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53A-716 DATA CABLE

SERVICE MANUAL

DESCRIPTION

The 53A-716 Data Cable is a two meter long cable terminated at one end with a 53A-780 hooded Connector assembly and at the other end with an IEEE STD 488 connector. The 53A-716 Cable is used with either the 53A-127 Communications Card, the 53A-128 Communications Card, the 53A-130 Communications Card with a 53A-138 IEEE-488 Option, or the 53A-488 IEEE-488 Bus Controller Function Card. When used with the 53A-127 Card, 53A-128 Card or 53A-130/53A-138 Cards the cable interfaces a 53/63 Series Card Cage to the calculator or computer used to control the IEEE-488 Bus. When used with the 53A-488 Function Card, the cable interfaces the 53A-488 Card to the IEEE-488 equipment to be controlled by the 53A-488 Card.

INSTALLATION

The blue connector marked "53A-716" plugs onto either the 53A-127 Communications Card, 53A-128 Communications Card, 53A-130 Communications Card with 53A-138 Option, or the 53A-488 Bus Controller Function Card such that the cable egresses out the rear of the 53/63 System Mainframe between the instrument case bottom cover and the mainframe false floor. The IEEE STD 488 connector is then used to connect the Communications Cards or 53A-488 Card to other devices on the IEEE-488 Interface Bus.

CABLE CONNECTIONS

IEEE STD 488

The Interface Bus uses 16 signal lines to connect all units of a system in parallel. Eight of the bus lines carry data bits; three of the lines coordinate the flow of data. The remaining five lines are bus management lines.

The following table lists the 16 bus signals together with ground signals, and indicates the hooded connector pin numbers and the IEEE-488 connector pin numbers.

Signal		Hooded Connector Pin No.	IEEE-488 Pin No.
ATN	ATTENTION	8	11
SRQ	SERVICE REQUEST	9	10
EOI	END OR IDENTIFY	12	5
NDAC	NOT DATA ACCEPTED	11	8
NRFD	NOT READY FOR DATA	10	7
DAV	DATA AVAILABLE	13	6
REN	REMOTE ENABLE	6	17
IFC	INTERFACE CLEAR	7	9
DIO1	DATA INPUT/OUTPUT 1	C	1
DIO2	DATA INPUT/OUTPUT 2	3	2
DIO3	DATA INPUT/OUTPUT 3	2	3
DIO4	DATA INPUT/OUTPUT 4	B	4
DIO5	DATA INPUT/OUTPUT 5	E	13
DIO6	DATA INPUT/OUTPUT 6	5	14
DIO7	DATA INPUT/OUTPUT 7	D	15
DIO8	DATA INPUT/OUTPUT 8	4	16
SHIELD		24	12
GROUND	LOGIC	BB	24
GROUND	(TWSTD W/IFC)	H	21
GROUND	(TWSTD W/ATN)	J	23
GROUND	(TWSTD W/SRQ)	K	22
GROUND	(TWSTD W/NRFD)	L	19
GROUND	(TWSTD W/NDAC)	M	20
GROUND	(TWSTD W/DAV)	P	18

53A-716 CABLE WIRING

53A-780 CONNECTOR	WIRE (1)	WIRE (2)	WIRE (3)
BB	Blk-Blu-Wht	Lt Brn	Blk-Wht Purple-Wht
24	Shield	Shields	Shields
P 13	Wht-Gray Blu	Org Blu	Brn-Wht Brn
12	Grn	Grn	Blk
M 11	Blk-Wht-Red Gray	Red Grn	Org-Wht Org
L 10	Blk-Wht-Brn Purple	Gray Purple	Red-Wht Red
K 9	Blk-Wht-Yel Blk-Wht	Yel Brn	Grn-Wht Grn
J 8	Grn-Blk-Wht Brn-Wht	Pink Lt Brn	Blu-Wht Blu
H 7	Org-Blk-Wht Wht	Blk Wht	Yel-Wht Yel
6	Purple-Wht	Violet	Purple
E	Org-Wht	Pink	Blk-Wht-Gr
5	Yel-Wht	Wht	Blk-Wht-Blu
D	Grn-Wht	Gray	Wht-Gray
4	Blu-Wht	Blu	Wht
C	Brn	Drk Brn	Blk-Wht-Brn
3	Red	Red	Blk-Wht-Red
B	Yel	Yel	Blk-Wht-Yel
2	Org	Org	Blk-Wht-Org

(1) Cable with single shield. (Manufacturer: Victor)
(2) Cable with double shield. (Manufacturer: Bunker-Ramo, Inc.)
(3) Cable with double shield. (Manufacturer: Cablelink)

REFERENCE DESIGNATOR	CDS PART NUMBER	QTY.	PART DESCRIPTION	MFG. NUM.	MFG. PART NUMBER
X1	40420-00012		IEEE 488 CABLE 4 METER	0022	408-30111304
J1	45001-48125	1	CONNECTOR 48 PIN	0095	RSM24DREH-S342
	40420-00001	1	PLASTIC HOOD ASSEMBLY DWG 00000-00678	0274	40420-00001
E2	92302-00412	2	SCREW PHIL PAN 4X.5 PLASTITE	0290	4X.5POSPANPLASTZP
E3	92302-00438	2	SCREW PHIL FLTHD 4 X .375 TYPE AB SELF TAP 82 DE	0137	4X.375 PH FLTHD
E4	92306-76632	1	SET SCREW 6-32 X .5 CUP PNT	0137	6-32X.5 SET SCREW
E7	92300-07164	1	NO. 4 FLAT WASHER-NYLON	0020	120X250X062ACETAL

CABLE WITH HOODED CONNECTOR

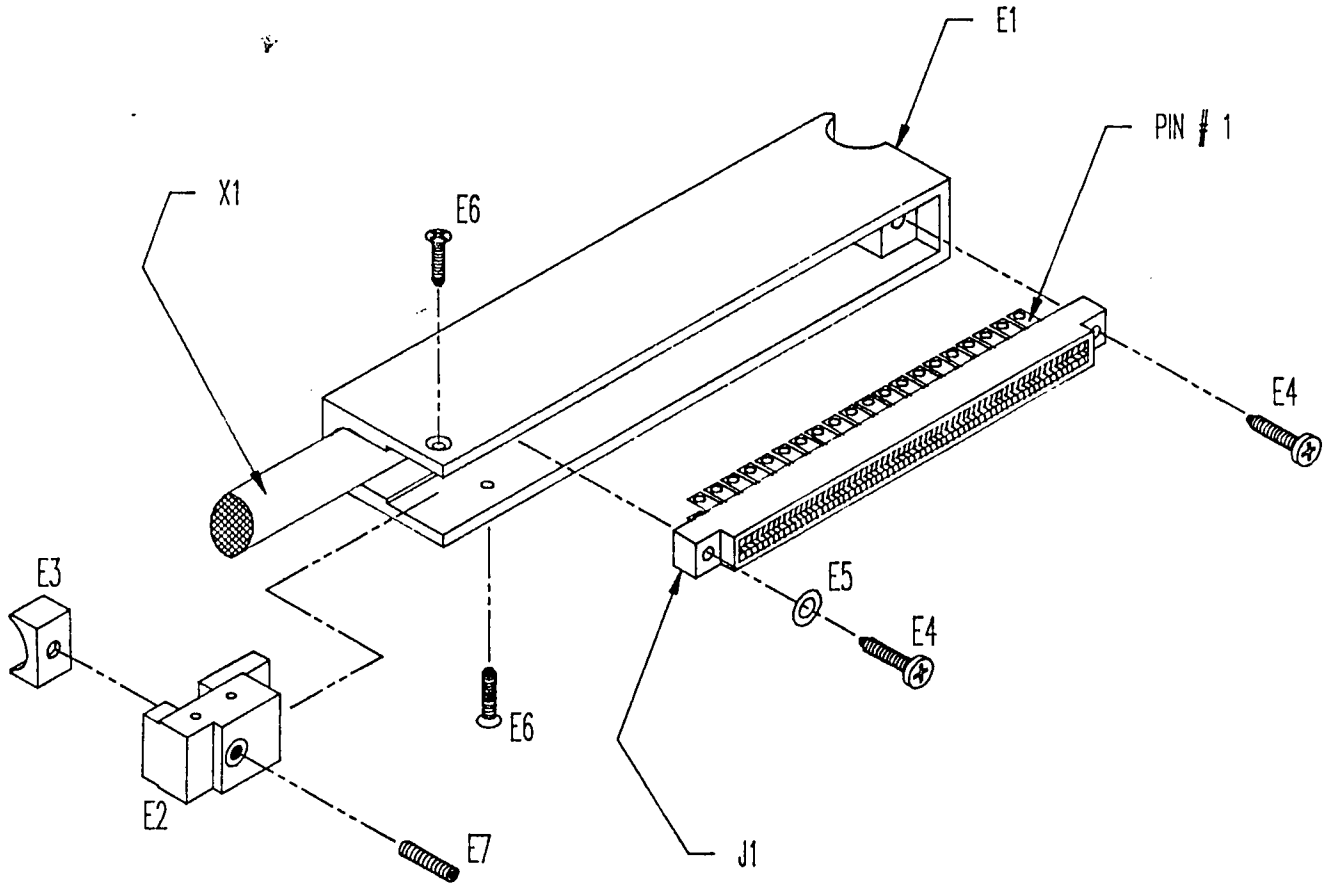


FIGURE 1.

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