"DATASPEED*" 40 OPERATOR CONSOLES

KD AND ROP

WIRING

CONTENTS PAGE

1. GENERAL

1.01 This section provides wiring diagram information for the two basic types of DATASPEED 40 Operator Consoles (Opcon), KD and RO, shown in Fig. 1.

1.02 This section is reissued to incorporate DATASPEED 40 40K003 and 40K004 ROP opcons, 40K203 KD opcon, and the latest engineering changes available at this time.

Note: When ordering replaceable components, unless otherwise specified, prefix each part number with the letters "TP" (ie, TP410075).

1.03 Detailed actual and schematic wiring diagrams and circuit descriptions for the DATASPEED 40 Operator Consoles are provided in the following Wiring Diagram Packages (WDP).

0404WDP — DATASPEED 40, 40K001 ROP Opcon

0492WDP — DATASPEED 40, 40K003 ROP Opcon

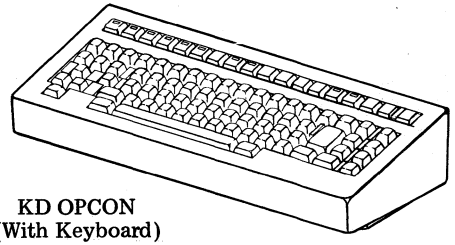
0496WDP — DATASPEED 40, 40K004 ROP Opcon

0403WDP — DATASPEED 40, 40K101 KD Opcon

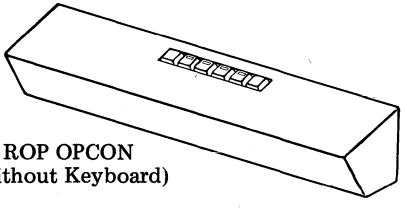
0449WDP — Synchronous DATASPEED 40, 40K104 KD Opcon

0477WDP — Synchronous DATASPEED 40, 40K105 KD Data Entry Opcon

0511WDP — Synchronous DATASPEED 40, 40K203 KD External Numeric Entry Opcon



KD OPCON
(With Keyboard)



ROP OPCON
(Without Keyboard)

Fig. 1—Operator Consoles

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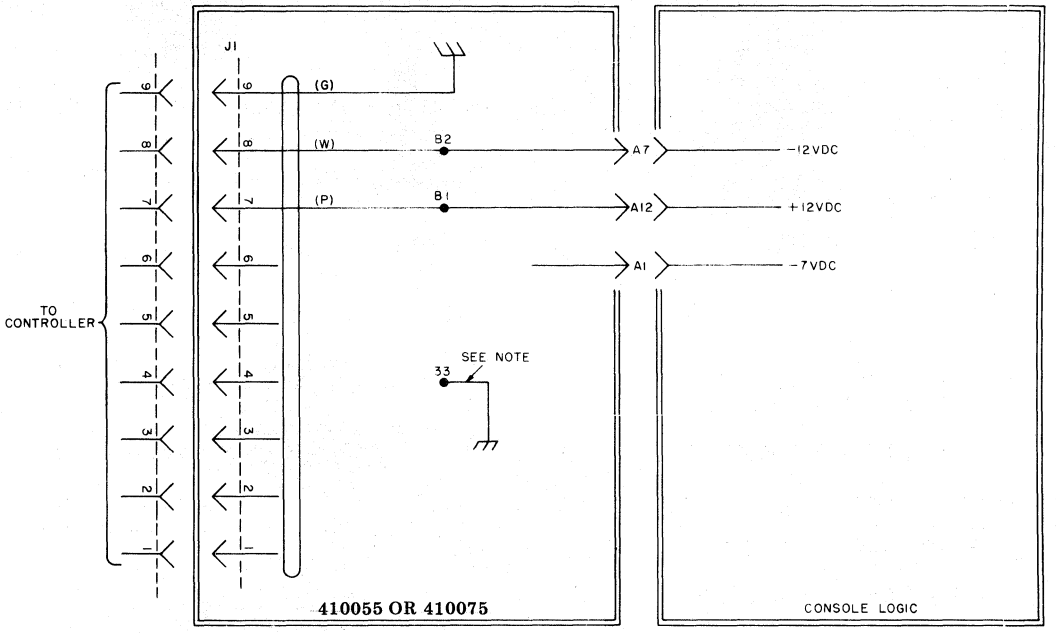
Prepared for American Telephone and Telegraph Company by Teletype Corporation

2. WIRING DIAGRAMS (Fig. 2 through 14)

POWER DISTRIBUTION



Note: Ground strap is present only on the 410075 circuit card, Issue 1B or later.

Fig. 2--Early Design 40K101 and 40K104 Opcons

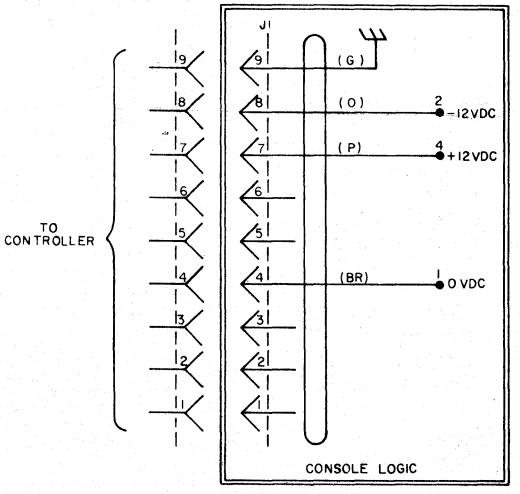


Fig. 3--Late Design 40K101, 40K104, 40K203 and 40K105 Opcons

SSI INTERCONNECTION

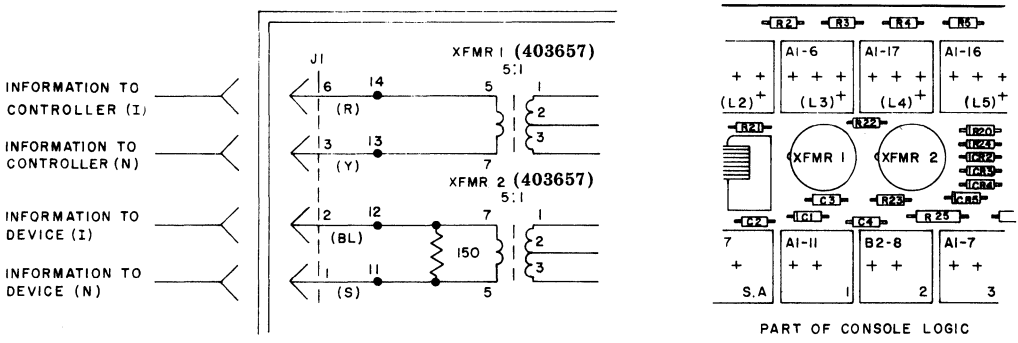


Fig. 4.--Late Design 40K101, 40K104, 40K203 and 40K105 Opcons

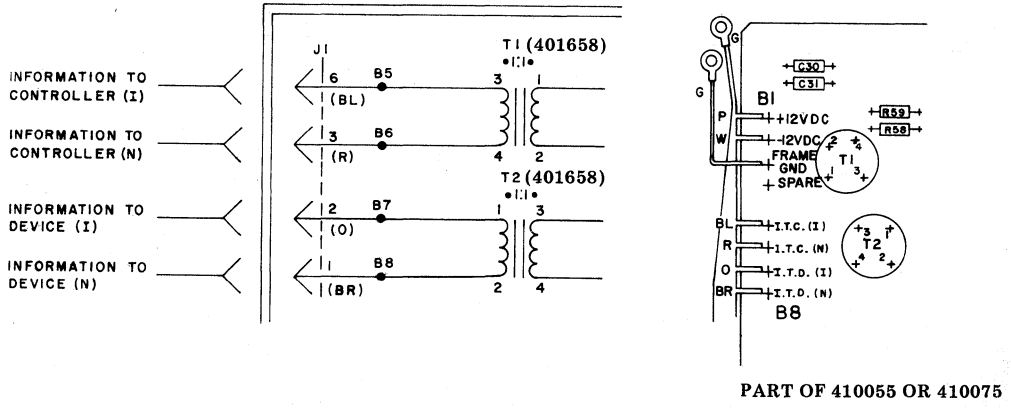


Fig. 5--Early Design 40K101 and 40K104 Opcons

ALARM

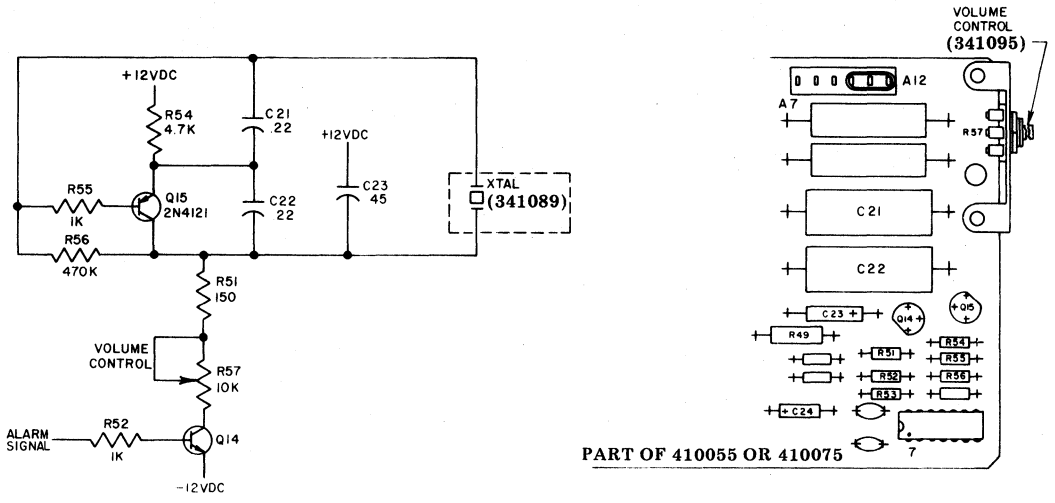


Fig. 6—Early Design 40K101 and 40K104 Opcons

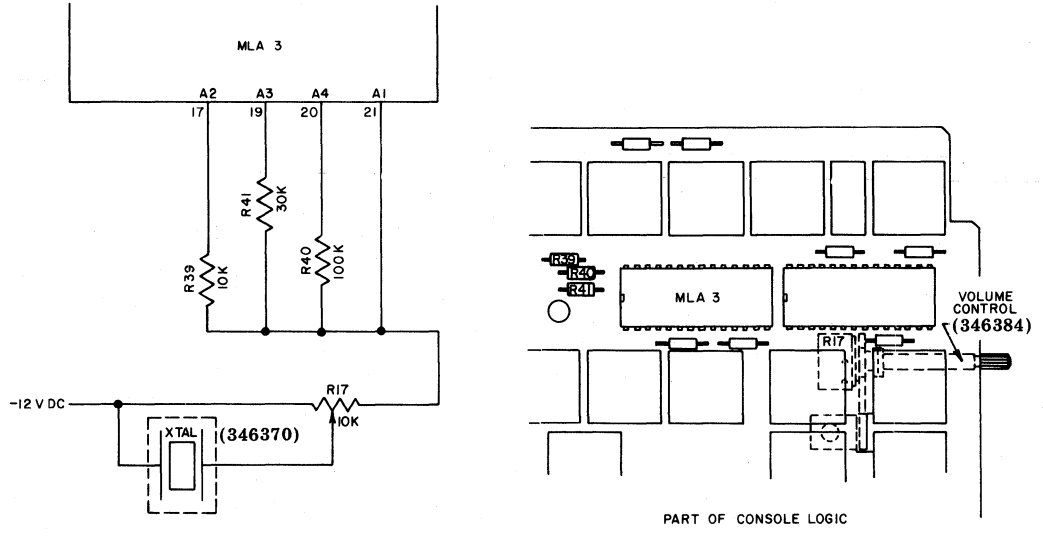
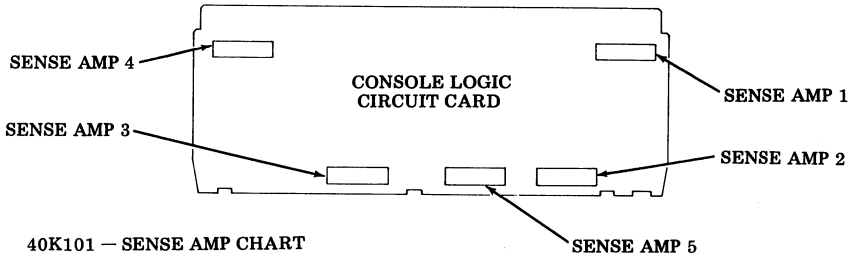


Fig. 7—Late Design 40K101, 40K104, 40K203 and 40K105 Opcons

SENSING AMPLIFIER KEYSWITCH ASSIGNMENT



40K101 — SENSE AMP CHART

SENSE AMP PIN NO.	SENSE AMP 1	SENSE AMP 2	SENSE AMP 3	SENSE AMP 4	SENSE AMP 5
	KEYTOP CHARACTER				
11	{	X2(CPTIICN)	E	1	6
10	\	I	B	→	H
9	'	U	F	↑	T
8	=	L	2	←	5
7	P	7	V	(NOT USED)	N
6	+	/	W	S/R	G
5	-	K	Q	LOCAL	R
3	0 (ZERO)	,	D	CURSOR RETURN	4
2	9	.	C	HOME	3
28	L9	8	Z	SEND	Y
27	(NOT USED)	;	A	PRINT LOCAL	M
26	L10	0	S	PRINT ON LINE	J
24	FORM ENTER	"	X	L6	SPACE
23	TAB SET	RETURN	SHIFT (LEFT)	RECEIVE	CONTROL (LEFT
20	TAB CLEAR	LINE INSERT	CAPS LOCK	SCROLL DOWN	SHIFT RIGHT
19	HIGH LIGHT	LINE DELETE	CURSOR TAB	SCROLL UP	NEW LINE
17	L12	CHAR.INSERT	SEG. ADV.	INTERRUPT	TAB
16	L11	CHAR.DELETE	↓	FORM SEND	CONTRL (RIGHT)
15	CLEAR	CHAR.DEL.(REP)	→(REPEAT)	SCROLL UP(REP)	. (REPEAT)
14	CHAR.INS.(REP)	X2 (REPEAT)	←(REPEAT)	SCROLL DN(REP)	SPACE(REPEAT)
13	— (REPEAT)	NEW LINE(REP)	↑ (REPEAT)	↓ (REPEAT)	X1(OPTION)

40K104 — SENSE AMP CHART

SENSE AMP PIN NO.	SENSE AMP 1	SENSE AMP 2	SENSE AMP 3	SENSE AMP 4	SENSE AMP 5
	KEYTOP CHARACTER				
11	{	X2(OPTICN)	E	1	6
10	\	I	B	→	H
9	'	U	F	↑	T
8	=	L	2	←	5
7	P	7	V	(NOT USED)	N
6	+	/	W	PA2	G
5	-	K	Q	PA1	R
3	0 (ZERO)	,	D	CURSOR RETURN	4
2	9	.	C	HOME	3
28	PF5	8	Z	S/R	Y
27	(NOT USED)	;	A	PF4	M
26	PF6	0	S	PF3	J
24	PF10	"	X	PF2	SPACE
23	PF11	ERASE INPUT	SHIFT (LEFT)	LOCAL	CONTROL (LEFT
20	PF12	LINE INSERT	CAPS LOCK	SCROLL DOWN	SHIFT RIGHT
19	PF9	LINE DELETE	CURSOR TAB	SCROLL UP	NEW LINE
17	PF8	CHAR.INSERT	BACK TAB	PRINT LOCAL	TAB
16	PF7	CHAR.DELETE	↓	PF1	CONTRL (RIGHT)
15	CLEAR	CHAR.DEL.(REP)	→(REPEAT)	SCROLL UP(REP)	(REPEAT)
14	CHAR.INS.(REP)	X2 (REPEAT)	←(REPEAT)	SCROLL DN(REP)	SPACE(REPEAT)
13	— (REPEAT)	NEW LINE(REP)	↑ (REPEAT)	↓ (REPEAT)	X1(OPTION)

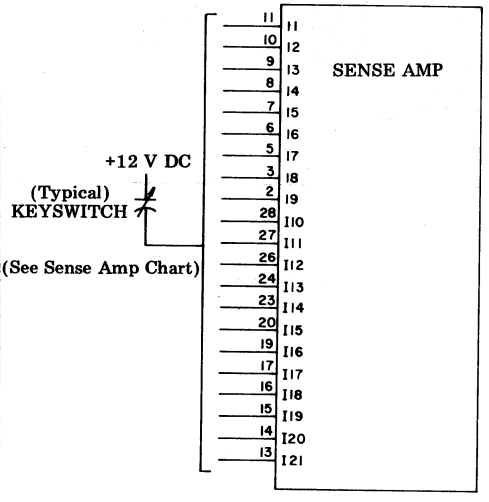
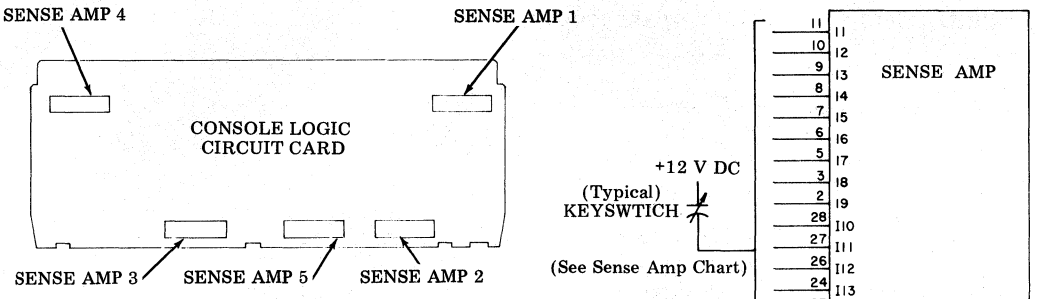


Fig. 8—Early Design 40K101 and 40K104 Opcons



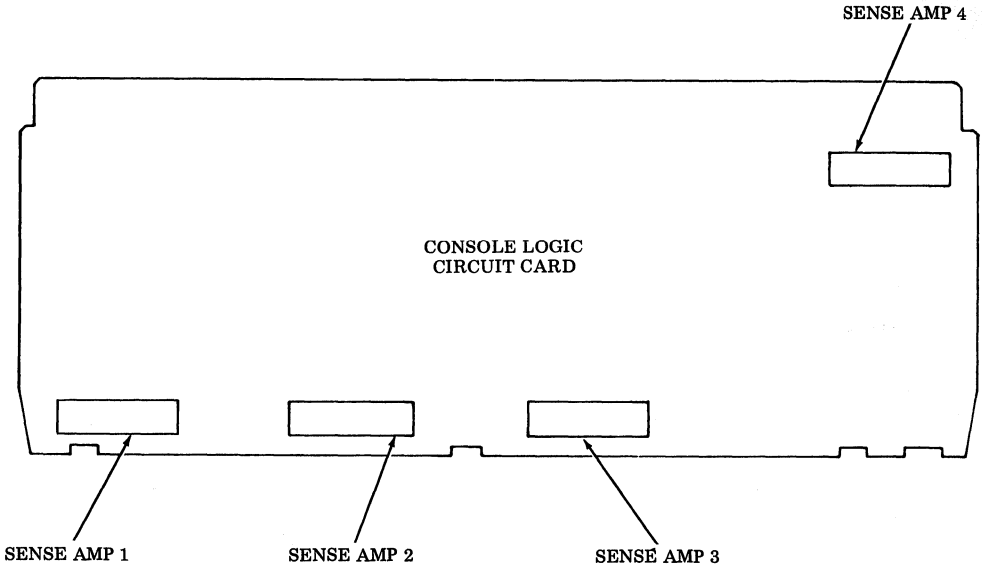
40K101 — SENSE AMP CHART

SENSE AMP PIN NO	SENSE AMP 1	SENSE AMP 2	SENSE AMP 3	SENSE AMP 4	SENSE AMP 5
	KEYTOP CHARACTER				
11	{	XTRA	E	1	Y
10	\	8	B	→	H
9	↑	I	F	↓	6
8	P (TEST)	L	2	—	T
7	P	U	V	3	N
6	TAB	/	W	S/R	G
5	+	K	Q	LOCAL	5
3	−	,	D	CURSOR RETURN	R
2	0 (ZERO)	.	C	HOME	4
28	(L9)	O	Z	SEND	7
27	=	;	A	PRINT LOCAL	M
26	(L10)	9	S	PRINT ON LINE	J
24	FORM ENTER	←	X	(L6)	SPACE
23	TAB SET	RETURN	SHIFT (LEFT)	RECEIVE	CONTROL (LEFT)
20	TAB CLEAR	LINE INSERT	CAPS LOCK	SCROL DOWN	SHIFT (RIGHT)
19	HIGH LIGHT	LINE DELETE	CURSR. TAB	SCROL UP	NEW LINE
17	(L12)	CHAR. INSAT	SEGMT. ADV.	INTERRUPT	" (TEST)
16	(L11)	CHAR. DLETE	|	FORM SEND	CONTROL (RIGHT)
15	CLEAR	CHAR. DLETE - RPT	→ REPEAT	SCROL UP - RPT	> . - REPEAT
14	CHAR. INSRT-RPT	OPTION - RPT	← REPEAT	SCROL DOWN - RPT	SPACE - RPT
13	= -RPT	NEW LINE - RPT	↓ REPEAT	↓ REPEAT	RETURN (TEST)

40K104 — SENSE AMP CHART

SENSE AMP PIN NO	SENSE AMP 1	SENSE AMP 2	SENSE AMP 3	SENSE AMP 4	SENSE AMP 5
	KEYTOP CHARACTER				
11	{	XTRA (V_{SS})	E	1	Y
10	\	8	B	→	H
9	↑	I	F	↓	6
8	P (TEST)	L	2	—	T
7	P	U	V	3	N
6	TAB	/	W	PA2	G
5	+	K	Q	PA1	5
3	−	,	D	TAB	R
2	0 (ZERO)	.	C	HOME	4
28	PF5	O	Z	S/R	7
27	=	;	A	PF4	M
26	PF6	9	S	PF3	J
24	PF10	←	X	PF2	SPACE
23	PF11	ERASE INPUT	SHIFT (LEFT)	LOCAL	CONTROL (LEFT)
20	PF12	LINE INSERT	CAPS LOCK	(NOT ASSIGNED)	SHIFT (RIGHT)
19	PF9	LINE DELETE	CURSR. TAB	(NOT ASSIGNED)	NEW LINE
17	PF8	CHAR. INSAT	BACK TAB	PRINT LOCAL	" (TEST)
16	PF7	CHAR. DLETE	|	PF1	CONTROL (RIGHT)
15	CLEAR	CHAR. DLETE - RPT	→ REPEAT	SCROL UP - RPT	> . - REPEAT
14	CHAR. INSRT-RPT	OPTION-RPT(V_{SS})	← REPEAT	SCROL DOWN - RPT	SPACE - RPT
13	= -RPT	NEW LINE-RPT(V_{SS})	↓ REPEAT	↓ REPEAT	E.INPUT (TEST)

Fig. 9—Late Design 40K101 and 40K104 Opcons



40K105 — SENSE AMP CHART

SENSE AMP PIN NO	SENSE AMP 1 (MLB1)	SENSE AMP 2 (MLB2)	SENSE AMP 3 (MLB4)	SENSE AMP 4 (MLA6)
	KEYTOP CHARACTER			
11	Z	SPACE	NEW LINE - RPT	↓
10	X	N	NEW LINE	CHAR. DELETE
9	D	J	PF5	LINE DELETE
8	S	/	,	LINE INSRT (TEST)
7	HOME	U	L	LINE INSERT
6	TAB	H	0	↓ - RPT
5	ERASE INPUT	B	K	PA2
3	PA3	F	M	↓
2	CLEAR	R	I	CHAR. INSERT
28	@	<	PF1	CONSOL TEST
27	%	C	P	PRINT LOCAL (L5)
26	Q	T	SKIP	PF3
24	*	FIELD MARK	.	BACK TAB
23	W	G	SKIP - RPT	PA1
20	A	V	ENTER	L/TST
19	E	Y	PF2	R/TST
17	CURSR TAB	DUP	PF4	→ - RPT
16	CURSR TAB - RPT	—	←	→
15	NUM LOCK (L8)	RESET	← - RPT	← - RPT
14	NUMERIC	RESET (TEST)	REPT.	←
13	RESET	SPACE - RPT	ALPHA	↓ - RPT

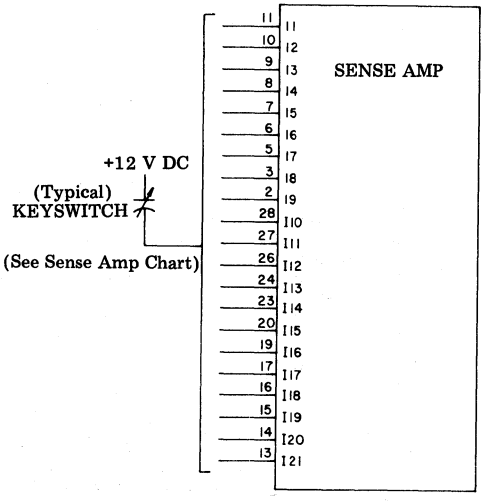
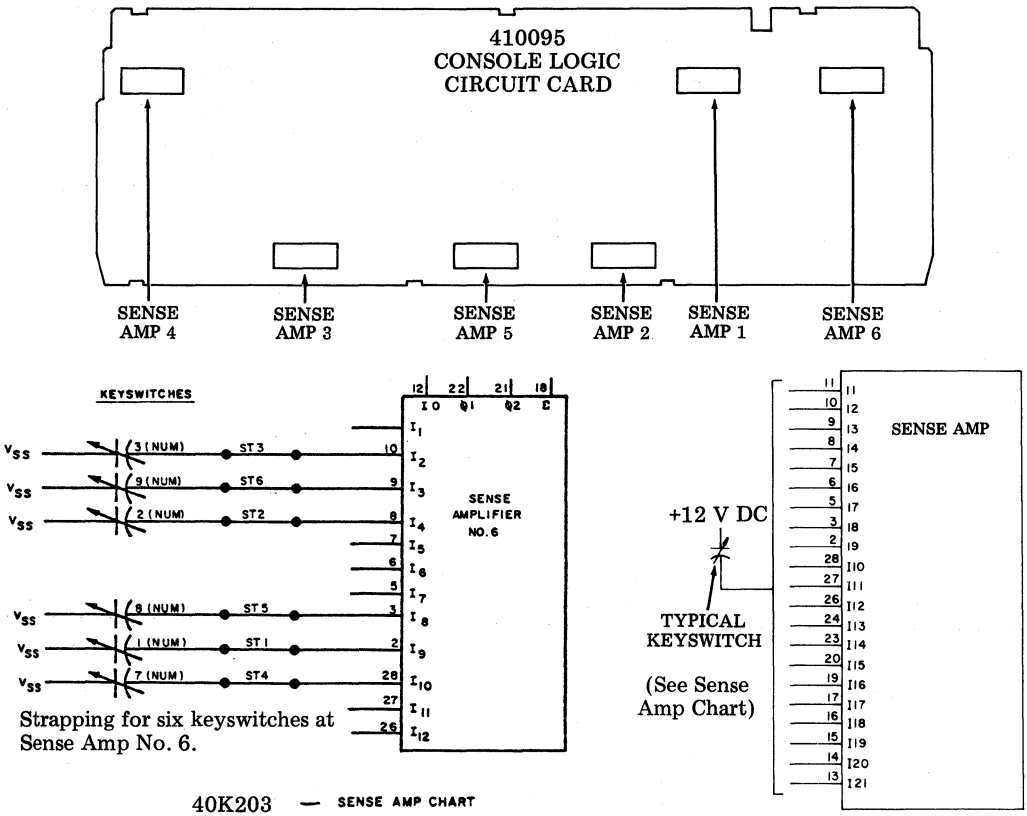


Fig. 10—40K105 Opcon



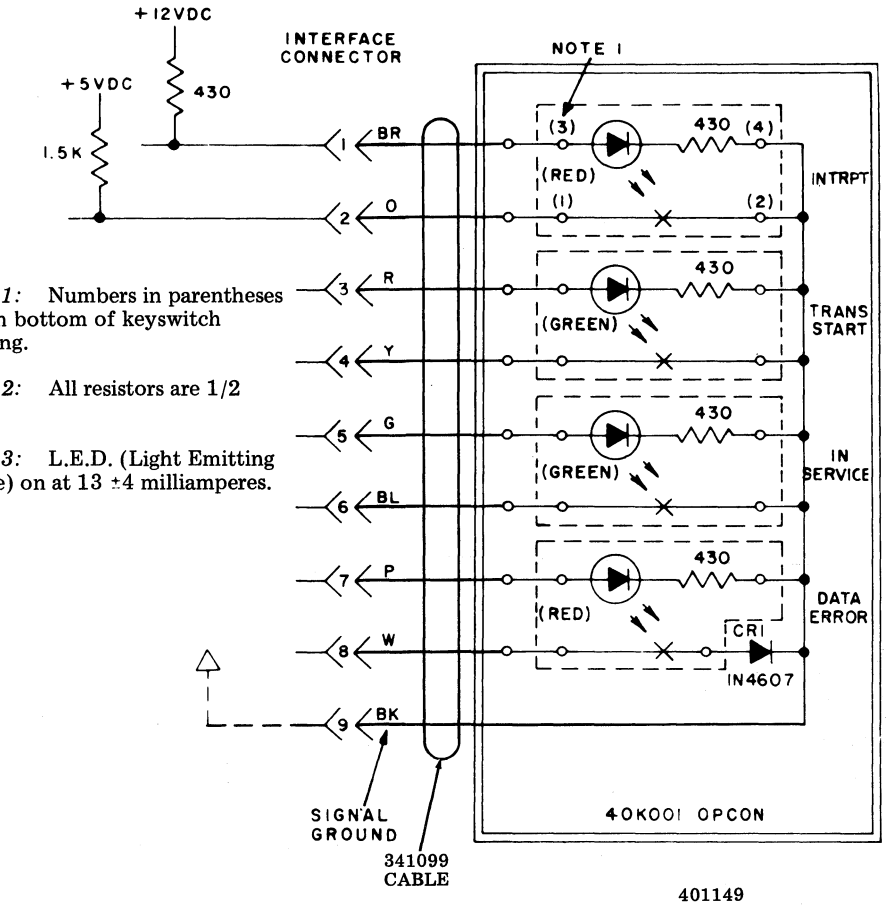
Strapping for six keyswitches at Sense Amp No. 6.

40K203 — SENSE AMP CHART

SENSE AMP PIN NO	SENSE AMP 1 (MLA4)	SENSE AMP 2 (MLB4)	SENSE AMP 3 (MLB2)	SENSE AMP 4 (MLA1)	SENSE AMP 5 (MLB3)	SENSE AMP 6 (MLA5)
	KEYTOP CHARACTER					
11	{	BACK TAB	E	I	Y	6 (PAD 7)
10	\	8	B	J	H	3 (PAD 11)
9	\	I	F	M	6	9 (PAD 3)
8	/	L	2	←	T	2 (PAD 10)
7	P	U	V	3	N	5 (PAD 6)
6	9	/	W	(L3)	G	0(ZERO) (PAD 14)
5	+	K	Q	(L2)	5	4 (PAD 5)
3	-	,	D	X	R	8 (PAD 2)
2	0 (ZERO)	.	C	$	4	1 (PAD 4)
28	(L9)	O	¿	(L0)	7	7 (PAD 1)
27	=	;	A	(L8)	→	E. INPUT (TST)
26	(L10)	P (TEST)	HOME	(L7)	↑	CURSOR TAB (PAD 17)
24	(L14)	TAB	CURSOR RET	(L6)	SPACE	← (PAD 4)
23	(L15)	ERASE INPUT	SHIFT (LEFT)	(L1)	CONTROL (LEFT)	, (PAD 8)
20	(PF12)	LINE INSERT	CAPS LOCK	NOT ASSIGNED	SHIFT (RIGHT)	* (PAD 12)
19	(L13)	LINE DELETE	CURSR TAB	NOT ASSIGNED	NEW LINE	. (PAD 15)
17	(L12)	CHAR INSERT	BACK TAB	(L4)	" (TEST)	ENTER S/R (PAD 18)
16	(L11)	CHAR DELETE	↓	(L5)	ENTER (S/R)	/ (PAD 16)
15	CLEAR	CHAR DLETE RPT	→ REPEAT	SCROL UP RPT	. REPEAT	- (PAD 13)
14	CHAR. INSRT RPT	RPT	← REPEAT	SCROL DOWN RPT	SPACE RPT	V_{SS}
13	— RPT	NEW LINE RPT (V_{SS})	↑ REPEAT	↓ REPEAT	VSS	V_{SS}

Fig. 11—40K203 Opcon

40K001 RECEIVE-ONLY OPCON



Note 1: Numbers in parentheses are on bottom of keyswitch housing.

Note 2: All resistors are 1/2 watt.

Note 3: L.E.D. (Light Emitting Diode) on at 13 ±4 milliamperes.

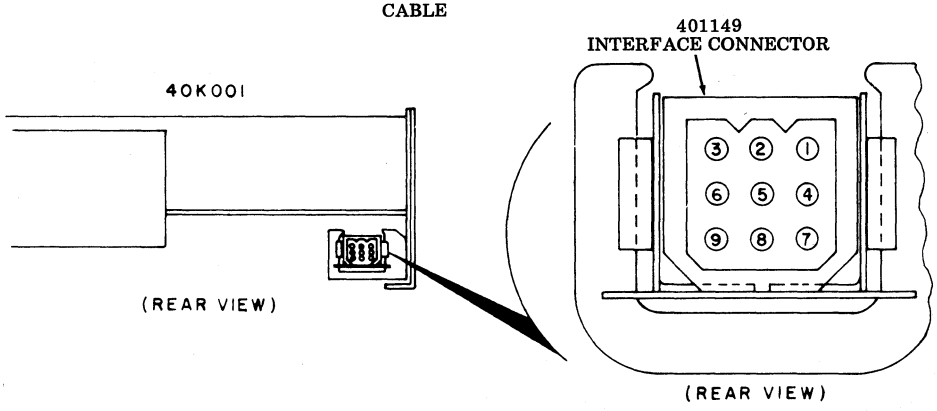
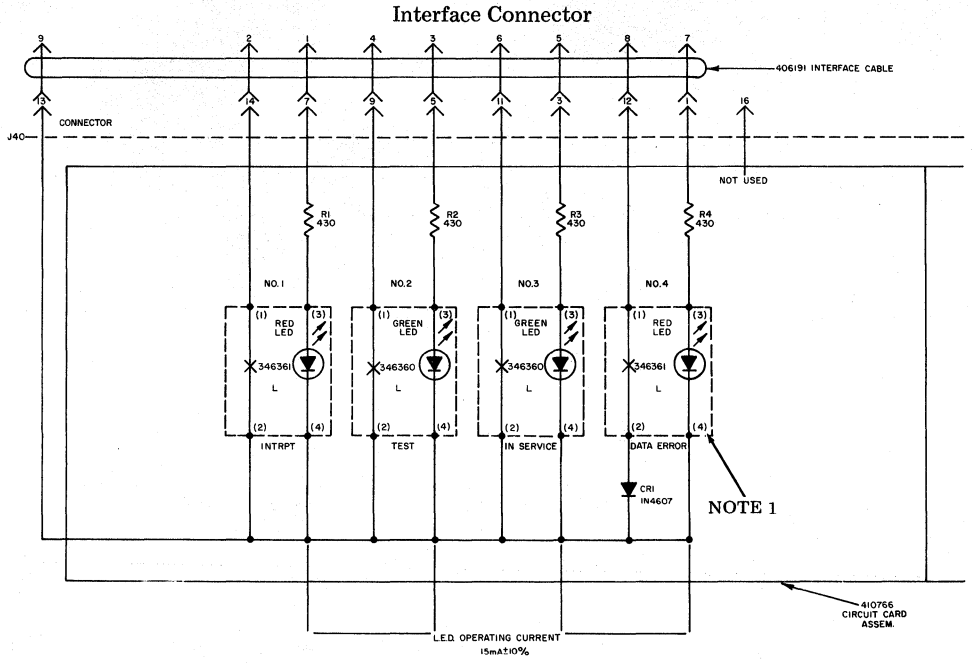


Fig. 12

40K004 RECEIVE-ONLY OPCON



Note 1: Numbers in parentheses on bottom of keyswitch housing.

Note 2: All resistors 1/2 watt unless otherwise specified.

Note 3: L.E.D. (Light Emitting Diode)

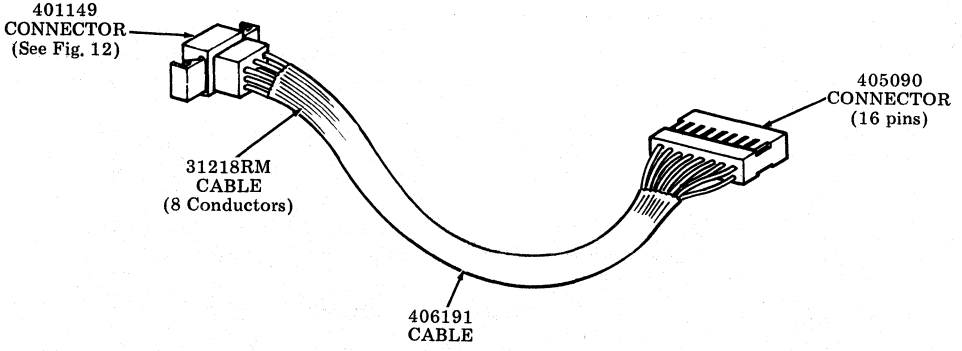
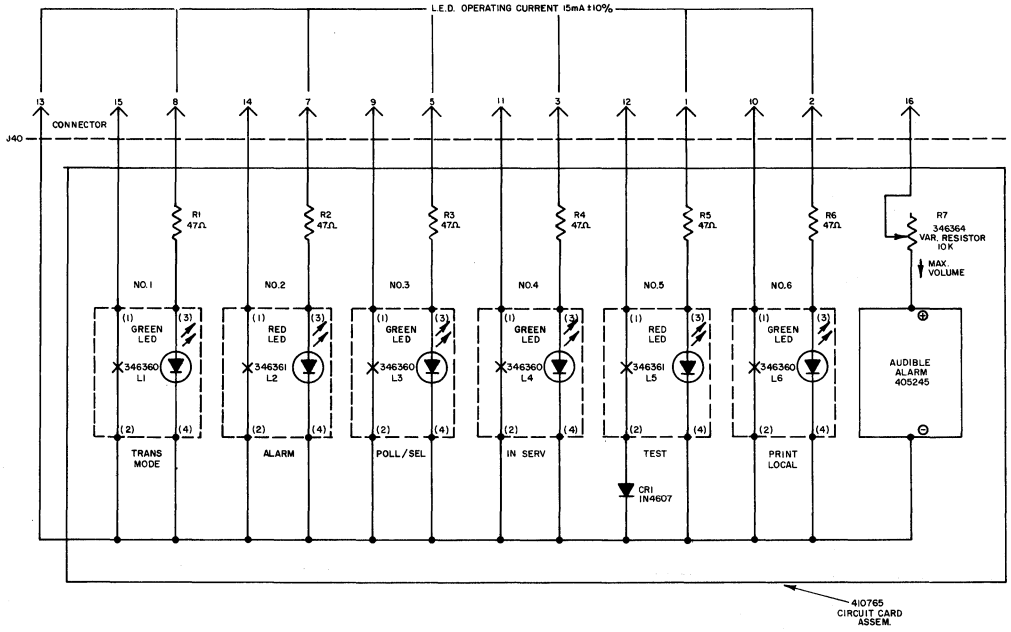


Fig. 13

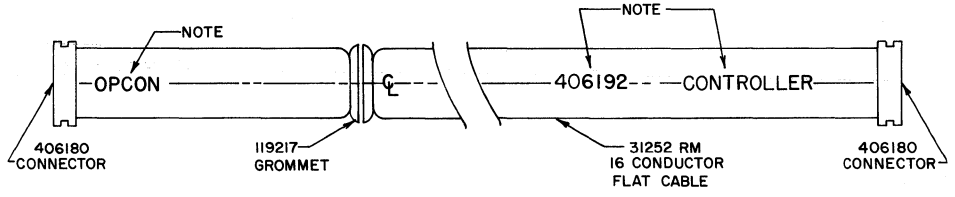
40K003 RECEIVE-ONLY OPCON



Note 1: Numbers in parentheses on bottom of keyswitch housing.

Note 2: All resistors 1/2 watt unless otherwise specified.

Note 3: L.E.D. (Light Emitting Diode).



Note: Rubber stamp block letters.

Fig. 14

CABLE ASSEMBLIES

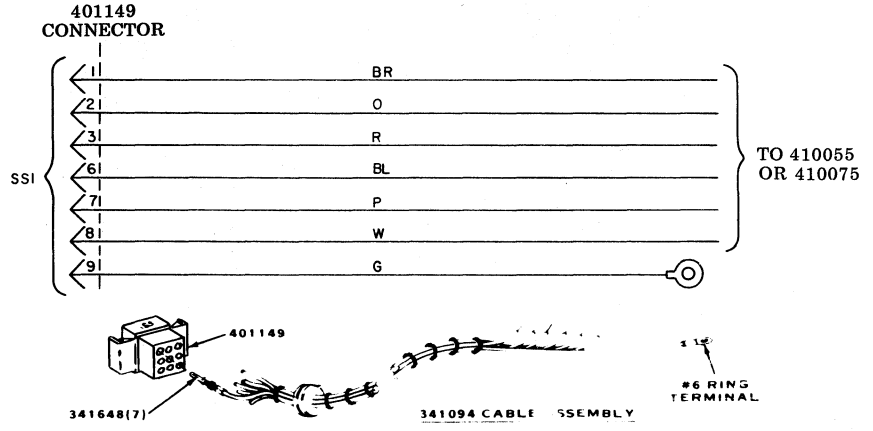


Fig. 15—341094 Cable Assembly for Early Design 40K101 and 40K104 Opcons

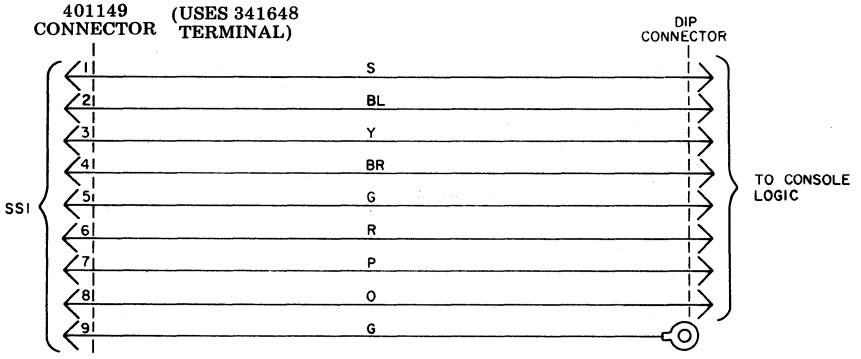


Fig. 16—346387 Cable Assembly for Late Design 40K101, 40K104/203 and 40K105 Opcons

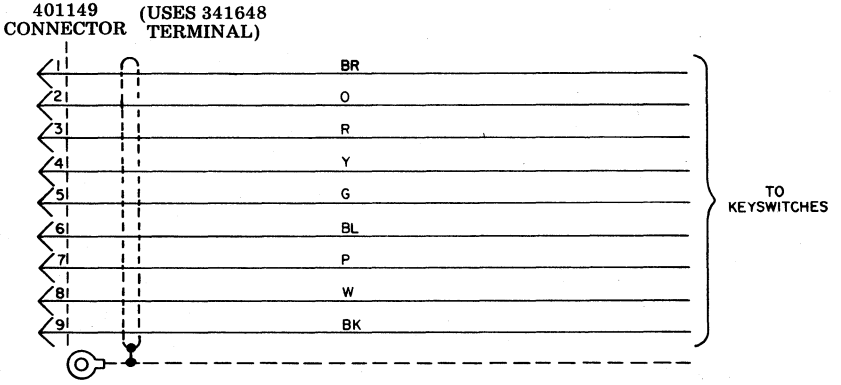


Fig. 17—341099 Cable Assembly for the 40K001 Opcon