



Maintenance Manual

Motor Replacement

Product Name

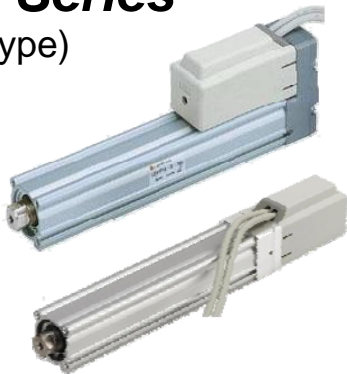
Electric Actuator / Rod Type

Model/Series

LEY Series

Applicable model: LEY*, LEYG*

LEY Series
(Rod type)



LEYG Series
(Guide rod type)



SMC株式会社

Contents

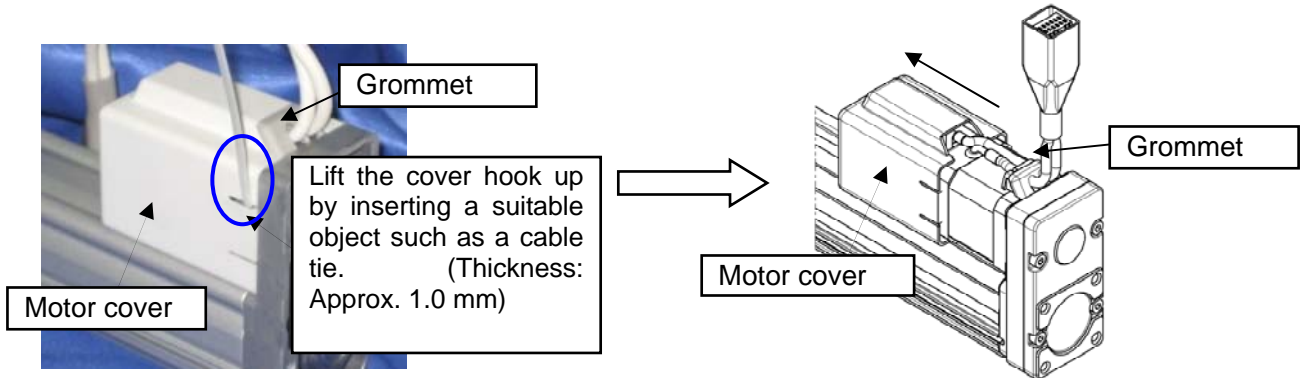
1. How to Replace the Motor (Parallel Mounting Type).....p 3
2. How to Replace the Motor (Straight Type).....p 5
3. Motor Assembly No. (Order No. for Replacement Motor).....p 7

1. How to Replace the Motor (Parallel Mounting Type)

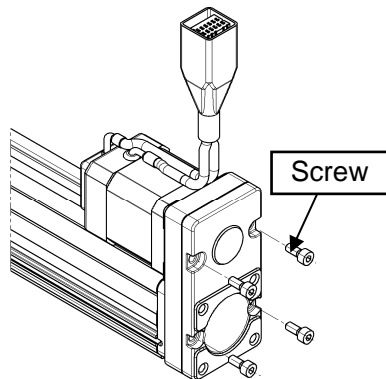
1-1. Motor Removal Procedure

* Tools required are a hexagon wrench set and a Phillips screwdriver.

1. Remove the cover and grommet. (For motor option "with cover" or "with lock cover" only.)

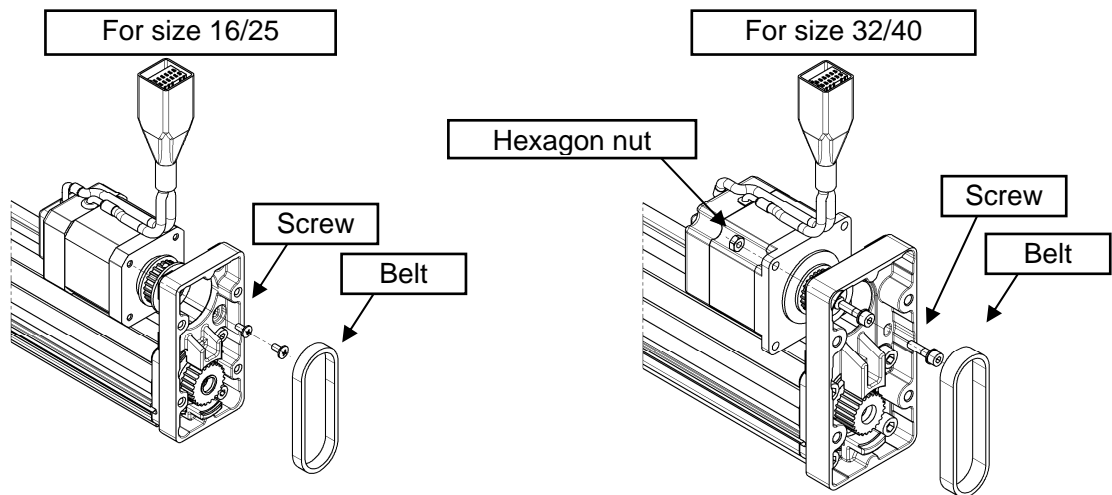


2. Remove the four screws, then remove the pulley plate.

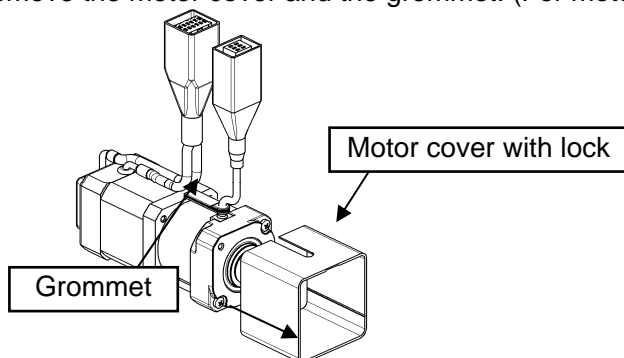


3. Loosen the motor fixing screws (2 pcs.), then remove the belt and motor.

* For actuator size 32/40, hold the hexagon nuts with a spanner while loosening the screws.

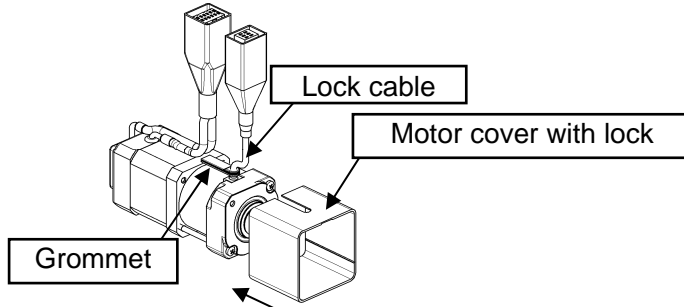


4. Remove the motor cover and the grommet. (For motor option "with lock cover" only.)

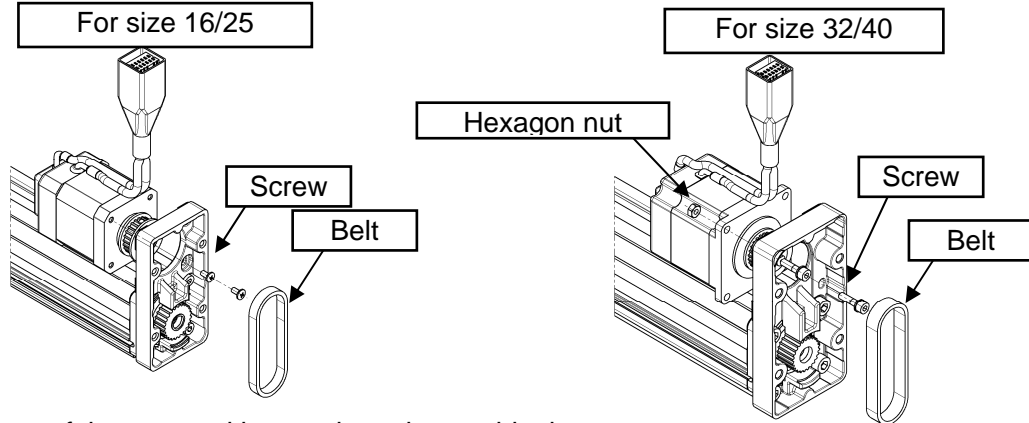


1-2. Motor Replacement Procedure

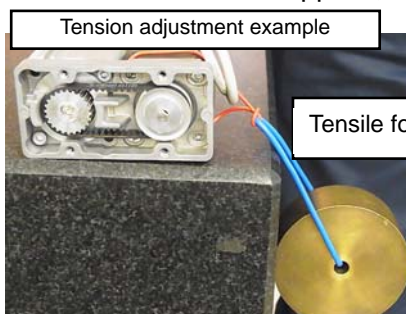
1. Mount the grommet onto the lock cable, then mount the motor cover with lock onto the motor.
(For motor option "with lock cover" only.)



2. Mount the motor with screws (2 pcs.) temporarily to assemble the belt.
* For size 32/40, hold the hexagon nuts with a spanner when tightening the screws.



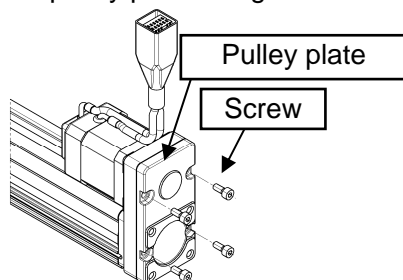
3. Pull the base of the motor with a cord or a long cable tie.
With a tensile force applied, tighten the screws which secure the motor.



Size	Replacement Belt part No.	Tensile force (N)	Screw size	Tightening torque (Nm)
16	LE-D-2-1	10	M2.6 (Step motor) M2.5 (Servo motor) M2.6 (Motor with lock)	0.36
25	LE-D-2-2	19	M3	0.63
32/40	LE-D-2-3	30	M4	1.5

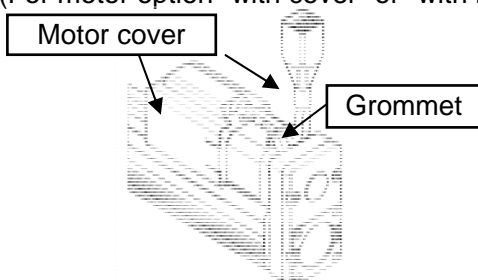
* For size 32/40, hold the motor side nuts with a spanner, then tighten the screws.

4. Secure the pulley plate using the four screws.



Size	Screw size	Tightening torque (Nm)
16	M3	0.63
25	M4	1.5
32/40	M6	5.2

5. Mount the grommet, then mount the motor cover onto the motor.
(For motor option "with cover" or "with lock cover" only.)

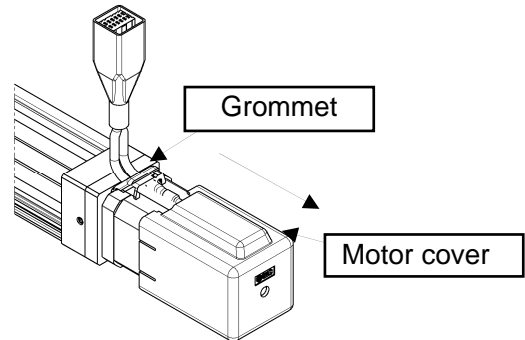
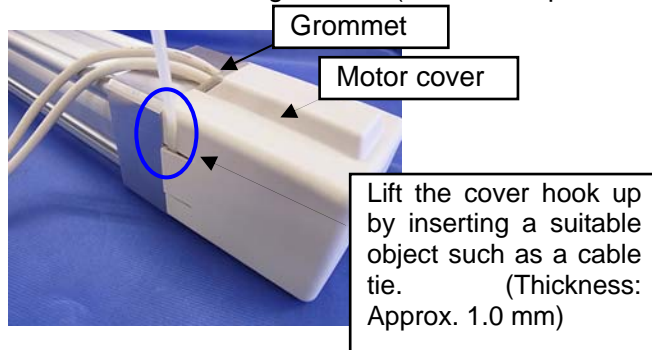


2. How to Replace the Motor (Straight Type)

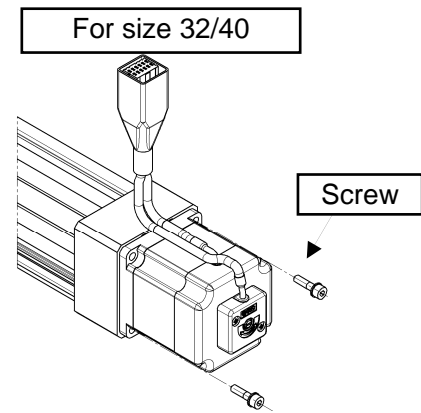
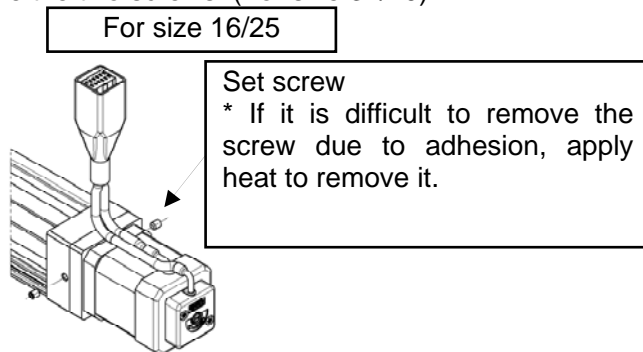
2-1. Motor Removal Procedure

* Tools required are a hexagon wrench set and a Phillips screwdriver.

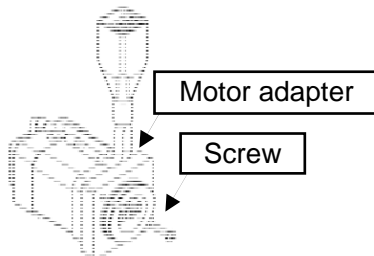
1. Remove the cover and grommet. (For motor option "with cover" or "with lock cover" only.)



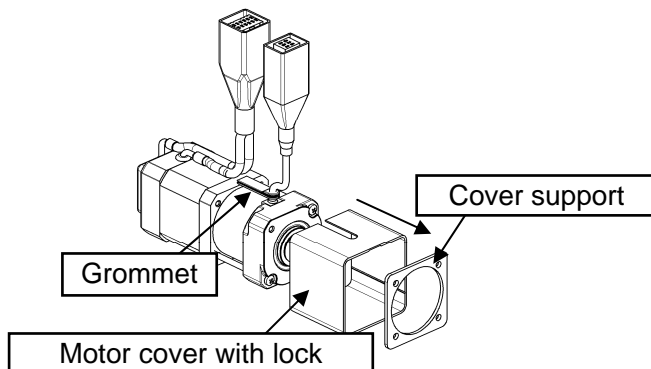
2. Remove the two hexagon set screws. (For size 16/25)
Remove the two screws. (For size 32/40)



3. Remove the two screws which secure the motor and the motor adapter. (For size 16/25 only)

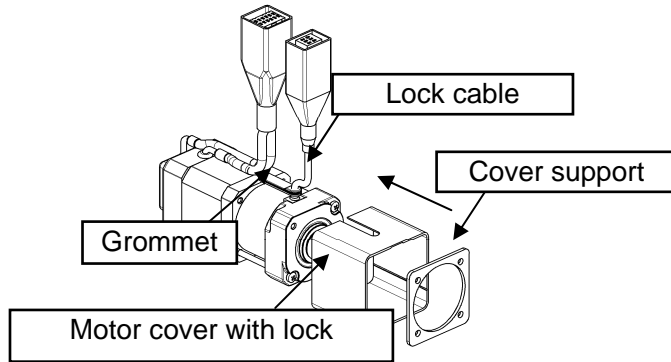


4. Remove the motor cover with lock, cover support and grommet. (For motor option "with lock cover" only.)

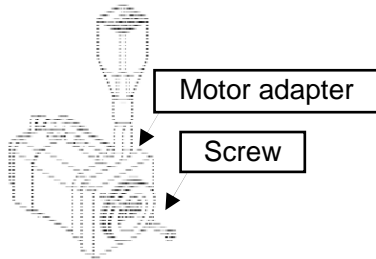


2-2. Motor Replacement Procedure

1. Mount the grommet onto the lock cable, then mount the motor cover with lock and cover support onto the motor. (For motor option "with lock cover" only.)

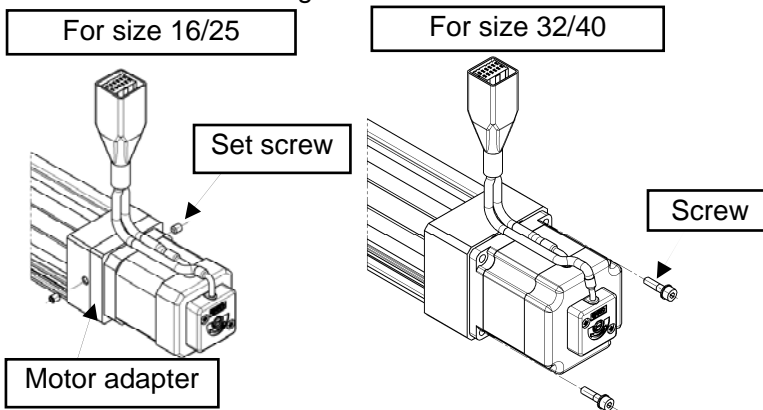


2. Mount the motor and motor adapter with two screws temporarily, then apply the final tightening torque. (For size 16/25 only)



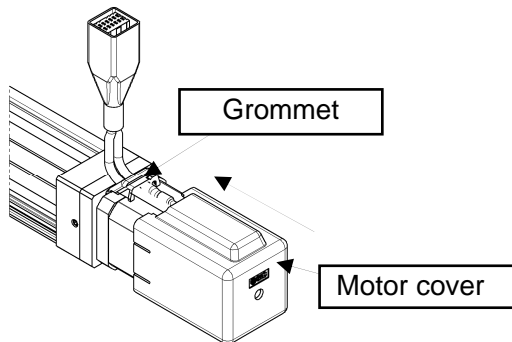
Size	Screw size	Tightening torque (Nm)
16	M2.6 (Step motor)	0.36
	M2.5 (Servo motor)	
	M2.6 (Motor with lock)	
25	M3	0.63

3. Secure the motor adapter using the two hexagon set screws. (For size 16/25)
Secure the motor using the two screws. For size 32/40



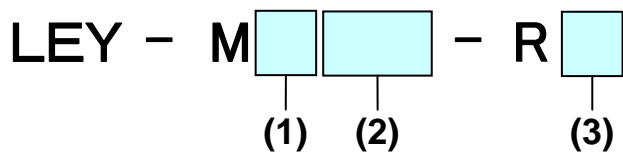
Size	Screw size	Tightening torque (Nm)
16	M2.6 (Step motor)	0.63
	M2.5 (Servo motor)	
	M2.6 (Motor with lock)	
25	M3	1.5
32/40	M4	1.5

4. Mount the grommet, then mount the motor cover onto the motor. (For motor option "with cover" or "with lock cover" only.)



3. Motor Assembly No. (Order No. for Replacement Motor)

3-1. Motor Assembly No. (Parallel Mounting Type)



(1) Motor type

P	Step motor (servo 24 VDC)	
A	Servo motor (24 VDC)	For size 16/25 only

(2) Size

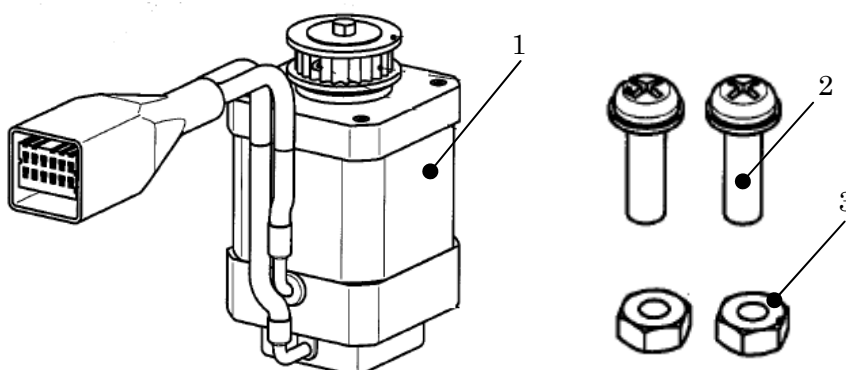
16	LE Y16/LE YG16
25	LE Y25/LE YG25
32	LE Y32/40/LE YG32/40

(3) Motor option

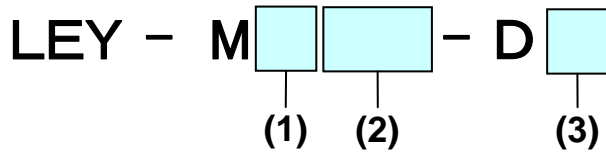
Nil	No
B	

List of included items

No.	Part name	Qty.	Remarks
1	Motor with pulley	1	
2	Motor mounting screw	2	
3	Hexagon nut	2	For size 32/40 only



3-2. Motor Assembly No. (Straight Type)



(1) Motor type

P	Step motor (servo 24 VDC)	
A	Servo motor (24 VDC)	For size 16/25 only

(2) Size

16	LEY16/LEYG16
25	LEY25/LEYG25
32	LEY32/40/LEYG32/40

(3) Motor option

Nil	No
B	

List of included items

No.	Part name	Qty.	Remarks
1	Motor with hub	1	
2	Motor mounting screw	2	

