

# Type A7900A LRS Controllers

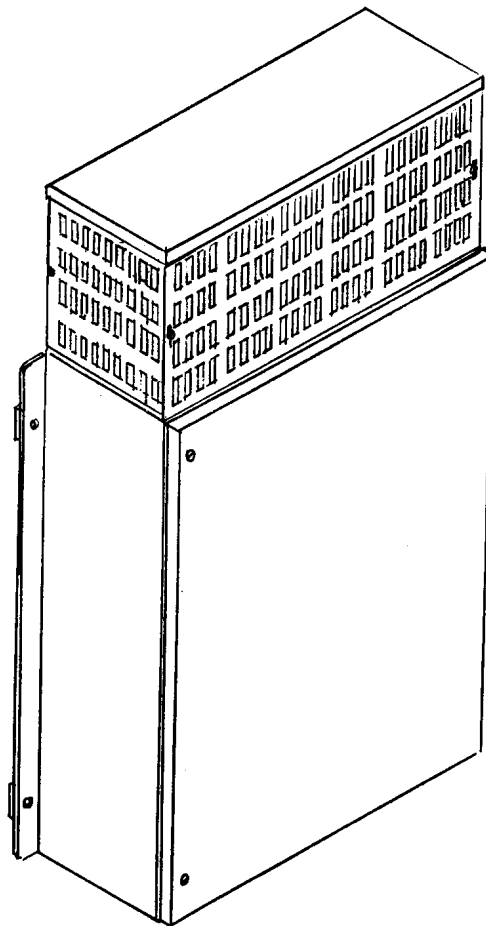
**Spare Parts Leaflet**

**C-3074**

**October 5, 2022 / Page 1 of 15**

## OBSOLESCENCE NOTICE

The product covered in this SPL has been designated as obsolete and is no longer supported. See TIP 32.2-1, *Obsolete Components*, for potential upgrade. Replacement lower-level parts listed within and unique to this design will be reviewed for obsolescence.



# OTIS

This document does not contain any technical data subject to EAR or ITAR

**SERVICE ENGINEERING**

**Otis Elevator Company**

**Bloomfield, Connecticut USA**

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**Leaflet Description**

This leaflet covers spare parts info for type A7900A LRS Controllers.

**Leaflet Revisions**

<b>Date Revised</b>	<b>Subject Matter Expert</b>	<b>Reason for Revision</b>
March 1984	---	New SPL
March 23, 2011	Matt Fournier	Added history page; added alternate part numbers for P613AP6 and 9.
December 21, 2011	Matt Fournier	Updated parts information for P613AP6 and 9
July 12, 2017	Ali Bozorgzadeh	Corrected part numbers in references 9 and 11 on p. 7
October 5, 2022	Juan Murillo	Updated to include OBSOLESCENCE note on cover

**Related Drawings**

<b>Drawing No.</b>	<b>Title</b>	<b>Drawing No.</b>	<b>Title</b>
A7900A	Assembly, 1, 2, 3 H0CL; H1CL; 1, 2, 3 H0TL; H1TL Controller	---	---
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**Related Documents**

<b>Document ID</b>	<b>Title</b>
TIP 1.2.0-38	P613AP6, 7, and 9 Aromat Relay Replacements
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**Subject Matter Expert**

<b>Name</b>	<b>Department</b>
Matt Fournier	OSC Service Engineering

**About Spare Parts Leaflets...**

This document lists the lowest replaceable units (LRUs) for the standard version of the product. The LRUs are chosen by a team of Otis associates representing engineering and manufacturing.

While goal of this document is to make parts identification as easy as possible, the document cannot be all-inclusive. Elevator and escalator contracts classified as “special” or “custom” are not addressed here. For such contracts, please refer to specified information, the contract folder, TIPs, Field Education Articles, Construction Letters, etc. for further information.

If you have any suggestions about this document, please contact the subject matter expert listed on this page.



**Type A7900A Controller Assembly**

<b>REF No.</b>	<b>PART No.</b>	<b>QTY</b>	<b>DESCRIPTION</b>
1	235CD1	1	Transformer, TRF1, 198-252V
2	235CD2	1	Transformer, TRF1, 418-450V
3	235CD3	1	Transformer, TRF1, 511-630V
4	235CC2	1	Transformer, TRF2, 198-252V
5	235CC3	1	Transformer, TRF2, 418-510V
6	235CC4	1	Transformer, TRF2, 511-630V
*7	---	1	Accelerating Contactor (AC), Type 7151, AC (see Contactor Table on pp. 4-5)
8	---	1	Pump-Motor Contactor (PMC), Type 7151, AC (see Contactor Table on page 5)
9	---	1	Overload Relay, PTO, Type 6315Y (see Contactor Table on pp. 5-6)
*10	---	3	Heater Elements, T1, T2, T3, Type 232AP (see Contactor Table on pp. 5-6)
*11	375J6	3	Fuse, 6 Amps, 4.5 in. Long
12	P303BA3 180CN1	1	Fuse Block
*13	P613AP9 AAA24831M9 AAA613DL16	1	4-Pole Relay, 115V AC, 3 NO, 1 NC Contacts, See <b>NOTE 3</b>
*14	6204F2	1	Reverse Phase Relay, J
**15	V618J1	1	Reverse Phase Relay Socket
16	232F37 AAA232FM149	1	Resistor, 1/2 Watt, 1.5 Meg Ohm
17	232F48	1	Resistor, 1/2 Watt, 27 kOhm
18	P303BP1	1	Terminal Board, with 31-60 HP Motor
19	P303BP2 303DH16	1	Terminal Board, with 0-30 HP Motor
20	---	1	Power Panel, MCP, Type A6840CJ (see details on page 7)
21	---	1	Condenser Panel, Type 6938AA (see details on page 8)
22	P605F1	2	Suppressor, 3.5 in. Long, 1-1/8 in. High
23	---	1	Resistor Tube Box (see details on pp. 12-13)
24	8200AJ1	1	Door Operator Panel, DOP (see details on page 9)
25	---	1	Relay Panel, Type 6850ER (see details on pp. 10-11)

\* **NOTE 1:** Recommended spare parts.

\*\***NOTE 2:** General location; parts not illustrated.

**NOTE 3:** For first time replacement, order AAA24831M\_; for subsequent replacements, order AAA613DL\_. Refer to TIP 1.2.0-38, P613AP6, 7 and 9 Aromat Relay Replacements, for replacement options.

# Contactor Table

**C-3074**

PARAMETER		OVERLOAD RELAY (PTO)			CONTACTOR	
HP	VOLTAGE	RELAY	HEATER ELEMENTS	TEST AMPS	(PMC)	(AC)
3	200-208	6315Y2	232AP8	39.6	7151B1 AAA638AK201	7151B1 AAA638AK201
	220-240		232AP6	34.4	7151B1 AAA638AK201	7151B1 AAA638AK201
	440-480		232AP30	17.2	7151B1 AAA638AK201	7151B1 AAA638AK201
	550-600		232AP32	13.8	7151B1 AAA638AK201	7151B1 AAA638AK201
5	200-208		232AP13	60.0	7151B1 AAA638AK201	7151B1 AAA638AK201
	220-240		232AP10	52.2	7151B1 AAA638AK201	7151B1 AAA638AK201
	440-480		232AP3	26.1	7151B1 AAA638AK201	7151B1 AAA638AK201
	550-600		232AP1	20.8	7151B1 AAA638AK201	7151B1 AAA638AK201
7.5	200-208		232AP17	84.3	7151B1 AAA638AK201	7151B1 AAA638AK201
	220-240		232AP16	73.3	7151B1 AAA638AK201	7151B1 AAA638AK201
	440-480		232AP7	36.7	7151B1 AAA638AK201	7151B1 AAA638AK201
	550-600		232AP5	29.3	7151B1 AAA638AK201	7151B1 AAA638AK201
10	200-208		232AP18	98.7	7151B1 AAA638AK201	7151B1 AAA638AK201
	220-240		232AP17	85.5	7151B1 AAA638AK201	7151B1 AAA638AK201
	440-480		232AP9	42.7	7151B1 AAA638AK201	7151B1 AAA638AK201
	550-600		232AP6	34.6	7151B1 AAA638AK201	7151B1 AAA638AK201
15	200-208	232AP21	138.6	7151D1 AAA638R107	7151B1 AAA638AK201	
	220-240	232AP20	121.3	7151D1 AAA638R107	7151B1 AAA638AK201	
	440-480	232AP13	60.6	7151B1 AAA638AK201	7151B1 AAA638AK201	
	550-600	232AP10	51.4	7151B1 AAA638AK201	7151B1 AAA638AK201	

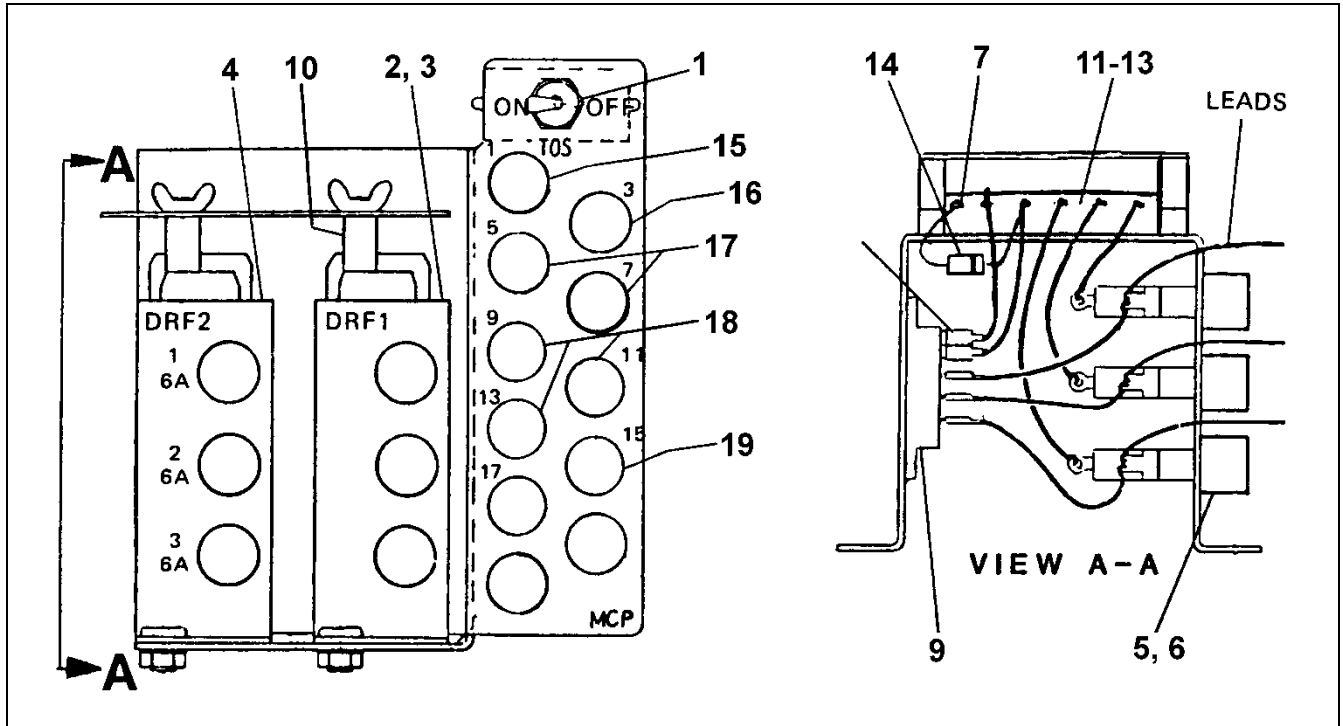
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**Contactor Table**

PARAMETER		OVERLOAD RELAY (PTO)			CONTACTOR	
HP	VOLTAGE	RELAY	HEATER ELEMENTS	TEST AMPS	(PMC)	(AC)
20	200-208	6315Y1	232AP23	170.3	7151D4 AAA638R107	7151D4 AAA638R107
	220-240	6315Y1	232AP22	155.9	7151D4 AAA638R107	7151B4 AAA638AK201
	440-480	6315Y2	232AP16	77.9	7151D4 AAA638R107	7151B4 AAA638AK201
	550-600	6315Y2	232AP14	63.5	7151D4 AAA638R107	7151B4 AAA638AK201
25	200-208	6315Y1	232AP27	216.5	7151F4 AAA638A110	7151D4 AAA638R107
	220-240	6315Y1	232AP24	195.2	7151F4 AAA638A110	7151D4 AAA638R107
	440-480	6315Y2	232AP18	97.6	7151D4 AAA638R107	7151B4 AAA638AK201
	550-600	6315Y2	232AP17	85.5	7151D4 AAA638R107	7151B4 AAA638AK201
30	200-208	6315Y5	232AP20	254.0	7151F4 AAA638A110	7151D4 AAA638R107
	220-240	6315Y1	232AP25	217.1	7151F4 AAA638A110	7151D4 AAA638R107
	440-480	6315Y1	232AP19	108.6	7151D4 AAA638R107	7151B4 AAA638AK201
	550-600	6315Y2	232AP18	89.5	7151D4 AAA638R107	7151B4 AAA638AK201
40	200-208	6315Y5	232AR22	334.9	7151F4 AAA638A110	7151F4 AAA638A110
	220-240	6315Y5	232AR11	297.9	7151F4 AAA638A110	7151D4 AAA638R107
	440-480	6315Y1	232AP21	149.0	7151F4 AAA638A110	7151B4 AAA638AK201
	550-600	6315Y2	232AP21	131.6	7151F4 AAA638A110	7151B4 AAA638AK201
50	200-208	6315Y5	232AR24	427.3	7151E2	7151F4 AAA638A110
	220-240	6315Y5	232AR23	357.8	7151E2	7151F4 AAA638A110
	440-480	6315Y1	232AP23	179.0	7151F4 AAA638A110	7151B4 AAA638AK201
	550-600	6315Y1	232AP21	150.1	7151F4 AAA638A110	7151B4 AAA638AK201
60	200-208	6315Y5	232AR27	537.0	7151E2	7151F4 AAA638A110
	220-240	6315Y5	232AR25	456.1	7151E2	7151F4 AAA638A110
	440-480	6315Y1	232AP26	228.1	7151F4 AAA638A110	7151D4 AAA638R107
	550-600	6315Y1	232AP23	173.2	7151F4 AAA638A110	7151B4 AAA638AK201

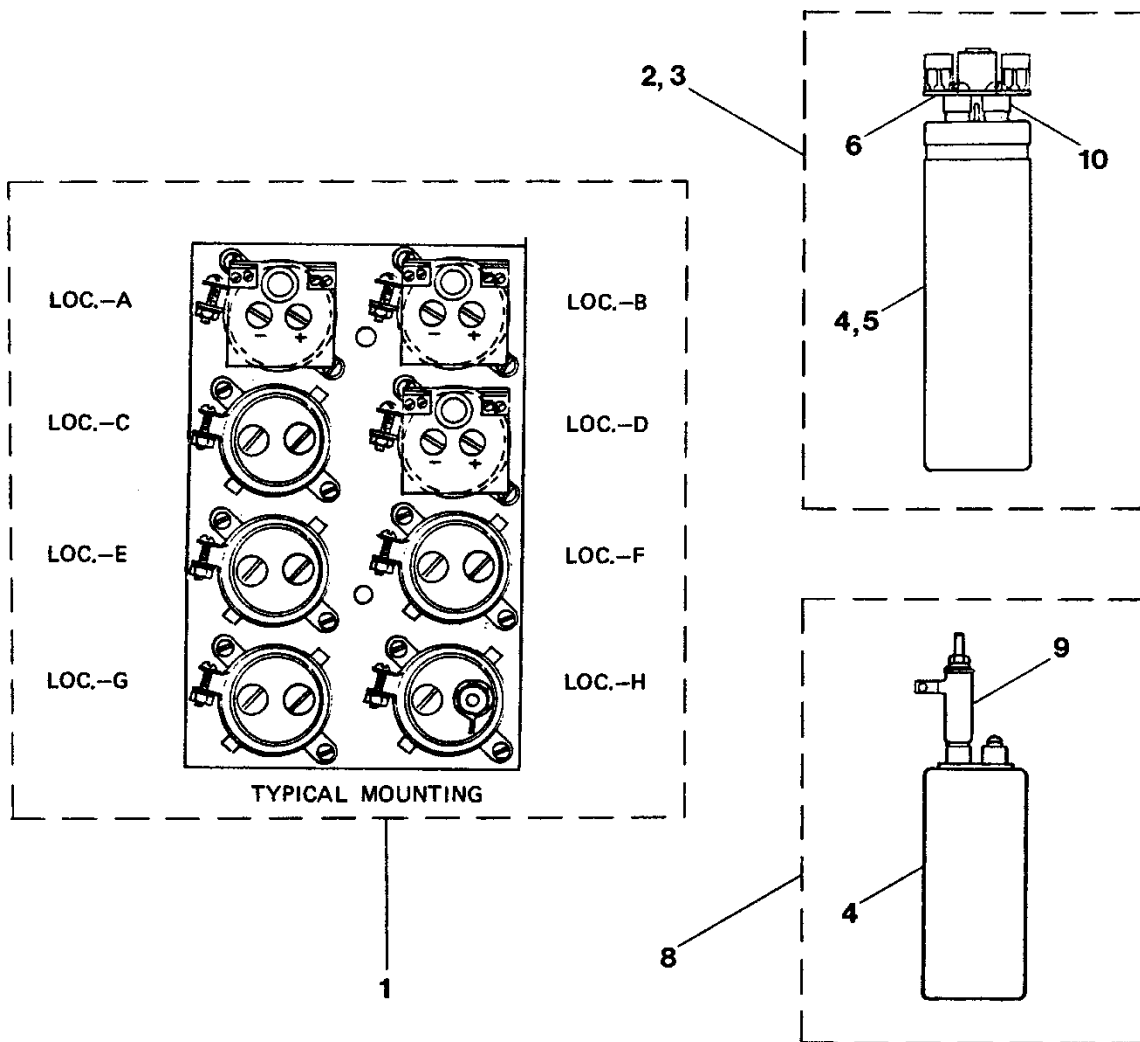
# A6840CJ Power Panel Assembly

**C-3074**



REF No.	PART No.	QTY	DESCRIPTION
1	P177AY3	1	Toggle Switch, D.P.S.T. 16A, 125V AC-DC
2*	A7130D1	1	Static Power Converter Assembly (including Ref. 5-12)
3*	A7130D2	1	Static Power Converter Assembly (including Ref. 5-12)
4*	A7130D3	1	Static Power Converter Assembly (including Ref. 5-11, 13, 14)
5	180AA1	AS	Fuse Holder
6*	375P6	3	Glass Fuse 6 Amps, 1-1/4 in. Long
7	187AM1	AS	Terminal
8	P190AH1	5	Terminal
9*	P230BL2 AAA612AJ1	1	Rectifier, 3-Phase, 400 V, 25 Amps
10	354BE1	2	Distance Piece
11*	P604A1	3	Varistor (mounted on Terminal Block)
12	P303BE1	1	5-Position Terminal Block
13	P303BE2	1	6-Position Terminal Block
14*	P606F2	1	Zenor Diode, 5.1 V, 5 Watts
15*	P375AF10	1	Fuse, 10 Amp, Constant
16*	375P26 AAA375BT26	1	Fuse, 1.5 Amp, Constant
17*	375P4 AAA375BT17	2	Glass Fuse, 1 Amp, 1-1/4 in. Long, Constant
18*	375P4 AAA375BT17	3	Glass Fuse, 1 Amp, 1-1/4 in. Long (Optional: Simplex Operation, Light Ray Operation w/Signals)
19*	P375AF10	1	Fuse, 10 Amp, with 7770A Operator

\* **NOTE 1:** Recommended spare parts.

**C-3074****6938AA Condenser Panel**

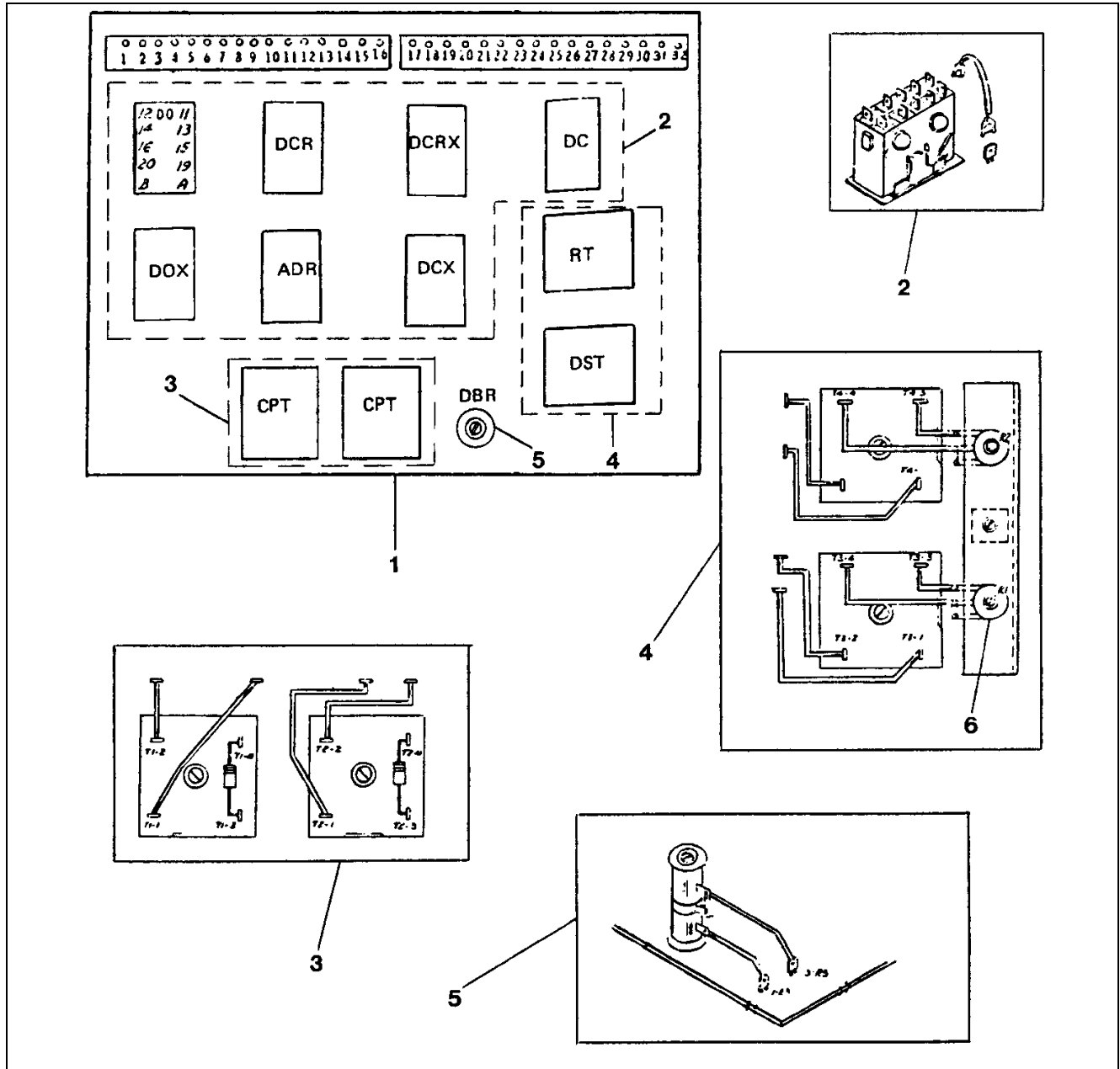
REF No.	PART No.	QTY	DESCRIPTION
1	6938AA1	1	Condenser Panel, Complete (including Ref. 2, 3)
2	226DK5	1	Condenser Assembly, Constant (including Ref. 4, 6, 10)/ LOC.-A
3	226DK1	1	Condenser Assembly, Constant (including Ref. 5, 6, 10)/ LOC.-E
*4	226H11	1	Condenser, 750 MFD, 150 VDC, 4.75 in. Long
*5	226H1	1	Condenser, 125MFD, 150 VDC. 3.5 in. Long
6	A8121H1	1	Transistor Timing Module
*7	---	2	Optional Condenser (including Ref. 4) For: Duplex Operation/ LOC.-D, Light Ray Operation/ LOC.-H
*8	226H15	2	Optional Condenser Assembly (including Ref. 4, 9), 6.5 in. Length, for Duplex Operation/ LOC.-B, Light Ray Operation/ LOC.-F
9	232AE2	2	Resistor, 1000 Ohm
10	462HA47	2	Spacer, 3/8 in. OD, .2 in. Thick

\* **NOTE 1:** Recommended spare parts.



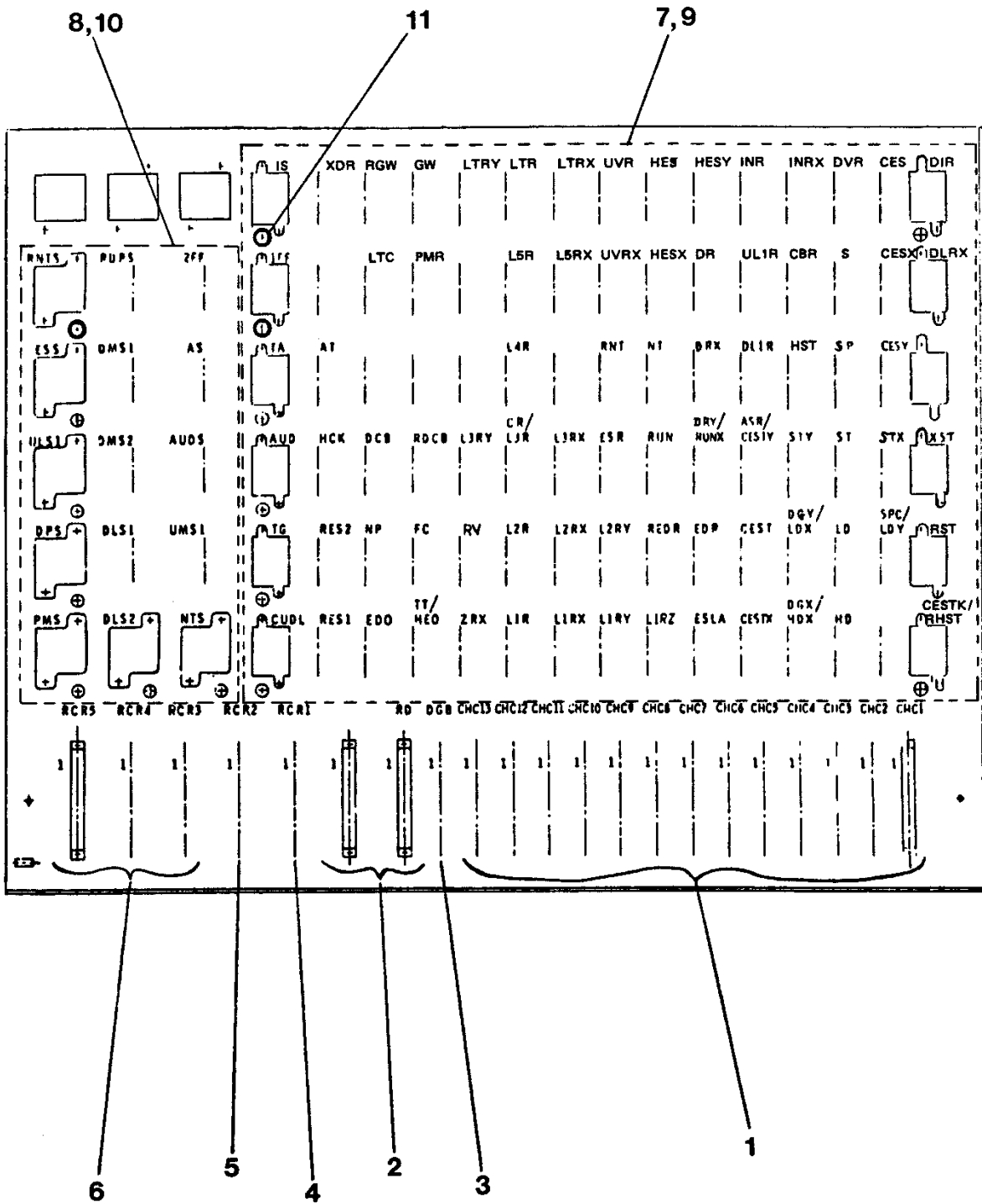
# 8200AJ Door Operator Panel

**C-3074**



REF No.	PART No.	QTY	DESCRIPTION
1	8200AJ1	1	Door Operator Panel, Complete (including Ref. 2–6), See <b>NOTE 3</b>
2	P613AP6 AAA24831M6 AAA613DL17	6	Relay Switch, 4-Pole, 120 VAC, See <b>NOTE 3</b>
3	P623B5	2	Timer, 10 Sec. Delay, 115 VDC (T1, T2)
4	P623B4	2	Timer, 1.00 Sec. Delay, 115 VAC (T3, T4)
5	P232DF3 AAA617M10	1	Adjustable Resistor, 25 Ohm (R3)
6	P232DK1	2	Potentiometer, 1 Meg. Ohm, (R1, R2)

**NOTE 3:** For first time replacement, order AAA24831M\_; for subsequent replacements, order AAA613DL\_. Refer to TIP 1.2.0-38, P613AP6, 7 and 9 Aromat Relay Replacements, for replacement options.



# 6850ER Relay Panel

**C-3074**

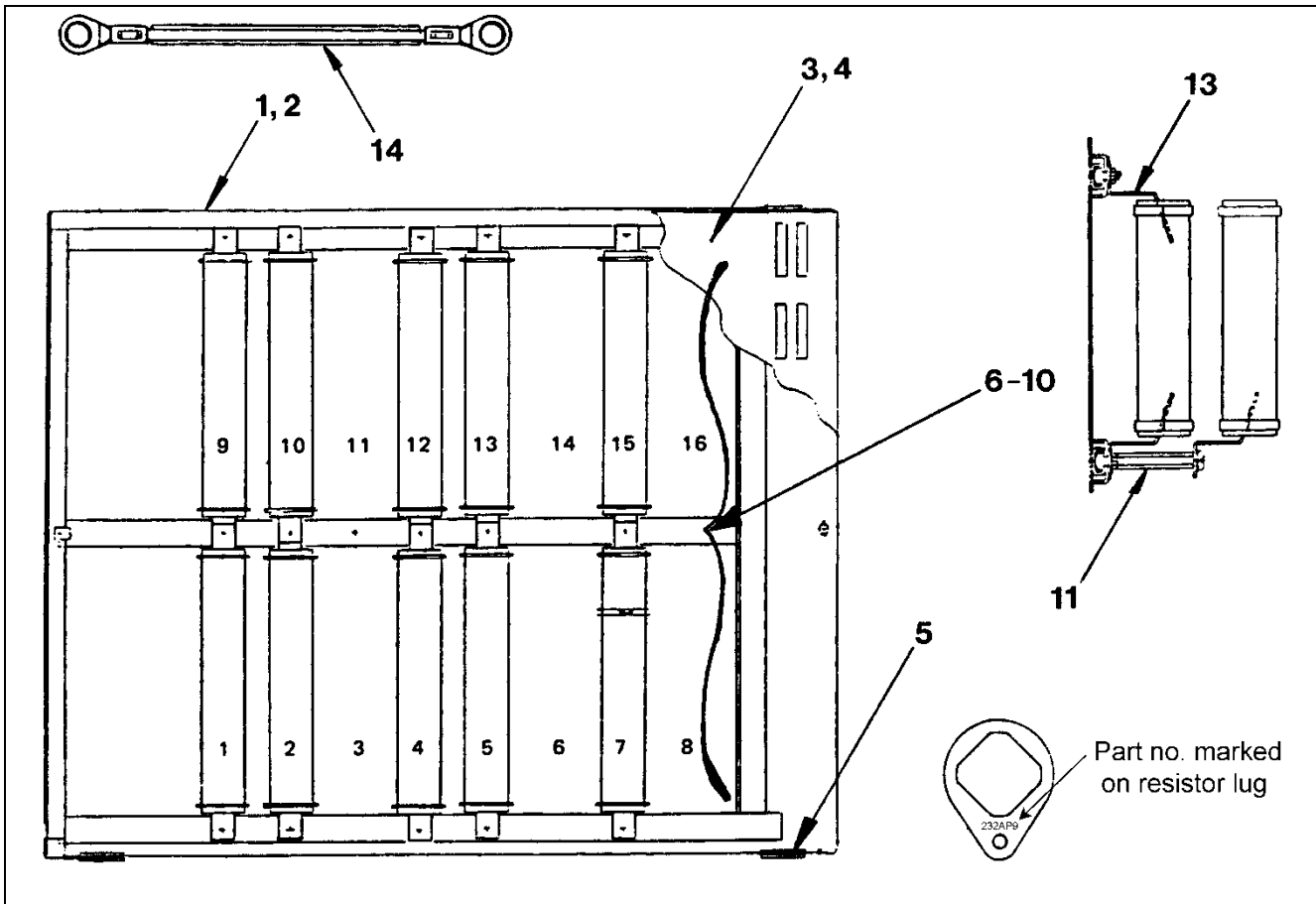
REF No.	PART No.	QTY	DESCRIPTION
1	A8121B1	AS	Car or Hall Call Interface PCB, w/Neon Lamp 424A1
	A8121B2		Car or Hall Call Interface PCB, w/Neon Lamp 424A1
2	A8121D1		Relay Driver Latching Interface PCB
	A8121D2		Relay Driver Latching Interface PCB, w/2-Set Reset Relays P613AV2
	A8121D3		Relay Driver Latching Interface PCB, w/1-Set Reset Relays P613AV2
	A8121D4		Relay Driver Latching Interface PCB
	A8121D5		Relay Driver Latching Interface PCB
3	A8121E1		Double Gong PCB (DGB)
4	A8121P1		Component No. 1 PCB
5	A8121R1		Component No. 2 PCB
6	A8121T1		Component No. 3 PCB (RCR3, RCR5)
	A8121W1	Component No. 4 PCB (RCR4)	
7	P613AP5	AS	Relay, 6-Pole, 110 VDC
8	P613AB5	AS	Relay, 3-Pole, 110 VDC, w/Push to Operate Button
*9	618R1	1	Relay Socket per Each P613AP5 Relay
*10	P467AS1	1	Relay Socket per Each P613AB5 Relay
11	P424P1	1	Neon Lamp per Each Relay

\* General location; parts not illustrated.

AS = As specified per contract condition.

# C-3074

# Resistor Box



REF No.	PART No.	QTY	DESCRIPTION
*1	308HR3	1	Single Row Resistor Tube Box, 13.3 in. High
2	308HR4	1	Double-Deck Resistor Tube Box, 24.0 in. High
*3	285GL1	1	Single Row Resistor Tube Cover
4	285GL2	1	Double-Deck Resistor Tube Cover
5	334G1	4	Insulating Bushing
6	---	AS	Resistor, Type 232AA, MO1, MO2, MO3 (see Resistor Table on page 13)
7	P232BJ2	1	Resistor, 250 Ohm, OR3
8	P232BJ4	2	Resistor, 30 Ohm, CR1
9	P232BJ5	2	Resistor, 50 Ohm, OR1, OR2
10	P232BJ6	1	Resistor, 100 Ohm, CR2
11	354AN2	AS	Distance Piece, 2-15/16 in. Long
*12	AM8782-B-2520-3A	AS	Anodized Brass Standoff, 4-3/4 in. Long
13	180AD1	2	KBK-Holder (Per Resistor Tube)
14	175AN2	1	Conductor, 10" Long (Per 232BJ Resistor)

\* Part not illustrated.

AS = As specified per contract condition.

**NOTE:** Double the quantity for rear door opening resistors.

# 232AA Resistor Table

**C-3074**

HP	VOLTAGE	QTY	RESISTOR	SIZE (OHM)	
3	200-208	3	232AA4	2.61	
	220-240	3	232AA4	2.61	
	440-480	3	232AA9	14.10	
	550-600	3	232AA6	4.93	
		3	232AA9	14.10	
5	200-208	3	232AA2	1.65	
	220-240	3	232AA3	2.08	
	440-480	3	232AA8	9.28	
	550-600		3	232AA9	14.10
	550-600		3	232AA9	14.10
7.5	200-208	3	232AA2	1.65	
	220-240	3	232AA2	1.65	
	440-480	3	232AA7	6.12	
	550-600		3	232AA8	9.28
	550-600		3	232AA8	9.28
10	200-208	3	232AA1	1.32	
	220-240	3	232AA2	1.65	
	440-480	3	232AA7	6.12	
	550-600		3	232AA8	9.28
	550-600		3	232AA8	9.28
15	200-208	3	232AA3	2.08	
		3	232AA4	2.61	
	220-240	6	232AA4	2.61	
	440-480	6	232AA4	2.61	
	500-600	3	232AA3	2.08	
		3	232AA7	6.12	
		3	232AA7	6.12	
20	200-208	6	232AA2	1.65	
	220-240	3	232AA2	1.65	
		3	232AA3	2.08	
	440-480	3	232AA2	1.65	
		3	232AA3	2.08	
	550-600	3	232AA4	2.61	
		3	232AA5	3.82	
25	200-208	6	232AA2	1.65	
	220-240	6	232AA2	1.65	
	440-480	6	232AA2	1.65	
	550-600		6	232AA4	2.61
	550-600		6	232AA4	2.61
30	200-208	3	232AA2	1.65	
		6	232AA3	2.08	
	220-240	9	232AA3	2.08	
	440-480	3	232AA7	6.12	
		6	232AA8	9.28	
	550-600	6	232AA1	1.32	
		3	232AA2	1.65	
	40	200-208	9	232AA2	1.65
13			232AA3	2.08	
220-240		12	232AA3	2.08	
440-480		12	232AA3	2.08	
500-600		12	232AA9	14.10	
500-600		12	232AA9	14.10	

# Resistor Tube Locations: Doors Full or Semi-Selective

Total Quantities of Resistance Tubes		SINGLE-ROW ARRANGEMENT																	
		FRONT									REAR								
Front & Rear DOH & XSRE 12		F1	F2	F3	F4	F5	F6	F7	F8	F9	R1	R2	R3	R4	R5	R6	R7	R8	R9
			OR1		CR1			CRR1		ORR1		OR2	OR3	CR1	CR2	CRR2	CRR1	ORR3	ORR2
Front & Rear DOH & SRE 15		F1	F2	F3	F4	F5	F6	F7	F8	F9	R1	R2	R3	R4	R5	R6	R7	R8	R9
			OR1	CR2	CR1		CRR1	CRR1	CRR2	ORR1		OR2	OR3	CR1	MO1	MO2	MO3	ORR3	ORR2
Front & Rear (DOH & SRE) 15		F1	F2	F3	F4	F5	F6	F7	F8	F9	R1	R2	R3	R4	R5	R6	R7	R8	R9
		OR2	OR1	CR2	CR1	CR1	CRR1	CRR1	CRR2	ORR1	OR3	MO1	MO1	MO2	MO2	MO3	MO3	ORR3	ORR2
Total Quantities of Resistance Tubes DOH & SRE		DOUBLE-ROW ARRANGEMENT																	
		FRONT								REAR									
21	UPPER SECTION	F9	F10	F11	F12	F13	F14	F15	F16	R9	R10	R11	R12	R13	R14	R15	R16		
		ORR1	ORR2	ORR3	CRR2	CRR1	CRR1						MO3	MO3	MO3				
24	LOWER SECTION	F1	F2	F3	F4	F5	F6	F7	F8	R1	R2	R3	R4	R5	R6	R7	R8		
		OR1	OR2	OR3	CR2	CR1	CR1			MO1	MO1	MO1		MO2	MO2	MO2			
27	UPPER SECTION	F9	F10	F11	F12	F13	F14	F15	F16	R9	R10	R11	R12	R13	R14	R15	R16		
		ORR1	ORR2	ORR3	CRR2	CRR1	CRR1						MO3	MO3	MO3	MO3			
30	LOWER SECTION	F1	F2	F3	F4	F5	F6	F7	F8	R1	R2	R3	R4	R5	R6	R7	R8		
		MO1	OR1	OR2	OR3	CR2	CR1	CR1	MO2	MO1	MO1	MO1	MO1	MO1	MO2	MO2	MO2	MO2	
30	UPPER SECTION	F9	F10	F11	F12	F13	F14	F15	F16	R9	R10	R11	R12	R13	R14	R15	R16		
		ORR1	ORR2	ORR3	CRR2	CRR1	CRR1												
30	LOWER SECTION	F1	F2	F3	F4	F5	F6	F7	F8	R1	R2	R3	R4	R5	R6	R7	R8		
		MO1	OR1	OR2	OR3	CR2	CR1	CR1	MO2	MO1	MO1	MO1	MO1	MO1	MO1	MO2	MO2	MO2	

DOH = Type 7770A Door Operator  
 SRE = Resistance Starting  
 X = without

# Resistor Tube Locations: Doors Non-Selective

**C-3074**

Total Quantities of Resistance Tubes DOH & SRE	SINGLE-ROW ARRANGEMENT																	
	F1	F2	F3	F4	F5	F6	F7	F8	F9	R1	R2	R3	R4	R5	R6	R7	R8	R9
6		OR1	OR2	OR3	CR2	CR1	CR1											
9		OR1	OR2	OR3	CR2	CR1	CR1					MO1			MO2		MO3	
12		OR1	OR2	OR3	CR2	CR1	CR1				MO1	MO1		MO2	MO2		MO3	MO3
15		OR1	OR2	OR3	CR2	CR1	CR1		MO3	MO1	MO1	MO1		MO2	MO2	MO2	MO3	MO3
18	MO1	OR1	OR2	OR3	CR2	CR1	CR1	MO3	MO3	MO1	MO1	MO1	MO2	MO2	MO2	MO2	MO3	MO3

Total Quantities of Resistance Tubes DOH & SRE	DOUBLE-ROW ARRANGEMENT															
	UPPER SECTION															
	F9	F10	F11	F12	F13	F14	F15	F16	R9	R10	R11	R12	R13	R14	R15	R16
21		MO3	MO3	MO3	MO3	MO3										
	LOWER SECTION															
	F1	F2	F3	F4	F5	F6	F7	F8	R1	R2	R3	R4	R5	R6	R7	R8
	MO1	OR1	OR2	OR3	CR2	CR1	CR1	MO2	MO1	MO1	MO1	MO1	MO2	MO2	MO2	MO2
24	UPPER SECTION															
	F9	F10	F11	F12	F13	F14	F15	F16	R9	R10	R11	R12	R13	R14	R15	R16
		MO2	MO2	MO2	MO2	MO2	MO2			MO3	MO3	MO3	MO3	MO3	MO3	
	LOWER SECTION															
	F1	F2	F3	F4	F5	F6	F7	F8	R1	R2	R3	R4	R5	R6	R7	R8
		OR1	OR2	OR3	CR2	CR1	CR1			MO1	MO1	MO1	MO1	MO1	MO1	

DOH = Type 7770A Door Operator  
SRE = Resistance Starting