

Landing Door System Installation

Manual

Version: 2019.A

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Landing Door System Installation Manual

1 Safety Regulations

1.1 Safety Sign Description

This installation manual uses the following symbols as safety signs.



Danger

This symbol draws attention to an extreme danger to life or risk of injury to persons. Disregard of warning means danger to life!



Danger

This symbol draws attention to an immediate impending danger to life or risk of injury to persons caused by electric current.

Warning notices must always be observed!



Warning

This symbol draws attention to an impending danger. Disregard can cause injury to persons or extensive damage to property.

Warning notices must always be observed!



Note

This symbol draws attention to important information and instructions for operation. Disregard can lead to damages, hazards or failures.



Inspection

This symbol draws attention to inspection sequence.

These inspection notices must be observed in any case. Disregard can lead to injury to persons or damage to property.

1.2 Security Measures under an emergency

Unlock the elevator in an emergency



Only the personnel who are acquired with elevator safety regulations and are trained can manually open the landing door and the car door !

2 Preparations of Installation Tools

The installation tools necessary for the Landing Door installation are listed in the below table2-1.

Table 2-1 Installation Tools

No.	Name	Speciafication	Quantity	Note
Common tools				
1	Circlip Pliers	175mm	1	
2	Level Bar	500mm	1	
3	Plumb Bob	Steel 1kg	1	
4	Cruciform Screw Driver	75-200mm suction type	2	
5	Single-head Solid Wrench	10/13/15/17/19/24	2 sets/type	
6	Socket Wrench	10/13/15	2 sets/type	
7	Inner Hexagonal Spanner	3/4/5/6	1 sets/type	
8	Cypriot ruler	100A21	1 sets	

3 Vulnerable Parts of Landing Door

Refer to Table 3-1

Table 3-1 Table of Vulnerable Parts

Part Name	Use	Note
Hanger Sheave ϕ 48	Car door, landing door	
Door Guide Shoe Assembly	Car door, landing door	
Contact Switch	Door machine contact, Landing door auxiliary contact	AZ05(06)
Wire rope	Car door, landing door	Door type and clear opening should be specified.
Eccenter ϕ 26	Landing door	
Door Roller	Landing door	
Interlocking Switch	Landing door main contact	(plug/socket)

4 Landing Door System installation manual

4.1 Parts Description

Refer to Figure 4-1

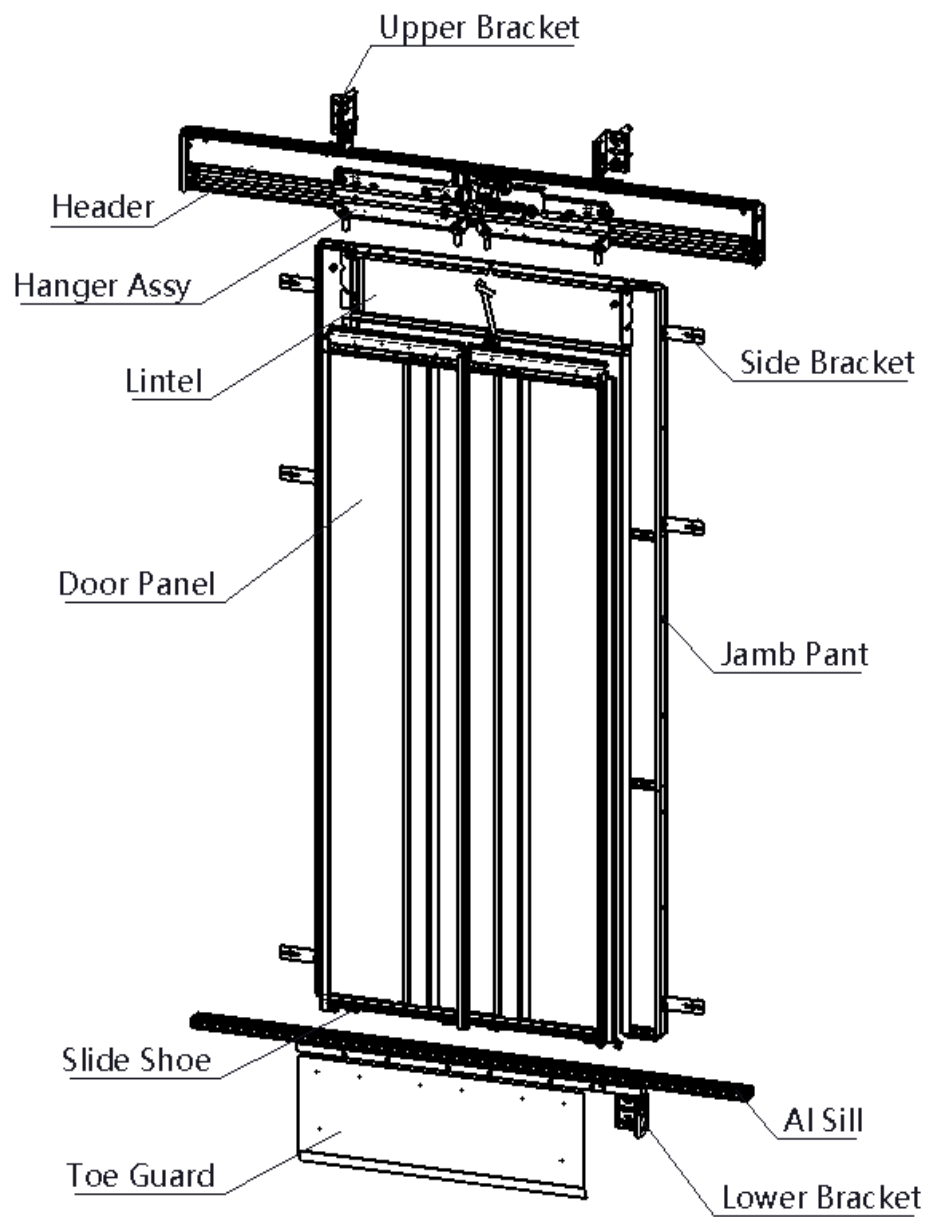
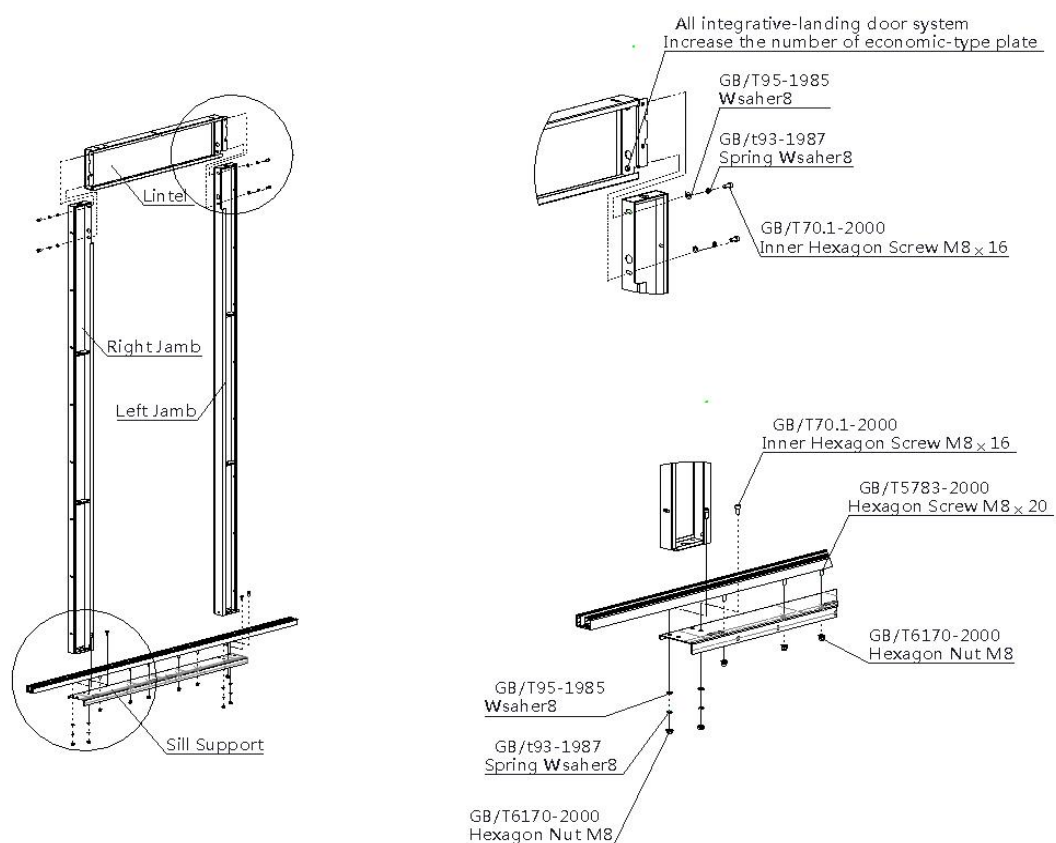


Figure 4-1 Assembly Drawing of Landing Door

4.2 Assembly of Door Jamb

Refer to Figure4-2



After the door jamb has been assembled, check and ensure the two cross dimensions A and B.

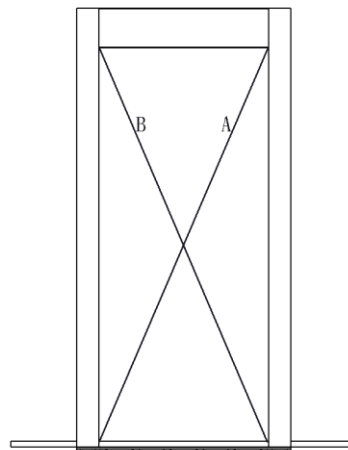


Figure 4-2 Assembly of Door Jamb

4.3 Connection between Landing Door and Door Jamb

Refer to Figure 4-3 and 4-4

Door hanging baseline Refer to Figure 4-3-1

Preparation of connection between Landing mechanism and frames: Before installing the landing mechanism, connect the plate and Jamb, first not fixing, keep a gap of 1~3mm, fix the nuts after landing mechanism was hung. Refer to drawing Figure 4-3

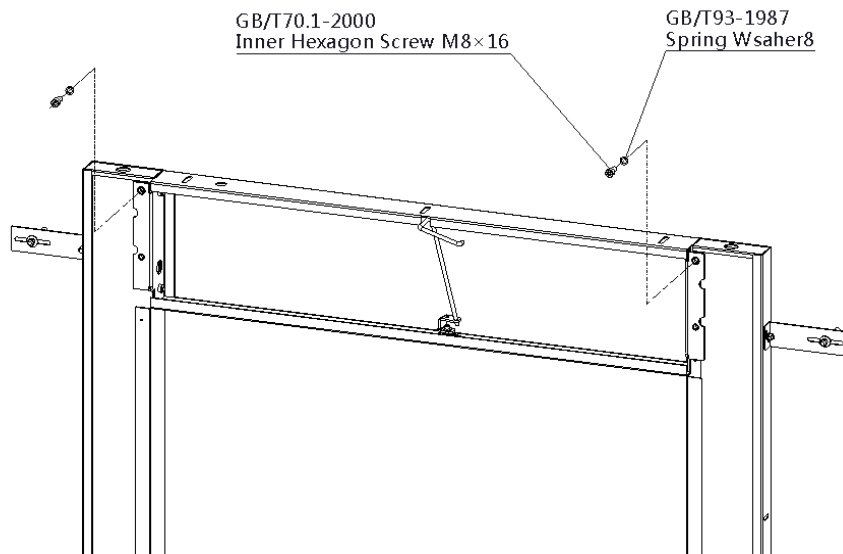


Figure 4-3 Connection of economic type plate and Jamb(All integrative-Landing Door)



Attention: First check the landing locking units, hexagon bolt M5X10, Nut M20 and fix, then install the landing mechanism. Since if install the landing mechanism first, it may be impossible for fixing., pls refer to the draft below. **Figure A-1.**

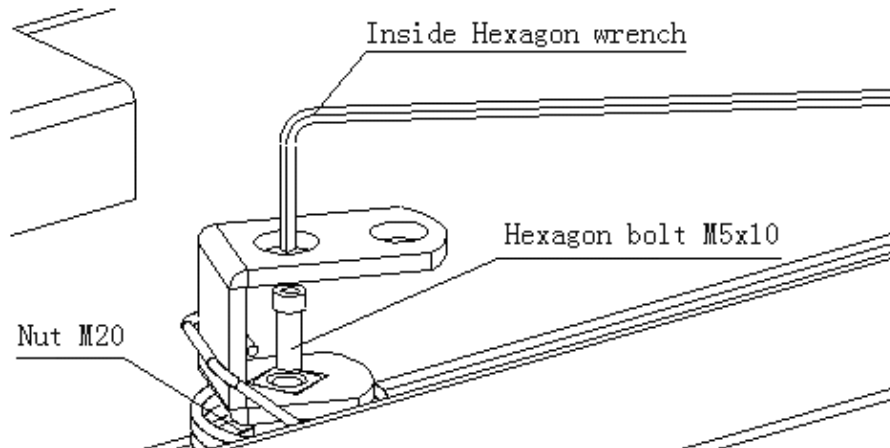


Figure A-1 D locking unit installment drawing

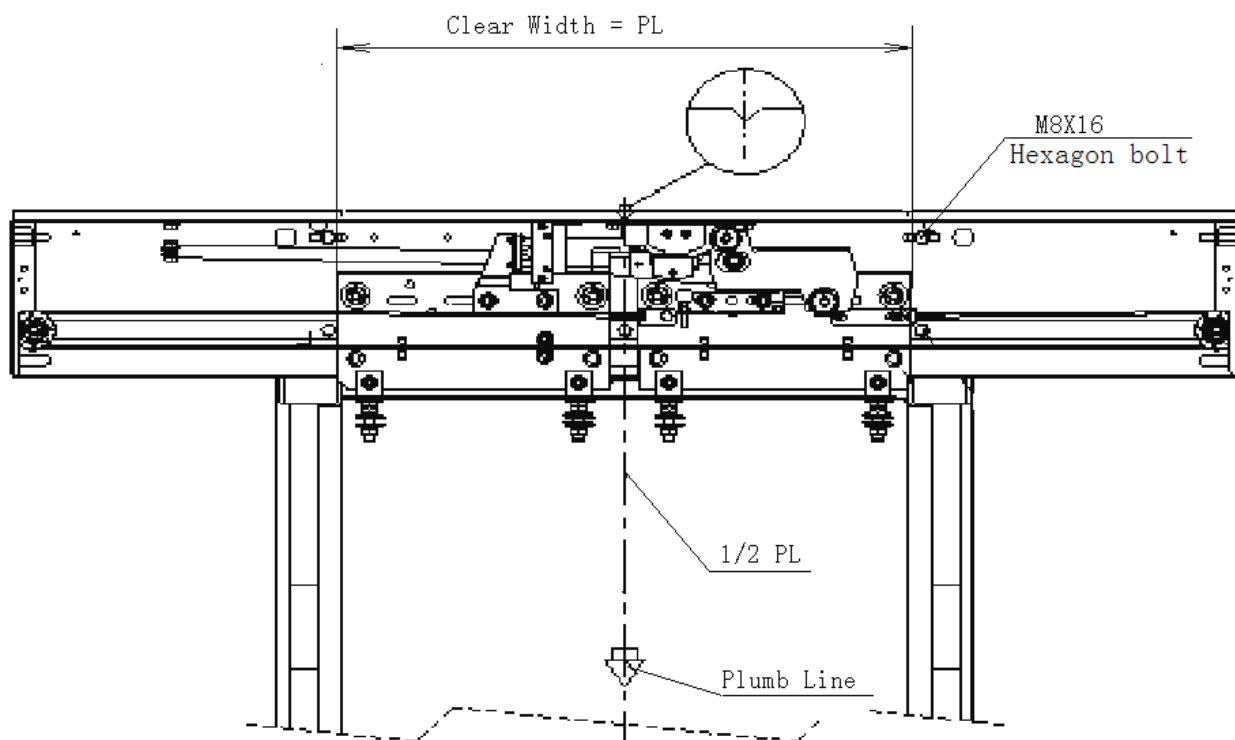


Figure 4-3-1 First Connection Drawing of Landing Door and Door Jamb

Installing order drawing of landing mechanism and Jambs. 4-3-2

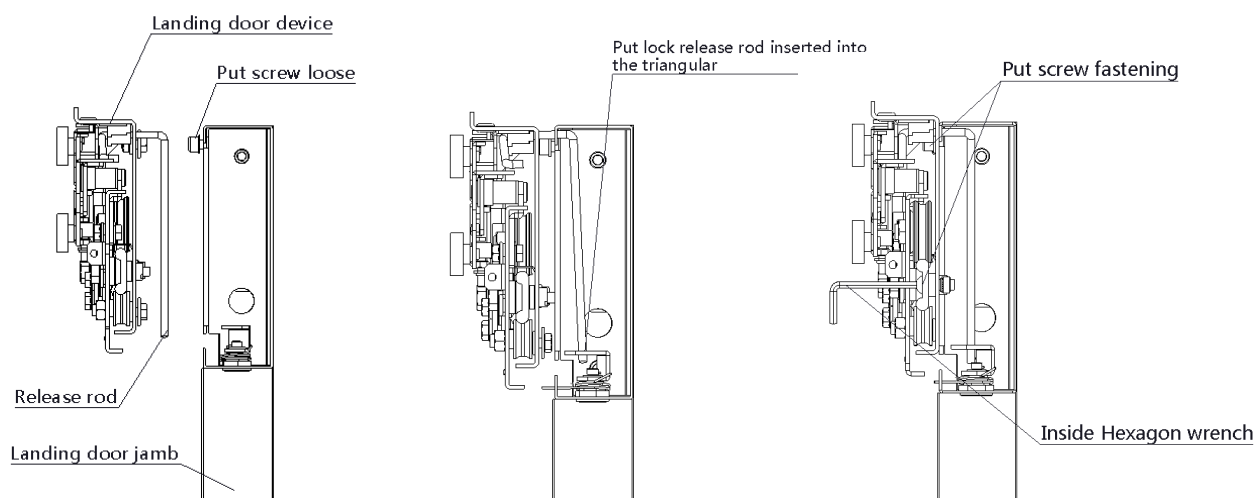


Figure 4-3-2 Installing order drawing of All integrative-Landing Door and Door Jamb.

Connection of standard Landing mechanism and Jambs Figure 4-4

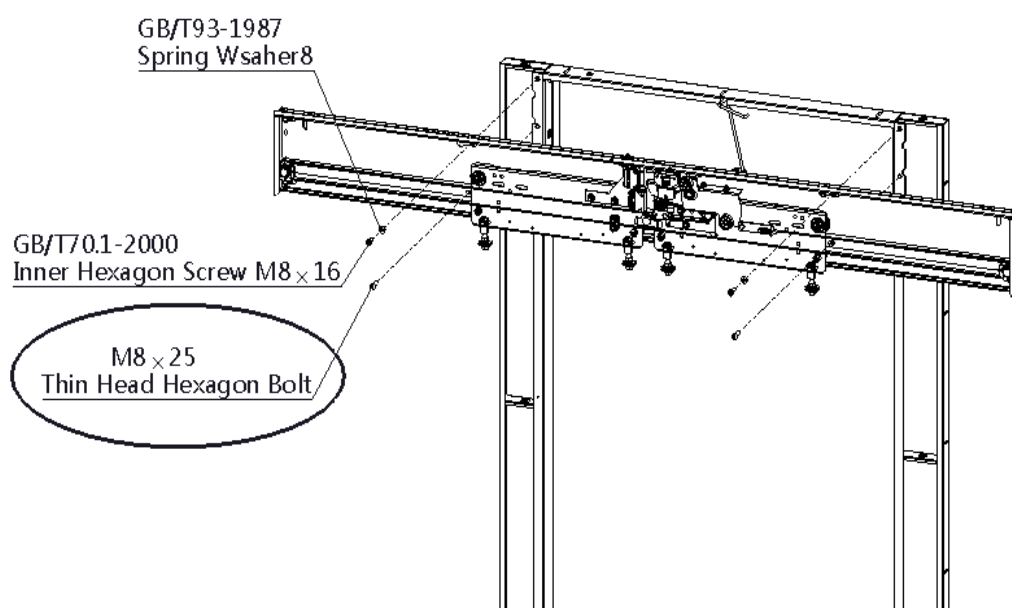


Figure 4-4 Connection of standard Landing mechanism and Jambs

4.4 Field Installation of Landing Door and Door Jamb

Refer to Figure 4-5

When connecting the combinatorial bracket and landing mechanism, the connection bolt should be adjusted to the end as indicated by arrowhead **Figure 4-5-1**.

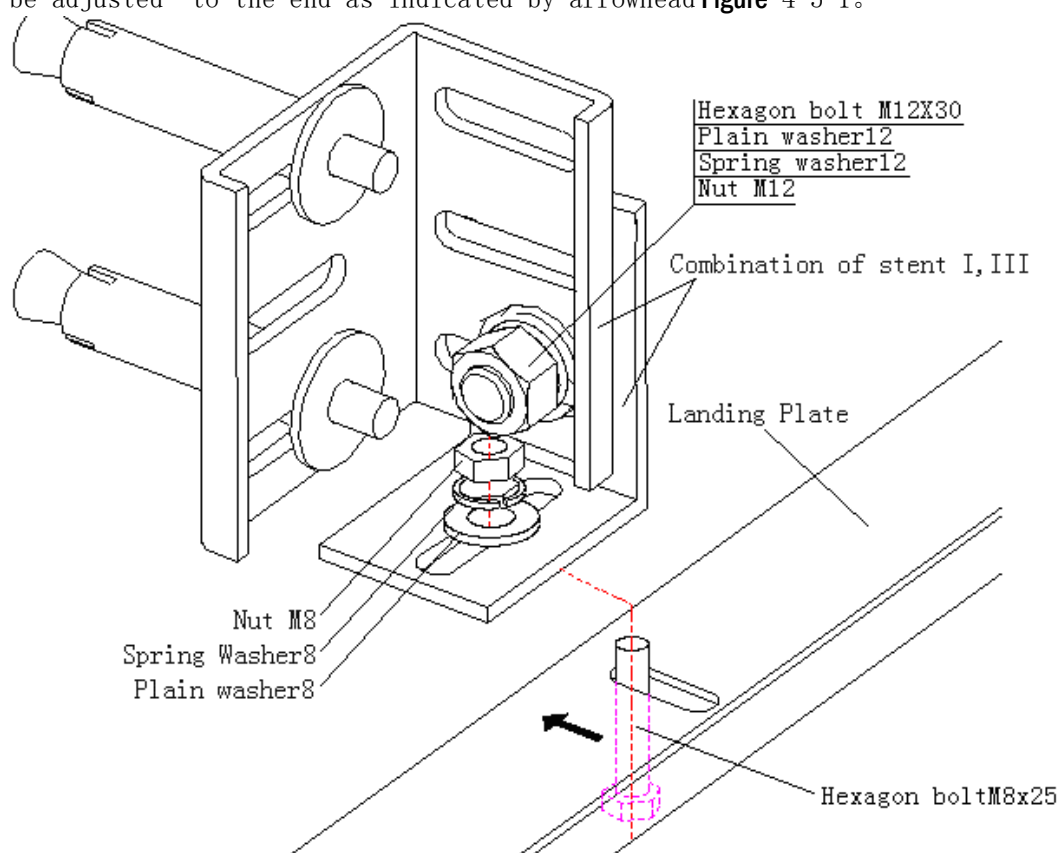


Figure 4-5-1 Connection of Brackets I, III and landing mechanism

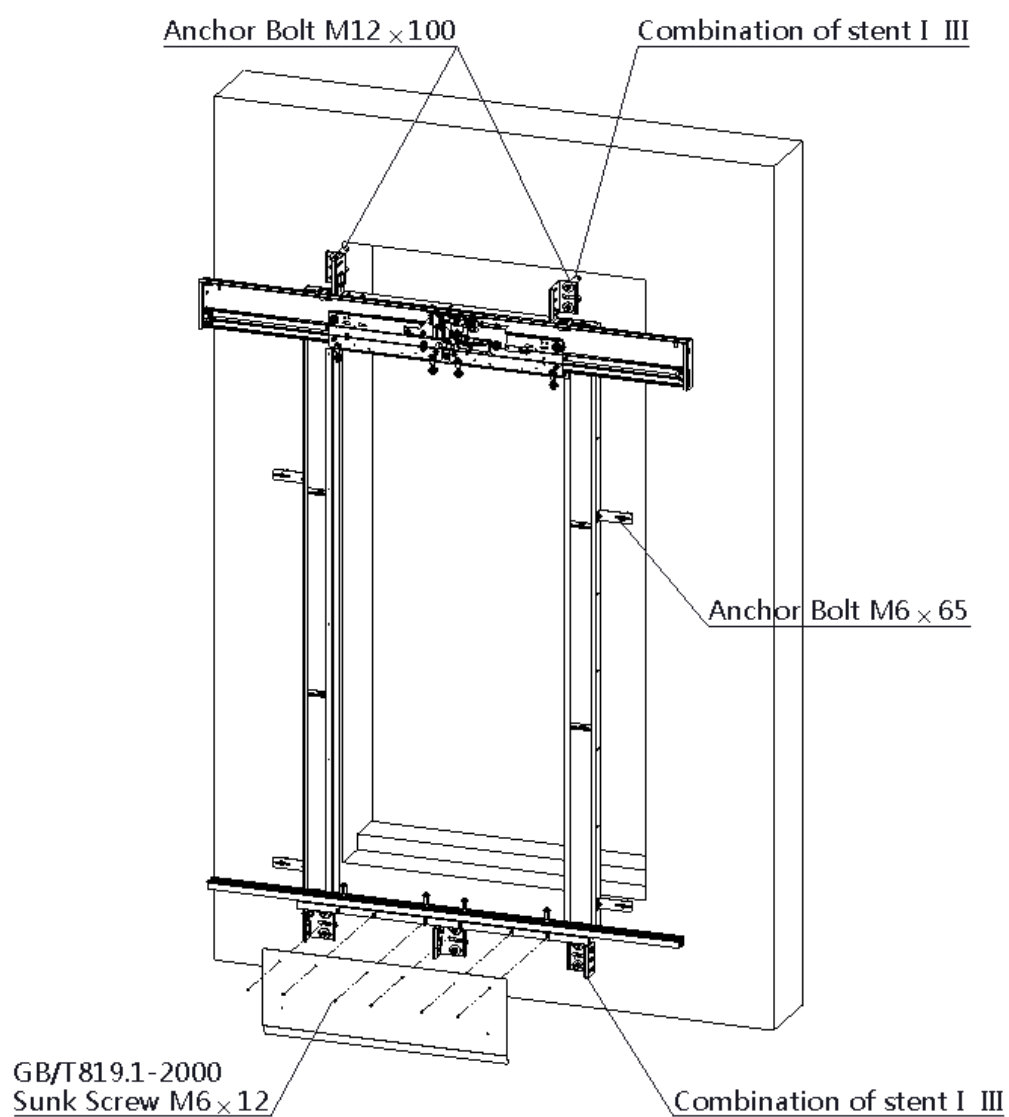
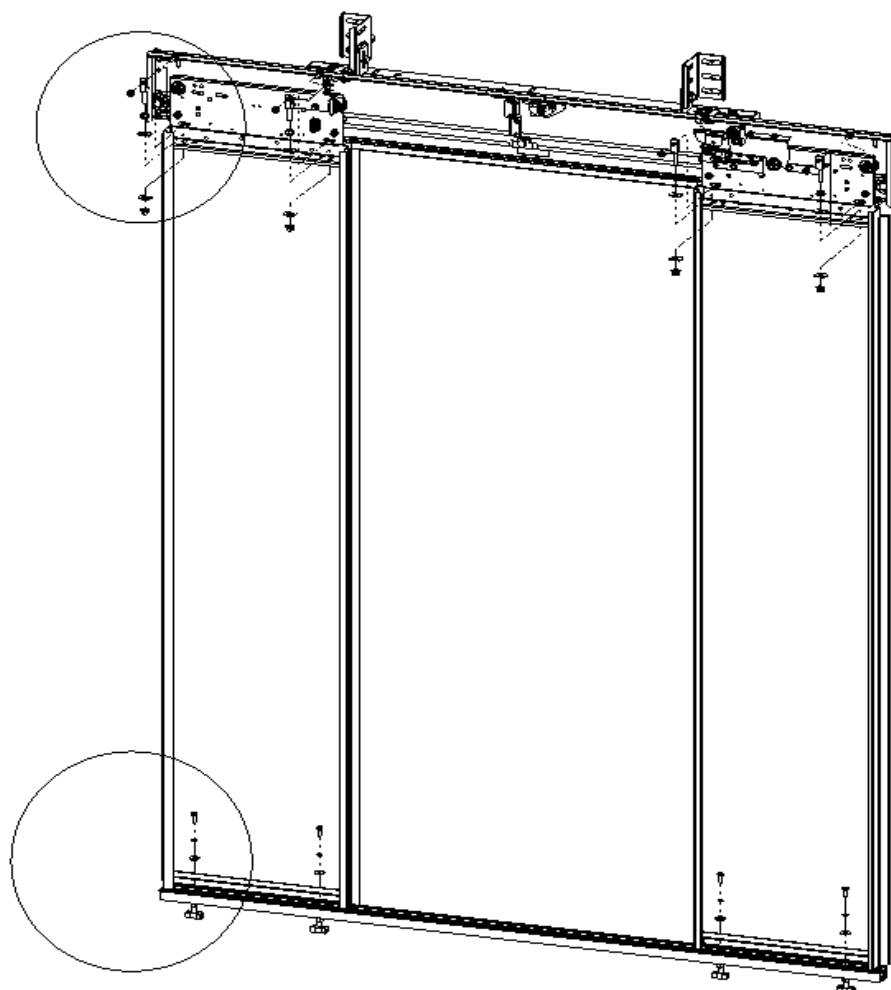


Figure 4-5 Field Installation of Landing Door and Door Jamb

4.5 Installation of Landing Door Panel and Slide Shoe

Refer to Figure 4-6



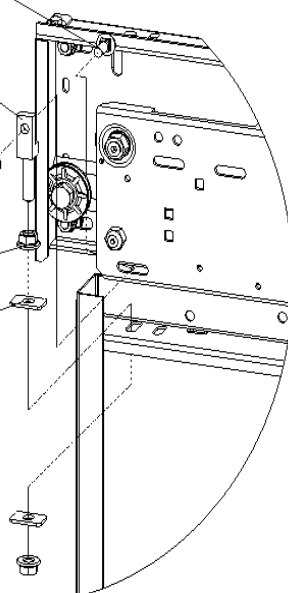
Half-ball square-neck Bolt M8 × 20

Hanger Assy

Hexagon flange Nut M8
GB/T6177-1986

Hexagon flange Nut M10
GB/T6177-1986

Plain washers8

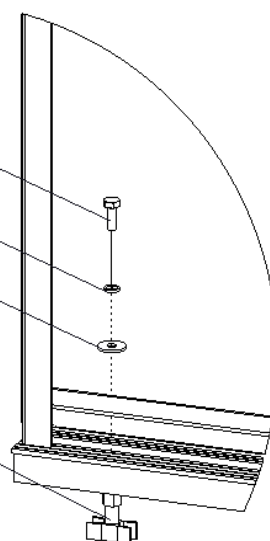


Hexagon Nut M8 × 20
GB/T5783-2000

Spring Washer8
GB/T93-1987

Plain washers8

Slide Shoe Assy



Move the door panels from side to center.

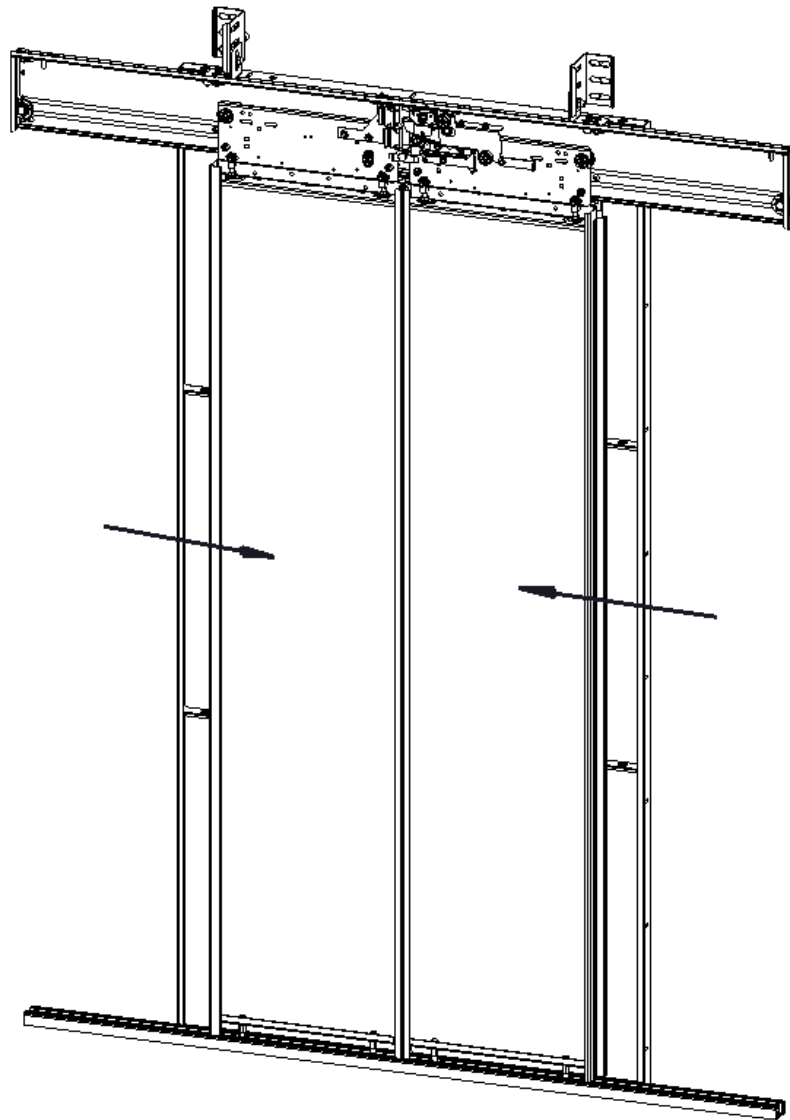


Figure 4-6 Installation of Landing Door Panel and Slide Shoe

4.6 Adjustment of Landing Door Panel

a) horizontal adjustment: loose four M8 flange faced hexagonal nuts on the components of the hanger bolts for adjusting the door panel position. Refer to Figure 4-7.

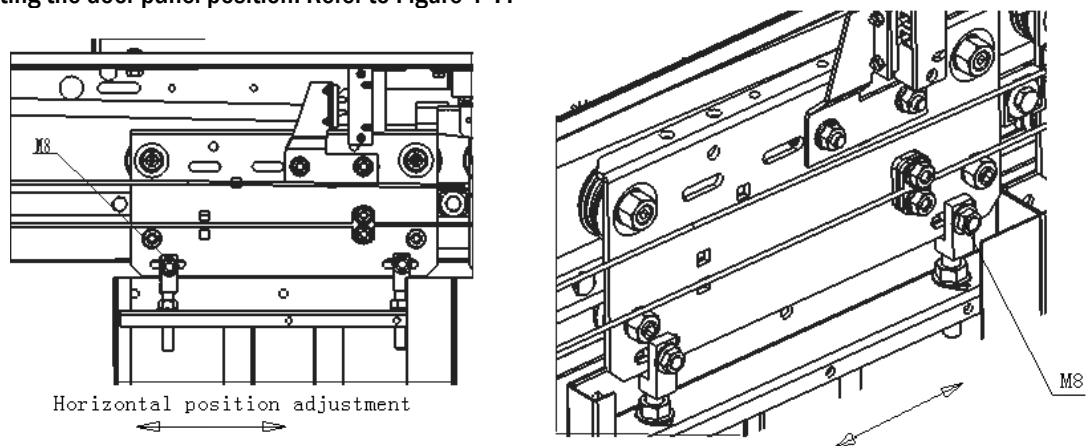


Figure 4-7 Horizontal Adjustment Drawing of Landing Door Panel

b) Vertical and gap adjustment: loose four M8 flange faced hexagonal nuts on the components of the hanger bolts adjusting the door panel position. Refer to Figure 4-8.

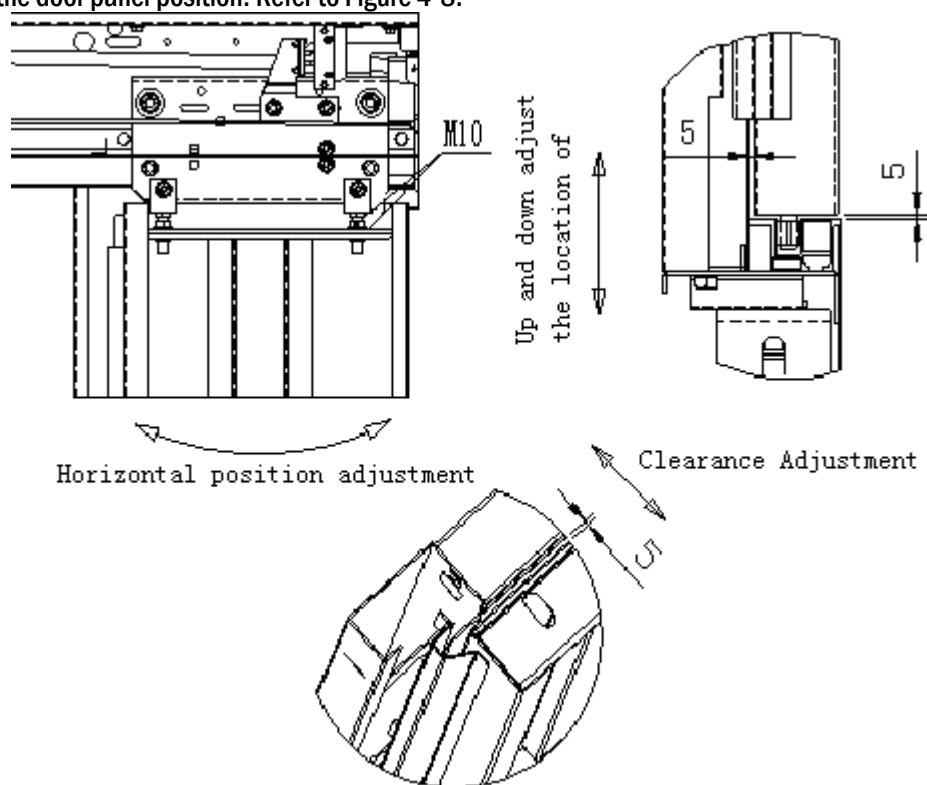


Figure 4-8 Vertical and Gap Adjustment of Landing Door Panel

4.7 Adjustment of Eccenter

Normally, the gap between pulley and rail has been adjusted after assembling in factory. During operation, in case of gap exceeding the given value, regulate the lower pulley (eccenter) to adjust the gap. The correct adjustment method is to adjust the gap between the lower pulley (eccenter) and rail within 0.2~0.5mm, and then lock the Nut M10. Refer to Figure 4-9.

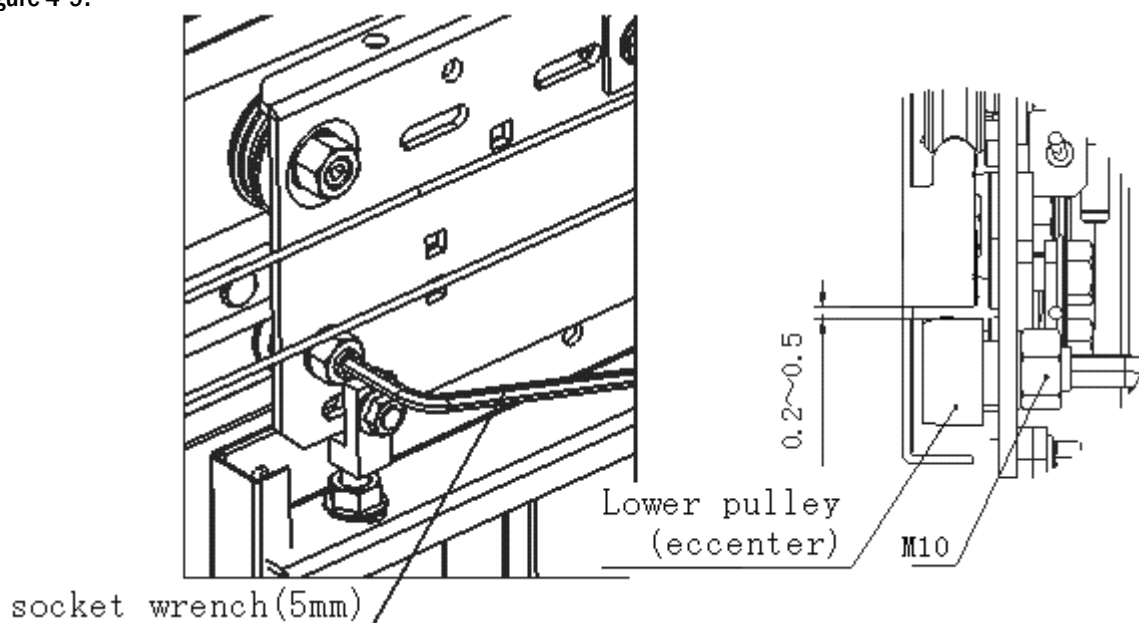


Figure 4-9 Adjustment Drawing of Eccenter

4.8 Adjustment of Landing Door Lock

a) Loose two nuts M8 on the spacing rubber support; move the ledge lightly and adjust the distance between the lock tip and the contact switch support to be 1~2mm e. And then lock the nut. Refer to Figure 4-10.

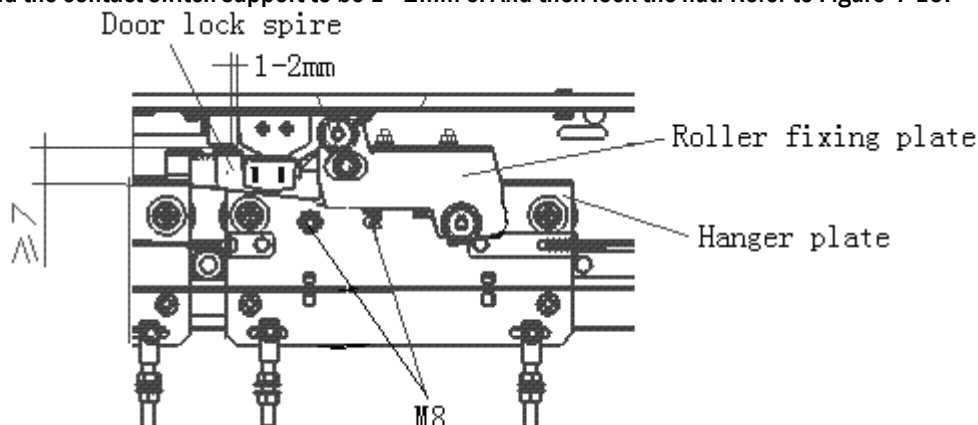


Figure 4-10 First Adjustment Drawing of Landing Door Lock

b) Loose two nuts M6 on the door roller fixing plate; move the plate lightly and adjust the centerline of the two door roller 145mm away from the hanger plate edge. And then jam the nut. Refer to Figure 4-11.

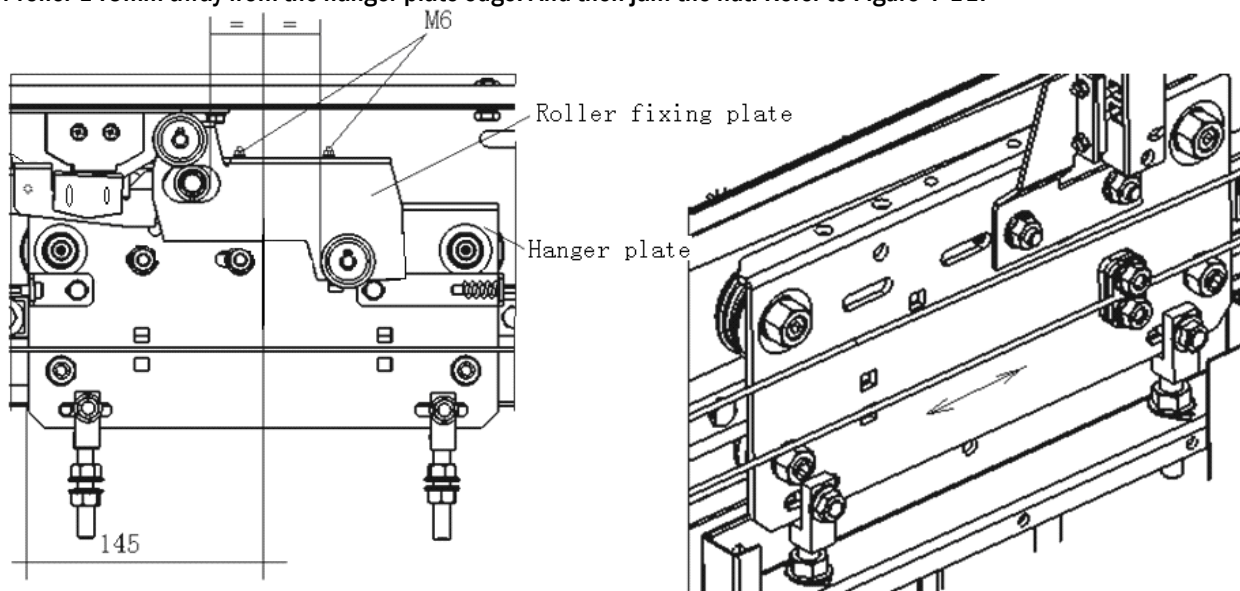


Figure 4-11 Second Adjustment Drawing of Landing Door Lock

5 Trouble Shooting

Refer to 《AC Permanent-magnet Synchronous Car Door System Installation Manual》 relative content about trouble shooting.

6 Notes for Maintenance

Refer to 《AC Permanent-magnet Synchronous Car Door System Installation Manual》 relative content about Notes for Maintenance.