

PARTS LIST

SAFETY PRECAUTION

Parts identified by the Δ symbol are critical for safety. Replace only with specified part numbers.

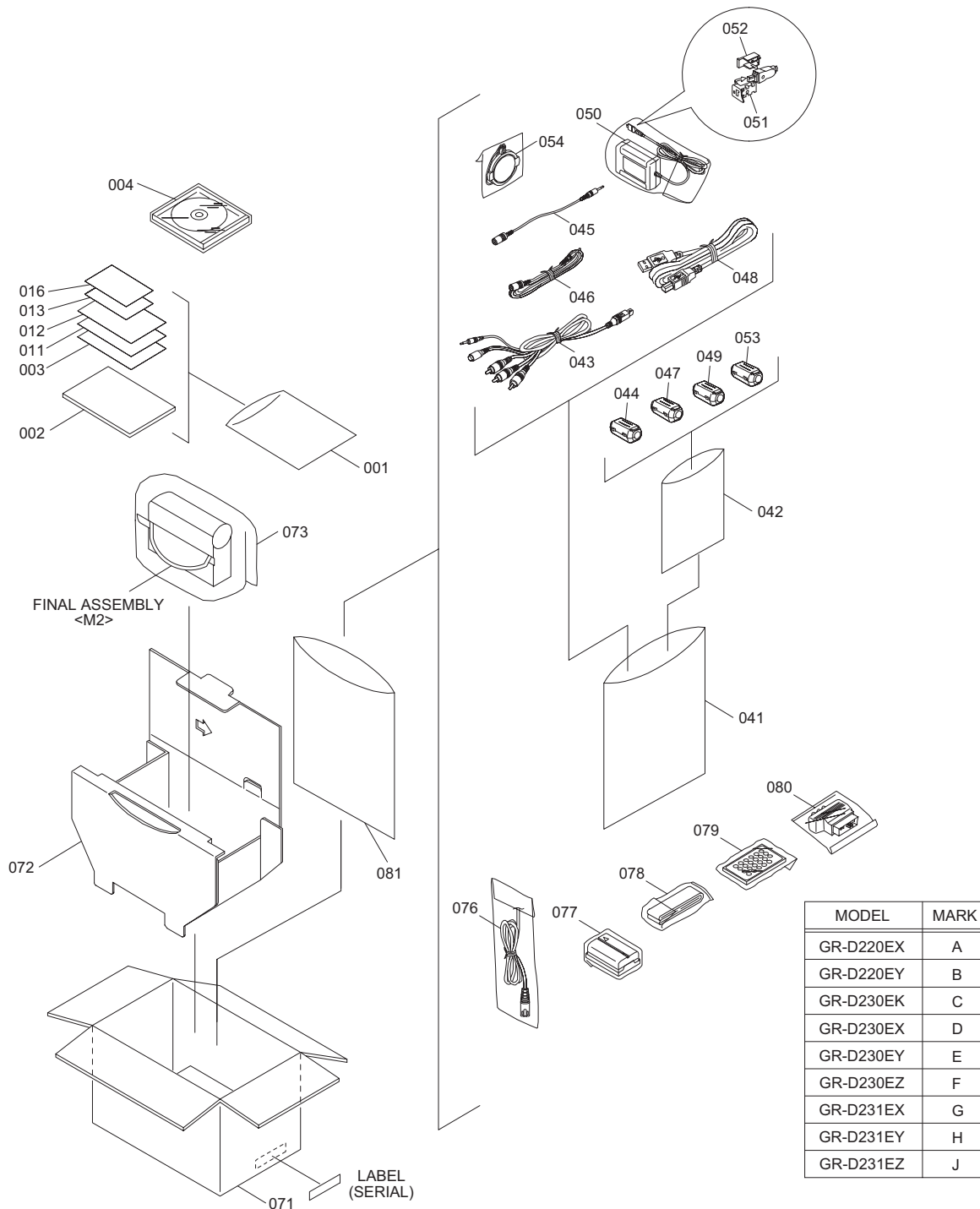
BEWARE OF BOGUS PARTS

Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.

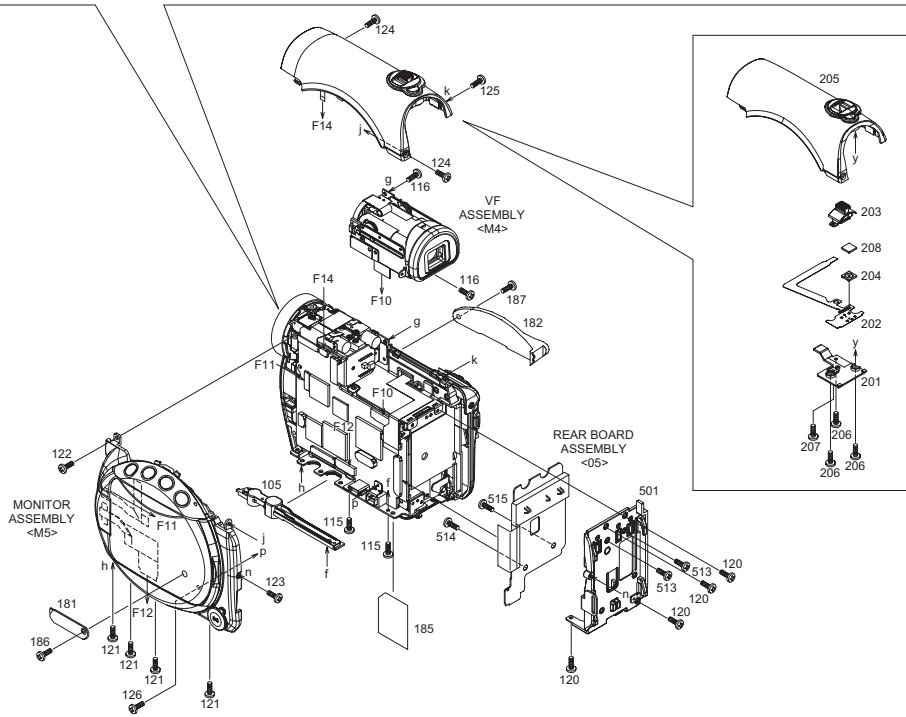
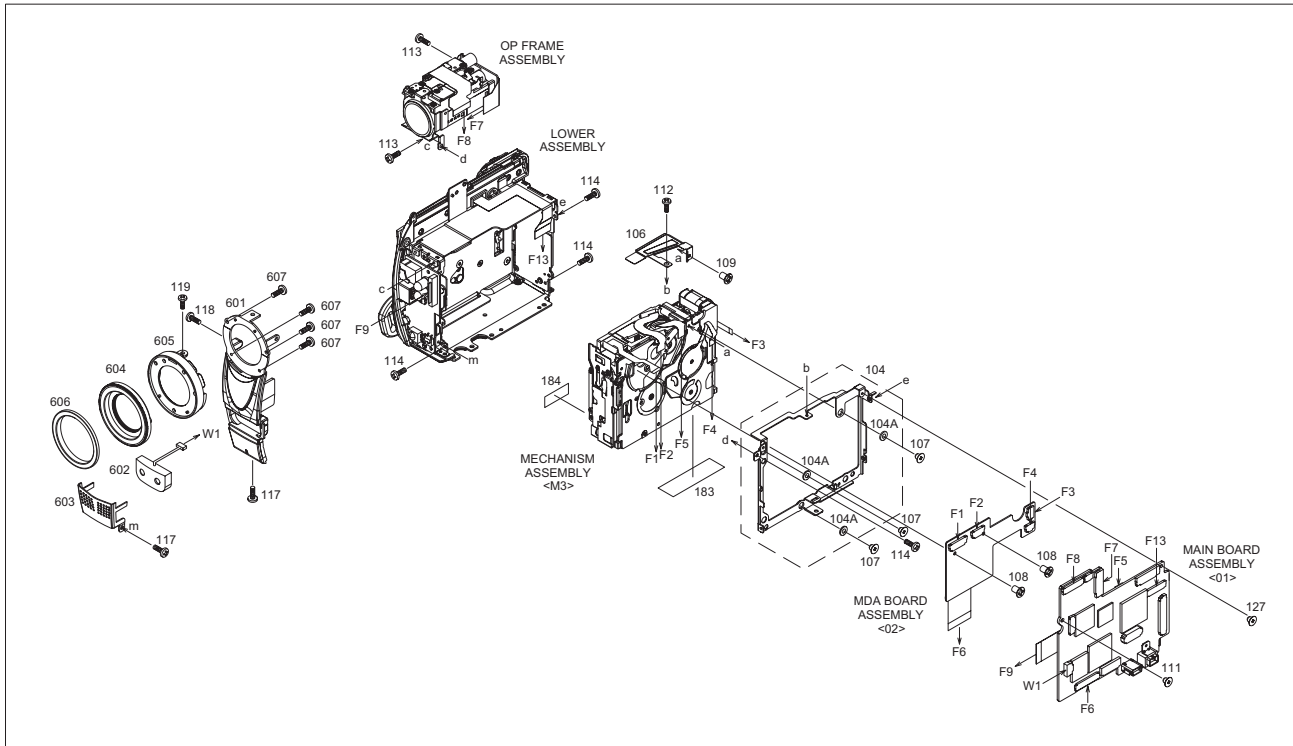
1. EXPLODED VIEW

1.1 PACKING AND ACCESSORY ASSEMBLY <M1>

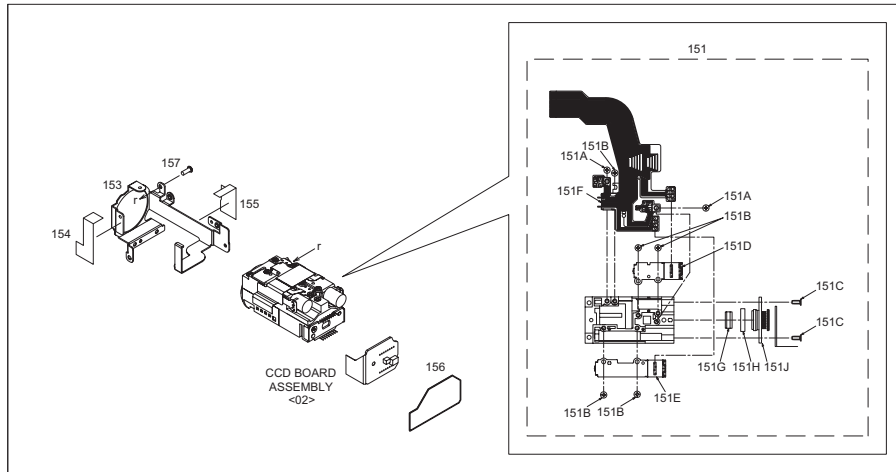
The instruction manual to be provided with this product will differ according to the destination.



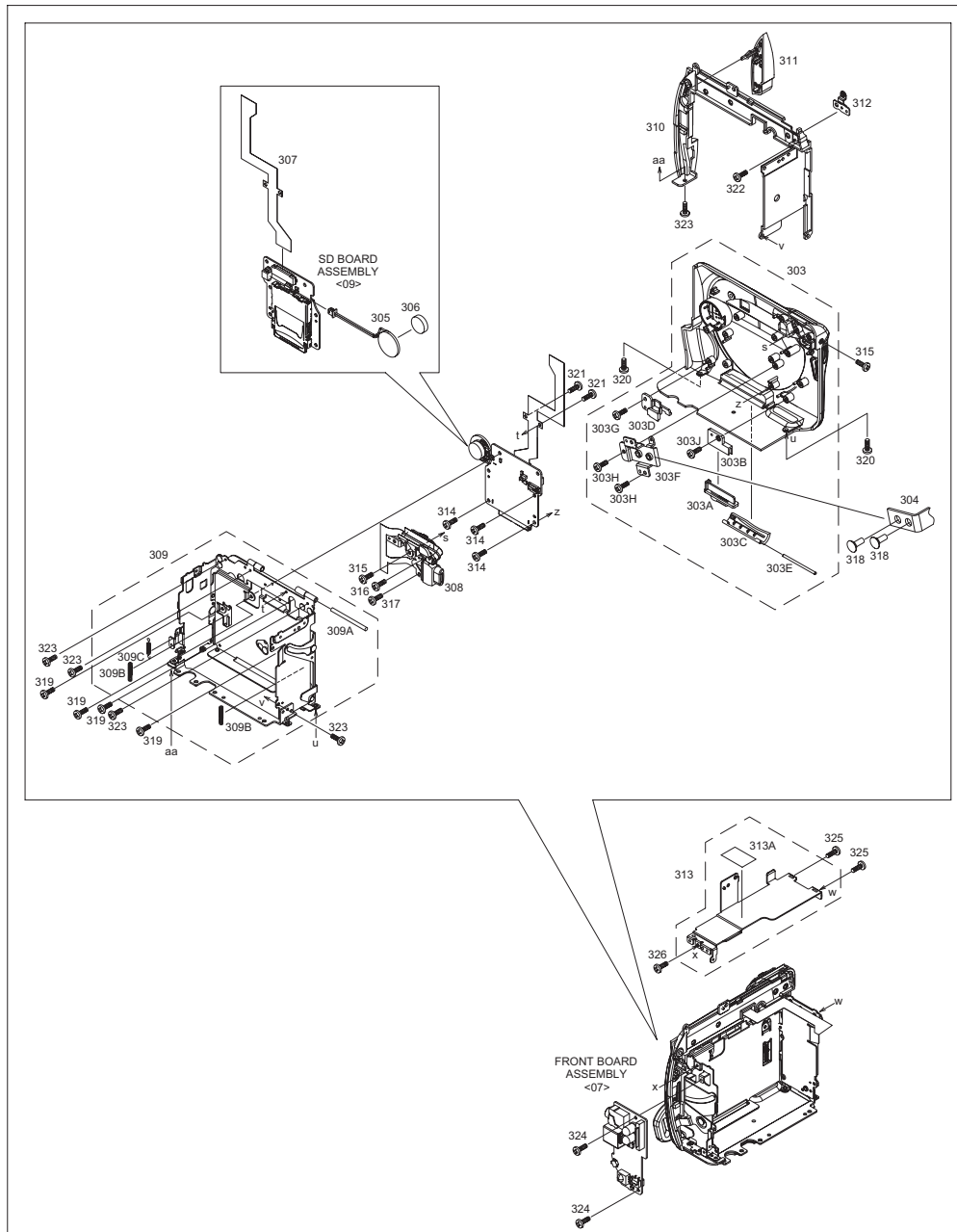
1.2 FINAL ASSEMBLY <M2>



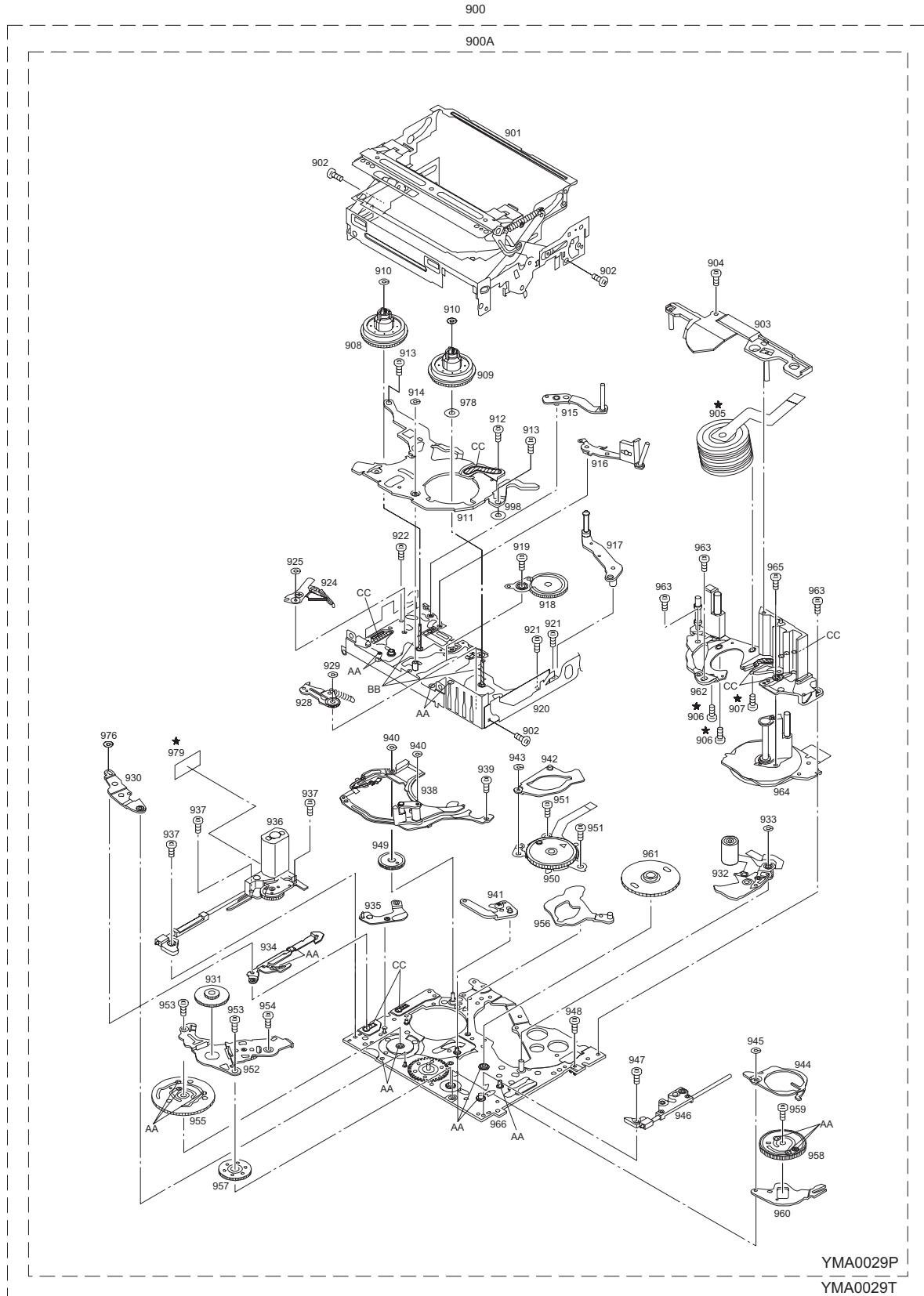
< OP FRAME ASSEMBLY >



< LOWER ASSEMBLY >



1.3 MECHANISM ASSEMBLY <M3>



YMA0029P

YMA0029T

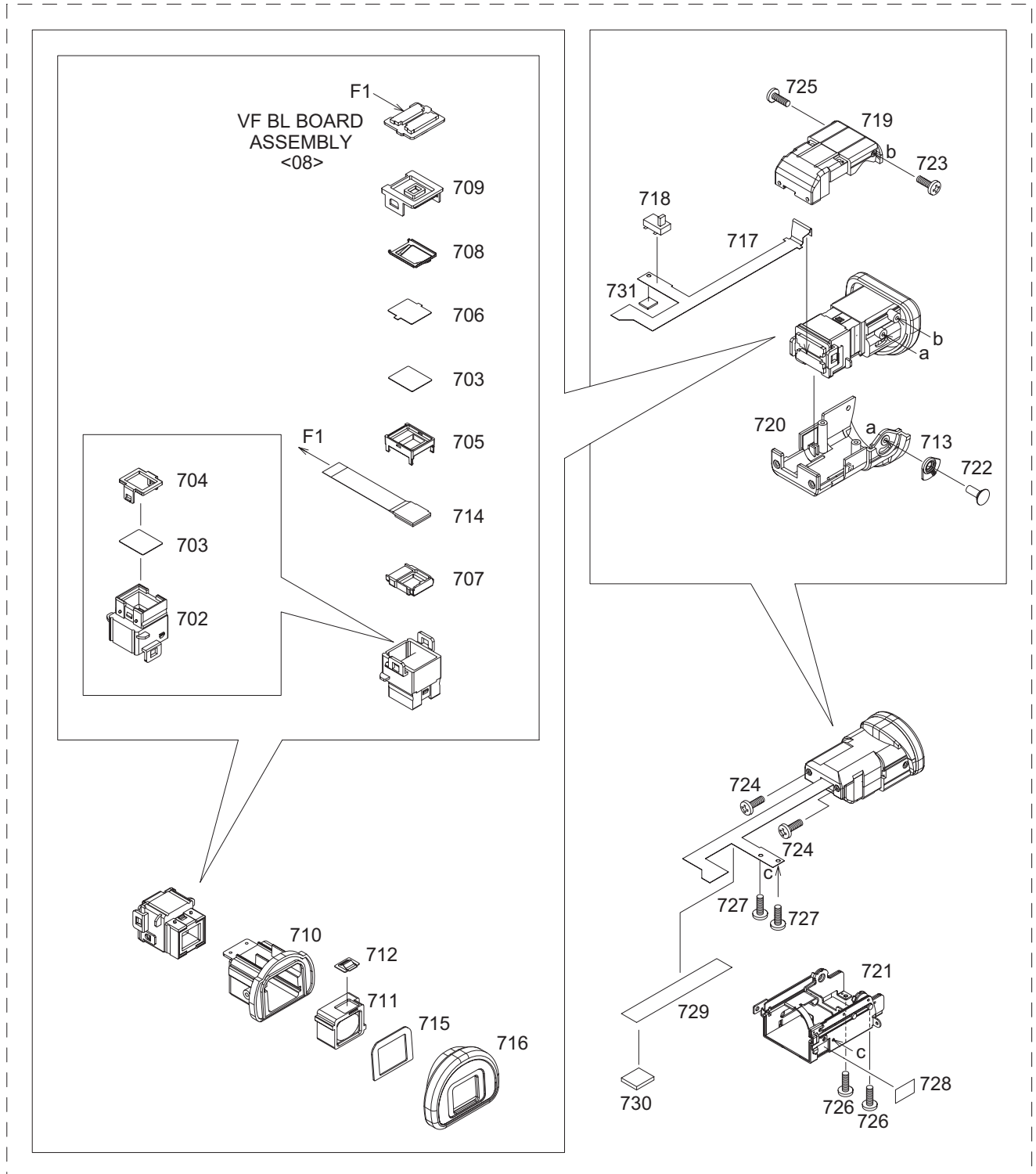
Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-JB	AA
Oil	YTU94027	BB
Grease (HANARL)	RX-410R	CC

NOTE1: The section marked in AA, BB and CC indicate lubrication and greasing areas.

NOTE2: Mark ★ is not contained in 900A.

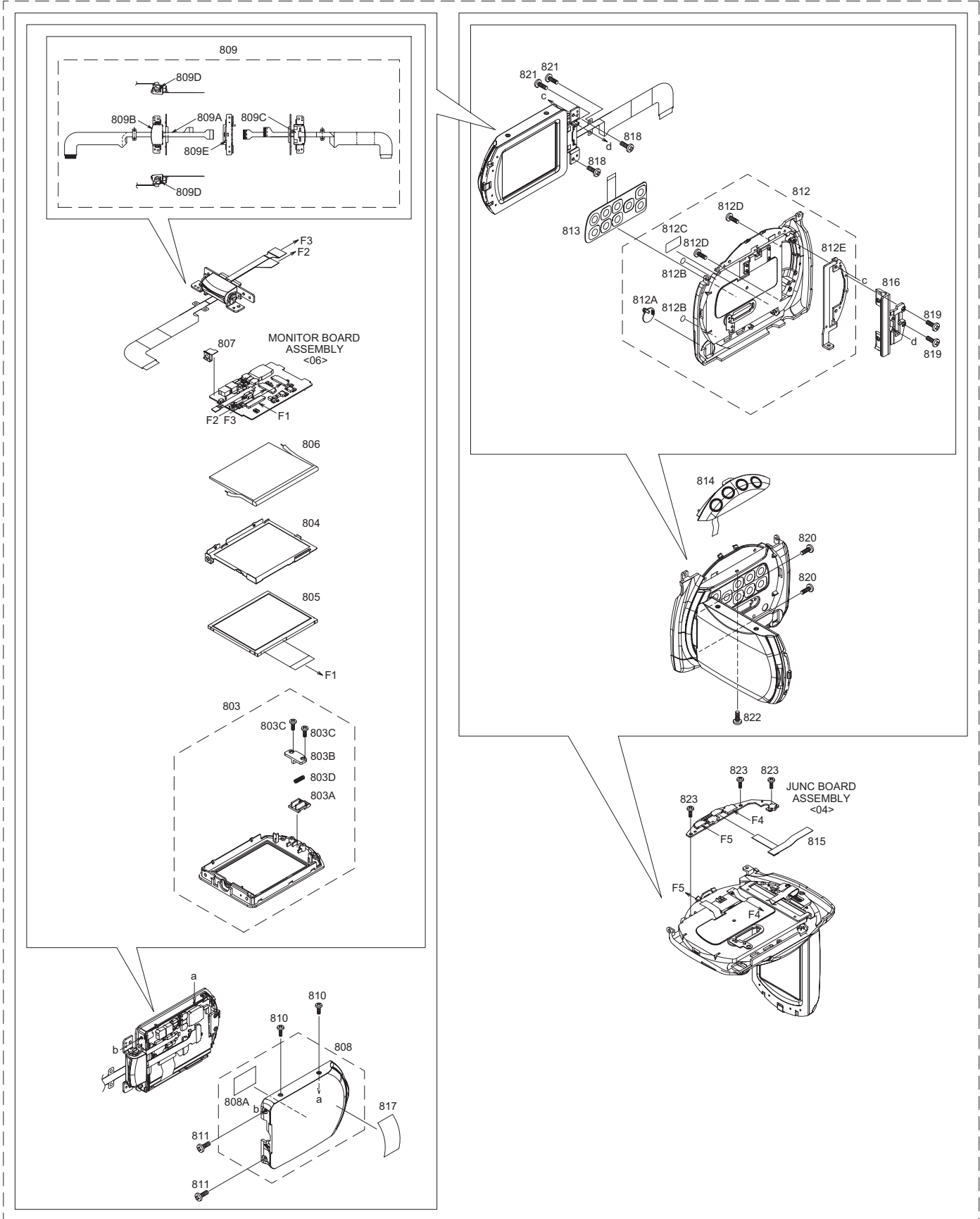
1.4 VF(COLOR) ASSEMBLY <M4>

700



1.5 MONITOR ASSEMBLY <M5>

800



MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

2. PARTS LIST

PACKING AND ACCESSORY ASSEMBLY <M1>

△ Symbol No.	Part No.	Part Name	Description	Local
	QPA02003506	POLY BAG	DOCUMENT 20cm x 35cm	AB,D,E,F,G,H,J
001	YQM30061-3	POLY BAG	DOCUMENT	C
△ 002	LYT1268-001A	INST BOOK(EN)	(ENGLISH)	C
△ 002	LYT1268-002A	INST BOOK(GE)	(GERMAN)	AB,D,E,G,H
△ 002	LYT1268-003A	INST BOOK(FR)	(FRENCH)	A,D,G
△ 002	LYT1268-004A	INST BOOK(DU)	(DUTCH)	A,D,G
△ 002	LYT1268-005A	INST BOOK(SP)	(SPANISH)	A,D,G
△ 002	LYT1268-006A	INST BOOK(IT)	(ITALIAN)	A,D,G
△ 002	LYT1268-007A	INST BOOK(DA)	(DANISH)	B,E,H
△ 002	LYT1268-008A	INST BOOK(FI)	(FINN)	B,E,H
△ 002	LYT1268-009A	INST BOOK(SW)	(SWEDISH)	B,E,H
△ 002	LYT1268-010A	INST BOOK(NO)	(NORWEGIAN)	B,E,H
△ 002	LYT1268-011A	INST BOOK(RU)	(RUSSIAN)	F,J
△ 002	LYT1268-012A	INST BOOK(CZ)	(CZECH)	F,J
△ 002	LYT1268-013A	INST BOOK(PO)	(POLISH)	F,J
△ 002	LYT1268-014A	INST BOOK(HU)	(HUNGARIAN)	F,J
△ 002	LYT1268-015A	INST BOOK(PT)	(PORTUGUESE)	A,D,G
003	LYT1247-001A	INST BOOK(SOFT.EN)	(SOFT.ENGLISH)	C
003	LYT1247-002A	INST BOOK(SOFT.GE)	(SOFT.GERMAN)	AB,D,E,G,H
003	LYT1247-003A	INST BOOK(SOFT.FR)	(SOFT.FRENCH)	A,D,G
003	LYT1247-004A	INST BOOK(SOFT.DU)	(SOFT.DUTCH)	A,D,G
003	LYT1247-005A	INST BOOK(SOFT.SP)	(SOFT.SPANISH)	A,D,G
003	LYT1247-006A	INST BOOK(SOFT.IT)	(SOFT.ITALIAN)	A,D,G
003	LYT1247-007A	INST BOOK(SOFT.DA)	(SOFT.DANISH)	B,E,H
003	LYT1247-008A	INST BOOK(SOFT.FI)	(SOFT.FINN)	B,E,H
003	LYT1247-009A	INST BOOK(SOFT.SW)	(SOFT.SWEDISH)	B,E,H
003	LYT1247-010A	INST BOOK(SOFT.NO)	(SOFT.NORWEGIAN)	B,E,H
003	LYT1247-011A	INST BOOK(SOFT.RU)	(SOFT.RUSSIAN)	F,J
003	LYT1247-018A	INST BOOK(SOFT.PT)	(SOFT.PORTUGUESE)	A,D,G
004	LY32210-081B	CD ROM ASSY		A,C,D,G
004	LY32210-082C	CD ROM ASSY		B,E,F,H,J
011	LYT0194-001B	Q.CARD		C
012	YU30878	REGIST. CARD		C
013	-----	WARRANTY CARD		AB,D,E,F,G,H,J
016	BT-54008-6	GUARANTY CARD		C
041	QPA02003005P	POLY BAG	CABLE ASSY 20cm x 30cm	
042	LY30023-014A	POLY BAG	CORE FILT.	
043	QAM0542-001	MULTI CABLE	MULTI	A,C,G
043	QAM0542-002	MULTI CABLE	MULTI	B,D,E,F,H,J
044	QQR0917-002	CORE FILTER	MULTI	
045	QAM0515-001	RM CABLE	EDIT EXT	
046	QAM0495-001	AUDIO CABLE	MIC	
047	QQR0917-002	CORE FILTER	MIC 2T	
048	QAM0538-001	USB CABLE	USB	
049	QQR0491-002	FERRITE CORE	USB 1T	
△ 050	LY21104-001B	AC ADAPTER	STRAIGHT TYPE AP-V14E	
△ 050	or LY21153-001B	AC ADAPTER	STRAIGHT TYPE AP-V15E	
051	LY34211-001A	COVER (DC PLUG)		
052	LY34212-001A	COVER2(DC PLUG)		
053	QQR0917-002	CORE FILTER		
054	LY34154-001B	HOOD CAP ASSY		
071	LY34143-001A	PACKING CASE		A,B,D,E,F
071	LY34143-002A	PACKING CASE		C,G,H,J
072	LY34144-001C	CUSHION		
073	LY30023-038A	POLY BAG		
△ 076	QMPP210-190-JR	POWER CORD(EK)	BS PLUG 1.9m BLACK	C
△ 076	QMPL270-190-JR	POWER CORD(EU)	CEE PLUG 1.9m BLACK	AB,D,E,F,G,H,J
△ 077	LY32566-001A	BATTERY PACK ASSY	BN-V408U-B	
078	LY21105-004A	SHOULDER STRAP		
079	LY21185-002A	REMOTE CONTROL UNIT	RM-V719US	
080	QAM0302-001	ADAPTOR PLUG	PERI-RCAS	
081	QPA02503505P	POLY BAG	ACC. 25cm x 35cm	

FINAL ASSEMBLY <M2>

△ Symbol No.	Part No.	Part Name	Description	Local
104	LY34071-001B	BKT(MECHA)ASSY		
104A	LY42796-001A	BUSH	(x3)	
105	LY34076-001A	BASE		
106	LY34181-001A	SHIELD COVER(1)		
107	LY30032-002A	SPECIAL SCREW	BK(MEC-MEC)(x3)	

△ Symbol No.	Part No.	Part Name	Description	Local
108	LY30031-015A	SPECIAL SCREW	MDA PWB(x2)	
109	LY30031-015A	SPECIAL SCREW	S.CO(1-MEC)	
111	LY30032-010A	SPECIAL SCREW	M PWB-BK(M)	
112	LY30031-063A	SPECIAL SCREW	S.CO(1-2)	
113	LY30031-063A	SPECIAL SCREW	BKT(OP-TOP)(x2)	
114	LY30031-063A	SPECIAL SCREW	ARM-BKT(ME)(x4)	
115	LY30031-063A	SPECIAL SCREW	ARM-BASE(x2)	
116	LY30031-063A	SPECIAL SCREW	VF-ARM(x2)	
117	LY30031-063A	SPECIAL SCREW	FRONT-ARM(x2)	
118	LY30031-003A	SPECIAL SCREW	LOWER-FRON	
119	LY30031-032A	SPECIAL SCREW	FRO-BKT(OP)	
120	LY30031-065A	SPECIAL SCREW	REAR-ARM(x4)	
121	LY30031-065A	SPECIAL SCREW	UPPER-BASE(x4)	
122	LY30031-032A	SPECIAL SCREW	UPR-BKT(OP)	
123	LY30031-003A	SPECIAL SCREW	UPPER-REAR	
124	LY30031-065A	SPECIAL SCREW	TOP-BKT(x2)	
125	LY30031-063A	SPECIAL SCREW	TOP-BK(LOW)	
126	LY30031-063A	SPECIAL SCREW	UPPER-DV	
127	LY30031-0E9A	SPECIAL SCREW	M PWB-BK(M)	
151	J7C-219A	OP BLOCK ASSY		
151A	LY30727-001A	TAPPING SCREW	(x2)	
151B	LY30727-002A	TAPPING SCREW	(x5)	
151C	QYSPGSU1750Z	TAP SCREW	M1.7 x 5mm(x2)	
151D	LY32692-001D	FOCUS MOTOR		
151E	LY32691-002B	ZOOM MOTOR		
151F	LY33365-001A	IRIS MOTOR UNIT		
151G	LY43384-001A	OP LPF		
151H	LY43494-001A	SHEET		
151J	LYH30375-012A	CCD BASE ASSY		
153	LY34075-001B	BKT(OP)		
154	LY44639-001B	SHIELD(OP-R)		
155	LY44365-001A	SHIELD(OP-L)		
156	LY44382-001C	SHIELD(CCD PWB)		
157	LY30031-026A	SPECIAL SCREW	OP-BKT(OP)	
181	LY33527-002A	COVER(JIG)		
182	LY34132-001C	COVER(ADJUST)		
183	LY40699-002A	LABEL(PUSH)		
184	LY32001-004A	LABEL(HOUSING)		
185	QAM0366-002	MEMORY CARD	SD 8MB	
186	LY30031-063A	SPECIAL SCREW	COVER(JIG)	
187	LY30031-063A	SPECIAL SCREW	COV(ADJUST)	
201	LY34127-001C	HOLDER(SW)		
202	QAL0562-001	FPC		
203	LY34126-001A	ZOOM SW		
204	NSW0223-001X	TACT SWITCH		
205	LY34123-001B	TOP COVER ASSY		
206	LY30031-031A	SPECIAL SCREW	HOL(SW-TOP)(x3)	
207	LY30031-061A	SPECIAL SCREW	ZOOM SW	
208	LY30034-074A	SPACER(A)	TACT SW	
△ 303	LY34101-001C	CASSETTE COVER ASSY		
303A	LY34102-001A	KNOB(LOCK)		
303B	LY34103-001A	HOLDER(LOCK)		
303C	LY34104-001B	COVER(SD)		
303D	LY34105-001A	HOLDER(SD)		
303E	LY44575-001A	SHAFT(SD)		
303F	LY34106-001A	HOOK(GRIP)		
303G	LY30031-003A	SPECIAL SCREW	FOR SD	
303H	LY30031-003A	SPECIAL SCREW	FOR GRIP(x2)	
303J	LY30031-003A	SPECIAL SCREW	FOR KNOB	
304	LY21228-001A	GRIP BELT		
305	QAS0203-001	SPEAKER		
306	LY44259-002A	SPACER		
307	QAL0560-001	FPC		
308	LY21195-001A	POWER UNIT		
309	LY21215-001B	ARM ASSY		
309A	LY42781-001A	SHAFT		
309B	LY30002-046B	COMPRESSION SPRING	(x2)	
309C	LY44348-001A	TENSION SPRING		
310	LY10506-001B	LOWER CASE		
311	LY44582-001B	JACK COVER(AV)ASSY		
312	LY34173-001A	BKT(LOWER)		
313	LY34073-001B	BKT(TOP)ASSY		
313A	LY30034-059A	SPACER(A)		
314	LY30031-003A	SPECIAL SCREW	SD PWB(x3)	
315	LY30031-003A	SPECIAL SCREW	POWER(x2)	
316	LY30031-003A	SPECIAL SCREW	TRIG	
317	LY30031-063A	SPECIAL SCREW	TRIG	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

Symbol No.	Part No.	Part Name	Description	Local
318	LY30031-004A	SPECIAL SCREW	GRIP(x2)	
319	LY30031-003A	SPECIAL SCREW	ARM-CASS(x4)	
320	LY30031-063A	SPECIAL SCREW	CASS-ARM(x2)	
321	LY30031-063A	SPECIAL SCREW	SD FPC(x2)	
322	LY30031-063A	SPECIAL SCREW	LOWER-BKT	
323	LY30031-063A	SPECIAL SCREW	LOWER-ARM(x5)	
324	LY30031-063A	SPECIAL SCREW	FRONT PWB(x2)	
325	LY30031-063A	SPECIAL SCREW	TOPBKT-ARM(x2)	
326	LY30031-063A	SPECIAL SCREW	TOPBKT-ARM	
△ 501	LY34128-001D	REAR COVER ASSY		
513	LY30031-003A	SPECIAL SCREW	TER-REAR(x2)	
514	LY30031-003A	SPECIAL SCREW	REAR-PWB	
515	LY30031-010A	SPECIAL SCREW	BKT-PWB	
601	LY34079-001C	FRONT COVER ASSY		A,B,D,E,F
601	LY34079-002C	FRONT COVER ASSY		C,G,H,J
602	LY33770-002A	MIC ASSY		
603	LY34088-001A	COVER(MIC)		A,B,D,E,F
603	LY34088-003A	COVER(MIC)		C,G,H,J
604	LY34082-001C	HOOD		
605	LY34148-001B	RING(HOOD)		
606	LY34080-001C	HOOD(FILTER)		
607	LY30031-003A	SPECIAL SCREW	F.COV-HOOD(x4)	

Symbol No.	Part No.	Part Name	Description	Local
951	YQ43893	MINI SCREW		(x2)
952	LY32860-001E	GEAR COVER ASSY		
953	YQ43893	MINI SCREW		(x2)
954	YQ43893-4	MINI SCREW		
955	LY43676-001A	MAIN CAM ASSY		
956	LY41941-001B	SLIDE ARM ASSY		
957	LY43678-001A	CONNECT GEAR 2		
958	LY43679-001C	SUB CAM ASSY		
959	LY42120-001A	MINI SCREW		
960	LY43692-001A	CONTROL ARM ASSY		
961	LY32859-001A	REEL GEAR 1		
962	LY31508-004D	DRUM BASE ASSY		
963	LY43675-006B	MINI SCREW		(x3)
964	QAR0142-001	CAPSTAN MOTOR		
965	YQ43893	MINI SCREW		
966	LY10367-001M	MAIN DECK ASSY		
976	YQ44246	SLIT WASHER		
978	LY44609-001A	WASHER		
979	LY44502-001A	SPACER		JVM/BJVC
998	QYWFM163013	WASHER		6.3mm/21.1mm x 0.01mm

VF ASSEMBLY <M4>

MECHANISM ASSEMBLY <M3>

Symbol No.	Part No.	Part Name	Description	Local
900	YMA0029T	MECHA(A) ASSY	Y/E Y07442	
900A	YMA0029P	MECHA(A) ASSY	JVM/BJVC	
901	LY32870-001Q	CASSETTEHOUSING ASSY		
902	YQ43893-8	MINI SCREW		(x3)
903	LYH30420-001A	UPPER BASE ASSY		
904	QYSPSPU1425M	SCREW	M1.4 x 2.5mm	
905	YDV2102B	DRUM ASSY	M/B SET022	
906	LY44533-001A	DAMPER SCREW ASSY	JVM/BJVC(x2)	
907	LY44533-002A	DAMPER SCREW ASSY	JVM/BJVC	
908	LY31538-001G	REEL DISK ASSY		
909	LY31538-002J	REEL DISK ASSY		
910	YQ44246	SLIT WASHER		(x2)
911	LY10372-001H	REEL COVER ASSY		
912	LY42120-002A	MINI SCREW		
913	LY41945-003A	MINI SCREW		(x2)
914	YQ44246	SLIT WASHER		
915	LY43725-001F	TENSION ARM ASSY		
916	LYH40269-001A	SLANT POLE ARM ASSY		
917	LY43731-001F	TAKE UP ARM ASSY		
918	LY31531-001E	SWING ARM ASSY		
919	YQ43893-9	MINI SCREW		
920	LYH30424-001A	SLIDE DECK FINAL ASSY		
921	YQ43893	MINI SCREW		(x2)
922	LY43023-001A	MINI SCREW		
924	LYH30419-001A	PAD ARM ASSY		
925	YQ44246	SLIT WASHER		
928	LYH40270-001A	TAKE UP BRAKE ASSY		
929	YQ44246	SLIT WASHER		
930	LY43684-001B	TENSION CONTROL LEVER ASSY		
931	LY32861-001B	CENTER GEAR		
932	LY31516-001H	PINCH ROLLER ARM FINAL ASSY		
933	YQ44246	SLIT WASHER		
934	LY43681-001A	TENSION CONTROL PLATE ASSY		
935	LY43687-001A	BRAKE CONTROL LEVER ASSY		
936	LYH30421-001A	MOTOR BRACKET ASSY		
937	YQ43893	MINI SCREW		(x3)
938	LYH30422-001A	GUIDE RAIL ASSY		
939	YQ43893	MINI SCREW		
940	YQ44246	SLIT WASHER		(x2)
941	LY32843-001F	SLIDE LEVER2 ASSY		
942	LY43690-001A	LOADING PLATE ASSY		
943	YQ44246	SLIT WASHER		
944	LY32858-001B	EJECT LEVER		
945	YQ44246	SLIT WASHER		
946	LYH40271-001A	BASE R ASSY		
947	YQ43893	MINI SCREW		
948	LY41945-001B	MINI SCREW		
949	LY43665-001A	MODE GEAR		
950	QSW0876-005	ROTARY ENCODER		

Symbol No.	Part No.	Part Name	Description	Local
700	LYH20756-001A	VF ASSY		
702	LY34095-001A	HOLDER(LCD)		
703	LY44611-001A	SHEET(POLA)		(x2)
704	LY34094-001A	STOPPER(POLA)		
705	LY34205-001A	HOLDER(SHEET)		
706	LY44612-001A	SHEET(DIFF)		
707	LY34206-001A	GUIDE(LCD)		
708	LY34207-001A	SPRING(LCD)		
709	LY34153-001A	CASE(B.LIGHT)		
710	LY34091-001D	GUIDE(LENS)		
711	LY44562-001B	LENS HOLDER ASSY		
712	LY44563-001B	SPRING(LENS)		
713	LY34093-001A	LEVER(VF)		
714	QLD0313-001	LCD MODULE		
715	LY44561-001A	SHEET(LENS)		
716	LY34090-001A	EYE CUP		
717	QAL0559-001	FPC		
718	NSW0200-001X	LEVER SWITCH		
719	LY21220-001B	VF CASE (L)		
720	LY21221-001B	VF CASE (U)		
721	LY21222-001D	HOLDER(VF)ASSY		
722	LY30032-009B	SPECIAL SCREW		
723	LY30031-039A	SPECIAL SCREW	CASE(L-GUI)	
724	LY30031-056A	SPECIAL SCREW	CASE(U-HOL)(x2)	
725	LY30031-096A	SPECIAL SCREW	CASE(L-GUI)	
726	LY30031-058A	SPECIAL SCREW	HOLD-(U-(L)(x2)	
727	LY30031-005A	SPECIAL SCREW	VF SW(x2)	
728	LY30034-064A	SPACER(A)		
729	LY30034-073A	SPACER(A)		
730	LY44685-001A	GASKET		
731	LY30034-083A	SPACER(A)		

MONITOR ASSEMBLY <M5>

Symbol No.	Part No.	Part Name	Description	Local
△ 800	LYH20755-001A	MONITOR ASSY		A,B,D,E,F
△ 800	LYH20755-002A	MONITOR ASSY		C,G,H,J
803	LY34136-001C	MONITOR CASE ASSY		
803A	LY34137-001B	LOCK		
803B	LY34138-001A	HOLDER(LOCK)		
803C	LY30031-003A	SPECIAL SCREW		(x2)
803D	LY34139-001B	COMPRESSION SPRING		
804	LY34140-001A	SHIELD CASE		
805	QLD0314-001	LCD MODULE		
806	QLL0159-001	BACK LIGHT		
807	LY34151-001A	EARTH PLATE(P)		
△ 808	LY34133-001D	MONITOR COVER ASSY		

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

△ Symbol No.	Part No.	Part Name	Description	Local
808A	LY44638-001B	SPACER(MONI)		
809	LY34177-001A	HINGE UNIT ASSY		
809A	QAL0558-001	FPC		
809B	LY34141-001A	HINGE COVER(U)		
809C	LY34142-001A	HINGE COVER(L)		
809D	LY30031-023A	SPECIAL SCREW	(x2)	
809E	LY42355-001A	P.C.MAGNET		
810	LY30031-0D4A	SPECIAL SCREW	M.COVS.CA(x2)	
811	LY30031-062A	SPECIAL SCREW	M.COVS-HING(x2)	
△ 812	LY34108-001C	UPPER CASE ASSY		
812A	LY34112-002B	JACK COVER(DC)		
812B	LY40664-001A	SPACER	(x2)	
812C	LY34245-001A	CAUTION LABEL		
812D	LY30031-056A	SPECIAL SCREW	(x2)	
812E	LY34109-001A	BKT(HINGE)		
813	LY33985-001B	SUB OPE UNIT		
814	LY21196-001B	OPERATION UNIT		A,B,D,E,F
814	LY21196-002B	OPERATION UNIT		C,G,H,J
815	WJT0150-001A	E-CARD WIRE		
816	LY34122-001A	COVER(UPPER)		
817	LY34150-001A	STICKER		A,C,G
817	LY34150-003A	STICKER		B,D,E,F,H,J
818	LY30031-054A	SPECIAL SCREW	M.COVS-HING(x2)	
819	LY30031-065A	SPECIAL SCREW	COVER(U)(x2)	
820	LY30031-0A2A	SPECIAL SCREW	COVER(U)(x2)	
821	LY30031-026A	SPECIAL SCREW	MONI FPC(x2)	
822	LY30031-0A2A	SPECIAL SCREW	OPE.UNIT	
823	LY30031-0A2A	SPECIAL SCREW	JUNC PWB(x3)	

△ Symbol No.	Part No.	Part Name	Description	Local
IC5003	MM1613DN-X	IC		REG 3.3V
IC6001	XC6202P33M-X	IC		
IC6002	R1224N102G-X	IC		
IC6101	FA3698F	IC		SW_REG IC
IC8001	TMS320DSC24GHKL	IC		_DSC24
IC8002	K4S643233F-SE75	IC		64MSDRAM
IC8002 or	K4S643233F-DE75	IC		64MSDRAM
IC8003	MR27T1602F19HLA	IC(MICRO C ROM)		OTP
IC8004	SM8707EV-G-X	IC		FS PLL
IC8301	ISP1181ABS	IC		USBQNF2.6
Q1001	DTA114EE-X	DIGI TRANSISTOR		
Q1001 or	PDTA114EE-X	DIGI TRANSISTOR		
Q1001 or	RN2102-X	DIGI TRANSISTOR		
Q1001 or	BCR183T-X	DIGI TRANSISTOR		
Q1002	UMC3N-W	DIGI TRANSISTOR		
Q1003	UMC3N-W	DIGI TRANSISTOR		
Q1004	UMC3N-W	DIGI TRANSISTOR		
Q1005	DTC143XE-X	DIGI TRANSISTOR		
Q1005 or	UN921FJ-X	DIGI TRANSISTOR		
Q1006	DTC144EE-X	DIGI TRANSISTOR		
Q1007	2SC4617/QR/-X	TRANSISTOR		
Q1007 or	BC847BT-X	TRANSISTOR		
Q1007 or	2SD2216J/QR/-X	TRANSISTOR		
Q1008	DTC124EE-X	DIGI TRANSISTOR		
Q1008 or	PDTC124EE-X	DIGI TRANSISTOR		
Q1008 or	BCR141T-X	DIGI TRANSISTOR		
Q1009	RTE002P02F-X	MOS FET		
Q1010	DTC144EE-X	DIGI TRANSISTOR		
Q1011	UMC3N-W	DIGI TRANSISTOR		
Q1012	DTC143XE-X	DIGI TRANSISTOR		
Q2201	DTC144EE-X	DIGI TRANSISTOR		
Q2201 or	UN9213J-X	DIGI TRANSISTOR		
Q2401	2SC5658/QRS/-X	TRANSISTOR		
Q2403	2SC5658/QRS/-X	TRANSISTOR		
Q2601	2SA1774/QRS/-X	TRANSISTOR		5332
Q3501	2SA2029/QRS/-X	TRANSISTOR		
Q3701	UMT1N-W	PAIR TRANSISTOR		
Q3701 or	XP4401-W	TRANSISTOR		
Q3701 or	BC856S-X	PAIR TRANSISTOR		
Q3702	BC847PN-X	PAIR TRANSISTOR		
Q3702 or	UMZ1N-W	PAIR TRANSISTOR		
Q3702 or	XP4601-W	TRANSISTOR		
Q3704	2SA1774/RS/-X	TRANSISTOR		
Q3704 or	BC857BT-X	TRANSISTOR		
Q3704 or	2SB1462J/RS/-X	TRANSISTOR		
Q3705	UMT1N-W	PAIR TRANSISTOR		
Q3705 or	XP4401-W	TRANSISTOR		
Q3705 or	BC856S-X	PAIR TRANSISTOR		
Q3706	EMH11-W	PAIR TRANSISTOR		
Q3731	2SC4617/RS/-X	TRANSISTOR		C,D,E,F,G,H,J
Q3731 or	2SD2216J/RS/-X	TRANSISTOR		C,D,E,F,G,H,J
Q3731 or	BC847BT-X	TRANSISTOR		C,D,E,F,G,H,J
Q3733	BC847PN-X	PAIR TRANSISTOR		C,D,E,F,G,H,J
Q3733 or	UMZ1N-W	PAIR TRANSISTOR		C,D,E,F,G,H,J
Q3733 or	XP4601-W	TRANSISTOR		C,D,E,F,G,H,J
Q3734	2SC4617/RS/-X	TRANSISTOR		C,D,E,F,G,H,J
Q3734 or	2SD2216J/RS/-X	TRANSISTOR		C,D,E,F,G,H,J
Q3734 or	BC847BT-X	TRANSISTOR		C,D,E,F,G,H,J
Q3735	BC847PN-X	PAIR TRANSISTOR		C,D,E,F,G,H,J
Q3735 or	UMZ1N-W	PAIR TRANSISTOR		C,D,E,F,G,H,J
Q3735 or	XP4601-W	TRANSISTOR		C,D,E,F,G,H,J
Q4951	DTC114EE-X	DIGI TRANSISTOR		
Q6001	FML9-W	TRANSISTOR		
Q6201	QS6U24-W	MOS FET		
Q6202	2SA1577/RS/-X	TRANSISTOR		
Q6203	QS6U24-W	MOS FET		
Q6204	QS6U24-W	MOS FET		
Q6205	2SA1577/RS/-X	TRANSISTOR		
Q6206	DTC124TM-X	DIGI TRANSISTOR		
Q6207	QS6U24-W	MOS FET		
Q6208	QS6U24-W	MOS FET		
Q6209	SSM3J14T-X	MOS FET		
Q6210	2SC5658/QRS/-X	TRANSISTOR		
Q6211	2SC5658/QRS/-X	TRANSISTOR		
Q6212	EMT1-W	PAIR TRANSISTOR		
Q6701	SSM3J14T-X	MOS FET		
Q8001	2SA1774/RS/-X	TRANSISTOR		PLL REG SW

MAIN BOARD ASSEMBLY <01>

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	YB10465C-02	MAIN BOARD ASSY		A,B
PW1	YB10465A-02	MAIN BOARD ASSY		C,D,E,F,G,H,J
IC1001	UPD703166-M42	IC(MICRO C ROM)	MASK	A,B
IC1001 or	UPD70F3166M42	IC(MICRO C ROM)	FLASH	A,B
IC1001	UPD703166-M30	IC(MICRO C ROM)	MASK	C,D,E,F,G,H,J
IC1001 or	UPD70F3166M30	IC(MICRO C ROM)	FLASH	C,D,E,F,G,H,J
IC1002	MB90097PFV153-X	IC(MICRO C ROM)	OSD	
IC1003	SN74AHC1G00K-X	IC		
IC1003 or	SN74AHC1G00DC-X	IC		
IC1004	S-89220ACNC-W	IC		
IC1005	X25330S8I-2.5-X	IC		
IC1005 or	AT25320N-10SI-X	IC		
IC1005 or	M95320-WMN6W-X	IC		
IC1005 or	25LC320-I/SN-X	IC		
IC1005 or	CAT25C32SI-X	IC	CATALYST	
IC1006	RS5C314-X	IC		
IC1007	IC-PST3423U-X	IC		
IC1007 or	S-80823CNNB-X	IC		
IC1009	SN74AHC1G08K-X	IC		
IC1009 or	SN74AHC1G08DC-X	IC(DIGITAL)		
IC1010	R1160N251B-X	IC		
IC1701	BA10358FVM-W	IC	REELAMP5V	
IC1702	NJM2407R-W	IC	REELSMT	
IC2101	AK4550VT-X	IC		
IC2201	AK4564VQ	IC	48P0.5	
IC3001	JCY0152	IC		
IC3002	JCY0177-W	IC		
IC3003	SN74AHC1G04DC-X	IC(DIGITAL)		
IC3201	JCP8075	IC		
IC3501	JCY0132	IC		
IC3502	SN74LVC2G04K-X	IC	RCLK BUF	
IC3701	BH7612FV-X	IC		
IC3731	MM1504XN-X	IC		C,D,E,F,G,H,J
IC4201	HD49340HNP-X	IC	CDS/AD	
IC4202	MM1613BN-X	IC	REG 3.1V	
IC4301	JCY0183	IC	CAMERA DSP	
IC4302	R1160N121B-X	IC	REG1.2V	
IC4901	JCY0207	IC		
IC4902	NJM3414AV-X	IC		
IC4951	AN41902A	IC		
IC5001	CXD3602AR	IC	TG/V DRV	
IC5002	CY2302SC-1-X	IC	PLL 72MHZ	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

Symbol No.	Part No.	Part Name	Description	Local
Q8001	or 2SB1462J/RS/-X	TRANSISTOR	PLL REG SW	
D1001	DA221-X	DIODE ARRAY		
D1002	1SS376-X	SI DIODE		
D3001	EC2C01C-TR-X	VARI CAP DIODE		
D3002	EC2C01C-TR-X	VARI CAP DIODE		
D3003	EC2C01C-TR-X	VARI CAP DIODE		
D3004	RB551V-30-X	SB DIODE		
D4901	RB751V-40-X	SB DIODE		
D5001	1SS355-X	SI DIODE		
D5001	or MA111-X	SI DIODE		
D5002	1SS355-X	SI DIODE	PANA	
D5002	or MA111-X	SI DIODE	PANA	
△ D6001	RB706D-40-X	SB DIODE		
△ D6002	RB715F-X	SB DIODE		
D6201	RB480Y-W	SB DIODE		
D6203	RB480Y-W	SB DIODE		
D6701	DG1M3-X	SB DIODE		
D6702	DG1M3-X	SB DIODE		
C1001	NDCA1HJ-8R0W	C CAPACITOR	8pF 50V J	
C1002	NDCA1HJ-100W	C CAPACITOR	10pF 50V J	
C1003	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1004	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1005	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1006	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1007	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1008	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1009	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1010	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1011	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1012	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1013	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1014	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1015	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1016	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1017	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1018	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1019	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1020	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1021	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1022	NCBA1EK-682W	C CAPACITOR	6800pF 25V K	
C1023	NCBA1EK-682W	C CAPACITOR	6800pF 25V K	
C1024	NCFA1HZ-103W	C CAPACITOR	0.01uF 50V Z	
C1025	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1027	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1028	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1029	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1031	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1032	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1033	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1034	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1035	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1036	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1037	NCFA1HZ-103W	C CAPACITOR	0.01uF 50V Z	
C1038	NCFA1HZ-103W	C CAPACITOR	0.01uF 50V Z	
C1039	NCFA1HZ-103W	C CAPACITOR	0.01uF 50V Z	
C1040	NDCA1HJ-9R0W	C CAPACITOR	9pF 50V J	
C1041	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1042	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1043	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1044	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1046	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C1047	NCFA1HZ-103W	C CAPACITOR	0.01uF 50V Z	
C1049	NCFA1HZ-103W	C CAPACITOR	0.01uF 50V Z	
C1050	NCFA1HZ-103W	C CAPACITOR	0.01uF 50V Z	
C1051	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K	
C1052	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K	
C1053	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K	
C1054	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K	
C1056	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C1701	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C1702	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C1703	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C2101	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C2102	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C2103	NCBA1HK-222W	C CAPACITOR	2200pF 50V K	
C2104	NCBA1HK-222W	C CAPACITOR	2200pF 50V K	

Symbol No.	Part No.	Part Name	Description	Local
C2105	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C2106	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2107	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2108	NBE90JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C2201	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2202	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C2203	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C2204	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C2205	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C2209	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C2210	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C2211	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2212	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2213	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2214	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2215	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2216	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2217	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2218	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2223	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2224	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2225	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2226	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2401	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C2402	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C2403	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C2404	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C2405	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2406	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C2603	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K	
C2604	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K	
C2605	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
C2606	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
C2609	NCBA1HK-332W	C CAPACITOR	3300pF 50V K	
C2610	NCBA1HK-332W	C CAPACITOR	3300pF 50V K	
C2611	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2612	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2613	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C2614	NDCA1HJ-101W	C CAPACITOR	100pF 50V J	
C2615	NDCA1HJ-101W	C CAPACITOR	100pF 50V J	
C2616	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C2617	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C2618	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2619	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2621	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C2622	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C2655	NCBA1CK-473W	C CAPACITOR	0.047uF 16V K	
C2656	NCBA1CK-473W	C CAPACITOR	0.047uF 16V K	
C3001	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3003	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3005	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3007	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C3008	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3011	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3012	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3013	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3015	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3016	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3017	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3020	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3021	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3022	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3023	NDCA1HJ-330W	C CAPACITOR	33pF 50V J	
C3024	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C3025	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3026	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3027	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
C3028	NDCA1EJ-271W	C CAPACITOR	270pF 25V J	
C3029	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3030	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3031	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3032	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C3033	NDCA1HJ-120W	C CAPACITOR	12pF 50V J	
C3036	NDCA1HJ-6R0W	C CAPACITOR	6pF 50V J	
C3037	NDCA1HJ-6R0W	C CAPACITOR	6pF 50V J	
C3038	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3039	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3042	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C3043	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3535	NDCA1HJ-120W	C CAPACITOR	12pF 50V J	
C3044	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C3536	NDCA1HJ-120W	C CAPACITOR	12pF 50V J	
C3045	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C3537	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3046	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3701	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C3047	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C3706	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3048	NCB31CK-473X	C CAPACITOR	0.047uF 16V K		C3707	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3049	NCBA1HK-222W	C CAPACITOR	2200pF 50V K		C3708	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3050	NCBA1HK-102W	C CAPACITOR	1000pF 50V K		C3709	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3056	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C3710	NBE20GM-226X	TA E CAPACITOR	22uF 4V M	
C3058	NCBA1AK-473W	C CAPACITOR	0.047uF 10V K		C3711	NBE20GM-226X	TA E CAPACITOR	22uF 4V M	
C3059	NCBA1HK-102W	C CAPACITOR	1000pF 50V K		C3712	NBE20GM-107X	TA E CAPACITOR	100uF 4V M	
C3061	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3713	NBE20GM-107X	TA E CAPACITOR	100uF 4V M	
C3062	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3715	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3072	NBE20GM-476X	TA E CAPACITOR	47uF 4V M		C3731	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K C,DEFGH,J	
C3201	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M		C3732	NCBA1HK-102W	C CAPACITOR	1000pF 50V K C,DEFGH,J	
C3202	NCB21AK-105X	C CAPACITOR	1uF 10V K		C3733	NDCA1HJ-3R0W	C CAPACITOR	3pF 50V J C,DEFGH,J	
C3203	NCB21AK-105X	C CAPACITOR	1uF 10V K		C3734	NDCA1HJ-5R0W	C CAPACITOR	5pF 50V J C,DEFGH,J	
C3204	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M		C3735	NDCA1HJ-330W	C CAPACITOR	33pF 50V J C,DEFGH,J	
C3205	NBE20GM-476X	TA E CAPACITOR	47uF 4V M		C3736	NCBA1HK-102W	C CAPACITOR	1000pF 50V K C,DEFGH,J	
C3206	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3738	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K C,DEFGH,J	
C3207	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3739	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K C,DEFGH,J	
C3208	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3740	NCB30JK-105X	C CAPACITOR	1uF 6.3V K C,DEFGH,J	
C3209	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3741	NCB30JK-105X	C CAPACITOR	1uF 6.3V K C,DEFGH,J	
C3210	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3742	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K C,DEFGH,J	
C3211	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3743	NDCA1HJ-3R0W	C CAPACITOR	3pF 50V J C,DEFGH,J	
C3212	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3744	NDCA1HJ-5R0W	C CAPACITOR	5pF 50V J C,DEFGH,J	
C3213	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3745	NDCA1HJ-330W	C CAPACITOR	33pF 50V J C,DEFGH,J	
C3214	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3746	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M C,DEFGH,J	
C3215	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C3747	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K C,DEFGH,J	
C3216	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4201	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C3217	NCB21AK-105X	C CAPACITOR	1uF 10V K		C4202	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3218	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4203	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3219	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4204	NBE20GM-476X	TA E CAPACITOR	47uF 4V M	
C3220	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4205	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3221	NCB21AK-105X	C CAPACITOR	1uF 10V K		C4206	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3222	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4207	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3223	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4208	NCBA1CK-123W	C CAPACITOR	0.012uF 16V K	
C3224	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4209	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3225	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4210	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C3226	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4211	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C3227	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4213	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3228	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4214	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3229	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4215	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3230	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4216	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C3231	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4217	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3232	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4218	NBE20GM-476X	TA E CAPACITOR	47uF 4V M	
C3233	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4219	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3234	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4220	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C3235	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4221	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C3236	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4222	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C3237	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4223	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3501	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K		C4301	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3502	NCBA1AK-473W	C CAPACITOR	0.047uF 10V K		C4302	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3503	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4303	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3505	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4304	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3506	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4305	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3507	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4306	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3508	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M		C4307	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3509	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4308	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3510	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M		C4309	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3511	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4310	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3512	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4311	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3514	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4312	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3516	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4901	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C3519	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4902	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C3520	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M		C4903	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C3522	NCBA1AK-473W	C CAPACITOR	0.047uF 10V K		C4904	NBE21AM-106X	TA E CAPACITOR	10uF 10V M	
C3523	NCBA1AK-473W	C CAPACITOR	0.047uF 10V K		C4905	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C3524	NCBA1AK-473W	C CAPACITOR	0.047uF 10V K		C4906	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C3526	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4907	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C3527	NCBA1HK-102W	C CAPACITOR	1000pF 50V K		C4908	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C3528	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4909	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3529	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		C4911	NDCA1HJ-680W	C CAPACITOR	68pF 50V J	
C3530	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M		C4912	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C3531	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4914	NDCA1HJ-680W	C CAPACITOR	68pF 50V J	
C3532	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4915	NDCA1HJ-121W	C CAPACITOR	120pF 50V J	
C3533	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M		C4916	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C3534	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		C4917	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

△ Symbol No.	Part No.	Part Name	Description	Local
C4951	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C4952	NBE21AM-106X	TA E CAPACITOR	10uF 10V M	
C4953	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C4954	NBE21AM-106X	TA E CAPACITOR	10uF 10V M	
C4955	NCFA1AZ-104W	C CAPACITOR	0.1uF 10V Z	
C4956	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C4957	NDCA1HJ-220W	C CAPACITOR	22pF 50V J	
C4958	NDCA1HJ-220W	C CAPACITOR	22pF 50V J	
C5001	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5002	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5003	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C5004	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5005	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5006	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5007	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5008	NBE20GM-476X	TA E CAPACITOR	47uF 4V M	
C5009	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C5010	NBZ0003-475X	TA E CAPACITOR	4.7uF 20V M	
C5011	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5012	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5013	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5014	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5015	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5017	NBE41AM-476X	TA E CAPACITOR	47uF 10V M	
C5018	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C5019	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5020	NBZ0003-475X	TA E CAPACITOR	4.7uF 20V M	
C5021	NBZ0003-475X	TA E CAPACITOR	4.7uF 20V M	
C5022	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C5023	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5024	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C5025	NBP21VM-105X	TA E CAPACITOR	1uF 35V M	
C5026	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5027	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5028	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C5029	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5030	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C5031	NDCA1HJ-220W	C CAPACITOR	22pF 50V J	
C6001	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6002	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C6003	NDCA1HJ-151W	C CAPACITOR	150pF 50V J	
C6004	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6005	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C6006	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6101	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6102	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6103	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6105	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6106	NBP41DM-106X	TA E CAPACITOR	10uF 20V M	
C6107	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6108	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6109	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6110	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6111	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C6112	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C6113	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C6114	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C6115	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6116	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6117	NCBA1AK-333W	C CAPACITOR	0.033uF 10V K	
C6118	NCBA1HK-561W	C CAPACITOR	560pF 50V K	
C6119	NCBA1HK-272W	C CAPACITOR	2700pF 50V K	
C6120	NCBA1HK-561W	C CAPACITOR	560pF 50V K	
C6121	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C6123	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6124	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6125	NDCA1HJ-101W	C CAPACITOR	100pF 50V J	
C6126	NCBA1AK-473W	C CAPACITOR	0.047uF 10V K	
C6127	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6128	NCBA1AK-473W	C CAPACITOR	0.047uF 10V K	
C6129	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C6130	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C6131	NCBA1CK-153W	C CAPACITOR	0.015uF 16V K	
C6132	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C6133	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C6134	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6201	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6202	NCB21CK-105X	C CAPACITOR	1uF 16V K	

△ Symbol No.	Part No.	Part Name	Description	Local
C6203	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C6204	NCBA1HK-561W	C CAPACITOR	560pF 50V K	
C6205	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C6206	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6207	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C6208	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
C6209	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6210	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C6211	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C6212	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6213	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C6214	NCBA1AK-683W	C CAPACITOR	0.068uF 10V K	
C6215	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6216	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C6217	NCJA0JK-105W-A	C CAPACITOR	1uF 6.3V K	
C6218	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6219	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6220	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6221	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C6222	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6224	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6225	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6227	NCB31CK-105X	C CAPACITOR	1uF 16V K	
C6228	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C6701	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6702	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C8001	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C8002	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C8003	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8004	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8005	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8006	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8007	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8008	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8009	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8010	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8011	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C8012	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8013	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8014	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8015	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8016	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C8017	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C8018	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8021	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C8022	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C8023	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8024	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8025	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C8026	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8027	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8301	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C8305	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8306	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8307	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8310	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8311	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
R1001	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R1005	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1006	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R1007	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1008	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1009	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1010	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R1011	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1012	NRSA6AJ-103W	MG RESISTOR	100kΩ 1/16W J	
R1013	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1014	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1015	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1016	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1017	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1018	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1019	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1020	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1021	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1022	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1023	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R1024	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1122	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1025	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1123	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1026	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J		R1124	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1027	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R1125	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1029	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1126	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1030	NRSA6AJ-753W	MG RESISTOR	75kΩ 1/16W J		R1127	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1031	NRSA6AJ-334W	MG RESISTOR	330kΩ 1/16W J		R1128	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1032	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J		R1129	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1033	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J		R1130	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1034	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J		R1131	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1035	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		R1132	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1036	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		R1133	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1037	NRSA6AJ-561W	MG RESISTOR	560Ω 1/16W J		R1134	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1038	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1136	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1040	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1137	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1041	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		R1138	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R1042	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		R1140	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1043	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R1151	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1044	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1152	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R1045	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J		R1701	NRSA6AJ-823W	MG RESISTOR	82kΩ 1/16W J	
R1046	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1702	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R1047	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1703	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R1048	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R1704	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R1049	NRSA6AJ-623W	MG RESISTOR	62kΩ 1/16W J		R1705	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R1050	NRSA6AJ-823W	MG RESISTOR	82kΩ 1/16W J		R1706	NRSA6AJ-823W	MG RESISTOR	82kΩ 1/16W J	
R1051	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		R1707	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1052	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1708	NRSA6AJ-124W	MG RESISTOR	120kΩ 1/16W J	
R1053	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J		R1709	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1054	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1710	NRSA6AJ-124W	MG RESISTOR	120kΩ 1/16W J	
R1055	NRSA6AJ-152W	MG RESISTOR	1.5kΩ 1/16W J		R1711	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1056	NRSA6AJ-561W	MG RESISTOR	560Ω 1/16W J		R1712	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1061	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R1713	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1062	NRSA6AJ-224W	MG RESISTOR	220kΩ 1/16W J		R2101	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R1067	NRSA6AJ-334W	MG RESISTOR	330kΩ 1/16W J		R2102	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R1068	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R2103	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1069	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R2201	NRSA6AJ-224W	MG RESISTOR	220kΩ 1/16W J	
R1070	NRSA6AJ-154W	MG RESISTOR	150kΩ 1/16W J		R2202	NRSA6AJ-564W	MG RESISTOR	560kΩ 1/16W J	
R1071	NRSA6AJ-272W	MG RESISTOR	2.7kΩ 1/16W J		R2203	NRSA6AJ-393W	MG RESISTOR	39kΩ 1/16W J	
R1072	NRSA6AJ-183W	MG RESISTOR	18kΩ 1/16W J		R2204	NRSA6AJ-154W	MG RESISTOR	150kΩ 1/16W J	
R1073	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R2206	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R1074	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J		R2207	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R1075	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		R2208	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R1076	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		R2209	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R1077	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R2212	NRSA6AJ-2R7W	MG RESISTOR	2.7Ω 1/16W J	
R1078	NRSA6AJ-393W	MG RESISTOR	39kΩ 1/16W J		R2213	NRSA6AJ-2R7W	MG RESISTOR	2.7Ω 1/16W J	
R1079	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J		R2217	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R1080	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J		R2225	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1081	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R2226	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1082	NRSA6AJ-123W	MG RESISTOR	12kΩ 1/16W J		R2227	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R1083	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J		R2228	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R1084	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R2229	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R1085	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R2230	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R1086	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J		R2231	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1087	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J		R2401	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R1088	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J		R2402	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R1089	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J		R2407	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R1090	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J		R2601	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R1091	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R2602	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R1092	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R2604	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1093	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R2605	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R1094	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R2607	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R1095	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R2608	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R1096	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		R2609	NRSA6AJ-334W	MG RESISTOR	330kΩ 1/16W J	
R1097	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R2610	NRSA6AJ-334W	MG RESISTOR	330kΩ 1/16W J	
R1099	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R2611	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1109	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J		R2612	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1110	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J		R2613	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1111	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J		R2614	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1112	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J		R2615	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1113	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J		R2616	NRSA6AJ-334W	MG RESISTOR	330kΩ 1/16W J	
R1114	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R2617	NRSA6AJ-334W	MG RESISTOR	330kΩ 1/16W J	
R1115	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		R2807	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1116	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R2808	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1117	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R2809	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1118	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R2810	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R1119	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R2815	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1120	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R2821	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1121	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R2822	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

△ Symbol No.	Part No.	Part Name	Description	Local
R3002	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3004	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3007	NRSA6AJ-562W	MG RESISTOR	5.6kΩ 1/16W J	
R3008	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R3009	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3010	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3011	NRSA6AJ-224W	MG RESISTOR	220kΩ 1/16W J	
R3013	NRSA6AJ-242W	MG RESISTOR	2.4kΩ 1/16W J	
R3014	NRSA6AJ-392W	MG RESISTOR	3.9kΩ 1/16W J	
R3015	NRSA6AJ-392W	MG RESISTOR	3.9kΩ 1/16W J	
R3016	NRVA6AD-560W	CMF RESISTOR	56Ω 1/16W D	
R3017	NRVA6AD-560W	CMF RESISTOR	56Ω 1/16W D	
R3018	NRVA6AD-560W	CMF RESISTOR	56Ω 1/16W D	
R3019	NRVA6AD-560W	CMF RESISTOR	56Ω 1/16W D	
R3020	NRVA6AD-512W	CMF RESISTOR	5.1kΩ 1/16W D	
R3021	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R3022	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R3027	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3028	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R3029	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R3030	NRSA6AJ-224W	MG RESISTOR	220kΩ 1/16W J	
R3031	NRSA6AJ-224W	MG RESISTOR	220kΩ 1/16W J	
R3032	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R3033	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R3034	NRSA6AJ-823W	MG RESISTOR	82kΩ 1/16W J	
R3035	NRSA6AJ-123W	MG RESISTOR	12kΩ 1/16W J	
R3036	NRSA6AJ-122W	MG RESISTOR	1.2kΩ 1/16W J	
R3037	NRSA6AJ-152W	MG RESISTOR	1.5kΩ 1/16W J	
R3038	NRSA6AJ-561W	MG RESISTOR	560Ω 1/16W J	
R3039	NRSA6AJ-561W	MG RESISTOR	560Ω 1/16W J	
R3040	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R3045	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3046	NRSA6AJ-681W	MG RESISTOR	680Ω 1/16W J	
R3049	NRSA6AJ-560W	MG RESISTOR	56Ω 1/16W J	
R3051	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R3056	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3058	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3059	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R3062	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3064	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3068	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3201	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R3202	NRSA6AD-183W	MG RESISTOR	18kΩ 1/16W D	
R3203	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D	
R3204	NRSA6AD-821W	MG RESISTOR	820Ω 1/16W D	
R3205	NRSA6AD-821W	MG RESISTOR	820Ω 1/16W D	
R3207	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3212	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	C,D,E,F,G,H,J
R3213	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3214	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3339	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3501	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R3502	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R3503	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R3504	NRVA6AD-241W	CMF RESISTOR	240Ω 1/16W D	
R3505	NRVA6AD-241W	CMF RESISTOR	240Ω 1/16W D	
R3506	NRVA6AD-241W	CMF RESISTOR	240Ω 1/16W D	
R3507	NRVA6AD-241W	CMF RESISTOR	240Ω 1/16W D	
R3508	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R3518	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R3520	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3521	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R3522	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R3523	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R3524	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3525	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3701	NRSA6AD-271W	MG RESISTOR	270Ω 1/16W D	
R3703	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R3704	NRSA6AD-301W	MG RESISTOR	300Ω 1/16W D	
R3706	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R3707	NRSA6AD-680W	MG RESISTOR	68Ω 1/16W D	
R3708	NRSA6AD-680W	MG RESISTOR	68Ω 1/16W D	
R3709	NRSA6AD-680W	MG RESISTOR	68Ω 1/16W D	
R3710	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3712	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R3713	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R3714	NRSA6AJ-823W	MG RESISTOR	82kΩ 1/16W J	
R3715	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R3717	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3720	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3722	NRSA6AD-750W	MG RESISTOR	75Ω 1/16W D	
R3724	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R3725	NRSA6AD-750W	MG RESISTOR	75Ω 1/16W D	
R3726	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R3727	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R3728	NRSA6AD-750W	MG RESISTOR	75Ω 1/16W D	
R3730	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R3731	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	C,D,E,F,G,H,J
R3732	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	C,D,E,F,G,H,J
R3733	NRSA6AD-561W	MG RESISTOR	560Ω 1/16W D	C,D,E,F,G,H,J
R3734	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	C,D,E,F,G,H,J
R3735	NRSA6AD-182W	MG RESISTOR	1.8kΩ 1/16W D	C,D,E,F,G,H,J
R3736	NRSA6AJ-183W	MG RESISTOR	18kΩ 1/16W J	C,D,E,F,G,H,J
R3737	NRSA6AJ-183W	MG RESISTOR	18kΩ 1/16W J	C,D,E,F,G,H,J
R3738	NRSA6AJ-681W	MG RESISTOR	680Ω 1/16W J	C,D,E,F,G,H,J
R3739	NRSA6AJ-821W	MG RESISTOR	820Ω 1/16W J	C,D,E,F,G,H,J
R3740	NRSA6AJ-821W	MG RESISTOR	820Ω 1/16W J	C,D,E,F,G,H,J
R3741	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	C,D,E,F,G,H,J
R3742	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	C,D,E,F,G,H,J
R3743	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	C,D,E,F,G,H,J
R3744	NRSA6AD-561W	MG RESISTOR	560Ω 1/16W D	C,D,E,F,G,H,J
R3745	NRSA6AD-152W	MG RESISTOR	1.5kΩ 1/16W D	C,D,E,F,G,H,J
R3746	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	C,D,E,F,G,H,J
R3747	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	C,D,E,F,G,H,J
R3748	NRSA6AJ-474W	MG RESISTOR	470kΩ 1/16W J	C,D,E,F,G,H,J
R4201	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4202	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4203	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R4204	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
R4205	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
R4206	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4302	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4303	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R4304	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R4306	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R4307	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R4308	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4310	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4311	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4312	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R4313	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R4314	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R4315	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4316	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4317	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4318	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4319	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4320	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4321	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4322	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4323	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4324	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4325	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4326	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4327	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4328	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4329	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4901	NRSA6AJ-243W	MG RESISTOR	24kΩ 1/16W J	
R4902	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4903	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R4904	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4905	NRSA6AJ-153W	MG RESISTOR	15kΩ 1/16W J	
R4906	NRSA6AJ-684W	MG RESISTOR	680kΩ 1/16W J	
R4907	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R4908	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R4909	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R4910	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4911	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4912	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4914	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R4917	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4918	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4921	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4922	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4923	NRSA6AJ-123W	MG RESISTOR	12kΩ 1/16W J	
R4924	NRSA6AJ-123W	MG RESISTOR	12kΩ 1/16W J	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R4925	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6225	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D	
R4926	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6226	NRSA6AD-562W	MG RESISTOR	5.6kΩ 1/16W D	
R4927	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6227	NRSA6AD-273W	MG RESISTOR	27kΩ 1/16W D	
R4928	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6228	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D	
R4929	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6229	NRSA6AJ-272W	MG RESISTOR	2.7kΩ 1/16W J	
R4930	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6230	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D	
R4931	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6231	NRSA6AD-432W	MG RESISTOR	4.3kΩ 1/16W D	
R4932	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6232	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D	
R4933	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6233	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D	
R4934	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6234	NRSA6AD-563W	MG RESISTOR	56kΩ 1/16W D	
R4935	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R6235	NRSA6AD-333W	MG RESISTOR	33kΩ 1/16W D	
R4944	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R6236	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4945	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R6237	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R4947	NRSA6AJ-123W	MG RESISTOR	12kΩ 1/16W J		R6240	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R4948	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R6241	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4949	NRSA6AJ-683W	MG RESISTOR	68kΩ 1/16W J		R6243	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4951	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R6701	NRV142F-R20X	CMF RESISTOR	0.2Ω 1/4W F	
R4952	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R6702	NRSA6AD-104W	MG RESISTOR	100kΩ 1/16W D	
R4953	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R6703	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D	
R4954	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R6704	NRSA6AD-823W	MG RESISTOR	82kΩ 1/16W D	
R4955	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R6705	NRSA6AD-333W	MG RESISTOR	33kΩ 1/16W D	
R4956	NRSA6AJ-4R7W	MG RESISTOR	4.7Ω 1/16W J		R6706	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4957	NRSA6AJ-4R7W	MG RESISTOR	4.7Ω 1/16W J		R8002	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4958	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8005	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R4959	NRSA6AJ-4R7W	MG RESISTOR	4.7Ω 1/16W J		R8007	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R4960	NRSA6AJ-4R7W	MG RESISTOR	4.7Ω 1/16W J		R8008	NRSA6AJ-561W	MG RESISTOR	560Ω 1/16W J	
R4961	NRSA6AJ-271W	MG RESISTOR	270Ω 1/16W J		R8009	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R4962	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8011	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4963	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8012	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4964	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8016	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4965	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8017	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R5001	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J		R8019	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5002	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J		R8021	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5003	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J		R8022	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5004	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8023	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R5005	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8025	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R5006	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J		R8027	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R5009	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J		R8028	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R5010	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J		R8029	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R5017	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R8030	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R5020	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8031	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R5023	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8032	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R6001	NRSA6AJ-224W	MG RESISTOR	220kΩ 1/16W J		R8033	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
△ R6002	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R8036	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
△ R6003	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R8037	NRSA6AJ-221W	MG RESISTOR	220Ω 1/16W J	
R6004	NRSA6AJ-681W	MG RESISTOR	680Ω 1/16W J		R8041	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R6005	NRSA6AD-513W	MG RESISTOR	51kΩ 1/16W D		R8042	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R6006	NRSA6AD-243W	MG RESISTOR	24kΩ 1/16W D		R8302	NRS181J-220X	MG RESISTOR	22Ω 1/8W J	
R6101	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		R8303	NRS181J-220X	MG RESISTOR	22Ω 1/8W J	
R6102	NRSA6AJ-751W	MG RESISTOR	750Ω 1/16W J		R8306	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R6103	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		R8307	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R6104	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J		R8308	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R6105	NRSA6AJ-562W	MG RESISTOR	5.6kΩ 1/16W J		R8309	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R6106	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J		R8310	NRSA6AJ-153W	MG RESISTOR	15kΩ 1/16W J	
R6107	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8313	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R6108	NRSA6AJ-823W	MG RESISTOR	82kΩ 1/16W J		R8314	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R6109	NRSA6AJ-823W	MG RESISTOR	82kΩ 1/16W J		R8315	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R6110	NRSA6AD-153W	MG RESISTOR	15kΩ 1/16W D		R8316	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R6112	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J		R8317	NRSA6AJ-154W	MG RESISTOR	150kΩ 1/16W J	
R6113	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		RA3001	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
R6202	NRSA6AD-223W	MG RESISTOR	22kΩ 1/16W D		RA3002	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
R6203	NRSA6AJ-474W	MG RESISTOR	470kΩ 1/16W J		RA3003	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J	
R6204	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		RA3004	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
R6205	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		RA3005	NRZ0034-100W	NET RESISTOR	10Ω 1/32W J	
R6206	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		RA3201	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J	
R6207	NRSA6AD-183W	MG RESISTOR	18kΩ 1/16W D		RA3202	NRZ0034-0R0W	NET RESISTOR	0Ω 1/32W J	
R6208	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D		RA4201	NRZ0034-470W	NET RESISTOR	47Ω 1/32W J	
R6210	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D		RA4202	NRZ0034-470W	NET RESISTOR	47Ω 1/32W J	
R6211	NRSA6AD-153W	MG RESISTOR	15kΩ 1/16W D		RA4301	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
R6213	NRSA6AD-183W	MG RESISTOR	18kΩ 1/16W D		RA4302	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
R6215	NRSA6AD-472W	MG RESISTOR	4.7kΩ 1/16W D		RA4303	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
R6216	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		RA4304	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
R6217	NRSA6AJ-152W	MG RESISTOR	1.5kΩ 1/16W J		RA4307	NRZ0034-100W	NET RESISTOR	10Ω 1/32W J	
R6219	NRSA6AD-243W	MG RESISTOR	24kΩ 1/16W D		RA4308	NRZ0034-100W	NET RESISTOR	10Ω 1/32W J	
R6220	NRSA6AD-302W	MG RESISTOR	3kΩ 1/16W D		RA8001	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
R6221	NRSA6AD-104W	MG RESISTOR	100kΩ 1/16W D		RA8002	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
R6222	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D		RA8003	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
R6223	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		RA8004	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

Symbol No.	Part No.	Part Name	Description	Local
L1001	NQL402M-100X	COIL	10uH M	
L1002	NQL402M-100X	COIL	10uH M	
L2101	NQL402M-100X	COIL	10uH M	
L2401	NQL402M-100X	COIL	10uH M	
L2402	NQL402M-100X	COIL	10uH M	
L2601	NQR0269-013X	FERRITE BEADS		
L2602	NQR0269-013X	FERRITE BEADS		
L2603	NQR0269-013X	FERRITE BEADS		
L2807	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L2808	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L3001	NQR0129-002X	FERRITE BEADS		
L3002	NQR0129-002X	FERRITE BEADS		
L3004	NQR0006-001X	FERRITE BEADS		
L3005	NQR0006-001X	FERRITE BEADS		
L3006	NQR0006-001X	FERRITE BEADS		
L3007	NQL085J-2R2X	COIL	2.2uH J	
L3008	NQL085J-120X	COIL	12uH J	
L3012	NQR0006-001X	FERRITE BEADS		
L3201	NQR0129-002X	FERRITE BEADS		
L3202	NQR0129-002X	FERRITE BEADS		
L3203	NQR0006-001X	FERRITE BEADS		
L3204	NQL38DK-100X	P COIL	10uH K	
L3501	NQR0006-001X	FERRITE BEADS		
L3502	NQR0006-001X	FERRITE BEADS		
L3503	NQR0006-001X	FERRITE BEADS		
L3504	NQR0006-001X	FERRITE BEADS		
L3505	NQL402M-100X	COIL	10uH M	
L3701	NQL38DK-100X	P COIL	10uH K	
L3731	NQL085J-6R8X	COIL	6.8uH J C,D,E,F,G,H,J	
L3732	NQL085J-6R8X	COIL	6.8uH J C,D,E,F,G,H,J	
L4201	NQL38DK-100X	P COIL	10uH K	
L4202	NQL38DK-100X	P COIL	10uH K	
L4301	NQR0129-002X	FERRITE BEADS		
L4302	NQR0129-002X	FERRITE BEADS		
L4303	NQR0129-002X	FERRITE BEADS		
L4304	NQR0129-002X	FERRITE BEADS		
L4305	NQR0129-002X	FERRITE BEADS		
L4901	NQR0129-002X	FERRITE BEADS		
L4902	NQL38DK-100X	P COIL	10uH K	
L4953	NQR0129-002X	FERRITE BEADS		
L4954	NQL38DK-100X	P COIL	10uH K	
L4955	NQL38DK-100X	P COIL	10uH K	
L5001	NQR0129-002X	FERRITE BEADS		
L5002	NQL38DK-100X	P COIL	10uH K	
L5003	NQL38DK-100X	P COIL	10uH K	
L5004	NQL38DK-100X	P COIL	10uH K	
L5005	NQR0129-002X	FERRITE BEADS		
L5006	NQL38DK-100X	P COIL	10uH K	
L5007	NQR0129-002X	FERRITE BEADS		
L5008	NQL38DK-100X	P COIL	10uH K	
L6001	NQL87EN-330X	COIL	33uH N	
L6101	NQL87EN-4R7X	COIL	4.7uH N	
L6102	NQL87EN-4R7X	COIL	4.7uH N	
L6201	NQL87EN-390X	COIL	39uH N	
L6202	NQL87EN-390X	COIL	39uH N	
L6203	NQL87EN-220X	COIL	22uH N	
L6204	NQL144K-220X	P COIL	22uH K	
L6205	NQL87EN-470X	COIL	47uH N	
L6206	NQL87EN-470X	COIL	47uH N	
L6207	NQLZ011-221X	COIL	220uH M	
L6208	NQL38DK-100X	P COIL	10uH K	
L6701	NQLZ010-100X	COIL	10uH	
L8001	NQR0129-002X	FERRITE BEADS		
L8002	NQR0129-002X	FERRITE BEADS		
L8003	NQR0129-002X	FERRITE BEADS		
L8004	NQR0006-001X	FERRITE BEADS		
L8005	NQR0129-002X	FERRITE BEADS		
L8006	NQR0006-001X	FERRITE BEADS		
L8301	NQR0129-002X	FERRITE BEADS		
CN101	QGF0538F1-24X	CONNECTOR	OP FFC/FPC (1-24)	
CN102	QGF0517F2-20X	CONNECTOR	CCD FFC/FPC (1-20)	
CN103	QGF0517F2-22X	CONNECTOR	CVF FFC/FPC (1-22)	
CN104	QGF0528F1-40X	CONNECTOR	REAR PWB FFC/FPC (1-40)	
CN105	QGF0532F2-22X	CONNECTOR	SD PWB FFC/FPC (1-22)	
CN106	QGF0537F1-30X	CONNECTOR	MDA PWB FFC/FPC (1-30)	
CN107	QGA1001F1-04X	CONNECTOR	MIC W-B (1-4)	

Symbol No.	Part No.	Part Name	Description	Local
CN108	QGF0517F2-24X	CONNECTOR	FRONT PWB FFC/FPC (1-24)	
CN109	QGF0532F2-06X	CONNECTOR	ZOOM OPE FFC/FPC (1-6)	
CN110	QGF0532F2-10X	CONNECTOR	JUNCTION FFC/FPC (1-10)	
CN111	QGB0512L4-40X	CONNECTOR	JIG CN B-B (1-40)	
CN112	QGF0307F2-39W	CONNECTOR	MONITOR FFC/FPC (1-39)	
CN113	QGF0517F2-08X	CONNECTOR	HEAD FFC/FPC (1-8)	
CN114	QGF0532F2-16X	CONNECTOR	SENSOR FFC/FPC (1-16)	
△ F4951	NMFZ007-R20X-K	FUSE	0.2A 50V	
△ F4952	NMFZ007-R20X-K	FUSE	0.2A 50V	
△ F6001	NMFZ007-1R0X-K	FUSE	1A 32V	
△ F6101	NMFZ007-2R0X-K	FUSE	2A 32V	
△ F6201	NMFZ007-1R25X-K	FUSE	1.25A 32V	
J101	QNZ0518-002	D CONNECTOR	DV	
J102	QNZ0617-001	USB CONNECTOR	USB	
X1001	NAX0645-001X	CRYSTAL		
X1002	NAX0564-001X	CRYSTAL		
X3002	NAX0591-001X	CRYSTAL		
X4301	NAX0587-001X	CXO		
X8301	NAX0612-001X	C RESONATOR		
OT1	LY44683-001A	BUSTERAID(1)	20*15	
OT2	LY44684-001A	BUSTERAID(2)	33*24	
SD1	LY34182-001A	SHIELD COVER(2)	P/R SHIELD	
WR1	WJT0149-001A	E-CARD WIRE	FRONT FFC	

CCD BOARD ASSEMBLY <02>

Symbol No.	Part No.	Part Name	Description	Local
PW1	YB20958A-01	CCD BOARD ASSY		
Q5201	2SC3931/CD/-X	TRANSISTOR		
C5201	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C5202	NBP41DM-106X	TA E CAPACITOR	10uF 20V M	
C5203	NCF31EZ-104X	C CAPACITOR	0.1uF 25V Z	
C5204	NBE91AM-475X	TA E CAPACITOR	4.7uF 10V M	
C5205	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C5206	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
R5201	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R5202	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R5203	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R5204	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R5205	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5206	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R5207	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L5201	NQL315K-100X	COIL	10uH K	
L5202	NQL38DK-100X	P COIL	10uH K	

MDA BOARD ASSEMBLY <03>

Symbol No.	Part No.	Part Name	Description	Local
PW1	YB10466A-01	MDA BOARD ASSY		
△ IC1601	BD6637KV	IC	MDA 64PIN	
Q1601	UMC3N-W	DIGI TRANSISTOR	LD ON	
D1602	DAP222-X	DIODE ARRAY	LD OUT	
D1602	or MA132WA-X	SI DIODE		
D1603	DAP222-X	DIODE ARRAY	LD ON	
D1603	or MA132WA-X	SI DIODE		
D1604	DAP222-X	DIODE ARRAY	C.ERR-3V	
D1604	or MA132WA-X	SI DIODE		
C1601	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1602	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C1603	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C1605	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C1606	NCBA1HK-152W	C CAPACITOR	1500pF 50V K	
C1607	NCBA1CK-473W	C CAPACITOR	0.047uF 16V K	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

△ Symbol No. Part No. Part Name Description Local

C1614	NBE91AM-475X	TA E CAPACITOR	4.7uF 10V M	
C1618	NCBA1HK-222W	C CAPACITOR	2200pF 50V K	
C1619	NCBA1HK-222W	C CAPACITOR	2200pF 50V K	
C1620	NCBA1HK-222W	C CAPACITOR	2200pF 50V K	
C1621	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1622	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K	
C1623	NCBA1AK-473W	C CAPACITOR	0.047uF 10V K	
C1624	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1625	NDCA1HJ-101W	C CAPACITOR	100pF 50V J	
C1626	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
C1627	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
C1628	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C1629	NCJ31EK-224X-A	C CAPACITOR	0.22uF 25V K	
C1630	NCJ31EK-224X-A	C CAPACITOR	0.22uF 25V K	
C1631	NBZ0015-106X	TA E CAPACITOR	10uF 6.3V M	
C1632	NCJ31CK-474X-A	C CAPACITOR		
C1633	NCB30JK-474X	C CAPACITOR	0.47uF 6.3V K	

R1601	NRSA6AJ-681W	MG RESISTOR	680Ω 1/16W J	
R1602	NRSA6AJ-124W	MG RESISTOR	120kΩ 1/16W J	
R1603	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R1604	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1610	NRSA6AJ-391W	MG RESISTOR	390Ω 1/16W J	
R1611	NRSA6AJ-391W	MG RESISTOR	390Ω 1/16W J	
R1612	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1613	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1614	NRZ0072-R330X	MG RESISTOR	0.33Ω 1/4W F	
R1616	NRSA6AD-392W	MG RESISTOR	3.9kΩ 1/16W D	
R1617	NRZ0072-R330X	MG RESISTOR	0.33Ω 1/4W F	
R1620	NRSA6AJ-683W	MG RESISTOR	68kΩ 1/16W J	
R1621	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1622	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1624	NRSA6AD-183W	MG RESISTOR	18kΩ 1/16W D	
R1625	NRSA6AD-681W	MG RESISTOR	680Ω 1/16W D	
R1629	NRSA6AJ-564W	MG RESISTOR	560kΩ 1/16W J	
R1635	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R1636	NRSA6AJ-123W	MG RESISTOR	12kΩ 1/16W J	
R1637	NRSA6AJ-154W	MG RESISTOR	150kΩ 1/16W J	

L1601	NQL382M-100X	COIL	10uH M	
CN301	QGF0538F1-18X	CONNECTOR	CAPSTAN FFC/FPC (1-18)	
CN302	QGF0538F1-11X	CONNECTOR	DRUM MOTOR FFC/FPC (1-11)	
CN303	QGF0532F2-06X	CONNECTOR	R.ENCODER FFC/FPC (1-6)	
CN304	QGF0517F2-06X	CONNECTOR	LOAD MOTOR FFC/FPC (1-6)	
CN305	QGF0537F1-30X	CONNECTOR	MAIN PWB FFC/FPC (1-30)	
△ F1601	NMFZ007-R20X-K	FUSE	0.2A 50V	
△ F1602	NMFZ007-R50X-K	FUSE	0.5A 50V	
OT1	LY44625-001A	SPACER(MDA)	MDA-MECHA	
OT2	LY30034-061A	SPACER(A)	MDA-MAIN	
WR1	WJT0148-001A	E-CARD WIRE	FFC	

JUNC BOARD ASSEMBLY <04>

△ Symbol No. Part No. Part Name Description Local

PW4	YB10471A4-02	JUNC BOARD ASSY		
R401	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R402	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R403	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R404	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R405	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R406	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R407	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R408	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
CN401	QGF0532F2-10X	CONNECTOR	MAIN FFC/FPC (1-10)	
CN402	QGF0517F2-06X	CONNECTOR	D_OPE FFC/FPC (1-6)	
CN403	QGF0532F2-11X	CONNECTOR	SUB_OPE FFC/FPC (1-11)	
S405	NSW0099-001X	SLIDE SWITCH	DSC-VIDEO	
S406	NSW0221-001X	DETECT SWITCH	MONITOR SW	

PEAR BOARD ASSEMBLY <05>

△ Symbol No. Part No. Part Name Description Local

PW3	YB10471A3-02	REAR BOARD ASSY		
D501	MA8068-X	Z DIODE	T_BATT	
C501	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C502	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C503	NCB31CK-105X	C CAPACITOR	1uF 16V K	
BT501	QAB0040-001	LITHIUM BATTERY		
CN501	QGF0528F1-40X	CONNECTOR	FFC/FPC (1-40)	
J501	QNA0036-002	DC JACK	DC JACK	
OT1	LY30031-003A	SPECIAL SCREW	TER-PWB	
TB1	LY33994-001A	BATTERY TERMINAL UNIT		
WR1	QAL0561-001	FPC	MAIN FPC	

MONITOR BOARD ASSEMBLY <06>

△ Symbol No. Part No. Part Name Description Local

PW1	YB10469A-01	MONITOR BOARD ASSY		
IC7601	CXA3657R	IC	SONY MT+VF	
IC7602	MM1613BN-X	IC	3.1V	
IC7604	DN8797MS-X	IC		
Q7501	2SD1664/QR/-W	TRANSISTOR		
Q7502	2SD1664/QR/-W	TRANSISTOR		
Q7503	DTA144EE-X	DIGI TRANSISTOR		
Q7503	or RN2104-X	DIGI TRANSISTOR		
Q7503	or UN9113J-X	DIGI TRANSISTOR		
Q7504	2SC4617/QR/-X	TRANSISTOR		
Q7504	or 2SC4738/YG/-X	TRANSISTOR		
Q7504	or 2SD2216J/QR/-X	TRANSISTOR		
D7601	UDZS5.6B-X	Z DIODE	1.5kΩ 1/10W J	
C7501	NCZ1016-150X	C CAPACITOR	15pF 2kV J	
C7502	NCZ1016-150X	C CAPACITOR	15pF 2kV J	
C7503	NFV41HJ-183X	MPPS CAPACITOR	0.018uF 50V J	
C7504	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C7505	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C7510	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C7602	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C7603	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C7607	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C7608	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K	
C7609	NBE21AM-335X	TA E CAPACITOR	3.3uF 10V M	
C7610	NCBA1EK-682W	C CAPACITOR	6800pF 25V K	
C7611	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C7612	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C7613	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C7615	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C7616	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C7617	NBE21AM-106X	TA E CAPACITOR	10uF 10V M	
C7618	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C7619	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C7620	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C7621	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C7622	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C7623	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C7624	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C7625	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C7626	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7627	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7628	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7629	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C7630	NCB21CK-105X	C CAPACITOR	1uF 16V K	
R7501	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R7502	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R7503	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R7506	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R7507	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GR-D220EX	A	GR-D230EX	D	GR-D231EX	G
GR-D220EY	B	GR-D230EY	E	GR-D231EY	H
GR-D230EK	C	GR-D230EZ	F	GR-D231EZ	J

Symbol No.	Part No.	Part Name	Description	Local
R7603	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7605	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7606	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7608	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R7609	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R7610	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R7611	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R7612	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R7613	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R7614	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R7615	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R7616	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R7617	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R7618	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	

L7501	NQLZ010-680X	COIL	68uH	
L7502	NQLZ010-220X	COIL	22uH	
L7601	NQL04DK-100X	COIL	10uH K	
L7602	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
L7603	NQL38DK-101X	P COIL	100uH K	
L7604	NQL04DK-100X	COIL	10uH K	
△ T7501	NQS0060-001X	SW TARN SF		
CN7601	QGF0538F1-20X	CONNECTOR	MAIN FFC/FPC (1-20)	
CN7602	QGF0538F1-20X	CONNECTOR	MAIN FFC/FPC (1-20)	
CN7603	QGF0532F2-24X	CONNECTOR	LCD FFC/FPC (1-24)	
△ F7501	NMFZ007-R40X-K	FUSE	0.4A 50V	
WR1	QAL0396-001	FPC	HOLL	

FRONT BOARD ASSEMBLY <07>

Symbol No.	Part No.	Part Name	Description	Local
PW1	YB10471A1-02	FRONT BOARD ASSY		
IC701	RPM7138-SV4	IR DETECT UNIT		IR
Q701	RPM-22PB	PHOTO TRANSISTOR		WB
Q702	UMX1N-W	PAIR TRANSISTOR		
Q6501	BC847PN-X	PAIR TRANSISTOR		
Q6502	BC847PN-X	PAIR TRANSISTOR		
Q6503	2SC4617/RS/-X	TRANSISTOR		
D701	SML-211UT-X	LED		TALLY
D6501	NSPW500BS/CRS/	LED		
D6502	NSPW500BS/CRS/	LED		
C701	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C702	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C703	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C704	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C707	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
C708	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
R701	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R702	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R703	NRSA6AJ-821W	MG RESISTOR	820Ω 1/16W J	
R704	NRSA6AJ-821W	MG RESISTOR	820Ω 1/16W J	
R705	NRSA6AJ-564W	MG RESISTOR	560kΩ 1/16W J	
R706	NRSA6AJ-564W	MG RESISTOR	560kΩ 1/16W J	
R707	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R708	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R6501	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R6502	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R6503	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R6504	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R6505	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R6506	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R6507	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
L701	NQR0265-001X	FERRITE BEADS		
L702	NQR0269-013X	FERRITE BEADS		
L703	NQR0269-013X	FERRITE BEADS		
L704	NQR0269-013X	FERRITE BEADS		
L705	NQR0251-004X	FERRITE BEADS		
L706	NQR0251-004X	FERRITE BEADS		

Symbol No.	Part No.	Part Name	Description	Local
L707	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L708	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L709	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
CN701	QGF0503C1-24V	CONNECTOR	FFC/FPC (1-24)	
J701	QNS0147-001	3.5 JACK	EXT_MIC	
J702	QNZ0669-002	M CONNECTOR	MULTI	
S701	NSW0209-001X	DETECT SWITCH	EJECT	

VF BOARD ASSEMBLY <08>

Symbol No.	Part No.	Part Name	Description	Local
PW5	YB10471A5-02	VF BL BOARD ASSY		
Q7001	2SC4617/QR/-X	TRANSISTOR		
Q7001	or 2SC4738/YG/-X	TRANSISTOR		
Q7001	or 2SD2216J/QR/-X	TRANSISTOR		
D7001	E1S35AW0C501-X	LED		
D7002	UDZS5.6B-X	Z DIODE	1.5kΩ 1/10W J	
C7003	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7004	NCB21CK-105X	C CAPACITOR	1uF 16V K	
R7001	NRVA63D-682X	CMF RESISTOR	6.8kΩ 1/16W D	
R7002	NRVA63D-272X	CMF RESISTOR	2.7kΩ 1/16W D	
R7003	NRVA63D-390X	CMF RESISTOR	39Ω 1/16W D	
R7004	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R7005	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7006	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
CN7001	QGF0532F2-20X	CONNECTOR	MAIN FFC/FPC (1-20)	
CN7002	QGF0532F2-20X	CONNECTOR	LCD FFC/FPC (1-20)	

SD BOARD ASSEMBLY <09>

Symbol No.	Part No.	Part Name	Description	Local
PW2	YB10471A2-02	SD BOARD ASSY		
D901	EMZ6.8N-X	Z DIODE		
C901	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C902	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
R901	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R902	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R903	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R904	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R905	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R906	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
L901	NQR0006-001X	FERRITE BEADS		
CN901	QGF0532F2-22X	CONNECTOR	MAIN FFC/FPC (1-22)	
CN902	QGF0532F2-09X	CONNECTOR	POWER_OPE FFC/FPC (1-9)	
CN903	QGA1002F1-02X	CONNECTOR	SPEAKER W-B (1-2)	
CN904	NNZ0058-001X	SD CARD CONNE	SD SOCKET.	