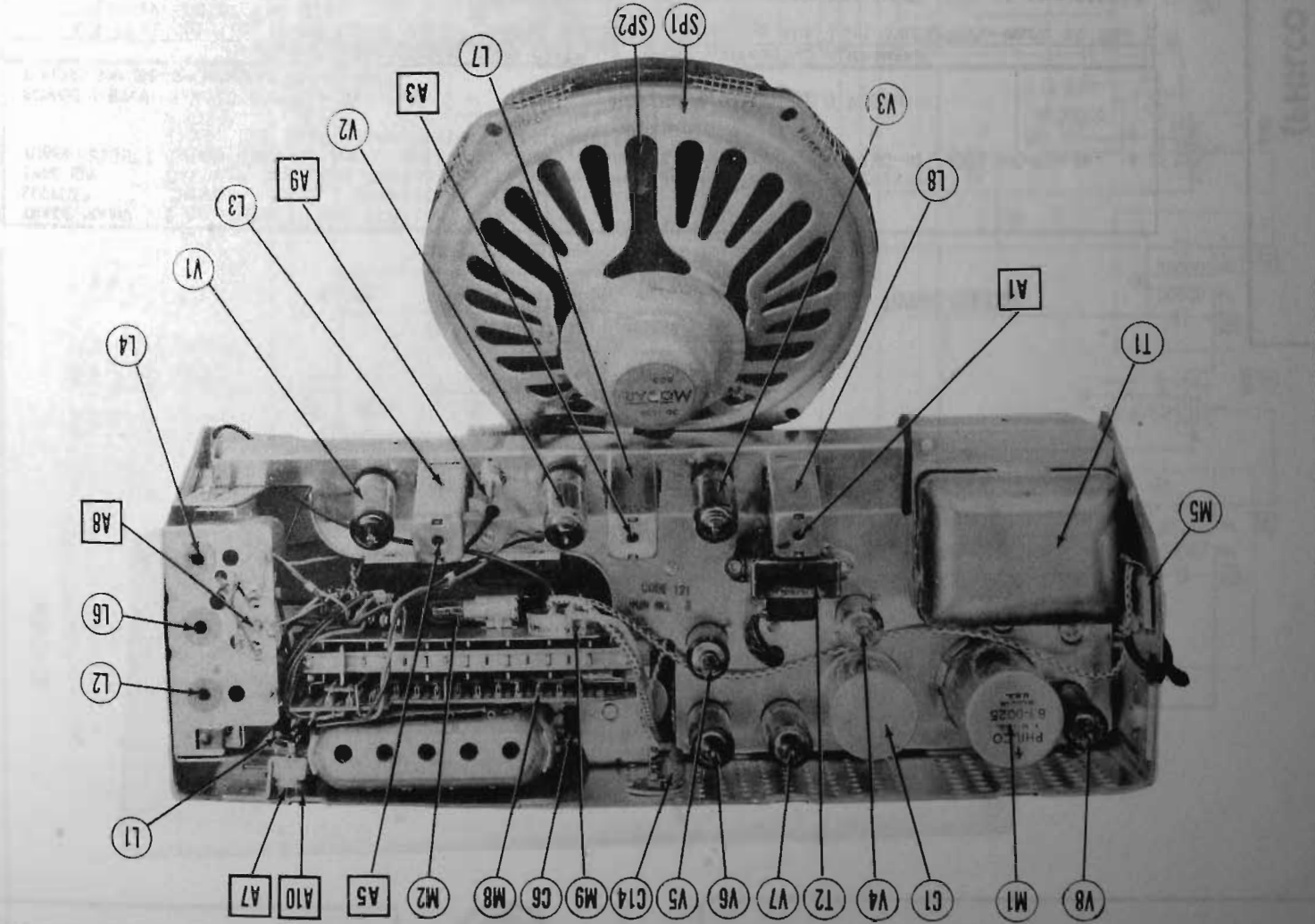
## CONTROLS

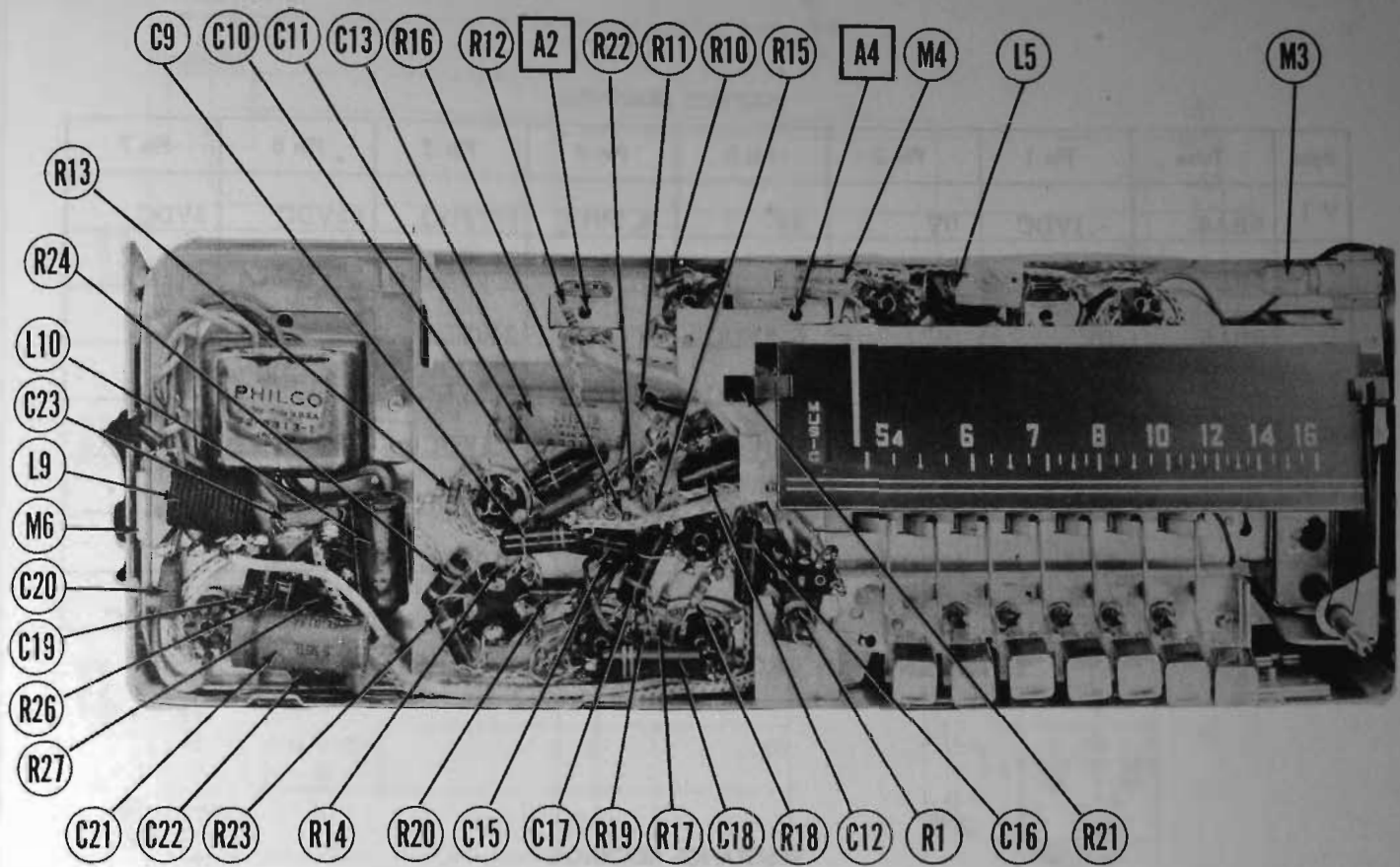
| ITEM No. | RATING RESIST. ANCE WATTS | REPLACEMENT DATA      |              |                    | INSTALLATION NOTES               |
|----------|---------------------------|-----------------------|--------------|--------------------|----------------------------------|
|          |                           | MOPAR-PHILCO PART No. | IRC PART No. | CLAROSTAT PART No. |                                  |
| RIA      | 350K $\times$ 2           | 33-5557-5             |              |                    | Volume control (Dual Concentric) |
| B        | 4 Meg.                    |                       |              |                    | Tone control - open at center    |

## RESISTORS

| ITEM No. | RATING RESISTANCE WATTS | REPLACEMENT DATA      |              |                    | IDENTIFICATION CODES |
|----------|-------------------------|-----------------------|--------------|--------------------|----------------------|
|          |                         | MOPAR-PHILCO PART No. | IRC PART No. | CLAROSTAT PART No. |                      |
| R2       | 330 $\times$ 2          | 66-1338340            | BM-1-330     |                    | RF Cathode           |
| R3       | 330 $\times$ 2          | 66-1338340            | BM-1-330     |                    | RF Cathode           |
| R4       | 10K $\times$ 2          | 66-8103340            | BTS-10K      |                    | RF Plate             |
| R5       | 27K $\times$ 2          | 66-8274340            | BTA-27K      |                    | Screen Dropping      |
| R6       | 2.2 Meg.                | 66-8223340            | BTS-2.2 Meg  |                    | AVC Network          |
| R7       | 68K $\times$ 2          | 66-3683340            | BTS-68K      |                    | Conv. Grid           |
| R8       | 10K $\times$ 2          | 66-8103340            | BTS-10K      |                    | RF Coll. Shunt       |
| R9       | 22K $\times$ 2          | 66-8223340            | BTS-22K      |                    | Osc. Grid            |
| R10      | 1500 $\times$ 2         | 66-2153340            | BTS-1500     |                    | TF Cathode           |
| R11      | 1 Meg.                  | 66-5103340            | BTS-1 Meg.   |                    | AVC Network          |

## CHASSIS—TOP VIEW





| ITEM No. | RATING        |       | REPLACEMENT DATA      |              | IDENTIFICATION CODES |
|----------|---------------|-------|-----------------------|--------------|----------------------|
|          | RESISTANCE    | WATTS | MOPAR-PHILCO PART No. | IRC PART No. |                      |
| R12      | 22K $\Omega$  |       | 66-3223340            | BTS-22K      | Diode Filter         |
| R13      | 15 Meg.       |       | 66-6153340            | BTS-15 Meg   | AF Grid              |
| R14      | 220K $\Omega$ |       | 66-4223340            | BTS-220K     | AF Plate             |
| R15      | 15 Meg.       |       | 66-6153340            | BTS-15 Meg.  | Phase Inv. Grid      |
| R16      | 220K $\Omega$ |       | 66-4223340            | BTS-220K     | Phase Inv. Cathode   |
| R17      | 220K $\Omega$ |       | 66-4223340            | BTS-220K     | Phase Inv. Plate     |
| R18      | 470K $\Omega$ |       | 66-4473340            | BTS-470K     | Output Grid          |
| R19      | 470K $\Omega$ |       | 66-4473340            | BTS-470K     | Output Cathode       |
| R20      | 330 $\Omega$  |       | 66-1334340            | BTA-330      | Feedback             |
| R21      | 2200 $\Omega$ |       | 66-2223340            | BTS-2200     | Tone Compensation    |
| R22      | 180 $\Omega$  |       | 66-1183340            | BW-1-180     | Filter               |
| R23      | 1000 $\Omega$ |       | 66-2104340            | BW-1-1000    | Filter               |
| R24      | 4700 $\Omega$ |       | 66-2474340            | BW-1-4700    | Filter               |
| R25      | 100 $\Omega$  |       | 66-1104340            | BW-1-100     | Hash Suppression     |
| R26      | 100 $\Omega$  |       | 66-1104340            | BW-1-100     | Hash Suppression     |
| R27      | 100 $\Omega$  |       | 66-1104340            | BW-1-100     | Hash Suppression     |

### TRANSFORMER (POWER)

| ITEM No. | RATING               |                   |        | REPLACEMENT DATA      |                  |                  |
|----------|----------------------|-------------------|--------|-----------------------|------------------|------------------|
|          | PRI.                 | SEC. 1            | SEC. 2 | MOPAR-PHILCO PART No. | STANCOR PART No. | CHICAGO PART No. |
| T1       | 5VDC<br>③ 3.6A<br>DC | 560VCT<br>③ .054A |        | 32-8313-1             | P-4061†          | P-2971†          |

† Remove Brackets and Mount Horizontally On Chassis. Redrill Holes As Required.

### TRANSFORMER (OUTPUT)

| ITEM No. | RATING              |              |                    | REPLACEMENT DATA      |                  |                  | INSTALLATION NOTES                        |
|----------|---------------------|--------------|--------------------|-----------------------|------------------|------------------|---|
|          | IMPEDANCE           | DC RES.      |                    | MOPAR-PHILCO PART No. | STANCOR PART No. | CHICAGO PART No. |   |
| T2       | 7500 $\Omega$<br>CT | 3.2 $\Omega$ | 450 $\Omega$<br>CT | 32-8316-4             | A-3556†          | RO-302†          | A-2900†<br>* Drill One New Mounting Hole. |

### SPEAKER

| ITEM No. | RATINGS    |              | REPLACEMENT DATA      |                    |               | INSTALLATION NOTES |
|----------|------------|--------------|-----------------------|--------------------|---------------|--------------------|
|          | FIELD      | V.C. IMP.    | MOPAR-PHILCO PART No. | JENSEN PART No.    | QUAM PART No. |                    |
| SPI      | 6 $\Omega$ | 3.2 $\Omega$ | 36-1632               | ST-807<br>MOD.P7-T | 7A21          |                    |
| SP2      | 6 5/8"     | 1"           |                       |                    |               |                    |

### R F COILS

| ITEM No. | USE            | DC RES.     |             | REPLACEMENT DATA      |                   | INSTALLATION NOTES  |
|----------|----------------|-------------|-------------|-----------------------|-------------------|---|
|          |                | PRI.        | SEC.        | MOPAR-PHILCO PART No. | MEISSNER PART No. |   |
| L1       | Ant. Choke     | 6 $\Omega$  |             | 65-0437               |                   | Used In Push-Button Position Only<br>Used In Manual Position Only |
| L2       | Ant. Coil      | 10 $\Omega$ |             | 65-0443-16            |                   |   |
| L3       | RF Trans.      | 30 $\Omega$ | 25 $\Omega$ | 32-4349A              |                   |   |
| L4       | RF Coil        | 10 $\Omega$ |             | 65-0443-17            |                   |   |
| L5       | Osc. Coil      | 28          |             | 65-0443-18            |                   |   |
| L6       | Osc. Shunt     | 28          |             | 32-4110-2             |                   |   |
| L7       | Input IF       | 12 $\Omega$ |             | 32-4160A              |                   |   |
| L8       | Output IF      | 15 $\Omega$ |             | 32-4240A              |                   |   |
| L9       | Hash Choke     | 0 $\Omega$  |             | 52-1644               |                   |   |
| L10      | Vibrator Choke | 0 $\Omega$  |             | 32-4170-2             |                   |   |

### VIBRATOR

| ITEM No. | TYPE | INPUT VOLTS | FREQUENCY | REPLACEMENT DATA      |                         |                  | INSTALLATION NOTES |
|----------|------|-------------|-----------|-----------------------|-------------------------|------------------|--------------------|
|          |      |             |           | MOPAR-PHILCO PART No. | CORNELL-DUBIER PART No. | RADIART PART No. |                    |
| M1       | Int. | 6V          | 115V      | 83-0026               | C25F                    | 5326F            |                    |

VOLTAGE READINGS

| Item | Tube | Pin 1    | Pin 2 | Pin 3  | Pin 4  | Pin 5  | Pin 6  | Pin 7  |
|------|------|----------|-------|--------|--------|--------|--------|--------|
| V 1  | 6BA6 | -.1VDC   | 0V    | 0V     | 6.3VDC | 177VDC | 65VDC  | 2VDC   |
| V 2  | 6BE6 | §-3.8VDC | 0V    | 0V     | 6.3VDC | 250VDC | 65VDC  | -3VDC  |
| V 3  | 6BA6 | 0V       | 0V    | 6.3VDC | 0V     | 250VDC | 65VDC  | 3VDC   |
| V 4  | 6AU6 | -.4VDC   | 0V    | 6.3VDC | 0V     | -.5VDC | -.5VDC | 90VDC  |
| V 5  | 6C4  | 125VDC   | 0V    | 6.3VDC | 0V     | 125VDC | .2VDC  | 110VDC |
| V 6  | 6AQ5 | 0V       | 15VDC | 0V     | 6.3VDC | 250VDC | 250VDC | 0V     |
| V 7  | 6AQ5 | 0V       | 15VDC | 0V     | 6.3VDC | 250VDC | 250VDC | 0V     |
| V 8  | 6X4  | 280VAC   | 0V    | 6.3VDC | 0V     | 0V     | 280VAC | 250VDC |

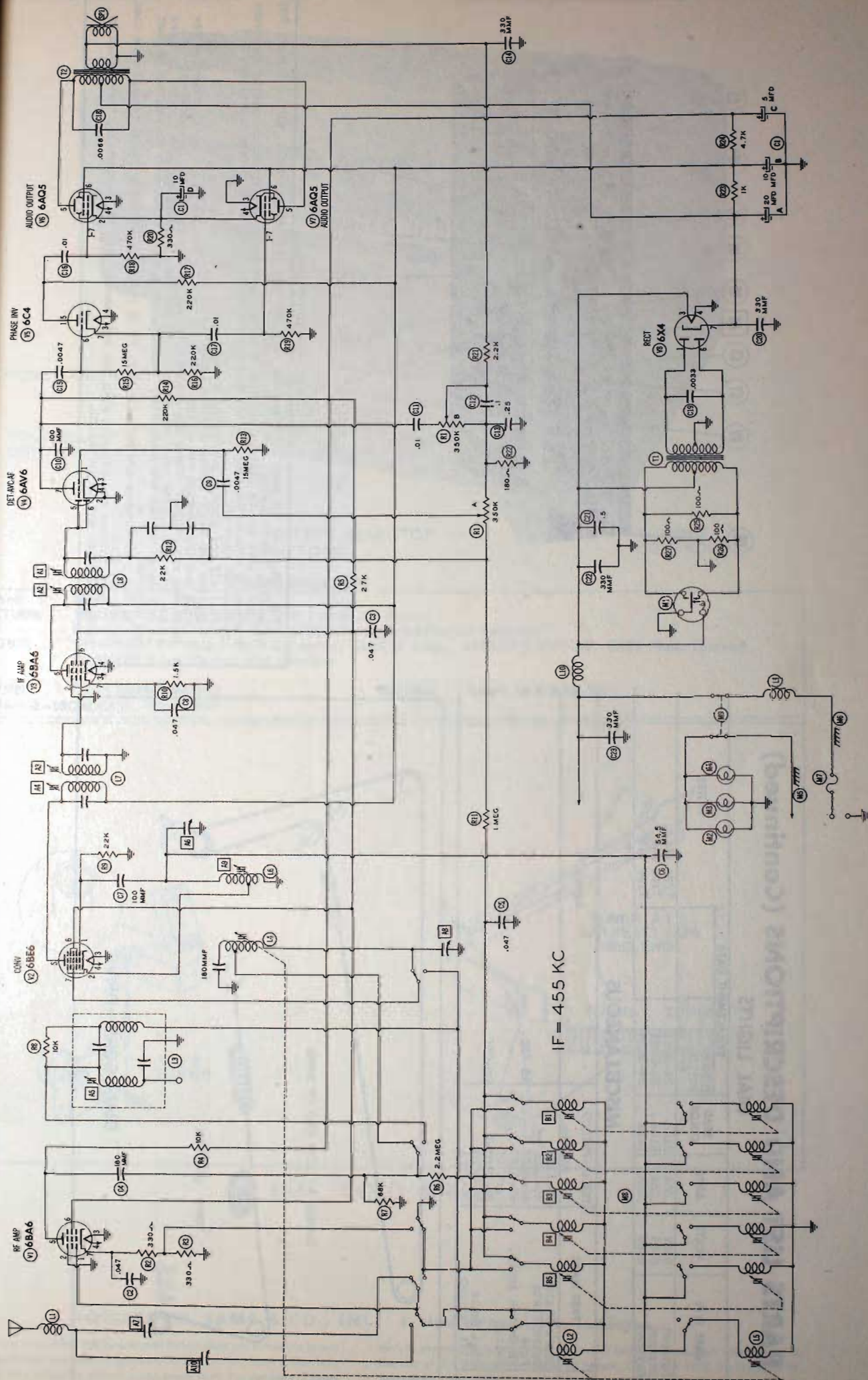
§ TAKEN WITH VACUUM TUBE VOLTMETER.

RESISTANCE READINGS

| Item | Tube | Pin 1   | Pin 2 | Pin 3 | Pin 4 | Pin 5   | Pin 6   | Pin 7   |
|------|------|---------|-------|-------|-------|---------|---------|---------|
| V 1  | 6BA6 | 800KΩ   | 0Ω    | 0Ω    | .2Ω   | † 15KΩ  | † 30KΩ  | 660Ω    |
| V 2  | 6BE6 | 22KΩ    | 1Ω    | 0Ω    | .2Ω   | † 1000Ω | † 30KΩ  | 70KΩ    |
| V 3  | 6BA6 | 13Ω     | 0Ω    | .2Ω   | 0Ω    | † 1000Ω | † 30KΩ  | 1.5KΩ   |
| V 4  | 6AV6 | 15Meg   | 0Ω    | .2Ω   | 0Ω    | 300KΩ   | 300KΩ   | † 225KΩ |
| V 5  | 6C4  | † 230KΩ | INF   | .2Ω   | 0Ω    | † 230KΩ | 15Meg   | 220KΩ   |
| V 6  | 6AQ5 | 470KΩ   | 330Ω  | 0Ω    | .2Ω   | † 225Ω  | † 1000Ω | 470KΩ   |
| V 7  | 6AQ5 | 470KΩ   | 330Ω  | .2Ω   | 0Ω    | † 190Ω  | † 1000Ω | 470KΩ   |
| V 8  | 6X4  | 440Ω    | INF   | .2Ω   | 0Ω    | INF     | 390Ω    | 100KΩ   |

† MEASURED FROM PIN 7 OF V8.

1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Battery voltage maintained at 6.3 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of +15% in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.



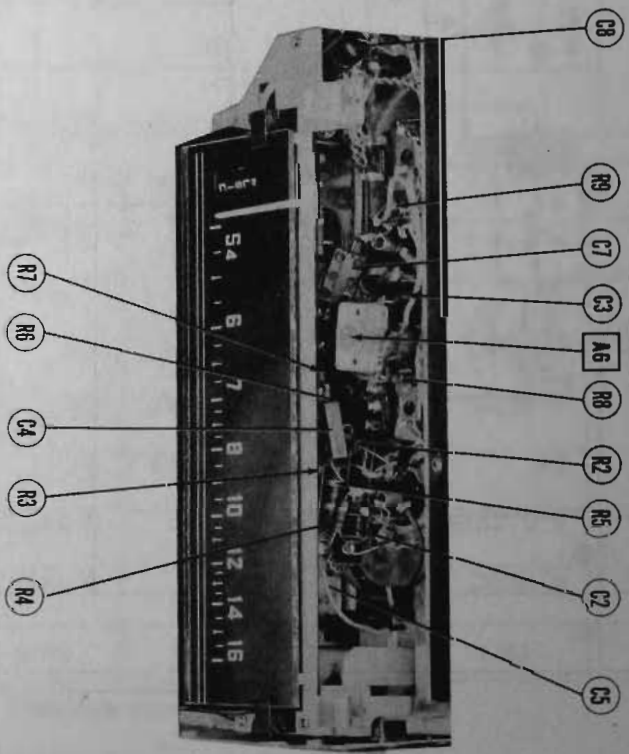
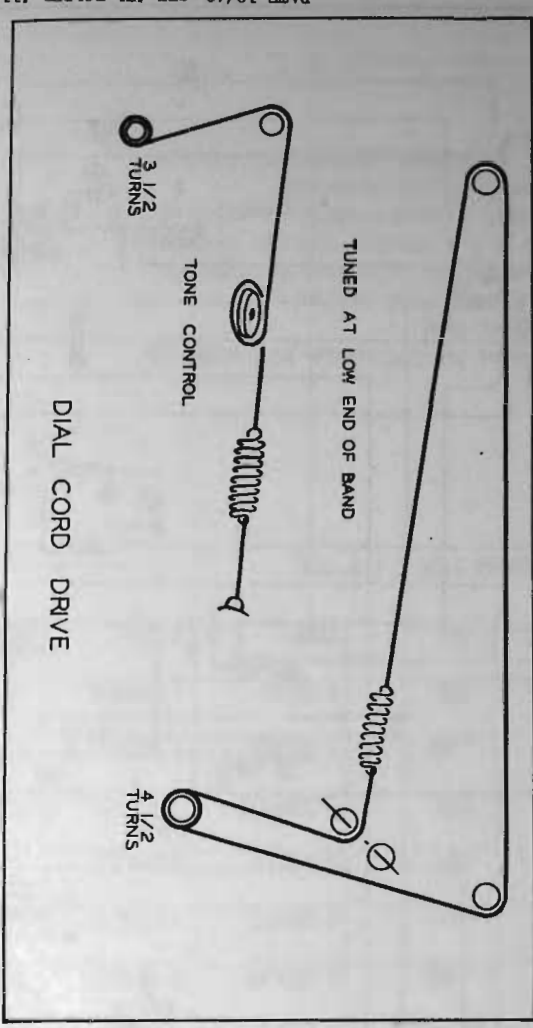
# PARTS LIST AND DESCRIPTIONS (Continued)

## DIAL LIGHTS

| ITEM No. | BASE TYPE | VOLTS | AMPS. | BEAD COLOR | REPLACEMENT DATA             |                    | NOTES    |
|----------|-----------|-------|-------|------------|------------------------------|--------------------|----------|
|          |           |       |       |            | MOPAR-<br>PHILCO<br>PART No. | PHILCO<br>PART No. |          |
| M2       | Bayonet   | 6-8V  | .25A  | Blue       | 34-2064                      |                    | Type #44 |
| M3       | Bayonet   | 6-8V  | .25A  | Blue       | 34-2064                      |                    | Type #44 |
| M4       | Bayonet   | 6-8V  | .25A  | Blue       | 34-2064                      |                    | Type #44 |

## MISCELLANEOUS

| ITEM No. | PART NAME       | MOPAR-PHILCO PART No. | NOTES   |
|----------|-----------------|-----------------------|---------|
| M5       | Spark Plate     | 30-1235               |         |
| M6       | Spark Plate     | 30-1235               |         |
| M7       | Fuse            | 45-2559               | 14 Amp. |
| M8       | PB Switch Assy. | 85-0157-1             |         |
| M9       | Switch          | Part of 85-0157-1     |         |
|          | Dial Scale      | 54-5087               | On-Off  |
|          | Dial Pointer    | 56-8761               |         |



PUSHBUTTON ADJUSTMENTS

The ranges of the push buttons from left to right are 535 to 1020KC, 610 to 1200KC, 700 to 1410KC, 740 to 1500KC, and 840 to 1600KC. Make a list of the station to which the push buttons are to be aligned making sure each station is within the range of the desired pushbutton. Turn the set on and allow 20 minutes for warm up.

Pull off the plastic pushbutton covers. Depress the No. 5 button (840 to 1600KC). Pull out the knurled end of the button and turn BI to tune in the station desired between 840 and 1600KC. Check the accuracy of the pushbutton setting by depressing dial button and tune in the station pushbutton is set for. Depress the push button. If there is any change retune the pushbutton. Repeat this procedure for each push button as they are adjusted.

If the push buttons are very far off, it is recommended that a signal generator be used to pre-set them. If push buttons are adjusted with the set removed from the automobile, they should be rechecked after set is installed.