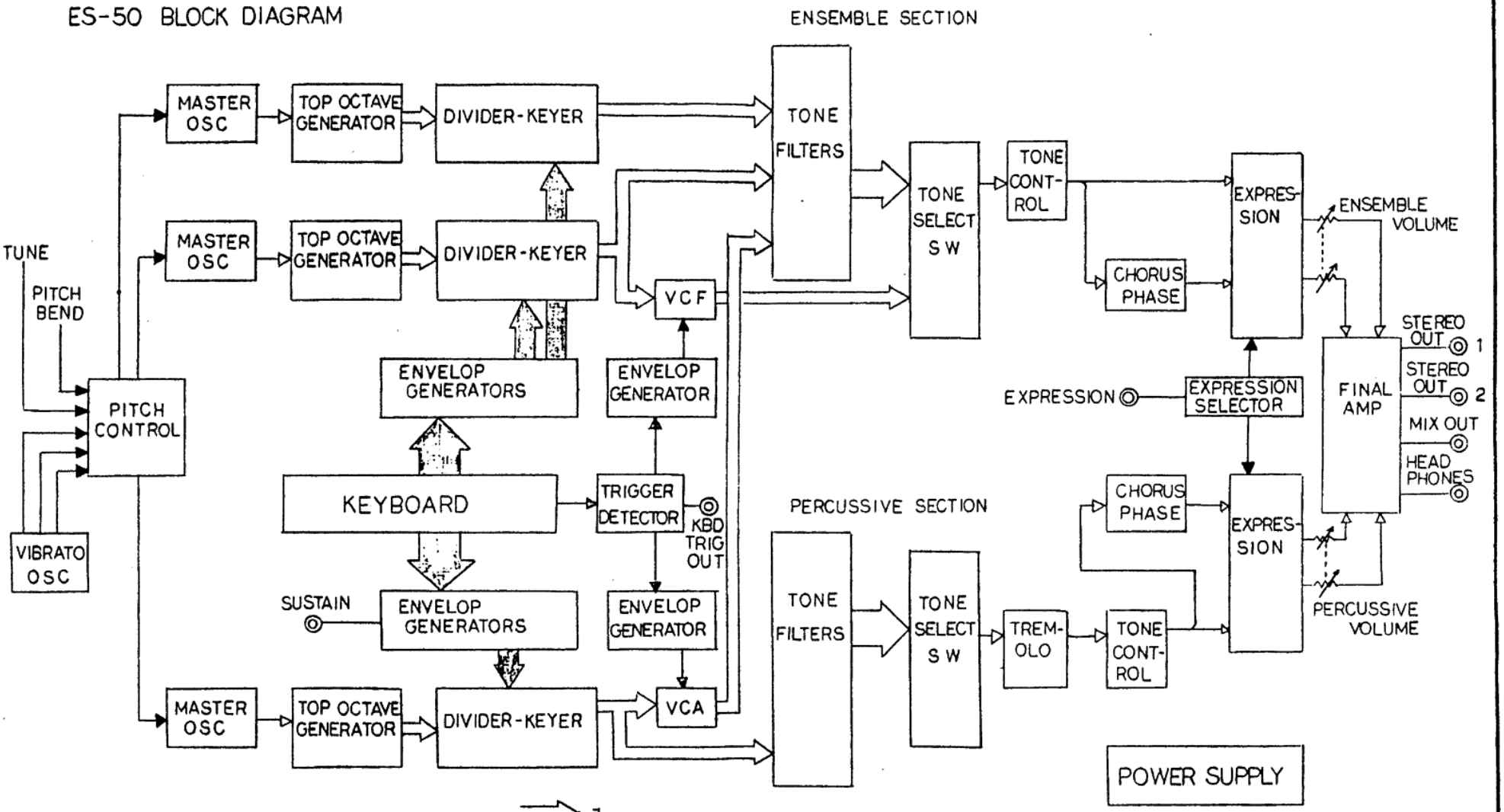
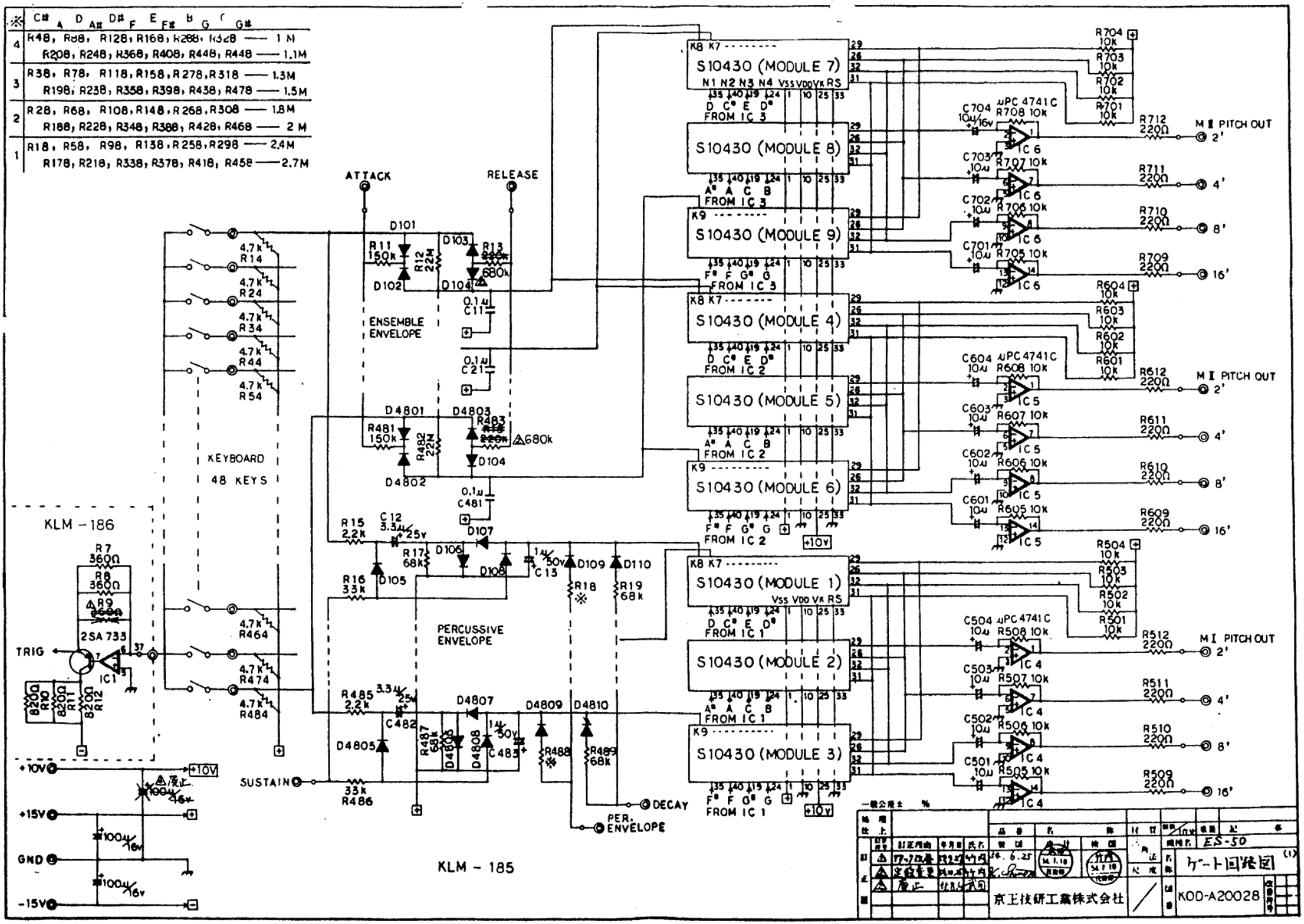
ES-50 BLOCK DIAGRAM

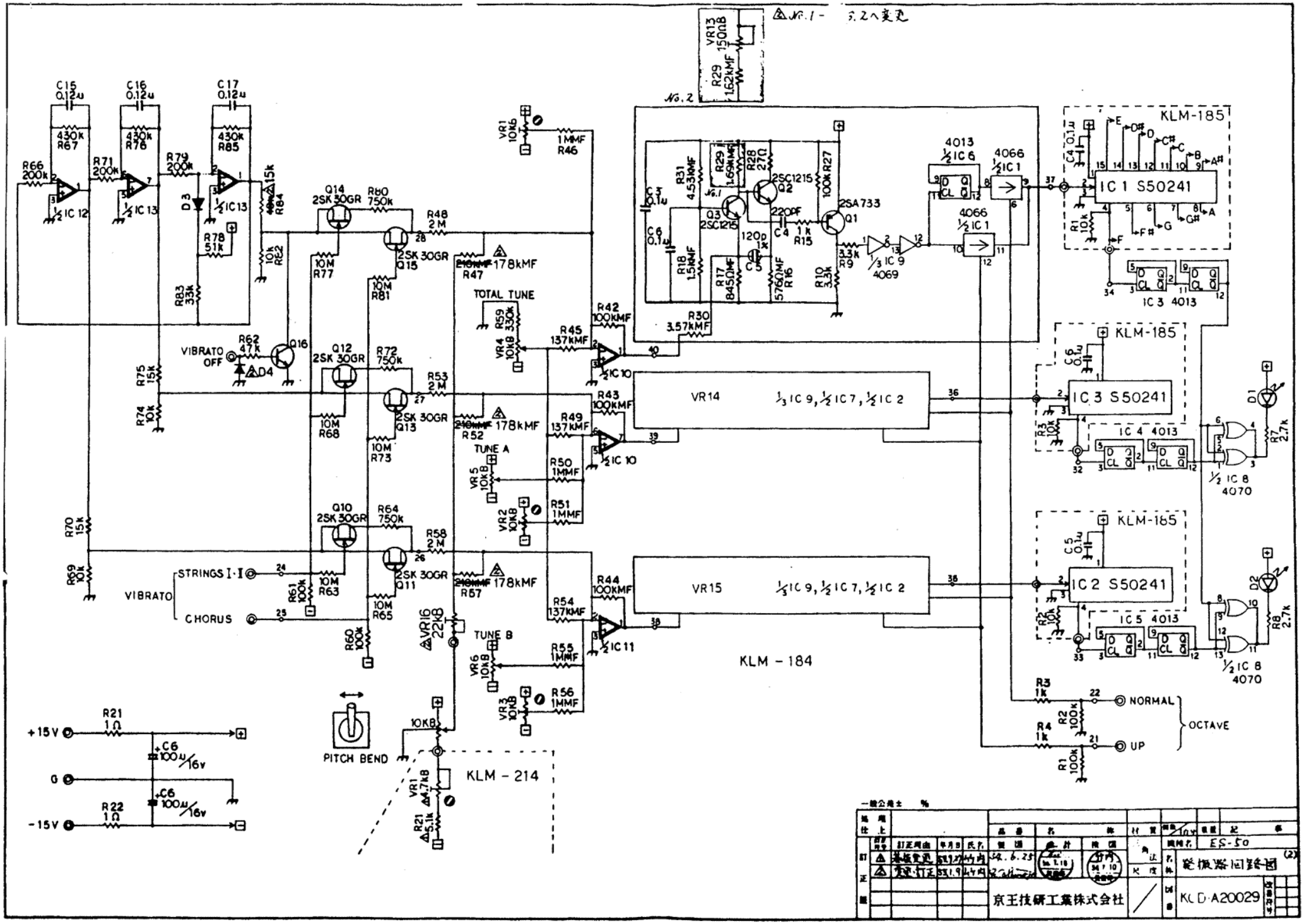


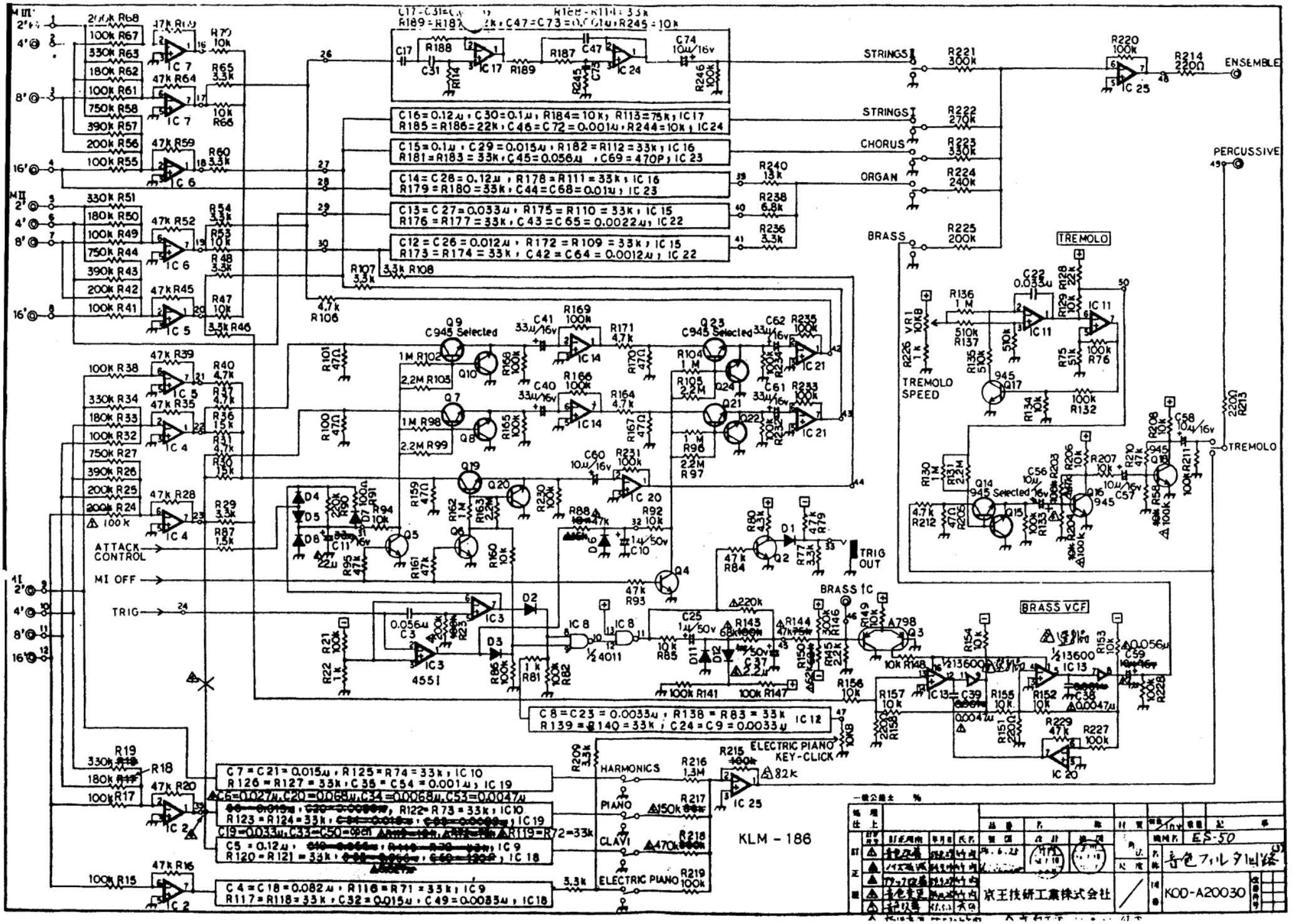
REVISAL MARK	REVISAL REASON	REVISAL DATE	REVISED BY

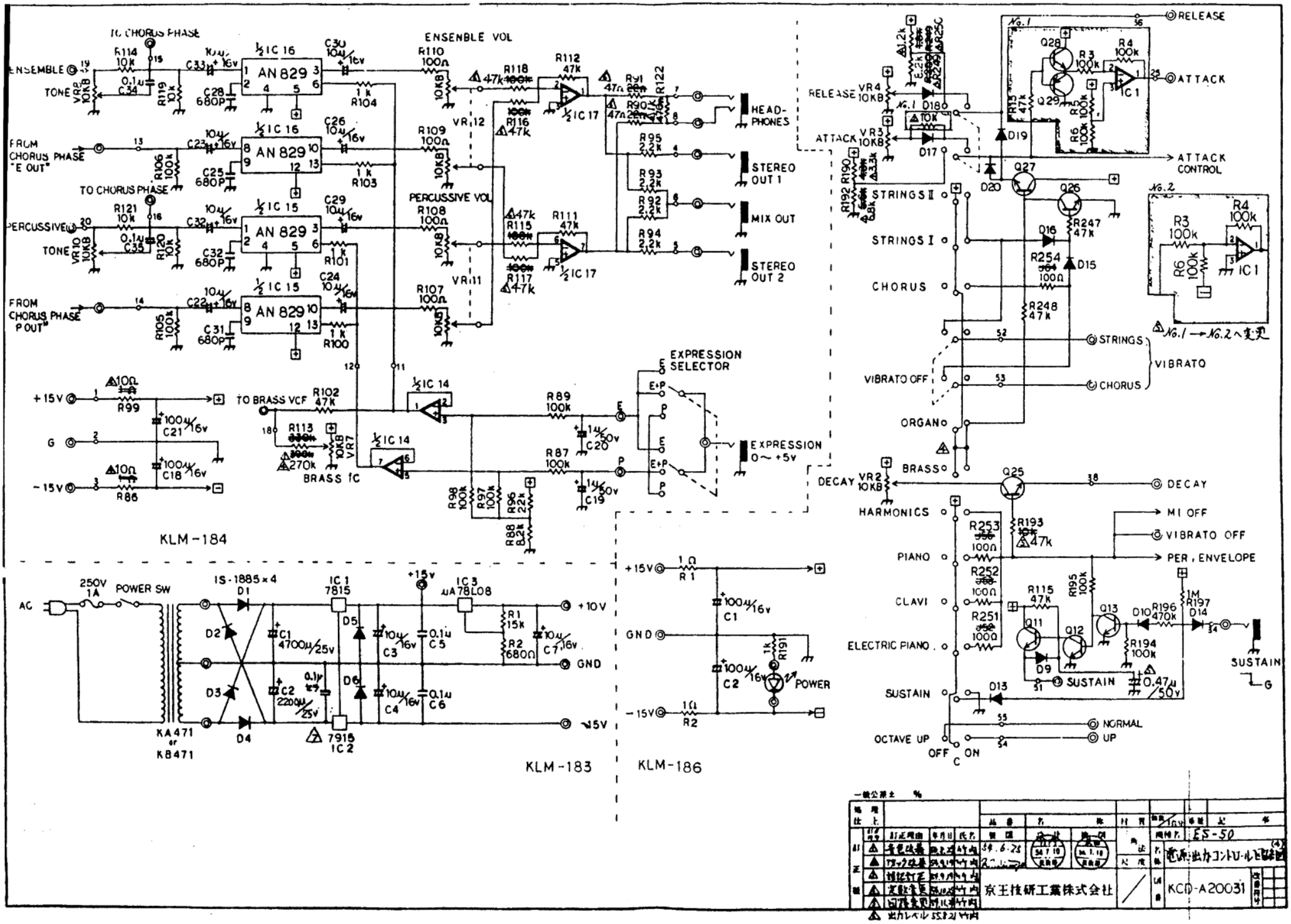
COMMERCIAL TOLERANCE ± %

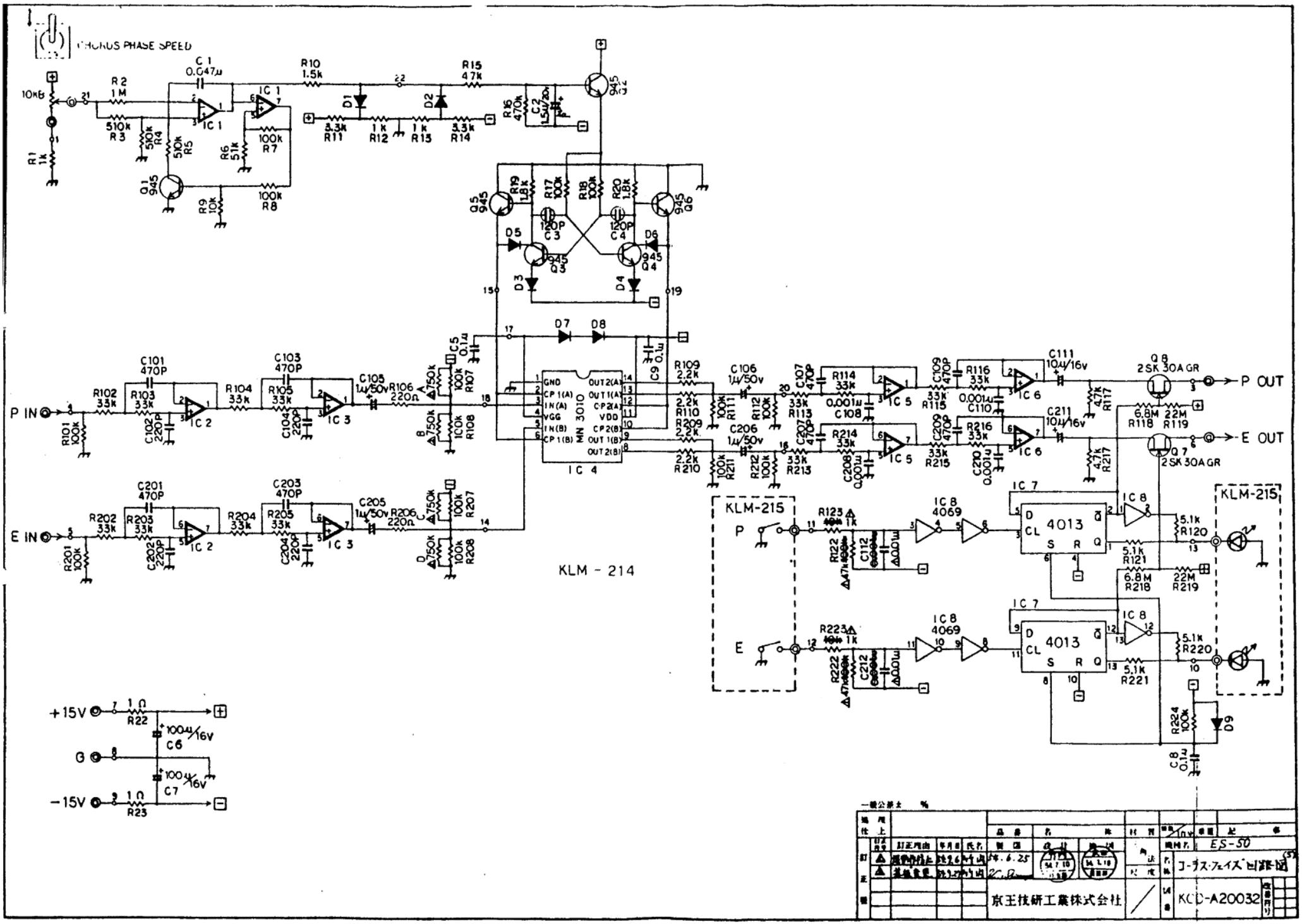
PART NO.	NAME OF PART	MATERIAL	NO. OF PART	WEIGHT	REMARK
TREATMENT	DRAWN BY 54. 1. 27	DESIGNED BY 54. 1. 27	CHECKED BY	MODEL ES-50	DATE
				TITEL ブロックダイアグラム	
KORG KEIO ELECTRONIC LAB., CORP.		SCALE /		DRAWING NO. KOD-B30010	REVISAL NO.


※
C# A D A# D# F E F# B G C G#
4 R48, R88, R128, R168, R208, R328 — 1 M
R208, R248, R368, R408, R448, R488 — 1.1M
3 R38, R78, R118, R158, R278, R318 — 1.3M
R198, R238, R358, R398, R438, R478 — 1.5M
2 R28, R68, R108, R148, R268, R308 — 1.8M
R188, R228, R348, R388, R428, R468 — 2 M
1 R18, R58, R98, R138, R258, R298 — 2.4M
R178, R218, R338, R378, R418, R458 — 2.7M
ATTACK
RELEASE
D101
D102
D103
D104
R11 150k
R12 22M
R13 680k
0.1μ C11
ENSEMBLE ENVELOPE
0.1μ C21
D4801
D4802
D4803
D104
R481 150k
R482 22M
R483 680k
0.1μ C481
KEYBOARD
48 KEYS
4.7k R14
4.7k R24
4.7k R34
4.7k R44
4.7k R54
4.7k R464
4.7k R474
4.7k R484
KLM – 186
R7 360Ω
R8 360Ω
R9 680Ω
2SA 733
TRIG
IC1
R10 820Ω
R11 820Ω
R12 820Ω
R15 2.2k
C12 3.3μ 25v
R17 68k
D105
D106
D108
1μ 50v C13
D109
D110
R16 33k
R18 ※
R19 68k
PERCUSSIVE ENVELOPE
R485 2.2k
3.3μ 25v C482
D4805
D4806
D4807
D4808
R487 68k
1μ 50v C483
D4809
D4810
R488 ※
R489 68k
SUSTAIN
33k R486
DECAY
PER. ENVELOPE
+10V
+15V
GND
-15V
100μ 16v
KLM – 185
K8 K7
S10430 (MODULE 7)
S10430 (MODULE 8)
S10430 (MODULE 9)
S10430 (MODULE 4)
S10430 (MODULE 5)
S10430 (MODULE 6)
S10430 (MODULE 1)
S10430 (MODULE 2)
S10430 (MODULE 3)
N1 N2 N3 N4 Vss VDD VK RS
D C E D
A A C B
F F G G
FROM IC 3
FROM IC 2
FROM IC 1
μPC 4741C
IC 6
IC 5
IC 4
C704 10μ R708 10k
C703 10μ R707 10k
C702 10μ R706 10k
C701 10μ R705 10k
C604 10μ R608 10k
C603 10μ R607 10k
C602 10μ R606 10k
C601 10μ R605 10k
C504 10μ R508 10k
C503 10μ R507 10k
C502 10μ R506 10k
C501 10μ R505 10k
R704 10k
R703 10k
R702 10k
R701 10k
R604 10k
R603 10k
R602 10k
R601 10k
R504 10k
R503 10k
R502 10k
R501 10k
R712 220Ω
R711 220Ω
R710 220Ω
R709 220Ω
R612 220Ω
R611 220Ω
R610 220Ω
R609 220Ω
R512 220Ω
R511 220Ω
R510 220Ω
R509 220Ω
M II PITCH OUT
M I PITCH OUT
2'
4'
8'
16'
京王技研工業株式会社
ES-50
ゲート回路図 (1)
KOD-A20028

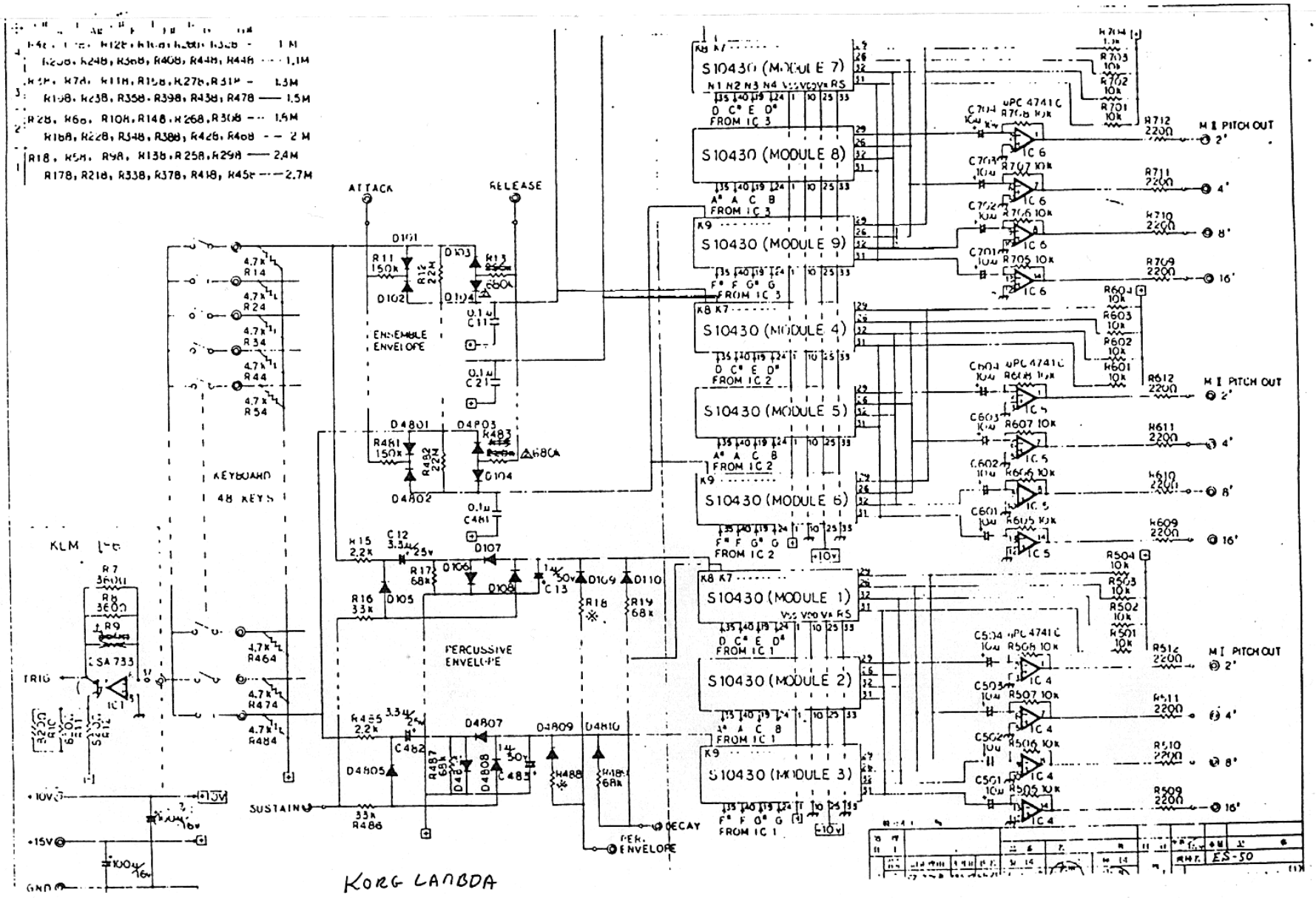

KLM - 184
KLM - 214
KLM-185
KLM-165
IC 1 S50241
IC 3 S50241
IC 2 S50241
IC 3 4013
IC 4 4013
IC 5 4013
VR14
VR15
TOTAL TUNE
TUNE A
TUNE B
VIBRATO OFF
VIBRATO
CHORUS
STRINGS I·I
PITCH BEND
NORMAL
UP
OCTAVE
+15V
0
-15V
京王技研工業株式会社
KLD-A20029
EG-50


STRINGS
STRINGS
CHORUS
ORGAN
BRASS
PERCUSSIVE
ENSEMBLE
TREMOLO
TREMOLO SPEED
ATTACK CONTROL
MI OFF
TRIG
TRIG OUT
BRASS VCF
BRASS VC
HARMONICS
PIANO
CLAVI
ELECTRIC PIANO
ELECTRIC PIANO KEY-CLICK
KLM - 186
京王技研工業株式会社
KOD-A20030
ES-50
音色フィルタ回路

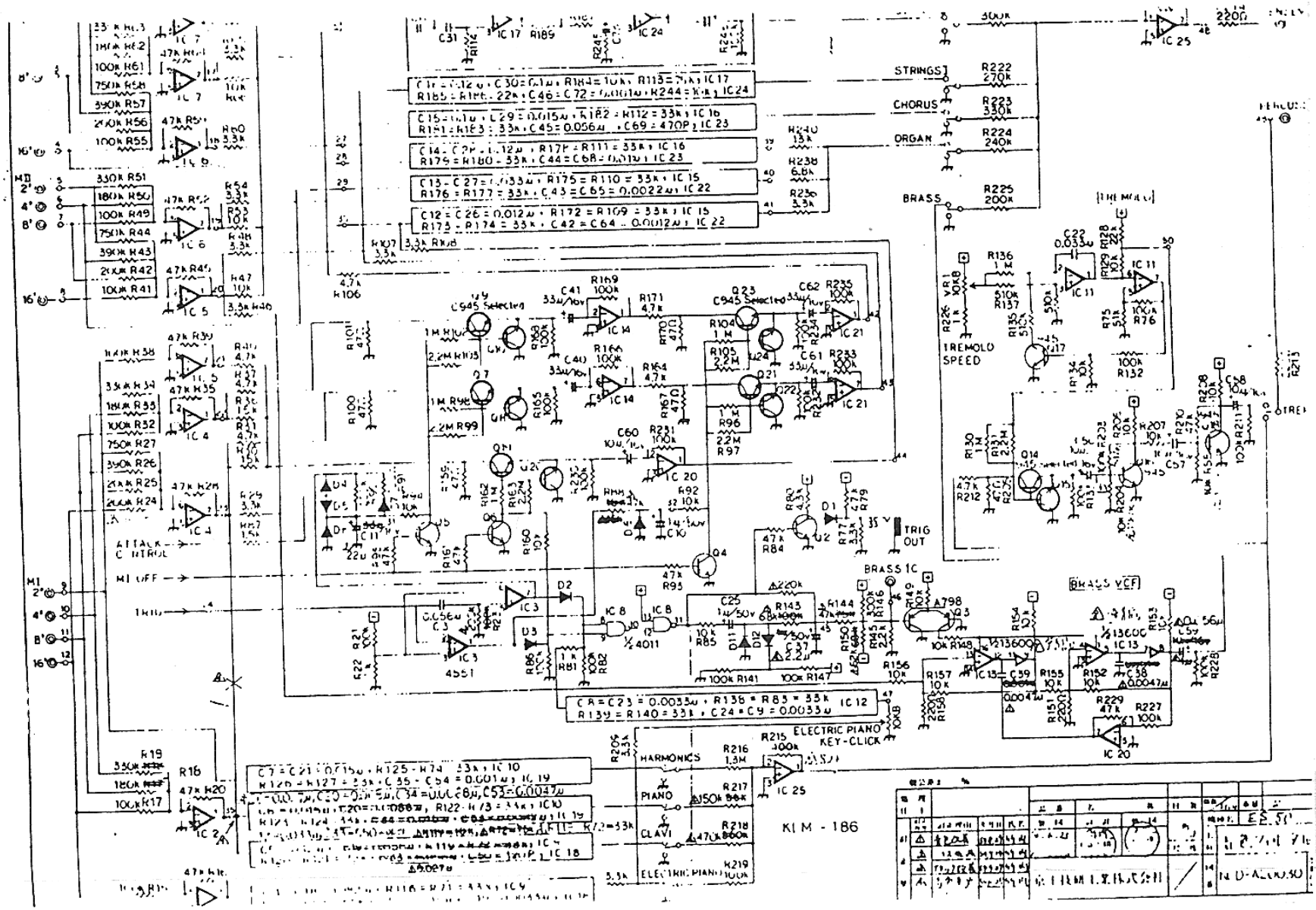

TO CHORUS PHASE
ENSEMBLE
TONE
FROM CHORUS PHASE "E OUT"
TO CHORUS PHASE
PERCUSSIVE
FROM CHORUS PHASE "P OUT"
AN 829
ENSEMBLE VOL
PERCUSSIVE VOL
HEAD-PHONES
STEREO OUT 1
MIX OUT
STEREO OUT 2
EXPRESSION SELECTOR
EXPRESSION 0～+5V
+15V
G
-15V
TO BRASS VCF
BRASS FC
KLM-184
250V 1A
POWER SW
AC
IS-1885×4
KA471 or KB471
IC 1 7815
IC 2 7915
IC 3 μA78L08
+10V
GND
-15V
KLM-183
POWER
KLM-186
RELEASE
ATTACK
ATTACK CONTROL
STRINGS II
STRINGS I
CHORUS
STRINGS
VIBRATO
VIBRATO OFF
CHORUS
ORGAN
BRASS
DECAY
HARMONICS
PIANO
CLAVI
ELECTRIC PIANO
SUSTAIN
OCTAVE UP
OFF
ON
NORMAL
UP
MI OFF
VIBRATO OFF
PER. ENVELOPE
No.1 → No.2 へ変更
ES-50
KCD-A20031
京王技研工業株式会社

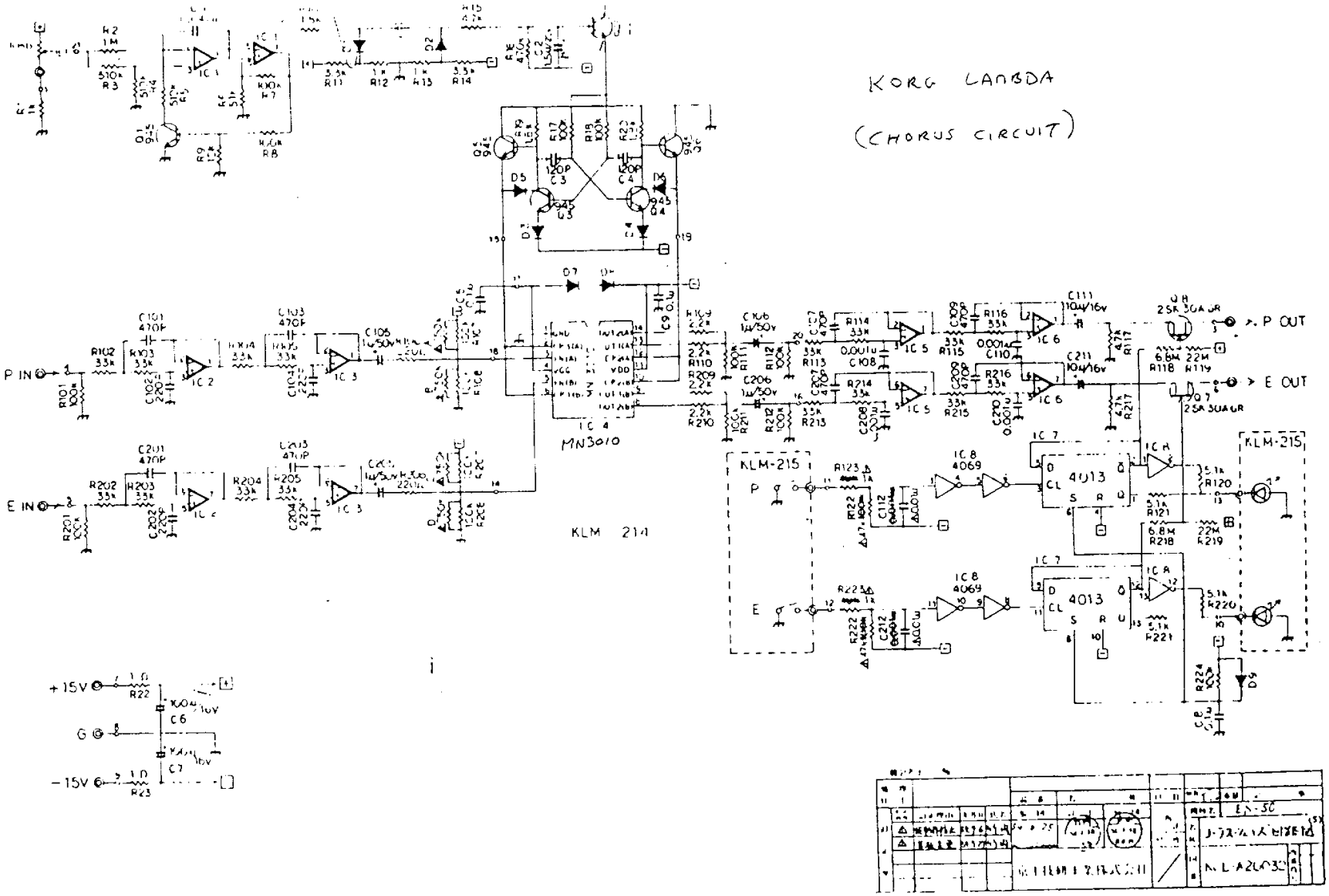

CHORUS PHASE SPEED
P IN
E IN
P OUT
E OUT
KLM - 214
KLM-215
P
E
IC 1
IC 2
IC 3
IC 4
IC 5
IC 6
IC 7
IC 8
4013
4069
MN 3010
2SK 30A GR
+15V
G
-15V
KCD-A20032
京王技研工業株式会社
ES-50
コーラス・フェイズ回路図

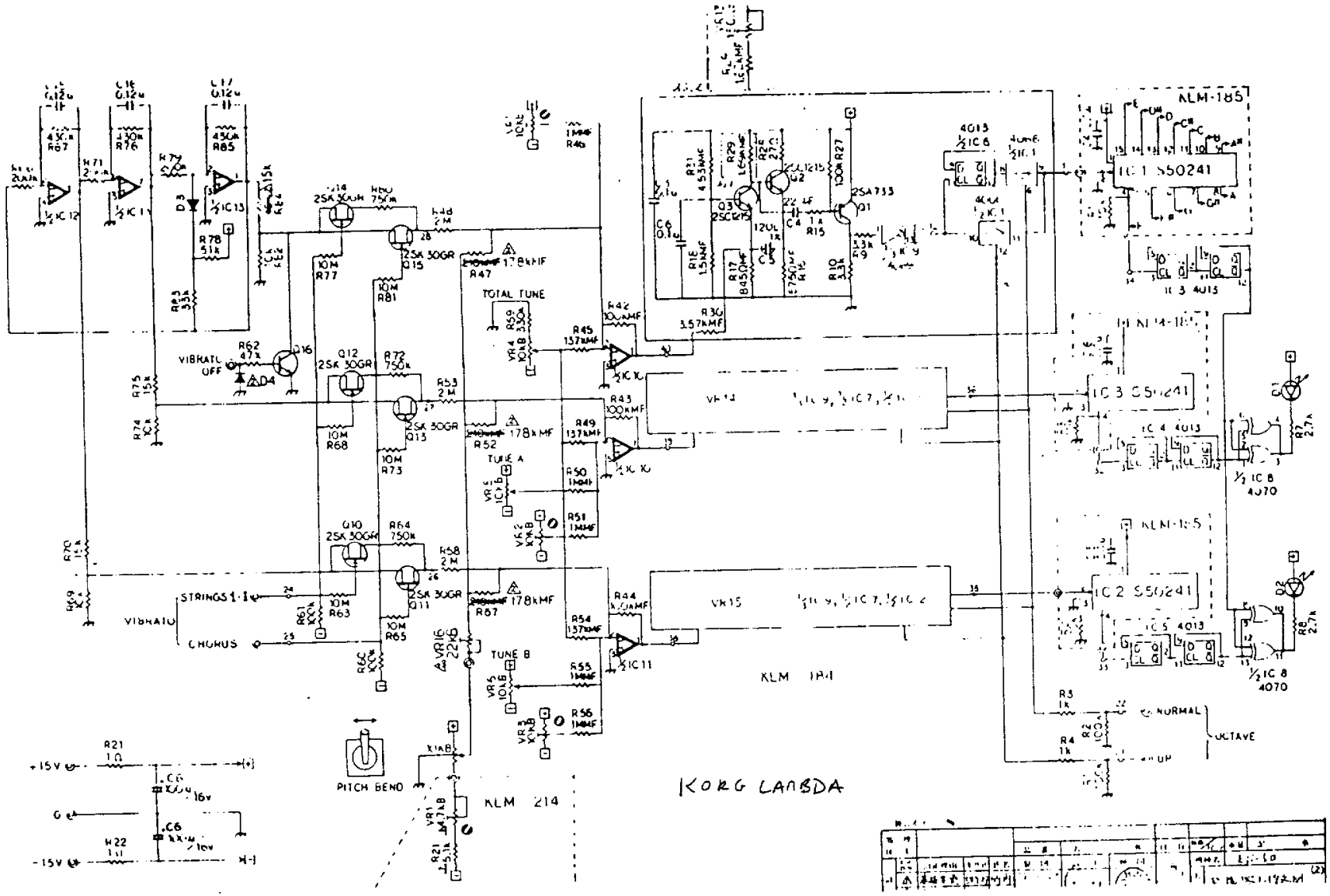

KORG
POWER

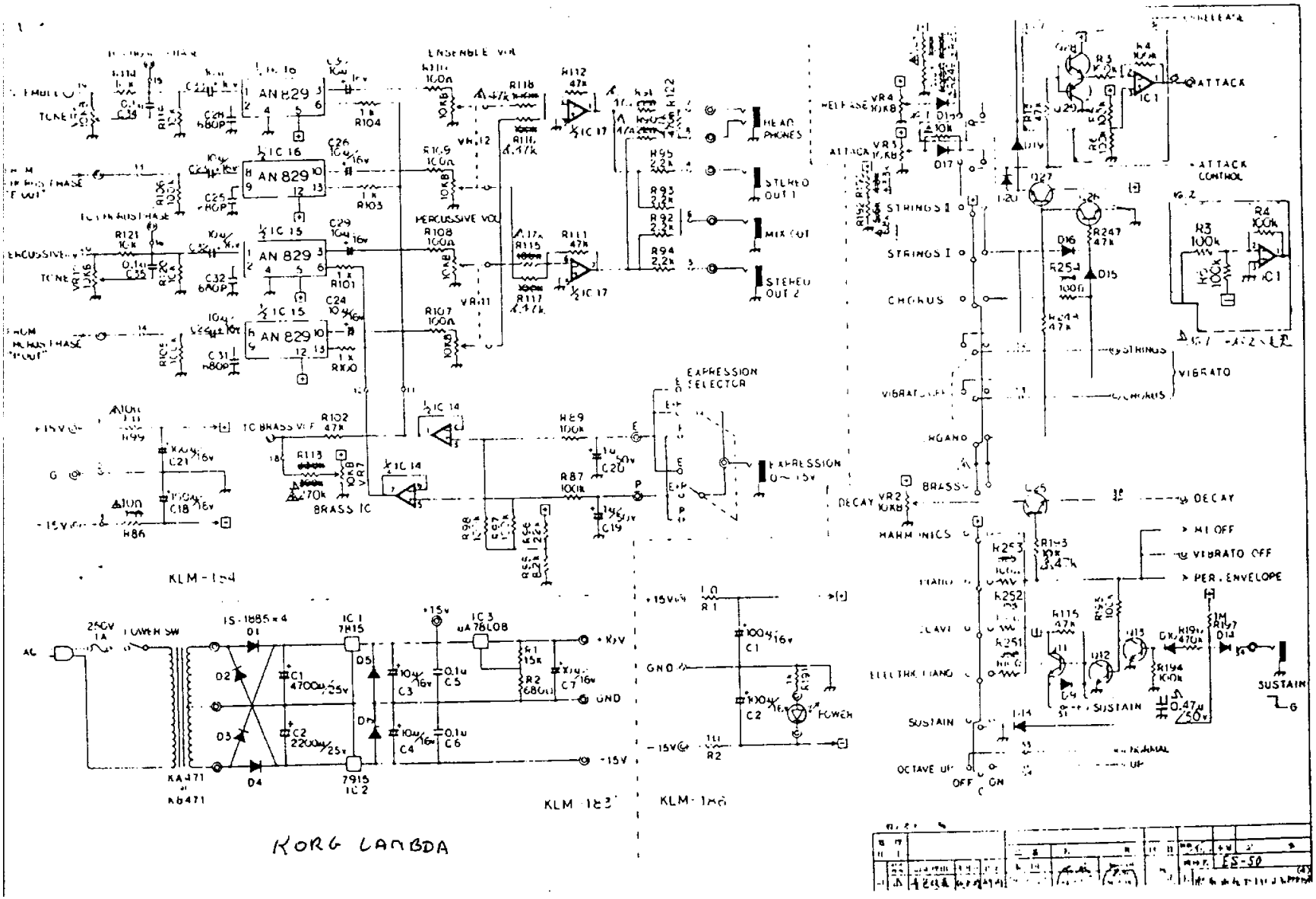

ATTACK
RELEASE
ENSEMBLE ENVELOPE
KEYBOARD 48 KEYS
PERCUSSIVE ENVELOPE
SUSTAIN
DECAY
PER. ENVELOPE
TRIG
S10430 (MODULE 7)
S10430 (MODULE 8)
S10430 (MODULE 9)
S10430 (MODULE 4)
S10430 (MODULE 5)
S10430 (MODULE 6)
S10430 (MODULE 1)
S10430 (MODULE 2)
S10430 (MODULE 3)
FROM IC 3
FROM IC 2
FROM IC 1
M I PITCH OUT
KORG LAMBDA
ES-50

KORG LAMBDA


STRINGS
CHORUS
ORGAN
BRASS
TREMOLO SPEED
TRIG OUT
ATTACK CONTROL
M1 OFF
BRASS VCF
ELECTRIC PIANO KEY-CLICK
HARMONICS
PIANO
CLAVI
ELECTRIC PIANO
KIM - 186


KORG LAMBDA
(CHORUS CIRCUIT)
P IN
E IN
MN3010
KLM 214
KLM-215
P
E
4013
4069
P OUT
E OUT
+15V
G
-15V


KLM-185
IC 1 S50241
IC 3 4013
IC 3 S50241
IC 4 4013
IC 2 S50241
IC 5 4013
4013 ½IC 6
½IC 1
½ IC 8 4070
½ IC 8 4070
2SA733
2SC815
TOTAL TUNE
TUNE A
TUNE B
VIBRATO OFF
VIBRATO
CHORUS
STRINGS 1·1
PITCH BEND
NORMAL
OCTAVE
KLM 184
KLM 214
KORG LAMBDA
+15V
0
-15V


AN 8291
AN 8292
AN 8293
ENSEMBLE VOL
PERCUSSIVE VOL
HEAD PHONES
STEREO OUT 1
MIX OUT
STEREO OUT 2
EXPRESSION SELECTOR
EXPRESSION 0 ~ +15V
BRASS IC
KLM-154
KLM-183
KLM-146
KORG LAMBDA
ATTACK
ATTACK CONTROL
STRINGS 1
STRINGS II
CHORUS
VIBRATO
ORGAN
BRASS
DECAY
HARMONICS
PIANO
CLAVI
ELECTRIC GUITAR
SUSTAIN
OCTAVE UP
OFF
ON
VIBRATO OFF
PER. ENVELOPE
ES-50