

Issued in NOV. 2004, NOV. 2002

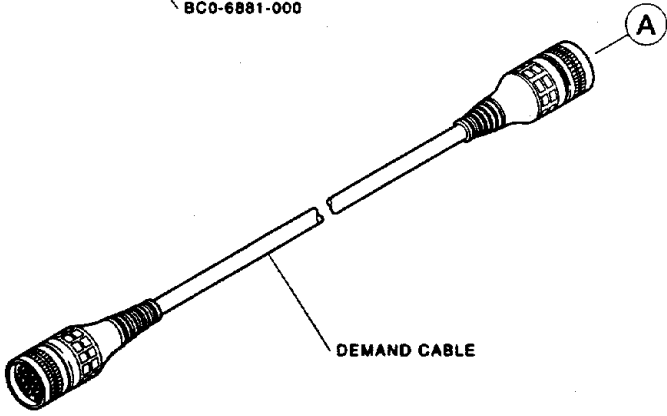
# PARTS CATALOGUE

ZOOM DEMAND

## Contents

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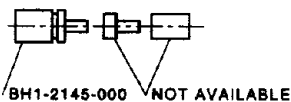
|                                   |     |
|-----------------------------------|-----|
| ZDJ-D02 (REF. NO. BG2-5124) ..... | B-1 |
| ZDJ-DN2 (REF. NO. BG2-5155) ..... | B-2 |
| ZDJ-P01 (REF. NO. BG5-7003) ..... | B-3 |



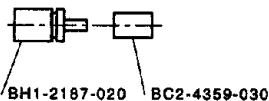
**ZDJ-D02**  
**ZOOM DEMAND**  
**BG2-5124**

Detail - 1

## TYPE-1



## TYPE-2



NOTE:TYPE-1からTYPE-2に変更することができます。  
その時はTYPE-2の部品2つが必要です。

NOTE:Available to change from type1 to type2.  
When changing it, two type2 parts are needed.

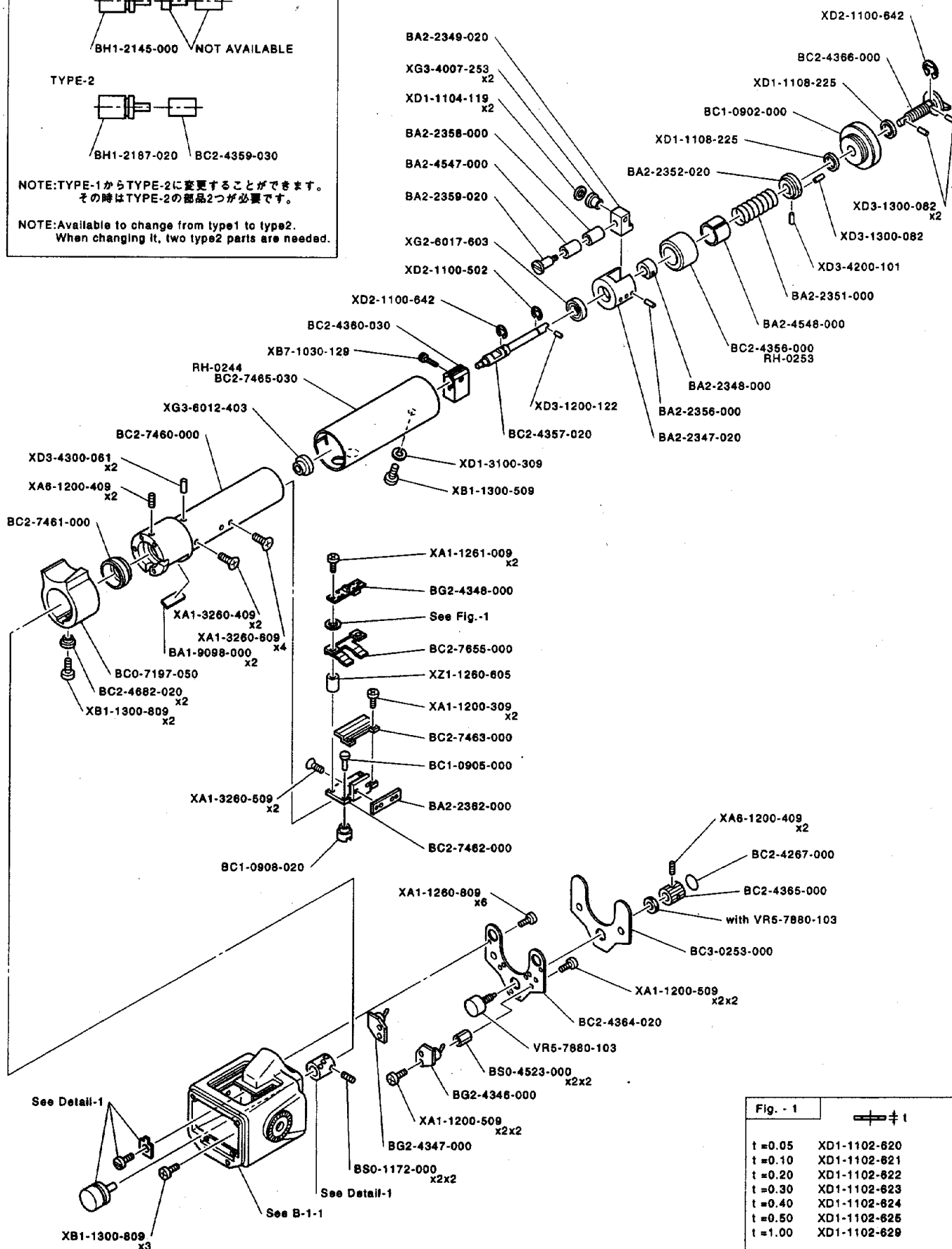


Fig. - 1

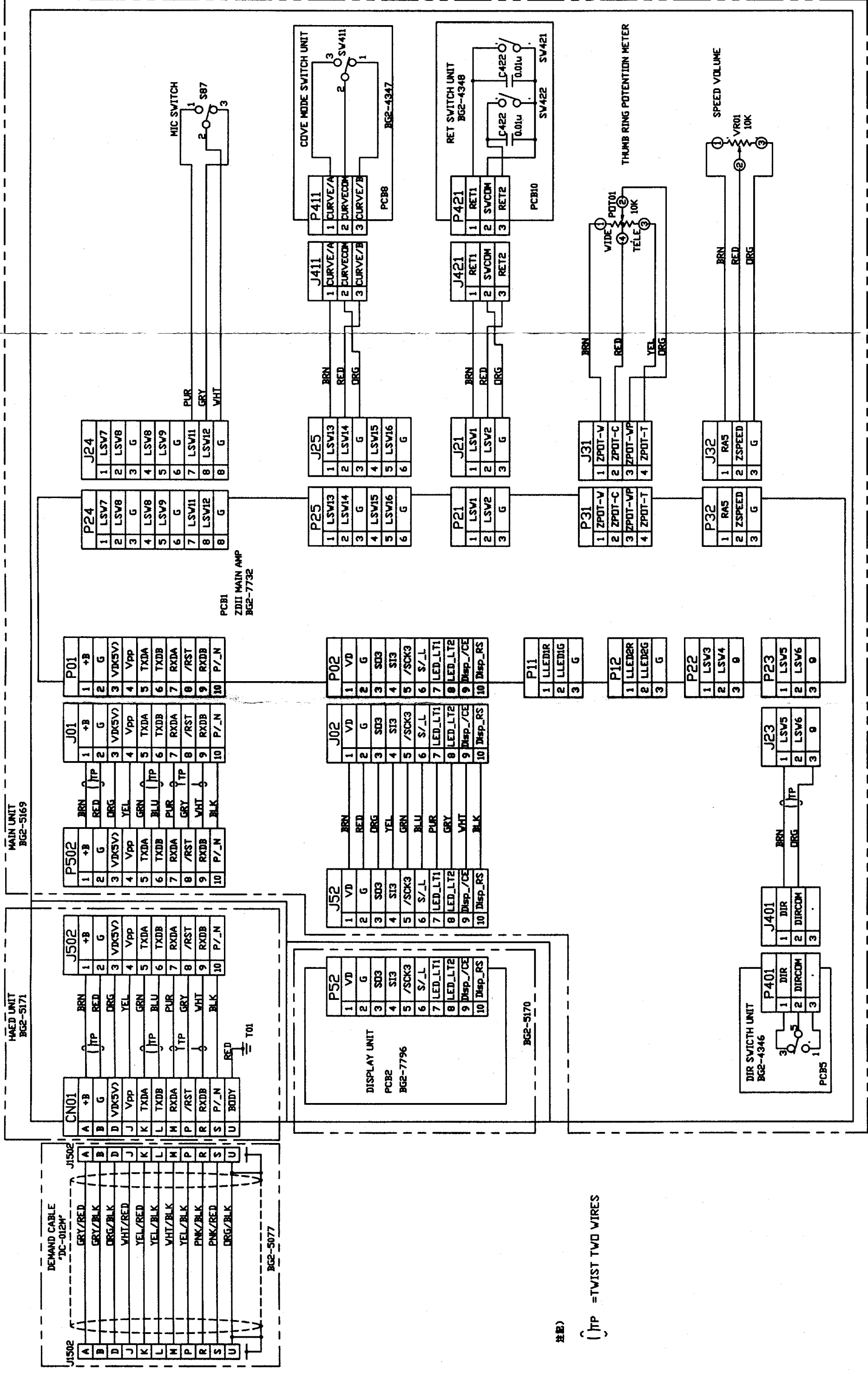


|          |              |
|----------|--------------|
| t = 0.05 | XD1-1102-620 |
| t = 0.10 | XD1-1102-621 |
| t = 0.20 | XD1-1102-622 |
| t = 0.30 | XD1-1102-623 |
| t = 0.40 | XD1-1102-624 |
| t = 0.50 | XD1-1102-625 |
| t = 1.00 | XD1-1102-629 |

| Parts Number     | Q'ty | Description              | Page  |
|------------------|------|--------------------------|-------|
| BA0-7994-000 000 | 2    | WASHER                   | B-1-1 |
| BA1-3393-000 000 | 1    | CAP                      | B-1-1 |
| BA1-8597-000 000 | 2    | SPACER                   | B-1-1 |
| BA1-9098-000 000 | 4    | RUBBER                   | B-1-2 |
| BA2-2347-020 000 | 2    | HOLDER                   | B-1-2 |
| BA2-2348-000 000 | 2    | CAM                      | B-1-2 |
| BA2-2349-020 000 | 2    | HOLDER                   | B-1-2 |
| BA2-2351-000 000 | 1    | SPRING                   | B-1-2 |
| BA2-2352-020 000 | 1    | WASHER                   | B-1-2 |
| BA2-2356-000 000 | 2    | PIN                      | B-1-2 |
| BA2-2358-000 000 | 2    | ROLLER                   | B-1-2 |
| BA2-2359-020 000 | 2    | SCREW                    | B-1-2 |
| BA2-2362-000 000 | 1    | PLATE                    | B-1-2 |
| BA2-4356-000 000 | 1    | BARREL                   | B-1-2 |
| BA2-4547-000 000 | 2    | TUBE (PER METER)         | B-1-2 |
| BA2-4548-000 000 | 2    | PLATE                    | B-1-2 |
| BC0-6880-020 000 | 2    | SHAFT                    | B-1-1 |
| BC0-6881-000 000 | 4    | SHAFT                    | B-1-1 |
| BC0-7197-050 000 | 1    | THUMB RING               | B-1-2 |
| BC0-8373-020 000 | 1    | CROWN RING (FEMALE)      | B-2-1 |
| BC1-0902-000 000 | 1    | COVER                    | B-1-2 |
| BC1-0905-000 000 | 1    | PUSH BUTTON              | B-1-2 |
| BC1-0908-020 000 | 1    | GUIDE                    | B-1-2 |
| BC1-7488-020 000 | 1    | ORDER PLATE, PETP        | B-1-1 |
| BC1-9467-030 000 | 2    | HOLDER                   | B-1-1 |
| BC1-9470-020 000 | 2    | LOCK SCREW, S            | B-1-1 |
| BC2-4267-000 000 | 1    | GEAR                     | B-1-2 |
| BC2-4350-050 000 | 1    | BODY                     | B-1-1 |
| BC2-4357-020 000 | 1    | SHAFT                    | B-1-2 |
| BC2-4358-000 000 | 1    | COVER                    | B-1-1 |
| BC2-4359-030 000 | 2    | COUPLING                 | B-1-2 |
| BC2-4360-030 000 | 2    | HOLDER                   | B-1-2 |
| BC2-4361-000 000 | 1    | PLATE                    | B-1-1 |
| BC2-4362-000 000 | 1    | PLATE                    | B-1-1 |
| BC2-4364-020 000 | 1    | PLATE                    | B-1-2 |
| BC2-4365-000 000 | 2    | KNOB                     | B-1-2 |
| BC2-4366-000 000 | 1    | KNOB                     | B-1-2 |
| BC2-4367-000 000 | 1    | PLATE (ZOOM SPEED, T, W) | B-2-2 |
| BC2-4682-020 000 | 4    | INSERT COLLAR            | B-1-2 |
| BC2-4683-040 000 | 2    | GRIP, ZOOM DEMAND        | B-1-1 |
| BC2-7460-000 000 | 1    | BARREL                   | B-1-2 |
| BC2-7461-000 000 | 1    | HOLDER                   | B-1-2 |
| BC2-7462-000 000 | 1    | HOLDER                   | B-1-2 |
| BC2-7463-000 000 | 1    | PLATE                    | B-1-2 |

| Parts Number     | Qty | Description                      | Page  |
|------------------|-----|----------------------------------|-------|
| BC2-7465-000 000 | 1   | GRIP                             | B-1-2 |
| BC2-7655-000 000 | 1   | LEAF SPRING                      | B-1-2 |
| BC3-0168-030 000 | 1   | HOLDER                           | B-1-1 |
| BC3-0252-000 000 | 1   | HOLDER                           | B-1-1 |
| BC3-0253-000 000 | 1   | PLATE                            | B-1-2 |
| BC3-0254-030 000 | 1   | PANEL                            | B-1-1 |
| BC3-0255-020 000 | 1   | SHEET, MYLAR                     | B-1-1 |
| BC3-0256-000 000 | 1   | FOAM RUBBER                      | B-1-1 |
| BC3-0257-000 000 | 1   | PANEL                            | B-1-1 |
| BC3-0258-000 000 | 1   | NAME PLATE , PET                 | B-1-1 |
| BC3-0260-000 000 | 1   | BODY                             | B-1-1 |
| BG2-4346-000 000 | 1   | DIRECTION SWITCH BOARD ASS'Y     | B-1-2 |
| BG2-4347-000 000 | 1   | CURVE SWITCH BOARD ASS'Y         | B-1-2 |
| BG2-4348-000 000 | 1   | RETURN SWITCH BOARD ASS'Y        | B-1-2 |
| BG2-7732-000 000 | 2   | NEW ZD AMP PCB ASS'Y             | B-1-1 |
| BG2-7796-000 000 | 1   | SWITCH BOARD ASS'Y               | B-1-1 |
| BH1-2145-000 000 | 1   | POTENTIOMETER                    | B-1-2 |
| BH1-2187-020 000 | 2   | POTENTIOMETER                    | B-1-2 |
| BH3-0731-000 000 | 1   | ROCKER SWITCH                    | B-1-1 |
| BH3-9360-000 000 | 1   | CAP, SWITCH                      | B-1-1 |
| BH7-1503-000 000 | 1   | RECEPTACLE                       | B-1-1 |
| BS0-1172-000 000 | 8   | SCREW                            | B-1-2 |
| BS0-1726-000 000 | 4   | HELISERT INSERT                  | B-1-1 |
| BS0-4523-000 000 | 4   | SPACER                           | B-1-2 |
| BS0-4545-000 000 | 7   | WASHER , PTFE                    | B-1-1 |
| BS0-4546-000 000 | 7   | WASHER , PTFE                    | B-1-1 |
| BS0-4547-000 000 | 4   | SPACER , SUS                     | B-1-1 |
| VR5-7880-103 000 | 2   | VARIABLE RESISTOR                | B-1-2 |
| XA1-1200-300 000 | 8   | SCREW, CROSS-RECESS              | B-1-1 |
| XA1-1200-309 000 | 2   | SCREW                            | B-1-2 |
| XA1-1200-409 000 | 26  | SCREW, MACHINE, PAN HEAD, M2X4   | B-1-1 |
| XA1-1200-509 000 | 8   | SCREW, MACHINE M2X5              | B-1-2 |
| XA1-1201-000 000 | 4   | SCREW, CROSS-RECESS              | B-1-1 |
| XA1-1260-500 000 | 4   | SCREW                            | B-1-1 |
| XA1-1260-509 000 | 10  | SCREW, CROSS-RECESS, PH, M2. 6X5 | B-1-1 |
| XA1-1260-809 000 | 6   | SCREW, CROSS-RECESS, PH          | B-1-2 |
| XA1-1261-009 000 | 2   | SCREW                            | B-1-2 |
| XA1-3260-409 000 | 6   | SCREW, CROSS-RECESS, FCH         | B-1-2 |
| XA1-3260-509 000 | 2   | SCREW, CROSS-RECESS, FCH         | B-1-2 |
| XA1-3260-609 000 | 8   | SCREW, CROSS-RECESS, FCH         | B-1-2 |
| XA6-1200-409 000 | 5   | SETSCREW, SLOTTED, HLCP          | B-1-2 |
| XB1-1300-509 000 | 1   | SCREW, MACHINE M3X5              | B-1-2 |
| XB1-1300-809 000 | 5   | SCREW, MACHINE M3X8              | B-1-2 |
| XB1-1401-002 000 | 4   | SCREW, STAINLESS PH4X10          | B-1-1 |

| Parts Number     | Qty | Description                | Page  |
|------------------|-----|----------------------------|-------|
| XB7-1030-129 000 | 4   | BOLT, HEX SKT, M3X12       | B-1-2 |
| XB8-1101-002 000 | 1   | HELISERT INSERT            | B-1-1 |
| XD1-1102-620 000 | 1   | WASHER, COP                | B-1-2 |
| XD1-1102-621 000 | 1   | WASHER, COP                | B-1-2 |
| XD1-1102-622 000 | 1   | WASHER, COP                | B-1-2 |
| XD1-1102-623 000 | 1   | WASHER, COP                | B-1-2 |
| XD1-1102-624 000 | 1   | WASHER, COP                | B-1-2 |
| XD1-1102-625 000 | 7   | WASHER, COP                | B-1-2 |
| XD1-1102-629 000 | 1   | WASHER, COP                | B-1-2 |
| XD1-1104-119 000 | 4   | WASHER, COP                | B-1-2 |
| XD1-1106-229 000 | 4   | WASHER, COP                | B-1-1 |
| XD1-1108-225 000 | 4   | WASHER, COP                | B-1-2 |
| XD1-3100-309 000 | 7   | LOCK-WASHER, SPLIT         | B-1-2 |
| XD2-1100-502 000 | 2   | RETAINING RING (E-TYPE)    | B-1-2 |
| XD2-1100-642 000 | 3   | RING, E                    | B-1-2 |
| XD3-1160-062 000 | 2   | PIN, SPRING, D=1.6, L=6    | B-1-1 |
| XD3-1200-122 000 | 2   | SPRING PIN                 | B-1-2 |
| XD3-1300-082 000 | 6   | PIN, SPRING                | B-1-2 |
| XD3-1400-122 000 | 4   | PIN, SPRING D=4 L=12       | B-1-1 |
| XD3-4200-101 000 | 2   | STRAIGHT PIN               | B-1-2 |
| XD3-4300-061 000 | 3   | PIN                        | B-1-2 |
| XG2-6017-603 000 | 2   | BALL BEARING, NSK 606ZZS   | B-1-2 |
| XG3-4007-253 000 | 4   | BALL BEARING, NMB RF740ZZ  | B-1-2 |
| XG3-6012-403 000 | 2   | BALL BEARING, NSK MF126ZZS | B-1-2 |
| XZ1-1260-605 000 | 1   | SPACER                     | B-1-2 |



| Symbol | Parts No.    | Description                  | Maker Type       | Maker      | Specification |
|--------|--------------|------------------------------|------------------|------------|---------------|
| P081   | BG2-7732-000 | ZD II MAIN AMP PCB ASS'Y     |                  |            |               |
| P082   | BG2-7796-000 | DISPLAY UNIT AMP PCB ASS'Y   |                  |            |               |
| P085   | BG2-4346-000 | DIR AMP PCB ASS'Y            |                  |            |               |
| P088   | BG2-4347-000 | CURVE MODE SW UNIT PCB ASS'Y |                  |            |               |
| P0810  | BG2-4348-000 | RETURN SW UNIT PCB ASS'Y     |                  |            |               |
| CN01   | VS1-5866-012 | 10PIN CONNECTOR              | HR10G-10R-12P-01 | HIROSE     |               |
| J1     | VS3-0320-010 | CONNECTOR HOUSING            | 51021-1000       | MOLEX      |               |
|        | WS3-1309-000 | CONTACT PIN                  | 50079-1000       | MOLEX      |               |
| J2     | VS3-5233-010 | CONNECTOR HOUSING            | SHR-10V-S-B      | NICHIA TSU |               |
|        | WS3-5583-000 | CONTACT PIN                  | SSH-002T-P0.2    | NICHIA TSU |               |
| J21    | VS3-5233-003 | CONNECTOR HOUSING            | SHR-03V-S-B      | NICHIA TSU |               |
|        | WS3-5583-000 | CONTACT PIN                  | SSH-002T-P0.2    | NICHIA TSU |               |
| J23    | VS3-5233-003 | CONNECTOR HOUSING            | SHR-03V-S-B      | NICHIA TSU |               |
|        | WS3-5583-000 | CONTACT PIN                  | SSH-002T-P0.2    | NICHIA TSU |               |
| J24    | VS3-5233-009 | CONNECTOR HOUSING            | SHR-09V-S-B      | NICHIA TSU |               |
|        | WS3-5583-000 | CONTACT PIN                  | SSH-002T-P0.2    | NICHIA TSU |               |
| J25    | VS3-5233-006 | CONNECTOR HOUSING            | SHR-06V-S-B      | NICHIA TSU |               |
|        | WS3-5583-000 | CONTACT PIN                  | SSH-002T-P0.2    | NICHIA TSU |               |
| J31    | VS3-5233-004 | CONNECTOR HOUSING            | SHR-04V-S-B      | NICHIA TSU |               |
|        | WS3-5583-000 | CONTACT PIN                  | SSH-002T-P0.2    | NICHIA TSU |               |
| J32    | VS3-5233-003 | CONNECTOR HOUSING            | SHR-03V-S-B      | NICHIA TSU |               |
|        | WS3-5583-000 | CONTACT PIN                  | SSH-002T-P0.2    | NICHIA TSU |               |
| J52    | VS3-5233-010 | CONNECTOR HOUSING            | SHR-10V-S-B      | NICHIA TSU |               |
|        | WS3-5583-000 | CONTACT PIN                  | SSH-002T-P0.2    | NICHIA TSU |               |
| J401   | VS3-0320-003 | CONNECTOR HOUSING            | 51021-0300       | MOLEX      |               |
|        | WS3-1309-000 | CONTACT PIN                  | 50079-1000       | MOLEX      |               |
| J411   | VS3-0320-003 | CONNECTOR HOUSING            | 51021-0300       | MOLEX      |               |
|        | WS3-1309-000 | CONTACT PIN                  | 50079-1000       | MOLEX      |               |
| J421   | VS3-0320-003 | CONNECTOR HOUSING            | 51021-0300       | MOLEX      |               |
|        | WS3-1309-000 | CONTACT PIN                  | 50079-1000       | MOLEX      |               |
| J502   | VS3-0244-010 | RECEPTACLE                   | 51005-100        | MOLEX      |               |
|        | WS3-5191-000 | CONTACT PIN                  | 50013-8100       | MOLEX      |               |

## PARTS LIST

| Symbol | Parts No.    | Description       | Maker Type   | Maker            | Specification |
|--------|--------------|-------------------|--------------|------------------|---------------|
| P01    | VS1-5873-010 | CONNECTOR HOUSING | 53398-1010   | MOLEX            |               |
| P02    | VS1-6273-010 | CONNECTOR HOUSING | BM108-SRSS   | JAPAN SOLDERLESS |               |
| P11    | VS1-6273-003 | CONNECTOR HOUSING | BM038-SRSS   | JAPAN SOLDERLESS |               |
| P12    | VS1-6273-003 | CONNECTOR HOUSING | BM038-SRSS   | JAPAN SOLDERLESS |               |
| P21    | VS1-6273-003 | CONNECTOR HOUSING | BM038-SRSS   | JAPAN SOLDERLESS |               |
| P22    | VS1-6273-003 | CONNECTOR HOUSING | BM038-SRSS   | JAPAN SOLDERLESS |               |
| P23    | VS1-6273-003 | CONNECTOR HOUSING | BM038-SRSS   | JAPAN SOLDERLESS |               |
| P24    | VS1-6273-009 | CONNECTOR HOUSING | BM098-SRSS   | JAPAN SOLDERLESS |               |
| P25    | VS1-6273-006 | CONNECTOR HOUSING | BM068-SRSS   | JAPAN SOLDERLESS |               |
| P31    | VS1-6273-004 | CONNECTOR HOUSING | BM048-SRSS   | JAPAN SOLDERLESS |               |
| P32    | VS1-6273-003 | CONNECTOR HOUSING | BM038-SRSS   | JAPAN SOLDERLESS |               |
| P52    | VS1-6273-010 | CONNECTOR HOUSING | BM108-SRSS   | JAPAN SOLDERLESS |               |
| P401   | VS1-1201-003 | PIN HEADER        | 53047-0310   | MOLEX            |               |
| P411   | VS1-1201-003 | PIN HEADER        | 53047-0310   | MOLEX            |               |
| P421   | VS1-1201-003 | PIN HEADER        | 53047-0310   | MOLEX            |               |
| P502   | VS3-0245-010 | PLUG              | 51006-1000   | MOLEX            |               |
|        | WS3-5190-000 | TERMINAL          | 50012-8100   | MOLEX            |               |
| P1501  | BH7-1505-000 | CONNECTOR PLUG    | PT05A-14-18P | BENDIX           |               |
| P1502  | BH7-1506-000 | CONNECTOR PLUG    | PT05A-14-18S | BENDIX           |               |
| C421   | VC5-8030-103 | CONDENSER         | GRM40F103Z50 | MURATA           |               |
| C422   | VC5-8030-103 | CONDENSER         | GRM40F103Z50 | MURATA           |               |
| S87    | BH3-0731-000 | MIC SWITCH        | M-2029N-G    | NIHON KAIHEI     |               |
|        | BH3-9360-000 | BUTTON            | AT-448-W     | NIHON KAIHEI     |               |
| SW401  | WC1-5057-000 | TOGGLE SWITCH     | ATE1D-2M3-10 | FUJISOKU         |               |
| SW411  | WC1-5058-000 | TOGGLE SWITCH     | ATE1E-2M3-10 | FUJISOKU         |               |
| SW421  | WC2-5046-000 | PUSH SWITCH       | SKHWAC       | ALPS DENKI       |               |
| SW422  | WC2-5046-000 | PUSH SWITCH       | SKHWAC       | ALPS DENKI       |               |

## PARTS LIST

| Symbol | Parts No.    | Description                | Maker Type              | Maker     | Specification |
|--------|--------------|----------------------------|-------------------------|-----------|---------------|
| T1     | WT1-0362-000 | EARTH LUG                  | VO. 5-3                 | NACHIATSU |               |
| VR01   | VR5-7780-103 | SPEED VOLUME               | RV12YN15SB 10k $\Omega$ | TOCOS     |               |
| POT01  | BH1-2145-000 | POTENTIOMETER              | SFCP22A-4974            | SAKAE     |               |
|        | KEI-2259-001 | WIRE, LEAD (BRN) PER METER | UL1571AWG28 (BRN)       | HIRAKAWA  |               |
|        | KEI-2259-002 | WIRE, LEAD (RED) PER METER | UL1571AWG28 (RED)       | HIRAKAWA  |               |
|        | KEI-2259-003 | WIRE, LEAD (ORG) PER METER | UL1571AWG28 (ORG)       | HIRAKAWA  |               |
|        | KEI-2259-004 | WIRE, LEAD (YEL) PER METER | UL1571AWG28 (YEL)       | HIRAKAWA  |               |
|        | KEI-2259-005 | WIRE, LEAD (GRN) PER METER | UL1571AWG28 (GRN)       | HIRAKAWA  |               |
|        | KEI-2259-006 | WIRE, LEAD (BLU) PER METER | UL1571AWG28 (BLU)       | HIRAKAWA  |               |
|        | KEI-2259-007 | WIRE, LEAD (PUR) PER METER | UL1571AWG28 (PUR)       | HIRAKAWA  |               |
|        | KEI-2259-008 | WIRE, LEAD (GRY) PER METER | UL1571AWG28 (GRY)       | HIRAKAWA  |               |
|        | KEI-2259-009 | WIRE, LEAD (WHT) PER METER | UL1571AWG28 (WHT)       | HIRAKAWA  |               |
|        | KEI-2259-010 | WIRE, LEAD (BLK) PER METER | UL1571AWG28 (BLK)       | HIRAKAWA  |               |

HEAD-1

Y62-2486-000

XB1-2400-806  
x4

To GRIP  
See B-2-2  
B-2-3

HEAD-2

XB1-2400-806  
x4

XB6-1030-602  
x4

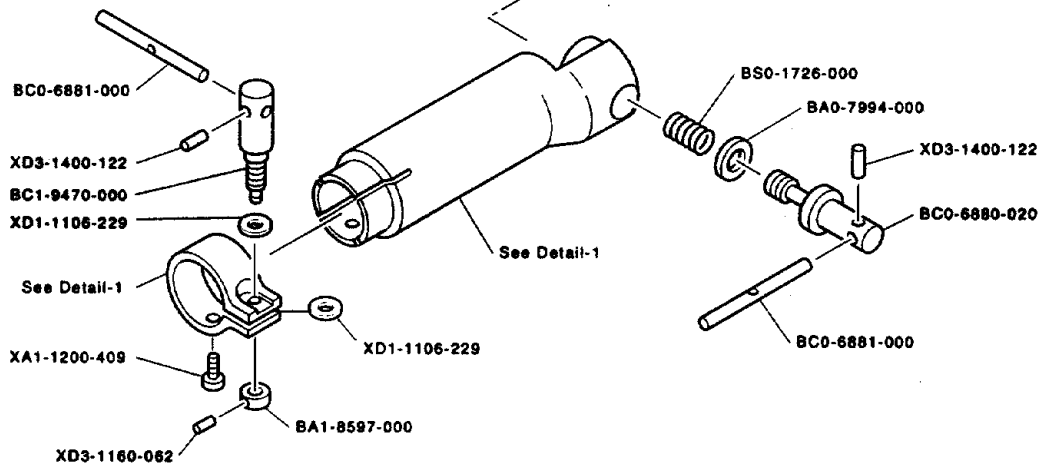
XD3-4400-101  
x4

Y62-2487-000

BC0-8373-020

XD1-3100-309  
x4

XB7-1030-089  
x4



See Detail-1

TYPE-1



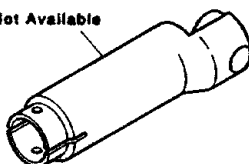
Not Available

TYPE-2

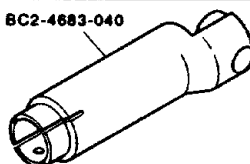


BC1-9467-030

Not Available



BC2-4683-040



TYPE-1の部品を交換する場合は、TYPE-2の2つの部品をセットで交換する事。  
When changing either of TYPE-1 parts, change both of TYPE-2 parts.

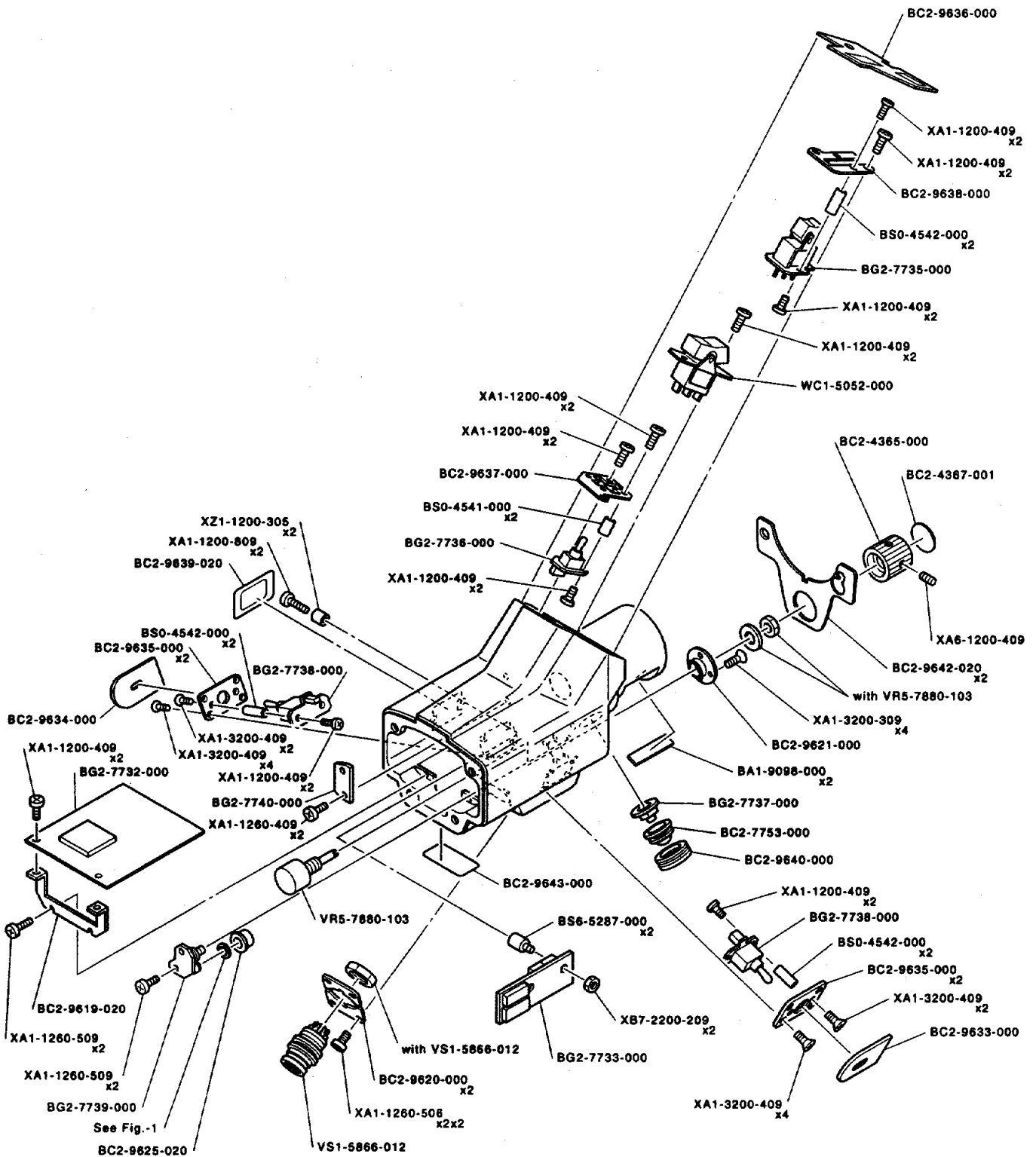
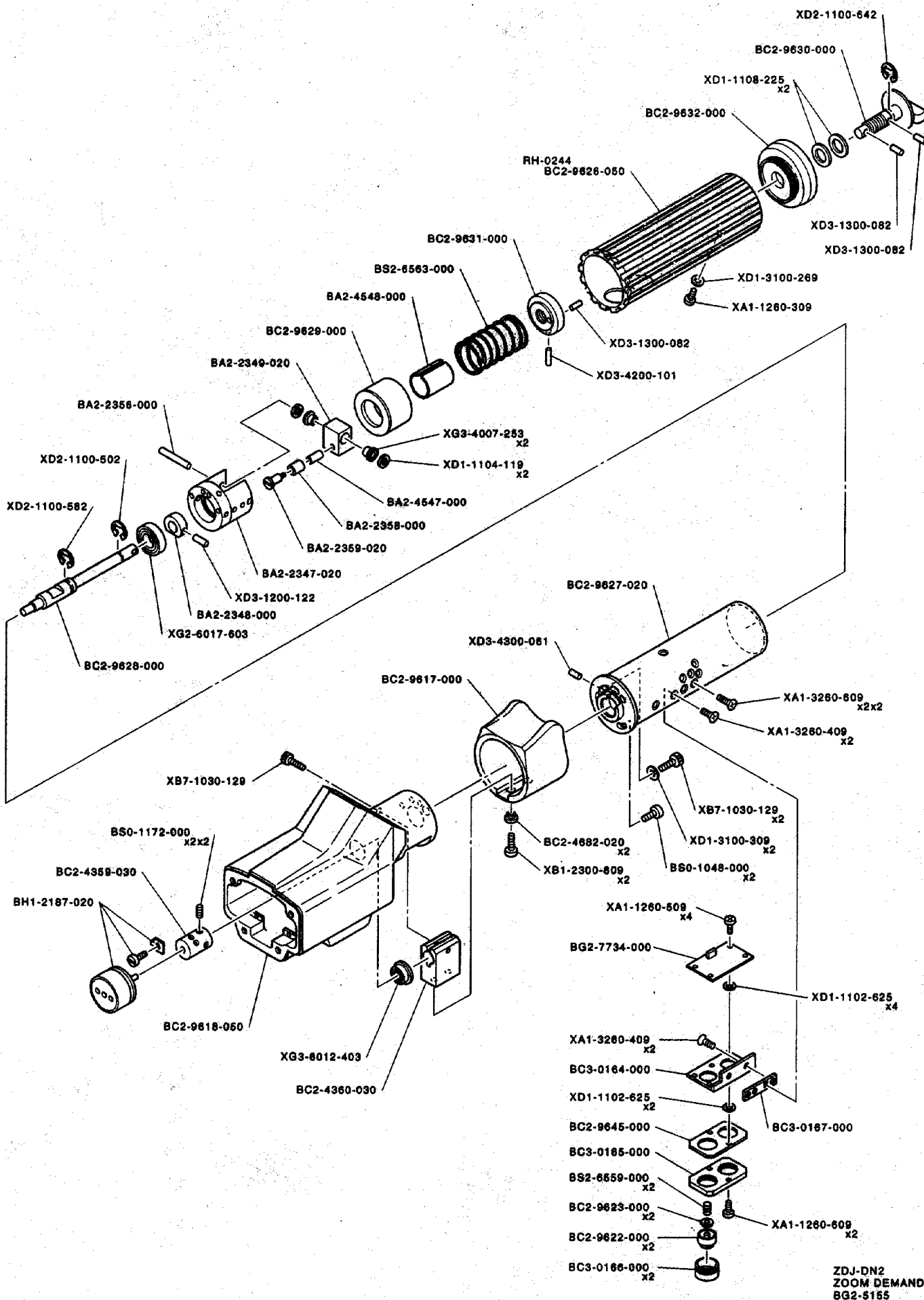


Fig. - 1

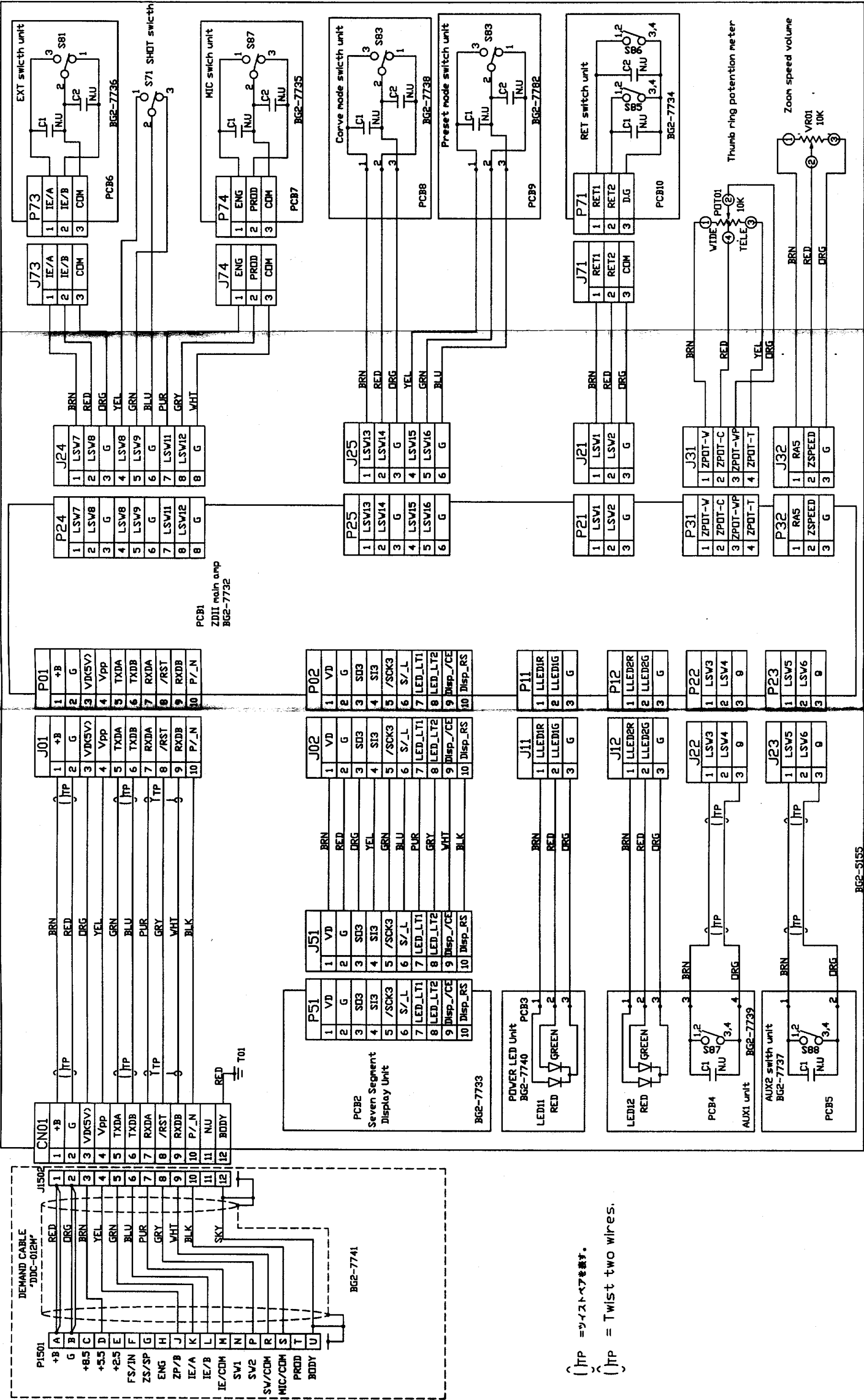
|          |              |
|----------|--------------|
| t = 0.05 | XD1-1102-120 |
| t = 0.10 | XD1-1102-121 |
| t = 0.20 | XD1-1102-122 |
| t = 0.30 | XD1-1102-123 |
| t = 0.40 | XD1-1102-124 |
| t = 0.50 | XD1-1102-125 |
| t = 1.00 | XD1-1102-129 |



| Parts Number     | Qty | Description              | Page  |
|------------------|-----|--------------------------|-------|
| BA0-7994-000 000 | 2   | WASHER                   | B-2-1 |
| BA1-8597-000 000 | 2   | SPACER                   | B-2-1 |
| BA1-9098-000 000 | 4   | RUBBER                   | B-2-2 |
| BA2-2347-020 000 | 2   | HOLDER                   | B-2-3 |
| BA2-2348-000 000 | 2   | CAM                      | B-2-3 |
| BA2-2349-020 000 | 2   | HOLDER                   | B-2-3 |
| BA2-2356-000 000 | 2   | PIN                      | B-2-3 |
| BA2-2358-000 000 | 2   | ROLLER                   | B-2-3 |
| BA2-2359-020 000 | 2   | SCREW                    | B-2-3 |
| BA2-4547-000 000 | 2   | TUBE (PER METER)         | B-2-3 |
| BA2-4548-000 000 | 2   | PLATE                    | B-2-3 |
| BC0-6880-020 000 | 2   | SHAFT                    | B-2-1 |
| BC0-6881-000 000 | 4   | SHAFT                    | B-2-1 |
| BC0-8373-020 000 | 1   | CROWN RING (FEMALE)      | B-2-1 |
| BC1-9467-030 000 | 2   | HOLDER                   | B-2-1 |
| BC1-9470-020 000 | 2   | LOCK SCREW, S            | B-2-1 |
| BC2-4359-030 000 | 2   | COUPLING                 | B-2-3 |
| BC2-4360-030 000 | 2   | HOLDER                   | B-2-3 |
| BC2-4365-000 000 | 2   | KNOB                     | B-2-2 |
| BC2-4367-000 000 | 1   | PLATE (ZOOM SPEED, T, W) | B-2-2 |
| BC2-4682-020 000 | 4   | INSERT COLLAR            | B-2-3 |
| BC2-4683-040 000 | 2   | GRIP, ZOOM DEMAND        | B-2-1 |
| BC2-7753-000 000 | 1   | CAP, RET SW              | B-2-2 |
| BC2-9617-000 000 | 1   | THUMB RING, ABS          | B-2-3 |
| BC2-9618-050 000 | 1   | BODY                     | B-2-3 |
| BC2-9619-020 000 | 1   | HOLDER                   | B-2-2 |
| BC2-9620-000 000 | 2   | BASE, CONNECTOR          | B-2-2 |
| BC2-9621-000 000 | 1   | BASE                     | B-2-2 |
| BC2-9622-000 000 | 2   | PUSH BUTTON              | B-2-3 |
| BC2-9623-000 000 | 2   | WASHER, COP              | B-2-3 |
| BC2-9625-030 000 | 1   | BOTTOM, SWITCH           | B-2-2 |
| BC2-9626-030 000 | 1   | COVER                    | B-2-3 |
| BC2-9627-020 000 | 1   | GRIP                     | B-2-3 |
| BC2-9628-000 000 | 1   | SHAFT                    | B-2-3 |
| BC2-9629-000 000 | 1   | BARREL                   | B-2-3 |
| BC2-9630-000 000 | 1   | KNOB                     | B-2-3 |
| BC2-9631-000 000 | 1   | WASHER, AL               | B-2-3 |
| BC2-9632-000 000 | 1   | COVER                    | B-2-3 |
| BC2-9633-000 000 | 1   | BASE, PRESET SWITCH      | B-2-2 |
| BC2-9634-000 000 | 1   | BASE, CURVE SWITCH       | B-2-2 |
| BC2-9635-000 000 | 4   | HOLDER                   | B-2-2 |
| BC2-9636-000 000 | 1   | PLATE                    | B-2-2 |
| BC2-9637-000 000 | 1   | HOLDER                   | B-2-2 |
| BC2-9638-000 000 | 1   | HOLDER                   | B-2-2 |

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| BC2-9639-020 000 | 1   | PANEL                           | B-2-2        |
| BC2-9640-000 000 | 1   | COVER                           | B-2-2        |
| BC2-9642-020 000 | 2   | PLATE                           | B-2-2        |
| BC2-9643-000 000 | 1   | NAME PLATE (PET)                | B-2-2        |
| BC2-9645-000 000 | 1   | STOPPER                         | B-2-3        |
| BC3-0164-000 000 | 1   | BASE , RET SWITCH               | B-2-3        |
| BC3-0165-000 000 | 1   | BASE                            | B-2-3        |
| BC3-0166-000 000 | 2   | GUIDE, SW, AL                   | B-2-3        |
| BC3-0167-000 000 | 1   | HOLDER                          | B-2-3        |
| BG2-7732-000 000 | 2   | NEW ZD AMP PCB ASS'Y            | B-2-2        |
| BG2-7733-000 000 | 1   | DISPLAY PCB ASS'Y               | B-2-2        |
| BG2-7734-000 000 | 1   | RET SWITCH PCB ASS'Y            | B-2-3        |
| BG2-7735-000 000 | 1   | MIC SWITCH PCB ASS'Y            | B-2-2        |
| BG2-7736-000 000 | 1   | IE SWITCH PCB ASS'Y             | B-2-2        |
| BG2-7737-000 000 | 1   | AUX2 SWITCH PCB ASS'Y           | B-2-2        |
| BG2-7738-000 000 | 2   | CURVE SWITCH PCB ASS'Y          | B-2-2        |
| BG2-7739-000 000 | 1   | AUX1 SWITCH PCB ASS'Y           | B-2-2        |
| BG2-7740-000 000 | 1   | POWER LED PCB ASS'Y             | B-2-2        |
| BH1-2187-020 000 | 2   | POTENTIOMETER                   | B-2-3        |
| BS0-1048-000 000 | 2   | SCREW                           | B-2-3        |
| BS0-1172-000 000 | 8   | SCREW                           | B-2-3        |
| BS0-1726-000 000 | 4   | HELISERT INSERT                 | B-2-1        |
| BS0-4541-000 000 | 2   | SPACER , SUS                    | B-2-2        |
| BS0-4542-000 000 | 6   | SPACER , SUS                    | B-2-2        |
| BS2-6559-000 000 | 2   | SPRING , SUS                    | B-2-3        |
| BS2-6563-000 000 | 1   | SPRING , SUS                    | B-2-3        |
| BS6-5287-000 000 | 2   | SPACER , GLASS EPOXY            | B-2-2        |
| VR5-7880-103 000 | 2   | VARIABLE RESISTOR               | B-2-2        |
| VS1-5866-012 000 | 1   | CONNECTOR                       | B-2-2        |
| WC1-5052-000 000 | 1   | ROCKER SWITCH                   | B-2-2        |
| XA1-1200-409 000 | 26  | SCREW, MACHINE, PAN HEAD, M2X4  | B-2-1, B-2-2 |
| XA1-1200-809 000 | 2   | SCREW, MACHINE M2X8             | B-2-2        |
| XA1-1260-409 000 | 2   | SCREW, PH M2.6X4                | B-2-2        |
| XA1-1260-506 000 | 4   | SCREW, CROSS-RECESS             | B-2-2        |
| XA1-1260-509 000 | 10  | SCREW, CROSS-RECESS, PH, M2.6X5 | B-2-2, B-2-3 |
| XA1-1260-609 000 | 2   | SCREW, CROSS-RECESS, PH, M2.6X6 | B-2-3        |
| XA1-3200-309 000 | 4   | SCREW, CROSS-RECESS, FCH        | B-2-2        |
| XA1-3200-409 000 | 12  | SCREW, FTH2X4 (S)               | B-2-2        |
| XA1-3260-409 000 | 6   | SCREW, CROSS-RECESS, FCH        | B-2-3        |
| XA1-3260-609 000 | 8   | SCREW, CROSS-RECESS, FCH        | B-2-3        |
| XA6-1200-409 000 | 5   | SETSCREW, SLOTTED, HLCP         | B-2-2        |
| XB1-2300-809 000 | 2   | SCREW, MACHINE M3X8             | B-2-3        |
| XB1-2400-806 000 | 8   | SCREW                           | B-2-1        |
| XB7-1030-089 000 | 4   | BOLT, HEX SKT. M3X8             | B-2-1        |

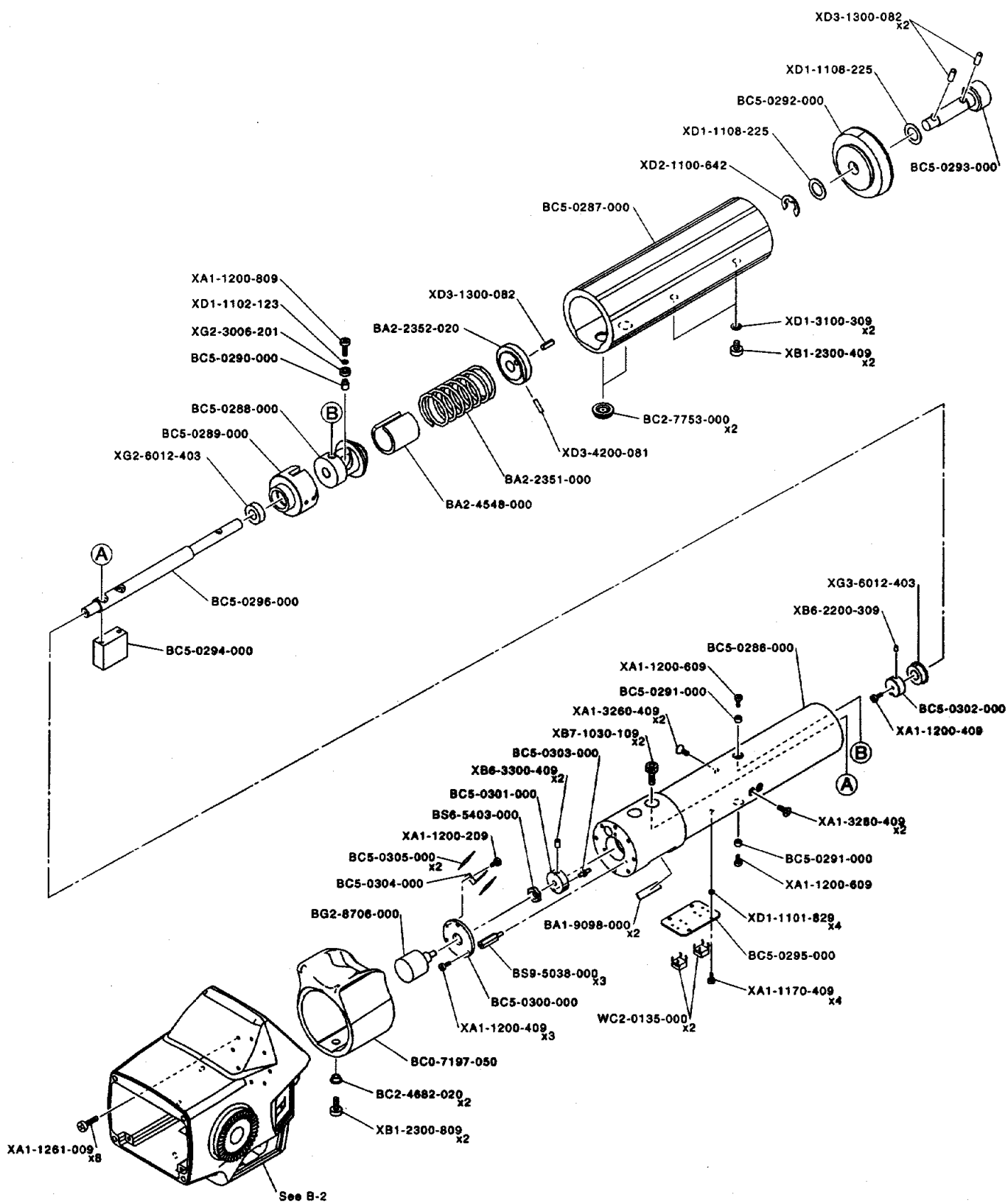
| Parts Number     | Qty | Description                | Page         |
|------------------|-----|----------------------------|--------------|
| XB7-1030-129 000 | 4   | BOLT, HEX SKT, M3X12       | B-2-3        |
| XB7-2200-209 000 | 2   | NUT                        | B-2-2        |
| XB8-1030-602 000 | 4   | HELISERT                   | B-2-1        |
| XD1-1102-120 000 | 1   | WASHER, COP                | B-2-2        |
| XD1-1102-121 000 | 1   | WASHER, COP                | B-2-2        |
| XD1-1102-122 000 | 1   | WASHER, COP                | B-2-2        |
| XD1-1102-123 000 | 1   | WASHER, COP                | B-2-2        |
| XD1-1102-124 000 | 1   | WASHER, COP                | B-2-2        |
| XD1-1102-125 000 | 1   | WASHER, COP                | B-2-2        |
| XD1-1102-129 000 | 1   | WASHER, COP                | B-2-2        |
| XD1-1102-625 000 | 7   | WASHER, COP                | B-2-3        |
| XD1-1104-119 000 | 4   | WASHER, COP                | B-2-3        |
| XD1-1106-229 000 | 4   | WASHER, COP                | B-2-1        |
| XD1-1108-225 000 | 4   | WASHER, COP                | B-2-3        |
| XD1-3100-269 000 | 1   | PIN, SPRING                | B-2-3        |
| XD1-3100-309 000 | 7   | LOCK-WASHER, SPLIT         | B-2-1, B-2-3 |
| XD2-1100-502 000 | 2   | RETAINING RING (E-TYPE)    | B-2-3        |
| XD2-1100-582 000 | 1   | RETAINING RING (E-TYPE)    | B-2-3        |
| XD2-1100-642 000 | 3   | RING, E                    | B-2-3        |
| XD3-1160-062 000 | 2   | PIN, SPRING, D=1.6, L=6    | B-2-1        |
| XD3-1200-122 000 | 2   | SPRING PIN                 | B-2-3        |
| XD3-1300-082 000 | 6   | PIN, SPRING                | B-2-3        |
| XD3-1400-122 000 | 4   | PIN, SPRING D=4 L=12       | B-2-1        |
| XD3-4200-101 000 | 2   | STRAIGHT PIN               | B-2-3        |
| XD3-4300-061 000 | 3   | PIN                        | B-2-3        |
| XD3-4400-101 000 | 4   | PIN                        | B-2-1        |
| XG2-6017-603 000 | 2   | BALL BEARING, NSK 606ZZS   | B-2-3        |
| XG3-4007-253 000 | 4   | BALL BEARING, NMB RF740ZZ  | B-2-3        |
| XG3-6012-403 000 | 2   | BALL BEARING, NSK MF126ZZS | B-2-3        |
| XZ1-1200-305 000 | 2   | SPACER                     | B-2-2        |
| Y62-2486-000 000 | 1   | HEAD UNIT 1                | B-2-1        |
| Y62-2487-000 000 | 1   | HEAD UNIT 2                | B-2-1        |

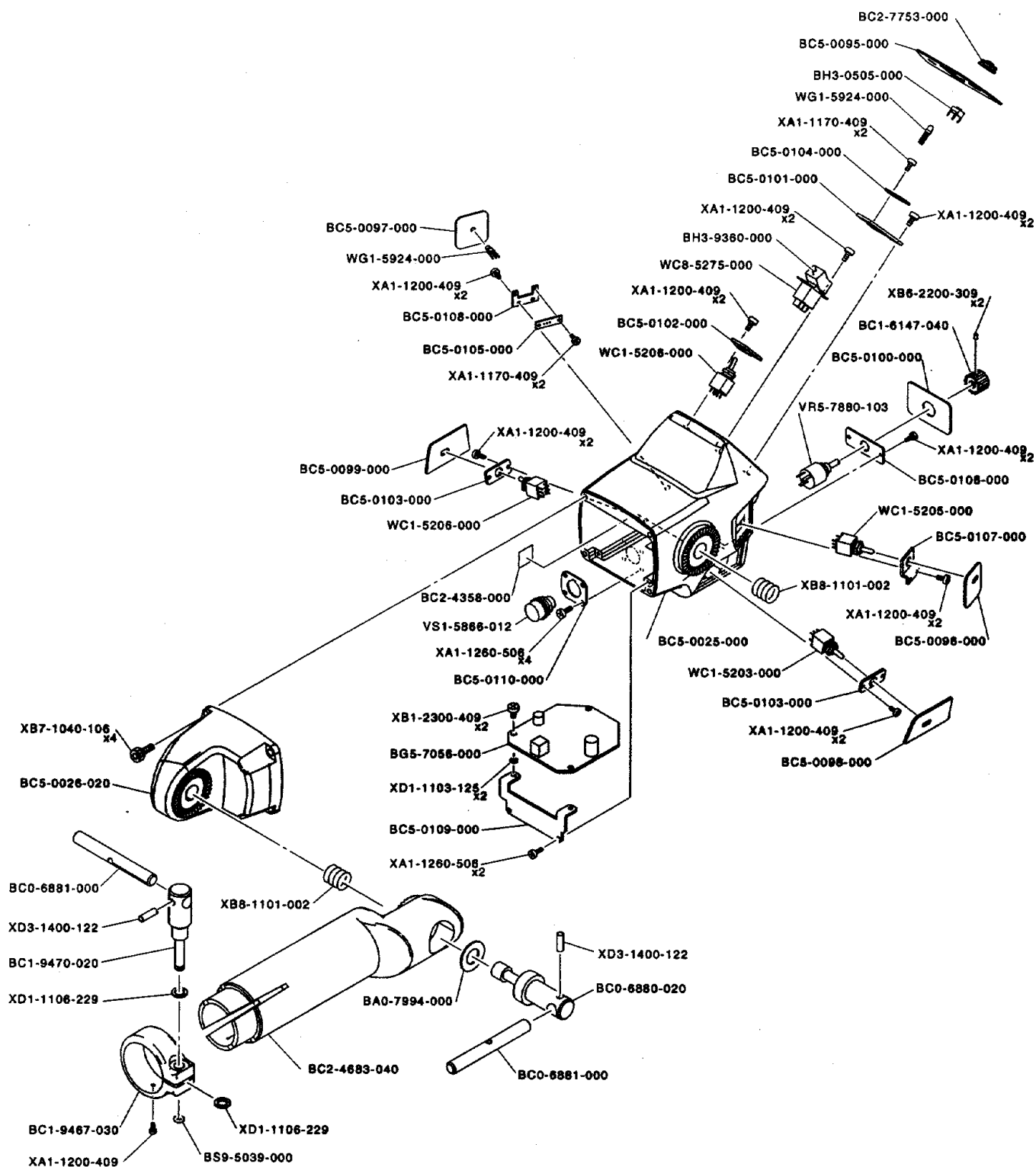


| Symbol | Parts No.    | Description                            | Maker Type       | Maker      | Specification |
|--------|--------------|----------------------------------------|------------------|------------|---------------|
| P081   | BG2-7732-000 | ZD II MAIN AMP PCB ASS'Y               |                  |            |               |
| P082   | BG2-7733-000 | DISPLAY UNIT FOR DN TYPE AMP PCB ASS'Y |                  |            |               |
| P083   | BG2-7740-000 | POWER DISPLAY UNIT AMP PCB ASS'Y       |                  |            |               |
| P084   | BG2-7739-000 | AUX1 UNIT AMP PCB ASS'Y                |                  |            |               |
| P085   | BG2-7737-000 | AUX2 UNIT AMP PCB ASS'Y                |                  |            |               |
| P086   | BG2-7736-000 | EXT SWITCH UNIT AMP PCB ASS'Y          |                  |            |               |
| P087   | BG2-7735-000 | MIC SWITCH UNIT AMP PCB ASS'Y          |                  |            |               |
| P088   | BG2-7738-000 | C/S SELECT MODE SWITCH AMP PCB ASS'Y   |                  |            |               |
| P089   | BG2-7738-000 | C/S SELECT MODE SWITCH AMP PCB ASS'Y   |                  |            |               |
| P0810  | BG2-7734-000 | RETURN SWITCH UNIT AMP PCB ASS'Y       |                  |            |               |
| CN01   | VS1-5866-012 | 10PIN CONNECTOR                        | HR10G-10R-12P-01 | HIROSE     |               |
| J01    | VS3-0320-010 | CONNECTOR HOUSING                      |                  |            |               |
| J02    | WS3-1309-000 | CONTACT PIN                            | 51021-1000       | MOLEX      |               |
| J11    | VS3-0320-010 | CONNECTOR HOUSING                      | 50079-1000       | MOLEX      |               |
| J12    | WS3-1309-000 | CONTACT PIN                            | 51021-1000       | MOLEX      |               |
| J21    | VS3-5233-003 | CONNECTOR HOUSING                      | 50079-1000       | MOLEX      |               |
| J22    | WS3-5233-003 | CONTACT PIN                            | SHR-03V-S-B      | NICHIA TSU |               |
| J23    | VS3-5583-000 | CONNECTOR HOUSING                      | SSH-002T-P0.2    | NICHIA TSU |               |
| J24    | WS3-5583-000 | CONTACT PIN                            | SHR-03V-S-B      | NICHIA TSU |               |
| J25    | VS3-5233-009 | CONNECTOR HOUSING                      | SHR-03V-S-B      | NICHIA TSU |               |
| J31    | VS3-5233-006 | CONNECTOR HOUSING                      | SSH-002T-P0.2    | NICHIA TSU |               |
| J32    | WS3-5583-000 | CONTACT PIN                            | SHR-03V-S-B      | NICHIA TSU |               |
| J51    | VS3-5333-004 | CONNECTOR HOUSING                      | SSH-002T-P0.2    | NICHIA TSU |               |
| J71    | WS3-5583-000 | CONTACT PIN                            | SHR-09V-S-B      | NICHIA TSU |               |
|        | VS3-5233-003 | CONNECTOR HOUSING                      | SHR-06V-S-B      | NICHIA TSU |               |
|        | VS3-5583-000 | CONTACT PIN                            | SSH-002T-P0.2    | NICHIA TSU |               |
|        | VS3-5333-003 | CONNECTOR HOUSING                      | SHR-04V-S-B      | NICHIA TSU |               |
|        | VS3-5583-000 | CONTACT PIN                            | SSH-002T-P0.2    | NICHIA TSU |               |
|        | VS3-5233-010 | CONNECTOR HOUSING                      | SHR-03V-S-B      | NICHIA TSU |               |
|        | VS3-5233-003 | CONNECTOR HOUSING                      | SHR-10V-S-B      | NICHIA TSU |               |
|        | WS3-5583-000 | CONTACT PIN                            | SHR-03V-S-B      | NICHIA TSU |               |
|        |              |                                        | SSH-002T-P0.2    | NICHIA TSU |               |

| Symbol | Parts No.    | Description       | Maker Type    | Maker               | Specification |
|--------|--------------|-------------------|---------------|---------------------|---------------|
| J73    | VS3-5233-003 | CONNECTR HOUSING  | SHR-03V-S-B   | NICHIA TSU          |               |
| J74    | VS3-5233-003 | CONNECTR HOUSING  | SHR-03V-S-B   | NICHIA TSU          |               |
|        | WS3-5583-000 | CONTACT PIN       | SSH-002T-P0.2 | NICHIA TSU          |               |
| P1501  | BH7-1505-000 | CONNECTOR PLUG    | PT05A-14-18P  | BENDIX              |               |
| J1502  | BH7-0790-000 | CONNECTOR SOCKET  | HR10A-10P-12S | HIROSE              |               |
| P01    | VS1-5873-010 | CONNECTOR HOUSING | 53398-1010    | MOLEX               |               |
| P02    | VS1-6273-010 | CONNECTOR HOUSING | BMT0B-SRSS    | JAPAN SOLDERLESS    |               |
| P11    | VS1-6273-003 | CONNECTOR HOUSING | BMO3B-SRSS    | JAPAN SOLDERLESS    |               |
| P12    | VS1-6273-003 | CONNECTOR HOUSING | BMO3B-SRSS    | JAPAN SOLDERLESS    |               |
| P21    | VS1-6273-003 | CONNECTOR HOUSING | BMO3B-SRSS    | JAPAN SOLDERLESS    |               |
| P22    | VS1-6273-003 | CONNECTOR HOUSING | BMO3B-SRSS    | JAPAN SOLDERLESS    |               |
| P23    | VS1-6273-003 | CONNECTOR HOUSING | BMO3B-SRSS    | JAPAN SOLDERLESS    |               |
| P24    | VS1-6273-009 | CONNECTOR HOUSING | BMO9B-SRSS    | JAPAN SOLDERLESS    |               |
| P25    | VS1-6273-006 | CONNECTOR HOUSING | BMO6B-SRSS    | JAPAN SOLDERLESS    |               |
| P31    | VS1-6273-004 | CONNECTOR HOUSING | BMO4B-SRSS    | JAPAN SOLDERLESS    |               |
| P32    | VS1-6273-003 | CONNECTOR HOUSING | BMO3B-SRSS    | JAPAN SOLDERLESS    |               |
| P51    | VS1-6210-010 | PIN HEADER        | SMT0B-SRSS    | NICHIA TSU          |               |
| P71    | VS1-6273-003 | CONNECTOR HOUSING | BMO3B-SRSS    | NIHON ACCYAKUTANSHI |               |
| P73    | VS1-6273-003 | CONNECTOR HOUSING | BMO3B-SRSS    | NIHON ACCYAKUTANSHI |               |
| P74    | VS1-6273-003 | CONNECTOR HOUSING | BMO3B-SRSS    | NIHON ACCYAKUTANSHI |               |
| P75    | VS1-6273-003 | CONNECTOR HOUSING | BMO3B-SRSS    | NIHON ACCYAKUTANSHI |               |
| C1     | N. U.        |                   |               |                     |               |
| C2     | N. U.        |                   |               |                     |               |
| LED11  | WG1-5703-000 | LED               | VRBG3312X     | STANREY             |               |
| LED12  | WG1-5703-000 | LED               | VRBG3312X     | STANREY             |               |
| POT1   | BH1-2187-000 | POTENTIOMETER     |               | SAKAE               |               |

| Symbol | Parts No.    | Description                | Maker Type        | Maker        | Specification |
|--------|--------------|----------------------------|-------------------|--------------|---------------|
| S71    | WC1-5052-000 | SHOT SWITCH                | M-2018N-G         | NIHON KAIHEI |               |
| S81    | WC1-5057-000 | TOGGLE SWITCH              | ATE1D-2M3-10      | FUJISOKU     |               |
| S83    | WC1-5058-000 | TOGGLE SWITCH              | ATE1E-2M3-10      | FUJISOKU     |               |
| S85    | WC2-0135-000 | PUSH SWITCH                | SKHAJ             | ALPS         |               |
| S86    | WC2-0135-000 | PUSH SWITCH                | SKHAJ             | ALPS         |               |
| S87    | WC1-5161-000 | LOCKER SWITCH              | 8V1052-M          | FUJISOKU     |               |
|        | WC6-5065-000 | LOCKER                     | MD0481531         | FUJISOKU     |               |
| S88    | WC2-5397-000 | PUSH SWITCH                | SKHRAB            | ALPS         |               |
| VR01   | VR5-7880-103 | SPEED VOLUME               |                   | TOKOS        |               |
| T01    | WT1-0362-000 | EARTH LUG                  | V0. 5-3           | NICHIATSU    |               |
|        | KE1-2259-001 | WIRE, LEAD (BRN) PER METER | UL1571AWG28 (BRN) | HIRAKAWA     |               |
|        | KE1-2259-002 | WIRE, LEAD (RED) PER METER | UL1571AWG28 (RED) | HIRAKAWA     |               |
|        | KE1-2259-003 | WIRE, LEAD (ORG) PER METER | UL1571AWG28 (ORG) | HIRAKAWA     |               |
|        | KE1-2259-004 | WIRE, LEAD (YEL) PER METER | UL1571AWG28 (YEL) | HIRAKAWA     |               |
|        | KE1-2259-005 | WIRE, LEAD (GRN) PER METER | UL1571AWG28 (GRN) | HIRAKAWA     |               |
|        | KE1-2259-006 | WIRE, LEAD (BLU) PER METER | UL1571AWG28 (BLU) | HIRAKAWA     |               |
|        | KE1-2259-007 | WIRE, LEAD (PUR) PER METER | UL1571AWG28 (PUR) | HIRAKAWA     |               |
|        | KE1-2259-008 | WIRE, LEAD (GRY) PER METER | UL1571AWG28 (GRY) | HIRAKAWA     |               |
|        | KE1-2259-009 | WIRE, LEAD (WHT) PER METER | UL1571AWG28 (WHT) | HIRAKAWA     |               |
|        | KE1-2259-010 | WIRE, LEAD (BLK) PER METER | UL1571AWG28 (BLK) | HIRAKAWA     |               |





| Parts Number     | Qty | Description        | Page         |
|------------------|-----|--------------------|--------------|
| BA0-7994-000 000 | 1   | WASHER             | B-3-2        |
| BA1-9098-000 000 | 2   | RUBBER             | B-3-1        |
| BA2-2351-000 000 | 1   | SPRING             | B-3-1        |
| BA2-2352-020 000 | 1   | WASHER             | B-3-1        |
| BA2-4548-000 000 | 1   | PLATE              | B-3-1        |
| BC0-6880-020 000 | 1   | SHAFT              | B-3-2        |
| BC0-6881-000 000 | 2   | SHAFT              | B-3-2        |
| BC0-7197-050 000 | 1   | THUMB RING         | B-3-1        |
| BC1-6147-040 000 | 1   | KNOB               | B-3-2        |
| BC1-9467-030 000 | 1   | HOLDER             | B-3-2        |
| BC1-9470-020 000 | 1   | LOCK SCREW         | B-3-2        |
| BC2-4358-000 000 | 1   | COVER              | B-3-2        |
| BC2-4682-020 000 | 2   | INSERT COLLAR      | B-3-1        |
| BC2-4683-040 000 | 1   | GRIP, ZOOM DEMAND  | B-3-2        |
| BC2-7753-000 000 | 3   | CAP, RET SW        | B-3-1, B-3-2 |
| BC5-0025-000 000 | 1   | BODY               | B-3-2        |
| BC5-0026-020 000 | 1   | BODY               | B-3-2        |
| BC5-0095-000 000 | 1   | PANEL              | B-3-2        |
| BC5-0096-000 000 | 1   | PANEL              | B-3-2        |
| BC5-0097-000 000 | 1   | PANEL              | B-3-2        |
| BC5-0098-000 000 | 1   | PANEL              | B-3-2        |
| BC5-0099-000 000 | 1   | PANEL              | B-3-2        |
| BC5-0100-000 000 | 1   | PANEL              | B-3-2        |
| BC5-0101-000 000 | 1   | PANEL              | B-3-2        |
| BC5-0102-000 000 | 1   | PANEL              | B-3-2        |
| BC5-0103-000 000 | 2   | PANEL              | B-3-2        |
| BC5-0104-000 000 | 1   | PCB, SWITCH, LED   | B-3-2        |
| BC5-0105-000 000 | 1   | PCB, LED           | B-3-2        |
| BC5-0106-000 000 | 1   | PANEL              | B-3-2        |
| BC5-0107-000 000 | 1   | HOLDER, SW         | B-3-2        |
| BC5-0108-000 000 | 1   | HOLDER, LED        | B-3-2        |
| BC5-0109-000 000 | 1   | HOLDER, AMP        | B-3-2        |
| BC5-0110-000 000 | 1   | BASE, CONNECTOR    | B-3-2        |
| BC5-0286-000 000 | 1   | GRIP, ZOOM DEMAND  | B-3-1        |
| BC5-0287-000 000 | 1   | COVER, GRIP        | B-3-1        |
| BC5-0288-000 000 | 1   | CAM                | B-3-1        |
| BC5-0289-000 000 | 1   | HOLDER, BEARING    | B-3-1        |
| BC5-0290-000 000 | 1   | SHAFT              | B-3-1        |
| BC5-0291-000 000 | 2   | ROLLER             | B-3-1        |
| BC5-0292-000 000 | 1   | COVER              | B-3-1        |
| BC5-0293-000 000 | 1   | KNOB               | B-3-1        |
| BC5-0294-000 000 | 1   | HOLDER             | B-3-1        |
| BC5-0295-000 000 | 1   | HOLDER, RET SWITCH | B-3-1        |
| BC5-0296-000 000 | 1   | SHAFT              | B-3-1        |

BC5-0096-000 "Z-Track" Plate  
(white)

BC5-0097-000 "Power" Plate  
(white)

BC5-0098-000 "Preset" Plate  
(white)

BC5-0099-000 "Curve" Plate  
(white)

BC5-3420-000 "Preset" Plate  
(black)

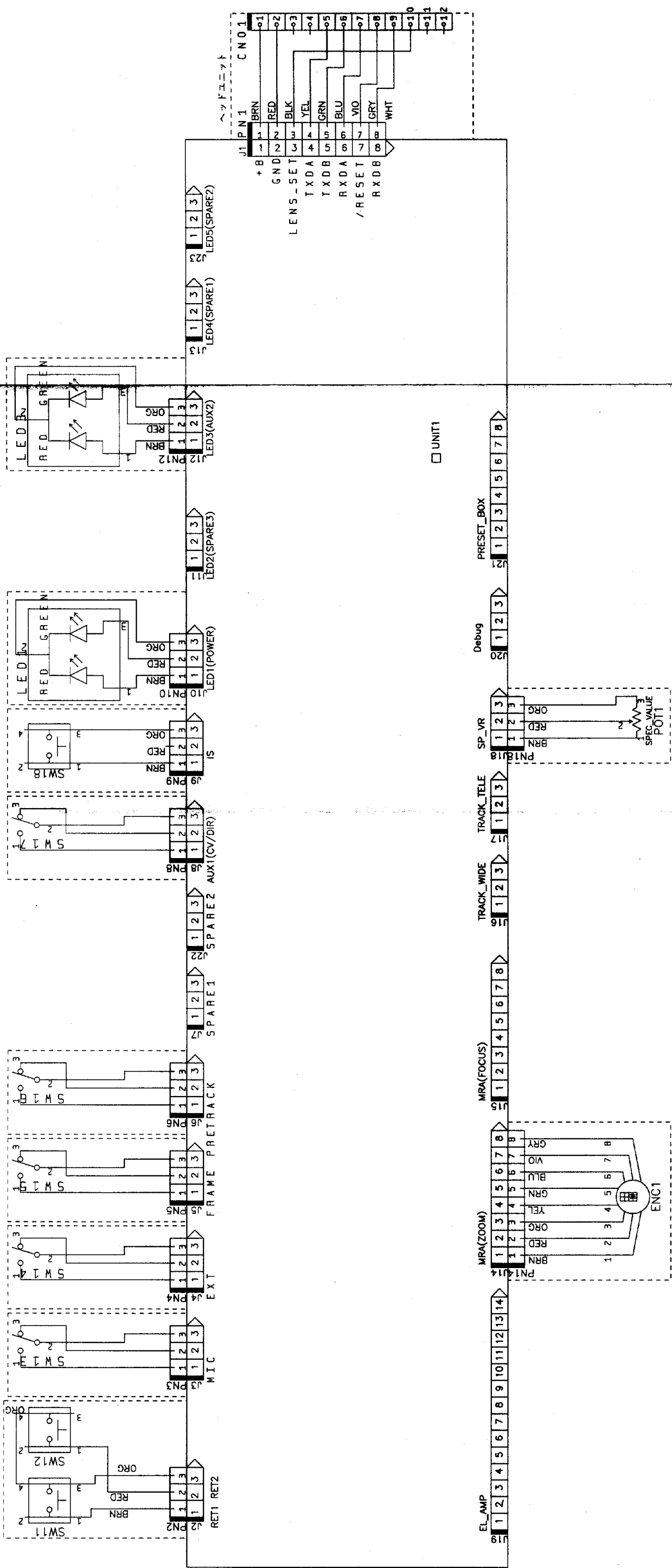
BC5-3421-000 "Power" Plate  
(black)

BC5-3422-000 "Z-Track" Plate  
(black)

BC5-3423-000 "Curve" Plate  
(black)

| Parts Number     | Qty | Description                            | Page         |
|------------------|-----|----------------------------------------|--------------|
| BC5-0300-000 000 | 1   | HOLDER, ENCODER                        | B-3-1        |
| BC5-0301-000 000 | 1   | COUPLING (A)                           | B-3-1        |
| BC5-0302-000 000 | 1   | COUPLING (B)                           | B-3-1        |
| BC5-0303-000 000 | 1   | SHAFT, COUPLING                        | B-3-1        |
| BC5-0304-000 000 | 1   | SPRING                                 | B-3-1        |
| BC5-0305-000 000 | 2   | TAPE                                   | B-3-1        |
| BG2-8706-000 000 | 1   | ENCODER UNIT, RME-H01, CANON PRECISION | B-3-1        |
| BG5-7056-000 000 | 1   | PCB ASS'Y, MAIN                        | B-3-2        |
| BH3-0505-000 000 | 1   | PUSH BUTTON SWITCH                     | B-3-2        |
| BH3-9360-000 000 | 1   | CAP, SWITCH                            | B-3-2        |
| BS6-5403-000 000 | 1   | NUT                                    | B-3-1        |
| BS9-5038-000 000 | 3   | SPACER                                 | B-3-1        |
| BS9-5039-000 000 | 1   | O-RING                                 | B-3-2        |
| VR5-7880-103 000 | 1   | VARIABLE RESISTOR                      | B-3-2        |
| VS1-5866-012 000 | 1   | CONNECTOR                              | B-3-2        |
| WC1-5203-000 000 | 1   | SWITCH, TOGGLE                         | B-3-2        |
| WC1-5205-000 000 | 1   | SWITCH, TOGGLE                         | B-3-2        |
| WC1-5206-000 000 | 2   | SWITCH, TOGGLE                         | B-3-2        |
| WC2-0135-000 000 | 2   | SWITCH, PUSH                           | B-3-1        |
| WC8-5275-000 000 | 1   | SWITCH, TOGGLE                         | B-3-2        |
| WG1-5924-000 000 | 2   | LED, SPR-39MVW, ROHM                   | B-3-2        |
| XA1-1170-409 000 | 8   | SCREW                                  | B-3-1, B-3-2 |
| XA1-1200-209 000 | 1   | SCREW                                  | B-3-1        |
| XA1-1200-409 000 | 21  | SCREW                                  | B-3-1, B-3-2 |
| XA1-1200-609 000 | 2   | SCREW                                  | B-3-1        |
| XA1-1200-809 000 | 1   | SCREW                                  | B-3-1        |
| XA1-1260-506 000 | 6   | SCREW                                  | B-3-2        |
| XA1-1261-009 000 | 8   | SCREW                                  | B-3-1        |
| XA1-3260-409 000 | 4   | SCREW                                  | B-3-1        |
| XB1-2300-409 000 | 4   | SCREW                                  | B-3-1, B-3-2 |
| XB1-2300-809 000 | 2   | SCREW                                  | B-3-1        |
| XB6-2200-309 000 | 3   | SET SCREW                              | B-3-1, B-3-2 |
| XB6-3300-409 000 | 2   | SET SCREW                              | B-3-1        |
| XB7-1030-109 000 | 2   | BOLT                                   | B-3-1        |
| XB7-1040-106 000 | 4   | BOLT                                   | B-3-2        |
| XB8-1101-002 000 | 2   | HELISERT INSERT                        | B-3-2        |
| XD1-1101-829 000 | 4   | WASHER                                 | B-3-1        |
| XD1-1102-123 000 | 1   | WASHER                                 | B-3-1        |
| XD1-1103-125 000 | 2   | WASHER                                 | B-3-2        |
| XD1-1106-229 000 | 2   | WASHER                                 | B-3-2        |
| XD1-1108-225 000 | 2   | WASHER                                 | B-3-1        |
| XD1-3100-309 000 | 2   | LOCK-WASHER, SPLIT                     | B-3-1        |
| XD2-1100-642 000 | 1   | RING, E                                | B-3-1        |
| XD3-1300-082 000 | 3   | PIN, SPRING                            | B-3-1        |

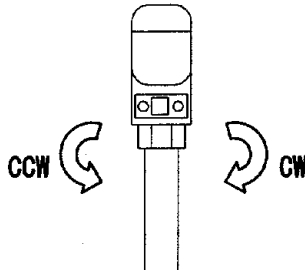
| Parts Number     | Q'ty | Description          | Page  |
|------------------|------|----------------------|-------|
| XD3-1400-122 000 | 2    | PIN, SPRING D=4 L=12 | B-3-2 |
| XD3-4200-081 000 | 1    | PIN                  | B-3-1 |
| XG2-3006-201 000 | 1    | BALL BEARING         | B-3-1 |
| XG2-6012-403 000 | 1    | BALL BEARING         | B-3-1 |
| XG3-6012-403 000 | 1    | BALL BEARING         | B-3-1 |



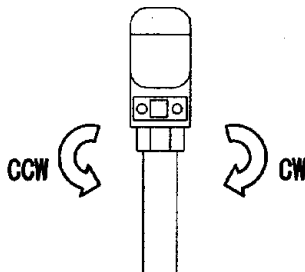
ZDJ-P01  
GENERAL CIRCUIT DIAGRAM

## PARTS LIST

| Symbol      | Parts No.     | Description      | Maker Type               | Maker            | Specification |
|-------------|---------------|------------------|--------------------------|------------------|---------------|
| UNIT1       | BG5-7056-000  | MAIN PCB ASS'Y   |                          |                  |               |
| SW11        | PUSH SW       | WC2-0135-000     | SKHHAJ                   | ALPS             |               |
| SW12        | PUSH SW       | WC2-0135-000     | SKHHAJ                   | ALPS             |               |
| SW13        | TOGGLE SWITCH | WC8-5275-000     | M-2019N-G                | NIHON KAIHEI     |               |
|             | MIC CAP       | BH3-9360-000     | AT-448-W                 | NIHON KAIHEI     |               |
| SW14        | TOGGLE SWITCH | WC1-5206-000     | B-12A1P                  | NIHON KAIHEI     |               |
| SW15        | TOGGLE SWITCH | WC1-5205-000     | B-18A1P                  | NIHON KAIHEI     |               |
| SW16        | TOGGLE SWITCH | WC1-5203-000     | B-19A1P                  | NIHON KAIHEI     |               |
| SW17        | TOGGLE SWITCH | WC1-5206-000     | B-12A1P                  | NIHON KAIHEI     |               |
| SW18        | TOGGLE SWITCH | BH3-0505-000     | B3F-1000                 | OMRON            |               |
| PN2         | HOUSING       | VS1-5866-003     | SHR-03V-S-B              | JAPAN SOLDERLESS |               |
| PN3         | HOUSING       | VS1-5866-003     | SHR-03V-S-B              | JAPAN SOLDERLESS |               |
| PN4         | HOUSING       | VS1-5866-003     | SHR-03V-S-B              | JAPAN SOLDERLESS |               |
| PN5         | HOUSING       | VS1-5866-003     | SHR-03V-S-B              | JAPAN SOLDERLESS |               |
| PN6         | HOUSING       | VS1-5866-003     | SHR-03V-S-B              | JAPAN SOLDERLESS |               |
| PN8         | HOUSING       | VS1-5866-003     | SHR-03V-S-B              | JAPAN SOLDERLESS |               |
| PN9         | HOUSING       | VS1-5866-003     | SHR-03V-S-B              | JAPAN SOLDERLESS |               |
| PN10        | HOUSING       | VS1-5866-003     | SHR-03V-S-B              | JAPAN SOLDERLESS |               |
| PN12        | HOUSING       | VS1-5866-003     | SHR-03V-S-B              | JAPAN SOLDERLESS |               |
| PN18        | HOUSING       | VS1-5866-003     | SHR-03V-S-B              | JAPAN SOLDERLESS |               |
| PIN CONTACT | WS3-5583      | SH-002T-P0.2     | JAPAN SOLDERLESS         | JAPAN SOLDERLESS |               |
| LED1        | LED           | WGT-5924         | SPR-39MVM                | ROHM             |               |
| LED3        | LED           | WGT-5924         | SPR-39MVM                | ROHM             |               |
| ENC1        | ENCODER       | BG2-8706         |                          |                  |               |
| POT1        | POT           | VR5-788-0103     | RV12YN15SB10K Ω          | TOCOS            |               |
|             | WIRE (BRN)    | KE1-2599-000 001 | UL1571-28AWG-NR-S-NON-PB | HIRAKAWA         |               |
|             | WIRE (RED)    | KE1-2599-000 003 | UL1571-28AWG-NR-S-NON-PB | HIRAKAWA         |               |
|             | WIRE (BLK)    | KE1-2599-000 010 | UL1571-28AWG-NR-S-NON-PB | HIRAKAWA         |               |
|             | WIRE (YEL)    | KE1-2599-000 004 | UL1571-28AWG-NR-S-NON-PB | HIRAKAWA         |               |
|             | WIRE (GRN)    | KE1-2599-000 005 | UL1571-28AWG-NR-S-NON-PB | HIRAKAWA         |               |
|             | WIRE (BLU)    | KE1-2599-000 006 | UL1571-28AWG-NR-S-NON-PB | HIRAKAWA         |               |
|             | WIRE (VIO)    | KE1-2599-000 007 | UL1571-28AWG-NR-S-NON-PB | HIRAKAWA         |               |
|             | WIRE (GRY)    | KE1-2599-000 008 | UL1571-28AWG-NR-S-NON-PB | HIRAKAWA         |               |

| 項 目           | 規格内容                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |     |     |     |     |     |     |     |     |     |  |  |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |     |     |     |    |     |     |     |     |     |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|
| 1. 基準電圧の確認    | <p>CP1 (GND) 基準で、コンデンサー C14 の + 端子が 11 ～ 13V であることを確認後、下記の電圧の確認を行う。</p> <ul style="list-style-type: none"><li>・ CP1 (GND) 基準 CP2 (D3.3V) 3.3V ± 200mV</li><li>・ CP1 (GND) 基準 CP3 (A3.3V) 3.3V ± 200mV</li><li>・ CP1 (GND) 基準 CP4 (MR3.3V) 3.3V ± 200mV</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |     |     |     |     |     |     |     |     |     |  |  |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |     |     |     |    |     |     |     |     |     |
| 2. センサー位置のメモリ | <p>2-1. ディップスイッチを以下のように設定する（メモリーモード）。</p> <table><tr><th colspan="6">SW2</th><th colspan="6">SW3</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>ON</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>ON</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> <p>2-2. サムリングを中点に保った状態で、POWER ON。</p> <p>2-3. POWER LED が消灯 → 赤色点滅であることを示す。</p> <p>2-4. サムリングをゆっくりと CCW 端まで倒した後 POWER LED が赤色点滅 → オレンジ色点滅に変わることを確認。</p> <div></div> <p>2-5. サムリングをゆっくりと、CW 方向に倒した後、POWER LED がオレンジ色点滅 → 赤色点灯に変わることを確認。</p> <p>2-6. サムリングを中点に保ち（このとき絶対にサムリングに手を触れない）、RET1 を 1 回 ON することで、POWER LED が、赤色点灯 → 消灯 に変わることを確認</p> <p>2-7. サムリングをゆっくりと CCW 方向に倒した後、POWER LED が、消灯 → 緑色点滅 に変わることを確認。なお、このとき、消灯 → 赤色高速点滅 に変わった場合、サムリングの操作速度が速いことで、エラーとなったことを表すので、最初(2-1)からやり直すこと。</p> <p>2-8. サムリングを緩やかに CCW 側に倒す（初期化の為の操作）ことで、POWER LED が 緑色点滅 → 緑色点灯 に変わり、初期化完了することを確認</p> <p>2-9. POWER OFF</p> | SW2 |     |     |     |     |     | SW3 |     |     |     |  |  | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | ON | OFF | OFF | OFF | OFF | OFF | ON | OFF | OFF | OFF | OFF | OFF |
| SW2           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |     |     |     | SW3 |     |     |     |     |     |  |  |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |     |     |     |    |     |     |     |     |     |
| 1             | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3   | 4   | 5   | 6   | 1   | 2   | 3   | 4   | 5   | 6   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |     |     |     |    |     |     |     |     |     |
| ON            | OFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | OFF | OFF | OFF | OFF | ON  | OFF | OFF | OFF | OFF | OFF |  |  |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |     |     |     |    |     |     |     |     |     |

| 項 目          | 規格内容                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |     |     |     |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|--|--|---|---|---|---|---|---|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|--|---|---|---|---|---|---|-----|-----|-----|-----|-----|-----|------------|--|--|--|--|--|---|---|---|---|---|---|-----|-----|-----|-----|-----|-----|------------|--|--|--|--|--|---|---|---|---|---|---|-----|-----|-----|-----|-----|-----|
| 3. 出荷時スイッチ設定 | <p>2-10. 基板上の各ディップスイッチが以下のような出荷時の設定であることを確認する。</p> <table><tr><th colspan="6">SW2</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> <table><tr><th colspan="6">SW3</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> <p>基板上のスイッチが、以下の設定であることを確認。<br/>SW1（ロータリー型）： 0</p> <table><tr><th colspan="6">SW2(ディップ型)</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> <table><tr><th colspan="6">SW3(ディップ型)</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> | SW2 |     |     |     |  |  | 1 | 2 | 3 | 4 | 5 | 6 | OFF | OFF | OFF | OFF | OFF | OFF | SW3 |  |  |  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | OFF | OFF | OFF | OFF | OFF | OFF | SW2(ディップ型) |  |  |  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | OFF | OFF | OFF | OFF | OFF | OFF | SW3(ディップ型) |  |  |  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | OFF | OFF | OFF | OFF | OFF | OFF |
| SW2          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |     |     |     |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| 1            | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3   | 4   | 5   | 6   |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| OFF          | OFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | OFF | OFF | OFF | OFF |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| SW3          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |     |     |     |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| 1            | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3   | 4   | 5   | 6   |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| OFF          | OFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | OFF | OFF | OFF | OFF |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| SW2(ディップ型)   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |     |     |     |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| 1            | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3   | 4   | 5   | 6   |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| OFF          | OFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | OFF | OFF | OFF | OFF |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| SW3(ディップ型)   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |     |     |     |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| 1            | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3   | 4   | 5   | 6   |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |
| OFF          | OFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | OFF | OFF | OFF | OFF |  |  |   |   |   |   |   |   |     |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |            |  |  |  |  |  |   |   |   |   |   |   |     |     |     |     |     |     |

| Item                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |     |     |     |  |  |   |   |   |   |   |   |    |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |    |     |     |     |     |     |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|--|--|---|---|---|---|---|---|----|-----|-----|-----|-----|-----|-----|--|--|--|--|--|---|---|---|---|---|---|----|-----|-----|-----|-----|-----|
| 1. Reference voltage check | <p>First check that the “+” pin voltage of capacitor C14 is 11V to 13V as referenced to CP1 (GND), and then check the following voltages.</p> <p>CP1 (GND)reference CP2 (D3.3V)</p> <p>CP1 (GND)reference CP3 (A3.3V)</p> <p>CP1 (GND)reference CP4 (MR3.3V)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |     |     |     |  |  |   |   |   |   |   |   |    |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |    |     |     |     |     |     |
| 2. Sensor position memory  | <p>2-1. Set the DIP switches as follows (memory mode).</p> <table><tr><th colspan="6">SW2</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>ON</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> <table><tr><th colspan="6">SW3</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>ON</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> <p>2-2. While holding the thumb ring at its center point, turn on the power.</p> <p>2-3. Check that the POWER LED goes off and then flashes red.</p> <p>2-4. After turning down the thumb ring slowly all the way to the counterclockwise end, check that the POWER LED changes from flashing red to flashing orange.</p> <div></div> <p>2-5. After turning down the thumb ring slowly all the way to the clockwise end, check that the POWER LED changes from flashing orange to lighted red.</p> <p>2-6. Check that the POWER LED changes from lighted red to lighted off when RET1 is turned on once while holding the thumb ring at its center point (At this time, do not touch the thumb ring under any circumstances).</p> <p>2-7. After turning down the thumb ring slowly counterclockwise, check that the POWER LED changes from lighted off to flashing green. A change from lighted off to rapidly flashing red denotes an error indicating that the thumb ring was operated too quickly. In this case, repeat the steps from the beginning (2-1).</p> <p>2-8. Check that when the thumb ring is thrown down toward the counterclockwise side (this is done for initialization) the POWER LED changes from flashing green to lighted green and that the initialization is completed.</p> <p>2-9. Turn off the power.</p> | SW2 |     |     |     |  |  | 1 | 2 | 3 | 4 | 5 | 6 | ON | OFF | OFF | OFF | OFF | OFF | SW3 |  |  |  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | ON | OFF | OFF | OFF | OFF | OFF |
| SW2                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |     |     |     |  |  |   |   |   |   |   |   |    |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |    |     |     |     |     |     |
| 1                          | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3   | 4   | 5   | 6   |  |  |   |   |   |   |   |   |    |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |    |     |     |     |     |     |
| ON                         | OFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | OFF | OFF | OFF | OFF |  |  |   |   |   |   |   |   |    |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |    |     |     |     |     |     |
| SW3                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |     |     |     |  |  |   |   |   |   |   |   |    |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |    |     |     |     |     |     |
| 1                          | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3   | 4   | 5   | 6   |  |  |   |   |   |   |   |   |    |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |    |     |     |     |     |     |
| ON                         | OFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | OFF | OFF | OFF | OFF |  |  |   |   |   |   |   |   |    |     |     |     |     |     |     |  |  |  |  |  |   |   |   |   |   |   |    |     |     |     |     |     |

| Item                                                                                                                                                                                                             | Description                                                                                                                                                                                            |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|---|---|---|---|---|---|-----|-----|-----|-----|-----|-----|-----|
| 3. Factory switch settings                                                                                                                                                                                       | 2-10. Check that the DIP switches on the circuit board are set as following factory setting at time of shipment.                                                                                       |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
|                                                                                                                                                                                                                  | <table><tr><th colspan="6">SW2</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> | SW2 |     |     |     |     |   | 1 | 2 | 3 | 4 | 5 | 6   | OFF | OFF | OFF | OFF | OFF | OFF |
|                                                                                                                                                                                                                  | SW2                                                                                                                                                                                                    |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
|                                                                                                                                                                                                                  | 1                                                                                                                                                                                                      | 2   | 3   | 4   | 5   | 6   |   |   |   |   |   |   |     |     |     |     |     |     |     |
|                                                                                                                                                                                                                  | OFF                                                                                                                                                                                                    | OFF | OFF | OFF | OFF | OFF |   |   |   |   |   |   |     |     |     |     |     |     |     |
|                                                                                                                                                                                                                  | <table><tr><th colspan="6">SW3</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> | SW3 |     |     |     |     |   | 1 | 2 | 3 | 4 | 5 | 6   | OFF | OFF | OFF | OFF | OFF | OFF |
|                                                                                                                                                                                                                  | SW3                                                                                                                                                                                                    |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
|                                                                                                                                                                                                                  | 1                                                                                                                                                                                                      | 2   | 3   | 4   | 5   | 6   |   |   |   |   |   |   |     |     |     |     |     |     |     |
|                                                                                                                                                                                                                  | OFF                                                                                                                                                                                                    | OFF | OFF | OFF | OFF | OFF |   |   |   |   |   |   |     |     |     |     |     |     |     |
|                                                                                                                                                                                                                  | Check that the switches on the circuit board are set as follows.                                                                                                                                       |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
| SW1 (rotary type): 0                                                                                                                                                                                             |                                                                                                                                                                                                        |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
| SW2 (dip type)                                                                                                                                                                                                   |                                                                                                                                                                                                        |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
| <table><tr><th colspan="6">SW2(dip type)</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> | SW2(dip type)                                                                                                                                                                                          |     |     |     |     |     | 1 | 2 | 3 | 4 | 5 | 6 | OFF | OFF | OFF | OFF | OFF | OFF |     |
| SW2(dip type)                                                                                                                                                                                                    |                                                                                                                                                                                                        |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
| 1                                                                                                                                                                                                                | 2                                                                                                                                                                                                      | 3   | 4   | 5   | 6   |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
| OFF                                                                                                                                                                                                              | OFF                                                                                                                                                                                                    | OFF | OFF | OFF | OFF |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
| <table><tr><th colspan="6">SW3(dip type)</th></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr></table> | SW3(dip type)                                                                                                                                                                                          |     |     |     |     |     | 1 | 2 | 3 | 4 | 5 | 6 | OFF | OFF | OFF | OFF | OFF | OFF |     |
| SW3(dip type)                                                                                                                                                                                                    |                                                                                                                                                                                                        |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
| 1                                                                                                                                                                                                                | 2                                                                                                                                                                                                      | 3   | 4   | 5   | 6   |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
| OFF                                                                                                                                                                                                              | OFF                                                                                                                                                                                                    | OFF | OFF | OFF | OFF |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
|                                                                                                                                                                                                                  |                                                                                                                                                                                                        |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |
|                                                                                                                                                                                                                  |                                                                                                                                                                                                        |     |     |     |     |     |   |   |   |   |   |   |     |     |     |     |     |     |     |