



Maintenance Manual

Belt Replacement

Product Name

Electric Actuator / Compact Slider Type

Model/Series

LEM Series (Guide type)

Applicable models: LEMC/H/HT25, LEMC/H/HT32

SMC Corporation

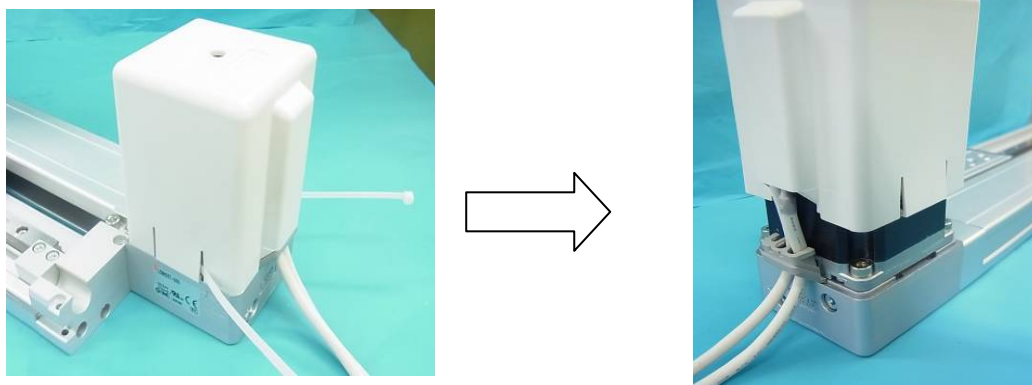
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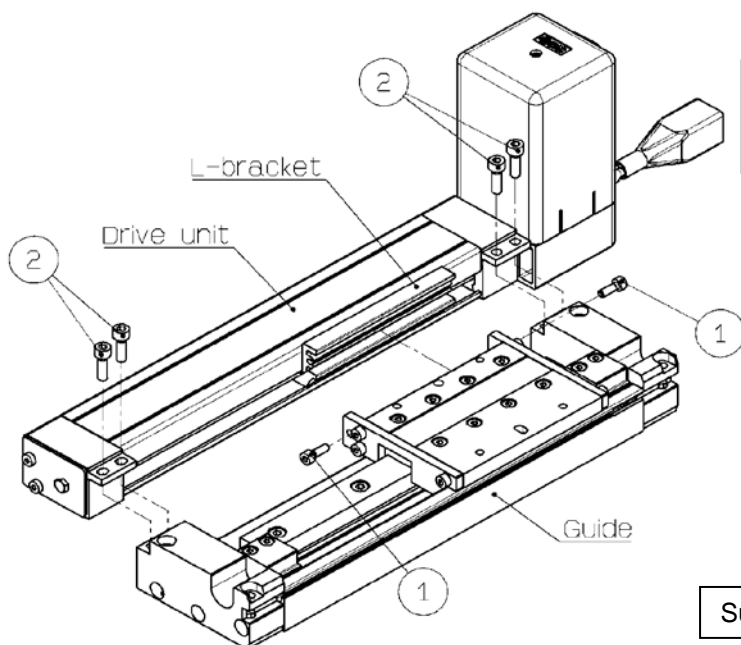
1. Attachment / detachment of the motor

1-1. Insert something flat such as a cable tie behind the fingers of the motor cover to lift the fingers.

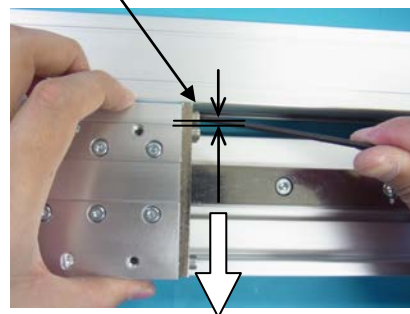
(Thickness: Approximately 1.0 mm)



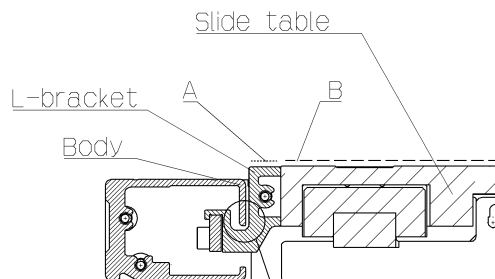
1-2. Remove the screws (1) and (2). Separate the motor from the guide.



Tighten the screw (1) keeping the L-bracket closely in contact with the body horizontally so that no gap is created during assembly.



Surface A and B must be level after assembly.

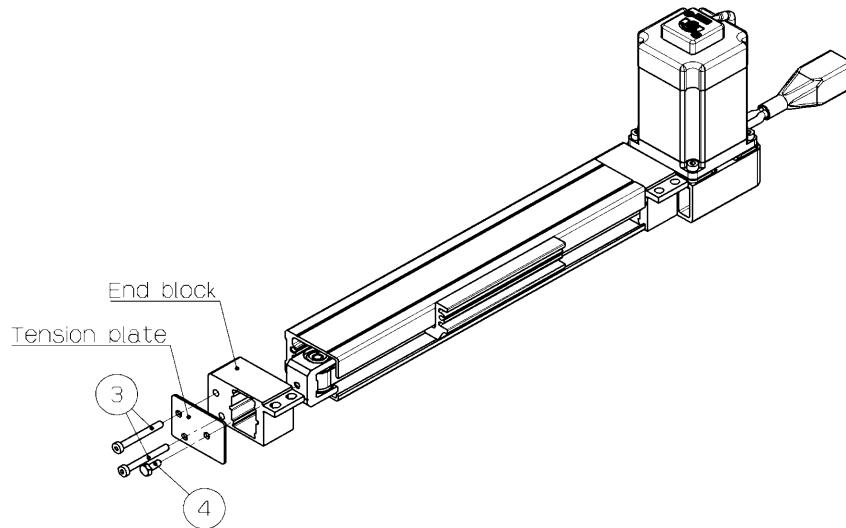


If surface A and B are not level, the L-bracket may make contact with the body.

No.	Length	Screw type	Recommended tightening torque (Nm)
(1)	25	Hexagon socket head cap screw (M3)	0.63
	32	Hexagon socket head cap screw (M4)	1.5
(2)	25	Hexagon socket head cap screw (M4)	1.5
	32	Hexagon socket head cap screw (M5)	3

2. Assembly/ disassembly of the motor

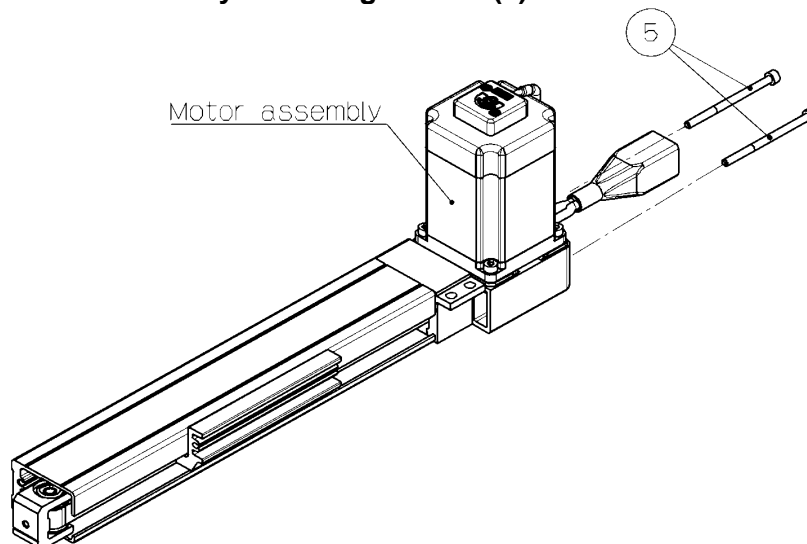
2-1.Remove the tension plate and end block.



No.	Length	Screw type	Recommended tightening torque (Nm)
(3)	25	Hexagon socket head screw (M4)	1.5
	32	Hexagon socket head screw (M4)	1.5
(4)	25	Hexagon head screw (M4)	Secure temporarily
	32	Hexagon head screw (M4)	Secure temporarily

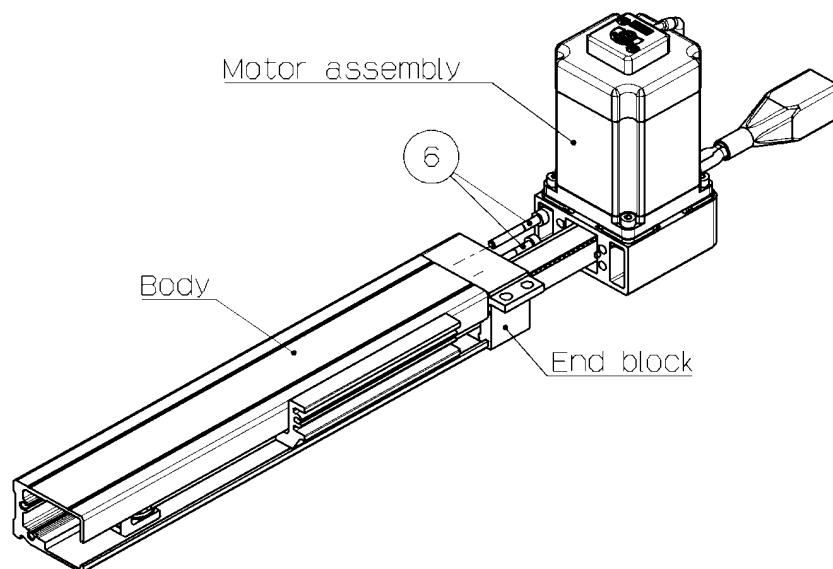
* Tighten the hexagon socket head screw (4) temporarily.
This screw will be secured in the "4. Belt Tension Adjustment" procedure shown below.

2-2.Remove the motor assembly mounting screws (5).



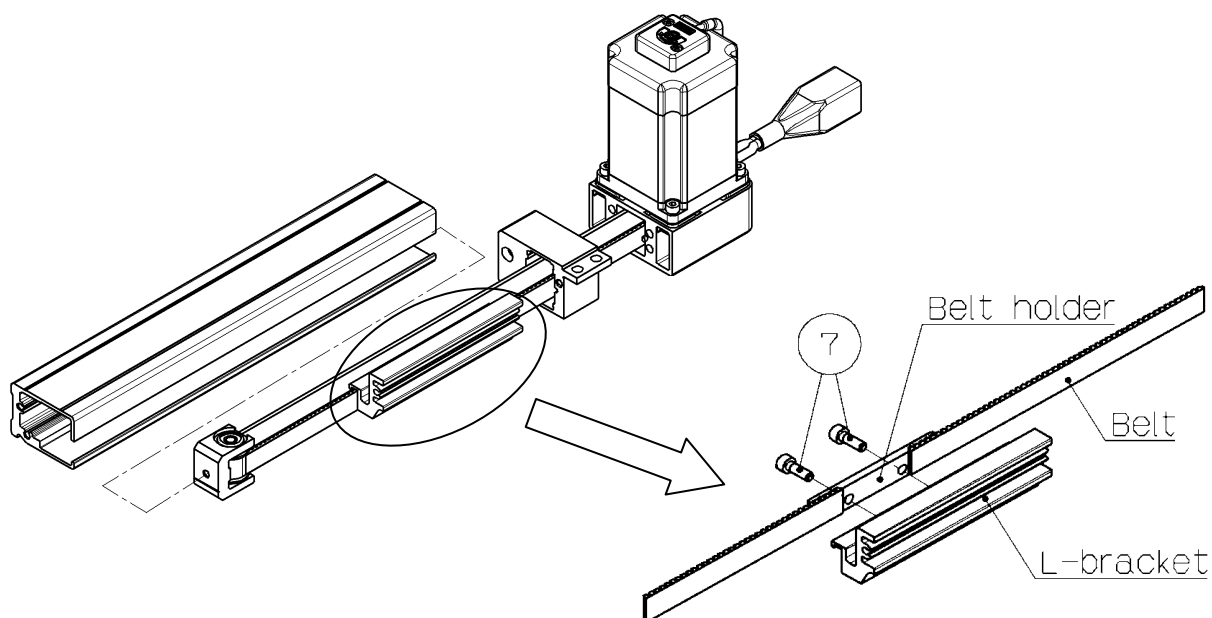
No.	Length	Screw type	Recommended tightening torque (Nm)
(5)	25	Hexagon socket head cap screw (M4)	1.5
	32	Hexagon socket head cap screw (M4)	1.5

2-3. Pull out the motor assembly a little to remove the motor end block set screws (6).



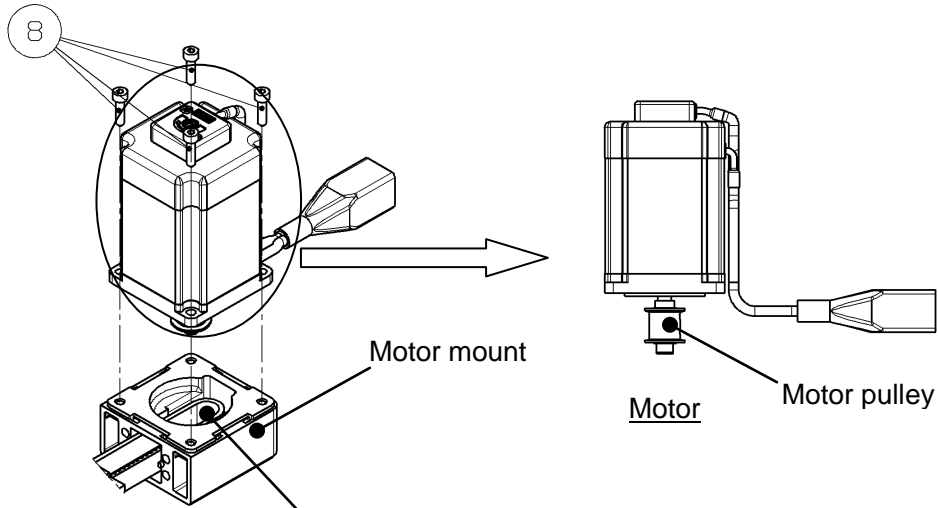
No.	Length	Screw type	Recommended tightening torque (Nm)
(6)	25	Hexagon socket head cap screw (M4)	1.5
	32	Hexagon socket head cap screw (M4)	1.5

2-4. Pull out the body. Remove the L-bracket and belt holder.



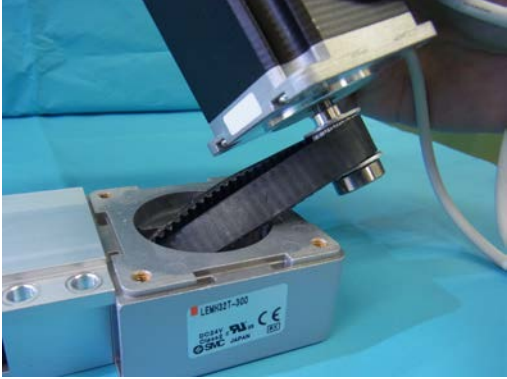
No.	Length	Screw type	Recommended tightening torque (Nm)
(7)	25	Hexagon socket head cap screw (M3)	0.63
	32	Hexagon socket head cap screw (M4)	1.5

2-5.Remove the motor. Pull out the belt.



Before starting re-assembly, confirm that the bearing that supports the motor pulley is mounted at the bottom of the motor.

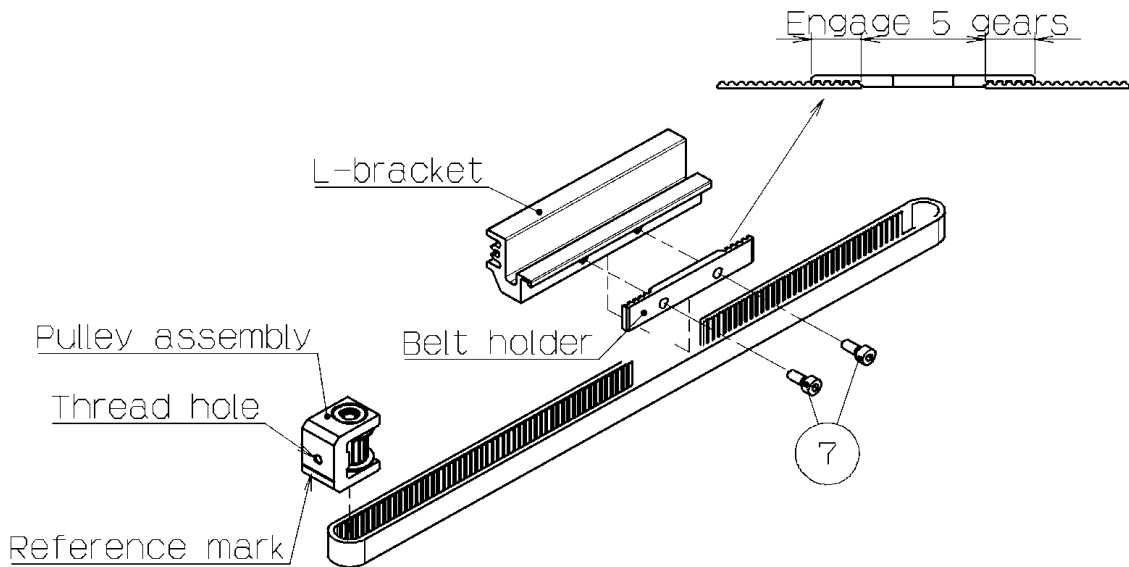
When re-assembling, securely engage the gears of the belt on to the pulley. Pull out a part of the belt, and engage the gears of the belt to the motor pulley as shown in the photo on the right, and then assemble the motor to the motor mount.



No.	Length	Screw type	Recommended tightening torque (Nm)
(8)	25	Hexagon socket head cap screw (M4)	1.5
	32	Hexagon socket head cap screw (M4)	1.5

3. Points to be Noted for Assembly

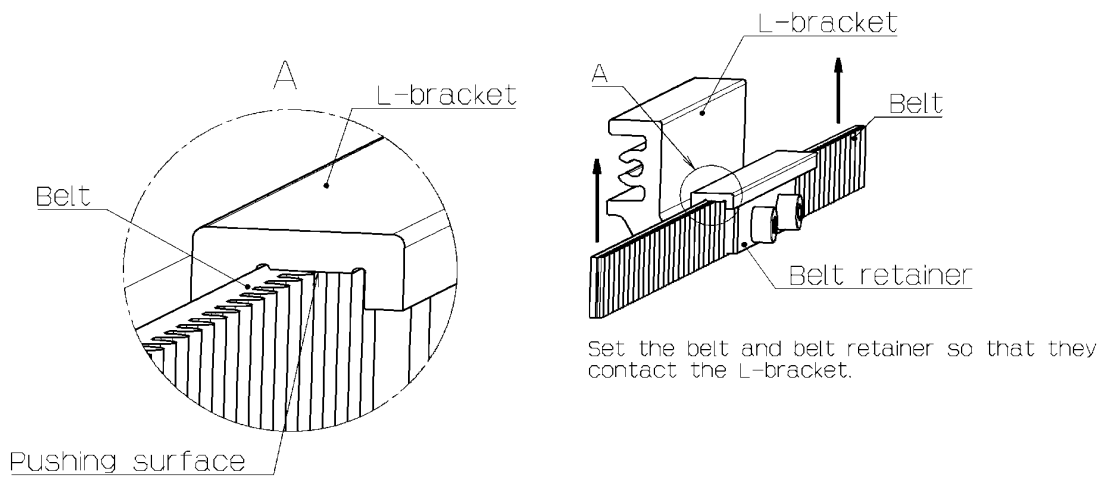
3-1. Install a new belt (See drawing below)



Orientation of the pulley holder assembly is specified.
Confirm that the reference mark is below the screw hole.

Check that the pulley operates smoothly. If it does not, the pulley will need to be replaced. (Please contact SMC.)

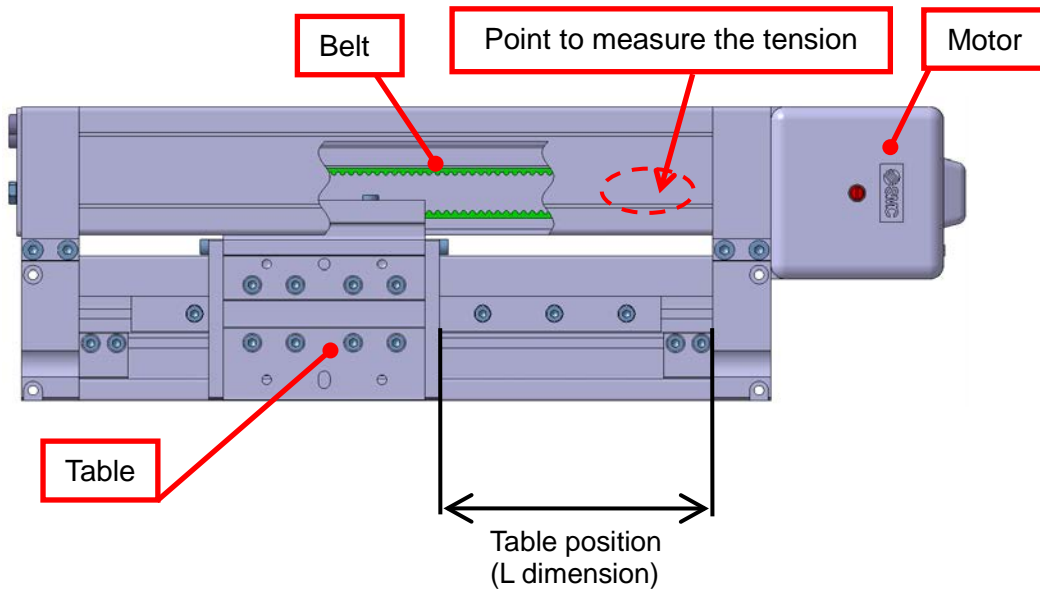
Set the belt so that it contacts the L-bracket (Drawing A).



Assemble the driving part by following the reverse procedure.

4. Belt Tension Adjustment

4-1. Measure the belt tension using a belt tension meter as shown in the diagram below.



Recommended position of the belt tension meter



Tap the belt with a thin rod such as a hexagon wrench at the specified position for tensile measurement. Do not use a rod which has a sharp edge, as it may damage the belt.

4-2. Tighten the hexagon head screw (4) until the belt tension reaches the specified value. The belt tension adjustment conditions are shown in Table 1.

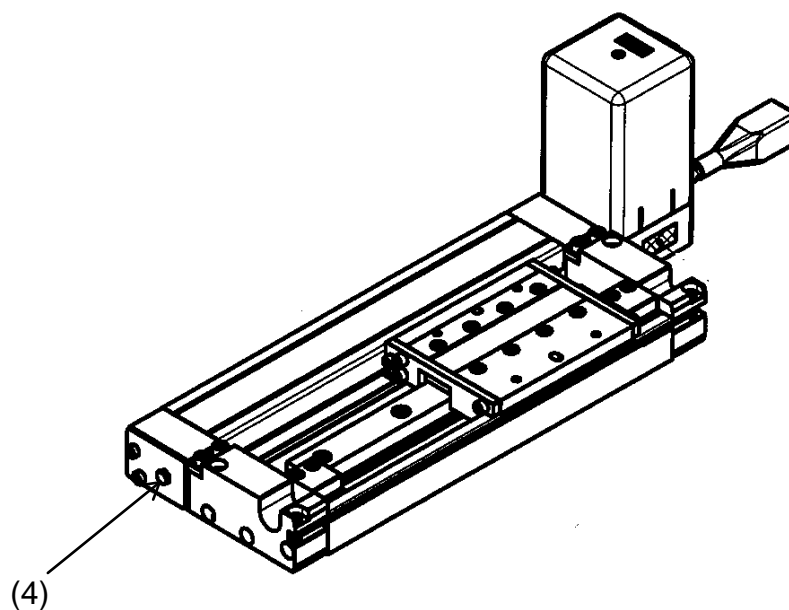


Table 1 Measurement of the belt tension

Model	Table position (L dimension) (mm)	Set values for acoustic belt tension meter			Belt tension set value (N)
		Belt width (mm)	Belt span (mm)	Specific gravity (Note 1)	
LEMB25*T	91	6	150	2.5	53±10%
LEMB32*T		12			70±10%
LEMC25*T	95	6			53±10%
LEMH25*T		12			70±10%
LEMHT25*T					
LEMC32*T	75	12			70±10%
LEMH32*T					
LEMHT32*T					

Note 1: Unit: (Width g/mm x Length m)