

TAJIMA TECHNICAL DOCUMENT

NEW SINGLE-HEAD MACHINE
TMBR-SC
TMBP-SC

TECHNICAL SUMMARY

TAJIMA
Technical
Document



FOREWORD

We have started the mass-production of the new Single-head machines [TMBR-SC], [TMBP-SC] (hereinafter called "TMBR/TMBP") since December 2015.

[TMBR/TMBP] enhances the quality of embroidery finish and functionality in the equivalent or higher level to the conventional Single-head machines.

Besides, there are widely differences between the conventional machines and [TMBR/TMBP] in the electrical component parts as well as in the mechanical parts.

This document describes the features, specification comparison of [TMBR/TMBP] and also the information of electrical components parts.

You are kindly requested to clearly understand of [TMBR/TMBP], referring to this document.

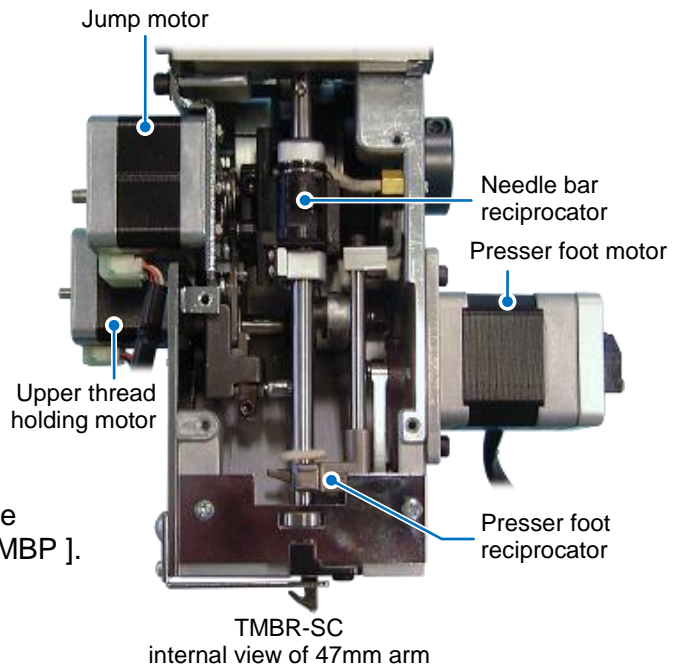
Contents

	Page
1. Features of TMBR/TMBP	1
1-1. Individual drive mechanism of presser foot (Only for TMBR)	1
1-2. New type Cylinder bed	1
1-3. Operation panel, I/O port	2
1-4. Tension base	2
1-5. Snap-fit middle thread guide	3
1-6. Cap frame base	4
1-7. Lightweight	4
1-8. FS mode	4
1-9. System software	4
2. Specification comparison	5
3. Allocation of major electrical component parts	7
4. Compatibility of electrical component parts	8
5. Electrical system diagram	9
5-1. Electrical system diagram	9
5-2. Harness list	10
6. Compatibility of major parts	11
6-1. TMBR-SC	11
6-1-1. Cylinder bed (E1-03)	11
6-1-2. Color change system (E1-04)	13
6-1-3. Arm 1 (E1-05-1)	15
6-1-4. Arm 2 (E1-05-2)	17
6-1-5. Arm 3 (E1-05-3)	19
6-1-6. Needle bar case 1 (E1-06-1)	21
6-1-7. Needle bar case 2A [6-needle M/C] (E1-06-2a)	23
6-1-8. Needle bar case 2B [12, 15-needle M/C] (E1-06-2b)	25
6-2. TMBP-SC	27
6-2-1. Arm 1 (E2-05-1)	27
6-2-2. Arm 2 (E2-05-2)	29
6-2-3. Arm 3 (E2-05-3)	31
6-2-4. Needle bar case 1 (E2-06-1)	33
6-2-5. Needle bar case 2A [6-needle M/C] (E2-06-2a)	35
6-2-6. Needle bar case 2B [12, 15-needle M/C] (E2-06-2b)	37
6-2-7. Upper thread holder (E2-07)	39

1. Features of TMBR/TMBP

1-1. Individual drive mechanism of presser foot (Only for TMBR)

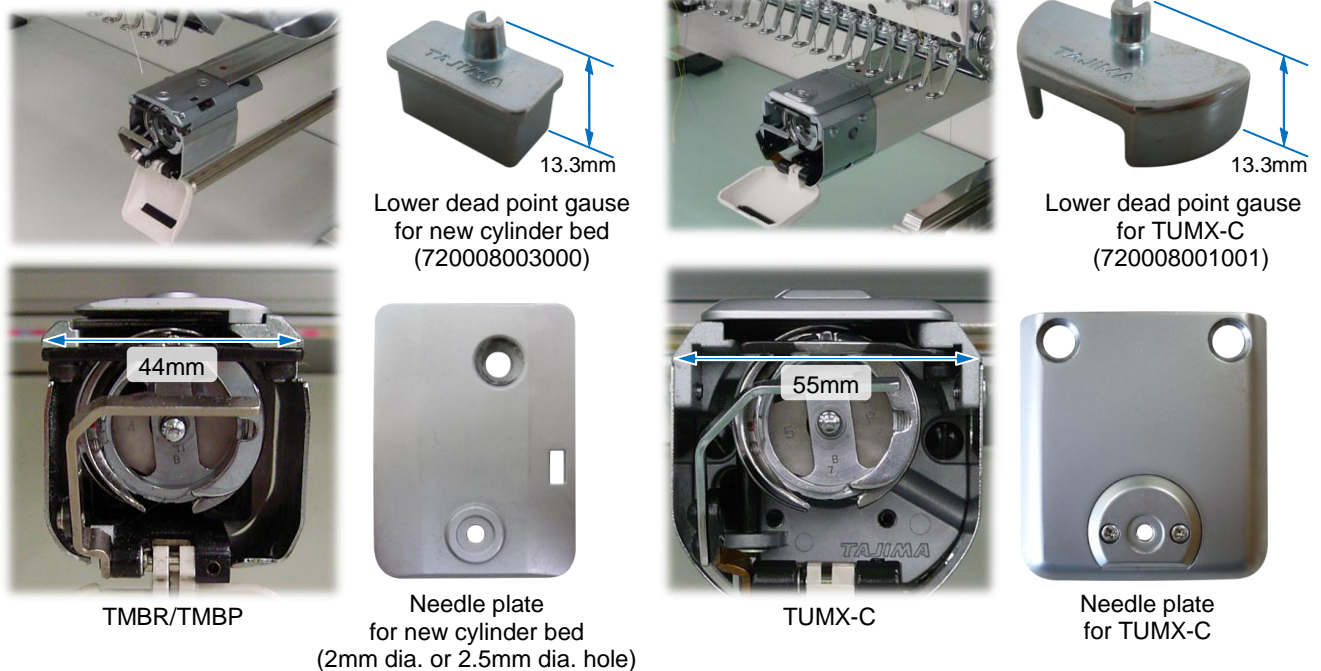
[TMBR] has adopted the new mechanism to individually drive the presser foot on 47mm arm (DCP : Digitally-Controlled Presser foot). DCP has been adopted to [TMAR series TYPE-2]. It accurately controls the height of presser foot by using the pulse motor to provide the embroidery finish in high quality. For [TMBP], the mechanical type presser foot is equipped in the same mechanism with that of TUMX-C.



Note) The Needle bar reciprocator for MX type machines cannot be used to [TMBR/TMBP].

1-2. New type Cylinder bed

[TMBR/TMBP] has adopted the slimmer cylinder bed compared with that of conventional machine to locate the embroidery material closer to the needle plate when using the cap frame. The new cylinder bed requires an exclusive gauge to adjust the lower dead point.



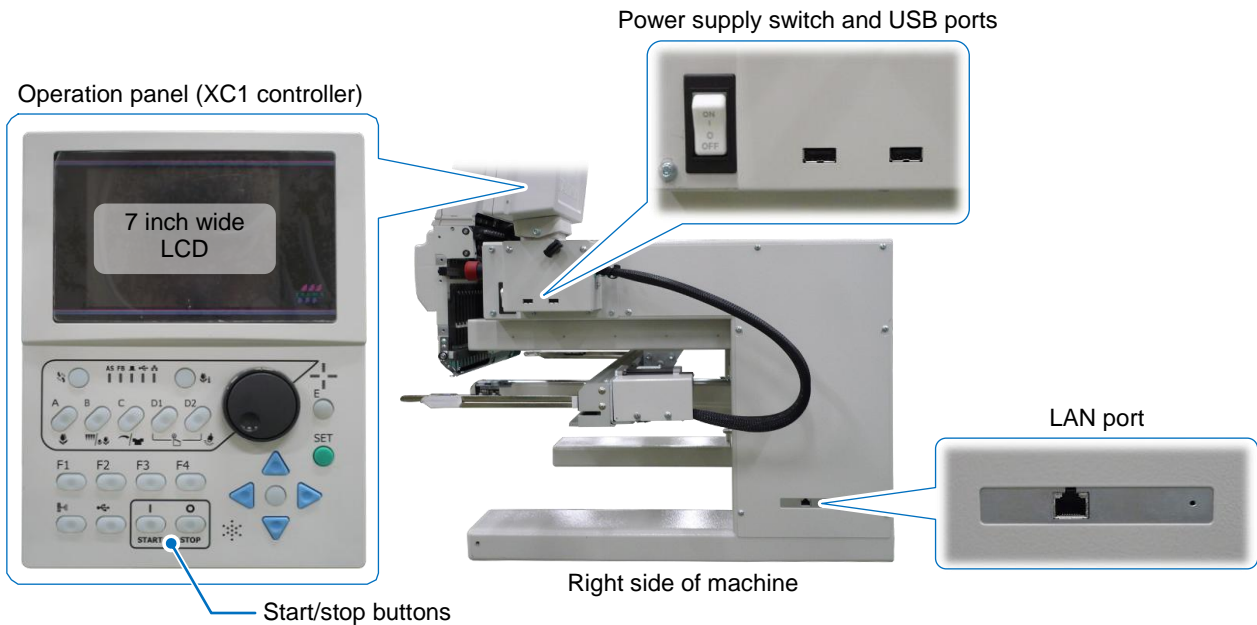
1-3.Operation panel, I/O port

[TMBR/TMBP] has equipped 7 inch wide LCD display (6.5 inch in actual display area) for the new operation panel.

For the panel operation, the same user interface with MX type series has been succeeded.

The locations of USB and LAN ports have moved to the right side of machine to enhance the convenience of connection.

The operation of machine start/stop is performed with the buttons on the operation panel.



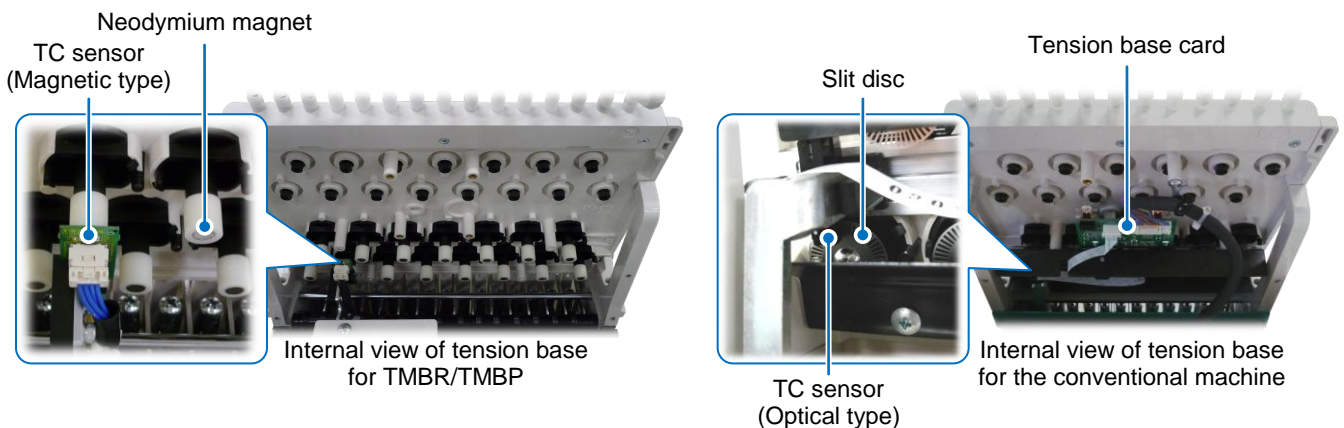
Note) USB ports support the multiple connection of the USB memory and barcode reader.
2 USB memory devices cannot be used at the same time.

1-4.Tension base

On the tension base for [TMBR/TMBP], the magnetic type sensor has been adopted for the thread breakage detection to reduce the malfunction because of the dust such as lint.

This new sensor has been adopted to TMAR series TYPE-2 as well and will be introduced by turns to the new models in the future.

Tension base switch is not mounted onto the tension base like that of TEJT2-C.



1-5.Snap-fit middle thread guide

We have further improved [One-touch type middle thread guide], having been adopted to TFGNII series as well as to the conventional TMAR series, and we have now introduced it to [TMBR/TMBP] as [Snap-fit middle thread guide].

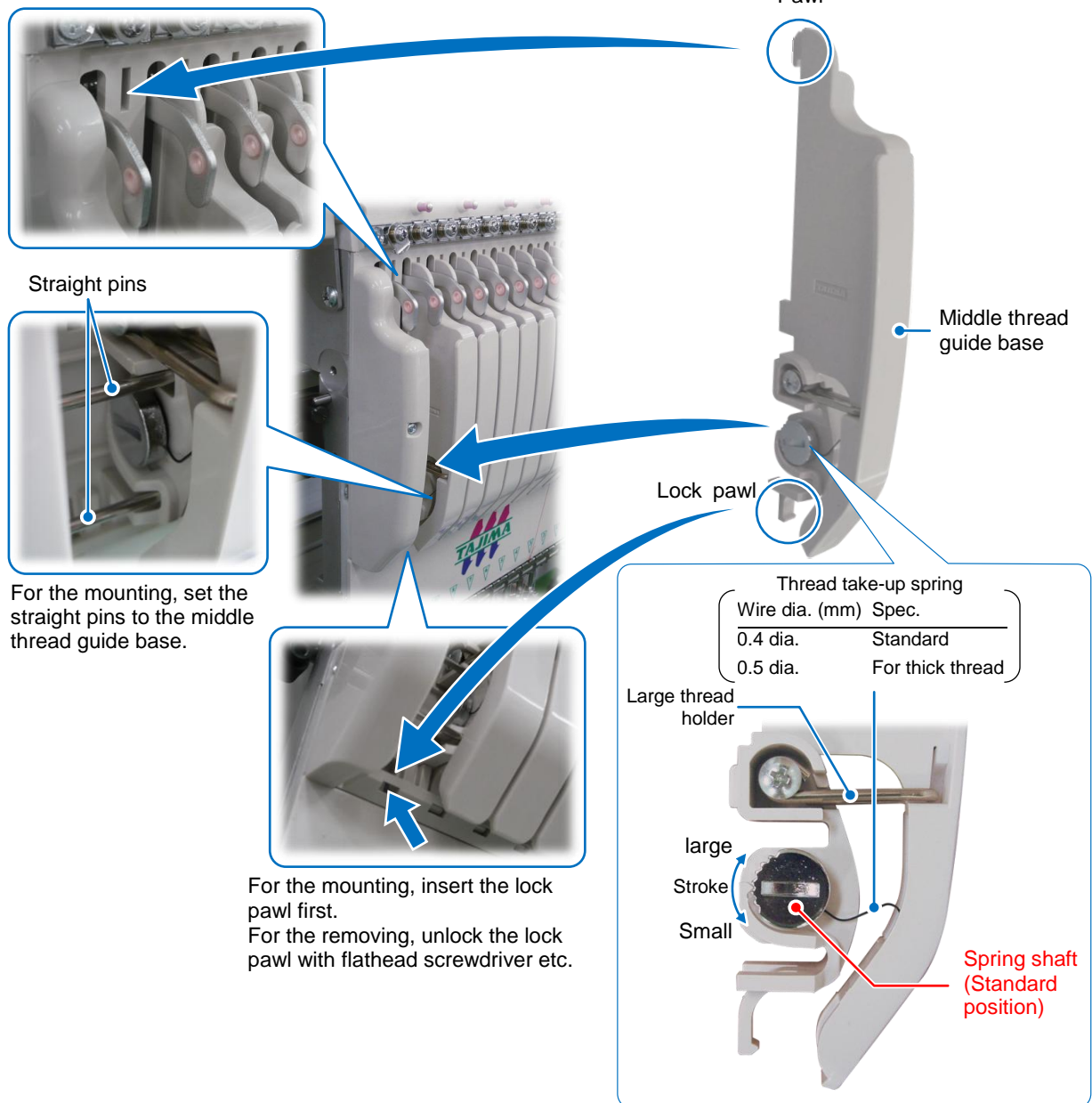
Note) [Snap-fit middle thread guide] is mounted for 9/12/15-needle machines.
For 6-needle machine, [One-touch type middle thread guide] is mounted.

• Major features

- To facilitate attachment/detachment of device by fixing with the locking pawl (On-touch type middle thread guide is fixed with the screw.)
- To facilitate to adjust the stroke of thread take-up spring by using the notch type adjuster (7 steps)

• Exterior view, adjustment points

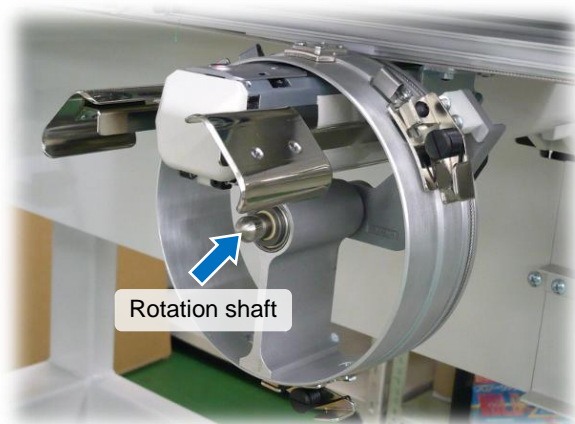
For the mounting, insert the pawl into a hole and push down middle thread guide base.



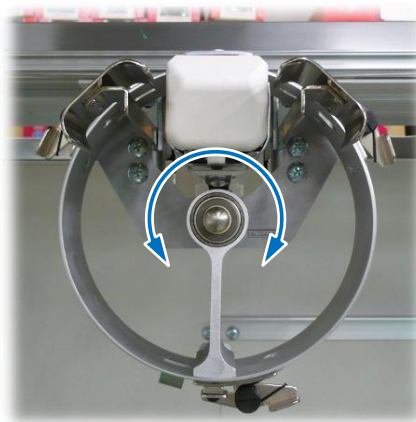
1-6. Cap frame base

On [TMBR/TMBP], we have improved the cap frame base with the improvement of cylinder bed. The rotation shaft for the cap frame base is mounted onto the bottom side of cylinder bed to stabilize the cap frame embroidery.

The conventional cap frame can be used to the new cap frame base.



Exterior view of cap frame base
for the slim type cylinder



Front view of cap frame base
for the slim type cylinder

Note) The cap frame base is in common with TMAR-KC TYPE2.
(The photos shown above are the Cap frame base on TMAR-KC TYPE2)

1-7. Lightweight

On [TMBR/TMBP], for the easier machine installation and relocation, redesign the machine stand and reduce the quantity of electrical component parts to reduce the machine weight.

The machine vibration and stability of needle location are equivalent to TUMX-C.

Model	TMBR/TMBP	TUMX-C
Weight	95kg	102kg

1-8. FS mode

[TMBR/TMBP] supports "FS mode", having been adopted to TFGNII and TMAR series Type2.

"FS mode" is effective to enhance the embroidery finish with the metallic yarn or loose twisted thread and it can be set in units of needle bar.

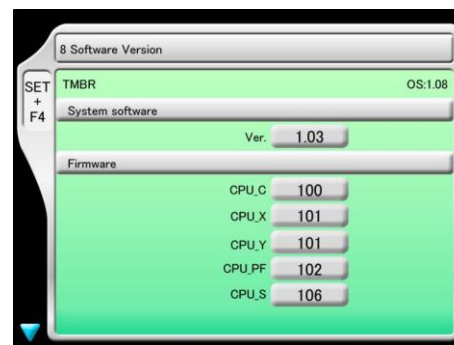
Note) The maximum R.P.M. will be limited up to 900rpm (4mm) when "FS mode" is selected and it may vary depending on the stitch length being embroidered.

1-9. System software

The system software for [TMBR/TMBP] can be installed through USB memory in the same manner with that of conventional MX type series.

In the system installation, the firmware, memorized in the cards, can be updated as well as the system software.

The version name of the system software and firmware can be checked on the panel screen.



Check the version name in [SET] +F4- [8 Software Version]

2. Specification comparison

Item		TMBR/TMBP	TUMX-C	TEJTII-C
Machine code (Type)		TMBR : E1 (1-1A) TMBP : E2 (1-1A)	MU (1-1A)	JT (1-1A)
Number of needles		6/12/15 needles	6/15 needles	6/9/12/15 needles
Maximum embroidery space (X*Y)		500*360	360*360/500*360	500*360
Arm	Needle bar stroke	47mm		50mm
	Presser foot drive system	TMBR : Pulse motor (DCP) TMBP : Mechanical	Mechanical	
Maximum R.P.M	Border/tubular	1200rpm (4mm)	1200rpm (*1)	1200rpm
	Cap frame	1000rpm (4mm)	900rpm	
Width of cylinder bed (Width of needle plate bracket)		45mm (44mm)	56mm (55mm)	
Standard rotary hook		Regular E-hook, supporting thick thread FS (KHS12-RYPTFSOE)	Regular hook (HSL-ATR [MTQETA])	
Operation panel	Screen	LCD (7 inch wide)	LCD (6.5 inch)	LCD (20-digit, 4-line)
	System OS	Windows Embedded Compact 7 (English)	Windows CE 5.0 (Japanese/English)	ITron
	System recording medium	SD card	CF card	Built-in memory
Main shaft motor (Upper shaft reduction ratio)		AC servo 188W (1:2.5)	AC servo 200W (1:2.5)	AC servo 120W (1:2) [Direct coupling]
X-axis motor		60mm square pulse motor (Direct coupling 1:1)		
Y-axis motor		60mm square pulse motor (Reduction ratio 1:3.5)		
Upper thread locking device		Installed		Not installed
Middle thread guide		Snap-fit type (*2)	Roller types	
Needle base LED light		Installed (*3)	Installed	
Thread breakage detection type		Magnetic type	Optical type	
Tension base switch		Not mounted	Mounted	Not mounted
Design data input/output		USB, LAN		Serial, USB, LAN
FS mode		Supported	Not supported	
Network		Supported		
Time limit locking type		AR/GN type (User management system)	MX type (Password maker)	Not supported
System boot up lock (*4)		Supported	Not supported	
Barcode input (*5)		Supported		
System boot up time		40 sec.	105 sec.	8 sec.
Sleep mode		Not supported	Supported	Not supported
System installation medium		USB		USB, floppy disk
Timing	Stop position	100+/-2 deg.		
	Main shaft adjusting position	97.5 to 107.5 deg.		
	Upper dead point	0 deg.		
	Lower dead point	178 deg.		180 deg.
	Needle/rotary hook	200+/-1 deg.		
	ATH	287+/-1 deg.		
	Take-up lever lower dead point	297+/-2 deg.		
Power supply specification	Voltage (1-phase)	100 to 120V/200 to 240V (50/60Hz), 120V (Only for UL spec.)		
	Power consumption	TMBR : 160W TMBP : 190W	230W	225W
Weight		95kg	102kg	75kg

(*1) Only for the tubular frame because the border frame not supported

(*2) One-touch type middle thread guide is mounted only to 6-needle machine.

(*3) ON/OFF operation on the operation panel

(*4) A function to enable the machine operation by cancelling the password lock at machine installation after shipping

(*5) Barcode reader with USB connection (commercial item) is required separately.

NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Item		TMBR/TMBP	TUMX-C	TEJTII-C
Optional frame	Cap frame	Common part with other models (*6)	Common part with other models	
	Cylindrical frame	Not supported		Supported
	Border frame (X*Y)	Supported (500*350)	Not supported	Supported (500*350)
	Auto clamp frame	Supported (Air type)		Supported
	X-extension unit (X*Y)	To be supported in the future (1200*350)	Not supported	Supported (1200*350)
Optional device	Beam sensor	Supported		
	LED light (fluorescent type)	Supported		Not supported
	Position marker	Supported		Supported (*7)
	Multi cord device	TMBR : Supported TMBP : Not supported	Not supported	
	Stand	Supported		
	Stand tray	Supported		Not supported
	Serial communication (RS-232C)	To be supported in the future	Not supported	Supported (*8)
	Sequin device III		Not supported	
	Sequin device IV		Supported	
	Laser line marker(*9)		Not supported	
	Signal tower		Supported	Not supported
	Under thread winder (Built-in)		Not supported	Not supported (*10)
	Lochrose embroidery device		Supported	Not supported
	Laser device, made by other suppliers		Not supported	
	Boring device (Mechanical type)		Not supported	Supported

(*6) Exclusive cap frame base for the slim cylinder

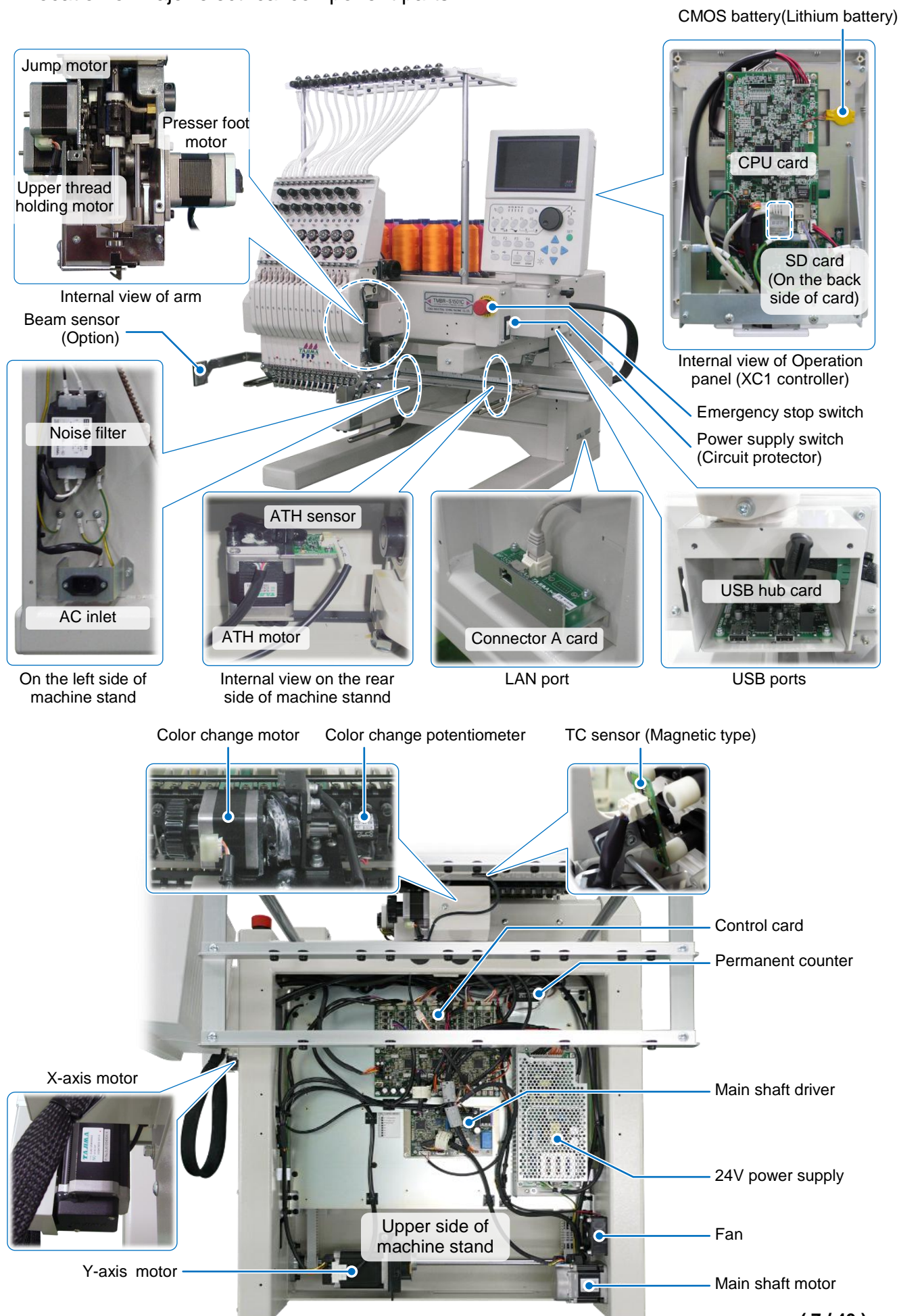
(*7) Position marker cannot be mounted with the cap frame.

(*8) Standard specification

(*9) A device to mark the needle position from the bottom of needle bar

(*10) Not equipped since October 2013

3. Allocation of major electrical component parts



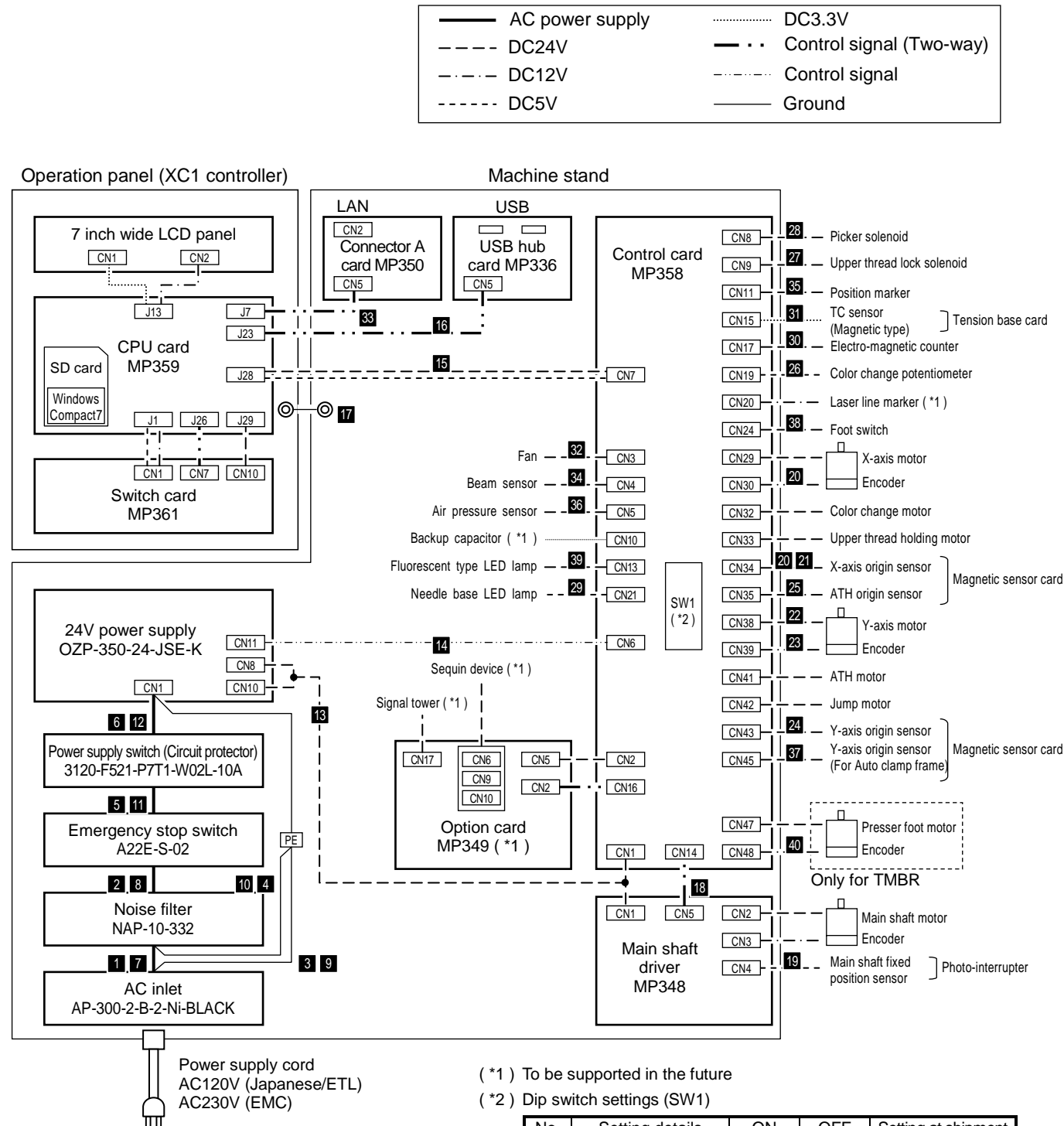
NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

4. Compatibility of electrical component parts

 : New part
 ○ : Available
 × : Not available

Category		Part name	Part No.	BR/BP	TUMX	Remark	
Cards	Operation panel	Controller :XC1[A]	0J0204700A00	○	×	7 inch wide LCD	
		└ LCD :7 inch Wide	641200250000	○	×	NL8048AC19-13	
		└ Card :CPU :XC1[A]	0J2306300A00	○	×	MP359-1A	
		└ Lithium Battery :XC[A]	645300490A01	○	×	CMOS Battery	
		└ SD Card :XC1	0J2402600000	○	×	512MB、Class6	
		└ Card :Switch :XC1	0J3504400000	○	×	MP361-2A	
		Controller :X16-E[A]	0J0204001A15	×	○	The component parts of English operation panel of TUMX-C are described here for the example of comparison.	
		└ LCD :6.5 inch	641200140000	×	○		
		└ Card :CPU-E :X16[A]	0J2304803A15	×	○		
		└ Lithium Battery	645300350000	×	○		
		└ Compact Flash Memory :English :6.5-inch	0J2402301000	×	○		
		└ Card :Capacitor	0J3502600011	×	○		
		└ Card :I/F Connector	0J3200700011	×	○		
		└ Inverter :Backlight	645500160000	×	○		
		└ Card :Switch	0J3502000015	×	○		
		Input/output	Card :Connector :A	0J2503800000	○	×	MP350-1A, for LAN
			Card :USB Hub :B	0J2503701000	○	×	MP336-1B, for USB
		Control	Main Shaft Driver :X14 :200[A]	0J0305000A11	○	×	MP348-2B-B
	Main Shaft Driver :X13-A :200[A]		0J0303300A11	×	○		
	Card :Control		0J2206900000	○	×	MP358-2B	
	Card :Machine		0J250230109C	×	○		
	Card :Head		0J27023010AC	×	○		
	Tension base	Card :TC Sensor :Magnetic Type	0J2603000000	○	×	TCS131	
		Card :Tension Base	0J2601900035	×	○		
		Card :TC Sensor	0J2602100012	×	○		
	Power supply	Card :Power Supply :Single Head	0J2101602035	×	○	DC24V/R is used for the power supply of BR/BP	
Sensor, switch (SW)	ATH, X/Y-axis	Card :Magnetic Sensor A	0J4204400000	○	○		
	Main shaft	Card :Photo-interrupter	0J4204500000	○	○		
	Color change	Potentiometer	640900010001	○	○		
	Emergency stop SW	Switch :Emergency Stop[A]	0J0607500A00	○	×	A22E-S-02 with lead wire	
		Switch :Emergency Stop[A]	0J0603900A00	×	○		
	Start/stop SW	Switch :Cylinder Head[A]	0J0603300A11	×	○	BR/BP: built-in SW in the panel	
	Permanent counter	Counter :Electro-Magnetic	0J4500200011	○	○		
Power supply	AC power supply	Circuit Protector :Single-phase 10A	646100310000	○	×	3120-F521-P7T1-W02L-10A	
		Circuit Protector :Single-phase 10A	646100100010	×	○		
		Noise Filter :Single-phase :10A	641400250000	○	×	NAP-10-332	
		Noise Filter :Single-phase :10A	641400140000	×	○		
		AC Inlet	643500220000	○	○		
	DC5V, 12V	DC Power Supply :5V +/-12V	645300030000	×	○		
	DC24V	DC Power Supply :24V :350W	645300500000	○	×	OZP-350-24-JSE-K	
		DC Power Supply :24V	645300191011	×	○		
Transformer	Transformer :X12	643100140011	×	○			
Motor	Main shaft	Servo Motor :188W	0J6301700000	○	×	602030D2-01	
		Servo Motor :200W	0J6300800000	×	○		
	X/Y-axis	Pulse Motor :60mm Square :With Sensor[A]	0J6105400A14	○	○		
	Presser foot	Pulse Motor :42mm Square 44L :With Sensor[A]	0J6110000A03	○	×	To be used only for TMBR	
	Jump, Upper thread hold, Color change	Pulse Motor :42mm Square :Double-End[T]	0J6110700T11	○	○		
	ATH	Pulse Motor :42mm Square :Double-End	0J6106200001	○	○		
	Fan	Motor :Fan :60mm Square	0J6500700000	○	○		
Solenoid	Upper thread lock	Solenoid :Open Frame	640600121001	○	○		
	Picker	Solenoid :Open Frame[A]	0J6600100A11	○	○		
Optional device	Needle position	Position Marker[A]	0J7100200A22	○	○		
	Safety	Sensor :Beam Sensor :3	642200080010	○	○		
	Light	Lamp :Needle Base LED Light[A]	0J7101700A00	○	○	For the needle base	
		Lamp :LED Light :16W	0J7101800001	○	○	LE38B101B, fluorescent type LE	

5. Electrical system diagram
5-1. Electrical system diagram



(*1) To be supported in the future
(*2) Dip switch settings (SW1)

No.	Setting details	ON	OFF	Setting at shipment
1	Beam sensor	Enabled	Disabled	To be set according to the machine specification
2	Position marker	--	Enabled	OFF
3	Auto clamp frame air valve	--	Enabled	OFF
4	Not used	Always OFF		
5				
6				
7				
8				

NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

5-2.Harness list

No.	Part name	Part No.	Type, remark
1	Harness :AC inlet - Noise filter :ETL	H0E100100000	For ETL spec.
2	Harness : Noise filter - Emergency stop :ETL	H0E104000000	For ETL spec.
3	Harness :AC inlet grounding :ETL	H0E100200000	For ETL spec.
4	Harness :Noise filter grounding :ETL	H0E104100000	For ETL spec.
5	Harness :Emergency stop-Power supply switch :ETL	H0E100300000	For ETL spec.
6	Harness :Power supply switch-24V power supply :ETL	H0E100400000	For ETL spec.
7	Harness :AC inlet-Noise filter :CE	H0E104200000	For EMC spec.
8	Harness : Noise filter- Emergency stop :CE	H0E104300000	For EMC spec.
9	Harness :AC inlet grounding :CE	H0E104400000	For EMC spec.
10	Harness :Noise filter grounding :CE	H0E104500000	For EMC spec.
11	Harness :Emergency stop - Power supply switch :CE	H0E104600000	For EMC spec.
12	Harness : Power supply switch -24V power supply :CE	H0E104700000	For EMC spec.
13	Harness :24V power supply output	H0E100500000	
14	Harness :Power failure detection	H0E100600000	
15	Harness :CPU card – Control card	H0E100700000	
16	Harness :CPU card – USB Hub card	H0E100800000	
17	Harness :Controller :Grounding	H0E101700000	
18	Harness :Control card – Main shaft driver	H0E101000000	
19	Harness :Main shaft fixed position sensor	H0E101100000	
20	Harness :X-axis junction	H0E101200000	
21	Harness :X-axis origin sensor	H0E101300000	
22	Harness :Y-axis motor	H0E101400000	
23	Harness :Y-axis encoder	H0E101500000	
24	Harness :Y-axis origin sensor	H0E101600000	
25	Harness :ATH knife retracting sensor	H0E101900000	
26	Harness :Color change potentiometer	H0E102000000	
27	Harness :Upper thread lock solenoid	H0E102200000	
28	Harness :Picker solenoid	H0E102300000	
29	Harness :Needle base LED lamp	H0E102400000	
30	Harness :Permanent counter	H0E102500000	
31	Harness :Thread breakage sensor	H0E102100000	
32	Harness :Fan motor	H0E102600000	
33	Harness :CPU card – Connector card :LAN	H0E100900000	
34	Harness :Beam sensor	H0E103100000	
35	Harness :Position marker	H0E103200000	
36	Harness :Air pressure sensor	H0E103300000	
37	Harness :Auto clamp :Y-axis frame origin sensor	H0E103400000	
38	Harness :Auto clamp :Two-steps type foot switch	H0E103500000	
39	Harness :LED lamp	H0E103600000	
40	Harness :Presser foot encoder	H0E101800000	

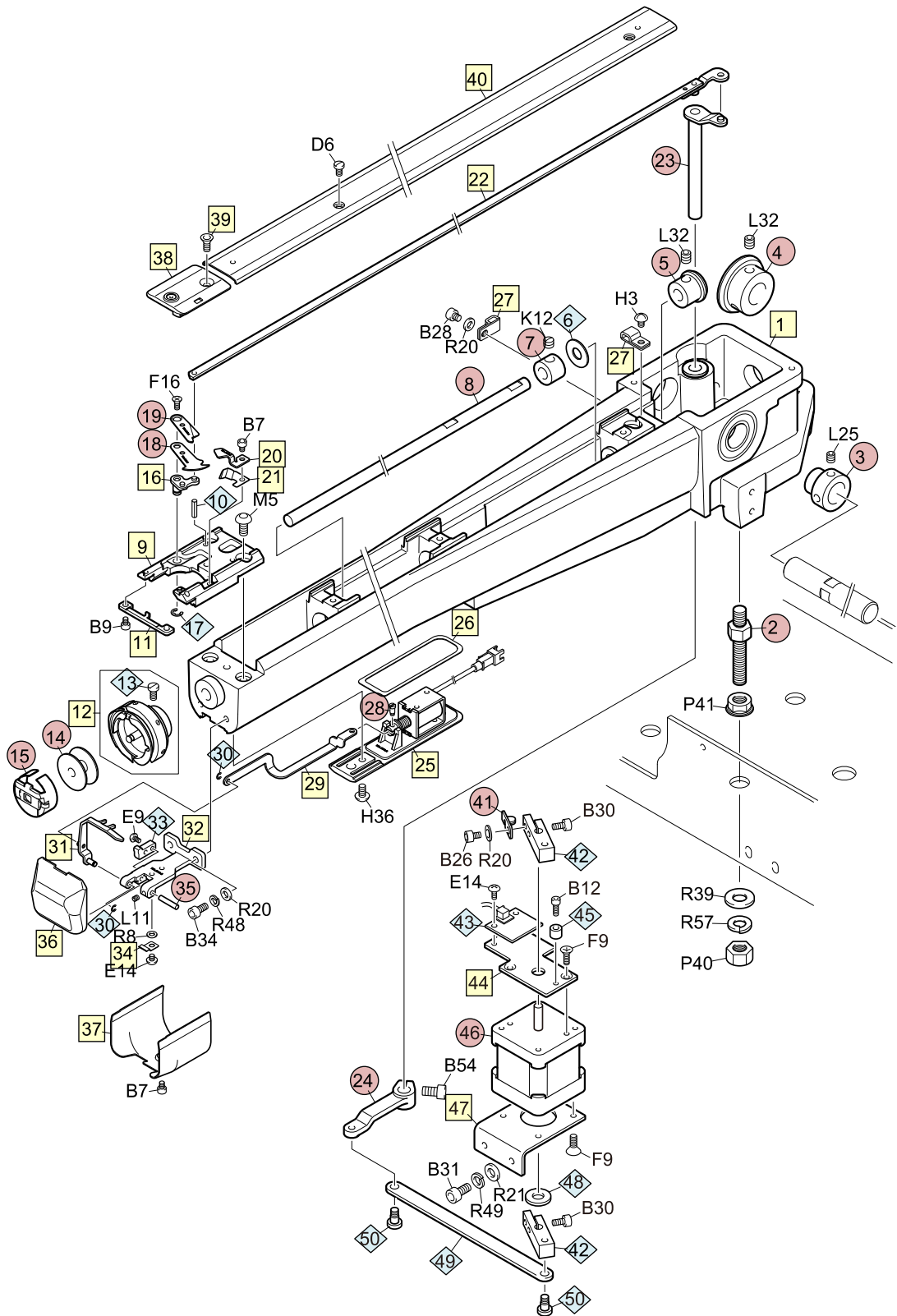
6. Compatibility of major parts

The compatibility of major parts on [TMBR-SC/TMBP-SC] is described here. (Excluding the screws)

6-1.TMBR-SC

6-1-1. Cylinder bed (E1-03)

Symbol	Upward compatibility	
	TUMX-C	TEJT2-C
○	Yes	No
△	No	Yes
◇	Yes	Yes
□	No	No

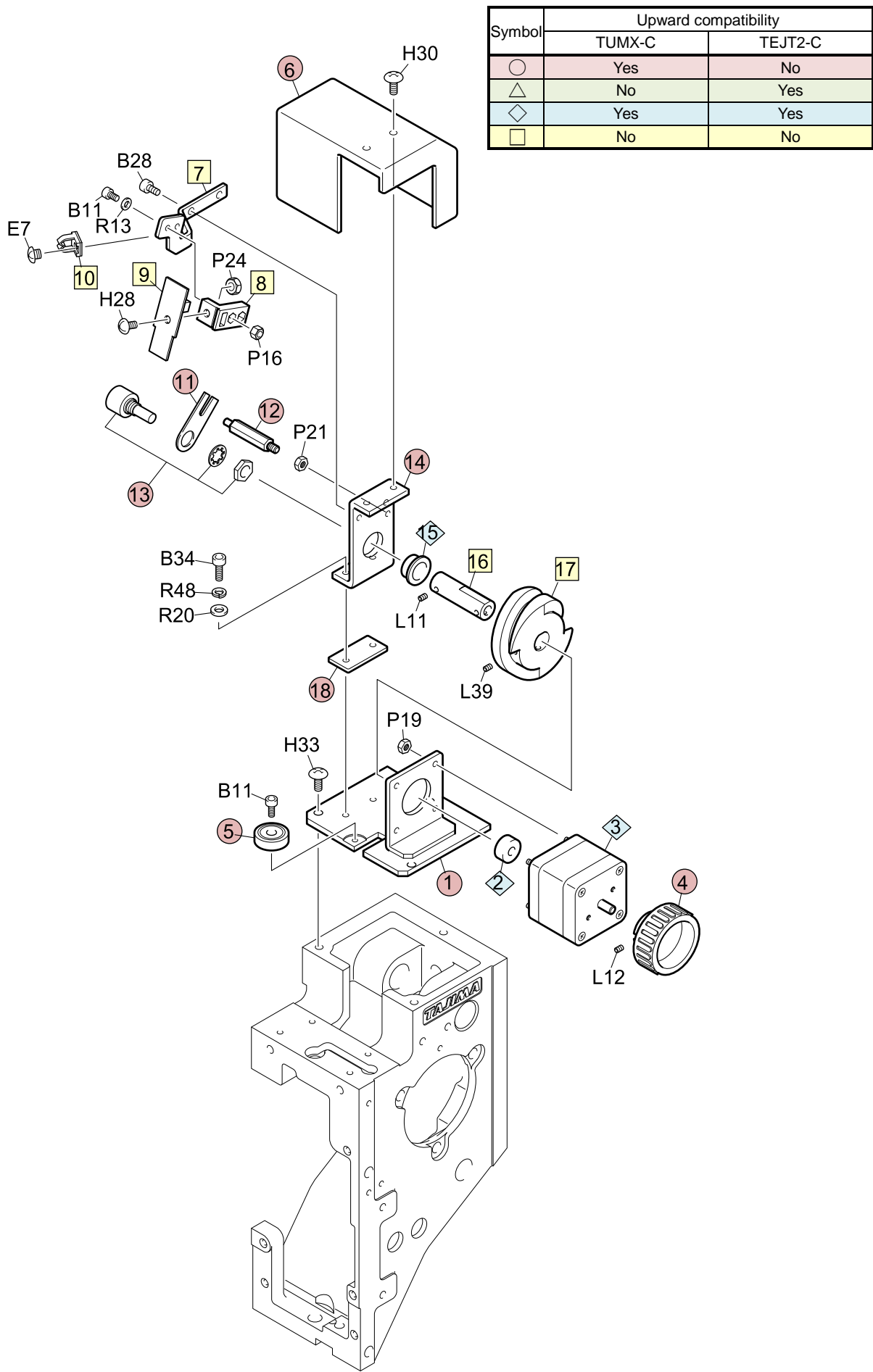


NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Cylinder bed (E1-03)

Symbol	No.	Part name	Part No.	Remark
□	1	Long Cylinder Bed[S]	050170030S01	
○	2	Rotary Hook Base Stud	050330330002	
○	3	Bearing Collar :15mm dia.	502715080003	
○	4	Spiral Bevel Gear :No.1 :28t	506528030000	
○	5	Spiral Bevel Gear :No.1 :14t	506514030000	
◇	6	Plain Washer :7.94*19*t0.8	519108030000	
○	7	Stopper Collar :7.94mm dia.	502107020000	
○	8	Shaft :Rotary Hook :7.94mm dia.	050330550000	
□	9	Needle Plate Bracket[S]	050330640S00	
◇	10	Spring Pin :3*12	611400080000	
□	11	Rotary Hook Support	050330660000	
□	12	Rotary Hook : KHS12-RYPOEET2	050230090002	
◇	13	Rotary Hook Set Screw :11/64*7.2	050290020000	
○	14	Bobbin :Regular Rotary Hook	050260010020	
○	15	Bobbin Case :Regular Rotary Hook :Standard	050240150001	
□	16	Lever Shaft :Knife[S]	050321510S00	
◇	17	E-Ring :4mm dia.	611100070000	
○	18	Thread Separating Plate :Direct Movement 2-Blade Type	050320930011	
○	19	Movable Knife :Direct Movement 2-Blade Type	050320920012	
□	20	Fixed Knife :Direct Movement 2-Blade Type	050321520000	
□	21	Under Thread Presser	050321530001	
□	22	Connecting Plate :Knife[S]	050321550S00	
○	23	Lever Shaft :Knife Connecting Plate[S]	050320850S21	
○	24	Lever :Knife Connecting Plate Shaft	050321000000	
□	25	Base :Solenoid[A]	050321450A02	
□	26	Rubber Packing	050321560000	
□	27	Cord Clamp	644100040000	
○	28	Stepped Screw :No.1 :M2.5*6	512130010011	
□	29	Connecting Plate :Picker	050321480002	
◇	30	E-Ring :2mm dia.	611100050000	
□	31	Picker[S]	050321470S12	
□	32	Holder :Picker	050321490000	
◇	33	Stopper :Picker	050320700000	
□	34	Plate Spring :Rotary Hook Cover :t0.3	507802060001	
○	35	Straight Pin :No.1 :3mm dia.	503101100001	
□	36	Rotary Hook Cover[S]	050330680S00	
□	37	Cover :Needle Plate Bracket	050330670002	
□	38	Needle Plate	05034055@002	
□	39	Hexagon Socket Head Countersunk Screw : M4*8	S125040801SD	
□	40	Cover :Cylinder Bed :Front	050330700001	
○	41	Sensor Plate :No.1	050320110001	
◇	42	Lever :ATH	050320100000	
◇	43	Card :Magnetic Sensor A	0J4204400000	
□	44	Base :Sensor	050321590000	
◇	45	Damper Ring :3mm dia. E	050320470013	
○	46	Pulse Motor :42mm Square :Double-End	0J6106200001	
□	47	Base :ATH Motor	050321580000	
◇	48	Plastic Washer :6*15*t2.5	519206020000	
◇	49	Connecting Plate :ATH Drive Arm	050320430000	
◇	50	Stepped Screw :No.1 :M4*6.7	512104100044	

6-1-2. Color change system (E1-04)

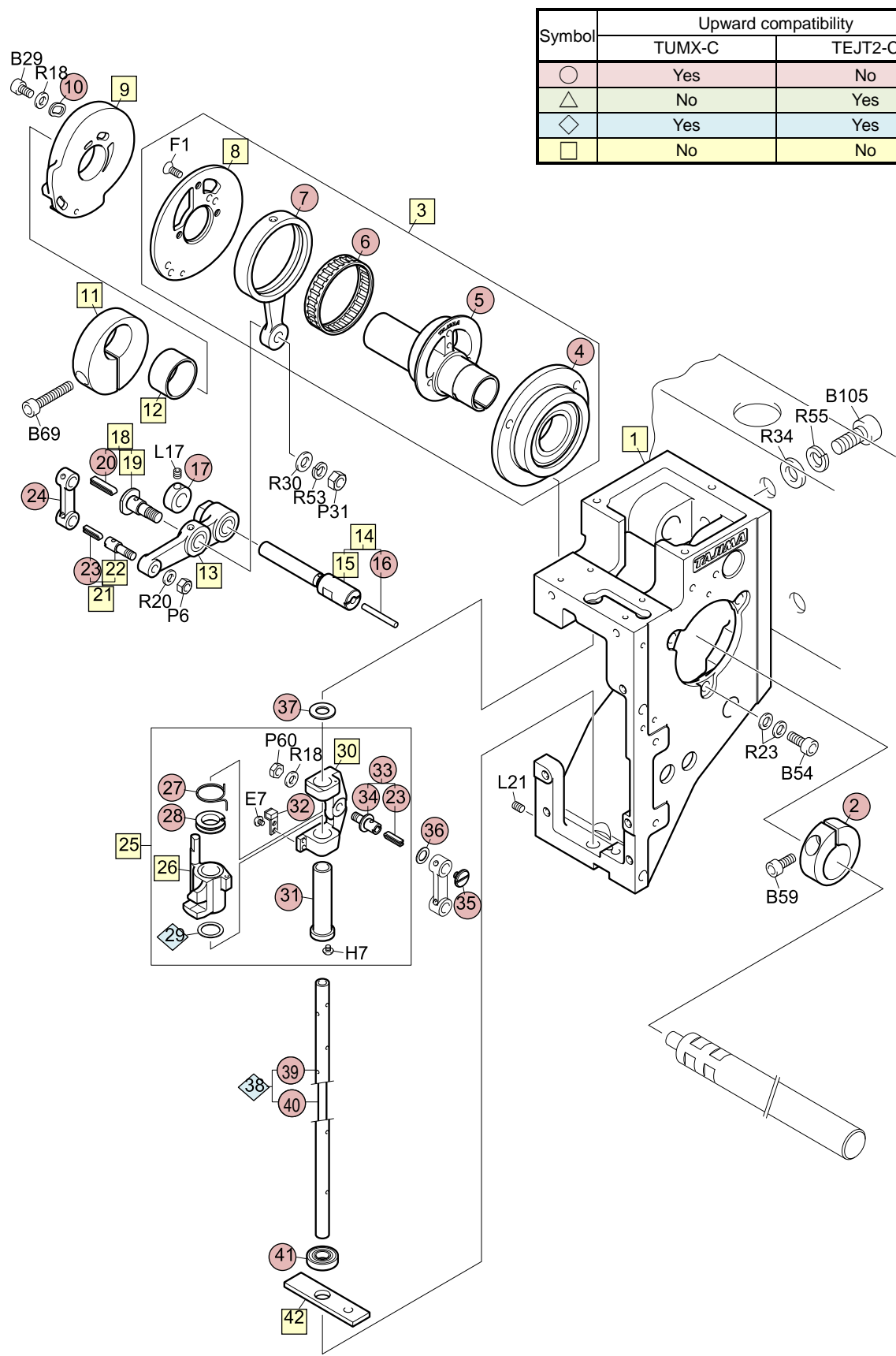


NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Color change system (E1-04)

Symbol	No.	Part name	Part No.	Remark
○	1	Base :Change Motor	070110340013	
◇	2	Collar :No.1 :5.1mm dia.	502551010000	
◇	3	Pulse Motor :42mm Square :Double-End[T]	0J6110700T11	
○	4	Knob :B	08052001B012	
○	5	Roller Pin[S]	080290040S11	
○	6	Cover :Change	070110050011	
□	7	Sensor Arm	0C0230350000	
□	8	Base :Card	0C0230340000	
□	9	Card :TC Sensor :Magnetic Type	0J2603000000	
□	10	Mini Clamp :MB-3	644100200000	
○	11	Bracket :Potentiometer	0C0420020010	
○	12	Stud :No.4 :M4-27.5	505404030022	
○	13	Potentiometer	640900010001	
○	14	Bearing Case :Change Cam	070110370001	
◇	15	Oil-Bushing :No.2 :MB0206-20FDU	638100240000	
□	16	Shaft :Change Cam	070110490000	
□	17	Cam :Change	070110480000	
○	18	Spacer :No.2 :t3	510200390011	

6-1-3. Arm 1 (E1-05-1)



Symbol	Upward compatibility	
	TUMX-C	TEJT2-C
○	Yes	No
△	No	Yes
◇	Yes	Yes
□	No	No

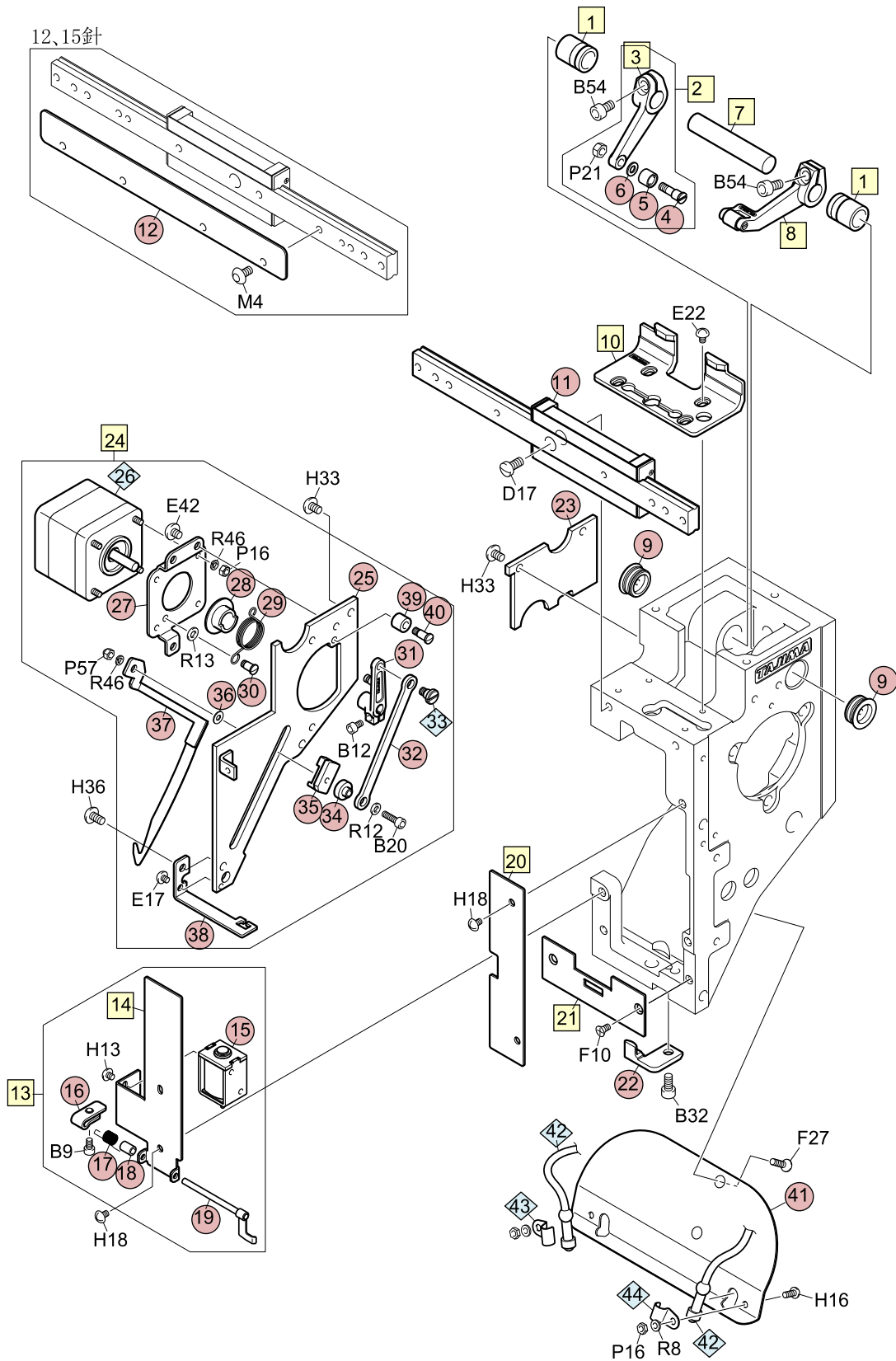
NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Arm 1 (E1-05-1)

Symbol	No.	Part name	Part No.	Remark
□	1	Head	080120040000	
○	2	Tightening Collar :21mm dia.	502221010011	
□	3	Cam :Needle Bar[A]	080220010A03	
○	4	Bearing Case :No.2 :22mm dia.[S]	508222010S02	
○	5	Cam :Needle Bar	080220010001	
○	6	Needle Cage : KT404310NE01B2	634400070001	
○	7	Connecting Rod :51.7	080220040001	
□	8	Base :Take-Up Lever Cam	080220400000	
□	9	Cam :Take-Up Lever :M6 :Regular Rotary Hook	080220430000	
○	10	Washer :Cam	080220180000	
□	11	Balancer :Head	080290310000	
□	12	Spacer :Balancer	080290320000	
□	13	Lever :Needle Bar[S]	080230390S00	
□	14	Stepped Pin :No.4[S]	503204070S00	
□	15	Stepped Pin :No.4	503204070000	
○	16	Wick :3P*61	080240230000	
○	17	Stopper Collar :8mm dia.	502108020014	
□	18	Stepped Screw :No.2 :M6*13[S]	512206010S11	
□	19	Stepped Screw :No.2 :M6*13	512206010011	
○	20	Wick :3.5*1*34	080240140002	
□	21	Screw With Pin :No.3 :11/64-7.7[A]	513354020A11	
□	22	Screw With Pin :No.3 :11/64-7.7	513354020012	
○	23	Wick :2.5*1*22	080240120012	
○	24	Connecting Rod :26	080230010002	
□	25	Needle Bar Reciprocator[A]	9A0804200A00	
□	26	Needle Bar Reciprocator[S]	9A0804000S00	
○	27	Torsion Spring :0.7mm dia.	507307010013	
○	28	Holder :Jump Spring	080210110013	
◇	29	Plain Washer :10.3*14*t0.5	519112010000	
□	30	Reciprocating Slide Block	080210660000	
○	31	Plastic Bushing :No.2 :7.24mm dia.	509472050011	
○	32	Damper Bracket :Needle Bar Reciprocator	080210090000	
○	33	Screw With Pin :No.3 :11/64-7.9[A]	513354060A22	
○	34	Screw With Pin :No.3 :11/64-7.9	513354060023	
○	35	Flat Fillister Head Screw :9/64*4	511153010010	
○	36	Plain Washer :6*9.5*t0.05-0.5	51910604@024	
○	37	Felt :14mm dia.	080240060000	
◇	38	Needle Bar Drive Shaft :Automatic Lubrication[S]	0L0210030S00	
○	39	Needle Bar Drive Shaft :Automatic Lubrication	0L0210030003	
○	40	Wick :3.5P*183	080240020011	
○	41	Guide :Needle Bar Case[S]	080250170S22	
□	42	Felt :Needle Bar Drive Shaft	080240270000	

6-1-4. Arm 2 (E1-05-2)

Symbol	Upward compatibility	
	TUMX-C	TEJT2-C
○	Yes	No
△	No	Yes
◇	Yes	Yes
□	No	No



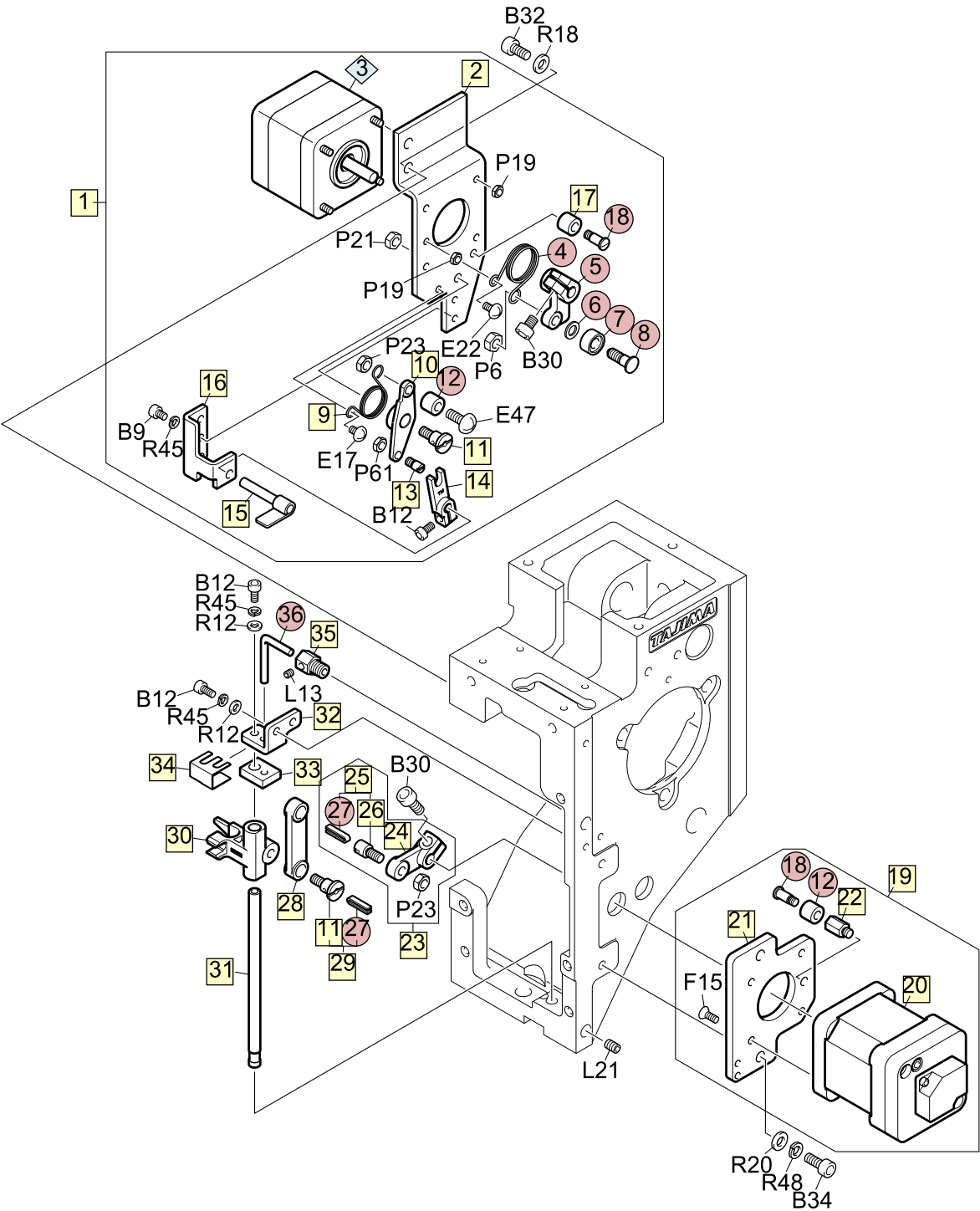
NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Arm 2 (E1-05-2)

Symbol	No.	Part name	Part No.	Remark
□	1	Bearing Bushing :No.1 :10mm dia.	509510020000	
□	2	Lever :Take-Up Lever[S]	080230380S00	
□	3	Lever :Take-Up Lever	080230380000	
○	4	Stepped Screw :No.1 :M4*5.3	512104160022	
○	5	Roller :5*8*5	515105020011	
○	6	Plain Washer :4*7.5*t0.8	519104060000	
□	7	Straight Pin :No.1 :10mm dia.	503101580000	
□	8	Arm :Take-Up Lever[S]	080230270S00	
○	9	Lid :Take-Up Lever Shaft Holder :15.3mm dia.	080290270000	
□	10	Take-Up Lever Guide	080250210000	
○	11	Linear Way :Needle Bar Case	08025004@003	
○	12	Reinforcing Plate	08025005@002	
□	13	Head Front Cover :L[A]	08042030LA00	
□	14	Head Front Cover :L	08042030L000	
○	15	Solenoid :Open Frame	640600121001	
○	16	Lever :Solenoid	080270010011	
○	17	Torsion Spring :0.5mm dia.	507305020022	
○	18	Collar :No.1 :3.1mm dia.	502505010000	
○	19	Lever :Drive[S]	080270040S12	
□	20	Head Front Cover :R	08042031R000	
□	21	Guide Plate :Needle Bar Case	080250220000	
○	22	Guide Bracket :Needle Bar Case	080250200000	
○	23	Side Cover :Head :Upper	080430010000	
□	24	Upper Thread Holder[A]	0B0110740A01	
○	25	Side Cover :Head :Lower	080430220002	
◇	26	Pulse Motor :42mm Square :Double-End[T]	0J6110700T11	
○	27	Base :Hook Motor	0B0110420002	
○	28	Collar :Spring Guide	502522010011	
○	29	Torsion Spring :0.8mm dia.	507308190015	
○	30	Stepped Screw :No.1 :9/64*7.5	512153040001	
○	31	Lever :Hook	0B0110470002	
○	32	Connecting Plate :Hook	0B0110080013	
◇	33	Stepped Screw :No.1 :M4*6.7	512104100044	
○	34	Spacer :Slide Hook	0B0110370011	
○	35	Slide :Hook	0B0110510000	
○	36	Washer :2.6*7*t0.5	519204010000	
○	37	Hook[S]	0B0110650S11	
○	38	Guide :Hook	0B0110520023	
○	39	Damper Ring :4mm dia.	080320410001	
○	40	Stepped Screw :No.1 :9/64*10	512153020001	
○	41	Bracket :LED Lamp	0L2310020000	
◇	42	Lamp :Needle Base LED Light[A]	0J7101700A00	
◇	43	Clamp :LED Lamp :L	0L231003L000	
◇	44	Clamp :LED Lamp :R	0L231003R000	

6-1-5. Arm 3 (E1-05-3)

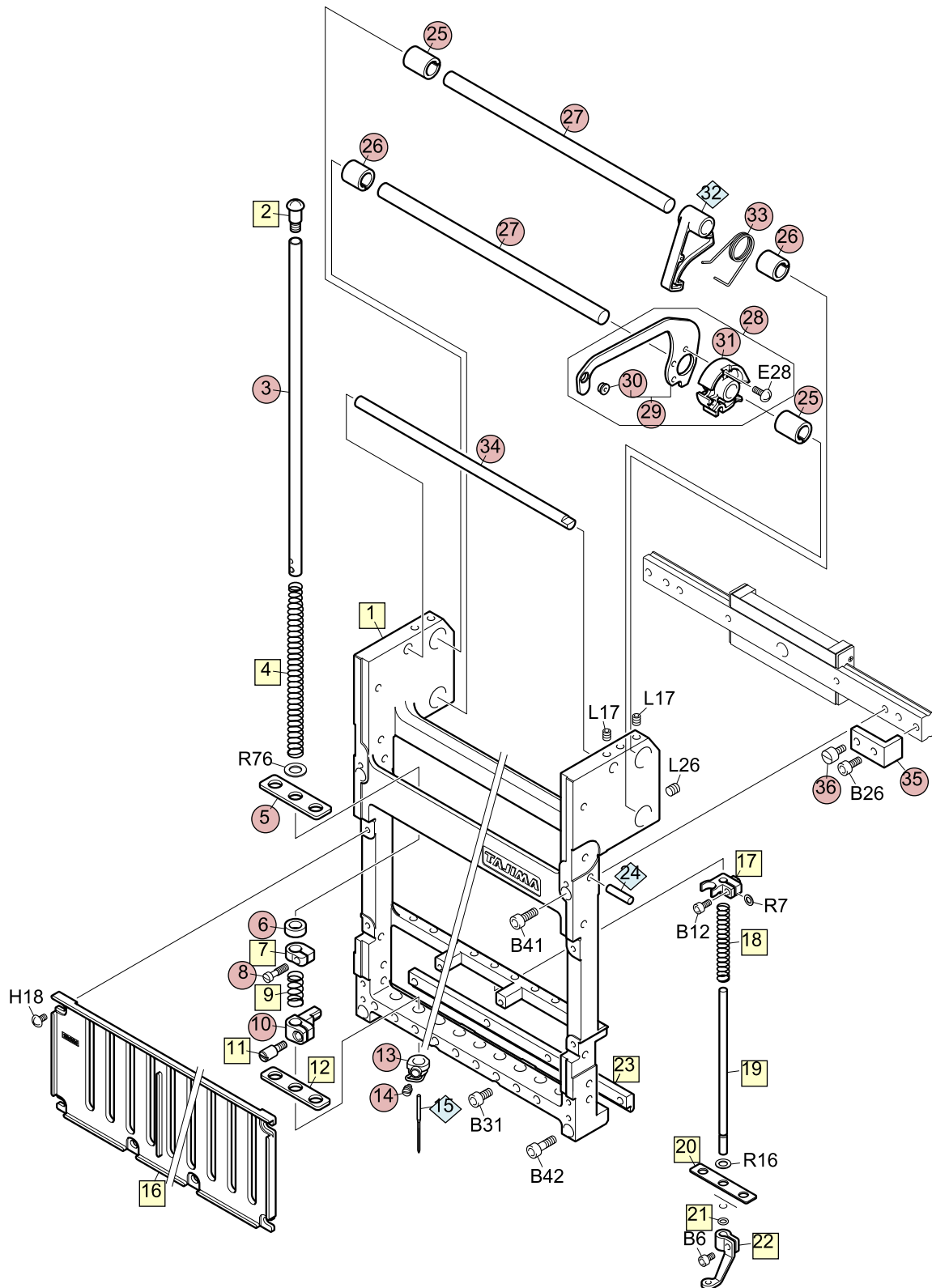
Symbol	Upward compatibility	
	TUMX-C	TEJT2-C
○	Yes	No
△	No	Yes
◇	Yes	Yes
□	No	No



NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Arm 3 (E1-05-3)

Symbol	No.	Part name	Part No.	Remark
□	1	Jump[A]	080320700A11	
□	2	Bracket :Jump Motor	080320640000	
◇	3	Pulse Motor :42mm Square :Double-End[T]	0J6110700T11	
○	4	Torsion Spring :0.9mm dia.	507309040020	
○	5	Lever :Jump	080320420013	
○	6	Washer :4.8*8*t0.8	S301040801KC	
○	7	Roller :4.7mm dia.	515110010011	
○	8	Stepped Screw :No.1 :11/64*8.2	512154010012	
□	9	Torsion Spring :0.7mm dia.	507307060000	
□	10	Lever :Clutch :Middle	080320690000	
□	11	Stepped Screw :No.2 :M4*12.5	512204050000	
○	12	Damper Ring :4mm dia.	080320410001	
□	13	Screw With Pin :No.1 :9/64-4	513153060011	
□	14	Lever :Clutch :Reversing	080320670000	
□	15	Lever :Clutch :Drive[S]	080320610S00	
□	16	Base :Clutch	080320650000	
□	17	Duracon Spacer :C-406.5	614100270000	
○	18	Stepped Screw :No.1 :9/64*10	512153020001	
□	19	Presser Foot Motor[A]	0J6110900A00	
□	20	Pulse Motor :42mm Square 44L :With Sensor[A]	0J6110000A02	
□	21	Base :Presser Foot Motor	080210640000	
□	22	Stud :No.1 :M4-8.5	505104250001	
□	23	Lever :Presser Foot[S]	080230360S01	
□	24	Lever :Presser Foot	080230360000	
□	25	Screw With Pin :No.3 :M4-5.5[A]	513304060A00	
□	26	Screw With Pin :No.3 :M4-5.5	513304060000	
○	27	Wick :2.5*1*22	080240120012	
□	28	Connecting Rod :Presser Foot	080230340000	
□	29	Stepped Screw :No.2 :M4*12.5[A]	512204050A00	
□	30	Presser Foot Reciprocator	080210610000	
□	31	Shaft :Presser Foot Drive	080210630000	
□	32	Shaft Holder :Presser Foot Drive	080210620000	
□	33	Felt :Presser Foot Shaft	080240280000	
□	34	Felt Presser :Presser Foot Shaft	080240290000	
□	35	Stud :No.1 :M6-7	505106080000	
○	36	Wick :3P*61	080240230000	



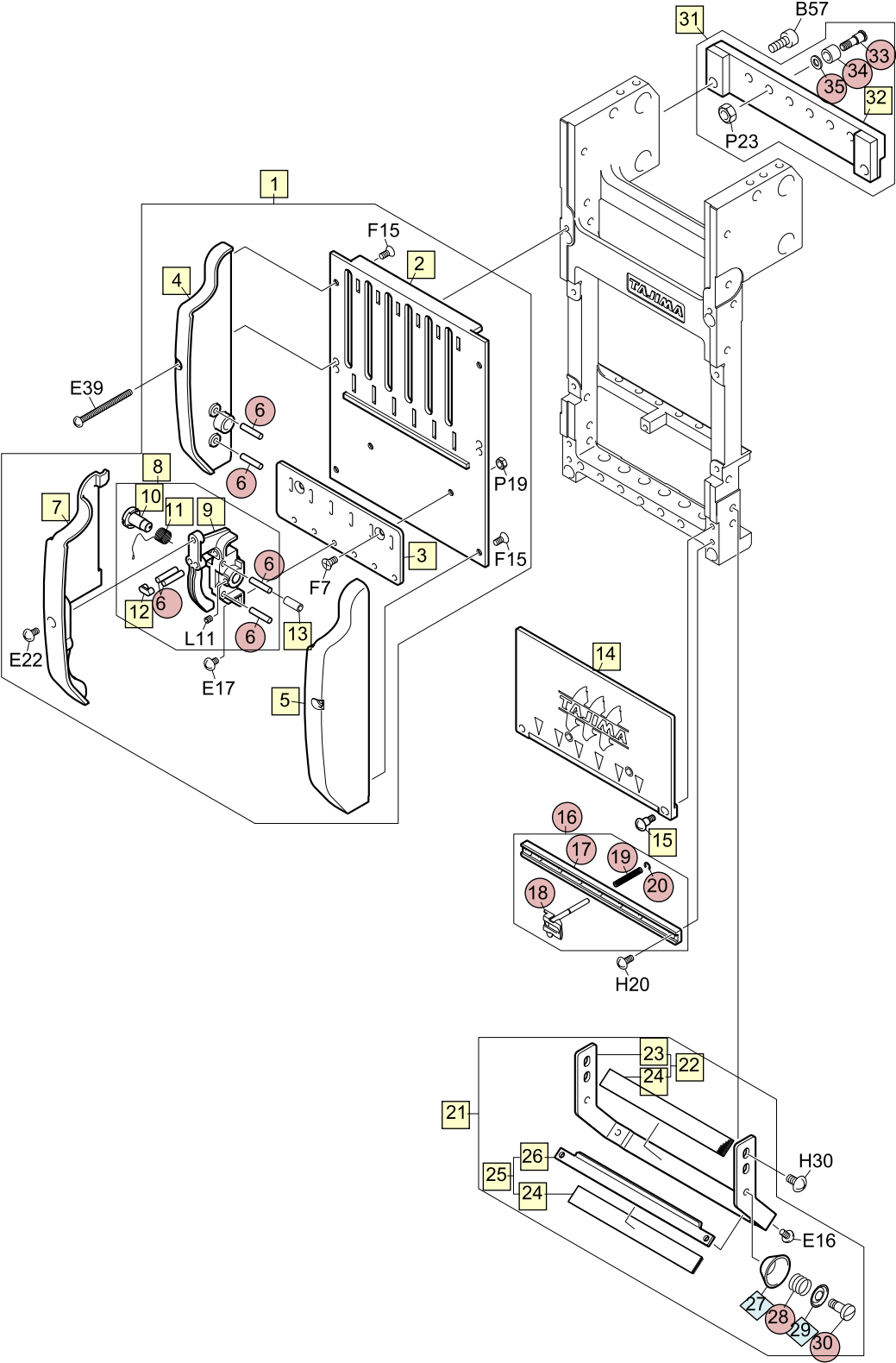
NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Needle bar case 1 (E1-06-1)

Symbol	No.	Part name	Part No.	Remark
□	1	Needle Bar Case	09012004@001	
□	2	Screw :Needle Bar	090410060000	
○	3	Needle Bar	090410020013	
□	4	Compression Spring :0.6mm dia.	507606100000	
○	5	Felt Packing	090430040001	
○	6	Damper Ring :F	090430020010	
□	7	Stopper :Upper Dead Point	090420090001	
○	8	Flat Fillister Head Screw :9/64*12	SA41741201UN	
□	9	Compression Spring :0.5mm dia.	507605180000	
○	10	Needle Bar Connecting Stud	090420060017	
□	11	Screw With Pin :No.1 :9/64-8	513153080000	
□	12	Felt :Needle Bar	090430180000	
○	13	Needle Clamp[S]	090420010S67	
○	14	Slotted Head Set Screw :11/64*6B	511754010011	
◇	15	Needle :DB-K5Z1 #11	616500080000	
□	16	Needle Bar Guide	0904501@001	
□	17	Presser Foot Connecting Stud	090420130000	
□	18	Compression Spring :0.4mm dia.	507604060000	
□	19	Presser Foot Shaft	090460530011	
□	20	Felt :Presser Foot	090430190000	
□	21	O-Ring :SO-3-90	612200230000	
□	22	Presser Foot :2mm dia./3mm dia.	09046034@001	
□	23	Rail :Case :Lower	09044007@000	
◇	24	Parallel Pin :4*16-h7	611200050000	
○	25	Split Collar :No.1 :8mm dia.	502308010011	
○	25	Split Collar :No.1 :8mm dia.	502308020011	For 15-needle machine
○	26	Split Collar :No.2 :8mm dia.	502408020013	
○	26	Split Collar :No.2 :8mm dia.	502408010023	For 15-needle machine
○	27	Guide Shaft :Take Up Lever	09033001@001	
○	28	Take-Up Lever[A]	090310050A44	
○	29	Take-Up Lever[S]	090310050S44	
○	30	Thread Guide Collar :2mm dia.	516503020012	
○	31	Boss :Take-Up Lever	090310040012	
◇	32	Lever :Stopper	090320010000	
○	33	Torsion Spring :1mm dia.	507310040011	
○	34	Spring Hook Bar	09033002@003	
○	35	Stopper :Linear Way	080260120000	
○	36	Flat Fillister Head Screw :M4*10	511104010011	

6-1-7. Needle bar case 2A [6-needle M/C] (E1-06-2a)

Symbol	Upward compatibility	
	TUMX-C	TEJT2-C
○	Yes	No
△	No	Yes
◇	Yes	Yes
□	No	No



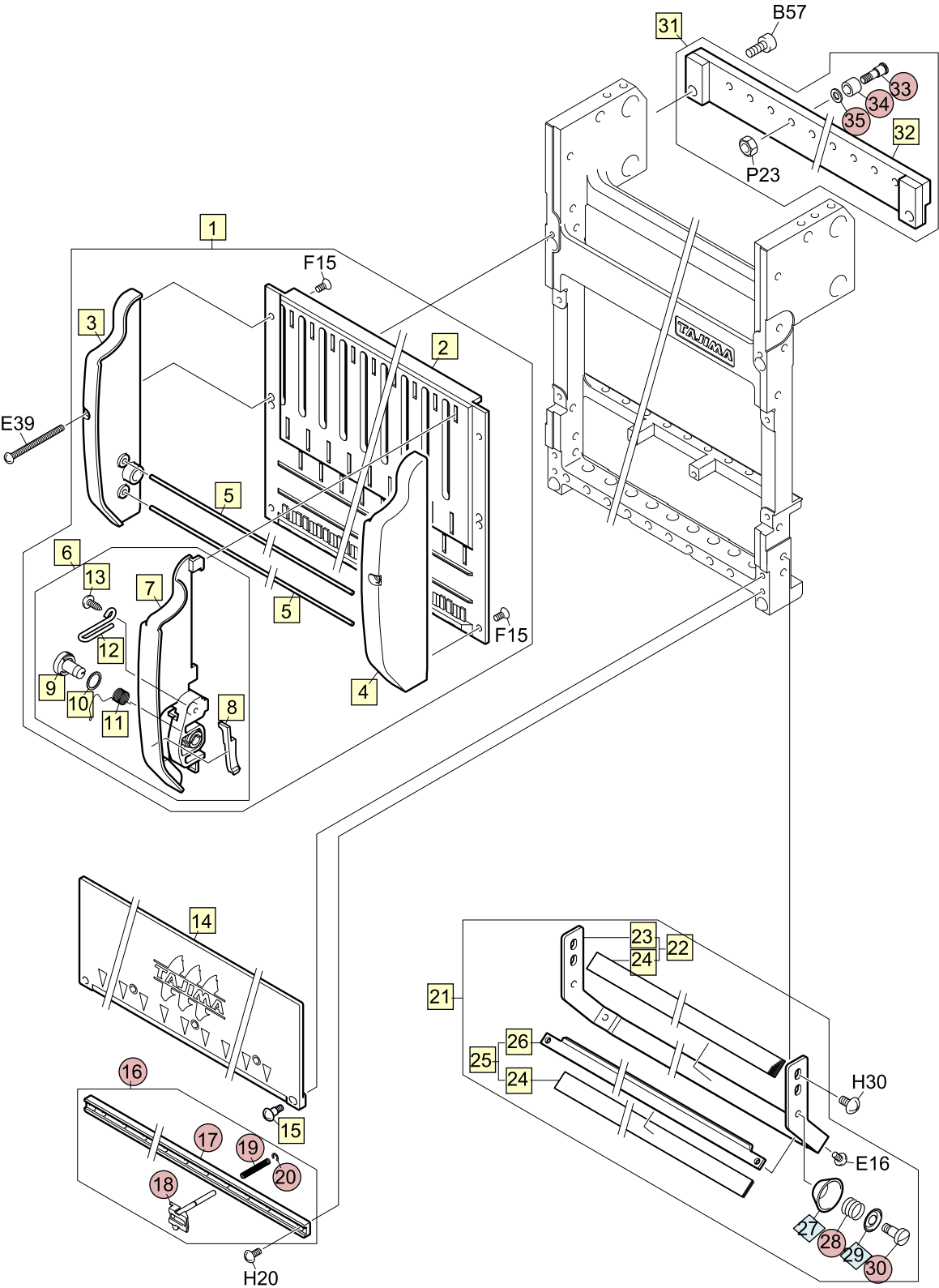
NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Needle bar case 2A [6-needle M/C] (E1-06-2a)

Symbol	No.	Part name	Part No.	Remark
□	1	Top Cover[A]	09053021@A00	
□	2	Top Cover	09053010@003	
□	3	Middle Thread Guide Base	09021039@000	
□	4	Side Cover :L	09053019L000	
□	4	Side Cover :L :15-Needle	09053020L000	
□	5	Side Cover :R	09053019R000	
□	5	Side Cover :R :15-Needle	09053020R000	
○	6	Straight Pin :No.1 :3mm dia.	503101150022	
□	7	Front Face Cover :Middle Thread Guide	090530120001	
□	8	Base :Middle Thread Guide :0.4mm dia.[A]	090210401A11	
□	8	Base :Middle Thread Guide :0.5mm dia.[A]	090210402A11	Wire diameter 0.5mm (For thick thread)
□	9	Base :Middle Thread Guide	090210400001	
□	10	Spring Shaft :Thread Take-Up Spring	090210410001	
□	11	Thread Take-Up Spring :No.2 :0.4mm dia.	507204030011	
□	11	Thread Take-Up Spring :No.2 :0.5mm dia.	507205030000	Wire diameter 0.5mm (For thick thread)
□	12	Grommet :Middle Thread Guide Base	090210350000	
□	13	Urethane Tube :4mm dia. :10L	090210440000	
□	14	Face Cover :Needle Bar Case	09051018@000	
□	15	Stepped Screw :No.1 :M3*9	512103120000	
○	16	Upper Thread Lock[A]	08027005@A12	
○	17	Base :Upper Thread Lock	08027005@00A	
○	18	Lock Shaft[S]	080270030S14	
○	19	Compression Spring :0.3mm dia.	507603040032	
○	20	E-Ring :1.5mm dia.	611100040000	
□	21	Upper Thread Holder[A]	0B020037@A00	
□	22	Base :Upper Thread Holder[S]	0B020039@s00	
□	23	Base :Upper Thread Holder	0B020039@000	
□	24	Velcro	0B020038@000	
□	25	Upper Thread Holder[S]	0B020037@s00	
□	26	Upper Thread Holder	0B020037@000	
◇	27	Thread Suspender Disk	0B0200050000	
○	28	Compression Spring :0.3mm dia.	507603020011	
◇	29	Presser :Thread Suspender Spring	0B0200060000	
○	30	Stepped Screw :No.1 :9/64*7.5	512153040001	
□	31	Base :Change Roller[A]	07011047@A00	
□	32	Base :Change Roller[S]	07011047@s00	
○	33	Stepped Screw :No.1 :M4*5.3	512104160022	
○	34	Roller :5*8*5	515105020011	
○	35	Plain Washer :4*7.5*t0.8	519104060000	

6-1-8. Needle bar case 2B [12, 15-needle M/C] (E1-06-2b)

Symbol	Upward compatibility	
	TUMX-C	TEJT2-C
○	Yes	No
△	No	Yes
◇	Yes	Yes
□	No	No



NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

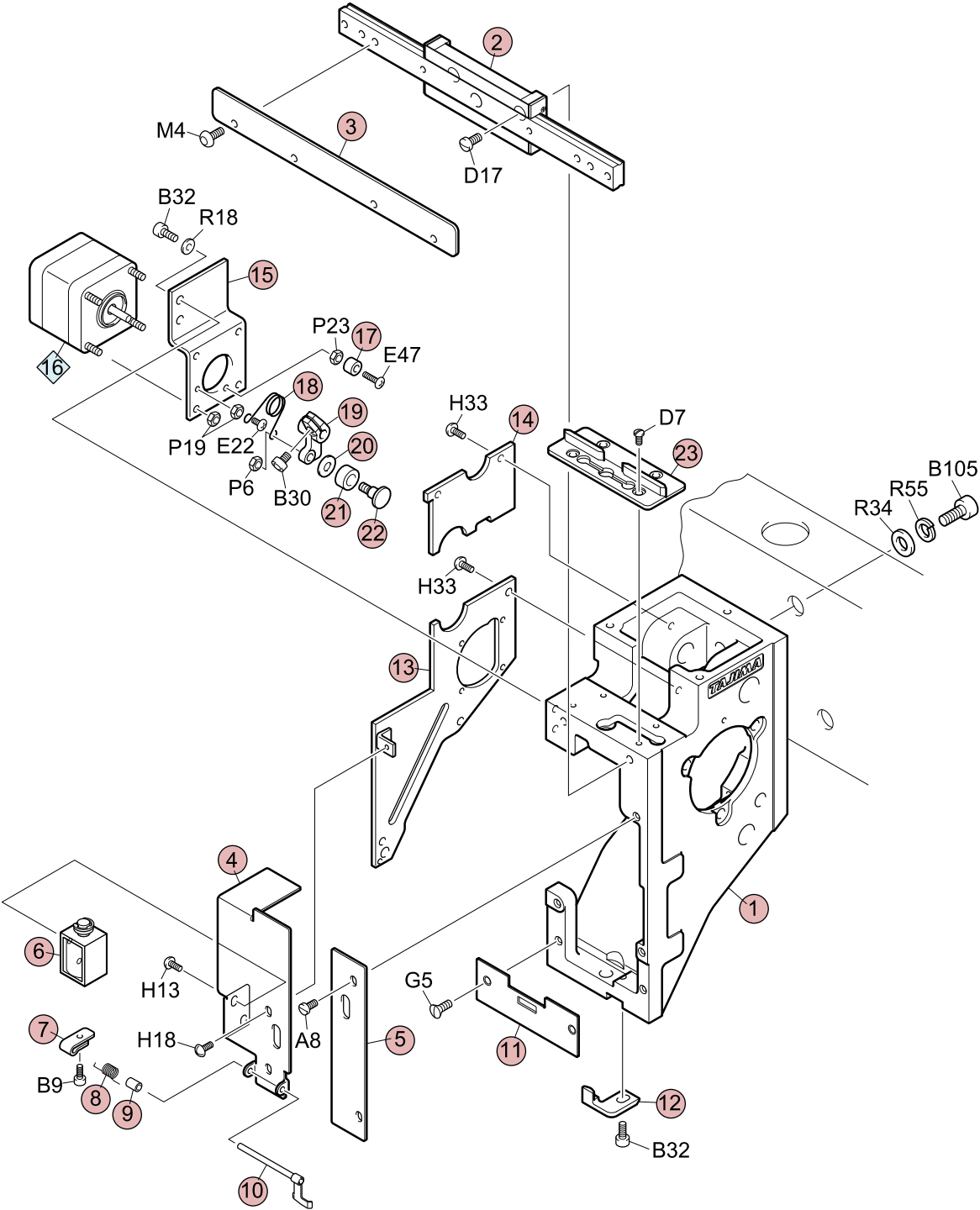
Needle bar case 2B [12, 15-needle M/C] (E1-06-2b)

Symbol	No.	Part name	Part No.	Remark
<input type="checkbox"/>	1	Top Cover[A]	09053023@A00	
<input type="checkbox"/>	2	Top Cover	09053023@000	
<input type="checkbox"/>	3	Side Cover :L	09053019L000	
<input type="checkbox"/>	3	Side Cover :L :15-Needle	09053020L000	
<input type="checkbox"/>	4	Side Cover :R	09053019R000	
<input type="checkbox"/>	4	Side Cover :R :15-Needle	09053020R000	
<input type="checkbox"/>	5	Straight Pin :2mm dia.	09021054@000	
<input type="checkbox"/>	6	Base :Middle Thread Guide :0.4mm dia.[A]	090210511A00	
<input type="checkbox"/>	6	Base :Middle Thread Guide :0.5mm dia.[A]	090210512A00	Wire diameter 0.5mm (For thick thread)
<input type="checkbox"/>	7	Base :Middle Thread Guide	090210510000	
<input type="checkbox"/>	8	Side Wall Plate :Middle Thread Guide	090210500000	
<input type="checkbox"/>	9	Spring Shaft :Thread Take-Up Spring	090210520000	
<input type="checkbox"/>	10	Plain Washer :8*10*t0.5	519108110000	
<input type="checkbox"/>	11	Thread Take-Up Spring :No.2 :0.4mm dia.	507204030011	
<input type="checkbox"/>	11	Thread Take-Up Spring :No.2 :0.5mm dia.	507205030000	Wire diameter 0.5mm (For thick thread)
<input type="checkbox"/>	12	Large Thread Holder	090210530000	
<input type="checkbox"/>	13	Truss Head Tapping Screw :3P*12	S530031201SD	
<input type="checkbox"/>	14	Face Cover :Needle Bar Case	09051018@000	
<input type="checkbox"/>	15	Stepped Screw :No.1 :M3*9	512103120000	
<input type="radio"/>	16	Upper Thread Lock[A]	08027005@A12	
<input type="radio"/>	17	Base :Upper Thread Lock	08027005@00A	
<input type="radio"/>	18	Lock Shaft[S]	080270030S14	
<input type="radio"/>	19	Compression Spring :0.3mm dia.	507603040032	
<input type="radio"/>	20	E-Ring :1.5mm dia.	611100040000	
<input type="checkbox"/>	21	Upper Thread Holder[A]	0B020037@A00	
<input type="checkbox"/>	22	Base :Upper Thread Holder[S]	0B020039@s00	
<input type="checkbox"/>	23	Base :Upper Thread Holder	0B020039@000	
<input type="checkbox"/>	24	Velcro	0B020038@000	
<input type="checkbox"/>	25	Upper Thread Holder[S]	0B020037@s00	
<input type="checkbox"/>	26	Upper Thread Holder	0B020037@000	
<input type="checkbox"/>	27	Thread Suspender Disk	0B0200050000	
<input type="radio"/>	28	Compression Spring :0.3mm dia.	507603020011	
<input type="checkbox"/>	29	Presser :Thread Suspender Spring	0B0200060000	
<input type="radio"/>	30	Stepped Screw :No.1 :9/64*7.5	512153040001	
<input type="checkbox"/>	31	Base :Change Roller[A]	07011047@A00	
<input type="checkbox"/>	32	Base :Change Roller[S]	07011047@s00	
<input type="radio"/>	33	Stepped Screw :No.1 :M4*5.3	512104160022	
<input type="radio"/>	34	Roller :5*8*5	515105020011	
<input type="radio"/>	35	Plain Washer :4*7.5*t0.8	519104060000	

6-2.TMBP-SC

6-2-1. Arm 1 (E2-05-1)

Symbol	Upward compatibility	
	TUMX-C	TEJT2-C
○	Yes	No
△	No	Yes
◇	Yes	Yes
□	No	No

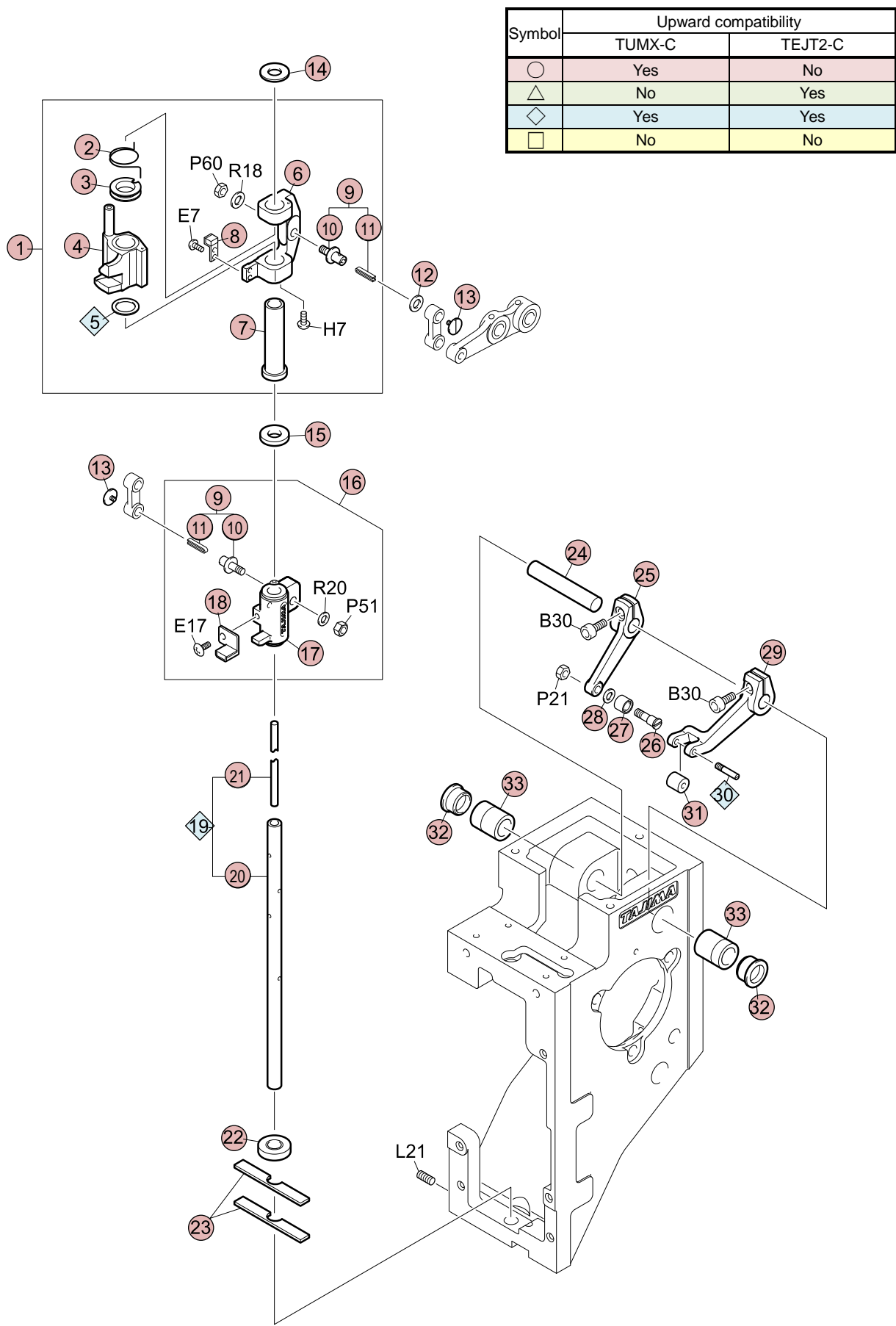


NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Arm 1 (E2-05-1)

Symbol	No.	Part name	Part No.	Remark
○	1	Head	080120070000	
○	2	Linear Way :Needle Bar Case	08025004@003	
○	3	Reinforcing Plate	08025005@002	For 12, 15-needle machine
○	4	Head Front Cover :L	08042002L014	
○	5	Head Front Cover :R	08042002R001	
○	6	Solenoid :Open Frame	640600121001	
○	7	Lever :Solenoid	080270010000	
○	8	Torsion Spring :0.5mm dia.	507305020022	
○	9	Collar :No.1 :3.1mm dia.	502505010000	
○	10	Lever :Drive[S]	080270040S12	
○	11	Guide Plate :Needle Bar Case	080250190011	
○	12	Guide Bracket :Needle Bar Case	080250200000	
○	13	Side Cover :Head :Lower	080430220001	
○	14	Side Cover :Head :Upper	080430010000	
○	15	Bracket :Jump Motor	080320490002	
◇	16	Pulse Motor :42mm Square :Double-End[T]	0J6110700T11	
○	17	Damper Ring :4mm dia.	080320410001	
○	18	Torsion Spring :0.9mm dia.	507309040020	
○	19	Lever :Jump	080320420013	
○	20	Washer :4.8*8*t0.8	S301040801KC	
○	21	Roller :4.7mm dia.	515110010011	
○	22	Stepped Screw :No.1 :11/64*8.2	512154010012	
○	23	Take-Up Lever Guide Rail	080280070001	

6-2-2. Arm 2 (E2-05-2)

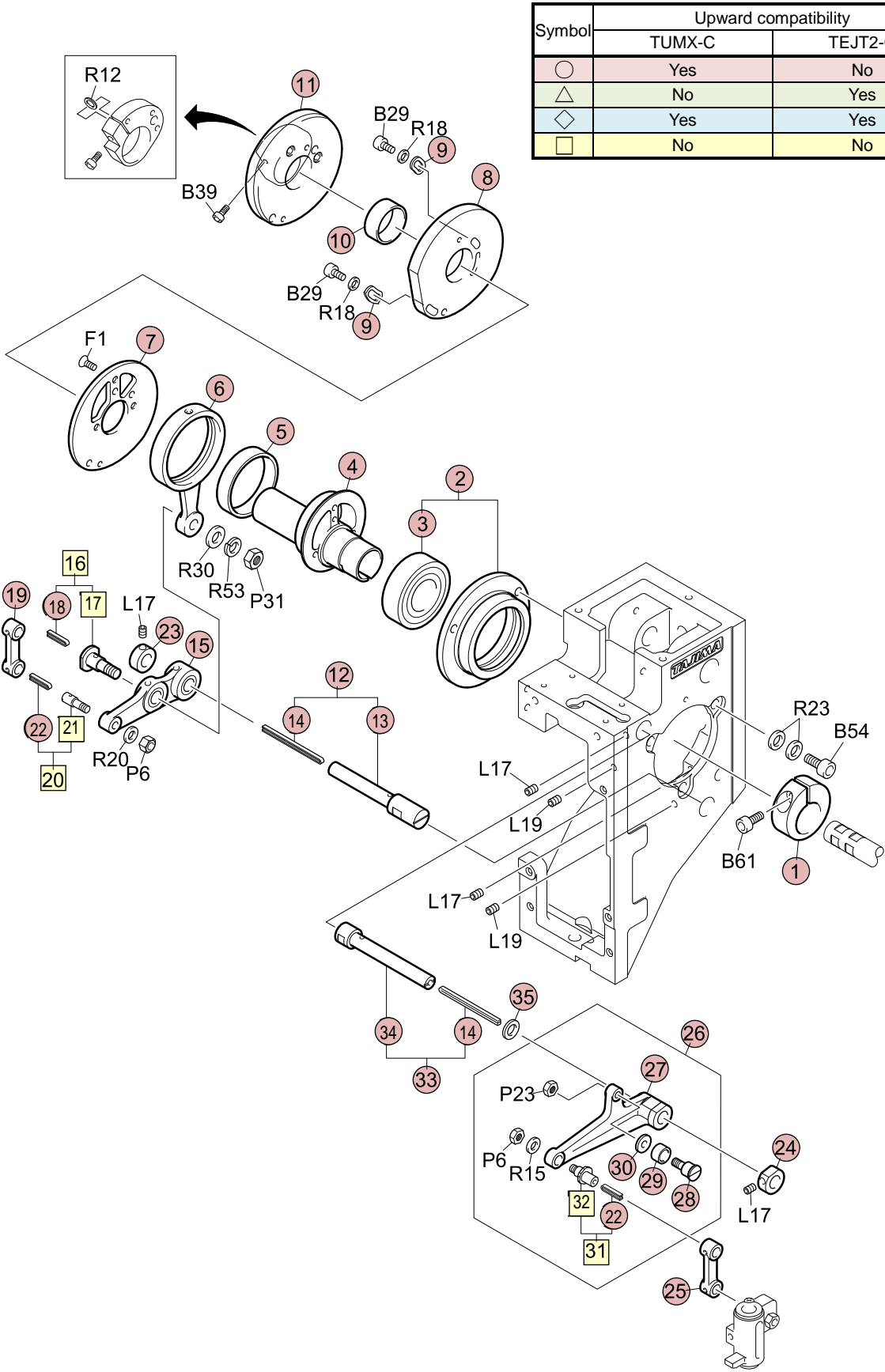


NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Arm 2 (E2-05-2)

Symbol	No.	Part name	Part No.	Remark
○	1	Needle Bar Reciprocator :GN[A]	080210360A67	
○	2	Torsion Spring :0.7mm dia.	507307010013	
○	3	Holder :Jump Spring	080210110013	
○	4	Needle Bar Reciprocator[S]	080210270S49	
◇	5	Plain Washer :10.3*14*t0.5	519112010000	
○	6	Reciprocating Slide Block	080210410044	
○	7	Plastic Bushing :No.2 :7.24mm dia.	509472050011	
○	8	Damper Bracket :Needle Bar Reciprocator	080210090000	
○	9	Screw With Pin :No.3 :11/64-7.9[A]	513354060A11	
○	10	Screw With Pin :No.3 :11/64-7.9	513354060012	
○	11	Wick :2.5*1*22	080240120012	
○	12	Plain Washer :6*9.5*t0.05-0.5	519106040024	
○	13	Flat Fillister Head Screw :9/64*4	511153010010	
○	14	Felt :14mm dia.	080240060000	1mm-thick
○	15	Felt :14mm dia.	080240220000	3mm-thick
○	16	Presser Foot Reciprocator :47mm st[A]	080210420A24	
○	17	Presser Foot Reciprocator :47mm st[S]	080210420S13	
○	18	Damper Bracket :Presser Foot Reciprocator[S]	080210180S23	
◇	19	Needle Bar Drive Shaft :Automatic Lubrication[S]	0L0210030S00	
○	20	Needle Bar Drive Shaft :Automatic Lubrication	0L0210030003	
○	21	Wick :3.5P*183	080240020011	
○	22	Guide :Needle Bar Case[S]	080250170S11	
○	23	Felt :Needle Bar Drive Shaft :D	080240170000	
○	24	Straight Pin :No.1 :8mm dia.	503101130000	
○	25	Lever :Take-Up Lever	080230020001	
○	26	Stepped Screw :No.1 :M4*12.2	512104180000	
○	27	Roller :4.7*7.94*4	515121050024	
○	28	Plain Washer :4*7.5*t0.8	519104060000	
○	29	Arm :Take-Up Lever	080230060005	
◇	30	Screw With Pin :No.4 :M3-12.5	513403020000	
○	31	Roller :3mm dia.	515103010023	
○	32	Lid :Take-Up Lever Shaft Holder : 15.3mm dia.	080290270000	
○	33	Bearing Bushing :No.1 :8mm dia.	509508080001	

6-2-3. Arm 3 (E2-05-3)



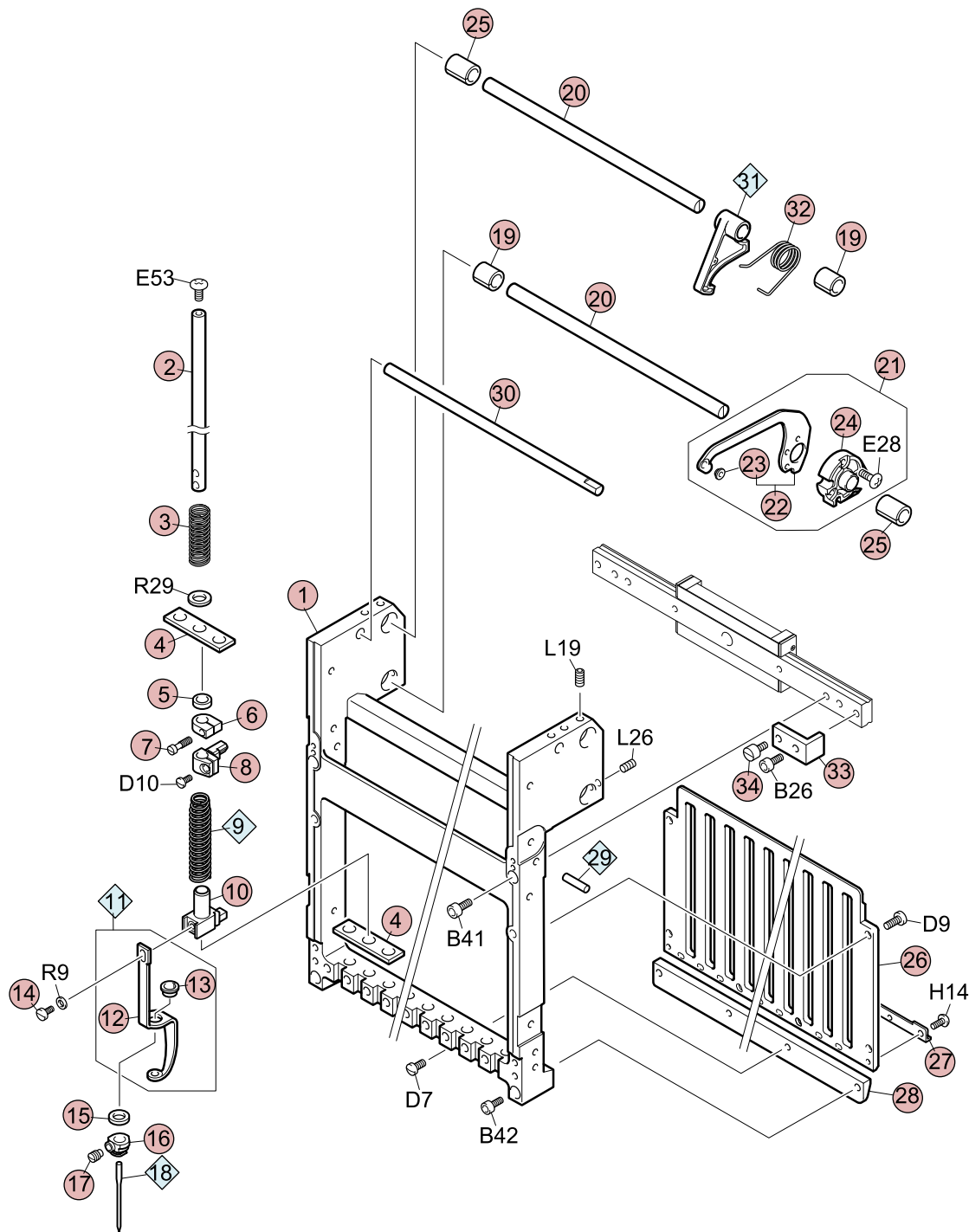
NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Arm 3 (E2-05-3)

Symbol	No.	Part name	Part No.	Remark
○	1	Tightening Collar :21mm dia.	502221010011	
○	2	Bearing Case :No.2 :22mm dia.[S]	508222010S02	
○	3	Bearing :60/22ZZ	630200040000	
○	4	Cam :Needle Bar	080220010001	
○	5	Needle Cage : KT404310NE01B2	634400070001	
○	6	Connecting Rod :51.7	080220040001	
○	7	Base :Take-Up Lever Cam	080220050001	
○	8	Cam :Take-Up Lever :Regular Rotary Hook	080220060011	
○	9	Washer :Cam	080220180000	
○	10	Collar :No.1 :21mm dia.	502521010000	
○	11	Cam :Presser Foot[A]	080220021A27	
○	12	Stepped Pin :No.4[S]	503204040S01	
○	13	Stepped Pin :No.4	503204040024	
○	14	Wick :3P*61	080240230000	
○	15	Lever :Needle Bar[S]	080230050S12	
□	16	Stepped Screw :No.2 :M6*13[S]	512206010S11	
□	17	Stepped Screw :No.2 :M6*13	512206010011	
○	18	Wick :3.5*1*34	080240140002	
○	19	Connecting Rod	080230210002	
□	20	Screw With Pin :No.3 :11/64-7.7[A]	513354020A11	
□	21	Screw With Pin :No.3 :11/64-7.7	513354020012	
○	22	Wick :2.5*1*22	080240120012	
○	23	Stopper Collar :8mm dia.	502108020014	
○	24	Stopper Collar :8mm dia.	502108050011	
○	25	Connecting Rod :26	080230010002	
○	26	Lever :Drive :Presser Foot :47	U8K000000000	
○	27	Lever :Presser Foot[S]	080230140S58	
○	28	Stepped Screw :No.1 :M4*5.3	512104160022	
○	29	Roller :5*8*5	515105020011	
○	30	Plain Washer :4*7.5*t0.8	519104060000	
□	31	Screw With Roller Pin :No.4 :11/64E[S]	514454020S00	
□	32	Screw With Roller Pin :No.4 :11/64E	514454020000	
○	33	Stepped Pin :No.4[S]	503204030S01	
○	34	Stepped Pin :No.4	503204030024	
○	35	Plain Washer :8*15*t0.5	519108050000	

6-2-4. Needle bar case 1 (E2-06-1)

Symbol	Upward compatibility	
	TUMX-C	TEJT2-C
○	Yes	No
△	No	Yes
◇	Yes	Yes
□	No	No



NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Needle bar case 1 (E2-06-1)

Symbol	No.	Part name	Part No.	Remark
○	1	Needle Bar Case	09012001@035	
○	2	Needle Bar	090410020013	
○	3	Compression Spring :0.5mm dia.	507605030044	
○	4	Felt Packing	090430040001	
○	5	Damper Ring :F	090430020010	
○	6	Stopper :Upper Dead Point	090420040021	
○	7	Flat Fillister Head Screw :9/64*12	SA41741201UN	
○	8	Needle Bar Connecting Stud	090420060017	
◇	9	Compression Spring :0.9mm dia.	507609060000	
○	10	Presser Foot Connecting Stud	090420020023	
◇	11	Presser Foot[A]	090460230A00	2mm dia. hole (Standard)
○	11	Presser Foot[A]	090460070A05	3mm dia. hole (For thick thread)
○	12	Presser Foot	090460230001	2mm dia. hole (Standard)
○	12	Presser Foot	090460070006	3mm dia. hole (For thick thread)
○	13	Split Collar :Presser Foot	090460040031	
○	14	Flat Fillister Head Screw :1/8*44	090470020013	
○	15	Damper Ring :A	090430070043	
○	16	Needle Clamp[S]	090420010S67	
○	17	Slotted Head Set Screw :11/64*6B	511754010011	
◇	18	Needle :DB-K5Z1 #11	616500080000	
○	19	Split Collar :No.2 :8mm dia.	502408020013	
○	19	Split Collar :No.2 :8mm dia.	502408010023	For 15-needle machine
○	20	Guide Shaft :Take Up Lever	09033001@000	
○	21	Take-Up Lever[A]	090310050A33	
○	22	Take-Up Lever[S]	090310050S33	
○	23	Thread Guide Collar :2mm dia.	516503020001	
○	24	Boss :Take-Up Lever	090310040012	
○	25	Split Collar :No.1 :8mm dia.	502308010011	
○	25	Split Collar :No.1 :8mm dia.	502308020011	For 15-needle machine
○	26	Needle Bar Guide	0904500@@011	
○	27	Rail Guide	08027006@023	
○	28	Rail :Case :Lower	09044005@000	
◇	29	Parallel Pin :4*16-h7	611200050000	
○	30	Spring Hook Bar	09033002@001	
◇	31	Lever :Stopper	090320010000	
○	32	Torsion Spring :1mm dia.	507310040011	
○	33	Stopper :Linear Way	080260120000	
○	34	Flat Fillister Head Screw :M4*10	511104010011	

NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Needle bar case 2A [6-needle M/C] (E2-06-2a)

Symbol	No.	Part name	Part No.	Remark
□	1	Top Cover[A]	09053021@A00	
□	2	Top Cover	09053010@003	
□	3	Middle Thread Guide Base	09021039@000	
□	4	Side Cover :L	09053019L000	
□	4	Side Cover :L :15-Needle	09053020L000	
□	5	Side Cover :R	09053019R000	
□	5	Side Cover :R :15-Needle	09053020R000	
○	6	Straight Pin :No.1 :3mm dia.	503101150022	
□	7	Front Face Cover :Middle Thread Guide	090530120001	
□	8	Base :Middle Thread Guide :0.4mm dia.[A]	090210401A11	
□	8	Base :Middle Thread Guide :0.5mm dia.[A]	090210402A11	Wire diameter 0.5mm (For thick thread)
□	9	Base :Middle Thread Guide	090210400001	
□	10	Spring Shaft :Thread Take-Up Spring	090210410001	
□	11	Thread Take-Up Spring :No.2 :0.4mm dia.	507204030011	
□	11	Thread Take-Up Spring :No.2 :0.5mm dia.	507205030000	Wire diameter 0.5mm (For thick thread)
□	12	Grommet :Middle Thread Guide Base	090210350000	
□	13	Urethane Tube :4mm dia. :10L	090210440000	
□	14	Pan Head Screw :9/64*40	511353020000	
□	15	Face Cover :Needle Bar Case	09051016@000	
○	16	Stepped Screw :No.1 :9/64*8.8	512153150001	
○	17	Upper Thread Lock[A]	08027005@A12	
○	18	Base :Upper Thread Lock	08027005@00A	
○	19	Lock Shaft[S]	080270030S14	
○	20	Compression Spring :0.3mm dia.	507603040032	
○	21	E-Ring :1.5mm dia.	611100040000	
△	22	Upper Thread Holder[A]	0B020036@A00	
◇	23	Bracket :Upper Thread Holder	0B0200010000	
◇	24	Thread Suspender Disk	0B0200050000	
○	25	Compression Spring :0.3mm dia.	507603020011	
◇	26	Presser :Thread Suspender Spring	0B0200060000	
○	27	Stepped Screw :No.1 :9/64*7.5	512153040001	
□	28	Base :Upper Thread Holder[S]	0B020034@S00	
□	29	Base :Upper Thread Holder	0B020034@000	
□	30	Velcro	0B020035@001	
□	31	Upper Thread Holder[S]	0B020033@S00	
□	32	Upper Thread Holder	0B020033@000	
◇	33	Collar :No.1 :3mm dia.	502503070013	
□	34	Base :Change Roller[A]	07011047@A00	
□	35	Base :Change Roller[S]	07011047@S00	
○	36	Stepped Screw :No.1 :M4*5.3	512104160022	
○	37	Roller :5*8*5	515105020011	
○	38	Plain Washer :4*7.5*t0.8	519104060000	

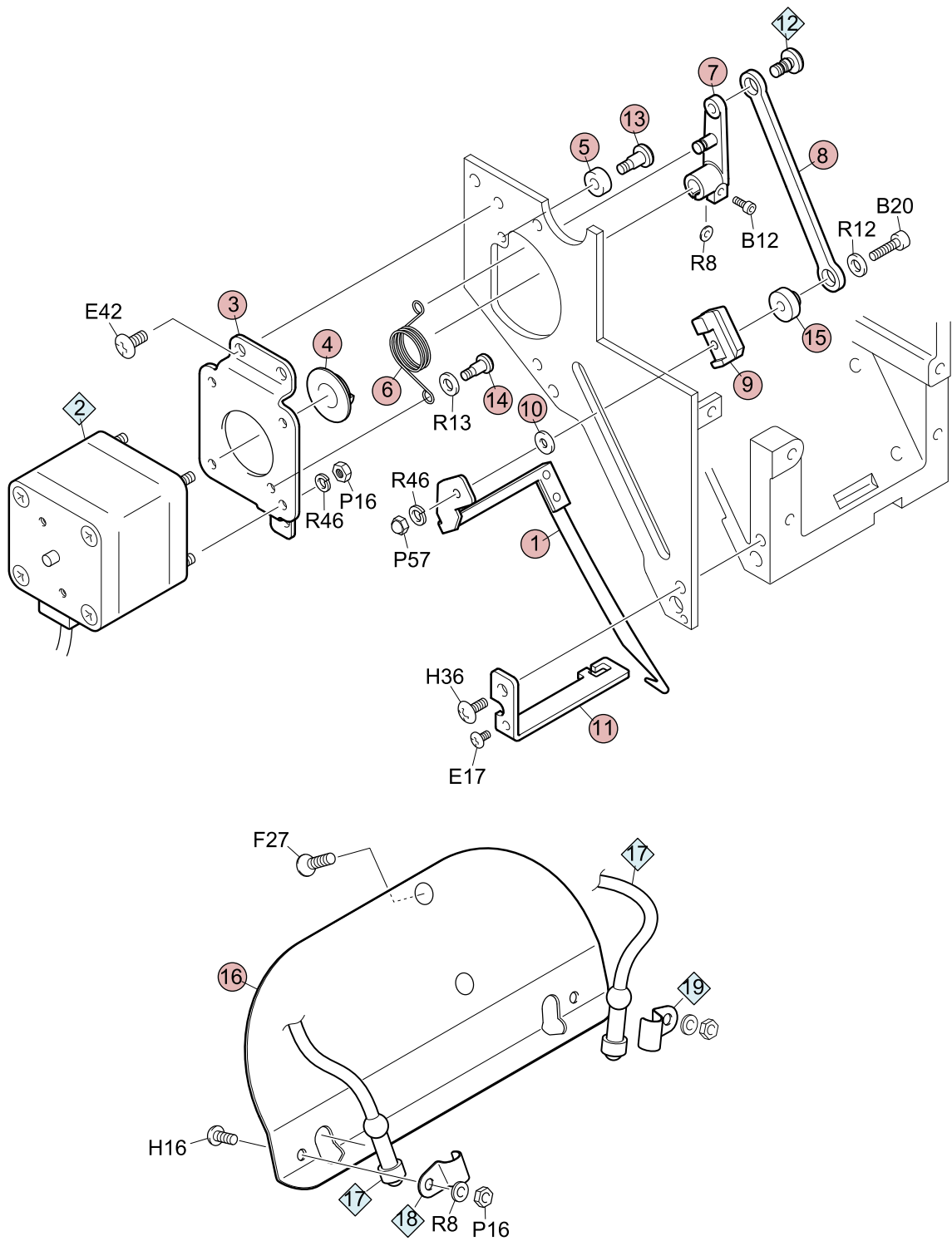
NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Needle bar case 2B [12, 15-needle M/C] (E2-06-2b)

Symbol	No.	Part name	Part No.	Remark
□	1	Top Cover[A]	09053023@A00	
□	2	Top Cover	09053023@000	
□	3	Side Cover :L	09053019L000	
□	3	Side Cover :L :15-Needle	09053020L000	
□	4	Side Cover :R	09053019R000	
□	4	Side Cover :R :15-Needle	09053020R000	
□	5	Straight Pin :2mm dia.	09021054@000	
□	6	Base :Middle Thread Guide :0.4mm dia.[A]	090210511A00	
□	6	Base :Middle Thread Guide :0.5mm dia.[A]	090210512A00	Wire diameter 0.5mm (For thick thread)
□	7	Base :Middle Thread Guide	090210510000	
□	8	Side Wall Plate :Middle Thread Guide	090210500000	
□	9	Spring Shaft :Thread Take-Up Spring	090210520000	
□	10	Plain Washer :8*10*t0.5	519108110000	
□	11	Thread Take-Up Spring :No.2 :0.4mm dia.	507204030011	
□	11	Thread Take-Up Spring :No.2 :0.5mm dia.	507205030000	Wire diameter 0.5mm (For thick thread)
□	12	Large Thread Holder	090210530000	
□	13	Truss Head Tapping Screw :3P*12	S530031201SD	
□	14	Pan Head Screw :9/64*40	511353020000	
□	15	Face Cover :Needle Bar Case	09051016@000	
○	16	Stepped Screw :No.1 :9/64*8.8	512153150001	
○	17	Upper Thread Lock[A]	08027005@A12	
○	18	Base :Upper Thread Lock	08027005@00A	
○	19	Lock Shaft[S]	080270030S14	
○	20	Compression Spring :0.3mm dia.	507603040032	
○	21	E-Ring :1.5mm dia.	611100040000	
△	22	Upper Thread Holder[A]	0B020036@A00	
◇	23	Bracket :Upper Thread Holder	0B0200010000	
◇	24	Thread Suspender Disk	0B0200050000	
○	25	Compression Spring :0.3mm dia.	507603020011	
◇	26	Presser :Thread Suspender Spring	0B0200060000	
○	27	Stepped Screw :No.1 :9/64*7.5	512153040001	
□	28	Base :Upper Thread Holder[S]	0B020034@S00	
□	29	Base :Upper Thread Holder	0B020034@000	
□	30	Velcro	0B020035@001	
□	31	Upper Thread Holder[S]	0B020033@S00	
□	32	Upper Thread Holder	0B020033@000	
◇	33	Collar :No.1 :3mm dia.	502503070013	
□	34	Base :Change Roller[A]	07011047@A00	
□	35	Base :Change Roller[S]	07011047@S00	
○	36	Stepped Screw :No.1 :M4*5.3	512104160022	
○	37	Roller :5*8*5	515105020011	
○	38	Plain Washer :4*7.5*t0.8	519104060000	

6-2-7. Upper thread holder (E2-07)

Symbol	Upward compatibility	
	TUMX-C	TEJT2-C
○	Yes	No
△	No	Yes
◇	Yes	Yes
□	No	No



NEW SINGLE-HEAD MACHINE TMBR-SC/TMBP-SC : TECHNICAL SUMMARY

Upper thread holder (E2-07)

Symbol	No.	Part name	Part No.	Remark
○	1	Hook[S]	0B0110650S11	
◇	2	Pulse Motor :42mm Square :Double-End[T]	0J6110700T11	
○	3	Base :Hook Motor	0B0110420002	
○	4	Collar :Spring Guide	502522010011	
○	5	Damper Ring :4mm dia.	080320410001	
○	6	Torsion Spring :0.8mm dia.	507308190015	
○	7	Lever :Hook	0B0110470002	
○	8	Connecting Plate :Hook	0B0110080013	
○	9	Slide :Hook	0B0110510000	
○	10	Washer :2.6*7*t0.5	519204010000	
○	11	Guide :Hook	0B0110520023	
◇	12	Stepped Screw :No.1 :M4*6.7	512104100044	
○	13	Stepped Screw :No.1 :9/64*10	512153020001	
○	14	Stepped Screw :No.1 :9/64*7.5	512153040001	
○	15	Spacer :Slide Hook	0B0110370011	
○	16	Bracket :LED Lamp	0L2310020000	
◇	17	Lamp :Needle Base LED Light[A]	0J7101700A00	
◇	18	Clamp :LED Lamp :L	0L231003L000	
◇	19	Clamp :LED Lamp :R	0L231003R000	