

Hydraulic Controller
4H =>30HP, 240 V

Spare Parts Leaflet
10-AAA21040C

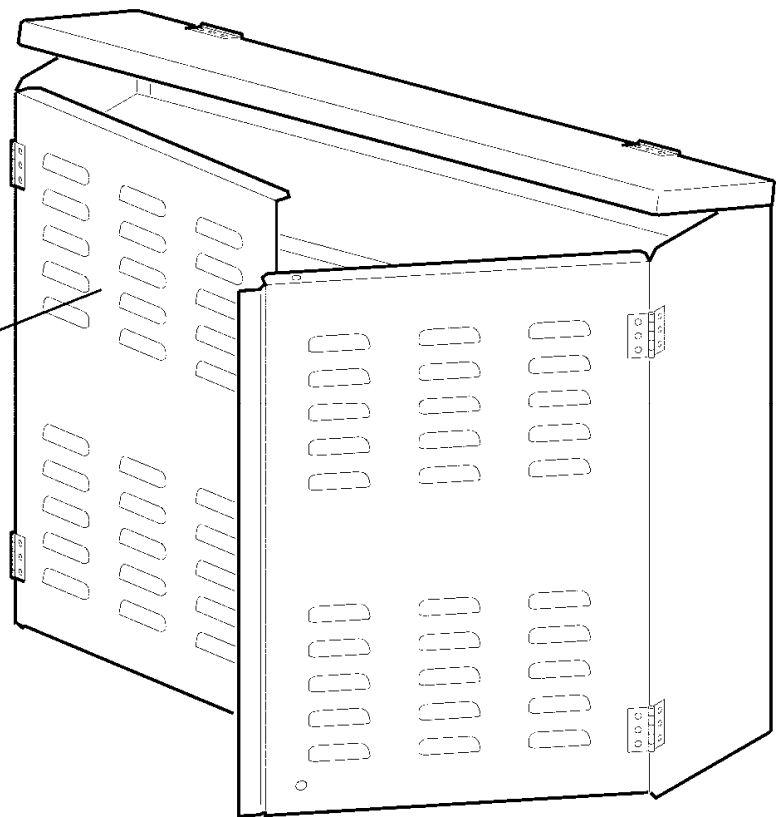
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CONTROLLER
SERIAL No.
SERVICE ORDER No.
CONTRACT No.
MODEL No.
VOLTS AMPS
H.P. PHASES
WIRES HERTZ
COMPONENT VINTAGE NO. AAA21040C
COMPONENT CODE 10
LETTER DESIGNATION
WIRING DIAGRAM
DATE

VINTAGES

AAA21040C

ABA21040C



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 provides replacement part information for hydraulic controller.

Leaflet Revisions

Date Revised	Subject Matter Expert	Reason for Revision
June 1997	---	---
September 20, 2006	John Dwyer	Updated parts listing.
November 4, 2009	Matt Fournier	Updated overload relay parts on pages 5 and 6.
March 16, 2011	Matt Fournier	p. 12 more reliable parts AAA613DL15, 16, and 17
January 4, 2012	Matt Fournier	Updated relay information on p. 12.
September 26, 2018	Ali Bozorgzadeh	Updated description for p/n P226DA4

Related Drawings

Drawing No.	Title	Drawing No.	Title
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Related Documents

Document ID	Title
SPL 10-7151A	AC & DC Contactors, Reversing/Wye-Delta Contactors & Starters
TIP 1.2.0-37	Replacing Obsolete Commercial Relays
TIP 1.2.0-38	P613AP6, 7 and 9 Aromat Relay Replacements

Subject Matter Expert

Name	Department
Ali Bozorgzadeh	OSC Service Engineering

About Spare Parts Leaflets...

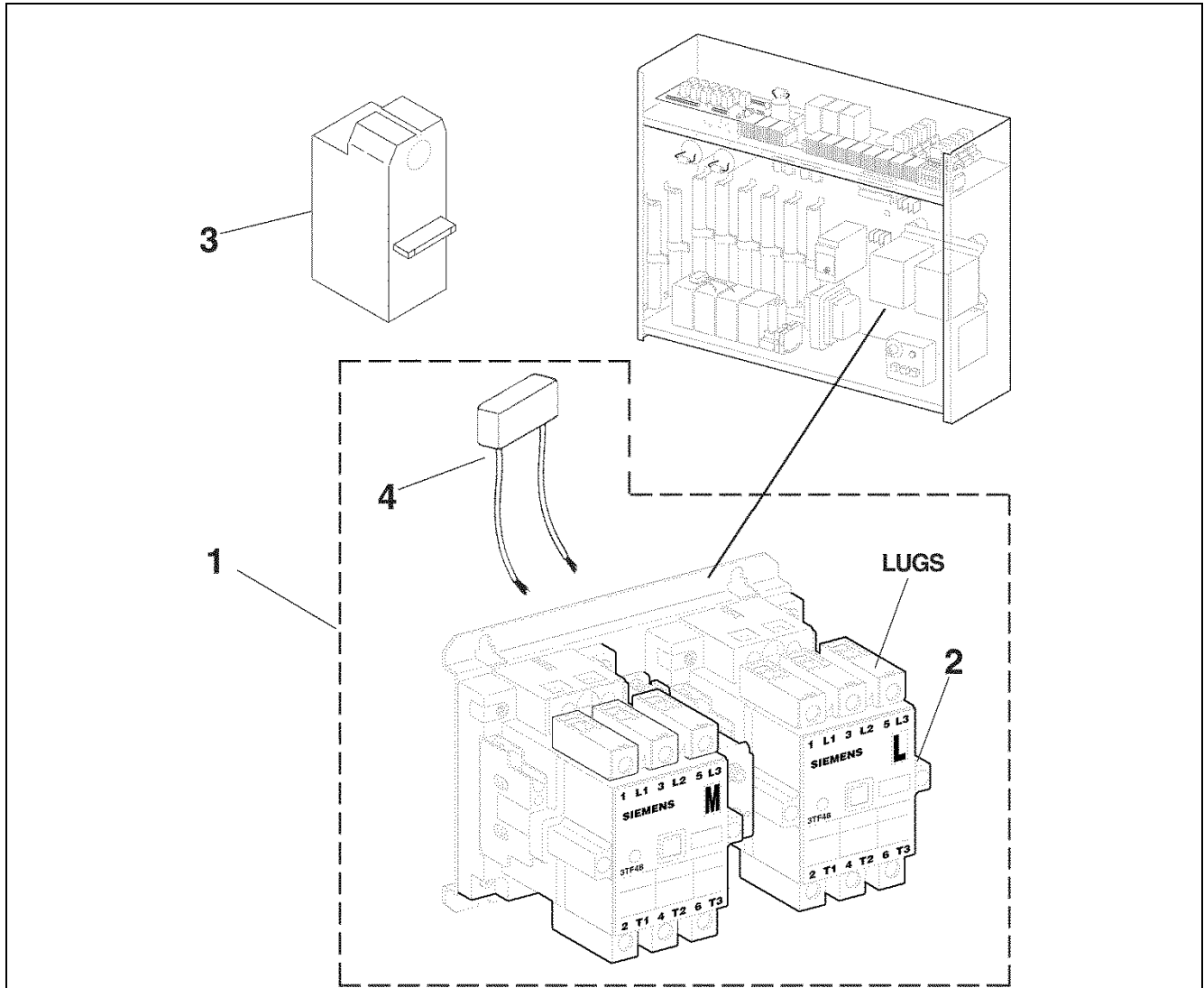
This document lists the lowest replaceable units (LRUs) for the standard version of the product. The LRUs are chosen by a team of Otis associates representing engineering and manufacturing.

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.

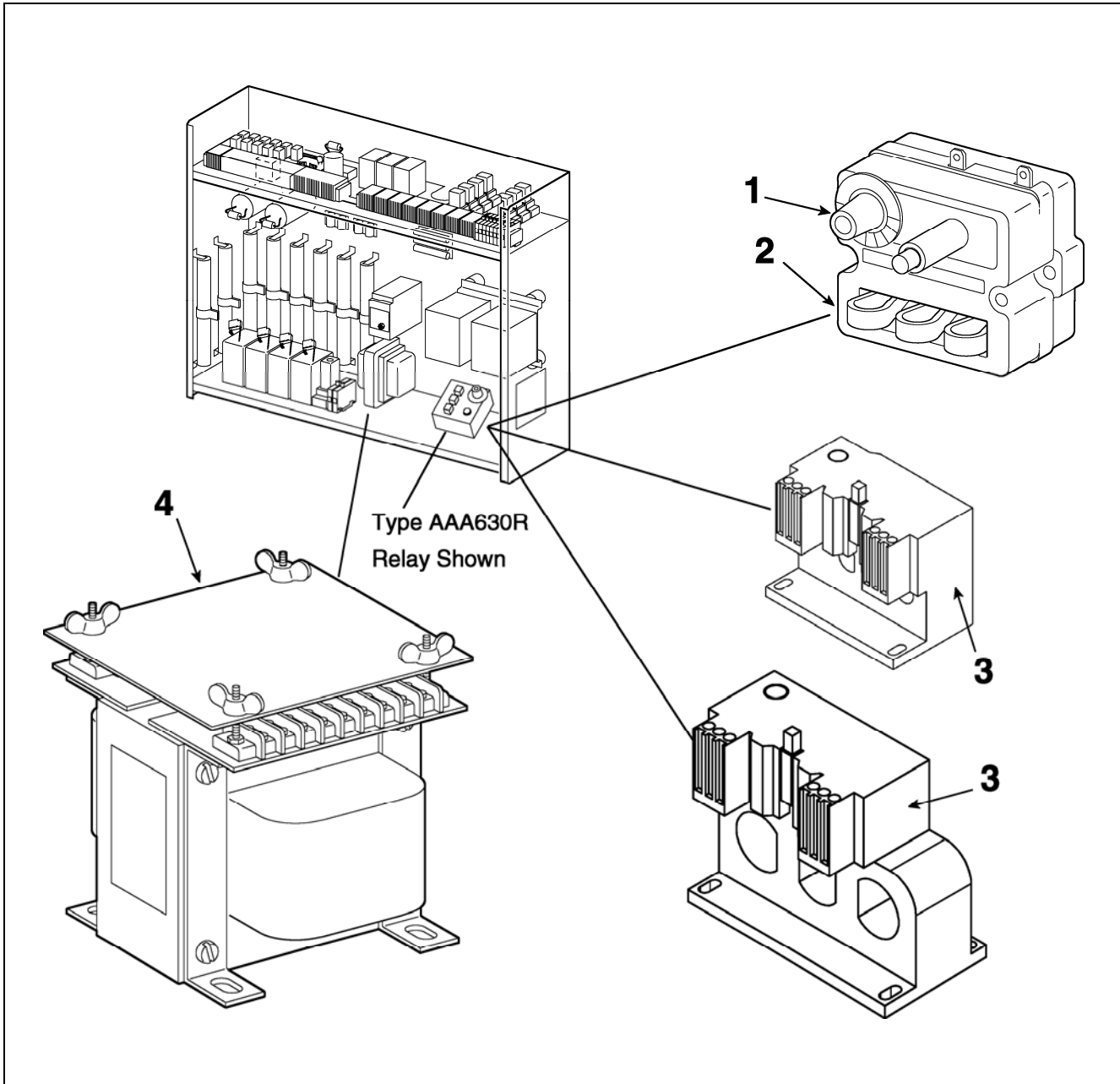
Contactors

10-AAA21040C



REF. No.	PART No.	DESCRIPTION	SYMBOL	NEMA	STARTING	VOLTS	H.P.
	AAA21040C ABA21040C						
1	AAA638F12 AAA638F107	Assembly, Contactor, AC Reversing	LC-MC	4	Wye-Delta	240	>30
2	AAA638F2 AAA638F107 AAA638F11 AAA638F107	Contact, w/Lug Set Contactor, w/o Lug Set					
3	AAA638AAH1	Guard, Bus Bar, for AAA638F12					
4	AAA00605AAA014 or AAA00605AAA114	Suppressor, Transient, 125 VAC, See NOTE					

NOTE: AAA00605AAA014 is used with all earlier version contactors whereas AAA00605AAA114 is used with the latest version contactors (Siemens type 3RT10).



AAA21040C
ABA21040C

REF. No.	PART No.	DESCRIPTION	SYMBOL
1	AAA630R7	Overload Adjustment Knob	---
2	AAA630R	Relay, Overload	PTO
3	---	Relay, Overload, Type AAA660B, 15-180 A Adjustable, Pages 5 and 6 for Selection and Setting	
4	235DN1	Transformer, 200-240 V	TRF

Overload Relay Selection Table

10-AAA21040C

H.P.	VOLTAGE	OTIS P/N	MUST HOLD AMPERES (MHA)	DIAL SETTINGS	TEST CURRENT (2 TO 5 SECONDS)
15	200	AAA660B9 AAA660B109 AAA660B209	55	55	225
15	230	AAA660B9 AAA660B109 AAA660B209	48	48	196
15	460	AAA660B7 AAA660B107 AAA660B207	24	24	98
15	575	AAA660B7 AAA660B107 AAA660B207	20	20	78
20	200	AAA660B10 AAA660B110 AAA660B210	77	77	260
20	230	AAA660B10 AAA660B110 AAA660B210	67	67	227
20	460	AAA660B8 AAA660B108 AAA660B208	33	33	113
20	575	AAA660B7 AAA660B107 AAA660B207	26	26	91
25	200	AAA660B10 AAA660B110 AAA660B210	87	87	357
25	230	AAA660B10 AAA660B110 AAA660B210	76	76	310
25	460	AAA660B8 AAA660B108 AAA660B208	38	38	155
25	575	AAA660B8 AAA660B108 AAA660B208	30	30	124

*Wired inside DELTA. Others wired in-line.

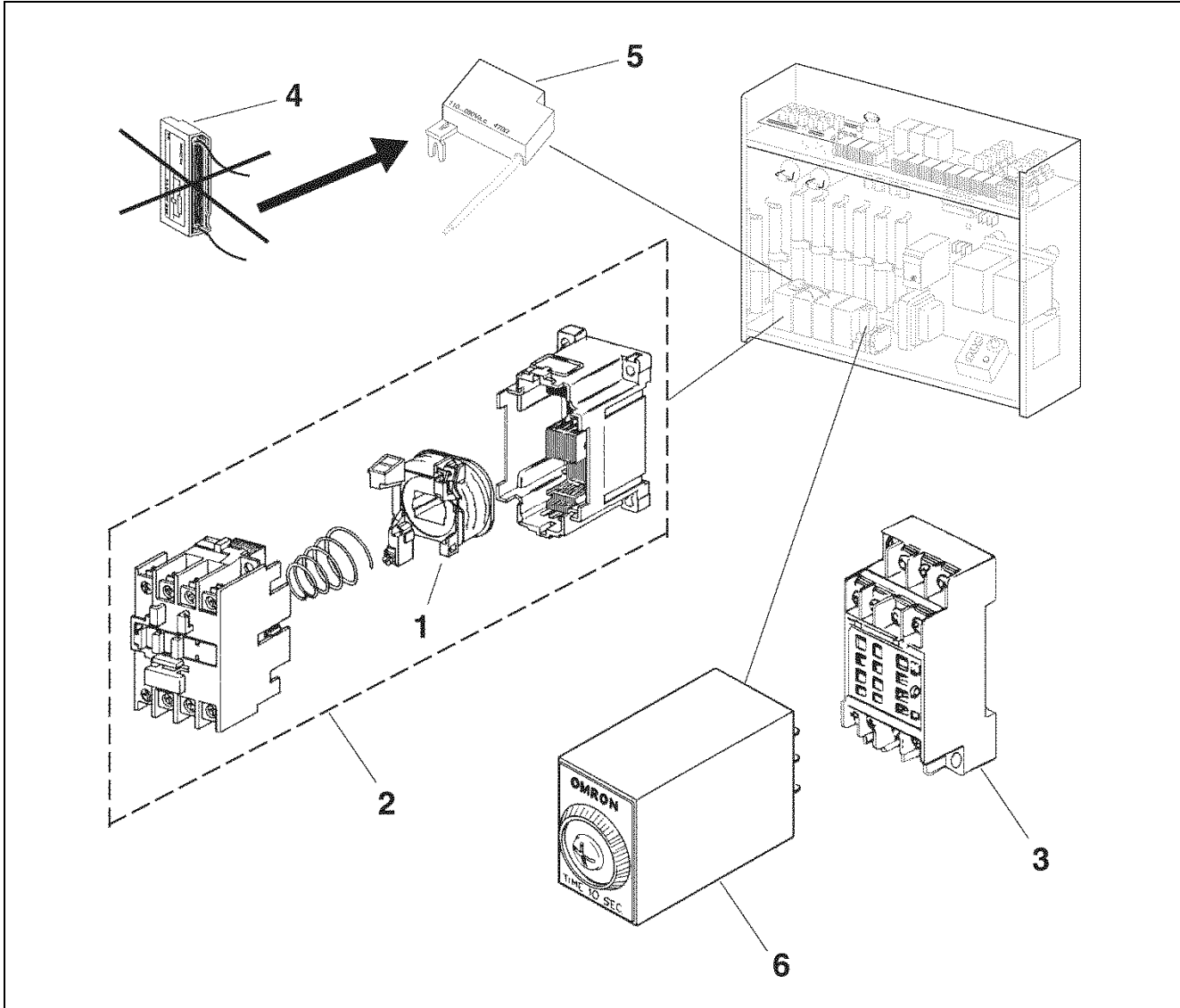
(Continued on next page)

H.P.	VOLTAGE	OTIS P/N	MUST HOLD AMPERES (MHA)	DIAL SETTINGS	TEST CURRENT (2 TO 5 SECONDS)
30	200	AAA660B14 AAA660B114 AAA660B211	106	106	366
30	230	AAA660B14 AAA660B114 AAA660B211	92	92	319
30	460	AAA660B9 AAA660B109 AAA660B209	46	46	159
30	575	AAA660B8 AAA660B108 AAA660B208	37	37	127
40	460	AAA660B9 AAA660B109 AAA660B209	58	58	245
40	575	AAA660B9 AAA660B109 AAA660B209	46	46	196
50	460	AAA660B10 AAA660B110 AAA660B210	72	72	255
50	575	AAA660B9 AAA660B109 AAA660B209	58	58	204
40*	200	AAA660B10 AAA660B110 AAA660B210	77	77	327
40*	230	AAA660B10 AAA660B110 AAA660B210	67	67	284
50*	200	AAA660B14 AAA660B114 AAA660B211	97	97	308
50*	230	AAA660B10 AAA660B110 AAA660B210	84	84	294

*Wired inside DELTA. Others wired in-line.

Door Operator Relays

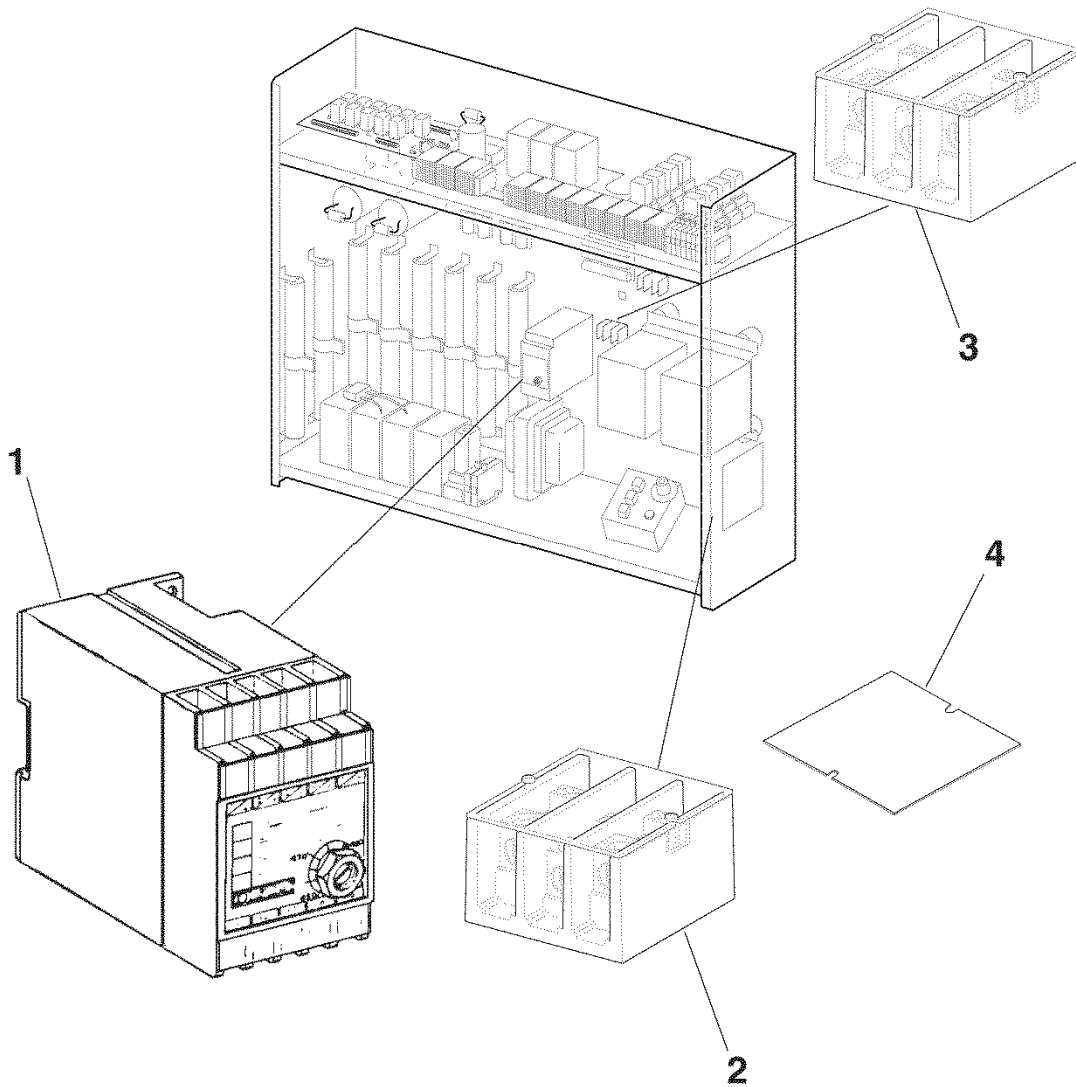
10-AAA21040C



REF. No.	PART No.	DESCRIPTION	SYMBOL
	AAA21040C ABA21040C		
1*	613BX/22.122.304-33	Coil	---
2**	613BX13 AAA613DL16	Relay, 120 VAC, 3 NO, 2 NC Contacts	RDOR, RDCR, CSA
	613BX4 AAA613DL17	Relay, 120 VAC, 2 NO, 2 NC Contacts	RHES
3	618AE2	Relay Socket	---
4	605T2	Suppressor, Transient	CSA, RDOR, RDCR, RHES
5	AAA00605AAA018 AAA00605AAA014	Suppressor, Transient, 110-280 VAC, 470 Ω	
6	P613AY8 P613AY9	Relay, Wye-Delta Timer	---

* Obsolete. Replace it with complete relay AAA613DL16 or DL17.

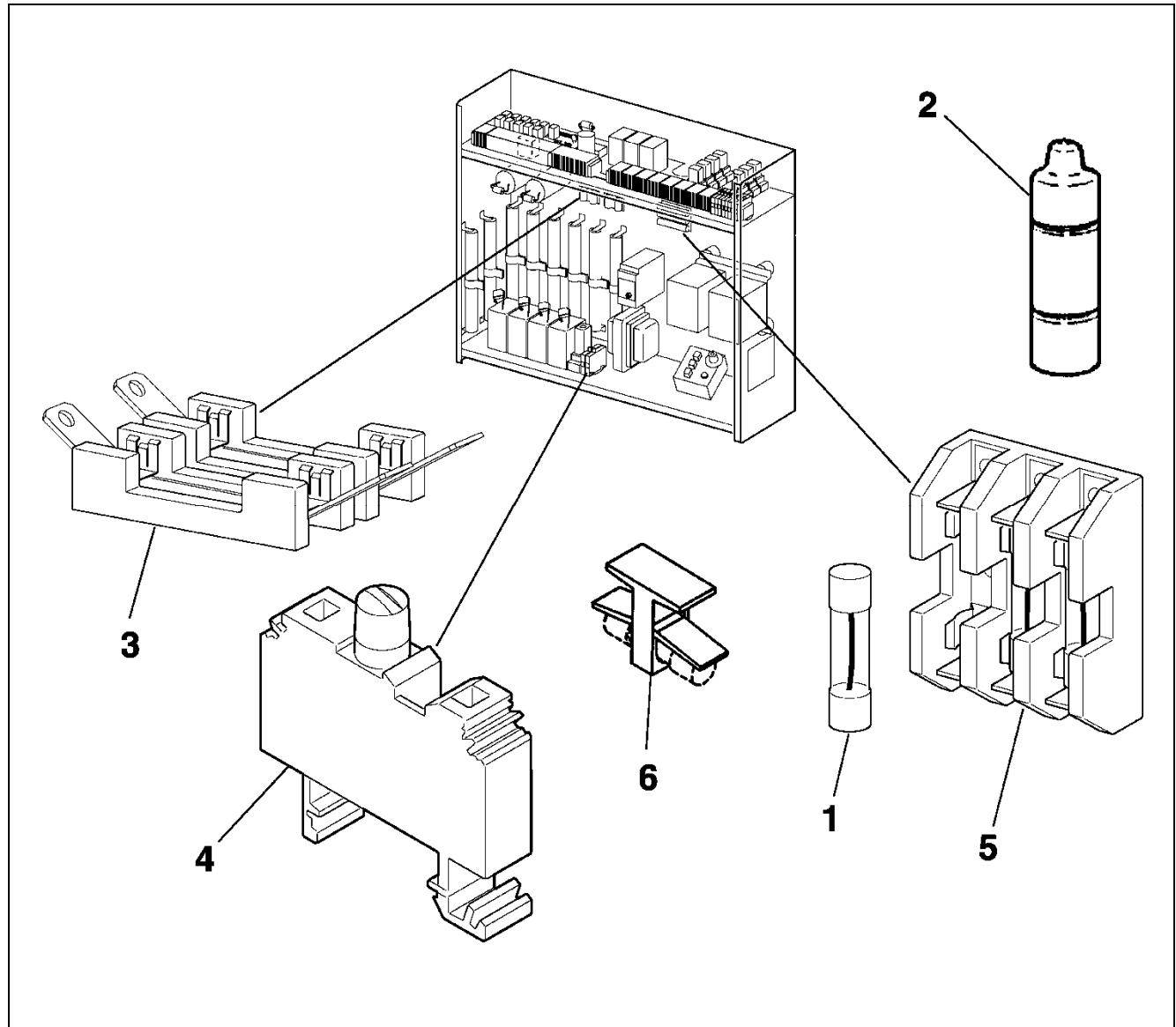
** Functional replacement. See TIP 1.2.0-37, *Replacing Obsolete Commercial Relays*.



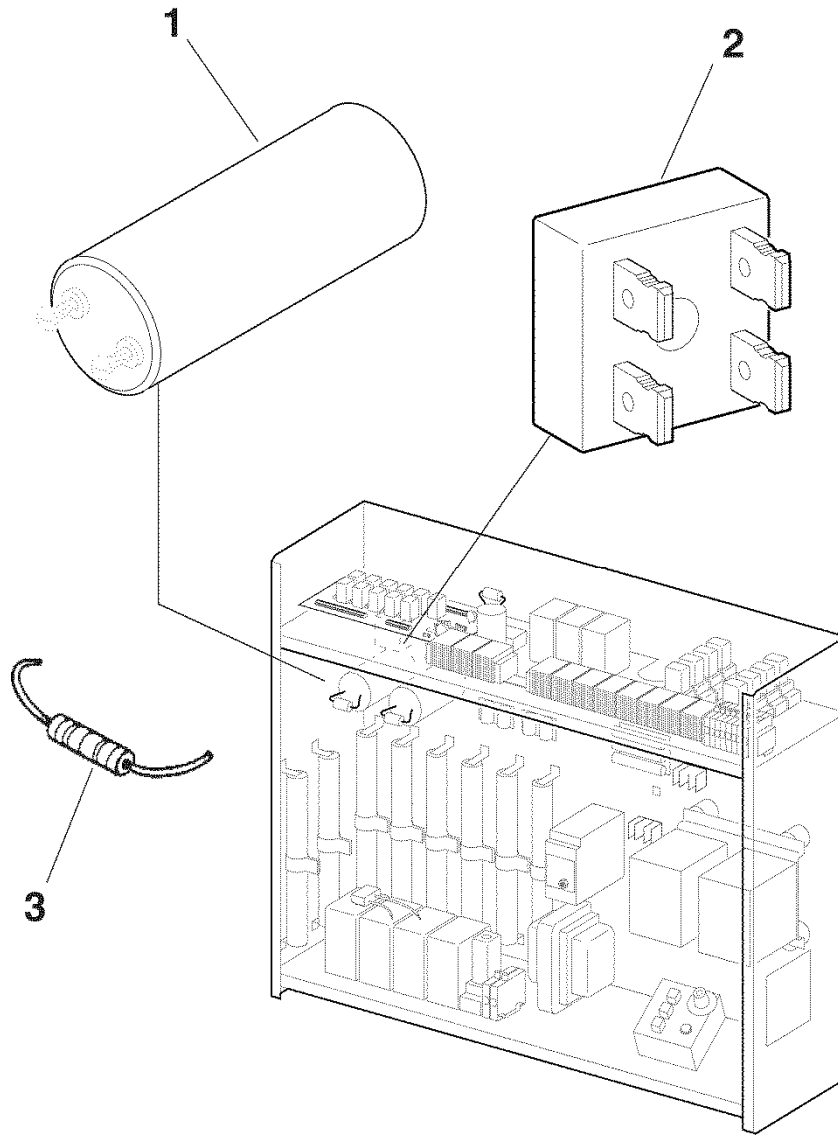
REF. No.	PART No.	DESCRIPTION	SYMBOL
	AAA21040C ABA21040C		
1	613BY1 613BY17	Relay, Reverse Phase, 200-240 V	RPR
2	303DH1	Terminal Block	PTB
3	303DH16		1 and 2 MTB
4	303DH2	Terminal Block Cover	PTB
	303DH4 AAA303FT100		1 and 2 MTB

Fuses

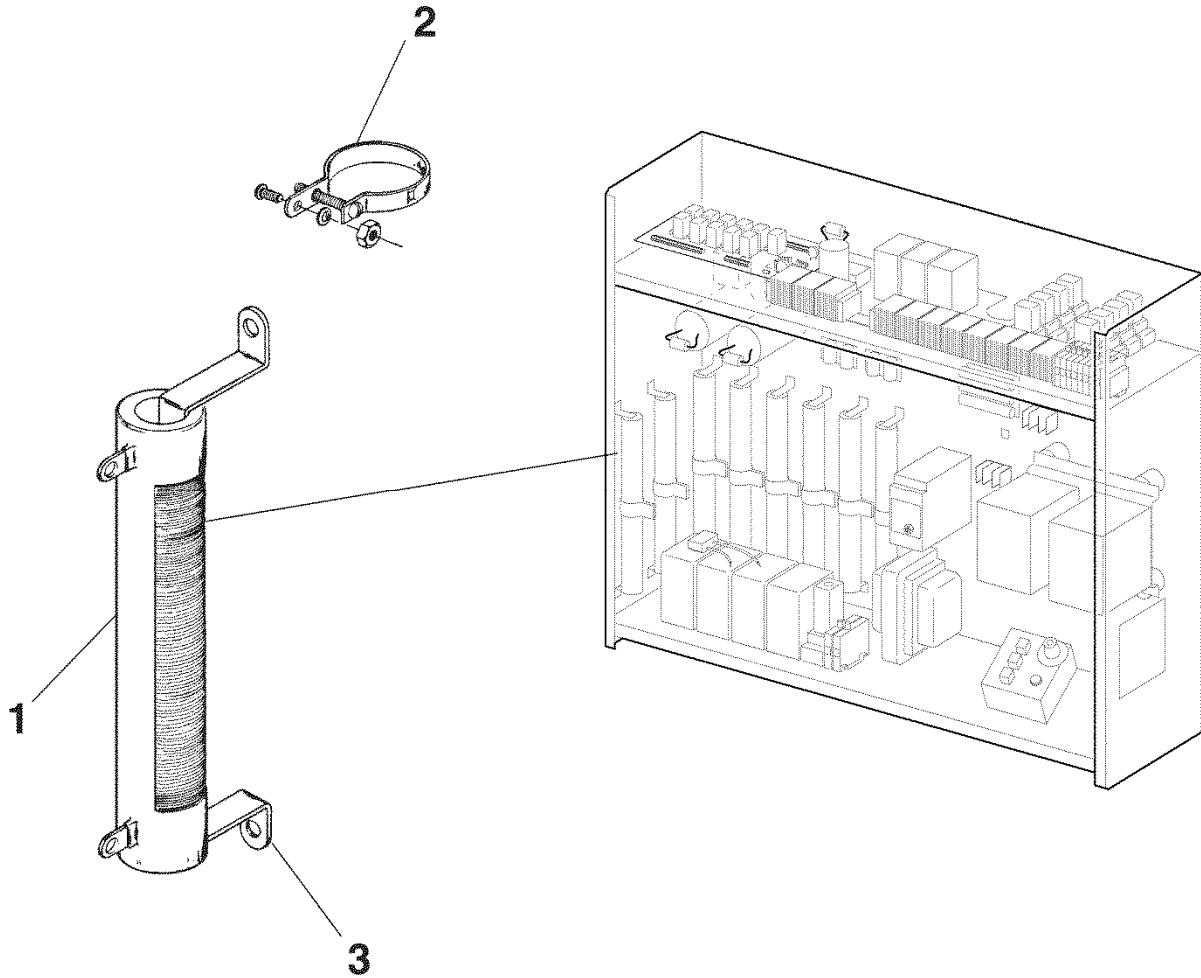
10-AAA21040C



REF. No.	PART No.	DESCRIPTION	SYMBOL
1	AAA375BR16	Fuse, Time Delay, 6.25 A, 250 V	F9, F10, F13, F14
	AAA375BR12	Fuse, Time Delay, 3 A, 250 V	F15, F16
2	AAA375BK31	Fuse, 200-240 V, 5 A, Front/Rear Door & Reverse Phase Relay	F7, F8, F17
3	AAA00180AAD001	Fuse Holder, 2-Pole, 16 A, 300 V	F9, F10, F13, F14
4	AAA653E1 AAA653E2	Fuse Holder	F15, F16
5	480GP4 AAA180FK1	Fuse Holder	F7, F8, F17
6	AAA180FK2	Puller, Fuse (Mount to Holder)	---

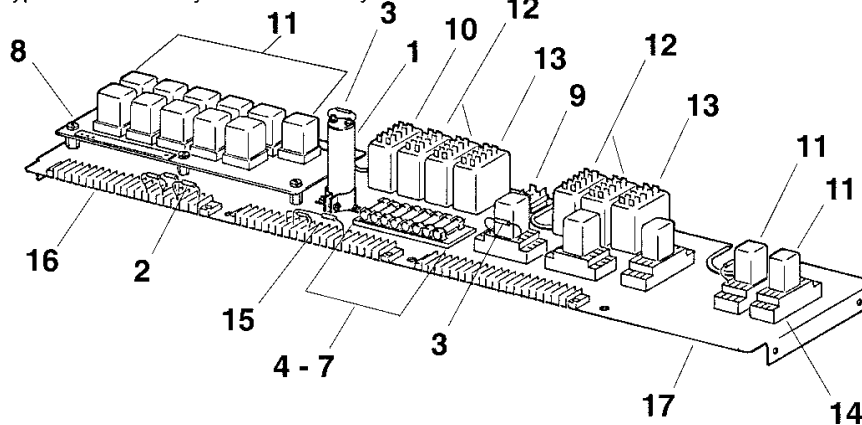


REF. No.	PART No.	DESCRIPTION	SYMBOL
	AAA21040C ABA21040C		
1	P226DA5	Capacitor, 2 K μ F	C
2	P230BP2 AAA612AM4	Rectifier, Silicon Bridge, 1-Phase, 25 A, 800 V	DRF, RDRF
3	AAA232FP94	Resistor, 75 K Ω , 2 W	---



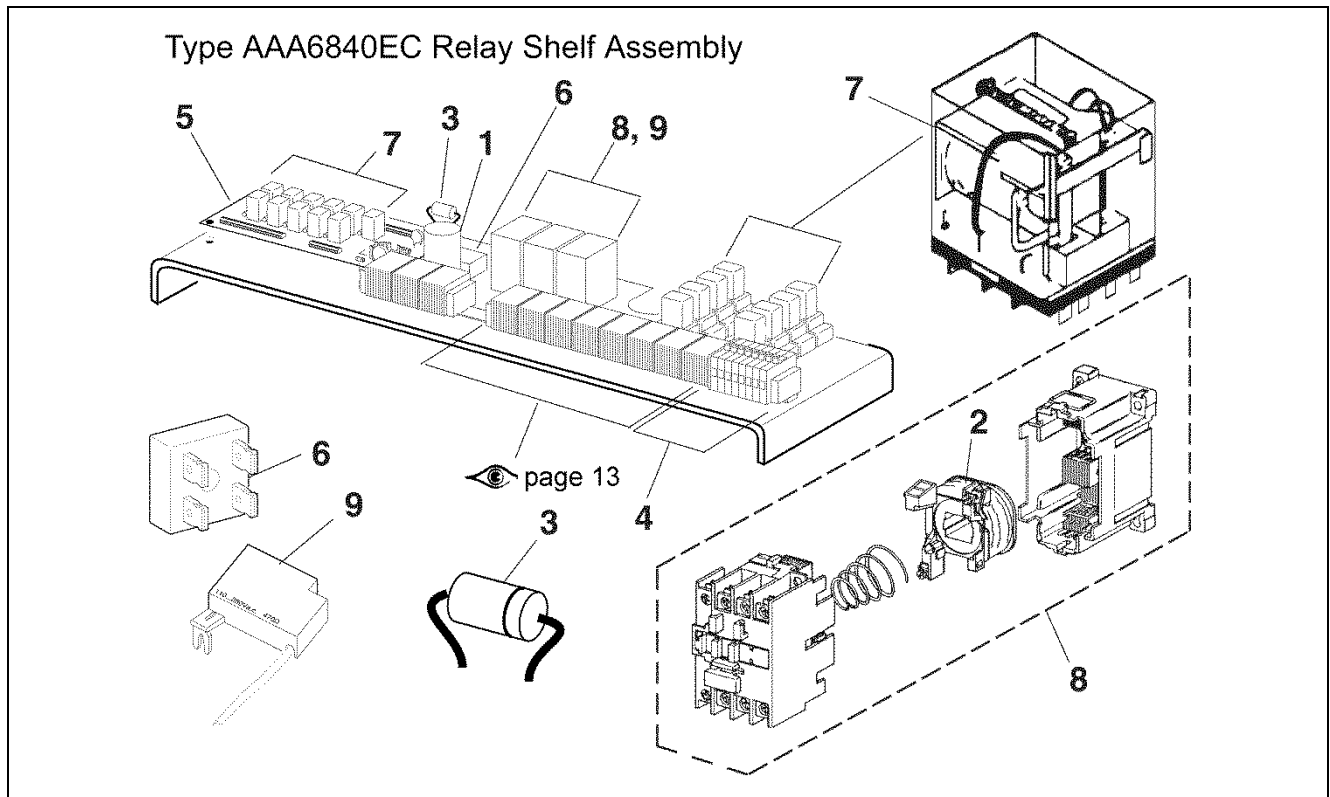
REF. No.	PART No.	DESCRIPTION	SYMBOL
	AAA21040C ABA21040C		
1	AAA232FF8	Resistor, 50 Ω , 225 W	R2-R4, RR2-RR4
	AAA232FF10	Resistor, 250 Ω , 225 W	R1, RR1
2	AAA232FF102	Resistor, Adjusting Lug	R1-R3, RR1-RR3
3	AAA232FF101	Resistor, Mounting Clip	- - -

Type 6840DY Relay Shelf Assembly



REF. No.	PART No.	DESCRIPTION	SYMBOL
	AAA21040C		
1	P226DA4	Capacitor, 12000 μ F	C1
2	AAA00612AAA002	Diode, 3 A, 100 V (Term. 18-20)	---
3	AAA612AF2	Diode, Rectifier, 400 V PIV, 1 A Forward Current	RDO, RDC, RNDGE, PRR
4	AAA00180AAD007	Fuse Holder	---
5	375P26 AAA375BT26	Fuse, 1.5 A, 250 V	F3
6	AAA375BR16	Fuse, 6.25 A, 250 V	F12
7	AAA375BR12	Fuse, 3 A, 250 V	F1, F2, F4-F6, F11
8	C8121AX1	PC Board, Relay (see p. 16 for details)	---
9	P230BP2 AAA612AM4	Rectifier, Bridge	DRF1
10	P613AP7 AAA24831M7 AAA613DL15	Relay, 120 VAC, 4 N.C. Contacts	See NOTE CSA
11	AAA613CZ9	Relay, 115 VAC 4 N.C. Contacts	DR, LPR
	AAA613CZ8	Relay, 24 VDC 4 N.C. Contacts	RDO, RDC, RNDGE, RV, PRR, DO, DC, AUD, NDGE, DMV, DLV, ULV, UMV, DZ, PM
12	P613AP9 AAA24831M9 AAA613DL16	Relay, 115 VAC, 3 N.O., 1 N.C. Contacts	See NOTE DOR, DCR, RDOR, RDC
13	P613AP6 AAA24831M6 AAA613DL17	Relay, 120 VAC, 2 N.O., 2 N.C. Contacts	See NOTE HES, RHES
14	618AE2	Relay Socket	---
15	605H4 AAA00605AAA014	Suppressor, 0.5 μ F	
16	P303CG1	Terminal Block, 20 Terminals	
17	P303CG2	Terminal Block, 15 Terminals	

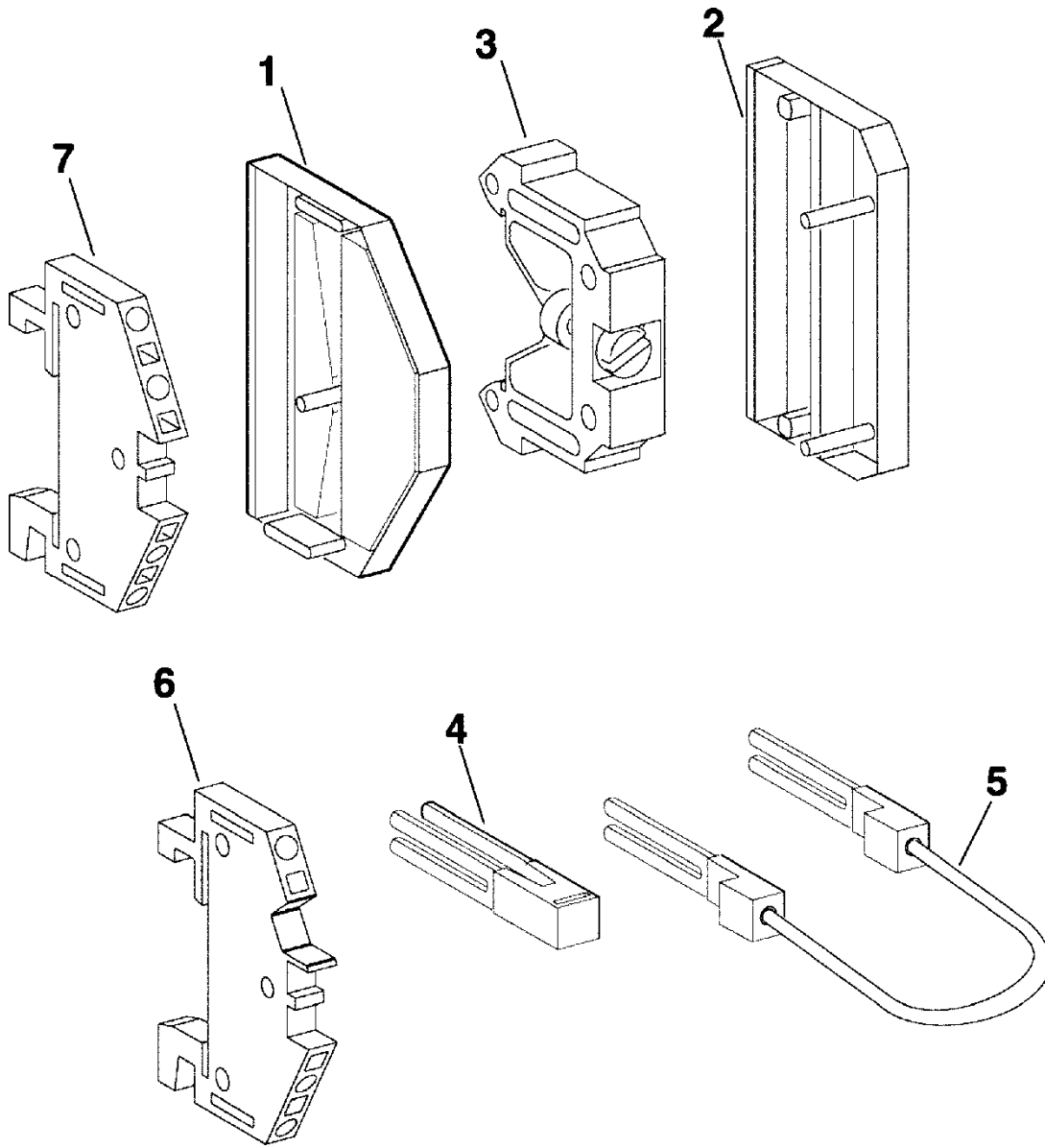
NOTE: For first time replacement, order AAA24831M_; for subsequent replacements, order AAA613DL_. Refer to TIP 1.2.0-38, P613AP6, 7 and 9 Aromat Relay Replacements, for replacement options.



REF. No.	PART No.	DESCRIPTION	SYMBOL
	ABA21040C		
1	P226DA4	Capacitor, 12000 μ F	C1
2*	613BX/22-122-304-33	Coil	---
3	AAA612AF2	Diode, Rectifier, 400 V PIV, 1A Forward Current	---
4	375P26 AAA375BT26	Fuse, 1.5 A, 250 V	F3
	AAA375BR12	Fuse, 3 A, 250 V	F1, F2, F4-F6, F11
	AAA375BR16	Fuse, 6.25 A, 250 V	F12
5	AAA26800MZ1	P.C. Board, Relay	RB1
6	P230BP2 AAA612AM4	Rectifier, Silicon Bridge, 1-Phase	DRF1
7	AAA613CZ8	Relay, 24 VDC, 4 NC Contacts	PRR, RDO, RDC, RNDG, CDB, LDB, DO, DC, AUD, NDGE, DMV, DLV, ULV, UMV, DZ, PM
	AAA613CZ9	Relay, 115 VAC, 4 NC Contacts	DR, LPR, CSR
8**	613BX4 AAA613DL17	Relay, 120 VAC, 2 NO, 2 NC Contacts	HES
	613BX13 AAA613DL16	Relay, 120 VAC, 3 NO, 1 NC Contacts	DOR, DCR
9	AAA00605AAA018 AAA00605AAA014	Suppressor, Transient, 110-280 VAC	DOR, DCR, HES

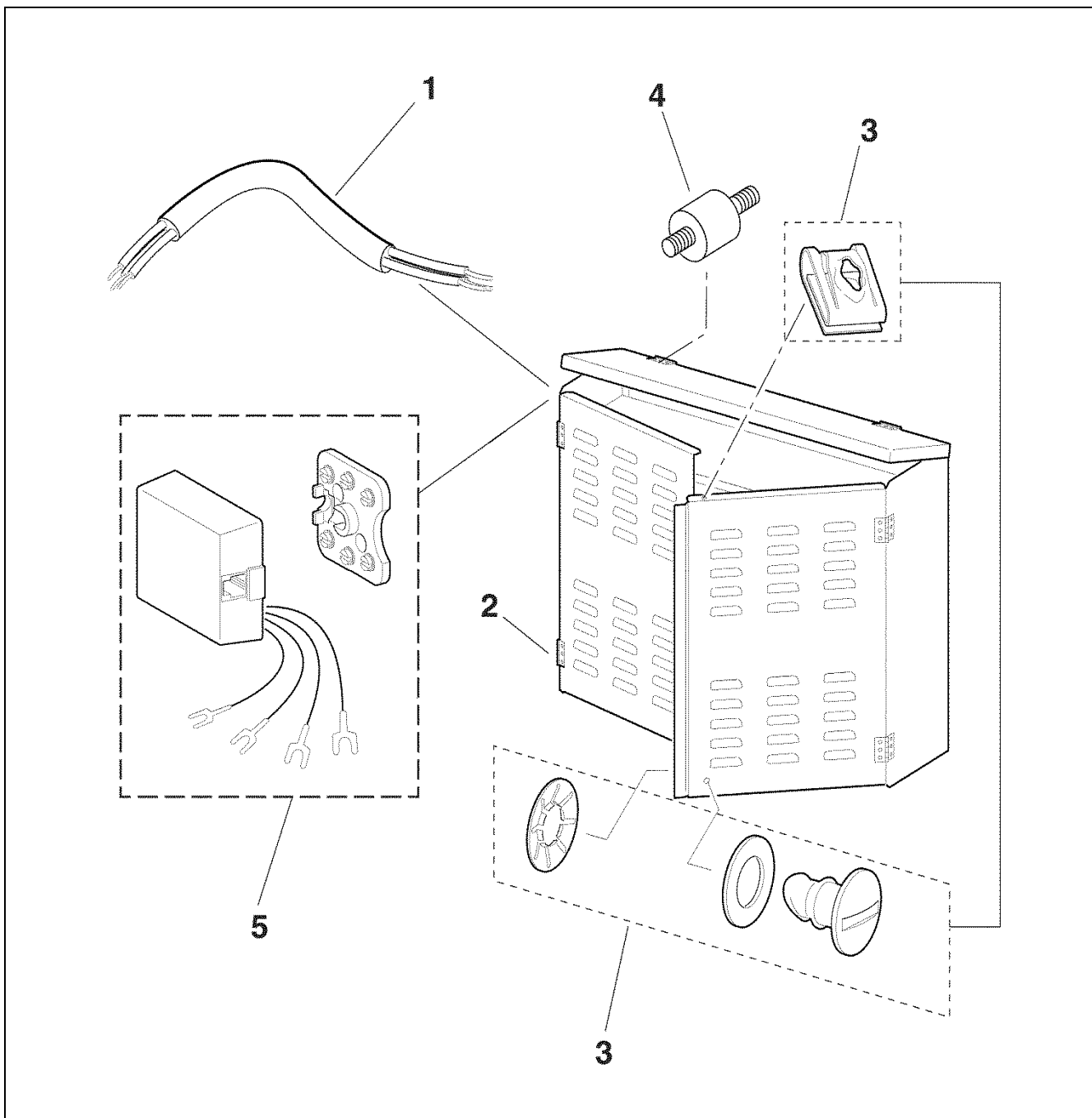
* Obsolete. Replace it with complete relay AAA613DL16 or DL17.

** Functional replacement. See TIP 1.2.0-37, *Replacing Obsolete Commercial Relays*.



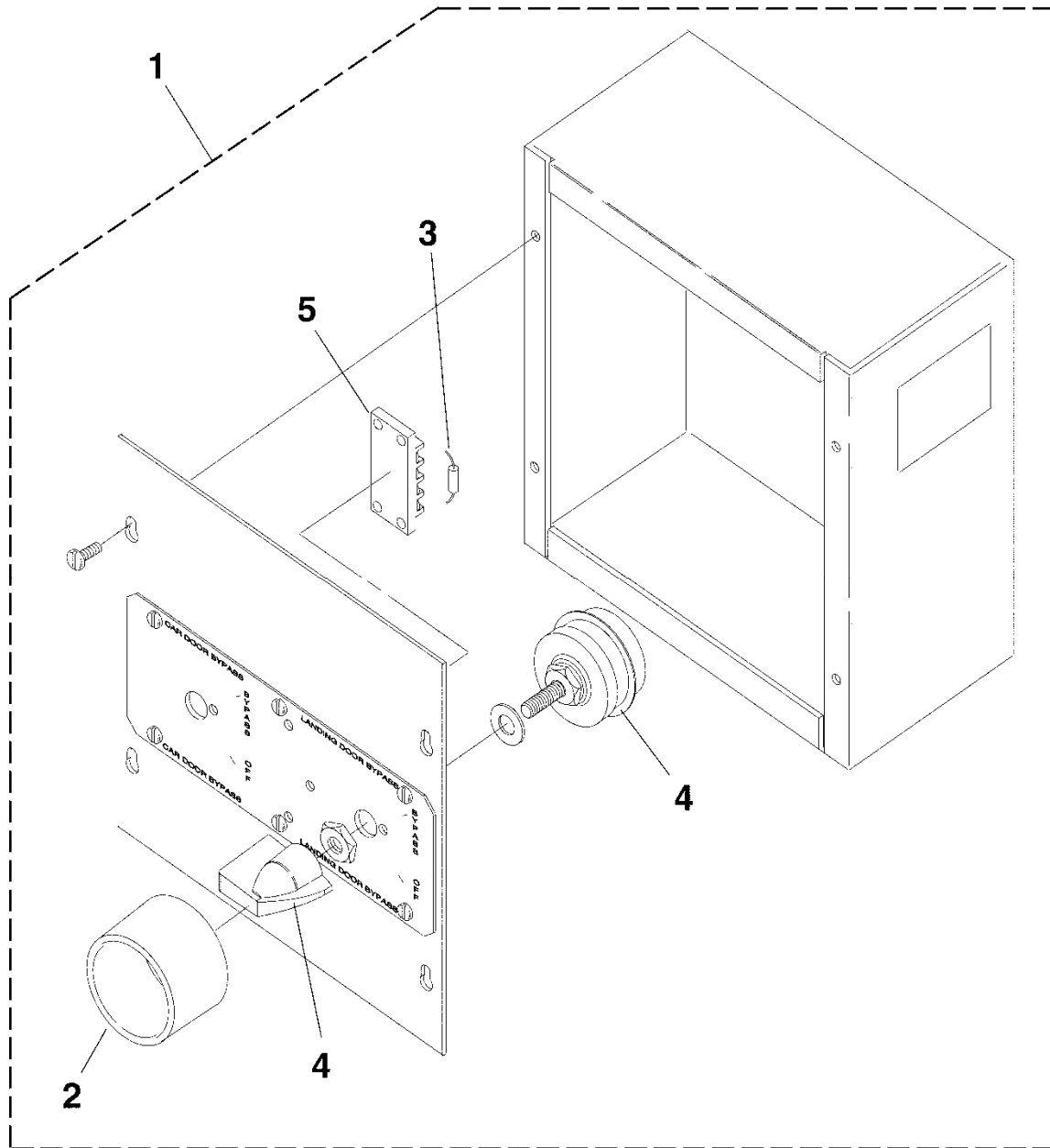
ABA21040C

REF. No.	PART No.	DESCRIPTION
1	AAA303EP3	End Plate
2	AAA303EP6	End Plate
3	AAA303EP5	End Stop
4	AAA303EP90	Jumper, Horizontal
5	AAA303EP91	Jumper, Wire
6	AAA303EP89	Terminal Block, 3 Terminals, 600 V, 15 A, 26-14 AWG
7	AAA303EP1	Terminal Block, 4 Terminals, 600 V, 15 A, 26-14 AWG



AAA21040C
ABA21040C

REF. No.	PART No.	DESCRIPTION
1	174ET13	Cable Assembly
2	391BL3	Hinge
3	2700CCK1	Kit, Controller Door Lock
4	334AS2	Sound Isolation Stud
5	303CP1	Terminal Block, Phone

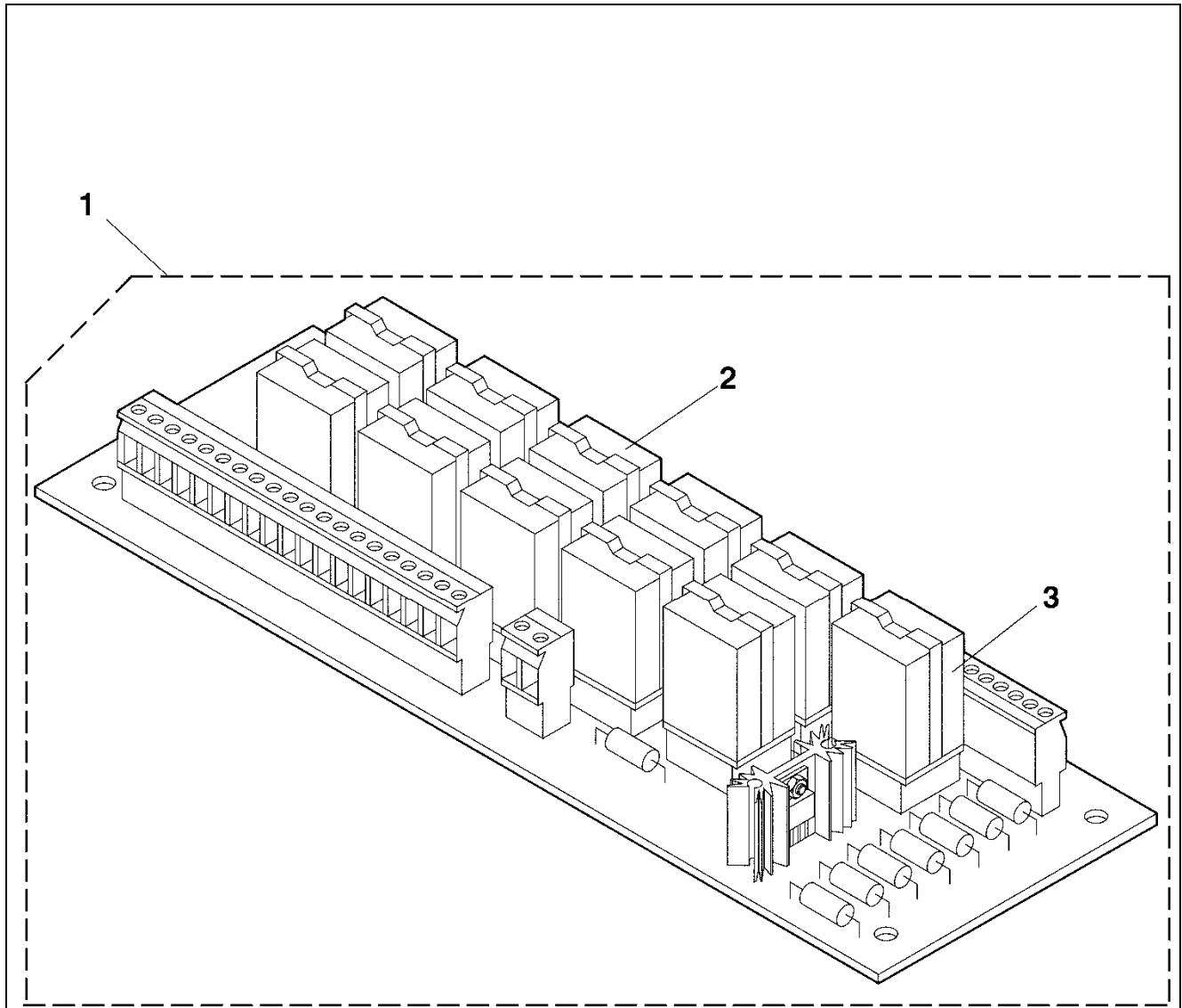


ABA21040C

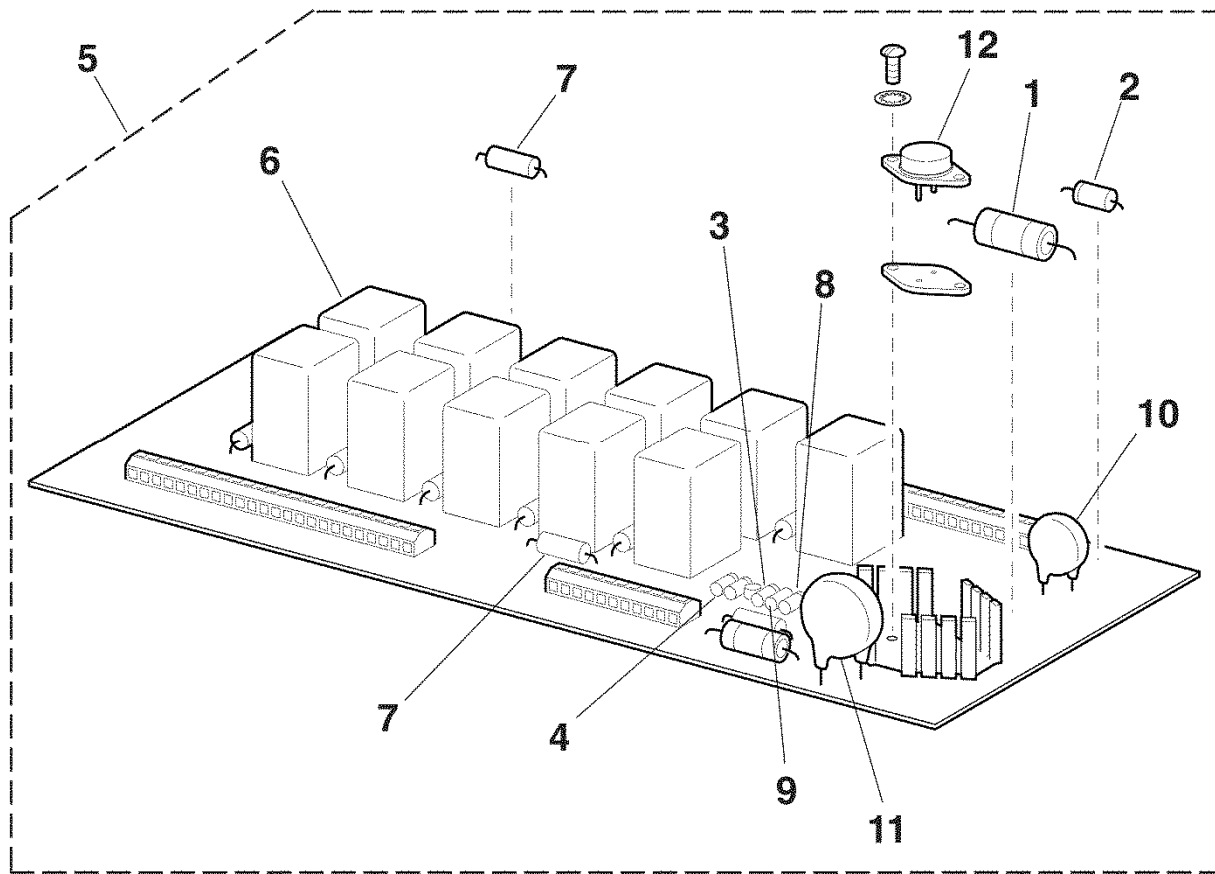
REF. No.	PART No.	DESCRIPTION
1	ABA21791A1	Assembly, Car & Landing Door Bypass Switch Box, Canada B44 Bypass Code
2	384VY1	Guard
3	AAA232GK126	Resistor, 200 Ω, 1.0 W
4	AAA636E2	Switch, Maintained Position
5	303CX2	Terminal Block

Relay PC Board

10-AAA21040C



REF. No.	PART No.	DESCRIPTION	SYMBOL
	AAA21040C		
1	A8121AX1	PC Board, Relay	RB1
	B8121AX1		
	C8121AX1		
2	630F3 AAA613CZ8	Relay, 24 VDC, 4 NC Contacts	DO, DC, AUD, NUDGE, DMV, DLV, ULV, UMV, DZ, PM
3	630F4 AAA613CZ9	Relay, 115 VAC, 4 NC Contacts	DR



REF. No.	PART No.	DESCRIPTION	SYMBOL
1	P226BL1	Capacitor, 0.1MFD, 200 VDC	C1, C2
2	AAA612T4	Diode, 400 V PIV, 1A	CR1-CR12
3	AAA612T5	Diode, 600 V PIV, 1A	CR13
4	AAA612AA1	Diode, Signal	CR14, CR15
5	AAA26800MZ1 ABA26800MZ1	PC Board, Relay	RB1
6	AAA613CZ9	Relay, 115 VAC, 4 Pole Double-Throw	DR
	AAA613CZ8	Relay, 24 VDC, 4 Pole Double-Throw	DO, DC, AUD, NDGE, DMV, DLV, ULV, UMV, DZ, PM
7	AAA232FN56	Resistor, 200 Ω	R1, R2
8	AAA232FY411	Resistor, Metal Film, 187 KΩ, 0.5 W	R3
9	AAA232FC30	Resistor, Wire Wound, 50 Ω, 3 W	R4
10	AAA605AA13	Varistor, Metal Oxide	SUP2
11	AAA605AA36	Varistor, Metal Oxide	SUP1
12*	P601EE1	Voltage Regulator	VR1

* Obsolete. Replace it w/complete board ABA26800MZ1.