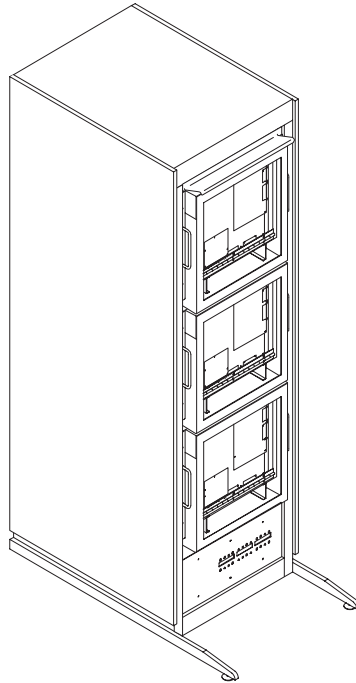


SECTION 12- GRAM CABINET

TABLE OF CONTENTS



| <u>SECTION</u> | <u>PAGE</u> |
|--------------------------------------|-------------|
| 12-1 GRAM CABINET | 12-2 |
| Contains information on GRAM Cabinet | |

12-1 GRAM CABINET

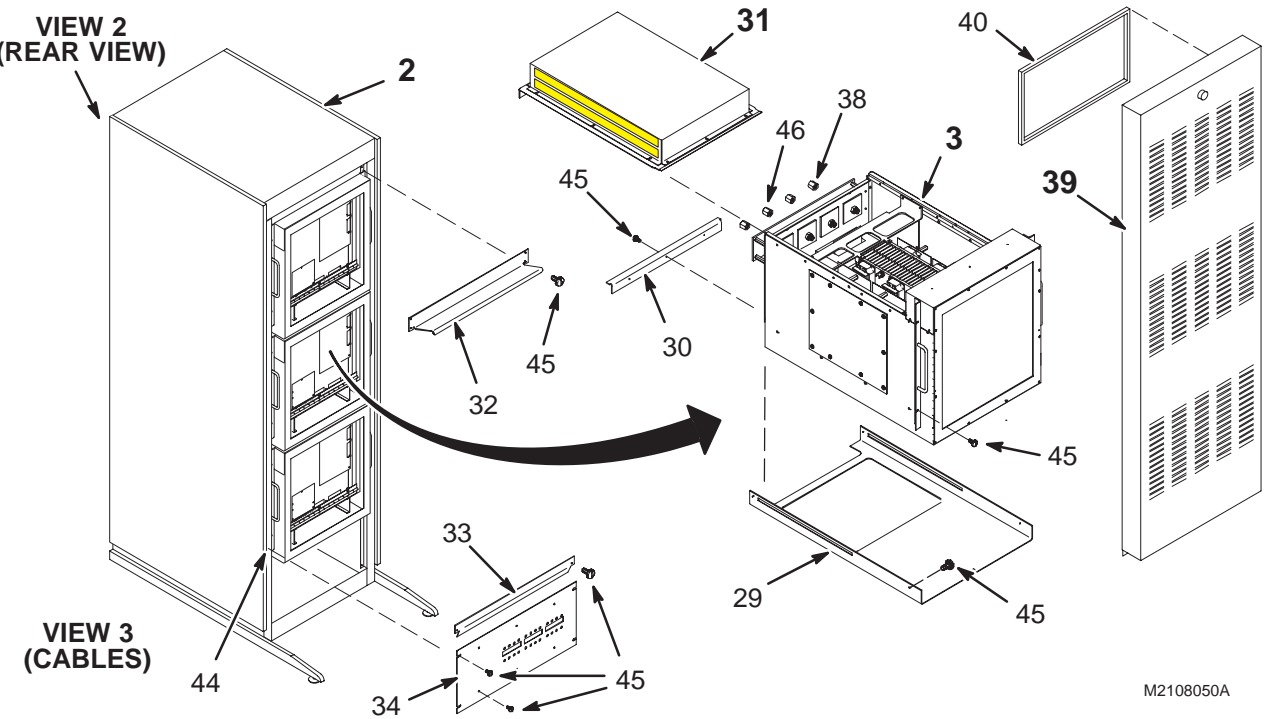
GRAM CABINET

2108050

MR7

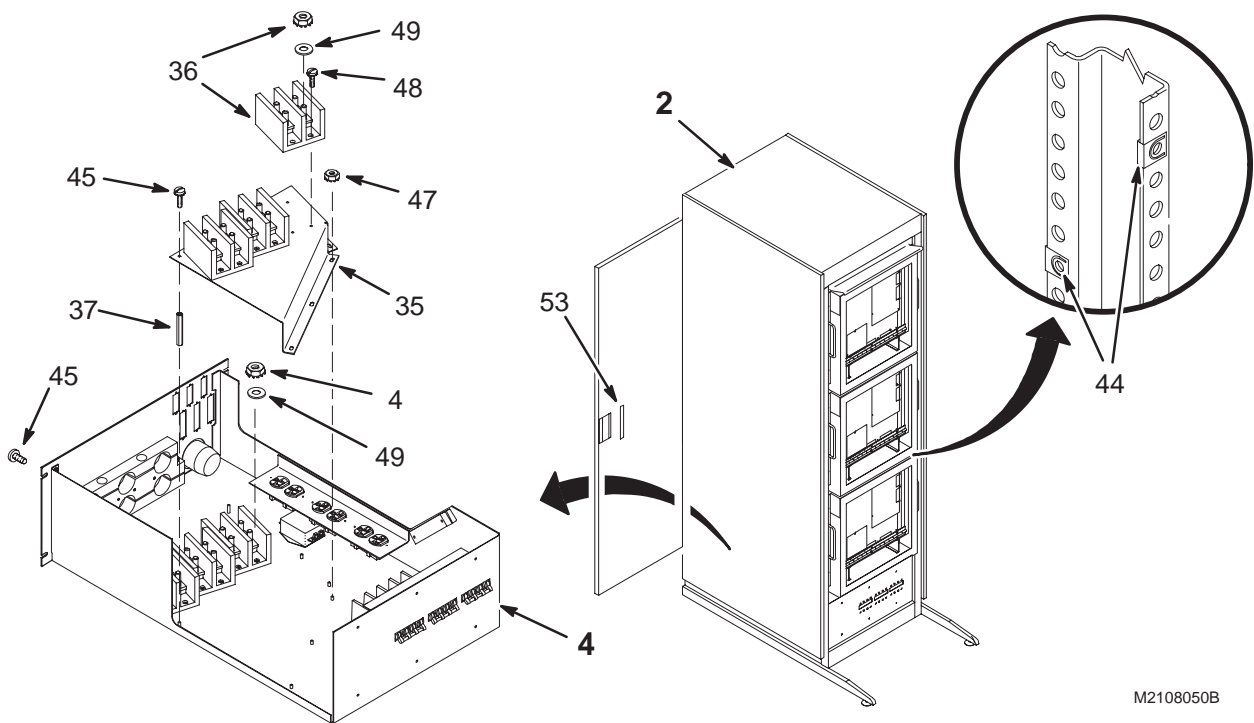
VIEW 2
(REAR VIEW)

VIEW 3
(CABLES)



M2108050A

VIEW 1



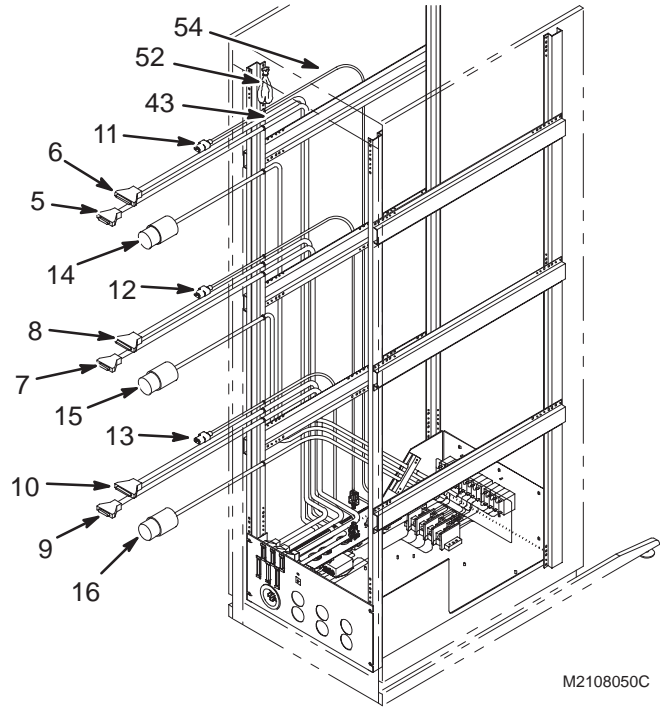
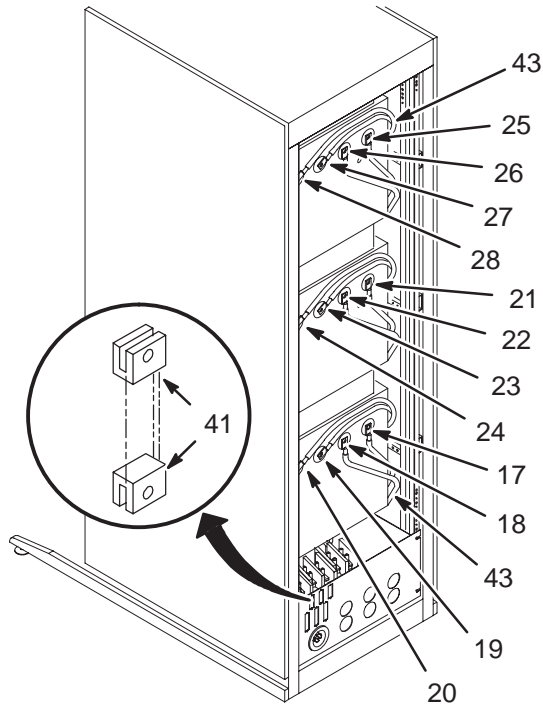
M2108050B

VIEW 2

GRAM CABINET

2108050

MR7

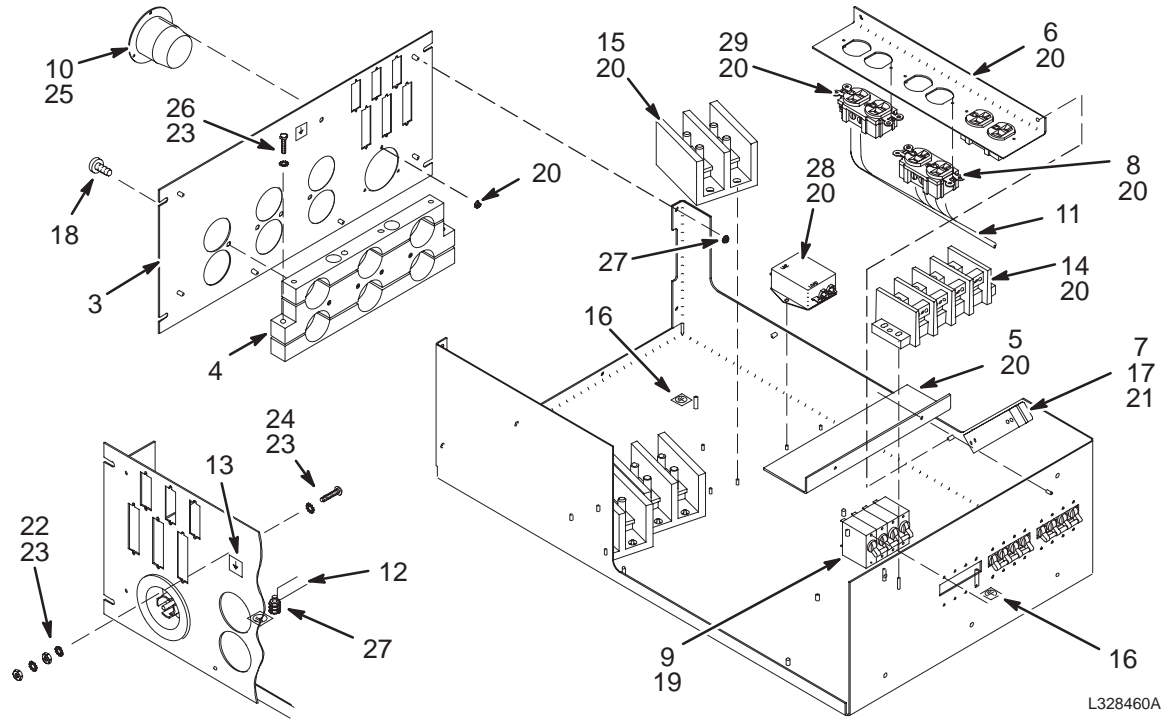


M2108050C

VIEW 3

INTERFACE PANEL

46-328460G1



L328460A

INTERFACE PANEL

46-328460G1

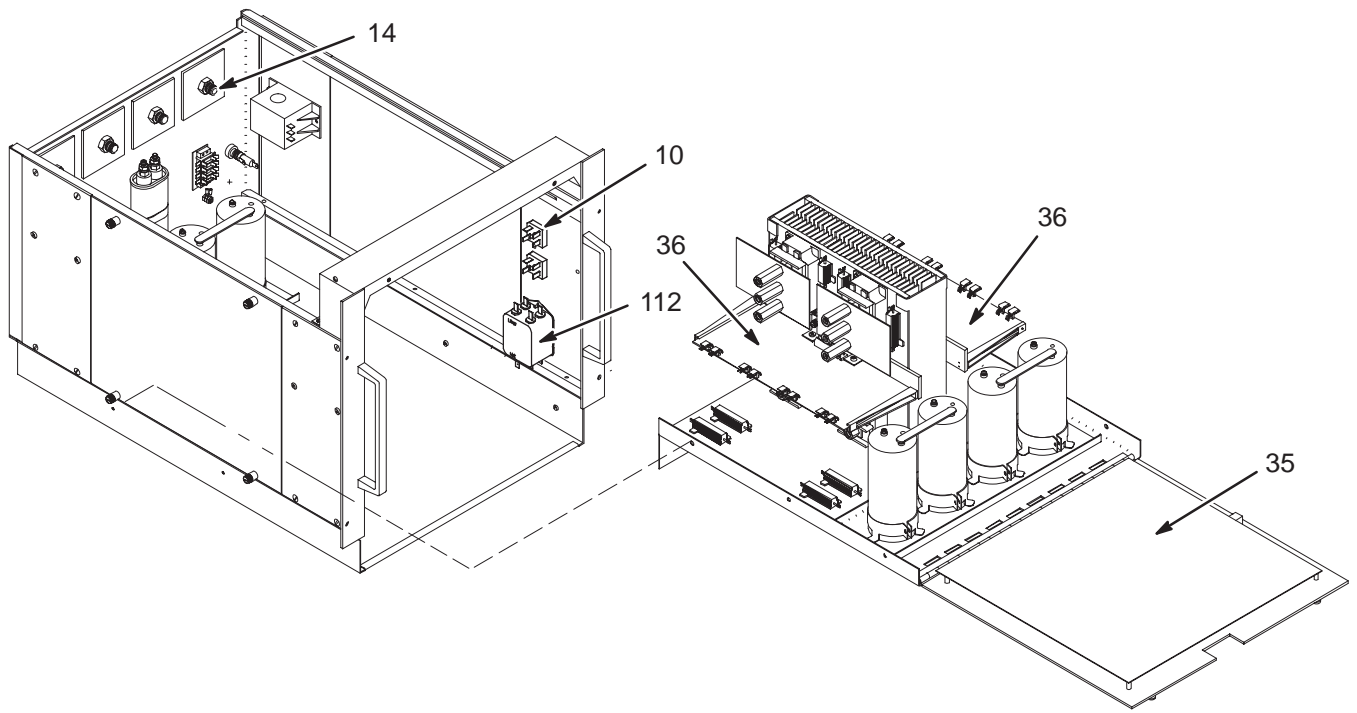
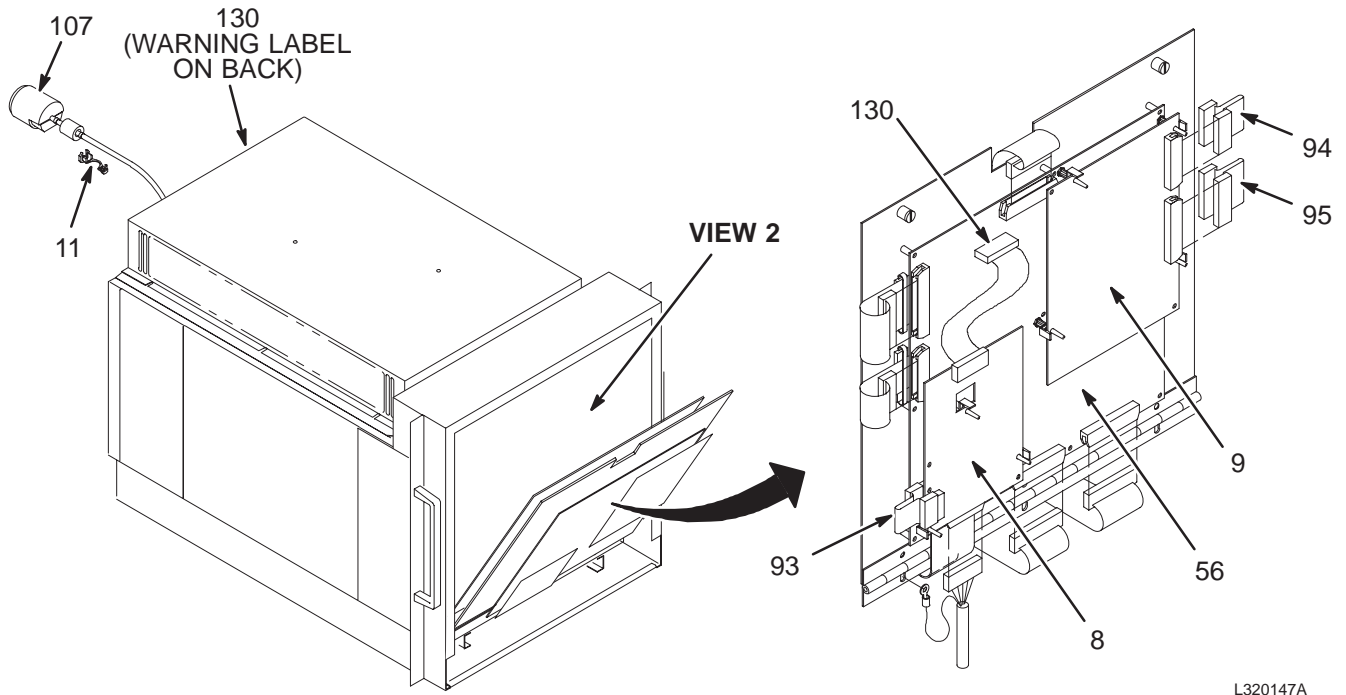
FRU N

(PART OF 2108050 PAGE 12-4)

| Item | Part Number | FRU | Name | Quantity | Description (Remarks) |
|------|--------------|-----|--------------|----------|--------------------------------------|
| 3 | 46-320652P1 | 2 | PLATE, REAR | 1 | GRAM CABINET INTERFACE PANEL |
| 4 | 46-320659P1 | 2 | CABLE CLAMP | 1 | GRAM INPUT & OUTPUT 6-CABLE CLAMP |
| 5 | 46-320656P1 | 2 | COVER | 1 | TERMINAL BLOCK SHIELD 3" X 10" LEXAN |
| 6 | 46-320655P1 | 2 | OUTLET PANEL | 1 | POWER OUTLETS J14, J15, J16, SERVICE |
| 7 | 46-243811P1 | 2 | CABLE CLAMP | 1 | CABINET CABLE 2-PIECE CLAMP, 4 HOLES |
| 8 | 46-287941P1 | 2 | RECEPTACLE | 2 | 20 AMP, 125V, DUPLEX RECEPTACLE, |
| 9 | 46-271382P28 | 2 | CIRCUIT BKR | 3 | CIRCUIT BREAKER 10 AMPS 250 VOLTS 65 |
| 10 | 46-317671P1 | 2 | RECEPT,MALE | 1 | FLANGED INLET, 30A, 120/208 3-PHASE |
| 11 | 46-320077G1 | 2 | HARNESS | 1 | DISTRIBUTION BLOCK - CIRCUIT BREAKER |
| 12 | 2109432 | 2 | WIRE LEADS | 1 | SET OF TWELVE WIRES FOR GRAM PWR MOD |
| 13 | 46-271110P5 | 2 | LABEL | 1 | EQUIPOTENTIALITY |
| 14 | 2111379 | 2 | TERMINAL BLK | 1 | POWER DISTRIBUTION TERMINAL BLOCK |
| 15 | 2111378 | 2 | TERMINAL BLK | 3 | BARRIER TERMINAL BLOCK 4-STUD W/NUTS |
| 16 | 46-271110P1 | 2 | LABEL | 2 | PROTECTIVE EARTH (GROUND) |
| 17 | 46-170015P6 | 2 | SCR,SEMS | 2 | 10-32 X 1/2 LG BIND HD STL EXT TOOTH |
| 18 | 46-170015P7 | 2 | SCR,SEMS | 4 | 1/4-20 X 5/8" BIND HD STL EXT TOOTH |
| 19 | 46-170015P10 | 2 | SCR,SEMS | 24 | 6-32 X 1/4" LG BIND HD STL EXT TOOTH |
| 20 | 46-170012P35 | 2 | NUT,LOCK | 29 | 6-32, 1/4" HEX KEPS NUT, 3/32 THICK |
| 21 | 46-170015P22 | 2 | SCR,SEMS | 2 | 10-32 X 7/8 LG BIND HD STL EXT TOOTH |
| 22 | 46-208935P8 | 2 | NUT,HEX,MS | 2 | 1/4-20, 7/16" HEX X 3/16 THK, BRASS |
| 23 | 46-208599P5 | 2 | WASHER,LOCK | 11 | 1/4" SCREW SIZE EXTERNAL TOOTH STEEL |
| 24 | 46-220184P54 | 2 | SCREW MACH | 1 | 1/4-20 X 1" LG, RND HD SLOT, BRASS |
| 25 | 46-170015P27 | 2 | SCR,SEMS | 3 | 6-32 X 1/2" LG BIND HD STL EXT TOOTH |
| 26 | 46-208561P24 | 2 | SCREW,CAP | 8 | 1/4-20 X 1-1/2 LG HEX HD STL GRADE 5 |
| 27 | 46-170012P39 | 2 | NUT,LOCK | 14 | 10-32, 3/8" HEX KEPS NUT, 1/8" THICK |
| 28 | 2118478 | 2 | FILTER | 1 | AC LINE FILTER, 10A, ISOLATED GROUND |
| 29 | 2118597 | 2 | OUTLET | 1 | 15A, 125V, DUPLEX, ISOLATED GROUND |

GRAM

46-320147G1

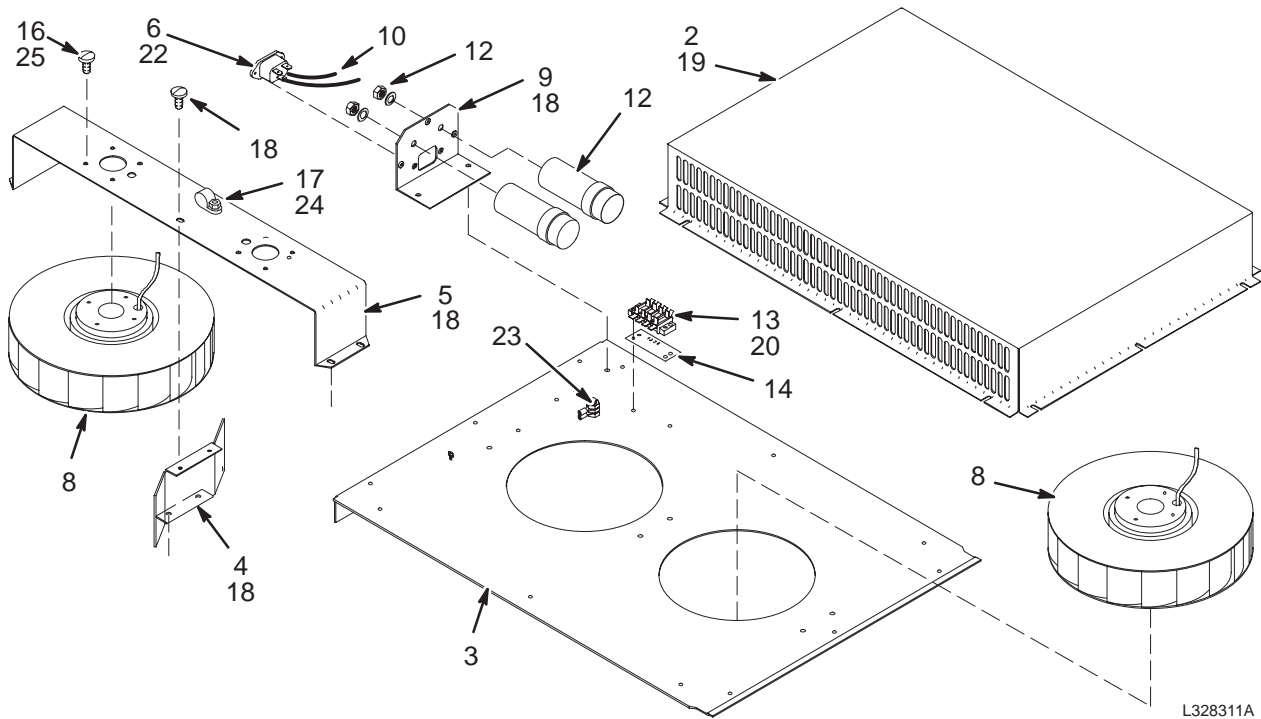


GRAM 46-320147G1 FRU N (PART OF 2108050 PAGE 12-4)

| Item | Part Number | FRU | Name | Quantity | Description (Remarks) |
|------|---------------|-----|--------------|----------|--------------------------------------|
| 8 | 2120062 | 1 | CIRCUIT BOAR | 1 | DIGITAL TUNING BOARD |
| 9 | 2103294 | 1 | CIRCUIT BD | 1 | GRAM ASM BOARD, MR7-A1(A2,A3)-A4 |
| 10 | 46-302362P2 | 2 | SEMICONDUCTO | 2 | 800 PIV, 30 A, 1.122" SQUARE PKG, |
| 11 | 46-208697P61 | 2 | BUSHING | 1 | HEYCO PART NO.1260 SR-8P-2 BLACK |
| 14 | 46-320527P1 | 2 | BRASS NUT | 4 | 3/4" HEX 1/2-13 SPRIALOCK THREAD |
| 35 | 46-288948G1 | 1 | CIRCUIT BD | 1 | GRAM POWER SUPPLY BD. |
| 36 | 46-288946G1 | 1 | CIRCUIT BD | 2 | IGBT GATE DRIVER BD. |
| 52 | 46-170365P1 | 2 | MECHANICAL/M | AR | PENETROX A 8 OZ FOR ALUMINUM SEALING |
| 56 | 46-288952G1 | 1 | CIRCUIT BD | 1 | GRAM CONTROL BOARD |
| 59 | 46-208908P46 | 2 | SCREW | 4 | 10-32 X 1/2" SLOT FLAT-HD F70B5A |
| 62 | 2113550 | N | INDUCTOR | 1 | INDUCTOR FOR GRAM |
| 70 | 46-208599P4 | 2 | WASHER | 28 | #10 SCREW SIZE, EXTERNAL TOOTH |
| 72 | 46-220181P5 | 2 | WASHER | 44 | #10 (0.190) SCREW, ZINC PLATED STEEL |
| 73 | 2177260 | 2 | LABEL | 2 | SGD DANGER LABEL |
| 74 | 46-170212P2 | 2 | MECHANICAL/M | AR | THERMAL JOINT COMPOUND, 8-OZ JAR |
| 75 | 46-170686P1 | 2 | ADHESIVE | AR | LOCTITE 242, 0.5CC TUBE |
| 76 | 46-170015P6 | 2 | SCREW | 71 | 10-32 X 1/2 LG BIND HD STL EXT TOOTH |
| 77 | 46-208560P41 | 2 | SCREW | 4 | 8-32 X 1/4" LG BIND HD, STL F70B5A |
| 78 | 46-170015P10 | 2 | SCREW | 42 | 6-32 X 1/4" LG BIND HD STL EXT TOOTH |
| 79 | 46-170015P16 | 2 | SCREW | 46 | 10-32 X 3/8 LG BIND HD STL EXT TOOTH |
| 80 | 46-208758P3 | 2 | TY-RAP | 2 | 7.31" X .184" SELF-LOCKING CABLE TIE |
| 81 | 12-496 | 2 | WASHER | 4 | 3/8" OD, #8 BODY HOLE, 0.031" THICK |
| 82 | 46-170015P27 | 2 | SCREW | 18 | 6-32 X 1/2" LG BIND HD STL EXT TOOTH |
| 83 | 46-170012P36 | 2 | NUT | 47 | 6-32 HEX 5/16 NUT THK 7/64, KEPS |
| 84 | 46-170015P34 | 2 | SCREW | 84 | 4-40 X 3/8 LG BIND HD STL EXT TOOTH |
| 85 | 46-170012P39 | 2 | NUT | 18 | 10-32, 3/8" HEX KEPS NUT, 1/8" THICK |
| 86 | 46-170012P38 | 2 | NUT | 8 | 8-32 KEPS, HEX 5/16 NUT THK 7/64 |
| 87 | 1000904P425 | 2 | WASHER | 67 | 0.2 ID, 0.5 OD, .04 THK, B11H89C |
| 88 | 46-208560P34 | 2 | SCREW | 44 | 10-32 X 5/8" LG BIND HD, STL F70B5A |
| 89 | 46-208601P5 | 2 | WASHER | 16 | #10 SCREW SIZE, INTERNAL TOOTH |
| 93 | 46-244890P146 | 2 | RIBBON CABLE | 1 | 20 TO 20 PIN SOCKET, 1.5" LONG |
| 94 | 46-244890P147 | 2 | RIBBON CABLE | 1 | 26 TO 26 PIN SOCKET, 1.5" LONG |
| 95 | 46-244890P148 | 2 | RIBBON CABLE | 1 | 34 TO 34 PIN SOCKET, 1.5" LONG |
| 107 | 2109429 | 2 | POWER CORD | 1 | GRAM 3-PHASE POWER, 5-#16 WIRE, 3-FT |
| 112 | 46-311476P1 | 2 | LINE FILTER | 1 | FILTER, POWER LINE |
| 113 | 46-170024P21 | 2 | SCREW | 2 | SHLD DIA 0.2495 X SHLD LG 0.3755 THD |
| 114 | 46-208718P6 | 2 | CLAMP | 1 | .5625 ID LOOP TYPE TA MFG CO TA713D9 |
| 116 | 12-297 | 2 | WASHER | 26 | ID 0.140 OD 0.312 THK .032 STL |
| 117 | 46-220191P3 | 2 | CLAMP | 8 | PANDUIT FCM2-A-C14 GRAY, FLAT CABLE |
| 118 | 46-170015P24 | 2 | SCREW | 8 | 8-32 X 3/4" LG BIND HD STL EXT TOOTH |
| 119 | 46-170015P37 | 2 | SCREW | 16 | 6-32 X 5/8" LG BIND HD STL EXT TOOTH |
| 120 | 46-208750P1 | 2 | VIBRATION IS | 1 | TIE ANCHOR PANDUIT TA158-M |
| 121 | 46-208761P1 | 2 | TY-RAP | 50 | NATURAL NYLON, LOCKING CABLE TIE. |
| 122 | 46-136323P32 | 2 | TUBING | 1.700 | BLACK EXPANDED ID .125 |
| 123 | 46-208747P1 | 2 | VIBRATION IS | 8 | CABLE TIE,ADH.BACKED |
| 124 | 46-170015P17 | 2 | SCREW | 11 | 10-32 X 1/4 LG BIND HD STL EXT TOOTH |
| 125 | 46-221417P1 | 2 | CONNECTOR | 2 | FEMALE SCREWLOCKS, TWO PER KIT |
| 130 | 2139941 | 2 | RIBBON CABLE | 1 | 20 CONDUCTOR RIBBON CABLE |
| 131 | 46-208761P1 | 2 | TY-RAP | 4 | NATURAL NYLON, LOCKING CABLE TIE. |

FAN MODULE

46-328311G1



FAN MODULE

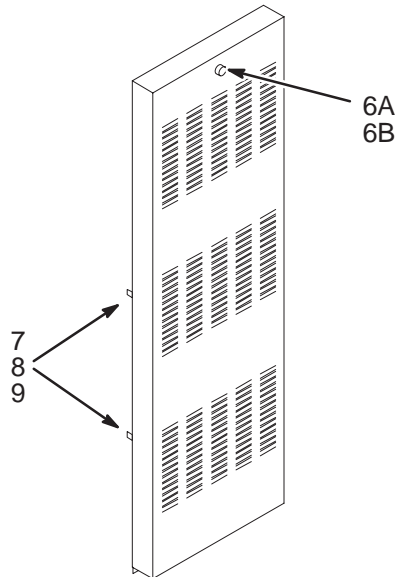
46-328311G1 FRU N

(PART OF 2108050 PAGE 12-4)

| Item | Part Number | FRU | Name | Quantity | Description (Remarks) |
|------|--------------|-----|--------------|----------|--------------------------------------|
| 2 | 46-320211P1 | 2 | BLOWER CAGE | 1 | IMPELLER AIR EXHAUST PLENUM |
| 3 | 46-320216P1 | 2 | FAN PLATE | 1 | IMPELLER INLET BASE PLATE |
| 4 | 46-320649P1 | 2 | BRACE | 1 | AIR DEFLECTOR BARRIER BRACKET |
| 5 | 46-320648P1 | 2 | BRACKET | 1 | IMPELLER MOUNTING BRIDGE |
| 6 | 2111377 | 2 | CONNECTOR | 1 | PANEL MOUNTED MALE AC RECEPTACLE |
| 8 | 46-306703G1 | 1 | IMPELLER ASM | 2 | IMPELLER FAN WITH TERMINALS ATTACHED |
| 9 | 46-320298P1 | 2 | BRACKET | 1 | CAPACITOR MOUNTING ANGLE BRACKET |
| 10 | 2112992 | 2 | WIRES | 1 | SET OF 4 WIRES FOR FAN MODULE |
| 12 | 46-306702G1 | 2 | CAP ASM | 2 | CAPACITOR WITH TERMINALS ATTACHED |
| 13 | 46-221880P9 | 2 | TERM. STRIP | 1 | 4 TERMINALS 20 AMP, 3/8" CENTERS |
| 14 | 514A350P307 | 2 | MARKER STR | 1 | 04 POSITION MARKER STRIP |
| 16 | 46-208924P22 | 2 | SCREW,MACH | 8 | M4 X 0.7 X 6 DIN 84 STL |
| 17 | 46-208713P5 | 2 | CLAMP | 2 | CABLE OD 3/8", RICHCO NO. E-6 |
| 18 | 46-170015P8 | 2 | SCR,SEMS | 9 | 8-32 X 1/4" LG BIND HD STL EXT TOOTH |
| 19 | 46-170015P10 | 2 | SCR,SEMS | 15 | 6-32 X 1/4" LG BIND HD STL EXT TOOTH |
| 20 | 46-170015P27 | 2 | SCR,SEMS | 2 | 6-32 X 1/2" LG BIND HD STL EXT TOOTH |
| 22 | 46-170015P41 | 2 | SCR,SEMS | 2 | 4-40 X 1/4" LG BIND HD STL EXT TOOTH |
| 23 | 46-170012P39 | 2 | NUT,LOCK | 2 | 10-32, 3/8" HEX KEPS NUT, 1/8" THICK |
| 24 | 46-170015P14 | 2 | SCR,SEMS | 2 | 8-32 X 3/8 LG BIND HD STL EXT TOOTH |
| 25 | 46-170686P1 | 2 | SEALANT | AR | LOCTITE 242, 0.5CC TUBE |

GRAM CABINET COVER ASM

2109575



GRAM CABINET COVER ASM 2109575 FRU 2 (PART OF 2108050 PAGE 12-4)

| Item | Part Number | FRU | Name | Quantity | Description (Remarks) |
|------|--------------|-----|--------|----------|-------------------------------------|
| 6A | 46-301852P1 | 2 | LATCH | 1 | LATCH ASM FOR SLAM-LATCH COVERS |
| 6B | 46-301852P2 | 2 | LATCH | ALT | LATCH |
| 7 | 46-306566P1 | 2 | BUMPER | 4 | FRONT COVER BUMPER, BLACK RUBBER |
| 8 | 46-208560P13 | 2 | SCREW | 4 | 4-40 X 1/2 LG BIND HEAD, STEEL |
| 9 | 46-170012P34 | 2 | NUT | 4 | 4-40, 1/4" HEX, 3/32 THICK KEPS NUT |

AMCO GRAM CABINET 2108234 FRU N (PART OF 2108050 PAGE 12-4)

| Item | Part Number | FRU | Name | Quantity | Description (Remarks) |
|------|-------------|-----|--------|----------|--------------------------------------|
| | 2108243-4 | 2 | PANEL | 2 | AMCO S25313-16 SIDE PANEL, MIST |
| | 2108243-6 | 2 | CASTER | 4 | AMCO S2219-12 CASTER (400LB LOAD) |
| | 2108243-7 | 2 | LEGS | 2 | AMCO ATLE-30-1 ANTI-TIP LEGS |
| | 2108243-10 | 2 | DOOR | 1 | AMCO DFH61-19R-L REAR DOOR WITH LOCK |