REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	–	SEE ECP NO. 21HE001000	22-10-18	SDE
	A	SEE ECP NO. 24CE002600	24-07-29	SDE

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH ASME Y14.100.

2. HEAT STAMP APPROPRIATE CONNECTOR IDENTIFICATION P5 THRU P14 AND P17, ON (STRAP, TIEDOWN)FN 23 USING BLACK CHARACTERS IN ACCORDANCE WITH MIL-M-60903. LOCATE STAMPED (STRAP TIEDOWNS) AT APPROPRIATE ENDS.

3. ADD PART IDENTIFICATION IN ACCORDANCE WITH MIL-STD-130 BY HEAT STAMPING, IN ACCORDANCE WITH MIL-M-60903, "98-19782" ON (STRAP TIEDOWN) FN 33, USING BLACK CHARACTERS AND LOCATE AT CENTER.

4. HARNESS LAYOUTS SHOWN ARE SINGLE LINE SCHEMATIC DIAGRAMS NOT TO BE USED AS A CONSTRUCTION PATTERN. HARNESS SHALL BE CONSTRUCTED SO THAT WHILE INSTALLED IN THE NEXT HIGHER ASSEMBLY, IT SHALL FIT NEATLY AND PERMIT THE NECESSARY CONNECTIONS.

5. MARK WIRES WITH APPROPRIATE "WIRE MARKING NO" AND "MARKING COLOR" INDICATED IN WIRE LIST TABLE, BY HEAT STAMPING, IN ACCORDANCE WITH MIL-M-60903, AT 3.00 INCH MAXIMUM INTERVALS.

6. STRAP WIRE BUNDLES WITH TIEDOWN STRAPS FN 24 OR 27 AT 3.00 MAXIMUM SPACING ALONG BRANCHES AND AT BRANCH-OFFS.

7. FOR WIRE LENGTHS LESS THAN 1.00 INCH, THE TOLERANCE SHALL BE +1.00 -.00, FOR LENGTHS BETWEEN 1.00 INCH AND 5.00 INCHES, THE TOLERANCE SHALL BE +1.00 -.50, FOR LENGTHS LONGER THAN 5.00 INCHES THE TOLERANCE SHALL BE ±1.00.

8. INSTALLED CRIMPED CONNECTIONS SHALL WITHSTAND AN AXIAL LOAD OF 8 POUNDS, SHALL HAVE CONTINUITY AND SHALL SHOW NO EVIDENCE OF DAMAGE OR ARCING WHEN CRIMPED WITH MANUFACTURERS RECOMMENDED CRIMPING TOOL.

9. WIRE REF NO'S 86 AND 88, ARE LOOSE, UNMARKED WIRES, TO BE INSTALLED AT NEXT ASSEMBLY.

10. FOR REFERENCE SEE WIRING DIAGRAM DWG NO. 98-19525.

11. VENDOR ITEM-SEE VENDOR ITEM/SOURCE CONTROL DRAWING.

12. USE VENDOR SUPPLIED STRAIGHT CLAMP BRACKET WITH CONNECTOR.

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FIND NO.	CAGE CODE	PART OR IDENTIFYING NO.	QTY REQD	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL
33		88-20019-1	1	STRAP, TIEDOWN, ELECTRICAL COMPONENTS, IDENTIFICATION		NOTE 11
32		98-19774-01	18	CONTACT, ELECTRICAL, FEMALE (18-24 AWG)		NOTE 11
31		88-20274-11	1	TERMINAL, SPADE		NOTE 11
30	97403	13226E0107-14	5	TERMINAL, LUG, SMALL, RING, TONGUE, FULLY INSULATED		NOTE 11
29		88-20274-4	4	TERMINAL, SPADE		NOTE 11
28		88-20472	1	CONNECTOR BODY, RECEPTACLE		NOTE 11
27		88-20018-3	40	STRAP, TIEDOWN		NOTE 6,11
26		88-20274-1	21	TERMINAL, SPADE		NOTE 11
25		88-20274-5	9	TERMINAL, SPADE		NOTE 11
24		88-20018-2	30	STRAP, TIEDOWN		NOTE 6,11
23		88-20018-1	11	STRAP, TIEDOWN		NOTE 11
22	97403	13226E0107-23	1	TERMINAL, LUG, SMALL, RING, TONGUE, FULLY INSULATED		NOTE 11
21	97403	13226E0107-16	2	TERMINAL, LUG, SMALL, RING, TONGUE, FULLY INSULATED		NOTE 11
20		88-20275-3	1	TERMINAL, DISCONNECT		NOTE 11
19		88-20274-9	3	TERMINAL, SPADE		NOTE 11
18		88-20274-3	2	TERMINAL, SPADE		NOTE 11
17		98-19751-01	4	TERMINAL, DISCONNECT, FEMALE 90°		NOTE 11
16		98-19528-04	1	CONNECTOR BODY, ELECTRICAL RECEPTACLE		NOTE 11
15		88-20474	1	CONNECTOR BODY, RECEPTACLE		NOTE 11
14		88-20477	21	CONTACT, ELECTRICAL, FEMALE		NOTE 11
13		88-20470	7	CONNECTOR BODY, RECEPTACLE		NOTE 11
12	97403	13226E0107-5	3	TERMINAL, LUG, SMALL, RING, TONGUE, FULLY INSULATED		NOTE 11
11		98-19750-01	1	TERMINAL, DISCONNECT, FEMALE		NOTE 11
10	97403	13226E0107-7	1	TERMINAL, LUG, SMALL, RING, TONGUE, FULLY INSULATED		NOTE 11
9	97403	13226E0107-15	10	TERMINAL, LUG, SMALL, RING, TONGUE, FULLY INSULATED		NOTE 11
8	97403	13226E0107-22	8	TERMINAL, LUG, SMALL, RING, TONGUE, FULLY INSULATED		NOTE 11
7		M22759/16-14-9	A/R	WIRE ELECTRICAL 14GA	SAE-AS22759/16	
6		M22759/16-16-9	A/R	WIRE ELECTRICAL 16GA	SAE-AS22759/16	
5		M22759/16-18-9	A/R	WIRE ELECTRICAL 18GA	SAE-AS22759/16	
4		M22759/16-10-9	A/R	WIRE ELECTRICAL 10GA	SAE-AS22759/16	
3		88-21947	1	CLAMP, CABLE, ELECTRICAL CONNECTOR		NOTE 11, 12
2		88-21944	35	SOCKET		NOTE 11
1		88-21940	1	CONNECTOR BODY, PLUG, ELECTRICAL		NOTE 11

PARTS LIST

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NEXT ASSY	USED ON
98-19503	98-831

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ANGLES ±
3 PLACE DECIMALS ±
2 PLACE DECIMALS ±
FRACTIONS ±

MATERIAL
SEE PARTS LIST

CONTRACT NO. DAAK01-96-C-0085
DATE 98-03-06

PREPARED	K. HESCOCK	22-10-18
CHECKED	R. BALTAZAR	22-10-18
ENGINEER	K. BEUTEL	22-10-18

DEPT OF DEFENSE PROJECT MANAGER
EXPEDITIONARY ENERGY & SUSTAINMENT SYSTEMS
CORY R GOETZ

DOD PROJECT MANAGER,
EXPEDITIONARY ENERGY & SUSTAINMENT SYSTEMS
WASHINGTON, D.C.

WIRING HARNESS, ENGINE, 60 HZ

SIZE	CAGE CODE	DRAWING NO.
D	30554	98-19782

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WIRE LIST TABLE

WIRE REF NO	WIRE MARKING	FROM	TERMINAL FN	TO	TERMINAL FN	WIRE FN	MARKING COLOR	WIRE LENGTH
1	1C14	SR1-(+)	21	K2-A1	9	7	RED	50
2	1D16	P7-17	2	K13-A1	9	6	RED	57.5
3								
4								
5	1H14	K2-A1	9	K13-A1	9	7	RED	16
6	1J14	P6-1	14	K2-A1	9	7	RED	20.5
7	2L16	P7-6	2	TB4-4A	25	6	RED	31
8	2M14	SR1-(-)	21	TB4-5A	25	7	RED	34
9	2N18	P17-17	32	TB4-5B	26	5	RED	58
10	2P14	P6-2	14	TB4-5B	25	7	RED	8.5
11								
12								
13	2T18	P12-2	14	TB4-5A	26	5	RED	59
14	2U18	MT5-GND	12	TB4-4B	26	5	RED	54
15	2V18	P9-2	14	MT5-GND	12	5	RED	36
16	2W18	K13-X2	29	TB4-4B	26	5	RED	21.5
17	3A14	H1-1	30	K13-A2	9	7	RED	84
18	4A14	K2-A2	9	L4	20	7	RED	73
19	6B18	P7-15	2	K13-X1	29	5	RED	57.5
20	9A18	P7-10	2	P17-12	32	5	RED	46
21	10A18	P7-22	2	K2-X1	29	5	RED	55.5
22	11B18	P7-16	2	K2-X2	29	5	RED	55.5
23	13D18	P7-13	2	TB4-8A	26	5	RED	29
24	13G18	K1-1	17	TB4-8B	26	5	RED	48
25	13H18	K1-1	17	P12-1	14	5	RED	62
26	13K18	TB4-8B	26	P17-18	32	5	RED	59
27	2AB18	P17-5	32	TB4-4A	26	5	RED	50
28	19A18	P7-14	2	K1-4	17	5	RED	35
29	20D18	P7-9	2	P17-11	32	5	RED	46
30	23B18	P7-30	2	P8-1	14	5	RED	35
31	24C18	P7-31	2	P8-3	14	5	RED	35
32	25C18	P7-27	2	P8-2	14	5	RED	35
33	26B18	P7-32	2	P9-1	14	5	RED	46
34	27B18	P7-21	2	TB4-6A	26	5	RED	30
35	27C18	P17-2	32	TB4-6A	26	5	RED	49
36	27D18	OP-1	26	TB4-6B	26	5	RED	43
37	27E18	P5-2	14	TB4-6B	26	5	RED	51
38	27F18	P17-13	32	TB4-7A	26	5	RED	48.5
39	27H18	P11-1	14	TB4-7A	26	5	RED	38.5
40	28B18	P7-26	2	P11-2	14	5	RED	35
41	29B18	P7-25	2	OP-2	26	5	RED	20
42	30B18	P7-24	2	P5-1	14	5	RED	38
43	31B18	P7-29	2	K1-2	17	5	RED	35
44								
45	32B18	P7-1	2	P17-3	32	5	RED	46
46	34A18	P7-12	2	P17-14	32	5	RED	46
47	35C18	P7-34	2	P17-4	32	5	RED	46
48	40A18	P7-2	2	MT5-S	12	5	RED	44
49	43B18	P7-8	2	P10-1	14	5	RED	20
50	44B18	P7-11	2	P10-2	14	5	RED	20
51	101A10	A8-L1	19	K1-A1	8	4	BLK	56
52	101B18	A8-L1	18	P17-7	32	5	BLK	18
53	101C16	TB4-1A	25	K1-A1	9	6	BLK	40
54	101D18	P7-33	2	K1-A1	10	5	BLK	33.5
55	101G18	TB4-1B	26	P13-1	14	5	BLK	16.5
56	101H18	TB4-1B	26	P14-1	14	5	BLK	42.5

CONTINUED

WIRE REF NO	WIRE MARKING	FROM	TERMINAL FN	TO	TERMINAL FN	WIRE FN	MARKING COLOR	WIRE LENGTH
57	102A10	TB2-N	8	A8-N	19	4	BLK	43
58	102B16	TB4-3A	25	TB2-N	9	6	BLK	27.5
59	201A16	P6-3	14	TB4-9B	25	6	BLK	7.0
60	102E18	P7-18	2	TB4-3B	26	5	BLK	38
61	102M18	TB4-2B	26	P13-2	14	5	BLK	16
62	102N18	TB4-2B	26	P14-2	14	5	BLK	42
63	103A10	A8-L2	19	K1-B1	8	4	BLK	56
64	103B18	A8-L2	18	P17-9	32	5	BLK	15.5
65	105A10	TB2-L1	8	K1-A2	8	4	BLK	22
66	202A16	P6-4	14	FU1-1	11	6	BLK	21.5
67	106A10	TB2-L2	8	K1-B2	8	4	BLK	22
68	122A18	P7-36	2	P17-16	32	5	BLK	46
69	109B18	P7-19	2	P17-19	32	5	BLK	46
70	110B18	P7-20	2	P17-8	32	5	BLK	46
71								
72	120B18	P7-3	2	P17-20	32	5	BLK	46
73	121A18	P7-37	2	P17-15	32	5	BLK	46
74	114B18	P7-23	2	P17-1	32	5	BLK	46
75	115B16	P7-28	2	TB6-1A	25	6	BLK	38
76								
77	116B16	P7-4	2	TB6-2A	25	6	BLK	38.5
78								
79	117B16	P7-5	2	TB6-3A	25	6	BLK	39
80	113A14	J1-3	31	GND	9	7	BLK	37
81								
82								
83								
84								
85								
86		SR1-(-)	22	GND	8	4		8
87								
88		H1-2	30	H2-2	30	7		2
89	2AA14	H2-1	30	B1-GND	30	7	BLK	21

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SIZE	CAGE CODE	DRAWING NO.
D	30554	98-19782

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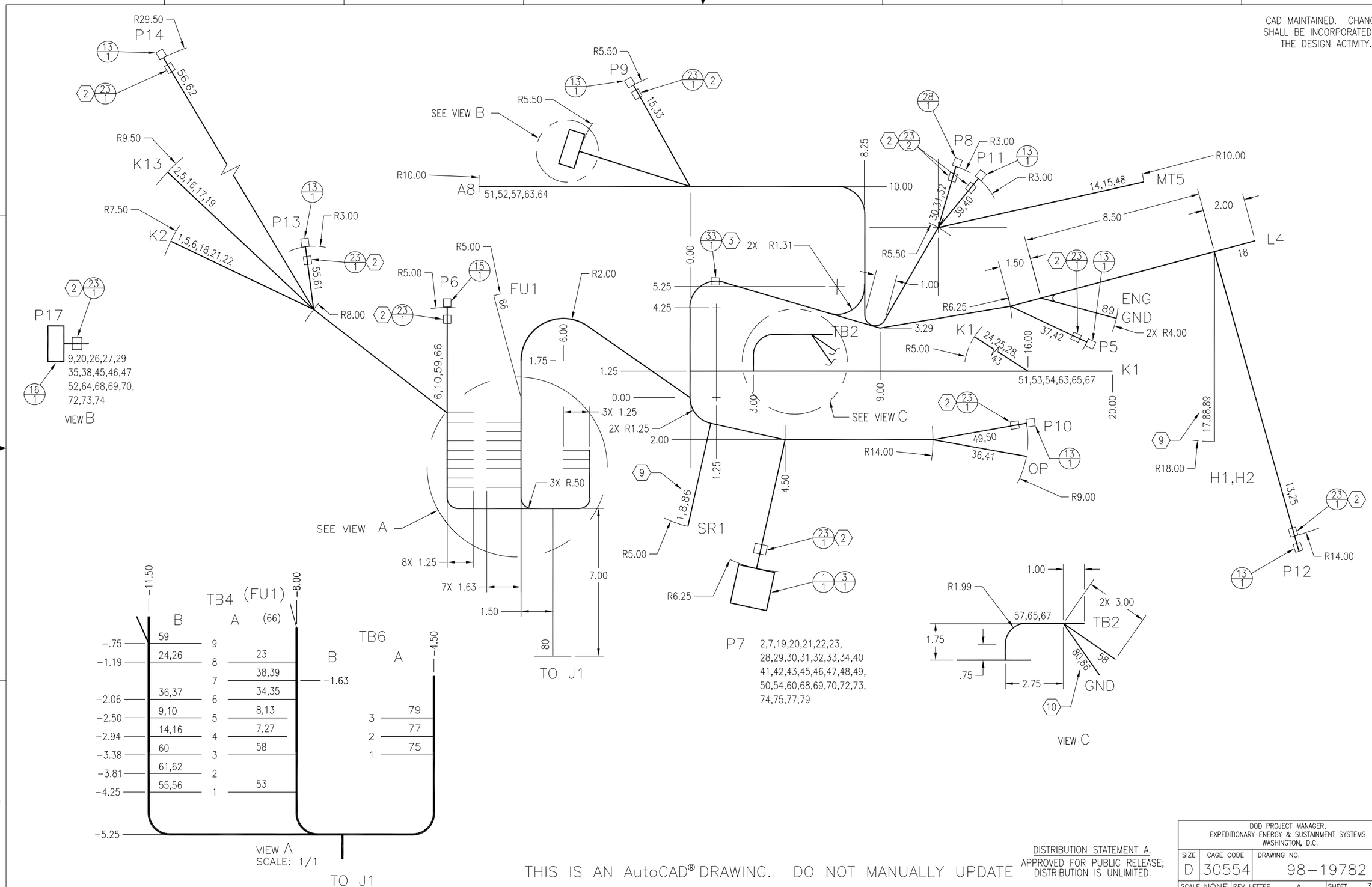

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