

HP 3245A Universal Source

Mainframe and Assemblies

Component Level Information Packet

This is the Component Level Information Packet (CLIP) for HP 3245A Mainframe and Assemblies. This packet contains schematics, component locators, and parts lists for the Standard version and for the Option 002 (High-Voltage) version.



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03245-90033
E1291

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Declaration of Conformity

According to ISO/IEC Guide 22 and EN 45014

The Hewlett-Packard Company declares that the HP 3245A conforms to the following Product Specifications.

Safety: IEC 1010
CSA 231
UL 1244

EMC: CISPR 11, EN 55011, Class A
IEC 801-2, EN 50082-1, 4kVCD, 8kVAD
IEC 801-3, EN 50082-1, 3 V/M
IEC 801-4, EN 50082-1, 1kV



Q.A. Manager
December 1991

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Printing History

The Printing History shown below lists all Editions and Updates of this manual and the printing date(s). The first printing of the manual is Edition 1. The Edition number increments by 1 whenever the manual is revised. Updates, which are issued between Editions, contain replacement pages to correct the current Edition of the manual. Updates are numbered sequentially starting with Update 1. When a new Edition is created, it contains all the Update information for the previous Edition. Each new Edition or Update also includes a revised copy of this printing history page. Many product updates or revisions do not require manual changes and, conversely, manual corrections may be done without accompanying product changes. Therefore, do not expect a one-to-one correspondence between product updates and manual updates.

Edition 1 (Part Number 03245-90033)December 1991

Safety Symbols



Instruction manual symbol affixed to product. Indicates that the user must refer to the manual for specific Warning or Caution information to avoid personal injury or damage to the product.



Indicates the field wiring terminal that must be connected to earth ground before operating the equipment – protects against electrical shock in case of fault.



OR



Frame or chassis ground terminal – typically connects to the equipment's metal frame.



Alternating current (AC).



Direct current (DC).



Indicates hazardous voltages.

WARNING

Calls attention to a procedure, practice, or condition that could cause bodily injury or death.

CAUTION

Calls attention to a procedure, practice, or condition that could possibly cause damage to equipment or permanent loss of data.

WARNINGS

The following general safety precautions must be observed during all phases of operation, service, and repair of this product. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture, and intended use of the product. Hewlett-Packard Company assumes no liability for the customer's failure to comply with these requirements.

Ground the equipment: For Safety Class 1 equipment (equipment having a protective earth terminal), an uninterruptible safety earth ground must be provided from the mains power source to the product input wiring terminals or supplied power cable.

DO NOT operate the product in an explosive atmosphere or in the presence of flammable gases or fumes.

For continued protection against fire, replace the line fuse(s) only with fuse(s) of the same voltage and current rating and type. DO NOT use repaired fuses or short-circuited fuseholders.

Keep away from live circuits: Operating personnel must not remove equipment covers or shields. Procedures involving the removal of covers or shields are for use by service-trained personnel only. Under certain conditions, dangerous voltages may exist even with the equipment switched off. To avoid dangerous electrical shock, DO NOT perform procedures involving cover or shield removal unless you are qualified to do so.

DO NOT operate damaged equipment: Whenever it is possible that the safety protection features built into this product have been impaired, either through physical damage, excessive moisture, or any other reason, REMOVE POWER and do not use the product until safe operation can be verified by service-trained personnel. If necessary, return the product to a Hewlett-Packard Sales and Service Office for service and repair to ensure that safety features are maintained.

DO NOT service or adjust alone: Do not attempt internal service or adjustment unless another person, capable of rendering first aid and resuscitation, is present.

DO NOT substitute parts or modify equipment: Because of the danger of introducing additional hazards, do not install substitute parts or perform any unauthorized modification to the product. Return the product to a Hewlett-Packard Sales and Service Office for service and repair to ensure that safety features are maintained.

HP 3245A REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|---|-----------|------------------|
| | 03245-80000 | 1 | STANDARD KIT | 28480 | 03245-80000 |
| | 03245-04102 | 1 | COVER-BNC FRONT PANEL | 28480 | 03245-04102 |
| | 6960-0142 | 1 | PLUG-HOLE DOME-HD FOR .562-D-HOLE | 28480 | 6960-0142 |
| | 03245-60201 | 1 | FRONT PANEL ASSEMBLY | 28480 | 03245-60201 |
| LBL1 | 03245-40201 | 1 | PANEL-FRONT | 28480 | 03245-40201 |
| MP1 | 03245-81901 | 1 | SW-PADS,RUBBER | 28480 | 03245-81901 |
| MP2 | 03245-69301 | 1 | WINDOW-DISPLAY SS | 28480 | 03245-69301 |
| * A7 | 03458-66507 | 1 | DISPLAY LOGIC PRINTED CIRCUIT BOARD | 28480 | 03458-66507 |
| SCW1 | 0624-0681 | 1 | SCREW-TPG 4-20 .25-IN-LG PAN-HD-TORX | 28480 | 0624-0681 |
| | 03245-84302 | 1 | LABEL-PANEL,REAR | 28480 | 03245-84302 |
| | 03245-00101 | 1 | DECK-SOURCE BRD | 28480 | 03245-00101 |
| | 0361-1228 | 3 | RIVET-SEMITUB OVH .146DIA .188LG | 28480 | 0361-1228 |
| | 0590-1088 | 3 | THREADED INSERT-NUT M3 X 0.5 1.5-MM-LG | 46384 | S-M3-2-Z1 |
| | 0590-1298 | 7 | THREADED INSERT-STDF M3 X 0.5 12-MM-LG | 46384 | BSOS-3.5M3-12 |
| | 0590-1720 | 7 | THREADED INSERT-STDF M3 X 0.5 25-MM-LG | 46384 | BSOS-3.5M3-25 |
| | 1400-0617 | 3 | CLIP-SPRING .375-DIA .375-WD PLASTIC | 06915 | TC-30-1 |
| | 7204-0575 | 2 | ALUMINUM SH .08IN 32IN 48IN AA5052-H321 | 28480 | 7204-0575 |
| | 03245-04101 | 1 | PLATE-BNC TERMINAL | 28480 | 03245-04101 |
| | 03245-04701 | 3 | SPACER-BNC MOUNTING | 28480 | 03245-04701 |
| | 03245-24701 | 1 | SPACER-HEX F/F M3.0X50MM | 28480 | 03245-24701 |
| | 03245-61604 | 1 | 3M RIBBON 40P/20P CABLE ASSEMBLY | 28480 | 03245-61604 |
| | 03245-90032 | 1 | CUSTOMER QUALITY AUDIT FORM | 28480 | 03245-90032 |
| | 0515-0372 | 27 | SCREW-MACHINE ASSEMBLY M3 X 0.5 8MM-LG | 28480 | 0515-0372 |
| | 5180-0409 | 1 | SPRING CLIP | 28480 | 5180-0409 |
| | 5180-6646 | 1 | CARTON-CORRUGATED | 28480 | 5180-6646 |
| | 7124-2083 | 1 | LABEL-WARNING 1-IN-WD 3.5-IN-LG PPR | 28480 | 7124-2083 |
| | 8120-1378 | 1 | CABLE ASSEMBLY 18AWG | 16428 | CH7081 |
| | 8160-0470 | 2 | RFI STRIP-FINGERS BE-CU SN-PL .38-IN-WD | 30817 | 97-541-02-X |
| | 9222-1266 | 1 | BAG-STAT-DISS POLYETH FLM ENV 4-IN X 6-IN | 28480 | 9222-1266 |
| | 9222-1438 | 2 | BAG-STAT-DISS POLYETH FLM ENV 4-IN X 4-IN | 71983 | CHIPLOC DP |
| | 03245-66511 | 1 | PRINTED CIRCUIT BOARD-INGUARD SOURCE | 28480 | 03245-66511 |
| A1 | 03245-66502 | 1 | BACKPLANE PRINTED CIRCUIT ASSEMBLY | 28480 | 03245-66502 |
| * A2 | 03245-66505 | 1 | OUTGUARD LOGIC PRINTED CIRCUIT ASSEMBLY | 28480 | 03245-66505 |
| * A5 | 03245-66506 | 1 | OUTGUARD POWER SUPPLY PC ASSEMBLY | 28480 | 03245-66506 |
| * A6 | | | | | |
| B1 | 03458-68501 | 1 | FAN ASSEMBLY | 28480 | 03458-68501 |
| | 1252-1878 | 2 | CONTACT-CONNECTOR U/W-POST-TYPE FEM CRIMP | 27264 | 18-02-0088 |
| | 1252-2518 | 2 | CONNECTOR-POST TYPE .100-PIN-SPCG 2-CONTACT | 27264 | 50-57-8402 |
| | 3160-0492 | 1 | FAN-TUBEAXIAL 12.4-CFM 12VDC | 28480 | 3160-0492 |
| CVR1 | 03458-04101 | 1 | COVER, TOP | 28480 | 03458-04101 |
| | 7204-0810 | 4 | ALUMINUM SHEET .064IN 24IN 48IN AA5005-H | 28480 | 7204-0810 |
| CVR2 | 03458-04102 | 1 | COVER, BOTTOM | 28480 | 03458-04102 |
| | 7204-0810 | 4 | ALUMINUM SHEET .064IN 24IN 48IN AA5005-H | 28480 | 7204-0810 |
| F1M | 2110-0202 | 1 | FUSE .5A 250V 1.25X.25 UL | 16428 | MDL-1/2 |
| FC2 | 2110-0565 | 1 | FUSEHOLDER CAP 12A MAX FOR UL | 28480 | 2110-0565 |
| FRM1 | 03458-00104 | 1 | GUSSET, CENTER | 28480 | 03458-00104 |
| | 0361-0015 | 2 | EYELET-FL-FLG .743-OD .177-LG .013-THK | 57771 | A-810 |
| | 0361-0161 | 2 | RIVET-SEMITUB OVH .069DIA .125LG | 12014 | R3718 X 1/8 TIN |
| | 0361-0231 | 1 | RIVET-SEMITUB OVH .123DIA .218LG | 12014 | R-3472 |
| | 0590-1368 | 2 | THREADED INSERT-NUT M3 X 0.5 1.5-MM-LG | 46384 | CLS-M3-2 |
| | 1460-1311 | 1 | SPRING, GROUND | 28480 | 1460-1311 |
| | 3050-0116 | 1 | WASHER-FL NO. 4 .125-IN-ID .375-IN-OD | 28480 | 3050-0116 |
| | 5061-1665 | 1 | CLB 18AWG PVC AMP 4177Z/AMP 61783-1 | 28480 | 5061-1665 |
| | 7144-0323 | 1 | STEEL SH .06IN 32IN 48IN AISI 1010 | 28480 | 7144-0323 |
| FRM2 | 03458-00106 | 1 | CHASSIS, MAINFRAME | 28480 | 03458-00106 |
| | 0361-0233 | 2 | RIVET-SEMITUB OVH .123DIA .281LG | 12014 | R-3682 |
| | 0590-1086 | 4 | THREADED INSERT-NUT M4 X 0.7 2-MM-LG | 46384 | S-M4-2-Z1 |
| | 0590-1089 | 1 | THREADED INSERT-NUT M2.5 X 0.45 1.5-MM-LG | 46384 | S-M2.5-2-Z1 |
| | 0590-1102 | 2 | THREADED INSERT-NUT M4 X 0.7 1.5-MM-LG | 46384 | F-M4-1 |
| | 0590-1203 | 2 | THREADED INSERT-NUT M3 X 0.5 1.5-MM-LG | 46384 | F-M3-1 |
| | 0590-1220 | 3 | THREADED INSERT-NUT M3 X 0.5 1.5-MM-LG | 46384 | S-M3-1-Z1 |
| | 0590-1590 | 6 | THREADED INSERT-STDF M4 X 0.7 10-MM-LG | 46384 | BSOS-M4-10 |
| | 7144-0521 | 3 | STEEL SH .09IN 24IN 55IN AISI 1010 | 28480 | 7144-0521 |
| | 9135-0167 | 1 | FILTER-LINE CEE-22-TERMS | 28480 | 9135-0167 |

* IN-DEPTH COMPONENT LOCATOR IN SECTION UNDER INDIVIDUAL HP PART NUMBER.

HP 3245A REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|---|-----------|--------------------------|
| FRM3 | 03458-00105 | 1 | CHASSIS, OUTGUARD | 28480 | 03458-00105 |
| | 0590-1088 | 3 | THREADED INSERT-NUT M3 X 0.5 1.5-MM-LG | 46384 | S-M3-2-ZI |
| | 0590-1871 | 5 | THREADED INSERT-STDF M3 X 0.5 8-MM-LG | 46384 | SOSG-3.5M3-8 |
| | 7144-0323 | 1 | STEEL SH .06IN 32IN 48IN AISI 1010 | 28480 | 7144-0323 |
| HDW1 | 1510-0038 | 1 | BINDING POST ASSY SGL THD-STUD | 74970 | 111-2223-001 |
| HDW2 | 2950-0006 | 1 | NUT-HEX-DBL-CHAM 1/4-32-THD .094-IN-THK | 73734 | 9000 |
| HDW3 | 2190-0027 | 1 | WASHER-LK INTL T 1/4 IN .256-IN-ID | 78189 | 1914-00 |
| HDW4 | 2190-0119 | 2 | WASHER-FL 15/32 IN .48-IN-ID .75-IN-OD | 73734 | 1499 |
| HDW5-HDW6 | 2190-0577 | 2 | WASHER-LK NO. 10 .194-IN-ID .294-IN-OD | 28480 | 2190-0577 |
| HDW7-HDW10 | 2190-0432 | 4 | WASHER-LK 5/16 IN .319-IN-ID .575-IN-OD | 28480 | 2190-0432 |
| HDW11 | 2190-0119 | 1 | WASHER-FL 15/32 IN .48-IN-ID .75-IN-OD | 73734 | 1499 |
| HDW12 | 2190-0037 | 1 | WASHER-LK 1/2 IN .512-IN-ID .789-IN-OD | 78189 | 1224-08 |
| HDW13-HDW16 | 2190-0099 | 5 | WASHER-LK 7/16 IN .472-IN-ID .607-IN-OD | 54294 | 16-886 |
| HDW17-HDW19 | 2950-0035 | 5 | NUT-HEX-DBL-CHAM 15/32-32-THD | 28480 | 2950-0035 |
| HDW20 | 2950-0054 | 1 | NUT-HEX-DBL-CHAM 1/2-28-THD .125-IN-THK | 28480 | 2950-0054 |
| HDW21-HDW22 | 2950-0001 | 2 | NUT-HEX-DBL-CHAM 3/8-32-THD .094-IN-THK | 73734 | 9002 |
| HDW23-HDW24 | 0360-1632 | 2 | TERMINAL-SOLDER LUG LK-MTG FOR-#3/8-SCR | 79963 | 761-3/8 |
| HDW25 | 2190-0099 | 1 | WASHER-LK 7/16 IN .472-IN-ID .607-IN-OD | 54294 | 16-886 |
| HDW26-HDW27 | 2950-0035 | 1 | NUT-HEX-DBL-CHAM 15/32-32-THD | 28480 | 2950-0035 |
| HDW28-HDW29 | 3050-0604 | 2 | WASHER-FL 7/16 IN .5-IN-ID .75-IN-OD | 86928 | 5710-94-16 |
| HDW30-HDW33 | 00310-48801 | 4 | INSULATOR | 28480 | 00310-48801 |
| HDW34 | 3050-0891 | 1 | WASHER-FL 3.0 MM 3.3-MM-ID 6.85-MM-OD | 28480 | 3050-0891 |
| J1-J2 | 1250-0083 | 2 | CONNECTOR-RF BNC FEM SGL-HOLE FR 50-OHM | 24931 | 28JR130-1 |
| KYC1 | 5041-0564 | 1 | PB 1/4-COWHT | 28480 | 5041-0564 |
| LBL1 | 03245-84304 | 1 | LABEL FOR REAR PANEL OPT 02 | 28480 | 03245-84304 |
| LBL2 | 7120-4835 | 1 | LABEL-INFORMATION .75-IN-WD 2-IN-LG PPR | 80509 | CSA STOCK NO. 8-1113-405 |
| LBL3 | 03245-84300 | 1 | LABEL-SERIAL NUMBER, 3245A | 28480 | 03245-84300 |
| LBL4 | 7120-3528 | 1 | LABEL .6-IN-WD 1.8-IN-LG | 28480 | 7120-3528 |
| MNL1 | 03245-90000 | 1 | USERS MANUAL SET | 28480 | 03245-90000 |
| MP1 | 03458-01201 | 1 | BRACKET, TRANSFORMER | 28480 | 03458-01201 |
| | 0360-1813 | 1 | TERMINAL-TAB QUICK DISC MALE; 45 DEG | 00779 | 42822-2 |
| | 0361-0228 | 1 | RIVET-SEMITUB OVH .123DIA .156LG | 12014 | R-3472 |
| | 0590-1088 | 8 | THREADED INSERT-NUT M4 X 0.7 2-MM-LG | 46384 | S-M4-2-ZI |
| | 7144-0323 | 1 | STEEL SH .06IN 32IN 48IN AISI 1010 | 28480 | 7144-0323 |
| MP4-MP7 | 03458-24701 | 4 | STANDOFF-HEX, (MALE/FEMALE) | 28480 | 03458-24701 |
| MP8 | 03458-47901 | 1 | BENZEL OVERLAY, REAR | 28480 | 03458-47901 |
| | 0590-1866 | 4 | THREADED INSERT-ULTINST M3.5 X 0.8 | 80201 | 8075-3.5BR-0038 |
| | 1390-0793 | 4 | FASTENER-CAPTIVE SCREW M4 X 0.7 THD;8.0 MM LG | 28480 | 1390-0793 |
| MP9 | 03458-84303 | 1 | LABEL, KEYBOARD OVERLAY | 28480 | 03458-84303 |
| MP10 | 3150-0300 | 1 | FILTER-AIR NYLON 2.3-IN-OD .75-IN-LG | 28480 | 3150-0300 |
| MP11 | 2190-0586 | 4 | WASHER-LK HLCL 4.0 MM 4.1-MM-ID 7.6-MM-OD | 28480 | 2190-0586 |
| MP12 | 03458-43701 | 1 | PUSHROD, 186.2 L | 28480 | 03458-43701 |
| MP13-MP15 | 2190-0586 | 1 | WASHER-LK HLCL 4.0 MM 4.1-MM-ID 7.6-MM-OD | 28480 | 2190-0586 |
| MP16-MP19 | 0390-0006 | 4 | INSULATOR-FLANGE-BUSHING NYLON | 73734 | 103304 |
| MP20-MP23 | 3050-0893 | 4 | WASHER-FL 4.0 MM 4.4-MM-ID 8.85-MM-OD | 28480 | 3050-0893 |
| MP24 | 1250-0161 | 1 | ADAPTER-COAX STRAIGHT F-BNC F-BNC | 24931 | 28AS101-2 |
| MP25-MP28 | 1400-0249 | 4 | CABLE TIE .062-.625-DIA .091-WD NYLON | 59730 | TY-23M-8 |
| MP34 | 1460-1311 | 1 | SPRING, GROUND | 28480 | 1460-1311 |
| MP35-MP36 | 1460-1345 | 2 | TILT STAND STAINLESS STEEL | 28480 | 1460-1345 |
| MP41-MP42 | 5001-0538 | 2 | TRIM STRIP SIDE 3 1/2 | 28480 | 5001-0538 |
| MP43-MP46 | 5041-8801 | 4 | FOOT FULL MOD | 28480 | 5041-8801 |
| MP47 | 5041-8802 | 1 | TRIM STRIP TOP | 28480 | 5041-8802 |
| MP49-MP50 | 5041-8819 | 2 | HANDLE CAP | 28480 | 5041-8819 |
| MP51-MP52 | 5041-8820 | 2 | HANDLE CAP | 28480 | 5041-8820 |
| MP53-MP54 | 5062-3704 | 2 | STRAP HANDLE-18 INCH | 28480 | 5062-3704 |
| MP57-MP58 | 5180-6650 | 2 | STANDOFF, HEX | 28480 | 5180-6650 |

HP 3245A REPLACEMENT PARTS

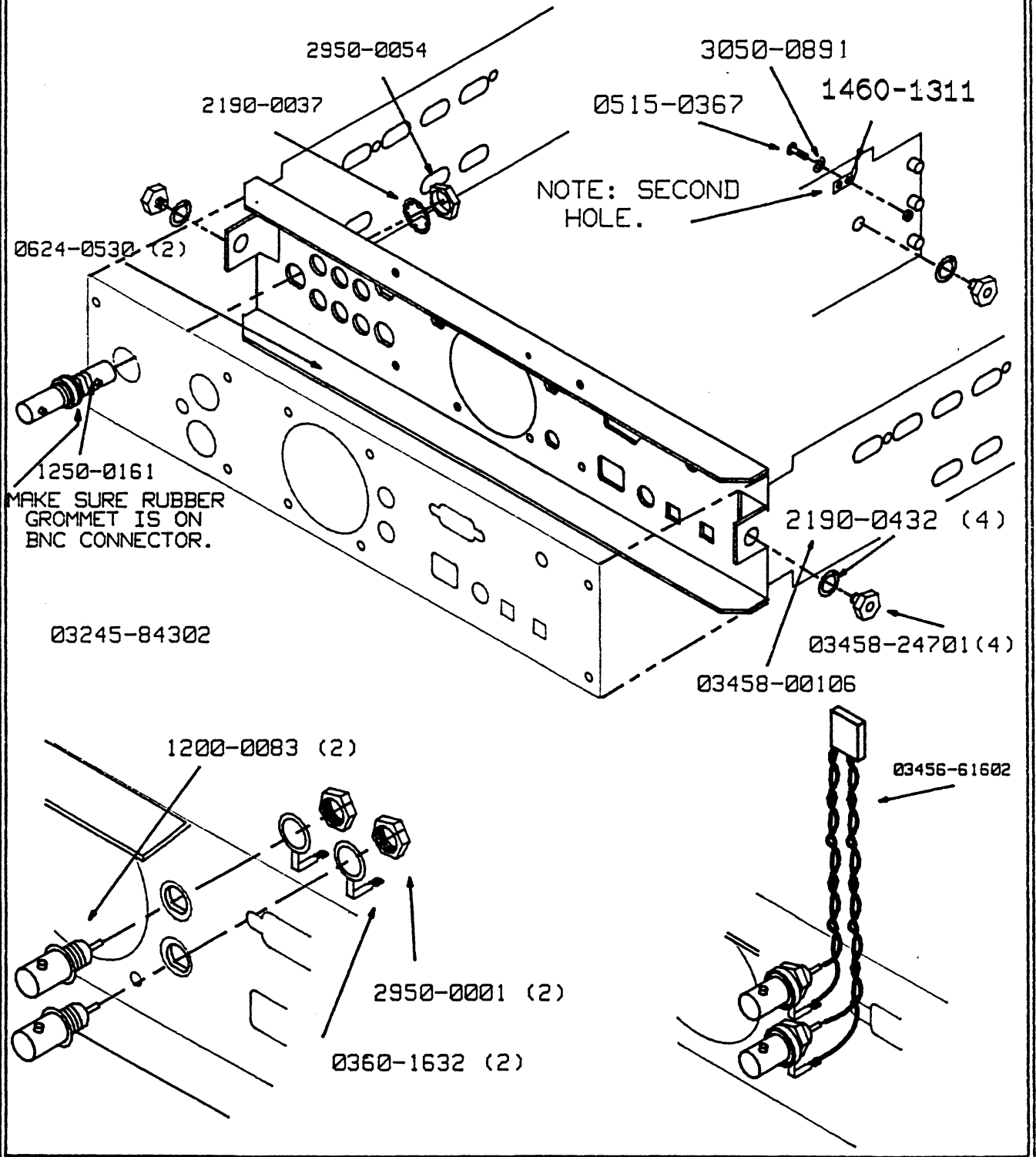
| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|------------------|
| SCW1-SCW4 | 0515-1404 | 4 | SCREW-MACHINE M4 X 0.7 55MM-LG PAN-HD | 28480 | 0515-1404 |
| SCW5-SCW8 | 0515-0433 | 4 | SCREW-MACHINE ASSY M4 X 0.7 8MM-LG PAN-HD | 28480 | 0515-0433 |
| SCW11-SCW16 | 0515-0372 | | SCREW-MACHINE ASSY M3 X 0.5 8MM-LG PAN-HD | 28480 | 0515-0372 |
| SCW17 | 0515-0367 | 1 | SCREW-MACHINE ASSY M2.5 X 0.45 8MM-LG PAN-HD | 28480 | 0515-0367 |
| SCW21-SCW24 | 0515-1132 | 4 | SCREW-MACHINE M3 X 0.8 10MM-LG FLAT-HD | 28480 | 0515-1132 |
| SCW41-SCW42 | 0624-0530 | 2 | SCREW-TPG 8-16 .375-IN-LG PAN-HD-TORX | 28480 | 0624-0530 |
| T1 | 9100-4749 | 1 | TRANSFORMER-POWER 100/120/220/240V | 05216 | PX4881 |
| W1 | 03458-61601 | 1 | CABLE ASSEMBLY - 20 PIN | 28480 | 03458-61601 |
| | 1251-5007 | 2 | PULL TAB-POST 20/28 CONNECTOR | 76381 | 3490-2 |
| | 1251-7584 | 2 | CONNECTOR-POST TYPE .100-PIN-SPOG 20-CONTACT | 18873 | 66900-220 |
| | 8120-1778 | 0 | CABLE-FLAT-RIBBON 28AWG 20-CNDCT GRA-INSUL | 76381 | 3365-20 |
| W3 | 03458-61602 | 1 | EXT I/O 4 WIRE CABLE | 28480 | 03458-61602 |
| | 1251-3476 | 4 | CONTACT-CONNECTOR U/W-POST-TYPE FEM CRIMP | 27264 | 08-50-0113 |
| | 1251-7111 | 1 | CONNECTOR-POST TYPE .100-PIN-SPOG 4-CONTACT | 27264 | 22-01-3047 |

Code List of Manufacturers - HP 3245A MAINFRAME

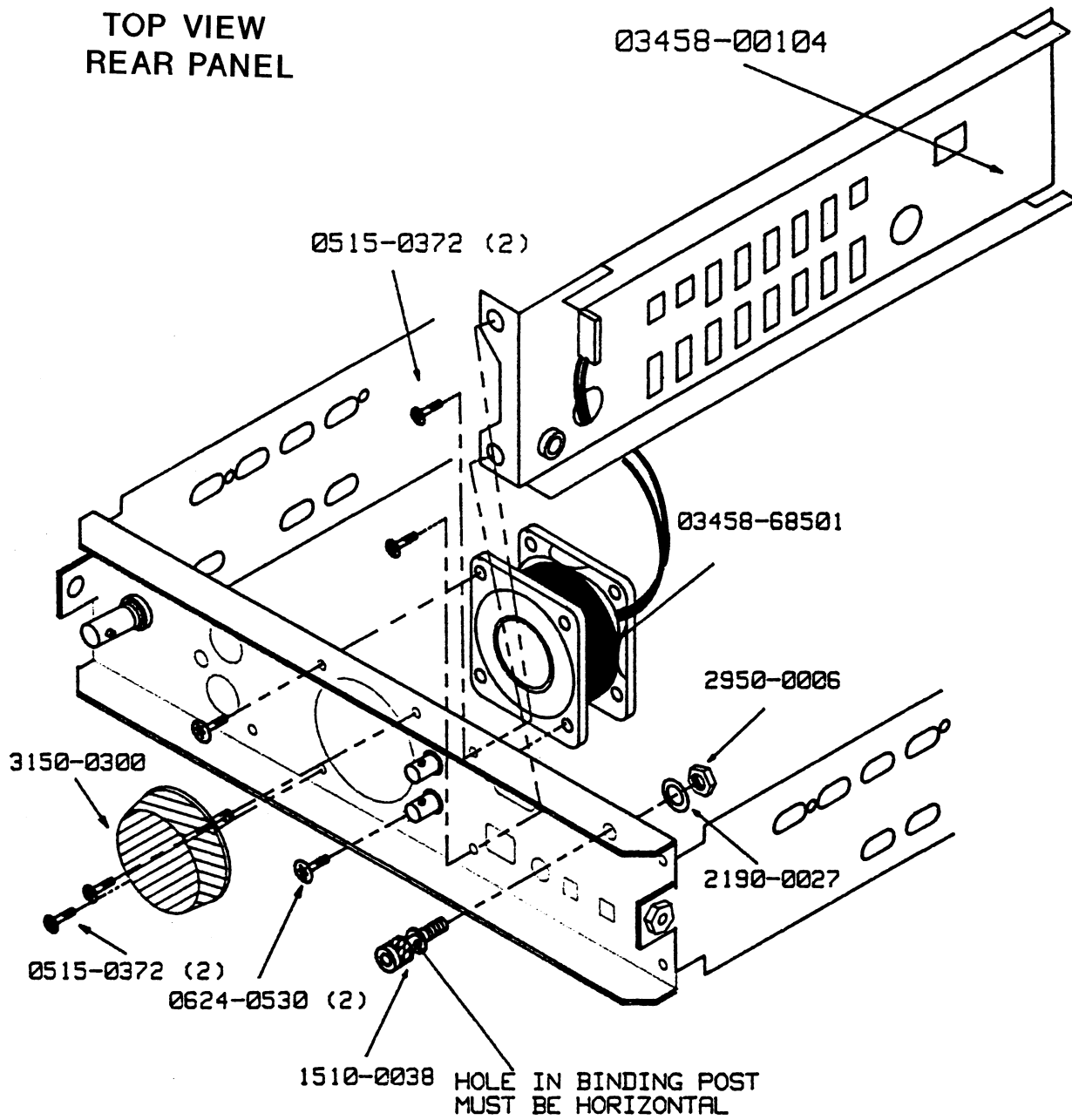
| Mfr. Code | Manufacturer's Name | Manufacturer's Address | Zip Code |
|-----------|-------------------------------------|------------------------|----------|
| 00779 | AMP INC | HARRISBURG PA US | 17111 |
| 05216 | PHOENIX TRANSFORMER CO | PHOENIX AZ US | 85040 |
| 06915 | RICHCO PLASTIC CO | CHICAGO IL US | 60646 |
| 12014 | CHICAGO RIVET & MACHINE CO | NAPERVILLE IL US | 60540 |
| 16428 | COOPER INDUSTRIES INC | HOUSTON TX US | 77210 |
| 18873 | DUPONT E I DE NEMOURS & CO | WILMINGTON DE US | 19801 |
| 24931 | SPECIALTY CONNECTOR CO | FRANKLIN IN US | 46131 |
| 27264 | MOLEX INC | LISLE IL US | 60532 |
| 28480 | HEWLETT PACKARD COMPANY - CORPORATE | PALO ALTO CA US | 94304 |
| 30817 | INSTRUMENT SPECIALTIES CO INC | DEL WATER GAP PA US | 07424 |
| 46384 | PENN ENGINEERING & MFG CORP | DOYLESTOWN PA US | 18901 |
| 54294 | SHALLCROSS INC | NORTHBROOK IL US | 60062 |
| 57771 | STIMPSON EDWIN B CO INC | BROOKLYN NY US | 11705 |
| 59730 | THOMAS & BETTS CORP | RARITAN NJ US | 08869 |
| 71983 | DOW CHEMICAL CO | MIDLAND MI US | 48674 |
| 73734 | FEDERAL SCREW PRODUCTS CO | CHICAGO IL US | 60618 |
| 74970 | EF JOHNSON CO | WASECA MN US | 56093 |
| 76381 | 3M CO | ST PAUL MN US | 55144 |
| 78189 | ILLINOIS TOOL WORKS INC SHAKEPROOF | ELGIN IL US | 60126 |
| 79963 | ZIERICK MFG CO | MT KISCO NY US | 10549 |
| 80509 | AVERY LABEL CO | MONROVIA CA US | 91016 |
| 86928 | SEASTROM MFG CO | GLENDALE CA US | 91201 |
| 90201 | EMHART CORP | FARMINGTON CT US | 06032 |

TOP VIEW
REAR PANEL

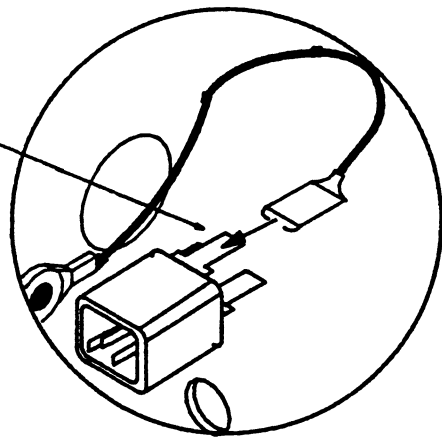
"SOURCE"

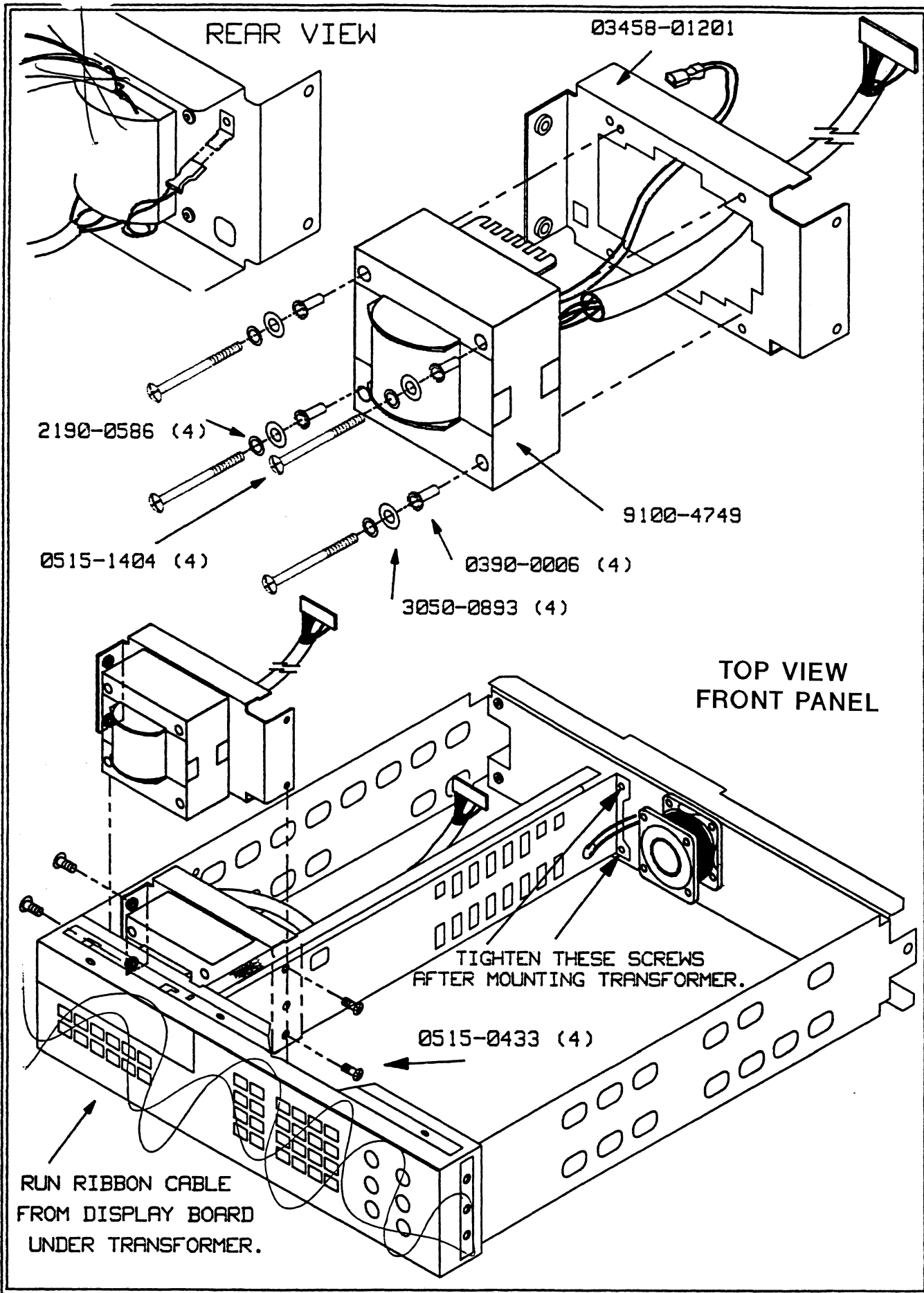


TOP VIEW REAR PANEL

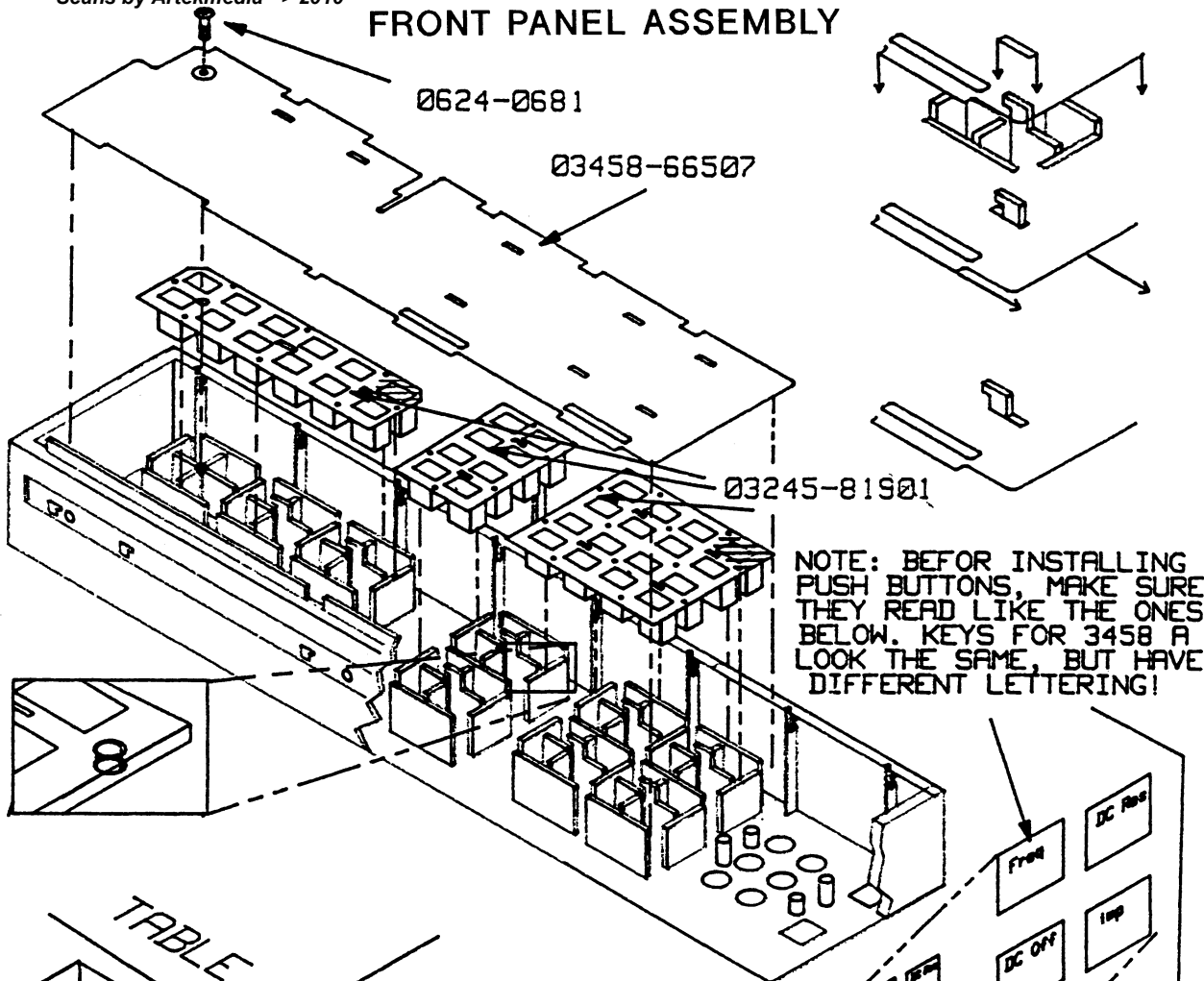


SOLDER THIS CONNECTION
AFTER PLUGGING IT IN.

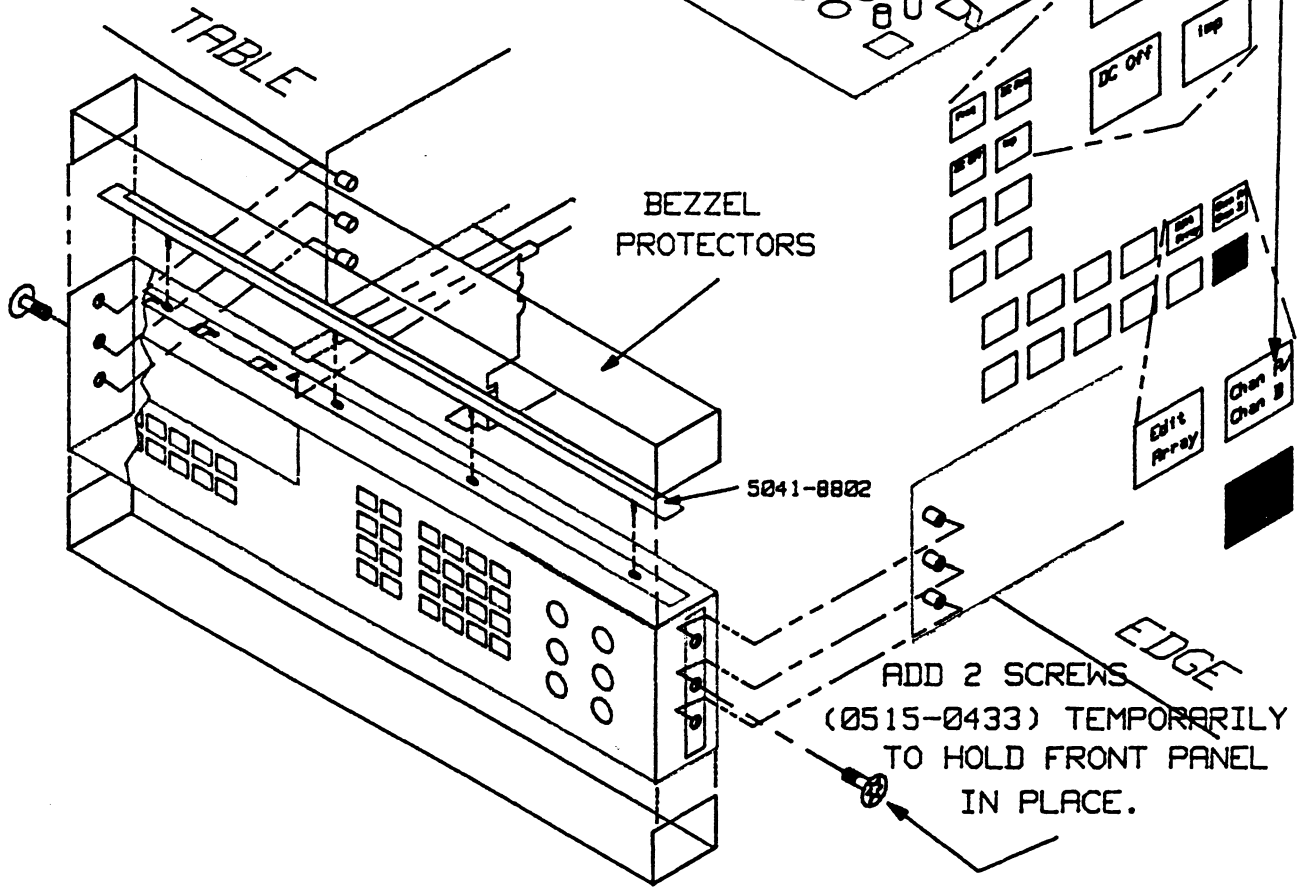


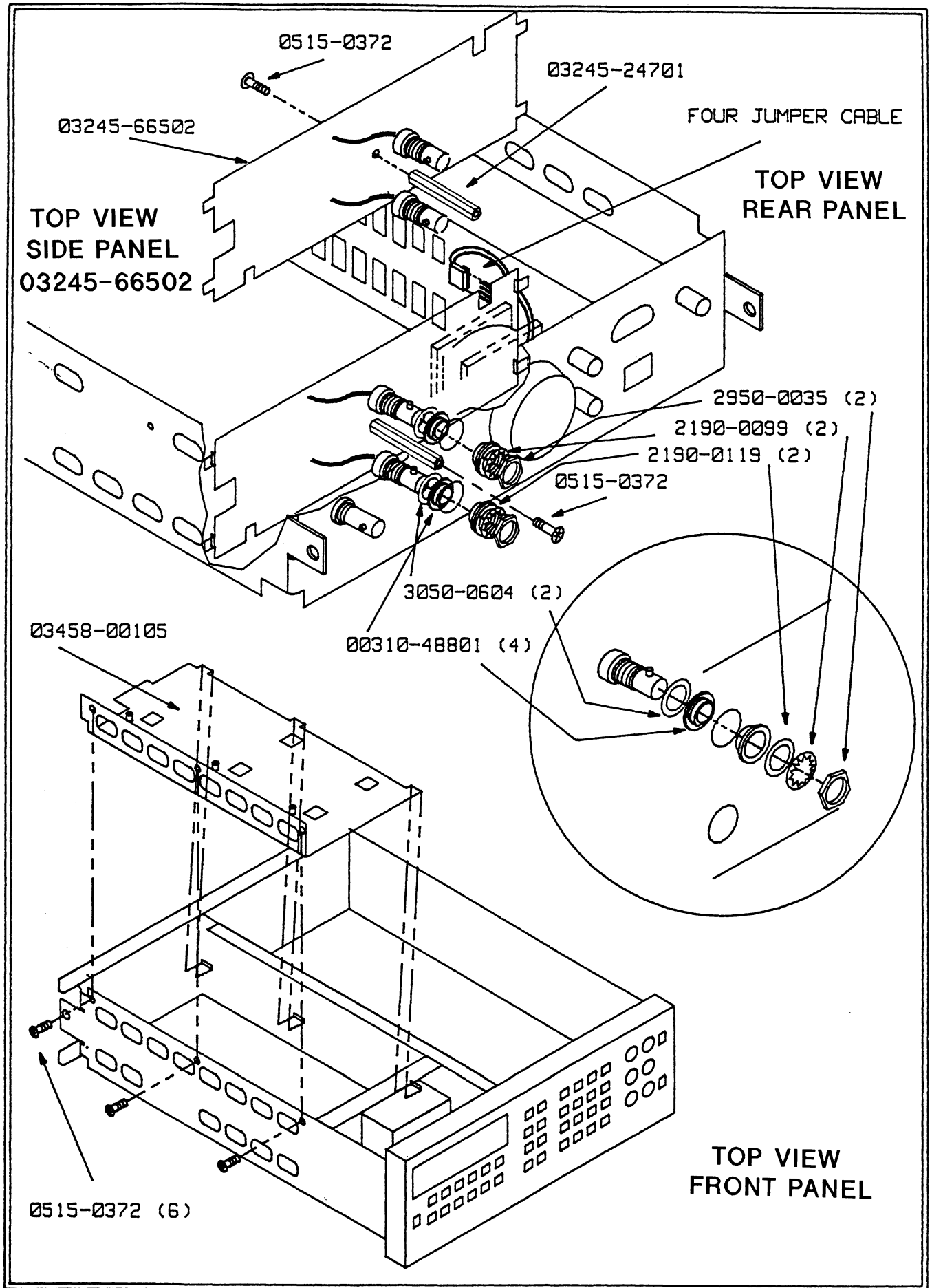


FRONT PANEL ASSEMBLY



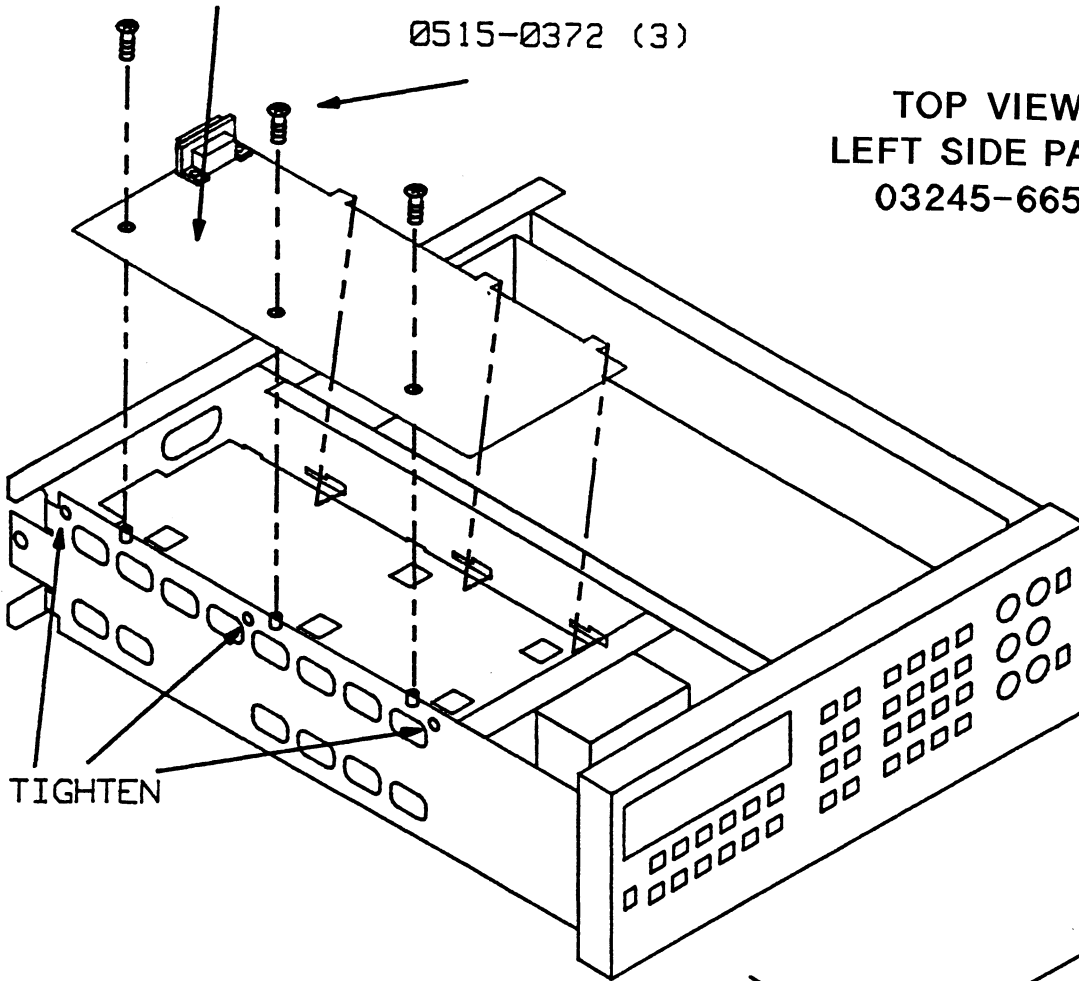
NOTE: BEFORE INSTALLING PUSH BUTTONS, MAKE SURE THEY READ LIKE THE ONES BELOW. KEYS FOR 3458 A LOOK THE SAME, BUT HAVE DIFFERENT LETTERING!





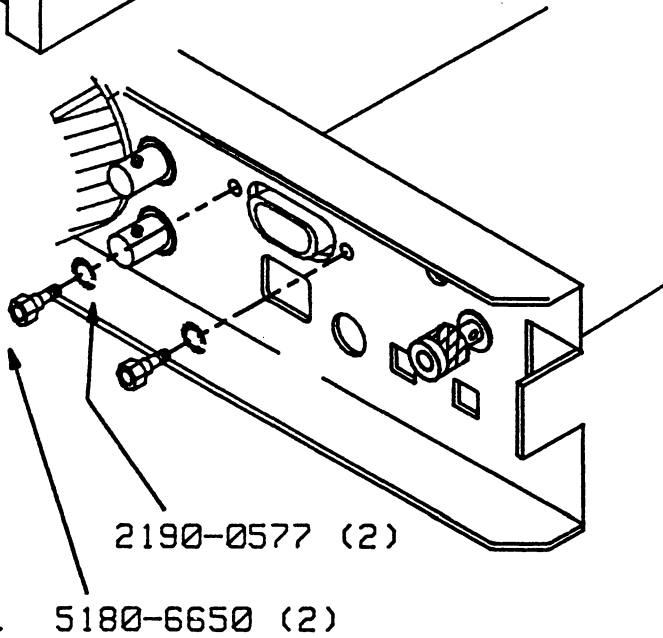
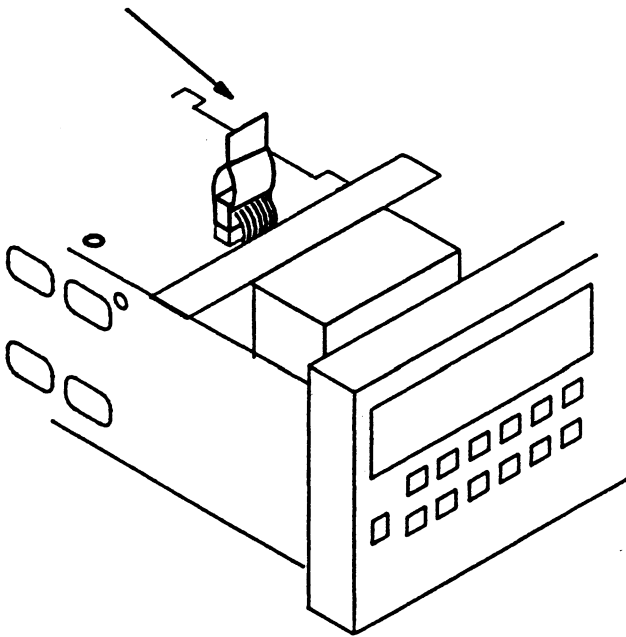
0515-0372 (3)

TOP VIEW
LEFT SIDE PANEL
03245-66505



TIGHTEN

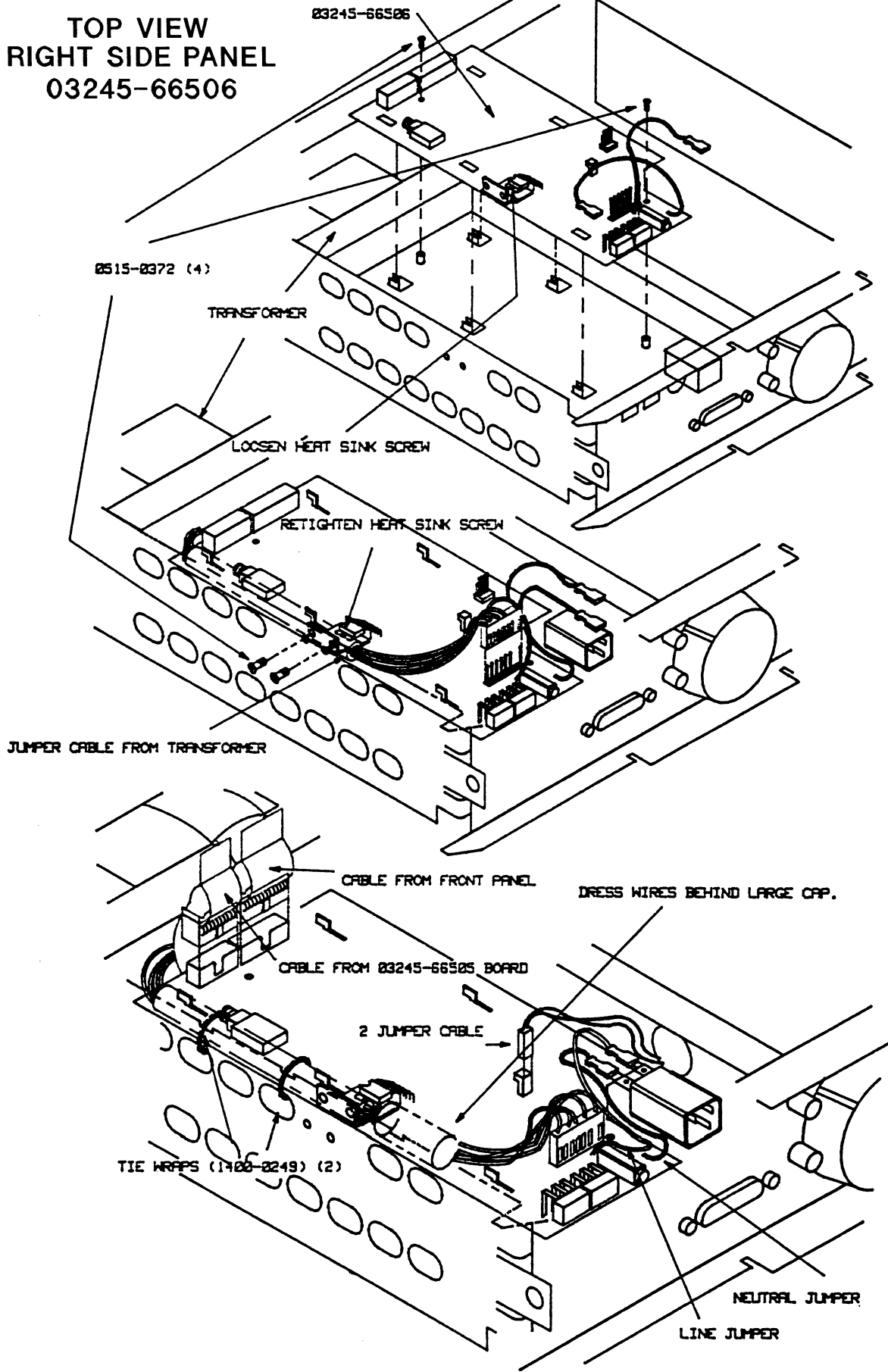
03458-61601



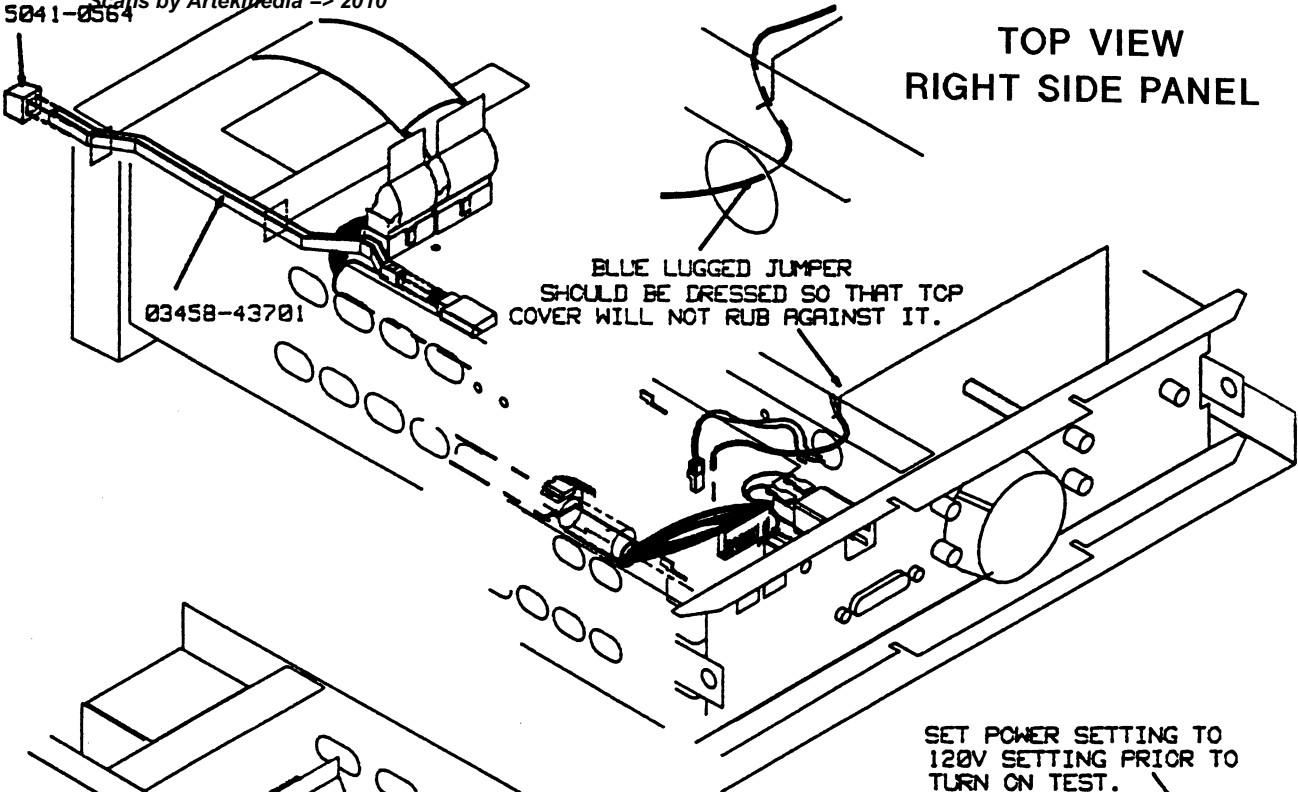
2190-0577 (2)

5180-6650 (2)

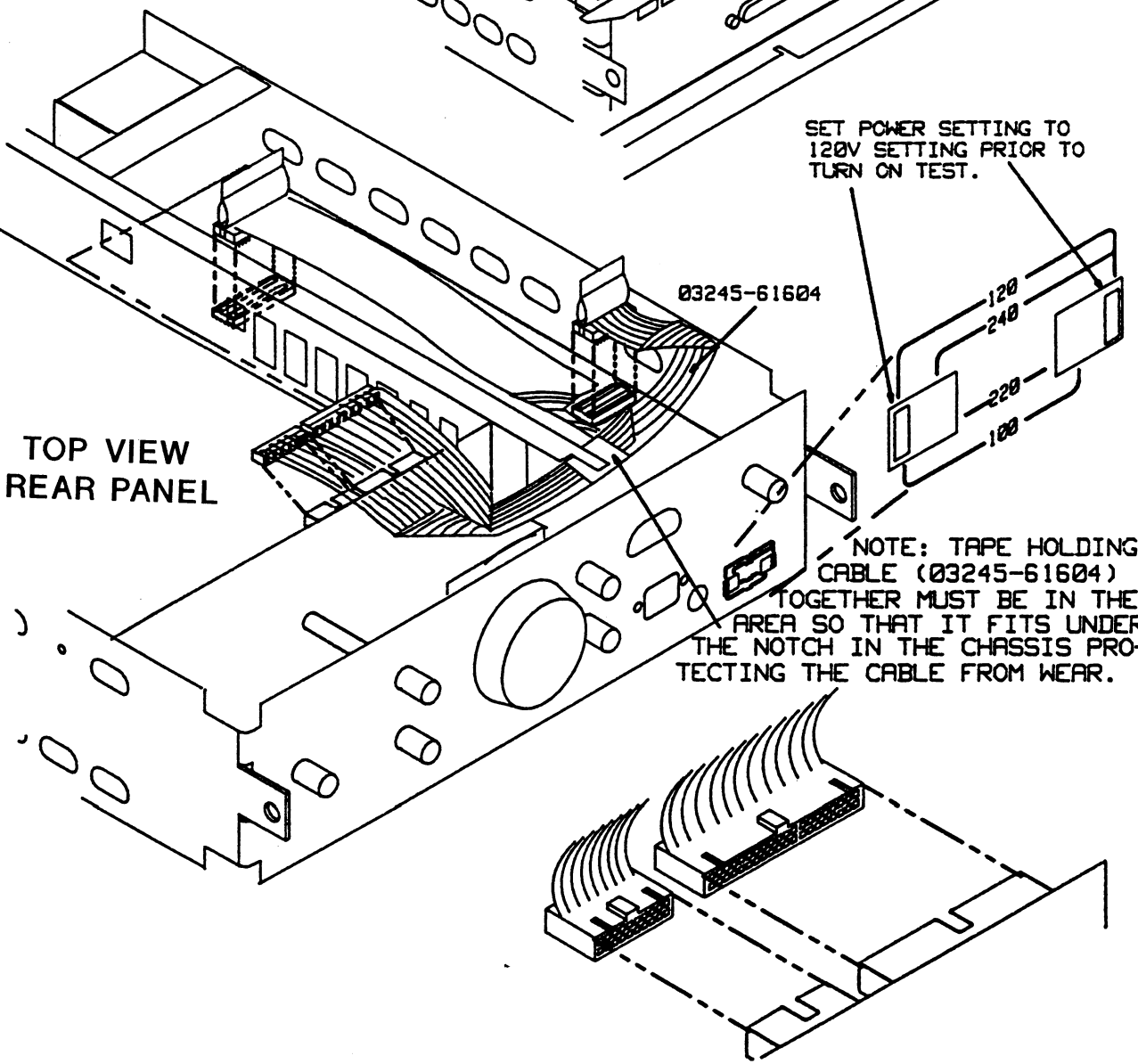
**TOP VIEW
RIGHT SIDE PANEL
03245-66506**



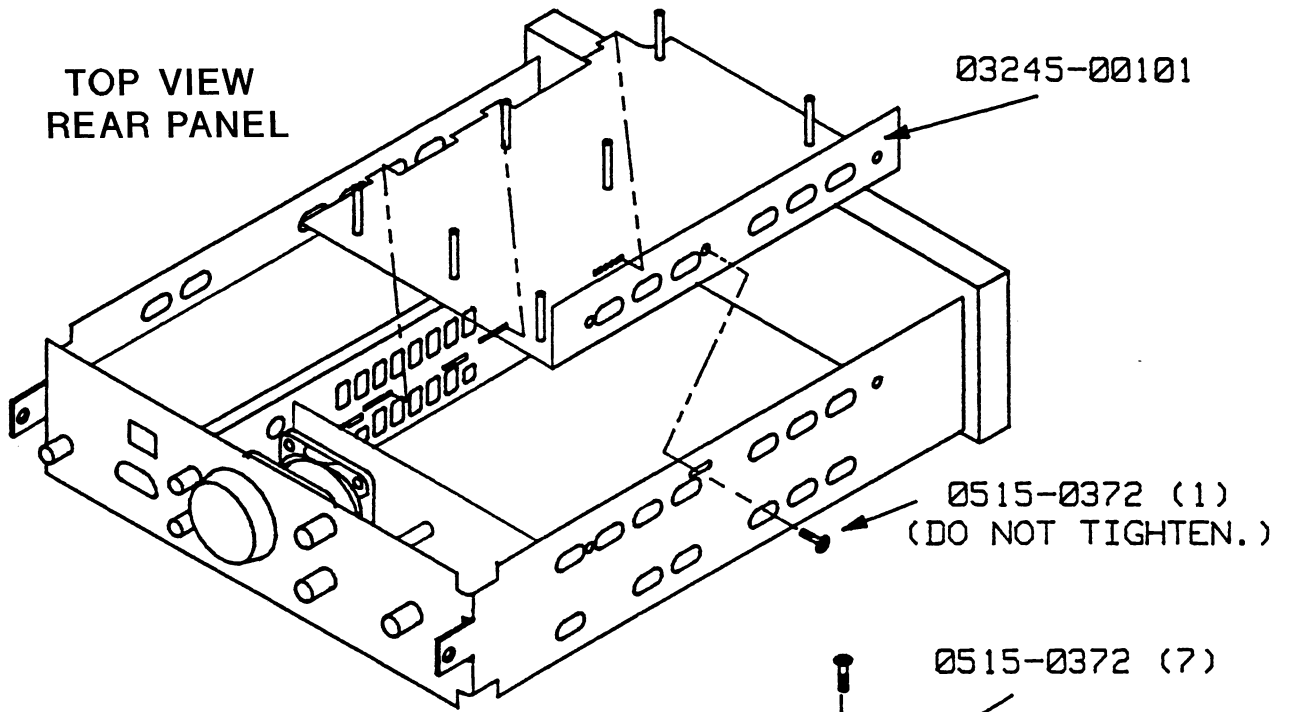
TOP VIEW RIGHT SIDE PANEL



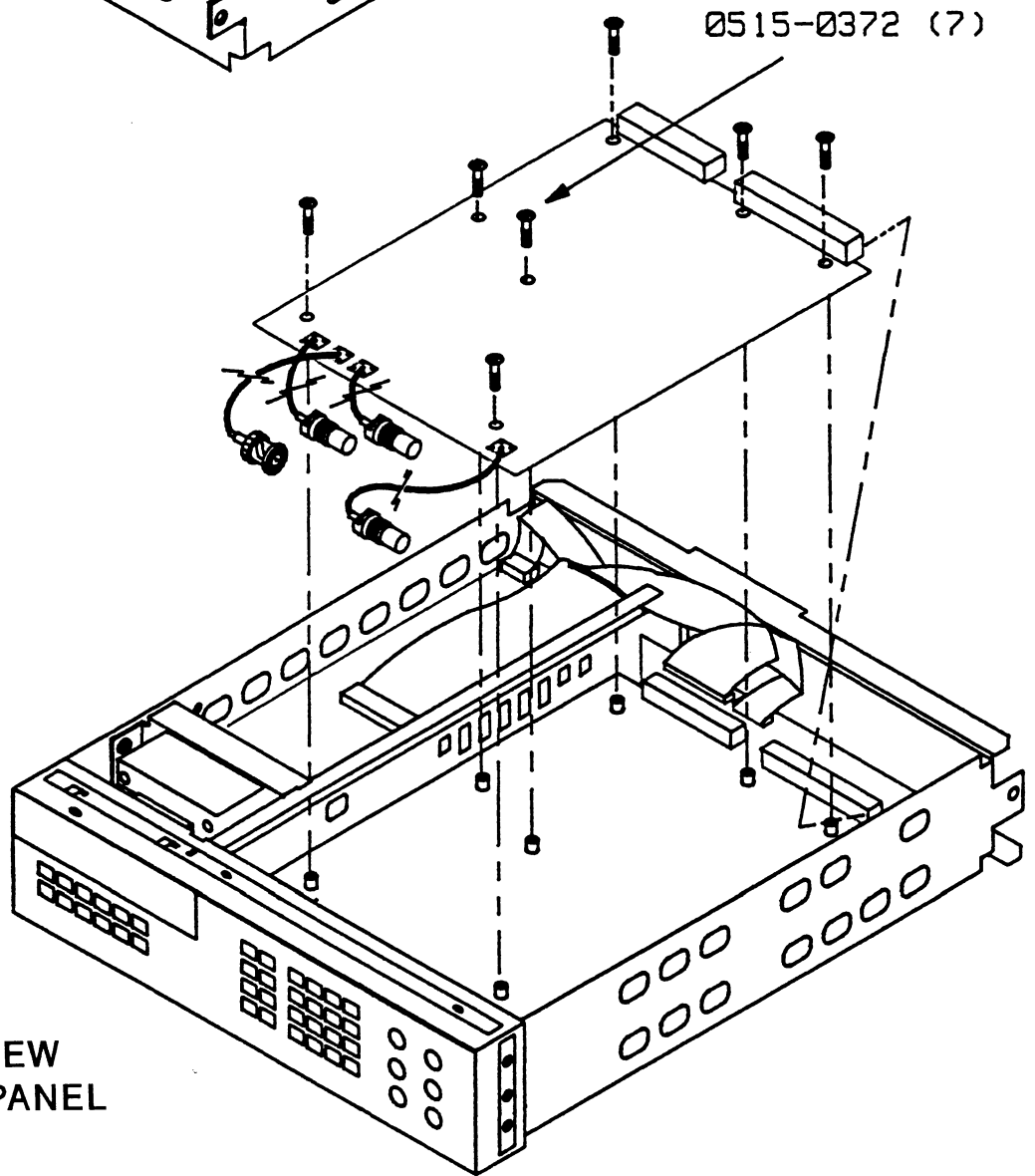
TOP VIEW REAR PANEL



TOP VIEW
REAR PANEL

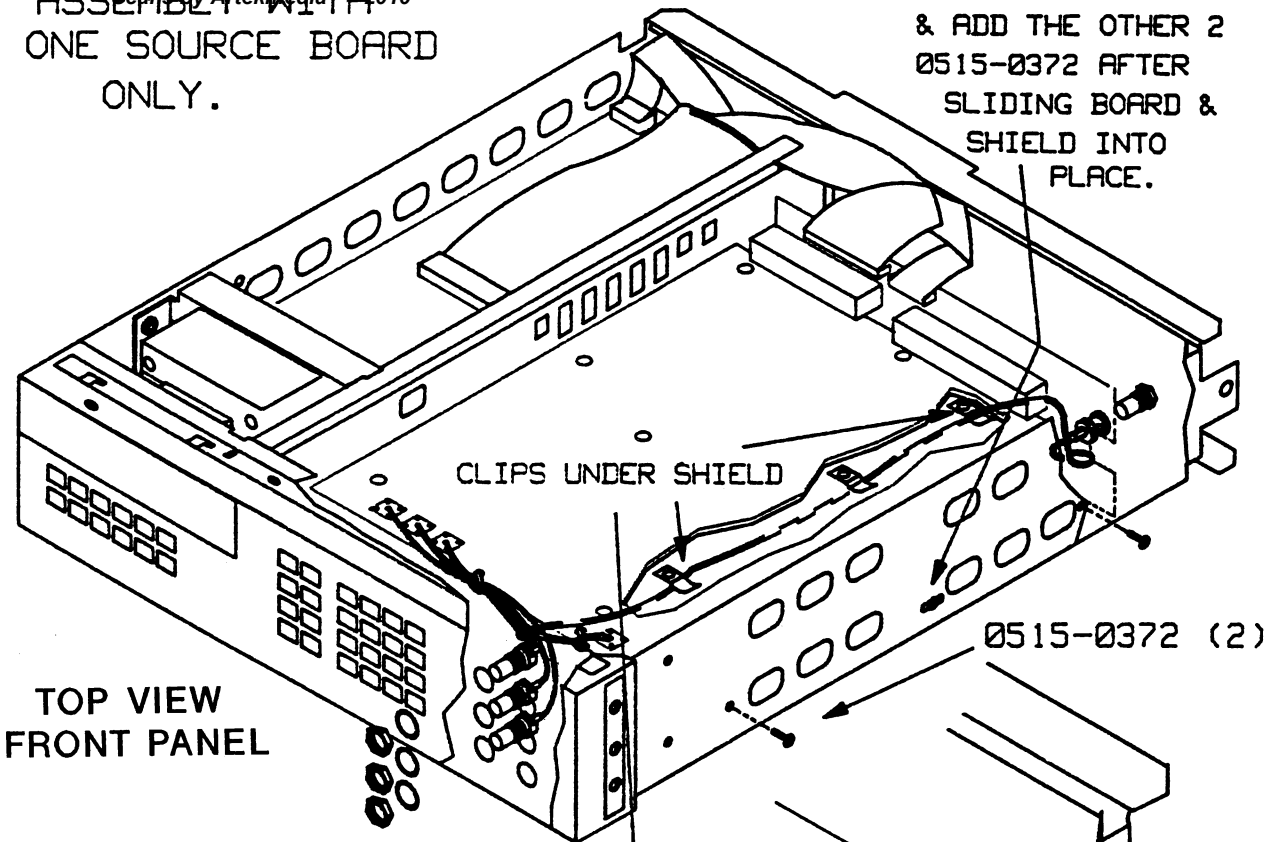


TOP VIEW
FRONT PANEL



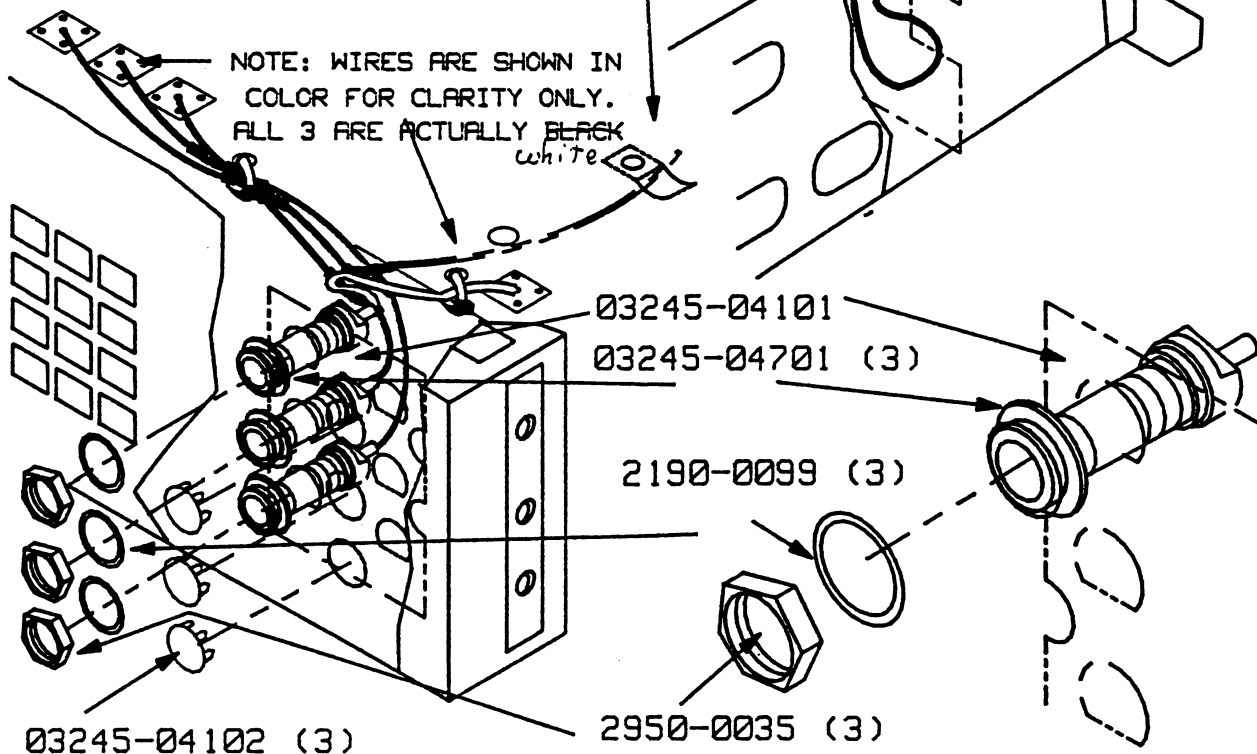
ASSEMBLY WITH
ONE SOURCE BOARD
ONLY.

TIGHTEN THIS SCREW
& ADD THE OTHER 2
0515-0372 AFTER
SLIDING BOARD &
SHIELD INTO PLACE.



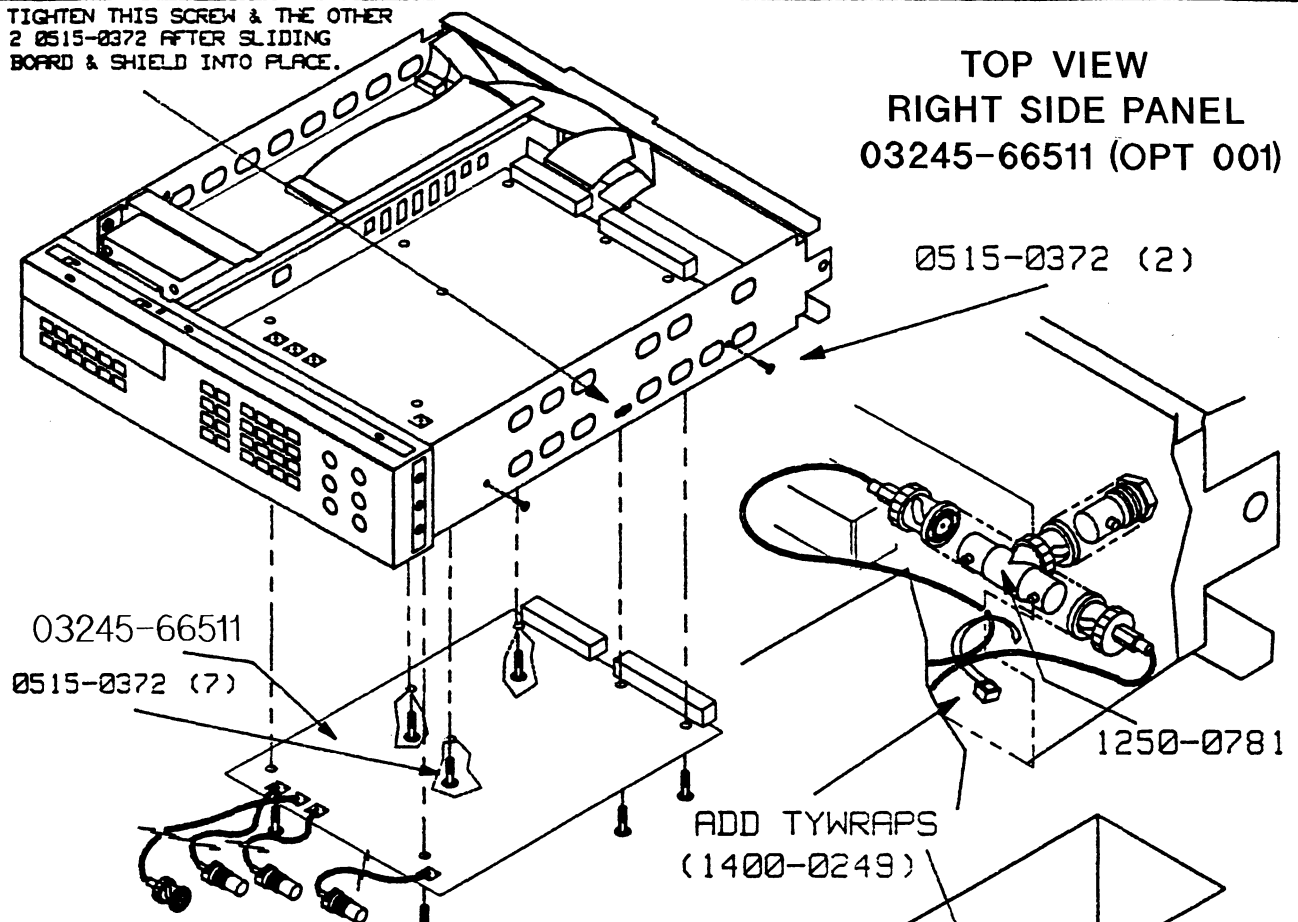
LONGEST CABLE GOES TO BACK OF
INSTRUMENT. OTHER 3 ARE AS FOLLOWS:
LONGEST TO MIDDLE. SHORTEST TO
○ TOP. MEDIUM TO BOTTOM.

NOTE: WIRES ARE SHOWN IN
COLOR FOR CLARITY ONLY.
ALL 3 ARE ACTUALLY BLACK
white



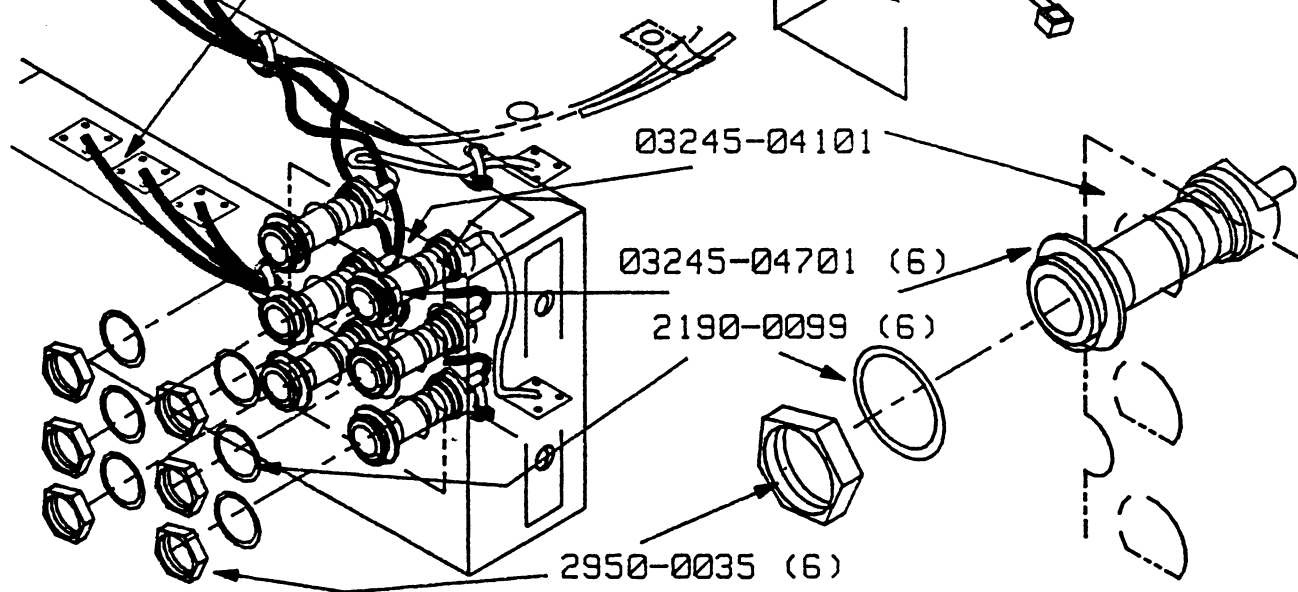
TIGHTEN THIS SCREW & THE OTHER
2 0515-0372 AFTER SLIDING
BOARD & SHIELD INTO PLACE.

TOP VIEW
RIGHT SIDE PANEL
03245-66511 (OPT 001)



LONGEST CABLE GOES TO BACK
OF INSTRUMENT. REMAINING 3 ARE
AS FOLLOWS: LONGEST TO MIDDLE
SHORT TO TOP, MEDIUM TO
BOTTOM.

NOTE: WIRES ARE SHOWN IN
COLOR FOR CLARITY ONLY.
ALL 6 ARE ACTUALLY BLACK



03458-04101

TOP VIEW
TOP COVER

03458-00601

5180-0409

03458-04102

ADD SERIAL NUMBER
AT THIS TIME.

5041-8801 (4)

1460-1345 (2)

BOTTOM VIEW
BOTTOM COVER

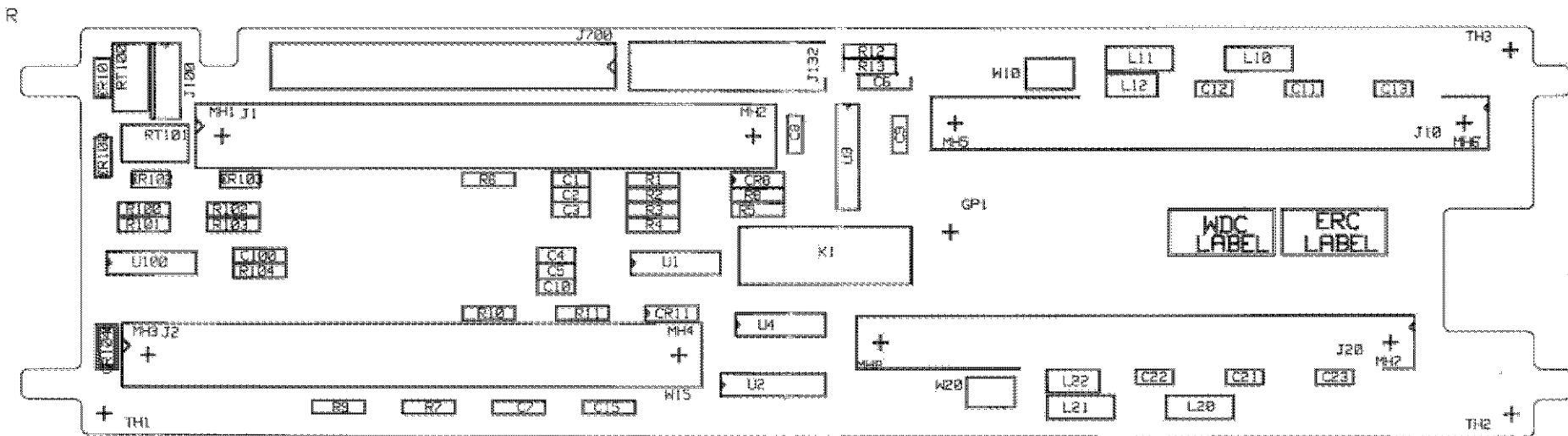
03458-47901
(ATTACH AFTER TOP
& BOTTOM COVERS ARE
ADDED)

03245-66502 REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|-------------------|
| A2 | 03245-66502 | 1 | PRINTED CIRCUIT ASSEMBLY - BACKPLANE | 28480 | 03245-66502 |
| | 0361-0236 | 4 | RIVET-SEMITUB OVH .123DIA .406LG | 28480 | 0361-0236 |
| | 0361-1222 | 4 | RIVET-SEMITUB OVH .099DIA .218LG | 28480 | 0361-1222 |
| A2C1-C5 | 0160-4805 | 10 | CAPACITOR-FXD 47pF +-5% 100 V CER COG | 04222 | SA102A470JAAH |
| A2C6-C7 | 0160-4571 | 4 | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A2C8-C11 | 0160-4805 | | CAPACITOR-FXD 47pF +-5% 100 V CER COG | 04222 | SA102A470JAAH |
| A2C12-C13 | 0160-4809 | 4 | CAPACITOR-FXD 390pF +-5% 100 V CER COG | 04222 | SA101A391JAAH |
| A2C15 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A2C21 | 0160-4805 | | CAPACITOR-FXD 47pF +-5% 100 V CER COG | 04222 | SA102A470JAAH |
| A2C22-C23 | 0160-4809 | | CAPACITOR-FXD 390pF +-5% 100 V CER COG | 04222 | SA101A391JAAH |
| A2C100 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A2CR8 | 1902-0958 | 1 | DIODE-ZENER 10V 5% PD=.4W TC=+.075% IR=10U | 28480 | 1902-0958 |
| A2CR11 | 1902-0950 | 1 | DIODE-ZENER 4.7V 5% PD=.4W TC=+.025% IR=2U | 28480 | 1902-0950 |
| A2CR100-CR103 | 1901-0743 | 4 | DIODE-POWER RECTIFIER 1N4004 400V 1A DO-41 | 71744 | 1N4004 |
| A2CR104 | 1902-1291 | 1 | DIODE-ZENER 1N5338B 5.1V 5% PD=5W IR=1UA | 04713 | 1N5338B |
| A2J1-J2 | 1252-1590 | 2 | CONNECTOR-POST TYPE 5.08-PIN-SPCG 48-CONTACT | 09922 | P196B35R00A0N9 |
| A2J10 | 5180-8213 | 2 | CONNECTOR-2X9F> NO KEY | 28480 | 5180-8213 |
| A2J20 | 5180-8213 | | CONNECTOR-2X9F> NO KEY | 28480 | 5180-8213 |
| A2J100 | 1252-0293 | 1 | CONNECTOR-POST TYPE .100-PIN-SPCG 4-CONTACT | 27264 | 22-11-2042 |
| A2J132 | 1251-8106 | 1 | CONNECTOR-POST TYPE .100-PIN-SPCG 20-CONTACT | 76381 | 2520-6002UB |
| A2J700 | 1251-8828 | 1 | CONNECTOR-POST TYPE .100-PIN-SPCG 40-CONTACT | 76381 | 2540-6002UB |
| A2K1 | 0490-1423 | 1 | RELAY-REED 1C 250MA 28VDC 5VDC-COIL 3VA | 71707 | 7001-5077 |
| A2L10-L11 | 9100-2486 | 4 | INDUCTOR RF-CHOKE-MOLDED 330NH +-5% | 01961 | 15M330J |
| A2L12 | 9170-1368 | 2 | CORE-SHIELDING BEAD INIT PERMEABILITY | 19701 | 11426-4A6 |
| A2L20-L21 | 9100-2486 | | INDUCTOR RF-CHOKE-MOLDED 330NH +-5% | 01961 | 15M330J |
| A2L22 | 9170-1368 | | CORE-SHIELDING BEAD INIT PERMEABILITY | 19701 | 11426-4A6 |
| .2LBL1 | 9320-5333 | 1 | LBL-LNE-PTR; .625-IN-WD X .25-IN-LG | 28480 | 9320-5333 |
| A2LBL2 | 7121-7148 | 1 | LABEL-INFORMATION .25-IN-WD .9-IN-LG | 28480 | 7121-7148 |
| A2PCB1 | 03245-26502 | 1 | PC BOARD-BLANK | 28480 | 03245-26502 |
| A2R1-R6 | 0757-0407 | 8 | RESISTOR 200 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-201-F |
| A2R7 | 0757-0280 | 7 | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A2R8 | 0757-0427 | 1 | RESISTOR 1.5K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1501-F |
| A2R9-R11 | 0757-0280 | | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A2R12-R13 | 0757-0407 | | RESISTOR 200 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-201-F |
| A2R100 | 0698-4126 | 2 | RESISTOR 35.7 +-1% .125W TF TC=0+-100 | 28480 | 0698-4126 |
| A2R101 | 0757-0280 | | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A2R102 | 0698-4126 | | RESISTOR 35.7 +-1% .125W TF TC=0+-100 | 28480 | 0698-4126 |
| A2R103-R104 | 0757-0280 | | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A2RT100-RT101 | 0837-0223 | 2 | THERMISTOR DISC 10-OHM | 75263 | RL400811040PT2 |
| A2U1 | 1820-1568 | 2 | IC DRIVER TTL/LS BUS QUAD | 01295 | SN74LS125AN |
| A2U2 | 1820-3466 | 1 | IC FF TTL/ALS D-TYPE POS-EDGE-TRIG COM | 01295 | SN74ALS175N |
| A2U3 | 1820-3796 | 1 | IC DCDR CMOS/74HCT 2-T0-4-LINE DUAL | 27014 | MM74HCT139N |
| A2U4 | 1820-3537 | 1 | IC FF CMOS/74HCT D-TYPE POS-EDGE-TRIG | 18324 | 74HCT74N |
| A2U100 | 1820-1568 | | IC DRIVER TTL/LS BUS QUAD | 01295 | SN74LS125AN |
| A2W10 | 03245-61603 | 2 | CABLE-PCB/F BNC 135MM LONG | 28480 | 03245-61603 |
| | 1250-0050 | 2 | NUT-RF CONNECTOR BNC SERIES; CLAMP NUT | 24931 | NS101-2 |
| | 1250-0051 | 2 | CONTACT-RF CONNECTOR SER BNC; FEMALE | 24931 | C182-1 |
| | 1250-0252 | 2 | BODY-RF CONNECTOR SERIES BNC; STRAIGHT | 24931 | 28JS108-1 |
| | 1250-0980 | 2 | SLEEVE-RF CONNECTOR SERIES BNC/TNC | 24931 | T101-13 |
| | 8120-1848 | 0 | CABLE-COAX 800V WHITE | 92194 | 2834 |
| A2W15 | 8120-3933 | 1 | JUMPER ASSEMBLY 22-AWG 1-COND 225-MM-LG | 28480 | 8120-3933 |
| A2W20 | 03245-61603 | | CABLE-PCB/F BNC 135MM LONG | 28480 | 03245-61603 |

| Mfr. Code | Manufacturer's Name | Manufacturer's Address | Zip Code |
|-----------|-------------------------------------|------------------------|----------|
| 01295 | TEXAS INSTRUMENTS INC | DALLAS TX US | 75265 |
| 01961 | PULSE ENGINEERING INC | SAN DIEGO CA US | 92111 |
| 04222 | AVX CORP | GREAT NECK NY US | 11021 |
| 04713 | MOTOROLA INC | ROSELLE IL US | 60195 |
| 09922 | BURNDY CORP | NORWALK CT US | 06856 |
| 12014 | CHICAGO RIVET & MACHINE CO | NAPERVILLE IL US | 60540 |
| 18324 | SIGNETICS CORP | SUNNYVALE CA US | 94086 |
| 19701 | NORTH AMERICAN PHILIPS CORP | NEW YORK NY US | 10017 |
| 24546 | CORNING GLASS WORKS | CORNING NY US | 14830 |
| 24931 | SPECIALTY CONNECTOR CO | FRANKLIN IN US | 46131 |
| 27014 | NATIONAL SEMICONDUCTOR CORP | SANTA CLARA CA US | 95052 |
| 27264 | MOLEX INC | LISLE IL US | 60532 |
| 28480 | HEWLETT PACKARD COMPANY - CORPORATE | PALO ALTO CA US | 94304 |
| 71707 | COTO WABASH | PROVIDENCE RI US | 02907 |
| 71744 | GENERAL INSTRUMENT CORP | CLIFTON NJ US | 07012 |
| 75263 | KEYSTONE CARBON CO INC | ST MARY PA US | 15857 |
| 76381 | 3M CO | ST PAUL MN US | 55144 |
| 92194 | ALPHA WIRE CORP | ELIZABETH NJ US | 07207 |

DRILL SIDE 03245-26502 10-17-90 REV C EGS-200 V2.1



03245-66505 REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|--------------------|
| A5 | 03245-66505 | 1 | PRINTED CIRCUIT ASSEMBLY-OUTGRD LOGIC | 28480 | 03245-66505 |
| | 0361-0232 | 2 | RIVET-SEMITUB OVH .123DIA .25LG | 28480 | 0361-0232 |
| | 9320-5780 | 0 | LBL-LNE-PTR; .9-IN-WD X .25-IN-LG | 85480 | DAT-50-652 |
| A5C100-C119 | 0160-4832 | 30 | CAPACITOR-FXD 0.01uF +-10% 100 V CER X7R | 04222 | SA101C103KAAH |
| A5C122-C130 | 0160-4832 | | CAPACITOR-FXD 0.01uF +-10% 100 V CER X7R | 04222 | SA101C103KAAH |
| A5C150-C155 | 0180-0291 | 6 | CAPACITOR-FXD 1uF +-10% 35 V TA | 56289 | 150D105X9035A2-DYS |
| A5C700 | 0160-4844 | 1 | CAPACITOR-FXD 1uF +80% -20% 50 V CER Z5U | 04222 | SA305E105ZAA |
| A5C701 | 0160-4791 | 1 | CAPACITOR-FXD 10pF +-5% 100 V CER COG | 04222 | SA102A100JAAH |
| A5C801 | 0160-4832 | | CAPACITOR-FXD 0.01uF +-10% 100 V CER X7R | 04222 | SA101C103KAAH |
| A5J100 | 1251-8106 | 1 | CONNECTOR-POST TYPE .100-PIN-SPCG 20-CONTACT | 76381 | 2520-6002UB |
| A5J900 | 5180-8228 | 1 | CONNECTOR-HPIB | 28480 | 5180-8228 |
| A5JM600 | 1251-4682 | 1 | CONNECTOR-POST TYPE .100-PIN-SPCG 3-CONTACT | 26742 | 1102-1-103-02 |
| A5JM600A | 1258-0141 | 1 | JUMPER-REMOVABLE FOR .025 IN SQ PINS | 18873 | 65474-004 |
| A5L801 | 9170-1368 | 1 | CORE-SHIELDING BEAD INIT PERMEABILITY | 19701 | 11426-4A6 |
| A5LBL1 | 9320-5333 | 1 | LBL-LNE-PTR; .625-IN-WD X .25-IN-LG | 28480 | 9320-5333 |
| A5LBL2 | 7121-7148 | 1 | LABEL-INFORMATION .25-IN-WD .9-IN-LG | 28480 | 7121-7148 |
| A5PCB1 | 03458-26505 | 1 | PRINTED CIRCUIT BOARD - BLANK | 28480 | 03458-26505 |
| A5R100 | 0757-0401 | 5 | RESISTOR 100 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-101-F |
| A5R101-R103 | 0757-0280 | 6 | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A5R200 | 0757-0280 | | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A5R208-R209 | 0757-0427 | 2 | RESISTOR 1.5K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1501-F |
| A5R400 | 0757-0442 | 6 | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A5R502 | 0757-0280 | | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A5R600 | 0757-0442 | | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A5R601 | 0757-0280 | | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A5R700 | 0757-0442 | | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A5R701-R702 | 0757-0401 | | RESISTOR 100 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-101-F |
| A5R703 | 0757-0442 | | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A5R704-R705 | 0757-0401 | | RESISTOR 100 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-101-F |
| A5R800 | 0757-0442 | | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A5R801 | 0757-0433 | 1 | RESISTOR 3.32K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-3321-F |
| A5R900 | 0757-0442 | | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A5RP100-RP103 | 1810-0286 | 4 | NETWORK-RES 16-DIP 10.0K OHM X 15 | 11236 | 761-1-R10K |
| A5RP105-RP107 | 1810-0338 | 3 | NETWORK-RES 16-DIP 100.0 OHM X 8 | 11236 | 761-3-R100 |
| A5U100 | 1820-5700 | 1 | IC-16-BIT MPU, 8MHZ, CMOS | 04713 | MC68HC000P8 |
| A5U101-U102 | 1820-3378 | 3 | IC LATCH TTL/ALS TRANSPARENT OCTL | 27014 | DM74ALS373N |
| A5U103-U104 | 1820-3121 | 3 | IC TRANSCEIVER TTL/ALS BUS OCTL | 01295 | SN74ALS245AN |
| A5U105 | 03458-88803 | 1 | PAL-PROGRAMMED (1820-5817) 8L14ACN | 28480 | 03458-88803 |
| A5U106 | 03458-88804 | 1 | PAL-PROGRAMMED (1820-5817) 8L14ACN | 28480 | 03458-88804 |
| A5U107 | 1820-3378 | | IC LATCH TTL/ALS TRANSPARENT OCTL | 27014 | DM74ALS373N |
| A5U110 | 03245-88820 | 1 | EPROM-PROGRAMMED (1818-4368) 27C512-2 | 28480 | 03245-88820 |
| A5U111 | 03245-88821 | 1 | EPROM-PROGRAMMED (1818-4368) 27C512-2 | 28480 | 03245-88821 |
| A5U112 | 03245-88822 | 1 | EPROM-PROGRAMMED (1818-4368) 27C512-2 | 28480 | 03245-88822 |
| A5U113 | 03245-88823 | 1 | EPROM-PROGRAMMED (1818-4368) 27C512-2 | 28480 | 03245-88823 |
| A5U121-U122 | 1818-4336 | 2 | IC CMOS 262144 (256K) STAT RAM 150-NS | 28480 | 1818-4336 |
| A5U123-U126 | 1818-3981 | 4 | IC CMOS 262144 (256K) STAT RAM 120-NS | 28480 | 1818-3981 |
| A5U130 | 1820-3537 | 4 | IC FF CMOS/74HCT D-TYPE POS-EDGE-TRIG | 18324 | 74HCT74N |
| A5U131 | 1820-4949 | 2 | IC CNTR CMOS/74HCT BIN ASYNCHRO | 18324 | 74HCT4020N |
| A5U134 | 1820-3664 | 2 | IC GATE CMOS/HCT NAND QUAD 2-INP | 27014 | MM74HCT00N |
| A5U135 | 1820-4948 | 2 | IC CNTR CMOS/74HCT BIN ASYNCHRO | 18324 | 74HCT393N |
| A5U140 | 1820-4721 | 3 | IC GATE CMOS/74HCT OR QUAD 2-INP | 18324 | 74HCT32N |
| A5U141 | 1820-4643 | 1 | IC GATE CMOS/74HCT NOR QUAD 2-INP | 18324 | 74HCT02N |
| A5U200 | 1820-4948 | | IC CNTR CMOS/74HCT BIN ASYNCHRO | 18324 | 74HCT393N |
| A5U400 | 1820-5875 | 1 | IC-PROGRAMMABLE TIMER MODULE; 6MHZ | 28480 | 1820-5875 |
| A5U401 | 1820-3664 | | IC GATE CMOS/HCT NAND QUAD 2-INP | 27014 | MM74HCT00N |

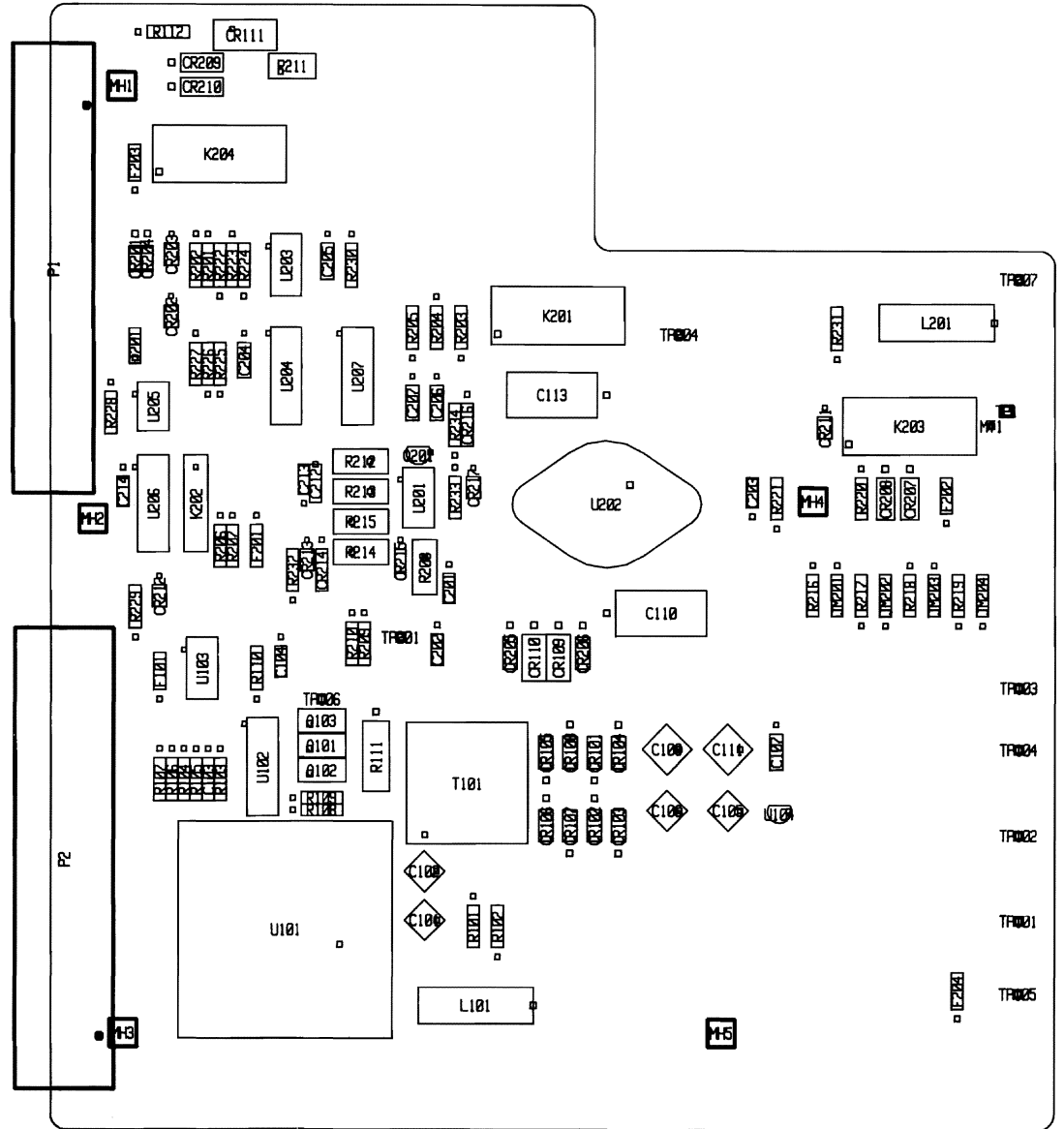
03245-66505 REPLACEMENT PARTS

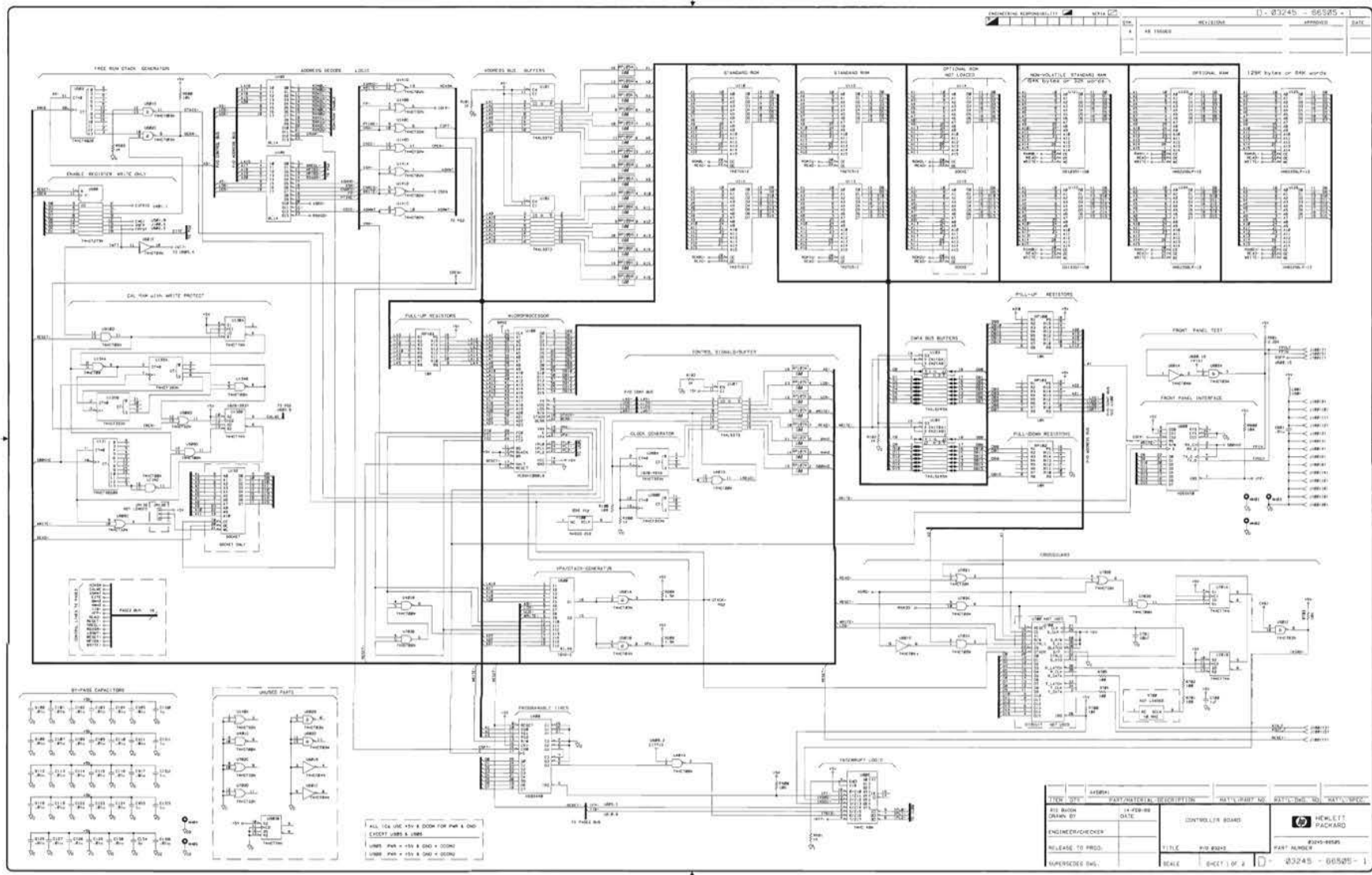
| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|------------------|
| A5U500 | 03458-88805 | 1 | PAL-PROGRAMMED (1820-5816) 16H2-2 | 28480 | 03458-88805 |
| A5U501 | 1820-4863 | 2 | IC GATE CMOS/74HCT NAND QUAD 2-INP | 18324 | 74HCT03N |
| A5U503 | 1820-4949 | | IC CNTR CMOS/74HCT BIN ASYNCHRO | 18324 | 74HCT4020N |
| A5U600 | 1820-4086 | 1 | IC FF CMOS/74HCT D-TYPE POS-EDGE-TRIG | 18324 | 74HCT273N |
| A5U601 | 1820-3629 | 1 | IC INVERTER CMOS/HCT HEX | 27014 | MM74HCT04N |
| A5U602 | 1820-4863 | | IC GATE CMOS/74HCT NAND QUAD 2-INP | 18324 | 74HCT03N |
| A5U603 | 1820-4586 | 1 | IC DRIVER/RCVR CMOS/HCT BUS OCTL | 01295 | SN74HCT541N |
| A5U605 | 1820-4675 | 1 | IC ENCDR CMOS/74HC PRIORITY 8-TO-3-LINE | 01295 | SN74HC148N |
| A5U701 | 1820-3537 | | IC FF CMOS/74HCT D-TYPE POS-EDGE-TRIG | 18324 | 74HCT74N |
| A5U702 | 1820-4721 | | IC GATE CMOS/74HCT OR QUAD 2-INP | 18324 | 74HCT32N |
| A5U703 | 1820-4583 | 3 | IC GATE CMOS/74HCT AND QUAD 2-INP | 18324 | 74HCT08N |
| A5U800 | 1820-5905 | 1 | IC-ASYNCH. COMMUN. INTERFACE ADAPTER | 28480 | 1820-5905 |
| A5U900 | 1820-3121 | | IC TRANSCEIVER TTL/ALS BUS OCTL | 01295 | SN74ALS245AN |
| A5U901 | 1820-4147 | 1 | IC LCH CMOS/74HCT TRANSPARENT OCTL | 34371 | CD74HCT573E |
| A5U902-U903 | 1820-3537 | | IC FF CMOS/74HCT D-TYPE POS-EDGE-TRIG | 18324 | 74HCT74N |
| A5U904 | 1820-2548 | 1 | IC-GENERAL PURPOSE INTERFACE BUS ADAPTER | 01295 | TMS9914ANL |
| A5U905 | 1820-6170 | 1 | IC-INTERFACE XCVR BIPOLAR BUS OCTL | 01295 | SN75ALS160N |
| A5U906 | 1820-3513 | 1 | IC-INTERFACE XCVR MISC/UNKNOWN | 27014 | DS75161AN |
| A5U907 | 03458-88816 | 1 | PAL-PROGRAMMED (1820-3600) | 28480 | 03458-88816 |
| A5U908 | 1820-4721 | | IC GATE CMOS/74HCT OR QUAD 2-INP | 18324 | 74HCT32N |
| A5U909-U910 | 1820-4583 | | IC GATE CMOS/74HCT AND QUAD 2-INP | 18324 | 74HCT08N |
| A5XU110-XU113 | 1200-0861 | 4 | SOCKET-IC-DIP 28-CONTACT DIP DIP-SLDR | 00779 | 2-640362-1 |
| A5XU132 | 1200-0541 | 1 | SOCKET-IC-DIP 24-CONTACT DIP DIP-SLDR | 09922 | DILB24P-308T |
| A5XU700 | 1200-0817 | 1 | SOCKET-IC-DIP 40-CONTACT DIP DIP-SLDR | 00779 | 2-640379-1 |
| A5Y100 | 1813-0668 | 1 | CLOCK-OSCILLATOR-XTAL 8.0000-MHZ 0.005% | 28480 | 1813-0668 |

Code List of Manufacturers - 03245-66505

| Mfr. Code | Manufacturer's Name | Manufacturer's Address | Zip Code |
|-----------|-------------------------------------|------------------------|----------|
| 00779 | AMP INC | HARRISBURG PA US | 17111 |
| 01295 | TEXAS INSTRUMENTS INC | DALLAS TX US | 75265 |
| 04222 | AVX CORP | GREAT NECK NY US | 11021 |
| 04713 | MOTOROLA INC | ROSELLE IL US | 60195 |
| 09922 | BURNDY CORP | NORWALK CT US | 06856 |
| 11236 | CTS CORP | ELKHART IN US | 46514 |
| 18324 | SIGNETICS CORP | SUNNYVALE CA US | 94086 |
| 18873 | DUPONT E I DE NEMOURS & CO | WILMINGTON DE US | 19801 |
| 19701 | NORTH AMERICAN PHILIPS CORP | NEW YORK NY US | 10017 |
| 24546 | CORNING GLASS WORKS | CORNING NY US | 14830 |
| 26742 | METHODE ELECTRONICS INC | CHICAGO IL US | 60656 |
| 27014 | NATIONAL SEMICONDUCTOR CORP | SANTA CLARA CA US | 95052 |
| 28480 | HEWLETT PACKARD COMPANY - CORPORATE | PALO ALTO CA US | 94304 |
| 34371 | HARRIS CORP | MELBOURNE FL US | 32901 |
| 56289 | SPRAGUE ELECTRIC CO | LEXINGTON MA US | 02173 |
| 76381 | 3M CO | ST PAUL MN US | 55144 |
| 85480 | BRADY W H CO | MILWAUKEE WI US | 53209 |

03245-26503 A 2-11-91

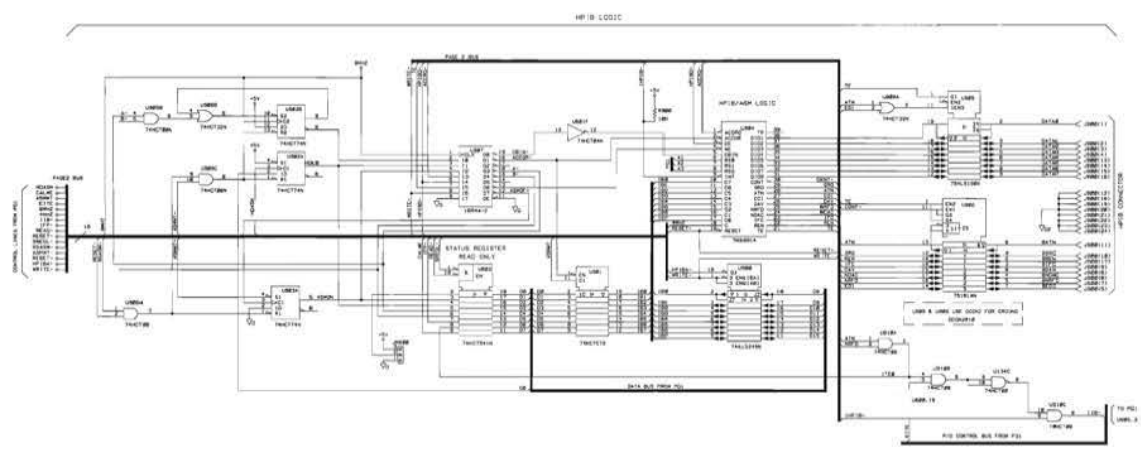




PULL-UP: 10K Ω, 15K Ω & 20K Ω FOR PWR & DMC
 EXCEPT WHERE SHOWN
 PULL-DOWN: 10K Ω & 20K Ω
 EXCEPT WHERE SHOWN

| | | | | | | |
|------------------|-----------|----------------|--------------------|------|---------|------|
| REV. DATE | REVISIONS | DESCRIPTION | REV. BY | DATE | REV. BY | DATE |
| 001 | 001 | INITIAL DESIGN | | | | |
| DESIGNED BY | DATE | CONTROL BOARD | HEWLETT PACKARD | | | |
| ENGINEER/CHECKER | | | | | | |
| RELEASE TO PROD. | TITLE | REV. BY | PART NUMBER | | | |
| DATE | SCALE | SHEET NO. 4 | 07245 - 66525 - 1 | | | |

| | | | | | |
|---------|---|------|--------|----|--|
| REVISED | | DATE | | BY | |
| 1 | A | 24 | FEB 88 | WJ | |



| ITEM | QTY | ASSEMBLY | PARENT/CHILD DESCRIPTION | MATERIAL PART NO. | QUANTITY | UNIT OF MEASURE |
|------------------|-----|----------|--------------------------|-------------------|----------|-----------------|
| 812 BACN | | DATE | OUTSOURCING | | | |
| 812 BACN | | DATE | CONTROLLER BOARD | | | |
| ENGINEER/CHECKER | | | 7/8 88848 | | | |
| RELEASE TO PROD. | | | TITLE | | | |
| SUPERSEDER DWG. | | | SCALE | | | |



HP HEWLETT
PACKARD

PART NUMBER
812A-0089

SCALE SHEET 2 OF 2 03245 - 66585 - 1

03245-66506 REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|--------------------|
| A6 | 03245-66506 | 1 | PRINTED CIRCUIT ASSEMBLY - OUTGRD P.S. | 28480 | 03245-66506 |
| | 0460-0778 | .17 | TAPE-INDL .75-IN-W .25-IN-T POLYU-FM | 87730 | TESA 761-4763 |
| | 0590-1095 | 1 | THREADED INSERT - M3 X 0.5 1.5-MM-LG | 46384 | KF2-M3-ZI |
| | 9320-5780 | 0 | LBL-LNE-PTR; .9-IN-WD X .25-IN-LG | 85480 | DAT-50-652 |
| A6C1 | 0180-4032 | 2 | CAPACITOR-FXD 680uF +-20% 50 V AL-ELCTLT | 28480 | 0180-4032 |
| A6C2 | 0180-0116 | 1 | CAPACITOR-FXD 6.8uF +-10% 35 V TA | 56289 | 150D685X9035B2-DYS |
| A6C3 | 0160-4819 | 1 | CAPACITOR-FXD 2200pF +-5% 100 V CER COG | 04222 | SA301A222JAAH |
| A6C4 | 0180-0197 | 3 | CAPACITOR-FXD 2.2uF +-10% 20 V TA | 56289 | 150D225X9020A2-DYS |
| A6C5-C6 | 0160-4842 | 2 | CAPACITOR-FXD 0.22uF +-80% -20% 50 V CER Z5U | 04222 | SA115E224ZAAH |
| A6C7 | 0160-4204 | 1 | CAPACITOR-FXD .033uF +-10% 500 V CER X7R | 28480 | 0160-4204 |
| A6C8 | 0180-3898 | 1 | CAPACITOR-FXD 8300uF +-75% -10% 35 V AL-ELCTLT | 56289 | 53D832G035JP7 |
| A6C9 | 0160-4571 | 1 | CAPACITOR-FXD 0.1uF +-80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A6C11 | 0180-4032 | 1 | CAPACITOR-FXD 680uF +-20% 50 V AL-ELCTLT | 28480 | 0180-4032 |
| A6C12 | 0180-0100 | 1 | CAPACITOR-FXD 4.7uF +-10% 35 V TA | 56289 | 150D475X9035B2-DYS |
| A6C15-C16 | 0160-4281 | 2 | CAPACITOR-FXD 2200pF +-20% 250 V PPR-MET | 28480 | 0160-4281 |
| A6C103 | 0160-4835 | 5 | CAPACITOR-FXD 0.1uF +-10% 50 V CER X7R | 04222 | SA105C104KAAH |
| A6C104 | 0160-4787 | 1 | CAPACITOR-FXD 22pF +-5% 100 V CER COG | 04222 | SA102A220JAAH |
| A6C105 | 0180-0197 | 1 | CAPACITOR-FXD 2.2uF +-10% 20 V TA | 56289 | 150D225X9020A2-DYS |
| A6C200-C201 | 0180-3828 | 2 | CAPACITOR-FXD 47uF +-20% 63 V AL-ELCTLT | 28480 | 0180-3828 |
| A6C202 | 0180-3830 | 1 | CAPACITOR-FXD 330uF +-20% 25 V AL-ELCTLT | 28480 | 0180-3830 |
| A6C203 | 0180-3829 | 1 | CAPACITOR-FXD 220uF +-20% 16 V AL-ELCTLT | 28480 | 0180-3829 |
| A6C301-C303 | 0160-4835 | 1 | CAPACITOR-FXD 0.1uF +-10% 50 V CER X7R | 04222 | SA105C104KAAH |
| A6C304 | 0180-0197 | 1 | CAPACITOR-FXD 2.2uF +-10% 20 V TA | 56289 | 150D225X9020A2-DYS |
| A6C400 | 0160-4822 | 1 | CAPACITOR-FXD 1000pF +-5% 100 V CER COG | 04222 | SA201A102JAAH |
| A6C401 | 0160-4835 | 1 | CAPACITOR-FXD 0.1uF +-10% 50 V CER X7R | 04222 | SA105C104KAAH |
| A6C402-C403 | 0160-4832 | 7 | CAPACITOR-FXD 0.01uF +-10% 100 V CER X7R | 04222 | SA101C103KAAH |
| A6C405 | 0160-4832 | 1 | CAPACITOR-FXD 0.01uF +-10% 100 V CER X7R | 04222 | SA101C103KAAH |
| A6C406-C407 | 0180-0291 | 2 | CAPACITOR-FXD 1uF +-10% 35 V TA | 56289 | 150D105X9035A2-DYS |
| A6C409-C421 | 0160-4812 | 20 | CAPACITOR-FXD 220pF +-5% 100 V CER COG | 04222 | SA101A221JAAH |
| A6C422-C425 | 0160-4832 | 1 | CAPACITOR-FXD 0.01uF +-10% 100 V CER X7R | 04222 | SA101C103KAAH |
| A6C426-C432 | 0160-4812 | 1 | CAPACITOR-FXD 220pF +-5% 100 V CER COG | 04222 | SA101A221JAAH |
| A6CR1 | 1901-0638 | 1 | DIODE-FULL WAVE BRIDGE 100V 4A | 71744 | KBU4B |
| A6CR2 | 1902-1505 | 1 | DIODE-V-SUPPR 6.5V TO-220AC | 04713 | M2T4554B |
| A6CR3 | 1902-0644 | 1 | DIODE-ZENER 1N5363B 30V 5% PD=5W TC=+29MV | 28480 | 1902-0644 |
| A6CR4 | 1901-0782 | 1 | DIODE-SCHOTTKY BARRIER 30V 3A | 04713 | 1N5821 |
| A6CR101 | 1901-0050 | 2 | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A6CR301-CR304 | 1901-0734 | 4 | DIODE-POWER RECTIFIER 1N5818 30V 1A | 04713 | 1N5818 |
| A6CR305 | 1901-0050 | 1 | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A6CR306-CR307 | 1902-0952 | 2 | DIODE-ZENER 5.6V 5% PD=.4W TC=+.046% IR=1U | 04713 | S230035-10RL |
| A6CR400 | 1902-0951 | 1 | DIODE-ZENER 5.1V 5% PD=.4W TC=+.035% IR=1U | 04713 | S230035-9RL |
| A6E400 | 0960-0561 | 1 | AUDIO TRANSDUCER 1-3 VDC; 80DB AT 10CM | 28480 | 0960-0561 |
| A6F1 | 2110-0043 | 1 | FUSE 1.5A 250V 1.25X.25 UL | 75915 | 312 01.5 |
| A6FC1 | 2110-0565 | 1 | FUSEHOLDER CAP 12A MAX FOR UL | 28480 | 2110-0565 |
| A6HS2 | 1205-0318 | 1 | HEAT SINK SGL TO-220-CS | 13103 | 6045B |
| A6J15 | 1251-0600 | 1 | CONNECTOR-SGL CONTACT PIN 1.14-MM-BSC-SZ SQ | 27264 | 16-06-0034 |
| A6J100 | 1251-8106 | 1 | CONNECTOR-POST TYPE .100-PIN-SPCG 20-CONTACT | 76381 | 2520-6002UB |
| A6J200 | 1251-8248 | 1 | CONNECTOR-POST TYPE .100-PIN-SPCG 26-CONTACT | 76381 | 2526-6002UB |
| A6JM1 | 7175-0057 | 7 | RESISTOR 0 MFS | 28480 | 7175-0057 |
| A6JM100-JM101 | 7175-0057 | 1 | RESISTOR 0 MFS | 28480 | 7175-0057 |
| A6JM102-JM103 | 8159-0005 | 2 | RESISTOR 0 MFS | 55210 | L-2007-1 |
| A6JM200 | 7175-0057 | 1 | RESISTOR 0 MFS | 28480 | 7175-0057 |
| A6JM300 | 7175-0057 | 1 | RESISTOR 0 MFS | 28480 | 7175-0057 |
| A6JM400-JM401 | 7175-0057 | 1 | RESISTOR 0 MFS | 28480 | 7175-0057 |

03245-66506 REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|-------------------|
| A6L1 | 9140-1178 | 1 | INDUCTOR-FIXED L=643 uH @ 0Adc MIN | 01961 | PE-51970 |
| A6L2 | 9140-1062 | 2 | INDUCTOR-FIXED L: 70 UH TYPICAL @ 3.0 A | 01961 | 52679 |
| A6L200 | 9140-1062 | | INDUCTOR-FIXED L: 70 UH TYPICAL @ 3.0 A | 01961 | 52679 |
| A6L201 | 9100-3560 | 1 | INDUCTOR RF-CHOKE-MOLDED 5.6UH +-5% | 24226 | 15M561J |
| A6L401-L404 | 9170-1368 | 4 | CORE-SHIELDING BEAD INIT PERMEABILITY | 19701 | 11426-4A6 |
| A6LBL1 | 9320-5333 | 1 | LBL-LNE-PTR; .625-IN-WD X .25-IN-LG | 28480 | 9320-5333 |
| A6LBL2 | 7121-7148 | 1 | LABEL-INFORMATION .25-IN-WD .9-IN-LG | 28480 | 7121-7148 |
| A6MP1 | 03458-01204 | 1 | BRKT-HEAT SINK | 28480 | 03458-01204 |
| | 0580-1088 | 2 | THREADED INSERT-NUT M3 X 0.5 1.5-MM-LG | 48384 | S-M3-2-ZI |
| | 7204-0513 | 0 | ALUMINUM SH .083IN 32IN 48IN AA5052-H321 | 28480 | 7204-0513 |
| A6MP1A | 0515-0372 | 1 | SCREW-MACHINE ASSEMBLY M3 X 0.5 8MM-LG | 28480 | 0515-0372 |
| A6P2 | 1252-0239 | 1 | CONNECTOR-POST TYPE 5.0-PIN-SPCG 8-CONTACT | 27264 | 10-16-3081 |
| A6P3 | 1252-3694 | 1 | CONNECTOR-POST TYPE .100-PIN-SPCG 2-CONTACT | 27264 | 705-45-0071 |
| A6PCB1 | 03458-26506 | 1 | PRINTED CIRCUIT BOARD-BLANK | 28480 | 03458-26506 |
| A6R1 | 0757-0280 | 1 | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A6R2 | 0698-3279 | 1 | RESISTOR 4.99K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-4991-F |
| A6R5 | 0699-1075 | 1 | RESISTOR .1 +-3% 3W MFS TC=0+-70 | 01686 | LO-3-0.1-3-RP |
| A6R6 | 0757-0446 | 2 | RESISTOR 15K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1502-F |
| A6R101 | 0698-4422 | 2 | RESISTOR 1.27K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1271-F |
| A6R102 | 0757-0420 | 1 | RESISTOR 750 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-751-F |
| A6R103 | 0698-4123 | 1 | RESISTOR 499 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-499R-F |
| A6R104 | 0757-0284 | 3 | RESISTOR 150 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-151-F |
| A6R105-R108 | 0757-0401 | 5 | RESISTOR 100 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-101-F |
| A6R301 | 0698-4422 | | RESISTOR 1.27K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1271-F |
| A6R302 | 0757-0446 | | RESISTOR 15K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1502-F |
| A6R303 | 0757-0284 | | RESISTOR 150 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-151-F |
| A6R304 | 0764-0016 | 1 | RESISTOR 1K +-5% 2W MO TC=0+-200 | 28480 | 0764-0016 |
| A6R405 | 0757-0474 | 2 | RESISTOR 243K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2433-F |
| A6R406 | 0757-0284 | | RESISTOR 150 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-151-F |
| A6R407 | 0757-0474 | | RESISTOR 243K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2433-F |
| A6R409 | 0757-0401 | | RESISTOR 100 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-101-F |
| A6RP400 | 1810-0286 | 1 | NETWORK-RES 16-DIP 10.0K OHM X 15 | 11236 | 761-1-R10K |
| A6RP401-RP403 | 1810-0338 | 3 | NETWORK-RES 16-DIP 100.0 OHM X 8 | 11236 | 761-3-R100 |
| A6S1-S2 | 3101-2769 | 2 | SWITCH-SL DPDT STD 5A 250VAC PC | 28480 | 3101-2769 |
| A6S3 | 3101-2887 | 1 | SWITCH-PB DPDTALTN 6A 250 VAC | 71468 | 130222 |
| A6SCR1 | 1884-0350 | 1 | THYRISTOR-SCR 2N6394 TO-220AB VRRM=50 | 04713 | 2N6394 |
| A6U1 | 1826-1822 | 1 | IC VOLTAGE REGULATOR-SWG 5.1/40V 15 PKG | 50088 | L296HT |
| A6U2 | 1826-0106 | 1 | IC V RGLTR-FXD-POS 14.4/15.6V TO-220 PKG | 04713 | MC7815CT |
| A6U200 | 0950-1904 | 1 | DC-DC CONVERTER 5 VDC TO 25.0 V AND 32.5 | 28480 | 0950-1904 |
| A6U400 | 03458-85502 | 1 | IC-ROM PROGRAMMED (INTELL) 80C51 | 28480 | 03458-85502 |
| A6U401 | 1826-0180 | 1 | IC TIMER TTL | 18324 | NE555N |
| A6U402 | 1820-3664 | 1 | IC GATE CMOS/HCT NAND QUAD 2-INP | 27014 | MM74HCT00N |
| A6W3-W4 | 5061-1664 | 2 | CABLE 18 AWG TERM1;1251-4823 TERM2;8MM STRIP | 28480 | 5061-1664 |
| | 1251-4823 | 1 | CONNECTOR-SINGLE CONTACT QDISC-FEM | 00778 | 2-520183-2 |
| | 8150-0224 | 1 | WIRE 18AWG W/BK/GY 800V PVC 19X30 105C | 28480 | 8150-0224 |
| A6XF1 | 2110-0642 | 1 | FUSEHOLDER-EXTRACTOR-POST 6.3A 250V | 28480 | 2110-0642 |
| A6Y400 | 1813-0661 | 1 | CLOCK-OSCILLATOR-XTAL 12.0000-MHZ 0.01% | 28480 | 1813-0661 |

Code List of Manufacturers - 03245-66506

| Mfr. Code | Manufacturer's Name | Manufacturer's Address | Zip Code |
|--------------|-------------------------------------|---------------------------|-------------|
| 00779 | AMP INC | HARRISBURG PA US | 17111 |
| 01686 | RCL ELECTRONICS INC | NORTHBROOK IL US | 60062 |
| 01961 | PULSE ENGINEERING INC | SAN DIEGO CA US | 92111 |
| 04222 | AVX CORP | GREAT NECK NY US | 11021 |
| 04713 | MOTOROLA INC | ROSELLE IL US | 60195 |
| 11236 | CTS CORP | ELKHART IN US | 46514 |
| 13103 | THERMALLOY INC | DALLAS TX US | 75234 |
| 18324 | SIGNETICS CORP | SUNNYVALE CA US | 94086 |
| 19701 | NORTH AMERICAN PHILIPS CORP | NEW YORK NY US | 10017 |
| 24226 | GOWANDA ELECTRONICS CORP | GOWANDA NY US | 14070 |
| 24546 | CORNING GLASS WORKS | CORNING NY US | 14830 |
| 27014 | NATIONAL SEMICONDUCTOR CORP | SANTA CLARA CA US | 95052 |
| 27264 | MOLEX INC | LISLE IL US | 60532 |
| 28480 | HEWLETT PACKARD COMPANY - CORPORATE | PALO ALTO CA US | 94304 |
| 46384 | PENN ENGINEERING & MFG CORP | DOYLESTOWN PA US | 18901 |
| 50088 | SGS-THOMSON MICROELECTRONICS INC | PHOENIX AZ US | 85022 |
| 55210 | GETTIG ENGRG & MFG CO INC | SPRING MILLS PA US | 16875 |
| 56289 | SPRAGUE ELECTRIC CO | LEXINGTON MA US | 02173 |
| 71468 | ITT CORP | NEW YORK NY US | 10022 |
| 71744 | GENERAL INSTRUMENT CORP | CLIFTON NJ US | 07012 |
| 75915 | LITTELFUSE INC | DES PLAINES IL US | 60016 |
| 76381 | 3M CO | ST PAUL MN US | 55144 |
| 85480 | BRADY W H CO | MILWAUKEE WI US | 53209 |
| 87730 | UNIMICA | NEW YORK NY US | 10013 |

03245-66511 REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|--------------------|
| A1 | 03245-66511 | 1 | PRINTED CIRCUIT ASSEMBLY-INGRD SOURCE | 28480 | 03245-66511 |
| | 0361-0321 | 2 | RIVET-SEMITUB OVH .123DIA .469LG | 42838 | TC1-15-ST |
| | 0361-1294 | 2 | RIVET-SEMITUB .099DIA .328LG | 28480 | 0361-1294 |
| | 0590-1095 | 8 | THREADED INSERT- M3 X 0.5 1.5-MM-LG | 46384 | KF2-M3-ZI |
| | 9320-5780 | 0 | LABEL-LNE-PTR; .9-IN-WD X .25-IN-LG | 85480 | DAT-50-652 |
| A1C1 | 0180-0229 | 1 | CAPACITOR-FXD 33uF +-10% 10 V TA | 56289 | 150D336X9010B2-DYS |
| A1C2-C9 | 0160-4571 | 36 | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C10 | 0180-3871 | 1 | CAPACITOR-FXD 330uF +-20% 50 V AL-ELCTLT | 28480 | 0180-3871 |
| A1C11-C12 | 0160-4835 | 4 | CAPACITOR-FXD 0.1uF +-10% 50 V CER X7R | 04222 | SA105C104KAAH |
| A1C13 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C14 | 0160-4800 | 5 | CAPACITOR-FXD 120pF +-5% 100 V CER COG | 04222 | SA102A121JAAH |
| A1C16 | 0160-4800 | | CAPACITOR-FXD 120pF +-5% 100 V CER COG | 04222 | SA102A121JAAH |
| A1C17 | 0160-4532 | 8 | CAPACITOR-FXD 1000pF +-20% 50 V CER X7R | 04222 | SA101C102MAAH |
| A1C18 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C19 | 0160-4786 | 1 | CAPACITOR-FXD 27pF +-5% 100 V CER COG | 04222 | SA102A270JAAH |
| A1C20 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C300-C301 | 0160-4800 | | CAPACITOR-FXD 120pF +-5% 100 V CER COG | 04222 | SA102A121JAAH |
| A1C302-C303 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C304 | 0160-4831 | 4 | CAPACITOR-FXD 4700pF +-10% 100 V CER X7R | 04222 | SA101C472KAAH |
| A1C400-C401 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C402 | 0160-4532 | | CAPACITOR-FXD 1000pF +-20% 50 V CER X7R | 04222 | SA101C102MAAH |
| A1C403 | 0160-4835 | | CAPACITOR-FXD 0.1uF +-10% 50 V CER X7R | 04222 | SA105C104KAAH |
| A1C404 | 0160-4532 | | CAPACITOR-FXD 1000pF +-20% 50 V CER X7R | 04222 | SA101C102MAAH |
| A1C405 | 0180-0291 | 9 | CAPACITOR-FXD 1uF +-10% 35 V TA | 56289 | 150D105X9035A2-DYS |
| A1C406-C410 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C411 | 0160-4791 | 3 | CAPACITOR-FXD 10pF +-5% 100 V CER COG | 04222 | SA102A100JAAH |
| A1C412-C415 | 0160-6941 | 9 | CAPACITOR-FXD 0.01uF +-5% 160 V POLYP-FL | 28480 | 0160-6941 |
| A1C416-C420 | 0160-6942 | 5 | CAPACITOR-FXD 0.022uF +-5% 160 V POLYP-FL | 28480 | 0160-6942 |
| A1C421 | 0160-6941 | | CAPACITOR-FXD 0.01uF +-5% 160 V POLYP-FL | 28480 | 0160-6941 |
| A1C422 | 0160-6841 | 3 | CAPACITOR-FXD 1000pF +-2% 250 V POLYP-FL | 28480 | 0160-6841 |
| 1C423 | 0160-4805 | 2 | CAPACITOR-FXD 47pF +-5% 100 V CER COG | 04222 | SA102A470JAAH |
| 1C424 | 0160-4813 | 1 | CAPACITOR-FXD 180pF +-5% 100 V CER COG | 04222 | SA101A181JAAH |
| A1C425 | 0160-5349 | 1 | CAPACITOR-FXD 200pF +-5% 100 V CER COG | 04222 | SA101A201JAAH |
| A1C426 | 0160-5305 | 1 | CAPACITOR-FXD 3.3pF +-10% 200 V CER COG | 04222 | MA102A3R3KAAH |
| A1C427-C428 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C429 | 0160-4831 | | CAPACITOR-FXD 4700pF +-10% 100 V CER X7R | 04222 | SA101C472KAAH |
| A1C430 | 0160-4791 | | CAPACITOR-FXD 10pF +-5% 100 V CER COG | 04222 | SA102A100JAAH |
| A1C431-C432 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C433-C434 | 0160-6941 | | CAPACITOR-FXD 0.01uF +-5% 160 V POLYP-FL | 28480 | 0160-6941 |
| A1C435-C436 | 0160-4831 | | CAPACITOR-FXD 4700pF +-10% 100 V CER X7R | 04222 | SA101C472KAAH |
| A1C438 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C500 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C501 | 0160-4791 | | CAPACITOR-FXD 10pF +-5% 100 V CER COG | 04222 | SA102A100JAAH |
| A1C502 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C504 | 0160-4532 | | CAPACITOR-FXD 1000pF +-20% 50 V CER X7R | 04222 | SA101C102MAAH |
| A1C505 | 0160-4807 | 1 | CAPACITOR-FXD 33pF +-5% 100 V CER COG | 04222 | SA102A330JAAH |
| A1C506 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C507 | 0180-0116 | 2 | CAPACITOR-FXD 6.8uF +-10% 35 V TA | 56289 | 150D685X9035B2-DYS |
| A1C508 | 0160-4787 | 1 | CAPACITOR-FXD 22pF +-5% 100 V CER COG | 04222 | SA102A220JAAH |
| A1C509 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C510 | 0180-0116 | | CAPACITOR-FXD 6.8uF +-10% 35 V TA | 56289 | 150D685X9035B2-DYS |
| A1C511 | 0180-0291 | | CAPACITOR-FXD 1uF +-10% 35 V TA | 56289 | 150D105X9035A2-DYS |
| A1C513-C514 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C515 | 0160-4800 | | CAPACITOR-FXD 120pF +-5% 100 V CER COG | 04222 | SA102A121JAAH |
| A1C600-C603 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| A1C604 | 0160-6841 | | CAPACITOR-FXD 1000pF +-2% 250 V POLYP-FL | 28480 | 0160-6841 |
| A1C605 | 0160-6941 | | CAPACITOR-FXD 0.01uF +-5% 160 V POLYP-FL | 28480 | 0160-6941 |
| A1C606 | 0160-4805 | | CAPACITOR-FXD 47pF +-5% 100 V CER COG | 04222 | SA102A470JAAH |
| A1C607 | 0160-4809 | 2 | CAPACITOR-FXD 390pF +-5% 100 V CER COG | 04222 | SA101A391JAAH |
| A1C608 | 0160-6941 | | CAPACITOR-FXD 0.01uF +-5% 160 V POLYP-FL | 28480 | 0160-6941 |
| A1C609 | 0180-0291 | | CAPACITOR-FXD 1uF +-10% 35 V TA | 56289 | 150D105X9035A2-DYS |
| A1C610 | 0160-4571 | | CAPACITOR-FXD 0.1uF +80% -20% 50 V CER Z5U | 04222 | SA105E104ZAAH |
| 1C611 | 0160-6841 | | CAPACITOR-FXD 1000pF +-2% 250 V POLYP-FL | 28480 | 0160-6841 |
| C612 | 0160-4809 | | CAPACITOR-FXD 390pF +-5% 100 V CER COG | 04222 | SA101A391JAAH |

03245-66511 REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|---------------------|
| A1C620 | 0160-4532 | | CAPACITOR-FXD 1000pF +-20% 50 V CER X7R | 04222 | SA101C102MAAH |
| A1C900 | 0180-3872 | 1 | CAPACITOR-FXD 470uF +100 -10% 25 V AL-ELCTLT | 56289 | 672D477H025DS3PD129 |
| A1C901 | 0180-0291 | | CAPACITOR-FXD 1uF +-10% 35 V TA | 56289 | 150D105X9035A2-DYS |
| A1C902 | 0160-0161 | 2 | CAPACITOR-FXD 0.01uF +-10% 200 V POLYE-FL | 28480 | 0160-0161 |
| A1C903-C904 | 0160-4532 | | CAPACITOR-FXD 1000pF +-20% 50 V CER X7R | 04222 | SA101C102MAAH |
| A1C905 | 0160-0161 | | CAPACITOR-FXD 0.01uF +-10% 200 V POLYE-FL | 28480 | 0160-0161 |
| A1C906 | 0160-4532 | | CAPACITOR-FXD 1000pF +-20% 50 V CER X7R | 04222 | SA101C102MAAH |
| A1C907 | 0180-3866 | 1 | CAPACITOR-FXD 100uF +-20% 25 V AL-ELCTLT | 56289 | 513D107M025BB3DD002 |
| A1C908 | 0180-0291 | | CAPACITOR-FXD 1uF +-10% 35 V TA | 56289 | 150D105X9035A2-DYS |
| A1C909 | 0180-1731 | 1 | CAPACITOR-FXD 4.7uF +-10% 50 V TA | 56289 | 150D475X9050B2-DYS |
| A1C910-C911 | 0180-3904 | 2 | CAPACITOR-FXD 470uF +-20% 50 V AL-ELCTLT | 28480 | 0180-3904 |
| A1C912 | 0160-4835 | | CAPACITOR-FXD 0.1uF +-10% 50 V CER X7R | 04222 | SA105C104KAAH |
| A1C913 | 0180-0291 | | CAPACITOR-FXD 1uF +-10% 35 V TA | 56289 | 150D105X9035A2-DYS |
| A1C915-C917 | 0180-0291 | | CAPACITOR-FXD 1uF +-10% 35 V TA | 56289 | 150D105X9035A2-DYS |
| A1CR1 | 1901-0050 | 15 | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A1CR2-CR8 | 1901-0743 | 11 | DIODE-POWER RECTIFIER 1N4004 400V 1A DO-41 | 71744 | 1N4004 |
| A1CR9 | 1901-0050 | | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A1CR13 | 1901-0050 | | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A1CR15 | 1902-1291 | 1 | DIODE-ZENER 1N5338B 5.1V 5% PD=5W IR=1UA | 04713 | 1N5338B |
| A1CR16 | 1902-0029 | 1 | DIODE-ZENER 12V 5% PD=1W IR=5UA | 28480 | 1902-0029 |
| A1CR18 | 1902-0951 | 3 | DIODE-ZENER 5.1V 5% PD=.4W TC=+.035% IR=1U | 04713 | SZ30035-9RL |
| A1CR400 | 1901-0050 | | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A1CR500-CR502 | 1901-0050 | | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A1CR507-CR508 | 1901-0743 | | DIODE-POWER RECTIFIER 1N4004 400V 1A DO-41 | 71744 | 1N4004 |
| A1CR509 | 1901-0050 | | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A1CR511-CR512 | 1901-0050 | | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A1CR513 | 1902-0945 | 1 | DIODE-ZENER 3V 5% PD=.4W TC=-.043% IR=50UA | 04713 | SZ0035-3RL |
| A1CR600-CR603 | 1901-0880 | 4 | DIODE-GENERAL PURPOSE 125MA DO-35 | 27014 | FDH5323.03 |
| A1CR604-CR605 | 1901-0050 | | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A1CR620-CR621 | 1901-0050 | | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A1CR900-CR901 | 1902-0951 | | DIODE-ZENER 5.1V 5% PD=.4W TC=+.035% IR=1U | 04713 | SZ30035-9RL |
| A1CR902-CR903 | 1901-0734 | 2 | DIODE-POWER RECTIFIER 1N5818 30V 1A | 04713 | 1N5818 |
| A1CR904 | 1901-0050 | | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| A1CR905-CR908 | 1901-0828 | 4 | DIODE-POWER RECTIFIER 50V 2.5A | 28480 | 1901-0828 |
| A1CR909 | 1902-0522 | 1 | DIODE-ZENER 1N5340B 6V 5% PD=5W IR=1UA | 04713 | 1N5340B |
| A1CR910-CR911 | 1902-0632 | 2 | DIODE-ZENER 1N5354B 17V 5% PD=5W TC=-75% I | 04713 | 1N5354B |
| A1CR913-CR914 | 1901-0743 | | DIODE-POWER RECTIFIER 1N4004 400V 1A DO-41 | 71744 | 1N4004 |
| A1F1-F3 | 2110-0698 | 3 | FUSE-SUBMINIATURE 2.5A 125V NTD AX | 75915 | R25102.5T1 |
| A1HS180 | 1205-0623 | 6 | HEAT SINK PLASTIC-POWER-CASE | 13103 | 6079B |
| A1HS507 | 1205-0376 | 1 | HEAT SINK SGL PLASTIC-POWER-CASE | 13103 | 6072B |
| A1HS507A | 0340-0564 | 2 | INSULATOR-XSTR THERMAL-CONDUCTIVE | 55285 | 7403-09FR-51 |
| A1HS507B | 0340-0564 | | INSULATOR-XSTR THERMAL-CONDUCTIVE | 55285 | 7403-09FR-51 |
| A1HS900-HS901 | 1205-0623 | | HEAT SINK PLASTIC-POWER-CASE | 13103 | 6079B |
| A1HS904 | 1205-0623 | | HEAT SINK PLASTIC-POWER-CASE | 13103 | 6079B |
| A1HS906-HS907 | 1205-0623 | | HEAT SINK PLASTIC-POWER-CASE | 13103 | 6079B |
| A1JM001-JM009 | 7175-0057 | 9 | RESISTOR 0 MFS | 28480 | 7175-0057 |
| A1JM1 | 1251-4682 | 1 | CONNECTOR-POST TYPE .100-PIN-SPCG 3-CONTACT | 26742 | 1102-1-103-02 |
| A1JM1A | 1258-0141 | 1 | JUMPER-REMOVABLE FOR .025 IN SQ PINS | 18873 | 65474-004 |
| A1K1 | 0490-1564 | 1 | RELAY 4A 12VDC-COIL 4A 250VAC | 28480 | 0490-1564 |
| A1K2 | 0490-1649 | 2 | RELAY 2B 12VDC-COIL 3A 250VDC | 28480 | 0490-1649 |
| A1K3 | 0490-1563 | 2 | RELAY 3AB 12VDC-COIL 4A 250VAC | 28480 | 0490-1563 |
| A1K4 | 0490-1649 | | RELAY 2B 12VDC-COIL 3A 250VDC | 28480 | 0490-1649 |
| A1K90 | 0490-1563 | | RELAY 3AB 12VDC-COIL 4A 250VAC | 28480 | 0490-1563 |
| A1L1 | 9100-3560 | 1 | INDUCTOR-FIXED RF-CH-MLD 5.6UH +-5% | 24226 | 15M561J |
| A1L2 | 9100-1788 | 1 | CORE-FERRITE CHOKE-WIDEBAND;IMP:>680 | 28480 | 9100-1788 |
| A1L400 | 9140-0639 | 1 | INDUCTOR-FIXED RF-CH-MLD 100UH +-10% | 04213 | 6376-1 |
| A1L401 | 9100-2565 | 1 | INDUCTOR-FIXED RF-CH-MLD 180UH +-10% | 28480 | 9100-2565 |

03245-66511 REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|-------------------|
| A1L600 | 9100-2486 | 2 | INDUCTOR-FIXED RF-CH-MLD 330NH +-5% | 24226 | 15M330J |
| A1L601 | 9170-1368 | 1 | CORE-SHIELDING BEAD INIT PERMEABILITY | 19701 | 11426-4A6 |
| A1L603 | 9100-2486 | 1 | INDUCTOR-FIXED RF-CH-MLD 330NH +-5% | 24226 | 15M330J |
| A1L900 | 9140-1024 | 1 | INDUCTOR-FIXED L: 0.50 MH -0,+30% @ | 01961 | PE-50503-006 |
| A1L901 | 9140-1175 | 2 | INDUCTOR-FIXED L:1 MH,-0%,+30% @ 0.35 A | 01961 | PE-50501-004 |
| A1L902 | 9140-0893 | 1 | INDUCTOR-FIXED 2MH -0%+30%; Q:60 MIN | 01961 | PE 50502 |
| A1L903 | 9140-1175 | 1 | INDUCTOR-FIXED L:1 MH,-0%,+30% @ 0.35 A | 01961 | PE-50501-004 |
| A1LBL1 | 9320-5333 | 1 | LABEL-LNE-PTR; .625-IN-WD X .25-IN-LG | 28480 | 9320-5333 |
| A1LBL2 | 7121-7148 | 1 | LABEL-INFORMATION .25-IN-WD .9-IN-LG | 28480 | 7121-7148 |
| A1MP1-MP2 | 3050-0082 | 2 | WASHER-FL NM NO. 4 .116-IN-ID .188-IN-OD | 76854 | 8942-3 |
| A1P1 | 5180-6699 | 1 | CONNECTOR-2X9M> NOKEY | 28480 | 5180-6699 |
| A1P2 | 1252-1591 | 1 | CONNECTOR-POST TYPE 5.08-PIN-SPCG 48-CONTACT | 00779 | 534893-5 |
| A1PCB1 | 03245-26511 | 1 | PRINTED CIRCUIT BOARD - BLANK | 28480 | 03245-26511 |
| A1Q1 | 1854-1028 | 1 | TRANSISTOR NPN SI PD=350MW FT=300MHZ | 04713 | 2N3904 |
| A1Q500 | 1853-0673 | 1 | TRANSISTOR-DUAL PNP 2N3811 PD=600MW | 04713 | 2N3811 |
| A1Q501 | 1855-0414 | 2 | TRANSISTOR J-FET 2N4393 N-CHAN D-MODE | 17856 | 2N4393 |
| A1Q502 | 1855-0730 | 1 | TRANSISTOR-J-FET DUAL N-CHAN D-MODE SI | 27014 | NPDS564(SEL) |
| A1Q503 | 1854-1040 | 1 | TRANSISTOR NPN SI PD=310MW FT=50MHZ | 27014 | 2N5088 |
| A1Q504 | 1853-0563 | 1 | TRANSISTOR PD=310MW FT=250MHZ | 04713 | 2N3906(SEL) |
| A1Q505 | 1855-0414 | 1 | TRANSISTOR J-FET 2N4393 N-CHAN D-MODE | 17856 | 2N4393 |
| A1Q506 | 1854-0233 | 1 | TRANSISTOR NPN 2N3866 PD=1W FT=500MHZ | 3L585 | 2N3866 |
| A1Q507 | 1854-1187 | 1 | TRANSISTOR NPN SI PD=1.2W FT=120MHZ | 2M627 | 2SD1378 |
| A1Q508 | 1853-0674 | 1 | TRANSISTOR PNP SI PD=1.2W FT=100MHZ | 2M627 | 2SB1007 |
| A1Q509 | 1853-0569 | 1 | TRANSISTOR PNP SI PD=310MW FT=40MHZ | 28480 | 1853-0569 |
| A1Q600 | 1855-0410 | 1 | TRANSISTOR J-FET N-CHAN D-MODE TO-18 SI | 28480 | 1855-0410 |
| A1Q900-Q901 | 1855-0548 | 2 | TRANSISTOR MOSFET N-CHAN E-MODE TO-220 | 04713 | BUZ71A |
| A1R1-R2 | 0698-3279 | 8 | RESISTOR 4.99K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-4991-F |
| A1R3-R4 | 0757-0424 | 11 | RESISTOR 1.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1101-F |
| A1R5 | 0698-3279 | 1 | RESISTOR 4.99K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-4991-F |
| A1R7 | 0757-0283 | 6 | RESISTOR 2K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2001-F |
| A1R8-R9 | 0757-0424 | 1 | RESISTOR 1.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1101-F |
| A1R10 | 0698-3279 | 1 | RESISTOR 4.99K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-4991-F |
| A1R11 | 0757-0393 | 5 | RESISTOR 47.5 +-1% .125W TF TC=0+-100 | 28480 | 0757-0393 |
| A1R13 | 0757-0469 | 3 | RESISTOR 150K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1503-F |
| A1R15 | 0757-0415 | 3 | RESISTOR 475 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-475R-F |
| A1R16 | 0757-0283 | 1 | RESISTOR 2K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2001-F |
| A1R17 | 0757-0424 | 1 | RESISTOR 1.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1101-F |
| A1R18 | 0698-3215 | 1 | RESISTOR 499K +-1% .125W TF TC=0+-100 | 28480 | 0698-3215 |
| A1R19 | 0757-0283 | 1 | RESISTOR 2K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2001-F |
| A1R20-R21 | 0757-0393 | 1 | RESISTOR 47.5 +-1% .125W TF TC=0+-100 | 28480 | 0757-0393 |
| A1R23-R24 | 0698-4126 | 2 | RESISTOR 35.7 +-1% .125W TF TC=0+-100 | 28480 | 0698-4126 |
| A1R25 | 0757-0442 | 7 | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A1R26 | 0757-0449 | 3 | RESISTOR 20K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2002-F |
| A1R27 | 0757-0442 | 1 | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A1R28 | 0698-3279 | 1 | RESISTOR 4.99K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-4991-F |
| A1R29 | 0698-3496 | 2 | RESISTOR 3.57K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-357R-F |
| A1R30 | 0757-0427 | 6 | RESISTOR 1.5K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1501-F |
| A1R300 | 0757-0283 | 1 | RESISTOR 2K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2001-F |
| A1R301 | 0757-0424 | 1 | RESISTOR 1.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1101-F |
| A1R302 | 0698-4442 | 2 | RESISTOR 4.42K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-4421-F |
| A1R303 | 0757-0427 | 1 | RESISTOR 1.5K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1501-F |
| A1R304 | 0698-3228 | 5 | RESISTOR 49.9K +-1% .125W TF TC=0+-100 | 28480 | 0698-3228 |
| A1R400 | 0757-0424 | 1 | RESISTOR 1.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1101-F |
| A1R401 | 0698-3496 | 1 | RESISTOR 3.57K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-357R-F |
| A1R402 | 0757-0442 | 1 | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A1R403 | 0757-0469 | 1 | RESISTOR 150K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1503-F |
| A1R404 | 0757-0476 | 1 | RESISTOR 301K +-1% .125W TF TC=0+-100 | 28480 | 0757-0476 |
| A1R405 | 0698-4442 | 1 | RESISTOR 4.42K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-4421-F |

03245-66511 REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|---------------------|
| A1R406 | 0698-3148 | 2 | RESISTOR 102K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1023-F |
| A1R407 | 0698-4516 | 1 | RESISTOR 113K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1133-F |
| A1R408 | 0698-4484 | 1 | RESISTOR 19.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1912-F |
| A1R409 | 0698-3158 | 1 | RESISTOR 23.7K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2372-F |
| A1R410 | 0757-0288 | 2 | RESISTOR 9.09K +-1% .125W TF TC=0+-100 | 19701 | 5033R-1/8-T0-9091-F |
| A1R411 | 0757-0463 | 1 | RESISTOR 82.5K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-8252-F |
| A1R412 | 0698-3202 | 2 | RESISTOR 1.74K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1741-F |
| A1R413 | 0757-0280 | 3 | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A1R414 | 0698-3148 | | RESISTOR 102K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1023-F |
| A1R415 | 0698-3150 | 1 | RESISTOR 2.37K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2371-F |
| A1R416-R417 | 0698-4508 | 2 | RESISTOR 78.7K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-7872-F |
| A1R418 | 0757-0470 | 1 | RESISTOR 162K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1623-F |
| A1R419 | 0757-0427 | | RESISTOR 1.5K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1501-F |
| A1R420 | 0757-0446 | 1 | RESISTOR 15K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1502-F |
| A1R421 | 0757-0424 | | RESISTOR 1.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1101-F |
| A1R422 | 0757-0427 | | RESISTOR 1.5K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1501-F |
| A1R423 | 0757-0452 | 2 | RESISTOR 27.4K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2742-F |
| A1R424-R425 | 0757-0384 | 4 | RESISTOR 20 +-1% .125W TF TC=0+-100 | 19701 | 5033R-1/8-T0-20R0-F |
| A1R426 | 0757-0424 | | RESISTOR 1.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1101-F |
| A1R427 | 0757-0427 | | RESISTOR 1.5K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1501-F |
| A1R428 | 0698-3359 | 1 | RESISTOR 12.7K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1272-F |
| A1R429 | 0698-3202 | | RESISTOR 1.74K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1741-F |
| A1R430 | 0757-0270 | 1 | RESISTOR 249K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2493-F |
| A1R431 | 0698-3495 | 1 | RESISTOR 866 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-866R-F |
| A1R432-R433 | 0698-3279 | | RESISTOR 4.99K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-4991-F |
| A1R434 | 0757-0291 | 2 | RESISTOR 24.9 +-1% .125W TF TC=0+-100 | 19701 | 5033R-1/8-T0-2492-F |
| A1R500 | 0757-0410 | 1 | RESISTOR 301 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-301R-F |
| A1R501 | 0757-0452 | | RESISTOR 27.4K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2742-F |
| A1R502 | 0757-0465 | 8 | RESISTOR 100K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1003-F |
| A1R503-R504 | 0698-4421 | 2 | RESISTOR 249 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-249R-F |
| A1R505-R506 | 0757-0402 | 2 | RESISTOR 110 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-111-F |
| A1R507 | 0757-0393 | | RESISTOR 47.5 +-1% .125W TF TC=0+-100 | 28480 | 0757-0393 |
| A1R508 | 0698-4423 | 1 | RESISTOR 1.37K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1371-F |
| A1R509 | 0757-0291 | | RESISTOR 24.9 +-1% .125W TF TC=0+-100 | 19701 | 5033R-1/8-T0-2492-F |
| A1R510-R511 | 0683-0515 | 2 | RESISTOR 5.1 +-5% .25W CF TC=0-400 | 01121 | CB51G5 |
| A1R512 | 0757-0346 | 1 | RESISTOR 10 +-1% .125W TF TC=0+-100 | 28480 | 0757-0346 |
| A1R516 | 0757-0465 | | RESISTOR 100K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1003-F |
| A1R519 | 0757-0380 | 3 | RESISTOR 13 +-1% .125W TF TC=0+-100 | 19701 | 5033R-1/8-T0-13R0-F |
| A1R521-R522 | 0757-0465 | | RESISTOR 100K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1003-F |
| A1R525 | 0757-0427 | | RESISTOR 1.5K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1501-F |
| A1R526 | 0698-3279 | | RESISTOR 4.99K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-4991-F |
| A1R527 | 0757-0288 | | RESISTOR 9.09K +-1% .125W TF TC=0+-100 | 19701 | 5033R-1/8-T0-9091-F |
| A1R531 | 0757-0465 | | RESISTOR 100K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1003-F |
| A1R533 | 0757-0465 | | RESISTOR 100K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1003-F |
| A1R534-R535 | 0698-6286 | 2 | RESISTOR 100M +-10% .25W CC | 28480 | 0698-6286 |
| A1R600 | 0757-0420 | 1 | RESISTOR 750 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-751-F |
| A1R601 | 0699-0173 | 1 | RESISTOR 866 +-1% .3W MF TC=0+-1.5 | 28480 | 0699-0173 |
| A1R602 | 0698-7479 | 1 | RESISTOR 10K +-0.1% .225W MF TC=0+-1.5 | 28480 | 0698-7479 |
| A1R603 | 0699-2392 | 1 | RESISTOR 100K +-0.5% .6W MF TC=0+-1.5 | 28480 | 0699-2392 |
| A1R604 | 0699-0073 | 1 | RESISTOR 10M +-1% .125W TF TC=0+-100 | 28480 | 0699-0073 |
| A1R605-R606 | 0757-0380 | | RESISTOR 13 +-1% .125W TF TC=0+-100 | 19701 | 5033R-1/8-T0-13R0-F |
| A1R607 | 0757-0424 | | RESISTOR 1.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1101-F |
| A1R608 | 0699-0064 | 1 | RESISTOR 50 +-0.1% .5W TF TC=0+-25 | 28480 | 0699-0064 |
| A1R609 | 0699-2391 | 1 | RESISTOR 12.4 +-1% .6W MF TC=0+-5 | 28480 | 0699-2391 |
| A1R620 | 0757-0442 | | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A1R621 | 0757-0472 | 1 | RESISTOR 200K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2003-F |
| A1R622 | 0757-0469 | | RESISTOR 150K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1503-F |
| A1R623-R624 | 0698-3228 | | RESISTOR 49.9K +-1% .125W TF TC=0+-100 | 28480 | 0698-3228 |
| A1R625-R627 | 0757-0442 | | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A1R628-R629 | 0757-0465 | | RESISTOR 100K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1003-F |
| A1R630-R631 | 0698-3228 | | RESISTOR 49.9K +-1% .125W TF TC=0+-100 | 28480 | 0698-3228 |
| A1R900-R901 | 0757-0415 | | RESISTOR 47.5 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-475R-F |
| A1R902 | 0699-1075 | 1 | RESISTOR .1 +-3% 3W MFS TC=0+-70 | 01686 | LO-3-0.1-3-RP |
| A1R903-R904 | 0757-0449 | | RESISTOR 20K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2002-F |

03245-66511 REPLACEMENT PARTS

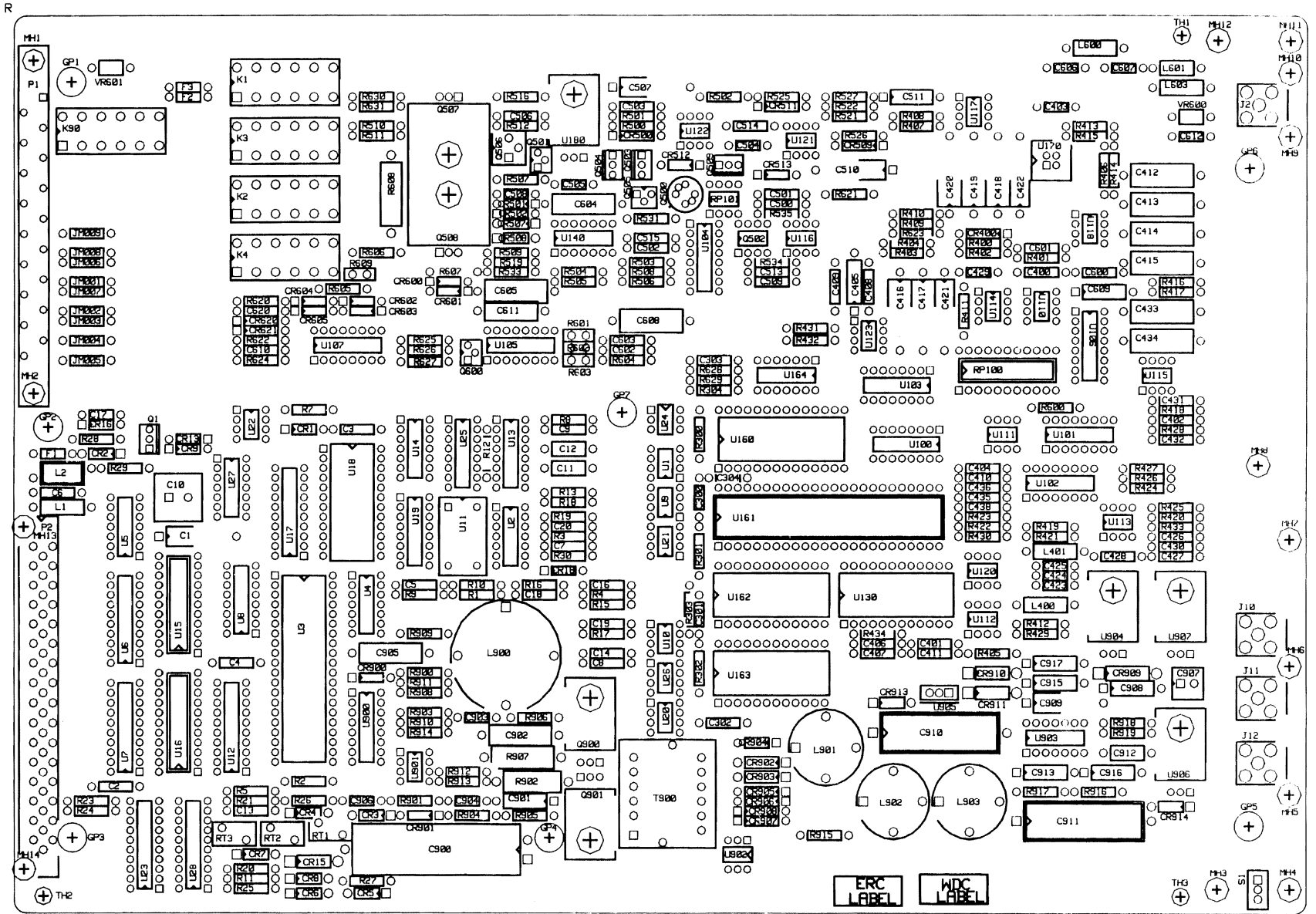
| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|---------------------|
| A1R905-R906 | 0757-0384 | | RESISTOR 20 +-1% .125W TF TC=0+-100 | 19701 | 5033R-1/8-T0-20R0-F |
| A1R907 | 0698-3631 | 1 | RESISTOR 330 +-5% 2W MO TC=0+-200 | 28480 | 0698-3631 |
| A1R908 | 0757-0273 | 2 | RESISTOR 3.01K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-3011-F |
| A1R909 | 0757-0393 | | RESISTOR 47.5 +-1% .125W TF TC=0+-100 | 28480 | 0757-0393 |
| A1R910 | 0757-0280 | | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A1R911 | 0757-0273 | | RESISTOR 3.01K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-3011-F |
| A1R912 | 0757-0438 | 1 | RESISTOR 5.11K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-5111-F |
| A1R913 | 0757-0409 | 1 | RESISTOR 274 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-274R-F |
| A1R914 | 0757-0280 | | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| A1R915 | 0757-0424 | | RESISTOR 1.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1101-F |
| A1R916-R917 | 0757-0283 | | RESISTOR 2K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2001-F |
| A1R918 | 0698-3268 | 1 | RESISTOR 11.5K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1152-F |
| A1R919 | 0698-4471 | 1 | RESISTOR 7.15K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-7151-F |
| A1RP100 | 1810-1163 | 1 | NETWORK-RESISTOR 6 db STEP ATTENUATOR | 73138 | 1693-15-0 |
| A1RP101 | 1810-1164 | 1 | NETWORK-RESISTOR R-ARRAY, 4 X 1K; TOL. | 73138 | 1694-16-0 |
| A1RT1-RT3 | 0837-0223 | 3 | THERMISTOR DISC 10-OHM | 75263 | RL400811040PT2 |
| A1SCW180 | 0515-0886 | 8 | SCREW-MACHINE M3 X 0.5 6MM-LG PAN-HD | 28480 | 0515-0886 |
| A1SCW507A | 0515-0886 | | SCREW-MACHINE M3 X 0.5 6MM-LG PAN-HD | 28480 | 0515-0886 |
| A1SCW507B | 0515-0886 | | SCREW-MACHINE M3 X 0.5 6MM-LG PAN-HD | 28480 | 0515-0886 |
| A1SCW900-SCW901 | 0515-0886 | | SCREW-MACHINE M3 X 0.5 6MM-LG PAN-HD | 28480 | 0515-0886 |
| A1SCW904 | 0515-0886 | | SCREW-MACHINE M3 X 0.5 6MM-LG PAN-HD | 28480 | 0515-0886 |
| A1SCW906-SCW907 | 0515-0886 | | SCREW-MACHINE M3 X 0.5 6MM-LG PAN-HD | 28480 | 0515-0886 |
| A1T900 | 9100-4694 | 1 | TRANSFORMER-SWITCHING; PRI IND: 1 MH | 91637 | IPE-1629-16 |
| A1U1 | 1990-0732 | 1 | OPTO-ISOLATOR LED-PDIO/XSTR IF=20MA-MAX | 28480 | HCPL-2731 |
| A1U2 | 1820-3007 | 1 | IC GATE CMOS/74HC EXCL-OR QUAD 2-INP | 04713 | MC74HC86N |
| A1U3 | 1820-3671 | 1 | IC GATE-ARRAY CMOS | 28480 | 1820-3671 |
| A1U4 | 1820-2924 | 1 | IC GATE CMOS/74HC NOR QUAD 2-INP | 04713 | MC74HC02N |
| A1U5 | 1820-1568 | 1 | IC DRIVER TTL/LS BUS QUAD | 01295 | SN74LS125AN |
| A1U6-U7 | 1820-3665 | 2 | IC TRANSCEIVER CMOS/HCT BUS OCTL | 27014 | MM74HCT245N |
| A1U8 | 1820-3796 | 1 | IC DCDR CMOS/74HCT 2-TO-4-LINE DUAL | 27014 | MM74HCT139N |
| A1U9-U10 | 1990-0996 | 4 | OPTO-ISOLATOR LED-IC GATE IF=10MA-MAX | 28480 | HCPL-2200 |
| A1U11 | 1813-0580 | 1 | OSCILLATOR-CRYSTALVXCO; FREQUENCY | 28480 | 1813-0580 |
| A1U12 | 1820-3975 | 1 | IC DRIVER CMOS/74HC LINE OCTL | 01295 | SN74HC541N |
| A1U13 | 1820-4590 | 1 | IC MV CMOS/74HC MONOSTBL RETRIG DUAL | 27014 | MM74HC423AN |
| A1U14 | 1820-3629 | 1 | IC INVERTER CMOS/HCT HEX | 27014 | MM74HCT04N |
| A1U15-U16 | 1820-3165 | 2 | IC-INTERFACE DRIVER CMOS PERIPHERAL | 28480 | 1820-3165 |
| A1U17 | 1820-3399 | 2 | IC FF CMOS/74HC D-TYPE POS-EDGE-TRIG COM | 04713 | MC74HC273N |
| A1U18 | 1818-4583 | 1 | IC NMOS 16384 (16K) EEPROM 250-NS 3-S | 28480 | 1818-4583 |
| A1U19 | 1820-5571 | 1 | IC CNTR CMOS/74HC BIN SYNCHRO DUAL 4-BIT | 18324 | 74HC4520N |
| A1U20-U21 | 1990-0996 | | OPTO-ISOLATOR LED-IC GATE IF=10MA-MAX | 28480 | HCPL-2200 |
| A1U22 | 1820-0535 | 1 | IC-INTERFACE DRIVER MISC/UNKNOWN AND DUAL | 01295 | SN75451BP |
| A1U23 | 34521-88801 | 1 | IC-PROGRAMMED (1820-4879) PAL16L8-2CN | 28480 | 34521-88801 |
| | 1820-4879 | 1 | IC PROGRAMMABLE-LGC TTL/S PAL UNPROGRAMMED | 27014 | PAL16L8A2NC UNPRGMD |
| A1U24 | 1990-0488 | 2 | OPTO-ISOLATOR LED-PXSTR IF=80MA-MAX | 04713 | 4N25 |
| A1U25 | 1820-2228 | 1 | IC LATCH CMOS NAND R-S QUAD | 04713 | MC14048BCP |
| A1U26 | 1990-1015 | 1 | OPTO-ISOLATOR LED-IC GATE IF=10MA-MAX | 28480 | HCPL-2400 |
| A1U27 | 1820-1200 | 1 | IC INVERTER TTL/LS HEX | 01295 | SN74LS05N |
| A1U28 | 1820-3399 | | IC FF CMOS/74HC D-TYPE POS-EDGE-TRIG COM | 04713 | MC74HC273N |
| A1U100 | 1826-1346 | 1 | ANALOG SWITCH 4 SPST 16-DIP-P | 24355 | ADG201HSKN |
| A1U101 | 1826-1205 | 1 | ANALOG SWITCH 2 SPDT 16-DIP-P | 34371 | HI3-0390-5 |
| A1U102-U104 | 1826-0850 | 3 | IC ANALOG SWITCH PIN | 17856 | DG211CJ |
| A1U105 | 1826-0610 | 1 | ANALOG MULTIPLEXER 4 CHNL 16-CERDIP | 06665 | MUX-24FQ |
| A1U106-U107 | 1826-1021 | 2 | ANALOG MULTIPLEXER CHNL 16-DIP-P | 17856 | DG508ACJ |
| A1U110-U111 | 1826-0635 | 2 | IC OP AMP LOW-OFS 8-DIP | 06665 | OP-07CP |
| A1U112-U113 | 1826-1771 | 2 | IC OP AMP HIGH-SPEED 8-DIP-P PKG | 27014 | LM6364N |
| A1U114 | 1826-1767 | 1 | IC OP AMP LOW-NOISE 8-DIP-P PKG | 28480 | 1826-1767 |
| A1U115 | 1826-1328 | 1 | IC OP AMP LOW-NOISE DUAL 8-PIN DIP-P | 01295 | NE5532P |
| A1U116 | 1826-1382 | 1 | IC OP AMP PRCN 8-DIP-P PKG | 28480 | 1826-1382 |
| A1U117-U118 | 1826-0521 | 2 | IC OP AMP LOW-BIAS-H-IMPED DUAL 8-PIN | 01295 | TL072CP |

03245-66511 REPLACEMENT PARTS

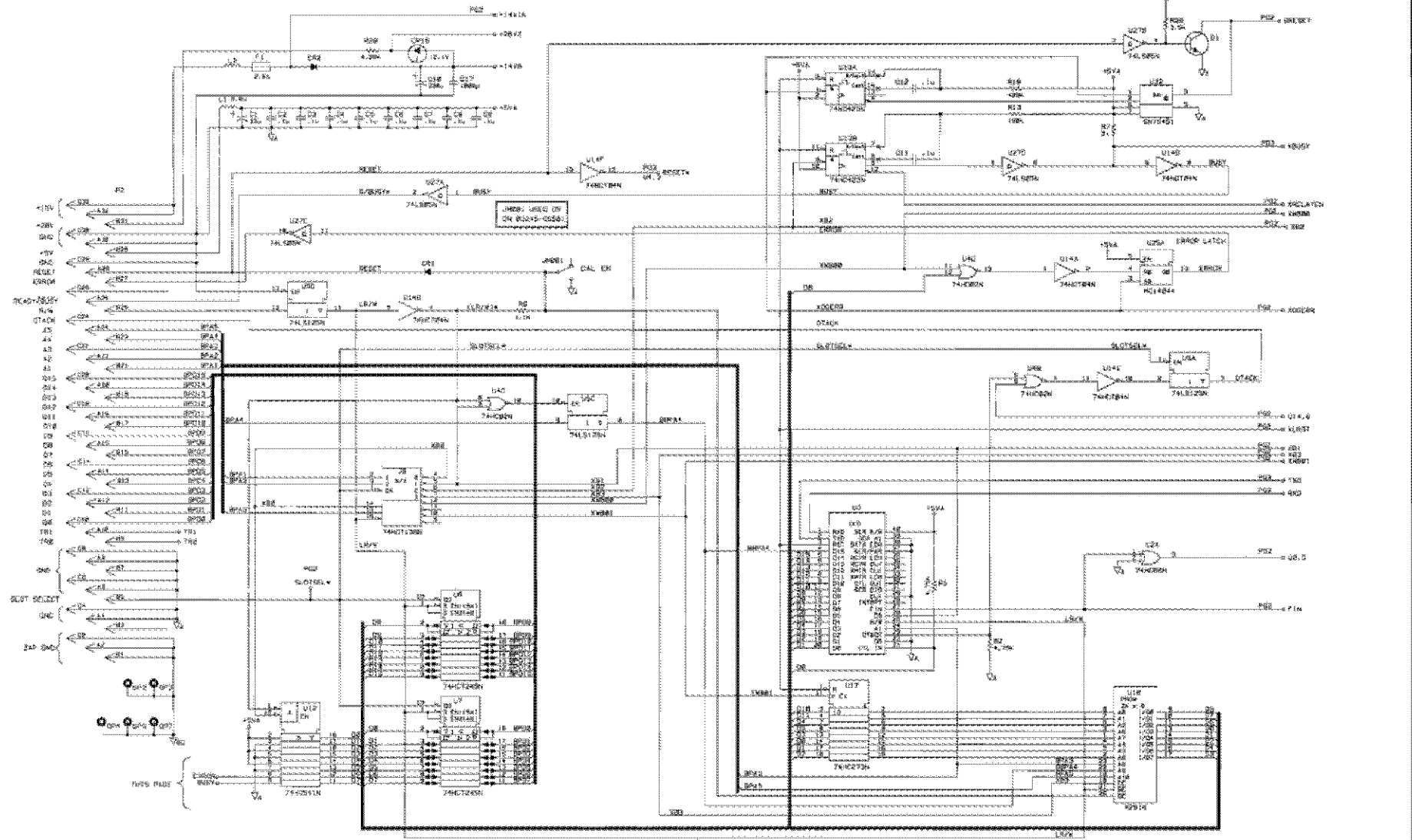
| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|---|-----------|------------------|
| A1U120 | 1826-1122 | 1 | IC COMPARATOR GENERAL PURPOSE 8-DIP-P PKG | 06665 | CMP-01CP |
| A1U121-U122 | 1826-0412 | 3 | IC COMPARATOR PRECISION DUAL 8-DIP-P PKG | 27014 | LM393N |
| A1U123 | 1826-0346 | 1 | IC OP AMP GENERAL PURPOSE DUAL 8-PIN DIP-P | 27014 | LM358N |
| A1U130 | 1826-1770 | 1 | IC D/A 12-BIT 24-CERDIP BIPOLAR | 27014 | DAC1266LCJ |
| A1U140 | 1858-0032 | 1 | TRANSISTOR ARRAY 14-PIN PLASTIC DIP | 27014 | LM3146 |
| A1U160 | 1820-5648 | 1 | IC ASIC GATE-ARRAY CMOS PLASTIC DIP | 28480 | 1820-5648 |
| A1U161 | 1820-5647 | 1 | IC ASIC GATE-ARRAY CMOS PLASTIC DIP | 28480 | 1820-5647 |
| A1U162-U163 | 1818-1611 | 2 | IC CMOS 16384 (16K) STAT RAM 150-NS 3-S | 34333 | AM9128-15PC |
| A1U164 | 1820-2922 | 1 | IC GATE CMOS/74HC NAND QUAD 2-INP | 04713 | MC74HC00N |
| A1U170 | 1826-1249 | 1 | IC V RGLTR-V-REF-FXD 6.8/7.1V TO-46 PKG | 28480 | 1826-1249 |
| A1U180 | 1826-0393 | 1 | IC V RGLTR-ADJ-POS 1.2/37V TO-220 PKG | 27014 | LM317T |
| A1U900 | 1826-0905 | 1 | IC V RGLTR-SWG 5/5.2V 16-DIP-P PKG | 34333 | SG3525AJ |
| A1U901 | 1826-0412 | 1 | IC COMPARATOR PRECISION DUAL 8-DIP-P PKG | 27014 | LM393N |
| A1U902 | 1990-0488 | 1 | OPTO-ISOLATOR LED-PXSTR IF=80MA-MAX | 04713 | 4N25 |
| A1U903 | 1826-0409 | 1 | IC V RGLTR-ADJ-POS 2/37V 14-DIP-C PKG | 04713 | MC1723L |
| A1U904-U905 | 1826-0551 | 2 | IC V RGLTR-FXD-POS 4.9/5.1V TO-220 PKG | 27014 | LM340AT-5 |
| A1U906 | 1826-0214 | 1 | IC V RGLTR-FXD-NEG -14.4/-15.6V TO-220 | 04713 | MC7915CT |
| A1U907 | 1826-0106 | 1 | IC V RGLTR-FXD-POS 14.4/15.6V TO-220 PKG | 04713 | MC7815CT |
| A1VR600-VR601 | 0837-0196 | 2 | VOLTAGE SUPPRESSOR V _{NOM} =430V, 10A PEAK | 34371 | V430MT3A |
| A1W2 | 03245-61603 | 1 | CABLE-PCB/F BNC 135MM LONG | 28480 | 03245-61603 |
| | 1250-0050 | 1 | NUT-RF CONNECTOR BNC SERIES; CLAMP NUT | 24931 | NS101-2 |
| | 1250-0051 | 1 | CONTACT-RF CONNECTOR SER BNC; FEMALE | 24931 | C182-1 |
| | 1250-0252 | 1 | BODY-RF CONNECTOR SERIES BNC; STRAIGHT | 24931 | 28JS108-1 |
| | 1250-0960 | 1 | SLEEVE-RF CONNECTOR SERIES BNC/TNC | 24931 | T101-13 |
| | 8120-1848 | 1 | CABLE-COAX 600V WHITE | 92194 | 2834 |
| A1W10 | 03245-61601 | 2 | CABLE-FEM BNC TO PC BOARD 260MM LONG | 28480 | 03245-61601 |
| | 1250-0050 | 2 | NUT-RF CONNECTOR BNC SERIES; CLAMP NUT | 24931 | NS101-2 |
| | 1250-0051 | 2 | CONTACT-RF CONNECTOR SER BNC; FEMALE | 24931 | C182-1 |
| | 1250-0052 | 2 | BODY-RF CONNECTOR BNC SERIES; FOR MALE | 24931 | 28P117-1 |
| | 1250-0960 | 2 | SLEEVE-RF CONNECTOR SERIES BNC/TNC | 24931 | T101-13 |
| | 8120-1280 | 2 | CABLE-COAX 50-OHM 1.2KV 29PF/FT MAX | 72983 | 421-077 |
| A1W11 | 03245-61602 | 1 | CABLE-MALE BNC TO PC BOARD 685MM LONG | 28480 | 03245-61602 |
| | 8120-1280 | 2 | CABLE-COAX 50-OHM 1.2KV 29PF/FT MAX | 72983 | 421-077 |
| A1W12 | 03245-61601 | 1 | CABLE-FEM BNC TO PC BOARD 260MM LONG | 28480 | 03245-61601 |

Code List of Manufacturers - 03245-66511

| Mfr. Code | Manufacturer's Name | Manufacturer's Address | | | Zip Code |
|-----------|-------------------------------------|------------------------|----|----|----------|
| 00779 | AMP INC | HARRISBURG | PA | US | 17111 |
| 01121 | ALLEN-BRADLEY CO INC | EL PASO | TX | US | 79935 |
| 01295 | TEXAS INSTRUMENTS INC | DALLAS | TX | US | 75265 |
| 01686 | RCL ELECTRONICS INC | NORTHBROOK | IL | US | 60062 |
| 01961 | PULSE ENGINEERING INC | SAN DIEGO | CA | US | 92111 |
| 04213 | CADDELL-BURNS MFG CO INC | MINEOLA | NY | US | 11501 |
| 04222 | AVX CORP | GREAT NECK | NY | US | 11021 |
| 04713 | MOTOROLA INC | ROSELLE | IL | US | 60195 |
| 06665 | PRECISION MONOLITHICS INC | SANTA CLARA | CA | US | 95054 |
| 13103 | THERMALLOY INC | DALLAS | TX | US | 75234 |
| 17856 | SILICONIX INC | SANTA CLARA | CA | US | 95054 |
| 18324 | SIGNETICS CORP | SUNNYVALE | CA | US | 94086 |
| 18873 | DUPONT E I DE NEMOURS & CO | WILMINGTON | DE | US | 19801 |
| 19701 | NORTH AMERICAN PHILIPS CORP | NEW YORK | NY | US | 10017 |
| 24226 | GOWANDA ELECTRONICS CORP | GOWANDA | NY | US | 14070 |
| 24355 | ANALOG DEVICES INC | NORWOOD | MA | US | 02062 |
| 24546 | CORNING GLASS WORKS | CORNING | NY | US | 14830 |
| 24931 | SPECIALTY CONNECTOR CO | FRANKLIN | IN | US | 46131 |
| 26742 | METHODE ELECTRONICS INC | CHICAGO | IL | US | 60656 |
| 27014 | NATIONAL SEMICONDUCTOR CORP | SANTA CLARA | CA | US | 95052 |
| 28480 | HEWLETT-PACKARD COMPANY - CORPORATE | PALO ALTO | CA | US | 94304 |
| 2M627 | ROHM CORP | IRVINE | CA | US | 92713 |
| 34333 | SILICON GENERAL INC | SAN JOSE | CA | US | 95134 |
| 34335 | ADVANCED MICRO DEVICES INC | SUNNYVALE | CA | US | 94086 |
| 34371 | HARRIS CORP | MELBOURNE | FL | US | 32901 |
| 3L585 | RCA CORP | NEW YORK | NY | US | 10112 |
| 42838 | NATIONAL RIVET & MFG CO | WAUPUN | WI | US | 53963 |
| 46384 | PENN ENGINEERING & MFG CORP | DOYLESTOWN | PA | US | 18901 |
| 55285 | BERQUIST CO | MINNEAPOLIS | MN | US | 55420 |
| 56289 | SPRAGUE ELECTRIC CO | LEXINGTON | MA | US | 02173 |
| 71744 | GENERAL INSTRUMENT CORP | CLIFTON | NJ | US | 07012 |
| 72983 | ESSEX INTERNATIONAL INC | FORT WAYNE | IN | US | 46804 |
| 73138 | BECKMAN INDUSTRIAL CORP | FULLERTON | CA | US | 92635 |
| 75263 | KEYSTONE CARBON CO INC | ST. MARY | PA | US | 15857 |
| 75915 | LITTELFUSE INC | DES PLAINES | IL | US | 60016 |
| 76854 | OAK INDUSTRIES INC CO | WALTHAM | MA | US | 02154 |
| 84411 | AMERICAN SHIZUKI CORP | CANOGA PARK | CA | US | 91304 |
| 85480 | BRADY W H CO | MILWAUKEE | WI | US | 53209 |
| 91637 | DALE ELECTRONICS INC | COLUMBUS | NE | US | 68601 |
| 92194 | ALPHA WIRE CORP | ELIZABETH | NJ | US | 07207 |



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| ENGINEERING RESPONSIBILITY | DESIGN | D. 23245-66511-1 | |
| DATE | REVISED | APPROVED | DATE |
| A | AS ISSUED | | |



USE LOGIC ON THIS PAGE

| | |
|---------|--------------------------|
| 74LS00 | NAND |
| 74LS04 | INVERTER |
| 74LS10 | NAND |
| 74LS125 | MONOSTABLE MULTIVIBRATOR |
| 74LS163 | COUNTER |
| 74LS244 | BUS DRIVER |
| 74LS245 | BUS TRANSCEIVER |
| 74LS277 | TRISTATE BUFFER |



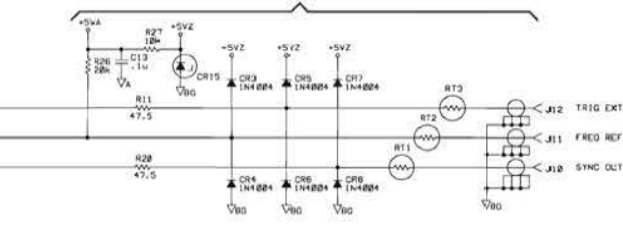
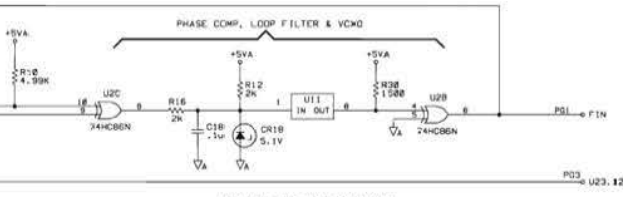
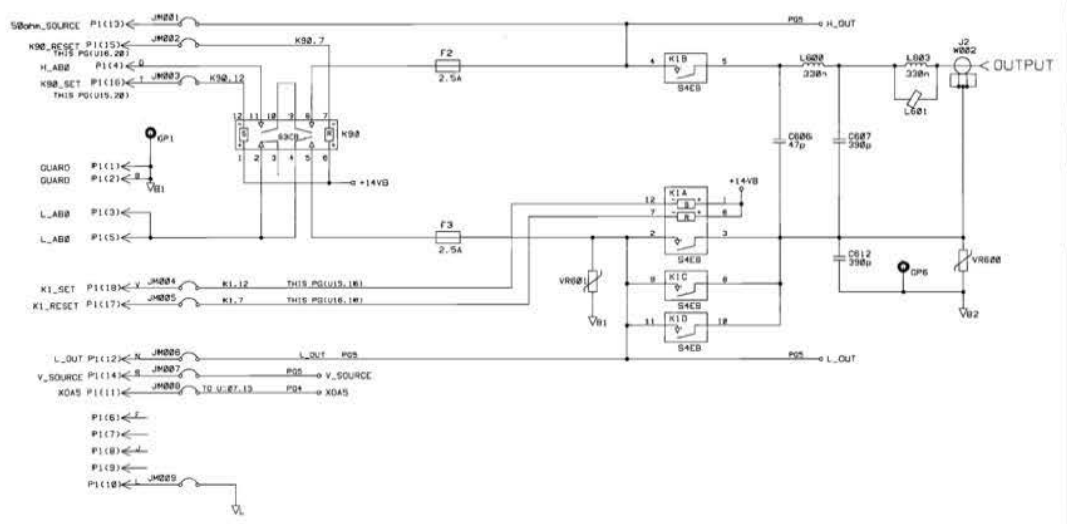
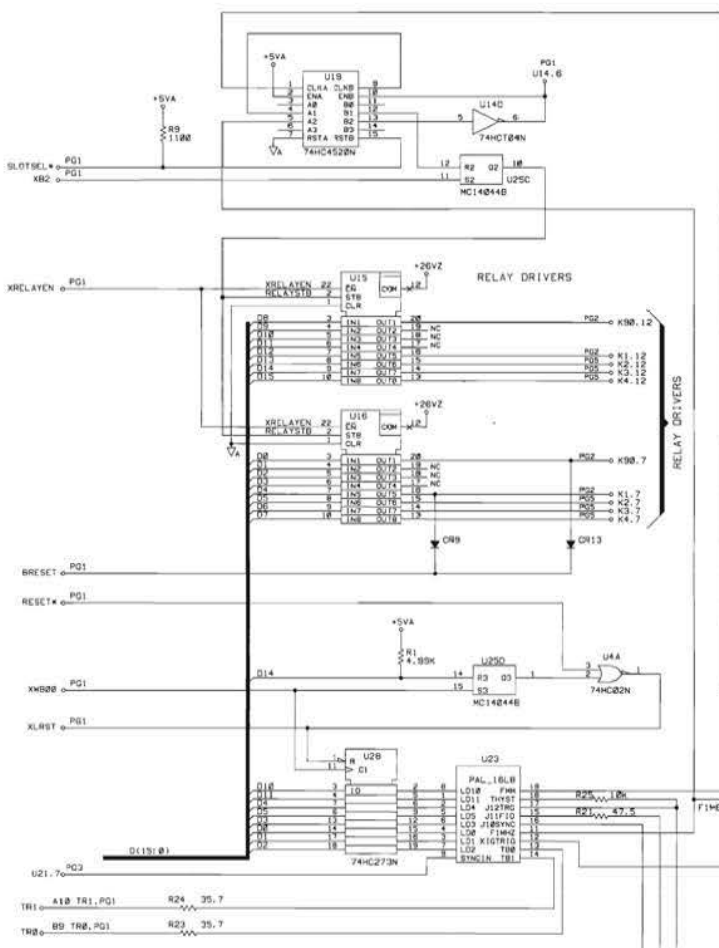
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| REV. BACH | DATE | DATE | AC/DC-SOURCE-DIGITAL POWER SUPPLY OUTGUARD LOGIC | | | |
| DRAWN BY | ENGINEER/CHECKER | RELEASE TO PROD. | | | | |
| SUPERSEDES DWG. | SCALE | SHEET 015 | | | | |
| | | | PART NUMBER 83245-66511 | | 83245-66511-1 | |

ENGINEERING RESPONSIBILITY SEPIA

C - 03245- 66511 - 1

| SYM | REVISIONS | APPROVED | DATE |
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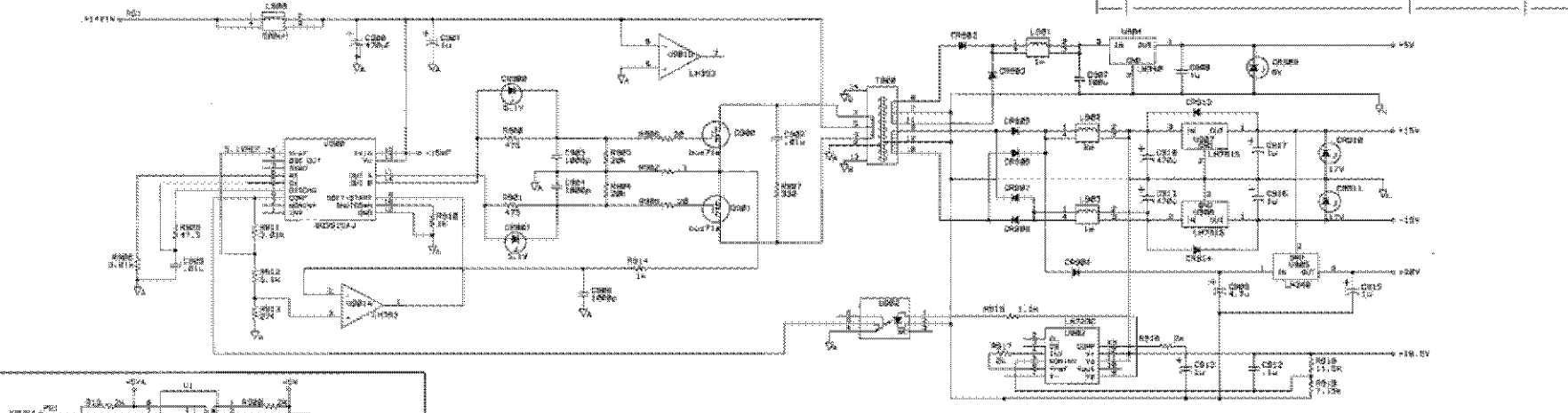


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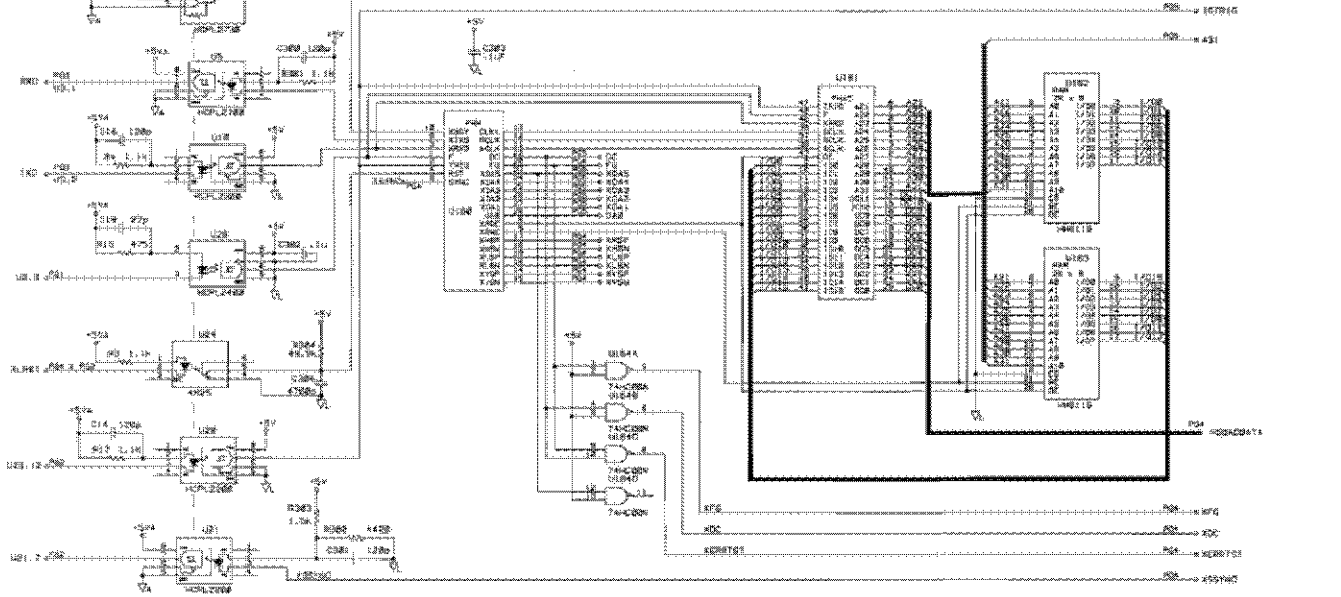
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| U100 | 1 | 74HC04 | | | |

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| ENGINEERING APPROVED: [Signature] | | SC14 | | C - 03245 - 66511 - 1 | |
| REV | DESCRIPTION | APPROVED | DATE | | |
| A | AS ISSUED | | | | |

POWER SUPPLY



INGUARD LOGIC



PINS CONNECTED TO COMMON POWER/SIGNAL NETS:

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| U11 | 74180 | 15 | GND |
| U11 | 74180 | 16 | VCC |
| U11 | 74180 | 17 | GND |
| U11 | 74180 | 18 | VCC |
| U11 | 74180 | 19 | GND |
| U11 | 74180 | 20 | VCC |
| U11 | 74180 | 21 | GND |
| U11 | 74180 | 22 | VCC |
| U11 | 74180 | 23 | GND |
| U11 | 74180 | 24 | VCC |
| U11 | 74180 | 25 | GND |
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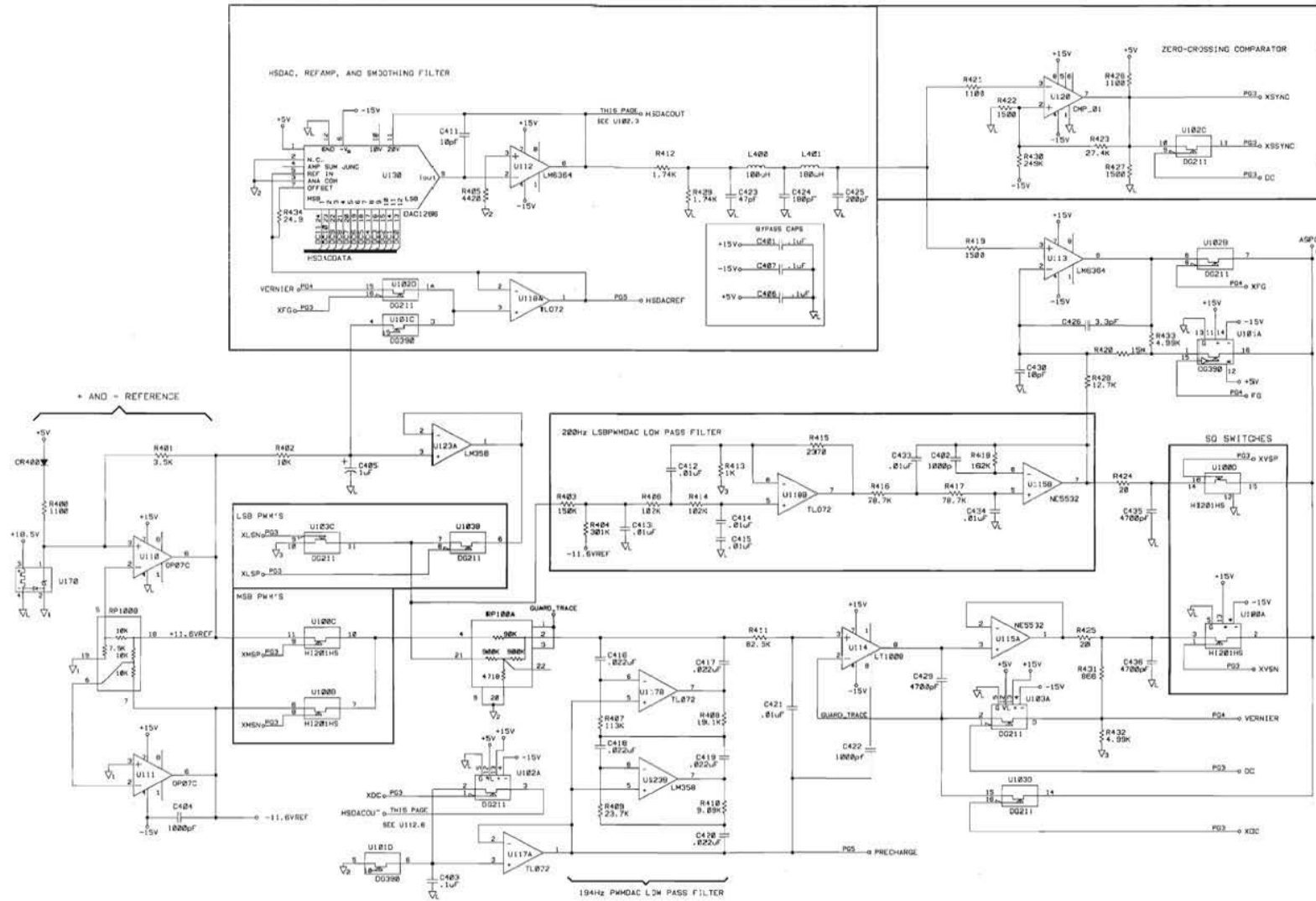
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| U40 | 74181 |
| U41 | 74180 |
| U42 | 74182 |
| U43 | 74181 |
| U44 | 74180 |
| U45 | 74182 |
| U46 | 74181 |
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| U50 | 74180 |
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| U58 | 74181 |
| U59 | 74180 |
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| U61 | 74181 |
| U62 | 74180 |
| U63 | 74182 |
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| U74 | 74180 |
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| U82 | 74181 |
| U83 | 74180 |
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| U85 | 74181 |
| U86 | 74180 |
| U87 | 74182 |
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| U89 | 74180 |
| U90 | 74182 |
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| U92 | 74180 |
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| U94 | 74181 |
| U95 | 74180 |
| U96 | 74182 |
| U97 | 74181 |
| U98 | 74180 |
| U99 | 74182 |
| U100 | 74181 |

| | | | | | | |
|------------------|-----|--------|---------------------------|-------------------------|---------------|------------|
| ITEM | QTY | SYMBOL | PART/MATERIAL DESCRIPTION | MFG. PART NO. | MFG. DWG. NO. | MFG. SPEC. |
| 610 | 2 | 610 | AC/DC-SOURCE-DIGITAL | | | |
| DRAWN BY | | | DATE | AC/DC-SOURCE-DIGITAL | | |
| ENGINEER/CHECKER | | | | POWER SUPPLY | | |
| RELEASE TO PROD. | | | | INGUARD LOGIC | | |
| SUPERSEDES DWG. | | | | SCALE | AS SHOWN | |
| | | | | PART NUMBER 03245-66511 | | |
| | | | | C - 03245 - 66511 - 1 | | |

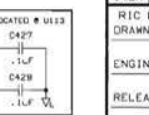
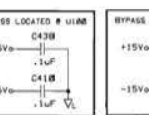
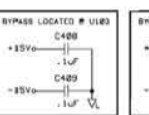
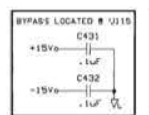
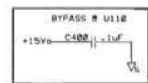


| SYM | REVISIONS | APPROVED | DATE |
|-----|-----------|----------|------|
| A | AS ISSUED | | |



ICs USED ON THIS PAGE:

| | |
|------|------|
| U102 | U115 |
| U103 | U117 |
| U104 | U118 |
| U105 | U120 |
| U106 | U122 |
| U107 | U123 |
| U108 | U124 |
| U109 | U125 |
| U110 | U126 |
| U111 | U127 |
| U112 | U128 |
| U113 | U129 |
| U114 | U130 |



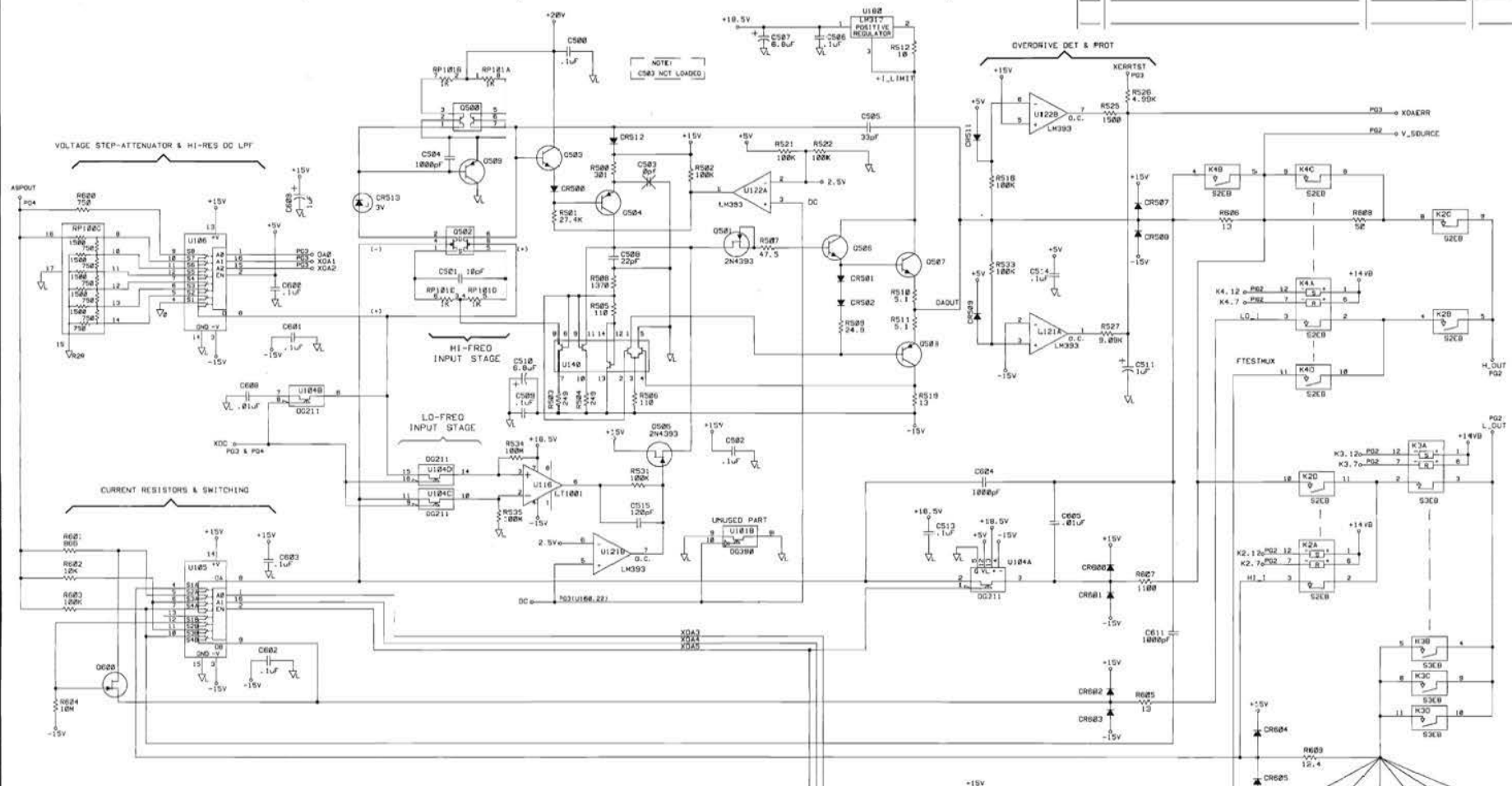
| ITEM | QTY | PART/MATERIAL-DESCRIPTION | MAT'L-PART NO. | MAT'L-DWG. NO. | MAT'L-SPEC. |
|------------------|-----|---------------------------|----------------|----------------|-----------------------|
| BT45114 | | | | | |
| RIC BACON | | | 30-OCT-90 | | AC/DC-SOURCE-DIGITAL |
| DRAWN BY | | | DATE | | HSDAC, REFAMP |
| ENGINEER/CHECKER | | | | | SMOOTHING FILTER |
| RELEASE TO PROD. | | | | | + & - REFERENCE |
| SUPERSEDES DWG. | | | | | LOW PASS FILTERS |
| TITLE | | | SCALE | SHEET 4 OF 5 | C - 03245 - 66511 - 1 |



PART NUMBER 03245-66511

OUTPUT AMP

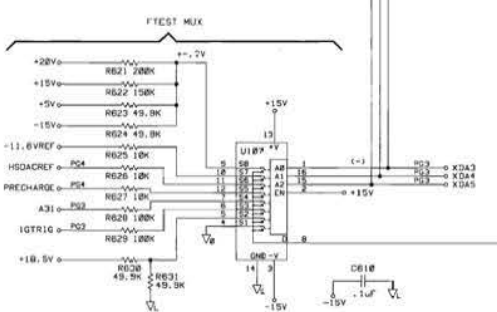
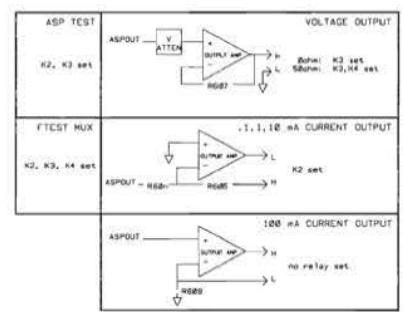
| | | | | | |
|----------------------------|-----------|-----------|----------|-----------------------|--|
| ENGINEERING RESPONSIBILITY | | SEP 1A | | C - 03245 - 66511 - 1 | |
| SYN | REV | REVISIONS | APPROVED | DATE | |
| A | AS ISSUED | | | | |



ICs USED ON THIS PAGE:

| | |
|------|----|
| U101 | K2 |
| U104 | K3 |
| U105 | K4 |
| U106 | |
| U107 | |
| U110 | |
| U121 | |
| U122 | |
| U108 | |
| U100 | |

| | |
|----|--------|
| FG | DC |
| 0 | SG |
| 1 | DC |
| 1 | FG |
| 1 | CARTST |



| | | | | | | |
|------------------|-----------|---|--|-------------------------|----------------|-------------|
| BT4E11x5 | | PART/MATERIAL-DESCRIPTION | | MAT'L-PART NO. | MAT'L-DWG. NO. | MAT'L-SPEC. |
| ITER | QTY | AC/DC-SOURCE-DIGITAL OVERDRIVE DET ATTENUATOR OUTPUT AMP FTST MUX | | | | |
| RIC BACON | 30-OCT-90 | DATE | | HEWLETT PACKARD | | |
| ENGINEER/CHECKER | | TITLE | | PART NUMBER 34521-66501 | | |
| RELEASE TO PROD. | | SCALE | | SHEET 5 OF 5 | | |
| SUPERSEDES DWG. | | C - 03245 - 66511 - 1 | | | | |

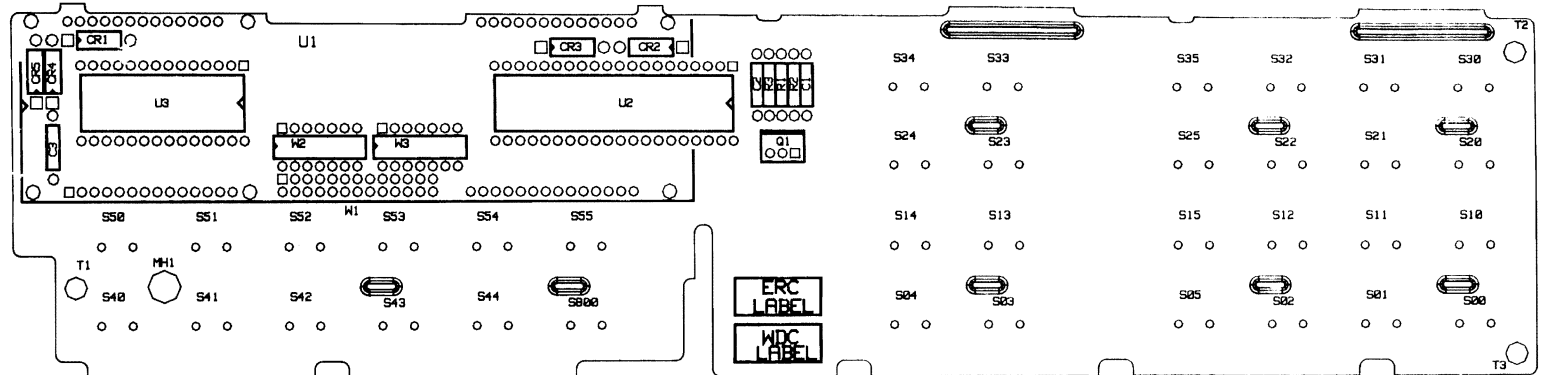
03458-66507 REPLACEMENT PARTS

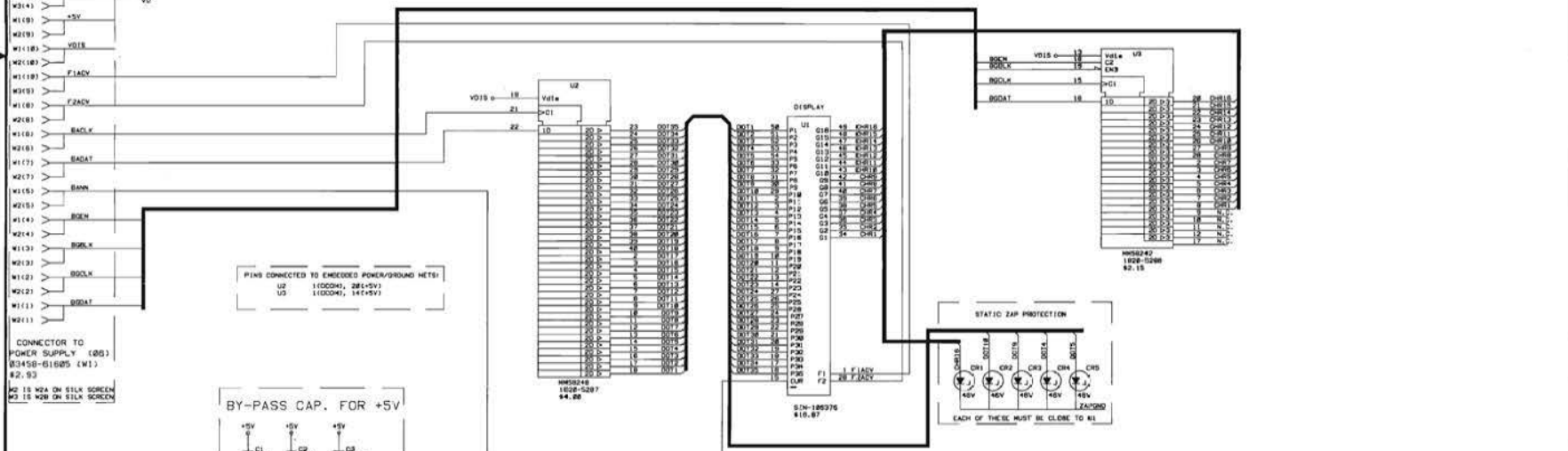
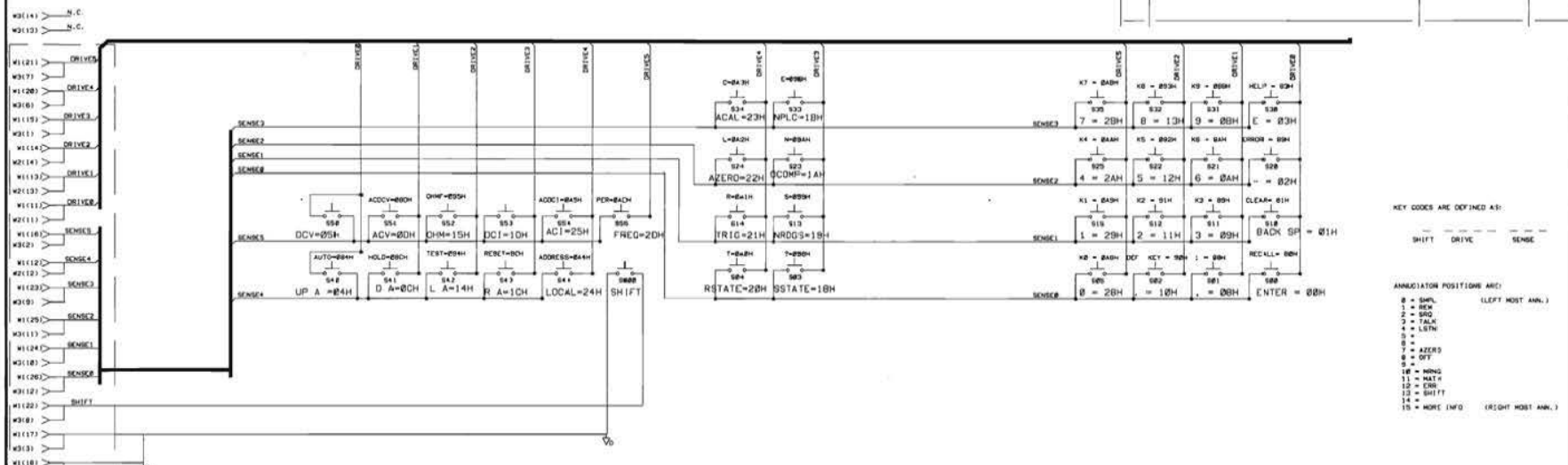
| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|-------------------|
| A7 | 03458-66507 | 1 | DISPLAY LOGIC BOARD | 28480 | 03458-66507 |
| A7C1-C3 | 0160-4832 | 3 | CAPACITOR-FXD 0.01uF +-10% 100 V CER X7R | 04222 | SA101C103KAAH |
| A7CR1-CR5 | 1902-0657 | 5 | DIODE-ZENER 43.2V 5% PD=1W TC=+.08% IR=100 | 28480 | 1902-0657 |
| A7LBL1 | 7121-7148 | 1 | LABEL-INFORMATION .25-IN-WD .9-IN-LG | 28480 | 7121-7148 |
| A7LBL2 | 9320-5333 | 1 | LBL-LNE-PTR; .625-IN-WD X .25-IN-LG | 28480 | 9320-5333 |
| A7PCB7 | 03458-26507 | 1 | PRINTED CIRCUIT BOARD - BLANK | 28480 | 03458-26507 |
| A7Q1 | 1853-0510 | 1 | TRANSISTOR PD=625MW | 28480 | 1853-0510 |
| A7R1 | 0757-0273 | 1 | RESISTOR 3.01K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-3011-F |
| A7R2 | 0757-0442 | 1 | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| A7R3 | 0757-0458 | 1 | RESISTOR 51.1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-5112-F |
| A7SHD1-SHD2 | 03458-00604 | 2 | SHIELD-ESD | 28480 | 03458-00604 |
| A7U1 | 2090-0217 | 1 | DISPLAY-VFD MONITOR | 28480 | 2090-0217 |
| A7U2 | 1820-5287 | 1 | IC-INTERFACE DRIVER CMOS DISPLAY | 27014 | MM58248N |
| A7U3 | 1820-5286 | 1 | IC-INTERFACE DRIVER CMOS DISPLAY | 27014 | MM58242N |
| A7W1 | 03458-61606 | 1 | CABLE ASSEMBLY 26P | 28480 | 03458-61606 |

Code List of Manufacturers - 03458-66507

| Mfr. Code | Manufacturer's Name | Manufacturer's Address | Zip Code |
|-----------|-------------------------------------|------------------------|----------|
| 04222 | AVX CORP | GREAT NECK NY US | 11021 |
| 24546 | CORNING GLASS WORKS | CORNING NY US | 14830 |
| 27014 | NATIONAL SEMICONDUCTOR CORP | SANTA CLARA CA US | 95052 |
| 28480 | HEWLETT PACKARD COMPANY - CORPORATE | PALO ALTO CA US | 94304 |

C-03458-66507--2





| ITEM | QTY | PART/MATERIAL-DESCRIPTION | MAT'L-PART NO. | MAT'L-DWG. NO | MAT'L-SPEC. |
|------------------|-----|---------------------------|----------------|-----------------------|-------------|
| DRAWN BY | | 28-JAN-88 | DATE | | |
| ENGINEER/CHECKER | | FRONT PANEL | | | |
| RELEASE TO PROD. | | TITLE | | | |
| SUPERSEDES DWG. | | SCALE | SHEET 1 of 1 | C - 03458 - 66507 - 1 | |

HEWLETT PACKARD
PART NUMBER 03458-66507

HP 3245A OPTION 002 - HIGH VOLTAGE AMP REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|--------------------|-----|--|--------------|--------------------|
| | 03245-80002 | 1 | HIGH VOLTAGE KIT | 28480 | 03245-80002 |
| | 03245-60202 | 1 | FRONT PANEL | 28480 | 03245-60202 |
| PNL1 | 03245-40202 | 1 | PANEL F/W LABEL OPT2 | 28480 | 03245-40202 |
| MP1 | 03245-81901 | 1 | SW-PADS,RUBBER | 28480 | 03245-81901 |
| MP2 | 03245-69301 | 1 | WINDOW-DISPLAY SS | 28480 | 03245-69301 |
| * A7 | 03458-66507 | 1 | DISPLAY LOGIC PRINTED CIRCUIT BOARD | 28480 | 03458-66507 |
| SCW1 | 0624-0681 | 1 | SCREW-TPG 4-20 .25-IN-LG PAN-HD-TORX | 28480 | 0624-0681 |
| | 03245-84304 | 1 | LABEL-RR PANEL, OPT2 | 28480 | 03245-84304 |
| | 0515-0372 | 5 | SCREW-MACH ASSEMBLY M3 X 0.5 8MM-LG PAN-HD | 28480 | 0515-0372 |
| | 2190-0099 | 1 | WASHER-LK 7/16 IN .472-IN-ID .607-IN-OD | 54294 | 16-886 |
| | 2950-0035 | 1 | NUT-HEX-DBL-CHAM 15/32-32-THD | 28480 | 2950-0035 |
| | 03245-66503 | 1 | PRINTED CIRCUIT ASSY HIGH VOLTAGE AMP | 28480 | 03245-66503 |
| | 0361-0321 | 2 | RIVET-SEMITUB OVH .123DIA .469LG | 42838 | TC1-15-ST |
| | 0361-1294 | 2 | RIVET-SEMITUB OVH .099DIA .328LG | 28480 | 0361-1294 |
| | 1400-0249 | 1 | CABLE TIE .062-.625-DIA .091-WD NYLON | 59730 | TY-23M-8 |
| C101-C102 | 0180-3810 | 4 | CAPACITOR-FXD 68uF +-20% 50 V AL-ELCTLT | 28480 | 0180-3810 |
| C103 | 0160-4832 | 1 | CAPACITOR-FXD 0.01uF +-10% 100 V CER X7R | 04222 | SA101C103KAAH |
| C104 | 0160-4822 | 1 | CAPACITOR-FXD 1000pF +-5% 100 V CER COG | 04222 | SA201A102JAAH |
| C105-C106 | 0180-3810 | 1 | CAPACITOR-FXD 68uF +-20% 50 V AL-ELCTLT | 28480 | 0180-3810 |
| C107 | 0180-4130 | 4 | CAPACITOR-FXD 2.2uF +-10% 20 V TA | 56289 | 173D225X9020V |
| C108 | 0180-4007 | 2 | CAPACITOR-FXD 4.7uF +-20% 200 V AL-ELCTLT | 28480 | 0180-4007 |
| C110 | 0160-0168 | 2 | CAPACITOR-FXD 0.1uF +-10% 200 V POLYE-FL | 28480 | 0160-0168 |
| C111 | 0180-4007 | 2 | CAPACITOR-FXD 4.7uF +-20% 200 V AL-ELCTLT | 28480 | 0180-4007 |
| C113 | 0160-0168 | 2 | CAPACITOR-FXD 0.1uF +-10% 200 V POLYE-FL | 28480 | 0160-0168 |
| C201 | 0160-4791 | 1 | CAPACITOR-FXD 10pF +-5% 100 V CER COG | 04222 | SA102A100JAAH |
| C202 | 0160-4805 | 1 | CAPACITOR-FXD 47pF +-5% 100 V CER COG | 04222 | SA102A470JAAH |
| C203 | 0160-4786 | 1 | CAPACITOR-FXD 27pF +-5% 100 V CER COG | 04222 | SA102A270JAAH |
| C204 | 0180-3552 | 1 | CAPACITOR-FXD 4.7uF +-10% 20 V TA | 56289 | 173D475X9020V1 |
| C205-C207 | 0180-4130 | 1 | CAPACITOR-FXD 2.2uF +-10% 20 V TA | 56289 | 173D225X9020V |
| C212 | 0160-4793 | 1 | CAPACITOR-FXD 6.8pF +-7.35% 100 V CER COG | 04222 | SA102A6R8DAAH |
| C213-C214 | 0160-4801 | 2 | CAPACITOR-FXD 100pF +-5% 100 V CER COG | 04222 | SA102A101JAAH |
| CR101-CR108 | 1901-1065 | 10 | DIODE-POWER RECTIFIER 1N4936 400V 1A 200NS | 30043 | 1N4936 |
| CR109-CR110 | 1901-1307 | 2 | DIODE VOLTAGE SUPPRESSOR (AXIAL PLASTIC) | 04713 | 1.5KE160A |
| CR111 | 1990-1022 | 1 | LED-LAMP LUM-INT=4MCD 25MA-MAX BVR=5V RED LENS | 28480 | HLMP-5030 |
| CR201 | 1902-0556 | 2 | DIODE-ZENER 20V 5% PD=1W IR=5UA | 28480 | 1902-0556 |
| CR202-CR203 | 1901-0050 | 6 | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| CR204 | 1902-0556 | 2 | DIODE-ZENER 20V 5% PD=1W IR=5UA | 28480 | 1902-0556 |
| CR205-CR206 | 1901-1065 | 2 | DIODE-POWER RECTIFIER 1N4936 400V 1A 200NS | 30043 | 1N4936 |
| CR207-CR210 | 0837-0196 | 4 | VOLTAGE SUPPRESSOR VNOM=430V, 10A PEAK | 34371 | V430MT3A |
| CR211-CR213 | 1901-0050 | 2 | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| CR214 | 1902-0959 | 2 | DIODE-ZENER 11V 5% PD=.4W TC=+.076% IR=5UA | 28480 | 1902-0959 |
| CR215 | 1901-0047 | 1 | DIODE-SWITCHING 20V 75MA 10NS DO-35 | 28480 | 1901-0047 |
| CR216 | 1902-0959 | 1 | DIODE-ZENER 11V 5% PD=.4W TC=+.076% IR=5UA | 28480 | 1902-0959 |
| CR217 | 1901-0050 | 1 | DIODE-SWITCHING 80V 200MA 2NS DO-35 | 28480 | 1901-0050 |
| F101 | 2110-0698 | 1 | FUSE-SUBMINIATURE 2.5A 125V NTD AX | 75915 | R25102.5T1 |
| F201 | 2110-0757 | 1 | FUSE-SUBMINIATURE .063A 125V AX UL CSA | 75915 | 251.062 |
| F202-F204 | 2110-0679 | 3 | FUSE-SUBMINIATURE 1.5A 125V NTD AX UL | 75915 | R25101.5T1 |
| HDW101-HDW101A | 0515-0458 | 4 | SCREW-MACH ASSEMBLY M3.5 X 0.6 8MM-LG PAN-HD | 28480 | 0515-0458 |
| HS101 | 1205-0799 | 1 | HEAT SINK SGL TO-220-CS | 30161 | 552022B |
| HS202 | 1205-0798 | 1 | HEAT SINK SGL TO-3-CS | 30161 | 506115B00700 |
| HWD1-HWD2 | 0590-1237 | 2 | THREADED INSERT-NUT M3.5 X 0.6 1.5-MM-LG | 46384 | KF2-M3.5 |
| HWD202-HWD202A | 0515-0458 | 1 | SCREW-MACH ASSEMBLY M3.5 X 0.6 8MM-LG PAN-HD | 28480 | 0515-0458 |
| J201 | 1251-4682 | 1 | CONNECTOR-POST TYPE .100-PIN-SPCG 3-CONTACT | 26742 | 1102-1-103-02 |
| JM201-JM204 | 8159-0005 | 4 | RESISTOR 0 MFS | 55210 | L-2007-1 |

* IN-DEPTH COMPONENT LOCATOR IN SECTION UNDER INDIVIDUAL HP PART NUMBER.

HP 3245A OPTION 002 - HIGH VOLTAGE AMP REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|---------------------|
| K201 | 0490-1566 | 1 | RELAY 4A 12VDC-COIL 4A 250VAC | 28480 | 0490-1566 |
| K202 | 0490-1526 | 1 | RELAY-REED | 28480 | 0490-1526 |
| K203-K204 | 0490-1649 | 2 | RELAY 2B 12VDC-COIL 3A 250VDC | 28480 | 0490-1649 |
| L101 | 9100-3334 | 2 | INDUCTOR 25UH +-10% .3D-INX.505LG-IN | 99848 | ES-2638 |
| L201 | 9100-3334 | | INDUCTOR 25UH +-10% .3D-INX.505LG-IN | 99848 | ES-2638 |
| MT1 | 03245-61601 | 1 | CABLE-FEM BNC TO PC BOARD 260MM LONG | 28480 | 03245-61601 |
| | 1250-0050 | 1 | NUT-RF CONNECTOR BNC SERIES; CLAMP NUT | 24931 | NS101-2 |
| | 1250-0051 | 1 | CONTACT-RF CONNECTOR SER BNC; FEMALE | 24931 | C182-1 |
| | 1250-0052 | 1 | BODY-RF CONNECTOR BNC SERIES; FOR MALE | 24931 | 28P117-1 |
| | 1250-0960 | 1 | SLEEVE-RF CONNECTOR SERIES BNC/TNC | 24931 | T101-13 |
| | 8120-1280 | 1 | CABLE-COAX 50-OHM 1.2KV 29PF/FT MAX | 72983 | 421-077 |
| P1 | 5180-6699 | 1 | CONNECTOR-2X9M> NOKEY | 28480 | 5180-6699 |
| P2 | 1252-1591 | 1 | CONNECTOR-POST TYPE 5.08-PIN-SPCG 48-CONTACT | 00779 | 534893-5 |
| P201 | 1258-0141 | 1 | JUMPER-REMOVABLE FOR .025 IN SQ PINS | 18873 | 65474-004 |
| PCB1 | 03245-26503 | 1 | PRINTED CIRCUIT BOARD - BLANK | 28480 | 03245-26503 |
| Q101-Q103 | 1855-0548 | 3 | TRANSISTOR MOSFET N-CHAN E-MODE TO-220 | 04713 | BUZ71A |
| Q201 | 1853-0700 | 1 | TRANSISTOR PNP SI TO-92 PD=625MW | 27014 | 6292/T62547A |
| R101 | 0757-0406 | 1 | RESISTOR 182 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-182R-F |
| R102 | 0757-0283 | 3 | RESISTOR 2K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2001-F |
| R103 | 0757-0277 | 1 | RESISTOR 49.9 +-1% .125W TF TC=0+-100 | 28480 | 0757-0277 |
| R104 | 0757-0280 | 3 | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| R105 | 0757-0273 | 2 | RESISTOR 3.01K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-3011-F |
| R106 | 0757-0438 | 3 | RESISTOR 5.11K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-5111-F |
| R107 | 0698-4446 | 1 | RESISTOR 267 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-267R-F |
| R108-R109 | 0757-0400 | 3 | RESISTOR 90.9 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-90R9-F |
| R110 | 0757-0280 | 1 | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| R111 | 0699-1075 | 1 | RESISTOR .1 +-3% 3W MFS TC=0+-70 | 01686 | LO-3-0.1-3-RP |
| R112 | 0757-0433 | 3 | RESISTOR 3.32K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-3321-F |
| R201-R202 | 0757-0442 | 4 | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| R203-R204 | 0698-3457 | 4 | RESISTOR 316K +-1% .125W TF TC=0+-100 | 28480 | 0698-3457 |
| R205 | 0757-0290 | 2 | RESISTOR 6.19K +-1% .125W TF TC=0+-100 | 19701 | 5033R-1/8-T0-6191-F |
| R206 | 0757-0280 | 1 | RESISTOR 1K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1001-F |
| R207 | 0757-0284 | 1 | RESISTOR 150 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-151-F |
| R208 | 0699-3208 | 1 | RESISTOR 4.443K +-0.1% .3W MF TC=0+-2.5 | 28480 | 0699-3208 |
| R209 | 0698-4351 | 1 | RESISTOR 10.5 +-1% .125W TF TC=0+-100 | 28480 | 0698-4351 |
| R210 | 0698-4486 | 1 | RESISTOR 24.9K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2492-F |
| R211 | 2100-3274 | 1 | RESISTOR-TRIMMER 10K 10% TFK SIDE-ADJ 1-TRN | 32997 | 3386X-Y46-103 |
| R212-R215 | 0699-1125 | 4 | RESISTOR 40K +-1% .6W TC=0+-1.3 | 28480 | 0699-1125 |
| R216 | 0698-4355 | 1 | RESISTOR 12.4 +-1% .125W TF TC=0+-100 | 28480 | 0698-4355 |
| R217 | 0698-3431 | 1 | RESISTOR 23.7 +-1% .125W TF TC=0+-100 | 28480 | 0698-3431 |
| R218 | 0757-0393 | 1 | RESISTOR 47.5 +-1% .125W TF TC=0+-100 | 28480 | 0757-0393 |
| R219 | 0757-0400 | 1 | RESISTOR 90.9 +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-90R9-F |
| R220 | 0757-0346 | 1 | RESISTOR 10 +-1% .125W TF TC=0+-100 | 28480 | 0757-0346 |
| R221 | 0757-0123 | 1 | RESISTOR 34.8K +-1% .125W TF TC=0+-100 | 28480 | 0757-0123 |
| R222 | 0757-0442 | 1 | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| R223-R224 | 0757-0433 | 1 | RESISTOR 3.32K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-3321-F |
| R225-R226 | 0698-3457 | 1 | RESISTOR 316K +-1% .125W TF TC=0+-100 | 28480 | 0698-3457 |
| R227 | 0757-0438 | 1 | RESISTOR 5.11K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-5111-F |
| R228 | 0757-0283 | 1 | RESISTOR 2K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2001-F |
| R229 | 0757-0442 | 1 | RESISTOR 10K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-1002-F |
| R230 | 0757-0290 | 1 | RESISTOR 6.19K +-1% .125W TF TC=0+-100 | 19701 | 5033R-1/8-T0-6191-F |
| R231 | 0757-0389 | 1 | RESISTOR 33.2 +-1% .125W TF TC=0+-100 | 28480 | 0757-0389 |
| R232 | 0757-0273 | 1 | RESISTOR 3.01K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-3011-F |
| R233 | 0757-0438 | 1 | RESISTOR 5.11K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-5111-F |
| R234 | 0757-0283 | 1 | RESISTOR 2K +-1% .125W TF TC=0+-100 | 24546 | CT4-1/8-T0-2001-F |
| T101 | 9100-4929 | 1 | TRANSFORMER-ISOLATION INPUT V | 28480 | 9100-4929 |

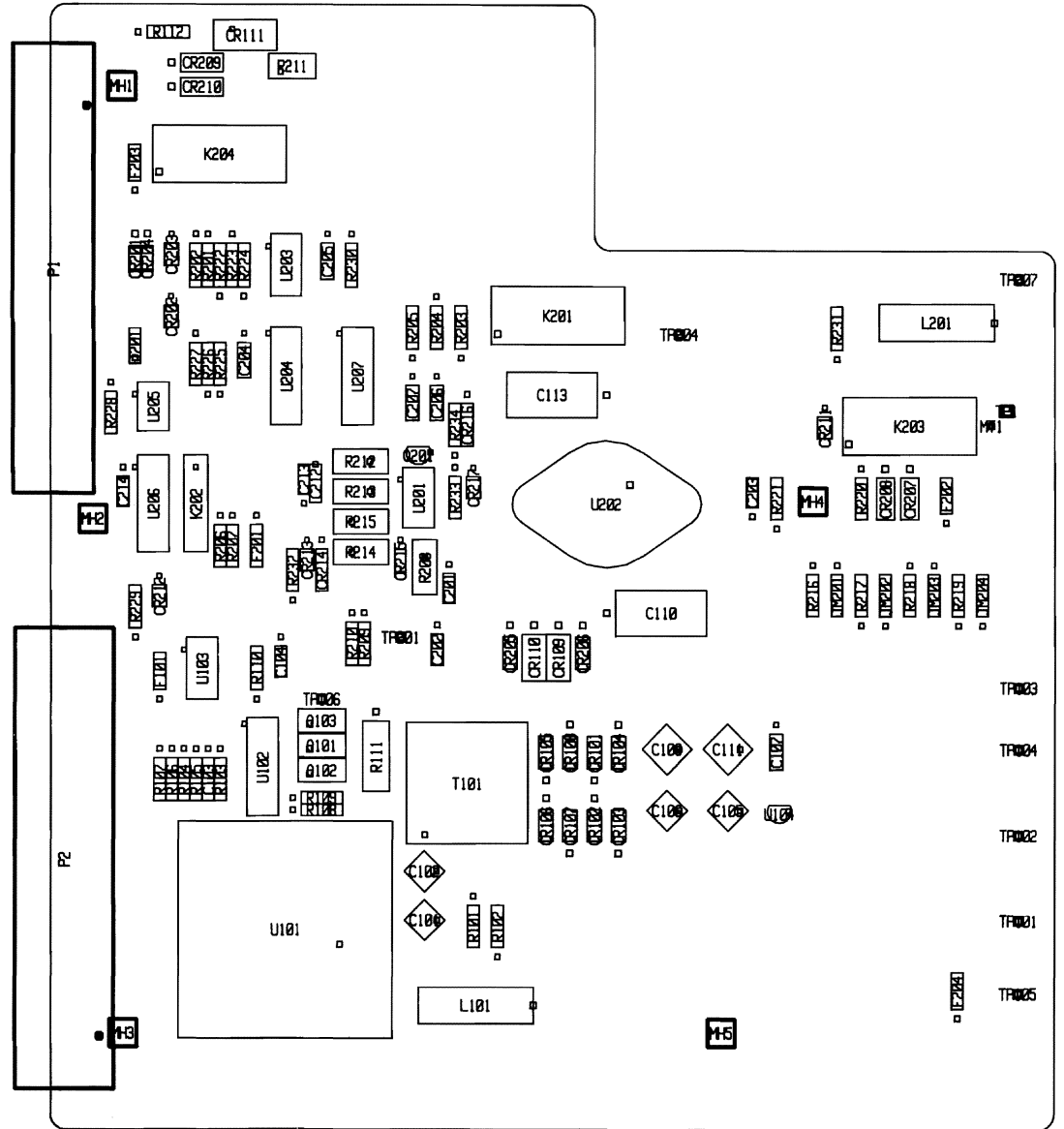
HP 3245A OPTION 002 - HIGH VOLTAGE AMP REPLACEMENT PARTS

| Reference Designation | HP Part Number | Qty | Part Description | Mfr. Code | Mfr. Part Number |
|-----------------------|----------------|-----|--|-----------|------------------|
| TP101-TP106 | 1251-0600 | 9 | CONNECTOR-SGL CONTACT PIN 1.14-MM-BSC-SZ SQ | 27264 | 16-06-0034 |
| TP201 | 1251-0600 | | CONNECTOR-SGL CONTACT PIN 1.14-MM-BSC-SZ SQ | 27264 | 16-06-0034 |
| TP204 | 1251-0600 | | CONNECTOR-SGL CONTACT PIN 1.14-MM-BSC-SZ SQ | 27264 | 16-06-0034 |
| TP207 | 1251-0600 | | CONNECTOR-SGL CONTACT PIN 1.14-MM-BSC-SZ SQ | 27264 | 16-06-0034 |
| U101 | 1826-2134 | 1 | IC VOLTAGE RGLTR-ADJ-POS 15/30V 3-TO-220 PKG | 28480 | 1826-2134 |
| U102 | 1826-0905 | 1 | IC VOLTAGE RGLTR-SWG 5/5.2V 16-DIP-P PKG | 34333 | SG3525AJ |
| U103 | 1826-0412 | 1 | IC COMPARATOR PRECISION DUAL 8-DIP-P PKG | 27014 | LM393N |
| U104 | 1826-1646 | 1 | IC VOLTAGE RGLTR-FXD-POS 4.975/5.025V TO-92 | 27014 | LP2950ACZ |
| U201 | 1826-2378 | 1 | IC OP AMP HIGH SPEED SINGLE 8 PIN TO-99 | 28480 | 1826-2378 |
| U202 | 1826-2377 | 1 | IC INSTRMNTN AMPLIFIER PWR SINGLE 8 PIN TO-3 | 28480 | 1826-2377 |
| U203 | 1826-1533 | 1 | IC OP AMP HIGH-SLEW-RATE DUAL 8 PIN DIP-PKG | 04713 | MC34072P |
| U204 | 1826-1370 | 1 | IC COMPARATOR QUAD 16-DIP-P PKG | 27014 | LP365N |
| U205 | 1990-1074 | 1 | OPTO-ISOLATOR LED-PXSTR IF=60MA-MAX | 04713 | 4N35 |
| U206A | 1820-2922 | 1 | IC GATE CMOS/74HC NAND QUAD 2-INP | 04713 | MC74HC00N |
| U207A | 1858-0047 | 1 | TRANSISTOR ARRAY 16-PIN PLASTIC DIP | 28480 | 1858-0047 |

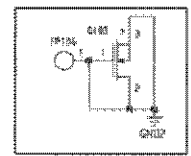
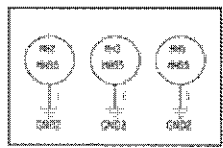
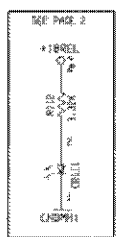
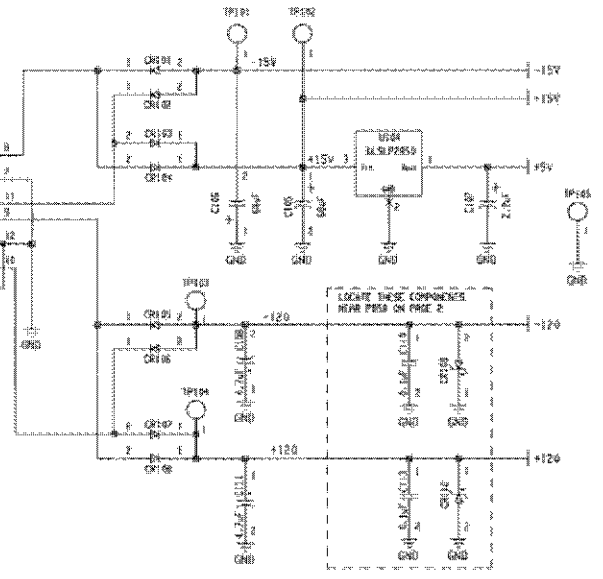
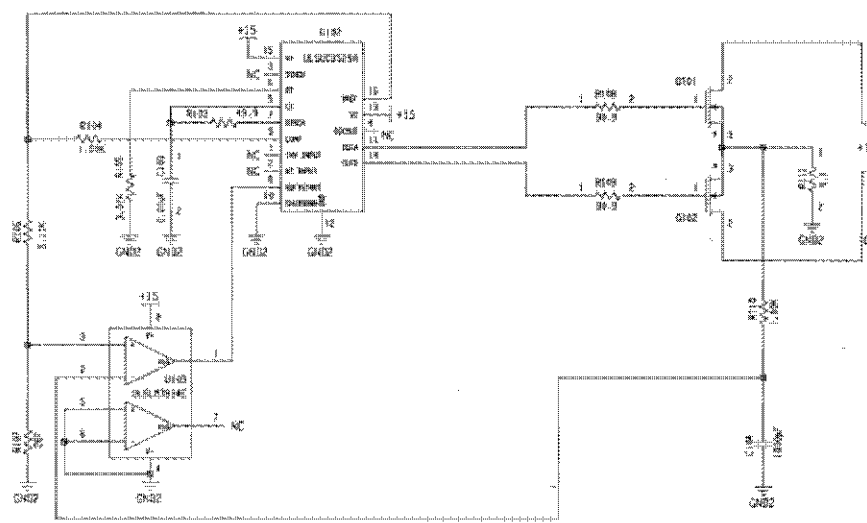
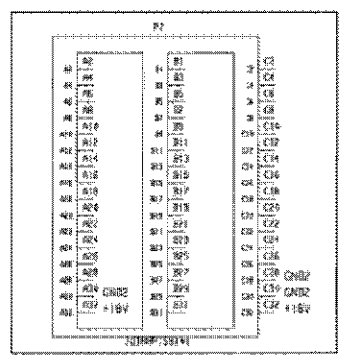
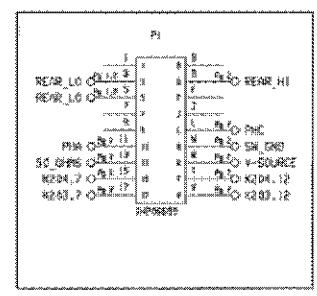
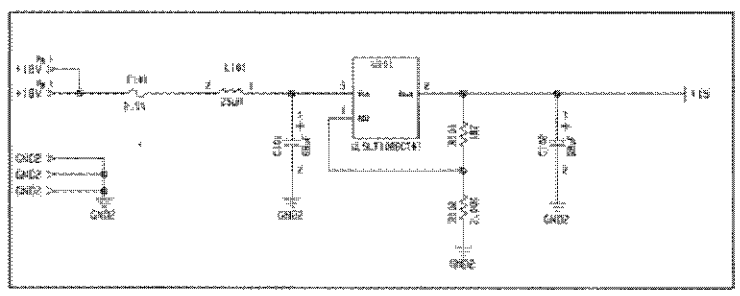
Code List of Manufacturers - HP 3245A OPTION 002

| Mfr. Code | Manufacturer's Name | Manufacturer's Address | Zip Code |
|-----------|-------------------------------------|------------------------|----------|
| 00779 | AMP INC | HARRISBURG PA US | 17111 |
| 01686 | RCL ELECTRONICS INC | NORTHBROOK IL US | 60062 |
| 04222 | AVX CORP | GREAT NECK NY US | 11021 |
| 04713 | MOTOROLA INC | ROSELLE IL US | 60195 |
| 18873 | DUPONT E I DE NEMOURS & CO | WILMINGTON DE US | 19801 |
| 19701 | NORTH AMERICAN PHILIPS CORP | NEW YORK NY US | 10017 |
| 24546 | CORNING GLASS WORKS | CORNING NY US | 14830 |
| 24931 | SPECIALTY CONNECTOR CO | FRANKLIN IN US | 46131 |
| 26742 | METHODE ELECTRONICS INC | CHICAGO IL US | 60656 |
| 27014 | NATIONAL SEMICONDUCTOR CORP | SANTA CLARA CA US | 95052 |
| 27264 | MOLEX INC | LISLE IL US | 60532 |
| 28480 | HEWLETT-PACKARD COMPANY - CORPORATE | PALO ALTO CA US | 94304 |
| 30043 | SOLID STATE DEVICES INC | LA MIRADA CA US | 90638 |
| 30161 | AAVID ENGINEERING INC | LACONIA NH US | 03247 |
| 32997 | BOURNS NETWORKS INC | RIVERSIDE CA US | 92507 |
| 34333 | SILICON GENERAL INC | SAN JOSE CA US | 95134 |
| 34371 | HARRIS CORP | MELBOURNE FL US | 32901 |
| 42838 | NATIONAL RIVET & MFG CO | WAUPUN WI US | 53963 |
| 46384 | PENN ENGINEERING & MFG CORP | DOYLESTOWN PA US | 18901 |
| 54294 | SHALLCROSS INC | NORTHBROOK IL US | 60062 |
| 55210 | GETTIG ENGINEERING & MFG CO INC | SPRING MILLS PA US | 16875 |
| 56289 | SPRAGUE ELECTRIC CO | LEXINGTON MA US | 02173 |
| 59730 | THOMAS & BETTS CORP | RARITAN NJ US | 08869 |
| 72983 | ESSEX INTERNATIONAL INC | FORT WAYNE IN US | 46804 |
| 75915 | LITTELFUSE INC | DES PLAINES IL US | 60016 |
| 99848 | WILCO CORP | INDIANAPOLIS IN US | 46222 |

03245-26503 A 2-11-91



| REV | DATE | REVISIONS | APPROVED | DATE |
|-----|------|-----------|----------|------|
| 3 | | | | |
| A | | AS ISSUED | | |

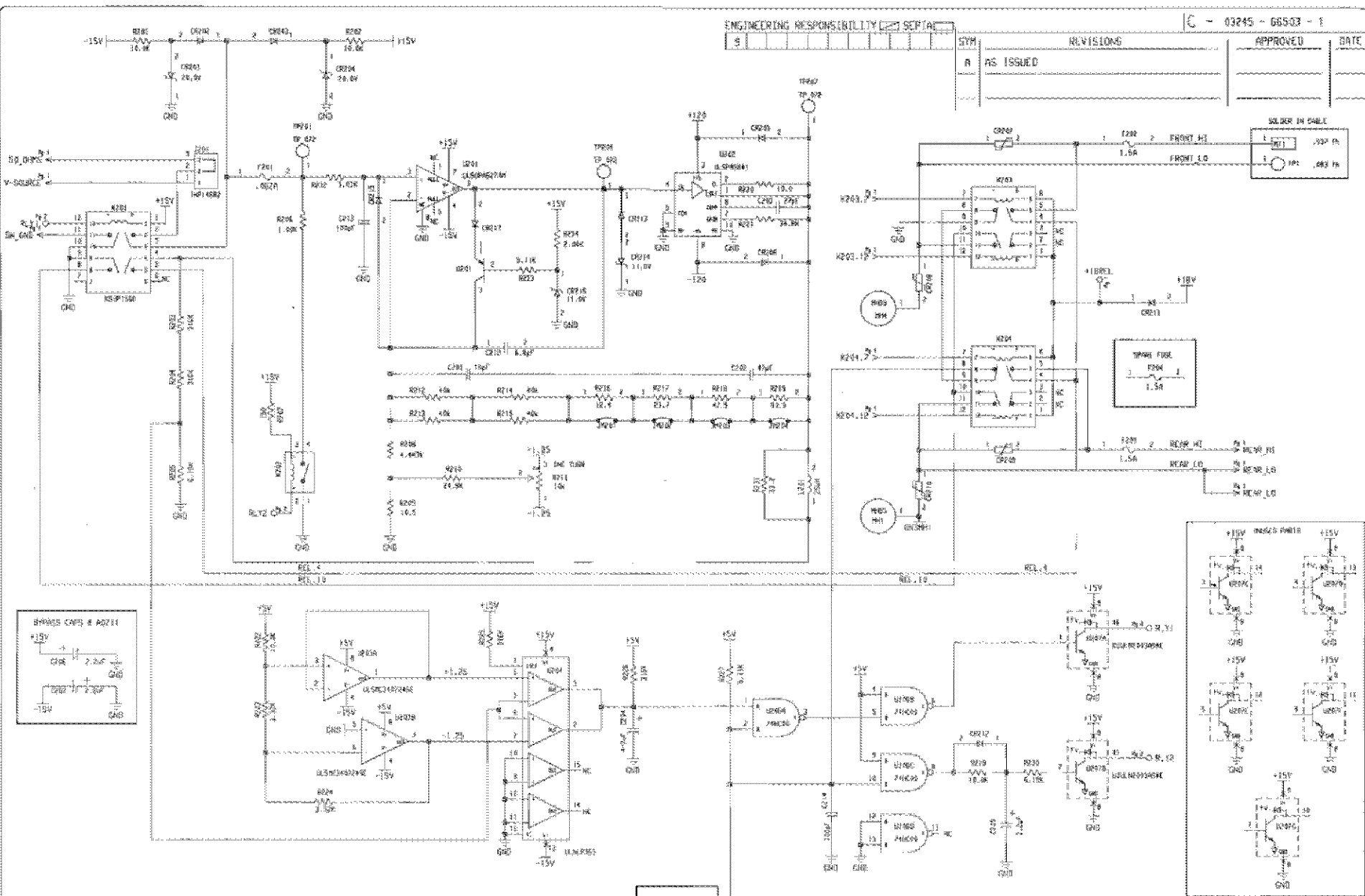


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|------------------|-----|---|----------------|-----------------------|-------------|
| DRAWN BY | | 13-MAR-91 | | | |
| ENGINEER/CHECKER | | HI VOLTAGE AND POWER SUPPLIES AND BYPASS CAPS | | | |
| RELEASE TO PROD. | | TITLE | | PART NUMBER | 03245-66503 |
| SUPERSEDES DNG. | | SCALE | SHEET 1 OF 2 | C - 03245 - 66503 - 1 | |

ENGINEERING RESPONSIBILITY: [Signature]

03245 - 66503 - 1

| REVISIONS | | APPROVED | DATE |
|-----------|-----------|----------|------|
| 1 | AS ISSUED | | |



| ITEM | QTY | PART/MATERIAL DESCRIPTION | MAT'L PART NO. | PART Q. INC. NO. | PART Q. SPEC. |
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| U4 | 1 | 74100 | 74100 | | |
| U5 | 1 | 74100 | 74100 | | |
| U6 | 1 | 74100 | 74100 | | |
| U7 | 1 | 74100 | 74100 | | |
| U8 | 1 | 74100 | 74100 | | |
| U9 | 1 | 74100 | 74100 | | |
| U10 | 1 | 74100 | 74100 | | |
| U11 | 1 | 74100 | 74100 | | |
| U12 | 1 | 74100 | 74100 | | |
| U13 | 1 | 74100 | 74100 | | |
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| U22 | 1 | 74100 | 74100 | | |
| U23 | 1 | 74100 | 74100 | | |
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| U25 | 1 | 74100 | 74100 | | |
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| U60 | 1 | 74100 | 74100 | | |
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DRAWN BY: [Name] DATE: 11-19-91
 ENGINEER/CHECKER: [Name]
 RELEASE TO PROD: SUPERDIES INC.
 TITLE: RELAY, INJECTION AND AMPLIFIERS
 SCALE: SHEET 2 OF 2
 PART NUMBER: 03245-66503

