

HAPPY

Parts Manual

HCA-1501-40TTC

ELECTRONIC EMBROIDERY MACHINE

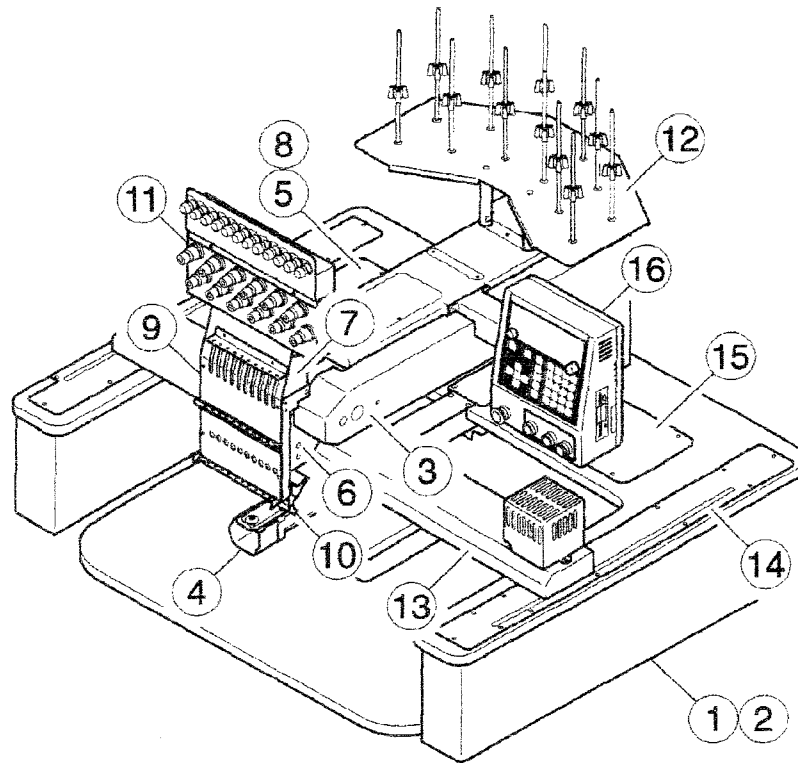
PARTS LIST

パーツリスト



2002.05.01

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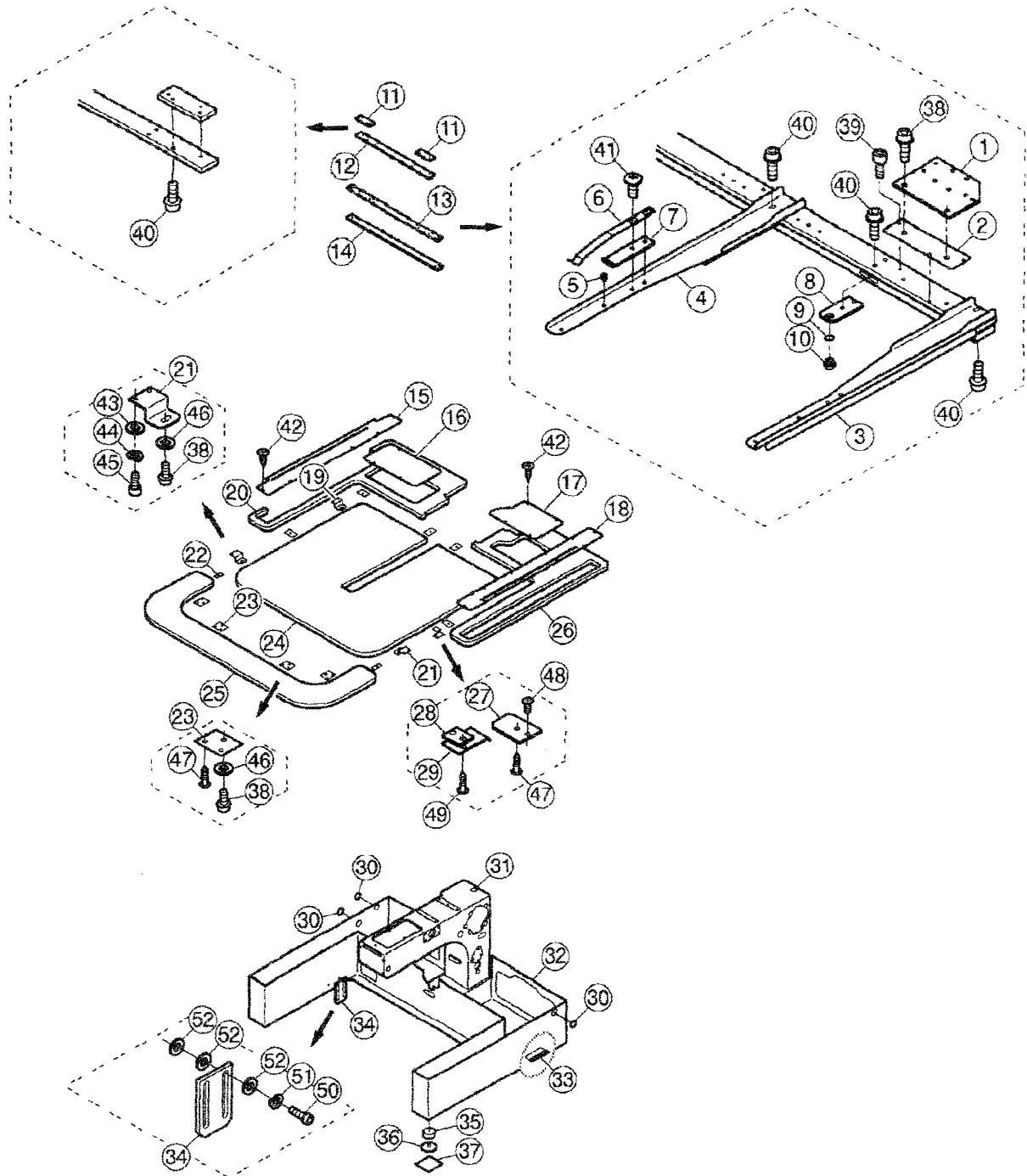
※ Specifications are subject to change without notice.

※ When you place parts orders, please state machine model (example : HCA-1501-40TTC), machine number and if machine is with option (example : cap frame) or not.

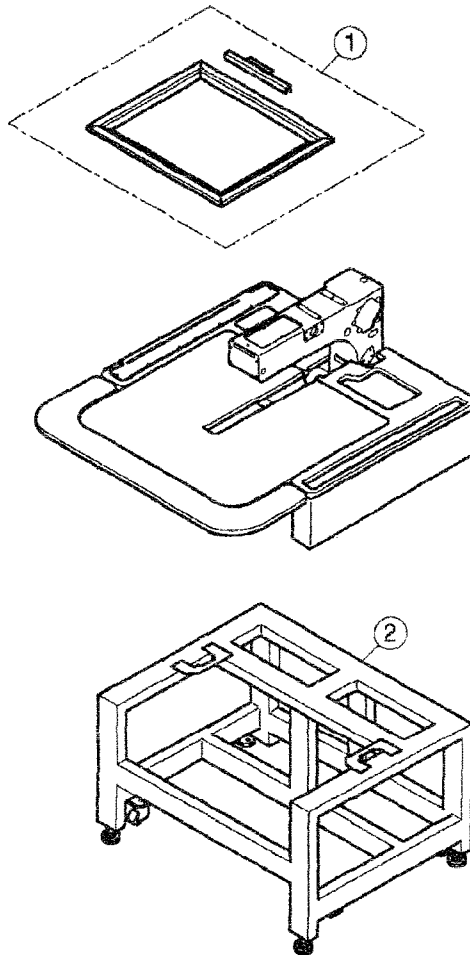
EXPLANATION OF LIST

Ass'y	El't	Parts No.	Parts Names
	9	HMF17870	Adjusting plate
11*	10	M0416186	Thread check spring
	11	HMF17840	Thread tension ass'y
	12	HMF17860	Thread tension lid
	31	HCG08170	Roller pin guide
	32	→10b	Jump solenoid ass'y (by model)
①	②	③	④

- ① This element number here is an assembly part number.
It indicates that the part shown here is a component of an assembly part.
- ② It is element number.
- ③ It is parts number.
- ④ This parts is entered to other page of that mark "→" shows.



Ass'y	El't	Parts No.	Parts Names	Note
	1	→13a	Connecting plate	
	2	HCG37050	Tubular frame spacer A	
	3	HCA37051	Tubular frame hold arm (right)	
	4	HCA37061	Tubular frame hold arm (left)	
	5	C0440563	positioning pin	
	6	HCM41353	Hold spring C	
	7	HCM41361	Hold spring base	
	8	HCG37071	Cap frame spacer	
	9	M0424080	Spacer	
	10	M0438941	Insert nut	
	11	HCA37031	Cap frame bracket B	
	12	HCA37040	Cap frame bracket A	
	13	HCA37022	Tubular frame bracket B	
	14	HCA37011	Tubular frame bracket A	
	15	HCA30071	Y carriage cover (left)	
	16	HCA30051	Cover for thread cutting driver	
	17	HCA30081	Cover for main unit	
	18	HCA30061	Y carriage cover (right)	
	19	HCA30171	Table bracket 2	
	20	HCA30021	Table (left)	
	21	HCA30162	Table bracket	
	22	HCA30131	Auxiliary table bracket B	
	23	HCA30121	Auxiliary table bracket A	
	24	HCA30030	Table (front)	
	25	HCA30040	Auxiliary table	
	26	HCA30011	Table (right)	
	27	HCA30101	Holder bracket A	
	28	HCA30150	Holder spacer	
	29	HCA30141	Table holder	
	30	M0408150	Rubber cap (small)	
	31	→3a	Arm	
	32	HCA00092	Chassis	
	33	HCA00150	Trim	
	34	HCA00140	Stopper	
	35	HCA00160	Leg	
	36	HCA00170	Adjuster	
	37	HCA00190	Rubber mount	
	38	SCBD04008	Hexagon socket head cap screw with flange (M4x8)	
	39	SCAD03006	Hexagon socket head cap screw (M3x6)	
	40	SCBD04006	Hexagon socket head cap screw with flange (M4x6)	
	41	SBAB04010	Binding head screw (cross recessed, M4x10)	
	42	SNAB3A010	Flat head tapping screw (cross recessed head, 3.1x10)	
	43	WPAA05000	Plain washer (M5)	
	44	WSAA05000	Spring lock washer (M5)	
	45	SCAA05012	Hexagon socket head cap screw (M5x12)	
	46	WPAA04000	Plain washer (M4)	
	47	SKAB4E016	Round head wood screw (cross recessed head, 4.5x16)	
	48	SGAB05012	Flat head screw (cross recessed head, M5x12)	
	49	SLAB4E016	Oval head wood screw (cross recessed head, 4.5x16)	
	50	SCAA08025	Hexagon socket head cap screw (M8x25)	
	51	WSAA08000	Spring lock washer (M8)	
	52	WPAA08000	Plain washer (M8)	

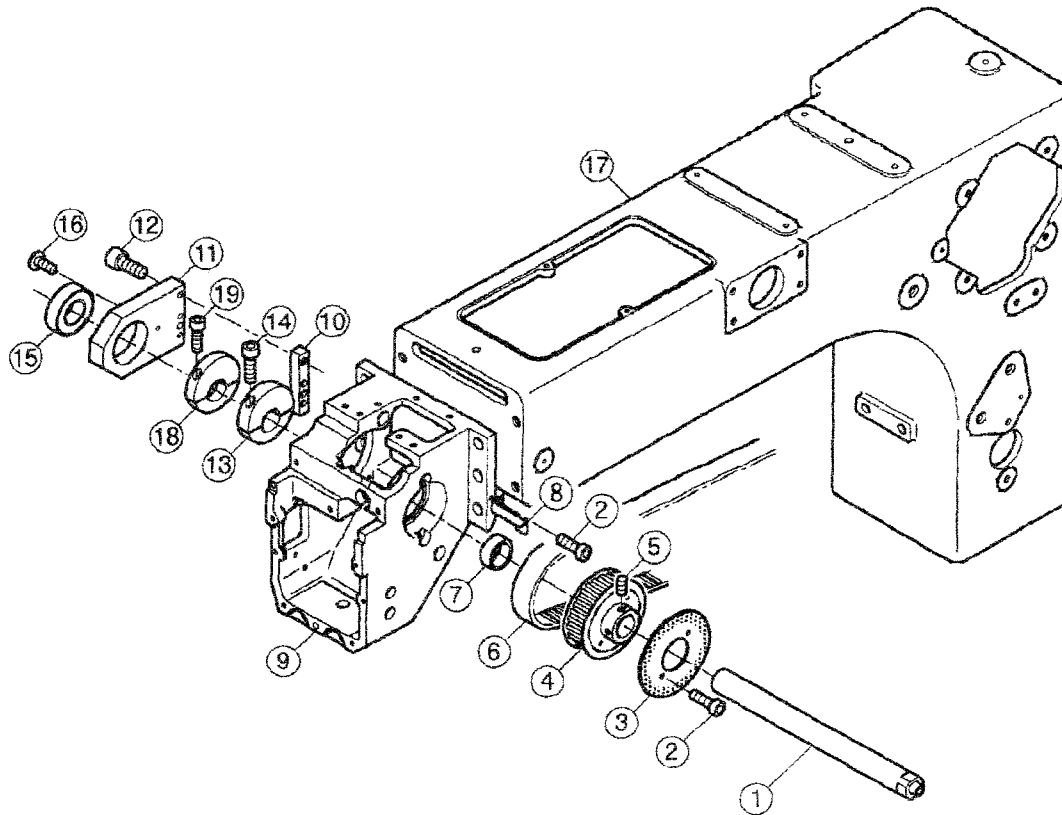


CHASSIS & TABLE (OPTION PARTS)

Cha0717

2a-1

Ass'y	El't	Parts No.	Parts Names	Note
	1	HCA937040	Border frame set	
	2	HCA00701	Stand ass'y (type 5)	
	2	HCA00721	Stand ass'y (type 7)	

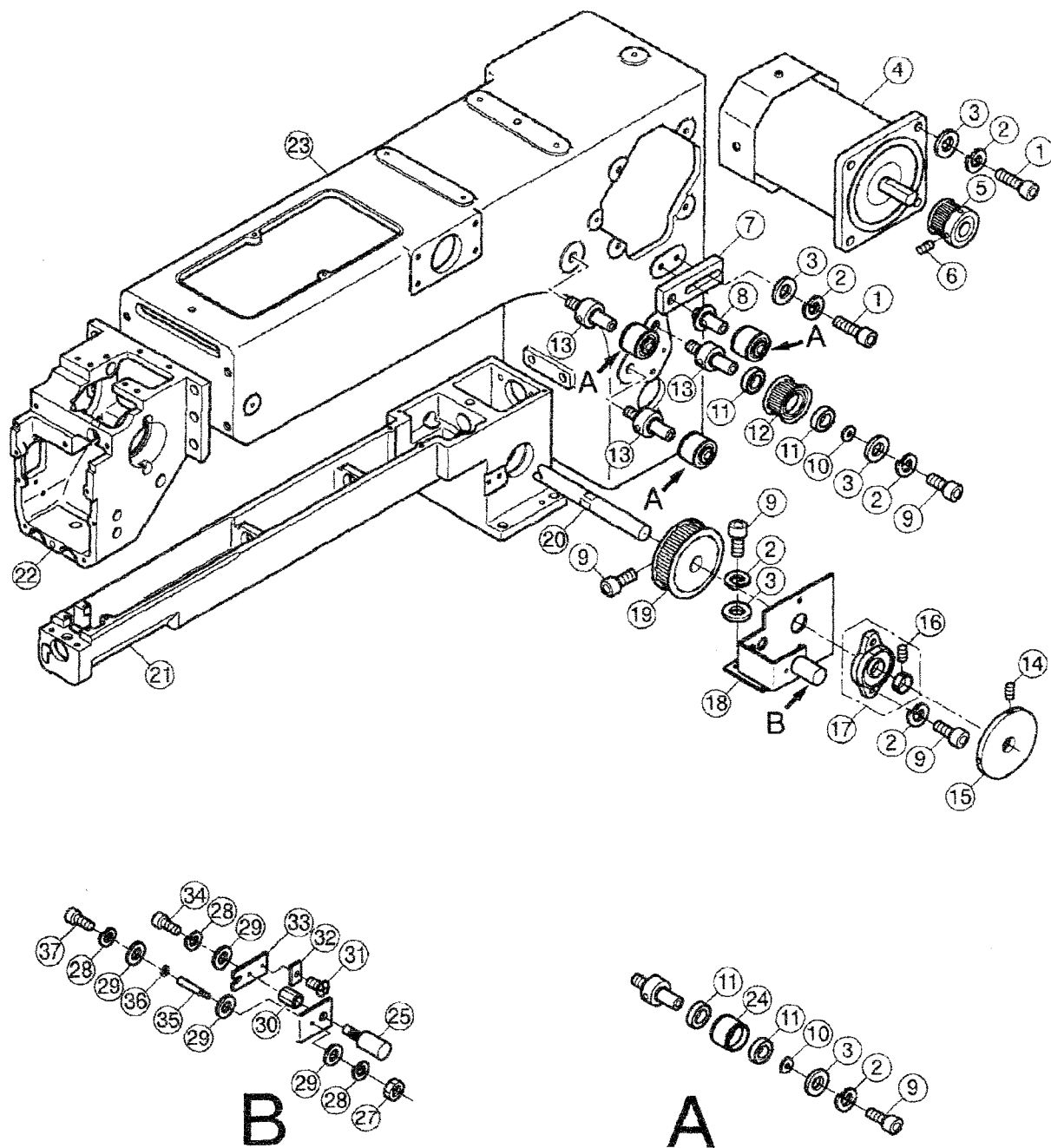


TRANSMISSION UNIT 1

CAb1806

3a-1

Ass'y	El't	Parts No.	Parts Names	Note
	1	HCA02130	Upper shaft (with screw)	
	2	SCAA04006	Hexagon socket head cap screw (M4x6)	
	3	HCA02041	Dial	
	4	HCA02220	Upper shaft pulley	
	5	SSAA06010	Hexagon socket set screw (M6x10)	
	6	MPV00550	Timing belt	
	7	HCA02231	Upper shaft collar	
	8	HCA02051	Pointer	
	9	→6a	Fixed head	
	10	HCA02121	Spacer	
	11	HCA02032	Upper shaft support	
	12	SCAA05025	Hexagon socket head cap screw (M5x25)	
	13	HCA02150	Balancer B	
	14	SCAA04022	Hexagon socket head cap screw (M4x22)	
	15	MPB00770	Bearing (6004ZZ)	
	16	SBAD03006	Binding head screw (cross recessed, M3x6)	
	17	HCA02010	Arm	
	18	HCA02500	Balancer C	
	19	SCAA03022	Hexagon socket head cap screw (M3x22)	

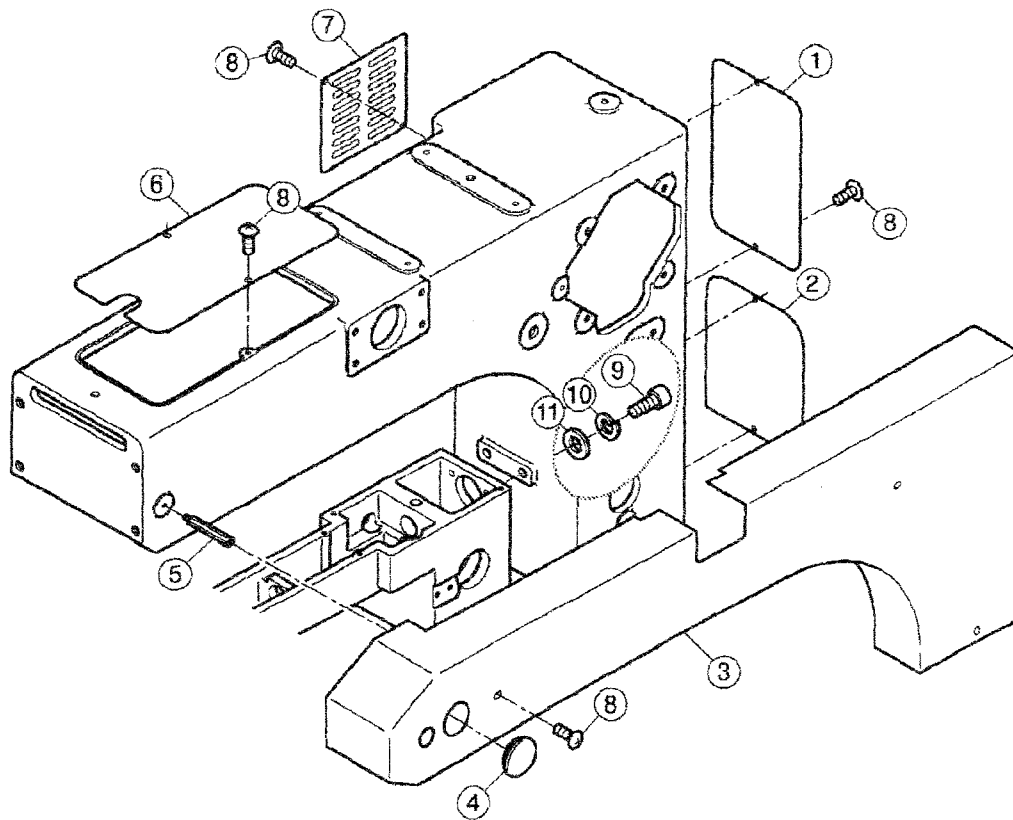


TRANSMISSION UNIT 2

CAa1001

3b-1

Ass'y	El't	Parts No.	Parts Names	Note
	1	SCAA06025	Hexagon socket head cap screw (M6x25)	
	2	WSAA06000	Spring lock washer (M6)	
	3	WPAA06000	Plain washer (M6)	
	4	HCA75012	Drive motor	
	5	HCA02060	Motor pulley	
	6	SSAA06010	Hexagon socket set screw (M6x10)	
	7	HCA02110	Tension plate	
	8	HCA02100	Tension shaft	
	9	SCAA06012	Hexagon socket head cap screw (M6x12)	
	10	HCA02250	Washer	
	11	MPB00790	Bearing (6901ZZ)	
	12	HCA02070	Idler pulley	
	13	HCA02080	Idler shaft	
	14	SSAA04006	Hexagon socket set screw (M4x6)	
	15	HCA02170	Disc	
	16	SSAA03004	Hexagon socket set screw (M3x4)	
	17	MPB00780	Flange type bearing unit	
	18	HCA02161	Brake bracket	
	19	HCA02240	Lower shaft pulley	
	20	HCA02140	Lower shaft	
	21	→4a	Bed	
	22	→6a	Fixed head	
	23	HCA02010	Arm	
	24	HCA02090	Tension pulley	
	25	HCA75030	Brake solenoid	
	27	NHAA04000	Hexagon nut (M4)	
	28	WSAA04000	Spring lock washer (M4)	
	29	WPAA04000	Plain washer (M4)	
	30	M0409062	Solenoid nut	
	31	SGAB03005	Flat head screw (cross recessed head, M3x5)	
	32	HCA02190	Pad	
	33	HCA02180	Pad bracket	
	34	SCAA04010	Hexagon socket head cap screw (M4x10)	
	35	HCA02210	Stopper shaft	
	36	HCA02201	Stopper	
	37	SCAA04006	Hexagon socket head cap screw (M4x6)	



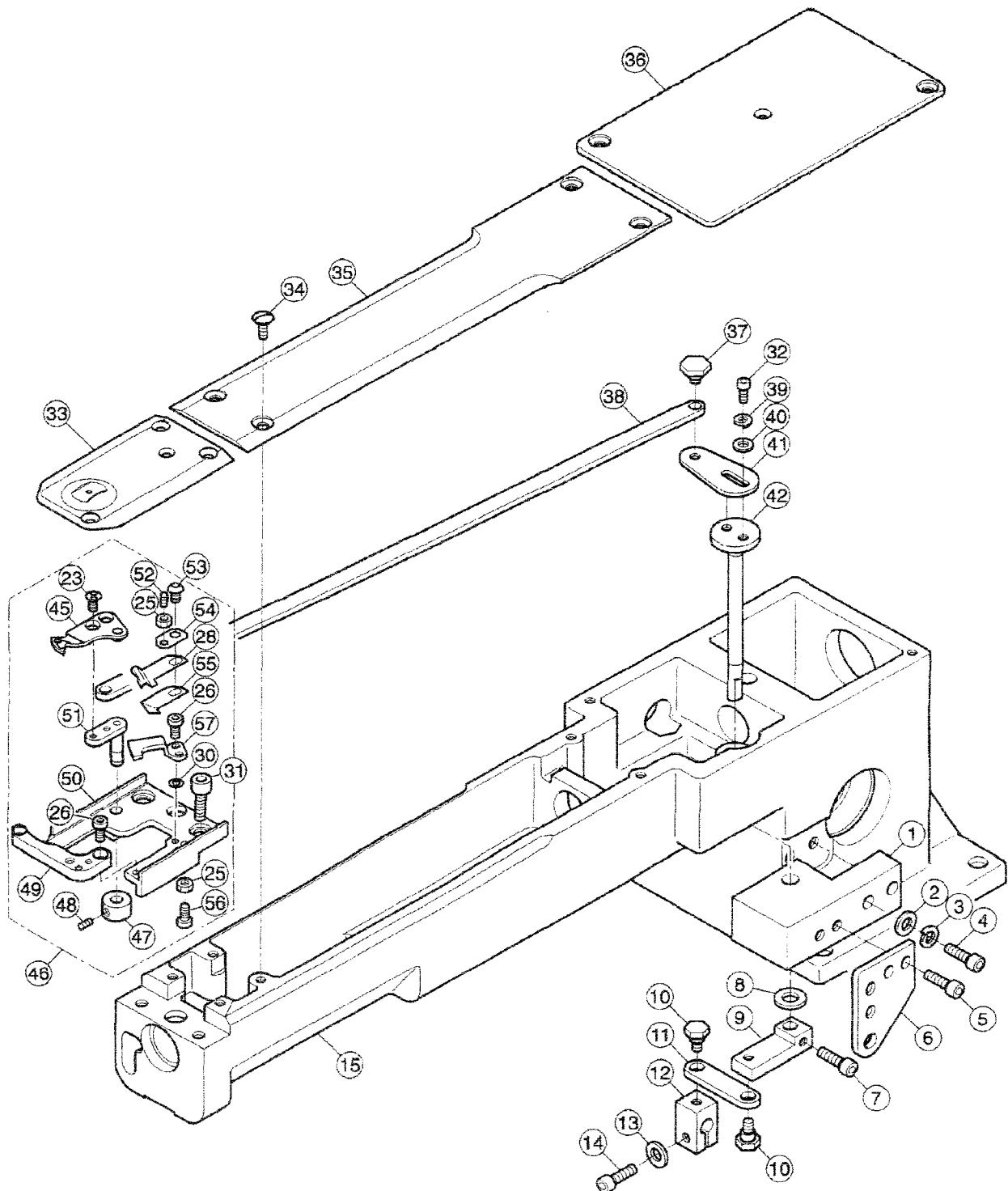
TRANSMISSION UNIT 3

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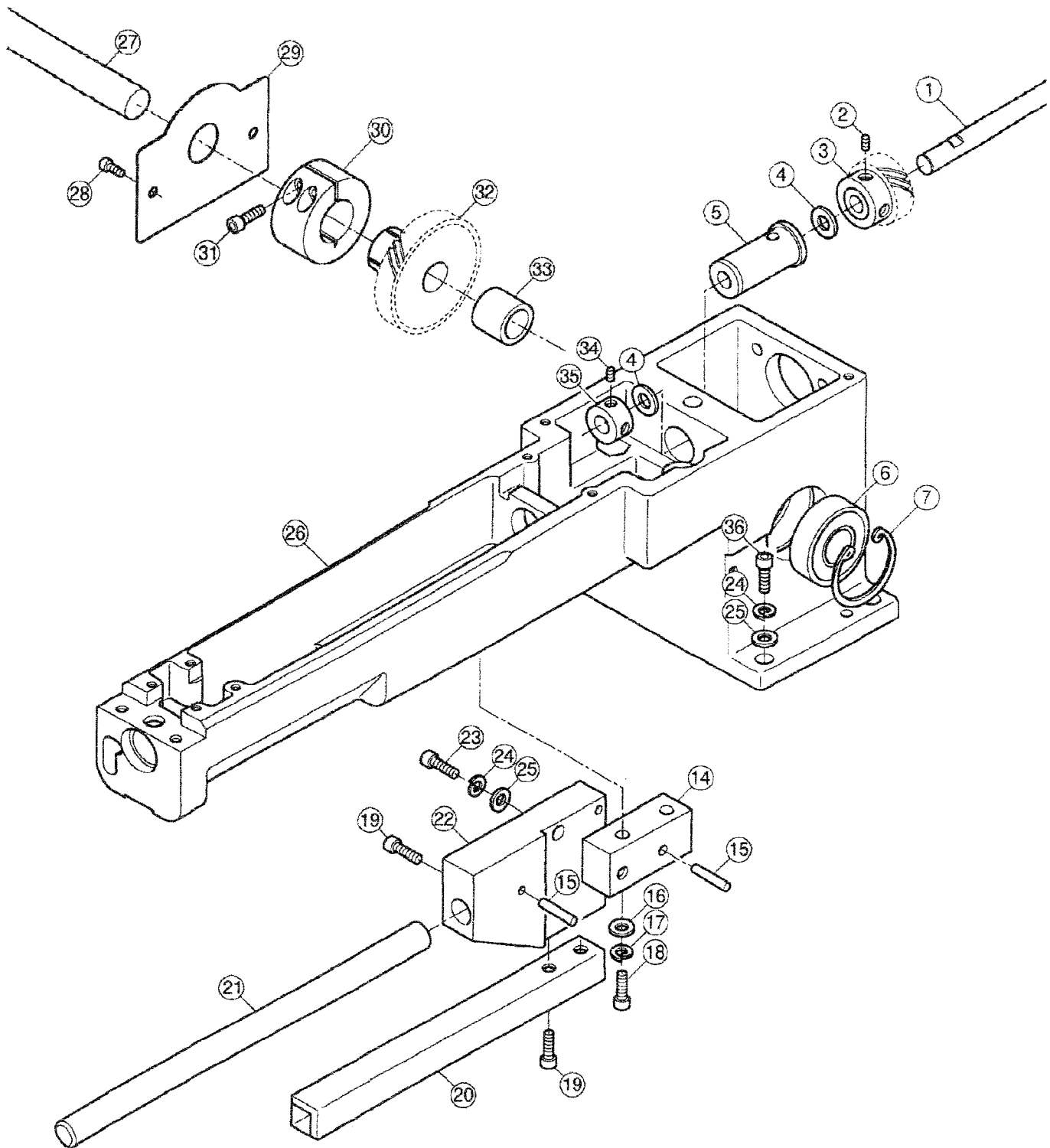
3c-1

Ass'y	El't	Parts No.	Parts Names	Note
	1	HCA02270	Arm cover B	
	2	HCA02280	Arm cover C	
	3	HCA02320	Transmission cover B	
	4	M0408150	Rubber cap (small)	
	5	MPA00010	Spacer (BSB-450)	
	6	HCA02260	Arm cover A	
	7	HCA02290	Arm cover D	
	8	STAB04006	Truss head screw (cross recessed, M4x6)	
	9	SCAA06025	Hexagon socket head cap screw (M6x25)	
	10	WSAA06000	Spring lock washer (M6)	
	11	WPAA06000	Plain washer (M6)	

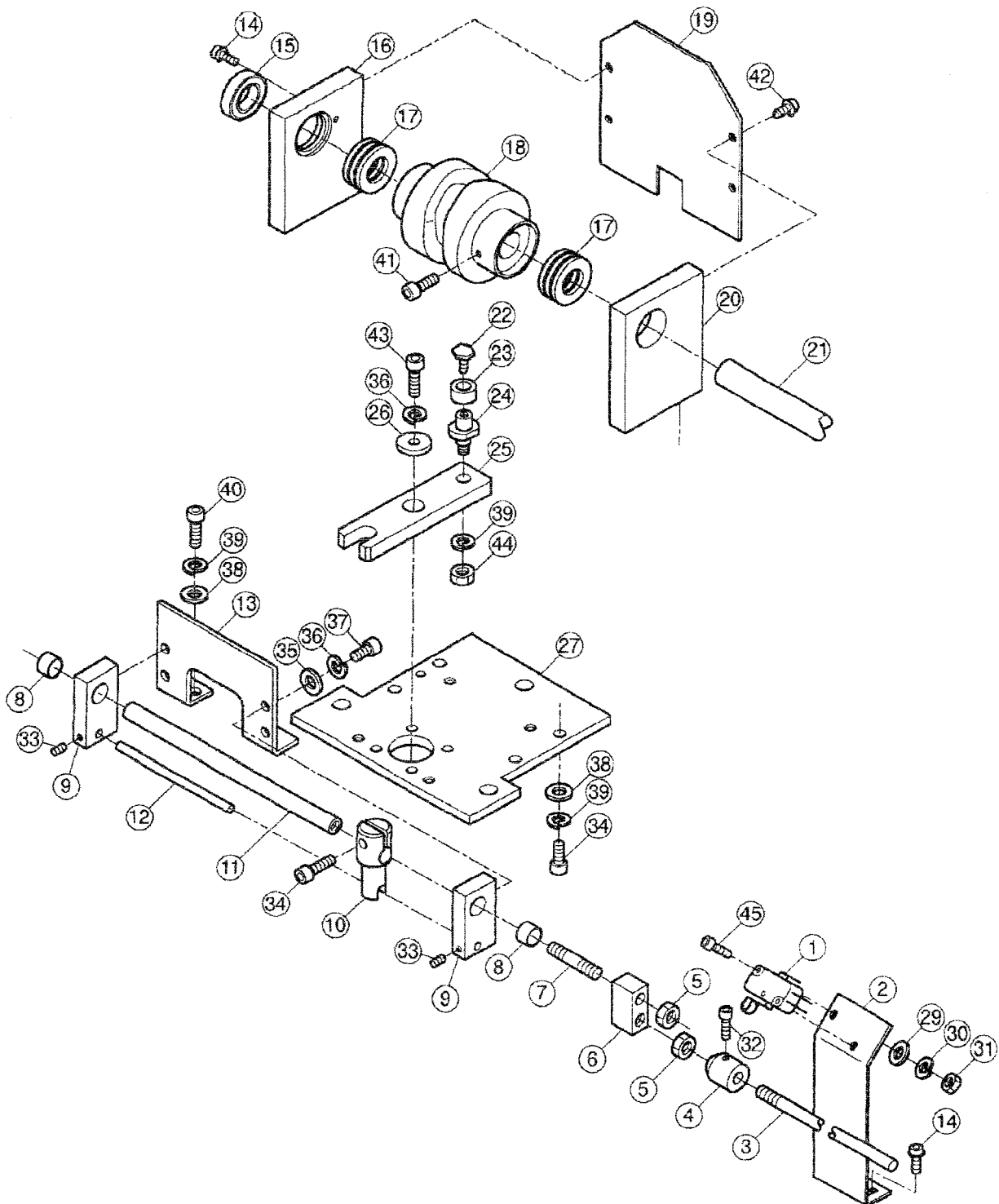
Ass'y	El't	Parts No.	Parts Names	Note
	1	SPDB04008	Pan head screw (cross recessed, M4x8)	
	2	HCX78002	Keeper solenoid	
	3	HCM04180	Spring B	
	4	MPR00420	E-ring (E-4)	
	5	SPDB03006	Pan head screw (cross recessed, M3x6)	
	6	HCM04171	Solenoid base	
	7	HCM04191	Plunger	
	8	SPAC2C010	Pan head screw (cross recessed, M2.3x10)	
	9	NHAC2C000	Hexagon nut (M2.3)	
	10	HCM04531	Rotary hook shaft (for Y480)	
	11	SSAA04004	Hexagon socket set screw (M4x4)	
	12	HCM04680	Stopping collar A	
	13	MPB00120	Plastic thrust washer (TW0815)	
	14	HCA04010	Bed	
	15	HCM04232	Rotary hook retainer	
	16	SAAA03006	Hexagon socket button head screw (M3x6)	
	17	HCG04035	Bushing for rotary hook shaft	
	18	SSAA05006	Hexagon socket set screw (M5x6)	
	19	HMF04190	Stopping collar	
	20	MPZ00050	Rotary hook	
	20	MPZ00540	Rotary hook (for thick thread)	
	21	MPZ00550	Bobbin	
	22	MPZ00080	Bobbin case	
	23	HCM04144	Shaft holder	
	24	HCM04650	Hinge spacer	
	25	SPDB04010	Pan head screw (cross recessed, M4x10)	
	26	HCM04160	Keeper shaft	
	27	HCM04150	Spring A	
	28	HCG04230	Keeper cover	
	29	HCM04490	Stopper pin	
	30	HCM04510	Stopper	
	31	HCM04480	Stopper bracket	
	32	SCBA03006	Hexagon socket head cap screw with flange (M3x6)	
	33	HCM04131	Fulcrum block	
	34	HCM04413	Keeper	
	35	WSAD03000	Spring lock washer (M3)	
	36	NHAD03000	Hexagon nut (M3)	
	37	HCM04121	Fulcrum pin	
	38	MPR00290	E-ring (E-3)	
	39	HCM04203	Keeper actuating plate A	
	40	HCM04211	Keeper actuating plate B	



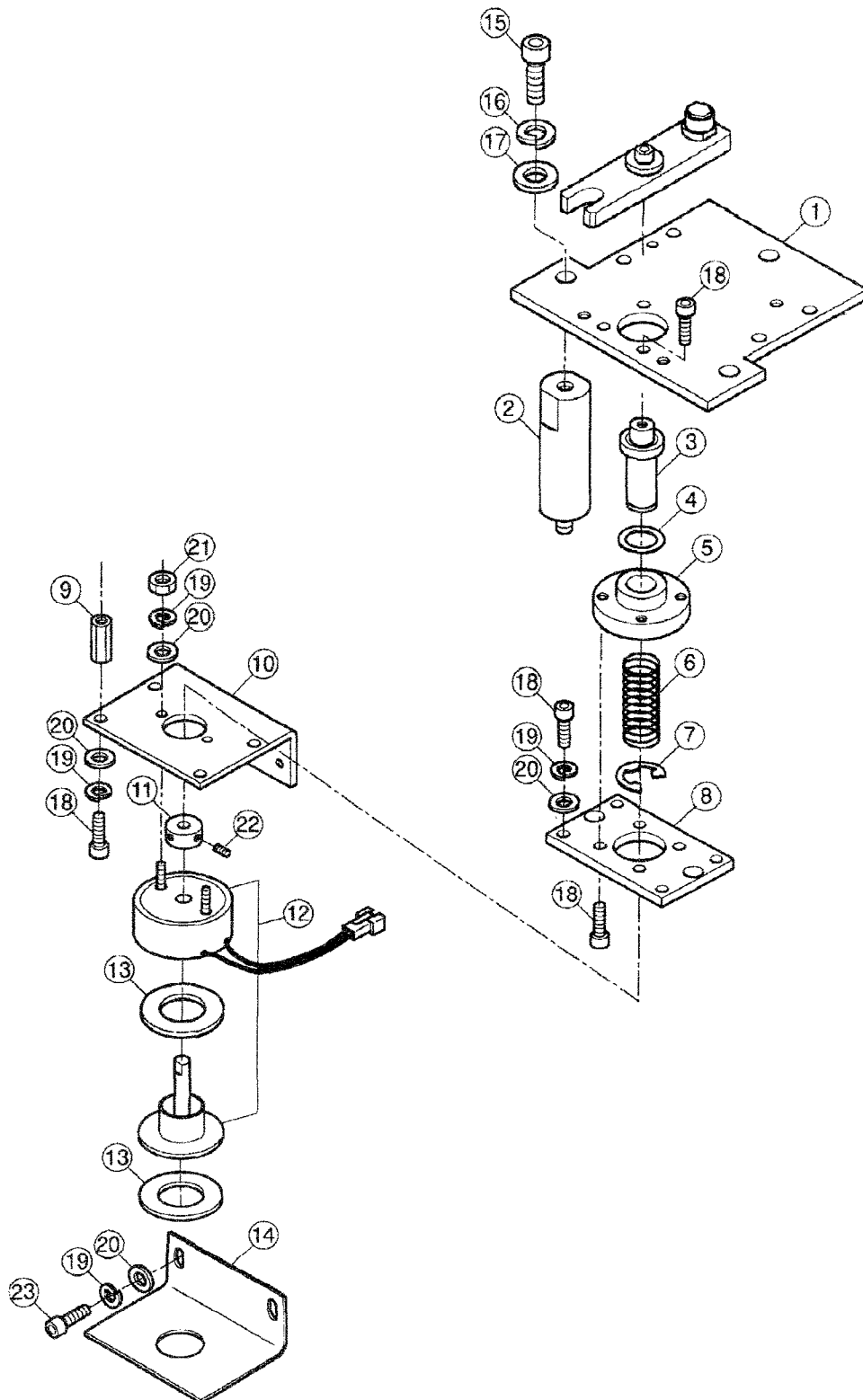
Ass'y	El't	Parts No.	Parts Names	Note
	1	HCM04092	Link base	
	2	WPAA05000	Plain washer (M5)	
	3	WSAA05000	Spring lock washer (M5)	
	4	SCAA05020	Hexagon socket head cap screw (M5x20)	
	5	SCAA04010	Hexagon socket head cap screw (M4x10)	
	6	HMF04050	Support for moving shaft	
	7	SCAA04008	Hexagon socket head cap screw (M4x8)	
	8	WPAA06000	Plain washer (M6)	
	9	M0404240	Drive arm for knife	
	10	M0404263	Hinge screw for link	
	11	M0404250	Link	
	12	M0404271	Fasten block for thread cut shaft	
	13	WPAA04000	Plain washer (M4)	
	14	SCCA04015	Hexagon socket head cap screw (M4x15)	
	15	HCA04010	Bed	
46 *	23	HMF04260	Flat head screw	
46 *	25	NHCA03000	Hexagon nut (M3)	
46 *	26	SCAA03004	Hexagon socket head cap screw (M3x4)	
46 *	28	HCM04580	Bobbin thread holder	
46 *	30	MPZ02230	Washer	
	31	SCAA05010	Hexagon socket head cap screw (M5x10)	
	32	SCAA03006	Hexagon socket head cap screw (M3x6)	
	33	HCM04750	Needle plate	
	34	MPZ00040	Screw for needle plate	
	35	HCM04050	Cover B (for Y480)	
	36	HCM04041	Cover A	
	37	HCM04252	Hinge screw for link	
	38	HCM04223	Rod (for Y480)	
	39	WSAA03000	Spring lock washer (M3)	
	40	WPAA03000	Plain washer (M3)	
	41	HCM04550	Link C	
	42	C0404301	Drive shaft for link	
46 *	45	HCM04293	Knife	
	46	HCA04030	Thread cutting device ass'y	
46 *	47	HCA04060	Knife drive shaft retainer	
46 *	48	SSAA04004	Hexagon socket set screw (M4x4)	
46 *	49	HCA04070	Rotary hook retainer base	
46 *	50	HCA04040	Thread cutting device base	
46 *	51	HCA04050	Knife drive shaft	
46 *	52	SSAA03003	Hexagon socket set screw (M3x3)	
46 *	53	SAAA03005	Hexagon socket button head screw (M3x5)	
46 *	54	HCA04090	Holder retainer	
46 *	55	HCA04082	Holder support	
46 *	56	SCAA03012	Hexagon socket head cap screw (M3x12)	
46 *	57	HCA04100	Fixed knife	



Ass'y	El't	Parts No.	Parts Names	Note
	1	HCM04531	Rotary hook shaft (for Y480)	
	2	SSAA05008	Hexagon socket set screw (M5x8)	
	3	HMF04060	Gear for rotary hook shaft	
	4	MPB00120	Plastic thrust washer (TW0815)	
	5	HCG04035	Bushing for rotary hook shaft	
	6	MPB00150	Bearing (6202LLU)	
	7	MPR00410	C-ring (C-35)	
	14	HCM04540	Holder (for Y480, standard hook)	
	15	MPP00090	Spring pin (4x20)	
	16	WPAA05000	Plain washer (M5)	
	17	WSAA05000	Spring lock washer (M5)	
	18	SCAA05035	Hexagon socket head cap screw (M5x35)	
	19	SCAD06010	Hexagon socket head cap screw (M6x10)	
	20	FRA43872	Guide shaft for cap frame	
	21	FRA43860	Fulcrum shaft for cap frame	
	22	HCM04672	Fulcrum shaft holder	
	23	SCAA06035	Hexagon socket head cap screw (M6x35)	
	24	WSAA06000	Spring lock washer (M6)	
	25	WPAA06000	Plain washer (M6)	
	26	HCA04010	Bed	
	27	→3a	Lower shaft	
	28	SCAA04006	Hexagon socket head cap screw (M4x6)	
	29	C0404031	Side cover	
	30	M0404123	Fasten collar	
	31	SCAA04015	Hexagon socket head cap screw (M4x15)	
	32	SF404070	Drive spiral gear	
	33	SF404030	Spiral gear collar	
	34	SSAA04004	Hexagon socket set screw (M4x4)	
	35	HCM04680	Stopping collar A	
	36	SCAA06020	Hexagon socket head cap screw (M6x20)	



Ass'y	El't	Parts No.	Parts Names	Note
	1	EPS00010	Micro switch	
	2	HCA06062	Micro switch bracket	
	3	HCA06070	Moving shaft	
	4	M0406101	LS dog	
	5	M0404280	Nut	
	6	HCG06320	Connecting block	
	7	HCG06300	Bolt	
	8	MPB00740	Bushing	
	9	HCA06120	Shaft support	
	10	M0406142	Lever drive pin	
	11	M0406161	Slide shaft	
	12	HCG06310	Guide pin	
	13	HCG06291	Shaft support bracket	
	14	SCBA04008	Hexagon socket head cap screw with flange (M4x8)	
	15	MPB00730	Bearing (6902ZZ)	
	16	HCA06111	Cam support (left)	
	17	MPB00160	Thrust bearing (51102)	
	18	HCA06090	Cam for thread cutting driver	
	19	HCA06081	Cam support bracket	
	20	HCA06101	Cam support (right)	
	21	→3a	Lower shaft	
	22	M0406211	Roller screw	
	23	M0406220	Thread cutting roller	
	24	M0406231	Roller shaft	
	25	HCG06270	Cam lever	
	26	M0406410	Washer	
	27	HCA06040	Cam support base	
	29	WPAA03000	Plain washer (M3)	
	30	WSAA03000	Spring lock washer (M3)	
	31	NHAA03000	Hexagon nut (M3)	
	32	SCAA04008	Hexagon socket head cap screw (M4x8)	
	33	SSAA04008	Hexagon socket set screw (M4x8)	
	34	SCAA06020	Hexagon socket head cap screw (M6x20)	
	35	WPAA05000	Plain washer (M5)	
	36	WSAA05000	Spring lock washer (M5)	
	37	SCAA05012	Hexagon socket head cap screw (M5x12)	
	38	WPAA06000	Plain washer (M6)	
	39	WSAA06000	Spring lock washer (M6)	
	40	SCAA06015	Hexagon socket head cap screw (M6x15)	
	41	SCAA06012	Hexagon socket head cap screw (M6x12)	
	42	SPDB04008	Pan head screw (cross recessed, M4x8)	
	43	SCAA05015	Hexagon socket head cap screw (M5x15)	
	44	NHAA06000	Hexagon nut (M6)	
	45	SCAA03018	Hexagon socket head cap screw (M3x18)	

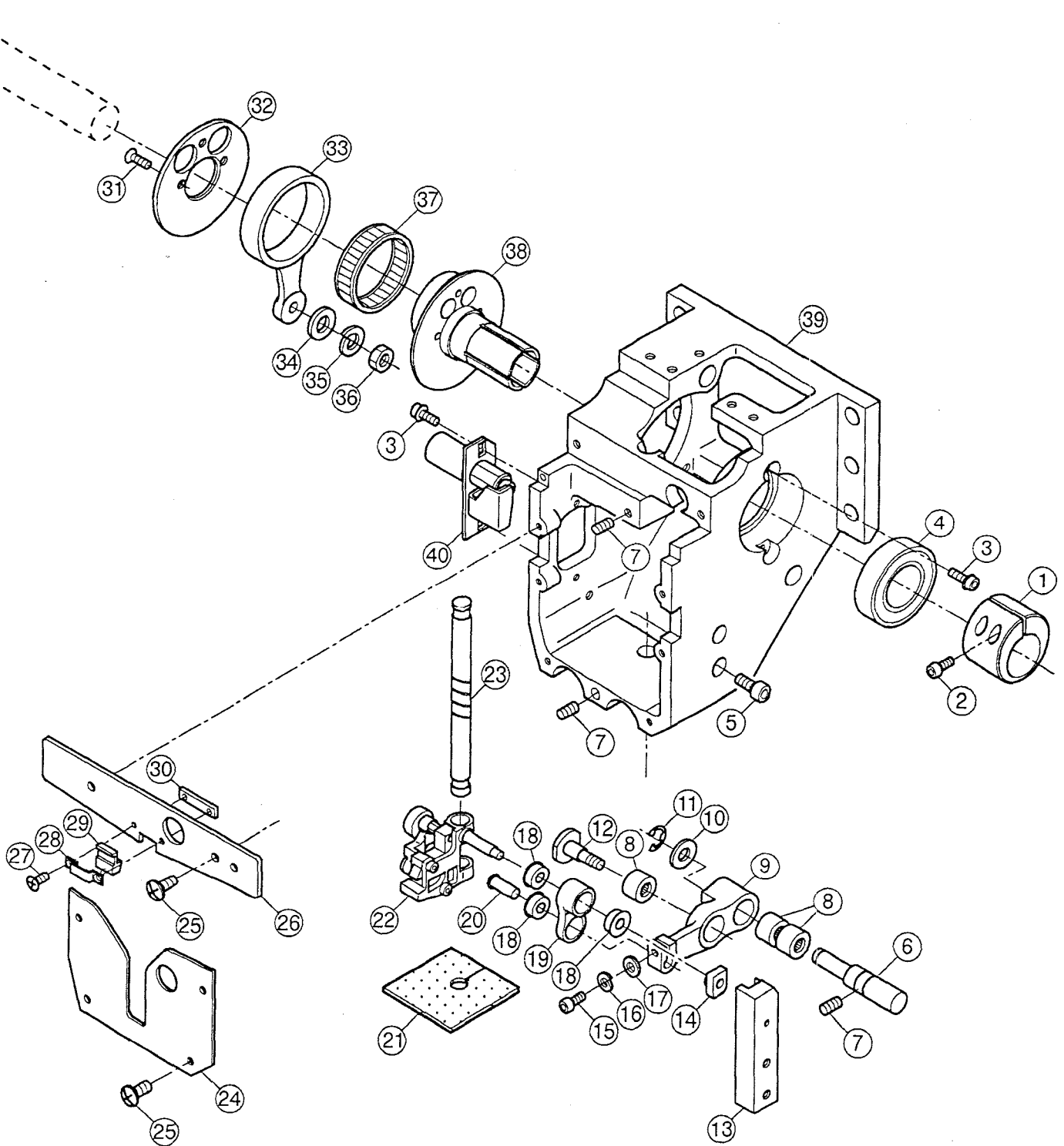


THREAD CUTTING DRIVER 2

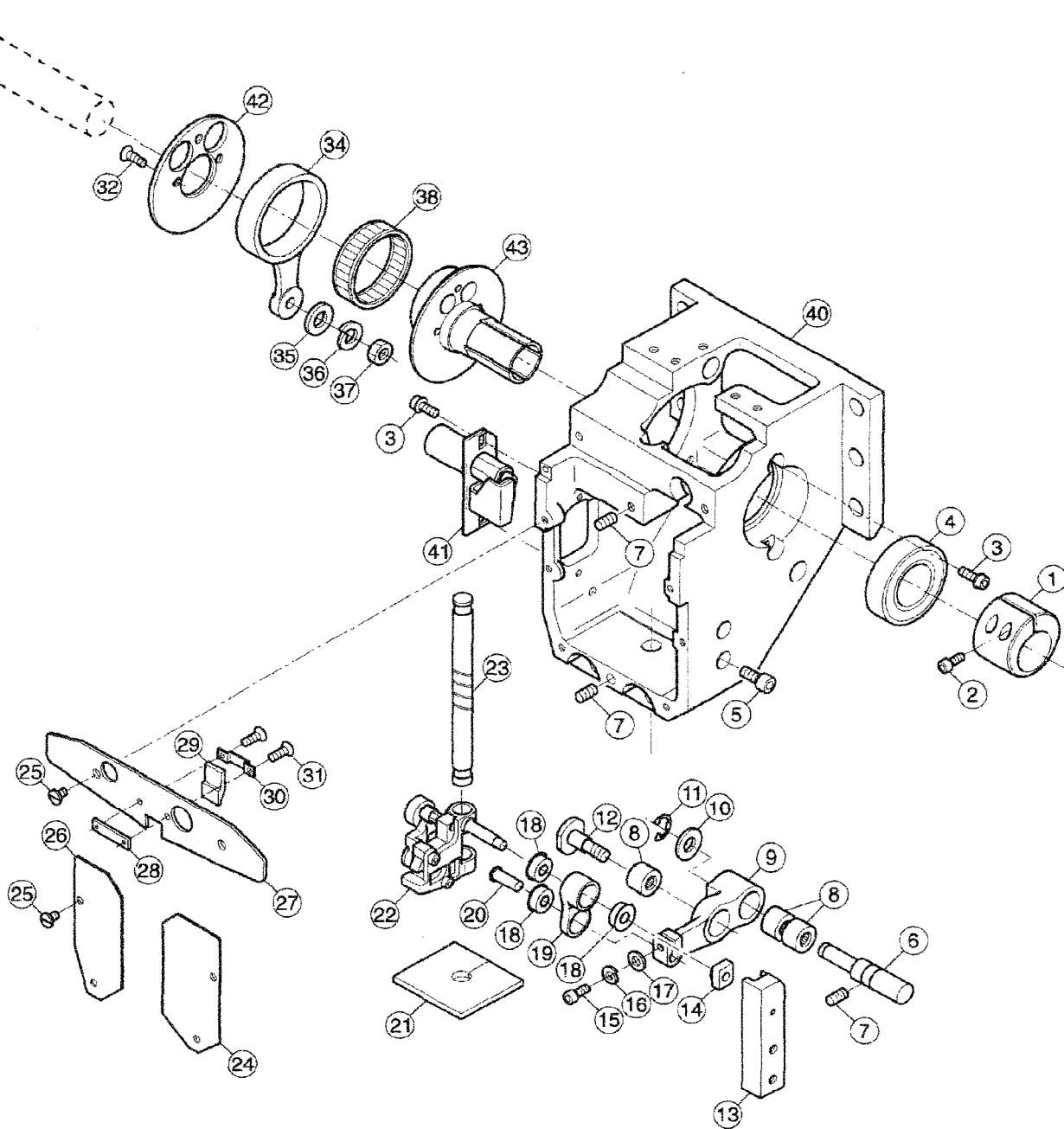
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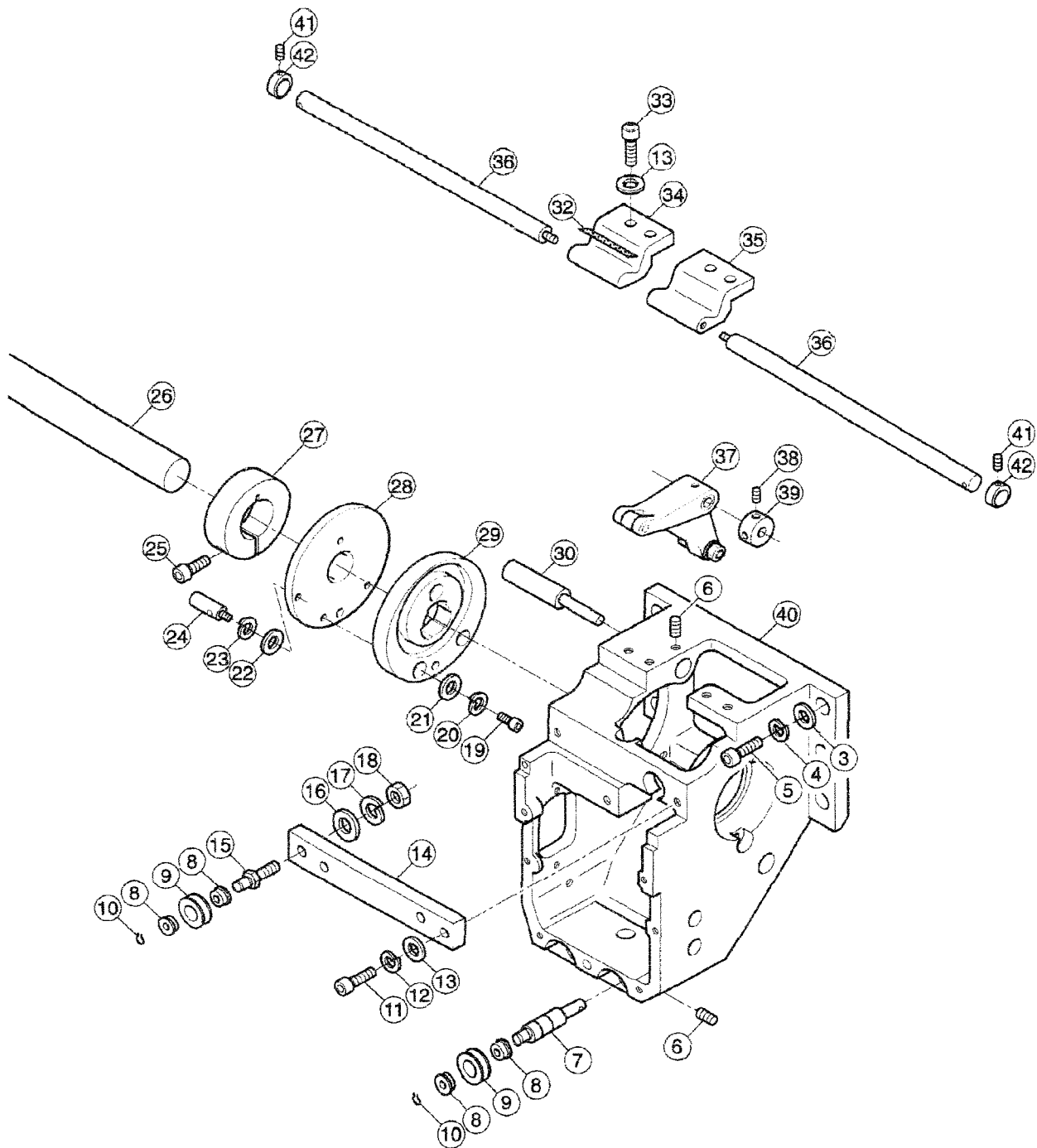
Ass'y	El't	Parts No.	Parts Names	Note
	1	HCA06040	Cam support base	
	2	HCA00100	Stud	
	3	HCA06140	Lever shaft	
	4	M0406260	Washer	
	5	HCA06130	Lever shaft support	
	6	M0406050	Lever spring	
	7	MPR00430	E-ring (E-12)	
	8	HCG06341	Solenoid base	
	9	HMF06050	Solenoid stud	
	10	HCA06030	Fixing plate	
	11	HCA06050	Collar	
	12	HCA75040	Thread cutting solenoid	
	13	HCA06020	Solenoid felt	
	14	HCA06010	Felt base	
	15	SCAA08020	Hexagon socket head cap screw (M8x20)	
	16	WSAA08000	Spring lock washer (M8)	
	17	WPAA08000	Plain washer (M8)	
	18	SCAA05015	Hexagon socket head cap screw (M5x15)	
	19	WSAA05000	Spring lock washer (M5)	
	20	WPAA05000	Plain washer (M5)	
	21	NHAA05000	Hexagon nut (M5)	
	22	SSAA05006	Hexagon socket set screw (M5x6)	
	23	SCAA05010	Hexagon socket head cap screw (M5x10)	



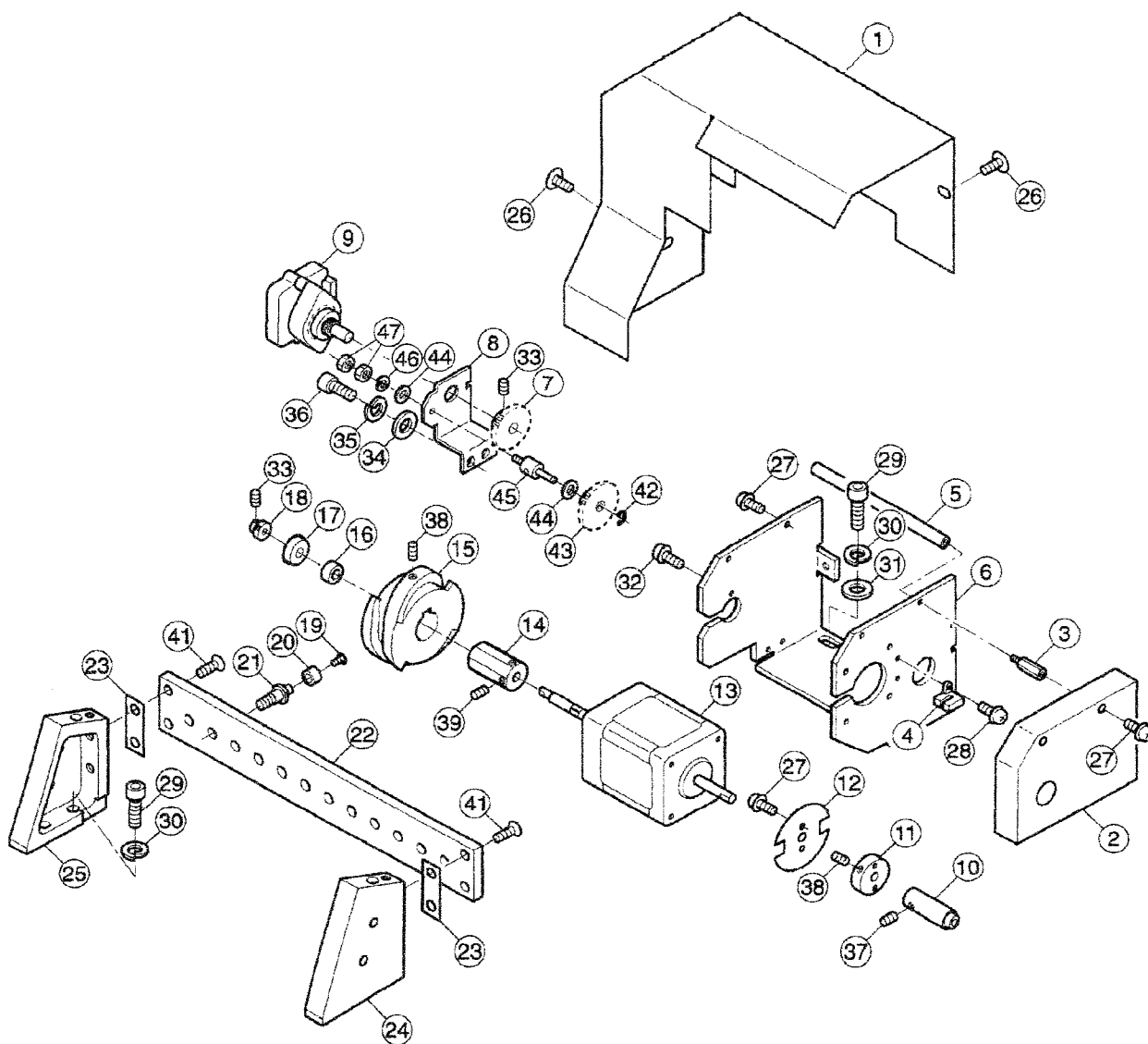
組 Ass'y	指図 El't	部品番号 PARTS No.	PARTS NAMES	CA9208 NOTE / 備考
	1	HCG08040	Fasten collar	
	2	SCAA04015	Hexagon socket head cap screw (M4x15)	
	3	SCBA04008	Hexagon socket head cap screw with flange (M4x8)	
	4	MPB00670	Bearing (6005LLB)	
	5	SCAA05012	Hexagon socket head cap screw (M5x12)	
	6	HCG08081	Pin (for needle bar driving lever)	
	7	SSAA05008	Hexagon socket set screw (M5x8)	
	8	MPB00680	Needle bearing (RNAO-8x15x10T2)	
	9	HCG08062	Needle bar driving lever	
	10	WPAA08000	Plain washer (M8)	
	11	MPR00060	E-ring (E-7)	
	12	HCG08072	Pin (for coupling rod)	
	13	HCG08140	Guide rail	
	14	M0408230	Slide block	
	15	SCAA04012	Hexagon socket head cap screw (M4x12)	
	16	WSAA04000	Spring lock washer (M4)	
	17	WPBA04000	Plain washer (M4)	
	18	MPB00660	Miniature bearing (LFW686ZZA)	
	19	HCG08092	Link	
	20	HCG08102	Pin (for link)	
	21	M0408870	Fixed head felt	
	22	HCA08022	Needle bar driver	
	23	HMF08040	Slide shaft	
	24	HCG08131	Lower face plate B	
	25	SBBB04006	Binding head screw (M4x6)	
	26	HCG08200	Upper face plate B	
	27	SGAB2E005	Flat head screw (cross recessed head, M2.5x5)	
	28	M0408423	Holding plate	
	29	M0408412	Cushion	
	30	M0408430	Plate nut	
	31	SCDA04008	Hexagon socket flat head screw (M4x8)	
	32	HCG08031	Plate	
	33	HCG08050	Connecting rod	
	34	WPAA06000	Plain washer (M6)	
	35	WSAA06000	Spring lock washer (M6)	
	36	NHAA06000	Hexagon nut (M6)	
	37	MPB00690	Needle bearing (K40x45x13)	
	38	HCG08021	Needle bar cam	
	39	HCA08014	Fixed head	
	40	HMF08300	Jump solenoid ass'y	



Ass'y	El't	Parts No.	Parts Names	Note
	1	HCG08042	Fasten collar	
	2	SCAA04015	Hexagon socket head cap screw (M4x15)	
	3	SCBA04008	Hexagon socket head cap screw with flange (M4x8)	
	4	MPB00850	Bearing (6005LLU)	
	5	SCAA05012	Hexagon socket head cap screw (M5x12)	
	6	HCG08082	Pin (for needle bar driving lever)	
	7	SSAA05008	Hexagon socket set screw (M5x8)	
	8	MPB00680	Needle bearing (RNAO-8x15x10T2)	
	9	HCG08062	Needle bar driving lever	
	10	WPAA08000	Plain washer (M8)	
	11	MPR00060	E-ring (E-7)	
	12	HCG08073	Pin (for coupling rod)	
	13	HCG08140	Guide rail	
	14	M0408230	Slide block	
	15	SCAA04012	Hexagon socket head cap screw (M4x12)	
	16	WSAA04000	Spring lock washer (M4)	
	17	WPBA04000	Plain washer (M4)	
	18	MPB00660	Miniature bearing (LFW686ZZA)	
	19	HCG08092	Link	
	20	HCG08102	Pin (for link)	
	21	HMG08150	Felt (for fixed head)	
	22	HCA08022	Needle bar driver	
	23	HMF08040	Slide shaft	
	24	HMG08110	Lower face plate (right)	
	25	M0408440	Face plate screw	
	26	HMG08100	Lower face plate (left)	
	27	HMG08120	Upper face plate C	
	28	M0408430	Plate nut	
	29	HMG08130	Cushion B	
	30	M0408423	Holding plate	
	31	SGAB2E005	Flat head screw (cross recessed head, M2.5x5)	
	32	SCDA04008	Hexagon socket flat head screw (M4x8)	
	34	HCG08051	Connecting rod	
	35	WPAA06000	Plain washer (M6)	
	36	WSAA06000	Spring lock washer (M6)	
	37	NHAA06000	Hexagon nut (M6)	
	38	MPB00690	Needle bearing (K40x45x13)	
	40	HCA08210	Fixed head	
	41	HMF08300	Jump solenoid ass'y	
	42	HCG08320	Plate B	
	43	HCG08340	Needle bar cam D	



Ass'y	El't	Parts No.	Parts Names	Note
	3	WPAA08000	Plain washer (M8)	
	4	WSAA08000	Spring lock washer (M8)	
	5	SCAA08025	Hexagon socket head cap screw (M8x25)	
	6	SSAA05008	Hexagon socket set screw (M5x8)	
	7	HMF08172	Lower roller pin	
	8	MPB00240	Bearing (LF1060ZZ)	
	9	M0408484	Bearing case	
	10	MPR00280	DIN-ring (G-6)	
	11	SCAA05020	Hexagon socket head cap screw (M5x20)	
	12	WSAA05000	Spring lock washer (M5)	
	13	WPAA05000	Plain washer (M5)	
	14	HCG08170	Roller pin guide	
	15	HMF08062	Upper roller pin	
	16	WPAA06000	Plain washer (M6)	
	17	WSAA06000	Spring lock washer (M6)	
	18	NHAA06000	Hexagon nut (M6)	
	19	SCAA04010	Hexagon socket head cap screw (M4x10)	
	20	WSAA04000	Spring lock washer (M4)	
	21	WPBA04000	Plain washer (M4)	
	22	WPAB04000	Plain washer (M4)	
	23	WSAB04000	Spring lock washer (M4)	
	24	C0408051	Positioning pin	
	25	SCAA06020	Hexagon socket head cap screw (M6x20)	
	26	→3a	Upper shaft	
	27	C0408040	Fasten collar	
	28	C0408030	Take-up lever cam fixing plate	
	29	HMF08270	Take-up lever cam	
	30	HCG08150	Cam lever shaft	
	32	HCA08140	Guide tape	
	33	SCAA05015	Hexagon socket head cap screw (M5x15)	
	34	HMF08091	Take-up lever guide base (left)	
	35	HMF08101	Take-up lever guide base (right)	
	36	HCA08150	Take-up lever guide bar (for 15 needle)	
	37	C0408065	Cam lever ass'y	
	38	SSAA04006	Hexagon socket set screw (M4x6)	
	39	HCG08160	Cam lever shaft collar	
	40	HCA08210	Fixed head	
	41	SSAA03003	Hexagon socket set screw (M3x3)	
	42	HCA08160	Stopper	

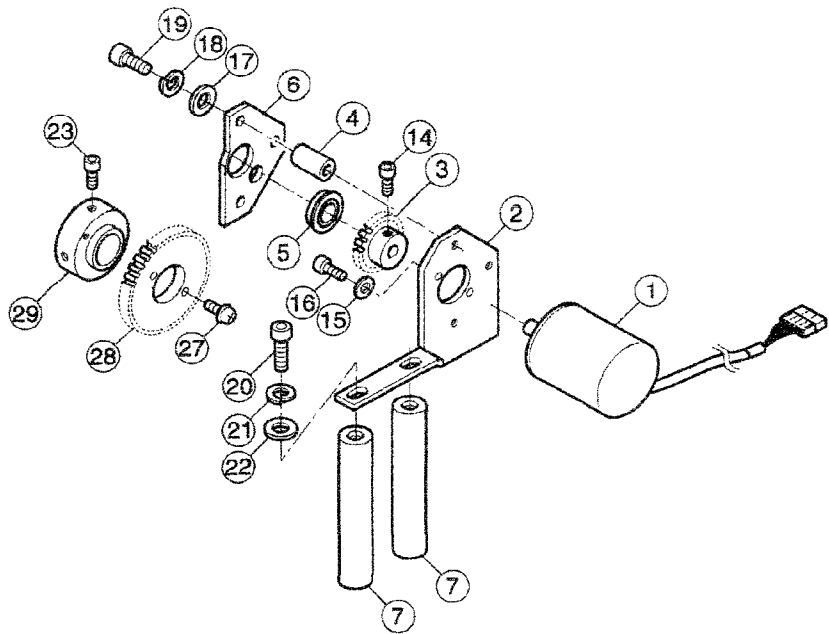


NEEDLE BAR CHANGE UNIT

CAB1131

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Ass'y	Elt	Parts No.	Parts Names	Note
	1	HCA10080	Cover	
	2	HCA10180	Slit disk caver	
	3	MPA00030	Spacer (BSB-314)	
	4	HCA75110	Sensor	
	5	HCA10070	Spacer	
	6	HCA10011	Bracket	
	7	HCA10220	Channel gear	
	8	HCA10210	Channel bracket	
	9	HCA75140	Digital code switch	
	10	HCA10050	Adjusting shaft (with screw)	
	11	HCA10170	Boss	
	12	HCA10160	Slit disc	
	13	HCA75100	Motor	
	14	HCA10110	Bushing	
	15	HCA10061	Cam for needle bar change unit	
	16	HCA10190	Collar	
	17	MPB00800	Bearing (RF1350ZZ)	
	18	HCA10042	Motor gear	
	19	HCA10130	Screw	
	20	HCA10141	Roller	
	21	HCA10151	Roller shaft	
	22	HCA10240	Trailing plate	
	23	HCA10200	Spacer	
	24	HCA10251	connecting block (right)	
	25	HCA10262	connecting block (left)	
	26	STAB04006	Truss head screw (cross recessed, M4x6)	
	27	SPDD03008	Pan head screw (cross recessed, M3x8)	
	28	SPCD03006	Pan head screw (cross recessed, M3x6)	
	29	SCAA05015	Hexagon socket head cap screw (M5x15)	
	30	WSAA05000	Spring lock washer (M5)	
	31	WPAA05000	Plain washer (M5)	
	32	SCBD04006	Hexagon socket head cap screw with flange (M4x6)	
	33	SSAA03006	Hexagon socket set screw (M3x6)	
	34	WPAA04000	Plain washer (M4)	
	35	WSAA04000	Spring lock washer (M4)	
	36	SCAA04008	Hexagon socket head cap screw (M4x8)	
	37	SSAA04004	Hexagon socket set screw (M4x4)	
	38	SSAA04008	Hexagon socket set screw (M4x8)	
	39	SSAA04006	Hexagon socket set screw (M4x6)	
	41	SGAB05012	Flat head screw (cross recessed head, M5x12)	
	42	MPR00300	E-ring (E-2)	
	43	HCA10230	Gear	
	44	WPAA03000	Plain washer (M3)	
	45	HCA10270	Gear shaft	
	46	WSAA03000	Spring lock washer (M3)	
	47	NHAA03000	Hexagon nut (M3)	



TIMING DETECTING UNIT

CAa1808

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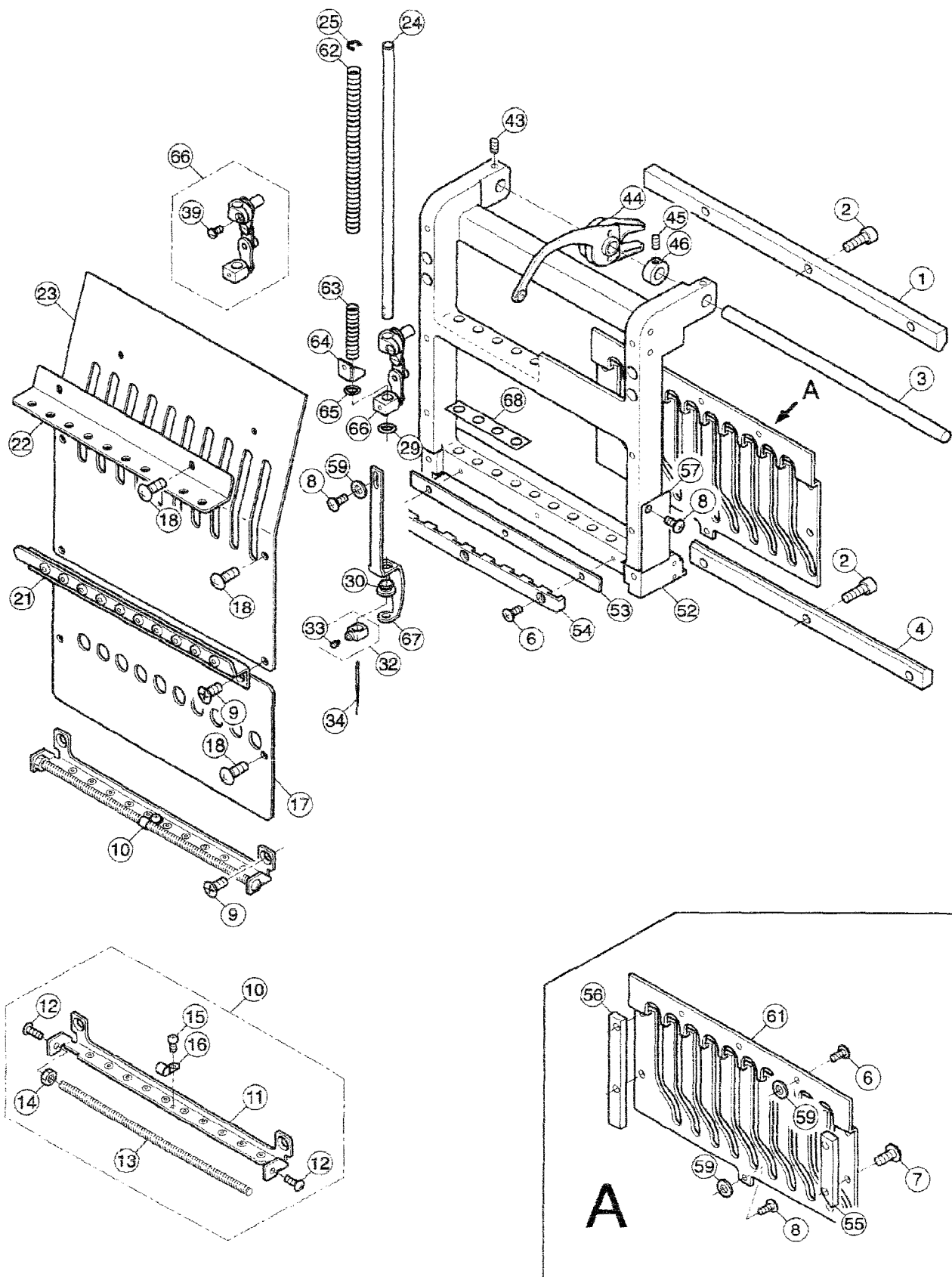
Ass'y	El't	Parts No.	Parts Names	Note
	1	HCG75001	Rotary encoder	
	2	HMF10194	Encoder bracket A	
	3	HMF10221	Encoder drive gear B	
	4	HMF10230	Encoder collar	
	5	MPB00620	Bearing (LF1680ZZ)	
	6	HMF10203	Encoder bracket B	
	7	HCA00111	Stud	
	9	HCA11030	Detecting slit disc	
	10	HCA11010	Slit disc boss	
	11	HMF10610	Detecting slit disc	
	12	HMF83050	Timing detecting board ass'y	
	13	HMF10251	Board bracket	
	14	SCAA04008	Hexagon socket head cap screw (M4x8)	
	15	WPAA03000	Plain washer (M3)	
	16	SCAA03008	Hexagon socket head cap screw (M3x8)	
	17	WPAA04000	Plain washer (M4)	
	18	WSAA04000	Spring lock washer (M4)	
	19	SCAA04028	Hexagon socket head cap screw (M4x28)	
	20	SCAA06090	Hexagon socket head cap screw (M6x90)	
	21	WSAA06000	Spring lock washer (M6)	
	22	WPAA06000	Plain washer (M6)	
	23	SCAA04012	Hexagon socket head cap screw (M4x12)	
	24	SPCD03006	Pan head screw (cross recessed, M3x6)	
	25	SSAA05008	Hexagon socket set screw (M5x8)	
	26	SPDD03006	Pan head screw (cross recessed, M3x6)	
	27	SPCD03012	Pan head screw (cross recessed, M3x12)	
	28	HMG11020	Encoder drive gear B	
	29	HCA11100	Boss A	

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Ass'y	El't	Parts No.	Parts Names	Note
	1	HMG12760	Upper rail (for 15 needle)	
	2	HMG12790	Take-up lever shaft (for 15 needle)	
	3	HMG12781	Needle bar boss check plate (for 15 needle)	
	4	HMG12770	Lower rail (for 15 needle)	
	9	HMG12800	Lower front panel (for 15 needle)	
	10	HMG12810	Thread guide plate B ass'y (for 15 needle)	
	11	HCA12120	Thread guide plate A ass'y (for 15 needle)	
	12	HCA12110	Upper front panel (for 15 needle)	
	13	HCA12150	Moving head (for 15 needle)	
	14	HMF12812	Take-up lever ass'y	
	15	HMF12152	Collar	
	16	HMG12592	Urethane sheet	
	17	HMG12582	Pressure foot felt (3.0mm)	
	18	M0412500	Pressure foot felt (1.0mm)	
	18	M0412510	Pressure foot felt (1.5mm)	
	18	M0412610	Pressure foot felt (2.0mm)	
	19	HMF12290	Adjusting sheet A	
	20	HMG12870	Pressure foot sheet (for 15 needle)	
	21	HMG12890	Pressure foot guide (for 15 needle)	
	22	M0412164	Needle bar	
	23	HMF12090	Needle bar spring (upper)	
	24	MPR00080	E-ring (E-5)	
	25	M0412812	Needle bar boss	
25 *	26	M0412200	Screw for needle bar boss	
	27	HMF12112	Bushing	
	28	HCM12011	Needle bar spring (lower)	
	29	HMG12750	Pressure foot	
	30	HMG12261	Needle holder cushion	
	31	WPBD06000	Plain washer (M6)	
	32	HMG12200	Needle holder B	
32 *	33	HMG12230	Screw for needle holder	
	34	MPZ00150	Needle (#11)	
	35	SCAA04015	Hexagon socket head cap screw (M4x15)	
	36	SBAB04006	Binding head screw (M4x6)	
	37	SGAB04008	Flat head screw (cross recessed head, M4x8)	
	39	STAB04008	Truss head screw (cross recessed, M4x8)	
	40	SSAA04004	Hexagon socket set screw (M4x4)	
	41	SSAA03006	Hexagon socket set screw (M3x6)	
	42	SBAD03008	Binding head screw (M3x8)	
	48	HMG12430	Guide tube	
	49	HMG12940	Lower thread guide plate ass'y (for 15 needle)	
49 *	50	HMG12840	Lower thread guide plate (for 15 needle)	
49 *	51	STAB04012	Truss head screw (cross recessed, M4x12)	
49 *	52	HMG12850	Spring (for 15 needle)	
49 *	53	NHAB04000	Hexagon nut (M4)	
49 *	54	SPAB03005	Pan head screw (cross recessed, M3x5)	
49 *	55	HMG12600	Spring bracket	

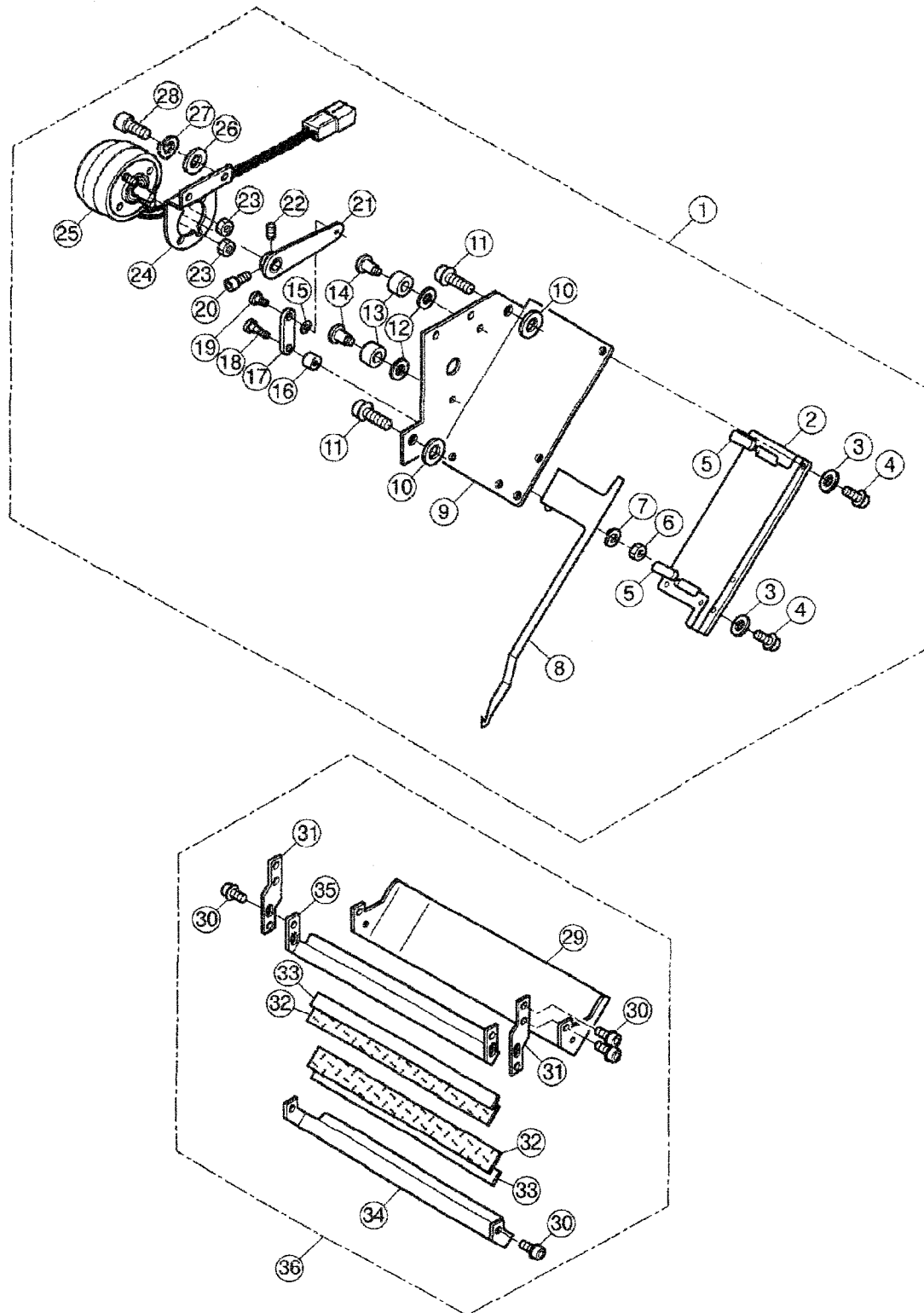
NON-NOISE REDUCTION

NOISE REDUCTION

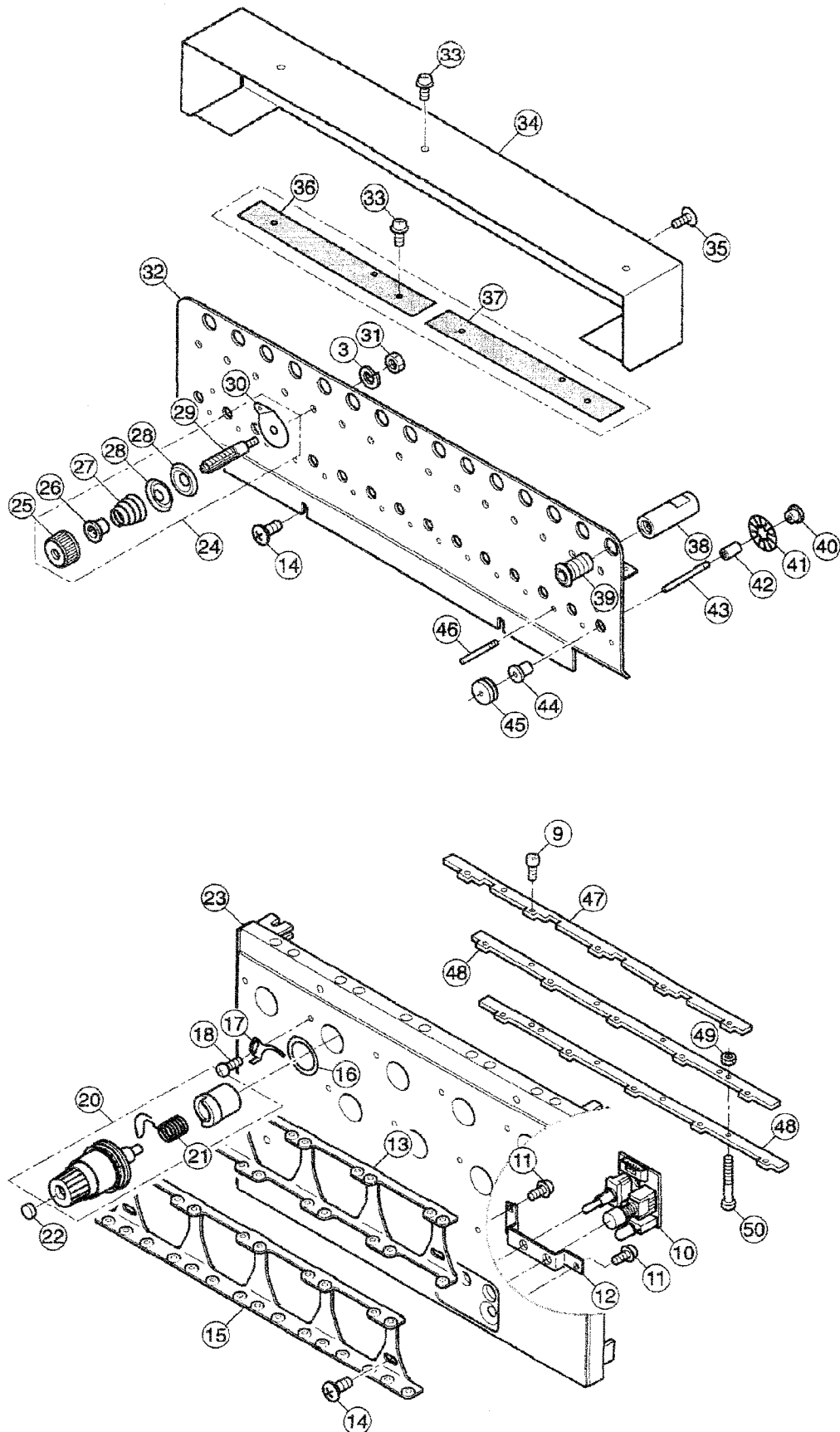


Ass'y	El't	Parts No.	Parts Names	Note
	1	HMG12760	Upper rail (for 15 needle)	
	2	SCAA04015	Hexagon socket head cap screw (M4x15)	
	3	HMG12790	Take-up lever shaft (for 15 needle)	
	4	HMG12770	Lower rail (for 15 needle)	
	6	SBAD03008	Binding head screw (M3x8)	
	7	SBAD04014	Binding head screw (M4x14)	
	8	SBBD03005	Binding head screw (M3x5)	
	9	SGAB04008	Flat head screw (cross recessed head, M4x8)	
	10	HMG12940	Lower thread guide plate ass'y (for 15 needle)	
10 *	11	HMG12840	Lower thread guide plate (for 15 needle)	
10 *	12	STAB04012	Truss head screw (cross recessed, M4x12)	
10 *	13	HMG12850	Spring (for 15 needle)	
10 *	14	NHAB04000	Hexagon nut (M4)	
10 *	15	SPAB03005	Pan head screw (cross recessed, M3x5)	
10 *	16	HMG12600	Spring bracket	
	17	HMG12800	Lower front panel (for 15 needle)	
	18	STAB04008	Truss head screw (cross recessed, M4x8)	
	21	HMG12810	Thread guide plate B ass'y (for 15 needle)	
	22	HCA12120	Thread guide plate A ass'y (for 15 needle)	
	23	HCA12110	Upper front panel (for 15 needle)	
	24	M0412164	Needle bar	
	25	MPR00080	E-ring (E-5)	
	29	MPR00500	O-ring (P-7)	
	30	HMF12112	Bushing	
	32	HMG12200	Needle holder B	
32 *	33	HMG12230	Screw for needle holder	
	34	MPZ00150	Needle (#11)	
66 *	39	M0412200	Screw for needle bar boss	
	43	SSAA04004	Hexagon socket set screw (M4x4)	
	44	HMF12812	Take-up lever ass'y	
	45	SSAA03006	Hexagon socket set screw (M3x6)	
	46	HMF12152	Collar	
	52	HCA12150	Moving head (for 15 needle)	
	53	HMG12870	Pressure foot sheet (for 15 needle)	
	54	HMG12890	Pressure foot guide (for 15 needle)	
	55	HMG13590	Spacer (right)	
	56	HMG13600	Spacer (left)	
	57	HMG13580	Side cover	
	59	WPAD03000	Plain washer (M3)	
	61	HMG13750	Guide plate (for 15 needle)	
	62	M0412172	Needle bar spring 1	
	63	HMG13680	Spring	
	64	HMG13540	Pressure foot bracket	
	65	MPR00510	O-ring	
	66	HMG13701	Link ass'y	
	67	HMG13630	Pressure foot	
	68	HMG13670	Pressure foot felt (0.6mm)	

NOISE REDUCTION



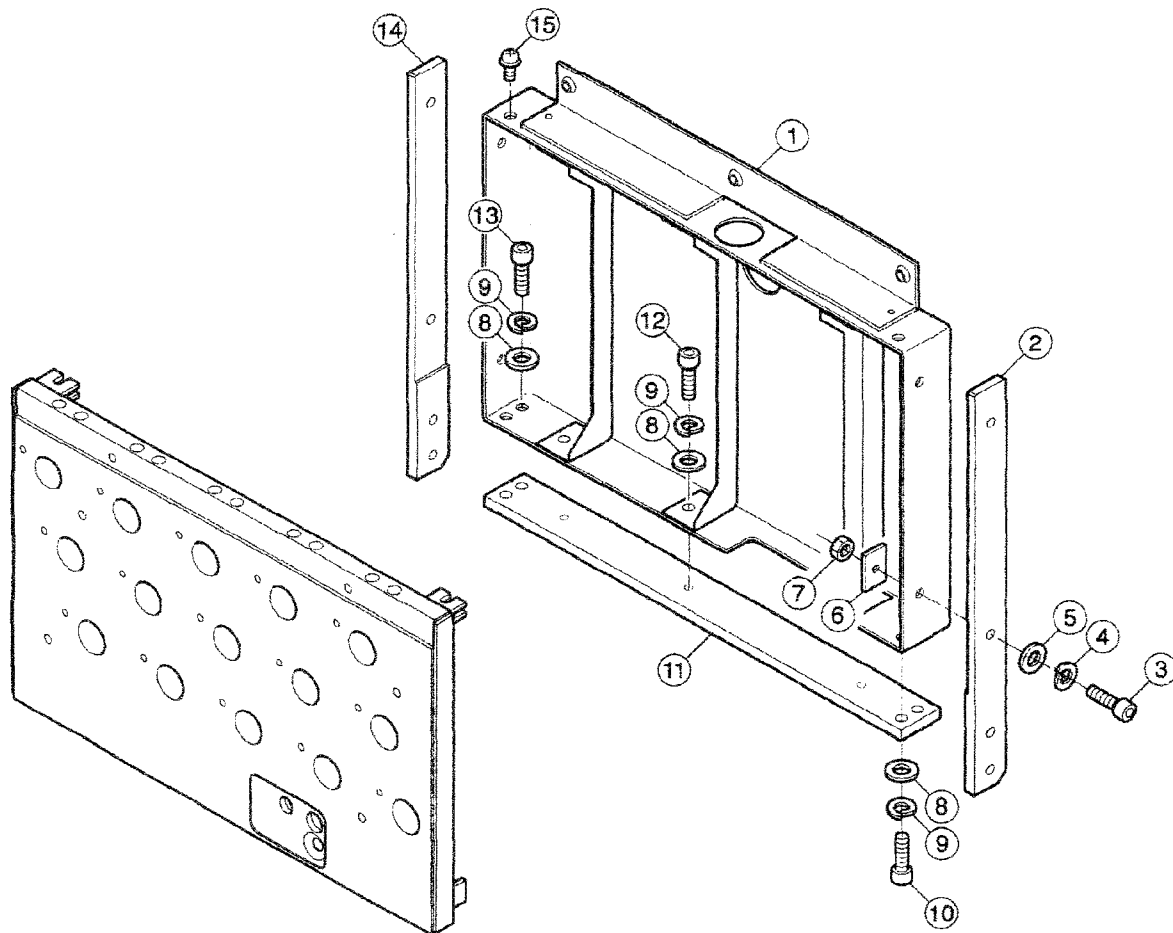
Ass'y	El't	Parts No.	Parts Names	Note
	1	HCM914120	Thread catcher ass'y	
	2	HMF14170	Guide plate B	
	3	WPAB03000	Plain washer (M3)	
	4	SPDB03008	Pan head screw (cross recessed, M3x8)	
	5	MO414180	Cushion	
	6	NHAA03000	Hexagon nut (M3)	
	7	WSAA03000	Spring lock washer (M3)	
	8	CO414055	Hook	
	9	HCM14012	Bracket	
	10	WPBA06000	Plain washer (M6)	
	11	SCBA05008	Hexagon socket head cap screw with flange (M5x8)	
	12	WPAD04000	Plain washer (M4)	
	13	MO412241	Plastic ring	
	14	MO414080	Hinge screw B	
	15	MO414150	Washer for hinge screw	
	16	CO414080	Spacer for hinge screw	
	17	MO414162	Connecting plate	
	18	CO414070	Hinge screw	
	19	MO414142	Hinge screw A	
	20	SCAA03006	Hexagon socket head cap screw (M3x6)	
	21	MO414100	Actuating plate	
	22	SSAA03006	Hexagon socket set screw (M3x6)	
	23	NHCC04000	Hexagon nut (M4)	
	24	MO414111	Solenoid fixing plate	
	25	MO414121	Solenoid	
	26	WPAA04000	Plain washer (M4)	
	27	WSAA04000	Spring lock washer (M4)	
	28	SCAA04006	Hexagon socket head cap screw (M4x6)	
	29	HCG14150	Hook guard (for 15 needle)	
	30	SCBA03006	Hexagon socket head cap screw with flange (M3x6)	
	31	HCM14030	Holder guide	
	32	HCG14130	Magic tape (for 15 needle)	
	33	HCG14140	Adhesive tape (for 15 needle)	
	34	HCG14120	Holder (lower) (for 15 needle)	
	35	HCG14110	Holder (upper) (for 15 needle)	
	36	--	Thread holder ass'y (for 15 needle)	



THREAD TENSION UNIT 1

CAB1824 11a-1

Ass'y	El't	Parts No.	Parts Names	Note
	3	WSAA04000	Spring lock washer (M4)	
	9	SCAD03008	Hexagon socket head cap screw (M3x8)	
	10	HCM83050	Jump switch board ass'y	
	11	SPDD03008	Pan head screw (cross recessed, M3x8)	
	12	HMG17400	Switch borad bracket	
	13	HMG17270	Thread guide upper ass'y	
	14	SBAB04014	Binding head screw (M4x14)	
	15	HMG17290	Thread guide lower ass'y	
	16	HMF17820	Isolation plate	
	17	HMF17870	Adjusting plate	
	18	SPAC2E006	Pan head screw (cross recessed, M2.5x6)	
	20	HMF17840	Thread tension ass'y	
20 *	21	M0416186	Thread adjusting spring	
	22	HMF17860	Thread tension lid	
	23	HMG17260	Thread tension bracket (for 15 needle)	
	24	M0416124	Thread guide unit	
24 *	25	MPZ00960	Tension nut	
24 *	26	MPZ00280	Spring guide	
24 *	27	M0416111	Spring	
24 *	28	MPZ00221	Disc	
24 *	29	M0418211	Tension shaft	
24 *	30	MPZ00200	Tension guide plate	
	31	NHAA04000	Hexagon nut (M4)	
	32	HCA16020	Thread guide bracket	
	33	SPDD03006	Pan head screw (cross recessed, M3x6)	
	34	HCA16040	Cover	
	35	STAB04006	Truss head screw (cross recessed, M4x6)	
	36	HCG83140	Detecting board B ass'y	
	37	HCG83130	Detecting board A ass'y	
	38	HCA20061	Bushing nut	
	39	HCA20050	Pipe bushing	
	40	MPZ00350	Eyelet	
	41	HMG17212	Slit disc 2	
	42	MPZ00360	Spacer	
	43	M0445070	Roller shaft	
	44	M0445080	Roller shaft support	
	45	M0445092	Detecting roller	
	46	M0445103	Thread guide bar	
	47	HMG17430	Thread tension fixer E (for 15 needle)	
	48	HMG17420	Thread tension fixer D (for 15 needle)	
	49	NHAC03000	Hexagon nut (M3)	
	50	SPAC03070	Pan head screw (cross recessed, M3x70)	

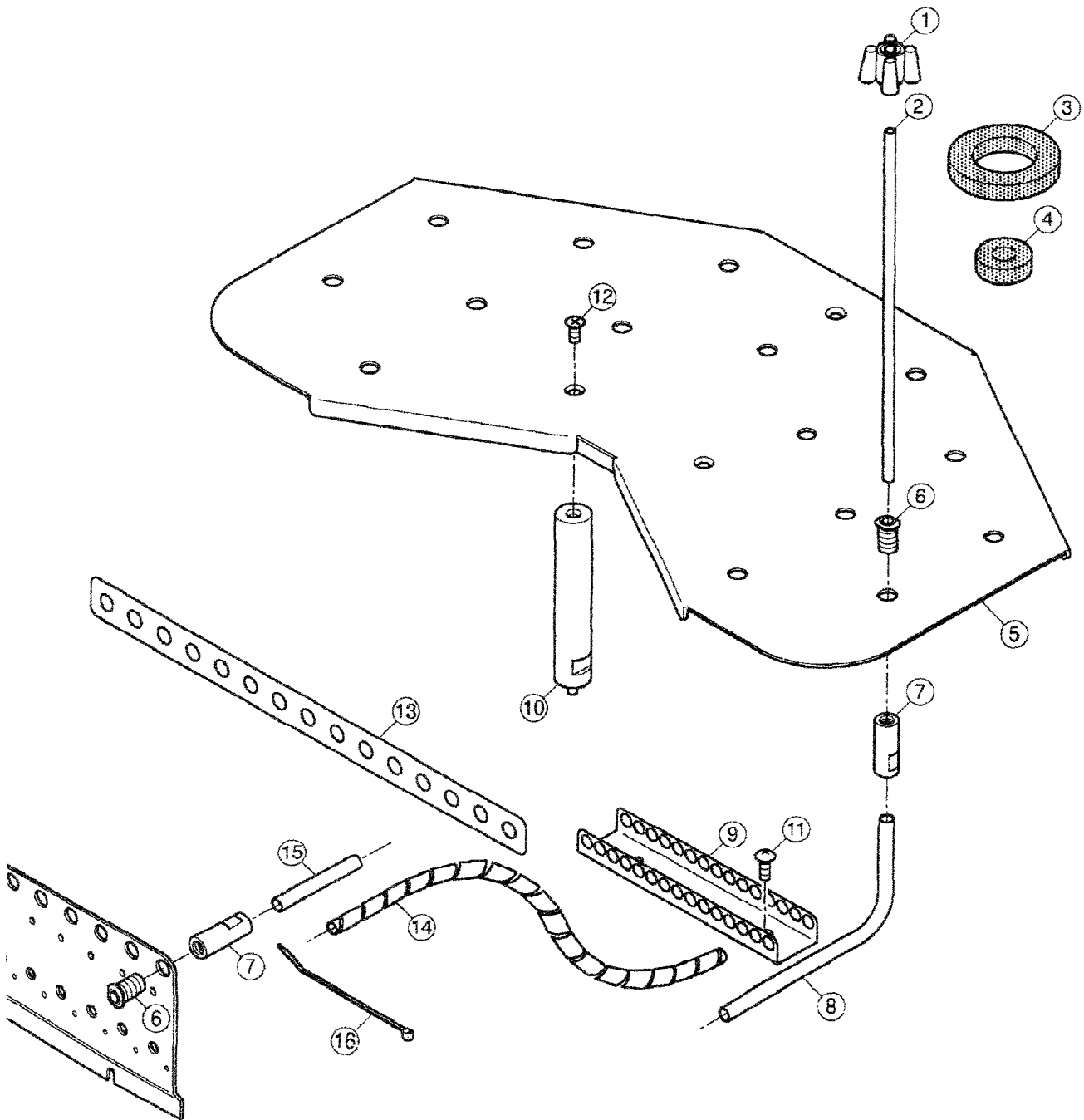


THREAD TENSION UNIT 2

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Ass'y	El't	Parts No.	Parts Names	Note
	1	HCA17031	Thread tension box	
	2	HCA17050	Reinforcement plate (right)	
	3	SCAD04015	Hexagon socket head cap screw (M4x15)	
	4	WSAD04000	Spring lock washer (M4)	
	5	WPAD04000	Plain washer (M4)	
	6	M0420901	Plate nut	
	7	NHAD04000	Hexagon nut (M4)	
	8	WPAA04000	Plain washer (M4)	
	9	WSAA04000	Spring lock washer (M4)	
	10	SCAA04022	Hexagon socket head cap screw (M4x22)	
	11	HCA17040	Base plate	
	12	SCAA04010	Hexagon socket head cap screw (M4x10)	
	13	SCAA04018	Hexagon socket head cap screw (M4x18)	
	14	HCA17060	Reinforcement plate (left)	
	15	SPDB04010	Pan head screw (cross recessed, M4x10)	

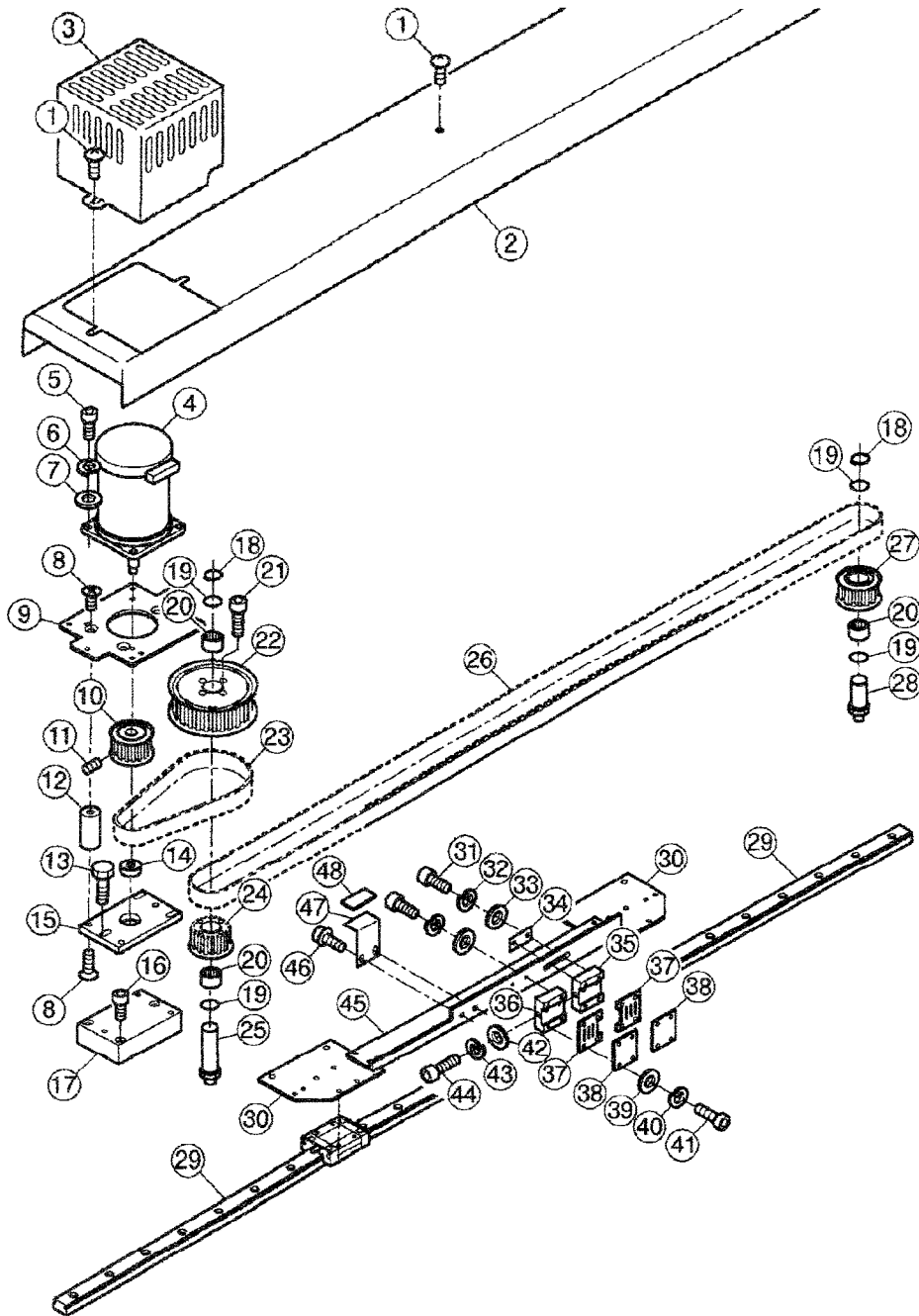


THREAD STAND

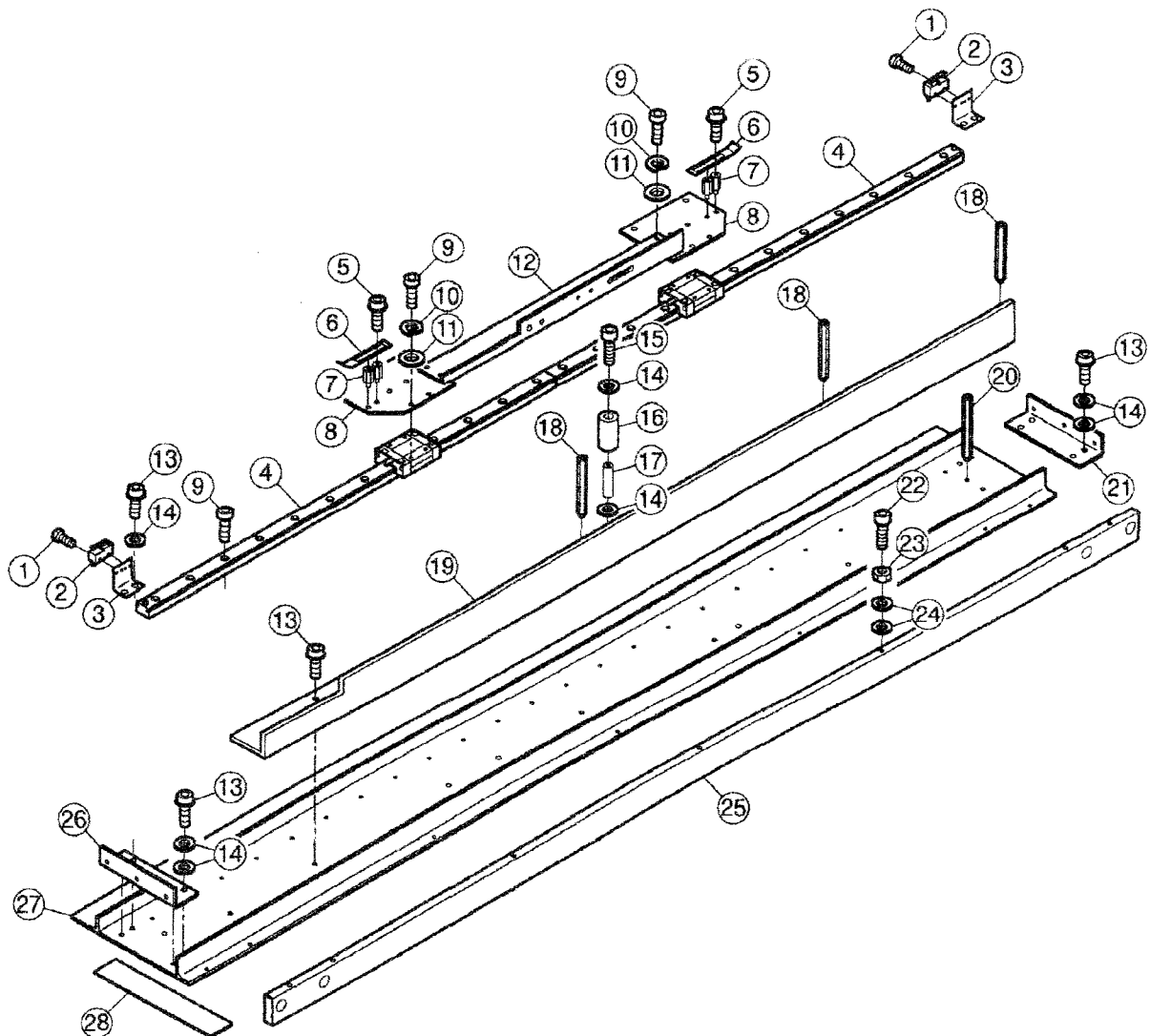
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Ass'y	Elt	Parts No.	Parts Names	Note
	1	MPZ00340	Plastic spring	
	2	HCA20101	Thread stand pipe B (185mm)	
	2	HCA20021	Thread stand pipe A (235mm)	
	3	HMF20571	Thread stand felt (80mm)	
	4	M0420051	Thread stand felt (45mm)	
	5	HCA20120	Thread stand base	
	6	HCA20050	Pipe bushing	
	7	HCA20061	Bushing nut	
	8	--	Tube	
	9	HCA20130	Tube guide	
	10	HCA20031	Pillar	
	11	STAB04006	Truss head screw (cross recessed, M4x6)	
	12	SGAB05012	Flat head screw (cross recessed head, M5x12)	
	13	HCA20180	Guide plate	
	14	--	Spiral tube	
	15	HCA20160	Connecting tube	
	16	--	Binder	



Ass'y	El't	Parts No.	Parts Names	Note
	1	STAB04008	Truss head screw (cross recessed, M4x8)	
	2	HCA25020	X carriage base cover	
	3	HCA25031	Pulse motor cover	
	4	HCA75080	Pulse motor	
	5	SCAA04010	Hexagon socket head cap screw (M4x10)	
	6	WSAA04000	Spring lock washer (M4)	
	7	WPAA04000	Plain washer (M4)	
	8	SGAB05012	Flat head screw (cross recessed head, M5x12)	
	9	HCA25092	Pulse motor bracket	
	10	HCA25060	Motor pulley	
	11	SSAA05008	Hexagon socket set screw (M5x8)	
	12	HCG25221	Pulse motor stud	
	13	SHCB04015	Hexagon head bolt (cross recessed head, M4x15)	
	14	MPB00720	Bearing (BC6-16ZZ)	
	15	HCA25050	Pulse motor base	
	16	SCAA04015	Hexagon socket head cap screw (M4x15)	
	17	HCA25140	Pulse motor block	
	18	MPR00460	C-ring (C-12)	
	19	M0424160	Spacer	
	20	MPB00280	Needle bearing (HK1210)	
	21	SCAA03020	Hexagon socket head cap screw (M3x20)	
	22	HCA25070	Change pulley	
	23	MPV00570	Timing belt	
	24	HCA25080	Drive pulley	
	25	HCA25150	Change pulley shaft	
	26	MPV00520	Timing belt	
	27	HCG25290	Idler pulley	
	28	HCA25190	Idler shaft	
	29	HCG25031	LM guide	
	30	HCG25090	Connecting plate A	
	31	SCAD04012	Hexagon socket head cap screw (M4x12)	
	32	WSAD04000	Spring lock washer (M4)	
	33	WPAD04000	Plain washer (M4)	
	34	HCG25260	Washer	
	35	HCG25130	Belt fixing plate C	
	36	HCG25110	Belt fixing plate A	
	37	HCG25270	Belt holding plate A	
	38	HCG25280	Belt holding plate B	
	39	WPAD03000	Plain washer (M3)	
	40	WSAD03000	Spring lock washer (M3)	
	41	SCAD03012	Hexagon socket head cap screw (M3x12)	
	42	WPBA04000	Plain washer (M4)	
	43	WSAA04000	Spring lock washer (M4)	
	44	SCAA04045	Hexagon socket head cap screw (M4x45)	
	45	HCA25101	Connecting plate	
	46	SCBA03006	Hexagon socket head cap screw with flange (M3x6)	
	47	HCA25040	Cover felt bracket	
	48	HCG25202	Cover felt	

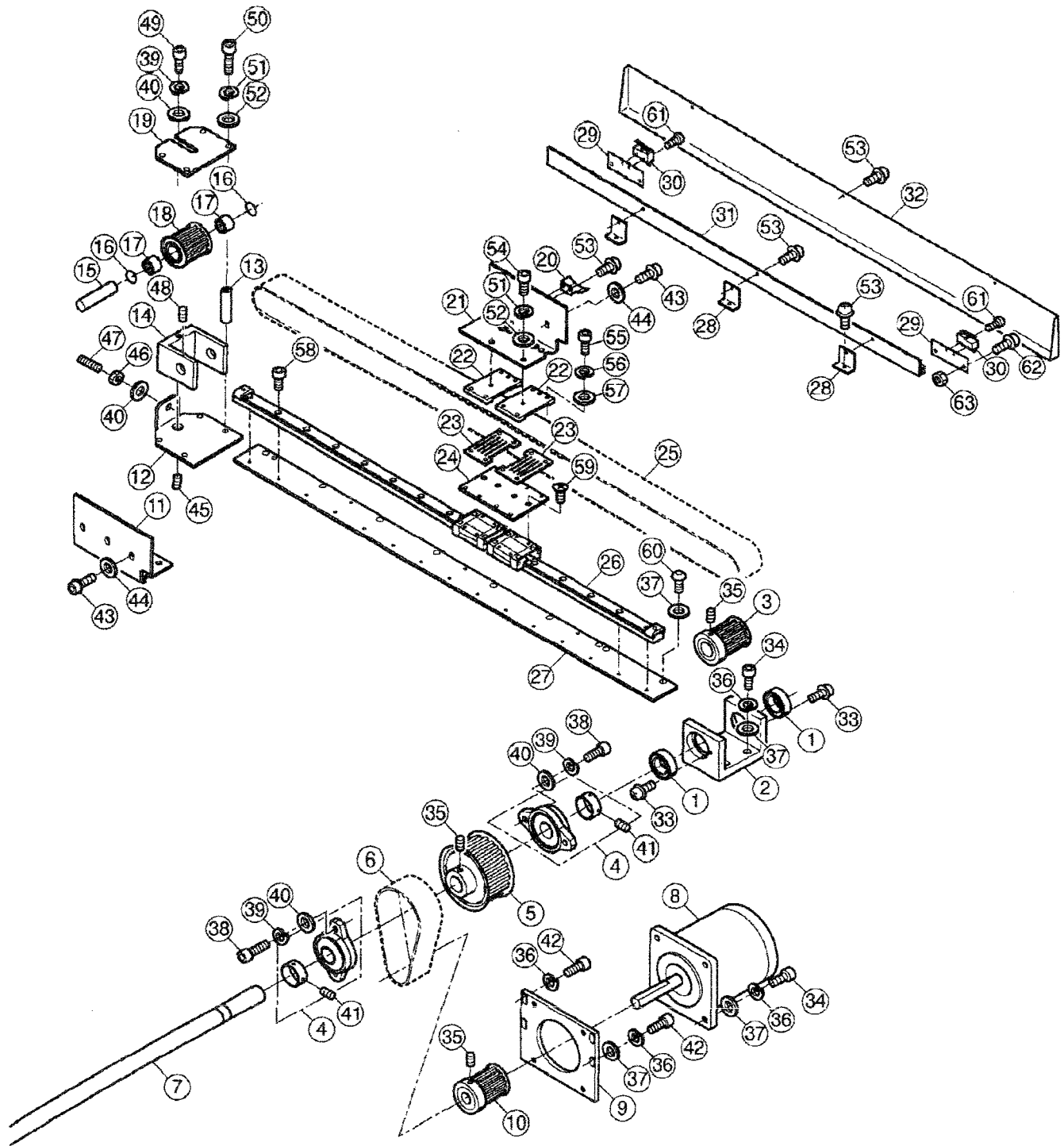


X CARRIAGE 2

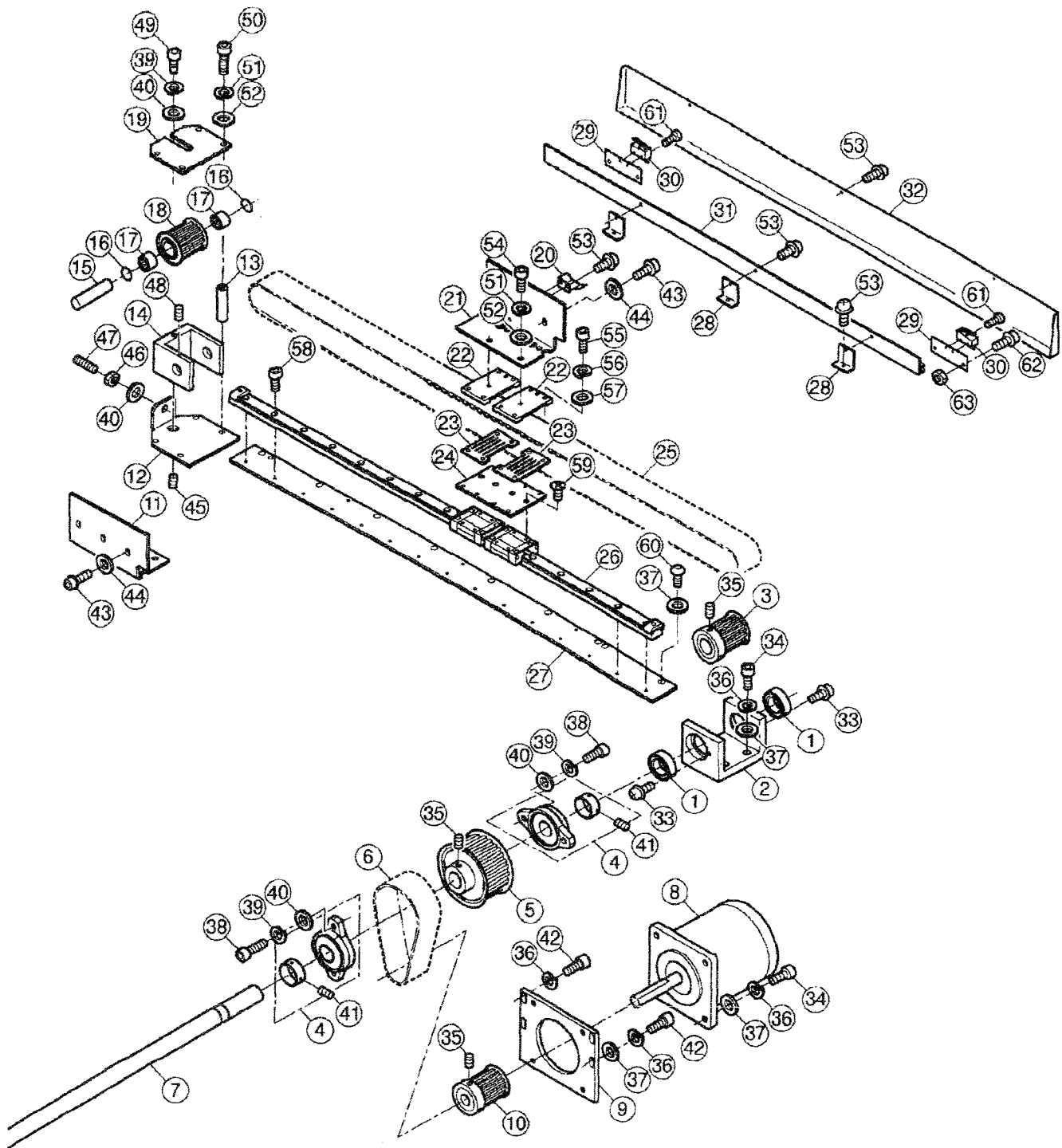
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13b-1

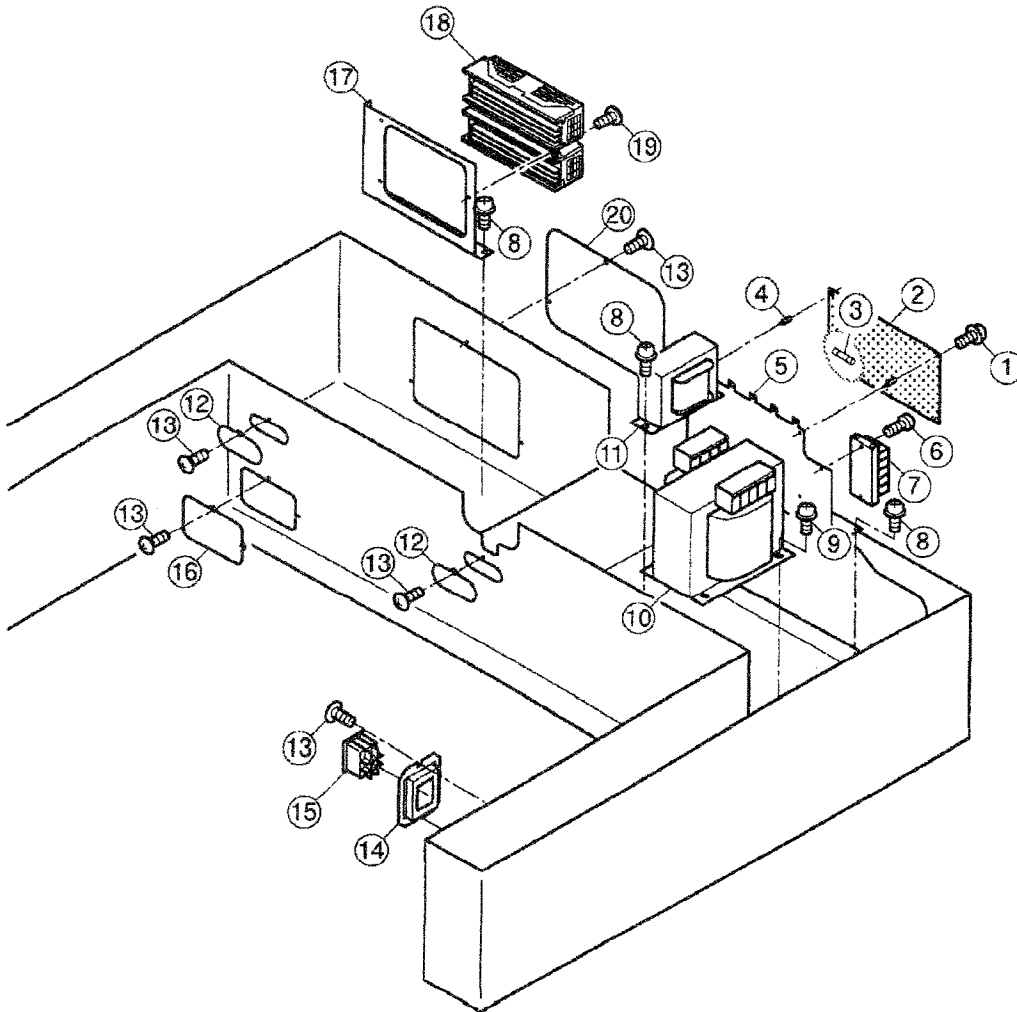
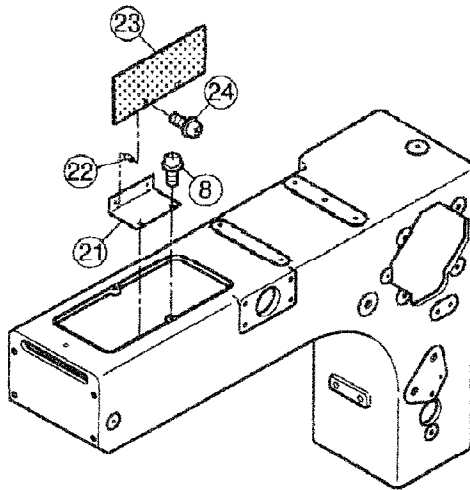
Ass'y	Elt	Parts No.	Parts Names	Note
	1	SPAC2C008	Pan head screw (cross recessed, M2.3x8)	
	2	HCG75040	Limit switch	
	3	HCA25120	Limit switch bracket	
	4	HCG25031	LM guide	
	5	SCBA03006	Hexagon socket head cap screw with flange (M3x6)	
	6	HCA25110	Limit switch dog	
	7	MPZ01960	Spacer (BSB-4312)	
	8	HCG25090	Connecting plate A	
	9	SCAA03008	Hexagon socket head cap screw (M3x8)	
	10	WSAA03000	Spring lock washer (M3)	
	11	WPAA03000	Plain washer (M3)	
	12	HCA25101	Connecting plate	
	13	SCBD04008	Hexagon socket head cap screw with flange (M4x8)	
	14	WPAD04000	Plain washer (M4)	
	15	SCAD04035	Hexagon socket head cap screw (M4x35)	
	16	HCG25250	Tension roller	
	17	MPZ01970	Spacer (CB-430)	
	18	MPA00020	Spacer (BSB-455)	
	19	HCA25180	Reinforcement plate	
	20	HCA25200	Stud	
	21	HCA25130	Stay (left)	
	22	SCAD03035	Hexagon socket head cap screw (M3x35)	
	23	NHAD03000	Hexagon nut (M3)	
	24	WPAD03000	Plain washer (M3)	
	25	HCA25170	Reinforcement pipe	
	26	HCG25360	Stay (right)	
	27	HCA25010	X carriage base	
	28	HCG25212	Base felt	



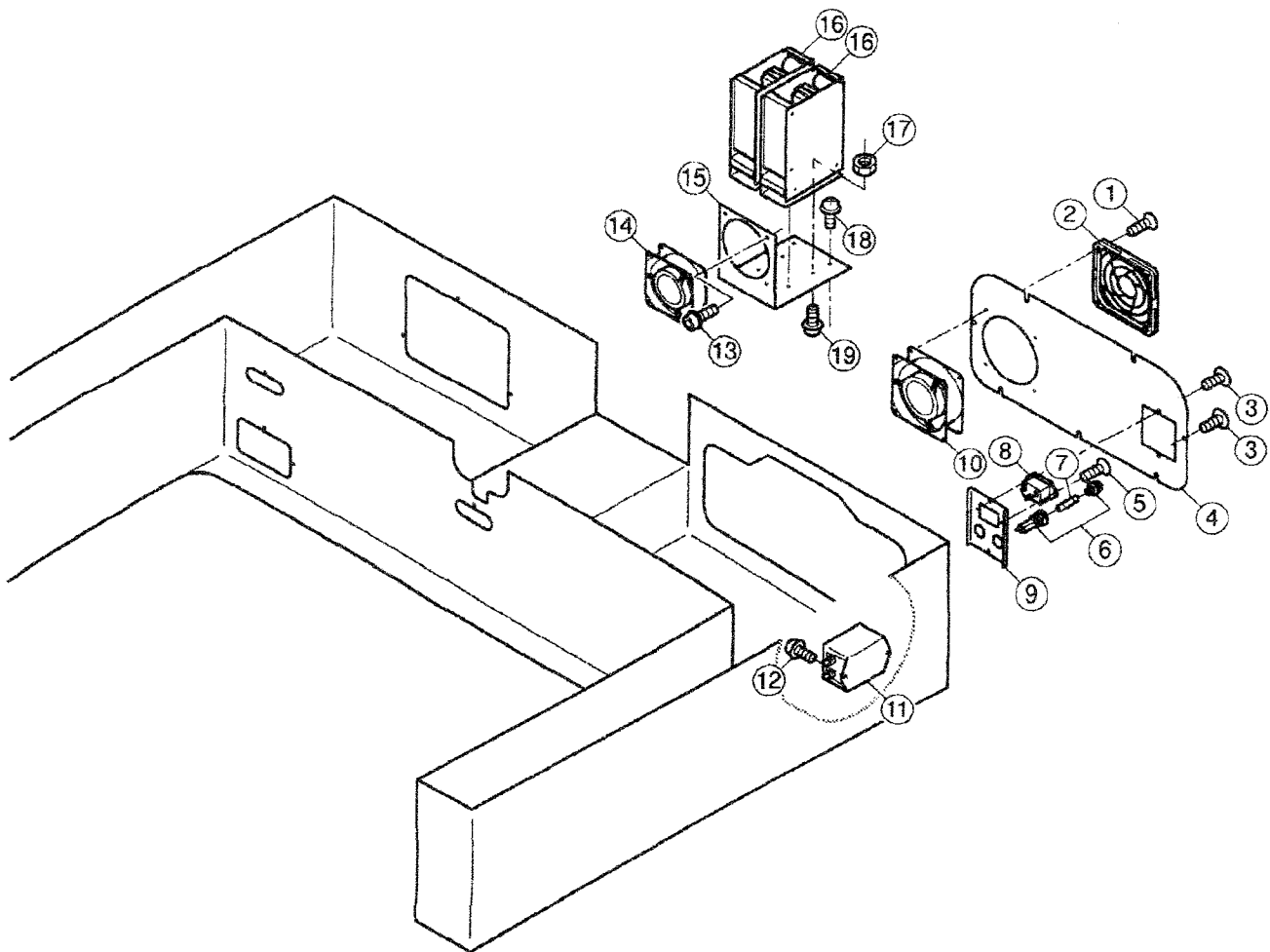
Ass'y	El't	Parts No.	Parts Names	Note
	1	MPB00270	Bearing (6903ZZ)	
	2	HCA24022	Drive shaft support	
	3	HCG24040	Drive pulley	
	4	MPB00290	Flange type bearing unit	
	5	HCA24140	Change pulley	
	6	MPV00580	Timing belt	
	7	HCA24131	Y carriage drive shaft	
	8	HCA75090	Pulse motor	
	9	HCA24160	Pulse motor bracket	
	10	HCA24150	Motor pulley	
	11	HCA24121	Stay (right)	
	12	HCA24031	Idler pulley bracket	
	13	HCA24050	Pillar	
	14	HCA24040	Idler pulley support	
	15	M0424180	Idler shaft	
	16	M0424160	Spacer	
	17	MPB00280	Needle bearing (HK1210)	
	18	HCG24050	Idler pulley	
	19	HCA24061	Holding plate	
	20	HCA24101	Limit switch dog	
	21	HCA24111	Stay (left)	
	22	HCG24131	Belt fixing plate	
	23	HCG24230	Belt holding plate A	
	24	HCG24430	Belt holding plate C	
	25	MPV00310	Timing belt	
	26	HCG24031	LM guide	
	27	HCA24012	LM guide bracket	
	28	HCA24070	Rail bracket	
	29	HCA24090	Limit switch bracket	
	30	HCG75040	Limit switch	
	31	HCA24080	Limit switch rail	
	32	HCA24171	Limit switch cover	
	33	SPDB04008	Pan head screw (cross recessed, M4x8)	
	34	SCAA05015	Hexagon socket head cap screw (M5x15)	
	35	SSAA06010	Hexagon socket set screw (M6x10)	
	36	WSAA05000	Spring lock washer (M5)	
	37	WPAA05000	Plain washer (M5)	
	38	SCAA06015	Hexagon socket head cap screw (M6x15)	
	39	WSAA06000	Spring lock washer (M6)	
	40	WPAA06000	Plain washer (M6)	
	41	SSAA04004	Hexagon socket set screw (M4x4)	
	42	SCAA05020	Hexagon socket head cap screw (M5x20)	



Ass'y	El't	Parts No.	Parts Names	Note
	43	SCBD04008	Hexagon socket head cap screw with flange (M4x8)	
	44	WPAD04000	Plain washer (M4)	
	45	SSAA04008	Hexagon socket set screw (M4x8)	
	46	NHAA06000	Hexagon nut (M6)	
	47	SSAA06035	Hexagon socket set screw (M6x35)	
	48	SSAA03006	Hexagon socket set screw (M3x6)	
	49	SCAA06012	Hexagon socket head cap screw (M6x12)	
	50	SCAA04055	Hexagon socket head cap screw (M4x55)	
	51	WSAA04000	Spring lock washer (M4)	
	52	WPAA04000	Plain washer (M4)	
	53	SPDD03006	Pan head screw (cross recessed, M3x6)	
	54	SCAA04008	Hexagon socket head cap screw (M4x8)	
	55	SCAA03015	Hexagon socket head cap screw (M3x15)	
	56	WSAA03000	Spring lock washer (M3)	
	57	WPAA03000	Plain washer (M3)	
	58	SCAA03008	Hexagon socket head cap screw (M3x8)	
	59	HCA24180	Flat head screw	
	60	SAAA05010	Hexagon socket button head screw (M5x10)	
	61	SPAC2C008	Pan head screw (cross recessed, M2.3x8)	
	62	SCBA03006	Hexagon socket head cap screw with flange (M3x6)	
	63	NHAA03000	Hexagon nut (M3)	

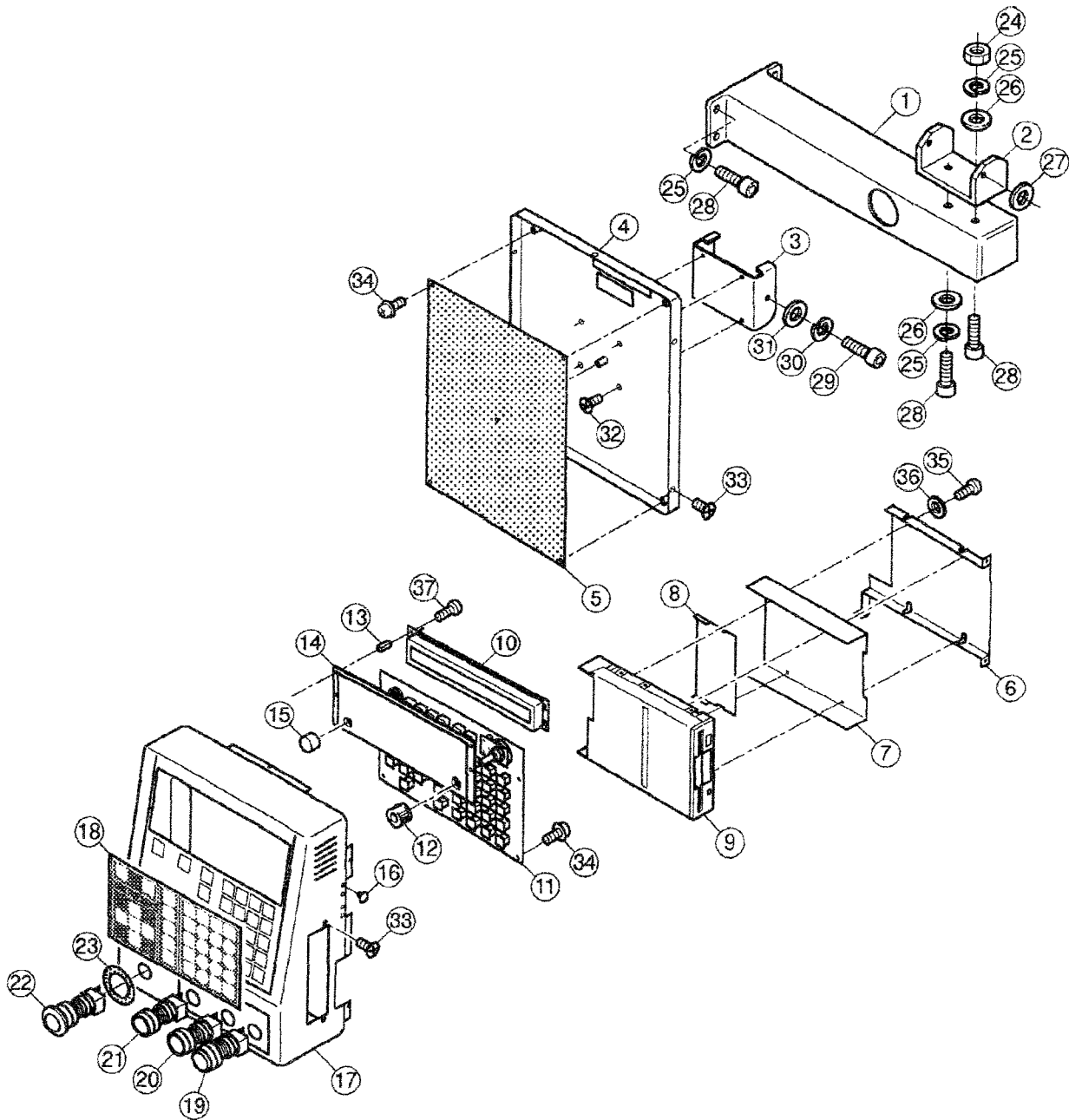


Ass'y	El't	Parts No.	Parts Names	Note
	1	SPDD03006	Pan head screw (cross recessed, M3x6)	
	2	HCA83015	Drive circuit board ass'y	
	3	EPF00330	Fuse (2A)	
	4	MPZ00470	Spacer (BSB-312)	
	5	HCA27042	Bracket for drive circuit board	
	6	SPAD04014	Pan head screw (cross recessed, M4x14)	
	7	EPF00290	Terminal base	
	8	SPDB04008	Pan head screw (cross recessed, M4x8)	
	9	SPDB05008	Pan head screw (cross recessed, M5x8)	
	10	EPK00810	Transformer	
	11	EPK00830	Transformer	
	12	HCA00010	Cover A	
	13	STAB04006	Truss head screw (cross recessed, M4x6)	
	14	HCA00041	Power switch bracket	
	15	EPS00810	Power switch	
	16	HCA00020	Cover B	
	17	HCA27051	Inverter bracket	
	18	EPM00450	Inverter	
	19	SBAB04008	Binding head screw (M4x8)	
	20	HCA00061	Inverter cover	
	21	HCA27020	Bracket for thread detecting board	
	22	MPZ00360	Spacer (C-310)	
	23	HMX83228	Thread detecting board ass'y	
	24	SPDB03016	Pan head screw (cross recessed, M3x16)	



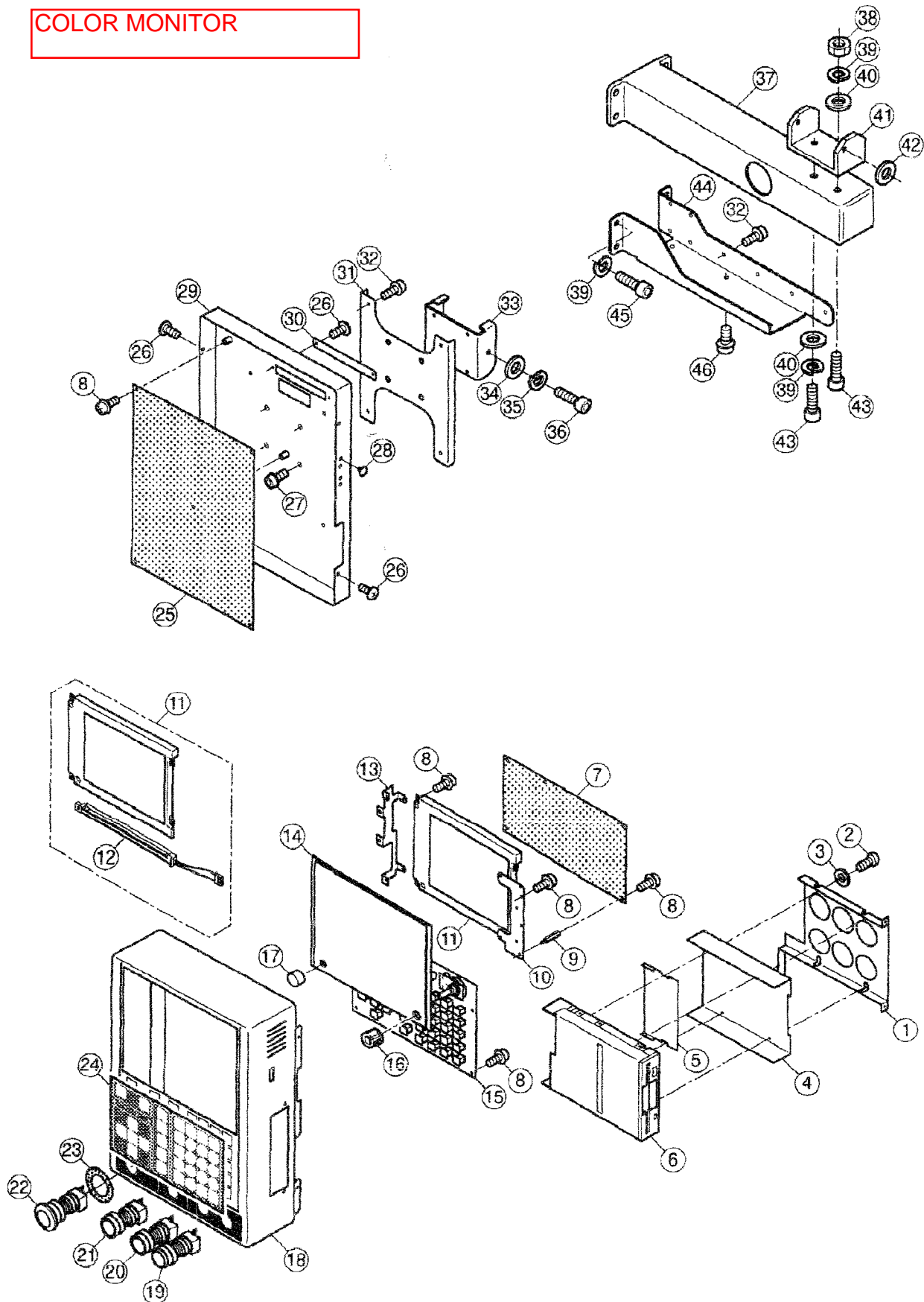
Ass'y	El't	Parts No.	Parts Names	Note
	1	SGAB04020	Flat head screw (cross recessed head, M4x20)	
	2	EPK00680	Filter	
	3	STAB04006	Truss head screw (cross recessed, M4x6)	
	4	HCA00071	Cover	
	5	SGAB03006	Flat head screw (cross recessed head, M3x6)	
	6	EPF00070	Fuse holder	
	7	EPF00360	Fuse (6A)	
	8	EPK00720	Socket	
	9	HCA27090	Fuse holder bracket	
	10	EPK00670	Fan	
	11	EPK00470	Noise filter	
	12	SPDB04006	Pan head screw (cross recessed, M4x6)	
	13	SCBD04006	Hexagon socket head cap screw with flange (M4x6)	
	14	HCA75130	Fan	
	15	HCA27010	Driver bracket	
	16	EPM00460	Pulse motor driver	
	17	NHAB03000	Hexagon nut (M3)	
	18	SPDB04008	Pan head screw (cross recessed, M4x8)	
	19	SPDD03008	Pan head screw (cross recessed, M3x8)	

STANDARD MONITOR



Ass'y	El't	Parts No.	Parts Names	Note
	1	HCA29052	Arm	STANDARD MONITOR
	2	HCA29062	Control box base	
	3	HCA29071	Control box bracket	
	4	HCA29080	Rear panel	
	5	HCG83054	CPU board ass'y	
	6	HCG29150	FDD bracket	
	7	M0429360	Insulation plate	
	8	HMF29111	Insulation plate B	
	9	EPZ00282	Disk drive unit (3 mode type)	
	10	SF429092	Liquid crystal display	
	11	HCG83060	Switch board ass'y	
	12	EPS00350	Volume knob	
	13	MPZ01980	Spacer (AS-312)	
	14	HCG29112	Display panel	
	15	EPS00640	Switch top	
	16	FRA44630	Cushion	
	17	HCA29032	Chassis	
	18	HCG51031	Switch sheet C	
	19	EPS00680	Stop switch (black)	
	20	EPS00670	Start switch (white)	
	21	EPS00730	Thread cut switch (blue)	
	22	EPS00840	Emergency stop switch	
	23	HMF51080	Emergency stop sticker	
	24	NHAD06000	Hexagon nut (M6)	
	25	WSAD06000	Spring lock washer (M6)	
	26	WPAD06000	Plain washer (M6)	
	27	WPAD08000	Plain washer (M8)	
	28	SCAD06015	Hexagon socket head cap screw (M6x15)	
	29	SCAD05015	Hexagon socket head cap screw (M5x15)	
	30	WSAD05000	Spring lock washer (M5)	
	31	WPAD05000	Plain washer (M5)	
	32	SGAB04006	Flat head screw (cross recessed head, M4x6)	
	33	SGAB03006	Flat head screw (cross recessed head, M3x6)	
	34	SPDD03006	Pan head screw (cross recessed, M3x6)	
	35	SPAH03004	Pan head screw (cross recessed, M3x4)	
	36	WPBD03000	Plain washer (M3)	
	37	SPAD03006	Pan head screw (cross recessed, M3x6)	

COLOR MONITOR

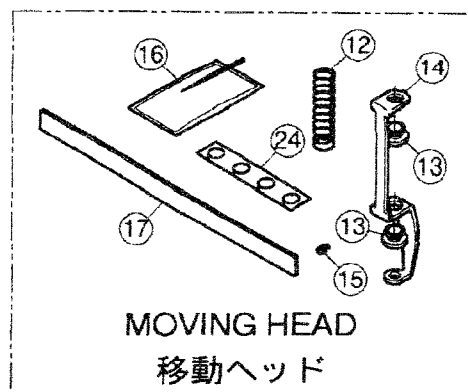
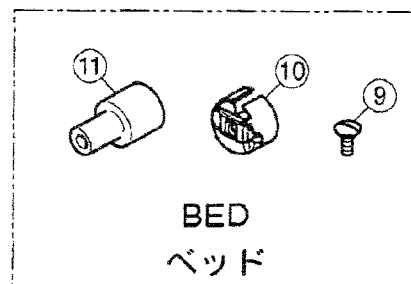
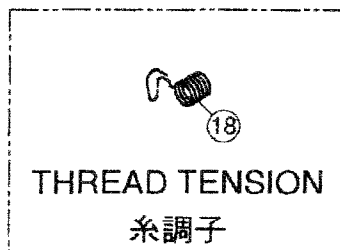
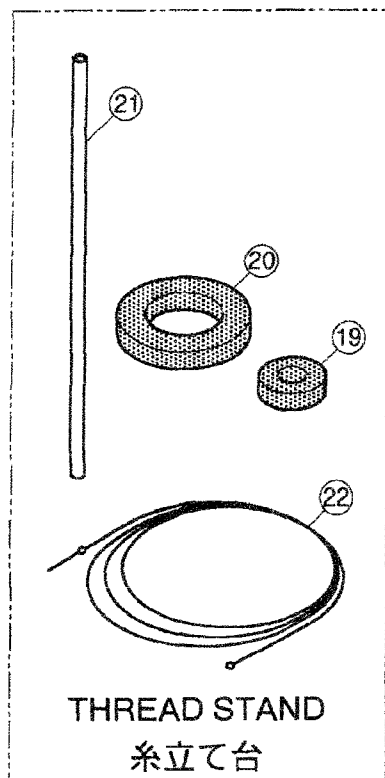
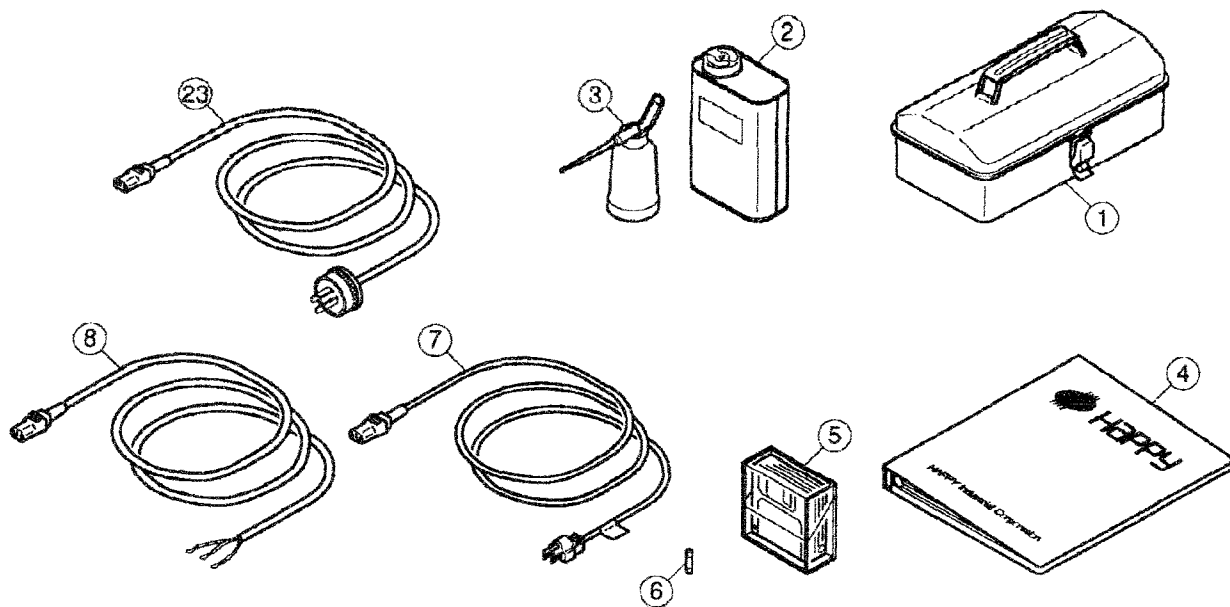


CONTROL BOX

CAC2501

16a-1

Ass'y	El't	Parts No.	Parts Names	Note
	1	HCA29641	FDD bracket	COLOR MONITOR
	2	SPAH03004	Pan head screw (cross recessed, M3x4)	
	3	WPBD03000	Plain washer (M3)	
	4	M0429360	Insulation plate	
	5	HMF29111	Insulation plate B	
	6	EPZ00282	Disk drive unit (3 mode type)	
	7	HCG83110	LCD board ass'y	
	8	SPDD03006	Pan head screw (cross recessed, M3x6)	
	9	MPZ01390	Spacer (BSB-320)	
	10	HCA29630	LCD bracket (right)	
	11	EPZ00460	LCD unit	
	12	EPZ00470	Lamp unit	
	13	HCA29621	LCD bracket (left)	
	14	--	Display panel (with seal)	
	15	HCG83060	Switch board ass'y	
	16	EPS00350	Volume knob	
	17	EPS00640	Switch top	
	18	HCA29612	Front chassis	
	19	EPS00680	Stop switch (black)	
	20	EPS00670	Start switch (white)	
	21	EPS00730	Thread cut switch (blue)	
	22	EPS00840	Emergency stop switch	
	23	HMF51080	Emergency stop sticker	
	24	HCG51031	Switch sheet C	
	25	HCG83054	CPU board ass'y	
	26	SBAB03005	Binding head screw (M3x5)	
	27	SCBD04008	Hexagon socket head cap screw with flange (M4x8)	
	28	FRA44630	Cushion	
	29	HCA29651	Rear chassis	
	30	HCA29711	DIP switch cover	
	31	HCA29661	Reinforcement plate	
	32	SCBD04006	Hexagon socket head cap screw with flange (M4x6)	
	33	HCA29071	Control box bracket	
	34	WPAD05000	Plain washer (M5)	
	35	WSAD05000	Spring lock washer (M5)	
	36	SCAD05015	Hexagon socket head cap screw (M5x15)	
	37	HCA29690	Arm	
	38	NHAD06000	Hexagon nut (M6)	
	39	WSAD06000	Spring lock washer (M6)	
	40	WPAD06000	Plain washer (M6)	
	41	HCA29062	Control box base	
	42	WPAD08000	Plain washer (M8)	
	43	SCAD06015	Hexagon socket head cap screw (M6x15)	
	44	HCA29701	Arm bracket	
	45	SCAD06018	Hexagon socket head cap screw (M6x18)	
	46	SCBD05008	Hexagon socket head cap screw with flange (M5x8)	

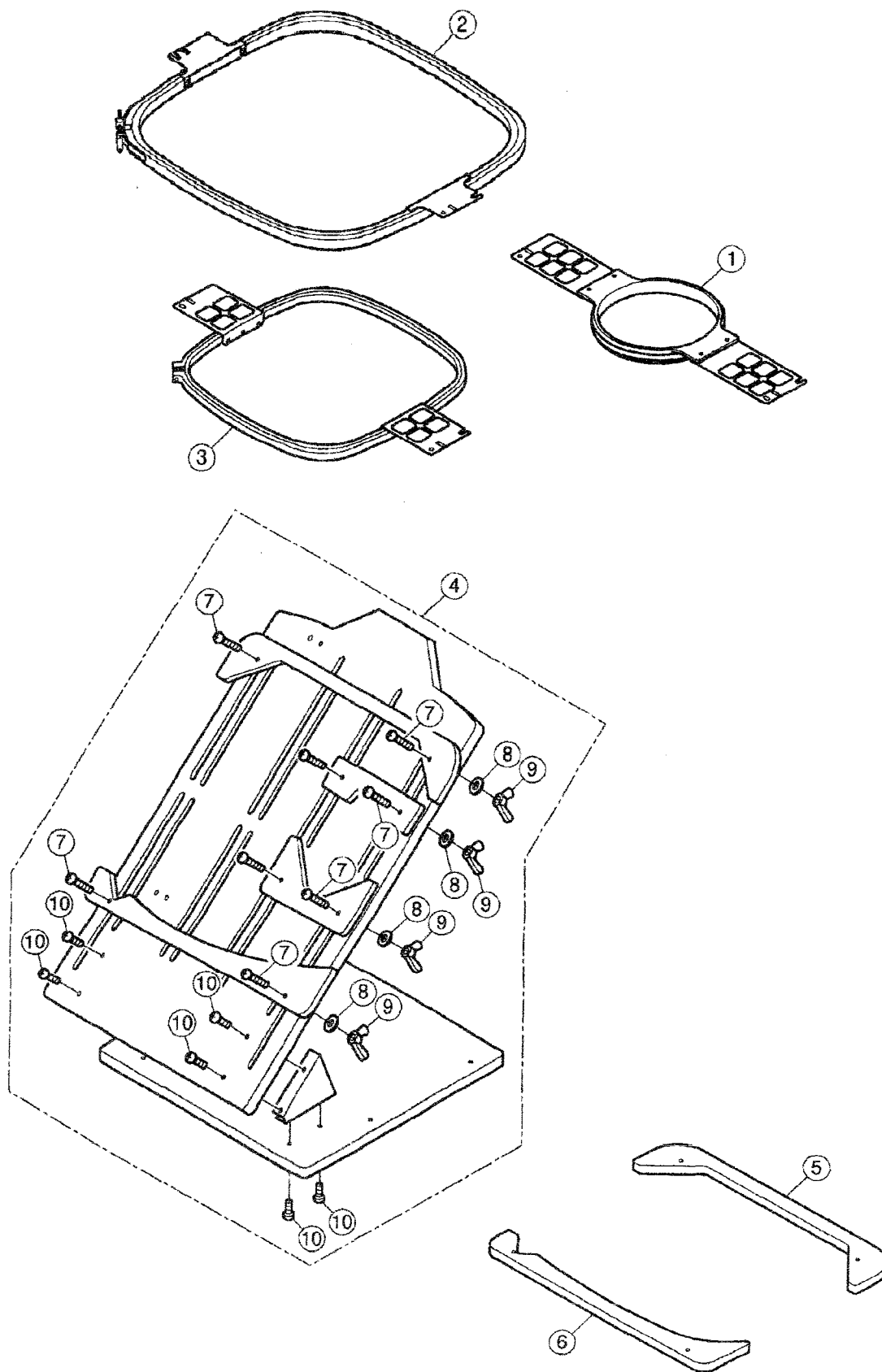


ACCESSORIES 1

CAAS1001

17a-1

Ass'y	El't	Parts No.	Parts Names	Note
1*	1	MPZ00530	Tool set	
	2	MPZ00480	Machine oil	
	3	--	Oiler	
	4	--	Instruction book	
	5	EPZ00450	Floppy disk (1 case)	
	6	EPF00360	Fuse (6A)	
	6	EPF00330	Fuse (2A)	
	7	EPE00050	Power cord (for 120V)	
	8	HCA70052	Power cord (for 200V)	
	9	MPZ00040	Screw for needle plate	
	10	MPZ00080	Bobbin case	
	11	M0404342	Needle height gauge	
	13	HMF12112	Bushing	
	15	HMG12230	Screw for needle holder	
	16	MPZ00150	Needle (#11)	
	17	HMG12470	Thread holding rubber B	
	18	M0416186	Thread adjusting spring	
	19	M0420051	Thread stand felt (45mm)	
	20	HMF20571	Thread stand felt (80mm)	
	21	HCA20101	Thread stand pipe B (185mm)	
	21	HCA20021	Thread stand pipe A (235mm)	
	22	HCA20090	Guide rope	
	23	HCA70261	Power cord (for 200V)	
	24	HMG13680	Spring	
	25	HMG13630	Pressure foot	

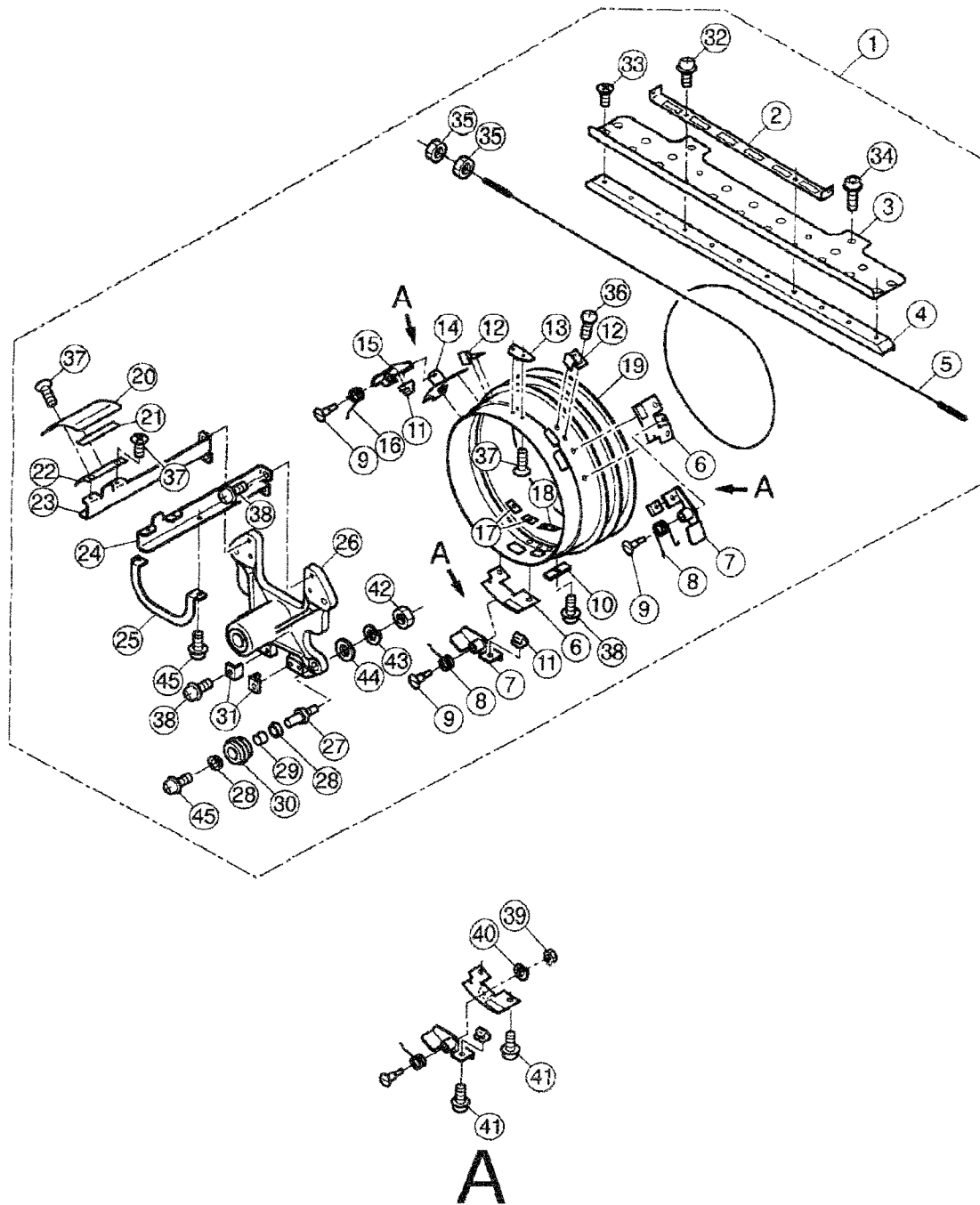


ACCESSORIES 2

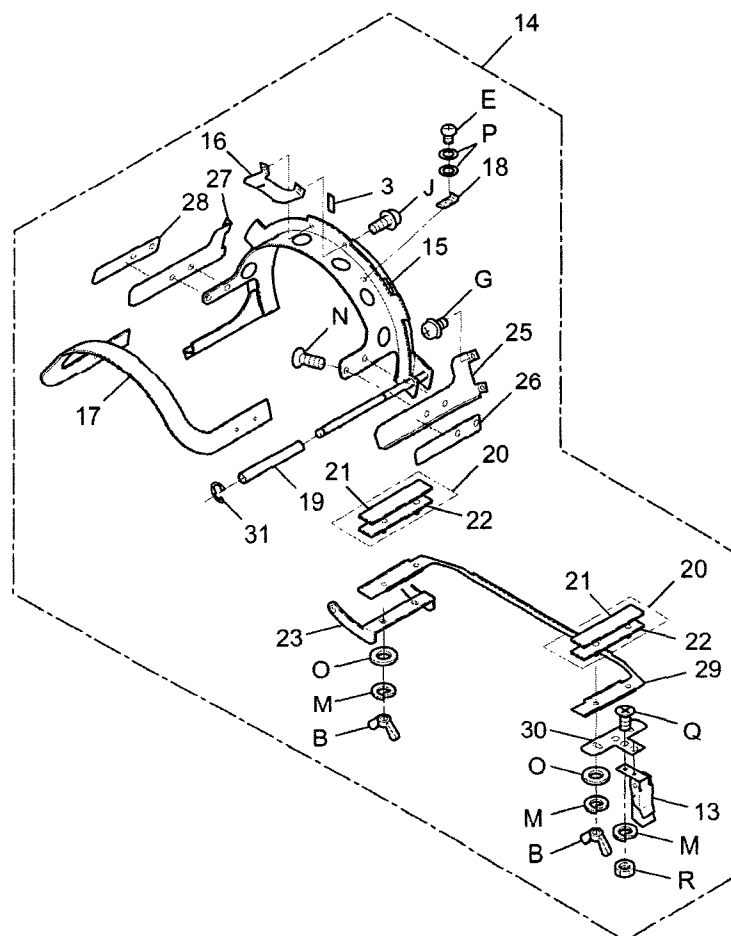
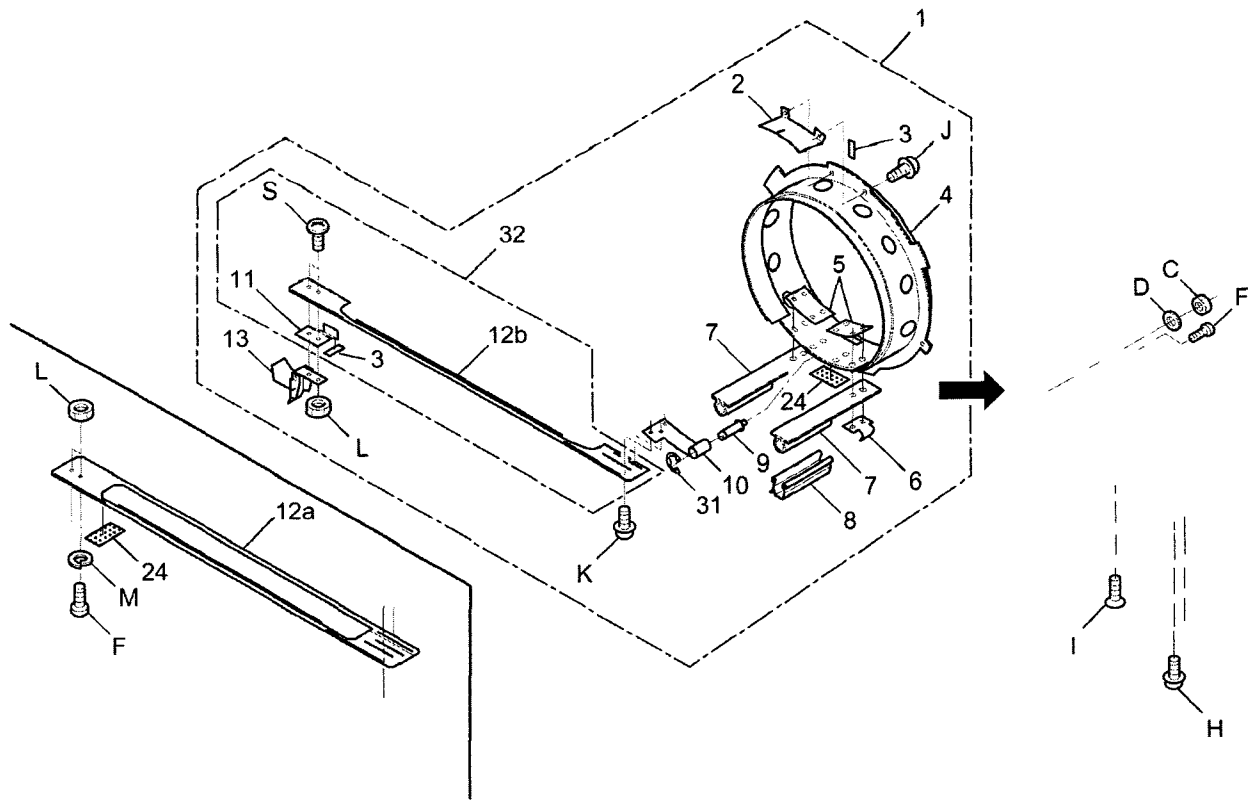
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17b-1

Ass'y	El't	Parts No.	Parts Names	Note
	1	HCM41214	PTA-15-520	
	1	HCM41254	PTA-18-520	
	2	FRA40282	WS-42440-520	
	3	FRA40122	PTA-32320-520	
	4	FRA40500	Preparatory table ass'y (for PTA-32320)	
	5	FRA40430	Holding plate F	
	6	FRA40510	Holding plate I	
	7	SPCB05040	Pan head screw (cross recessed, M5x40)	
	8	WPAB05000	Plain washer (M5)	
	9	NWAB05000	Wing nut (M5)	
	10	SPCB05020	Pan head screw (cross recessed, M5x20)	

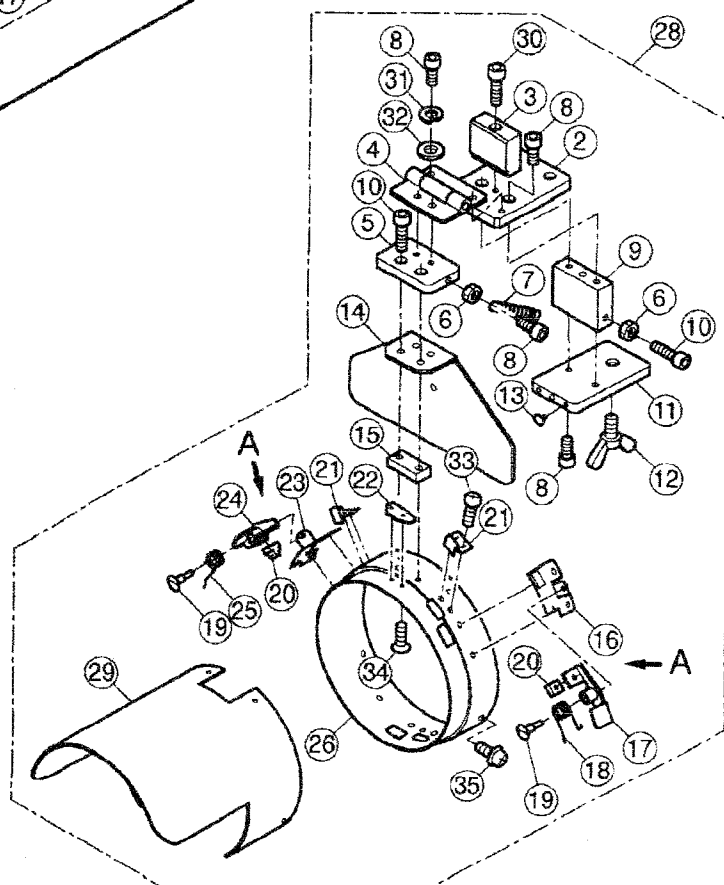
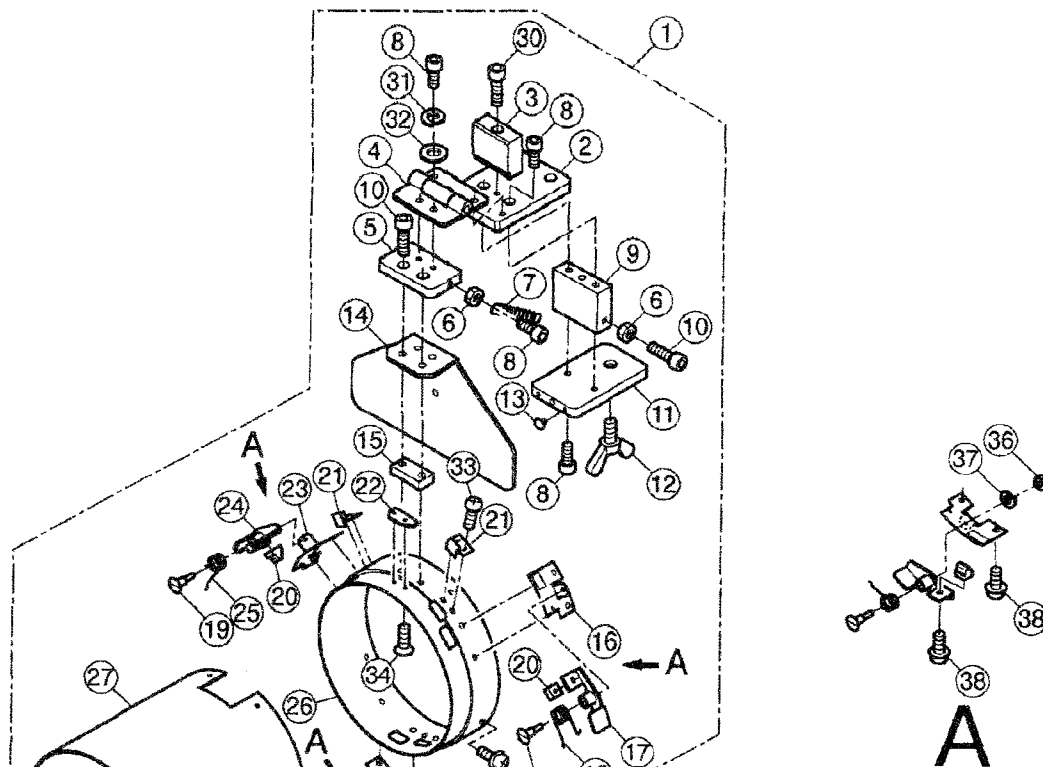


Ass'y	El't	Parts No.	Parts Names	Note
	1	FRA43501	Drive frame ass'y A (red)	
	1	FRA43881	Drive frame ass'y B (blue)	
	2	FRA43790	Wire fixing plate	
	3	FRA43830	Rail bracket	
	4	FRA43820	Rail	
	5	FRA43780	Wire	
	6	FRA43590	Lever bracket (right)	
	7	FRA43560	Hold lever ass'y (right)	
	8	FRA43620	Torsion coil spring (right)	
	9	FRA43610	Support pin	
	10	FRA43800	Wire keeper	
	11	FRA43601	Lock pin	
	12	FRA43550	Spring	
	13	FRA43540	Center guide	
	14	FRA43650	Lever bracket (left)	
	15	FRA43630	Hold lever ass'y (left)	
	16	FRA43660	Torsion coil spring (left)	
	17	FRA43670	Plate nut (M4)	
	18	FRA43680	Plate nut (M3)	
	19	FRA43841	rotary cylinder	
	20	FRA43700	Guide	
	21	FRA43740	Protect sheet	
	22	FRA43730	Guide bracket	
	23	FRA43721	Guide support (left)	
	24	FRA43711	Guide support (right)	
	25	FRA43690	Reinforcement plate	
	26	FRA43971	Base ass'y	
	27	FRA43530	Guide roller pin	
	28	FRA43520	Bearing	
	29	FRA43750	Guide roller spacer	
	30	FRA43510	Guide roller	
	31	FRA43810	Stopper	
	32	SPDD04012	Pan head screw (cross recessed, M4x12)	
	33	SGAD04008	Flat head screw (cross recessed head, M4x8)	
	34	SCAD04008	Hexagon socket head cap screw (M4x8)	
	35	NHAD03000	Hexagon nut (M3)	
	36	SPAD03005	Pan head screw (cross recessed, M3x5)	
	37	SGAD03004	Flat head screw (cross recessed head, M3x4)	
	38	SPDD04010	Pan head screw (cross recessed, M4x10)	
	39	NHCD04000	Hexagon nut (M4)	
	40	WSAD04000	Spring lock washer (M4)	
	41	SPDD04008	Pan head screw (cross recessed, M4x8)	
	42	NHAD05000	Hexagon nut (M5)	
	43	WSAD05000	Spring lock washer (M5)	
	44	WPAD05000	Plain washer (M5)	
	45	SPDD04006	Pan head screw (cross recessed, M4x6)	



CAP FRAME (HOLD FRAME) 帽子枠 (取付枠) 19b-1

組 指図 Ass'y E't	部品番号 Parts No.	Parts Names	部品名	CSKC10 備考 Note
1	FRA44003	Cap hold frame ass'y (wide type)	帽子取付枠組 (ワイドタイプ)	
2	FRA44210	Position bracket	位置ブラケット	
3	FRA44180	Cap marker	センターステッカー	
4	FRA44103	Cap hold frame (wide type)	帽子取付枠 (ワイドタイプ)	
5	FRA44050	Cap holder bracket	帽子保持ブラケット	
6	FRA44031	Hook	パチン錠フック	
7	FRA44201	Cap holder A	帽子固定ブラケット A	
8	FRA44090	Clip	クリップ	
9	FRA44013	Guide pin	ガイドピン	
10	FRA44022	Grip bracket	グリップブラケット	
11	FRA44260	Grip guide	グリップガイド	
12a	FRA44042	Cap grip	帽子グリップ	
12b	FRA44270	Cap grip	帽子グリップ	
13	FRA44160	Latch	小型パチン錠	
14	FRA46502	Cap hold frame ass'y (low profile type)	帽子取付枠組 (ロープロタイプ)	
15	FRA46025	Cap hold frame (low profile type)	帽子取付枠 (ロープロタイプ)	
16	FRA44240	Position bracket	位置ブラケットロープロ	
17	FRA46550	Clamp C	クランプ C	
18	FRA46620	Spring clip	バネグリップ	
19	FRA46141	Spacer	スペーサー	
20	FRA46610	Side holder ass'y	サイド押えセット	
21	FRA46630	Side holder cushion	サイド押えゴム	
22	FRA46182	Side holder	サイド押え	
23	FRA46082	Bracket	ブラケット	
24	FRA44251	Caution sticker	注意ステッカー	
25	FRA46520	Side support (right)	サイド受け (右)	
26	FRA46561	Side support ruber (right)	サイド受けゴム (右)	
27	FRA46530	Side support (left)	サイド受け (左)	
28	FRA46571	Side support ruber (left)	サイド受けゴム (左)	
29	FRA46212	Clamp B	クランプ B	
30	FRA46151	Latch bracket	パチン錠ブラケット	
31	FRA44170	E-ring	Eリング	
32	FRAU44270	Cap grip set This can be substituted for "12a".	帽子グリップ部組 "12a" の代用可	
B	NWBB03000	Wing nut (M3)	ちょうナット (M3)	
C	NHAD04000	Hexagon nut (M4)	六角ナット (M4)	
D	WPAD04000	Plain washer (M4)	平座金 (M4)	
E	SPAD03003	Pan head screw (cross recessed, M3x3)	十字穴付きなべ小ねじ (M3x3)	
F	SPAD03005	Pan head screw (cross recessed, M3x5)	十字穴付きなべ小ねじ (M3x5)	
G	SPDD04005	Pan head screw (cross recessed, M4x5)	十字穴付きなべ小ねじ (M4x5)	
H	SPDD04012	Pan head screw (cross recessed, M4x12)	十字穴付きなべ小ねじ (M4x12)	
I	SGAD04008	Flat head screw (cross recessed head, M4x8)	十字穴付き皿小ねじ (M4x8)	
J	SPDD03005	Pan head screw (cross recessed, M3x5)	十字穴付きなべ小ねじ (M3x5)	
K	SPDD03004	Pan head screw (cross recessed, M3x4)	十字穴付きなべ小ねじ (M3x4)	
L	NHAD03000	Hexagon nut (M3)	六角ナット (M3)	
M	WSAD03000	Spring lock washer (M3)	ばね座金 (M3)	
N	SGAD03004	Flat head screw (cross recessed head, M3x4)	十字穴付き皿小ねじ (M3x4)	
O	WPAD03000	Plain washer (M3)	平座金 (M3)	
P	WPBD03000	Plain washer (M3)	平座金 (M3)	
Q	SGAD03006	Flat head screw (cross recessed head, M3x6)	十字穴付き皿小ねじ (M3x6)	
R	NHCD03000	Hexagon nut (M3)	六角ナット (M3)	
S	SBAD03005	Binding head screw (M3x5)	バインド小ねじ (M3x5)	



CAP FRAME (CAP STRETCHER)

CAa8A18

18c-1

Ass'y	Elt	Parts No.	Parts Names	Note
	1	FRA44501	Cap stretcher (for wide type)	
	2	FRA44600	Base E	
	3	FRA44610	Stopper A	
	4	FRA44580	Hinge	
	5	FRA44590	Base D	
	6	NHAD05000	Hexagon nut (M5)	
	7	FRA44620	Tension coil spring	
	8	SCAD05012	Hexagon socket head cap screw (M5x12)	
	9	FRA44561	Base B	
	10	SCAD05020	Hexagon socket head cap screw (M5x20)	
	11	FRA44571	Base C	
	12	SWAB10020	Wing bolt (M10x20)	
	13	FRA44630	Cushion	
	14	FRA44531	Back plate	
	15	FRA44540	R block	
	16	FRA43590	Lever bracket (right)	
	17	FRA43560	Hold lever ass'y (right)	
	18	FRA43620	Torsion coil spring (right)	
	19	FRA43610	Support pin	
	20	FRA43601	Lock pin	
	21	FRA43550	Spring	
	22	FRA43540	Center guide	
	23	FRA43650	Lever bracket (left)	
	24	FRA43630	Hold lever ass'y (left)	
	25	FRA43660	Torsion coil spring (left)	
	26	FRA44510	Cylinder	
	27	FRA44521	Stretch plate (for wide type)	
	28	FRA46310	Cap stretcher (for semi wide type)	
	29	FRA46300	Stretch plate (for semi wide type)	
	30	SCAD05035	Hexagon socket head cap screw (M5x35)	
	31	WSAD05000	Spring lock washer (M5)	
	32	WPAD05000	Plain washer (M5)	
	33	SPAD03005	Pan head screw (cross recessed, M3x5)	
	34	SGAD03005	Flat head screw (cross recessed head, M3x5)	
	35	SPDD04010	Pan head screw (cross recessed, M4x10)	
	36	NHCD04000	Hexagon nut (M4)	
	37	WSAD04000	Spring lock washer (M4)	
	38	SPDD04008	Pan head screw (cross recessed, M4x8)	



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Model	HCA-1501-40TTC
Machine No.	

2K821