



# HAPPY

HAPPY Industrial Corporation

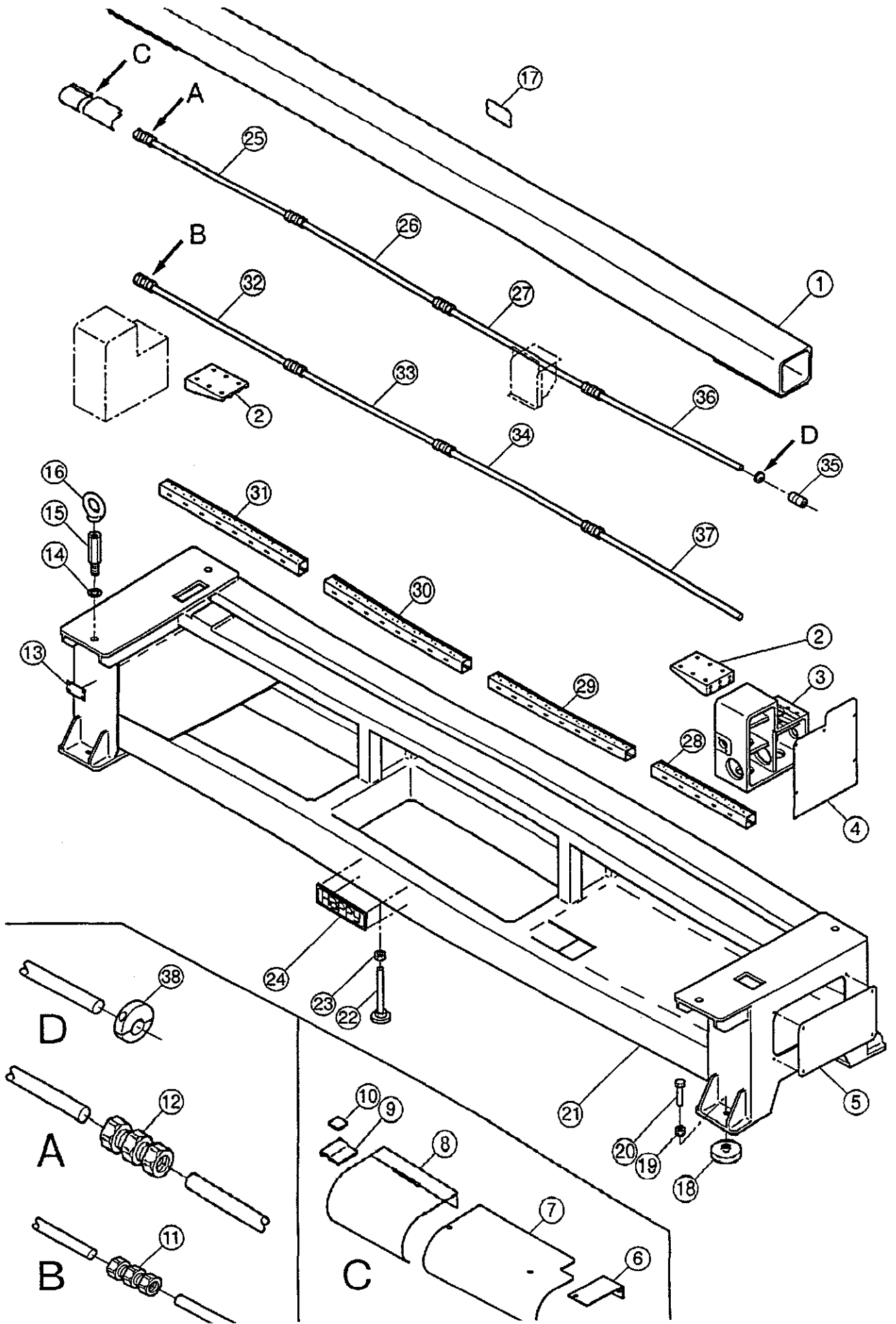
HEAD OFFICE 5-9-16, Miyamachi, Yamagata-city 990, Japan  
Phone: 0236-23-7111 FAX: 0236-23-2654

TOKYO OFFICE 2-9-5, Taito, Taito-Ku, Tokyo 110, Japan  
Phone: 03-3834-0711 Telex: 265-5482  
FAX: 03-3835-8917 Cable: HAPPYSEW TOKYO

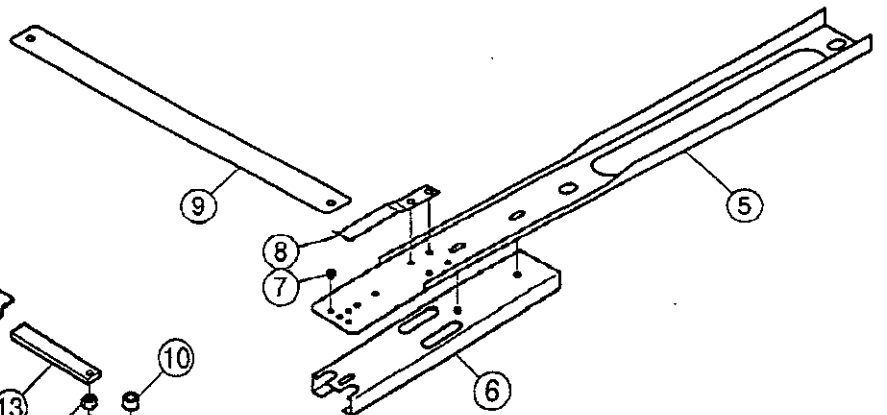
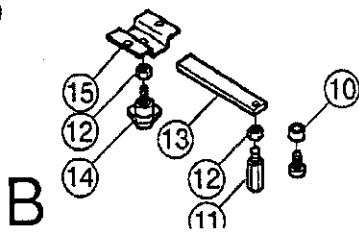
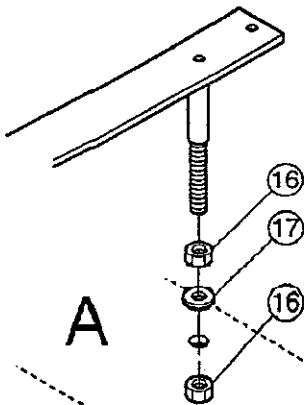
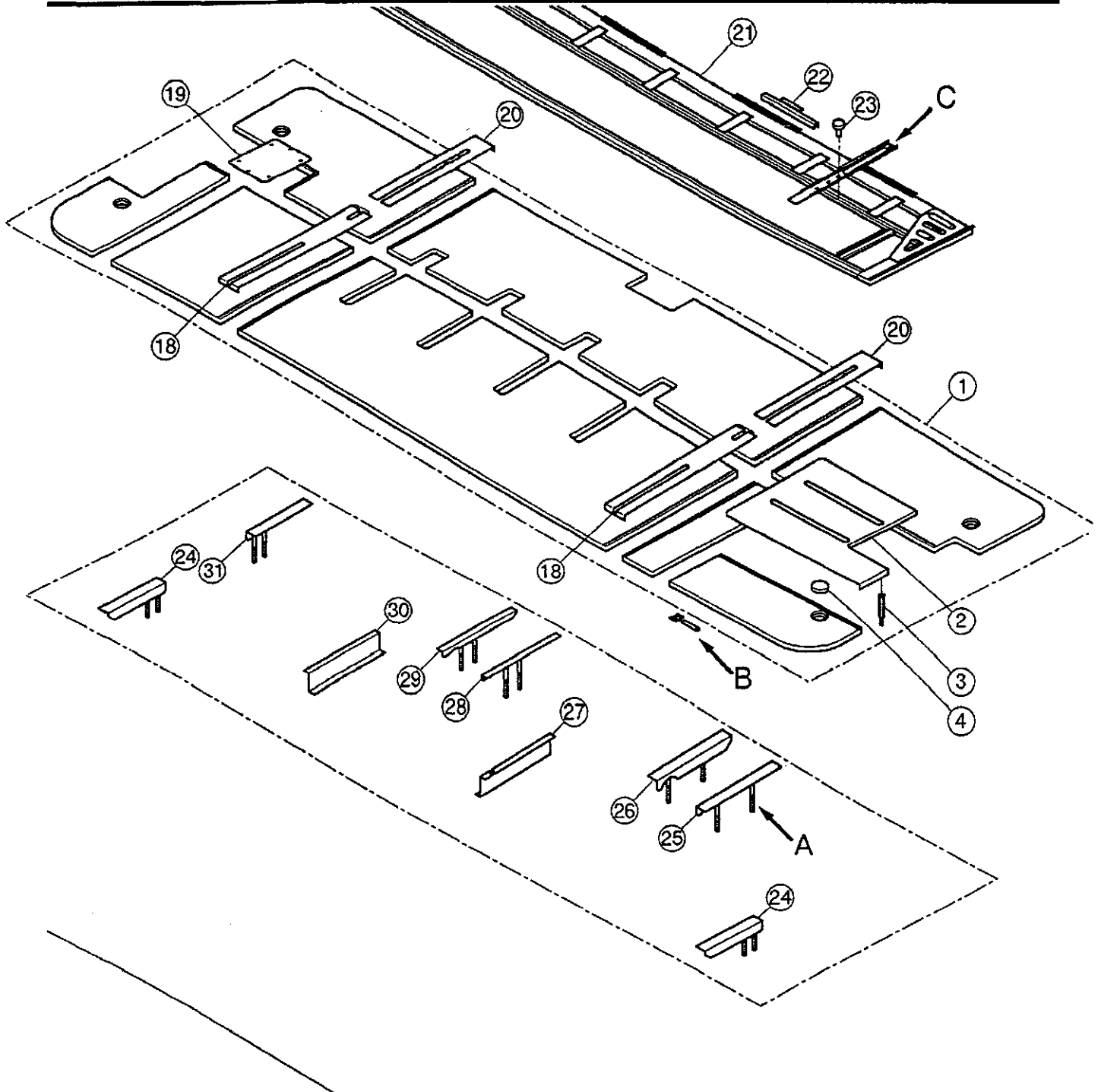
HAPPY INDUSTRIAL GmbH Am Kummerling, 10-12  
6501 Bodenheim am Rhein  
Germany  
Phone: 06135-8101 FAX: 0211-161630

Model	HCM-806-36T
Machine No.	

1995.01.17



組	指図	部品番号		CM4C27
Ass'y	El't	PARTS No.	PARTS NAMES	NOTE / 備考
	1	-	Beam (by model)	
	2	HMF02070	Arm	
	3	HMF02021	Support box right	
	3	HCM02220	Support box right (for 806,804type)	
	3	HMF02041	Support box right, for jumbo hook	
	3	HCM02200	Support box right, for jumbo hook (for 806,804type)	
	4	HMF02061	Cover right	
	4	HMF02310	Cover right (for 812-48)	
	5	M0400081	Cover plate for frame	
	6	HMF13150	Bracket for shaft cover	
	7	-	Shaft cover left (by model)	
	8	HMF13161	Shaft cover left (I) ass'y	
	9	HMF13271	Shaft cover support	
	10	SF530511	Magnet (B) for cover bracket	
	11	MPC00010	N-coupling (15-15)	
	12	MPC00020	N-coupling (20-20)	
	13	M0400062	Machine number plate	
	14	MPB00460	Thrust washer	
	15	M0400020	Stud bolt	
	15	HCM00351	Hoisting bolt pillar (for 812-48)	
	16	M0400010	Hoisting bolt	
	16	MPZ01590	Hoisting bolt (for 812-48)	
	17	HMF00180	Cover	
	18	M0400031	Block base	
	19	NA18000A	Nut (M18)	
	20	SV18050A	Bolt (M18x50)	
	21	-	Frame (by model)	
	22	MPZ01240	Adjuster	
	23	NA20000A	Nut (M20)	
	24	M0400071	"HAPPY" brand plate	
	25	-	Upper shaft 1 (by model)	
	26	-	Upper shaft 2 (by model)	
	27	-	Upper shaft 3 (by model)	
	28	HMF00170	Duct E (812-48)	
	28	HMF00130	Duct A (806-48)	
	28	HMF00150	Duct C (804-48)	
	29	HCM00120	Duct A (812-48,804-48)	
	29	HMF00150	Duct C (806-48)	
	30	HCM00120	Duct A (812-48,806-48)	
	31	HCM00120	Duct A (812-48)	
	32	-	Lower shaft 1 (by model)	
	33	-	Lower shaft 2 (by model)	
	34	-	Lower shaft 3 (by model)	
	35	M0402130	Upper shaft grip	
	36	M0408811	Upper shaft 4 (812-48)	
	37	-	Lower shaft 4 (by model)	
	38	HMF02341	Balancer (for 812-48)	

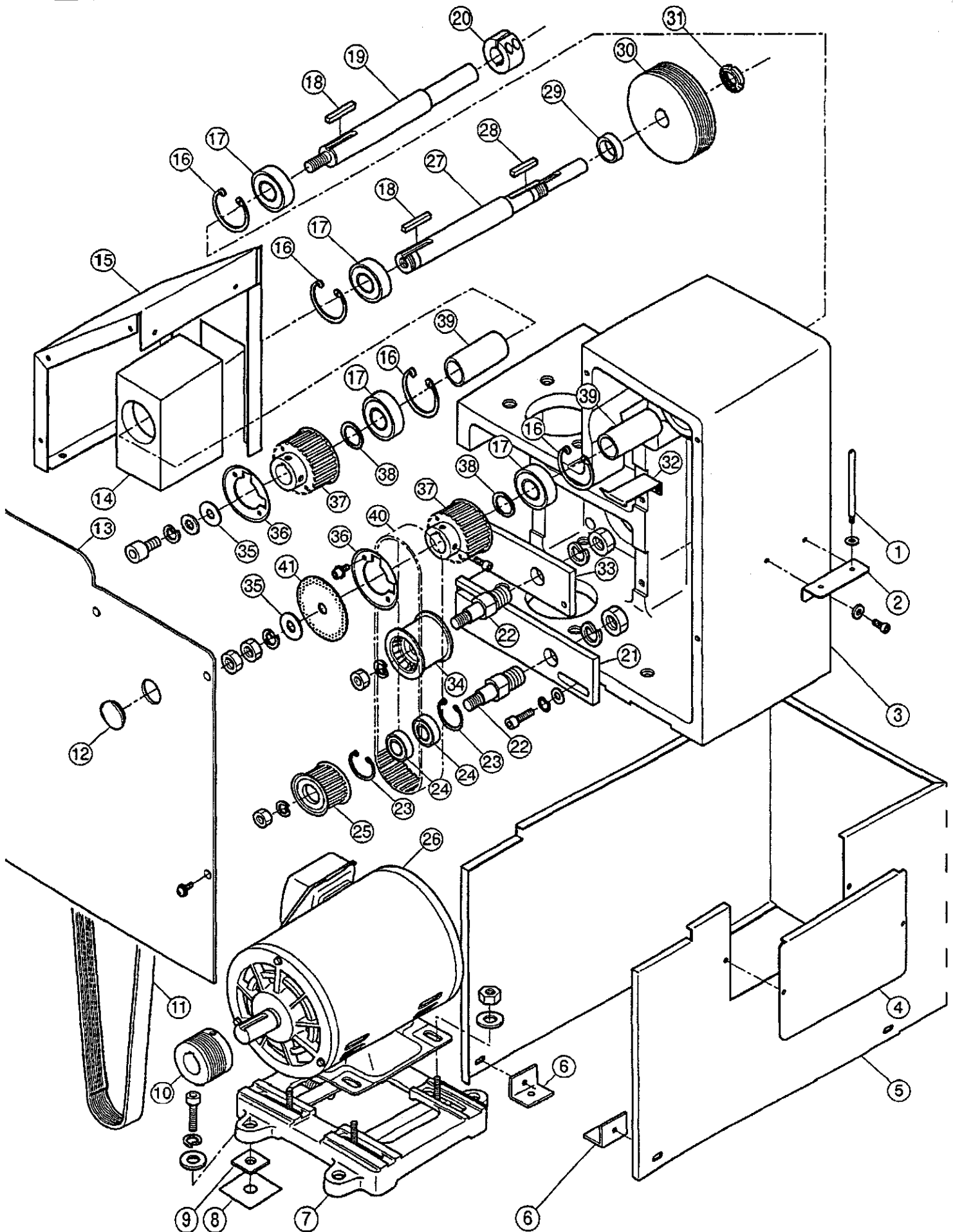


# HAPPY TABLE 1

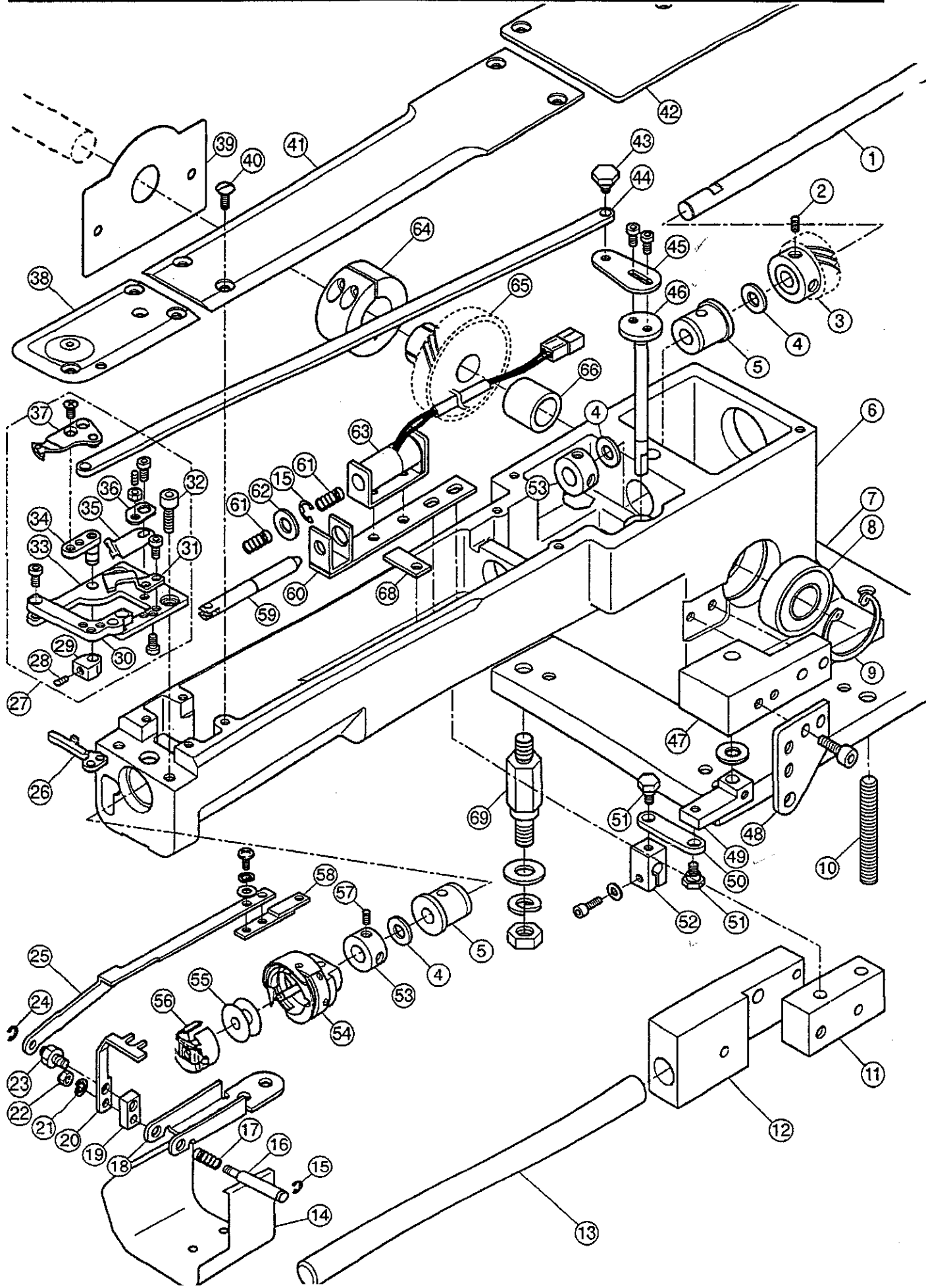
2.1

組 Ass'y	指図 EIT	部品番号 PARTS No.	PARTS NAMES	CM5113 NOTE / 備考
	1	-	Table set (by model)	
	2	-	X carriage cover (by model)	
	3	M0430013	Stud for cover	
	4	M0430020	Lid for table hole	
	4	HCM30410	Lid for table hole (for 812-48)	
	5	HCM40450	Hold arm D for Tubular frame (Y480)	
	5	HCM40470	Hold arm F for Tubular frame (Y300,Y360)	
	5	HCM40700	Hold arm F for Tubular frame (for 720-30)	
	6	HCM40480	Hold arm D reinforcement (Y480)	
	6	HCM40440	Hold arm F reinforcement (Y300,Y360)	
	7	C0440561	positioning pin	
	8	HCM40491	Hold spring	
	9	-	Jig for positioning tubular frame (by model)	
	10	M0412241	Plastic ring	
	11	M0410041	Stud	
	12	NA05000B	Nut (M5)	
	13	HCM34060	Table prop B	
	14	MP201080	Knob bolt (M6)	
	15	HCM34050	Table prop A	
	16	NA12000D	Nut (M12)	
	17	WA12000D	Plain washer (M12)	
	18	HCM33021	Y carriage cover, front (Y480)	
	18	HCM33060	Y carriage cover, front (Y300)	
	18	HCM33110	Y carriage cover, front (Y360)	
	19	HCM33041	Thread cut cover (Y480)	
	19	HCM33080	Thread cut cover (Y300,Y360)	
	20	HCM33031	Y carriage cover, rear (Y480)	
	20	HCM33070	Y carriage cover, rear (Y300)	
	20	HCM33120	Y carriage cover, rear (Y360)	
	21	-	Frame ass'y (by model)	
	22	M0437016	Clip (300mm)	
	22	M0437036	Clip (250mm)	
	22	M0437056	Clip (190mm)	
	22	M0437836	Clip (170mm)	
	23	M0437002	Knob screw	
	24	HCM32030	Table support C (Y480)	
	24	HCM32060	Table support F (Y300,Y360)	
	25	HCM32010	Table support A (Y480)	
	25	HCM32050	Table support E (Y300,Y360)	
	26	HCM32020	Table support B (Y480)	
	26	HCM32040	Table support D (Y300,Y360)	
	27	HCM32090	Table support I (for 720-30)	
	28	HCM32071	Table support G (for 720-30)	
	29	HCM32081	Table support H (for 720-30)	
	30	HCM32101	Table support J (for 720-30)	
	31	HCM32030	Table support C	

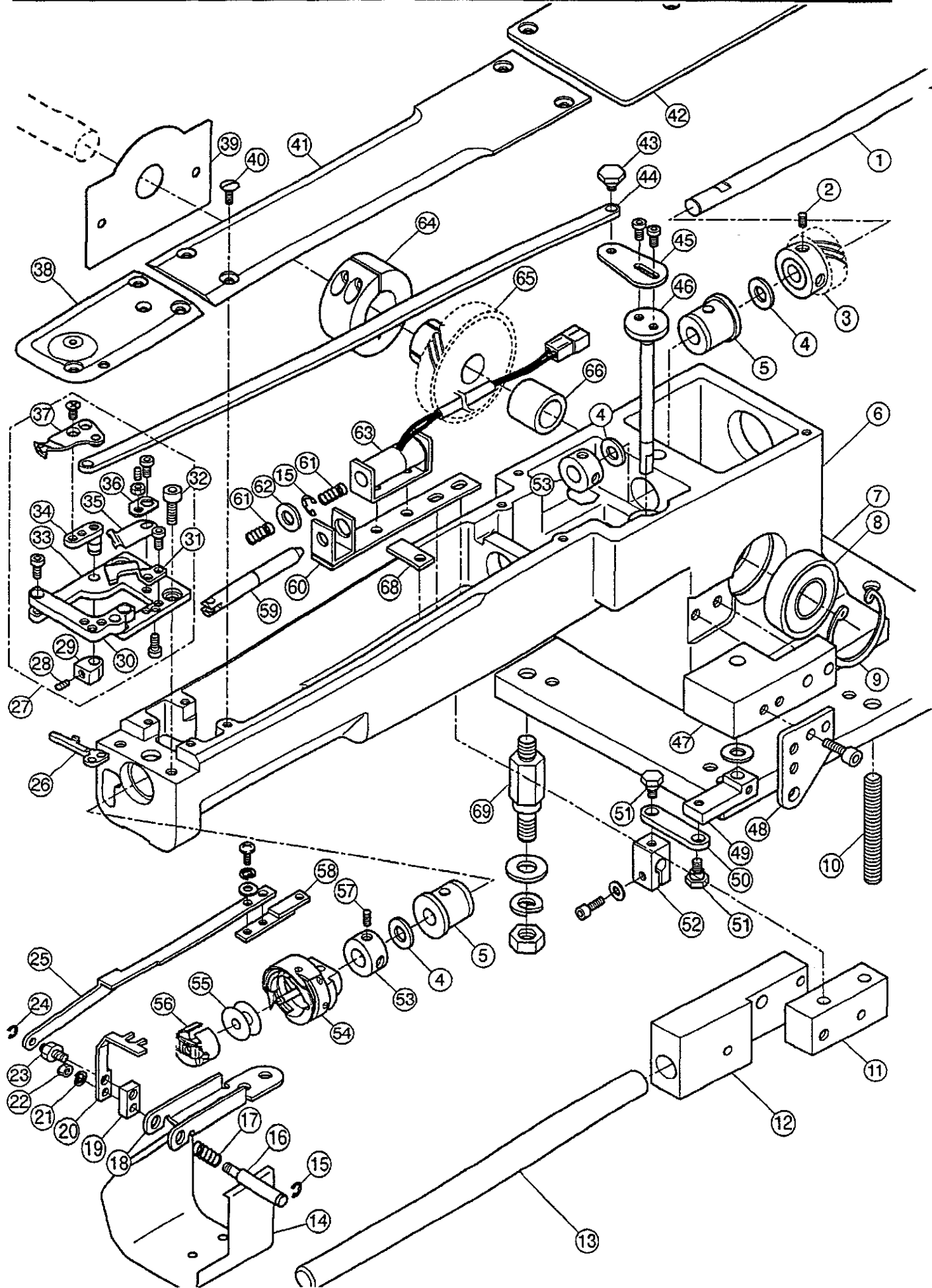
組 Ass'y	指図 Elt	部品番号 PARTS No.	PARTS NAMES	CM5113 NOTE / 備考
	1	SV05020A	Hexagon head bolt (M5x20)	
	3	HCM34020	Bracket for table reinforcement	
	4	NA05000A	Nut (M5)	
	5	-	Table reinforcement pipe 1 (by model)	
	6	MPZ01490	HD-pipe, 6m	
	6	MPZ01500	HD-pipe, 4m (for 804,806type)	
	7	MPZ01510	Connecting screw	
	8	MPZ01520	Clamping ring	
	9	MPZ01460	Pump PB4625	
	9	MPZ01450	Pump PB2623 (for 804,806type)	
	10	MPZ01480	Folding crank	
	11	HCM34532	Cylinder cover	
	12	HCM34523	Holder	
	13	MPZ01470	Cylinder	
	14	SS04004A	Set screw (M4x4)	
	15	HCM34631	Spacer B	
	15	HCM34641	Spacer (for 812-48)	
	16	-	Table reinforcement 1 (by model)	
	17	SC05015A	Cap screw (M5x15)	
	18	WB05000A	Spring washer (M5)	
	19	WA05000A	Plain washer (M5)	
	20	HCM34141	Connecting plate for reinforcement	
	21	-	Table reinforcement 2 (by model)	
	22	WA06000A	Plain washer (M6)	
	23	WB06000A	Spring washer (M6)	
	24	NA06000A	Nut (M6)	
	25	SS06035A	Set screw (M6x35)	
	26	HCM34041	Support for table reinforcement	
	27	-	Table reinforcement pipe 2 (by model)	
	28	HCM34621	Table bracket B (for 812-48)	
	28	HCM34512	Table bracket	
	29	HCM34131	Support B for table reinforcement	
	30	SC06035A	Cap screw (M6x35)	
	31	HCM34551	Guide	
	32	MPB00630	Bushing (80B2030)	
	33	HCM34561	Guide shaft	
	34	HCM34570	Guide reinforcement	
	35	WA10000A	Plain washer (M10)	
	36	WB10000A	Spring washer (M10)	
	37	SC10020A	Cap screw (M10x20)	
	38	HCM34541	Guide holder	



組 Ass'y	指図 E'l't	部品番号 PARTS No.	PARTS NAMES	CM4C27 NOTE / 備考
	1	M0402052	Spool pin	
	2	M0402371	Spool support	
	3	HCM02132	Support box left	
	3	HCM02211	Support box left (for 806,804type)	
	3	HCM02012	Support box left, for jumbo hook	
	3	HCM02191	Support box left, for jumbo hook (for 806,804type)	
	4	HMF00110	Thread cut actuation unit cover	
	5	HCM00060	Motor cover (Y480)	
	5	HCM00181	Motor cover (Y300,Y360)	
	6	HMF00120	Motor cover bracket	
	7	MPZ00020	Motor slide base	
	7	MPZ01530	Motor slide base (for 804type)	
	8	M0402220	Rubber sheet for motor	
	9	MPZ00010	Square washer	
	10	HMF02110	Motor pulley	
	10	HCM02050	Motor pulley (for 804type)	
	11	MPV00400	Main drive belt	
	12	M0408150	Rubber cap (small)	
	13	HCM02072	Cover left (Y480)	
	13	HCM02121	Cover left (812-48)	
	13	HCM02163	Cover left (Y300,Y360)	
	14	HCM02230	Drive shaft support	
	15	HCM02241	Drive shaft support cover A (Y480)	
	15	HCM02251	Drive shaft support cover B (Y300,Y360)	
	16	MPR00350	JO-ring (JO-52)	
	17	MPB00530	Bearing (6205LLU)	
	18	M0402141	Key for upper shaft	
	19	HMF02121	Drive shaft upper	
	20	M0402150	Clamp (upper)	
	21	HCM02041	Tension bracket (Y480)	
	21	HCM02151	Tension bracket (Y300,Y360)	
	22	MPV00020	Idler pin	
	23	MPR00410	JO-ring (JO-35)	
	24	MPB00150	Bearing (6202LLU)	
	25	HCM02060	Tension pulley	
	26	EPM00280	Drive motor with brake 6P-0.75KW	
	26	EPM00340	Drive motor 6P-0.75KW (for 806type)	
	26	EPM00320	Drive motor 6P-0.4KW (for 804type)	
	27	M0402863	Drive shaft lower	
	28	M0402181	Allocation shaft key A	
	29	M0402810	Drive pulley spacer (D)	
	30	HMF02100	Drive pulley	
	31	MPB00590	U-Nut	
	32	HMF02090	Pointer	
	33	HCM02031	Idler bracket	
	34	MPV00030	Idler pulley	
	35	M0402840	Washer for drive shaft	
	36	M0402620	Flange	
	37	M0402830	Timing pulley (D)	
	38	M0402800	Timing pulley spacer (D)	
	39	M0402820	Inner spacer (D)	
	40	MPV00310	Timing belt (Y480)	
	40	MPV00280	Timing belt (Y300,Y360)	
	41	M0402295	Adjusting disc	



組 Ass'y	指図 E't	部品番号 PARTS No.	PARTS NAMES	CMS117 NOTE / 備考
	1	HCM04030	Rotary hook shaft (Y480)	
	1	HCM04370	Rotary hook shaft (Y300,Y360)	
	2	SS05008A	Set screw (M5x8)	
	3	HMF04060	Gear for rotary hook shaft	
	4	MPB00120	Plastic thrust washer (TW0815)	
	5	CS404030	Bushing for rotary hook shaft	
	6	HCM04012	Rotary hook base (Y480)	
	6	HCM04364	Rotary hook base (Y300,Y360)	
	7	HCM04020	Bed plate (for Y480type)	
	8	MPB00150	Bearing (6202LLU)	
	9	MPR00410	C-ring (C-35)	
	10	HCM04340	Bed stud B (Y480)	
	10	HCM04430	Bed stud C (Y300,Y360)	
	11	HCM04080	Holder	
	12	C0404420	Fulcrum shaft holder	
	13	C0440431	Fulcrum shaft for cap frame	
	14	HCM04422	Keeper cover	
	14	HCM04072	Keeper cover (for jumbo hook)	
	15	MPR00420	E-ring (E-4)	
	16	HCM04160	Keeper shaft	
	17	HCM04150	Spring A	
	18	HCM04141	Shaft holder	
	19	HCM04131	Fulcrum block	
	20	HCM04411	Keeper	
	20	HCM04111	Keeper (for jumbo hook)	
	21	WB03000D	Spring washer (M3)	
	22	NA03000D	Nut (M3)	
	23	HCM04121	Fulcrum pin	
	24	MPR00290	E-ring (E-3)	
	25	HCM04203	Keeper actuating plate A	
	26	HCM04230	Rotary hook retainer	
	27	HCM04264	Thread cutting device ass'y	
27*	28	SS04006A	Set screw (M4x6)	
27*	29	C0404241	Knife drive shaft retainer	
27*	30	HCM04282	Rotary hook retainer base	
27*	31	HCM04321	Fixed knife	
	32	SC05010A	Cap screw (M5x10)	
27*	33	HCM04271	Thread cutting base	
27*	34	HCM04301	Knife drive shaft	
27*	35	HCM04330	Bobbin thread holder	
27*	36	HMF04140	Holder retainer	
27*	37	HCM04291	Knife	
	38	HCM04061	Needle plate	
	39	C0404031	Side cover for rotary hook base	
	40	MPZ00040	Screw for needle plate	
	41	HCM04050	Cover B (Y480)	
	41	HCM04381	Cover C (Y300,Y360)	
	42	HCM04041	Cover A	
	43	HCM04251	Hinge screw for link	
	44	HCM04222	Rod (Y480)	
	44	HCM04391	Rod (Y300,Y360)	
	45	HCM04470	Link B	
	46	C0404301	Drive shaft for link	
	47	HCM04090	Link base	
	48	HMF04050	Support for thread cut shaft	
	49	MO404240	Drive arm for knife	
	50	MO404250	Link	
	51	MO404262	Hinge screw for link	
	52	MO404271	Fasten block for thread cut shaft	

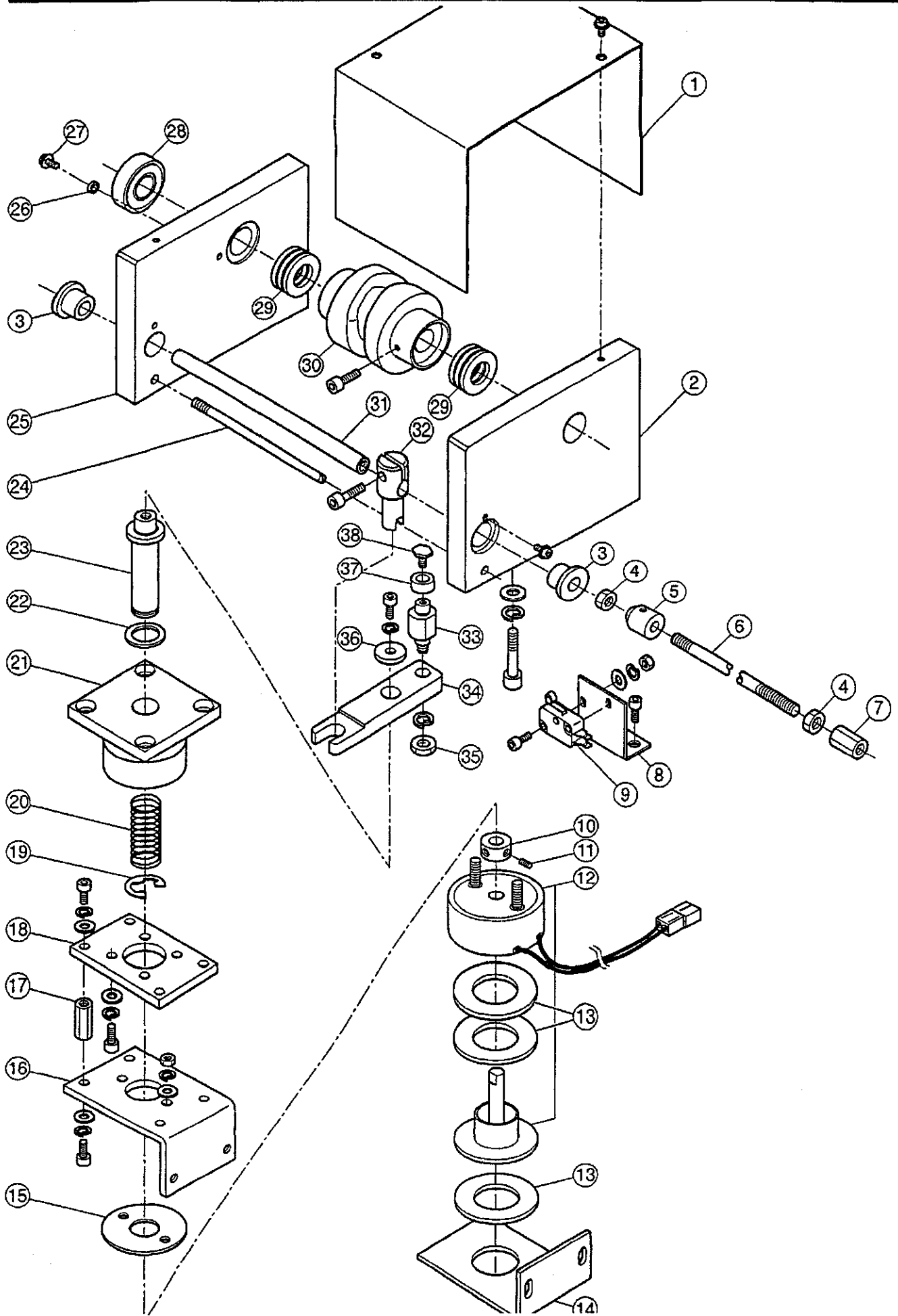


組 Ass'y	指図 Elt	部品番号 PARTS No.	PARTS NAMES	CM4C27 NOTE / 備考
	53	HMF04190	Stopping collar	
	54	MPZ01260	Rotary hook	
	54	MPZ01290	Rotary hook (for thick thread)	
	54	MPZ01360	Jumbo hook	
	55	MPZ00550	Bobbin	
	55	MPZ01370	Bobbin (for jumbo hook)	
	56	MPZ00080	Bobbin case	
	56	MPZ01380	Bobbin case (for jumbo hook)	
	57	SS05006A	Set screw (M5x6)	
	58	HCM04211	Keeper actuating plate B	
	59	HCM04191	Plunger	
	60	HCM04170	Solenoid base	
	61	HCM04180	Spring B	
	62	WA06000A	Plain washer (M6)	
	63	HGX78000	Keeper solenoid	
	64	M0404122	Fasten collar	
	65	SF404070	Drive spiral gear	
	66	SF404030	Spiral collar	
	68	HCM04400	Rod support (for Y300,Y360type)	
	69	HCM04101	Bed stud A (Y480)	
	69	HCM04442	Bed stud D (Y300,Y360)	

# HAPPY THREAD CUT ACTUATION UNIT

CM4725

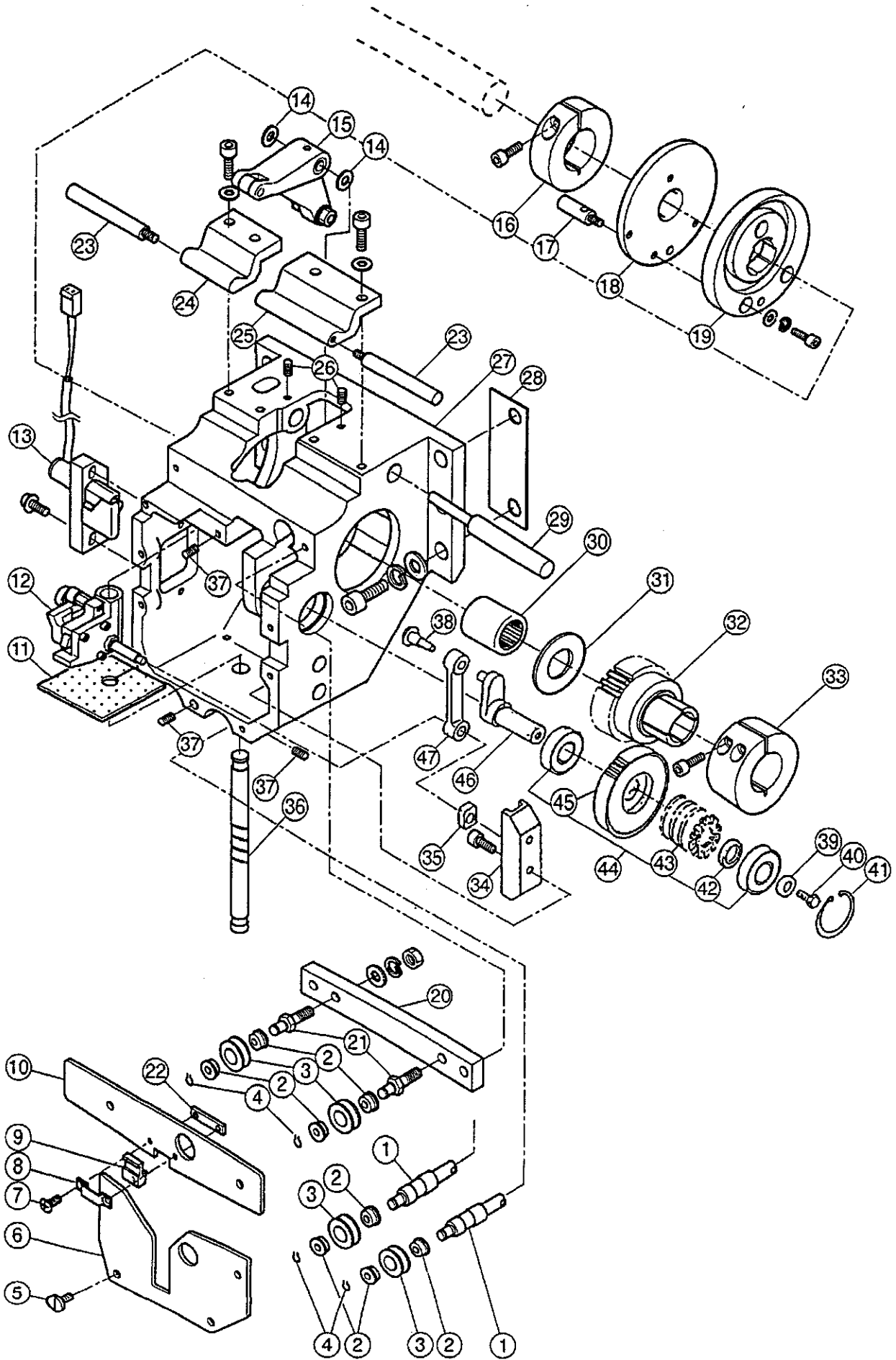
5.0



# HAPPY THREAD CUT ACTUATION UNIT

# 5.1

組 Assy	指図 E/I	部品番号 PARTS No.	PARTS NAMES	CM4725 NOTE / 備考
	1	HMF06100	Cover for thread cutting drive	
	2	HMF06010	Cam support right	
	3	MP200440	Flange bushing	
	4	M0404280	Nut	
	5	M0406101	LS dog	
	6	-	Moving shaft (by model)	
	7	M0404292	Joint for moving shaft	
	8	HCM06030	Micro switch base	
	9	EPS00010	Micro switch	
	10	HMF04190	Collar	
	11	SS04004A	Set screw (M4x4)	
	12	HMX78020	Thread cutting solenoid	
	13	M0406010	Solenoid felt	
	14	HMF06070	Felt base	
	15	HMF06080	Solenoid spacer	
	16	HMF06060	Fixing plate	
	17	HMF06050	Solenoid stud	
	18	HMF06041	Solenoid base	
	19	-	E-ring (E-12)	
	20	M0406050	Lever spring	
	21	HMF06030	Lever shaft support	
	22	M0406260	Urethane washer	
	23	M0406252	Lever shaft	
	24	M0406171	Guide pin	
	25	HMF06020	Cam support left	
	26	M0406200	Spacer	
	27	SX04008D	Cap screw with flange (M4x8)	
	28	MPB00150	Bearing (6202LLU)	
	29	MPB00160	Thrust bearing (51102)	
	30	HCM06011	Drive cam for thread cutting	
	31	M0406161	Slide shaft	
	32	M0406142	Lever drive pin	
	33	SF406050	Roller shaft	
	34	SF406040	Cam lever	
	35	NC06000A	Nut (M6)	
	36	M0406410	Washer	
	37	M0406220	Thread cutting roller	
	38	M0406211	Roller screw	



# FIXED HEAD

0.1

CM5113

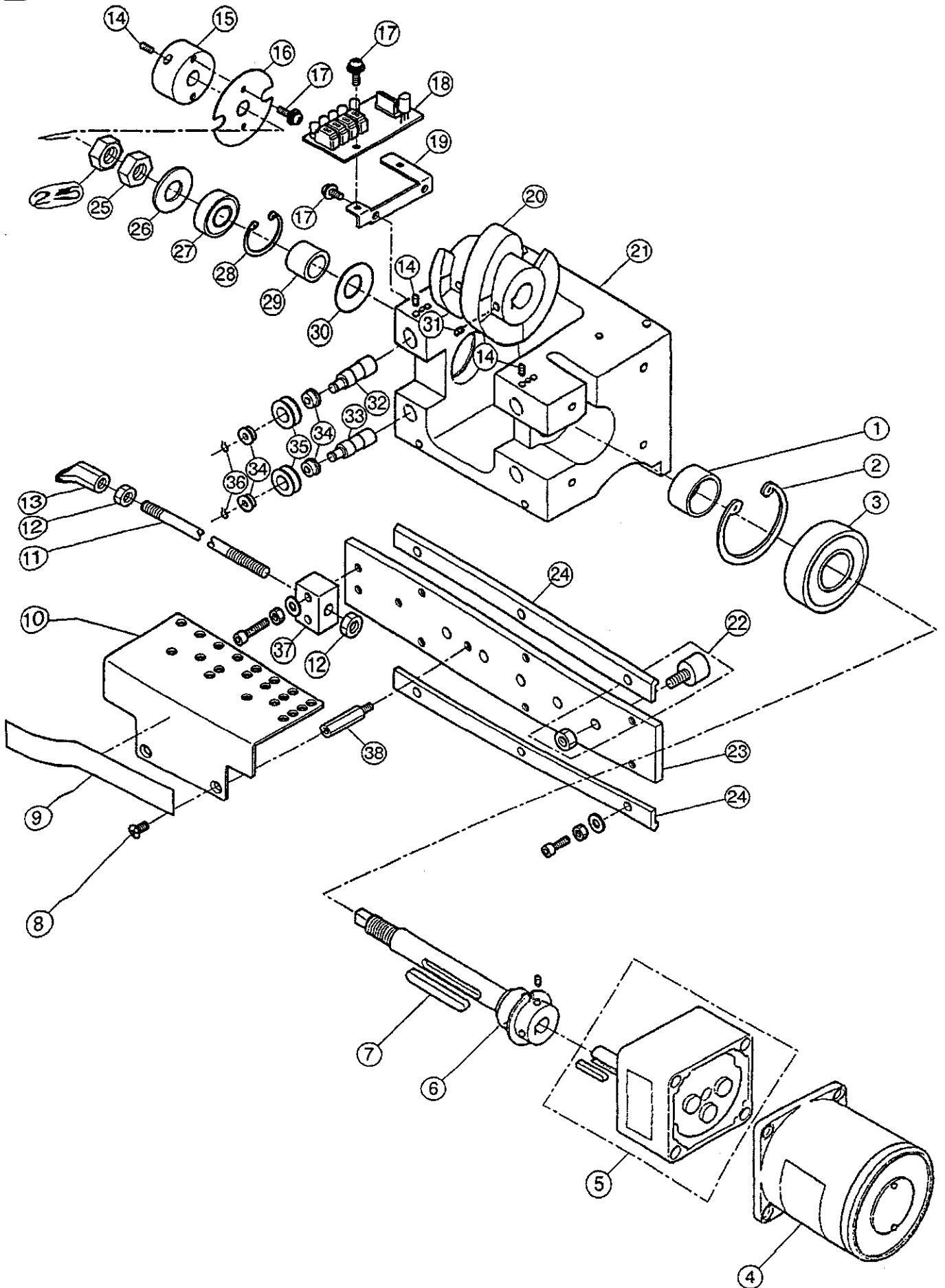
NOTE / 備考

図	部品番号	
Fig	PARTS No.	PARTS NAMES
1	HMF08170	Roller pin (lower)
2	MPB00240	Bearing (LF1060ZZ)
3	M0408483	Bearing case
4	MPR00280	DIN-ring (G-6)
5	SB04006A	Screw for face plate
6	M0408403	Lower face plate
7	-	Flat head screw (M2.5x5)
8	M0408423	Holding plate
9	M0408412	Cushion
10	HMF08050	Upper face plate
11	M0408870	Felt for fixed head
12	M0408276	Jump structure unit
13	HMF08191	Jump solenoid ass'y
13	HCM08020	Jump solenoid ass'y (for 812-48type)
14	MPB00080	Plastic thrust washer (TW0613)
15	C0408060	Take-up lever catcher ass'y
16	C0408040	Fasten collar
17	C0408051	Positioning pin
18	C0408030	Fixing plate for cam
19	HMF08200	Take-up lever cam
19	HMF08120	Take-up lever cam (for jumbo hook)
20	HMF08080	Roller pin guide
21	HMF08061	Roller pin (upper)
22	M0408430	Plate nut
23	HMF08140	Guide bar for take-up lever (for 7 needle)
23	HMF08150	Guide bar for take-up lever (for 8 needle)
24	HMF08090	Guide base (left) for take-up lever
25	HMF08100	Guide base (right) for take-up lever
26	SS04006A	Set screw (M4x6)
27	HCM08012	Fixed head
28	HMF08070	Head spacer
29	C0408100	Take-up lever catcher shaft
30	MPB00190	Needle bearing (HK2020LL)
31	MPB00180	Plastic thrust washer (TW2040)
32	HMF08110	Drive gear (1) for needle bar
33	M0408003	Fasten collar
34	M0408223	Guide rail for slide block
35	M0408230	Slide block
36	HMF08040	Slide shaft
37	SS05008A	Set screw (M5x8)
38	M0408210	Screw for crank rod
39	M0408160	Washer (B)
40	SV06010E	Bolt (M6x10)
41	MPR00050	BO-ring (BO-28)
42	M0408170	Washer (A)
43	MPS00030	Holder spring
44	MPB00210	Bearing (6001ZZ)
45	M0408180	Drive gear (2) for needle bar
46	HMF08030	Crank shaft
47	M0408203	Crank rod

# HAPPY NEEDLE BAR SELECTION UNIT

HMF4120

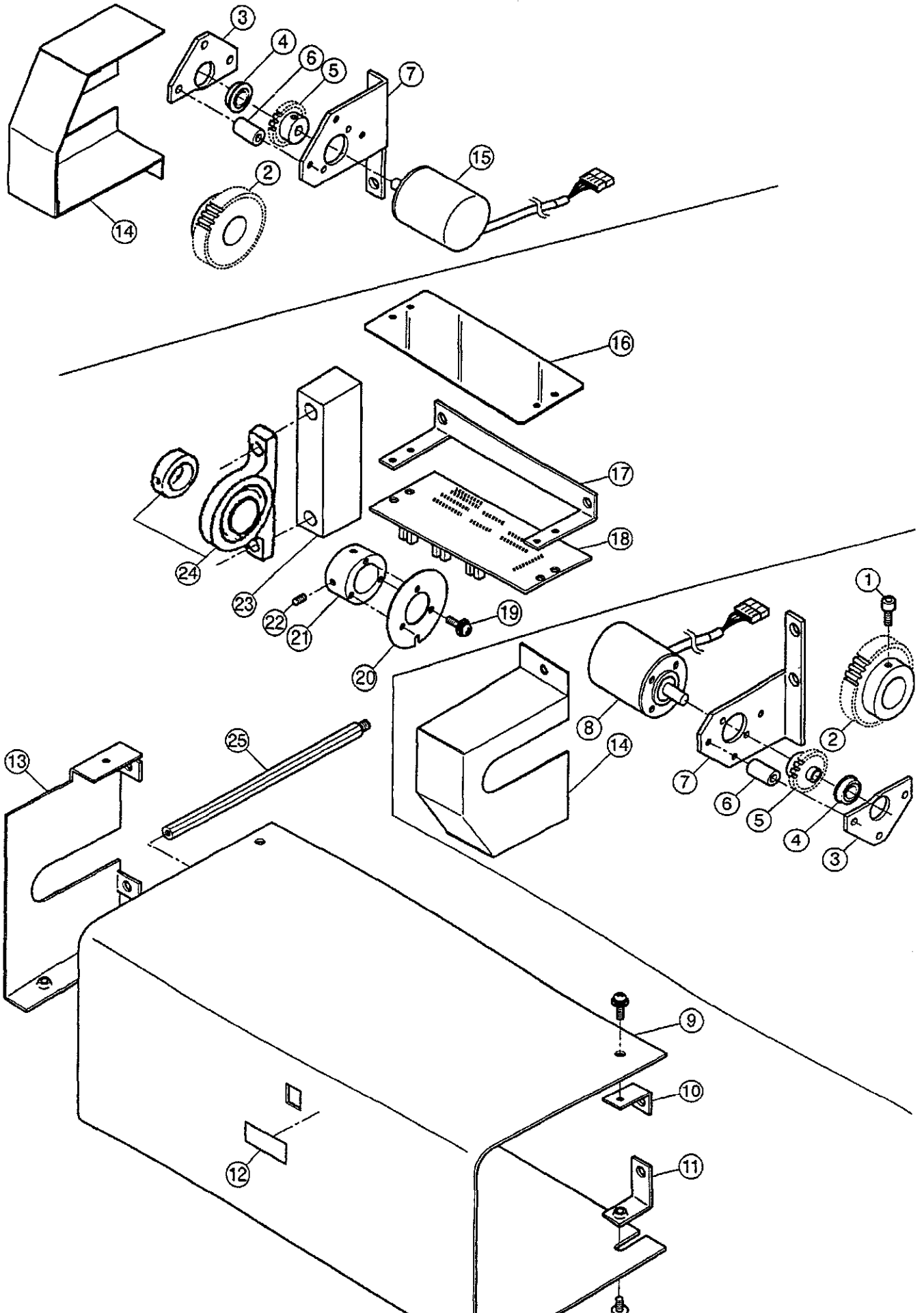
7.0



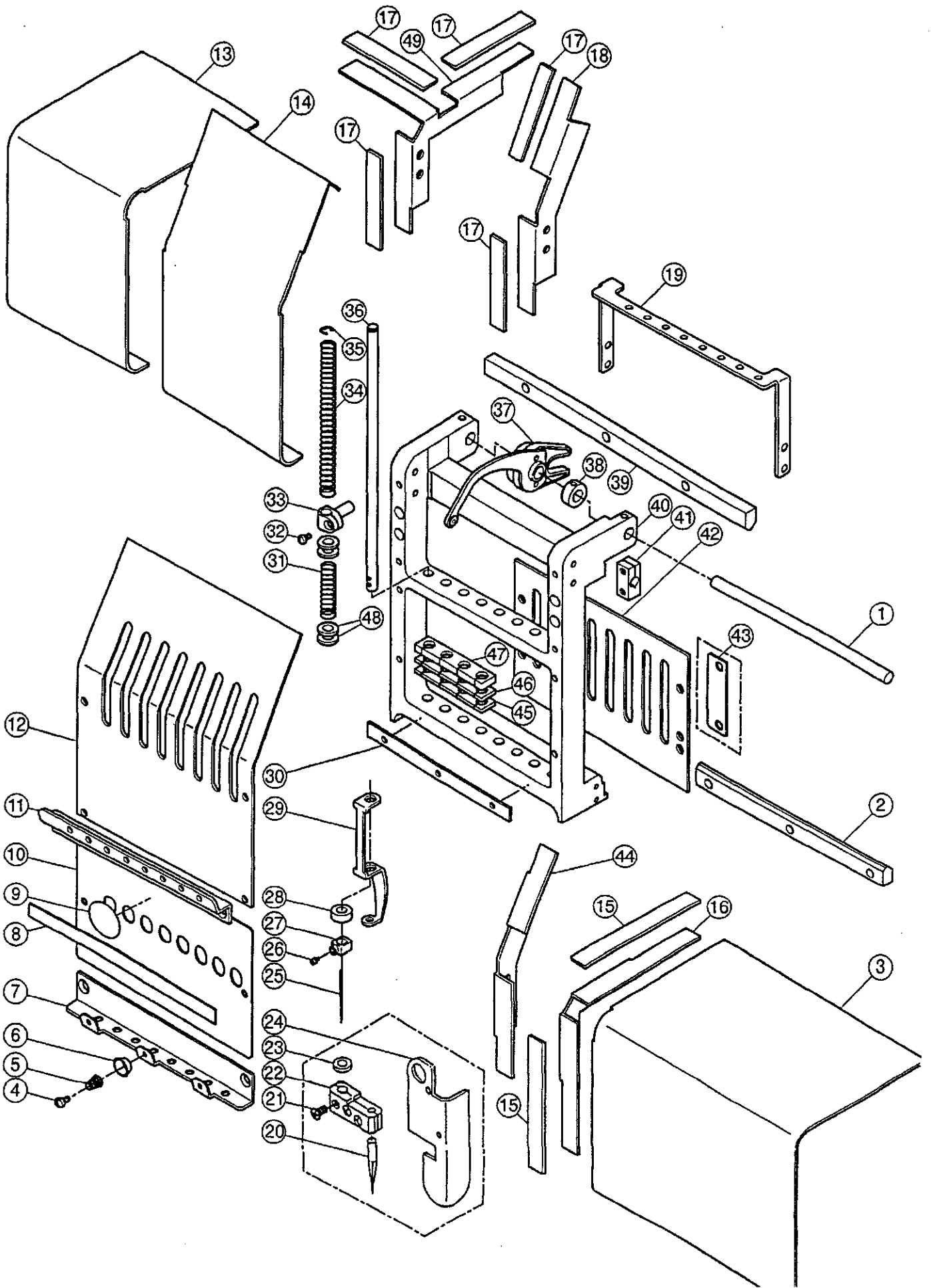
# HAPPY NEEDLE BAR SELECTION UNIT

# 7.1

組 Ass'y	指図 E't	部品番号 PARTS No.	PARTS NAMES	MF4725 NOTE / 備考
	1	HMF10060	Collar	
	2	-	JO-ring (JO-42)	
	3	MPB00610	Bearing (6905ZZ)	
	4	EPM00090	Motor	
	5	EPM00020	Gear head	
	6	HMF10020	Drive shaft ass'y for needle bar selection unit	
	7	MPK00010	Key (both round 5x5x47)	
	8	SPO4008B	Flat head screw (M4x8)	
	9	M0451020	Needle No. display sticker	
	10	HMF10120	Detecting plate for needle position	
	11	-	Moving shaft (by model)	
	12	M0404280	Nut	
	13	M0404292	Joint	
	14	SS05008A	Set screw (M5x8)	
	15	HMF10080	Slit disc boss	
	16	HMF10071	Slit disc	
	17	SM03006D	Screw (M3x6)	
	18	HMF83620	Needle bar selection board ass'y	
	19	HMF10090	Bracket for needle bar selection board	
	20	M0410070	Rotating slotted cam	
	21	HMF10010	Base for needle bar selection unit	
	22	MPB00230	Cam follower (with nut, KR16XLL)	
	23	HMF10100	Slide bar	
	24	HMF10110	Rail	
	25	NA12000B	Nut (M12)	
	26	WA14000D	Washer (M14)	
	27	MPB00220	Bearing (6002ZZ)	
	28	MPR00070	C-ring (C-32)	
	29	M0410081	Collar A	
	30	MPS00050	Plate spring	
	31	SS04008A	Set screw (M4x8)	
	32	HMF10151	Pin (upper)	
	33	HMF10171	Pin (lower)	
	34	MPB00240	Bearing (LF1060ZZ)	
	35	M0408483	Bearing case	
	36	MPR00280	DIN-ring (G-6)	
	37	HMF10180	Shaft holder	
	38	HMF10131	Stud	



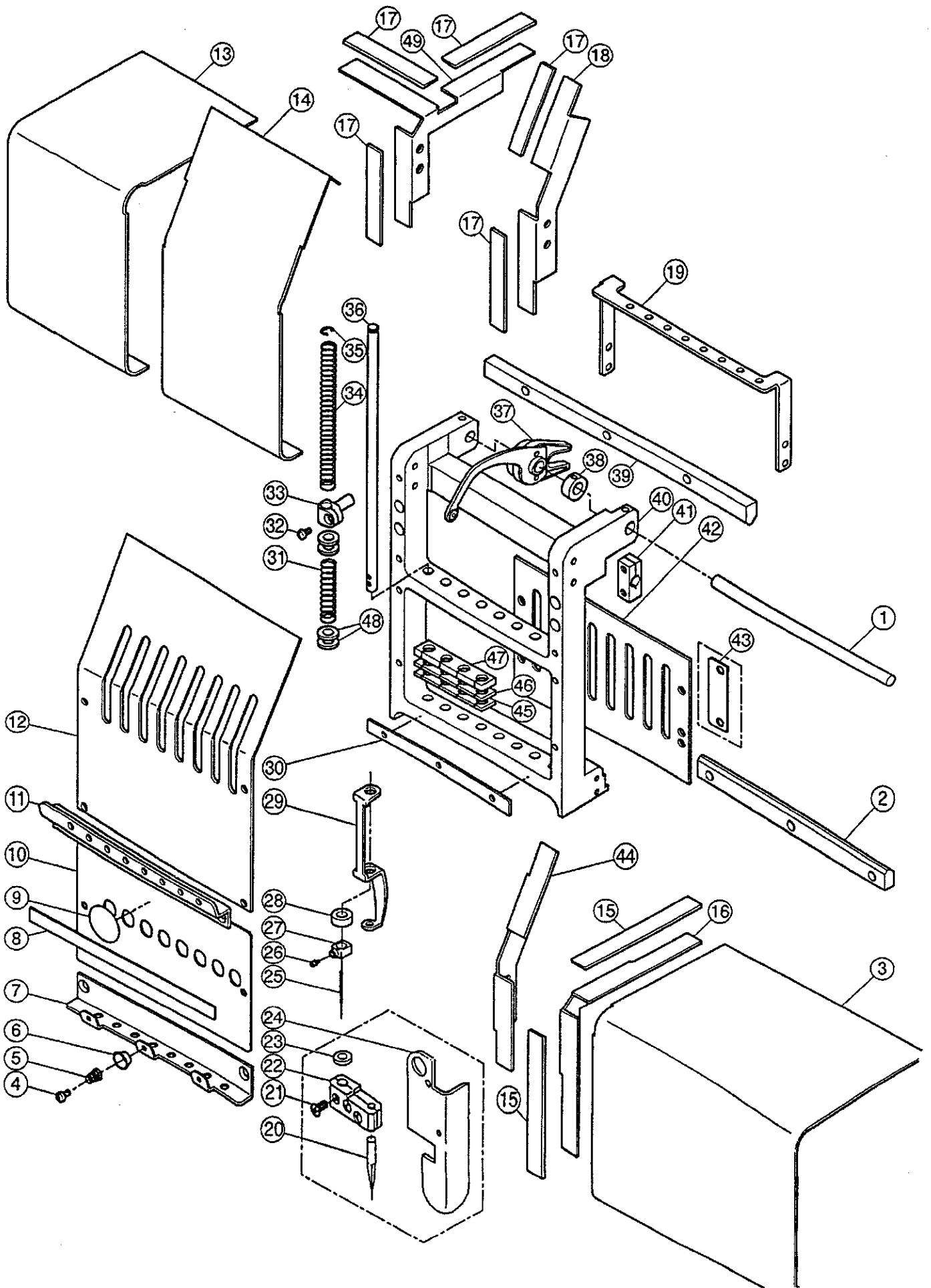
組 Assy	指図 Elt	部品番号 PARTS No.	PARTS NAMES	MF4B14 NOTE / 備考
	1	SS04010A	Cap screw (M4x10)	
	2	HMF10210	Encoder drive gear A	
	3	HMF10203	Encoder bracket B	
	4	MPB00620	Bearing (LF1680ZZ)	
	5	HMF10220	Encoder drive gear B	
	6	HMF10230	Encoder collar	
	7	HMF10193	Encoder bracket A	
	8	MO402670	Rotary encoder A	
	9	-	Cover (by model)	
	10	HMF10281	Cover bracket B	
	11	HMF10270	Cover bracket A	
	12	MO451060	-	
	12	MO451070	Needle No. sticker	
	13	HMF10291	Side cover	
	14	HMF10241	Encoder cover	
	15	HMF84010	Rotary encoder B	
	16	C0402070	Board cover	
	17	HMF10250	Bracket for board	
	18	MO410103	Timing detecting board ass'y	
	19	SM03008D	Screw (M3x8)	
	20	MO410123	Detecting slit disc	
	21	C0402041	Slit disc boss	
	22	SS05008A	Set screw (M5x8)	
	23	HMF10260	Spacer	
	24	MPB00050	Bearing block	
	25	HCM10020	Stud (for HCM-Y480,806-36type)	



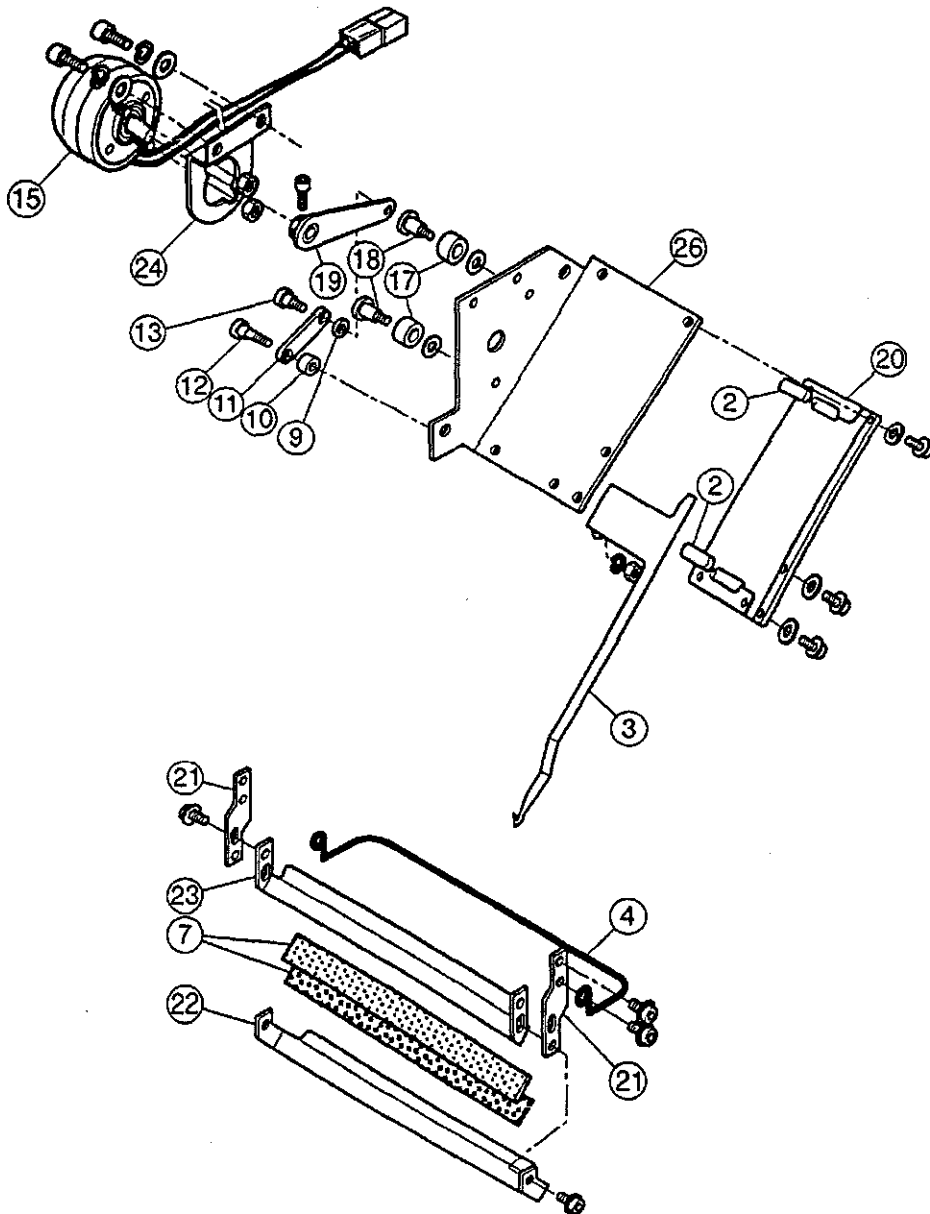
組	指図	部品番号		
Assy	E/t	PARTS No.	PARTS NAMES	MF5113 NOTE / 備考
1		M0412060	Take-up lever shaft (for 7 needle)	
1		M0412070	Take-up lever shaft (for 8 needle)	
2		M0412120	Rail 2 (for 7 needle)	
2		M0412130	Rail 2 (for 8 needle)	
3		-	Cover right (by model)	
4		M0412411	Thread holding screw	
5		M0412400	Spring	
6		M0412390	Thread holding disc	
7		HMF12200	Thread guide plate lower (for 7 needle)	
7		HMF12210	Thread guide plate lower (for 8 needle)	
8		M0412382	Thread holding rubber	
9		-	Number sticker	
10		HMF12240	Front panel lower (for 7 needle)	
10		HMF12250	Front panel lower (for 8 needle)	
11		M0412334	Thread guide plate B (for 7 needle)	
11		M0412342	Thread guide plate B (for 8 needle)	
12		HMF12223	Front panel upper (for 7 needle)	
12		HMF12233	Front panel upper (for 8 needle)	
13		HMF13040	Cover left	
14		-	Cover center (by model)	
15		SF530502	Magnet (A) for cover bracket	
16		HMF13012	Cover bracket	
17		HMF13302	Magnet for cover bracket	
18		HMF13290	Cover bracket (left)	
19		M0412005	Thread guide plate C (for 7 needle)	
19		M0412012	Thread guide plate C (for 8 needle)	
20		M0412280	Borer blade	
21		SF03006D	Screw (M3x6)	
22		M0412273	Bracket A,B for borer	
23		M0413030	Plastic ring (C)	
24		SF512010	Blade cover	
25		MP200150	Needle (#11)	
26		MP200140	Fixing screw	
27		M0412250	Needle holding block	
28		HMF12120	Cushion	
29		HMF12300	Prsure foot ass'y	
30		HMF12070	Prsure foot sheet (for 7 needle)	
30		HMF12080	Prsure foot sheet (for 8 needle)	
31		M0413060	Needle bar spring (2)	
32		M0412200	Screw for needle bar boss	
33		M0412801	Needle bar boss	
34		HMF12090	Needle bar spring upper	
35		MFR00080	E-ring (E-5)	
36		M0412164	Needle bar	
37		HMF12271	Take-up lever ass'y	
38		HMF12150	Collar	
39		HMF12161	Rail upper (for 7 needle)	
39		HMF12171	Rail upper (for 8 needle)	
40		HMF12022	Moving head main body (for 7 needle)	
40		HMF12012	Moving head main body for jumbo hook (for 7 needle)	
40		HMF12052	Moving head main body (for 8 needle)	
40		HMF12042	Moving head main body for jumbo hook (for 8 needle)	
41		HMF12310	Fasten block	
42		HMF12180	Needle bar boss lift cage (for 7 needle)	
42		HMF12190	Needle bar boss lift cage (for 8 needle)	

★  
TO STRAIGHTEN UP NEEDLE  
TO GO THROUGH CENTER  
OF NEEDLE PLATE

LOOSEN 3mm (SUD) ALLEN SCREW  
ON FRONT OF HEAD - ADJUST  
SO 1/4" BAR CENTER



組 Ass'y	指図 Elt	部品番号 PARTS No.	PARTS NAMES	MF5113 NOTE / 備考
	43	HMF12260	Borer plate	
	44	HMF13280	Cover bracket (right)	
	45	HMF12290	Adjusting sheet (A)	
	46	M0412490	Prsure foot felt (0.5mm)	
	46	M0412500	Prsure foot felt (1.0mm)	
	46	M0412510	Prsure foot felt (1.5mm)	
	46	M0412610	Prsure foot felt (2.0mm)	
	47	M0412223	Prsure foot felt (5.0mm)	
	48	HMF12330	Plastic washer	
	49	HMF13350	Cover bracket (left)	



# HAPPY THREAD CATCHER

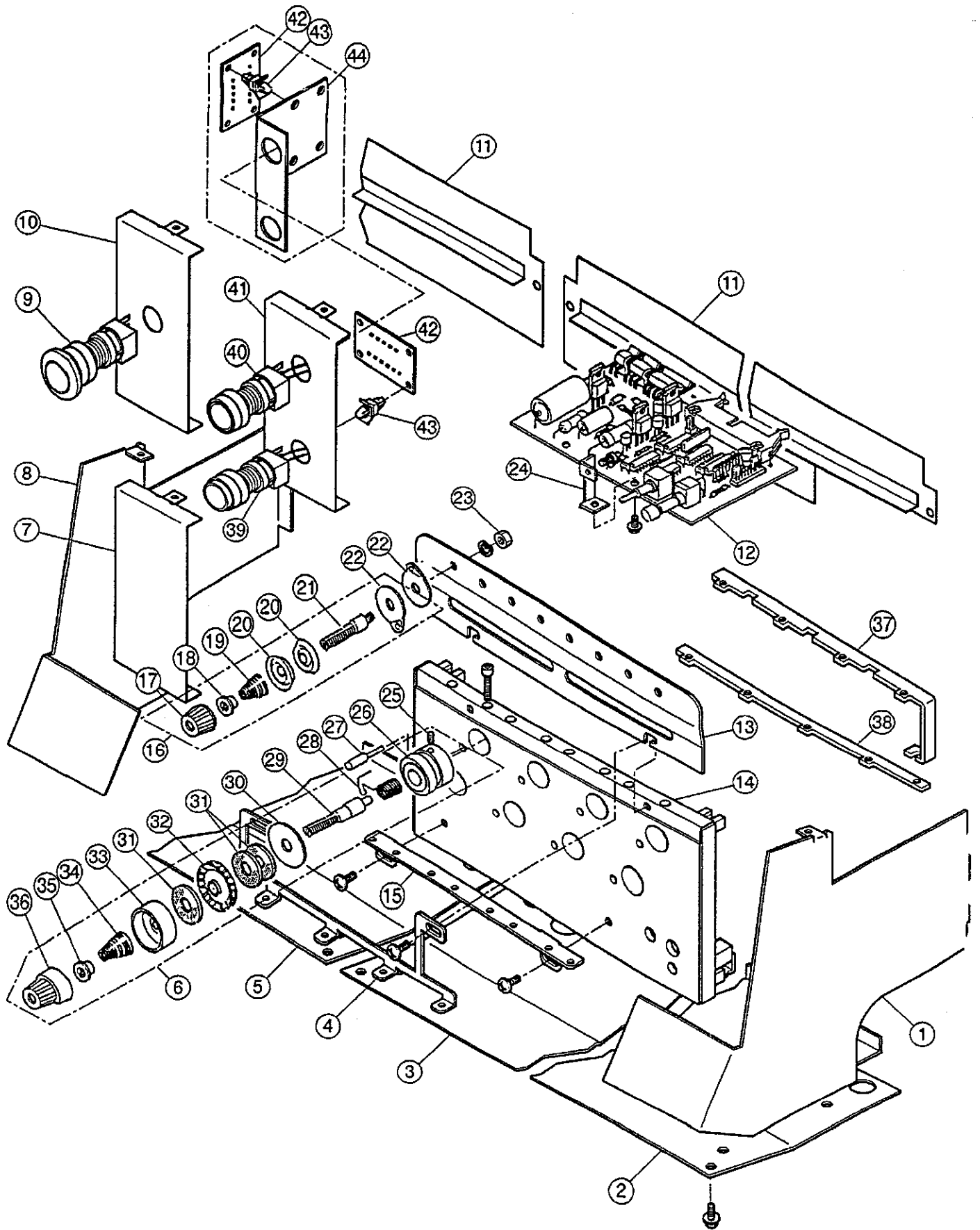
10.1

組 Ass'y	指図 El't	部品番号 PARTS No.	PARTS NAMES	CM4B22 NOTE / 備考
	2	M0414180	Cushion	
	3	C0414055	Hook	
	4	HCM14100	Hook guide for 7 needle	
	4	C0414121	Hook guide for 8 needle	
	7	M0414040	Magic tape for 7 needle	
	7	C0414111	Magic tape for 8 needle	
	9	M0414150	Washer for hinge screw	
	10	C0414080	Spacer for hinge screw	
	11	M0414162	Connecting plate	
	12	C0414070	Hinge screw	
	13	M0414142	Hinge screw (A)	
	15	M0414120	Solenoid	
	17	M0412241	Plastic ring	
	18	M0414080	Hinge screw (B)	
	19	M0414100	Actuating plate	
	20	HMF14081	Guide plate	
	21	HCM14030	Holder guide	
	22	HCM14070	Holder (Lower) for 7 needle	
	22	HCM14060	Holder (Lower) for 8 needle	
	23	HCM14050	Holder (Upper) for 7 needle	
	23	HCM14040	Holder (Upper) for 8 needle	
	24	M0414111	Solenoid fixing plate	
	26	HCM14012	Bracket	

*Need*  
*C0414070* Hinge Screw

# HAPPY THREAD TENSION UNIT

CM4727 TT.U

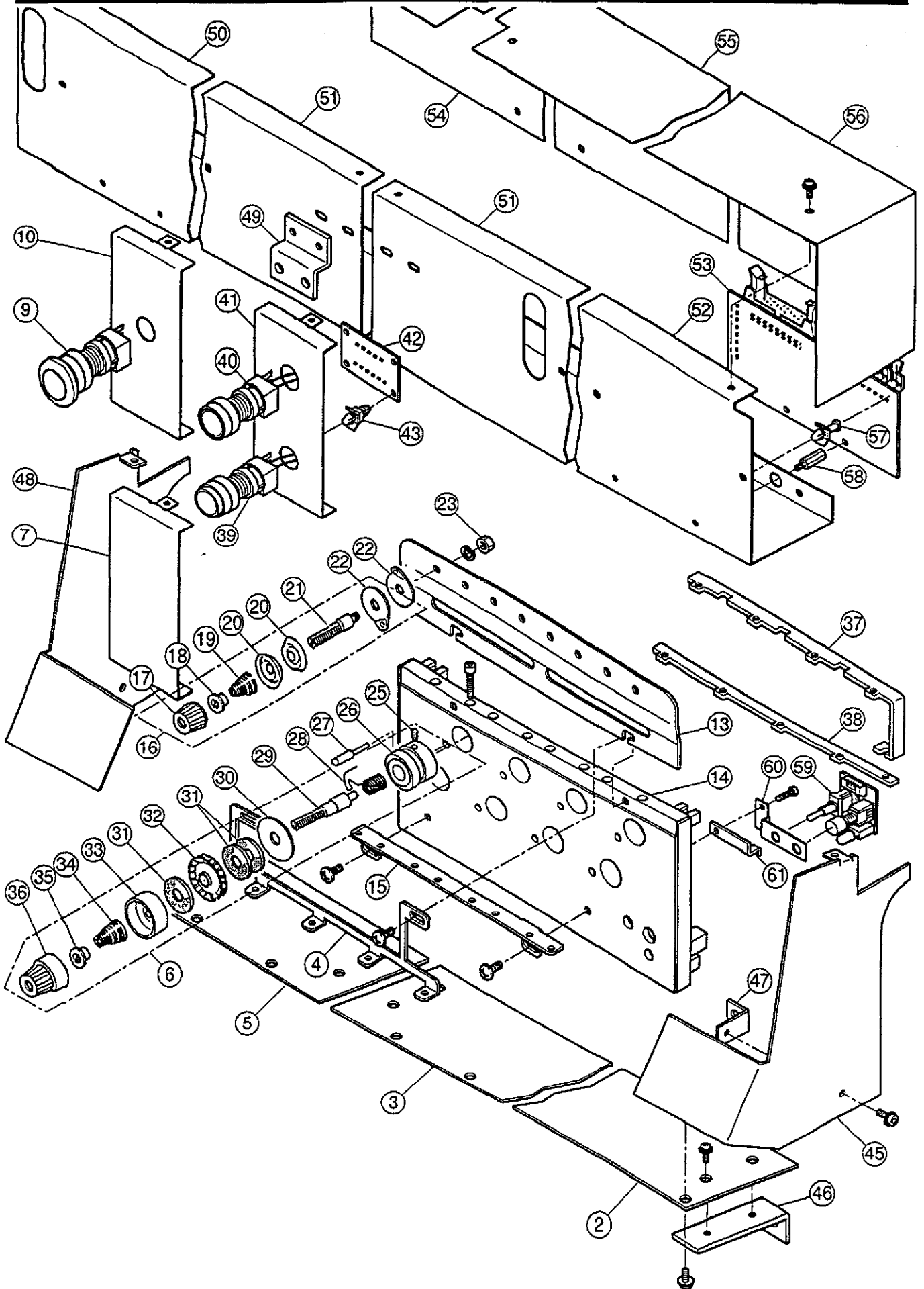


# HAPPY THREAD TENSION UNIT

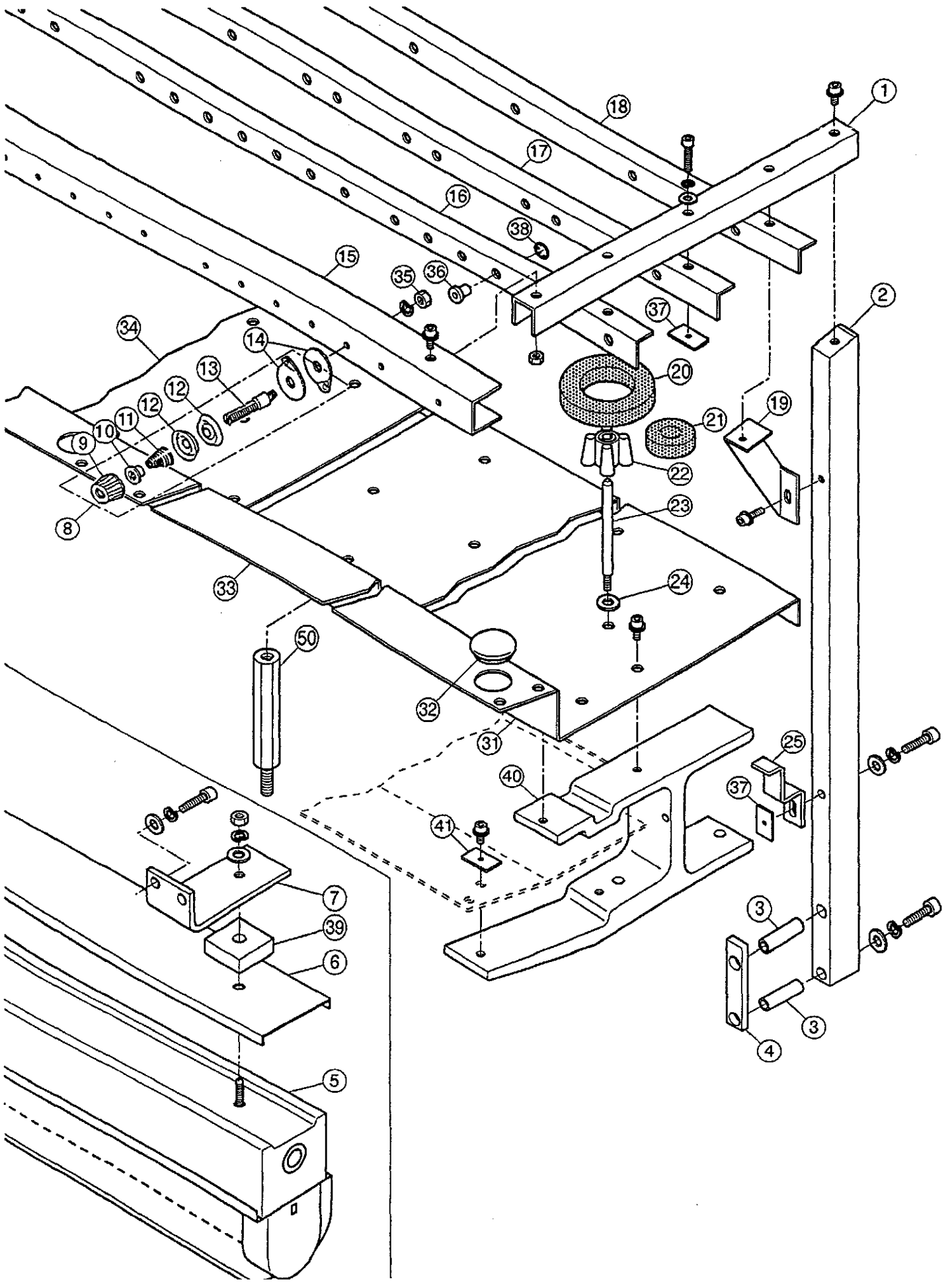
# 11.1

組	指図	部品番号		CM4C27
Ass'y	El't	PARTS No.	PARTS NAMES	NOTE / 備考
	1	HMF20633	Thread tension side cover (Right)	
	2	-	Fixing plate B right (by model)	
	3	-	Fixing plate B center (by model)	
	4	M0416260	Upper thread guide	
	5	-	Fixing plate B left (by model)	
	6	M0416214	Thread tension ass'y	
	7	-	Thread tension cover C (by model)	
	8	HMF20643	Thread tension side cover (Left)	
	9	EPS00550	Emergency stop switch	
	10	-	Thread tension cover B (by model)	
	11	-	Rear cover (by model)	
	12	M0483222	Thread detecting board ass'y	
	13	M0416085	Thread guide base (for 7 needle)	
	13	M0416075	Thread guide base (for 8 needle)	
	14	M0416130	Thread tension bracket (for 7 needle)	
	14	M0416140	Thread tension bracket (for 8 needle)	
	15	M0416220	Lower thread guide A (for 7 needle)	
	15	M0416230	Lower thread guide A (for 8 needle)	
	16	M0416123	Thread guide unit	
16*	17	MPZ00960	Tension nut	
16*	18	MPZ00280	Spring guide	
16*	19	M0416111	Spring	
16*	20	MPZ00220	Disc	
16*	21	M0418211	Tension shaft	
16*	22	MPZ00200	Tension guide plate	
	23	NA04000A	Nut (M4)	
	24	M0416031	Bracket for thread detecting board	
6*	25	SS04005A	Set screw (M4x5)	
6*	26	M0416171	Cylinder cover	
	27	M0416160	Detecting pin	
6*	28	M0416183	Thread check spring	
6*	29	MPZ00250	Tension shaft	
6*	30	M0416191	Isolation disc (Gray)	
6*	31	M0416201	Felt (Gray)	
6*	32	MPZ00260	Rotary tension disc	
6*	33	MPZ00270	Holder (Black)	
6*	34	M0416111	Spring	
6*	35	MPZ00280	Spring guide	
6*	36	MPZ00290	Knob nut (Black)	
	37	M0417440	Thread tension fixer A	
	38	M0417450	Thread tension fixer B (for 8 needle)	
	38	M0417460	Thread tension fixer C (for 7 needle)	
	39	C0484020	Stop switch ass'y	
	40	C0484010	Start switch ass'y	
	41	-	Thread tension cover A (by model)	
	42	C0416120	Start switch board ass'y	
	43	EPN00290	Locking card spacer	
	44	HCM18120	Board bracket (for 720 type)	

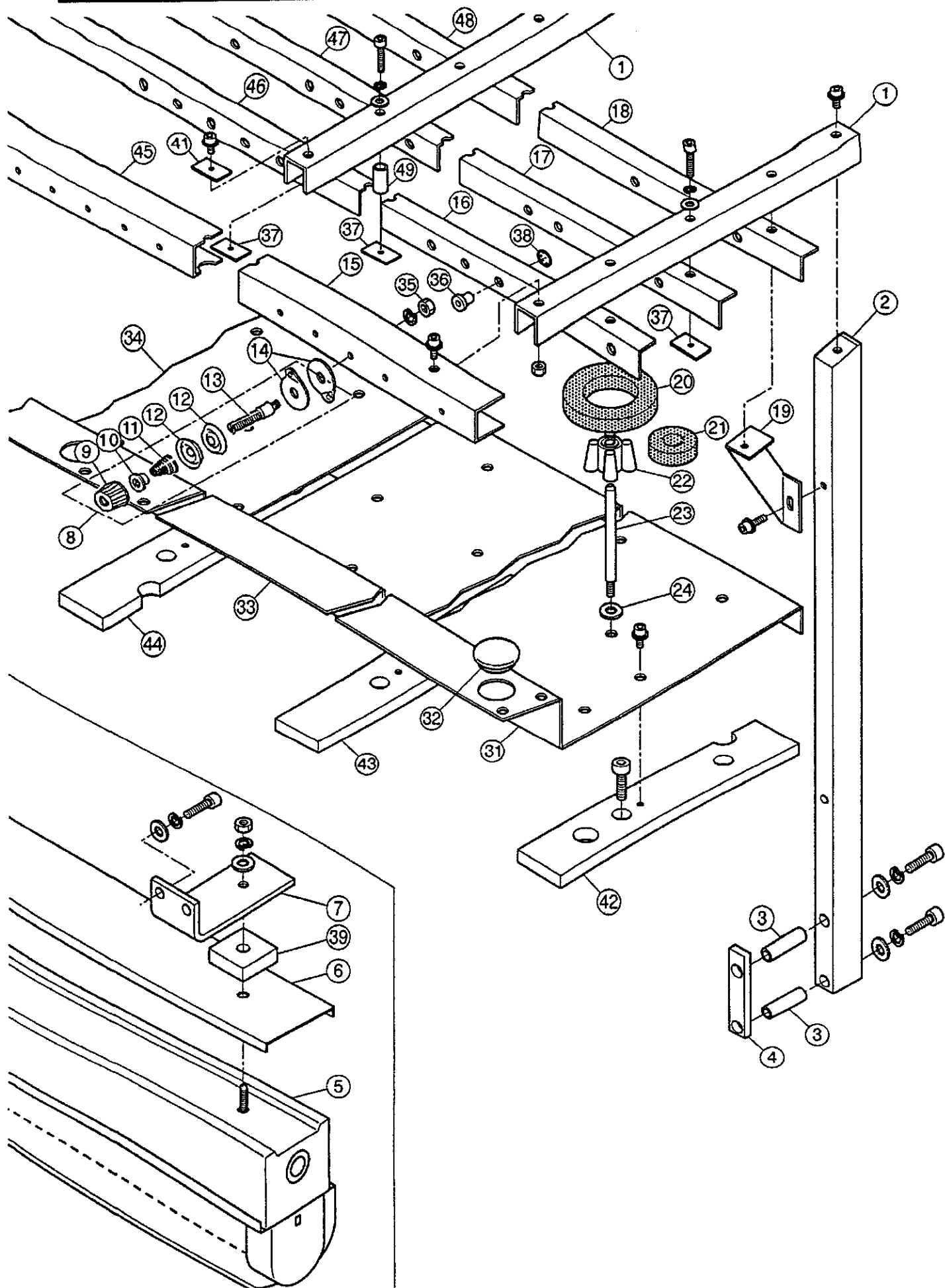
# HAPPY THREAD TENSION UNIT (812-48) CM4727 11.2



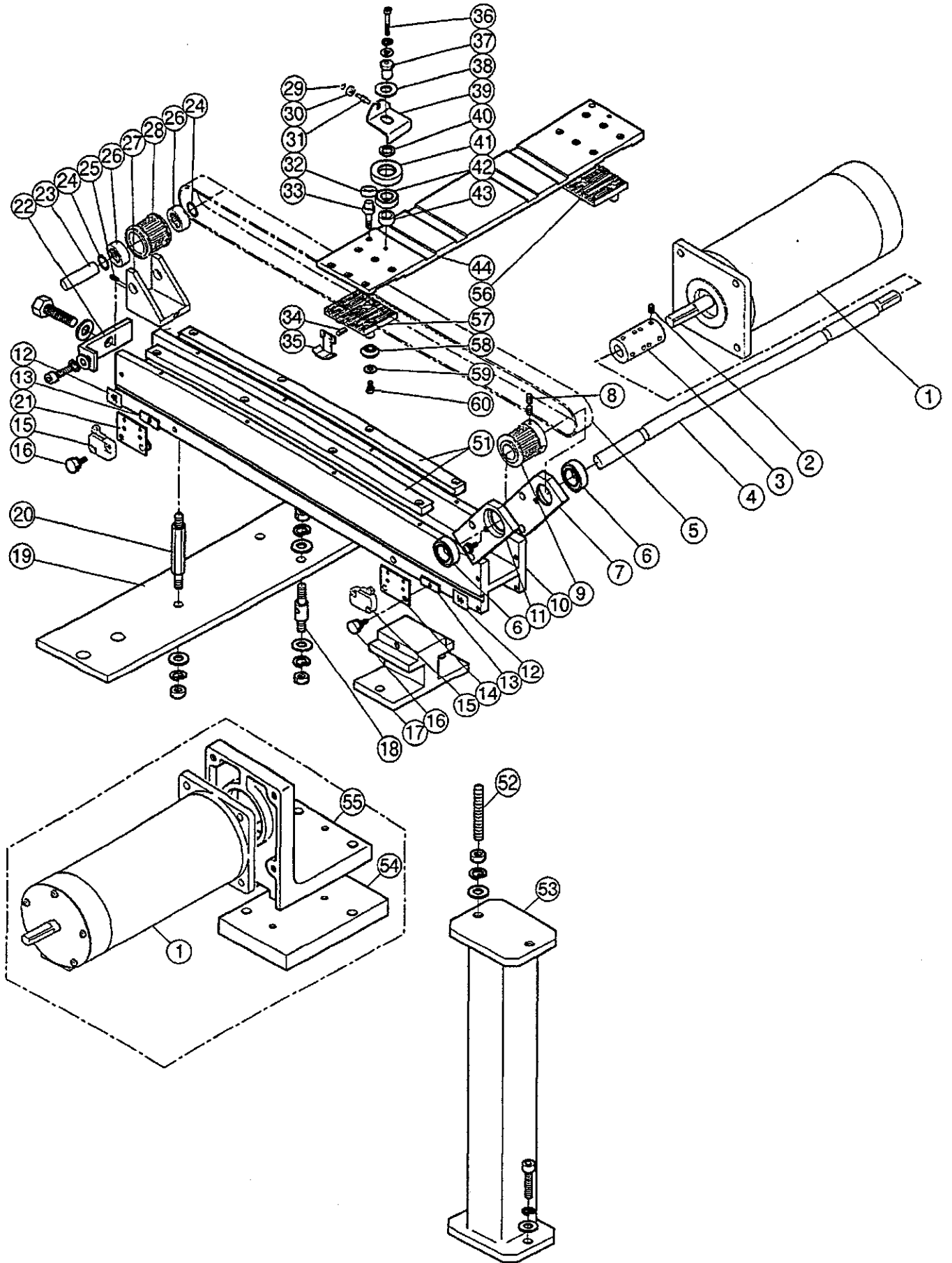
組 Ass'y	指図 Elt	部品番号 PARTS No.	PARTS NAMES	CM4C27 NOTE / 備考
	2	HCM16191	Fixing plate B right	
	3	HCM16200	Fixing plate B center	
	4	M0416260	Upper thread guide	
	5	HCM16211	Fixing plate B left	
	6	M0416214	Thread tension ass'y	
	7	HCM18080	Thread tension cover C	
	9	EPS00550	Emergency stop switch	
	10	HCM18070	Thread tension cover B	
	13	M0416075	Thread guide base (for 8 needle)	
	14	M0416140	Thread tension bracket (for 8 needle)	
	15	M0416230	Lower thread guide A (for 8 needle)	
	16	M0416123	Thread guide unit	
16*	17	MPZ00960	Tension nut	
16*	18	MPZ00280	Spring guide	
16*	19	M0416111	Spring	
16*	20	MPZ00220	Disc	
16*	21	M0418211	Tension shaft	
16*	22	MPZ00200	Tension guide plate	
	23	NA04000A	Nut (M4)	
6*	25	SS04005A	Set screw (M4x5)	
6*	26	M0416171	Cylinder cover	
	27	M0416160	Detecting pin	
6*	28	M0416183	Thread check spring	
6*	29	MPZ00250	Tension shaft	
6*	30	M0416191	Isolation disc (Gray)	
6*	31	M0416201	Felt (Gray)	
6*	32	MPZ00260	Rotary tension disc	
6*	33	MPZ00270	Holder (Black)	
6*	34	M0416111	Spring	
6*	35	MPZ00280	Spring guide	
6*	36	MPZ00290	Knob nut (Black)	
	37	M0417440	Thread tension fixer A	
	38	M0417450	Thread tension fixer B (for 8 needle)	
	39	C0484020	Stop switch ass'y	
	40	C0484010	Start switch ass'y	
	41	HCM18060	Thread tension cover A	
	42	C0416120	Start switch board ass'y	
	43	EPN00290	Locking card spacer	
	45	HCM16260	Thread tension side cover (Right)	
	46	HCM16220	Fixing plate bracket	
	47	HMF10281	Cover bracket B	
	48	HCM16270	Thread tension side cover (Left)	
	49	HCM16340	Duct bracket	
	50	HCM16300	Duct (right)	
	51	HCM16290	Duct (center)	
	52	HCM16280	Duct (left)	
	53	HMX83222	Thread detecting board ass'y	
	54	HCM16330	Duct cover (right)	
	55	HCM16321	Duct cover (center)	
	56	HCM16310	Duct cover (left)	
	57	EPN00340	Card spacer	
	58	MPZ01430	Stud (BSB315)	
	59	HCM83001	Jump switch board ass'y	
	60	HCM16600	Switch fixing plate	
	61	HCM16380	Switch bracket	



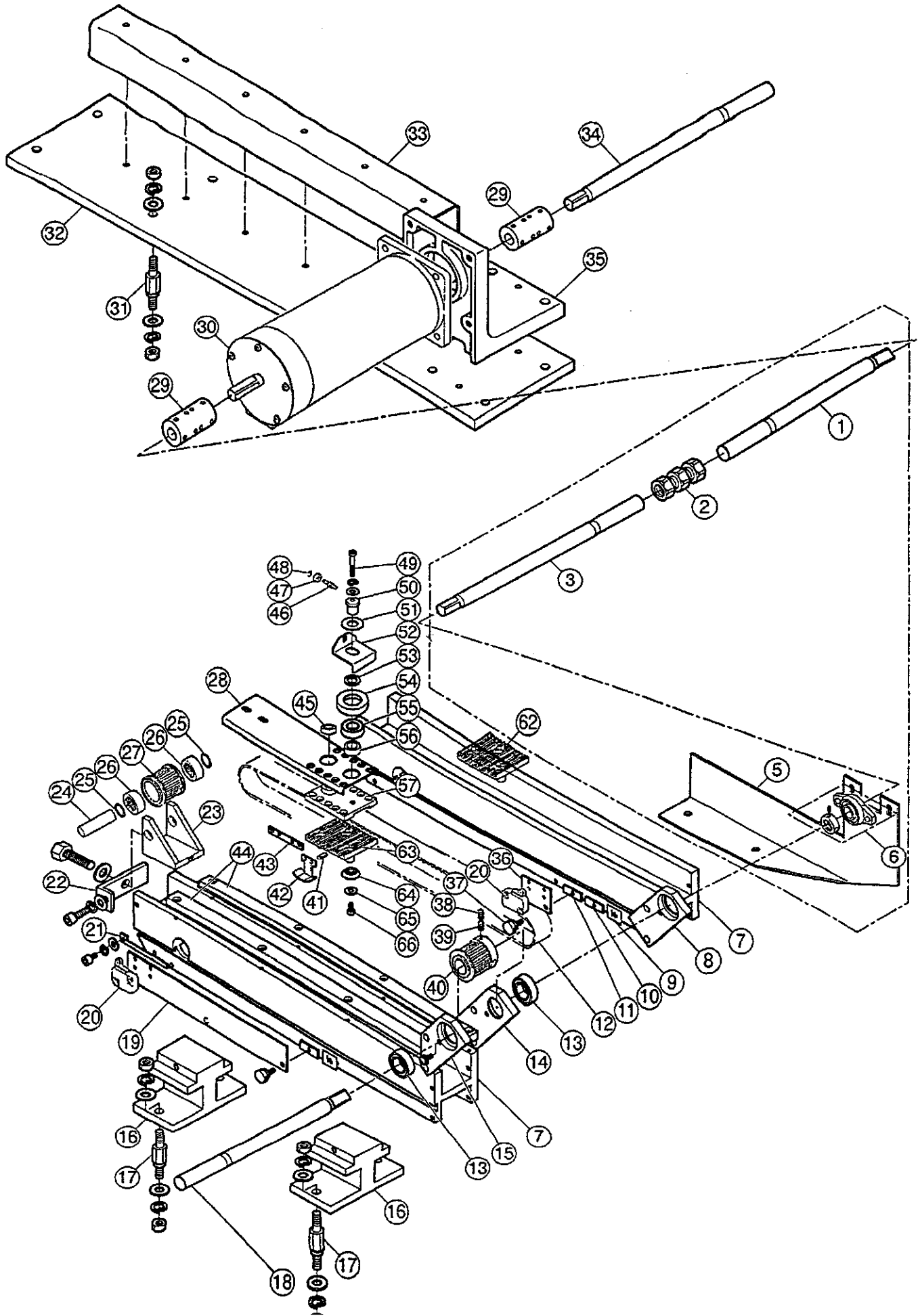
組 Ass'y	指図 Elt	部品番号 PARTS No.	PARTS NAMES	MF5113 NOTE / 備考
	1	HMF20053	Thread guide connecting plate	
	2	HMF20063	Thread guide support pillar	
	3	HMF20670	Spacer	
	4	HMF20660	Vibration insulator B	
	5	EPP00360	Illuminator	
	6	HMF00200	Illuminator cover	
	7	HMF00190	Illuminator bracket	
	8	MO416123	Thread guide unit	
8*	9	MPZ00960	Tension nut	
8*	10	MPZ00280	Spring guide	
8*	11	MO416111	Spring	
8*	12	MPZ00220	Disc	
8*	13	MO418211	Tension shaft	
8*	14	MPZ00200	Tension guide plate	
	15	-	Thread guide unit fixing plate (by model)	
	16	-	Thread guide A (by model)	
	17	-	Thread guide B (by model)	
	18	-	Thread guide C (by model)	
	19	HMF20321	Reinforcement plate	
	20	HMF20570	Felt ring (Large)	
	21	MO420050	Felt ring (Small)	
	22	MPZ00340	Plastic spring	
	23	MO420032	Spool pin	
	24	MO420890	Washer	
	25	HMF20610	Reinforcement plate B	
	31	-	Fixing plate A right (by model)	
	32	MPZ00190	Hole cover	
	33	-	Fixing plate A center (by model)	
	34	-	Fixing plate A left (by model)	
	35	NA04000A	Nut (M4)	
	36	MO445080	Eyelet	
	37	MO420900	Fixing nut	
	38	MPR00110	SE-ring (SE-7)	
	39	HMF00320	Vibration insulator	
	40	HMF20590	Base for thread stand	
	41	HMF20650	Washer	
	50	HCM20370	Stud (for HCM-720-30)	



組 Ass'y	指図 E/t	部品番号 PARTS No.	PARTS NAMES	CM4B14 NOTE / 備考
	1	HMF20053	Thread guide connecting plate	
	2	HMF20063	Thread guide support pillar	
	3	HMF20670	Spacer	
	4	HMF20660	Vibration insulator B	
	5	EPP00360	Illuminator	
	6	HMF00200	Illuminator cover	
	7	HMF00190	Illuminator bracket	
	8	M0416123	Thread guide unit	
8*	9	MPZ00960	Tension nut	
8*	10	MPZ00280	Spring guide	
8*	11	M0416111	Spring	
8*	12	MPZ00220	Disc	
8*	13	M0418211	Tension shaft	
8*	14	MPZ00200	Tension guide plate	
	15	HCM20191	Thread guide unit fixing plate (right)	
	16	HCM20131	Thread guide A (right)	
	17	HCM20151	Thread guide B (right)	
	18	HCM20171	Thread guide C (right)	
	19	HMF20321	Reinforcement plate	
	20	HMF20570	Felt ring (Large)	
	21	M0420050	Felt ring (Small)	
	22	MPZ00340	Plastic spring	
	23	M0420032	Spool pin	
	24	M0420890	Washer	
	31	HCM16160	Fixing plate A right	
	32	MPZ00190	Hole cover	
	33	HCM16170	Fixing plate A center	
	34	HCM16180	Fixing plate A left	
	35	NA04000A	Nut (M4)	
	36	M0445080	Eyelet	
	37	M0420900	Fixing nut	
	38	MPR00110	SE-ring (SE-7)	
	39	HMF00320	Vibration insulator	
	41	HMF20650	Washer	
	42	HCM16230	Base (right) for thread stand	
	43	HCM16240	Base (center) for thread stand	
	44	HCM16250	Base (left) for thread stand	
	45	HCM20201	Thread guide unit fixing plate (left)	
	46	HCM20141	Thread guide A (left)	
	47	HCM20161	Thread guide B (left)	
	48	HCM20181	Thread guide C (left)	
	49	HMF20770	Spacer	



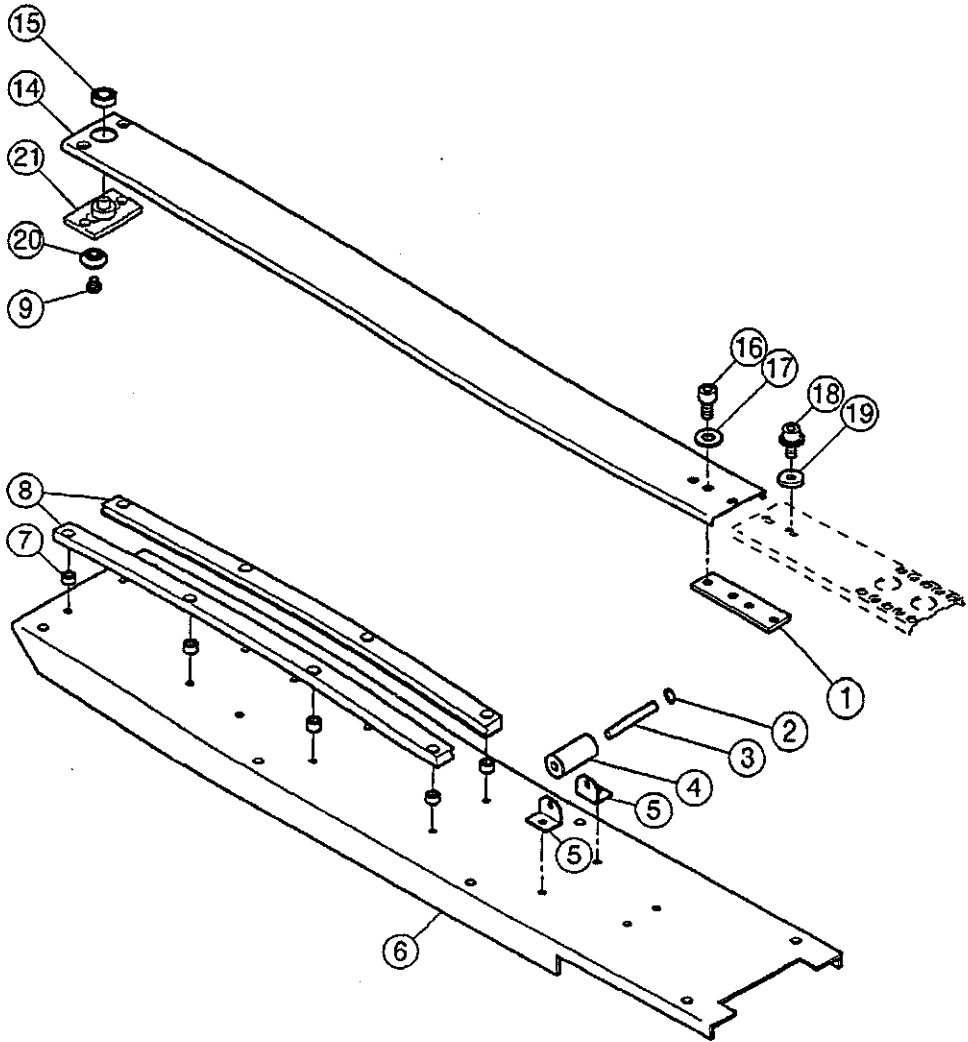
組 Ass'y	指図 E'l't	部品番号 PARTS No.	PARTS NAMES	CMS110 NOTE / 備考
	1	EPM00080	Pulse motor	
	1	EPM00330	Pulse motor (for 804type)	
	2	SS05008A	Set screw (M5x8)	
	3	M0424093	Coupling A	
	4	HMF24220	X carriage drive shaft	
	4	HCM24300	X carriage drive shaft (for 812-48type)	
	5	-	X timing belt (by model)	
	6	MPB00270	Bearing (6903ZZ)	
	7	HMF24050	Drive shaft support A	
	8	SS06006A	Set screw (M6x6)	
	9	M0424141	Drive pulley	
	10	-	X rail base (by model)	
	11	HMF24060	Drive shaft support B	
	12	M0451080	Embroidery range sticker for carriage	
	13	M0424210	Fixing nut	
	14	M0424221	Limit switch plate	
	15	EPS00010	Micro switch	
	16	MPZ00990	Thumb knob	
	17	HMF24020	Supporting base B	
	18	HCM24150	X supporting base stud	
	19	HCM24010	X base plate	
	20	HMF24080	X carriage stud	
	21	M0424231	Limit switch plate 2	
	22	M0424201	Tension bracket	
	23	M0424180	Idler shaft	
	24	M0424160	Spacer	
	25	SS03006A	Set screw (M3x6)	
	26	MPB00280	Needle bearing (HK1210)	
	27	M0424190	X idler pulley support	
	28	M0424172	Idler pulley	
	29	MPR00230	E-ring	
	30	M0425160	Small roller	
	31	M0425151	Small roller shaft	
	32	MPB00250	Bearing (L-1680ZZ)	
	33	M0424003	X cam follower shaft	
	34	MPZ01610	Roll bushing spacer	
	35	M0424050	Limit switch dog	
	36	SC04030D	Cap screw (M4x30)	
	37	M0426081	Roller support B (eccentric)	
	38	WA10000D	Plain washer (M10)	
	39	HMF24181	Roller support fixture	
	40	HMF24200	Spacer	
	41	HMF24210	Bearing roller	
	42	MPB00560	Bearing (6900ZZ)	
	43	HMF24190	Collar	
	44	HCM24040	Cam follower base (for Y480type)	
	44	HCM24221	Cam follower base (for Y300,Y360type)	
	51	-	X rail with V groove (by model)	
	52	HCM04340	Bed stud B	
	53	HCM24020	X base support	
	54	HCM24320	Rectifying plate (for 812-48type)	
	55	HCM24331	Pulse motor bracket (for 812-48type)	
	56	HMF24610	Holding plate D	
	57	HMF24600	Holding plate C	
	58	HMF24570	Roller bearing	
	59	WA04000A	Washer (M4)	
	60	SC04006A	Cap screw (M4x6)	



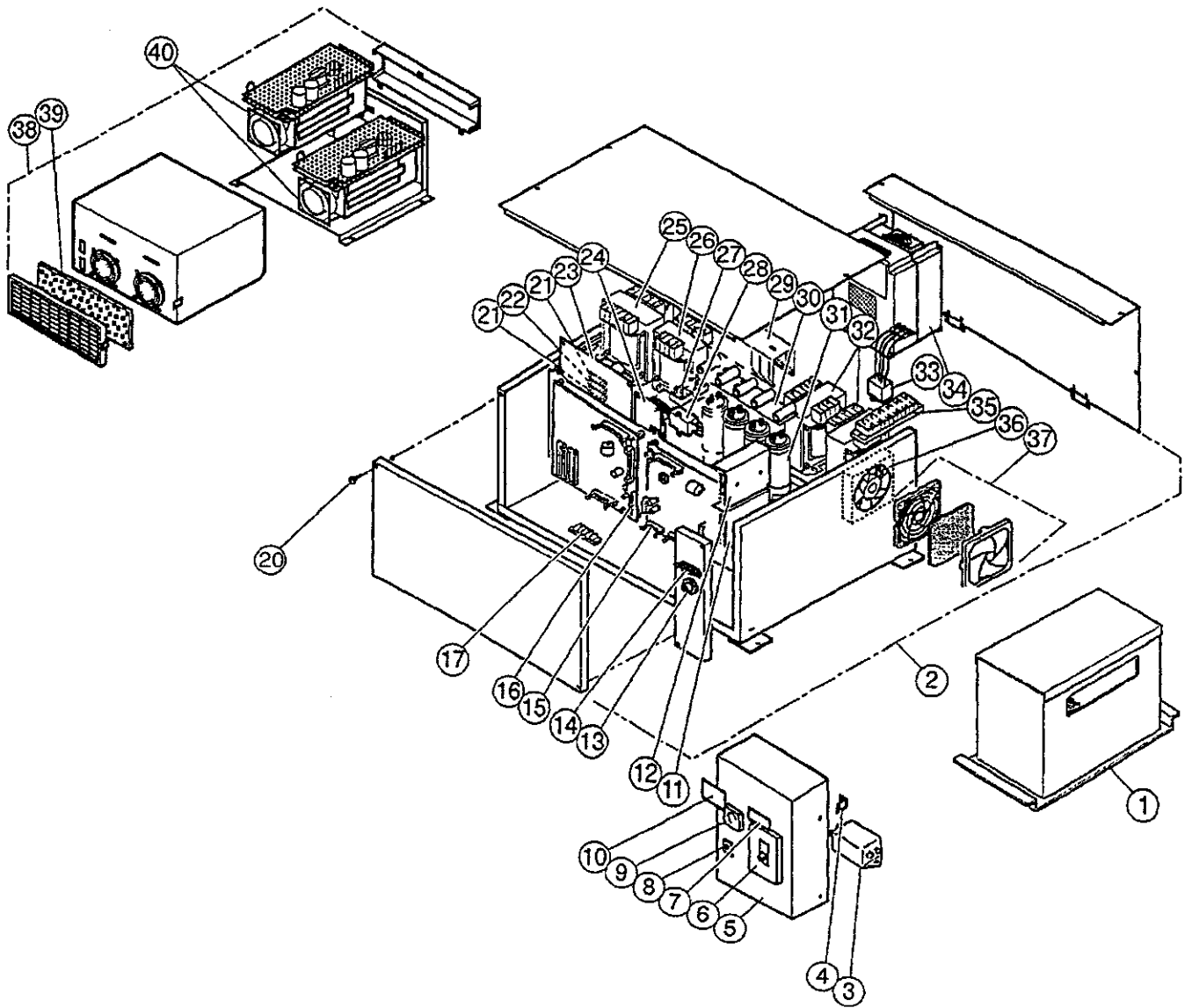
組 Ass'y	指図 E/I	部品番号 PARTS No.	PARTS NAMES	CM5110 NOTE / 備考
	1	HCM24350	Y carriage drive shaft G (812-48)	
	2	MPC00040	N-coupling N17-17 (for 812-48type)	
	3	HCM24361	Y carriage drive shaft H (812-48)	
	5	HCM24340	Shaft intermediate support (812-48)	
	6	MPB00290	Flange type bearing unit (for 812-48type)	
	7	HCM24050	Rail base (Y480)	
	7	HCM24240	Rail base (Y300)	
	7	HCM24390	Rail base (Y360)	
	8	HMF24060	Drive shaft support B	
	9	M0451080	Embroidery range sticker for carriage	
	10	M0424210	Fixing nut (for Y480type)	
	10	C0424230	Fixing nut (for Y300,Y360type)	
	11	M0424210	Fixing nut	
	12	MPV00310	Y timing belt (for Y480 type)	
	12	MPV00380	Y timing belt (for Y300 type)	
	12	MPV00280	Y timing belt (for Y360 type)	
	13	MPB00270	Bearing (6903ZZ)	
	14	HMF24050	Drive shaft support A	
	15	HMF24070	Drive shaft support C	
	16	HMF24010	Supporting base A	
	17	HMF24450	Y supporting base pillar	
	18	-	Y carriage drive shaft 1 (by model)	
	19	C0424070	Limit switch plate (for Y480type)	
	19	M0424231	Limit switch plate 2 (for Y300,Y360type)	
	20	EPS00010	Micro switch	
	21	C0424150	Plate nut	
	22	M0424201	Tension bracket	
	23	C0424060	Idler pulley support	
	24	M0424180	Idler shaft	
	25	M0424160	Spacer	
	26	MPB00280	Needle bearing (HK1210)	
	27	M0424172	Idler pulley	
	28	HCM24080	Slide base, rear	
	29	M0424093	Coupling A	
	30	EPM00080	Pulse motor	
	30	EPM00330	Pulse motor (for 804type)	
	31	HMF24470	Pulse motor base pillar	
	32	HCM24101	bracket base (Y480)	
	32	HCM24270	bracket base (Y300)	
	32	HCM24431	bracket base (Y360)	
	33	HCM24110	Reinforcement pipe (Y480)	
	34	-	Y carriage drive shaft 2 (by model)	
	35	M0424273	Pulse motor bracket	
	36	M0424221	Limit switch plate	
	37	MPZ00990	Thumb knob	
	38	SG06006A	Set screw (flat tipped M6x6)	
	39	SS06006A	Set screw (M6x6)	
	40	M0424141	Drive pulley	
	41	MPZ01610	Roll bushing spacer	
	42	M0424050	Limit switch dog	
	43	C0424080	Limit switch dog bracket (for Y480 type)	
	43	HCM24260	Limit switch dog bracket (for Y300,Y360type)	
	44	M0425001	Rail with V groove, rear (for Y480 type)	
	44	M0424531	Rail with V groove, rear (for Y300 type)	
	44	M0424501	Rail with V groove, rear (for Y360 type)	



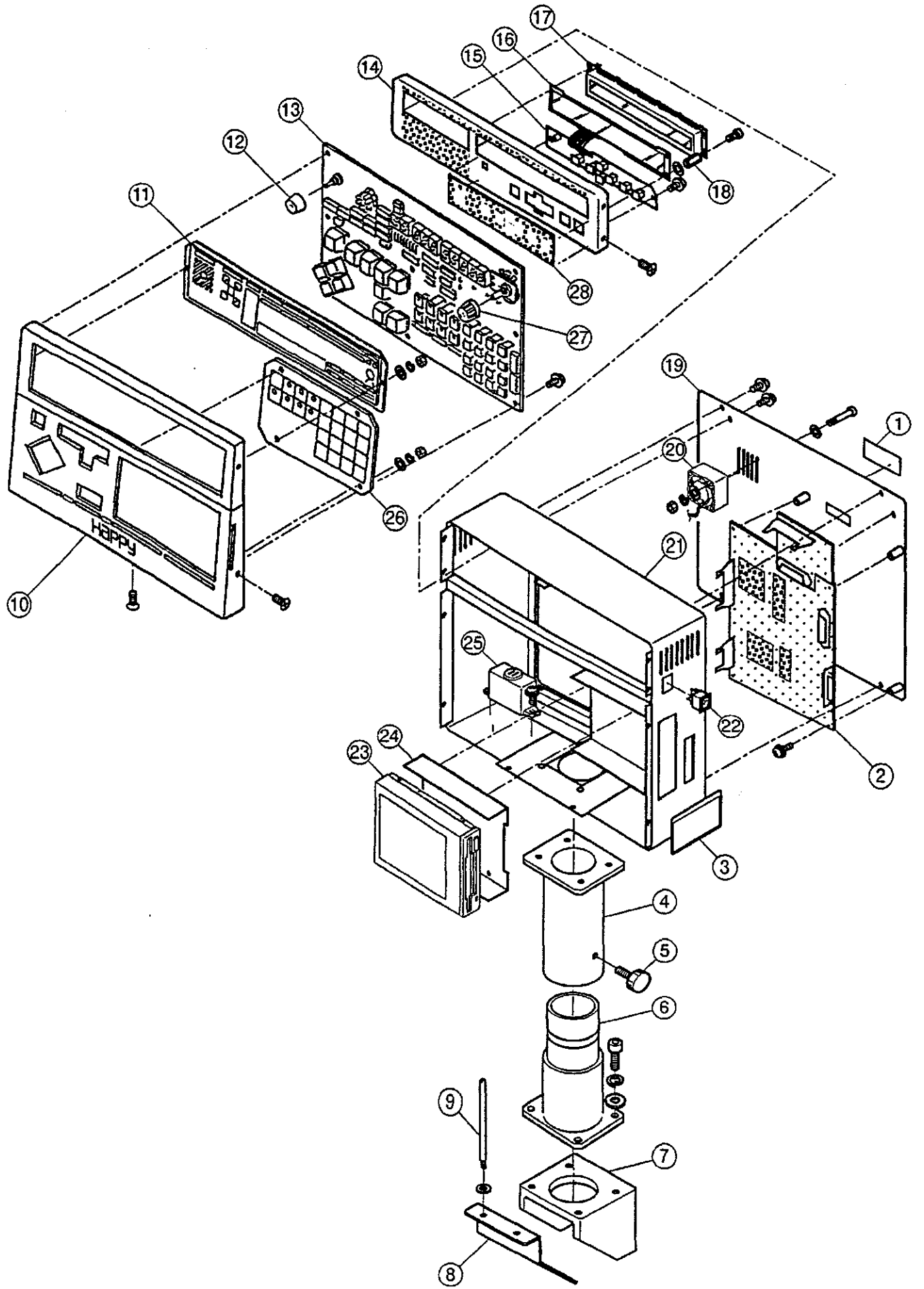
組 Assy	指図 E/t	部品番号 PARTS No.	PARTS NAMES	CMS110 NOTE / 備考
	45	MPB00250	Bearing (L-1680ZZ)	
	46	M0425151	Small roller shaft	
	47	M0425160	Small roller	
	48	MPR00230	E-ring	
	49	SC04030D	Cap screw (M4x30)	
	50	M0426081	Roller support B (eccentric)	
	51	WA10000D	Washer (M10)	
	52	HMF24181	Roller support fixture	
	53	HMF24200	Spacer	
	54	HMF24210	Bearing roller	
	55	MPB00560	Bearing (6900ZZ)	
	56	HMF24190	Collar	
	57	HMF24131	Fixing plate ass'y for belt	
	57	HMF24430	Fixing plate ass'y for belt (for jumbo hook)	
	62	HMF24610	Holding plate D	
	63	HMF24600	Holding plate C	
	64	HMF24570	Roller bearing	
	65	WA04000A	Washer (M4)	
	66	SC04006A	Cap screw (M4x6)	



組	指図	部品番号		CM5110
Assy	El't	PARTS No.	PARTS NAMES	NOTE / 備考
	1	C0424101	Joint plate	
	2	MPR00100	SE-ring (SE-5)	
	3	M0424382	Center roller shaft	
	4	M0424390	Center roller	
	5	HCM24090	Center roller support	
	6	HCM24060	Rail bracket (Y480)	
	6	HCM24230	Rail bracket (Y300)	
	6	HCM24400	Rail bracket (Y360)	
	7	HCM24470	Rail spacer	
	8	HMF24230	Rail with V groove, front (for Y480 type)	
	8	M0424531	Rail with V groove, front (for Y300, Y360 type)	
	9	SF524160	Idler screw	
	14	HCM24071	Slide base, front (Y480)	
	14	HCM24251	Slide base, front (Y300)	
	14	HCM24411	Slide base, front (Y360)	
	15	MPB00250	Bearing (L-1680ZZ)	
	16	SC05008D	Cap screw (M5x8)	
	17	NA05000D	Plain washer (M5)	
	18	SX05010D	Cap screw with flange (M5x10)	
	19	C0424190	Plastic washer	
	20	HMF24570	Roller bearing	
	21	HMF24580	Roller supporting idler ass'y	



組 Assy	指図 Elt	部品番号 PARTS No.	PARTS NAMES	MF5117 NOTE / 備考
	1	M0427360	Transformer ass'y	
	2	HMF27014	Main unit box ass'y	
	3	EPK00070	Noise filter	
	4	HMF10281	Cover bracket B	
	5	HMF27100	Breaker bracket	
	6	M0475171	Automatic breaker (3 phase)	
	6	M0475181	Automatic breaker (1 phase)	
	7	-	Power supply sticker	
	8	SF427120	Outlet (with fram)	
	9	EPK00080	Voltmeter	
	10	-	Voltmeter sticker	
	11	EPK00580	Switching power supply (24V)	
	12	EPK00590	Switching power supply (5V)	
	13	EPJ00580	Power supply terminal for reader	
	14	EPJ00540	Communication terminal for reader	
	15	HMF83611	Slave circuit board ass'y	
	16	M0483017	Master circuit board ass'y	
	17	EPF00080	Terminal base	
	20	MPZ00990	Thumb knob	
	21	EPF00160	Fuse (5A)	
	22	EPF00170	Fuse (10A)	
	23	HMF83631	Power supply board ass'y	
	24	HMF83641	Thread catch circuit board ass'y	
	25	EPK00550	Transformer	
	26	EPK00560	Transformer	
	27	EPD00010	Diode stack	
	28	EPK00600	Noise filter	
	29	-	Duct	
	30	M0483230	Condenser connecting board ass'y	
	31	EPC00640	Electrolytic condenser	
	32	EPK00570	Transformer	
	33	EPC00600	Surge protector	
	34	EPM00260	Inverter	
	35	EPF00060	Terminal base	
	36	EPK00290	Fan	
	37	EPK00300	Filter for fan	
	38	EPM00150	Pulse motor driver ass'y	
	39	-	Air filter	
	40	EPM00200	Pulse motor driver	



# HAPPY CONTROL BOX

16.1

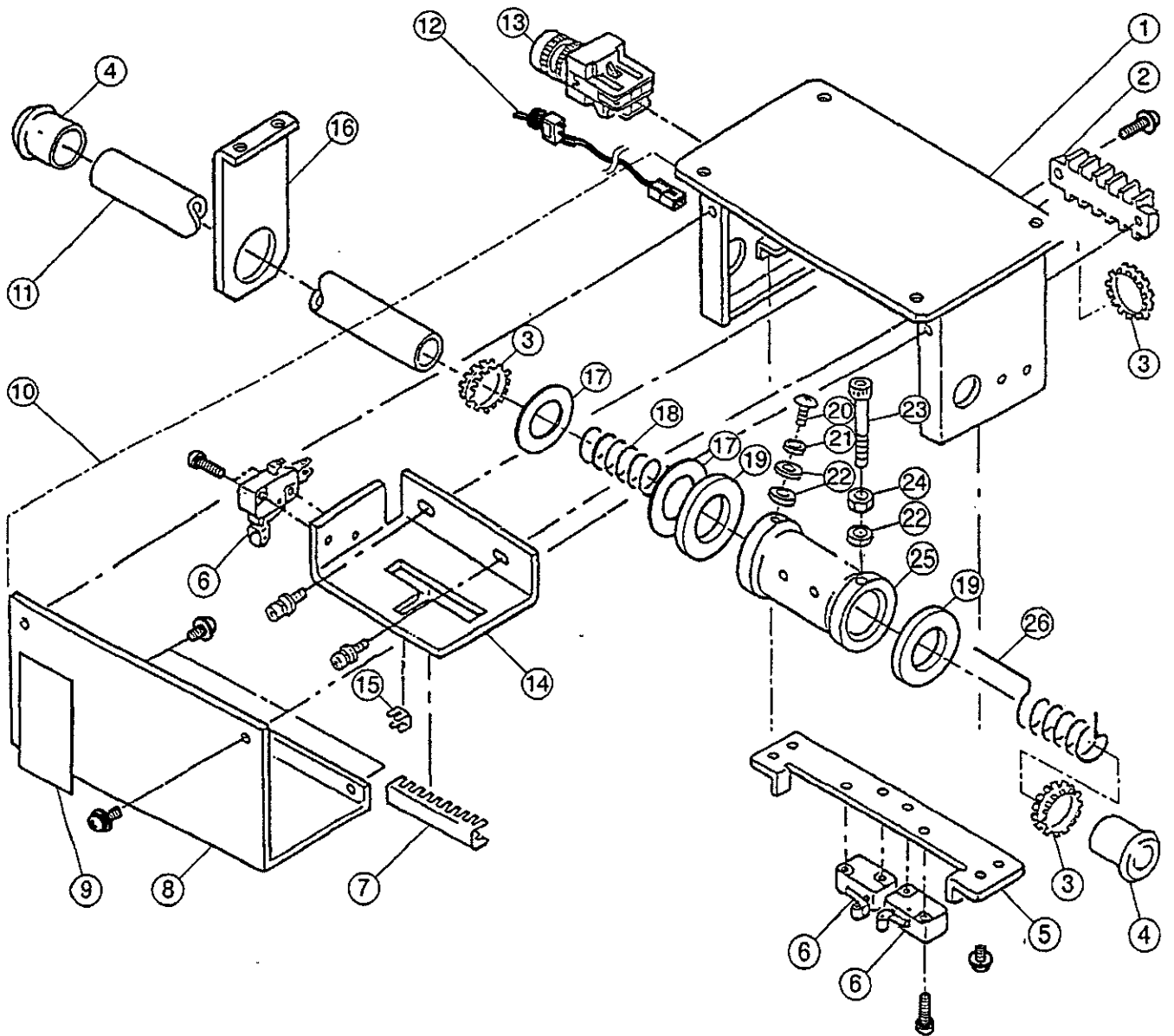
組 Ass'y	指図 Elt	部品番号 PARTS No.	PARTS NAMES	MF4C27 NOTE / 備考
	1	-	DIP switch setting list for disk drive	
	2	MO42933 <sup>2</sup>	FDC circuit board ass'y	1
	3	HMF51050	Sticker	
	3	HMF51040	-	
	4	HMF29100	Pillar (A)	
	5	-	Thumb screw	
	6	SF529100	Pillar (B)	
	7	HMF29010	Pole support	
	8	SF529120	Pole support cover	
	9	MO402051	Spool pin	
	10	MO429142	Front panel	
	10	MO429152	-	
	11	MO429100	Acrylic panel	
	11	MO429110	-	
	12	-	Switch top	
	13	MO429093	Display circuit board ass'y	
	14	HMF29071	Front panel for disk drive	
	15	MO429350	Switch board ass'y for disk drive	
	16	MO429300	Acrylic panel for disk drive	
	17	SF429090	Liquid crystal display	
	18	-	Stud (M3x10)	
	19	MO429271	Rear panel	
	20	EPK00380	DC fan unit	
	21	HMF29052	Main body	
	22	EPS00480	Switch	
	23	EPZ00280	Disk drive unit	3
	24	HMF29120	Insulation plate	
	25	MO429031	Buzzer	
	26	MO429120	Switch sheet (with sub panel)	
	26	MO429130	-	
	27	-	Knob	
	28	MO429310	Switch sheet for disk drive	

4 rollers for pulso cap drivers  
JEAC OK 157

004229-01 Roller clip

# HAPPY BAR SWITCH

MF4802 17.0



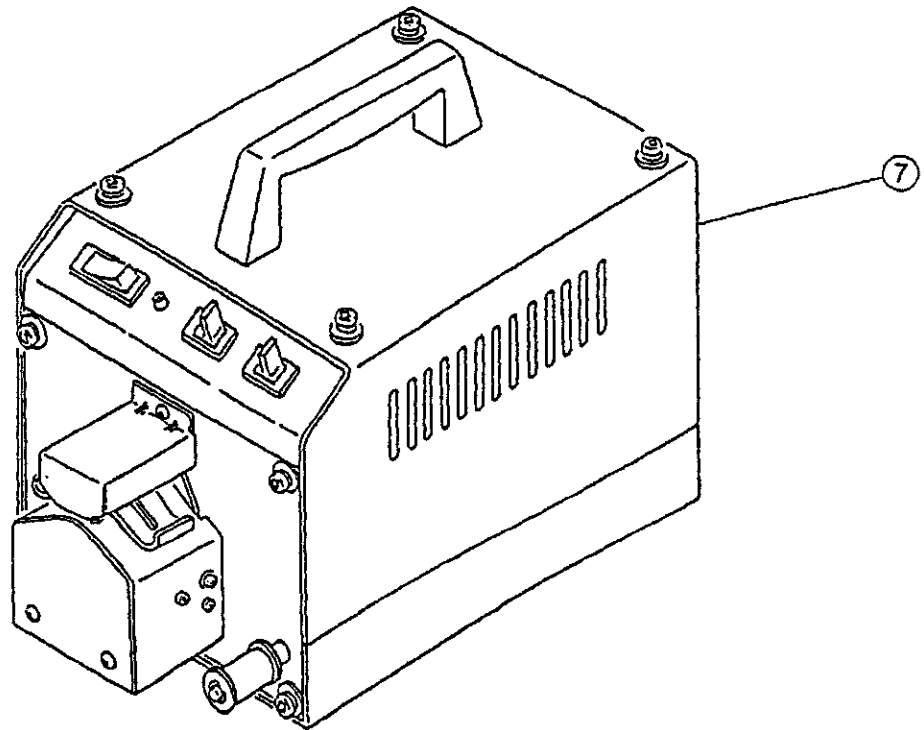
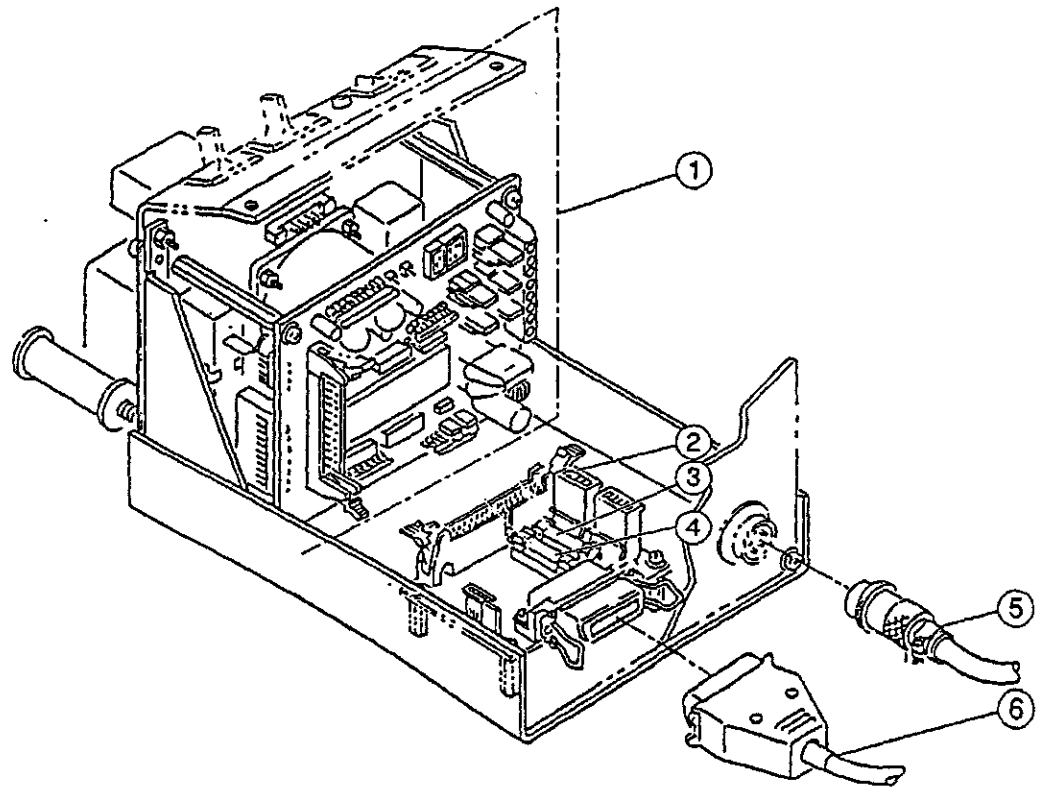
# HAPPY BAR SWITCH

17.1

MF4802

NOTE / 備考

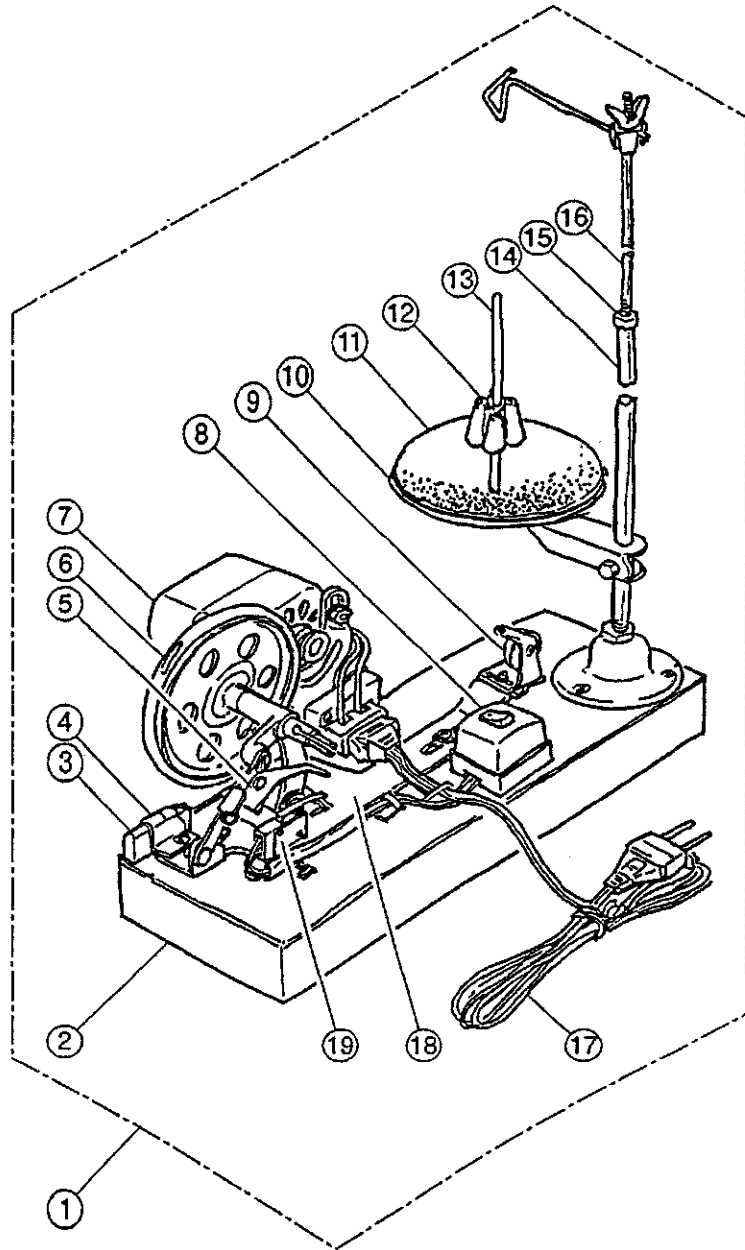
組 Ass'y	指図 Elt	部品番号 PARTS No.	PARTS NAMES
	1	M0435063	Bar switch box
	2	EPF00030	Terminal base
	3	EPN00010	Flexible bush
	4	-	Bar switch cap
	5	M0435082	Micro switch braket
	6	EPS00010	Micro switch
	7	EPN00010	Flexible bush
	8	M0435072	Bar switch box cover
	9	M0451010	Bar switch sticker
	10	M0435050	Bar switch box ass'y
	11	-	Switch bar (by model)
	12	M0435150	Brake on/off switch
	13	EPS00030	Switch
	14	M0435092	Mode changing switch base
	15	EPN00010	Flexible bush
	16	M0435041	Bar switch bracket (for HM4Btype)
	17	M0435160	Sheet
	18	M0435030	Spring (A)
	19	M0435011	Rubber spacer
	20	STO4006B	Screw (M4x6)
	21	WBO4000B	Spring washer (M4)
	22	NAO4000B	Washer (M4)
	23	SC04030B	Cap screw (M4x30)
	24	NAO4000B	Nut (M4)
	25	M0435020	Switch dock
	26	M0435002	Spring (B)



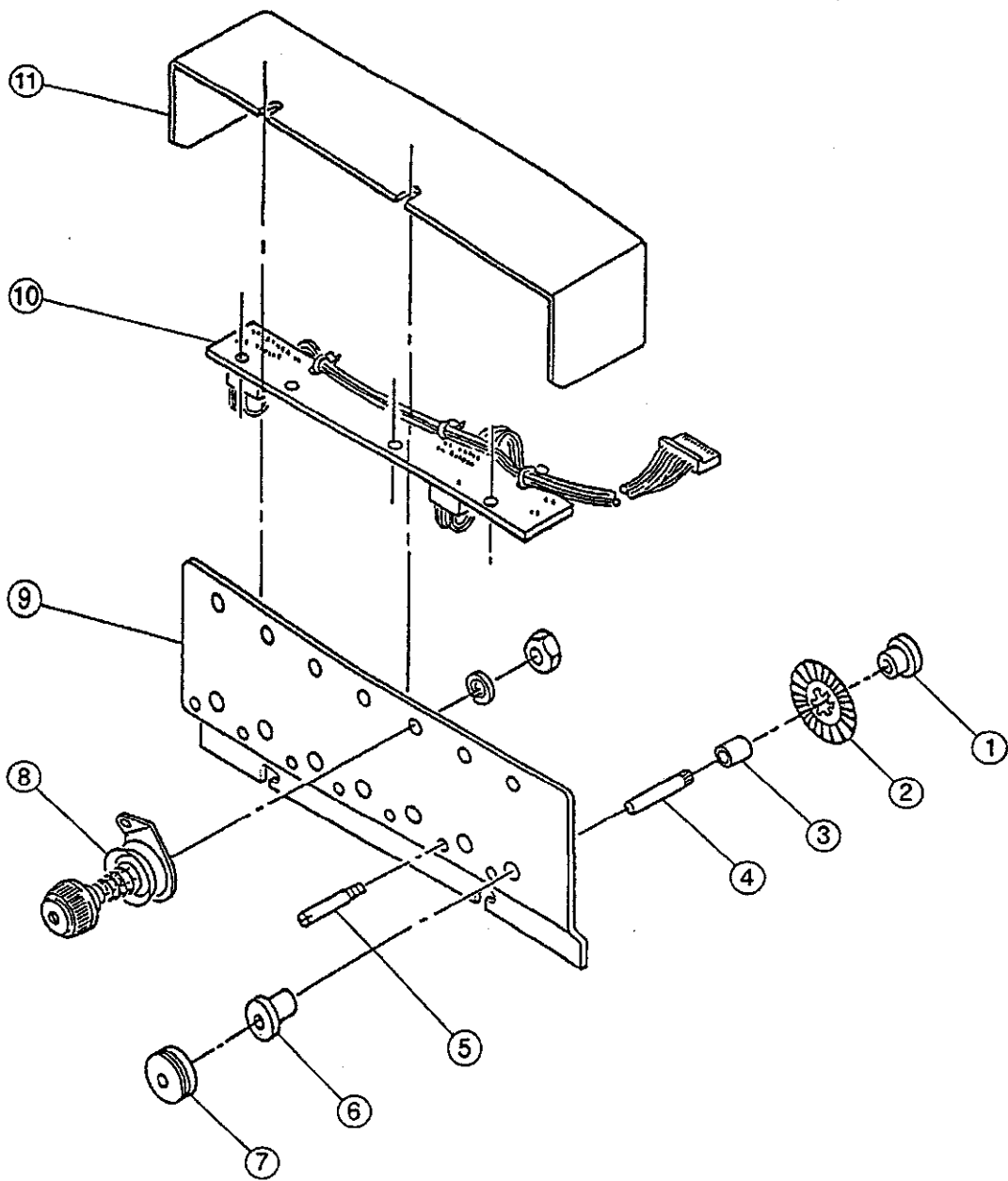
# HAPPY TAPE READER

18.1

組 Ass'y	指図 E/t	部品番号 PARTS No.	PARTS NAMES	S844B02 NOTE / 備考
	1	EPK00120	Read unit	
	2	M0436022	Leader connector board ass'y	
	3	EPF00140	Fuse (1A)	
	4	EPF00150	Fuse (2A)	
	5	M0470891	Power supply cord for reader	
	6	M0470900	Communication cord for reader	
	7	M0436010	Tape reader ass'y	



組 Assy	指図 E't	部品番号 PARTS No.	PARTS NAMES	MF4C20 NOTE / 備考
	1	EPK00390	Bobbin winder (100V)	
	1	EPK00400	Bobbin winder (220V)	
	2	MPZ01630	Table	
	3	MPZ01740	Brake rubber	
	4	MPZ01750	Brake rubber fixer	
	5	MPZ01730	Hold spring	
	6	MPV00490	Belt (6mm)	
	7	EPM00360	Motor (100V)	
	7	EPM00370	Motor (220V)	
	8	EPS00630	Power switch	
	9	MPZ01770	Thread tension unit	
	10	MPZ01710	Spool disc	
	11	MPZ01700	Spool mat	
	12	MPZ01690	Spool spring	
	13	MPZ01680	Spool pin	
	14	MPZ01650	Main pillar	
	15	MPZ01670	Nut	
	16	MPZ01660	Assist pillar	
	17	EPE00040	Motor cable	
	18	MPZ01760	Base	
	19	EPS00620	Stop switch	



組 Assy	指図 Elt	部品番号 PARTS No.	PARTS NAMES	HMF4130 NOTE / 備考
	1	MPZ00350	Eyelet	
	2	M0445060	Slit disc	
	3	MPZ00360	Spacer	
	4	M0445070	Detecting roller shaft	
	5	M0445102	Detecting roller to bring up thread	
	6	M0445080	Support for detecting roller shaft	
	7	M0445092	Detecting roller	
	8	M0416123	Thread guide unit	
	9	M0445053	Fixing plate (for 7 needle)	
	9	M0445043	Fixing plate (for 8 needle)	
	10	M0445020	Detecting board ass'y (for 7 needle)	
	10	M0445030	Detecting board ass'y (for 8 needle)	
	11	M0445013	Cover for fixing plate (for 7 needle)	
	11	M0445003	Cover for fixing plate (for 8 needle)	



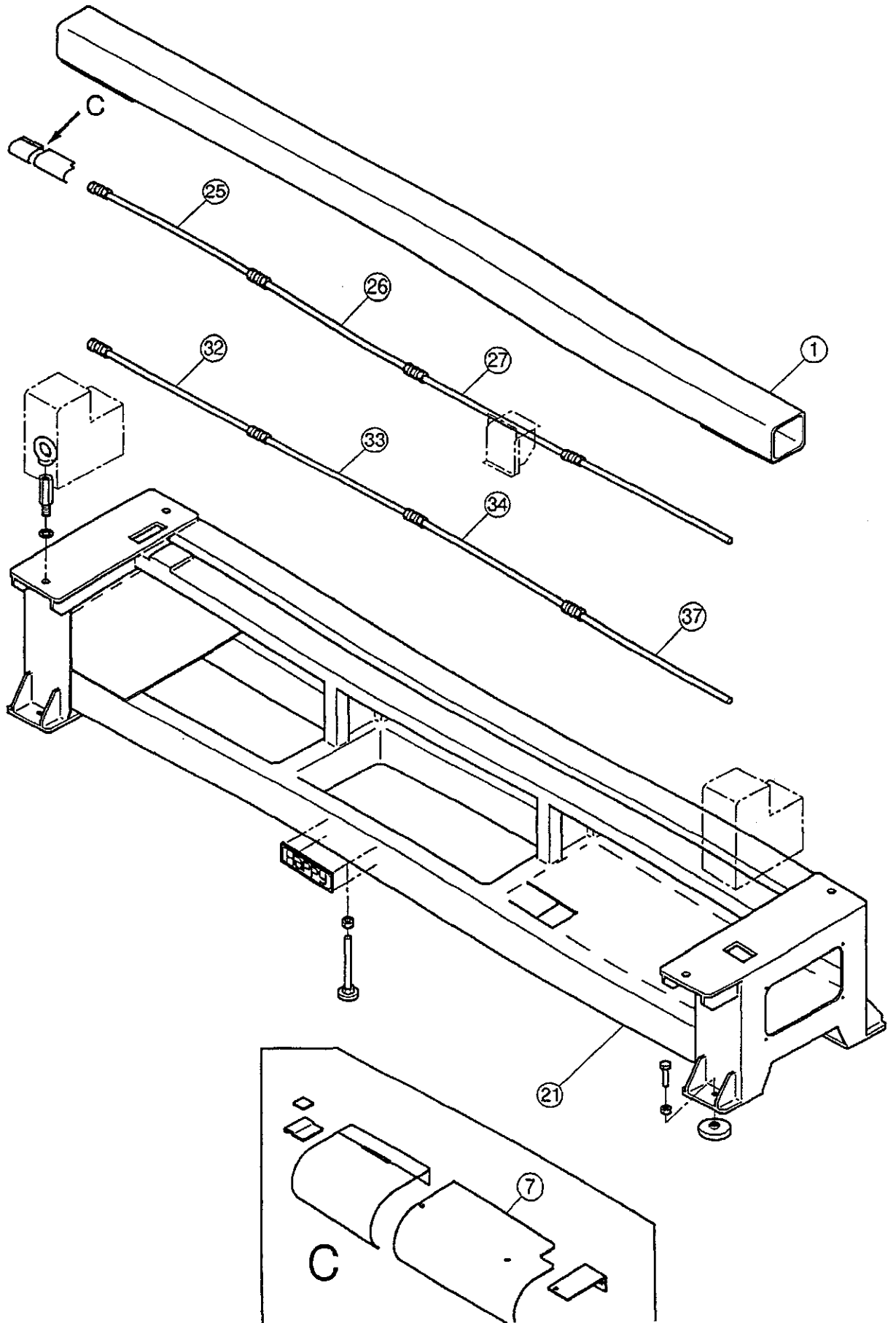
## INDEX

FRAME -----b-0 b-1  
 TABLE-----c-0 c-1  
 MOVING SHAFT-----d-0 d-1  
 DETECTING UNIT /  
 MOVING HEAD -----e-0 e-1  
 THREAD TENSION UNIT -----f-0 f-1  
 REAR COVER -----g-0 g-1  
 THREAD STAND -----h-0 h-1  
 CARRIAGE -----i-0 i-1

## HOW TO USE THIS LIST

E/I		1-25	
PARTS NAMES		Upper shaft (left)	
MODEL	L 7 2 0 A	HMF02140	
	L 8 1 8	M0408791	
	L 8 1 6	HMF02140	
	L 8 1 4	HMF02150	
	L 8 1 2	HMF02130	
	L 8 1 0	M0408821	
	K 7 1 8 A	HMF02140	
	K 8 1 5	M0408781	
	S 7 1 5	M0408791	
	S 8 1 2	M0408801	
	S 8 1 0	M0408811	
	S 8 0 8	M0408801	

- ① This number shows where the part is mentioned in the parts list.  
(Ex. 1-25 means this part is mentioned in the page 1, E/I No.25 in the parts list)
- ② This column shows model number.
- ③ This column shows each parts number of the part which differs depend on the model.  
(Ex. Parts number of "Upper shaft (left)" for L720A is HMF02140)

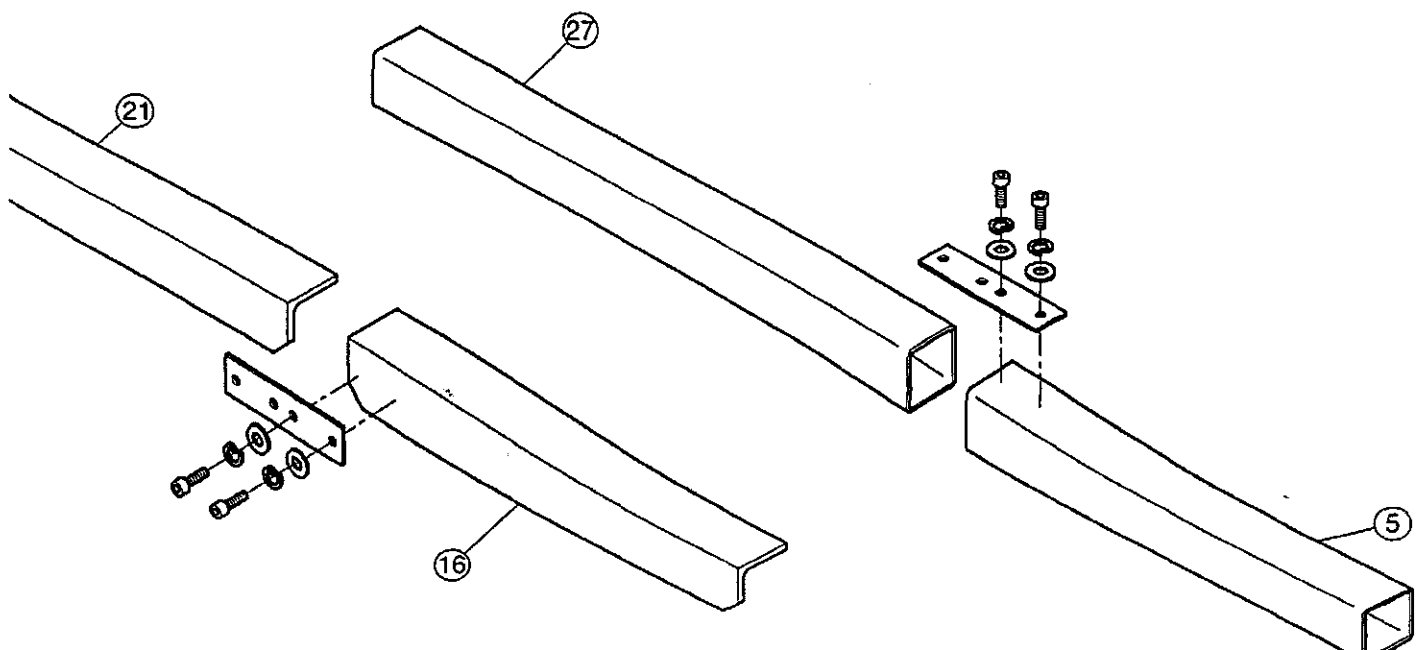
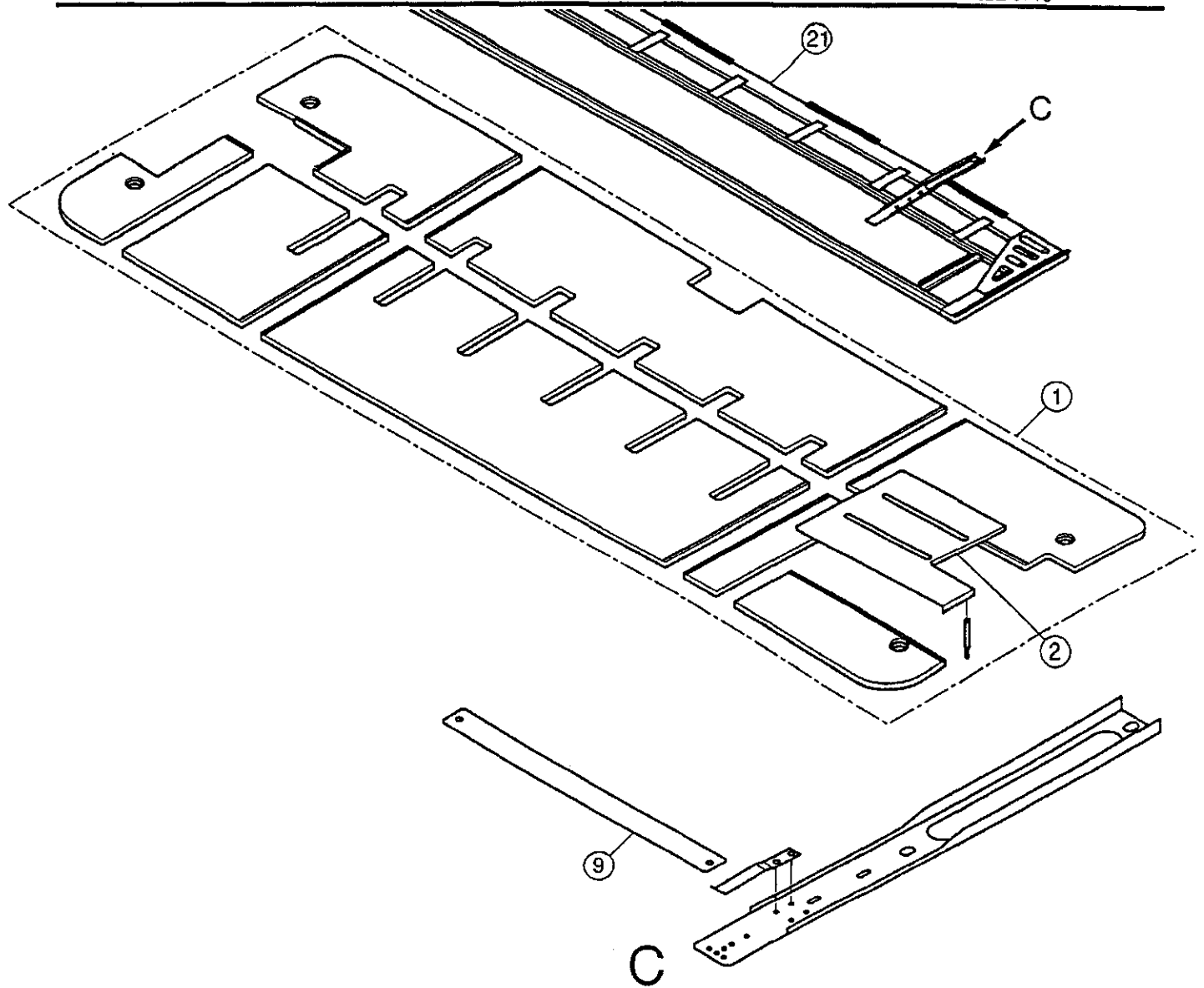


E/t PARTS NAMES		1-1 Beam	1-7 Shaft cover (left)	1-21 Frame
MODEL	8 1 2 - 4 8	HCM00143	HCM13080	HCM00134
	8 0 6 - 4 8	HCM00082	HCM13010	HCM00071
	8 0 4 - 4 8	HCM00041	HCM13010	HCM00021
	7 2 0 - 3 0	HCM00252	HMF13180	HCM00284
	8 1 2 - 3 0	HCM00202	HCM13030	HCM00193
	8 1 2 - 3 6	HCM00202	HCM13030	HCM00193
	8 0 6 - 3 6	HCM00313	HCM13050	HCM00342

E/t PARTS NAMES		1-25 Upper shaft 1	1-26 Upper shaft 2	1-27 Upper shaft 3
MODEL	8 1 2 - 4 8	M0408781	M0408811	M0408781
	8 0 6 - 4 8	M0408811	SF508000	M0408791
	8 0 4 - 4 8	M0408811	M0408791	-
	7 2 0 - 3 0	HMF02180	HCM02180	HMF02140
	8 1 2 - 3 0	M0408801	M0408821	M0408811
	8 1 2 - 3 6	M0408801	M0408821	M0408811
	8 0 6 - 3 6	M0408801	M0408801	SF508000

E/t PARTS NAMES		1-32 Lower shaft 1	1-33 Lower shaft 2	1-34 Lower shaft 3
MODEL	8 1 2 - 4 8	M0404492	M0404482	M0404462
	8 0 6 - 4 8	M0404452	M0404482	-
	8 0 4 - 4 8	M0404472	HCM02080	-
	7 2 0 - 3 0	M0404482	HCM02080	M0404492
	8 1 2 - 3 0	M0404442	M0404452	-
	8 1 2 - 3 6	M0404442	M0404452	-
	8 0 6 - 3 6	M0404462	M0404472	-

E/t PARTS NAMES		1-37 Lower shaft 4		
MODEL	8 1 2 - 4 8	HCM02080		
	8 0 6 - 4 8	-		
	8 0 4 - 4 8	-		
	7 2 0 - 3 0	M0404472		
	8 1 2 - 3 0	-		
	8 1 2 - 3 6	-		
	8 0 6 - 3 6	-		

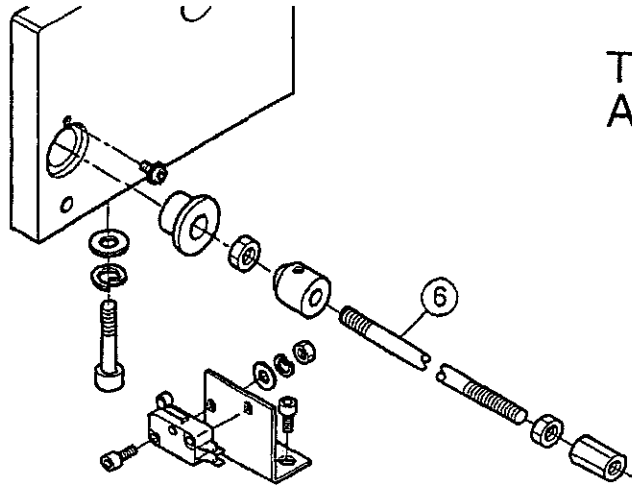
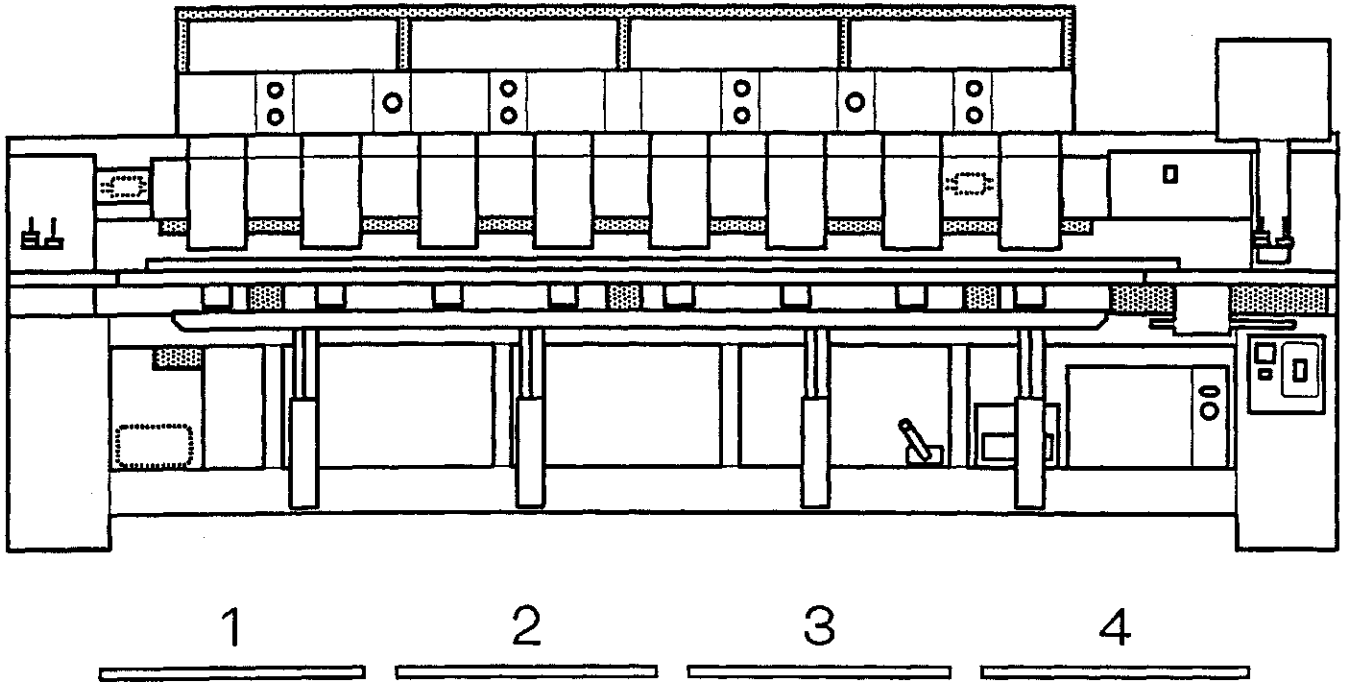


E/I PARTS NAMES		2.0-1 Table set	2.0-2 X carriage cover	2.0-9 Jig
MODEL	812-48	HCM30294	HCM33090	HCM53021
	806-48	HCM30103	HCM33011	HCM53011
	804-48	HCM30012	HCM33011	HCM53011
	720-30	HCM30422	HCM33130	HCM53040
	812-30	HCM30166	HCM33051	HCM53030
	812-36	HCM30614	HCM33051	HCM53030
	806-36	HCM30525	HCM33100	HCM53021

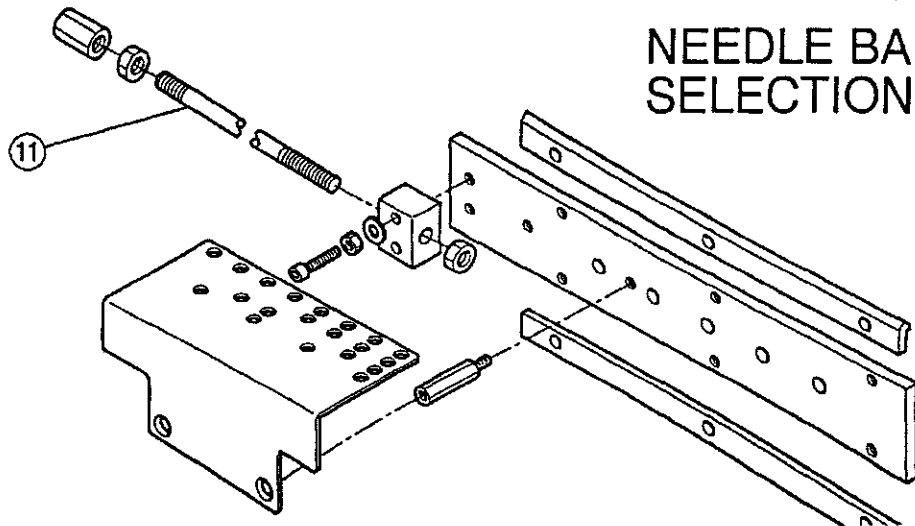
E/I PARTS NAMES		2.0-21 Frame ass'y		
MODEL	812-48	HCM937060		
	806-48	HCM937040		
	804-48	HCM937020		
	720-30	HCM937100		
	812-30	HCM937080		
	812-36	HCM937170		
	806-36	HCM937120		

E/I PARTS NAMES		2.2-5 Reinforcement pipe 1	2.2-27 Reinforcement pipe 2	
MODEL	812-48	HCM34150	HCM34160	
	806-48	HCM34070	-	
	804-48	HCM34010	-	
	720-30	-	-	
	812-30	HCM34090	HCM34100	
	812-36	HCM34090	HCM34100	
	806-36	HCM34190	-	

E/I PARTS NAMES		2.2-16 Table reinforcement 1	2.2-21 Table reinforcement 2	
MODEL	812-48	HCM34171	HCM34181	
	806-48	HCM34080	-	
	804-48	HCM34030	-	
	720-30	-	-	
	812-30	HCM34110	HCM34120	
	812-36	HCM34110	HCM34120	
	806-36	HCM34200	-	



THREAD CUT  
ACTUATION UNIT



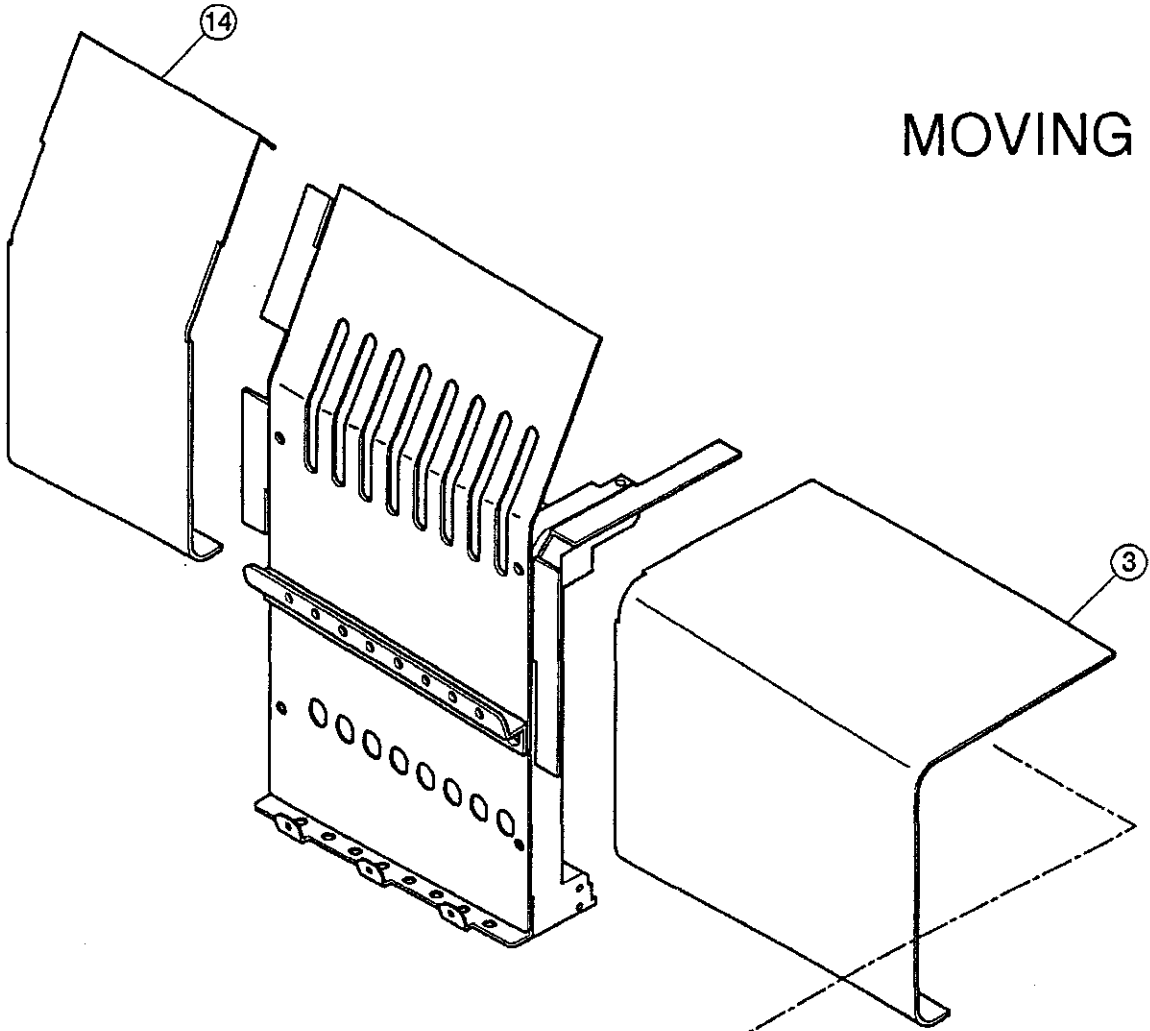
NEEDLE BAR  
SELECTION UNIT

EIt		5-6	5-6	5-6
PARTS NAMES		Moving shaft 1	Moving shaft 2	Moving shaft 3
MODEL	812-48	HMF06121	HMF06111	HMF06121
	806-48	HMF06151	HMF06121	-
	804-48	HMF06111	HMF06170	-
	720-30	HMF06161	HMF06131	HMF06131
	812-30	HMF06121	HMF06121	HMF06121
	812-36	HMF06121	HMF06121	HMF06121
	806-36	HMF06121	HMF06111	-

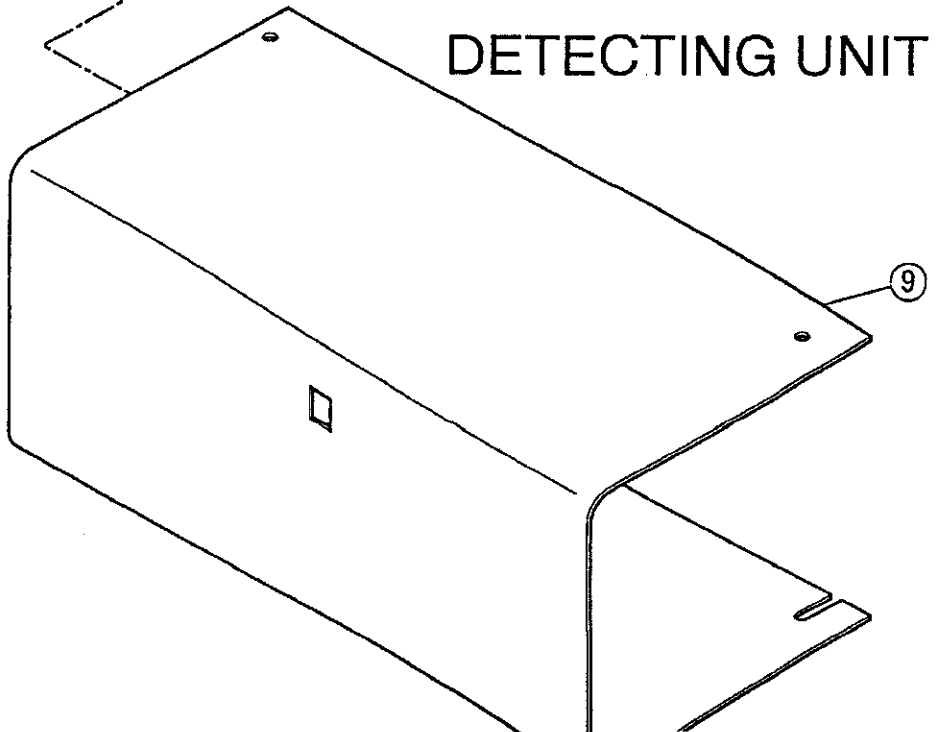
EIt		5-6		
PARTS NAMES		Moving shaft 4		
MODEL	812-48	HMF06111		
	806-48	-		
	804-48	-		
	720-30	-		
	812-30	-		
	812-36	-		
	806-36	-		

EIt		7-11	7-11	7-11
PARTS NAMES		Moving shaft 1	Moving shaft 2	Moving shaft 3
MODEL	812-48	HMF06170	HMF06121	HMF06151
	806-48	HMF06161	HMF06151	-
	804-48	HMF06180	HMF06111	-
	720-30	HCM06020	HCM06020	HMF06111
	812-30	HMF06151	HMF06131	HMF06131
	812-36	HMF06151	HMF06131	HMF06131
	806-36	HMF06201	HMF06121	-

EIt		7-11		
PARTS NAMES		Moving shaft 4		
MODEL	812-48	HMF06161		
	806-48	-		
	804-48	-		
	720-30	-		
	812-30	-		
	812-36	-		
	806-36	-		



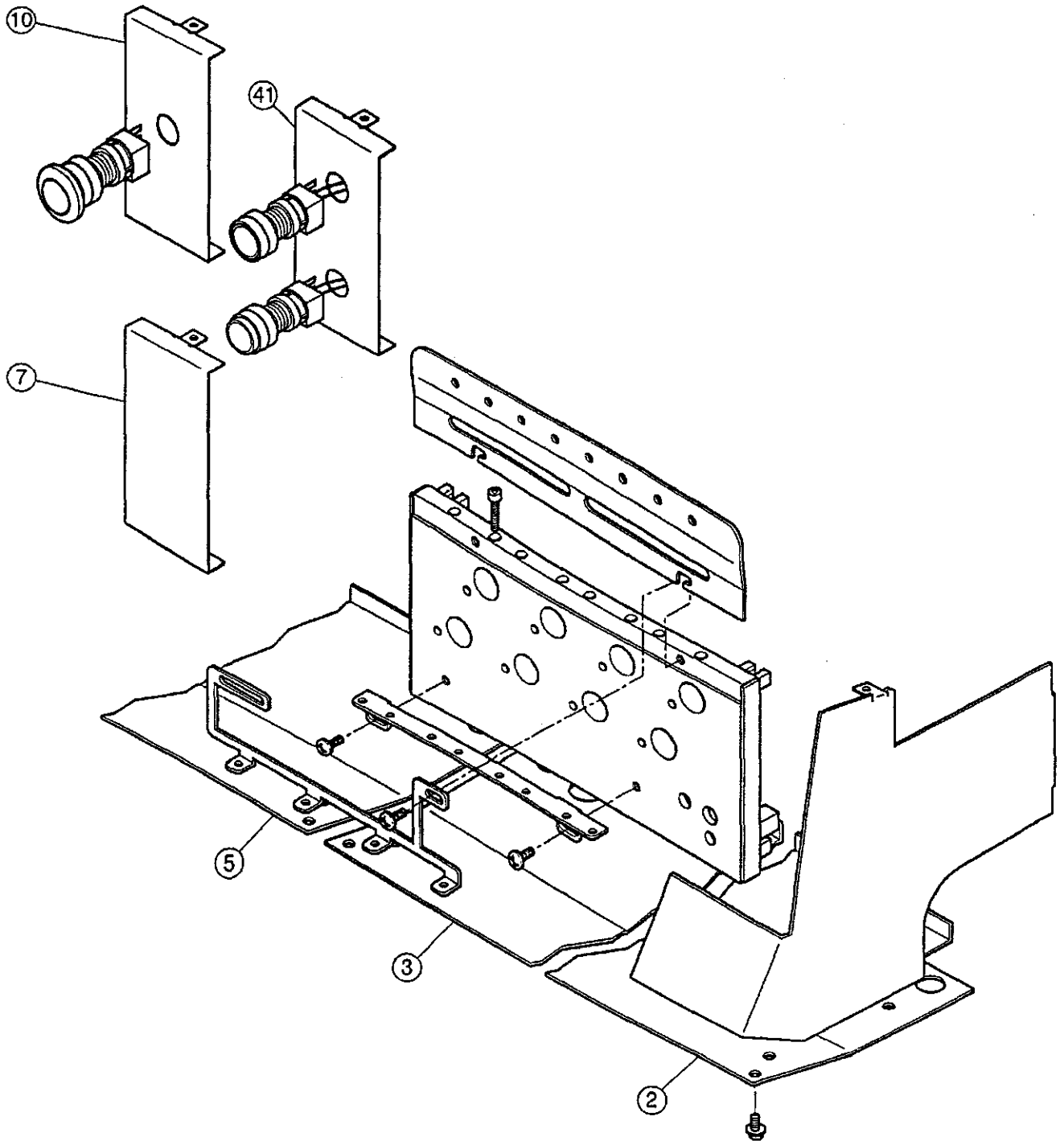
MOVING HEAD



DETECTING UNIT

E/n		8-9	9-3	9-14
PARTS NAMES		Cover	Cover (right)	Cover (center)
MODEL	812-48	HCM10080	HMF13030	HCM13061
	806-48	HCM10060	HMF13030	HCM13020
	804-48	HCM10060	HMF13030	HCM13020
	720-30	HMF10370	HMF13020	HCM13071
	812-30	HCM10070	HMF13030	HCM13041
	812-36	HCM10070	HMF13030	HCM13041
	806-36	HCM10090	HMF13030	HCM13060

CM5113

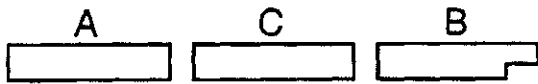


EIt PARTS NAMES		11-2 Fixing plate B right	11-3 Fixing plate B center	11-5 Fixing plate B left
MODEL	806-48	HCM16050	-	HCM16060
	804-48	HCM16020	-	-
	720-30	HCM16420	HCM16430	HCM16440
	812-30	HCM16130	HCM16140	HCM16150
	812-36	HCM16130	HCM16140	HCM16150
	806-36	HCM16500	-	HCM16510

EIt PARTS NAMES		11-7 Cover C	11-10 Cover B	11-41 Cover A
MODEL	806-48	-	HCM18022	HCM18011
	804-48	-	HCM18022	HCM18011
	720-30	HCM18110	HCM18100	HCM18090
	812-30	HCM18050	HCM18040	HCM18030
	812-36	HCM18050	HCM18040	HCM18030
	806-36	-	HCM18070	HCM18060

CM4802

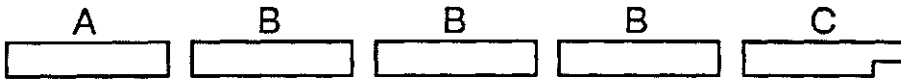
806-48



804-48



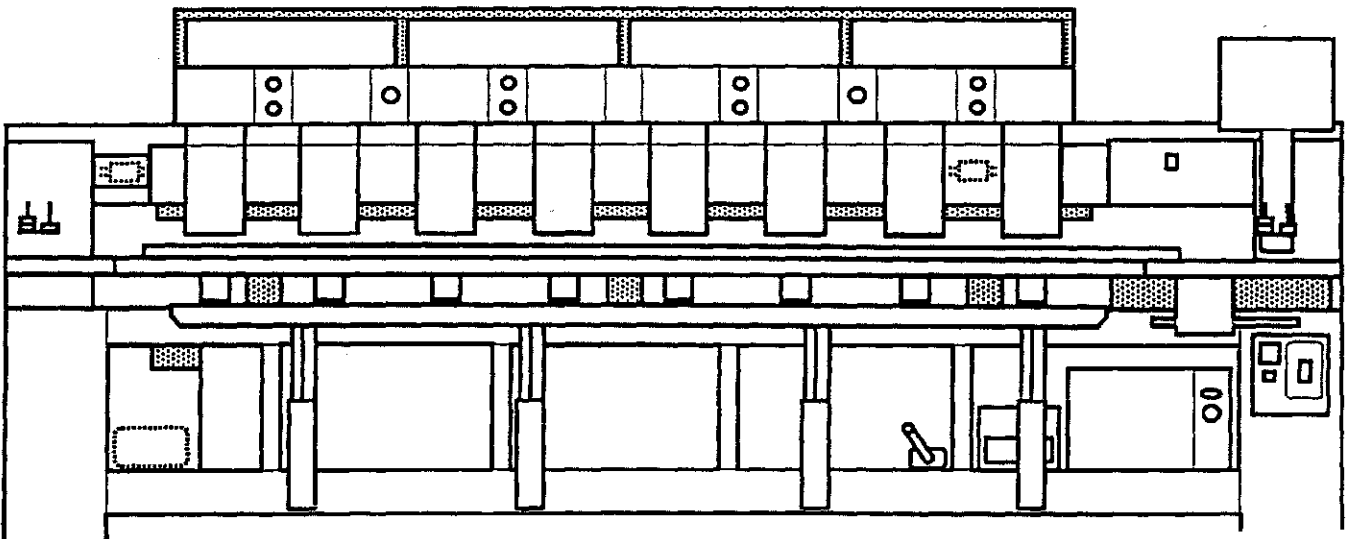
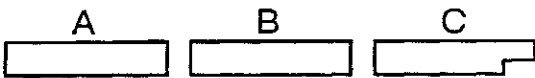
720-30



812-30, 812-36



806-36



# HAPPY REAR COVER

g-1

E/t PARTS NAMES		11-11 Rear cover A	11-11 Rear cover B	11-11 Rear cover C
MODEL	806-48	HCM16071	HCM16081	HCM16091
	804-48	HCM16071	HCM16081	-
	720-30	HCM16451	HCM16461	HCM16471
	812-30	HCM16561	HCM16571	HCM16581
	812-36	HCM16561	HCM16571	HCM16581
	806-36	HCM16351	HCM16361	HCM16371

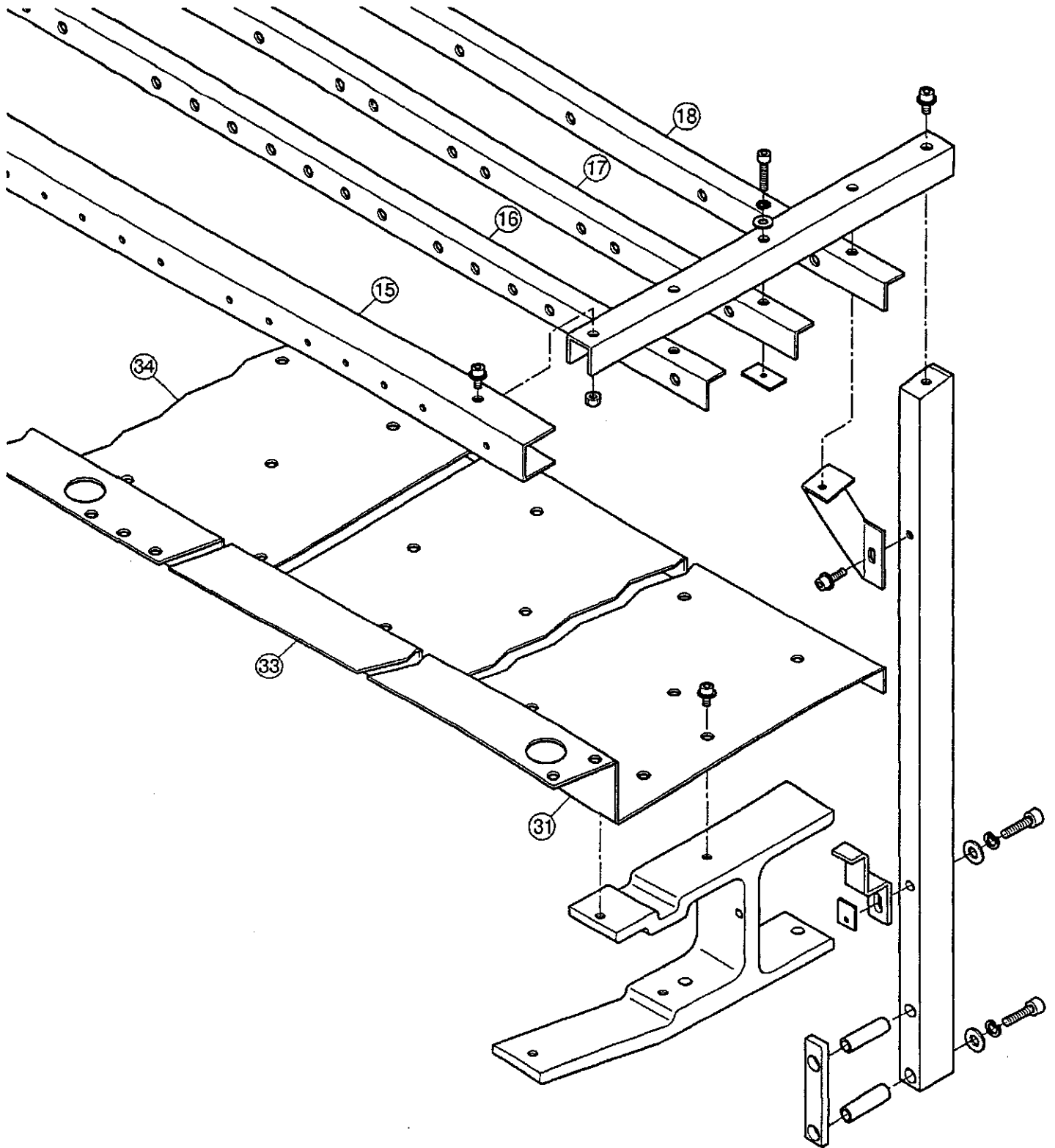
E/t PARTS NAMES		11-11 Rear cover D		
MODEL	806-48	-		
	804-48	-		
	720-30	-		
	812-30	HCM16591		
	812-36	HCM16591		
	806-36	-		

CM4804

# HAPPY THREAD STAND

MF4617

n-U

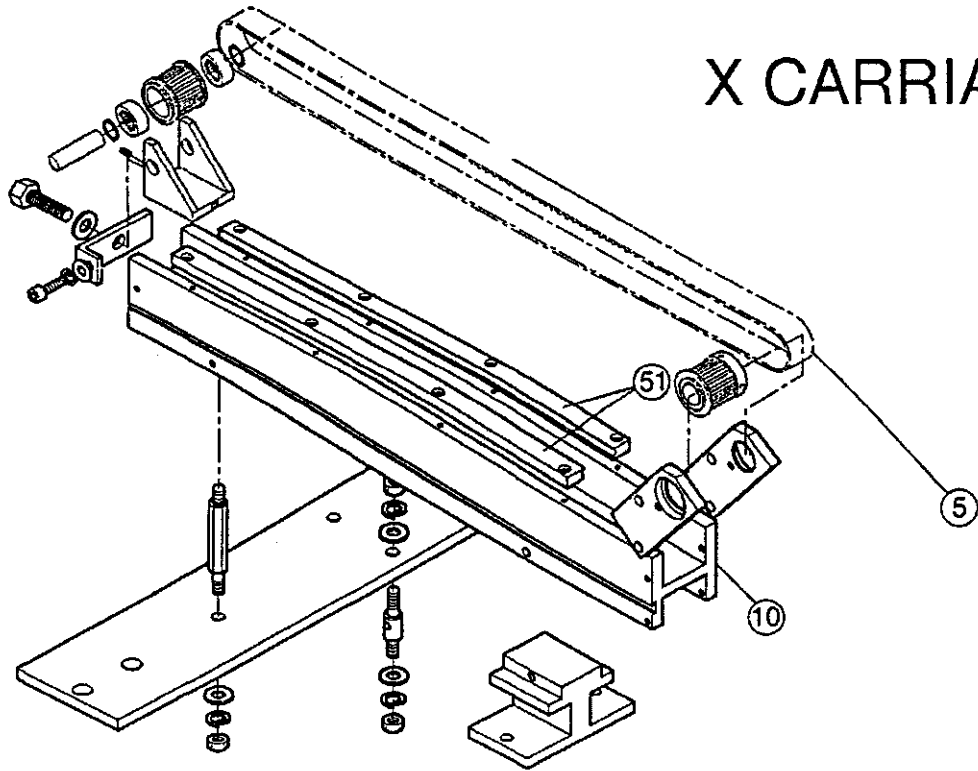


E/H		12-15		
PARTS NAMES		Thread guide unit fixing plate		
MODEL	806-48	HCM20081		
	804-48	HCM20041		
	720-30	HCM20241		
	812-30	HCM20121		
	812-36	HCM20121		
	806-36	HCM20281		

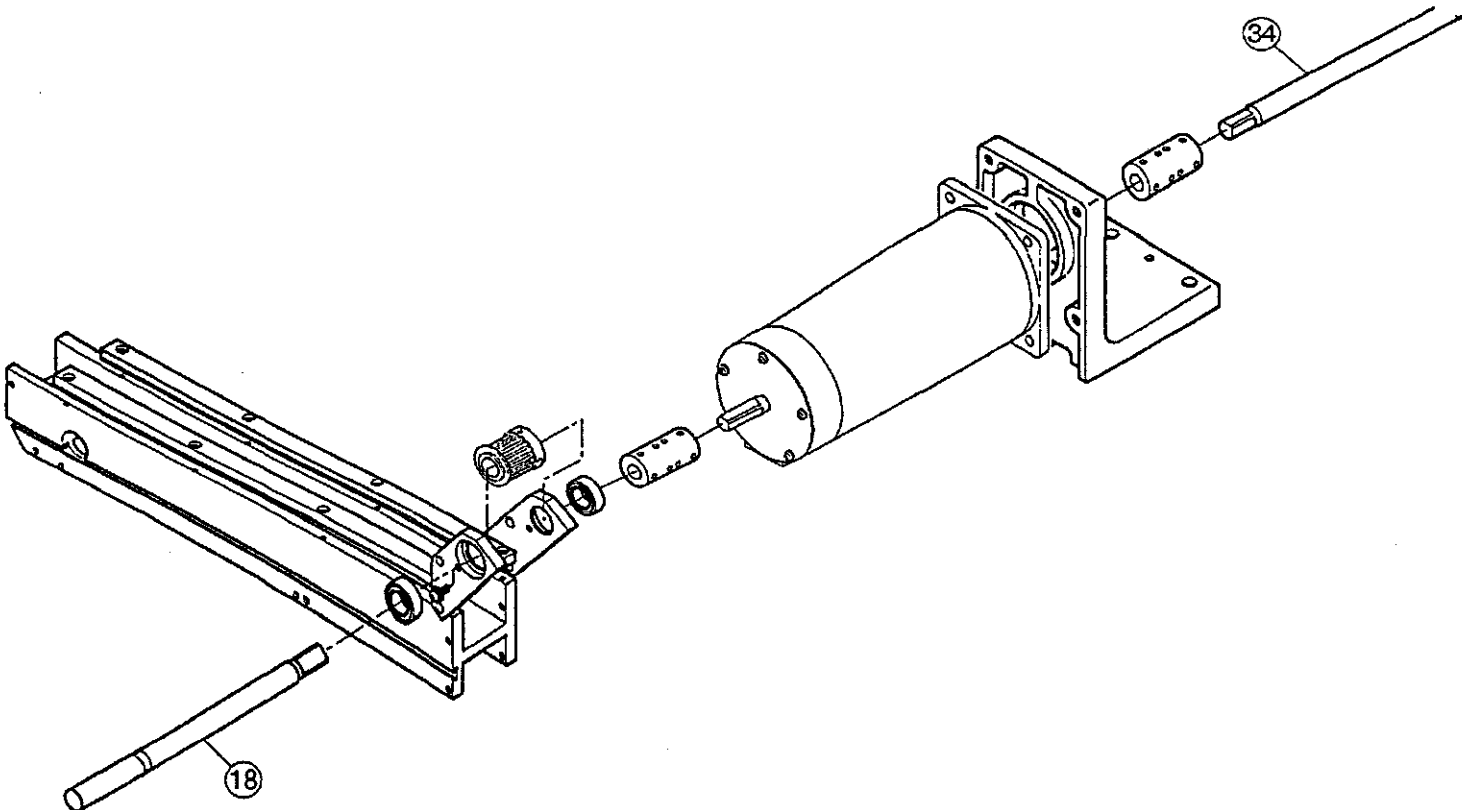
E/H		12-16	12-17	12-18
PARTS NAMES		Thread guide A	Thread guide B	Thread guide C
MODEL	806-48	HCM20051	HCM20061	HCM20071
	804-48	HCM20011	HCM20021	HCM20031
	720-30	HCM20211	HCM20221	HCM20231
	812-30	HCM20091	HCM20101	HCM20111
	812-36	HCM20091	HCM20101	HCM20111
	806-36	HCM20251	HCM20261	HCM20271

E/H		12-31	12-33	12-34
PARTS NAMES		Fixing plate A right	Fixing plate A center	Fixing plate A left
MODEL	806-48	HCM16031	-	HCM16041
	804-48	HCM16011	-	-
	720-30	HCM16391	HCM16402	HCM16411
	812-30	HCM16101	HCM16111	HCM16121
	812-36	HCM16101	HCM16111	HCM16121
	806-36	HCM16481	-	HCM16492

# X CARRIAGE



# Y CARRIAGE 1



Elt		13-5	13-10	13-51
PARTS NAMES		X timing belt	X rail base	X rail with V groove
MODEL	812-48	MPV00050	HCM24310	M0425001
	806-48	MPV00050	HCM24030	HMF24380
	804-48	MPV00050	HCM24030	HMF24380
	720-30	MPV00270	HMF24290	M0424561
	812-30	MPV00390	HCM24200	HCM24210
	812-36	MPV00390	HCM24200	HCM24210
	806-36	MPV00310	HCM24380	M0425001

Elt		14.0-18	14.0-34	
PARTS NAMES		Y carriage shaft 1	Y carriage shaft 2	
MODEL	812-48	HCM24350	HCM24370	
	806-48	HCM24171	HCM24180	
	804-48	HCM24130	HCM24140	
	720-30	HCM24450	HCM24460	
	812-30	HCM24280	HCM24290	
	812-36	HCM24280	HCM24290	
	806-36	HCM24420	HCM24420	

CM4B02