



TRANSISTOR CAR RADIO

MODEL CR-555, CR-555S



★ Difference between CR-555 and CR-555S

The CR-555S does not include speaker, and consists of only an amplifier and accessories. It is so designed as to be used combined with a mounting kit (panel) and speaker. Most of the accessories for both are the same.

SPECIFICATIONS

Circuit System : 1 RF & 2 IF amplification stages,

Pushpull system, 8 transistors

Tuning System : μ -tuning/Manual/Pushbuttons
(5 buttons) System

Receiving Frequency : 535 KC - 1605 KC

Intermediate Frequency : 450 KC

Sensitivity : 20 μ V (26 dB) or less (at 500 mW
rated output)

Selectivity : 20 dB or more (at \pm 10 KC detuning)

AGC Characteristics : 40 dB or more

Output Impedance : 8 ohms

Maximum Output : 3.0 watts or more

Power Supply Voltage : DC 11-16 volts (standard voltage 13.2V)
Exclusive for negative ground

Antenna Capacity : 80 pf \pm 10 pf

ALIGNMENT INSTRUCTIONS

(1) Preparations before adjusting

- 1) Power supply voltage DC 13.2 V negative ground
- 2) Volume (R_7, R_8) Turn the volume control to maximum and set tone control at treble.
- 3) Signal generator output Modulation frequency 400 c/s 30 % modulation
- 4) Output load An 8-ohm ohmic resistor (5 watts or more) or a loudspeaker
- 5) Signal supplying point Antenna receptacle through dummy antenna
- 6) Dummy antenna See Fig. 7.

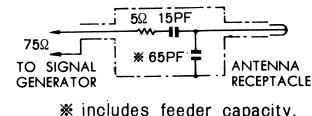


Fig. 7

(2) Adjusting procedure (See Fig. 8)

| Adjusting Step | Adjusting Point | Signal Frequency | Radio Dial Position | Remarks |
|----------------|---------------------|-----------------------------|---------------------|---|
| 1 | IFT adjustment | T ₄ (black) | 450 KC | In the vicinity of 1,500 KC where there is no station |
| 2 | | T ₃ (white) | " | " |
| 3 | | T ₂ (blue) | " | " |
| 4 | | T ₁ (pink) | " | " |
| 5 | Matching adjustment | OSC trimmer C ₁₂ | 1400 KC | *1400 KC (See Fig. 9) |
| 6 | | RF trimmer C ₇ | " | " |
| 7 | | Ant. trimmer C ₂ | " | " |

* After adjustment set the dial pointer at extreme right and then left, and confirm that signals of 535 KC and 1,605 KC from the signal generator are received, respectively.

* Tune to a signal in the vicinity of 1400 KC and adjust antenna trimmer (C₂) for a maximum output when the radio set is installed in the car after bench adjustment, or when the antenna has been replaced.

* 1400 KC point : Tuner core stroke 16.7 mm.

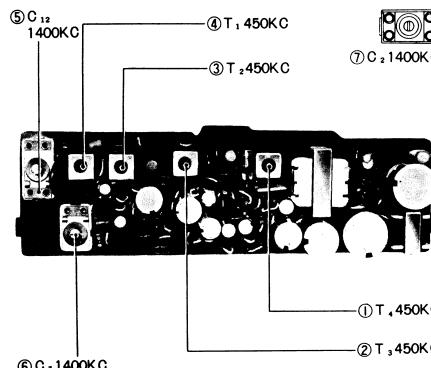


Fig. 8

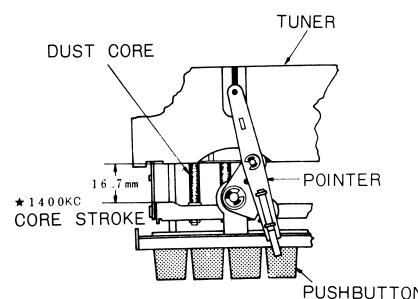
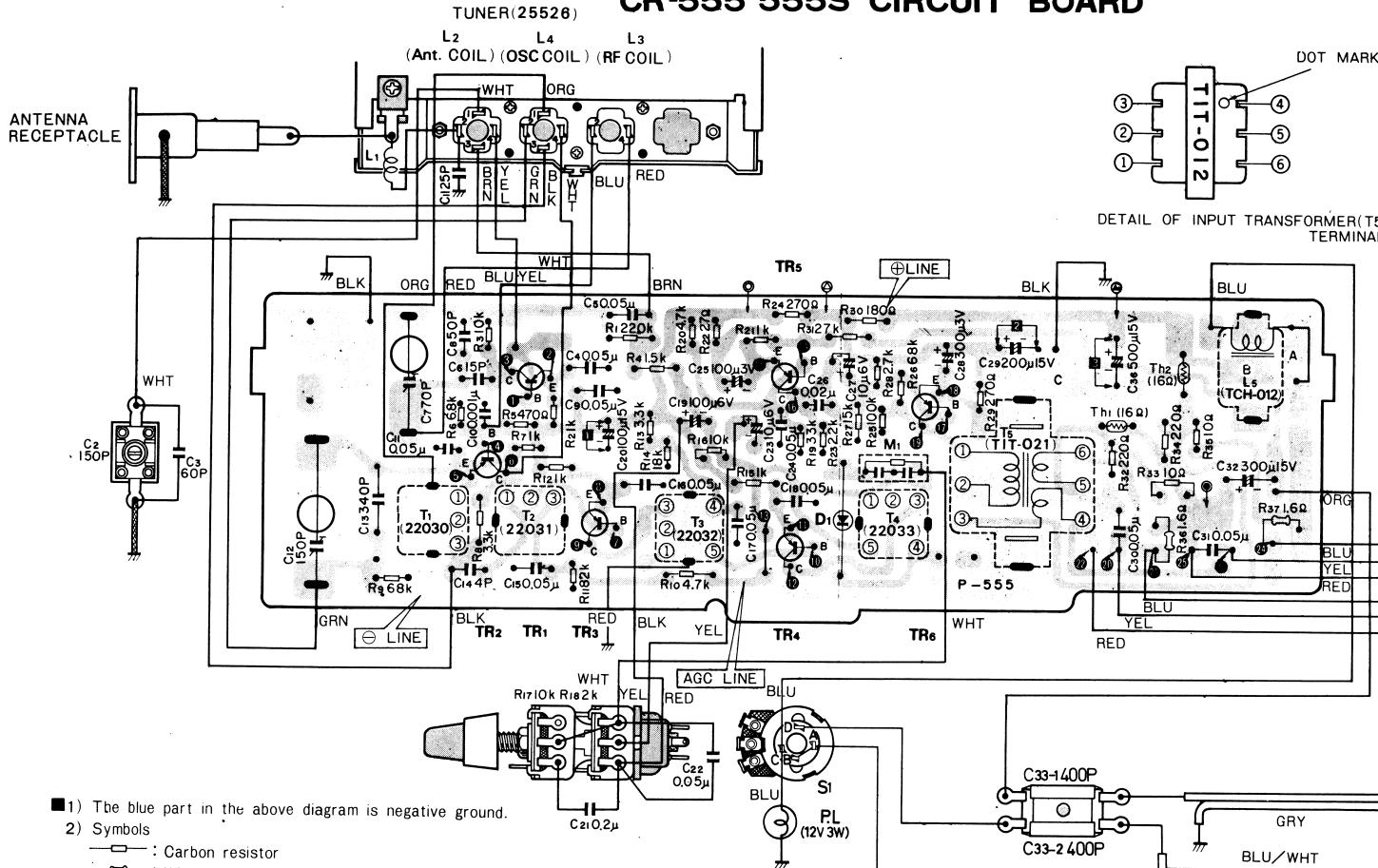


Fig. 9

CR-555 555S CIRCUIT BOARD



■1) The blue part in the above diagram is negative ground.

2) Symbols

- : Carbon resistor
- : Wirewound resistor
- : Trimmer condenser
- : Electrolytic condenser
- : Other condenser
- : Thermistor
- : Diode (D₁)

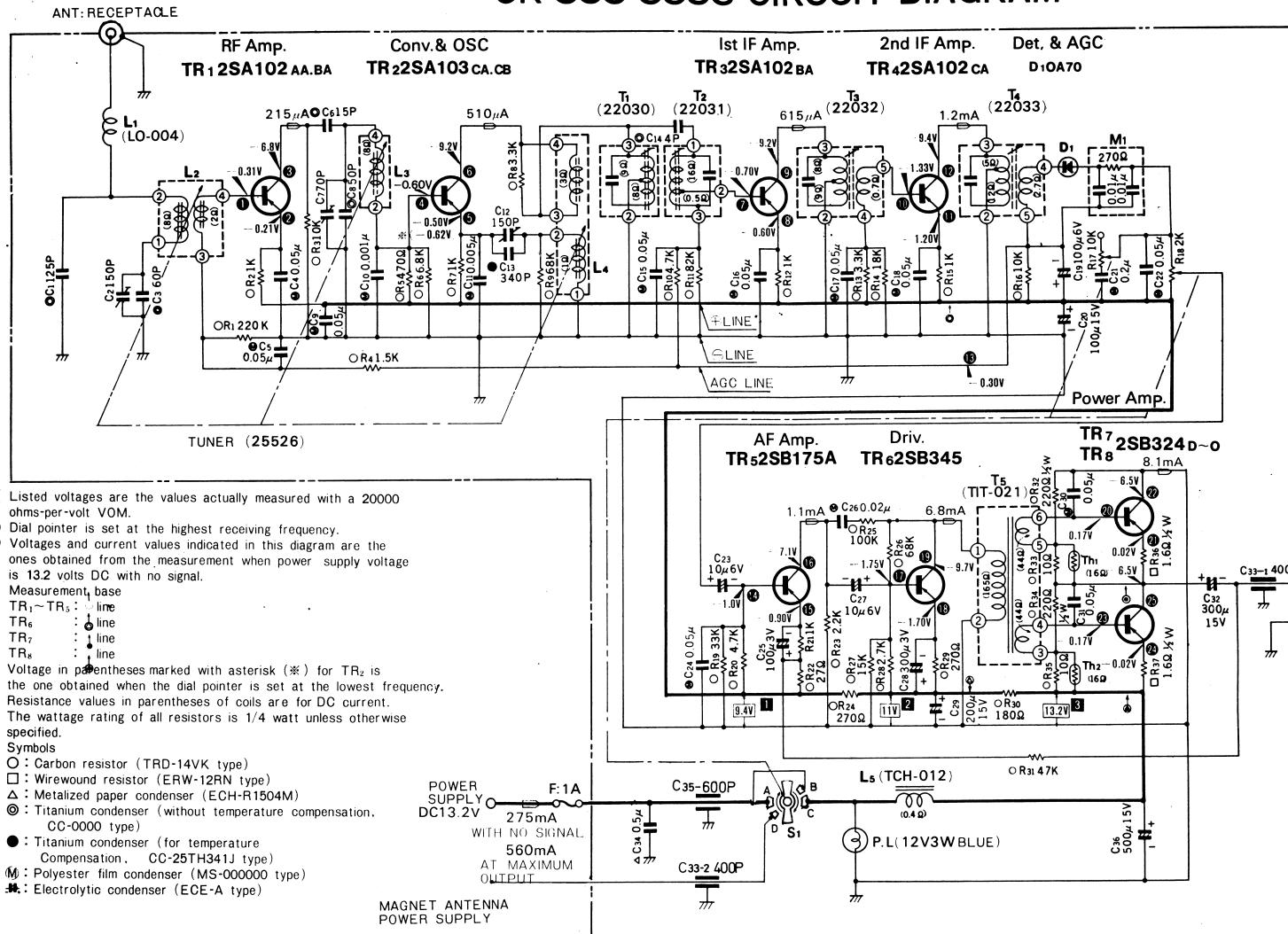
| No. | Voltage | No. | Voltage | No. | Voltage | No. | Voltage |
|-----|----------|-----|---------|-----|---------|-----|---------|
| ① | -0.31V | ① | -0.60V | ① | -7.1V | ① | -0.02V |
| ② | -0.21V | ① | -9.2V | ① | -1.75V | ① | -6.5V |
| ③ | -6.8V | ① | -1.33V | ① | -1.70V | ② | 9.4V |
| ④ | -0.60V | ① | -1.20V | ① | -9.7V | ② | 11V |
| ⑤ | -0.50V | ① | -9.4V | ① | -0.17V | ③ | 13.2V |
| ⑥ | * -0.62V | ① | -0.30V | ① | -0.02V | | |
| ⑦ | -9.2V | ① | -1.0V | ① | -6.5V | | |
| ⑧ | -0.70V | ① | -0.90V | ① | -0.17V | | |

SPEAKER LEAD

"A" LEAD FOR MAGNET ANTENNA

"A" LEAD TO BATTERY (DC 13.2V)

CR-555·555S CIRCUIT DIAGRAM



| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|----|---|----|----|----|----|----|----|--------|----|----|----|-----|-----|-----|-----|------|
| R | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 22 | 13 | 24 | 25 | 26 | 15 | 16 | 32 | 34 | 17 | 36 | 18 |
| C | I | 2 | 3 | 4 | 9 | 6 | 8 | 10 | | II | I2 | I3 | | I5 | I4 | 3533-2 | 16 | I7 | I8 | I29 | I30 | I33 | I35 | I37 |
| L.T.M | | | | 5 | 7 | | | | | 34 | 24 | 23 | | 25 | | 26 | 27 | 28 | | 19 | 30 | 21 | 22 | 32 |
| D.Th | | | | | | | | | | | | | | | | | | | | 20 | 31 | 36 | | 33-1 |

■ ALTERED PARTS