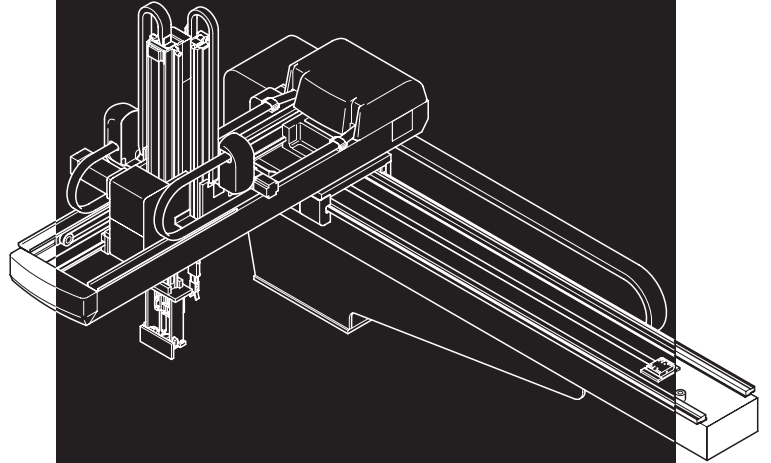


TAKE-OUT ROBOT PARTS CATALOG



WEBLINER

This manual provides information on the following models.

- RAII- α -1300S-e
- RAII- α -1300D-e

CAUTION

Deliver this manual for the related department.
Read this manual before installation and maintenance.

Version 1.0

Heartful Technology

Yushin

■ Greetings

Thank you for purchasing a Yushin take-out robot. We strive every day to develop and manufacture take-out robots that are one step ahead of the competition and we are confident that you will be satisfied with your new take-out robot. In order to use your new take-out robot to its fullest potential, please read this manual carefully and use the take-out robot correctly.

We will continue our efforts to improve our technology and services so that we can provide you with even better products in the future. We look forward to your ongoing patronage.

Yushin Precision Equipment Co., Ltd.

Taking the Robot abroad

- When the entire take-out robot or any part thereof is to be taken abroad after delivery to the original purchaser, the purchaser must obtain legal permission to export the robot according to the laws in both the exporting country and the importing country. Yushin Precision Equipment Co., Ltd., will assume no responsibility whatsoever if the purchaser exports the robot without following the required procedures.

Disclaimers

- The content of this manual is subject to change without notice.
- While every effort has been made to ensure the accuracy of the information in this manual, we invite you to inform us if any errors or questionable content is discovered.
- The various data include in this manual is intended to serve as reference data concerning the take-out robot. Yushin Precision Equipment Co., Ltd., is not legally bound in any way whatsoever by these data.
- Yushin Precision Equipment Co., Ltd., assumes no responsibility whatsoever for damage or lost profits resulting from modifications, disassembly, misuse, inadequate installation environment, or any other situation beyond our control.
- Yushin Precision Equipment Co., Ltd., assumes no responsibility whatsoever for damage or lost profits resulting from the use of this equipment.

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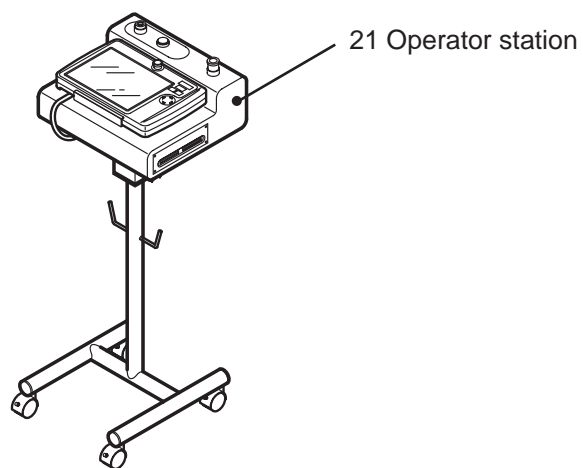
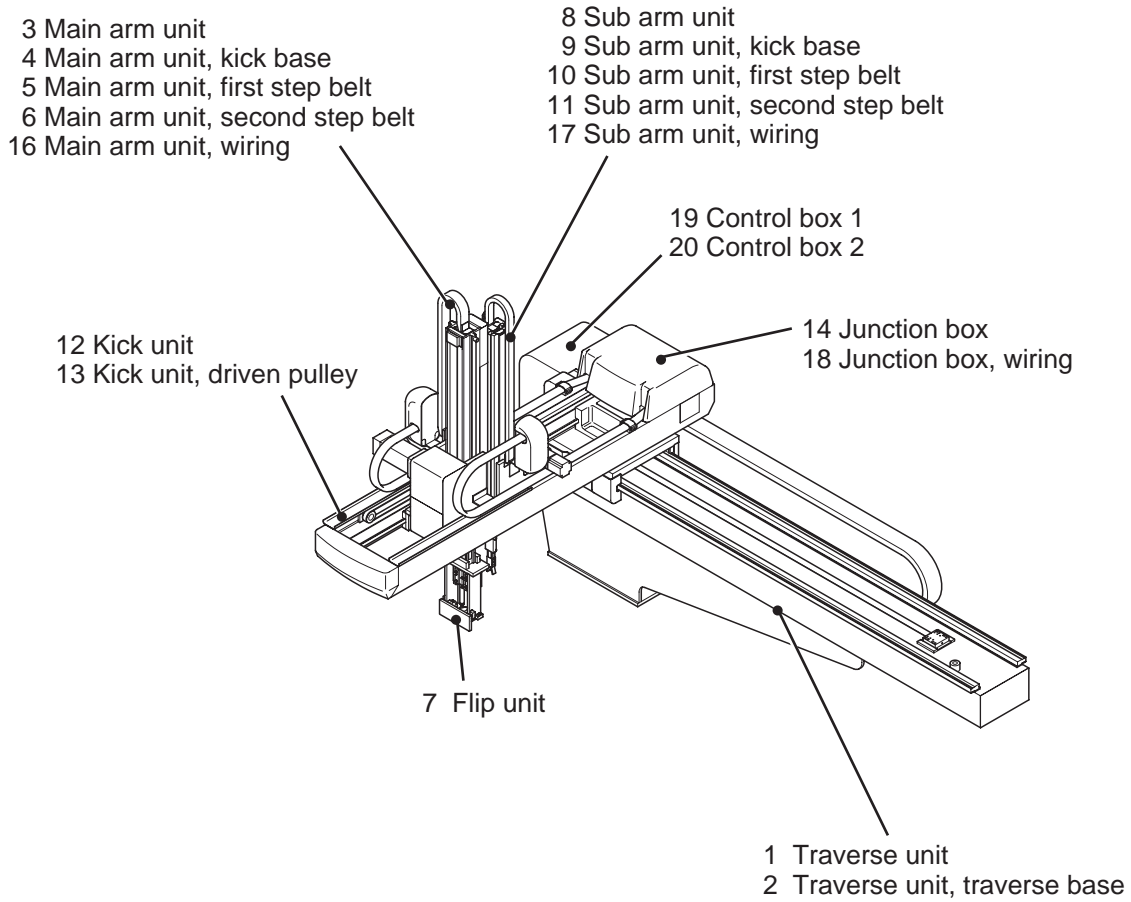
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INTRODUCTION

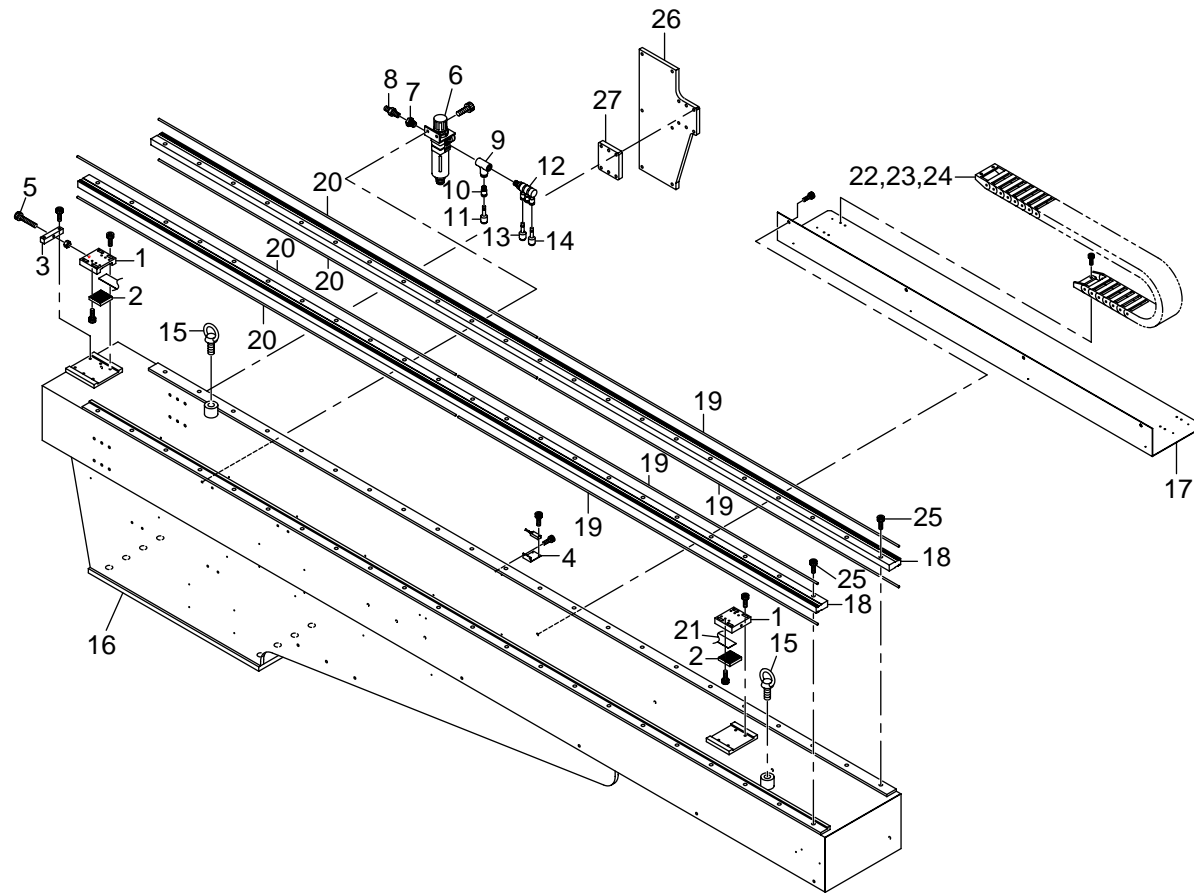
This parts catalog is provided for the take-out robot. Before maintenance of the take-out robot, read this manual carefully to utilize the robot's capabilities to the fullest and in an efficient manner. After reading it, keep it in good order for occasional reference.



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1 Traverse unit

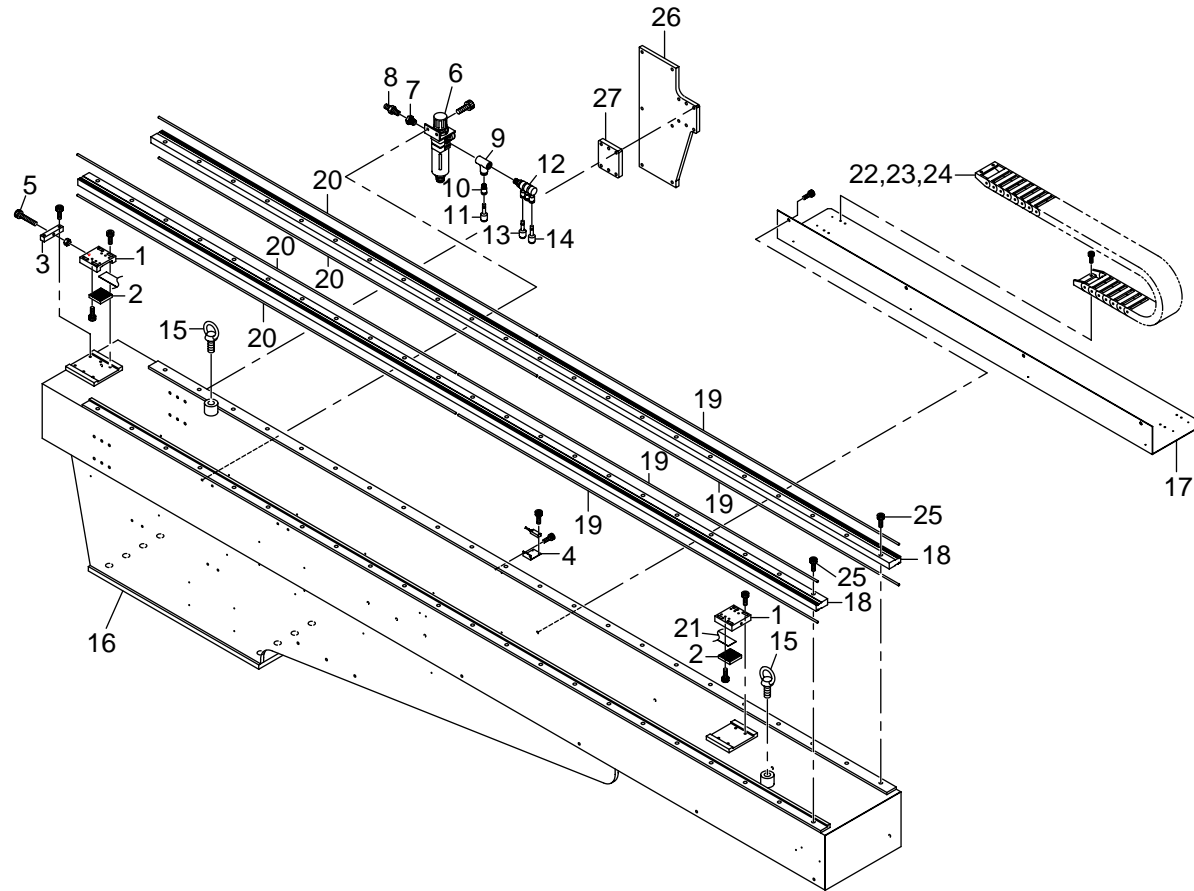


ZT000808BM13010

1 Traverse unit**ZT000808BM13010****(1 of 2)**

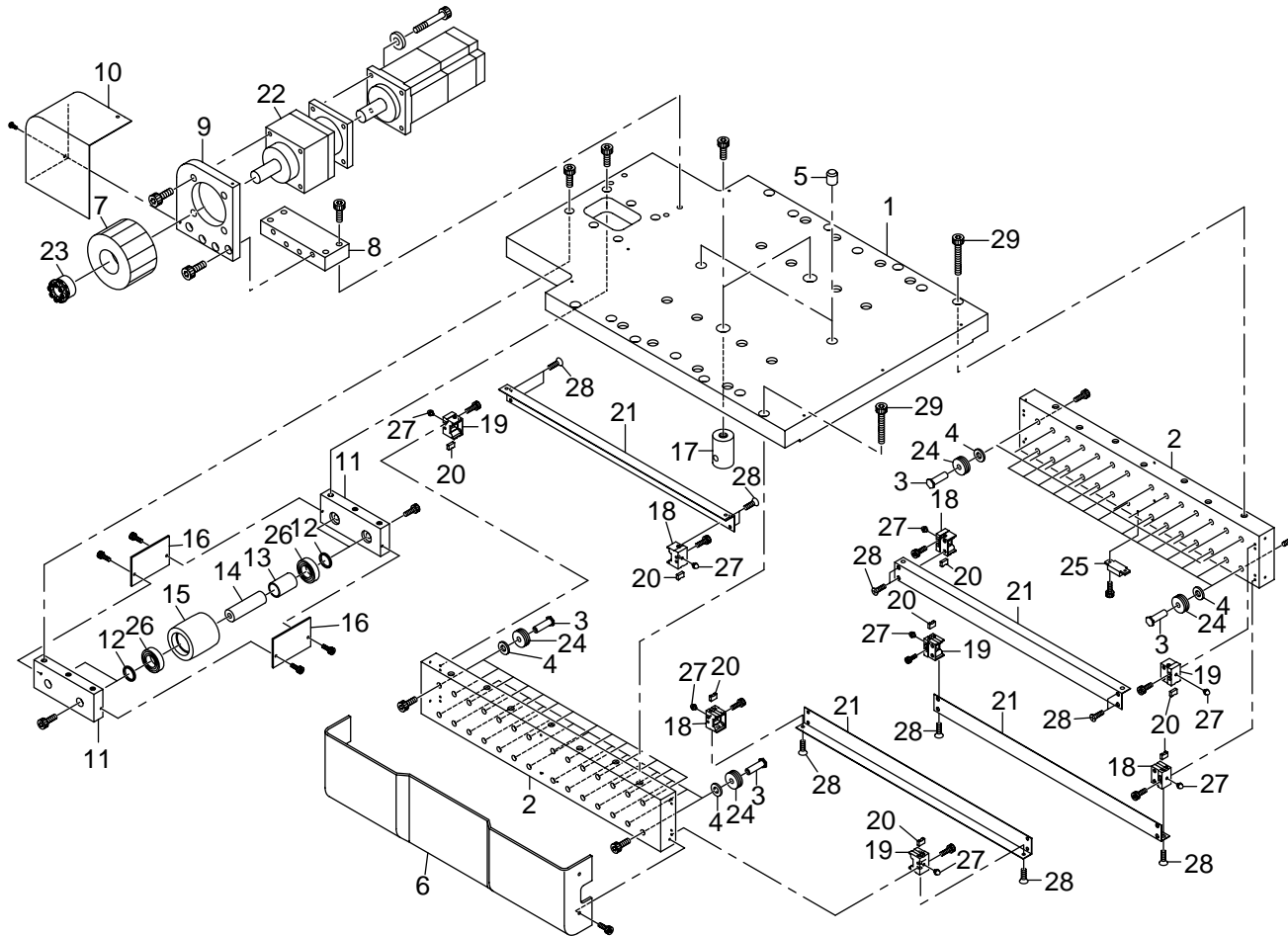
No.	PART No.	PART NAME	Q'TY	REMARKS
01	2693920	Clamp	2	
02	2693930	Clamp	2	
03	2646700	Block	1	
04	0842280	Bracket	1	
05	2646850	Hexagon bolt	1	
06	2694090	Regulator	1	
07	0329490	Bush	1	
08	0114660	Coupler	1	
09	1614900	Quick release joint	1	
10	1614990	Quick release joint	1	
11	2014170	Plug	1	
12	1614940	Quick release joint	1	
13	0930060	Quick release joint	1	
14	1383920	Plug	1	
15	0816290	Eye bolt	2	
16	2839690	Frame	1	3000 traverse
	2839710	Frame	1	3500 traverse
17	2694110	Bracket	1	3000/3500 traverse
18	1615131	Frame	2	3000 traverse
	1669481	Frame	2	3500 traverse
19	0660660	Rail	4	3000 traverse
	0739020	Rail	12	3500 traverse
20	0001351	Rail	4	3000 traverse
21	2694120	Timing belt	1	3000 traverse
	2694170	Timing belt	1	3500 traverse

1 Traverse unit



ZT000808BM13010

2 Traverse unit, traverse base

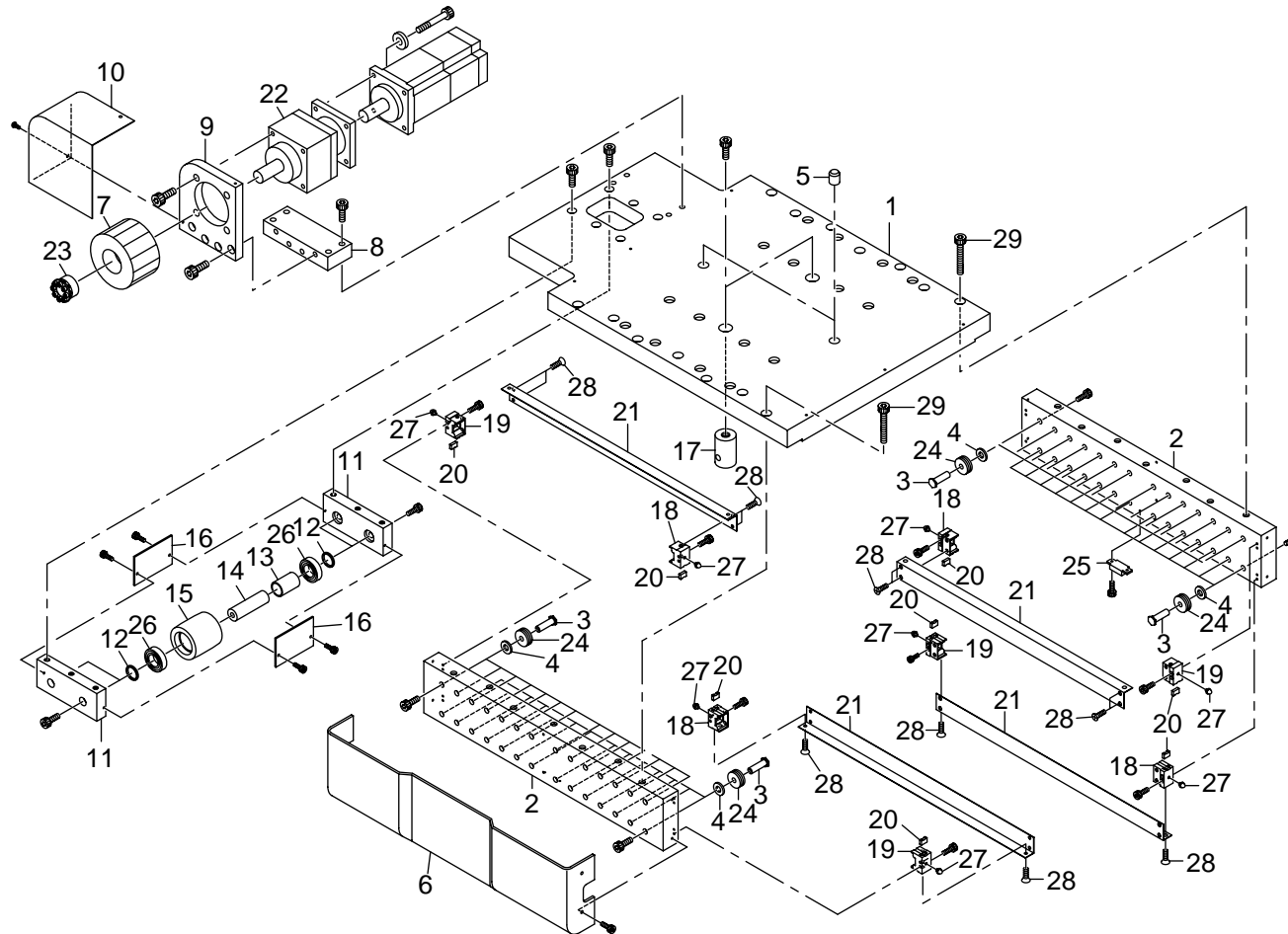


ZT000808BM13020

2 Traverse unit, traverse base**ZT000808BM13020****(1 of 2)**

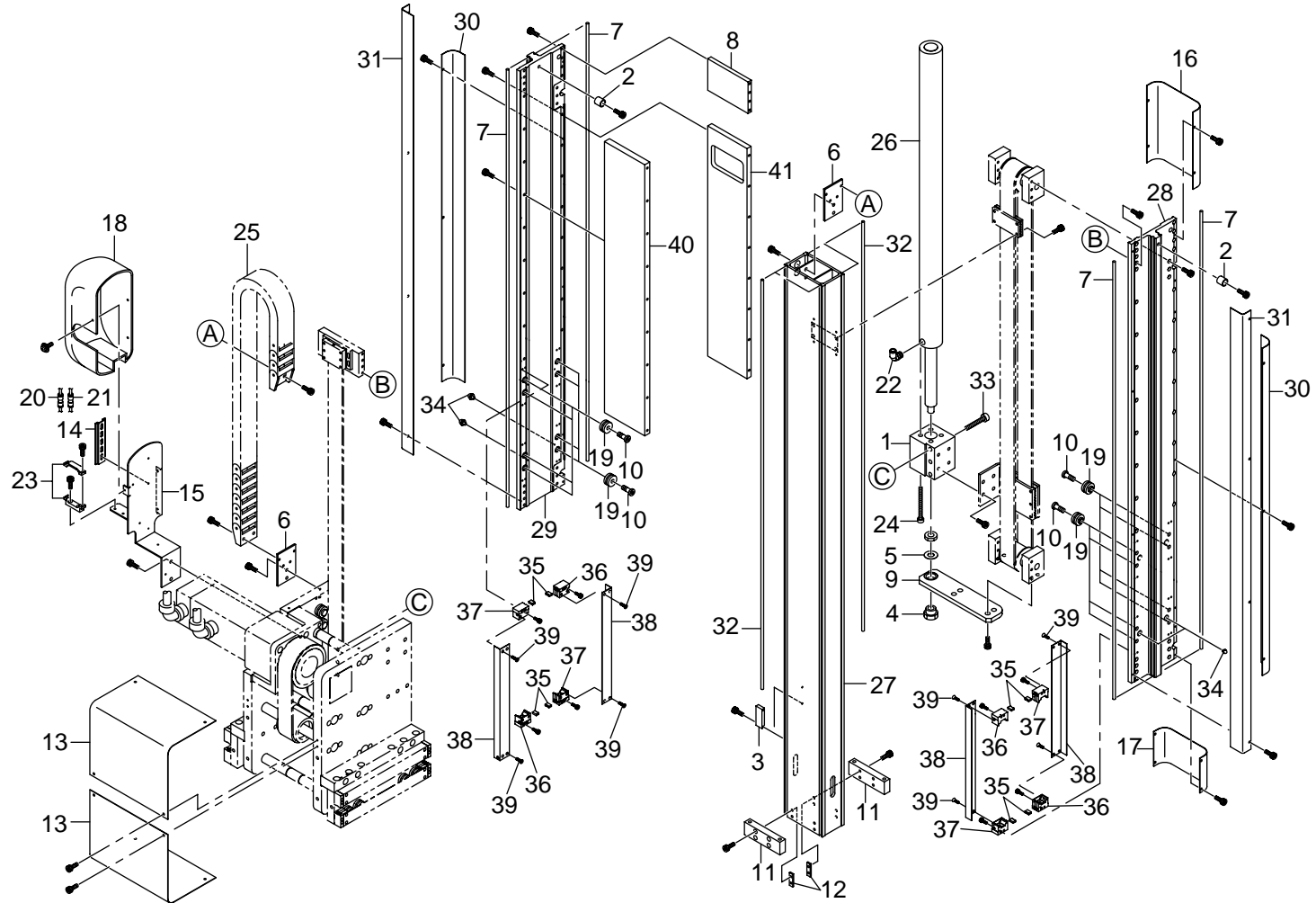
No.	PART No.	PART NAME	Q'TY	REMARKS
01	2693900	Plate	1	
02	2693910	Plate	2	
03	2646670	Shaft	56	
04	0842330	Collar	56	
05	1531540	Pin	2	
06	2828240	Cover	1	
07	2646710	Pulley	1	
08	2646720	Plate	1	
09	2646730	Plate	1	
10	2646740	Cover	1	
11	2646750	Plate	2	
12	2646760	Collar	4	
13	2646770	Collar	2	
14	2646780	Shaft	2	
15	2646790	Pulley	2	
16	2646800	Scraper	2	
17	2646810	Stopper	2	
18	2571000	Cover	4	
19	2671010	Cover	4	
20	0842350	Seal	8	
21	2693970	Cover	4	
22	2634550	Reduction gear	1	
23	0810320	Mechanical lock	1	
24	0840230	Radial ball bearing	56	
25	0106480	Magnet	1	

2 Traverse unit, traverse base



ZT000808BM13020

3 Main arm unit

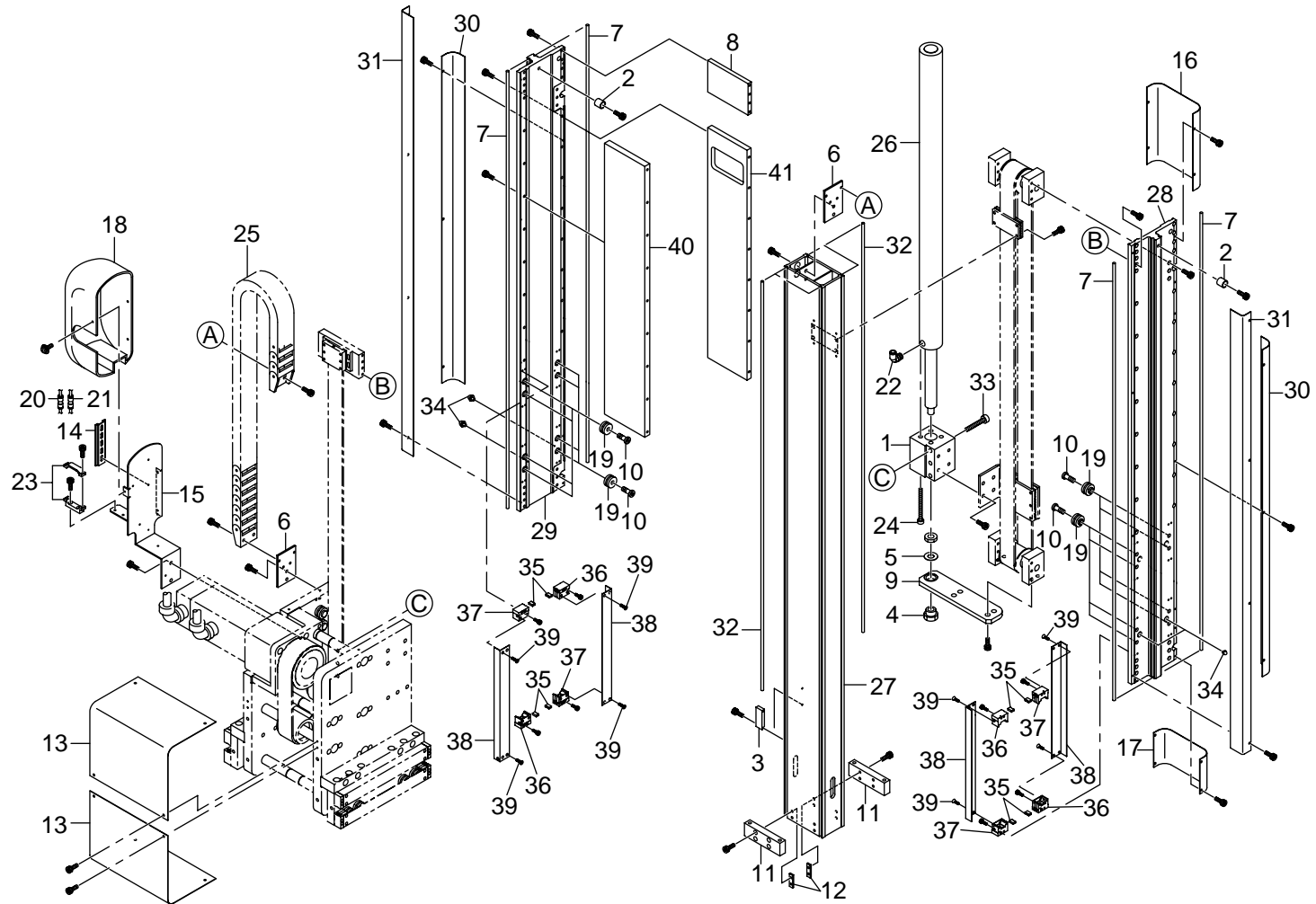


ZT000808BM13030

3 Main arm**ZT000808BM13030****(1 of 3)**

No.	PART No.	PART NAME	Q'TY	REMARKS
01	2696730	Block	1	
02	1587280	Stopper	2	
03	0028710	Dog	1	
04	0434090	Holder	1	
05	0434100	Washer	1	
06	2696770	Bracket	1	
07	2647970	Round shaft guide	4	1800 stroke
	0024751	Round shaft guide	4	2100 stroke
08	2696790	Stay	1	
09	2696800	Plate	1	
10	1092440	Bolt	16	
11	1618780	Block	2	
12	1618790	Plate nut	4	
13	2696830	Cover	2	
14	1328621	Rail	1	
15	2696900	Bracket	1	
16	2696930	Cover	1	
17	2696940	Cover	1	
18	2699880	Cover	1	
19	0607140	Radial ball bearing	16	
20	1327640	Quick release joint	10	
21	1255550	Quick release joint	3	
22	1349590	Quick release joint	1	
23	1340480	Saddle	1	
24	0079020	Hexagon socket head cap bolt	4	

3 Main arm unit

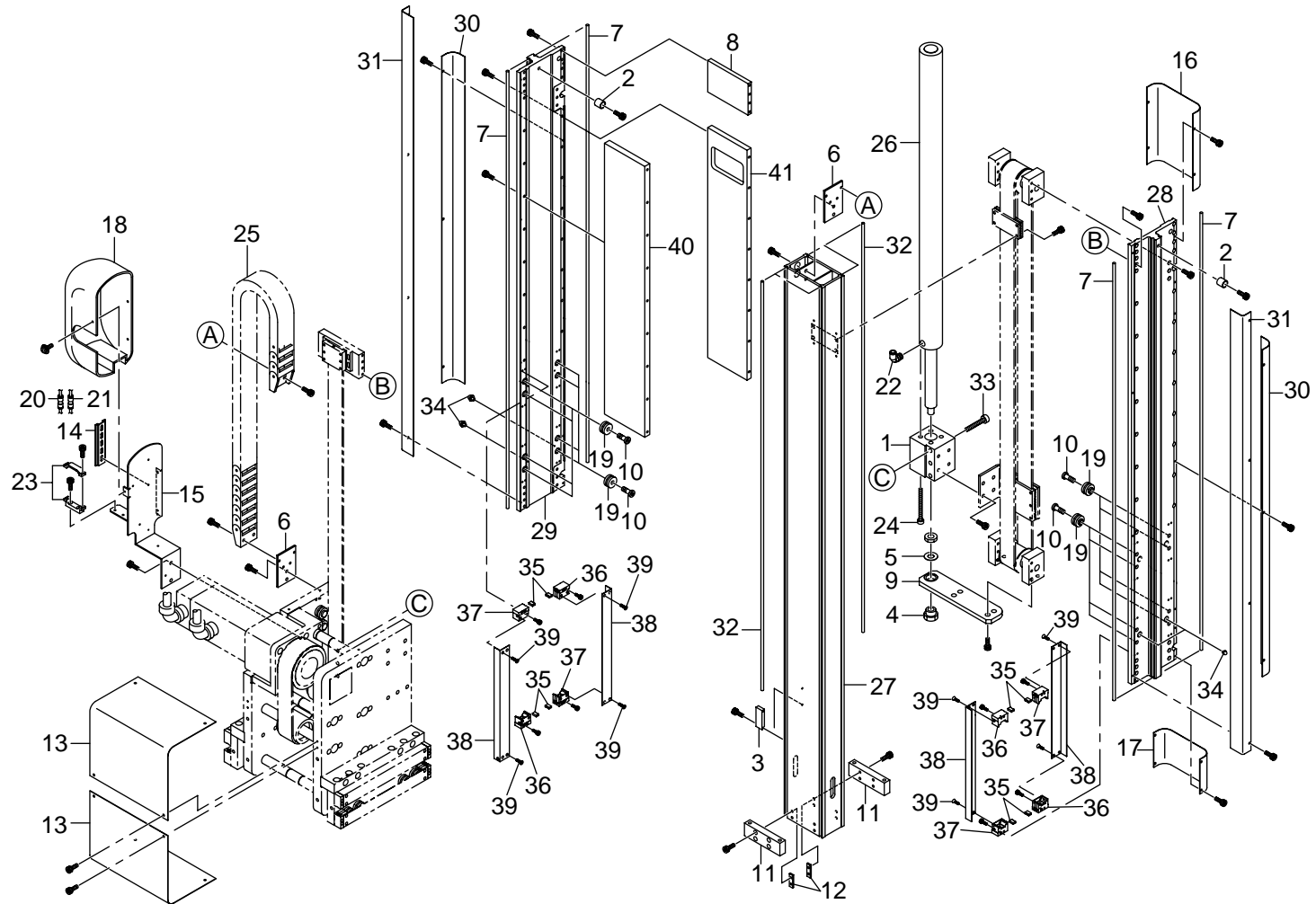


ZT000808BM13030

3 Main arm**ZT000808BM13030****(2 of 3)**

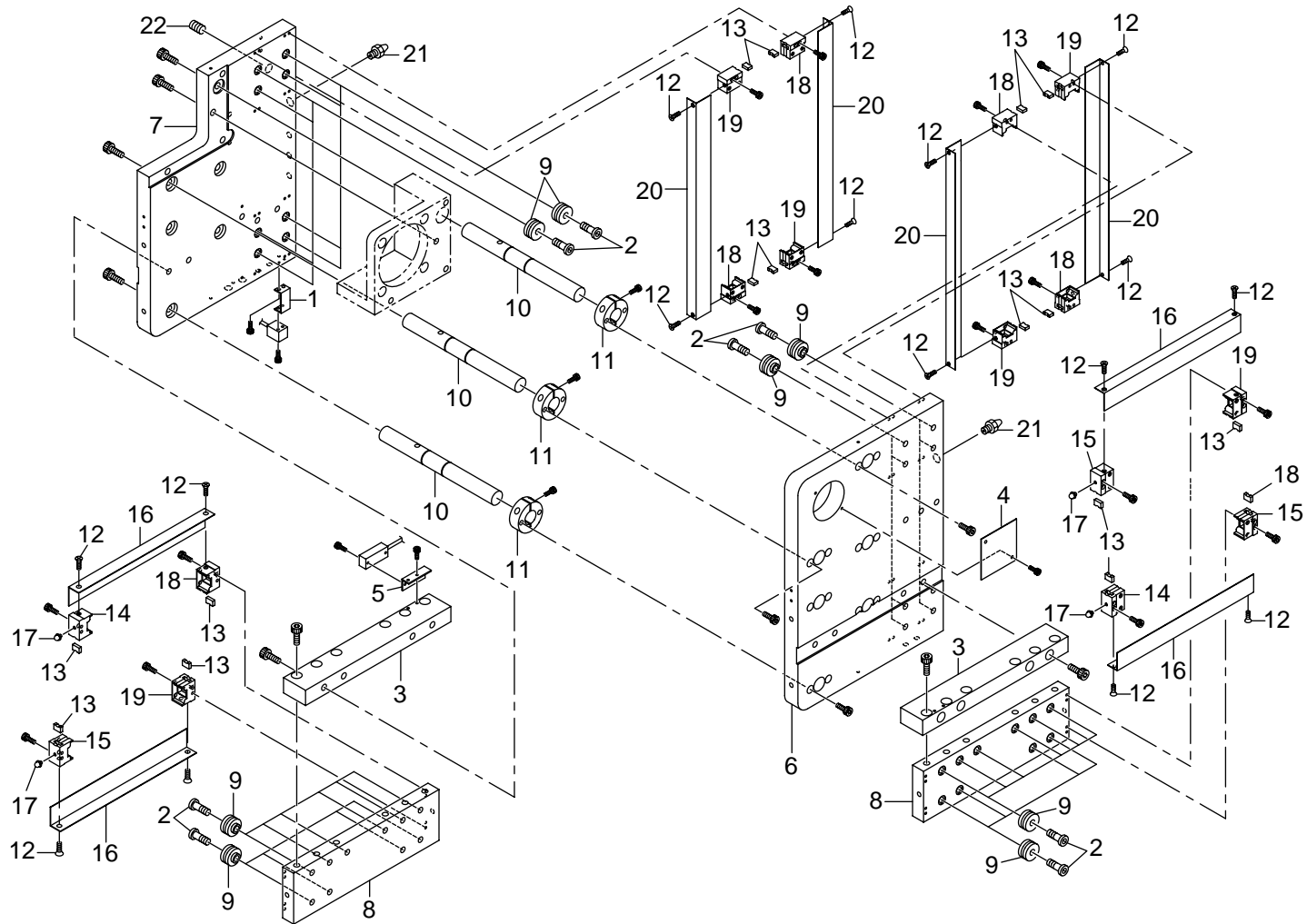
No.	PART No.	PART NAME	Q'TY	REMARKS
25	1694300	Cable carrier	1	1800 stroke
	1695330	Cable carrier	1	2100 stroke
26	2697180	Pneumatic cylinder	1	1800 stroke
	2697260	Pneumatic cylinder	1	2100 stroke
27	2697100	Frame	1	1800 stroke
	2697190	Frame	1	2100 stroke
28	2746960	Frame	1	1800 stroke
	2758200	Frame	1	2100 stroke
29	2746970	Frame	1	1800 stroke
	2758220	Frame	1	2100 stroke
30	2697130	Cover	2	1800 stroke
	2697220	Cover	2	2100 stroke
31	2697140	Cover	2	1800 stroke
	2697230	Cover	2	2100 stroke
32	0049401	Rail	4	1800 stroke
	0739020	Rail	4	2100 stroke
33	0824840	Hexagon socket head cap bolt	3	
34	2228670	Grease nipple	4	
35	0842350	Seal	8	
36	2288320	Cover	4	
37	2288330	Cover	4	
38	2737710	Cover	4	
39	2288370	Cross recess tapping screw	16	
40	2747060	Stay	1	1800 stroke
	2758140	Stay	1	2100 stroke

3 Main arm unit



ZT000808BM13030

4 Main arm unit, kick base

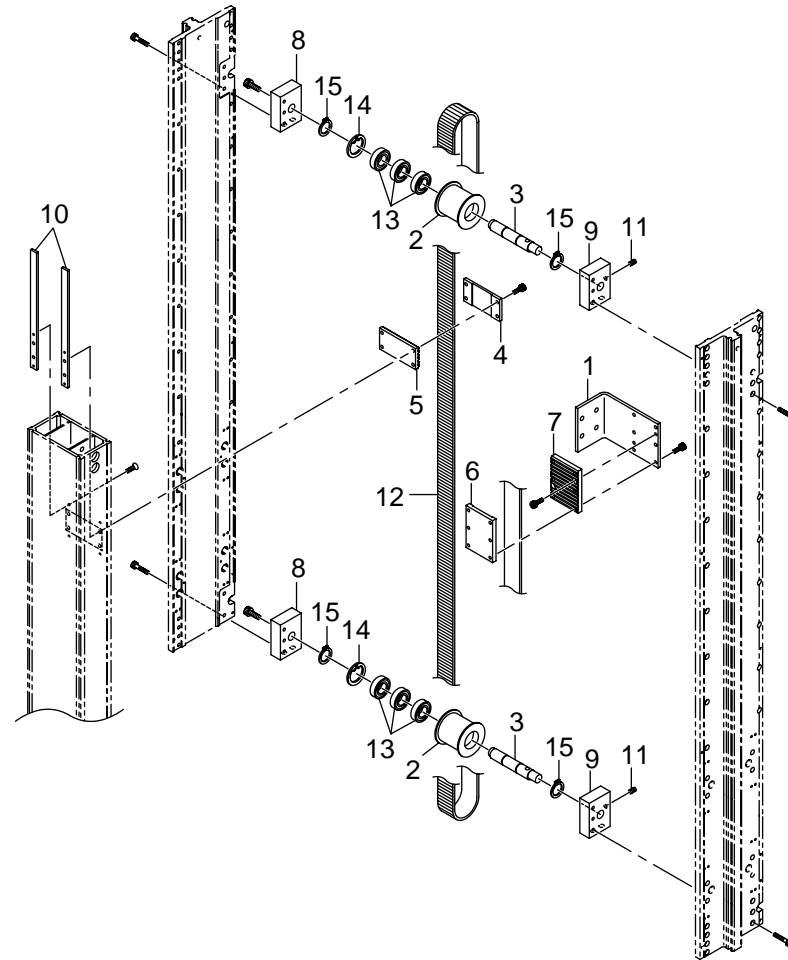


ZT000808BM13040

4 Main arm unit, kick base**ZT000808BM13040****(1 of 1)**

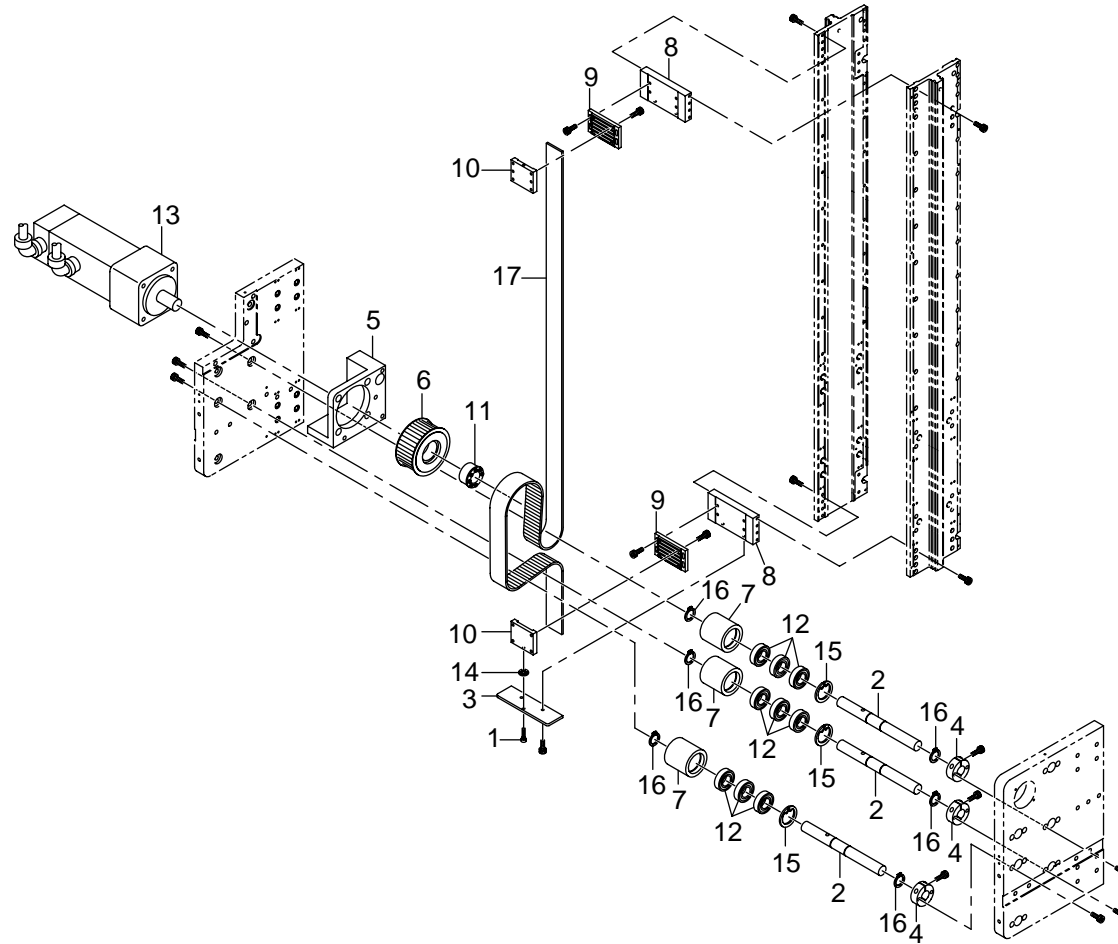
No.	PART No.	PART NAME	Q'TY	REMARKS
01	0074520	Bracket	1	
02	0634780	Screw	36	
03	2696810	Joint	2	
04	2647170	Cover	1	
05	0022630	Bracket	1	
06	2696880	Plate	1	
07	2696890	Plate	1	
08	2696980	Plate	2	
09	0607140	Radial ball bearing	36	
10	2696750	Shaft	3	
11	2647140	Collar	3	
12	2288370	Cross recess tapping screw	16	
13	0842350	Seal	16	
14	2571000	Cover	2	
15	2571010	Cover	2	
16	2697010	Cover	4	
17	2228670	Grease nipple	4	
18	2288320	Cover	6	
19	2288330	Cover	6	
20	2737700	Cover	4	
21	0019670	Nipple	2	
22	0106350	Plug	1	

5 Main arm unit, first step belt



ZT000808BM13050

6 Main arm unit, second step belt



ZT000808BM13060

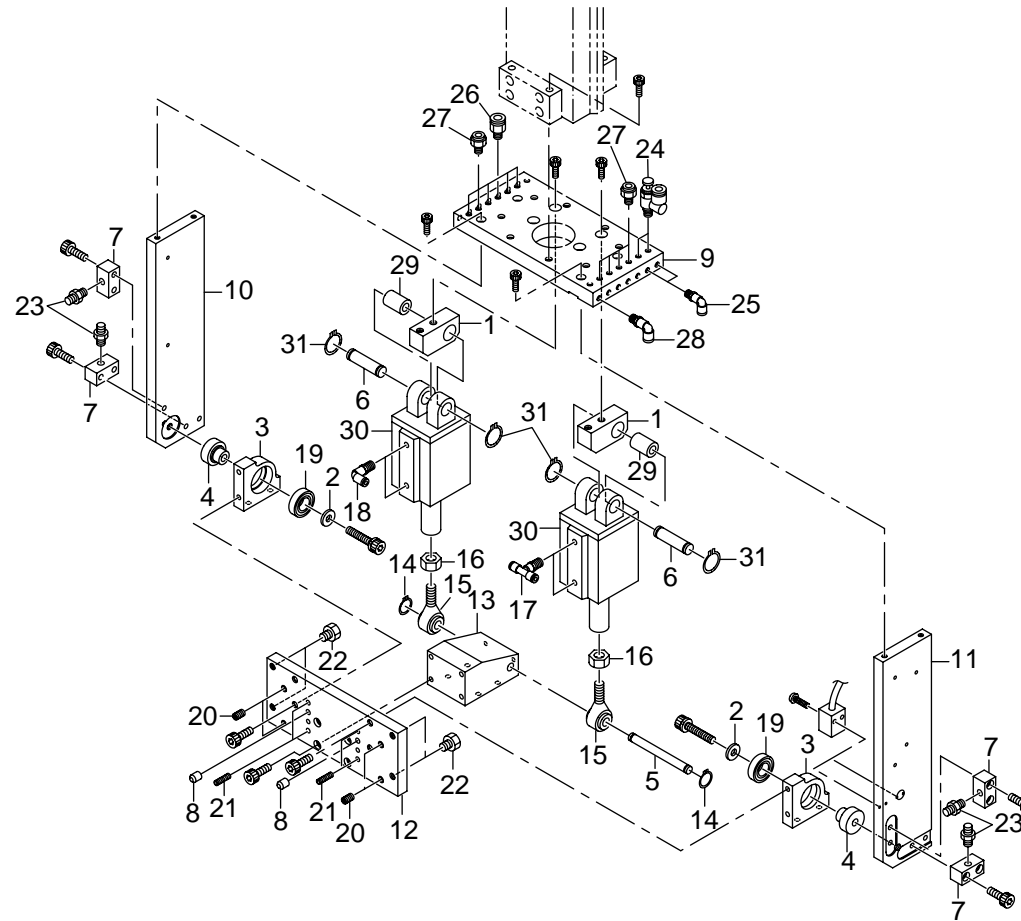
6 Main arm unit, second step belt

ZT000808BM13060

(1 of 1)

No.	PART No.	PART NAME	Q'TY	REMARKS
01	2647020	Hexagon socket head cap bolt	1	
02	2696750	Shaft	3	
03	2696760	Plate	1	
04	2647140	Collar	3	
05	2696820	Block	1	
06	2647190	Pulley	1	
07	2647200	Pulley	3	
08	2696950	Stay	2	
09	2647480	Clamp	2	
10	2647490	Clamp	2	
11	0606500	Mechanical lock	1	
12	0148220	Radial ball bearing	9	
13	2647660	Reduction gear	1	
14	0129650	E ring	1	
15	0329160	Snap ring	3	
16	0171860	Snap ring	6	
17	2697170	Timing belt	1	1800 stroke
	2627250	Timing belt	1	2100 stroke

7 Flip unit

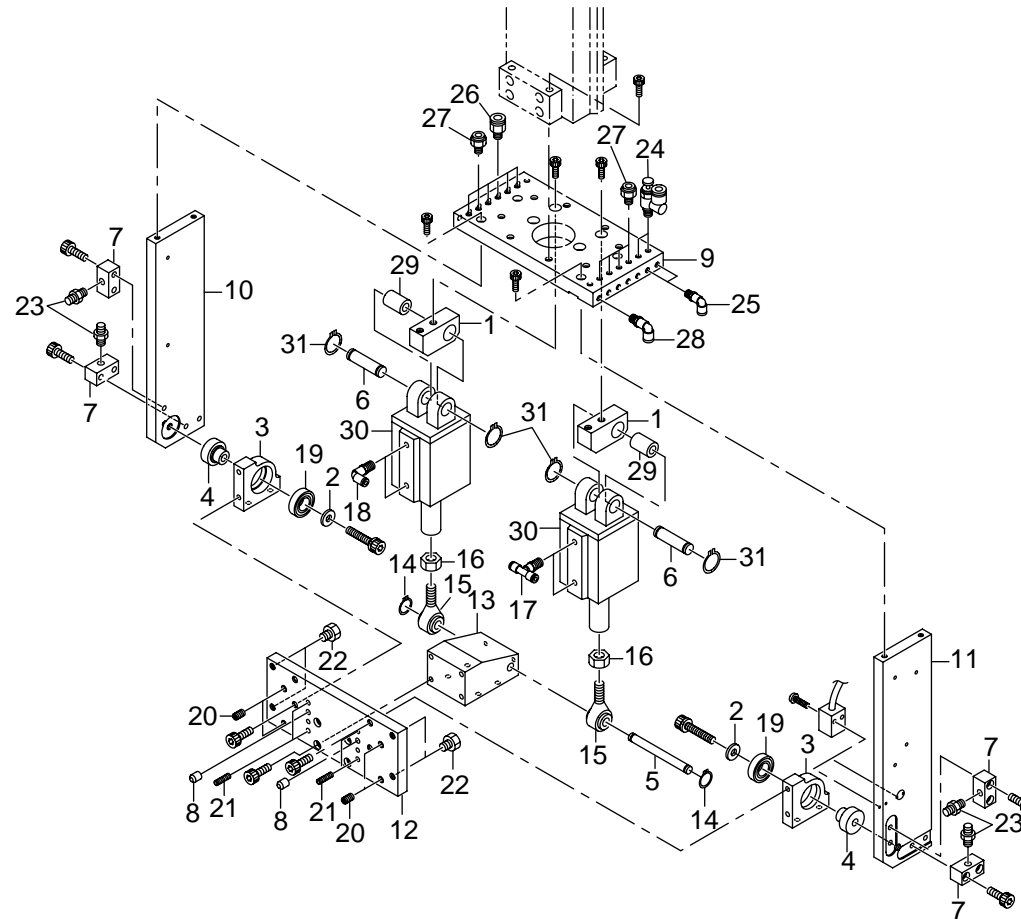


ZT000808BM13070

7 Flip unit**ZT000808BM13070****(1 of 2)**

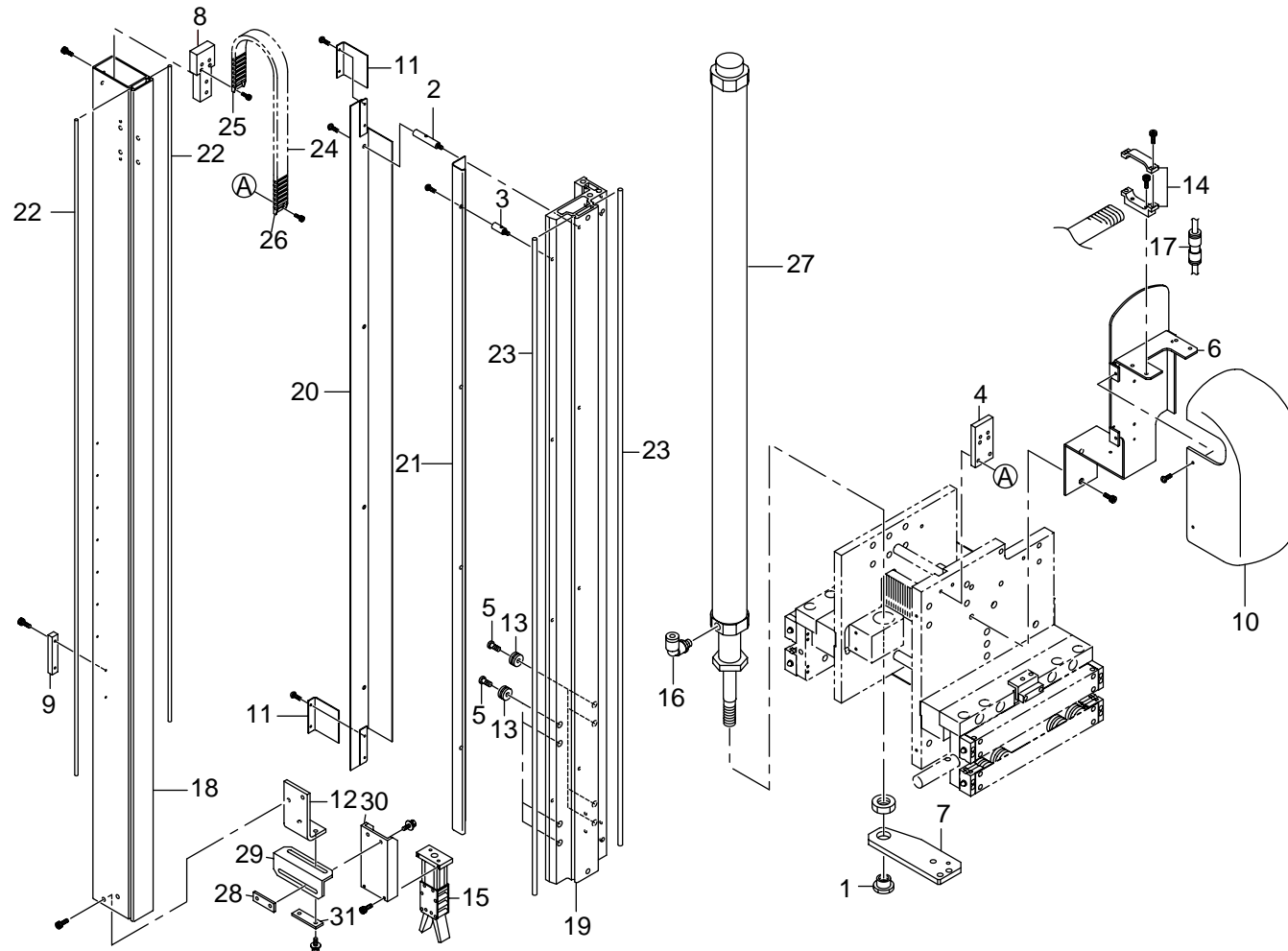
No.	PART No.	PART NAME	Q'TY	REMARKS
01	1536040	Joint	2	
02	0500870	Collar	2	
03	0500880	Arm	2	
04	0500890	Fixing shaft	2	
05	0062230	Pin	1	
06	1536100	Pin	2	
07	0500970	Block	4	
08	0142970	Pin	2	
09	2769720	Plate	1	
10	1613060	Plate	1	
11	2769770	Plate	1	
12	1613080	Plate	1	
13	0714150	Joint	1	
14	0050870	Snap ring	2	
15	0062380	Rod end	2	
16	0814040	Hexagon nut	2	
17	1359440	Quick release joint	2	
18	1160260	Quick release joint	2	
19	0113390	Radial ball bearing	2	
20	0803140	Heli-sert	4	
21	0810920	Ensat	4	
22	0501000	Stop pin	4	
23	0501010	Stopper	4	
24	0907610	Speed controller	2	
25	0442730	Quick release joint	2	

7 Flip unit



ZT000808BM13070

8 Sub arm unit



ZT000808BM13080

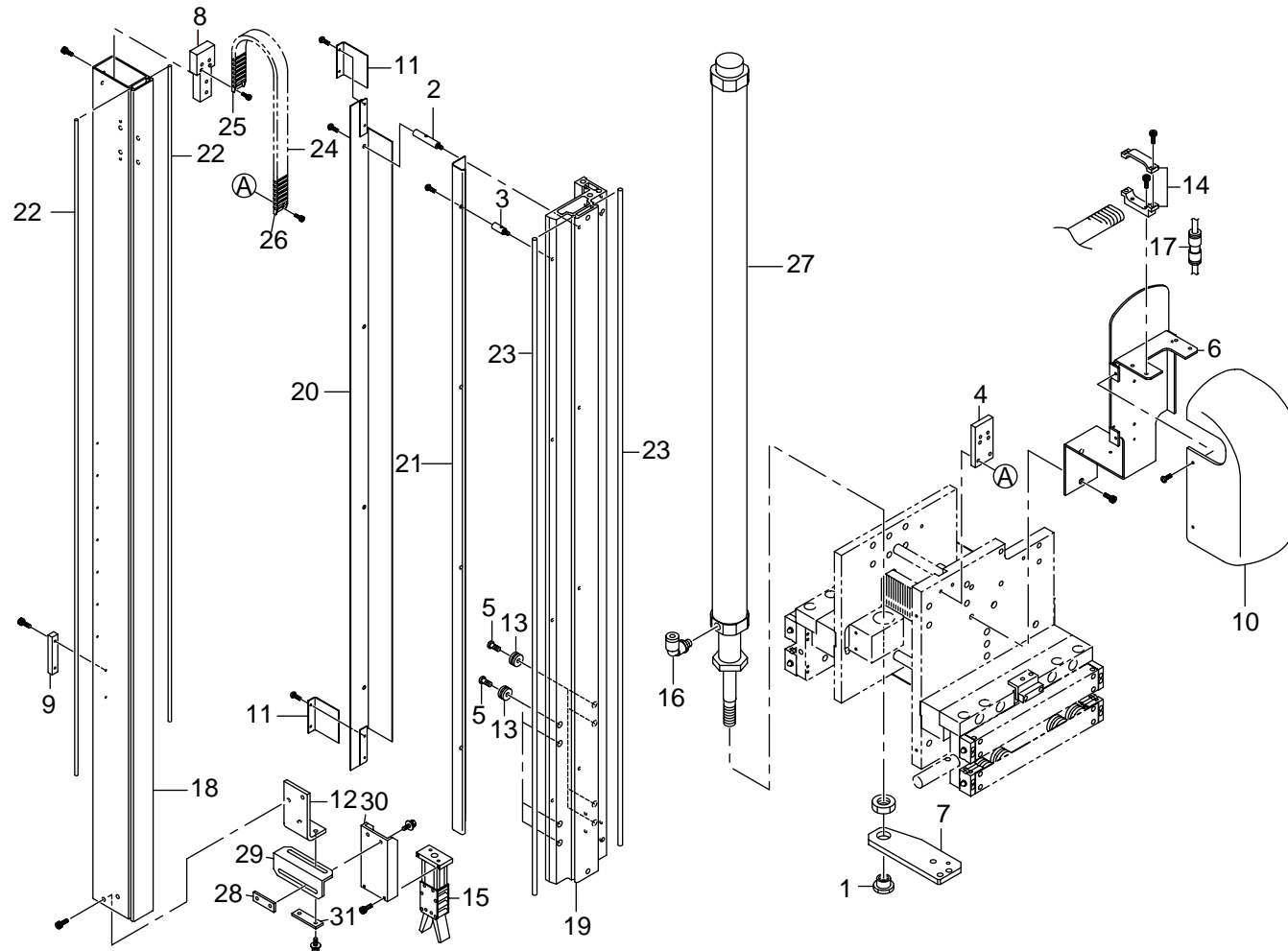
8 Sub arm unit

ZT000808BM13080

(1 of 2)

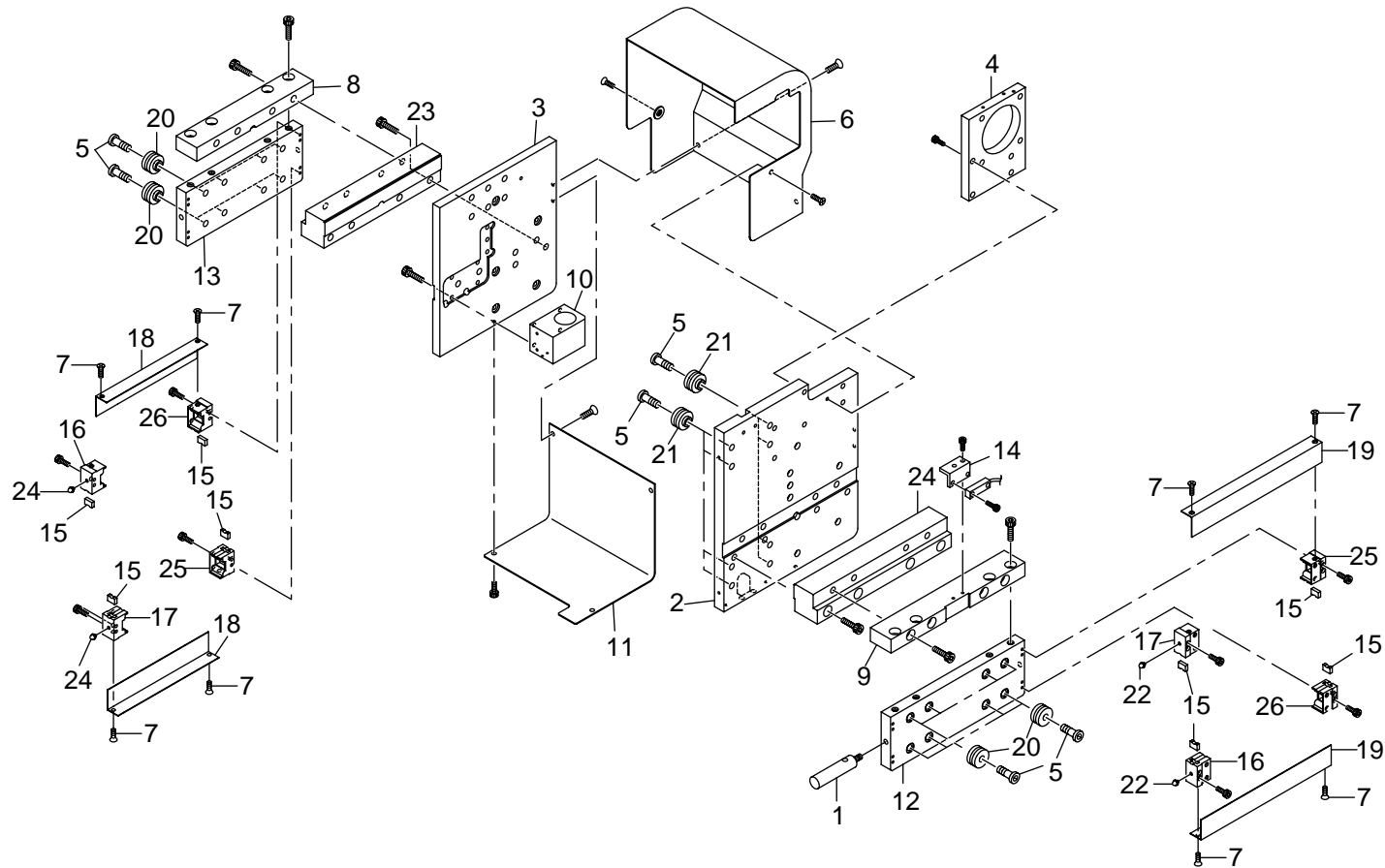
No.	PART No.	PART NAME	Q'TY	REMARKS
01	0039510	Holder	1	
02	2484820	Strut	4	
03	2648060	Strut	4	
04	2648081	Bracket	1	
05	0634780	Screw	8	
06	2697370	Bracket	1	
07	2648130	Cover	1	
08	2648141	Bracket	1	ZA31003MBM30101
09	2648150	Dog	1	
10	2288730	Cover	1	
11	2484881	Cover	2	
12	2648220	Bracket	1	
13	2389310	Radial ball bearing	8	
14	1340480	Saddle	1	
15	Q764480	Runner chuck	1	
16	1160260	Quick release joint	1	
17	1327640	Quick release joint	1	
18	2648710	Frame	1	1800 stroke
	2697440	Frame	1	2100 stroke
19	2648721	Frame	1	1800 stroke
	2697450	Frame	1	2100 stroke
20	2648730	Cover	1	1800 stroke
	2697460	Cover	1	2100 stroke
21	2648740	Cover	1	1800 stroke
	2697470	Cover	1	2100 stroke

8 Sub arm unit



ZT000808BM13080

9 Sub arm unit, kick base

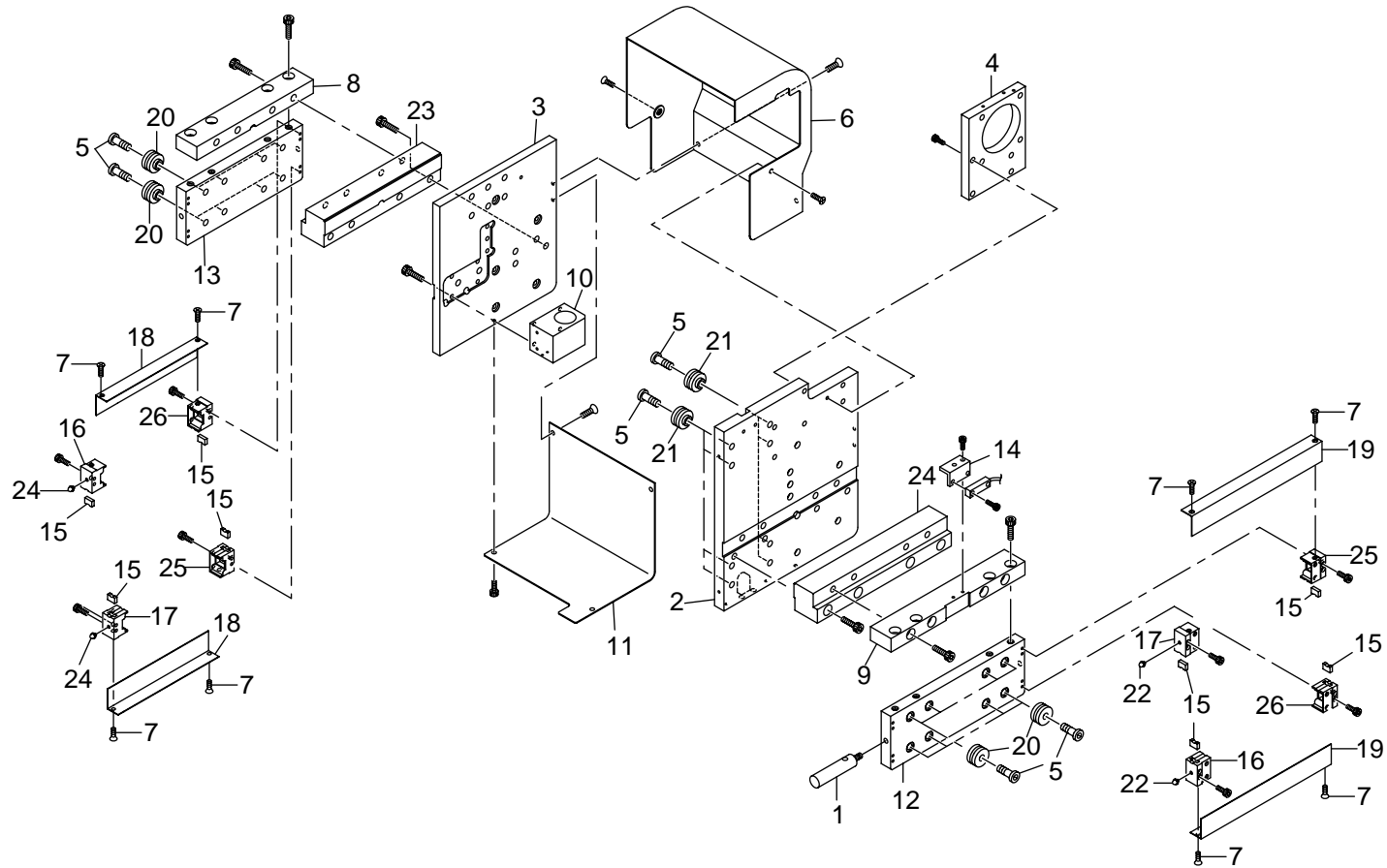


ZT000808BM13090

9 Sub arm unit, kick base**ZT000808BM13090****(1 of 2)**

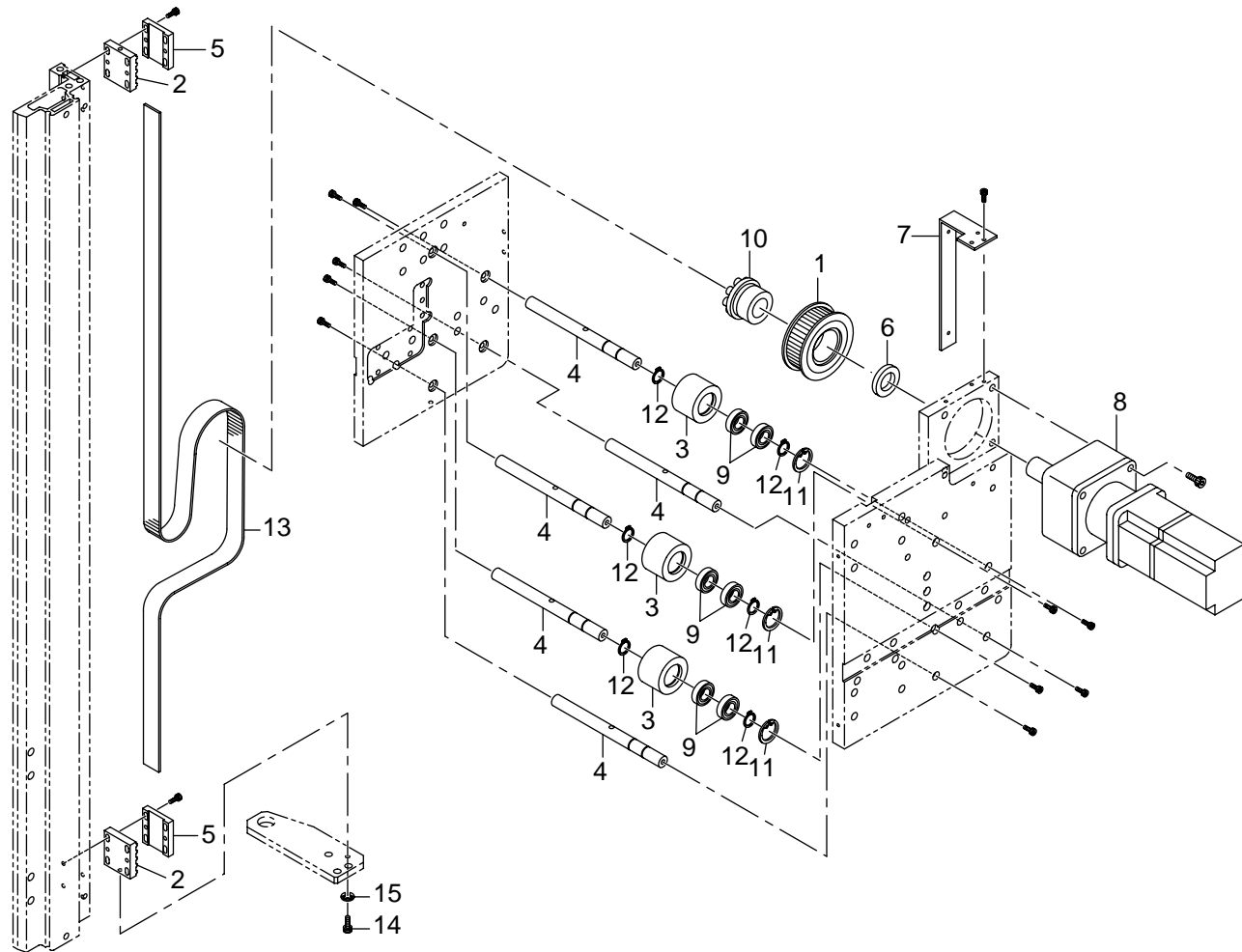
No.	PART No.	PART NAME	Q'TY	REMARKS
01	2648010	Stopper	1	
02	2697321	Plate	1	
03	2697331	Plate	1	
04	2697340	Plate	1	
05	0634780	Screw	24	
06	2697361	Cover	1	
07	2288370	Cross recess tapping screw	8	
08	2648160	Joint	1	
09	2648171	Joint	1	
10	2648180	Block	1	
11	2648190	Cover	1	
12	2697380	Plate	1	
13	2697390	Plate	1	
14	0022630	Bracket	1	
15	0842350	Seal	8	
16	2571000	Cover	2	
17	2571010	Cover	2	
18	2662001	Cover	2	
19	2662011	Cover	2	
20	0607140	Radial ball bearing	16	
21	0522750	Radial ball bearing	8	
22	2228670	Grease nipple	4	
23	2697400	Plate	1	
24	2697410	Plate	1	
25	2288320	Cover	2	

9 Sub arm unit, kick base



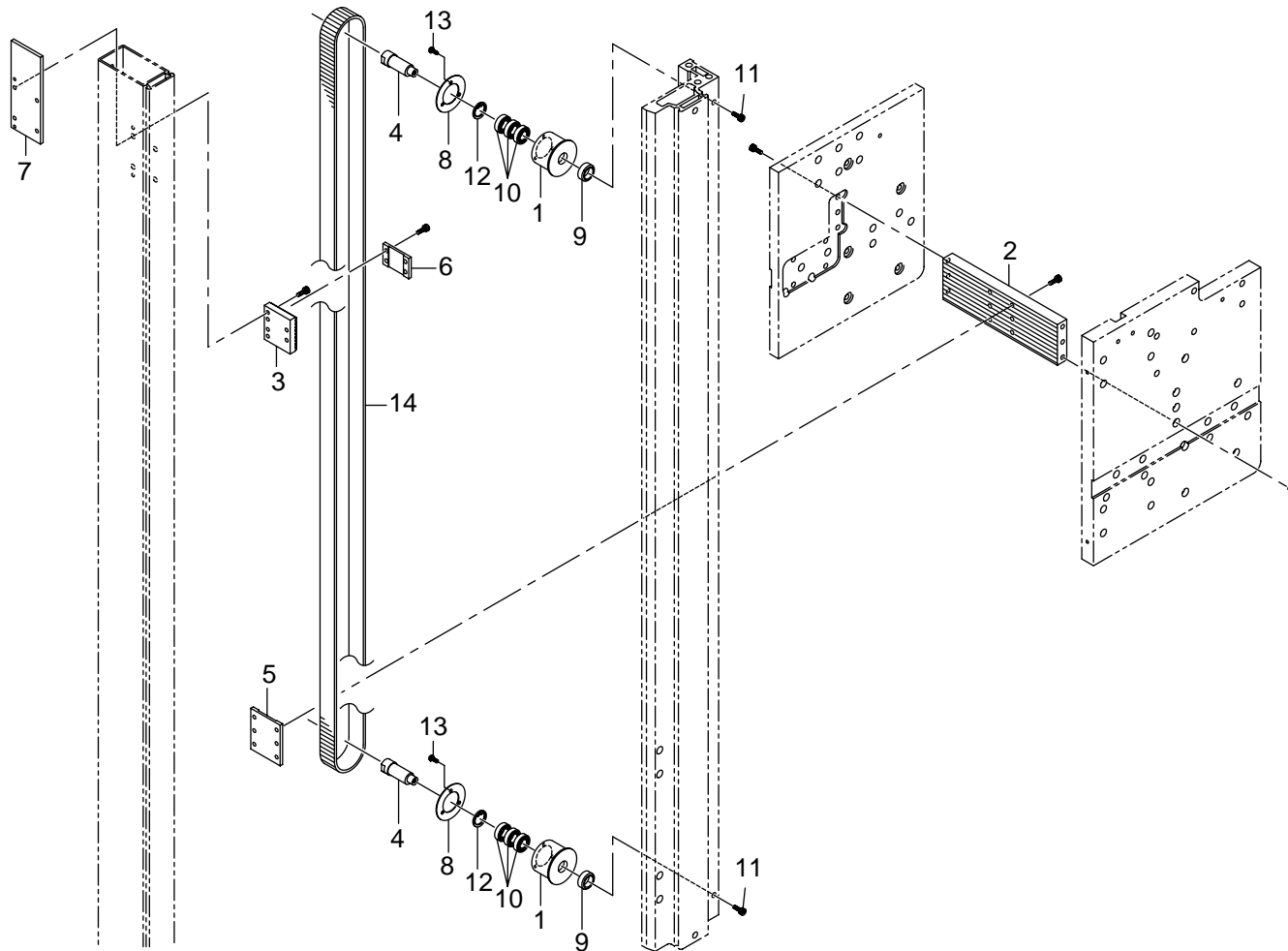
ZT000808BM13090

10 Sub arm unit, first step belt



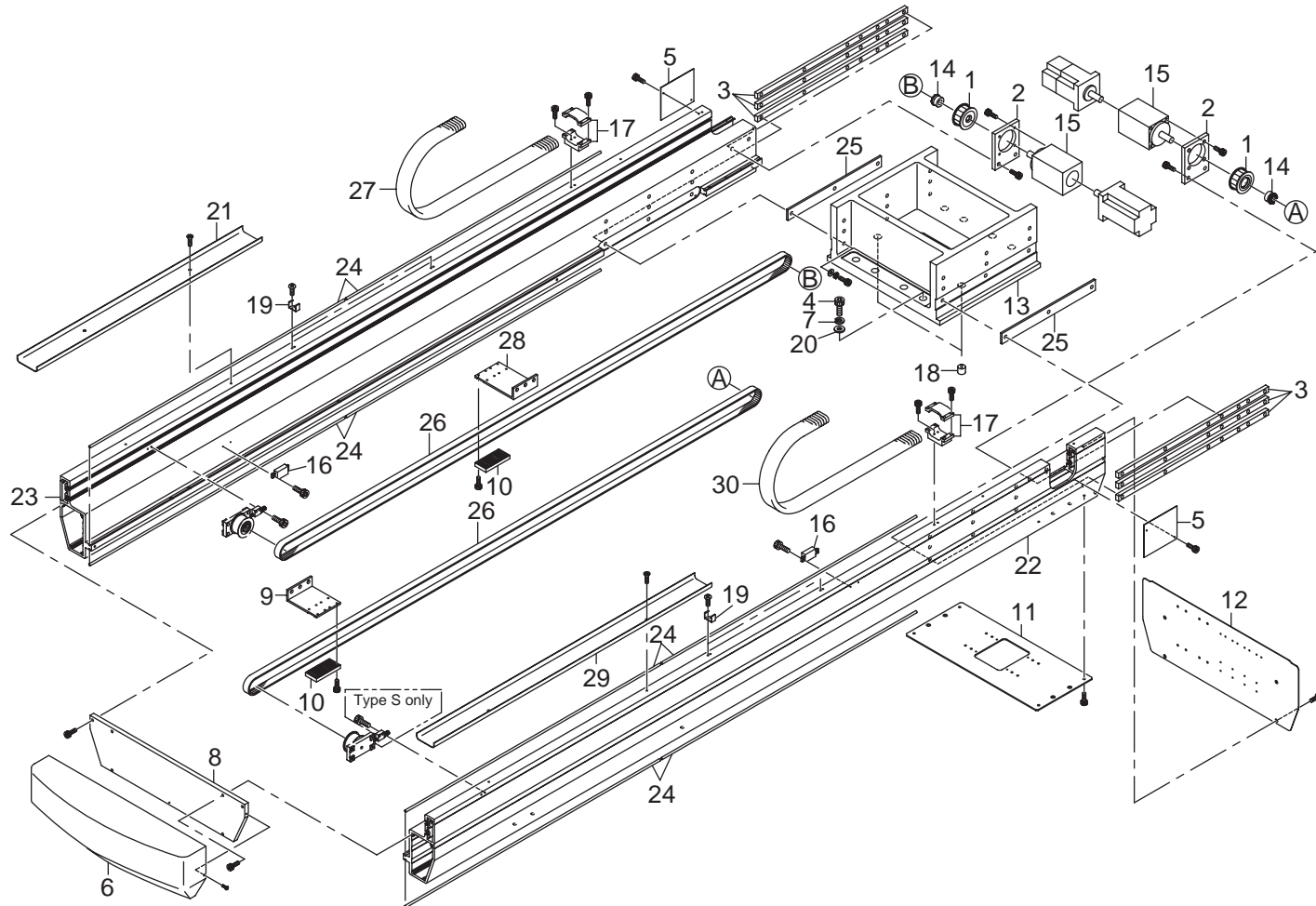
ZT000808BM13100

11 Sub arm unit, second step belt



ZT000808BM13110

12 Kick unit

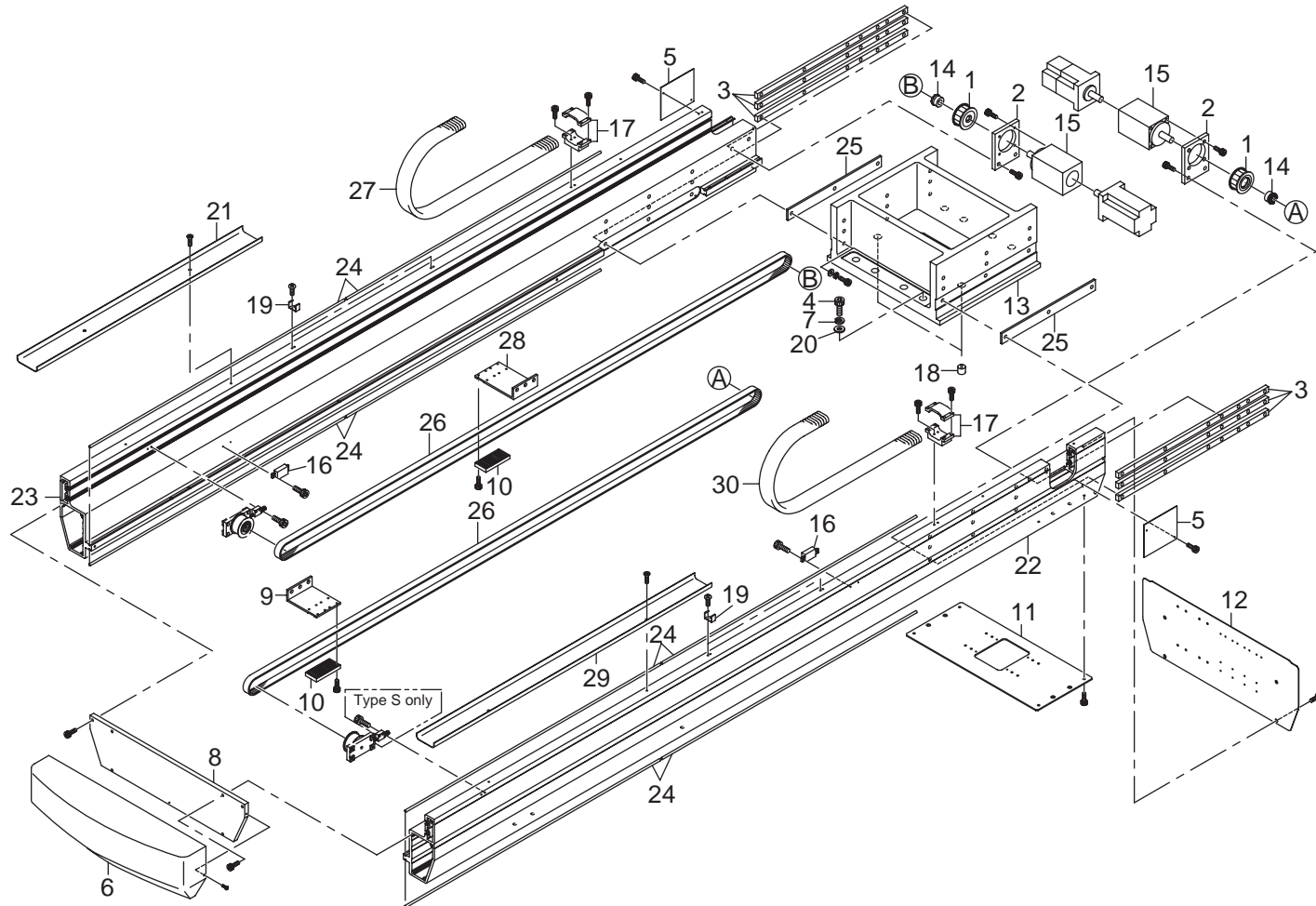


ZT000808BM13120

12 Kick unit**ZT000808BM13120****(1 of 2)**

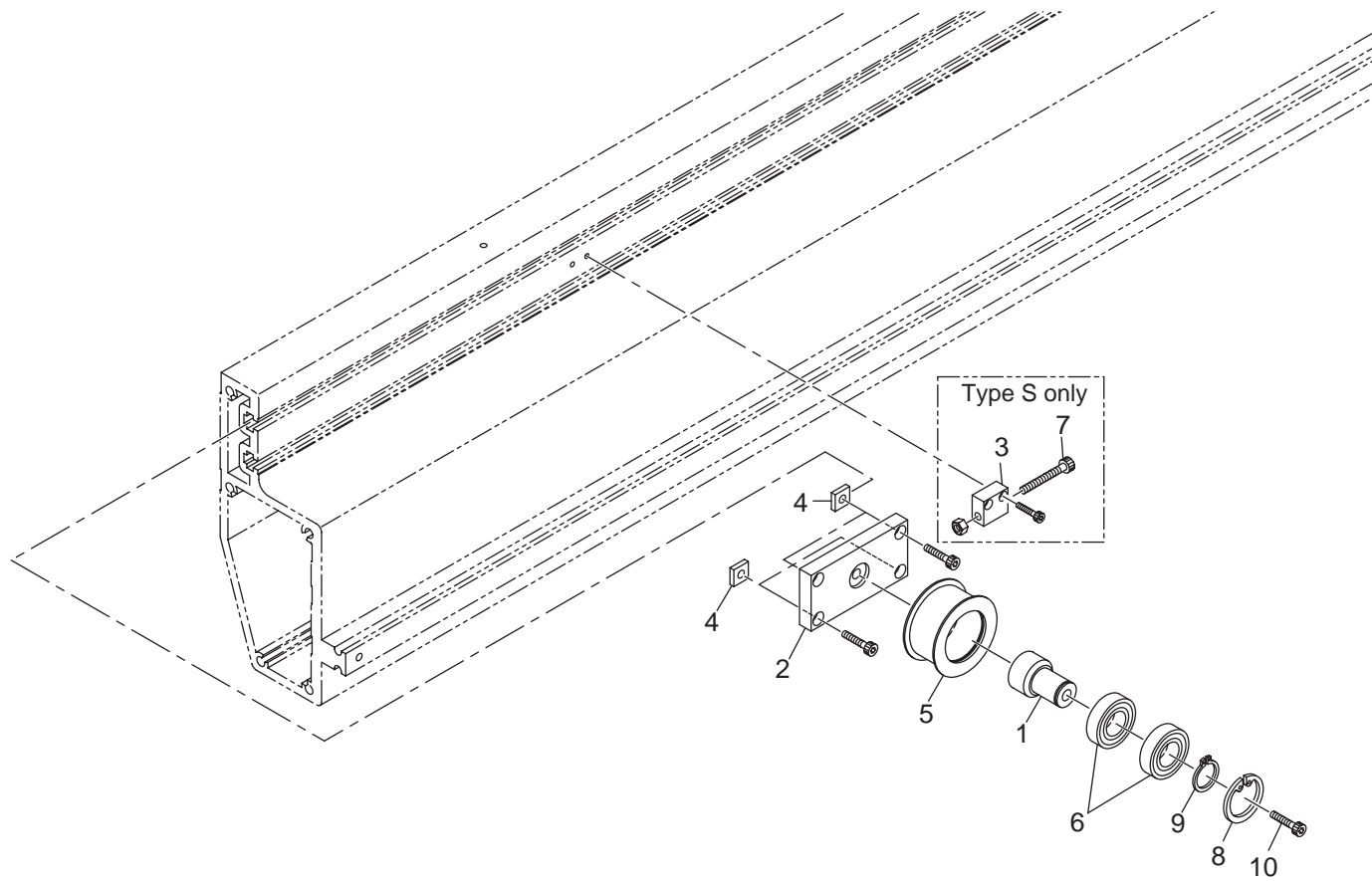
No.	PART No.	PART NAME	Q'TY	REMARKS
01	2648790	Pulley	1 (2)	Numbers in () are for type D.
02	2698520	Bracket	1 (2)	
03	2698540	Plate	2	
04	0430710	Hexagon socket head cap bolt	8	
05	1570771	Cover	2	
06	2698560	Cover	1	
07	0034850	Plain washer	8	
08	1612780	Plate	1	
09	2698570	Clamp	1	
10	2648890	Clamp	1 (2)	
11	2698580	Plate	1	
12	2698590	Cover	1	
13	2698550	Block	1	
14	0800900	Mechanical lock	1 (2)	
15	2580900	Reduction gear	1 (2)	
16	0106480	Magnet	1 (2)	
17	1340480	Saddle	1 (2)	
18	0740290	Radial plain bearing	2	
19	1668980	Holder	2 (4)	
20	0036020	Spring washer	8	
21	2649080	Cover	1	1800 stroke
	2698710	Cover	1	2100 stroke
22	2698680	Frame	1	1800 stroke
	2698720	Frame	1	2100 stroke
23	2698690	Frame	1	1800 stroke

12 Kick unit



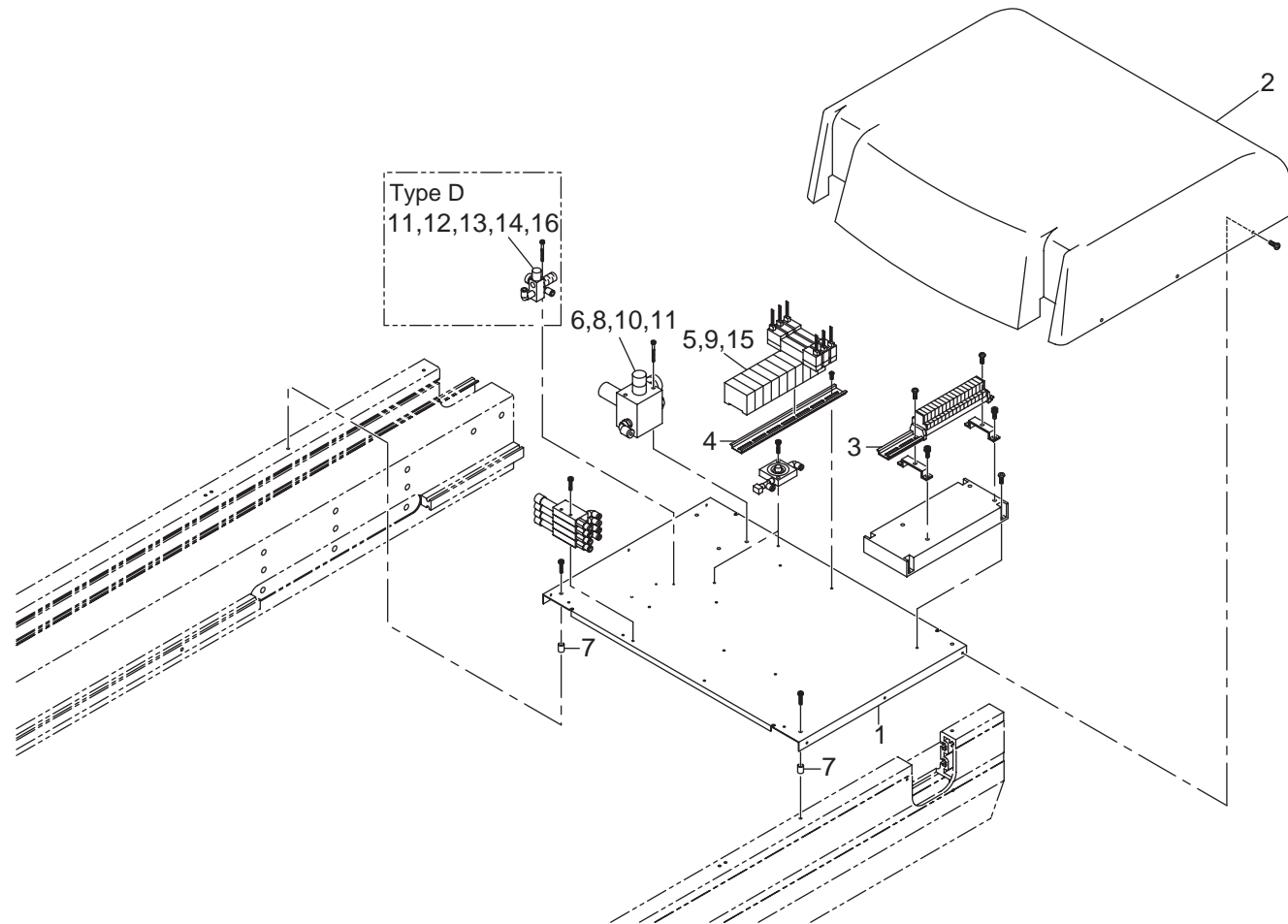
ZT000808BM13120

13 Kick unit, driven pulley



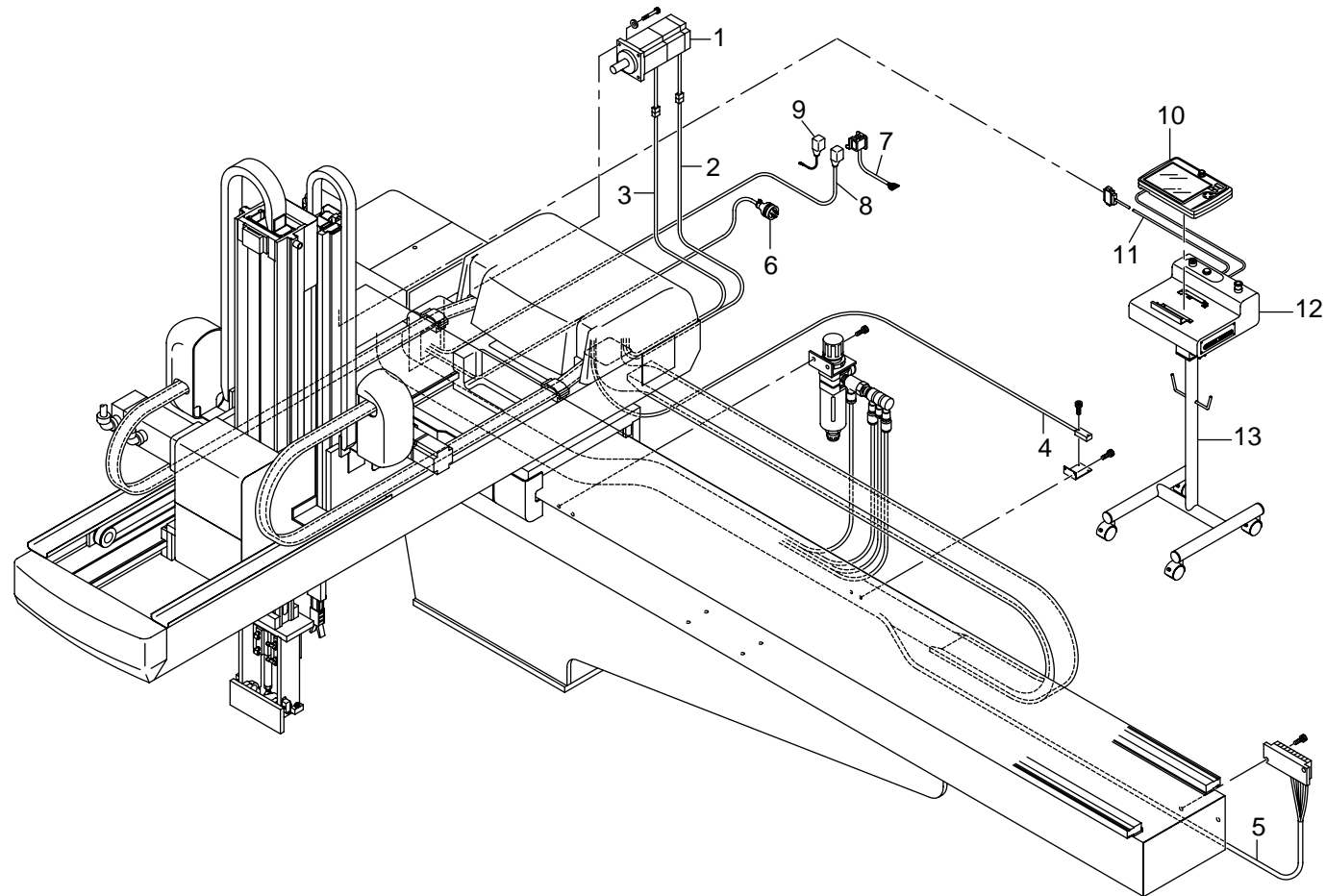
ZT000808BM13130

14 Junction box



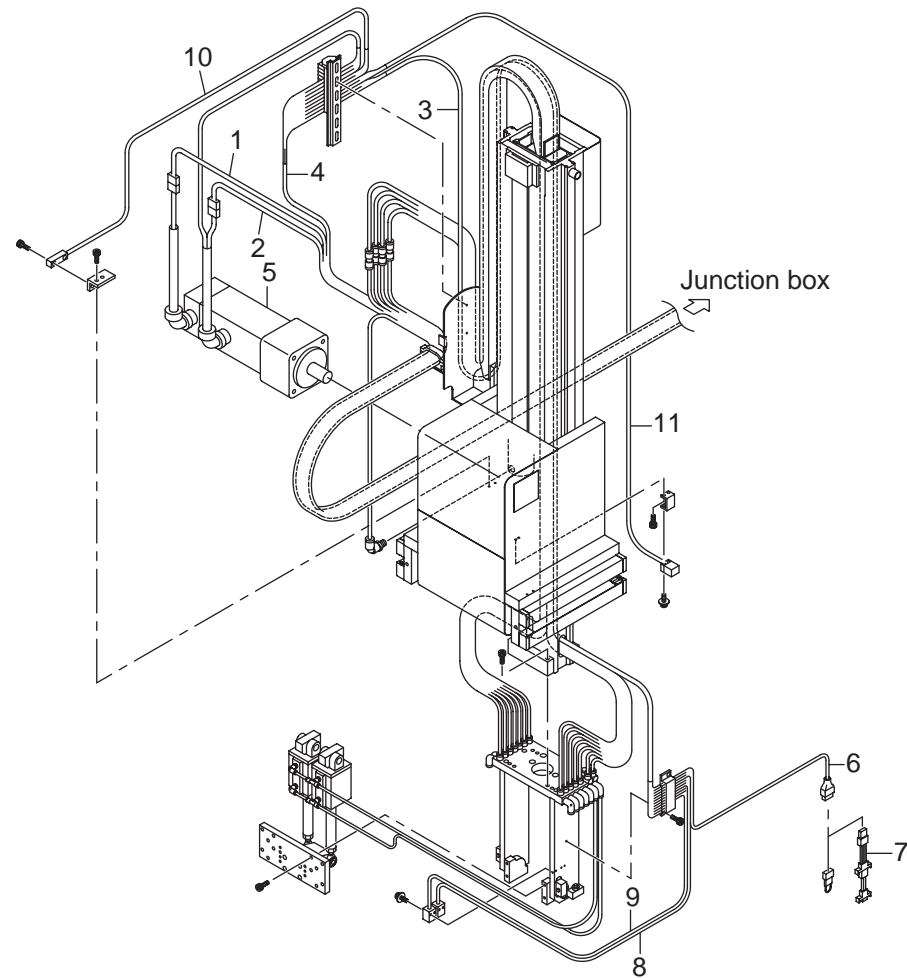
ZT000808BM13140

15 Main wiring



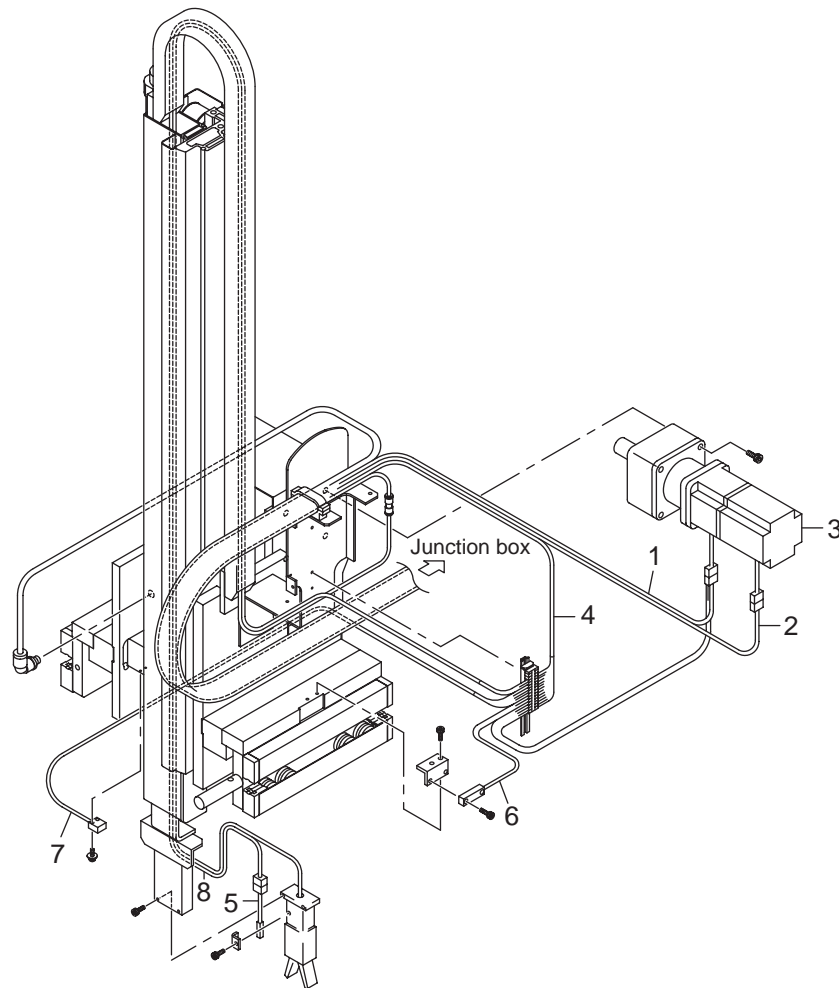
ZT000808BE13010

16 Main arm unit, wiring



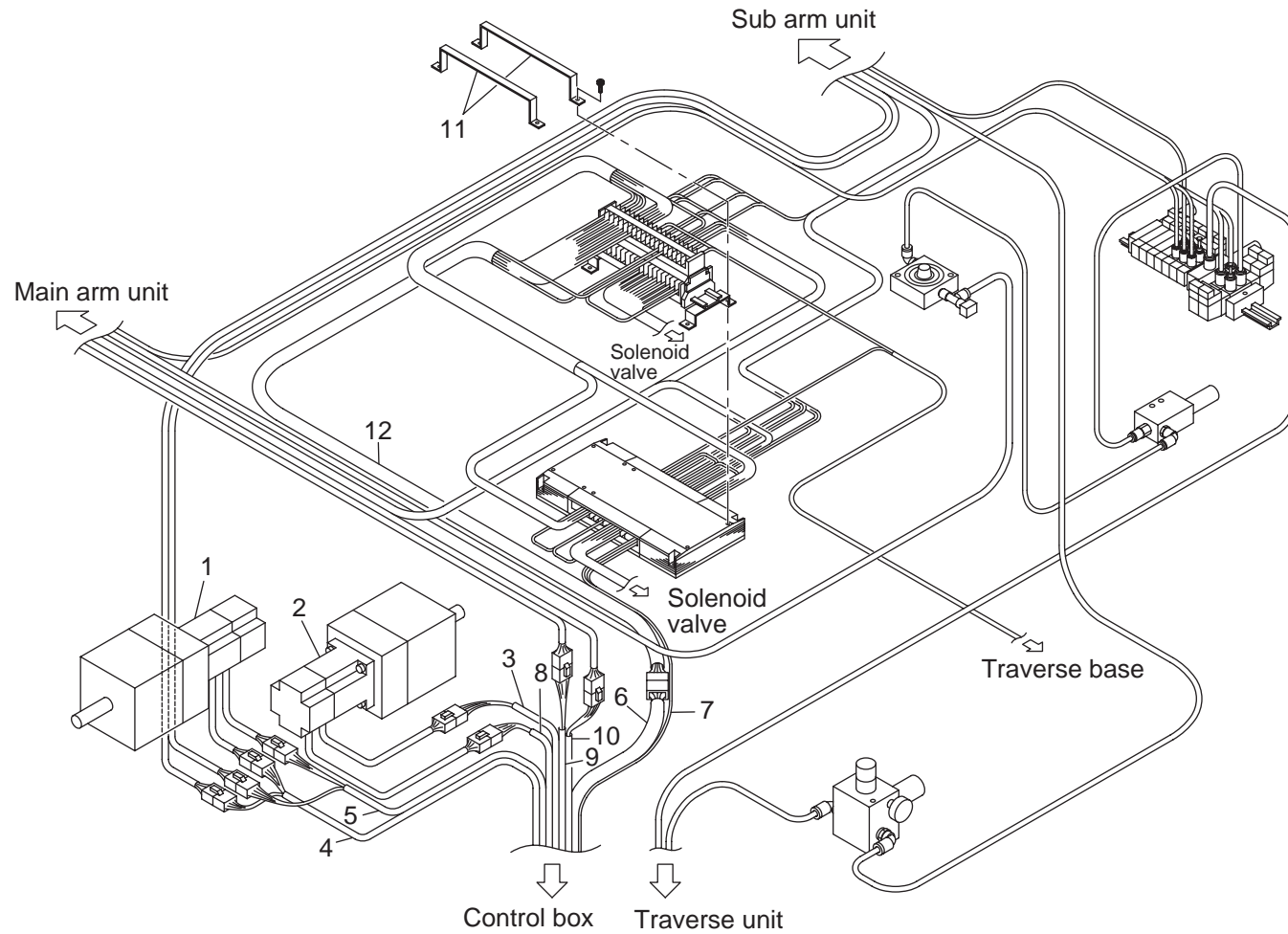
ZT000808BE13020

17 Sub arm unit, wiring



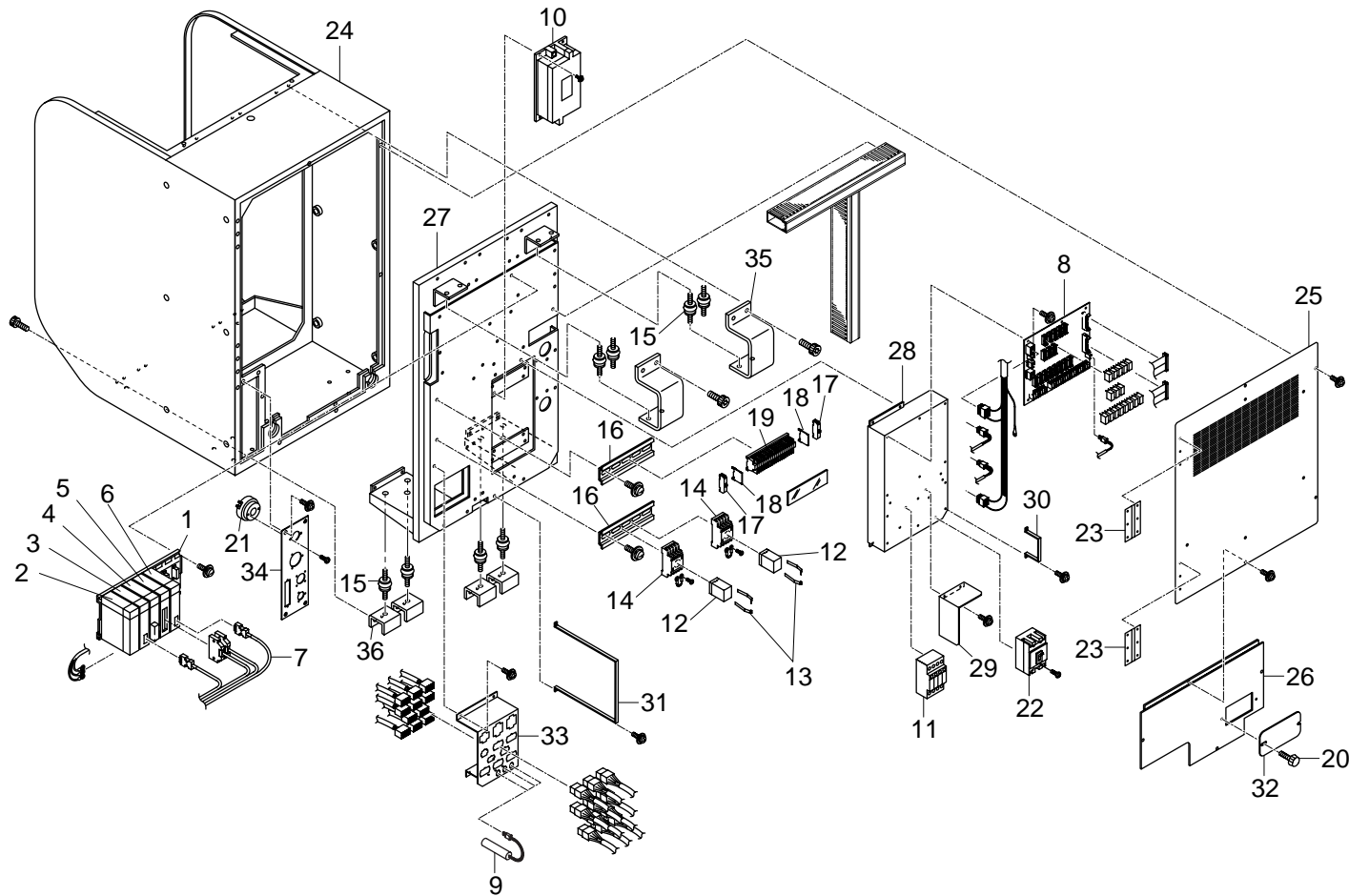
ZT000808BE13030

18 Junction box, wiring



ZT000808BE13040

19 Control box 1

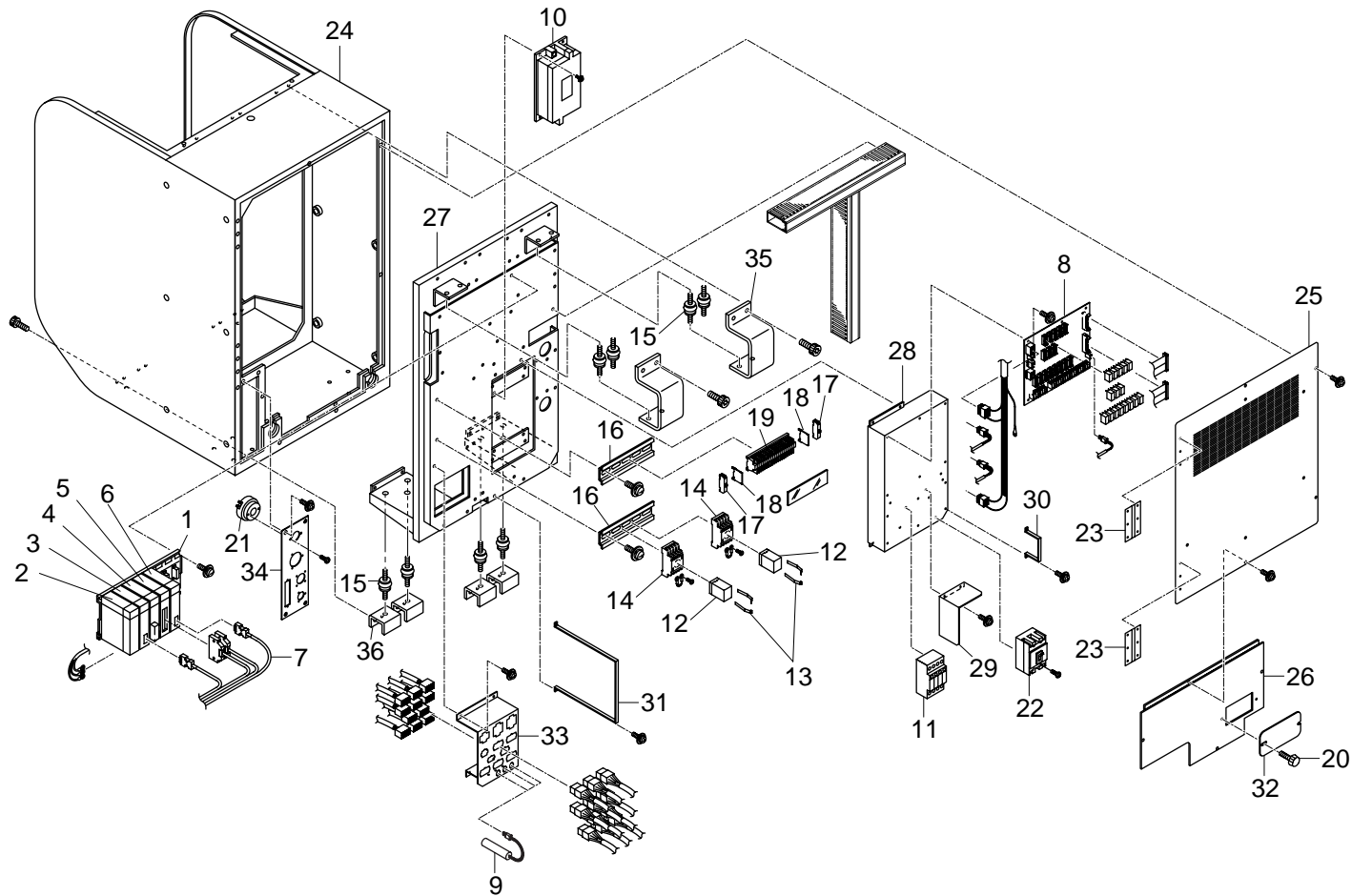


ZT000808BE13050

19 Control box 1**ZT000808BE13050****(1 of 2)**

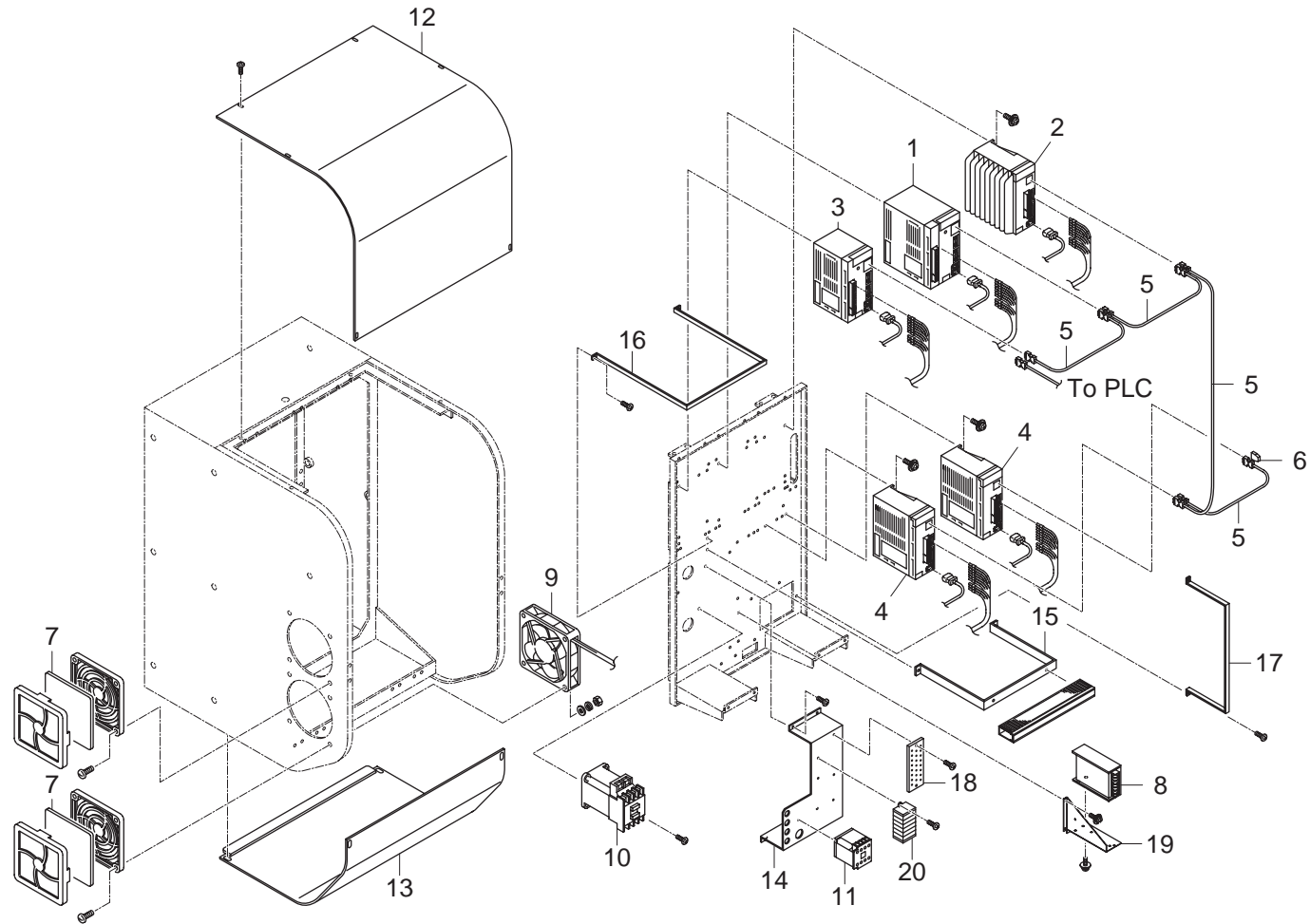
No.	PART No.	PART NAME	Q'TY	REMARKS
01	0614260	Base module	1	
02	0614270	Power module	1	
03	1457440	CPU module	1	
04	0607730	μ -bus module	1	
05	0607740	Input/output module	1	
06	2585700	MECHATROLINK II module	1	
07	2585720	MECHATROLINK II communication cable (1.0 m)	1	
08	1373030	P6V interface board	1	
09	2215620	Battery	2	
10	2662790	Noise filter	1	
11	0032570	Contact relay	1	
12	0280120	Relay	2 (3)	Numbers in () are for type D.
13	0150360	Retainer	2 (3)	
14	1331360	Relay socket	2 (3)	
15	2844560	Cushion	8	
16	0154370	Rail	280 mm	
17	0154340	Fixing bracket	2	
18	0154360	Side plate	2	
19	0154330	Terminal	12	
20	2254010	Screw	2	
21	0151900	Buzzer	1	
22	1520650	Breaker	1	
23	1460790	Hinge	2	
24	2888970	Case	1	
25	2889000	Rear cover 1	1	

19 Control box 1



ZT000808BE13050

20 Control box 2



ZT000808BE13060

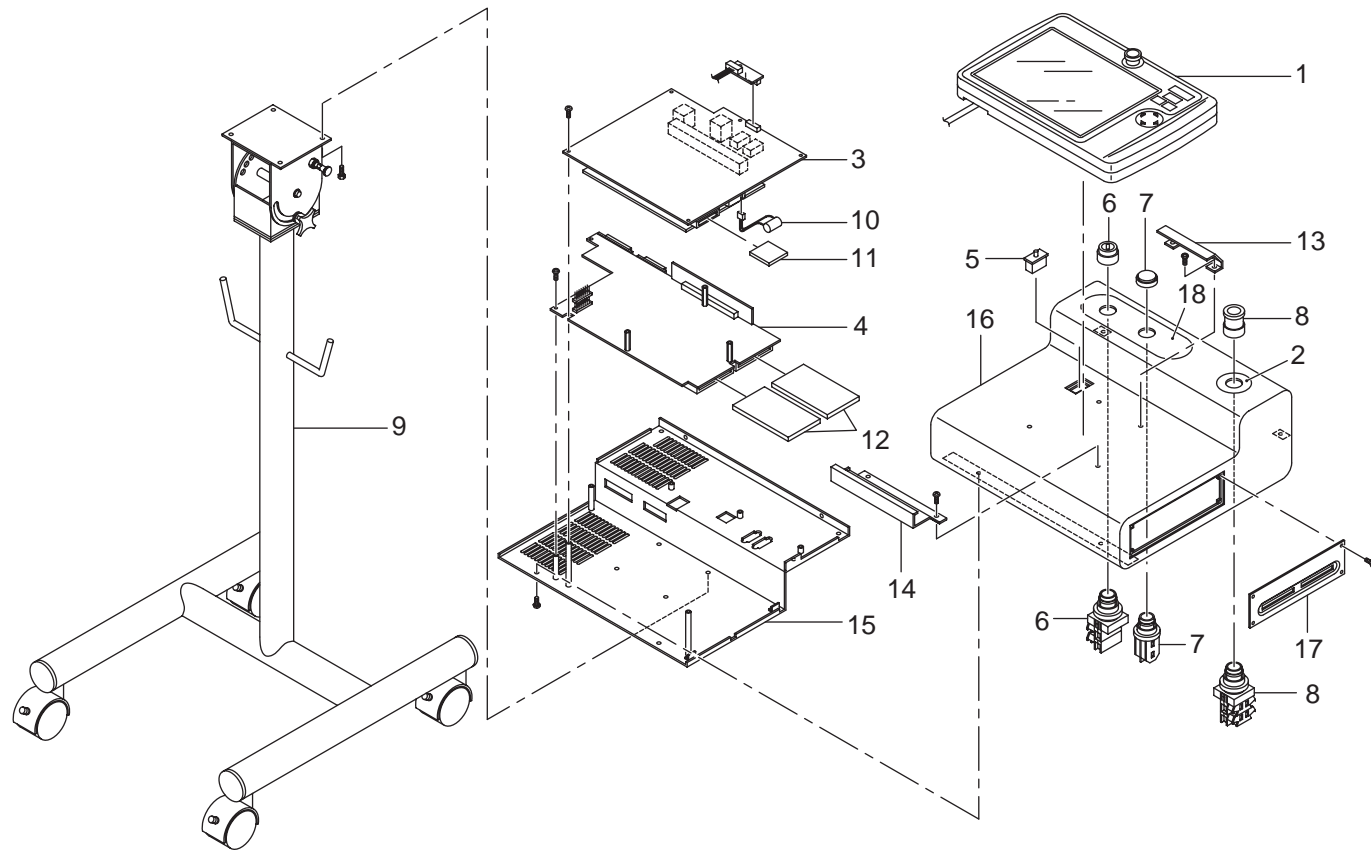
20 Control box 2

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(1 of 2)

No.	PART No.	PART NAME	Q'TY	REMARKS
01	2638650	Servo amplifier (1.5KW)	1	
02	2381780	Servo amplifier (750W)	1	
03	2381770	Servo amplifier (400W)	0 (1)	Numbers in () are for type D.
04	2381760	Servo amplifier (200W)	1 (2)	
05	2585710	MECHATROLINK II communication cable (0.5m)	2	
06	2585730	MECHATROLINK II communication terminator	1	
07	0157010	Filter	2	
08	2585690	Switching power supply	1	
09	0444150	Fan	1	
10	2203960	Magnetic contactor	1	
11	0269490	Magnetic contactor	1	
12	2888980	Front cover 1	1	
13	2888990	Front cover 2	1	
14	2889050	Terminal mounting plate	1	
15	2889080	Duct bracket	1	
16	2889090	Cable mounting bracket 1	1	
17	2889100	Cable mounting bracket 2	1	
18	2889160	Ground bar	1	
19	2746080	Power supply mounting plate	1	
20	2869540	Terminal	1	

21 Operator station



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21 Operator station

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(1 of 1)

No.	PART No.	PART NAME	Q'TY	REMARKS
01	2582110	Handheld controller	1	
02	2661660	Emergency stop SW seal	1	
03	2661670	CPU board	1	
04	2661681	Extension board	1	
05	2667660	Deadman switch	1	
06	0928700	Key switch	1	
07	2173460	Power lamp	1	
08	1109090	Emergency stop switch	1	
09	2661790	Stand Assy	1	
10	2667830	Battery	1	
11	2667840	Compact flash	1	
12	2667850	Dummy card	2	
13	2667890	Upper hook	1	
14	2667900	Lower hook	1	
15	2667870	Box base	1	
16	2667860	Box cover	1	
17	2667880	Slot cover	1	
18	2661650	SW seal	1	

Take-out Robot Parts Catalog

15th April, 2004 Version 1.0

Yushin Precision Equipment Co., Ltd.

TEL(075)933-9555 FAX(075)934-4033

YPE200406072992