



SANYO

**SANYO
CASSETTE TAPE DECK
RD4600_{UM}
SERVICE MANUAL**



SPECIFICATIONS

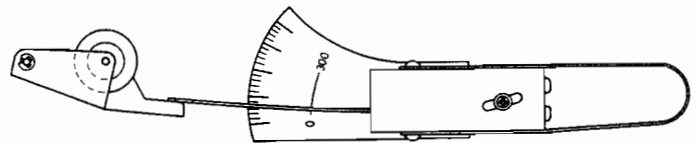
| | |
|-----------------------------------|---|
| Recording System: | AC bias 4 track 2 channel |
| Erasing system: | AC erase |
| Tape speed: | 1-7/8 IPS. (4.75 cm/sec.) |
| Recording time: | 60 min (C-60) |
| Rew & F. Fwd time: | 1 min. 30 sec. (C-60) |
| Frequency response: | 30 ~ 13,000 Hz 30 ~ 16,000 Hz (CrO2 tape) |
| Signal to Noise ratio: | Dolby OFF: 50dB ON: 58 dB |
| Wow & Flutter: | 0.07% WRMS |
| Bias oscillator frequency: | 90 ~ 103 kHz |
| Input terminal: | MIC: -70 dB 200 ~ 10 k ohm AUX IN: -20 dB 100K ohm DIN INPUT: -55 dB 10K ohm LINE OUT: 0.775V 2K ohm DIN OUTPUT: 0.775V 2K ohm HEADPHONE: 30mV 8 ohm |
| Output terminal: | 20 W |
| Power consumption: | 20 W |
| Power source: | AC 110 125, 220V 50/60 Hz |
| Dimension (approx.): | 466 x 284 x 104 mm |
| Weight (approx.): | 7.5 kg |

DISASSEMBLY INSTRUCTION

1. Remove the AC power supply cord from the unit.
2. Remove the Dolby level control knobs on the front of the unit.
3. Put the unit front side down on a soft sheet.
4. Remove two washers and legs each at the front on the cabinet bottom.
5. Turn over unit and take away the chassis from the cabinet.
6. Remove the seven screws (Pan Hd. Tapping 3 x 8 4, Pan Hd. 3 x 35 1, Pan Hd. 3 x 30 2) fixing deck panel to chassis.
7. Remove four level control knobs from shafts.
8. Pull out a shaft from hinge for meter panel and operation panel.
NOTE:
Should not lose two spring coils for meter deck panel.
9. To remove the meter deck panel from operation panel, pull out a pin fixing damper of panel-up mechanism to chassis, and remove the two jumper lead's plugs which connect deck panel with chassis.

PINCH ROLLER ADJUSTMENT

1. Set the unit into the PLAY mode.
2. Apply a tension gauge to the pinch roller. Read the gauge at the precise moment when the pinch roller separates from the capstan.
3. If the gauge reading falls more than 100 gr, no adjustment is necessary. If otherwise, make adjustment by changing the force of the spring coil. (See exploded view No. 17)

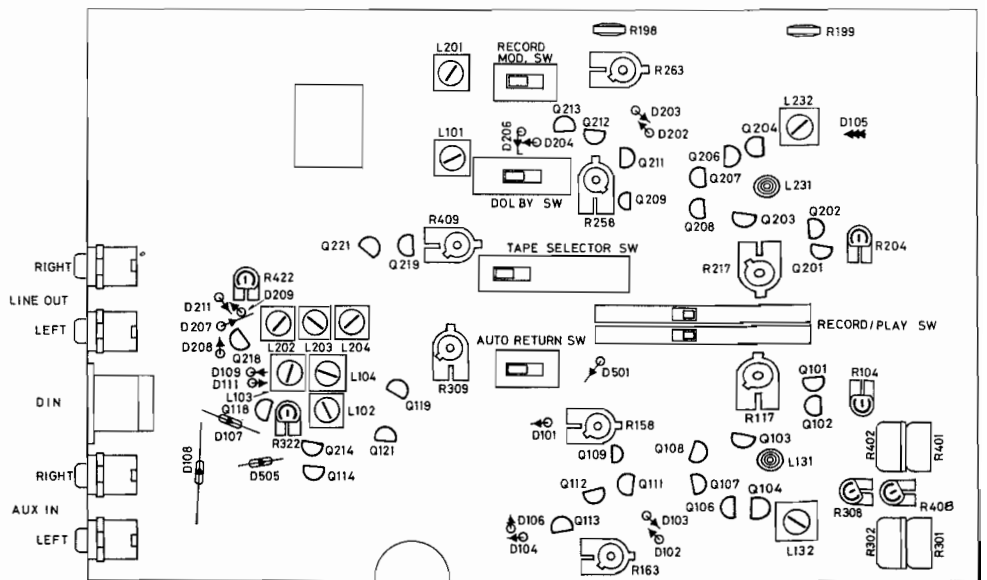
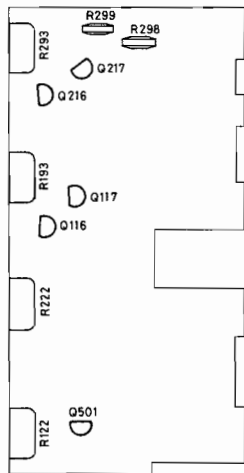
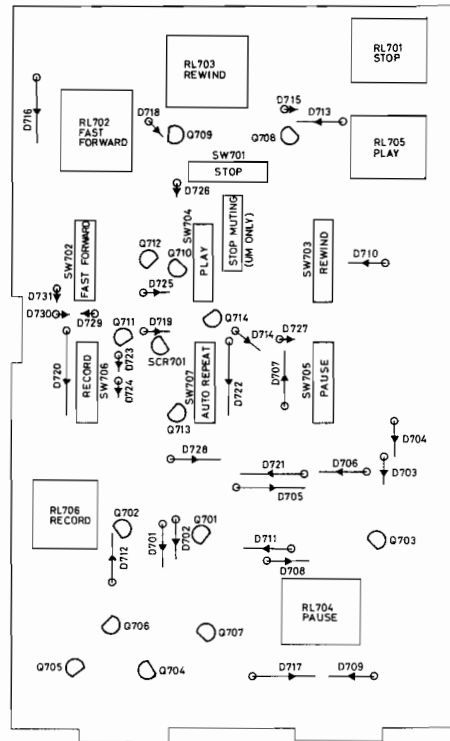
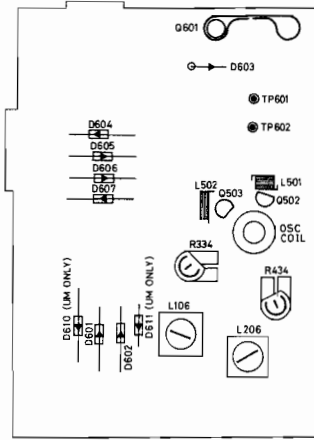


TORQUE ADJUSTMENT

1. Set the unit into the PLAY, FAST FORWARD or REWIND mode.
2. Measure the each torque with a torque gauge. They should be as following:

| | |
|--------------|--------------------|
| PLAY | 30 - 50 gr/cm |
| FAST FORWARD | more than 90 gr/cm |
| REWIND | more than 90 gr/cm |
3. If the each torque fails to reach the standard value. Clean the drive belt, flywheel, motor pulley, take-up reel, take-up pulley, idler and rewind roller with a cotton swab soaked in alcohol.

PARTS LOCATION

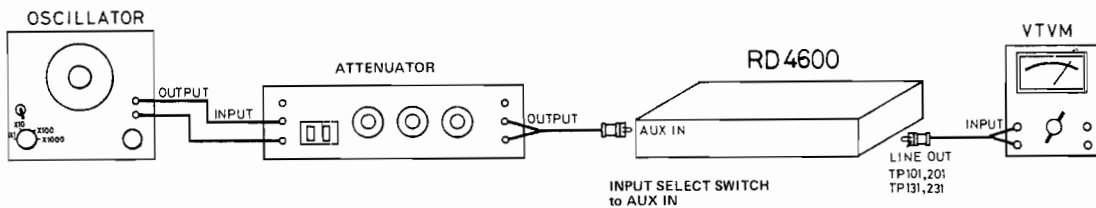


ADJUSTMENT

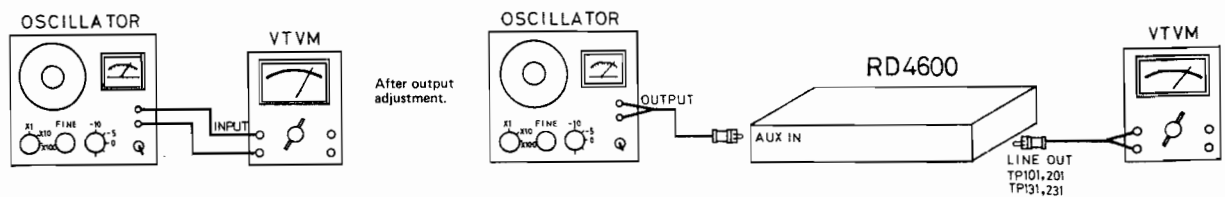
| | SWITCH POSITION | | | | | | VOLUME | | |
|-----------------------------|-----------------|----------|------------|------------------|-------------|-----------|--------------|---------------|-------------|
| | R/P | LINE/MIC | ST LH CrOz | DOLBY ON/OFF | AUTO RETURN | 400Hz OSC | OUTPUT LEVEL | INPUT LEVEL | DOLBY LEVEL |
| Head azimuth | P | --- | ST | OFF | --- | OFF | Adjust | Max. | Center |
| Wow & flutter | P | --- | ST | OFF | --- | OFF | Adjust | Max. | Center |
| Playback gain | P | --- | ST | OFF | --- | OFF | Max. | Max. | Center |
| Playback frequency response | P | --- | ST | OFF | --- | OFF | Adjust | Max. | Center |
| Bias trap | ① | R | MIC | ST | OFF | --- | Max. | Max. | Center |
| | ② | R | MIC | ST | OFF | --- | Max. | Max. | Center |
| Bias current | R | MIC | ST | OFF | --- | OFF | Max. | Max. | Center |
| 19kHz trap | R | MIC | ST | OFF | --- | OFF | Max. | Max. | Center |
| Dolby | ① | R | LINE | ST | OFF | --- | Max. | Max. | Center |
| | ② | R | LINE | ST | OFF | --- | Max. | Max. | Center |
| | ③ | R | LINE | ST | ON | --- | Max. | Max. | Center |
| | ④ | R | LINE | ST | ON | --- | Max. | Max. | Center |
| | ⑤ | R | LINE | ST | ON/OFF | --- | Max. | Max. | Center |
| Recording Current | ① | R | LINE | ST | OFF | --- | Max. | Max. | Center |
| | ② | R | LINE | ST | OFF | --- | Max. | Max. | Center |
| | ③ | P | LINE | ST | OFF | --- | Max. | Max. | Center |
| | ④ | R | LINE | CrO ₂ | OFF | --- | Max. | Max. | Center |
| | ⑤ | P | LINE | CrO ₂ | OFF | --- | Max. | Max. | Center |
| 400Hz OSC | R | LINE | ST | OFF | --- | ON | Max. | Adjust | Center |
| Meter | ① | R | LINE | ST | OFF | --- | Max. | Adjust | Center |
| | ② | R | LINE | ST | OFF | --- | Max. | At position ① | Center |
| Peak level | ① | R | LINE | ST | OFF | --- | Max. | Max. | Center |
| | ② | R | LINE | ST | OFF | --- | Max. | Max. | Center |
| | ③ | R | LINE | ST | OFF | --- | Max. | Max. | Center |

CONNECTIONS

There is no level meter for the CR oscillator but the attenuator is connected.



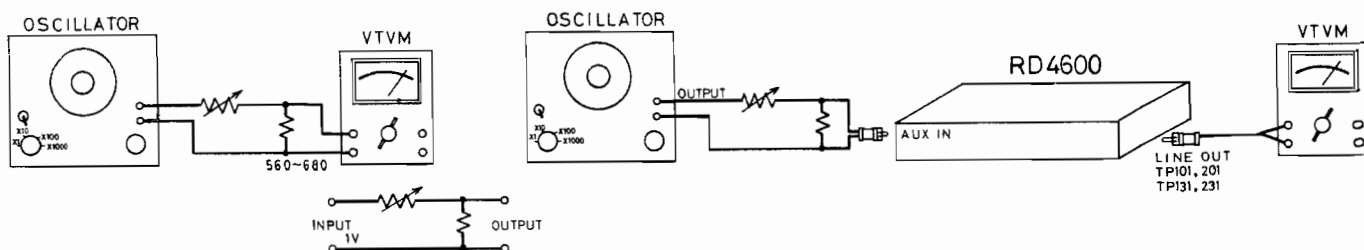
The CR oscillator is hooked to the level meter (VTVM) but the attenuator is not used.



Turn both the FINE and OUTPUT knobs while watching VTVM to adjust the output to 0 dB=1V or 0 dBm=0.775V.

| Frequency (Hz) | INPUT | | OUTPUT | | ADJUSTMENT | | REMARK |
|----------------|----------------|-----------------------|-----------------|--|----------------|----------------|---|
| | INPUT Terminal | INPUT Level | OUTPUT Terminal | OUTPUT Level (VTVM) | Left Channel | Right Channel | |
| | | Test tape | LINE OUT | 0.1 ~ 1V | | | 10kHz recorded test tape. |
| | | Test tape | LINE OUT | 0.1 ~ 1V | | | 3kHz recorded test tape. |
| 400 | | 400Hz Dolby test tape | TP-131 231 | 580mV | SVR R117 | SVR R217 | 400Hz Dolby test tape. Adjust SVRs to obtain output of 580mV. |
| | | Test tape | LINE OUT | 0.1 ~ 1V | SVR R104 | SVR R204 | Playback 1kHz & 10kHz using test tape. Adjust SVRs R104 & R204 for standard frequency characteristics. |
| | | Non input power | LINE OUT | Hum + noise + bias leakage = less than 6mV | L101 | L201 | Adjust L101 & L201 to obtain output of min. |
| | | Non input power | PA | | L106 | L206 | Adjust L106 & L206 to obtain output of min (less than 200mV). |
| | | Non input power | TP-101 201 | 1.2mV | SVR R334 | SVR R434 | Adjust SVRs to obtain output of standard output. |
| 19K | MIC | | LINE OUT | | L132 | L133 | Adjust L132 & L133 to obtain output of min. |
| 400 | AUX IN | | TP-131 231 | 580mV | Input level VR | Input level VR | Adjust input level VRs to obtain output of 580mV. |
| 5K | AUX IN | Input ① - 30dB | TP-131 231 | 18mV | | | Adjust input power to input ① - 30dB. |
| 5K | AUX IN | Input ① - 30dB | TP-131 231 | 58mV | SVR R163 | SVR R263 | Turn SVR R158 & R258 to obtain output of max. Adjust SVR R163 & R263 to obtain output of standard output. |
| 5K | AUX IN | Input ① - 30dB | TP-131 231 | 46mV | SVR R158 | SVR R258 | Adjust SVR R158 & R258 to obtain output of standard output. |
| 5K | AUX IN | Input ① - 30dB | TP-131 231 | | | | Turn ON & OFF Dolby switch. Confirm difference in output is larger than 8dB. If not, re-adjust. |
| 400 | AUX IN | 89mV ±12.6mV | TP-131 231 | 580mV | Input level VR | Input level VR | Adjust input level VRs to obtain output of standard output. |
| 400 | AUX IN | Same as input ① | TP-131 231 | 580mV | SVR R309 | SVR R409 | Playback recorded tape. Adjust SVRs R309 & R409 to make output levels identical. Use BASF C=60 tape. |
| 400 | AUX IN | Playback ② | TP-131 231 | 580mV | | | |
| 400 | AUX IN | Same as input ① | TP-131 231 | 580mV | SVR R308 | SVR R408 | Playback recorded tape. Adjust SVRs R308 & R408 to make output levels identical. Use Chrome C=60 tape. |
| 400 | AUX IN | Playback ④ | TP-131 231 | 580mV | | | |
| | | | LINE OUT | 0.775V | Input level VR | Input level VR | Adjust input level VRs to obtain output of 0.775V. OSC frequency 400±30dB. |
| 400 | AUX IN | 100mV ±18mV | TP-131 231 | 460mV | Input level VR | Input level VR | Adjust input level VRs to obtain output of standard output. |
| 400 | AUX IN | Same as input ① | | | SVR R199 | SVR R299 | Adjust SVRs R199 & R299 until meters on amplifier stand at 0VU. |
| 400 | AUX IN | 100mV ±18mV | TP-131 231 | 460mV | Input level VR | Input level VR | Adjust input level VRs to obtain output of standard output. |
| 400 | AUX IN | Same as input ① | TP-131 231 | 460mV | SVR R198 | SVR R298 | Meter readings should be 0dB at standard output level, at which peak indicator lamps should go on. Adjust SVRs so peak indicator lamps go off when input, decreases by 1dB. |
| 400 | AUX IN | Input - 1dB | TP-131 231 | 460mV | SVR R198 | SVR R298 | |

- NOTES. 1. Keep at hand test tape, VTVM, CR OSC and tester in making repairs and conducting inspection work.
2. Do not allow grounding current to flow with voltage being applied to base-emitter circuit of Q601 (2SC1383), when conducting inspection or making repairs. Otherwise, transistor will be destroyed.
3. Discharge capacitors prior to parts replacement.



EXAMPLE: Regulate VR so that output is 79mV to attenuate 22 dB at input of 1V.
Regulate VR so that output is 7.9mV to attenuate 42 dB at input of 1V.
Regulate VR so that output is 2.5mV to attenuate 52 dB at input of 1V.

PARTS LIST

| Key. No. | Part No. | Description | Q'ty |
|----------------|------------------|---|------|
| PACKING | | | |
| | 141-6-132T-51603 | Individual carton | 1 |
| | 141-6-313T-01700 | Styrol filler, Side pad | 2 |
| | 141-6-479T-01900 | Label, DOLBY | 1 |
| | 141-6-455T-01101 | Serial number plate | 2 |
| | 141-6-411T-56401 | Instruction booklet | 1 |
| | 141-6-472T-05604 | Caution label, Power supply cord | 1 |
| | 141-6-415T-07101 | Notice, Head slide protector | 1 |
| | 141-6-316T-60700 | Pad, Remote control unit | 1 |
| | 141-117-00 | Remote control unit RB9600 | 1 |
| | | Polyethylene bag 100 x 200mm, Remote control unit & Cord | 4 |
| | 141-6-415T-11100 | Polyethylene bag 500 x 700mm, Set Notice, Swedish | 1 |
| | 141-6-421T-27600 | Schematic diagram | 1 |
| | 141-6-415T-06700 | Notice, SEMKO | 1 |
| | 147-2-196T-00300 | Cleaner stick | 1 |

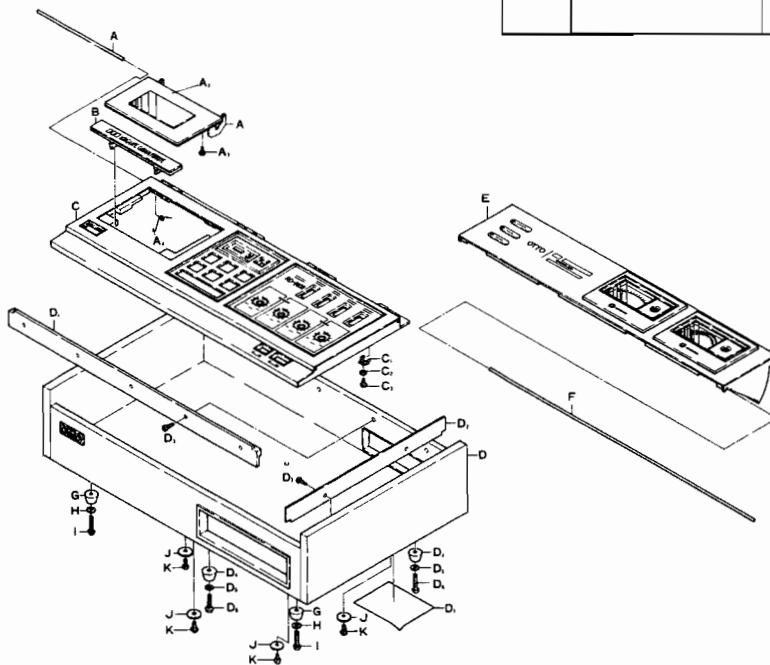
CABINET

| Key. No. | Part No. | Description | Q'ty |
|----------|------------------|--------------------------------------|------|
| D | 141-0-111T-05403 | Cabinet assembly | 1 |
| C | 141-0-121T-02000 | Deck panel assembly, Control | 1 |
| A | 141-0-124T-00900 | Cassette compartment lid assembly | 1 |
| B | 141-0-134T-01201 | Head cover assembly | 1 |
| E | 141-0-121T-01801 | Deck panel assembly, Meter | 1 |
| G | 123-2-174R-10700 | Stand, Rubber leg | 2 |
| J | 141-2-457T-05300 | Special washer, Cabinet fixer | 4 |
| F | 141-2-751T-61900 | Shaft, Meter deck panels' fulcrum | 1 |
| | 141-2-163T-17500 | Rotary knob, DOLBY CAL. | 2 |
| | 141-2-851T-76300 | Spring coil, (T-175) mtg. | 2 |
| | 141-2-163T-17100 | Rotary knob, DOLBY CAL. | 2 |
| | 141-0-163T-05600 | Rotary knob assembly | 4 |
| | 141-2-157T-18300 | Inlay, PAUSE | 1 |
| | 141-2-157T-18400 | Inlay, F. FWD | 1 |
| | 141-2-157T-18500 | Inlay, AUTO REPEAT PLAY | 1 |
| | 141-2-157T-18600 | Inlay, REC | 1 |
| | 141-2-157T-18700 | Inlay, PLAY | 1 |
| | 141-2-157T-18800 | Inlay, REWIND | 1 |
| | | Fiber washer 4 x 13 x 0.5mm, chassis | 1 |

CHASSIS

| Key. No. | Part No. | Description | Q'ty |
|----------|------------------|-------------------------|------|
| | 141-2-311T-14300 | Chassis | 1 |
| | 141-2-741T-58700 | Lever, Record mechanism | 1 |

CABINET EXPLODED VIEW



| Key. No. | Part No. | Description | Q'ty |
|----------------|------------------|---|------|
| CHASSIS | | | |
| | 141-2-851T-70600 | Spring coil, Record mechanism | 1 |
| | 141-2-488T-00200 | Lock pin, Solenoid couple | 1 |
| | 141-2-743T-03300 | Arm, Solenoid mtg. | 1 |
| | 141-2-371T-05801 | Bracket, Transformer mtg. | 1 |
| | 141-2-143T-51400 | Marking plate, Rear jack base | 1 |
| | 147-2-411T-00600 | Plate nut, Insert chassis | 2 |
| | 141-2-751T-74300 | Shaft, REC lever fulcrum | 1 |
| | 141-0-741T-11400 | Lever assembly | 1 |
| | 141-2-464T-13100 | Fixer, Panel up couple | 1 |
| | 141-0-731T-07400 | Slide assembly, Panel up lock | 1 |
| | 141-2-741T-63800 | Lever, Slide (T-074) mtg. | 1 |
| | 141-2-488T-00400 | Lock pin, Lever (T-638) mtg. | 1 |
| | | Adhesive tape 5 x 10 x 5mm, Slide (T-704) to Lever (T-638) | 1 |
| | 141-2-751T-66900 | Shaft, Chassis (T-143) fixed | 1 |
| | 141-2-614T-04400 | Lever, Panel up lock | 1 |
| | 141-2-851T-71100 | Spring coil, Lever (T-044) lock operation | 1 |
| | 141-2-851T-76400 | Spring coil, Shaft (T-623) insert | 1 |
| | 141-2-377T-12500 | Bracket, VR mtg. | 1 |
| | 147-2-411T-00601 | Plate nut, Bracket (T-125) P.C.B. insert | 1 |
| | 123-2-457T-11700 | Special washer, VR mtg. to bracket (T-125) P.C.B. | 4 |
| | 141-2-365T-22200 | Bracket, DOLBY CAL SW mtg. | 1 |
| | 141-2-164T-09100 | Slide knob, CAL OSC SW | 1 |
| | 141-2-143T-51300 | Marking plate, Front jack base | 1 |
| | 147-2-411T-00601 | Plate nut, Marking plate (T-513) insert | 1 |
| | 141-2-322T-21100 | Shield plate | 1 |
| | 141-2-322T-21200 | Shield plate | 1 |
| | 141-2-322T-21300 | Shield plate | 1 |
| | 141-2-322T-21500 | Shield plate | 1 |
| | 141-2-411T-05900 | Plate nut, REC spring SW mtg. | 1 |
| | 141-0-741T-12600 | Lever assembly, Rec mechanism | 1 |
| | 141-2-322T-28400 | Shield plate, PT | 1 |
| | 141-2-322T-23200 | Shield plate, Chassis (T-143) mtg. | 1 |
| | 141-2-311T-14400 | Chassis, Relay SW | 1 |
| | 141-2-851T-70800 | Spring coil | 6 |
| | 141-2-445T-13400 | Rubber cushion, PL support | 6 |
| | 141-2-751T-62100 | Shaft, Push button (T-178) mtg. | 2 |
| | 141-2-161T-17800 | Push button | 6 |
| | 141-2-135T-41200 | Cover, voltage select | 1 |
| | | Fiber washer 3 x 8 x 0.5mm PCB mtg. | 1 |
| | 141-2-741T-80600 | Lever | 1 |
| | 141-2-569T-00900 | Guide shaft | 1 |
| | | Fiber heat 8 x 15 x 1 mm, Chassis mtg. | 1 |
| | 141-6-476T-03100 | Indication label | 2 |
| | 141-6-476T-04200 | Indication label | 1 |
| | 141-2-135T-22001 | Cover, Meter adjust hole | 2 |
| | | Felt 10 x 10 x 10mm, Shield plate mtg. | 1 |

PARTS LIST

| Key. No. | Part No. | Description | Q'ty | Key. No. | Part No. | Description | Q'ty |
|-------------------------|------------------|---|------|--|----------------------------------|---|------|
| CHASSIS | | | | ELECTRICAL PARTS | | | |
| | 141-0-161T-01700 | Push button assembly, stop | 1 | | 4-235T-21800 | Socket 3P, Panel ~Power supply P.C.B. | 1 |
| | 141-2-741T-58400 | Lever | 1 | | 141-2-472T-01200 | Lug, Lead fixer | 1 |
| | 141-2-851T-70700 | Spring coil | 1 | | 4-511T-04072 | Meter, VU | 2 |
| | 141-2-751T-62000 | Shaft, Push button (T-017) mtg. | 1 | | 4-235R-15000 | Socket, Operation P.C.B. ~ REC solenoid (-) | 3 |
| | 123-2-445R-11000 | Rubber cushion, Chassis (T-144) insert | 1 | | | AUDIO Rewind SW | |
| | 141-0-162T-02200 | Lever knob assembly, Rec mode, Dolby N.R, Auto return | 3 | | | REC solenoid (+) | |
| | 141-2-741T-58600 | Lever | 4 | | 4-235T-27400 | Socket | 1 |
| | | Rubber cushion 4 x 10 x 1mm, Lever SW | 8 | | 141-2-472T-01200 | Lug, Lead fixer | 2 |
| | 141-2-161T-17600 | Push button, POWER SW | 1 | | 141-2-472T-02300 | Lug, VR earth | 4 |
| | 141-2-377T-12400 | Bracket, Chassis (T-143) fixer | 1 | | 123-2-474R-00200 | Tip plug, Auto repeat PL relay | 1 |
| | | Rubber cushion 8 x 10 x 10mm, P.C.B. and Bracket (T-124) mtg. | 1 | | 141-2-472T-01200 | Lug, Bias lead fixer | 1 |
| | 141-2-377T-12600 | Bracket, Power supply P.C.B. fixer | 1 | | 141-2-464T-08700 | Fixer, Lead | 2 |
| | 141-2-161T-18200 | Push button, MEMORY SW | 1 | | 4-235T-21900 | Socket, MAIN ~Operating P.C.B. (2-1 ~5) 5P | 1 |
| | 141-2-161T-18000 | Push button, EJECT | 1 | | 4-235T-21900 | Socket, MAIN ~Power supply (3-1 ~5) 5P | 1 |
| | 141-2-367T-25300 | Bracket, Remote control socket mtg. | 1 | | 141-2-472T-02200 | Lug, Shield plate fixer | 1 |
| | 141-2-143T-57100 | Marking plate, Voltage select socket | 1 | | | Adhesive tape 12 x 18mm, Shield plate | 5 |
| | 141-2-373T-04900 | Bracket, Meter fixer | 1 | | | Adhesive tape 12 x 22mm, Shield plate | 2 |
| | 141-2-741T-63900 | Lever, Lever lock (614T-044) take off | 1 | | | Adhesive tape 12 x 10mm, Shield plate SW | 3 |
| | 141-2-462T-28300 | Boss, Lever (T-639) mtg. | 1 | | | Adhesive tape 12 x 20mm, Shield plate | 1 |
| | 141-2-445T-13500 | Rubber cushion, Meter (T-04072) | 2 | | 123-2-368R-12900 | Heat sink, 2SC1383 | 1 |
| | 141-2-374T-08000 | Bracket, PL (T-048) mtg. | 1 | | 123-2-474R-00200 | Chip plug, | 2 |
| | 141-2-681T-01901 | Sleeve, Damper | 1 | PRINTED CIRCUIT BOARD ASSY (OPERATION) | | | |
| | 141-2-751T-40700 | Shaft, Damper | 1 | | 4-226T-66191 | Printed circuit board assembly, OPERATION | 1 |
| | 141-2-315T-10700 | Spring pin 2 x 10mm, Damper mtg. | 1 | SW701 ~ 707 | 4-231T-11901 | Special switch, Operation | 7 |
| | 141-2-488T-00200 | Reinforcement, Damper stopper | 1 | | 4-231T-11902 | Special switch, Muting | 1 |
| | 141-2-851T-76100 | Lock pin, Damper mtg. | 1 | RL701,704,705,706 | 4-232T-01803 | Relay | 4 |
| | 141-2-851T-76200 | Spring coil, Panel up | 1 | PL701,705 | 4-612T-05700 | Lamp 14V 30mA L=150mm | 2 |
| | 141-2-851T-76200 | Spring coil, Panel up | 1 | | 4-226T-07300 | Plug 12 pin, Mechanism ~ Operating P.C.B. | 1 |
| | 141-2-464T-13600 | Fixer, Spring coil (T-762) mtg. | 1 | | 4-236T-06100 | Plug 5 pin, Operating P.C.B. ~ MAIN P.C.B. | 1 |
| | 141-2-851T-53400 | Spring coil, Lever (T-639) | 1 | PL702,703 | 4-612T-05772 | Lamp 14V 30mA L=90mm | 2 |
| | 141-2-445T-08700 | Rubber cushion, PL mtg. | 1 | PL704,706 | 4-612T-05771 | Lamp 14V 30mA L=130mm | 2 |
| | 141-0-162T-02201 | Lever knob Assy, Tape select | 1 | RL702,703 | 4-232T-04100 | Relay | 2 |
| | 141-0-161T-01600 | Push button assy, panel up | 1 | | 4-232T-04300 or | | |
| | 141-2-751T-62300 | Shaft, panel up connection rod | 1 | | 4-232T-04171 | | |
| | | | | | 4-253T-01019 | H.F. choke coil 4.7mH | 1 |
| ELECTRICAL PARTS | | | | | L701 | Transistor 2SC945Q | 7 |
| T501 | 4-251T-35100 | Power transformer | 1 | Q701,702,706,709,711,712,713 | | | |
| | 4-264T-04400 | Magnetic coil, REC | 1 | Q703,705 | Transistor 2SA564R or 2SA573 (4) | | 2 |
| | 4-231T-40800 | Power switch | 1 | Q707 | Transistor 2SC945R | | 1 |
| | 4-231T-11903 | Special switch, REC solenoid | 2 | Q704,708 | Transistor 2SA561(0, Y) | | 2 |
| | 4-231T-53600 | Switch, voltage select | 1 | Q710,714 | Transistor 2SA564R or 2SA573(4) | | 2 |
| | 123-2-464R-14400 | Fixer, Power supply cord | 1 | SCR701 | Silicon control rectifier M21C | | 1 |
| | 123-2-474R-00200 | Tip plug, PT 6V | 1 | D701,702,703,704,705,706,707,708,709,710,711,712,713,714,715,716,717,718,719,720,721,722,723,724,725,726,727,728,729,730,731 | Diode DS-442 or 1S2473 | | 31 |
| | 141-2-464T-07400 | Fixer, AC ourd | 1 | | | | |
| | 141-2-464T-08700 | Fixer, Wiring disposition | 1 | | | | |
| | 123-2-474R-00200 | Tip plug, REC solenoid | 2 | | | | |
| | 4-243T-03100 | Lead, RCA shield wire | 4 | | | | |
| D608,609 | 4-231T-03101 | Diode 1N4002, REC solenoid | 2 | | | | |
| | 123-2-382R-00600 | Terminal, REC. solenoid, Solenoid SW | 3 | | | | |
| | 141-2-472T-01200 | Lug, AC lead fixer | 1 | | | | |
| | 123-2-472R-00600 | Lug, R/P head lead fixer | 1 | | | | |
| | 123-2-472R-00600 | Lug, Power SW earth | 1 | | | | |
| | 123-2-472R-00400 | Lug, Power SW earth | 1 | | | | |
| | 4-241T-08300 | Cassette tape C-12 type | 1 | | | | |
| | 141-2-472T-01200 | Lug, REC solenoid & SW lead fixer | 1 | | | | |
| | 4-243T-77172 | Power supply cord | 1 | | | | |
| | 4-234T-03600 | Fuse 2A SEMCO | 1 | | | | |
| | 4-234T-01900 | Fuse 0.8A SEMCO | 2 | | | | |
| | 141-2-383T-02001 | Fuse holder 3P | 1 | | | | |
| | 123-2-472R-00600 | Lug, PT case earth, Power SW shield earth | 2 | | | | |
| | 123-2-472R-00400 | Lug, REC solenoid earth | 1 | | | | |
| PL003 | 4-612R-12484 | Lamp, DOLBY 6V 30mA | 1 | | | | |
| PL004,005 | 4-612R-10172 | Lamp, Peak indicator 6V 30mA L=500mm | 2 | | | | |
| PL001 | 4-612R-12484 | Lamp, MEMORY 6V 30mA | 1 | | | | |
| PL002 | 4-612R-12484 | Lamp, CrO2 6V 30mA | 1 | | | | |
| | 4-235T-22100 | Socket 8P, Panel ~MAIN | 1 | | | | |

NOTES: 1. Parts orders must contain Model Number, Part Number and Description.
 2. Unless otherwise noted, component parts indicated by parentheses in the column Q'ty are not available.
 3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

PARTS LIST

| Key No. | Part No. | Description | Q'ty |
|---|--------------|--|------|
| PRINTED CIRCUIT BOARD ASSY (OPERATION) | | | |
| CAPACITORS | | | |
| C708 | | Electrolytic 0.22μF 16V | 1 |
| C716 | | Electrolytic 0.47μF 16V | 1 |
| C706,710 | | Electrolytic 1μF 16V | 2 |
| C705,707 | | Electrolytic 4.7μF 16V | 2 |
| C700,703 | | Electrolytic 10μF 16V | 2 |
| C704 | | Electrolytic 22μF 16V | 1 |
| C715 | | Electrolytic 22μF 25V | 1 |
| C701 | | Electrolytic 47μF 25V | 1 |
| C702 | | Electrolytic 100μF 16V | 1 |
| RESISTORS | | | |
| R754 | | Carbon 33 ohm ±10%, 1/4W | 1 |
| R751 | | Carbon 150 ohm ±10%, 1/4W | 1 |
| R755 | | Carbon 220 ohm ±10%, 1/4W | 1 |
| R720,725,752 | | Carbon 1K ohm ±10%, 1/4W | 3 |
| R700,702 | | Carbon 1.5K ohm ±10%, 1/4W | 2 |
| R710 | | Carbon 1.8K ohm ±10%, 1/4W | 1 |
| R708,709,715 | | Carbon 2.2K ohm ±10%, 1/4W | 3 |
| R750,756 | | Carbon 2.7K ohm ±10%, 1/4W | 2 |
| R705 | | Carbon 3.9K ohm ±10%, 1/4W | 1 |
| R723,724 | | Carbon 5.6K ohm ±10%, 1/4W | 2 |
| R729 | | Carbon 6.8K ohm ±10%, 1/4W | 1 |
| R730 | | Carbon 8.2K ohm ±10%, 1/4W | 1 |
| R704,706,722,728,740 | | Carbon 10K ohm ±10%, 1/4W | 5 |
| R714 | | Carbon 12K ohm ±10%, 1/4W | 1 |
| R716,721 | | Carbon 15K ohm ±10%, 1/4W | 2 |
| R717,727 | | Carbon 33K ohm ±10%, 1/4W | 2 |
| R703,719 | | Carbon 47K ohm ±10%, 1/4W | 2 |
| R707 | | Carbon 100K ohm ±10%, 1/4W | 1 |
| R711,712,713 | | Carbon 120K ohm ±10%, 1/4W | 3 |
| R718,726 | | Carbon 270K ohm ±10%, 1/4W | 2 |
| PRINTED CIRCUIT BOARD ASSY (VR) | | | |
| R122,222 | 4-226T-60999 | Printed circuit board assembly, VR | 1 |
| R193,293 | 4-222T-34000 | Variable resistor 50KA, Record VR | 2 |
| | 4-222T-33900 | Variable resistor 10KA, Line out VR | 2 |
| R299 | 4-222T-03100 | Variable resistor 2KB, Right meter | 1 |
| R298 | 4-222R-61100 | Variable resistor 5KB, Right Peak ind. | 1 |
| S7 | 4-231T-42000 | Switch, DOLBY 400Hz OSC Terminal, TP | 1 |
| | 4-237T-00100 | | 2 |
| Q116,216 | | Transistor 2SC945P, Q | 2 |
| Q117,217,501 | | Transistor 2SC945P | 3 |
| CAPACITORS | | | |
| C113,213,114,214,116,216 | | Electrolytic 4.7μF 16V | 6 |
| C512 | | Electrolytic 10μF 16V | 1 |
| C117,217 | | Electrolytic 33μF 16V | 2 |
| C511 | | Electrolytic 100μF 6.3V | 1 |
| C500 | | Mylar 0.0022μF ±20% 50WV | 1 |
| C507,508,509 | | Mylar 0.01μF ±10% 50WV | 3 |
| C506 | | Mylar 0.039 or 0.04μF ±20% 50WV | 1 |
| RESISTORS | | | |
| R192,292 | | Carbon 100 ohm ±5%, 1/4W | 2 |
| R194,294 | | Carbon 100 ohm ±10%, 1/4W | 2 |
| R329,429 | | Carbon 180 ohm ±10%, 1/4W | 2 |
| R197,297 | | Carbon 820 ohm ±10%, 1/4W | 2 |

| Key No. | Part No. | Description | Q'ty |
|---|--------------|--|------|
| PRINTED CIRCUIT BOARD ASSY (VR) | | | |
| R512 | | Carbon 1.8K ohm ±10%, 1/4W | 1 |
| R509 | | Carbon 3.9K ohm ±10%, 1/4W | 1 |
| R342,442 | | Carbon 4.7K ohm ±10%, 1/4W | 2 |
| R127,227 | | Carbon 6.8K ohm ±5%, 1/4W | 2 |
| R191,291,507,516 | | Carbon 15K ohm ±10%, 1/4W | 4 |
| R128,228 | | Carbon 18K ohm ±5%, 1/4W | 2 |
| R506,513 | | Carbon 18K ohm ±10%, 1/4W | 2 |
| R514 | | Carbon 22K ohm ±10%, 1/4W | 1 |
| R508 | | Carbon 47K ohm ±10%, 1/4W | 1 |
| R129,229,500,501 | | Carbon 68K ohm ±10%, 1/4W | 4 |
| R196,296 | | Carbon 100K ohm ±10%, 1/4W | 2 |
| PRINTED CIRCUIT BOARD ASSY (MAIN AMP.) | | | |
| | 4-226T-60891 | Printed circuit board assembly, MAIN | 1 |
| R301,302,401,402 | 4-222T-34200 | Variable resistor 20KB x 2 | 2 |
| R117,217 | 4-222R-60900 | Potentiometer 50KB, | 2 |
| R199 | 4-222T-03100 | Potentiometer 2KB, Left meter | 1 |
| R198 | 4-222R-61100 | Potentiometer 5KB, Left peak ind. | 1 |
| R163,263 | 4-222T-32200 | Potentiometer 500B, DOLBY gain | 2 |
| R158,258 | 4-222T-39475 | Potentiometer 10KB, DOLBY ATT. | 2 |
| R104,204 | 4-222T-34800 | Variable resistor 200KB, Frequency response (Playback) high | 2 |
| R308,408 | 4-222T-29800 | Variable resistor 10KB, Bias | 2 |
| R322,422 | 4-222T-29871 | Variable resistor 20KB, CrO ₂ frequency response (Record) | 2 |
| R309,409 | 4-222R-61500 | Variable resistor 10KB, Bias | 2 |
| L101,201 | 4-255R-10400 | Choke coil 5.6mH, IF | 2 |
| L102,202 | 4-252T-03200 | Choke coil 10mH | 2 |
| L103,203 | 4-252T-03100 | Choke coil 12mH | 2 |
| L104,204 | 4-252T-03300 | Choke coil 6.8mH | 2 |
| L131,231 | 4-252T-02900 | L.F. choke coil 36mH, DOLBY | 2 |
| L132,232 | 4-252T-02800 | L.H. choke coil 23mH, 19kHz trap DOLBY | 2 |
| | 4-235T-25000 | Socket, MIC | 2 |
| | 4-235T-25100 | Socket, Headphone | 1 |
| | 4-235T-23700 | Socket, LINE IN, LINE OUT | 4 |
| | 4-235T-23100 | Socket, DIN | 1 |
| | 4-231T-40100 | Slide switch, Auto return | 1 |
| | 4-231T-11302 | Slide switch, R/P | 2 |
| | 4-231T-40200 | Slide switch, DOLBY | 1 |
| | 4-231T-40171 | Slide switch, Line/MIC DIN | 1 |
| | 4-231T-16000 | Slide switch, CrO ₂ /LH/Normal | 1 |
| | 4-235R-15000 | Terminal, Lead relay | 1 |
| | 4-236T-06100 | Plug 5 pin, Mechanism ~ MAIN | 1 |
| | 4-236T-06000 | Plug 8 pin, Panel ~ MAIN | 1 |
| Q109,209 | | FET 2SK30D | 2 |
| Q101,201 | | Transistor 2SC644T, S | 2 |
| Q102,202,103,203 | | Transistor 2SC644S | 4 |
| Q104,204 | | Transistor 2SC945R | 2 |
| Q106,206 | | Transistor 2SA628E | 2 |
| Q107,207 | | Transistor 2SC644R | 2 |
| Q108,208 | | Transistor 2SC945Q | 2 |
| Q111,211 | | Transistor 2SC945R | 2 |
| Q112,212 | | Transistor 2SA628E | 2 |
| Q113,213 | | Transistor 2SC945R, Q | 2 |
| Q114,214 | | Transistor 2SD227W, S | 2 |
| Q118,218,119,219,121,221 | | Transistor 2SC945P | 6 |
| D101,104,204,505 | | Diode 1N60 | 4 |
| D102,103,106,202,203,206 | | Diode DS442 | 6 |
| D107,207,108,208 | | Diode 1N60 | 4 |
| D109,209,111,211 | | Diode DS442 | 4 |

NOTES: 1. Parts orders must contain Model Number, Part Number and Description.
 2. Unless otherwise noted, component parts indicated by parentheses in the column Q'ty are not available.
 3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

PARTS LIST

| Key No. | Part No. | Description | Q'ty | Key No. | Part No. | Description | Q'ty |
|---|----------|--------------------------------------|------|--|---------------|---------------------------------------|------|
| PRINTED CIRCUIT BOARD ASSY (MAIN AMP.) | | | | PRINTED CIRCUIT BOARD ASSY (MAIN AMP.) | | | |
| D105 | | Diode VD1211 B1 } Pair or | 1 | R321,421 | | Carbon 1.5K ohm ±10%, 1/4W | 2 |
| D105 (1) | | Diode 1S1211 | 1 | R311,411 | | Carbon 1.8K ohm ±10%, 1/4W | 2 |
| | | VD1212 Gr } Pair | 1 | R121,221, 126,226, 141,241, 517 | | Carbon 2.2K ohm ±10%, 1/4W | 7 |
| D501 | | Diode RD8,2E | 1 | R176,276 | | Carbon 2.7K ohm ±5%, 1/4W | 2 |
| CAPACITORS | | | | R154,254 | | Carbon 3.3K ohm ±2%, 1/4W | 2 |
| C153,253 | | Electrolytic 0.33µF 10W | 2 | R133,233 | | Carbon 3.3K ohm ±5%, 1/4W | 2 |
| C118,218, 505(1) | | Electrolytic 1µF 16 ~ 50WV | 3 | R102,202, 501 | | Carbon 3.3K ohm ±10%, 1/4W | 3 |
| C504 | | Electrolytic 1µF 16 or 25WV | 1 | R151,251 | | Carbon 2.7K ohm ±10%, 1/4W | 2 |
| C504(1) | | Electrolytic 2.2µF 16WV | 1 | R103,203 | | Carbon 3.9K ohm ±10%, 1/4W | 2 |
| C128,228 | | Electrolytic 3.3µF 25WV | 2 | R412 | | Carbon 4K ohm ±10%, 1/4W | 1 |
| C101,201, 106,206, 136,236, 121,221, 119,219, 111,211 | | Electrolytic 4.7µF 16WV | 12 | R116,216, 312,341, 441,518 | | Carbon 4.7K ohm ±10%, 1/4W | 6 |
| C122,222, 148,248, 139,239 | | Electrolytic 10µF 10WV | 6 | R111,211, 303,403 | | Carbon 5.6K ohm ±10%, 1/4W | 4 |
| C131,231, 137,237, 138,238, 154,254 | | Electrolytic 10µF 16WV | 8 | R137,237, 159 | | Carbon 6.8K ohm ±10%, 1/4W | 3 |
| C505 | | Electrolytic 22µF 16WV | 1 | R147,247, 164,264 | | Carbon 8.2K ohm ±5%, 1/4W | 4 |
| C144,244, 147,247 | | Electrolytic 33µF 10WV | 4 | R167,267, 114,214, 168,268, 304,404, 307,407 | | Carbon 8.2K ohm ±10%, 1/4W | 10 |
| C107,207 | | Electrolytic 100µF 6.3V | 2 | R106,206, 166,266, 330,430 | | Carbon 10K ohm ±10%, 1/4W | 6 |
| C501 | | Electrolytic 100µF 10WV | 1 | R162,262, 178,278, 327,427 | | Carbon 15K ohm ±10%, 1/4W | 6 |
| C502 | | Electrolytic 100µF 16WV | 1 | R316,416 | | Carbon 18K ohm ±10%, 1/4W | 2 |
| C503 | | Electrolytic 470µF 16WV | 1 | R113,213, 149,249 | | Carbon 22K ohm ±10%, 1/4W | 4 |
| C102,202 | | Mylar 470pF ±10% 50WV | 2 | R146,246 | | Carbon 27K ohm ±10%, 1/4W | 2 |
| C129,229, 108,208 | | Mylar 680pF ±20% 50WV | 4 | R143,243, 152,252, 169,269 | | Carbon 33K ohm ±10%, 1/4W | 6 |
| C109,209 | | Mylar 0.0075µF ±10% 50WV | 2 | R153,253 | | Carbon 39K ohm ±5%, 1/4W | 2 |
| C126,226 | | Mylar 0.0082µF ±10% 50WV | 2 | R118,218, 132,232, 136,236, 172,272, 331,431 | | Carbon 47K ohm ±10%, 1/4W | 10 |
| C123,223 | | Mylar 0.01µF ±10% 50WV | 2 | R101,201, 317,417 | | Carbon 56K ohm ±10%, 1/4W | 4 |
| C124,224 | | Mylar 0.02µF ±10% 50WV | 2 | R314,414, 324,424 | | Carbon 82K ohm ±10%, 1/4W | 4 |
| C142,242 | | Mylar 0.027µF ±5% 50WV | 2 | R105,205 | | Carbon 100K ohm ±10%, 1/4W | 4 |
| C127,227 | | Mylar 0.027µF ±20% 50WV | 2 | R119,219 | | Carbon 120K ohm ±10%, 1/4W | 2 |
| C151,251 | | Mylar 0.1µF ±5% 50WV | 2 | R171,271 | | Carbon 150K ohm ±5%, 1/4W | 4 |
| C152,252 | | Mylar 0.1µF ±10% 50WV | 2 | R144,244, 148,248 | | Carbon 180K ohm ±5%, 1/4W | 2 |
| C146,246, 149,249, 510 | | Mylar 0.1µF ±20% 50WV | 5 | R142,242, R108,208, 156,256, 313,413 | | Carbon 220K ohm ±10%, 1/4W | 6 |
| C104,204 | | Ceramic 25pF ±10% 50WV | 2 | R179,279 | | Carbon 270K ohm ±10%, 1/4W | 4 |
| C103,203 | | Ceramic 100pF ±10% 50WV | 2 | 181,281 | | Carbon 470K ohm ±10%, 1/4W | 4 |
| C112,212 | | Ceramic 500pF ±10% 50WV | 2 | R131,231, 326,426 | | Carbon 680K ohm ±10%, 1/4W | 2 |
| C132,232 | | StyroI 3900pF ±5% 50 ~ 125WV | 2 | R161,261 | | Carbon 1M ohm ±10%, 1/4W | 2 |
| C133,233 | | StyroI 3000pF ±5% 50 ~ 125WV | 2 | R112,212 | | Carbon 3.9M ohm ±10%, 1/4W | 2 |
| C134,234 | | StyroI 2200pF ±5% 50 ~ 125WV | 2 | R110,210 | | | |
| C141,241 | | StyroI 5600pF ±2.5 or ±5% 50 ~ 125WV | 2 | PRINTED CIRCUIT BOARD ASSY (POWER) | | | |
| C143,243 | | StyroI 4700pF ±2.5 or ±5% 50 ~ 125WV | 2 | | 4-226T-610992 | Printed circuit board assembly, POWER | 1 |
| RESISTORS | | | | R334,434 | 4-222T-34100 | Variable resistor 100KB, Bias adjust | 2 |
| R123,223, 505 | | Carbon 10 ohm ±10%, 1/4W | 3 | L501,502 | 4-265R-05000 | VHF coil | 2 |
| R174,274, 318,418 | | Carbon 33 ohm ±10%, 1/4W | 4 | L503 | 4-258T-08600 | OSC coil | 1 |
| R177,277 | | Carbon 47 ohm ±10%, 1/4W | 2 | L106,206 | 4-255R-10500 | Choke coil 15mH | 2 |
| R182,282, 319,419 | | Carbon 100 ohm ±10%, 1/4W | 4 | | 4-236T-06100 | Plug 5 pin, POWER ~ MAIN | 1 |
| R138,238, 328,428 | | Carbon 120 ohm ±10%, 1/4W | 4 | | | | |
| R107,207, 504 | | Carbon 220 ohm ±10%, 1/4W | 3 | | | | |
| R157 | | Carbon 270 ohm ±10%, 1/4W | 1 | | | | |
| R323,423 | | Carbon 470 ohm ±10%, 1/4W | 2 | | | | |
| R134,234, 139,239 | | Carbon 560 ohm ±10%, 1/4W | 4 | | | | |
| R109,209 | | Carbon 680 ohm ±10%, 1/4W | 2 | | | | |
| R173,273 | | Carbon 1K ohm ±5%, 1/4W | 2 | | | | |
| R503 | | Carbon 1K ohm ±10%, 1/4W | 1 | | | | |

NOTES: 1. Parts orders must contain Model Number, Part Number and Description.
 2. Unless otherwise noted, component parts indicated by parentheses in the column Q'ty are not available.
 3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

PARTS LIST

| Key No. | Part No. | Description | Q'ty |
|---|------------------|---|------|
| PRINTED CIRCUIT BOARD ASSY (POWER) | | | |
| TP601,602 Q601 Q502,503 D601,602 D604,605, 606,607 D603 D610,611 | 4-236T-06400 | Plug 3 pin, POWER ~ Panel | 1 |
| | 123-2-474R-00200 | Chip plug, Mechanism power supply, Power P.C.B. ~ Mechanism memory P.L. | 3 |
| | 123-2-382R-00291 | Terminal | 2 |
| | 123-2-474R-00200 | Chip plug, C620 ~ REC solenoid | 1 |
| | | Transistor 2SC1383R | 1 |
| | | Transistor 2SC945P | 2 |
| | | Diode 1N4002 | 2 |
| | | Diode 1N4001 | 4 |
| | | Diode WZ 192 | 1 |
| | | Diode 1N4002 | 2 |
| CAPACITORS | | | |
| C620 | | Electrolytic 470µF 16WV | 1 |
| C610 | | Electrolytic 100µF 25WV | 1 |
| C607 | | Electrolytic 1000µF 25WV | 1 |
| C604 | | Electrolytic 1000µF 35WV | 1 |
| C605,606 | | Electrolytic Block-470 + 1000µF 25WV | 1 |
| C613 | | Mylar 0.01µF ±20% 50WV | 1 |
| C522 | | Mylar 0.033µF ±20% 50WV | 1 |
| C193,293 | | Ceramic 100pF ±10% 50WV | 2 |
| C191,291 | | Ceramic 180pF ±5% 50WV | 2 |
| C601,602, 603 | | Ceramic 0.01µF +100 -0% 500WV | 3 |
| C521 | | StyroI 2200pF ±5% 500WV | 1 |
| C614,615 | | Ceramic 0.01µF +80-20% 50WV | 2 |
| RESISTORS | | | |
| R602 | | Carbon 5.6 ohm ±10%, 1/4W | 1 |
| R524,526 | | Carbon 4.7 ohm ±10%, 1/4W | 2 |
| R519 | | Carbon 56 ohm ±10%, 1/4W | 1 |
| R521 | | Carbon 180 ohm ±10%, 1/4W | 1 |
| R601 | | Carbon 390 ohm ±10%, 1/4W | 1 |
| R523 | | Carbon 2.2K ohm ±10%, 1/4W | 1 |
| R522 | | Carbon 22K ohm ±10%, 1/4W | 1 |
| SCREW MOUNTING | | | |
| | | Pan head screw 2 x 18mm | 2 |
| | | Pan head screw 2.6 x 4mm | 4 |
| | | Pan head screw 2.6 x 6mm | 2 |
| | | Pan head screw 3 x 6mm | 6 |
| | | Pan head screw 3 x 8mm | 6 |
| | | Pan head screw 3 x 10mm | 1 |
| | | Pan head screw 3 x 12mm | 2 |
| | | Pan head screw 3 x 30mm | 2 |
| | | Pan head screw 3 x 35mm | 1 |
| | | Pan head screw 4 x 8mm | 1 |
| | | Pan head screw 4 x 10mm | 2 |
| | | Pan head screw 4 x 16mm | 4 |
| | | Pan head screw 4 x 20mm | 2 |
| | | Tapping screw 3 x 6mm | 7 |
| | | Tapping screw 3 x 8mm | 43 |
| | | Tapping screw 3 x 10mm | 9 |
| | | Tapping screw 3 x 12mm | 2 |
| | | Regular hexagon bolt 3 x 16mm | 2 |
| | | Regular hexagon nut 3mm | 8 |
| | | Washer 3mm | 2 |
| | | Washer 2mm | 2 |
| | | Washer 3 x 8 x 0.5mm | 1 |
| | | Washer 3 x 10 x 0.5mm | 3 |
| | | Washer 4.5 x 10 x 0.8mm | 2 |
| | | External tooth lock washer 4mm | 1 |
| | | External "E" ring 2mm | 1 |
| | | External "E" ring 3mm | 1 |
| MECHANISM | | | |
| 1 | 149-085-00 | Mechanism assembly TM-4600 | 1 |
| 3 | 141-0-311T-02200 | Chassis assembly | 1 |
| 3 | 141-2-472T-01000 | Lug, Brake solenoid, Terminal board | 4 |
| 4 | 141-2-472R-00600 | Chassis upper, Bracket counter | 1 |
| 5 | 141-0-741T-10301 | Lug, Bracket play SW mtg. | 1 |
| 6 | 141-2-851T-72500 | Lever assembly, Slide operation | 1 |
| | | Spring coil, Solenoid joint | 1 |

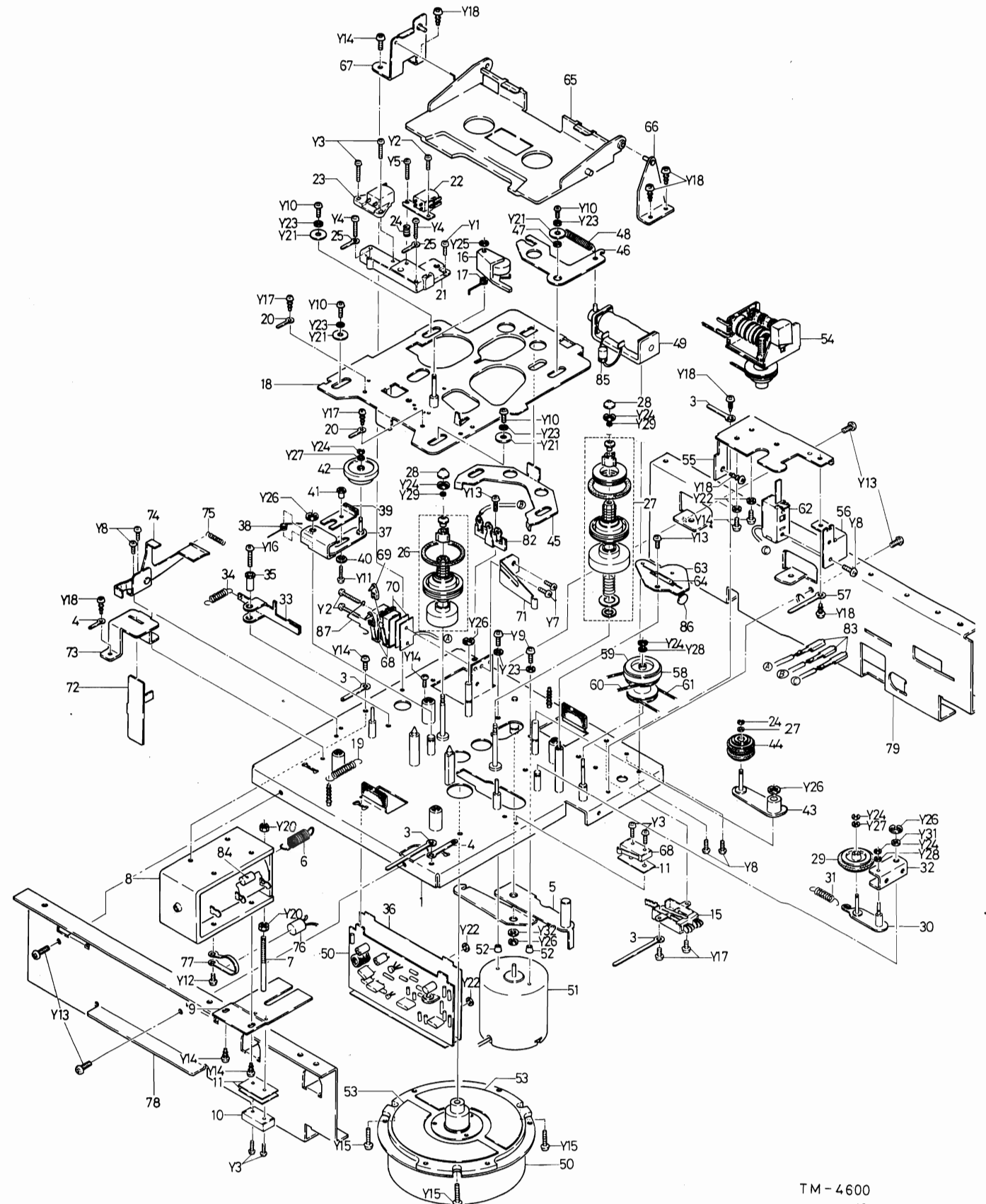
| Key No. | Part No. | Description | Q'ty |
|------------------|------------------|--|------|
| MECHANISM | | | |
| 7 | 141-2-569T-00300 | Guide shaft, Spring hook | 1 |
| 8 | 4-264T-04700 | Solenoid, Play | 1 |
| 9 | 141-2-365T-22500 | Bracket, Micro SW mtg. | 1 |
| 10 | 4-231T-11902 | Switch, Solenoid coil changer | 1 |
| 11 | 141-2-327T-07600 | Insulator, Micro SW | 4 |
| 12 | 141-2-751T-67900 | Shaft, Muting SW operating | 1 |
| 13 | 4-231T-11903 | Switch, Muting | 1 |
| 14 | 141-2-365T-25000 | Bracket, Switch mtg. | 1 |
| 15 | 4-231T-31171 | Switch, Head slide operating (Snap SW) | 1 |
| 16 | 141-0-545T-01400 | Pinch roller lever assembly | 1 |
| 17 | 141-2-852T-18000 | Spring wire, Pinch lever pressure | 1 |
| 18 | 141-0-731T-08500 | Slide assembly, Head | 1 |
| 19 | 141-2-851T-72600 | Spring coil, Slide returning | 1 |
| 20 | 123-2-472R-00600 | Lug, Head slide | 1 |
| 21 | 141-2-375T-05900 | Bracket, Head mtg. | 1 |
| 22 | 4-242T-15900 | R/P head | 1 |
| 23 | 4-242T-16800 | E head | 1 |
| 24 | 141-2-851T-58400 | Spring coil, Head alignment adjust | 1 |
| 25 | 141-2-472T-02200 | Lug, R/P head lead alignment | 2 |
| 26 | 141-0-531T-02600 | Reel plate assembly, Supply | 1 |
| 27 | 141-0-531T-02700 | Reel plate assembly, Take up | 1 |
| 28 | 141-2-536T-01500 | Reel cap | 2 |
| 29 | 141-0-662T-01300 | Roller assembly, Take up idlar | 1 |
| 30 | 141-0-741T-10400 | Lever assembly, Take up idlar | 1 |
| 31 | 141-2-851T-62700 | Spring coil, Idlar pressure | 1 |
| 32 | 141-2-741T-59300 | Lever, Idlar | 1 |
| 33 | 141-0-741T-10500 | Lever assembly, Back tension | 1 |
| 34 | 141-2-851T-72900 | Spring coil, Back tension | 1 |
| 35 | 141-2-751T-63600 | Shaft, Back tension | 1 |
| 36 | 141-2-322T-22100 | Shield plate, Motor | 1 |
| 37 | 141-0-741T-10700 | Lever assembly, F. FWD REW | 1 |
| 38 | 141-2-852T-24800 | Spring wire, REW F. FWD roller pressure | 1 |
| 39 | 141-0-731T-07300 | Slide assembly, Tension | 1 |
| 40 | 141-2-462T-24700 | Boss, Slide bearing | 1 |
| 41 | 141-2-462T-29800 | Boss, Spring hook | 1 |
| 42 | 141-2-662T-07901 | Roller, F. FWD REW | 1 |
| 43 | 141-0-741T-10900 | Lever assembly | 1 |
| 44 | 141-0-662T-01600 | Roller assembly, F. FWD filiction | 1 |
| 45 | 141-2-731T-26200 | Slide, Brake lower | 1 |
| 46 | 141-2-741T-59800 | Lever, Slide operation | 1 |
| 47 | 141-2-683T-03500 | Ring | 1 |
| 48 | 141-2-851T-73000 | Spring coil, Slide pressure | 1 |
| 49 | 4-264T-04300 | Solenoid, Brake | 1 |
| 50 | 4-527T-07600 | Brushless motor assembly | 1 |
| 51 | 4-527T-07500 | Commutate motor assembly | 1 |
| 52 | 141-2-461T-19600 | Pipe, Motor mtg. | 2 |
| 53 | 141-2-322T-21700 | Shield plate | 2 |
| 54 | 141-2-811T-03000 | Counter | 1 |
| 55 | 141-2-812T-04100 | Bracket, Counter mtg. | 1 |
| 56 | 141-2-365T-07200 | Bracket, Switch mtg. | 1 |
| 57 | 141-2-472T-01000 | Lug, Motor lead retainer | 2 |
| 58 | 141-2-661T-18200 | Pulley, Relay | 1 |
| 59 | 141-2-765T-01300 | Magnet | 1 |
| 60 | 141-2-562T-03100 | Round belt, Counter drive reel side | 1 |
| 61 | 141-2-562T-03400 | Round belt, Counter drive counter side | 1 |
| 62 | 4-231T-42700 | Push switch, Counter | 1 |
| 63 | 4-226T-61400 | Printed circuit board, Lead switch mtg | 1 |
| 64 | 4-231T-41300 | Lead switch | 1 |
| 65 | 141-0-741T-05300 | Lever assembly, Cassette up lever | 1 |
| 66 | 141-0-747T-01000 | Bracket lever assembly | 1 |
| 68 | 4-231T-11902 | Switch, Prevent the miss recording Eject stop | 2 |
| 69 | 141-2-243T-06300 | Base, Micro switch operation | 2 |
| 70 | 141-2-327T-07600 | Insulator, Micro switch mtg. | 4 |
| 71 | 141-2-853T-32800 | Spring plate, Cassette pressure | 1 |
| 72 | 141-2-741T-59900 | Lever, Button slide | 1 |
| 73 | 141-2-747T-06800 | Bracket, Lever mtg. | 1 |
| 74 | 141-0-741T-11000 | Lever assembly, Eject | 1 |
| 75 | 141-2-751T-58600 | Spring coil, Lever returning | 1 |
| 76 | | Electrical capacitor 470µF 16V, Solenoid noise prevent | 1 |
| 77 | 147-2-363T-02100 | Bracket, Capacitor mtg. | 1 |
| 78 | 141-2-214T-00900 | Bracket, Front flame | 1 |
| | 141-2-214T-00901 | or Bracket, Front flame | 1 |
| 79 | 141-2-214T-01000 | or Bracket, Rear flame | 1 |
| | 141-2-214T-01001 | or Bracket, Rear flame | 1 |
| 67 | 141-0-741T-00900 | Bracket Assy, Lever (65) fulcrum right | 1 |

NOTES: 1. Parts orders must contain Model Number, Part Number and Description.
 2. Unless otherwise noted, component parts indicated by parentheses in the column Q'ty are not available.
 3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

PARTS LIST

| Key No. | Part No. | Description | Q'ty |
|------------------------|------------------|--|------|
| MECHANISM | | | |
| 80 | 4-235T-25200 | Socket, Operation part connect | 1 |
| 81 | 4-235T-21900 | Socket, Mechanism MAIN connect | 1 |
| 82 | 4-237T-05800 | Terminal board, Lug plate | 1 |
| 83 | 123-2-382R-00600 | Terminal | 3 |
| 84 | | Diode 1N4002, Solenoid noise prevent | 1 |
| 85 | | Electrical capacitor 4.7 μ F 25V, Solenoid noise prevent | 1 |
| 86 | | Ceramic capa. 0.01 μ F +80-20% 50WV | 1 |
| 87 | 141-2-465T-12000 | Stopper, Micro switch mtg. | 1 |
| MECHANISM SCREW | | | |
| Y 1 | | Pan head screw 2 x 4mm | 1 |
| Y 2 | | Pan head screw 2 x 5mm | 1 |
| Y 3 | | Pan head screw 2 x 8mm | 5 |
| Y 4 | | Pan head screw 2 x 10mm | 2 |
| Y 5 | | Pan head screw 2 x 12mm | 1 |
| Y 6 | | Pan head screw 2 x 15mm | 2 |
| Y 7 | | Pan head screw 2.6 x 3mm | 3 |
| Y 8 | | Pan head screw 2.6 x 4mm | 4 |
| Y 9 | | Pan head screw 2.6 x 7mm | 2 |
| Y10 | | Pan head screw 2.6 x 8mm | 4 |
| Y11 | | Pan head screw 2.6 x 10mm | 1 |
| Y12 | | Pan head screw 3 x 4mm | 3 |
| Y13 | | Pan head screw 3 x 5mm | 10 |
| Y14 | | Pan head screw 3 x 6mm | 7 |
| Y15 | | Pan head screw 3 x 12mm | 3 |
| Y17 | | Tapping screw 3 x 4mm | 4 |
| Y18 | | Tapping screw 3 x 6mm | 6 |
| Y20 | | Regular hexagon nut 3mm | 2 |
| Y21 | | Washer 2.7 x 10 x 0.5mm | 4 |
| Y22 | | Washer 3 x 8 x 0.5mm | 4 |
| Y23 | | Spring washer 2.6mm | 6 |
| Y24 | | External "E" ring 1.5mm | 7 |
| Y25 | | External "E" ring 1.9mm | 1 |
| Y26 | | External "E" ring 3.2mm | 5 |
| Y27 | | Graphite nylon washer 2 x 4 x 0.25mm | 4 |
| Y28 | | Graphite nylon washer 2 x 4 x 0.5mm | 2 |
| Y29 | | Graphite nylon washer 2.5 x 4.7 x 0.13mm | 4 |
| Y30 | | Graphite nylon washer 1.8 x 12 x 0.5mm | 1 |
| Y31 | | Graphite nylon washer 4 x 6.5 x 0.25mm | 1 |
| Y32 | | Graphite nylon washer 5.2 x 8 x 0.5mm | 1 |
| Y33 | | Graphite nylon washer 3 x 5.4 x 0.5mm | 1 |
| Y34 | | Washer 2.5 x 4.4 x 0.4mm | 1 |

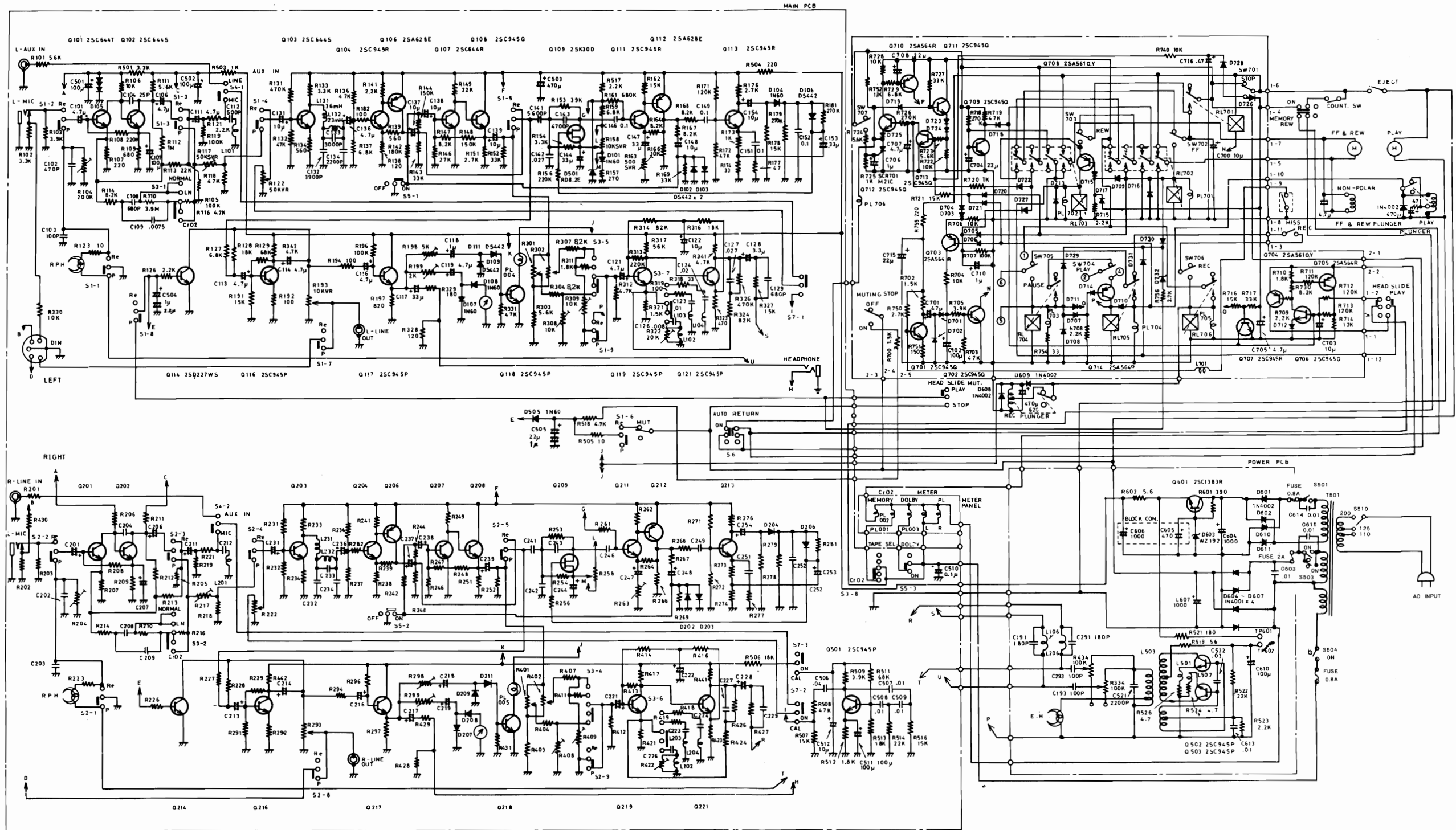
EXPLODED VIEW



NOTES: 1. Parts orders must contain Model Number, Part Number and Description.
 2. Unless otherwise noted, component parts indicated by parentheses in the column Q'ty are not available.
 3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

TM-4600
 1973 7.25 CHK.
 Oct. 1, 1975 CHK.

SCHEMATIC DIAGRAM



Subject to change without notice.

