This revision details changes to Revisions C and D of ATM-483.

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Cable A Details Terminal Board Pin		Connector Pin (J40)	Pin Function
		1	Connected to pin 9
TB40-01		2	Data
		3	Connected to pin 9
TB40-02		4	Frame Mark
		5	Connected to pin 9
TB40-03		6	Shift Pulse
		7	Connected to pin 9
TB40-04		8	Demand Pulse
TB40-05		9	Shield
TB40-06		10	Command 1
TB40-07		11	Command 2
TB40-08		12	Command 3
TB40-09		13	Command 4
TB40-10		14	Command 5
TB40-11		15	Command 6
TB40-12		16	Command 7
TB40-13		17	Command 8
TB40-14	Not Wired	18	Connected to pin 9
TB40-15	Not Wired	19	Connected to pin 9
TB40-16		20	Power Return
TB40-17		21	Operating Power
		22	Connected to pin 20
		23	Connected to pin 21
		24	Connected to pin 20
		25	Connected to pin 21
		26	Connected to pin 20
		27	Connected to pin 21

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All wires constituting Cable A are 24 AWG Manganin.

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Heat Flow, Cable A Details

Connector (J70)	Function	Terminal Board Pin
1	Analog H.F.1	70-01
2	Analog H.F.2	70-02
3	Analog H.F.3	70-03
4	Analog H.F.4	70-04
5	Analog H.F.5	70-05
6	Analog H.F.6	70-06
7	Analog H.F.7	70-07
8	Shield	70-08
9	Data	70-09
10	Connected to pin 8	
11	Shift Pulse	70-10
12	Connected to pin 8	
13	Demand Line	70-11
14	Connected to pin 8	
15	Frame Mark	70-12
16	Connected to pin 8	
17	90 Frame Mark	70-13
18	Signal Return	70-14
19	Connected to pin 8	
20	Command CH1	70-15
21	Command CH2	70-16
22	Command CH3	70-17
23	Command CH4	70-18
24	Command CH5	70-19
25	Command CH6	70-20
26	Command CH7	70-21
27	Command CH8	70-22
28	Command CH9	70-23
29	Command CH10	70-24
30	29 V Power Return	70-25
31	29 V Power	70-26
32	Connected to pin 30	
33	Connected to pin 31	
34	Connected to pin 30	
35	Connected to pin 31	
36	Connected to pin 30	
37	Connected to pin 31	

Cable A Details Cont'd

Connector (J70)	Function		Terminal Board Pin
38	Connected to pin 30		
39	Connected to pin 31		
40	29 V Survival Heater Power		70-27
41	Command CH11 Spare	Not Wired	70-28
42	Command CH12 Spare	Not Wired	70-29
43	Command CH13 Spare	Not Wired	70-30
44	Command CH14 Spare	Not Wired	70-31
45	Spare		
46	Spare		
47	Spare		

All Wires to the terminal board are 24 AWG Manganin.

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Cable C and E Details

Wire	Wire type and AWG		Function	
1	Iron	34	Ref. Junction	
2	Constantan	34	Thermocouple No. 1	
3	Constantan	34	Thermocouple No. 2	
4	Constantan	34	Thermocouple No. 3	
5	Constantan	34	Thermocouple No. 4	
6	Manganin	30	Heater Common (Upper Probe)	
7	Manganin	30	Heater No. 1 Return	
8	Manganin	30	Heater No. 2 Return	
9	Manganin	28	K Sensor Excitation No. 1	
10	Manganin	28	K Sensor Return No. 1	
11	Evanohm	34	Voltage sense (Remote Lead)	Screened
12	Evanohm	34	Voltage sense (Remote Lead)	Screen Connected
13	Evanohm	34	Signal sense (Remote Lead)	to Electronics
14	Evanohm	34	Signal sense (Remote Lead)	Signal Ground
15	Manganin	30	PT Budge No. 1 Excitation	
16	Manganin	30	PT Budge No. 1 Return	
17	Manganin	34	K Sensor No. 1 Offset Signal	
18	Manganin	34	K Sensor No. 1 Offset Return	
19	Manganin	34	PT Bridge No. 1 Offset Signal	
20	Manganin	34	PT Bridge No. 1 Offset Return	
21	Manganin	30	Heater Common (Power Probe)	
22	Manganin	30	Heater No. 3 Return	
23	Manganin	30	Heater No. 4 Return	
24	Manganin	28	K Sensor Excitation No. 2	
25	Manganin	28	K Sensor Return No. 2	
26	Evanohm	34	Voltage sense (Remote Lead)	Screened
27	Evanohm	34	Voltage sense (RemoteLead)	Screen Connected
28	Evanohm	34	Signal sense (Remote Lead)	to E lectronics
29	Evanohm	34	Signal sense (Remote Lead)	Signal Ground
30	Manganin	30	PT Bridge No. 2 Excitation	
31	Manganin	30	PT Bridge No. 2 Return	
32	Manganin	34	K Sensor No. 2 Offset Signal	
33	Manganin	34	K Sensor No. 2 Offset Return	
34	Manganin	34	PT Bridge No. 2 Offset Signal	
35	Manganin	34	PT Bridge No. 2 Offset Return	

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Cable B Details

Connector Pin (P70)	Function
1 thru 7	Analog Line
8	Shield
9	Data Line
10	Shield
11	Shift Pulse
12	Shield
13	Data Demand
14	Shield
15	Frame Mark
16	Shield
17	90 th Frame Mark
18	Signal Return
19	Chassis Return
20 thru 29	Commands
30	Power Return
31	Experiment Power
32	Power Return
33	Experiment Power
34	Powe r Return
35	Experiment Power
36	Power Return
37	Experiment Power
38	Power Return
39	Experiment Power
40	Survival Heater Power
41	Command Spare
42	Command Spare
43	Command Spare
44	Command Spare
45	Not Used
46	Not Used
47	Not Used

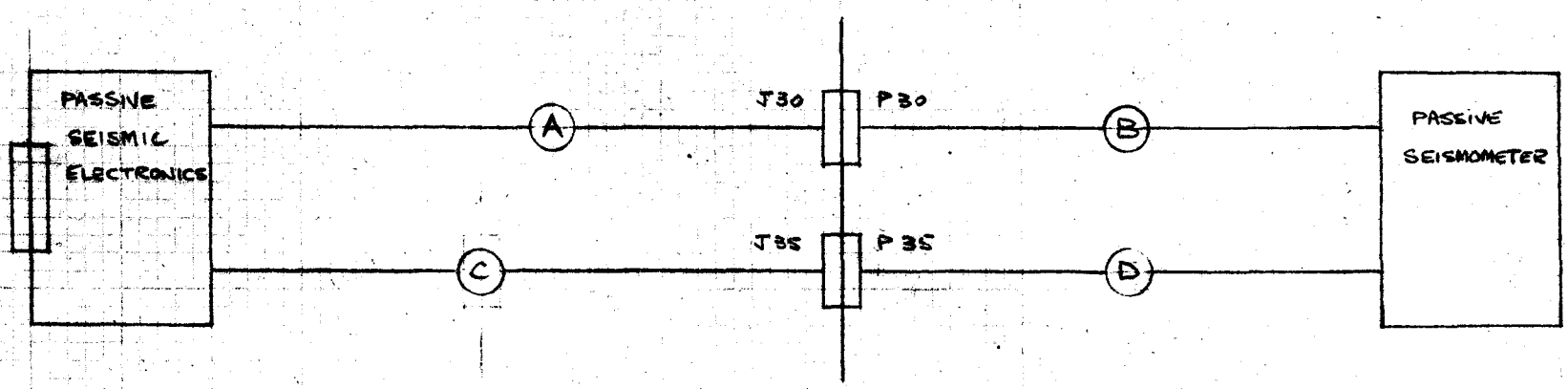
Heat Flow Experiment Jumper Cables

Connectors (J70A, P70A)	Connectors (P70B, J70B)	Function
1	F	Analog Signal
2	g	Analog Signal
3	G	Analog Signal
4	H	Analog Signal
5	h	Analog Signal
6	J	Analog Signal
7	i	Analog Signal
8	K	Shield Wire 9
9	j	Data
10	BB	Shield Wire 11
11	k	Shift Pulse
12	M	Shield Wire 13
13	N	Data Demand
14	m	Shield Wire 15
15	CC	Frame Mark
16	P	Shield Wire 17
17	n	90th Frame Mark
18	R	Signal Return
19	p	Shield Wires 20 to29 & 41 to 44
20	DD	Command
21	S	Command
22	EE	Command
23	T	Command
24	q	Command
25	U	Command
26	NN	Command
27	r	Command
28	V	Command
29	FF	Command
30	u	Power Return
31	Y	Power
32	Z	Power Return
33	a	Power
34	b	Power Return
35	A	Power
36	c	Power Return
37	B	Power
38	d	Power Return

Heat Flow Experiment Jumper Cable (continued)

Connectors (J70A, P70A)	Connectors (P70B, J70B)	Function
39	C	Power
40	e	Heater Power
41	s	Command Spare
42	W	Command Spare
43	t	Command Spare
44	X	Command Spare
45	D	Spare
46	f	Spare
47	E	Spare

Passive Seismic Experiment Line Diagram



CABLE	MATING UNIT	CONNECTOR	CABLE TYPE	NUMBER OF WIRES	LENGTH	CONNECTOR	MATING UNIT
A	PASSIVE SEISMIC ELECTRONICS	HARDWIRE	COPPER & CONSTANTAN 24 A.W.G WIRES	20			CONNECTOR ON CABLE 'B'
B	CONNECTOR ON CENTRAL STATION		METHODE H FILM FLAT CONDUCTOR CABLE	27	10 FEET	HARDWIRE	PASSIVE SEISMOMETER
C	PASSIVE SEISMIC ELECTRONICS	HARDWIRE	COPPER & CONSTANTAN 24 A.W.G WIRES	19			CONNECTOR ON CABLE 'D'
D	CONNECTOR ON CENTRAL STATION		METHODE H FILM FLAT CONDUCTOR CABLE	27	10 FEET	HARDWIRE	PASSIVE SEISMOMETER

ISSUE NUMBER DATE									
APPROVED									

Passive Seismic Experiment

Cable A Details

Connector (J30) Pins	Wire Type (all 28 AWG)	Function
1	Copper	Connected to pin 27
2	Copper	Signal Common
3	Manganin	XLP Seismic
4		Connected to pin 2
5	Manganin	YLP Seismic
6		Connected to pin 2
7	Manganin	ZLP Seismic
8	Copper	+12 Volts
9	Copper	X and Y Calibrate
10		Connected to pin 8
11	Manganin	SP Seismic +
12		Connected to pin 8
13	Manganin	SP Seismic -
14	Manganin	Thermal Bypass
15	Manganin	X Motor Power
16	Manganin	X Level Drive +
17	Manganin	Connected to pin 15
18	Manganin	X Level Drive -
19	Manganin	Y Motor Power
20	Manganin	Y Level Drive +
21	Manganin	Connected to pin 19
22	Manganin	Y Level Drive -
23	Manganin	Z Motor Power
24	Manganin	Z Level Drive +
25	Manganin	Connected to pin 23
26	Manganin	Z Level Drive -
27	Copper	Cable Shields

Conductors on pins 3, 5, 7, 9, 11, and 13 are to be shielded, with the shields grounded in the Passive Seismic central electronics.

Passive Seismic Experiment Cable B Details

Connector (P30)	Function
1	Chassis Ground and Upper Shield
2	Signal Common
3	XLP Seismic
4	Signal Common
5	YLP Seismic
6	Signal Common
7	ZLP Seismic
8	+12 volts
9	X and Y Calibrate
10	+12 volts
11	SP Seismic +
12	+12 volts
13	SP Seismic -
14	Thermal Bypass
15	X Motor Power
16	X Level Drive +
17	X Motor Power
18	X Level Drive -
19	Y Motor Power
20	Y Level Drive +
21	Y Motor Power
22	Y Level Drive -
23	Z Motor Power
24	Z Level Drive +
25	Z Motor Power
26	Z Level Drive -
27	Chassis Ground and Lower Shield

Passive Seismic Experiment

Cable C Details

Connector (J35) Pin	Wire Type (all 28 AWG)	Function
1	Copper	Power Converter Common
2	Manganin	X Tidal
3		Connected to pin 1
4	Manganin	Y Tidal
5		Connected to pin 1
6	Manganin	Z Tidal
7	Copper	-12 volts
8	Copper	Z Calibrate
9		Connected to pin7
10	Manganin	SP Calibrate
11		Connected to pin 7
12	Manganin	Temperature Data
13	Manganin	Heater on/off
14	Manganin	Cage Status
15	Manganin	Uncage Command
16	Manganin	Filter in/out
17	Manganin	Coarse level power
18	Manganin	X Coarse Level +
19	Manganin	X Coarse Level -
20	Manganin	Y Coarse Level +
21	Manganin	Y Coarse Level -
22	Manganin	29 V Heater Power
23	Copper	29 V Power Common
24		Connected to pin 22
25		Connected to pin 23
26		Connected to pin 22
27		Connected to pin 23

Conductors on pins 2, 4, 6, 8, 10 and 12 to be shielded with the shields being grounded in the Passive Seismic electronics.

Passive Seismic Experiment

Cable D Details

Connector (P35) Pin	Function
1	Power Converter Common
2	X Tidal
3	Power Converter Common
4	Y Tidal
5	Power Converter Common
6	Z Tidal
7	- 12 volts
8	Z Calibrate
9	- 12 volts
10	SP Calibrate
11	- 12 volts
12	Temperature Data
13	Heater ON/OFF
14	Cage Status
15	Uncage Command
16	Filter IN/OUT
17	Coarse Level Power
18	X Coarse Level +
19	X Coarse Level -
20	Y Coarse Level +
21	Y Coarse Level -
22	29 volt Heater Power
23	29 volt Power Common
24	29 volt Heater Power
25	29 volt Power Common
26	29 volt Heater Power
27	29 volt Power Common

Passive Seismic Experiment

Central Electronics/Data Subsystem Interface

Connector (J9) Pin	Function	
1	Command	X and Y LP Gain Change
2	Command	Z LP Gain Change
3	Command	LP Calibrate ON/OFF
4	Command	Level Direction
5	Command	SP Gain Change
6	Command	Level Speed HIGH/LOW
7	Command	SP Calibrate ON/OFF
8	Command	Level (Auto-Sequence)
9	Command	Level Power X ON/OFF
10	Command	Level Power Y ON/OFF
11	Command	Level Power Z ON/OFF
12	Command	Uncage
13	Command	Thermal Control Bypass ON/OFF
14	Command	Filter IN/OUT
15	Command	Coarse Level IN/OUT
16		LP Gain X and Y
17		LP Gain Z
18		SP Gain
19		Level Speed and Direction
20		Level Mode and Coarse Sensor Mode
21		Signal Return
22		Thermal Control Status
23		Standby Power
24		Power Return
25		Operating Power
26		Spare
27		Even Frame Mark
28		Spare
29		Frame Mark
30		Spare
31		Data Demand
32		Spare
33		Data Gate
34		Uncage Status
35		Shift Pulse
36		Calibration Status LP and SP
37		Digital Data
38		Chassis Ground