

CONTROL DATA[®]

DISK DRIVE CONTROLLER

1738-A/FA708-A,
1738-B/FA708-B,
1738-C/FA708-C
INCLUDES FV431-A

MAINTENANCE
PARTS DATA
CARD PLACEMENT
EQUATION SUMMARY
WIRE LISTS

CONTROL DATA

CORPORATION

CUSTOMER ENGINEERING MANUAL

RECORD of REVISIONS

REVISION	NOTES
A (1-5-67)	Manual released, initial printing. Product designation 1738-A03 and 1738-B03.
B (4-26-67)	Field Change Order 15902, new Product Designation 1738-A04 and 1738-B04 (MDR 004). Pages 2-ii, 2-v, 2-14, 2-15, 2-34, 2-35, 2-41, 5-13, 6-16, 6-45, 6-48, 6-56, 6-100, 6-109, 7-1, 7-3, 7-6, 7-13, 7-18, 7-24, 7-26, 7-27, 7-28, 7-38, 7-40, 7-43, 7-45, 7-48 and 7-53 revised.
	Field Change Order 16174, new Product Designation 1738-A05 and 1738-B05. No change to manual.
C (4-26-67)	Publication Change Order 16327, no Product Designation change. Pages v, 3-3 and 3-4 revised.
D (7-21-67)	Field Change Order 16221, new Product Designation 1738-A06 and 1738-B06 (MDR 005). Pages 2-iii, 2-7, 2-37, 2-47, 6-16, 6-30, 6-36, 6-41, 6-50 and 6-108 revised.
E (7-21-67)	Field Change Order 16571, new Product Designation 1738-A07 and 1738-B07 (MDR 006). Pages 2-i, 2-ii, 2-9, 2-11, 5-1, 5-2, 5-5, 5-12, 5-13, 6-27, 6-42, 6-43, 6-44, 6-53 and 6-105 revised.
F (7-21-67)	Change Order 16603, no Product Designation change. Page 2-49 revised.
G (7-21-67)	Publication Change Order 16946, no Product Designation change. Pages iii, v, 2-iv thru 2-49, 3-5 thru 3-16, 6-12 and 7-1 thru 7-48 revised.
H (7-17-68)	Engineering Change Order 19597. Pages 2-16, 2-17, 2-35, 2-37, 6-30, 6-33, 6-52, 6-87, 6-106, 7-16 and 7-46 revised.
(6-5-69)	Field Change Order 18932, equipment level 1738-A08 and 1738-B08. No change to this manual.
J (6-5-69)	Manual revised, includes Field Change Order 20983, equipment level 1738-A09, 1738-B09 and 1738-C02. Pages vii, 1-1, 2-ii, 2-iii, 2-v, 2-10, 2-32, 2-37, 2-38, 2-39, 5-5, 5-12, 5-13, 5-14, 6-32, 6-36, 6-47, 6-48, 6-108, 7-16, 7-18, 7-24, 7-34, 7-46 and 7-47 revised.
K (6-5-69)	Manual revised, includes Engineering Change Order 21869, no change in equipment level. Cover, Title Page and Comment Sheet revised. Pages iii, 2-vi, 2-vii, 2-0, 2-2, 2-9, 2-33, 2-48, 4-1 thru 4-53 and 6-45 revised.
L (10-21-69)	Manual revised, includes Field Change Order 22088 equipment level 1738-A10, 1738-B10, 1738-C03 and FA7A2-A02. Pages 2-17, 2-19, 2-29, 2-31, 2-35, 2-47, 4-12, 4-31, 4-51, 5-1, 5-5, 5-12, 6-25, 6-46, 7-6, 7-12, 7-13, 7-14, 7-15, 7-16, and 7-19 revised.
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or use Comment Sheet in the back of this manual.

MANUAL TO EQUIPMENT LEVEL CORRELATION SHEET

SHEET 1 OF 2

		EQUIPMENTS					
MANUAL REV	FCO OR ECO	1738-A	1738-B	1738-C	FA708-A	FA708-B	FA708-C
T	FCO28039	A13	B14	C02	A13	B14	C08
U	ECO28023					B15	C09

MANUAL TO EQUIPMENT LEVEL CORRELATION SHEET

SHEET 2 OF 2

		EQUIPMENTS					
MANUAL REV	FCO OR ECO	FV431-A					
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FOREWORD

This manual contains customer engineering information for the CONTROL DATA* 1738 Disk Drive Controller. The controller implements the exchange of data and control signals between a CONTROL DATA 1700 Computer System and a maximum of two CONTROL DATA 853 or 854 Disk Storage Drive Units.

Reference information for this controller is contained in the 1700 Standard Peripheral Reference Manual, Pub. No. 60182700.

*Registered trademark of Control Data Corporation

PART 1

INTRODUCTION

PART 1
INTRODUCTION

SCOPE

The 1738 Disk Drive Controller serves as an interface between the 1704 Computer and the 853/854 Disk Storage Drive Unit.

The controller contains the logic necessary to interpret computer function codes, control drive unit operations, synchronize data transfer between the computer and drive units, and provide the system status information to the computer.

REFERENCES

This manual assumes that the customer engineer is familiar with 1700 Computer System instructions and procedures. Refer to the following publications for information on the 1700 Computer System:

1700 Systems Manual	Pub No. 60152900
1700 Computer Reference Manual	Pub No. 60153100
1700 Input/Output Specifications Manual	Pub No. 60165800
1700 Site Preparation and Installation Manual	Pub No. 60158400

PART 2

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J471	2-27	K106	2-9	K229	2-17	K502	2-47	P017	2-31
J475	2-27	K107	2-9	K230	2-17	K503	2-47	P018	2-31
J478	2-33	K108	2-9	K231	2-17	K510	2-47	P019	2-31
J479	2-33	K109	2-9	K232	2-17	K511	2-47	P020	2-31
J480	2-33	K110	2-9	K233	2-17	K512	2-47	P021	2-31
J481	2-33	K111	2-9	K234	2-17	K513	2-47	P022	2-31
J482	2-33	K112	2-9	K235	2-17	K514	2-47	P023	2-31
J490	2-33	K113	2-9	K236	2-17	K515	2-47	P024	2-31
J500	2-47	K114	2-9	K237	2-17	K517	2-47	P025	2-31
J501	2-47	K115	2-9	K238	2-17	K520	2-47	P026	2-31
J502	2-47	K116	2-9	K239	2-17	K521	2-47	P027	2-31
J503	2-47	K117	2-9	K240	2-21	K524	2-47	P028	2-31
J504	2-47	K118	2-9	K241	2-21	K526	2-47	P029	2-31
J505	2-47	K119	2-9	K242	2-21	K528	2-47	P030	2-31
J506	2-47	K120	2-9	K243	2-21	K530	2-47	P031	2-31
J507	2-47	K121	2-9	K244	2-21	K531	2-47	P032	2-31
J509	2-47	K122	2-9	K245	2-21	K532	2-47	P033	2-31
J510	2-47	K123	2-9	K321	2-17	K533	2-47	P034	2-31
J511	2-47	K124	2-9	K400	2-33	K534	2-47	P035	2-31
J514	2-47	K125	2-9	K401	2-33	K535	2-47	P036	2-31

SYMBOL INDEX

P037	2-31	R109	2-3	S010	2-21	T204	2-13	U102	2-3
P038	2-31	R110	2-3	S011	2-21	T205	2-13	U107	2-3
P039	2-31	R120	2-3	S012	2-21	T206	2-13	U108	2-3
P040	2-31	R121	2-3	S013	2-21	T207	2-13	U109	2-3
P041	2-31	R130	2-3	S014	2-21	T208	2-13	U110	2-3
P042	2-31	R131	2-3	S015	2-21	T209	2-13	U120	2-3
P043	2-31	R132	2-3	S016	2-21	T210	2-13	U121	2-3
P044	2-31	R200	2-13	S017	2-21	T211	2-13	U131	2-3
P045	2-31	R201	2-13	S018	2-21	T212	2-13	W000	2-23
P046	2-31	R202	2-13	S019	2-21	T213	2-13	W001	2-23
P047	2-31	R203	2-13	S020	2-21	T214	2-13	W002	2-23
P048	2-31	R204	2-13	S021	2-21	T215	2-13	W003	2-23
P049	2-31	R205	2-13	S022	2-21	T300	2-13	W004	2-23
P700	2-31	R206	2-13	S023	2-21	T301	2-13	W005	2-23
P701	2-31	R207	2-13	S024	2-21	T302	2-13	W006	2-23
P702	2-31	R208	2-13	S025	2-21	T303	2-13	W007	2-23
P703	2-31	R209	2-13	S026	2-21	T304	2-13	W008	2-23
P704	2-31	R210	2-13	S027	2-21	T305	2-13	W009	2-23
P705	2-31	R211	2-13	S028	2-21	T306	2-13	W010	2-23
P710	2-31	R212	2-13	S029	2-21	T307	2-13	W011	2-23
P711	2-31	R213	2-13	S700	2-21	T308	2-13	W012	2-23
P720	2-31	R214	2-13	S701	2-21	T309	2-13	W013	2-23
P721	2-31	R215	2-13	S702	2-21	T310	2-13	W014	2-23
P722	2-31	R220	2-13	S703	2-21	T311	2-13	W015	2-23
P723	2-31	R230	2-13	S740	2-21	T312	2-13	W016	2-23
P724	2-31	R231	2-13	S741	2-21	T313	2-13	W017	2-23
P725	2-31	R330	2-13	S750	2-21	T314	2-13	W018	2-23
P730	2-31	R400	2-39	S760	2-21	T320	2-15	W019	2-23
P750	2-31	R401	2-39	S767	2-21	T321	2-15	W020	2-23
P751	2-31	R402	2-39	S768	2-21	T322	2-15	W021	2-23
P752	2-31	R403	2-39	S769	2-21	T330	2-15	W022	2-23
P753	2-31	R404	2-39	S770	2-21	T400	2-39	W023	2-23
P754	2-31	R405	2-39	T000	2-3	T401	2-39	W024	2-23
P755	2-31	R406	2-39	T001	2-3	T402	2-39	W025	2-23
R000	2-3	R407	2-39	T002	2-3	T403	2-39	W026	2-23
R001	2-3	R410	2-37	T003	2-3	T404	2-39	W027	2-23
R002	2-3	R411	2-37	T004	2-3	T405	2-39	W028	2-23
R003	2-3	R420	2-37	T005	2-3	T406	2-39	W029	2-23
R004	2-3	R430	2-37	T006	2-3	T407	2-39	W100	2-23
R005	2-3	R431	2-37	T007	2-3	T410	2-39	W101	2-23
R006	2-3	R500	2-37	T008	2-3	T411	2-39	W102	2-23
R007	2-3	R501	2-37	T009	2-3	T412	2-39	W103	2-23
R008	2-3	R510	2-37	T010	2-3	T413	2-39	W104	2-23
R009	2-3	R520	2-37	T011	2-3	T414	2-39	W105	2-23
R010	2-3	R521	2-37	T012	2-3	T420	2-37	W106	2-23
R011	2-3	S000	2-21	T013	2-3	T500	2-37	W107	2-23
R012	2-3	S001	2-21	T014	2-3	T501	2-37	W108	2-23
R013	2-3	S002	2-21	T015	2-3	T900	2-15	W109	2-23
R014	2-3	S003	2-21	T020	2-5	T901	2-15	W110	2-23
R015	2-3	S004	2-21	T021	2-5	T903	2-3	W111	2-23
R100	2-3	S005	2-21	T102	2-3	U007	2-3	W112	2-23
R101	2-3	S006	2-21	T200	2-13	U008	2-3	W113	2-23
R102	2-3	S007	2-21	T201	2-13	U009	2-3	W114	2-23
R107	2-3	S008	2-21	T202	2-13	U100	2-3	W115	2-23
R108	2-3	S009	2-21	T203	2-13	U101	2-3	W116	2-23

SYMBOL INDEX

W120	2-23	X115	2-45	X186	2-43	Y223	2-17
W700	2-23	X120	2-43	X187	2-43	Y224	2-17
W701	2-23	X121	2-43	X188	2-45	Y225	2-17
W702	2-23	X122	2-43	X189	2-45	Y226	2-17
W703	2-23	X123	2-43	X190	2-45	Y227	2-17
W740	2-23	X124	2-43	X191	2-45	Y228	2-17
W741	2-23	X125	2-43	X192	2-45	Y229	2-17
W750	2-23	X126	2-43	X193	2-45	Y230	2-17
X000	2-43	X127	2-43	X194	2-45	Y231	2-17
X001	2-43	X128	2-45	X195	2-45	Y240	2-21
X002	2-43	X129	2-45	X200	2-43	Y241	2-21
X003	2-43	X130	2-45	X201	2-43	Y241	2-21
X004	2-43	X131	2-45	X202	2-45	Y242	2-21
X005	2-43	X132	2-45	X203	2-45	Y250	2-25
X006	2-43	X133	2-45	X220	2-43	Y400	2-33
X007	2-43	X134	2-45	X221	2-45	Y401	2-33
X008	2-43	X135	2-45	X230	2-43	Y402	2-33
X009	2-43	X140	2-43	X231	2-45	Y403	2-33
X010	2-43	X141	2-43	X240	2-43	Y404	2-33
X011	2-43	X142	2-43	X241	2-45	Y405	2-33
X012	2-43	X143	2-43	X247	2-43	Y406	2-33
X013	2-43	X144	2-43	X248	2-43	Y407	2-33
X014	2-43	X145	2-43	X249	2-45	Y408	2-35
X015	2-43	X146	2-43	X250	2-43	Y409	2-35
X016	2-45	X147	2-43	X251	2-43	Y410	2-35
X017	2-45	X148	2-45	X252	2-45	Y411	2-35
X018	2-45	X149	2-45	X253	2-45	Y412	2-35
X019	2-45	X150	2-45	X255	2-43	Y413	2-37
X020	2-45	X151	2-45	X257	2-45	Y481	2-37
X021	2-45	X152	2-45	X260	2-43	Y482	2-37
X022	2-45	X153	2-45	X261	2-43	Y483	2-39
X023	2-45	X154	2-45	X262	2-43	Y484	2-39
X024	2-45	X155	2-45	X263	2-45	Y490	2-37
X025	2-45	X160	2-43	X264	2-45	Y491	2-37
X026	2-45	X161	2-43	Y000	2-7	Y492	2-37
X027	2-45	X162	2-43	Y001	2-7	Y493	2-37
X028	2-45	X163	2-43	Y002	2-7	Y500	2-47
X029	2-45	X164	2-43	Y010	2-3	Y501	2-47
X030	2-45	X165	2-43	Y020	2-5	Y509	2-47
X031	2-45	X166	2-43	Y030	2-9	Y510	2-47
X100	2-43	X167	2-43	Y031	2-9	Y511	2-47
X101	2-43	X168	2-45	Y032	2-9	Y512	2-47
X102	2-43	X169	2-45	Y033	2-9	Y513	2-47
X103	2-43	X170	2-45	Y049	2-11	Y530	2-47
X104	2-43	X171	2-45	Y050	2-9	Y540	2-47
X105	2-43	X172	2-45	Y200	2-15	Y603	2-39
X106	2-43	X173	2-45	Y201	2-15	Y770	2-41
X107	2-43	X174	2-45	Y202	2-15	Y780	2-41
X108	2-45	X175	2-45	Y203	2-15		
X109	2-45	X180	2-43	Y204	2-15		
X110	2-45	X181	2-43	Y209	2-17		
X111	2-45	X182	2-43	Y210	2-17		
X112	2-45	X183	2-43	Y220	2-17		
X113	2-45	X184	2-43	Y221	2-17		
X114	2-45	X185	2-43	Y222	2-17		

Logic diagrams represent a symbolic approach to electronic schematics. By using symbols to represent building block circuits, the diagram becomes easy to read if the reader understands the function of the symbols. In Control Data Corporation logic, two signals, a logical 0 ("0") and logical 1 ("1"), are the possible input or output conditions of a circuit. A circuit with an output of "1" is "up" and a circuit with an output of "0" is "down". Detailed descriptions of logic symbols and their associated building block circuit cards are contained in the appropriate printed circuit manual (1604 and 3600 Card Types). Refer to the Literature Distribution Center Catalog for the publication number and latest revision level.

STANDARD LOGIC SYMBOLS

Standard logic diagram symbols for Control Data equipment using 1604- or 3600-type cards are inverters, flip-flops, control delays, capacitive delays, inductive delays, and line drivers and receivers.

Inverters

An inverter is a logic element which provides an output that is an inversion of its input. When more than one input is provided to an inverter, "1's" take precedence over "0's" and drive the output of the inverter to "0". Because any "1" input of several inputs drives the output to a "0", an inverter may be considered an inverting OR (NOR) gate when more than one input is present.

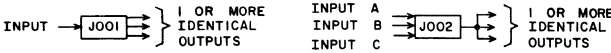


Figure 1. Inverter Symbols

Acceptable conventions for showing multiple OR inputs are given in Figure 2.



Figure 2. OR Circuit Conventions

An AND gate requires that all its inputs be "1's" in order that its output be a "1". If one or more of the inputs to an AND gate are "0", the output is a "0". Figure 3 illustrates conventions for showing AND gates feeding an inverter.



Figure 3. AND Circuit Conventions

Figure 4 illustrates a combination AND/OR input.

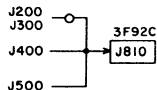


Figure 4. AND/OR Circuit Convention

KEY TO LOGIC SYMBOLS

(STANDARD 1604 OR 3600 CARD TYPES)_c

Flip-Flops (FF)

The flip-flop (FF) is a storage device with two stable states - designated as Set and Clear - and is composed of two or more inverters. The logic symbols (Figure 5) are formed by the combination of inverter symbols. By convention, Set inputs and outputs are shown in the upper part of the symbol and Clear inputs and outputs are shown in the lower part of the symbol.

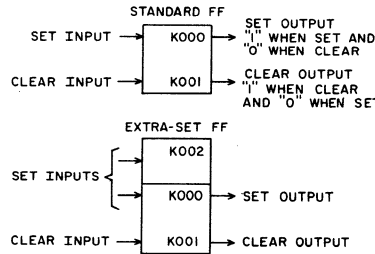


Figure 5. Flip-Flop Symbols

Figure 6 illustrates the interconnection of inverter symbols to form a flip-flop symbol. The term numbers assigned to each flip-flop are the term numbers of the internal inverters as seen by comparing the terms in Figure 5 with those in Figure 6. Notice that the Set output is the output of inverter K001, and the Clear output is the output of inverters K000 and K002.

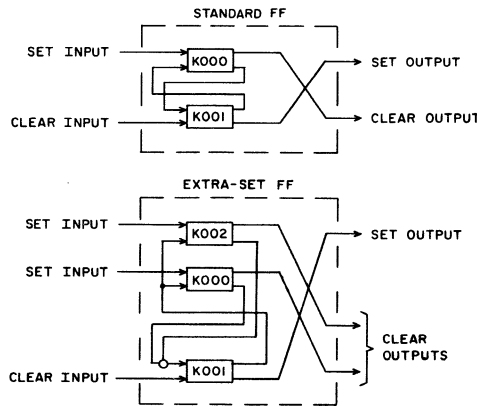


Figure 6. Internal Inverter Connections for a Flip-Flop

Control Delay

A control delay is a timing device consisting of an H term which receives the input and one or more V, Y, or N terms to provide the outputs. The H term is essentially a flip-flop with controlled feedback and occupies an entire printed circuit card. The output term(s) are inverter(s) located elsewhere on the logic chassis. The "1" outputs from a control delay are clocked pulses which are delayed one phase time from the "1" inputs. Clock inputs are not shown on the logic diagrams for any H, V, Y, or N terms; these terms, which control the start and duration of the delayed output pulses, may be found in the Equation Summary. Figure 7 illustrates two representative forms of the control delay symbol, with possible inputs and outputs labelled. Figure 8 shows the electrical connections for the two forms.

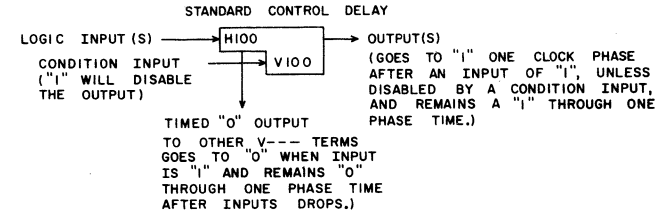


Figure 7. Control Delay Symbols

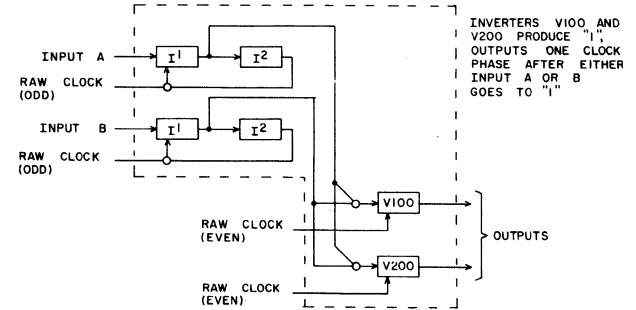
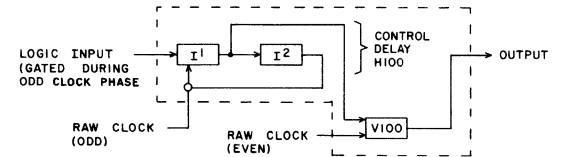


Figure 8. Electrical Connections for Control Delay

Control delays may have multiple inputs and/or multiple outputs. When a control delay has multiple output terms (i. e., more than one V, Y, or N term), each output term may have a separate conditioning input.

Capacitive Delays

A capacitive delay is used to delay the "1" input to a logic element. ("0" inputs are not affected by the delay.) Capacitive delays may be active or passive, depending upon whether or not transistors are used as part of the delaying circuit. Delay periods are checked by using a dual-trace scope connected to the input and output of the delay producing element. The actual connection points for the scope and probes vary for different cards and should be determined by referring to the Printed Circuit Manual.

Active delays may be recognized by the circuit letter always present as part of the card location. Pin numbers are also shown when external wiring is needed to connect the proper capacitance. In Figure 9, the pluggable delay uses this wiring to connect to capacitors on the same card. In the third example, this wiring connects to capacitors located on two separate capacitor cards.

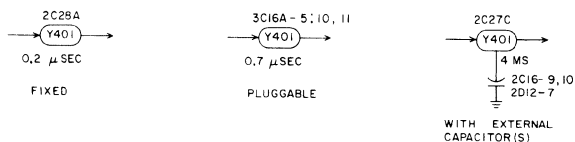


Figure 9. Active Capacitive Delays

All passive capacitive delays (Figure 10) are formed by wiring grounded capacitors, located on one or more capacitor cards, as an AND input to the affected logic element. For this reason, all passive delays show pin numbers to provide this external wiring data.



Figure 10. Passive Capacitive Delays

Capacitive delays may be adjustable or nonadjustable, depending on the card type and/or the external wiring connections on the card. When it is necessary to adjust the delay period in order to obtain specified circuit operation (usually done by varying a potentiometer in the RC network), a diagonal arrow is added to the delay symbol as shown in Figure 11.



Figure 11. Adjustable Capacitive Delays

Inductive Delays

An inductive delay is used to delay either the "1" or "0" input to a logic element or as a tapped delay line for timing of operations. The symbol for this delay is an elongated oval with a double vertical line just within the input end of the oval. When used as a tapped delay line, the inductive delay is terminated in its characteristic impedance. Inductive delays are identified

in the same manner as capacitive delays (except for the vertical lines) unless they are used as delay lines. On multi-section cards where no identifying circuit letters are present, pin numbers are shown adjacent to the input and output arrows. Figure 12 shows both kinds of inductive delays.

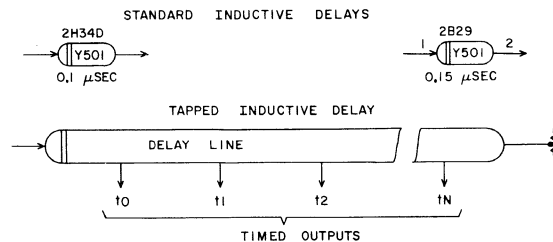


Figure 12. Inductive Delays

Line Drivers/Receivers

Voltage levels used to represent "1's" and "0's" on cables are different from those used for internal logic. The level shift to and from internal logic is made by line drivers and line receivers. These cards may be considered as inverting the signal electrically, but not logically. The letters commonly associated with these cards are L & M (1604) and R & T (3000 Series). A 3000 Series Receiver may also be used to perform a logical inversion by swapping the twisted pair wires. This usage is indicated by a circle on the input side of the symbol. In Figure 13, "1's" and "0's" have been added to clarify the logic states; they are not part of the symbol.

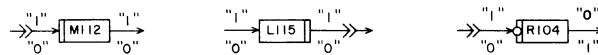


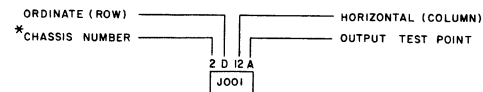
Figure 13. Typical Line Driver/Receiver Symbols

NON-LOGIC CONVENTION

The use of the double vertical bar, as shown in Figure 13, denotes a shift in signal voltage level from that used in internal logic. The double bar appears on the input or output side of the symbol, depending on which side connects to the non-logic-level signal. No particular voltage level is implied by the double bar - only that it is non-logic.

JACK ASSIGNMENTS

Each numbered term in the logic diagrams contains a jack assignment showing the physical location of that hardware element and the test point (circuit section) associated with it. For some card types, the test point letter is replaced by a pin number. For these cases, a card extender must be used in order to test that section of the card. Also, some symbols show no test point. This is because the entire card is used for one purpose (e.g. a single inverter, FF, or control delay). Figure 14 illustrates the inverter J001, with 2D12A representing its jack assignment.



*When most or all jack assignments are located on one chassis, the chassis numbers for that chassis are omitted. All multi-chassis devices include a chassis number as part of each jack assignment.

Figure 14. Jack Assignment Scheme

CABLE IDENTIFICATION

Cable connections are represented by the MIL-STD-15 symbol and identified as to connector location and pins used, as shown in Figure 15.

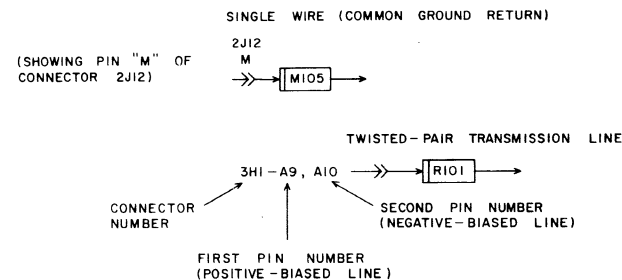


Figure 15. Cable Connections

SPECIAL LOGIC SYMBOLS

Nonstandard elements (special logic and/or non-logic elements) are represented by a special circuit symbol (generally a rectangle as shown in Figure 16). The special circuit symbol always shows the symbol designation, jack location, and the card type. Supplemental information may also be shown such as in the case of special delay cards which indicate the delay period. For detailed information refer to the specific card type in the appropriate Printed Circuit or Logic Module Manual.

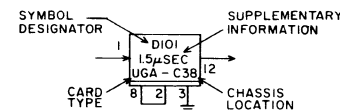


Figure 16. Symbol for Special Circuits

INPUT/OUTPUT DESIGNATIONS

Where several pages of logic are involved, a symbol index and term list (side cars) are incorporated within the manual. Also in certain instances such as special card types or on equipments for which no equation summary exists (as for peripheral devices) input and output pin numbers are indicated on each logic element as are the output destinations of the elements (Figure 17).

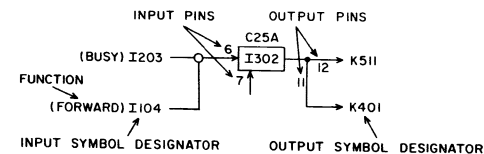


Figure 17. Input/Output Designations

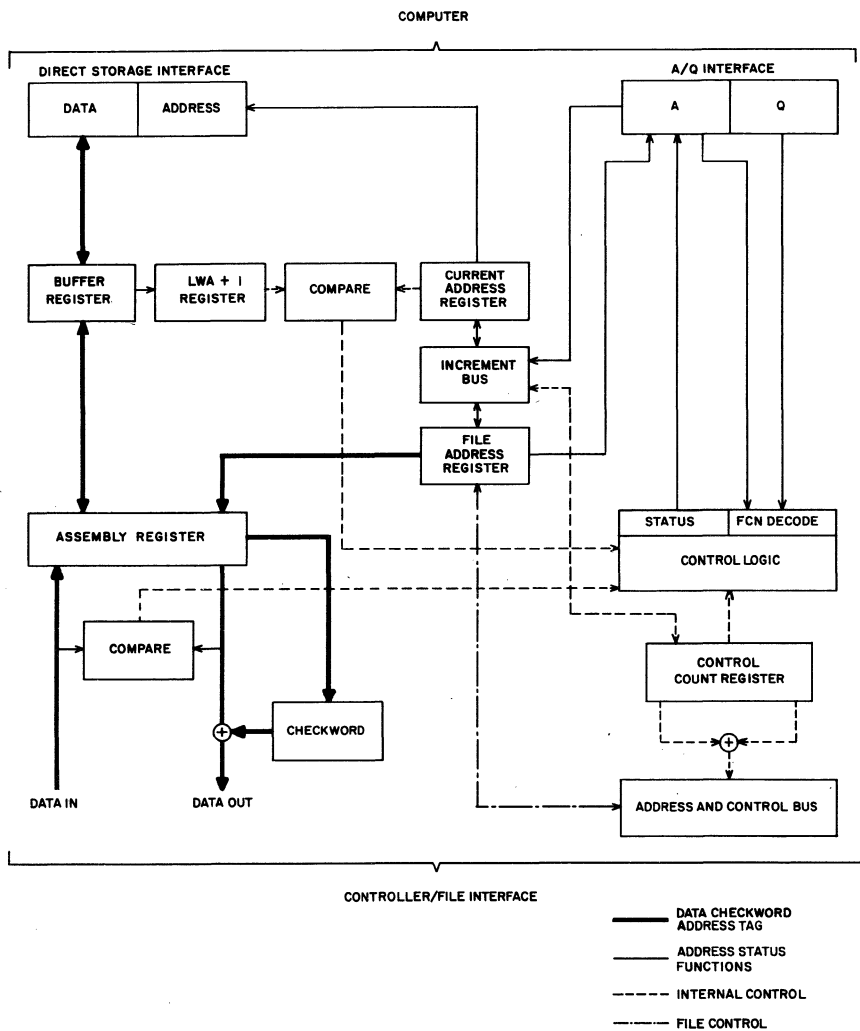


Figure 2-1. 1738 Functional Block Diagram

A/Q INTERFACE

The A/Q interface, Figure 2-1, is used to transmit functions and address information to the controller and status and address information to the computer. The computer Output from A and Input to A instructions initiate all transfers at this interface. During all transfers, the computer Q register must contain the controller equipment number in bit positions 10 through 7 and the function code in bit positions 2 through 0. All other bits in Q except the W field are ignored. The W field of Q must be zero for all operations (see Figure 2-2).

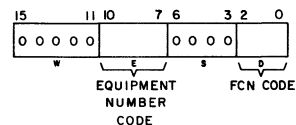


Figure 2-2. Q Register Format

ADDRESSING

Addressing of the records is under program control from the computer. Access to the records is accomplished by the Sector Record Address word. This word (16 bits) selects the sector, head, and cylinder. It is sent from the computer A register to the controller File Address register via the A/Q interface upon programmed instructions. The cylinder address portion (8 bits) of the Sector Record Address word is compared to the current cylinder address of the drive unit. The Increment Bus increments both addresses until one of the addresses becomes all "1's" which causes a difference count to be generated. This difference count and the new cylinder address (the address from the computer A register) are sent to the drive unit via the Address and Control Bus. The difference count causes the drive unit to seek forward or seek reverse and thus head-positioning is accomplished.

DATA TRANSFER

When the controller is Ready and Not Busy and the drive unit is On Cylinder, data may be transferred to or from computer storage. For Write operations, the controller accepts data from the computer in a parallel format (16-bit bytes) through the Direct Storage Interface. This data is disassembled and then transmitted serially to the drive unit. For reading data, the controller accepts serial data from the drive unit, assembles it into 16-bit bytes and transfers it in parallel to the computer.

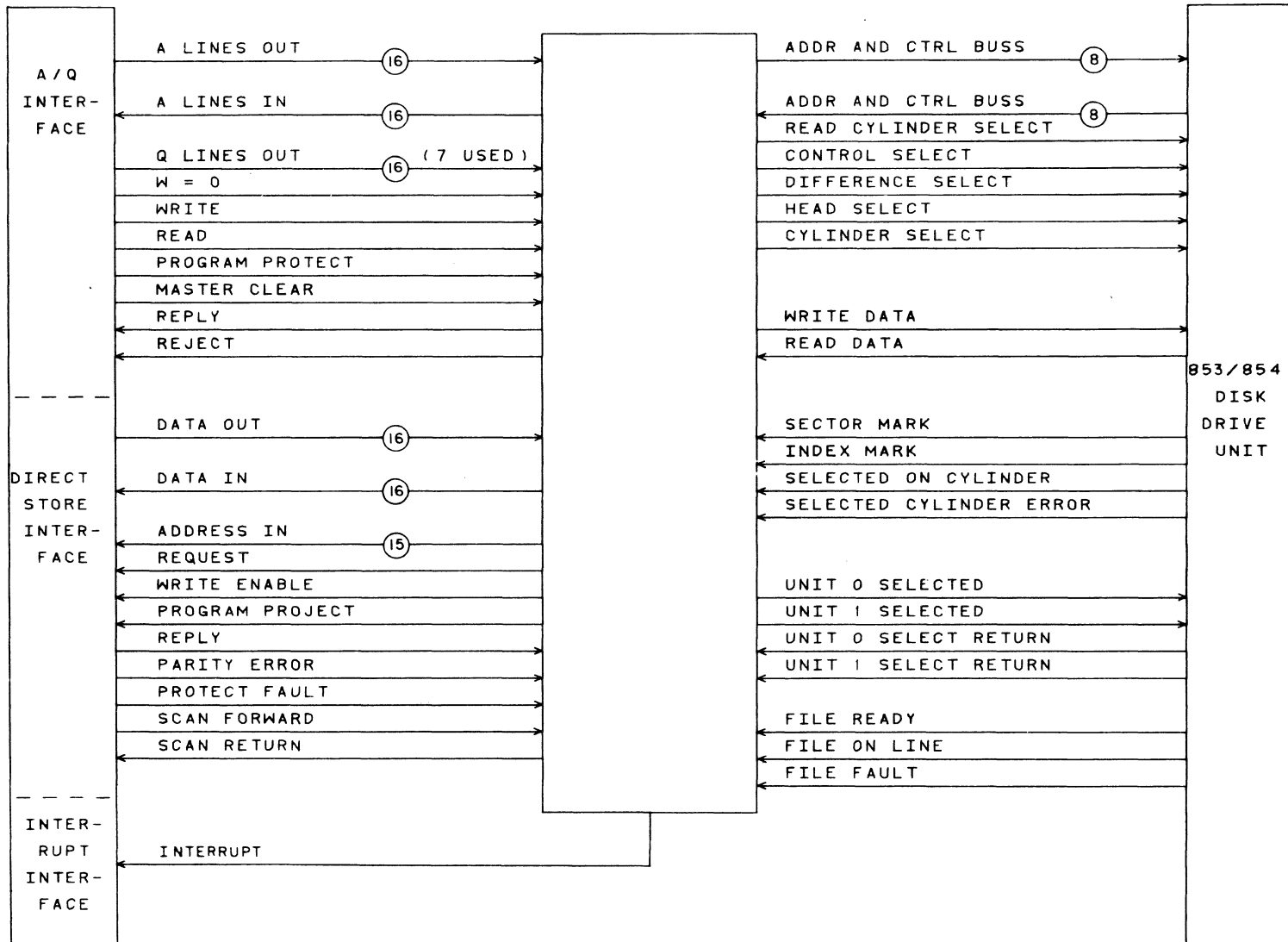
The controller has complete control when storing data in computer memory. The first word address minus one (FWA-1) is loaded into the current address register of the controller through the A/Q interface. The content of this storage location (FWA-1) is the last word address plus one (LWA+1). The LWA+1 is loaded into the LWA+1 register as data and compared with the current address. As each data word is transferred, the controller increments the content of the current address register. The incrementing continues until the current address compares with the LWA+1. When this occurs, the controller signals the computer that the data transfer is complete.

ADDRESS AND CONTROL BUS

This bus contains the lines necessary to position the cylinder select mechanism and to control the Read/Write operations.

1704
COMPUTER

1738 CONTROLLER



CONTROL DATA CORPORATION DEVELOPMENT DIVISION AUTOMATED DRAFTING	TITLE	PRODUCT	REV
	DISK STORAGE SYSTEM BLOCK DIAGRAM	1738	60167700
			6494

TERM	LOCATION	PAGE
A001	G42B	2-25
A003	G42D	2-25
A005	G38B	2-25
A007	G38D	2-25
A009	G37B	2-25
A011	G37D	2-25
A013	G33B	2-25
A015	G33D	2-25
A017	G31B	2-25
A019	G31D	2-25
A021	G30B	2-25
A023	G30D	2-25
A025	G29B	2-25
A027	G29D	2-25
A029	G28B	2-25
A031	G28D	2-25
J071	K33A	2-5
J072	K33B	2-5
J076	K33C	2-5
J077	K33D	2-5
J104	I31C	2-9
J115	F21D	2-9
K101	I42B	2-9
K105	I41B	2-9
K107	I40B	2-9
K109	I40D	2-9
K111	I39B	2-9
K113	I38B	2-9
K117	I37B	2-9
K119	I36B	2-9
K121	I36B	2-9
K123	I35D	2-9
K125	I34B	2-9
K127	I34D	2-9
K129	I33D	2-9
M001	I18C	2-5

A/Q DATA CABLE (E)

During Output from A instructions, the controller receives address and control information from the computer A register via the A/Q data cable (E). This same cable carries status information from the controller to the computer during Input to A instructions.

A/Q DATA CABLE (F)

This cable carries the equipment number code, the function code, and control information from the computer to the controller.

EQUIPMENT NUMBER CODE

The equipment number code is hexadecimal 0-9 and A-F and is determined by the setting of the EQUIPMENT CODE switch located inside the controller cabinet. The code is contained in bit positions 10-7 of the Q register and must accompany all input and output function codes. The controller ignores all instructions which do not contain the equipment number code.

FUNCTION CODES

The function code determines the type of operation to be performed by the controller. It is issued by the computer and is contained in the lower three bits of Q. All 1738 function codes are defined by Output from A or Input to A operations.

The Output from A functions are:

Director Function	(001)
Load Address	(010)
Write	(011)
Read	(100)
Compare	(101)

Checkword Check (110)

Write Address (111)

The Input to A functions are:

Director Status (001)

Address Status (010)

All other input or output function codes are illegal and will be rejected.

WRITE SIGNAL

The Write signal is present to signify that an output operation is being requested. If the data can be used at the time the Write signal rises, a Reply signal (page 2-5) will be returned to the computer; if not, a Reject signal (page 2-5) will be returned within 4 microseconds.

READ SIGNAL

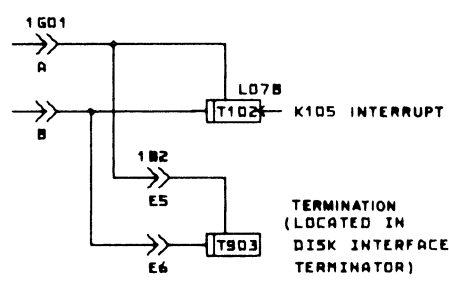
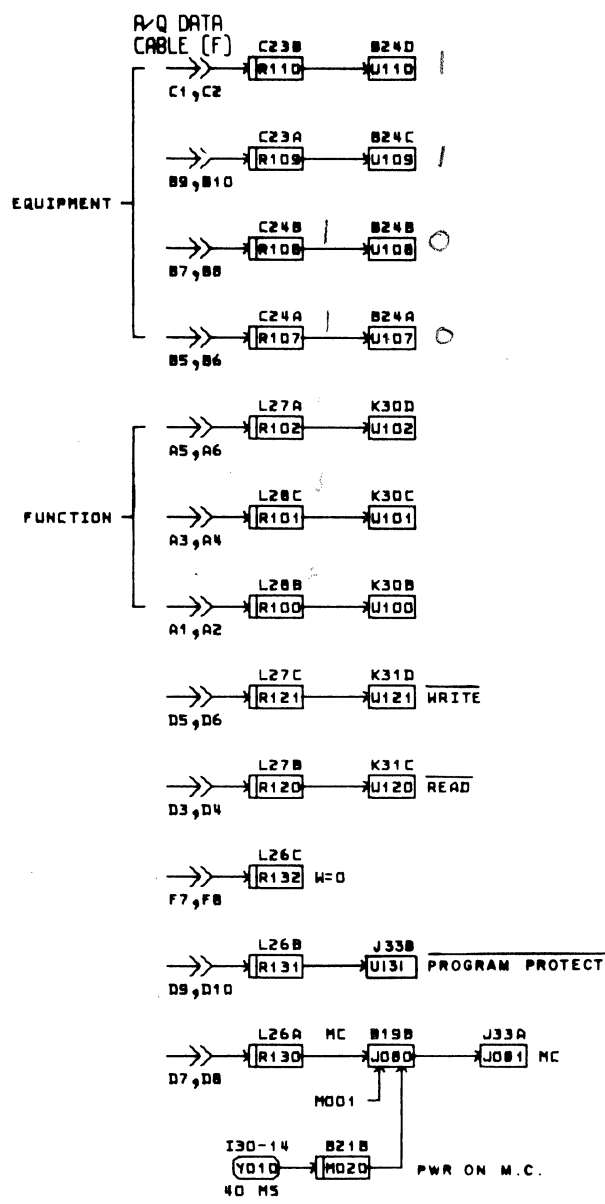
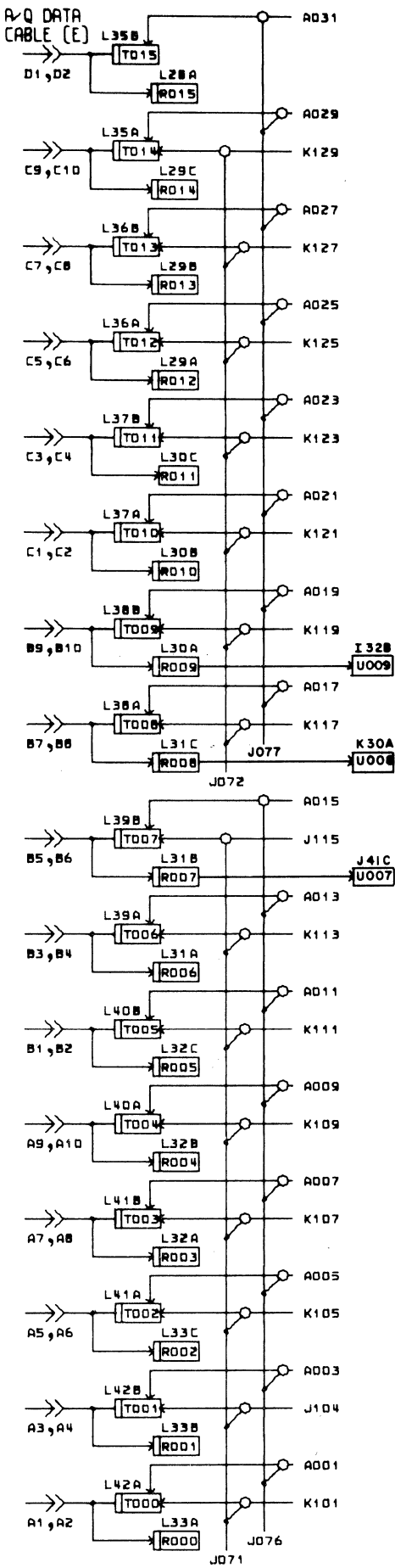
The Read signal is present to signify that an input operation is being requested. If data is available at the time the Read signal rises, a Reply signal will be returned to the computer; if not, a Reject signal (page 2-5) will be returned within 4 microseconds.

W = 0

For all input and output operations, the W field of Q must be filled with zeros in order to bring up the W = 0 line. If anything other than zeros are placed in the W field of Q, a Reject will occur.

PROGRAM PROTECT

The Program Protect signal is present if the I/O instruction requires access to a protected device. If the signal is not present, a Reject signal will be returned by the protected device.



PROJECT	I738	REVISED BY	G
DRAWING NO.	60167700	DATE	3/8/61
TITLE	A/Q INTERFACE		
CONTROL DATA CORPORATION	DEVELOPMENT DIVISION		
	AUTOMATED DRAFTING		
			2-3

TERM LOCATION PAGE FUNCTION DECODE

F714	J26D	2-7
I120	I07A	2-37
J023	K22B	2-7
J024	K22C	2-7
J029	K25D	2-7
J091	J32B	2-7
K000	K34A	2-7
K001	K34B	2-7
R100	L28B	2-3
R101	L28C	2-3
R102	L27A	2-3
R410	J03A	2-37
U100	K30B	2-3
U101	K30C	2-3
U102	K30D	2-3

The function decode circuit translates the lower three bits of Q. All function codes are translated by the controller including the 000 code which is illegal. Hardware is provided for the 000 code so that a Reject signal can be generated. If the output of J010 is a "1", the Function Reply Control FF (page 2-7) will not set which in turn will generate a Reject signal.

STATUS GATE

The status gate is enabled only by the Director Status function (001) in conjunction with the Read signal from the computer. The status gate input terms, J011 (Director Status) and J023 (Read signal), are ANDed with J029 which is from the timing chain (page 2-7). When the status gate is enabled, the computer A register receives the status condition of the controller and the disk storage drive unit. The status response bits are listed in Table 2-1.

TABLE 2-1. STATUS RESPONSE BITS

BIT SET IN A	TITLE	BIT SET IN A	TITLE
A0 = 1	Ready	A8 = 1	Checkword Error
A1 = 1	Busy	A9 = 1	Lost Data
A2 = 1	Interrupt	A10 = 1	Seek Error
A3 = 1	On Cylinder	A11 = 1	Address Error
A4 = 1	End of Operation	A12 = 1	Defective Track
A5 = 1	Alarm	A13 = 1	Storage Parity Error
A6 = 1	No Compare	A14 = 1	Protect Fault
A7 = 1	Protected	A15 = 1	Not Used

FILE ADDRESS GATE

The file address gate is enabled only by the Address Register Status function (010) in conjunction with the Read signal from the computer. When this gate is enabled, the computer A register receives the file address as shown in Figure 2-3.

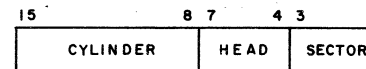


Figure 2-3. File Address

ADDRESS WRITE SWITCH

This switch is used for the Write Address function (111). When the switch is in the OFF position, the controller rejects Write Address functions. When the switch is in the NORMAL position, the controller accepts the Write Address function and write address tags which contain the good track bit. When the switch is in the BAD TRK position, the controller accepts the Write Address function and the write address tags which do not contain the good track bit. The ADDRESS WRITE switch affects only the Write Address function.

AUTO LOAD SWITCH

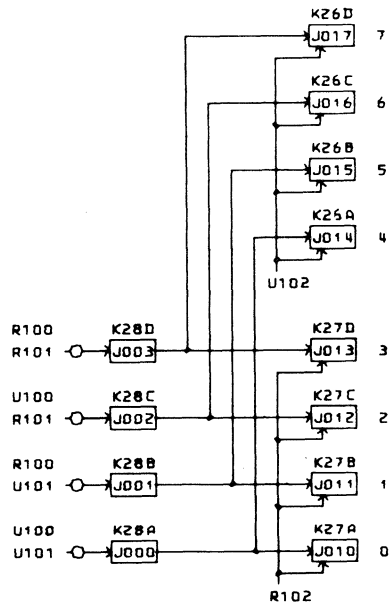
Operation of this switch forces a select on unit 0, and causes the controller to read the 16 sectors of track 0, cylinder 0, and load this data into the first 1536 addresses of computer storage. Operation of this switch also clears the controller, aborting any other operation that may be in process. The controller will become Busy and remain Busy until the sixteenth sector is stored in computer storage.

EQUIPMENT CODE SWITCH

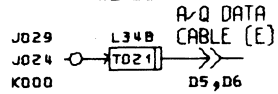
Any communication with the controller via the A/Q interface must include an equipment number code equal to that set by this switch.

FUNCTION DECODE

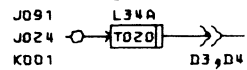
CODE



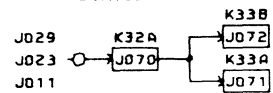
REJECT



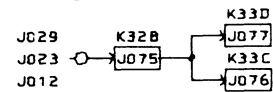
REPLY



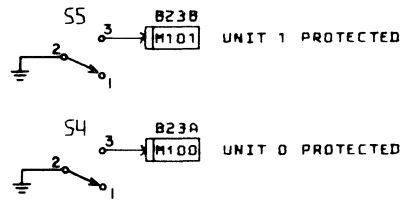
STATUS GATE



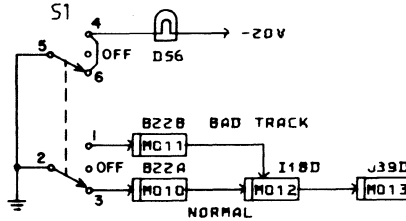
FILE ADDRESS GATE



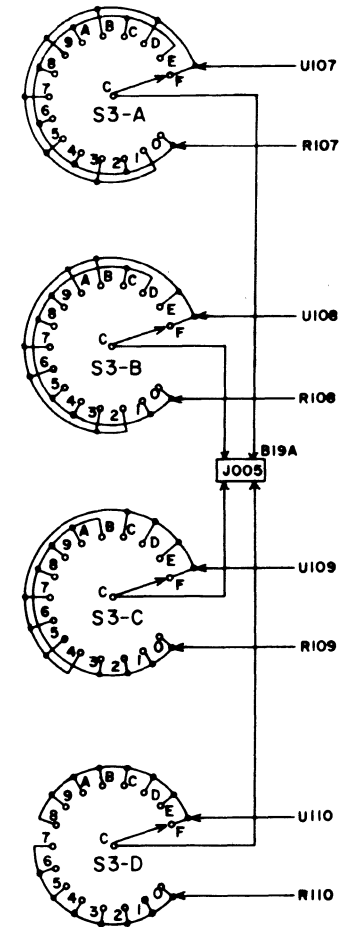
UNIT PROTECT



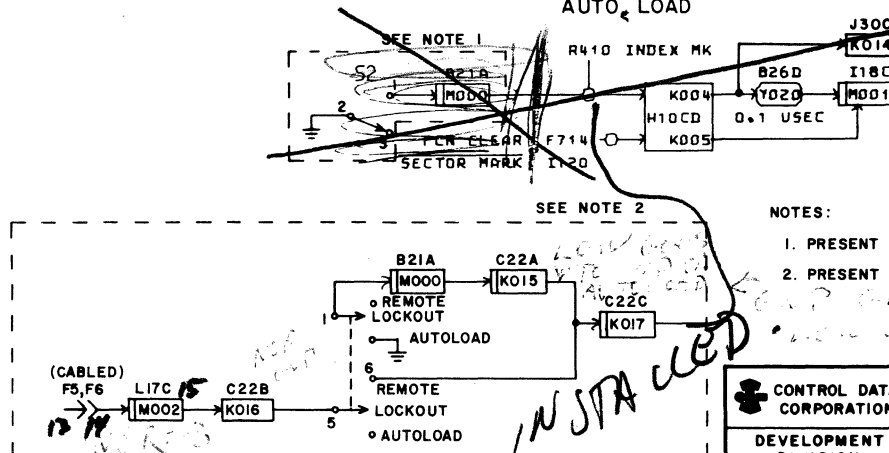
ADDRESS WRITE



EQUIP CODE SWITCH



AUTO LOAD



NOTES:

1. PRESENT ONLY IF ST. OPT. 10278-1 IS NOT INSTALLED.
2. PRESENT ONLY IF ST. OPT. 10278-1 IS INSTALLED.

CONTROL DATA CORPORATION DEVELOPMENT DIVISION AUTOMATED DRAFTING	TITLE A/Q INTERFACE AND MANUAL CONTROL	PRODUCT 1738
		DRAWING NO 60167700
		REV S
		SHEET PAGE 2 2-5

TERM	LOCATION	PAGE
J005	B19A	2-5
J010	K27A	2-5
J011	K27B	2-5
J012	K27C	2-5
J013	K27D	2-5
J014	K26A	2-5
J015	K26B	2-5
J016	K26C	2-5
J017	K26D	2-5
J080	B19B	2-3
J081	J33A	2-3
J100	I32A	2-9
K102	I24C	2-9
K107	I40B	2-9
K108	I40C	2-9
K114	K29A	2-9
K140	J25A	2-17
K212	H36A	2-17
K220	H32A	2-17
M000	B21A	2-5
M013	J39D	2-5
M100	B23A	2-5
M101	B23B	2-5
R001	L33B	2-3
R002	L33C	2-3
R003	L32A	2-3
R004	L32B	2-3
R008	L31C	2-3
R009	L30A	2-3
R120	L27B	2-3
R121	L27C	2-3
R131	L26B	2-3
R132	L26C	2-3
U000	K37A	2-3
U009	I32B	2-3
U131	J33B	2-3

FUNCTION REPLY CONTROL

The Function Reply Control circuit is used to acknowledge the acceptance of function codes. Any acceptable function in conjunction with a Read or Write signal will set the Function Reply Control FF at a time specified by J026 of the timing chain. Of the inputs to the timing chain, the W = 0 and Select signals should always be a "1" under normal operation conditions. Therefore, the timing of this chain is conditioned by a Read or Write signal. If no Reject occurs, the controller will send a Reply signal to the computer upon acceptance of a function code.

As soon as the computer receives a Reply, the Read or Write signal drops. In the absence of both Read and Write signals, inverter J025 clears the Function Reply Control FF.

FUNCTION REPLY DELAY

All functions use the Function Reply Delay circuit except the Director Function, Director Status, and Address Status. These functions have no data on the data cable to be transferred to a register, therefore they may reply immediately. Functions that are accompanied by an address or data word on the A cable must delay the reply until the data is loaded into a register.

PROTECT LOGIC

A protected function will cause K002/003 to set indicating that the function is protected. This allows protected programs to have access to protected storage. K006/007 sets if a protected unit has been selected but does not prevent further unit selects, (the case when an unprotected program selects a protected unit).

K114/115 (sheet - 4) sets to indicate that a protected program has selected a protected unit then prevents entry of all unprotected functions.

INTERRUPTS

The desired interrupts are selected by setting the appropriate bit in the A register during a Director Function. Selection of the interrupts allows the controller to interrupt the computer when certain status conditions develop. The status conditions which can enable the interrupt line (1G01, page 2-3) are Next Ready and Not Busy, End of Operation, and Alarm. The interrupt line becomes active when the Interrupt FF sets. A Master Clear or any acceptable output function clears an interrupt.

NEXT READY AND NOT BUSY INTERRUPT

If the Next Ready and Not Busy Interrupt FF is set, it causes the interrupt line to become active when the controller becomes Ready and Not Busy.

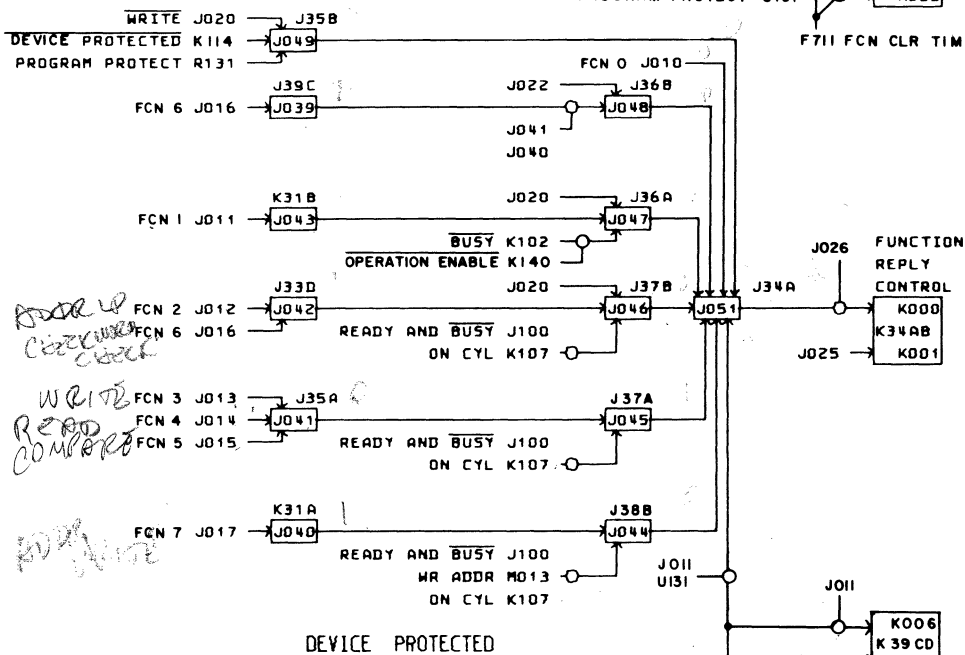
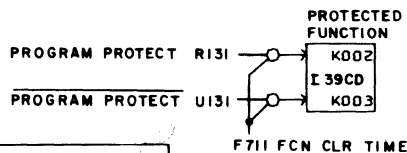
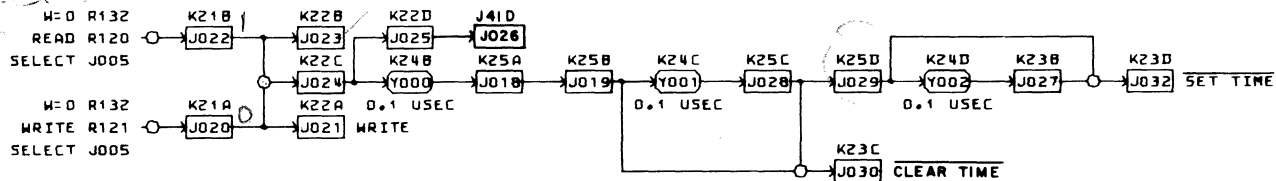
END OF OPERATION INTERRUPT

If the End of Operation FF is set, it causes the interrupt line to become active when the controller portion of an operation is complete. A Busy condition can still exist if the drive unit is positioning.

ALARM INTERRUPT

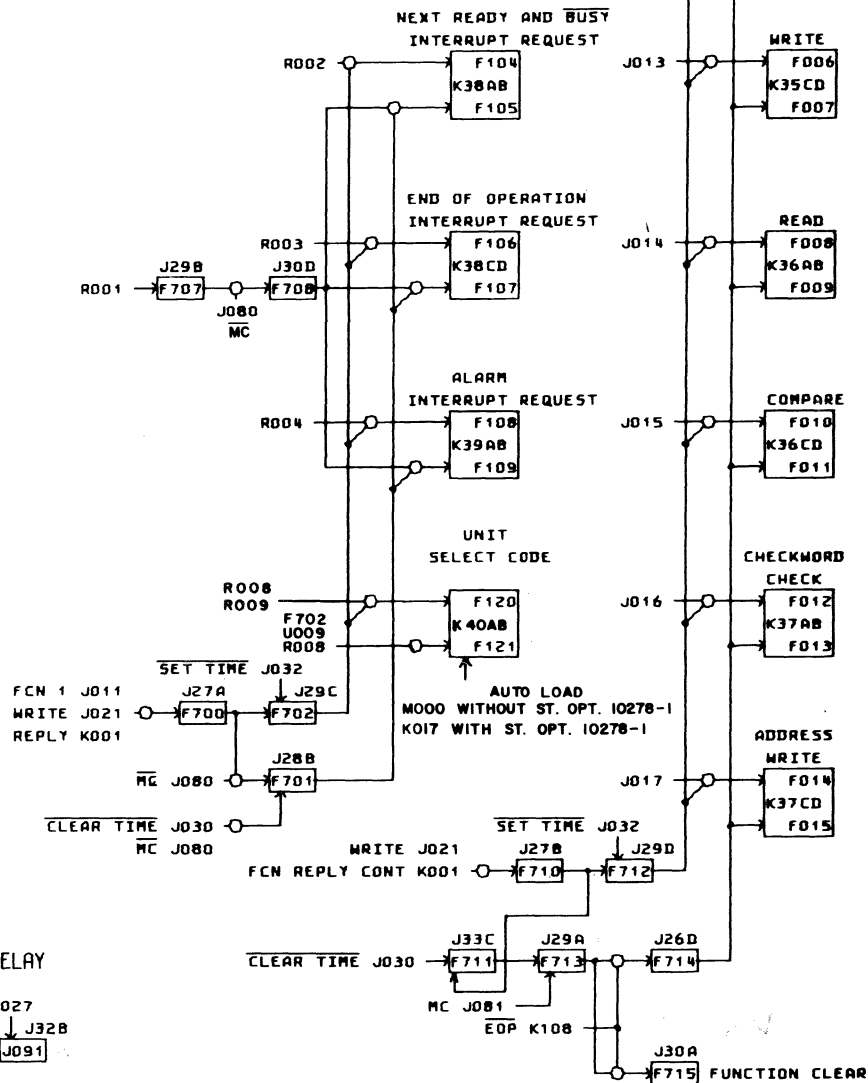
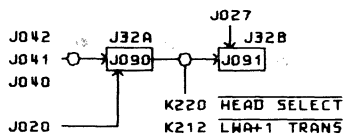
If the Alarm Interrupt FF is set, it causes the interrupt line to become active if any of the following conditions occur:

- 1) Not Ready and Busy
- 2) Checkword Error
- 3) Lost Data
- 4) Seek Error
- 5) Address Error
- 6) Defective Track
- 7) Storage Parity Error
- 8) Protect Fault



Handwritten notes:
 FCN 2 J012
 FCN 6 J016
 FCN 3 J013
 FCN 4 J014
 FCN 5 J015

FUNCTION REPLY DELAY



CONTROL DATA CORPORATION COMPUTER DIVISION AUTOMATED DRAFTING	TITLE FUNCTION TRANSFER	PRODUCT 1738	DRAWING NO 60167700	REV S
		TAPE NO 5985	SHEET PAGE 3	2-7

TERM	LOCATION	PAGE
A781	E16C	2-25
B750	G07A	2-19
B800	G01A	2-19
B801	G01B	2-19
D774	F17H	2-29
F011	K36D	2-7
F105	K38B	2-7
F107	K38D	2-7
F109	K39B	2-7
F701	J28B	2-7
F702	J29C	2-7
F713	J29A	2-7
F715	J30A	2-7
I100	I12A	2-37
I101	I13A	2-37
I125	I08A	2-37
I130	H03B	2-37
I131	I03A	2-37
J025	K22D	2-7
J050	J38A	2-7
J081	J33A	2-3
J123	I27A	2-11
J133	I26B	2-11
J204	K15D	2-15
J242	H33C	2-17
J406	G20C	2-33
J448	G20A	2-35
J535	I20C	2-47
K006	K39C	2-7
K134	K34D	2-11
K140	J25A	2-17
K141	J25B	2-17
K210	H37A	2-17
K221	H32B	2-17
K227	H23B	2-17
K410	H02A	2-33
K419	G22D	2-33
K421	H01B	2-33
K451	H05B	2-35
K470	C16A	2-27
K493	I04D	2-37
K521	H18D	2-47
P754	C17B	2-31
P755	B04D	2-31
R131	L26B	2-3
R230	L01B	2-13
R231	L01C	2-13
R430	J02A	2-37
R431	J02B	2-37
U007	J41C	2-3
W008	K30A	2-3
W115	C28A	2-23

The status response bits allow the computer to monitor certain conditions within the controller and the disk storage drive unit. Control and error bits are available to the computer only upon the execution of a Director Status (001) input function.

The outputs of the Control and Error Status FFs are fed directly to the status transmitter cards on page 2-3. Execution of a Director Status gates the status response bits to the computer A register.

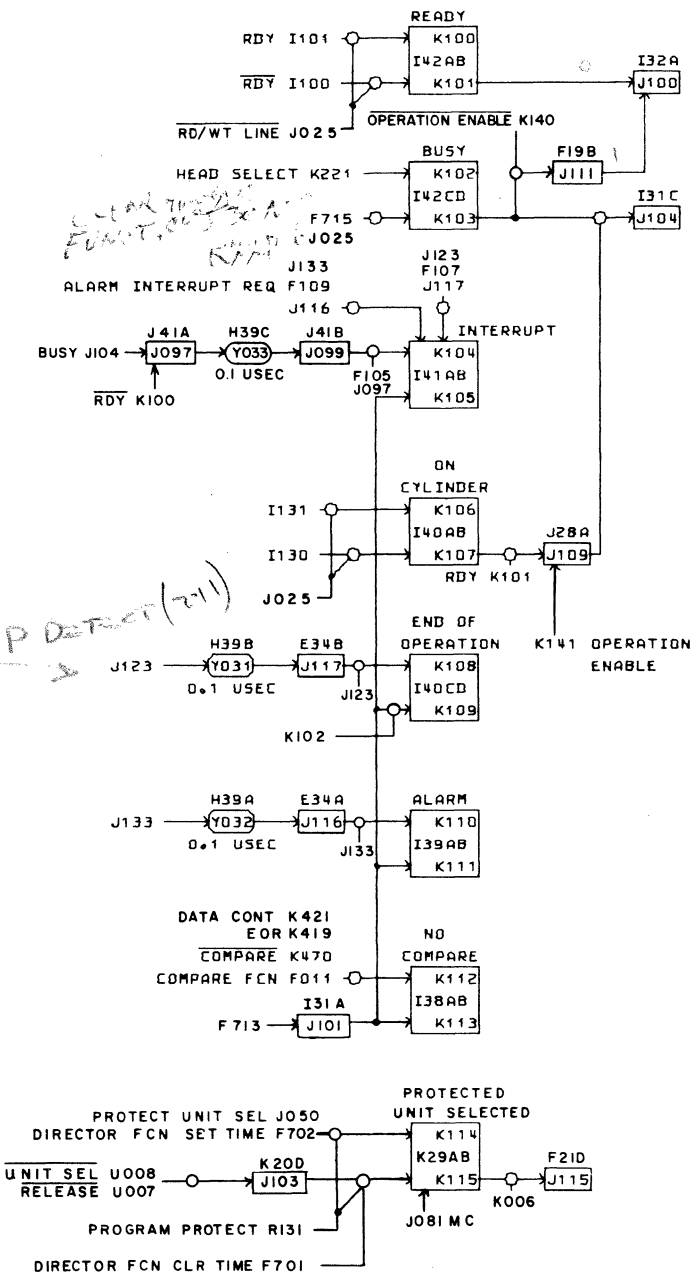
With the exception of the Ready, Busy, On Cylinder, and Protected FFs, the status FFs clear by any function which sets the Busy status. The

Busy FF clears at the end of operation (EOP). The Protected FF clears on a Protected Director function with the release bit set.

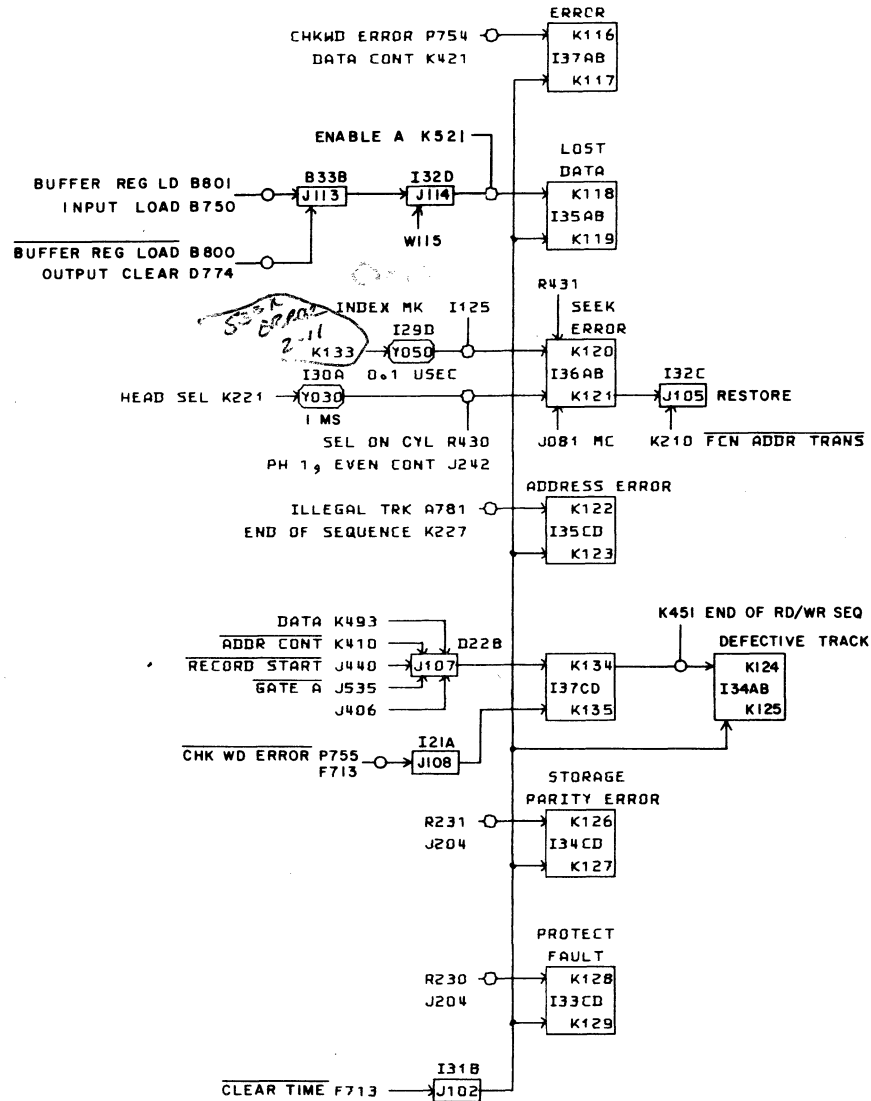
The Seek Error FF is cleared by the On Cylinder condition. The clear is enabled 1 ms after the Restore is sent to the drive. Y030 should be adjusted to 1 msec.

The Ready and On Cylinder FFs are set and cleared by conditions in the drive units. Input J025 ensures that the FF does not change while a function is being processed.

LUNINOL SIMIUS



LUNINOL SIMIUS CHECKWORD



CONTROL DATA CORPORATION COMPUTER DIVISION AUTOMATED DRAFTING	TITLE	PRODUCT
	CONTROL AND ERROR STATUS	1738
		DRAWING NO. 60167700
	TAPE NO. 3923	SHEET PAGE 4 2-9

TERM	LOCATION	PAGE
F005	K35B	2-7
F006	K35C	2-7
F008	K36A	2-7
F010	K36C	2-7
F715	J30A	2-7
I125	I08A	2-37
J104	I31C	2-9
J252	827C	2-21
J402	G15A	2-33
K100	I42A	2-9
K101	I42B	2-9
K103	I24D	2-9
K106	I40A	2-9
K107	I40B	2-9
K108	I40C	2-9
K109	I40D	2-9
K110	I39A	2-9
K111	I39B	2-9
K116	I37A	2-9
K118	I35A	2-9
K120	I36A	2-9
K122	I35C	2-9
K124	I34A	2-9
K126	I34C	2-9
K128	I33C	2-9
K141	J25B	2-17
K212	H36A	2-17
K227	H23B	2-17
K441	H06B	2-35
K451	H05B	2-35
M115	C28A	2-23

SEEK ERROR DETECT

Seek Error Detect FF K130/131 is set when an index mark occurs during a Write, Read, Compare, or Checkword Check function or initial load. If a second index mark occurs before the File Address Increment FF is set, K132/133 will set. If a third index mark occurs before File Address Increment FF is set, the Seek Error Detect FF will be set.

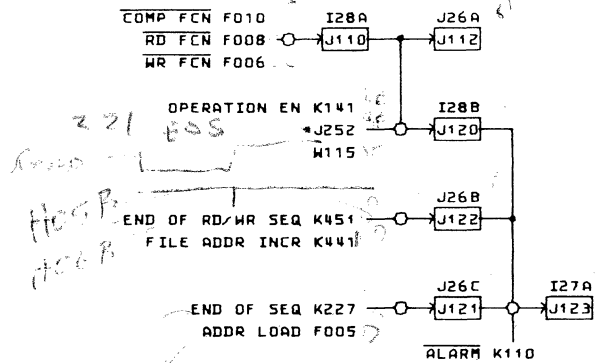
ALARM DETECT

If an Alarm condition occurs, the Alarm Detect circuit will become active and generate a pulse which will set the Alarm Status FF (page 2-9).

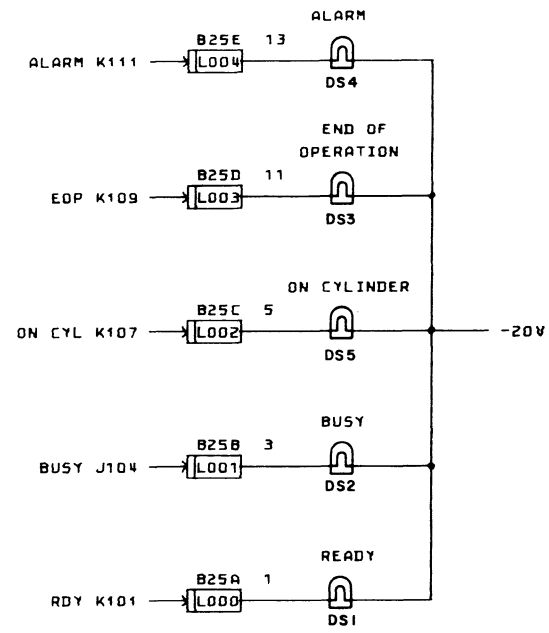
END OF OPERATION DETECT

This circuit will detect any normal end of operation and also will force an end of operation if an error occurs that causes an Alarm, thus the End of Operation FF (page 2-9) will be set.

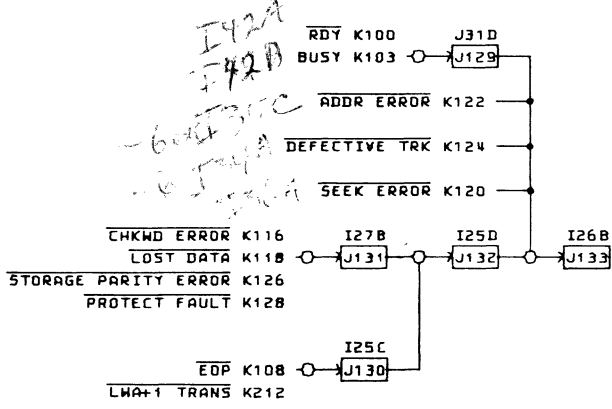
END OF OPERATION DETECT



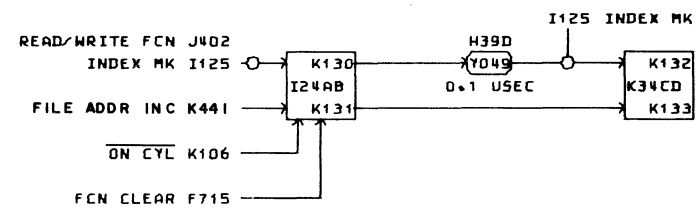
INDICATOR DRIVERS



ALARM DETECT



SEEK ERROR DETECT



CONTROL DATA CORPORATION COMPUTER DIVISION AUTOMATED DRAFTING	TITLE OPERATION ENABLE, DETECTS, AND INDICATORS	PRODUCT I738
		DRAWING NO. 60167700
		REV 6
		SHEET PAGE 5 2-11

TERM	LOCATION	PAGE	
B001	F16B	2-19	The Direct Storage Interface is used for all data transfer to or from the computer. This interface is also used to transfer the last word address plus one (LWA+1) of the buffer areas to be used.
B003	F15B	2-19	
B005	F14B	2-19	The controller has direct access to the computer core storage, and I/O data transfer proceeds completely independent of the computer.
B007	F13B	2-19	
B009	F12B	2-19	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
B011	F11B	2-19	
B013	F10B	2-19	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
B015	F09B	2-19	
B017	F08B	2-19	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
B019	F07B	2-19	
B021	F06B	2-19	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
B023	F05B	2-19	
B025	F04B	2-19	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
B027	F03B	2-19	
B029	F02B	2-19	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
B031	F01B	2-19	
B780	G09A	2-19	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
J205	J30B	2-15	
K206	K17A	2-15	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
K207	K17B	2-15	
S001	B42B	2-21	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
S003	B42D	2-21	
S005	B41B	2-21	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
S007	B41D	2-21	
S009	B40B	2-21	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
S011	B40D	2-21	
S013	B39B	2-21	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
S015	B39D	2-21	
S017	B37B	2-21	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
S019	B37D	2-21	
S021	B36B	2-21	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
S023	B36D	2-21	
S025	B35B	2-21	The direct store data cable (C) carries data to and from the controller in 16-bit bytes. The R--- cards receive parallel data from the computer, and this data is fed directly to the Buffer register (page 2-19). In a similar
S027	B35D	2-21	
S029	B34B	2-21	

manner, data to the computer is from the Buffer register via the T--- cards. The data is gated to the computer by the combination of (Read FCN + Auto Load · $\overline{\text{LWA}+1}$ · Address Delayed).

The direct store address cable (D) receives the 15-bit current address from the Storage Address register (page 2-21). The least significant bit of the address is received by T300, and the most significant bit is received by T314. As soon as the Address FF sets (page 2-15), the current address is sent to the computer. Each data word (16 bits) follows the corresponding address by 100 nsec.

DIRECT STORE DATA CABLE (C)

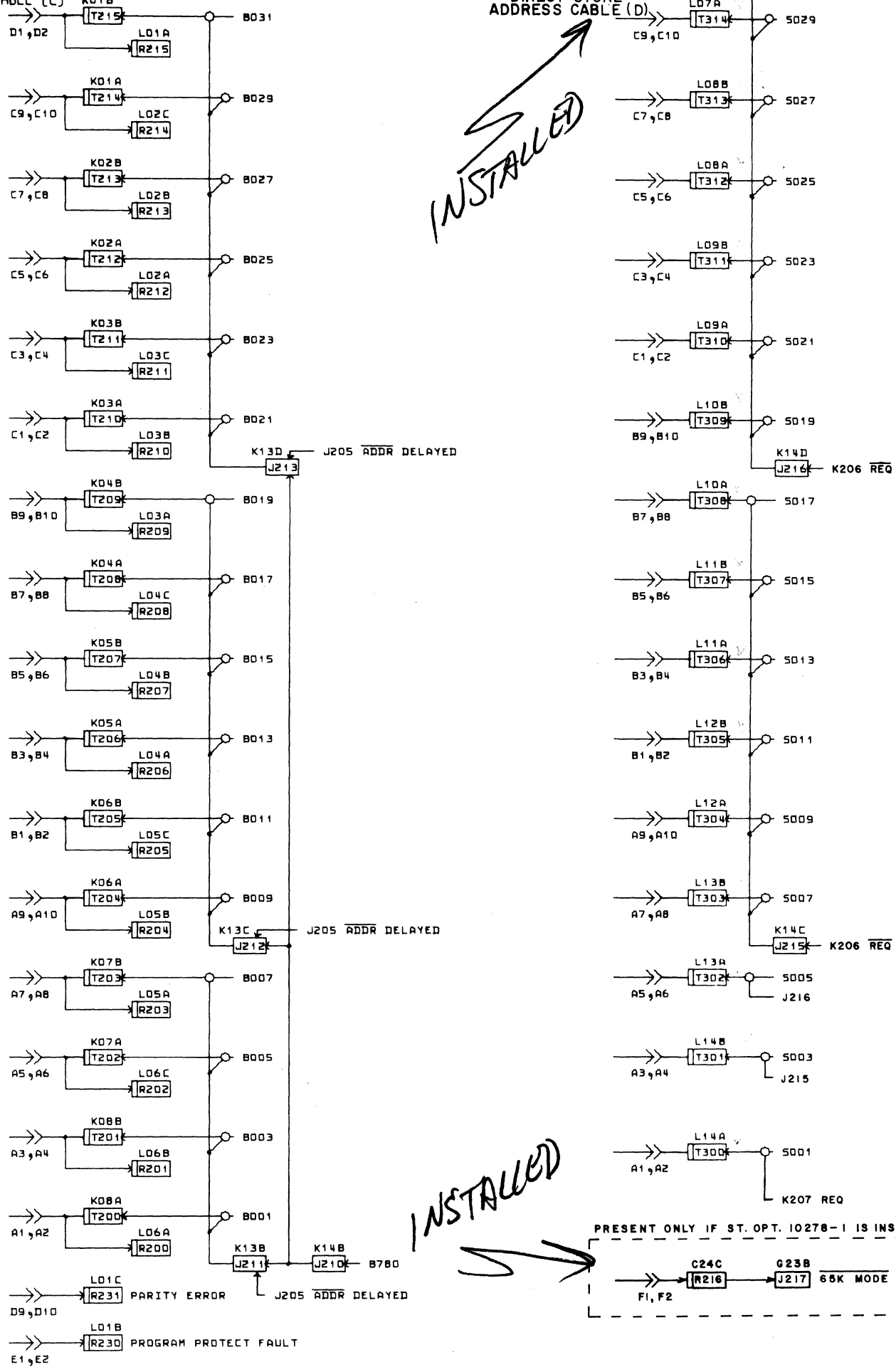
DIRECT STORE ADDRESS CABLE (D)

PRESENT ONLY IF ST. OPT. 10278-1 IS INSTALLED

PRESENT ONLY IF ST. OPT. 10278-1 IS INSTALLED

INSTALLED

INSTALLED



CONTROL DATA CORPORATION		COMPUTER DIVISION	
AUTOMATED DRAFTING		AUTOMATED DRAFTING	
DIRECT STORAGE INTERFACE			
PRODUCT	1738	DATE	5
DRAWING NO.	60167700	TYPE NO.	6
TITLE	DIRECT STORAGE INTERFACE		2-13

TERM	LOCATION	PAGE
B778	G08A	2-19
B788	G09A	2-17
J088	B19B	2-3
K002	I39C	2-7
K014	J30C	2-5

DIRECT STORAGE CONTROL CIRCUIT

The Direct Storage Control circuit is used to gain access to computer storage via the Direct Storage Access (DSA) bus. This bus may be time-shared with other devices. A scanner is used by each device connected to the DSA bus. The scanner determines which device may use the bus.

When the 1738 Controller requests use of the DSA bus, an Input Load or Output Clear condition will set the Need FF. When the Need FF is set and J201 is a "1", the Halt FF sets which causes the scanner to stop. The scanner normally toggles until the Halt FF sets. When the scanner stops, the Request FF sets and data transfer begins. The Request, Need, Halt, and Scan FFs clear upon receipt of a Reply signal from the computer.

PROGRAM PROTECT

During an initial load, the program protect line to the computer will be enabled. Therefore a protect fault cannot occur as on a normal read function.

WRITE ENABLE

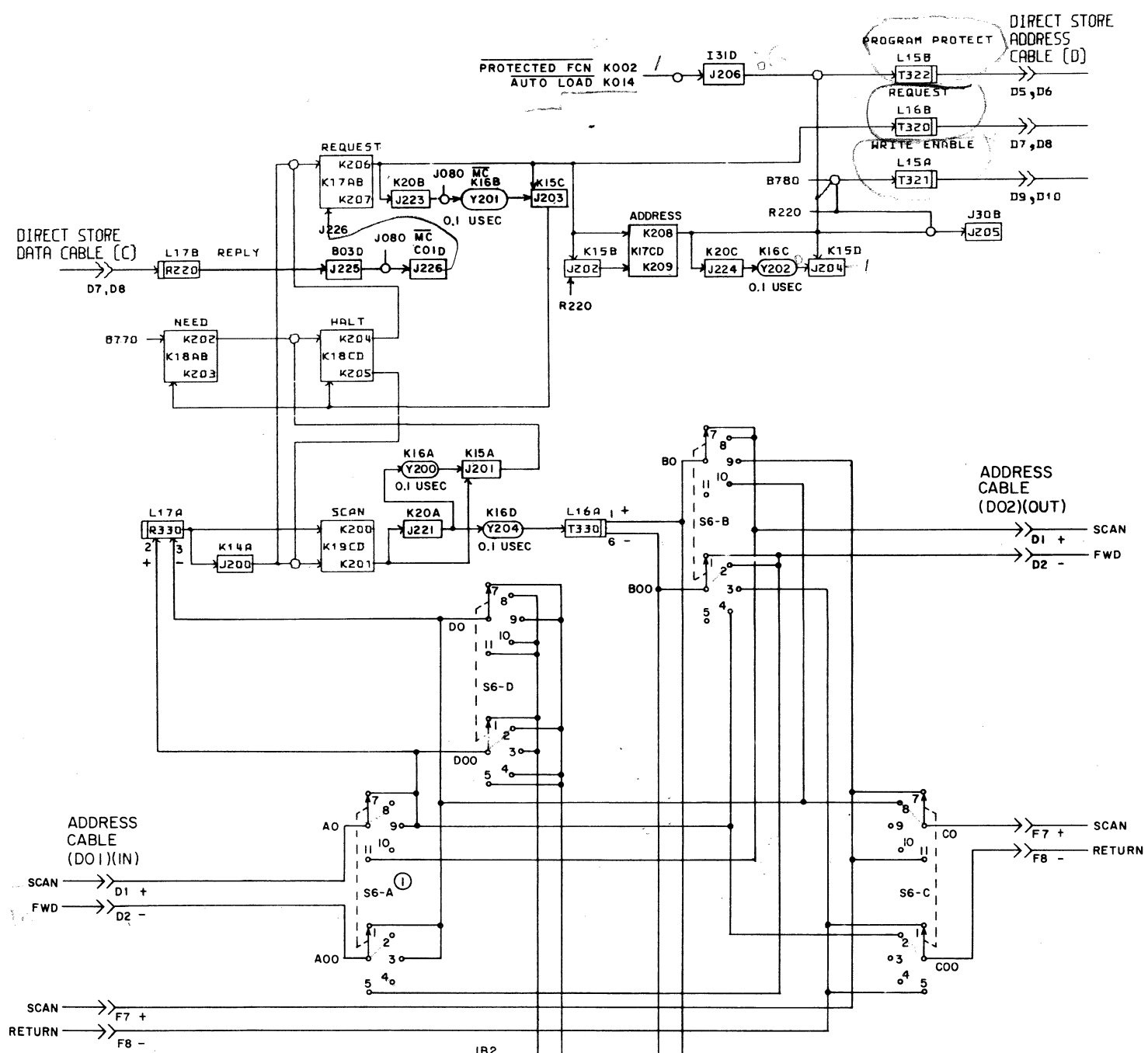
The write enable line will be active if the operation is writing data into memory and will not if it is reading from memory.

DIRECT STORAGE CONTROL SWITCH (S6)

This is a 5-position switch mounted on the bottom row of the controller chassis. The five positions are labeled:

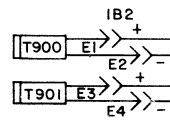
- 1) MID
- 2) FIRST
- 3) LAST
- 4) ONE
- 5) OUT

The names reflect the position of the controller on the DSA bus. For instance, if the controller is the first device on the DSA bus, the switch setting is FIRST. If the controller is the only device on the DSA bus, the switch setting is ONE. The OUT position is used when performing maintenance so the controller cannot affect the operation system.



NOTE :
 ① SWITCH S6-A, PIN 7 - MIDDLE ,
 PIN 8 - FIRST, PIN 9 - LAST ,
 PIN 10 - ONE, PIN 11 - OUT.
 2. SWITCH S6 IS LOCATED NEAR THE
 BOTTOM OF THE CONTROLLER

LOCATED
 IN DISK
 INTERFACE
 TERMINATOR



 CONTROL DATA CORPORATION DEVELOPMENT DIVISION AUTOMATED DRAFTING	TITLE	PRODUCT
	DIRECT STORAGE CONTROL	1738
		DRAWING NO. 60167700
	TAPE NO. 3927	SHEET 7
		PAGE 2-15

Note: All terms not in alphanumeric order.

FUNCTION ADDRESS TRANSFER

TERM	LOCATION	PAGE
C312	F17C	2-41
C313	F17D	2-41
G220	G24C	2-41
F713	J29A	2-7
F715	J30A	2-7
J027	K23B	2-7
J040	K31A	2-7
J041	J35A	2-7
J042	J33D	2-7
J090	J32A	2-7
J110	I28A	2-11
J252	B27C	2-21
J414	H27B	2-35
J510	H15A	2-47
J511	H15B	2-47
J517	F19A	2-47
K000	K34A	2-7
K001	K34B	2-7
K004	H10C	2-5
K103	I24D	2-9
K120	I36A	2-9
K243	B29B	2-21
M441	M06B	2-35
M001	I18C	2-5
M116	B27D	2-23
K014	J30C	2-5
F710	J31B	2-7

The Function address transfer FF is used to enable the transfer of an address from the A register of the computer to the controller. During a Write, Read, or Compare function, this address will be the FWA-1 of the data buffer area and will be transferred to the current address register. During a Load Address, Checkword Check, or Address Write function, this address will be the address on the disk pack where the operation will begin and is transferred to the File Address register.

An autoload operation will also set the Function Address Transfer FF and clears the Current Address register and File Address register.

LWA + 1 TRANSFER

The setting of the LWA + 1 transfer FF will initiate a memory reference and will read the LWA + 1 from the memory location indicated by the current address register and will place it in the LWA + 1 register. This register defines the upper limits of the buffer area used when transferring data to or from computer storage.

DRIVE UNIT ADDRESS TRANSFER TIMING CHAIN

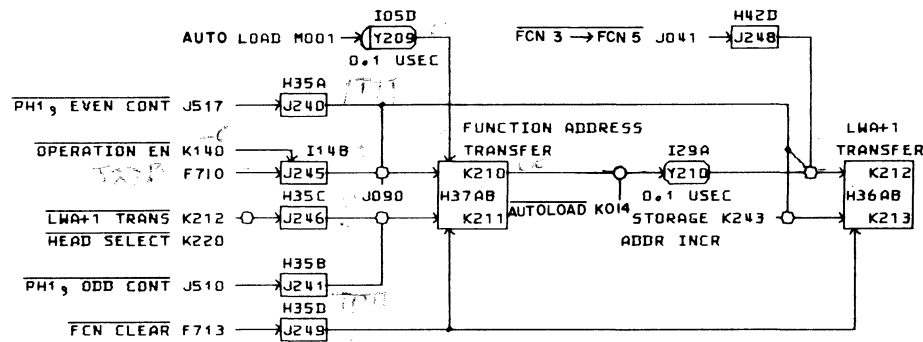
The timing chain is used to enable the disk drive select lines in the proper sequence and causes the drive unit heads to position at the desired address. It is enabled for every output function except a director function. During a Load Address, Checkword Check, Address Write function or autoload operation it is enabled by the completion of

the address load sequence (function address transfer FF set). During a Write, Read, or Compare function the timing chain is enabled by the completion of the LWA + 1 transfer sequence (J252 = "1"). It is also enabled after every File Address Increment (K441) if the End of Operation has not been reached.

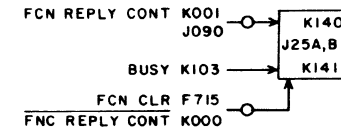
When any of these occur the Head Select FF will be set. This causes the head address to be gated to the disk drive. Next the Read Cylinder FF sets. This enables the cylinder address to be read from the disk drive and compared with the new cylinder address. These two addresses are contained in the upper and lower halves of the control count register. If they are equal C312 will become a "1" allowing End of Sequence FF to set. If they are not equal, the increment enable FF will set, allowing both addresses to be incremented until one address equals all "1's". C720 then allows the Difference Gate FF to set. This enables the difference of the two cylinder addresses to be gated to the disk drive. This is followed by the new cylinder address when the Cylinder Gate FF sets. The Seek FF will then set causing a Seek signal to be sent to the disk drive. This causes the End of Sequence FF to set enabling the next operation.

OPERATION ENABLE

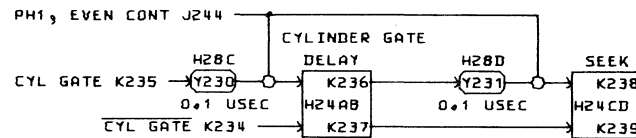
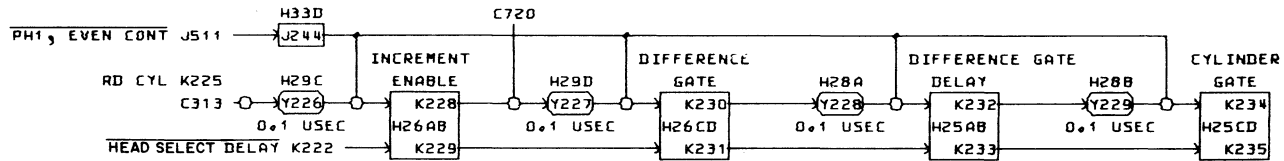
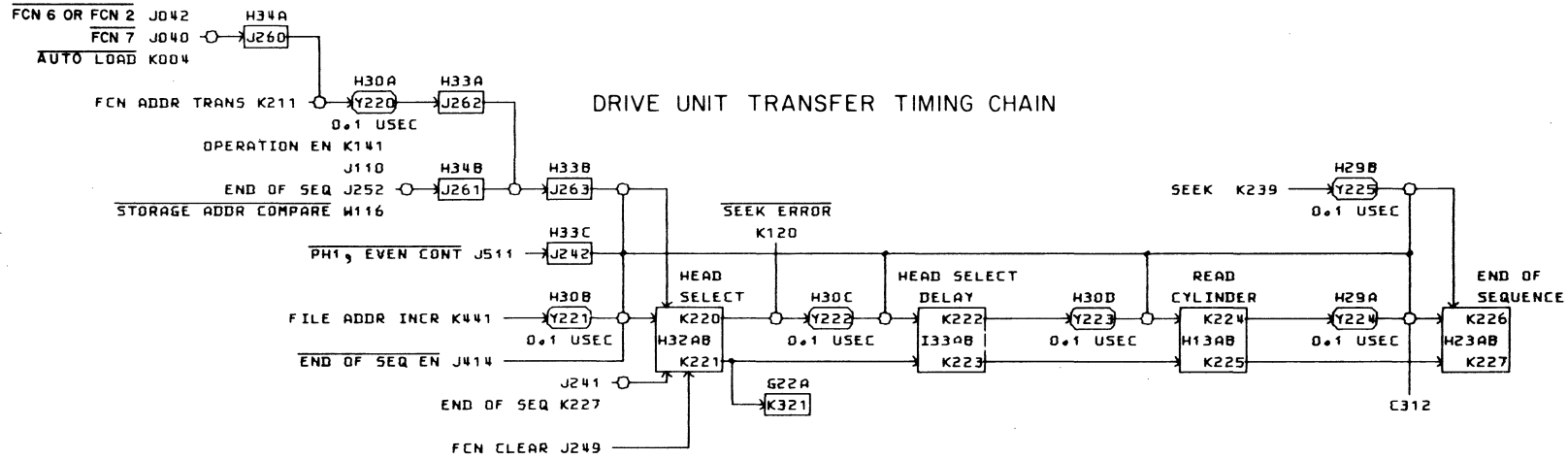
The Operation Enable FF indicates that one of the output functions excluding director functions was received and the address transfer control sequence initiated. This causes a Busy status to be generated and enables the setting of the Function Address Transfer FF, which starts the file address transfer sequence which loads the new file address or the new storage address.



OPERATION ENABLE



DRIVE UNIT TRANSFER TIMING CHAIN



 CONTROL DATA CORPORATION COMPUTER DIVISION AUTOMATED DRAFTING	TITLE ADDRESS AND FILE TRANSFER CONTROL	PRODUCT 1738
		DRAWING NO. 60167700
		SHEET PAGE 8 2-17

TERM	LOCATION	PAGE
C028	F34A	2-41
C210	G17A	2-41
C401	C09D	2-41
D000	C05A	2-27
D001	C05B	2-27
D004	C04A	2-27
D005	C04B	2-27
D008	C03A	2-27
D009	C03B	2-27
D012	C02A	2-27
D013	C02B	2-27
D016	C10A	2-27
D017	C10B	2-27
D020	D11A	2-27
D021	D11B	2-27
D024	D10A	2-27
D025	D10B	2-27
D028	D09A	2-27
D029	D09B	2-27
D032	D05A	2-29
D033	D05B	2-29
D036	D04A	2-29
D037	D04B	2-29
D040	E13A	2-29
D041	E13B	2-29
D044	E12A	2-29
D045	E12B	2-29
D048	F07A	2-29
D049	E07B	2-29
D052	E06A	2-29
D053	E06B	2-29
D056	E05A	2-29
D057	E05B	2-29
D060	E04A	2-29
D061	E04B	2-29
D769	C28B	2-29
D773	C01A	2-29
F006	K35C	2-7
F009	K36B	2-7
F010	K36C	2-7
J080	B19B	2-3
J204	K15D	2-15
J336	I20D	2-47
J337	I21D	2-47
K005	H10D	2-5
K211	H37B	2-17
K212	H36A	2-17
K213	H36B	2-17
K403	G13B	2-33
K404	G12A	2-33

K420	F01A	2-33
K451	F05B	2-35
K515	F14B	2-47
L060	L06A	2-13
L061	L06B	2-13
L062	L06C	2-13
L063	L06A	2-13
L064	L05B	2-13
L065	L05C	2-13
L066	L04A	2-13
L067	L04B	2-13
L068	L04C	2-13
L069	L03A	2-13
L070	L03B	2-13
L071	L03C	2-13
L072	L02A	2-13
L073	L02B	2-13
L074	L02C	2-13
L075	L01A	2-13
M116	R27D	2-23
M703	C38D	2-23

BUFFER REGISTER

During a write or compare the Buffer register will accept each word of data from the direct storage data cable and send it on to the D register where it will be disassembled and gated out to the disk drive or to the compare logic. During a read operation the data coming from the disk will be assembled in the D register and transferred to the Buffer register. From there it will be gated to the direct storage data transmitter and sent to the computer. The data will be held in the Buffer register until the disk drive or computer can accept it.

INPUT LOAD

This circuit is used to gate the data from the D register to the Buffer register and (in conjunction with FF B800/001) to detect a Lost Data condition during read operation. It is also used to set the Need FF and enable a storage reference during a read operation.

OUTPUT LOAD

This circuit is used to gate the data from the direct storage data receivers to the Buffer register and also to detect (in conjunction with FF B800/001) a Lost Data condition on a write operation.

OUTPUT CLEAR

This circuit is used to clear the Buffer register. It is also used to set the Need FF and stop the scanner which enables a storage reference during write and compare operations. It is also used to request the LWA + 1 transfer.

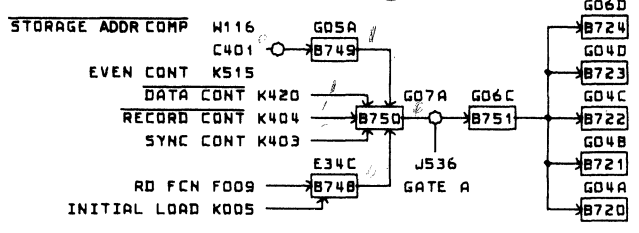
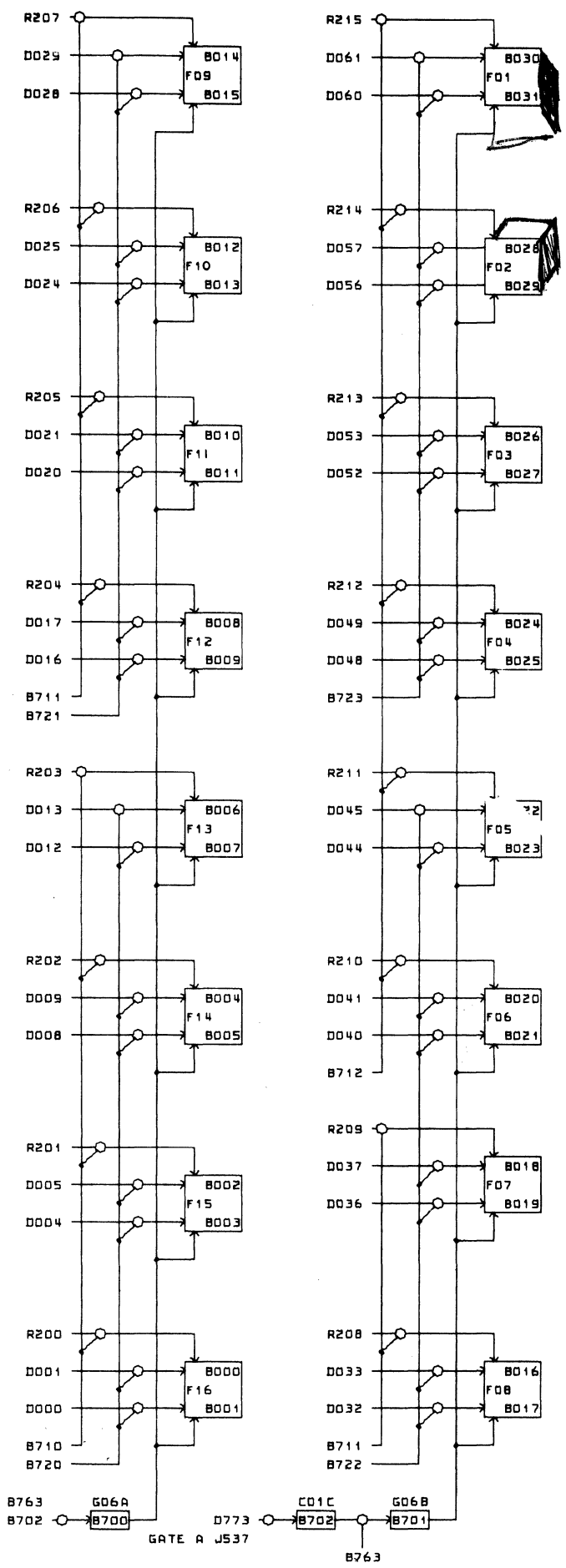
NEED GATE

This inverter is gated by Input Load or Output Clear and is used to set the Need FF and stop the scanner. This will cause the Request FF (page 2-15) to set and enable a storage reference.

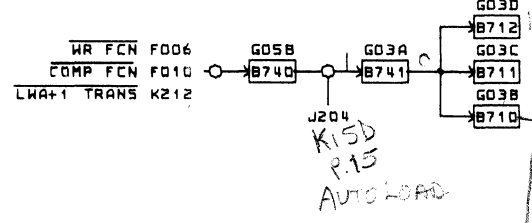
BUFFER REGISTER LOADED

This circuit is used to detect a Lost Data condition. There are two ways that this error can occur. The first is if the Buffer Register Loaded FF is set and there is more data ready to be transferred into the Buffer register. The second is if the Buffer Register Loaded FF is clear and the disk drive is ready to accept more data.

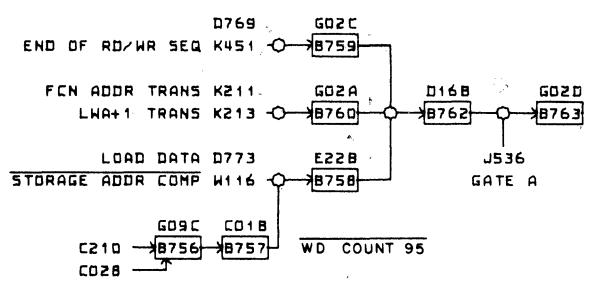
(NPU) (LOAD)



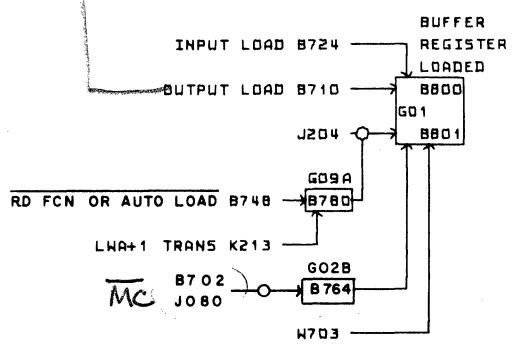
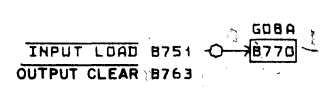
OUTPUT LOAD



OUTPUT CLEAR



NEED GATE



PROJECT NO.	1738
DRAWING NO.	60167700
TYPE NO.	3929
SHEET NO.	9
TOTAL SHEETS	2-19
TITLE	
BUFFER REGISTER	
CONTROL DATA CORPORATION	DEVELOPMENT DIVISION
AUTOMATED DRAFTING	

CURRENT ADDRESS REGISTER

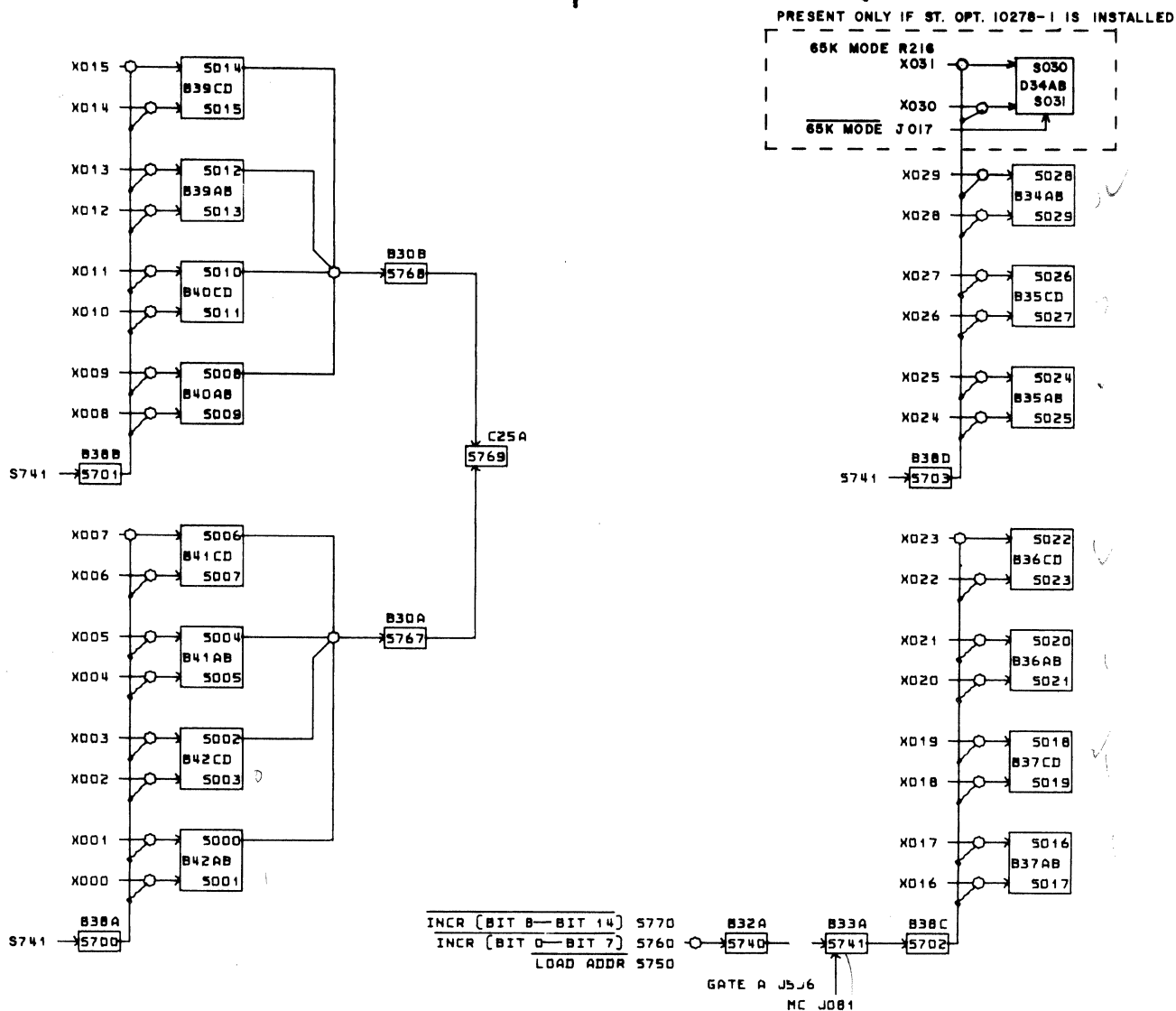
TERM	LOCATION	PAGE
B710	G03B	2-19
B780	G09A	2-19
C730	G19B	2-41
J081	J33A	2-3
J110	I28A	2-11
J204	K15D	2-15
J510	H15A	2-47
J936	I20D	2-47
K004	H10C	2-5
K211	H37B	2-17
K212	H36A	2-17
K515	H14B	2-47
K917	H14D	2-47
X000	D33A	2-43
X001	D33B	2-43
X002	D33C	2-43
X003	D33D	2-43
X004	D32A	2-43
X005	D32B	2-43
X006	D32C	2-43
X007	D32D	2-43
X008	D21A	2-43
X009	D21B	2-43
X010	D21C	2-43
X011	D21D	2-43
X012	D20A	2-43
X013	D20B	2-43
X014	D20C	2-43
X015	D20D	2-43
X016	E33A	2-45
X017	E33B	2-45
X018	E33C	2-45
X019	E33D	2-45
X020	E32A	2-45
X021	E32B	2-45
X022	E32C	2-45
X023	E32D	2-45
X024	E21A	2-45
X025	E21B	2-45
X026	E21C	2-45
X027	E21D	2-45
X029	E20B	2-45

The Current Address register is used to keep track of the address in core storage where data is stored or read from during a buffer operation.

The lower half of the register will increment until S769 becomes a "1". This will enable incrementing of the upper half of the register. The incrementing is gated by S770 and S760. The Word Transfer FF is used

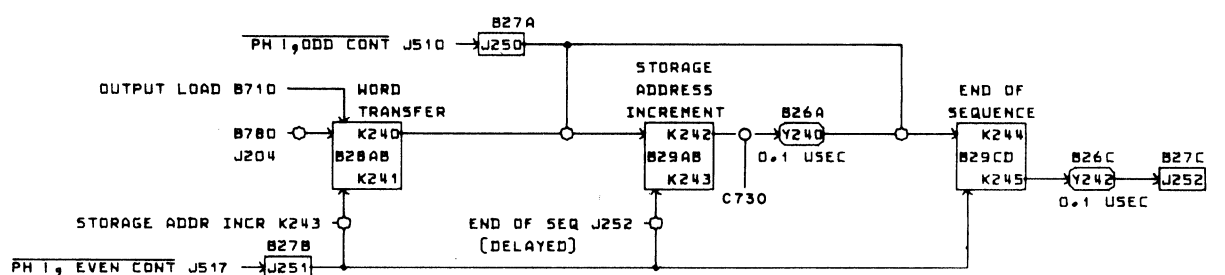
to indicate that a data transfer has been completed and it enables the Storage Address Increment FF which causes the Current Address register to be transferred to the increment bus, incremented, and transferred back to the Current Address register. During the load address sequence, the FWA-1 address is gated to the Current Address register by S750. During the LWA + 1 transfer, the storage address is incremented and the End of Sequence FF sets which allows the Head Select FF to set.

*INSTALLER
N/A.*

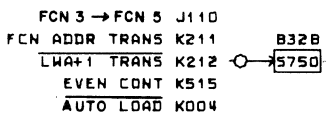


PRESENT ONLY IF ST. OPT. 10278-1 IS INSTALLED

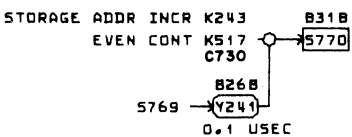
PRODUCT	1738	REV.	S
DRAWING NO.	60167700	SHEET NO.	10
TITLE	STORAGE ADDRESS REGISTER (CURRENT ADDRESS)		
CONTROL DATA CORPORATION	COMPUTER DIVISION AUTOMATED DRAFTING		
TITLE		2-21	



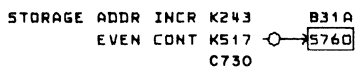
LOAD ADDRESS



INCREMENT [BIT 8 - BIT 14]



INCREMENT [BIT 0 - BIT 7]



TERM LOCATION PAGE

0000 F16A 2-19
 0001 F16B 2-19
 0002 F15A 2-19
 0003 F15B 2-19
 0004 F14A 2-19
 0005 F14B 2-19
 0006 F13A 2-19
 0007 F13B 2-19
 0008 F12A 2-19
 0009 F12B 2-19
 0010 F11A 2-19
 0011 F11B 2-19
 0012 F10A 2-19
 0013 F10B 2-19
 0014 F09A 2-19
 0015 F09B 2-19
 0016 F08A 2-19
 0017 F08B 2-19
 0018 F07A 2-19
 0019 F07B 2-19
 0020 F06A 2-19
 0021 F06B 2-19
 0022 F05A 2-19
 0023 F05B 2-19
 0024 F04A 2-19
 0025 F04B 2-19
 0026 F03A 2-19
 0027 F03B 2-19
 0029 F02B 2-19
 J131 I27B 2-11
 J536 I20D 2-47
 K004 H10C 2-5
 K213 H36B 2-17
 K243 B29B 2-21
 9009 B42A 2-21
 9001 B42B 2-21
 9002 B42C 2-21
 9003 B42D 2-21
 9004 B41A 2-21
 9005 B41B 2-21
 9006 B41C 2-21
 9007 B41D 2-21
 9008 B40A 2-21
 9009 B40B 2-21
 9010 B40C 2-21
 9011 B40D 2-21
 9012 B39A 2-21
 9013 B39B 2-21
 9014 B39C 2-21
 9015 B39D 2-21

S016 B37A 2-21
 S017 B37B 2-21
 S018 B37C 2-21
 S019 B37D 2-21
 S020 B36A 2-21
 S021 B36B 2-21
 S022 B36C 2-21
 S023 B36D 2-21
 S024 B35A 2-21
 S025 B35B 2-21
 S026 B35C 2-21
 S027 B35D 2-21
 S028 B34A 2-21

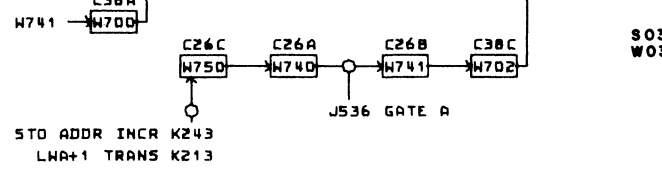
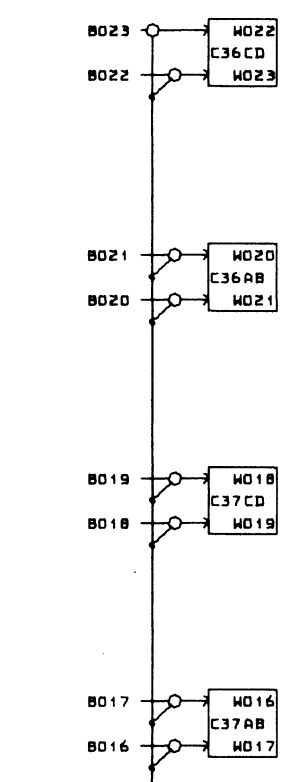
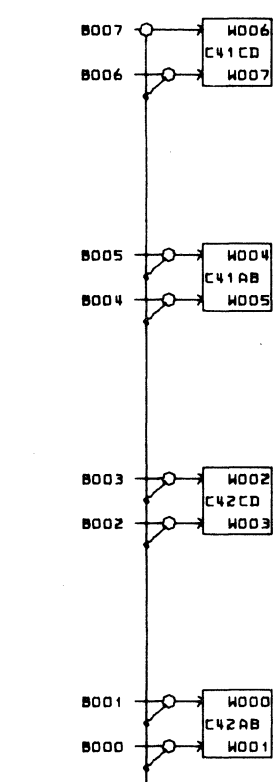
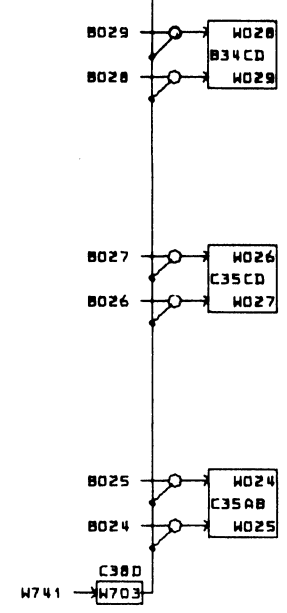
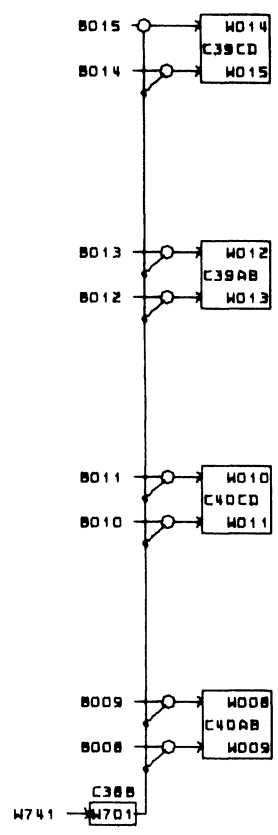
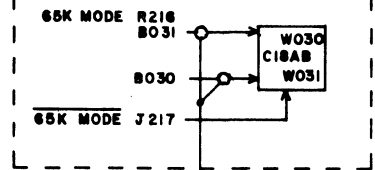
LWA + 1 REGISTER

The LWA + 1 register is used to define the upper limit of the buffer area used when transferring data to or from computer storage.

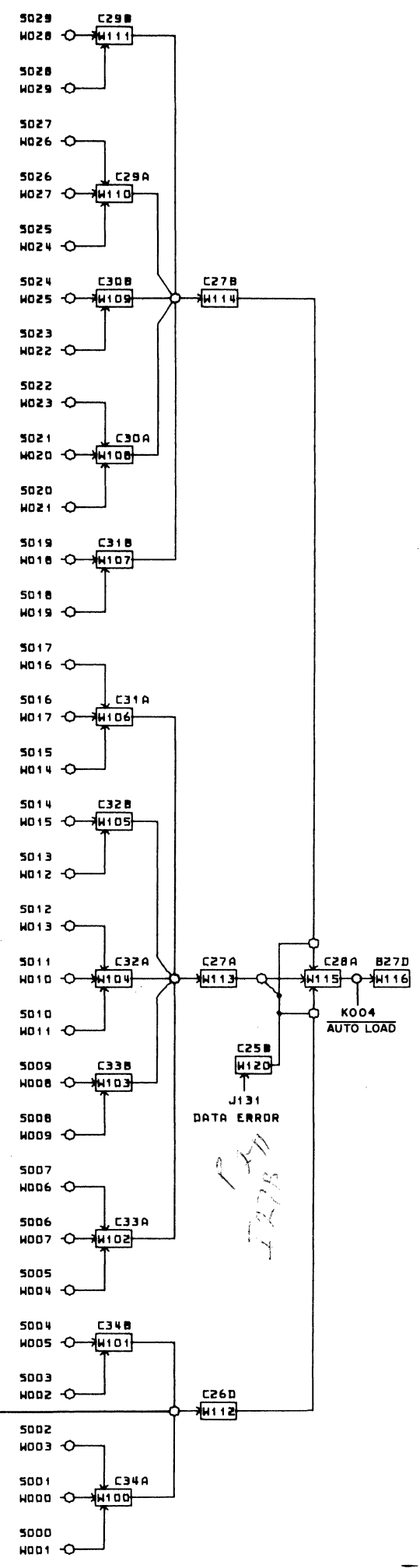
W100/W111 are used to compare the LWA + 1 with the current address to determine when the data transfer is complete. This condition will be indicated by a "1" signal from W115. If a data error should occur W120 will become a "0" forcing W115 to a "1" simulating a compare and causing the data transfer to stop.

INSTALLED

PRESENT ONLY IF ST. OPT. 10278-1 IS INSTALLED



STO ADDR INCR K243
LMA+1 TRANS K213



10/27/77

PROJECT 1738	REV S	DATE 11	2-23
DRAWING NO. 60167700		SHEET NO. 11	
TITLE STORAGE ADDRESS REGISTER (LAST WORD ADDRESS +1)			
CONTROL DATA CORPORATION		DEVELOPMENT DIVISION	
AUTOMATED DRAFTING			

TERM	LOCATION	PAGE
J040	K31A	2-7
J042	J33D	2-7
J081	J33A	2-3
J036	I20D	2-47
K004	H10C	2-5
K011	H37B	2-17
K020	H32A	2-17
K024	H13A	2-17
K025	H13B	2-17
K028	H26A	2-17
K029	H26B	2-17
K041	H06B	2-35
K014	H14A	2-47
K015	H14B	2-47
R000	K11A	2-39
R001	K11B	2-39
R002	K11C	2-39
R003	K10A	2-39
R004	K10B	2-39
R005	K10C	2-39
R006	K09A	2-39
R007	K09B	2-39
R020	K09C	2-37
X000	D33A	2-43
X002	D33C	2-43
X003	D33D	2-43
X004	D32A	2-43
X005	D32B	2-43
X006	D32C	2-43
X007	D32D	2-43
X008	D21A	2-43
X009	D21B	2-43
X010	D21C	2-43
X011	D21D	2-43
X012	D20A	2-43
X013	D20B	2-43
X014	D20C	2-43
X015	D20D	2-43
X016	E33A	2-45
X017	E33B	2-45
X018	E33C	2-45
X019	E33D	2-45
X020	E32A	2-45
X021	E32B	2-45
X022	E32C	2-45
X023	E32D	2-45
X024	E21A	2-45
X025	E21B	2-45
X026	E21C	2-45
X027	E21D	2-45
X028	E20A	2-45
X029	E20B	2-45
X030	E20C	2-45
X031	E20D	2-45

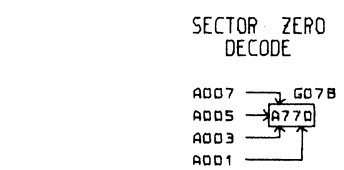
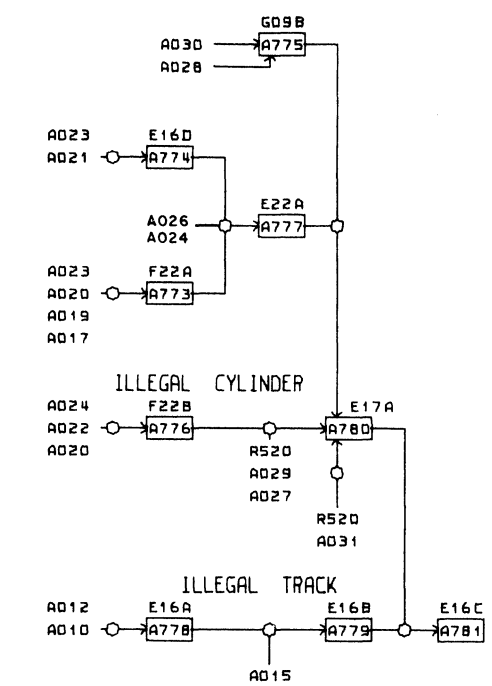
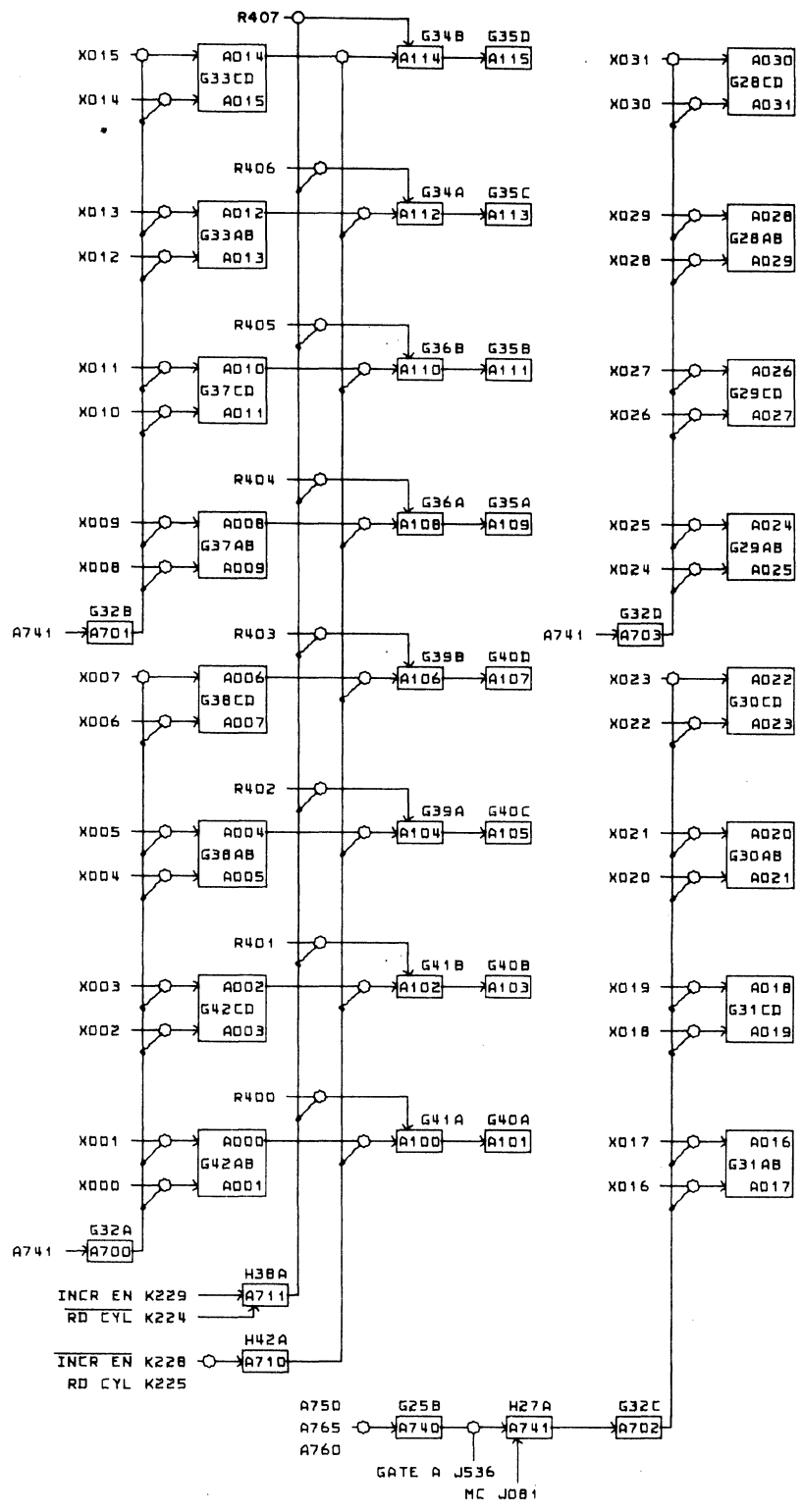
FILE ADDRESS REGISTER

The File Address register contains the address at which the disk drive is positioned or will be positioned if a Seek operation is in process. A750 enables the register to be loaded during a Load address, Checkword Check, or Address Write function. A760 and A765 enable the incrementing of the File Address register.

A781 is used to detect an illegal address. This will enable the End of Sequence FF (page 2-17) and the Address Error Status FF (page 2-9).

When the sector part of the address is zero, A770 will be a "1". At this time during a Checkword Check, Address Write, or autoloading, the End of Read/Write Sequence FF will be set (page 2-35) and an End of Operation status pulse generated (J122, page 2-11).

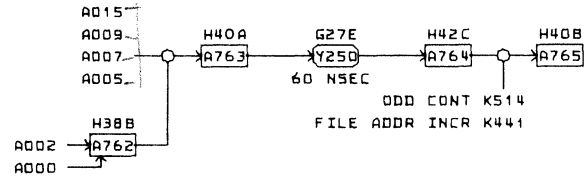
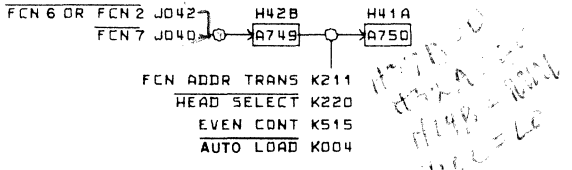
PRODUCT 1738	DRAWING NO. 60167700	TYPE NO. 3932	SHEET NO. 12	REV. 6	DATE 2-25
TITLE FILE ADDRESS REGISTER					
CONTROL DATA CORPORATION		DIVISION AUTOMATED DRAFTING			



INCREMENT ADDRESS
(BIT 0 — BIT 7)

INCREMENT ADDRESS
(BIT 8 — BIT 15)

ADDRESS REGISTER LOAD



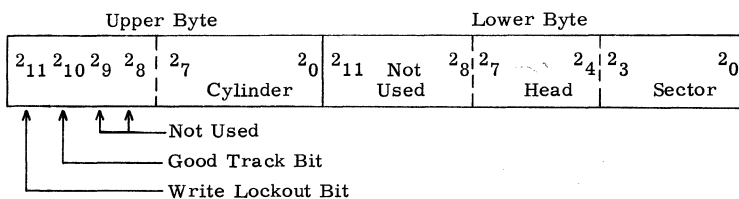
*H38A = K001
H42A = K001
H38B = K001
H42B = K001*

TERM	LOCATION	PAGE
A001	G42B	2-25
A003	G42D	2-25
A005	G38B	2-25
A007	G38D	2-25
A017	G31B	2-25
A019	G31D	2-25
A021	G37B	2-25
A023	G37D	2-25
B001	F16B	2-19
B003	F15B	2-19
B005	F14B	2-19
B007	F13B	2-19
B009	F12B	2-19
B011	F11B	2-19
B013	F10B	2-19
B015	F09B	2-19
B000	G01A	2-19
D060	E04A	2-29
D061	E04B	2-29
D751	D02A	2-29
D761	D02C	2-29
D769	C28B	2-29
D771	E03A	2-29
D774	F17B	2-29
D781	E03C	2-29
I113	I06B	2-37
I118	I03C	2-37
I206	J10D	2-37
J409	I25B	2-33
J430	G08C	2-35
J440	G20A	2-35
J535	I20C	2-47
J538	G21A	2-47
K404	G12A	2-33
K407	G11B	2-33
K492	I04C	2-37
K493	I04D	2-37
K521	H18D	2-47
K528	G21B	2-47
R754	C17B	2-31

D REGISTER

The D register is shown on pages 2-27 and 2-29. The D register is used as a data assembly/disassembly register. All data going to the disk pack is transferred in parallel to the D register then shifted out serially via FF D060/061 and the disk drive interface to the disk pack. All data received from the disk drive is loaded serially into the D register and transferred in parallel to the Buffer register.

During an Address Write, the address is gated to the pack in two 12-bit bytes. (The lower 4 bits of the D register are not used during an address write.)



The upper byte contains the cylinder address, good track bit and write lockout bit. If the write address switch is in the normal position, the good track bit is forced into the D register at the same time that the upper byte (byte 1) is loaded. The good track bit will not be set if the switch is in the bad track position. The write lockout bit may be in an address tag on a disk pack written by the 3234 Mass Storage controller.

This bit cannot be written by the 1738 controller and is ignored when encountered by that controller.

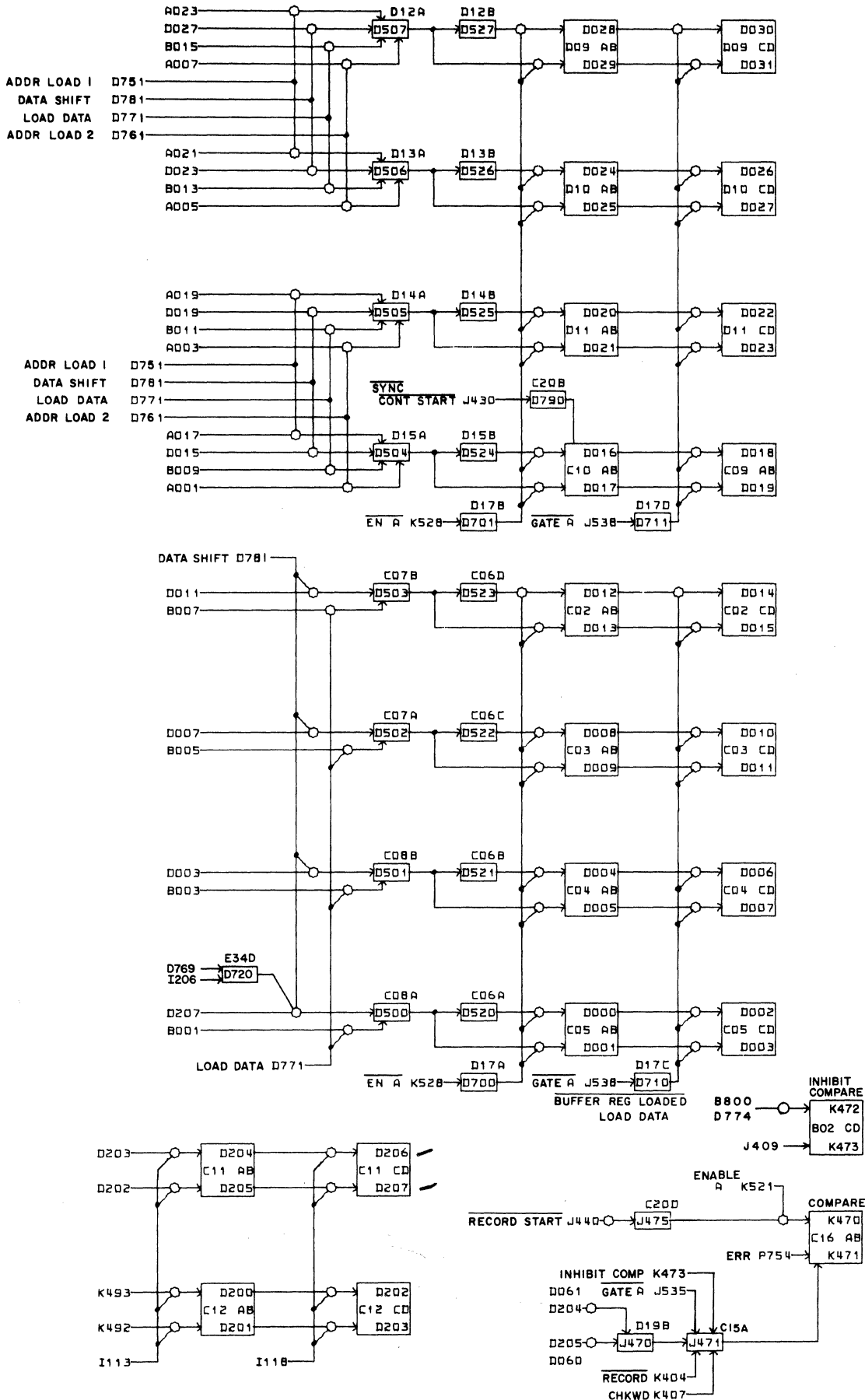
The lower byte (byte 2) contains the head address and sector address in the lower 8 bits while the upper 4 bits are not used.

An address compare is accomplished by shifting the address through the D register as described above except that the address is not gated to the disk pack. Instead it is being compared with the address that is being read in from the pack. This address is transferred serially through FF D200/D207. The output of D206/207 is compared with the output of D060/061. The Compare FF is set at the start of the address read. As long as the addresses compare, the compare FF will remain set, but if a miscompare should occur, the Compare FF will clear and will remain clear until another address is read. Checkword error will also clear the Compare FF.

During a data write data is transferred from the Buffer register (page 2-19) to the D register in a 16 bit word. Then it is shifted through the register and transferred serially to the disk pack via the disk drive interface (page 2-37).

During a data read, the data is shifted into the D register serially from the disk pack and then it is transferred to the Buffer register.

A compare data operation is similar to the address compare operation described above. The data from core storage is transferred from the Buffer register to the D register, then it is shifted out serially and compared with the incoming data being transferred through D204/205. The Compare FF will again be set previous to the operation and will remain set as long as the incoming data compares with the data from core storage. If the data buffer ends in the middle of a sector, the Inhibit Compare FF will set, disabling the compare logic until the end of the sector is reached.



PRODUCT	1738	REV	6
DRAWING NO.	60167700	DATE	3668
SHEET NO.	13	SHEET TOTAL	2-27
TITLE			
D REGISTER			
STAGES 0-7			
(ASSEMBLY REGISTER)			
CONTROL DATA CORPORATION		COMPUTER DIVISION	
AUTOMATED DRAFTING			

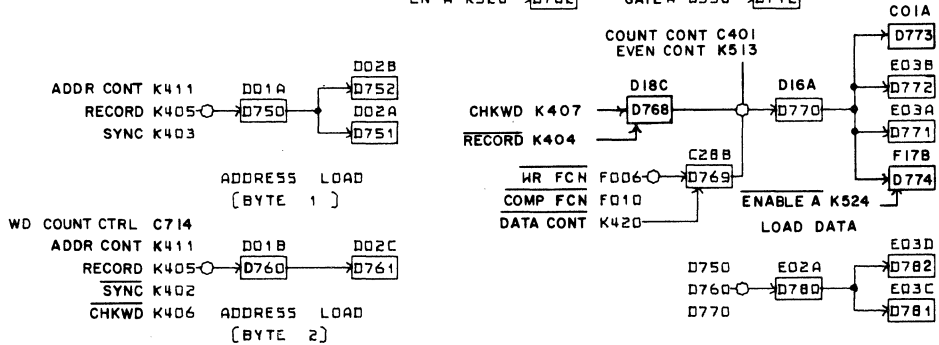
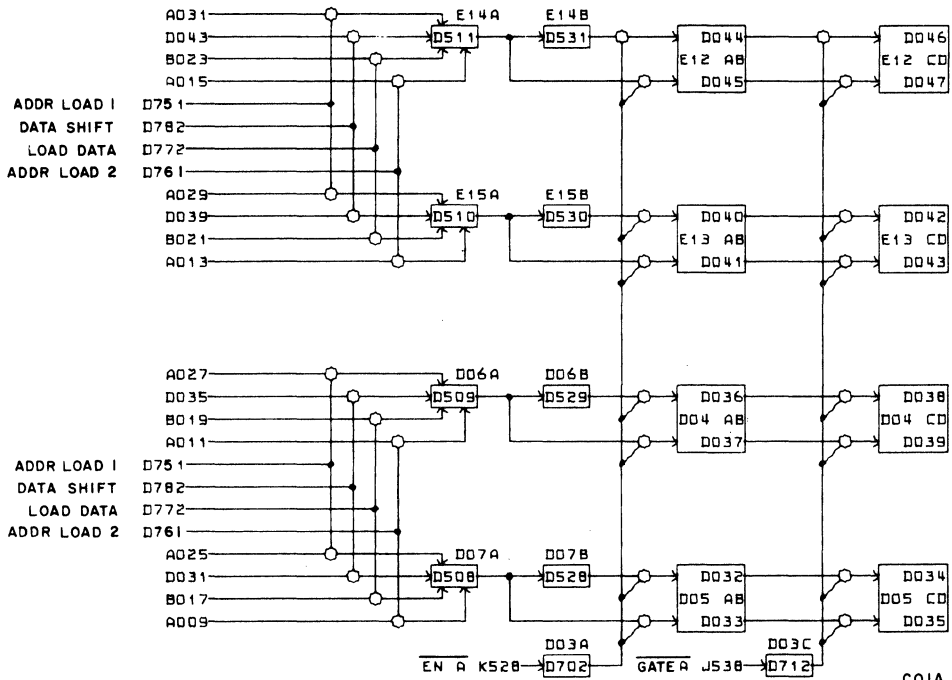
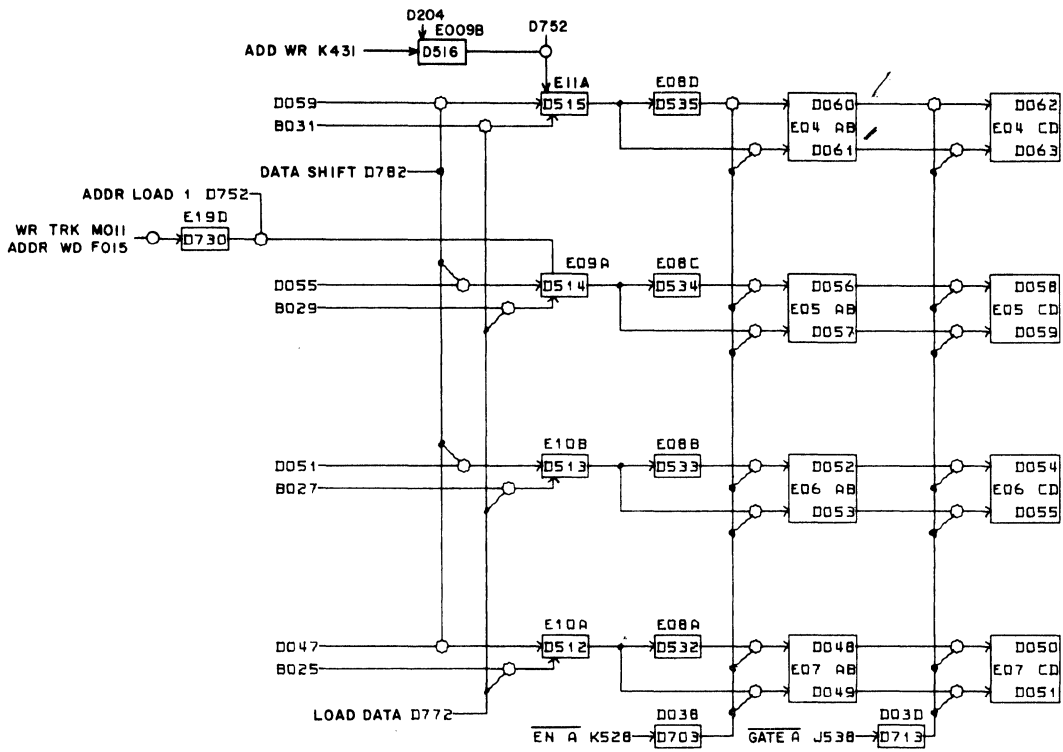
TERM	LOCATION	PAGE
A009	G37B	2-25
A011	G37D	2-25
A013	G33B	2-25
A015	G33D	2-25
A025	G29B	2-25
A027	G29D	2-25
A029	G28B	2-25
A031	G28D	2-25
B017	F08B	2-19
B019	F07B	2-19
B021	F06B	2-19
B023	F05B	2-19
B025	F04B	2-19
B027	F03B	2-19
B029	F02B	2-19
B031	F01B	2-19
C001	C09D	2-41
C714	E02B	2-41
D031	D09D	2-27
F006	K35C	2-7
F010	K36C	2-7
F015	K37D	2-7
J530	G21A	2-47
K402	G13A	2-33
K403	G13B	2-33
K404	G12A	2-33
K405	G12B	2-33
K406	G11A	2-33
K407	G11B	2-33
K411	H02B	2-33
K420	H01A	2-33
K513	H13D	2-47
K524	I21B	2-47
K528	G21B	2-47
M011	B22B	2-5

D REGISTER

The upper byte (byte 1) of the address is gated to the D register by D761.

The lower byte (byte 1) of the address is gated to the D register by D751

and D752. Data is gated to the D register by D771 and D772 and all shifting through the register is enabled by gates D781 and D782. All shifts are inhibited while loading.



DATA SHIFT

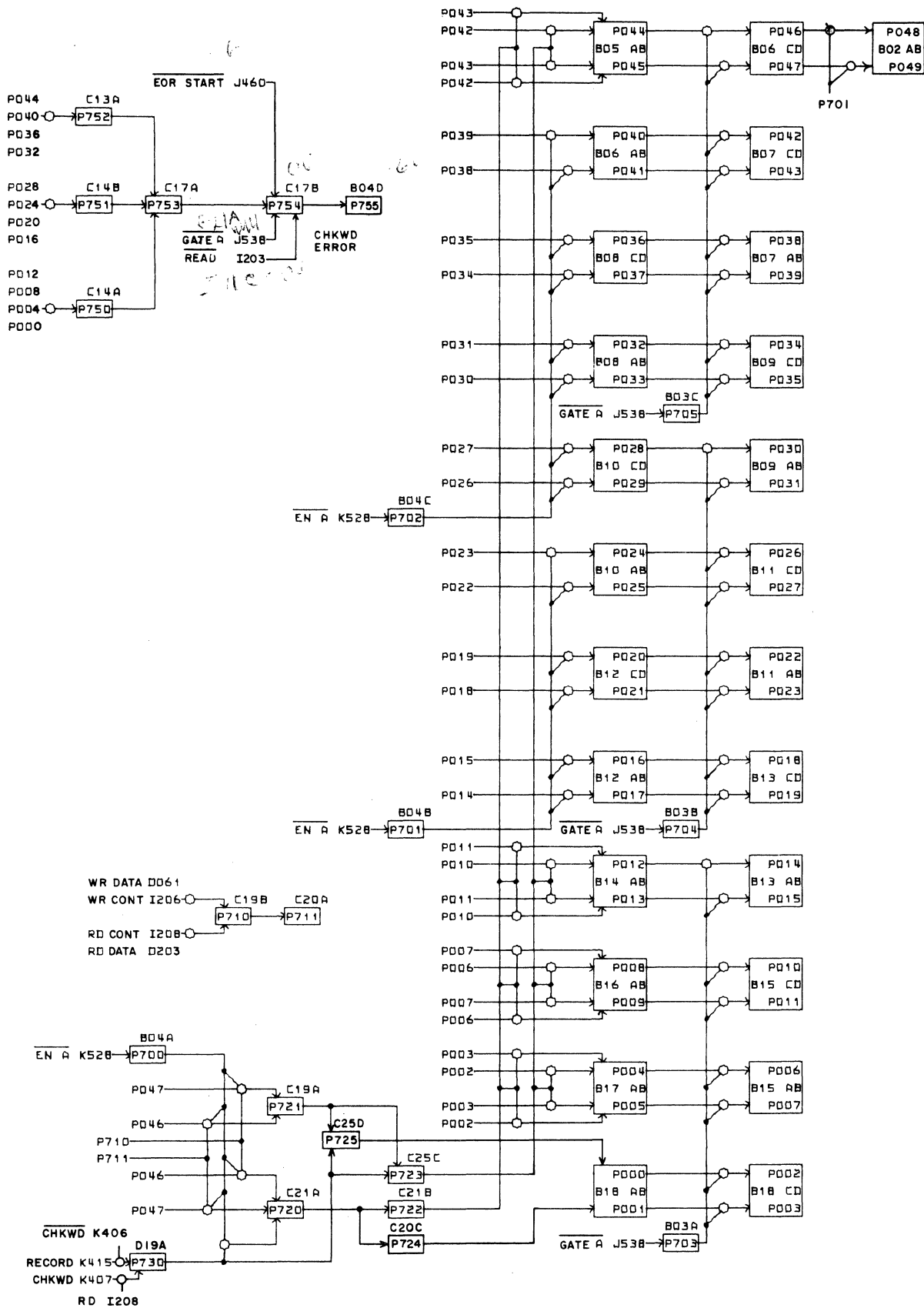
CONTROL DATA CORPORATION COMPUTER DIVISION AUTOMATED DRAFTING	TITLE	D REGISTER STAGES 8-15 (ASSEMBLY REGISTER)		
	PRODUCT	1738	DRAWING NO.	60167700
	REV.	R	TYPE NO.	14
			3 869	2-29

TERM	LOCATION	PAGE
D061	F04B	2-29
D203	C12D	2-27
I203	I11C	2-37
I206	J10D	2-37
I208	J31A	2-37
J460	H04B	2-35
J538	G21A	2-47
K406	G11A	2-33
K407	G11B	2-33
K415	J10B	2-33
K528	G21B	2-47

P REGISTER

The P register is used to generate a checkword at the end of each address and each data record. While writing, the data is shifted through the P register. The register logic will cause a checkword to be generated. The checkword is the 12 bit word remaining in the register after the record is written. This checkword is then written on the disk pack immediately after the record. When data is read, both the record and the checkword are shifted through the P register. After the checkword is read the register should be all zeros. If not, a checkword error has occurred and will be indicated by a "1" from P754.

The input logic to the P register will cause a zero to be entered into its lowest ordered stage, and the remaining stages to be shifted upward without change if the incoming data bit and the uppermost bit in the P register are the same. It can be seen that if a 12-bit data pattern enters the P register which is equal to its contents, that the logic will cause the register to clear bit by bit as the data enters, and after the 12th bit enters, it will be cleared. This sequence occurs during checkword control time on data and address reads. After the record is read, the P register should contain the same bit pattern as that which is about to come in as the checkword. If it does, the register will clear; if it does not, the register will not clear and an error will be detected.



PRODUCT	1738
DRAWING NO.	60167700
REV	L
TYPE NO.	3667
SHEET/PAGE	15
	2-31

TITLE
P REGISTER
(CHECKWORD)

CONTROL DATA CORPORATION
COMPUTER DIVISION
AUTOMATED DRAFTING

TERM	LOCATION	PAGE
C017	F37B	2-41
C018	F37C	2-41
C019	F37D	2-41
C020	F36A	2-41
C027	F35D	2-41
C029	F34B	2-41
C715	D02D	2-41
F012	K37A	2-7
F702	J29C	2-7
I123	I07B	2-37
I202	I09B	2-37
J081	J33A	2-3
J112	J26A	2-11
J410	H04C	2-35
J510	H15A	2-47
J511	H15B	2-47
J517	F19A	2-47
K004	H10C	2-5
K111	I39B	2-9
K141	J25B	2-17
K221	H32B	2-17
K440	H06A	2-35
K441	H06B	2-35
K450	H05A	2-35
K470	C16A	2-27
K553	H21B	2-47
R008	L31C	2-3

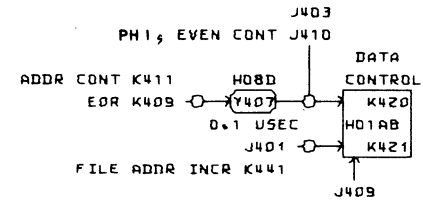
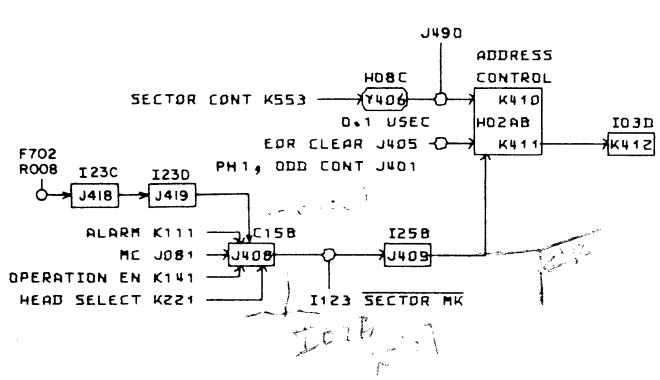
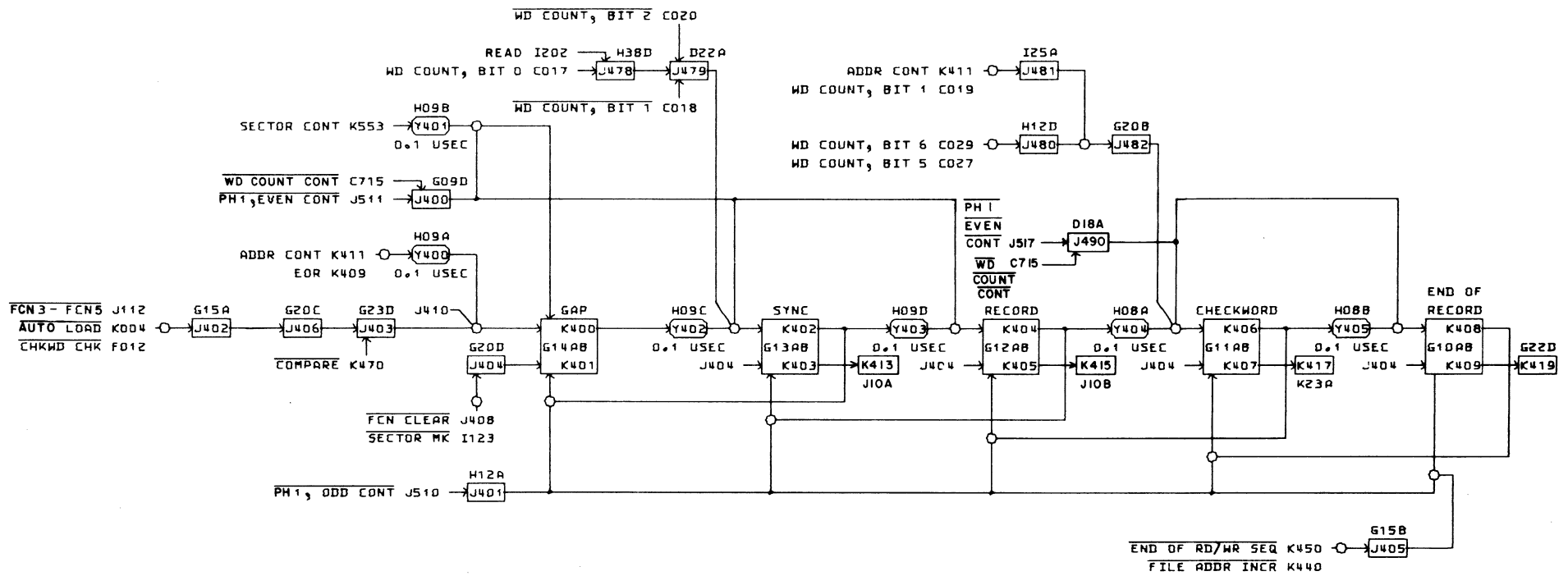
READ/WRITE TIMING SEQUENCE

This sequence is initiated by any Write, Read, Compare or Checkword Check or Address Write operation and is controlled by the read/write timing chain and the control counter (page 2-41). If an address is being written or read, address control is set and if data is being read or written, data control is set. Each FF in the timing chain corresponds to a portion of the data or address format. The time each FF in the timing chain is set, is determined by the word count in the control counter (page 2-41). The word counts used to determine the length of successive stages in the timing chain are: Gap control, 7 counts for a write and 6 counts for a read, Sync control, 1 count, record control, 2 counts for address record and 96 counts for data record, checkword control, 1 count, and end of record control, 1 count on a write and 2 bit times on a read. (Refer to page 2-41 for operation of control count register.)

During a read, the Gap Control FF is set during the time the drive unit read logic is being turned on to permit the logic to settle down. The controller logic uses the write clock at this time. During sync control

the logic timing is switched to the read clock and all control timing is halted until a sync bit is read off the pack. This synchronizes the data bits received from the drive with the controller word count logic. During record time, the 2 words of address, or 96 words of data, are read into the controller. If it is an address, it is compared with the address in the file address register to see if the heads are positioned correctly. If data is being read, it is assembled in the D register (pages 2-27 and 2-29) and transferred to the computer memory via the buffer register. Checkword time is used to read the checkword at the end of each sector. The checkword is shifted through the checkword register. It should contain all '0's' if the data read in was correct. Finally, the End of Record FF will set, ending the read sequence.

The write sequence is similar to the read except that data or addresses are being written on the disk pack. The write clock is used throughout the whole write operation. The checkword is generated rather than checked on a write.



TERM	LOCATION	PAGE
A770	G07B	2-25
B004	F41A	2-41
F012	K37A	2-7
F014	K37C	2-7
F015	K37D	2-7
F715	J30A	2-7
I125	I08A	2-37
I202	I09B	2-37
I206	J10D	2-37
J110	I28A	2-11
J409	I25B	2-33
J510	H15A	2-47
J511	H15B	2-47
J517	F19A	2-47
K004	H10C	2-5
K220	H32A	2-17
K400	G14A	2-33
K402	G14B	2-33
K402	G13A	2-33
K405	G12B	2-33
K407	G11B	2-33
K408	G10A	2-33
K409	G10B	2-33
K410	H02A	2-33
K413	J10A	2-33
K415	J10B	2-33
K422	H01B	2-33
K553	H21B	2-47
W115	C28A	2-23

FILE ADDRESS INCREMENT

The file address increment is automatically enabled at the end of each sector during an address Write, Read, Write, Compare or Checkword Check operation. It gates the contents of the File Address register to the increment bus, increments it, and then transfers it back to the File Address register.

ADDRESS WRITE CONTROL

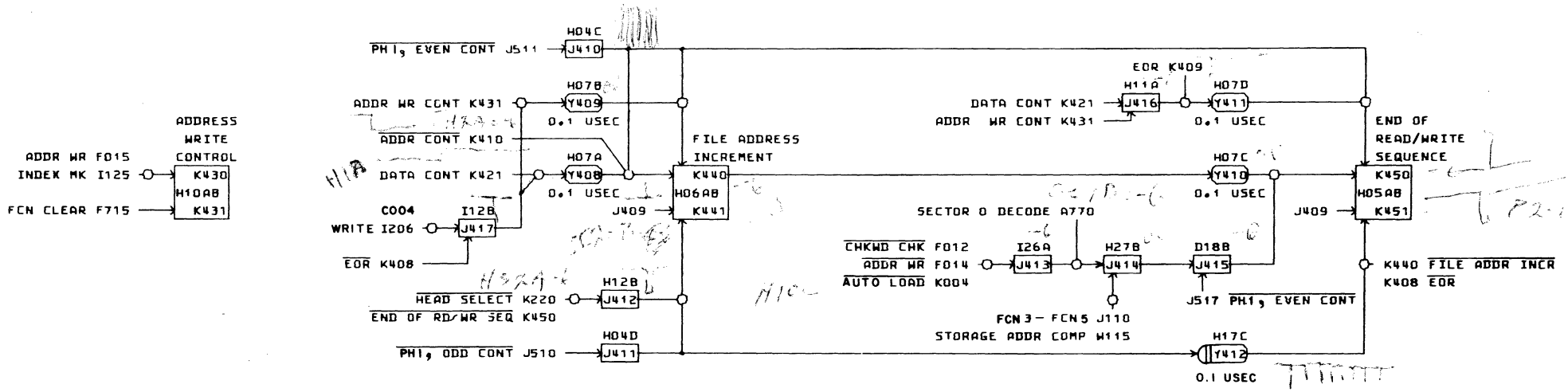
The Address Write Control FF will be set while addresses are being written on the disk pack.

END OF READ/WRITE SEQUENCE

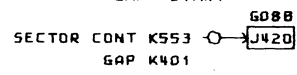
This FF will be set whenever the read or write operation is complete. During a Checkword Check, Address write, or autoloading operation, it will set as soon as the File Address register (page 2-25) is incremented to sector 0. This indicates that all sectors in the track have been operated on. The FF will also set if the LWA + 1 register and the Current Address register become equal during a Read, Write, Compare, or Checkword Check operation.

CONTROL GATES

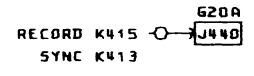
The gap start, read sync start, write sync start, record start, checkword start, and end of record start are pulses enabled by the read/write timing sequence (page 2-34) and used to control various logic circuits in the controller.



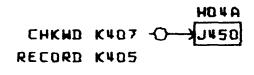
GAP START



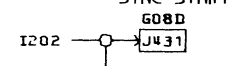
RECORD START



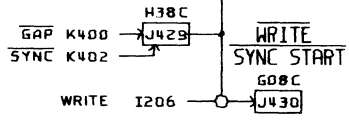
CHECKWORD START



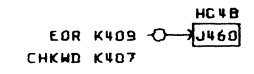
READ SYNC START



WRITE SYNC START



END OF RECORD START



TERM	LOCATION	PAGE
D061	E04B	2-29
F007	K35D	2-7
F120	K40A	2-7
F121	K40B	2-7
J105	I32C	2-9
J903	I14D	2-47
J904	H15D	2-47
K121	I36B	2-9
K141	J25B	2-17
K221	H32B	2-17
K227	H23B	2-17
K238	H24C	2-17
K606	G11A	2-33
K410	H02A	2-33
K411	H02B	2-33
K412	I03D	2-33
K419	G22D	2-33
K420	H01A	2-33
K431	H10B	2-35
K550	H22A	2-47
R049	B02B	2-31

READ/WRITE LINES

These lines carry the data to and from the file in double frequency format. Read data is received serially from the file by R420. Write data is transmitted serially to the file by T420.

SELECTION OF UNIT

Transmitter cards T500 and T501 transmit the desired selection of disk storage drive unit. If F121 = "1", unit 1 is selected. If F120 = "1", unit 0 is selected.

The unit-selected lines (C5, C6, and C7, C8) are enabled by the drive unit. Information on these lines is used to detect select errors. If a unit-selected line is different from the unit which is selected (lines A1, A2 or A3, A4), the system becomes Not Ready. If the unit-selected line corresponds to the unit which is selected and no File Fault occurs, inverter I101 will set the Ready FF (page 2-9).

FILE FAULT

This line is enabled by the selected drive unit when the drive unit detects one of the following conditions:

- 1) More than one head selected
- 2) Select read and write simultaneously
- 3) Select read and erase simultaneously
- 4) Erase and no write selected
- 5) Erase and both write drivers on
- 6) Either one or both write drivers on and no erase
- 7) More than one unit selected

When the controller detects a file fault, the system becomes Not Ready.

DISK PACK ON LINE

If an 853 is selected, it enables the "853 On Line", and if an 854 is selected, it enables the "854 On Line". This information is used by the controller for detecting address errors.

SECTOR MARK

This line is enabled by the selected drive unit when the drive unit detects a sector mark slot on the disk pack. This mark is used by the controller as a reference when reading or writing address tags.

INDEX MARK

This line is enabled by the selected drive unit when the drive unit detects a sector mark slot on the disk pack. This mark is used by the controller as a reference when writing address tags.

SELECTED CYLINDER ERROR

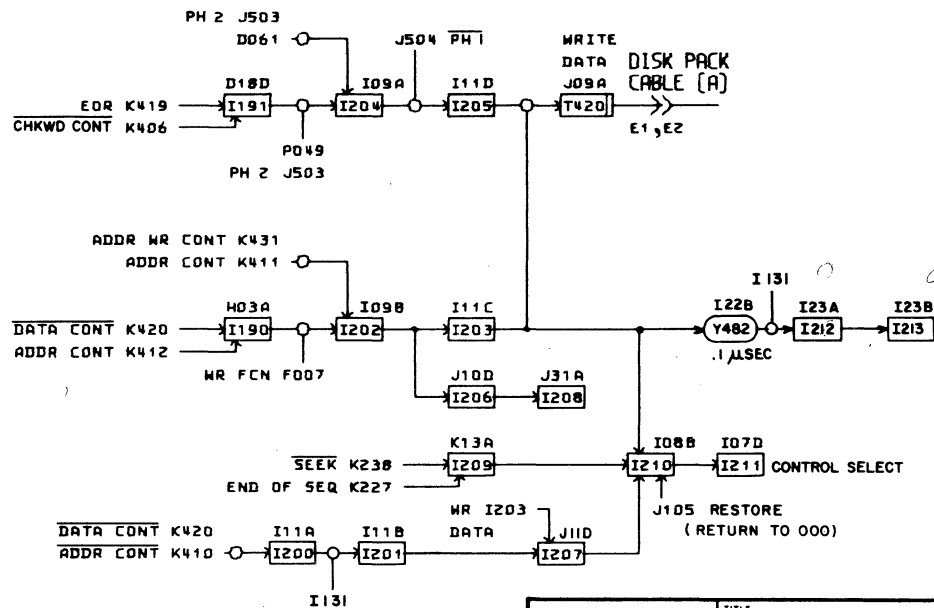
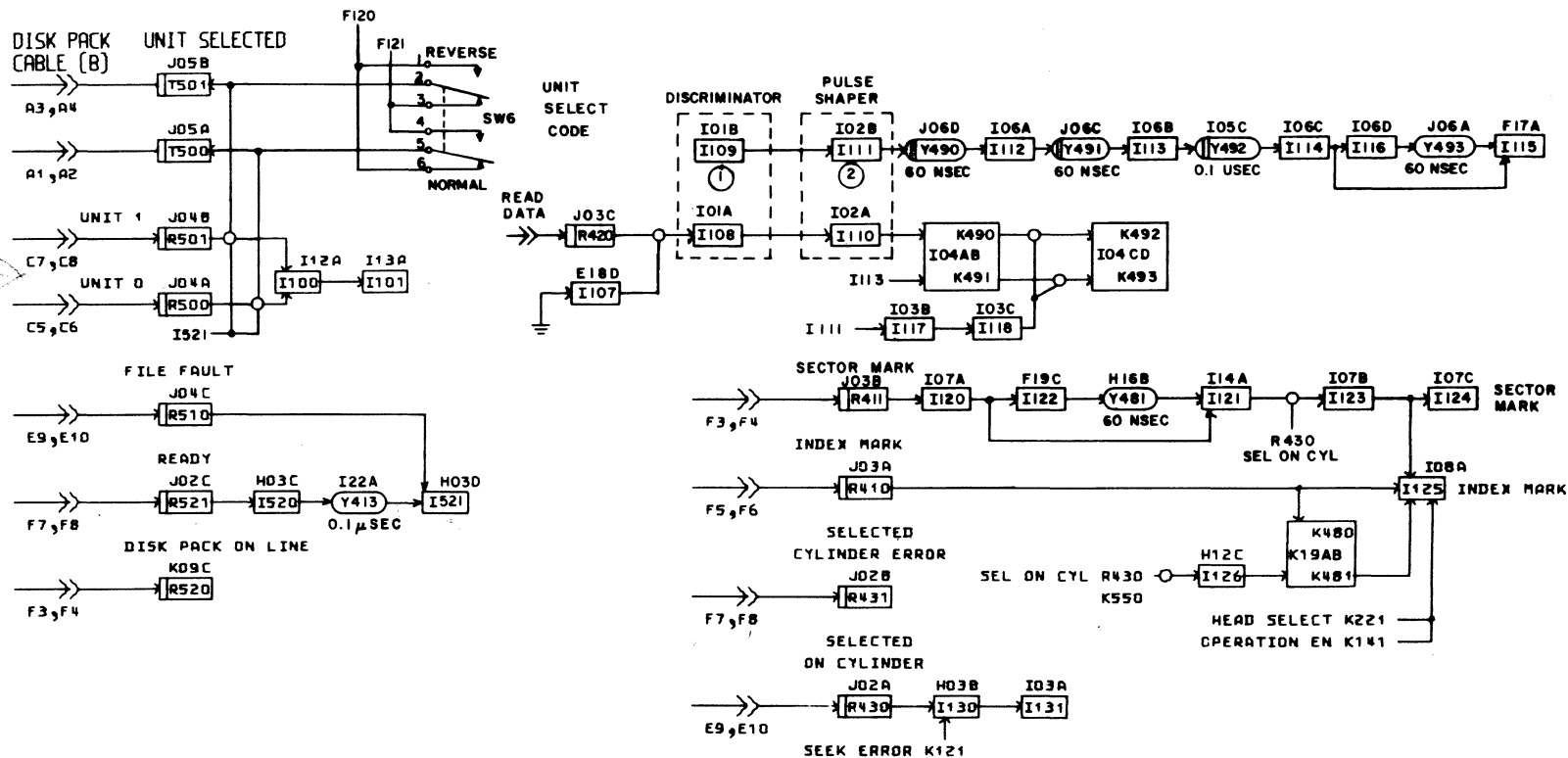
The selected drive unit enables this line when the drive unit detects that the cylinder select mechanism has moved beyond its legal limits. This is below cylinder 0 and above cylinder 99 on the 853 and above cylinder 202 on the 854. The controller sets the Seek Error status bit (page 2-9) when this line is enabled.

SELECTED ON CYLINDER

This line is enabled by the selected drive unit when the drive unit has completed its seek operation and has detected that its cylinder select mechanism has detented.

DISCRIMINATOR

The discriminator is a special circuit that receives the data from the disk pack in double frequency format. This means that between each data bit, there is a clock pulse. The clock pulse is stripped off, shaped and used to control the read timing chain. The data pulse is shaped and transferred to the D register to be assembled and used.



NOTES:

- ① SPECIAL CIRCUITS:
 I108 - DISCRIMINATOR DATA
 I109 - DISCRIMINATOR CLOCK
- ② SPECIAL CIRCUITS:
 I110 - PULSE SHAPER DATA
 I111 - PULSE SHAPER CLOCK

TERM LOCATION PAGE

A009 G37B 2-25
A011 G37D 2-25
A013 G33B 2-25
A015 G33D 2-25
A017 G31B 2-25
A019 G31D 2-25
A021 G30B 2-25
A023 G30D 2-25
A025 G29B 2-25
A027 G29D 2-25
A029 G28B 2-25
A031 G28D 2-25
C001 F42B 2-41
C003 F42D 2-41
C005 F41B 2-41
C007 F41D 2-41
C009 F40B 2-41
C011 F40D 2-41
C013 F39B 2-41
C015 F39D 2-41
C017 F37B 2-41
C019 F37D 2-41
C021 F36B 2-41
C023 F36D 2-41
C025 F35B 2-41
C027 F35D 2-41
C029 F34B 2-41
C031 F34D 2-41
C202 G16A 2-41
C212 G16C 2-41
I207 J11D 2-37
I209 K13A 2-37
I211 I07D 2-37
I213 I23B 2-37
J105 I32C 2-9
K120 I36A 2-9
K221 H32B 2-17
K222 I33A 2-17
K225 H13B 2-17
K228 H26A 2-17
K230 H26C 2-17
K231 H26D 2-17
K232 H25A 2-17
K234 H25C 2-17
K235 H25D 2-17
K236 H24A 2-17
K239 H24D 2-17
K321 G22A 2-17

This interface contains control lines and bidirectional address lines necessary to control movement of the head positioner. The various control lines are brought up in sequence as determined by the timing chain on page 2-17.

The table below shows the information on the Address and Control Bus when the various select lines are enabled.

TABLE 2-2. ADDRESS AND CONTROL BUS INFORMATION

ADDRESS AND CONTROL BUS	SELECT LINES				
	Read Cylinder Address	Difference Count	Cylinder Address	Head Address	Control
Bit 0	1	1	1	1	Write
Bit 1	2	2	2	2	Read
Bit 2	4	4	4	4	Seek Forward
Bit 3	8	8	8	8	Not Used
Bit 4	16	16	16	Not Used	Erase
Bit 5	32	32	32	Not Used	Seek Reverse
Bit 6	64	64	64	Not Used	Return to 000
Bit 7	128/854 Not Used on 853	128/854 Not Used on 853	128/854 Not Used on 853	Not Used	Not Used

Upon execution of a Load Address, Checkword Check, or Write Address function, the controller receives the drive unit current cylinder address (8 bits) through receiver cards R400-R407. This address is then compared to the new cylinder address as specified by the contents of the A register. Both addresses are then incremented and a difference count is generated. The controller sends the difference count and the new cylinder address to the drive unit and initiates movement of the head positioner.

RESTORE

If the cylinder address is beyond the legal limits of the drive unit, the Restore signal causes the head positioner to return to cylinder 000.

SEEK REVERSE

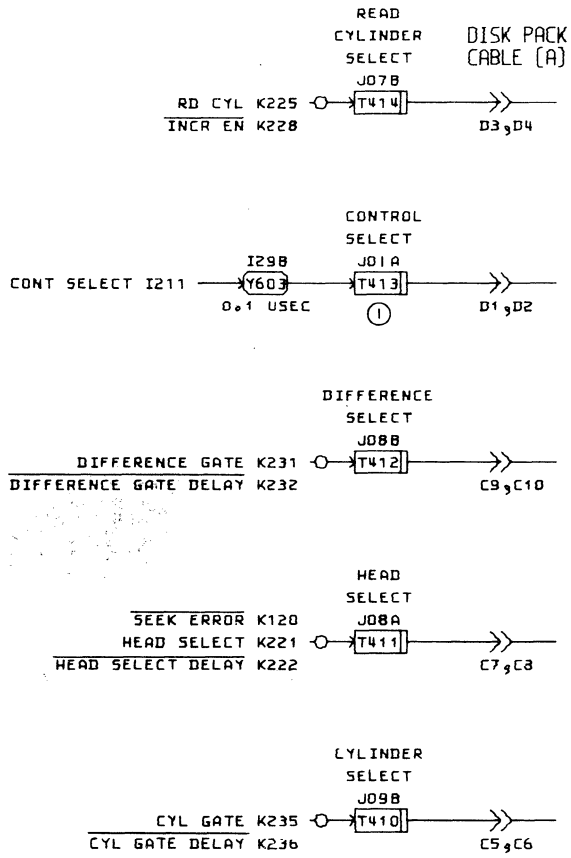
If the new cylinder address is smaller than the current cylinder address, a Seek Reverse is initiated.

ERASE GATE

The Erase Gate is enabled for all Write operations.

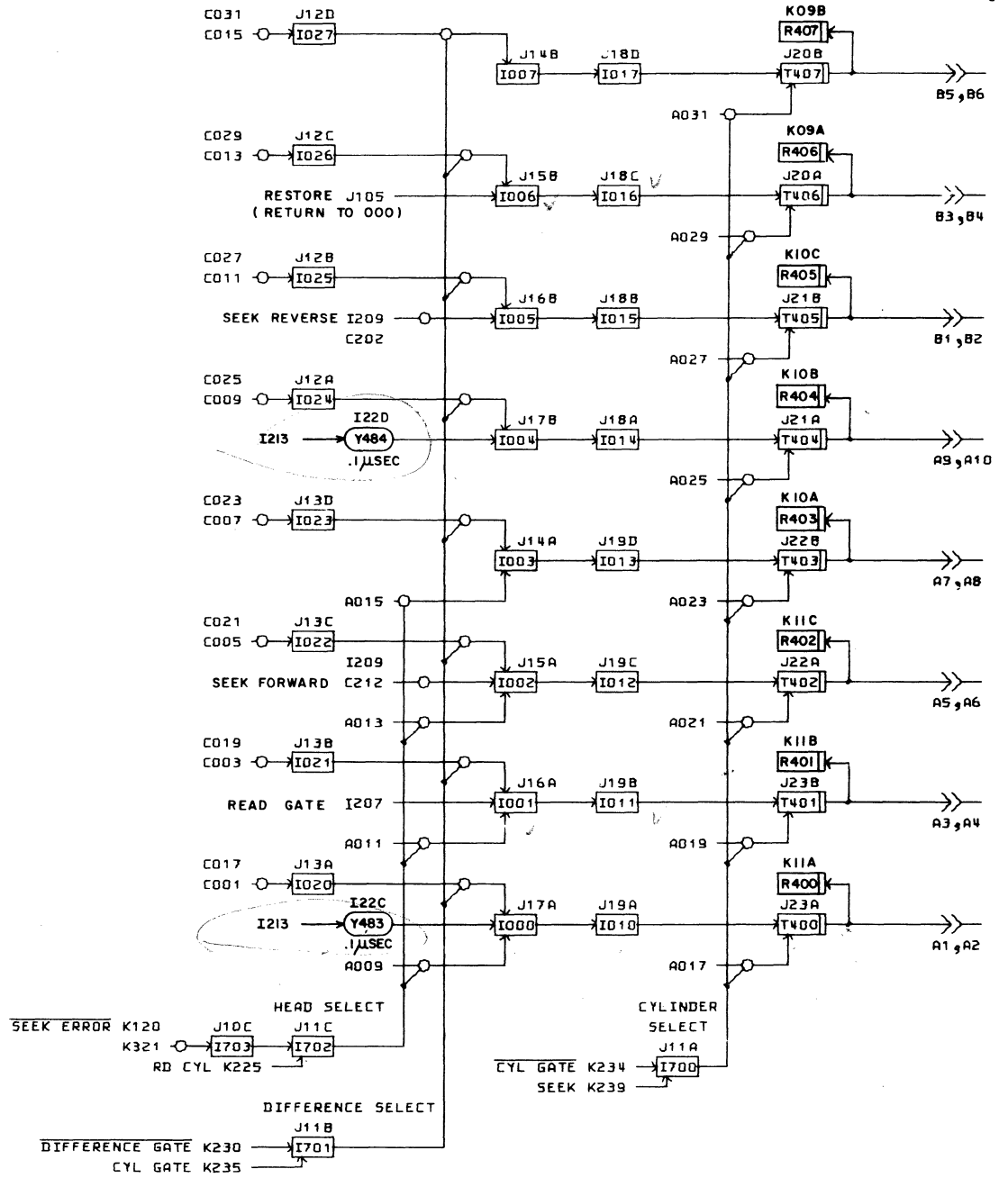
SEEK FORWARD

If the new cylinder address is greater than the current cylinder address, a Seek Forward is initiated.



NOTE:
① TRANSMITTER, POWER LOSS DETECTOR

57



TERM	LOCATION	PAGE
X781	E16C	2-25
X800	I11A	2-37
X801	I11B	2-37
J840	H35A	2-17
J420	G08B	2-35
J430	G08C	2-35
J431	G08D	2-35
J440	G20A	2-35
J450	H04A	2-35
J460	H04B	2-35
J537	I21D	2-47
K225	H13B	2-17
K228	H26A	2-17
K229	H26B	2-17
K230	H26C	2-17
K221	H01B	2-33
K214	H14A	2-47
K215	H14B	2-47
K217	H14D	2-47
K252	H21A	2-47
X000	D33A	2-43
X001	D33B	2-43
X002	D33C	2-43
X003	D33D	2-43
X004	D32A	2-43
X005	D32B	2-43
X006	D32C	2-43
X007	D32D	2-43
X008	D21A	2-43
X009	D21B	2-43
X010	D21C	2-43
X011	D21D	2-43
X012	D20A	2-43
X013	D20B	2-43
X014	D20C	2-43
X015	D20D	2-43
X016	E33A	2-45
X017	E33B	2-45
X018	E33C	2-45
X019	E33D	2-45
X020	E32A	2-45
X021	E32B	2-45
X022	E32C	2-45
X023	E32D	2-45
X024	E21A	2-45
X025	E21B	2-45
X026	E21C	2-45
X027	E21D	2-45
X028	E20A	2-45
X029	E20B	2-45
X030	E20C	2-45
X031	E20D	2-45
X247	E19C	2-43

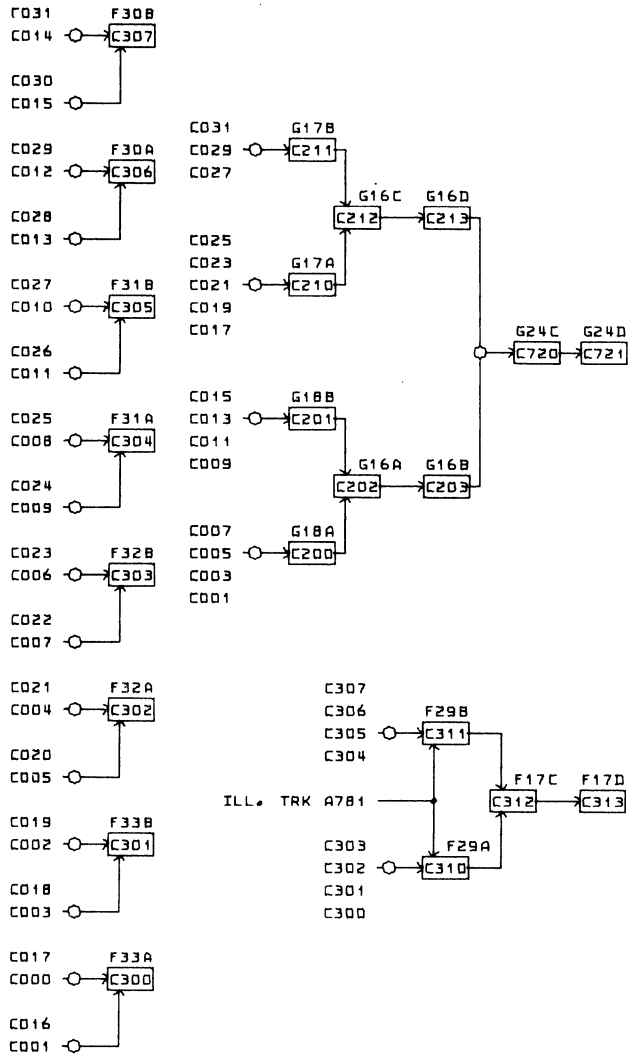
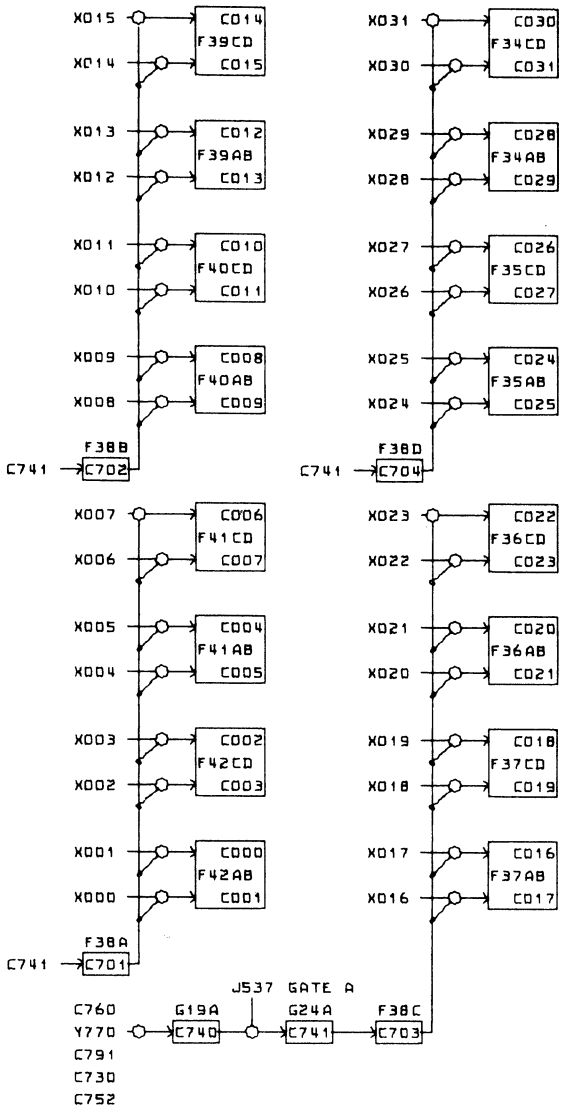
CONTROL COUNT REGISTER

The Control Count register performs two separate functions. The first is that of determining the difference between the old and new file addresses during a drive unit address transfer. The old and new cylinder addresses are transferred into the upper and lower halves of the Control Count register. If they are equal, C312/313 will end the address transfer sequence. If they are not equal then they are both incremented until one of them equals all "1's". At this time C720 will become a "1". The complement of the difference will then be in the half that does not contain all ones and the difference on the outputs of I020-7 is then gated to the drive to let it know how far to seek forward or backward.

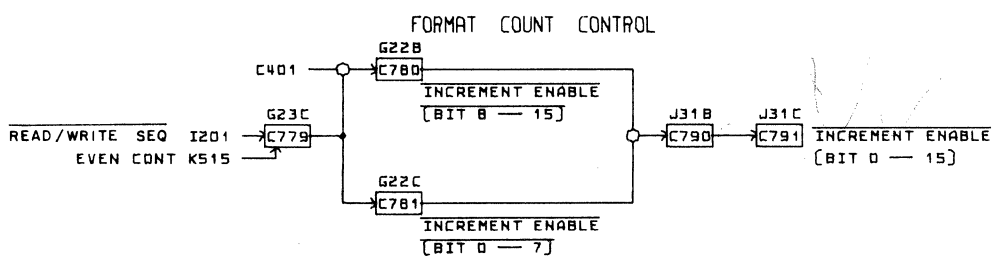
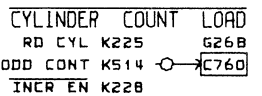
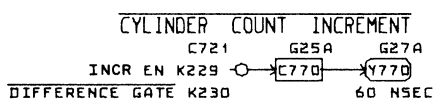
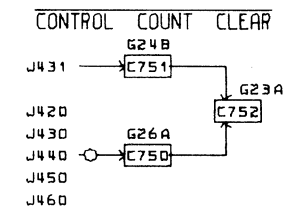
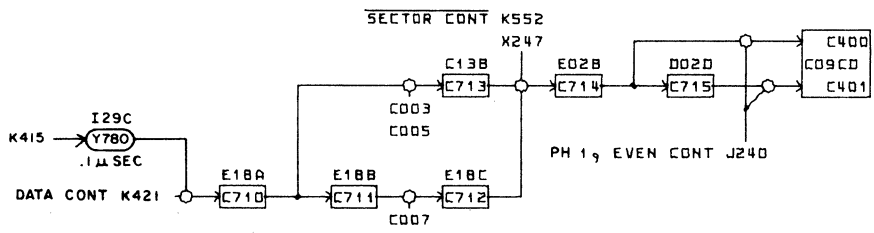
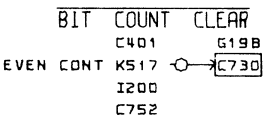
The second function is to keep a bit count and word count used for format control when data is being written on or read from the disk pack. The

Bit Count register includes FFs C000/001 through C014/015. The Word Count register uses FFs C016/017 through C030/031. The Bit Count register increments once for each two bits of data that are written on or read from the pack. The Word Count register increments once for each 6 or 8 counts of the Bit Count register. It will increment every 8 counts during the data record sequence of the Read/Write control timing chain. For all other sequences it will increment every 6 counts. The Control Count register will be running continuously during read or write sequences except at read sync time.

The incrementing is controlled by the Format Count Control circuit (C780-C781 and C790). C780 = "0" causes the word count to increment and C781 = "0" causes the bit count to increment.



WORD COUNT CONT



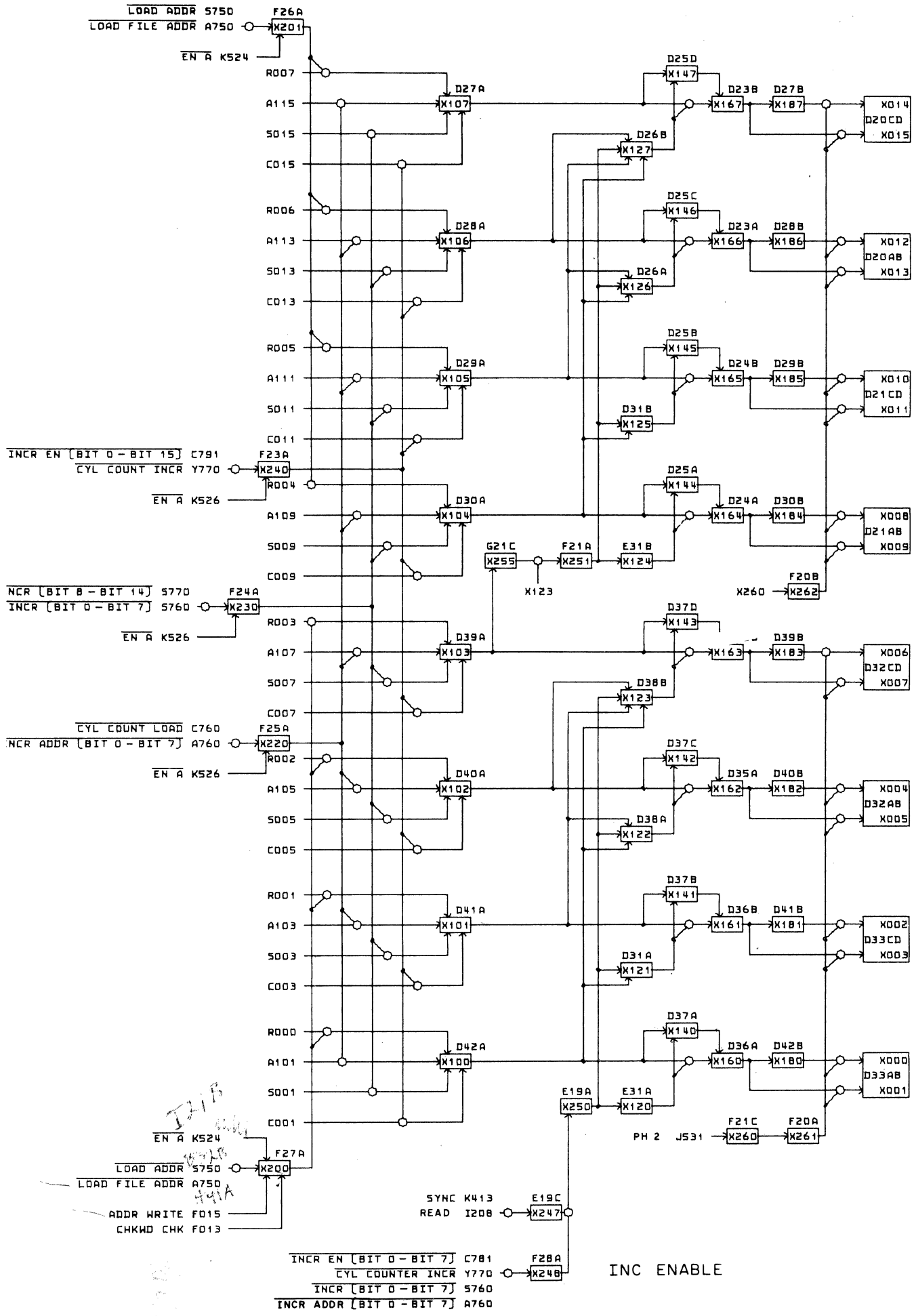
CONTROL DATA CORPORATION DEVELOPMENT DIVISION AUTOMATED DRAFTING	PRODUCT 1738	DRAWING NO. 60167700	SHEET NO. 20	PAGE 2-41
	CONTROL COUNT REGISTER			

INCREMENT BUS

TERM	LOCATION	PAGE
A101	G40A	2-25
A103	G40B	2-25
A105	G40C	2-25
A107	G40D	2-25
A109	G35A	2-25
A111	G35B	2-25
A113	G35C	2-25
A115	G35D	2-25
A750	H41A	2-25
A760	H41B	2-25
G001	F42B	2-41
G003	F42D	2-41
G005	F41B	2-41
G007	F41D	2-41
G009	F40B	2-41
G011	F40D	2-41
G013	F39B	2-41
G015	F39D	2-41
G760	G26B	2-41
G781	G22C	2-41
G791	J31C	2-41
F013	K37B	2-7
F015	K37D	2-7
T000	J31A	2-37
Y531	I19C	2-47
K013	J10A	2-33
M524	I21B	2-47
M526	I21C	2-47
R000	L33A	2-3
R001	L33B	2-3
R002	L33C	2-3
R003	L32A	2-3
R004	L32B	2-3
R005	L32C	2-3
R006	L31A	2-3
R007	L31B	2-3
S001	B42B	2-21
S003	B42D	2-21
S005	B41B	2-21
S007	B41D	2-21
S009	B40B	2-21
S011	B40D	2-21
S013	B39B	2-21
S015	B39D	2-21
S750	B32B	2-21
S760	B31A	2-21
S770	B31B	2-21
Y770	G27A	2-41

The increment bus is a 16 bit register, used as an increment register and a transfer register. There are four inputs to the register. AQ interface, File Address register, Current Address register, and Control Count register. All data is either incremented and transferred to the X register or transferred directly to the X register. The terms

that determine this are X247, X248 and X249. Then the data is transferred from the X register to its destination. All incrementing is done on a time shared basis in the increment bus. The multiple use of this bus requires that a clear time reference be established in order to view its operation.



PROJECT	1738	REV	6
DRAWING NO	60167700	SHEET NO	21
DATE	3938	SCALE	2-43
TITLE CONTROL DATA CORPORATION DIVISION AUTOMATED DRAFTING			
TRANSFERS INCREMENT BUS BIT 0 - BIT 7			

TERN	LOCATION	PAGE
A017	G31B	2-25
A019	G31D	2-25
A021	G30B	2-25
A023	G30D	2-25
A025	G29B	2-25
A027	G29D	2-25
A029	G28B	2-25
A031	G28D	2-25
A750	H41A	2-25
A760	H41B	2-25
A765	H40B	2-25
G017	F37B	2-41
G019	F37D	2-41
G021	F36B	2-41
G023	F36D	2-41
G025	F35B	2-41
G027	F35D	2-41
G029	F34B	2-41
G031	F34D	2-41
G730	G19B	2-41
G760	G26B	2-41
G790	J31C	2-41
H013	J10A	2-33
H524	I21B	2-47
H520	I21C	2-47
R008	L31C	2-3
R009	L30A	2-3
R010	L30B	2-3
R011	L30C	2-3
R012	L29A	2-3
R013	L29B	2-3
R014	L29C	2-3
R015	L28A	2-3
G017	B37B	2-21
G019	B37D	2-21
G021	B36B	2-21
G023	B36D	2-21
G025	B35B	2-21
G027	B35D	2-21
G029	B34B	2-21
G750	B32B	2-21
G760	B31A	2-21
G770	B31B	2-21
X047	E19C	2-43
X060	F21C	2-43
Y770	G27A	2-41

LOAD ADDR S750
LOAD FILE ADDR A750

EN A K524

PRESENT ONLY IF
ST. OPT. 10278-1
IS INSTALLED

INSTALLED

INCR EN [BIT 0 - BIT 15] C794
BIT COUNT CLEAR C730
CYL COUNT INCR Y770

EN A K526

INCR [BIT 0 - BIT 14] S770
INCR [BIT 0 - BIT 7] S760

EN A K526

CYL COUNT LOAD C760
[NCR ADDR [BIT 8 - BIT 15]] A765
[NCR ADDR [BIT 0 - BIT 7]] A760

EN A K526

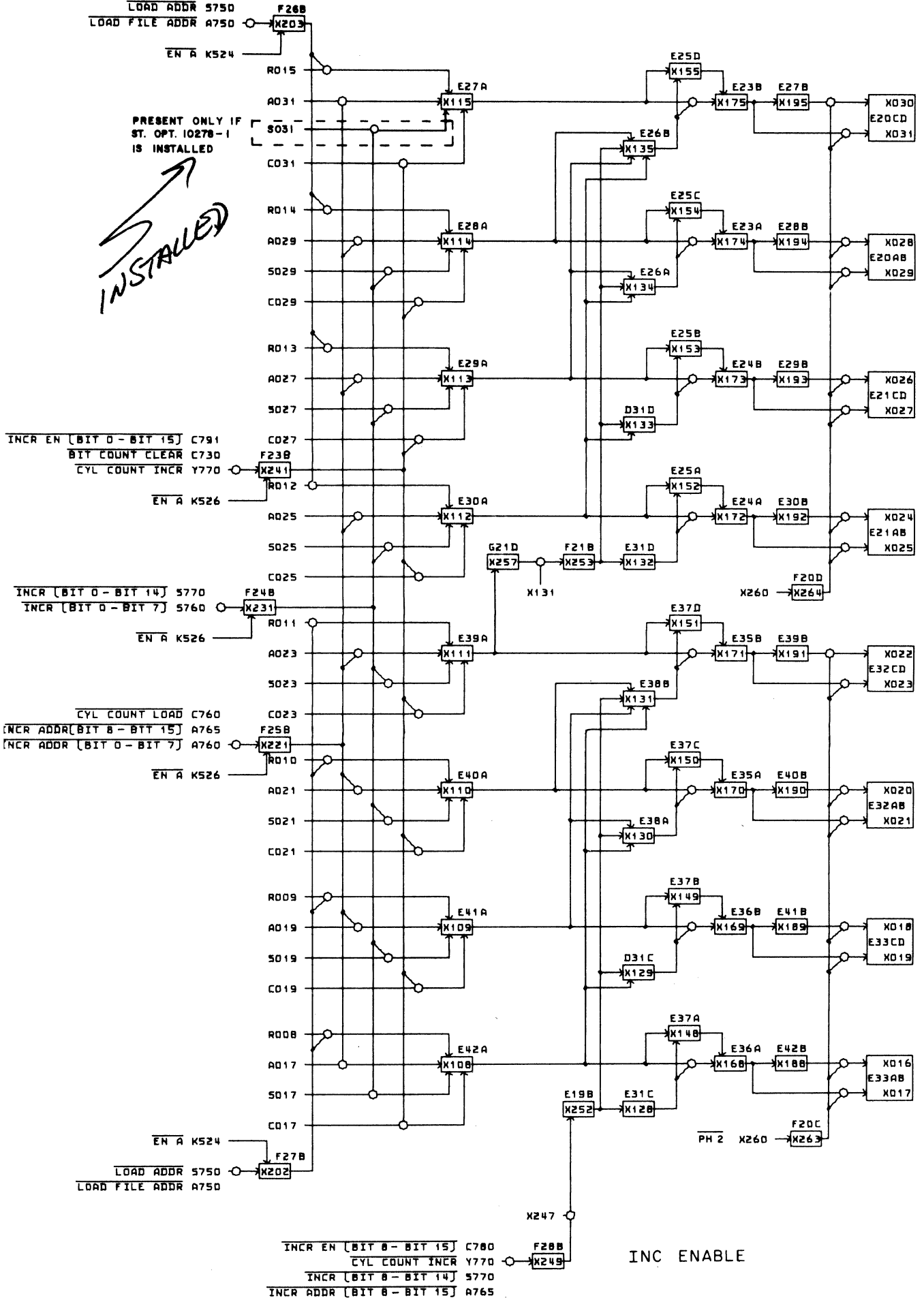
EN A K524

LOAD ADDR S750
LOAD FILE ADDR A750

INCR EN [BIT 8 - BIT 15] C780
CYL COUNT INCR Y770
INCR [BIT 8 - BIT 14] S770
INCR ADDR [BIT 8 - BIT 15] A765

INC ENABLE

PRODUCT		REV	
1738		S	
DRAWING NO		DATE	
60167700		22	
TYPE NO		2 - 45	
3939			
TITLE			
TRANSFER BUS			
INCREMENT BIT 8 - BIT 15			
CONTROL DATA CORPORATION		DEVELOPMENT DIVISION	
AUTOMATED DRAFTING			



CLOCK CONTROL

TERM	LOCATION	PAGE
B205	C11B	2-27
1111	I02B	2-37
1113	I06B	2-37
1115	F17A	2-37
1123	I07B	2-37
1124	I07C	2-37
J240	H35A	2-17
J241	H35B	2-17
J405	G15B	2-33
J408	C15B	2-33
J411	H04D	2-35
J431	G08D	2-35
K401	G14B	2-33

This logic is in control when the read clock and write clock are used. It is used for synchronizing the data read from the drive unit with the controller timing. The write clock is used at all times except while data is being read. Normally the Clock Control FFs will be clear enabling the write clock gate J541. When read sync start (page 2-35) is enabled, K530/531 will be set. K532/533 will set just after write clock ph 1 has occurred which will disable the write clock gate J541. This will also disable odd/even control, forcing it to the odd condition. This disables the phase 1 even pulses thus halting the read/write timing sequence. Then K534/535 will set enabling the read clock gate, J540.

K530/531 will clear when the sync bit is received enabling odd/even control and the read/write timing sequence. The read clock will remain enabled until J405 (page 2-33) becomes a "1". This will disable the read clock gate by clearing K532/533. A write clock ph 1 pulse will then enable the write clock gate allowing the write clock to take over.

WRITE CLOCK

The write clock uses a 2.5 megacycle oscillator. Phase 1 and phase 2 pulses are generated which are approximately 80 or 150 nsec in width. These are used, along with the odd/even control pulses, as gating pulses while doing all operations except reading data.

POWER WIRING

Power Distribution

1738-A P. 2-49

1738-B P. 2-51

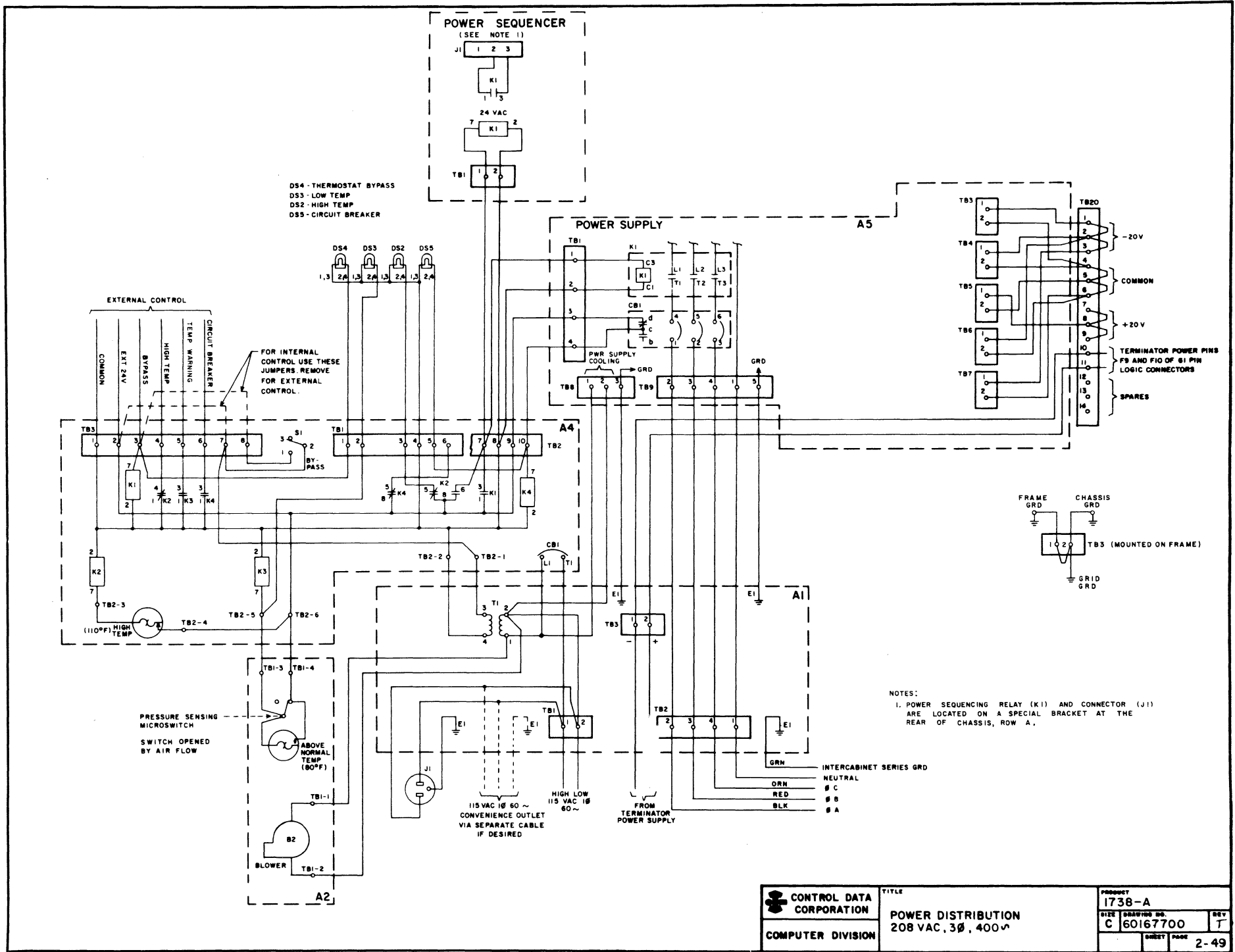
1738-C See Cabinets Manual
Pub. No. 60224100, see
wiring diagrams (2)
for 1700 Vertical
Cabinet. (3000 Logic)

Power Supply

See CDC Power Supplies
Manual Pub. No. 60120700
Power Supply No. 25151702.

P. 2-51

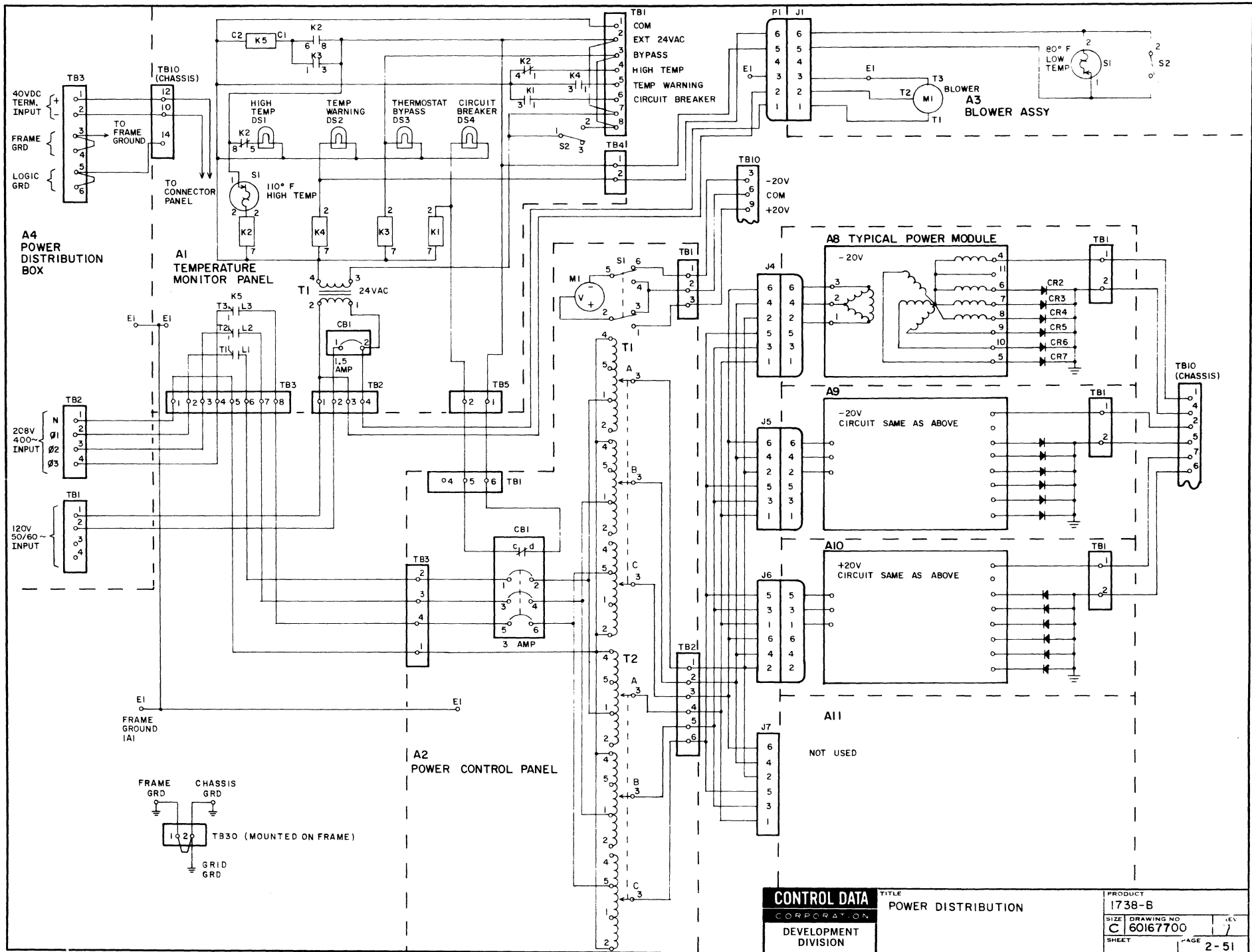
See CDC Power Supplies
Manual Pub. No. 60120700
Power Supply No. 18340200
18340300



CONTROL DATA CORPORATION
COMPUTER DIVISION

PRODUCT 1738-A
TITLE POWER DISTRIBUTION 208 VAC, 3Ø, 400VA

SIZE C
DRAWING NO. 60167700
REV T
SHEET 2-49



CONTROL DATA
CORPORATION
DEVELOPMENT
DIVISION

TITLE
POWER DISTRIBUTION

PRODUCT
1738-B
SIZE DRAWING NO
C 60167700
SHEET PAGE
7
2-51

PART 3

MAINTENANCE

PART 3
MAINTENANCE

GENERAL INFORMATION

This section contains general maintenance information for the 1738 Disk Drive Controller. It is assumed that maintenance personnel are familiar with Control Data logic diagrams, correct equipment handling techniques, and 1700 Series Computer Systems I/O specifications.

The controller logic uses 3000-type logic cards on a standard chassis. The chassis may be mounted in a 3000 Type A cabinet (1738-A), or a 1700 vertical cabinet (1738-B). A 400-Hertz, 3-phase, 208-volt power supply mounted in the same cabinet provides the necessary power.

The only maintenance required by the controller is periodic cleaning of the air filter at the bottom of the cabinet. This filter is accessible from the front of the cabinet. It is recommended that the filter be cleaned once a week, and the air inlet checked for the accumulation of paper and other foreign objects.

POWER CONTROL

When performing maintenance operations or in emergency situations, it may be necessary to remove primary power from the 1738 system. This can be done by turning off the 400-Hertz, 3-phase circuit breaker switch on the controller power supply, the 60-Hertz, single phase circuit breaker switch on the controller monitor box, and the 60-Hertz, 3-phase primary power circuit breaker at the rear of the drive unit. A power distribution diagram for the 1738-A is illustrated on page 2-49, and Table 3-1 gives the 1738 specifications.

DIRECT STORE CONTROL

When performing maintenance on the controller, the Direct Store Control switch is set to the OUT position so that controller maintenance can be performed without affecting the operating system.

TABLE 3-1. 1738 CONTROLLER SPECIFICATIONS

PHYSICAL SPECIFICATIONS	1738-A	1738-B
Height	56-7/8 in (144.5 cm)	75 in (190.5 cm)
Width	22-3/4 in (58 cm)	28 in (71 cm)
Depth	20-1/2 in (52 cm)	24 in (61 cm)
Weight	450 lbs (204 kg)	525 lbs (238 kg)
Cooling	Self-contained blowers	
Operating Environment	60° to 90° F (15.5° to 32.2° C)	
ELECTRICAL SPECIFICATIONS		
Input Voltages	208 volts, 3-phase, 400-Hertz 115 volts, 1-phase, 60-Hertz	
Input Current	750 va maximum	

CABLING INFORMATION

COMPUTER A/Q INTERFACE

Two 29 twisted pair cables are required for this interface. The A/Q data cable is plugged into the E1 receptacle, while the A/Q address cable is plugged into the F1 receptacle. If the controller is the last equipment on the A/Q interface, terminators are plugged into the E2 and F2 receptacles; if not, the data and address cables for the next equipment are plugged into these receptacles.

COMPUTER DIRECT STORE INTERFACE

Two 29 twisted pair cables are required for this interface. The direct storage data cable is plugged into the controller C1 receptacle, and the direct storage address cable is plugged into the D1 receptacle. If the controller is the last equipment on the direct storage interface, terminators are plugged into the C2 and D2 receptacles; if not, the data and address cables for the next equipment are plugged into the receptacles.

These cables are an integral part of the computer memory access scanner, therefore, it is imperative that the Direct Storage cables be as short as possible since all line delays add directly to memory access time.

These cables should determine the position of the 1738 Controller within the system configuration. Normally this will be adjacent to the computer.

COMPUTER INTERRUPT INTERFACE

One single twisted pair cable is required for this interface. This cable is plugged into the G1 receptacle on the controller.

DISK DRIVE INTERFACE

Two 29 twisted pair cables are required for this interface. The Data and Control cable is plugged into the A1 receptacle on the controller and the J100 receptacle on the first disk drive. The Unit Select cable is plugged into the B1 receptacle on the controller and into the J102 receptacle on the first disk drive. These cables are also required between disk drive units. The last drive unit in line must have both cables terminated with a plug-in terminator. Terminators MUST be plugged into receptacles A2 and B2 on the controller.

POWER SEQUENCING INTERFACE

One two-wire cable is required for this interface. This cable is plugged into receptacle J1 which is mounted on the rear and near the top of the controller chassis. This cable is plugged into receptacle J8 in the drive unit. These cables are also required between the drive units. Refer to Figure 3-1 for an illustration of the 1738 cables and connectors.

REFERENCES

For information on Publications numbers of supporting documents which are listed below refer to the Publications Index for Customer Engineering.

- 1700 Computer System Manual
- 1700 Computer Reference Manual
- 1700 Input/Output Specifications
- 1700 Site Preparation and Installation Manual
- 853 Disk Storage Drive Maintenance Manual
- 854 Disk Storage Drive Maintenance Manual
- Control Data Power Supplies
- Printed Circuit Manual

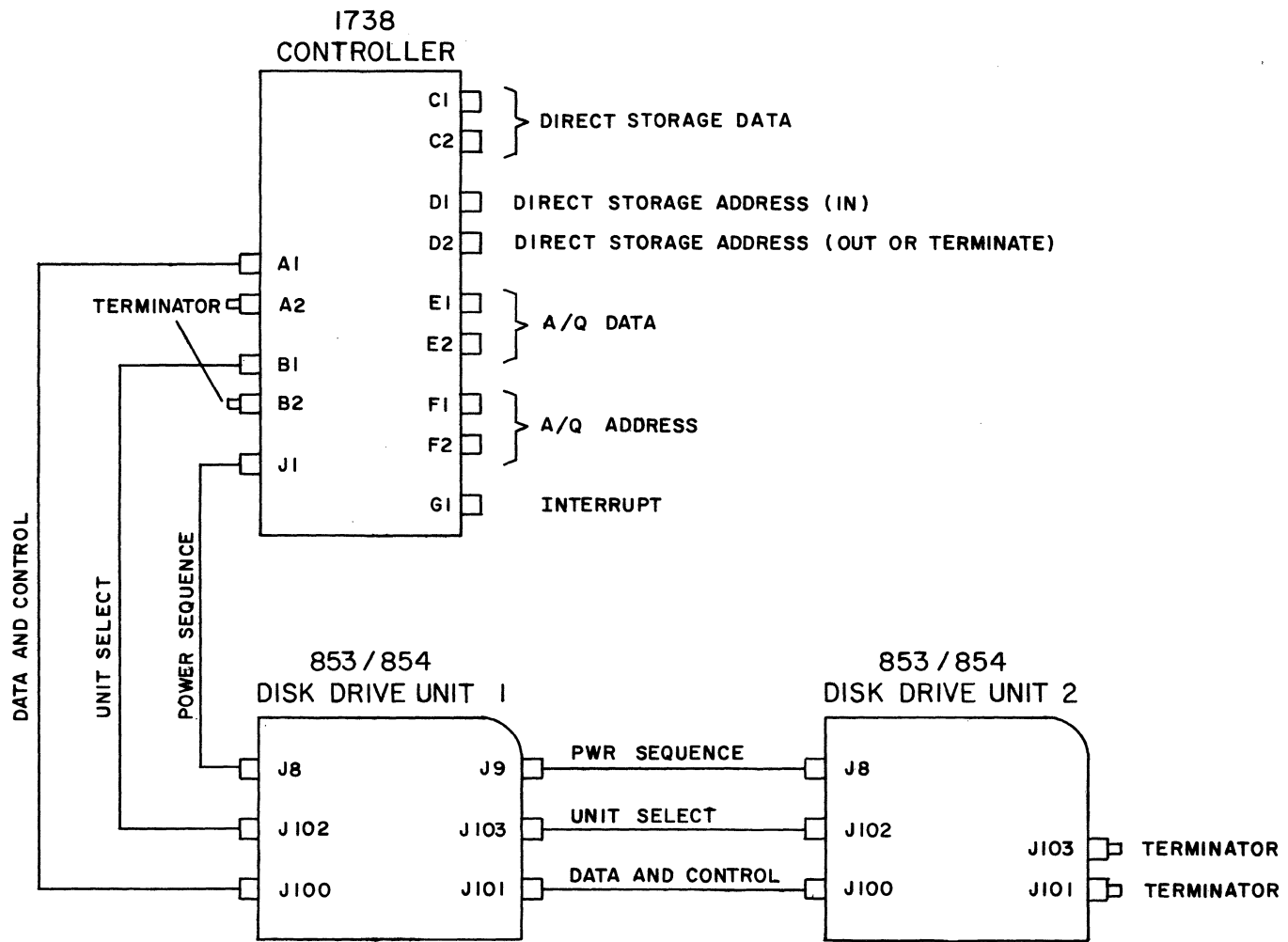


Figure 3-1. 1738 Cabling Diagram

TIMING

The following pages contain timing information for the 1738 controller. The waveforms are idealized, and the actual scope readings may vary due to the switching time of transistors and inherent characteristics of the various cards.

Rev. G

3-6

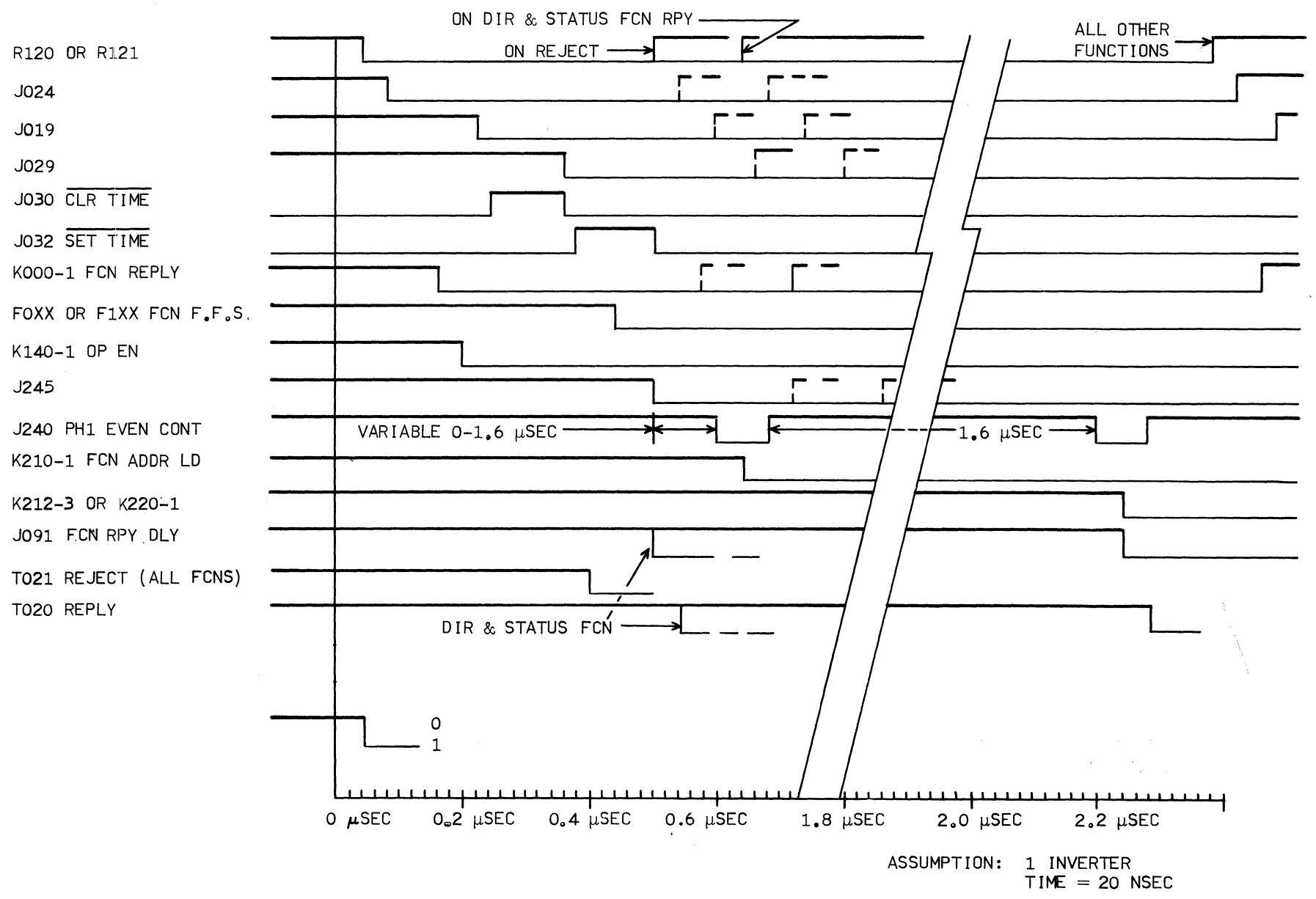
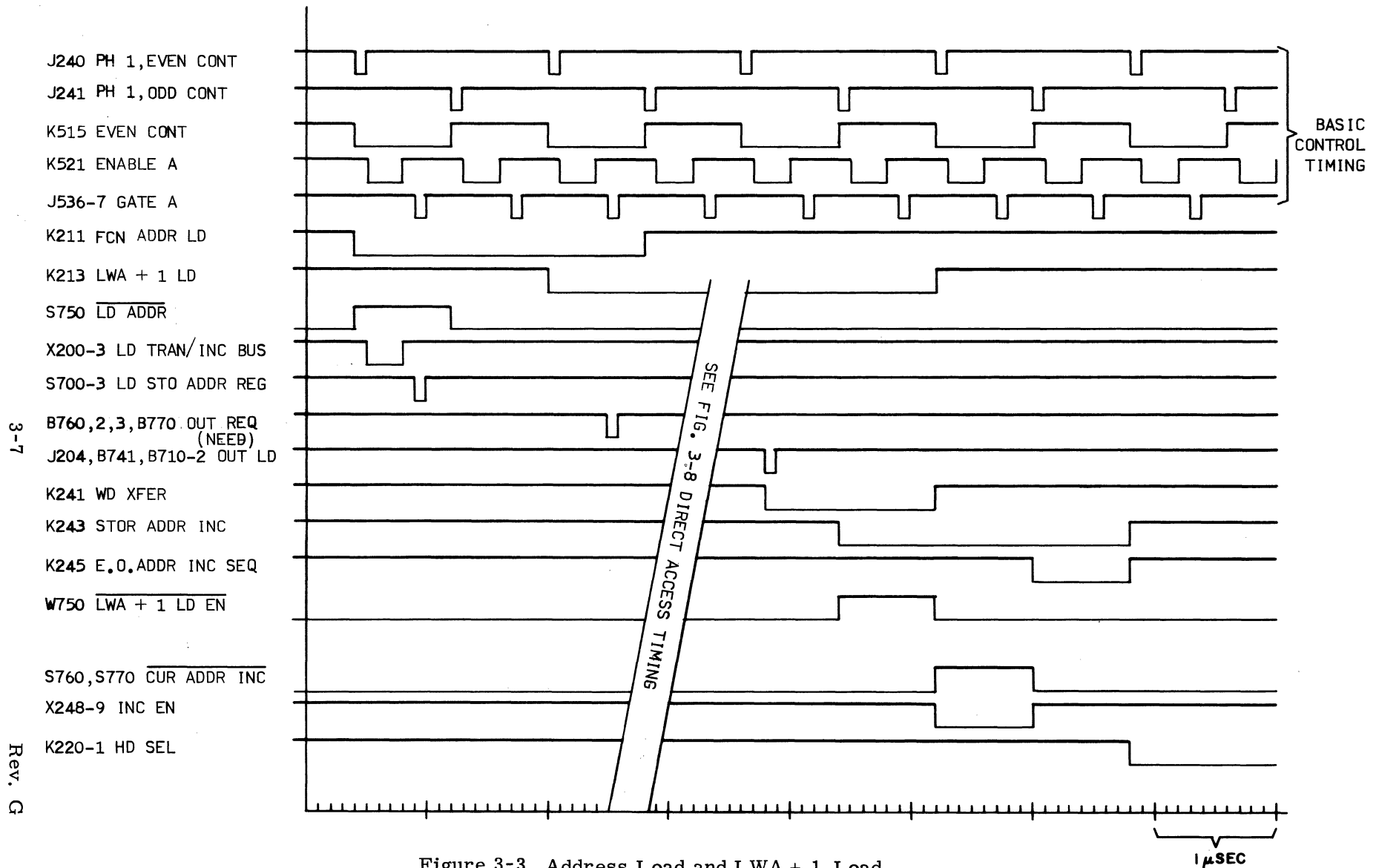


Figure 3-2. Function Transfer Timing



3-7

Rev. G

Figure 3-3. Address Load and LWA + 1 Load.

ASSUMPTION: INVERTER TIME = 0

Rev. G

3-8

J242, J244 PH1 EVEN
J241 PH1 ODD
SEQ CONT F.F.S.
K226-7 E.O. ADDR
TRANS SEQ
SEQ CONT F.F.S.
K226-7 E.O. ADDR
TRANS SEQ
I702 HEAD SEL GT
T411 HEAD SEL
T414 RD CYL SEL
A711 FILE ADDR REG GT
C760 CYL COUNT LD
C770 CYL COUNT INC
C720 INC COMPLETE
I701 DIF SEL GT
T412 DIF SEL
I700 CYL SEL GT
T410 CYL SEL
I209 SEEK GT
T413 CONT SEL

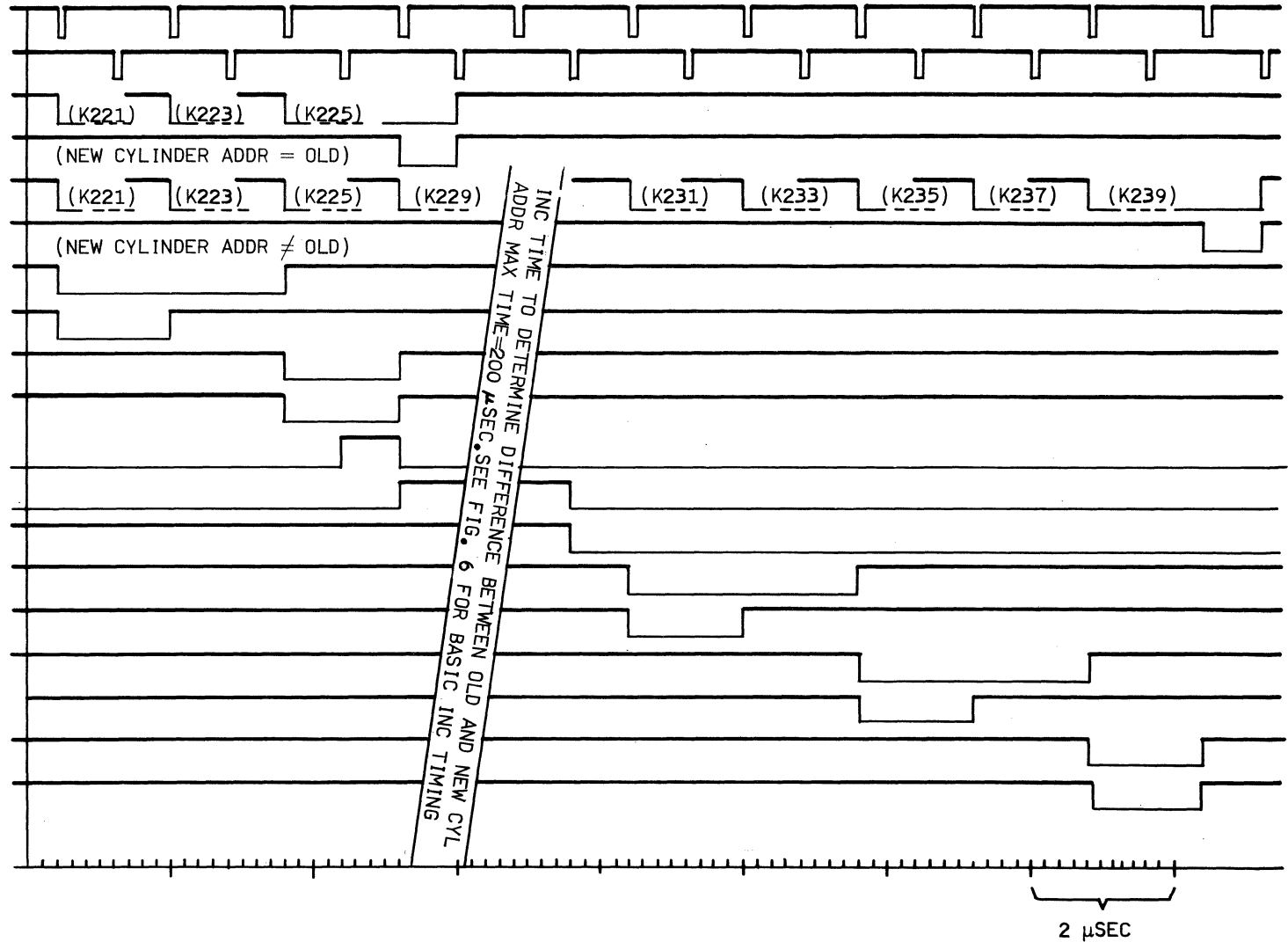
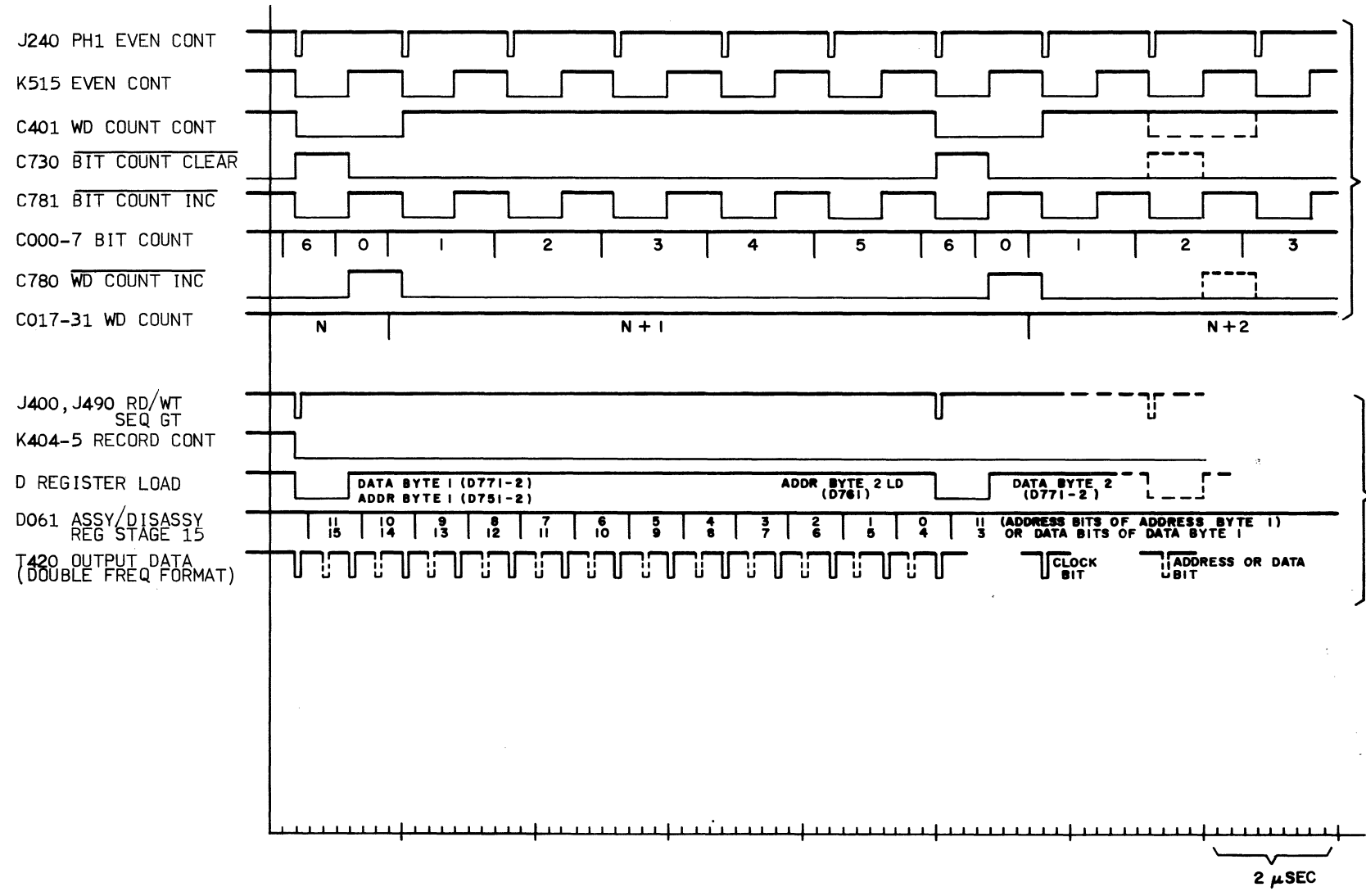


Figure 3-4. Drive Unit Transfer Timing.

CONTROL COUNTER
TIMING

TYPICAL WRITE TIMING SHOWING
RELATIONSHIP OF RECORD CONTROL,
LOAD GATES, AND WRITTEN DATA



3-9

Rev. G

Figure 3-5. Read/Write Control Timing

Rev. G

3-10

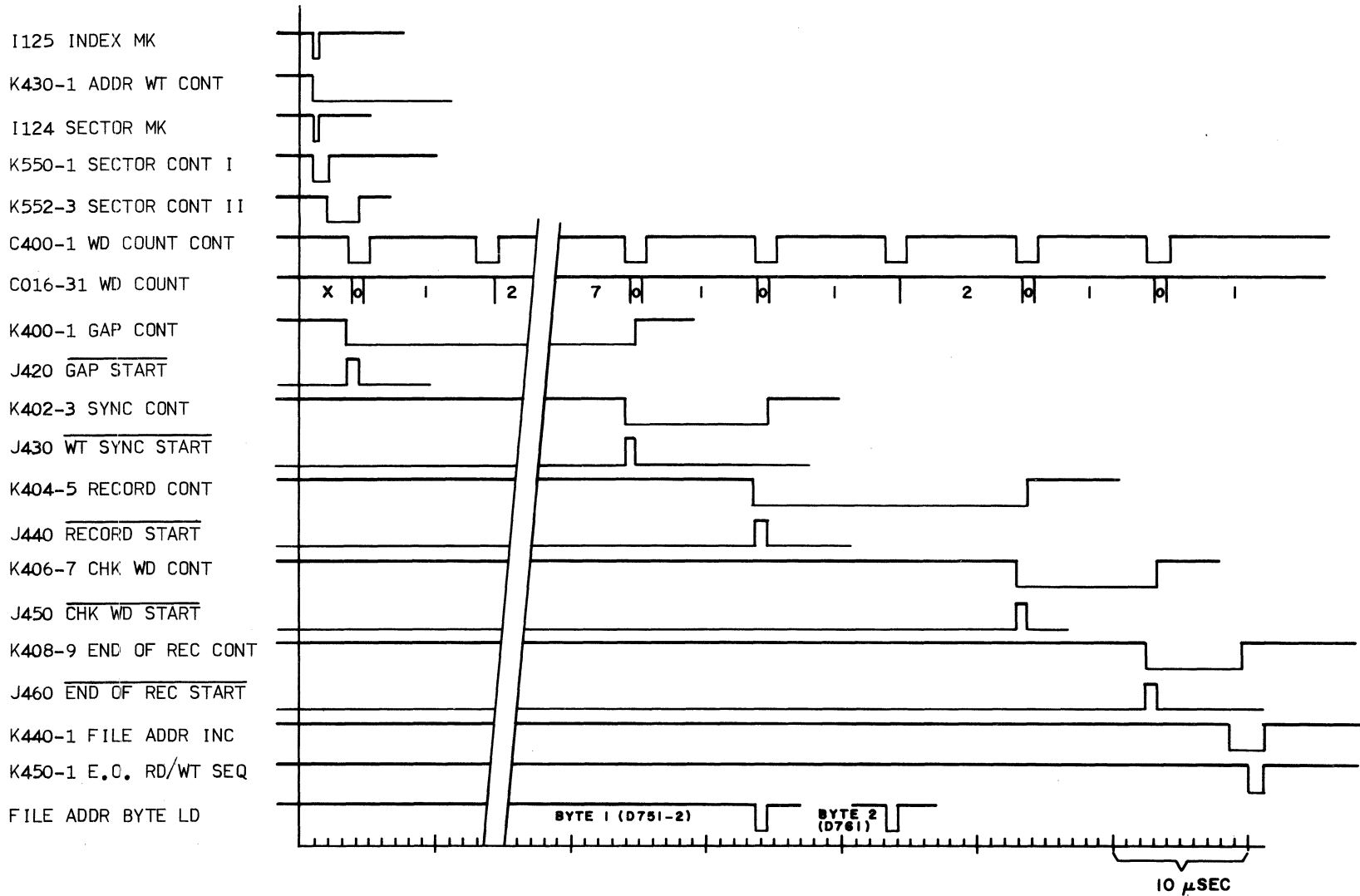
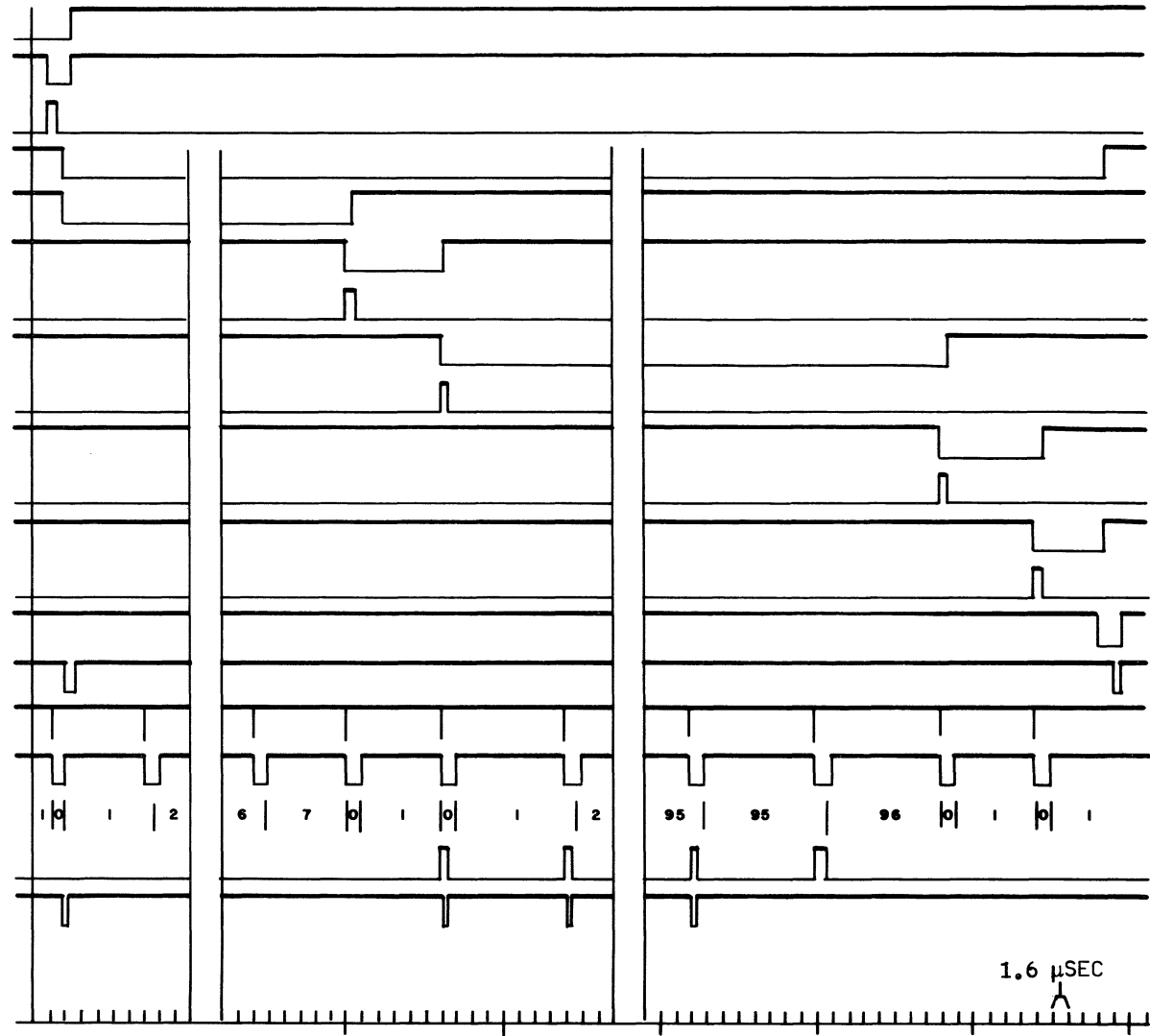


Figure 3-6. Address Write Timing.

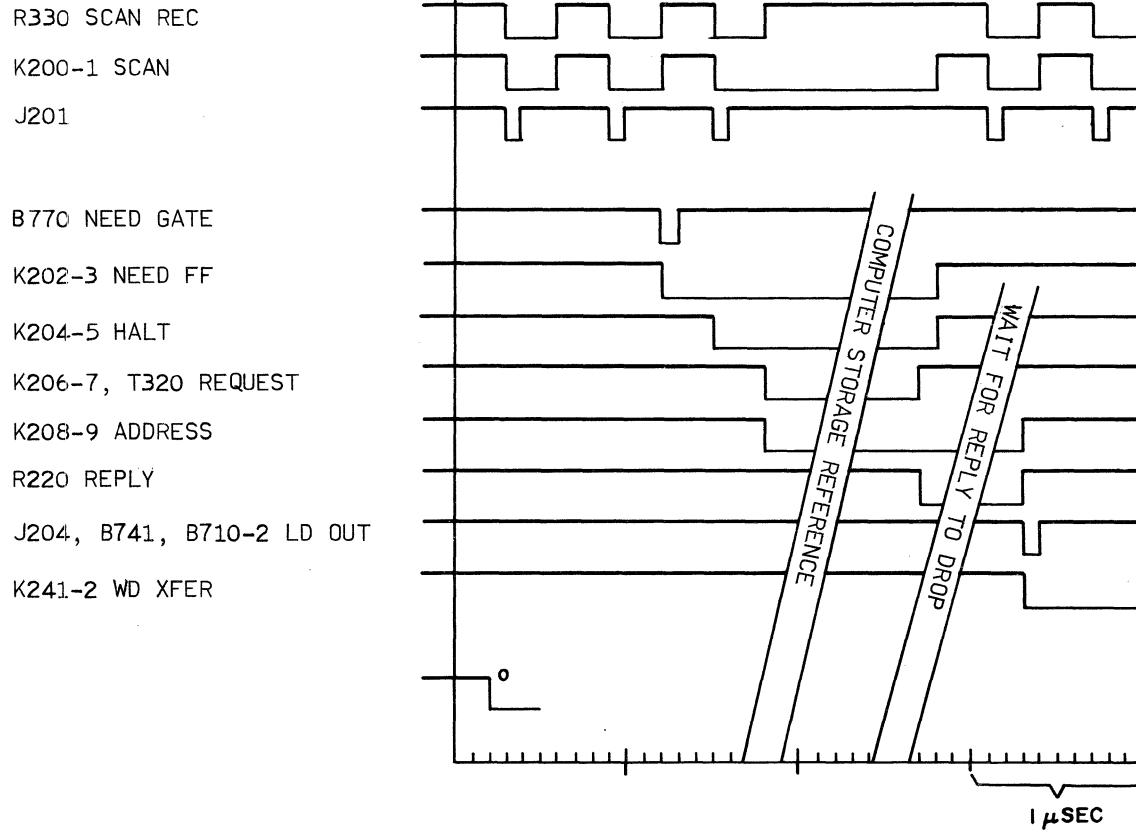
K411-12 ADDRESS CONT
 K409-10 END OF REC
 J460 $\overline{\text{E.O. REC START}}$
 K420-1 DATA CONT
 K401-2 GAP CONT
 K403-4 SYNC CONT
 J430 $\overline{\text{WT SYNC START}}$
 K405-6 REC CONT
 J440 $\overline{\text{REC START}}$
 K407-8 CHK WD CONT
 J450 $\overline{\text{CHK WD START}}$
 K409-10 E.O. REC CONT
 J460 $\overline{\text{E.O. REC START}}$
 K441-2 FILE ADDR INC
 K451-2 E.O. RD/WT SEQ
 J400 PH 1 EVEN + WD
 COUNT CONT
 C401 WD COUNT CONT
 C017-C031 WD COUNT
 D770 $\overline{\text{D REG LOAD}}$
 B770 NEED GATE
 (REQUEST DATA)



3-11

Rev. G

Figure 3-7. Data Write Timing



ASSUMPTION: INVERTER
TIME = 0

Figure 3-8. Direct Access Timing

3-13

Rev. G

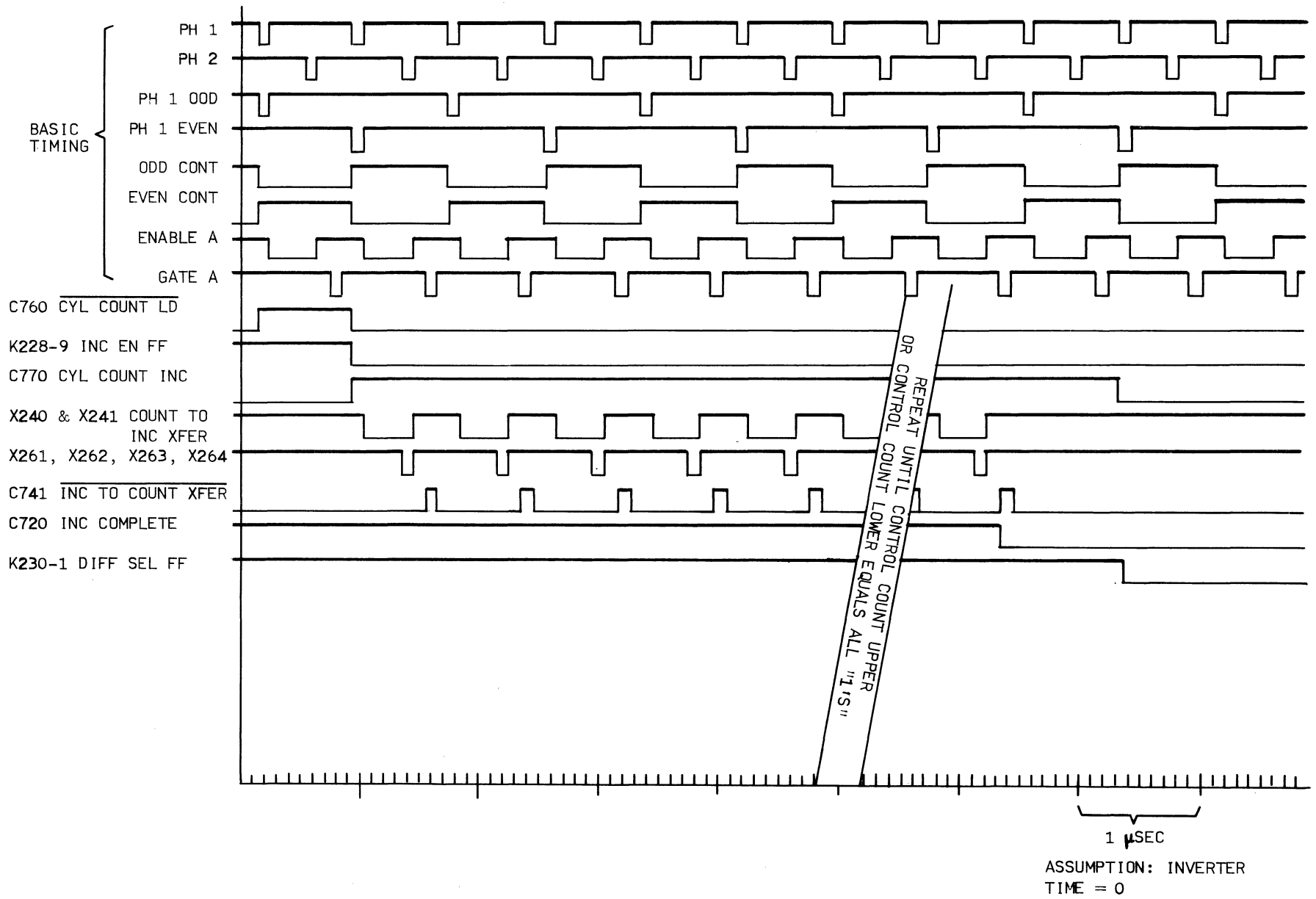


Figure 3-9. Cylinder Address Difference Increment

Rev. G

3-14

J509 WT OSC
J500 WT PH 1
J501 WT PH 2
R420 RD DATA
I111 RD PH 1
I115 RD PH 2

J542 RD SYNC & GATE A
K530-1 CLOCK CONT I
K532-3 CLOCK CONT II
K534-5 CLOCK CONT III
J541 WT CLOCK GATE
J540 RD CLOCK GATE
J405 END OF RD/WT

J521 CONT PH 1
J531 CONT PH 2

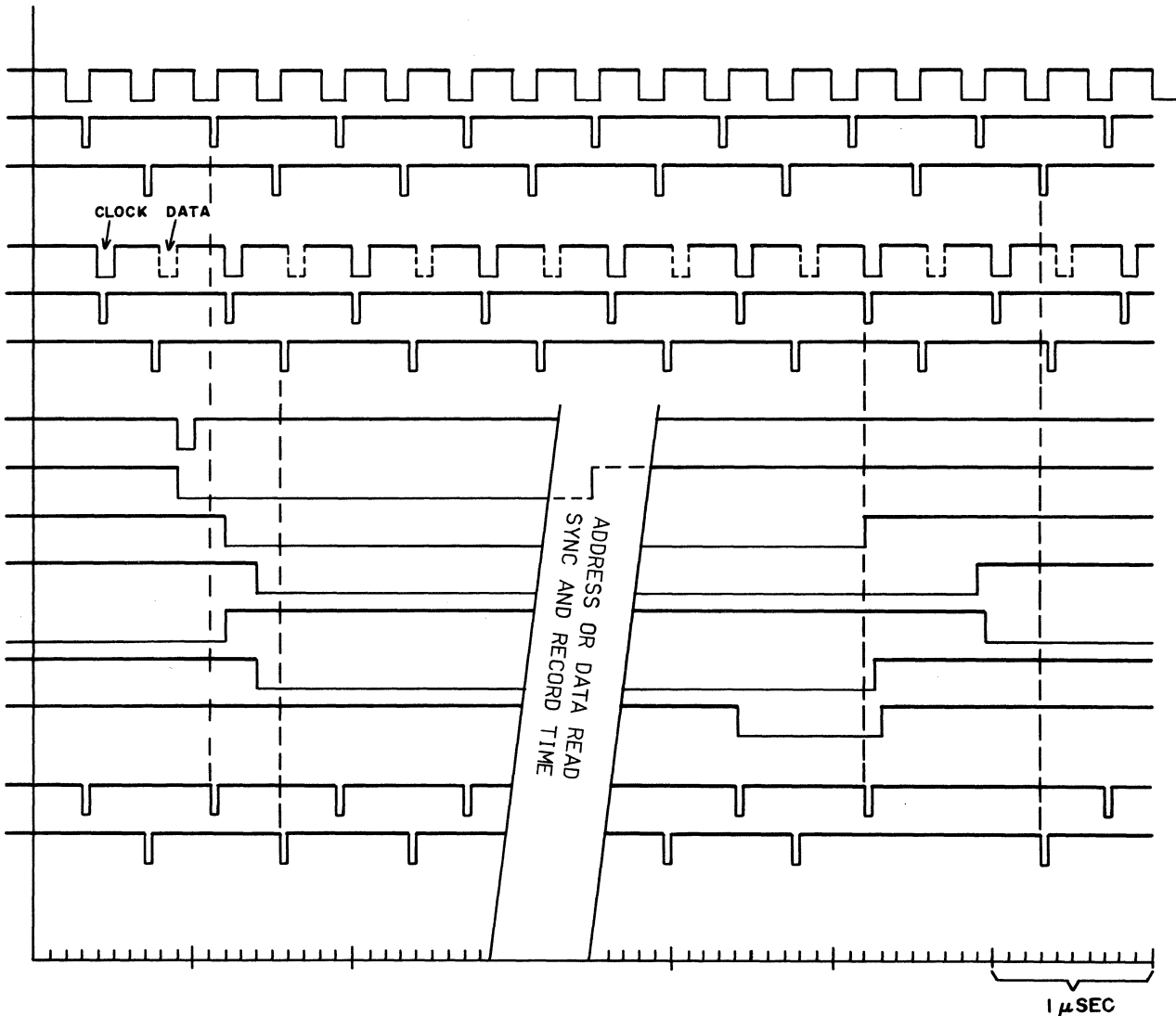


Figure 3-10. Clock Control Timing

J240 PH 1 EVEN
 K515 EVEN CTRL
 C401 WD COUNT CONT
 C730 BIT COUNT CLR
 C781 BIT COUNT INC
 C000-7 (ADDRESS
 BIT COUNT DATA)
 K403-4 SYNC CONT
 J431 RD SYNC ST
 K530-1 CLOCK CONT I
 K532-3 CLOCK CONT II
 J514 FORCE ODD CONT
 X247 FORCE WD COUNT
 INHIBIT INC
 K405-6 RECORD CONT
 D205 INPUT (ADDRESS
 COMPARE POS DATA)
 D000 INPUT DATA
 BIT 0 POS
 D061 OUTPUT (ADDRESS
 BIT 15 POS DATA)
 D750, D760, D770
 D REG LOAD
 B751 INPUT LOAD

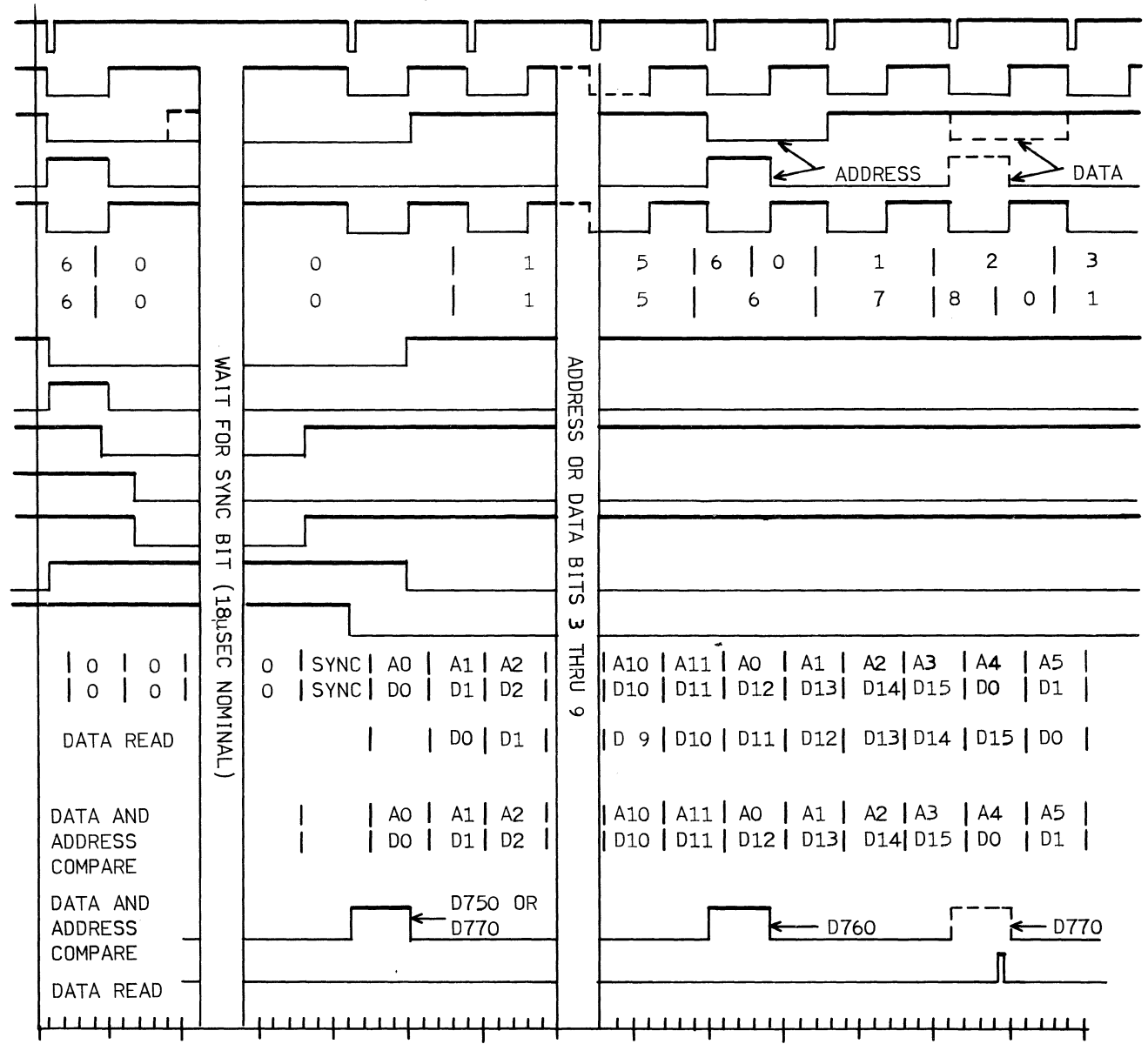


Figure 3-11. Data/Control Counter Synchronization. (Address Compare and Data read or Compare.)

1 μSEC

Rev. G

3-16

J400 RD/WT SEQ GT
K404-5 RECORD CONT
K402-3 SYNC CONT
K406-7 CHECKWORD CONT
K408-9 E.O.R. CONT
D205 INPUT DATA
(ADDRESS 0000)
D205 INPUT DATA
(ADDRESS 6390₁₆)

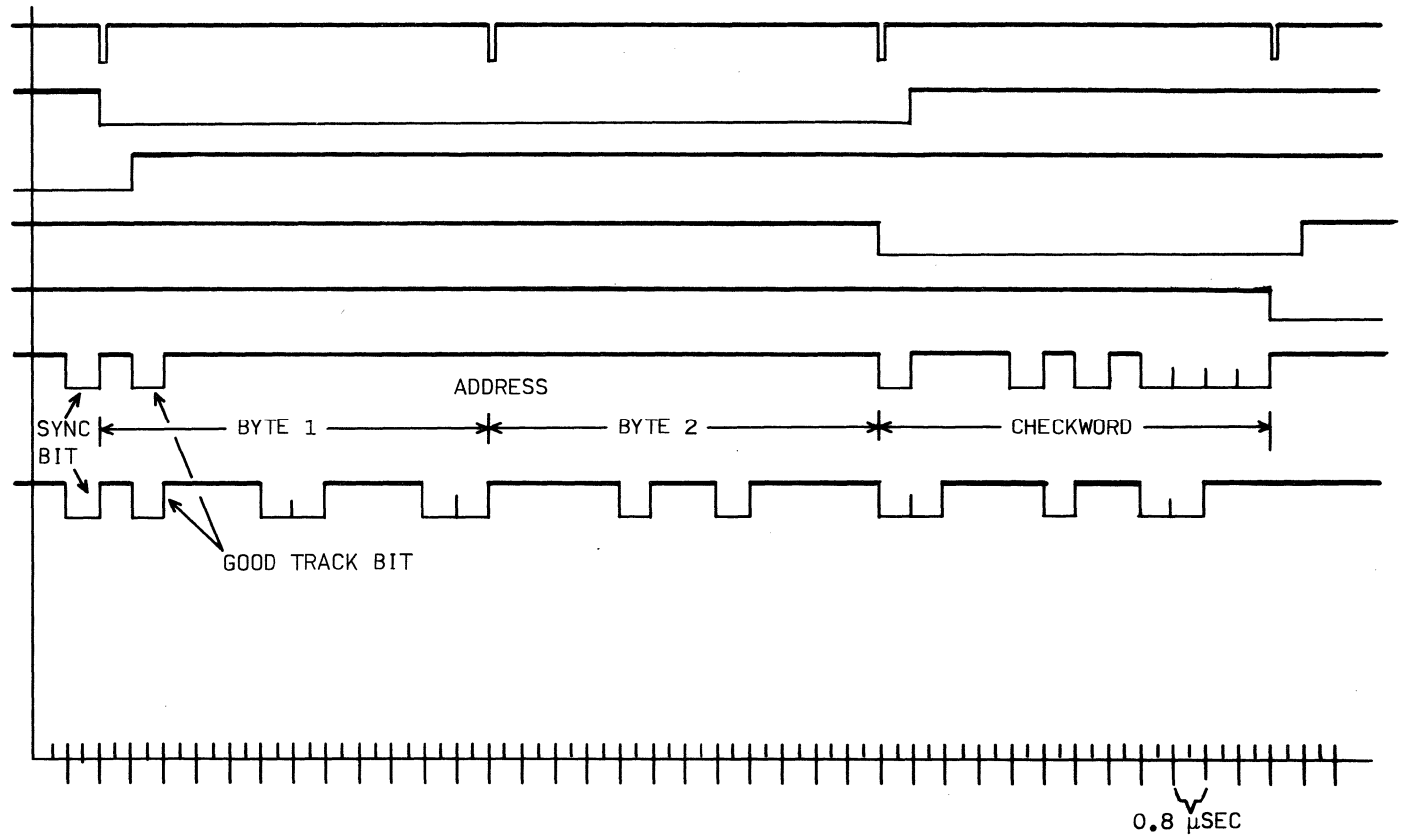
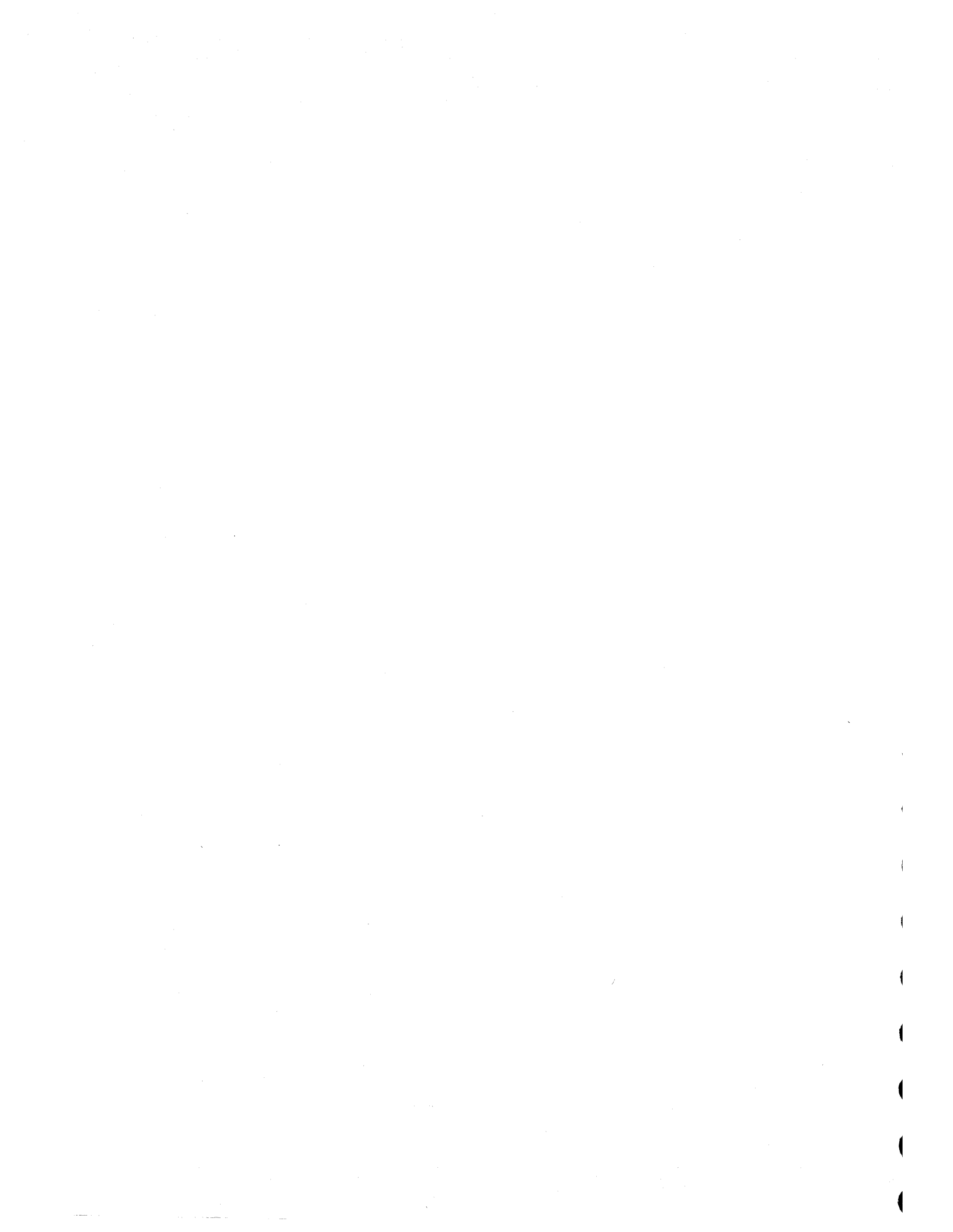


Figure 3-12. Address Read and Typical checkword patterns

PART 4

PARTS LIST



PART 4
PARTS LIST

The parts list provides the identification and ordering data necessary for the replacement of electrical and hardware parts for this equipment. The equipment designation, final assembly number, and equipment name appear at the top of each page. The list is arranged in disassembly order, using levels of assembly to indicate the relationship of parts.

A typical parts list is shown below:

MAG14-C 18588000 D 'MAG14C CENTRAL STORAGE MOD				
L E V E L*	PART NO	REV	DESCRIPTION	ECO-NO** **
1	18515400	B	SYSTEM SUB-ASSY	
2	18074900	J	STOR MODULE ASSY WIRED	IN 064591
3	18074700	G	PL TOP STORAGE MODULE	
3	18074800	H	STACK AND DR DK ASSY WIRED	
4	18075000	G	STACK ASSY WIRED STOR MODULE	
5	63130100	F	PLANE ASSY INNER STOR MODULE	IN 020152
6	63702100	J	BOARD BLANK MEMORY PLANE IN	
3	18541302	00	0000000000000000 0000000000000000	***

Refer to the Literature Distribution Center Catalog for related manuals on printed circuit card assemblies, peripheral cabinets, power supplies, and vendor parts lists necessary to complete a total parts breakdown of the equipment.

*The level of assembly in relation to the final cabinet assembly (2 is the subassembly of level 1, 3 is the subassembly of level 2, etc).

**The ECO-NO on which the part is either added (IN) or deleted (OUT) in the equipment.

***If the description column contains all zeros, this means the drawing is not released. Revisions will show corrections.

1738-A

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
1	18143100	J	CARD PLACEMENT	IN 012513
2	18224900	D	Printed Circuit Card Type 6AAH	IN
2	18225100	A	Printed Circuit Card Type 6AFH	IN
2	18225300	E	PC Type Discriminator	IN
2	18255800	E	Printed Circuit Card Type 6AGH	IN 014982
2	30908201	J	Printed Circuit Card Type CA21	IN
2	30911001	J	Printed Circuit Card Type CA28	IN
2	30921801	J	Printed Circuit Card Type CA55	IN
2	30924601	E	Printed Circuit Card Type CA62B	IN
2	30927801	E	Printed Circuit Card Type CA70	IN 14295
2	30929801	C	Printed Circuit Card Type CA75B	IN
2	30942201	H	Printed Circuit Card Type HA05	IN
2	30944201	C	Printed Circuit Card Type HA10A	IN
2	30944601	A	Printed Circuit Card Type HA11A	IN
2	30947801	B	Printed Circuit Card Type HA19A	IN
2	30952201	B	Printed Circuit Card Type HA30	IN
2	30954201	A	Printed Circuit Card Type HA35	IN
2	30957801	D	Printed Circuit Card Type HA46A	IN
2	30958201	F	Printed Circuit Card Type HA47	IN 016571
2	30958601	G	Printed Circuit Card Type HA48A	IN
2	30960201	A	Printed Circuit Card Type HA53	IN 014295
2	31701801	E	Printed Circuit Card Type K16	IN
2	31702601	F	Printed Circuit Card Type K22	IN
2	31711801	A	Printed Circuit Card Type K23	IN 014778
2	31703001	E	Printed Circuit Card Type K24	IN
2	31703401	E	Printed Circuit Card Type K25	IN
2	31703801	E	Printed Circuit Card Type K26	IN
2	31704201	E	Printed Circuit Card Type K27	IN
2	31709401	D	Printed Circuit Card Type K31	IN
2	31705001	D	Printed Circuit Card Type K32	IN
2	31709801	D	Printed Circuit Card Type K33	IN 014778
2	31705801	D	Printed Circuit Card Type K36	IN
2	31711001	C	Printed Circuit Card Type K69	IN 014445
2	31709001	D	Printed Circuit Card Type K71	IN 016221
1	18145600	L	CHASSIS ASSY -	IN
2	00856604	C	THUMRSREW	IN
2	00857102	B	BRG SLV-FLG NYLON 1/4	IN 015763
2	09005306	A	SCR MACH FH SLOT 1/4	IN 015763
2	09018302	A	SCR MACH PAN HD PHL NO. 5	IN 015763
2	10125103	A	HEXAGON MACHINE SCREW NUTS	IN 015763
2	10125106	A	HEXAGON MACHINE SCREW NUTS	IN 015763
2	10125301	A	HEXAGON NUTS	IN 015763

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
2	10125460	A	82_FH MACH SCR SLOT DR 8-32	IN 015763
2	10125605	A	PLAIN WASHERS	IN 015763
2	10126101	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126102	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126105	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126106	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10127104	A	SCR MACH PAN PHL 4-40	IN 015763
2	10127114	A	SCR MACH PAN PHL 6-32	IN 015763
2	10127144	A	SCR MACH PAN PHL 10-32	IN 015763
2	11412600	B	STRIP, MARKER (01-21)	IN 012513
2	11412700	B	STRIP, MARKER (22-42)	IN 012513
2	17901553	F	5-40 SCR THD ROLL PHL H PAN	IN 016864
2	17901555	F	5-40 SCR THD ROLL PHL H PAN	IN 016864
2	17915800	C	BRACKET RELAY	IN
2	18143200	H	CHASSIS WIRE TAB	IN
3	24500707	J	PIN TAPER	IN 014295
3	24500810	H	INSULATION SLEEVING ELECT	IN 014295
3	24511414	K	LEAD, ELECTRICAL, 14 INCH.	IN 013965
3	24524805	N	TERMINAL, LUG CRIMP-INSULATED	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN 013248
3	24548302	J	WIRE ELECT 24 AWG INSULATED	IN 014295
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN 013248
3	24548304	J	WIRE ELEC STRD INS. UL APPD	IN 014295
3	24548305	J	WIRE ELEC STRD INS. UL APPD	IN 014295
3	24548306	J	WIRE ELEC STRD INS. UL APPD	IN 014295
3	24548308	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548313	J	WIRE ELEC STRD INS. UL APPD	IN 014295
3	24548319	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000902	R	FEMALE CONTACT	IN 015787
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN 015787
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN 015787
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 015787
3	93462111	C	WIRE ELECTRICAL 20 AWG -1	IN
3	93462222	C	WIRE ELECTRICAL 20 AWG -2	IN 014295
3	93462333	C	WIRE ELECTRICAL 20 AWG -3	IN 014295
3	93943001	A	CONTACT, SOCKET, SERIES .090	IN 014295
2	18143400	B	CONN ASSY 61 PIN 1A1	IN
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN

REV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
2	18143500	B	CONN ASSY 61 PIN 1A2	IN
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
2	18143600	C	CONN ASSY 61 PIN 1B1	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	R	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN
3	31000026	R	WIRE, 24GA TWIST, PR. BLU-W/R	IN
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 013844
2	18143700	F	CONN ASSY 61 PIN-1B2	IN
3	00865005	H	GROM STR REL 0.391 ID	IN
3	24500707	J	PIN TAPER	IN 015787
3	24500810	H	INSULATION SLEEVING ELECT	IN 015787
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 015787
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN 013782
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN 013782
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN 013782
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN 013782
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN 014778
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 014778
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 013782
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 013782
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 013782
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 013844
2	18143800	R	CONNECTOR ASSY. 61 PIN 1C1	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN

REV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YE-W/GY	IN
3	31000020	R	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN 016078
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
3	31000029	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
2	18143900	B	CONNECTOR ASSY. 61 PIN 1C2	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YE-W/GY	IN
3	31000020	R	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN

RFV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
2	18144000	D	61 PIN CONN CABLE ASSY 1D1	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN 015787
3	24500810	H	INSULATION SLEEVING ELECT	IN 015787
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YE-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN 016078
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
2	18144100	D	61 PIN CONN CABLE ASSY 1D2	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN 015787
3	24500810	H	INSULATION SLEEVING ELECT	IN 015787
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 015787
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN

REV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000009	R	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	R	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	R	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	R	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	R	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000017	R	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	R	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	R	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	R	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	R	WIRE, 24GA TWIST, PR. GR-W/RD	IN
2	18144200	R	CONNECTOR ASSY 61 PIN 1E1	IN
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	R	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	R	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	R	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	R	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	R	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	R	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	R	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	R	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	R	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	R	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	R	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	R	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	R	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	R	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000017	R	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	R	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	R	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	R	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	R	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	R	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000023	R	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	R	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	R	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	R	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	R	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
3	31000029	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
2	18144300	R	CONNECTOR ASSY 61 PIN 1E2	IN 016513
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

L E V E L	PART-NO	REV	DESCRIPTION	ECN-NO
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
2	18144400	C	CONN ASSY 61 PIN F01	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YF-W/R	IN

REV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000017	R	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	R	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
3	31000029	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN 013782
2	18144500	C	CONNECTOR ASSY 61 PIN 1F2	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	R	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	R	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	R	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YE-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
2	18158800	C	BRACKET ROTARY SWITCH	IN
2	18178000	C	CONTROL PANEL ASSEMBLY	IN
3	18092201	C	SWITCH ROT 2-17 POS 1 POL/SEC	IN
3	18143300	F	CONTROL PANEL, WIRE LIST	IN
4	24500707	J	PIN TAPER	IN 019597
4	24500810	H	INSULATION SLEEVING ELECT	IN 019597
4	24548301	J	WIRE ELECT 24 AWG - 0	IN
4	24548302	J	WIRE ELECT 24 AWG INSULATED	IN 019597

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
4	24548303	J	WIRE ELEC STRD INS. UL APPD	IN 019597
4	24548304	J	WIRE ELEC STRD INS. UL APPD	IN 019597
4	24548305	J	WIRE ELEC STRD INS. UL APPD	IN 019597
4	24548306	J	WIRE ELEC STRD INS. UL APPD	IN
4	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
4	24548308	J	WIRE ELEC STRD INS. UL APPD	IN
4	24548309	J	WIRE ELEC STRD INS. UL APPD	IN
3	18159800	G	PANEL CONTROL	IN
3	24508800	A	SWITCH, TOGGLE 3 POSITION-DPDT	IN
3	24523001	A	SWITCH, PUSH SPST MOMENTARY	IN
3	24533001	F	LIGHT, INDICATOR	IN 013599
3	24535400	C	SWITCH TOGGLE DPDT 2 POSITION	IN 019597
2	18186800	A	ANGLE, MOUNTING RELAY BRACKET	IN
2	18201100	C	CONNECTOR ASSY 3-PIN 1G1	IN 013718
3	17896900	C	CONNECTOR RECEPT 3 CONTACTS	IN
3	24500707	J	PIN TAPER	IN 018932
3	24500801	H	INSULATION SLEEVING ELECT	IN 018932
3	24500810	H	INSULATION SLEEVING ELECT	IN 018932
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
2	18202000	A	PLATE CONNECTOR	IN 013718
2	18213100	B	STRIP MKR WIDE MODIFIED 25-42	IN 012513
3	11412700	B	STRIP, MARKER (22-42)	IN
2	18213200	A	STRIP, MARKER, NAR MOD (01-18)	IN 012513
3	25153100	A	STRIP MARKER NARROW (01-21)	IN
4	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	18213300	A	STRIP MKR WIDE-MOD. (01-18)	IN 012513
3	11412600	B	STRIP, MARKER (01-21)	IN
2	18213400	B	STRIP MKR NARROW MOD. (25-42)	IN 012513
3	25153200	A	STRIP MARKER NARROW (22-42)	IN
4	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	18214100	A	STRIP, MARKER, NARROW 19-24	IN 012513
3	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	18334400	H	LOGIC WIRE TAB	IN 013718
3	24511403	K	LEAD, ELECTRICAL, 3 INCH.	IN 016571
3	24511404	K	LEAD, ELECTRICAL, 4 INCH.	IN 022088
3	24511405	K	LEAD, ELECTRICAL, 5 INCH.	IN 022420
3	24511406	K	LEAD, ELECTRICAL, 6 INCH.	IN 022088
3	24511407	K	LEAD, ELECTRICAL, 7 INCH.	IN 014778
3	24511408	K	LEAD, ELECTRICAL, 8 INCH.	IN 022420
3	24511409	K	LEAD, ELECTRICAL, 9 INCH.	IN 022088
3	24511410	K	LEAD, ELECTRICAL, 10 INCH.	IN 016571
3	24511411	K	LEAD, ELECTRICAL, 11 INCH.	IN 016221
3	24511412	K	LEAD, ELECTRICAL, 12 INCH.	IN 016571
3	24511413	K	LEAD, ELECTRICAL, 13 INCH.	IN 015902
3	24511414	K	LEAD, ELECTRICAL, 14 INCH.	IN 016571
3	24511415	K	LEAD, ELECTRICAL, 15 INCH.	IN 016571
3	24511416	K	LEAD, ELECTRICAL, 16 INCH.	IN 019597
3	24511417	K	LEAD, ELECTRICAL, 17 INCH.	IN 019597
3	24511418	K	LEAD, ELECTRICAL, 18 INCH.	IN 015902
3	24511422	K	LEAD, ELECTRICAL, 22 INCH.	IN 016571
3	24511423	K	LEAD, ELECTRICAL, 23 INCH.	IN 016571
3	24511424	K	LEAD, ELECTRICAL, 24 INCH.	IN 014778
3	24511425	K	LEAD, ELECTRICAL, 25 INCH.	IN 016571
3	24511426	K	LEAD, ELECTRICAL, 26 INCH.	IN
3	24511427	K	LEAD, ELECTRICAL, 27 INCH.	IN
3	24511428	K	LEAD, ELECTRICAL, 28 INCH.	IN 015902
3	24511429	K	LEAD, ELECTRICAL, 29 INCH.	IN 016571
3	24511430	K	LEAD, ELECTRICAL, 30 INCH.	IN 015902

REV M

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	24511431	K	LEAD,ELECTRICAL,31 INCH.	IN
3	24511432	K	LEAD,ELECTRICAL,32 INCH.	IN
3	24511433	K	LEAD,ELECTRICAL,33 INCH.	IN
3	24511434	K	LEAD,ELECTRICAL,34 INCH.	IN
3	24511435	K	LEAD,ELECTRICAL,35 INCH.	IN
2	18338900	A	WL POWER	IN 013818
3	24500702	J	PIN TAPER	IN
3	24500706	J	PIN TAPER	IN
3	24524804	N	TERMINAL, LUG CRIMP-INSULATED	IN
3	24524805	N	TERMINAL, LUG CRIMP-INSULATED	IN
3	24543801	A	JUMPER, TERMINAL STRIP	IN
3	93462000	C	WIRE ELECTRICAL 20 AWG -0	IN
3	93462222	C	WIRE ELECTRICAL 20 AWG -2	IN
3	93462666	C	WIRE ELECTRICAL 20 AWG -6	IN
3	93464000	C	WIRE ELECTRICAL 16 AWG -0	IN
3	93464222	C	WIRE ELECTRICAL 16 AWG -2	IN
3	93464666	C	WIRE ELECTRICAL 16 AWG -6	IN
2	18382600	A	SHIELD CONNECTOR, LETTERED	IN 014234
3	30116500	A	SHIELD CONN RECP ELEC-LONG	IN
2	24501214	A	STRIP TERMINAL	IN 013818
2	24501502	B	STRIP TERMINAL	IN
2	24502214	C	STRIP MARKER 1 THRU 14	IN 013818
2	24527400	G	SWITCH,ROTARY-8 POLE,2-5 POS	IN 013267
2	24547900	B	SOCKET, TUBE 8 CONTACT, OCTAL	IN
2	24550801	J	RELAY, OCTAL SOCKET	IN 014234
2	25153100	A	STRIP MARKER NARROW (01-21)	IN 012513
3	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	25153200	A	STRIP MARKER NARROW (22-42)	IN 012513
3	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	25156700	C	PLATE,RETAINING, ELEC. CONN.-	IN
3	09028002	B	WELD NUT TYPE SN	IN 019827
3	25156701	C	PLATE CRS 16 GA (.059)	IN 019827
2	25156801	C	PL RETAINING ELEC. CONN	IN
2	25159700	A	LATCH, CONNECTOR PANEL	IN
2	25160300	D	MEMBER FR CHASSIS LEFT SIDE	IN
3	30004000	D	AL ALY SPECIAL SHAPED SECTION	IN
2	25160400	D	MEMBER FR CHAS RIGHT SIDE	IN
3	30004000	D	AL ALY SPECIAL SHAPED SECTION	IN
2	25161800	E	BAR MTG CONN-MIDDLE (01-42)	IN
3	18673300	A	ALUM ALLOY BAR EXTRUDED	IN 017378
2	25161900	D	SPACER MODULE MIDDLE (01-42)	IN
3	18683500	B	ALUMINUM ALLOY BAR EXTRUDED	IN 017098
2	25162001	C	MEMBER FR CHAS TOP AND BOT	IN
2	25162002	C	MEMBER FR CHAS TOP AND BOT	IN
2	25184100	A	BRACKET TERMINAL STRIP	IN
2	30000100	K	CONN RECP ELEC 30 SOC CONT	IN 012513
2	30002201	L	CAP FXD ELECTROLYTIC	IN 014270
2	30008700	C	BKT ANGLE CHASSIS FRAME	IN
2	30013802	C	SPACER	IN
2	30092702	E	TERM BLK 20 CAV RED	IN 013718
2	30092706	E	TERM BLK 20 CAV BLUE	IN 013718
2	30092710	E	TERM BLK 20 CAV BLACK	IN 013718
2	30093502	C	CLIP SPRING TENSION	IN 013818

RFV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
2	30093614	A	COVER TERMINAL BOARD	IN 013818
2	30103800	B	PLATE, RETAINING, CABLE	IN
2	30103900	C	STUD, EXTENSION	IN
2	30104600	D	SUPPORT CONN, ASSY	IN
2	30104800	H	HINGE, I/O CONNECTOR PANEL	IN
2	30116600	B	BRACKET MOUNTING SHIELD	IN
2	93947003	B	CONNECTOR (SOCKET HOUSING)	IN
1	25150901	M	PERIPHERAL CAB ASSY TYPE A	IN
2	00859300	A	CATCH FRICTION	IN
2	00859801	A	CATCH FRICTION, CATCH	IN
2	00861000	A	BALL, BEARING	IN
2	00863708	A	CLAMP, CABLE ELECTRICAL	IN
2	09005306	A	SCR MACH FH SLOT 1/4	IN
2	09018404	C	SCR. MACH PAN HD PHL NO. 6	IN
2	09024304	A	SCR MACH HEX HD TRIMMED 1/4	IN
2	09024307	A	SCR MACH HEX HD TRIMMED 1/4	IN
2	09024309	A	SCR MACH HEX HD TRIMMED 1/4	IN
2	09029702	A	SCREW, NICKEL BLACK	IN
2	09031601	A	SCR CAP SOCKET BUT HD NO. 8	IN
2	09040203	A	WASHER LOCK - DISH TYPE	IN
2	09040209	A	WASHER-LOCK-DISH TYPE	IN
2	09040700	A	CABLE, WIRE, COATED	IN
2	10125061	A	HEX HD MACH SCR 10-32	IN
2	10125105	A	HEXAGON MACHINE SCREW NUTS	IN
2	10125106	A	HEXAGON MACHINE SCREW NUTS	IN
2	10125108	A	HEXAGON MACHINE SCREW NUTS	IN
2	10125301	A	HEXAGON NUTS	IN
2	10125444	A	82 FH MACH SCR SLOT DR 6-32	IN
2	10125448	A	82 FH MACH SCR SLOT DR 6-32	IN
2	10125459	A	82 FH MACH SCR SLOT DR 8-32	IN
2	10125493	A	82 FH MACH SCR SLOT DR 10-32	IN
2	10125605	A	PLAIN WASHERS	IN
2	10125606	A	PLAIN WASHERS	IN
2	10125607	A	PLAIN WASHERS	IN
2	10125608	A	PLAIN WASHERS	IN
2	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN
2	10126105	A	INTERNAL TOOTH LOCK WASHERS	IN
2	10126106	A	INTERNAL TOOTH LOCK WASHERS	IN
2	10126401	A	EXTERNAL TOOTH LOCK WASHERS	IN
2	10127113	A	SCR MACH PAN PHL 6-32	IN
2	10127114	A	SCR MACH PAN PHL 6-32	IN
2	10127123	A	SCR MACH PAN PHL 8-32	IN
2	10127124	A	SCR MACH PAN PHL 8-32	IN
2	10127142	A	SCR MACH PAN PHL 10-32	IN
2	10127144	A	SCR MACH PAN PHL 10-32	IN
2	11554202	A	RETAINER CABLE	IN
2	11554302	A	CLAMP, CABLE	IN
2	17901510	F	6-32 SCR THD ROLL PHL H PAN	IN
2	17981114	N	LENS INDICATOR CORPORATE SW	IN 012666
2	23293300	A	EMBLEM, PRODUCT IDENTIFICATION	IN 020805
2	24511766	L	LENS, IND. LIGHT	IN
2	24515807	A	LAMP, INCANDESCENT	IN
2	24524201	A	FILTER LENS - CAP IND LT	IN

REV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
2	24524202	A	FILTER LENS - CAP IND LT	IN
2	24536900	B	CONN RECEPT, ELECT - 3 WIRE	IN 011509
2	24541301	D	PLATE IDENT 1 3/4X3 1/2	IN
2	24543546	U	LENS, IND. LIGHT	IN
2	24543549	U	LENS, IND. LIGHT	IN
2	25150601	D	DOOR ASSY-FRONT	IN
3	00857001	A	CLIP, THUMB	IN
3	00859802	A	CATCH FRICTION, STRIKE	IN
3	00867502	C	LIQ SEALANT-MET PT RED	IN 017859
3	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN
3	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN
3	10126219	A	HEX SCH CAP SCR (1960SER)6-32	IN
3	10127112	A	SCR MACH PAN PHL 6-32	IN
3	10127113	A	SCR MACH PAN PHL 6-32	IN
3	10127115	A	SCR MACH PAN PHL 6-32	IN
3	10127128	A	SCR MACH PAN PHL 8-32	IN
3	17936500	B	EXTRUSION WINDOW MOULDING	IN 013617
3	25155201	F	FRAME OBSERVATION WINDOW	IN
4	00860901	A	EM CS 26 GA	IN
4	30107700	E	FRAME OBSERVATION WINDOW	IN
3	25156000	F	WINDOW OBSERVATION DOOR	IN
4	17936602	D	GLASS WINDOW DOOR	IN
3	25156300	A	MEMBER FRAME DOOR SIDE RH	IN
4	30003300	B	ALUMINUM ALLOY SPECIAL SHAPED	IN
3	25159800	D	MEMBER FRAME DOOR-TOP AND BOT	IN
4	30005400	A	AL ALY DOOR FRAME	IN
3	25159900	D	MEMBER FRAME DOOR-TOP AND BOT	IN
4	30005400	A	AL ALY DOOR FRAME	IN
3	25162400	A	MEMBER FR DR HINGE SIDE LH	IN
4	30003300	B	ALUMINUM ALLOY SPECIAL SHAPED	IN
3	25164400	A	PULL, DOOR	IN
4	11438100	A	EXTRUSION DOOR PULL	IN
3	30107700	E	FRAME OBSERVATION WINDOW	IN
3	30112800	A	SEAL RUBBER SPL SHAPED SECT	IN
2	25150701	C	DOOR ASSY-REAR	IN
3	00859802	A	CATCH FRICTION, STRIKE	IN
3	00867502	C	LIQ SEALANT-MET PT RED	IN 017859
3	09040450	B	SCREW TAPPING THREAD CUTTING	IN 013690
3	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN
3	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN
3	10126219	A	HEX SCH CAP SCR (1960SER)6-32	IN
3	10127112	A	SCR MACH PAN PHL 6-32	IN
3	10127128	A	SCR MACH PAN PHL 8-32	IN
3	25156300	A	MEMBER FRAME DOOR SIDE RH	IN
4	30003300	B	ALUMINUM ALLOY SPECIAL SHAPED	IN
3	25159800	D	MEMBER FRAME DOOR-TOP AND BOT	IN
4	30005400	A	AL ALY DOOR FRAME	IN
3	25159900	D	MEMBER FRAME DOOR-TOP AND BOT	IN
4	30005400	A	AL ALY DOOR FRAME	IN
3	25162400	A	MEMBER FR DR HINGE SIDE LH	IN
4	30003300	B	ALUMINUM ALLOY SPECIAL SHAPED	IN
3	25164400	A	PULL, DOOR	IN
4	11438100	A	EXTRUSION DOOR PULL	IN

REV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

L E V E L	PART-NO	REV	DESCRIPTION	ECO-NO
3	25170701	A	PANEL, REAR DOOR	IN
2	25150801	A	LOWER PANEL ASSY-SHORT	IN
2	25151201	A	RIM LATCH-POWER SUPPLY	IN
2	25151301	E	BLOWER ASSY	IN
3	00813400	A	GROMMET RUBBER 1/4 I.D.	IN
3	00838300	A	NUT U TYPE 8-32 NC	IN
3	00865300	B	CLAMP FAN	IN
3	00866102	C	VANE, ACTUATOR	IN
3	10125103	A	HEXAGON MACHINE SCREW NUTS	IN
3	10125105	A	HEXAGON MACHINE SCREW NUTS	IN
3	10125605	A	PLAIN WASHERS	IN 013274
3	10126101	A	INTERNAL TOOTH LOCK WASHERS	IN
3	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN
3	10127105	A	SCR MACH PAN PHL 4-40	IN
3	10127107	A	SCR MACH PAN PHL 4-40	IN
3	10127113	A	SCR MACH PAN PHL 6-32	IN
3	10127114	A	SCR MACH PAN PHL 6-32	IN
3	10127115	A	SCR MACH PAN PHL 6-32	IN 013274
3	24501204	A	STRIP TERMINAL	IN
3	24502204	C	STRIP MARKER 1 THRU 4	IN
3	24536500	C	FAN AXIAL 270 CFM	IN
3	24548200	B	SWITCH, ROTARY LOW FORCE, N.C	IN
3	25158100	D	PLENUM, LOWER	IN
3	25158200	E	PLENUM UPPER	IN
3	25158301	C	PLATE, FAN MTG	IN
3	25167300	A	BRACKET, THERMOSTAT	IN
3	25167400	A	BRACKET, VELOCITY SWITCH	IN
3	25172600	A	WIRE TAB BLOWER ASSEMBLY	IN
3	30093502	C	CLIP SPRING TENSION	IN 013274
3	30093604	A	COVER TERMINAL BOARD	IN 013274
3	30096206	A	THERMOSTAT BKT MTG 80 DEG CL	IN
3	93464666	C	WIRE ELECTRICAL 16 AWG -6	IN
2	25153600	B	BRACKET BALL MTG	IN
2	25154300	G	FRAME TOP	IN
2	25154400	A	GUSSET TOP	IN
2	25154700	A	GUSSET LOWER	IN
2	25154900	G	FRAME SIDE LEFT	IN
2	25155000	D	FRAME SIDE RIGHT	IN
2	25155100	A	ANGLE MTG-END SKIN	IN
2	25155300	D	PANEL END	IN
2	25155500	B	PANEL TOP HALF	IN
2	25156100	A	BRKT, TOP PANEL	IN
2	25157401	F	BASE HALF	IN
2	25157600	B	LEG, BASE	IN
2	25158401	A	RECEPTACLE, TURNLOCK FASTENER	IN
2	25158501	A	RECEP TURNLOCK FASTENER L.H.	IN
2	25160500	B	BLOCK CABLE RETAINER DOOR	IN
2	25161200	A	COVER, FILTER OPENING	IN
2	25161301	A	FILTER, MODIFICATION	IN
2	25162601	A	ANGLE DOOR LATCH	IN
2	25162602	A	ANGLE DOOR LATCH	IN
2	25175601	J	PANEL ASSY, TEMP MONITOR	IN
3	00838200	J	NUT U TYPE NO. 6-32NC	IN

REV JK

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	09000402	B	SCR MACH BIND HD SLOT NO. 6	IN
3	09026401	A	NUT RING SPLINED	IN
3	10125105	A	HEXAGON MACHINE SCREW NUTS	IN
3	10125106	A	HEXAGON MACHINE SCREW NUTS	IN
3	10125605	A	PLAIN WASHERS	IN
3	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN
3	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN
3	10127112	A	SCR MACH PAN PHL 6-32	IN
3	10127124	A	SCR MACH PAN PHL 8-32	IN
3	24501506	B	STRIP TERMINAL	IN
3	24501510	B	STRIP TERMINAL	IN
3	24513600	E	SWITCH-TOGGLE DPDT	IN
3	24518201	C	CONN FLEX 90 DEG CONDUIT	IN 017620
3	24550602	F	CKT BRK SP 115V 60CPS	IN
3	24550801	J	RELAY, OCTAL SOCKET	IN 014124
3	25168700	A	COVER, CIRCUIT BREAKER	IN
3	25169600	D	PANEL TEMPERATURE MONITOR	IN
3	25177601	D	WIRE TABULATION TEMP MON PNL	IN
4	17620300	C	STRAP CABLE ADJUSTABLE	IN 015294
4	24528613	G	INS SLEEVING, ELEC-BULK	IN 015294
4	24547900	B	SOCKET, TUBE 8 CONTACT, OCTAL	IN 015294
4	93462000	C	WIRE ELECTRICAL 20 AWG -0	IN 015294
4	93462111	C	WIRE ELECTRICAL 20 AWG -1	IN 015294
4	93462222	C	WIRE ELECTRICAL 20 AWG -2	IN 015294
4	93462333	C	WIRE ELECTRICAL 20 AWG -3	IN 015294
4	93462444	C	WIRE ELECTRICAL 20 AWG -4	IN 015294
4	93462555	C	WIRE ELECTRICAL 20 AWG -5	IN 015294
3	30092309	B	THERMOSTAT FL MT 110 DEG OPEN	IN
2	25175701	H	POWER BOX DISTRIBUTION	IN
3	00838300	A	NUT U TYPE 8-32 NC	IN
3	09040202	A	WASHER LOCK - DISH TYPE	IN
3	10125105	A	HEXAGON MACHINE SCREW NUTS	IN
3	10125606	A	PLAIN WASHERS	IN
3	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN
3	10127115	A	SCR MACH PAN PHL 6-32	IN
3	10127120	A	SCR MACH PAN PHL 8-32	IN
3	10127121	A	SCR MACH PAN PHL 8-32	IN
3	10127122	A	SCR MACH PAN PHL 8-32	IN
3	24501601	G	BLOCK, TERMINAL	IN
3	24501603	G	BLOCK, TERMINAL	IN
3	24518101	H	CONN FLEX. CND AND CABLE	IN
3	24518201	C	CONN FLEX 90 DEG CONDUIT	IN
3	24518203	C	CONN FLEX 90 DEG CONDUIT	IN 017660
3	24550700	C	TRANSFORMER 24 VOLT	IN
3	25169300	D	BOX POWER DISTRIBUTION	IN
3	25169400	A	COVER, BOX - PWR DISTRIBUTION	IN
3	25169502	B	BUSS BAR DISTRIBUTION BOX	IN
2	25178001	F	CABLE ASSY-TEMP MONITOR PANEL	IN
3	17620300	C	STRAP CABLE ADJUSTABLE	IN 016640
3	18535801	D	TERMINAL SPADE FLANGED INS	IN 017829
3	24528635	G	INS SLEEVING, ELEC-BULK	IN
3	93462000	C	WIRE ELECTRICAL 20 AWG -0	IN
3	93462222	C	WIRE ELECTRICAL 20 AWG -2	IN

REV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	93462333	C	WIRE ELECTRICAL 20 AWG -3	IN
3	93462444	C	WIRE ELECTRICAL 20 AWG -4	IN
2	25179701	C	WIRE LISTING PERIPH CAB TP A	IN 014018
3	24500804	H	INSULATION SLEEVING ELECT	IN
3	24536103	J	TERMINAL, SOLDERLESS RING	IN
3	24536110	J	TERMINAL, SOLDERLESS RING	IN
3	24543801	A	JUMPER, TERMINAL STRIP	IN
3	93462111	C	WIRE ELECTRICAL 20 AWG -1	IN
3	93462333	C	WIRE ELECTRICAL 20 AWG -3	IN
3	93464999	C	WIRE ELECTRICAL 16 AWG -9	IN
3	93508000	B	WIRE ELECTRICAL 14 AWG -0	IN
3	93508555	B	WIRE ELECTRICAL 14 AWG -5	IN
3	93508999	B	WIRE ELECTRICAL 14 AWG -9	IN
2	25181901	C	ASSY_CABLE PWR DISTRIBUTION	IN
3	17620300	C	STRAP CABLE ADJUSTABLE	IN 016139
3	18535801	D	TERMINAL SPADE FLANGED INS	IN 016139
3	18535804	D	TERMINAL SPADE FLANGED INS	IN 016139
3	24500512	E	CABLE PWR ELECT 16 GA 2 COND	IN 011655
3	24528615	G	INS SLEEVING, ELEC-BULK	IN 011655
3	93462333	C	WIRE ELECTRICAL 20 AWG -3	IN
3	93462555	C	WIRE ELECTRICAL 20 AWG -5	IN
3	93463000	D	WIRE ELECTRICAL 18 AWG -0	IN
3	93463444	D	WIRE ELECTRICAL 18 AWG -4	IN
2	25182102	C	CABLE ASSY-INDICATOR	IN
3	00863702	A	CLAMP, CABLE ELECTRICAL	IN
3	09018404	C	SCR. MACH PAN HD PHL NO. 6	IN
3	10125105	A	HEXAGON MACHINE SCREW NUTS	IN
3	10125605	A	PLAIN WASHERS	IN 013147
3	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN
3	17620300	C	STRAP CABLE ADJUSTABLE	IN 013147
3	24500814	H	INSULATION SLEEVING ELECT	IN
3	24511005	D	FANNING STRIP, RH	IN
3	24511601	D	LAMPHOLDER	IN 013147
3	24528635	G	INS SLEEVING, ELEC-BULK	IN
3	93462000	C	WIRE ELECTRICAL 20 AWG -0	IN
3	93462111	C	WIRE ELECTRICAL 20 AWG -1	IN
3	93462222	C	WIRE ELECTRICAL 20 AWG -2	IN
3	93462444	C	WIRE ELECTRICAL 20 AWG -4	IN
3	93462555	C	WIRE ELECTRICAL 20 AWG -5	IN
2	25184201	E	PLATE TERMINAL PWR CHASSIS	IN 012979
2	25188701	E	PERIPHERAL CAB SUB-ASSY	IN
2	30093414	A	STRIP TERM-MARKED 14 CONT	IN 016950
2	30093502	C	CLIP SPRING TENSION	IN
2	30093614	A	COVER TERMINAL BOARD	IN
2	30108100	F	LEAF, HINGE, LEFT HAND	IN
2	30115701	G	CASE, IDENT. PLATE	IN
1	25151702	K	POWER SUPPLY ASSY, 400 CYCLE	IN 013268
2	00836603	C	RETAINER, NUT, SPEED	IN
2	00852001	H	FAN, MUFFIN	IN 012779
2	00861303	A	NUT, SELF-LOCKING CAP	IN
2	00863801	C	KNOB, CONTROL	IN
2	09005309	A	SCR MACH FH SLOT 1/4	IN
2	09018504	A	SCR MACH PAN HD PHL NO. 8	IN

REV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECN-NO
2	09018632	B	SCR MACH PAN HD PHL NO. 10	IN
2	10125103	A	HEXAGON MACHINE SCREW NUTS	IN
2	10125105	A	HEXAGON MACHINE SCREW NUTS	IN
2	10125106	A	HEXAGON MACHINE SCREW NUTS	IN
2	10125301	A	HEXAGON NUTS	IN
2	10125606	A	PLAIN WASHERS	IN
2	10126101	A	INTERNAL TOOTH LOCK WASHERS	IN
2	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN
2	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN
2	10126105	A	INTERNAL TOOTH LOCK WASHERS	IN
2	10126106	A	INTERNAL TOOTH LOCK WASHERS	IN
2	10127111	A	SCR MACH PAN PHL 6-32	IN
2	10127113	A	SCR MACH PAN PHL 6-32	IN
2	10127115	A	SCR MACH PAN PHL 6-32	IN
2	10127121	A	SCR MACH PAN PHL 8-32	IN
2	10127123	A	SCR MACH PAN PHL 8-32	IN
2	10127124	A	SCR MACH PAN PHL 8-32	IN
2	10127125	A	SCR MACH PAN PHL 8-32	IN
2	18263600	A	POWER SUPPLY IDENT PLATE	IN 014401
2	18877100	G	RECTIFIER ASSEMBLY	IN 018288
3	00855012	A	STANDOFF RUB. WITH THD INSERT	IN 018504
3	17901509	F	6-32 SCR THD ROLL PHL H PAN	IN 020254
3	18700100	C	RECTIFIER, SILICON, 10 AMPERE	IN
3	18876900	B	HEAT SINK	IN
3	93464666	C	WIRE ELECTRICAL 16 AWG -6	IN 018801
2	18877101	G	RECTIFIER ASSEMBLY	IN 018288
3	00855012	A	STANDOFF RUB. WITH THD INSERT	IN 018504
3	17901509	F	6-32 SCR THD ROLL PHL H PAN	IN 020254
3	18700101	C	RECTIFIER SILICON 10 AMP	IN
3	18876900	B	HEAT SINK	IN
3	93464222	C	WIRE ELECTRICAL 16 AWG -2	IN
2	24501208	A	STRIP TERMINAL	IN
2	24501502	B	STRIP TERMINAL	IN
2	24501504	R	STRIP TERMINAL	IN
2	24502208	C	STRIP MARKER 1 THRU 8	IN
2	24503101	F	CONT 15 AMP 3P-NO	IN
2	24508600	A	FUSEHOLDER-INDICATING	IN
2	24512901	B	FUSE FAST ACTION	IN
2	24518101	H	CONN FLEX. CND AND CABLE	IN 012779
2	24518103	H	CONN FLEX. CND AND CABLE	IN 012779
2	25154600	J	FRAME, POWER SUPPLY	IN
2	25157500	A	COVER POWER SUPPLY	IN 012779
2	25160700	B	GRILL, POWER SUPPLY	IN
3	00849900	A	METAL PERE STR SLOTS 1/4X1 1/	IN
2	25160900	B	STRIKE LATCH - PWR SUP	IN
2	25170501	D	WIRE TAB PWR SUP GR 2 400 CYC	IN
3	17620300	C	STRAP CABLE ADJUSTABLE	IN 013656
3	17924502	A	LABEL WIRE MARK 1 THRU 33	IN 013656
3	24500513	E	CABLE PWR ELECT 16 GA 3 COND	IN
3	24500525	E	CABLE PWR ELECT 14 GA 5 COND	IN
3	24528616	G	INS SLEEVING, FLEC-BULK	IN 013656
3	24536103	J	TERMINAL, SOLDERLESS RING	IN
3	24536109	J	TERMINAL, SOLDERLESS RING	IN

REV K

1738 A 17845400 N MODEL 1738-A DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	93463000	D	WIRE ELECTRICAL 18 AWG -0	IN 013656
3	93463222	D	WIRE ELECTRICAL 18 AWG -2	IN 013656
3	93463333	D	WIRE ELECTRICAL 18 AWG -3	IN 013656
3	93463444	D	WIRE ELECTRICAL 18 AWG -4	IN 013656
3	93463666	D	WIRE ELECTRICAL 18 AWG -6	IN 013656
3	93463999	D	WIRE ELECTRICAL 18 AWG -9	IN 013656
3	93464000	C	WIRE ELECTRICAL 16 AWG -0	IN 013656
3	93464222	C	WIRE ELECTRICAL 16 AWG -2	IN 013656
3	93464444	C	WIRE ELECTRICAL 16 AWG -4	IN 013656
3	93464555	C	WIRE ELECTRICAL 16 AWG -5	IN 013656
3	93464666	C	WIRE ELECTRICAL 16 AWG -6	IN 013656
3	93464999	C	WIRE ELECTRICAL 16 AWG -9	IN 013656
2	25185901	D	WIRE LISTING-CABLE ASSY	IN 012779
3	17620300	C	STRAP CABLE ADJUSTABLE	IN 012728
3	18535813	D	TERMINAL SPADE FLANGED INS	IN
3	18535820	D	TERM SPADE FLGD INSULATED	IN
3	24528638	G	INS SLEEVING, ELEC-BULK	IN 014394
3	93464000	C	WIRE ELECTRICAL 16 AWG -0	IN 014394
3	93464222	C	WIRE ELECTRICAL 16 AWG -2	IN 014394
3	93464666	C	WIRE ELECTRICAL 16 AWG -6	IN 014394
2	30002000	E	TRANSFORMER VARIABLE-POWER	IN
2	30002100	F	REACTOR-TRANSFORMER-16V	IN
2	30002503	J	CIRCUIT BREAKER 3 POLE AUX SW	IN
2	30091301	H	VOLTMETER 25 VDC	IN 012779
2	30108301	K	LEAF HINGE L.H.	IN
2	52305600	A	P.S. 6635 +12V 370-500 HZ R.H.	IN 019974
2	60120700	K	CONTROL DATA POWER SUPPLIES	IN 019974
1	25184401	C	PWR CABLE ASSY 1X2 CHASSIS	IN 012314
2	17620300	C	STRAP CABLE ADJUSTABLE	IN
2	24524804	N	TERMINAL, LUG CRIMP-INSULATED	IN
2	24524805	N	TERMINAL, LUG CRIMP-INSULATED	IN
2	24528661	G	INS SLEEVING, ELEC-BULK	IN 012865
2	93463222	D	WIRE ELECTRICAL 18 AWG -2	IN
2	93463666	D	WIRE ELECTRICAL 18 AWG -6	IN
2	93464000	C	WIRE ELECTRICAL 16 AWG -0	IN
2	93464222	C	WIRE ELECTRICAL 16 AWG -2	IN
2	93464666	C	WIRE ELECTRICAL 16 AWG -6	IN

REV K

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1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
1	00812000	A	BUMPER STEM	IN 016666
1	00836610	C	RETAINER, NUT, SPEED	IN 016666
1	00836617	C	RETAINER, NUT, SPEED	IN 016666
1	00843515	D	RING, RETAINING	IN
1	00851418	A	SCREW SHOULDER	IN
1	00856909	A	SPG COMPR 1 L	IN
1	00863709	A	CLAMP, CABLE ELECTRICAL	IN 016666
1	00863713	A	CLAMP, CABLE ELECTRICAL	IN 016666
1	00865702	D	SPACER, NONMETALLIC	IN 016666
1	00867203	A	PAD LEV THD STUD 5/8-11 UNC2A	IN
1	09005306	A	SCR MACH FH SLOT 1/4	IN 016666
1	09018301	A	SCR MACH PAN HD PHL NO. 5	IN 016666
1	09024309	A	SCR MACH HEX HD TRIMMED 1/4	IN 016666
1	09027806	H	WASHER, NONMETALLIC	IN 016666
1	10125105	A	HEXAGON MACHINE SCREW NUTS	IN 016666
1	10125106	A	HEXAGON MACHINE SCREW NUTS	IN 016666
1	10125108	A	HEXAGON MACHINE SCREW NUTS	IN 016666
1	10125301	A	HEXAGON NUTS	IN 016666
1	10125606	A	PLAIN WASHERS	IN 016666
1	10125607	A	PLAIN WASHERS	IN 016666
1	10125608	A	PLAIN WASHERS	IN 016666
1	10126102	A	INTERNAL TOOTH LOCK WASHERS	IN 016666
1	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN 016666
1	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN 016666
1	10126105	A	INTERNAL TOOTH LOCK WASHERS	IN 016666
1	10126106	A	INTERNAL TOOTH LOCK WASHERS	IN 016666
1	10127113	A	SCR MACH PAN PHL 6-32	IN 016666
1	10127122	A	SCR MACH PAN PHL 8-32	IN 016666
1	10127142	A	SCR MACH PAN PHL 10-32	IN 016666
1	10127143	A	SCR MACH PAN PHL 10-32	IN 016666
1	10127152	A	SCR MACH PAN PHL 1/4-20	IN 016666
1	10127153	A	SCR MACH PAN PHL 1/4-20	IN 016666
1	17710800	D	PLATE IDENT COMPUTER DEV DIV	IN
1	17883209	H	BUSHING NYLON FLANGED	IN
1	17915800	C	BRACKET RELAY	IN 016666
1	18015100	C	TOP VERT CABINET	IN
1	18044900	E	CHANNEL MTG TOP VERT CABINET	IN
2	09028004	B	WELD NUT TYPE SN	IN 020061
2	18044901	E	FRAME CRS 18 GA (.047)	IN 020061
1	18088001	C	DOOR FRONT VERTICAL CABINET	IN
1	18088100	B	BRACKET DOOR	IN
1	18088300	D	PANEL DISTRIBUTION BOX	IN
1	18088400	C	COVER DISTRIBUTION BOX VERT	IN
1	18088500	C	PANAL, SIDE	IN
1	18098200	F	FRAME WELDING AND DRILLING	IN
1	18100300	R	COVER CABLE AREA	IN
1	18107500	C	MT-POWER MODULE VERTICAL	IN
2	09028004	R	WELD NUT TYPE SN	IN 019823
2	18107501	C	PANEL CRS 16 GA (.059) CRS	IN 019823
2	18107502	C	ANGLE CRS 14 GA (.074)	IN 019823
1	18107700	A	SHIELD	IN
1	18143100	J	CARD PLACEMENT	IN 014986

RFV K

1738 B

18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECN-NO
2	18224900	D	Printed Circuit Card Type 6AAH	IN
2	18225100	A	Printed Circuit Card Type 6AFH	IN
2	18225300	E	PC Type Discriminator	IN
2	18255800	E	Printed Circuit Card Type 6AGH	IN 014982
2	30908201	J	Printed Circuit Card Type CA21	IN
2	30911001	J	Printed Circuit Card Type CA28	IN
2	30921801	J	Printed Circuit Card Type CA55	IN
2	30924601	E	Printed Circuit Card Type CA62B	IN
2	30927801	E	Printed Circuit Card Type CA70	IN 14295
2	30929801	C	Printed Circuit Card Type CA75B	IN
2	30942201	H	Printed Circuit Card Type HA05	IN
2	30944201	C	Printed Circuit Card Type HA10A	IN
2	30944601	A	Printed Circuit Card Type HA11A	IN
2	30947801	B	Printed Circuit Card Type HA19A	IN
2	30952201	B	Printed Circuit Card Type HA30	IN
2	30954201	A	Printed Circuit Card Type HA35	IN
2	30957801	D	Printed Circuit Card Type HA46A	IN
2	30958201	F	Printed Circuit Card Type HA47	IN 016571
2	30958601	G	Printed Circuit Card Type HA48A	IN
2	30960201	A	Printed Circuit Card Type HA53	IN 014295
2	31701801	E	Printed Circuit Card Type K16	IN
2	31702601	F	Printed Circuit Card Type K22	IN
2	31711801	A	Printed Circuit Card Type K23	IN 014778
2	31703001	E	Printed Circuit Card Type K24	IN
2	31703401	E	Printed Circuit Card Type K25	IN
2	31703801	E	Printed Circuit Card Type K26	IN
2	31704201	E	Printed Circuit Card Type K27	IN
2	31709401	D	Printed Circuit Card Type K31	IN
2	31705001	D	Printed Circuit Card Type K32	IN
2	31709801	D	Printed Circuit Card Type K33	IN 014778
2	31705801	D	Printed Circuit Card Type K36	IN
2	31711001	C	Printed Circuit Card Type K69	IN 014445
2	31709001	D	Printed Circuit Card Type K71	IN 016221

1	18145600	L	CHASSIS ASSY	IN
2	00856604	C	THUMBSCREW	IN
2	00857102	B	BRG SLV-FLG NYLON 1/4	IN 015763
2	09005306	A	SCR MACH FH SLOT 1/4	IN 015763
2	09018302	A	SCR MACH PAN HD PHL NO. 5	IN 015763
2	10125103	A	HEXAGON MACHINE SCREW NUTS	IN 015763
2	10125106	A	HEXAGON MACHINE SCREW NUTS	IN 015763
2	10125301	A	HEXAGON NUTS	IN 015763
2	10125460	A	82_FH MACH SCR SLOT DR 8-32	IN 015763
2	10125605	A	PLAIN WASHERS	IN 015763

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
2	10126101	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126102	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126105	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126106	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10127104	A	SCR MACH PAN PHL 4-40	IN 015763
2	10127114	A	SCR MACH PAN PHL 6-32	IN 015763
2	10127144	A	SCR MACH PAN PHL 10-32	IN 015763
2	11412600	B	STRIP, MARKER (01-21)	IN 012513
2	11412700	B	STRIP, MARKER (22-42)	IN 012513
2	17901553	F	5-40 SCR THD ROLL PHL H PAN	IN 016864
2	17901555	F	5-40 SCR THD ROLL PHL H PAN	IN 016864
2	17915800	C	BRACKET RELAY	IN
2	18143200	H	CHASSIS WIRE TAB	IN
3	24500707	J	PIN TAPER	IN 014295
3	24500810	H	INSULATION SLEEVING ELECT	IN 014295
3	24511414	K	LEAD, ELECTRICAL, 14 INCH.	IN 013965
3	24524805	N	TERMINAL, LUG CRIMP-INSULATED	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN 013248
3	24548302	J	WIRE ELECT 24 AWG INSULATED	IN 014295
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN 013248
3	24548304	J	WIRE ELEC STRD INS. UL APPD	IN 014295
3	24548305	J	WIRE ELEC STRD INS. UL APPD	IN 014295
3	24548306	J	WIRE ELEC STRD INS. UL APPD	IN 014295
3	24548308	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548313	J	WIRE ELEC STRD INS. UL APPD	IN 014295
3	24548319	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000902	R	FEMALE CONTACT	IN 015787
3	31000016	B	WIRE, 24GA TWIST, PR. YF-W/R	IN 015787
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN 015787
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 015787
3	93462111	C	WIRE ELECTRICAL 20 AWG -1	IN
3	93462222	C	WIRE ELECTRICAL 20 AWG -2	IN 014295
3	93462333	C	WIRE ELECTRICAL 20 AWG -3	IN 014295
3	93943001	A	CONTACT, SOCKET, SERIES .090	IN 014295
2	18143400	B	CONN ASSY 61 PIN 1A1	IN
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

L E V E L	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
2	18143500	B	CONN ASSY 61 PIN 1A2	IN
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
2	18143600	C	CONN ASSY 61 PIN 1B1	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 013844
2	18143700	F	CONN ASSY 61 PIN-182	IN
3	00865005	H	GROM STR REL 0.391 ID	IN
3	24500707	J	PIN TAPER	IN 015787
3	24500810	H	INSULATION SLEEVING ELECT	IN 015787
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 015787
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN 013782
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN 013782
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN 013782
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN 013782
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN 014778
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 014778
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 013782
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 013782
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 013782
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 013844
2	18143800	B	CONNECTOR ASSY. 61 PIN 1C1	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN

RFV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YE-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN 016078
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
2	18143900	B	CONNECTOR ASSY. 61 PIN IC2	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELEC 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YE-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
2	18144000	D	61 PIN CONN CABLE ASSY 101	IN
3	00865004	H	GROM STR REL 0.468 ID	IN

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECC-NO
3	24500707	J	PIN TAPER	IN 015787
3	24500810	H	INSULATION SLEEVING ELECT	IN 015787
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	R	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	R	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	R	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000017	R	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	R	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000019	R	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	R	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	R	WIRE, 24GA TWIST, PR. GR-W/YE	IN 016078
3	31000023	R	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	R	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
2	18144100	D	61 PIN CONN CABLE ASSY 102	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN 015787
3	24500810	H	INSULATION SLEEVING ELECT	IN 015787
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 015787
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	R	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YE-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
2	18144200	B	CONNECTOR ASSY 61 PIN 1E1	IN
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
2	18144300	B	CONNECTOR ASSY 61 PIN 1E2	IN 012513
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
2	18144400	C	CONN ASSY 61 PIN FO1	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000019	B	WIRE, 24GA TWIST, PR. YE-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 013782
2	18144500	C	CONNECTOR ASSY 61 PIN 1F2	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YE-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
2	18158800	C	BRACKET ROTARY SWITCH	IN
2	18178000	C	CONTROL PANEL ASSEMBLY	IN
3	18092201	C	SWITCH ROT 2-17 POS 1 POL/SEC	IN
3	18143300	E	CONTROL PANEL, WIRE LIST	IN
4	24500707	J	PIN TAPER	IN 019597
4	24500810	H	INSULATION SLEEVING ELECT	IN 019597
4	24548301	J	WIRE ELECT 24 AWG - 0	IN
4	24548302	J	WIRE ELECT 24 AWG INSULATED	IN 019597
4	24548303	J	WIRE ELEC STRD INS. UL APPD	IN 019597
4	24548304	J	WIRE ELEC STRD INS. UL APPD	IN 019597

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
4	24548305	J	WIRE ELEC STRD INS. UL APPD	IN 019597
4	24548306	J	WIRE ELEC STRD INS. UL APPD	IN
4	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
4	24548308	J	WIRE ELEC STRD INS. UL APPD	IN
4	24548309	J	WIRE ELEC STRD INS. UL APPD	IN
3	18159800	G	PANEL CONTROL	IN
3	24508800	A	SWITCH, TOGGLE 3 POSITION-DPDT	IN
3	24523001	A	SWITCH, PUSH SPST MOMENTARY	IN
3	24533001	F	LIGHT, INDICATOR	IN 013599
3	24535400	C	SWITCH TOGGLE DPDT 2 POSITION	IN 019597
2	18186800	A	ANGLE, MOUNTING RELAY BRACKET	IN
2	18201100	C	CONNECTOR ASSY 3-PIN 1G1	IN 013718
3	17896900	C	CONNECTOR RECEPT 3 CONTACTS	IN
3	24500707	J	PIN TAPER	IN 018932
3	24500801	H	INSULATION SLEEVING ELECT	IN 018932
3	24500810	H	INSULATION SLEEVING ELECT	IN 018932
3	31000001	R	WIRE, 24GA TWIST, PR. BR-W/RD	IN
2	18202000	A	PLATE CONNECTOR	IN 013718
2	18213100	B	STRIP MKR WIDE MODIFIED 25-42	IN 012513
3	11412700	B	STRIP, MARKER (22-42)	IN
2	18213200	A	STRIP, MARKER, NAR MOD (01-18)	IN 012513
3	25153100	A	STRIP MARKER NARROW (01-21)	IN
4	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	18213300	A	STRIP MKR WIDE-MOD. (01-18)	IN 012513
3	11412600	B	STRIP, MARKER (01-21)	IN
2	18213400	B	STRIP MKR NARROW MOD. (25-42)	IN 012513
3	25153200	A	STRIP MARKER NARROW (22-42)	IN
4	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	18214100	A	STRIP, MARKER, NARROW 19-24	IN 012513
3	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	18334400	H	LOGIC WIRE TAB	IN 013718
3	24511403	K	LEAD, ELECTRICAL, 3 INCH.	IN 016571
3	24511404	K	LEAD, ELECTRICAL, 4 INCH.	IN 022088
3	24511405	K	LEAD, ELECTRICAL, 5 INCH.	IN 022420
3	24511406	K	LEAD, ELECTRICAL, 6 INCH.	IN 022088
3	24511407	K	LEAD, ELECTRICAL, 7 INCH.	IN 014778
3	24511408	K	LEAD, ELECTRICAL, 8 INCH.	IN 022420
3	24511409	K	LEAD, ELECTRICAL, 9 INCH.	IN 022088
3	24511410	K	LEAD, ELECTRICAL, 10 INCH.	IN 016571
3	24511411	K	LEAD, ELECTRICAL, 11 INCH.	IN 016221
3	24511412	K	LEAD, ELECTRICAL, 12 INCH.	IN 016571
3	24511413	K	LEAD, ELECTRICAL, 13 INCH.	IN 015902
3	24511414	K	LEAD, ELECTRICAL, 14 INCH.	IN 016571
3	24511415	K	LEAD, ELECTRICAL, 15 INCH.	IN 016571
3	24511416	K	LEAD, ELECTRICAL, 16 INCH.	IN 019597
3	24511417	K	LEAD, ELECTRICAL, 17 INCH.	IN 019597
3	24511418	K	LEAD, ELECTRICAL, 18 INCH.	IN 015902
3	24511422	K	LEAD, ELECTRICAL, 22 INCH.	IN 016571
3	24511423	K	LEAD, ELECTRICAL, 23 INCH.	IN 016571
3	24511424	K	LEAD, ELECTRICAL, 24 INCH.	IN 014778
3	24511425	K	LEAD, ELECTRICAL, 25 INCH.	IN 016571
3	24511426	K	LEAD, ELECTRICAL, 26 INCH.	IN
3	24511427	K	LEAD, ELECTRICAL, 27 INCH.	IN
3	24511428	K	LEAD, ELECTRICAL, 28 INCH.	IN 015902
3	24511429	K	LEAD, ELECTRICAL, 29 INCH.	IN 016571
3	24511430	K	LEAD, ELECTRICAL, 30 INCH.	IN 015902
3	24511431	K	LEAD, ELECTRICAL, 31 INCH.	IN
3	24511432	K	LEAD, ELECTRICAL, 32 INCH.	IN

REV M

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	24511433	K	LEAD,ELECTRICAL,33 INCH.	IN
3	24511434	K	LEAD,ELECTRICAL,34 INCH.	IN
3	24511435	K	LEAD,ELECTRICAL,35 INCH.	IN
2	18338900	A	WL POWER	IN 013818
3	24500702	J	PIN TAPER	IN
3	24500706	J	PIN TAPER	IN
3	24524804	N	TERMINAL, LUG CRIMP-INSULATED	IN
3	24524805	N	TERMINAL, LUG CRIMP-INSULATED	IN
3	24543801	A	JUMPER, TERMINAL STRIP	IN
3	93462000	C	WIRE ELECTRICAL 20 AWG -0	IN
3	93462222	C	WIRE ELECTRICAL 20 AWG -2	IN
3	93462666	C	WIRE ELECTRICAL 20 AWG -6	IN
3	93464000	C	WIRE ELECTRICAL 16 AWG -0	IN
3	93464222	C	WIRE ELECTRICAL 16 AWG -2	IN
3	93464666	C	WIRE ELECTRICAL 16 AWG -6	IN
2	18382600	A	SHIELD CONNECTOR, LETTERED	IN 014234
3	30116500	A	SHIELD CONN RECP ELEC-LONG	IN
2	24501214	A	STRIP TERMINAL	IN 013818
2	24501502	B	STRIP TERMINAL	IN
2	24502214	C	STRIP MARKER 1 THRU 14	IN 013818
2	24527400	G	SWITCH,ROTARY-8 POLE,2-5 POS	IN 013267
2	24547900	B	SOCKET, TUBE 8 CONTACT, OCTAL	IN
2	24550801	J	RELAY, OCTAL SOCKET	IN 014234
2	25153100	A	STRIP MARKER NARROW (01-21)	IN 012513
3	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	25153200	A	STRIP MARKER NARROW (22-42)	IN 012513
3	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	25156700	C	PLATE,RETAINING, ELEC. CONN.-	IN
3	09028002	B	WELD NUT TYPE SN	IN 019827
3	25156701	C	PLATE CRS 16 GA (.059)	IN 019827
2	25156801	C	PL RETAINING ELEC. CONN	IN
2	25159700	A	LATCH, CONNECTOR PANEL	IN
2	25160300	D	MEMBER FR CHASSIS LEFT SIDE	IN
3	30004000	D	AL ALY SPECIAL SHAPED SECTION	IN
2	25160400	D	MEMBER FR CHAS RIGHT SIDE	IN
3	30004000	D	AL ALY SPECIAL SHAPED SECTION	IN
2	25161800	E	BAR MTG CONN-MIDDLE (01-42)	IN
3	18673300	A	ALUM ALLOY BAR EXTRUDED	IN 017378
2	25161900	D	SPACER MODULE MIDDLE (01-42)	IN
3	18683500	B	ALUMINUM ALLOY BAR EXTRUDED	IN 017098
2	25162001	C	MEMBER FR CHAS TOP AND BOT	IN
2	25162002	C	MEMBER FR CHAS TOP AND BOT	IN
2	25184100	A	BRACKET TERMINAL STRIP	IN
2	30000100	K	CONN RECP ELEC 30 SOC CONT	IN 012513
2	30002201	L	CAP FXD ELECTROLYTIC	IN 014270
2	30008700	C	BKT ANGLE CHASSIS FRAME	IN
2	30013802	C	SPACER	IN
2	30092702	E	TERM BLK 20 CAV RED	IN 013718
2	30092706	E	TERM BLK 20 CAV BLUE	IN 013718
2	30092710	E	TERM BLK 20 CAV BLACK	IN 013718
2	30093502	C	CLIP SPRING TENSION	IN 013818
2	30093614	A	COVER TERMINAL BOARD	IN 013818
2	30103800	B	PLATE, RETAINING, CABLE	IN

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
2	30103900	C	STUD, EXTENSION	IN
2	30104600	D	SUPPORT CONN, ASSY	IN
2	30104800	H	HINGE, I/O CONNECTOR PANEL	IN
2	30116600	B	BRACKET MOUNTING SHIELD	IN
2	93947003	B	CONNECTOR (SOCKET HOUSING)	IN
1	18153100	B	SLIDE VERT CAB	IN 016666
1	18167400	D	DOOR, REAR	IN
1	18173900	A	ACTUATOR, DOOR	IN
1	18174700	A	LATCH	IN
1	18176800	A	ANGLE, DOOR CATCH VERTICAL	IN
1	18201903	A	CABLE ASSY 3 PIN	IN
2	17897000	B	CONN PLUG 3 CON SOLID SHELL	IN
2	17944011	B	LABEL CABLE LENGTH MARKING	IN
2	18157700	B	CABLE 22 GA TWIST PAIR SHIELD	IN
2	24530202	B	CLAMP, CABLE	IN
1	18213700	C	CABLE ASSY TEMP MONITOR BOX	IN
2	17620300	C	STRAP CABLE ADJUSTABLE	IN
2	24524804	N	TERMINAL, LUG CRIMP-INSULATED	IN
2	24528639	G	INS SLEEVING, ELEC-BULK	IN
2	24534806	A	SHIELD, ELECT, BRAIDED-BULK	IN 017179
2	93508444	B	WIRE ELECTRICAL 14 AWG -4	IN 013769
2	93508555	B	WIRE ELECTRICAL 14 AWG -5	IN 013769
2	93508999	B	WIRE ELECTRICAL 14 AWG -9	IN 013769
1	18213800	B	CABLE ASSY POWER CONTROL PNL	IN
2	17620300	C	STRAP CABLE ADJUSTABLE	IN
2	24524804	N	TERMINAL, LUG CRIMP-INSULATED	IN
2	24524805	N	TERMINAL, LUG CRIMP-INSULATED	IN
2	24528639	G	INS SLEEVING, ELEC-BULK	IN
2	93462444	C	WIRE ELECTRICAL 20 AWG -4	IN 013770
2	93508444	B	WIRE ELECTRICAL 14 AWG -4	IN
2	93508555	B	WIRE ELECTRICAL 14 AWG -5	IN 013770
2	93508999	B	WIRE ELECTRICAL 14 AWG -9	IN
1	18215400	B	HAT SECT VERT+HORIZ CAB	IN 016666
2	09028004	B	WELD NUT TYPE SN	IN 020205
2	18215401	B	CHANNEL, CRS 16 GA (.059)	IN 020205
1	18218900	B	CABLE ASSY BLOWER POWER	IN
2	17620300	C	STRAP CABLE ADJUSTABLE	IN
2	17763803	C	CONN PLUG POLARIZED 6 CONTACT	IN 013724
2	24524804	N	TERMINAL, LUG CRIMP-INSULATED	IN
2	24524805	N	TERMINAL, LUG CRIMP-INSULATED	IN
2	24528636	G	INS SLEEVING, ELEC-BULK	IN
2	24552336	D	INSULATION SLEEVING, 5/8 L, U/L	IN
2	93462444	C	WIRE ELECTRICAL 20 AWG -4	IN
2	93464444	C	WIRE ELECTRICAL 16 AWG -4	IN
2	93464555	C	WIRE ELECTRICAL 16 AWG -5	IN
1	18318800	A	AIR DUCT BLOWER EXTENSION	IN
1	18339900	D	PWR CONTROL ASSY 20 VOLT	IN
2	00860803	D	TRACK SLIDING TELESCOPE	IN
2	00863801	C	KNOB, CONTROL	IN
2	10125105	A	HEXAGON MACHINE SCREW NUTS	IN 015763
2	10125106	A	HEXAGON MACHINE SCREW NUTS	IN 015763
2	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN 015763

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECN-NO
2	10126105	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10127111	A	SCR MACH PAN PHL 6-32	IN 015763
2	10127113	A	SCR MACH PAN PHL 6-32	IN 015763
2	10127120	A	SCR MACH PAN PHL 8-32	IN 015763
2	10127122	A	SCR MACH PAN PHL 8-32	IN 015763
2	10127124	A	SCR MACH PAN PHL 8-32	IN 015763
2	10127142	A	SCR MACH PAN PHL 10-32	IN 015763
2	17849400	C	PLATE METER	IN
2	18155800	A	WIRE DIA-POWER CONTROL PANEL	IN
2	18155900	C	WIRE LIST POWER CONTROL PANEL	IN
3	17620300	C	STRAP CABLE ADJUSTABLE	IN
3	18535810	D	TERMINAL SPADE FLANGED INS	IN 016040
3	18535813	D	TERMINAL SPADE FLANGED INS	IN 016040
3	24524808	N	TERMINAL, LUG CRIMP-INSULATED	IN 015763
3	24524810	N	TERMINAL LUG CRIMP-INS	IN 015763
3	93462444	C	WIRE ELECTRICAL 20 AWG -4	IN 015763
3	93463000	D	WIRE ELECTRICAL 18 AWG -0	IN 015763
3	93463222	D	WIRE ELECTRICAL 18 AWG -2	IN 015763
3	93463444	D	WIRE ELECTRICAL 18 AWG -4	IN 015763
3	93463666	D	WIRE ELECTRICAL 18 AWG -6	IN 015763
3	93508444	B	WIRE ELECTRICAL 14 AWG -4	IN 015763
3	93508999	B	WIRE ELECTRICAL 14 AWG -9	IN 015763
2	18215100	B	BRKT RH POWER CONTROL ASSY	IN
3	09028002	B	WELD NUT TYPE SN	IN 020205
3	18215101	B	ANGLE CRS, 14 GA (.074)	IN 020205
2	18215200	C	COVER (POWER CONTROL BOX)	IN 018062
3	18215201	C	COVER CRS 18 GA (.047)	IN 019448
3	18215202	C	ANGLE CRS 18 GA (.047)	IN 019448
2	18215300	B	BRKT LH POWER CONTROL ASSY	IN
3	09028002	B	WELD NUT TYPE SN	IN 019805
3	18215301	B	BRACKET CRS 14 GA (.074)	IN 019805
2	18340100	A	BOX PWR CONTROL 20 VOLT	IN
2	24501204	A	STRIP TERMINAL	IN
2	24501206	A	STRIP TERMINAL	IN
2	24502204	C	STRIP MARKER 1 THRU 4	IN
2	24502206	C	STRIP MARKER 1 THRU 6	IN
2	24518100	H	CONN FLEX. CND AND CABLE	IN
2	24547504	B	PLATE, WARNING	IN
2	24571900	B	SW TOGGLE 2 POS DPDT U/L	IN
2	30002000	E	TRANSFORMER VARIABLE-POWER	IN
2	30002503	J	CIRCUIT BREAKER 3 POLE AUX SW	IN
2	30091301	H	VOLTMETER 25 VDC	IN
1	18340200	D	POWER MODULE ASSY -20 VOLT	IN
2	00838200	J	NUT U TYPE NO. 6-32NC	IN
2	00839501	D	GROM RUB 1/8 GROOVE 3/8 DIA	IN
2	09027803	H	WASHER, NONMETALLIC	IN
2	10125605	A	PLAIN WASHERS	IN
2	10127113	A	SCR MACH PAN PHL 6-32	IN
2	17763801	C	CONN PLUG POLARIZED 6 CONTACT	IN
2	17883206	H	BUSHING NYLON FLANGED	IN
2	18100100	A	BRACKET RECTIFIER	IN
2	18263600	A	POWER SUPPLY IDENT PLATE	IN 020597
2	18339600	C	COV PWR MODULE 20 VOLT 1738	IN

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	00849900	A	METAL PERF STR SLOTS 1/4X1 1/	IN
2	18339700	E	BASE, POWER MODULE 20 VOLT	IN
3	18339701	E	PLATE CRS 14GA (.074)	IN 019408
3	18339702	E	CHANNEL CRS 16GA (.059)	IN 019408
3	18339703	E	CHANNEL CRS 16GA (.059)	IN 019408
2	18340800	F	XMFR +IND 20V, 12 AMP 400 HZ	IN
2	18342800	A	WL -20 VOLT PWR MODULE	IN
3	17620300	C	STRAP CABLE ADJUSTABLE	IN
3	24524804	N	TERMINAL, LUG CRIMP-INSULATED	IN
3	24528635	G	INS SLEEVING, ELEC-BULK	IN
3	24536116	J	TERMINAL, SOLDERLESS RING	IN
3	24552314	D	INS SLV, 5/8 LG 10 AWG BLK	IN
3	24552318	D	INS SLV, 5/8 LG 6 AWG BLK	IN
3	24552320	D	INS SLV, 5/8 LG 4 AWG BLK	IN
3	24552322	D	INS SLV, 5/8 LG 2 AWG BLK	IN
3	93464444	C	WIRE ELECTRICAL 16 AWG -4	IN
3	93464666	C	WIRE ELECTRICAL 16 AWG -6	IN
3	93508000	B	WIRE ELECTRICAL 14 AWG -0	IN
3	93508666	B	WIRE ELECTRICAL 14 AWG -6	IN
2	24501502	B	STRIP TERMINAL	IN
2	24554601	B	CONNECTOR STRAIN RELIEF	IN 014420
2	24561603	D	RECTIFIER SILICON 40 AMP	IN
2	60120700	K	CONTROL DATA POWER SUPPLIES	IN 019974
1	18340300	E	POWER MODULE ASSY +20 VOLT	IN
2	00838200	J	NUT U TYPE NO. 6-32NC	IN
2	00839501	D	GROM RUB 1/8 GROOVE 3/8 DIA	IN
2	09027803	H	WASHER, NONMETALLIC	IN
2	10125605	A	PLAIN WASHERS	IN
2	10127113	A	SCR MACH PAN PHL 6-32	IN
2	17763801	C	CONN PLUG POLARIZED 6 CONTACT	IN
2	17883206	H	BUSHING NYLON FLANGED	IN
2	18100100	A	BRACKET RECTIFIER	IN
2	18263600	A	POWER SUPPLY IDENT PLATE	IN 020597
2	18339600	C	COV PWR MODULE 20 VOLT	IN
3	00849900	A	METAL PERF STR SLOTS 1/4X1 1/	IN
2	18339700	E	BASE, POWER MODULE 20 VOLT	IN
3	18339701	E	PLATE CRS 14GA (.074)	IN 019408
3	18339702	E	CHANNEL CRS 16GA (.059)	IN 019408
3	18339703	E	CHANNEL CRS 16GA (.059)	IN 019408
2	18340800	F	XMFR +IND 20V, 12 AMP 400 HZ	IN
2	18342700	A	WL +20 VOLT PWR MODULE	IN
3	17620300	C	STRAP CABLE ADJUSTABLE	IN
3	24524804	N	TERMINAL, LUG CRIMP-INSULATED	IN
3	24528635	G	INS SLEEVING, ELEC-BULK	IN
3	24536116	J	TERMINAL, SOLDERLESS RING	IN
3	24552314	D	INS SLV, 5/8 LG 10 AWG BLK	IN
3	24552320	D	INS SLV, 5/8 LG 4 AWG BLK	IN
3	24552322	D	INS SLV, 5/8 LG 2 AWG BLK	IN
3	24552340	D	INS SLV, 5/8 LG 6 AWG CLR	IN
3	93464222	C	WIRE ELECTRICAL 16 AWG -2	IN
3	93464444	C	WIRE ELECTRICAL 16 AWG -4	IN
3	93508000	B	WIRE ELECTRICAL 14 AWG -0	IN

REV K

1738 B 18340000 S MODEL 1738B DISK PACK CONT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	93508222	B	WIRE ELECTRICAL 14 AWG -2	IN
2	24501502	B	STRIP TERMINAL	IN
2	24554601	B	CONNECTOR STRAIN RELIEF	IN 014480
2	24561604	D	RECTIFIER SILICON 40 AMP	IN 014519
2	52305300	A	** ERRONEOUS PART NUMBER	IN 019974
2	60120700	K	CONTROL DATA POWER SUPPLIES	IN 019974
1	18342500	D	W/L CAB POWER WIRING 1738B	IN
2	17620300	C	STRAP CABLE ADJUSTABLE	IN
2	24524804	N	TERMINAL, LUG CRIMP-INSULATED	IN 015340
2	24524807	N	TERMINAL, LUG CRIMP-INSULATED	IN
2	24528635	G	INS SLEEVING, ELEC-BULK	IN
2	24528636	G	INS SLEEVING, ELEC-BULK	IN
2	24528639	G	INS SLEEVING, ELEC-BULK	IN
2	24534805	A	SHIELD, ELECT, BRAIDED-BULK	IN
2	93464000	C	WIRE ELECTRICAL 16 AWG -0	IN
2	93464222	C	WIRE ELECTRICAL 16 AWG -2	IN
2	93464666	C	WIRE ELECTRICAL 16 AWG -6	IN
2	93508000	B	WIRE ELECTRICAL 14 AWG -0	IN
2	93508222	B	WIRE ELECTRICAL 14 AWG -2	IN
2	93508555	B	WIRE ELECTRICAL 14 AWG -5	IN 015340
2	93508666	B	WIRE ELECTRICAL 14 AWG -6	IN
1	18343100	B	CABLE ASSY PWR SUPPLY 1738B	IN
2	17620300	C	STRAP CABLE ADJUSTABLE	IN
2	17763602	C	CONN PANEL MOUNT 6 CONTACT	IN
2	24524805	N	TERMINAL, LUG CRIMP-INSULATED	IN
2	24528635	G	INS SLEEVING, ELEC-BULK	IN
2	24552316	D	INS SLV, 5/8 LG 8 AWG BLK	IN
2	24552318	D	INS SLV, 5/8 LG 6 AWG BLK	IN
2	93463444	D	WIRE ELECTRICAL 18 AWG -4	IN
1	18343700	D	TEMP MONITOR ASSY 1738	IN
2	00836610	C	RETAINER, NUT, SPEED	IN 015763
2	00838300	A	NUT U TYPE 8-32 NC	IN 015445
2	10125105	A	HEXAGON MACHINE SCREW NUTS	IN 015763
2	10125106	A	HEXAGON MACHINE SCREW NUTS	IN 015763
2	10125606	A	PLAIN WASHERS	IN 015763
2	10126103	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10126104	A	INTERNAL TOOTH LOCK WASHERS	IN 015763
2	10127111	A	SCR MACH PAN PHL 6-32	IN 015763
2	10127113	A	SCR MACH PAN PHL 6-32	IN 015763
2	10127122	A	SCR MACH PAN PHL 8-32	IN
2	10127123	A	SCR MACH PAN PHL 8-32	IN
2	10127124	A	SCR MACH PAN PHL 8-32	IN 015763
2	17981114	N	LENS INDICATOR CORPORATE SW	IN 016603
2	18153100	B	SLIDE VERT CAB	IN
2	18153200	E	TEMPERATURE MONITOR BOX	IN
3	00841102	D	FASTENER, SCREW TYPE	IN 020636
3	18153201	E	BASE CRS 16 GA. (.059)	IN 020636
3	18153202	E	SIDE CHANNEL CRS 16 GA. (.059)	IN 020636
3	18153203	E	SIDE CHANNEL CRS 16 GA. (.059)	IN 020636
3	18153204	E	ANGLE CRS 14 GA. (.074)	IN 020636
3	18153205	E	ANGLE CRS 14 GA. (.074)	IN 020636
2	18155800	A	WIRE DIA-POWER CONTROL PANEL	IN
2	18156200	B	MONITOR PANEL	IN

1738 B		18340000	S	MODEL 1738B DISK PACK CONT		
LEVEL	PART-NO	REV		DESCRIPTION		ECO-NO
3	17620300	C		STRAP CABLE ADJUSTABLE	IN	
3	18535801	D		TERMINAL SPADE FLANGED INS	IN	015763
3	24524805	N		TERMINAL, LUG CRIMP-INSULATED	IN	015763
3	24524810	N		TERMINAL LUG CRIMP-INS	IN	015763
3	24547900	B		SOCKET, TUBE 8 CONTACT, OCTAL	IN	015763
3	24552316	D		INS SLV, 5/8 LG 8 AWG BLK	IN	015763
3	93462444	C		WIRE ELECTRICAL 20 AWG -4	IN	
3	93463444	D		WIRE ELECTRICAL 18 AWG -4	IN	
3	93463999	D		WIRE ELECTRICAL 18 AWG -9	IN	
2	18207400	A		COVER TEMP MON BOX VERT CAB	IN	
2	18325100	A		STOP TEMP MONITOR BOX	IN	015763
2	24501202	A		STRIP TERMINAL	IN	
2	24501204	A		STRIP TERMINAL	IN	
2	24501208	A		STRIP TERMINAL	IN	
2	24501508	B		STRIP TERMINAL	IN	
2	24502202	C		STRIP MARKER 1 THRU 2	IN	
2	24502204	C		STRIP MARKER 1 THRU 4	IN	
2	24502208	C		STRIP MARKER 1 THRU 8	IN	
2	24503101	F		CONT 15 AMP 3P-NO	IN	
2	24511601	D		LAMPHOLDER	IN	
2	24511766	L		LENS, IND. LIGHT	IN	
2	24515807	A		LAMP, INCANDESCENT	IN	
2	24516000	R		SW TOGGLE TWO POSITION SPST	IN	
2	24518105	H		CONN FLEX, CND AND CABLE	IN	
2	24524201	A		FILTER LENS - CAP IND LT	IN	015763
2	24524202	A		FILTER LENS - CAP IND LT	IN	015763
2	24524203	A		FILTER LENS - CAP IND LT	IN	015763
2	24543546	U		LENS, IND. LIGHT	IN	
2	24543549	U		LENS, IND. LIGHT	IN	
2	24550614	F		CIRCUIT BREAKER MAG	IN	
2	24550700	C		TRANSFORMER 24 VOLT	IN	
2	24550801	J		RELAY, OCTAL SOCKET	IN	
2	30092309	B		THERMOSTAT FL MT 110 DEG OPEN	IN	
1	18343800	D		BLOWER ASSY 1738	IN	
2	00813500	A		GROMMET RUBBER 3/8 I.D.	IN	
2	00815437	AK		FILTER WASHABLE	IN	
2	00816700	E		BLOWER 523 C.F.M.	IN	
2	00838300	A		NUT U TYPE 8-32 NC	IN	015445
2	00866104	C		VANE,ACTUATOR	IN	
2	10125103	A		HEXAGON MACHINE SCREW NUTS	IN	015763
2	10125105	A		HEXAGON MACHINE SCREW NUTS	IN	015763
2	10125108	A		HEXAGON MACHINE SCREW NUTS	IN	015763
2	10125607	A		PLAIN WASHERS	IN	015763
2	10126101	A		INTERNAL TOOTH LOCK WASHERS	IN	015763
2	10126103	A		INTERNAL TOOTH LOCK WASHERS	IN	015763
2	10126104	A		INTERNAL TOOTH LOCK WASHERS	IN	015763
2	10126105	A		INTERNAL TOOTH LOCK WASHERS	IN	015763
2	10127107	A		SCR MACH PAN PHL 4-40	IN	015763
2	10127113	A		SCR MACH PAN PHL 6-32	IN	015763
2	10127123	A		SCR MACH PAN PHL 8-32	IN	015763
2	10127145	A		SCR MACH PAN PHL 10-32	IN	015763
2	17763601	C		CONN PANEL MOUNT 6 CONTACT	IN	
2	18098300	E		ENCLOSURE BLOWER	IN	

1738 B		18340000	S	MODEL 1738B DISK PACK CONT		
L E V E L	PART-NO	REV		DESCRIPTION		ECO-NO
2	18125600	D		COVER BLOWER	IN	
2	18125700	A		COVER FILTER	IN	
2	18230600	B		WIRE LIST BLOWER ASSY	IN	
3	24524804	N		TERMINAL, LUG CRIMP-INSULATED	IN	013188
3	24528615	G		INS SLEEVING, FLEC-BULK	IN	
3	24552314	D		INS SLV, 5/8 LG 10 AWG BLK	IN	
3	24552318	D		INS SLV, 5/8 LG 6 AWG BLK	IN	
3	93462444	C		WIRE ELECTRICAL 20 AWG -4	IN	
3	93464555	C		WIRE ELECTRICAL 16 AWG -5	IN	
2	24548200	B		SWITCH, ROTARY LOW FORCE, N.C	IN	
2	30096202	A		THERMOSTAT BKT MTG 90 DEG CL	IN	015496
1	18363500	C		BRKT CHAS SUPPORT L	IN	
1	18363800	C		BRKT CHAS MOUNT L	IN	
1	18363900	D		BRKT CHAS MOUNT R	IN	
1	18364000	C		BRKT CHAS SUPPORT R	IN	
1	18365300	A		PANDUIT LONG	IN	
2	00860209	A		CONDUIT RACEWAY NONMETALLIC	IN	
1	18365400	A		PANDUIT SHORT	IN	
2	00860209	A		CONDUIT RACEWAY NONMETALLIC	IN	
1	18365800	A		COVER CONNECTOR	IN	
1	24501603	G		BLOCK, TERMINAL	IN	
1	24501605	G		BLOCK, TERMINAL	IN	
1	24518105	H		CONN FLEX, CND AND CABLE	IN	016666
1	24519908	A		PL IDENT ASSY DES A8	IN	
1	24519909	A		PL IDENT ASSY DES A9	IN	
1	24519910	A		PL IDENT ASSY DES A10	IN	
1	30001201	F		RESISTOR, ASSEMBLY TERMINATOR	IN	015235
1	31000403	V		CABLE SPL, PURP, ELECT.	IN	
2	00865007	H		GROMMET STRAIN RELIEF	IN	017974
2	17944001	B		LABEL CABLE LENGTH MARKING	IN	011494
2	18710101	F		CONN PLUG ELEC (61 PIN CONT)	IN	017974
2	18710103	F		CONN PLUG ELEC (61 PIN CONT)	IN	017974
2	31000100	A		CABLE, SPECIAL PURPOSE, ELECT	IN	
1	32584800	C		PIN PIVOT	IN	

1738-C



1738 C 18691700 G CABINET ASSY 1738 VERT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
1	00843515	D	RING, RETAINING	IN
1	00851418	A	SCREW SHOULDER	IN
1	00856909	A	SPG COMPR 1 L	IN
1	00860209	A	CONDUIT RACEWAY NONMETALLIC	IN
1	00863702	A	CLAMP, CABLE ELECTRICAL	IN
1	00863704	A	CLAMP, CABLE ELECTRICAL	IN
1	00863709	A	CLAMP, CABLE ELECTRICAL	IN
1	00863711	A	CLAMP, CABLE ELECTRICAL	IN
1	00863713	A	CLAMP, CABLE ELECTRICAL	IN
1	00867203	A	PAD LEV THD STUD 5/8-11 UNC2A	IN
1	09027805	H	WASHER, NONMETALLIC	IN
1	17710800	D	PLATE IDENT COMPUTER DEV DIV	IN
1	17780228	B	CABLE LOOP END	IN 021578
1	17981114	N	LENS INDICATOR CORPORATE SW	IN
1	17981121	N	LENS, INDICATOR-	IN
1	18015100	C	TOP VERT CABINET	IN
1	18044900	E	CHANNEL MTG TOP VERT CABINET	IN
2	09028004	B	WELD NUT TYPE SN	IN 020061
2	18044901	E	FRAME CRS 18 GA (.047)	IN 020061
1	18088100	B	BRACKET DOOR	IN
1	18100300	B	COVER CABLE AREA	IN
1	18143100	J	CARD PLACEMENT	IN
2	18224900	D	Printed Circuit Card Type 6AAH	IN
2	18225100	A	Printed Circuit Card Type 6AFH	IN
2	18225300	E	PC Type Discriminator	IN
2	18255800	E	Printed Circuit Card Type 6AGH	IN 014982
2	30908201	J	Printed Circuit Card Type CA21	IN
2	30911001	J	Printed Circuit Card Type CA28	IN
2	30921801	J	Printed Circuit Card Type CA55	IN
2	30924601	E	Printed Circuit Card Type CA62B	IN
2	30927801	E	Printed Circuit Card Type CA70	IN 14295
2	30929801	C	Printed Circuit Card Type CA75B	IN
2	30942201	H	Printed Circuit Card Type HA05	IN
2	30944201	C	Printed Circuit Card Type HA10A	IN
2	30944601	A	Printed Circuit Card Type HA11A	IN
2	30947801	B	Printed Circuit Card Type HA19A	IN
2	30952201	B	Printed Circuit Card Type HA30	IN
2	30954201	A	Printed Circuit Card Type HA35	IN
2	30957801	D	Printed Circuit Card Type HA46A	IN
2	30958201	F	Printed Circuit Card Type HA47	IN 016571
2	30958601	G	Printed Circuit Card Type HA48A	IN
2	30960201	A	Printed Circuit Card Type HA53	IN 014295
2	31701801	E	Printed Circuit Card Type K16	IN
2	31702601	F	Printed Circuit Card Type K22	IN
2	31711801	A	Printed Circuit Card Type K23	IN 014778
2	31703001	E	Printed Circuit Card Type K24	IN
2	31703401	E	Printed Circuit Card Type K25	IN
2	31703801	E	Printed Circuit Card Type K26	IN
2	31704201	E	Printed Circuit Card Type K27	IN
2	31709401	D	Printed Circuit Card Type K31	IN

1738 C 18691700 G CABINET ASSY 1738 VERT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
2	31705001	D	Printed Circuit Card Type K32	IN
2	31709801	D	Printed Circuit Card Type K33	IN 014778
2	31705801	D	Printed Circuit Card Type K36	IN
2	31711001	C	Printed Circuit Card Type K69	IN 014445
2	31709001	D	Printed Circuit Card Type K71	IN 016221
1	18167400	D	DOOR, REAR	IN
1	18173900	A	ACTUATOR, DOOR	IN
1	18174700	A	LATCH	IN
1	18176800	A	ANGLE, DOOR CATCH VERTICAL	IN
1	18201903	A	CABLE ASSY 3 PIN	IN
2	17897000	B	CONN PLUG 3 CON SOLID SHELL	IN
2	17944011	B	LABEL CABLE LENGTH MARKING	IN
2	18157700	B	CABLE 22 GA TWIST PAIR SHIELD	IN
2	24530202	B	CLAMP, CABLE	IN
1	18268001	C	CABLE ASSEMBLY	IN
2	24500503	E	CABLE DWR. ELECT. 18 GA 3 COND	IN 015099
2	93942003	A	CONTACT PIN SERIES .090	IN
2	93948003	A	CONNECTOR (PIN HOUSING)	IN
1	18318800	A	AIR DUCT BLOWER EXTENSION	IN
1	18340200	D	POWER MODULE ASSY -20 VOLT	IN
2	00838200	J	NUT U TYPE NO. 6-32NC	IN
2	00839501	D	GROM RUB 1/8 GROOVE 3/8 DIA	IN
2	09027803	H	WASHER, NONMETALLIC	IN
2	10125605	A	PLAIN WASHERS	IN
2	10127113	A	SCR MACH PAN PHL 6-32	IN
2	17763801	C	CONN PLUG POLARIZED 6 CONTACT	IN
2	17883206	H	BUSHING NYLON FLANGED	IN
2	18100100	A	BRACKET RECTIFIER	IN
2	18263600	A	POWER SUPPLY IDENT PLATE	IN 020597
2	18339600	C	COV PWR MODULE 20 VOLT	IN
3	00849900	A	METAL PERF STR SLOTS 1/4X1 1/4	IN
2	18339700	E	BASE, POWER MODULE 20 VOLT	IN
3	18339701	E	PLATE CRS 14GA (.074)	IN 019408
3	18339702	E	CHANNEL CRS 16GA (.059)	IN 019408
3	18339703	E	CHANNEL CRS 16GA (.059)	IN 019408
2	18340800	F	XMFR +IND 20V, 12 AMP 400 HZ	IN
2	18342800	A	WL -20 VOLT PWR MODULE	IN
3	17620300	C	STRAP CABLE ADJUSTABLE	IN
3	24524804	N	TERMINAL, LUG CRIMP-INSULATED	IN
3	24528635	G	INS SLEEVING, FLEC-BULK	IN
3	24536116	J	TERMINAL, SOLDERLESS RING	IN
3	24552314	D	INS SLV, 5/8 LG 10 AWG BLK	IN
3	24552318	D	INS SLV, 5/8 LG 6 AWG BLK	IN
3	24552320	D	INS SLV, 5/8 LG 4 AWG BLK	IN
3	24552322	D	INS SLV, 5/8 LG 2 AWG BLK	IN

1738 C		18691700	G	CABINET ASSY 1738 VERT		
LEVEL	PART-NO	REV		DESCRIPTION		ECO-NO
3	93464444	C		WIRE ELECTRICAL 16 AWG -4	IN	
3	93464666	C		WIRE ELECTRICAL 16 AWG -6	IN	
3	93508000	R		WIRE ELECTRICAL 14 AWG -0	IN	
3	93508666	R		WIRE ELECTRICAL 14 AWG -6	IN	
2	24501502	B		STRIP TERMINAL	IN	
2	24554601	B		CONNECTOR STRAIN RELIEF	IN	014420
2	24561603	D		RECTIFIER SILICON 40 AMP	IN	
2	60120700	K		CONTROL DATA POWER SUPPLIES	IN	019974
1	18340300	E		POWER MODULE ASSY +20 VOLT	IN	
2	00838200	J		NUT U TYPE NO. 6-32NC	IN	
2	00839501	D		GROM RUB 1/8 GROOVE 3/8 DIA	IN	
2	09027803	H		WASHER, NONMETALLIC	IN	
2	10125605	A		PLAIN WASHERS	IN	
2	10127113	A		SCR MACH PAN PHL 6-32	IN	
2	17763801	C		CONN PLUG POLARIZED 6 CONTACT	IN	
2	17883206	H		BUSHING NYLON FLANGED	IN	
2	18100100	A		BRACKET RECTIFIER	IN	
2	18263600	A		POWER SUPPLY IDENT PLATE	IN	026597
2	18339600	C		COV PWR MODULE 20 VOLT	IN	
3	00849900	A		METAL PERF STR SLOTS 1/4X1 1/	IN	
2	18339700	E		BASE, POWER MODULE 20 VOLT	IN	
3	18339701	E		PLATE CRS 14GA (.074)	IN	019408
3	18339702	E		CHANNEL CRS 16GA (.059)	IN	019408
3	18339703	E		CHANNEL CRS 16GA (.059)	IN	019408
2	18340800	F		XMFR +IND 20V, 12 AMP 400 HZ	IN	
2	18342700	A		WL+20 VOLT PWR MODULE	IN	
3	17620300	C		STRAP CABLE ADJUSTABLE	IN	
3	24524804	N		TERMINAL, LUG CRIMP-INSULATED	IN	
3	24528635	G		INS SLEEVING, ELEC-BULK	IN	
3	24536116	J		TERMINAL, SOLDERLESS RING	IN	
3	24552314	D		INS SLV, 5/8 LG 10 AWG BLK	IN	
3	24552320	D		INS SLV, 5/8 LG 4 AWG BLK	IN	
3	24552322	D		INS SLV, 5/8 LG 2 AWG BLK	IN	
3	24552340	D		INS SLV, 5/8 LG 6 AWG CLR	IN	
3	93464222	C		WIRE ELECTRICAL 16 AWG -2	IN	
3	93464444	C		WIRE ELECTRICAL 16 AWG -4	IN	
3	93508000	R		WIRE ELECTRICAL 14 AWG -0	IN	
3	93508222	B		WIRE ELECTRICAL 14 AWG -2	IN	
2	24501502	R		STRIP TERMINAL	IN	
2	24554601	B		CONNECTOR STRAIN RELIEF	IN	014480
2	24561604	D		RECTIFIER SILICON 40 AMP	IN	014519
2	60120700	K		CONTROL DATA POWER SUPPLIES	IN	019974
1	18363500	C		BRKT CHAS SUPPORT L	IN	
1	18363800	C		BRKT CHAS MOUNT L	IN	
1	18363900	D		BRKT CHAS MOUNT R	IN	
1	18364000	C		BRKT CHAS SUPPORT R	IN	
1	18365800	A		COVER CONNECTOR	IN	
1	18408802	C		CONN PLUG (POL) 8 CONTACT	IN	019199
1	18545400	G		FRAME VERT CABINET MODIFIED	IN	
1	18565200	B		RELAY, 25AMP (3P SINGLE THROW)	IN	
1	18611100	C		W/L CABINET POWER WIRING	IN	

1738 C 18691700 G CABINET ASSY 1738 VERT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
1	18613100	A	C/A 400HZ POWER PACK	IN
2	17620300	C	STRAP CABLE ADJUSTABLE	IN
2	17763602	C	CONN PANEL MOUNT 6 CONTACT	IN
2	24528635	G	INS SLEEVING, FLEC-BULK	IN
2	24546501	D	TERMINAL, SPADE, FLARED	IN
2	24552318	D	INS SLV, 5/8 LG 6 AWG BLK	IN
2	93463444	D	WIRE ELECTRICAL 18 AWG -4	IN
1	18618100	C	POWER CONTROL ASSY	IN
2	00860803	D	TRACK SLIDING TELESCOPE	IN
2	00863801	C	KNOB, CONTROL	IN 019034
2	18113000	B	TRANSFORMER VARIABLE 2 GANG	IN
2	18215100	B	BRKT RH POWER CONTROL ASSY	IN
3	09028002	B	WELD NUT TYPE SN	IN 020205
3	18215101	B	ANGLE CRS, 14 GA (.074)	IN 020205
2	18215200	C	COVER (POWER CONTROL BOX)	IN
3	18215201	C	COVER CRS 18 GA (.047)	IN 019448
3	18215202	C	ANGLE CRS 18 GA (.047)	IN 019448
2	18215300	B	BRKT LH POWER CONTROL ASSY	IN
3	09028002	B	WELD NUT TYPE SN	IN 019805
3	18215301	B	BRACKET CRS 14 GA (.074)	IN 019805
2	18435600	B	VM DC EXTERNAL MULTIPLIER	IN
2	18574900	R	MULTIPLIER ASSY TERMINATOR	IN
3	18433000	C	MULT BD/MA TERMINATOR	IN
3	18435005	R	POT TRIMMER 1/2 W 10000 OHMS	IN
3	24524709	M	RES FXD CARBON .5W 18200 OHMS	IN
2	18611200	B	W/L POWER CONTROL PANEL	IN 019049
3	17620300	C	STRAP CABLE ADJUSTABLE	IN
3	24546501	D	TERMINAL, SPADE, FLARED	IN
3	24546503	D	TERMINAL, SPADE, FLARED	IN
3	24552316	D	INS SLV, 5/8 LG 8 AWG BLK	IN
3	93463000	D	WIRE ELECTRICAL 18 AWG -0	IN
3	93463222	D	WIRE ELECTRICAL 18 AWG -2	IN
3	93463444	D	WIRE ELECTRICAL 18 AWG -4	IN
3	93463666	D	WIRE ELECTRICAL 18 AWG -6	IN
3	93464444	C	WIRE ELECTRICAL 16 AWG -4	IN
3	93464999	C	WIRE ELECTRICAL 16 AWG -9	IN
2	18717200	B	BOX PWR CONTROL 20 VOLT	IN
2	24518103	H	CONN FLEX, CND AND CABLE	IN
2	24571900	B	SW TOGGLE 2 POS DPDT U/L	IN
2	30002000	F	TRANSFORMER VARIABLE-POWER	IN
2	30093404	A	STRIP TERM-MARKED 4 CONT	IN
2	30093406	A	STRIP TERM-MARKED 6 CONT	IN
1	18618300	D	BOX POWER DISTRIBUTION	IN
1	18618900	A	COVER DISTRIBUTION BOX	IN
1	18691600	B	BLOWER ASSEMBLY	IN
2	00813500	A	GROMMET RUBBER 3/8 I.D.	IN
2	00815437	AK	FILTER WASHABLE	IN
2	00816700	E	BLOWER 523 C.F.M.	IN
2	00838300	A	NUT U TYPE 8-32 NC	IN
2	00863708	A	CLAMP, CARLE ELECTRICAL	IN
2	00866104	C	VANE,ACTUATOR	IN
2	10125103	A	HEXAGON MACHINE SCREW NUTS	IN
2	10125105	A	HEXAGON MACHINE SCREW NUTS	IN

1738 C		18691700	G	CABINET ASSY 1738 VERT	
LEVEL	PART-NO	REV		DESCRIPTION	ECO-NO
2	10125108	A		HEXAGON MACHINE SCREW NUTS	IN
2	10125607	A		PLAIN WASHERS	IN
2	10126101	A		INTERNAL TOOTH LOCK WASHERS	IN
2	10126103	A		INTERNAL TOOTH LOCK WASHERS	IN
2	10126104	A		INTERNAL TOOTH LOCK WASHERS	IN
2	10126105	A		INTERNAL TOOTH LOCK WASHERS	IN
2	10127107	A		SCR MACH PAN PHL 4-40	IN
2	10127113	A		SCR MACH PAN PHL 6-32	IN
2	10127123	A		SCR MACH PAN PHL 8-32	IN
2	10127145	A		SCR MACH PAN PHL 10-32	IN
2	18125600	D		COVER BLOWER	IN
2	18125700	A		COVER FILTER	IN
2	18170500	D		STRIP GASKET RETAINER, POWER	IN 021017
2	18170600	B		GASKET BLOWER	IN 021017
2	18408901	B		CONN PANEL MOUNT (POL) 8 CONT	IN
2	30096005	D		THERMOSTAT N/O 80 F	IN 026078
2	30092207	D		THERMOSTAT N/C 90 F	IN 026078
2	18692000	R		W/L BLOWER ASSY	IN
2	18740300	C		ENCLOSURE BLOWER VERTICAL CAB	IN
2	24548200	B		SWITCH, ROTARY LOW FORCE, N.C	IN
1	18704400	B		PLATE CKT BREAKER 3 POSITION	IN
1	18765700	B		CHASSIS ASSEMBLY	IN
2	00856604	C		THUMBSCREW	IN
2	00857102	R		BRG SLV-FLG NYLON 1/4	IN
2	09005306	A		SCR MACH FH SLOT 1/4	IN
2	09018302	A		SCR MACH PAN HD PHL NO. 5	IN
2	09029102	C		SCREW, SEMS PHILLIPS ROUND HD	IN
2	09029104	C		SCREW, SEMS PHILLIPS ROUND HD	IN
2	10125103	A		HEXAGON MACHINE SCREW NUTS	IN
2	10125106	A		HEXAGON MACHINE SCREW NUTS	IN
2	10125301	A		HEXAGON NUTS	IN
2	10125460	A		82 FH MACH SCR SLOT DR 8-32	IN
2	10125605	A		PLAIN WASHERS	IN
2	10126101	A		INTERNAL TOOTH LOCK WASHERS	IN
2	10126102	A		INTERNAL TOOTH LOCK WASHERS	IN
2	10126103	A		INTERNAL TOOTH LOCK WASHERS	IN
2	10126104	A		INTERNAL TOOTH LOCK WASHERS	IN
2	10126105	A		INTERNAL TOOTH LOCK WASHERS	IN
2	10126106	A		INTERNAL TOOTH LOCK WASHERS	IN
2	10127104	A		SCR MACH PAN PHL 4-40	IN
2	10127114	A		SCR MACH PAN PHL 6-32	IN
2	10127144	A		SCR MACH PAN PHL 10-32	IN
2	11412600	B		STRIP, MARKER (01-21)	IN
2	11412700	B		STRIP, MARKER (22-42)	IN
2	11819100	D		CHASSIS PWR AND GROUND WIRING	IN 017890
2	17915800	C		BRACKET RELAY	IN
2	18143400	R		CONN ASSY 61 PIN 1A1	IN
3	00865003	H		GROM STR REL 0.453 ID	IN
3	24500707	J		PIN TAPER	IN
3	24500810	H		INSULATION SLEEVING ELECT	IN
3	24548301	J		WIRE ELECT 24 AWG - 0	IN
3	24548303	J		WIRE ELFC STRD INS. UL APPD	IN
3	24548307	J		WIRE ELFC STRD INS. UL APPD	IN

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LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	R	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	R	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	R	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	R	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	R	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	R	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000024	R	WIRE, 24GA TWIST, PR. GR-W/GY	IN
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN
3	31000027	R	WIRE, 24GA TWIST, PR. BLU-W/Y	IN
3	31000028	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN
3	31000029	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN
2	18143500	R	CONN ASSY 61 PIN 1A2	IN
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELEC 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	R	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	R	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000013	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	R	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	R	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	R	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	R	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000024	R	WIRE, 24GA TWIST, PR. GR-W/GY	IN
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN
3	31000026	R	WIRE, 24GA TWIST, PR. BLU-W/R	IN
3	31000027	R	WIRE, 24GA TWIST, PR. BLU-W/Y	IN

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L E V F L	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000028	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN
3	31000029	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN
2	18143600	C	CONN ASSY 61 PIN 1B1	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	R	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	R	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	R	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	R	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000013	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	R	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	R	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000025	R	WIRE, 24GA TWIST, PR. GR-W/BL	IN
3	31000026	R	WIRE, 24GA TWIST, PR. BLU-W/R	IN
3	31000027	R	WIRE, 24GA TWIST, PR. BLU-W/Y	IN
3	31000029	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN 013844
2	18143700	F	CONN ASSY 61 PIN-1R2	IN
3	00865005	H	GROM STR REL 0.391 ID	IN
3	24500707	J	PIN TAPER	IN 015787
3	24500810	H	INSULATION SLEEVING ELECT	IN 015787
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 015787
3	31000001	R	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	R	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	R	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	R	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000013	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN 013782
3	31000014	R	WIRE, 24GA TWIST, PR. OR-W/GY	IN 013782
3	31000015	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN 013782
3	31000016	R	WIRE, 24GA TWIST, PR. YF-W/R	IN 013782
3	31000022	R	WIRE, 24GA TWIST, PR. GR-W/YE	IN 014778
3	31000023	R	WIRE, 24GA TWIST, PR. GR-W/BL	IN 014778
3	31000025	R	WIRE, 24GA TWIST, PR. GR-W/BL	IN 013782
3	31000026	R	WIRE, 24GA TWIST, PR. BLU-W/R	IN 013782
3	31000027	R	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 013782
3	31000029	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN 013844
2	18143800	B	CONNECTOR ASSY. 61 PIN 1C1	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN

1738 C 18691700 G CABINET ASSY 1738 VERT

L E V E L	PART-NO	REV	DESCRIPTION	ECO-NO
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN 016078
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
2	18143900	B	CONNECTOR ASSY. 61 PIN IC2	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN

1738 C 18691700 G CABINET ASSY 1738 VERT

LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000014	R	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	R	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000017	R	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	R	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	R	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	R	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000021	R	WIRE, 24GA TWIST, PR. GR-W/RD	IN
2	18144000	D	61 PIN CONN CABLE ASSY 1D1	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN 015787
3	24500810	H	INSULATION SLEEVING ELECT	IN 015787
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN 016078
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
2	18144100	D	61 PIN CONN CABLE ASSY 1D2	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN 015787
3	24500810	H	INSULATION SLEEVING ELECT	IN 015787
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELFC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 015787

1738 C 18691700 G CABINET ASSY 1738 VERT

L E V E L	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	R	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	R	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	R	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	R	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	R	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	R	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	R	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000017	R	WIRE, 24GA TWIST, PR. YE-W/YE	IN
3	31000018	R	WIRE, 24GA TWIST, PR. YE-W/BL	IN
3	31000019	R	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	R	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	R	WIRE, 24GA TWIST, PR. GR-W/RD	IN
2	18144200	R	CONNECTOR ASSY 61 PIN 1F1	IN
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	R	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	R	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	R	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	R	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	R	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	R	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	R	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	R	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	R	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	R	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	R	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000017	R	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	R	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	R	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	R	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	R	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	R	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	R	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078

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LEVEL	PART_NO	REV	DESCRIPTION	ECO_NO
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	R	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	R	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
2	18144300	B	CONNECTOR ASSY 61 PIN 1F2	IN
3	00865003	H	GROM STR REL 0.453 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	R	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	R	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	R	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	R	WIRE, 24GA TWIST, PR. YE-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	R	WIRE, 24GA TWIST, PR. GR-W/YE	IN
2	18144400	C	CONN ASSY 61 PIN F01	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN 016078
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN

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LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000023	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000024	B	WIRE, 24GA TWIST, PR. GR-W/GY	IN 016078
3	31000025	B	WIRE, 24GA TWIST, PR. GR-W/BL	IN 016078
3	31000026	B	WIRE, 24GA TWIST, PR. BLU-W/R	IN 016078
3	31000027	B	WIRE, 24GA TWIST, PR. BLU-W/Y	IN 016078
3	31000028	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 016078
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN 013782
2	18144500	C	CONNECTOR ASSY 61 PIN 1F2	IN
3	00865004	H	GROM STR REL 0.468 ID	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
3	30000901	R	CONN. RECP ELEC 61 PIN CONT	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
3	31000002	B	WIRE, 24GA TWIST, PR. BR-W/YE	IN
3	31000003	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000004	B	WIRE, 24GA TWIST, PR. BR-W/GY	IN
3	31000005	B	WIRE, 24GA TWIST, PR. BR-W/BL	IN
3	31000006	B	WIRE, 24GA TWIST, PR. RD-W/RD	IN
3	31000007	B	WIRE, 24GA TWIST, PR. RD-W/YE	IN
3	31000008	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000009	B	WIRE, 24GA TWIST, PR. RD-W/GY	IN
3	31000010	B	WIRE, 24GA TWIST, PR. RD-W/BL	IN
3	31000011	B	WIRE, 24GA TWIST, PR. OR-W/RD	IN
3	31000012	B	WIRE, 24GA TWIST, PR. OR-W/YE	IN
3	31000013	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000014	B	WIRE, 24GA TWIST, PR. OR-W/GY	IN
3	31000015	B	WIRE, 24GA TWIST, PR. OR-W/BL	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YF-W/R	IN
3	31000017	B	WIRE, 24GA TWIST, PR. YF-W/YE	IN
3	31000018	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000019	B	WIRE, 24GA TWIST, PR. YF-W/GY	IN
3	31000020	B	WIRE, 24GA TWIST, PR. YF-W/BL	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000022	B	WIRE, 24GA TWIST, PR. GR-W/YE	IN
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN

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LEVEL	PART-NO	REV	DESCRIPTION	ECO-NO
2	18158800	C	BRACKET ROTARY SWITCH	IN
2	18178000	C	CONTROL PANEL ASSEMBLY	IN
3	18092201	C	SWITCH ROT 2-17 POS 1 POL/SEC	IN
3	18143300	E	CONTROL PANEL, WIRF LIST	IN
4	24500707	J	PIN TAPER	IN 019597
4	24500810	H	INSULATION SLEEVING ELECT	IN 019597
4	24548301	J	WIRE ELECT 24 AWG - 0	IN
4	24548302	J	WIRE ELECT 24 AWG INSULATED	IN 019597
4	24548303	J	WIRE ELEC STRD INS. UL APPD	IN 019597
4	24548304	J	WIRE ELEC STRD INS. UL APPD	IN 019597
4	24548305	J	WIRE ELEC STRD INS. UL APPD	IN 019597
4	24548306	J	WIRE ELEC STRD INS. UL APPD	IN
4	24548307	J	WIRE ELEC STRD INS. UL APPD	IN
4	24548308	J	WIRE ELEC STRD INS. UL APPD	IN
4	24548309	J	WIRE ELEC STRD INS. UL APPD	IN
3	18159800	G	PANEL CONTROL	IN
3	24508800	A	SWITCH, TOGGLE 3 POSITION-DPDT	IN
3	24523001	A	SWITCH, PUSH SPST MOMENTARY	IN
3	24533001	F	LIGHT, INDICATOR	IN 013599
3	24535400	C	SWITCH TOGGLE DPDT 2 POSITION	IN 019597
2	18186800	A	ANGLE, MOUNTING RELAY BRACKET	IN
2	18201100	C	CONNECTOR ASSY 3-PIN 1G1	IN
3	17896900	C	CONNECTOR RECP 3 CONTACTS	IN
3	24500707	J	PIN TAPER	IN 018932
3	24500801	H	INSULATION SLEEVING ELECT	IN 018932
3	24500810	H	INSULATION SLEEVING ELECT	IN 018932
3	31000001	B	WIRE, 24GA TWIST, PR. BR-W/RD	IN
2	18202000	A	PLATE CONNECTOR	IN
2	18213100	B	STR MKR WIDE MODIFIED 25-42	IN
3	11412700	B	STRIP, MARKER (22-42)	IN
2	18213200	A	STRIP, MARKER, NAR MOD (01-18)	IN
3	25153100	A	STRIP, MARKER NARROW (01-21)	IN
4	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	18213300	A	STP MKR WIDE-MOD. (01-18)	IN
3	11412600	B	STRIP, MARKER (01-21)	IN
2	18213400	B	STP MKR NARROW MOD. (25-42)	IN
3	25153200	A	STRIP, MARKER NARROW (22-42)	IN
4	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	18214100	A	STRIP, MARKER, NARROW 19-24	IN
3	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	18334400	H	LOGIC WIRE TAB	IN
3	24511403	K	LEAD, ELECTRICAL, 3 INCH.	IN 016571
3	24511404	K	LEAD, ELECTRICAL, 4 INCH.	IN 022088
3	24511405	K	LEAD, ELECTRICAL, 5 INCH.	IN 022420
3	24511406	K	LEAD, ELECTRICAL, 6 INCH.	IN 022088
3	24511407	K	LEAD, ELECTRICAL, 7 INCH.	IN 014778
3	24511408	K	LEAD, ELECTRICAL, 8 INCH.	IN 022420
3	24511409	K	LEAD, ELECTRICAL, 9 INCH.	IN 022088
3	24511410	K	LEAD, ELECTRICAL, 10 INCH.	IN 016571
3	24511411	K	LEAD, ELECTRICAL, 11 INCH.	IN 016221
3	24511412	K	LEAD, ELECTRICAL, 12 INCH.	IN 016571
3	24511413	K	LEAD, ELECTRICAL, 13 INCH.	IN 015902
3	24511414	K	LEAD, ELECTRICAL, 14 INCH.	IN 016571
3	24511415	K	LEAD, ELECTRICAL, 15 INCH.	IN 016571
3	24511416	K	LEAD, ELECTRICAL, 16 INCH.	IN 019597
3	24511417	K	LEAD, ELECTRICAL, 17 INCH.	IN 019597
3	24511418	K	LEAD, ELECTRICAL, 18 INCH.	IN 015902
3	24511422	K	LEAD, ELECTRICAL, 22 INCH.	IN 016571

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L E V E L	PART-NO	REV	DESCRIPTION	ECO-NO
3	24511423	K	LEAD,ELECTRICAL,23 INCH.	IN 016571
3	24511424	K	LEAD,ELECTRICAL,24 INCH.	IN 014778
3	24511425	K	LEAD,ELECTRICAL,25 INCH.	IN 016571
3	24511426	K	LEAD,ELECTRICAL,26 INCH.	IN
3	24511427	K	LEAD,ELECTRICAL,27 INCH.	IN
3	24511428	K	LEAD,ELECTRICAL,28 INCH.	IN 015902
3	24511429	K	LEAD,ELECTRICAL,29 INCH.	IN 016571
3	24511430	K	LEAD,ELECTRICAL,30 INCH.	IN 015902
3	24511431	K	LEAD,ELECTRICAL,31 INCH.	IN
3	24511432	K	LEAD,ELECTRICAL,32 INCH.	IN
3	24511433	K	LEAD,ELECTRICAL,33 INCH.	IN
3	24511434	K	LEAD,ELECTRICAL,34 INCH.	IN
3	24511435	K	LEAD,ELECTRICAL,35 INCH.	IN
2	18382600	A	SHIELD CONNECTOR, LETTERED	IN
3	30116500	A	SHIELD CONN RECP ELEC-LONG	IN
2	18764700	A	CHASSIS WIRE TAB	IN
3	18535801	D	TERMINAL SPADE FLANGED INS	IN
3	24500706	J	PIN TAPER	IN
3	24500707	J	PIN TAPER	IN
3	24500810	H	INSULATION SLEEVING ELECT	IN
3	24548301	J	WIRE ELECT 24 AWG - 0	IN
3	24548302	J	WIRE ELECT 24 AWG INSULATED	IN
3	24548303	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548304	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548305	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548306	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548313	J	WIRE ELEC STRD INS. UL APPD	IN
3	24548319	J	WIRE ELEC STRD INS. UL APPD	IN
3	24552336	D	INSULATION SLEEVING,5/8 L, U/L	IN
3	30000902	R	FEMALE CONTACT	IN
3	31000016	B	WIRE, 24GA TWIST, PR. YE-W/R	IN
3	31000021	B	WIRE, 24GA TWIST, PR. GR-W/RD	IN
3	31000029	B	WIRE, 24GA TWIST, PR. BLU-W/B	IN
3	93462000	C	WIRE ELECTRICAL 20 AWG -0	IN
3	93462111	C	WIRE ELECTRICAL 20 AWG -1	IN
3	93462222	C	WIRE ELECTRICAL 20 AWG -2	IN
3	93462333	C	WIRE ELECTRICAL 20 AWG -3	IN
3	93943001	A	CONTACT, SOCKET, SERIES .090	IN
2	18801100	A	FILTER CAPACITOR ASSEMBLY	IN 017890
3	18786200	A	CAPACITOR, FIXED CERAMIC DISC	IN
3	24500707	J	PIN TAPER	IN
3	24528602	G	INS SLEEVING, ELEC-BULK	IN
2	24501502	R	STRIP TERMINAL	IN
2	24527400	G	SWITCH,ROTARY-8 POLE,2-5 POS	IN
2	24547900	R	SOCKET, TUBE 8 CONTACT, OCTAL	IN
2	24550802	J	RELAY, OCTAL SOCKET	IN
2	25153100	A	STRIP MARKER NARROW (01-21)	IN
3	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	25153200	A	STRIP MARKER NARROW (22-42)	IN
3	10057600	A	EXTRUSION NARROW MARKER STRIP	IN
2	25156700	C	PLATE,RETAINING, ELEC. CONN.-	IN
3	09028002	B	WELD NUT TYPE SN	IN 019827
3	25156701	C	PLATE CRS 16 GA (.059)	IN 019827

1738 C		18691700	G	CABINET ASSY 1738 VERT		
LEVEL	PART-NO	REV		DESCRIPTION		ECO-NO
2	25156801	C		PL RETAINING ELEC. CONN		IN
2	25159700	A		LATCH, CONNECTOR PANEL		IN
2	25160300	D		MEMBER FR CHASSIS LEFT SIDE		IN
3	30004000	D		AL ALY SPECIAL SHAPED SECTION		IN
2	25160400	D		MEMBER FR CHAS RIGHT SIDE		IN
3	30004000	D		AL ALY SPECIAL SHAPED SECTION		IN
2	25161800	E		BAR MTG CONN-MIDDLE (01-42)		IN
3	18673300	A		ALUM ALLOY BAR EXTRUDED		IN 017378
2	25161900	D		SPACER MODULE MIDDLE (01-42)		IN
3	18683500	B		ALUMINUM ALLOY BAR EXTRUDED		IN 017098
2	25162001	C		MEMBER FR CHAS TOP AND BOT		IN
2	25162002	C		MEMBER FR CHAS TOP AND BOT		IN
2	30000100	K		CONN RECP ELEC 30 SOC CONT		IN
2	30002201	L		CAP FXD ELECTROLYTIC		IN
2	30008700	C		BKT ANGLE CHASSIS FRAME		IN
2	30013802	C		SPACER		IN
2	30092702	E		TERM BLK 20 CAV RED		IN
2	30092706	E		TERM BLK 20 CAV BLUE		IN
2	30092710	E		TERM BLK 20 CAV BLACK		IN
2	30103800	B		PLATE, RETAINING, CABLE		IN
2	30103900	C		STUD, EXTENSION		IN
2	30104600	D		SUPPORT CONN, ASSY		IN
2	30104800	H		HINGE, I/O CONNECTOR PANEL		IN
2	30116600	B		BRACKET MOUNTING SHIELD		IN
2	93947003	B		CONNECTOR (SOCKET HOUSING)		IN
1	18822200	A		COVER, ELECTRICAL		IN
1	18883900	D		DOOR FRONT VERTICAL CABINET		IN 018283
1	24501601	G		BLOCK, TERMINAL		IN
1	24501603	G		BLOCK, TERMINAL		IN
1	24511601	D		LAMPHOLDER		IN 019199
1	24516803	B		LAMP, INCANDESCENT SLIDE TYPE		IN
1	24519905	A		PL IDENT ASSY DES A5		IN
1	24519906	A		PL IDENT ASSY DES A6		IN
1	24519907	A		PL IDENT ASSY DES A7		IN
1	24519908	A		PL IDENT ASSY DES A8		IN
1	24550900	A		SW TGL DPST 2POS 15A-120VAC		IN
1	30001201	F		RESISTOR, ASSEMBLY TERMINATOR		IN
1	30002503	J		CIRCUIT BREAKER 3 POLE AUX SW		IN
1	30093402	A		STRIP TERM-MARKED 2 CONT		IN
1	31000403	V		CABLE SPL, PURP. ELECT		IN
2	00865007	H		GROMMET STRAIN RELIEF		IN 017974
2	17944001	B		LABEL CABLE LENGTH MARKING		IN 011494
2	18710101	F		CONN PLUG ELEC (61 PIN CONT)		IN 017974
2	18710103	F		CONN PLUG ELEC (61 PIN CONT)		IN 017974
2	31000100	A		CABLE, SPECIAL PURPOSE, ELECT		IN

PART 5

CARD PLACEMENT

NOTE

This part contains a card placement and a card placement supplement. The card placement identifies the card location through the use of the coordinate system. It also identifies the card type and the numbered terms. Note, however, that the card placement terms correspond only to test points A and B. The supplement provides the terms which correspond to test points C and D.



CHASSIS 1	A	B	C	D	E	
1			H47 D773 B757	C21 D750 D760	AAH J509	1
2		H46 P048 P049	H46 D012 D013	H47 D751 D752	C21 D780 C714	2
3		H47 P703 P704	H46 D008 D009	H47 D702 D703	H47 D771 D772	3
4		H47 P700 P701	H46 D004 D005	H46 D036 D037	H46 D060 D061	4
5		K33 P044 P045	H46 D000 D001	H46 D032 D033	H46 D056 D057	5
6		H46 P040 P041	H47 D520 D521	H05 D509 D529	H46 D052 D053	6
7		H46 P038 P039	K23 D502 D503	H05 D508 D528	H46 D048 D049	7
8		H46 P032 P033	K23 D500 D501		H47 D532 D533	8
9		H46 P030 P031	H46 D018 D019	H46 D028 D029	C28 D514	9
10		H46 P024 P025	K33 D016 D017	H46 D024 D025	K23 D512 D513	10
11		H46 P022 P023	H46 D204 D205	H46 D020 D021	C28 D515	11
12		H46 P016 P017	H46 D200 D201	H05 D507 D527	H46 D044 D045	12
13		H46 P014 P015	C21 P752 C713	H05 D506 D526	H46 D040 D041	13
14		K33 P012 P013	C21 P750 P751	H05 D505 D525	H05 D511 D531	14
15		H46 P006 P007	K25 J471 J408	H05 D504 D524	H05 D510 D530	15
16		K33 P008 P009	K33 K470 K471	C21 D770 B762	H47 A778 A779	16
17		K33 P004 P005	K25 P753 P754	H47 D700 D701	C55 A780	17
18		H46 P000 P001	*K33 W030 W031	H48 J490 J415	H47 C710 C711	18
19		K25 J005 J080	K23 P721 P710	C28 P730 J470	H47 X250 X252	19
20		*K23 W112 W117	H47 P711 D790	H46 X012 X013	H46 X028 X029	20
21		C75 M000 M020	H30 P720 P722	H46 X008 X009	H46 X024 X025	21
22		C75 M010 M011	*H47 K015 K016	K25 J479 J107	C21 A777 B758	22
23		C75 M100 M101	H11 R109 R110	K23 X166 X167	K23 X174 X175	23
24		H47 U107 U108	H11 R107 R108	K23 X164 X165	K23 X172 X173	24
25		H10 L000 L001	H48 S769 W120	H48 X144 X145	H48 X152 X153	25
26		K71 Y240 Y241	H47 W740 W741	K25 X126 X127	K25 X134 X135	26

CHASSIS 1 A B C D E

* Present if St. Opt. 10278-1 is installed.

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CHASSIS 1	A	B	C	D	E	
27		H47 J250 J251	C21 W113 W114	H05 X107 X187	H05 X115 X195	27
28		K33 K240 K241	C28 W115 D769	H05 X106 X186	H05 X114 X194	28
29		H46 K242 K243	C28 W110 W111	H05 X105 X185	H05 X113 X193	29
30		C21 S767 S768	C28 W108 W109	H05 X104 X184	H05 X112 X192	30
31		C21 S760 S770	C28 W106 W107	H48 X121 X125	H47 X120 X124	31
32		C21 S740 S750	C28 W104 W105	H46 X004 X005	H46 X020 X021	32
33		K22 S741 J113	C28 W102 W103	H46 X000 X001	H46 X016 X017	33
34		H46 S028 S029	C28 W100 W101	*K33 S030 S031	H48 J116 J117	34
35		H46 S024 S025	H46 W024 W025	K23 X162 X163	K23 X170 X171	35
36		H46 S020 S021	H46 W020 W021	K23 X160 X161	K23 X168 X169	36
37		H46 S016 S017	H46 W016 W017	H48 X140 X141	H48 X148 X149	37
38		H47 S700 S701	H47 W700 W701	K25 X122 X123	K25 X130 X131	38
39		H46 S012 S013	H46 W012 W013	H05 X103 X183	H05 X111 X191	39
40		H46 S008 S009	H46 W008 W009	H05 X102 X182	H05 X110 X190	40
41		H46 S004 S005	H46 W004 W005	H05 X101 X181	H05 X109 X189	41
42		H46 S000 S001	H46 W000 W001	H05 X100 X180	H05 X108 X188	42
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CHASSIS 1	A	B	C	D	E	

* Present if Std. Opt. 10278-1 is installed.

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CHASSIS 1 A B C D E 5-3 Rev. A

CHASSIS 1 A B C D E

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CHASSIS 1 A B C D E

CHASSIS 1	F	G	H	I	J	
1	K33 B030 B031	K32 B800 B801	K33 K420 K421	ADM I108 I109	AGH T413	1
2	K33 B028 B029	H47 B760 B764	K33 K410 K411	AFH I110 I111	H11 R430 R431	2
3	K33 B026 B027	H47 B741 B710	H48 I190 I130	H47 I131 I117	H11 R410 R411	3
4 ✓	K33 B024 B025	H47 B720 B721	H47 J450 J460	H46 K490 K491	H11 R500 R501	4
5	K33 B022 B023	C21 B749 B740	K33 K450 K451	H35 Y511	C62 T500 T501	5
6	K33 B020 B021	H47 B700 B701	K33 K440 K441	H47 I112 I113	H53 Y493 Y509	6
7	K33 B018 B019	K25 B750 A770	K71 Y408 Y409	H47 I120 I123	C62 Z000 T414	7
8	K33 B016 B017	H47 B770 J420	K71 Y404 Y405	K25 I125 I210	C62 T411 T412	8
9	K33 B014 B015	H48 B780 A775	K71 Y400 Y401	K23 I204 I202	C62 T420 T410	9
10	K33 B012 B013	K33 K408 K409	H46 K430 K431	K33 K510 K511	H47 K413 K415	10
11	K33 B010 B011	K33 K406 K407	H48 J416 J542	H47 I200 I201	H48 I700 I701	11
12	K33 B008 H009	K33 K404 K405	H47 J401 J412	K23 I100 J417	H47 I024 I025	12
13	K33 B006 R007	K33 K402 K403	H46 K224 K225	H47 I101 J505	H47 I020 I021	13
14	K33 B004 B005	K33 K400 K401	H47 K514 K515	H40 I121	C28 I003 I007	14
15	K33 B002 B003	C21 J402 J405	H47 J510 J511	H46 K500 K501	C28 I002 I006	15
16	K33 B000 B001	H48 C202 C203	H53 Y510 Y481	K25 J500 J501	C28 I001 I005	16
17	H48 I115 D774	C21 C210 C211	H35 Y500	K23 J520 J530	C28 I000 I004	17
18		K27 C200 C201	H46 K534 K535	H40 J540 J541	H47 I014 I015	18
19	H47 J517 J111	C21 C740 C730	K33 K532 K533	H47 J543 J521	H47 I010 I011	19
20	H47 X261 X262	H47 J440 J482	K33 K530 K531	H47 J533 J534	H19 T406 T407	20
21	H47 X251 X253	H47 J538 K52A	K33 K552 K553	H47 J108 K524	H19 T404 T405	21
22	C27 A773 A776	H47 K321 C780	K33 K550 K551	K71 Y413 Y482	H19 T402 T403	22
23	K27 X240 X241	H48 C752	K33 K226 K227	H47 I212 I213	H19 T400 T401	23
24	K27 X230 X231	H47 C741 C757	H46 K236 K237	K32 K130 K131	*C62 T315	24
25	K27 X220 X221	C21 C770 A740	H46 K232 K233	H47 J481 J409	K33 K140 K141	25
26	K27 X201 X203	C21 C750 C760	H46 K228 K229	C21 J413 J133	H47 J112 J122	26
CHASSIS 1	F	G	H	I	J	

* Present if Std. Opt. 10278-1 is installed.

CHASSIS 1	F	G	H	I	J	
27	K24 X200 X202	C70 Y770 Y530	K23 A741 J414	C21 J123 J131	C21 F700 F710	27
28	C27 X248 X249	H46 A028 A029	K71 Y228 Y229	C21 J110 J120	C28 J109 F701	28
29	K27 C310 C311	H46 A024 A025	K71 Y224 Y225	K71 Y210 Y603	H48 F713 F707	29
30	K23 C306 C307	H46 A020 A021	K71 Y220 Y221	K69 Y030	H47 F715 J205	30
31	K23 C304 C305	H46 A016 A017		H47 J101 J102	H47 I208 C790	31
32	K23 C302 C303	H47 A700 A701	K33 K220 K221	H48 J100 U009	K26 J090 J091	32
33	K23 C300 C301	H46 A012 A013	H47 J262 J263	H46 K222 K223	H48 J081 U131	33
34	H46 C028 C029	K23 A112 A114	C21 J260 J261	H46 K124 K125	K16 J051	34
35	H46 C024 C025	H47 A109 A111	H47 J240 J241	H46 K118 K119	K25 J041 J049	35
36	H46 C020 C021	K23 A108 A110	K33 K212 K213	K33 K120 K121	K26 J047 J048	36
37	H46 C016 C017	H46 A008 A009	K33 K210 K211	H46 K116 K117	K26 J045 J046	37
38	H47 C701 C702	H46 A004 A005	H48 A711 A762	K31 K112 K113	K26 J050 J044	38
39	H46 C012 C013	K23 A104 A106	K71 Y032 Y031	H46 K110 K111	H47 J060 J061	39
40	H46 C008 C009	H47 A101 A103	C21 A763 A765	H46 K106 K107		40
41	H46 C004 C005	K23 A100 A102	C21 A750 A760	K36 K104 K105	H48 J097 J099	41
42	H46 C000 C001	H46 A000 A001	H47 A710 A749	H46 K100 K101		42
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1	C62	T214	T215	H11	R215	R230
2	C62	T212	T213	H11	R212	R213
3	C62	T210	T211	H11	R209	R210
4	C62	T208	T209	H11	R206	R207
5	C62	T206	T207	H11	R203	R204
6	C62	T204	T205	H11	R200	R201
7	C62	T202	T203	C62	T314	T102
8	C62	T200	T201	C62	T312	T313
9	H11	R406	R407	C62	T310	T311
10	H11	R403	R404	C62	T308	T309
11	H11	R400	R401	C62	T306	T307
12				C62	T304	T305
13	H48	J209	J211	C62	T302	T303
14	H47	J200	J210	C62	T300	T301
15	H48	J201	J202	C62	T321	T322
16	K71	Y200	Y201	C62	T330	T320
17	H46	K206	K207	H11	R330	R220
18	H46	K202	K203			
19	H46	K480	K481			
20	H47	J221	J223			
21	C21	J020	J022			
22	H47	J021	J023			
23	H47	K417	J027			
24	K71	Y203	Y000			
25	H47	J018	J019			
26	H48	J014	J015	H11	R130	R131

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27	H48	J010 J011	H11	R102 R120
28	H47	J000 J001	H11	R015 R100
29	K33	K114 K115	H11	R012 R013
30	H47	U008 U100	H11	R009 R010
31	H47	J040 J043	H11	R006 R007
32	C21	J070 J075	H11	R003 R004
33	H47	J071 J072	H11	R000 R001
34	H46	K000 K001	C62	T020 T021
35	H46	F004 F005	H19	T014 T015
36	H46	F008 F009	H19	T012 T013
37	H46	F012 F013	H19	T010 T011
38	H46	F104 F105	H19	T008 T009
39	H46	F108 F109	H19	T006 T007
40	K33	F120 F121	H19	T004 T005
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42			H19	T000 T001
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CARD PLACEMENT TOTALS FOR CHASSIS 1

CARD TYPE	TOTAL
K16	1
K36	1
H35	2
K27	6
H48	26
C21	27
K33	45

CARD TYPE	TOTAL
K26	4
K31	1
H53	2
C55	1
H11	23
K71	12
H47	71

CARD TYPE	TOTAL
H19	12
K69	1
C70	1
AAH	1
H30	1
H10	1
H46	93

CARD TYPE	TOTAL
C62	23
AFH	1
K32	2
H05	24
K23	24
C75	3

CARD TYPE	TOTAL
AGH	1
ADH	1
K24	1
C28	15
K22	1
K25	12

K12
C15
K17
K67
H37
K1

H48
H47
H48

H47
H47
H47

H46
H46
H46

J026 IJ041D H48
R520 IK009C H11
R4A5 IK010C H11
R4A2 IK011C H11
J212 IK013C H48
J213 IK013D H48
J215 IK014C H47
J216 IK014D H47
J2A3 IK015C H48
J2A4 IK015D H48
Y2A2 IK016C K71
Y2A4 IK016D K71
K2A8 IK017C H46
K2A9 IK017D H46
K2A4 IK018C H46
K205 IK018D H46
K2A0 IK019C H46
K2A1 IK019D H46
J224 IK020C H47
J1A3 IK020D H47
J024 IK022C H47
J025 IK022D H47
J030 IK023C H47
J032 IK023D H47
Y0A1 IK024C K71
Y0A2 IK024D K71
J028 IK025C H47
J029 IK025D H47
J016 IK026C H48
J017 IK026D H48
J012 IK027C H48
J013 IK027D H48
J0A2 IK028C H47
J0A3 IK028D H47
U1A1 IK030C H47
U1A2 IK030D H47
U12A IK031C H47
U121 IK031D H47
J076 IK033C H47
J077 IK033D H47
K132 IK034C H46
K133 IK034D H46
F0A6 IK035C H46
F0A7 IK035D H46
F010 IK036C H46
F011 IK036D H46
F014 IK037C H46
F015 IK037D H46
F1A6 IK038C H46
F1A7 IK038D H46
K0A6 IK039C H46
K0A7 IK039D H46
R231 IL001C H11
R214 IL002C H11
R211 IL003C H11
R2A8 IL004C H11
R2A5 IL005C H11
R2A2 IL006C H11
R132 IL026C H11
R121 IL027C H11
R1A1 IL028C H11
R014 IL029C H11

R011 IL030C H11
R0A8 IL031C H11
R0A5 IL032C H11
R0A2 IL033C H11

PART 6

EQUATION SUMMARY



A000=A001+A700 X001.
 1 / I / 2 3
 1G042A H46 A001 A762

A001=A000+A700 X000.
 6 / I / 4 5
 1G042B H46 A000 A100 A770 D504 T000

A002=A003+A700 X003.
 10 / I / 11 12
 1G042C H46 A003 A762

A003=A002+A700 X002.
 15 / I / 13 14
 1G042D H46 A002 A102 A770 D505 T001

A004=A005+A700 X005.
 1 / I / 2 3
 1G038A H46 A005

A005=A004+A700 X004.
 6 / I / 4 5
 1G038B H46 A004 A104 A763 A770 D506 T002

A006=A007+A700 X007.
 10 / I / 11 12
 1G038C H46 A007

A007=A006+A700 X006.
 15 / I / 13 14
 1G038D H46 A006 A106 A763 A770 D507 T003

A008=A009+A701 X009.
 1 / I / 2 3
 1G037A H46 A009

A009=A008+A701 X008.
 6 / I / 4 5
 1G037B H46 A008 A108 A763 D508 I000 T004

A010=A011+A701 X011.
 10 / I / 11 12
 1G037C H46 A011 A778

A011=A010+A701 X010.
 15 / I / 13 14
 1G037D H46 A010 A110 D509 I001 T005

A012=A013+A701 X013.
 1 / I / 2 3
 1G033A H46 A013 A778

A013=A012+A701 X012.

6 / I / 4 5
1G033B H46 A012 A112 D510 I002 T006

A014=A015+A701 X015.

10 / I / 11 12
1G033C H46 A015

A015=A014+A701 X014.

15 / I / 13 14
1G033D H46 A014 A114 A763 A779 D511 I003 T007

A016=A017+A702 X017.

1 / I / 2 3
1G031A H46 A017

A017=A016+A702 X016.

6 / I / 4 5
1G031B H46 A016 A773 D504 T008 T400 X108

A018=A019+A702 X019.

10 / I / 11 12
1G031C H46 A019

A019=A018+A702 X018.

15 / I / 13 14
1G031D H46 A018 A773 D505 T009 T401 X109

A020=A021+A702 X021.

1 / I / 2 3
1G030A H46 A021 A773 A776

A021=A020+A702 X020.

6 / I / 4 5
1G030B H46 A020 A774 D506 T010 T402 X110

A022=A023+A702 X023.

10 / I / 11 12
1G030C H46 A023 A776

A023=A022+A702 X022.

15 / I / 13 14
1G030D H46 A022 A773 A774 D507 T011 T403 X111

A024=A025+A703 X025.

1 / I / 2 3
1G029A H46 A025 A776 A777

A025=A024+A703 X024.

6 / I / 4 5
1G029B H46 A024 D508 T012 T404 X112

A026=A027+A703 X027.

10 / I / 11 12
1G029C H46 A027 A777

A027=A026+A703 X026.

15 / I / 13 14
1G029D H46 A026 A780 D509 T013 T405 X113

A028=A029+A703 X029.

1 / I / 2 3
1G028A H46 A029 A775

A029=A028+A703 X028.

6 / I / 4 5
1G028B H46 A028 A780 D510 T014 T406 X114

A030=A031+A703 X031.

10 / I / 11 12
1G028C H46 A031 A775

A031=A030+A703 X030.

15 / I / 13 14
1G028D H46 A030 A780 D511 T015 T407 X115

A100=A710 A001 +A711 R400.

1 / 2 3 4 / 5 6 10
1G041A K23 A101

A101=A100.

1 / 2 3
1G040A H47 X100

A102=A710 A003+A711 R401.

15 / 11 12 / 13 14
1G041B K23 A103

A103=A102.

6 / 4 5
1G040B H47 X101

A104=A710 A005 +A711 R402.

1 / 2 3 4 / 5 6 10
1G039A K23 A105

A105=A104.

10 / 11 12
1G040C H47 X102

A106=A710 A007+A711 R403.

15 / 11 12 / 13 14
1G039B K23 A107

A107=A106.

15 / 13 14
1G040D H47 X103

A108=A710 A009 +A711 R404.

1 / 2 3 4 / 5 6 10
1G036A K23 A109

A109=A108.

1 / 2 3
1G035A H47 X104

A110=A710 A011+A711 R405.

15 / 11 12 / 13 14
1G036B K23 A111

A111=A110.

6 / 4 5
1G035B H47 X105

A112=A710 A013 +A711 R406.

1 / 2 3 4 / 5 6 10
1G034A K23 A113

A113=A112.

10 / 11 12
1G035C H47 X106

A114=A710 A015+A711 R407.

15 / 11 12 / 13 14
1G034B K23 A115

A115=A114.

15 / 13 14
1G035D H47 X107

A700=A741.

1 / 2 3
1G032A H47 A000 A001 A002 A003 A004 A005 A006 A007

A701=A741.

6 / 4 5
1G032B H47 A008 A009 A010 A011 A012 A013 A014 A015

A702=A741.

10 / 11 12
1G032C H47 A016 A017 A018 A019 A020 A021 A022 A023

A703=A741.

15 / 13 14
1G032D H47 A024 A025 A026 A027 A028 A029 A030 A031

A710=K228 K225.

1 / 2 3
1H042A H47 A100 A102 A104 A106 A108 A110 A112 A114

A711=K224+K229.

1 / 2 / 3
1H038A H48 A100 A102 A104 A106 A108 A110 A112 A114

A740=A750 A765 A760.

15 / 10 11 12 13 14
1G025B C21 A741

A741=J081 +A740 J536.

1 / 2 3 4 / 5 6 10
1H027A K23 A700 A701 A702 A703

A749=J042 J040.

6 / 4 5
1H042B H47 A750

A750=A749 K211 K220 K515 K004.

1 / 2 3 4 5 6
1H041A C21 A740 X200 X201 X202 X203

A760=A765 K441 K514.

15 / 10 11 12 13 14
1H041B C21 A740 X220 X221 X248

A762=A002+A000.

6 / 4 / 5
1H038B H48 A763

A763=A015 A009 A007 A005 A762.

1 / 2 3 4 5 6
1H040A C21 Y250

A764=Y250.

10 / 11 12
1H042C H47 A765

A765=A764 K441 K514.

15 / 10 11 12 13 14
1H040B C21 A740 A760 X221 X249

A770= A001+A003+A005+A007.

15 / 10 / 11 / 12 / 13 / 14
1G007B K25 J414

A773=A023 A020 A019 A017.

1 / 2 3 4 5 6
1F022A C21 A777

A774=A023 A021.

15 / 13 14
1E016D H47 A777

A775=A030+A028.

6 / 4 / 5
1G009B H48 A780

A776=A024 A022 A020.

15 / 10 11 12 13 14
1F022B C21 A780

A777=A774 A026 A024 A773.

1 / 2 3 4 5 6
1F022A C21 A780

A778=A012 A010.

1 / 2 3
1E016A H47 A779

A779=A015 A778.

6 / 4 5
1E016B H47 A781

A780=A775 A777 +R520 A031 +R520 A029 A027 A776.

1 / 2 3 4 / 5 6 10 11 / 12 13 14 15
1E017A C55 A781

A781=A780 A779.

10 / 11 12
1E016C H47 C310 C311 K122

B000=B001+B720 D001+B710 R200.
 1 / I / 2 3 / 4 5 6
 1F016A K33 B001 W001

B001=B000+B700 +B720 D000.
 15 / I / 10 11 / 12 13 14
 1F016B K33 B000 D500 T200 W000

B002=B003+B720 D005+B710 R201.
 1 / I / 2 3 / 4 5 6
 1F015A K33 B003 W003

B003=B002+B700 +B720 D004.
 15 / I / 10 11 / 12 13 14
 1F015B K33 B002 D501 T201 W002

B004=B005+B720 D009+B710 R202.
 1 / I / 2 3 / 4 5 6
 1F014A K33 B005 W005

B005=B004+B700 +B720 D008.
 15 / I / 10 11 / 12 13 14
 1F014B K33 B004 D502 T202 W004

B006=B007+B720 D013+B710 R203.
 1 / I / 2 3 / 4 5 6
 1F013A K33 B007 W007

B007=B006+B700 +B720 D012.
 15 / I / 10 11 / 12 13 14
 1F013B K33 B006 D503 T203 W006

B008=B009+B721 D017+B711 R204.
 1 / I / 2 3 / 4 5 6
 1F012A K33 B009 W009

B009=B008+B700 +B721 D016.
 15 / I / 10 11 / 12 13 14
 1F012B K33 B008 D504 T204 W008

B010=B011+B721 D021+B711 R205.
 1 / I / 2 3 / 4 5 6
 1F011A K33 B011 W011

B011=B010+B700 +B721 D020.
 15 / I / 10 11 / 12 13 14
 1F011B K33 B010 D505 T205 W010

B012=B013+B721 D025+B711 R206.
 1 / I / 2 3 / 4 5 6
 1F010A K33 B013 W013

613-4
 601-4

B013=B012+B700 +B721 D024.
 15 / I / 10 11 / 12 13 14
 1F010B K33 B012 D506 T206 W012

B014=B015+B721 D029+B711 R207.
 1 / I / 2 3 / 4 5 6
 1F009A K33 B015 W015

B015=B014+B700 +B721 D028.
 15 / I / 10 11 / 12 13 14
 1F009B K33 B014 D507 T207 W014

B016=B017+B722 D033+B711 R208.
 1 / I / 2 3 / 4 5 6
 1F008A K33 B017 W017

B017=B016+B701 +B722 D032.
 15 / I / 10 11 / 12 13 14
 1F008B K33 B016 D508 T208 W016

B018=B019+B722 D037+B711 R209.
 1 / I / 2 3 / 4 5 6
 1F007A K33 B019 W019

B019=B018+B701 +B722 D036.
 15 / I / 10 11 / 12 13 14
 1F007B K33 B018 D509 T209 W018

B020=B021+B722 D041+B712 R210.
 1 / I / 2 3 / 4 5 6
 1F006A K33 B021 W021

B021=B020+B701 +B722 D040.
 15 / I / 10 11 / 12 13 14
 1F006B K33 B020 D510 T210 W020

B022=B023+B722 D045+B712 R211.
 1 / I / 2 3 / 4 5 6
 1F005A K33 B023 W023

B023=B022+B701 +B722 D044.
 15 / I / 10 11 / 12 13 14
 1F005B K33 B022 D511 T211 W022

B024=B025+B723 D049+B712 R212.
 1 / I / 2 3 / 4 5 6
 1F004A K33 B025 W025

B025=B024+B701 +B723 D048.
 15 / I / 10 11 / 12 13 14
 1F004B K33 B024 D512 T212 W024

B026=B027+B723 D053+B712 R213.

1 / I / 2 3 / 4 5 6
1F003A K33 B027 W027

B027=B026+B701 +B723 D052.

15 / I / 10 11 / 12 13 14
1F003B K33 B026 D513 T213 W026

B028=B029+B723 D057+B712 R214.

1 / I / 2 3 / 4 5 6
1F002A K33 B029 W029

B029=B028+B701 +B723 D056.

15 / I / 10 11 / 12 13 14
1F002B K33 B028 D514 T214 W028

B030=B031+B723 D061+B712 R215.

1 / I / 2 3 / 4 5 6
1F001A K33 B031 (W031)*

B031=B030+B701 +B723 D060.

15 / I / 10 11 / 12 13 14
1F001B K33 B030 D515 T215 (W031)*

B700=B763 B702.

1 / 2 3
1G006A H47 B001 B003 B005 B007 B009 B011 B013 B015

B701=B763 B702.

6 / 4 5
1G006B H47 B017 B019 B021 B023 B025 B027 B029 B031

B702=D773 J537.

10 / 11 12
1C001C H47 B700 B701 B764

B710=B741.

6 / 4 5
1G003B H47 B000 B002 B004 B006 B800 K240

B711=B741.

10 / 11 12
1G003C H47 B008 B010 B012 B014 B016 B018

B712=B741.

15 / 13 14
1G003D H47 B020 B022 B024 B026 B028 B030

B720=B751.

1 / 2 3
1G004A H47 B000 B001 B002 B003 B004 B005 B006 B007

B721=B751.

6 / 4 5
1G004B H47 B008 B009 B010 B011 B012 B013 B014 B015

B722=B751.

10 / 11 12
1G004C H47 B016 B017 B018 B019 B020 B021 B022 B023

B723=B751.

15 / 13 14
1G004D H47 B024 B025 B026 B027 B028 B029 B030 B031

B724=B751.

15 / 13 14
1G006D H47 B800

B740=F006 F010 K212.

15 / 10 11 12 13 14
1G005B C21 B741

B741=B740 J204.

1 / 2 3
1G003A H47 B710 B711 B712

B748=F009+K005.

10 / 11 / 12
1E034C H48 B750 B780

B749=W116 C401 K515.

1 / 2 3 4 5 6
1G005A C21 B750

B750=B749+B748+K403+K404+K420.

1 / 2 / 3 / 4 / 5 / 6
1G007A K25 B751 J113

B751=B750 J536.

10 / 11 12
1G006C H47 B720 B721 B722 B723 B724 B770

B756=C210+C028.

10 / 11 / 12
1G009C H48 B757

B757=B756.

6 / 4 5
1C001B H47 B758

B758=D773 W116 B757.

15 / 10 11 12 13 14
1E022B C21 B762

B759=K451 D769.

10 / 11 12
1G002C H47 B762

B760=K211 K213.

1 / 2 3
1G002A H47 B762

B762=B760 B758 B759.

15 / 10 11 12 13 14
1D016B C21 B763

B763=B762 J536.

15 / 13 14
1G002D H47 B700 B701 B770

003 B764=B702 J080.

6 / 4 5
1G002B H47 B801

B770=B751 B763.

1 / 2 3
1G008A H47 K202

B780=B74H+K213.

1 / 2 / 3
1G009A H48 B801 J210 K240 T321

B800=B801+ B724 +B710.

003 1 / 1 / 2 / 3 4 / 5 6
1G001A K32 B801 J113 K472

B801=B800+W703+B764 +B780 J204.

15 / 1 / 10 / 11 12 / 13 14
1G001B K32 B800 J113

C000=C001+C701 X001.
 1 / 1 / 2 3
 1F042A H46 C001 C300

C001=C000+C701 X000.
 6 / 1 / 4 5
 1F042B H46 C000 C200 C300 I020 X100

C002=C003+C701 X003.
 10 / 1 / 11 12
 1F042C H46 C003 C301

C003=C002+C701 X002.
 15 / 1 / 13 14
 1F042D H46 C002 C200 C301 C713 I021 X101

C004=C005+C701 X005.
 1 / 1 / 2 3
 1F041A H46 C005 C302 J417

C005=C004+C701 X004.
 6 / 1 / 4 5
 1F041B H46 C004 C200 C302 C713 I022 X102

C006=C007+C701 X007.
 10 / 1 / 11 12
 1F041C H46 C007 C303

C007=C006+C701 X006.
 15 / 1 / 13 14
 1F041D H46 C006 C200 C303 C712 I023 X103

C008=C009+C702 X009.
 1 / 1 / 2 3
 1F040A H46 C009 C304

C009=C008+C702 X008.
 6 / 1 / 4 5
 1F040B H46 C008 C201 C304 I024 X104

C010=C011+C702 X011.
 10 / 1 / 11 12
 1F040C H46 C011 C305

C011=C010+C702 X010.
 15 / 1 / 13 14
 1F040D H46 C010 C201 C305 I025 X105

C012=C013+C702 X013.
 1 / 1 / 2 3
 1F039A H46 C013 C306

C013=C012+C702 X012.
 6 / I / 4 5
 1F0398 H46 C012 C201 C306 I026 X106

C014=C015+C702 X015.
 10 / I / 11 12
 1F039C H46 C015 C307

C015=C014+C702 X014.
 15 / I / 13 14
 1F039D H46 C014 C201 C307 I027 X107

C016=C017+C703 X017.
 1 / I / 2 3
 1F037A H46 C017 C300

C017=C016+C703 X016.
 6 / I / 4 5
 1F037B H46 C016 C210 C300 I020 J478 X108

C018=C019+C703 X019.
 10 / I / 11 12
 1F037C H46 C019 C301 J479

C019=C018+C703 X018.
 15 / I / 13 14
 1F037D H46 C018 C210 C301 I021 J481 X109

C020=C021+C703 X021.
 1 / I / 2 3
 1F036A H46 C021 C302 J479

C021=C020+C703 X020.
 6 / I / 4 5
 1F036B H46 C020 C210 C302 I022 X110

C022=C023+C703 X023.
 10 / I / 11 12
 1F036C H46 C023 C303

C023=C022+C703 X022.
 15 / I / 13 14
 1F036D H46 C022 C210 C303 I023 X111

C024=C025+C704 X025.
 1 / I / 2 3
 1F035A H46 C025 C304

C025=C024+C704 X024.
 6 / I / 4 5
 1F035B H46 C024 C210 C304 I024 X112

C026=C027+C704 X027.
 10 / I / 11 12
 1F035C H46 C027 C305

C027=C026+C704 X026.
 15 / I / 13 14
 1F035D H46 C026 C211 C305 I025 J480 X113

C028=C029+C704 X029.
 1 / I / 2 3
 1F034A H46 B756 C029 C306

C029=C028+C704 X028.
 6 / I / 4 5
 1F034B H46 C028 C211 C306 I026 J480 X114

C030=C031+C704 X031.
 10 / I / 11 12
 1F034C H46 C031 C307

C031=C030+C704 X030.
 15 / I / 13 14
 1F034D H46 C030 C211 C307 I027 X115

C200=GND +C007 C005 C003 C001.
 1 / 2 / 3 4 5 6
 1G018A K27 C202

C201=GND +C015 C013 C011 C009.
 15 / 10 / 11 12 13 14
 1G018B K27 C202

C202=C201+C200.
 1 / 2 / 3
 1G016A H48 C203 I005

C203= C202.
 6 / 4 / 5
 1G016B H48 C720

C210=C023 C021 C019 C017 C025.
 1 / 2 3 4 5 6
 1G017A C21 B756 C212

C211=C031 C029 C027.
 15 / 10 11 12 13 14
 1G017B C21 C212

C212=C210+C211.
 10 / 11 / 12
 1G016C H48 C213 I002

C213= C212.
 15 / 13 / 14
 1G016D H48 C720

C300=C017 C000 +C016 C001.
 1 / 2 3 4 / 5 6 10
 1F033A K23 C310

C301=C019 C002+C018 C003.
 15 / 11 12 / 13 14
 1F033B K23 C310

C302=C021 C004 +C020 C005.
 1 / 2 3 4 / 5 6 10
 1F032A K23 C310

C303=C023 C006+C022 C007.
 15 / 11 12 / 13 14
 1F032B K23 C310

C304=C025 C008 +C024 C009.
 1 / 2 3 4 / 5 6 10
 1F031A K23 C311

C305=C027 C010+C026 C011.
 15 / 11 12 / 13 14
 1F031B K23 C311

C306=C029 C012 +C028 C013.
 1 / 2 3 4 / 5 6 10
 1F030A K23 C311

C307=C031 C014+C030 C015.
 15 / 11 12 / 13 14
 1F030B K23 C311

C310=A781+C300 C301 C302 C303.
 1 / 2 / 3 4 5 6
 1F029A K27 C312

C311=A781+C304 C305 C306 C307.
 15 / 10 / 11 12 13 14
 1F029B K27 C312

C312=C310+C311.
 10 / 11 / 12
 1F017C H48 C313 K226

C313= C312.
 15 / 13 / 14
 1F017D H48 Y226

C40^h=C401+C714 J240.

10 / I / 11 12
1C009C H46 C401

C40_i=C400+C715 J240.

15 / I / 13 14
1C009D H46 B749 C400 C730 C780 D770

C70_i=C741.

1 / 2 3
1F038A H47 C000 C001 C002 C003 C004 C005 C006 C007

C70_o=C741.

6 / 4 5
1F038B H47 C008 C009 C010 C011 C012 C013 C014 C015

C70₃=C741.

10 / 11 12
1F038C H47 C016 C017 C018 C019 C020 C021 C022 C023

C70₄=C741.

15 / 13 14
1F038D H47 C024 C025 C026 C027 C028 C029 C030 C031

A04 C71_r=Y780 K421.

1 / 2 3
1E018A H47 C711 C713

C71_i=C710.

6 / 4 5
1E018B H47 C712

C71_o=C711 C007.

10 / 11 12
1E018C H47 C714

C71₃=C710 C003 C005.

15 / 10 11 12 13 14
1C013B C21 C714

C71₄=C712 C713 K552 X247.

15 / 10 11 12 13 14
1E002B C21 C400 C715 D760

C71₅=C714.

15 / 13 14
1D002D H47 C401 J400 J490

C72_A=C213 C203.

10 / 11 12
1G024C H47 C721 Y227

C721=C720.

15 / 13 14
1G024D H47 C770

C730=C401 K517 I200 C752.

15 / 10 11 12 13 14
1G019B C21 C740 S760 X241 Y240

C740=C752 C760 Y770 C791 C730.

1 / 2 3 4 5 6
1G019A C21 C741

C741=J537 C740.

1 / 2 3
1G024A H47 C701 C702 C703 C704

C750=J420 J430 J440 J460 J450.

1 / 2 3 4 5 6
1G026A C21 C752

C751=J431.

6 / 4 5
1G024B H47 C752

C752=C750+C751.

1 / 2 / 3
1G023A H48 C730 C740

C760=K225 K514 K228.

15 / 10 11 12 13 14
1G026B C21 C740 X220 X221

C770=C721 K229 K230.

1 / 2 3 4 5 6
1G025A C21 Y770

C779=I201+K515.

10 / 11 / 12
1G023C H48 C780 C781

C780=C401 C779.

6 / 4 5
1G022B H47 C790 X249

C781=C779.

10 / 11 12
1G022C H47 C790 X248

C790=C780 C781.

6 / 4 5
1J031B H47 C791

C791=C790.

10 / 11 12

1J031C H47 C740 X240 X241

D000=D001+D700 D520.
 1 / I / 2 3
 1C005A H46 B001 D001 D003

D001=D000+D700 D500.
 6 / I / 4 5
 1C005B H46 B000 D000 D002

D002=D003+D001 D710.
 10 / I / 11 12
 1C005C H46 D003

D003=D002+D000 D710.
 15 / I / 13 14
 1C005D H46 D002 D501

D004=D005+D521 D700.
 1 / I / 2 3
 1C004A H46 B003 D005 D007

D005=D004+D501 D700.
 6 / I / 4 5
 1C004B H46 B002 D004 D006

D006=D007+D005 D710.
 10 / I / 11 12
 1C004C H46 D007

D007=D006+D004 D710.
 15 / I / 13 14
 1C004D H46 D006 D502

D008=D009+D522 D700.
 1 / I / 2 3
 1C003A H46 B005 D009 D011

D009=D008+D502 D700.
 6 / I / 4 5
 1C003B H46 B004 D008 D010

D010=D011+D009 D710.
 10 / I / 11 12
 1C003C H46 D011

D011=D010+D008 D710.
 15 / I / 13 14
 1C003D H46 D010 D503

D012=D013+D523 D700.
 1 / I / 2 3
 1C002A H46 B007 D013 D015

D013=D012+D503 D700.
 6 / I / 4 5
 1C0028 H46 B006 D012 D014

D014=D015+D013 D710.
 10 / I / 11 12
 1C002C H46 D015

D015=D014+D012 D710.
 15 / I / 13 14
 1C002D H46 D014 D504

D016=D017+D790 +D524 D701.
 1 / I / 2 3 / 4 5 6
 1C010A K33 B009 D017 D019

D017=D016+D504 D701+GND .
 15 / I / 10 11 / 12 13 14
 1C010B K33 B008 D016 D018

D018=D019+D017 D711.
 1 / I / 2 3
 1C009A H46 D019

D019=D018+D016 D711.
 6 / I / 4 5
 1C009B H46 D018 D505

D020=D021+D525 D701.
 1 / I / 2 3
 1D011A H46 B011 D021 D023

D021=D020+D505 D701.
 6 / I / 4 5
 1D011B H46 B010 D020 D022

D022=D023+D021 D711.
 10 / I / 11 12
 1D011C H46 D023

D023=D022+D020 D711.
 15 / I / 13 14
 1D011D H46 D022 D506

D024=D025+D526 D701.
 1 / I / 2 3
 1D010A H46 B013 D025 D027

D025=D024+D506 D701.
 6 / I / 4 5
 1D010B H46 B012 D024 D026

D026=D027+D025 D711.
 10 / I / 11 12
 10010C H46 D027

D027=D026+D024 D711.
 15 / I / 13 14
 10010D H46 D026 D507

D028=D029+D527 D701.
 1 / I / 2 3
 10009A H46 B015 D029 D031

D029=D028+D507 D701.
 6 / I / 4 5
 10009B H46 B014 D028 D030

D030=D031+D029 D711.
 10 / I / 11 12
 10009C H46 D031

D031=D030+D028 D711.
 15 / I / 13 14
 10009D H46 D030 D508

D032=D033+D528 D702.
 1 / I / 2 3
 10005A H46 B017 D033 D035

D033=D032+D508 D702.
 6 / I / 4 5
 10005B H46 B016 D032 D034

D034=D035+D033 D712.
 10 / I / 11 12
 10005C H46 D035

D035=D034+D032 D712.
 15 / I / 13 14
 10005D H46 D034 D509

D036=D037+D529 D702.
 1 / I / 2 3
 10004A H46 B019 D037 D039

D037=D036+D509 D702.
 6 / I / 4 5
 10004B H46 B018 D036 D038

D038=D039+D037 D712.
 10 / I / 11 12
 10004C H46 D039

D039=D038+D036 D712.
 15 / I / 13 14
 1D004D H46 D038 D510

D040=D041+D530 D702.
 1 / I / 2 3
 1E013A H46 B021 D041 D043

D041=D040+D510 D702.
 6 / I / 4 5
 1E013B H46 B020 D040 D042

D042=D043+D041 D712.
 10 / I / 11 12
 1E013C H46 D043

D043=D042+D040 D712.
 15 / I / 13 14
 1E013D H46 D042 D511

D044=D045+D531 D702.
 1 / I / 2 3
 1E012A H46 B023 D045 D047

D045=D044+D511 D702.
 6 / I / 4 5
 1E012B H46 B022 D044 D046

D046=D047+D045 D712.
 10 / I / 11 12
 1E012C H46 D047

D047=D046+D044 D712.
 15 / I / 13 14
 1E012D H46 D046 D512

D048=D049+D532 D703.
 1 / I / 2 3
 1E007A H46 B025 D049 D051

D049=D048+D512 D703.
 6 / I / 4 5
 1E007B H46 B024 D048 D050

D050=D051+D049 D713.
 10 / I / 11 12
 1E007C H46 D051

D051=D050+D048 D713.
 15 / I / 13 14
 1E007D H46 D050 D513

D052=D053+D053 D703.

1 / I / 2 3
1E006A H46 B027 D053 D055

D053=D052+D053 D703.

6 / I / 4 5
1E006B H46 B026 D052 D054

D054=D055+D053 D713.

10 / I / 11 12
1E006C H46 D055

D055=D054+D052 D713.

15 / I / 13 14
1E006D H46 D054 D0514

D056=D057+D0534 D703.

1 / I / 2 3
1E005A H46 B029 D057 D059

D057=D056+D0514 D703.

6 / I / 4 5
1E005B H46 B028 D056 D058

D058=D059+D057 D713.

10 / I / 11 12
1E005C H46 D059

D059=D058+D056 D713.

15 / I / 13 14
1E005D H46 D058 D0515

D060=D061+D0535 D703.

1 / I / 2 3
1E004A H46 B031 D061 D063 J470

D061=D060+D0515 D703.

6 / I / 4 5
1E004B H46 B030 D060 D062 I204 J470 P710

D062=D063+D061 D713.

10 / I / 11 12
1E004C H46 D063

D063=D062+D060 D713.

15 / I / 13 14
1E004D H46 D062

D200=D201+K493 I113.

1 / I / 2 3
1C012A H46 D201 D203

D201=D200+K492 I113.

6 / 1 / 4 5
1C0128 H46 D200 D202

D202=D203+D201 I118.

10 / 1 / 11 12
1C012C H46 D203 D205

D203=D202+D200 I118.

15 / 1 / 13 14
1C012D H46 D202 D204 P710

D204=D205+D203 I113.

1 / 1 / 2 3
1C011A H46 D205 D207 J470 D516

D205=D204+D202 I113.

6 / 1 / 4 5
1C011B H46 D204 D206 J470 K531

D206=D207+D205 I118.

10 / 1 / 11 12
1C011C H46 D207

D207=D206+D204 I118.

15 / 1 / 13 14
1C011D H46 D206 D500

D500=B001 D771 +D207 D781 D720.

1 / 2 3 4 / 5 6 10
1C008A K23 D001 D520

D501=B003 D771+D003 D781.

15 / 11 12 / 13 14
1C008B K23 D005 D521

D502=B005 D771 +D007 D781.

1 / 2 3 4 / 5 6 10
1C007A K23 D009 D522

D503=B007 D771+D011 D781.

15 / 11 12 / 13 14
1C007B K23 D013 D523

D504=A001 D761+B009 D771+D015 D781+A017 D751.

1 / 3 4 / 5 6 / 10 11 / 12 13
1D015A H05 D017 D524

D505=A003 D761+B011 D771+D019 D781+A019 D751.

1 / 3 4 / 5 6 / 10 11 / 12 13
1D014A H05 D021 D525

D506=A005 D761+B013 D771+D023 D781+A021 D751.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D013A H05 D025 D526

D507=A007 D761+B015 D771+D027 D781+A023 D751.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D012A H05 D029 D527

D508=A009 D761+B017 D772+D031 D782+A025 D751.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D007A H05 D033 D528

D509=A011 D761+B019 D772+D035 D782+A027 D751.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D006A H05 D037 D529

D510=A013 D761+B021 D772+D039 D782+A029 D751.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1E015A H05 D041 D530

D511=A015 D761+B023 D772+D043 D782+A031 D751.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1E014A H05 D045 D531

D512=B025 D772 +D047 D782.
 1 / 2 3 4 / 5 6 10
 1E010A K23 D049 D532

D513=B027 D772+D051 D782.
 15 / 11 12 / 13 14
 1E010B K23 D053 D533

D514=B029 D772+D055 D782+D730 D752.
 1 / 2 3 / 4 5 / 6 10
 1E009A C28 D057 D534

D515=B031 D772+D059 D782+ D516 D752.
 15 / 11 12 / 13 14
 1E011A C28 D061 D535

D516=D204 + K431.
 1E009B C28 D515

D520=D500.
 1 / 2 3
 1C006A H47 D000

D521=D501.
 6 / 4 5
 1C006B H47 D004

D522=D502.
 10 / 11 12
 1C006C H47 D008

D523=D503.
15 / 13 14
1C006D H47 D012

D524=D504.
15 / 14
1D015B H05 D016

D525=D505.
15 / 14
1D014B H05 D020

D526=D506.
15 / 14
1D013B H05 D024

D527=D507.
15 / 14
1D012B H05 D028

D528=D508.
15 / 14
1D007B H05 D032

D529=D509.
15 / 14
1D006B H05 D036

D530=D510.
15 / 14
1E015B H05 D040

D531=D511.
15 / 14
1E014B H05 D044

D532=D512.
1 / 2 3
1E008A H47 D048

D533=D513.
6 / 4 5
1E008B H47 D052

D534=D514.
10 / 11 12
1E008C H47 D056

D535=D515.
15 / 13 14
1E008D H47 D060

D700=K528.

1 / 2 3
1D017A H47 D000 D001 D004 D005 D008 D009 D012 D013

D701=K528.

6 / 4 5
1D017B H47 D016 D017 D020 D021 D024 D025 D028 D029

D702=K528.

1 / 2 3
1D003A H47 D032 D033 D036 D037 D040 D041 D044 D045

D703=K528.

6 / 4 5
1D003B H47 D048 D049 D052 D053 D056 D057 D060 D061

D710=J538.

10 / 11 12
1D017C H47 D002 D003 D006 D007 D010 D011 D014 D015

D711=J538.

15 / 13 14
1D017D H47 D018 D019 D022 D023 D026 D027 D030 D031

D712=J538.

10 / 11 12
1D003C H47 D034 D035 D038 D039 D042 D043 D046 D047

D713=J538.

15 / 13 14
1D003D H47 D050 D051 D054 D055 D058 D059 D062 D063

D720=D769+I206.

15 / 13 / 14
1E034D H48 D500

00 D730=M011 F015.

15 / 13 14
1E019D H47 D514

D750=K403 K405 K411.

1 / 2 3 4 5 6
1D001A C21 D751 D752 D780

D751=D750.

1 / 2 3
1D002A H47 D504 D505 D506 D507 D508 D509 D510 D511

D752=D750.

6 / 4 5
1D002B H47 D514

D760=K406 K402 K405 K411 C714.
15 / 10 11 12 13 14
1D0018 C21 D761 D780

D761=D760.
10 / 11 12
1D002C H47 D504 D505 D506 D507 D508 D509 D510 D511

D768=K407+K404.
10 / 11 / 12
1D018C H48 D770

D769=F006 F010+K420.
15 / 11 12 / 13 14
1C02AB C28 B759 D720 D770

D770=D769 D768 C401 OPEN K513.
1 / 2 3 4 5 6
1D016A C21 D771 D772 D773 D774 D780

D771=D770.
1 / 2 3
1E003A H47 D500 D501 D502 D503 D504 D505 D506 D507

D772=D770.
6 / 4 5
1E003B H47 D508 D509 D510 D511 D512 D513 D514 D515

D773=D770.
1 / 2 3
1C001A H47 B702 B758

003 D774=D770+K524.
6 / 4 / 5
003 1F017B H48 J113 K472

D780=D770 D760 D750.
1 / 2 3 4 5 6
1E002A C21 D781 D782

D781=D780.
10 / 11 12
1E003C H47 D500 D501 D502 D503 D504 D505 D506 D507

D782=D780.
15 / 13 14
1E003D H47 D508 D509 D510 D511 D512 D513 D514 D515

D790=J430.
6 / 4 5
1C020B H47 D016

F004=F005+J012 F712.

1 / I / 2 3
1K035A H46 F005

F005=F004+F714.

6 / I / 4 5
1K035B H46 F004 J121

F006=F007+F712 J013.

10 / I / 11 12
1K035C H46 B740 D769 F007 J110

F007=F006+F714.

15 / I / 13 14
1K035D H46 F006 I202

F008=F009+F712 J014.

1 / I / 2 3
1K036A H46 F009 J110

F009=F008+F714.

6 / I / 4 5
1K036B H46 B748 F008

F010=F011+F712 J015.

10 / I / 11 12
1K036C H46 B740 D769 F011 J110

F011=F010+F714.

15 / I / 13 14
1K036D H46 F010 K112

F012=F013+F712 J016.

1 / I / 2 3
1K037A H46 F013 J402 J413

F013=F012+F714.

6 / I / 4 5
1K037B H46 F012 X200

F014=F015+F712 J017.

10 / I / 11 12
1K037C H46 F015 J413

F015=F014+F714.

15 / I / 13 14
1K037D H46 F014 K430 X200

F104=F105+F702 R002.

1 / I / 2 3
1K038A H46 F105

F105=F104+F708 F701.

6 / I / 4 5
iK038B H46 F104 K104

F106=F107+F702 R003.

10 / I / 11 12
iK038C H46 F107

F107=F106+F701 F708.

15 / I / 13 14
iK038D H46 F106 K104

F108=F109+F702 R004.

1 / I / 2 3
iK039A H46 F109

F109=F108+F701 F708.

6 / I / 4 5
iK039B H46 F108 K104

003 F120=F121+GND +F702 R009 R008.

1 / I / 2 3 / 4 5 6
iK040A K33 F121

00 F121=F120+K017 +F702 U009 R008.

15 / I / 10 11 / 12 13 14
iK040B K33 F120

F700=J011 J021 K001.

1 / 2 3 4 5 6
iJ027A C21 F701 F702

F701=J030 J080+F700 J080.

15 / 11 12 / 13 14
iJ028B C28 F105 F107 F109 K115

F702=F700+J032.

10 / 11 / 12
iJ029C H48 F104 F106 F108 F120 F121 K114

F707=GND +R001.

6 / 4 / 5
iJ029B H48 F708

F708=F707 J080.

15 / 13 14
iJ030D H47 F105 F107 F109

F710=J021 K001.

15 / 10 11 12 13 14
iJ027B C21 F711 F712

F711=J030+F710.

10 / 11 / 12

1J033C H48 F713 K002 K003

F712=J032+F710.

15 / 13 / 14

1J029D H48 F004 F006 F008 F010 F012 F014

F713=F711+J081.

1 / 2 / 3

1J029A H48 F714 F715 J101 J102 J108 J249

F714=F713 K108.

15 / 13 14

1J026D H47 F005 F007 F009 F011 F013 F015 K005

F715=F713 K108.

1 / 2 3

1J030A H47 K007 K103 K131 K141 K431

00 I000=Y483 +I701 I020+I702 A009.
 1 / 2 3 / 4 5 / 6 10
 IJ017A C28 I010

I001=I207 +I701 I021+I702 A011.
 1 / 2 3 / 4 5 / 6 10
 IJ016A C28 I011

I002=I209 C212+I701 I022+I702 A013.
 1 / 2 3 / 4 5 / 6 10
 IJ015A C28 I012

I003=I701 I023+I702 A015+GND .
 1 / 2 3 / 4 5 / 6 10
 IJ014A C28 I013

00 I004=Y484 +I701 I024.
 15 / 11 12 / 13 14
 IJ017B C28 I014

I005=I209 C202+I701 I025.
 15 / 11 12 / 13 14
 IJ016B C28 I015

I006=J105 +I701 I026.
 15 / 11 12 / 13 14
 IJ015B C28 I016

I007=I701 I027+GND .
 15 / 11 12 / 13 14
 IJ014B C28 I017

I010=I000.
 1 / 2 3
 IJ019A H47 T400

I011=I001.
 6 / 4 5
 IJ019B H47 T401

I012=I002.
 10 / 11 12
 IJ019C H47 T402

I013=I003.
 15 / 13 14
 IJ019D H47 T403

I014=I004.
 1 / 2 3
 IJ018A H47 T404

I015=I005.
 6 / 4 5
 1J018B H47 T405

I016=I006.
 10 / 11 12
 1J018C H47 T406

I017=I007.
 15 / 13 14
 1J018D H47 T407

I020=C017 C001.
 1 / 2 3
 1J013A H47 I000

I021=C019 C003.
 6 / 4 5
 1J013B H47 I001

I022=C021 C005.
 10 / 11 12
 1J013C H47 I002

I023=C023 C007.
 15 / 13 14
 1J013D H47 I003

I024=C025 C009.
 1 / 2 3
 1J012A H47 I004

I025=C027 C011.
 6 / 4 5
 1J012B H47 I005

I026=C029 C013.
 10 / 11 12
 1J012C H47 I006

I027=C031 C015.
 15 / 13 14
 1J012D H47 I007

I100=R500 I521 open +R501 I521 open.
 1 / 2 3 4 / 5 6 10
 1I012A K23 I101 K101

I101=I100.
 1 / 2 3
 1I013A H47 K100

I107=GND .

15 / 13 14
1E018D H47 I108

I108=R420 I107.

4 / 1 2
1I001A ADH I110

I109=OPEN.

11 / 10
1I001B ADH I111

I110=I108 GND GND .

6 / 1 2 3
1I002A AFH K490

I111=I109 GND GND .

10 / 13 14 15
1I002B AFH I117 J519 J520 Y490

I112=Y490.

1 / 2 3
1I006A H47 Y491

I113=Y491.

6 / 4 5
1I006B H47 D200 D201 D204 D205 K491 K534 Y492

I114=Y492.

10 / 11 12
1I006C H47 I115 I116

B I115=I114+Y493.

1 / 2 / 3
1F017A H48 J530

B I116=I114.

15 / 13 14
1I006D H47 Y493

B

I117=I111.

6 / 4 5
1I003B H47 I118

I118=I117.

10 / 11 12
1I003C H47 D202 D203 D206 D207 K492 K493

I120=R411.

1 / 2 3
1I007A H47 I121 I122 K005

I121=I120+Y481.

1 / 2 / 3

1I014A H48 I123

B I122=I120.

10 / 11 12

B 1F019C H47 Y481

I123=I121 R430.

6 / 4 5

1I007B H47 I124 I125 J404 J409 J543

I124=I123.

10 / 11 12

1I007C H47 Y540

I125=K221+K141+I123+R410+K480.

1 / 2 / 3 / 4 / 5 / 6

1I008A K25 K120 K130 K132 K430

I126=K550 R430.

10 / 11 12

1H012C H47 K481

I130=R430+K121.

6 / 4 / 5

1H003B H48 I131 K107

I131=I130.

1 / 2 3

1I003A H47 K106 I201 I212

I190=K420+K412.

1 / 2 / 3

1H003A H48 I202

I191=K419+K406.

15 / 13 / 14

10018D H48 I204

I200=K420 K410.

1 / 2 3

1I011A H47 C730 I201

I201=I200 I131

6 / 4 5

1I011B H47 C779 I207

I202=K431 K411+F007 I190.

15 / 11 12 / 13 14

1I009B K23 I203 I206 J431 J478

I203=I202.
10 / 11 12
I1011C H47 I207 I210 P754 T420 Y482

I204=J503 D061 +J503 P049 I191.
1 / 2 3 4 / 5 6 10
I1009A K23 I205

I205=J504 I204.
15 / 13 14
I1011D H47 T420

I206=I202.
15 / 13 14
I1010D H47 D720 I208 J417 J430 P710

I207=I203+I201.
15 / 13 / 14
I1011D H48 I001 I210

I208=I206.
1 / 2 3
I1031A H47 P710 P730 X247

I209=K238+K227.
1 / 2 / 3
I1013A H48 I002 I005 I210

I210= I203+I209+J105+I207.
15 / 10 / 11 / 12 / 13 / 14
I1008B K25 I211

I211=I210.
15 / 13 14
I1007D H47 Y603

00 I212=Y482 I131
1 / 2 3
I1023A H47 I213

00 I213=I212.
6 / 4 5
I1023B H47 Y483 Y484

I520=R521.
10 / 11 / 12
I1003C H48 Y413

00 I521=Y413+R510.
15 / 13 / 14
I1003D H48 I100 I100

I700=K234+K239.
1 / 2 / 3
I1011A H48 T400 T401 T402 T403 T404 T405 T406 T407

I701=K230+K235.
6 / 4 / 5
I1011B H48 I000 I001 I002 I003 I004 I005 I006 I007

I702=K225+I703.

10 / 11 / 12

1J011C H48 I000 I001 I002 I003

I703=K120 K321.

10 / 11 12

1J010C H47 I702

J000=U100 U101.
 1 / 2 3
 1K028A H47 J010 J014

J001=R100 U101.
 6 / 4 5
 1K028B H47 J011 J015

J002=R101 U100.
 10 / 11 12
 1K028C H47 J012 J016

J003=R100 R101.
 15 / 13 14
 1K028D H47 J013 J017

J005=GND +OPEN+OPEN+OPEN+OPEN.
 1 / 2 / 3 / 4 / 5 / 6
 1B019A K25 J020 J022

J010=J000+R102.
 1 / 2 / 3
 1K027A H48 J051

J011=J001+R102.
 6 / 4 / 5
 1K027B H48 F700 J043 J051 J070 K006

J012=J002+R102.
 10 / 11 / 12
 1K027C H48 F004 J042 J075

J013=J003+R102.
 15 / 13 / 14
 1K027D H48 F006 J041

J014=J000+U102.
 1 / 2 / 3
 1K026A H48 F008 J041

J015=J001+U102.
 6 / 4 / 5
 1K026B H48 F010 J041

J016=J002+U102.
 10 / 11 / 12
 1K026C H48 F012 J039 J042

J017=J003+U102.
 15 / 13 / 14
 1K026D H48 F014 J040

J018=Y000.

1 / 2 3
1K025A H47 J019

J019=J018.

6 / 4 5
1K025B H47 J030 Y001

J020=J005 R121 R132.

1 / 2 3 4 5 6
1K021A C21 J021 J024 J046 J047 J049 J050 J090

J021=J020.

1 / 2 3
1K022A H47 F700 F710

J022=J005 R120 R132.

15 / 10 11 12 13 14
1K021B C21 J023 J024 J048

J023=J022.

6 / 4 5
1K022B H47 J070 J075

J024=J020 J022.

10 / 11 12
1K022C H47 J025 T020 T021 Y000

J025=J024.

15 / 13 14
1K022D H47 J026 K001 K100 K101 K103 K106 K107

003 J026= J025.

15 / 13 / 14

003 1J041D H48 K000

J027=Y002.

6 / 4 5
1K023B H47 J032 J091 J245

J028=Y001.

10 / 11 12
1K025C H47 J029 J030

J029=J028.

15 / 13 14
1K025D H47 J032 J070 J075 T021 Y002

J030=J019 J028.

10 / 11 12
1K023C H47 F701 F711

J032=J029 J027.

15 / 13 14

1K023D H47 F702 F712

J039=J016.

10 / 11 12

1J039C H47 J048

J040=J017.

1 / 2 3

1K031A H47 A749 J044 J048 J090 J260

J041= J013+J014+J015.

1 / 2 / 3 / 4 / 5 / 6

1J035A K25 J045 J048 J090 J248

J042=J012+J016.

15 / 13 / 14

1J033D H48 A749 J046 J090 J260

J043=J011.

6 / 4 5

1K031B H47 J047

003 J044=GND +J040+J100 M013 K107.

15 / 10 / 11 / 12 13 14

1J038B K26 J051

003 J045=GND +J041+J100 K107.

1 / 2 / 3 / 4 5 6

1J037A K26 J051

J046=J020+J042+J100 K107.

15 / 10 / 11 / 12 13 14

1J037B K26 J051

B J047=J020+J043+K102 K140.

1 / 2 / 3 / 4 5 6

1J036A K26 J051

J048= J022+J040 J041 J039.

15 / 10 / 11 / 12 13 14

1J036B K26 J051

003 J049= J020+K114+R131.

15 / 10 / 11 / 12 / 13 / 14

1J035B K25 J051

003 J050=U008+J020+J060 J061.

1 / 2 / 3 / 4 5 6

1J038A K26 J051 K006 K114

003 J051=J010+J044+J045+J046+J047+J048+J049+U131 J011 J050.
 1 / 2 / 3 / 4 / 5 / 6 / 10 / 11 / 12 13 14 15
 IJ034A K16 K000

003 J065=U009 M100.
 1 / 2 3
 IJ039A H47 J050

003 J061=R009 M101.
 6 / 4 5
 IJ039B H47 J050

J072=J011 J023 J029.
 1 / 2 3 4 5 6
 IK032A C21 J071 J072

J071=J070.
 1 / 2 3
 IK033A H47 T000 T001 T002 T003 T004 T005 T006 T007

J072=J070.
 6 / 4 5
 IK033B H47 T008 T009 T010 T011 T012 T013 T014

J075=J012 J023 J029.
 15 / 10 11 12 13 14
 IK032B C21 J076 J077

J076=J075.
 10 / 11 12
 IK033C H47 T000 T001 T002 T003 T004 T005 T006 T007

J077=J075.
 15 / 13 14
 IK033D H47 T008 T009 T010 T011 T012 T013 T014 T015

J082= R130+M001+M020.
 15 / 10 / 11 / 12 / 13 / 14
 IB019B K25 B764 F701 F701 F708 J081 J226 Y201

J081= J080.
 1 / 2 / 3
 IJ033A H48 A741 F713 J408 K115 K121 S741

J092= J020+J040 J041 J042.
 1 / 2 / 3 / 4 5 6
 IJ032A K26 J091 K140 K210

J091= J027+J090 K212 K220.
 15 / 10 / 11 / 12 13 14
 IJ032B K26 T020

J097=K100+J104.
 1 / 2 / 3
 1J041A H48 K104 Y033

00 J098=GND +Y033.
 6 / 4 / 5
 1J041B H48 K104

B J108=K100+J111.
 1 / 2 / 3
 1I032A H48 J044 J045 J046

J101=F713.
 1 / 2 / 3
 1I031A H47 K105 K109 K111 K113

J102=F713.
 6 / 4 / 5
 1I031B H47 K117 K119 K123 K125 K127 K129

003 J103=U008 U007.
 15 / 13 / 14

003 1K020D H47 K115

J104=K102 J109.
 10 / 11 / 12
 1I031C H47 J097 L001 T001

J105=K210+K120.
 10 / 11 / 12
 1I032C H48 I006 I210

J107=J406+K493+K410+J440+J535.
 15 / 10 / 11 / 12 / 13 / 14
 1D022B K25 K134

J108=F713 P755.
 1 / 2 / 3
 1I021A H47 K135

J109=K141 +K101 K106+GND .
 1 / 2 / 3 / 4 / 5 / 6 / 10
 1J028A C28 J104

J118=F006 F008 F010.
 1 / 2 / 3 / 4 / 5 / 6
 1I028A C21 J112 J120 J261 J414 S750

B J111=K140 K102.
 6 / 4 / 5

B 1F019B H47 J100

J112=J110.
 1 / 2 3
 1J026A H47 J402

003 J113= B801 B750+B800 D774.
 15 / 10 / 11 12 / 13 14
 003 1B033B K22 J114

003 J114=J113+W115.
 15 / 13 / 14
 003 1I032D H48 K118

003 J115=K114 K006.
 15 / 13 14
 00 1F021D H47 T007

00 J116=GND +Y032.
 1 / 2 / 3
 1E034A H48 K104 K110

00 J117=GND +Y031.
 6 / 4 / 5
 1E034B H48 K104 K108

J120=J110 K141 J252 W115.
 15 / 10 11 12 13 14
 1I028B C21 J123

J121=K227 F005.
 10 / 11 12
 1J026C H47 J123

J122=K441 K451.
 6 / 4 5
 1J026B H47 J123

J123=J120 J121 J122 K110.
 1 / 2 3 4 5 6
 1I027A C21 K104 K108 Y031

J129=K100 K103.
 15 / 13 14
 1J031D H47 J133

J130=K108 K212.
 10 / 11 12
 1I025C H47 J132

J131=K116 K118 K126 K128.
 15 / 10 11 12 13 14
 1I027B C21 J132 W120

J132=J130 J131.

15 / 13 14
1I025D H47 J133

J133=J132 K120 K124 J129 K122.

15 / 10 11 12 13 14
1I026B C21 K104 K110 Y032

J200=R330.

1 / 2 3
1K014A H47 K201 K206

J201=Y200+K200.

1 / 2 / 3
1K015A H48 K204

J202=R220+K207.

6 / 4 / 5
1K015B H48 K209

J203=K207+Y201.

10 / 11 / 12
1K015C H48 K203 K205

J204=K209+Y202.

15 / 13 / 14
1K015D H48 B741 B801 K126 K128 K240

J205=K209 R220

6 / 4 5
1J030B H47 J211 J212 J213

003 J206=K002 K014.

15 / 13 14
1I031D H47 T322

J210=B780.
 6 / 4 ⁵
 1K014B H47 J211 J212 J213

J211=J210+J205.
 6 / 4 / 5
 1K013B H48 T200 T201 T202 T203

J212=J210+J205.
 10 / 11 / 12
 1K013C H48 T204 T205 T206 T207 T208 T209

J213=J210+J205.
 15 / 13 / 14
 1K013D H48 T210 T211 T212 T213 T214 T215

J215=K206
 10 / 11 ¹²
 1K014C H47 T301 T303 T304 T305 T306 T307 T308

J216=K206
 15 / 13 ¹⁴
 1K014D H47 T302 T309 T310 T311 T312 T313 T314

B J221=K200.
 1 / 2 ³

B 1K020A H47 Y200 Y204

*J217=R216
 1G023B H48 S031 W031

B J223=K207.
 6 / 4 ⁵

B 1K020B H47 Y201

B J224=K209.
 10 / 11 ¹²

B 1K020C H47 Y202

ICA J225=R220.
 15 / 13 ¹⁴

ICA 1B003D H47 J226

ICA J226=J225 J280.
 15 / 13 ¹⁴

ICA 1C001D H47 K207

B J240=J517.
 1 / 2 ³

1H035A H47 C400 C401 K210 K212 K213 K552

J241=J510.
 6 / 4 ⁵

1H035B H47 K211 K221 K553

J242=J511.
 10 / 11 ¹²

1H033C H47 K121 K220 K220 K222 K224 K526 K226

J244=J511.
 15 / 13 ¹⁴

1H033D H47 K228 K230 K232 K234 K236 K538

*Present if Std. Opt. 10278-1 is installed.

J245=K140+ F710.

6 / 4 / 5
1I014B H48 K210

J246=K212 K220.

10 / 11 12
1H035C H47 K211

J248=J041.

15 / 13 14
1H042D H47 K212

J249=F713.

15 / 13 14
1H035D H47 K211 K213 K221

J250=J510.

1 / 2 3
1B027A H47 K242 K244

B J251=J517.

6 / 4 5
1B027B H47 K241 K243 K245

J252=Y242.

10 / 11 12
1B027C H47 J120 J261 K243

J260=J040 J042 K004.

1 / 2 3 4 5 6
1H034A C21 Y220

J261=J110 J252 K141 W116.

15 / 10 11 12 13 14
1H034B C21 J263

J262=Y220.

1 / 2 3
1H033A H47 J263

J263=J261 J262.

6 / 4 5
1H033B H47 K220

J400=C715+J511.

15 / 13 / 14
1G009D H48 K400 K402 K404

J401=J510.

1 / 2 3
1H012A H47 K401 K403 K405 K407 K409 K411 K421

J402=F012 J112 K004.
 1 / 2 3 4 5 6
 IG015A C21 J406 K130

J403=J406+K470.
 15 / 13 / 14
 IG023D H48 K400 K420

J404=J408 I123.
 15 / 13 14
 IG020D H47 K401 K403 K405 K407 K409

J405=OPEN K440 K450.
 15 / 10 11 12 13 14
 IG015B C21 K409 K411 K533

J406=J402.
 10 / 11 12
 IG020C H47 J107 J403

00 J408=K221+K141+K111+J081+J419.
 15 / 10 / 11 / 12 / 13 / 14
 IC015B K25 J404 J409 J543 J544

J409=J408 I123.
 6 / 4 5
 II025B H47 K411 K421 K441 K451 K473

J410=J511.
 10 / 11 12
 IH004C H47 K400 K420 K440 K440 K450

J411=J510.
 15 / 13 14
 IH004D H47 K441 K533 Y412

J412=K220 K450.
 6 / 4 5
 IH012B H47 K441

J413=F012 F014 K004.
 1 / 2 3 4 5 6
 II026A C21 J414

J414=A770 J413+J110 W115.
 15 / 11 12 / 13 14
 IH027B K23 J415 K220

B J415=J414+J517.
 6 / 4 5
 ID018B H48 K450

J416=K421+K431.
 1 / 2 / 3
 1H011A H48 Y411

A04 J417=C404 I206+K408.
 15 / 11 12 / 13 14
 1I012B K23 Y408 Y409

00 J418=R408 F702.
 10 / 11 12
 00 1I023C H47 J419

00 J419=J418.
 15 / 13 14
 00 1I023D H47 J408

J420=K401 K553.
 6 / 4 5
 1G008B H47 C750

J429=K400+K402.
 10 / 11 / 12
 1H038C H48 J430 J431

J430=J429 I206.
 10 / 11 12
 1G008C H47 C750 D790

J431=J429 I202.
 15 / 13 14
 1G008D H47 C751 J542

J440=K413 K415.
 1 / 2 3
 1G020A H47 C750 J107 J475

J450=K405 K407.
 1 / 2 3
 1H004A H47 C750

J460=K407 K409.
 6 / 4 5
 1H004B H47 C750 P754

J470=D461 D204+D205 D060.
 15 / 11 12 / 13 14
 1D019B C28 J471

J471=K407+K404+J470+K473+J535.
 1 / 2 / 3 / 4 / 5 / 6
 1C015A K25 K471

J475=J440.
 15 / 13 14
 1C020D H47 K470

J478=I202+C417.
 15 / 13 / 14
 1H038D H48 J479

J479= J478+C018+C020.
 1 / 2 / 3 / 4 / 5 / 6
 1D022A K25 K402

J480=C027 C029.
 15 / 13 14
 1H012D H47 J482

J481=C019 K411.
 1 / 2 3
 1I025A H47 J482

J482=J480 J481.
 6 / 4 5
 1G020B H47 K406

B J490=C715+J517.
 1 / 2 / 3
 B 1D018A H48 K406 K408 K410

J500= J506+K500+J507.
 1 / 2 / 3 / 4 / 5 / 6
 1I016A K25 J520

J501= J506+K501+J507.
 15 / 10 / 11 / 12 / 13 / 14
 1I016B K25 J530

J502=K500+J506.
 10 / 11 / 12
 1I014C H48 J504

J503=K501+J506.
 15 / 13 / 14
 1I014D H48 I204 I204

J504=J502.
 15 / 13 14
 1H015D H47 I205 J544

J505=J509.
 6 / 4 5
 1I013B H47 K502 K503

J506=Y500.
 10 / 11 12
 1I013C H47 J500 J501 J502 J503 Y501

J507=Y501.
 15 / 13 14
 1I013D H47 J500 J501

J509=OPEN.
 15 / 1
 00 I E001A AAH J505 K500 K501 Y500
 J510=J516 K510.
 1 / 2 3
 I H015A H47 J241 J250 J401 J411
 J511=J516 K511.
 6 / 4 5
 I H015B H47 J242 J244 J400 J410
 J514=K530+K532.
 10 / 11 / 12
 I H011C H48 J515 K511
 J515=J530+J514.
 15 / 13 / 14
 I H011D H48 K510 K511
 J516=J520.
 10 / 11 12
 I H015C H47 J510 J511 J517 K512 K513
 B J517=K511 J516.
 1 / 2 3
 B I F019A H47 J240 J251 J415 J490
 B J519=I111.
 15 / 13 14
 B I F019D H47 Y509
 B J520=I111 J540 Y509+J500 J541.
 1 / 2 3 4 / 5 6 10
 I I017A K23 J516 J521
 J521=J520.
 6 / 4 5
 I I019B H47 Y511
 J530=I115 J540+J501 J541.
 15 / 11 12 / 13 14
 I I017B K23 J515 J531
 J531=J530.
 10 / 11 12
 I I019C H47 X260 Y510
 J532=Y510.
 15 / 13 14
 I I019D H47 J533 Y512

J533=J532.

1 / 2 3
1I020A H47 K521

B J534=Y513.

6 / 4 5
1I020B H47 J535 J538

J535=J534.

10 / 11 12
1I020C H47 J107 J471 J536 J537 J542

J536=J535.

15 / 13 14
1I020D H47 A741 B751 B763 S741 W741

J537=J535.

15 / 13 14
1I021D H47 B702 C741

J538=J534.

1 / 2 3
1G021A H47 D710 D711 D712 D713 P703 P704 P705 P754

J540=K532+K534.

1 / 2 / 3
1I018A H48 J520 J530

J541=K533+K535.

6 / 4 / 5
1I018B H48 J520 J530

J542=J431+J535.

6 / 4 / 5
1H011B H48 K530

J543=J408 1123.

1 / 2 3
1I019A H47 K531 K533 K551 K553

003 J544=J504 J408.

10 / 11 12
1H014C H47 K535

003 K000=K001+J026 J051.
 1 / I / 2 3
 1K034A H46 K001 K141 T021

 K001=K000+J025.
 6 / I / 4 5
 1K034B H46 F700 F710 K000 K140 T020

 003 K002=K003+F711 R131.
 10 / I / 11 12
 003 1I039C H46 J206 K003

 003 K003=K002+F711 U131.
 15 / I / 13 14
 003 1I039D H46 K002

 K004=K005+K017 R410.
 10 / I / 11 12
 1H010C H46 A750 J260 J402 J413 K005 M001 S750 W116

 K005=K004+F714 I120.
 15 / I / 13 14
 1H010D H46 B748 K004 K014 Y020

 003 K006=K007+J011 J050.
 10 / I / 11 12
 003 1K039C H46 J115 K007

 003 K007=K006+F715.
 15 / I / 13 14
 003 1K039D H46 K006

 003 K014=K005.
 10 / 11 12
 003 1J030C H47 J206 Y210

 003 K100=K101+J025 I101.
 1 / I / 2 3
 1I042A H46 J097 J100 J129 K101

 003 K101=K100+J025 I100.
 6 / I / 4 5
 1I042B H46 J109 K100 L000 T000

 K102=K103+K221.
 10 / I / 11 12
 1I042C H46 J047 J104 J111 K103 K109

 003 K103=K102+F715 J025.
 15 / I / 13 14
 1I042D H46 J129 K102 K141

*K015=M000
 1L022A H47 K017
 *K016=M002
 1C022B H47
 *K017=K015 OPEN
 1C022C H47 K004

00 K104=K105+F105 J099 J097+F107 J117 J123+F109 J116 J133.
 1 / I / 2 3 4 / 5 6 10 / 11 12 13
 I1041A K36 K105

 K105=K104+J101.
 15 / I / 14
 I1041B K36 K104 T002 T102

 003 K106=K107+J025 I131.
 1 / I / 2 3
 I1040A H46 J109 K107 K131

 003 K107=K106+J025 I130.
 6 / I / 4 5
 I1040B H46 J044 J045 J046 K106 L002 T003

 00 K108=K109+J117 J123.
 10 / I / 11 12
 I1040C H46 F714 F715 J130 K109

 K109=K108+J101 K102
 15 / I / 13 14
 I1040D H46 K108 L003 T004

 00 K110=K111+J116 J133.
 1 / I / 2 3
 I1039A H46 J123 K111

 K111=K110+J101.
 6 / I / 4 5
 I1039B H46 J408 K110 L004 T005

 K112=K113+F011 K419 K421 K470.
 1 / I / 2 3 4 5 6
 I1038A K31 K113

 K113=K112+J101.
 15 / I / 10 11 12 13 14
 I1038B K31 K112 T006

 003 K114=K115+GND +J050 F702 R131.
 1 / I / 2 3 / 4 5 6
 003 I1029A K33 J049 J115 K115

 003 K115=K114+J081 +J103 F701 R131.
 15 / I / 10 11 / 12 13 14
 003 I1029B K33 K114

 K116=K117+K421 P754.
 1 / I / 2 3
 I1037A H46 J131 K117

K117=K116+J102.

6 / I / 4 5
1I037B H46 K116 T008

003 K118=K119+J114 K521.

1 / I / 2 3
1I035A H46 J131 K119

K119=K118+J102.

6 / I / 4 5
1I035B H46 K118 T009

K120=K121+R431 +OPEN I125 Y050.

1 / I / 2 3 / 4 5 6
1I036A K33 I703 J105 J133 K121 T411 Y222

K121=K120+J081 +R430 J242 Y030.

15 / I / 10 11 / 12 13 14
1I036B K33 I130 K120 T010

K122=K123+A781 K227.

10 / I / 11 12
1I035C H46 J133 K123

K123=K122+J102.

15 / I / 13 14
1I035D H46 K122 T011

K124=K125+K135 K451.

1 / I / 2 3
1I034A H46 J133 K125

K125=K124+J102.

6 / I / 4 5
1I034B H46 K124 T012

K126=K127+R231 J204.

10 / I / 11 12
1I034C H46 J131 K127

K127=K126+J102.

15 / I / 13 14
1I034D H46 K126 T013

K128=K129+R230 J204.

10 / I / 11 12
1I033C H46 J131 K129

K129=K128+J102.

15 / I / 13 14
1I033D H46 K128 T014

K130=K131+GND +GND +I125 J402.
 1 / I / 2 / 3 4 / 5 6
 1I024A K32 K131 K133

003 K131=K130+K441+OPEN F715+K106.
 15 / I / 10 / 11 12 / 13 14
 1I024B K32 K130 Y049

K132=K133+I125 Y049.
 10 / I / 11 12
 1K034C H46 K133

K133=K132+K130.
 15 / I / 13 14
 1K034D H46 K132 Y050

K134=K135+J107.
 10 / I / 11 12
 1I037C H46 K135

K135=K134+J108.
 15 / I / 13 14
 1I037D H46 K124 K134

K140=K141+GND +J090 K001.
 1 / I / 2 3 / 4 5 6
 1J025A K33 J047 J111 J245 K141

K141=K140+K103 +F715 K000.
 15 / I / 10 11 / 12 13 14
 1J025B K33 I125 J109 J120 J261 J408 K140

K200=K201+R330.
 10 / I / 11 12
 1K019C H46 J201 J221 K201

K201=K200+J200 K204.
 15 / I / 13 14
 1K019D H46 K200

K202=K203+B770.
 1 / I / 2 3
 1K018A H46 K203

K203=K202+J203.
 6 / I / 4 5
 1K018B H46 K202 K204

K204=K205+K203 J201.
 10 / I / 11 12
 1K018C H46 K201 K205

K205=K204+J203.

15 / I / 13 14
1K018D H46 K204 K206

K206=K207+J200 K205.

1 / I / 2 3
1K017A H46 K207 J45 J216

K207=K206+ J226

6 / I / 4 5
1K017B H46 J202 J203 J223 K206 K208 T320 T300

K208=K209+K207.

10 / I / 11 12
1K017C H46 K209

K209=K208+J202.

15 / I / 13 14
1K017D H46 J204 J224 K208 T321 T322

K210=K211+Y209 +J240 J090 J245.

1 / I / 2 3 / 4 5 6
1H037A K33 J105 K211

K211=K210+J249 +J241 J246.

15 / I / 10 11 / 12 13 14
1H037B K33 A750 B760 K210 S750 Y210 Y220

K212=K213+GND +J240 J248 Y210.

1 / I / 2 3 / 4 5 6
1H036A K33 B740 J091 J130 J246 K213 S750

K213=K212+J249 +K243 J240.

15 / I / 10 11 / 12 13 14
1H036B K33 B760 B780 K212 W750

K220=K221+J242 J263+J242 Y221 J414.

1 / I / 2 3 / 4 5 6
1H032A K33 A750 J091 J246 J412 K221 K223 K321

K221=K220+J249 +J241 K227.

15 / I / 10 11 / 12 13 14
1H032B K33 I125 J408 K102 K220 T411 Y030 Y222

K222=K223+J242 Y222.

1 / I / 2 3
1I033A H46 K223 K225 K229 T411

K223=K222+K220.

6 / I / 4 5
1I033B H46 K222 Y223

K224=K225+J242 Y223.

1 / I / 2 3
1H013A H46 A711 K225 K227

K225=K224+K222.

6 / I / 4 5
1H013B H46 A710 C760 I702 K224 T414 Y224 Y226

K226=K227+J242 Y225+J242 Y224 C312.

1 / I / 2 3 / 4 5 6
1H023A K33 K227

K227=K226+GND +K224.

15 / I / 10 11 / 12 13 14
1H023B K33 I209 J121 K122 K221 K226

K228=K229+J244 Y226.

1 / I / 2 3
1H026A H46 A710 C760 K229 K231 T414

K229=K228+K222.

6 / I / 4 5
1H026B H46 A711 C770 K228 Y227

K230=K231+J244 Y227.

10 / I / 11 12
1H026C H46 C770 I701 K231 K233

K231=K230+K228.

15 / I / 13 14
1H026D H46 K230 T412 Y228

K232=K233+J244 Y228.

1 / I / 2 3
1H025A H46 K233 K235 T412

K233=K232+K230.

6 / I / 4 5
1H025B H46 K232 Y229

K234=K235+J244 Y229.

10 / I / 11 12
1H025C H46 I700 K235 K237

K235=K234+K232.

15 / I / 13 14
1H025D H46 I701 K234 T410 Y230

K236=K237+J244 Y230.

1 / I / 2 3
1H024A H46 K237 K239 T410

K237=K236+K234.

6 / I / 4 5
1H024B H46 K236 Y231

K238=K239+J244 Y231.

10 / I / 11 12
1H024C H46 I209 K239

K239=K238+K236.

15 / I / 13 14
1H024D H46 I700 K238 Y225

K240=K241+B710 +B780 J204.

1 / I / 2 3 / 4 5 6
1B028A K33 K241

K241=K240+J251 K243+GND .

15 / I / 10 11 / 12 13 14
1B028B K33 K240 K242

K242=K243+K241 J250.

1 / I / 2 3
1B029A H46 K243

K243=K242+J252 J251.

6 / I / 4 5
1B029B H46 K213 K241 K242 S760 S770 W750 Y240

K244=K245+Y240 J250.

10 / I / 11 12
1B029C H46 K245 Y242

K245=K244+J251.

15 / I / 13 14
1B029D H46 K244

K321=K220.

1 / 2 3
1G022A H47 I703

K400=K401+J400 Y401+J410 J403 Y400.

1 / I / 2 3 / 4 5 6
1G014A K33 J429 K401

K401=K400+J404 +J401 K403.

15 / I / 10 11 / 12 13 14
1G014B K33 J420 K400 K553 Y402

K402=K403+GND +J400 Y402 J479.

1 / I / 2 3 / 4 5 6
1G013A K33 D760 J429 K403 K413

K403=K402+J404 +J401 K405.
 15 / I / 10 11 / 12 13 14
 1G013B K33 B750 D750 K401 K402 Y403

K404=K405+J400 Y403+GND .
 1 / I / 2 3 / 4 5 6
 1G012A K33 B750 D768 J471 K405 K415

K405=K404+J404 +J401 K407.
 15 / I / 10 11 / 12 13 14
 1G012B K33 D750 D760 J450 K403 K404 Y404

B K406=K407+GND +J490 Y404 J482.
 1 / I / 2 3 / 4 5 6
 1G011A K33 D760 I191 K407 K417 P730

K407=K406+J404 +J401 K409.
 15 / I / 10 11 / 12 13 14
 1G011B K33 D768 J450 J460 J471 K405 K406 P730 Y405

B K408=K409+J490 Y405+GND .
 1 / I / 2 3 / 4 5 6
 1G010A K33 J417 K409 K419 K451

K409=K408+J404 +J401 J405.
 15 / I / 10 11 / 12 13 14
 1G010B K33 J460 K407 K408 Y400 Y407 Y411

B K410=K411+J490 Y406+GND .
 1 / I / 2 3 / 4 5 6
 1H002A K33 I200 J107 K411 K412 K440

K411=K410+J409 +J405 J401.
 15 / I / 10 11 / 12 13 14
 1H002B K33 D750 D760 I202 J481 K410 Y400 Y407

K412=K410.
 15 / 13 14
 1I003D H47 I190

K413=K402.
 1 / 2 3
 1J010A H47 J440 X247

K415=K404.
 6 / 4 5
 1J010B H47 C710 J440 P730

K417=K406.
 1 / 2 3
 1K023A H47

K419=K408.

15 / 13 14
1G022D H47 I191 K112

K420=K421+GND +J410 Y407 J403.

1 / I / 2 3 / 4 5 6
1H001A K33 B750 D769 I190 I200 K421

K421=K420+J409 +J401 K441.

15 / I / 10 11 / 12 13 14
1H001B K33 C710 J416 K112 K116 K420 Y408

K430=K431+F015 I125.

1 / I / 2 3
1H010A H46 K431

K431=K430+F715.

6 / I / 4 5
1H010B H46 I202 J416 K430 Y409 D516

K440=K441+J410 Y409+J410 Y408 K410.

1 / I / 2 3 / 4 5 6
1H006A K33 J405 K441 K451

K441=K440+J409 +J412 J411.

15 / I / 10 11 / 12 13 14
1H006B K33 A760 A765 J122 K131 K421 K440 Y221 Y410

K450=K451+J415 Y410+J410 Y411.

1 / I / 2 3 / 4 5 6
1H005A K33 J405 J412 K451

K451=K450+J409 +Y412 K408 K440.

15 / I / 10 11 / 12 13 14
1H005B K33 B759 J122 K124 K450

K470=K471+J475 K521+GND .

1 / I / 2 3 / 4 5 6
1C016A K33 J403 K112 K471

K471=K470+P754 +J471.

15 / I / 10 11 / 12 13 14
1C016B K33 K470

003 K472=K473+B880 D774.

10 / I / 11 12
1B002C H46 K473

003 K473=K472+J409.

15 / I / 13 14
1B002D H46 J471 K472

K480=K481+R410.

1 / I / 2 3
1K019A H46 I125 K481

K481=K480+I126.

6 / I / 4 5
1K019B H46 K480

K490=K491+I110.

1 / I / 2 3
1I004A H46 K491 K493

K491=K490+I113.

6 / I / 4 5
1I004B H46 K490 K492

K492=K493+I118 K491.

10 / I / 11 12
1I004C H46 D201 K493

K493=K492+I118 K490.

15 / I / 13 14
1I004D H46 D200 J107 K492

K500=K501+J509 K502.

1 / I / 2 3
1I015A H46 J500 J502 K501 K503

K501=K500+J509 K503.

6 / I / 4 5
1I015B H46 J501 J503 K500 K502

K502=K503+J505 K501.

10 / I / 11 12
1I015C H46 K500 K503

K503=K502+J505 K500.

15 / I / 13 14
1I015D H46 K501 K502

K510=K511+GND +J515 K512.

1 / I / 2 3 / 4 5 6
1I010A K33 J510 K511 K513

K511=K510+J514 +J515 K513.

15 / I / 10 11 / 12 13 14
1I010B K33 J511 J517 K510 K512

K512=K513+J516 K511.

10 / I / 11 12
1H013C H46 K510 K513 K515 K517

K513=K512+J516 K510.

15 / I / 13 14
1H013D H46 D770 K511 K512 K514

K514=K513.

1 / 2 3
1H014A H47 A760 A765 C760

K515=K512.

6 / 4 5
1H014B H47 A750 B749 C779 S750

K517=K512.

15 / 13 14
1H014D H47 C730 S760 S770

K520=K521+Y511.

10 / I / 11 12
1H018C H46 K521

K521=K520+J533.

15 / I / 13 14
1H018D H46 K118 K470 K520 K524 K526 K528 K532

K524=K521.

6 / 4 5
1I021B H47 D774 X200 X201 X202 X203

K526=K521.

10 / 11 12
1I021C H47 X220 X221 X230 X231 X240 X241

K528=K521.

6 / 4 5
1G021B H47 D700 D701 D702 D703 P700 P701 P702

K530=K531+GND +J542.

1 / I / 2 3 / 4 5 6
1H020A K33 J514 K531

K531=K530+J543 +D205.

15 / I / 10 11 / 12 13 14
1H020B K33 K530 K532

K532=K533+K521 K531+GND .

1 / I / 2 3 / 4 5 6
1H019A K33 J514 J540 K533 K535

K533=K532+J543 +J405 J411.

15 / I / 10 11 / 12 13 14
1H019B K33 J541 K532 K534

K534=K535+I113 K533.

1 / I / 2 3
1H018A H46 J540 K535

K535=K534+K532 J544.

6 / I / 4 5
1H018B H46 J541 K534

K550=K551+GND +Y540.

1 / I / 2 3 / 4 5 6
1H022A K33 I126 K551

K551=K550+J543 +Y530.

15 / I / 10 11 / 12 13 14
1H022B K33 K550 K552

K552=K553+K551 J240+GND .

1 / I / 2 3 / 4 5 6
1H021A K33 C714 K553

K553=K552+J543 +J241 K401.

15 / I / 10 11 / 12 13 14
1H021B K33 J420 K552 Y401 Y406 Y530

L000=K101.

1 / 2

1B025A H10

L001=J104.

3 / 4

1B025B H10

L002=K107.

5 / 6

1B025C H10

L003=K109.

11 / 10

1B025D H10

L004=K111.

13 / 12

1B025E H10

M000=OPEN.
1 / 3
1B021A C75 K004 F121

M001=Y020+K004.
10 / 11 / 12
1I018C H48 J080 Y209

*M002=OPEN
1L017C H11 K016

M010=OPEN.
1 / 3
1B022A C75 M012

M011=OPEN.
15 / 13
1B022B C75 D730 M012

M012=M010+M011.
15 / 13 / 14
1I018D H48 M013

M013=M012.
15 / 13 14
1J039D H47 J044

M020=OPEN.
15 / 13
1B021B C75 J080

M100=OPEN.
1 / 3
1B023A C75 J060

M101=OPEN.
15 / 13
1B023B C75 J061

P000=P001+P725.
 1 / I / 2 3
 1B018A H46 P001 P003 P750

P001=P000+P724.
 6 / I / 4 5
 1B018B H46 P000 P002

P002=P003+P001 P703.
 10 / I / 11 12
 1B018C H46 P003 P004 P005

P003=P002+P000 P703.
 15 / I / 13 14
 1B018D H46 P002 P004 P005

P004=P005+P723 P002+P722 P003.
 1 / I / 2 3 / 4 5 6
 1B017A K33 P005 P007 P750

P005=P004+P723 P003+P722 P002.
 15 / I / 10 11 / 12 13 14
 1B017B K33 P004 P006

P006=P007+P005 P703.
 1 / I / 2 3
 1B015A H46 P007 P008 P009

P007=P006+P004 P703.
 6 / I / 4 5
 1B015B H46 P006 P008 P009

P008=P009+P723 P006+P722 P007.
 1 / I / 2 3 / 4 5 6
 1B016A K33 P009 P011 P750

P009=P008+P723 P007+P722 P006.
 15 / I / 10 11 / 12 13 14
 1B016B K33 P008 P010

P010=P011+P009 P703.
 10 / I / 11 12
 1B015C H46 P011 P012 P013

P011=P010+P008 P703.
 15 / I / 13 14
 1B015D H46 P010 P012 P013

P012=P013+P723 P010+P722 P011.
 1 / I / 2 3 / 4 5 6
 1B014A K33 P013 P015 P750

P013=P012+P723 P011+P722 P010.
 15 / I / 10 11 / 12 13 14
 1B014B K33 P012 P014

P014=P015+P013 P703.
 1 / I / 2 3
 1B013A H46 P015 P017

P015=P014+P012 P703.
 6 / I / 4 5
 1B013B H46 P014 P016

P016=P017+P701 P015.
 1 / I / 2 3
 1B012A H46 P017 P019 P751

P017=P016+P701 P014.
 6 / I / 4 5
 1B012B H46 P016 P018

P018=P019+P017 P704.
 10 / I / 11 12
 1B013C H46 P019 P021

P019=P018+P016 P704.
 15 / I / 13 14
 1B013D H46 P018 P020

P020=P021+P019 P701.
 10 / I / 11 12
 1B012C H46 P021 P023 P751

P021=P020+P018 P701.
 15 / I / 13 14
 1B012D H46 P020 P022

P022=P023+P021 P704.
 1 / I / 2 3
 1B011A H46 P023 P025

P023=P022+P020 P704.
 6 / I / 4 5
 1B011B H46 P022 P024

P024=P025+P023 P701.
 1 / I / 2 3
 1B010A H46 P025 P027 P751

P025=P024+P022 P701.
 6 / I / 4 5
 1B010B H46 P024 P026

P026=P027+P025 P704.
 10 / I / 11 12
 1B011C H46 P027 P029

P027=P026+P024 P704.
 15 / I / 13 14
 1B011D H46 P026 P028

P028=P029+P027 P702.
 10 / I / 11 12
 1B010C H46 P029 P031 P751

P029=P028+P026 P702.
 15 / I / 13 14
 1B010D H46 P028 P030

P030=P031+P029 P704.
 1 / I / 2 3
 1B009A H46 P031 P033

P031=P030+P028 P704.
 6 / I / 4 5
 1B009B H46 P030 P032

P032=P033+P031 P702.
 1 / I / 2 3
 1B008A H46 P033 P035 P752

P033=P032+P030 P702.
 6 / I / 4 5
 1B008B H46 P032 P034

P034=P035+P033 P705.
 10 / I / 11 12
 1B009C H46 P035 P037

P035=P034+P032 P705.
 15 / I / 13 14
 1B009D H46 P034 P036

P036=P037+P035 P702.
 10 / I / 11 12
 1B008C H46 P037 P039 P752

P037=P036+P034 P702.
 15 / I / 13 14
 1B008D H46 P036 P038

P038=P039+P037 P705.
 1 / I / 2 3
 1B007A H46 P039 P041

P039=P038+P036 P705.

6 / I / 4 5
1B007B H46 P038 P040

P040=P041+P039 P702.

1 / I / 2 3
1B006A H46 P041 P043 P752

P041=P040+P038 P702.

6 / I / 4 5
1B006B H46 P040 P042

P042=P043+P041 P705.

10 / I / 11 12
1B007C H46 P043 P044 P045

P043=P042+P040 P705.

15 / I / 13 14
1B007D H46 P042 P044 P045

P044=P045+P723 P042+P722 P043.

1 / I / 2 3 / 4 5 6
1B005A K33 P045 P047 P752

P045=P044+P723 P043+P722 P042.

15 / I / 10 11 / 12 13 14
1B005B K33 P044 P046

P046=P047+P045 P705.

10 / I / 11 12
1B006C H46 P047 P049 P720 P721

P047=P046+P044 P705.

15 / I / 13 14
1B006D H46 P046 P048 P720 P721

P048=P049+P047 P701.

1 / I / 2 3
1B002A H46 P049

P049=P048+P046 P701.

6 / I / 4 5
1B002B H46 I204 P048

P700=K528.

1 / 2 3
1B004A H47 P720 P720 P720 P721 P721

P701=K528.

6 / 4 5
1B004B H47 P016 P017 P020 P021 P024 P025 P048 P049

P702=K528.

10 / 11 12
1B004C H47 P028 P029 P032 P033 P036 P037 P040 P041

P703=J538.

1 / 2 3
1B003A H47 P002 P003 P006 P007 P010 P011 P014 P015

P704=J538.

6 / 4 5
1B003B H47 P018 P019 P022 P023 P026 P027 P030 P031

P705=J538.

10 / 11 12
1B003C H47 P034 P035 P038 P039 P042 P043 P046 P047

P710=I208 D203+I206 D061.

15 / 11 12 / 13 14
1C019B K23 P711 P720 P721

P711=P710.

1 / 2 3
1C020A H47 P720 P721

P720=P730 P700+P047 P711 P700+P046 P710 P700.

1 / 2 3 / 4 5 6 / 10 11 12 13
1C021A H30 P722 P724

P721=P700 P047 P710+P700 P046 P711.

1 / 2 3 4 / 5 6 10
1C019A K23 P723 P725

P722=P720.

15 / 14
1C021B H30 P004 P005 P008 P009 P012 P013 P044 P045

P723=P730+P721.

10 / 11 / 12
1C025C H48 P004 P005 P008 P009 P012 P013 P044 P045

P724=P720.

10 / 11 12
1C020C H47 P001

P725=P721+P730.

15 / 13 / 14
1C025D H48 P000

P730=K406 K415+K407 I208+GND .

1 / 2 3 / 4 5 / 6 10
1D019A C28 P720 P723 P725

P750=P000 P004 P008 P012.

1 / 2 3 4 5 6
1C014A C21 P753

P751=P016 P020 P024 P028.

15 / 10 11 12 13 14
1C014B C21 P753

P752=P032 P036 P040 P044.

1 / 2 3 4 5 6
1C013A C21 P753

P753= P750+P751+P752.

1 / 2 / 3 / 4 / 5 / 6
1C017A K25 P754

P754= I203+J538+P753+J460.

15 / 10 / 11 / 12 / 13 / 14
1C017B K25 K116 K471 P755

P755=P754.

15 / 13 14
1B004D H47 J108

R000=OPEN.
1 / 2 3
1L033A H11 X100

R001=OPEN.
10 / 5 6
1L033B H11 F707 X101

R002=OPEN.
15 / 13 14
1L033C H11 F104 X102

R003=OPEN.
1 / 2 3
1L032A H11 F106 X103

R004=OPEN.
10 / 5 6
1L032B H11 F108 X104

R005=OPEN.
15 / 13 14
1L032C H11 X105

R006=OPEN.
1 / 2 3
1L031A H11 X106

R007=OPEN.
10 / 5 6
1L031B H11 U007 X107

R008=OPEN.
15 / 13 14
1L031C H11 F120 F121 U008 X108

R009=OPEN.
1 / 2 3
1L030A H11 F120 J061 U009 X109

R010=OPEN.
10 / 5 6
1L030B H11 X110

R011=OPEN.
15 / 13 14
1L030C H11 X111

R012=OPEN.
1 / 2 3
1L029A H11 X112

R013=OPEN.
10 / 5 6
1L029B H11 X113

R014=OPEN.
15 / 13 14
1L029C H11 X114

R015=OPEN.
1 / 2 3
1L028A H11 X115

R100=OPEN.
10 / 5 6
1L028B H11 J001 J003 U100

R101=OPEN.
15 / 13 14
1L028C H11 J002 J003 U101

R102=OPEN.
1 / 2 3
1L027A H11 J010 J011 J012 J013 U102

R107=OPEN.
1 / 2 3
1C024A H11 U107

R108=OPEN.
10 / 5 6
1C024B H11 U108

R109=OPEN.
1 / 2 3
1C023A H11 U109

R110=OPEN.
10 / 5 6
1C023B H11 U110

R120=OPEN.
10 / 5 6
1L027B H11 J022 U120

R121=OPEN.
15 / 13 14
1L027C H11 J020 U121

R130=OPEN.
1 / 2 3
1L026A H11 J080

R131=OPEN.

10 / 5 6
1L026B H11 J049 K002 K114 K115 U131

R132=OPEN.

15 / 13 14
1L026C H11 J020 J022

R200=OPEN.

1 / 2 3
1L006A H11 B000

R201=OPEN.

10 / 5 6
1L006B H11 B002

R202=OPEN.

15 / 13 14
1L006C H11 B004

R203=OPEN.

1 / 2 3
1L005A H11 B006

R204=OPEN.

10 / 5 6
1L005B H11 B008

R205=OPEN.

15 / 13 14
1L005C H11 B010

R206=OPEN.

1 / 2 3
1L004A H11 B012

R207=OPEN.

10 / 5 6
1L004B H11 B014

R208=OPEN.

15 / 13 14
1L004C H11 B016

R209=OPEN.

1 / 2 3
1L003A H11 B018

R210=OPEN.

10 / 5 6
1L003B H11 B020

R211=OPEN.
15 / 13 14
1L003C H11 B022

R212=OPEN.
1 / 2 3
1L002A H11 B024

R213=OPEN.
10 / 5 6
1L002B H11 B026

R214=OPEN.
15 / 13 14
1L002C H11 B028

R215=OPEN.
1 / 2 3
1L001A H11 B030

R220=OPEN.
10 / 5 6
1L017B H11 J202 K207 J205 T321

R230=OPEN.
10 / 5 6
1L001B H11 K128

R231=OPEN.
15 / 13 14
1L001C H11 K126

R330=OPEN.
1 / 2 3
1L017A H11 J200 K200

R400=OPEN.
1 / 2 3
1K011A H11 A100

R401=OPEN.
10 / 5 6
1K011B H11 A102

R402=OPEN.
15 / 13 14
1K011C H11 A104

R403=OPEN.
1 / 2 3
1K010A H11 A106

*R216=OPEN
1C024C H11 J217 W030

R404=OPEN.

10 / 5 6
1K010B H11 A108

R405=OPEN.

15 / 13 14
1K010C H11 A110

R406=OPEN.

1 / 2 3
1K009A H11 A112

R407=OPEN.

10 / 5 6
1K009B H11 A114

R410=OPEN.

1 / 2 3
1J003A H11 I125 K004 K480

R411=OPEN.

10 / 5 6
1J003B H11 I120

R420=OPEN.

15 / 13 14
1J003C H11 I108

R430=OPEN.

1 / 2 3
1J002A H11 I123 I126 I130 K121

R431=OPEN.

10 / 5 6
1J002B H11 K120

R500=OPEN.

1 / 2 3
1J004A H11 I100

R501=OPEN.

10 / 5 6
1J004B H11 I100

R510=OPEN.

15 / 13 14
1J004C H11 I521

R520=OPEN.

15 / 13 14
1K009C H11 A780 A780

R521=OPEN.

15 / 13 14

1J002C H11 I520

S000=S001+S700 X001.
 1 / I / 2 3
 1B042A H46 S001 W100

S001=S000+S700 X000.
 6 / I / 4 5
 1B042B H46 S000 S767 T300 W100 X100

S002=S003+S700 X003.
 10 / I / 11 12
 1B042C H46 S003 W100

S003=S002+S700 X002.
 15 / I / 13 14
 1B042D H46 S002 S767 T301 W101 X101

S004=S005+S700 X005.
 1 / I / 2 3
 1B041A H46 S005 W101

S005=S004+S700 X004.
 6 / I / 4 5
 1B041B H46 S004 S767 T302 W102 X102

S006=S007+S700 X007.
 10 / I / 11 12
 1B041C H46 S007 W102

S007=S006+S700 X006.
 15 / I / 13 14
 1B041D H46 S006 S767 T303 W102 X103

S008=S009+S701 X009.
 1 / I / 2 3
 1B040A H46 S009 W103

S009=S008+S701 X008.
 6 / I / 4 5
 1B040B H46 S008 S768 T304 W103 X104

S010=S011+S701 X011.
 10 / I / 11 12
 1B040C H46 S011 W104

S011=S010+S701 X010.
 15 / I / 13 14
 1B040D H46 S010 S768 T305 W104 X105

S012=S013+S701 X013.
 1 / I / 2 3
 1B039A H46 S013 W104

S013=S012+S701 X012.
 6 / I / 4 5
 1B039B H46 S012 S768 T306 W105 X106

S014=S015+S701 X015.
 10 / I / 11 12
 1B039C H46 S015 W105

S015=S014+S701 X014.
 15 / I / 13 14
 1B039D H46 S014 S768 T307 W106 X107

S016=S017+S702 X017.
 1 / I / 2 3
 1B037A H46 S017 W106

S017=S016+S702 X016.
 6 / I / 4 5
 1B037B H46 S016 T308 W106 X108

S018=S019+S702 X019.
 10 / I / 11 12
 1B037C H46 S019 W107

S019=S018+S702 X018.
 15 / I / 13 14
 1B037D H46 S018 T309 W107 X109

S020=S021+S702 X021.
 1 / I / 2 3
 1B036A H46 S021 W108

S021=S020+S702 X020.
 6 / I / 4 5
 1B036B H46 S020 T310 W108 X110

S022=S023+S702 X023.
 10 / I / 11 12
 1B036C H46 S023 W108

S023=S022+S702 X022.
 15 / I / 13 14
 1B036D H46 S022 T311 W109 X111

S024=S025+S703 X025.
 1 / I / 2 3
 1B035A H46 S025 W109

S025=S024+S703 X024.
 6 / I / 4 5
 1B035B H46 S024 T312 W110 X112

S026=S027+S703 X027.
 10 / I / 11 12
 1B035C H46 S027 W110

S027=S026+S703 X026.
 15 / I / 13 14
 1B035D H46 S026 T313 W110 X113

S028=S029+S703 X029.
 1 / I / 2 3
 1B034A H46 S029 W111

*S030=S031+GND+S703 R216 X031
 1D034A K33 S031 W117

S029=S028+S703 X028.
 6 / I / 4 5
 1B034B H46 S028 T314 W111 X114

*S031=S030+S703 X030+J217.
 1D034B K33 S030 T315 W117 X115

S700=S741.
 1 / 2 3
 1B038A H47 S000 S001 S002 S003 S004 S005 S006 S007

S701=S741.
 6 / 4 5
 1B038B H47 S008 S009 S010 S011 S012 S013 S014 S015

S702=S741.
 10 / 11 12
 1B038C H47 S016 S017 S018 S019 S020 S021 S022 S023

S703=S741.
 15 / 13 14
 1B038D H47 S024 S025 S026 S027 S028 S029

S740=S770 S760 S750.
 1 / 2 3 4 5 6
 1B032A C21 S741

S741= J081 +J536 S740.
 1 / 2 / 3 4 / 5 6
 1B033A K22 S700 S701 S702 S703

S750=J110 K211 K212 K515 K004.
 15 / 10 11 12 13 14
 1B032B C21 S740 X200 X201 X202 X203

003 S760=K243 K517 C730.
 1 / 2 3 4 5 6
 1B031A C21 S740 X230 X231 X248

S767=S007 S005 S003 S001.
 1 / 2 3 4 5 6
 1B030A C21 S769

*Present if Std. Opt. 10278-1 is installed.

S768=S015 S013 S011 S009.

15 / 10 11 12 13 14
1B030B C21 S769

S769=S768+S767.

1 / 2 / 3
1C025A H48 Y241

S770=K243 K517 Y241.

15 / 10 11 12 13 14
1B031B C21 S740 X230 X231 X249

T000=J071 K101+J076 A001.
1 / 2 3 / 4 5
1L042A H19

T001=J071 J104+J076 A003.
15 / 11 12 / 13 14
1L042B H19

T002=J071 K105+J076 A005.
1 / 2 3 / 4 5
1L041A H19

T003=J071 K107+J076 A007.
15 / 11 12 / 13 14
1L041B H19

T004=J071 K109+J076 A009.
1 / 2 3 / 4 5
1L040A H19

T005=J071 K111+J076 A011.
15 / 11 12 / 13 14
1L040B H19

T006=J071 K113+J076 A013.
1 / 2 3 / 4 5
1L039A H19

T007=J071 J115+J076 A015.
15 / 11 12 / 13 14
1L039B H19

T008=J072 K117+J077 A017.
1 / 2 3 / 4 5
1L038A H19

T009=J072 K119+J077 A019.
15 / 11 12 / 13 14
1L038B H19

T010=J072 K121+J077 A021.
1 / 2 3 / 4 5
1L037A H19

T011=J072 K123+J077 A023.
15 / 11 12 / 13 14
1L037B H19

T012=J072 K125+J077 A025.
1 / 2 3 / 4 5
1L036A H19

T013=J072 K127+J077 A027.
15 / 11 12 / 13 14
1L036B H19

T014=J072 K129+J077 A029.
1 / 2 3 / 4 5
1L035A H19

T015=GND +J077 A031.
15 / 11 12 / 13 14
1L035B H19

T020=K001 J091 J024.
1 / 2 3 4
1L034A C62

T021=K000 J029 J024.
15 / 11 12 13
1L034B C62

T102=K105.
15 / 11 12 13
1L007B C62

T200=J211 B001.
1 / 2 3 4
1K008A C62

T201=J211 B003.
15 / 11 12 13
1K008B C62

T202=J211 B005.
1 / 2 3 4
1K007A C62

T203=J211 B007.
15 / 11 12 13
1K007B C62

T204=J212 B009.
1 / 2 3 4
1K006A C62

T205=J212 B011.
15 / 11 12 13
1K006B C62

T206=J212 B013.
1 / 2 3 4
1K005A C62

T207=J212 B015.
15 / 11 12 13
1K005B C62

T208=J212 B017.
1 / 2 3 4
1K004A C62

T209=J212 B019.
15 / 11 12 13
1K004B C62

T210=J213 B021.
1 / 2 3 4
1K003A C62

T211=J213 B023.
15 / 11 12 13
1K003B C62

T212=J213 B025.
1 / 2 3 4
1K002A C62

T213=J213 B027.
15 / 11 12 13
1K002B C62

T214=J213 B029.
1 / 2 3 4
1K001A C62

T215=J213 B031.
15 / 11 12 13
1K001B C62

T300=K207 S001.
1 / 2 3 4
1L014A C62

B T301=J215 S003.
15 / 11 12 13
1L014B C62

B T302=J216 S005.
1 / 2 3 4
1L013A C62

T303=J215 S007.
15 / 11 12 13
1L013B C62

T304=J215 S009.

1 / 2 3 4
1L012A C62

T305=J215 S011.

15 / 11 12 13
1L012B C62

T306=J215 S013.

1 / 2 3 4
1L011A C62

T307=J215 S015.

15 / 11 12 13
1L011B C62

T308=J215 S017.

1 / 2 3 4
1L010A C62

T309=J216 S019.

15 / 11 12 13
1L010B C62

T310=J216 S021.

1 / 2 3 4
1L009A C62

T311=J216 S023.

15 / 11 12 13
1L009B C62

T312=J216 S025.

1 / 2 3 4
1L008A C62

T313=J216 S027.

15 / 11 12 13
1L008B C62

T314=J216 S029.

1 / 2 3 4
1L007A C62

*T315=J216 S031
1J024A C62

T320=K207.

15 / 11 12 13
1L016B C62

T321=K209 R220 B780.

1 / 2 3 4
1L015A C62

003 T322=K209 J206.
15 / 11 12 13
1L015B C62

B T330=Y204.
1 / 2 3 4
1L016A C62

T400=I010 +I700 A017.
1 / 2 3 / 4 5
1J023A H19

T401=I011 +I700 A019.
15 / 11 12 / 13 14
1J023B H19

T402=I012 +I700 A021.
1 / 2 3 / 4 5
1J022A H19

T403=I013 +I700 A023.
15 / 11 12 / 13 14
1J022B H19

T404=I014 +I700 A025.
1 / 2 3 / 4 5
1J021A H19

T405=I015 +I700 A027.
15 / 11 12 / 13 14
1J021B H19

T406=I016 +I700 A029.
1 / 2 3 / 4 5
1J020A H19

T407=I017 +I700 A031.
15 / 11 12 / 13 14
1J020B H19

T410=K235 K236.
15 / 11 12 13
1J009B C62

T411=K221 K222 K120.
1 / 2 3 4
1J008A C62

T412=K231 K232.
15 / 11 12 13
1J008B C62

T413=Y603.

13 / 11 12
1J001A AGH

T414=K225 K228.

15 / 11 12 13
1J007B C62

T420=I205 I203.

1 / 2 3 4
1J009A C62

T500= open.

1 / 2 3 4
1J005A C62

T501= open.

15 / 11 12 13
1J005B C62

003 U007=R007+GND .
 10 / 11 / 12
 003 1J041C H48 J103
 003 U008=R008.
 1 / 2 3
 003 1K030A H47 J050 J103
 003 U009=R009+GND .
 6 / 4 / 5
 003 1I032B H48 F121 J060
 U100=R100.
 6 / 4 5
 1K030B H47 J000 J002
 U101=R101.
 10 / 11 12
 1K030C H47 J000 J001
 U102=R102.
 15 / 13 14
 1K030D H47 J014 J015 J016 J017
 U107=R107.
 1 / 2 3
 1B024A H47
 U108=R108.
 6 / 4 5
 1B024B H47
 U109=R109.
 10 / 11 12
 1B024C H47
 U110=R110.
 15 / 13 14
 1B024D H47
 U120=R120.
 10 / 11 12
 1K031C H47
 U121=R121.
 15 / 13 14
 1K031D H47
 003 U131=R131+GND .
 6 / 4 / 5
 003 1J033B H48 J051 K003

W000=W001+W700 B001.
 1 / I / 2 3
 1C042A H46 W001 W100

W001=W000+W700 B000.
 6 / I / 4 5
 1C042B H46 W000 W100

W002=W003+W700 B003.
 10 / I / 11 12
 1C042C H46 W003 W101

W003=W002+W700 B002.
 15 / I / 13 14
 1C042D H46 W002 W100

W004=W005+W700 B005.
 1 / I / 2 3
 1C041A H46 W005 W102

W005=W004+W700 B004.
 6 / I / 4 5
 1C041B H46 W004 W101

W006=W007+W700 B007.
 10 / I / 11 12
 1C041C H46 W007 W102

W007=W006+W700 B006.
 15 / I / 13 14
 1C041D H46 W006 W102

W008=W009+W701 B009.
 1 / I / 2 3
 1C040A H46 W009 W103

W009=W008+W701 B008.
 6 / I / 4 5
 1C040B H46 W008 W103

W010=W011+W701 B011.
 10 / I / 11 12
 1C040C H46 W011 W104

W011=W010+W701 B010.
 15 / I / 13 14
 1C040D H46 W010 W104

W012=W013+W701 B013.
 1 / I / 2 3
 1C039A H46 W013 W105

W013=W012+W701 B012.
 6 / I / 4 5
 1C039B H46 W012 W104

W014=W015+W701 B015.
 10 / I / 11 12
 1C039C H46 W015 W106

W015=W014+W701 B014.
 15 / I / 13 14
 1C039D H46 W014 W105

W016=W017+W702 B017.
 1 / I / 2 3
 1C037A H46 W017 W106

W017=W016+W702 B016.
 6 / I / 4 5
 1C037B H46 W016 W106

W018=W019+W702 B019.
 10 / I / 11 12
 1C037C H46 W019 W107

W019=W018+W702 B018.
 15 / I / 13 14
 1C037D H46 W018 W107

W020=W021+W702 B021.
 1 / I / 2 3
 1C036A H46 W021 W108

W021=W020+W702 B020.
 6 / I / 4 5
 1C036B H46 W020 W108

W022=W023+W702 B023.
 10 / I / 11 12
 1C036C H46 W023 W109

W023=W022+W702 B022.
 15 / I / 13 14
 1C036D H46 W022 W108

W024=W025+W703 B025.
 1 / I / 2 3
 1C035A H46 W025 W110

W025=W024+W703 B024.
 6 / I / 4 5
 1C035B H46 W024 W109

W026=W027+W703 B027.
10 / I / 11 12
1C035C H46 W110

W027=W028+W703 B026.
15 / I / 13 14
1C035D H46 W026 W110

W028=W029+W703 B029.
10 / I / 11 12
1B034C H46 W027 W029 W111

W029=W028+W703 B028.
15 / I / 13 14
1B034D H46 W028 W111

*W030=W031+GND+W703 B031 R216.
1C018A K33 W031 W117

*W031=W030+W703 B030+J217
1C018B K33 W030 W117

W100=S000 W001+S001 W000+S002 W003.
1 / 2 3 / 4 5 / 6 10
1C034A C28 W112

W101=S003 W002+S004 W005.
15 / 11 12 / 13 14
1C034B C28 W112

W102=S005 W004+S006 W007+S007 W006.
1 / 2 3 / 4 5 / 6 10
1C033A C28 W113

W103=S008 W009+S009 W008.
15 / 11 12 / 13 14
1C033B C28 W113

W104=S010 W011+S011 W010+S012 W013.
1 / 2 3 / 4 5 / 6 10
1C032A C28 W113

W105=S013 W012+S014 W015.
15 / 11 12 / 13 14
1C032B C28 W113

W106=S015 W014+S016 W017+S017 W016.
1 / 2 3 / 4 5 / 6 10
1C031A C28 W113

W107=S018 W019+S019 W018.
15 / 11 12 / 13 14
1C031B C28 W114

W108=S020 W021+S021 W020+S022 W023.
1 / 2 3 / 4 5 / 6 10
1C030A C28 W114

W109=S023 W022+S024 W025.

15 / 11 12 / 13 14
1C030B C28 W114

W110=S025 W024+S026 W027+S027 W026.

1 / 2 3 / 4 5 / 6 10
1C029A C28 W114

W111=S028 W029+S029 W028.

15 / 11 12 / 13 14
1C029B C28 W114

W112=W100 W101.

15 / 13 14
1C026D H47 W115

*W112=W100 W101 W117+GND
1B020A K23 W115

W113=W102 W103 W104 W105 W106.

1 / 2 3 4 5 6
1C027A C21 W115

W114=W107 W108 W109 W110 W111.

15 / 10 11 12 13 14
1C027B C21 W115

W115=W112 W120+W113 W120+W114 W120.

1 / 2 3 / 4 5 / 6 10
1C028A C28 J114 J120 J414 W116

003 W116=W115 K004.

15 / 13 14
1B027D H47 B749 B758 J261

**W117=S030 W031+S031 W030
1B020B K23 W112

W120= J131.

6 / 4 / 5
1C025B H48 W115 W115 W115

W700=W741.

1 / 2 3
1C038A H47 W000 W001 W002 W003 W004 W005 W006 W007

W701=W741.

6 / 4 5
1C038B H47 W008 W009 W010 W011 W012 W013 W014 W015

W702=W741.

10 / 11 12
1C038C H47 W016 W017 W018 W019 W020 W021 W022 W023

W703=W741.

15 / 13 14
1C038D H47 B801 W024 W025 W026 W027 W028 W029

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* Replacement equation if Std. Opt. 10278-1 is installed.

** Present if Std. Opt. 10278-1 is installed.

W740=W750.

1 / 2 3
1C026A H47 W741

W741=W740 J536.

6 / 4 5
1C026B H47 W700 W701 W702 W703

W750=K213 K243.

10 / 11 12
1C026C H47 W740

X000=X001+X261 X180.
1 / I / 2 3
1D033A H46 A001 C001 S001 X001

X001=X000+X261 X160.
6 / I / 4 5
1D033B H46 A000 C000 S000 X000

X002=X003+X261 X181.
10 / I / 11 12
1D033C H46 A003 C003 S003 X003

X003=X002+X261 X161.
15 / I / 13 14
1D033D H46 A002 C002 S002 X002

X004=X005+X261 X182.
1 / I / 2 3
1D032A H46 A005 C005 S005 X005

X005=X004+X261 X162.
6 / I / 4 5
1D032B H46 A004 C004 S004 X004

X006=X007+X261 X183.
10 / I / 11 12
1D032C H46 A007 C007 S007 X007

X007=X006+X261 X163.
15 / I / 13 14
1D032D H46 A006 C006 S006 X006

X008=X009+X262 X184.
1 / I / 2 3
1D021A H46 A009 C009 S009 X009

X009=X008+X262 X164.
6 / I / 4 5
1D021B H46 A008 C008 S008 X008

X010=X011+X262 X185.
10 / I / 11 12
1D021C H46 A011 C011 S011 X011

X011=X010+X262 X165.
15 / I / 13 14
1D021D H46 A010 C010 S010 X010

X012=X013+X262 X186.
1 / I / 2 3
1D020A H46 A013 C013 S013 X013

X013=X012+X262 X166.
 6 / I / 4 5
 1D020B H46 A012 C012 S012 X012

X014=X015+X262 X187.
 10 / I / 11 12
 1D020C H46 A015 C015 S015 X015

X015=X014+X262 X167.
 15 / I / 13 14
 1D020D H46 A014 C014 S014 X014

X016=X017+X263 X188.
 1 / I / 2 3
 1E033A H46 A017 C017 S017 X017

X017=X016+X263 X168.
 6 / I / 4 5
 1E033B H46 A016 C016 S016 X016

X018=X019+X263 X189.
 10 / I / 11 12
 1E033C H46 A019 C019 S019 X019

X019=X018+X263 X169.
 15 / I / 13 14
 1E033D H46 A018 C018 S018 X018

X020=X021+X263 X190.
 1 / I / 2 3
 1E032A H46 A021 C021 S021 X021

X021=X020+X263 X170.
 6 / I / 4 5
 1E032B H46 A020 C020 S020 X020

X022=X023+X263 X191.
 10 / I / 11 12
 1E032C H46 A023 C023 S023 X023

X023=X022+X263 X171.
 15 / I / 13 14
 1E032D H46 A022 C022 S022 X022

X024=X025+X264 X192.
 1 / I / 2 3
 1E021A H46 A025 C025 S025 X025

X025=X024+X264 X172.
 6 / I / 4 5
 1E021B H46 A024 C024 S024 X024

X026=X027+X264 X193.
 10 / I / 11 12
 1E021C H46 A027 C027 S027 X027

X027=X026+X264 X173.
 15 / I / 13 14
 1E021D H46 A026 C026 S026 X026

X028=X029+X264 X194.
 1 / I / 2 3
 1E020A H46 A029 C029 S029 X029

X029=X028+X264 X174.
 6 / I / 4 5
 1E020B H46 A028 C028 S028 X028

X030=X031+X264 X195.
 10 / I / 11 12
 1E020C H46 A031 C031 X031

X031=X030+X264 X175.
 15 / I / 13 14
 1E020D H46 A030 C030 X030

X100=X200 R000+X240 C001+X220 A101+X230 S001.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D042A H05 X121 X122 X123 X140 X160

X101=X200 R001+X240 C003+X220 A103+X230 S003.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D041A H05 X122 X123 X141 X161

X102=X200 R002+X240 C005+X220 A105+X230 S005.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D040A H05 X123 X142 X162

X103=X200 R003+X240 C007+X220 A107+X230 S007.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D039A H05 X143 X163 X255

X104=X201 R004+X240 C009+X220 A109+X230 S009.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D030A H05 X125 X126 X127 X144 X164

X105=X201 R005+X240 C011+X220 A111+X230 S011.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D029A H05 X126 X127 X145 X165

X106=X201 R006+X240 C013+X220 A113+X230 S013.
 1 / 3 4 / 5 6 / 10 11 / 12 13
 1D028A H05 X127 X146 X166

X107=X201 R007+X240 C015+X220 A115+X230 S015.

1 / 3 4 / 5 6 / 10 11 / 12 13
1D027A H05 X147 X167

X108=X202 R008+X241 C017+X221 A017+X231 S017.

1 / 3 4 / 5 6 / 10 11 / 12 13
1E042A H05 X129 X130 X131 X148 X168

X109=X202 R009+X241 C019+X221 A019+X231 S019.

1 / 3 4 / 5 6 / 10 11 / 12 13
1E041A H05 X130 X131 X149 X169

X110=X202 R010+X241 C021+X221 A021+X231 S021.

1 / 3 4 / 5 6 / 10 11 / 12 13
1E040A H05 X131 X150 X170

X111=X202 R011+X241 C023+X221 A023+X231 S023.

1 / 3 4 / 5 6 / 10 11 / 12 13
1E039A H05 X151 X171 X257

X112=X203 R012+X241 C025+X221 A025+X231 S025.

1 / 3 4 / 5 6 / 10 11 / 12 13
1E030A H05 X133 X134 X135 X152 X172

X113=X203 R013+X241 C027+X221 A027+X231 S027.

1 / 3 4 / 5 6 / 10 11 / 12 13
1E029A H05 X134 X135 X153 X173

X114=X203 R014+X241 C029+X221 A029+X231 S029.

1 / 3 4 / 5 6 / 10 11 / 12 13
1E028A H05 X135 X154 X174

X115=GND +X203 R015+X241 C031+X221 A031.

1 / 3 4 / 5 6 / 10 11 / 12 13
1E027A H05 X155 X175

X120=X250.

1 / 2 3
1E031A H47 X140 X160

*X115=X231 S031+X203 R015+X241 C031+X221
A031

1E027A H05 X155 X175

X121=X250+X100.

1 / 2 / 3
1D031A H48 X141 X161

X122= X250+X100+X101.

1 / 2 / 3 / 4 / 5 / 6
1D038A K25 X142 X162

X123= X250+X100+X101+X102.

15 / 10 / 11 / 12 / 13 / 14
1D038B K25 X143 X163 X251

X124=X251.

6 / 4 5
1E031B H47 X144 X164

X125=X251+X104.

6 / 4 / 5
1D031B H48 X145 X165

X126= X251+X104+X105.

1 / 2 / 3 / 4 / 5 / 6
1D026A K25 X146 X166

X127= X251+X104+X105+X106.

15 / 10 / 11 / 12 / 13 / 14
1D026B K25 X147 X167

X128=X252.

10 / 11 12
1E031C H47 X148 X168

X129=X252+X108.

10 / 11 / 12
1D031C H48 X149 X169

X130= X252+X108+X109.

1 / 2 / 3 / 4 / 5 / 6
1E038A K25 X150 X170

X131= X252+X108+X109+X110.

15 / 10 / 11 / 12 / 13 / 14
1E038B K25 X151 X171 X253

X132=X253.

15 / 13 14
1E031D H47 X152 X172

X133=X253+X112.

15 / 13 / 14
1D031D H48 X153 X173

X134= X253+X112+X113.

1 / 2 / 3 / 4 / 5 / 6
1E026A K25 X154 X174

X135= X253+X112+X113+X114.

15 / 10 / 11 / 12 / 13 / 14
1E026B K25 X155 X175

X140=X100+X120.

1 / 2 / 3
1D037A H48 X160

X141=X101+X121.
 6 / 4 / 5
 1D037B H48 X161

X142=X102+X122.
 10 / 11 / 12
 1D037C H48 X162

X143=X103+X123.
 15 / 13 / 14
 1D037D H48 X163

X144=X104+X124.
 1 / 2 / 3
 1D025A H48 X164

X145=X105+X125.
 6 / 4 / 5
 1D025B H48 X165

X146=X106+X126.
 10 / 11 / 12
 1D025C H48 X166

X147=X107+X127.
 15 / 13 / 14
 1D025D H48 X167

X148=X108+X128.
 1 / 2 / 3
 1E037A H48 X168

X149=X109+X129.
 6 / 4 / 5
 1E037B H48 X169

X150=X110+X130.
 10 / 11 / 12
 1E037C H48 X170

X151=X111+X131.
 15 / 13 / 14
 1E037D H48 X171

X152=X112+X132.
 1 / 2 / 3
 1E025A H48 X172

X153=X113+X133.
 6 / 4 / 5
 1E025B H48 X173

X154=X114+X134.
10 / 11 / 12
1E025C H48 X174

X155=X115+X135.
15 / 13 / 14
1E025D H48 X175

X160=X140 +X100 X120.
1 / 2 3 4 / 5 6 10
1D036A K23 X001 X180

X161=X141 +X101 X121.
15 / 11 12 / 13 14
1D036B K23 X003 X181

X162=X142 +X102 X122.
1 / 2 3 4 / 5 6 10
1D035A K23 X005 X182

X163=X143 +X103 X123.
15 / 11 12 / 13 14
1D035B K23 X007 X183

X164=X144 +X104 X124.
1 / 2 3 4 / 5 6 10
1D024A K23 X009 X184

X165=X145 +X105 X125.
15 / 11 12 / 13 14
1D024B K23 X011 X185

X166=X146 +X106 X126.
1 / 2 3 4 / 5 6 10
1D023A K23 X013 X186

X167=X147 +X107 X127.
15 / 11 12 / 13 14
1D023B K23 X015 X187

X168=X148 +X108 X128.
1 / 2 3 4 / 5 6 10
1E036A K23 X017 X188

X169=X149 +X109 X129.
15 / 11 12 / 13 14
1E036B K23 X019 X189

X170=X150 +X110 X130.
1 / 2 3 4 / 5 6 10
1E035A K23 X021 X190

x171=x151 +x111 x131.
 15 / 11 12 / 13 14
 1E035B K23 X023 X191

x172=x152 +x112 x132.
 1 / 2 3 4 / 5 6 10
 1E024A K23 X025 X192

x173=x153 +x113 x133.
 15 / 11 12 / 13 14
 1E024B K23 X027 X193

x174=x154 +x114 x134.
 1 / 2 3 4 / 5 6 10
 1E023A K23 X029 X194

x175=x155 +x115 x135.
 15 / 11 12 / 13 14
 1E023B K23 X031 X195

x180=x160.
 15 / 14
 1D042B H05 X000

x181=x161.
 15 / 14
 1D041B H05 X002

x182=x162.
 15 / 14
 1D040B H05 X004

x183=x163.
 15 / 14
 1D039B H05 X006

x184=x164.
 15 / 14
 1D030B H05 X008

x185=x165.
 15 / 14
 1D029B H05 X010

x186=x166.
 15 / 14
 1D028B H05 X012

x187=x167.
 15 / 14
 1D027B H05 X014

X188=X168.
 15 / 14
 1E042B H05 X016

X189=X169.
 15 / 14
 1E041B H05 X018

X190=X170.
 15 / 14
 1E040B H05 X020

X191=X171.
 15 / 14
 1E039B H05 X022

X192=X172.
 15 / 14
 1E030B H05 X024

X193=X173.
 15 / 14
 1E029B H05 X026

X194=X174.
 15 / 14
 1E028B H05 X028

X195=X175.
 15 / 14
 1E027B H05 X030

X200=K524+F013+F015+A750 S750.
 1 / 2 / 3 / 4 / 5 6
 1F027A K24 X100 X101 X102 X103

X201=K524+S750 A750.
 1 / 2 / 3 4 5 6
 1F026A K27 X104 X105 X106 X107

X202= K524+S750 A750.
 15 / 10 / 11 / 12 / 13 14
 1F027B K24 X108 X109 X110 X111

X203=K524+S750 A750.
 15 / 10 / 11 12 13 14
 1F026B K27 X112 X113 X114 X115

X220=K526+C760 OPEN A760.
 1 / 2 / 3 4 5 6
 1F025A K27 X100 X101 X102 X103 X104 X105 X106 X107

X221=K526+C760 A765 A760.
15 / 10 / 11 12 13 14
1F025B K27 X108 X109 X110 X111 X112 X113 X114 X115

X230=K526+S770 S760.
1 / 2 / 3 4 5 6
1F024A K27 X100 X101 X102 X103 X104 X105 X106 X107

X231=K526+S770 S760.
15 / 10 / 11 12 13 14
1F024B K27 X108 X109 X110 X111 X112 X113 X114

X240=K526+C791 Y770.
1 / 2 / 3 4 5 6
1F023A K27 X100 X101 X102 X103 X104 X105 X106 X107

X241=K526+C791 C730 Y770.
15 / 10 / 11 12 13 14
1F023B K27 X108 X109 X110 X111 X112 X113 X114 X115

X247=K413 I208.
10 / 11 12
1E019C H47 C714 X250 X252

X248=C781 Y770 S760 A760.
1 / 2 3 4 5 6
1F028A C21 X250

X249=C780 Y770 S770 A765.
15 / 10 11 12 13 14
1F028B C21 X252

X250=X248 X247.
1 / 2 3
1E019A H47 X120 X121 X122 X123

X251=X123 X255.
1 / 2 3
1F021A H47 X124 X125 X126 X127

X252=X249 X247.
6 / 4 5
1E019B H47 X128 X129 X130 X131

X253=X131 X257.
6 / 4 5
1F021B H47 X132 X133 X134 X135

X255=X103.
10 / 11 12
1G021C H47 X251

X257=X111.

15 / 13 14
1G021D H47 X253

X260=J531.

10 / 11 12
1F021C H47 X261 X262 X263 X264

X261=X260.

1 / 2 3
1F020A H47 X000 X001 X002 X003 X004 X005 X006 X007

X262=X260.

6 / 4 5
1F020B H47 X008 X009 X010 X011 X012 X013 X014 X015

X263=X260.

10 / 11 12
1F020C H47 X016 X017 X018 X019 X020 X021 X022 X023

X264=X260.

15 / 13 14
1F020D H47 X024 X025 X026 X027 X028 X029 X030 X031

Y000=J024.
 6 / 4 5
 IK024B K71 J018

Y001=J019.
 10 / 11 12
 IK024C K71 J028

Y002=J029.
 15 / 13 14
 IK024D K71 J027

Y020=K005.
 15 / 13 14
 IB026D K71 M001

Y030=K221.
 1 / 2 3 4
 II030A K69 K121

Y031=J123.
 6 / 4 5
 IH039B K71 J117

Y032=J133.
 1 / 2 3
 IH039A K71 J116

00 Y033=J097.
 10 / 11 12
 IH039C K71 J099

Y040=K131.
 15 / 13 14
 IH039D K71 K132

Y050=K133.
 15 / 13 14
 II029D K71 K120

B Y200=J221.
 1 / 2 3
 IK016A K71 J201

ICA Y201=J223 J080.
 6 / 4 5
 IK016B K71 J203

B Y202=J224.
 10 / 11 12
 IK016C K71 J204

B Y204=J221.
 15 / 13 14
 B 1K016D K71 T330

 Y209=M001.
 15 / 13
 1I005D H35 K210

 Y210=K211 K014
 1 / 2 3
 1I029A K71 K212

 Y220=K211 J260.
 1 / 2 3
 1H030A K71 J262

 Y221=K441.
 6 / 4 5
 1H030B K71 K220

 Y222=K221 K120.
 10 / 11 12
 1H030C K71 K222

 Y223=K223.
 15 / 13 14
 1H030D K71 K224

 Y224=K225.
 1 / 2 3
 1H029A K71 K226

 Y225=K239.
 6 / 4 5
 1H029B K71 K226

 Y226=K225 C313.
 10 / 11 12
 1H029C K71 K228

 Y227=K229 C720.
 15 / 13 14
 1H029D K71 K230

 Y228=K231.
 1 / 2 3
 1H028A K71 K232

Y229=K233.

6 / 4 5
1H028B K71 K234

Y230=K235.

10 / 11 12
1H028C K71 K236

Y231=K237.

15 / 13 14
1H028D K71 K238

003 Y240=K243 C730.

1 / 2 3
1B026A K71 K244

Y241=S769.

6 / 4 5
1B026B K71 S770

Y242=K244.

10 / 11 12
1B026C K71 J252

Y250=A763.

12 / 13
1G027E C70 A764

Y400=K411 K409.

1 / 2 3
1H009A K71 K400

Y401=K553.

6 / 4 5
1H009B K71 K400

Y402=K401.

10 / 11 12
1H009C K71 K402

Y403=K403.

15 / 13 14
1H009D K71 K404

Y404=K405.

1 / 2 3
1H008A K71 K406

Y405=K407.

6 / 4 5
1H008B K71 K408

Y406=K553.
 10 / 11 12
 1H008C K71 K410

Y407=K411 K409.
 15 / 13 14
 1H008D K71 K420

Y408=K421 J417.
 1 / 2 3
 1H007A K71 K440

Y409=J417 K431.
 6 / 4 5
 1H007B K71 K440

Y410=K441.
 10 / 11 12
 1H007C K71 K450

Y411=K409 J416.
 15 / 13 14
 1H007D K71 K450

Y412=J411.
 10 / 11
 1H017C H35 K451

00 Y413=I520.
 1 / 2 3
 00 1I022A K71 I521

B Y481=I122.
 6 / 5
 1G027C C70 I121

00 Y482=I203.
 6 / 4 5
 00 1I022B K71 I212

00 Y483=I213.
 10 / 11 12
 00 1I022C K71 I000

00 Y484=I213.
 15 / 13 14
 00 1I022D K71 I004

Y490=I111.
 15 / 13
 003 1J006D H53 I112

Y491=I112.
 10 / 11
 003 1J006C H53 I113

Y492=I113.
 10 / 11
 1I005C H35 I114

B Y493=I116.
 1 / 2
 B 1J006A H53 I115

Y500=J509.
 1 / 2
 1H017A H35 J506

Y501=J506.

15 / 13

1H016D H53 J507

B Y509=J519.

6 / 4

B 1J006B H53 J520

Y510=J531.

1 / 2

1H016A H53 J532

Y511=J521.

1 / 2

003 1I005A H35 K520

Y512=J532.

10 / 11

1H016C H53 Y513

B Y513=Y512.

10 / 11

B 1G027D C70 J534

Y530=K553.

4 / 3

1G027B C70 K551

Y540=I124.

15 / 13

1H017D H35 K550

Y603=I211.

6 / 4 5

1I029B K71 T413

Y770=C770.

2 / 1

1G027A C70 C740 X240 X241 X248 X249

Y780=K415

1I029C K71

Z000

1

003 1J007A C62

PART 7

WIRE LISTS



1000	8	1J023-01	1K011-02	CHASSIS
1001	8	1J023-06	1K011-03	WIRING
1002	7	1J023-15	1K011-05	ASSOCIATED
1003	7	1J023-10	1K011-06	WITH
1004	9	1J022-01	1K011-13	DISK
1005	8	1J022-06	1K011-14	PACK
1006	7	1J022-15	1K010-02	CONTROL
1007	7	1J022-10	1K010-03	INTERFACE
1008	8	1J021-01	1K010-05	CHASSIS
1009	8	1J021-06	1K010-06	WIRING
1010	7	1J021-15	1K010-13	ASSOCIATED
1011	8	1J021-10	1K010-14	WITH
1012	8	1J020-01	1K009-02	DISK
1013	7	1J020-06	1K009-03	PACK
1014	7	1J020-15	1K009-05	CONTROL
1015	8	1J020-10	1K009-06	INTERFACE
1100	6	1K008-01	1L006-02	CHASSIS
1101	5	1K008-06	1L006-03	WIRING
1102	4	1K008-15	1L006-05	ASSOCIATED
1103	5	1K008-10	1L006-06	WITH
1104	7	1K007-01	1L006-13	DIRECT
1105	6	1K007-06	1L006-14	STORE
1106	4	1K007-15	1L005-02	DATA
1107	5	1K007-10	1L005-03	INTERFACE
1108	6	1K006-01	1L005-05	CHASSIS
1109	5	1K006-06	1L005-06	WIRING
1110	5	1K006-15	1L005-13	ASSOCIATED
1111	6	1K006-10	1L005-14	WITH
1112	5	1K005-01	1L004-02	DIRECT
1113	4	1K005-06	1L004-03	STORE
1114	4	1K005-15	1L004-05	DATA
1115	5	1K005-10	1L004-06	INTERFACE
1116	7	1K004-01	1L004-13	CHASSIS
1117	6	1K004-06	1L004-14	WIRING
1118	4	1K004-15	1L003-02	ASSOCIATED
1119	5	1K004-10	1L003-03	WITH
1120	6	1K003-01	1L003-05	DIRECT
1121	5	1K003-06	1L003-06	STORE
1122	5	1K003-15	1L003-13	DATA
1123	6	1K003-10	1L003-14	INTERFACE
1124	5	1K002-01	1L002-02	CHASSIS
1125	4	1K002-06	1L002-03	WIRING
1126	4	1K002-15	1L002-05	ASSOCIATED
1127	5	1K002-10	1L002-065	WITH
1128	7	1K001-01	1L002-13	DIRECT
1129	6	1K001-06	1L002-14	STORE
1130	3	1K001-15	1L001-02	DATA
1131	4	1K001-10	1L001-03	INTERFACE
1200	6	1L033-02	1L042-01	CHASSIS
1201	6	1L033-03	1L042-06	WIRING
1202	6	1L033-05	1L042-15	ASSOCIATED
1203	6	1L033-06	1L042-10	WITH
1204	6	1L033-13	1L041-01	A/Q
1205	5	1L033-14	1L041-06	DATA
1206	6	1L032-02	1L041-15	INTERFACE
1207	6	1L032-03	1L041-10	CHASSIS
1208	6	1L032-05	1L040-01	WIRING
1209	6	1L032-06	1L040-06	ASSOCIATED
1210	5	1L032-13	1L040-15	WITH
1211	6	1L032-14	1L040-10	A/Q
1212	5	1L031-02	1L039-01	DATA
1213	5	1L031-03	1L039-06	

1214	5	1L031-05	1L039-15
1215	5	1L031-06	1L039-10
1216	5	1L031-13	1L038-01
1217	5	1L031-14	1L038-06
1218	5	1L030-02	1L038-15
1219	5	1L030-03	1L038-10
1220	5	1L030-05	1L037-01
1221	5	1L030-06	1L037-06
1222	5	1L030-13	1L037-15
1223	5	1L030-14	1L037-10
1224	5	1L029-02	1L036-01
1225	5	1L029-03	1L036-06
1226	5	1L029-05	1L036-15
1227	5	1L029-06	1L036-10
1228	5	1L029-13	1L035-01
1229	5	1L029-14	1L035-06
1230	5	1L028-02	1L035-15
1231	5	1L028-03	1L035-10
1400	23	1I030-14	1B021-14
1401	2	1I030-05	1I030-10
1402	3	1H031-05	1H031-10
1500	2	1J001-03	1J001-04
A000	6	1G042- 1*	1H038- 5
A001	3	1G041- 3	1G042- 6*
A001	23	1G007-11	1L042- 5
A001	17	1D015- 3	1G041- 3
A001	14	1D015- 3	1G007-11
A002	5	1G042-10*	1H038- 4
A003	3	1G041-12	1G042-15*
A003	24	1G007-12	1L042-14
A003	18	1G041-12	1L042-14
A003	14	1D014- 3	1G007-12
A005	3	1G038- 6*	1G039- 3
A005	6	1G039- 3	1H040- 5
A005	14	1H040- 5	1L041- 5
A005	23	1G007-13	1L041- 5
A005	14	1D013- 3	1G007-13
A007	3	1G038-15*	1G039-12
A007	4	1G039-12	1H040- 4
A007	16	1H040- 4	1L041-14
A007	24	1G007-14	1L041-14
A007	14	1D012- 3	1G007-14
A009	3	1G036- 3	1G037- 6*
A009	6	1G036- 3	1H040- 3
A009	14	1H040- 3	1L040- 5
A009	14	1J017-10	1L040- 5
A009	23	1D007- 3	1J017-10
A010	14	1E016- 3	1G037-10*
A011	3	1G036-12	1G037-15*
A011	15	1J016-10	1L040-14
A011	18	1G036-12	1L040-14
A011	23	1D006- 3	1J016-10
A012	12	1E016- 2	1G033- 1*
A013	3	1G033- 6*	1G034- 3
A013	14	1J015-10	1L039- 5
A013	13	1E015- 3	1G034- 3
A013	18	1E015- 3	1J015-10
A015	5	1G034-12	1H040- 2
A015	16	1J014- 5	1L039-14
A015	14	1E014- 3	1G033-15*
A015	3	1E014- 3	1E016- 4
A015	16	1E016- 4	1H040- 2

INTERFACE

CHASSIS
 WIRING
 ASSOCIATED
 WITH
 A/Q
 DATA
 INTERFACE

CHASSIS
 WIRING
 ASSOCIATED
 WITH
 A/Q
 DATA
 INTERFACE

Y010 DELAY

Y030 DELAY

Y040 DELAY

T413 POWER LOSS PROTECT TRANSMITTER

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

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173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

173A LOGIC

A015	14	1G034-12	1J014- 5	173A	LOGIC
A017	9	1E042-11	1G031- 6*	173A	LOGIC
A017	11	1J023- 5	1L038- 5	173A	LOGIC
A017	14	1D015-12	1E042-11	173A	LOGIC
A017	8	1D015-12	1F022- 5	173A	LOGIC
A017	14	1F022- 5	1J023- 5	173A	LOGIC
A019	11	1E041-11	1G031-15*	173A	LOGIC
A019	11	1J023-14	1L038-14	173A	LOGIC
A019	14	1D014-12	1E041-11	173A	LOGIC
A019	8	1D014-12	1F022- 4	173A	LOGIC
A019	16	1F022- 4	1J023-14	173A	LOGIC
A020	6	1F022-12	1G030- 1*	173A	LOGIC
A020	3	1F022- 3	1F022-12	173A	LOGIC
A021	9	1E040-11	1G030- 6*	173A	LOGIC
A021	11	1J022- 5	1L037- 5	173A	LOGIC
A021	14	1D013-12	1E040-11	173A	LOGIC
A021	6	1D013-12	1E016-14	173A	LOGIC
A021	17	1E016-14	1J022- 5	173A	LOGIC
A022	7	1F022-11	1G030-10*	173A	LOGIC
A023	10	1E039-11	1G030-15*	173A	LOGIC
A023	11	1J022-14	1L037-14	173A	LOGIC
A023	14	1D012-12	1E039-11	173A	LOGIC
A023	6	1D012-12	1E016-13	173A	LOGIC
A023	5	1E016-13	1F022- 2	173A	LOGIC
A023	16	1F022- 2	1J022-14	173A	LOGIC
A024	6	1F022-10	1G029- 1*	173A	LOGIC
A024	6	1E022- 4	1F022-10	173A	LOGIC
A025	7	1E030-11	1G029- 6*	173A	LOGIC
A025	11	1J021- 5	1L036- 5	173A	LOGIC
A025	13	1D007-12	1E030-11	173A	LOGIC
A025	22	1D007-12	1J021- 5	173A	LOGIC
A026	11	1E022- 3	1G029-10*	173A	LOGIC
A027	9	1E029-11	1G029-15*	173A	LOGIC
A027	11	1J021-14	1L036-14	173A	LOGIC
A027	23	1D006-12	1J021-14	173A	LOGIC
A027	7	1E017-14	1E029-11	173A	LOGIC
A027	8	1D006-12	1E017-14	173A	LOGIC
A028	10	1G009- 5	1G028- 1*	173A	LOGIC
A029	7	1E028-11	1G028- 6*	173A	LOGIC
A029	11	1J020- 5	1L035- 5	173A	LOGIC
A029	17	1E015-12	1J020- 5	173A	LOGIC
A029	7	1E017-13	1E028-11	173A	LOGIC
A029	3	1E015-12	1E017-13	173A	LOGIC
A030	10	1G009- 4	1G028-10*	173A	LOGIC
A031	9	1E027-13	1G028-15*	173A	LOGIC
A031	11	1J020-14	1L035-14	173A	LOGIC
A031	19	1E014-12	1J020-14	173A	LOGIC
A031	7	1E017- 6	1E027-13	173A	LOGIC
A031	4	1E014-12	1E017- 6	173A	LOGIC
A100	2	1G040- 2	1G041- 1*	173A	LOGIC
A101	10	1D042-11	1G040- 1*	173A	LOGIC
A102	4	1G040- 4	1G041-15*	173A	LOGIC
A103	10	1D041-11	1G040- 6*	173A	LOGIC
A104	4	1G039- 1*	1G040-11	173A	LOGIC
A105	11	1D040-11	1G040-10*	173A	LOGIC
A106	3	1G039-15*	1G040-13	173A	LOGIC
A107	12	1D039-11	1G040-15*	173A	LOGIC
A108	2	1G035- 2	1G036- 1*	173A	LOGIC
A109	10	1D030-11	1G035- 1*	173A	LOGIC
A110	4	1G035- 4	1G036-15*	173A	LOGIC
A111	11	1D029-11	1G035- 6*	173A	LOGIC
A112	4	1G034- 1*	1G035-11	173A	LOGIC

A113	12	1D028-11	1G035-10*	173A	LOGIC
A114	3	1G034-15*	1G035-13	173A	LOGIC
A115	13	1D027-11	1G035-15*	173A	LOGIC
A700	5	1G032- 1*	1G038-13	173A	LOGIC
A700	2	1G038-11	1G038-13	173A	LOGIC
A700	3	1G038- 4	1G038-11	173A	LOGIC
A700	2	1G038- 2	1G038- 4	173A	LOGIC
A700	4	1G038- 2	1G042- 2	173A	LOGIC
A700	2	1G042- 2	1G042- 4	173A	LOGIC
A700	3	1G042- 4	1G042-11	173A	LOGIC
A700	2	1G042-11	1G042-13	173A	LOGIC
A701	3	1G032- 6*	1G033-13	173A	LOGIC
A701	2	1G033-11	1G033-13	173A	LOGIC
A701	3	1G033- 4	1G033-11	173A	LOGIC
A701	2	1G033- 2	1G033- 4	173A	LOGIC
A701	4	1G033- 2	1G037- 2	173A	LOGIC
A701	2	1G037- 2	1G037- 4	173A	LOGIC
A701	3	1G037- 4	1G037-11	173A	LOGIC
A701	2	1G037-11	1G037-13	173A	LOGIC
A702	2	1G031-11	1G032-10*	173A	LOGIC
A702	2	1G031-11	1G031-13	173A	LOGIC
A702	2	1G030-13	1G031-13	173A	LOGIC
A702	2	1G030-11	1G030-13	173A	LOGIC
A702	3	1G030- 4	1G030-11	173A	LOGIC
A702	2	1G030- 2	1G030- 4	173A	LOGIC
A702	2	1G030- 2	1G031- 2	173A	LOGIC
A702	2	1G031- 2	1G031- 4	173A	LOGIC
A703	3	1G029-13	1G032-15*	173A	LOGIC
A703	2	1G029-11	1G029-13	173A	LOGIC
A703	2	1G028-11	1G029-11	173A	LOGIC
A703	2	1G028-11	1G028-13	173A	LOGIC
A703	3	1G028- 4	1G028-13	173A	LOGIC
A703	2	1G028- 2	1G028- 4	173A	LOGIC
A703	2	1G028- 2	1G029- 2	173A	LOGIC
A703	2	1G029- 2	1G029- 4	173A	LOGIC
A710	4	1G041-11	1H042- 1*	173A	LOGIC
A710	3	1G039-11	1G041-11	173A	LOGIC
A710	3	1G036-11	1G039-11	173A	LOGIC
A710	3	1G034-11	1G036-11	173A	LOGIC
A710	3	1G034- 2	1G034-11	173A	LOGIC
A710	3	1G034- 2	1G036- 2	173A	LOGIC
A710	3	1G036- 2	1G039- 2	173A	LOGIC
A710	3	1G039- 2	1G041- 2	173A	LOGIC
A711	3	1G039-13	1H038- 1*	173A	LOGIC
A711	3	1G039-13	1G041-13	173A	LOGIC
A711	3	1G041- 5	1G041-13	173A	LOGIC
A711	3	1G039- 5	1G041- 5	173A	LOGIC
A711	3	1G036- 5	1G039- 5	173A	LOGIC
A711	3	1G034- 5	1G036- 5	173A	LOGIC
A711	3	1G034- 5	1G034-13	173A	LOGIC
A711	3	1G034-13	1G036-13	173A	LOGIC
A740	4	1G025-15*	1H027- 5	173A	LOGIC
A741	5	1G032-13	1H027- 1*	173A	LOGIC
A741	2	1G032-11	1G032-13	173A	LOGIC
A741	3	1G032- 4	1G032-11	173A	LOGIC
A741	2	1G032- 2	1G032- 4	173A	LOGIC
A749	3	1H041- 2	1H042- 6*	173A	LOGIC
A750	9	1G025-10	1H041- 1*	173A	LOGIC
A750	5	1F027-14	1G025-10	173A	LOGIC
A750	3	1F026-12	1F027-14	173A	LOGIC
A750	3	1F026- 4	1F026-12	173A	LOGIC

A750	2	1F026- 4	1F027- 5	173A	LOGIC
A760	10	1G025-12	1H041-15*	173A	LOGIC
A760	5	1F025-13	1G025-12	173A	LOGIC
A760	3	1F025- 5	1F025-13	173A	LOGIC
A760	3	1F025- 5	1F028- 5	173A	LOGIC
A762	3	1H038- 6*	1H040- 6	173A	LOGIC
A763	8	1G027-13	1H040- 1*	173A	LOGIC
A764	3	1H040-10	1H042-10*	173A	LOGIC
A765	3	1H040-15*	1H041-10	173A	LOGIC
A765	10	1G025-11	1H041-10	173A	LOGIC
A765	3	1F025-12	1F028-13	173A	LOGIC
A765	5	1F025-12	1G025-11	173A	LOGIC
A770	11	1G007-15*	1H027-11	173A	LOGIC
A773	4	1E022- 5	1F022- 1*	173A	LOGIC
A774	5	1E016-15*	1E022- 2	173A	LOGIC
A775	10	1E017- 2	1G009- 6*	173A	LOGIC
A776	6	1E017-15	1F022-15*	173A	LOGIC
A777	4	1E017- 3	1E022- 1*	173A	LOGIC
A778	3	1E016- 1*	1E016- 5	173A	LOGIC
A779	3	1E016- 6*	1E016-12	173A	LOGIC
A780	4	1E016-11	1E017- 1*	173A	LOGIC
A781	3	1F029- 2	1F029-10	173A	LOGIC
A781	8	1E016-10*	1F029- 2	173A	LOGIC
A781	12	1F029-10	1I035-11	173A	LOGIC
B000	17	1C042- 5	1F016- 1*	173A	LOGIC
B001	26	1C008- 2	1K008- 3	173A	LOGIC
B001	17	1F016-15*	1K008- 3	173A	LOGIC
B001	16	1C008- 2	1C042- 3	173A	LOGIC
B002	16	1C042-14	1F015- 1*	173A	LOGIC
B003	26	1C008-11	1K008-12	173A	LOGIC
B003	18	1C042-12	1F015-15*	173A	LOGIC
B003	16	1C008-11	1C042-12	173A	LOGIC
B004	17	1C041- 5	1F014- 1*	173A	LOGIC
B005	26	1C007- 2	1K007- 3	173A	LOGIC
B005	17	1F014-15*	1K007- 3	173A	LOGIC
B005	16	1C007- 2	1C041- 3	173A	LOGIC
B006	17	1C041-14	1F013- 1*	173A	LOGIC
B007	26	1C007-11	1K007-12	173A	LOGIC
B007	18	1F013-15*	1K007-12	173A	LOGIC
B007	16	1C007-11	1C041-12	173A	LOGIC
B008	18	1C040- 5	1F012- 1*	173A	LOGIC
B009	16	1F012-15*	1K006- 3	173A	LOGIC
B009	25	1D015- 5	1K006- 3	173A	LOGIC
B009	14	1C040- 3	1D015- 5	173A	LOGIC
B010	17	1C040-14	1F011- 1*	173A	LOGIC
B011	10	1D014- 5	1F011-15*	173A	LOGIC
B011	14	1C040-12	1D014- 5	173A	LOGIC
B011	33	1C040-12	1K006-12	173A	LOGIC
B012	18	1C039- 5	1F010- 1*	173A	LOGIC
B013	16	1F010-15*	1K005- 3	173A	LOGIC
B013	24	1D013- 5	1K005- 3	173A	LOGIC
B013	14	1C039- 3	1D013- 5	173A	LOGIC
B014	18	1C039-14	1F009- 1*	173A	LOGIC
B015	17	1F009-15*	1K005-12	173A	LOGIC
B015	26	1D012- 5	1K005-12	173A	LOGIC
B015	14	1C039-12	1D012- 5	173A	LOGIC
B016	18	1C037- 5	1F008- 1*	173A	LOGIC
B017	16	1F008-15*	1K004- 3	173A	LOGIC
B017	23	1D007- 5	1K004- 3	173A	LOGIC
B017	16	1C037- 3	1D007- 5	173A	LOGIC
B018	18	1C037-14	1F007- 1*	173A	LOGIC
B019	17	1F007-15*	1K004-12	173A	LOGIC

B019	25	1D006-5	1K004-12	173A	LOGIC
B019	16	1C037-12	1D006-5	173A	LOGIC
B020	18	1C036-5	1F006-1*	173A	LOGIC
B021	16	1F006-15*	1K003-3	173A	LOGIC
B021	22	1E015-5	1K003-3	173A	LOGIC
B021	14	1C036-3	1E015-5	173A	LOGIC
B022	18	1C036-14	1F005-1*	173A	LOGIC
B023	17	1F005-15*	1K003-12	173A	LOGIC
B023	23	1E014-5	1K003-12	173A	LOGIC
B023	13	1C036-12	1E014-5	173A	LOGIC
B024	19	1C035-5	1F004-1*	173A	LOGIC
B025	16	1F004-15*	1K002-3	173A	LOGIC
B025	22	1E010-2	1K002-3	173A	LOGIC
B025	15	1C035-3	1E010-2	173A	LOGIC
B026	18	1C035-14	1F003-1*	173A	LOGIC
B027	17	1F003-15*	1K002-12	173A	LOGIC
B027	22	1E010-11	1K002-12	173A	LOGIC
B027	15	1C035-12	1E010-11	173A	LOGIC
B028	20	1B034-14	1F002-1*	173A	LOGIC
B029	15	1F002-15*	1K001-3	173A	LOGIC
B029	22	1E009-2	1K001-3	173A	LOGIC
B029	16	1B034-12	1E009-2	173A	LOGIC
B030	13	1C018-11	1F001-1	x	
B031	16	1C018-5	1F001-15	x	
B031	9	1C018-5	1E011-2	x	
B031	9	1E011-2.1	1F001-15*	xx	173A LOGIC
B031	24	1E011-2.1	1K001-12		173A LOGIC
B700	4	1F009-10	1G006-1*		173A LOGIC
B700	2	1F009-10	1F010-10		173A LOGIC
B700	2	1F010-10	1F011-10		173A LOGIC
B700	2	1F011-10	1F012-10		173A LOGIC
B700	2	1F012-10	1F013-10		173A LOGIC
B700	2	1F013-10	1F014-10		173A LOGIC
B700	2	1F014-10	1F015-10		173A LOGIC
B700	2	1F015-10	1F016-10		173A LOGIC
B701	5	1F008-10	1G006-6*		173A LOGIC
B701	2	1F007-10	1F008-10		173A LOGIC
B701	2	1F006-10	1F007-10		173A LOGIC
B701	2	1F005-10	1F006-10		173A LOGIC
B701	2	1F004-10	1F005-10		173A LOGIC
B701	2	1F003-10	1F004-10		173A LOGIC
B701	2	1F002-10	1F003-10		173A LOGIC
B701	2	1F001-10	1F002-10		173A LOGIC
B702	2	1G006-3	1G006-5		173A LOGIC
B702	13	1C001-10*	1G002-4		173A LOGIC
B702	4	1G002-4	1G006-5		173A LOGIC
B710	3	1G001-5	1G003-6*		173A LOGIC
B710	8	1F013-4	1G001-5		173A LOGIC
B710	2	1F013-4	1F014-4		173A LOGIC
B710	2	1F014-4	1F015-4		173A LOGIC
B710	2	1F015-4	1F016-4		173A LOGIC
B710	17	1B028-2	1F016-4		173A LOGIC
B711	7	1F007-4	1G003-10*		173A LOGIC
B711	2	1F007-4	1F008-4		173A LOGIC
B711	2	1F008-4	1F009-4		173A LOGIC
B711	2	1F009-4	1F010-4		173A LOGIC
B711	2	1F010-4	1F011-4		173A LOGIC
B711	2	1F011-4	1F012-4		173A LOGIC
B712	7	1F001-4	1G003-15*		173A LOGIC
B712	2	1F001-4	1F002-4		173A LOGIC
B712	2	1F002-4	1F003-4		173A LOGIC
B712	2	1F003-4	1F004-4		173A LOGIC
B712	2	1F004-4	1F005-4		173A LOGIC
B712	2	1F005-4	1F006-4		173A LOGIC
B720	6	1F013-12	1G004-1*		173A LOGIC

x Present if Std. Opt. 10278-1 is installed.

xx Deleted if Std. Opt. 10278-1 is installed.

B720	2	1F013-12	1F014-12	173A	LOGIC
B720	2	1F014-12	1F015-12	173A	LOGIC
B720	2	1F015-12	1F016-12	173A	LOGIC
B720	4	1F016- 2	1F016-12	173A	LOGIC
B720	2	1F015- 2	1F016- 2	173A	LOGIC
B720	2	1F014- 2	1F015- 2	173A	LOGIC
B720	2	1F013- 2	1F014- 2	173A	LOGIC
B721	5	1F009-12	1G004- 6*	173A	LOGIC
B721	2	1F009-12	1F010-12	173A	LOGIC
B721	2	1F010-12	1F011-12	173A	LOGIC
B721	2	1F011-12	1F012-12	173A	LOGIC
B721	4	1F012- 2	1F012-12	173A	LOGIC
B721	2	1F011- 2	1F012- 2	173A	LOGIC
B721	2	1F010- 2	1F011- 2	173A	LOGIC
B721	2	1F009- 2	1F010- 2	173A	LOGIC
B722	5	1F005-12	1G004-10*	173A	LOGIC
B722	2	1F005-12	1F006-12	173A	LOGIC
B722	2	1F006-12	1F007-12	173A	LOGIC
B722	2	1F007-12	1F008-12	173A	LOGIC
B722	4	1F008- 2	1F008-12	173A	LOGIC
B722	2	1F007- 2	1F008- 2	173A	LOGIC
B722	2	1F006- 2	1F007- 2	173A	LOGIC
B722	2	1F005- 2	1F006- 2	173A	LOGIC
B723	5	1F004-12	1G004-15*	173A	LOGIC
B723	2	1F003-12	1F004-12	173A	LOGIC
B723	2	1F002-12	1F003-12	173A	LOGIC
B723	2	1F001-12	1F002-12	173A	LOGIC
B723	4	1F001- 2	1F001-12	173A	LOGIC
B723	2	1F001- 2	1F002- 2	173A	LOGIC
B723	2	1F002- 2	1F003- 2	173A	LOGIC
B723	2	1F003- 2	1F004- 2	173A	LOGIC
B724	5	1G001- 3	1G006-15*	173A	LOGIC
B740	4	1G003- 2	1G005-15*	173A	LOGIC
B741	2	1G003- 1*	1G003- 4	173A	LOGIC
B741	3	1G003- 4	1G003-11	173A	LOGIC
B741	2	1G003-11	1G003-13	173A	LOGIC
B748	15	1E034-10*	1G009- 2	173A	LOGIC
B748	3	1G007- 3	1G009- 2	173A	LOGIC
B749	3	1G005- 1*	1G007- 2	173A	LOGIC
B750	4	1G006-11	1G007- 1*	173A	LOGIC
B750	22	1B033-12	1G006-11	173A	LOGIC
B751	2	1G006-10*	1G006-13	173A	LOGIC
B751	3	1G004-13	1G006-13	173A	LOGIC
B751	2	1G004-11	1G004-13	173A	LOGIC
B751	3	1G004- 4	1G004-11	173A	LOGIC
B751	2	1G004- 2	1G004- 4	173A	LOGIC
B751	4	1G004- 2	1G008- 2	173A	LOGIC
B756	17	1C001- 4	1G009-10*	173A	LOGIC
B757	14	1C001- 6*	1E022-12	173A	LOGIC
B758	7	1D016-11	1E022-15*	173A	LOGIC
B759	14	1D016-12	1G002-10*	173A	LOGIC
B760	12	1D016-10	1G002- 1*	173A	LOGIC
B762	14	1D016-15*	1G002-13	173A	LOGIC
B763	2	1G006- 2	1G006- 4	173A	LOGIC
B763	3	1G006- 2	1G008- 3	173A	LOGIC
B763	5	1G002-15*	1G006- 4	173A	LOGIC
B764	3	1G001-11	1G002- 6*	173A	LOGIC
B770	16	1G008- 1*	1K018- 2	173A	LOGIC
B780	6	1G001-13	1G009- 1*	173A	LOGIC
B780	15	1G001-13	1K014- 4	173A	LOGIC
B780	5	1K014- 4	1L015- 4	173A	LOGIC
B780	35	1B028- 4	1L015- 4	173A	LOGIC

B800	16	1B002-11	1G001- 1*	173A	LOGIC
B800	15	1B002-11	1B033-13	173A	LOGIC
B801	24	1B033-11	1G001-15*	173A	LOGIC
C000	6	1F033- 3	1F042- 1*	173A	LOGIC
C001	10	1F033- 6	1G018- 6	173A	LOGIC
C001	12	1G018- 6	1J013- 3	173A	LOGIC
C001	8	1D042- 6	1F042- 6*	173A	LOGIC
C001	10	1D042- 6	1F033- 6	173A	LOGIC
C002	6	1F033-12	1F042-10*	173A	LOGIC
C003	12	1G018- 5	1J013- 5	173A	LOGIC
C003	6	1F033-14	1F042-15*	173A	LOGIC
C003	14	1C013-11	1G018- 5	173A	LOGIC
C003	11	1D041- 6	1F033-14	173A	LOGIC
C003	14	1C013-11	1D041- 6	173A	LOGIC
C004	6	1F032- 3	1F041- 1*	173A	LOGIC
C004	16	1F032- 3	1I012-11	173A	LOGIC
C005	13	1G018- 4	1J013-12	173A	LOGIC
C005	6	1F032- 6	1F041- 6*	173A	LOGIC
C005	14	1C013-12	1G018- 4	173A	LOGIC
C005	10	1D040- 6	1F032- 6	173A	LOGIC
C005	14	1C013-12	1D040- 6	173A	LOGIC
C006	6	1F032-12	1F041-10*	173A	LOGIC
C007	14	1G018- 3	1J013-14	173A	LOGIC
C007	6	1F032-14	1F041-15*	173A	LOGIC
C007	7	1E018-12	1G018- 3	173A	LOGIC
C007	11	1D039- 6	1F032-14	173A	LOGIC
C007	13	1D039- 6	1E018-12	173A	LOGIC
C008	6	1F031- 3	1F040- 1*	173A	LOGIC
C009	9	1F031- 6	1G018-14	173A	LOGIC
C009	11	1G018-14	1J012- 3	173A	LOGIC
C009	10	1D030- 6	1F040- 6*	173A	LOGIC
C009	8	1D030- 6	1F031- 6	173A	LOGIC
C010	6	1F031-12	1F040-10*	173A	LOGIC
C011	6	1F031-14	1F040-15*	173A	LOGIC
C011	11	1G018-13	1J012- 5	173A	LOGIC
C011	10	1D029- 6	1F031-14	173A	LOGIC
C011	14	1D029- 6	1G018-13	173A	LOGIC
C012	6	1F030- 3	1F039- 1*	173A	LOGIC
C013	9	1F030- 6	1G018-12	173A	LOGIC
C013	12	1G018-12	1J012-12	173A	LOGIC
C013	10	1D028- 6	1F039- 6*	173A	LOGIC
C013	8	1D028- 6	1F030- 6	173A	LOGIC
C014	6	1F030-12	1F039-10*	173A	LOGIC
C015	6	1F030-14	1F039-15*	173A	LOGIC
C015	13	1G018-11	1J012-14	173A	LOGIC
C015	10	1D027- 6	1F030-14	173A	LOGIC
C015	14	1D027- 6	1G018-11	173A	LOGIC
C016	4	1F033- 5	1F037- 1*	173A	LOGIC
C017	11	1G017- 5	1J013- 2	173A	LOGIC
C017	6	1E042- 6	1F037- 6*	173A	LOGIC
C017	7	1E042- 6	1F033- 2	173A	LOGIC
C017	11	1F033- 2	1H038-14	173A	LOGIC
C017	13	1G017- 5	1H038-14	173A	LOGIC
C018	4	1F033-13	1F037-10*	173A	LOGIC
C018	11	1D022- 5	1F033-13	173A	LOGIC
C019	7	1E041- 6	1F037-15*	173A	LOGIC
C019	7	1E041- 6	1F033-11	173A	LOGIC
C019	9	1F033-11	1G017- 4	173A	LOGIC
C019	9	1G017- 4	1I025- 2	173A	LOGIC
C019	9	1I025- 2	1J013- 4	173A	LOGIC
C020	4	1F032- 5	1F036- 1*	173A	LOGIC

C020	10	1D022- 6	1F032- 5	173A	LOGIC
C021	10	1F032- 2	1G017- 3	173A	LOGIC
C021	13	1G017- 3	1J013-11	173A	LOGIC
C021	6	1E040- 6	1F036- 6*	173A	LOGIC
C021	6	1E040- 6	1F032- 2	173A	LOGIC
C022	4	1F032-13	1F036-10*	173A	LOGIC
C023	9	1F032-11	1G017- 2	173A	LOGIC
C023	7	1E039- 6	1F036-15*	173A	LOGIC
C023	7	1E039- 6	1F032-11	173A	LOGIC
C023	14	1G017- 2	1J013-13	173A	LOGIC
C024	4	1F031- 5	1F035- 1*	173A	LOGIC
C025	4	1F031- 2	1F035- 6*	173A	LOGIC
C025	5	1E030- 6	1F031- 2	173A	LOGIC
C025	11	1E030- 6	1G017- 6	173A	LOGIC
C025	11	1G017- 6	1J012- 2	173A	LOGIC
C026	4	1F031-13	1F035-10*	173A	LOGIC
C027	4	1F031-11	1F035-15*	173A	LOGIC
C027	6	1E029- 6	1F031-11	173A	LOGIC
C027	11	1E029- 6	1G017-12	173A	LOGIC
C027	6	1G017-12	1H012-13	173A	LOGIC
C027	7	1H012-13	1J012- 4	173A	LOGIC
C028	4	1F030- 5	1F034- 1*	173A	LOGIC
C028	13	1F030- 5	1G009-12	173A	LOGIC
C029	4	1F030- 2	1F034- 6*	173A	LOGIC
C029	5	1E028- 6	1F030- 2	173A	LOGIC
C029	11	1E028- 6	1G017-11	173A	LOGIC
C029	6	1G017-11	1H012-14	173A	LOGIC
C029	8	1H012-14	1J012-11	173A	LOGIC
C030	4	1F030-13	1F034-10*	173A	LOGIC
C031	4	1F030-11	1F034-15*	173A	LOGIC
C031	12	1G017-10	1J012-13	173A	LOGIC
C031	6	1E027-11	1F030-11	173A	LOGIC
C031	10	1E027-11	1G017-10	173A	LOGIC
C200	3	1G016- 3	1G018- 1*	173A	LOGIC
C201	4	1G016- 2	1G018-15*	173A	LOGIC
C202	3	1G016- 1*	1G016- 5	173A	LOGIC
C202	12	1G016- 5	1J016-12	173A	LOGIC
C203	6	1G016- 6*	1G024-12	173A	LOGIC
C210	4	1G016-11	1G017- 1*	173A	LOGIC
C210	5	1G009-11	1G016-11	173A	LOGIC
C211	3	1G016-12	1G017-15*	173A	LOGIC
C212	9	1G016-14	1J015- 3	173A	LOGIC
C212	3	1G016-10*	1G016-14	173A	LOGIC
C213	6	1G016-15*	1G024-11	173A	LOGIC
C300	4	1F029- 3	1F033- 1*	173A	LOGIC
C301	5	1F029- 4	1F033-15*	173A	LOGIC
C302	4	1F029- 5	1F032- 1*	173A	LOGIC
C303	4	1F029- 6	1F032-15*	173A	LOGIC
C304	4	1F029-11	1F031- 1*	173A	LOGIC
C305	3	1F029-12	1F031-15*	173A	LOGIC
C306	4	1F029-13	1F030- 1*	173A	LOGIC
C307	2	1F029-14	1F030-15*	173A	LOGIC
C310	8	1F017-11	1F029- 1*	173A	LOGIC
C311	7	1F017-12	1F029-15*	173A	LOGIC
C312	3	1F017-10*	1F017-14	173A	LOGIC
C312	8	1F017-14	1H023- 6	173A	LOGIC
C313	10	1F017-15*	1H029-12	173A	LOGIC
C401	4	1G019-10	1G022- 4	173A	LOGIC
C401	5	1C009-15*	1D016- 4	173A	LOGIC
C401	8	1G005- 3	1G019-10	173A	LOGIC
C401	12	1D016- 4	1G022- 4	173A	LOGIC
C701	3	1F038- 1*	1F041- 2	173A	LOGIC

C701	2	1F041- 2	1F041- 4	173A	LOGIC
C701	2	1F041- 4	1F042- 4	173A	LOGIC
C701	2	1F042- 2	1F042- 4	173A	LOGIC
C701	3	1F042- 2	1F042-11	173A	LOGIC
C701	2	1F042-11	1F042-13	173A	LOGIC
C701	2	1F041-13	1F042-13	173A	LOGIC
C701	2	1F041-11	1F041-13	173A	LOGIC
C702	3	1F038- 6*	1F040- 4	173A	LOGIC
C702	2	1F040- 2	1F040- 4	173A	LOGIC
C702	2	1F039- 2	1F040- 2	173A	LOGIC
C702	2	1F039- 2	1F039- 4	173A	LOGIC
C702	3	1F039- 4	1F039-13	173A	LOGIC
C702	2	1F039-11	1F039-13	173A	LOGIC
C702	2	1F039-11	1F040-11	173A	LOGIC
C702	2	1F040-11	1F040-13	173A	LOGIC
C703	2	1F037-11	1F038-10*	173A	LOGIC
C703	2	1F037-11	1F037-13	173A	LOGIC
C703	2	1F036-13	1F037-13	173A	LOGIC
C703	2	1F036-11	1F036-13	173A	LOGIC
C703	3	1F036- 4	1F036-11	173A	LOGIC
C703	2	1F036- 2	1F036- 4	173A	LOGIC
C703	2	1F036- 2	1F037- 2	173A	LOGIC
C703	2	1F037- 2	1F037- 4	173A	LOGIC
C704	3	1F035-13	1F038-15*	173A	LOGIC
C704	2	1F035-11	1F035-13	173A	LOGIC
C704	2	1F034-11	1F035-11	173A	LOGIC
C704	2	1F034-11	1F034-13	173A	LOGIC
C704	3	1F034- 4	1F034-13	173A	LOGIC
C704	2	1F034- 2	1F034- 4	173A	LOGIC
C704	2	1F034- 2	1F035- 2	173A	LOGIC
C704	2	1F035- 2	1F035- 4	173A	LOGIC
C710	2	1E018- 1*	1E018- 4	173A	LOGIC
C710	8	1C013-10	1E018- 4	173A	LOGIC
C711	3	1E018- 6*	1E018-11	173A	LOGIC
C712	9	1E002-10	1E018-10*	173A	LOGIC
C713	10	1C013-15*	1E002-11	173A	LOGIC
C714	7	1C009-11	1D002-13	173A	LOGIC
C714	5	1D001-14	1E002-15*	173A	LOGIC
C714	2	1D001-14	1D002-13	173A	LOGIC
C715	7	1C009-13	1D002-15*	173A	LOGIC
C715	6	1C009-13	1D018- 2	173A	LOGIC
C715	15	1D018- 2	1G009-13	173A	LOGIC
C720	2	1G024-10*	1G024-13	173A	LOGIC
C720	6	1G024-13	1H029-14	173A	LOGIC
C721	4	1G024-15*	1G025- 2	173A	LOGIC
C730	3	1G019- 6	1G019-15*	173A	LOGIC
C730	5	1F023-12	1G019- 6	173A	LOGIC
C730	16	1B026- 3	1F023-12	173A	LOGIC
C730	4	1B026- 3	1B031- 4	173A	LOGIC
C740	4	1G019- 1*	1G024- 3	173A	LOGIC
C741	8	1F038-13	1G024- 1*	173A	LOGIC
C741	2	1F038-11	1F038-13	173A	LOGIC
C741	3	1F038- 4	1F038-11	173A	LOGIC
C741	2	1F038- 2	1F038- 4	173A	LOGIC
C750	3	1G023- 2	1G026- 1*	173A	LOGIC
C751	3	1G023- 3	1G024- 6*	173A	LOGIC
C752	4	1G019- 2	1G023- 1*	173A	LOGIC
C752	4	1G019- 2	1G019-13	173A	LOGIC
C760	6	1G019- 3	1G026-15*	173A	LOGIC
C760	5	1F025-11	1G019- 3	173A	LOGIC
C760	3	1F025- 3	1F025-11	173A	LOGIC
C770	3	1G025- 1*	1G027- 1	173A	LOGIC

C779	2	1G022-11	1G023-10*	173A	LOGIC
C779	3	1G022- 5	1G022-11	173A	LOGIC
C780	6	1F028-10	1G022- 6*	173A	LOGIC
C780	14	1F028-10	1J031- 4	173A	LOGIC
C781	7	1F028- 2	1G022-10*	173A	LOGIC
C781	15	1F028- 2	1J031- 5	173A	LOGIC
C790	3	1J031- 6*	1J031-11	173A	LOGIC
C791	14	1G019- 5	1J031-10*	173A	LOGIC
C791	5	1F023-11	1G019- 5	173A	LOGIC
C791	3	1F023- 3	1F023-11	173A	LOGIC
D000	4	1C005- 1*	1C005-13	173A	LOGIC
D000	13	1C005-13	1F016-13	173A	LOGIC
D001	3	1C005- 6*	1C005-11	173A	LOGIC
D001	12	1C005-11	1F016- 3	173A	LOGIC
D003	3	1C005-15*	1C008-13	173A	LOGIC
D004	4	1C004- 1*	1C004-13	173A	LOGIC
D004	13	1C004-13	1F015-13	173A	LOGIC
D005	3	1C004- 6*	1C004-11	173A	LOGIC
D005	12	1C004-11	1F015- 3	173A	LOGIC
D007	4	1C004-15*	1C007- 5	173A	LOGIC
D008	4	1C003- 1*	1C003-13	173A	LOGIC
D008	13	1C003-13	1F014-13	173A	LOGIC
D009	3	1C003- 6*	1C003-11	173A	LOGIC
D009	12	1C003-11	1F014- 3	173A	LOGIC
D011	4	1C003-15*	1C007-13	173A	LOGIC
D012	4	1C002- 1*	1C002-13	173A	LOGIC
D012	13	1C002-13	1F013-13	173A	LOGIC
D013	3	1C002- 6*	1C002-11	173A	LOGIC
D013	12	1C002-11	1F013- 3	173A	LOGIC
D015	8	1C002-15*	1D015-10	173A	LOGIC
D016	3	1C009- 4	1C010- 1*	173A	LOGIC
D016	13	1C009- 4	1F012-13	173A	LOGIC
D017	4	1C009- 2	1C010-15*	173A	LOGIC
D017	12	1C009- 2	1F012- 3	173A	LOGIC
D019	7	1C009- 6*	1D014-10	173A	LOGIC
D020	4	1D011- 1*	1D011-13	173A	LOGIC
D020	8	1D011-13	1F011-13	173A	LOGIC
D021	3	1D011- 6*	1D011-11	173A	LOGIC
D021	7	1D011-11	1F011- 3	173A	LOGIC
D023	3	1D011-15*	1D013-10	173A	LOGIC
D024	4	1D010- 1*	1D010-13	173A	LOGIC
D024	8	1D010-13	1F010-13	173A	LOGIC
D025	3	1D010- 6*	1D010-11	173A	LOGIC
D025	7	1D010-11	1F010- 3	173A	LOGIC
D027	3	1D010-15*	1D012-10	173A	LOGIC
D028	4	1D009- 1*	1D009-13	173A	LOGIC
D028	8	1D009-13	1F009-13	173A	LOGIC
D029	3	1D009- 6*	1D009-11	173A	LOGIC
D029	7	1D009-11	1F009- 3	173A	LOGIC
D031	3	1D007-10	1D009-15*	173A	LOGIC
D032	4	1D005- 1*	1D005-13	173A	LOGIC
D032	9	1D005-13	1F008-13	173A	LOGIC
D033	3	1D005- 6*	1D005-11	173A	LOGIC
D033	7	1D005-11	1F008- 3	173A	LOGIC
D035	3	1D005-15*	1D006-10	173A	LOGIC
D036	4	1D004- 1*	1D004-13	173A	LOGIC
D036	9	1D004-13	1F007-13	173A	LOGIC
D037	3	1D004- 6*	1D004-11	173A	LOGIC
D037	7	1D004-11	1F007- 3	173A	LOGIC
D039	8	1D004-15*	1E015-10	173A	LOGIC
D040	4	1E013- 1*	1E013-13	173A	LOGIC
D040	6	1E013-13	1F006-13	173A	LOGIC

D041	3	1E013- 6*	1E013-11	173A	LOGIC
D041	6	1E013-11	1F006- 3	173A	LOGIC
D043	3	1E013-15*	1E014-10	173A	LOGIC
D044	4	1E012- 1*	1E012-13	173A	LOGIC
D044	6	1E012-13	1F005-13	173A	LOGIC
D045	3	1E012- 6*	1E012-11	173A	LOGIC
D045	6	1E012-11	1F005- 3	173A	LOGIC
D047	4	1E010- 5	1E012-15*	173A	LOGIC
D048	4	1E007- 1*	1E007-13	173A	LOGIC
D048	6	1E007-13	1F004-13	173A	LOGIC
D049	3	1E007- 6*	1E007-11	173A	LOGIC
D049	4	1E007-11	1F004- 3	173A	LOGIC
D051	3	1E007-15*	1E010-13	173A	LOGIC
D052	4	1E006- 1*	1E006-13	173A	LOGIC
D052	6	1E006-13	1F003-13	173A	LOGIC
D053	3	1E006- 6*	1E006-11	173A	LOGIC
D053	4	1E006-11	1F003- 3	173A	LOGIC
D055	4	1E006-15*	1E009- 4	173A	LOGIC
D056	4	1E005- 1*	1E005-13	173A	LOGIC
D056	6	1E005-13	1F002-13	173A	LOGIC
D057	3	1E005- 6*	1E005-11	173A	LOGIC
D057	4	1E005-11	1F002- 3	173A	LOGIC
D059	5	1E005-15*	1E011-4*	173A	LOGIC
D060	4	1E004- 1*	1E004-13	173A	LOGIC
D060	6	1E004-13	1F001-13	173A	LOGIC
D060	12	1D019-14	1F001-13	173A	LOGIC
D061	10	1C019-14	1E004- 6*	173A	LOGIC
D061	5	1C019-14	1D019-11	173A	LOGIC
D061	10	1D019-11	1E004-11	173A	LOGIC
D061	4	1E004-11	1F001- 3	173A	LOGIC
D061	13	1F001- 3	1I009- 3	173A	LOGIC
D200	4	1C012- 1*	1C012-13	173A	LOGIC
D201	3	1C012- 6*	1C012-11	173A	LOGIC
D202	3	1C011- 4	1C012-10*	173A	LOGIC
D203	4	1C011- 2	1C012-15*	173A	LOGIC
D203	6	1C011- 2	1C019-12	173A	LOGIC
D204	4	1C011- 1*	1C011-13	173A	LOGIC
D204	7	1C011-13	1D019-12	173A	LOGIC
D204	7	1D019-12	1E089-11		
D205	3	1C011- 6*	1C011-11	173A	LOGIC
D205	7	1C011-11	1D019-13	173A	LOGIC
D205	14	1D019-13	1H020-12	173A	LOGIC
D207	4	1C008- 5	1C011-15*	173A	LOGIC
D500	3	1C006- 2	1C008- 1*	173A	LOGIC
D500	3	1C005- 5	1C006- 2	173A	LOGIC
D501	4	1C006- 4	1C008-15*	173A	LOGIC
D501	3	1C004- 4	1C006- 4	173A	LOGIC
D502	4	1C006-11	1C007- 1*	173A	LOGIC
D502	4	1C003- 4	1C006-11	173A	LOGIC
D503	3	1C006-13	1C007-15*	173A	LOGIC
D503	4	1C002- 4	1C006-13	173A	LOGIC
D504	4	1D015- 1*	1D015-14	173A	LOGIC
D504	7	1C010-10	1D015-14	173A	LOGIC
D505	3	1D011- 4	1D014- 1*	173A	LOGIC
D505	4	1D011- 4	1D014-14	173A	LOGIC
D506	3	1D010- 4	1D013- 1*	173A	LOGIC
D506	4	1D010- 4	1D013-14	173A	LOGIC
D507	3	1D009- 4	1D012- 1*	173A	LOGIC
D507	4	1D009- 4	1D012-14	173A	LOGIC
D508	3	1D005- 4	1D007- 1*	173A	LOGIC
D508	4	1D005- 4	1D007-14	173A	LOGIC
D509	3	1D004- 4	1D006- 1*	173A	LOGIC

D509	4	1D004- 4	1D006-14	173A	LOGIC
D510	3	1E013- 4	1E015- 1*	173A	LOGIC
D510	4	1E013- 4	1E015-14	173A	LOGIC
D511	3	1E012- 4	1E014- 1*	173A	LOGIC
D511	4	1E012- 4	1E014-14	173A	LOGIC
D512	3	1E008- 2	1E010- 1*	173A	LOGIC
D512	3	1E007- 4	1E008- 2	173A	LOGIC
D513	4	1E008- 4	1E010-15*	173A	LOGIC
D513	3	1E006- 4	1E008- 4	173A	LOGIC
D514	4	1E008-11	1E009- 1*	173A	LOGIC
D514	4	1E005- 4	1E008-11	173A	LOGIC
D515	4	1E008-13	1E011-15*	173A	LOGIC
D515	4	1E004- 4	1E008-13	173A	LOGIC
D516	4	1E009-15	1E011-6		
D520	3	1C005- 3	1C006- 1*	173A	LOGIC
D521	3	1C004- 2	1C006- 6*	173A	LOGIC
D522	4	1C003- 2	1C006-10*	173A	LOGIC
D523	5	1C002- 2	1C006-15*	173A	LOGIC
D524	8	1D010- 4	1D015-15*	173A	LOGIC
D525	5	1D011- 2	1D014-15*	173A	LOGIC
D526	5	1D010- 2	1D013-15*	173A	LOGIC
D527	5	1D009- 2	1D012-15*	173A	LOGIC
D528	4	1D005- 2	1D007-15*	173A	LOGIC
D529	4	1D004- 2	1D006-15*	173A	LOGIC
D530	4	1E013- 2	1E015-15*	173A	LOGIC
D531	4	1E012- 2	1E014-15*	173A	LOGIC
D532	2	1E007- 2	1E008- 1*	173A	LOGIC
D533	3	1E006- 2	1E008- 6*	173A	LOGIC
D534	4	1E005- 2	1E008-10*	173A	LOGIC
D535	5	1E004- 2	1E008-15*	173A	LOGIC
D700	8	1C005- 2	1D017- 1*	173A	LOGIC
D700	2	1C005- 2	1C005- 4	173A	LOGIC
D700	2	1C004- 5	1C005- 4	173A	LOGIC
D700	2	1C004- 3	1C004- 5	173A	LOGIC
D700	2	1C003- 3	1C004- 3	173A	LOGIC
D700	2	1C003- 3	1C003- 5	173A	LOGIC
D700	2	1C002- 5	1C003- 5	173A	LOGIC
D700	2	1C002- 3	1C002- 5	173A	LOGIC
D701	5	1D011- 5	1D017- 6*	173A	LOGIC
D701	2	1D011- 3	1D011- 5	173A	LOGIC
D701	2	1D010- 3	1D011- 3	173A	LOGIC
D701	2	1D010- 3	1D010- 5	173A	LOGIC
D701	2	1D009- 5	1D010- 5	173A	LOGIC
D701	2	1D009- 3	1D009- 5	173A	LOGIC
D701	4	1C010-11	1D009- 3	173A	LOGIC
D701	3	1C010- 5	1C010-11	173A	LOGIC
D702	3	1D003- 1*	1D004- 5	173A	LOGIC
D702	2	1D004- 3	1D004- 5	173A	LOGIC
D702	2	1D004- 3	1D005- 3	173A	LOGIC
D702	2	1D005- 3	1D005- 5	173A	LOGIC
D702	6	1D005- 5	1E012- 5	173A	LOGIC
D702	2	1E012- 3	1E012- 5	173A	LOGIC
D702	2	1E012- 3	1E013- 3	173A	LOGIC
D702	2	1E013- 3	1E013- 5	173A	LOGIC
D703	5	1D003- 6*	1E004- 5	173A	LOGIC
D703	2	1E004- 3	1E004- 5	173A	LOGIC
D703	2	1E004- 3	1E005- 3	173A	LOGIC
D703	2	1E005- 3	1E005- 5	173A	LOGIC
D703	2	1E005- 5	1E006- 5	173A	LOGIC
D703	2	1E006- 3	1E006- 5	173A	LOGIC
D703	2	1E006- 3	1E007- 3	173A	LOGIC
D703	2	1E007- 3	1E007- 5	173A	LOGIC
D710	8	1C005-12	1D017-10*	173A	LOGIC

D710	2	1C005-12	1C005-14	173A	LOGIC
D710	2	1C004-14	1C005-14	173A	LOGIC
D710	2	1C004-12	1C004-14	173A	LOGIC
D710	2	1C003-12	1C004-12	173A	LOGIC
D710	2	1C003-12	1C003-14	173A	LOGIC
D710	2	1C002-14	1C003-14	173A	LOGIC
D710	2	1C002-12	1C002-14	173A	LOGIC
D711	5	1D011-14	1D017-15*	173A	LOGIC
D711	2	1D011-12	1D011-14	173A	LOGIC
D711	2	1D010-12	1D011-12	173A	LOGIC
D711	2	1D010-12	1D010-14	173A	LOGIC
D711	2	1D009-14	1D010-14	173A	LOGIC
D711	2	1D009-12	1D009-14	173A	LOGIC
D711	6	1C009- 5	1D009-12	173A	LOGIC
D711	2	1C009- 3	1C009- 5	173A	LOGIC
D712	3	1D003-10*	1D004-14	173A	LOGIC
D712	2	1D004-12	1D004-14	173A	LOGIC
D712	2	1D004-12	1D005-12	173A	LOGIC
D712	2	1D005-12	1D005-14	173A	LOGIC
D712	6	1D005-14	1E012-14	173A	LOGIC
D712	2	1E012-12	1E012-14	173A	LOGIC
D712	2	1E012-12	1E013-12	173A	LOGIC
D712	2	1E013-12	1E013-14	173A	LOGIC
D713	2	1E004-12	1E004-14	173A	LOGIC
D713	2	1E005-12	1E005-14	173A	LOGIC
D713	2	1E006-12	1E007-12	173A	LOGIC
D713	2	1E007-12	1E007-14	173A	LOGIC
D713	5	1D003-15*	1E004-14	173A	LOGIC
D713	2	1E004-12	1E005-12	173A	LOGIC
D713	2	1E005-14	1E006-14	173A	LOGIC
D713	2	1E006-12	1E006-14	173A	LOGIC
D720	16	1C008-10	1E034-15*	173A	LOGIC
D730	7	1E009- 6	1E019-15*	173A	LOGIC
D750	2	1D001- 1*	1D002- 2	173A	LOGIC
D750	2	1D002- 2	1D002- 4	173A	LOGIC
D750	5	1D002- 4	1E002- 4	173A	LOGIC
D751	5	1D002- 1*	1D006-13	173A	LOGIC
D751	2	1D006-13	1D007-13	173A	LOGIC
D751	4	1D007-13	1D012-13	173A	LOGIC
D751	2	1D012-13	1D013-13	173A	LOGIC
D751	2	1D013-13	1D014-13	173A	LOGIC
D751	2	1D014-13	1D015-13	173A	LOGIC
D751	5	1D015-13	1E015-13	173A	LOGIC
D751	2	1E014-13	1E015-13	173A	LOGIC
D752	7	1D002- 6*	1E009-10	173A	LOGIC
D752	3	1E009-10	1E011-10		
D760	3	1D001-15*	1D002-11	173A	LOGIC
D760	4	1D002-11	1E002- 3	173A	LOGIC
D761	4	1D002-10*	1D006- 4	173A	LOGIC
D761	2	1D006- 4	1D007- 4	173A	LOGIC
D761	4	1D007- 4	1D012- 4	173A	LOGIC
D761	2	1D012- 4	1D013- 4	173A	LOGIC
D761	2	1D013- 4	1D014- 4	173A	LOGIC
D761	2	1D014- 4	1D015- 4	173A	LOGIC
D761	5	1D015- 4	1E015- 4	173A	LOGIC
D761	2	1E014- 4	1E015- 4	173A	LOGIC
D768	4	1D016- 3	1D018-10*	173A	LOGIC
D769	9	1C028-15*	1E034-13	173A	LOGIC
D769	12	1D016- 2	1E034-13	173A	LOGIC
D769	15	1D016- 2	1G002-12	173A	LOGIC
D770	2	1E002- 2	1E003- 2	173A	LOGIC
D770	2	1E003- 2	1E003- 4	173A	LOGIC
D770	8	1C001- 2	1E002- 2	173A	LOGIC

D770	9	1D016- 1*	1F017- 4	173A	LOGIC
D770	9	1E003- 4	1F017- 4	173A	LOGIC
D771	8	1D015- 6	1E003- 1*	173A	LOGIC
D771	2	1D014- 6	1D015- 6	173A	LOGIC
D771	2	1D013- 6	1D014- 6	173A	LOGIC
D771	2	1D012- 6	1D013- 6	173A	LOGIC
D771	5	1C008-12	1D012- 6	173A	LOGIC
D771	2	1C007-12	1C008-12	173A	LOGIC
D771	3	1C007- 3	1C007-12	173A	LOGIC
D771	2	1C007- 3	1C008- 3	173A	LOGIC
D772	6	1D006- 6	1E003- 6*	173A	LOGIC
D772	2	1D006- 6	1D007- 6	173A	LOGIC
D772	7	1D007- 6	1E010-12	173A	LOGIC
D772	4	1E009-3	1E010-12	173A	LOGIC
D772	2	1E009- 3	1E010- 3	173A	LOGIC
D772	4	1E010- 3	1E011-3	173A	LOGIC
D772	3	1E011-3	1E014-66	173A	LOGIC
D773	4	1C001- 1*	1C001-11	173A	LOGIC
D773	13	1C001-11	1E022-10	173A	LOGIC
D774	16	1B033-14	1F017- 6*	173A	LOGIC
D774	15	1B002-12	1B033-14	173A	LOGIC
D780	4	1E002- 1*	1E003-11	173A	LOGIC
D780	2	1E003-11	1E003-13	173A	LOGIC
D781	2	1D012-11	1D013-11	173A	LOGIC
D781	2	1D013-11	1D014-11	173A	LOGIC
D781	2	1D014-11	1D015-11	173A	LOGIC
D781	8	1D015-11	1E003-10*	173A	LOGIC
D781	5	1C008-14	1D012-11	173A	LOGIC
D781	2	1C007-14	1C008-14	173A	LOGIC
D781	3	1C007- 6	1C007-14	173A	LOGIC
D781	2	1C007- 6	1C008- 6	173A	LOGIC
D782	2	1E014-11	1E015-11	173A	LOGIC
D782	6	1D007-11	1E010-14	173A	LOGIC
D782	4	1E009- 5	1E010-14	173A	LOGIC
D782	2	1D006-11	1D007-11	173A	LOGIC
D782	6	1D006-11	1E003-15*	173A	LOGIC
D782	2	1E010-6	1E011-5	173A	LOGIC
D782	4	1E011-3	1E014-11	173A	LOGIC
D790	6	1C010- 2	1C020- 6*	173A	LOGIC
F005	7	1J026-12	1K035- 6*	173A	LOGIC
F006	11	1I028- 2	1K035-10*	173A	LOGIC
F006	14	1G005-10	1I028- 2	173A	LOGIC
F006	19	1C028-11	1G005-10	173A	LOGIC
F007	16	1I009-13	1K035-15*	173A	LOGIC
F008	9	1I028- 3	1K036- 1*	173A	LOGIC
F009	20	1E034-11	1K036- 6*	173A	LOGIC
F010	11	1I028- 4	1K036-10*	173A	LOGIC
F010	14	1G005-11	1I028- 4	173A	LOGIC
F010	19	1C028-12	1G005-11	173A	LOGIC
F011	10	1I038- 2	1K036-15*	173A	LOGIC
F012	10	1I026- 2	1K037- 1*	173A	LOGIC
F012	10	1G015- 2	1I026- 2	173A	LOGIC
F013	20	1F027- 3	1K037- 6*	173A	LOGIC
F014	11	1I026- 3	1K037-10*	173A	LOGIC
F015	19	1H010- 2	1K037-15*	173A	LOGIC
F015	11	1E019-14	1H010- 2	173A	LOGIC
F015	6	1E019-14	1F027- 4	173A	LOGIC
F105	9	1I041- 2	1K038- 6*	173A	LOGIC
F107	10	1I041- 5	1K038-15*	173A	LOGIC
F109	8	1I041-11	1K039- 6*	173A	LOGIC

F120	6	1I012 4	1J005 2	1738 LOGIC	007
F121	7	1I012 10	1J005 11	1738 LOGIC	007
F700	4	1J027- 1*	1J029-11	1738 LOGIC	
F700	3	1J028-13	1J029-11	1738 LOGIC	
F701	2	1K038- 5	1K039- 4	1738 LOGIC	
F701	5	1J028-15*	1K029-13	1738 LOGIC	
F701	6	1K029-13	1K038-13	1738 LOGIC	
F701	3	1K038- 5	1K038-13	1738 LOGIC	
F702	2	1K038- 2	1K039- 2	1738 LOGIC	
F702	3	1K039- 2	1K040- 4	1738 LOGIC	
F702	3	1K038-11	1K040-12	1738 LOGIC	
F702	6	1I023-12	1J029-10*	1738 LOGIC	
F702	8	1I023-12	1K029- 5	1738 LOGIC	
F702	7	1K029- 5	1K040- 4	1738 LOGIC	
F702	3	1K038- 2	1K038-11	1738 LOGIC	
F707	3	1J029- 6*	1J030-13	1738 LOGIC	
F708	4	1K038-14	1K039- 5	1738 LOGIC	
F708	6	1J030-15*	1K038- 4	1738 LOGIC	
F708	2	1K038- 4	1K039- 5	1738 LOGIC	
F710	3	1J027-15*	1J029-14	1738 LOGIC	
F710	4	1J029-14	1J033-12	1738 LOGIC	
F710	12	1I014-5	1J033-12		
F711	4	1J029- 2	1J033-10*	1738 LOGIC	
F711	7	1I039-13	1J029- 2	1738 LOGIC	
F711	2	1I039-11	1I039-13	1738 LOGIC	
F712	5	1J029-15*	1K035- 3	1738 LOGIC	
F712	2	1K035- 3	1K036- 2	1738 LOGIC	
F712	2	1K036- 2	1K037- 2	1738 LOGIC	
F712	2	1K036-11	1K037-11	1738 LOGIC	
F712	2	1K035-11	1K036-11	1738 LOGIC	
F712	3	1K037- 2	1K037-11	1738 LOGIC	
F713	5	1J026-13	1J030- 2	1738 LOGIC	
F713	2	1I031- 2	1I031- 4	1738 LOGIC	
F713	4	1H035-13	1I031- 2	1738 LOGIC	
F713	2	1J029- 1*	1J030- 2	1738 LOGIC	
F713	7	1I031- 4	1J026-13	1738 LOGIC	
F713	8	1H035-13	1I021- 2	1738 LOGIC	
F714	7	1J026-15*	1K035-13	1738 LOGIC	
F714	2	1K035-13	1K036-13	1738 LOGIC	
F714	2	1K036-13	1K037-13	1738 LOGIC	
F714	3	1K037- 4	1K037-13	1738 LOGIC	
F714	2	1K036- 4	1K037- 4	1738 LOGIC	
F714	2	1K035- 4	1K036- 4	1738 LOGIC	
F714	16	1H010-13	1K035- 4	1738 LOGIC	
F715	7	1I042-13	1J030- 1*	1738 LOGIC	
F715	5	1I024-12	1J025-12	1738 LOGIC	
F715	10	1H010- 4	1I024-12	1738 LOGIC	
F715	9	1I042-13	1K039-13	1738 LOGIC	
F715	9	1J025-12	1K039-13	1738 LOGIC	
I000	3	1J017- 1*	1J019- 2	1738 LOGIC	
I001	3	1J016- 1*	1J019- 4	1738 LOGIC	
I002	4	1J015- 1*	1J019-11	1738 LOGIC	
I003	5	1J014- 1*	1J019-13	1738 LOGIC	
I004	4	1J017-15*	1J018- 2	1738 LOGIC	
I005	4	1J016-15*	1J018- 4	1738 LOGIC	
I006	4	1J015-15*	1J018-11	1738 LOGIC	
I007	4	1J014-15*	1J018-13	1738 LOGIC	
I010	4	1J019- 1*	1J023- 2	1738 LOGIC	
I011	4	1J019- 6*	1J023-11	1738 LOGIC	
I012	4	1J019-10*	1J022- 2	1738 LOGIC	
I013	4	1J019-15*	1J022-11	1738 LOGIC	

I014	3	1J018- 1*	1J021- 2	1738	LOGIC
I015	4	1J018- 6*	1J021-11	1738	LOGIC
I016	4	1J018-10*	1J020- 2	1738	LOGIC
I017	3	1J018-15*	1J020-11	1738	LOGIC
I020	4	1J013- 1*	1J017- 5	1738	LOGIC
I021	3	1J013- 6*	1J016- 5	1738	LOGIC
I022	3	1J013-10*	1J015- 5	1738	LOGIC
I023	4	1J013-15*	1J014- 3	1738	LOGIC
I024	5	1J012- 1*	1J017-14	1738	LOGIC
I025	4	1J012- 6*	1J016-14	1738	LOGIC
I026	4	1J012-10*	1J015-14	1738	LOGIC
I027	3	1J012-15*	1J014-12	1738	LOGIC
I100	2	1I012- 1*	1I013- 2	1738	LOGIC
I100	14	1I013- 2	1I042- 5	1738	LOGIC
I101	14	1I013- 1*	1I042- 3	1738	LOGIC
I107	15	1E018-15*	1I001- 2	1738	LOGIC
I108	3	1I001- 4*	1I002- 1	1738	LOGIC
I109	3	1I001-11*	1I002-13	1738	LOGIC
I110	3	1I002- 6*	1I004- 2	1738	LOGIC
I111	3	1I002-10*	1I003- 4	1738	LOGIC
I111	10	1F019-13	1I017- 2	1738	LOGIC
I111	7	1I003- 4	1J006-13	1738	LOGIC
I111	9	1I017- 2	1J006-13	1738	LOGIC
I112	7	1I006- 1*	1J006-11	1738	LOGIC
I113	3	1I005-11	1I006- 6*	1738	LOGIC
I113	18	1C011- 3	1H018- 2	1738	LOGIC
I113	2	1C011- 3	1C011- 5	1738	LOGIC
I113	2	1C011- 5	1C012- 5	1738	LOGIC
I113	2	1C012- 3	1C012- 5	1738	LOGIC
I113	3	1I004- 4	1I005-11	1738	LOGIC
I113	9	1H018- 2	1I004- 4	1738	LOGIC
I114	2	1I006-10*	1I006-13	1738	LOGIC
I114	15	1F017- 2	1I006-13	1738	LOGIC
I115	13	1F017- 1*	1I017-11	1738	LOGIC
I116	3	1I006-15*	1J006- 2	1738	LOGIC
I117	3	1I003- 6*	1I003-11	1738	LOGIC
I118	2	1I003-10*	1I004-11	1738	LOGIC
I118	2	1I004-11	1I004-13	1738	LOGIC
I118	21	1C011-14	1I004-13	1738	LOGIC
I118	2	1C011-12	1C011-14	1738	LOGIC
I118	2	1C011-12	1C012-12	1738	LOGIC
I118	2	1C012-12	1C012-14	1738	LOGIC
I120	4	1H010-14	1I007- 1*	1738	LOGIC
I120	4	1H010-14	1I014- 2	1738	LOGIC
I120	11	1F019-11	1I014- 2	1738	LOGIC
I121	5	1I007- 4	1I014- 1*	1738	LOGIC
I122	8	1F019-10*	1H016-4*	1738	LOGIC
I123	3	1I007- 6*	1I007-11	1738	LOGIC
I123	3	1I007-11	1I008- 4	1738	LOGIC
I123	8	1G020-14	1I025- 5	1738	LOGIC
I123	7	1I008- 4	1I019- 3	1738	LOGIC
I123	5	1I019- 3	1I025- 5	1738	LOGIC
I124	7	1H017-13	1I007-10*	1738	LOGIC
I125	5	1H010- 3	1I008- 1*	1738	LOGIC
I125	9	1H010- 3	1I024- 5	1738	LOGIC
I125	7	1I024- 5	1I036- 5	1738	LOGIC
I125	9	1I036- 5	1K034-11	1738	LOGIC
I126	11	1H012-10*	1K019- 4	1738	LOGIC
I130	17	1I003- 2	1I040- 5	1738	LOGIC
I130	4	1H003- 6*	1I003- 2	1738	LOGIC
I131	6	1I003-1	1I011-5		
I131	7	1I011-5	1I023-3		
I131	9	1I023-3	1I040-3		
I190	8	1H003- 1*	1I009-14	1738	LOGIC

I191	18	1D018-15*	1I009-10	1738	LOGIC
I200	2	1I011- 1*	1I011- 4	1738	LOGIC
I200	8	1G019-12	1I011- 4	1738	LOGIC
I201	6	1I011- 6*	1J011-14	1738	LOGIC
I201	14	1G023-11	1J011-14	1738	LOGIC
I202	6	1I011-11	1J010-13	1738	LOGIC
I202	8	1G008-14	1I011-11	1738	LOGIC
I202	5	1I009-15*	1J010-13	1738	LOGIC
I202	16	1G008-14	1H038-13	1738	LOGIC
I203	3	1I008-11	1I011-10*	1738	LOGIC
I203	4	1I008-11	1J009- 3	1738	LOGIC
I203	4	1J009- 3	1J011-13	1738	LOGIC
I203	9	1I022- 4	1J011-13	1738	LOGIC
I203	20	1C017-11	1I022- 4	1738	LOGIC
I204	4	1I009- 1*	1I011-14	1738	LOGIC
I205	3	1I011-15*	1J009- 2	1738	LOGIC
I206	9	1G008-12	1I012-12	1738	LOGIC
I206	6	1I012-12	1J010-15*	1738	LOGIC
I206	15	1G008-12	1J031- 2	1738	LOGIC
I206	16	1E034-14	1J031- 2	1738	LOGIC
I206	11	1C019-13	1E034-14	1738	LOGIC
I207	5	1J011-15*	1J016- 2	1738	LOGIC
I207	6	1I008-14	1J016- 2	1738	LOGIC
I208	18	1E019-12	1J031- 1*	1738	LOGIC
I208	6	1D019- 5	1E019-12	1738	LOGIC
I208	4	1C019-11	1D019- 5	1738	LOGIC
I209	4	1J016-11	1K013- 1*	1738	LOGIC
I209	4	1J015- 2	1J016-11	1738	LOGIC
I209	6	1I008-12	1J015- 2	1738	LOGIC
I210	3	1I007-13	1I008-15*	1738	LOGIC
I211	12	1I007-15*	1I029- 4	1738	LOGIC
I212	2	1I023- 1*	1I023- 4	1738	LOGIC
I213	3	1I022-11	1I023- 6*	1738	LOGIC
I213	2	1I022-11	1I022-13	1738	LOGIC
I520	11	1H003-10*	1I022- 2	1738	LOGIC
I521	6	1H003-15*	1I012- 3	1738	LOGIC
I521	2	1I012- 3	1I012- 6	1738	LOGIC
I700	6	1J011- 1*	1J020- 4	1738	LOGIC
I700	2	1J020- 4	1J021- 4	1738	LOGIC
I700	2	1J021- 4	1J022- 4	1738	LOGIC
I700	2	1J022- 4	1J023- 4	1738	LOGIC
I700	3	1J023- 4	1J023-13	1738	LOGIC
I700	2	1J022-13	1J023-13	1738	LOGIC
I700	2	1J021-13	1J022-13	1738	LOGIC
I700	2	1J020-13	1J021-13	1738	LOGIC
I701	4	1J011- 6*	1J014- 2	1738	LOGIC
I701	3	1J014- 2	1J017- 4	1738	LOGIC
I701	2	1J016- 4	1J017- 4	1738	LOGIC
I701	2	1J015- 4	1J016- 4	1738	LOGIC
I701	3	1J014-11	1J015- 4	1738	LOGIC
I701	3	1J014-11	1J015-13	1738	LOGIC
I701	2	1J015-13	1J016-13	1738	LOGIC
I701	2	1J016-13	1J017-13	1738	LOGIC
I702	4	1J011-10*	1J014- 4	1738	LOGIC
I702	3	1J014- 4	1J015- 6	1738	LOGIC
I702	2	1J015- 6	1J016- 6	1738	LOGIC
I702	2	1J016- 6	1J017- 6	1738	LOGIC
I703	3	1J010-10*	1J011-12	1738	LOGIC
J000	2	1K027- 2	1K028- 1*	1738	LOGIC
J000	2	1K026- 2	1K027- 2	1738	LOGIC
J001	3	1K027- 4	1K028- 6*	1738	LOGIC
J001	2	1K026- 4	1K027- 4	1738	LOGIC
J002	2	1K027-11	1K028-10*	1738	LOGIC

J002	2	1K026-11	1K027-11	173A	LOGIC
J003	3	1K027-13	1K028-15*	173A	LOGIC
J003	2	1K026-13	1K027-13	173A	LOGIC
J005	30	1B019- 1*	1K021- 2	173A	LOGIC
J005	3	1K021- 2	1K021-10	173A	LOGIC
J010	6	1J034- 2	1K027- 1*	173A	LOGIC
J011	4	1K027- 6*	1K031- 4	173A	LOGIC
J011	3	1K031- 4	1K032- 2	173A	LOGIC
J011	6	1K032- 2	1K039-11	173A	LOGIC
J011	6	1J034-13	1K039-11	173A	LOGIC
J011	6	1J027- 2	1J034-13	173A	LOGIC
J012	4	1K027-10*	1K032-10	173A	LOGIC
J012	4	1K032-10	1K035- 2	173A	LOGIC
J012	4	1J033-13	1K035- 2	173A	LOGIC
J013	5	1K027-15*	1K035-12	173A	LOGIC
J013	6	1J035- 4	1K035-12	173A	LOGIC
J014	6	1K026- 1*	1K036- 3	173A	LOGIC
J014	5	1J035- 5	1K036- 3	173A	LOGIC
J015	7	1K026- 6*	1K036-12	173A	LOGIC
J015	6	1J035- 6	1K036-12	173A	LOGIC
J016	6	1J033-14	1K026-10*	173A	LOGIC
J016	4	1J033-14	1K037- 3	173A	LOGIC
J016	4	1J039-11	1K037- 3	173A	LOGIC
J017	5	1K026-15*	1K031- 2	173A	LOGIC
J017	5	1K031- 2	1K037-12	173A	LOGIC
J018	2	1K025- 1*	1K025- 4	173A	LOGIC
J019	2	1K023-11	1K024-11	173A	LOGIC
J019	3	1K024-11	1K025- 6*	173A	LOGIC
J020	2	1K021- 1*	1K022- 2	173A	LOGIC
J020	3	1K022- 2	1K022-11	173A	LOGIC
J020	8	1J032- 3	1K022-11	173A	LOGIC
J020	4	1J032- 3	1J036- 2	173A	LOGIC
J020	3	1J036- 2	1J038- 3	173A	LOGIC
J020	3	1J037-10	1J038- 3	173A	LOGIC
J020	3	1J035-12	1J037-10	173A	LOGIC
J021	5	1J027-10	1K022- 1*	173A	LOGIC
J021	3	1J027- 3	1J027-10	173A	LOGIC
J022	3	1K021-15*	1K022-12	173A	LOGIC
J022	3	1K022- 4	1K022-12	173A	LOGIC
J022	9	1J036-11	1K022- 4	173A	LOGIC
J023	6	1K022- 6*	1K032- 3	173A	LOGIC
J023	3	1K032- 3	1K032-11	173A	LOGIC
J024	2	1K022-10*	1K022-13	173A	LOGIC
J024	4	1K022-13	1K024- 4	173A	LOGIC
J024	3	1L034- 4	1L034-13	173A	LOGIC
J024	8	1K024- 4	1L034- 4	173A	LOGIC
J025	8	1K022-15*	1K034- 4	173A	LOGIC
J025	6	1J041-14	1K034- 4	173A	LOGIC
J025	5	1I042-14	1J041-14	173A	LOGIC
J025	4	1I040- 2	1I042-14	173A	LOGIC
J025	2	1I040- 2	1I040- 4	173A	LOGIC
J025	3	1I040- 4	1I042- 4	173A	LOGIC
J025	2	1I042- 2	1I042- 4	173A	LOGIC
J026	5	1J041-15*	1K034- 2	173A	LOGIC
J027	3	1K023- 6*	1K023-14	173A	LOGIC
J027	7	1J032-11	1K023-14	173A	LOGIC
J028	2	1K025-10*	1K025-13	173A	LOGIC
J028	3	1K023-12	1K025-13	173A	LOGIC
J029	2	1K023-13	1K024-13	173A	LOGIC
J029	3	1K032- 4	1K032-12	173A	LOGIC
J029	3	1K024-13	1K025-15*	173A	LOGIC

J029	6	1K023-13	1K032- 4	173A LOGIC
J029	5	1K032-12	1L034-12	173A LOGIC
J030	6	1J028-11	1K023-10*	173A LOGIC
J030	4	1J028-11	1J033-11	173A LOGIC
J032	7	1J029-13	1K023-15*	173A LOGIC
J032	2	1J029-12	1J029-13	173A LOGIC
J039	4	1J036-14	1J039-10*	173A LOGIC
J040	5	1J036-12	1K031- 1*	173A LOGIC
J040	3	1J036-12	1J038-11	173A LOGIC
J040	5	1J032- 4	1J038-11	173A LOGIC
J040	9	1H034- 2	1J032- 4	173A LOGIC
J040	5	1H034- 2	1H042- 5	173A LOGIC
J041	4	1J032- 5	1J035- 1*	173A LOGIC
J041	4	1J032- 5	1J036-13	173A LOGIC
J041	4	1J036-13	1J037- 3	173A LOGIC
J041	7	1H042-13	1J037- 3	173A LOGIC
J042	4	1J033-15*	1J037-11	173A LOGIC
J042	4	1J032- 6	1J037-11	173A LOGIC
J042	9	1H034- 3	1J032- 6	173A LOGIC
J042	5	1H034- 3	1H042- 4	173A LOGIC
J043	6	1J036- 3	1K031- 6*	173A LOGIC
J044	5	1J034- 3	1J038-15*	173A LOGIC
J045	3	1J034- 4	1J037- 1*	173A LOGIC
J046	4	1J034- 5	1J037-15*	173A LOGIC
J047	3	1J034- 6	1J036- 1*	173A LOGIC
J048	3	1J034-10	1J036-15*	173A LOGIC
J049	3	1J034-11	1J035-15*	173A LOGIC
J050	5	1J034-14	1J038- 1*	173A LOGIC
J050	5	1J034-14	1K029- 4	173A LOGIC
J050	7	1K029- 4	1K039-12	173A LOGIC
J051	5	1J034- 1*	1K034- 3	173A LOGIC
J060	3	1J038- 4	1J039- 1*	173A LOGIC
J061	2	1J038- 5	1J039- 6*	173A LOGIC
J070	2	1K032- 1*	1K033- 2	173A LOGIC
J070	2	1K033- 2	1K033- 4	173A LOGIC
J071	6	1K033- 1*	1L039- 2	173A LOGIC
J071	2	1L039- 2	1L040- 2	173A LOGIC
J071	2	1L040- 2	1L041- 2	173A LOGIC
J071	2	1L041- 2	1L042- 2	173A LOGIC
J071	3	1L042- 2	1L042-11	173A LOGIC
J071	2	1L041-11	1L042-11	173A LOGIC
J071	2	1L040-11	1L041-11	173A LOGIC
J071	2	1L039-11	1L040-11	173A LOGIC
J072	2	1L037- 2	1L038- 2	173A LOGIC
J072	2	1L036- 2	1L037- 2	173A LOGIC
J072	2	1L035- 2	1L036- 2	173A LOGIC
J072	2	1L036-11	1L037-11	173A LOGIC
J072	2	1L037-11	1L038-11	173A LOGIC
J072	5	1K033- 6*	1L035- 2	173A LOGIC
J072	3	1L038- 2	1L038-11	173A LOGIC
J075	3	1K032-15*	1K033-13	173A LOGIC
J075	2	1K033-11	1K033-13	173A LOGIC
J076	5	1K033-10*	1L039- 4	173A LOGIC
J076	2	1L039- 4	1L040- 4	173A LOGIC
J076	2	1L040- 4	1L041- 4	173A LOGIC
J076	2	1L041- 4	1L042- 4	173A LOGIC
J076	3	1L042- 4	1L042-13	173A LOGIC
J076	2	1L041-13	1L042-13	173A LOGIC
J076	2	1L040-13	1L041-13	173A LOGIC
J076	2	1L039-13	1L040-13	173A LOGIC
J077	4	1K033-15*	1L035- 4	173A LOGIC

J077	2	1L035- 4	1L036- 4	173A	LOGIC
J077	2	1L036- 4	1L037- 4	173A	LOGIC
J077	2	1L037- 4	1L038- 4	173A	LOGIC
J077	3	1L038- 4	1L038-13	173A	LOGIC
J077	2	1L037-13	1L038-13	173A	LOGIC
J077	2	1L036-13	1L037-13	173A	LOGIC
J077	2	1L035-13	1L036-13	173A	LOGIC
J080	2	1J028-12	1J028-14	173A	LOGIC
J080	4	1J030-14	1J033- 3	173A	LOGIC
J080	11	1B019-15*	1C001-14	173A	LOGIC
J080	13	1C001-14	1G002- 5	173A	LOGIC
J080	17	1G002- 5	1K016- 5	173A	LOGIC
J080	8	1J028-14	1K016- 5	173A	LOGIC
J080	3	1J028-12	1J030-14	173A	LOGIC
J081	7	1J033- 1*	1K029-10	173A	LOGIC
J081	6	1J029- 3	1K029-10	173A	LOGIC
J081	6	1I036-10	1J029- 3	173A	LOGIC
J081	8	1H027- 2	1I036-10	173A	LOGIC
J081	18	1C015-13	1H027- 2	173A	LOGIC
J081	12	1B033- 3	1C015-13	173A	LOGIC
J090	4	1J032- 1*	1J032-12	173A	LOGIC
J090	10	1H037- 5	1J025- 4	173A	LOGIC
J090	5	1J025- 4	1J032-12	173A	LOGIC
J091	7	1J032-15*	1L034- 3	173A	LOGIC
J097	5	1I041- 4	1J041- 1*	173A	LOGIC
J097	4	1H039-11	1I041- 4	173A	LOGIC
J099	5	1I041- 3	1J041- 6*	173A	LOGIC
J100	6	1I032- 1*	1J037- 4	173A	LOGIC
J100	3	1J037- 4	1J037-12	173A	LOGIC
J100	2	1J037-12	1J038-12	173A	LOGIC
J101	5	1I031- 1*	1I039- 4	173A	LOGIC
J101	3	1I038-10	1I039- 4	173A	LOGIC
J101	2	1I040-13	1I041-14	173A	LOGIC
J101	3	1I038-10	1I040-13	173A	LOGIC
J102	3	1I031- 6*	1I034- 4	173A	LOGIC
J102	2	1I034- 4	1I035- 4	173A	LOGIC
J102	2	1I034-13	1I035-13	173A	LOGIC
J102	2	1I033-13	1I034-13	173A	LOGIC
J102	3	1I035- 4	1I037- 4	173A	LOGIC
J102	4	1I035-13	1I037- 4	173A	LOGIC
J103	6	1K020-15*	1K029-12	173A	LOGIC
J104	14	1I031-10*	1L042-12	173A	LOGIC
J104	10	1J041- 3	1L042-12	173A	LOGIC
J104	29	1B025- 4	1J041- 3	173A	LOGIC
J105	6	1I008-13	1J015-11	173A	LOGIC
J105	10	1I032-10*	1J015-11	173A	LOGIC
J107	19	1D022-15*	1I037-11	173A	LOGIC
J108	9	1I021- 1*	1I037-13	173A	LOGIC
J109	4	1I031-12	1J028- 1*	173A	LOGIC
J110	3	1I028- 1*	1I028-10	173A	LOGIC
J110	5	1H027-13	1H034-10	173A	LOGIC
J110	20	1B032-10	1H034-10	173A	LOGIC
J110	4	1I028-10	1J026- 2	173A	LOGIC
J110	6	1H027-13	1J026- 2	173A	LOGIC
J111	13	1F019- 6*	1I032- 3	173A	LOGIC
J112	13	1G015- 3	1J026- 1*	173A	LOGIC
J113	23	1B033-15*	1I032-13	173A	LOGIC
J114	5	1I032-15*	1I035- 2	173A	LOGIC
J115	23	1F021-15*	1L039-12	173A	LOGIC
J116	15	1E034- 1*	1I039- 2	173A	LOGIC
J116	4	1I039- 2	1I041-12	173A	LOGIC
J117	15	1E034- 6*	1I041- 6	173A	LOGIC

J117	3	1I040-11	1I041- 6	173A	LOGIC
J120	4	1I027- 2	1I028-15*	173A	LOGIC
J121	6	1I027- 3	1J026-10*	173A	LOGIC
J122	6	1I027- 4	1J026- 6*	173A	LOGIC
J123	8	1I027- 1*	1I040-12	173A	LOGIC
J123	3	1I040-12	1I041-10	173A	LOGIC
J123	6	1H039- 4	1I041-10	173A	LOGIC
J129	6	1I026-13	1J031-15*	173A	LOGIC
J130	2	1I025-10*	1I025-13	173A	LOGIC
J131	3	1I025-14	1I027-15*	173A	LOGIC
J131	21	1C025- 5	1I025-14	173A	LOGIC
J132	3	1I025-15*	1I026-10	173A	LOGIC
J133	8	1I026-15*	1I041-13	173A	LOGIC
J133	4	1I039- 3	1I041-13	173A	LOGIC
J133	5	1H039- 2	1I039- 3	173A	LOGIC
J200	3	1K014- 1*	1K017- 2	173A	LOGIC
J200	4	1K017- 2	1K019-13	173A	LOGIC
J201	4	1K015- 1*	1K018-12	173A	LOGIC
J202	4	1K015- 6*	1K017-13	173A	LOGIC
J203	3	1K015-10*	1K018-13	173A	LOGIC
J203	3	1K018- 4	1K018-13	173A	LOGIC
J204	13	1I034-12	1K015-15*	173A	LOGIC
J204	2	1I033-12	1I034-12	173A	LOGIC
J204	18	1G001-14	1I033-12	173A	LOGIC
J204	4	1G001-14	1G003- 3	173A	LOGIC
J204	22	1B028- 5	1G003- 3	173A	LOGIC
J205	2	1K013-12	1K013-14	173A	LOGIC
J205	3	1K013- 5	1K013-12	173A	LOGIC
J205	10	1J030- 6*	1K013- 5	173A	LOGIC
J206	14	1I031-15*	1L015-12	173A	LOGIC
J210	3	1K013- 4	1K014- 6*	173A	LOGIC
J210	3	1K013- 4	1K013-11	173A	LOGIC
J210	2	1K013-11	1K013-13	173A	LOGIC
J211	2	1K007-11	1K008-11	173A	LOGIC
J211	2	1K007- 2	1K008- 2	173A	LOGIC
J211	3	1K007- 2	1K007-11	173A	LOGIC
J211	4	1K008- 2	1K013- 6*	173A	LOGIC
J212	5	1K006-11	1K013-10*	173A	LOGIC
J212	2	1K005-11	1K006-11	173A	LOGIC
J212	2	1K004-11	1K005-11	173A	LOGIC
J212	3	1K004- 2	1K004-11	173A	LOGIC
J212	2	1K004- 2	1K005- 2	173A	LOGIC
J212	2	1K005- 2	1K006- 2	173A	LOGIC
J213	6	1K003-11	1K013-15*	173A	LOGIC
J213	2	1K002-11	1K003-11	173A	LOGIC
J213	2	1K001-11	1K002-11	173A	LOGIC
J213	3	1K001- 2	1K001-11	173A	LOGIC
J213	2	1K001- 2	1K002- 2	173A	LOGIC
J213	2	1K002- 2	1K003- 2	173A	LOGIC
J215	4	1K014-10*	1L012- 2	173A	LOGIC
J215	2	1L011- 2	1L012- 2	173A	LOGIC
J215	2	1L010- 2	1L011- 2	173A	LOGIC
J215	4	1L010- 2	1L011-11	173A	LOGIC
J215	2	1L011-11	1L012-11	173A	LOGIC
J215	2	1L012-11	1L013-11	173A	LOGIC
J215	2	1L013-11	1L014-11	173A	LOGIC
J216	5	1K014-15	1L010-11 **		
J216	4	1L007-2	1L008-11 **		
J216	4	1L009-2	1L013-2 **		
J216	10	1J024-2	1L013-2 **		
J216	2	1L007- 2	1L008- 2	173A	LOGIC
J216	2	1L008- 2	1L009- 2	173A	LOGIC
J216	4	1L009- 2	1L010-11 **	173A	LOGIC
J216	2	1L009-11	1L010-11	173A	LOGIC
J216	2	1L008-11	1L009-11	173A	LOGIC
J216	3	1K014-15*	1L013- 2 **	173A	LOGIC

** Present if Std. Opt. 10278-1 is installed.
 *** Deleted if Std. Opt. 10278-1 is installed.

J216	4	1L007- 2	1L013- 2	MM	173A LOGIC
J217	12	1D034-12	1G023-6	⊗	
J217	10	1C018-12	1D034-12	⊗	
J221	4	1K016- 2	1K020- 1*		173A LOGIC
J221	4	1K016- 2	1K016-13		173A LOGIC
J223	4	1K016- 4	1K020- 6*		173A LOGIC
J224	4	1K016-11	1K020-10*		173A LOGIC
J225	5	1B003-15*	1C001-13		173A LOGIC
J226	28	1C001-15*	1K017- 4		173A LOGIC
J240	2	1H036- 4	1H037- 4		173A LOGIC
J240	4	1H036-13	1H037- 4		173A LOGIC
J240	4	1H035- 1*	1H036-13		173A LOGIC
J240	8	1H021- 3	1H036- 4		173A LOGIC
J240	18	1C009-14	1H021- 3		173A LOGIC
J240	2	1C009-12	1C009-14		173A LOGIC
J241	3	1H035- 6*	1H037-12		173A LOGIC
J241	4	1H032-12	1H037-12		173A LOGIC
J241	6	1H021-12	1H032-12		173A LOGIC
J242	5	1H032- 2	1I033- 2		173A LOGIC
J242	2	1H032- 2	1H032- 4		173A LOGIC
J242	6	1H023- 4	1H032- 4		173A LOGIC
J242	2	1H023- 2	1H023- 4		173A LOGIC
J242	6	1H013- 2	1H023- 2		173A LOGIC
J242	6	1H033-10*	1I036-13		173A LOGIC
J242	4	1I033- 2	1I036-13		173A LOGIC
J244	5	1H026-11	1H033-15*		173A LOGIC
J244	2	1H025-11	1H026-11		173A LOGIC
J244	2	1H024-11	1H025-11		173A LOGIC
J244	3	1H024- 2	1H024-11		173A LOGIC
J244	2	1H024- 2	1H025- 2		173A LOGIC
J244	2	1H025- 2	1H026- 2		173A LOGIC
J245	13	1H037- 6	1I014- 6*		173A LOGIC
J246	3	1H035-10*	1H037-13		173A LOGIC
J248	5	1H036- 5	1H042-15*		173A LOGIC
J249	3	1H035-15*	1H037-10		173A LOGIC
J249	2	1H036-10	1H037-10		173A LOGIC
J249	4	1H032-10	1H036-10		173A LOGIC
J250	3	1B027- 1*	1B029- 3		173A LOGIC
J250	3	1B029- 3	1B029-12		173A LOGIC
J251	3	1B027- 6*	1B029- 5		173A LOGIC
J251	3	1B028-10	1B029- 5		173A LOGIC
J251	3	1B028-10	1B029-13		173A LOGIC
J252	3	1B027-10*	1B029- 4		173A LOGIC
J252	22	1B029- 4	1H034-11		173A LOGIC
J252	6	1H034-11	1I028-12		173A LOGIC
J260	4	1H030- 3	1H034- 1*		173A LOGIC
J261	4	1H033- 4	1H034-15*		173A LOGIC
J262	3	1H033- 1*	1H033- 5		173A LOGIC
J263	3	1H032- 3	1H033- 6*		173A LOGIC
J400	3	1G012- 2	1G013- 4		173A LOGIC
J400	3	1G013- 4	1G014- 2		173A LOGIC
J400	5	1G009-15*	1G012- 2		173A LOGIC
J401	4	1G014-12	1H012- 1*		173A LOGIC
J401	2	1G013-12	1G014-12		173A LOGIC
J401	2	1G012-12	1G013-12		173A LOGIC
J401	2	1G011-12	1G012-12		173A LOGIC
J401	2	1G010-12	1G011-12		173A LOGIC
J401	7	1G010-12	1H002-13		173A LOGIC
J401	2	1H001-12	1H002-13		173A LOGIC
J402	5	1G015- 1*	1G020-11		173A LOGIC
J402	8	1G020-11	1I024- 6		173A LOGIC
J403	6	1G014- 5	1G023-15*		173A LOGIC
J403	9	1G014- 5	1H001- 6		173A LOGIC
J404	5	1G014-10	1G020-15*		173A LOGIC

⊗ Present if Std. Opt. 10278-1 is installed.
 ⊗⊗ Deleted if Std. Opt. 10278-1 is installed.

J404	2	1G013-10	1G014-10	1738	LOGIC
J404	2	1G012-10	1G013-10	1738	LOGIC
J404	2	1G011-10	1G012-10	1738	LOGIC
J404	2	1G010-10	1G011-10	1738	LOGIC
J405	5	1G015-15*	1H019-12	1738	LOGIC
J405	7	1G010-13	1H019-12	1738	LOGIC
J405	7	1G010-13	1H002-12	1738	LOGIC
J406	3	1G020-10*	1G023-13	1738	LOGIC
J406	12	1D022-10	1G023-13	1738	LOGIC
J408	5	1I019- 2	1I025- 4	1738	LOGIC
J408	15	1C015-15*	1G020-13	1738	LOGIC
J408	6	1G020-13	1H014-12	1738	LOGIC
J408	5	1H014-12	1I019- 2	1738	LOGIC
J409	2	1H005-10	1H006-10	1738	LOGIC
J409	3	1H002-10	1H005-10	1738	LOGIC
J409	2	1H001-10	1H002-10	1738	LOGIC
J409	11	1H006-10	1I025- 6*	1738	LOGIC
J409	20	1B002-13	1H001-10	1738	LOGIC
J410	2	1H006- 2	1H006- 4	1738	LOGIC
J410	4	1H001- 4	1H004-10*	1738	LOGIC
J410	4	1H001- 4	1H005- 4	1738	LOGIC
J410	2	1H005- 4	1H006- 4	1738	LOGIC
J410	7	1G014- 4	1H006- 2	1738	LOGIC
J411	3	1H004-15*	1H006-13	1738	LOGIC
J411	7	1H006-13	1H017-11	1738	LOGIC
J411	3	1H017-11	1H019-13	1738	LOGIC
J412	5	1H006-12	1H012- 6*	1738	LOGIC
J413	3	1H027-12	1I026- 1*	1738	LOGIC
J414	5	1H027-15*	1H032- 6	1738	LOGIC
J414	17	1D018- 4	1H032- 6	1738	LOGIC
J415	16	1D018- 6*	1H005- 2	1738	LOGIC
J416	5	1H007-14	1H011- 1*	1738	LOGIC
J417	2	1H007- 3	1H007- 4	1738	LOGIC
J417	8	1H007- 4	1I012-15*	1738	LOGIC
J418	2	1I023-10*	1I023-13	1738	LOGIC
J419	22	1C015-14	1I023-15*	1738	LOGIC
J420	10	1G008- 6*	1G026- 2	1738	LOGIC
J429	2	1G008-11	1G008-13	1738	LOGIC
J429	15	1G008-13	1H038-10*	1738	LOGIC
J430	10	1G008-10*	1G026- 3	1738	LOGIC
J430	15	1C020- 4	1G026- 3	1738	LOGIC
J431	9	1G024- 4	1H011- 4	1738	LOGIC
J431	4	1G008-15*	1H011- 4	1738	LOGIC
J440	5	1G020- 1*	1G026- 4	1738	LOGIC
J440	10	1D022-13	1G026- 4	1738	LOGIC
J440	5	1C020-13	1D022-13	1738	LOGIC
J450	12	1G026- 6	1H004- 1*	1738	LOGIC
J460	13	1G026- 5	1H004- 6*	1738	LOGIC
J460	14	1C017-14	1G026- 5	1738	LOGIC
J470	8	1C015- 4	1D019-15*	1738	LOGIC
J471	4	1C015- 1*	1C016-12	1738	LOGIC
J475	5	1C016- 2	1C020-15*	1738	LOGIC
J478	19	1D022- 4	1H038-15*	1738	LOGIC
J479	14	1D022- 1*	1G013- 6	1738	LOGIC
J480	8	1G020- 4	1H012-15*	1738	LOGIC
J481	8	1G020- 5	1I025- 1*	1738	LOGIC
J482	6	1G011- 6	1G020- 6*	1738	LOGIC
J490	13	1D018- 1*	1G011- 4	1738	LOGIC
J490	3	1G010- 2	1G011- 4	1738	LOGIC
J490	7	1G010- 2	1H002- 2	1738	LOGIC
J500	3	1I016- 1*	1I017- 5	1738	LOGIC
J501	3	1I016-15*	1I017-13	1738	LOGIC
J502	5	1H015-13	1I014-10*	1738	LOGIC

J503	5	1I009- 5	1I014-15*	173A	LOGIC
J503	2	1I009- 2	1I009- 5	173A	LOGIC
J504	3	1H014-11	1H015-15*	173A	LOGIC
J504	6	1H014-11	1I011-13	173A	LOGIC
J505	3	1I013- 6*	1I015-11	173A	LOGIC
J505	2	1I015-11	1I015-13	173A	LOGIC
J506	3	1I013-10*	1I014-12	173A	LOGIC
J506	2	1I014-12	1I014-14	173A	LOGIC
J506	3	1I014-14	1I016-12	173A	LOGIC
J506	3	1I016- 4	1I016-12	173A	LOGIC
J506	4	1H016-13	1I016- 4	173A	LOGIC
J507	3	1I013-15*	1I016-14	173A	LOGIC
J507	3	1I016- 6	1I016-14	173A	LOGIC
J509	3	1I013- 4	1I015- 4	173A	LOGIC
J509	5	1H017- 2	1I015- 2	173A	LOGIC
J509	12	1E001-15*	1H017- 2	173A	LOGIC
J509	2	1I015- 2	1I015- 4	173A	LOGIC
J510	3	1H012- 2	1H015- 1*	173A	LOGIC
J510	6	1H004-13	1H012- 2	173A	LOGIC
J510	15	1H004-13	1H035- 4	173A	LOGIC
J510	22	1R027- 2	1H035- 4	173A	LOGIC
J511	5	1G009-14	1H015- 6*	173A	LOGIC
J511	6	1G009-14	1H004-11	173A	LOGIC
J511	14	1H004-11	1H033-11	173A	LOGIC
J511	2	1H033-11	1H033-13	173A	LOGIC
J514	3	1H011-10*	1H011-14	173A	LOGIC
J514	5	1H011-14	1I010-10	173A	LOGIC
J515	3	1H011-15*	1I010- 4	173A	LOGIC
J515	3	1I010- 4	1I010-12	173A	LOGIC
J516	3	1H013-13	1H015-10*	173A	LOGIC
J516	2	1H013-11	1H013-13	173A	LOGIC
J516	4	1H013-11	1H015- 4	173A	LOGIC
J516	2	1H015- 2	1H015- 4	173A	LOGIC
J516	9	1F019- 3	1H015- 2	173A	LOGIC
J517	12	1F019- 1*	1H035- 2	173A	LOGIC
J517	17	1D018- 5	1H035- 2	173A	LOGIC
J517	2	1D018- 3	1D018- 5	173A	LOGIC
J517	10	1B027- 4	1D018- 3	173A	LOGIC
J519	15	1F019-15*	1J006- 4	173A	LOGIC
J520	3	1I017- 1*	1I019- 4	173A	LOGIC
J520	5	1H015-11	1I019- 4	173A	LOGIC
J521	8	1I005- 2	1I019- 6*	173A	LOGIC
J530	3	1I017-15*	1I019-11	173A	LOGIC
J530	7	1H011-13	1I019-11	173A	LOGIC
J531	7	1H016- 2	1I019-10*	173A	LOGIC
J531	8	1F021-11	1H016- 2	173A	LOGIC
J532	4	1I019-15*	1I020- 2	173A	LOGIC
J532	4	1H016-11	1I020- 2	173A	LOGIC
J533	4	1H018-13	1I020- 1*	173A	LOGIC
J534	3	1I020- 6*	1I020-11	173A	LOGIC
J534	10	1G021- 2	1I020-11	173A	LOGIC
J535	2	1I020-13	1I021-13	173A	LOGIC
J535	3	1I020-10*	1I021-13	173A	LOGIC
J535	8	1H011- 5	1I020-13	173A	LOGIC
J535	15	1D022-14	1H011- 5	173A	LOGIC
J535	8	1C015- 6	1D022-14	173A	LOGIC
J536	4	1G002-14	1G006-12	173A	LOGIC
J536	6	1B033- 5	1C026- 5	173A	LOGIC
J536	8	1H027- 6	1I020-15*	173A	LOGIC
J536	12	1G006-12	1H027- 6	173A	LOGIC
J536	20	1C026- 5	1G002-14	173A	LOGIC
J537	11	1G024- 2	1I021-15*	173A	LOGIC

J537	17	1C001-12	1G024- 2	173A	LOGIC
J538	10	1D017-13	1G021- 1*	173A	LOGIC
J538	2	1D017-11	1D017-13	173A	LOGIC
J538	5	1C017-12	1D017-11	173A	LOGIC
J538	9	1C017-12	1D003-11	173A	LOGIC
J538	2	1D003-11	1D003-13	173A	LOGIC
J538	8	1B003-11	1D003-13	173A	LOGIC
J538	3	1B003- 4	1B003-11	173A	LOGIC
J538	2	1B003- 2	1B003- 4	173A	LOGIC
J540	3	1I017- 3	1I018- 1*	173A	LOGIC
J540	3	1I017- 3	1I017-12	173A	LOGIC
J541	2	1I017- 6	1I018- 6*	173A	LOGIC
J541	3	1I017- 6	1I017-14	173A	LOGIC
J542	6	1H011- 6*	1H020- 4	173A	LOGIC
J543	4	1H019-10	1I019- 1*	173A	LOGIC
J543	2	1H019-10	1H020-10	173A	LOGIC
J543	2	1H020-10	1H021-10	173A	LOGIC
J543	2	1H021-10	1H022-10	173A	LOGIC
J544	4	1H014-10*	1H018- 5	173A	LOGIC
K000	6	1J025-13	1K034- 1*	173A	LOGIC
K000	10	1J025-13	1L034-11	173A	LOGIC
K001	4	1K034- 6*	1L034- 2	173A	LOGIC
K001	3	1J025- 5	1J027- 4	173A	LOGIC
K001	3	1J027- 4	1J027-11	173A	LOGIC
K001	8	1J027-11	1L034- 2	173A	LOGIC
K002	5	1I031-13	1I039-10*	173A	LOGIC
K004	6	1I018-12	1I026- 4	173A	LOGIC
K004	5	1H034- 4	1H041- 6	173A	LOGIC
K004	7	1H010-10*	1I018-12	173A	LOGIC
K004	7	1H034- 4	1I026- 4	173A	LOGIC
K004	14	1G015- 4	1H041- 6	173A	LOGIC
K004	18	1B027-14	1G015- 4	173A	LOGIC
K004	4	1B027-14	1B032-14	173A	LOGIC
K005	12	1B026-13	1E034-12	173A	LOGIC
K005	13	1H010-15*	1J030-11	173A	LOGIC
K005	18	1E034-12	1J030-11	173A	LOGIC
K006	20	1F021-14	1K039-10*	173A	LOGIC
K014	5	1I031-14	1J030-10*	173A	LOGIC
K015	4	1C022-1 *	1C022-11		
K017	20	1C022-10*	1H010-11		
K017	19	1H010-11	1K040-10		
K100	5	1I042- 1*	1J041- 2	173A	LOGIC
K100	7	1J031-13	1J041- 2	173A	LOGIC
K100	7	1I032- 2	1J031-13	173A	LOGIC
K101	11	1I042- 6*	1L042- 3	173A	LOGIC
K101	11	1J028- 4	1L042- 3	173A	LOGIC
K101	27	1B025- 2	1J028- 4	173A	LOGIC
K102	3	1I040-14	1I042-10		
K102	4	1I040-14	1J036-4		
K102	5	1I031-11	1J036- 4	173A	LOGIC
K102	14	1F019- 5	1I031-11	173A	LOGIC
K103	5	1J025-10	1J031-14	173A	LOGIC
K103	8	1I042-15*	1J031-14	173A	LOGIC
K105	9	1I041-15*	1L041- 3	173A	LOGIC
K105	16	1L007-11	1L041- 3	173A	LOGIC
K106	9	1I040- 1*	1J028- 5	173A	LOGIC
K106	5	1I024-13	1J028- 5	173A	LOGIC
K107	2	1J037-13	1J038-14	173A	LOGIC
K107	8	1J038-14	1L041-12	173A	LOGIC
K107	12	1I040- 6*	1L041-12	173A	LOGIC
K107	3	1J037- 5	1J037-13	173A	LOGIC
K107	28	1B025- 6	1J037- 5	173A	LOGIC
K108	7	1I040-10*	1J030- 3	173A	LOGIC
K108	5	1J026-14	1J030- 3	173A	LOGIC
K108	6	1I025-11	1J026-14	173A	LOGIC
K109	9	1I040-15*	1L040- 3	173A	LOGIC

* Present if Std. Opt. 10278-1 is installed.

K109	34	1B025-10	1L040- 3	173A LOGIC
K110	7	1I027- 5	1I039- 1*	173A LOGIC
K111	12	1I039- 6*	1L040-12	173A LOGIC
K111	34	1C015-12	1L040-12	173A LOGIC
K111	8	1B025-12	1C015-12	173A LOGIC
K113	9	1I038-15*	1L039- 3	173A LOGIC
K114	5	1J035-13	1K029- 1*	173A LOGIC
K114	17	1F021-13	1J035-13	173A LOGIC
K116	7	1I027-10	1I037- 1*	173A LOGIC
K117	11	1I037- 6*	1L038- 3	173A LOGIC
K118	6	1I027-11	1I035- 1*	173A LOGIC
K119	13	1I035- 6*	1L038-12	173A LOGIC
K120	5	1H030-12	1I036- 1*	173A LOGIC
K120	5	1H030-12	1I032-12	173A LOGIC
K120	5	1I026-11	1I032-12	173A LOGIC
K120	10	1I026-11	1J010-11	173A LOGIC
K120	4	1J008- 4	1J010-11	173A LOGIC
K121	9	1I036-15*	1L037- 3	173A LOGIC
K121	22	1H003- 5	1L037- 3	173A LOGIC
K122	6	1I026-14	1I035-10*	173A LOGIC
K123	11	1I035-15*	1L037-12	173A LOGIC
K124	6	1I026-12	1I034- 1*	173A LOGIC
K125	11	1I034- 6*	1L036- 3	173A LOGIC
K126	5	1I027-12	1I034-10*	173A LOGIC
K127	11	1I034-15*	1L036-12	173A LOGIC
K128	5	1I027-13	1I033-10*	173A LOGIC
K129	10	1I033-15*	1L035- 3	173A LOGIC
K130	12	1I024- 1*	1K034-13	173A LOGIC
K131	10	1H039-13	1I024-15*	173A LOGIC
K133	9	1I029-13	1K034-15*	173A LOGIC
K135	5	1I034- 2	1I037-15*	173A LOGIC
K140	7	1J025- 1*	1J036- 5	173A LOGIC
K140	13	1I014- 4	1J036- 5	173A LOGIC
K140	12	1F019- 4	1I014- 4	173A LOGIC
K141	6	1H034-12	1I028-11	173A LOGIC
K141	5	1J025-15*	1J028- 2	173A LOGIC
K141	4	1I028-11	1J028- 2	173A LOGIC
K141	20	1C015-11	1I008- 3	173A LOGIC
K141	13	1H034-12	1I008- 3	173A LOGIC
K200	3	1K019-10*	1K020- 2	173A LOGIC
K200	4	1K015- 3	1K020- 2	173A LOGIC
K203	3	1K018- 6*	1K018-11	173A LOGIC
K204	3	1K018-10*	1K019-14	173A LOGIC
K205	4	1K017- 3	1K018-15*	173A LOGIC
K206	4	1K014-11	1K017-1	
K206	2	1K014-11	1K014-13	
K207	3	1K015-5	1K017-11	173A LOGIC
K207	3	1K015-11	1K017-11	173A LOGIC
K207	4	1K015-11	1L014-2	173A LOGIC
K207	3	1K017- 6*	1K020- 4	173A LOGIC
K207	4	1K015- 5	1K020- 4	173A LOGIC
K207	4	1L014-2	1L016-11	173A LOGIC
K209	3	1K015-13	1L015- 2	173A LOGIC
K209	5	1K017-15*	1L015-11	173A LOGIC
K209	4	1K015-13	1K020-11	173A LOGIC
K209	3	1L015-2	1L015-11	173A LOGIC
K209	8	1J030-4	1K020-11	173A LOGIC
K210	8	1H037- 1*	1I032-11	173A LOGIC
K211	5	1H037-15*	1H041- 3	173A LOGIC
K211	7	1H030- 2	1H041- 3	173A LOGIC
K211	5	1H030- 2	1I029- 2	173A LOGIC
K211	16	1G002- 2	1I029- 2	173A LOGIC

K211	22	1B032-11	1G002- 2	173A	LOGIC
K212	4	1H035-11	1H036- 1*	173A	LOGIC
K212	7	1I025-12	1J032-13	173A	LOGIC
K212	22	1B032-12	1G005-12	173A	LOGIC
K212	9	1H035-11	1J032-13	173A	LOGIC
K212	13	1G005-12	1I025-12	173A	LOGIC
K213	15	1G009- 3	1H036-15*	173A	LOGIC
K213	5	1G002- 3	1G009- 3	173A	LOGIC
K213	18	1C026-11	1G002- 3	173A	LOGIC
K220	4	1H032- 1*	1H035-12	173A	LOGIC
K220	4	1H035-12	1I033- 4	173A	LOGIC
K220	7	1H041- 4	1I033- 4	173A	LOGIC
K220	11	1G022- 2	1H041- 4	173A	LOGIC
K220	8	1G022- 2	1H012- 4	173A	LOGIC
K220	14	1H012- 4	1J032-14	173A	LOGIC
K221	5	1I008- 2	1J008- 2	173A	LOGIC
K221	4	1H030-11	1I030- 2	173A	LOGIC
K221	7	1H032-15*	1I042-11	173A	LOGIC
K221	8	1H030-11	1I042-11	173A	LOGIC
K221	12	1I030- 2	1J008- 2	173A	LOGIC
K221	20	1C015-10	1I008- 2	173A	LOGIC
K222	6	1H026- 4	1I033- 1*	173A	LOGIC
K222	9	1H013- 4	1J008- 3	173A	LOGIC
K222	7	1H013- 4	1H026- 4	173A	LOGIC
K223	5	1H030-13	1I033- 6*	173A	LOGIC
K224	7	1H013- 1*	1H023-12	173A	LOGIC
K224	9	1H023-12	1H038- 2	173A	LOGIC
K225	3	1H029- 2	1H029-11	173A	LOGIC
K225	10	1H013- 6*	1J007-11	173A	LOGIC
K225	4	1J007-11	1J011-11	173A	LOGIC
K225	14	1G026-10	1J011-11	173A	LOGIC
K225	6	1G026-10	1H029-11	173A	LOGIC
K225	7	1H029- 2	1H042- 3	173A	LOGIC
K227	6	1H023-15*	1H032-13	173A	LOGIC
K227	8	1J026-11	1K013- 3	173A	LOGIC
K227	5	1H032-13	1I035-12	173A	LOGIC
K227	7	1I035-12	1J026-11	173A	LOGIC
K228	3	1G026-12	1H026- 1*	173A	LOGIC
K228	9	1G026-12	1H042- 2	173A	LOGIC
K228	9	1H026-13	1H042- 2	173A	LOGIC
K228	13	1H026-13	1J007-12	173A	LOGIC
K229	6	1H029-13	1H038- 3	173A	LOGIC
K229	9	1G025- 3	1H038- 3	173A	LOGIC
K229	4	1H026- 6*	1H029-13	173A	LOGIC
K230	3	1H025- 4	1H026-10*	173A	LOGIC
K230	5	1G025- 4	1H025- 4	173A	LOGIC
K230	14	1G025- 4	1J011- 4	173A	LOGIC
K231	4	1H026-15*	1H028- 2	173A	LOGIC
K231	14	1H028- 2	1J008-11	173A	LOGIC
K232	4	1H025- 1*	1H025-13	173A	LOGIC
K232	12	1H025-13	1J008-12	173A	LOGIC
K233	3	1H025- 6*	1H028- 4	173A	LOGIC
K234	3	1H024- 4	1H025-10*	173A	LOGIC
K234	10	1H024- 4	1J011- 2	173A	LOGIC
K235	4	1H025-15*	1H028-11	173A	LOGIC
K235	11	1H028-11	1J011- 5	173A	LOGIC
K235	3	1J009-11	1J011- 5	173A	LOGIC
K236	4	1H024- 1*	1H024-13	173A	LOGIC
K236	11	1H024-13	1J009-12	173A	LOGIC
K237	4	1H024- 6*	1H028-13	173A	LOGIC
K238	12	1H024-10*	1K013- 2	173A	LOGIC

K239	5	1H024-15*	1H029- 4	173A	LOGIC
K239	12	1H029- 4	1J011- 3	173A	LOGIC
K241	4	1B028-15*	1B029- 2	173A	LOGIC
K243	4	1B026- 2	1B029- 6*	173A	LOGIC
K243	4	1B026- 2	1B031- 2	173A	LOGIC
K243	3	1B031- 2	1B031-10	173A	LOGIC
K243	3	1B028-11	1B031-10	173A	LOGIC
K243	6	1B028-11	1C026-12	173A	LOGIC
K243	19	1C026-12	1H036-12	173A	LOGIC
K244	3	1B026-11	1B029-10*	173A	LOGIC
K321	15	1G022- 1*	1J010-12	173A	LOGIC
K400	14	1G014- 1*	1H038-11	173A	LOGIC
K401	5	1G008- 4	1G014-15*	173A	LOGIC
K401	7	1H009-11	1H021-13	173A	LOGIC
K401	6	1G008- 4	1H009-11	173A	LOGIC
K402	12	1D001-11	1G013- 1*	173A	LOGIC
K402	20	1D001-11	1J010- 2	173A	LOGIC
K402	16	1H038-12	1J010- 2	173A	LOGIC
K403	7	1G007- 4	1H009-13	173A	LOGIC
K403	3	1G013-15*	1G014-13	173A	LOGIC
K403	6	1G014-13	1H009-13	173A	LOGIC
K403	13	1D001- 2	1G007- 4	173A	LOGIC
K404	12	1G012- 1*	1J010- 4	173A	LOGIC
K404	11	1G007- 5	1J010- 4	173A	LOGIC
K404	12	1D018-12	1G007- 5	173A	LOGIC
K404	7	1C015- 3	1D018-12	173A	LOGIC
K405	4	1H004- 2	1H008- 2	173A	LOGIC
K405	5	1G013-13	1H008- 2	173A	LOGIC
K405	3	1G012-15*	1G013-13	173A	LOGIC
K405	13	1D001-12	1H004- 2	173A	LOGIC
K405	3	1D001- 3	1D001-12	173A	LOGIC
K406	4	1D018-14	1D019- 2	173A	LOGIC
K406	10	1D001-10	1D019- 2	173A	LOGIC
K406	12	1D001-10	1G011- 1*	173A	LOGIC
K406	22	1D018-14	1K023- 2	173A	LOGIC
K407	4	1G012-13	1H008- 4	173A	LOGIC
K407	4	1H004- 4	1H008- 4	173A	LOGIC
K407	2	1H004- 3	1H004- 4	173A	LOGIC
K407	5	1G011-15*	1H004- 3	173A	LOGIC
K407	13	1D018-11	1G012-13	173A	LOGIC
K407	3	1D018-11	1D019- 4	173A	LOGIC
K407	6	1C015- 2	1D019- 4	173A	LOGIC
K408	8	1G010- 1*	1G022-13	173A	LOGIC
K408	10	1G022-13	1I012-13	173A	LOGIC
K408	6	1H005-13	1I012-13	173A	LOGIC
K409	3	1G010-15*	1G011-13	173A	LOGIC
K409	4	1G011-13	1H009- 3	173A	LOGIC
K409	4	1H008-14	1H009- 3	173A	LOGIC
K409	2	1H007-13	1H008-14	173A	LOGIC
K409	4	1H004- 5	1H007-13	173A	LOGIC
K410	4	1H002- 1*	1H006- 6	173A	LOGIC
K410	18	1D022-12	1I011- 3	173A	LOGIC
K410	7	1H006- 6	1I003-13	173A	LOGIC
K410	6	1I003-13	1I011- 3	173A	LOGIC
K411	5	1H008-13	1I009-12	173A	LOGIC
K411	4	1H008-13	1H009- 2	173A	LOGIC
K411	3	1D001- 4	1D001-13	173A	LOGIC
K411	12	1H002-15*	1I025- 3	173A	LOGIC
K411	9	1I009-12	1I025- 3	173A	LOGIC
K411	14	1D001-13	1H009- 2	173A	LOGIC
K412	7	1H003- 3	1I003-15*	173A	LOGIC
K413	13	1G020- 2	1J010- 1*	173A	LOGIC

K413	7	1E019-11	1G020- 2	173A	LOGIC
K415	11	1I029-11	1J010- 6*	173A	LOGIC
K415	11	1G020- 3	1I029-11	173A	LOGIC
K415	11	1D019- 3	1G020- 3	173A	LOGIC
K419	11	1G022-15*	1I038- 3	173A	LOGIC
K419	20	1D018-13	1I038- 3	173A	LOGIC
K420	8	1G007- 6	1I011- 2	173A	LOGIC
K420	17	1C028-13	1G007- 6	173A	LOGIC
K420	3	1H001- 1*	1H003- 2	173A	LOGIC
K420	7	1H003- 2	1I011- 2	173A	LOGIC
K421	5	1H001-15*	1H007- 2	173A	LOGIC
K421	4	1H007- 2	1H011- 2	173A	LOGIC
K421	3	1I037- 2	1I038- 4	173A	LOGIC
K421	12	1E018- 3	1H011- 2	173A	LOGIC
K421	18	1E018- 3	1I037- 2	173A	LOGIC
K431	6	1H007- 5	1I009-11	173A	LOGIC
K431	3	1H010- 6*	1H011- 3	173A	LOGIC
K431	7	1H011-3	1I009-11		
K431	10	1E009-13	1H007-5		
K440	4	1H005-14	1H006- 1*	173A	LOGIC
K440	8	1G015-11	1H005-14	173A	LOGIC
K441	4	1H001-13	1H006-15*	173A	LOGIC
K441	5	1H001-13	1H007-11	173A	LOGIC
K441	12	1H007-11	1J026- 4	173A	LOGIC
K441	7	1H030- 4	1H040-11	173A	LOGIC
K441	2	1H040-11	1H041-11	173A	LOGIC
K441	4	1I024-10	1J026- 4	173A	LOGIC
K441	7	1H030- 4	1I024-10	173A	LOGIC
K441	5	1H005- 1*	1H012- 5	173A	LOGIC
K450	5	1G015-12	1H012- 5	173A	LOGIC
K451	6	1G002-11	1H005-15*	173A	LOGIC
K451	16	1G002-11	1J026- 5	173A	LOGIC
K451	7	1I034- 3	1J026- 5	173A	LOGIC
K470	17	1C016- 1*	1G023-14	173A	LOGIC
K470	10	1G023-14	1I038- 5	173A	LOGIC
K473	8	1B002-15*	1C015- 5	173A	LOGIC
K480	9	1I008- 6	1K019- 1*	173A	LOGIC
K490	4	1I004- 1*	1I004-14	173A	LOGIC
K491	3	1I004- 6*	1I004-12	173A	LOGIC
K492	23	1C012- 4	1I004-10*	173A	LOGIC
K493	21	1D022-11	1I004-15*	173A	LOGIC
K493	8	1C012- 2	1D022-11	173A	LOGIC
K500	3	1I015- 1*	1I016- 5	173A	LOGIC
K500	3	1I014-11	1I016- 5	173A	LOGIC
K500	3	1I014-11	1I015-14	173A	LOGIC
K501	3	1I015- 6*	1I015-12	173A	LOGIC
K501	2	1I015-12	1I016-13	173A	LOGIC
K501	3	1I014-13	1I016-13	173A	LOGIC
K502	3	1I015- 3	1I015-10*	173A	LOGIC
K503	4	1I015- 5	1I015-15*	173A	LOGIC
K510	4	1H013-14	1I010- 1*	173A	LOGIC
K510	4	1H013-14	1H015- 3	173A	LOGIC
K511	6	1H013-12	1I010-15*	173A	LOGIC
K511	4	1H013-12	1H015- 5	173A	LOGIC
K511	9	1F019- 2	1H015- 5	173A	LOGIC
K512	3	1H013-10*	1H014- 4	173A	LOGIC
K512	3	1H014- 4	1H014-13	173A	LOGIC
K512	5	1H014-13	1I010- 5	173A	LOGIC
K513	5	1H013-15*	1I010-13	173A	LOGIC
K513	14	1D016- 6	1H014- 2	173A	LOGIC
K513	8	1H014- 2	1I010-13	173A	LOGIC
K514	2	1H040-12	1H041-12	173A	LOGIC
K514	8	1G026-11	1H014- 1*	173A	LOGIC

K514	9	1G026-11	1H040-12	173A	LOGIC
K515	10	1G005- 4	1G023-12	173A	LOGIC
K515	10	1G023-12	1H041- 5	173A	LOGIC
K515	21	1B032-13	1H041- 5	173A	LOGIC
K515	7	1G005- 4	1H014- 6*	173A	LOGIC
K517	3	1B031- 3	1B031-11	173A	LOGIC
K517	7	1G019-11	1H014-15*	173A	LOGIC
K517	19	1B031-11	1G019-11	173A	LOGIC
K521	3	1I021- 4	1I021-11	173A	LOGIC
K521	5	1G021- 4	1H019- 2	173A	LOGIC
K521	15	1C016- 3	1G021- 4	173A	LOGIC
K521	6	1H019- 2	1I021- 4	173A	LOGIC
K521	9	1H018-15*	1I035- 3	173A	LOGIC
K521	8	1I021-11	1I035- 3	173A	LOGIC
K524	2	1F026- 2	1F027- 2	173A	LOGIC
K524	3	1F026-10	1F027-12	173A	LOGIC
K524	11	1F027-12	1I021- 6*	173A	LOGIC
K524	3	1F026-10	1F027- 2	173A	LOGIC
K524	6	1F017- 5	1F026- 2	173A	LOGIC
K526	11	1F023-10	1I021-10*	173A	LOGIC
K526	2	1F023-10	1F024-10	173A	LOGIC
K526	2	1F024-10	1F025-10	173A	LOGIC
K526	3	1F025- 2	1F025-10	173A	LOGIC
K526	2	1F024- 2	1F025- 2	173A	LOGIC
K526	2	1F023- 2	1F024- 2	173A	LOGIC
K528	12	1D017- 2	1G021- 6*	173A	LOGIC
K528	2	1D017- 2	1D017- 4	173A	LOGIC
K528	8	1D003- 4	1D017- 4	173A	LOGIC
K528	2	1D003- 2	1D003- 4	173A	LOGIC
K528	7	1B004-11	1D003- 2	173A	LOGIC
K528	3	1B004- 4	1B004-11	173A	LOGIC
K528	2	1B004- 2	1B004- 4	173A	LOGIC
K530	6	1H011-11	1H020- 1*	173A	LOGIC
K531	4	1H019- 3	1H020-15*	173A	LOGIC
K532	3	1H018- 4	1H019- 1*	173A	LOGIC
K532	5	1H018- 4	1I018- 2	173A	LOGIC
K532	6	1H011-12	1I018- 2	173A	LOGIC
K533	3	1H019-15*	1I018- 4	173A	LOGIC
K533	5	1H018- 3	1I018- 4	173A	LOGIC
K534	5	1H018- 1*	1I018- 3	173A	LOGIC
K535	5	1H018- 6*	1I018- 5	173A	LOGIC
K550	7	1H012-11	1H022- 1*	173A	LOGIC
K551	4	1H021- 2	1H022-15*	173A	LOGIC
K552	13	1E002-12	1H021- 1*	173A	LOGIC
K553	3	1H008-11	1H009- 4	173A	LOGIC
K553	5	1G008- 5	1H009- 4	173A	LOGIC
K553	8	1H008-11	1H021-15*	173A	LOGIC
K553	10	1G008- 5	1G027- 3	173A	LOGIC
M000	24	1B021- 1*	1H010-11	173A	LOGIC
M000	19	1H010-11	1K040-10	173A	LOGIC
M000	5	1B021-1	1C022-2	173A	LOGIC
M001	26	1B019-13	1I005-13	173A	LOGIC
M001	8	1I005-13	1I018-10*	173A	LOGIC
M002	32	1C022-4	1L017-12	173A	LOGIC
M010	26	1B022- 1*	1I018-13	173A	LOGIC
M011	11	1B022-15*	1E019-13	173A	LOGIC
M011	14	1E019-13	1I018-14	173A	LOGIC
M012	12	1I018-15*	1J039-13	173A	LOGIC
M013	3	1J038-13	1J039-15*	173A	LOGIC
M020	3	1B019-14	1B021-15*	173A	LOGIC
M100	30	1B023- 1*	1J039- 3	173A	LOGIC
M101	28	1B023-15*	1J039- 5	173A	LOGIC
P000	4	1B018- 1*	1B018-13	173A	LOGIC
P000	4	1B018-13	1C014- 2	173A	LOGIC

* Present if Std. Opt. 10278-1 is installed.

** Deleted if Std. Opt. 10278-1 is installed.

P001	3	1B018- 6*	1B018-11	173A LOGIC
P002	3	1B017-13	1B018-10*	173A LOGIC
P002	4	1B017- 3	1B017-13	173A LOGIC
P003	3	1B017-11	1B018-15*	173A LOGIC
P003	3	1B017- 5	1B017-11	173A LOGIC
P004	3	1B015- 4	1B017- 1*	173A LOGIC
P004	5	1B015- 4	1C014- 3	173A LOGIC
P005	4	1B015- 2	1B017-15*	173A LOGIC
P006	3	1B015- 1*	1B016- 3	173A LOGIC
P006	4	1B016- 3	1B016-13	173A LOGIC
P007	2	1B015- 6*	1B016- 5	173A LOGIC
P007	3	1B016- 5	1B016-11	173A LOGIC
P008	4	1B015-13	1B016- 1*	173A LOGIC
P008	4	1B015-13	1C014- 4	173A LOGIC
P009	3	1B015-11	1B016-15*	173A LOGIC
P010	3	1B014-13	1B015-10*	173A LOGIC
P010	4	1B014- 3	1B014-13	173A LOGIC
P011	3	1B014-11	1B015-15*	173A LOGIC
P011	3	1B014- 5	1B014-11	173A LOGIC
P012	3	1B013- 4	1B014- 1*	173A LOGIC
P012	5	1B013- 4	1C014- 5	173A LOGIC
P013	4	1B013- 2	1B014-15*	173A LOGIC
P014	3	1B012- 5	1B013- 1*	173A LOGIC
P015	3	1B012- 3	1B013- 6*	173A LOGIC
P016	4	1B012- 1*	1B013-13	173A LOGIC
P016	5	1B013-13	1C014-10	173A LOGIC
P017	3	1B012- 6*	1B013-11	173A LOGIC
P018	3	1B012-13	1B013-10*	173A LOGIC
P019	3	1B012-11	1B013-15*	173A LOGIC
P020	3	1B011- 4	1B012-10*	173A LOGIC
P020	7	1B011- 4	1C014-11	173A LOGIC
P021	4	1B011- 2	1B012-15*	173A LOGIC
P022	3	1B010- 4	1B011- 1*	173A LOGIC
P023	3	1B010- 2	1B011- 6*	173A LOGIC
P024	4	1B010- 1*	1B011-13	173A LOGIC
P024	5	1B011-13	1C014-12	173A LOGIC
P025	3	1B010- 6*	1B011-11	173A LOGIC
P026	3	1B010-13	1B011-10*	173A LOGIC
P027	3	1B010-11	1B011-15*	173A LOGIC
P028	3	1B009- 4	1B010-10*	173A LOGIC
P028	7	1B009- 4	1C014-13	173A LOGIC
P029	4	1B009- 2	1B010-15*	173A LOGIC
P030	3	1B008- 4	1B009- 1*	173A LOGIC
P031	3	1B008- 2	1B009- 6*	173A LOGIC
P032	4	1B008- 1*	1B009-13	173A LOGIC
P032	4	1B009-13	1C013- 2	173A LOGIC
P033	3	1B008- 6*	1B009-11	173A LOGIC
P034	3	1B008-13	1B009-10*	173A LOGIC
P035	3	1B008-11	1B009-15*	173A LOGIC
P036	3	1B007- 4	1B008-10*	173A LOGIC
P036	6	1B007- 4	1C013- 3	173A LOGIC
P037	4	1B007- 2	1B008-15*	173A LOGIC
P038	3	1B006- 4	1B007- 1*	173A LOGIC
P039	3	1B006- 2	1B007- 6*	173A LOGIC
P040	4	1B006- 1*	1B007-13	173A LOGIC
P040	5	1B007-13	1C013- 4	173A LOGIC
P041	3	1B006- 6*	1B007-11	173A LOGIC
P042	3	1B005-13	1B007-10*	173A LOGIC
P042	4	1B005- 3	1B005-13	173A LOGIC
P043	3	1B005-11	1B007-15*	173A LOGIC
P043	3	1B005- 5	1B005-11	173A LOGIC

P044	4	1B005- 1*	1B006-13	173A	LOGIC
P044	6	1B006-13	1C013- 5	173A	LOGIC
P045	3	1B005-15*	1B006-11	173A	LOGIC
P046	3	1C019- 6	1C021-10	173A	LOGIC
P046	4	1B002- 4	1B006-10*	173A	LOGIC
P046	11	1B002- 4	1C019- 6	173A	LOGIC
P047	3	1C019- 3	1C021- 4	173A	LOGIC
P047	5	1B002- 2	1B006-15*	173A	LOGIC
P047	10	1B002- 2	1C019- 3	173A	LOGIC
P049	24	1B002- 6*	1I009- 6	173A	LOGIC
P700	10	1B004- 1*	1C019- 2	173A	LOGIC
P700	2	1C019- 2	1C019- 5	173A	LOGIC
P700	3	1C019- 5	1C021- 3	173A	LOGIC
P700	2	1C021- 3	1C021- 6	173A	LOGIC
P700	3	1C021- 6	1C021-12	173A	LOGIC
P701	2	1B012- 2	1B012- 4	173A	LOGIC
P701	2	1B010- 3	1B010- 5	173A	LOGIC
P701	3	1B010- 3	1B012- 2	173A	LOGIC
P701	3	1B012- 4	1B012-12	173A	LOGIC
P701	2	1B012-12	1B012-14	173A	LOGIC
P701	3	1B002- 3	1B004- 6*	173A	LOGIC
P701	2	1B002- 3	1B002- 5	173A	LOGIC
P701	5	1B002- 5	1B010- 5	173A	LOGIC
P702	3	1B004-10*	1B006- 5	173A	LOGIC
P702	2	1B006- 3	1B006- 5	173A	LOGIC
P702	3	1B006- 3	1B008- 3	173A	LOGIC
P702	2	1B008- 3	1B008- 5	173A	LOGIC
P702	3	1B008- 5	1B008-14	173A	LOGIC
P702	2	1B008-12	1B008-14	173A	LOGIC
P702	3	1B008-12	1B010-12	173A	LOGIC
P702	2	1B010-12	1B010-14	173A	LOGIC
P703	6	1B003- 1*	1B013- 5	173A	LOGIC
P703	2	1B013- 3	1B013- 5	173A	LOGIC
P703	3	1B013- 3	1B015- 3	173A	LOGIC
P703	2	1B015- 3	1B015- 5	173A	LOGIC
P703	3	1B015- 5	1B015-14	173A	LOGIC
P703	2	1B015-12	1B015-14	173A	LOGIC
P703	3	1B015-12	1B018-12	173A	LOGIC
P703	2	1B018-12	1B018-14	173A	LOGIC
P704	5	1B003- 6*	1B009- 5	173A	LOGIC
P704	2	1B009- 3	1B009- 5	173A	LOGIC
P704	3	1B009- 3	1B011- 3	173A	LOGIC
P704	2	1B011- 3	1B011- 5	173A	LOGIC
P704	3	1B011- 5	1B011-14	173A	LOGIC
P704	2	1B011-12	1B011-14	173A	LOGIC
P704	3	1B011-12	1B013-12	173A	LOGIC
P704	2	1B013-12	1B013-14	173A	LOGIC
P705	4	1B003-10*	1B007- 3	173A	LOGIC
P705	2	1B007- 3	1B007- 5	173A	LOGIC
P705	3	1B006-12	1B007- 5	173A	LOGIC
P705	2	1B006-12	1B006-14	173A	LOGIC
P705	2	1B006-14	1B007-14	173A	LOGIC
P705	2	1B007-12	1B007-14	173A	LOGIC
P705	3	1B007-12	1B009-12	173A	LOGIC
P705	2	1B009-12	1B009-14	173A	LOGIC
P710	3	1C019-15*	1C021-11	173A	LOGIC
P710	4	1C019- 4	1C021-11	173A	LOGIC
P710	3	1C019- 4	1C020- 2	173A	LOGIC
P711	3	1C020- 1*	1C021- 5	173A	LOGIC
P711	3	1C019-10	1C021- 5	173A	LOGIC
P720	4	1C020-11	1C021- 1*	173A	LOGIC
P720	3	1C020-11	1C021-14	173A	LOGIC

P721	5	1C019- 1*	1C025-12	1738	LOGIC
P721	2	1C025-12	1C025-13	1738	LOGIC
P722	6	1B017-12	1C021-15*	1738	LOGIC
P722	2	1B016-12	1B017-12	1738	LOGIC
P722	3	1B014-12	1B016-12	1738	LOGIC
P722	3	1B014- 4	1B014-12	1738	LOGIC
P722	3	1B014- 4	1B016- 4	1738	LOGIC
P722	2	1B016- 4	1B017- 4	1738	LOGIC
P722	3	1B005- 4	1B005-12	1738	LOGIC
P722	7	1B005- 4	1B017- 4	1738	LOGIC
P723	7	1B017-10	1C025-10*	1738	LOGIC
P723	2	1B016-10	1B017-10	1738	LOGIC
P723	3	1B014-10	1B016-10	1738	LOGIC
P723	3	1B014- 2	1B014-10	1738	LOGIC
P723	3	1B014- 2	1B016- 2	1738	LOGIC
P723	2	1B016- 2	1B017- 2	1738	LOGIC
P723	3	1B005- 2	1B005-10	1738	LOGIC
P723	7	1B005- 2	1B017- 2	1738	LOGIC
P724	6	1B018- 4	1C020-10*	1738	LOGIC
P725	8	1B018- 2	1C025-15*	1738	LOGIC
P730	4	1C021- 2	1C025-11	1738	LOGIC
P730	5	1C025-14	1D019- 1*	1738	LOGIC
P730	2	1C025-11	1C025-14	1738	LOGIC
P750	3	1C014- 1*	1C017- 4	1738	LOGIC
P751	4	1C014-15*	1C017- 5	1738	LOGIC
P752	4	1C013- 1*	1C017- 6	1738	LOGIC
P753	4	1C017- 1*	1C017-13	1738	LOGIC
P754	3	1C016-10	1C017-15*	1738	LOGIC
P754	8	1B004-13	1C016-10	1738	LOGIC
P754	28	1B004-13	1I037- 3	1738	LOGIC
P755	25	1B004-15*	1I021- 3	1738	LOGIC
R000	27	1D042- 4	1L033- 1*	1738	LOGIC
R001	10	1J029- 5	1L033-10*	1738	LOGIC
R001	23	1D041- 4	1J029- 5	1738	LOGIC
R002	8	1K038- 3	1L033-15*	1738	LOGIC
R002	23	1D040- 4	1K038- 3	1738	LOGIC
R003	5	1K038-12	1L032- 1*	1738	LOGIC
R003	24	1D039- 4	1K038-12	1738	LOGIC
R004	8	1K039- 3	1L032-10*	1738	LOGIC
R004	25	1D030- 4	1K039- 3	1738	LOGIC
R005	28	1D029- 4	1L032-15*	1738	LOGIC
R006	26	1D028- 4	1L031- 1*	1738	LOGIC
R007	10	1J041-11	1L031-10*	1738	LOGIC
R007	24	1D027- 4	1J041-11	1738	LOGIC
R008	3	1K040- 6	1K040-14	1738	LOGIC
R008	7	1K040-14	1L031-15*	1738	LOGIC
R008	6	1K030- 2	1K040- 6	1738	LOGIC
R008	8	1I023-11	1K030- 2	1738	LOGIC
R008	19	1E042- 4	1I023-11	1738	LOGIC
R009	7	1K040- 5	1L030- 1*	1738	LOGIC
R009	5	1J039- 4	1K040- 5	1738	LOGIC
R009	6	1I032- 4	1J039- 4	1738	LOGIC
R009	16	1E041- 4	1I032- 4	1738	LOGIC
R010	26	1E040- 4	1L030-10*	1738	LOGIC
R011	27	1E039- 4	1L030-15*	1738	LOGIC
R012	23	1E030- 4	1L029- 1*	1738	LOGIC
R013	24	1E029- 4	1L029-10*	1738	LOGIC
R014	25	1E028- 4	1L029-15*	1738	LOGIC
R015	22	1E027- 6	1L028- 1*	1738	LOGIC
R100	5	1K028-13	1L028-10*	1738	LOGIC
R100	3	1K028- 4	1K028-13	1738	LOGIC
R100	3	1K028- 4	1K030- 4	1738	LOGIC
R101	5	1K028-14	1L028-15*	1738	LOGIC

R101	2	1K028-11	1K028-14	173A	LOGIC
R101	3	1K028-11	1K030-11	173A	LOGIC
R102	3	1K027-14	1L027- 1*	173A	LOGIC
R102	2	1K027-12	1K027-14	173A	LOGIC
R102	3	1K027-12	1K030-13	173A	LOGIC
R102	4	1K027- 5	1K030-13	173A	LOGIC
R102	2	1K027- 3	1K027- 5	173A	LOGIC
R107	5	1B024- 2	1C024- 1*	173A	LOGIC
R108	6	1B024- 4	1C024-10*	173A	LOGIC
R109	4	1B024-11	1C023- 1*	173A	LOGIC
R110	5	1B024-13	1C023-10*	173A	LOGIC
R120	6	1K031-11	1L027-10*	173A	LOGIC
R120	6	1K021-11	1K031-11	173A	LOGIC
R121	6	1K031-13	1L027-15*	173A	LOGIC
R121	7	1K021- 3	1K031-13	173A	LOGIC
R130	32	1B019-12	1L026- 1*	173A	LOGIC
R131	5	1K029-14	1L026-10*	173A	LOGIC
R131	3	1K029- 6	1K029-14	173A	LOGIC
R131	5	1J035-14	1K029- 6	173A	LOGIC
R131	4	1J033- 4	1J035-14	173A	LOGIC
R131	5	1I039-12	1J033- 4	173A	LOGIC
R132	6	1K021-12	1L026-15*	173A	LOGIC
R132	3	1K021- 4	1K021-12	173A	LOGIC
R200	21	1F016- 5	1L006- 1*	173A	LOGIC
R201	23	1F015- 5	1L006-10*	173A	LOGIC
R202	23	1F014- 5	1L006-15*	173A	LOGIC
R203	21	1F013- 5	1L005- 1*	173A	LOGIC
R204	22	1F012- 5	1L005-10*	173A	LOGIC
R205	23	1F011- 5	1L005-15*	173A	LOGIC
R206	21	1F010- 5	1L004- 1*	173A	LOGIC
R207	22	1F009- 5	1L004-10*	173A	LOGIC
R208	22	1F008- 5	1L004-15*	173A	LOGIC
R209	20	1F007- 5	1L003- 1*	173A	LOGIC
R210	21	1F006- 5	1L003-10*	173A	LOGIC
R211	22	1F005- 5	1L003-15*	173A	LOGIC
R212	20	1F004- 5	1L002- 1*	173A	LOGIC
R213	21	1F003- 5	1L002-10*	173A	LOGIC
R214	22	1F002- 5	1L002-15*	173A	LOGIC
R215	19	1F001- 5	1L001- 1*	173A	LOGIC
R216	5	1C018-6	1C024-15*		
R216	10	1C018-6	1D034-5		
R216	13	1D034-5	1G023-5		
R220	4	1L015-3	1L017-10		
R220	5	1K015-4	1L015-3		
R220	10	1J030-5	1K015-4		
R220	30	1B003-13	1J030-5		
R230	19	1I033-11	1L001-10*	173A	LOGIC
R231	20	1I034-11	1L001-15*	173A	LOGIC
R330	4	1K019-11	1L017- 1*	173A	LOGIC
R330	5	1K014- 2	1K019-11	173A	LOGIC
R400	20	1G041- 6	1K011- 1*	173A	LOGIC
R401	20	1G041-14	1K011-10*	173A	LOGIC
R402	21	1G039- 6	1K011-15*	173A	LOGIC
R403	19	1G039-14	1K010- 1*	173A	LOGIC
R404	20	1G036- 6	1K010-10*	173A	LOGIC
R405	19	1G036-14	1K010-15*	173A	LOGIC
R406	18	1G034- 6	1K009- 1*	173A	LOGIC
R407	18	1G034-14	1K009-10*	173A	LOGIC
R410	5	1I008- 5	1J003- 1*	173A	LOGIC
R410	4	1H010-12	1I008- 5	173A	LOGIC
R410	11	1H010-12	1K019- 2	173A	LOGIC
R411	7	1I007- 2	1J003-10*	173A	LOGIC
R420	8	1I001- 1	1J003-15*	173A	LOGIC
R430	6	1H003- 4	1I007- 5	173A	LOGIC
R430	5	1I007- 5	1J002- 1*	173A	LOGIC
R430	6	1H003- 4	1H012-12	173A	LOGIC
R430	13	1H012-12	1I036-12	173A	LOGIC

* Present if Std. Opt. 10278-1 is installed.

R431	18	1I036- 2	1J002-10*	173A	LOGIC
R500	7	1I012- 2	1J004- 1*	173A	LOGIC
R501	7	1I012- 5	1J004-10*	173A	LOGIC
R510	8	1H003-14	1J004-15*	173A	LOGIC
R520	3	1E017- 5	1E017-12	173A	LOGIC
R520	22	1E017-12	1K009-15*	173A	LOGIC
R521	9	1H003-12	1J002-15*	173A	LOGIC
S000	7	1B042- 1*	1C034- 2	173A	LOGIC
S001	7	1B030- 5	1B042- 6*	173A	LOGIC
S001	6	1B030- 5	1C034- 4	173A	LOGIC
S001	8	1C034- 4	1D042-13	173A	LOGIC
S001	30	1D042-13	1L014- 3	173A	LOGIC
S002	6	1B042-10*	1C034- 6	173A	LOGIC
S003	8	1B030- 4	1B042-15*	173A	LOGIC
S003	7	1B030- 4	1C034-11	173A	LOGIC
S003	7	1C034-11	1D041-13	173A	LOGIC
S003	31	1D041-13	1L014-12	173A	LOGIC
S004	8	1B041- 1*	1C034-13	173A	LOGIC
S005	7	1B030- 3	1B041- 6*	173A	LOGIC
S005	5	1B030- 3	1C033- 2	173A	LOGIC
S005	8	1C033- 2	1D040-13	173A	LOGIC
S005	30	1D040-13	1L013- 3	173A	LOGIC
S006	6	1B041-10*	1C033- 4	173A	LOGIC
S007	7	1B030- 2	1B041-15*	173A	LOGIC
S007	6	1B030- 2	1C033- 6	173A	LOGIC
S007	7	1C033- 6	1D039-13	173A	LOGIC
S007	31	1D039-13	1L013-12	173A	LOGIC
S008	8	1B040- 1*	1C033-11	173A	LOGIC
S009	7	1B030-13	1B040- 6*	173A	LOGIC
S009	6	1B030-13	1C033-13	173A	LOGIC
S009	6	1C033-13	1D030-13	173A	LOGIC
S009	28	1D030-13	1L012- 3	173A	LOGIC
S010	6	1B040-10*	1C032- 2	173A	LOGIC
S011	6	1B030-12	1B040-15*	173A	LOGIC
S011	4	1B030-12	1C032- 4	173A	LOGIC
S011	7	1C032- 4	1D029-13	173A	LOGIC
S011	29	1D029-13	1L012-12	173A	LOGIC
S012	7	1B039- 1*	1C032- 6	173A	LOGIC
S013	6	1B030-11	1B039- 6*	173A	LOGIC
S013	5	1B030-11	1C032-11	173A	LOGIC
S013	6	1C032-11	1D028-13	173A	LOGIC
S013	28	1D028-13	1L011- 3	173A	LOGIC
S014	7	1B039-10*	1C032-13	173A	LOGIC
S015	6	1B030-10	1B039-15*	173A	LOGIC
S015	4	1B030-10	1C031- 2	173A	LOGIC
S015	8	1C031- 2	1D027-13	173A	LOGIC
S015	29	1D027-13	1L011-12	173A	LOGIC
S016	7	1B037- 1*	1C031- 4	173A	LOGIC
S017	6	1B037- 6*	1C031- 6	173A	LOGIC
S017	11	1C031- 6	1E042-13	173A	LOGIC
S017	28	1E042-13	1L010- 3	173A	LOGIC
S018	6	1B037-10*	1C031-11	173A	LOGIC
S019	6	1B037-15*	1C031-13	173A	LOGIC
S019	10	1C031-13	1E041-13	173A	LOGIC
S019	29	1E041-13	1L010-12	173A	LOGIC
S020	6	1B036- 1*	1C030- 2	173A	LOGIC
S021	6	1B036- 6*	1C030- 4	173A	LOGIC
S021	11	1C030- 4	1E040-13	173A	LOGIC
S021	28	1E040-13	1L009- 3	173A	LOGIC
S022	6	1B036-10*	1C030- 6	173A	LOGIC
S023	6	1B036-15*	1C030-11	173A	LOGIC

S023	10	1C030-11	1E039-13	173A	LOGIC
S023	29	1E039-13	1L009-12	173A	LOGIC
S024	8	1B035- 1*	1C030-13	173A	LOGIC
S025	6	1B035- 6*	1C029- 2	173A	LOGIC
S025	10	1C029- 2	1E030-13	173A	LOGIC
S025	26	1E030-13	1L008- 3	173A	LOGIC
S026	5	1B035-10*	1C029- 4	173A	LOGIC
S027	5	1B035-15*	1C029- 6	173A	LOGIC
S027	9	1C029- 6	1E029-13	173A	LOGIC
S027	27	1E029-13	1L008-12	173A	LOGIC
S028	8	1B034- 1*	1C029-11	173A	LOGIC
S029	7	1B034- 6*	1C029-13	173A	LOGIC
S029	8	1C029-13	1E028-13	173A	LOGIC
S029	26	1E028-13	1L007- 3	173A	LOGIC
S030	10	1B020-11	1D034-1 M		
S031	11	1B020-13	1D034-15 M		
S031	11	1B020-13	1E027-4 M		
S031	17	1E027-4	1J024-3 M		
S700	3	1B038- 1*	1B041- 2	173A	LOGIC
S700	2	1B041- 2	1B041- 4	173A	LOGIC
S700	2	1B041- 4	1B042- 4	173A	LOGIC
S700	2	1B042- 2	1B042- 4	173A	LOGIC
S700	3	1B042- 2	1B042-11	173A	LOGIC
S700	2	1B042-11	1B042-13	173A	LOGIC
S700	2	1B041-13	1B042-13	173A	LOGIC
S700	2	1B041-11	1B041-13	173A	LOGIC
S701	3	1B038- 6*	1B040- 4	173A	LOGIC
S701	2	1B040- 2	1B040- 4	173A	LOGIC
S701	2	1B039- 2	1B040- 2	173A	LOGIC
S701	2	1B039- 2	1B039- 4	173A	LOGIC
S701	3	1B039- 4	1B039-13	173A	LOGIC
S701	2	1B039-11	1B039-13	173A	LOGIC
S701	2	1B039-11	1B040-11	173A	LOGIC
S701	2	1B040-11	1B040-13	173A	LOGIC
S702	2	1B037-11	1B038-10*	173A	LOGIC
S702	2	1B037-11	1B037-13	173A	LOGIC
S702	2	1B036-13	1B037-13	173A	LOGIC
S702	2	1B036-11	1B036-13	173A	LOGIC
S702	3	1B036- 4	1B036-11	173A	LOGIC
S702	2	1B036- 2	1B036- 4	173A	LOGIC
S702	2	1B036- 2	1B037- 2	173A	LOGIC
S702	2	1B037- 2	1B037- 4	173A	LOGIC
S703	3	1B035-13	1B038-15*	173A	LOGIC
S703	2	1B035-11	1B035-13	173A	LOGIC
S703	3	1B035- 2	1B035-11 M	173A	LOGIC
S703	2	1B035- 2	1B035- 4	173A	LOGIC
S703	2	1B034- 4	1B035- 4 M	173A	LOGIC
S703	2	1B034- 2	1B034- 4	173A	LOGIC
S703	3	1B035-4	1B035-11 M		
S703	2	1B034-2	1B035-2 M		
S703	8	1B034-4	1D034-4 M		
S703	3	1D034-4	1D034-10 M		
S740	3	1B032- 1*	1B033- 6	173A	LOGIC
S741	4	1B033- 1*	1B038- 2	173A	LOGIC
S741	2	1B038- 2	1B038- 4	173A	LOGIC
S741	3	1B038- 4	1B038-11	173A	LOGIC
S741	2	1B038-11	1B038-13	173A	LOGIC
S750	4	1B032- 4	1B032-15*	173A	LOGIC
S750	15	1B032- 4	1F026- 3	173A	LOGIC
S750	3	1F026- 3	1F027- 6	173A	LOGIC
S750	3	1F026-11	1F027- 6	173A	LOGIC
S750	3	1F026-11	1F027-13	173A	LOGIC
S760	3	1B031- 1*	1B032- 3	173A	LOGIC
S760	15	1B032- 3	1F028- 4	173A	LOGIC
S760	4	1F024- 4	1F028- 4	173A	LOGIC
S760	3	1F024- 4	1F024-12	173A	LOGIC
S767	6	1B030- 1*	1C025- 3	173A	LOGIC
S768	5	1B030-15*	1C025- 2	173A	LOGIC
S769	5	1B026- 4	1C025- 1*	173A	LOGIC
S770	16	1B032- 2	1F024- 3	173A	LOGIC

M Present if Std. Opt. 10278-1 is installed.
MM Deleted if Std. Opt. 10278-1 is installed.

S770	3	1F024- 3	1F024-11	173A	LOGIC
S770	4	1F024-11	1F028-12	173A	LOGIC
S770	4	1B031-15*	1B032- 2	173A	LOGIC
U007	12	1J041-10*	1K020-14	173A	LOGIC
U008	7	1J038- 2	1K030- 1*	173A	LOGIC
U008	12	1J038- 2	1K020-13	173A	LOGIC
U009	6	1I032- 6*	1J039- 2	173A	LOGIC
U009	7	1J039- 2	1K040-13	173A	LOGIC
U100	3	1K028- 2	1K030- 6*	173A	LOGIC
U100	4	1K028- 2	1K028-12	173A	LOGIC
U101	3	1K028- 5	1K030-10*	173A	LOGIC
U101	2	1K028- 3	1K028- 5	173A	LOGIC
U102	4	1K026-14	1K030-15*	173A	LOGIC
U102	2	1K026-12	1K026-14	173A	LOGIC
U102	3	1K026- 5	1K026-12	173A	LOGIC
U102	2	1K026- 3	1K026- 5	173A	LOGIC
U131	3	1J033- 6*	1J034-12	173A	LOGIC
U131	6	1I039-14	1J034-12	173A	LOGIC
W000	6	1C034- 5	1C042- 1*	173A	LOGIC
W001	5	1C034- 3	1C042- 6*	173A	LOGIC
W002	5	1C034-12	1C042-10*	173A	LOGIC
W003	6	1C034-10	1C042-15*	173A	LOGIC
W004	5	1C033- 3	1C041- 1*	173A	LOGIC
W005	5	1C034-14	1C041- 6*	173A	LOGIC
W006	5	1C033-10	1C041-10*	173A	LOGIC
W007	6	1C033- 5	1C041-15*	173A	LOGIC
W008	6	1C033-14	1C040- 1*	173A	LOGIC
W009	5	1C033-12	1C040- 6*	173A	LOGIC
W010	6	1C032- 5	1C040-10*	173A	LOGIC
W011	6	1C032- 3	1C040-15*	173A	LOGIC
W012	6	1C032-12	1C039- 1*	173A	LOGIC
W013	5	1C032-10	1C039- 6*	173A	LOGIC
W014	6	1C031- 3	1C039-10*	173A	LOGIC
W015	5	1C032-14	1C039-15*	173A	LOGIC
W016	5	1C031-10	1C037- 1*	173A	LOGIC
W017	5	1C031- 5	1C037- 6*	173A	LOGIC
W018	5	1C031-14	1C037-10*	173A	LOGIC
W019	5	1C031-12	1C037-15*	173A	LOGIC
W020	5	1C030- 5	1C036- 1*	173A	LOGIC
W021	5	1C030- 3	1C036- 6*	173A	LOGIC
W022	5	1C030-12	1C036-10*	173A	LOGIC
W023	5	1C030-10	1C036-15*	173A	LOGIC
W024	5	1C029- 3	1C035- 1*	173A	LOGIC
W025	5	1C030-14	1C035- 6*	173A	LOGIC
W026	4	1C029-10	1C035-10*	173A	LOGIC
W027	5	1C029- 5	1C035-15*	173A	LOGIC
W028	7	1B034-10*	1C029-14	173A	LOGIC
W029	6	1B034-15*	1C029-12	173A	LOGIC
W030	3	1B020-14	1C018-1 *		
W031	6	1B020-12	1C018-15 *		
W100	9	1B020-2	1C034-1 *		
W100	6	1C026-13	1C034- 1* **	173A	LOGIC
W101	5	1C026-14	1C034-15* **	173A	LOGIC
W101	10	1B020-3	1C034-15 *		
W102	5	1C027- 2	1C033- 1*	173A	LOGIC
W103	5	1C027- 3	1C033-15*	173A	LOGIC
W104	4	1C027- 4	1C032- 1*	173A	LOGIC
W105	5	1C027- 5	1C032-15*	173A	LOGIC
W106	4	1C027- 6	1C031- 1*	173A	LOGIC
W107	4	1C027-10	1C031-15*	173A	LOGIC
W108	4	1C027-11	1C030- 1*	173A	LOGIC
W109	3	1C027-12	1C030-15*	173A	LOGIC
W110	4	1C027-13	1C029- 1*	173A	LOGIC
W111	3	1C027-14	1C029-15*	173A	LOGIC
W112	7	1B020-1	1C028-2 *		
W112	4	1C026-15*	1C028- 2 **	173A	LOGIC
W113	3	1C027- 1*	1C028- 4	173A	LOGIC

* Present if Std. Opt. 10278-1 is installed.

** Deleted if Std. Opt. 10278-1 is installed.

W114	4	1C027-15*	1C028- 6	173A	LOGIC
W115	3	1B027-13	1C028- 1*	173A	LOGIC
W115	20	1B027-13	1M027-14	173A	LOGIC
W115	5	1M027-14	1I028-13	173A	LOGIC
W115	4	1I028-13	1I032-14	173A	LOGIC
W116	16	1G005- 2	1M034-13	173A	LOGIC
W116	11	1E022-11	1G005- 2	173A	LOGIC
W116	11	1B027-15*	1E022-11	173A	LOGIC
W117	4	1B020-4	1B020-15 *		
W120	3	1C025- 6*	1C028- 3	173A	LOGIC
W120	2	1C028- 3	1C028- 5	173A	LOGIC
W120	3	1C028- 5	1C028-10	173A	LOGIC
W700	3	1C038- 1*	1C041- 2	173A	LOGIC
W700	2	1C041- 2	1C041- 4	173A	LOGIC
W700	2	1C041- 4	1C042- 4	173A	LOGIC
W700	2	1C042- 2	1C042- 4	173A	LOGIC
W700	3	1C042- 2	1C042-11	173A	LOGIC
W700	2	1C042-11	1C042-13	173A	LOGIC
W700	2	1C041-13	1C042-13	173A	LOGIC
W700	2	1C041-11	1C041-13	173A	LOGIC
W701	3	1C038- 6*	1C040- 4	173A	LOGIC
W701	2	1C040- 2	1C040- 4	173A	LOGIC
W701	2	1C039- 2	1C040- 2	173A	LOGIC
W701	2	1C039- 2	1C039- 4	173A	LOGIC
W701	3	1C039- 4	1C039-13	173A	LOGIC
W701	2	1C039-11	1C039-13	173A	LOGIC
W701	2	1C039-11	1C040-11	173A	LOGIC
W701	2	1C040-11	1C040-13	173A	LOGIC
W702	2	1C037-11	1C038-10*	173A	LOGIC
W702	2	1C037-11	1C037-13	173A	LOGIC
W702	2	1C036-13	1C037-13	173A	LOGIC
W702	2	1C036-11	1C036-13	173A	LOGIC
W702	3	1C036- 4	1C036-11	173A	LOGIC
W702	2	1C036- 2	1C036- 4	173A	LOGIC
W702	2	1C036- 2	1C037- 2	173A	LOGIC
W702	2	1C037- 2	1C037- 4	173A	LOGIC
W703	3	1C035-13	1C038-15*	173A	LOGIC
W703	2	1C035-11	1C035-13	173A	LOGIC
W703	3	1C035- 4	1C035-11	173A	LOGIC
W703	2	1C035- 2	1C035- 4	173A	LOGIC
W703	9	1B034-11	1C018-4 *		
W703	3	1C018-4	1C018-10 *		
W703	17	1C018-10	1G001-10 *		
W703	3	1B034-13	1C035- 2	173A	LOGIC
W703	2	1B034-11	1B034-13	173A	LOGIC
W703	24	1B034-11	1G001-10 **		
W740	2	1C026- 1*	1C026- 4	173A	LOGIC
W741	7	1C026- 6*	1C038- 2	173A	LOGIC
W741	2	1C038- 2	1C038- 4	173A	LOGIC
W741	3	1C038- 4	1C038-11	173A	LOGIC
W741	2	1C038-11	1C038-13	173A	LOGIC
W750	3	1C026- 2	1C026-10*	173A	LOGIC
X000	9	1B042- 5	1D033- 1*	173A	LOGIC
X000	5	1F042- 5	1G042- 5	173A	LOGIC
X000	14	1B042- 5	1F042- 5	173A	LOGIC
X001	10	1B042- 3	1D033- 6*	173A	LOGIC
X001	5	1F042- 3	1G042- 3	173A	LOGIC
X001	14	1B042- 3	1F042- 3	173A	LOGIC
X002	9	1B042-14	1D033-10*	173A	LOGIC
X002	5	1F042-14	1G042-14	173A	LOGIC
X002	14	1B042-14	1F042-14	173A	LOGIC
X003	10	1B042-12	1D033-15*	173A	LOGIC
X003	5	1F042-12	1G042-12	173A	LOGIC
X003	14	1B042-12	1F042-12	173A	LOGIC
X004	9	1B041- 5	1D032- 1*	173A	LOGIC
X004	6	1F041- 5	1G038- 5	173A	LOGIC

** Present if Std. Opt. 10278-1 is installed.
 *** Deleted if Std. Opt. 10278-1 is installed.

X004	14	1B041- 5	1F041- 5	173A	LOGIC
X005	10	1B041- 3	1D032- 6*	173A	LOGIC
X005	6	1F041- 3	1G038- 3	173A	LOGIC
X005	14	1B041- 3	1F041- 3	173A	LOGIC
X006	9	1B041-14	1D032-10*	173A	LOGIC
X006	6	1F041-14	1G038-14	173A	LOGIC
X006	14	1B041-14	1F041-14	173A	LOGIC
X007	10	1B041-12	1D032-15*	173A	LOGIC
X007	6	1F041-12	1G038-12	173A	LOGIC
X007	14	1B041-12	1F041-12	173A	LOGIC
X008	12	1B040- 5	1D021- 1*	173A	LOGIC
X008	6	1F040- 5	1G037- 5	173A	LOGIC
X008	14	1B040- 5	1F040- 5	173A	LOGIC
X009	13	1B040- 3	1D021- 6*	173A	LOGIC
X009	6	1F040- 3	1G037- 3	173A	LOGIC
X009	14	1B040- 3	1F040- 3	173A	LOGIC
X010	12	1B040-14	1D021-10*	173A	LOGIC
X010	6	1F040-14	1G037-14	173A	LOGIC
X010	14	1B040-14	1F040-14	173A	LOGIC
X011	13	1B040-12	1D021-15*	173A	LOGIC
X011	6	1F040-12	1G037-12	173A	LOGIC
X011	14	1B040-12	1F040-12	173A	LOGIC
X012	12	1B039- 5	1D020- 1*	173A	LOGIC
X012	6	1F039- 5	1G033- 5	173A	LOGIC
X012	14	1B039- 5	1F039- 5	173A	LOGIC
X013	13	1B039- 3	1D020- 6*	173A	LOGIC
X013	6	1F039- 3	1G033- 3	173A	LOGIC
X013	14	1B039- 3	1F039- 3	173A	LOGIC
X014	12	1B039-14	1D020-10*	173A	LOGIC
X014	6	1F039-14	1G033-14	173A	LOGIC
X014	14	1B039-14	1F039-14	173A	LOGIC
X015	13	1B039-12	1D020-15*	173A	LOGIC
X015	6	1F039-12	1G033-12	173A	LOGIC
X015	14	1B039-12	1F039-12	173A	LOGIC
X016	9	1E033- 1*	1G031- 5	173A	LOGIC
X016	6	1F037- 5	1G031- 5	173A	LOGIC
X016	14	1B037- 5	1F037- 5	173A	LOGIC
X017	8	1E033- 6*	1G031- 3	173A	LOGIC
X017	6	1F037- 3	1G031- 3	173A	LOGIC
X017	14	1B037- 3	1F037- 3	173A	LOGIC
X018	9	1E033-10*	1G031-14	173A	LOGIC
X018	6	1F037-14	1G031-14	173A	LOGIC
X018	14	1B037-14	1F037-14	173A	LOGIC
X019	8	1E033-15*	1G031-12	173A	LOGIC
X019	6	1F037-12	1G031-12	173A	LOGIC
X019	14	1B037-12	1F037-12	173A	LOGIC
X020	9	1E032- 1*	1G030- 5	173A	LOGIC
X020	6	1F036- 5	1G030- 5	173A	LOGIC
X020	14	1B036- 5	1F036- 5	173A	LOGIC
X021	8	1E032- 6*	1G030- 3	173A	LOGIC
X021	6	1F036- 3	1G030- 3	173A	LOGIC
X021	14	1B036- 3	1F036- 3	173A	LOGIC
X022	9	1E032-10*	1G030-14	173A	LOGIC
X022	6	1F036-14	1G030-14	173A	LOGIC
X022	14	1B036-14	1F036-14	173A	LOGIC
X023	8	1E032-15*	1G030-12	173A	LOGIC
X023	6	1F036-12	1G030-12	173A	LOGIC
X023	14	1B036-12	1F036-12	173A	LOGIC
X024	10	1E021- 1*	1G029- 5	173A	LOGIC
X024	6	1F035- 5	1G029- 5	173A	LOGIC
X024	14	1B035- 5	1F035- 5	173A	LOGIC

X025	9	1E021- 6*	1G029- 3	173A	LOGIC
X025	6	1F035- 3	1G029- 3	173A	LOGIC
X025	14	1B035- 3	1F035- 3	173A	LOGIC
X026	10	1E021-10*	1G029-14	173A	LOGIC
X026	6	1F035-14	1G029-14	173A	LOGIC
X026	14	1B035-14	1F035-14	173A	LOGIC
X027	9	1E021-15*	1G029-12	173A	LOGIC
X027	6	1F035-12	1G029-12	173A	LOGIC
X027	14	1B035-12	1F035-12	173A	LOGIC
X028	10	1E020- 1*	1G028- 5	173A	LOGIC
X028	6	1F034- 5	1G028- 5	173A	LOGIC
X028	14	1B034- 5	1F034- 5	173A	LOGIC
X029	9	1E020- 6*	1G028- 3	173A	LOGIC
X029	6	1F034- 3	1G028- 3	173A	LOGIC
X029	14	1B034- 3	1F034- 3	173A	LOGIC
X030	10	1E020-10*	1F034-14	173A	LOGIC
X030	6	1F034-14	1G028-14	173A	LOGIC
X030	9	1D034-11	1E020-10	×	
X030	8	1D034-11	1F034-14	×	
X031	9	1E020-15	1G028-12	×	
X031	9	1D034-6	1F034-12	×	
X031	9	1E020-15*	1F034-12	×	
X031	6	1F034-12	1G028-12	×	
X100	5	1D038-12	1D042- 1*		173A LOGIC
X100	3	1D038- 5	1D038-12		173A LOGIC
X100	3	1D037- 2	1D038- 5		173A LOGIC
X100	3	1D036- 5	1D037- 2		173A LOGIC
X100	4	1D031- 3	1D036- 5		173A LOGIC
X101	4	1D037- 4	1D041- 1*		173A LOGIC
X101	3	1D037- 4	1D038- 6		173A LOGIC
X101	3	1D038- 6	1D038-13		173A LOGIC
X101	3	1D036-13	1D038-13		173A LOGIC
X102	4	1D035- 5	1D040- 1*		173A LOGIC
X102	3	1D035- 5	1D037-11		173A LOGIC
X102	3	1D037-11	1D038-14		173A LOGIC
X103	4	1D037-13	1D039- 1*		173A LOGIC
X103	3	1D035-13	1D037-13		173A LOGIC
X103	14	1D035-13	1G021-11		173A LOGIC
X104	3	1D030- 1*	1D031- 5		173A LOGIC
X104	4	1D026- 5	1D031- 5		173A LOGIC
X104	3	1D025- 2	1D026- 5		173A LOGIC
X104	3	1D024- 5	1D025- 2		173A LOGIC
X104	4	1D024- 5	1D026-12		173A LOGIC
X105	4	1D025- 4	1D029- 1*		173A LOGIC
X105	3	1D025- 4	1D026- 6		173A LOGIC
X105	3	1D026- 6	1D026-13		173A LOGIC
X105	3	1D024-13	1D026-13		173A LOGIC
X106	4	1D023- 5	1D028- 1*		173A LOGIC
X106	3	1D023- 5	1D025-11		173A LOGIC
X106	3	1D025-11	1D026-14		173A LOGIC
X107	4	1D025-13	1D027- 1*		173A LOGIC
X107	3	1D023-13	1D025-13		173A LOGIC
X108	5	1E038-12	1E042- 1*		173A LOGIC
X108	3	1E038- 5	1E038-12		173A LOGIC
X108	3	1E037- 2	1E038- 5		173A LOGIC
X108	3	1E036- 5	1E037- 2		173A LOGIC
X108	5	1D031-12	1E036- 5		173A LOGIC
X109	4	1E037- 4	1E041- 1*		173A LOGIC
X109	3	1E037- 4	1E038- 6		173A LOGIC
X109	3	1E038- 6	1E038-13		173A LOGIC
X109	3	1E036-13	1E038-13		173A LOGIC
X110	4	1E035- 5	1E040- 1*		173A LOGIC
X110	3	1E035- 5	1E037-11		173A LOGIC
X110	3	1E037-11	1E038-14		173A LOGIC
X111	4	1E037-13	1E039- 1*		173A LOGIC
X111	3	1E035-13	1E037-13		173A LOGIC

× Present if Std. Opt. 10278-1 is installed.
 ×× Deleted if Std. Opt. 10278-1 is installed.

X111	11	1E035-13	1G021-13	173A	LOGIC
X112	3	1D031-14	1E030- 1*	173A	LOGIC
X112	5	1D031-14	1E025- 2	173A	LOGIC
X112	3	1E024- 5	1E025- 2	173A	LOGIC
X112	3	1E024- 5	1E026- 5	173A	LOGIC
X112	3	1E026- 5	1E026-12	173A	LOGIC
X113	4	1E025- 4	1E029- 1*	173A	LOGIC
X113	3	1E025- 4	1E026- 6	173A	LOGIC
X113	3	1E026- 6	1E026-13	173A	LOGIC
X113	3	1E024-13	1E026-13	173A	LOGIC
X114	4	1E023- 5	1E028- 1*	173A	LOGIC
X114	3	1E023- 5	1E025-11	173A	LOGIC
X114	3	1E025-11	1E026-14	173A	LOGIC
X115	4	1E025-13	1E027- 1*	173A	LOGIC
X115	3	1E023-13	1E025-13	173A	LOGIC
X120	5	1D036- 6	1E031- 1*	173A	LOGIC
X120	3	1D036- 6	1D037- 3	173A	LOGIC
X121	5	1D031- 1*	1D037- 5	173A	LOGIC
X121	4	1D036-14	1D037- 5	173A	LOGIC
X122	4	1D035- 6	1D038- 1*	173A	LOGIC
X122	3	1D035- 6	1D037-12	173A	LOGIC
X123	2	1D037-14	1D038-15*	173A	LOGIC
X123	3	1D035-14	1D037-14	173A	LOGIC
X123	10	1D035-14	1F021- 2	173A	LOGIC
X124	6	1D024- 6	1E031- 6*	173A	LOGIC
X124	3	1D024- 6	1D025- 3	173A	LOGIC
X125	5	1D025- 5	1D031- 6*	173A	LOGIC
X125	4	1D024-14	1D025- 5	173A	LOGIC
X126	4	1D023- 6	1D026- 1*	173A	LOGIC
X126	3	1D023- 6	1D025-12	173A	LOGIC
X127	2	1D025-14	1D026-15*	173A	LOGIC
X127	3	1D023-14	1D025-14	173A	LOGIC
X128	4	1E031-10*	1E036- 6	173A	LOGIC
X128	3	1E036- 6	1E037- 3	173A	LOGIC
X129	6	1D031-10*	1E037- 5	173A	LOGIC
X129	4	1E036-14	1E037- 5	173A	LOGIC
X130	4	1E035- 6	1E038- 1*	173A	LOGIC
X130	3	1E035- 6	1E037-12	173A	LOGIC
X131	2	1E037-14	1E038-15*	173A	LOGIC
X131	3	1E035-14	1E037-14	173A	LOGIC
X131	8	1E035-14	1F021- 4	173A	LOGIC
X132	5	1E025- 3	1E031-15*	173A	LOGIC
X132	3	1E024- 6	1E025- 3	173A	LOGIC
X133	5	1D031-15*	1E025- 5	173A	LOGIC
X133	4	1E024-14	1E025- 5	173A	LOGIC
X134	4	1E023- 6	1E026- 1*	173A	LOGIC
X134	3	1E023- 6	1E025-12	173A	LOGIC
X135	2	1E025-14	1E026-15*	173A	LOGIC
X135	3	1E023-14	1E025-14	173A	LOGIC
X140	2	1D036- 2	1D037- 1*	173A	LOGIC
X141	3	1D036-11	1D037- 6*	173A	LOGIC
X142	4	1D035- 2	1D037-10*	173A	LOGIC
X143	3	1D035-11	1D037-15*	173A	LOGIC
X144	2	1D024- 2	1D025- 1*	173A	LOGIC
X145	3	1D024-11	1D025- 6*	173A	LOGIC
X146	4	1D023- 2	1D025-10*	173A	LOGIC
X147	3	1D023-11	1D025-15*	173A	LOGIC
X148	2	1E036- 2	1E037- 1*	173A	LOGIC
X149	3	1E036-11	1E037- 6*	173A	LOGIC
X150	4	1E035- 2	1E037-10*	173A	LOGIC
X151	3	1E035-11	1E037-15*	173A	LOGIC
X152	2	1E024- 2	1E025- 1*	173A	LOGIC

X153	3	1E024-11	1E025- 6*	173A	LOGIC
X154	4	1E023- 2	1E025-10*	173A	LOGIC
X155	3	1E023-11	1E025-15*	173A	LOGIC
X160	4	1D033- 5	1D036- 1*	173A	LOGIC
X160	6	1D033- 5	1D042-14	173A	LOGIC
X161	3	1D033-14	1D036-15*	173A	LOGIC
X161	5	1D033-14	1D041-14	173A	LOGIC
X162	4	1D032- 5	1D035- 1*	173A	LOGIC
X162	6	1D032- 5	1D040-14	173A	LOGIC
X163	3	1D032-14	1D035-15*	173A	LOGIC
X163	5	1D032-14	1D039-14	173A	LOGIC
X164	4	1D021- 5	1D024- 1*	173A	LOGIC
X164	6	1D021- 5	1D030-14	173A	LOGIC
X165	3	1D021-14	1D024-15*	173A	LOGIC
X165	5	1D021-14	1D029-14	173A	LOGIC
X166	4	1D020- 5	1D023- 1*	173A	LOGIC
X166	6	1D020- 5	1D028-14	173A	LOGIC
X167	3	1D020-14	1D023-15*	173A	LOGIC
X167	5	1D020-14	1D027-14	173A	LOGIC
X168	4	1E033- 5	1E036- 1*	173A	LOGIC
X168	6	1E033- 5	1E042-14	173A	LOGIC
X169	3	1E033-14	1E036-15*	173A	LOGIC
X169	5	1E033-14	1E041-14	173A	LOGIC
X170	4	1E032- 5	1E035- 1*	173A	LOGIC
X170	6	1E032- 5	1E040-14	173A	LOGIC
X171	3	1E032-14	1E035-15*	173A	LOGIC
X171	5	1E032-14	1E039-14	173A	LOGIC
X172	4	1E021- 5	1E024- 1*	173A	LOGIC
X172	6	1E021- 5	1E030-14	173A	LOGIC
X173	3	1E021-14	1E024-15*	173A	LOGIC
X173	5	1E021-14	1E029-14	173A	LOGIC
X174	4	1E020- 5	1E023- 1*	173A	LOGIC
X174	6	1E020- 5	1E028-14	173A	LOGIC
X175	3	1E020-14	1E023-15*	173A	LOGIC
X175	5	1E020-14	1E027-14	173A	LOGIC
X180	7	1D033- 3	1D042-15*	173A	LOGIC
X181	5	1D033-12	1D041-15*	173A	LOGIC
X182	6	1D032- 3	1D040-15*	173A	LOGIC
X183	5	1D032-12	1D039-15*	173A	LOGIC
X184	7	1D021- 3	1D030-15*	173A	LOGIC
X185	5	1D021-12	1D029-15*	173A	LOGIC
X186	6	1D020- 3	1D028-15*	173A	LOGIC
X187	5	1D020-12	1D027-15*	173A	LOGIC
X188	7	1E033- 3	1E042-15*	173A	LOGIC
X189	5	1E033-12	1E041-15*	173A	LOGIC
X190	6	1E032- 3	1E040-15*	173A	LOGIC
X191	5	1E032-12	1E039-15*	173A	LOGIC
X192	7	1E021- 3	1E030-15*	173A	LOGIC
X193	5	1E021-12	1E029-15*	173A	LOGIC
X194	6	1E020- 3	1E028-15*	173A	LOGIC
X195	5	1E020-12	1E027-15*	173A	LOGIC
X200	10	1D039- 3	1F027- 1*	173A	LOGIC
X200	2	1D039- 3	1D040- 3	173A	LOGIC
X200	2	1D040- 3	1D041- 3	173A	LOGIC
X200	2	1D041- 3	1D042- 3	173A	LOGIC
X201	8	1D027- 3	1F026- 1*	173A	LOGIC
X201	2	1D027- 3	1D028- 3	173A	LOGIC
X201	2	1D028- 3	1D029- 3	173A	LOGIC
X201	2	1D029- 3	1D030- 3	173A	LOGIC
X202	9	1E039- 3	1F027-15*	173A	LOGIC
X202	2	1E039- 3	1E040- 3	173A	LOGIC
X202	2	1E040- 3	1E041- 3	173A	LOGIC

X202	2	1E041- 3	1E042- 3	173A LOGIC
X203	7	1E027- 5	1F026-15*	173A LOGIC
X203	3	1E027- 5	1E028- 3	173A LOGIC
X203	2	1E028- 3	1E029- 3	173A LOGIC
X203	2	1E029- 3	1E030- 3	173A LOGIC
X220	7	1D027-10	1F025- 1*	173A LOGIC
X220	2	1D027-10	1D028-10	173A LOGIC
X220	2	1D028-10	1D029-10	173A LOGIC
X220	2	1D029-10	1D030-10	173A LOGIC
X220	6	1D030-10	1D039-10	173A LOGIC
X220	2	1D039-10	1D040-10	173A LOGIC
X220	2	1D040-10	1D041-10	173A LOGIC
X220	2	1D041-10	1D042-10	173A LOGIC
X221	6	1E027-12	1F025-15*	173A LOGIC
X221	3	1E027-12	1E028-10	173A LOGIC
X221	2	1E028-10	1E029-10	173A LOGIC
X221	2	1E029-10	1E030-10	173A LOGIC
X221	6	1E030-10	1E039-10	173A LOGIC
X221	2	1E039-10	1E040-10	173A LOGIC
X221	2	1E040-10	1E041-10	173A LOGIC
X221	2	1E041-10	1E042-10	173A LOGIC
X230	7	1D027-12	1F024- 1*	173A LOGIC
X230	2	1D027-12	1D028-12	173A LOGIC
X230	2	1D028-12	1D029-12	173A LOGIC
X230	2	1D029-12	1D030-12	173A LOGIC
X230	6	1D030-12	1D039-12	173A LOGIC
X230	2	1D039-12	1D040-12	173A LOGIC
X230	2	1D040-12	1D041-12	173A LOGIC
X230	2	1D041-12	1D042-12	173A LOGIC
X231	7	1E027-3	1F024-15 * 1E028-12 * 1F024-15* **	173A LOGIC
X231	4	1E027-3	1E028-12 *	173A LOGIC
X231	6	1E028-12	1E029-12	173A LOGIC
X231	2	1E028-12	1E029-12	173A LOGIC
X231	2	1E029-12	1E030-12	173A LOGIC
X231	6	1E030-12	1E039-12	173A LOGIC
X231	2	1E039-12	1E040-12	173A LOGIC
X231	2	1E040-12	1E041-12	173A LOGIC
X231	2	1E041-12	1E042-12	173A LOGIC
X240	8	1D027- 5	1F023- 1*	173A LOGIC
X240	2	1D027- 5	1D028- 5	173A LOGIC
X240	2	1D028- 5	1D029- 5	173A LOGIC
X240	2	1D029- 5	1D030- 5	173A LOGIC
X240	6	1D030- 5	1D039- 5	173A LOGIC
X240	2	1D039- 5	1D040- 5	173A LOGIC
X240	2	1D040- 5	1D041- 5	173A LOGIC
X240	2	1D041- 5	1D042- 5	173A LOGIC
X241	7	1E027-10	1F023-15*	173A LOGIC
X241	3	1E027-10	1E028- 5	173A LOGIC
X241	2	1E028- 5	1E029- 5	173A LOGIC
X241	2	1E029- 5	1E030- 5	173A LOGIC
X241	6	1E030- 5	1E039- 5	173A LOGIC
X241	2	1E039- 5	1E040- 5	173A LOGIC
X241	2	1E040- 5	1E041- 5	173A LOGIC
X241	2	1E041- 5	1E042- 5	173A LOGIC
X247	3	1E019- 5	1E019-10*	173A LOGIC
X247	2	1E019- 3	1E019- 5	173A LOGIC
X247	10	1E002-13	1E019- 3	173A LOGIC
X248	7	1E019- 2	1F028- 1*	173A LOGIC
X249	9	1E019- 4	1F028-15*	173A LOGIC
X250	5	1D031- 2	1E031- 2	173A LOGIC
X250	5	1D031- 2	1D038- 4	173A LOGIC
X250	3	1D038- 4	1D038-11	173A LOGIC
X250	7	1E019- 1*	1E031- 2	173A LOGIC

* Present if Std. Opt. 10278-1 is installed.
 ** Deleted if Std. Opt. 10278-1 is installed.

X251	7	1E031- 4	1F021- 1*	173A	LOGIC
X251	5	1D026-11	1E031- 4	173A	LOGIC
X251	3	1D026- 4	1D026-11	173A	LOGIC
X251	4	1D026- 4	1D031- 4	173A	LOGIC
X252	3	1E038- 4	1E038-11	173A	LOGIC
X252	5	1D031-11	1E031-11	173A	LOGIC
X252	8	1D031-11	1E019- 6*	173A	LOGIC
X252	5	1E031-11	1E038-11	173A	LOGIC
X253	5	1E026-11	1F021- 6*	173A	LOGIC
X253	3	1E026- 4	1E026-11	173A	LOGIC
X253	5	1E026- 4	1E031-13	173A	LOGIC
X253	5	1D031-13	1E031-13	173A	LOGIC
X255	6	1F021- 3	1G021-10*	173A	LOGIC
X257	7	1F021- 5	1G021-15*	173A	LOGIC
X260	3	1F020-13	1F021-10*	173A	LOGIC
X260	2	1F020-11	1F020-13	173A	LOGIC
X260	3	1F020- 4	1F020-11	173A	LOGIC
X260	2	1F020- 2	1F020- 4	173A	LOGIC
X261	9	1D032-13	1F020- 1*	173A	LOGIC
X261	2	1D032-11	1D032-13	173A	LOGIC
X261	2	1D032-11	1D033-11	173A	LOGIC
X261	2	1D033-11	1D033-13	173A	LOGIC
X261	3	1D033- 4	1D033-13	173A	LOGIC
X261	2	1D033- 2	1D033- 4	173A	LOGIC
X261	2	1D032- 2	1D033- 2	173A	LOGIC
X261	2	1D032- 2	1D032- 4	173A	LOGIC
X262	7	1D021-11	1F020- 6*	173A	LOGIC
X262	2	1D021-11	1D021-13	173A	LOGIC
X262	2	1D020-13	1D021-13	173A	LOGIC
X262	2	1D020-11	1D020-13	173A	LOGIC
X262	3	1D020- 2	1D020-11	173A	LOGIC
X262	2	1D020- 2	1D020- 4	173A	LOGIC
X262	2	1D020- 4	1D021- 4	173A	LOGIC
X262	2	1D021- 2	1D021- 4	173A	LOGIC
X263	8	1E032-13	1F020-10*	173A	LOGIC
X263	2	1E032-11	1E032-13	173A	LOGIC
X263	2	1E032-11	1E033-11	173A	LOGIC
X263	2	1E033-11	1E033-13	173A	LOGIC
X263	3	1E033- 4	1E033-13	173A	LOGIC
X263	2	1E033- 2	1E033- 4	173A	LOGIC
X263	2	1E032- 2	1E033- 2	173A	LOGIC
X263	2	1E032- 2	1E032- 4	173A	LOGIC
X264	5	1E020-13	1F020-15*	173A	LOGIC
X264	2	1E020-11	1E020-13	173A	LOGIC
X264	2	1E020-11	1E021-11	173A	LOGIC
X264	2	1E021-11	1E021-13	173A	LOGIC
X264	3	1E021- 4	1E021-13	173A	LOGIC
X264	2	1E021- 2	1E021- 4	173A	LOGIC
X264	2	1E020- 2	1E021- 2	173A	LOGIC
X264	2	1E020- 2	1E020- 4	173A	LOGIC
Y000	3	1K024- 6*	1K025- 2	173A	LOGIC
Y001	2	1K024-10*	1K025-11	173A	LOGIC
Y002	4	1K023- 4	1K024-15*	173A	LOGIC
Y020	24	1B026-15*	1I018-11	173A	LOGIC
Y030	5	1I030- 1*	1I036-14	173A	LOGIC
Y031	12	1E034- 5	1H039- 6*	173A	LOGIC
Y032	12	1E034- 3	1H039- 1*	173A	LOGIC
Y033	8	1H039-10*	1J041- 5	173A	LOGIC
Y049	12	1H039-15*	1K034-12	173A	LOGIC
Y050	6	1I029-15*	1I036- 6	173A	LOGIC
Y200	2	1K015- 2	1K016- 1*	173A	LOGIC
Y201	3	1K015-12	1K016- 6*	173A	LOGIC

Y202	3	1K015-14	1K016-10*	1738	LOGIC
Y204	3	1K016-15*	1L016-2	1738	LOGIC
Y209	18	1H037-2	1I005-15*	1738	LOGIC
Y210	6	1H036-6	1I029-1*	1738	LOGIC
Y220	3	1H030-1*	1H033-2	1738	LOGIC
Y221	3	1H030-6*	1H032-5	1738	LOGIC
Y222	5	1H030-10*	1I033-3	1738	LOGIC
Y223	10	1H013-3	1H030-15*	1738	LOGIC
Y224	5	1H023-5	1H029-1*	1738	LOGIC
Y225	5	1H023-3	1H029-6*	1738	LOGIC
Y226	4	1H026-3	1H029-10*	1738	LOGIC
Y227	3	1H026-12	1H029-15*	1738	LOGIC
Y228	3	1H025-3	1H028-1*	1738	LOGIC
Y229	4	1H025-12	1H028-6*	1738	LOGIC
Y230	4	1H024-3	1H028-10*	1738	LOGIC
Y231	4	1H024-12	1H028-15*	1738	LOGIC
Y240	4	1B026-1*	1B029-11	1738	LOGIC
Y241	5	1B026-6*	1B031-12	1738	LOGIC
Y242	2	1B026-10*	1B027-11	1738	LOGIC
Y250	10	1G027-12*	1H042-11	1738	LOGIC
Y400	5	1G014-6	1H009-1*	1738	LOGIC
Y401	6	1G014-3	1H009-6*	1738	LOGIC
Y402	7	1G013-5	1H009-10*	1738	LOGIC
Y403	7	1G012-3	1H009-15*	1738	LOGIC
Y404	5	1G011-5	1H008-1*	1738	LOGIC
Y405	6	1G010-3	1H008-6*	1738	LOGIC
Y406	5	1H002-3	1H008-10*	1738	LOGIC
Y407	6	1H001-5	1H008-15*	1738	LOGIC
Y408	3	1H006-5	1H007-1*	1738	LOGIC
Y409	3	1H006-3	1H007-6*	1738	LOGIC
Y410	4	1H005-3	1H007-10*	1738	LOGIC
Y411	4	1H005-5	1H007-15*	1738	LOGIC
Y412	7	1H005-12	1H017-10*	1738	LOGIC
Y413	10	1H003-13	1I022-1*	1738	LOGIC
Y481	5	1H016-6*	1I014-3	1738	LOGIC
Y482	3	1I022-6*	1I023-2	1738	LOGIC
Y483	5	1I022-10*	1J017-2	1738	LOGIC
Y484	5	1I022-15*	1J017-11	1738	LOGIC
Y490	7	1I006-2	1J006-15*	1738	LOGIC
Y491	6	1I006-4	1J006-10*	1738	LOGIC
Y492	2	1I005-10*	1I006-11	1738	LOGIC
Y493	16	1F017-3	1J006-1*	1738	LOGIC
Y500	7	1H017-1*	1I013-11	1738	LOGIC
Y501	5	1H016-15*	1I013-13	1738	LOGIC
Y509	8	1I017-4	1J006-6*	1738	LOGIC
Y510	7	1H016-1*	1I019-13	1738	LOGIC
Y511	8	1H018-11	1I005-1*	1738	LOGIC
Y512	8	1G027-11	1H016-10*	1738	LOGIC
Y513	8	1G027-10*	1I020-4	1738	LOGIC
Y530	7	1G027-4*	1H022-12	1738	LOGIC
Y540	5	1H017-15*	1H022-4	1738	LOGIC
Y603	15	1I029-6*	1J001-11	1738	LOGIC
Y770	4	1F028-11	1G027-2*	1738	LOGIC
Y770	3	1F028-3	1F028-11	1738	LOGIC
Y770	4	1F023-13	1G019-4	1738	LOGIC
Y770	4	1F023-4	1F028-3	1738	LOGIC
Y770	3	1F023-4	1F023-13	1738	LOGIC
Y780	17	1E018-2	1I029-10*	1738	LOGIC
GND	2	1B019-8*	1B019-10	1738	LOGIC
GND	2	1B019-10	1B019-11	1738	LOGIC
GND	3	1B019-2	1B019-11	1738	LOGIC
GND	3	1B028-8*	1B028-12	1738	LOGIC
GND	2	1B033-8*	1B033-10	1738	LOGIC
GND	3	1B033-2	1B033-10	1738	LOGIC

GND	2	1B020-5	1B020-8 *	
GND	3	1C018-2	1C018-8 *	
GND	3	1D034-2	1D034-8 *	
GND	3	1G023-4	1G023-8 *	
GND	3	1C010- 8*	1C010-12	1738 LOGIC
GND	3	1C016- 4	1C016- 8*	1738 LOGIC
GND	3	1C017- 3	1C017-10	1738 LOGIC
GND	2	1C017- 2	1C017- 3	1738 LOGIC
GND	2	1C017- 8*	1C017-10	1738 LOGIC
GND	3	1C025- 4	1C025- 8*	1738 LOGIC
GND	2	1D019- 6	1D019- 8*	1738 LOGIC
GND	2	1D022- 2	1D022- 3	1738 LOGIC
GND	3	1D022- 3	1D022- 8*	1738 LOGIC
GND	2	1D026- 8*	1D026-10	1738 LOGIC
GND	3	1D026- 3	1D026-10	1738 LOGIC
GND	2	1D026- 2	1D026- 3	1738 LOGIC
GND	2	1D038- 8*	1D038-10	1738 LOGIC
GND	3	1D038- 3	1D038-10	1738 LOGIC
GND	2	1D038- 2	1D038- 3	1738 LOGIC
GND	3	1E018- 8*	1E018-13	1738 LOGIC
GND	2	1E026- 8*	1E026-10	1738 LOGIC
GND	3	1E026- 3	1E026-10	1738 LOGIC
GND	2	1E026- 2	1E026- 3	1738 LOGIC
GND	3	1E027- 3	1E027- 8*	1738 LOGIC
GND	3	1E034- 4	1E034- 8*	1738 LOGIC
GND	2	1E034- 2	1E034- 4	1738 LOGIC
GND	2	1E038- 8*	1E038-10	1738 LOGIC
GND	3	1E038- 3	1E038-10	1738 LOGIC
GND	2	1E038- 2	1E038- 3	1738 LOGIC
GND	3	1F017- 8*	1F017-13	1738 LOGIC
GND	2	1F027- 8*	1F027-10	1738 LOGIC
GND	2	1F027-10	1F027-11	1738 LOGIC
GND	3	1G001- 2	1G001- 8*	1738 LOGIC
GND	2	1G007- 8*	1G007-10	1738 LOGIC
GND	3	1G010- 4	1G010- 8*	1738 LOGIC
GND	3	1G011- 2	1G011- 8*	1738 LOGIC
GND	3	1G012- 4	1G012- 8*	1738 LOGIC
GND	3	1G013- 2	1G013- 8*	1738 LOGIC
GND	3	1G016- 4	1G016- 8*	1738 LOGIC
GND	3	1G016- 4	1G016-13	1738 LOGIC
GND	2	1G018- 8*	1G018-10	1738 LOGIC
GND	3	1G018- 2	1G018-10	1738 LOGIC
GND	3	1H001- 2	1H001- 8*	1738 LOGIC
GND	3	1H002- 4	1H002- 8*	1738 LOGIC
GND	2	1H003- 8*	1H003-11	1738 LOGIC
GND	3	1H019- 4	1H019- 8*	1738 LOGIC
GND	3	1H020- 2	1H020- 8*	1738 LOGIC
GND	3	1H021- 4	1H021- 8*	1738 LOGIC
GND	3	1H022- 2	1H022- 8*	1738 LOGIC
GND	2	1H023- 8*	1H023-10	1738 LOGIC
GND	3	1H036- 2	1H036- 8*	1738 LOGIC
GND	3	1I002- 3	1I002- 8*	1738 LOGIC
GND	2	1I002- 2	1I002- 3	1738 LOGIC
GND	4	1I002- 2	1I002-14	1738 LOGIC
GND	2	1I002-14	1I002-15	1738 LOGIC
GND	2	1I008- 8*	1I008-10	1738 LOGIC
GND	3	1I010- 2	1I010- 8*	1738 LOGIC
GND	2	1I016- 8*	1I016-11	1738 LOGIC
GND	2	1I016-10	1I016-11	1738 LOGIC
GND	3	1I016- 3	1I016-10	1738 LOGIC
GND	2	1I016- 2	1I016- 3	1738 LOGIC
GND	3	1I024- 3	1I024- 8*	1738 LOGIC
GND	2	1I024- 2	1I024- 3	1738 LOGIC
GND	2	1I032- 5	1I032- 8*	1738 LOGIC
GND	2	1J014- 6	1J014- 8*	1738 LOGIC

* Present if Std. Opt. 10278-1 is installed.

** Deleted if Std. Opt. 10278-1 is installed.

GND	3	1J014- 6	1J014-13	173A LOGIC
GND	3	1J025- 2	1J025- 8*	173A LOGIC
GND	2	1J028- 6	1J028- 8*	173A LOGIC
GND	3	1J029- 4	1J029- 8*	173A LOGIC
GND	2	1J032- 8*	1J032-10	173A LOGIC
GND	3	1J032- 2	1J032-10	173A LOGIC
GND	2	1J033- 5	1J033- 8*	173A LOGIC
GND	2	1J033- 2	1J033- 5	173A LOGIC
GND	2	1J035-10	1J035-11	173A LOGIC
GND	2	1J035- 2	1J035- 3	173A LOGIC
GND	2	1J035- 8*	1J035-11	173A LOGIC
GND	3	1J035- 3	1J035-10	173A LOGIC
GND	2	1J036- 8*	1J036-10	173A LOGIC
GND	3	1J037- 2	1J037- 8*	173A LOGIC
GND	2	1J038- 8*	1J038-10	173A LOGIC
GND	2	1J041-12	1J041-13	173A LOGIC
GND	3	1J041- 4	1J041- 8*	173A LOGIC
GND	3	1J041- 4	1J041-12	173A LOGIC
GND	3	1K029- 2	1K029- 8*	173A LOGIC
GND	3	1K040- 2	1K040- 8*	173A LOGIC
GND	2	1L035- 8*	1L035-11	173A LOGIC
.	END FILE		2923 WIRETAB RECORDS	

COMMENT SHEET

MANUAL TITLE CONTROL DATA[®] 1738-A/B/C, FA708-A/B/C, FV431-A

Disk Drive Controller Customer Engineering Manual

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