
BENDIX/KING® Service Bulletin

BULLETIN NO: KI 256-11
KI 256 Flight Command Indicator

EFFECTIVITY

KI 256 Indicators, P/N 060-0017-00 and -01, S/N 22474 and below.

Units with serial numbers above those stated have Mod 11 incorporated during original manufacturing.

REASON

To reduce loading effects to the pitch and roll outputs.

DESCRIPTION

This modification consists of replacing the PC board.

COMPLIANCE

Customer option.

WARRANTY INFORMATION

This modification is a product improvement and is not warranty reimbursable.

APPROVAL

This modification does not affect the original approval.

MANPOWER

Four (4.0) hours labor including testing.

REFERENCES

KI 255/256 Maintenance Manual, P/N 006-05146-XXXX.

MODIFICATION PROCEDURE

1. Disassemble the KI 256 according to maintenance manual procedures to access the Command Bar Board.

CAUTION

Any disassembly/assembly of the KI 256 MUST be done at a static-safe workstation. Removed modules should be placed in static-safe bags when not installed in the unit.

2. Remove the Command Bar Board, and replace it with the new PC Board, P/N 200-05802-0040. Notice that the layout of the wire connection points on the new board are the same as on the old board except that E114 has been moved to the opposite side of the board.
3. Reassemble the KI 256 according to maintenance manual procedures.

IDENTIFICATION PROCEDURE

Stamp an X on the modification section of the Unit Serial Tag to indicate that Mod 11 is complete. If there is no space for Mod 11 on the existing mod tag, apply new Mod Tag P/N 057-02139-0000 near the existing tag, and record Mod 11 on it.

TESTING PROCEDURE

Perform a complete functional test of the unit in accordance with Section VI of the KI 256 Maintenance Manual.

MATERIAL INFORMATION

All parts necessary to modify one KI 256 per this service bulletin are listed below:

Part Number	Qty	Description
200-05802-0040		P.C. Board
057-02139-0000		Mod Tag

KI 256 PC BOARD P/N 200-05802-0040 REV -

Symbol	Part Number	Description	UM	Qty
	009-05802-0040	KI 256 / KG 258 PC BD.	EA	1
	016-01040-0000	COATING TYPE AR	AR	0
C 101	106-04224-0047	CAP CHIP .22UF X7R	EA	1
C 102	106-04101-0026	CH 100PF NPO/100V	EA	1
C 103	106-00122-0000	CH CAP .33UF 50V	EA	1
C 104	096-01186-0019	CAP 22UF 20V 10%	EA	1
C 105	106-04101-0026	CH 100PF NPO/100V	EA	1
C 106	106-04224-0047	CAP CHIP .22UF X7R	EA	1
C 108	106-04392-0057	CAPCH3900PFX7R/100	EA	1
C 110	096-01186-0030	CAP 1UF 35V 10%	EA	1
C 111	096-01186-0030	CAP 1UF 35V 10%	EA	1
C 112	111-00001-0003	CAP CR .22UF 50V	AR	0
C 112	111-00001-0009	CAP CR .15UF 100V	AR	0
C 112	111-00001-0026	CAP CR .33UF 50V	AR	0
C 112	111-00001-0028	CAP CR .47UF 50V	AR	0
C 112	111-00001-0029	CAP CR .56UF 50V	AR	0
C 112	111-00001-0030	CAP CR .68UF 50V	AR	0
C 113	111-00001-0003	CAP CR .22UF 50V	AR	0
C 113	111-00001-0009	CAP CR .15UF 100V	AR	0
C 113	111-00001-0026	CAP CR .33UF 50V	AR	0
C 113	111-00001-0028	CAP CR .47UF 50V	AR	0
C 113	111-00001-0029	CAP CR .56UF 50V	AR	0
C 113	111-00001-0030	CAP CR .68UF 50V	AR	0
C 114	106-04101-0026	CH 100PF NPO/100V	EA	1
C 115	106-04101-0026	CH 100PF NPO/100V	EA	1
C 116	111-00001-0032	CAP CR 1UF 50V	EA	1
C 117	111-00001-0032	CAP CR 1UF 50V	EA	1
C 118	111-00001-0032	CAP CR 1UF 50V	EA	1
C 119	111-00001-0032	CAP CR 1UF 50V	EA	1
C 120	106-04392-0057	CAPCH3900PFX7R/100	EA	1
C 121	106-04103-0057	CAP CH 10KX7R/100V	EA	1
C 122	106-04103-0057	CAP CH 10KX7R/100V	EA	1
C 123	106-04103-0057	CAP CH 10KX7R/100V	EA	1
C 124	106-04103-0057	CAP CH 10KX7R/100V	EA	1
CR 102	007-06223-0000	DIO DA204K	EA	1
CR 104	007-06417-0000	DIODE SHOTTKY	EA	1
I 101	120-03053-0009	LM358D DUAL OP AMP	EA	1
I 102	120-03053-0009	LM358D DUAL OP AMP	EA	1
I 103	120-03053-0009	LM358D DUAL OP AMP	EA	1
I 104	120-03053-0009	LM358D DUAL OP AMP	EA	1
I 105	120-03053-0009	LM358D DUAL OP AMP	EA	1

Date: Dec/98
 Rev. 1: Mar/99
 P/N: 600-01463-0011

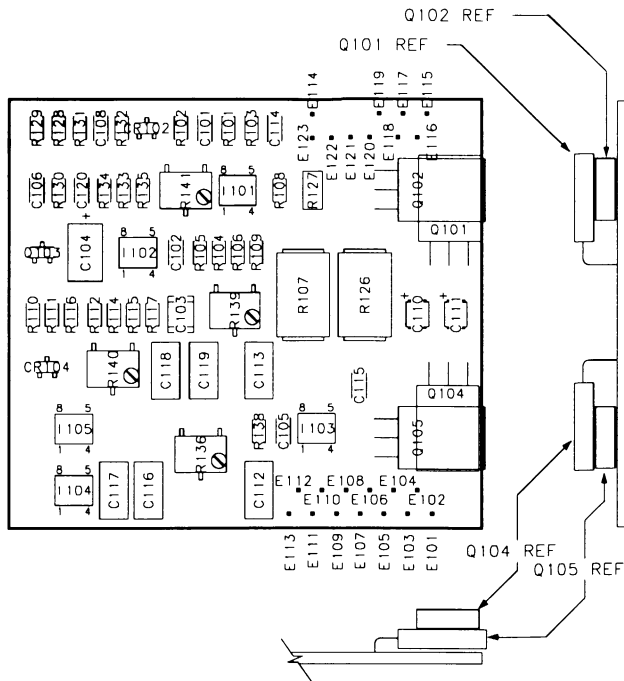
SB KI 256-11

Symbol	Part Number	Description	UM	Qty
Q 101	007-00208-0002	XSTR NPN MJE801	EA	1
Q 102	007-00207-0001	XSTR PNP MJE700	EA	1
Q 103	007-00932-0000	JFET P-CHANNEL	EA	1
Q 104	007-00208-0002	XSTR NPN MJE801	EA	1
Q 105	007-00207-0001	XSTR PNP MJE700	EA	1
R 101	139-02151-0000	RES CH 2.15K EW 1%	EA	1
R 102	139-05901-0000	RES CH 5.9K EW 1%	EA	1
R 103	139-04531-0000	RES CH 4.53K EW 1%	EA	1
R 104	139-07502-0000	RES CHIP 75KEW1%	EA	1
R 105	139-01503-0000	RES CHIP 150KEW1%	EA	1
R 106	139-01503-0000	RES CHIP 150KEW1%	EA	1
R 107	132-05145-0331	RES SM 3.3 2W 5%	EA	1
R 108	139-02051-0000	RES CH 2.05KEW 1%	EA	1
R 109	139-03922-0000	RES CH 39.2K EW 1%	EA	1
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R 111	139-01004-0000	RES CHIP 1M EW 1%	EA	1
R 112	139-05110-0000	RES CH 511 EW 1%	EA	1
R 113	139-02492-0000	RES CH 24.9K EW 1%	EA	1
R 114	139-04990-0000	RES CH 499 EW 1%	EA	1
R 115	139-01272-0000	RES CH 12.7K EW 1%	EA	1
R 116	139-07501-0000	RES CHIP 7.5KEW1%	EA	1
R 117	139-08251-0000	RES CH 8.25K EW 1%	EA	1
R 118	139-01003-0000	RES CHIP 100KEW1%	EA	1
R 119	139-01503-0000	RES CHIP 150KEW1%	EA	1
R 120	139-01503-0000	RES CHIP 150KEW1%	EA	1
R 121	139-03922-0000	RES CH 39.2K EW 1%	EA	1
R 122	139-01503-0000	RES CHIP 150KEW1%	EA	1
R 123	139-01503-0000	RES CHIP 150KEW1%	EA	1
R 124	139-08252-0000	RES CH 82.5K EW 1%	EA	1
R 125	139-02051-0000	RES CH 2.05KEW 1%	EA	1
R 126	132-05145-0331	RES SM 3.3 2W 5%	EA	1
R 127	139-02001-0030	RES CH 2000 HW 1%	EA	1
R 128	139-08251-0000	RES CH 8.25K EW 1%	EA	1
R 129	139-05623-0000	RES CHIP 562K 1%EW	EA	1
R 130	139-02743-0000	RES CH 274K EW 1%	EA	1
R 131	139-02743-0000	RES CH 274K EW 1%	EA	1
R 132	139-05112-0000	RES CHIP 51.1K 1%	EA	1
R 133	139-03572-0000	RES CHIP 35.7KEW1%	EA	1
R 134	139-03572-0000	RES CHIP 35.7KEW1%	EA	1
R 135	139-03652-0000	RES CHIP 36.5KEW1%	EA	1
R 136	133-00562-3503	RES VAR 12/15T 50K	EA	1
R 137	139-02742-0000	RES CHIP 27.4KEW1%	EA	1
R 138	139-02742-0000	RES CHIP 27.4KEW1%	EA	1
R 139	133-00562-3503	RES VAR 12/15T 50K	EA	1

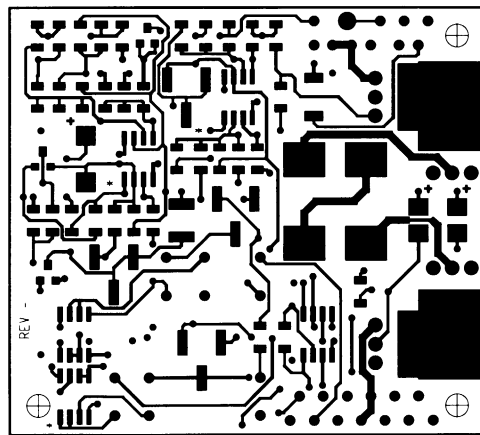
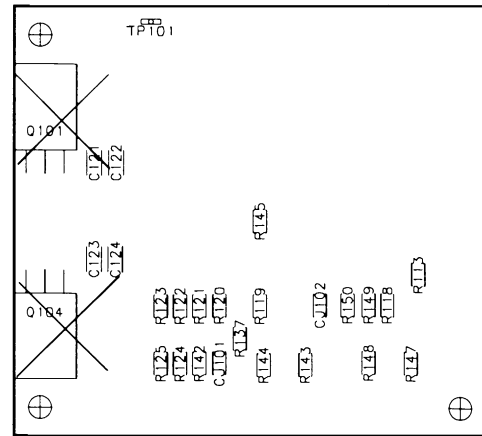
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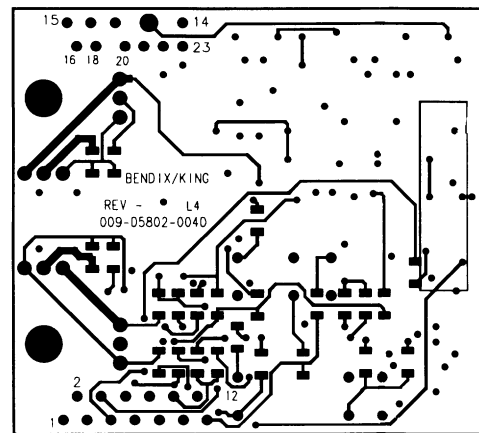
Symbol	Part Number	Description	UM	Qty
R 140	133-00562-3203	RES VAR 12-15T	EA	1
R 141	133-00562-3103	RES VAR 12/15T 10K	EA	1
R 142	139-05110-0000	RES CH 511 EW 1%	EA	1
R 143	139-05110-0000	RES CH 511 EW 1%	EA	1
R 144	139-00000-0004	RES CH 0 EW	EA	1
R 145	139-00000-0004	RES CH 0 EW	EA	1
R 147	139-04023-0000	RES CH 402K EW 1%	EA	1
R 148	139-04023-0000	RES CH 402K EW 1%	EA	1
R 149	139-04023-0000	RES CH 402K EW 1%	EA	1
R 150	139-04023-0000	RES CH 402K EW 1%	EA	1
REF 1	300-05802-0040	KI 256 / KG 258 ASSEMBLY DWG.	RF	0
REF 2	002-00433-0040	KI 256 / KG 258 SCHEMATIC	RF	0
REF 3	192-05802-0040	KI 256 OUTSOURCE	RF	0
TP 101	008-00096-0001	TERMINAL TEST PNT	EA	1



NOTE Q101 & Q104 are mounted on the near side of the board



NEAR SIDE VIEW OF PC BOARD



FAR SIDE VIEW OF PC BOARD

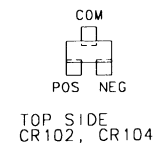
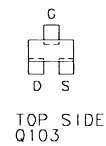
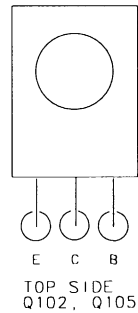
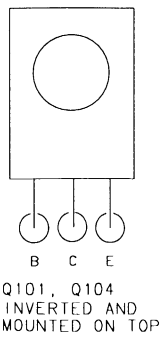
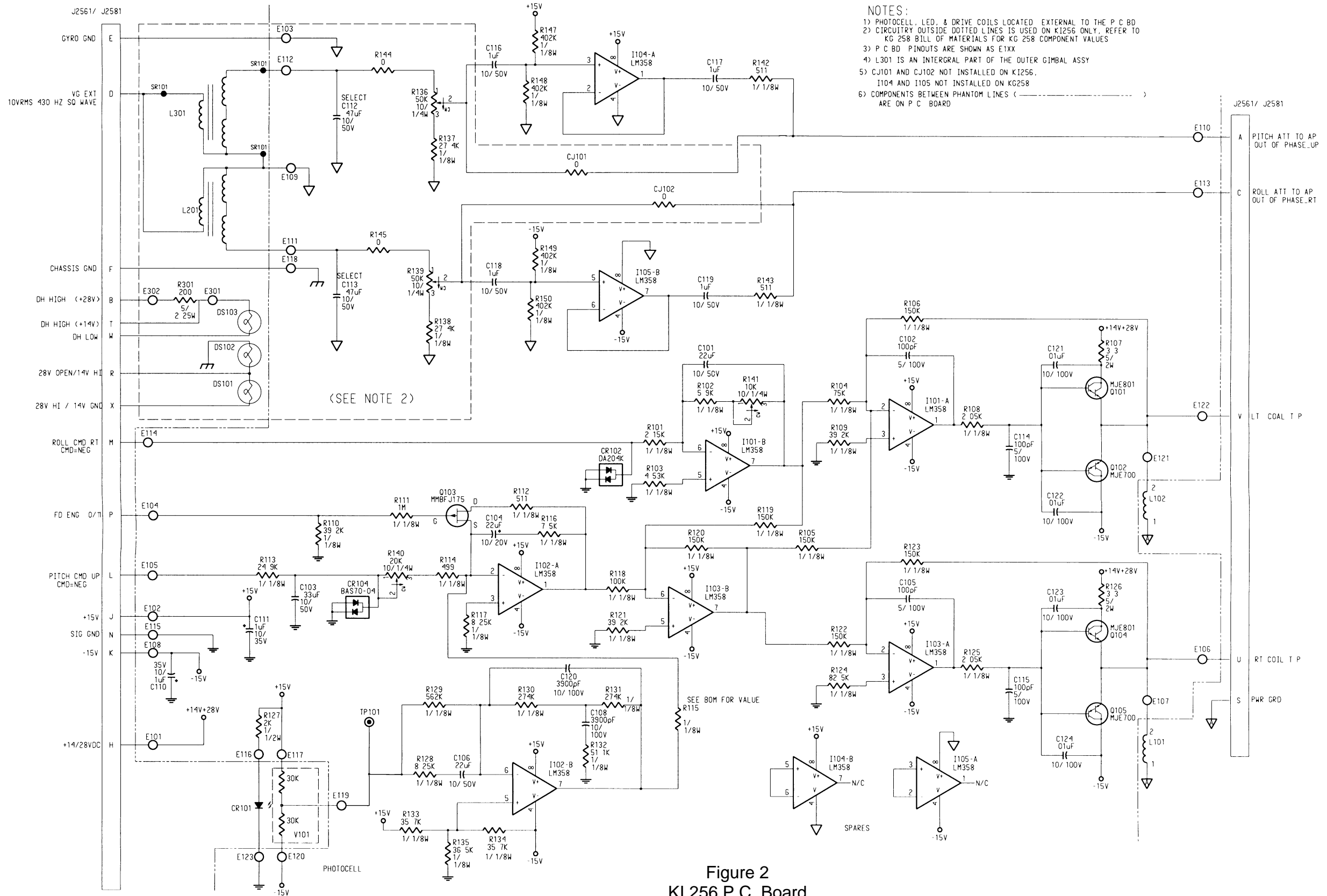


Figure 1
KI 256 P.C. Board
300-05802-0040 Rev -



- NOTES:
- 1) PHOTOCELL, LED, & DRIVE COILS LOCATED EXTERNAL TO THE P.C. BOARD
 - 2) CIRCUITRY OUTSIDE DOTTED LINES IS USED ON KI256 ONLY. REFER TO KG 258 BILL OF MATERIALS FOR KG 258 COMPONENT VALUES
 - 3) P.C. BOARD PINOUTS ARE SHOWN AS E1XX
 - 4) L301 IS AN INTEGRAL PART OF THE OUTER GIMBAL ASSY
 - 5) CJ101 AND CJ102 NOT INSTALLED ON KI256. I104 AND I105 NOT INSTALLED ON KG258
 - 6) COMPONENTS BETWEEN PHANTOM LINES (---) ARE ON P.C. BOARD

Figure 2
 KI 256 P.C. Board
 002-00433-0040 Rev -