

## $A_{16} \cdot 2 \pmod{13}$

	blocks	defect	matrix		blocks	defect	matrix
$G :$	1	1	$13 \times 12$		41	0	$24024_2 = \chi_{33,0}, \varphi_{33,0}$
	2	1	$13 \times 12$		42	0	$24024_3 = \chi_{33,1}, \varphi_{33,1}$
	3	1	$13 \times 12$		43	0	$24960_1 = \chi_{34,0}, \varphi_{34,0}$
	4	0	$104_1 = \chi_{3,0}, \varphi_{3,0}$		44	0	$24960_2 = \chi_{34,1}, \varphi_{34,1}$
	5	0	$104_2 = \chi_{3,1}, \varphi_{3,1}$		45	0	$30030_1 = \chi_{35,0}, \varphi_{35,0}$
	6	0	$455_1 = \chi_{6,0}, \varphi_{6,0}$		46	0	$30030_2 = \chi_{35,1}, \varphi_{35,1}$
	7	0	$455_2 = \chi_{6,1}, \varphi_{6,1}$		47	0	$32032_1 = \chi_{36,0}, \varphi_{36,0}$
	8	0	$1365_1 = \chi_{9,0}, \varphi_{9,0}$		48	0	$32032_2 = \chi_{36,1}, \varphi_{36,1}$
	9	0	$1365_2 = \chi_{9,1}, \varphi_{9,1}$		49	0	$36036_1 = \chi_{37,0}, \varphi_{38,0}$
	10	0	$1430_1 = \chi_{10,0}, \varphi_{10,0}$		50	0	$36036_2 = \chi_{37,1}, \varphi_{38,1}$
	11	0	$1430_2 = \chi_{10,1}, \varphi_{10,1}$		51	0	$36608_1 = \chi_{38,0}, \varphi_{39,0}$
	12	0	$2548_1 = \chi_{11,0}, \varphi_{12,0}$		52	0	$36608_2 = \chi_{38,1}, \varphi_{39,1}$
	13	0	$2548_2 = \chi_{11,1}, \varphi_{12,1}$		53	0	$38220_1 = \chi_{39,0}, \varphi_{40,0}$
	14	0	$3003_1 = \chi_{13,0}, \varphi_{13,0}$		54	0	$38220_2 = \chi_{39,1}, \varphi_{40,1}$
	15	0	$3003_2 = \chi_{13,1}, \varphi_{13,1}$		55	0	$42042_1 = \chi_{29+}, \varphi_{29+}$
	16	0	$3432_1 = \chi_{14,0}, \varphi_{14,0}$		56	0	$42120_1 = \chi_{40,0}, \varphi_{41,0}$
	17	0	$3432_2 = \chi_{14,1}, \varphi_{14,1}$		57	0	$42120_2 = \chi_{40,1}, \varphi_{41,1}$
	18	0	$3640_1 = \chi_{15,0}, \varphi_{15,0}$		58	0	$45760_1 = \chi_{42,0}, \varphi_{42,0}$
	19	0	$3640_2 = \chi_{15,1}, \varphi_{15,1}$		59	0	$45760_2 = \chi_{42,1}, \varphi_{42,1}$
	20	0	$3900_1 = \chi_{16,0}, \varphi_{16,0}$		60	0	$51480_1 = \chi_{43,0}, \varphi_{43,0}$
	21	0	$3900_2 = \chi_{16,1}, \varphi_{16,1}$		61	0	$51480_2 = \chi_{43,1}, \varphi_{43,1}$
	22	0	$4004_1 = \chi_{17,0}, \varphi_{17,0}$		62	0	$60060_1 = \chi_{44,0}, \varphi_{46,0}$
	23	0	$4004_2 = \chi_{17,1}, \varphi_{17,1}$		63	0	$60060_2 = \chi_{44,1}, \varphi_{46,1}$
	24	0	$5005_1 = \chi_{18,0}, \varphi_{18,0}$		64	0	$60060_3 = \chi_{45,0}, \varphi_{47,0}$
	25	0	$5005_2 = \chi_{18,1}, \varphi_{18,1}$		65	0	$60060_4 = \chi_{45,1}, \varphi_{47,1}$
	26	0	$6435_1 = \chi_{19,0}, \varphi_{19,0}$		66	0	$65520_1 = \chi_{46,0}, \varphi_{48,0}$
	27	0	$6435_2 = \chi_{19,1}, \varphi_{19,1}$		67	0	$65520_2 = \chi_{46,1}, \varphi_{48,1}$
	28	0	$11648_1 = \chi_{21,0}, \varphi_{21,0}$		68	0	$68640_1 = \chi_{47,0}, \varphi_{49,0}$
	29	0	$11648_2 = \chi_{21,1}, \varphi_{21,1}$		69	0	$68640_2 = \chi_{47,1}, \varphi_{49,1}$
	30	0	$14300_1 = \chi_{25,0}, \varphi_{25,0}$		70	0	$69888_1 = \chi_{48,0}, \varphi_{50,0}$
	31	0	$14300_2 = \chi_{25,1}, \varphi_{25,1}$		71	0	$69888_2 = \chi_{48,1}, \varphi_{50,1}$
	32	0	$16848_1 = \chi_{26,0}, \varphi_{26,0}$		72	0	$71500_1 = \chi_{49,0}, \varphi_{51,0}$
	33	0	$16848_2 = \chi_{26,1}, \varphi_{26,1}$		73	0	$71500_2 = \chi_{49,1}, \varphi_{51,1}$
	34	0	$18018_1 = \chi_{27,0}, \varphi_{27,0}$		74	0	$73710_1 = \chi_{51,0}, \varphi_{53,0}$
	35	0	$18018_2 = \chi_{27,1}, \varphi_{27,1}$		75	0	$73710_2 = \chi_{51,1}, \varphi_{53,1}$
	36	0	$20020_1 = \chi_{28,0}, \varphi_{28,0}$		76	0	$76440_1 = \chi_{52,0}, \varphi_{54,0}$
	37	0	$20020_2 = \chi_{28,1}, \varphi_{28,1}$		77	0	$76440_2 = \chi_{52,1}, \varphi_{54,1}$
	38	0	$21840_1 = \chi_{31,0}, \varphi_{32,0}$		78	0	$82368_1 = \chi_{54,0}, \varphi_{55,0}$
	39	0	$21840_2 = \chi_{31,1}, \varphi_{32,1}$		79	0	$82368_2 = \chi_{54,1}, \varphi_{55,1}$
	40	0	$24024_1 = \chi_{22+}, \varphi_{22+}$		80	0	$85800_1 = \chi_{55,0}, \varphi_{56,0}$

	blocks	defect	matrix
	81	0	$85800_2 = \chi_{55,1}, \varphi_{56,1}$
	82	0	$91520_1 = \chi_{56,0}, \varphi_{57,0}$
	83	0	$91520_2 = \chi_{56,1}, \varphi_{57,1}$
	84	0	$91728_1 = \chi_{57,0}, \varphi_{58,0}$
	85	0	$91728_2 = \chi_{57,1}, \varphi_{58,1}$
	86	0	$100100_1 = \chi_{58,0}, \varphi_{60,0}$
	87	0	$100100_2 = \chi_{58,1}, \varphi_{60,1}$
	88	0	$112112_1 = \chi_{60,0}, \varphi_{62,0}$
	89	0	$112112_2 = \chi_{60,1}, \varphi_{62,1}$
	90	0	$112112_3 = \chi_{61,0}, \varphi_{63,0}$
	91	0	$112112_4 = \chi_{61,1}, \varphi_{63,1}$
	92	0	$114400_1 = \chi_{62,0}, \varphi_{64,0}$
	93	0	$114400_2 = \chi_{62,1}, \varphi_{64,1}$
	94	0	$114660_1 = \chi_{63,0}, \varphi_{65,0}$
	95	0	$114660_2 = \chi_{63,1}, \varphi_{65,1}$
	96	0	$115830_1 = \chi_{64,0}, \varphi_{66,0}$
	97	0	$115830_2 = \chi_{64,1}, \varphi_{66,1}$
	98	0	$116480_1 = \chi_{65,0}, \varphi_{67,0}$
	99	0	$116480_2 = \chi_{65,1}, \varphi_{67,1}$
	100	0	$140140_1 = \chi_{68,0}, \varphi_{71,0}$
	101	0	$140140_2 = \chi_{68,1}, \varphi_{71,1}$
	102	0	$150150_1 = \chi_{69,0}, \varphi_{72,0}$
	103	0	$150150_2 = \chi_{69,1}, \varphi_{72,1}$
	104	0	$150150_3 = \chi_{70,0}, \varphi_{73,0}$
	105	0	$150150_4 = \chi_{70,1}, \varphi_{73,1}$
	106	0	$168168_1 = \chi_{72,0}, \varphi_{74,0}$
	107	0	$168168_2 = \chi_{72,1}, \varphi_{74,1}$
	108	0	$171600_1 = \chi_{73,0}, \varphi_{75,0}$
	109	0	$171600_2 = \chi_{73,1}, \varphi_{75,1}$
	110	0	$180180_1 = \chi_{75,0}, \varphi_{76,0}$
	111	0	$180180_2 = \chi_{75,1}, \varphi_{76,1}$
	112	0	$180180_3 = \chi_{76,0}, \varphi_{77,0}$
	113	0	$180180_4 = \chi_{76,1}, \varphi_{77,1}$
	114	0	$200200_1 = \chi_{79,0}, \varphi_{78,0}$
	115	0	$200200_2 = \chi_{79,1}, \varphi_{78,1}$
	116	0	$200200_3 = \chi_{80,0}, \varphi_{79,0}$
	117	0	$200200_4 = \chi_{80,1}, \varphi_{79,1}$
	118	0	$206388_1 = \chi_{83,0}, \varphi_{81,0}$
	119	0	$206388_2 = \chi_{83,1}, \varphi_{81,1}$
	120	0	$210210_1 = \chi_{84,0}, \varphi_{82,0}$

	blocks	defect	matrix
	121	0	$210210_2 = \chi_{84,1}, \varphi_{82,1}$
	122	0	$231660_1 = \chi_{85,0}, \varphi_{83,0}$
	123	0	$231660_2 = \chi_{85,1}, \varphi_{83,1}$
	124	0	$240240_1 = \chi_{86,0}, \varphi_{84,0}$
	125	0	$240240_2 = \chi_{86,1}, \varphi_{84,1}$
	126	0	$240240_3 = \chi_{87,0}, \varphi_{85,0}$
	127	0	$240240_4 = \chi_{87,1}, \varphi_{85,1}$
	128	0	$250250_1 = \chi_{66+}, \varphi_{68+}$
	129	0	$262080_1 = \chi_{88,0}, \varphi_{86,0}$
	130	0	$262080_2 = \chi_{88,1}, \varphi_{86,1}$
	131	0	$266240_1 = \chi_{89,0}, \varphi_{87,0}$
	132	0	$266240_2 = \chi_{89,1}, \varphi_{87,1}$
	133	0	$280280_1 = \chi_{90,0}, \varphi_{88,0}$
	134	0	$280280_2 = \chi_{90,1}, \varphi_{88,1}$
	135	0	$280280_3 = \chi_{91,0}, \varphi_{89,0}$
	136	0	$280280_4 = \chi_{91,1}, \varphi_{89,1}$
	137	0	$292864_1 = \chi_{92,0}, \varphi_{90,0}$
	138	0	$292864_2 = \chi_{92,1}, \varphi_{90,1}$
	139	0	$300300_1 = \chi_{93,0}, \varphi_{91,0}$
	140	0	$300300_2 = \chi_{93,1}, \varphi_{91,1}$
	141	0	$305760_1 = \chi_{94,0}, \varphi_{92,0}$
	142	0	$305760_2 = \chi_{94,1}, \varphi_{92,1}$
	143	0	$318500_1 = \chi_{95,0}, \varphi_{93,0}$
	144	0	$318500_2 = \chi_{95,1}, \varphi_{93,1}$
	145	0	$320320_1 = \chi_{96,0}, \varphi_{94,0}$
	146	0	$320320_2 = \chi_{96,1}, \varphi_{94,1}$
	147	0	$336336_1 = \chi_{97,0}, \varphi_{95,0}$
	148	0	$336336_2 = \chi_{97,1}, \varphi_{95,1}$
	149	0	$360360_1 = \chi_{99,0}, \varphi_{96,0}$
	150	0	$360360_2 = \chi_{99,1}, \varphi_{96,1}$
	151	0	$360360_3 = \chi_{100,0}, \varphi_{97,0}$
	152	0	$360360_4 = \chi_{100,1}, \varphi_{97,1}$
	153	0	$411840_1 = \chi_{101,0}, \varphi_{98,0}$
	154	0	$411840_2 = \chi_{101,1}, \varphi_{98,1}$
	155	0	$416988_1 = \chi_{102,0}, \varphi_{99,0}$
	156	0	$416988_2 = \chi_{102,1}, \varphi_{99,1}$
	157	0	$429000_1 = \chi_{103,0}, \varphi_{100,0}$
	158	0	$429000_2 = \chi_{103,1}, \varphi_{100,1}$
	159	0	$429000_3 = \chi_{104,0}, \varphi_{101,0}$
	160	0	$429000_4 = \chi_{104,1}, \varphi_{101,1}$

	blocks	defect	matrix
	161	0	$448448_1 = \chi_{105,0}, \varphi_{102,0}$
	162	0	$448448_2 = \chi_{105,1}, \varphi_{102,1}$
	163	0	$480480_1 = \chi_{108,0}, \varphi_{105,0}$
	164	0	$480480_2 = \chi_{108,1}, \varphi_{105,1}$
	165	0	$500500_1 = \chi_{109,0}, \varphi_{106,0}$
	166	0	$500500_2 = \chi_{109,1}, \varphi_{106,1}$
	167	0	$512512_1 = \chi_{110,0}, \varphi_{107,0}$
	168	0	$512512_2 = \chi_{110,1}, \varphi_{107,1}$
	169	0	$515970_1 = \chi_{111,0}, \varphi_{108,0}$
	170	0	$515970_2 = \chi_{111,1}, \varphi_{108,1}$
	171	0	$549120_1 = \chi_{112,0}, \varphi_{109,0}$
	172	0	$549120_2 = \chi_{112,1}, \varphi_{109,1}$
	173	0	$559104_1 = \chi_{113,0}, \varphi_{110,0}$
	174	0	$559104_2 = \chi_{113,1}, \varphi_{110,1}$
	175	0	$582400_1 = \chi_{114,0}, \varphi_{111,0}$
	176	0	$582400_2 = \chi_{114,1}, \varphi_{111,1}$
	177	0	$600600_1 = \chi_{115,0}, \varphi_{112,0}$
	178	0	$600600_2 = \chi_{115,1}, \varphi_{112,1}$
	179	0	$630630_1 = \chi_{116,0}, \varphi_{113,0}$
	180	0	$630630_2 = \chi_{116,1}, \varphi_{113,1}$
	181	0	$630630_3 = \chi_{117,0}, \varphi_{114,0}$
	182	0	$630630_4 = \chi_{117,1}, \varphi_{114,1}$
	183	0	$640640_1 = \chi_{118,0}, \varphi_{115,0}$
	184	0	$640640_2 = \chi_{118,1}, \varphi_{115,1}$
	185	0	$648648_1 = \chi_{119,0}, \varphi_{116,0}$
	186	0	$648648_2 = \chi_{119,1}, \varphi_{116,1}$
	187	0	$673920_1 = \chi_{120,0}, \varphi_{117,0}$
	188	0	$673920_2 = \chi_{120,1}, \varphi_{117,1}$
	189	0	$698880_1 = \chi_{121,0}, \varphi_{118,0}$
	190	0	$698880_2 = \chi_{121,1}, \varphi_{118,1}$
	191	0	$819000_1 = \chi_{122,0}, \varphi_{119,0}$
	192	0	$819000_2 = \chi_{122,1}, \varphi_{119,1}$
	193	0	$928746_1 = \chi_{106+}, \varphi_{103+}$
	194	0	$1153152_1 = \chi_{123,0}, \varphi_{120,0}$
	195	0	$1153152_2 = \chi_{123,1}, \varphi_{120,1}$

<b>Block 1:</b>	$\varphi_{1,0}$	$\varphi_{4,1}$	$\varphi_{7,1}$	$\varphi_{8,0}$	$\varphi_{11,1}$	$\varphi_{20,0}$	$\varphi_{31,1}$	$\varphi_{37,0}$	$\varphi_{45,1}$	$\varphi_{52,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.
$105_2 = \chi_{4,1}$	.	1	.	.	.	.	.	.	.	.
$896_2 = \chi_{7,1}$	.	1	1	.	.	.	.	.	.	.
$1260_1 = \chi_{8,0}$	1	.	.	1	.	.	.	.	.	.
$2640_2 = \chi_{12,1}$	.	.	1	.	1	.	.	.	.	.
$10752_1 = \chi_{20,0}$	.	.	.	1	.	1	.	.	.	.
$23100_2 = \chi_{32,1}$	.	.	.	.	1	.	1	.	.	.
$43120_1 = \chi_{41,0}$	.	.	.	.	.	1	.	1	.	.
$80640_2 = \chi_{53,1}$	.	.	.	.	.	.	1	.	1	.
$105600_1 = \chi_{59,0}$	.	.	.	.	.	.	.	1	.	1
$155232_2 = \chi_{71,1}$	.	.	.	.	.	.	.	.	1	.
$173250_1 = \chi_{74,0}$	.	.	.	.	.	.	.	.	.	1
$197120_1 = \chi_{78,0}$	.	.	.	.	.	.	.	.	.	.

<b>(Block 1:)</b>	$\varphi_{59,1}$	$\varphi_{61,0}$	
$1_1 = \chi_{1,0}$	.	.	$\varphi_{1,0} = 1_1$
$105_2 = \chi_{4,1}$	.	.	$\varphi_{4,1} = 105_2$
$896_2 = \chi_{7,1}$	.	.	$\varphi_{7,1} = 791_2$
$1260_1 = \chi_{8,0}$	.	.	$\varphi_{8,0} = 1259_1$
$2640_2 = \chi_{12,1}$	.	.	$\varphi_{11,1} = 1849_2$
$10752_1 = \chi_{20,0}$	.	.	$\varphi_{20,0} = 9493_1$
$23100_2 = \chi_{32,1}$	.	.	$\varphi_{31,1} = 21251_2$
$43120_1 = \chi_{41,0}$	.	.	$\varphi_{37,0} = 33627_1$
$80640_2 = \chi_{53,1}$	.	.	$\varphi_{45,1} = 59389_2$
$105600_1 = \chi_{59,0}$	.	.	$\varphi_{52,0} = 71973_1$
$155232_2 = \chi_{71,1}$	1	.	$\varphi_{59,1} = 95843_2$
$173250_1 = \chi_{74,0}$	.	1	$\varphi_{61,0} = 101277_1$
$197120_1 = \chi_{78,0}$	1	1	

<b>Block 2:</b>	$\varphi_{1,1}$	$\varphi_{4,0}$	$\varphi_{7,0}$	$\varphi_{8,1}$	$\varphi_{11,0}$	$\varphi_{20,1}$	$\varphi_{31,0}$	$\varphi_{37,1}$	$\varphi_{45,0}$	$\varphi_{52,1}$
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.	.	.	.
$105_1 = \chi_{4,0}$	.	1	.	.	.	.	.	.	.	.
$896_1 = \chi_{7,0}$	.	1	1	.	.	.	.	.	.	.
$1260_2 = \chi_{8,1}$	1	.	.	1	.	.	.	.	.	.
$2640_1 = \chi_{12,0}$	.	.	1	.	1	.	.	.	.	.
$10752_2 = \chi_{20,1}$	.	.	.	1	.	1	.	.	.	.
$23100_1 = \chi_{32,0}$	.	.	.	.	1	.	1	.	.	.
$43120_2 = \chi_{41,1}$	.	.	.	.	.	1	.	1	.	.
$80640_1 = \chi_{53,0}$	.	.	.	.	.	.	1	.	1	.
$105600_2 = \chi_{59,1}$	.	.	.	.	.	.	.	1	.	1
$155232_1 = \chi_{71,0}$	.	.	.	.	.	.	.	.	1	.
$173250_2 = \chi_{74,1}$	.	.	.	.	.	.	.	.	.	1
$197120_2 = \chi_{78,1}$	.	.	.	.	.	.	.	.	.	.

<b>(Block 2:)</b>	$\varphi_{59,0}$	$\varphi_{61,1}$	
$1_2 = \chi_{1,1}$	.	.	$\varphi_{1,1} = 1_2$
$105_1 = \chi_{4,0}$	.	.	$\varphi_{4,0} = 105_1$
$896_1 = \chi_{7,0}$	.	.	$\varphi_{7,0} = 791_1$
$1260_2 = \chi_{8,1}$	.	.	$\varphi_{8,1} = 1259_2$
$2640_1 = \chi_{12,0}$	.	.	$\varphi_{11,0} = 1849_1$
$10752_2 = \chi_{20,1}$	.	.	$\varphi_{20,1} = 9493_2$
$23100_1 = \chi_{32,0}$	.	.	$\varphi_{31,0} = 21251_1$
$43120_2 = \chi_{41,1}$	.	.	$\varphi_{37,1} = 33627_2$
$80640_1 = \chi_{53,0}$	.	.	$\varphi_{45,0} = 59389_1$
$105600_2 = \chi_{59,1}$	.	.	$\varphi_{52,1} = 71973_2$
$155232_1 = \chi_{71,0}$	1	.	$\varphi_{59,0} = 95843_1$
$173250_2 = \chi_{74,1}$	.	1	$\varphi_{61,1} = 101277_2$
$197120_2 = \chi_{78,1}$	1	1	

<b>Block 3:</b>	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{5,0}$	$\varphi_{5,1}$	$\varphi_{24,0}$	$\varphi_{24,1}$	$\varphi_{44,0}$	$\varphi_{44,1}$	$\varphi_{70,0}$	$\varphi_{70,1}$
$15_1 = \chi_{2,0}$	1	.	.	.	.	.	.	.	.	.
$15_2 = \chi_{2,1}$	.	1	.	.	.	.	.	.	.	.
$440_1 = \chi_{5,0}$	1	.	1	.	.	.	.	.	.	.
$440_2 = \chi_{5,1}$	.	1	.	1	.	.	.	.	.	.
$13860_1 = \chi_{24,0}$	.	.	1	.	1	.	.	.	.	.
$13860_2 = \chi_{24,1}$	.	.	.	1	.	1	.	.	.	.
$71680_1 = \chi_{50,0}$	.	.	.	.	1	.	1	.	.	.
$71680_2 = \chi_{50,1}$	.	.	.	.	.	1	.	1	.	.
$194040_1 = \chi_{77,0}$	.	.	.	.	.	.	1	.	1	.
$194040_2 = \chi_{77,1}$	.	.	.	.	.	.	.	1	.	1
$337920_1 = \chi_{98,0}$	.	.	.	.	.	.	.	.	1	.
$337920_2 = \chi_{98,1}$	.	.	.	.	.	.	.	.	.	1
$404250_1 = \chi_{81+}$	.	.	.	.	.	.	.	.	.	.

<b>(Block 3:)</b>	$\varphi_{80,0}$	$\varphi_{80,1}$	
$15_1 = \chi_{2,0}$	.	.	$\varphi_{2,0} = 15_1$
$15_2 = \chi_{2,1}$	.	.	$\varphi_{2,1} = 15_2$
$440_1 = \chi_{5,0}$	.	.	$\varphi_{5,0} = 425_1$
$440_2 = \chi_{5,1}$	.	.	$\varphi_{5,1} = 425_2$
$13860_1 = \chi_{24,0}$	.	.	$\varphi_{24,0} = 13435_1$
$13860_2 = \chi_{24,1}$	.	.	$\varphi_{24,1} = 13435_2$
$71680_1 = \chi_{50,0}$	.	.	$\varphi_{44,0} = 58245_1$
$71680_2 = \chi_{50,1}$	.	.	$\varphi_{44,1} = 58245_2$
$194040_1 = \chi_{77,0}$	.	.	$\varphi_{70,0} = 135795_1$
$194040_2 = \chi_{77,1}$	.	.	$\varphi_{70,1} = 135795_2$
$337920_1 = \chi_{98,0}$	1	.	$\varphi_{80,0} = 202125_1$
$337920_2 = \chi_{98,1}$	.	1	$\varphi_{80,1} = 202125_2$
$404250_1 = \chi_{81+}$	1	1	