



Maintenance Manual

Motor Replacement

Product Name

Electric Actuator/ Rod Type
<<AC Servo Motor>>

Type / Series

LEY Series

Applicable model: LEY□S□, LEYG□S□

LEY Series

(Rod type)



LEYG Series

(Guide rod type)



SMC Corporation

Contents

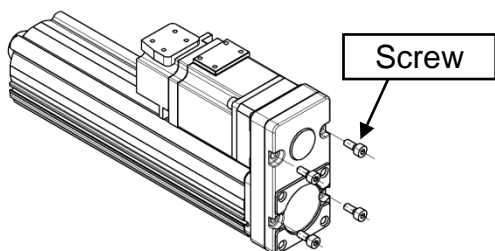
1.How to Replace the Motor(Parallel Mounting Type).....	3
2.How to Replace the Motor (Straight Type).....	6
3.Part number(Maintenance number).....	8
4.Motor Assembly No. (Order No. for Replacement Motor)	9

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

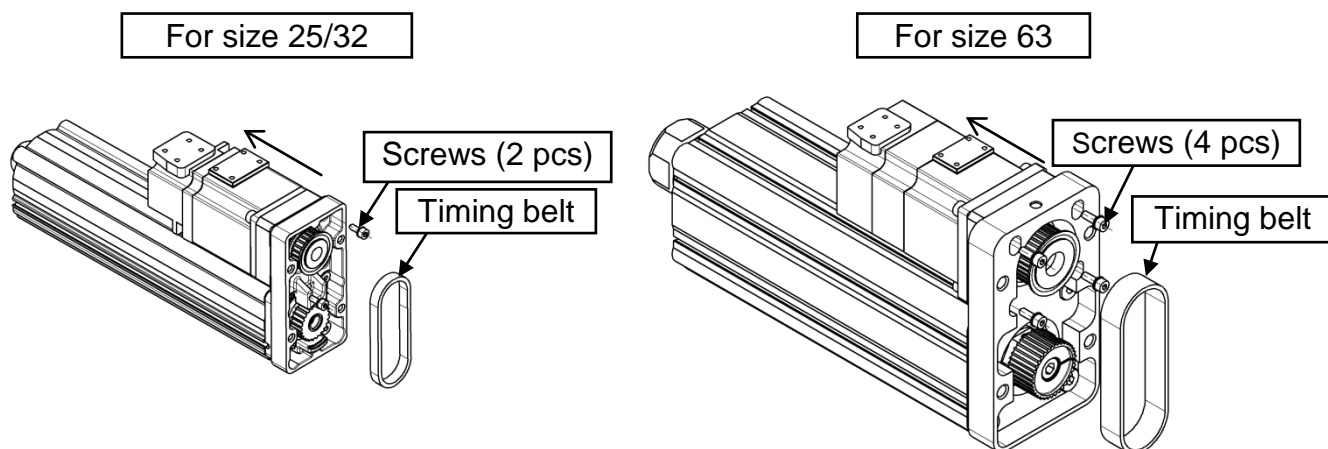
1-1. Motor Removal Procedure

* Tool required is a hexagon wrench set.

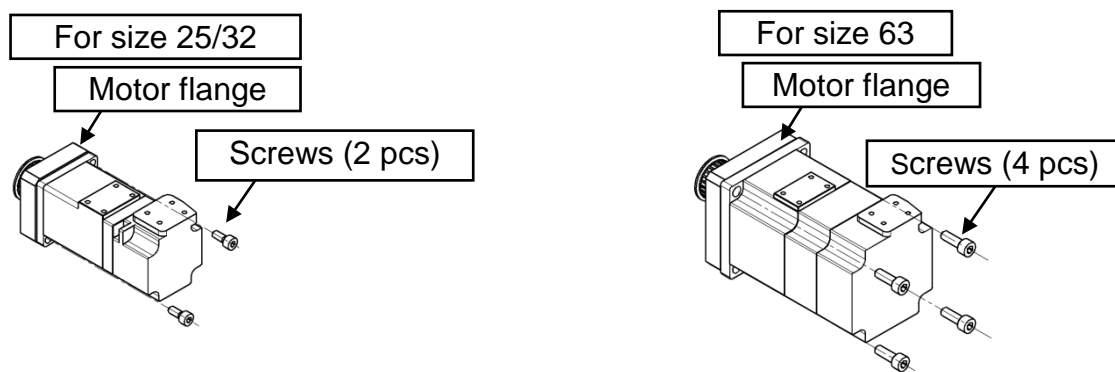
1.Remove the four hexagon socket head cap screws, then remove the pulley plate.



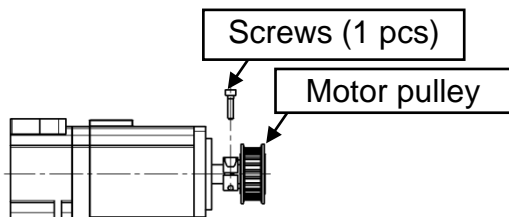
2.Loosen the motor fixing socket head cap screws, and then remove the timing belt and motor.



3.Remove the hexagon socket head cap screws and remove the motor and motor flange.



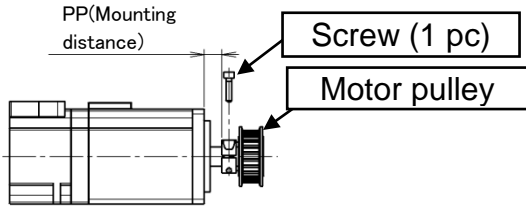
4.Loosen the hexagon socket head cap screws, and then remove the motor pulley.
(Not required when replacing the motor assembly with a pulley)



1-2. Motor Mounting Procedure

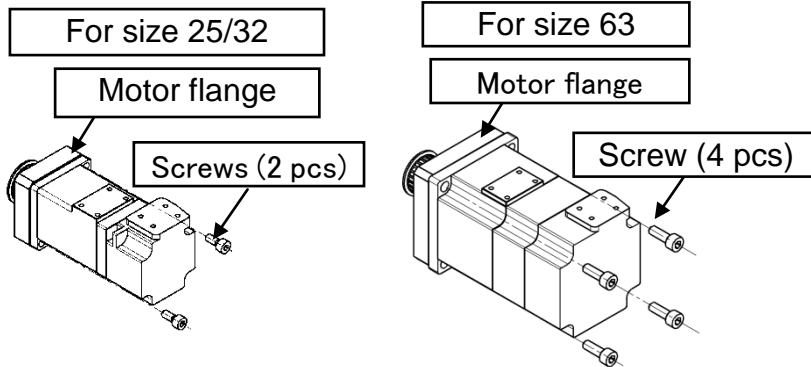
1. Mount the motor pulley with a socket head cap screw.

(Not required when replacing the motor assembly with a pulley)



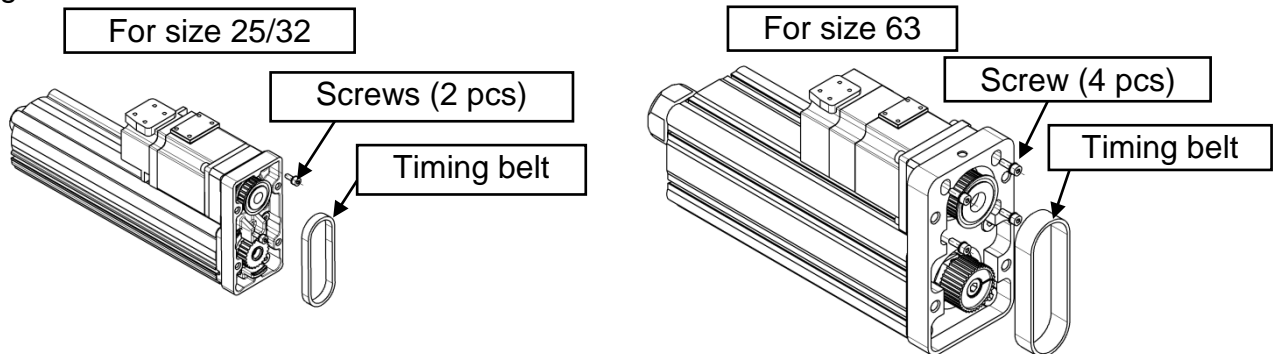
Size	PP[mm] (Mounting distance)	Screw size	Tightening torque [Nm]
25	7.5	M2.5	1.0
32	4.5	M3	1.5
63	4.5	M4	3.6

2. Mount the motor flange and motor with hexagon socket head cap screws.



Size	Screw size	Tightening torque [Nm]
25	M4	1.5
32	M5	3.0
63	M5	3.0

3. Mount the motor with hexagon socket head cap screws loosely and mount the timing belt.

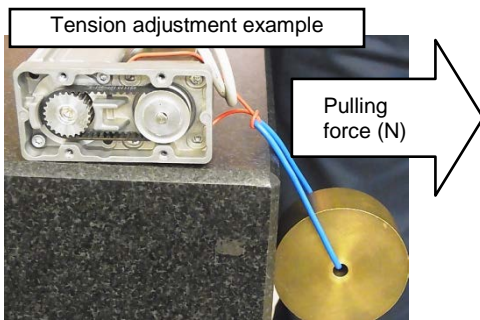


4. Adjust the belt tension.

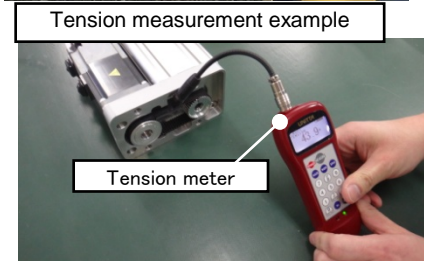
Pull the base of the motor with a cord or a long cable tie.

With a tensile force applied, tighten the screws which secure the motor.

Or measure the tensile force with a tension meter. (Gates Unitta Asia: U-508)

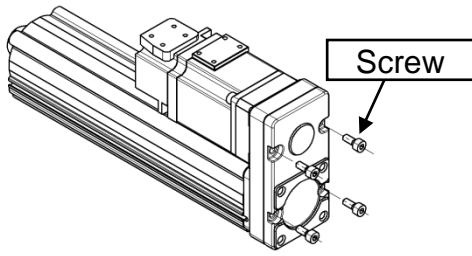


Size	Replacement belt Part number	Pulling force (N)	Screw Size	Tightening torque [Nm]
25	LE-D-2-2	19	M3	0.63
32	LE-D-2-4	30	M4	1.5
63	Lead (A/B/C): LE-D-2-5 Lead (L): LE-D-2-6	98	M4	2.7



Size	Belt width (mm)	Weight per belt (g/mm widthxm length)	Pitch (mm)	Tension [N]
25	6	2.5	3	9.5
32	9	2.5	3	15
63	15	2.5	3	49

5. Secure the pulley plate using the four hexagon socket head cap screws.



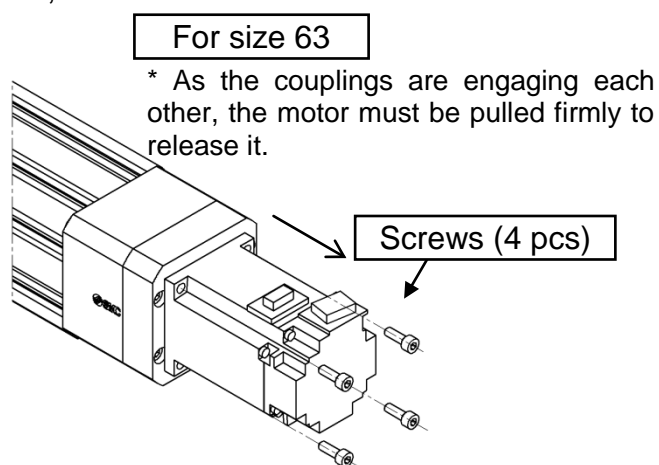
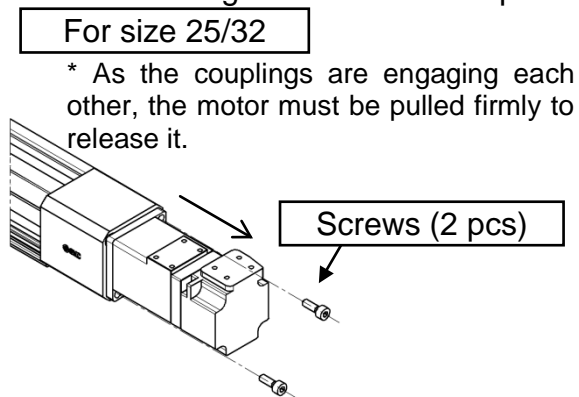
Size	Screw Size	Tightening torque [Nm]
25	M4	1.5
32	M6	5.2
63	M8	12.5

2.How to Replace the Motor (Straight Type)

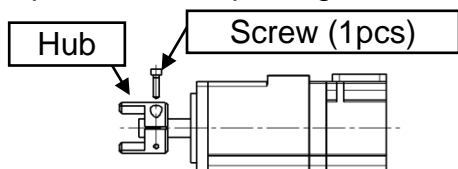
2-1. Motor Removal Procedure

* Tool required is a hexagon wrench set.

1.Remove the hexagon socket head cap screws, and remove the motor.

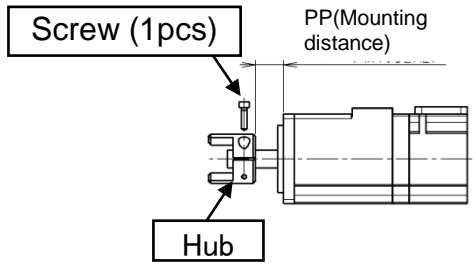


2.Remove the hexagon socket head cap screws, and remove the hub.
(Not required when replacing with a motor assembly with hub)



2-2. Motor Mounting Procedure

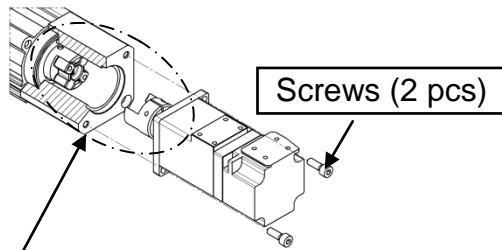
1. Connect the motor and hub with a hexagon socket head cap screw.
(Not required when replacing with a motor assembly with hub)



Size	PP[mm] (Mounting distance)	Screw size	Tightening torque [Nm]
25	12.5	M2.5	1.0
32	18	M3	1.5
63	17.7	M3	1.5

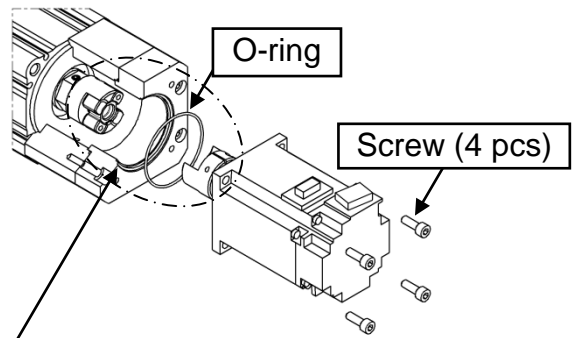
2. Connect the motor and motor flange with hexagon socket head cap screws.

For size 25/32



Turn the two raised parts of the motor hub in the direction that can be engaged to the two recesses of the hub on the body side and the spider.

For size 63



Turn the two raised parts of the motor hub in the direction that can be engaged to the two recesses of the hub on the body side and the spider.

Size	Screw size	Tightening torque [Nm]
25	M4	1.5
32	M5	3.0
63	M5	3.0

3.Part number(Maintenance number)

Product name	Part number	Applicable model	Description
Motor	LE-D-S2	LEY*25*S2*-*	Motor
	LE-D-S3	LEY*32*S3*-*	
	LE-D-S4	LEY*63*S4*-*	
	LE-D-S2-B	LEY*25*S2*-*B	
	LE-D-S3-B	LEY*32*S3*-*B	
	LE-D-S4-B	LEY*63*S4*-*B	
	LE-D-S6	LEY*25*S6*-*	
	LE-D-S7	LEY*32*S7*-*	
	LE-D-S8	LEY*63*S8*-*	
	LE-D-S6-B	LEY*25*S6*-*B	
	LE-D-S7-B	LEY*32*S7*-*B	
	LE-D-S8-B	LEY*63*S8*-*B	
Pulley Assembly	LE-D-12-14	LEY(G)25*S**	Pulley, screws
	LE-D-12-16	LEY(G)32*S**	
	LE-D-12-17	LEY63*S*[A/B/C]-*	
	LE-D-12-18	LEY63*S*L-*	
Belt	LE-D-2-2	LEY(G)25*/LEY(G)25*S*	Belt
	LE-D-2-4	LEY(G)32*S*-*	
	LE-D-2-5	LEY63*S*[A/B/C]-*	
	LE-D-2-6	LEY63*S*L-*	
Hub Assembly	LE-D-11-6	LEY(G)25DS**	Hub, spider, screws
	LE-D-11-8	LEY(G)32DS**/LEY63DS**	
Spider	LE-D-10-5	LEY(G)25DS**	Spider
	LE-D-10-6	LEY(G)32DS**/LEY63DS**	

4-2. Motor Assembly No. (Motor Straight Type)

LEY - MS - D

(1) (2) (3)

(1) Size

25	LEY25/LEYG25
32	LEY32/LEYG32
63	LEY63

(2) Motor type

A	Incremental encoder	Motor type:S2,S3,S4
B	Abusolute encoder	Motor type:S6,S7,S8

(3) Motor option

Nil	Without option
B	With lock

List of included items

No.	Product name	Qty	Description
1	Motor(With hub)	1	-
2	Screws	2	Size25/32
		4	Size63

