



Maintenance

Belt Replacement

Product Name

Electric Actuator / Compact Slider Type

Model/Series

LEM Series (Basic Type)

Applicable models: LEMB25/32

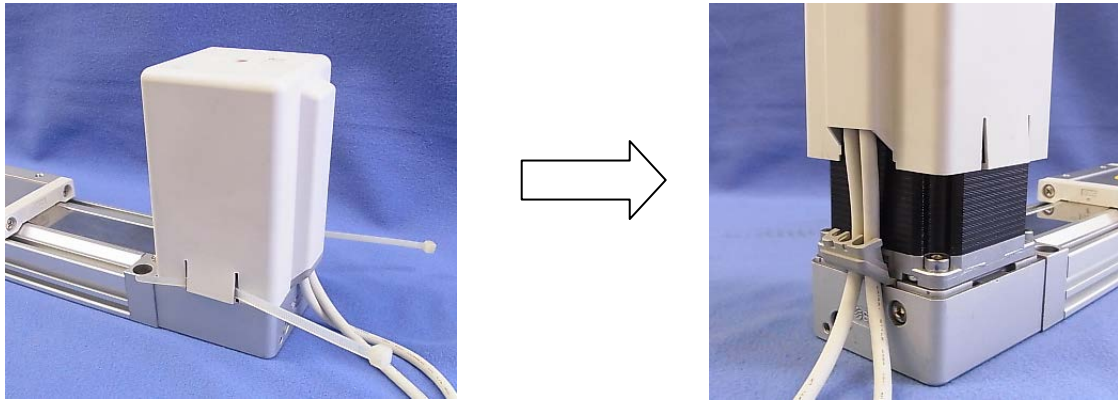
SMC Corporation

Contents

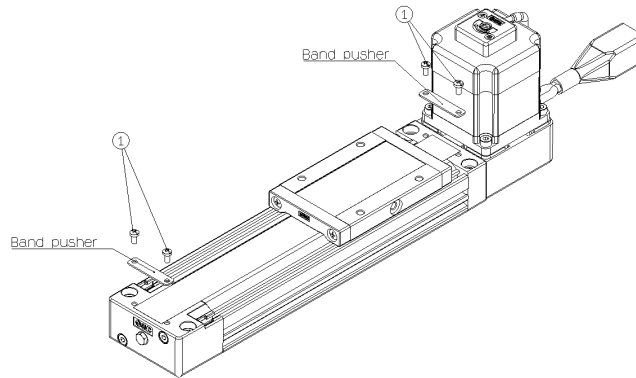
1. Removal and Mounting the Dust Seal Band.....	2
2. Disassembly and Assembly Procedure.....	3
3. Points to be Noted for Assembly.....	5
4. Belt Tension Adjustment	6

1. Removal and Mounting the Dust Seal Band

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)

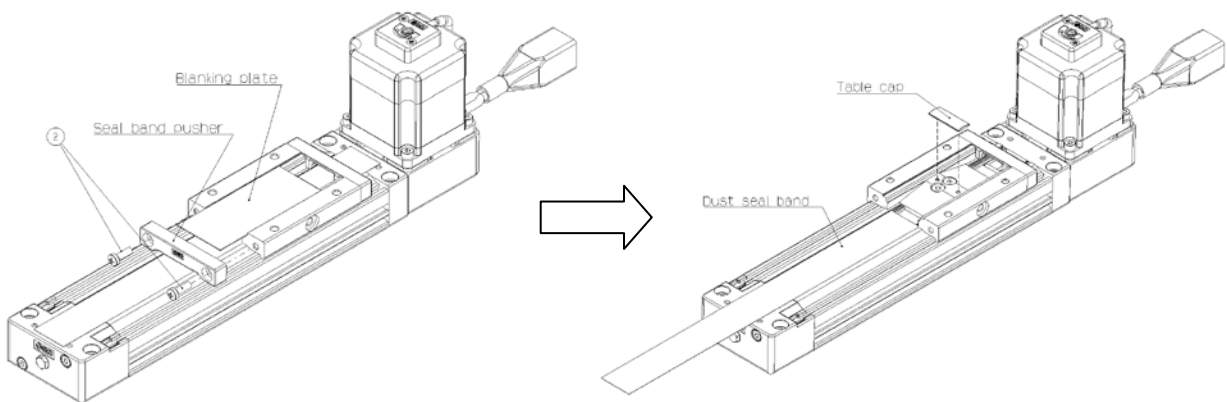


1-2. Remove the screws (1), and then remove the band retainers.



No.	Length	Screw type	Recommended tightening torque(Nm)
(1)	25	M3 pan head combination screw	0.63
	32	M3 pan head combination screw	0.63

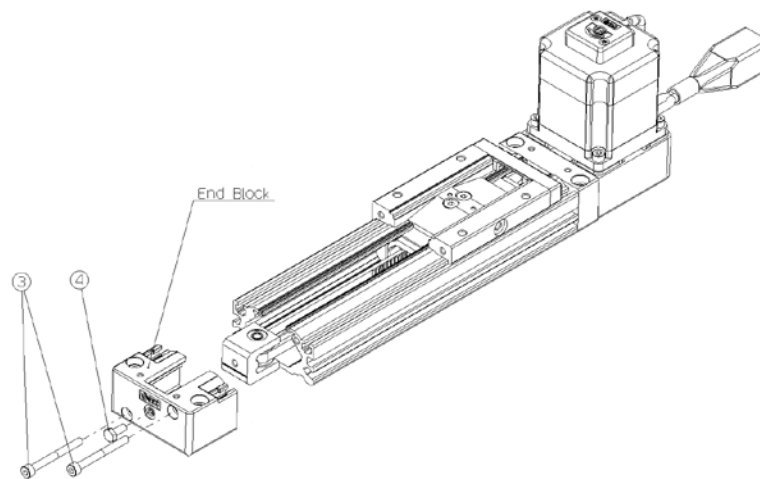
1-3. Remove the screws (2), and then remove the seal band retainer and the blanking plate. Pull the dust seal band in the direction of the arrow to remove it, and then remove the table cap.



No.	Length	Screw type	Recommended tightening torque (Nm)
(2)	25	M4 cross recessed pan-head screw	0.76
	32	M4 cross recessed pan-head screw	0.76

2. Disassembly and Assembly Procedure

2-1. Remove the screws (3) and (4), and remove the end block.

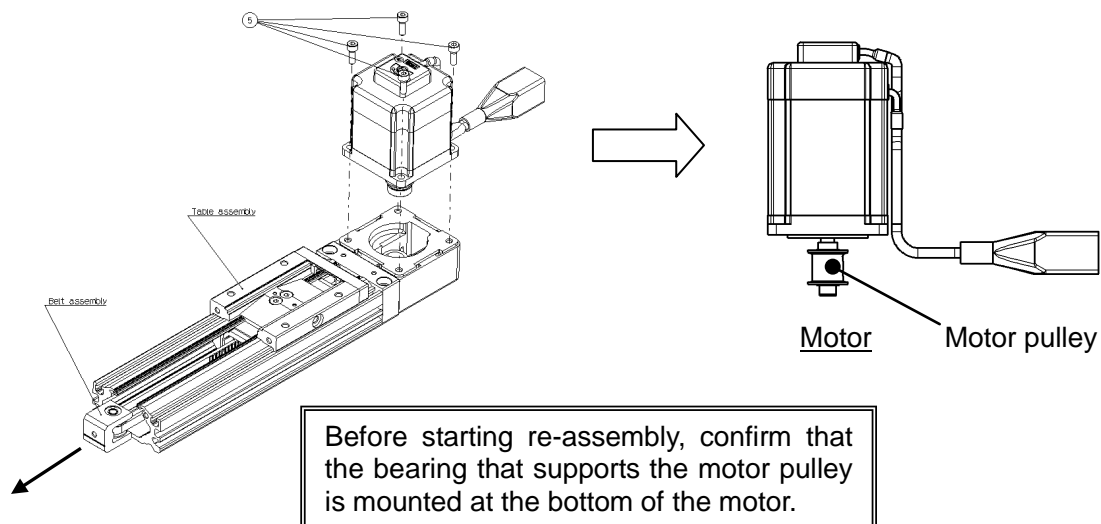


No.	Length	Screw type	Recommended tightening torque (Nm)
(3)	25	Hexagon socket head cap screw (M4)	1.5
	32	Hexagon socket head cap screw (M4)	1.5
(4)	25	Hexagon head screw (M4)	Secure temporarily*
	32	Hexagon head screw (M4)	Secure temporarily*

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

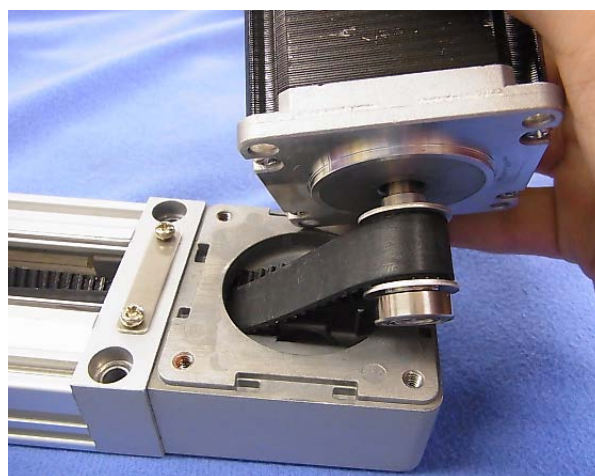
2-2. Remove the motor assembly mounting screws (5).

Pull and remove the belt assembly and the table assembly in the direction of the arrow.



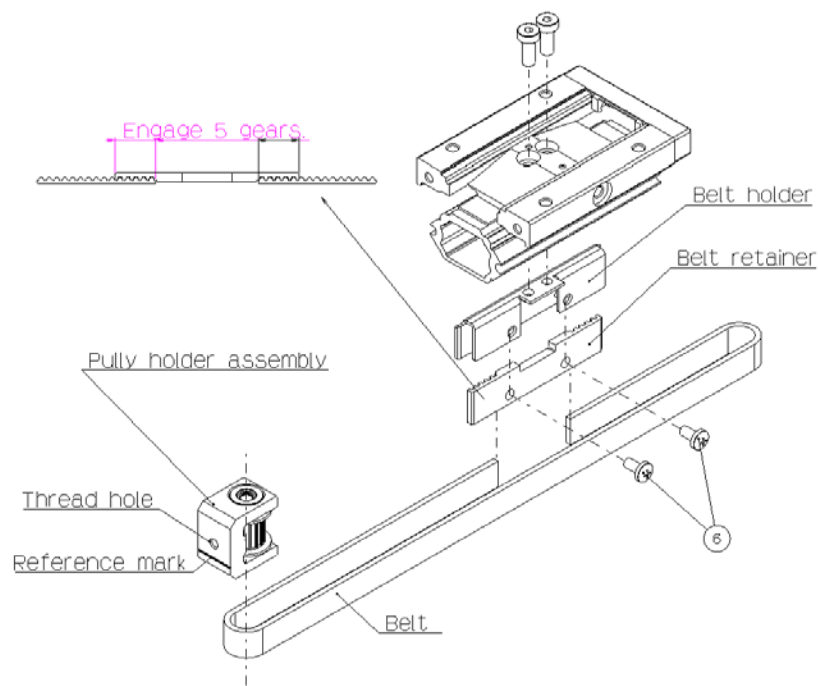
No.	Length	Screw type	Recommended tightening torque(Nm)
(5)	25	Hexagon socket head cap screw (M4)	1.5
	32	Hexagon socket head cap screw (M4)	1.5

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.



3. Points to be Noted for Assembly

3-1. Remove the screws (6), belt holder and the belt retainer, and then mount a new belt.

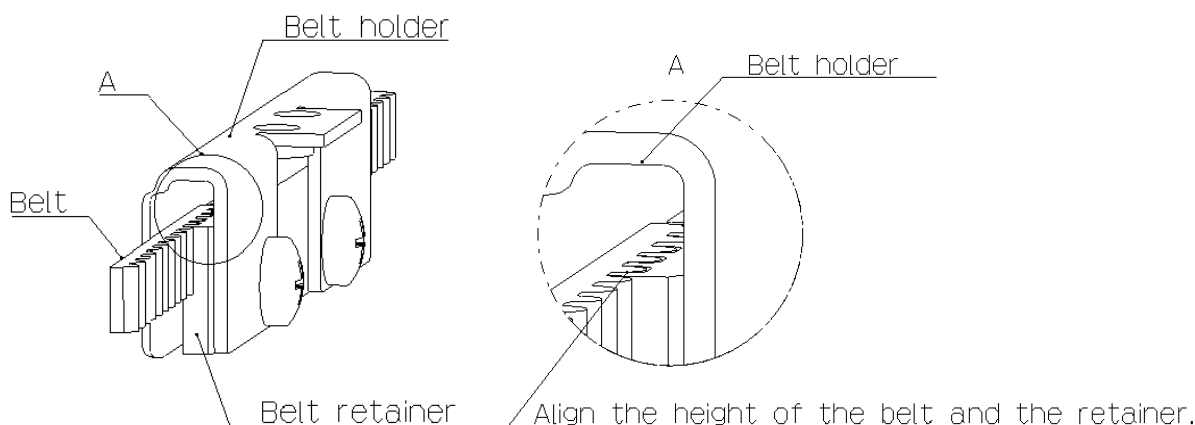


※Orientation of the pulley holder assembly is specified.
Confirm that the reference mark is below the screw hole.

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

Check that the pulley operates smoothly. If it does not, the pulley will need to be replaced with a new pulley. (Contact your SMC sales representatives.)

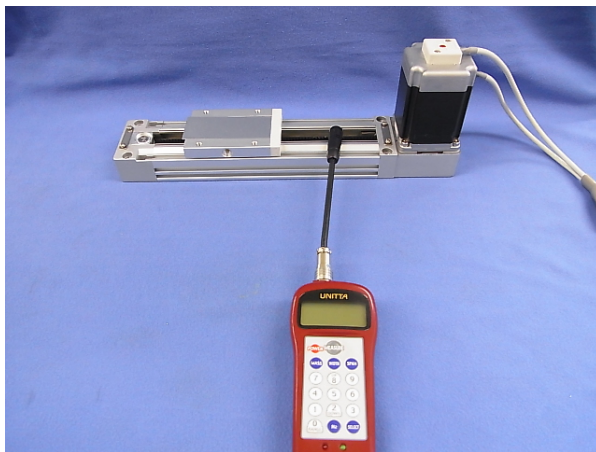
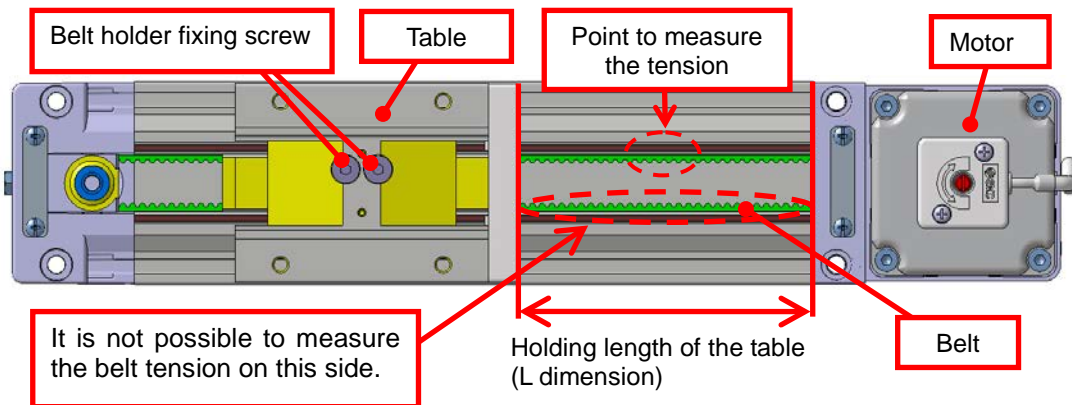
When fixing the belt to the belt holder, align the height of the belt and the belt holder as shown in Fig. A.



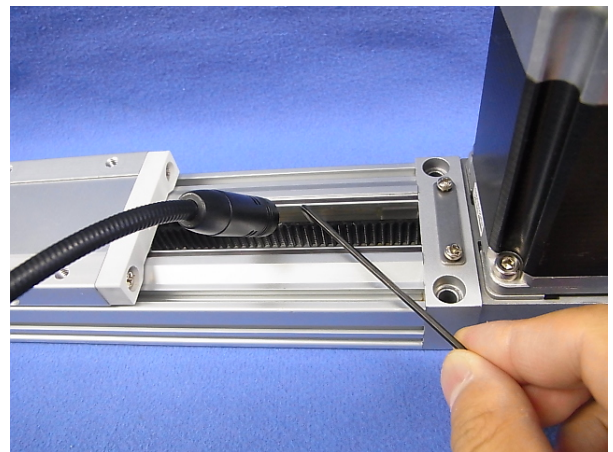
Assemble the driving part by following the reverse procedure.

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 for measuring the belt tension



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.

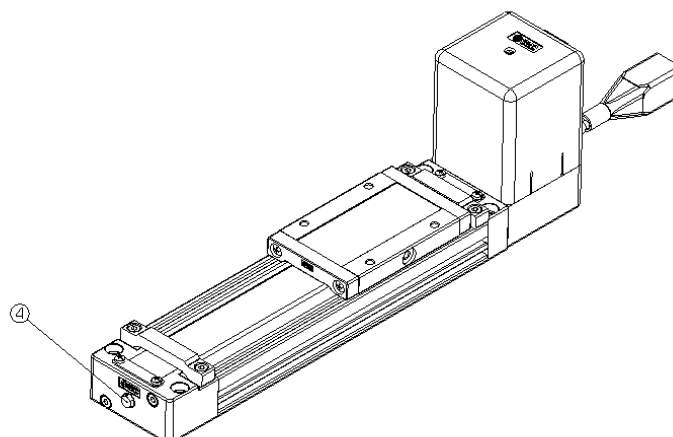


Table 1 Measurement of the belt tension

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

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