

# ROTEL *hifi*

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STEREO CASSETTE TAPE DECK

# RD-955AX

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# TECHNICAL MANUAL

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**THE ROTEL CO., LTD.**

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**ROTEL ELECTRONICS CO., LTD.**

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MN20001937



# Playback System Adjustment

Instruments: Oscilloscope, AC VTVM, Frequency Counter and Test Tape.

Conditions : Oscilloscope, AC VTVM and Frequency Counter---LINE OUT

Dolby NR---OFF

| Adjustment Item                                 | Test Tape | Adjust  | Adjust for  |
|---|-----------|---|---|
| Azimuth   | MTT-114N  | REC / PB<br>Head screw  | Obtain largest wave form on Oscilloscope for both channels. |
| Dolby Level                                     | MTT-150   | VR701<br>VR702  | AC VTVM reads 245mV at TP5, TP6.                            |
| Playback EQ Check                               | TCC-284N  | Output level difference between 1 kHz and 10 kHz signal is within +/- 3.0dB.  |   |
| Tape Speed Deflection Check / Tape Speed Adjust | TCC-112   | Check that allowable margin of deflecting at middle of or at the end of winding is in the range of +2% -1% (at 3,000 Hz allowable margin of deflection of speed is 3,060-2,970) If Tape Speed deflection surpasses the above range adjust speed of Motor. |   |

# Recording System Adjustment

Instruments: Oscilloscope, Signal Generator, AC VTVM and Blank Tape

Conditions : Dolby NR,---OFF

REC Level---Maximum

| Adjustment Item | Coupling  | Tape Selector | Adjust                     | Adjust for                                 |
|-----------------|---|---------------|----------------------------|--|
| Bias Carrier    | Oscilloscope---point TP1, TP2   | METAL         | L705 (L-CH)<br>L706 (R-CH) | Obtain Min. deflection on the Oscilloscope |
| 19 kHz Filter   | S.G.(400Hz 0dB)--LINE IN /LINE OUT---700mV<br>Changed S.G. to 19kHz<br>Dolby NR---OFF | NORMAL        | L701 (L-CH)<br>L702 (R-CH) | AC VTVM reads 30 dB (Minimum)              |
| Bias Voltage    | Oscilloscope---point TP3, TP4   | METAL         | VR708                      | AC VTVM reads 9.5mV                        |
|                 |   | SPECIAL       | VR705(L-CH)<br>VR706(R-CH) | AC VTVM reads 6.5mV                        |
|                 |   | NORMAL        | VR707                      | AC VTVM reads 4.0mV                        |

# REC / PB System Adjustment

Instruments: Signal Generator, H.D.Analyzer and Blank Tape.

Conditions : Dolby NR---OFF      REC Level---Maximum

PLAY, REC, PAUSE---ON

Blank Tape : METAL---AC712,    SPECIAL---AC513,    NORMAL---AC224

| Adjustment               | Conditions  | Adjust  | Adjust for   |
|--------------------------|---|---|--|
| REC / PB Output Level    | S.G. (400Hz 0dB) LINE IN / LINE OUT---700mV<br>Push PLAY Button and playback it again                           | VR703(L-CH)<br>VR704(R-CH)  | Recording and Playback level difference must be within +/- 1dB |
| Distortion Check         | S.G. (400Hz 0dB) LINE IN / LINE OUT---700mV<br>H.D.Analyzer--LINE OUT<br>Push PLAY Button and playback it again | Check that distortion is within following range.<br>a.METAL Tape----- under 2.5%<br>b.SPECIAL Tape----- under 2.0%<br>c.NORMAL Tape----- under 1.5% |  |
|                          | If the distortion factor exceeds the above, recheck Bias Voltage Adjustment.                                    |   |  |
| Frequency Response Check | METAL Tape insert it  | VR708   | 30Hz--17kHz..+/-3dB  |
|                          | SPECIAL Tape insert it  | VR706   | 30Hz--16kHz..+/-3dB  |
|                          | NORMAL Tape insert it   | VR707   | 30Hz--16kHz..+/-3dB  |

# Parts List

NOTE: THE COMPONENTS INDENTIFIED BY  $\Delta$  MARK ARE FOR SAFETY. REPLACE ONLY WITH ORIGINAL PARTS. DO NOT SUBSTITUTE.

| SYMBOL    | PARTS NO.  | DESCRIPTION            |
|-----------|------------|------------------------|
|           | TD103411   | P.C.B. ASSEMBLY        |
| R601      | RM51001816 | R, METAL 1K 1/4W F     |
| R602      | RM52212811 | R, METAL 22.1K 1/4W F  |
| R603      | RM54751816 | R, METAL 4.75K 1/4W F  |
| R604      | RM54752810 | R, METAL 47.5K 1/4W F  |
| R605-608  | RM51001816 | R, METAL 1K 1/4W F     |
| R609      | RM54752810 | R, METAL 47.5K 1/4W F  |
| R610      | RM24750810 | R, METAL 475 1/4W F    |
| R611, 612 | RM51001816 | R, METAL 1K 1/4W F     |
| R613      | RM52212811 | R, METAL 22.1K 1/4W F  |
| R614      | RM51002810 | R, METAL 10K 1/4W F    |
| R615      | RM54759815 | R, METAL 47.5 1/4W F   |
| R616      | RM54751816 | R, METAL 4.75K 1/4W F  |
| R617      | RM51001816 | R, METAL 1K 1/4W F     |
| R618      | RM54751816 | R, METAL 4.75K 1/4W F  |
| R619      | RM53322818 | R, METAL 33.2K 1/4W F  |
| R620      | RM51001816 | R, METAL 1K 1/4W F     |
| R622      | RM53329813 | R, METAL 33.2 1.4W F   |
| R701, 702 | RM51009815 | R, METAL 10 1/4W F     |
| R703, 704 | RM51003813 | R, METAL 100K 1/4W F   |
| R705, 706 | RM53321814 | R, METAL 3.32K 1/4W F  |
| R707, 708 | RM51003813 | R, METAL 100K 1/4W F   |
| R709, 710 | RM54759815 | R, METAL 47.5 1/4W F   |
| R711, 712 | RM52211818 | R, METAL 2.21K 1/4W F  |
| R713, 714 | RM52741819 | R, METAL 2.74K 1/4W F  |
| R715, 716 | RM52212811 | R, METAL 22.1K 1/4W F  |
| R717, 718 | RM51001816 | R, METAL 1K 1/4W F     |
| R719, 720 | RM52213815 | R, METAL 221K 1/4W F   |
| R721, 722 | RM51002810 | R, METAL 10K 1/4W F    |
| R723      | RM51502817 | R, METAL 15K 1/4W F    |
| R724      | RM51002810 | R, METAL 10K 1/4W F    |
| R725      | RM58251814 | R, METAL 8.25K 1/4W F  |
| R726      | RM51001816 | R, METAL 1K 1/4W F     |
| R727      | RM56811816 | R, METAL 6.81K 1/4W F  |
| R728      | RM51003813 | R, METAL 100K 1/4W F   |
| R729      | RM25622815 | R, METAL 56.2K 1/4W F  |
| R730      | RM51001816 | R, METAL 1K 1/4W F     |
| R731      | RM51503810 | R, METAL 150K 1/4W F   |
| R732      | RM51002810 | R, METAL 10K 1/4W F    |
| R733      | RM51001816 | R, METAL 1K 1/4W F     |
| R734      | RM51000812 | R, METAL 100 1/4W F    |
| R735, 736 | RM52212811 | R, METAL 22.1K 1/4W F  |
| R737      | RM51002810 | R, METAL 10K 1/4W F    |
| R738      | RM51003813 | R, METAL 100K 1/4W F   |
| R739      | RM56810812 | R, METAL 681 1/4W F    |
| R740, 741 | RM52211818 | R, METAL 2.21K 1/4W F  |
| R742, 743 | RM51002810 | R, METAL 10K 1/4W F    |
| R744, 745 | RM55621813 | R, METAL 5.62K 1/4W F  |
| R746, 747 | RM51502817 | R, METAL 15K 1/4W F    |
| R748, 749 | RM51002810 | R, METAL 10K 1/4W F    |
| R750      | RM51002810 | R, METAL 10K 1/4W F    |
| R751, 752 | RM55111811 | R, METAL 5.11K 1/4W F  |
| R753, 754 | RM54320817 | R, METAL 432 1/4W F    |
| R755, 756 | RM52431818 | R, METAL 2.43K 1/4W F  |
| R757, 758 | RM56811816 | R, METAL 6.81K 1/4W F  |
| R759, 760 | RM56810812 | R, METAL 681 1/4W F    |
| R762, 763 | RM54752810 | R, METAL 47.5K 1/4W F  |
| R764, 765 | RM52211818 | R, METAL 2.21K 1/4W F  |
| R766, 767 | RM54753813 | R, METAL 475K 1/4W F   |
| R768, 769 | RM53321814 | R, METAL 3.32K 1/4 W F |
| R780      | RM51502817 | R, METAL 15K 1/4W F    |
| R781, 782 | RM54752810 | R, METAL 47.5K 1/4W F  |
| R783, 784 | RM51000812 | R, METAL 100 1/4W F    |
| R785      | RM51002810 | R, METAL 10K 1/4W F    |
| R786      | RM56811816 | R, METAL 6.81K 1/4W F  |
| R787, 788 | RM51003813 | R, METAL 100K 1/4W F   |
| R789      | RM51502817 | R, METAL 15K 1/4W F    |
| R790      | RM53322818 | R, METAL 33.2K 1/4W F  |
| R791      | RM51502817 | R, METAL 15K 1/4W F    |

| SYMBOL    | PARTS NO.  | DESCRIPTION           |
|-----------|------------|-----------------------|
| R792, 793 | RM52212811 | R, METAL 22.1K 1/4W F |
| R794, 795 | RM54751816 | R, METAL 4.75K 1/4W F |
| R796      | RM51003813 | R, METAL 100K 1/4W F  |
| R797, 798 | RM51001816 | R, METAL 1K 1/4W F    |
| R799      | RM51003813 | R, METAL 100K 1/4W F  |
| R801, 802 | RM52212811 | R, METAL 22.1K 1/4W F |
| R803, 804 | RM53923814 | R, METAL 392K 1/4W F  |
| R805, 806 | RM51503810 | R, METAL 150K 1/4W F  |
| R807, 808 | RM54751816 | R, METAL 4.75K 1/4W F |
| R809, 810 | RM56811816 | R, METAL 6.81K 1/4W F |
| R811, 812 | RM51001816 | R, METAL 1K 1/4W F    |
| R813, 814 | RM55621813 | R, METAL 56.2 1/4W F  |
| R815, 816 | RM58251814 | R, METAL 8.25K 1/4W F |
| R817, 818 | RM54752810 | R, METAL 47.5K 1/4W F |
| R819, 820 | RM53921817 | R, METAL 3.92K 1/4W F |
| R821, 822 | RM51003813 | R, METAL 100K 1/4W F  |
| R823, 824 | RM51330812 | R, METAL 133 1/4W F   |
| R825, 826 | RM54752810 | R, METAL 47.5K 1/4W F |
| R827-830  | RM52213815 | R, METAL 221K 1/4W F  |
| R831, 832 | RM52211818 | R, METAL 2.21K 1/4W F |
| R833, 834 | RM53321814 | R, METAL 3.32K 1/4W F |
| R835, 836 | RM54751816 | R, METAL 4.75K 1/4W F |
| R837, 838 | RM55621813 | R, METAL 5.62K 1/4W F |
| R839      | RM52210814 | R, METAL 221 1/4W F   |
| R840      | RM58252818 | R, METAL 82.5K 1/4W F |
| R841      | RM51003813 | R, METAL 100K 1/4W F  |
| R842-844  | RM51002810 | R, METAL 10K 1/4W F   |
| R845      | RM51001816 | R, METAL 1K 1/4W F    |
| R846, 847 | RM57501811 | R, METAL 7.5K 1/4W F  |
| R848      | RM51001816 | R, METAL 1K 1/4W F    |
| R849, 850 | RM54751816 | R, METAL 4.75K 1/4W F |
| R851, 852 | RM54752810 | R, METAL 47.5K 1/4W F |
| R853, 854 | RM51001816 | R, METAL 1K 1/4W F    |
| R857      | RM51001816 | R, METAL 1K 1/4W F    |
| R858      | RM54752810 | R, METAL 47.5K 1/4W F |
| R859      | RM51003813 | R, METAL 100K 1/4W F  |
| R860      | RM58251814 | R, METAL 8.25K 1/4W F |
| R861      | RM51502817 | R, METAL 15K 1/4W F   |
| R862      | RM21829813 | R, METAL 18.2 1/4W F  |
| R863      | RM51502817 | R, METAL 15K 1/4W F   |
| R864      | RM53329813 | R, METAL 33.2 1/4W F  |
| R865      | RM54751816 | R, METAL 4.75K 1/4W F |
| R866      | RM51000812 | R, METAL 100 1/4W F   |
| R867      | RM54759815 | R, METAL 47.5 1/4W F  |
| R868      | RM51000812 | R, METAL 100 1/4W F   |
| R869      | RM55621813 | R, METAL 5.62K 1/4W F |
| R870      | RM51002810 | R, METAL 10K 1/4W F   |
| R871      | RM51000812 | R, METAL 100 1/4W F   |
| R872-875  | RM55620810 | R, METAL 562 1/4W F   |
| R876-878  | RM51002810 | R, METAL 10K 1/4W F   |
| R880      | RM51501813 | R, METAL 1.5K 1/4W F  |
| R881      | RM51002810 | R, METAL 10K 1/4W F   |
| R882, 883 | RM51501813 | R, METAL 1.5K 1/4W F  |
| R884      | RM51002810 | R, METAL 10K 1/4W F   |
| R885      | RM51501813 | R, METAL 1.5K 1/4W F  |
| R886      | RM52741819 | R, METAL 2.74K 1/4W F |
| R887      | RM51002810 | R, METAL 10K 1/4W F   |
| R888, 889 | RM55620810 | R, METAL 562 1/4W F   |
| R890      | RM51002810 | R, METAL 10K 1/4W F   |
| R891      | RM54752810 | R, METAL 47.5K 1/4W F |
| R892      | RM51001816 | R, METAL 1K 1/4W F    |
| R893      | RM51000812 | R, METAL 100 1/4W F   |
| R894      | RM51002810 | R, METAL 10K 1/4W F   |
| R895      | RM52212811 | R, METAL 22.1K 1/4W F |
| R896, 897 | RM55621813 | R, METAL 5.62K 1/4W F |
| R898, 899 | RM51003813 | R, METAL 100K 1/4W F  |
| R901      | RM23300810 | R, METAL 332 1/4W F   |
| R902      | RM52210814 | R, METAL 221 1/4W F   |

# Parts List

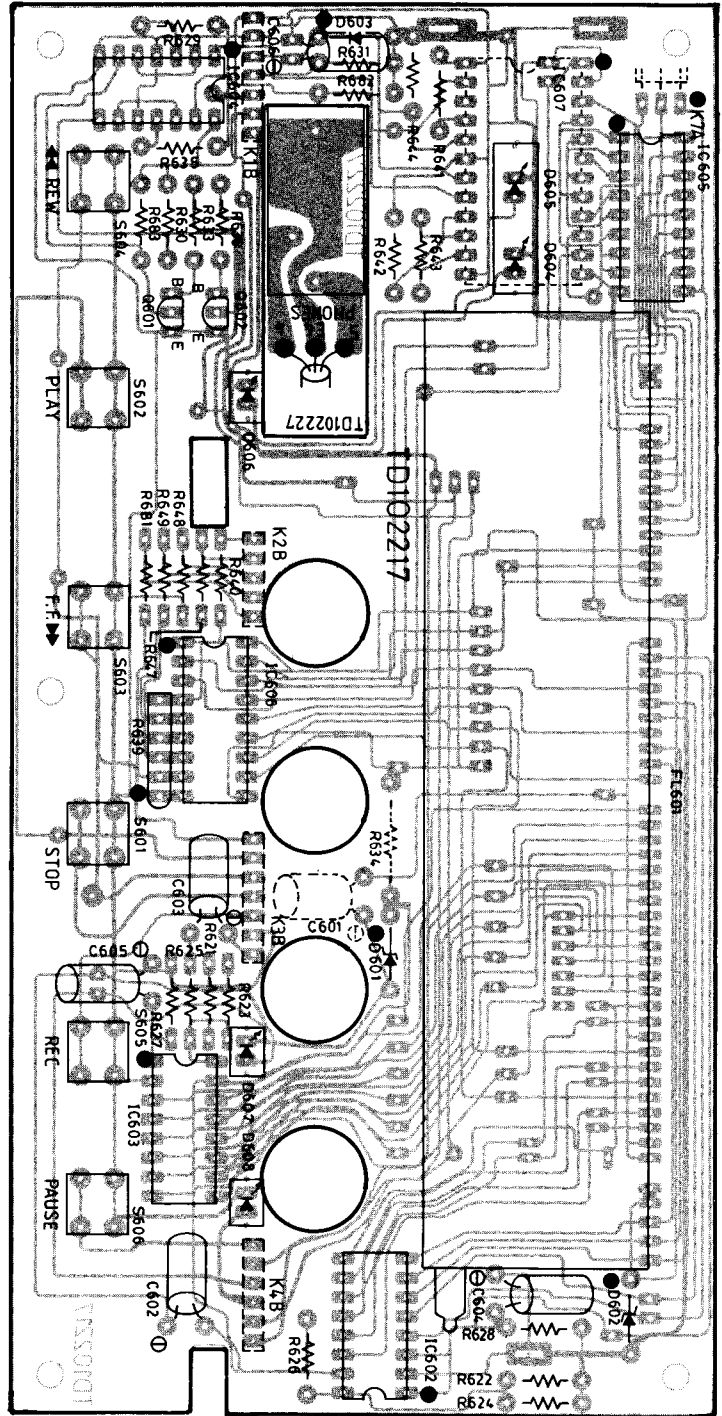
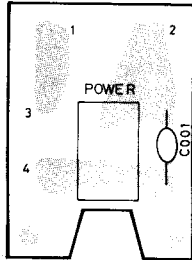
| SYMBOL    | PARTS NO.  | DESCRIPTION               |
|-----------|------------|---------------------------|
| R905      | RM53321814 | R,METAL 3.32K 1/4W F      |
| R906, 907 | RM53329813 | R,METAL 33.2 1/4W F       |
| R910      | RM98209122 | R,METAL 82 1W             |
| C701, 702 | CS44711420 | CAP,STYROL 470P 50V       |
| C703, 704 | CE01005167 | CAP,ELEC. 100uF 16V       |
| C705, 706 | CL32207454 | CAP,LOW NOISE U50V2R2LN   |
| C707, 708 | CM03909420 | CAP,MYLAR 393 J 50V       |
| C709, 710 | CM02709423 | CAP,MYLAR 273 J 50V       |
| C711, 712 | CE04707252 | CAP,ELEC. 4.7uF 25V       |
| C713      | CE01006251 | CAP,ELEC. 10uF 25V        |
| C714      | CM02209426 | CAP,MYLAR 223 J 50V       |
| C715-718  | CL34707259 | CAP,LOW NOISE U25V4R7LN   |
| C719, 720 | CM03010423 | CAP,MYLAR 302 J 50V       |
| C721, 722 | CC06812439 | CAP,CERAMIC 680P 50V      |
| C723, 724 | CM04710428 | CAP,MYLAR 472 J 50V       |
| C725, 726 | CE01508256 | CAP,ELEC. 0.15uF 25V      |
| C727, 728 | CE04708505 | CAP,ELEC. 0.47uF 50V      |
| C729, 730 | CE02208505 | CAP,ELEC. 0.22uF 50V      |
| C731, 732 | CM06809424 | CAP,MYLAR 683 J 50V       |
| C733, 734 | CM04709426 | CAP,MYLAR 473 J 50V       |
| C735, 736 | CM06810426 | CAP,MYLAR 682 J 50V       |
| C737, 738 | CM01009427 | CAP,MYLAR 103 J 50V       |
| C739, 740 | CM01509424 | CAP,MYLAR 153 J 50V       |
| C741, 742 | CL34707259 | CAP,LOW NOISE U25V4R7LN   |
| C743, 744 | CL31006258 | CAP,LOW NOISE U25V10LN    |
| C745, 746 | CE01006500 | CAP,ELEC. 10uF 50V        |
| C747, 748 | CM01009427 | CAP,MYLAR 103 J 50V       |
| C749, 750 | CM02208422 | CAP,MYLAR 224 J 50V       |
| C751, 752 | CM01009427 | CAP,MYLAR 103 J 50V       |
| C753, 754 | CC31011435 | CAP,CERAMIC 100P 50V      |
| C755, 756 | CL34707259 | CAP,LOW NOISE U25V4R7LN   |
| C757, 758 | CS42711324 | CAP,STYROL 270P 250V      |
| C759, 760 | CM01008423 | CAP,MYLAR 104 J 50V       |
| C761, 762 | CS44711420 | CAP,STYROL 470P 50V       |
| C763, 764 | CE04708505 | CAP,ELEC. 0.47uF 50V      |
| C765, 766 | CE04707501 | CAP,ELEC. 4.7uF 50V       |
| C767, 768 | CE01006500 | CAP,ELEC. 10uF 50V        |
| C769, 770 | CM02009425 | CAP,MYLAR 203 J 50V       |
| C771      | CE01007504 | CAP,ELEC. 1uF 50V         |
| C772, 773 | CM08210426 | CAP,MYLAR 822 J 50V       |
| C774      | CM01008423 | CAP,MYLAR 104 J 50V       |
| C775, 776 | CS41511327 | CAP,STYROL 150P 250V      |
| C777      | CM01009427 | CAP,MYLAR 103 J 50V       |
| C778      | CM01509424 | CAP,MYLAR 153 J 50V       |
| C779      | CE01007504 | CAP,ELEC. 1uF 50V         |
| C780      | CN01007507 | CAP,NON-POLARIZED 1uF 50V |
| C781      | CP01510420 | CAP,P.P 122 J 250V        |
| C782      | CE01005167 | CAP,ELEC. 100uF 16V       |
| C783      | CM01008423 | CAP,MYLAR 104 J 50V       |
| C784      | CM08210426 | CAP,MYLAR 822 J 50V       |
| C785      | CE01005106 | CAP,ELEC. 100uF 10V       |
| C786      | CC01008458 | CAP,CERAMIC 0.1uF 50V     |
| C788      | CE04707501 | CAP,ELEC. 4.7uF 50V       |
| C789, 790 | CM01810422 | CAP,MYLAR 182 J 50V       |
| C901, 902 | CE04705358 | CAP,ELEC. 470uF 35V       |
| C903, 904 | CE02205255 | CAP,ELEC. 220uF 25V       |
| C905      | CE03304356 | CAP,ELEC. 330uF 35V       |
| C906      | CE02204251 | CAP,ELEC. 220uF 25V       |
| C907      | CE04705164 | CAP,ELEC. 470uF 16V       |
| C908      | CE02205164 | CAP,ELEC. 220uF 16V       |
| C909, 910 | CE51005254 | CAP,ELEC. UKSIE101M       |
| C911, 912 | CE01005167 | CAP,ELEC. 100uF 16V       |
| C913, 914 | CE01005167 | CAP,ELEC. 100uF 16V       |
| C915, 916 | CE01005167 | CAP,ELEC. 100uF 16V       |
| C917, 918 | CE02205164 | CAP,ELEC. 220uF 16V       |
| C919, 920 | CE01005167 | CAP,ELEC. 100uF 16V       |
| C921-928  | CC01009256 | CAP,CERAMIC 0.01uF 250V   |
| C931      | CE01006251 | CAP,ELEC. 10uF 25V        |
| D701      | DD20000272 | ZENER DIODE RD-7.5E       |
| D702      | DD20000260 | ZENER DIODE RD-4.3E       |

| SYMBOL     | PARTS NO.  | DESCRIPTION                  |
|------------|------------|------------------------------|
| D703       | DD80000021 | DIODE 1N4148                 |
| D704-708   | DD80000010 | DIODE 1N4003                 |
| D709-719   | DD80000021 | DIODE 1N4148                 |
| D720-727   | DD80000021 | DIODE 1N4148                 |
| D728-730   | DD80000021 | DIODE 1N4148                 |
| D732       | DD80000021 | DIODE 1N4148                 |
| D901-910   | DD80000010 | DIODE 1N4003                 |
| D913, 914  | DD20000200 | DIODE UZ5.1E                 |
| Q701, 702  | TR30000327 | TRANSISTOR 2SC536G           |
| Q703, 704  | TR30000583 | TRANSISTOR 2SC2878 (A,B)     |
| Q705, 706  | TR30000327 | TRANSISTOR 2SC536G           |
| Q707       | TR10000126 | TRANSISTOR 2SA608K (F,G)     |
| Q708, 709  | TR30000327 | TRANSISTOR 2SC536G           |
| Q712-715   | TR30000327 | TRANSISTOR 2SC536G           |
| Q716, 717  | TR10000126 | TRANSISTOR 2SA608K (F,G)     |
| Q718-722   | TR30000327 | TRANSISTOR 2SC536G           |
| Q723-731   | TR30000327 | TRANSISTOR 2SC536G           |
| Q732       | TR10000126 | TRANSISTOR 2SA608K (F,G)     |
| Q733, 734  | TR30000327 | TRANSISTOR 2SC536G           |
| Q735, 736  | TR10000126 | TRANSISTOR 2SA608K (F,G)     |
| Q737-739   | TR30000327 | TRANSISTOR 2SC536G           |
| Q740       | TR10000126 | TRANSISTOR 2SA608K (F,G)     |
| Q741       | TR30000327 | TRANSISTOR 2SC536G           |
| Q742-744   | TR30000327 | TRANSISTOR 2SC536G           |
| Q745       | TR10000126 | TRANSISTOR 2SA608K (F,G)     |
| Q746       | TR30000080 | TRANSISTOR 2SD863 (E,F)      |
| Q747-749   | TR30000327 | TRANSISTOR 2SC536G           |
| Q750, 751  | TR30000583 | TRANSISTOR 2SC2878 (A,B)     |
| Q752       | TR30000327 | TRANSISTOR 2SC536G           |
| IC701      | IC00001693 | IC NE5532AN                  |
| IC702      | IC00001980 | IC CX20187                   |
| IC703      | IC00001474 | IC NJM4556D                  |
| IC704      | IC00002235 | IC TL-072CP                  |
| IC705      | IC00002545 | IC BA-10324                  |
| IC706      | IC00001693 | IC NE5532AN                  |
| IC707      | IC00002508 | IC TC9312AN-058              |
| IC708      | IC00002491 | IC TA7291P                   |
| IC709      | IC00001085 | IC TA7341D                   |
| IC901      | IC00001991 | IC NJM79M12                  |
| IC902      | IC00000974 | IC NJM78M12                  |
| IC903      | IC00001930 | IC NJM7812                   |
| IC904      | IC00000615 | IC NJM78M05                  |
| RY701      | LY00000253 | RELAY RY-12W-OH-KJ           |
| L701, 702  | LC23700000 | COIL,MPX FILTER TRL-370      |
| L703, 704  | LM00000371 | MICRO INDUCTOR 3.9mH RTL-324 |
| L705, 706  | LC31040107 | COIL,TRAP RLV104A00T         |
| L707       | LC23670006 | COIL,OSC TRL-367             |
| L708, 709  | LC31260004 | COIL,HXPRO RLV126A00T        |
| L710, 711  | LM00000449 | MICRO INDUCTOR 19mH TRL-350  |
| L901, 902  | LM00000012 | MICRO INDUCTOR 470uH TRL-237 |
| VR701, 702 | RV20000478 | R,SEMI-FIXED RH0615C47300    |
| VR703, 704 | RV20000478 | R,SEMI-FIXED RH0615C47300    |
| VR705-707  | RV20000442 | R,SEMI-FIXED RH0615C22300    |
| VR708      | RV20000430 | R,SEMI-FIXED RH0615C10300    |
| S1, S2     | SH11000380 | 1 KEY PUSH 4TR-2819          |
| S3         | SH11000392 | 1 KEY PUSH 4TR-2820          |
| S4-S6      | SH11000380 | 1 KEY PUSH 4TR-2819          |
|            | TD103421   | P.C.B ASSEMBLY               |
| R650       | RM51002810 | R,METAL 10K 1/4W F           |
| R651       | RM51000812 | R,METAL 100 1/4W F           |
| R652       | RM54752810 | R,METAL 47.5K 1/4W F         |
| R653, 654  | RM51002810 | R,METAL 10K 1/4W F           |
| R655       | RM54752810 | R,METAL 47.5K 1/4W F         |
| R656       | RM51002810 | R,METAL 10K 1/4W F           |
| R657, 658  | RM51000812 | R,METAL 100 1/4W F           |
| R659       | RM51002810 | R,METAL 10K 1/4W F           |
| R660       | RM54751816 | R,METAL 4.75K 1/4W F         |
| R661, 662  | RM54752810 | R,METAL 47.5K 1/4W F         |

| SYMBOL    | PARTS NO.  | DESCRIPTION                       |
|-----------|------------|-----------------------------------|
| R663      | RM54753813 | R,METAL 475K 1/4W F               |
| R664      | RM51001816 | R,METAL 1K 1/4W F                 |
| R665      | RM51003813 | R,METAL 100K 1/4W F               |
| R666      | RM54751816 | R,METAL 4.75K 1/4W F              |
| C610,611  | CE01006160 | CAP,ELEC. 10uF 16V                |
| C612      | CE02206259 | CAP,ELEC. 22uF 25V                |
| Q606-610  | TR30000327 | TRANSISTOR 2SC536G                |
| Q611      | TR10000126 | TRANSISTOR 2SA608K (F,G)          |
| Q612      | TR30000327 | TRANSISTOR 2SC536G                |
| Q613      | TR10000126 | TRANSISTOR 2SA608K (F,G)          |
| IC601     | IC00002569 | IC BA12004                        |
| IC608     | IC00002363 | IC TC4011BP                       |
| D610-620  | DD10000100 | DIODE IN4148                      |
|           | TD103431   | P.C.B ASSEMBLY                    |
| VR604     | RV10001553 | R,VARIABLE 4TR-2775 50Kx2         |
|           | TD103441   | P.C.B ASSEMBLY                    |
| VR603     | RV10001589 | R,VARIABLE 4TR-2821 250KW         |
| R641,642  | RM52211818 | R,METAL 2.21K 1/4W F              |
|           | TD102217   | P.C.B ASSEMBLY                    |
| R621,622  | RM29091816 | R,METAL 9.09K 1/4W F              |
| R623,624  | RD21003829 | R,CARBON 100K 1/4W J              |
| R625,626  | RM24752818 | R,METAL 47.5K 1/4W F              |
| R627,628  | RD21002825 | R,CARBON 10K 1/4W J               |
| R629-631  | RD22202822 | R,CARBON 22K 1/4W J               |
| R633      | RD21003829 | R,CARBON 100K 1/4W J              |
| R634      | RM93900229 | R,METAL 390 2W                    |
| R635      | RD22202822 | R,CARBON 22K 1/4W J               |
| R636      | RD21003829 | R,CARBON 100K 1/4W J              |
| R640-642  | RD22202822 | R,CARBON 22K 1/4W J               |
| R643      | RD25603827 | R,CARBON 560K 1/4W J              |
| R644      | RD24702822 | R,CARBON 47K 1/4W J               |
| R647-649  | RD22202822 | R,CARBON 22K 1/4W J               |
| R681-683  | RD22202822 | R,CARBON 22K 1/4W J               |
| C601      | CE01005258 | CAP,ELEC. 100uF 25V               |
| C602,603  | CE02207501 | CAP,ELEC. 2.2uF 50V               |
| C604,605  | CE04706168 | CAP,ELEC. 47uF 16V                |
| C606      | CE02207501 | CAP,ELEC. 2.2uF 25V               |
| IC602,603 | IC00002053 | IC BA6146                         |
| IC604     | IC00001528 | IC TC4013BP                       |
| IC605,606 | IC00002041 | IC LB-1290                        |
| IC607     | IC00002028 | IC TC5054P                        |
| FL601     | DD40000988 | FL TUBE FIP 48AMW9Y $\Delta$      |
| D601      | DD20000193 | DIODE RD-15E                      |
| D602      | DD20000200 | DIODE RD-5.1E                     |
| D603      | DD10000100 | DIODE IN4148                      |
| D604,605  | DD40001180 | LED SEL1323G                      |
| D606      | DD40000101 | LED LN324G                        |
| D607      | DD40000095 | LED LN224R                        |
| D608      | DD40000101 | LED LN324G                        |
| Q601,602  | TR30000327 | TRANSISTOR 2SC536G                |
| S601-606  | SH60000240 | KEY BOARD SW 4TR-2343             |
|           | TD102227   | P.C.B ASSEMBLY                    |
|           | JH00000147 | HEAD PHONE JACK C-3921#3          |
|           | TB-128-A   | P.C.B ASSEMBLY                    |
| S001      | SH40000120 | POWER SW C-3600B-T $\Delta$       |
| C001      | CK00000035 | SPARK KILLER DE7150F472M $\Delta$ |

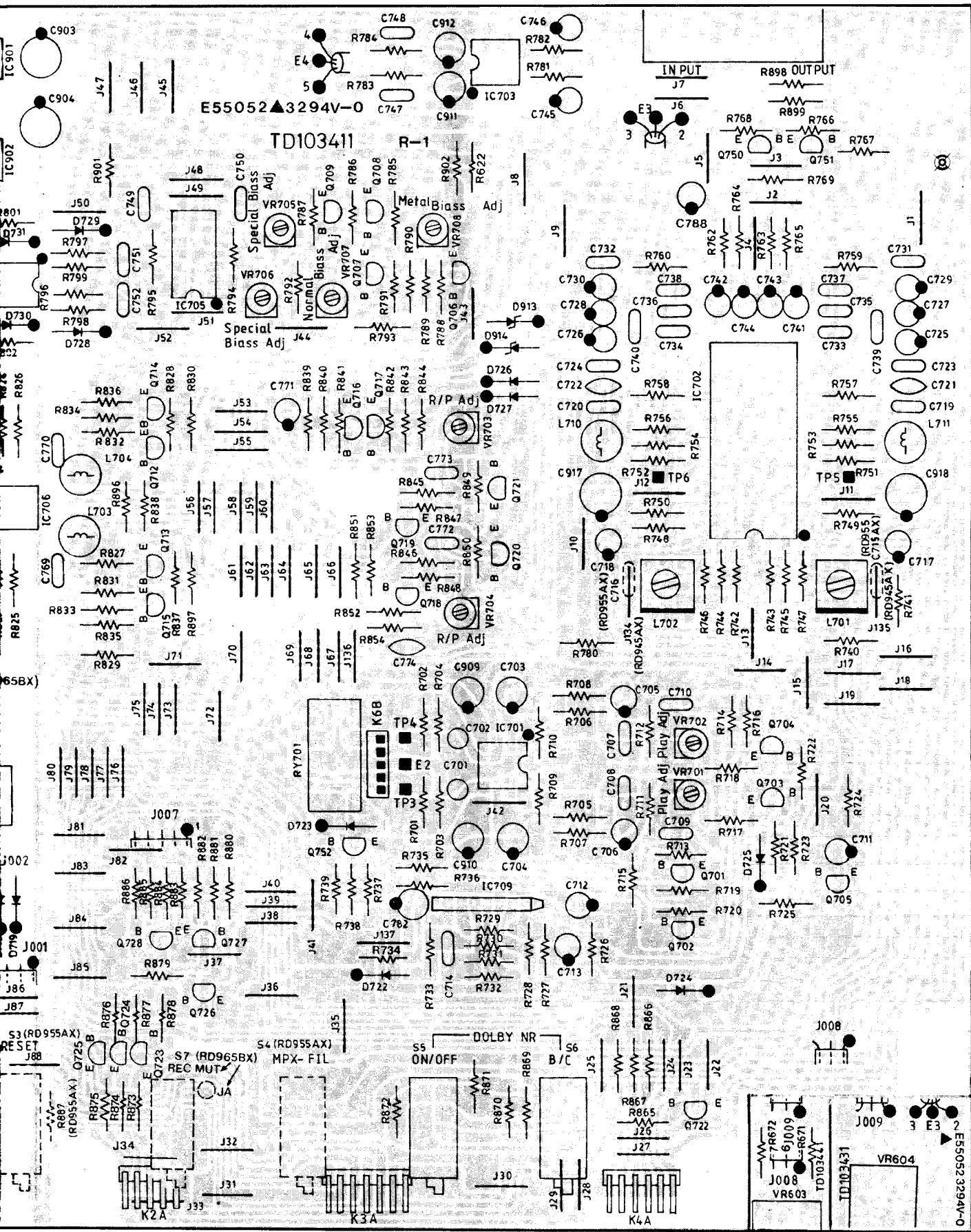
| SYMBOL | PARTS NO.  | DESCRIPTION  |
|--------|------------|--|
|        |            | OTHERS   |
|        | AB00000640 | BOTTOM BOARD 4TQN-12B                                |
|        | AF40000290 | FRONT CHASSIS 2TQK-3#2                               |
|        | AR40000274 | PRINTED REAR CHASSIS TRP-600                         |
|        | AS01000294 | SIDE CHASSIS 3TQL-1                                  |
|        | DC00000694 | CASSETTE DECK ASS'Y<br>CMAY5Z334C                    |
|        | PT28507102 | POWER TRANSFORMER TT-285GF $\Delta$                  |
|        | FT00000229 | PLASTIC FOOT 4TSH-19#2<br>50Fx14H                    |
|        | SP10006442 | EJECT SUPPORT 4TQK-10                                |
|        | CD00000218 | AC CORD SPT-2 AWG#18<br>4TR-670#4 $\Delta$ (U,C,A,J) |
|        | CD00000048 | AC POWER CORD 4TR-1037 $\Delta$<br>(H,E,K2)          |
|        | CD00000085 | AC POWER CORD C-2504A $\Delta$ (K1)                  |
|        | CD00000292 | AC POWER CORD 4TR-2631#1<br>H05VV-F $\Delta$ (D)     |
|        | CD00000115 | AC POWER CORD C-3763-T $\Delta$ (G)                  |
|        | NP00001949 | NAME STICKER AC120V<br>4TR-2828#1 TNP-382            |
|        | NP00001974 | NAME STICKER AC120V-C<br>4TR-2828#4 TNP-385          |
|        | NP00001962 | NAME STICKER AC240V<br>4TR-2828#3 TNP-384            |
|        | NP00001998 | NAME STICKER AC230V<br>4TR-2828#5 TNP-389            |
|        | NP00002012 | NAME STICKER AC100V<br>4TR-2828#6 TNP-391            |
|        | NP00001950 | NAME STICKER AC220V<br>4TR-2828#2 TNP-383            |
|        | SC00000131 | AC CORD STOPPER SR-5N-4 $\Delta$<br>(K1,A)           |
|        | SC00000039 | AC CORD STOPPER SR-6W-1 $\Delta$<br>(D)              |
|        | SC00000027 | AC CORD STOPPER SR-4N-4 $\Delta$                     |
|        | AA40000443 | FRONT PANEL 2TQK-1#2 TFP-632                         |
|        | AW00000551 | ACRYLIC DOOR PLATE 2TQK-17                           |
|        | AW00000540 | PANEL WINDOW 4TQK-6#1                                |
|        | BU00001145 | POWER RING W/LED<br>4TQF-13 14x14                    |
|        | BU00001157 | PUSH BUTTON RING 4TQF-14<br>5x10                     |
|        | BU00001169 | KNOB RING 4TQF-17 39F                                |
|        | BU00001200 | EJECT BUTTON RING 4TQK-16                            |
|        | BU00001212 | PUSH BUTTON RING PR4-09A00T<br>5x20                  |
|        | KB20002681 | POWER BUTTON 4TQF-15 14x14                           |
|        | KB20002693 | PUSH BUTTON 4TQF-16 5x10                             |
|        | KB20002711 | TACT BUTTON 6 KEY 3TQK-8                             |
|        | OM10001284 | ORNAMENTAL SIDE BOARD<br>4TR-2797#3 H=109MM          |
|        | OM10001302 | FL ORNAMENTAL PLATE 4TQK-4                           |
|        | OM10001326 | ALUMIN. DOOR 4TQK-5 TFP-637                          |
|        | DD40000095 | LED SEL1124R/LN224R                                  |
|        | OM70000065 | PUSH BUTTON CONNECTOR<br>4TTL-15                     |
|        | SN00000179 | BUTTON SPRING 4TR-1988A#2                            |
|        | AU00001249 | TOP COVER POLY 3TUV-6#8                              |
|        | KB10001722 | KNOB 4TQG-18 13F                                     |
|        | KB10001760 | KNOB 4TQG-6 33F                                      |
|        | KB20002735 | EJECT BUTTON 4TQK-18                                 |
|        | KB20002759 | PUSH BUTTON PR4-13A00T 5x20                          |
|        | FE00000067 | FELT 4TR-1083B#1 22F                                 |
|        | FE00000079 | FELT 4TR-1083B#3 46F                                 |
|        | SP10006557 | EJECT CONNECTOR 4TQK-21                              |
|        | SR00000882 | UPPER COVER SPACER 4TR-2418                          |
|        | MN10002811 | OWNER'S MANUAL RD-955BX                              |
|        | PL00001075 | STYROL SIDE MOULDING<br>3TTW-14#2 TZ-172-1           |

# Printed Circuit Boards









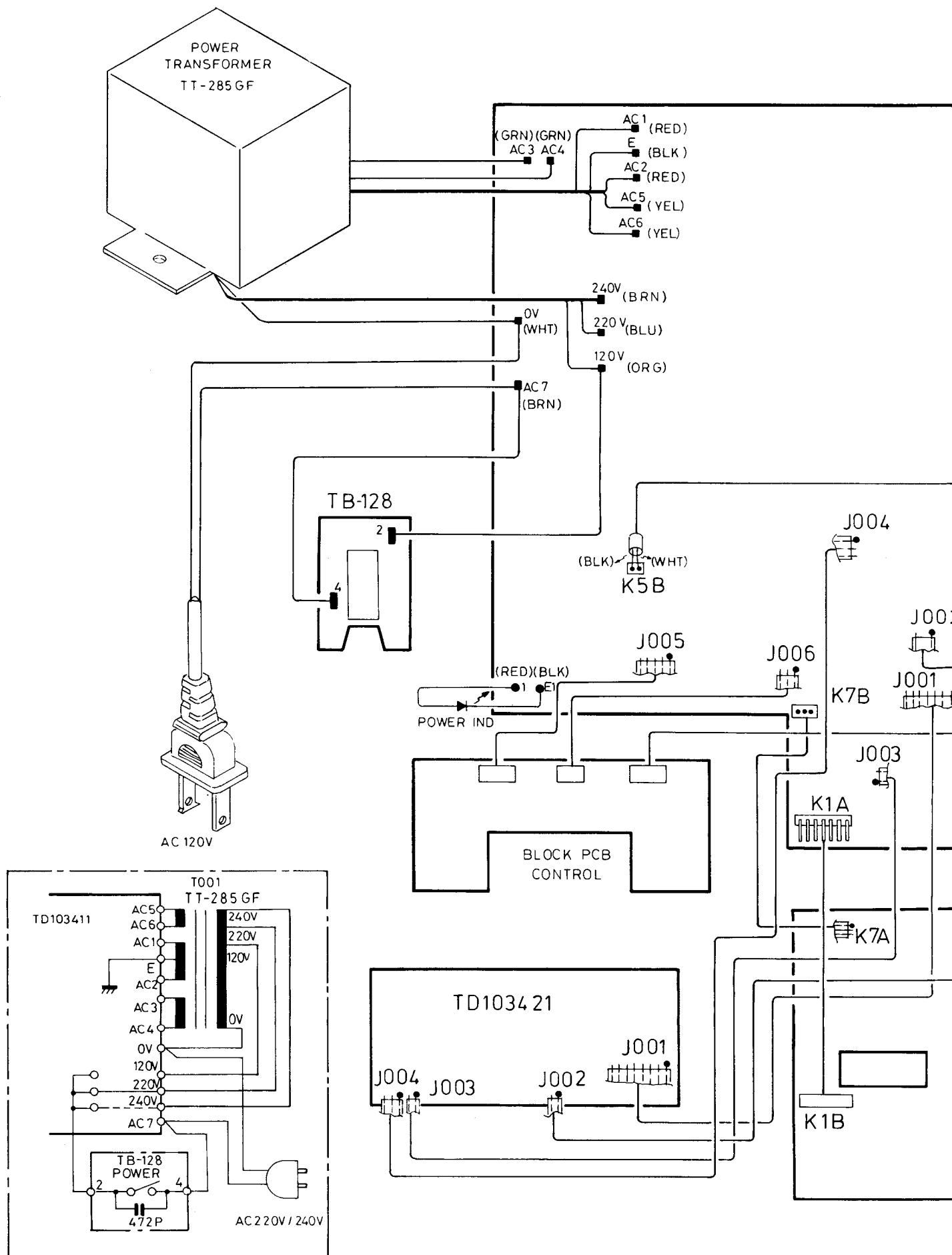
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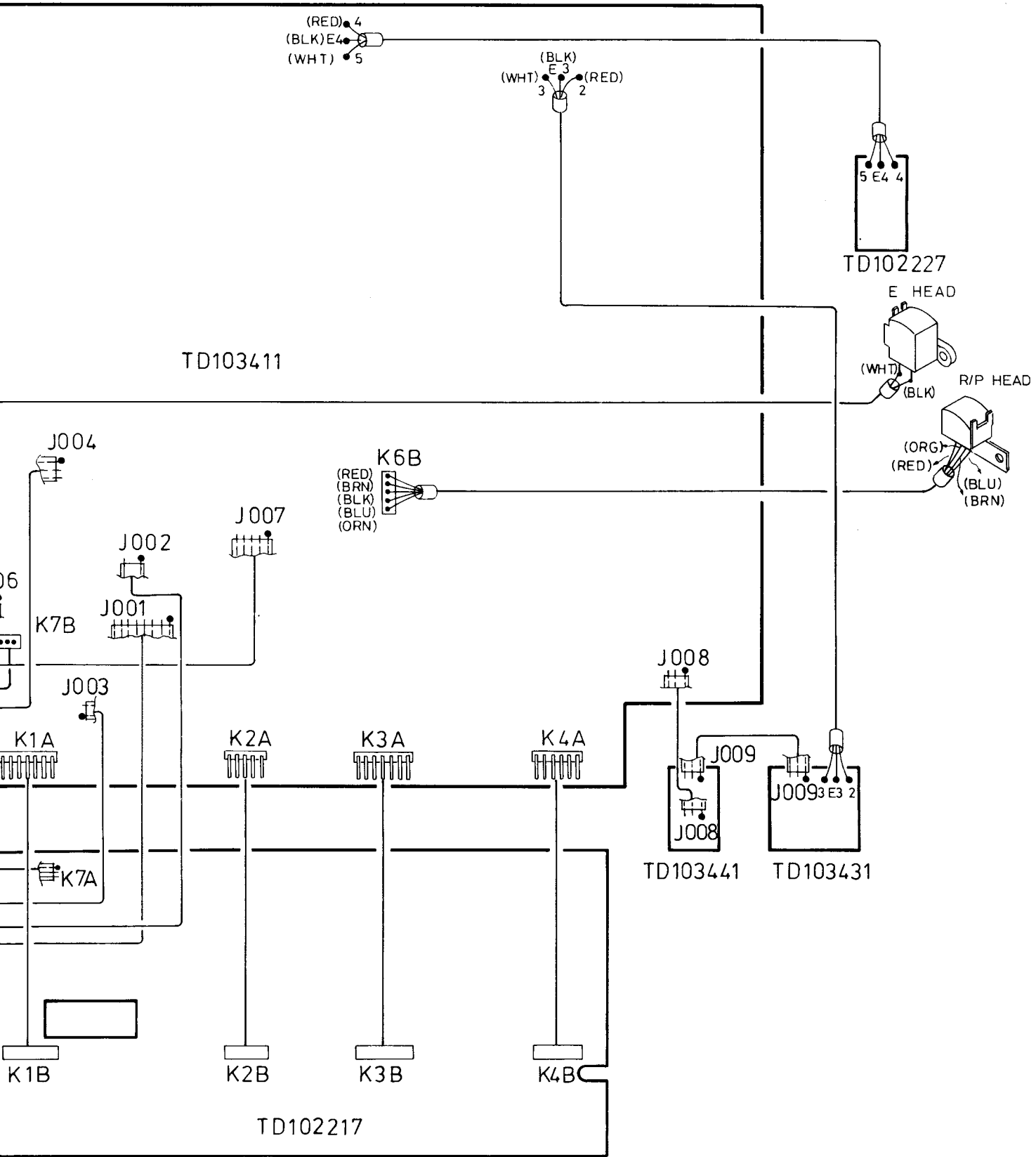
TD103411

R-1

E55052 3294V-0

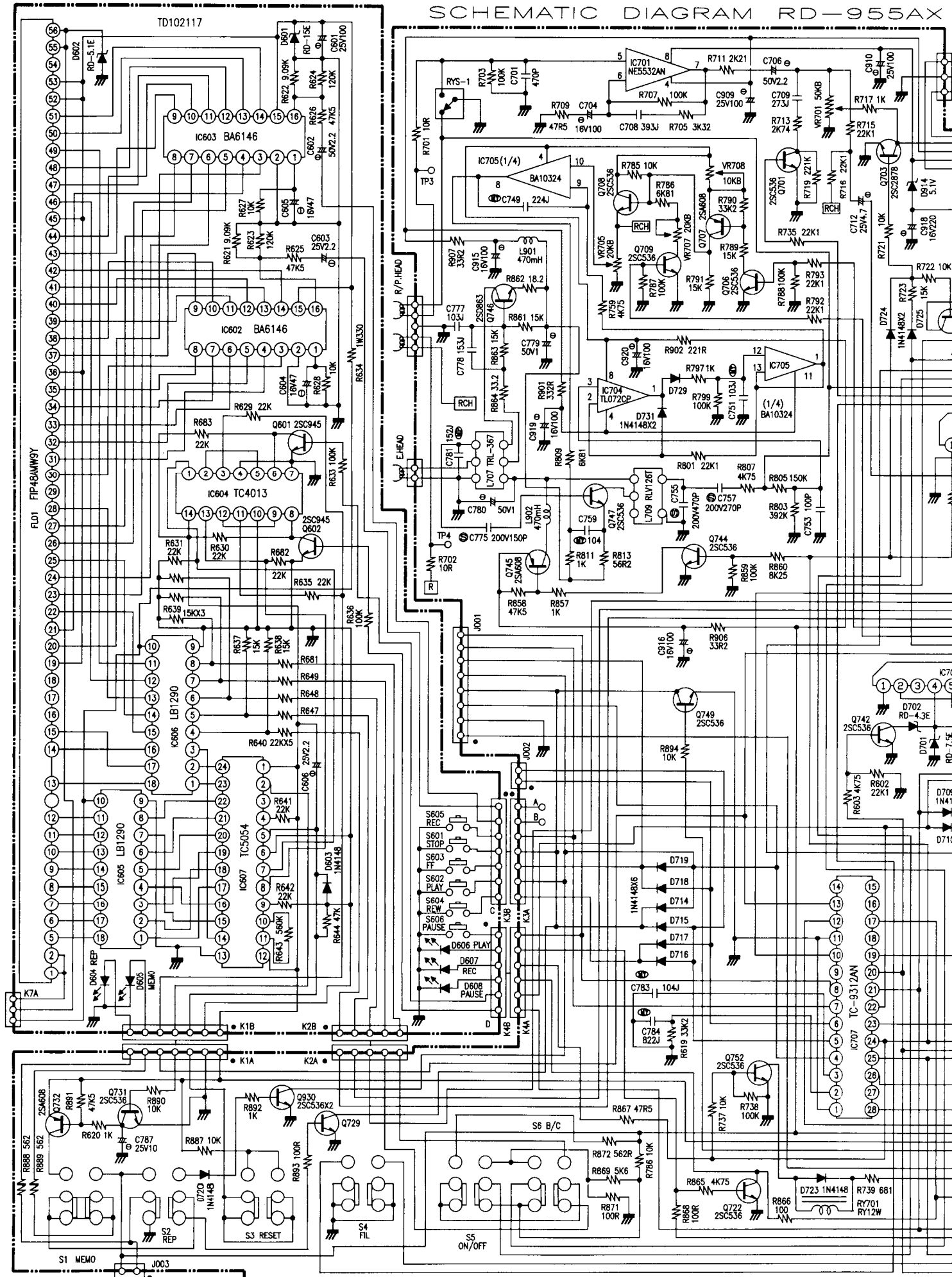
# Wiring Diagram



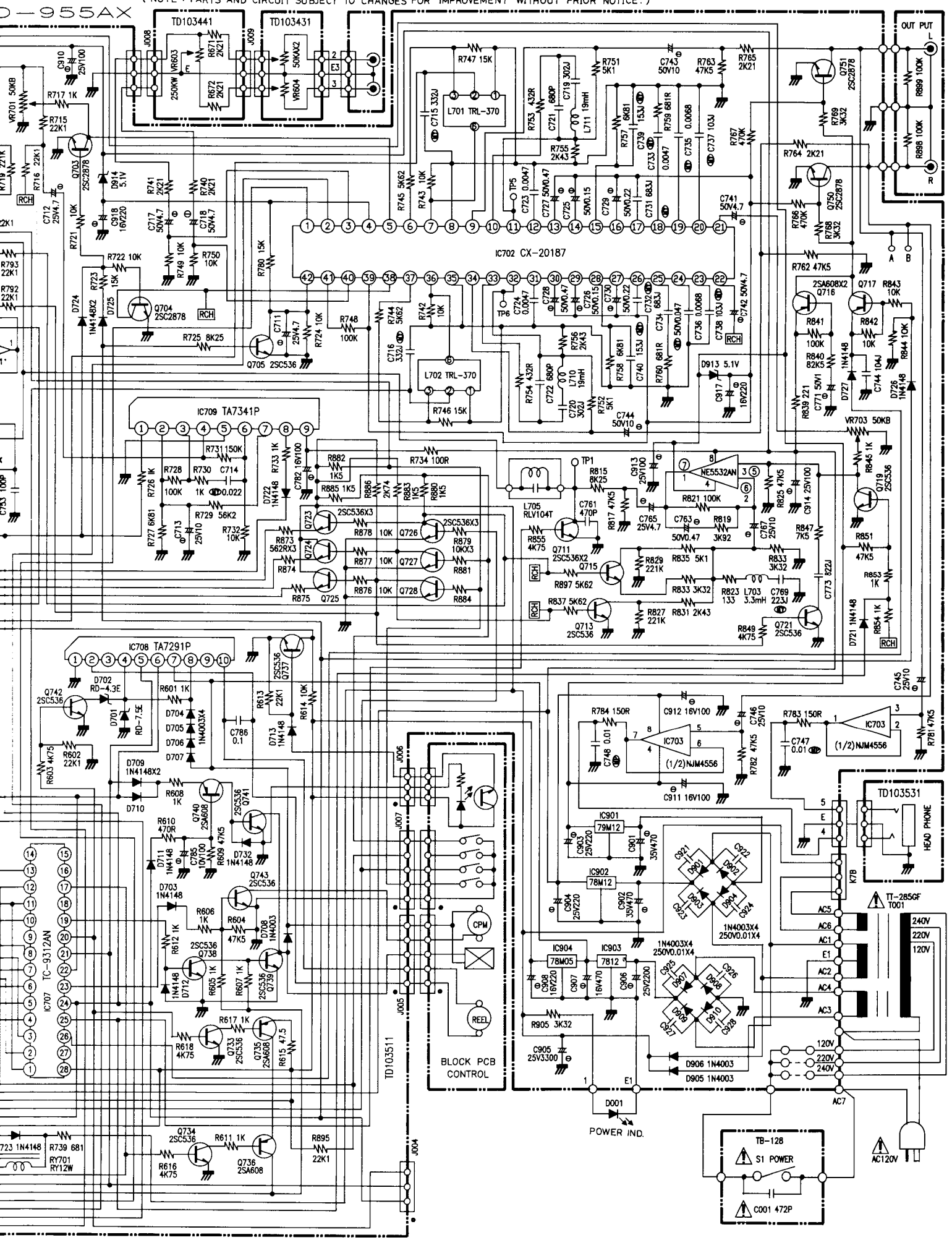


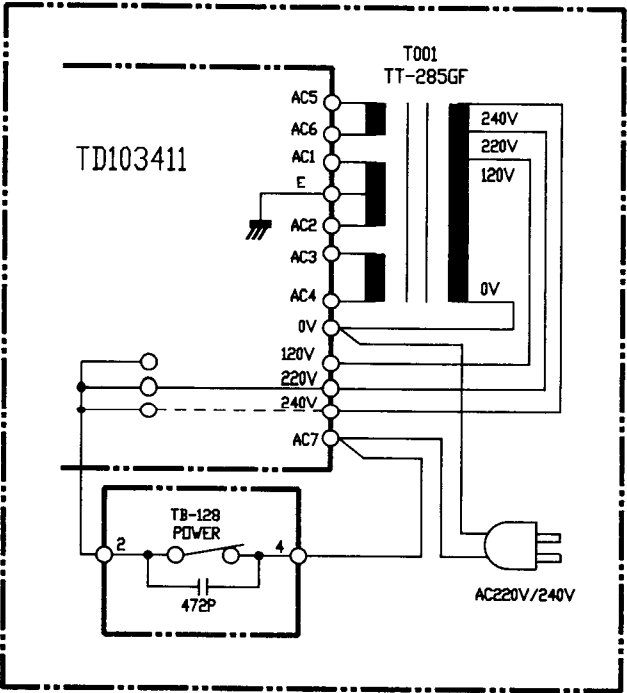
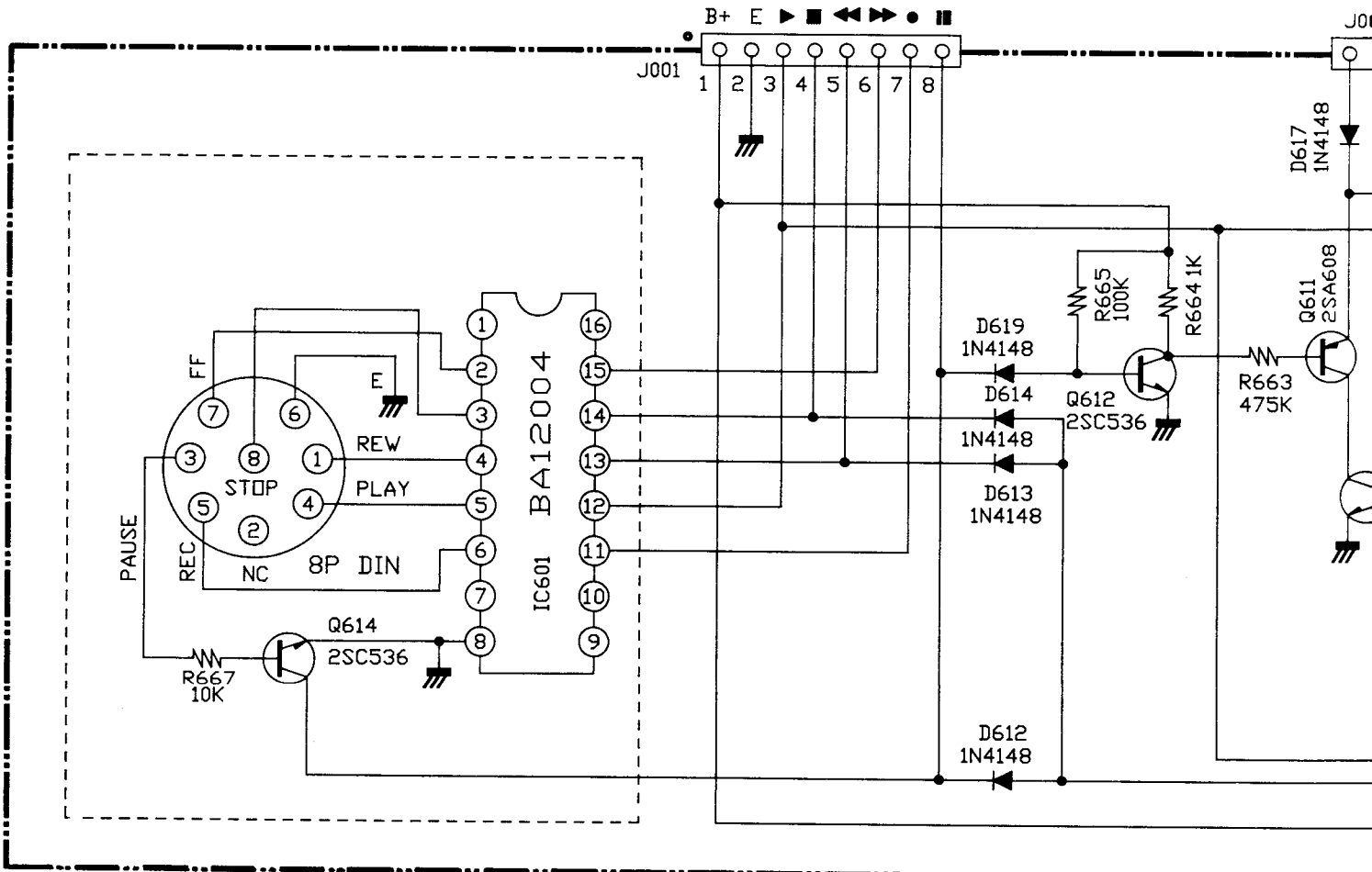
# Schematic Diagram

# SCHEMATIC DIAGRAM RD-955AX



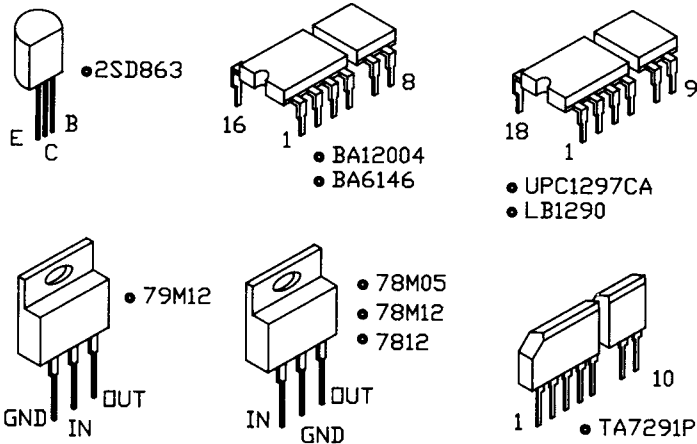
( NOTE : PARTS AND CIRCUIT SUBJECT TO CHANGES FOR IMPROVEMENT WITHOUT PRIOR NOTICE. )

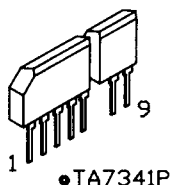
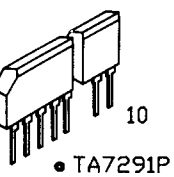
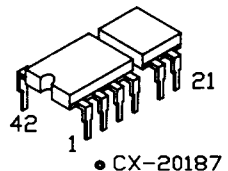
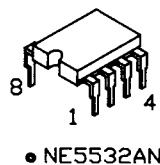
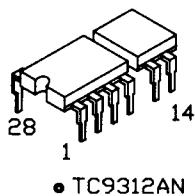
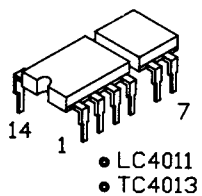
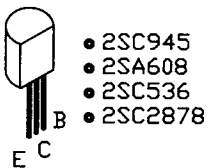
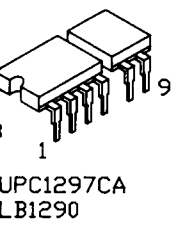
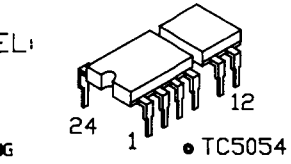
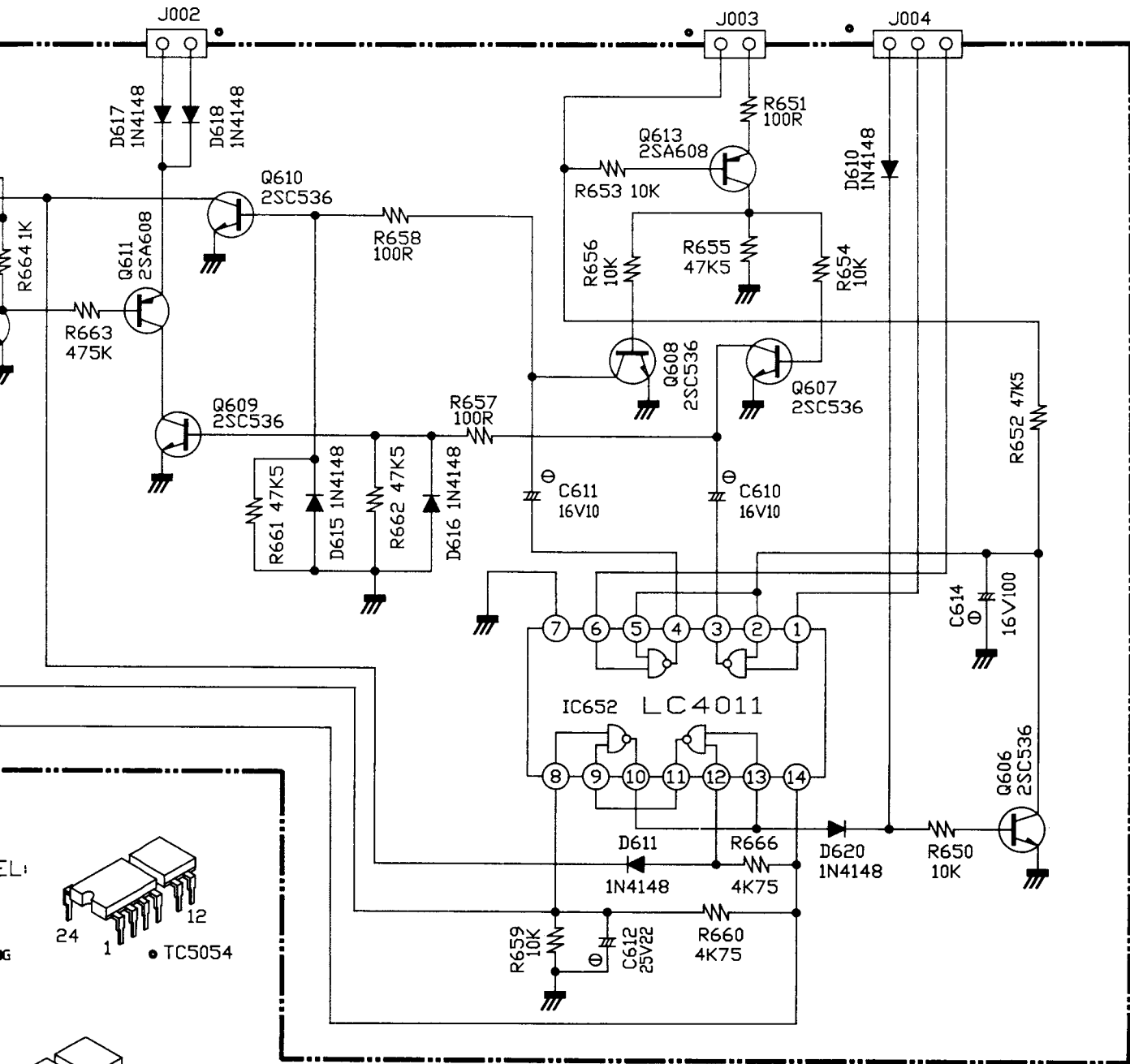




**INSTRUCTION FOR SERVICING PERSONNEL:**

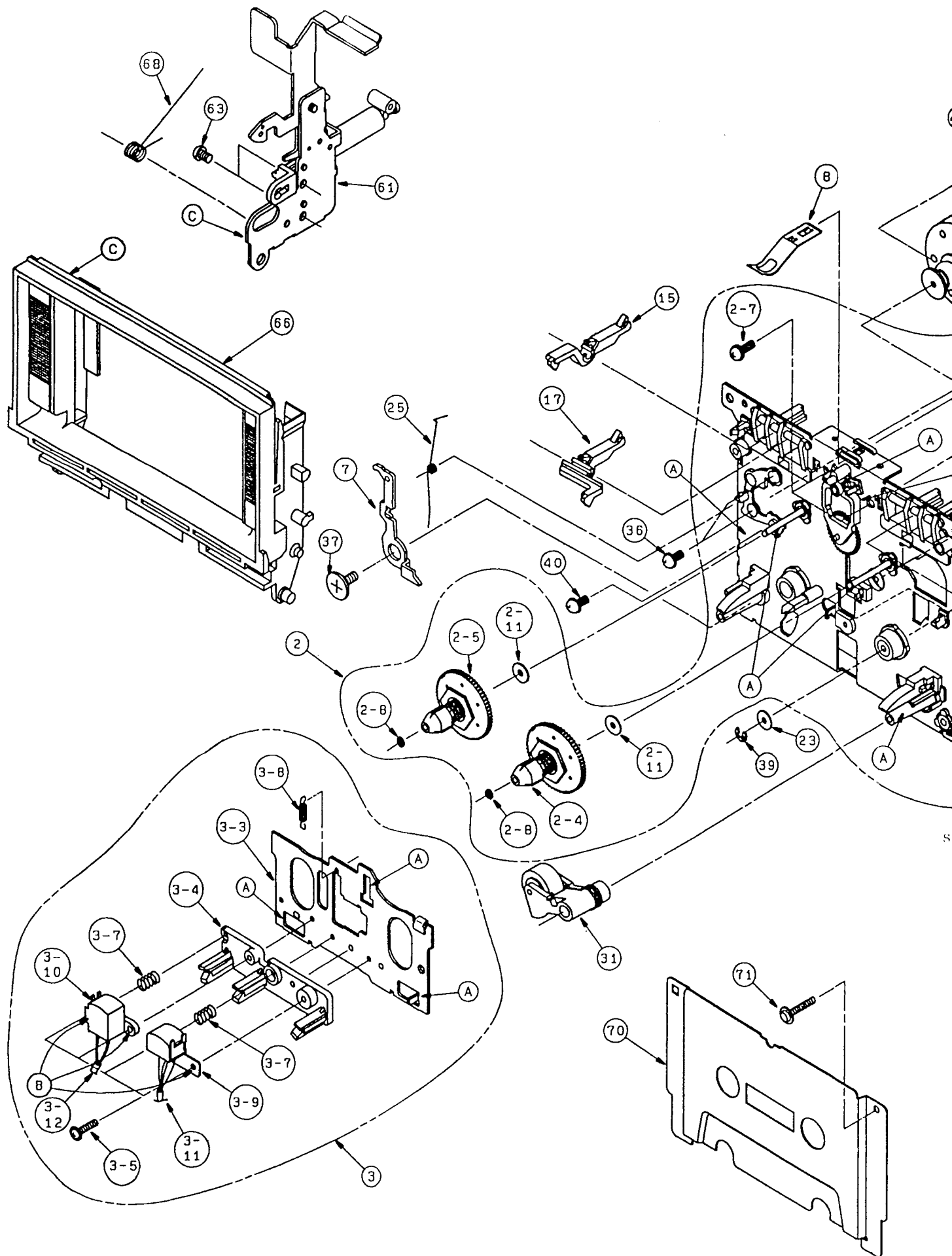
1. USE ONLY REPLACEMENT PARTS THAT HAVE THE CRITICAL CHARACTERISTICS RECOMMENDED BY MANUFACTURER.
2. MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE AC SUPPLY CIRCUIT BEFORE RETURNING THE UNIT TO THE CUSTOMER.

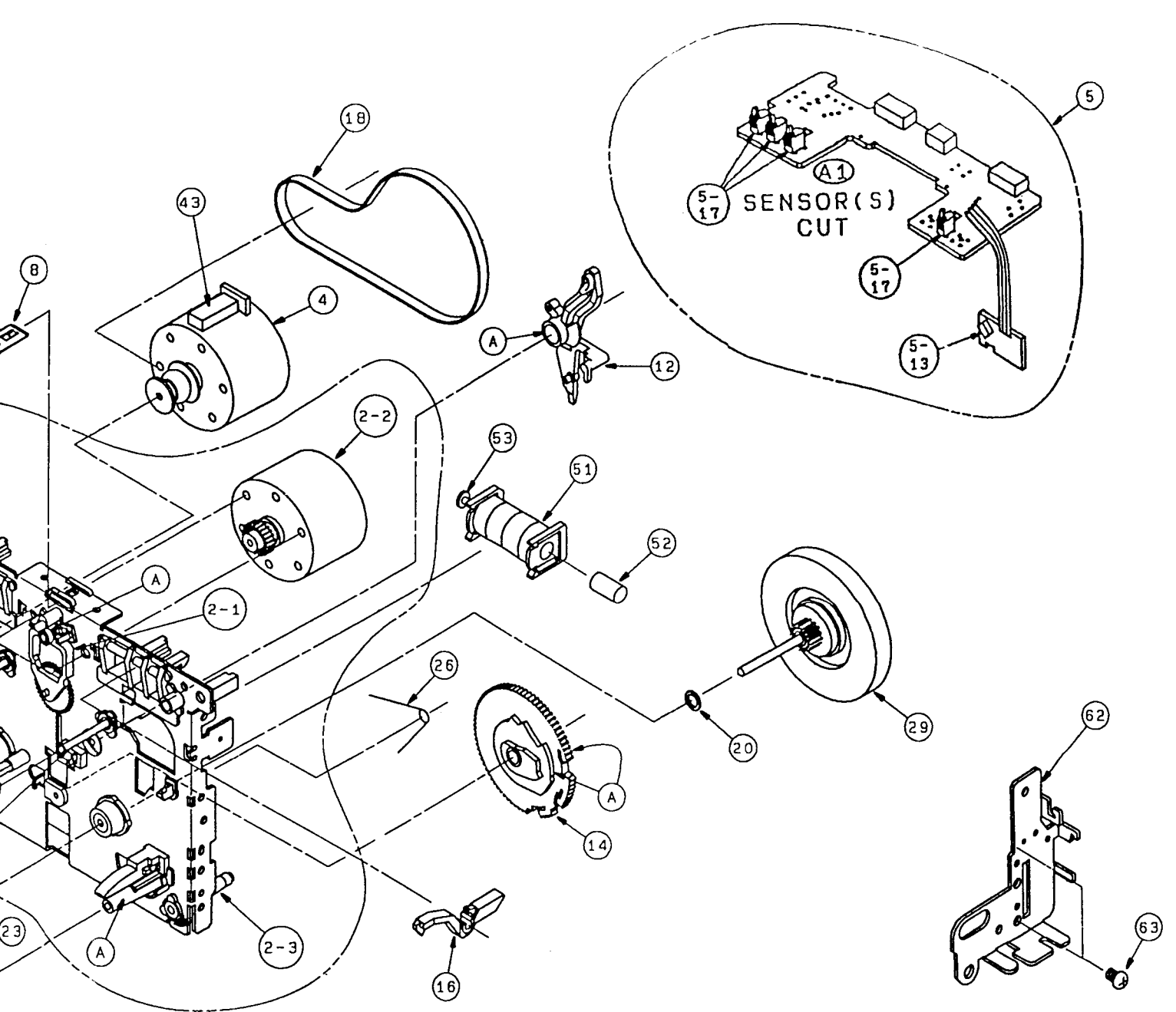






# Disassembly Diagram





| SYMBOL | PARTS NO. | DESCRIPTION             |
|--------|-----------|-------------------------|
| 2      | F511-422  | BLOCK CHASSIS           |
| 2-1    | F517-049  | BLOCK IDLER             |
| 2-2    | F564-280  | BLOCK MOTOR REEL        |
| 2-3    | F612-156  | BLOCK BASE CHASSIS      |
| 2-4    | F623-037  | BLOCK BASE REEL         |
| 2-5    | F623-127  | BLOCK BASE REEL         |
| 2-7    | FG156-11A | SCREW 2.6x6.4 ZN        |
| 2-8    | FJ111-17  | WASHER 1.7x0.25         |
| 2-11   | UJ12V-11  | POLYSLIDER 2.1x0.25     |
| 3      | F513-632  | BLOCK PLATE HEAD        |
| 3-3    | FC52E-46  | BASE HEAD               |
| 3-4    | FD45T-16  | SPACER HEAD             |
| 3-7    | FK21U-11  | SPRING AZIMUTH          |
| 3-8    | FK26N-14  | SPRING BASE HEAD        |
| 3-9    | FU16S-11  | R/P HEAD (HAYEH4405A)   |
| 3-10   | FU192-11  | E HEAD                  |
| 3-11   | WH51U-04  | WIRE CONNECTOR (R/P)    |
| 3-12   | WH46W-04  | WIRE CONNECTOR (E)      |
| 4      | F525-269  | BLOCK MOTOR MAIN        |
| 5      | F567-255  | BLOCK PCB CONTROL       |
| 5-13   | AW13F-00  | SENSOR (SPI-335-34-FG)  |
| 5-17   | UE16E-11  | PUSH SWITCH             |
| 7      | FC39S-33  | ARM INTERLOCK (OW)      |
| 8      | FC52H-13  | SPRING CASSETTE PUSHING |
| 12     | FD45G-13  | ARM PLAY                |
| 14     | FD45B-15  | GEAR CAM                |
| 15     | FD44T-14  | LEVER (REC SW)          |
| 16     | FD44Y-12  | LEVER (PACK SW)         |
| 17     | FD44V-12  | LEVER (METAL SW)        |
| 18     | FF17W-31  | BELT MAIN               |
| 20     | FJ111-30  | POLYSLIDER 2.6x0.25     |
| 23     | FJ111-14  | POLYSLIDER 2.6x0.5      |
| 25     | FK28M-16  | SPRING INTERLOCK (L)    |
| 26     | FK28R-11  | SPRING SRIDE            |
| 29     | FR22D-11  | ASSY FLYWHEEL           |
| 31     | FR20L-22  | ASSY PINCH ROLLER (R)   |
| 36     | FG114-14  | SCREW 2.6x5 ZN          |
| 37     | UG15S-11A | SCREW                   |
| 39     | UG13U-15  | E-RING                  |
| 40     | UG12H-16  | SCREW 3.0x8 ZN          |
| 43     | FF17C-12  | CUSHION HOLD            |
| 51     | F765-263  | BLOCK SOLENOID          |
| 52     | FL39H-12A | IRON CORE               |
| 53     | FL39K-12  | PLUNGER                 |
| 61     | FC52R-11  | BRACKET DAMRER (L)      |
| 62     | F573-096  | PLATE HOLD BLK          |
| 63     | KG194-28  | SCREW 2.6x4 ZN          |
| 66     | FD29U-11  | DOOR FRAME              |
| 70     | F684-053  | BLOCK DRESSING          |
| 71     | UG12T-11  | SCREW                   |