



US Model # 99-060-1615  
 Australian Model # 99-060-1611  
 European Model # 99-060-1612  
 Japanese Model # 99-060-163  
 UK Model # 99-060-164Rayan

**POD HD 500**

**Multi FX pedal**

Quick View Parts Guide

**Pod HD500 Pedal Board**

50-02-0142  
LCD DISPLAY PCBA

30-27-0217-1  
4-WAY BUTTON TOP  
30-27-0496-2  
DOUBLE BUTTON RT

30-45-0034  
LARGE KNOB

24-09-0002  
SLIDE SWITCH

50-03-0072  
FOOT PEDAL ASSEMBLY

30-45-0035  
SMALL KNOB  
W/O INDICATOR  
30-27-0496-1  
DOUBLE BUTTON LT

30-45-0035  
SMALL KNOB  
W/ INDICATOR



50-03-0071  
FOOTSWITCH COMPLETE ASSEMBLY

**Pod HD500 Back Panel**

21-00-6617  
INPUT JACK

21-04-5075  
5-PIN MIDI JACK

21-21-0001  
USB JACK

01-48-0023  
MIC LEVEL POT

21-02-0008  
RCA JACK FEMALE

21-12-0035  
3.5MM INPUT JACK

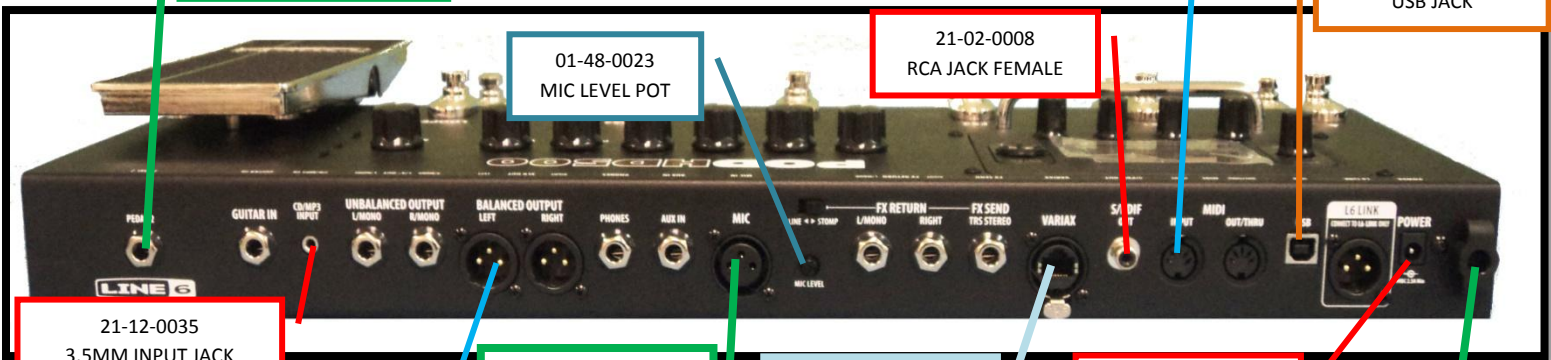
21-08-0013  
XLR JACK MALE

21-08-0002  
XLR JACK FEMALE

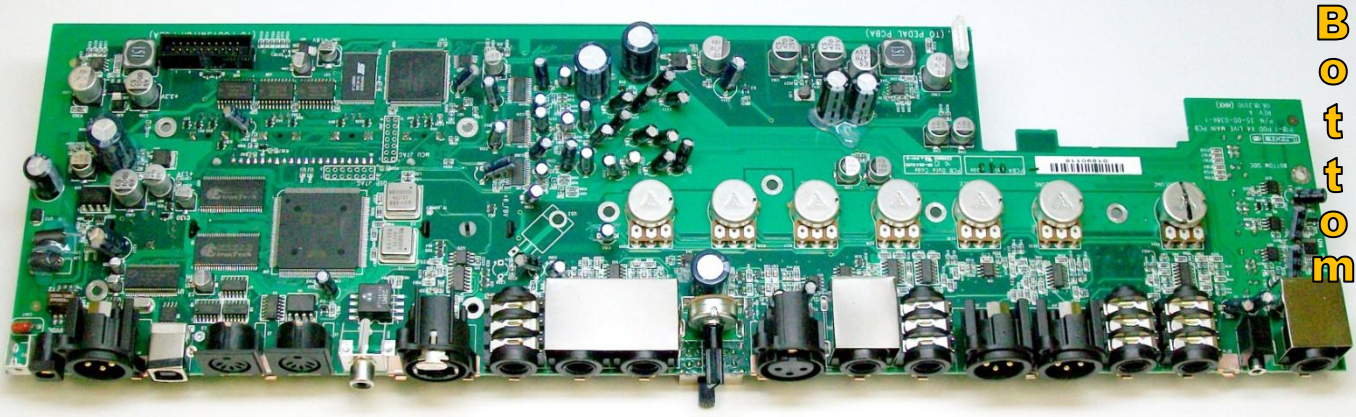
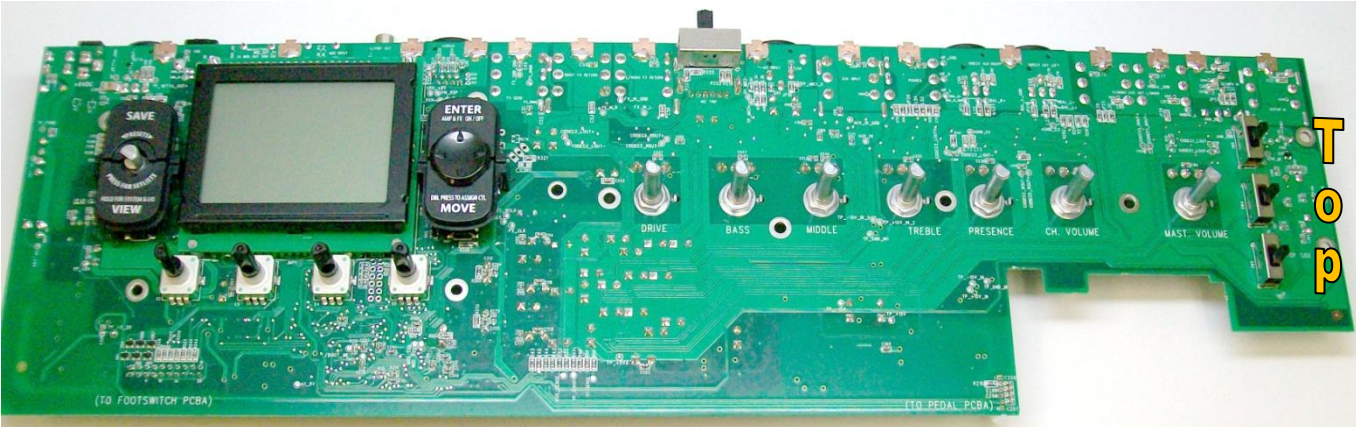
21-16-0001  
RJ-45 JACK

21-00-0014  
DC JACK

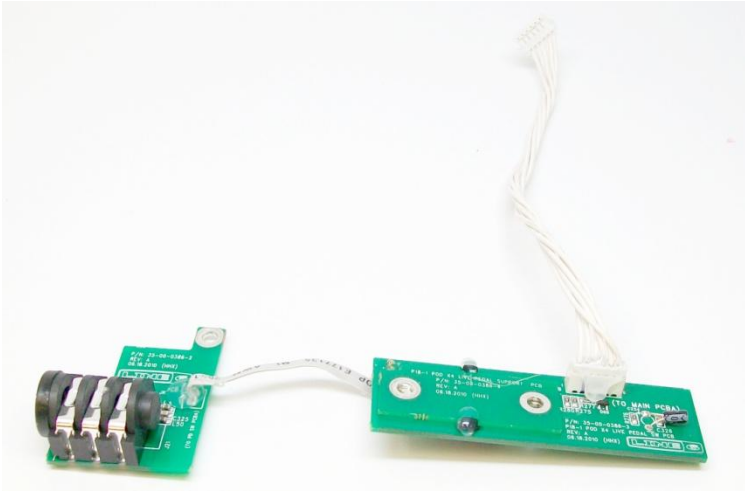
30-27-0304  
CABLE STRAIN RELIEF



50-02-0386  
Main Board



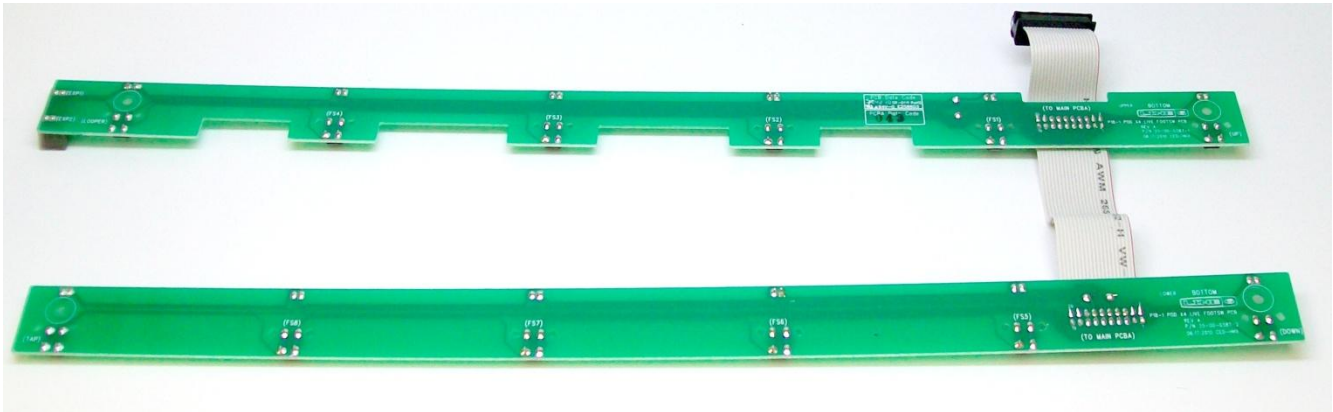
50-02-0386-2  
Pedal Board



50-03-0071  
Switch Assembly



50-02-0386-3  
Upper and Lower Switch Boards



# Disassembly Instructions

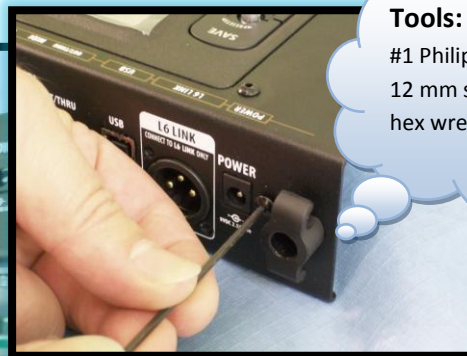
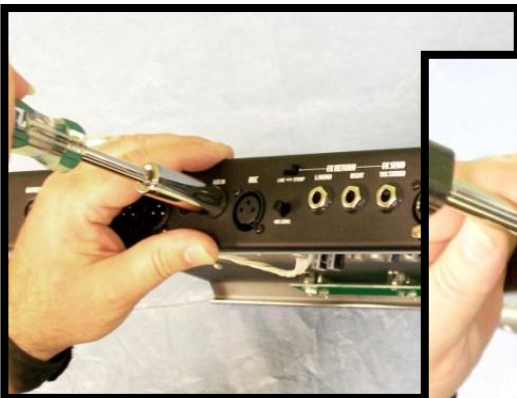
**Step 1-** Unscrew **6** screws from back panel and remove panel.



**Step 2-** Remove all pot knobs from front panel.



**Step 3-** Remove jack retainer nuts and **11** screws from back panel. Use hex wrench to remove screw right of the power supply jack.



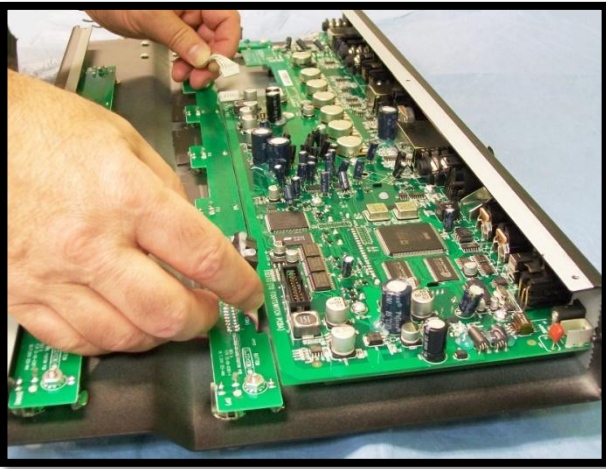
## Tools:

- #1 Philips head
- 12 mm socket
- hex wrench



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**Step 4-** To remove Main Board: Disconnect ribbon cable and wire harness.



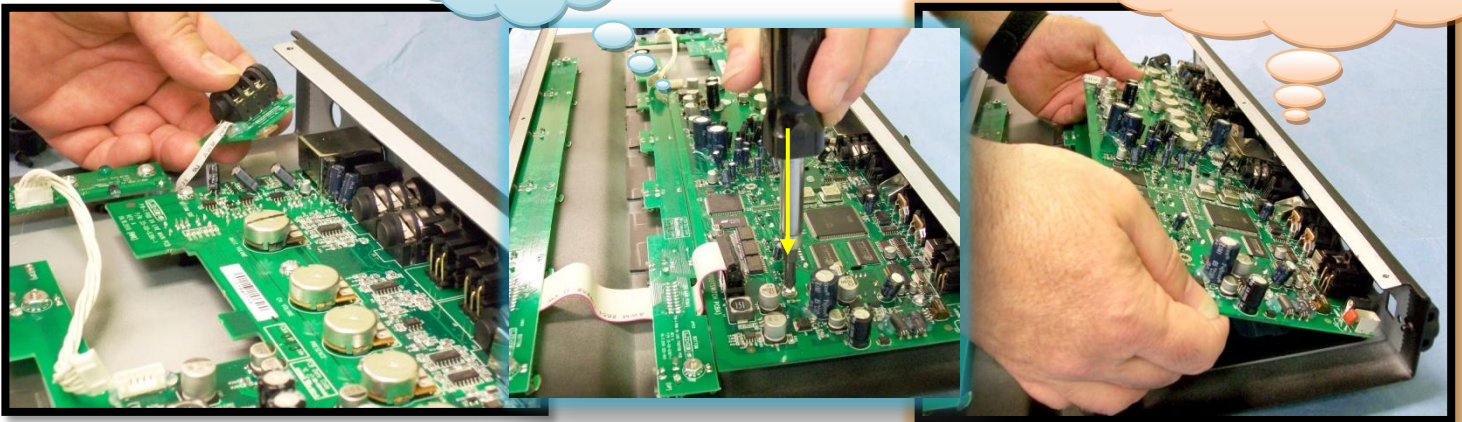
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**Step 5-** Remove **1** screw on external pedal input board and **9** screws on the remainder of the main board. Remove board.

**Tools:**  
#2 Philips

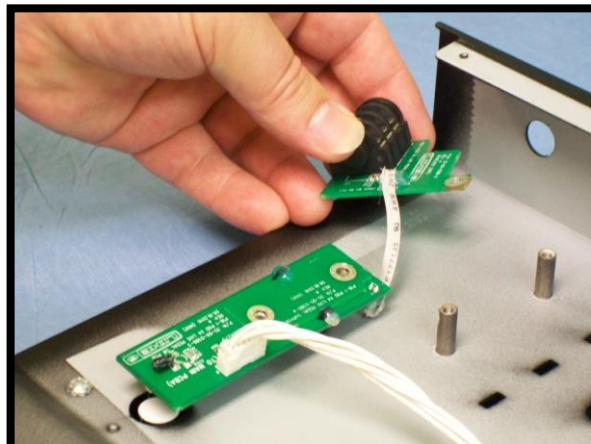
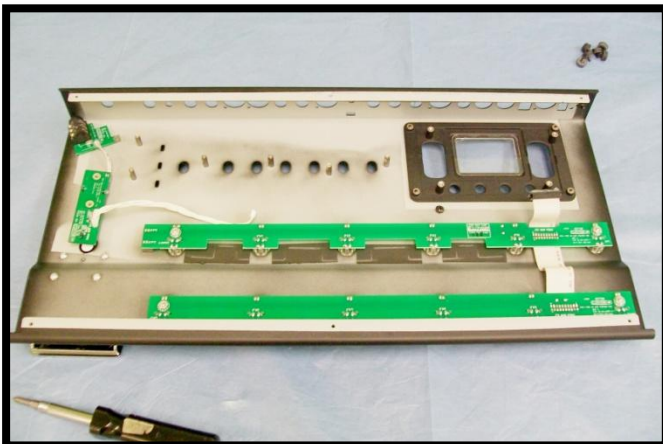


**Note:** Please take anti static precautions when handling PCBA.



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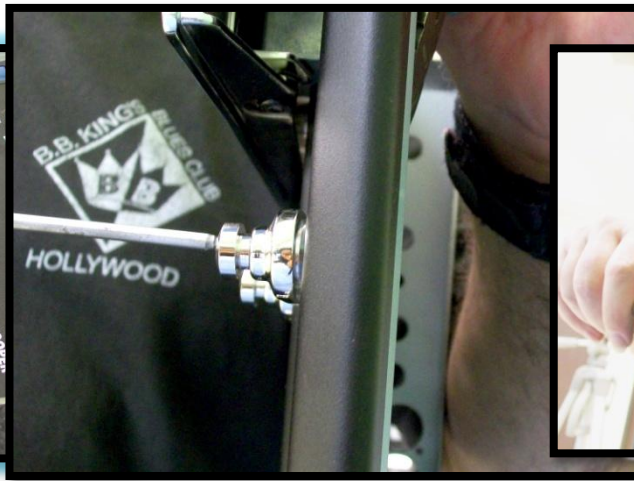
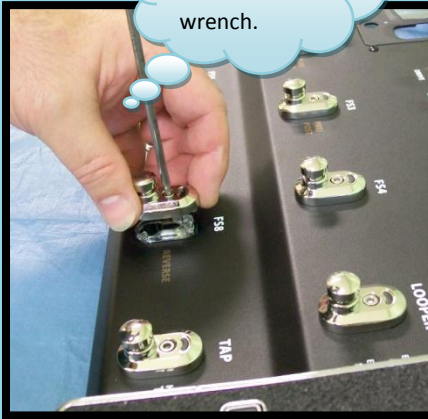
**Step 6-** Remove **2** screws from pedal board and remove board.



**Step 7-** To remove upper and lower footswitch boards: Remove **12** footswitch screws along with the nuts underneath. Note that the **4** outside switches have threaded spaces that will need removing.

**Tools:**

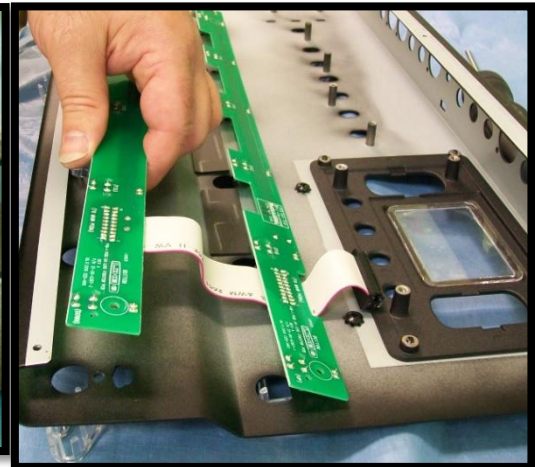
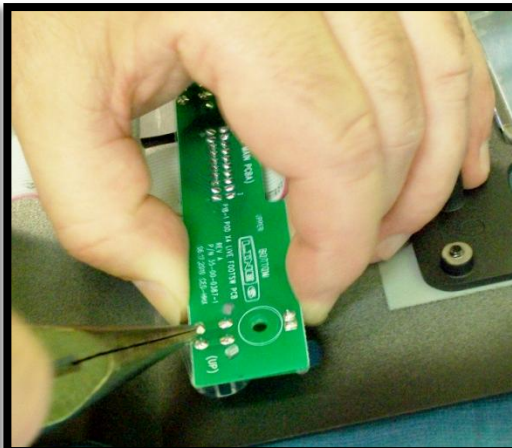
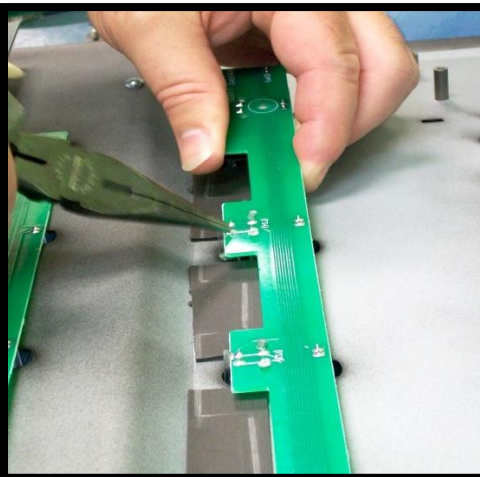
7/64<sup>th</sup> Hex wrench.



**Step 8-** Remove push pin, spring, nut and star/lock washer from inside switch.



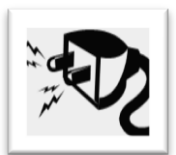
**Step 9-** Carefully unclamp light pipes from underside and remove upper and lower switch boards.



# Trouble Shooting Tips



- If you are experiencing strange runtime issues while programming sounds with Edit USB connectivity: Power device off and on in “Safe Mode” (hold “Right arrow” and power on or Power off and hold the “Left arrow” while powering on). Then, USB connect to a computer, run Line 6 Monkey, Highlight “Flash Memory” and click “Reinstall latest”.



- If when first powered on, unit power cycles and line 6 appears on the screen and goes blank:

1- If unit does not go into test mode (powering on while pushing down right arrow button on the four way switch), then doing a global reset might fix the problem (powering on while pushing down left arrow button on the four way switch).

2- If unit does go into test mode, then chances are doing a global reset won't fix the problem, replacing the Flash IC should fix it.

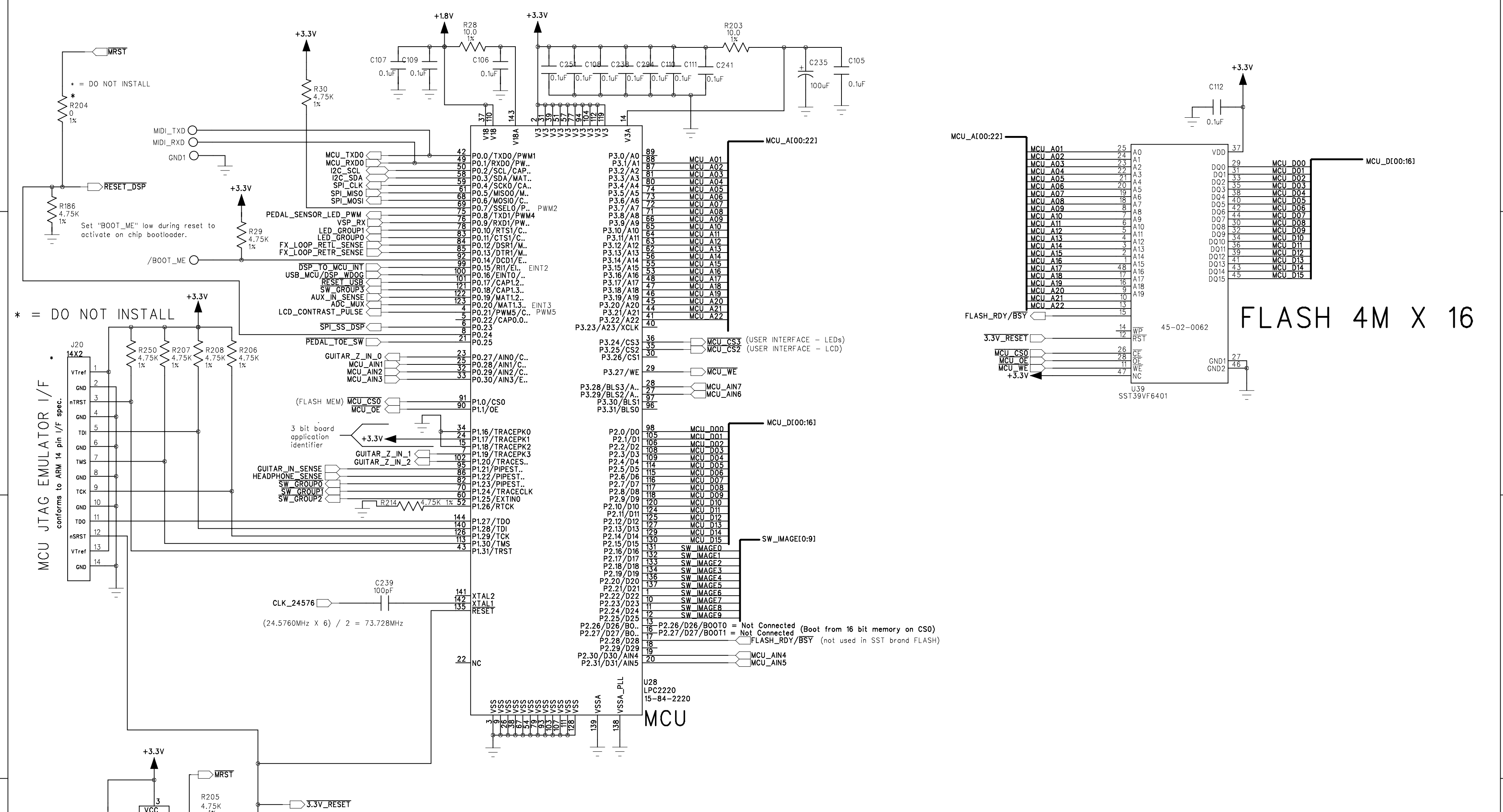


- No Audio: I/O configuration and DSP circuit (IC and crystal). Check input/output configurations 1<sup>st</sup>, to be sure there isn't a glitch there- before spending time and effort opening the unit to check the crystal (and the DSP chip). If it is a crystal problem, implement Technical Bulletin 058.



- Loud crackling noise, or low crackling noise that gets louder is a failing DSP 24.576-MHz clock (X1, 11-00-1003) crystal signal. Replace crystal or the Main PCBA. If it is a crystal problem, implement Technical Bulletin 058.

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
0003635	09.24.10	Released as rev.A3 Changed R226 from 10K to 0R.



This board: All resistors are 1% Tolerance

3 BIT BOARD APPLICATION IDENTIFIER

MCU\_IDEN2: P1.18 = L  
MCU\_IDEN1: P1.17 = H  
MCU\_IDEN0: P1.16 = L  
X4 TNG LIVE = 0x02

COMPANY: **LINE 6** **LINE 6**

TITLE: **P18-1 POD X4 LIVE**  
MCU

PROGRAM: **PADS LOGIC 2007**

REV: **C**

DRAWN: **CED** DATED: 11-11-2010

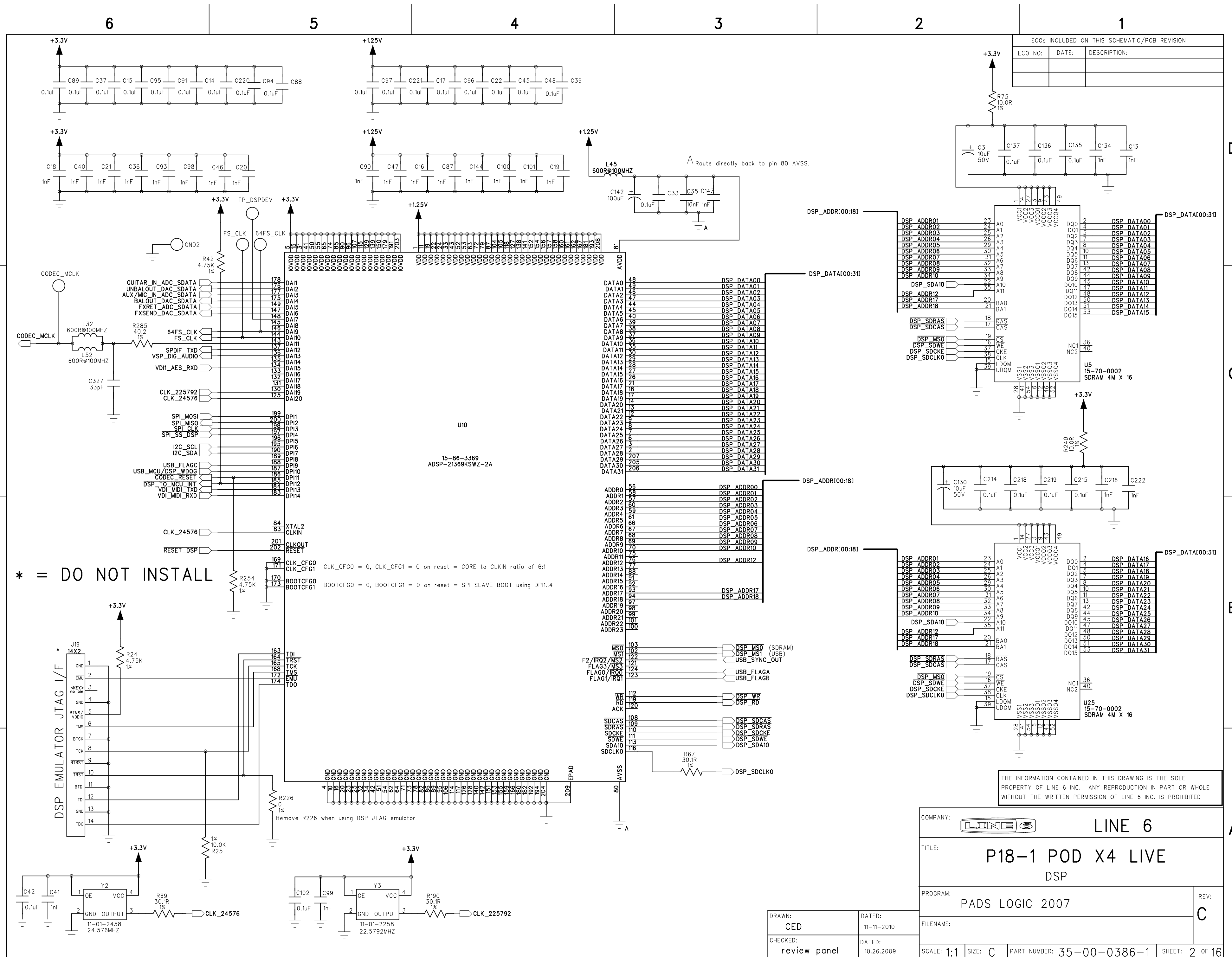
CHECKED: **review panel** DATED: 10.26.2009

FILENAME:

SCALE: 1:1 SIZE: C PART NUMBER: 35-00-0386-1 SHEET: 1 OF 16

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ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

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COMPANY: <b>LINE 6</b>		TITLE: <b>P18-1 POD X4 LIVE DSP</b>	
PROGRAM: <b>PADS LOGIC 2007</b>		REV: <b>C</b>	
DRAWN: <b>CED</b>		DATED: <b>11-11-2010</b>	
CHECKED: <b>review panel</b>		DATED: <b>10.26.2009</b>	
SCALE: <b>1:1</b>	SIZE: <b>C</b>	PART NUMBER: <b>35-00-0386-1</b>	SHEET: <b>2 OF 16</b>

\* = DO NOT INSTALL

CLK\_CFG0 = 0, CLK\_CFG1 = 0 on reset = CORE to CLKIN ratio of 6:1  
 BOOTCFG0 = 0, BOOTCFG1 = 0 on reset = SPI SLAVE BOOT using DP11.4

Remove R226 when using DSP JTAG emulator

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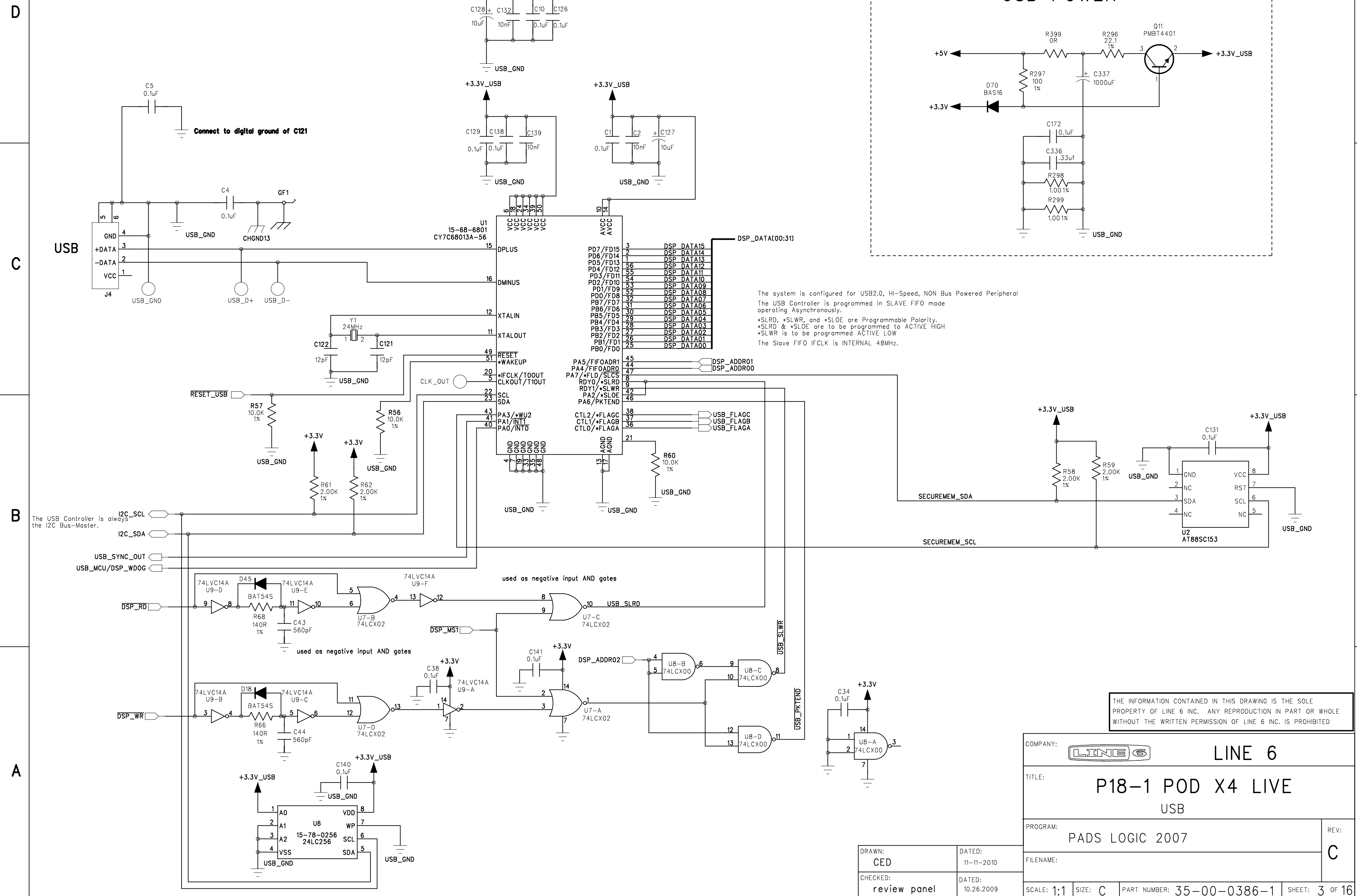
2

1

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

# USB SECTION

# USB POWER



The system is configured for USB2.0, Hi-Speed, NON Bus Powered Peripheral  
 The USB Controller is programmed in SLAVE FIFO mode operating Asynchronously.  
 \*SLRD, \*SLWR, and \*SLOE are Programmable Polarity.  
 \*SLRD & \*SLOE are to be programmed to ACTIVE HIGH  
 \*SLWR is to be programmed ACTIVE LOW  
 The Slave FIFO IFCLK is INTERNAL 48MHz.

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COMPANY: <b>LINE 6</b>		REV: <b>C</b>
TITLE: <b>P18-1 POD X4 LIVE USB</b>		
PROGRAM: <b>PADS LOGIC 2007</b>		FILENAME: <b>C</b>
DRAWN: <b>CED</b>	DATED: <b>11-11-2010</b>	SCALE: <b>1:1</b>
CHECKED: <b>review panel</b>	DATED: <b>10.26.2009</b>	SIZE: <b>C</b>
PART NUMBER: <b>35-00-0386-1</b>		SHEET: <b>3 OF 16</b>

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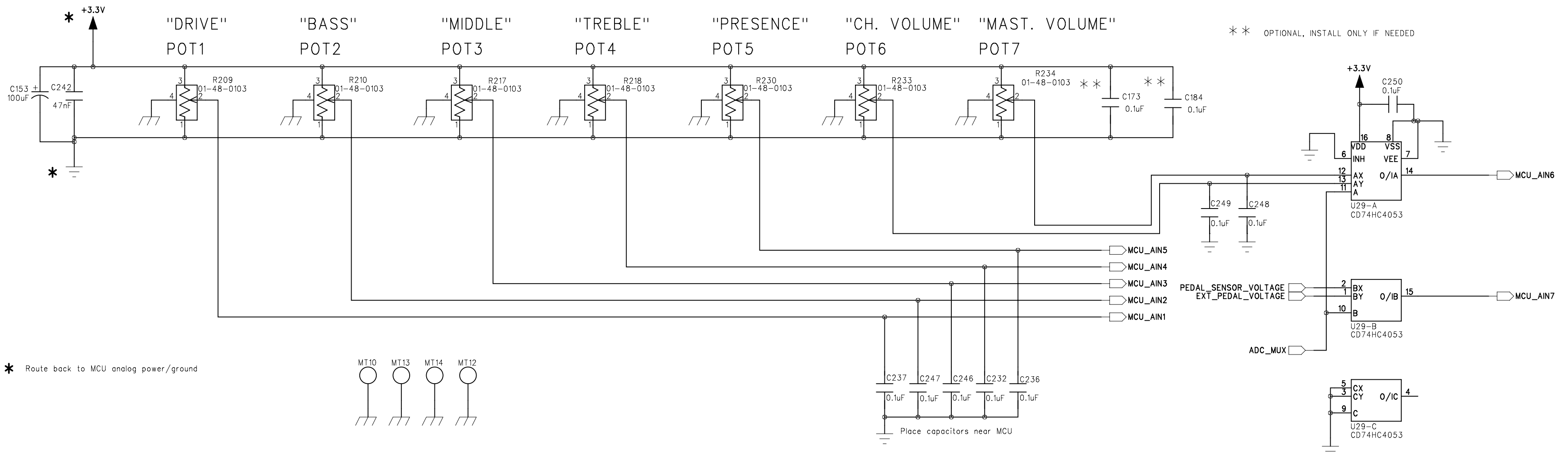
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1

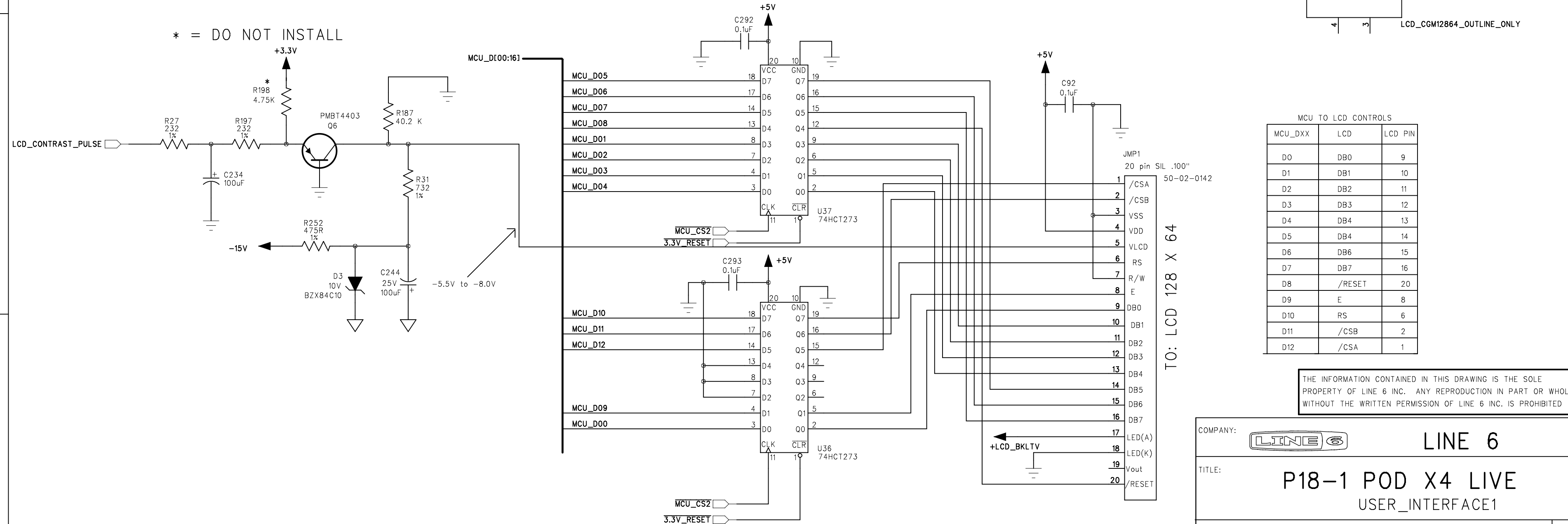
# POTENTIOMETERS



ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:



# LCD MODULE AND SUPPORT CIRCUITRY



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COMPANY: **LINE 6**

TITLE: **P18-1 POD X4 LIVE USER\_INTERFACE1**

PROGRAM: **PADS LOGIC 2007**

SCALE: 1:1 SIZE: C PART NUMBER: 35-00-0386-1 SHEET: 4 OF 16

DRAWN: CED	DATED: 11-11-2010
CHECKED: review panel	DATED: 10.26.2009

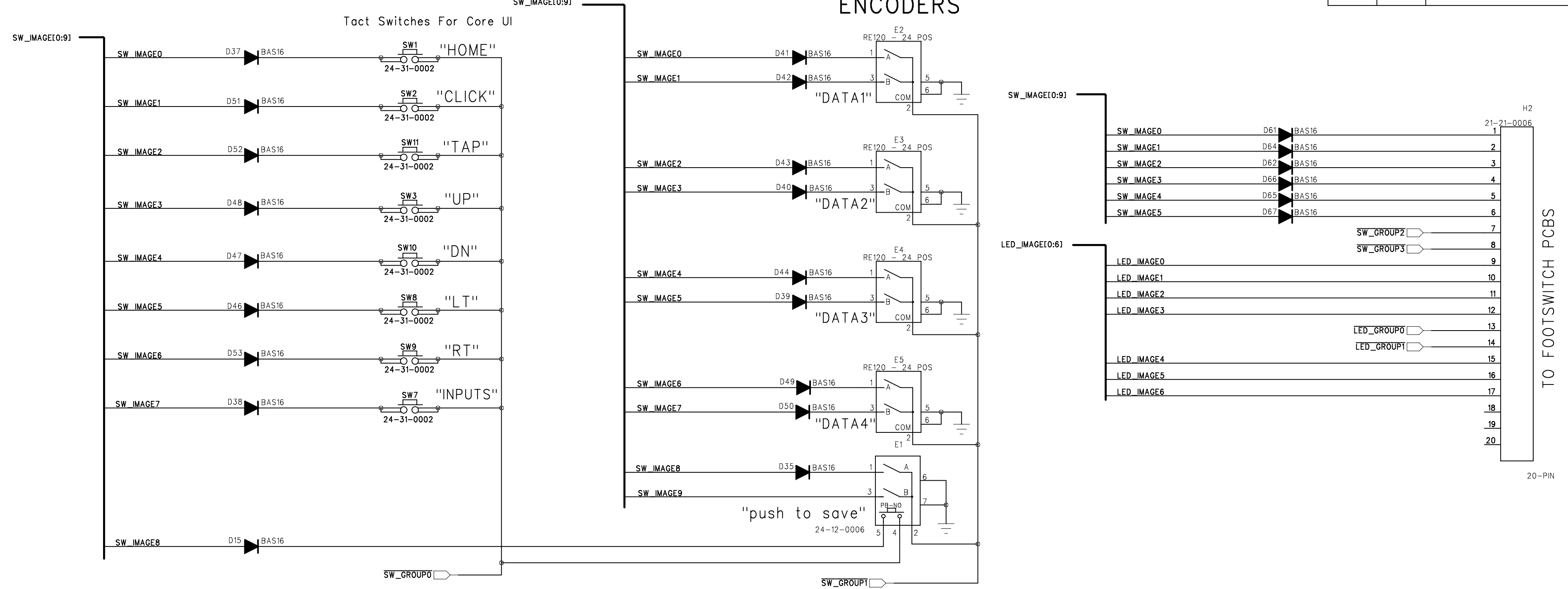
REV: C

Pullup resistors are not needed because the LPC2220 has built in pullup resistors in its I/O pins

ECO's INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

# SWITCHES

# ENCODERS

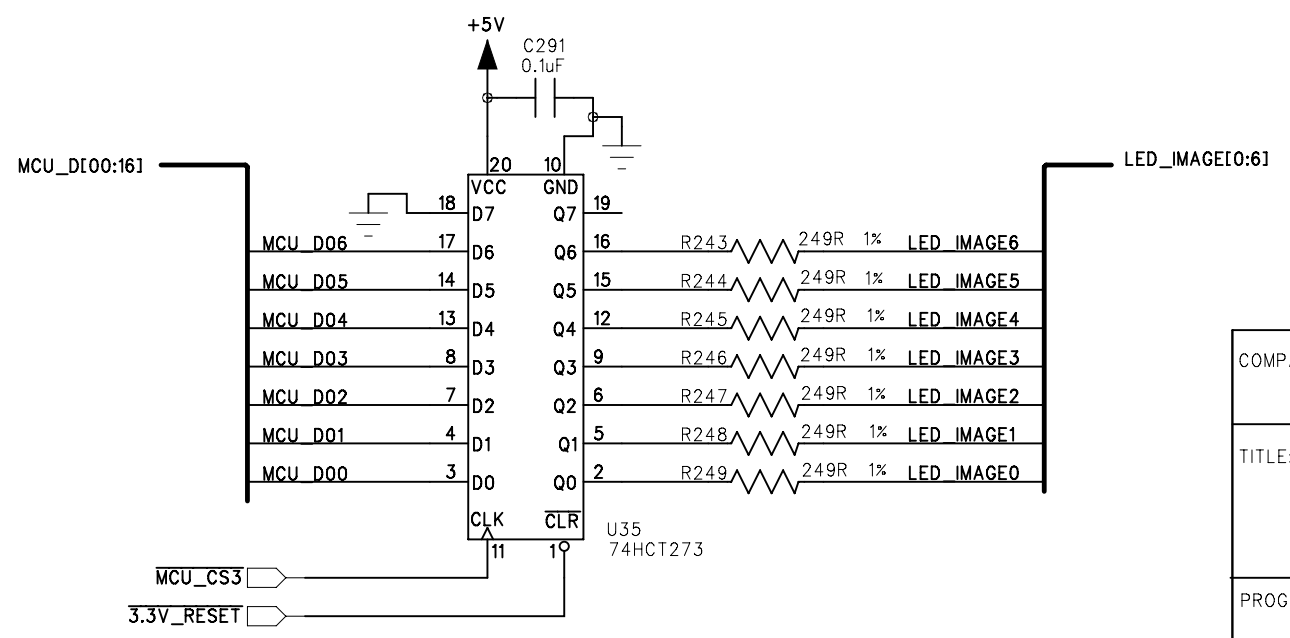
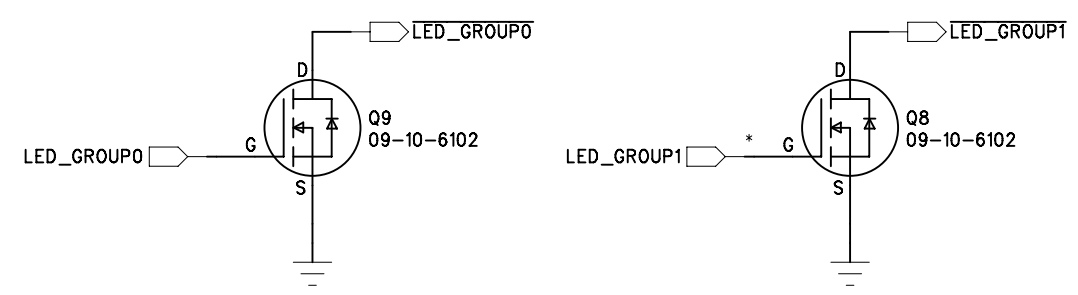


LED MATRIX 7 X 2

	LED_GROUP0	LED_GROUP1
LED_IMAGE0	FT SW UPPER 0	FT SW LOWER 0
LED_IMAGE1	FT SW UPPER 1	FT SW LOWER 1
LED_IMAGE2	FT SW UPPER 2	FT SW LOWER 2
LED_IMAGE3	FT SW UPPER 3	FT SW LOWER 3
LED_IMAGE4	FT SW UPPER 4	FT SW LOWER 4
LED_IMAGE5	FT SW UPPER 5	FT SW LOWER 5
LED_IMAGE6	EXP1	EXP2

SWITCH MATRIX 10 X 4

	SW_GROUP0	SW_GROUP1	SW_GROUP2	SW_GROUP3
SW_IMAGE0	HOME	E1-A	FT SW UPPER 0	FT SW LOWER 0
SW_IMAGE1	CLICK	E1-B	FT SW UPPER 1	FT SW LOWER 1
SW_IMAGE2	TAP	E2-A	FT SW UPPER 2	FT SW LOWER 2
SW_IMAGE3	UP	A2-B	FT SW UPPER 3	FT SW LOWER 3
SW_IMAGE4	DN	E3-A	FT SW UPPER 4	FT SW LOWER 4
SW_IMAGE5	LT	E3-B	FT SW UPPER 5	FT SW LOWER 5
SW_IMAGE6	RT	E4-A	-	-
SW_IMAGE7	INPUTS	E4-B	-	-
SW_IMAGE8	E1 pushbutton	E5-A	-	-
SW_IMAGE9	-	E5-B	-	-



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COMPANY:	<b>LINE 6</b>	
TITLE:	<b>P18-1 POD X4 LIVE USER_INTERFACE2</b>	
PROGRAM:	PADS LOGIC 2007	REV: C
FILENAME:		
SCALE: 1:1	SIZE: C	PART NUMBER: 35-00-0386-1
DRAWN: CED		DATED: 11-11-2010
CHECKED: review panel		DATED: 10.26.2009
SCALE: 1:1		SIZE: C
PART NUMBER: 35-00-0386-1		SHEET: 5 OF 16

6

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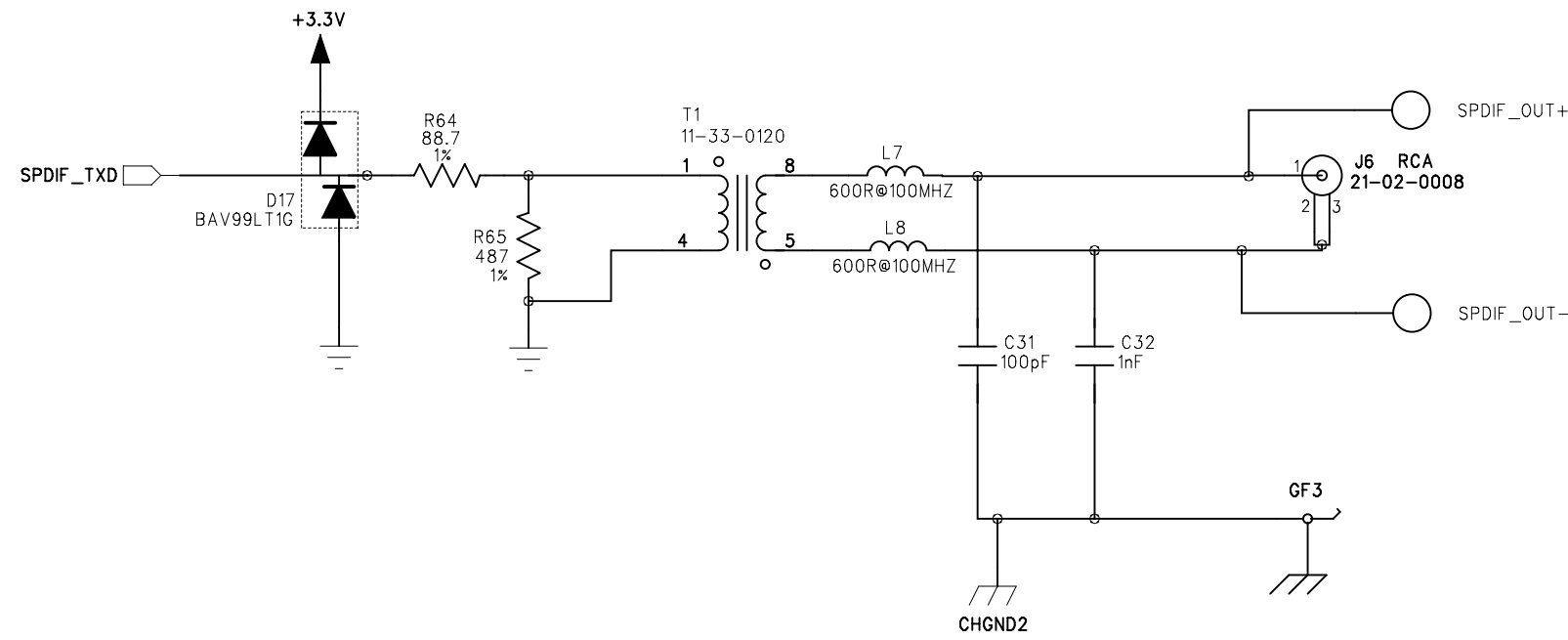
3

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1

# S/PDIF OUTPUT

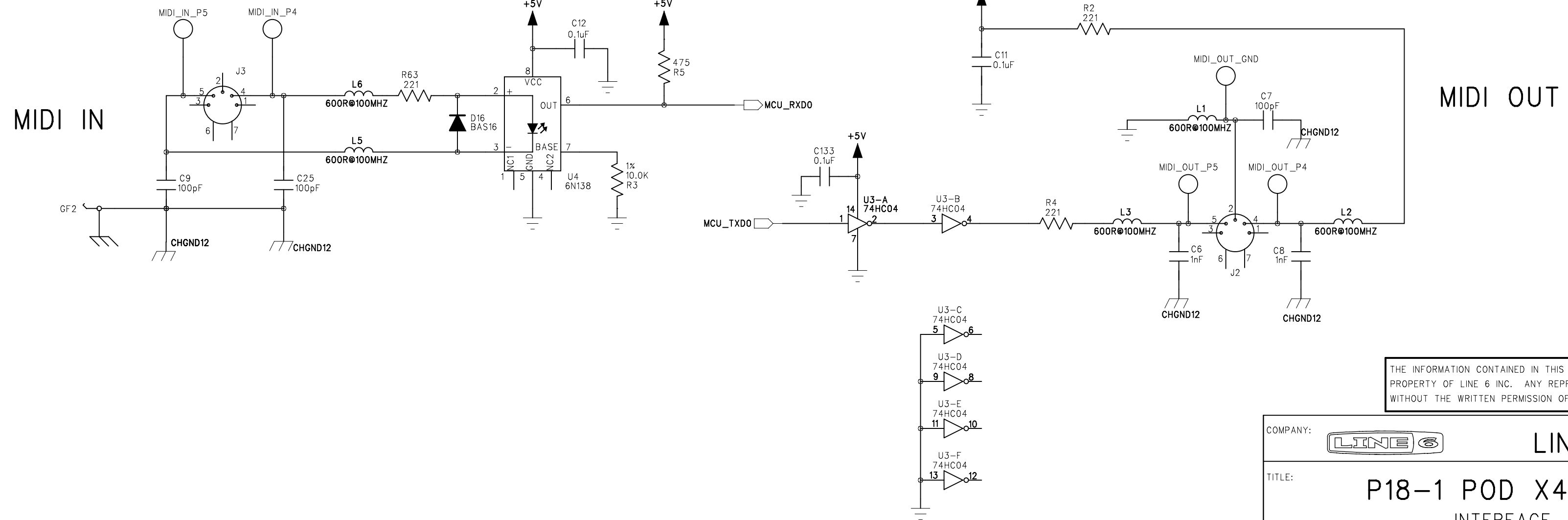
ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:



# S/PDIF OUTPUT

Vout = .5Vpp NOM  
Zout = 75ohm NOM

# MIDI INTERFACE



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COMPANY:	LINE 6	
TITLE:	P18-1 POD X4 LIVE INTERFACE	
PROGRAM:	PADS LOGIC 2007	REV: C
FILENAME:		
SCALE: 1:1	SIZE: C	PART NUMBER: 35-00-0386-1
DRAWN: CED		DATED: 11-11-2010
CHECKED: review panel		DATED: 10.26.2009
SHEET: 6 OF 16		

6

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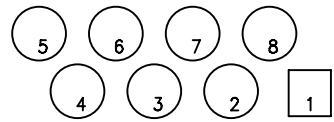
2

1

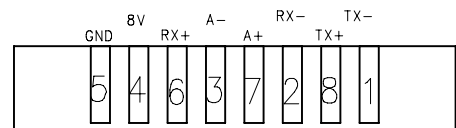
ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

# VARIAX 1.0 INTERFACE

Transmit and Receive names are relative to this board, not the attached Variax guitar



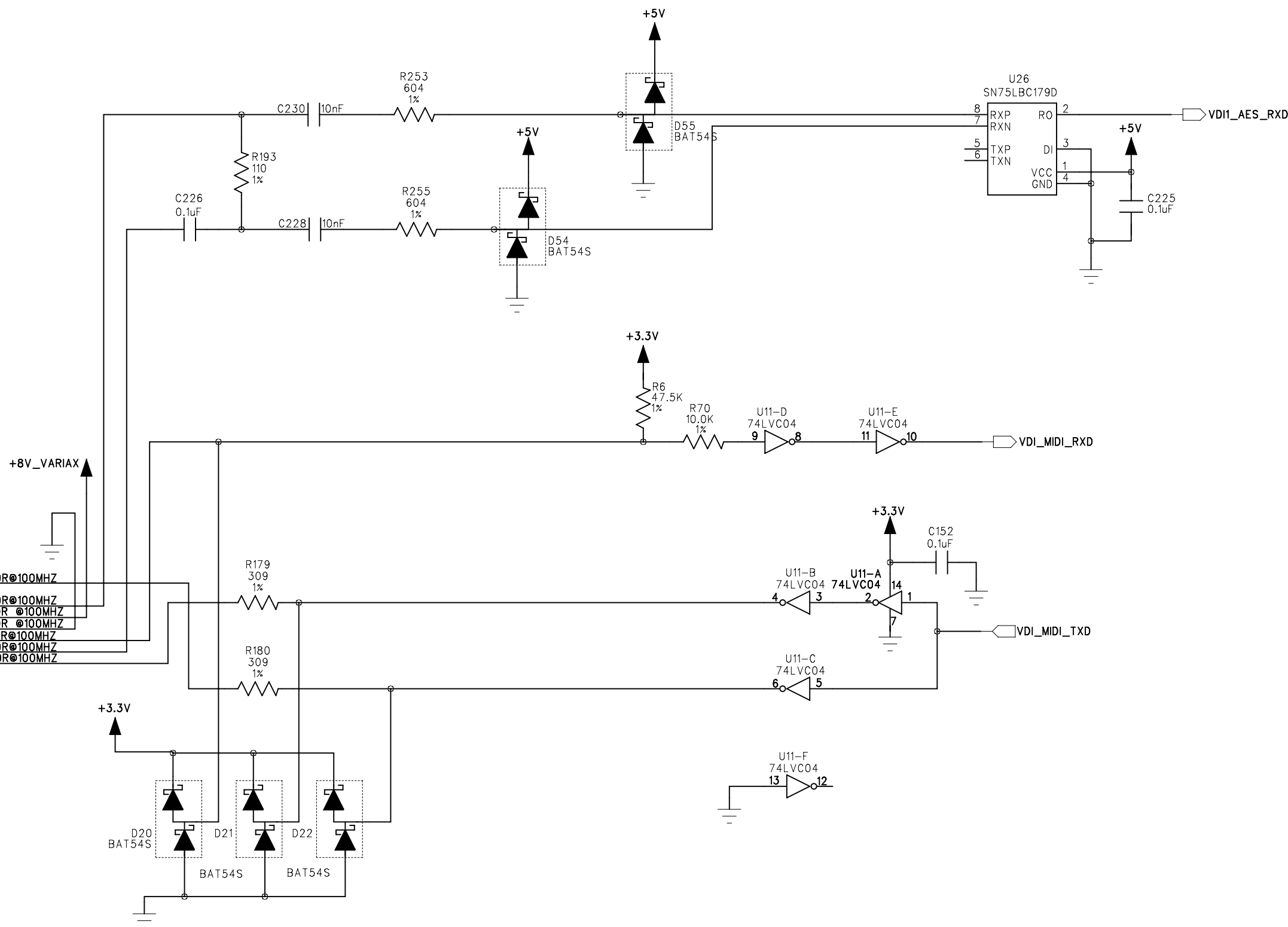
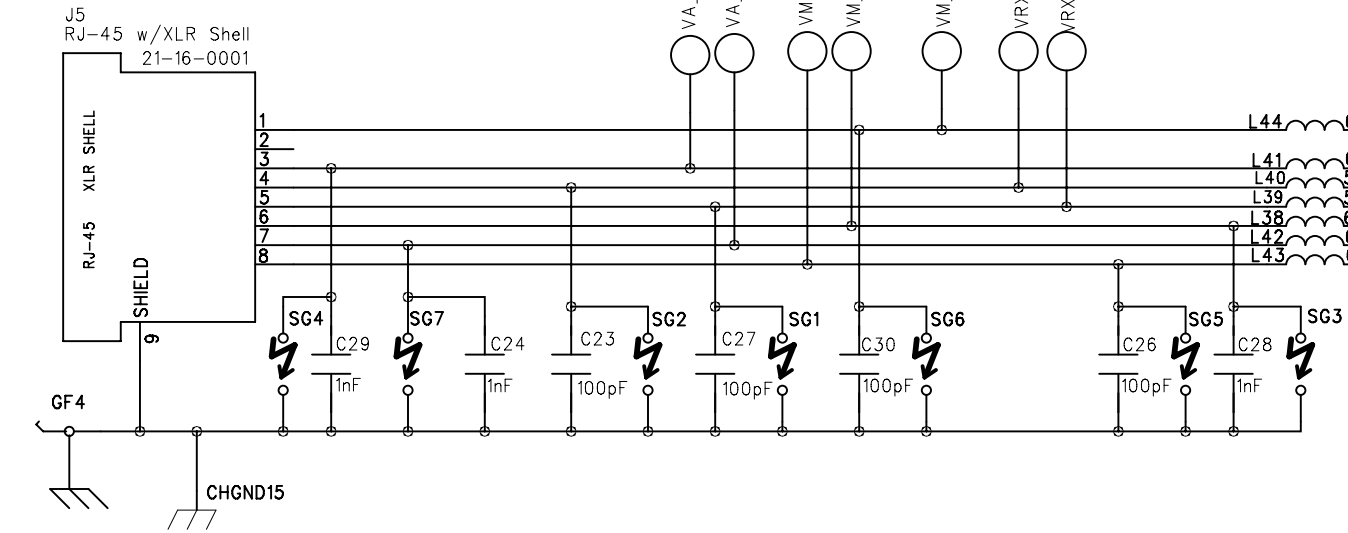
RJ45 JACK PINS BOTTOM VIEW (PCB UNDERSIDE VIEW)



VIEW LOOKING INTO FEMALE JACK INPUT

FOR VARIAX PORT MIDI LOOPBACK SHORT: VM\_TXP TO VM\_RXP

## MG-1 CLASS RJ-45 I/F



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COMPANY:	LINE 6	
TITLE:	P18-1 POD X4 LIVE VARIAX	
PROGRAM:	PADS LOGIC 2007	REV: C
FILENAME:		
SCALE: 1:1	SIZE: C	PART NUMBER: 35-00-0386-1
DRAWN: CED		DATED: 11-11-2010
CHECKED: review panel		DATED: 10.26.2009
SCALE: 1:1		SHEET: 7 OF 16

6

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1

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

D

D

C

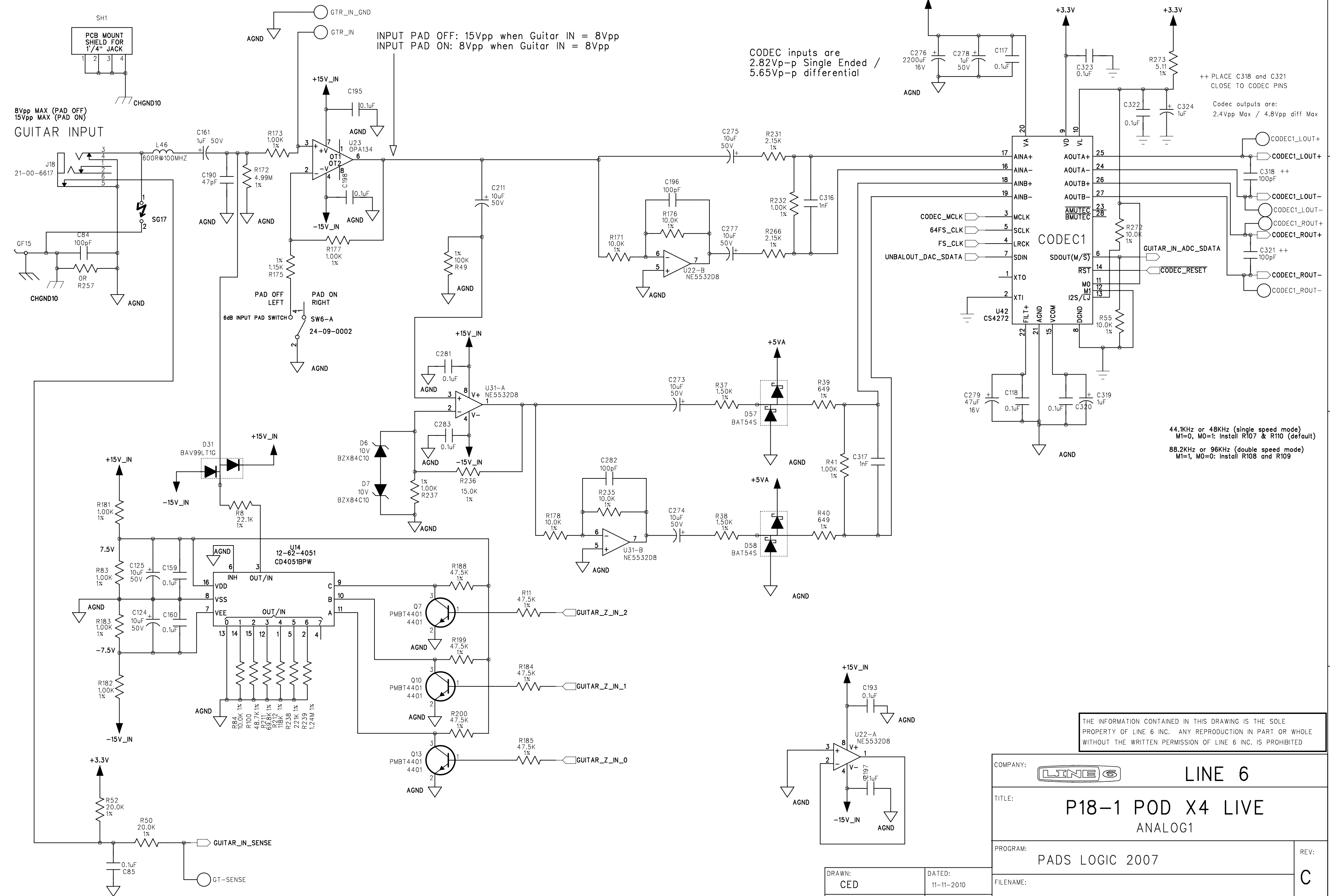
C

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A

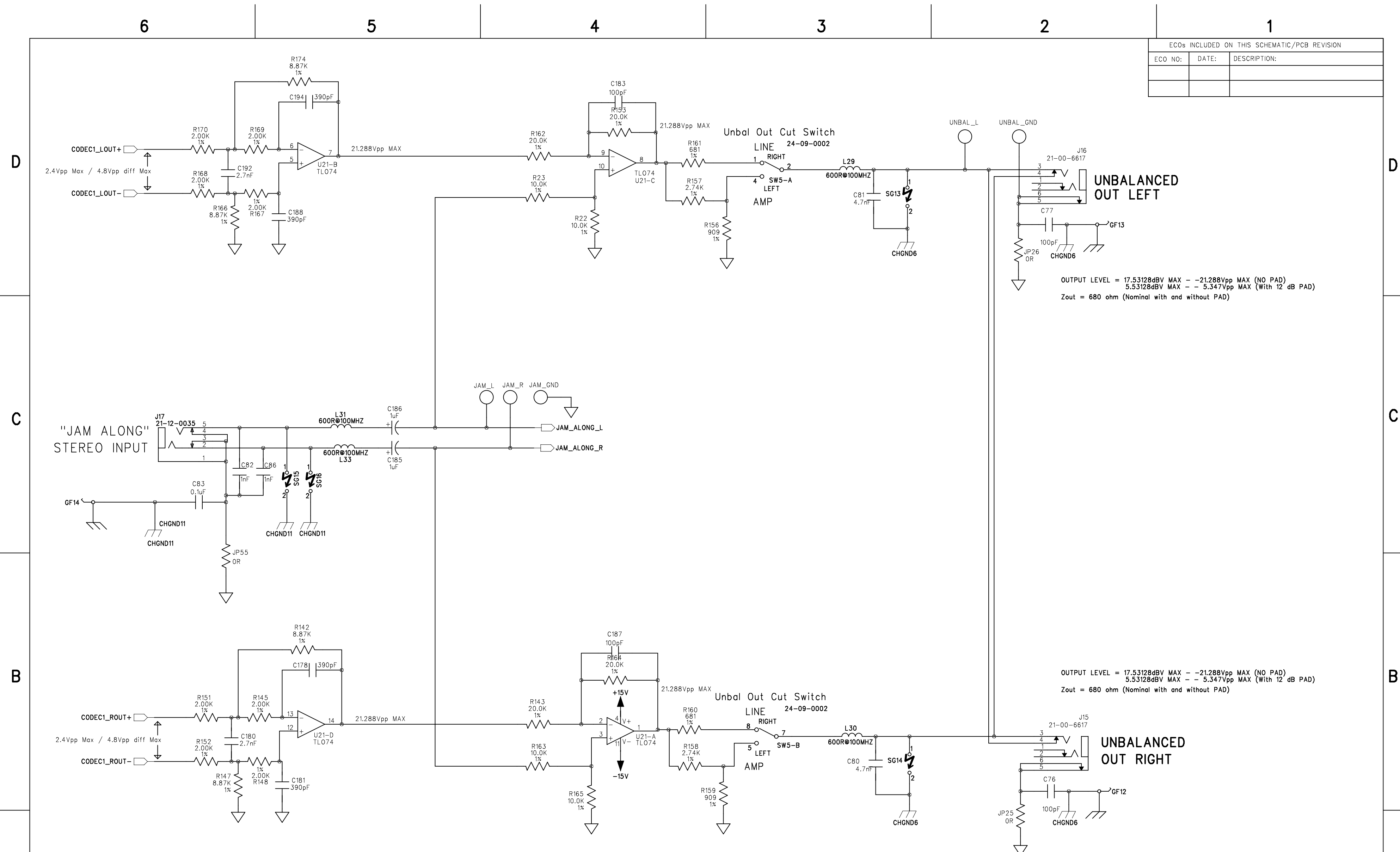
A



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COMPANY:	LINE 6	
TITLE:	P18-1 POD X4 LIVE ANALOG1	
PROGRAM:	PADS LOGIC 2007	REV: C
FILENAME:		
SCALE: 1:1	SIZE: C	PART NUMBER: 35-00-0386-1
DRAWN: CED	DATED: 11-11-2010	SHEET: 8 OF 16
CHECKED: review panel	DATED: 10.26.2009	

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:



OUTPUT LEVEL = 17.53128dBV MAX - -21.288Vpp MAX (NO PAD)  
 5.53128dBV MAX - - 5.347Vpp MAX (With 12 dB PAD)  
 Zout = 680 ohm (Nominal with and without PAD)

OUTPUT LEVEL = 17.53128dBV MAX - -21.288Vpp MAX (NO PAD)  
 5.53128dBV MAX - - 5.347Vpp MAX (With 12 dB PAD)  
 Zout = 680 ohm (Nominal with and without PAD)

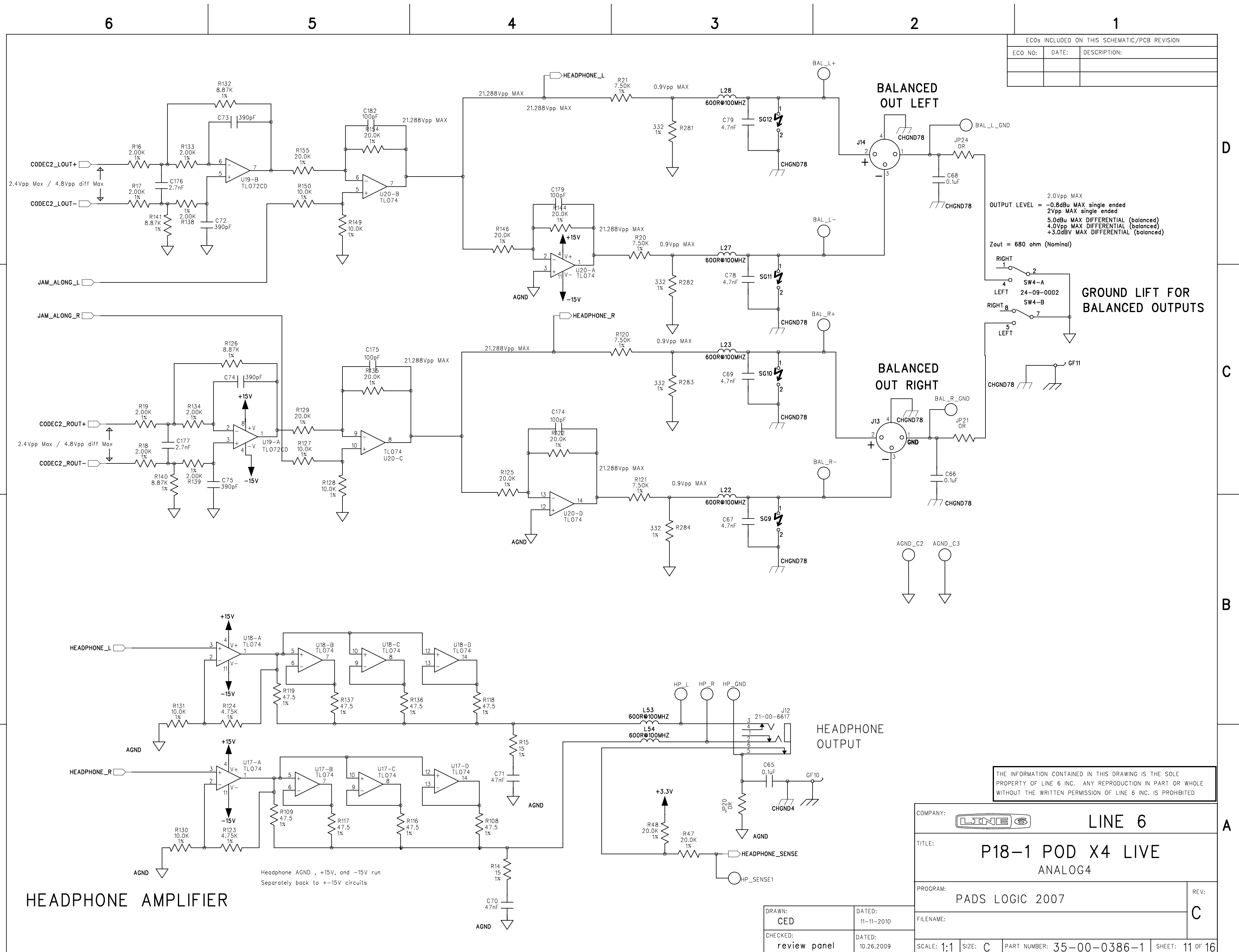
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COMPANY: <b>LINE 6</b>		REV: <b>C</b>
TITLE: <b>P18-1 POD X4 LIVE ANALOG2</b>		
PROGRAM: <b>PADS LOGIC 2007</b>		FILENAME:
DRAWN: <b>CED</b>	DATED: <b>11-11-2010</b>	SCALE: <b>1:1</b>
CHECKED: <b>review panel</b>	DATED: <b>10.26.2009</b>	SIZE: <b>C</b>
PART NUMBER: <b>35-00-0386-1</b>		SHEET: <b>9 OF 16</b>



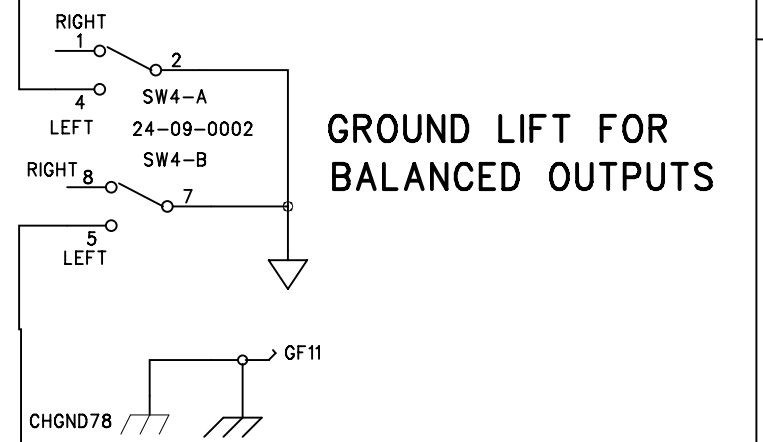


ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:



OUTPUT LEVEL =  
 2.0Vpp MAX  
 -0.8dBu MAX single ended  
 2Vpp MAX single ended  
 5.0dBu MAX DIFFERENTIAL (balanced)  
 4.0Vpp MAX DIFFERENTIAL (balanced)  
 +3.0dBV MAX DIFFERENTIAL (balanced)

Zout = 680 ohm (Nominal)



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# HEADPHONE AMPLIFIER

Headphone AGND, +15V, and -15V run Separately back to +-15V circuits

COMPANY:	LINE 6	
TITLE:	P18-1 POD X4 LIVE ANALOG4	
PROGRAM:	PADS LOGIC 2007	REV: C
FILENAME:		
DRAWN:	CED	DATED: 11-11-2010
CHECKED:	review panel	DATED: 10.26.2009
SCALE: 1:1	SIZE: C	PART NUMBER: 35-00-0386-1
		SHEET: 11 OF 16



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ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

D

D

C

C

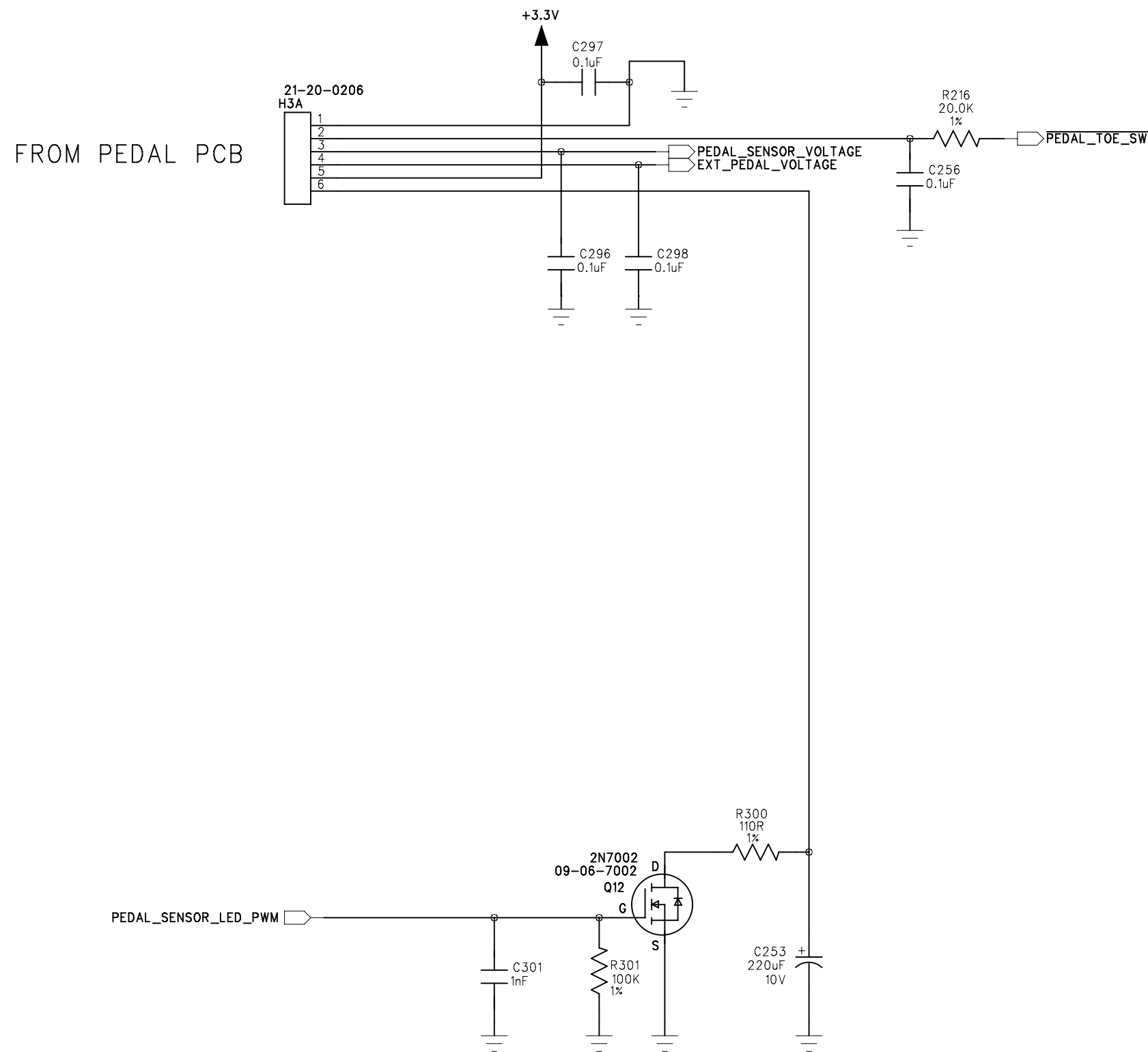
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A

### PEDAL INTERFACE



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COMPANY:  <b>LINE 6</b>		REV: <b>C</b>
TITLE: <b>P18-1 POD X4 LIVE</b> PEDAL_INTERFACE		
PROGRAM: <b>PADS LOGIC 2007</b>		FILENAME:
DRAWN: <b>CED</b>	DATED: <b>11-11-2010</b>	
CHECKED: <b>review panel</b>	DATED: <b>10.26.2009</b>	SCALE: <b>1:1</b>   SIZE: <b>C</b>   PART NUMBER: <b>35-00-0386-1</b>   SHEET: <b>13</b> OF <b>16</b>

6

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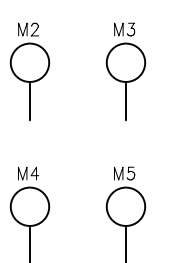
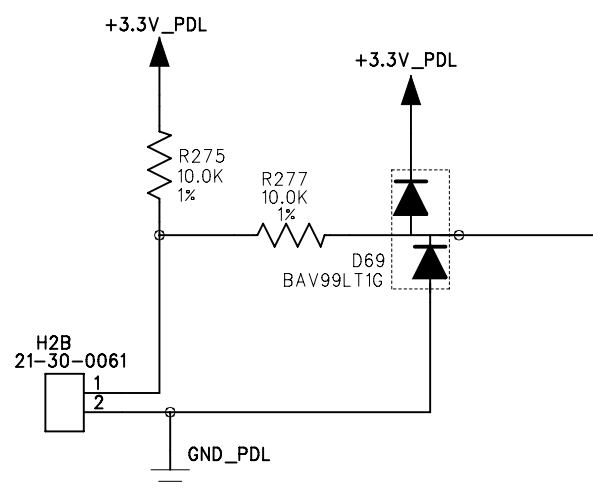
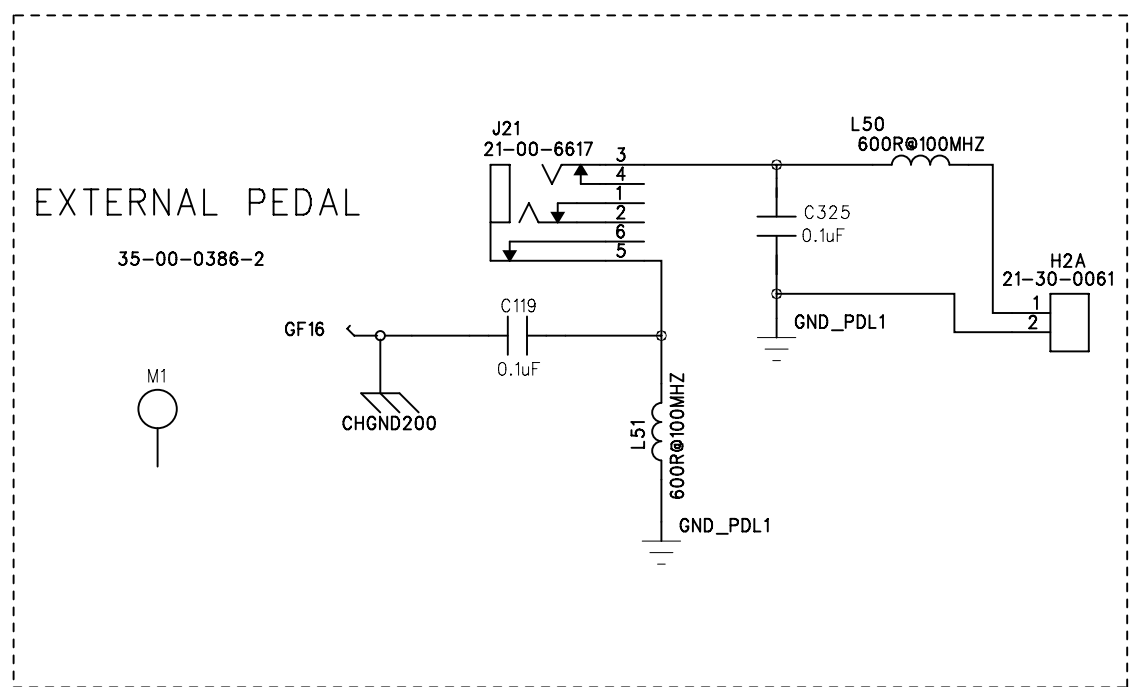
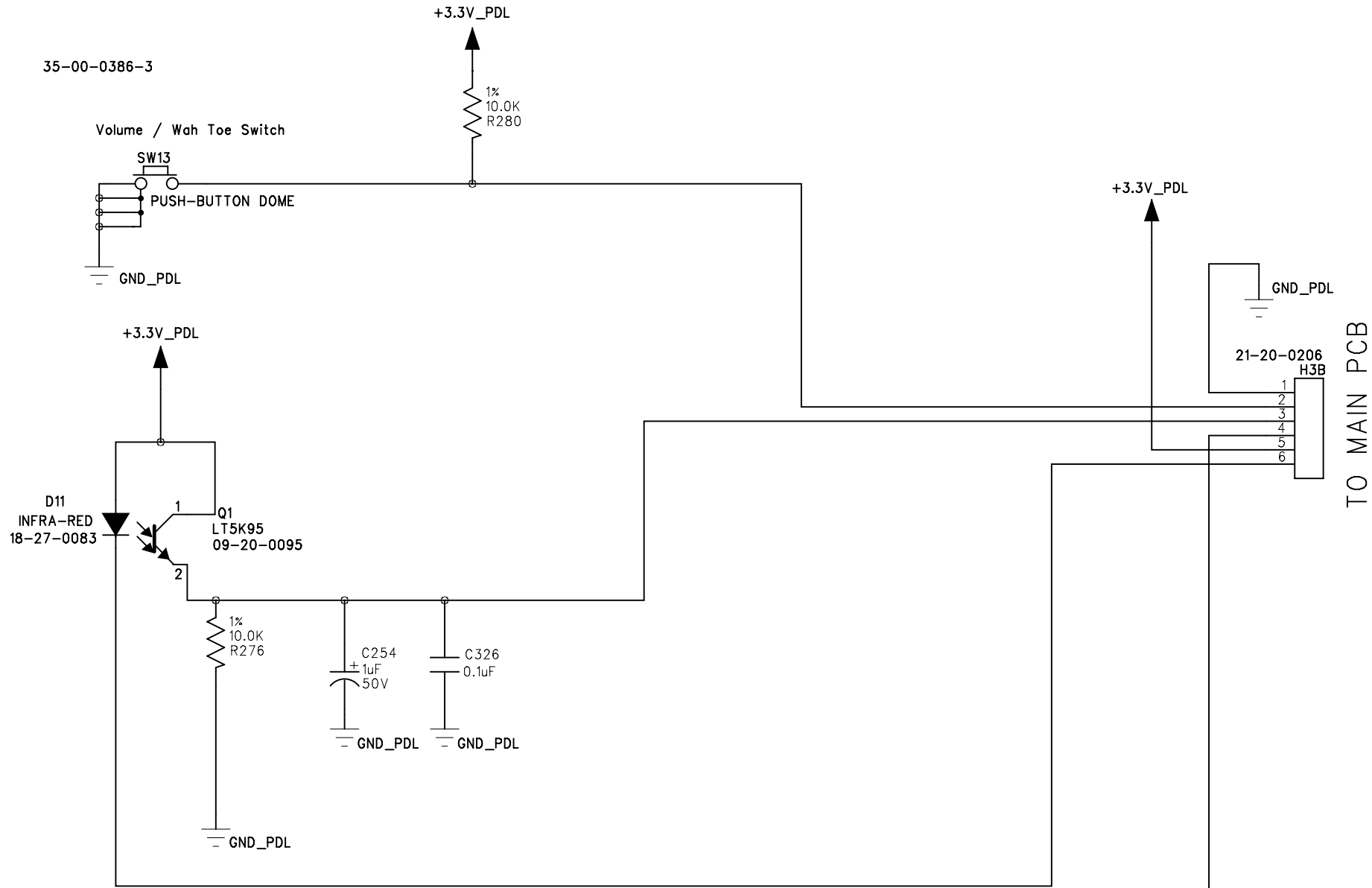
ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

(BREAKAWAY FROM MAIN BOARD)


PEDAL BOARD (Part number 35-00-0386-2)

PEDAL SWITCH BOARD (Part number 35-00-0386-3)

PEDAL SUPPORT BOARD (Part number 35-00-0386-4)



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COMPANY:  LINE 6		REV: C
TITLE: P18-1 POD X4 LIVE PEDAL_BREAKAWAY		
PROGRAM: PADS LOGIC 2007		SHEET: 14 of 16
FILENAME:		
DRAWN: CED	DATED: 11-11-2010	PART NUMBER: 35-00-0386-2 35-00-0386-3 35-00-0386-4
CHECKED: review panel	DATED: 10.26.2009	
SCALE: 1:1	SIZE: C	

DRAWN: CED	DATED: 11-11-2010
CHECKED: review panel	DATED: 10.26.2009

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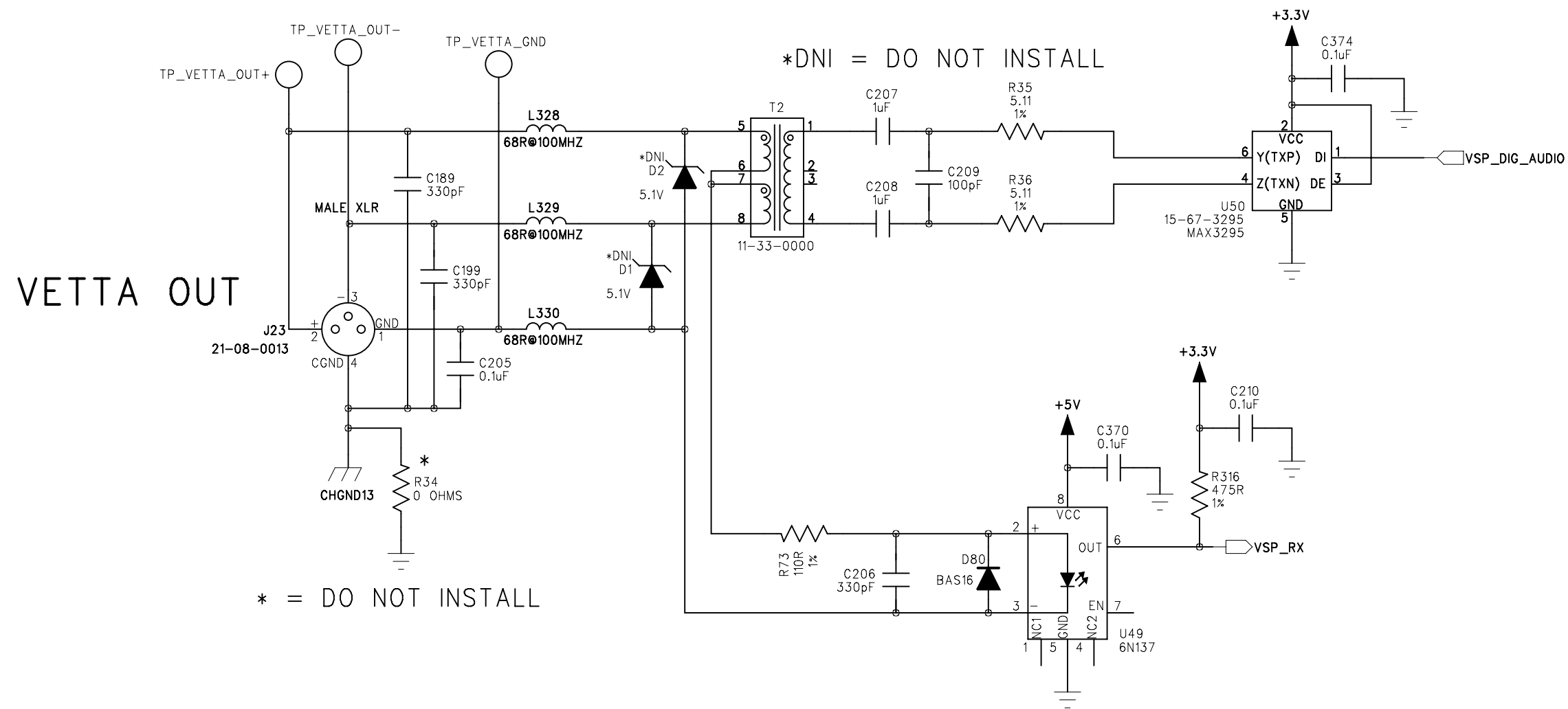
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ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

### VETTA INTERFACE



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COMPANY:  LINE 6		REV: C
TITLE: P18-1 POD X4 LIVE VETTA_INTERFACE		
PROGRAM: PADS LOGIC 2007		FILENAME:
DRAWN: CED	DATED: 11-11-2010	
CHECKED: review panel	DATED: 10.26.2009	SCALE: 1:1
PART NUMBER: 35-00-0386-1		SHEET: 15 OF 16

D

C

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ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

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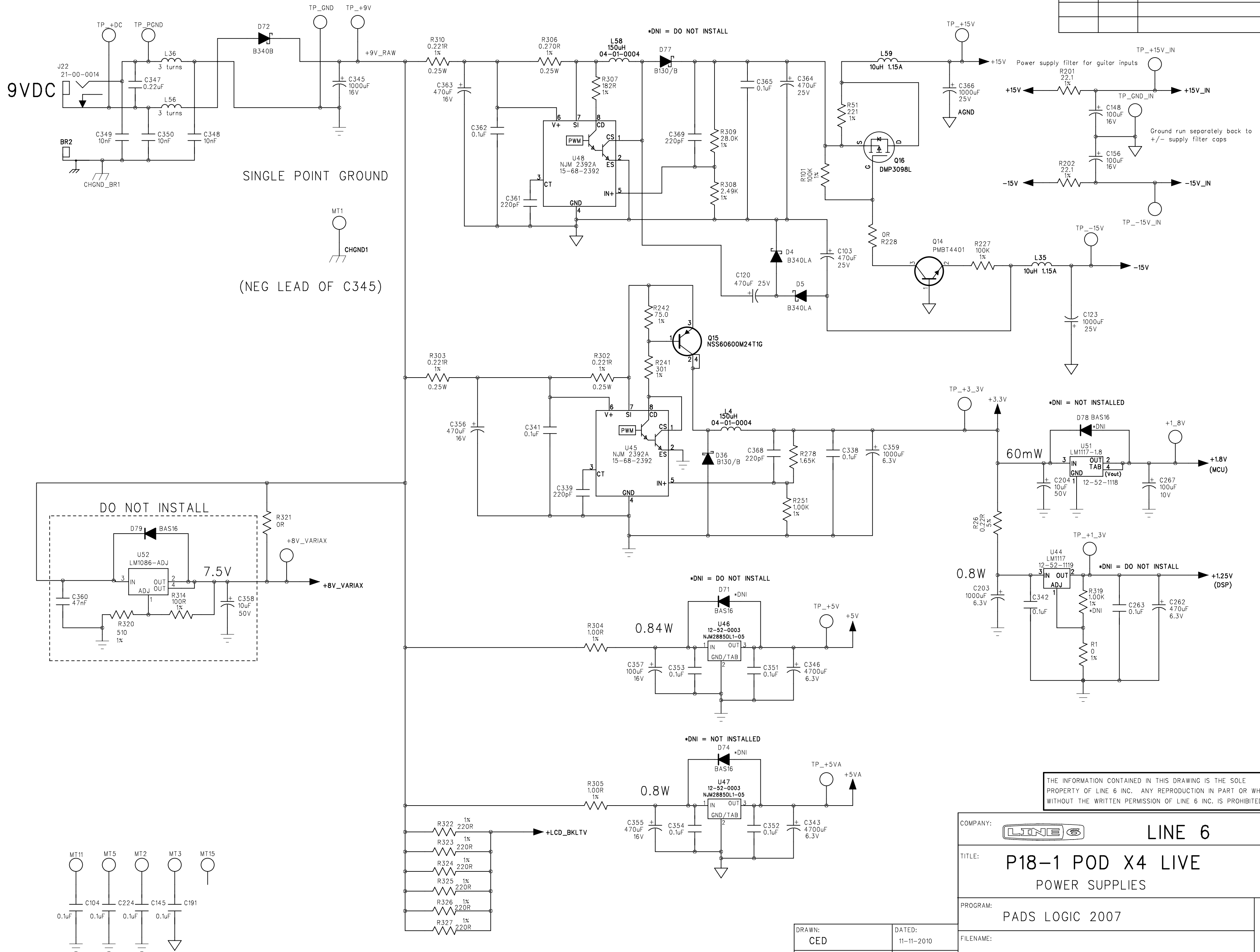
C

B

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A

A



SINGLE POINT GROUND

(NEG LEAD OF C345)

DO NOT INSTALL

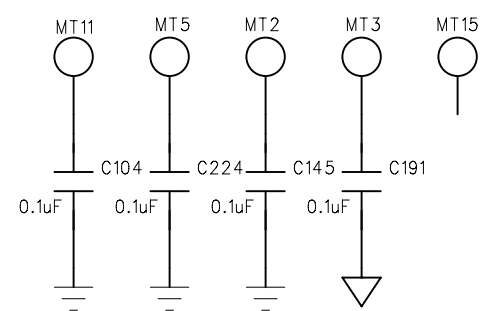
•DNI = DO NOT INSTALL

•DNI = NOT INSTALLED

•DNI = NOT INSTALLED

•DNI = DO NOT INSTALL

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DRAWN: CED	DATED: 11-11-2010
CHECKED: review panel	DATED: 10.26.2009

COMPANY: <b>LINE 6</b>	<b>LINE 6</b>
TITLE: <b>P18-1 POD X4 LIVE POWER SUPPLIES</b>	
PROGRAM: PADS LOGIC 2007	REV: <b>C</b>
FILENAME:	
SCALE: 1:1	SIZE: C
PART NUMBER: 35-00-0386-1	SHEET: 16 OF 16

6

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# FOOTSWITCH PCBS

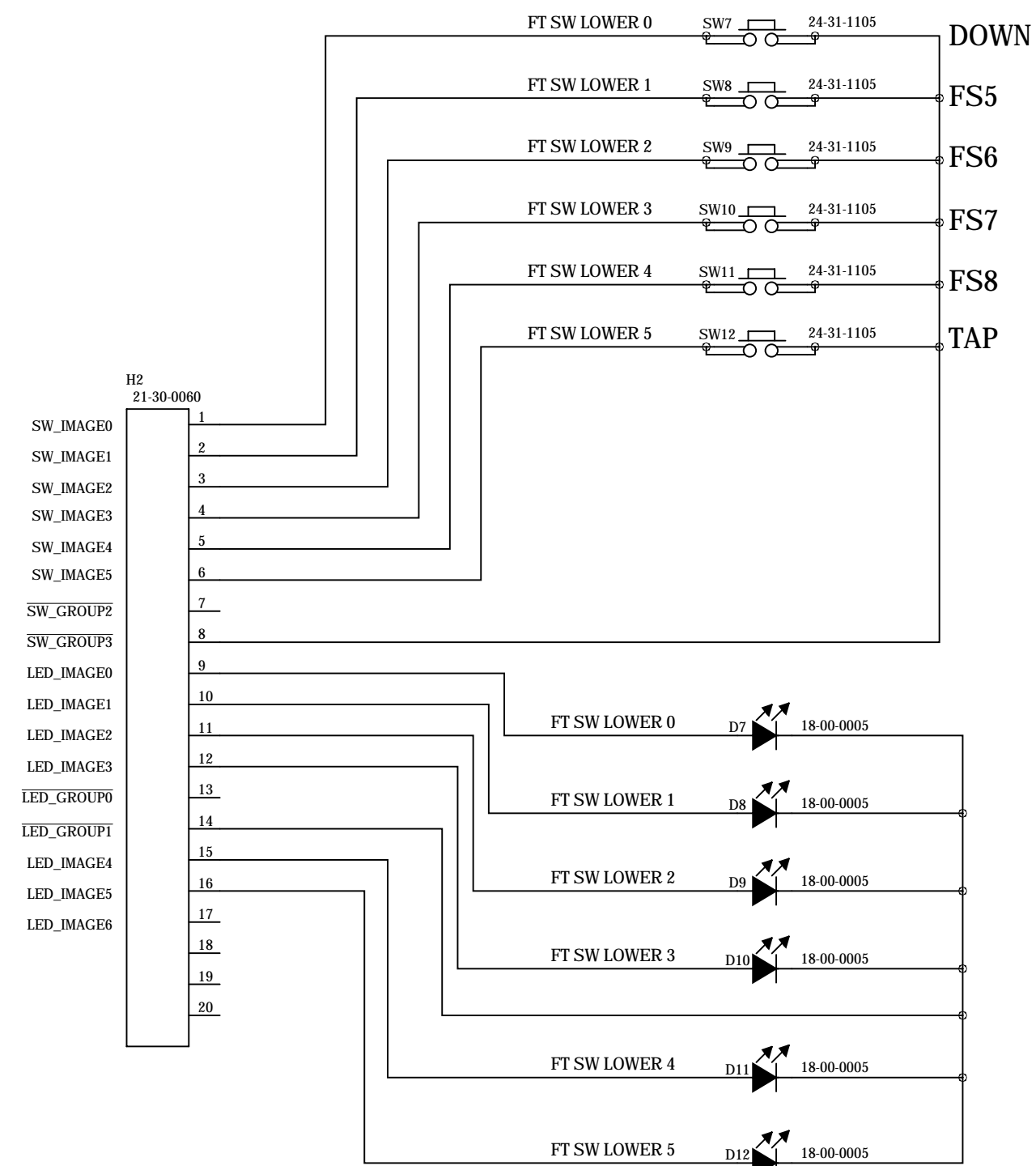
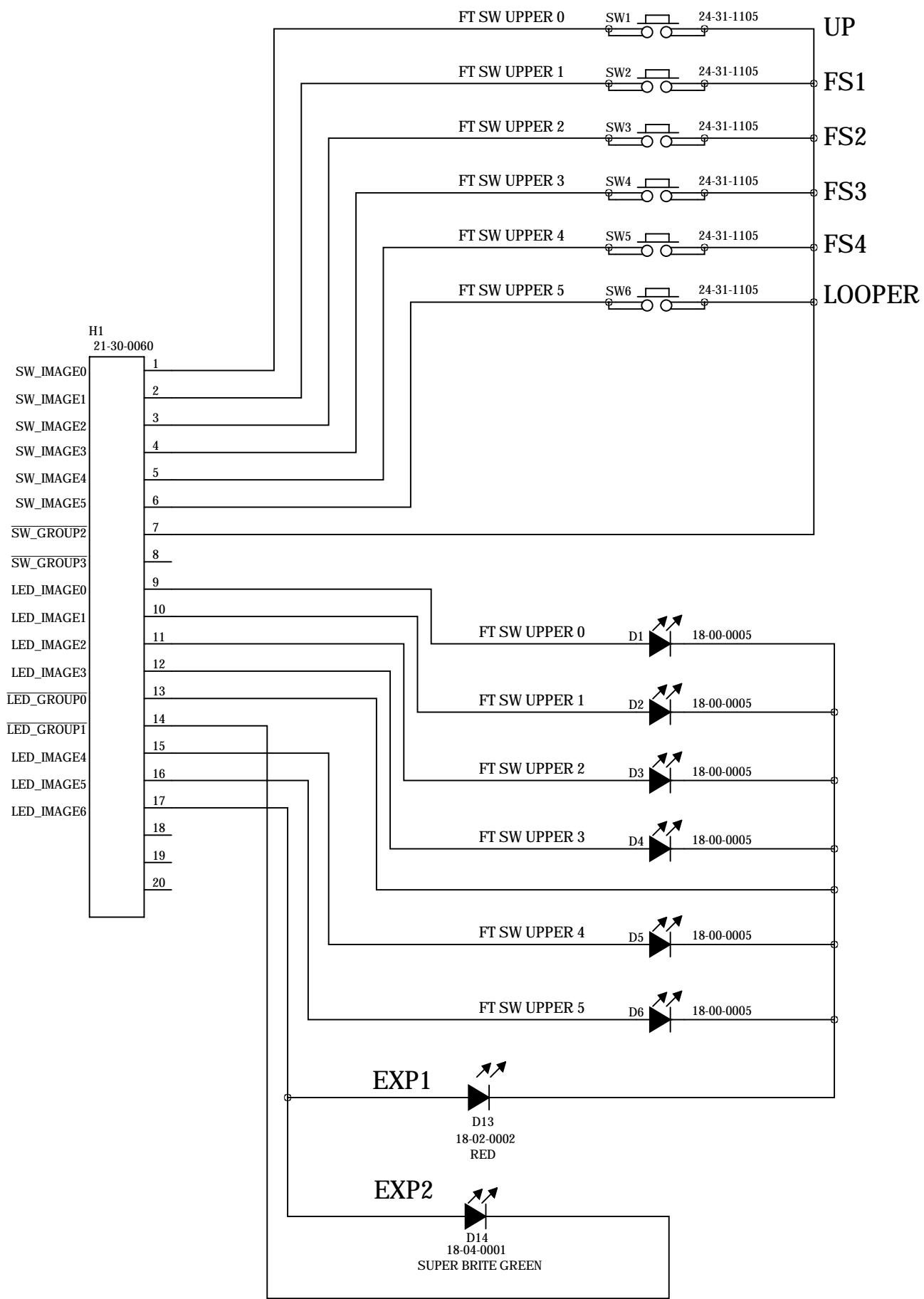
ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

## UPPER ROW 35-00-0387-1

## LOWER ROW 35-00-0387-2

D

D



C

C

B

B


SWITCH MATRIX 10 X 4

	SW_GROUP0	SW_GROUP1	SW_GROUP2	SW_GROUP3
SW_IMAGE0	HOME	E1-A	FT SW UPPER 0	FT SW LOWER 0
SW_IMAGE1	CLICK	E1-B	FT SW UPPER 1	FT SW LOWER 1
SW_IMAGE2	TAP	E2-A	FT SW UPPER 2	FT SW LOWER 2
SW_IMAGE3	UP	A2-B	FT SW UPPER 3	FT SW LOWER 3
SW_IMAGE4	DN	E3-A	FT SW UPPER 4	FT SW LOWER 4
SW_IMAGE5	LT	E3-B	FT SW UPPER 5	FT SW LOWER 5
SW_IMAGE6	RT	E4-A	-	-
SW_IMAGE7	INPUTS	E4-B	-	-
SW_IMAGE8	E1 pushbutton	E5-A	-	-
SW_IAMGE9	-	E5-B	-	-

LED MATRIX 7 X 2

	LED_GROUP0	LED_GROUP1
LED_IMAGE0	FT SW UPPER 0	FT SW LOWER 0
LED_IMAGE1	FT SW UPPER 1	FT SW LOWER 1
LED_IMAGE2	FT SW UPPER 2	FT SW LOWER 2
LED_IMAGE3	FT SW UPPER 3	FT SW LOWER 3
LED_IMAGE4	FT SW UPPER 4	FT SW LOWER 4
LED_IMAGE5	FT SW UPPER 5	FT SW LOWER 5
LED_IMAGE6	EXP1	EXP2

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COMPANY:	 <b>LINE 6</b>		REV:
TITLE:	<b>P18-1 POD X4 LIVE FOOTSWITCH PCB</b>		
PROGRAM:	PADS LOGIC 2007		A
FILENAME:			
DRAWN:	HHX	DATED:	11.10.2010
CHECKED:	review panel	DATED:	06.10.2010
SCALE:	1:1	SIZE:	C
PART NUMBER:		35-00-0387-1/35-00-0387-2	
SHEET:			of 1

A

A



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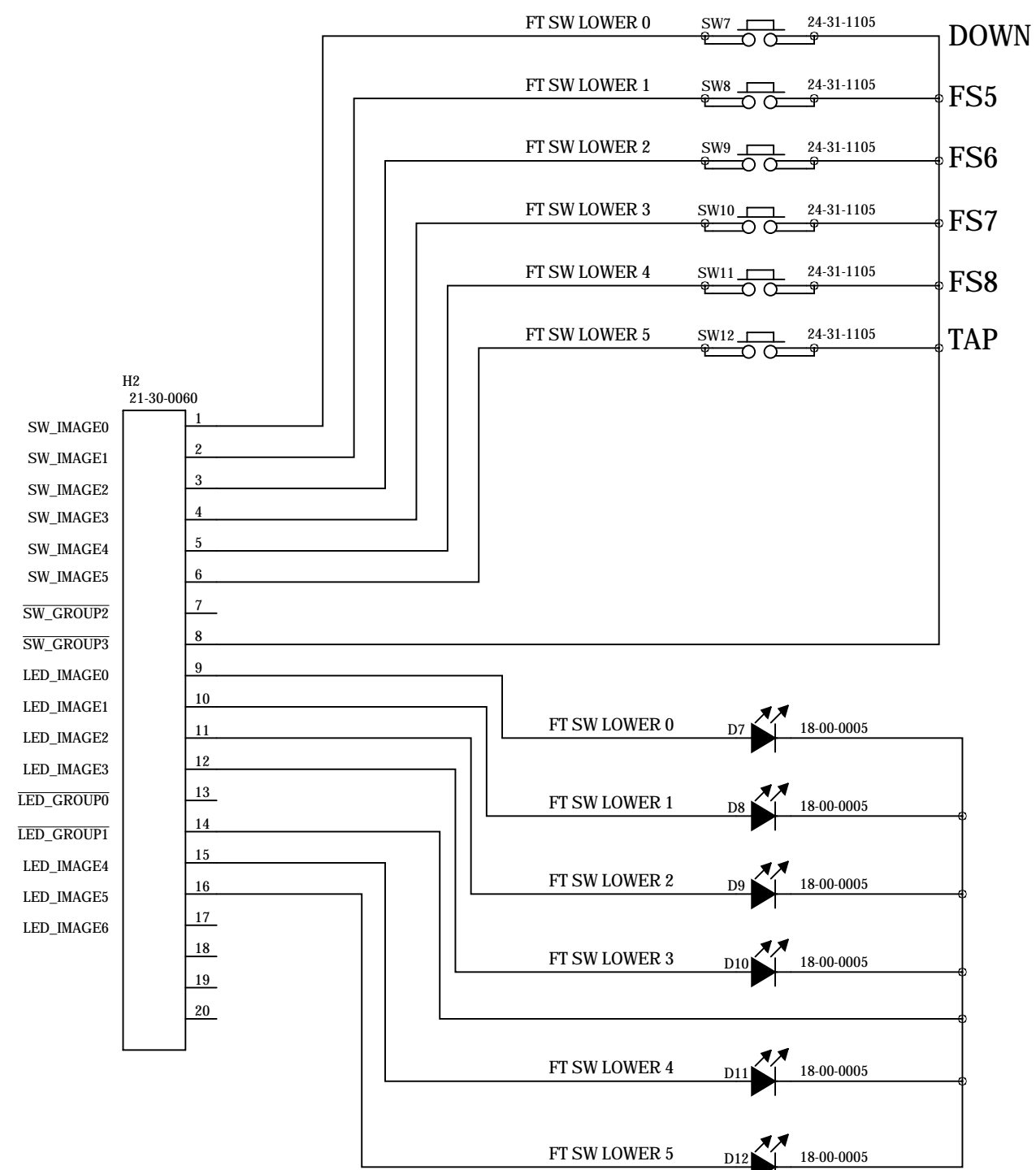
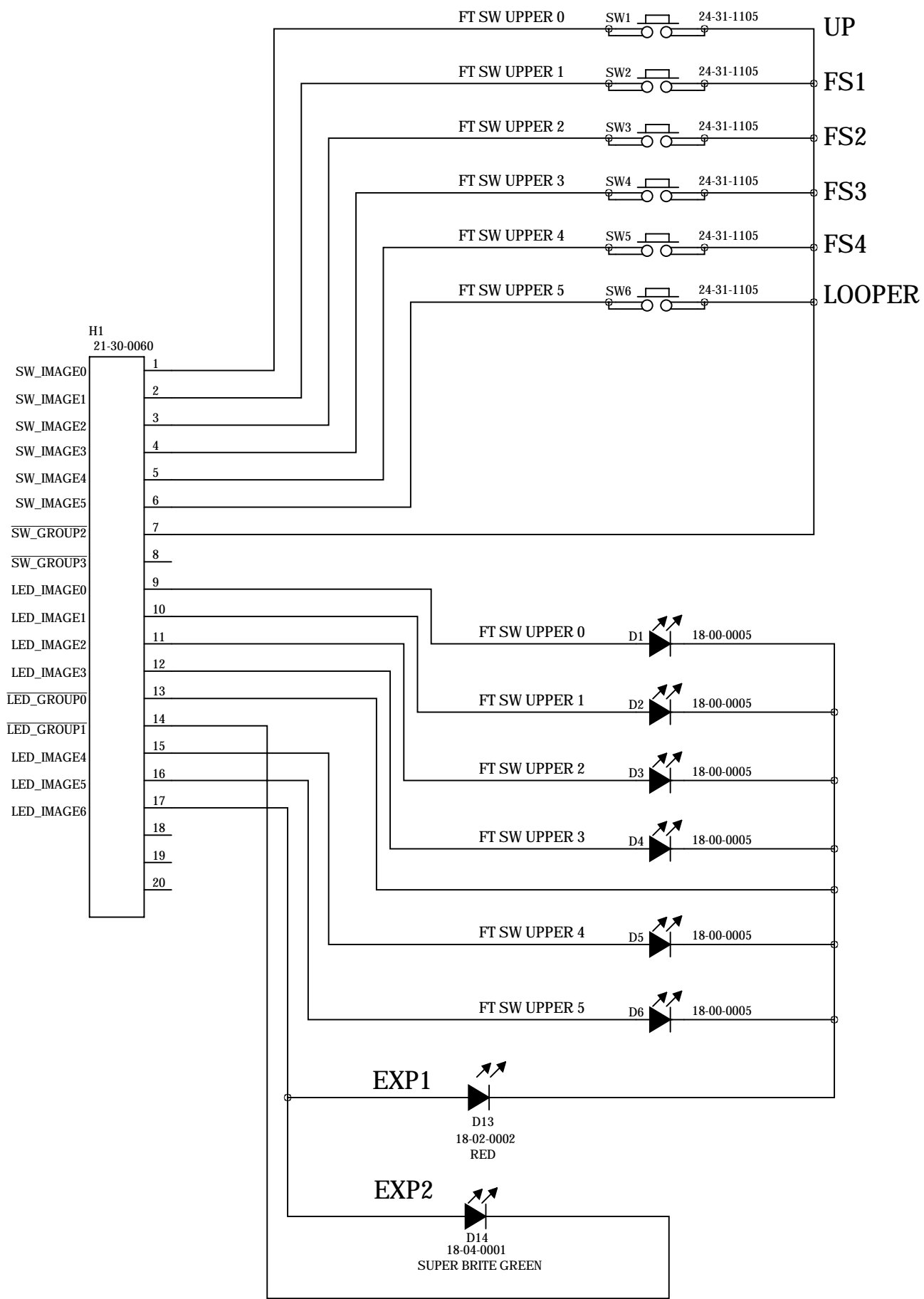
1

# FOOTSWITCH PCBS

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

## UPPER ROW 35-00-0387-1

## LOWER ROW 35-00-0387-2



SWITCH MATRIX 10 X 4

	SW_GROUP0	SW_GROUP1	SW_GROUP2	SW_GROUP3
SW_IMAGE0	HOME	E1-A	FT SW UPPER 0	FT SW LOWER 0
SW_IMAGE1	CLICK	E1-B	FT SW UPPER 1	FT SW LOWER 1
SW_IMAGE2	TAP	E2-A	FT SW UPPER 2	FT SW LOWER 2
SW_IMAGE3	UP	A2-B	FT SW UPPER 3	FT SW LOWER 3
SW_IMAGE4	DN	E3-A	FT SW UPPER 4	FT SW LOWER 4
SW_IMAGE5	LT	E3-B	FT SW UPPER 5	FT SW LOWER 5
SW_IMAGE6	RT	E4-A	-	-
SW_IMAGE7	INPUTS	E4-B	-	-
SW_IMAGE8	E1 pushbutton	E5-A	-	-
SW_IAMGE9	-	E5-B	-	-

LED MATRIX 7 X 2

	LED_GROUP0	LED_GROUP1
LED_IMAGE0	FT SW UPPER 0	FT SW LOWER 0
LED_IMAGE1	FT SW UPPER 1	FT SW LOWER 1
LED_IMAGE2	FT SW UPPER 2	FT SW LOWER 2
LED_IMAGE3	FT SW UPPER 3	FT SW LOWER 3
LED_IMAGE4	FT SW UPPER 4	FT SW LOWER 4
LED_IMAGE5	FT SW UPPER 5	FT SW LOWER 5
LED_IMAGE6	EXP1	EXP2

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LINE 6 INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF LINE 6 INC. IS PROHIBITED

COMPANY:	LINE 6	
TITLE:	P18-1 POD X4 LIVE FOOTSWITCH PCB	
PROGRAM:	PADS LOGIC 2007	REV: A
FILENAME:		
SCALE: 1:1	SIZE: C	PART NUMBER: 35-00-0387-1/35-00-0387-2
DRAWN: HHX	DATED: 11.10.2010	SHEET: 0f 1
CHECKED: review panel	DATED: 06.10.2010	

# 99-060-1615 - P18-1 POD HD500 US

Level	Item	Part Number	Qty	UOM	Refdes	Find	Rev	Description
1	1	11-30-8621	1				A	XFMR WALL 100-240VAC 50-60HZ 9VDC 3000MA DC-3G
1	2	21-34-2001	1				A	CBL USB w-FERRITE 2 METER HIGH SPEED BLACK
2	1	04-06-0002	1				A	FERRITE EMI BRDBND SNAP ROUND 17.3 x 5.1 x 36.2 x 8.41MM
2	2	21-34-2000	1					CBL USB HIGH SPEED 2 METER BLK
1	3	30-01-0011	1					HEX L-KEY SHORT ARM 3-16-IN BL K P7-1
1	4	40-00-0247	1				A	INSERT CARD PROPELLERHEAD RECORD
1	5	40-00-0281	1				A	MANUAL USER POD X4 LIVE P18-1
1	6	40-00-0296	1				A	INSERT MANUAL ADDENDUM POD HD500 P18-1
1	7	40-00-1000	1				H	CARD WARRANTY LINE 6
1	8	40-01-0016	1				D	CARD LICENSE-AGREEMNT END-USER ALL-PRODUCTS
1	9	40-03-2000	1				F	CARD REGISTRATION US
1	10	40-03-2000-1	1				A	CARD REGISTRATION EUROPE
1	11	40-10-0358	1				B	CARTON GIFT POD X4-LIVE P18-1
1	12	40-10-0359	1				A	CARTON SHIPPING POD X4 LIVE P18-1
1	13	40-15-0067	1				B	ENDCAP FOAM SHIPPING RIGHT POD X4 LIVE P18-1
1	14	40-15-0068	1				B	ENDCAP FOAM SHIPPING LEFT POD X4 LIVE P18-1
1	15	40-20-0011	1				A	BAG PLASTIC 10 x 16 2 mil
1	16	40-20-0022	1				A	BAG PLASTIC 2 MIL 36"x14"
1	17	40-25-0020	1				A	LABEL INSPECTION QUALITY
1	18	40-25-0024	1				B	STICKER ART SEAL EULA
1	19	40-25-0082	1				A	LABEL ROUND 1.75" TRANSPARENT
1	20	40-25-0233	1				C	LABEL MASTER CARTON MATTE WHITE
1	21	40-25-0319	1	EA			A	SHIPPING CARTON COMPLIANCE STICKER
1	22	40-30-0013	1				A	LABEL SERIAL NUMBER- PART NUMBER STANDARD MATTE WHITE
1	23	59-00-0070	1				I	ASSY UNIT- COMPLETE POD X4 LIVE P18-1
2	1	21-34-9006-2	1				X0	CBL SIL 6 COND 24AWG 2X175MM Z-TYPE
2	2	30-00-0042	10					SCREW SHEET METAL 4 x 0.375 IN SELF-TAP PPB
2	3	30-00-0043	16				A	SCREW 6-32 X 5-16 LG WITH LOCK WASHER PHIL PAN ZINC-PLATED STEEL
2	4	30-00-0125	2					SCREW 8-32 x 5-16 W-LK WASH PP H BLK STL
2	5	30-00-0192	4				X1	SCREW 6-32 X .75"LG SHCS NICKEL PL
2	6	30-00-0263	5				X0	SCREW 6-32 UNC BHCS 0.375 INCH STEEL
2	7	30-00-0375	9					SCREW 6-32 x .375 PPB
2	8	30-00-0405	8					SCREW 6-32 x .50" SHCS NICKEL PL P11-1
2	9	30-06-0021	4				X0	NUT THREAD STANDOFF 6-32UNC THREAD 0.335IN HIGH STEEL ZINC PLATING X4 SPIDER LIVE MID & PRO REV-X0
2	10	30-06-0623	12					NUT HEX 6-32 w-CAPTIVE STAR-WASHER
2	11	30-15-0004	9				A	SPACER .13 THICK x .63OD NYLON
2	12	30-27-0059	2					LENS LED .19" DIA x .29" HT PLASTIC CLEAR SNAP IN
2	13	30-27-0097	1				B	HOUSING SNAP DOME .78 x .84 x .278 ABS BLACK
2	14	30-27-0217-1	1				G	BUTTON 4 WAY TOP .8 DIA x .4 HT ABS NO PLTG
2	15	30-27-0218	1				A	BUTTON 4 WAY BOTTOM .8 DIA x 0.5 HT ABS
2	16	30-27-0221	1				B	4-WAY SW PIVOT PIN .37 x .200 DIA NYLON 6-6 WHITE
2	17	30-27-0304	1				A	CABLE STRAIN RELIEF 1.1" x .5" x .5" ABS BLACK
2	18	30-27-0495	1				A	LCD LENS 68.7MM PC 50.7MM 3.4MM CLEAR POLISHED P18-1
2	19	30-27-0496-1	1				X0	BUTTON DBL LEFT 46.8MM ABS 50.7MM 3.4MM BLACK P18-1
3	1	41-00-0303	0				B	ARTWORK SILKSCREEN BUTTON LEFT POD X4 P18-1
2	20	30-27-0496-2	1				X0	BUTTON DBL RIGHT 46.8MM ABS 50.7MM 3.4MM BLACK P18-1
3	1	41-00-0304	0				B	ARTWORK SILKSCREEN BUTTON RIGHT POD X4 P18-1
2	21	30-45-0034	7				X1	KNOB LARGE WITH INDICATOR 0.61INCH ABS BLACK P18-1
2	22	30-45-0035	4				A	KNOB POT 0.627INCH 0.565INCH ABS BLACK P18-1
2	23	30-45-0036	1				A	KNOB ENCODER W-O INDICATOR. 0.625 INCH ABS BLACK P18-1
2	24	30-48-5012	8					BUMPER RUBBER .465" OD BLACK
2	25	30-51-0078	3					TACTILE DOME 20MM SST NP
2	26	30-51-0499	1				A	CHASSIS TOP STEEL POWDER COAT BLACK 259.4MM 51.5MM 546.1MM P18-1
3	1	41-00-0300	0	EA			C	ARTWORK SILKSCREEN CHASSIS TOP REAR POD X4 P18-1
2	27	30-51-0500	1				A	CHASSIS BOTTOM STEEL POWDER COAT BLACK 255.3MM 50.5MM 543.5MM P18-1
3	1	41-00-0301	0				B	ARTWORK SILKSCREEN CHASSIS BOTTOM POD X4 P18-1
2	28	30-51-0501	1				A	CHASSIS SUPPORT STEEL ORIGINAL ORIGINAL 25.1MM 24MM 239.5MM P18-1
2	29	30-51-0502	1				A	BEZEL COVER ALU POLISHED ORIGINAL 95.1MM 17.7MM 170.1MM P18-1
3	1	41-00-0321	0				A	ARTWORK SILKSCREEN BEZEL COVER POD X4 P18-1
2	30	30-51-0513	1				A	GUARD KNOB STEEL CHROME PLATED 4.31INCH 0.75INCH 0.25INCH P18-1
2	31	30-63-0028	1				A	FOAM RING 4-WAY SW RET PU .75 OD x .40 ID x .18 HT BLK
2	32	30-63-0056	2				A	FOAM W-ADHS 56MM 3.5MM 0.5MM FOAM
2	33	30-63-0057	2				A	FOAM W-ADHS 38.0MM 3.5MM 0.5MM FOAM
2	34	30-63-0058	4				A	FOAM 60MM 20MM 1.5MM FOAM P18-1
2	35	30-63-0061	1				X0	FOAM LIGHT SHIELD 0.87 IN 0.37IN 0.35IN FOAM BLACK
2	36	30-63-0067	1				A	FOAM 70MM X 48MM X 1.5MM FOAM WITH 3M 468 ADHESIVE
2	37	30-75-0013	1					CAP RJ45 JACK PROTECTOR VINYL .692 OD x .250 H BLACK
2	38	40-30-0013	1				A	LABEL SERIAL NUMBER- PART NUMBER STANDARD MATTE WHITE
2	39	50-02-0386	1				A	PCBA MAIN-PEDAL-PEDAL SWITCH-SUPPORT P18-1
3	1	21-30-0061	1				B	CABLE RIBBON 2PIN PITCH 2MM LENGTH 71MM 28AWG TINNED
3	2	35-00-0386-4	1				A	PCB PEDAL SUPPORT 4-LAYER P18-1
3	3	50-02-0386-1	1				H	PCBA MAIN P18-1
4	1	01-04-OR22	1		R26			RES 0.22R 5% 1206
4	2	01-24-0000	14		JP10,JP15,JP18,JP20- JP21,JP24- JP26,JP55,JP57,R228,R2 57,R321,R399			RES OR 1% 0805
4	3	01-24-1000	1		R297			RES 100R 1% 0805
4	4	01-24-1001	2		R213,R215			RES 1.00K 1% 0805
4	5	01-24-1002	6		R130-R131,R275- R277,R280			RES 10.0K 1% 0805
4	6	01-24-1003	4		R9,R12,R74,R76			RES 100K 1% 0805

4	7	01-24-10R0	3	R28,R92,R203		RES 10.0R 1% 0805
4	8	01-24-1100	1	R193		RES 110R 1% 0805
4	9	01-24-1152	1	R112		RES 11.5K 1% 0805
4	10	01-24-1211	1	R225		RES 1.21K 1% 0805
4	11	01-24-1502	1	R236		RES 15.0K 1% 0805
4	12	01-24-15R0	2	R14-R15		RES 15R 1% 0805
4	13	01-24-1781	2	R111,R114		RES 1.78K 1% 0805
4	14	01-24-1R00	2	R298-R299		RES 1.0R 1% 0805
4	15	1-24-2002	23	R32-R33,R43-R48,R50,R52,R122,R125,R129,R135,R143-R144,R146,R153-R155,R162,R164,R216		RES 20.0K 1% 0805
4	16	1-24-2210	3	R2,R4,R63		RES 221R 1% 0805
4	17	1-24-22R1	1	R296		RES 22.1R 1% 0805
4	18	1-24-2490	7	R243-R249		RES 249R 1% 0805
4	19	1-24-2491	4	R89,R95,R219-R220		RES 2.49K 1% 0805
4	20	1-24-2741	2	R157-R158		RES 2.74K 1% 0805
4	21	1-24-3011	6	R189,R191,R286-R287,R291-R292		RES 3.01K 1% 0805
4	22	1-24-3090	2	R179-R180		RES 309R 1% 0805
4	23	1-24-30R1	3	R67,R69,R190	15	RES 30.1R 1% 0805
4	24	1-24-3320	4	R281-R284		RES 332R 1% 0805
4	25	1-24-40R2	1	R285		RES 40.2R 1% 0805
4	26	1-24-4421	2	R223-R224		RES 4.42K 1% 0805
4	27	1-24-4750	1	R5		RES 475R 1% 0805
4	28	1-24-4751	2	R123-R124		RES 4.75K 1% 0805
4	29	1-24-4752	1	R6		RES 47.5K 1% 0805
4	30	01-24-47R5	8	R108-R109,R116-R119,R136-R137		RES 47.5R 1% 0805
4	31	1-24-4870	1	R65		RES 487R 1% 0805
4	32	1-24-5110	2	R91,R97		RES 511R 1% 0805
4	33	01-24-5R11	5	R7,R10,R256,R265,R273		RES 5.11R 1% 0805
4	34	1-24-6040	2	R253,R255		RES 604R 1% 0805
4	35	1-24-6810	2	R160-R161		RES 681R 1% 0805
4	36	1-24-7501	4	R20-R21,R120-R121		RES 7.50K 1% 0805
4	37	1-24-8250	2	R221-R222		RES 825R 1% 0805
4	38	1-24-8871	12	R77,R82,R90,R99,R126,R132,R140-R142,R147,R166,R174		RES 8.87K 1% 0805
4	39	01-24-88R7	1	R64		RES 88.7R 1% 0805
4	40	1-24-9090	2	R156,R159		RES 909R 1% 0805
4	41	01-25-0000	2	R1,R226		RES 0R 1% 0603
4	42	01-25-01R0	2	R304-R305	A	RES 1.0R 1% 0603
4	43	01-25-0221	6	R322-R327		RES 220R 1% 0603
4	44	01-25-1001	16	R41,R83,R110,R113,R115,R173,R177,R181-R183,R229,R232,R237,R251,R290,R295		RES 1.00K 1% 0603
4	45	01-25-1002	36	R3,R22-R23,R25,R53-R57,R60,R70,R72,R84,R87,R103-R107,R127-R128,R149-R150,R163,R165,R171,R176,R178,R235,R263-R264,R272,R288-R289,R293-R294		RES 10.0K 1% 0603
4	46	01-25-1003	4	R49,R101,R227,R301		RES 100K 1% 0603
4	47	01-25-1004	3	R13,R71,R88	A	RES 1.00M 1% 0603
4	48	01-25-10R0	2	R75,R240	A	RES 10.0R 1% 0603
4	49	01-25-1100	2	R73,R300		RES 110R 1% 0603
4	50	01-25-1151	1	R175	XO	RES 1.15K 1% 0603
4	51	01-25-1183	1	R212	A	RES 118K 1% 0603
4	52	01-25-1244	1	R239		RES 1.24M 1% 0603
4	53	01-25-1400	2	R66,R68	A	RES 140R 1% 0603
4	54	01-25-1501	2	R37-R38	A	RES 1.50K 1% 0603
4	55	01-25-1651	1	R278	A	RES 1.65K 1% 0603
4	56	01-25-1820	1	R307	A	RES 182R 1% 0603
4	57	1-25-2001	28	R16-R19,R58-R59,R61-R62,R78-R81,R93-R94,R96,R98,R133-R134,R138-R139,R145,R148,R151-R152,R167-R170	A	RES 2.00K 1% 0603
4	58	1-25-2151	4	R192,R194,R231,R266	A	RES 2.15K 1% 0603
4	59	1-25-2210	1	R51	A	RES 221R 1% 0603
4	60	1-25-2212	1	R8	A	RES 22.1K 1% 0603
4	61	1-25-2213	1	R238	A	RES 221K 1% 0603
4	62	01-25-22R1	4	R195-R196,R201-R202	A	RES 22.1R 1% 0603
4	63	1-25-2320	2	R27,R197	A	RES 232R 1% 0603
4	64	1-25-2491	1	R308	A	RES 2.49K 1% 0603
4	65	1-25-2802	1	R309	A	RES 28.0K 1% 0603
4	66	1-25-4020	1	R187	A	RES 40.2K 1% 0603

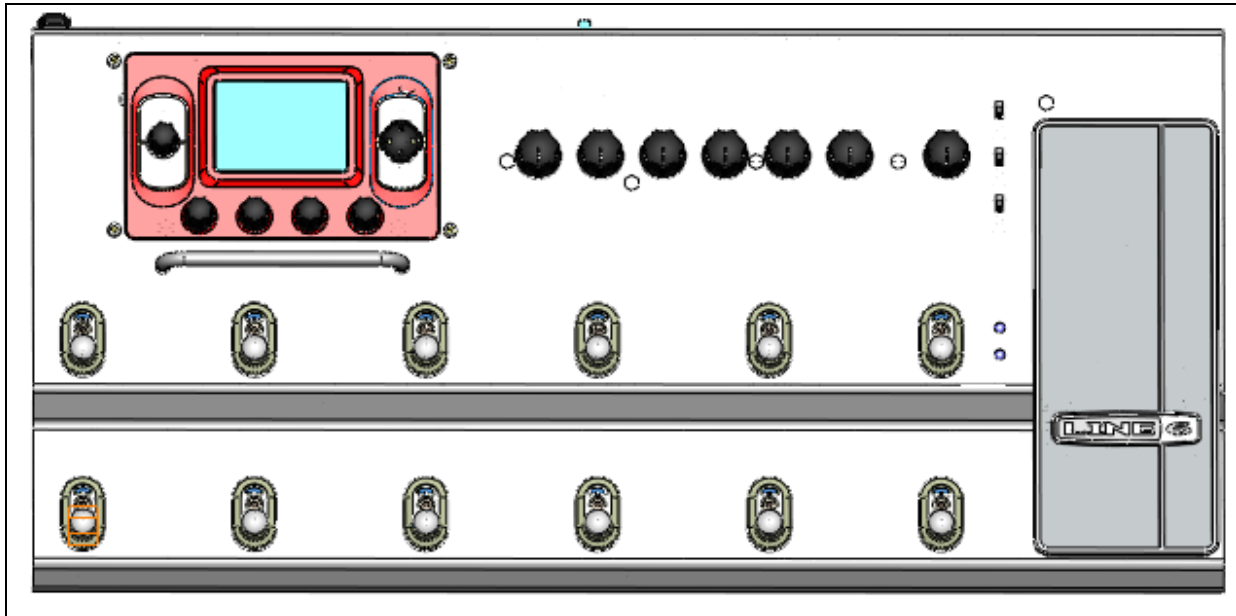
4	67	1-25-4750	2	R252,R316		RES 475R 1% 0603
4	68	1-25-4750	14	R24,R29- R30,R42,R86,R102,R18 6,R205- R208,R214,R250,R254		RES 4.75K 1% 0603
4	69	1-25-4752	6	R11,R184- R185,R188,R199-R200		RES 47.5K 1% 0603
4	70	1-25-4872	1	R100	A	RES 48.7K 1% 0603
4	71	1-25-4994	1	R172		RES 4.99M 1% 0603
4	72	01-25-5R11	2	R35-R36		RES 5.11R 1% 0603
4	73	1-25-6490	2	R39-R40	A	RES 649R 1% 0603
4	74	1-25-6982	1	R211	A	RES 69.8K 1% 0603
4	75	1-25-7320	1	R31	XO	RES 732R 1% 0603
4	76	01-25-75R0	1	R242		RES 75R 1% 0603
4	77	1-28-3010	1	R241	XO	RES 301R 1% 1206 SM
4	78	01-28-R221	3	R302-R303,R310		RES 0.22R 1% 1206
4	79	01-28-R270	1	R306		RES 0.270R 1% 1206
4	80	01-48-0023	1	R85	XO	POT DUAL 5KC LOG TAPER HORIZ MT 25MM RND PLASTIC
4	81	01-48-0103	7	R209-R210,R217- R218,R230,R233-R234	A	POT MONO 10KB LINEAR TAPER 25MM D-SHAFT
4	82	03-10-0478	3	C154,C343,C346		CAP ELEC 4700uF 6.3V 20% RADIAL 12.5-20-5
4	83	03-10-1107	3	C142,C234-C235		CAP ELEC 100uF 6.3V 20% RADIAL 5-11-5
4	84	3-10-6108	1	C337		CAP ELEC 1000uF 6.3V 20% RADIAL 8-11.5-5
4	85	03-12-0107	3	C153,C264-C265		CAP ELEC 100uF 16V 20% RADIAL 6.3-11-5
4	86	03-12-0108	1	C345		CAP ELEC 1000uF 16V 20% RADIAL 10-16-5
4	87	03-12-0228	1	C276		CAP ELEC 2200uF 16V 20% RADIAL 12.5-20-5
4	88	03-12-0476	3	C268,C270,C279		CAP ELEC 47uF 16V 20% RADIAL 6.3-11.2-5
4	89	03-14-0107	1	C244		CAP ELEC 100uF 25V 20% RADIAL 6.3-11.2-5
4	90	03-14-0108	2	C123,C366		CAP ELEC 1000uF 25V 20% RADIAL 10-20-5
4	91	03-18-0105	11	C185- C186,C255,C269,C278, C299,C302,C308,C315, C319,C324		CAP ELEC 1uF 50V 20% RADIAL 5-11-5
4	92	03-18-0106	17	C124-C125,C149- C150,C211,C259- C261,C266,C273- C275,C277,C328,C330- C331,C333		CAP ELEC 10uF 50V 20% RADIAL 5-11-5
4	93	03-20-0107	2	C162-C163		CAP ELEC 10uF 63V 20% RADIAL 5-12-5
4	94	03-36-0224	1	C347		CAP ESTR 0.22uF 50V 5% TH 11-6-11.5-7.5
4	95	03-44-0331	2	C189,C199	A	CAP NPO 330PF 1000V 5% 1206
4	96	03-45-0473	1	C64		CAP FILM 47nF 16V 20% 1206
4	97	03-46-1104	1	C205	A	CAP X7R .1uF 500V 10% 1812
4	98	03-50-0101	2	C9,C25		CAP NPO 100pF 50V 5% 0805
4	99	03-50-0120	2	C121-C122		CAP NPO 12pF 50V 5% 0805
4	100	03-50-0272	6	C147,C157,C176- C177,C180,C192		CAP NPO 2.7nF 50V 5% 0805
4	101	03-50-0330	1	C327		CAP NPO 33pF 50V 5% 0805
4	102	03-50-0391	12	C72- C75,C146,C151,C155,C 158,C178,C181,C188,C1 94		CAP NPO 390pF 50V 5% 0805
4	103	03-50-0561	2	C43-C44		CAP NPO 560pF 50V 5% 0805
4	104	03-52-0101	2	C53,C56		CAP X7R 100pF 50V 10% 0805
4	105	03-52-0102	2	C82,C86		CAP X7R 1nF 50V 10% 0805
4	106	03-52-0104	5	C5,C119,C172,C325- C326		CAP X7R 0.1uF 50V 10% 0805
4	107	03-52-0331	4	C164-C167		CAP X7R 330pF 50V 10% 0805
4	108	03-52-0334	1	C336		CAP X7R 0.33uF 25V 10% 0805
4	109	03-52-0472	6	C67,C69,C78-C81		CAP X7R 4.7nF 50V 10% 0805
4	110	03-52-0473	3	C70-C71,C242		CAP X7R 47nF 50V 10% 0805
4	111	03-56-0100	2	C61-C62		CAP NPO 10pF 50V 5% 0603
4	112	03-56-0101	26	C7,C23,C26-C27,C30- C31,C49,C76- C77,C84,C174- C175,C179,C182- C183,C187,C196,C209, C239,C282,C303,C306- C307,C310,C318,C321		CAP NPO 100pF 50V 5% 0603
4	113	03-56-0102	9	C6,C8,C32,C304- C305,C316- C317,C329,C332		CAP NPO 1nF 50V 5% 0603
4	114	03-56-0221	4	C339,C361,C368-C369		CAP NPO 220pF 50V 5% 0603
4	115	03-56-0331	1	C206		CAP NPO 330pF 50V 5% 0603
4	116	03-56-0470	2	C63,C190		CAP NPO 47pF 50V 5% 0603
4	117	03-57-0105	2	C207-C208		CAP X5R 1uF 10V 10% 0603

4	118	03-58-0102	27	C13,C16,C18-C21,C24,C28-C29,C36,C40-C41,C46-C47,C87,C90,C93,C98-C101,C134,C143-C144,C216,C222,C301	CAP X7R 1nF 50V 10% 0603
4	119	03-58-0103	9	C2,C35,C132,C139,C228,C230,C348-C350	CAP X7R 10nF 50V 10% 0603
4	120	03-58-0104	##	C1,C4,C10-C12,C14-C15,C17,C22,C33-C34,C37-C39,C42,C45,C48,C50,C54-C55,C57-C60,C65-C66,C68,C83,C85,C88-C89,C91-C92,C94-C97,C102,C104-C118,C126,C129,C131,C133,C135-C138,C140-C141,C145,C152,C159-C160,C168-C171,C173,C184,C191,C193,C195,C197-C198,C210,C214-C215,C218-C221,C224-C226,C232,C236-C238,C240-C241,C246-C251,C256,C263,C281,	CAP X7R 0.1uF 25V 10% 0603
4	121	03-58-0472	2	C51-C52	CAP X7R 4.7nF 50V 10% 0603
4	122	03-80-0107	1	C267	CAP ELEC 100uF 10V 20% SM 6.3-5.4-7.8
4	123	03-80-0108	2	C203,C359	CAP ELEC 1000uF 6.3V 20% SM 10-10.2-12
4	124	03-80-0227	1	C253	CAP ELEC 220uF 10V 20% SM 8-6.2-9.5
4	125	03-80-1477	1	C262	CAP ELEC 470uF 6.3V 20% VS SM
4	126	03-82-0106	2	C127-C128	CAP ELEC 10uF 16V 20% SM 4-5.4-5.5
4	127	03-82-0107	5	C148,C156,C200-C201,C357	CAP ELEC 100uF 16V 20% VS SM
4	128	03-82-0477	3	C355-C356,C363	CAP ELEC 470uF 16V 20% SM 10-10.2-12
4	129	03-84-0477	3	C103,C120,C364	CAP ELEC 470uF 25V 20% SM 10-10.2-12
4	130	03-88-0105	1	C161	CAP ELEC 1uF 50V 20% VS SM
4	131	03-88-0106	3	C3,C130,C204	CAP ELEC 10uF 50V 20% VS SM
4	132	04-01-0004	2	L4,L58	INDUCTOR CHOKE 150uH 0.4R 1A SM SHIELDED
4	133	04-01-0100	2	L35,L59	INDUCTOR DRUM-CORE 10uH @ 2.52MHz 1.15A SM
4	134	04-04-0001	2	L36,L56	FERRITE BEAD 3 TURN 600R @ 100MHZ MATERIAL 61 RADIAL TH
4	135	04-05-0004	2	L14,L16	FERRITE BEAD 400mA 1500 OMH 0805
4	136	04-05-0012	3	L328-L330	FERRITE BEAD 68R @ 100MHZ 300MA 0805 SM
4	137	06-20-0099	8	D17,D19,D24-D26,D30-D31,D69	DIODE GEN PUR DUAL 70V 215mA 6nS SOT-23 SM
4	138	06-23-0054	9	D18,D20-D22,D45,D54-D55,D57-D58	DIODE SCHOTTKY DUAL 30V 200mA 5nS SOT-23 SM
4	139	06-23-0340	2	D4-D5	DIODE SCHOTTKY 3A 40V SMA SM
4	140	6-28-8410	3	D3,D6-D7	DIODE ZENER 10V 5% 350mW SOT-2 3 SM
4	141	06-32-0130	2	D36,D77	DIODE SCHOTTKY 1A 30V SMB SM
4	142	06-32-0340	1	D72	DIODE SCHOTTKY 3A 40V SMB SM
4	143	06-34-0016	27	D15-D16,D35,D37-D44,D46-D53,D61-D62,D64-D67,D70,D80	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM
4	144	9-6-7002	1	Q12	TRANS MOSFET N-CHAN 60V 7R5 SOT-23 SM
4	145	09-10-0600	1	Q15	TRANS PNP 60V 6.0A 100MHZ SOT-223 SM
4	146	09-10-0860	2	Q3,Q5	TRANS PNP EPITAXIAL SILICON SO T-23 SM
4	147	9-10-4403	7	Q2,Q4,Q7,Q10-Q11,Q13-Q14	TRANS NPN SMALL SIGNAL SOT-23 SM
4	148	9-10-4403	1	Q6	TRANS PNP SMALL SIGNAL SOT-23 SM
4	149	9-10-6102	2	Q8-Q9	TRANS N-CHANNEL MOSFET SOT-23 SM
4	150	9-14-3098	1	Q16	TRANS MOSFET P-CHAN 30V 3.8A SOT-23 SMD
4	151	11-00-0003	1	Y1	CRYSTAL 24MHz 2 PIN LOW PROFIL E METAL CAN AT49 TH
4	152	11-1-2258	1	Y3	OSCILLATOR 22.5792MHz 3.3V W-3 -S HCMOS OUT 4 PIN HS-DIP8
4	153	11-1-2458	1	Y2	OSCILLATOR 24.576MHz 3.3V W-3 -S HCMOS OUT 4 PIN HS-DIP8
4	154	11-10-0501	2	L39-L40	FERRITE BEAD 500R @100MHZ 2.5A 1206 SM
4	155	11-10-2012	33	L1-L3,L5-L8,L11-L13,L17,L19,L22-L23,L27-L33,L38,L41-L46,L50-L54	FERRITE BEAD 600R @ 100MHZ 300 mA 0805 SM
4	156	11-33-0000	1	T2	XFMR AUDIO DIGITAL X-MISSION 1:1 W- CENTER-TAP
4	157	11-33-0120	1	T1	XFMR AUDIO DIGITAL X-MISSION 1:1
4	158	12-52-0003	2	U46-U47	IC REG LINEAR LDO +5V 500mA SM
4	159	12-52-1118	1	U51	IC REG 1.8V LDO LINEAR 800mA S OT-223 SM
4	160	12-52-1119	1	U44	IC VREG LINEAR LDO ADJ 800MA LM1117 DPAK TO-252 SMD
4	161	12-54-0072	4	U15-U16,U19,U43	IC OP AMP DUAL TL072 SM
4	162	12-54-0074	5	U13,U17-U18,U20-U21	IC OP AMP TL074 SM
4	163	12-54-0134	1	U23	IC OP AMP OPA134 SO-8 SM
4	164	12-54-5538	2	U22,U31	IC OP AMP DUAL LO NOISE SO-8 S SM
4	165	12-62-0053	1	U29	IC SWITCH ANALOG TRIPLE 2-CHAN TSSOP-16 SM
4	166	12-62-4051	1	U14	IC SWITCH ANALOG 8-CHAN TSSOP-16 SM
4	167	12-64-4272	3	U40-U42	IC STEREO AUDIO CODEC 24 BIT 192 KHz CS4272 SM
4	168	15-40-6137	1	U49	IC OPTO ISOLATOR 6N137 10MBIT DIP 8-PIN TH

4	169	15-40-6138	1	U4		IC OPTO ISOLATOR 6N138 DIP 8 P IN TH	
4	170	15-62-0004	1	U3		IC 74HC04 HEX INVERTER SO-14 S M	
4	171	15-64-0273	3	U35-U37		IC 74HC273 OCTAL D-TYPE FLIP FLOP 8 BIT SO-20 SM	
4	172	15-65-0000	1	U8		IC 74LXC00 LOW VOLTAGE QUAD 2 INPUT NAND GATE 5V SO-14 SM	
4	173	15-65-0002	1	U7		IC 74LXC02 LOW VOLTAGE QUAD 2 INPUT NOR GATE 5V SO-14 SM	
4	174	15-65-0004	1	U11		IC 74LVC04 LOW VOLTAGE HEX INV ERTER SO-14 SM	
4	175	15-65-0015	1	U9		IC SN74LVC14AD LOW VOLTAGE CMO S INV HEX SCHMITT TRIG SO-14	
4	176	15-67-0179	1	U26		IC DIFF DRIVER-RECPAIR RS-485 SO-8 SM	
4	177	15-67-3295	1	U50	A	IC RS-485-422 LINE DRIVER 3.3V SOT-23-6 SM	
4	178	15-68-2392	2	U45,U48	A	IC CONTROLLER JRC NJM2392 DMP-8 SMD	
4	179	15-68-6801	1	U1		IC CONTROLLER USB 2.0 w-8052 MCU SSOP-56 SM	
4	180	15-70-0002	2	U5,U25		IC SDRAM 3.3V 64MB 1M x 16 x 4 TSOP-54 SM	
4	181	15-78-0256	1	U6		IC EEPROM 256K 2.5V 400KHz CMO S SOIC-8 SM	
4	182	15-79-0088	1	U2		IC MEMORY SECURE WITH AUTHENTI CATION SO-8 SM	
4	183	15-84-2220	1	U28		IC MCU 16-32 BIT ARM W-64K ADC LPC2220 LQFP144 SM	
4	184	15-86-3369	1	U10		IC DSP SHARC PROCESSOR 32 BIT 333MHZ ADSP-21369KSWZ-2A LQFP208EP SMD	
4	185	15-92-5809	1	U27		IC RESET 3 PIN 3.3V ACTIVE LOW OUTPUT SOT-23 SM	
4	186	21-00-0014	1	J22		JACK BARREL PCB MT 2.5MM DC PO WER 3 PIN TH	
4	187	21-00-6617	9	J7-J9,J11-J12,J15-J16,J18,J21		JACK 1-4" TRS PCB MOUNT 6 PIN HORIZONTAL W-CHROME HRDWARE TH	
4	188	21-02-0008	1	J6		JACK RCA 3 PIN FEMALE RT ANGLE PCB MOUNT	
4	189	21-04-5075	2	J2-J3		JACK DIN FEMALE MIDI 5 PIN PCB MOUNT RT ANGLE	
4	190	21-08-0002	1	J10		JACK XLR FEMALE PCB MOUNT RT ANGLE W-NO RELEASE TAB TH	
4	191	21-08-0013	3	J13-J14,J23		JACK XLR MALE PCB MOUNT RIGHT ANGLE TH	
4	192	21-12-0035	1	J17		JACK 3.5MM STEREO 5 PIN CRIMPE D LEADS NON-THREADED	
4	193	21-16-0001	1	J5		JACK RJ-45 9 PIN IN XLR SHELL PCB MOUNT HORIZONTAL TH	
4	194	21-18-0002	1	BR2		TERMINAL SCREW PCB MOUNT RIGHT ANGLE SNAP-IN 6-32 THREAD	
4	195	21-20-0206	2	H3A,H3B		HDR SIL PCB-MT 6 PIN x 2MM MAL E SHRD VERT MT TH	
4	196	21-21-0001	1	J4		JACK USB SERIES B SHIELDED PCB MNT BLACK	
4	197	21-21-0006	1	H2		HDR DIL PCB-MT 20 PIN 2 x 10 x .100 MALE SHRD VERT TH	
4	198	24-09-0002	3	SW4-SW6		SWITCH SLIDE DPDT VERT PCB MNT	
4	199	24-09-0010	1	K1		SWITCH SLIDE 4 POLE DOUBLE THROW. 3.0 MM 12 TH PCB MOUNT P16-3 P18-1	
4	200	24-12-0001	4	E2-E5		ENCODER 24 STEP w-25MM SHFT TH	
4	201	24-12-0006	1	E1		ENCODER 20 STEP w-SWITCH 15MM D-SHAFT METAL V-MNT PCB	
4	202	24-31-0002	8	SW1-SW3,SW7-SW11		SWITCH TACT 6MM SQ 4 PIN W-RND 3.5MM ACTUATOR SM	
4	203	30-00-0266	2		X0	SCREW #3-48 UNC X 1-2" SOCKET HEAD STEEL	
4	204	30-06-0018	2			NUT HEX #3-48 STL	
4	205	30-15-0007	1			INSULATOR XTAL 4.9MM C-C 11.8 x 5.6MM MYLAR	
4	206	30-15-4028	2		X0	SPACER 0.18 ODX 0.1 ID X 0.2 H NYLON	
4	207	30-18-3030	16	GF1-GF16		CLIP GROUND PCB .30 x .30 x .07	
4	208	30-27-0219	2			SPRT DUAL LKG CKT BD TEARDROP 3-16 NYLON NAT P10-1	
4	209	30-51-0146	2	SH1-SH2	A	SHIELD PCB MT FOR 1-4 JACK 1.00 Hx1.25Wx.013THK BERYL COP	
4	210	30-51-0458	1	SH3	C	SHIELD INPUT JACK COPPER NICKEL PLATED 43MM 12.5MM 24.4MM	
4	211	35-00-0386-1	1		A	PCB MAIN 4-LAYER P18-1	
4	212	40-30-2000	1			LABEL ESN 38.10 X 6.35MM THERMAL XFR MATTE WHITE	
4	213	45-02-0062	1		1	IC PROGRAMMED FLASH P18-1	
5	1	15-78-6401	1	U39		IC FLASH 64Mb 3.3V 70ns TSOP-4 8 SM	
4	214	50-02-0142	1	JMP1	X1	PCBA DISPLAY LCD 128X64 POS GRAPHIC 6:00 WHITE P18-1	
5	1	18-30-0011-2	1		X0	DISPLAY LCD MODULE 128X64 POS GRAPHIC 6-OCLOCK XFLECT WHITE P18-1	
5	2	21-30-0035	1		D	CBL RIBBON SIL 20 PIN 28AWG . 100 CENTERS X 3" S-T	
3	4	50-02-0386-2	1		A	PCBA PEDAL P18-1	
4	1	03-52-0104	2	C119,C325		CAP X7R 0.1uF 50V 10% 0805	
4	2	11-10-2012	2	L50-L51		FERRITE BEAD 600R @ 100MHz 300 mA 0805 SM	
4	3	21-00-6617	1	J21		JACK 1-4" TRS PCB MOUNT 6 PIN HORIZONTAL W-CHROME HRDWARE TH	
4	4	30-18-3030	1	GF16		CLIP GROUND PCB .30 x .30 x .07	
4	5	35-00-0386-2	1		A	PCB PEDAL 4-LAYER P18-1	
3	5	50-02-0386-3	1		A	PCBA PEDAL SWITCH P18-1	
4	1	01-24-1002	4	R275-R277,R280		RES 10.0K 1% 0805	
4	2	03-18-1105	1	C254		CAP ELEC 1uF 50V 20% RADIAL 3-5-5	
4	3	03-52-0104	1	C326		CAP X7R 0.1uF 50V 10% 0805	
4	4	06-20-0099	1	D69		DIODE GEN PUR DUAL 70V 215mA 6ns SOT-23 SM	
4	5	09-20-0095	1	Q1		PHOTOTRANSISTOR BLUE LENS SM	
4	6	18-27-0083	1	D11		LED INFRA-RED 880nm CLEAR LENS	
4	7	21-20-0206	1	H3B		HDR SIL PCB-MT 6 PIN x 2MM MAL E SHRD VERT MT TH	
4	8	35-00-0386-3	1		A	PCB PEDAL SWITCH 4-LAYER P18-1	
2	40	50-02-0387	1		A	PCBA FOOTSWITCH UPPER-LOWER P18-1	
3	1	21-30-0060	1		A	CABLE RIBBON DIL 20 0.1INCH 6 INCH STAKED	
3	2	50-02-0387-1	1		A	PCBA FOOTSWITCH UPPER P18-1	
4	1	18-00-0005	6	D1-D6	X0	LED RED SUPER BRIGHT T-1 3M M TH	
4	2	24-31-1105	6	SW1-SW6		SWITCH TACT 6MM SQ 4 PIN TH	
4	3	35-00-0387-1	1		A	PCB FOOTSWITCH UPPER 1-LAYER 17" P18-1	
3	3	50-02-0387-2	1		A	PCBA FOOTSWITCH LOWER P18-1	
4	1	18-00-0005	6	D7-D12	X0	LED RED SUPER BRIGHT T-1 3M M TH	
4	2	18-02-0002	1	D13		LED RED DIFFUSED LENS 5V T-1 3MM 635nm TH	
4	3	18-04-0001	1	D14		LED GREEN SUPER BRIGHT TH	
4	4	24-31-1105	6	SW7-SW12		SWITCH TACT 6MM SQ 4 PIN TH	
4	5	35-00-0387-2	1		A	PCB FOOTSWITCH LOWER 1-LAYER 16.5" P18-1	
2	41	50-03-0071	12		B	ASSY FOOTSWITCH W-LIGHTPIPE CHROME	
3	1	30-27-0260	1	EA	A	FOOTSWITCH PUSH PIN .15 DIA x .15 LONG ABS BLACK P11-1	
3	2	30-27-0261	1	EA	C	LIGHT PIPE FOOTSWITCH 1.1 x .8 x .6 PC CLEAR P11-1	
3	3	30-51-0290	1	EA	C	FOOTSWITCH BASE 1.3 x .5 x .5 ADC P11-1	
3	4	30-51-0291	1	EA	D	FOOTSWITCH PLUNGER 0.5 DIA x 0.76 LG SST P11-1	
3	5	30-51-0293	1	EA	B	SPRING 9 COIL .30 DIA x .82 x .024 STEEL ZINC PLATE P11-1	
3	6	30-51-0294	1		D	SPRING 8 COIL .14 x .35 x .020 STEEL ZINC PLATE P11-1	
3	7	30-51-0295	1			CLIP E STYLE FOR 7-32" DIA SHAFT STEEL BLACK PHOS P11-1	
2	42	50-03-0072	1		C	ASSY FOOT PEDAL - X5-1	
3	1	30-00-0199	1	EA	A	SCREW 1-4 20 UNC SCH5 2.795" STEEL BO	
3	2	30-03-0003	2	EA		WASHER .473 x.260x .030 steel	

3	3	30-03-0042	2	EA		F	WASHER SHOULDER .50 .260 .880 NYLON
3	4	30-06-0009	1	EA			NUT 1-4-20 STL W-NYLON LOCK
3	5	30-27-0449	1	EA		A	REFLECTOR REFLECTING LIGHT PVC X5-1
3	6	30-48-0010	1	EA			FOOT RUBBER w-ADHESIVE 3M BUMPON SJ-5012 (OR EQUIV)
3	7	30-51-0415	1	EA		E	BRACKET PEDAL STEEL 2.15 .925 1.38 X5-1
3	8	30-51-0417	1	EA		G	PEDAL FOOT STEEL 3.35"WD .71"HT 7.80"LG X5-1
3	9	30-60-0009	1	EA		A	LOGO LINE 6 P3-1
3	10	30-65-0025	1	EA		A	TAPE ANTI SLIP 54MM 200MM NON ABRASIVE POLYLEFIN ANTI SLIP TAPE MCMaster-CARR 6243T731
3	11	30-65-0026	1	EA		A	TAPE ANTI SLIP 22MM 200MM NON ABRASIVE POLYLEFIN ANTI SLIP TAPE MCMaster-CARR 6243T721
3	12	30-75-0011	1	EA		A	STOP PEDAL RUBBER .81SQ x .52 BLACK

**L6D000270 POD X4 LIVE P18-1**  
**Complete Unit Assembly Instructions**  
**59-00-0070 **Rev D****



### Forward and Notes

The information in this booklet applies to the mechanical assembly of the X4 Chassis (59-00-0070). See also the Related Electrical assembly documentation, for major considerations in assembling the electrical components of the PCBs (through the soldering process and preparation of the board for addition of custom components).

***A note on the text: the illustrations in this book are for reference only. In some cases, color and geometry of illustrations may not accurately reflect the color or exact geometry of actual parts.***

- Unless otherwise noted, all dimensions are in MM.
- Part identifying notes are in this format: Description (Part Number)
- Drawings are not to scale.
- Torque value tolerance +/- .57cm-kg. Do not over tighten any components.

For clarity, not all component details are shown. This is especially true with respect to cable assemblies. They are often omitted from views to provide a clearer picture of the material discussed. Do not be confused by the absence (or unexpected presence) of any component in the illustrations in this book.





## Revision Comment Sheet

Revision	Changes
X0	SEE ECO#2522 INITIAL RELEASE
X1	SEE ECO#2522 UPDATED PROCESS.
X2	SEE ECO#2522 MODIFIED SECOND PICTURE FOR STEP8
X3	SEE ECO#2652 MODIFIED WASHER P/N IN STEP 3 & REFLECTOR DISC P/N IN STEP 4.
X4	SEE ECO#2872 REMOVED RT V OR GLUE STEP 19 & MODIFIED LENS AND BEZEL COVER ORDER STEP 20,21, AND CHANGED SCREWS IN STEP 25,26 (is-30-00-0263,was-30-00-0249), AND ADDED CABLE INSTALL COMMENT IN STEP 24.
A	SEE ECO#3505 ADDED PROCESS WHICH INSTALLED THE PART OF 30-75-0013 RJ45 CAP INTO RJ45 JACK(21-16-0001). SEE STEP 29.
B	SEE ECO#3549 ADDED A PART FOAM W - ADHESIVE (30-63-0067) ONE THE BOTTOM OF PEDAL. SEE STEP 2
C	SEE PCO#00006 ADDED APPLY HOT GLUE ADHESIVE. SEE STEP 25
D	SEE ECO-0003104 REPLACED '30-51-0293 FOOTSWITCH SPRING, LARGE' WITH '30-51-0531

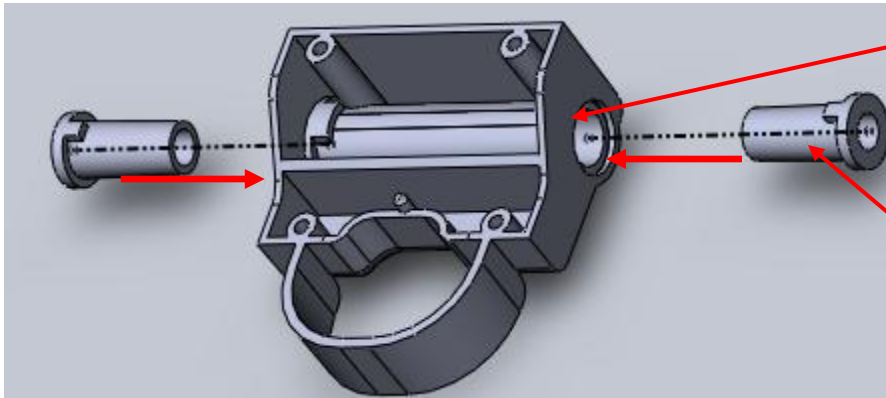
**STEP 1:**

P/N required:

1 each 30-51-0415 - Bracket Pedal foot

2 each 30-03-0042 – Shoulder Washer

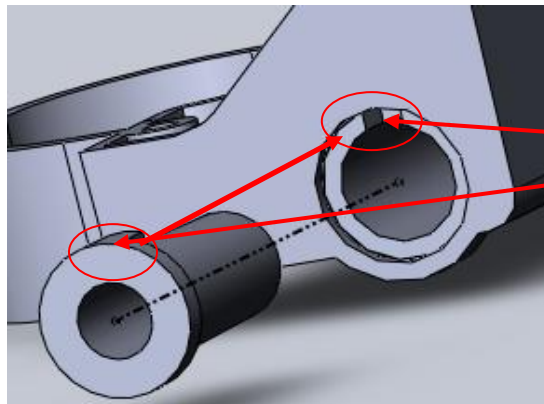
Insert two (2) Shoulder Washers into the holes on the side of the Bracket Pedal-foot as shown .



Bracket Pedal-foot  
(30-51-0415)

2X Shoulder Washer  
(30-03-0042)

Pay attention that align the rib on Washer with the groove on the Bracket .



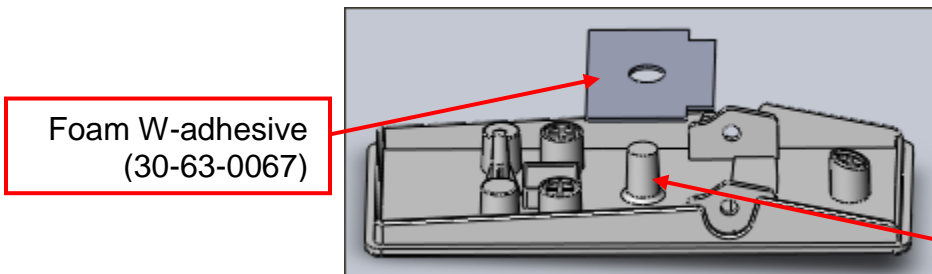
Align ribs and  
Grooves on two side

**STEP 2:**

P/N required:

1 each 30-63-0067 - Foam W-adhesive

Foam W - adhesive on the bottom of Pedal in assembly. Assembly benchmark for Pedal pillars of Foam through holes.



Foam W-adhesive  
(30-63-0067)

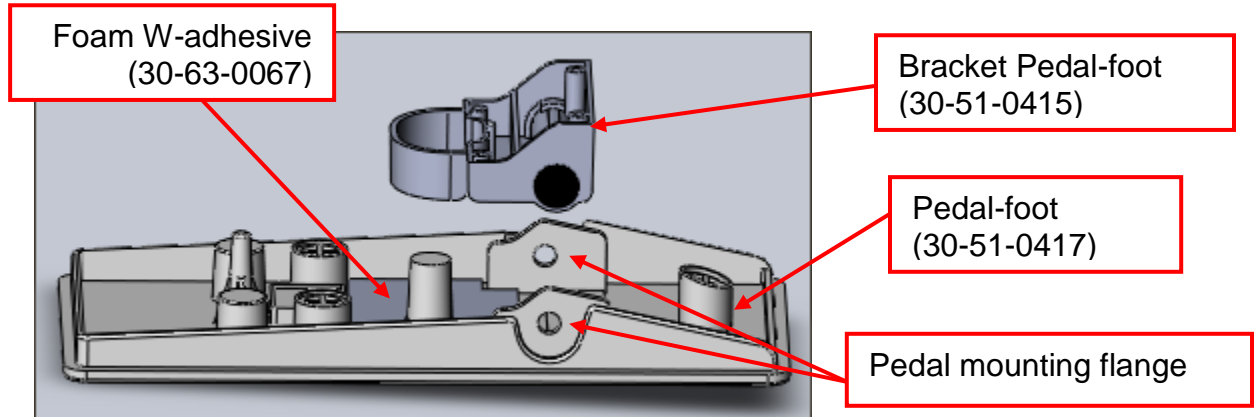
Pedal pillars

**STEP 3:**

P/N required:

1 each 30-51-0417 - Pedal foot

Position the foot pedal bracket/shoulder washer assembly onto the foot pedal between the foot pedal mounting flanges. Align the holes on the pedal bracket with the holes on the foot pedal flanges.



**STEP 4:**

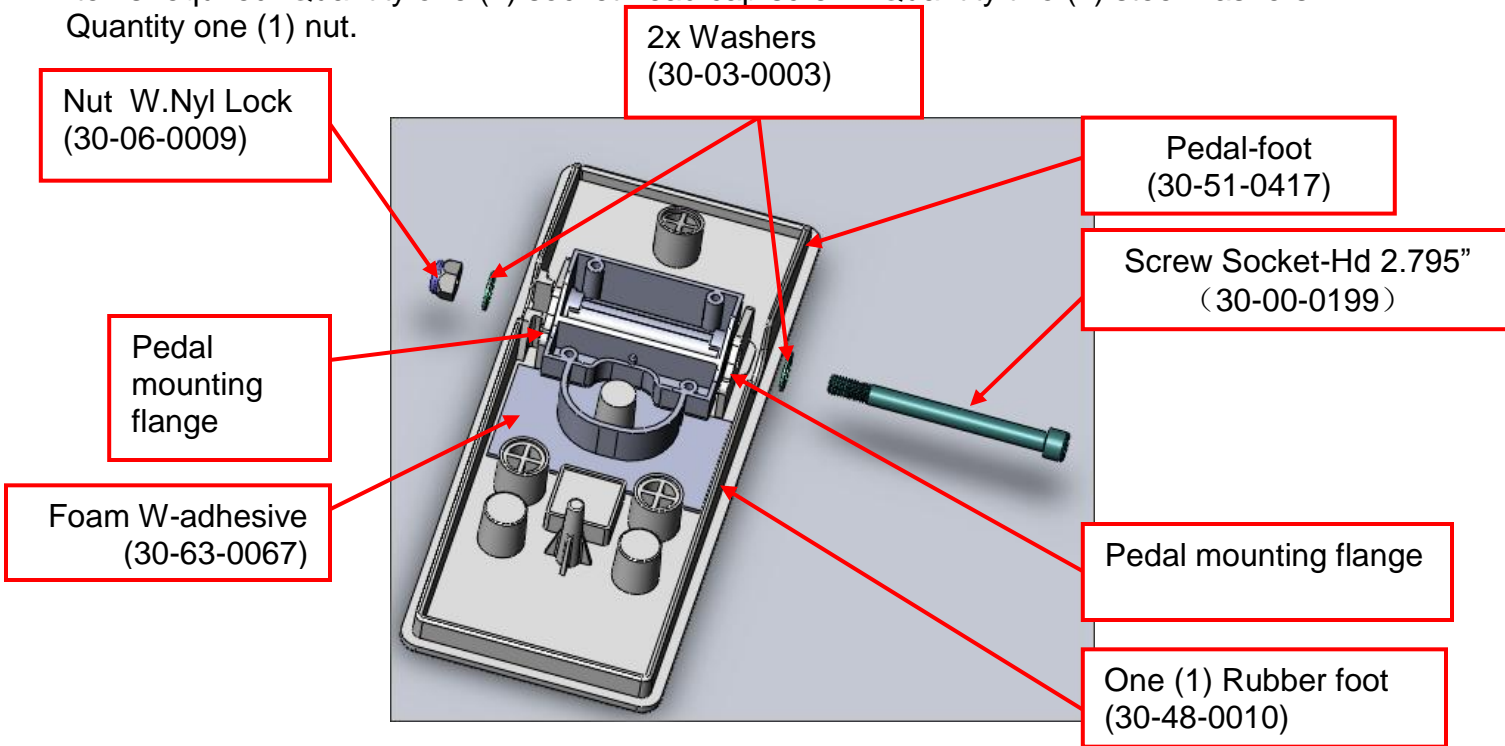
1 each 30-06-0009 - Nut W.Nyl Lock

2 each 30-03-0003 - Washer steel

1 each 30-00-0199 – Screw Socket\_Hd

Secure the pedal bracket assembly (with the shoulder washers) to the pedal through the holes in the pedal mounting flanges using the mounting hardware in the sequence shown. Torque 27.4-32.6 cm-kg.

Items required: Quantity one (1) socket head cap screw. Quantity two (2) steel washers. Quantity one (1) nut.

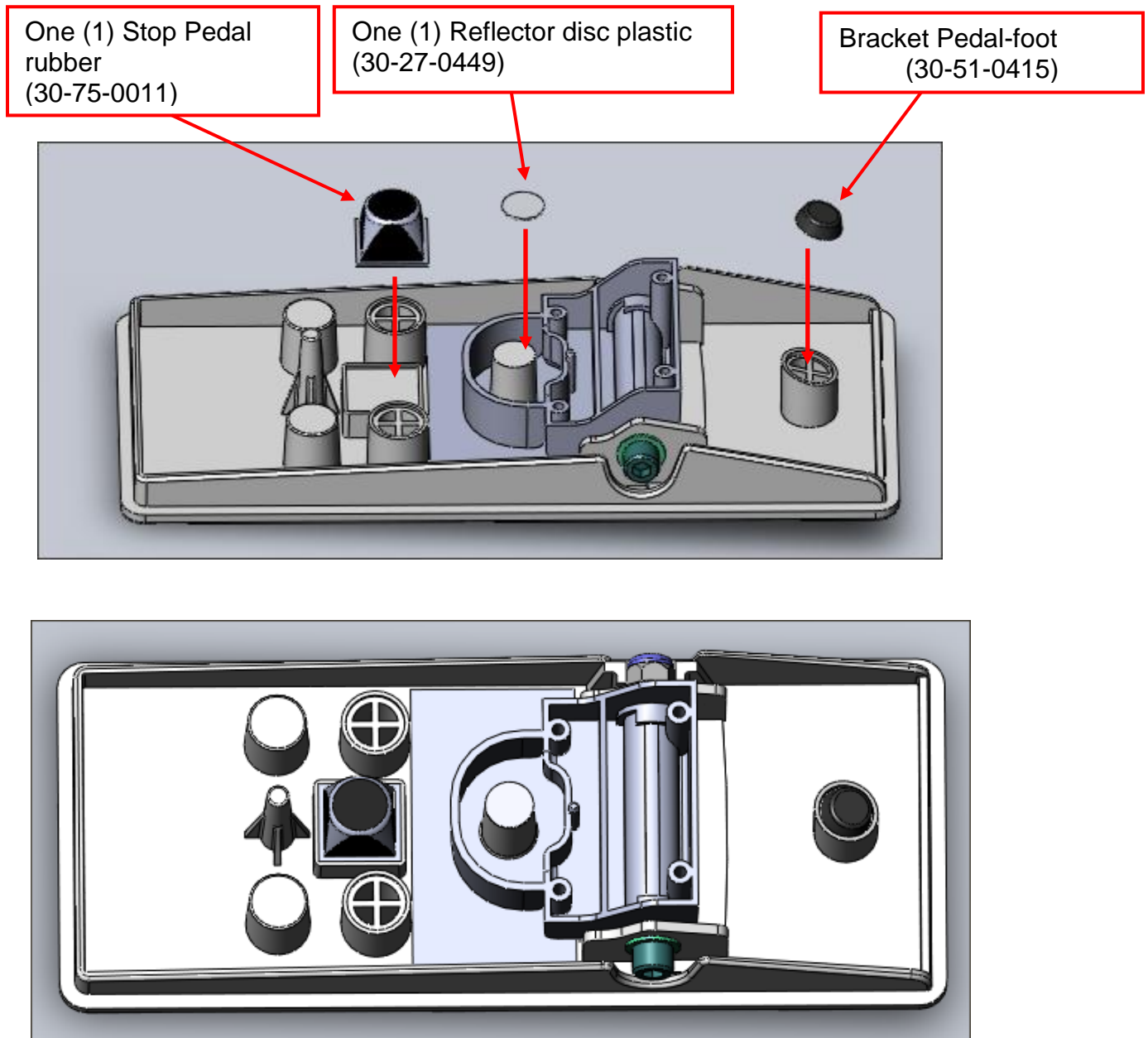


**STEP 5:**

P/N required:

- 1 each 30-75-0011 – Stop Pedal rubber
- 1 each 30-27-0449 – Reflector disc plastic
- 1 each 30-48-0010 - Rubber foot

Apply the pedal components in the applicable locations on the pedal as shown.





**STEP 6:**

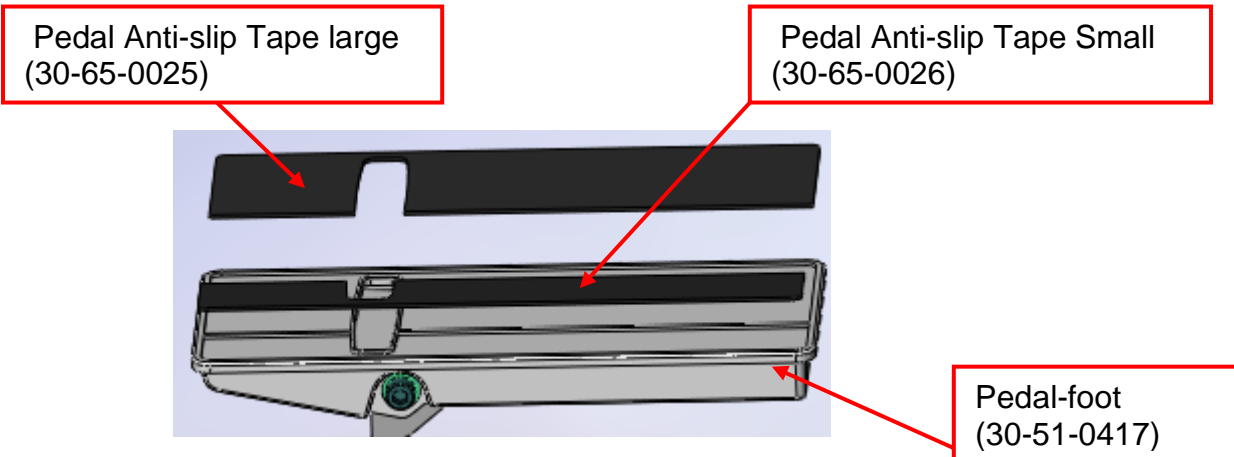
P/N required:

1 each 30-65-0025 – Pedal Anti-slip Tape large

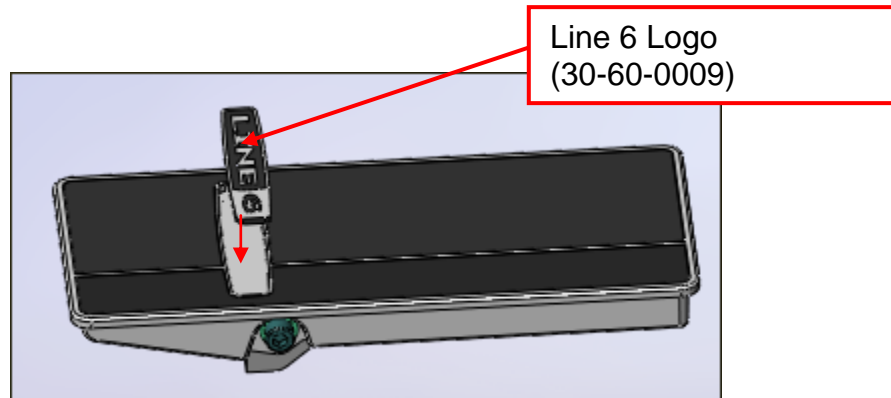
1 each 30-65-0026 – Pedal Anti-slip Tape Small

1 each 30-60-0009 – Line 6 Logo

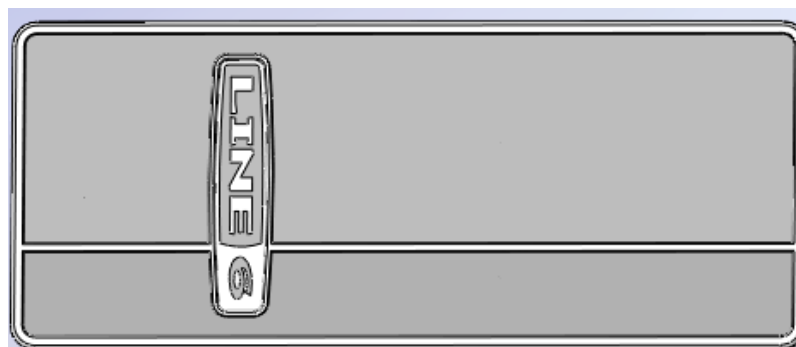
Apply one (1) Pedal Anti-slip Tape Large and one (1) Pedal Anti-slip Tape Small into the applicable recesses on the Pedal-foot as shown .



Apply the Line 6 Logo (30-60-0009) into the pedal recess as shown. Note the orientation of the Logo.



The P/N for subassembly is 50-03-0072



**Subassembly Front view**



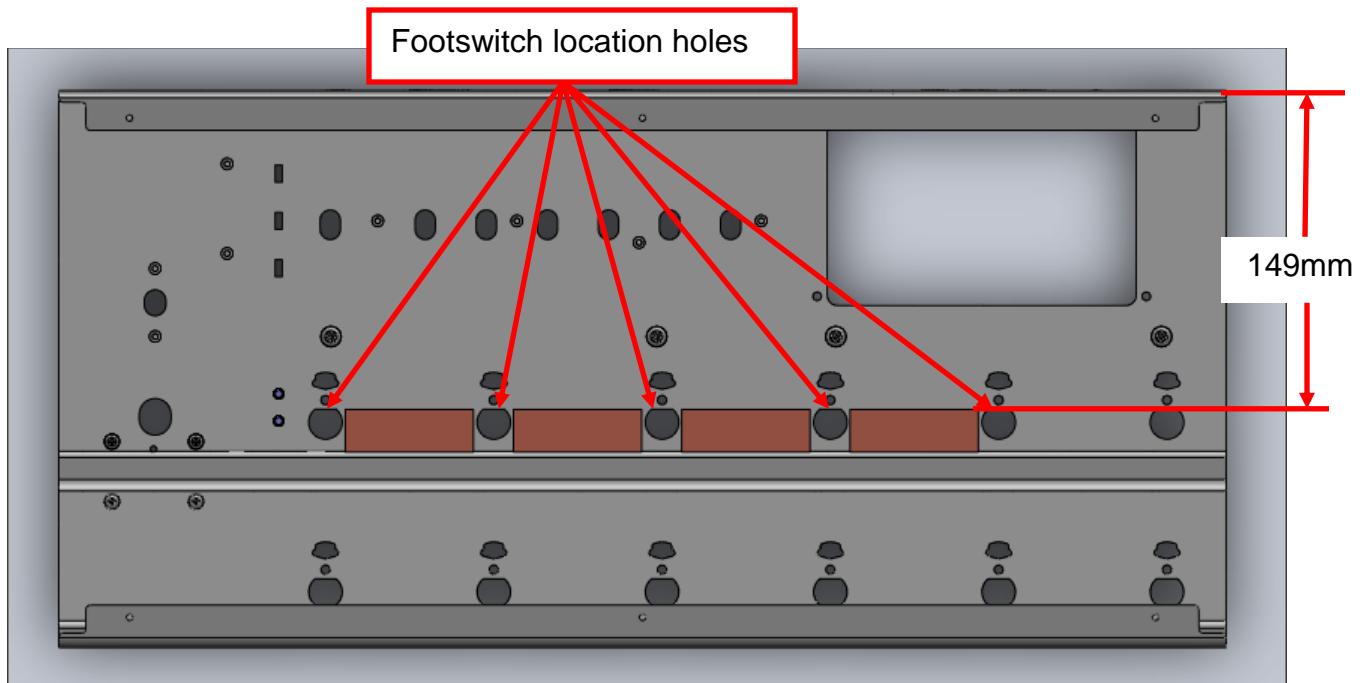
**STEP 7:**

P/N required:

1 each 30-51-0499 – Chassis Top

4 each 30-63-0058 – Foam Strip

Apply four (4) Foam Strips in the middle of the footswitch location holes on the bottom of the Chassis Top as shown.



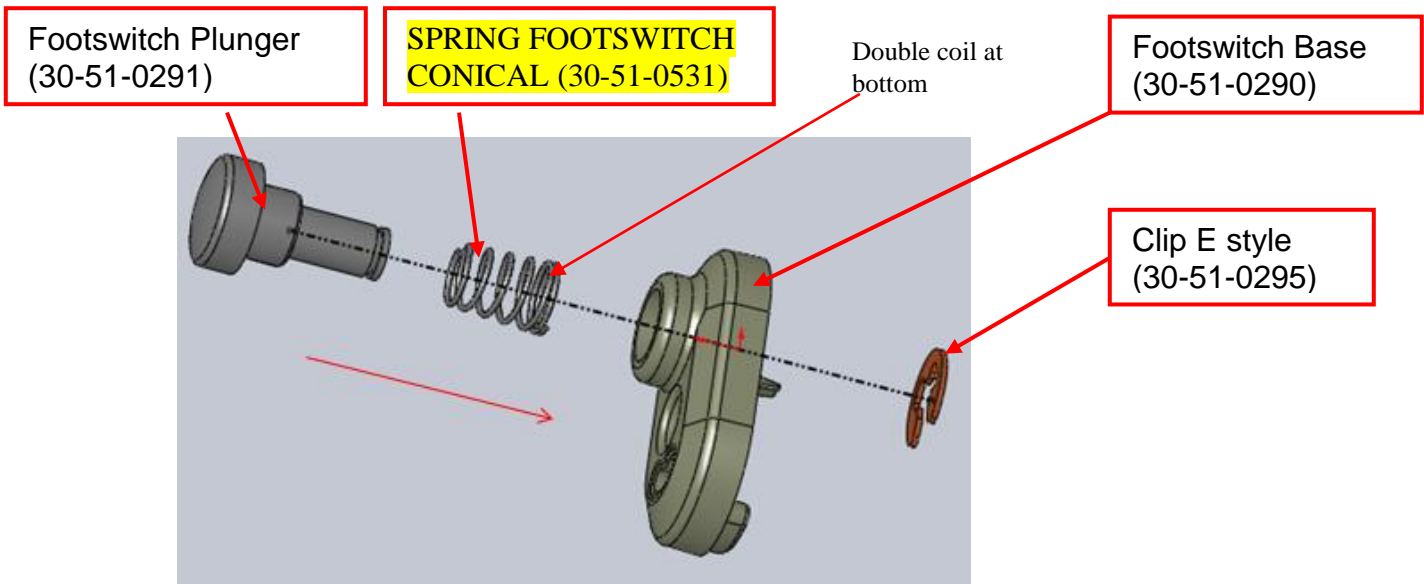
**STEP 8:**

P/N required:

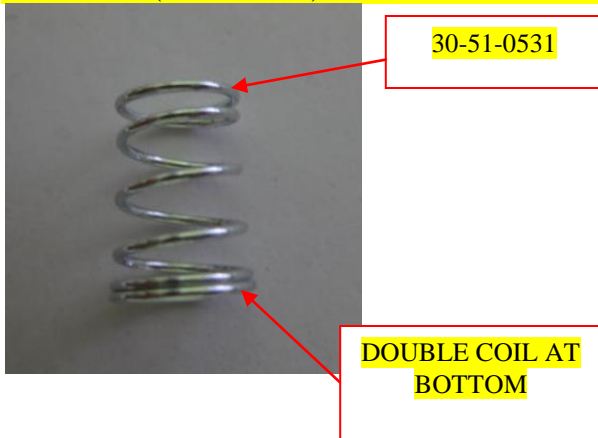
- 1 each 30-51-0291 – Footswitch Plunger
- 1 each 30-51-0531 – SPRING FOOTSWITCH CONICAL
- 1 each 30-51-0290 – Footswitch Base
- 1 each 30-51-0295 – Clip E style

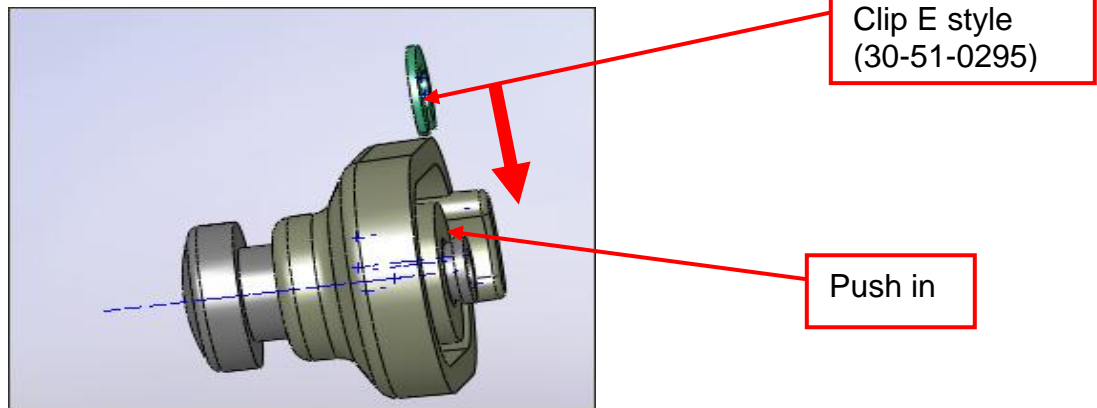
Insert one (1) Footswitch Plunger, one (1) SPRING FOOTSWITCH CONICAL (30-51-0531) into the hole of the Footswitch Base, and push the Clip E style into the groove of the Plunger as shown.

**CRITICAL STEP:** Ensure that SPRING FOOTSWITCH CONICAL is oriented such that the double coil at the wide end of the spring is in contact with the bottom of the hole in the FOOTSWITCH BASE as shown below. Incorrect installation of this spring will cause the footswitch assembly to fail over time.



After E-CLIP is installed, manually actuate the footswitch 5-10 times and ensure that operation is smooth. If there is any grinding or excessive friction, it is likely that SPRING FOOTSWITCH CONICAL (30-51-0531) is installed incorrectly. Disassemble the footswitch.



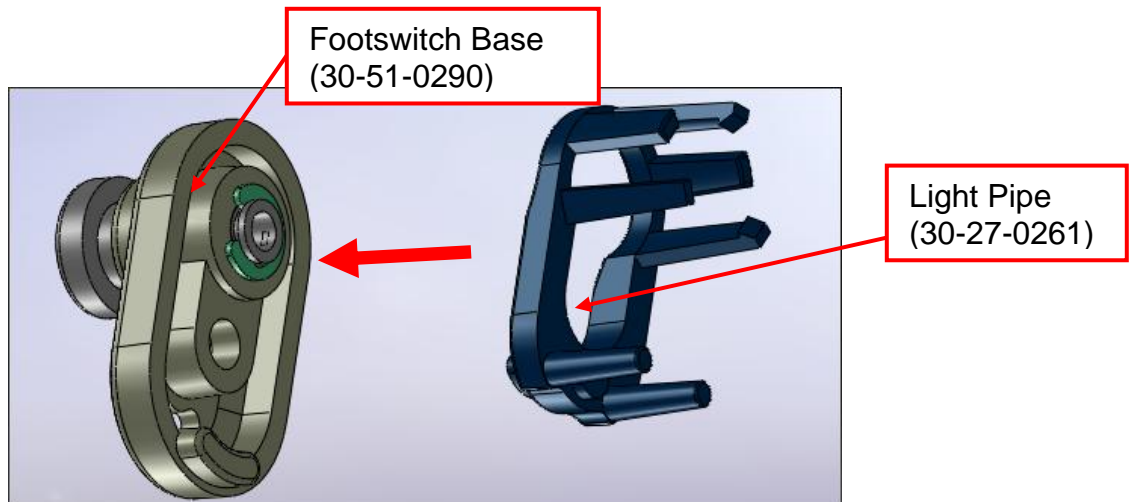


**STEP 9:**

P/N required

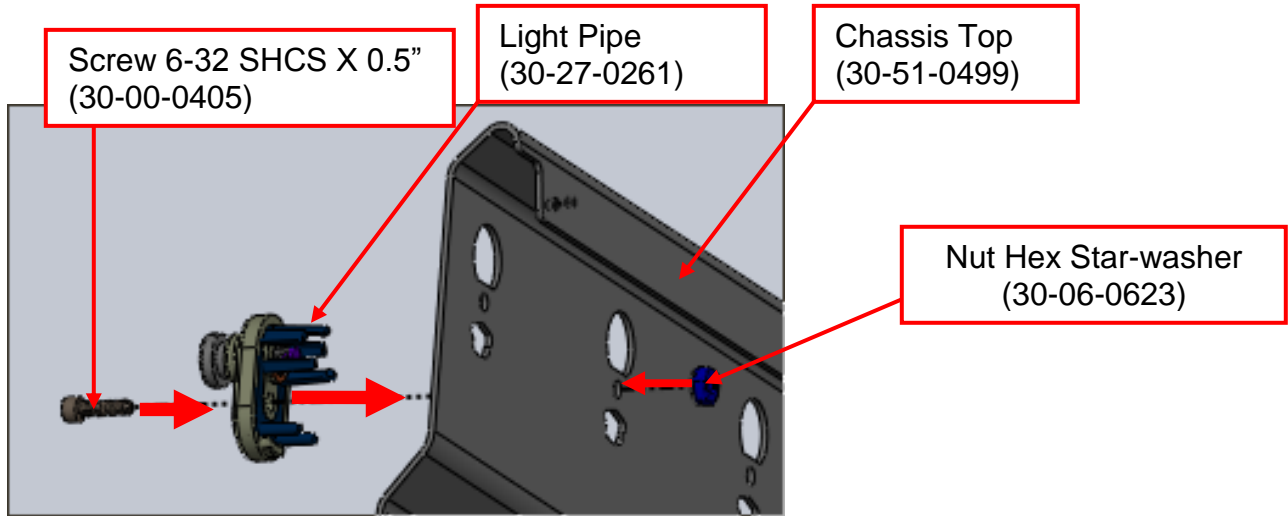
- 1 each 30-27-0261 – Light Pipe
- 1 each 30-00-0405 – Screw 6-32 SCHS X 0.5” plated
- 1 each 30-51-0499 – Chassis Top
- 1 each 30-06-0623 – Nut Hex 6-32 Star-washer

Install Light Pipe into groove of Footswitch Base, as shown.



Insert Light Pipe through the holes of Chassis Top, then insert one (1) Screw 6-32 SHCS x 0.5” plated. Apply one (1) Nut Hex 6-32 Star-washer as shown. Torque screw to 9.5-11.5cm-kg.

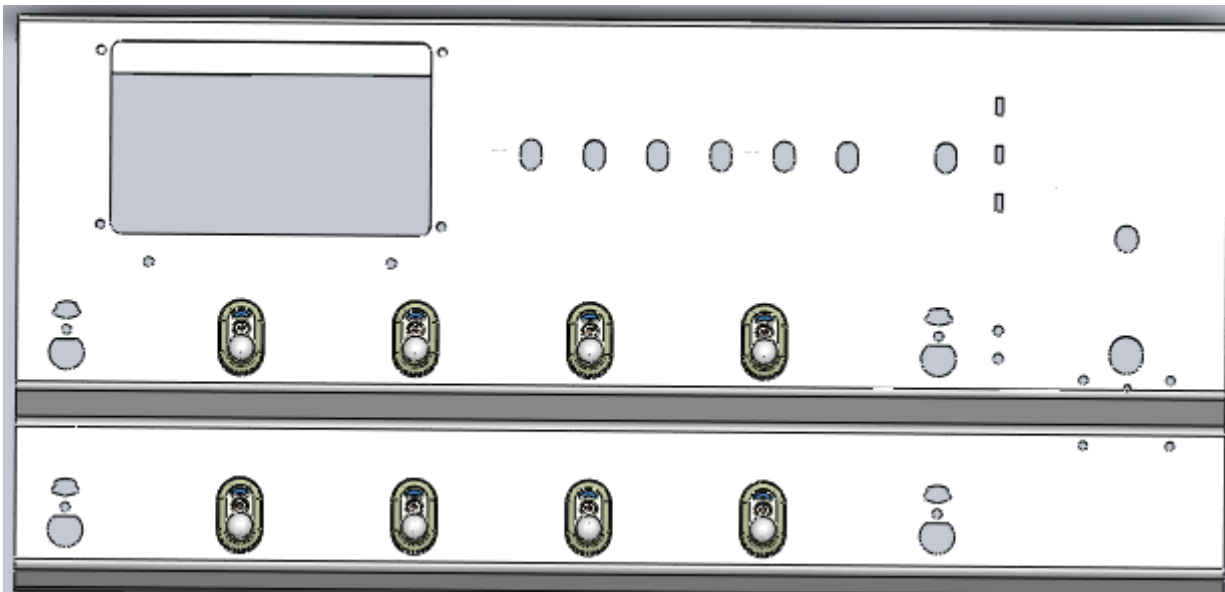




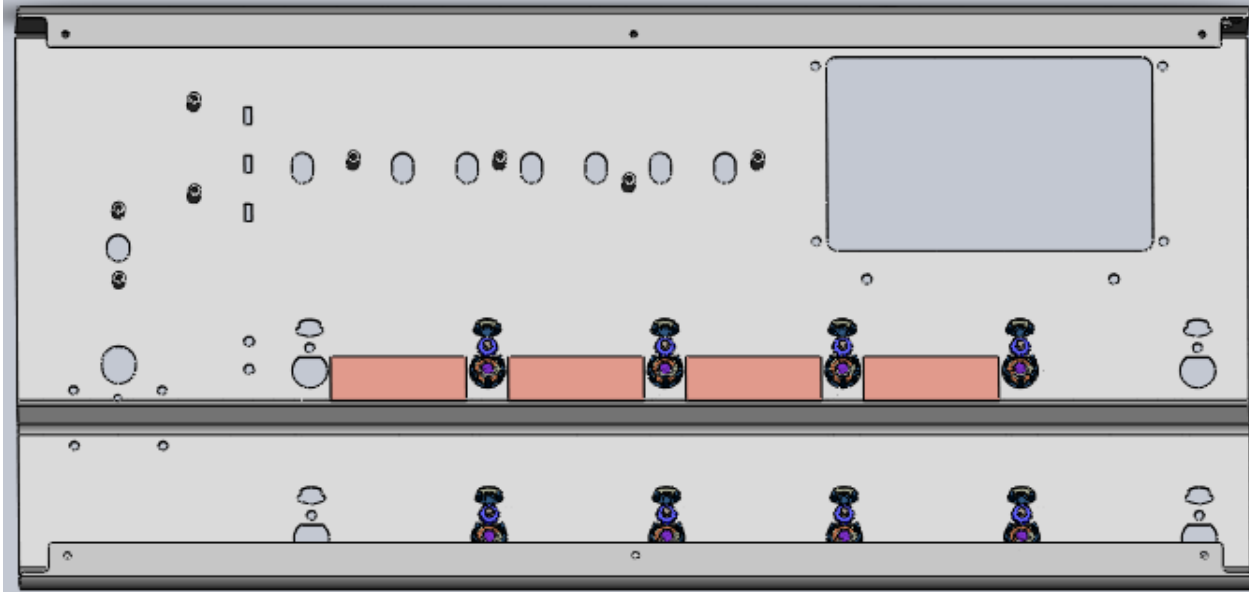
Repeat this Step 8 times for a total of 8 switches installation. See figures 1 and 2.

*(Step 9 is continued on the next page.)*

**Continued from STEP 9:**



**The top view: Figure 1**



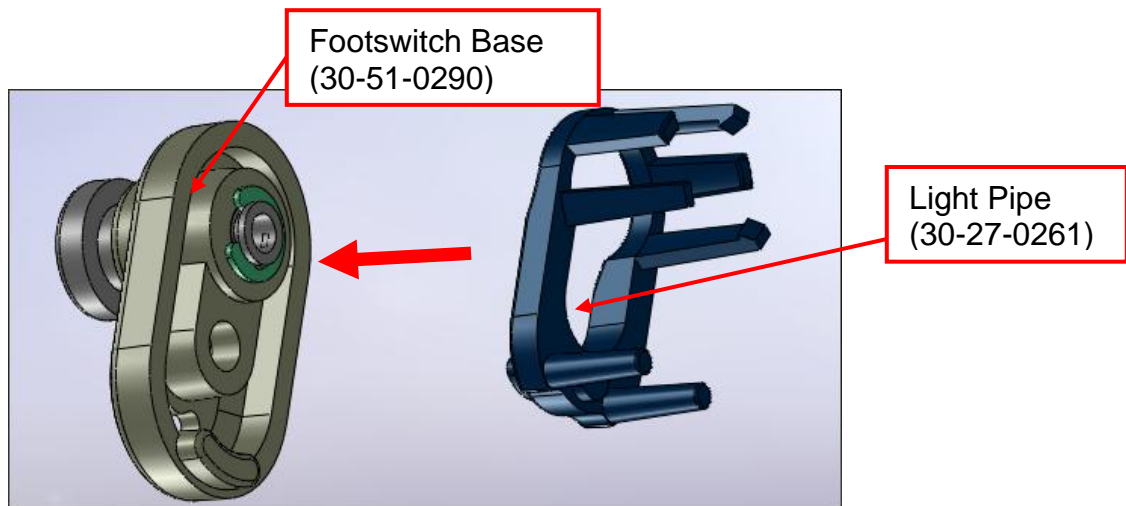
The bottom view: Figure 2

**STEP 10:**

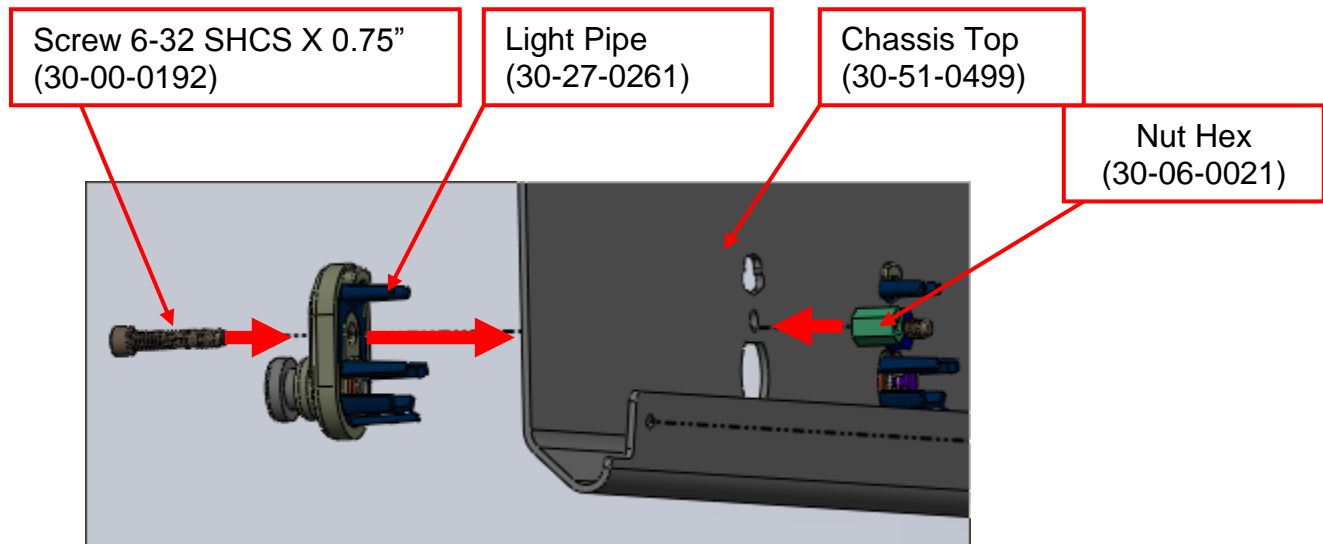
P/N required

- 1 each 30-27-0261 – Light Pipe
- 1 each 30-00-0192 – Screw 6-32 SCHS X 0.75" plated
- 1 each 30-51-0499 – Chassis Top
- 1 each 30-06-0021 - Nut Hex 6-32 Steel

Install Light Pipe into groove of Footswitch Base, as shown.



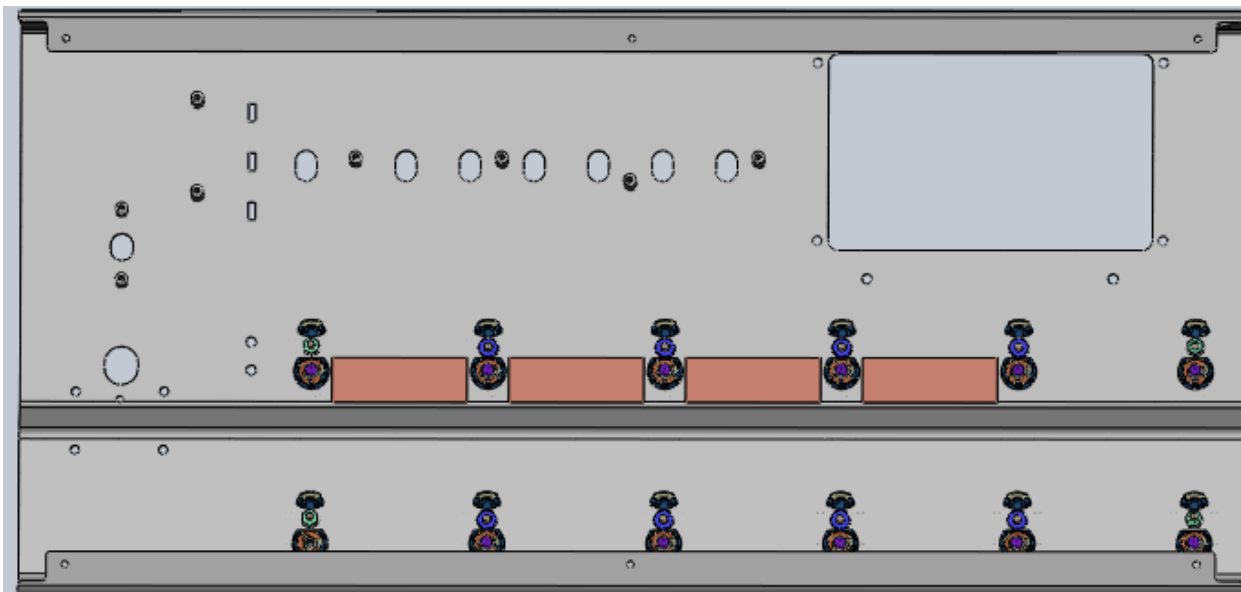
Insert Light Pipe through the holes of Chassis Top, then insert one (1) Screw 6-32 SHCS x 0.75" plated. Apply one (1) Nut Hex 6-32 steel as shown. Torque screw to 9.5-11.5cm-kg.



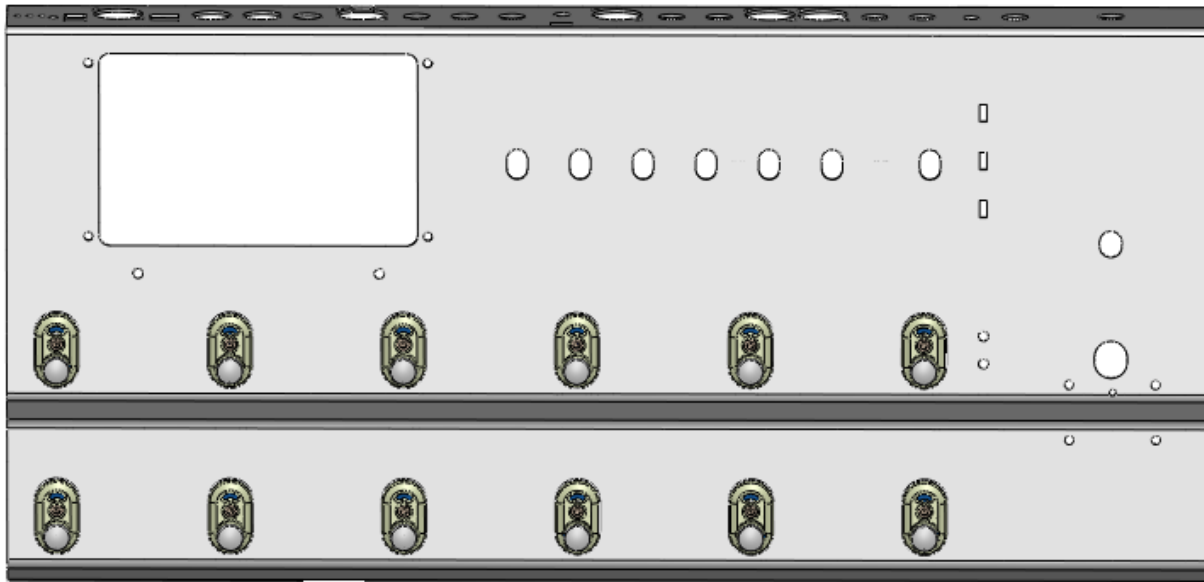
Repeat this Step 4 times for a total of 4 switches installation. See figures 3 and 4.

*(Step 9 is continued on the next page.)*

**Continued from STEP10:**



**The bottom view: Figure 3**



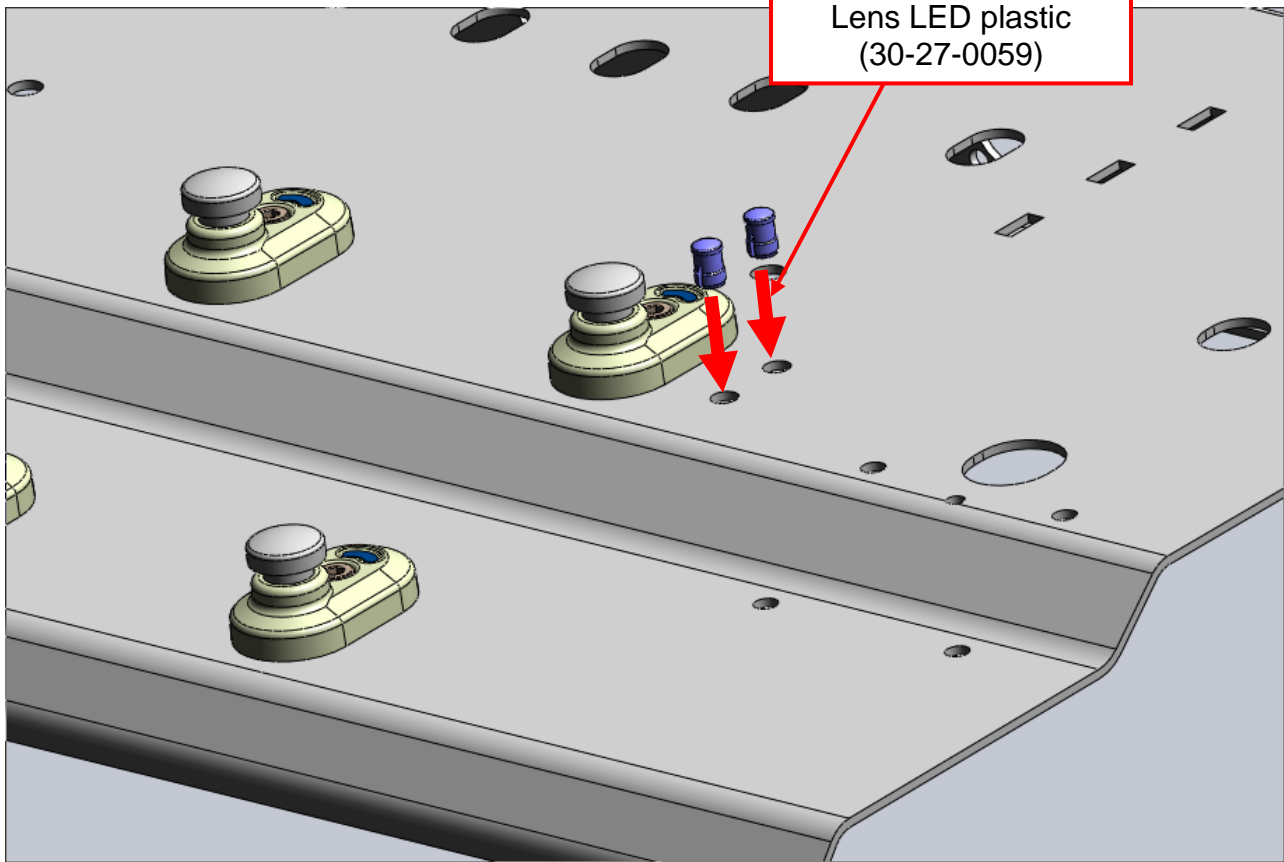
The top view: Figure 4

**STEP 11:**

P/N required:

2 each 30-27-0059 – Lens LED plastic

Snap one LENS into each of the two holes shown in the CHASSIS TOP.



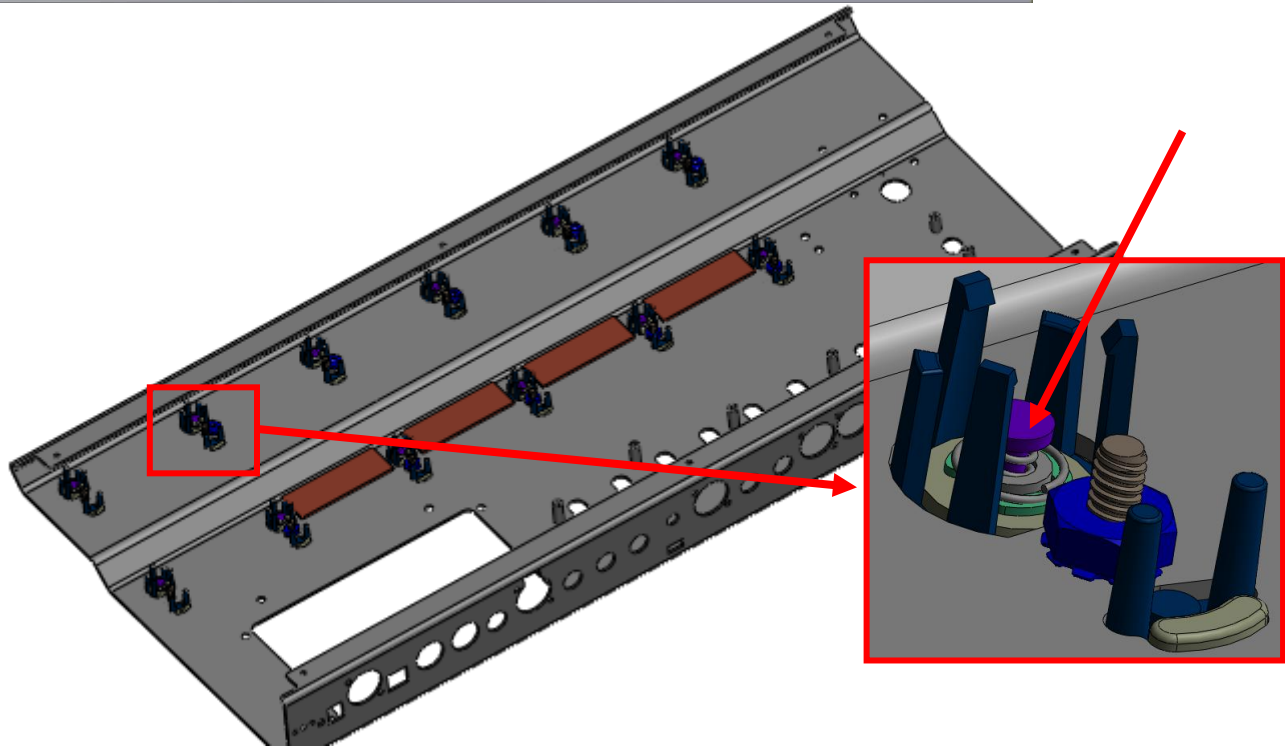
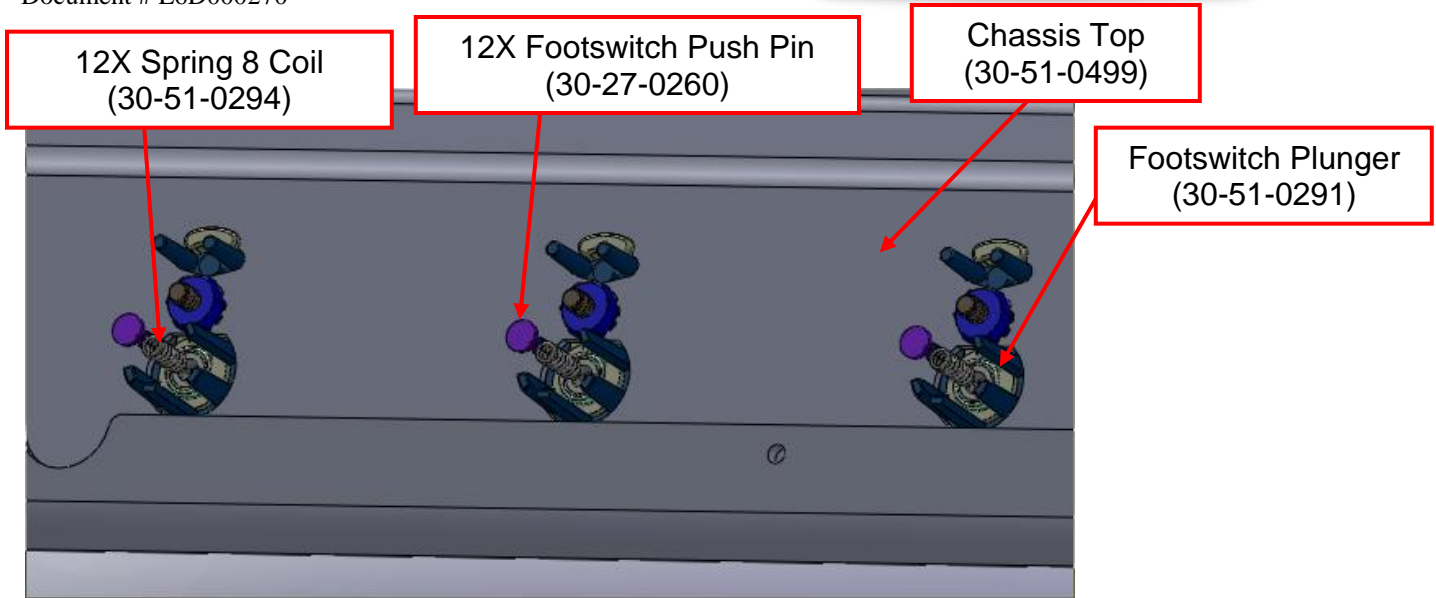
**STEP 12:**

P/N required:

12 each 30-51-0294 – Spring 8 Coil

12 each 30-27-0260 – Footswitch Push Pins

Insert Twelve (12) Spring 8 Coil and Footswitch Push Pins into the holes of Footswitch Plunger as shown.



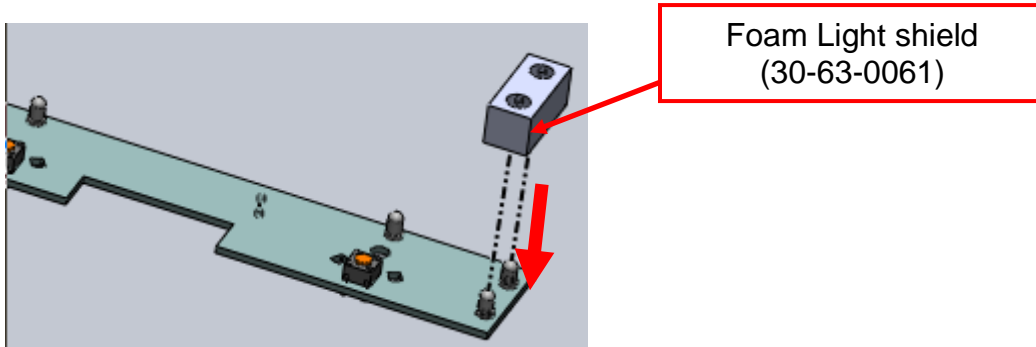
ASSEMBLED VIEW

**STEP 13:**

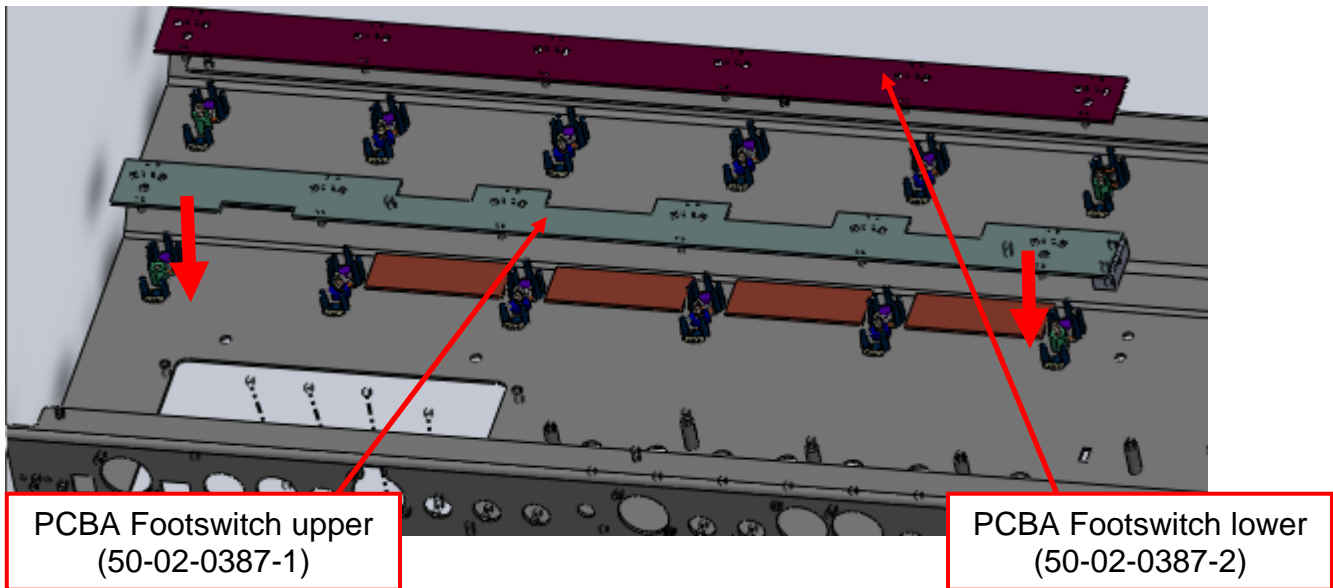
P/N required:

- 1 each 50-02-0387-1 – PCBA Footswitch Upper
- 1 each 50-02-0387-2 – PCBA Footswitch Lower
- 1 each 21-30-0060 RIBBON 20 pin CABLE (Soldered on Footswitch PCBA).
- 1 each 30-63-0061 – Foam Light shield
- 4 each 30-06-0623 – Nut Hex 6-32 Star-washer

Removable gum from Light shield (30-63-0061) and Apply one (1) between the wah and volume LEDs on the PCBA Footswitch upper (50-02-0387-1) to reduce light bleed from the LCD backlight into the LED lenses

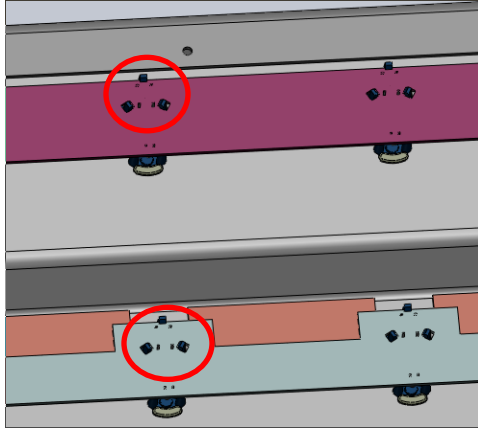


Install one (1) PCBA Footswitch Upper and one (1) PCBA Footswitch Lower onto the switches that are mounted on the top chassis. Align the three-hole switch-mounting pattern on the PCBA with the clip features on the three legs of the switch light pipes and snap into place.



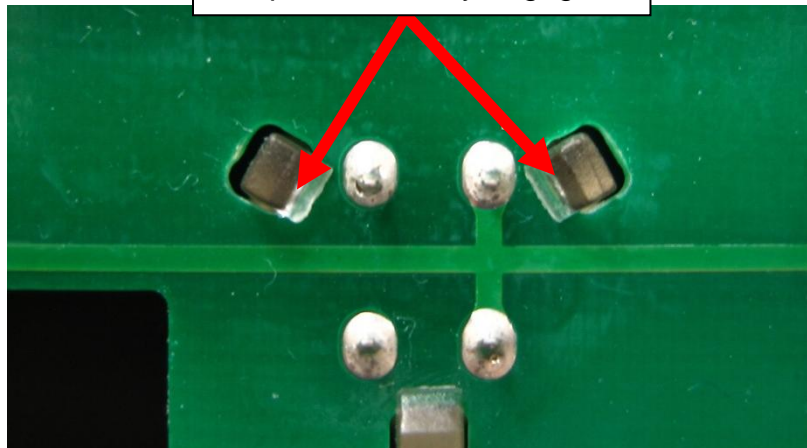
*(Step 13 is continued on the next page.)*

**Continued from STEP 13:**

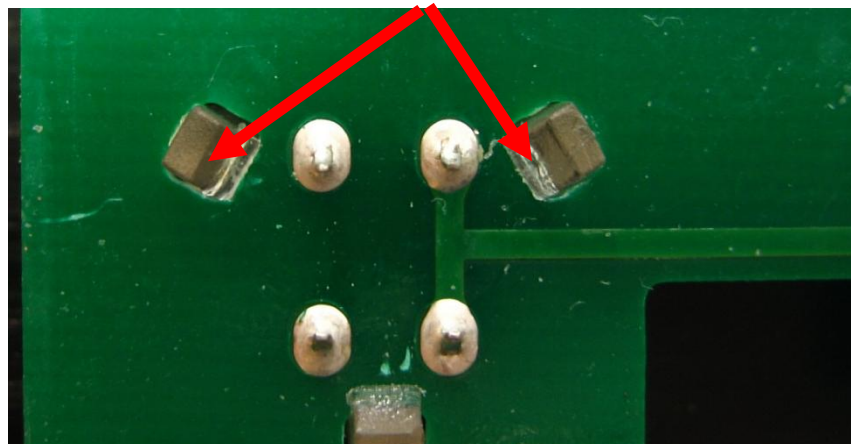


Verify that the clip features on the FOOTSWITCH LIGHTPIPES are fully engaged.

Clip features fully engaged



Clip features not fully engaged



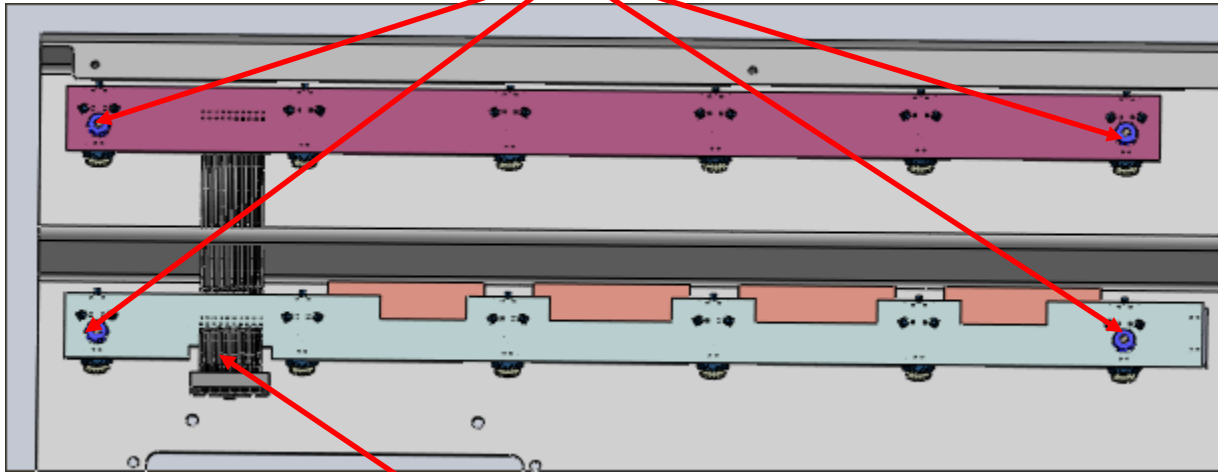
*(Step 13 is continued on the next page.)*

**Continued from STEP 13:**

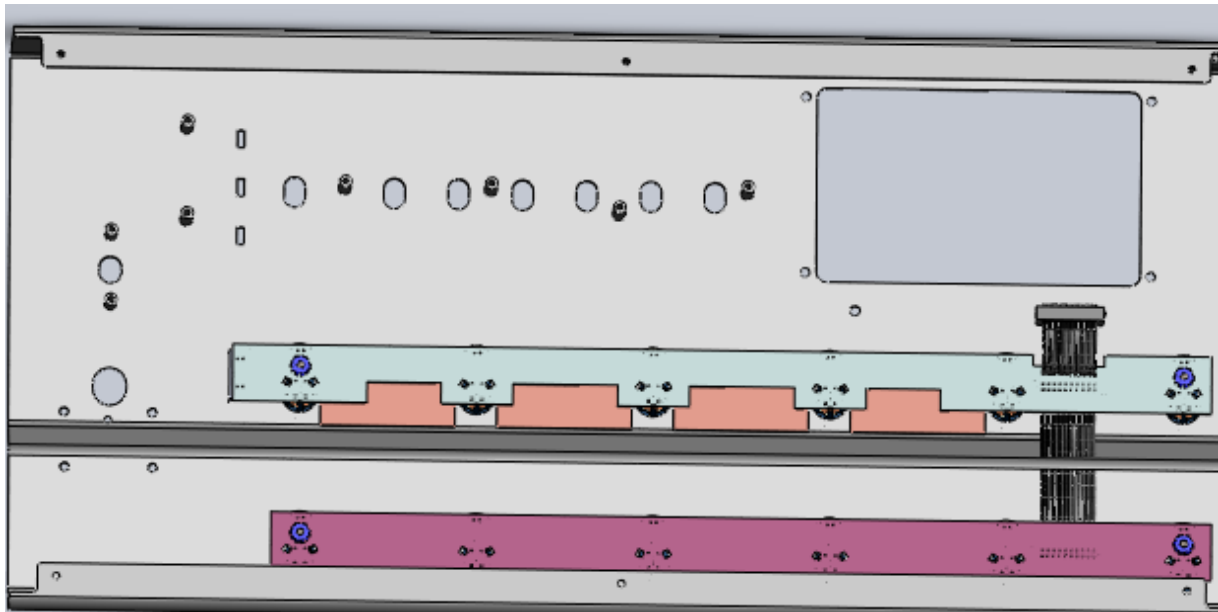


Apply four (4) Nut Hex 6-32 Star-washer as shown. Torque screws to 9.5-11.5cm-kg.

4X Nut 6-32 Star-washer  
(30-06-0623)



Ribbon Cable (21-30-0060). Soldered on PCBA  
Footswitch Upper and PCBA Footswitch Lower.



ASSEMBLED VIEW

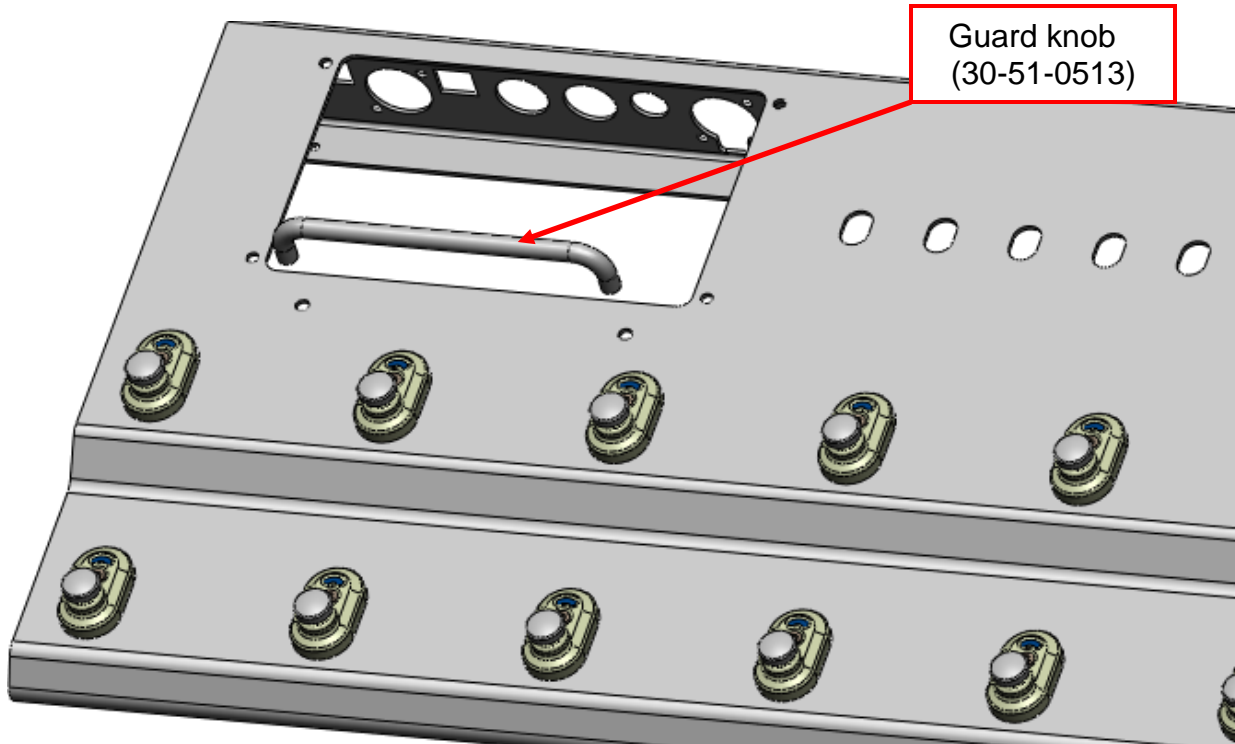
**STEP 14:**

P/N required:

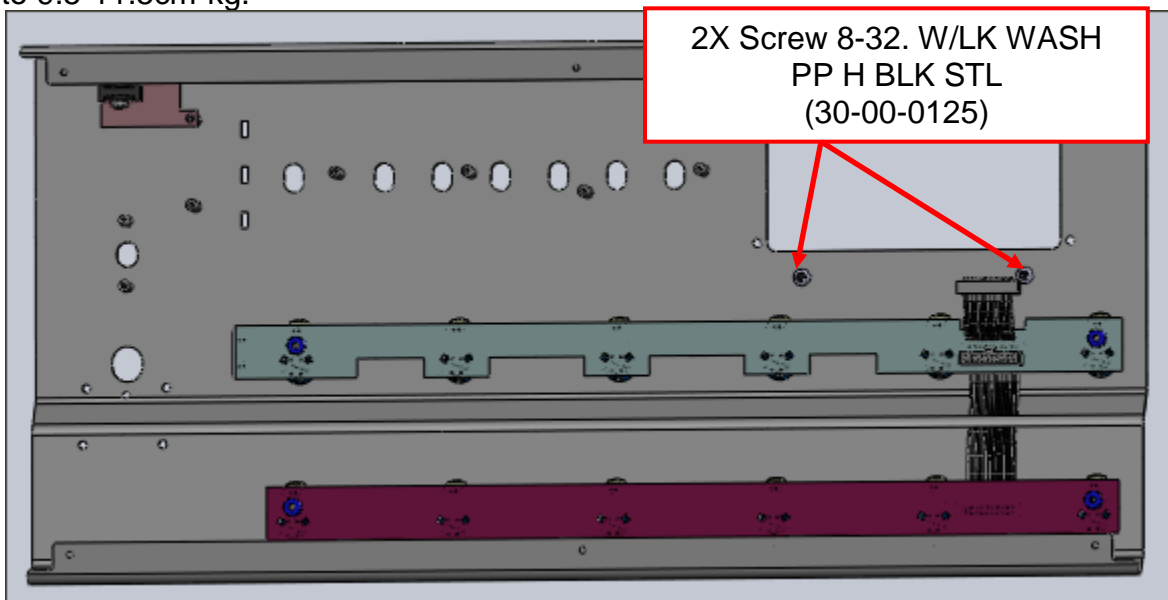
1 each 30-51-0513 – Guard knob

2 each 30-00-0125 – Screw 8-32

Install one (1) Guard knobs onto top surface of Chassis Top.



Secure Guard knob using two (2) Screws 8-32 W/LK wash PP H Blk Stl. Torque screws to 9.5-11.5cm-kg.

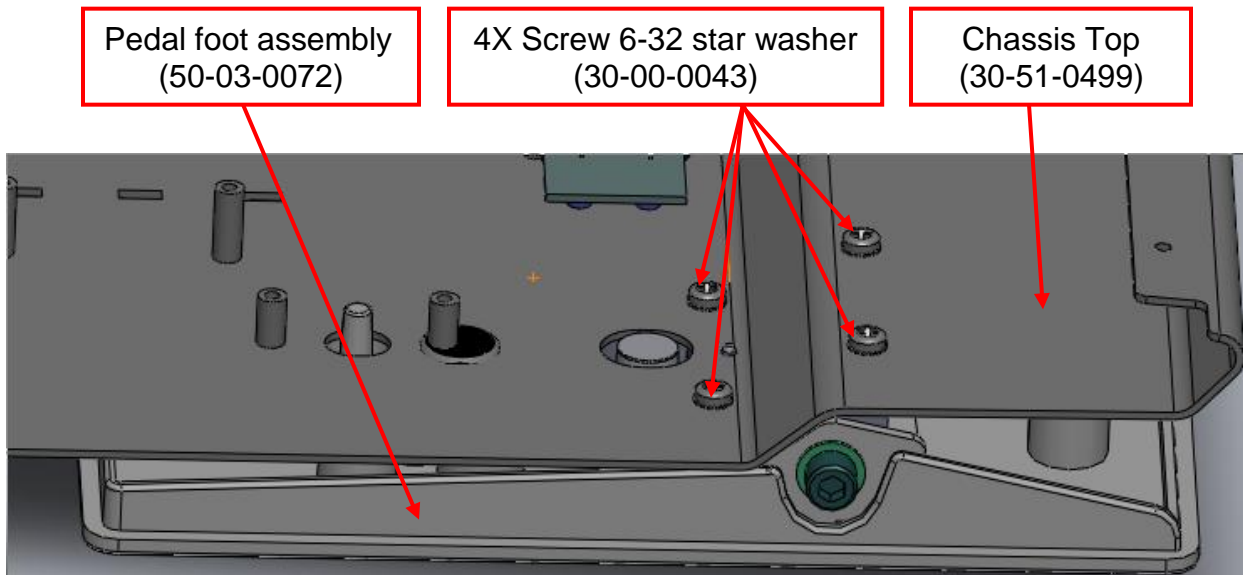
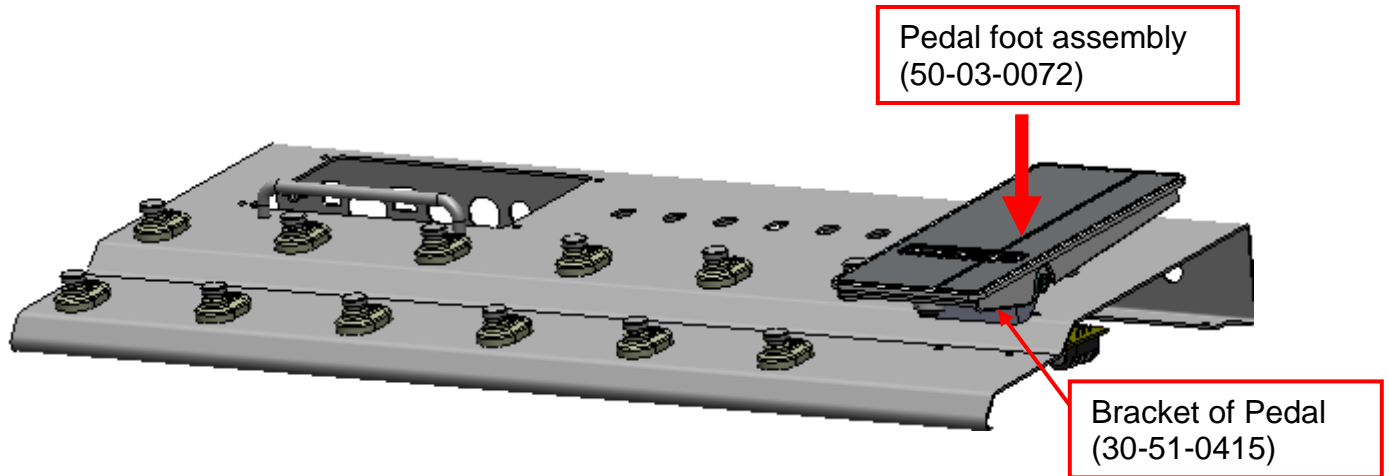


**STEP 15:**

P/N required:

- 1 each 50-03-0072 – Pedal foot assembly
- 4 each 30-00-0043 – Screw 6-32 star washer

Mount the Pedal Foot on the top of the Chassis Top . Secure the Pedal Foot Assembly to the Chassis Top using four (4) 6-32 screws with star washers through the four (4) holes from the insert of the Chassis Top and the four screw holes in the Pedal Bracket as shown. Torque each screw to 9.5 – 11.5 cm-kg.

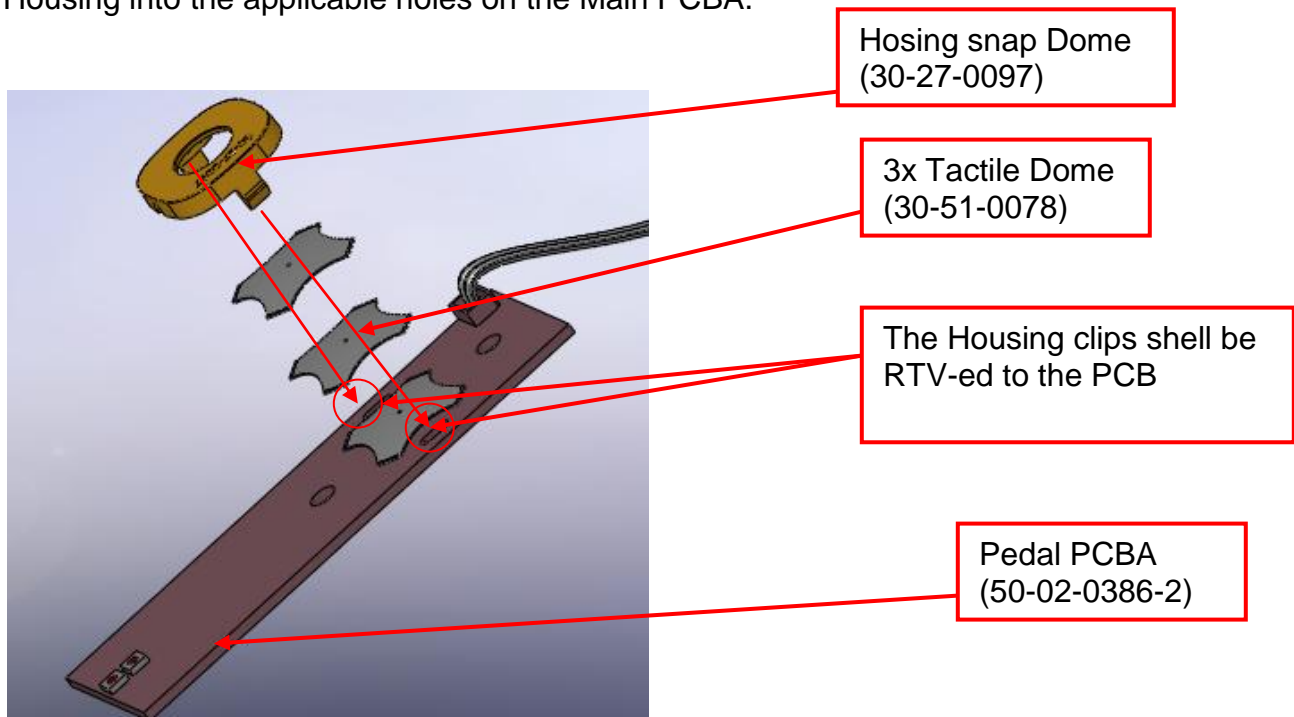


**STEP 16:**

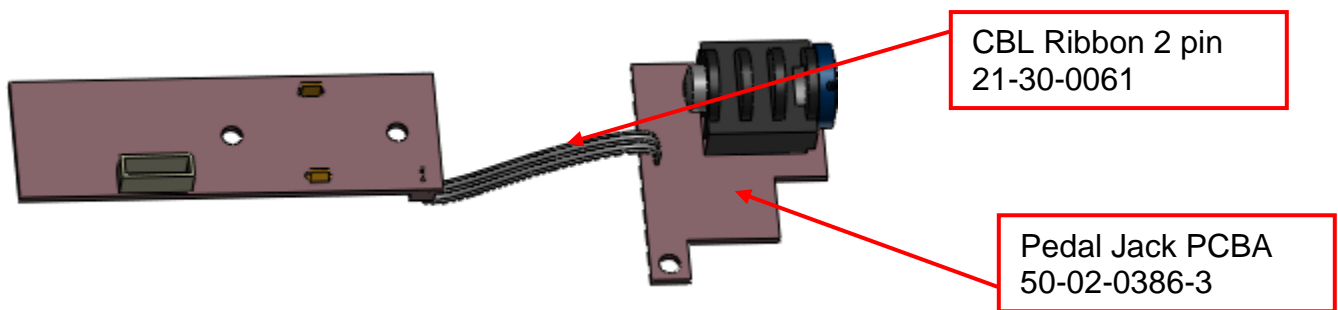
P/N required:

- 3 each 30-51-0078 – Tactile Dome
- 1 each 30-27-0097 – Snap Dome Housing
- 1 each 50-02-0386-2 – Pedal PCBA
- 1 each 35-00-386-4 – PCB Tact Switch Reinforcement
- 2 each 30-00-0043 – Screw 6-32 star washer
- 1 each 21-30-0061 - Cable Ribbon 2 pin
- 1 each 50-02-0386-3– Pedal Jack PCBA

Install three (3) Tactile Domes onto the Main PCBA. Insert the feet of the Snap Dome Housing into the applicable holes on the Main PCBA.



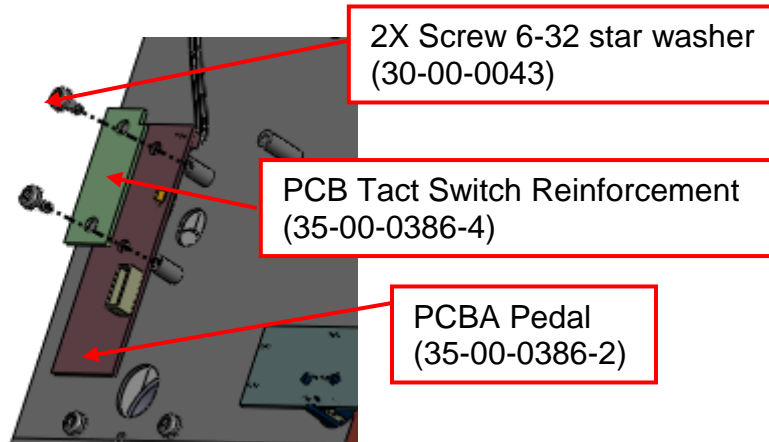
Solder the CBL Ribbon 2 pin (21-30-0061) on Pedal PCBA and Pedal Jack PCBA



*(Step 16 is continued on the next page.)*

**Continued from STEP 16:**

Secure the Pedal PCBA and PCB Tact Switch Reinforcement (35-00-0386-4) to the two applicable standoffs using two (2) 6-32 screws with lock washer. Torque screw to 9.5-11.5cm-kg.



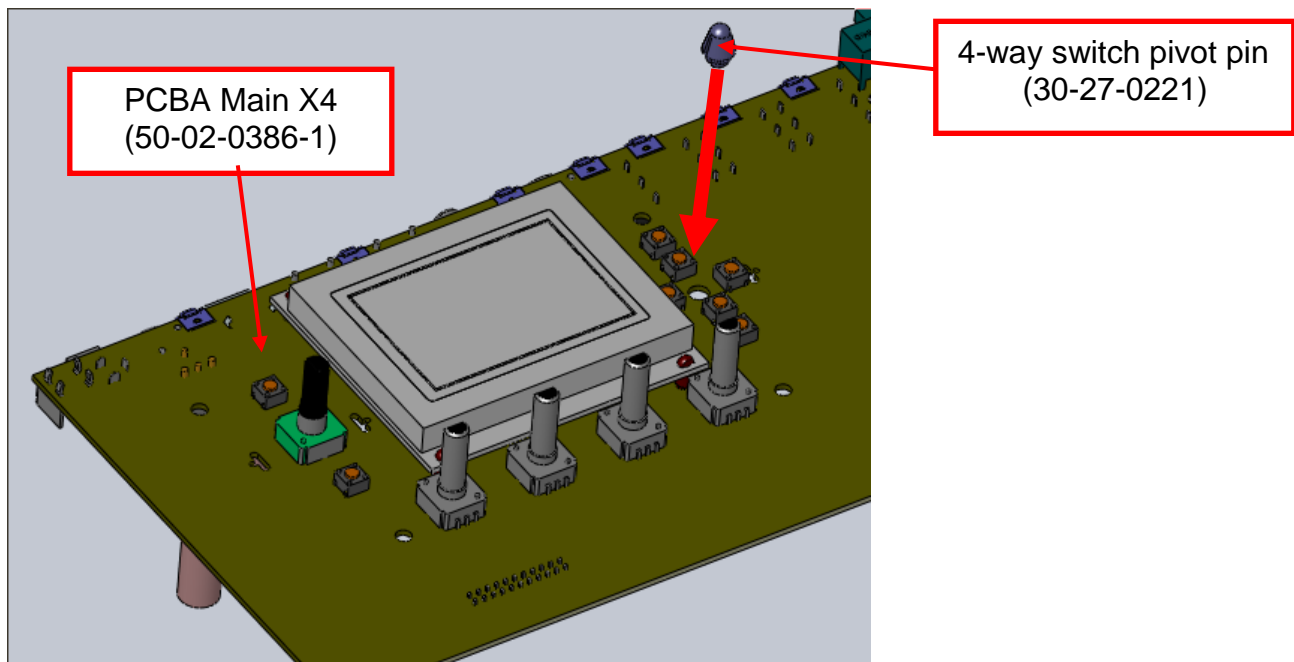
**STEP 17:**

P/N required:

1 each 30-27-0221 4-WAY SWITCH PIVOT PIN

1 each 50-02-0386-1 MAIN PCBA X4

Install the 4-WAY SWITCH PIVOT PIN into the hole between the tact switches as shown. Be sure that the 4-WAY SWITCH PIVOT PIN snaps completely into the hole.

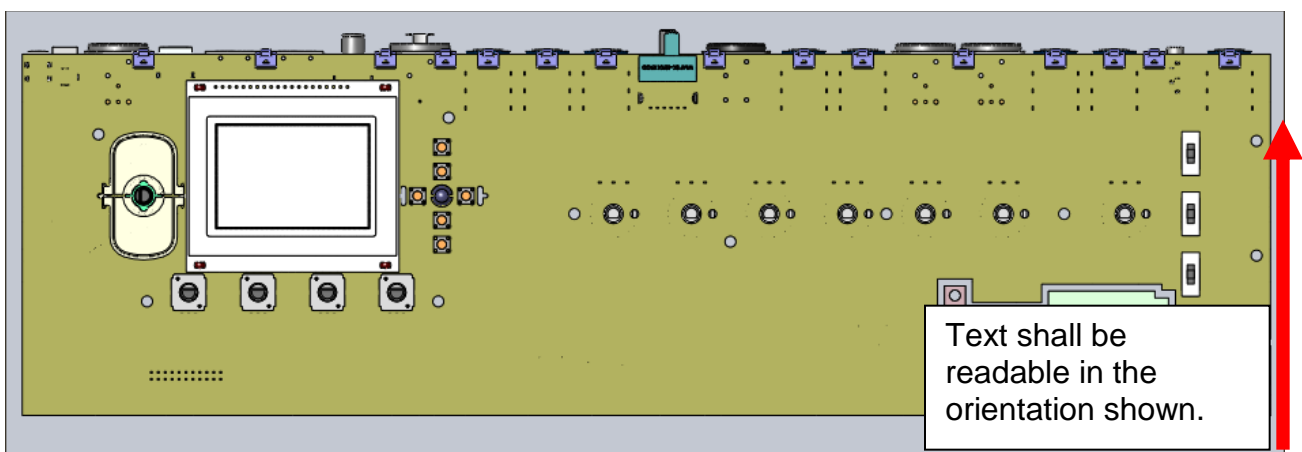
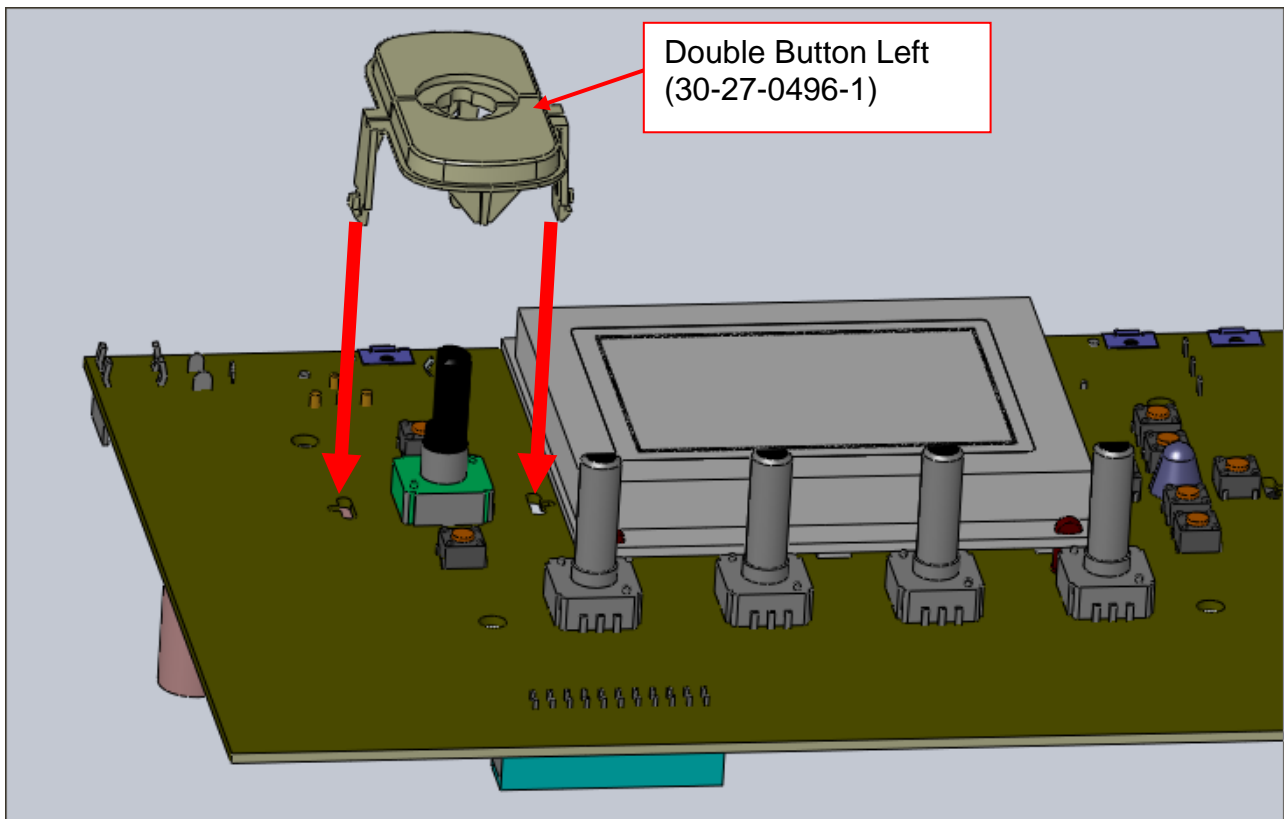


**STEP 18:**

P/N required:

1 each 30-27-0496-1 Double Button left

Snap the Double Button left (30-27-0496-1) into the slots around the single encoder on the MAIN PCBA as shown. The Double Button left shall be oriented such that the text is readable in the orientation shown.



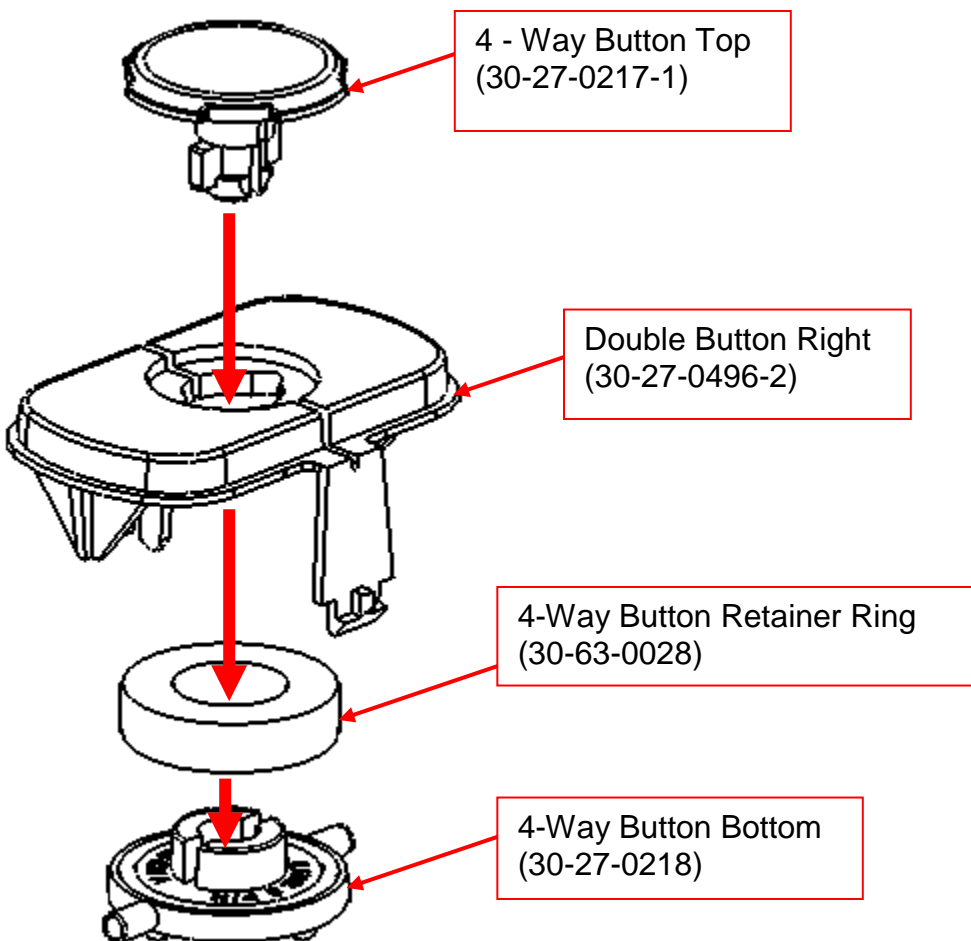
**STEP 19:**

P/N required:

- 1 each 30-27-0217-1 4 - Way Button Top
- 1 each 30-27-0496-2 Double Button Right
- 1 each 30-63-0028 4-Way Button Retainer Ring
- 1 each 30-27-0218 4-Way Button Bottom

Assemble the 4-Way Button Top (30-27-0217-1) to the 4-Way Button Bottom (30-27-0218) by snapping them through the Double Button Right (30-27-0496-2) and 4- Way Button Retainer Ring (30-63-0028) as shown.

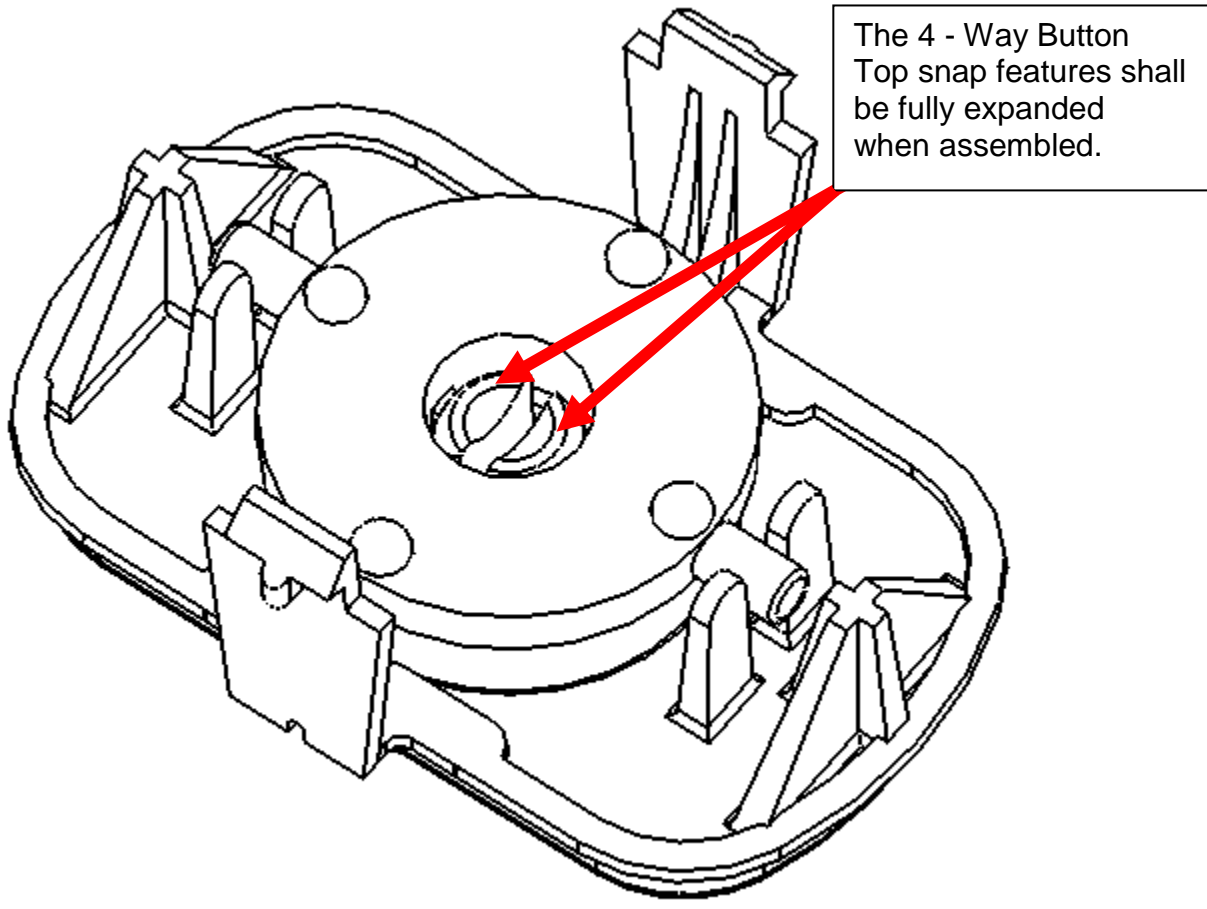
Be sure that the 4 - Way Button Top snap features expands fully when assembled.



*(Step 19 is continued on the next page.)*



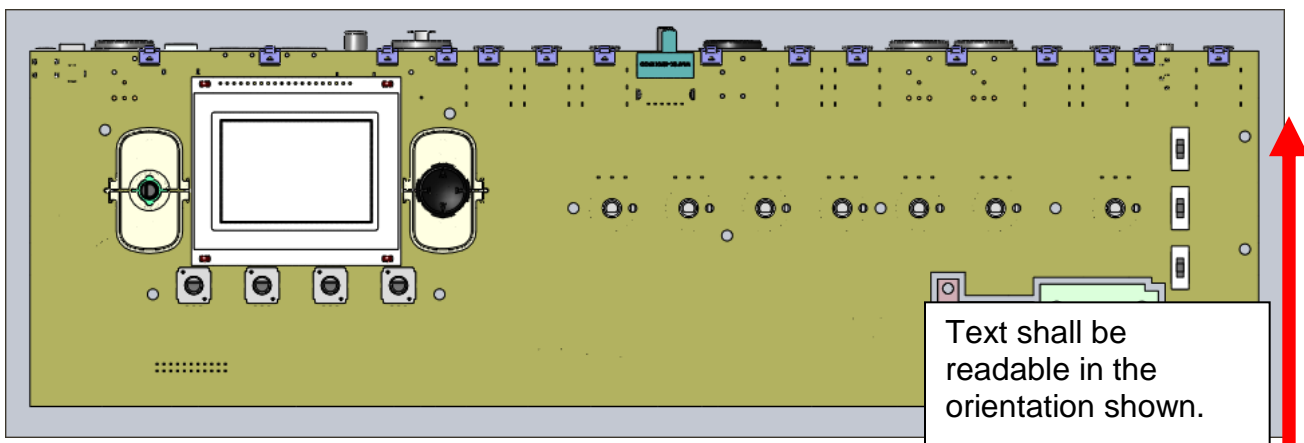
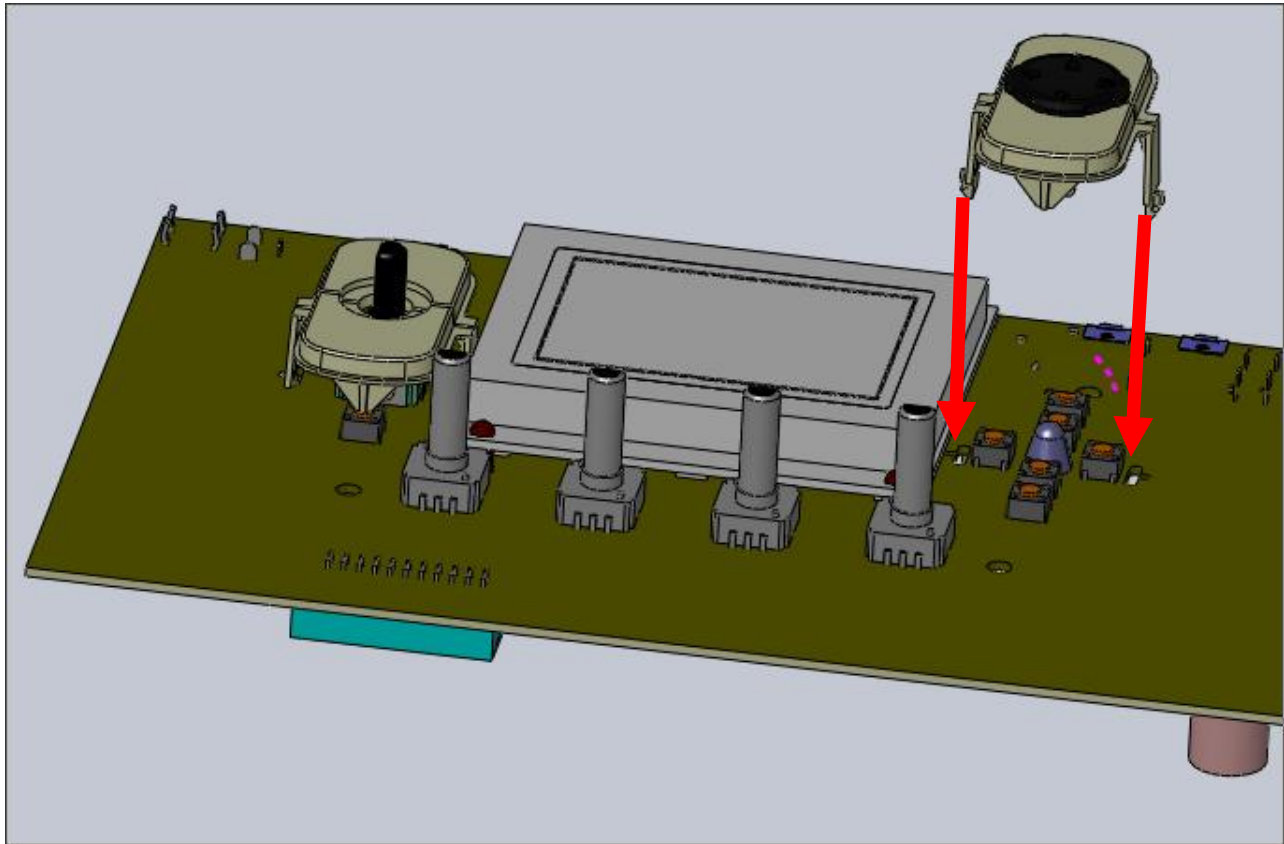
**Continued from STEP 19:**





**STEP 20**

Snap the DOUBLE BUTTON sub-assembly from the previous step into the slots around the four tact switches on the MAIN PCBA as shown. The DOUBLE BUTTON RIGHT shall be oriented such that the text is readable in the orientation shown.



*(No apply glue or RTV on the PCBA and Button frame snap.)*

**STEP 21:**

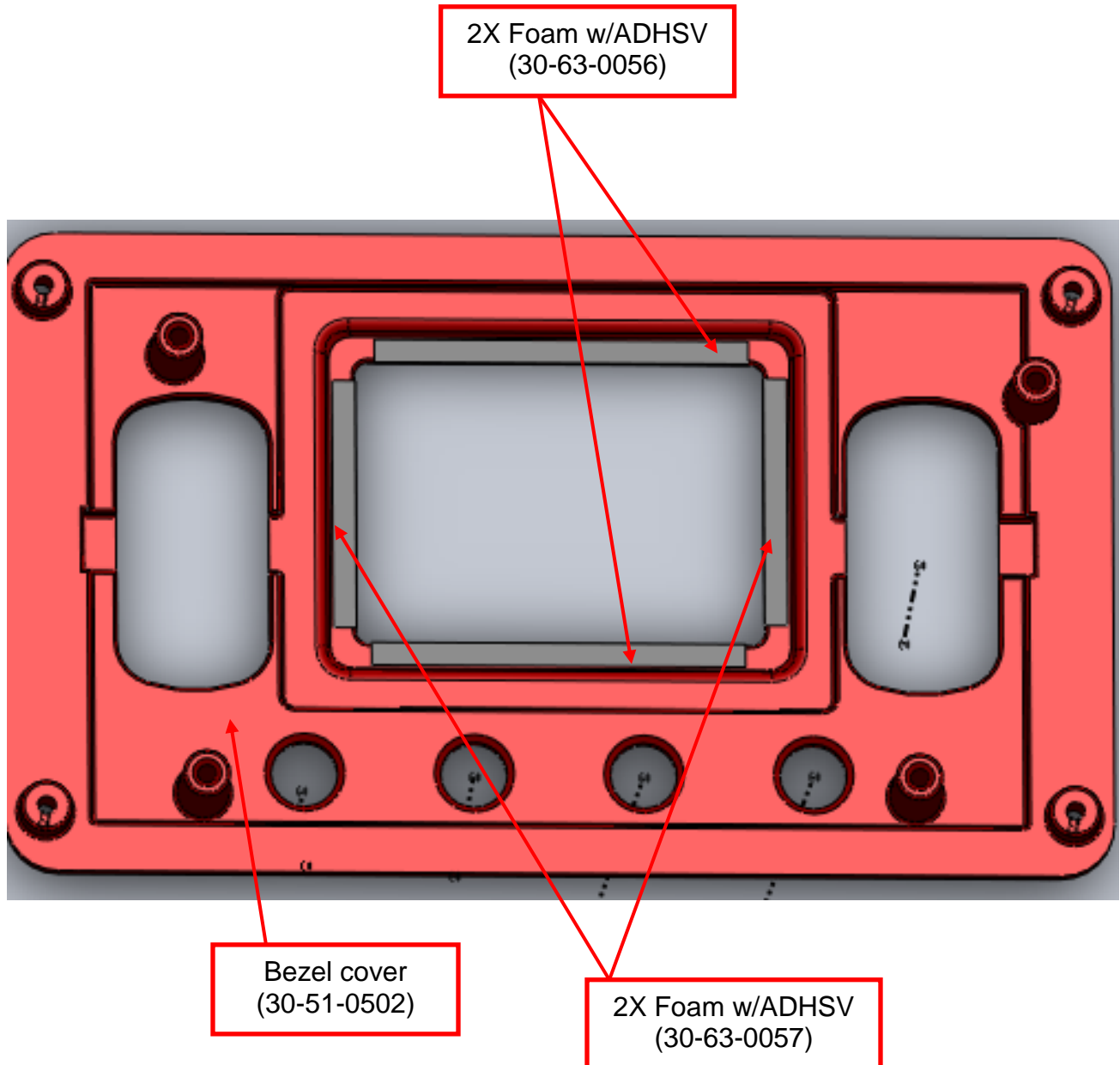
P/N required:

2 each 30-63-0056 –Foam w/ADHSV

2 each 30-63-0057– Foam w/ADHSV

1 each 30-51-0502 - Bezel cover

Apply two (2) Foam w/ADHSV (30-63-0056) and two (2) Foam w/ADHSV (30-63-0057) on each recessed surface of Bezel cover (30-51-0502) as shown below. The recessed surface on the Bezel cover shall be free of all dirt and grease before assembly.



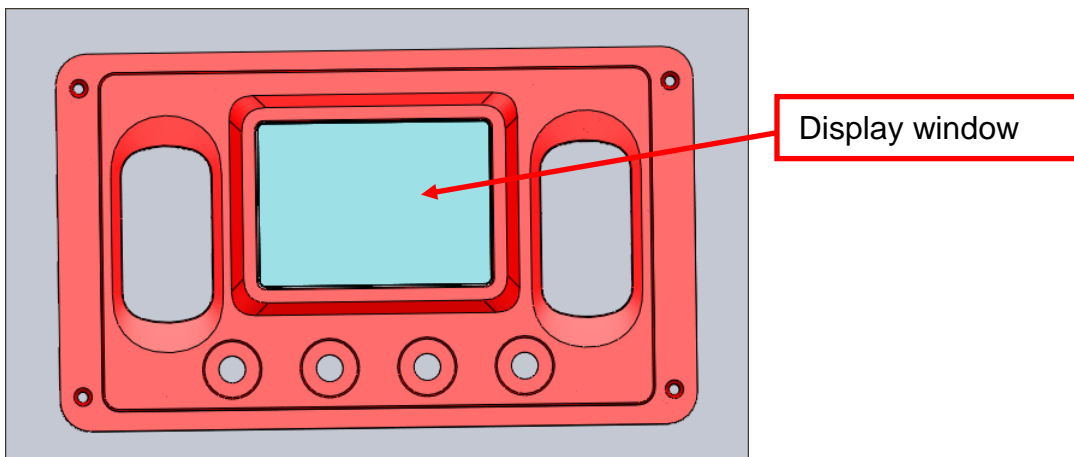
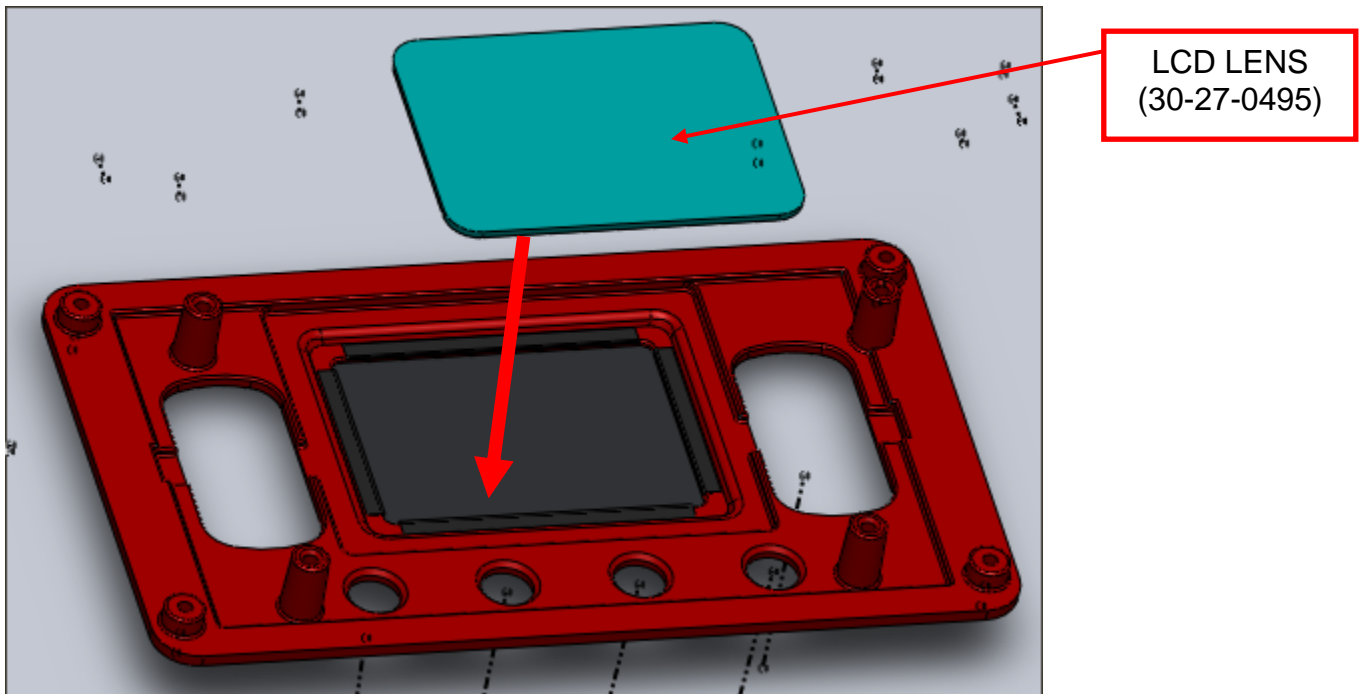
**STEP 22:**

P/N required:

1 each 30-27-0495 – LCD LENS

4 each 30-00-0043 – 6-32 screws with star washer

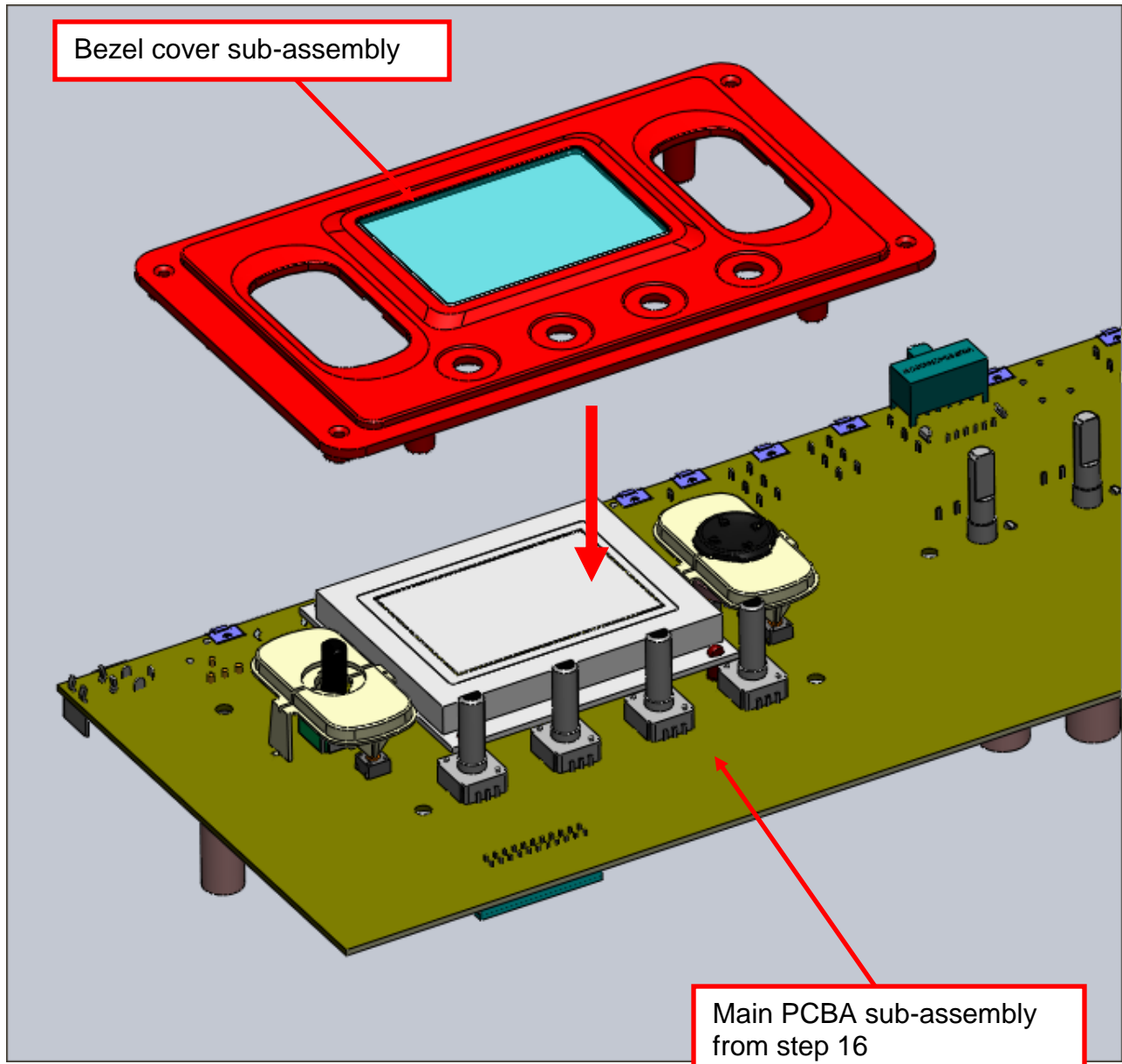
Press the LCD LENS into the surface on the Bezel cover from the previous step firmly. Remove the protective film from Foam w/ADHSV before LCD LENS installation. Be sure to orient display window of LCD LENS align with the square holes in the bezel cover.



*(Step 21 is continued on the next page.)*

**Continued from STEP 22:**

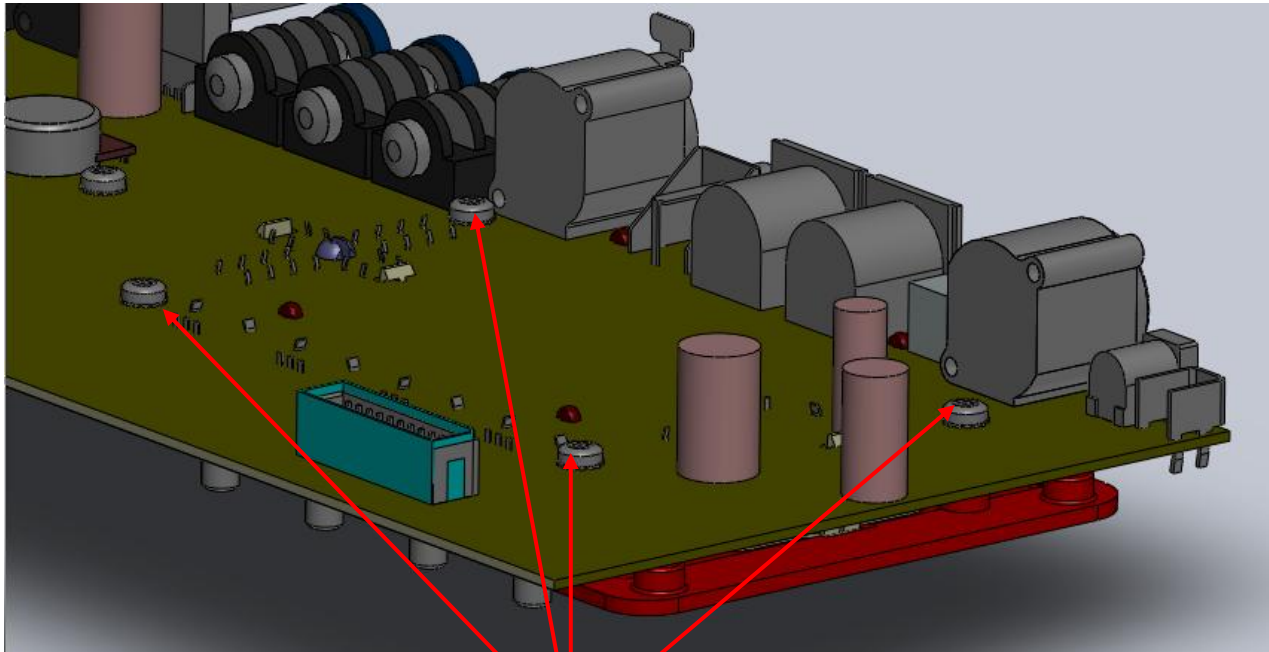
Install Bezel cover sub-assembly from the previous step onto the Main PCBA sub-assembly from step 16 as shown.



*(Step 21 is continued on the next page.)*

**Continued from STEP 22:**

Secure the Bezel cover sub-assembly to the Main PCBA using four (4) 6-32 screws with star washers (30-00-0043) as shown. Torque each screw to 9.5 – 11.5 cm-kg.

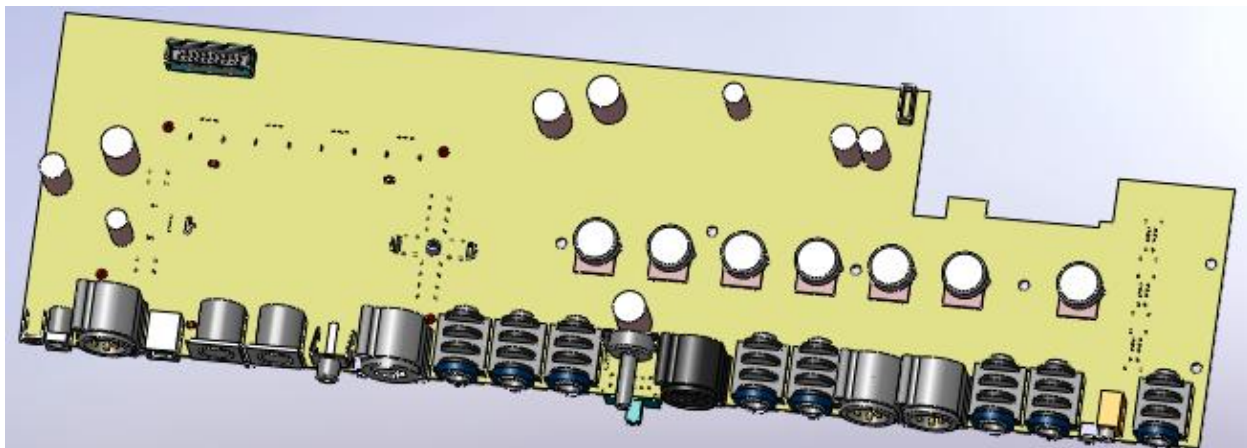
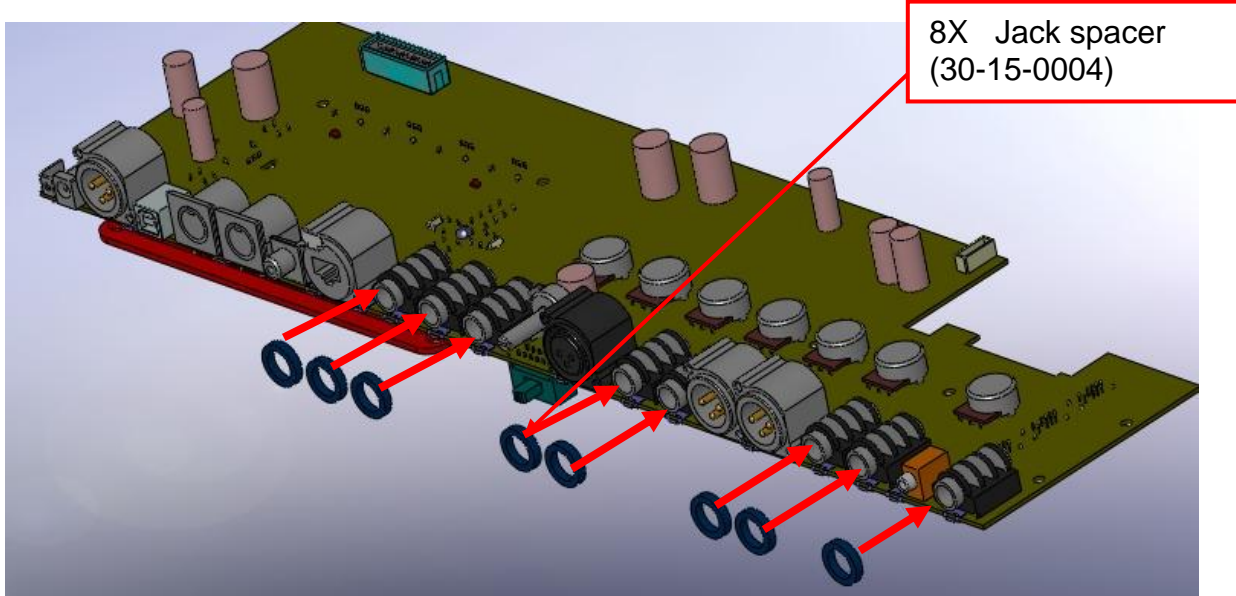


4X Screw 6-32 with star washer  
(30-00-0043)

**STEP 23**

P/N required:  
8 each 30-15-0004 – Jack spacer

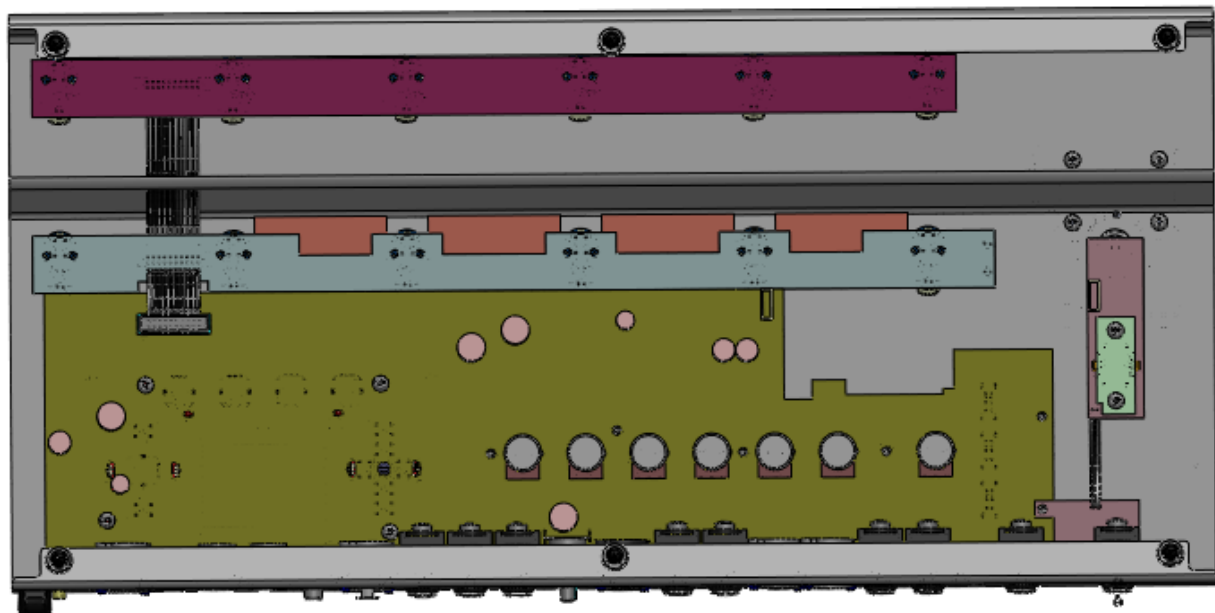
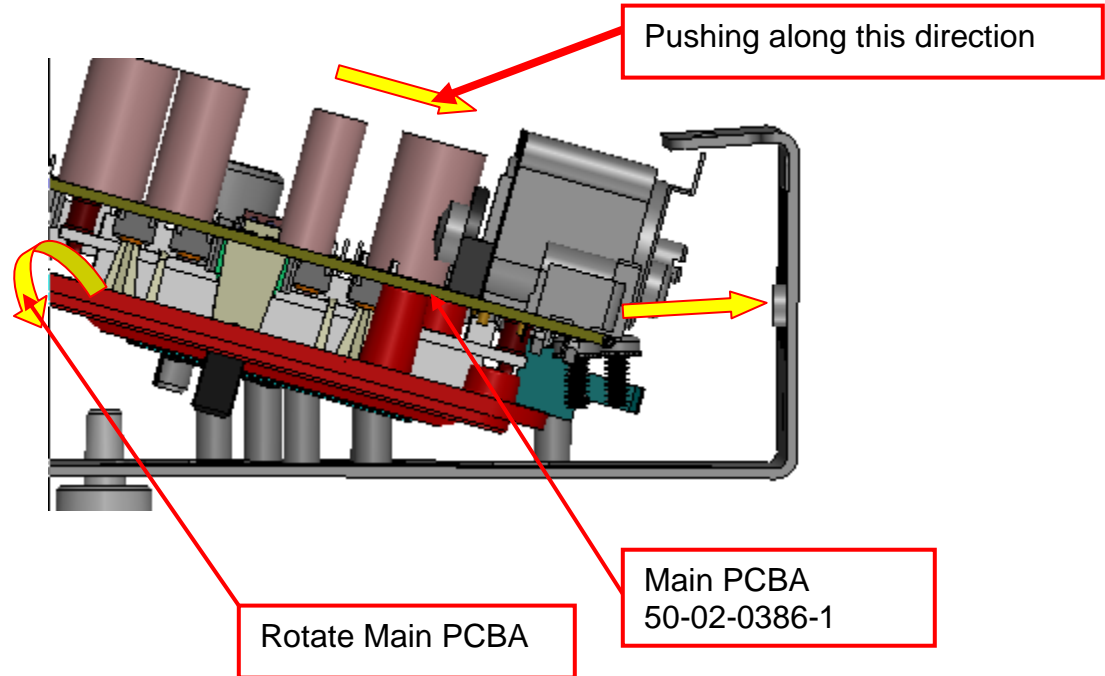
Install eight (8) Jacks spacer (30-15-0004) onto the eight (8) ¼” jacks on the MAIN PCBA.



*(Step 23 is continued on the next page.)*

**Continued from STEP 23:**

Pushing Main PCBA into Chassis top with an angle, then rotate it on stand-offs, install Main PCBA in the position.



ASSEMBLED VIEW

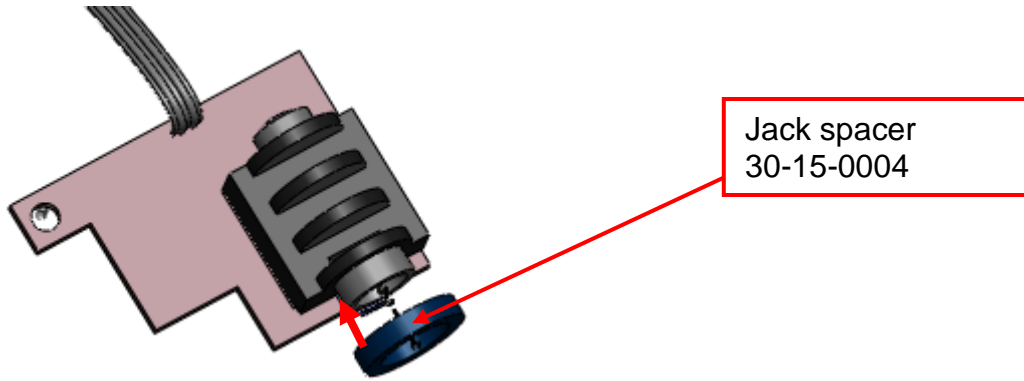
**STEP 24**

P/N required:

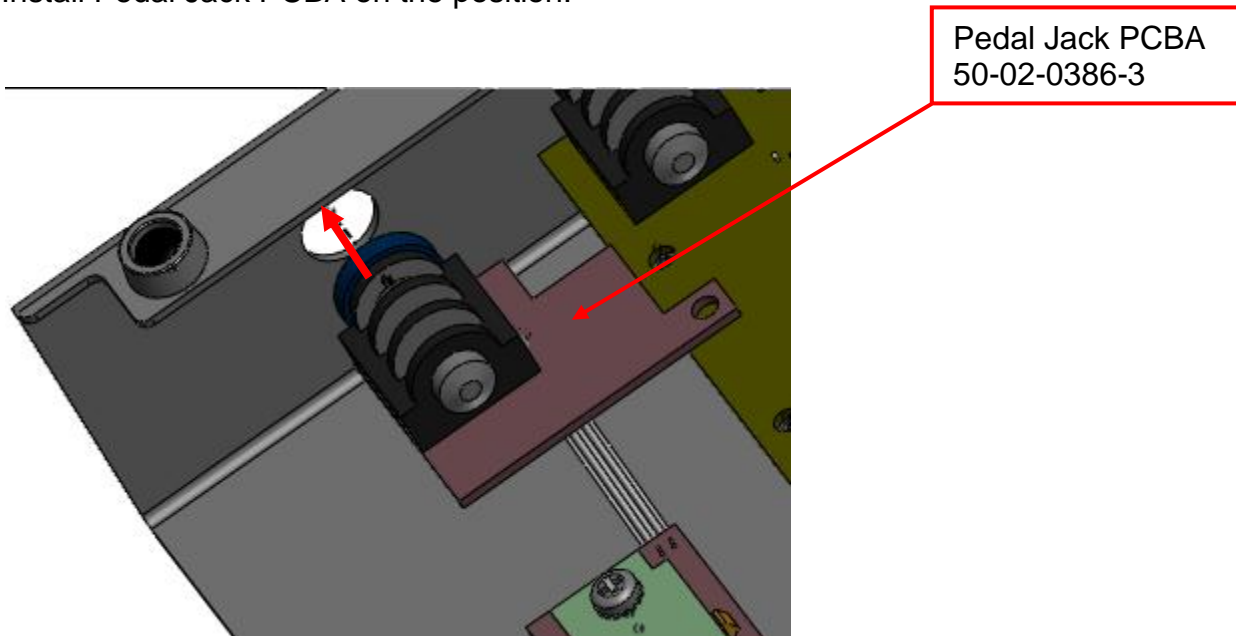
1 each 30-15-0004 – Jack spacer

1 each 50-02-0386-3 – PCBA Pedal jack

Install one Jack spacer (30-15-0004) onto 1/4" jack on the PCBA Pedal jack.



Install Pedal Jack PCBA on the position.



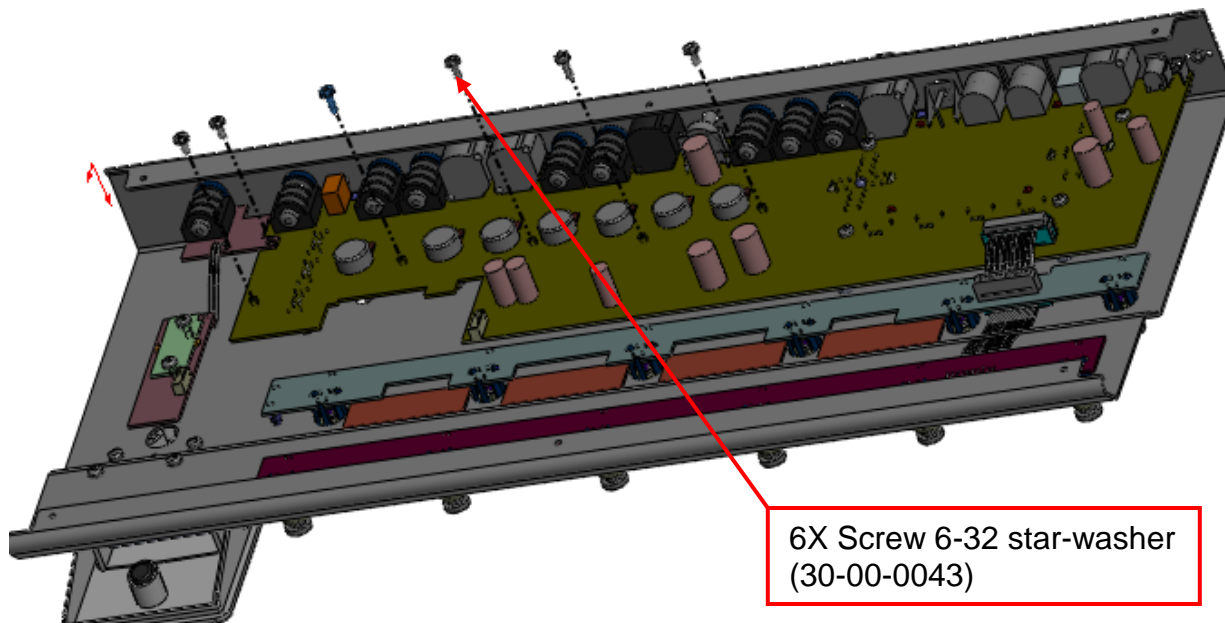


### STEP 25

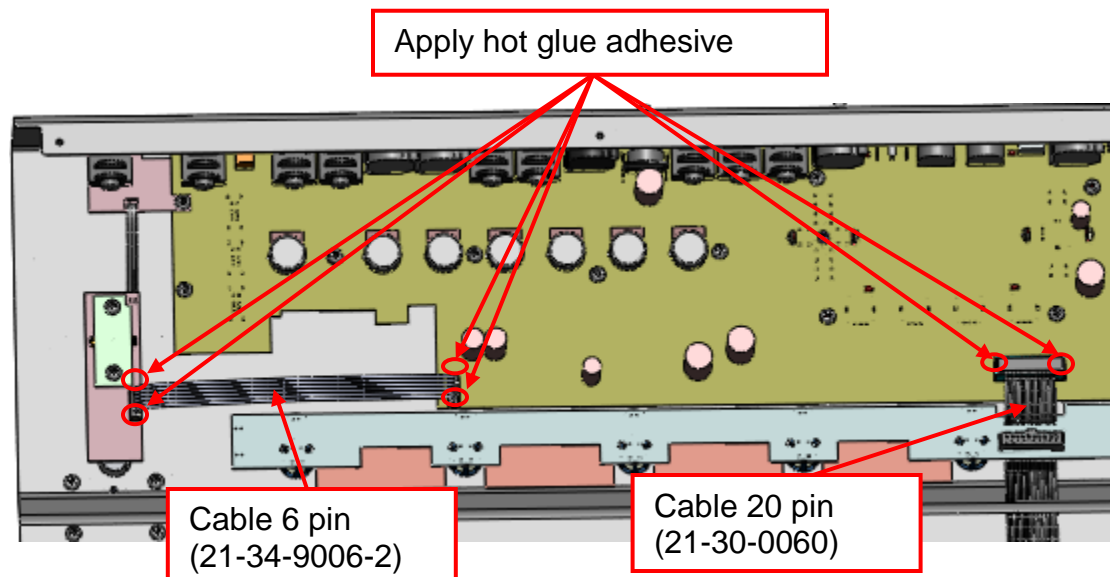
P/N required:

- 1 each 21-30-0060 Cable 20 pin
- 1 each 21-34-9006-2 Cable 6 pin
- 1 each 21-30-0061 Ribbon Cable 2 pin
- 6 each 30-00-0043 - Screw 6-32 star-washer

Secure the Main PCBA and Pedal jack PCBA to the nine applicable standoffs using nine (9) 6-32 screws with lock washer. Torque screw to 9.5-11.5cm-kg.



Insert cable 20 pin (21-30-0060) in PCBA into DIL in MAIN PCBA. Apply hot glue adhesive to two sides. Install cable 6 pin (21-34-9006-2) on Pedal PCBA, twist cable 3-times, then install on MAIN PCBA. Apply hot glue adhesive to two sides.

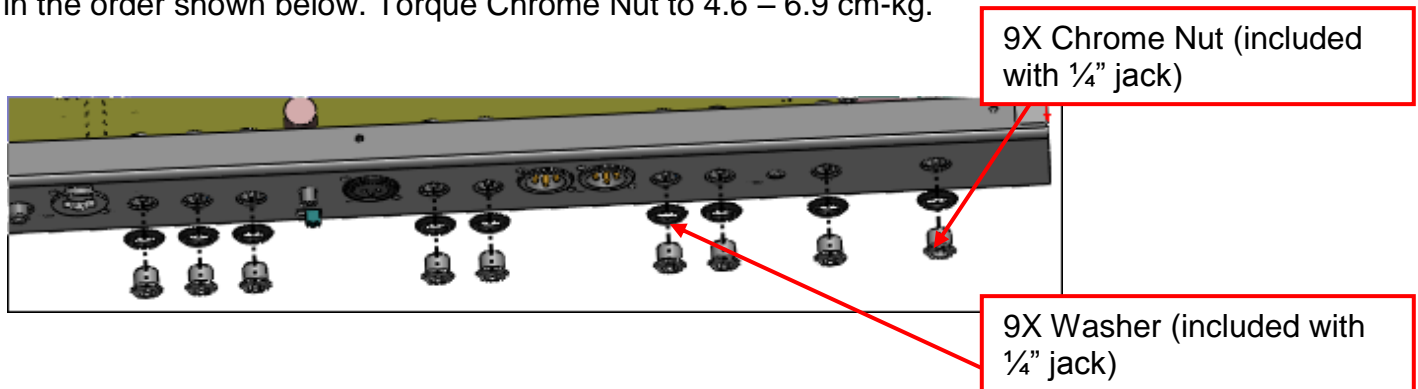


**STEP 26:**

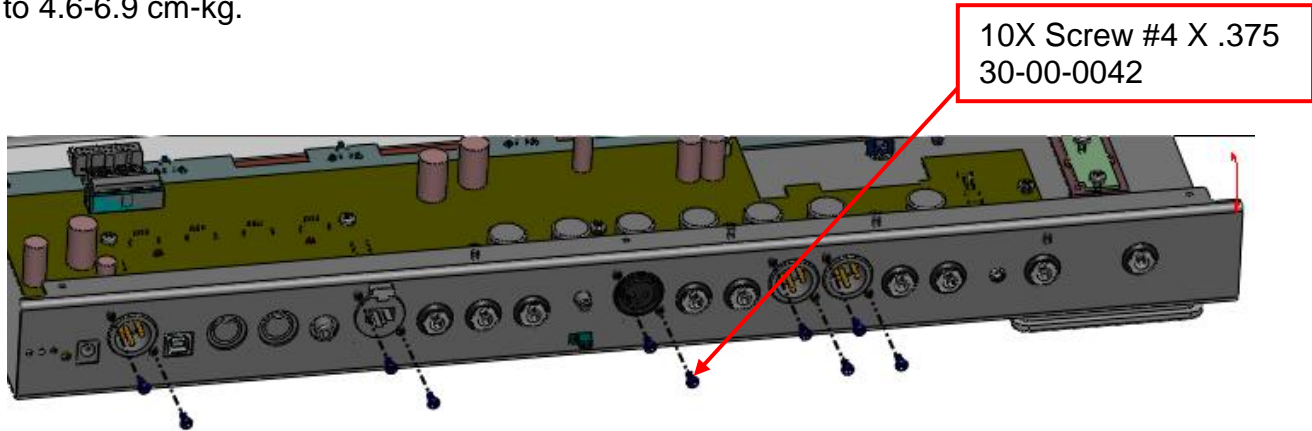
P/N required:

- 1 each 30-00-0375 – Screw 6-32 X .375
- 10 each 30-00-0042 – Screw #4 x .375
- 1 each 30-00-0263 – BHCS 6-32 X .375
- 1 each 30-27-0304 – Cable strain relief
- 9 each Chrome Nut (included with 1/4" jack)
- 9 each Washer (included with 1/4" jack)

Insert the nine (9) Washer (included with 1/4" jack) and Chrome Nut (included with 1/4" jack) in the order shown below. Torque Chrome Nut to 4.6 – 6.9 cm-kg.



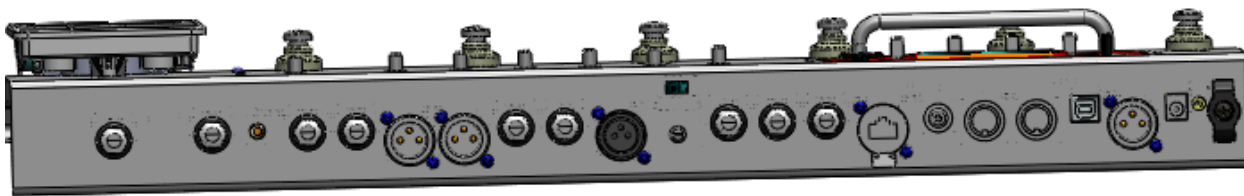
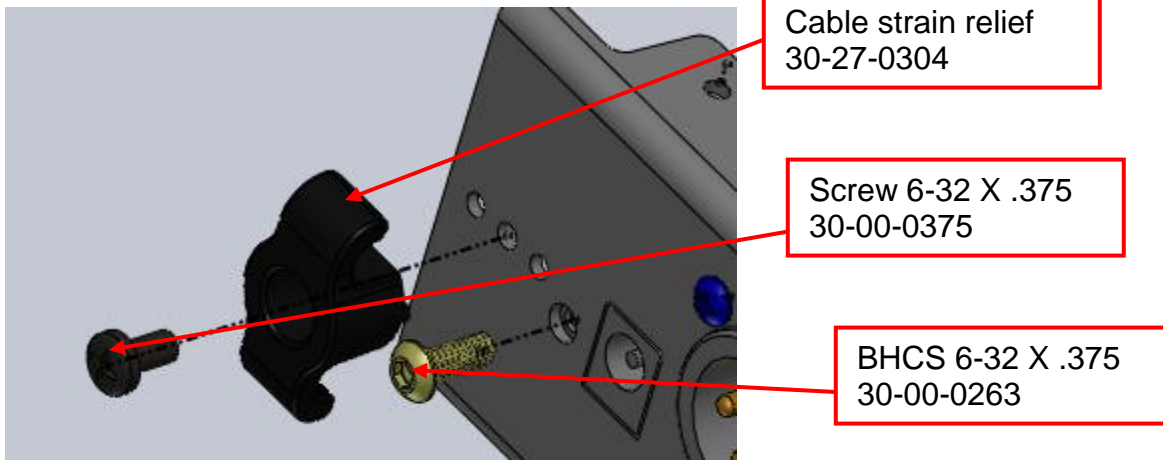
Then insert ten (10) Screw #4 X .375 in holes of Jack XLR Male as shown. Torque screw to 4.6-6.9 cm-kg.



*(Step 26 is continued on the next page.)*

**Continued from STEP 26:**

Insert one (1) BHCS 6-32 X .375 shown. Secure Cable strain relief using Screw 6-32 X .375 shown. Torque screw to 9.5-11.5mg-kg.



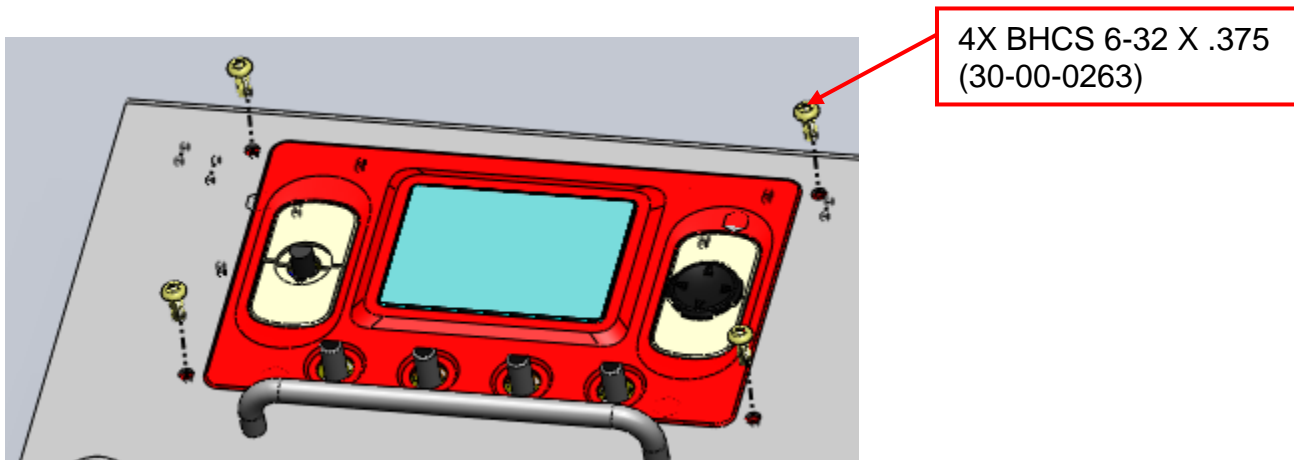
ASSEMBLED VIEW

**STEP 27:**

P/N required:

4 each 30-00-0263 – BHCS 6-32 X .375

Insert four (4) BHCS 6-32 X .375 as shown. Torque screw to 9.5-11.5mg-kg.

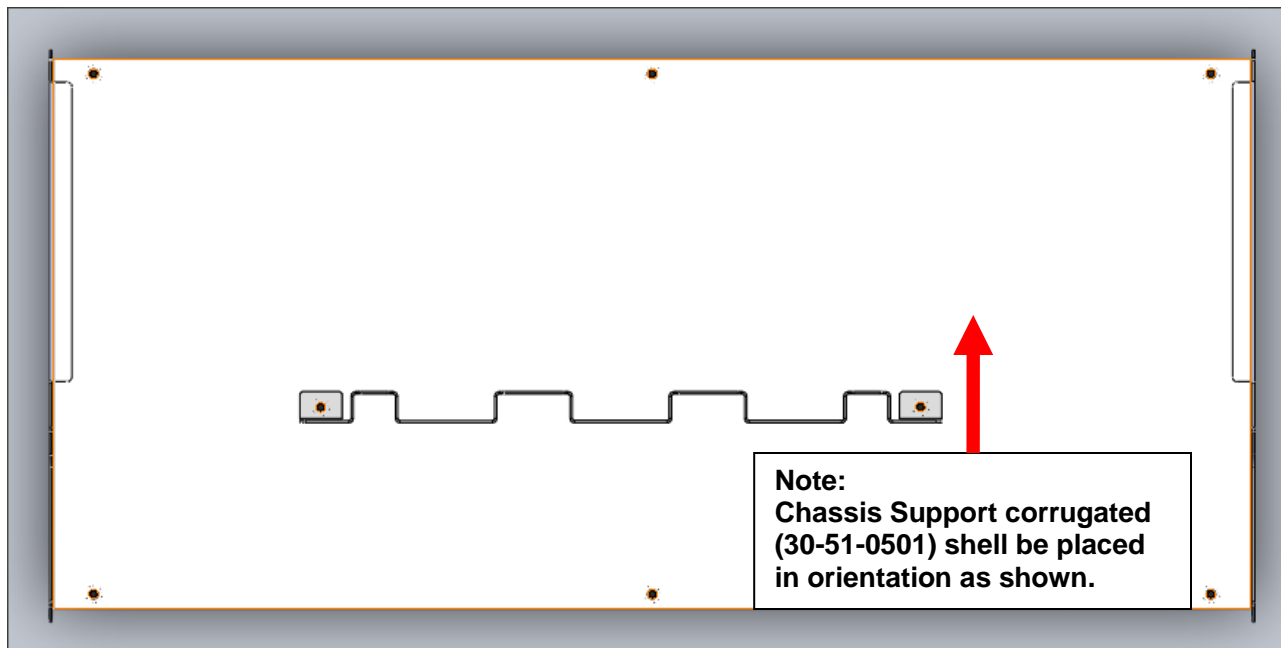
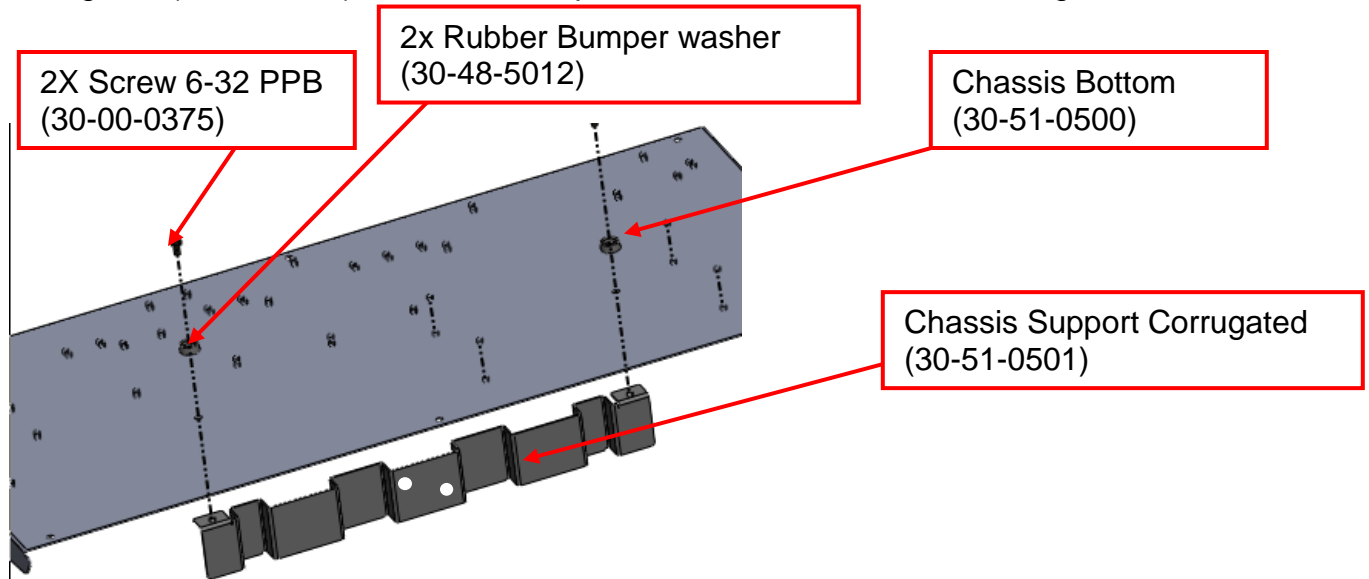


**STEP 28:**

P/N required:

- 8 each 30-00-0375 – Screw 6-32 PPB
- 8 each 30-48-5012 – Rubber Bumper with washer
- 1 each 30-51-0501 – Chassis support Corrugated
- 1 each 30-51-0500 – Chassis bottom

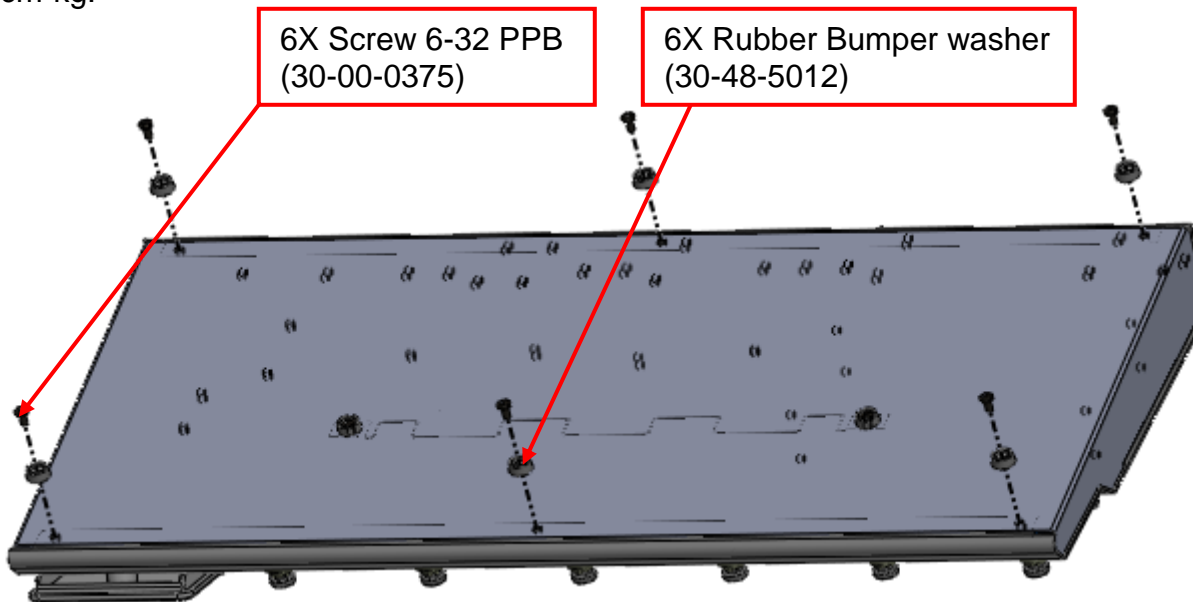
Insert two (2) Screws 6-32 PPB (30-00-0375) into the holes in Rubber Bumper with washer (30-48-5012) through Chassis Bottom (30-51-0500) and Chassis Support Corrugated (30-51-0501) as shown. Torque each screw to 9.5 – 11.5 cm-kg.



*(Step 27 is continued on the next page.)*

**Continued from STEP 28:**

Insert six (6) Screws 6-32 PPB (30-00-0375) into the holes in Rubber Bumper with washer (30-48-5012) through Chassis Bottom and Chassis top. Torque each screw to 9.5 – 11.5 cm-kg.



**STEP 29:**

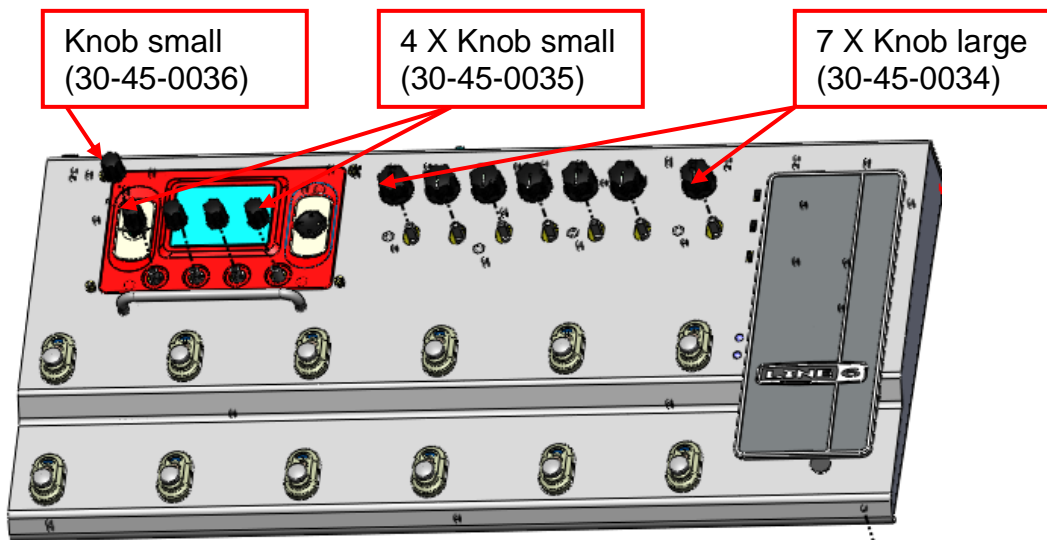
P/N required:

7 each 30-45-0034 – Knob Large with indicator

4 each 30-45-0035 – Knob small without indicator

1 each 30-45-0036 – Knob small no-indicator

Install seven (7) Knobs large with indicator (30-45-0034), four (4) Knobs small without indicator (30-45-0035) and one (1) Knob small no-indicator (30-45-0036) as shown.



**Note: all knobs at full counter clockwise (0n/off) and unit should be clean and free of fingerprints**

## STEP 30

P/N required:

1 each **30-75-0013** VINYL CAP

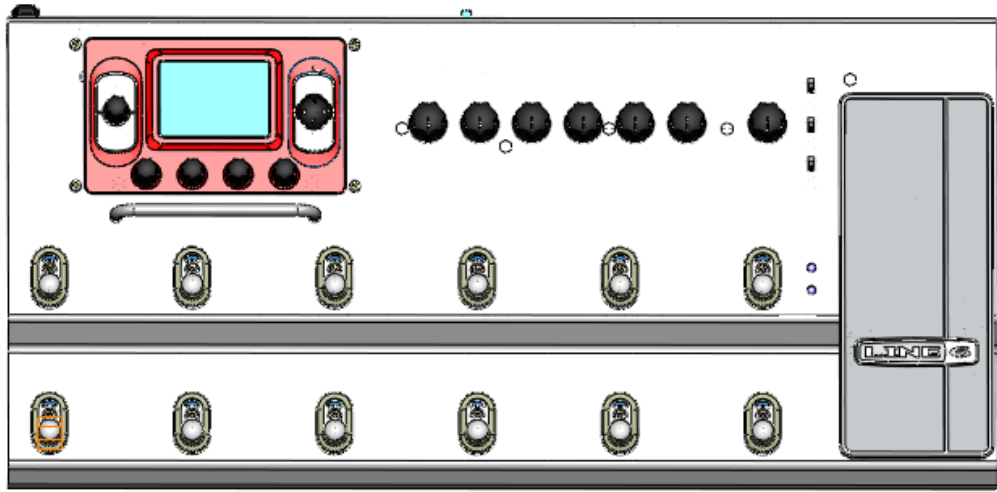
Press the VINYL CAP onto the Variax (RJ45) jack on the back panel of the unit as shown.



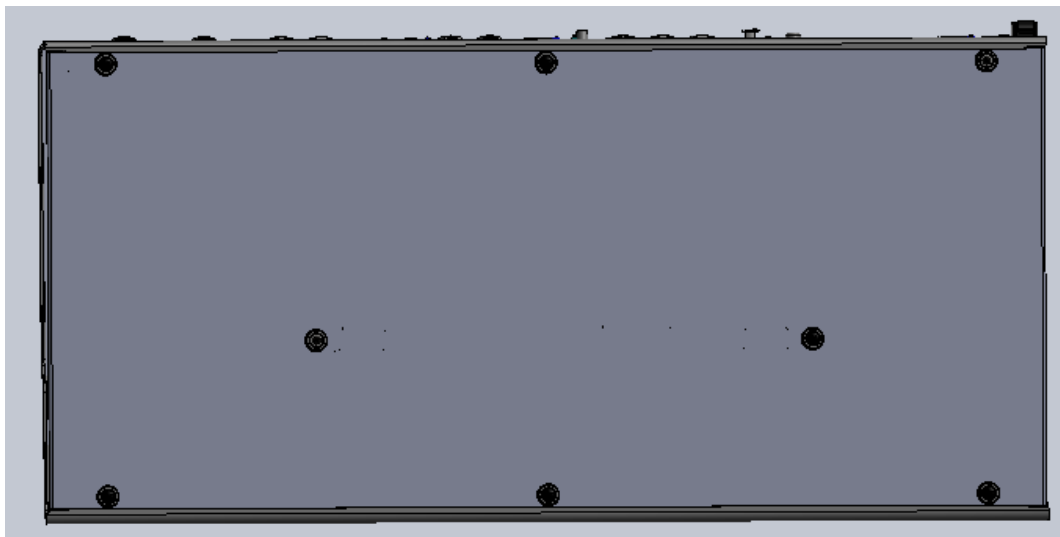
**Assembly of the P18-1 Complete Unit is now complete.**



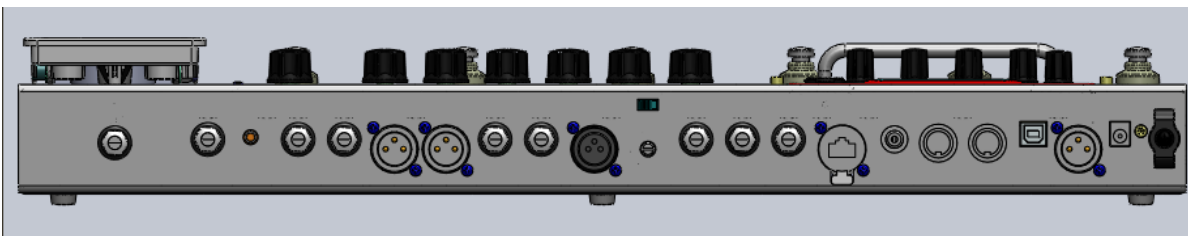
### Completed assembly (Reference)



Top view



Bottom view



Rear view