

PARTS CATALOG

LBP650 Series (CEL)

<PREFACE>

This Parts Catalog contains listings of parts used. Diagrams are provided with the listings to aid the service technician in identifying clearly, the item to be ordered.

Whenever ordering parts, consult this Parts Catalog for all of the information pertaining to each item. Be sure to include, in the Parts Request, the full item description, the item part number, and the quantity.

Canon

Index

SNL	PRODUCT CODE NO. /SERIAL NO.
A2	OPTION PARTS CATALOG LIST
001E	ACCESSORIES
100F	EXTERNAL COVERS, PANELS, ETC. (LBP654Cx TOUCH PANEL model)
100G	EXTERNAL COVERS, PANELS, ETC. (LBP653Cdw 5-LINE PANEL model)
101D	INTERNAL COMPONENTS 1 (LBP654Cdw, LBP654Cx)
101E	INTERNAL COMPONENTS 1 (LBP653Cdw)
102C	INTERNAL COMPONENTS 2 (230V TOUCH PANEL model)
102D	INTERNAL COMPONENTS 2 (5-LINE PANEL model)
103	INTERNAL COMPONENTS 3
104	INTERNAL COMPONENTS 4
105C	INTERNAL COMPONENTS 5 (230V)
ZZA	MECHANICAL STANDARD PARTS (HOW TO USE)
ZZB	MECHANICAL STANDARD PARTS (SCREWS)
ZZC	MECHANICAL STANDARD PARTS (BOLTS)
ZZD	MECHANICAL STANDARD PARTS (NUTS)
ZZE	MECHANICAL STANDARD PARTS (RETAINING RINGS)

Figure SNL PRODUCT CODE NO. /SERIAL NO.

	Product Code No.	Model Name	Remarks	Serial No.
1	F17-0391-000	i-SENSYS LBP654Cx	5-INCH TOUCH PANEL model	NHDA
2	F17-0393-000	i-SENSYS LBP653Cdw	5-LINE CONTROL PANEL model	NHJA

	中オーダー	製品名	備考	シリアル No.
1	F17-0391-000	i-SENSYS LBP654Cx	5 インチタッチパネルモデル	NHDA
2	F17-0393-000	i-SENSYS LBP653Cdw	5 行操作パネルモデル	NHJA

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
SNL	NPN		RF	Product Code No./Serial No.	
1	F17-0391-000		1	i-SENSYS LBP654Cx	NHDA 5-INCH TOUCH PANEL model
2	F17-0393-000		1	i-SENSYS LBP653Cdw	NHJA 5-LINE CONTROL PANEL model

Figure A2 OPTION PARTS CATALOG LIST

This is the table of the machine's options whose parts catalog is issued.
 本機オプションで、パーツカタログが発行されている機種の一覧である。

No.	Model Name(English)	Model Name(Japanese)
1	Cassette Feeding Module-AF1	1 段カセットユニット・AF1
2	(JAPAN ONLY)	環境ヒーターEH-C1
3	MiCARD Attachment Kit-B1	M i C A R D A t t a c h m e n t K i t - B 1

Figure 001E ACCESSORIES

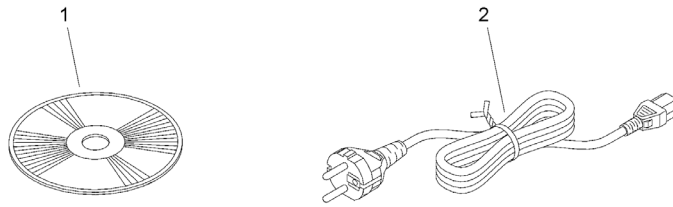


FIGURE & KEY NO.	PART NUMBER	R A N K	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
001E	NPN		RF	ACCESSORIES	
1	FM2-B974-000		1	DVD-ROM, USER SOFTWARE	
2	FK4-1390-000		1	CORD, POWER	

Figure 100F EXTERNAL COVERS, PANELS, ETC. (LBP654Cx TOUCH PANEL model)

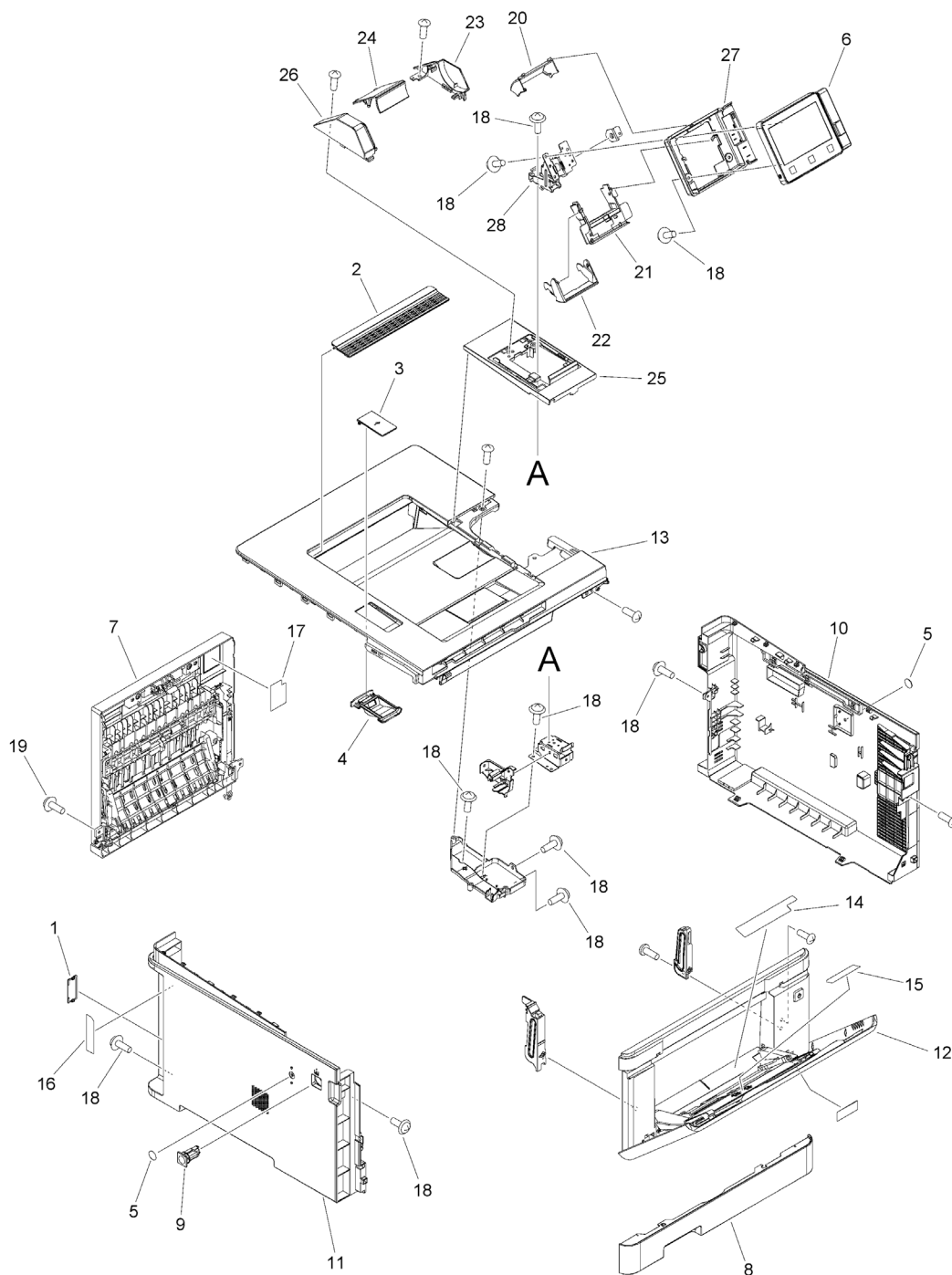


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
100F	NPN		RF	EXTERNAL COVERS, PANELS, ETC.	LBP654Cx 5-INCH TOUCH PANEL model
1	FE8-3017-000		1	LID, MODULAR	
2	FE8-3170-000		1	COVER, DELIVERY	
3	FE8-3189-000		1	LID, USB, UPPER	
4	FE8-3224-000		1	COVER, USB	
5	FL1-0525-000		2	SHEET, HANDSET	
6	FM1-P235-000		1	CONTROL PANEL ASSEMBLY	
7	FM1-P404-000		1	DUPLEXING DOOR ASS'Y	
8	FE8-3007-000		1	COVER, CASSETTE	
9	FE8-3016-000		1	BUTTON, DOOR, FRONT	
10	FM1-P425-000		1	COVER, RIGHT	
11	FM1-P426-000		1	COVER, LEFT	
12	FM1-P427-000		1	FRONT DOOR ASS'Y	
13	FM1-P429-000		1	TOP COVER ASS'Y	
14	FU2-1954-000		1	LABEL, MP SIZE	
15	FU2-1956-000		1	LABEL, MP PROHIBITION	
16	FU2-1959-000		1	LABEL, NETWORK	
17	FU2-1962-000		1	LABEL, DUPLEXING JAM	
18	XA9-1671-000		15	SCREW, D, M3X8	
19	XA9-1835-000		2	SCREW, D, M3X6	
20	FE8-3069-000		1	COVER, PANEL, REAR UPPER	
21	FE8-3070-000		1	COVER, PANEL, REAR UNDER	
22	FE8-3071-000		1	COVER, PANEL, LOWER	
23	FE8-3194-000		1	COVER, PANEL ARM, 2	
24	FE8-3195-000		1	COVER, PANEL ARM, 3	
25	FE8-3196-000		1	COVER, PANEL ARM, 4	
26	FE8-3198-000		1	COVER, PANEL ARM, 5	
27	FE8-3263-000		1	COVER, PANEL, REAR	
28	FM1-P442-000		1	HINGE ASSEMBLY	

Figure 100G EXTERNAL COVERS, PANELS, ETC. (LBP653Cdw 5-LINE PANEL model)

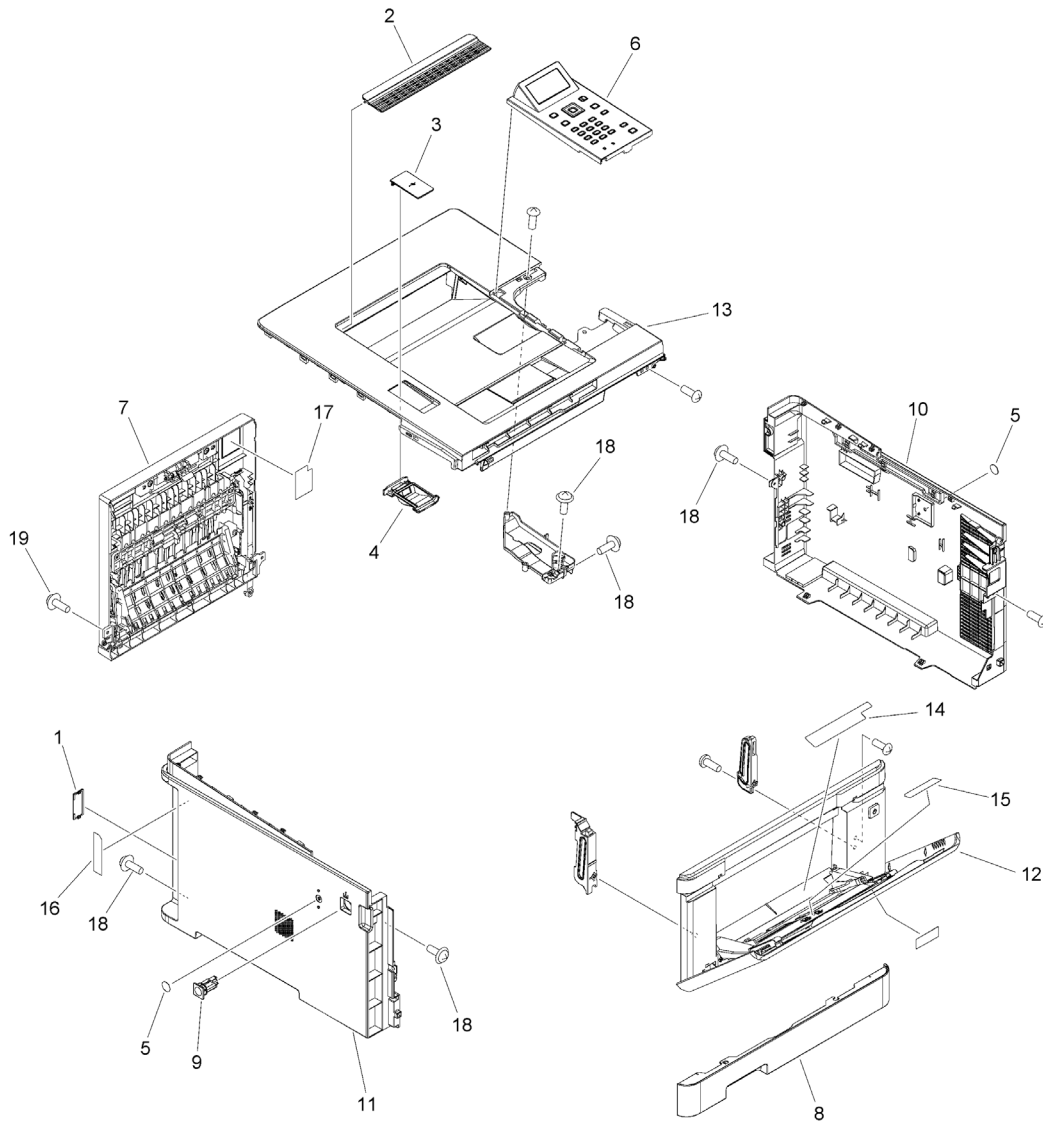


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
100G	NPN		RF	EXTERNAL COVERS, PANELS, ETC.	LBP653Cdw 5-LINE CONTROL PANEL model
1	FE8-3017-000		1	LID, MODULAR	
2	FE8-3170-000		1	COVER, DELIVERY	
3	FE8-3189-000		1	LID, USB, UPPER	
4	FE8-3224-000		1	COVER, USB	
5	FL1-0525-000		2	SHEET, HANDSET	
6	FM1-P262-000		1	CONTROL PANEL ASSEMBLY	
7	FM1-P404-000		1	DUPLEXING DOOR ASS'Y	
8	FE8-3007-000		1	COVER, CASSETTE	
9	FE8-3016-000		1	BUTTON, DOOR, FRONT	
10	FM1-P425-000		1	COVER, RIGHT	
11	FM1-P426-000		1	COVER, LEFT	
12	FM1-P427-000		1	FRONT DOOR ASS'Y	
13	FM1-P429-000		1	TOP COVER ASS'Y	
14	FU2-1954-000		1	LABEL, MP SIZE	
15	FU2-1956-000		1	LABEL, MP PROHIBITION	
16	FU2-1960-000		1	LABEL, NETWORK	
17	FU2-1962-000		1	LABEL, DUPLEXING JAM	
18	XA9-1671-000		7	SCREW, D, M3X8	
19	XA9-1835-000		2	SCREW, D, M3X6	

Figure 101D INTERNAL COMPONENTS 1 (LBP654Cdw, LBP654Cx)

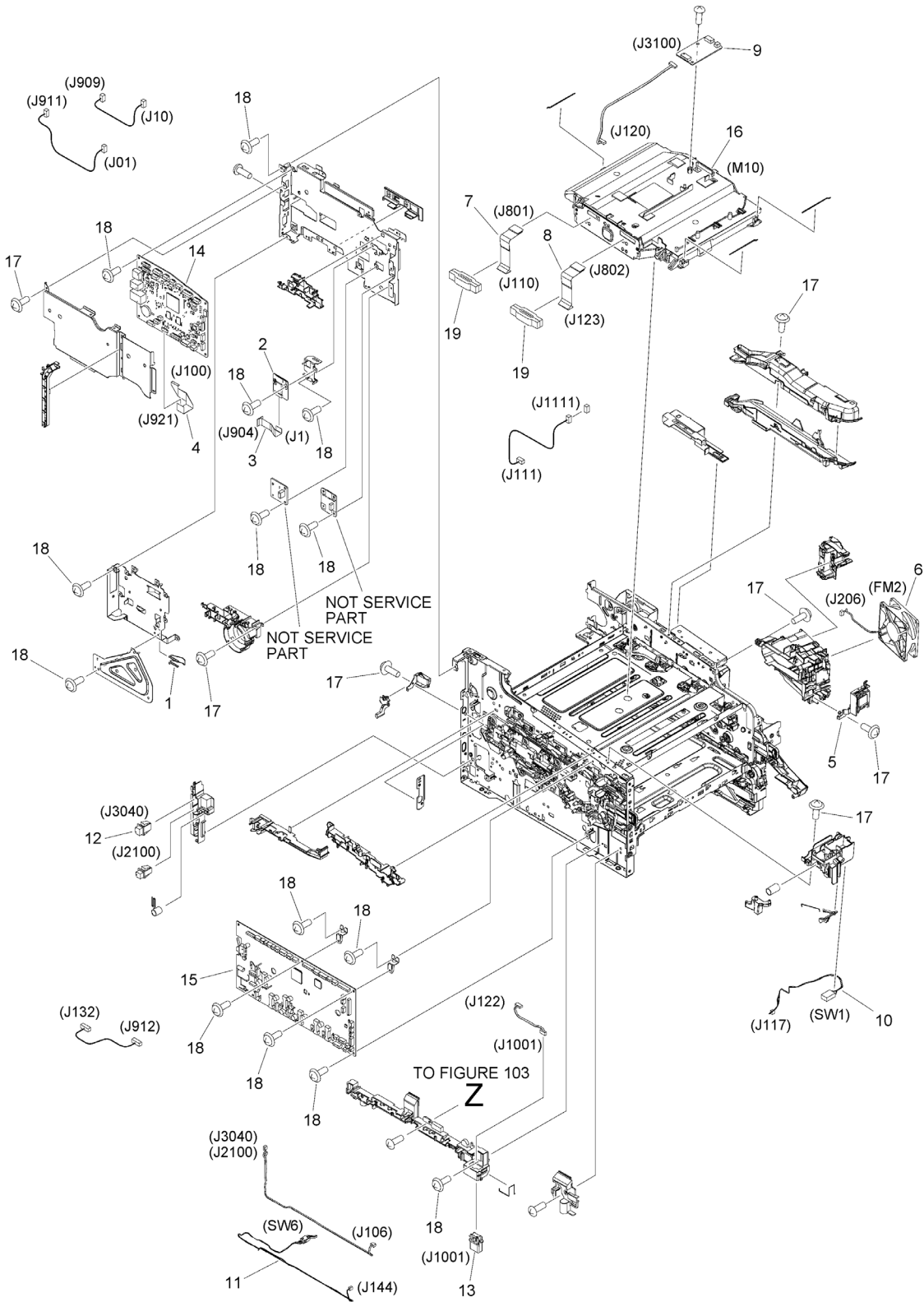


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
101D	NPN		RF	INTERNAL COMPONENTS 1	LBP654Cdw, LBP654Cx
1	FE8-3076-000		1	SPRING, GROUNDING	
2	FK4-1248-020		1	MODULE, WLAN	
3	FL0-8151-000		1	CABLE, FLAT	
4	FL0-8149-000		1	CABLE, FLEXIBLE FLAT	
5	FM1-P414-000		1	POWER SWITCH ASS'Y	
6	FK4-4315-000		1	FAN	FM2
7	FM2-D942-000		1	CABLE, FLEXIBLE FLAT	
8	FM2-D943-000		1	CABLE, FLEXIBLE FLAT	
9	RM2-7374-000		1	MEMORY PCB ASS'Y	
10	RM2-7889-000		1	FRONT DOOR SWITCH CABLE ASS'Y	SW1
11	RM2-7896-000		1	CASSETTE SWITCH CABLE ASS'Y	SW6
12	VS1-7207-003		1	CONNECTOR, SNAP TIGHT, BK	
13	VS1-7258-007		1	CONNECTOR, DRAWER	
14	FM1-X987-000		1	MAIN CONTROLLER PCB ASSEMBLY	
15	FM2-D944-000		1	ENGINE CONTROLLER PCB ASS'Y	
16	RM2-5612-000		1	LASER SCANNER ASS'Y	M10
17	XA9-1671-000		15	SCREW, D, M3X8	
18	XA9-1835-000		15	SCREW, D, M3X6	
19	FM1-T672-000		2	FERRITE CORE UNIT	

FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
101E	NPN		RF	INTERNAL COMPONENTS 1	LBP653Cdw
1	FE8-3076-000		1	SPRING, GROUNDING	
2	FK4-1248-020		1	MODULE, WLAN	
3	FL0-8151-000		1	CABLE, FLAT	
4	FL0-8149-000		1	CABLE, FLEXIBLE FLAT	
5	FM1-P414-000		1	POWER SWITCH ASS'Y	
6	FK4-4315-000		1	FAN	FM2
7	FM2-D942-000		1	CABLE, FLEXIBLE FLAT	
8	FM2-D943-000		1	CABLE, FLEXIBLE FLAT	
9	RM2-7374-000		1	MEMORY PCB ASS'Y	
10	RM2-7889-000		1	FRONT DOOR SWITCH CABLE ASS'Y	SW1
11	RM2-7896-000		1	CASSETTE SWITCH CABLE ASS'Y	SW6
12	VS1-7207-003		1	CONNECTOR, SNAP TIGHT, BK	
13	VS1-7258-007		1	CONNECTOR, DRAWER	
14	FM1-X989-000		1	MAIN CONTROLLER PCB ASSEMBLY	
15	FM2-D944-000		1	ENGINE CONTROLLER PCB ASS'Y	
16	RM2-5612-000		1	LASER SCANNER ASS'Y	M10
17	XA9-1671-000		15	SCREW, D, M3X8	
18	XA9-1835-000		15	SCREW, D, M3X6	
19	FM1-T672-000		2	FERRITE CORE UNIT	

Figure 102C INTERNAL COMPONENTS 2 (230V TOUCH PANEL model)

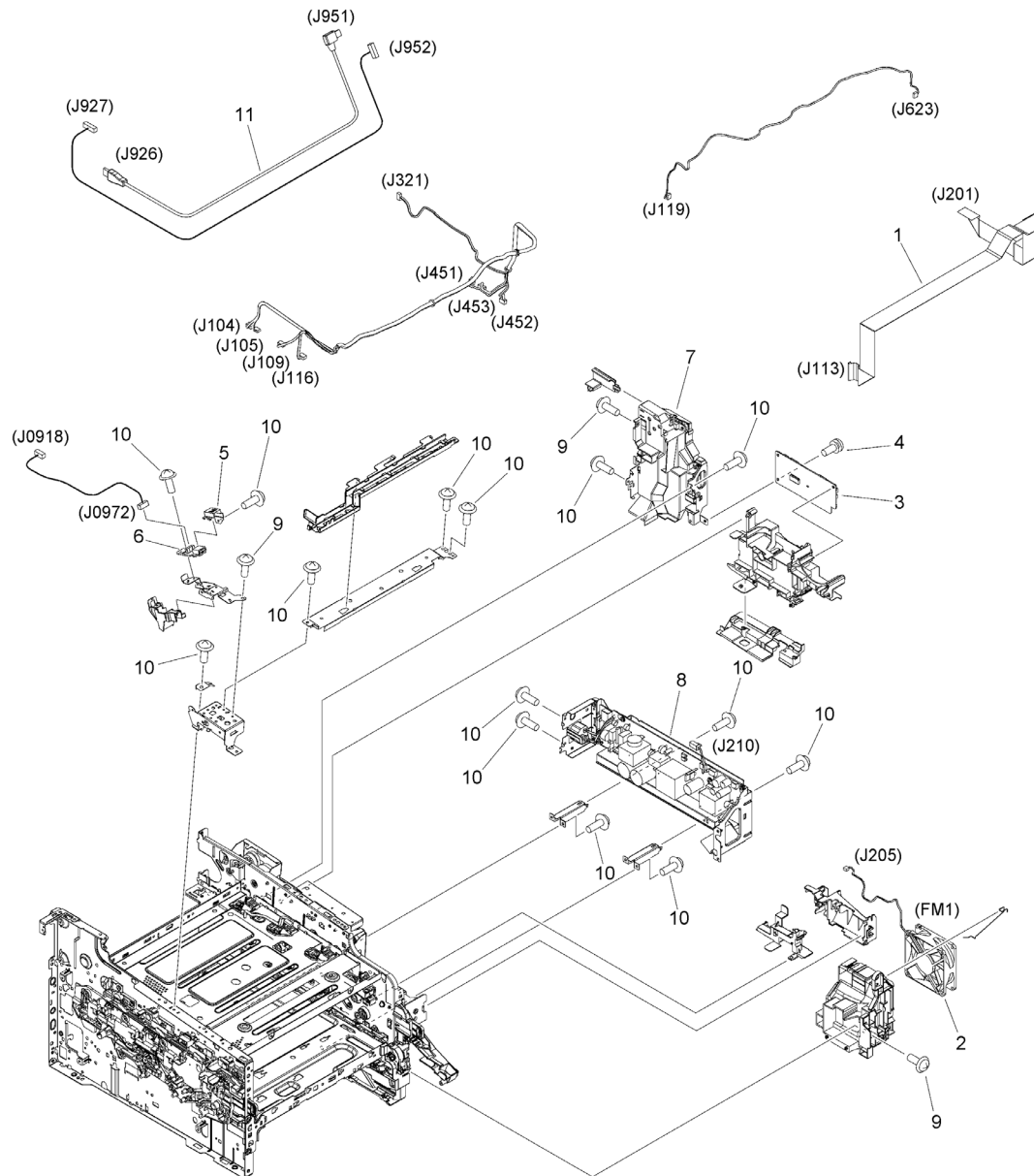


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
102C	NPN		RF	INTERNAL COMPONENTS 2	230V 5-INCH TOUCH PANEL model
1	RM2-8661-000		1	CABLE, FLEXIBLE FLAT	
2	FK4-4315-000		1	FAN	FM1
3	RM2-7369-000		1	DRIVER PCB ASS'Y	
4	XA9-1420-000		1	SCREW, W/WASHER, M3X8	
5	FE8-0014-000		1	PLATE, USB, GROUNDING	
6	FM1-R870-000		1	USB RELAY PCB ASSEMBLY	
7	FM1-P443-000		1	FIXING POWER SUPPLY PCB ASS'Y	
8	FM1-Z822-000		1	L.V. POWER SUPPLY PCB ASS'Y	
9	XA9-1671-000		15	SCREW, D, M3X8	
10	XA9-1835-000		15	SCREW, D, M3X6	
11	FK4-4092-000		1	CABLE, MADRID HDMI	

Figure 102D INTERNAL COMPONENTS 2 (5-LINE PANEL model)

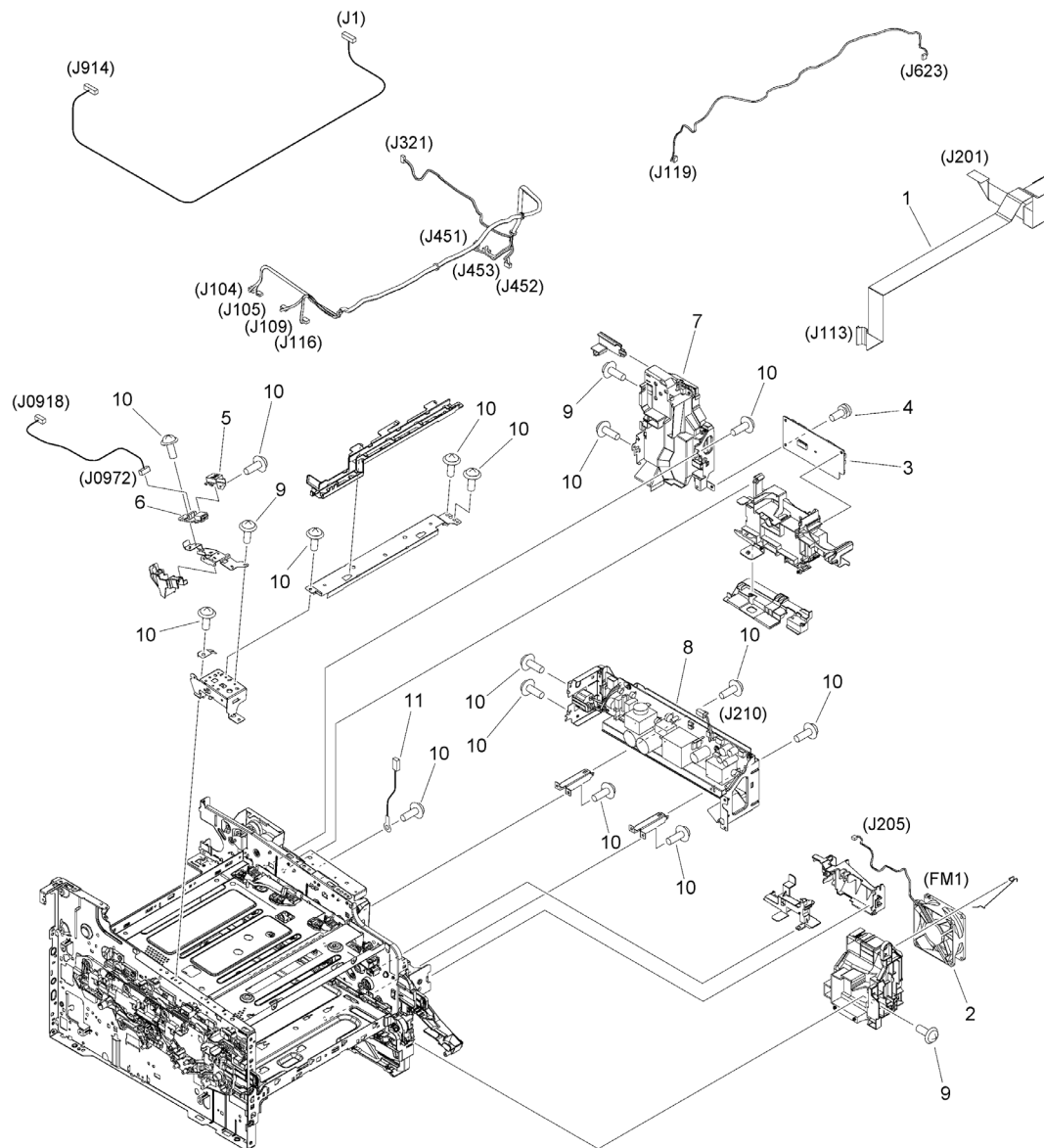


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
102D	NPN		RF	INTERNAL COMPONENTS 2	5-LINE CONTROL PANEL model
1	RM2-8661-000		1	CABLE, FLEXIBLE FLAT	
2	FK4-4315-000		1	FAN	FM1
3	RM2-7369-000		1	DRIVER PCB ASS'Y	
4	XA9-1420-000		1	SCREW, W/WASHER, M3X8	
5	FE8-0014-000		1	PLATE, USB, GROUNDING	
6	FM1-R870-000		1	USB RELAY PCB ASSEMBLY	
7	FM1-P443-000		1	FIXING POWER SUPPLY PCB ASS'Y	
8	FM1-Z822-000		1	L.V. POWER SUPPLY PCB ASS'Y	
9	XA9-1671-000		15	SCREW, D, M3X8	
10	XA9-1835-000		15	SCREW, D, M3X6	
11	FM1-X968-000		1	CABLE, GROUNDING	

Figure 103 INTERNAL COMPONENTS 3

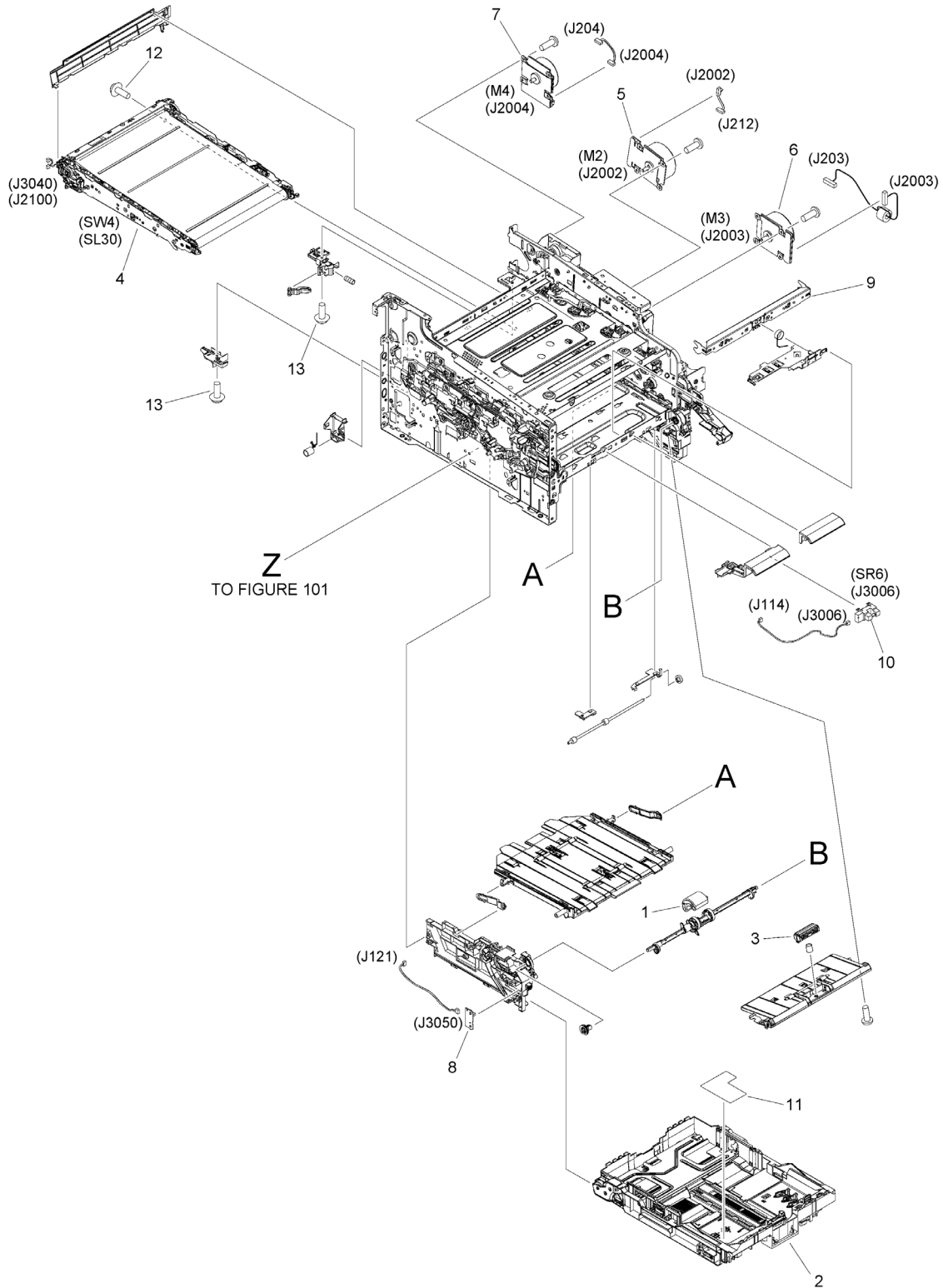


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
103	NPN		RF	INTERNAL COMPONENTS 3	
1	RL1-2593-000		1	ROLLER, PAPER PICK-UP	
2	RM2-6377-000		1	CASSETTE ASS'Y	
3	RM2-6406-000		1	SEPARATION PAD ASS'Y	
4	RM2-6454-000		1	INTERMEDIATE TRANS. BELT ASS'Y	SW4, SL30
5	RM2-7342-000		1	DRUM MOTOR ASS'Y	M2
6	RM2-7344-000		1	DEVELOPING MOTOR ASS'Y	M3
7	RM2-7349-000		1	FIXING MOTOR ASS'Y	M4
8	RM2-7376-000		1	ENVIRONMENT SENSOR PCB ASS'Y	
9	RM2-7399-000		1	DENSITY DETECT SENSOR ASS'Y	
10	WG8-5935-000		1	IC, PHOTO INTERRUPTER	SR6
11	FU2-1958-000		1	LABEL, CASSETTE OPERATOR	
12	XA9-1671-000		15	SCREW, D, M3X8	
13	XA9-1835-000		15	SCREW, D, M3X6	

Figure 104 INTERNAL COMPONENTS 4

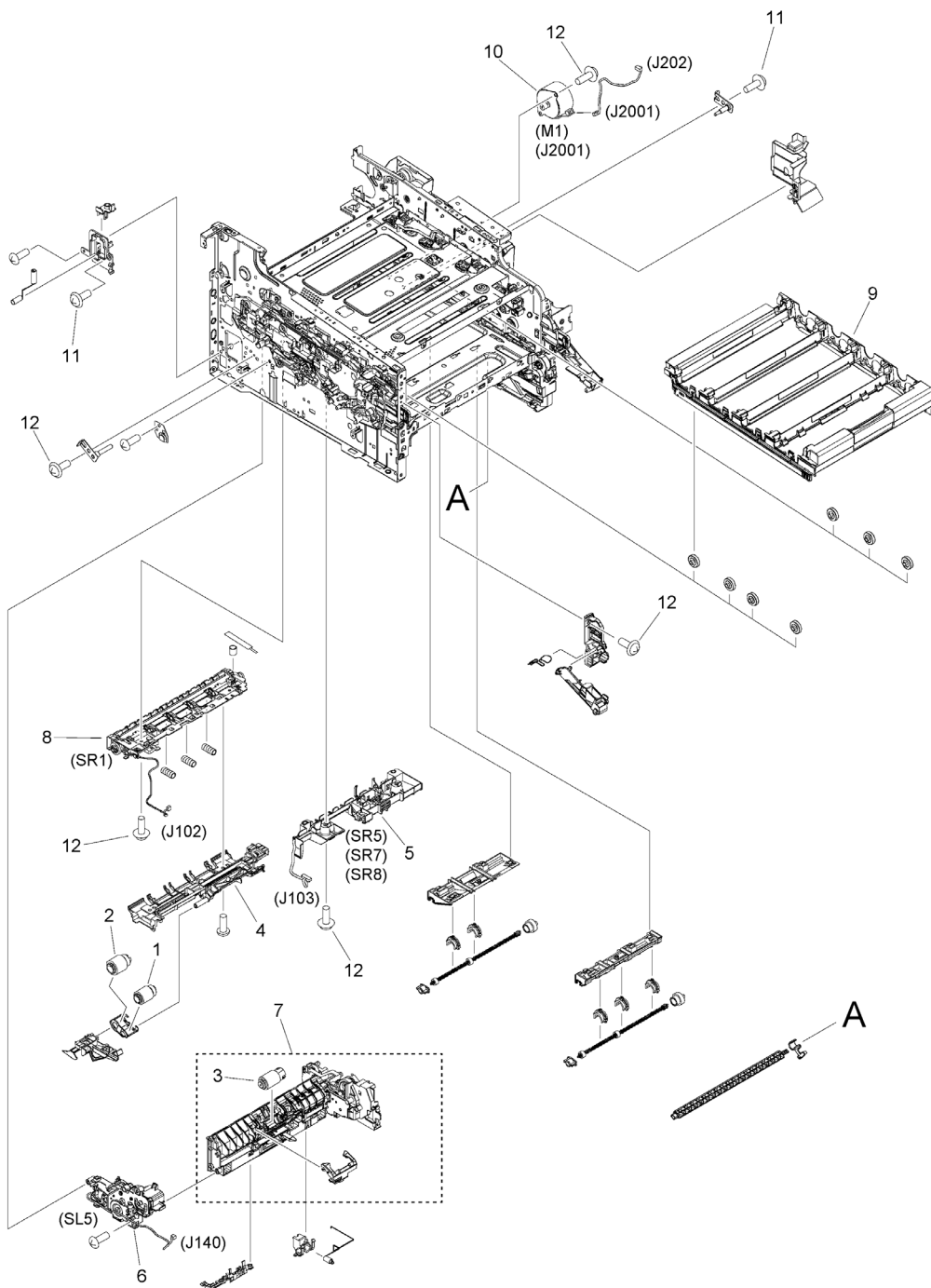


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
104	NPN		RF	INTERNAL COMPONENTS 4	
1	RM2-5576-000		1	PAPER PICK-UP ROLLER ASS'Y	
2	RM2-5577-000		1	FEED ROLLER ASS'Y	
3	RM2-5881-000		1	SEPARATION ROLLER ASS'Y	
4	RM2-6366-000		1	FEED GUIDE ASS'Y, REAR	
5	RM2-6368-000		1	FEED GUIDE ASS'Y, FRONT	SR5, SR7, SR8
6	RM2-6370-000		1	LIFTER DRIVE ASS'Y	SL5
7	RM2-6372-000		1	PAPER PICK-UP ASS'Y	
8	RM2-6374-000		1	REGISTRATION ASS'Y	SR1
9	RM2-6401-000		1	CARTRIDGE TRAY ASS'Y	
10	RM2-7350-000		1	PICK-UP MOTOR ASS'Y	M1
11	XA9-1671-000		15	SCREW, D, M3X8	
12	XA9-1835-000		15	SCREW, D, M3X6	

Figure 105C INTERNAL COMPONENTS 5 (230V)

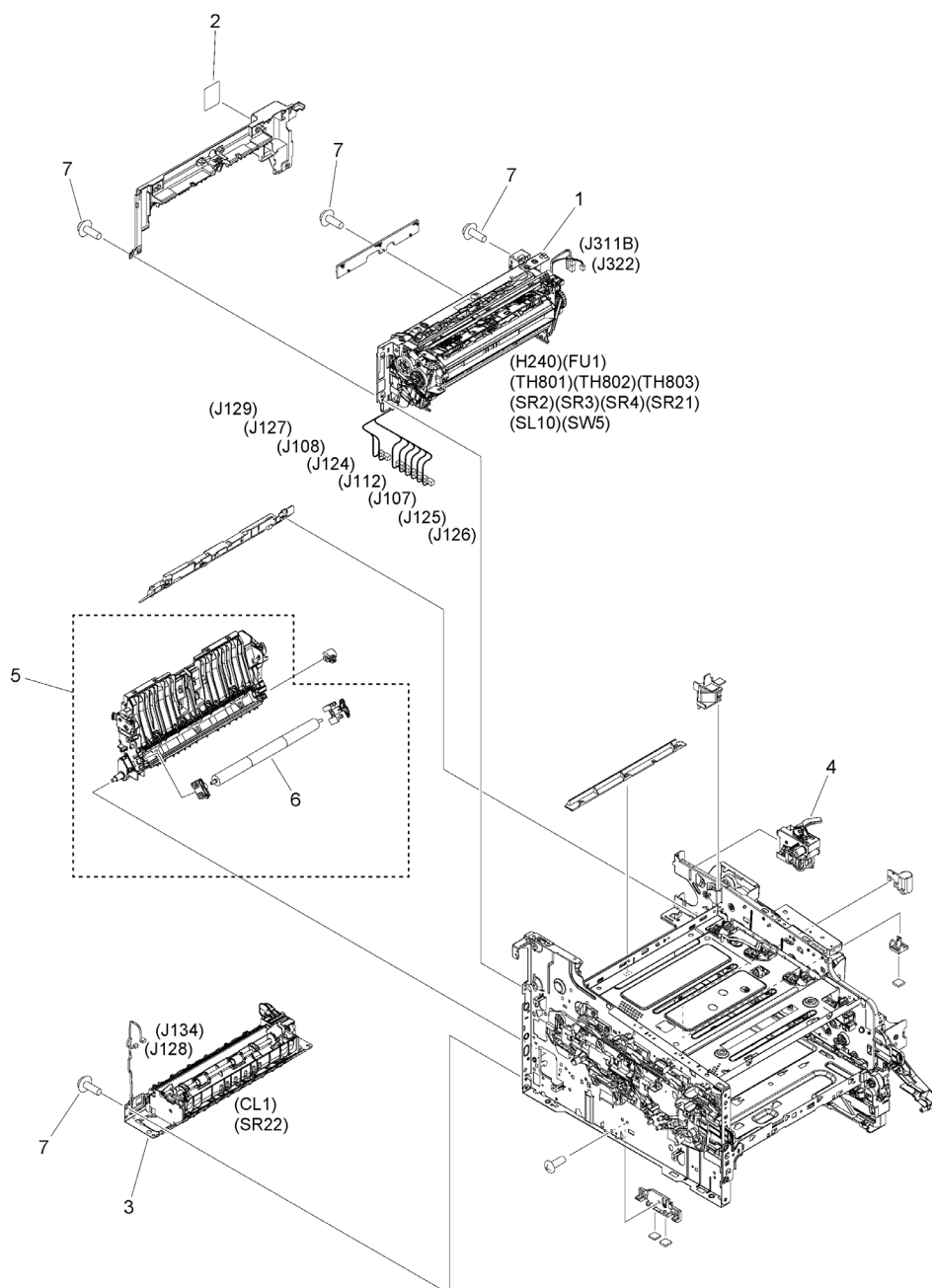


FIGURE & KEY NO.	PART NUMBER	RANK	QTY	DESCRIPTION	SERIAL NUMBER /REMARKS
105C	NPN		RF	INTERNAL COMPONENTS 5	230V
1	RM2-6435-000		1	FIXING ASSY	H240, FU1, TH801, TH802, TH803, SR2, SR3, SR4, SR21, SL10, SW5
2	FU2-1963-000		1	LABEL, HIGH TMP. CAUTION	
3	RM2-6387-000		1	PAPER RE-PICK UP ASS'Y	SR22, CL1
4	RM2-6389-000		1	REVERSE DRIVE ASS'Y	
5	RM2-6397-000		1	SECONDARY TRANSFER ASS'Y	
6	RM2-6455-000		1	2ND TRANSFER ROLLER ASS'Y	
7	XA9-1671-000		15	SCREW, D, M3X8	

Figure ZZA MECHANICAL STANDARD PARTS (HOW TO USE)

Mechanical standard parts 機械標準部品

About a mechanical standard parts

A Mechanical standard parts is a mechanical part which not parts peculiar to a product.
They are parts which are common to a Canon product and are used, such as a screw and a washer.
The Fig No. and parts number of the mechanical standard parts are not listed in the product parts catalog.
Refer to the parts catalog of mechanical standard parts when checking the parts number for screw or washer etc. and identify them by part shape or size.

機械標準部品とは

機械標準部品とは、製品特有の部品ではなく、ねじやワッシャなどキヤノン製品共通で使用されている機械部品（メカ部品）のことです。
製品のパーツカタログには、機械標準部品のFig No.や部品番号は記載していません。
ねじや、ワッシャ等の部品番号を調べるときは、機械標準部品のパーツカタログを参照し、部品の形状や大きさから判断し、使用している部品を調べてください。

Material and surface treatment of a mechanical standard parts

Material and surface treatment of mechanical standard parts are assigned commonly for each part.
Refer to the Table 1 for the parts which material and surface treatment are assigned as numbers.

機械標準部品の材料および表面処理

機械標準部品の材料および表面処理については、各種部品共通で決められています。
材料および表面処理が番号で決められている部品については、表1を参照してください。

Table 1 Material and Surface treatment
表1 材料および表面処理

No. 番号	Material 材料	Surface treatment 表面処理	Color 色
1	Stainless steel ステンレス	Stainless steel black coloring (BC4) ステンレス黒着色(BC4)	Black 黒
2		not to be given なし	White 白
3	Brass 黄銅	Regular nickel plating (NL) 普通ニッケルメッキ(NL)	White 白
4		Black nickel plating (BN) 黒色ニッケルメッキ(BN)	Black 黒
5	Steel 鋼	White zinc trivalent chromate treating (ZC3) 白色亜鉛3価クロメート(ZC3)	White 白
6		Regular nickel chromium plating (NC) 普通ニッケルクロムメッキ(NC)	White 白
7		Regular nickel plating (NL) 普通ニッケルメッキ(NL)	White 白
8		Iron and steel phosphating (P1) 鉄鋼燐酸塩処理(P1)	Black 黒
9		Black zinc trivalent chromate treating (BZ3) 黒色亜鉛3価クロメート(BZ3)	Black 黒

Figure ZZB (1/7)MECHANICAL STANDARD PARTS (SCREWS)

1. Screws
ねじ

How to read Parts Numbers
部品番号の見方

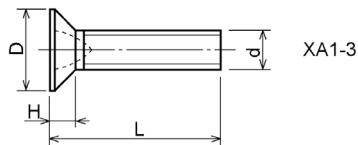
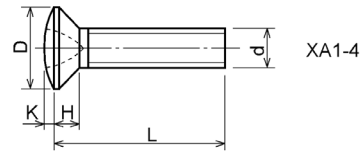
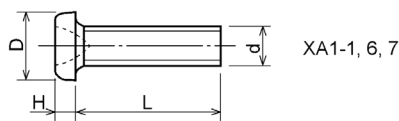
Screws
ねじ

XB1-2400-609

Type No.
類別番号
Normal designation (d)
ねじの呼び (d)
Length (L)
ねじの長さ (L)
Material and Surface treatment
材料および表面処理

XB1-2 expresses Binding head machine screw.
XB1-2は、バインドねじを表す
40 expresses M4.0.
40は、M4.0を表す
0-60 expresses a length of 6.0mm.
0-60は、6.0mmの長さを表す
9 expresses Steel (Black zinc trivalent chromate
treating) from Table 1.
9は、表1より鋼 (黒色亜鉛3価クロメート) を表す

1-1. Cross Recessed Head Screws for Precision Equipments
精密機器用十字穴付き小ねじ

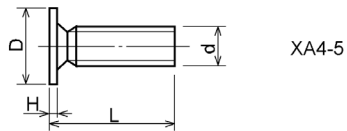
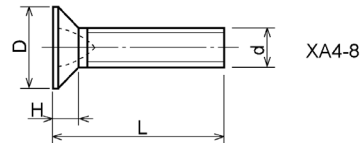
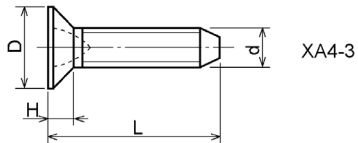
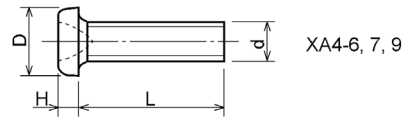
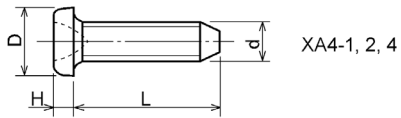


Type No. 類別番号	Type 類別
XA1-1	Pan head Class 1 なべ1種
XA1-3	Countersunk head Class 1 さら1種
XA1-4	Oval countersunk head Class 1 丸さら1種
XA1-6	Pan head Class 3 なべ3種
XA1-7	Pan head Class 2 なべ2種

		Head size (mm) 頭部寸法 (mm)					
		M1.4	M1.6	M1.7	M2	M2.5	M2.6
D	XA1-1	2	2.4	2.5	3	3.8	4
H	XA1-1	0.5	0.55	0.5	0.6	0.9	0.8
D	XA1-3	2	2.4	2.5	3	3.8	4
H	XA1-3	0.48	0.55	0.58	0.73	0.85	0.93
D	XA1-4	2	2.4	2.5	3	3.8	4
H + K	XA1-4	0.68	0.8	0.88	1	1.25	1.3
D	XA1-6	2.5	2.8	3	3.5	4.3	4.5
H	XA1-6	0.8	0.85	0.9	1	1.3	1.2
D	XA1-7	2.5	2.8	3	3.5	4.3	4.5
H	XA1-7	0.5	0.55	0.5	0.6	0.9	0.8

Figure ZZB (2/7) MECHANICAL STANDARD PARTS (SCREWS)

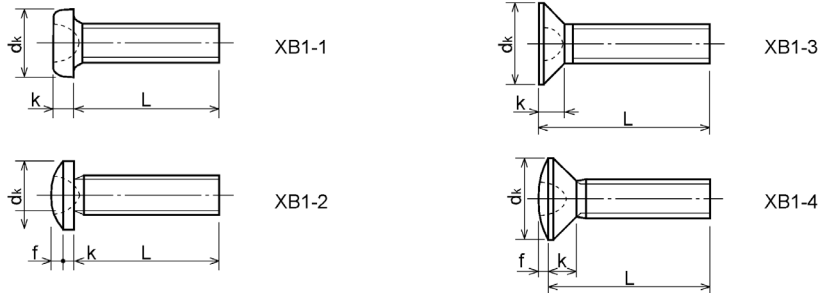
1-2. Precision Tapping Screws
精密用タッピンねじ



Type No. 類別番号	Type 類別	Head size (mm) 頭部寸法 (mm)						
		M1.4	M1.6	M1.7	M2	M2.5	M2.6	
XA4-1	With tapered end pan head Class 1 絞り-なべ1種	D XA4-1	2	2.4	2.5	3	3.8	4
		H XA4-1	0.5	0.55	0.5	0.6	0.9	0.8
XA4-2	With tapered end pan head Class 3 絞り-なべ3種	D XA4-2	2.5	2.8	3	3.5	4.3	4.5
		H XA4-2	0.8	0.85	0.9	1	1.3	1.2
XA4-3	With tapered end countersunk head 絞り-さら	D XA4-3	2	2.4	2.5	3	3.8	4
		H XA4-3	0.48	0.55	0.58	0.73	0.85	0.93
XA4-4	With tapered end pan head Class 2 絞り-なべ2種	D XA4-4	2.5	2.8	3	3.5	4.3	4.5
		H XA4-4	0.5	0.55	0.5	0.6	0.9	0.8
XA4-5	With parallel end ultra thin head ストレート-超薄頭	D XA4-5	2.5	2.8	3	-	-	-
		H XA4-5	0.2	0.2	0.2	-	-	-
XA4-6	With parallel end pan head Class 1 ストレート-なべ1種	D XA4-6	2	2.4	2.5	3	3.8	4
		H XA4-6	0.5	0.55	0.5	0.6	0.9	0.8
XA4-7	With parallel end pan head Class 3 ストレート-なべ3種	D XA4-7	2.5	2.8	3	3.5	4.3	4.5
		H XA4-7	0.8	0.85	0.9	1	1.3	1.2
XA4-8	With parallel end countersunk head ストレート-さら	D XA4-8	2	2.4	2.5	3	3.8	4
		H XA4-8	0.48	0.55	0.58	0.73	0.85	0.93
XA4-9	With parallel end pan head Class 2 ストレート-なべ2種	D XA4-9	2.5	2.8	3	3.5	4.3	4.5
		H XA4-9	0.5	0.55	0.5	0.6	0.9	0.8

Figure ZZB (3/7)MECHANICAL STANDARD PARTS (SCREWS)

1-3. Cross Recessed Head Screws
一般用十字穴付き小ねじ

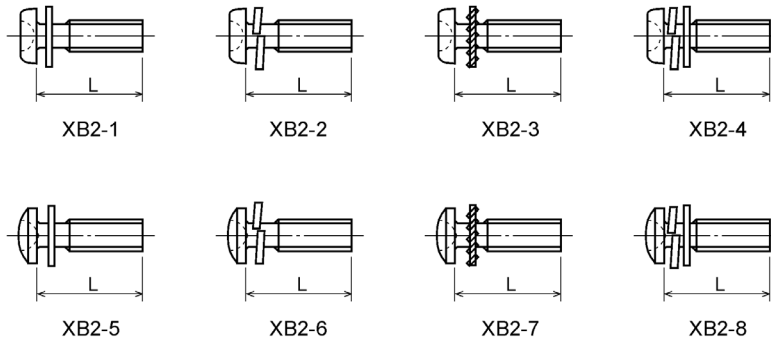


Type No. 類別番号	Type 類別
XB1-1	Pan head なべ
XB1-2	Binding head バインド
XB1-3	Countersunk head さら
XB1-4	Oval countersunk head 丸さら

		Head size (mm) 頭部寸法 (mm)					
		M2	M2.5	M2.6	M3	M4	M5
d_k	XB1-1	3.5	4.5	4.5	5.5	7	9
k	XB1-1	1.3	1.7	1.7	2	2.6	3.3
d_k	XB1-2	4.3	5.3	5.5	6.3	8.3	10.3
$k+f$	XB1-2	1.2	1.5	1.6	1.9	2.5	3.1
d_k	XB1-3	4	5	-	6	8	10
k	XB1-3	1.2	1.45	-	1.75	2.3	2.8
d_k	XB1-4	4	5	-	6	8	10
$k+f$	XB1-4	1.6	2	-	2.45	3.2	4
Screw part length ねじ部長さ b		8	12	12	12	16	20

Figure ZZB (4/7) MECHANICAL STANDARD PARTS (SCREWS)

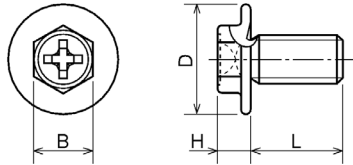
1-4. Cross Recessed Head Screws with Captive Washer
座金組込み十字穴付き小ねじ



Type No. 類別番号	Type 類別
XB2-1	Pan head + Plain washer (circular bright) なべねじ+平座金
XB2-2	Pan head + Spring washer なべねじ+ばね座金
XB2-3	Pan head + Toothed lock washer なべねじ+歯付座金
XB2-4	Pan head + Spring washer and plain washer (circular bright) なべねじ+(ばね+平)座金
XB2-5	Binding head + Plain washer (circular bright) バインドねじ+平座金
XB2-6	Binding head + Spring washer バインドねじ+ばね座金
XB2-7	Binding head + Toothed lock washer バインドねじ+歯付座金
XB2-8	Binding head + Spring washer and plain washer (circular bright) バインドねじ+(ばね+平)座金

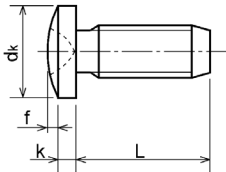
Figure ZZB (5/7) MECHANICAL STANDARD PARTS (SCREWS)

1-5. Hexagon Head Tapping Screws for Matallic Materials
 金属用六角タッピンねじ



Type No. 類別番号	Type 類別	Head size (mm) 頭部寸法 (mm)		
		M3	M4	
XB3-6	For metallic materials 金属用タッピン	D	8	10
		B	5.5	5.5
XB3-7	For metallic materials with clawed 金属用タッピン-つめ付き	H XB3-6	3.1	3.1
		H XB3-7	3.2	3.2

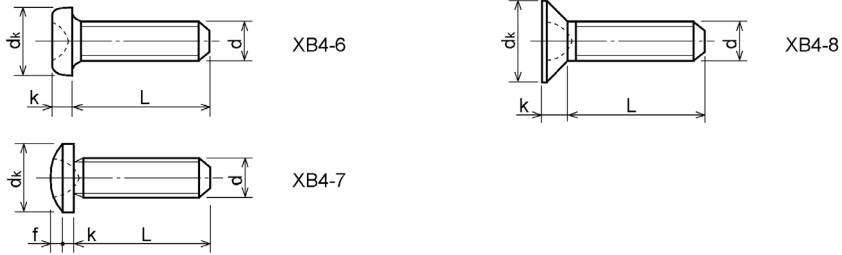
1-6. Special Tapping Screws
 特殊タッピンねじ



Type No. 類別番号	Type 類別	Head size (mm) 頭部寸法 (mm)		
		M3	M4	
XB4-5	Binding head バインド	dk	6.3	8.3
		k	1.3	1.7
		k+f	1.9	2.5

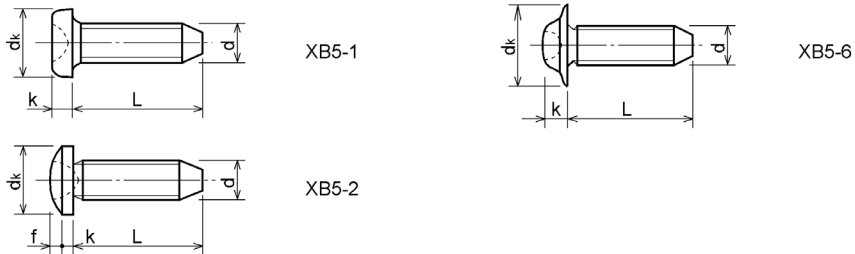
Figure ZZB (6/7) MECHANICAL STANDARD PARTS (SCREWS)

1-7. General Head Tapping Screws
一般用タッピンねじ



Type No. 類別番号	Type 類別	Head size (mm) 頭部寸法 (mm)						
		M2	M2.5	M2.6	M3	M4	M5	
XB4-6	Pan head なべ	dk	3.5	4.5	4.5	5.5	7	9
		k	1.3	1.7	1.7	2	2.6	3.3
XB4-7	Binding head バインド	dk	4.3	5.3	5.5	6.3	8.3	10.3
		k+f	1.2	1.5	1.6	1.9	2.5	3.1
XB4-8	Countersunk head さら	dk	4	5	5.2	6	8	10
		k	1.2	1.45	1.5	1.75	2.3	2.8

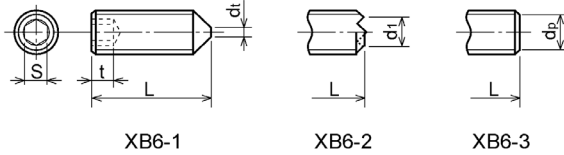
1-8. Tapping Screws for Metallic Materials
金属用タッピンねじ



Type No. 類別番号	Type 類別	Head size (mm) 頭部寸法 (mm)					
		M2.5	M2.6	M3	M4	M5	
XB5-1	Pan head なべ	dk	4.5	4.5	5.5	7	9
		k	1.7	1.7	2	2.6	3.3
XB5-2	Binding head バインド	dk	5.5	5.5	6.3	8.3	10.3
		k+f	1.6	1.6	1.9	2.5	3.1
XB5-6	Flanged pan head つば付きなべ	dk	6.5	6.5	8	10	12
		k	2.1	2.1	1.75	3.2	4

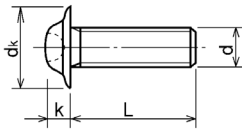
Figure ZZB (7/7) MECHANICAL STANDARD PARTS (SCREWS)

1-9. Hexagon Socket Set Screws
六角穴付き止めねじ



Type No. 類別番号	Type 類別	Head size (mm) 頭部寸法 (mm)						
		M1.6 M1.7	M2	M2.5 M2.6	M3	M5	M5	M6
	S	0.7	0.9	1.3	1.5	2	2.5	3
	t	1.5	1.7	2	2	2.5	3	3.5
	dt max XB6-1	0.4	0.5	0.65	0.75	1	1.25	1.5
	d1 max XB6-2	-	1.2	1.5	1.7	2.2	2.8	3.3
	d1 min XB6-2	-	1	1.2	1.4	1.9	2.4	2.9
	dp max XB6-3	0.8	1	1.5	2	2.5	3.5	4
	dp min XB6-3	0.55	0.75	1.25	1.75	2.25	3.2	3.7

1-10. Flanged Pan Head Machine Screws
つば付きなべ小ねじ



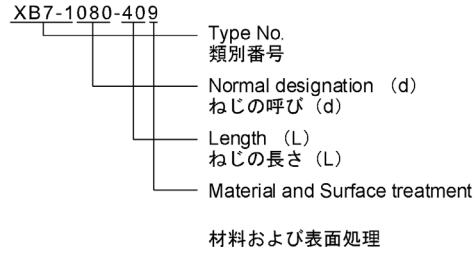
Type No. 類別番号	Type 類別	Head size (mm) 頭部寸法 (mm)				
		M2	M2.5 M2.6	M3	M5	M5
	dk	5	6.5	8	10	12
	k	1.7	2.1	2.5	3.2	4

Figure ZZC MECHANICAL STANDARD PARTS (BOLTS)

2. Bolts (Socket head cap screw)
ボルト

How to read Parts Numbers
部品番号の見方

Bolt (Socket head cap screw)
ボルト



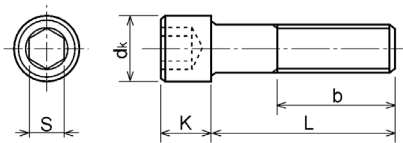
XB7-1 expresses Hexagon socket head cap screws.
XB7-1は、六角穴付きボルトを表す

080 expresses M8.0.
080は、M8.0を表す

40 expresses a length of 40mm.
40は、40mmの長さを表す

9 expresses Steel (Black zinc trivalent chromate treating) from Table 1.
9は、表1より鋼（黒色亜鉛3価クロメート）を表す

2-1. Hexagon socket head cap screws
六角穴付きボルト

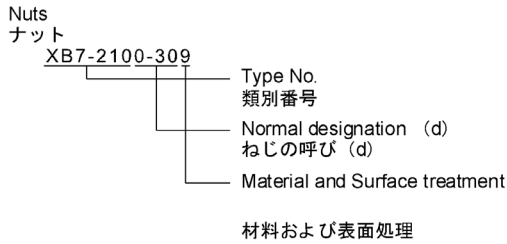


Type No. 類別番号	Type 類別	Head size (mm) 頭部寸法 (mm)						
		M3	M4	M5	M6	M8	M10	M12
S		2.5	3	4	5	6	8	10
dk		5.5	7	8.5	10	13	16	18
K		3	4	5	6	8	10	12
Screw part length ねじ部長さ b_{max}		18	20	22	24	28	32	36

Figure ZZD MECHANICAL STANDARD PARTS (NUTS)

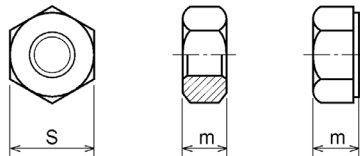
3. Nuts
ナット

How to read Parts Numbers
部品番号の見方



XB7-210 expresses Hexagon nut class 1.
XB7-210は、六角ナット1種を表す
0-30 expresses M3.0.
0-30は、M3.0を表す
9 expresses Steel (Black zinc trivalent chromate treating) from Table 1.
9は、表1より鋼（黒色亜鉛3価クロメート）を表す

3-1. Hexagon Nuts and Hexagon Thin Nuts
六角ナット



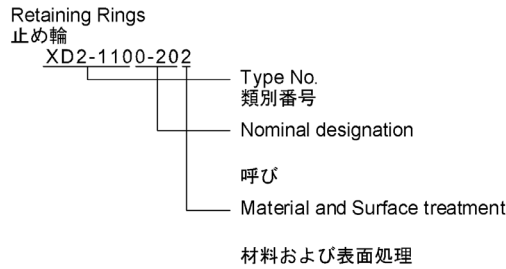
Type No. 類別番号	Type 類別
XB7-210	Hexagon nut Class 1 六角ナット-1種
XB7-220	Hexagon nut Class 3 六角ナット-3種
XB7-230	Hexagon nut Style 1 double chamfered 六角ナット-スタイル1-両面とり
XB7-231	Hexagon nut Style 1 washer faced 六角ナット-スタイル1-座付き
XB7-240	Hexagon nut Style 2 double chamfered 六角ナット-スタイル2-両面とり
XB7-241	Hexagon nut Style 2 washer faced 六角ナット-スタイル2-座付き
XB7-250	Hexagon nut 六角ナット
XB7-260	Hexagon thin nut double chamfered 六角低ナット-両面とり
XB7-270	Hexagon thin nut not chamfered 六角低ナット-面とり無し

	Head size (mm) 頭部寸法 (mm)						
	M2	M2.5	M3	M4	M5	M6	M8
S	4	5	5.5	7	8	10	13
m XB7-210	1.6	2	2.4	3.2	4	5	6.5
m XB7-220	1.2	1.6	1.8	2.4	3.2	3.6	5
m XB7-230, 231	1.6	2	2.4	3.2	4.7	5.2	6.8
m XB7-240, 241	-	-	-	-	5.1	5.7	7.5
m XB7-250	-	-	-	-	5.6	6.1	7.9
m XB7-260	1.2	1.6	1.8	2.2	2.7	3.2	4
m XB7-270	1.2	1.6	1.8	2.2	2.7	3.2	4

Figure ZZE (1/3)MECHANICAL STANDARD PARTS (RETAINING RINGS)

5. Retaining Rings
止め輪

How to read Parts Numbers
部品番号の見方

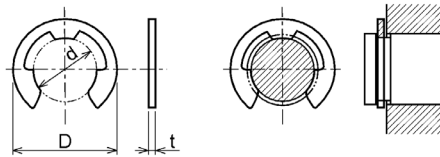


XD2-110 expresses retaining ring-E type (Type1).
XD2-110は、E形止め輪（1種）を表す

0-20 expresses a 020 of nominal designation.
(See Table 5)
0-20は、呼び020を表す（表5参照）

2 expresses Stainless steel (Surface treatment is not to be given) from Table 1.
2は、表1よりステンレス（表面処理なし）を表す

5-1. Retaining Rings - E type
E形止め輪



Type No. 類別番号	Type 類別
XD2-110	Retaining ring - E type (Type 1) E形止め輪（1種）
XD2-120	Retaining ring - E type (Type 2) E形止め輪（2種）

Table 5 表5

Type 種類	Nominal designation 呼び	d (mm)	D (mm)	t (mm)
Type 1 1種	007	0.65	2	0.2
	010	0.95	2.8	0.2
	013	1.25	3.3	0.3
	017	1.65	4.2	0.4
	020	1.95	4.6	0.5
	024	2.35	6	0.6
	028	2.74	6.5	0.6
	032	3.14	7.2	0.6
	037	3.64	8	0.7
	040	3.93	10	0.7
	042	4.13	10	0.7
	050	4.93	11	0.7
	058	5.73	12	0.7
	060	5.93	12.7	0.9
064	6.32	13.5	0.9	
074	7.31	15	0.9	
080	7.91	16.5	1	
Type 2 2種	008	0.8	2	0.2
	012	1.2	3	0.3
	015	1.5	4	0.4
	020	2	5	0.4
	025	2.5	6	0.4
	030	3	7	0.6
	040	4	9	0.6
	050	5	11	0.6
	060	6	12	0.8
	070	7	14	0.8
	080	8	16	0.8
	090	9	18	0.8
	100	10	20	1

Figure ZZE (2/3)MECHANICAL STANDARD PARTS (RETAINING RINGS)

5-2. Grip Rings
グリップ止め輪

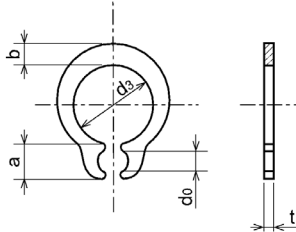


Table 5 表5

Nominal designation 呼び	d ₃ (mm)	t (mm)	b (mm)	a (mm)	d ₀ (mm)
020	1.9	0.5	1	1.8	0.8
025	2.35	0.5	1.2	1.9	0.9
030	2.85	0.6	1.4	1.9	0.9
035	3.3	0.6	1.6	2	0.9
040	3.8	0.8	1.8	2.8	1.2
045	4.25	0.8	2	2.9	1.3
050	4.75	0.8	2.2	2.9	1.3
060	5.7	1	2.4	3.1	1.4
070	6.7	1	2.7	3.3	1.4
080	7.7	1	3	3.5	1.4
090	8.65	1.2	3.3	4.7	1.5
100	9.65	1.2	3.5	4.7	2

Type No. 類別番号	Type 類別
XD2-210	Grip ring グリップ止め輪

5-3. Toothed Retaining Rings
歯付き形止め輪

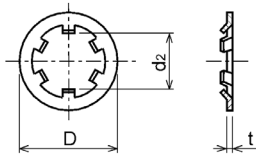


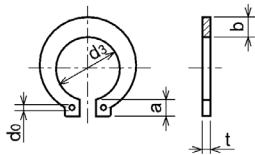
Table 5 表5

Nominal designation 呼び	d ₂ (mm)	D (mm)	t (mm)	No of teeth 歯数
015	1.4	5.2	0.25	3
020	1.9	6	0.25	3
024	2.3	6.4	0.25	3
030	2.8	8	0.25	4
040	3.8	9	0.25	4
050	4.8	10	0.25	5
060	5.8	11	0.25	5
080	7.8	13	0.25	5
100	9.8	15.4	0.25	6

Type No. 類別番号	Type 類別
XD2-230	Toothed retaining ring 歯付き形止め輪

Figure ZZE (3/3)MECHANICAL STANDARD PARTS (RETAINING RINGS)

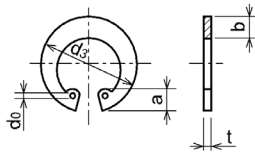
5-4. Retaining Rings - C Type
C形止め輪



Type No. 類別番号	Type 類別
XD2-310	Retaining ring - C type for shaft C形止め輪 軸用

Table 5 表5

Nominal designation 呼び	ds (mm)	t (mm)	b (mm)	a (mm)	d0 (mm)
010	9.3	1	1.6	3	1.2
012	11.1	1	1.8	3.2	1.5
014	12.9	1	2	3.4	1.7
015	13.8	1	2.1	3.5	1.7
016	14.7	1	2.2	3.6	1.7
017	15.7	1	2.2	3.7	1.7
018	16.5	1.2	2.6	3.8	1.7
020	18.5	1.2	2.7	3.9	2
022	20.5	1.2	2.7	4.1	2
025	23.2	1.2	3.1	4.3	2
028	25.9	1.5	3.1	4.6	2
030	27.9	1.5	3.5	4.8	2
032	29.6	1.5	3.5	5	2.5
035	32.2	1.5	4	5.4	2.5



Type No. 類別番号	Type 類別
XD2-320	Retaining ring - C type for hole C形止め輪 穴用

Table 5 表5

Nominal designation 呼び	ds (mm)	t (mm)	b (mm)	a (mm)	d0 (mm)
010	10.7	1	1.8	3.1	1.2
011	11.8	1	1.8	3.2	1.2
012	13	1	1.8	3.3	1.5
014	15.1	1	2	3.6	1.7
016	17.3	1	2	3.7	1.7
018	19.5	1	2.5	4	1.7
019	20.5	1	2.5	4	2
020	21.5	1	2.5	4	2
022	23.5	1	2.5	4.1	2
025	26.9	1.2	3	4.4	2
028	30.1	1.2	3	4.6	2
030	32.1	1.2	3	4.7	2
032	34.4	1.2	3.5	5.2	2.5
035	37.8	1.5	3.5	5.2	2.5
037	39.8	1.5	3.5	5.2	2.5
040	43.5	1.8	4	5.7	2.5
042	45.5	1.8	4	5.8	2.5
045	48.5	1.8	4.5	5.9	2.5
047	50.5	1.8	4.5	6.1	2.5
050	54.2	2	4.5	6.5	2.5
052	56.2	2	5.1	6.5	2.5
055	59.2	2	5.1	6.5	2.5
060	64.2	2	5.1	6.8	2.5
062	66.2	2	5.5	6.9	2.5
068	72.5	2.5	6	7.4	2.5
072	76.5	2.5	6.6	7.4	2.5
075	79.5	2.5	6.6	7.8	2.5
080	85.5	2.5	7	8	2.5
085	90.5	3	7	8	3
090	95.5	3	7.6	8.3	3
095	100.5	3	8	8.5	3