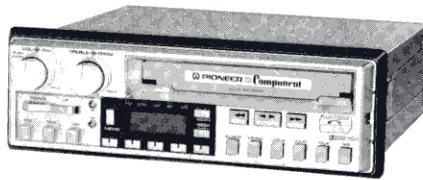


 PIONEER

Service Manual



The photo shows the model KEX-73

ORDER NO.
CRT - 254 - 0

CASSETTE CAR STEREO WITH AM/FM ELECTRONIC TUNER

KEX-70

CASSETTE CAR STEREO WITH LW/MW/FM ELECTRONIC TUNER

KEX-73

E

E

SPECIFICATIONS

General

Power source DC14.4V (10.8 ~ 15.6V allowable)
Grounding system Negative type
Dimensions (chassis) 180(W) × 50(H) × 150(D) mm
(Front face) 184(W) × 56(H) × 31(D) mm
Weight 2.0 kg
Tone controls (bass) ±10 dB (100 Hz)
(treble) ±10dB (10 kHz)
Loudness contour +12 dB (100 Hz), +4 dB (10kHz)
(volume: -30 dB)
Maximum output level 200 mV
Output impedance 1 kΩ

Tape player

Tape Compact cassette tape (C-30 ~ C-90)
Tape speed 4.76 cm/sec.
(+0.19 cm/sec. -0.05 cm/sec.)
Fast forward/rewind time Within 120 sec. for C-60
Wow & flutter No more than 0.09% (WRMS)
Frequency response 30 ~ 20,000 Hz (±3 dB) (at metal)
30 ~ 16,000 Hz (±3 dB) (at normal)
Stereo separation More than 40 dB
Signal-to-noise ratio Dolby NR IN: More than 63 dB
(IEC-A network)
Dolby NR OUT: More than 55 dB
(IEC-A network)

FM tuner

Frequency range 87.5 ~ 108 MHz
Usable sensitivity 12 dBf (1.1μV/75Ω, mono)
50 dB quieting sensitivity 17 dBf (1.9μV/75Ω, mono)
Alternate channel selectivity 70 dB (±400 kHz)
Distortion 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response 30 ~ 15,000 Hz (±3 dB)
Stereo separation 40 dB (at 65 dBf, 1kHz)

AM (MW) tuner

Frequency range 531 ~ 1,602 kHz
Usable sensitivity 18μV (25 dB) (S/N: 20 dB) (KEX-70)
Usable sensitivity 30μV (29.5 dB) (S/N: 20 dB) (KEX-73)
Selectivity 50 dB (±9 kHz)

LW tuner (KEX-73)

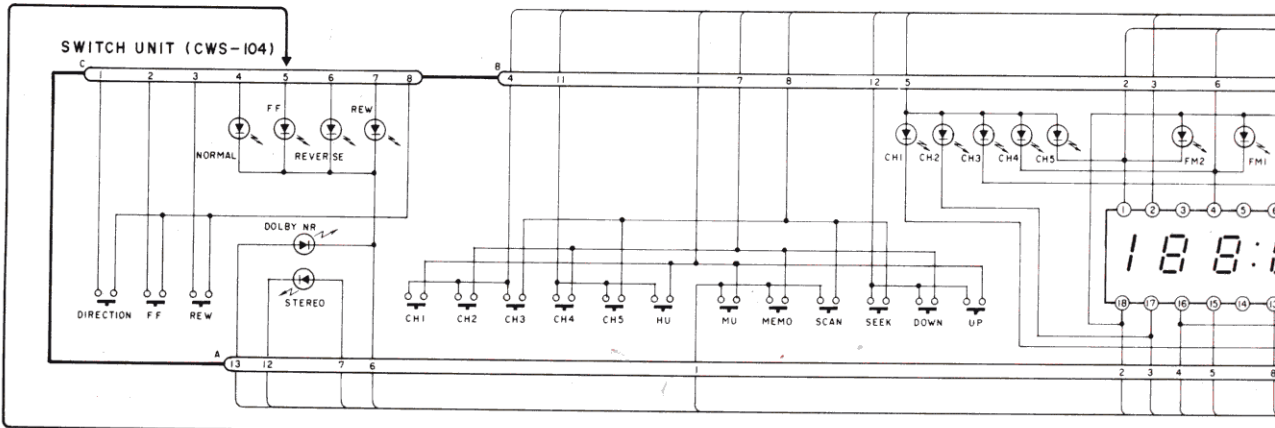
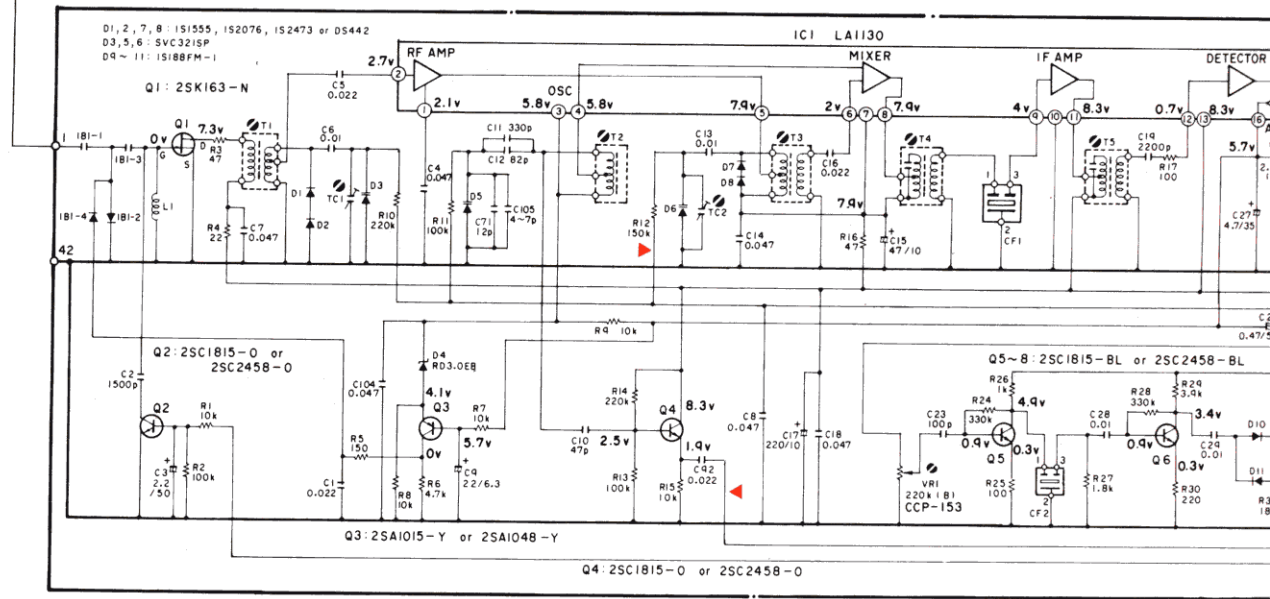
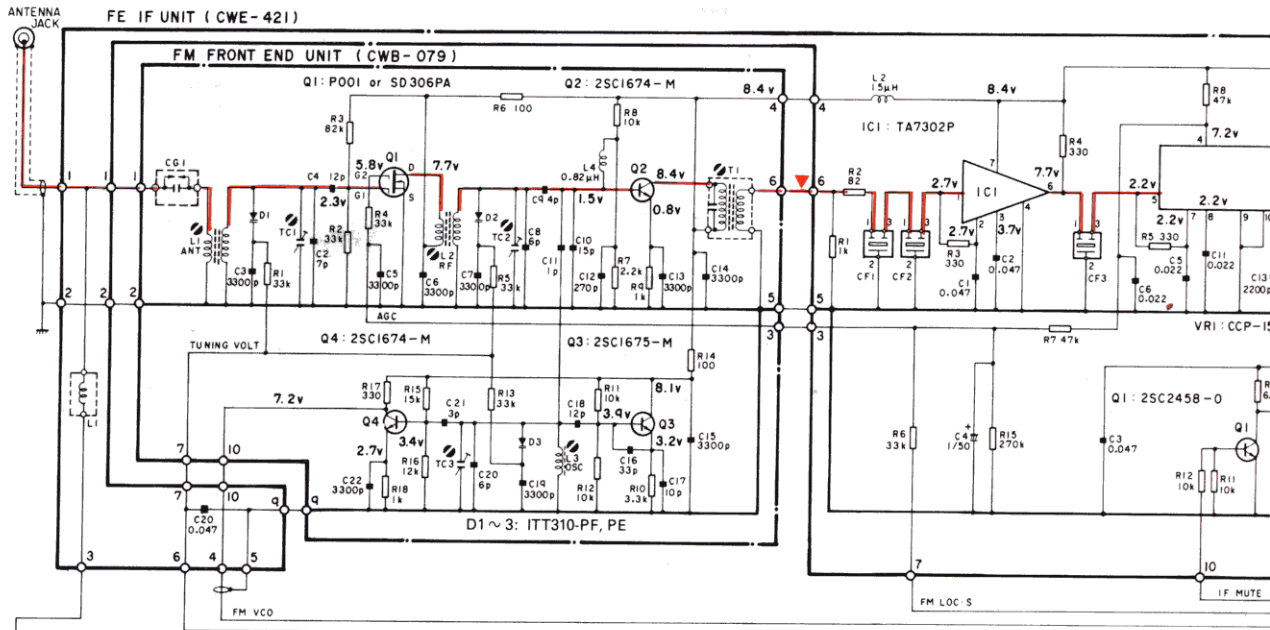
Frequency range 153 ~ 281 kHz
Usable sensitivity 70μV (37 dB) (S/N: 20 dB)
Selectivity 50 dB (±9 kHz)

Note:

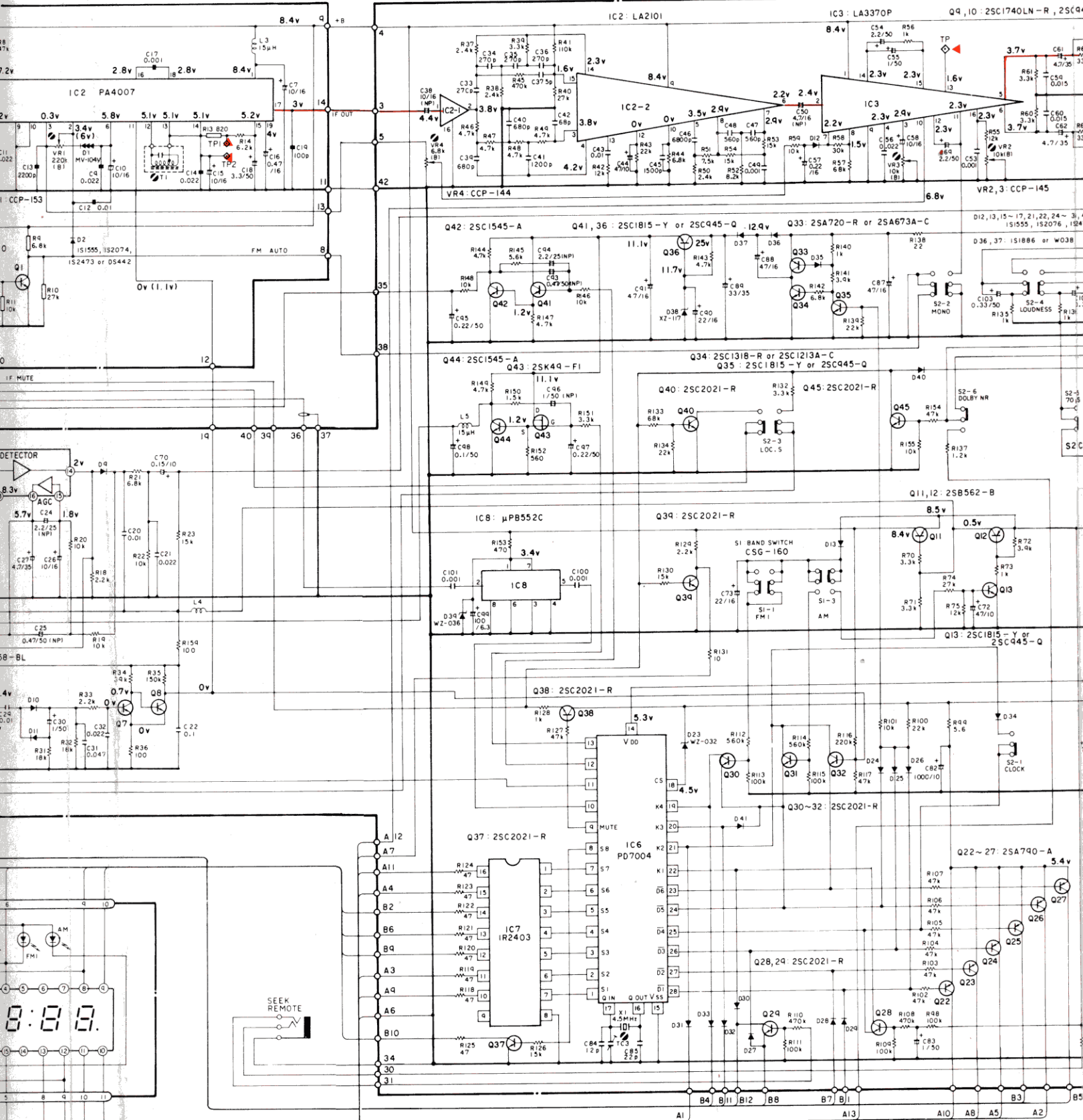
Specifications and the design are subject to possible modification without notice due to improvements.

- 'Dolby' and the double-D symbol are trademarks of Dolby Laboratories Licensing corporation.
- Noise Reduction System manufactured under license from Dolby Laboratories Licensing Corporation.

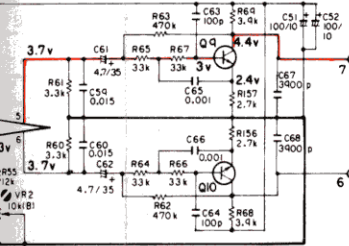
5. SCHEMATIC CIRCUIT DIAGRAM (KEX-70)



TUNER CONTROL UNIT (CWM-070)



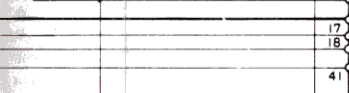
2SC1740LN-R, 2SC945L-P or 2SC732TM-GR



2, 3: CCP-145

13, 15-17, 21, 22, 24-38, 40, 41: 1S1955, 1S2076, 1S2473 or D5442

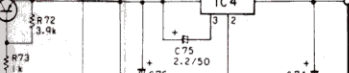
37: 1S1886 or W038



S2-4: LOUDNESS

S2-5: 70 μS

S2: CSG-161



IC4: LVC509

8.5v 4

13.8v

Q21: 2SC1061-B

5.4v

6.5v

2SA790-A

Q27

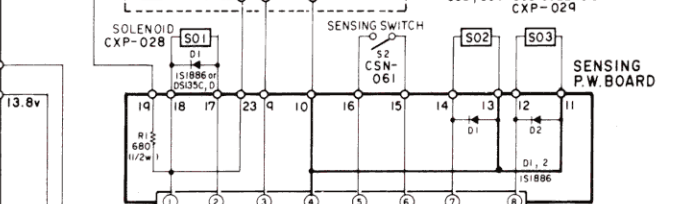
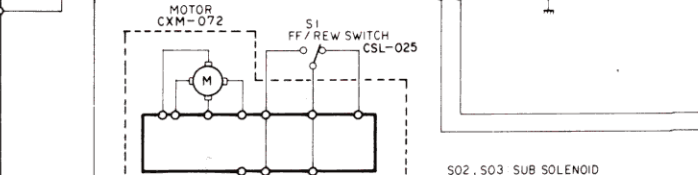
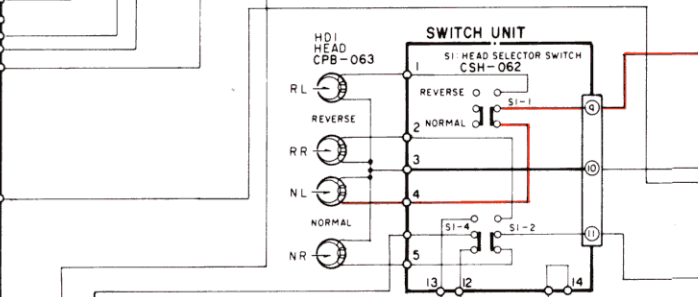
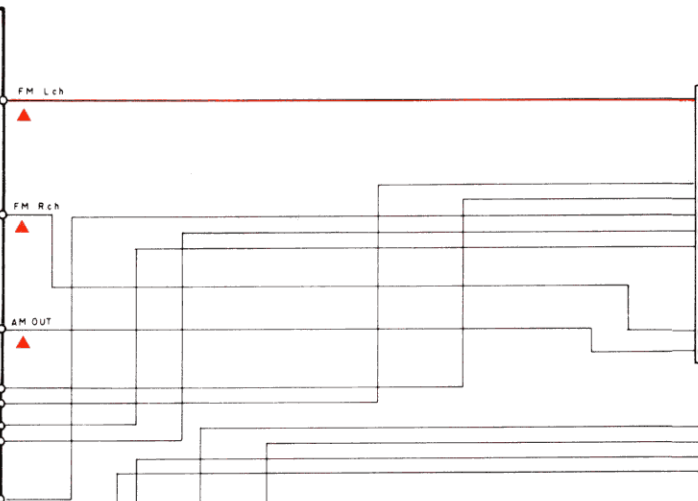
Q26

Q25

Q19, 20: 2SC1815-Y or 2SC945-Q

13.8v

Q18: 2SD837-P



Q14, 15: 2SC1815-Y or 2SC945-Q

Q16, 17: 2SB762-P

Q18: 2SD837-P

Q19, 20: 2SC1815-Y or 2SC945-Q

Q21: 2SC1061-B

Q22: 2SC1061-B

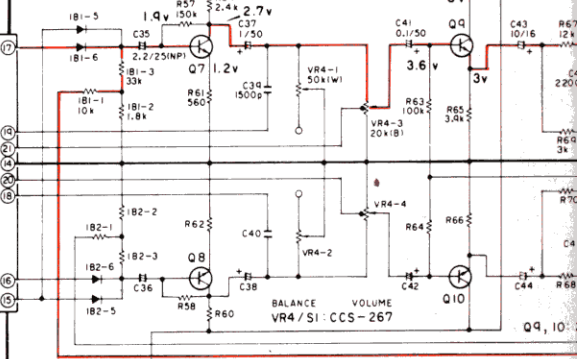
Q23: 2SC1061-B

Q24: 2SC1061-B

Q25: 2SC1061-B

AMP UNIT (CWK-238)

Q7, 8: 2SC1740LN-R, 2SC945L-Q, 2SC2458L-Y or 2SC2634NC-R



Q9, 10: 2SC1061-B

IC1: MB3106M

Q1-4: 2SC1740LN-R or 2SC945L-Q

VR1: 2: CCP-150

Q3: 2SC1061-B

Q4: 2SC1061-B

Q5: 2SC1061-B

Q6: 2SC1061-B

Q7: 2SC1740LN-R or 2SC945L-Q

Q8: 2SC1740LN-R or 2SC945L-Q

Q9: 2SC1061-B

Q10: 2SC1061-B

Q11: 2SC1061-B

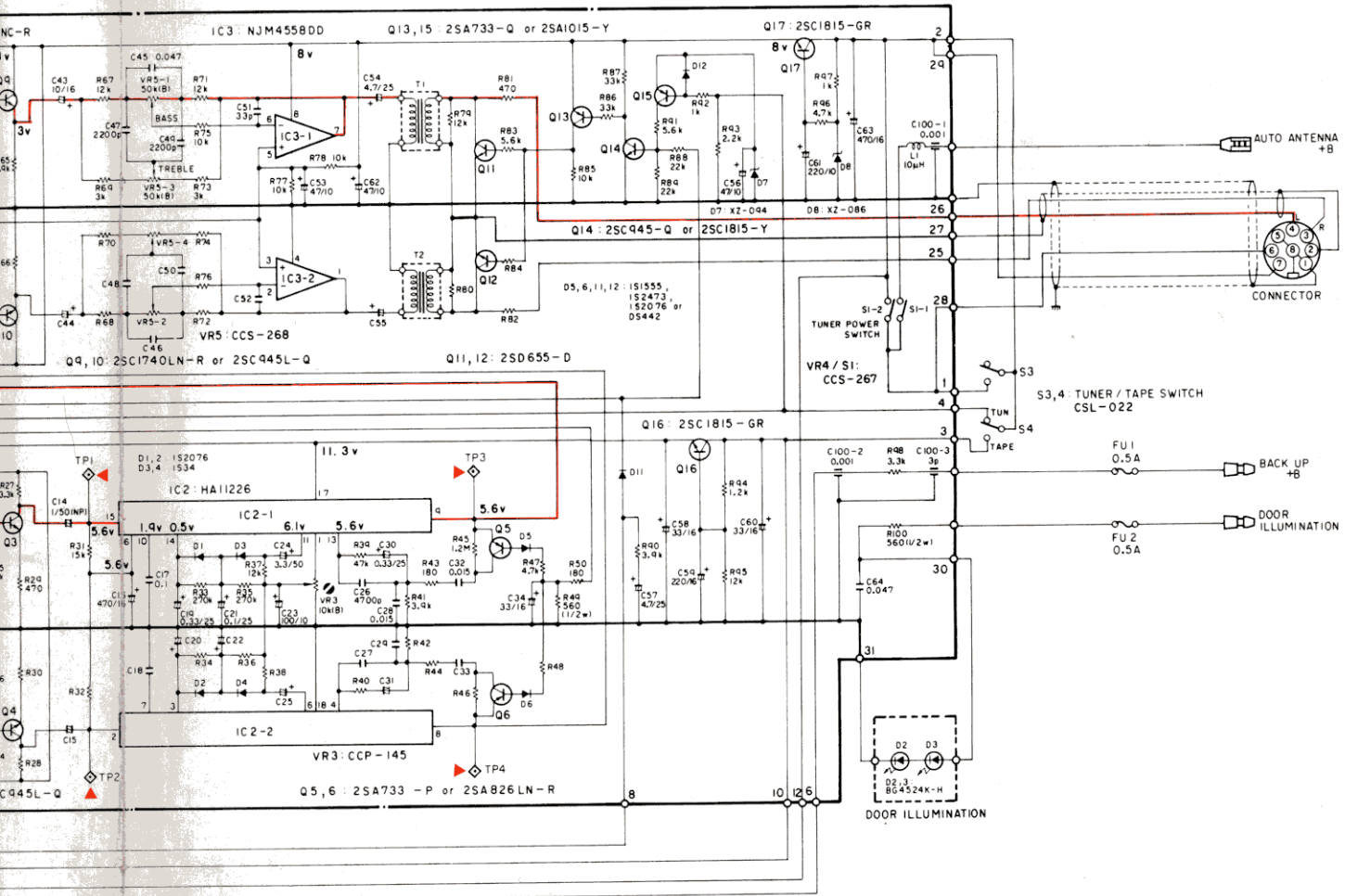
Q12: 2SC1061-B

Q13: 2SC1061-B

Q14: 2SC1815-Y or 2SC945-Q

Q15: 2SC1815-Y or 2SC945-Q

- SWITCHES:
- ⊙ TUNER CONTROL UNIT
 - S1 BAND FM1
 - S2 CLOCK ON
 - MONO ON
 - LOC.S ON
 - LOUDNESS ON
 - 70 μS ON
 - DOLBY NR ON
 - ⊙ AMP UNIT
 - S1: TUNER POWER ON



UNIT

FM1	FM2	AM
ON	OFF	
ON	OFF	
ON	OFF	
ON	OFF	
ON	OFF	
ON	OFF	
ON	OFF	
ON	OFF	
ON	OFF	
ON	OFF	

- ⊙ SWITCH UNIT
- S1: HEAD SELECTOR REVERSE — NORMAL
- ⊙ MISCELLANEOUS
- S1: FF / REW FF / REW PLAY
 - S2: SENSING ON — OFF
 - S3, 4 : TUNER / TAPE TUNER — TAPE

The underlined indicates the switch position.

Note:
The FM front end unit employs chip resistors indicated by "□" and chip capacitors indicated by "■".

Fig. 35

A

B

C

D