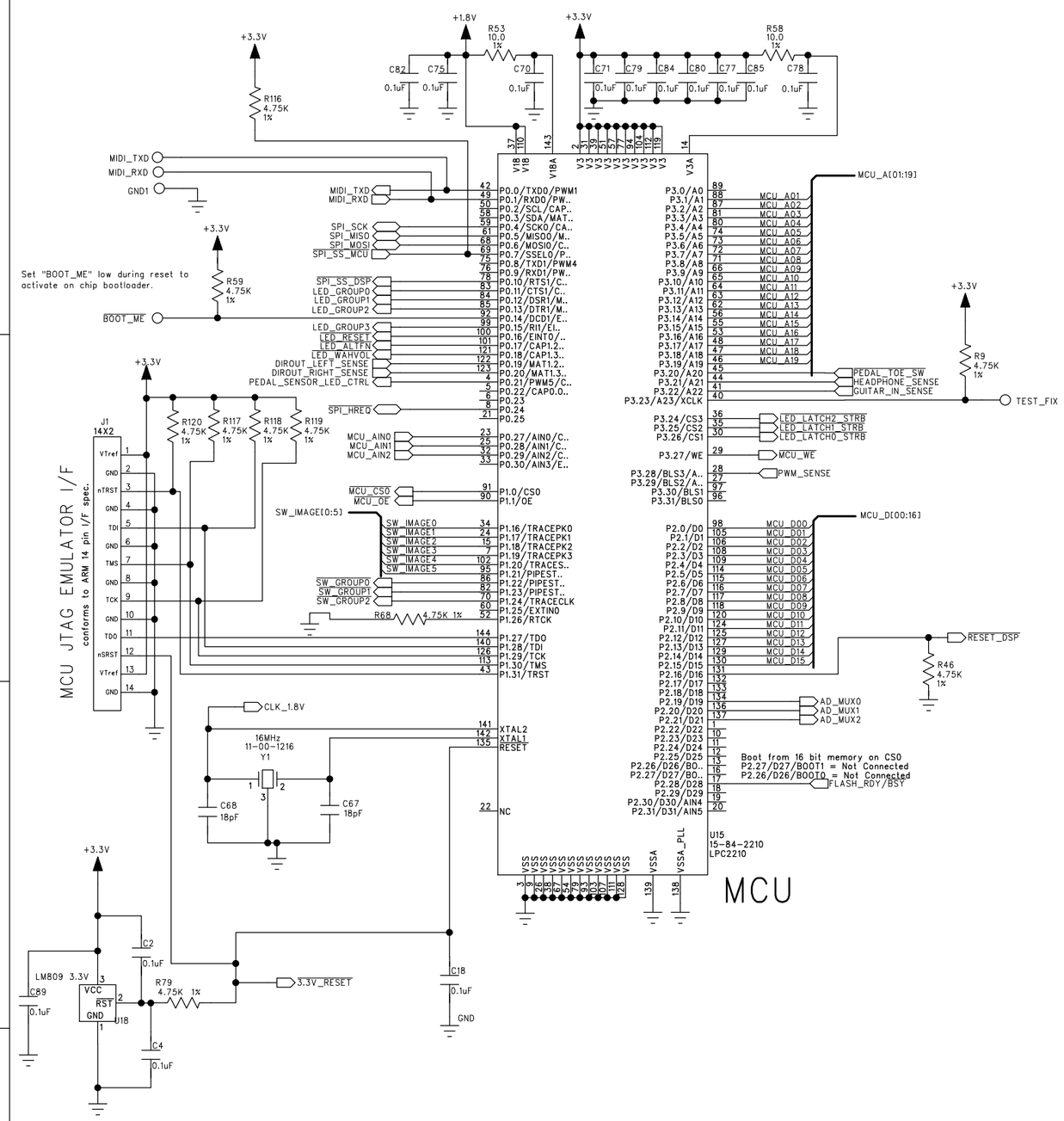
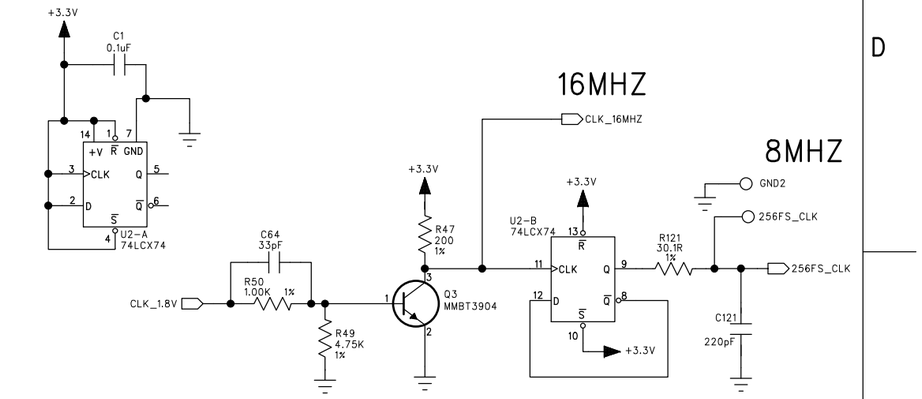
Floor POD Plus

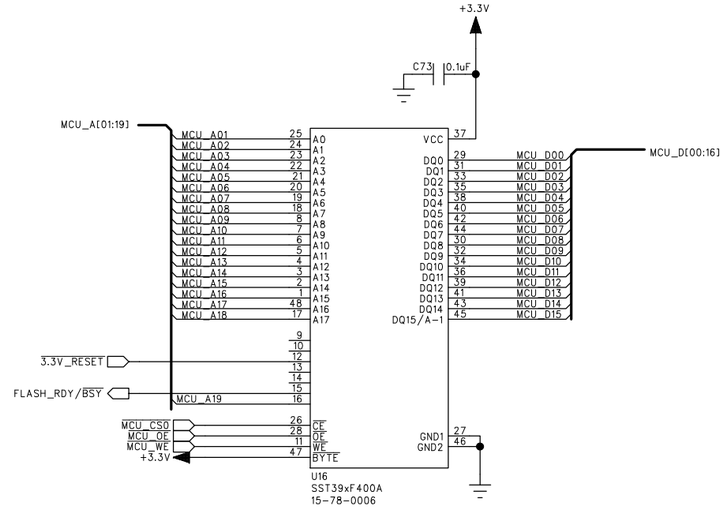
Service Manual

Line 6, Inc. Customer Service and Repair
3850-A Royal Ave. Simi Valley, CA 93063 P. 818-575-3600 F. 818-575-3961 E. service@line6.com

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







FLASH 256K X 16

TOP SIDE FIDUCALS

FID1 FID2 FID3

FID7 FID11 FID10

BOTTOM SIDE FIDUCALS

FID13 FID5 FID4 FID9 Located under MCU

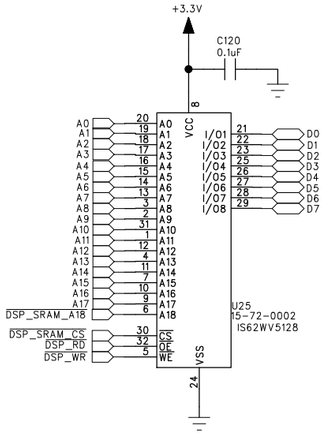
FID6 FID8 FID12 Located under DSP

This board: All resistors are 1% Tolerance

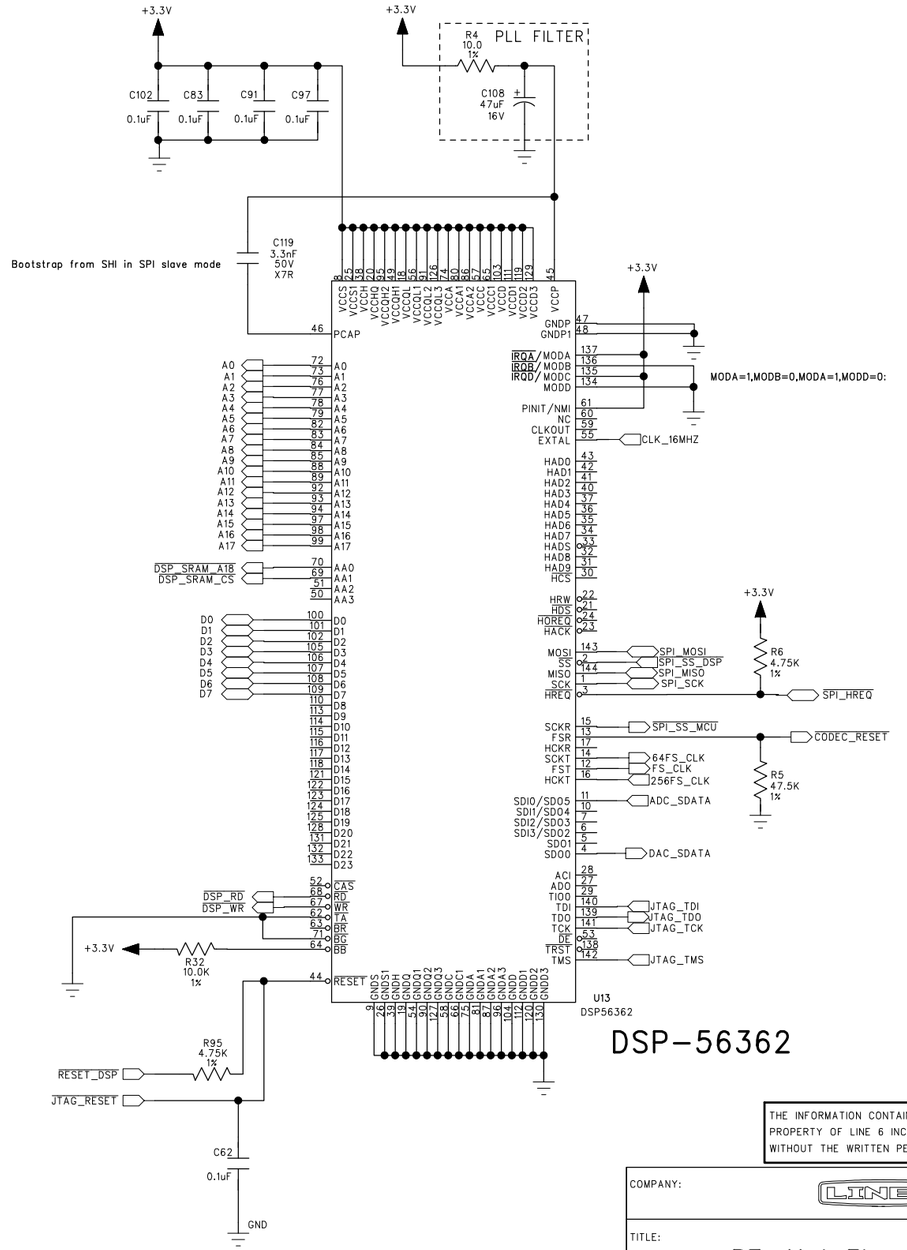
DRAWN: D. MOLNAR	DATED: 07.31.2006	COMPANY: LINE 6	
CHECKED: review panel	DATED:	TITLE: P7: MotoFloorPOD – MAIN PCB DIGITAL	
		PROGRAM: PADS POWER LOGIC 2004	REV: D
		FILENAME:	
SCALE: 1:1	SIZE: C	PART NUMBER: 35-00-xxxx	SHEET: 1 OF 10

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

DSP



SRAM

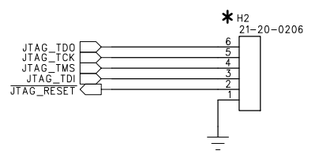


DSP-56362

CLOCKS

DSP CORE CLOCK = 120MHz
256FS_CLK = 8MHz
64FS_CLK = 2MHz
FS_CLK = 31250Hz

DSP JTAG Connector



DRAWN: D. MOLNAR	DATED: 01.18.2006
CHECKED: review panel	DATED:

COMPANY: LINE 6

TITLE: P7: MotoFloorPOD – DSP
DSP

PROGRAM: PADS POWER LOGIC 2004

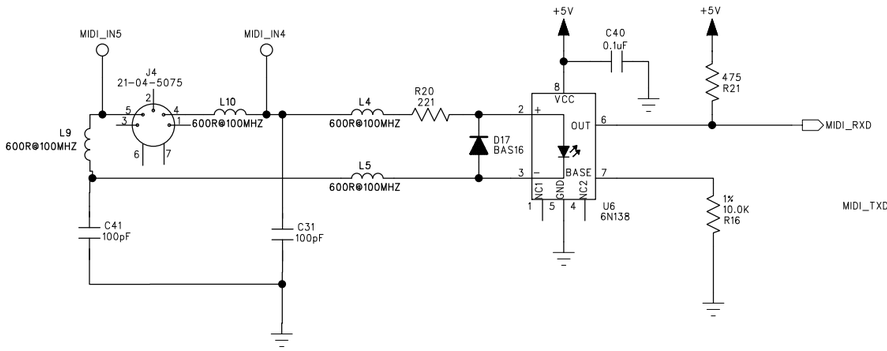
REV: D

FILENAME:

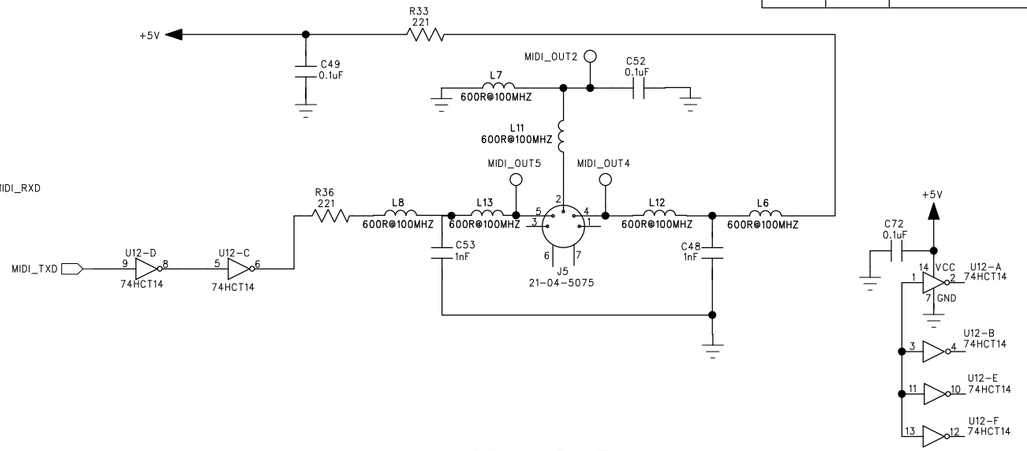
SCALE: 1:1 | SIZE: C | PART NUMBER: 35-00-xxxx | SHEET: 2 OF 10

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

MIDI INTERFACE



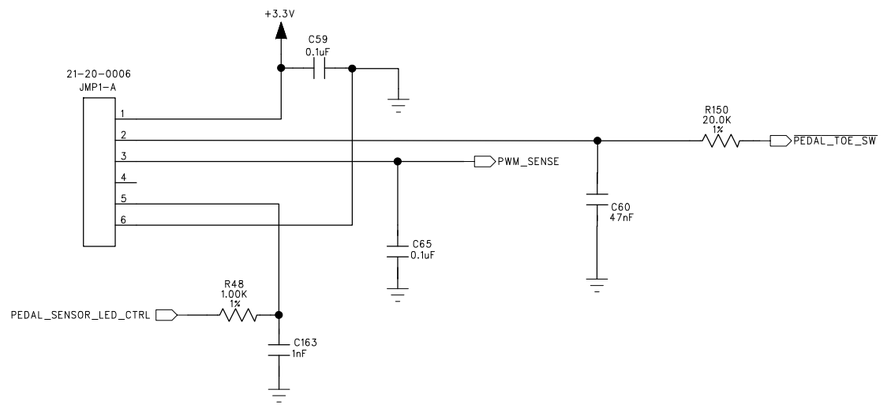
MIDI IN

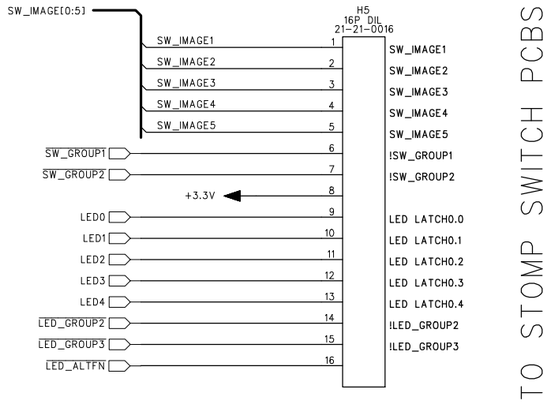


MIDI OUT

PEDAL INTERFACE

FROM PEDAL PCB





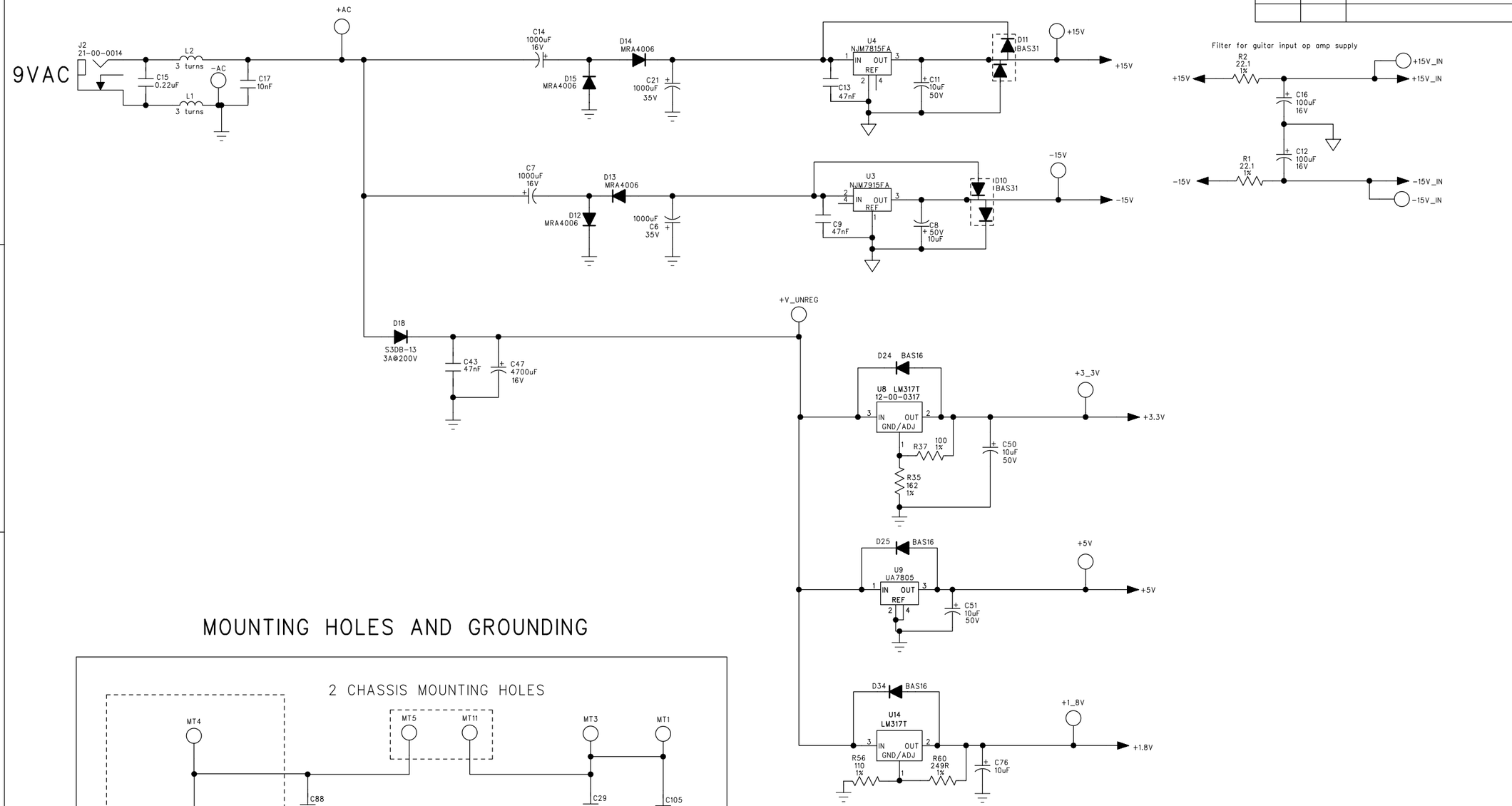
TO STOMP SWITCH PCBS

DRAWN: D. MOLNAR	DATED: 01.18.2006	COMPANY: LINE 6			
CHECKED: review panel	DATED:	TITLE: P7: MotoFloorPOD – MAIN PCB INTERFACE			
		PROGRAM: PADS POWER LOGIC 1004			REV: D
		FILENAME:			
		SCALE: 1:1	SIZE: C	PART NUMBER: XX-XX-XXXX	SHEET: 3 OF 10

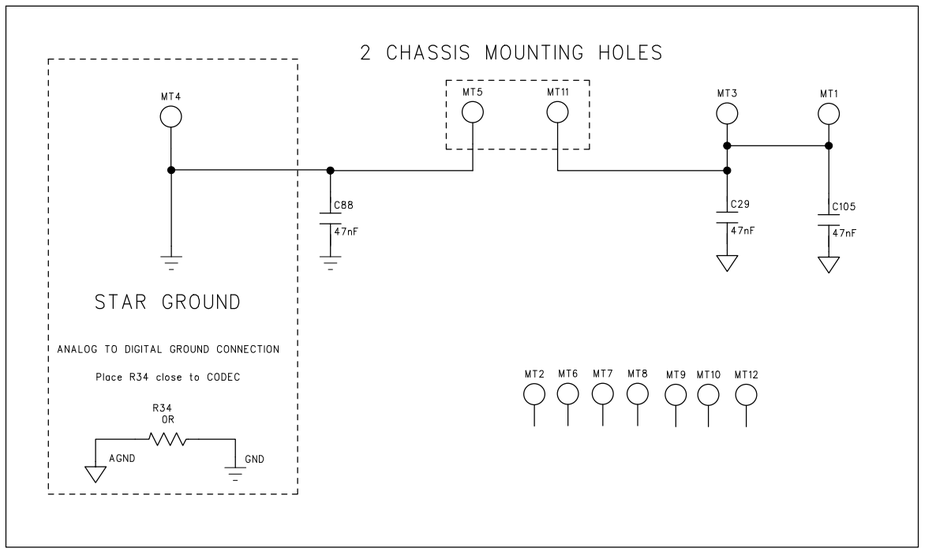
6	5	4	3	2	1

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

POWER SECTION



MOUNTING HOLES AND GROUNDING



DRAWN: D. MOLNAR	DATED: 01.18.2006		
CHECKED: review panel	DATED:		
SCALE: 1:1	SIZE: C	PART NUMBER: XX-XX-XXXX	SHEET: 4 OF 10

COMPANY: LINE 6

TITLE: P7: MotoFloorPOD – MAIN PCB
POWER

PROGRAM: PADS POWER LOGIC 2004

REV: D

FILENAME:

ANALOG INPUT SECTION

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

GUITAR INPUT

J3 21-00-6616

L15 600R@100MHZ

L3 600R@100MHZ

C30 47pF

R13 1.00K 1%

R17 1.00M 1%

D16 BAT54S

GUITAR_IN

+15V_IN

C25 47nF

U5-A TL072CD

-15V_IN

C34 47nF

R175 6.19K 1%

R11 2.00K 1%

C26 1uF 50V

5Vpp Max

L18 600R@100MHZ

C109 0.1uF

L36 600R@100MHZ

GND

GT_GND

C20 10nF

R10 100 1%

U5-B TL072CD

C32 1uF 50V

R18 1.50K 1%

R19 499 1%

D19 BAT54S

R14 15.0K 1%

1% 1.00K R15

C35 1nF

+5VA

R26 100K 1%

R28 100K 1%

C45 10uF

C37 47nF

C33 1nF

R27 100K 1%

R29 100K 1%

C46 10uF 50V

47nF C38

LIN+

RIN+

DAC_SDATA

FS_CLK

256FS_CLK

64FS_CLK

C122 10pF

+5V

R22 15 1%

C3 1000uF 10V

C44 1000uF 10V

C39 0.1uF

R8 10.0 1%

C27 47nF

+3.3V

R12 5.11 1%

C28 47nF

U7 AK4528 CODEC

+5VA VREF VD VT

LIN+ LIN- RIN+ RIN-

DACIN MCLK LRCLK BCLK

AGND VBIAS DGND

C36 47nF

C42 10uF 50V

GND3

LOUT+ LOUT- ROUT+ ROUT-

ADCOUT PWRDWN P/S CSN/DIF DEMO DEM1 DFS CCLK/CKSI CDTI/CKSO

ADC_SDATA

CODEC_RESET

C23 100pF

C22 100pF

CODEC_LOUT+

CODEC_LOUT-

CODEC_ROUT+

CODEC_ROUT-

Codec outputs are:
2.7V pp Max / 5.4V pp diff Max

+3.3V

R23 20.0K 1%

R24 20.0K 1%

47nF C10

GUITAR_IN_SENSE

GT-SENSE

COMPANY:	LINE 6
TITLE:	P7: MotoFloorPOD – MAIN PCB ANALOG IN
PROGRAM:	PADS POWER LOGIC 2004
REV:	D
FILENAME:	
DRAWN: D. MOLNAR	DATED: 01.18.2006
CHECKED: review panel	DATED:
SCALE: 1:1	SIZE: C
PART NUMBER: XX-XX-XXXX	SHEET: 5 OF 10

AUDIO OUTPUT CIRCUITRY

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

2.7V pp Max
CODEC_LOUT+
CODEC_LOUT-
2.7V pp Max
R83 2.00K 1%
R86 2.00K 1%
R90 2.00K 1%
R93 2.00K 1%
R92 8.87K 1%
C95 2.7nF
C100 390pF
C92 390pF
C55 0.1uF
C54 0.1uF
+15V
-15V
U1-A TL084
24V pp
R80 8.87K 1%
R122 0R
MVP_L
R101-A 10KA
MVP_GND

"JAM ALONG" STEREO INPUT
J10 21-12-0035
L26 600R@100MHZ
L27 600R@100MHZ
L24 600R@100MHZ
L25 600R@100MHZ
L28 600R@100MHZ
C5 10uF
C24 10uF
C168 10pF
C167 10pF
24.3K 1% R54
24.3K 1% R123
JAM_L
JAM_R
C63 0.1uF
GND
L23 600R@100MHZ
JAM_GND

MASTER VOLUME POT

2.7V pp Max
CODEC_ROUT+
CODEC_ROUT-
2.7V pp Max
R81 2.00K 1%
R88 2.00K 1%
R94 2.00K 1%
R91 2.00K 1%
R97 8.87K 1%
C98 2.7nF
C101 390pF
C96 390pF
R84 8.87K 1%
R125 0R
U1-B TL084
24V pp
MVP_R
R101-B 10KA

HEADPHONE_L
HEADPHONE_R
TL084 U1-D
TL084 U1-C
R87 0R
R89 0R
R98 681 1%
R82 681 1%
L17 600R@100MHZ
L14 600R@100MHZ
C90 1nF
C81 1nF
L31 600R@100MHZ
L32 600R@100MHZ
OUTL_TIP
24V pp Max
J8 21-00-6616
J7 21-00-6616
DIRECT OUT LEFT
DIRECT OUT RIGHT
L29 600R@100MHZ
C93 0.1uF
L19 600R@100MHZ
L30 600R@100MHZ
C86 0.1uF
L16 600R@100MHZ
HP_GND
+3.3V
R71 20.0K 1%
R74 20.0K 1%
R67 20.0K 1%
R65 20.0K 1%
DIROUT_LEFT_SENSE
DO_LSENSE
DIROUT_RIGHT_SENSE
DO_RSENSE

HEADPHONE_L
HEADPHONE_R
U22-A TL084
U22-B TL084
U22-C TL084
U22-D TL084
U21-A TL084
U21-B TL084
U21-C TL084
U21-D TL084
C56 0.1uF
C57 0.1uF
C58 0.1uF
C61 0.1uF
+15V
-15V
R110 47.5 1%
R111 47.5 1%
R105 47.5 1%
R104 47.5 1%
R108 47.5 1%
R109 47.5 1%
R103 47.5 1%
R102 47.5 1%
R114 20.0K 1%
R115 20.0K 1%
R112 20.0K 1%
R113 20.0K 1%
R107 15 1%
R106 15 1%
C107 47nF
C106 47nF
L22 600R@100MHZ
L21 600R@100MHZ
C103 1nF
C99 1nF
HDPH_L
HDPH_R
L33 600R@100MHZ
L35 600R@100MHZ
L34 600R@100MHZ
L20 600R@100MHZ
C94 0.1uF
J9 21-00-6616
HEADPHONE OUTPUT
+3.3V
R78 20.0K 1%
R77 20.0K 1%
HEADPHONE_SENSE
HP_SENSE

HEADPHONE AMPLIFIER

DRAWN: D. MOLNAR	DATED: 01.18.2006
CHECKED: review panel	DATED:

COMPANY: LINE 6

TITLE: P7: MotoFloorPOD – MAIN PCB
DIRECT OUTS / HEADPHONE AMP

PROGRAM: PADS POWER LOGIC 2004

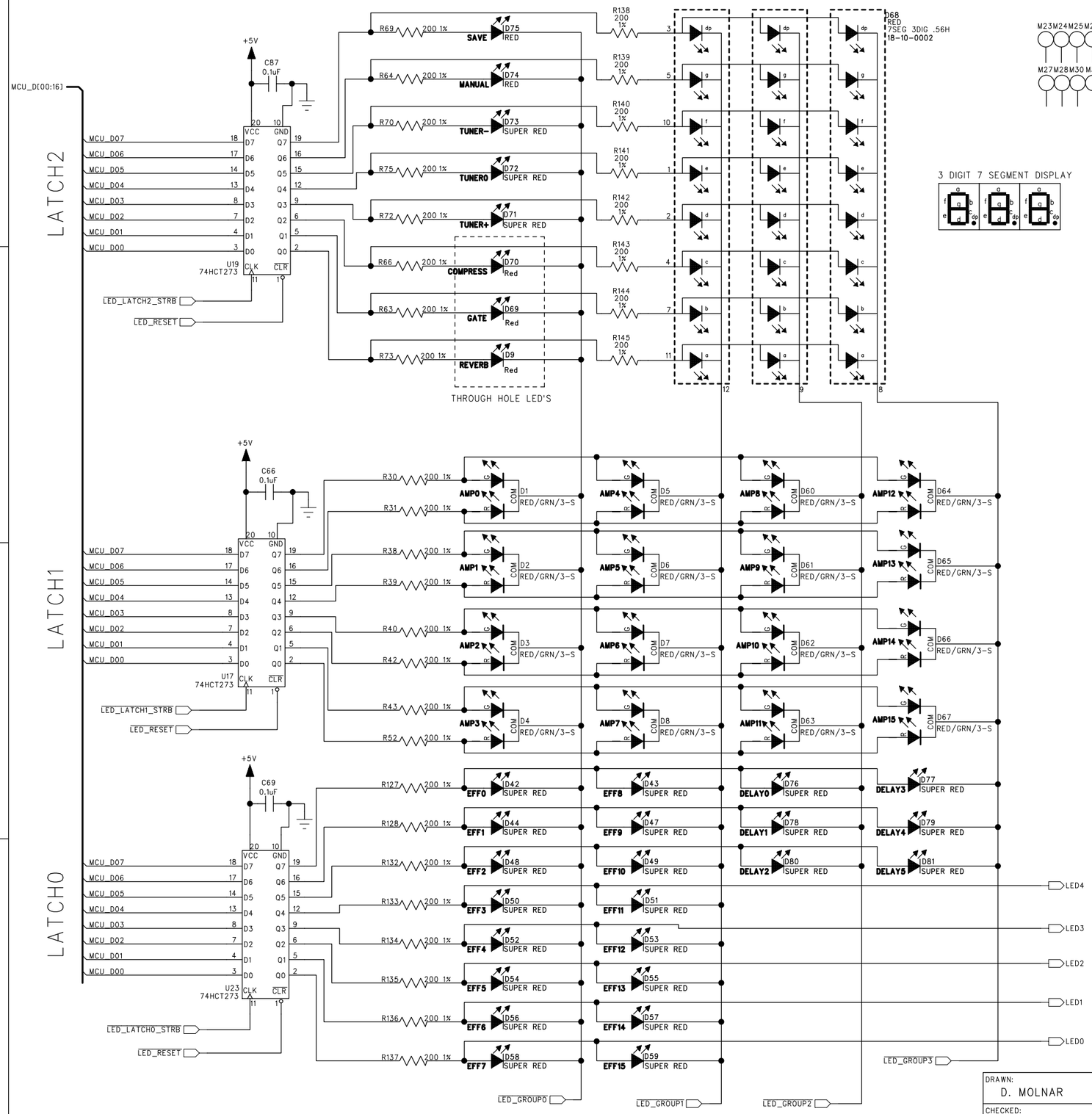
REV: D

FILENAME:

SCALE: 1:1 | SIZE: C | PART NUMBER: XX-XX-XXXX | SHEET: 6 OF 10

LEDS & DISPLAY

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



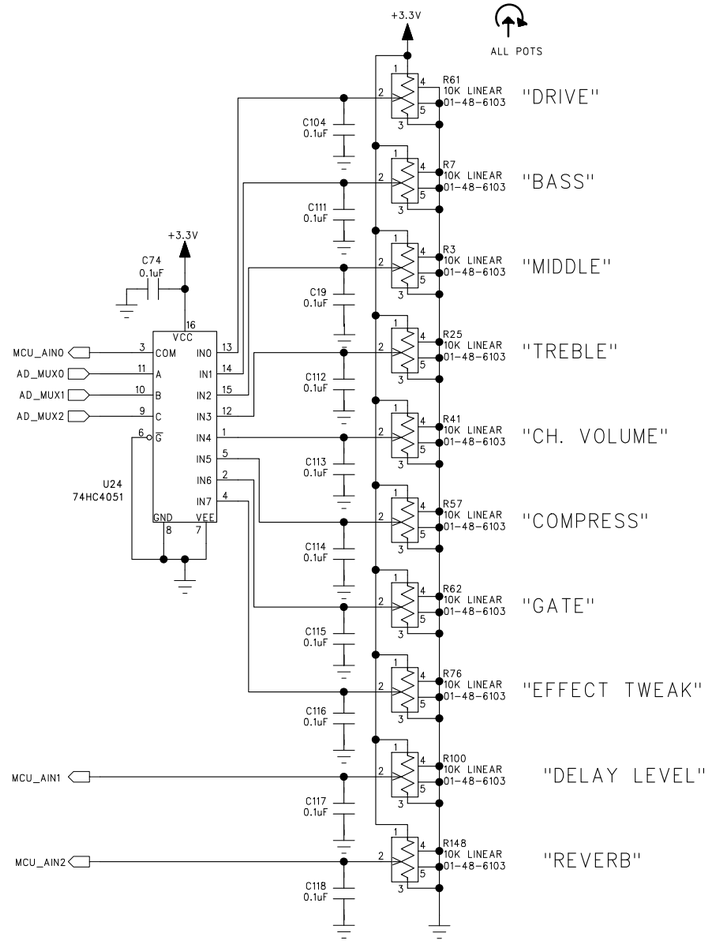
LED MATRIX: 24 X 4

	LED_GROUP0	LED_GROUP1	LED_GROUP2	LED_GROUP3
LATCH2.7	"SAVE"	7seg1 dp	7seg2 dp	7seg3 dp
LATCH2.6	"MANUAL"	7seg1 g	7seg2 g	7seg3 g
LATCH2.5	"TUNER-"	7seg1 f	7seg2 f	7seg3 f
LATCH2.4	"TUNER+"	7seg1 e	7seg2 e	7seg3 e
LATCH2.3	"TUNER0"	7seg1 d	7seg2 d	7seg3 d
LATCH2.2	"COMPRESS"	7seg1 c	7seg2 c	7seg3 c
LATCH2.1	"GATE"	7seg1 b	7seg2 b	7seg3 b
LATCH2.0	"REVERB"	7seg1 a	7seg2 a	7seg3 a
LATCH1.7	"AMP0" GREEN	"AMP4" GREEN	"AMP8" GREEN	"AMP12" GREEN
LATCH1.6	"AMP0" RED	"AMP4" RED	"AMP8" RED	"AMP12" RED
LATCH1.5	"AMP1" GREEN	"AMP5" GREEN	"AMP9" GREEN	"AMP13" GREEN
LATCH1.4	"AMP1" RED	"AMP5" RED	"AMP9" RED	"AMP13" RED
LATCH1.3	"AMP2" GREEN	"AMP6" GREEN	"AMP10" GREEN	"AMP14" GREEN
LATCH1.2	"AMP2" RED	"AMP6" RED	"AMP10" RED	"AMP14" RED
LATCH1.1	"AMP3" GREEN	"AMP7" GREEN	"AMP11" GREEN"	"AMP15" GREEN
LATCH1.0	"AMP3" RED	"AMP7" RED	"AMP11" RED	"AMP15" RED
LATCH0.7	"EFFECT0"	"EFFECT8"	"DELAY0"	"DELAY3"
LATCH0.6	"EFFECT1"	"EFFECT9"	"DELAY1"	"DELAY4"
LATCH0.5	"EFFECT2"	"EFFECT10"	"DELAY2"	"DELAY5"
LATCH0.4	"EFFECT3"	"EFFECT11"	FT.SW. "A" GREEN	FT.SW. "C" GREEN
LATCH0.3	"EFFECT4"	"EFFECT12"	FT.SW. "AMP" RED	FT.SW. "FX" RED
LATCH0.2	"EFFECT5"	"EFFECT13"	FT.SW. "B" GREEN	FT.SW. "D" GREEN
LATCH0.1	"EFFECT6"	"EFFECT14"	FT.SW. "SOLO" RED	FT.SW. "DLY" RED
LATCH0.0	"EFFECT7"	"EFFECT15"	FT.SW. "TAP"	

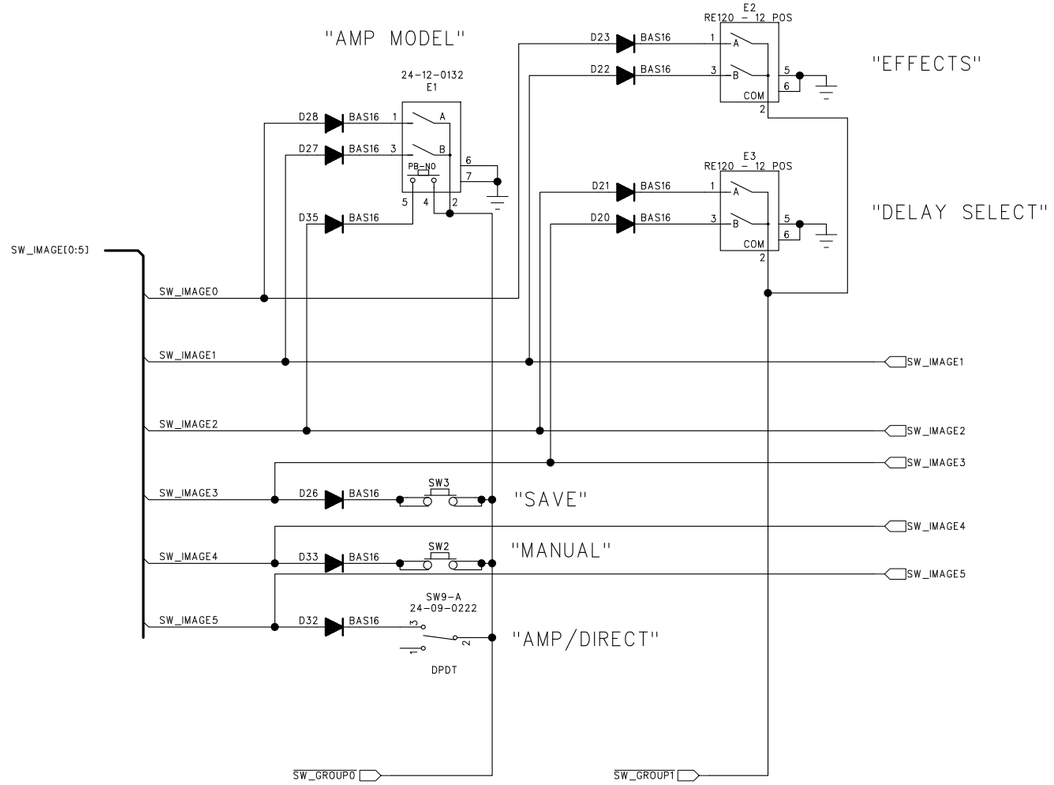
DRAWN: D. MOLNAR	DATED: 01.18.2006	COMPANY: LINE 6	
CHECKED: review panel	DATED:	TITLE: P7: MotoFloorPOD – MAIN PCB	
		PROGRAM: PADS POWER LOGIC 2004	REV: D
		FILENAME:	
		SCALE: 1:1 SIZE: C PART NUMBER: XX–XX–XXXX	SHEET: 7 OF 10

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

POTENTIOMETERS



SWITCHES AND ENCODERS



SWITCH MATRIX: 6 X 3

	SW_GROUP0	SW_GROUP1	SW_GROUP2
SW_IMAGE0	ENCODER1-A	ENCODER2-A	- unused -
SW_IMAGE1	ENCODER1-B	ENCODER2-B	FT.SW. "A/AMP"
SW_IMAGE2	ENCODER1-PUSH SWITCH	ENCODER3-A	FT.SW. "B/SOLO"
SW_IMAGE3	SW3 "SAVE"	ENCODER3-B	FT.SW. "C/FX"
SW_IMAGE4	SW3 "MANUAL"	FT.SW. "BANK UP"	FT.SW. "D/DLY"
SW_IMAGE5	SW9 "AMP/DIR"	FT.SW. "BANK DN"	FT.SW. "TAP/HOLD"

PRELIMINARY DRAWINGS
FOR QUOTATION PURPOSES ONLY
DO NOT USE FOR PRODUCTION

DRAWN: D. MOLNAR	DATED: 01.18.2006
CHECKED: review panel	DATED:

COMPANY: LINE 6

TITLE: P7: MotoFloorPOD - POTS & ENC

PROGRAM: PADS LOGIC 2004

REV: D

FILENAME:

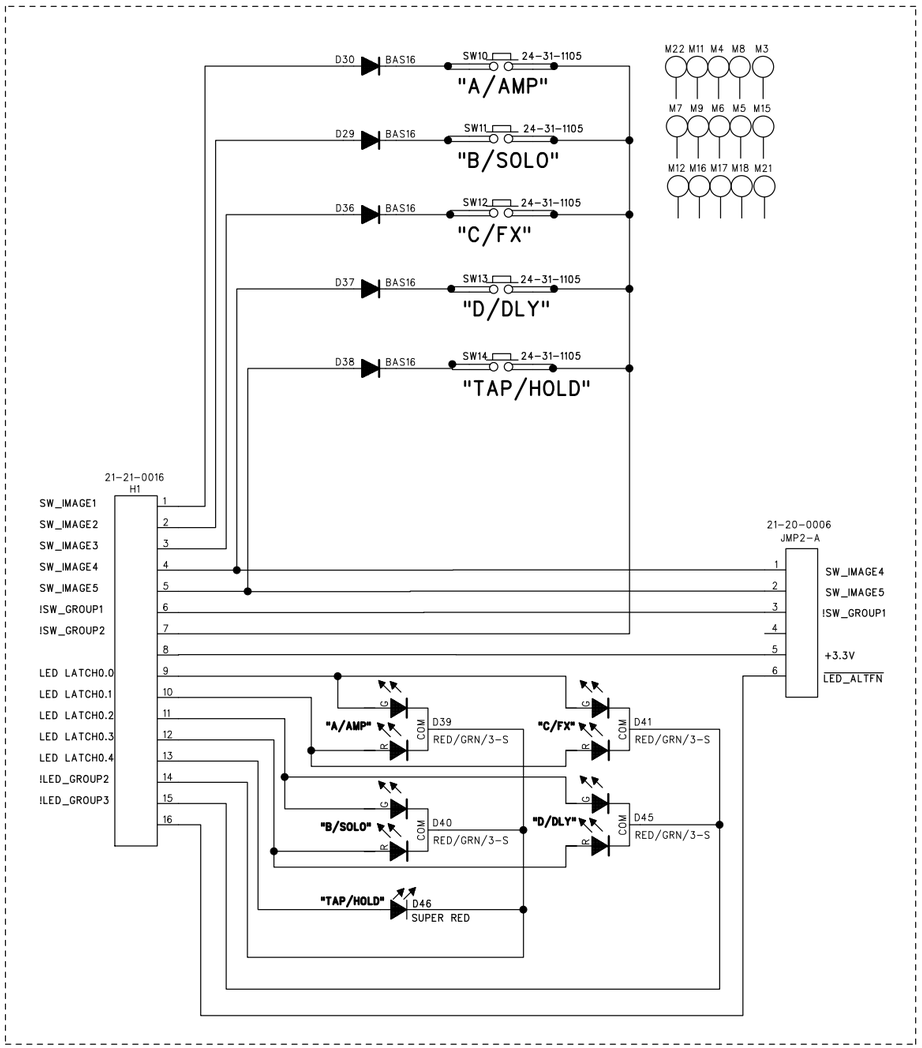
SCALE: 1:1 | SIZE: C | PART NUMBER: XX-XX-XXXX | SHEET: 8 OF 10

6	5	4	3	2	1

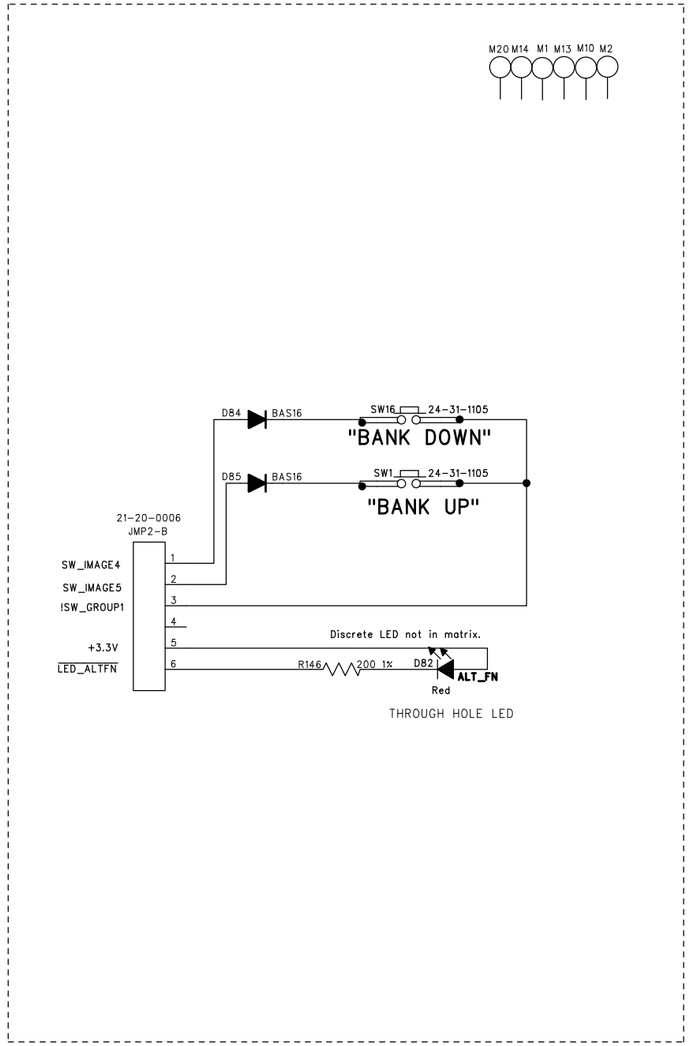
ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

FOOT SWITCHES

BOTTOM ROW
BREAKAWAY BOARD



UPPER ROW
BREAKAWAY BOARD



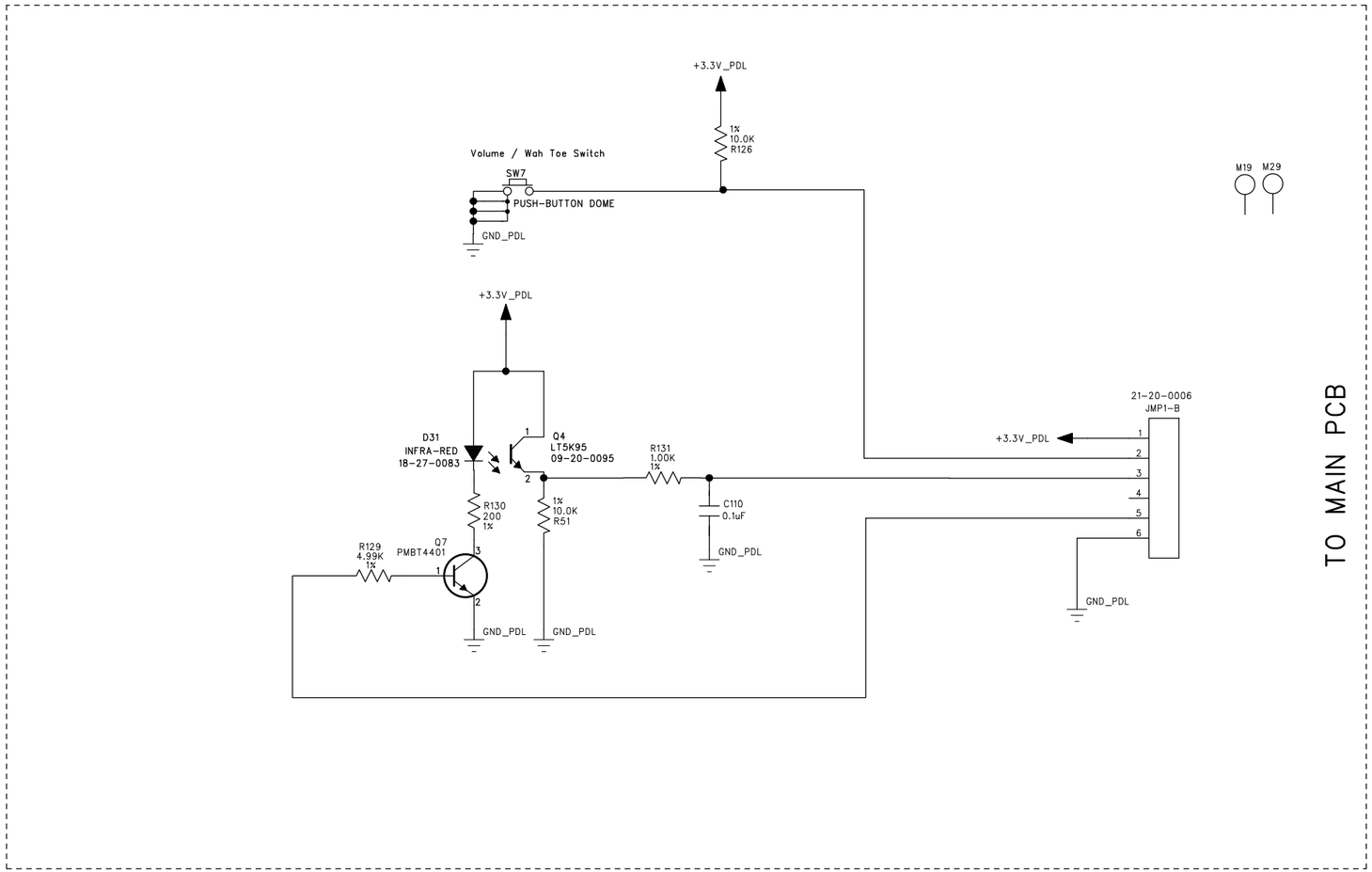
THROUGH HOLE LED

DRAWN: D. MOLNAR	DATED: 01.18.2006		
CHECKED: review panel	DATED:		
COMPANY: LINE 6			
TITLE: P7: MotoFloorPOD – SWITCH PCB			
PROGRAM: PADS POWER LOGIC 2004			REV: D
FILENAME:			
SCALE: 1:1	SIZE: C	PART NUMBER: XX-XX-XXXX	SHEET: 9 OF 10

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

VOLUME / WAH PEDAL

BREAKAWAY BOARD



DRAWN: D. Molnar	DATED: 01.18.2006	COMPANY: LINE 6	
CHECKED: review panel	DATED:	TITLE: P7: MotoFloorPOD – PEDAL PCB	
		PROGRAM: PADS POWER LOGIC 2004	REV: D
		FILENAME:	
SCALE: 1:1	SIZE: C	PART NUMBER: XX-XX-XXXX	SHEET: 10 OF 10

99-060-0905	FLOOR POD PLUS US		
Part Number	**Description**	**Qty. Per**	**Reference Designator(s)**
11-32-0000	XFMR PX2 120VAC/60Hz 9VAC/2A UL 2464 VW-1 6FT. BLK US	1	PACKOUT
30-01-0011	HEX L-KEY SHORT ARM 3/16-IN BLK P7-1	1	PACKOUT
40-00-0116	MANUAL USER REFERENCE MOTO FLOOR POD P7-1	1	PACKOUT
40-00-0117	CHART PRESET MOTO FLOOR POD P7-1	1	PACKOUT
40-00-1000	CARD WARRANTY LINE 6 HARDWARE	1	
40-01-0016	CARD LICENSE-AGREEMNT END-USERALL-PRODUCTS	1	PACKOUT
40-03-0031	CARD REGISTRATION UK	1	PACKOUT
40-03-2000	CARD REGISTRATION US	1	PACKOUT
40-03-2000-1	CARD REGISTRATION EUROPE	1	PACKOUT
40-10-0166	ENDCAP FOAM SHIPPING LEFT MOTO FLOOR POD P7-1	1	PACKOUT
40-10-0167	ENDCAP FOAM SHIPPING RIGHT MOTO FLOOR POD P7-1	1	PACKOUT
40-10-0168	CARTON GIFT MOTO FLOOR POD P7-1	1	PACKOUT
40-20-0011	BAG PLASTIC 10 x 16 2 mil	1	PACKOUT
40-20-0022	BAG PLASTIC 2 MIL 36"x14"	1	PACKOUT
40-25-0024	STICKER ART SEAL EULA REV.B	1	PACKOUT
40-25-0101	LABEL BAR CODE S/N 2-PNL LTX 16 1125502	1	REAR CHASSIS/GIFT
59-00-0035	ASSY UNIT COMPLETE MOTO- FLOORPOD P7-1	1	

59-00-0035	ASSY UNIT COMPLETE MOTO- FLOORPOD		
Part Number	**Description**	**Qty. Per**	**Reference Designator(s)**
21-34-0083	CBL 2-END 1-COND 18AWG 5.0 IN 2X AMP 34113-RING TRML	1	
30-00-0043	SCREW 6-32 x 5/16 w/LK WASH PPZ STL	4	2-PEDAL PCBA, 2-CHASSIS BOTTOM
30-00-0062	SCREW 10-32 x 3/8-IN w/CAPTIVEWASHER PPZ	2	TO CONNECT KICKBAR STANDOFFS CHASSIS BOTTOM
30-00-0063	SCREW THRD-FRM 6-20 x 1/2-IN PPB	1	CHASSIS BOTTOM
30-00-0112	SCREW SHCS 1/4-20 x 2 3/4 LG STL BLK OXIDE P7-1, GRADE 8	1	
30-00-0115	SCREW 6-20 x 5/16 THD-FRMG PPHD BLK	10	
30-00-0375	SCREW 6-32 x .375 PPB	21	RUBBER FEET
30-00-4250	SCREW SHEET METAL SELF-TAP #4 x .250IN PPB	21	TO ATTACH THE FOOTSWITCH AND BANK PCBA'S
30-03-0034	WASHER .500 OD x .260 ID x .080 THK NYLON	2	
30-06-0030	NUT 7/16 SQ x 3/16 HT 1/4-20 THD STL P7-1	1	
30-12-0006	STANDOFF HEX .375 10-32 M-F 1.250-IN AL	2	KICKBAR
30-12-0007	STANDOFF HEX .250 6-32 M-F 0.500-IN AL	4	CHASSIS TOP AND CHASSIS BOTTOM
30-12-8418	STANDOFF HEX .250 6-32 M-F 1IN AL	9	CHASSIS TOP AND CHASSIS BOTTOM
30-15-0036	SPACER .450 OD x .270 ID x .30LG STL P7-1	1	
30-27-0027	KNOB LGE ENCDR .80Dx.60 H IMP ABS MICROTEX	3	
30-27-0049	LT PIPE SHARCTONE 1.4 OD x .47 HIGH CLR POLY MINITEXTURE	3	
30-27-0095	KNOB 0.54-H x 0.44-D PLASTIC ABS BLACK	5	
30-27-0100	ACTUATOR FT-SWITCH 1.79 x 1.08x .33-IN ABS BLACK FLOORPOD	7	
30-27-0102	LIGHTPIPE .260-OD x.181-ID x .250-HT PLYCRBNTE-CLR FLOORPOD	5	
30-27-0183	RTNR FT SW 1.4" x .8" x .2" ABS BLK P3	7	
30-27-0210	CHASSIS BACK 18.0 x 1.0 x .9 ABS/PC P7-1	1	
30-27-0211	CHASSIS TOP 20.3 x 10.2 x 2.2 ABS/PC BLK P7-1	1	
30-27-0212	BEZEL DISPLAY 3.8 x 1.6 x .04 POLYCARBONATE P7-1	1	
30-42-0044	OVERLAY UI 8.9 x 2.4 x .025 ALUMINUM P7-1	1	
30-45-0011	KNOB POT .77 DIA x .76 HT PLASTIC CHROME-PLATED	5	
30-48-0010	FOOT RUBBER w/ADHSV 3M-BUMPON SJ-5012 (or equiv)	4	
30-48-5012	BUMPER RUBBER .465" O.D. BLK	22	
30-51-0078	TACTILE DOME 20mm SST NP	3	SW7
30-51-0186	SPRING 4.5-COILS 0.25-DIA x 0.51 x .081-IN ZINC PLATED STL	7	
30-51-0187	GUARD KNOB 6 x 1.06 x 0.38-IN ROUND STL-BAR CHROME	1	
30-51-0257	DISC REFLECTOR .343" DIA x .015"THK AL (P3)	1	
30-51-0268	CHASSIS BOTTOM 20.2 x 10.1 x .06 CRES P7-1	1	
30-51-0273	PEDAL ADC 8.0 x 3.0 x 1.6 (P7-1)	1	
30-60-0009	LOGO LINE 6 P3-1	1	
30-65-0016-1	TAPE ANTI SLIP W/ADH PEDAL LS HEEL BLK 2.5 x .70 x .035 P7-1	1	
30-65-0016-2	TAPE ANTI SLIP W/ADH PEDAL RS HEEL BLK 2.5 x .70 x .035 P7-1	1	
30-65-0017-1	TAPE ANTI SLIP W/ADH PEDAL LS TOE BLK 3.6 x .70 x .035 P7-1	1	
30-65-0017-2	TAPE ANTI SLIP W/ADH PEDAL RS TOE BLK 3.6 x .70 x .035 P7-1	1	
30-75-0022	PAD RUBBER w/ADHESIVE 1-SIDE ROUND .278-DIA. x .157-HT BLK	7	
30-75-0040	BUTTON SINGLE RUBBER 1 x 8 x 9-IN MICRO FLR POD P3-1	2	
40-25-0020	LABEL INSPECTION QUALITY	1	
50-02-0078-1	PCBA MAIN MOTO FLOORPOD P7-1	1	
50-02-0078-2	PCBA PEDAL MOTO FLOORPOD P7-1	1	
50-02-0078-3	PCBA BANK SWITCHES MOTO FLOOR POD P7-1	1	
50-02-0078-4	PCBA FOOTSWITCHES MOTO FLOOR POD P7-1	1	

50-02-0078-1	PCBA MAIN MOTO FLOORPOD		
Part Number	**Description**	**Qty. Per**	**Reference Designator(s)**
01-24-0000	RES 0R 1% 0805	5	R34,R87,R89,R122,R125
01-24-1000	RES 100R 1% 0805	2	R10,R37
01-24-1001	RES 1.00K 1% 0805	4	R13,R15,R48,R50
01-24-1002	RES 10.0K 1% 0805	2	R16,R32
01-24-1003	RES 100K 1% 0805	4	R26-29
01-24-1004	RES 1.00M 1% 0805	1	R17
01-24-10R0	RES 10.0R 1% 0805	4	R4,R8,R53,R58
01-24-1100	RES 110R 1% 0805	1	R56
01-24-1501	RES 1.50K 1% 0805	1	R18
01-24-1502	RES 15.0K 1% 0805	1	R14
01-24-15R0	RES 15R 1% 0805	3	R22,R106-107
01-24-1620	RES 162R 1% 0805	1	R35
01-24-2000	RES 200R 1% 0805	34	R30,R31,R38,R39,R40,R42,R43,R47,R52,R63,R64,R66,R69,R70,R72,R73,R75, R127,R128,R132,R133,R134,R135,R136,R137,R138,R139,R140,R141,R142,R143,R144,R145,R147
01-24-2001	RES 2.00K 1% 0805	9	R11,R81,R83,R86,R88,R90,R91,R93,R94
01-24-2002	RES 20.0K 1% 0805	13	R23,R24,R65,R67,R71,R74,R77,R78,R112,R113,R114,R115,R150
01-24-2210	RES 221R 1% 0805	3	R20,R33,R36
01-24-22R1	RES 22.1R 1% 0805	2	R1,R2
01-24-2432	RES 24.3K 1% 0805	2	R54,R123
01-24-2490	RES 249R 1% 0805	1	R60
01-24-30R1	RES 30.1R 1% 0805	1	R121
01-24-4750	RES 475R 1% 0805	1	R21
01-24-4751	RES 4.75K 1% 0805	13	R6,R9,R46,R49,R59,R68,R79,R95,R116,R117,R118,R119,R120
01-24-4752	RES 47.5K 1% 0805	1	R5
01-24-47R5	RES 47.5R 1% 0805	8	R102,R103,R104,R105,R108,R109,R110,R111
01-24-4990	RES 499R 1% 0805	1	R19
01-24-5R11	RES 5.11R 1% 0805	1	R12
01-24-6191	RES 6.19K 1% 0805	1	R175
01-24-6810	RES 681R 1% 0805	2	R82,R98
01-24-8871	RES 8.87K 1% 0805	4	R80,R84,R92,R97
01-48-6103	POT MONO 10KB LINEAR TAPER 25mm W/9mm NUT D-SHAFT	10	R3,R7,R25,R41,R57,R61,R62,R76,R100,R148
01-48-9103	POT DUAL 10KA AUDIO TAPER HORIZ MT 25mm RND PLASTIC	1	R101
03-10-1108	CAP ELEC 1000uF 10V 20% RADIAL 10/12.5/5	2	C3,C44
03-12-0107	CAP ELEC 100uF 16V 20% RADIAL 6.3/11/5	2	C12,C16
03-12-0108	CAP ELEC 1000uF 16V 20% RADIAL10/16/5	2	C7,C14
03-12-0478	CAP ELEC 4700uF 16V 20% RADIAL 16/25/7.5	1	C47
03-12-1476	CAP ELEC 47uF 16V 20% RADIAL 5/7/5	1	C108
03-16-2108	CAP ELEC 1000uF 35V 20% 105C LowZ RADIAL 12.5/25/5	2	C6,C21
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	2	C26,C32
03-18-0106	CAP ELEC 10uF 50V 20% RADIAL 5/11/5	10	C5,C8,C11,C24,C42,C45,R46,C50,C51,C76
03-24-0103	CAP MET-POLY 10nF 50V 5% TH 7.5/3.2/10.8/5	1	C20
03-36-0224	CAP ESTR 0.22uF 50V 5% TH 11/6/11.5/7.5	1	C15
03-50-0100	CAP NPO 10pF 50V 5% 0805	1	C122
03-50-0101	CAP NPO 100pF 50V 5% 0805	4	C22,C23,C31,C41
03-50-0102	CAP NPO 1nF 50V 5% 0805	8	C33,C35,C48,C53,C81,C90,C99,C103
03-50-0272	CAP NPO 2.7nF 50V 5% 0805	2	C95,C98
03-50-0330	CAP NPO 33pF 50V 5% 0805	2	C64,C121
03-50-0391	CAP NPO 390pF 50v 5% 0805	4	C92,C96,C100,C101
03-50-0470	CAP NPO 47pF 50V 5% 0805	1	C30
03-52-0100	CAP X7R 10pF 50V 10% 0805	2	C167,C168
03-52-0102	CAP X7R 1nF 50V 10% 0805	1	C163
03-52-0103	CAP X7R 10nF 50V 10% 0805	1	C17
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	54	C1,C2,C4,C18,C19,C39,C40,C49,C52,C54,C55,C56,C57,C58,C59,C61,C62,C63,C65,C66,C69,C70,C71,C72,C73,C74,C75 C77,C78,C79,C80,C82,C83,C84,C85,C86,C87,C89,C91,C93,C94,C97,C102,C104,C109,C111,C112,C113,C114,C115,C116,C1
03-52-0180	CAP X7R 18pF 50V 10% 0805	2	C67,C68
03-52-0332	CAP X7R 3.3nF 50V 10% 0805	1	C119

50-02-0078-1	PCBA MAIN MOTO FLOORPOD		
Part Number	**Description**	**Qty. Per**	**Reference Designator(s)**
03-52-0473	CAP X7R 47nF 50V 10% 0805	17	C9,C10,C13,C25,C27,C28,C29,C34,C36,C37,C38,C43,C60,C88,C105,C106,C107
04-04-0001	FERRITE BEAD 3-TURN 600R@ 100MHz MATERIAL-61 RADIAL TH	2	L1,L2
06-20-0099	DIODE GEN PUR DUAL 70V 215mA 6nS SOT-23 SM BAV99-7-F	2	D10,D11
06-23-0054	DIODE SCHOTTKY DUAL 30V 200mA 5nS SOT-23 SM BAT54S	2	D16,D19
06-32-0313	DIODE RECTIFIER 200V 3A SMB SM S3DB-13 - F	1	D18
06-32-4006	DIODE RECTIFIER 800V 1A SMA SM MRA4006T3G	4	D12-15
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	14	D17,D20,D21,D22,D23,D24,D25,D26,D27,D28,D32,D33,D34,D35
09-06-7002	TRANS MOSFET N-CHAN 60V 7R5 SOT-23 SM 2N7002	4	Q5,Q6,Q8,Q29
09-10-3904	TRANS NPN SMALL-SIGNAL MMBT3904LT1GSOT-23 SM	1	Q3
11-00-1216	CRYSTAL 16MHZ SHORT-CAN HC-49/S TH	1	Y1
11-10-2012	FERRITE BEAD 600R@100MHZ 300mA 0805 SM	34	L3,L4,L5,L6,L7,L8,L9,L10,L11,L12,L13,L14,L15,L16,L17,L18,L19,L129,L30,L31,L32,L33,L34,L35,L36
12-00-0317	IC VREG ADJ 1.2-37V 1.5 AMP TO-220 LM317/NOPB TH	2	U8,U14
12-02-0015	IC REG +15V 1.5AMP TO-220F TH NJM7815FA#	1	U4
12-02-0115	IC REG -15V 1.5AMP TO-220F TH NJM7915FA#	1	U3
12-02-7805	IC REG +5v 1.5 Amp TH	1	U9
12-54-0072	IC OP-AMP DUAL TL072CD SM	1	U5
12-54-0084	IC OP AMP QUAD TL084CD SM	3	U1,U21,U22
12-64-4528	IC CONVERTER 24B 48/96KHz AUDIO CODEC SM AK4528	1	U7
15-40-6138	IC 6N138 OPTO-ISOLATOR DIP-8 TH	1	U6
15-62-4051	IC 74HC4051 8 TO 1 ANALOG MUX/DMUX SM 74HC4051	1	U24
15-64-0014	IC 74HCT14 HEX INVERTER 6 SM	1	U12
15-64-0273	IC 74HCT273 FLIP-FLOP D-TYPE 8-BIT SO-20 SM	3	U17,U19,U23
15-65-0074	IC 74LCX74MX_NL LOW VOLT CMOS DUAL D-FLIP FLOP SM	1	U2
15-72-0002	IC SRAM 512K x 8 sTSOP-32 SM IS62WV5128BLL-55HLI	1	U25
15-84-2210	IC MCU LPC2210 16/32 Bit ARM w/10 Bit ADC LQFP144 SM	1	U15
15-86-6362	IC DSP 24-BIT TQFP144 SM DSPB56362PV120	1	U13
15-92-5809	IC RESET 3.3V 5% ACTIVE-LOW SOT-23 SM LM809M3-3.08/NOPB	1	U18
18-00-0314	LED RED SLX-LX3054ID TH	4	D9,D69,D70,D83
18-10-0002	LED 7 SEG RED 3 DIG W/DP .56H 640nm BC56-12SRWA 12-P DIP TH	1	D68
18-20-0002	LED RED SUPER SML-LX0805SRC-TR 0805 SM	25	D42,D43,D44,D47,D48,D49,D50,D51,D52,D53,D54,D55,D56,D57,D58,D59,D71,D72,D73,D76,D77,D78,D79,D80,D81
18-20-0004	LED RED HYPER 628nm 3020 SM	2	D74,D75
18-26-0001	LED TRI-STATE RD/GRN 627/565nmCLR LENS COM-CATH SOT-23 SM	16	D1,D2,D3,D4,D5,D6,D7,D8,D60,D61,D62,D63,D64,D65,D66,D67
21-00-0014	JACK BARREL PCB MT 2.5mm DC PWR 3-PIN TH	1	J2
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	4	J3,J7,J8,J9
21-04-5075	JACK DIN 5-PIN FEMALE MIDI PCB-MNT RT-ANG LN 05075	2	J4,J5
21-12-0035	JACK 3.5mm STEREO 5 PIN CRIMPED LEADS NON-THREADED	1	J10
21-30-0011-3	CBL RIBBON SIL 6-PIN 2.54mm x 76.2mm 22 AWG S/T	1	JMP1-A MAIN PCBA to JMP1-B PEDAL PCBA
21-30-0034-1	CBL DIL 16 PIN .100 PITCH 4.0"RIBBON STAKED TO FEMALE	1	H5
24-09-0222	SWITCH SLIDE DPDT 4.5mm SHAFT HORIZ MT	1	SW9
24-12-0002	ENCODER 12-STEP w/25mm SHFT EC12PVF-D-25F-12-12C-16Y TH	2	E2,E3
24-12-0132	ENCODER 12-STEP 25mm W/switch Alpha RE130F-41-25F-12P TH	1	E1
30-00-0607	SCREW 6-32 x 7/16IN w/LK WASH PPZ STL	2	(U9,U14)
30-12-0007	STANDOFF HEX .250 6-32 M-F 0.500-IN AL	1	(U8)
30-12-2210	STANDOFF HEX .250 6-32 F-F .500 LG AL	3	(U8,U9,U14)
30-15-0007	INSULATOR XTAL 4.9mm C-C 11.8x5.6mm MYLAR	1	(Y1)
30-15-0035	SPACER LED 4.5 MM DIA. X 10MM NYLON KANG YANG LEDH-10	3	(D9,D69,D70)
30-15-0401	SPACER LED .155 O.D. x .600 LGPVC BLACK	1	(D83)
35-00-0078-1	PCB MAIN MOTO FLOORPOD P7-1 REV C	1	
45-02-0035	IC PROGRAMMED FLASH v1.00 c/s=0x0DA0 MOTO FloorPOD P7-1	1	U16

50-02-0078-2	PCBA PEDAL MOTO FLOORPOD		
Part Number	**Description**	**Qty. Per**	**Reference Designator(s)**
01-24-1001	RES 1.00K 1% 0805	1	R131
01-24-1002	RES 10.0K 1% 0805	2	R51,R126
01-24-2000	RES 200R 1% 0805	1	R130
01-24-4991	RES 4.99K 1% 0805	1	R129
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	1	C110
09-10-4401	TRANS NPN SMALL-SIGNAL MBT4401SOT-23 SM	1	Q7
09-20-0095	PHOTOTRANSISTOR BLUE LENS LEDTECH LT5K95-AA-0125 SMD	1	Q4
18-27-0083	LED INFRA-RED 880nm CLEAR LENS LT5K83-AA-880	1	D31
35-00-0078-2	PCB PEDAL MOTO FLOOR POD P7-1 REV C	1	

50-02-0078-3	PCBA BANK SWITCHES MOTO FLOOR POD		
Part Number	**Description**	**Qty. Per**	**Reference Designator(s)**
01-24-2000	RES 200R 1% 0805	1	R146
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	2	D84,D85
18-00-0314	LED RED SLX-LX3054ID TH	1	D82
24-31-1105	SWITCH TACT 6mm SQ 4-PIN TH	2	SW1,SW16
30-15-0029-1	SPACER LED .110 H x .170 O.D. PLASTIC (LH-5-4)	1	(D82)
35-00-0078-3	PCB BANK SWITCHES MOTO FLOOR POD P7-1 REV C	1	

50-02-0078-4	PCBA FOOTSWITCHES MOTO FLOOR POD		
Part Number	**Description**	**Qty. Per**	**Reference Designator(s)**
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	5	D29,D30,D36,D37,D38
18-20-0002	LED RED SUPER SML-LX0805SRC-TR 0805 SM	1	D46
18-26-0001	LED TRI-STATE RD/GRN 627/565nmCLR LENS COM-CATH SOT-23 SM	4	D39,D40,D41,D45
21-21-0016	HDR DIL PCB-MT 16-PIN 2x8x.100MALE SHRD VERT MT TH	1	H1
21-30-0011-5	CBL RIBBON SIL 6-PIN 2.54mm x 114.3mm 22 AWG S/T	1	JMP2-A BANK SWITCH PCBA to JMP2-B FOOTSWITCH PCBA
24-31-1105	SWITCH TACT 6mm SQ 4-PIN TH	5	SW10,SW11,SW12,SW13,SW14
35-00-0078-4	PCB FOOTSWITCHES MOTO FLOOR POD P7-1 REV C	1	

Engineering

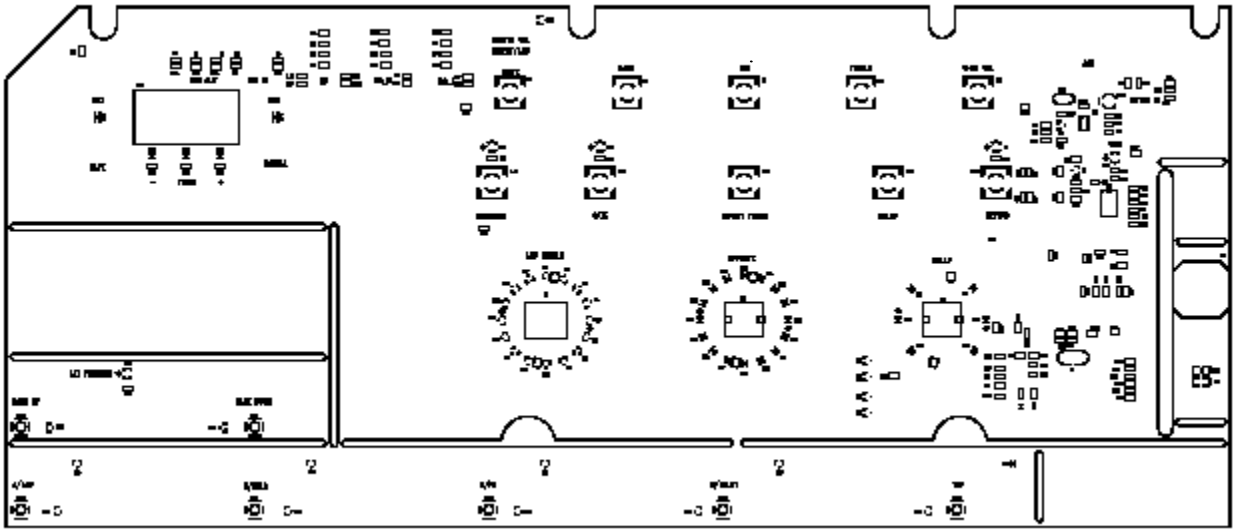
MICRO FLOOR POD P3-1
MAIN PCBA ASSEMBLY INSTRUCTIONS

Rev. A

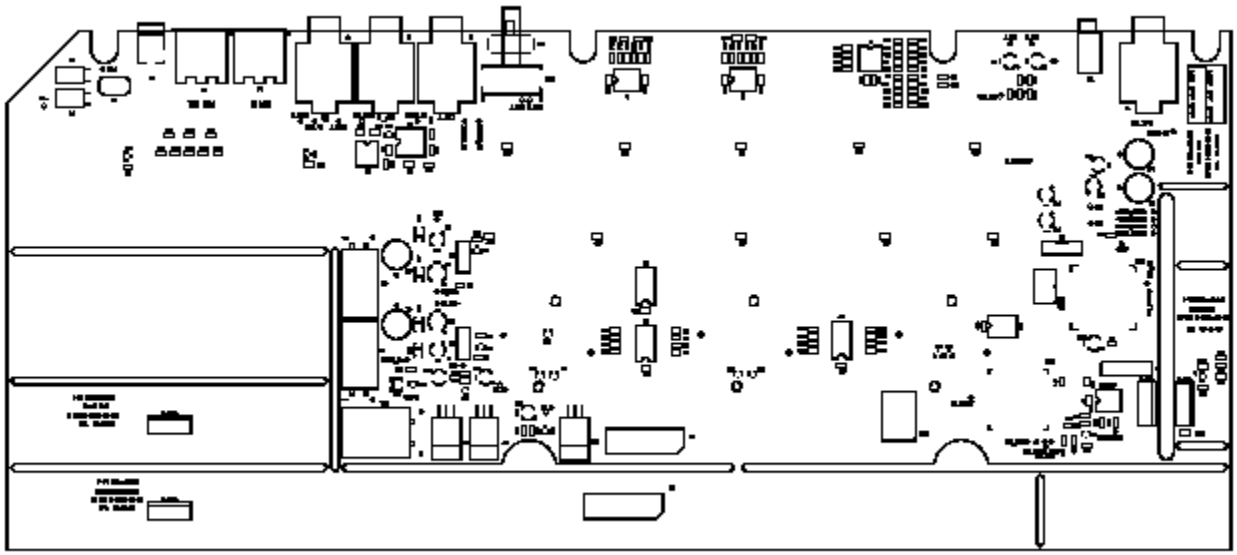
PRODUCT MAIN PCBA: 50-02-0178-1

PEDAL PCBA: 50-02-0178-2
BANK PCBA: 50-02-0178-3
FOOTSWITCH PCBA: 50-02-0178-4

TOP



BOTTOM



1. **<u>"NOT INSTALLED" COMPONENTS:</u>** Do not install the following components:
   J1 & H2

2. **<u>JACKS</u>**: Make sure ALL jacks are mounted flush with the PCB and lined up with silkscreen outline within +/-1 degree of accuracy. **All jacks are mounted on the BOTTOM side of PCB.** J3 (Input), J7 (Direct Out Right), J8 (Direct Out Left) and J9 (Headphone) are P/N 21-00-6616. J10 ("Jam Along" Stereo Input) P/N 21-12-0035. J2 (DC Jack Barrel) is part # 21-00-0014. J4 & J5 (Midi In & Midi Out) P/N 21-04-5075.

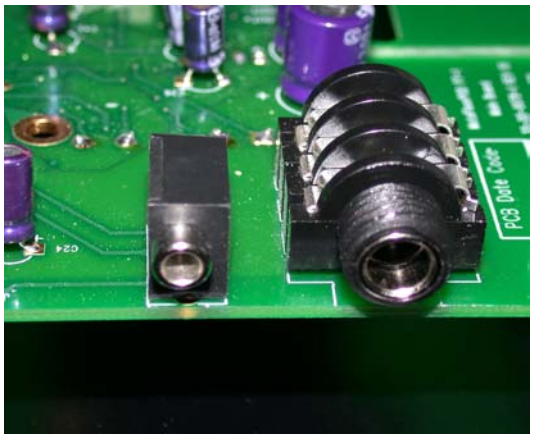


Figure # 1: Make sure J3, J7-J9 (21-00-6616) and J10 (21-00-001) are flush with are PCB before soldering.

3. **<u>CRYSTAL:</u>** Insert the insulator 30-15-0007 between the PCB and Crystal (11-00-1216) before soldering, this will prevent crystal from shorting out. Crystal Y1 is mounted flush with the PCB.

4. **<u>SWITCHES</u>:** Make sure switch 24-09-0222 (SW9) is mounted flush with the PCB and aligned within +/- 1 degree of accuracy on **BOTTOM SIDE** of the PCB.

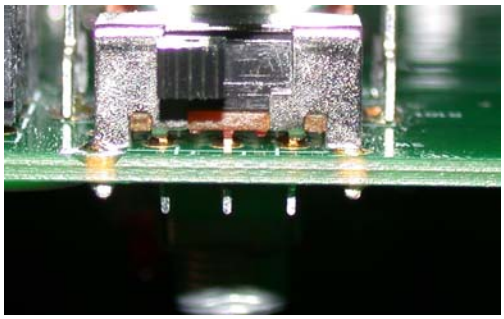


Figure # 2: Make sure SW1 is flush with PCB before soldering.

5. **POTENTIOMETER (R101) :** Potentiometer (part # 01-48-9103) is mounted on the BOTTOM SIDE of the PCB. Insert the pot leads into the through-hole from the bottom side of the board. The pot will sit perpendicular to the board when the pot is mounted flush to +/-1 degree. Ensure that the 6 soldering leads and 2 side pins extend through the board. **MAKE SURE THE POT IS STRAIGHT AND FLUSH BEFORE SOLDERING.**

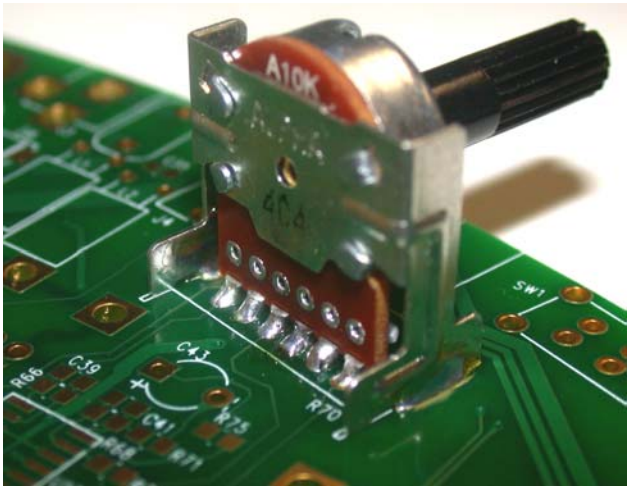


Figure # 3: Make sure pot is flush and straight before soldering to PCB.

6. **POTENTIOMETERS (R3 R7, R25, R41, R57, R61-62, R76, R100 and R148):** REMOVE WASHER AND NUT FROM POTS BEFORE INSTALLING INTO PCB. Potentiometers (part # 01-48-6103) are mounted on the TOP SIDE of the PCB. The pot will sit perpendicular to the board when the pot is mounted flush to +/-1 degree. Ensure that the 3 soldering leads and 2 side pins extend through the board. **MAKE SURE THE POT IS STRAIGHT AND FLUSH BEFORE SOLDERING.**

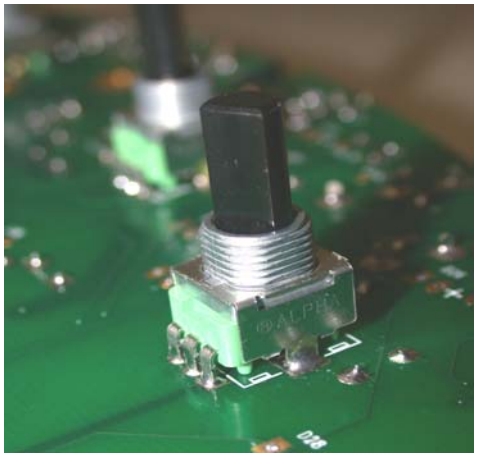


Figure # 4: Make sure pots are flush and straight before soldering.

7. **FERRITE BEADS:** L1 and L2 (P/N 04-04-0001) must be mounted on its side flush against the PCB and lined up with silkscreen outline. Clip leads to .060" on the TOP side of PCB. Make sure to apply a dab of RTV between L1 and L2, see picture below.

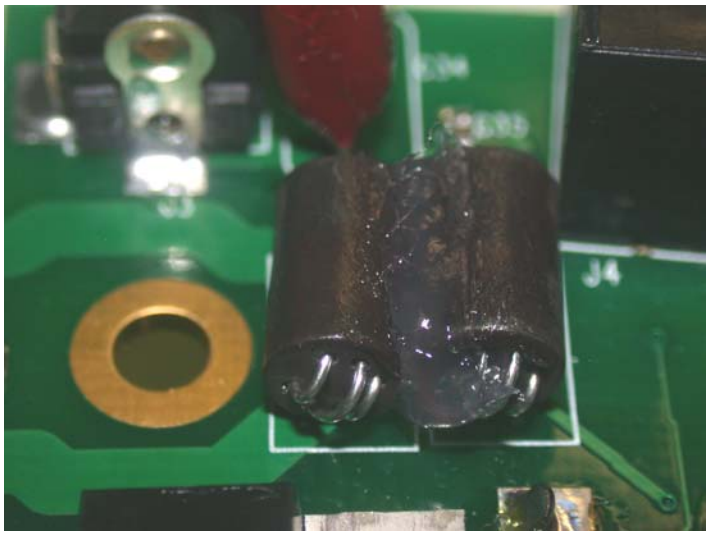


Figure # 5: Make sure to add a dab of RTV.

8. JUMPER: Make sure that the jumpers (P/N 21-30-0011-6) are flush on both sides of the PCB's, pedal pcb (JMP1-B) to Main PCB (JMP1-A). Second jumper (P/N 21-30-0011-5) goes from Bank Switch pcba to Footswitch pcba (JMP2-A to JMP2-B). **ADD RTV** TO BOTH ENDS OF THE JUMPER WIRES. **THIS IS A FRAGILE PART! SENSITIVE TO HEAT, PLEASE HANDLE WITH CARE.**

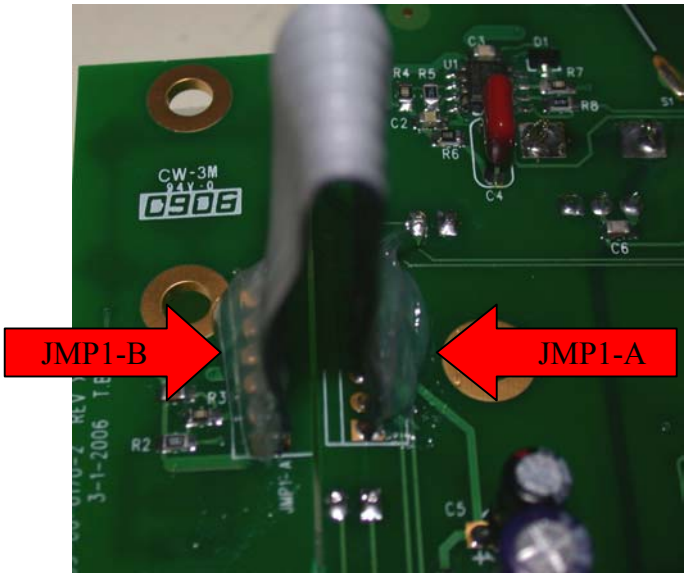


Figure #6: Add a dab of RTV to both ends of
Jumper cable JMP1-A (50-02-0078-1) & JMP1-B (50-02-0078-2).

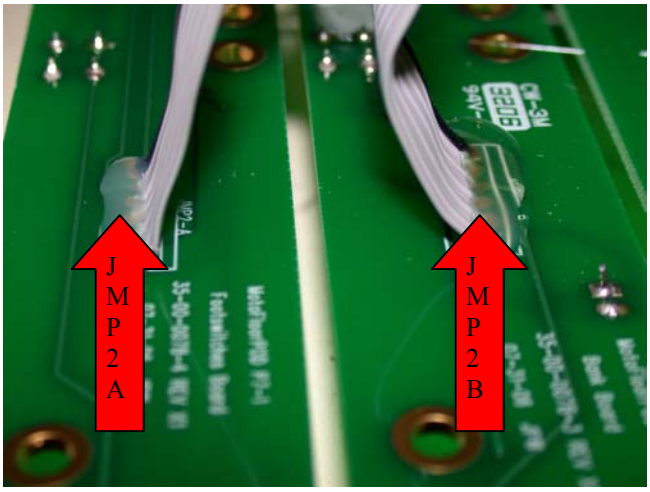


Figure #7: Add a dab of RTV to both ends of Jumper cable (21-30-0011-5) JMP2-A (50-02-0078-4) & JMP2-B (50-02-0078-3).

9. **STAKE CABLE TO HEADER:** Place the Staked part of the Ribbon Cable (P/N 21-30-0034-1) in H5 on the Main PCBA (P/N 35-00-0170-1) making sure that the pins are flush before soldering. The other end of the Cable (Female side) connects to H1 on the Footswitch PCBA (P/N 35-00-0170-4).

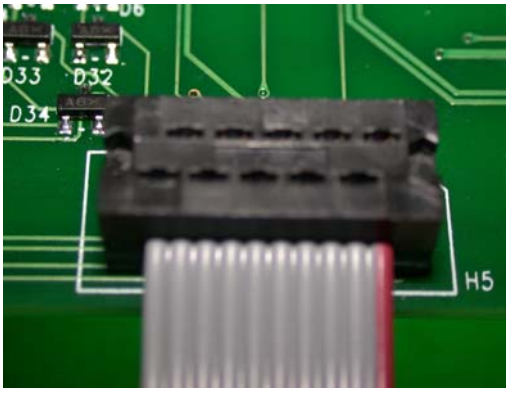


Figure # 8: Staked part of cable (P/N 21-30-0034-1) is soldered to H5 on Main PCB.

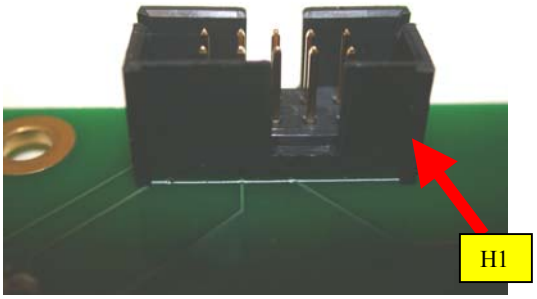


Figure #9: Solder H1 (P/N 21-21-0016) to the Footswitch PCB (P/N 35-00-0173-4).

Figure # 10: Insert Female side of Ribbon Cable (P/N 21-30-0034-1) onto H1 making sure it's secure.

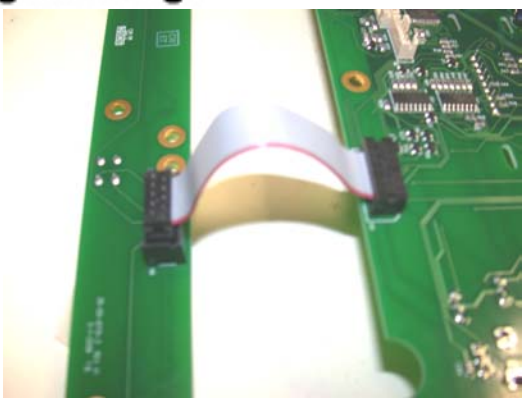


Figure # 11: Picture shows the Ribbon Cable connected to Footswitch PCB and Main PCB.

10. **RADIAL LEAD CAPACITORS**: All radial lead capacitors (C3, C5, C7-8, C11-12, C14, C16, C24, C26, C32, C42, C44-46, C50-51, C76 and C108) are to be mounted perpendicular to the PCB within +/- 1 degree of accuracy. They are to be mounted as low to the PCB without sacrificing the lead to package body integrity. Clip leads to 60 thousands on the **TOP** side.

11. **POLY ESTER AND MET-POLY CAPACITORS:** Poly Ester and Met-Poly capacitors (P/N 03-36-0224 & 03-24-0103), C15 C20 are to be mounted perpendicular to the PCB within +/- 1 degree of accuracy. C15 is mounted on the BOTTOM side of the pcb and C20 is mounted on the TOP side of pcb. They are to be mounted as low to the PCB without sacrificing the lead to package body integrity. Clip leads to 60 thousands.

12. **LARGE CAPACITORS:** C6, C21 & C47, electrolytic capacitors must be mounted on its side flush against the PCB, due to the size. Clip leads to .060" on the TOP side. Make sure to apply a dab of RTV at the bottom of the Capacitor, to secure the capacitor in place.

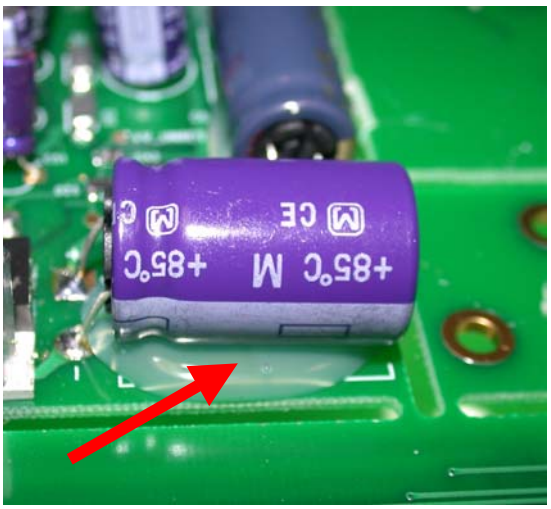


Figure #12a: Make sure to add a dab of RTV to C47.

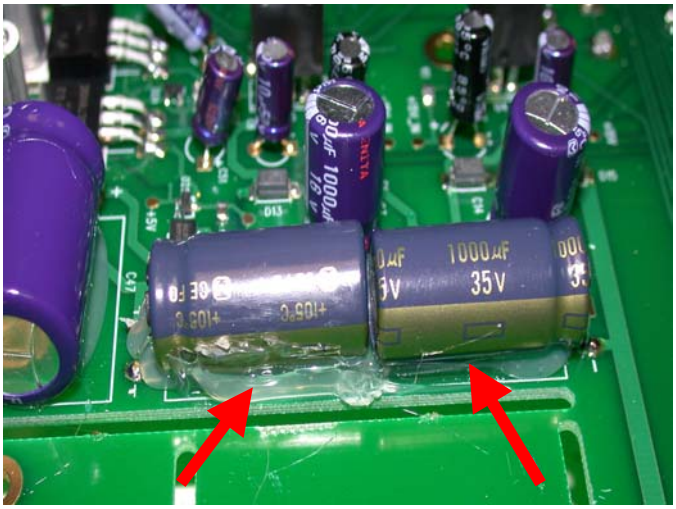


Figure #12b: Make sure to add a dab of RTV to C6 & C21.

13. **REGULATOR ICs:** U9 & U14 are mounted with a screw (30-00-0607) and standoff (30-12-2210) flushed against the **TOP side** of the PCB, tab side down. **The tab's hole must line up with the corresponding hole in the PCB. Make sure to solder the leads after installing the screw and heat sink (standoff).** **DO NOT INSTALL STANDOFFS ON U3 & U4.**

Figure # 13: Install standoff (30-12-2210) to U8-9 & U14 using screw (30-00-0607) to hold in place.

14. **REGULATOR IC:** U8 is mounted with two standoffs 30-12-2210 and 30-12-0007 flushed against both ends of the pcb. **The tab's hole must line up with the corresponding hole in the PCB. Make sure to solder the leads after installing the screw and heat sink (standoffs).**

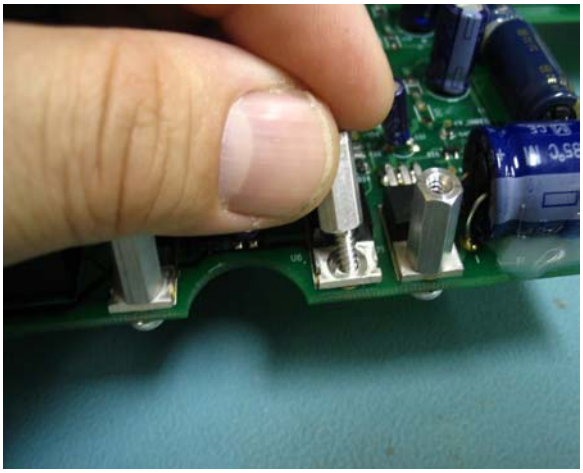


Figure #14a: Install standoff (30-12-0007) on the bottom side of the pcb.

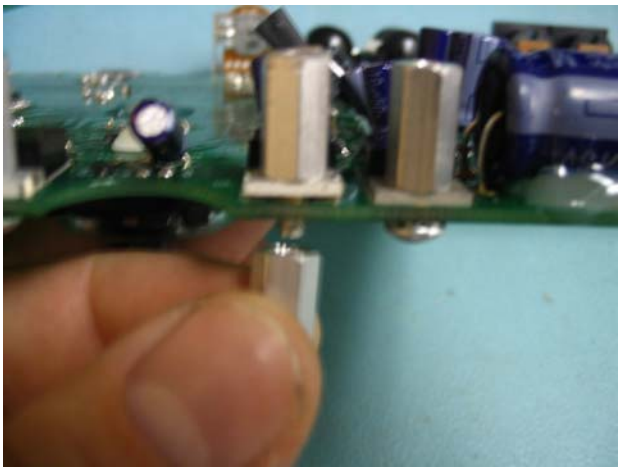


Figure #14b: Mate standoff (30-12-2210) with standoff (30-12-0007).

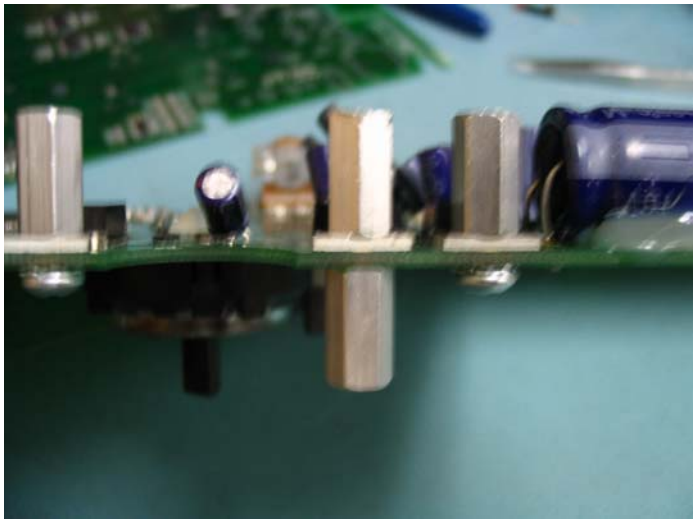
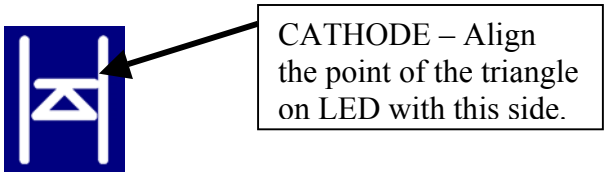


Figure #14c: Photo shows U8 with two heat sinks mounted. U14 & U9 should only have one standoff.

15. **SMT LED:** SMT LED's, have a small green triangle printed on the bottom. The point of the triangle denotes the cathode. Align the point of the triangle with the side of the diode that has a line in it on the silkscreen. **THIS IS A FRAGILE PART! SENSITIVE TO HEAT AND HUMIDITY. PLEASE HANDLE ACCORDING TO LED MANUFACTURER'S GUIDELINES.**



16. **THRU-HOLE LEDs WITH SPACERS**: Install LED Spacers on LED's before soldering to PCB. LED Spacers are used on all thru-hole LEDs. Solder LEDs on the BOTTOM SIDE of the PCB. Use P/N 30-15-0035 on D9, D69 &D70. Use P/N 30-15-0401 on D83 and P/N 30-15-0029-1 on D82.

17. **3 Digit Segment Display:** Place the segment display (P/N18-10-0002, D68) FLUSH against the PCB before soldering the pins on the opposite side of the PCB. MAKE SURE THE THREE DECIMAL POINTS ON THE SEGMENT DISPAY ARE FACING TOWARDS D71-73 AS INDICATED ON PHOTO BELOW AND DISPLAY IS ALIGNED WITH SILKSCREEN OUTLINE BEFORE SOLDERING. ALSO, VERIFY THAT THE SEGMENT DISPLAY IS PARALLEL WITH THE SILKSCREEN OUTLINE (Bottom side of segment display).

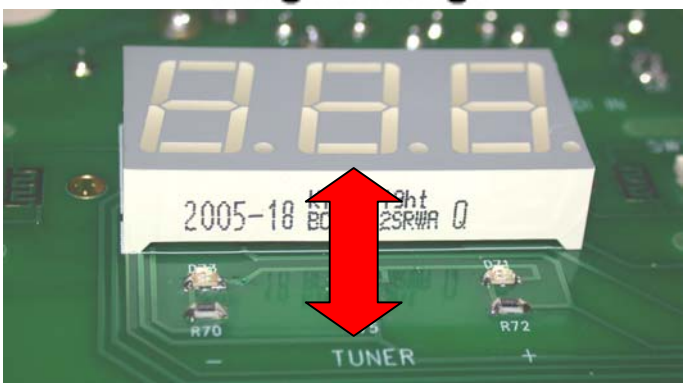
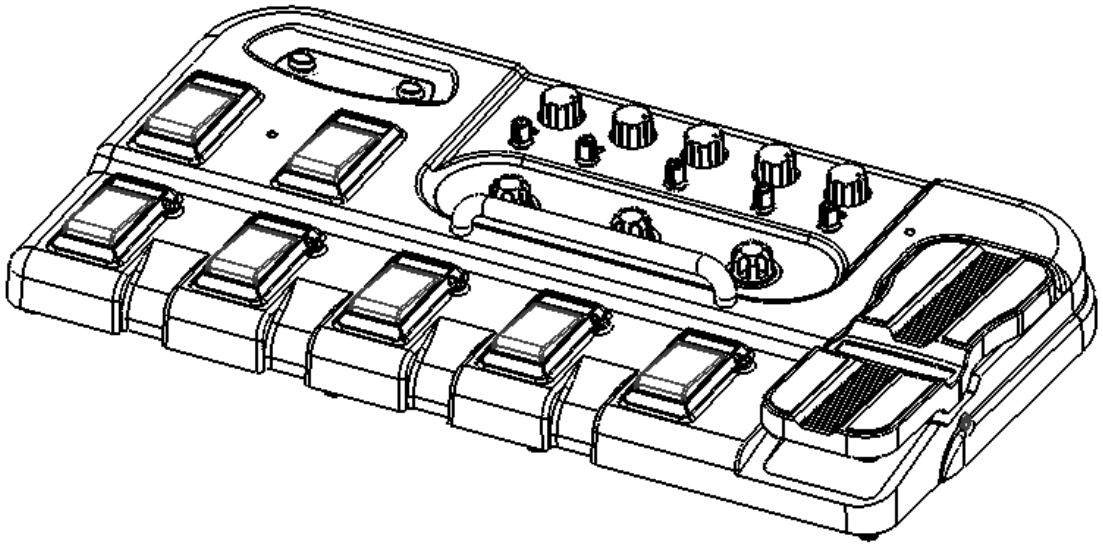


Figure # 15: Make sure the three decimal points are facing Tuner on pcb silkscreen and the segment display is straight before soldering.

MAIN PCBA ASSEMBLY INSTRUCTION REVISION CHANGE HISTORY

REVISION	NOTES	DATE	RELEASED BY
X2	- Initial Release	09/12/06	Jorge Aguila
A	- Production Release	10/12/06	Jorge Aguila



Forward and Notes

The information in this booklet applies to the P7-1 Complete Unit. It is suggested that the steps for assembly follow the order presented in these instructions.

These instructions deal with the assembling of the major subassemblies, the final product, and quality/inspection considerations. 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 inches.
- Drawings are not to scale.
- Torque value tolerance +/- .5 in.-lbs. 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
A	Initial release. See ECO 0628406.
B	ECO 0634704. Step 1 – part number revised. Step 22 – image revised. Step 24 – part number revised. Step 33 – torque value revised.
C	ECO 0700303. Step 24 – removed **30-27-0185** PEDAL BUSHING; added **30-03-0034** NYLON WASHER. Step 25 – removed **30-03-0003** WASHER; delayed installation of **30-06-0030** SQUARE NUT ¼-20 to the next step. Added a step after Step 25 to show the installation of **21-34-0083** GROUNDING CABLE; renumbered all proceeding steps; specified pedal position while tightening **30-00-0112** SCREW ¼-20 x 2.75”. Step 26 – revised to show installation of **21-34-0083** GROUNDING CABLE.
D	ECO 0701202. Step 9 – Included instruction and photos for heat staking the LIGHT PIPE RINGS to the MAIN PCBA.

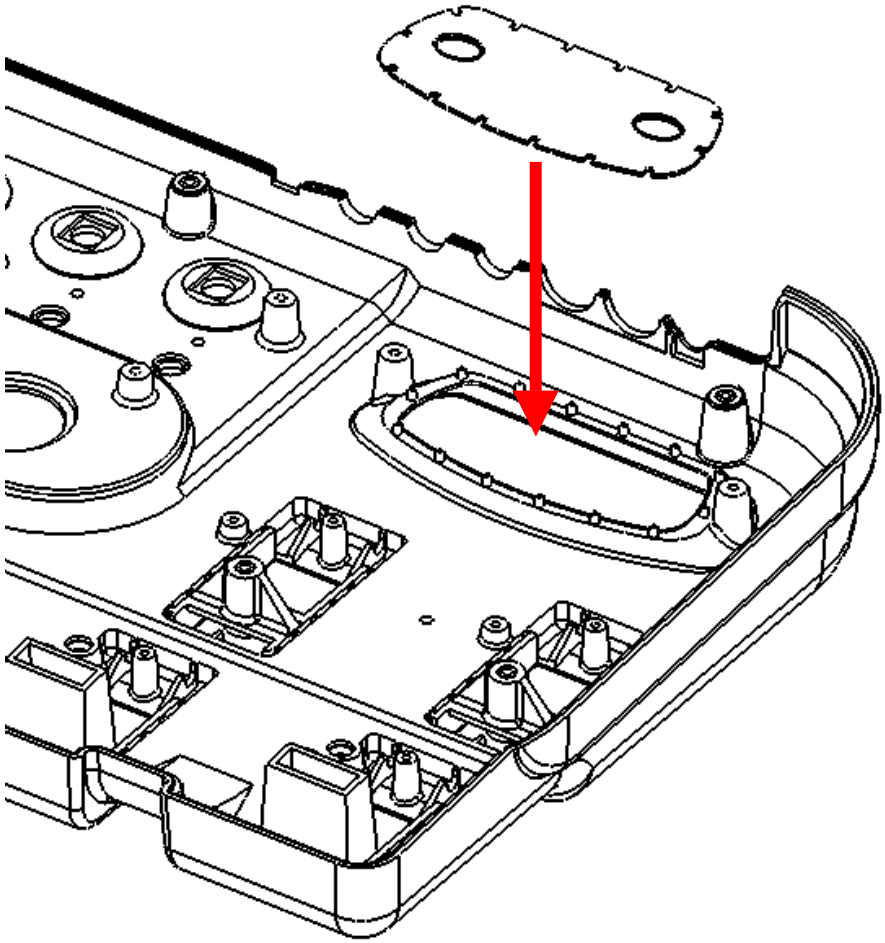
STEP 1

P/N required:
1 each **30-27-0211** CHASSIS TOP
1 each **30-27-0212** DISPLAY BEZEL

Remove the clear plastic film from both sides of the DISPLAY BEZEL.

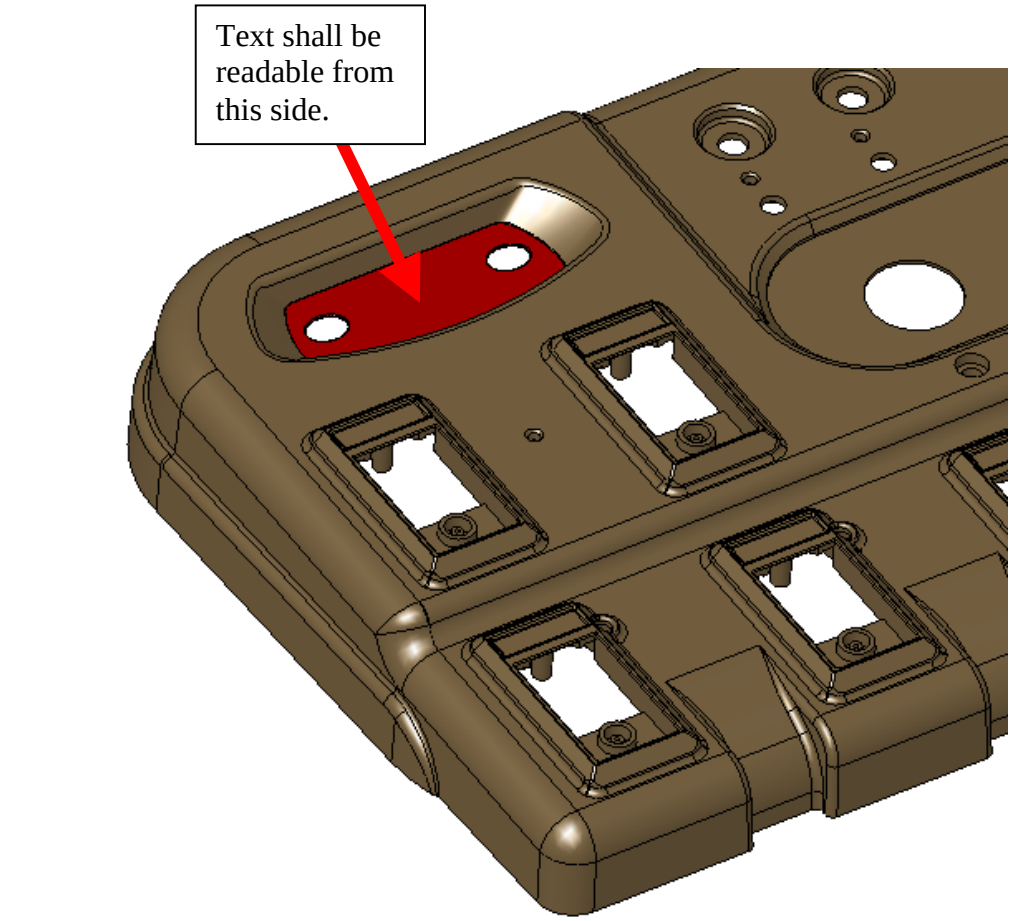
Place the DISPLAY BEZEL onto the flat area around the large opening in the CHASSIS TOP. The text shall be readable from the top.

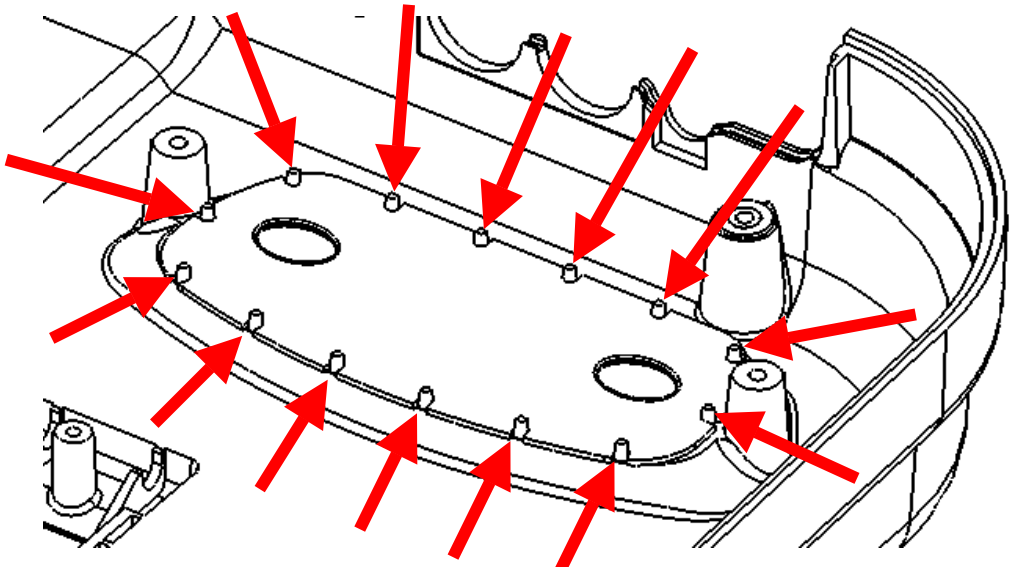
Secure the DISPLAY BEZEL to the CHASSIS TOP by heat staking the small posts.



(Step 1 is continued on the next page.)

STEP 1 (continued)





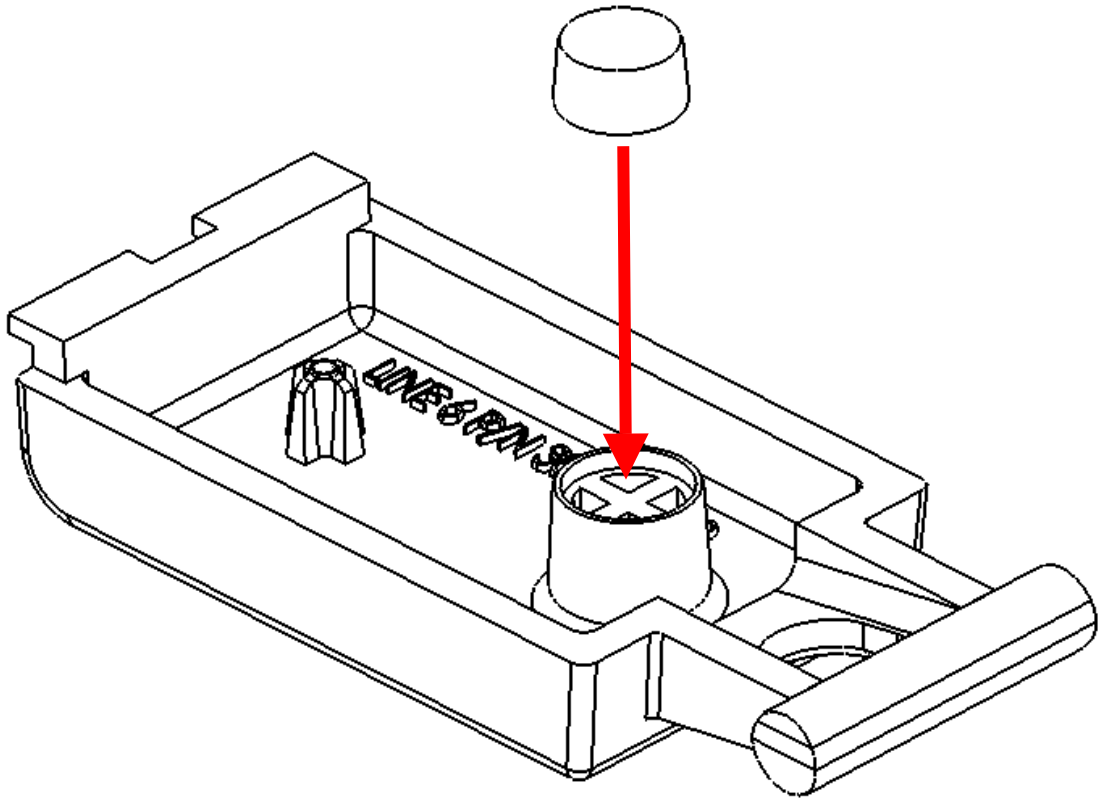
Heat stake these posts to secure the DISPLAY BEZEL.

STEP 2

P/N required:
7 each **30-27-0100** ACTUATOR FOOTSWITCH
7 each **30-75-0022** RUBBER PAD WITH ADHESIVE

Remove the protective backing from a RUBBER PAD WITH ADHESIVE, and install a RUBBER PAD WITH ADHESIVE on the round flat area on the ACTUATOR FOOTSWITCH as shown.

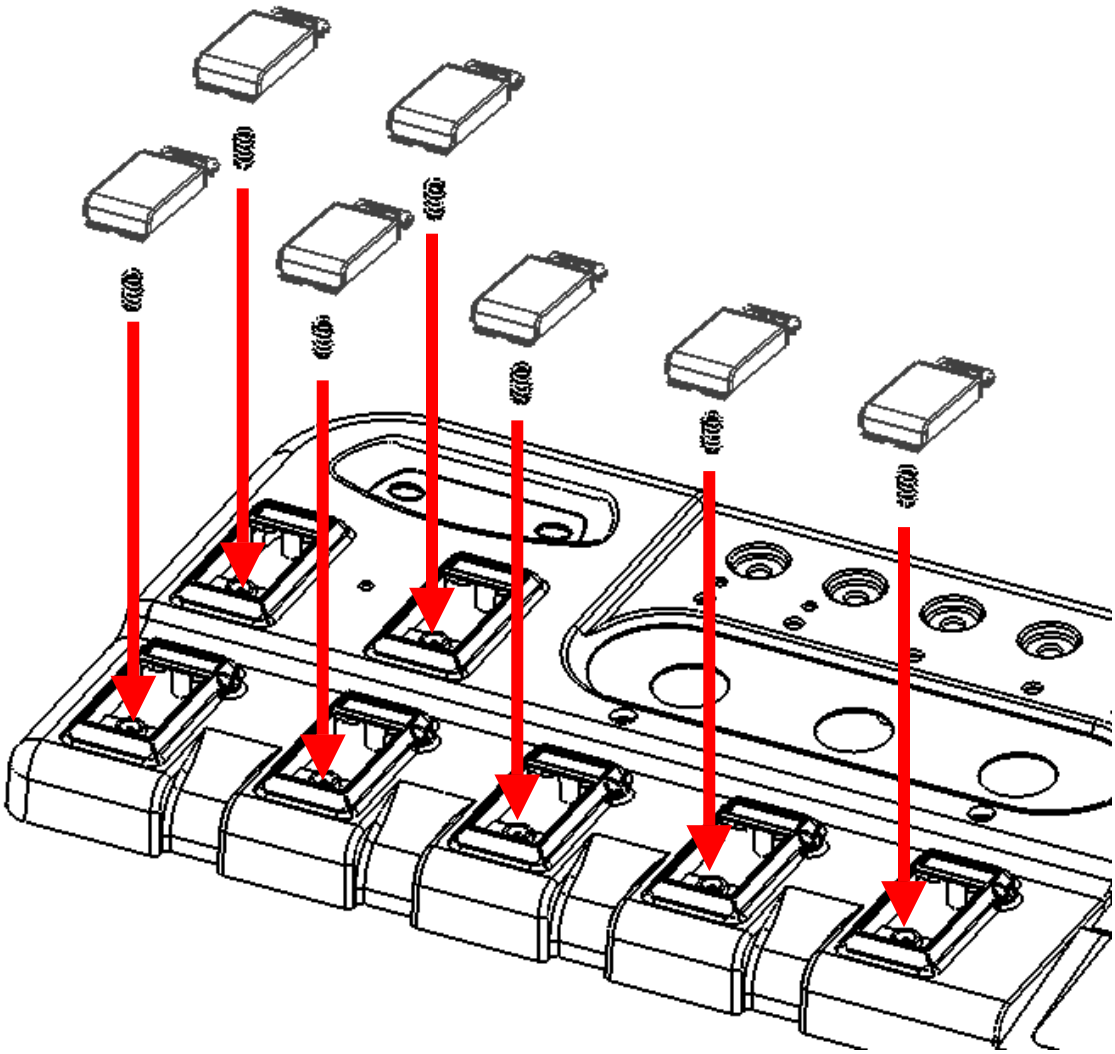
Repeat this step to make seven subassemblies.



STEP 3

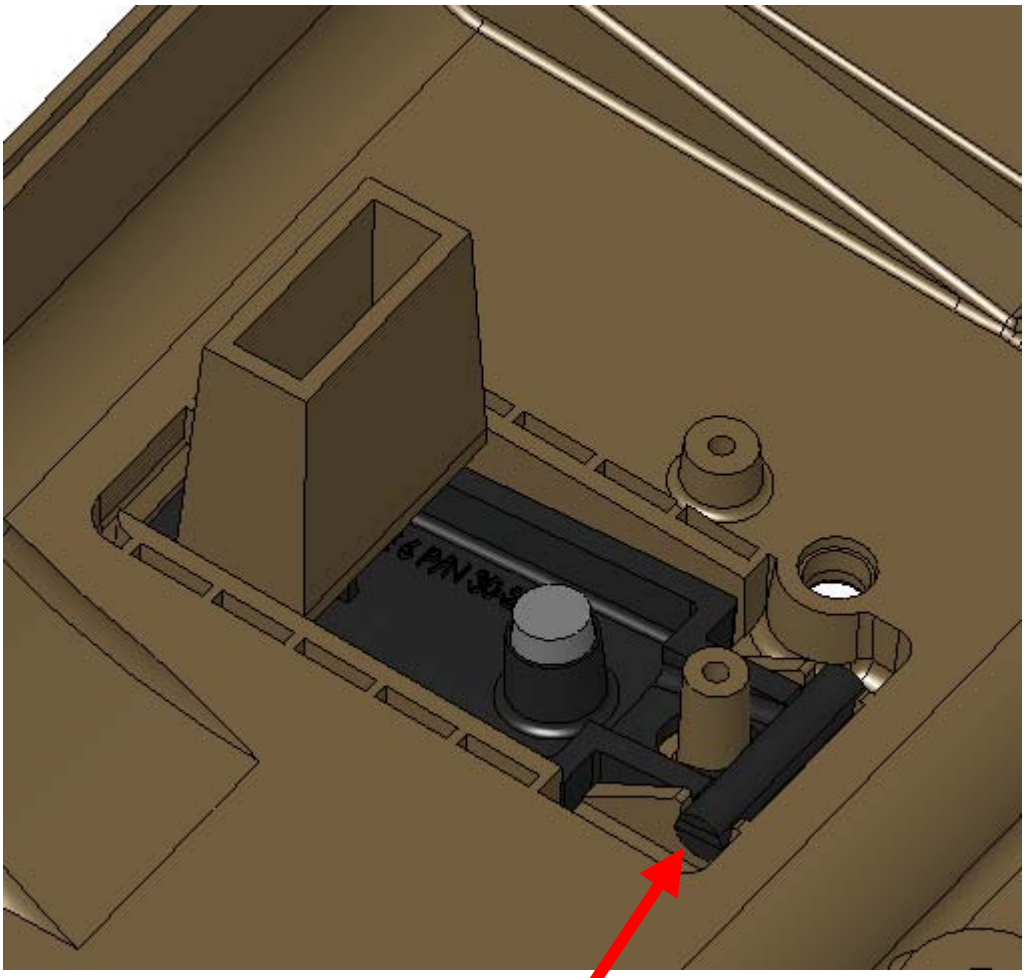
P/N required:
7 each **30-51-0186** COMPRESSION SPRING

Install three PEDAL ACTUATORS and COMPRESSION SPRINGS in the CHASSIS TOP. Be sure that the PEDAL ACTUATOR is fully seated as shown.



(Step 3 is continued on the next page.)

STEP 3 (continued)

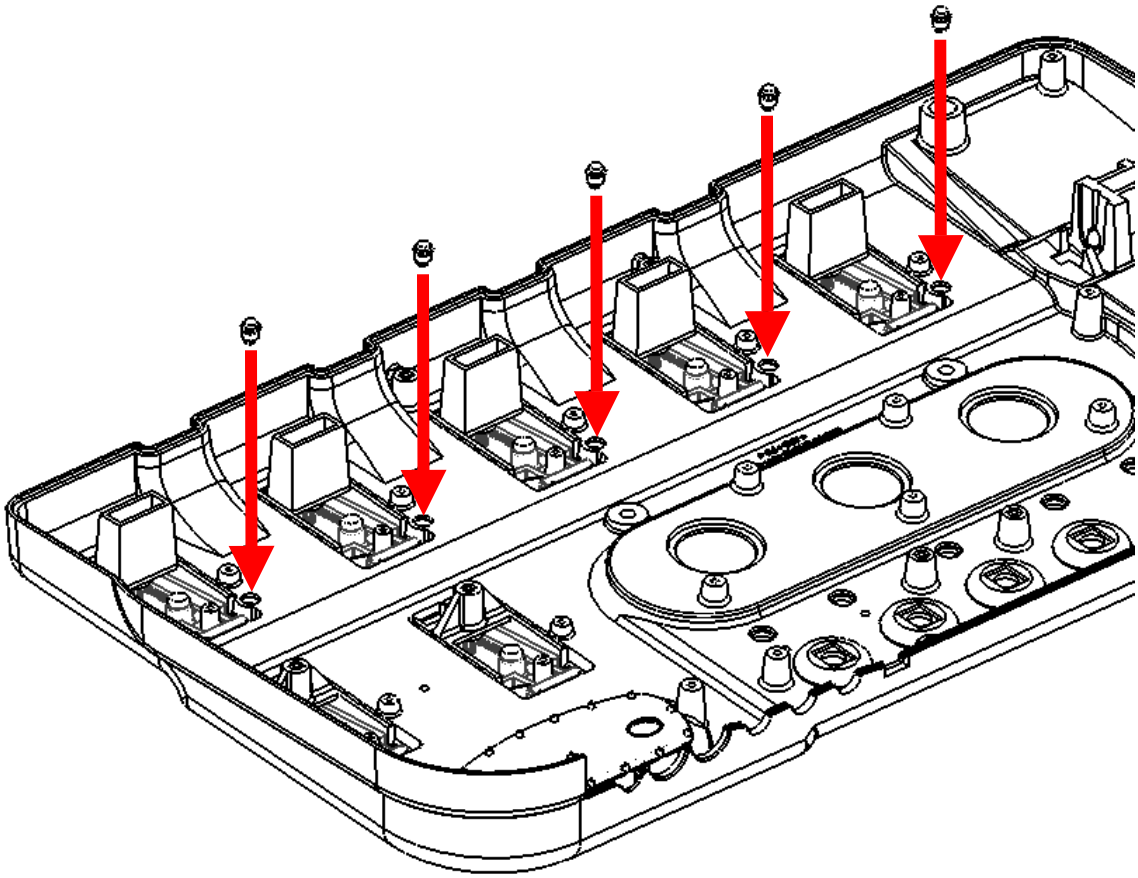


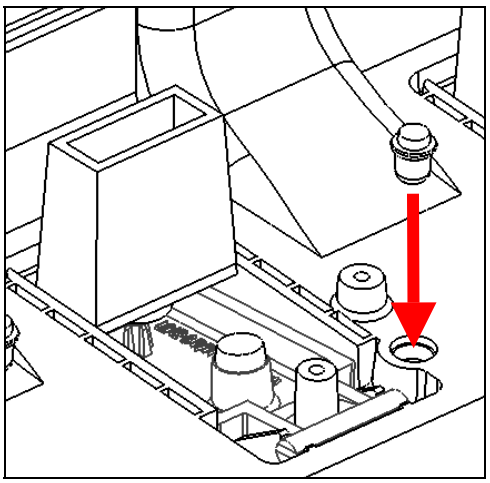
Be sure that the PEDAL ACTUATOR is fully seated.

STEP 4

P/N required:
5 each **30-27-0102** LIGHT PIPE

Install five LIGHT PIPES in the holes in the CHASSIS TOP next to the FOOTSWITCH ACTUATORS.



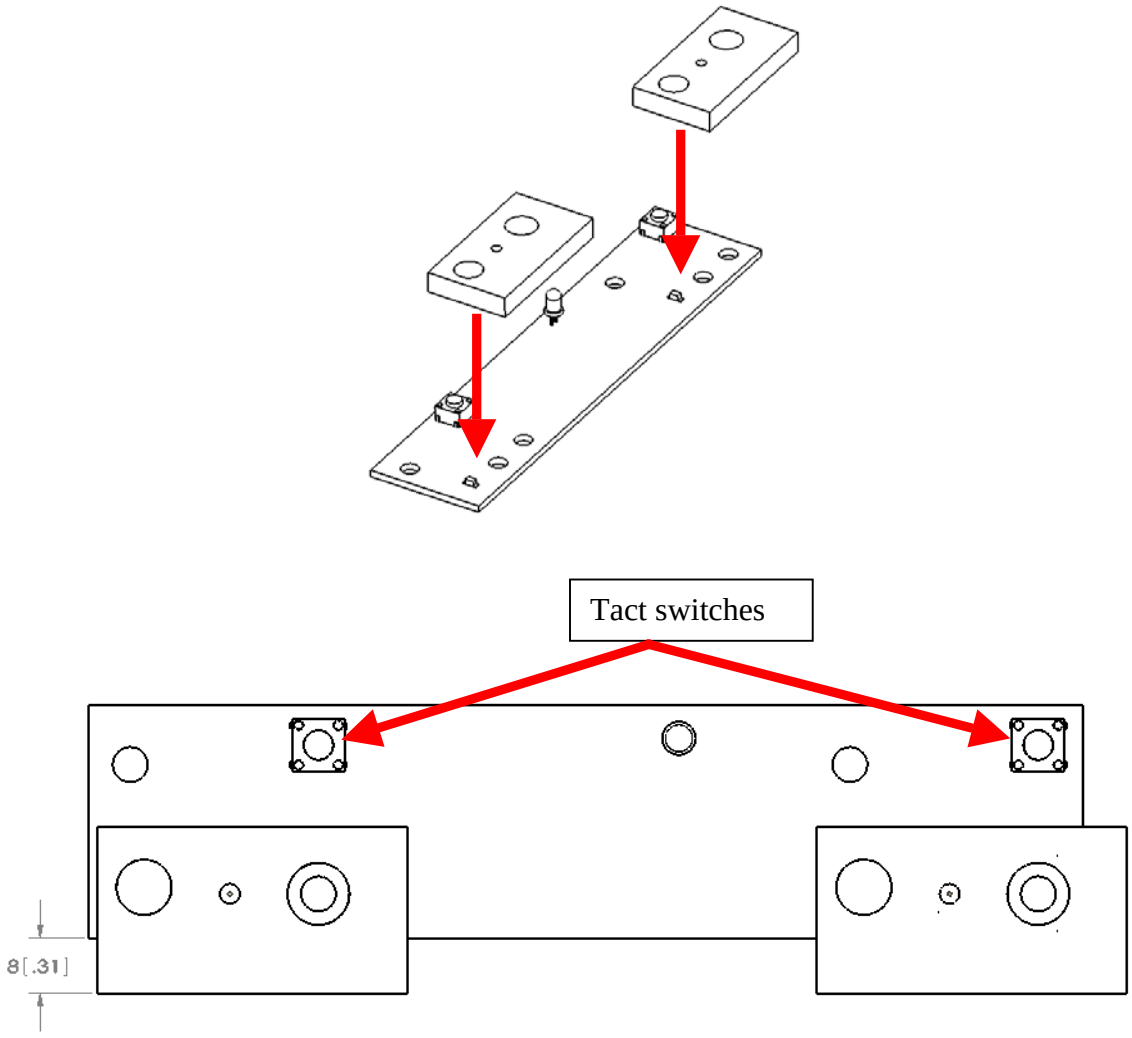


STEP 5

P/N required:
1 each **50-02-0078-3** BANK SWITCHES PCBA
2 each **30-27-0183** FOOTSWITCH RETAINER
2 each **30-00-4250** SCREW #4 x ¼”

Secure two FOOTSWITCH RETAINERS to the BANK SWITCHES PCBA with one SCREW #4 x ¼” each. Be sure to locate the FOOTSWITCH RETAINERS correctly.

Tighten the SCREWS #4 x ¼” to 3 – 4 inch-pounds or until they are fully seated on the PCB.



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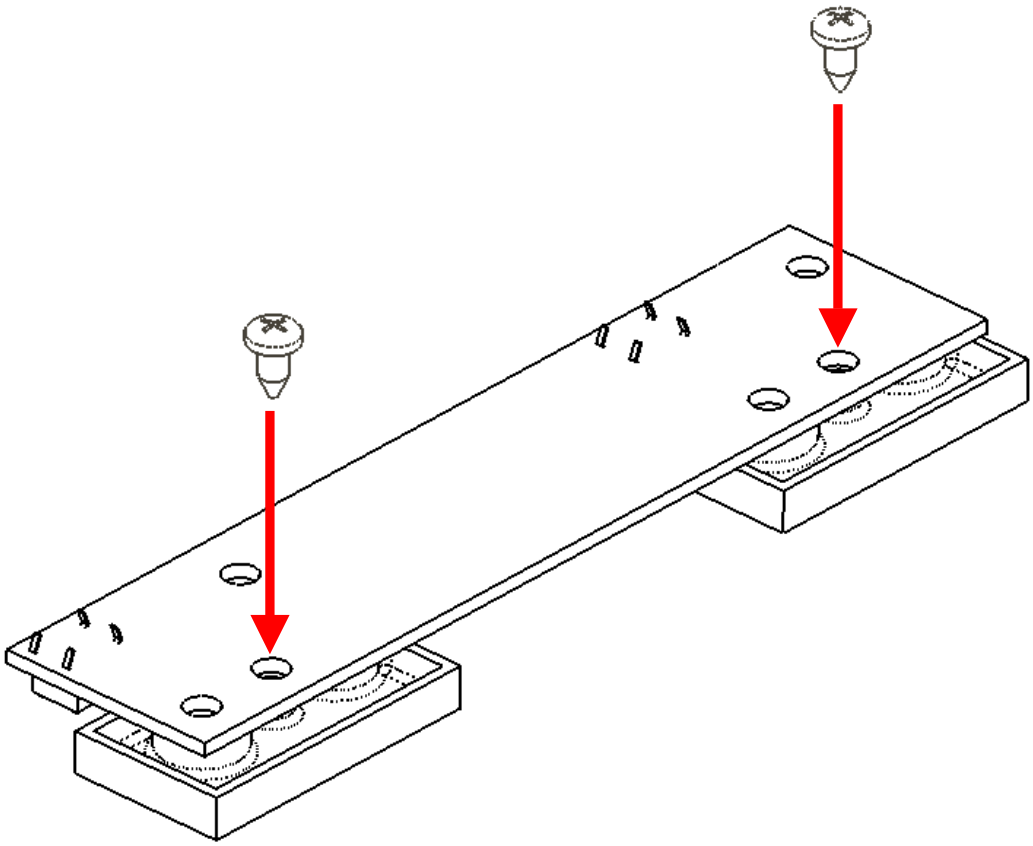
STEP 5 (continued)

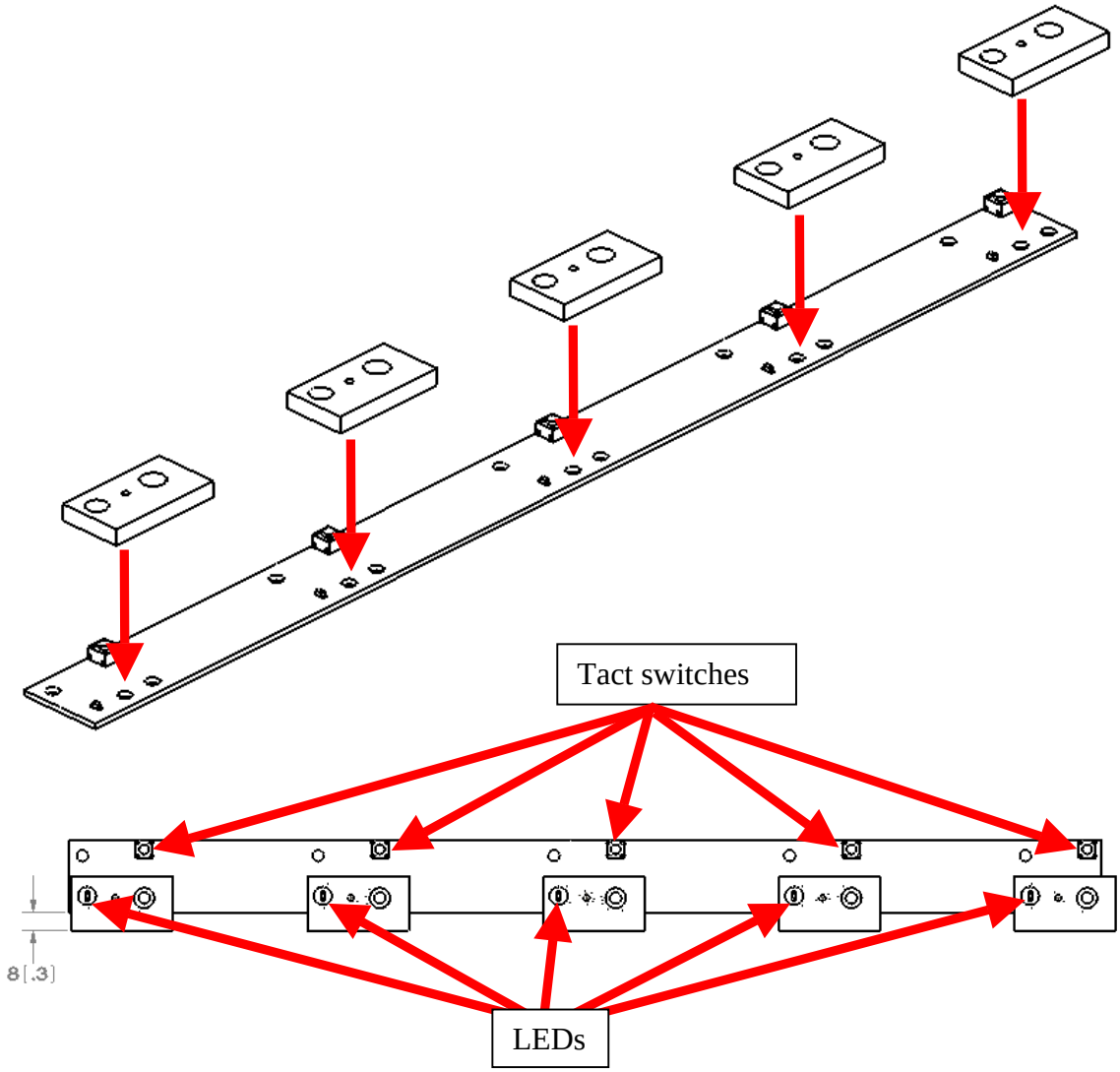


STEP 6

P/N required:
1 each **50-02-0078-4** FOOTSWITCH PCBA
5 each **30-27-0183** FOOTSWITCH RETAINER
5 each **30-00-4250** SCREW #4 x ¼”

Secure five FOOTSWITCH RETAINERS to the FOOTSWITCH PCBA with one SCREW #4 x ¼” each. Be sure to locate the FOOTSWITCH RETAINERS correctly.

Tighten the SCREWS #4 x ¼” to 3 – 4 inch-pounds or until they are fully seated on the PCB.



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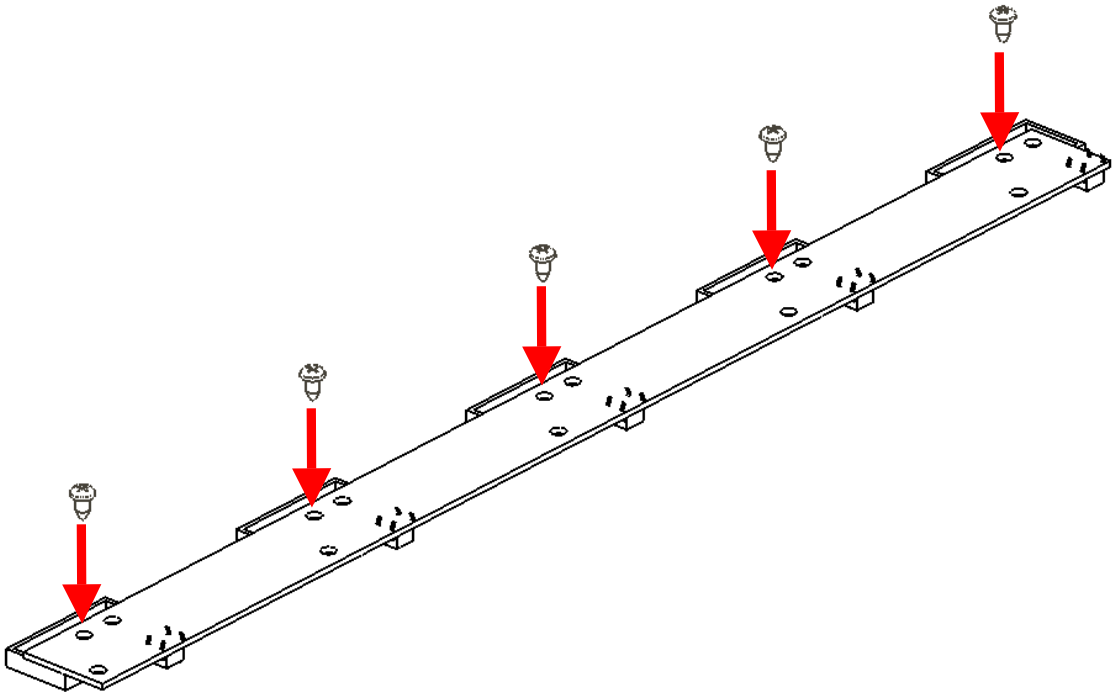
STEP 6 (continued)

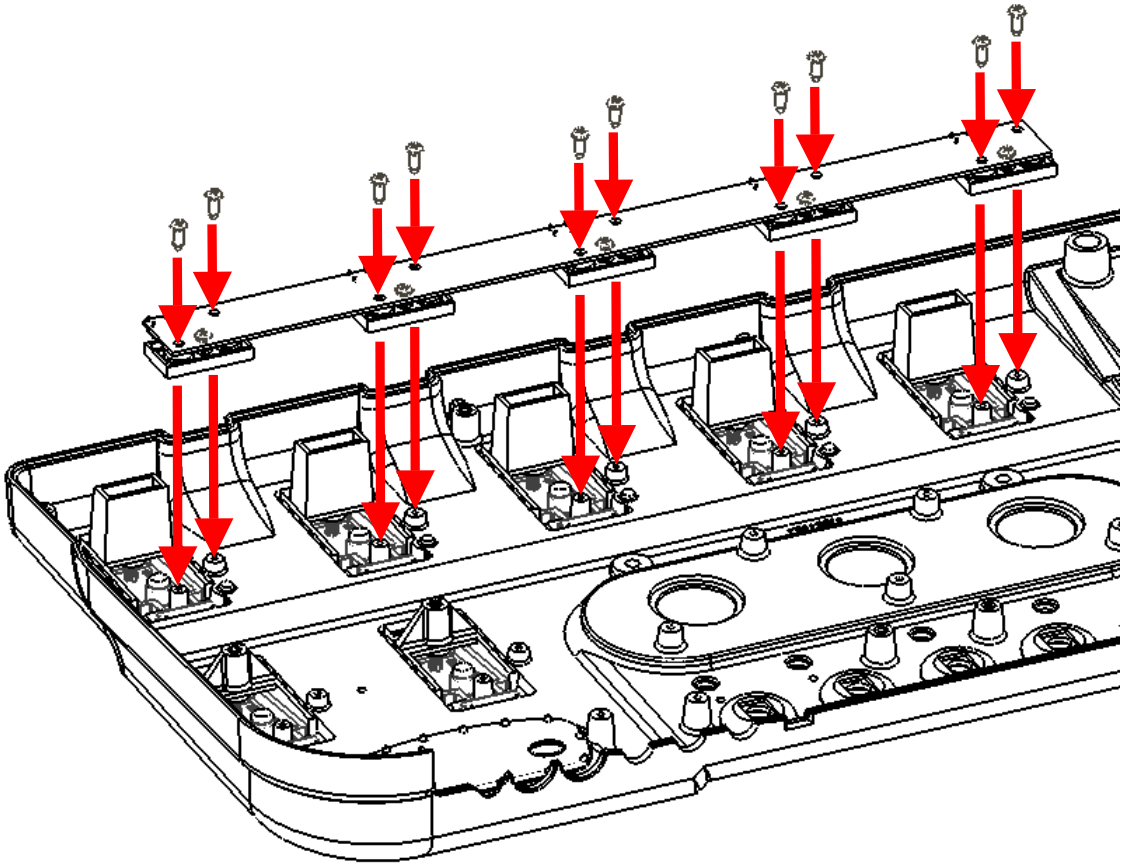


STEP 7

P/N required:
10 each **30-00-4250** SCREW #4 x ¼”
1 each **50-02-0078-4** FOOTSWITCH PCBA

Secure the FOOTSWITCH PCBA to the CHASSIS TOP with ten SCREWS #4 x ¼”.

Tighten the SCREWS #4 x ¼” to 3 – 4 inch-pounds or until they are fully seated on the PCB.

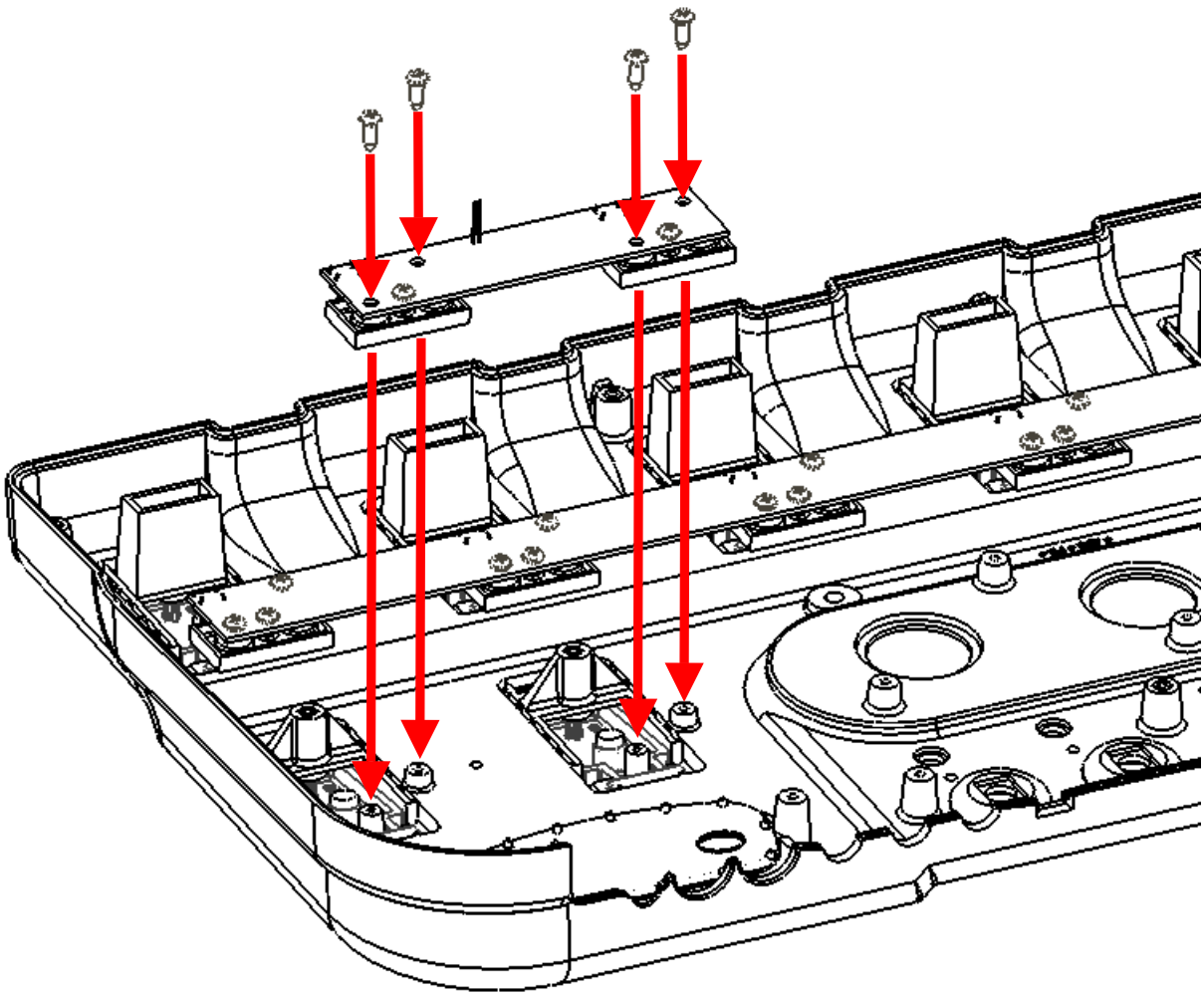


STEP 8

P/N required:
4 each **30-00-4250** SCREW #4 x ¼”
1 each **50-02-0078-3** BANK SWITCHES PCBA

Secure the BANK SWITCHES PCBA to the CHASSIS TOP with four SCREWS #4 x ¼”.

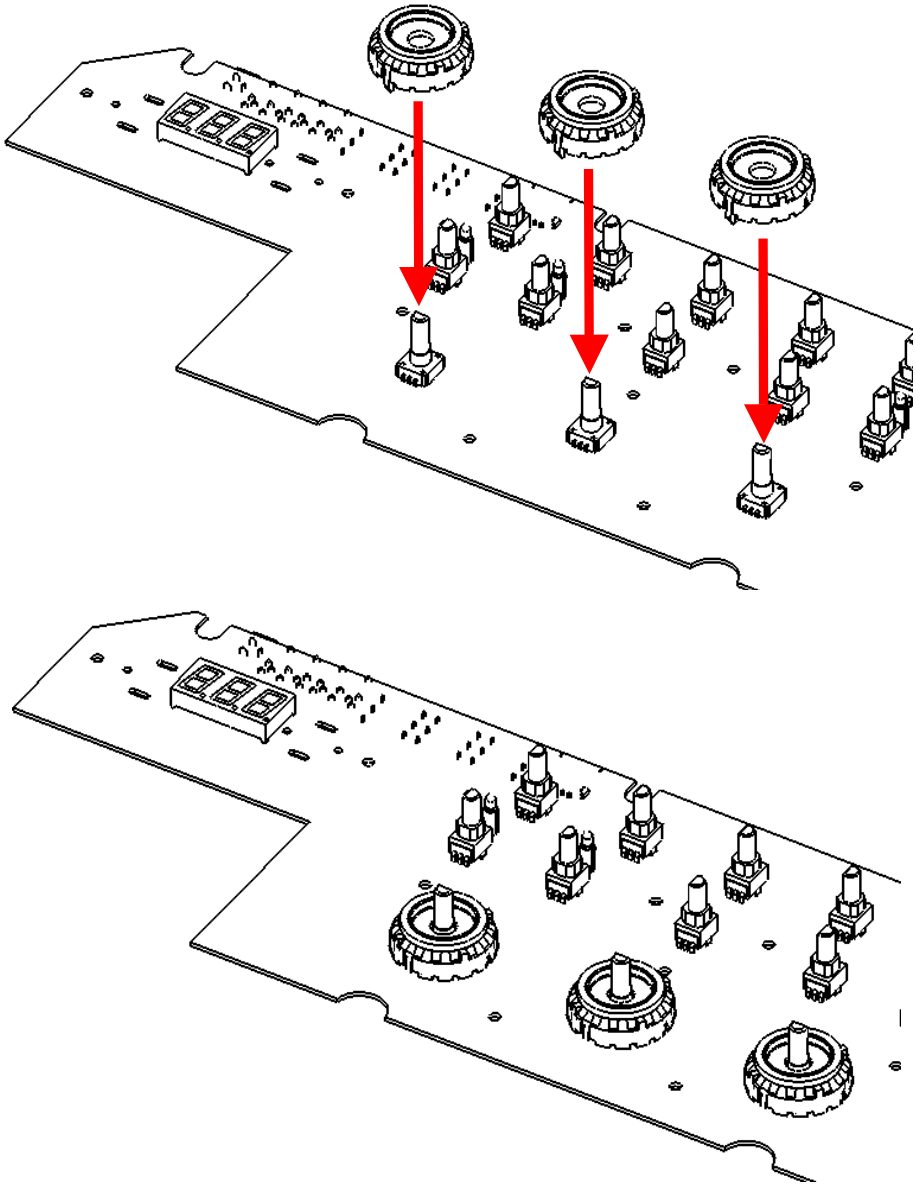
Tighten the SCREWS #4 x ¼” to 3 – 4 inch-pounds or until they are fully seated on the PCB.



STEP 9

P/N required:
3 each **30-27-0049** LIGHT PIPE RING

Install 3 LIGHT PIPE RINGS over the three encoders on the top of the MAIN PCBA as shown. The tabs on the bottoms of the LIGHT PIPE RINGS shall fit into the cutouts around the three encoders on the top of the MAIN PCBA . Heat stake the two tabs of each LIGHT PIPE RING to the MAIN PCBA as shown.



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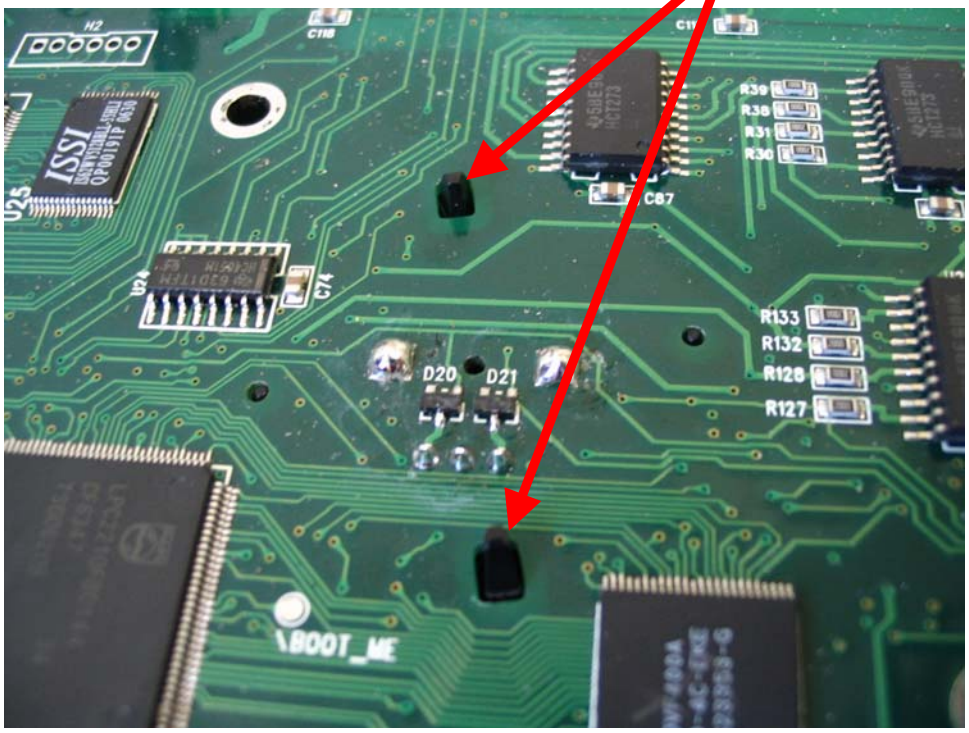
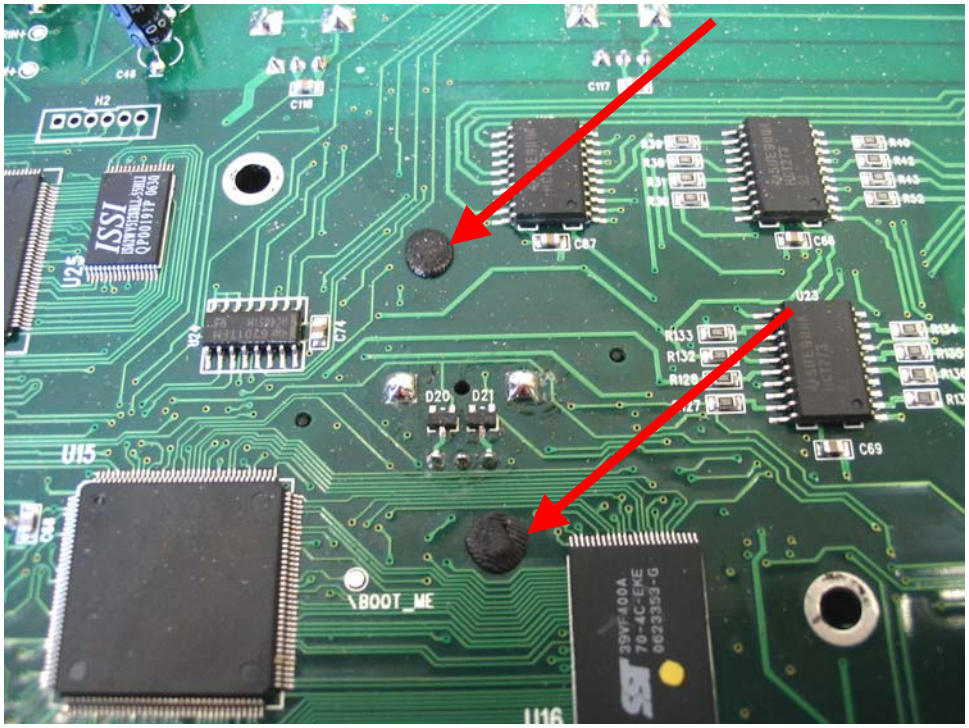
STEP 9 (continued)

Heat stake these posts to the MAIN PCBA for each LIGHT PIPE RING

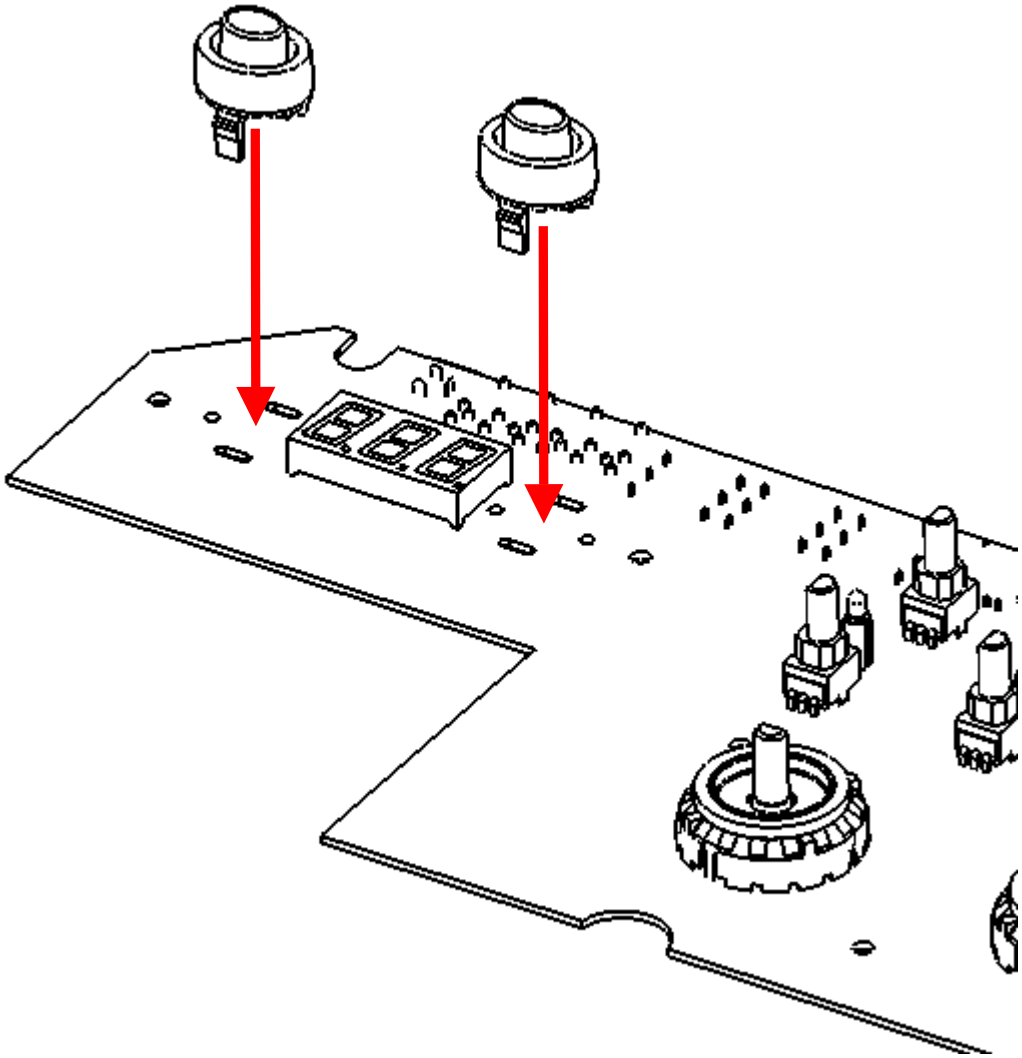




STEP 10

P/N required:
2 each **30-75-0040** SINGLE RUBBER BUTTON
1 each **50-02-0078-1** MAIN PCBA

Install two SINGLE RUBBER BUTTONS onto the top of the MAIN PCBA. Pull the tabs through the PCBA until each SINGLE RUBBER BUTTON is fully seated. Be sure that the two small pins on each SINGLE RUBBER BUTTON are located in the holes in the PCBA.



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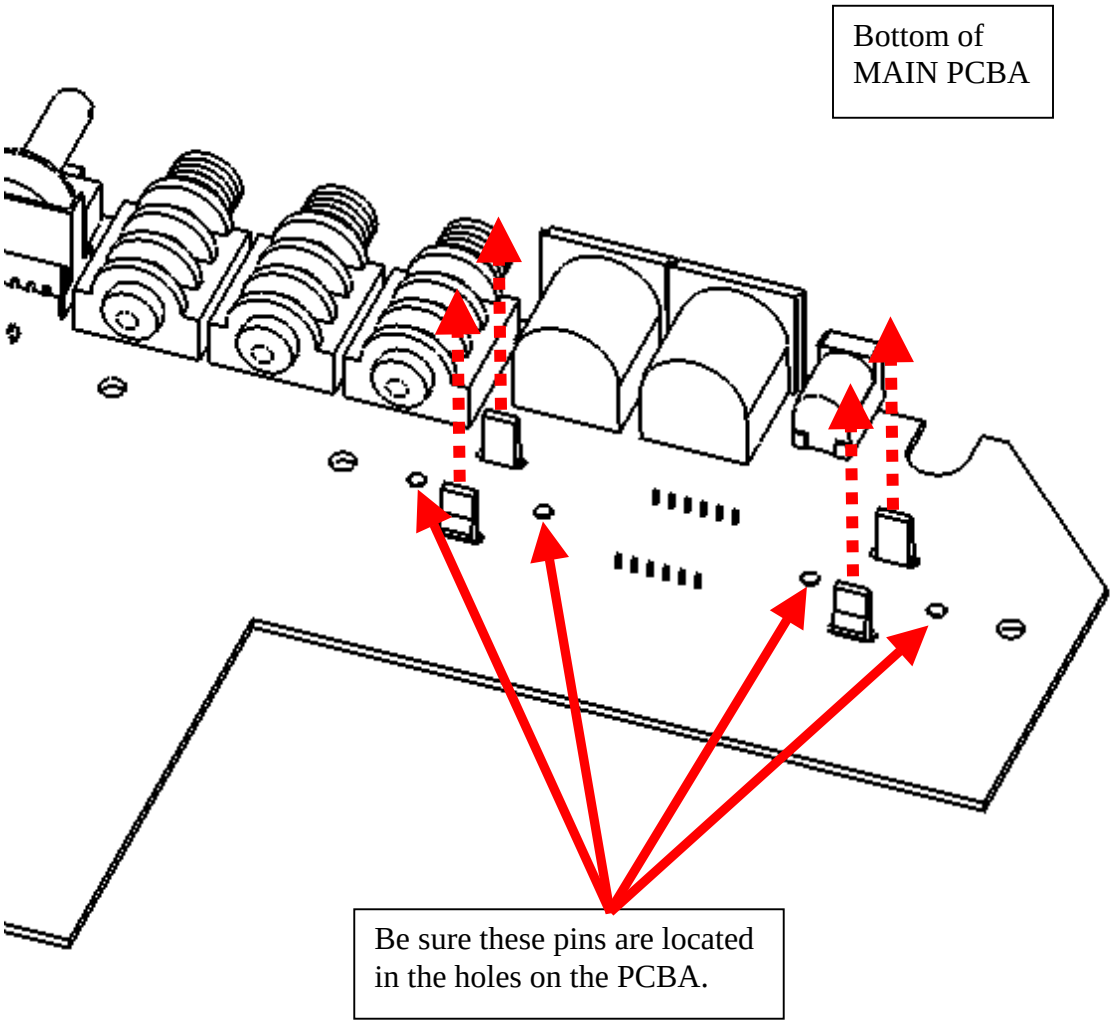
STEP 10 (continued)

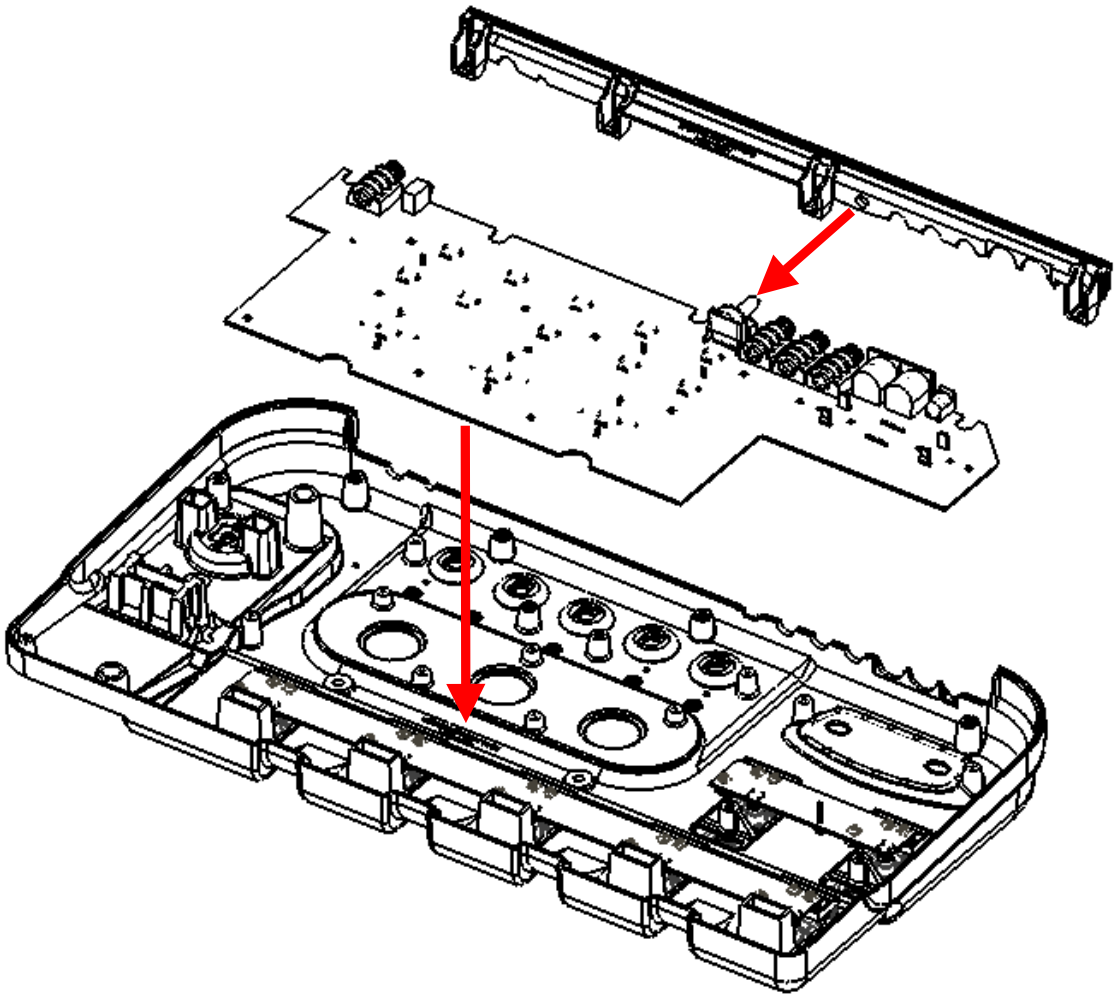


STEP 11

P/N required:
1 each **30-27-0210** CHASSIS BACK
1 each **50-02-0078-1** MAIN PCBA

Place the CHASSIS BACK onto the MAIN PCBA such that the horizontal potentiometer shaft protrudes through the hole as shown. Place the CHASSIS BACK and MAIN PCBA onto the CHASSIS TOP.

Be sure that the CHASSIS BACK and CHASSIS TOP mate together all around.



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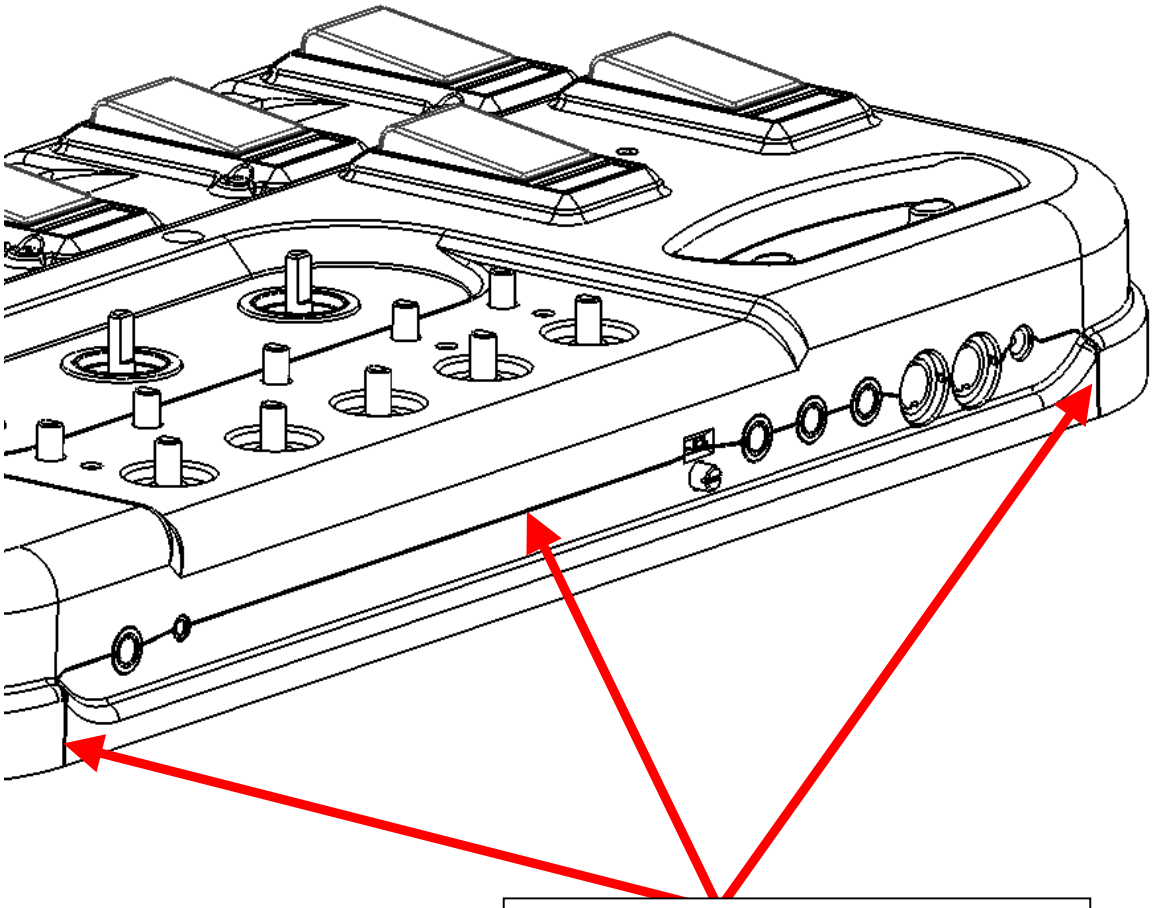
STEP 11 (continued)



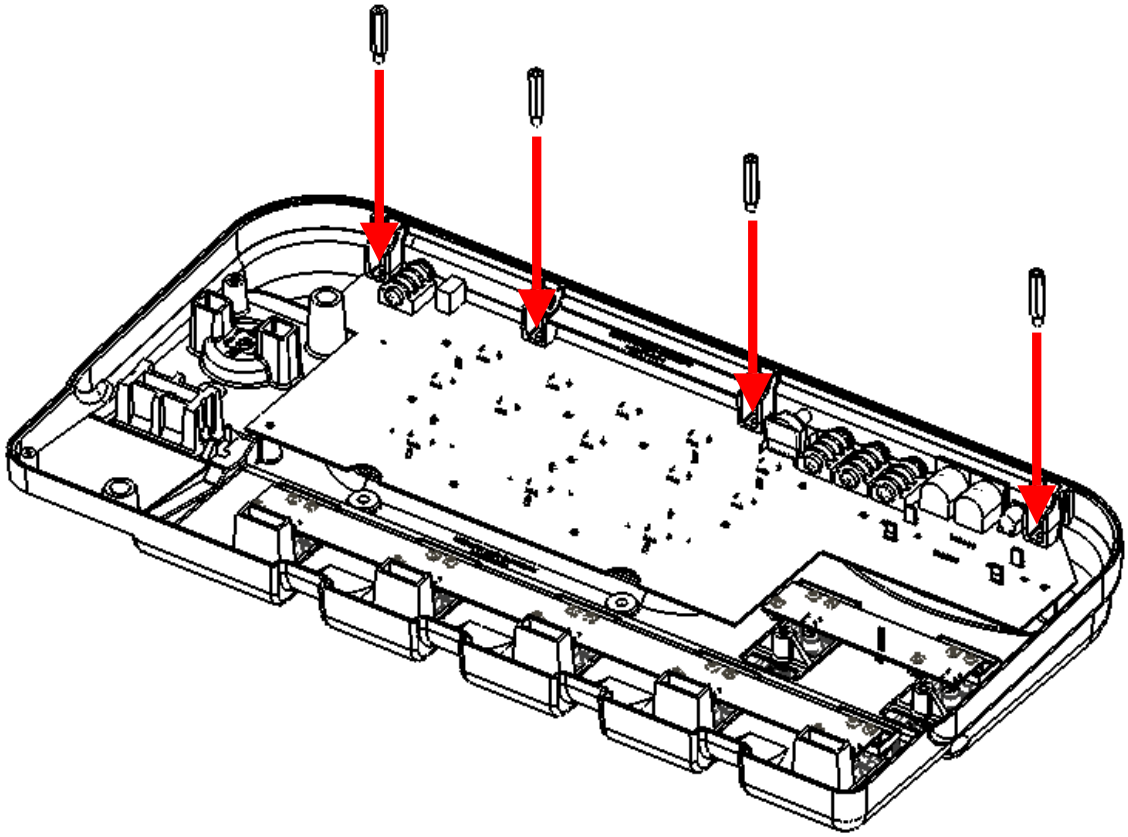
Be sure that the CHASSIS BACK and CHASSIS TOP mate together all around.

STEP 12

P/N required:
4 each **30-12-8418** STANDOFF HEX MALE-FEMALE 6-32 x 1.00”

Install four STANDOFFS HEX MALE-FEMALE 6-32 x 1.00” into the CHASSIS TOP through the mounting tabs on the CHASSIS BACK in the locations shown.

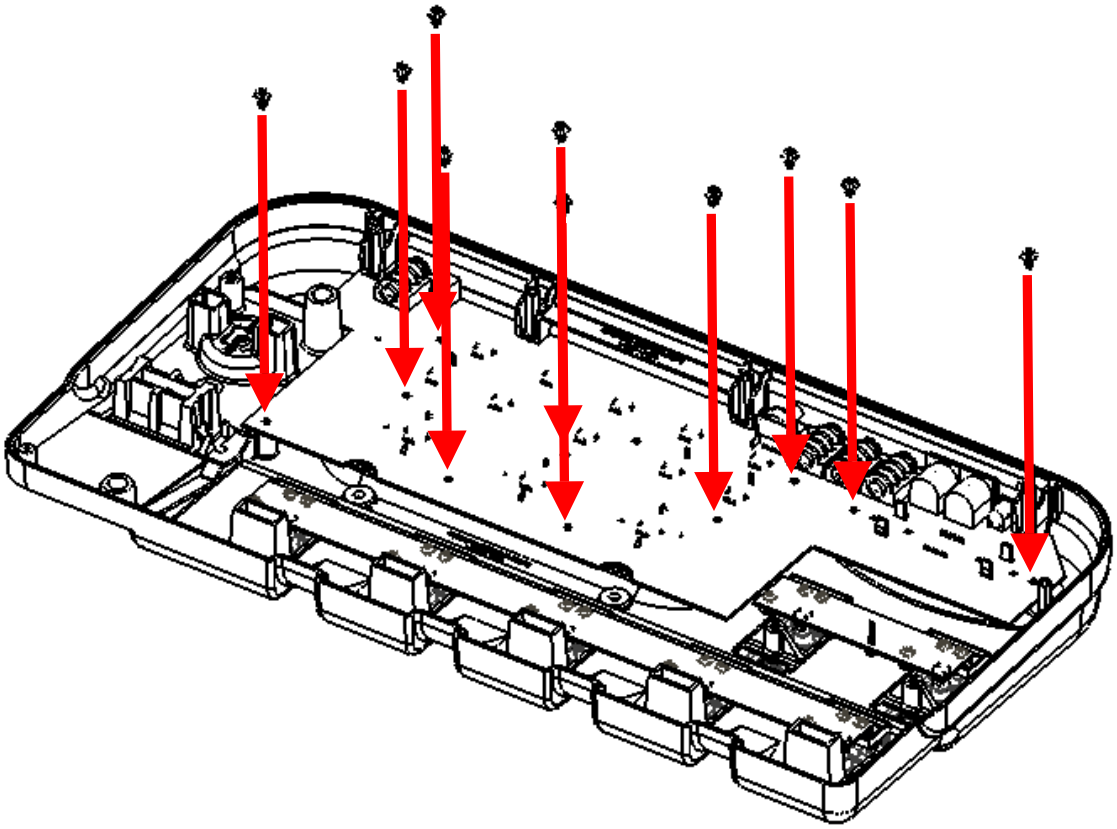
Torque the STANDOFFS HEX MALE-FEMALE 6-32 x 1” to 7 - 8 inch-pounds.



STEP 13

P/N required:
10 each **30-00-0115** SCREW #6 x 5/16”

Secure the MAIN PCBA to the CHASSIS TOP with ten SCREWS #6 x 5/16”.

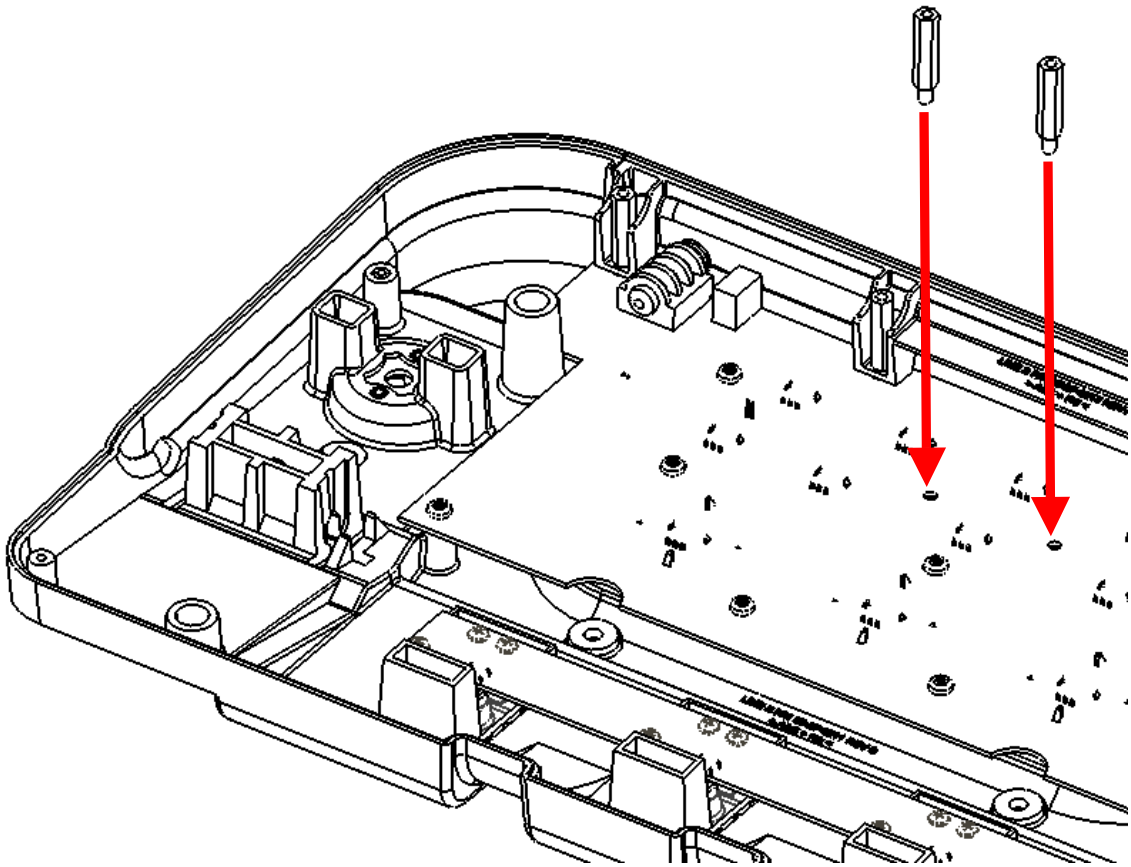


STEP 14

P/N required:
2 each **30-12-8418** STANDOFF HEX MALE-FEMALE 6-32 x 1.00”

Install two STANDOFFS HEX MALE-FEMALE 6-32 x 1.00” in the locations shown.

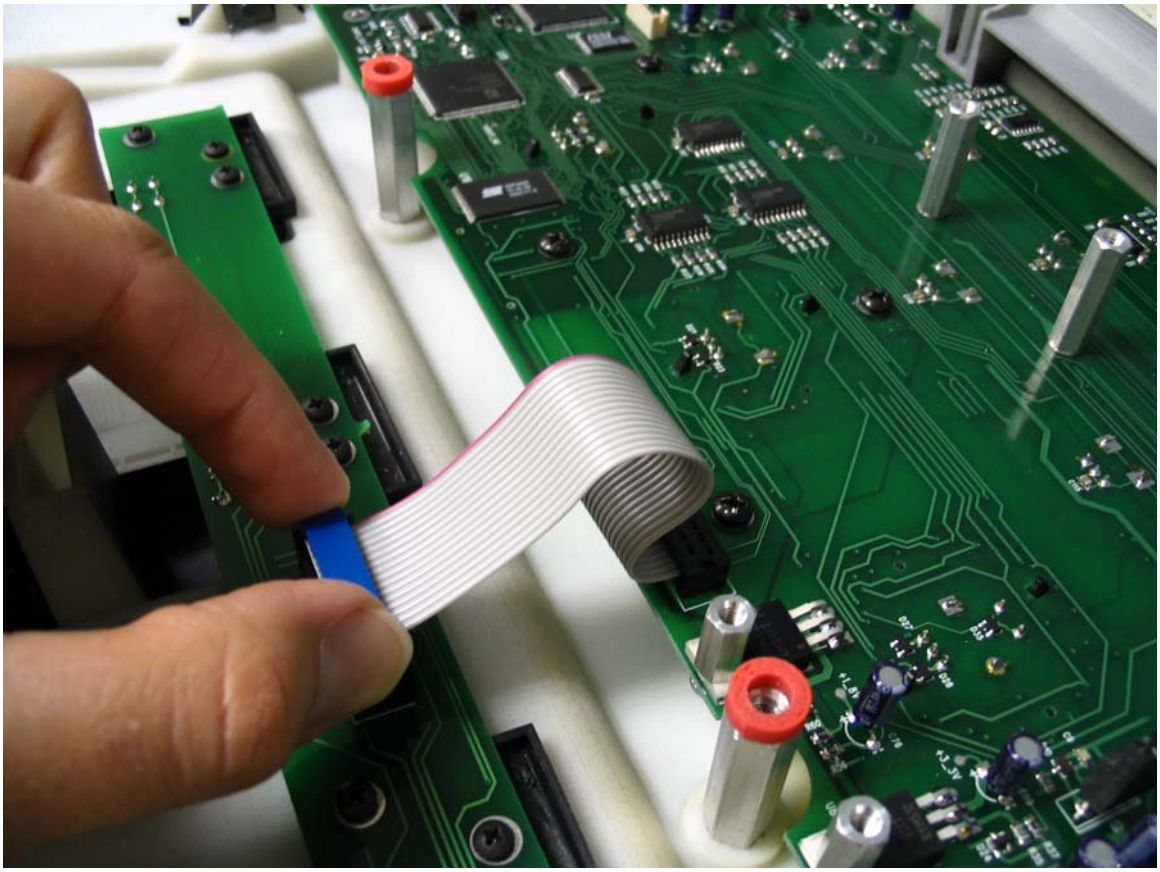
Torque the STANDOFFS HEX MALE-FEMALE 6-32 x 1” to 7 - 8 inch-pounds.



STEP 15

P/N required:
1 each **21-30-0034-1** CABLE 16 PIN

Connect the CABLE 16 PIN to the 16-pin headers on the MAIN PCBA and the FOOTSWITCH PCBA.

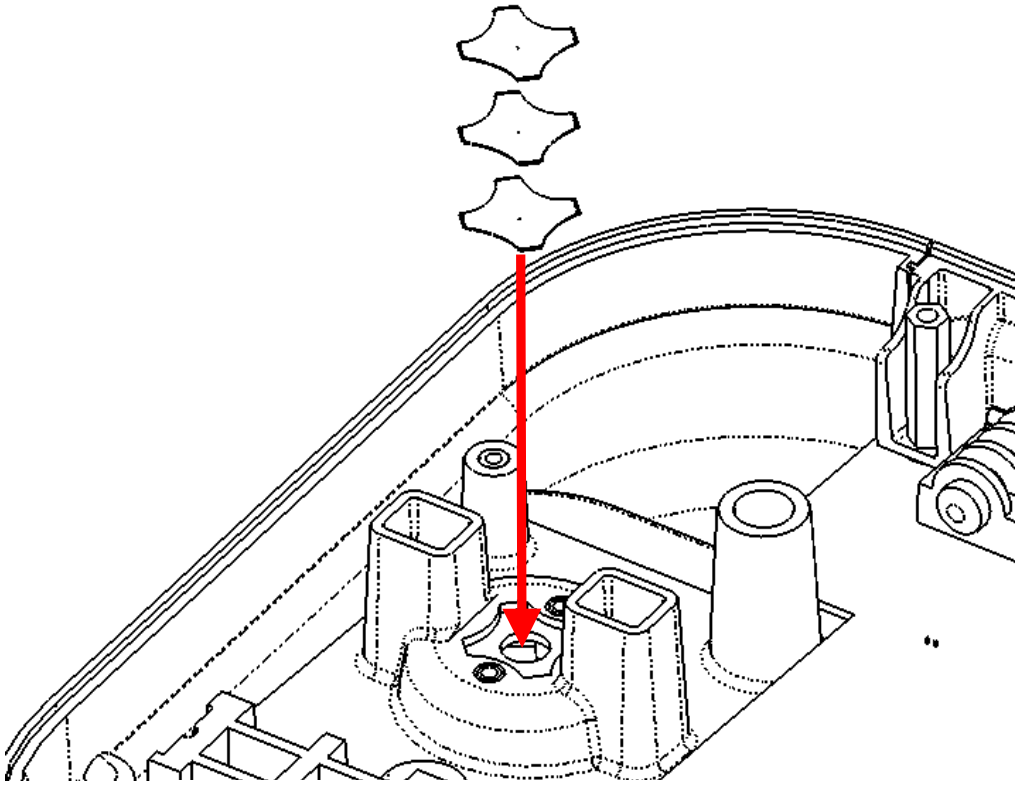


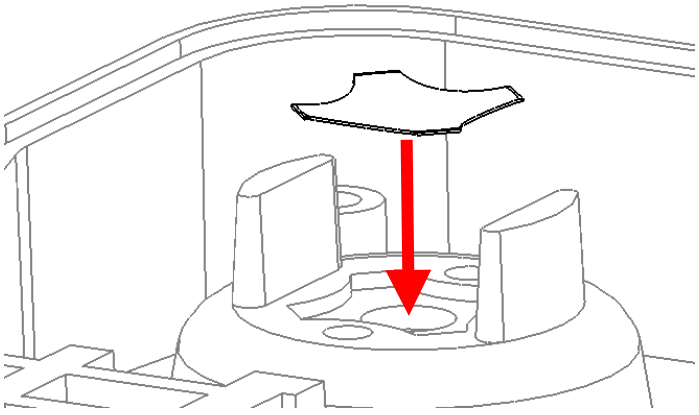
STEP 16

P/N required:
3 each **30-51-0078** TACTILE DOME

Place three TACTILE DOMES in the recess in the CHASSIS TOP as shown.

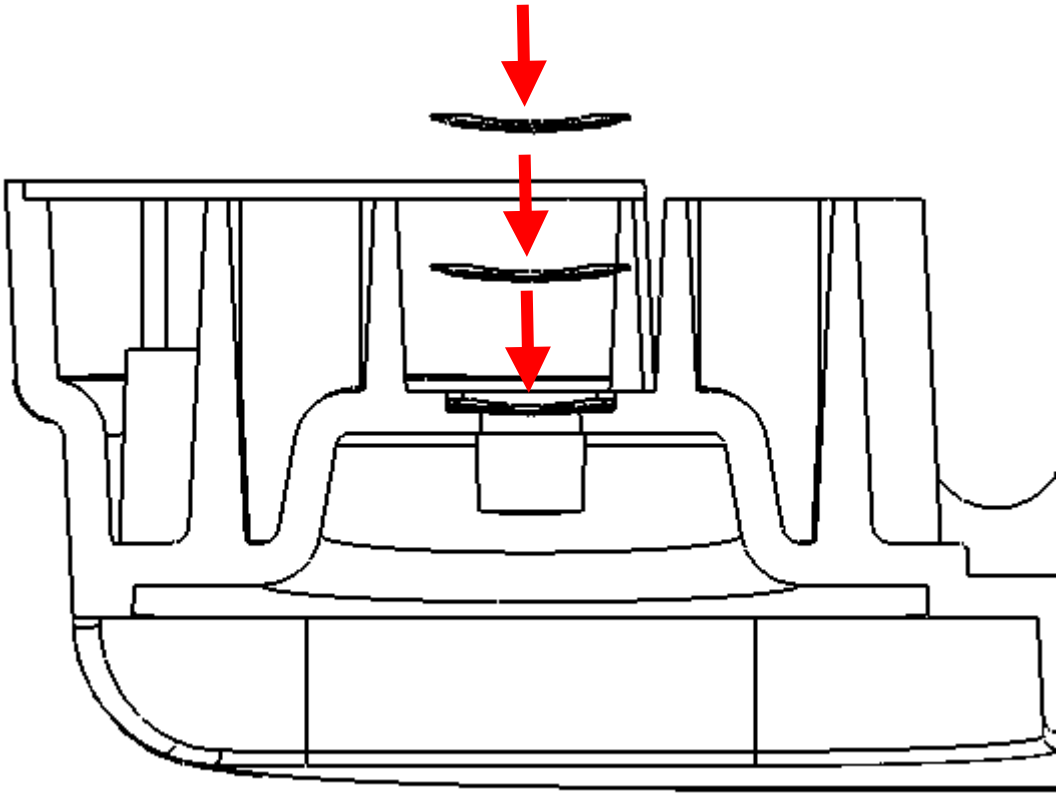
The domed surface (convex) shall be toward the plastic.





(Step 16 is continued on next page.)

STEP 16 (continued)

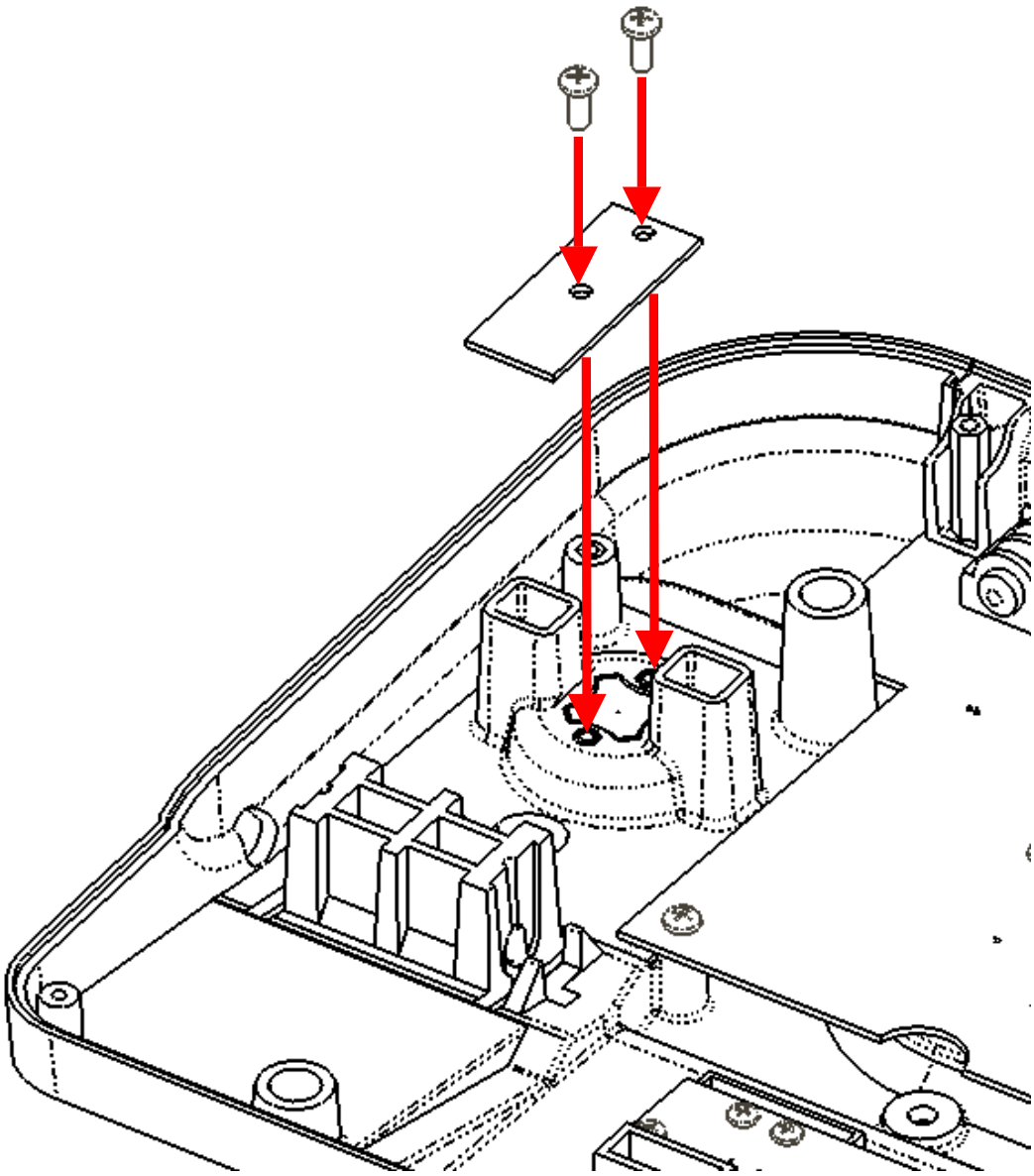


STEP 17

P/N required:
1 each **50-02-0078-2** PEDAL PCBA
2 each **30-00-0043** SCREW 6-32 x 5-16" w/STAR WASHER

Secure the PEDAL PCBA to the CHASSIS TOP with two SCREWS 6-32 x 5/16" w/STAR WASHER.

Torque the SCREWS 6-32 x 5/16" w/STAR WASHER to 7 - 8 inch-pounds.

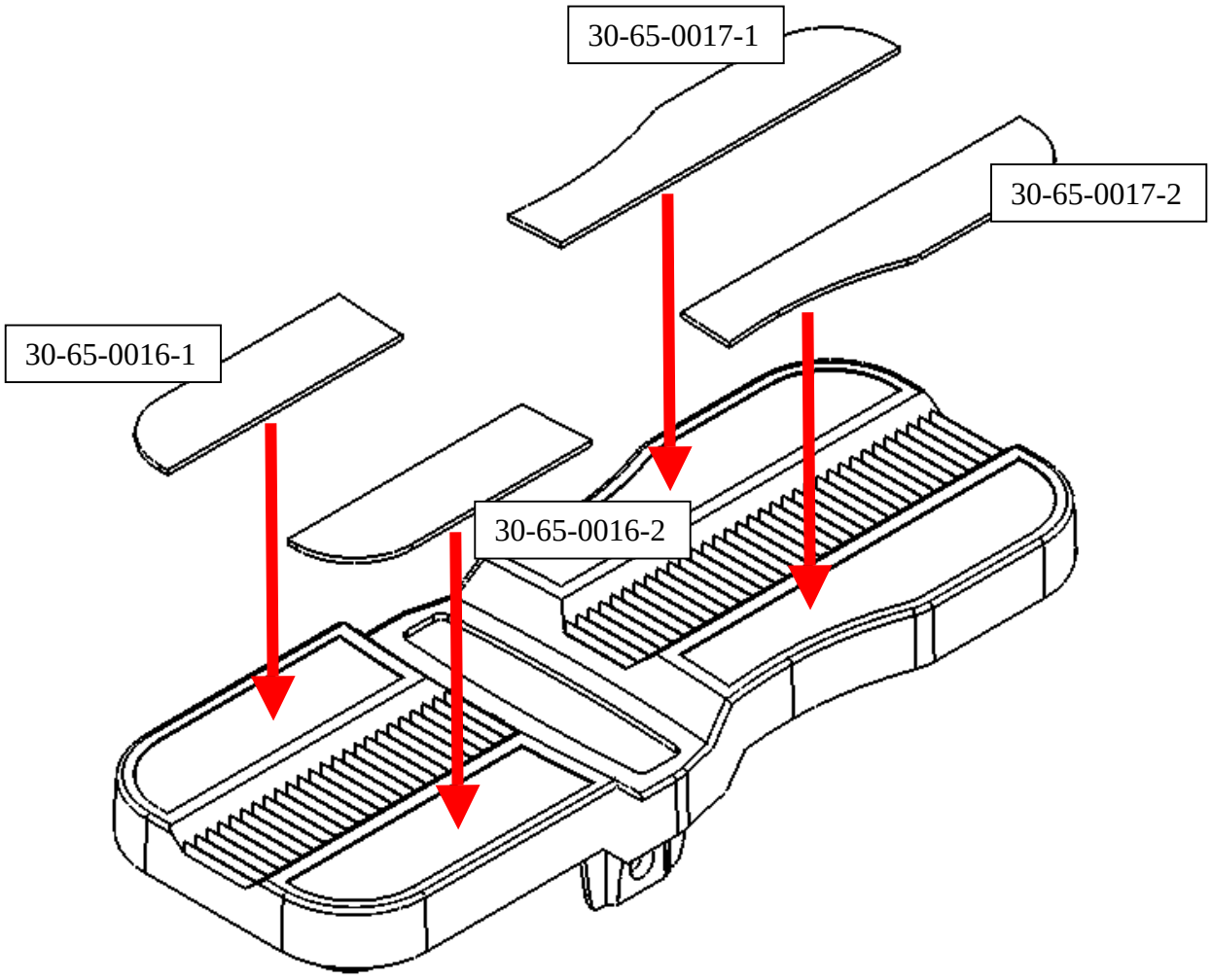


STEP 18

P/N required:
1 each **30-51-0273** ALUMINUM PEDAL
1 each **30-65-0016-1** ANTISLIP TAPE, LEFT HEEL
1 each **30-65-0016-2** ANTISLIP TAPE, RIGHT HEEL
1 each **30-65-0017-1** ANTISLIP TAPE, LEFT TOE
1 each **30-65-0017-1** ANTISLIP TAPE, RIGHT TOE

Remove the protective backing from each piece of ANTISLIP TAPE, and apply the ANTISLIP TAPE to the recessed areas on the ALUMINUM PEDAL as shown.

The recessed areas on the ALUMINUM PEDAL shall be free of all dirt and grease before application of the ANTISLIP TAPE.

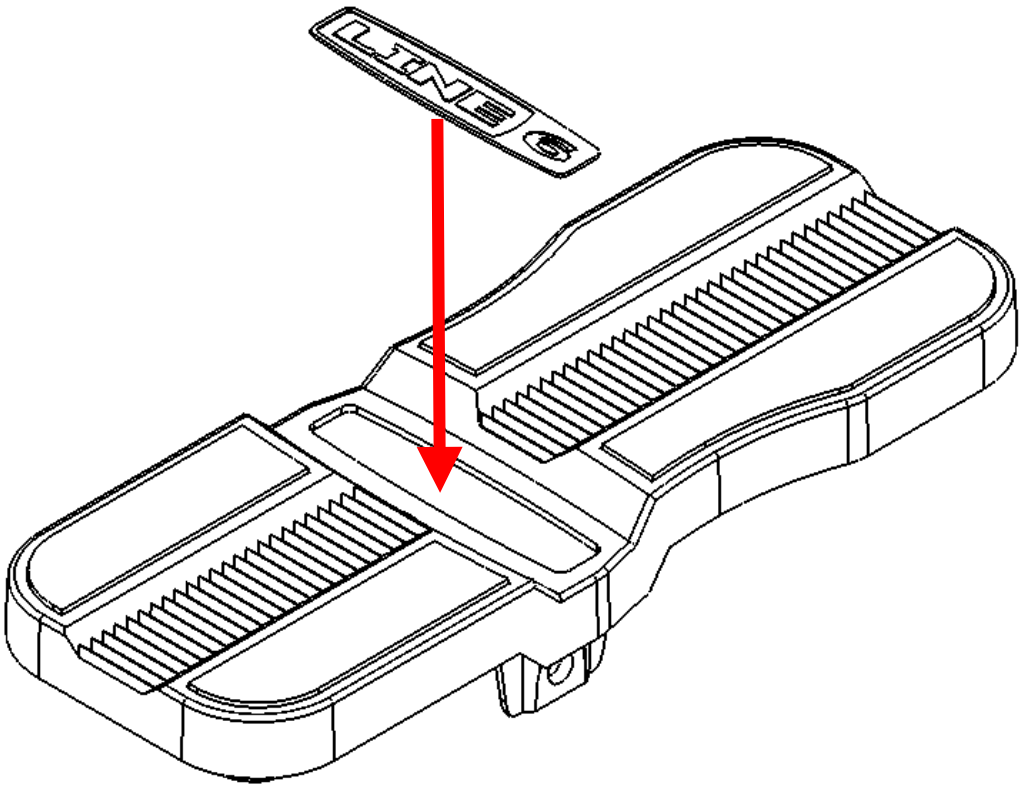


STEP 19

P/N required:
1 each **30-60-0009** LOGO

Remove the protective backing from the LOGO, and install the LOGO in the recess on the ALUMINUM PEDAL as shown.

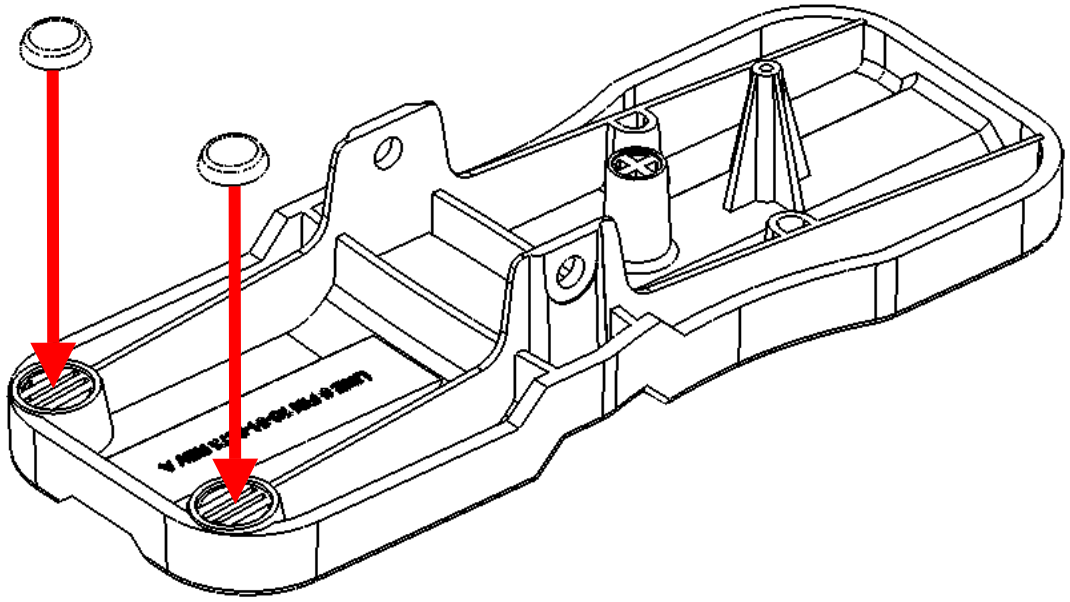
The recess on the ALUMINUM PEDAL shall be free of all dirt and grease before application of the LOGO.



STEP 20

P/N required:
2 each **30-48-0010** RUBBER BUMPER WITH ADHESIVE

Remove the protective backing from two RUBBER BUMPERS WITH ADHESIVE, and install the two RUBBER BUMPERS WITH ADHESIVE in the two round flat areas on the back half of the ALUMINUM PEDAL as shown.

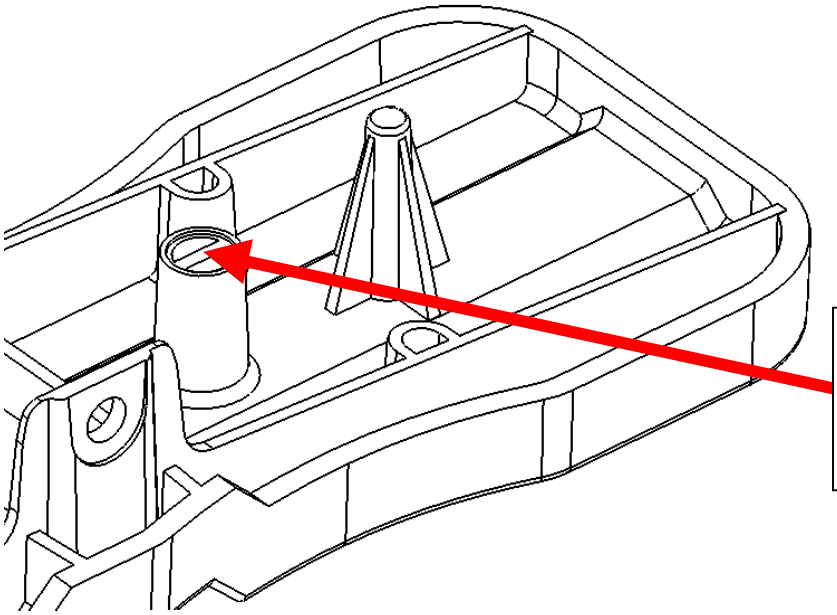


STEP 21

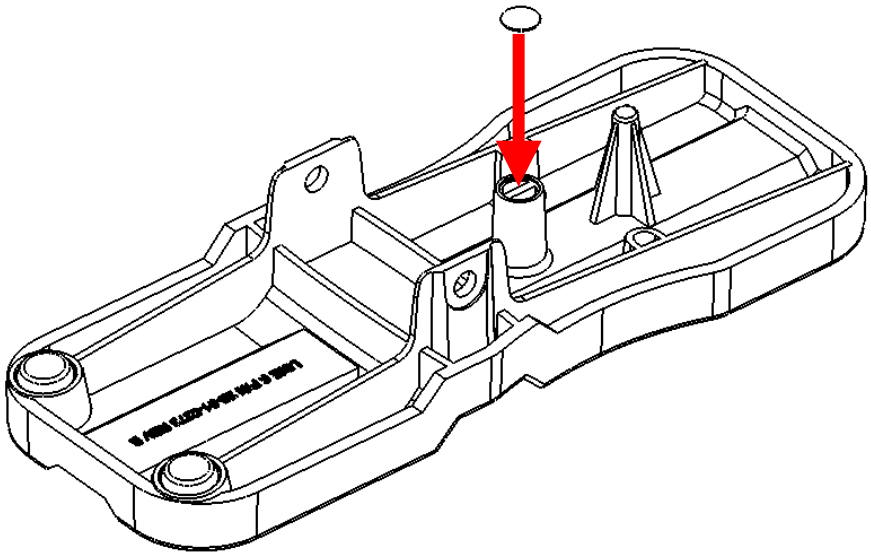
P/N required:
1 each **30-51-0257** REFLECTOR DISC

Remove the clear plastic film from the top of the REFLECTOR DISC.

Remove the protective backing from the REFLECTOR DISC, and install the REFLECTOR DISC on the round flat area at the end of the short post on the ALUMINUM PEDAL. Press firmly to ensure a good bond between the REFLECTOR DISC and the ALUMINUM PEDAL.



Verify that this surface has no flash or imperfections before installing the REFLECTOR DISC.

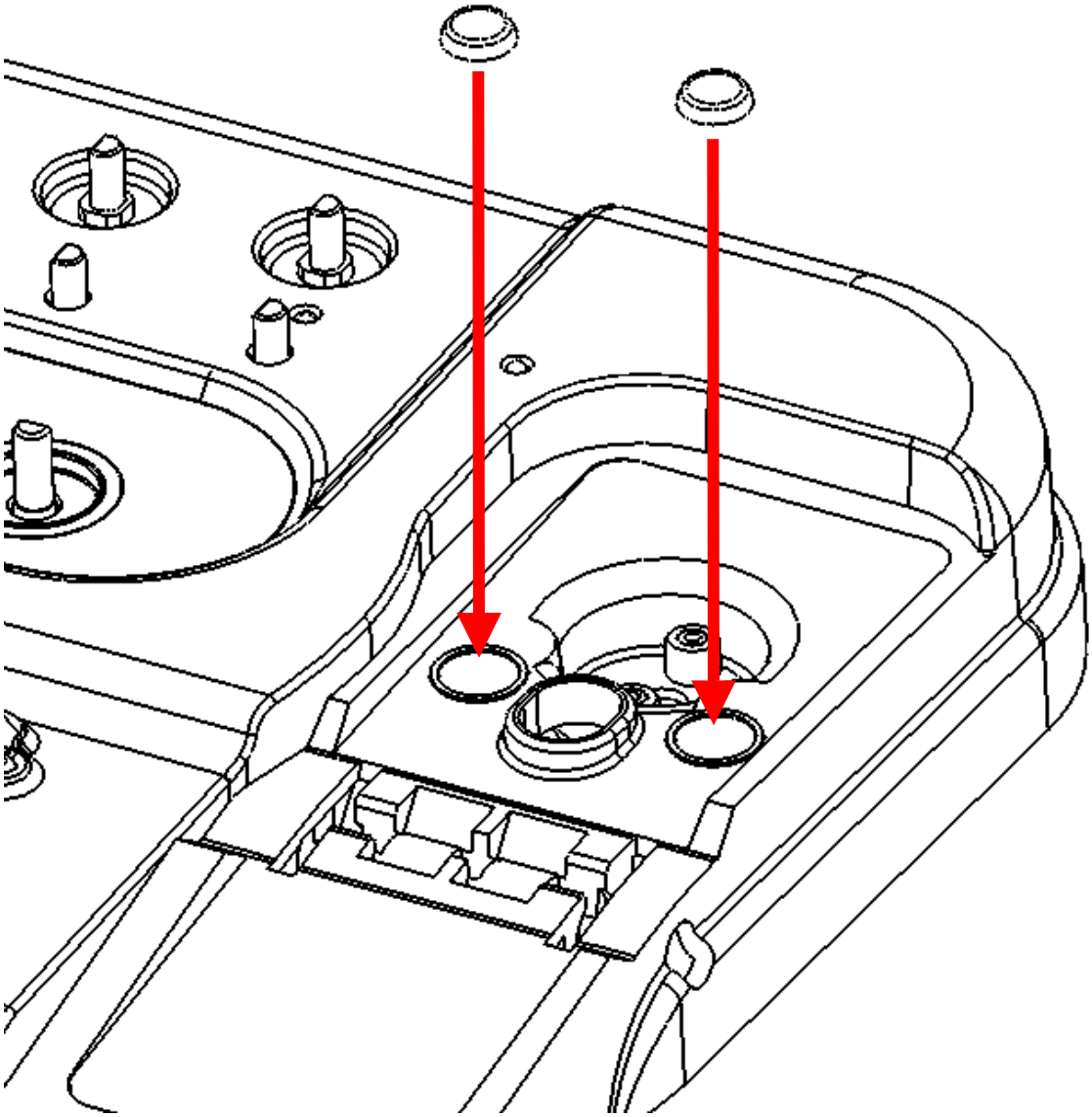


STEP 22

P/N required:
2 each **30-48-0010** RUBBER BUMPER WITH ADHESIVE

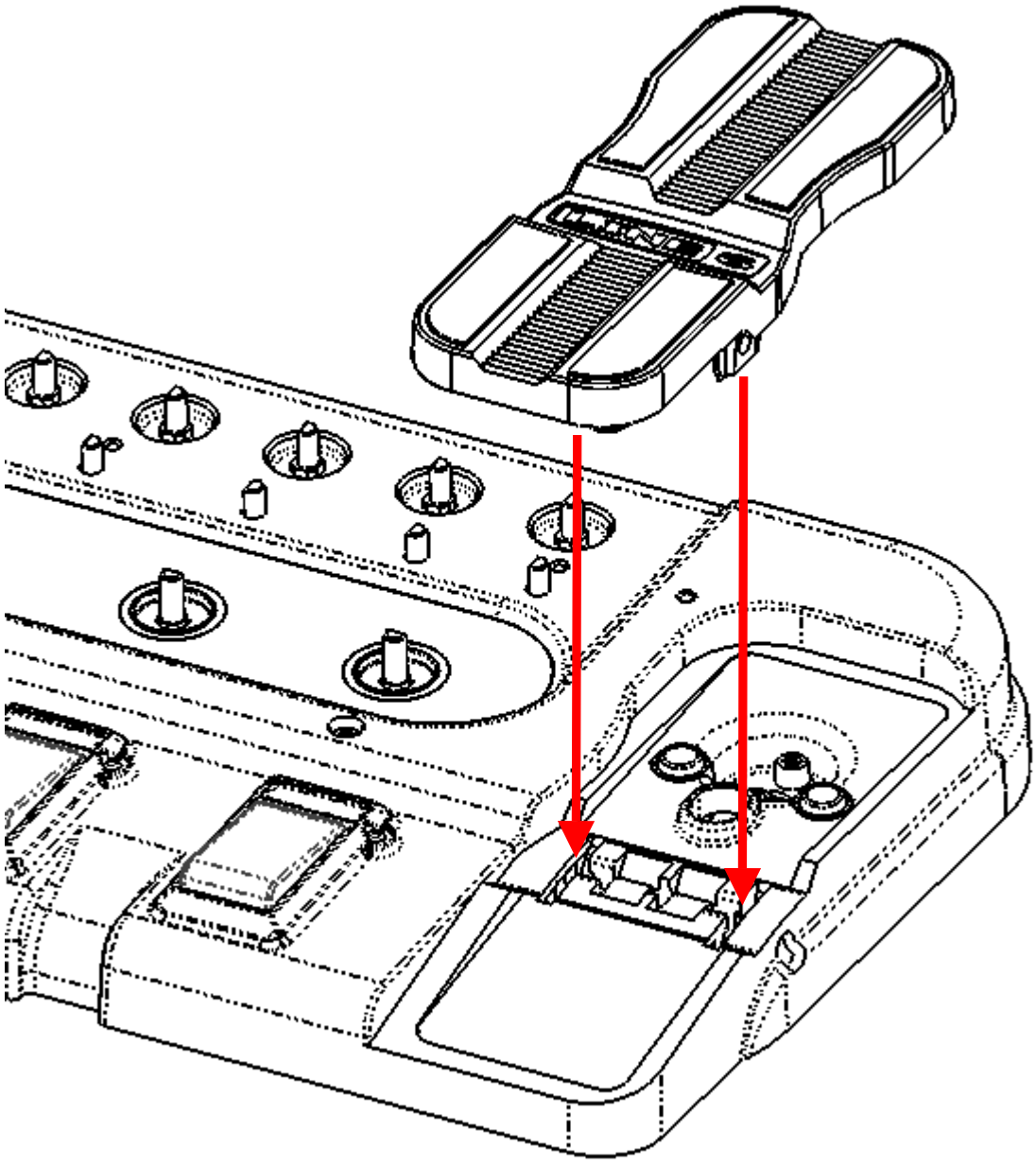
Remove the protective backing from two RUBBER BUMPERS WITH ADHESIVE, and install the two RUBBER BUMPERS WITH ADHESIVE in the two round flat areas on the CHASSIS TOP as shown.

The two round flat areas on the CHASSIS TOP shall be free of all dirt and grease before application of the RUBBER BUMPERS.



STEP 23

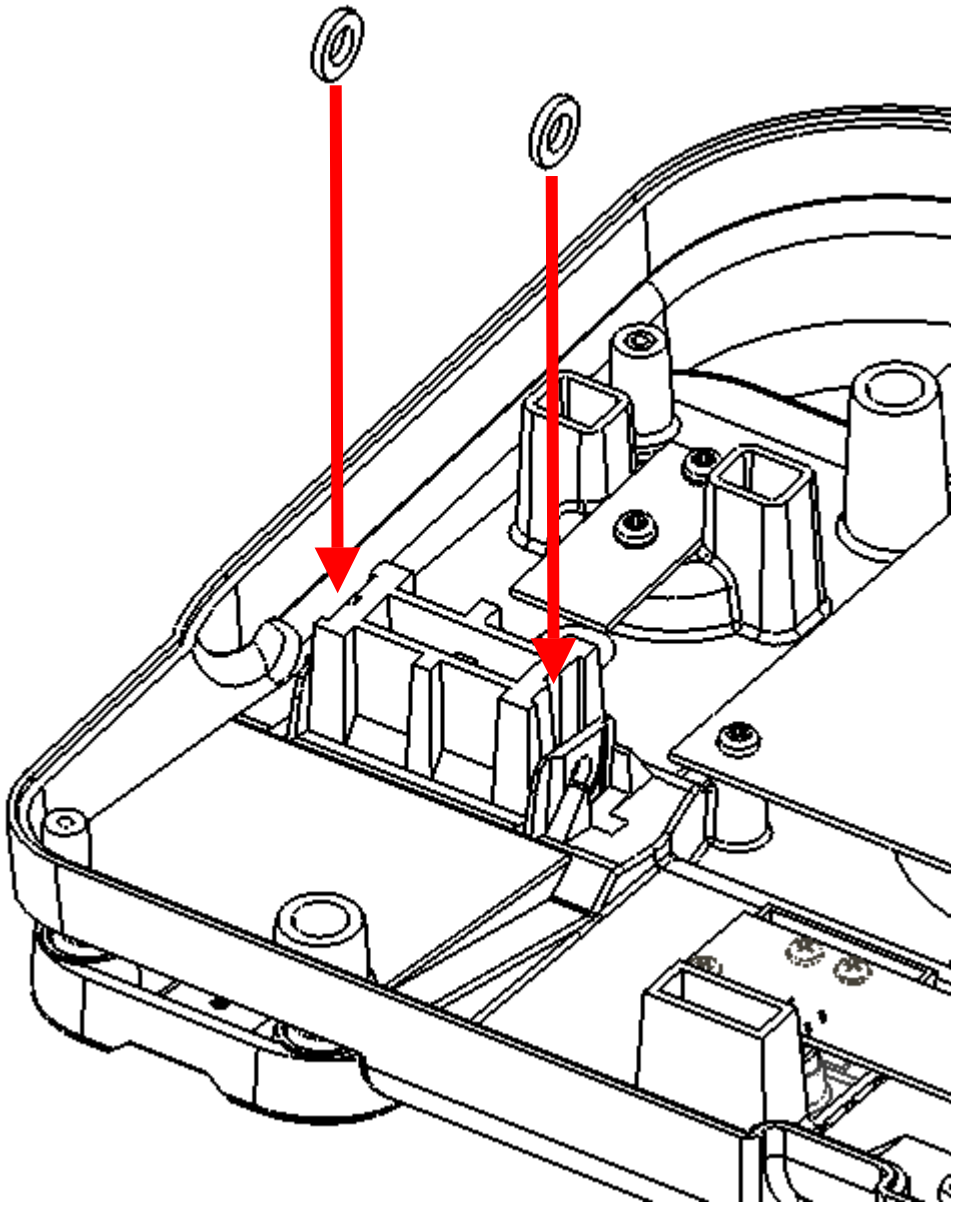
Place the tabs of the ALUMINUM PEDAL through the slots in the CHASSIS TOP as shown.



STEP 24

P/N required:
2 each **30-03-0034** NYLON WASHER

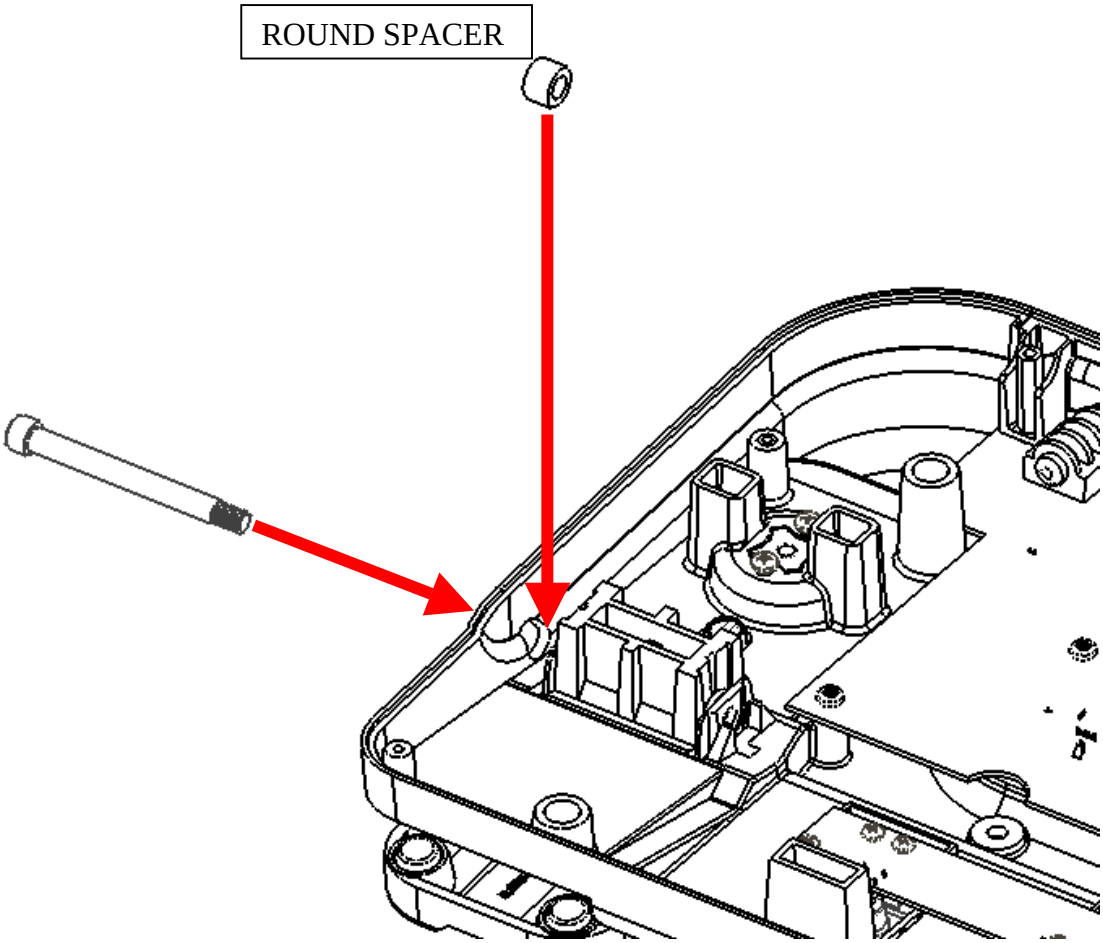
Insert the NYLON WASHERS in the space between the ALUMINUM PEDAL tabs and the CHASSIS TOP.



STEP 25

P/N required:
1 each **30-00-0112** SCREW ¼-20 x 2.75”
1 each **30-15-0036** ROUND SPACER

Install the ROUND SPACER on the side of the ALUMINUM PEDAL as shown. Insert the SCREW ¼-20 x 2.75” through the ROUND SPACER and ALUMINUM PEDAL.



STEP 26

P/N required:
1 each **21-34-0083** GROUNDING CABLE
1 each **30-06-0030** SQUARE NUT ¼-20

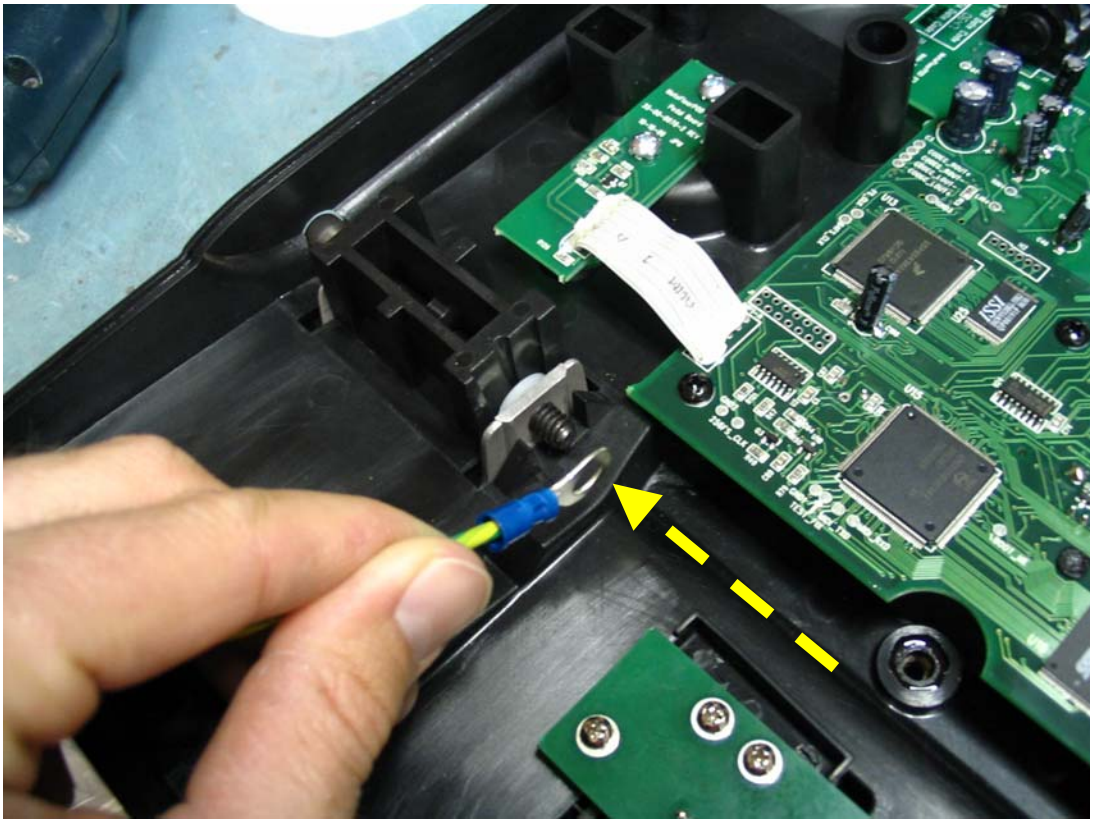
Install one tab of the GROUNDING CABLE onto the end of the SCREW ¼-20 x 2.75" as shown.

Install the SQUARE NUT onto the end of the SCREW ¼-20 x 2.75".

The SQUARE NUT shall be captured by the two walls in the CHASSIS TOP as shown.

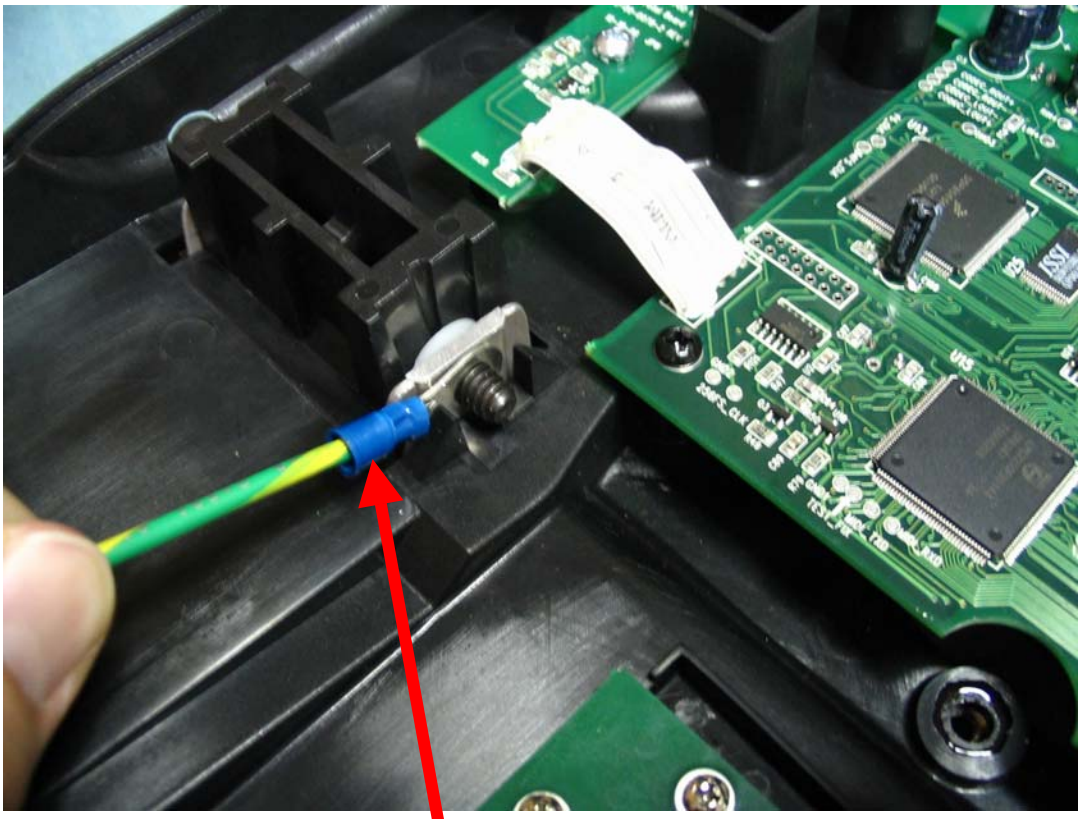
Torque the SCREW ¼-20 x 2.75" to 8 - 10 inch-pounds while holding the ALUMINUM PEDAL in the toe-down position as shown.

Keep the GROUNDING CABLE next to the CHASSIS TOP as the SCREW ¼-20 x 2.75" is being tightened.



(Step26 is continued on the next page.)

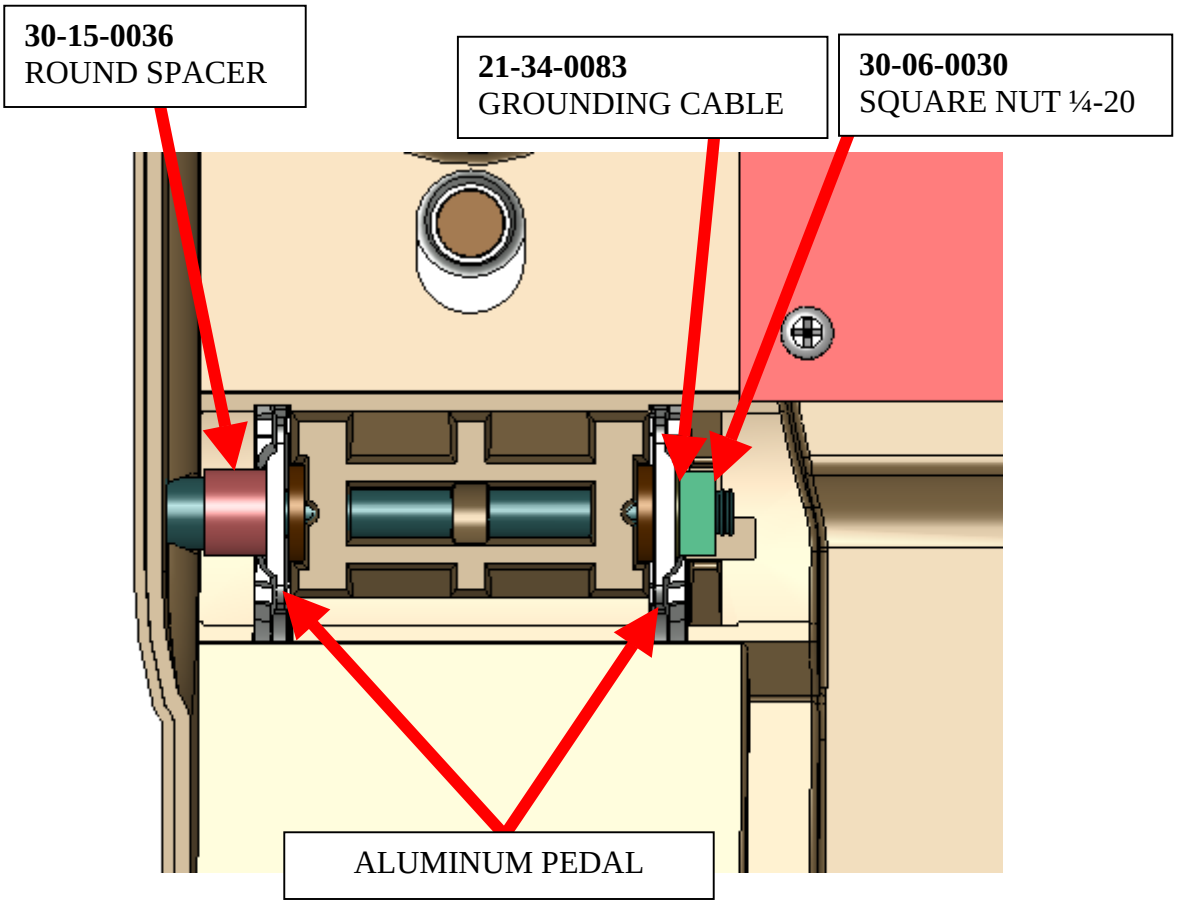
STEP 26 (continued)



Keep the GROUNDING CABLE next to the CHASSIS TOP as the SCREW ¼-20 x 2.75” is being tightened.

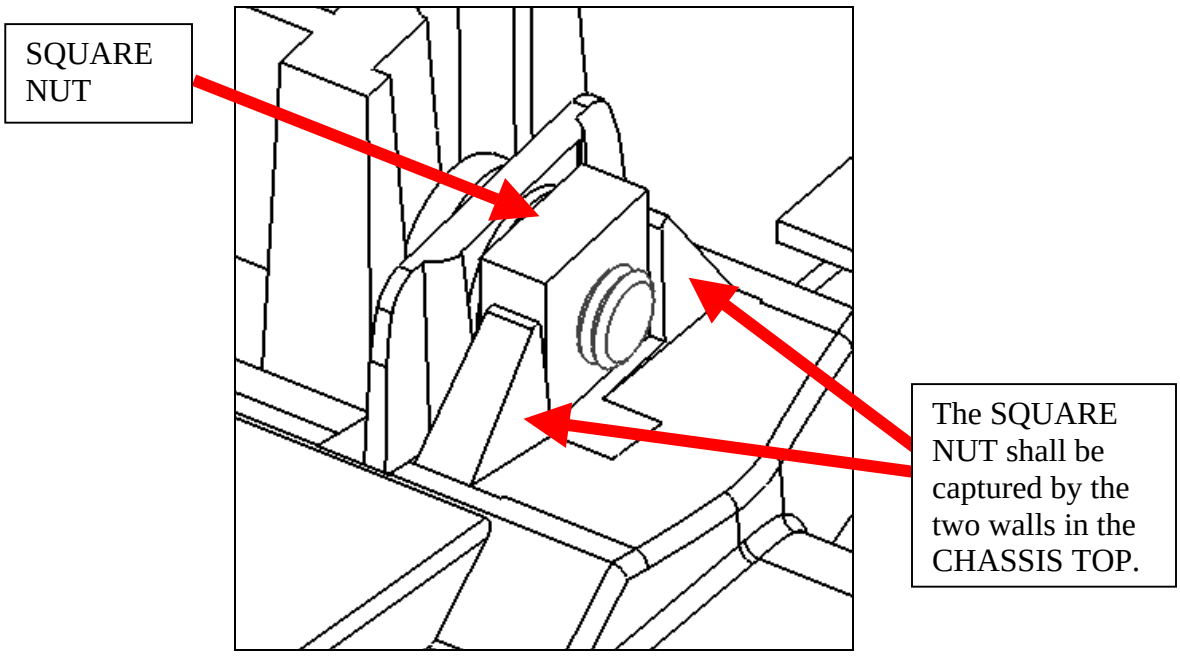
(Step26 is continued on the next page.)

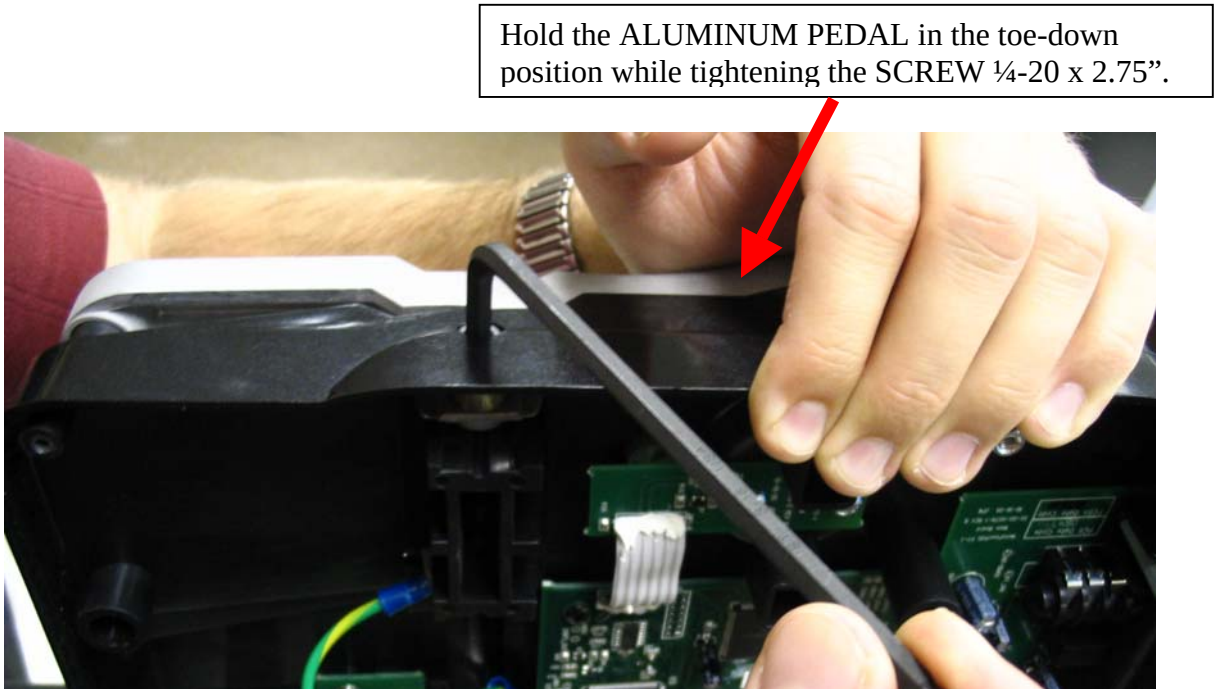
STEP 26 (continued)



(Step26 is continued on the next page.)

STEP 26 (continued)



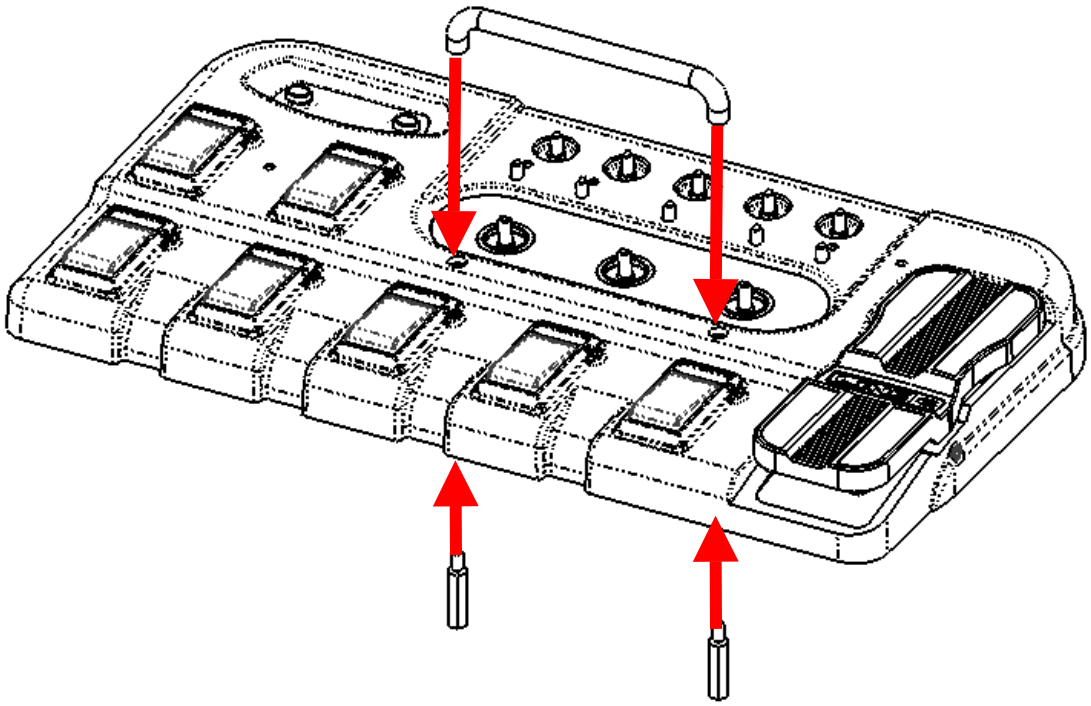


STEP 27

P/N required:
1 each **30-51-0187** KNOB GUARD
2 each **30-12-0006** STANDOFF HEX MALE-FEMALE 10-32 x 1.25”

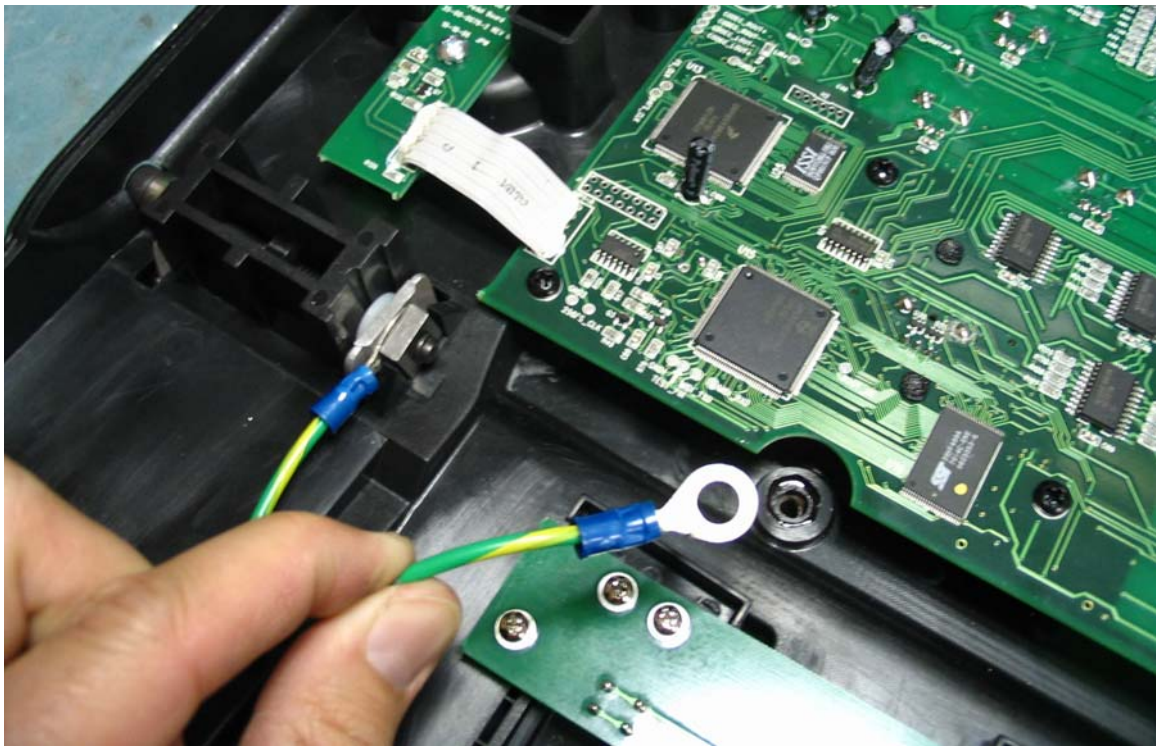
Secure the KNOB GUARD to the CHASSIS TOP with two STANDOFFS HEX MALE-FEMALE 10-32 x 1.25”. Install the free tab of the GROUNDING CABLE between the CHASSIS TOP and the STANDOFF HEX MALE-FEMALE 10-32 x 1.25” closest to the ALUMINUM PEDAL as shown.

Torque the STANDOFFS HEX MALE-FEMALE 10-32 x 1.25” to 10 - 12 inch-pounds.



(Step27 is continued on the next page.)

STEP 27 (continued)

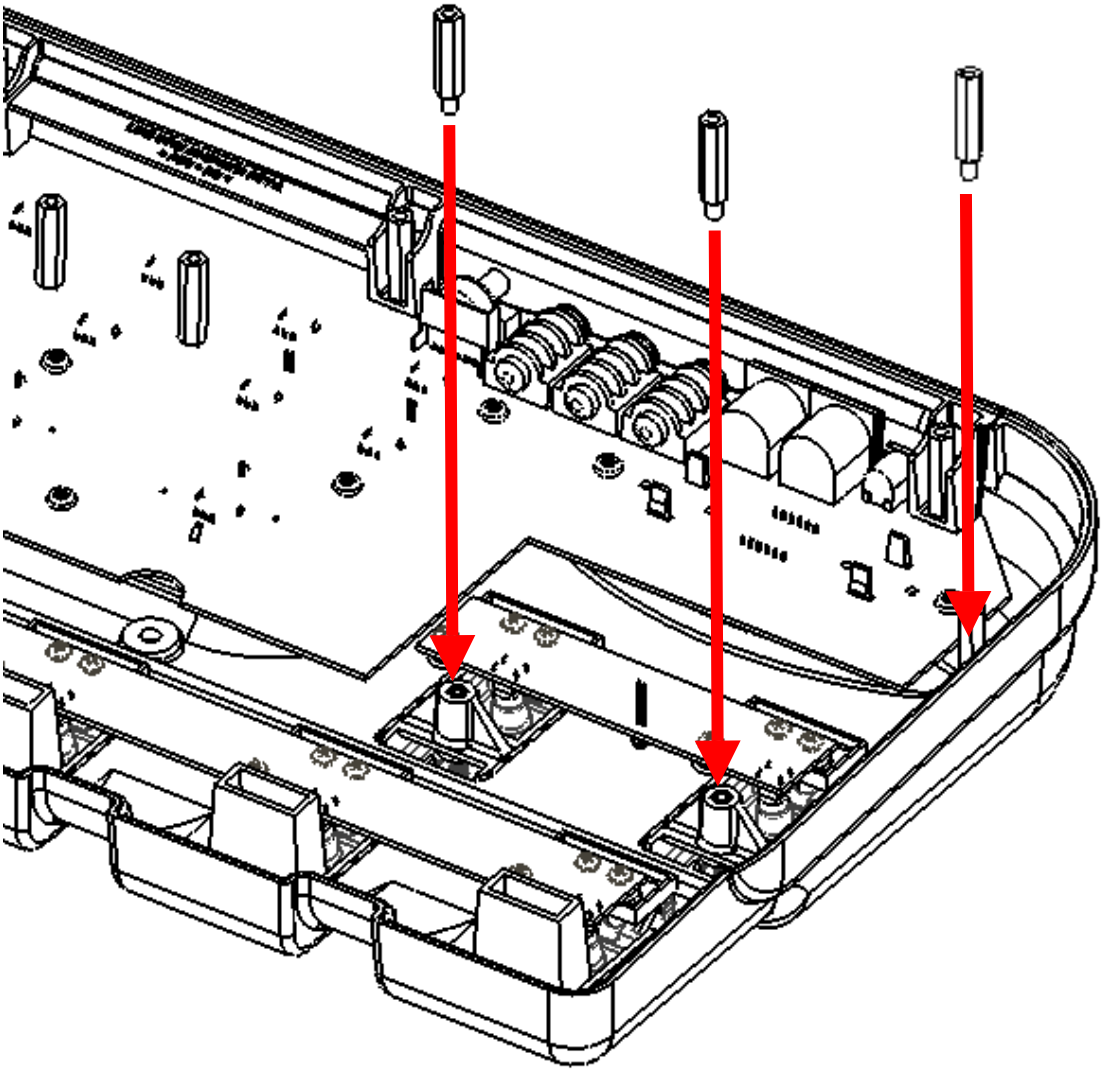


STEP 28

P/N required:
3 each **30-12-8418** STANDOFF HEX MALE-FEMALE 6-32 x 1”

Install three STANDOFFS HEX MALE-FEMALE 6-32 x 1” in the locations shown on the CHASSIS TOP.

Torque the STANDOFFS HEX MALE-FEMALE 6-32 x 1” to 7 - 8 inch-pounds.

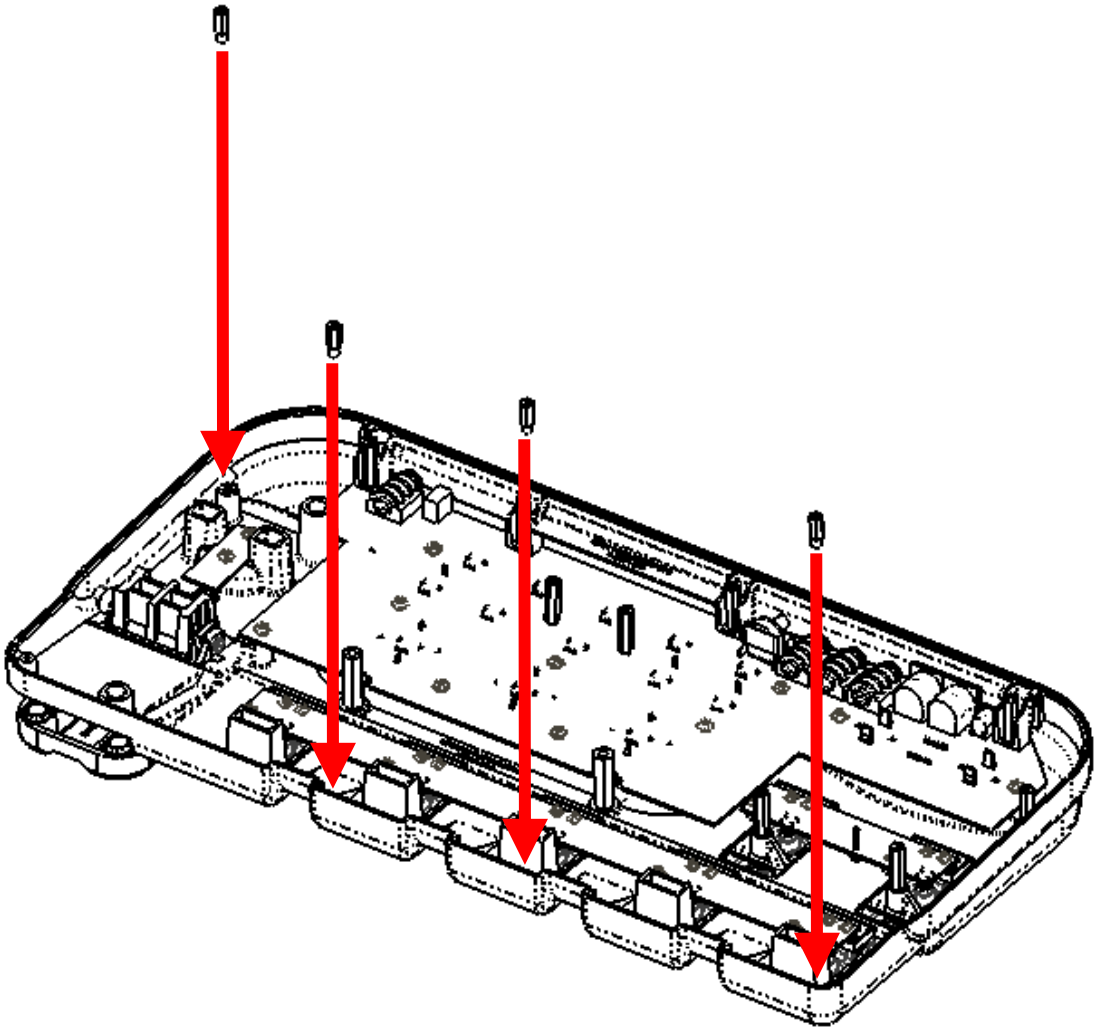


STEP 29

P/N required:
4 each **30-12-0007** STANDOFF HEX MALE-FEMALE 6-32 x ½”

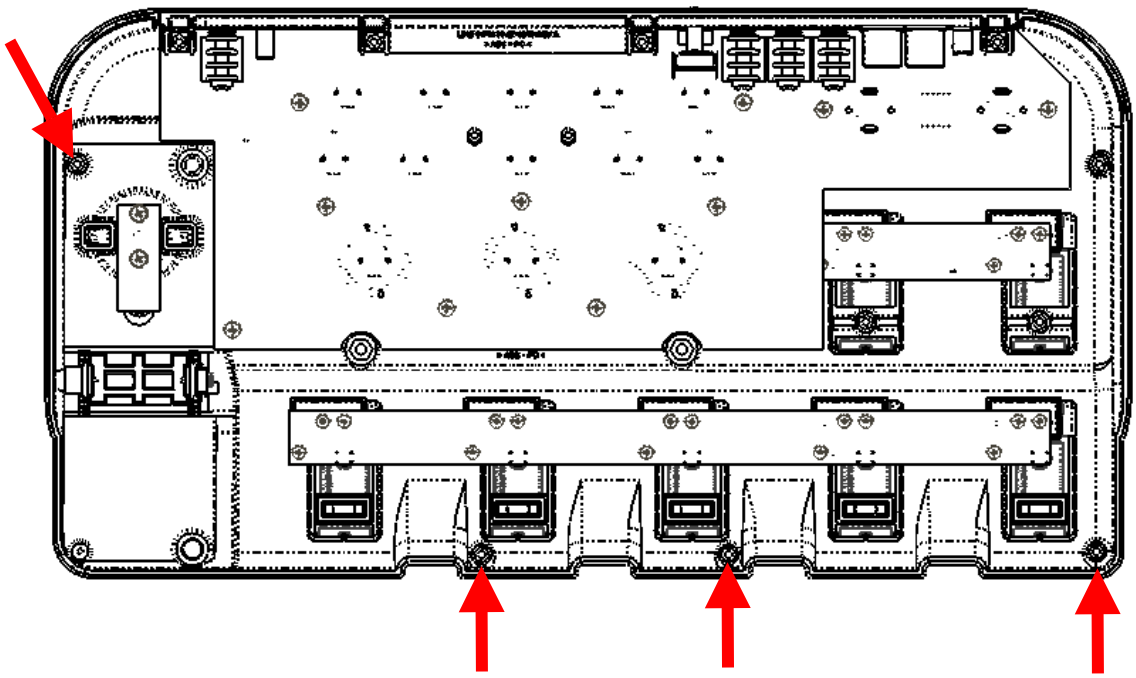
Install four STANDOFFS HEX MALE-FEMALE 6-32 x ½” in the locations shown on the CHASSIS TOP.

Torque the STANDOFFS HEX MALE-FEMALE 6-32 x ½” to 7 - 8 inch-pounds.



(Step29 is continued on the next page.)

STEP 29 (continued)



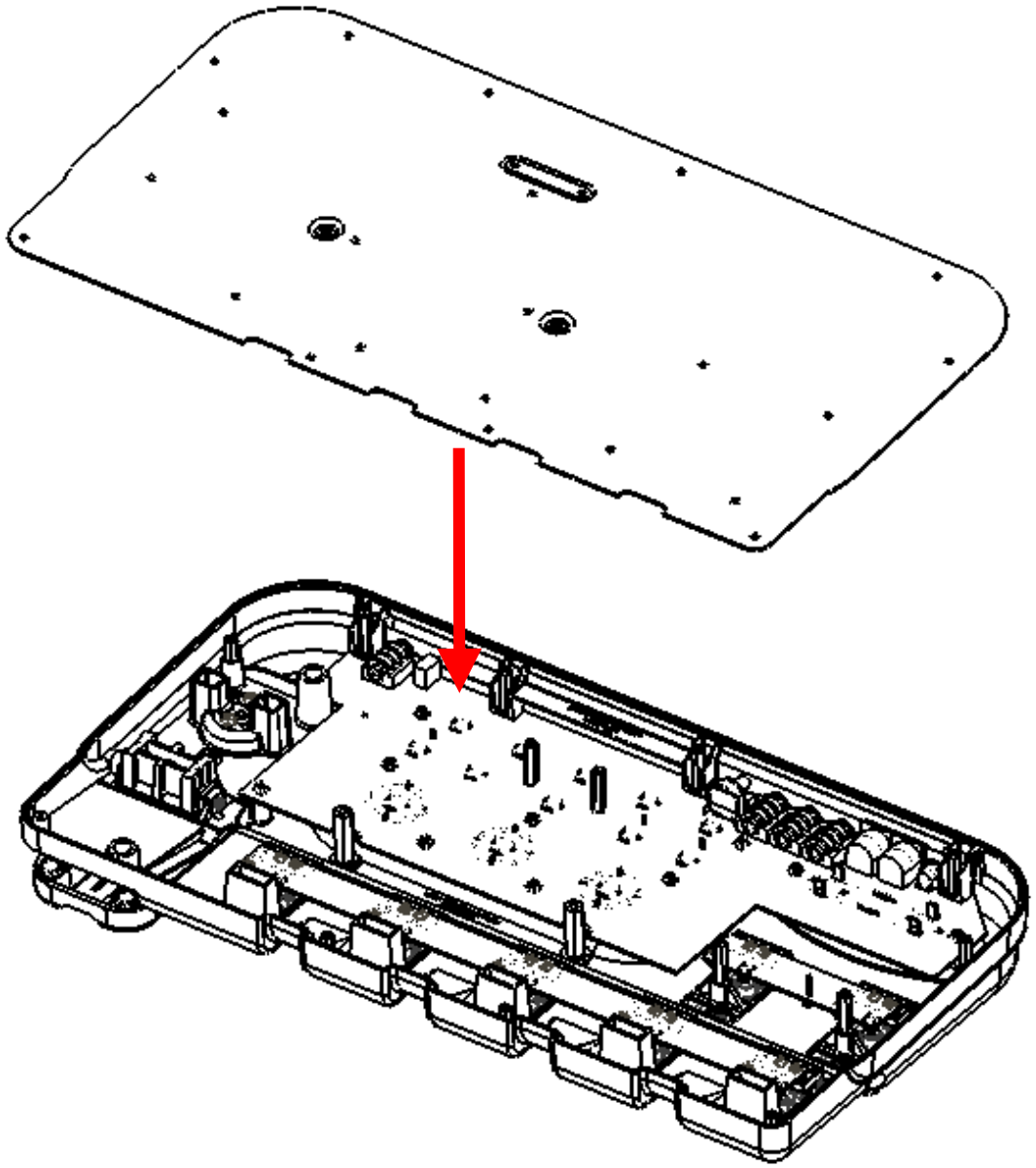
Locations of standoffs

STEP 30

P/N required:

1 each **30-51-0268** CHASSIS BOTTOM

Place the CHASSIS BOTTOM onto the CHASSIS TOP.

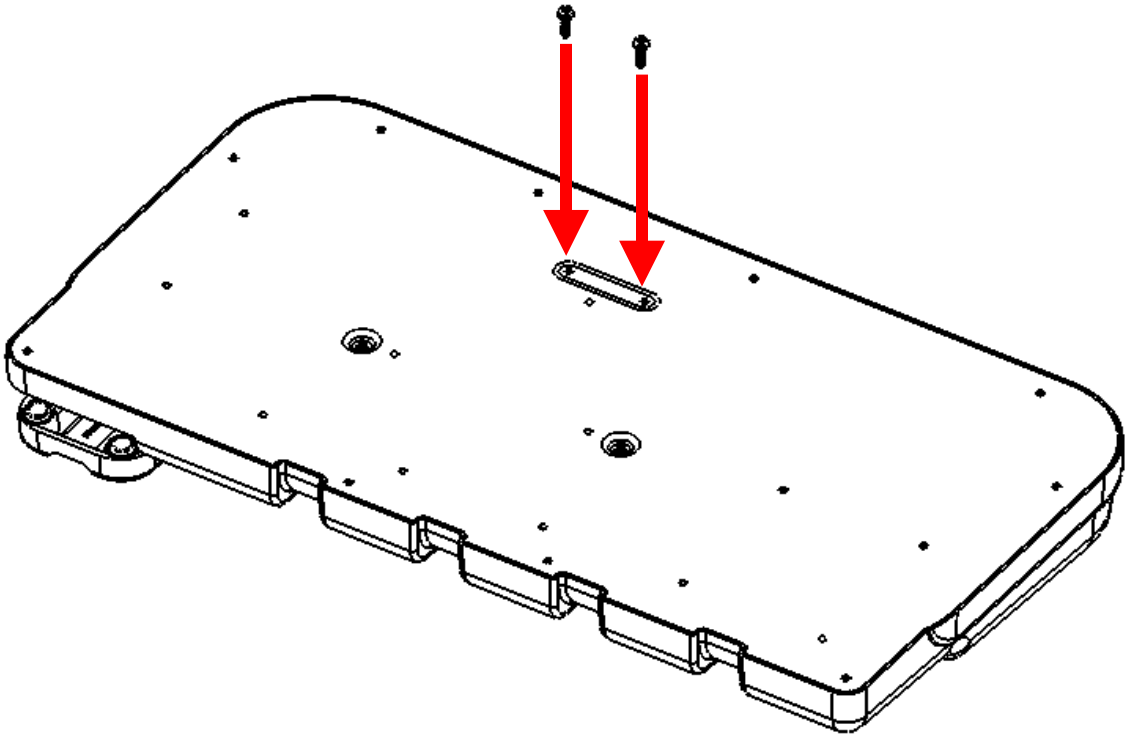


STEP 31

P/N required:
2 each **30-00-0043** SCREW 6-32 x 5/16” WITH STAR WASHER

Install two SCREWS 6-32 x 5/16” WITH STAR WASHER in the locations shown.

Torque the SCREWS 6-32 x 5/16” WITH STAR WASHER to 7 - 8 inch-pounds.

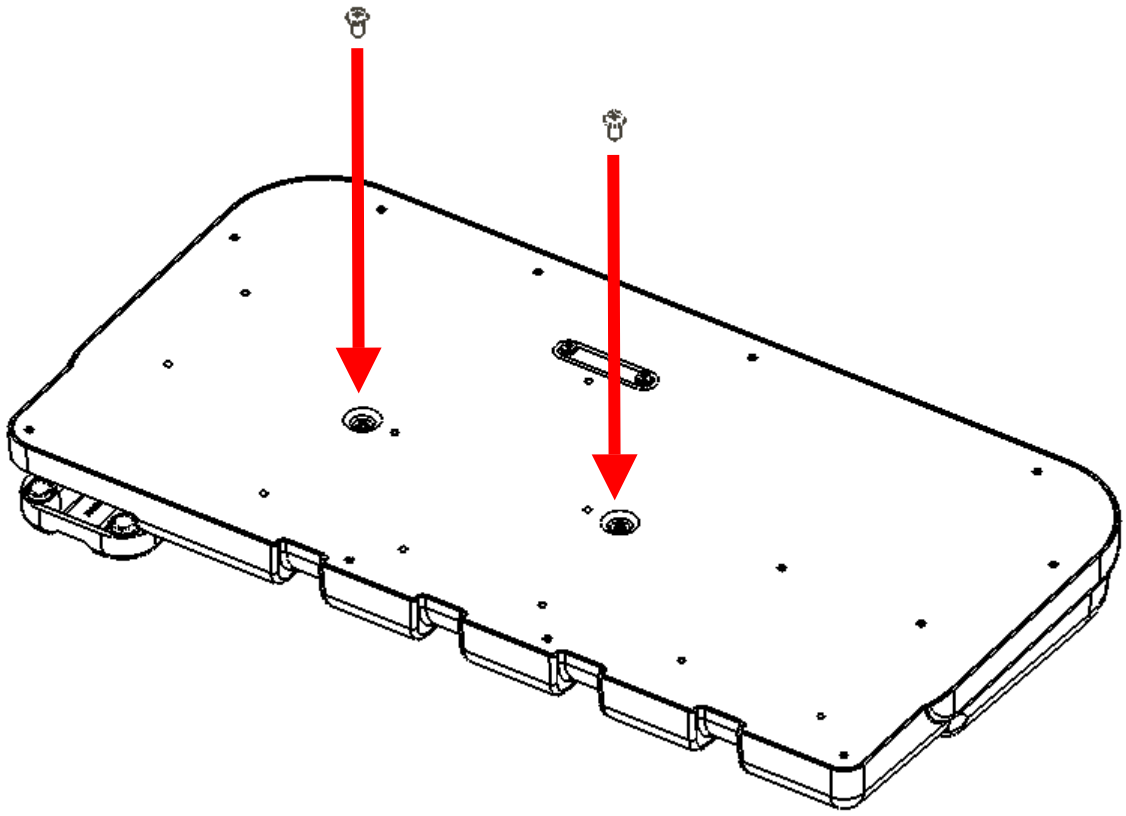


STEP 32

P/N required:
2 each **30-00-0062** SCREW 10-32 x 3/8”

Install two SCREWS 10-32 x 3/8” in the locations shown.

Torque the SCREWS 10-32 x 3/8” to 10 - 12 inch-pounds.

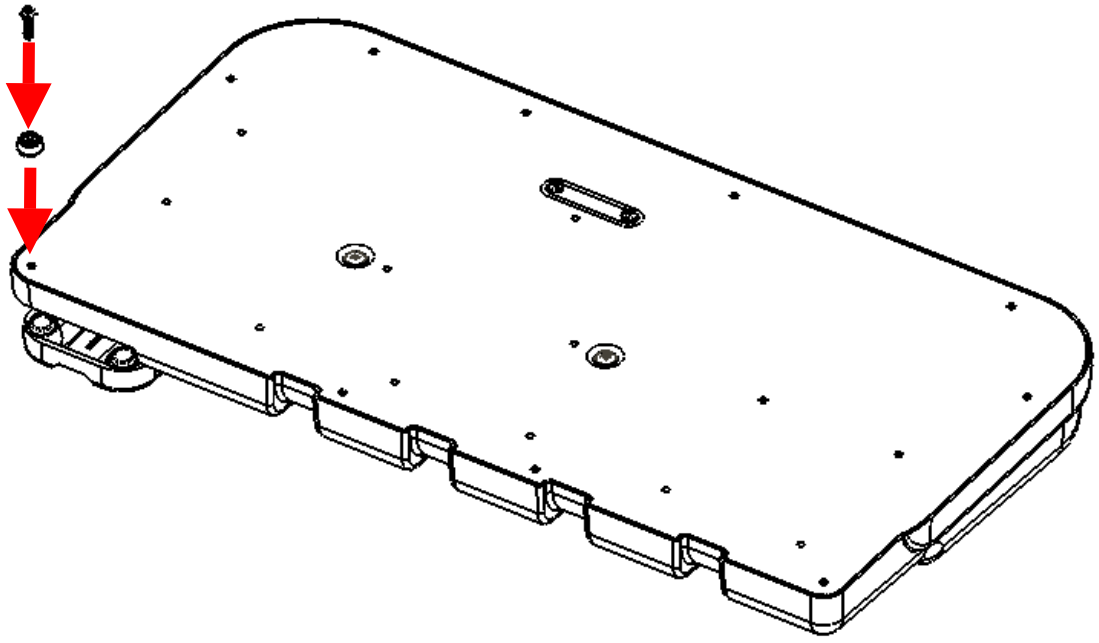


STEP 33

P/N required:
1 each **30-00-0063** SCREW 6-20 x 1/2”
1 each **30-48-5012** RUBBER BUMPER WITH WASHER

Secure one RUBBER BUMPER WITH WASHER with one SCREW 6-20 x 1/2” in the location shown.

Tighten the SCREW 6-20 x 1/2” to 4 - 5 inch-pounds or until the RUBBER BUMPER WITH WASHER is fully seated on the CHASSIS BOTTOM.

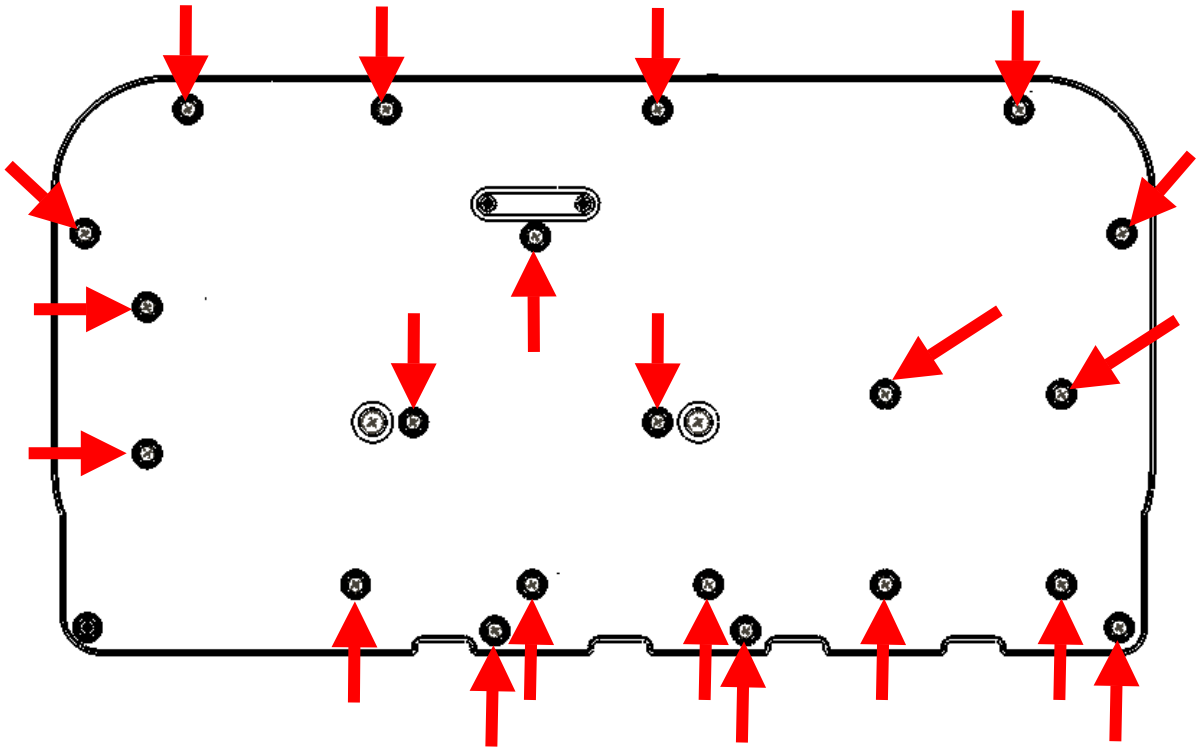


STEP 34

P/N required:
21 each **30-00-0375** SCREW 6-32 x 3/8”
21 each **30-48-5012** RUBBER BUMPER WITH WASHER

Secure 21 RUBBER BUMPERS WITH WASHER with 21 SCREWS 6-32 x 3/8” in the locations shown. The RUBBER BUMPERS WITH WASHER shall be fully seated on the surface of the CHASSIS BOTTOM.

Torque the SCREWS 6-32 x 3/8” to 2 - 3 inch-pounds.

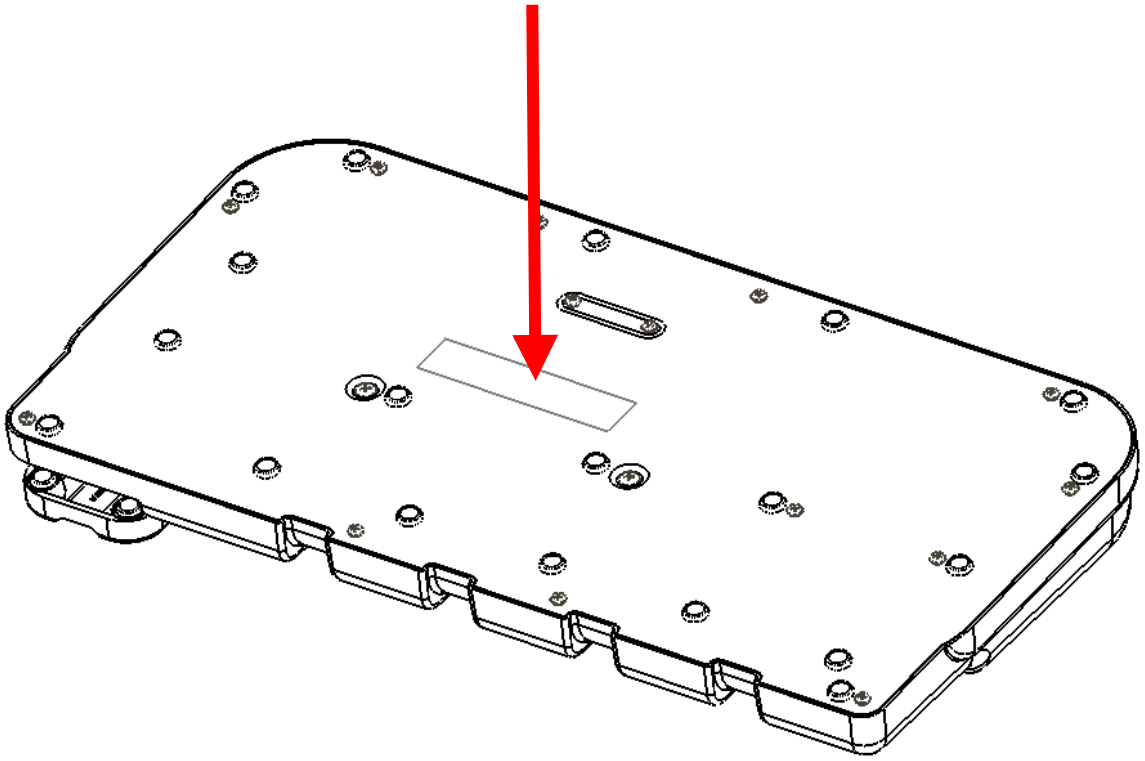


STEP 35

P/N required:
1 each **40-25-0101** LABEL BAR CODE SERIAL NUMBER

Remove the backing from the LABEL BAR CODE SERIAL NUMBER, and apply the LABEL BAR CODE SERIAL NUMBER within the rectangle silkscreened on the CHASSIS BOTTOM. Text on the LABEL BAR CODE SERIAL NUMBER shall be oriented in the same direction as the text silkscreened on the CHASSIS BOTTOM.

The CHASSIS BOTTOM shall be free of all dirt and grease before application of the LABEL BAR CODE SERIAL NUMBER.

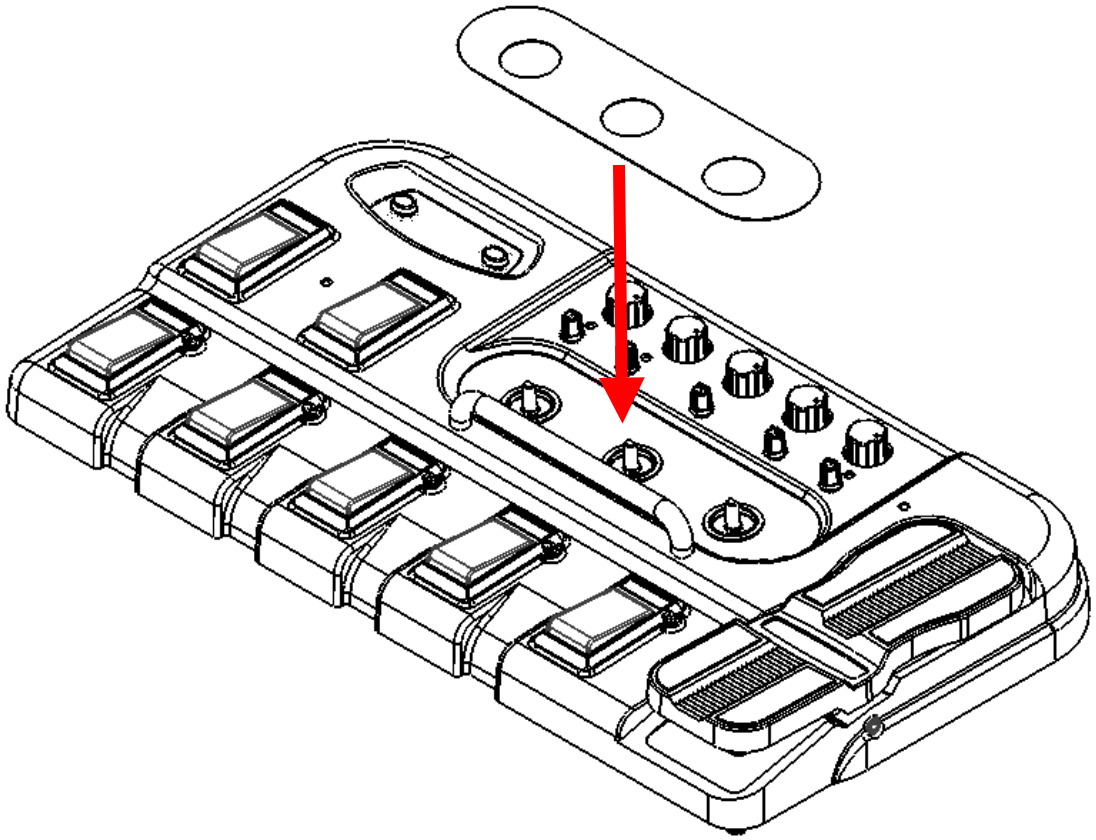


STEP 36

P/N required:
1 each **30-42-0044** UI OVERLAY

Remove the protective backing from the UI OVERLAY, and apply the UI OVERLAY to the recessed areas on the CHASSIS TOP as shown.

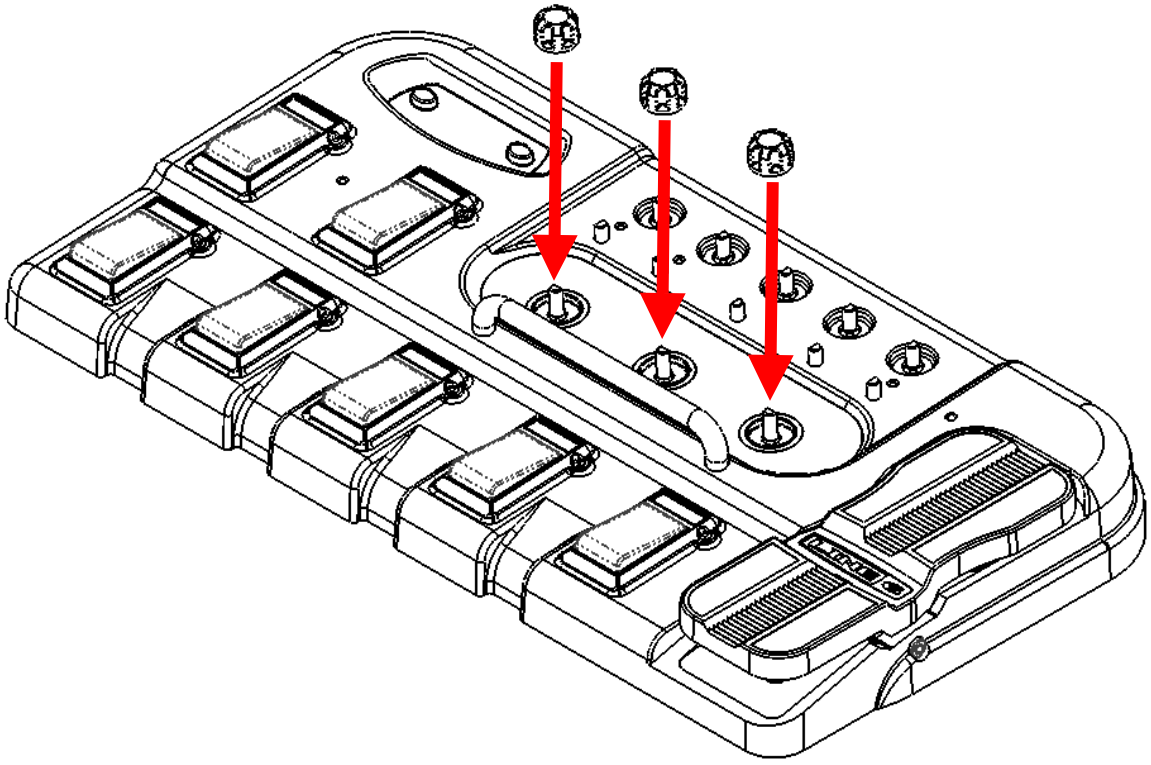
The recessed areas on the CHASSIS TOP shall be free of all dirt and grease before application of the UI OVERLAY.



STEP 37

P/N required:
3 each **30-27-0027** ENCODER KNOB

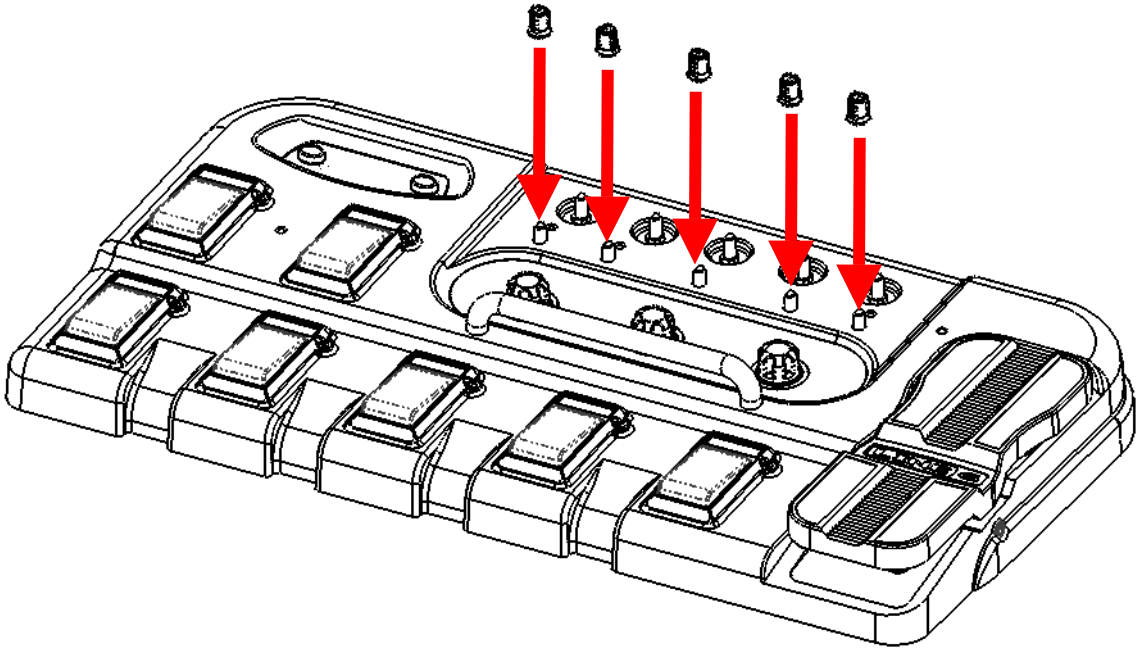
Press one ENCODER KNOB onto the shaft of each potentiometer.



STEP 38

P/N required:
5 each **30-27-0095** SMALL KNOB

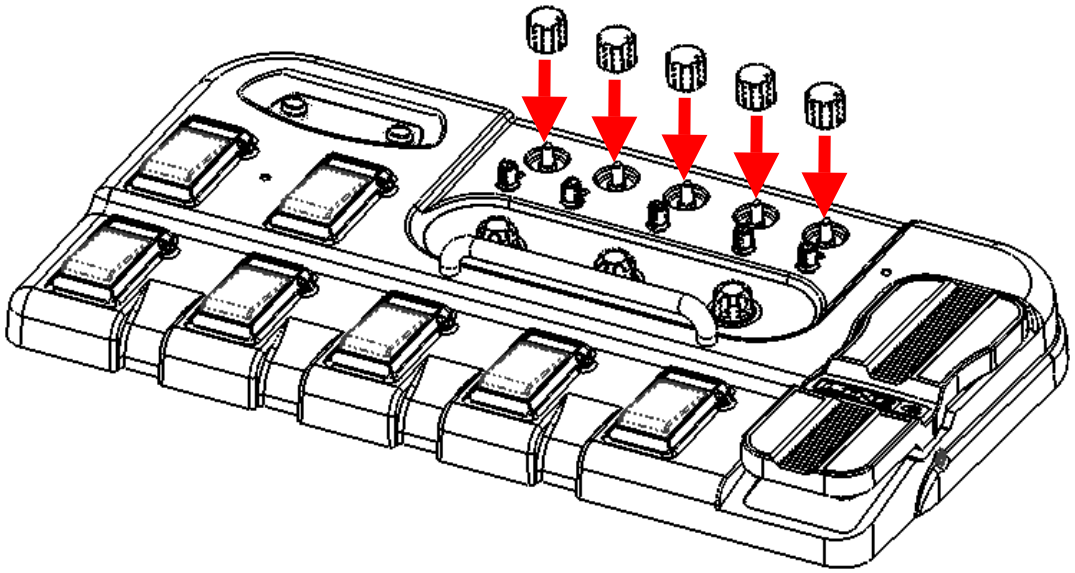
Press one SMALL KNOB onto the shaft of each potentiometer.



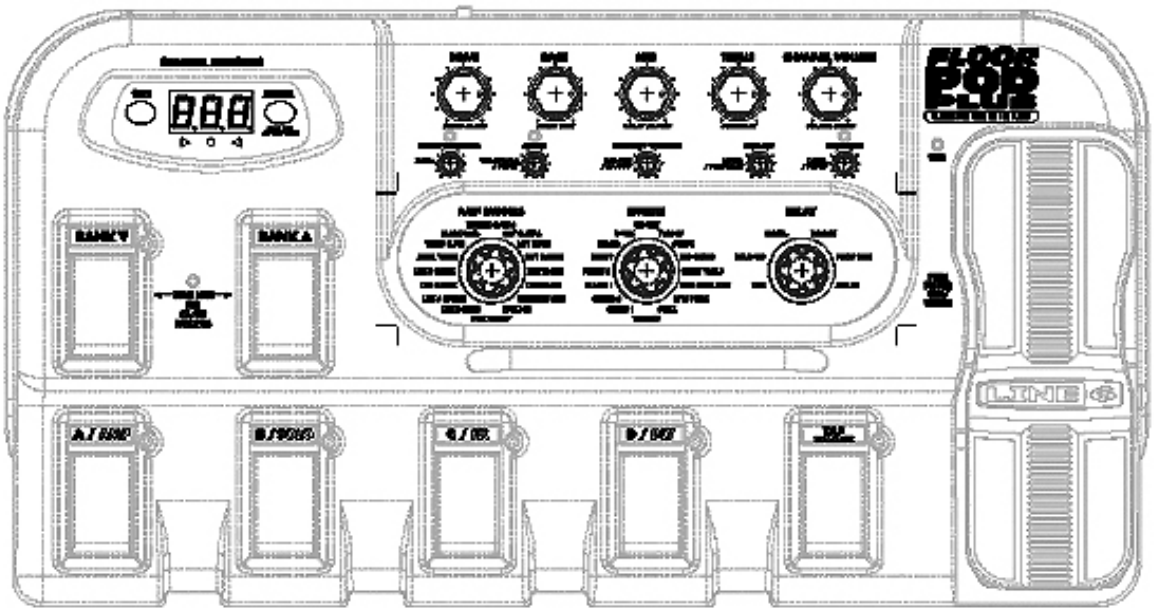
STEP 39

P/N required:
5 each **30-45-0011** CHROME-PLATED KNOB

Press one CHROME-PLATED KNOB onto the shaft of each potentiometer.



Assembly of the P7-1 Complete Unit is now complete.



Moto Floor POD (Floor POD Plus) P7-1
Final Unit Test Instructions
Rev 3.0

DATE: 01.17.2007

SUMMARY: The Moto Floor POD P7-1 final unit test will perform Pedal Calibration, UI and audio tests using a stand alone test system (not connected to test rack).

EQUIPMENT REQUIRED:

1 – Moto Floor POD Plus (Floor POD Plus) P7-1 COMPLETE UNIT
1 - (PX2) POWER SUPPLY (9VAC – 2000mA min)
1 - Function generator hand held or bench mount w/ ¼" mono guitar plug
1 - ¼"Female to 3.5mm Male adapter
1 - Guitar Amp, Spider 3 15W or equiv
1 – Headphone w/either stereo 3.5mm or ¼" plug.
1 – MIDI cable

SET UP:

1. Connect MIDI cable from MIDI IN to MIDI OUT.

CALIBRATING FOOT PEDAL:

1. Press down the **TOE-SWITCH** and plug in **POWER SUPPLY**. "**PC**" will display then "**000**".

2. Press down the **TOE-SWITCH PEDAL** and press the "**A**" footswitch, the display will cycle and display "**100**".

3. Press down the **HEEL PEDAL** position and press the "**B**" footswitch, the display will cycle and display "**100**".

4. Press the "**C**" footswitch, a number between **0** and **100** will display.

5. Press the **PEDAL** its full range of motion and **click the toe-switch**. Now the **LED's** around the center encoder **E2** should match the pedal values in a linear fashion.

6. Press and hold the **TAP** footswitch for 2 seconds, "**FIn"** will display the unit will boot into test mode. This last step guarantees that the pedal calibration values are written to the Flash.

7. After **FOOT PEDAL CALIBRATION** the display will read "**t0P**". Unplug **POWER** to turn unit **OFF.**

UI TEST:

1. **Press** and hold the **TAP TEMPO** button, while you plug in **POWER**. The display will indicate **'POD', '2.0', 'tSt**' and then should display '**t0P**'. The unit is in self-test mode.

2. **t0** - **SRAM Test**
    a. The SRAM test checks built-in ARM SRAM. This test runs automatically when entering self-test mode. It should show a '**t0P**' in the display.
    b. **Press** the **UP-Arrow button** to go to the **next test.**
    c. If the display shows 't0F', press TAP TEMPO to clear the result and press SAVE to re-run the test. If it still shows 't0F' abort testing and correct the problem.

3. **t1** - **FLASH test**
    a. The FLASH test performs a basic test of the FLASH memory. It should show a **'t1P'** in the display.
    b. **Press** the **UP-Arrow** button to go to the **next test**.
    c. If the display shows 't1F', press TAP TEMPO to clear the result and press SAVE to re-run the test. If it still shows 't1F' abort testing and correct the problem.

4. **t2** - **LED test**
    a. The display should indicate '**t2**'. **Press** the **SAVE** button to begin the test.
    b. All **LED's** should light **RED**.
    c. **Press** the **A** button and the **AMP MODELS** and **A, B, C, D - LED's** will light **GREEN** (the other LED's will light RED).
    d. **Press** the **UP-Arrow and DOWN-Arrow** buttons at the same time to complete the test. The display should read '**t2C**' to indicate test **complete**.
    e. **Press** the **UP-Arrow** button to go to the **next test**.

5. **t3** – **Button/Switch test**
    a. The display should indicate '**t3**'. **Press** the **SAVE** button to begin the test.
    b. The button test is to verify operation of the push buttons and switch. To get a PASS indication, each push button and the switch must be pushed and released at least once.
    c. The 1st column of the display shows '**b**' whenever a button is pressed.
    d. The 2nd column shows the button number: **1 (SAVE), 2 (MANUAL), 3 (DOWN), 4 (UP), 5 (A), 6 (B), 7 (C), 8 (D), 9 (TAP), A (PEDAL), b (AMP MODELS – E1), C (DIRECT/AMP switch)**.
    e. The 3rd column shows a lower case '**n**' when the button is not pressed and "_" when the button is pressed.
    f. **Press** the **UP-Arrow and DOWN-Arrow** buttons at the same time to complete the test. '**t3P**' should be in the display indicating a **PASS.**
    g. **Press** the **UP-Arrow** button to go to the **next test**.
    h. If the display shows 't3F', press TAP TEMPO to clear the result and press SAVE to repeat the test. If it still shows 't3F' abort testing and correct the problem.

6. **t4** - **Encoder test**
    a. The display should indicate '**t4** '. Press the **SAVE** button to begin the test.
    b. Turn **AMP MODELS** knob to the left and read '**AEb**' turn to the right and read '**AEF**'
    c. Turn **EFFECTS** knob to the left and read '**EEb**' turn to the right and read '**EEF**'
    d. Turn **DELAY** knob to the left and read '**dEb**' turn to the right and read '**dEF**'
    e. **Press** the **UP-Arrow and DOWN-Arrow** buttons at the same time to complete the test. '**t4P**' should be in the display indicating a **PASS.**

f. **Press** the **UP-Arrow** button to go to the **next test**.
g. If the display shows 't4F', press TAP TEMPO to clear the result and press SAVE to re-run the test. Press the UP-Arrow and DOWN-Arrow button at the same time to complete the test. If it still shows 't4F' abort testing and correct the problem.

7. **t5** - **Jack sense test**
   a. The display should indicate '**t5**'. **Press** the **SAVE** button to begin the test.
   b. Insert and remove all 4 jacks.
      i. "dLc" is displayed whenever the direct left ouput is connected
      ii. "dLd" is displayed whenever the direct left ouput is disconnected
      iii. "drc" is displayed whenever the direct right ouput is connected
      iv. "drd" is displayed whenever the direct right ouput is disconnected
      v. "gtc" is displayed whenever the guitar input is connected
      vi. "gtd" is displayed whenever the guitar input is disconnected
      vii. "HPc" is displayed whenever the headphone output is connected
      viii. "HPd" is displayed whenever the headphone output is disconnected
   c. **Press** the **UP**-**Arrow and DOWN-Arrow** buttons at the same time to complete the test.
   d. '**t4P**' should be in the display indicating a **PASS.**
   e. **Press** the **UP-Arrow** button to go to the **next test**.
   f. If the display shows 't5F', press TAP TEMPO to clear the result and press SAVE to repeat the test. If it still shows 't5F' abort testing and correct the problem.

8. **t6** – **Pots test**
   a. The display should indicate 't6 '. Press the SAVE button to begin the test.
   b. The **10 pots** must be **turned** to the **minimum** position and to the **maximum** position.
   c. The **PEDAL** must be moved the **minimum position (heel)** and to the **maximum position (toe).**
   d. The 1st column of the display shows '**P**' whenever a pot is turned.
   e. The 2nd column of the display shows the pot number. Pots are numbered from **1, 2, 3, 4, 5, 6, 7, 8, 9, A**.
   f. The 3rd column of the display shows the pot position (**0** through **9**).
   g. **Press** the **UP-Arrow and DOWN-Arrow** buttons at the same time to complete the test.
   h. When the test is completed, a '**t6P**' indicates **PASS**.
   i. **Press** the **UP-Arrow** button to go to the **next test**.
   j. If the display shows 't6F', press TAP TEMPO to clear the result and press SAVE to repeat the test. If it still shows 't6F' abort testing and correct the problem.

9. **t7** - **MIDI test** (MIDI cable required – see SET UP on page 1)
   a. The display should indicate '**t7**'. **Press** the **SAVE** button to begin the test.
   b. When the test is completed, '**t7P**' indicates **PASS**.
   c. If the display shows 't7F', press SAVE to re-run the test. If it still shows 't7F' abort testing and correct the problem.

10. Unplug **POWER** to turn **OFF** Moto Floor POD.

AUDIO TEST:

1. Set the Function Generator to a 1V p-p sine wave signal @ between 100 Hz. You should have a ¼" and a 3.5mm plug adapter for the Function Generator for these tests. You will also need a set of headphones with a 3.5mm plug.

2. Turn **POWER** on Moto FloorPOD. The display should read '**1A**'. Make sure the **Master Volume** is set to maximum and the **PEDAL** is also at **maximum (toe).**

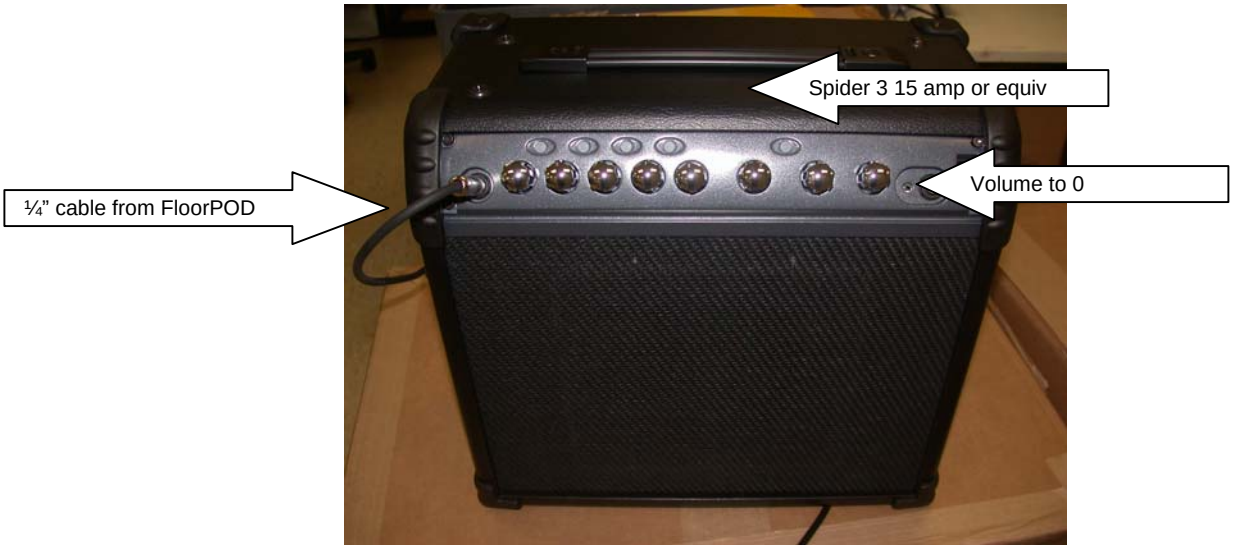


Figure 4

3. Using a 1/8" (3.5mm) adapter, **plug** the **Function Generator** into the **CD/MP3** input of the Moto Floor POD.

4. **Plug** a **¼" mono cable** from the **Moto Floor POD Left Output** to an **amp** (Spider 3 15W guitar amp or equivalent). Set the **amp master volume** to **0** and turn it on.

5. **Increase** the **amp master volume**, and listen for the output. Listen for a constant tone in the amp speaker, testing the **CD/MP3** input. **Move** Moto Floor POD **Master Volume** pot to verify that the volume will change.

6. **Plug** a **¼" mono cable** from the **Moto Floor POD Right Output** to an **amp** (Spider 3 15W guitar amp or equivalent). Listen for a constant tone in the amp speaker. **Move** Moto Floor POD **Master Volume** pot to verify that the volume will change.

7. Plug the **Function Generator** to the ¼" **Guitar Input** of the **Moto Floor POD** using a ¼" cable or adapter.

8. Plug a set of headphones into the **HEADPHONES**. **Listen** for a constant tone in both **left** and **right** headphone. Check the Moto Floor POD **Master Volume** pot at this time to confirm that it functions properly, moving pot towards and away from zero. You should hear an increase and decrease in sound in both left and right headphone. Return the **Master Volume** pot to maximum.

9. Move the **PEDAL** from **maximum (toe)** to **minimum (heel)** and back to **maximum (toe).** You should hear the volume increase and decrease evenly in the headphones.

10. **Turn off signal generator** (but still keep cable plugged in **INPUT**). Turn the **DELAY** knob to the **RIGHT**. **Listen** for 10 seconds. There should be **no repeated static digital noise** (that turns on and off every 2 seconds). If this noise is heard, the SRAM (U25) is bad and needs to be replaced.

11. AUDIO tests are completed.

12. Set all **KNOBS** to the **minimum position**, the Master Volume Pot at ½ (groove in pot shaft is @ 6 & 12 o'clock) and the Foot pedal at full (Toe position), ready for packaging.

13. At this point (a Passed UUT), re-initialize the unit to factory defaults. Unplug the unit. Press and hold the '**ARROW-UP *and* ARROW-DOWN'** footswitches while plugging in the unit **POWER,** wait for a '**Int**' to appear in the display, unplug the unit, then release the 2 footswitches. The unit is now initialized.

14. **FINAL TEST COMPLETE.**

REVISION HISTORY

Revision: 3.0 _MFG Date: 01.17.2007

i. Added Audio Test - Step 10 to check for SRAM noise.
ii. Changed Audio Test - Step 12 to set KNOBS to minimum position.

Revision: 2.0 _MFG Date: 12.06.2006

- Corrected UI LED Test. UI Test - 4

Revision: 1.0 _MFG Date: 11.22.2006

- Release for Beta/Production Build.

FLOOR POD® PLUS

CLASSIC POD TONE ON THE FLOOR

Pilot's Guide

Manuel de pilotage
Pilotenhandbuch
Pilotenhandboek
Manual del Piloto

An in-depth exploration of the technologies and pulsing tonal pleasures of Floor POD Plus.

Electrophonic Limited Edition available @ www.line6.com/manuals
40-00-0116 Rev A

The serial number can be found on the bottom of your Floor POD Plus. It's the number that begins with "(21)". Please note it here for future reference:

SERIAL NO: _____

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CAUTION: To reduce the risk of fire or electric shock, do not remove screws. No user-serviceable parts inside. Refer servicing to qualified service personnel.

CAUTION: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The lightning symbol within a triangle means "electrical caution!" It indicates the presence of information about operating voltage and potential risks of electrical shock.

The exclamation point within a triangle means "caution!" Please read the information next to all caution signs.

You should read these Important Safety Instructions
Keep these instructions in a safe place

Before using your Floor POD Plus, carefully read the applicable items of these operating instructions and safety suggestions:

1. Obey all warnings on the Floor POD Plus and in this Basic Features Guide.
2. Do not place near heat sources, such as radiators, heat registers, or appliances which produce heat.
3. Guard against objects or liquids entering the enclosure.
4. Connect only to AC power outlets rated 100-120V or 230V 47-63Hz (depending on the voltage range of the included power supply).
5. Do not step on power cords. Do not place items on top of power cords so that they are pinched or leaned on. Pay particular attention to the cord at the plug end and the point where it connects to the unit.
6. Unplug your Floor POD Plus when not in use for extended periods of time.
7. Do not perform service operations beyond those described in this Basic Features Guide. In the following circumstances, repairs should be performed only by qualified service personnel:
    - liquid is spilled into the unit
    - an object falls into the unit
    - the unit does not operate normally or changes in performance in a significant way
    - the unit is dropped or the enclosure is damaged
8. Prolonged listening at high volume levels may cause irreparable hearing loss and/or damage. Always be sure to practice "safe listening."

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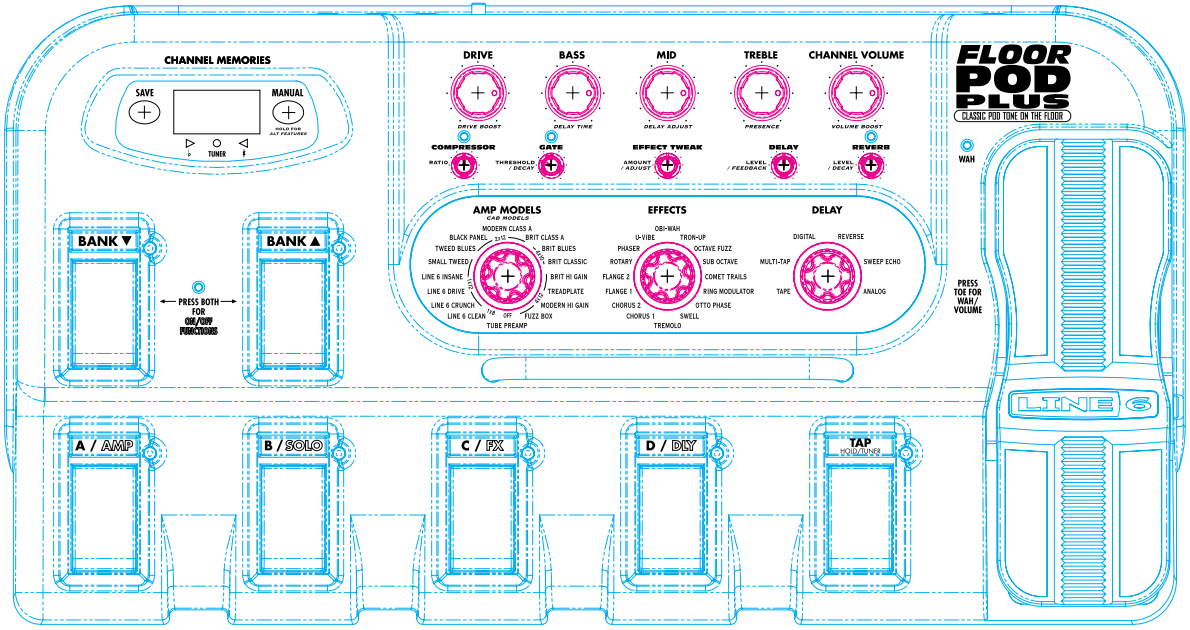
Controls & Connections



1 Amp Models – This knob selects one of 32 Amp Models originally from the famous Line 6 POD 2.0. There are two Models for each category silk-screened around the knob, for example, Black Panel has two Models, one indicated by a Red light and one by a Green light. Refer to Chapter 2 for a detailed listing of each Model.

When you choose an Amp Model, a Cabinet Model is also loaded automatically. For example, when you choose the Brit Hi Gain Model (based on* the Marshall® JCM 800), a Cabinet Model based on* a Marshall® 4x12 will be loaded too. You can mix 'n' match different cabs by pressing in the **Amp Models** knob, holding it down, and spinning it to select a different cabinet. You can also select a different cabinet by holding the **Manual** button and turning the **Amp Models** knob. Chapter 2 lists cabinet options.

The **Amp Model** button also acts as a "shift" key – press and hold to access secondary functions on many controls.

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2 Effects – This knob selects one of 16 different Effect Models. From standard chorus and flange effects to the more unique Comet Trails and Ring Modulator, you'll find a diverse variety to meet your needs. Red lights around the knob show your effects selection. See Chapter 3 for details.

3 Delay – The **Delay** knob selects one of 6 different Delay effects; Tape, Multi-Tap, Digital, Reverse, Sweep Echo, and Analog. Red lights around the knob show your delay selection. See Chapter 3 for details.

4 Drive – This knob controls how hard you're driving the input of a chosen Amp Model, and just like the input volume control on a non-master volume guitar amp, higher settings give you more "dirt."

Drive Boost can be turned on by holding down the **Manual** button or **Amp Models** knob and turning the **Drive** knob past twelve o'clock. This will give you the kind of extra "dirt" that you'd expect from a distortion pedal with the distortion control set low and the output control set high. It boosts your guitar signal before it reaches the Amp Model so you hit the Model harder and get a dirtier sound.

5 Tone Controls – From left to right we have **Bass**, **Mid**, and **Treble** just like a regular guitar amp, except that when you change Amp Models, the response and interactivity of the controls changes too. For example, when you select Black Panel the tone controls operate like the original amp that Model was based on*, the Fender® Deluxe Reverb®.

A **Presence** bump, which brightens your tone, can be switched on and off when you hold the **Manual** button or **Amp Models** knob and turn the **Treble** knob; fully left and the **Presence** is off, while fully right sets the **Presence** on.

You can adjust **Delay Time** and **Delay Adjust** by holding down the **Manual** button or **Amp Models** knob and turning the **Bass** and **Mid** knobs, respectively. See Chapter 3 for details.

6 Channel Volume – This knob controls the relative volume level of the "channel" you are playing through. Use this to balance levels between the sounds you store in two different Floor POD Plus Channel Memory locations. In general, you want to set the **Channel Volume** as high as possible to ensure you're getting the best signal-to-noise ratio.

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You can access a **Volume Boost** by holding down the **Manual** button or **Amp Models** knob and turning the **Channel Volume** knob past twelve o'clock. This boosts volume without any extra "dirt". Useful for a lead boost.

7 Compressor – This knob is the sole control for the Compressor. Turn it all the way to the left for "off" (the Compressor light turns off). Turning the knob from left to right gives you increasing **Compression Ratio** or amounts of compression. The state of this knob, for example off or full max, is stored with each Channel Memory when the Save button is pressed. See Chapter 3 for more info.

8 Gate – This knob controls the Noise Gate. Turn it all the way counterclockwise for "off" which is indicated when the Gate light turns off. Turning the knob from left to right gives you increasing amounts of gating. Press and hold the **Manual** button or **Amp Models** knob and turn this knob to adjust **Gate Decay**. The state of this knob is stored with each channel memory when the **Save** button is pressed. See Chapter 3 for more info.

9 Effect Tweak – This knob selects the **Amount** of whatever effect is selected; left for min and right for max. Press and hold the **Manual** button or **Amp Models** knob while turning this knob to **Adjust** various secondary parameters for each effect. See Chapter 3 for more info.

10 Delay – This knob sets the mix level of the Delay; left for min and right for max. Press and hold the **Manual** button or **Amp Models** knob while turning this knob to adjust **Delay Feedback**. See Chapter 3 for more info.

11 Reverb – This knob controls the reverb; left for off and clockwise for maximum reverb. The light above the knob is on if the reverb is on. Press and hold the **Manual** button or **Amp Models** knob while turning this knob to adjust **Reverb Decay**. See Chapter 3 for more info.

12 Save – When you want to store your own tweaked up sounds, press this button. More info on how to save can be found in Chapter 4.

13 Manual – Press this button once to enter **Manual Mode**. In this mode, the sound of the Floor POD Plus always reflects the knob settings. Move knobs around to change sounds. This button also acts as a "shift" key – press and hold while turning a knob to access the secondary functions labeled for many controls.

14 Channel Memories – Displays the selected **Channel Memory** from 1A-

31D. Each Channel Memory is a complete preset of the Amp and Effects Model settings.

15 Tuner Lights – The middle light illuminates when the tuner is on (activated by pressing and holding the **Tap** footswitch). The note you're playing is shown in the display while the corresponding flat or sharp lights are lit. All three lights will be lit when you are in tune.

16 Bank Up/Down – These footswitches select banks 1-31. To scroll through banks quickly, hold a footswitch down until you get to the bank you want. Press both footswitches together to choose modes as we're about to describe...

17 Footswitches A-D – There are two footswitch modes; **Channel Memory** and **On/Off**. To toggle between modes press both bank up and down simultaneously.

- **Channel Memory Mode:** In this mode **Bank Up** and **Bank Down** selects a bank while **Footswitches A-D** select a Channel Memory within that bank. In this mode, the footswitch lights will illuminate Red when the footswitch is pressed.

- **On/Off Mode:** This mode lets you to turn effects or the Amp Model on and off with your feet. **Footswitches A-D** now turn on and off the Amp Model, Solo boost, FX, and Delay respectively. In this mode, the footswitch lights will illuminate Green to indicate the On state of each function.

18 On/Off Functions Light – Lights when On/Off mode is active.

19 Tap/Hold For Tuner – Tap this footswitch a couple of times and the delay speed will match the speed you tapped. The light will blink at the current delay rate. Even if delay is off, you can still tap to set the delay rate. When you turn delay back on, the delay will be ready to rock at the new rate.

Press and hold this footswitch for more than 2 seconds to activate the tuner. Press again to exit tuner mode. See Chapter 4 for details.

20 Pedal and Wah Light – The onboard pedal can control volume and wah. When operating the pedal, you can press hard with your toe at the top of the pedal and the wah – as well as the wah lights to the left of the pedal – will switch on and off.

Note that some Amp Model selections place the volume pedal *before* the Amp Model (**Pre**) while some place the volume pedal *after* the Amp Model (**Post**). See Appendix A for the breakdown.

21 Input – Dude, plug in here.

22 Aux Input – This is where you plug the output of your CD or MP3 player into Floor POD Plus so you can jam along to your favorite tunes. To balance the music with your guitar you'll need to adjust the output volume on your CD player or MP3 player.

23 Output Level – Controls the overall level of the Left and Right Output as well as the level of the headphones.

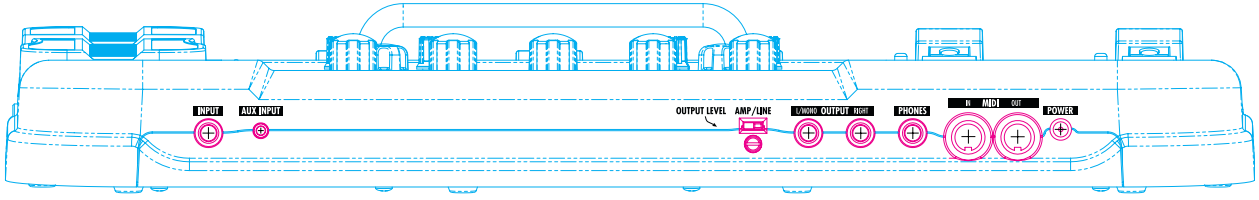
24 Amp/Line – Set this switch to **Line** when connecting Floor POD Plus directly to recording equipment, a mixing board, etc. This activates Line 6's acclaimed **A.I.R.** (*A*coustically *I*ntegrated *R*ecording) technology with advanced speaker-microphone-room tone simulation. Set this switch to **Amp** when plugging Floor POD Plus into the front of your guitar amp. This defeats the **A.I.R.** processing.

25 Left and Right Outputs – OK, this should be easy. Use the Left Output for a mono output to your amp or recording device. Use both left and right for your stereo output to either two amplifiers or a stereo input on your recording device.

26 Phones – This jack was designed for 1/4-inch phones. Make sure you turn the Output Level down all the way and then slowly turn it up to adjust the listening level of your headphones. Yes, you can use 1/8-inch phones with an adapter, too.

27 MIDI In & Out – Connect Floor POD Plus to your MIDI equipment to select Channel Memories (via Program Change messages), automate settings (via Continuous Controller messages) and back up your tones (via SysEx). All the details are online at www.line6.com/manuals, in the downloadable MIDI Reference document.

28 Power – Please only use the Line 6 power supply that came with your unit. Thanks.



Modeled Amps & Cabs

Which Amps and Cabs Are Modeled?

There are 32 Amp Models living within your Floor POD Plus and 16 Cab Model selections. The following is a list of all Amp Models and Cabinet Models available, along with a description of the original equipment that inspired them. See Appendix A for a summary.

Line 6 Clean

RED: "Line 6 Clean". To create this Amp Model, we essentially grafted the crisp top end of a solid state amp to a rich, satisfying tube amp-style bottom.
GREEN: "Line 6 Twang". Glassy high end, plus the snap and bite of a vintage tube amp. Things don't really get too crunchy until you get to the top range of the **Drive** knob.

Line 6 Crunch

RED: "Line 6 Crunch". Our "boutique" sound. Not too clean, but not too raging. Great for modern blues or jazz, this sound should be like a fine cognac, smooth and warm going down, but with a nice kick. The **Mid** control is located before the Amp Model's **Drive**, but the **Bass** and **Treble** controls are placed after the **Drive** for maximum range.
GREEN: "Line 6 Crunch #2". Looking for a 50 watt tube head tone with better EQ? Scoop out the mids even at high drive settings.

Line 6 Drive

RED: "Line 6 Drive". Our version of the modern, super-saturated, high gain, lead amp; smooth, yet biting. All the tone controls here are post-Amp Model for maximum control with minimum muddiness. It's like playing through a collection of amps simultaneously – a studio technique that has made possible some of the greatest guitar tones of modern recordings.
GREEN: "Line 6 Blues". This tone is based on* the '65 Marshall® JTM-45 Bluesbreaker but incorporates wider range tone controls. Once you get into higher **Drive** settings, this Amp Model begins to transition into a variant of the Budda Twinmaster (a high end boutique amp) for sweeter overdrive tonality.

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Line 6 Insane

RED:"Line 6 Insane". Our goal here was to provide you with as much input gain distortion as possible short of complete meltdown. You get ridiculous, rich tube drive to shame the distortion of pretty much any amp on the planet while still retaining tonal definition and character. As a result, you get lots of bottom end and cabinet character with tons of wide-ranging tone shaping. Crank up the **Drive** control and take no prisoners!

GREEN:"Line 6 Layer". Line 6 Clean meets **Line 6 Drive**. As we've already mentioned, many guitarists and producers have experimented with running multiple amps simultaneously, with each amp making a contribution to the overall tone. The **Drive** knob acts as a blender control – fully left you've got big bottom 21st Century Clean, and fully right you've got paint-peeling ultra-drive. Set it anywhere in between, and you get to have your cake and smear it all over your audience, too.

Small Tweed

RED: "Small Tweed". Based on* a 1952 "wide panel" Fender® Tweed Deluxe Reverb®. This Amp Model will snarl with the best of them. The original amp had only a single tone control, essentially a treble roll off. We set up the **Treble** knob to give you this treble roll off when using this Amp Model, which left us with the **Bass** and **Mid** knobs just sitting there. That just didn't seem right, so we figured out a way to put those knobs to work without mucking about with the authenticity of this Amp Model's treble tone control. We set up the **Bass** and **Mid** as post-Amp Model controls, which essentially lets you EQ up your tone as you would do on a mixing console after recording your amp. Set the **Bass** and **Mid** knobs at halfway to put them in "neutral," and try the **Treble** knob somewhere above halfway for a classic Tweed sound.

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GREEN: "Small Tweed #2". Based on* the 1960 Fender® Tweed Champ®. This is a great sound when the **Drive** is cranked (not bad clean, either). These amps were originally designed to be sold to beginners, but rock and rollers quickly discovered that you could get a great distorted sound at fairly low volume levels. Many of the classic guitar solos of the 50's were recorded through a Champ®. The Champ® had no tone control, only volume. With your Floor POD Plus, it's easy to get a classic Champ® tone. Just leave all the **Bass**, **Mid**, and **Treble** controls parked at 12 o'clock, which means they are "flat," making no contribution to the tone. Still, we'd hate to waste those things, so we figured out a way to put the **Bass**, **Mid**, and **Treble** controls to work without mucking about with the authenticity of this Amp Model. When using this Amp Model, all these tone controls are applied after the Amp Model processing, which essentially lets you EQ up your tone as you would do on a mixing console after recording your amp. Remember, for the authentic emulated sound of the Champ®, set all the tone controls at 12 o'clock.

Tweed Blues

RED:"Tweed Blues". Based on* the classic '59 Fender® Bassman® 4x10 combo. The amp that started it all – instant rock and roll tone. Originally a bass guitar amp, the Bassman® became a Blues staple for 6-string guitarists. It has the fat bottom end you'd expect from a bass amp but also has the Fender® twang on the top. The Bassman® was the "blueprint" for Floor POD Plus's **Tweed Blues**. Incidentally, when Jim Marshall built his first amps with Ken Bran they were heavily influenced by the early Bassman®. One of the interesting things about the Bassman® is just how interactive the **Mid** and **Treble** controls are. The **Mid** control isn't a bandpass, as in most tone control setups. Instead, it's almost like a second treble control. The two are additive, so if you're running the **Mid** knob higher than halfway up, you'll find that the **Treble** control might give you more bright than you really want. On the other hand, when you turn the **Mid** knob down, you'll probably want to boost the **Treble**. The Bassman®, like many of the amps modeled for Floor POD Plus, didn't have a master volume.

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So to get the kind of tone that the Bassman® can deliver at higher gain settings, you had to crank it up loud enough to do some serious damage to anyone who might be standing close by. With Floor POD Plus, you can get that kind of tone at a bedroom or studio level – or through your headphones even! Try a **Drive** setting of about 4 or 5 – it's guaranteed to dredge up the best R&B licks you know.

GREEN: "Boutique #3". Based on* a Budda Twinmaster head. The Budda philosophy is all about power tube distortion. Simplicity is the key. With relatively low front end gain, highly interactive tone controls, and tube rectifier "sag" it's great at getting a classic cranked sound for small gigs and recording. Once again, since the Twinmaster has no mid control, we've added a little bonus in the form of some post-Amp Model mid contouring available via the **Mid** control. As usual, set this control to 12 o'clock to get groovy with the unadorned Budda-style vibe.

Black Panel

RED: "Black Panel". Based on* the blackface Fender® Deluxe Reverb®. The Holy Grail for many blues, country, and "roots" players has been a blackface Fender® Deluxe Reverb®. After listening to quite a few candidates for modeling, we stumbled upon an extremely cool amp from 1964. Most players love a Deluxe Reverb® when it's turned up to about 7 for a nice gritty sound that cleans up when you back off your guitar's volume knob just a little. Notice how the tone control response changes as this Amp Model's **Drive** is changed; clean settings are crisp and present, while more driven settings will mellow the high end, which is similar to the response of an actual amplifier. We've set up the **Mid** knob for this model, so you can add some post-Amp Model midrange contouring for a little more flexibility. Once again, set the **Mid** knob to its "neutral" 12 o'clock position for the classic sound of a Fender® Deluxe Reverb®.

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GREEN: "Black Panel #2". Based on* a 1965 blackface Fender® Twin Reverb®. A real workhorse, everybody used it, from jazz and country players to serious rockers. I remember seeing Johnny Winter at a concert where both he and Rick Derringer – am I dating myself or what? – were using six Twins stacked in a pyramid each. We were in the second balcony and it was REALLY loud even all the way back there. The Twin has a lot of tonal flexibility and is at home in a great many different situations. It never gets extremely overdriven and dirty, mostly just louder; a lot louder. This is the amp for the classic surf sound. Dial up the spring reverb, switch on the tremolo, crank up the volume, and look out for bikinis.

Modern Class A

RED: "Modern Class A". Based on* a Matchless Chieftain. The '96 Matchless Chieftain, which was studied for the Modern Class A selection, is a very expensive handmade amp. The Matchless has an EL34-powered "modern class A" design – hence this model's name – and a unique tone (largely due to the complicated EQ scheme). The sound is sort of "future retro." Its soft clipping is typical of Class A amplifiers; almost a "hi-fi" sound in a great rock and roll amplifier.

GREEN: "Brit Class A #3". Based on* Channel 1 of a wonderful 1960 Vox® AC 15. Here's another Vox-inspired Amp Model. The sound is similar to that of the Vox® AC 30s that were studied for Floor POD Plus's **Brit Class A** and **Brit Class A #2** Amp Models, but this is a smaller amp (one, instead of two, 12" speakers) with a warmer, more "woody" sound. Once again, the original amp had only a single tone control – a treble cut. We faithfully modeled that and then slipped in some post-Amp Model bass and mid contouring. Set the **Bass** and **Mid** in neutral (12 o'clock, or halfway up) and play with the **Treble** control to get yourself some of those classic British invasion sounds.

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Brit Class A

RED: "Brit Class A". Based on* the Vox® AC 30. Music was changing in the early 60's and guitarists were asking for more brilliance & twang. So the Jennings Company, makers of Vox® amps, decided to add Treble and Bass controls (and an extra 12AX7 gain stage, incidentally); this additional circuit became known as Top Boost. The AC 30 with Top Boost was the amp made famous by many British invasion bands. Much of the unique character of the Vox® sound can be attributed to the fact that Class A amps overdrive in a very different way than Class AB. Brian May of Queen, Mike Campbell of Tom Petty's Heartbreakers, and The Edge of U2 have also used classic AC 30s to make their music. On this Amp Model, Floor POD Plus's **Mid** control acts like the Cut knob on the AC 30. Although usually played fairly clean, a cranked AC 30 has a great saturated lead tone, a la Brian May on the early Queen albums.

GREEN: "Brit Class A #2". Based on* the Normal Channel of a Non-Top Boost Vox® AC-30. As we mentioned, the early Vox® amps were the first designed especially for electric guitar (Hey, some early amps from other manufacturers have Accordion inputs! Polka, anyone?), and used Class A power amp designs, rather than the much more common Class AB type. We were lucky enough to find what we are told was one of Bryan Adams' favorite AC 30s for recording. Lenny Kravitz happened to be using it the week before we began testing. It was one of the gems in a great collection of vintage amplifiers offered for rental in Los Angeles, where Line 6 is located. We later bought this amp, and continued to hone our emulation of it to bring you the Amp Model it inspired in the Floor POD Plus. This is definitely a good place to start to get yourself some of those classic British invasion sounds. Like the AC 15, the AC 30 NTB has only a single treble control, so POD's **Bass** and **Mid** controls here are set up for boost after the Amp Model processing to add a little extra flexibility without compromising the accuracy of the model. The 12 o'clock setting on these controls is flat response.

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Brit Blues

RED: "Brit Blues". Based on* the Marshall® 1964-65 JTM-45 head. Although the sound normally associated with Marshall® Plexi amps comes from the 100-watt models of the late 60's, it is the 50-watt JTM-45 that was the inspiration for the next in Floor POD Plus's line up of Amp Models. Complete with block logo (predates the "scrolled" Marshall® logo) and a gold Plexiglas (Plexi) front panel, the JTM-45 marked the beginning of Marshall's transition from a mellower Fender®-like tone to the distinctive bright "crunchy" sound of the later Marshalls.

GREEN: "California Crunch #1". Based on* a Mesa/Boogie® Mark II-C+. The first of the "boutique" amp makers was probably Mesa/Boogie®. Boogie made their mark in the late 70's and early 80's by adding master volumes and more gain stages to amps with Fender®-style circuitry. You can hear the Fender® heritage but with more "punch" in the mids. This model is based on the Clean Channel of the classic Mesa/Boogie® Mark II-C, with the enhancements of the "+" version of the Mark II-C circuitry design.

Brit Classic

RED: "Brit Classic". Based on* the infamous Marshall® Plexi. Coveted by tone connoisseurs the world over. By this time (ca. 1968) Marshall® had completely changed the circuitry away from the Fender® 6L6 power tube heritage and moved to an EL34 tube; another major tone difference was due to the necessary output & power supply transformer changes. (See, we told you we spent some time looking into all this stuff.) All this mucking about added up to create a tone forever linked with Rock Guitar. Amps of this era didn't have any sort of master volume control, so to get this sound you'd have to crank your "Mark III Super Amp" to max – just the thing to help you really make friends with the neighbors. Hendrix used Marshalls of this era; 20 years later Van Halen's first two records

owed their "brown sound" to a 100-watt Plexi. In order to get a crunch sound out of a Plexi you would likely crank up the input volume and the tone controls (to 10!). You'll find that the Brit Classic, in keeping with our basic "make-it-sound-a-whole-lot-like-the-original" concept, is set up to do pretty darned near the same thing. Max out the **Mid** and **Treble** knobs and turn **Bass** to about 9 or 10 o'clock on your Floor POD Plus when using this Plexi-inspired Amp Model and you can treat those nice neighbors to a tasty slice of fat rock tone.
GREEN: "California Crunch #2". Based on* the Drive Channel of the Mesa/Boogie® Mark® II-C+. Try your Santana licks here.

Brit Hi Gain

RED: "Brit Hi Gain". Based on* the Marshall® JCM 800. Turn to this Amp Model to conjure up tones of the coveted JCM 800, one of Marshall's most universally-acclaimed modern amps. This updated version of the Plexi continued Marshall's heritage with added gain and edge for a new generation of rock guitarists. One of the biggest differences here is that the tone controls are located after the preamp tubes. We worked with a 1990 JCM 800 with Master Volume to develop this model. Incidentally, some versions of JCM800s get their distortion from clipping a diode. The amp we modeled uses a tube for distortion. This is the metal sound Marshall made famous. Although not many people play Marshalls clean, it's a great tone; so you should also be sure to check out this model with a low **Drive** setting, too. Of course, you can always pump up the drive and rage....
GREEN: "Boutique #1". Based on* the Clean Channel of the Dumble® Overdrive Special. The Dumble® Overdrive Special is one of those incredibly expensive, custom amps that most people never get a chance to actually get close to in this lifetime. Each incarnation of the Dumble® magic is a little bit different, because each of these amps is hand built for a specific customer, and voiced to match their playing and desires. With that in mind, we based this Amp Model on the analysis of several different Dumble® Overdrive Specials. Despite this tuning to the individual owner, these amplifiers tend to have a number of features in common; the clean channel is very sensitive to attack and dynamically responsive, and the drive channel has a thick, liquid, singing sustain that doesn't lose string definition when driven hard. Floor POD Plus's tone controls on this Amp Model are quite subtle, like those of the Dumble® itself.

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TreadPlate

RED: "TreadPlate". Based on* a 1994 Mesa/Boogie® Dual Rectifier® Tremoverb. You can use this Amp Model to get that tight, high gain sound used by bands like Dream Theater or Metallica. Mesa/Boogie® made their mark in the late 70's and early 80's by adding master volumes and more gain stages to amps with Fender®-style circuitry. You can hear the Fender® heritage but with more "punch" in the mids. The Dual Rectifier's tone controls are post-distortion and, as with the tone sections of most of the amps we based our models on, the individual controls interact with each other and with the **Drive**. With high drive settings, you can scoop the mids and crank the bottom end for some great Seattle grunge sounds.

GREEN: "TreadPlate #2". Based on* a 1995 Mesa/Boogie® Dual Rectifier® head. As with the Tremoverb combo that was modeled for the **TreadPlate** Amp Model, the Dual Rectifier® was part of Boogie's more modern, high gain approach for that "big hair" sound. In contrast to the earlier Boogies, the Dual Rectifier's tone controls have more influence at high gain settings, so you can scoop the mids and increase the bottom end.

Modern Hi Gain

RED: "Modern Hi Gain". Based on* the Soldano X88R. The Soldano sound is intensely overdriven, and also has EQ after the preamp distortion. This oversaturated tone is well-suited to thrash metal and grunge bands, but has also been used more subtly by artists like Eric Clapton. This is a good Amp Model to use if you want to get a Van Halen or Joe Satriani sound. The Floor POD Plus **Modern Hi Gain** Amp Model is based on one of Mike Soldano's rackmount preamps. Talk about high gain preamp tube distortion! The X88R we studied to create this Amp Model would have been the rage for Los Angeles studio use in the late '80s.

GREEN: "Modern Hi Gain #2". Based on* a Soldano SLO – Super Lead Overdrive – head. Unlike the X88R preamp used for the Floor POD Plus **Modern Hi Gain** Amp Model, the SLO includes a presence control, plus other little details that give it a bit of a different sound. With the **Drive** control cranked way up, you'll get sustain for days.... Go out'n'ave a bite – when you come back it'll still be sustaining!

Fuzzbox

RED:"Fuzzbox". Based on* the Arbiter® Fuzz Face. Although not technically an amp, we felt that the unique tonal qualities of the classic 1960's Arbiter® Fuzz Face earned it a place among the amps studied to create Floor POD Plus's Amp Models.

This fuzz box used broad-frequency transistor-based clipping. The result is a buzzing kind of distortion that has become popular again with the alternative and grunge set. Jimi Hendrix was among the first guitarists to popularize the Fuzz Face in the States, but our Model is considerably dirtier than the tones found on "Are You Experienced." Try playing "Satisfaction" by the Stones, or the lead from "American Woman" by The Guess Who. Liberal use of the **Bass**, **Mid**, and **Treble** controls will let you go beyond the tones that the Fuzz Face could deliver, enabling you to discover your own unique recipe for those elusive fuzz tones in your head. Just a note: when recording "Purple Haze", Jimi didn't even use an amp – he just went straight from a Fuzz Face to an Orange® power amp to a 4x12 cabinet. Which is the same sort of tone you find here....

GREEN: "Boutique #2". Based on the Dumble® Overdrive Special Drive Channel (described earlier). If you like the Dumble® sound, you might also want to check out the **Line 6 Crunch** model – it was created to deliver a similar kind of tone.

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Tube Preamp

RED: "Tube Preamp". Not even close to being a guitar amp, but once we got started, we just couldn't stop ourselves. The thinking went like this: 'Once people get this Floor POD Plus, it's gonna be so great that they're gonna wish they could use it for everything – warming up keyboards, crunching up drums, fuzzing up vocals. We've gotta give 'em something to do that!' So we did. The **Tube Preamp** Amp Model lets you warm up any sound source the way producers and engineers often do in the studio with vintage tube gear. For more "edge" on vocals, try running your vocal tracks through Floor POD Plus. Or punch up (or munch up) a synth bass track by sending it through Floor POD Plus and cranking up the **Drive** and EQ controls to suit your taste. Although this is not actually a guitar amp model, you can even get some great guitar tones out of it. Also try using it as a direct box for bass. When you do this stuff, you want to use the **Drive** control like a mix knob on a reverb to control how much processing you want to hear. You generally don't want to mix the pre-Floor POD Plus sound with the post-Floor POD Plus sound because of the comb filtering that results. Instead, jack the sound source right into Floor POD Plus and then only monitor it post-Floor POD Plus processing. With the tone controls at 12 o'clock, the EQ is "flat."

GREEN: "Jazz Clean". Based on* the classic Roland® JC-120. This transistor amp was known for a strident clean sound and built-in stereo chorus. When using the **Jazz Clean** Amp Model, try cranking up the **Treble** for a shimmering clean sound that'll cut through just about any mix. It's also perfect for that 80's "new wave" sound. Alternatively, try backing off on the **Treble** and turn up the **Bass** and **Mid** for a darker jazz tone. It'll give you an essentially flat response, providing a balanced tone across the fret board for jazz chord melodies or single-line phrasing.

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Cabinet Models

The following Cabinet Models are available on Floor POD Plus. When you turn the **Amp Models** knob, you select an Amp/Cab combination. You can then mix 'n' match different cabs with the amp by pressing in the **Amp Models** knob, holding it down, and spinning it to select a different cabinet. You can also select a different cabinet by holding the **Manual** button and turning the **Amp Models** knob. Amber lights around the knob will indicate the cabinet selection.

Cab Model	Based on*	Knob Label
1x8	1960 Fender® Tweed Champ®	Line 6 Clean
1x12s	1952 Fender® Tweed Deluxe Reverb®	Line 6 Crunch
	1960 Vox® AC-15	Line 6 Drive
	1964 Fender® Blackface Deluxe Reverb®	Line 6 Insane
	Line 6 1x12	Small Tweed
2x12s	1965 Fender® Blackface Twin Reverb®	Tweed Blues
	1967 Vox® AC-30	Black Panel
	1995 Matchless Chieftain	Modern Class A
	Line 6 2x12	Brit Class A
4x10s	1959 Fender® Bassman®	Brit Blues
	Line 6 4x10	Brit Classic
4x12s	1996 Marshall® with Vintage 30s	Brit Hi Gain
	1978 Marshall® with stock 70s	TreadPlate
	1968 Marshall® Basketweave with Greenbacks	Modern Hi Gain
	Line 6 4x12	Fuzz Box
No Cab	You will probably want to use this Cabinet model with the Tube Preamp model for non-guitar sources. It is selected by default when you pull up the Tube Preamp Amp Model.	Tube Preamp

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Cabinet Tuning Mode

Your Floor POD Plus can be tuned for optimal performance with a variety of systems when the Amp/Line switch is set to its **Amp** position. By default, your Floor POD Plus expects to be plugged in before an open-backed cabinet. If you want to plug in to something else, you'll want to change the Cabinet Tuning Mode. To do this, do the following:

- Press and hold the **Save** button while plugging in the power supply.
- After startup, the display will show "Cab" to indicate Cabinet Tuning Mode.
- The display will show current cabinet bank selection.
- Press the **Bank Up** or **Bank Down** footswitches to change selection as follows:

Use Mode...	when Floor POD Plus is...	& your speaker cabs are...
C-a	feeding power amp	closed back *(ideal for 4x12 cab)*
C-b	feeding power amp	open back *(ideal for 1x12)*
C-c (default)	in front of combo/head	open back *(ideal for 1x12 or 2x12)*
C-d	in front of combo/head	closed back *(ideal for 4x12)*

- Press **Save** to store the selection.

Effects

In addition to all the great Amp Models built into Floor POD Plus, there are some great sounding effects. To pick which effect you want to hear, turn the **Effects** knob. When you first select the effect you want, your helpful Floor POD Plus will preset the effect's parameters so you're instantly ready to go with a great sound. You can adjust the character of the effect you've chosen by turning the **Effect Tweak** knob.

Reverb – Reverb is the effect that makes your guitar sound like it is in a room. With Floor POD Plus, reverb is always available. You can control the **Reverb Level** with the **Reverb** knob. Press and hold the **Manual** button or **Amp Models** knob while turning the **Reverb** knob, and now you can adjust the **Reverb Decay Time**. This allows you to adjust the apparent size of the reverberant space. To turn the reverb off, rotate the knob all the way to the left. Reverb is on when this control's light is lit.

There are two basic reverbs, both from the original POD®; a spring reverb Model and a standard digital room reverb. The reverb type is automatically chosen when you select an Amp Model and generally speaking, if the amp that inspired a given Amp Model had a spring reverb, we give you a spring reverb. If the amp did not have a reverb, we've given you the room reverb. Below is a list of reverbs that are loaded with each Amp Model:

Knob Label and Light Color	Reverb Type	Knob Label and Light Color	Reverb Type
Line 6 Clean - RED	Room	Brit Class A - RED	Room
Line 6 Clean - GREEN	Spring	Brit Class A - GREEN	Room
Line 6 Crunch - RED	Spring	Brit Blues - RED	Room
Line 6 Crunch - GREEN	Room	Brit Blues - GREEN	Spring
Line 6 Drive - RED	Room	Brit Classic - RED	Room
Line 6 Drive - GREEN	Room	Brit Classic - GREEN	Spring
Line 6 Insane - RED	Room	Brit Hi Gain - RED	Room
Line 6 Insane - GREEN	Room	Brit Hi Gain - GREEN	Room
Small Tweed - RED	Room	TreadPlate - RED	Room
Small Tweed - GREEN	Room	TreadPlate - GREEN	Room
Tweed Blues - RED	Spring	Modern Hi Gain - RED	Room
Tweed Blues - GREEN	Room	Modern Hi Gain - GREEN	Room
Black Panel - RED	Spring	Fuzz Box - RED	Room
Black Panel - GREEN	Spring	Fuzz Box - GREEN	Room
Modern Class A - RED	Spring	Tube Preamp - RED	Room
Modern Class A - GREEN	Room	Tube Preamp - GREEN	Room

Delay – Sometimes referred to as echo or slap back, delay essentially repeats your sound in interesting and groovy ways. There are six (6) delay Models in the Floor POD Plus:

Tape gives you classic tape echo warmth. The high end will deteriorate with each repeat, in vintage tape echo style. And you never have to change tapes!

Multi-Tap is voiced similar to **Tape**, but has a tap pattern based on* the Roland® Space Echo.

Digital gives you straight up echoes, with crystal clear digital fidelity.

Reverse is a reverse version of **Digital**.

Sweep Echo is a tape delay emulation with a sweeping filter effect added to the delay repeats to give you unique new creative possibilities for adjusting the tone of your delays.

Analog is designed to give a vintage analog bucket brigade delay sound, with its darker distorted tone.

For all delay Models, the **Delay** knob controls the **Delay Level** and the **Tap** footswitch controls the **Delay Time**. To use the **Tap** footswitch, just tap it at the tempo want and the delays will change to match the tempo that you tapped. You can fine-tune the **Delay Time** by pressing and holding the **Manual** button or **Amp Models** knob while turning the **Bass** knob. When you are using quicker delay times, we cut down the number of repeats so you can get those rockabilly and surf slap back sounds. Holding down the **Manual** button or **Amp Models** knob while turning the **Delay** knob allows you adjust the **Delay Feedback**. By the way, we let you set the maximum delay level high enough that your delay's echoes can actually be louder than your direct signal. You may find this handy for getting delay effect setups like U2's The Edge is known for. To turn the delay off, use the **DLY** footswitch when in On/Off Mode. See Chapter 1 for more info.

Press and hold the **Manual** button or **Amp Models** knob while turning the **Mid** knob to adjust various Model-specific parameters, as outlined on the next page:

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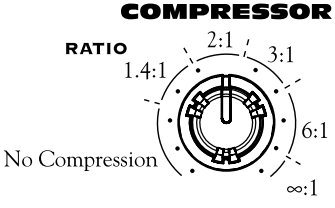
Delay Model	Delay Adjust
Tape	Wow and flutter depth
Multi-Tap	Modulation depth
Digital	Pitch shift in 1/2 steps from -12 to +12 with ring modulation
Reverse	Modulation depth
Sweep Echo	LFO speed for sweep
Analog	Modulation depth

Compressor – A Compressor "squeezes" your sound so that the softer sounds are louder and louder sounds won't jump out at you. In other words, it decreases the dynamic range. Compression is often expressed in ratios, such as 3:1 or 6:1. The higher the ratio, the less difference there is between your softest and loudest playing. The **Compressor** knob controls compression ratio. There are six settings: off, 1.4:1, 2:1, 3:1, 6:1, and ∞:1. With the **Compressor** knob set to max, you get infinite compression, which is similar to having a limiter. Note that the compressor is pre-Amp Model, so it acts like a compression pedal. Compression is active when this control's light is lit.



Gate – A Gate is intended to reduce the hiss and noise guitar systems tend to put out when you're not playing, especially when using a high gain setting. You can control the gate threshold with the **Gate** knob – turn the **Gate** knob to the right for more gating and left for off. Press and hold the **Manual** button or **Amp Models** knob while turning the **Gate** knob, and now you can adjust the **Gate Decay Time**. The gate is active when this control's light is lit.

Chorus – You'll find two different chorus effects in Floor POD Plus. Chorus 1 is modulated by a square wave, so it sounds more like a "rackmount" type chorus. Chorus 2 is modulated by a sine wave with more feedback, so it has richer harmonic content. Chorus 2 was massaged to closely approximate* the classic tone of an old Roland® CE-1 box. The **Effect Tweak** knob controls the **Depth** and **Speed** of the chorus.

Flanger – Flanging is that familiar "jet airplane taking off sound" you've heard on countless recordings from the 70's; just listen to "Barracuda", by Heart for example. Originally the effect was rarely used, since engineers had to use finger pressure on one of the tape reels. This pressure slowed the speed of the tape in tiny increments creating this effect. The part of the tape reel they pressed on is called the "flange", so you can see how the effect got its name. Eventually, the effect could be produced electronically and when it became available in guitar stomp boxes, it became standard equipment for most guitarists.

Two flangers are available in Floor POD Plus. Flange 1 is a light flange with no pre-delay, and is subtler than Flange 2, which is inverted, and has a deeper depth. The **Effect Tweak** knob controls the **Depth** and **Speed** of the flanging effect.

Rotary – This effect simulates* the effect of a mic'd, rotating high frequency speaker horn, like on a Leslie®. Rotary speakers have two speeds: slow and fast. We've set up Floor POD Plus's Rotary Speaker emulation to select a fixed slow speed when the **Effect Tweak** knob is in its minimum position, and a fixed fast speed when the **Effect Tweak** knob is past the 12 o'clock position. When you switch from one speed to the other, you'll notice that the speed doesn't change immediately, but gradually changes from one speed to the other, just as a real rotating speaker's speed would ramp from one setting to the other. The **Effect Tweak** knob controls the **Speed** and **Depth** of Doppler effect (pitch modulation).

Phaser – The phaser is based on* the MXR® Phase 90, a relatively subtle phaser that becomes part of the overall tone. This lush, organic, and groovy swirl is heard on countless albums from the 70's, 80's, 90's, and 2000's. The **Effect Tweak** knob controls the **Speed** and **Depth** of the effect.

U-Vibe – The legendary Uni-Vibe was put on the map in 1969 by Jimi Hendrix. Essentially a four-stage phase shifter, the Uni-Vibe is best known for its watery texture and sultry tones. The **Effect Tweak** knob controls the **Speed** and **Level** of the effect.

Obi-Wah – This is a sample and hold filter is based on* the classic Oberheim® Voltage Controlled Filter. It creates changes in tone by rhythmically emphasizing certain frequencies. The **Effect Tweak** knob controls the **Speed** and **Q** (frequency range) of the effect.

Tron Up – Part auto-wah, part triggered filter, this effect is based on* the Mu-Tron® III envelope follower and gives you everything you need for that 70's funk sound. The **Effect Tweak** knob controls the **Sensitivity** and **Q** of the effect.

Octave Fuzz – The Octave Fuzz is a Line 6 rendition of a fuzz+octave effect, which was first used by guitarists such as Jimi Hendrix from the late 60's. Listen to "Little Sister" by Queens of the Stone Age to hear a taste of what this effect can do. The **Effect Tweak** knob controls the **Level** and **Tone** of the effect.

Sub Octave – This Model is an Octave Fuzz with an octave below! It's just what you need to give those Moog players fits – deep, fat square wave distortion with enough grind and glory to shame any analog synth. The **Effect Tweak** knob controls the **Mix** and **Tone** of the effect.

Comet Trails – A Line 6 original effect from the FM4 Filter Modeler, this one gives you seven filters, all chasing each other around and looping back and forth across the great expanse of sonic space. The **Effect Tweak** knob controls the **Speed** and **Q** of the effect.

Ring Modulator – Ring modulators are for those special times when you want different, weird, distinctive, strange, and otherwise non-traditional guitar sounds. This effect is very percussive sounding and sounds almost as if you're changing the signal in a torturing-the-computer sort of way. The **Effect Tweak** knob controls the **Frequency** and **Mix** of the effect.

Otto Phase – Part phaser part vocal box, this effect is an envelope follower that drives a phaser. Think of it as a phased-up version of Tron Up. The **Effect Tweak** knob controls the **Sensitivity** and **Feedback** of the effect.

Swell – This effect is like an automatic volume pedal that will give you a very even volume swell with each note or chord you play. The **Effect Tweak** knob controls the **Rise Time** of the effect.

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Tremolo – Modeled after* the classic Fender® tremolo. The **Effect Tweak** knob controls **Speed** and **Depth**.

Effect Tweak

A summary of the various effect-model-specific parameters that can be adjusted using the **Effect Tweak** knob is shown below:

Effect Model	Effect Amount	Effect Adjust
Tremolo	Speed	Depth
Chorus 1	Depth	Speed
Chorus 2	Depth	Speed
Flange 1	Depth	Speed
Flange 2	Depth	Speed
Rotary	Speed	Depth
Phaser	Speed	Depth
U-Vibe	Speed	Level
Obi-Wah	Speed	Q
Tron-Up	Sensitivity	Q
Octave Fuzz	Level	Tone
Sub Octave	Mix	Tone
Comet Trails	Speed	Q
Ring Modulator	Frequency	Mix
Otto Phase	Sensitivity	Feedback
Swell	Rise Time	none

You can tweak the **Effect Amount** parameter by turning the knob. To tweak the **Effect Adjust** parameter, press and hold the **Manual** button or **Amp Models** knob while turning the knob.

To turn the effects off, use the **C / FX** footswitch when in On/Off Mode. See Chapter 1 for more info.

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Presets, Tuner & Pedal

Recalling Presets

The Floor POD Plus includes 124 presets to cover a wide range of tones and styles. These presets, or "channels", store a variety of complete amp-and-effect selections pre-programmed by the tone mavens at Line 6. The channels are arranged in 31 banks of 4 channels each. The four channels are called A, B, C and D.

To recall a channel, make sure you're in Channel Memory Mode (see Chapter 1), use the **Bank Up/Down** footswitches to select a bank, then use **Footswitches A-D** to select a channel. When recalling a channel, note that its settings will not be reflected by the present knob positions – like you may have left the **Bass** knob at minimum whereas the just-recalled channel has this control set to max.

To change anything, just grab a knob and tweak.

Saving Presets

You can edit any of the Floor POD Plus presets or create one of your own and store it to whatever location you want. You'll notice that when you adjust or change something in a dot (.) is shown to the right of the channel letter in the display. To save follow these steps:

- Press the **Save** button. The **Save** light will now flash.
- Use the arrow **Bank Up/Down** footswitches to select the Bank (1-31) where you want to store the new preset.
- If you want to save the preset to a different Channel (A, B, C or D) than is currently displayed, press the desired **Footswitch** to select the channel. Press that **Footswitch** again or press the **Save** button to execute the save.
- If you want to save the preset to the same Channel (A, B, C or D) that is currently displayed, press that **Footswitch** or press the **Save** button to execute the save.
- All user controls are saved at their current state.

To cancel a save, turn a knob or allow the unit to have 5 seconds of inactivity since the last press of a footswitch or the **Save** button.

Compare Mode

If you're curious to find out the knob setting that was saved in a given preset, you can enter Compare Mode by pressing and holding the **Save** button for two seconds. Now, while turning a knob, the Tuner lights will indicate that control's current value compared to the preset value. If the ♭ and Tuner lights are lit, the control position is lower than the preset setting. If the ♯ and Tuner lights are lit, the control position is higher than the preset setting. If all three tuner lights are lit, the control position is equal to the preset setting. Press the **Save** or **Tap** buttons to exit Compare Mode.

Manual Mode

When presets are recalled, all knob settings come from memory, not from the current knob positions. If you'd like to hear what all the current knob positions sound like, you can enter Manual Mode by pressing and releasing the **Manual** button. The **Manual** button light illuminates and the display shows no channel indication. Move the knobs around to change the sounds. To exit Manual Mode, press and release the **Manual** button again. This will reload the last channel that was recalled.

Creating and Saving Custom Setups

As if preset channels weren't enough, you can pack the Floor POD Plus with your own custom settings for each Amp Model, effect and delay selection available on the unit. Here's the scoop. Turning the **Amp Models**, **Effects** and **Delay** knobs actually sets all the related parameters to their factory-tweaked settings. However, you can adjust the parameters to your liking, then store these settings so they live directly on the **Amp Models**, **Effects** and **Delay** knobs. Here's how you do it:

- Decide whether you want to save an Amp Model, effect or delay custom setup.
- Tweak the appropriate controls to your liking.
- Simultaneously press the **Amp Models** encoder knob and the **Save** button. The **Save** and **Manual** lights will both flash.
- The display will show "A", indicating an Amp Model will be saved. Use the **Bank Up/Down** footswitches to select the desired custom setup to be saved: "A" = Amp Model, "E" = Effects, "d" = Delay.
- Press the **Save** button to execute the save or press the **Manual** or **Tap** buttons to cancel.

That's it. Now, when you turn the **Amp Models**, **Effects** or **Delay** knob to this position, you'll instantly get your personal settings, with all the controls set the way you like them.

There's one thing to note. You'll notice that you didn't get to pick a location to save your custom setup. That's because Floor POD Plus will only save to the knob position of the currently selected Amp Model, effect or delay. For example, if you started with the Line 6 Insane Amp Model, saving a custom amp setup will save to the Line 6 Insane knob position.

Tuner

Press and hold the **Tap** footswitch for 2 seconds to enter tuner mode. The Tuner light will light to let you know you're in tuner mode. Play a note on your guitar and Floor POD Plus will show you its pitch by displaying the note name in the display. All notes are displayed as naturals or flats, so you'll see "A♭" instead of "G♯" and so on.

The lights under the display tell you if the note is sharp or flat. If the ♭ light is lit, then you're flat. If the ♯ light is lit, now you're sharp. When all three are lit up, you're in tune. To exit tuner mode, press the **Save** or **Manual** button or the **Tap** footswitch.

Tuner Reference Frequency

When in Tuner Mode, you can change the tuner reference frequency by using the **Bank Up/Down** footswitches. By default, the unit has a tuner reference frequency of A440, but it can be adjusted from A436 to A445. The display will show you the frequency selected. This setting is automatically saved and will be recalled the next time you enter Tuner Mode.

Tuner Volume Level/Mute

When in Tuner Mode, you can also select whether you want your sound to be muted or pass through at a given volume. The pedal **Toe Switch** toggles tuner volume mute on and off. When tuner volume mute is off (and the Wah light is lit), you can set the pass-through volume by using the **Vol/Wah** pedal. This setting is automatically saved and will be recalled the next time you enter Tuner Mode.

Complete Factory Reset

If for any reason, or just for the sheer mad joy of it, you decide you need to reset your Floor POD Plus's entire memory to its factory-programmed state, then boldly do this: Simultaneously press the **Bank Up** and **Bank Down** footswitches while plugging in the power supply. After startup, the display will show "int", to indicate that the unit has been re-initialized. Disconnect the power supply then reconnect it. You're done.

Calibrating the Vol/Wah Pedal

To make sure the pedal on your Floor POD Plus has the most sensitivity and range possible, do the following:

- Unplug the power supply, then press and hold the **Toe Switch** on the **Vol/Wah** pedal while reconnecting the power supply. The display will show " PC" to indicate Pedal Calibration Mode, then "000".
- With the pedal in the toe (maximum) position, press **Footswitch A**. The display will scroll to "100".
- With the pedal in the heel (minimum) position, press **Footswitch B**. The display will scroll to "100".
- Press **Footswitch C**. The display will show a numerical value.
- Press pedal **Toe Switch**, then move the pedal from heel to toe positions and observe the lights around the **Effects** encoder. The number of lights should reflect the pedal position.
- Press-and-hold the **Tap** footswitch for two seconds to save the calibration.
- Unplug the power then plug it back in. You're there!

Appendix A: Amp Models

Knob Label & Light Color	Amp Model Name	Volume Pedal Position	Reverb Type	Bright Switch
Line 6 Clean – Red	Line 6 Clean	Pre	Room	Yes
Line 6 Clean – Green	Line 6 Twang	Pre	Spring	No
Line 6 Crunch – Red	Line 6 Crunch	Pre	Spring	Yes
Line 6 Crunch – Green	Line 6 Crunch #2	Pre	Room	No
Line 6 Drive – Red	Line 6 Drive	Post	Room	Yes
Line 6 Drive – Green	Line 6 Blues	Pre	Room	No
Line 6 Insane – Red	Line 6 Insane	Post	Room	No
Line 6 Insane – Green	Line 6 Layer	Post	Room	Yes
Small Tweed – Red	Small Tweed	Pre	Room	No
Small Tweed – Green	Small Tweed #2	Pre	Room	No
Tweed Blues – Red	Tweed Blues	Pre	Spring	No
Tweed Blues – Green	Boutique #3	Pre	Room	No
Black Panel – Red	Black Panel	Pre	Spring	No
Black Panel – Green	Black Panel #2	Pre	Spring	Yes
Modern Class A – Red	Modern Class A	Pre	Spring	No
Modern Class A – Green	Brit Class A #3	Pre	Room	No
Brit Class A – Red	Brit Class A	Pre	Room	No
Brit Class A – Green	Brit Class A #2	Pre	Room	No
Brit Blues – Red	Brit Blues	Pre	Room	Yes
Brit Blues – Green	California Crunch #1	Pre	Spring	Yes
Brit Classic – Red	Brit Classic	Pre	Room	No
Brit Classic – Green	California Crunch #2	Post	Spring	No
Brit Hi Gain – Red	Brit Hi Gain	Post	Room	No
Brit Hi Gain – Green	Boutique #1	Pre	Room	No
TreadPlate – Red	TreadPlate	Post	Room	No
TreadPlate – Green	TreadPlate #2	Post	Room	No
Modern Hi Gain – Red	Modern Hi Gain	Post	Room	No
Modern Hi Gain – Green	Modern Hi Gain #2	Post	Room	No
Fuzz Box – Red	Fuzz Box	Post	Room	No
Fuzz Box – Green	Boutique #2	Post	Room	No
Tube Preamp – Red	Tube Preamp	Post	Room	No
Tube Preamp – Green	Jazz Clean	Pre	Room	Yes