

BILL OF MATERIALS

OMEP - Shrinker

JOB: 11145

Bill-of-material for OR-OSHA project 99/01-30				
Item	Part no.	QTY	Description	Source
Fabricated components				
1	N/A	1	BASE PLT: 3/8 X 7 5/8 X 18 ALUM 6061 OR TP	D
2	N/A	1	TILT PLT: 1/4 X 7 5/8 X 18 ALUM 6061 OR TP	D
3	N/A	2	STATIONARY HINGE HALF: 1/4 X 3/4 X 1 1/8 ALUM	D
4	N/A	2	ROTATING HINGE HALF: 1/4 X 3/4 Z 1 1/8 ALUM	D
5	N/A	2	ROTATION LIMIT BAR: 1/8 X 5/8 X 9 1/4 ALUM	D
6	N/A	1	TRAVEL STOP: 3/8 dia. x 1 3/8 ALUM	D
7	N/A	1	HEAT SINK MT, FXD.: 1 1/8 X 1 1/2 X 1 3/4 ALUM	D
8	N/A	1	HEAT SINK MT, ADJ: 11/16 X 7/8 X 1 3/4 ALUM	D
9	N/A	1	SLIDE BAR: 1/4 X 1/2 X 3 ALUM	D
10	N/A	1	ANTI-BIND BAR: 1/4 X 1/4 X 2 ALUM	D
11	N/A	1	MALE CLEVIS: 3/8 dia. X .75 ALUM	D
12	N/A	1	FEMALE CLEVIS: 3/8 dia. X .75 ALUM	D
13	N/A	1	SHIELD BASE MT: 1/4 X 5/8 X 6 ALUM	D
14	N/A	1	SHIELD, 1ST ARM: 1/4 X 5/8 X 6 ALUM	D
15	N/A	1	SHIELD, 2ND ARM: 1/4 X 5/8 X 2 ALUM	D
16	N/A	1	SHIELD: 1/4 X 3 X 5 CHARCOAL SHADED LEXAN	D
17	N/A	4	FOOT: 5/8 dia. X 9/16 ALUM	D
Purchased components				
50	TR6101	1	BOX: BUD (RADAR ELEC), SPECIFY w/ CHASSIS PLATE	*D
51	IH5511	3	ELEMENT (SET): ERASER	*D
52	IH3116	2	SOCKET (SET): ERASER	*D
53	IH3551	3	ELEMENT GUARD (SET): ERASER	*D
54	491-S	1	FOOT SWITCH: LINEMASTER SWITCH CORP.	*D
55	191995-030	1	SOLENOID: SAIA-BURGESS (LEDEX) SIZE 2EP	*D
56	ART-95	2	SHOULDER SCREW: REID OR EQ 1/4 dia. X 1/4 LG	*D
57	ART-85	2	SHOULDER SCREW: REID OR EQ 1/4 dia. X 1/8 LG	*D
58	DKS-33	5	KNOB, BLACK PHENOLIC: REID, #10-32 X 1/2 SS	*D
59		4	RUBBER FOOT: 5/8 dia. X 5/16 HALF ROUND	*D
60		1	COMPUTER POWER CORD 6'	*D
61		1	REMOTE CORD: 52"	*D

*Although EPS listed as source, these components are available commercially from other sources

10987H.SCH

Bill Of Materials

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Item	Quantity	Reference	Part	Description	Source P/N	Source
1	2	D1,D2	1N5404	Rectifier diode 3 amp, 400 PIV	Digi-Key 1N5404	*D
2	3	D3,D6,D7	1N4005	Rectifier diode 1 amp, 600 PIV	Digi-Key 1N4005	
3	1	R12	470	Resistor 1/4W, 470 ohm, 5%, CF	Digi-Key,Mouser,Radio Shack	
4	1	R6	1K	Resistor 1/4W, 1000 ohm, 5%, CF	"	
5	2	R5,R7	4.7K	Resistor 1/4W, 4700 ohm, 5%, CF	"	
6	1	R8	22K	Resistor 1/4W, 22K ohm, 5%, CF	"	
7	1	R11	10M	Resistor 1/4W, 10Meg ohm, 5%, CF	"	
8	1	R9	50K	Resistor, trimpot 50K, Bourns 3007P	Digi_Key	
9	2	C5,C2	.1uF 50V	Capacitor MLC, X7R, .1uF, 50V, 10%	"	
10	2	C3,C4	.1uF 100V	Capacitor MLC, X7R, .1uF, 100V, 10%	"	
11	1	C7	1uF	Capacitor mylar, 100V, 10%	"	
12	1	C8	500uF	500 uF, 16V, electrolytic capacitor	Mouser, 647-UVR1V471MPA	
13	1	C1	3300uF	3300 uF, 25V, electrolytic capacitor	Digi-Key, P5535-ND	
14	1	U2	68HC705P	Microcomputer programmed with 10987 firmware	Joe Ouellette	
15	1	U3	MC34064F	Reset generator IC, Motorola	Future Active	
16	1	U1	7805	1.5 amp, 5V, regulator, TO220	Digi-Key,Mouser,Radio Shack	
17	1	Y1	4MHZ	Ceramic resonator with caps, 4.00 Mhz +/- .5%	Digi-Key	
18	1	Q6	2N3904	general purpose NPN transistor	Digi-Key,Mouser,Radio Shack	
19	1	Q6	BS170	N channel TO92 power FET, .2A, 60V	Mouser	
20	1	Q3	IRLZ44	N channel power FET 55V, 12A	Digi-Key, IRLZ44N-ND	
21	2	D8,D9	DIAC	36V-44V triac trigger	Digi-Key, HT-5761A-ND	
22	2	Q1,Q2	TRIAC	10 Amp, 400V, TO220	Digi-Key, Q4010R5-ND	
23	1	K1	HEATER	10 AMP, 120VAC contact, 12VDC coil, 260 ohm	Jameco, 186888	
24	1	D4	RED	red LED, generic	Radio Shack	
25	1	J3	CON7	7 circuit .1 in square pin connector	Digi-Key,WM4205-ND	
26	1	J1	CON5	5 pos header .156 in square pin	Digi-Key,WM4623	
27	1	J2	CON10	10 pos header .156 in square pin	Digi-Key, WM2119-ND	

* This system was purchased as part of the unit from EPS but this was his sub-supplier (vendor "E" on contract list).

Project Name:	Heat shrink device
Contract:	99/01-30

Grant recipient	Electronics Assemblers Inc.
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Concept Designer, CAD Designer, Equipment M	Engineering and Prototype Services
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Sub-designer (electrical circuit board)	
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