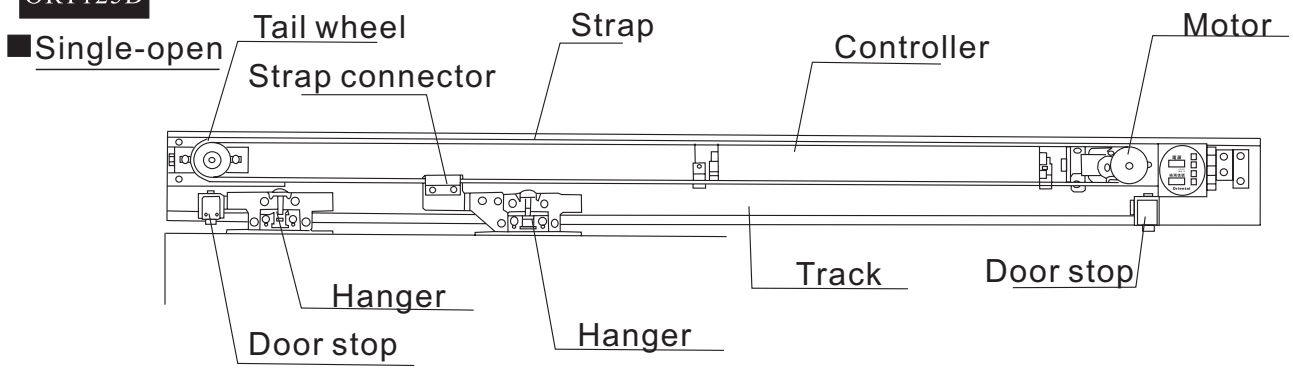
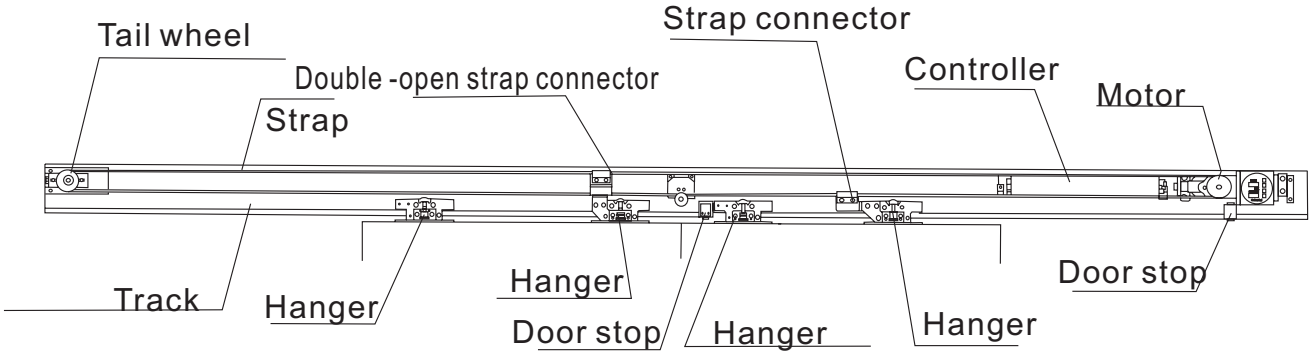
Contents

1、The title of each component

ORT125D

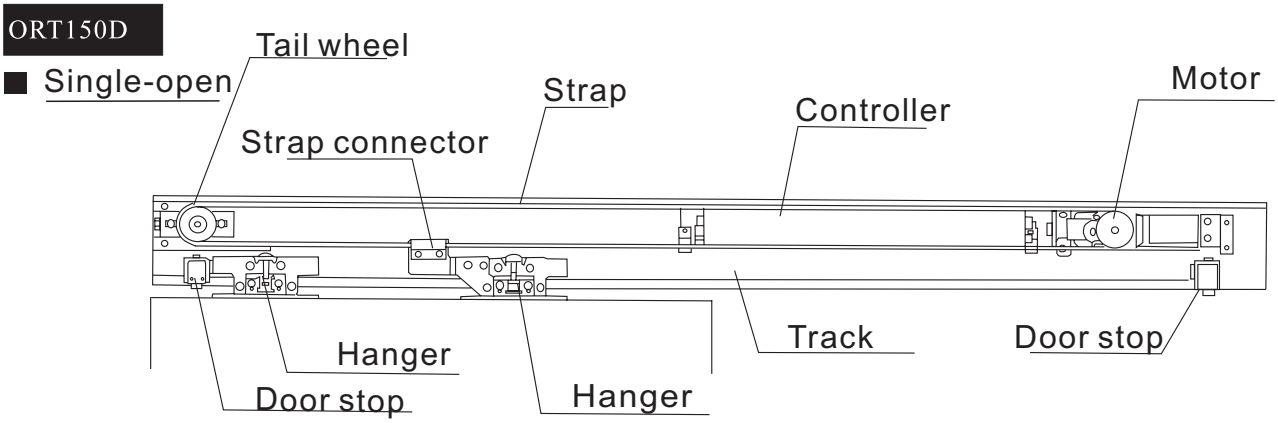
■Single-open

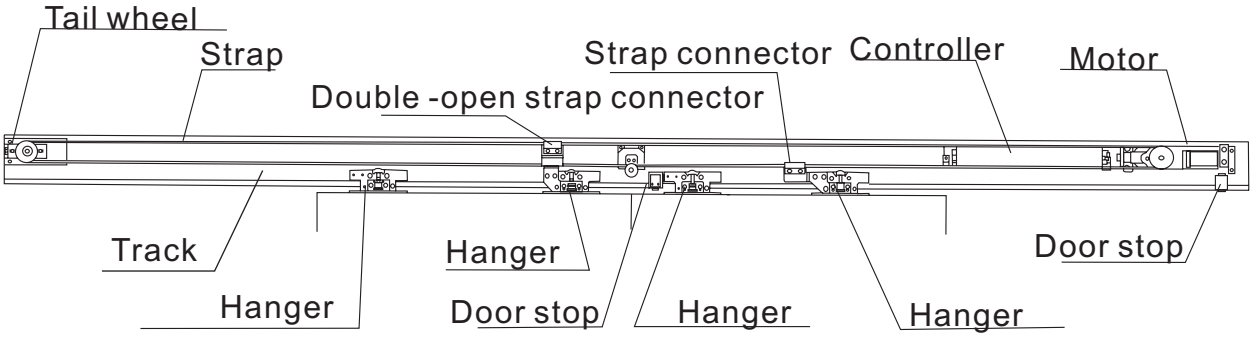




ORT150D

■ Single-open





2 List of door operator parts

ORT 120D

Form			Single-open	Double-open
Door weight			90kg×1	70kg×2
Item	Spc.	Photo	Q'ty	
Motor	OTDM0682		1	1
Controller	OTDM0684		1	1
Strap	OTDM0605		1	1
Track	OTDM0608		1	1
Wiring	OTDM0607		1	1
Double-open strap connector	OTDM0604			1
Strap connector	OTDM0603		1	1
Door stop	OTDM0606		1	2
Tail wheel	OTDM0602		1	1
Sensor	OTDM0685		1	2
Hanger	OTDM0601		2	4
Direction tag	OTDM0609		2	4
Warranty Card & Instruction			1	1

2 List of door operator parts

ORT125D

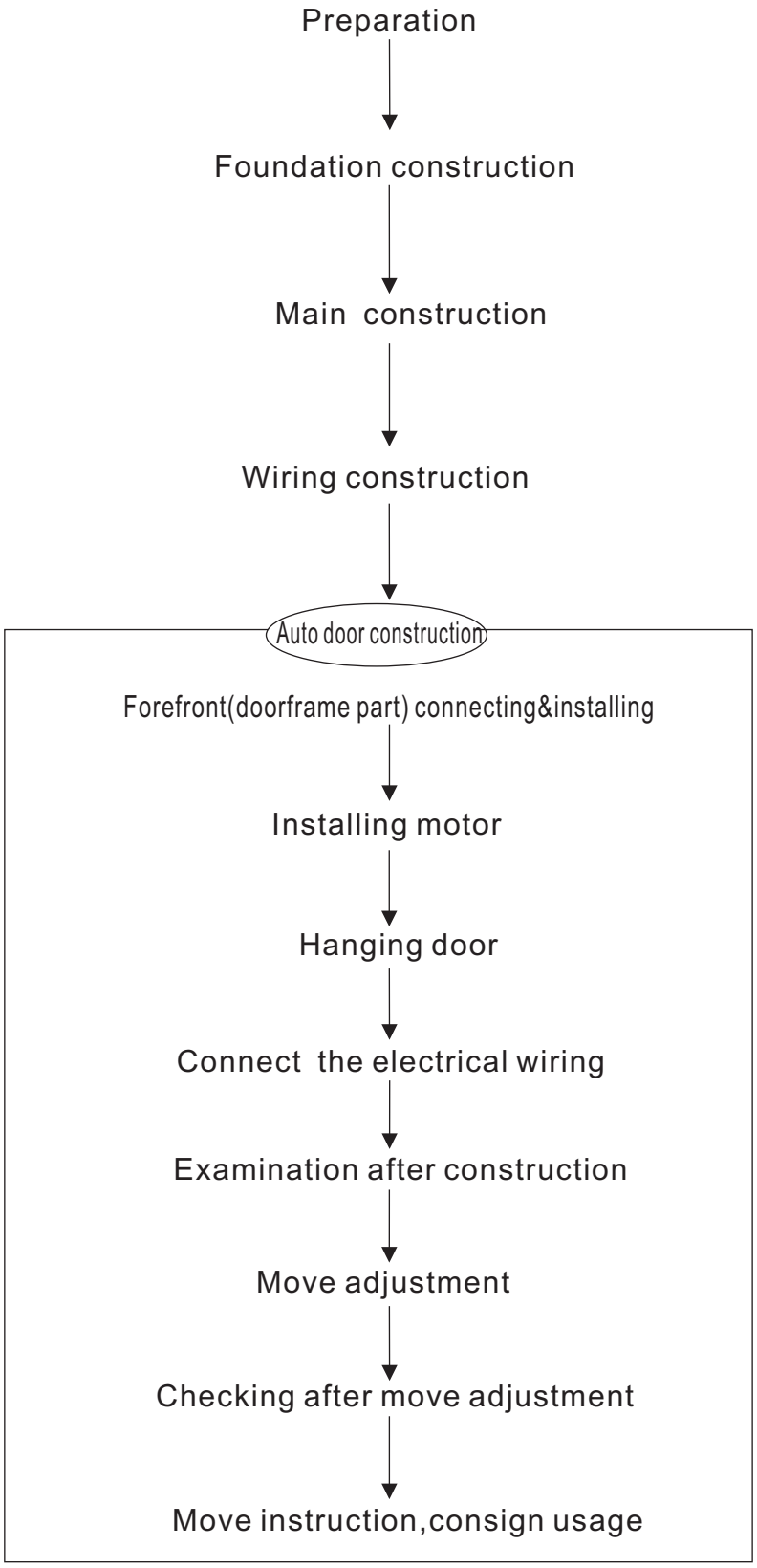
Form			Single-open	Double-open
Door weight			150kg×1	125kg×2
Item	Spc.	Photo	Q'ty	
Motor	OTDM0681		1	1
Controller	OTDM0683		1	1
Strap	OTDM0605		1	1
Track	OTDM0608		1	1
Wiring	OTDM0607		1	1
Double-open strap connector	OTDM0604			1
Strap connector	OTDM0603		1	1
Door stop	OTDM0606		1	2
Tail wheel	OTDM0602		1	1
Sensor	OTDM0685		1	2
Hanger	OTDM0601		2	4
Direction tag	OTDM0609		2	4
Warranty Card & Instruction			1	1

2 List of door operator parts

ORT150D

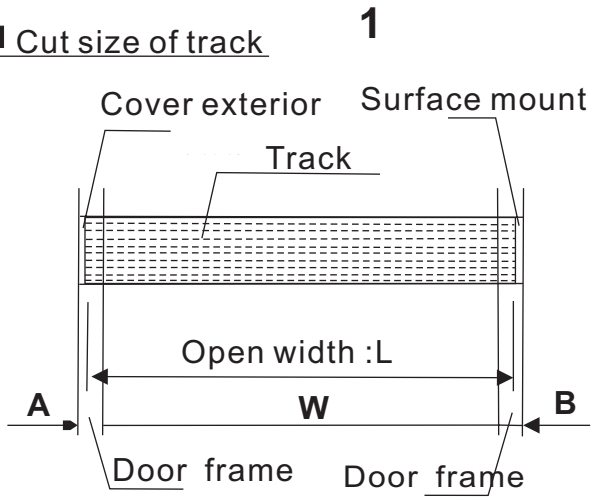
Form			Single-open	Double-open
Door weight			150kg×1	125kg×2
Item	Spc.	Photo	Q'ty	
Motor	OTDM0682		1	1
Controller	OTDM0684		1	1
Strap	OTDM0605		1	1
Track	OTDM0608		1	1
Wiring	OTDM0607		1	1
Double-open strap connector	OTDM0604			1
Strap connector	OTDM0603		1	1
Door stop	OTDM0606		1	2
Tail wheel	OTDM0602		1	1
Sensor	OTDM0685		1	2
Hanger	OTDM0601		2	4
Direction tag	OTDM0609		2	4
Warranty Card & Instruction			1	1

3、Construction project



4、Installing track

■ Cut size of track



1、Cut off the track

Track: L=W+A+B-5mm
(5mm:outside the end installs the lid 2 parts of sizes)

*Notice:Do not damage track when cutting, or influce the function or lifespan.

2、Drill the screw reservation hole on the doorleaf and the doorframe.

3、Drill the screw reservation hole on the track .

4、Fasten the end cover with the attached self-tapping screw(5×20)into the track firmly.

5、Fasten the track with the self-tapping screw into the leaf and the doorframe firmly.

*Notice: • Please make the track to be level status
• Do not damage the track,or will influnce function or lifespan
• Do not appear the tapping screw,or will stop operate smoothly

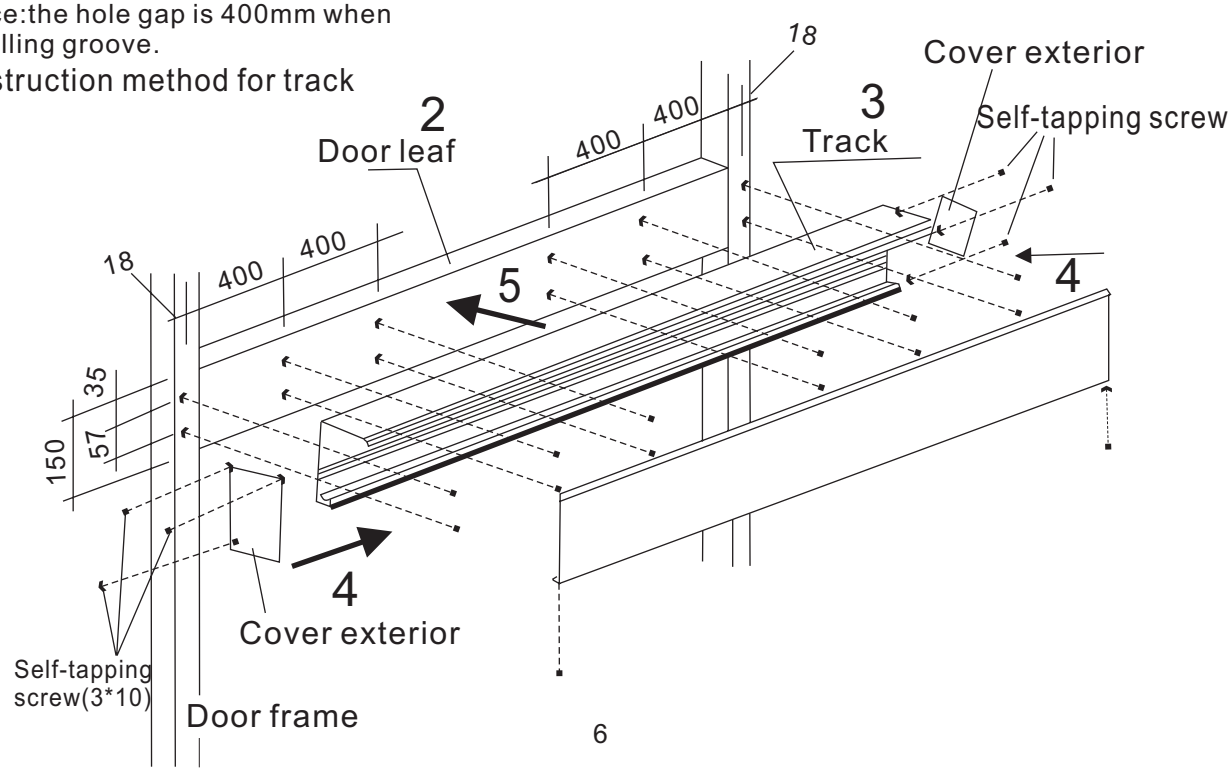
*Notice: • Carry on strictly types of bolt ,space installment and amount of screw.If not, it will cause fall.

※Installing groove

Please construct according to the above-mentioned main points 1~5.

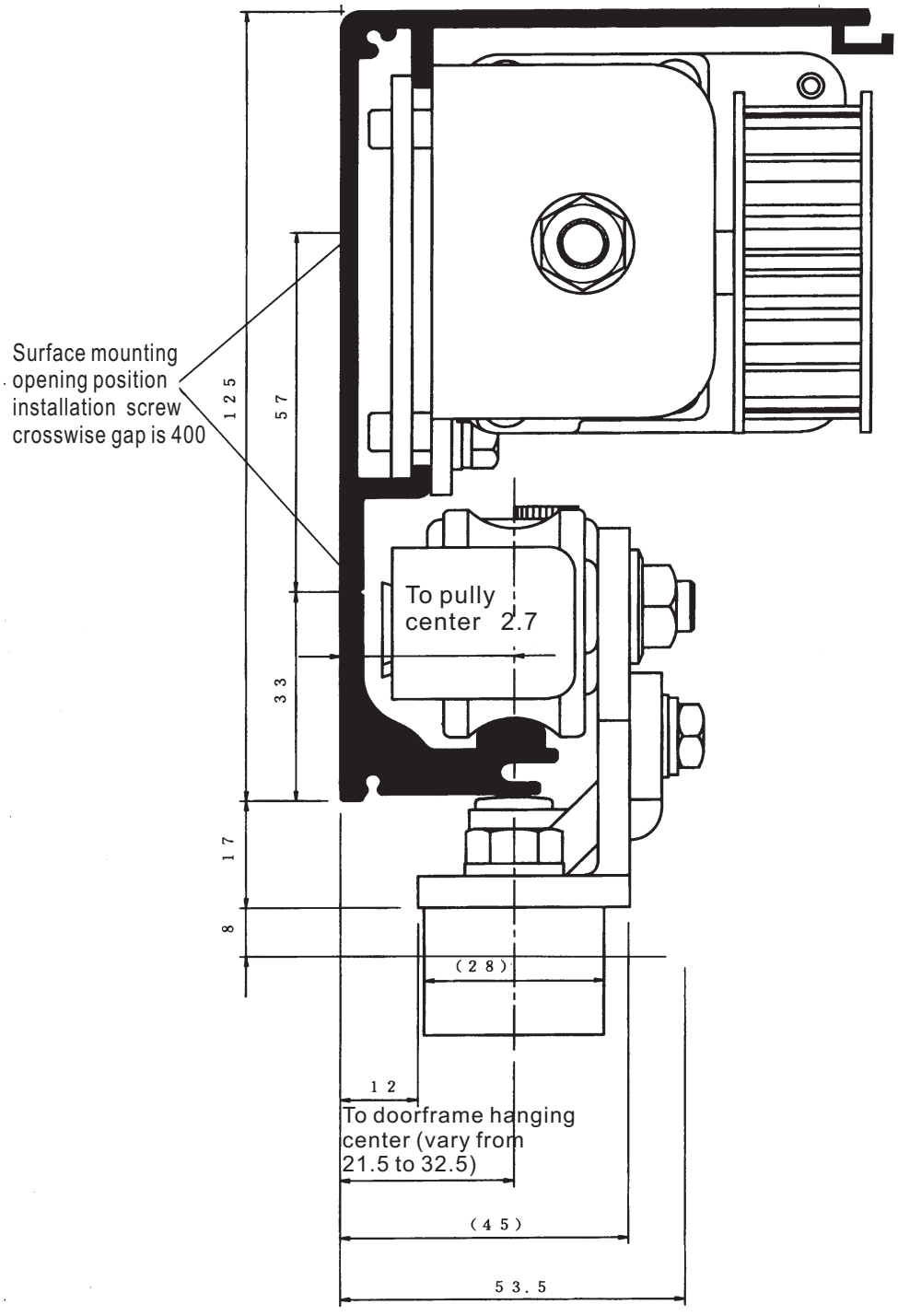
*Notice:the hole gap is 400mm when installing groove.

Construction method for track

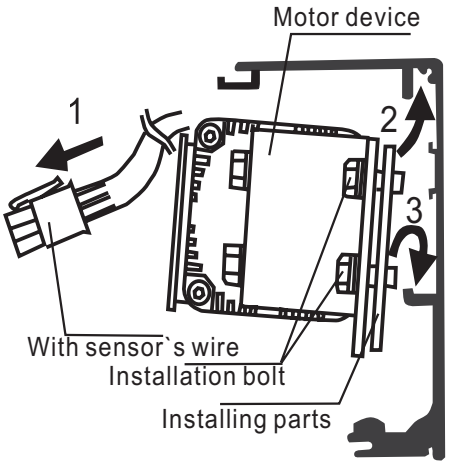


5、Installing track (continue)

ORT150D Section map



6、Installing motor



1、Set up the sensor wires in front of motor.

Notice: if carelessly opercction in the following steps 2,3,5,it will cause fall.

2、Put the accessories into the upper trech of the track.

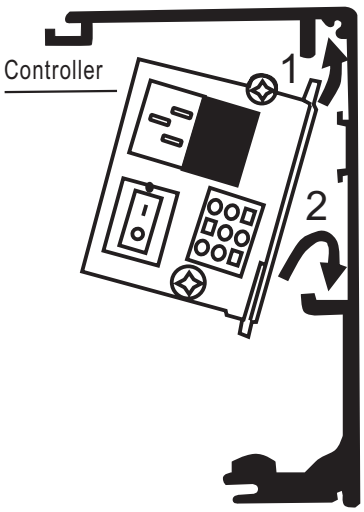
3、Make sure fix into the lower trench.

4、Move the motor device to the right side of track.

5、Install bolt seat.

6、Put the wires which attached to the sensor throuht the upper of motor, and then extend to the left ,to avoid ptosis.

7、Installing motor



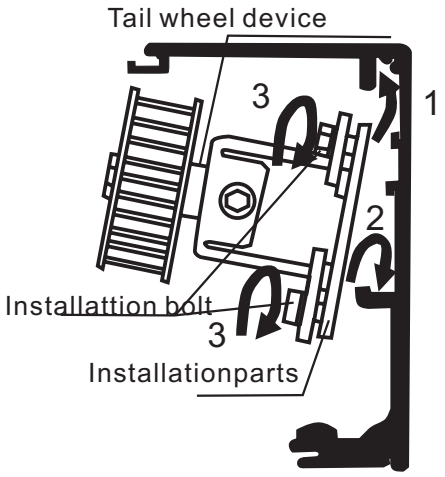
Notice:If carelessly in the following steps1、2, it will cause fall.

1、Put the controller device into the lower of the trench.

2、Make sure fix into the lower groove.

3、Move the soft-wire of the motor to the connection position.

8、Installing tail wheel



Notice: △ If carelessly operation in the following steps 1、2,it will cause fall.

1、Put the controller device into the lower of the trench.

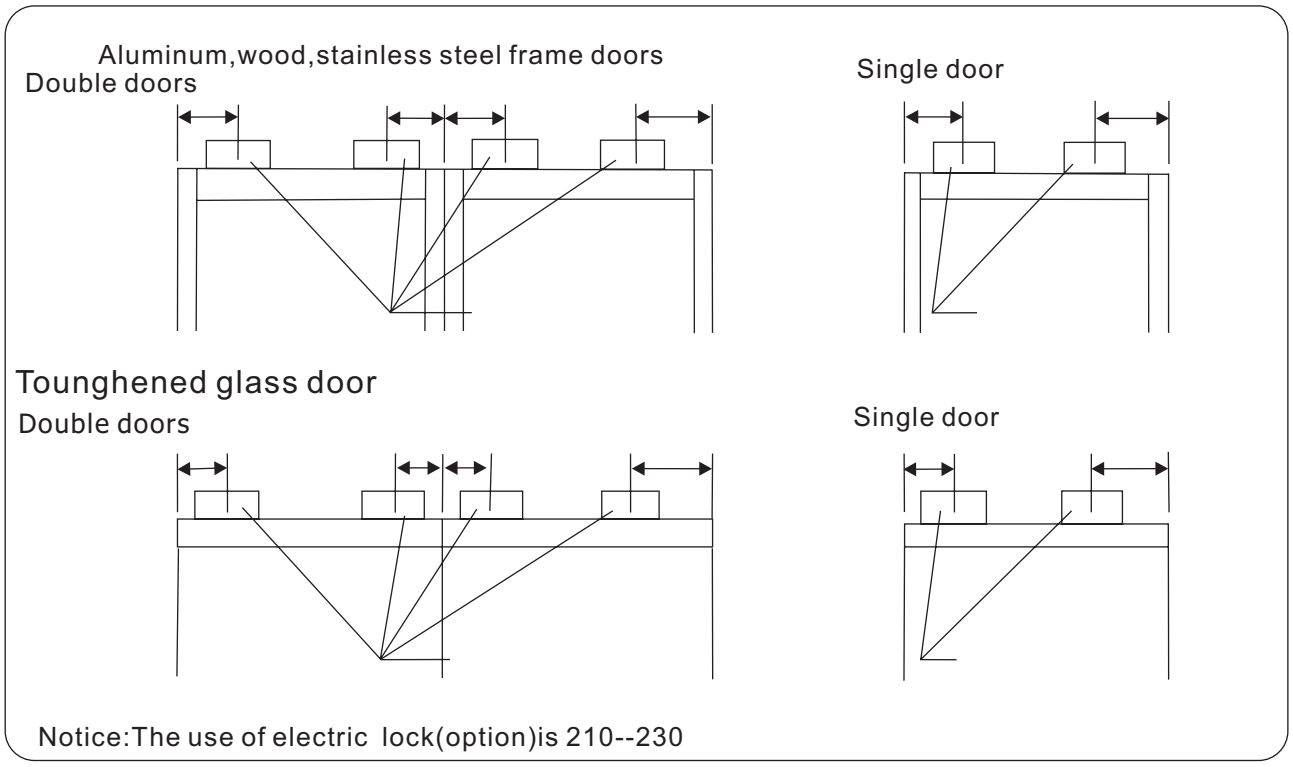
2、Make sure fix into the lower groove.

3、Move the tail wheel to the track left ,and tighten the installation bolt.

9、Hanging door

1、Install the hanger in the designated position.(if carelessly,it will cause fall.)

Hanger installation location drawing



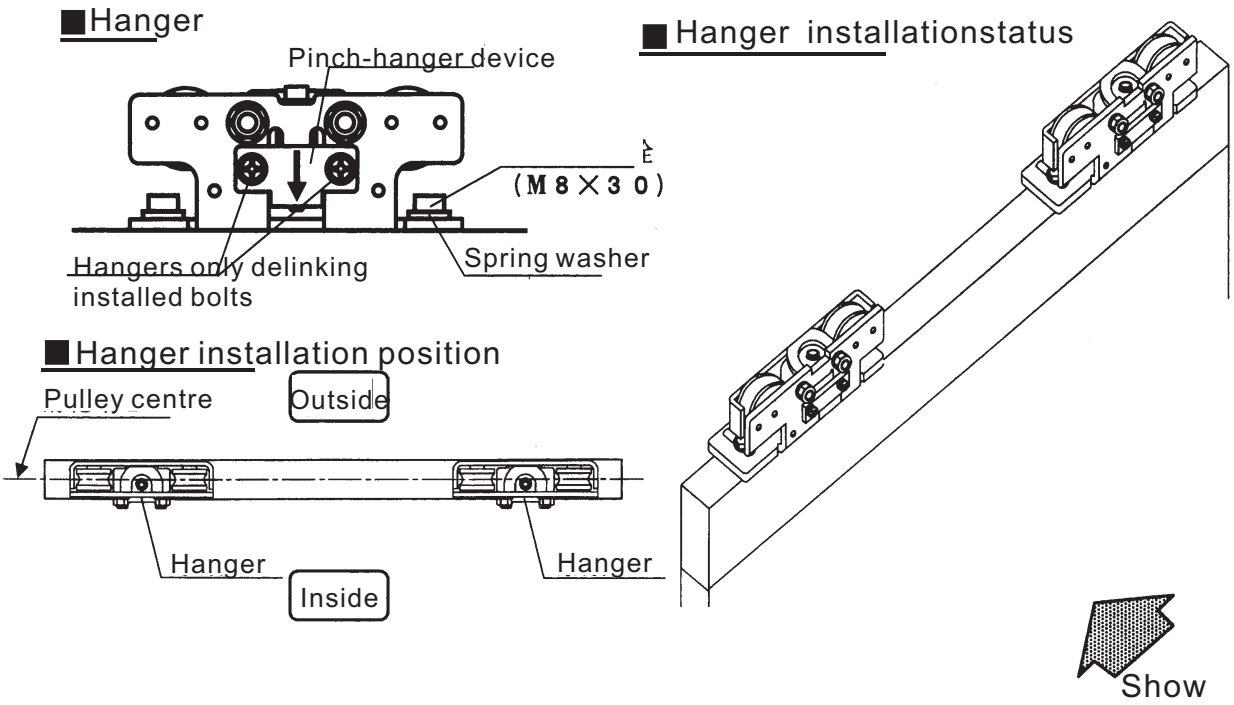
Notice:when istalling,the pulley centreof the hanger should be made in parallel status with the door frame.If not,it will cause to shorten the lifespan of pulley.

2、loose the installation bolt of the pinch-hanger device,and then lessen the pinch-hanger fixed position.

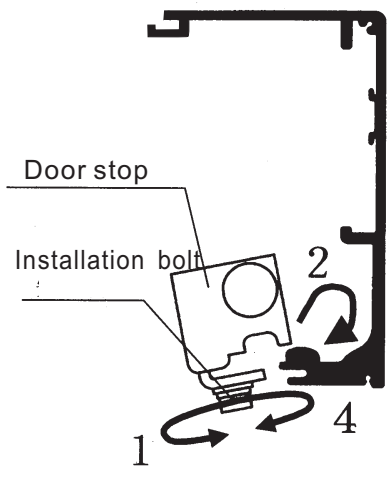
3、link the hanger pulley to the track .

Notice:Please do not damage the inside components of the tracks,or it will create parts failure or shorten the life of pulley,noise, and such as abnormal noise.

10、Installing hanger



11、Hanging door stop



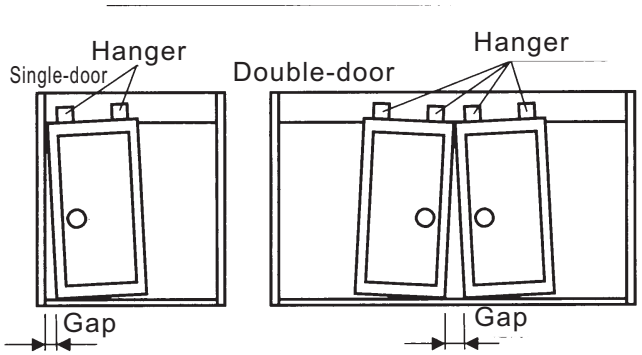
1、Loose the installation bolt of door stop.(heagon bolt:M8)

2、Make sure fix the door stop into the track.
Notice:Do not hurt track.

3、Move to the opening position of the door, confirm the door stop position.
Notice:Do not hurt track.
When setting up the position of door stop ,stop after wllision with the washer.

4、Tighten the installation bolt by wrenches
*If carelessly,it will cause door breakage.

12、Adjusting the height of doorframe



• Like as the left figure,when the door is unable horizontal installing ,and then make the installment adjustment.

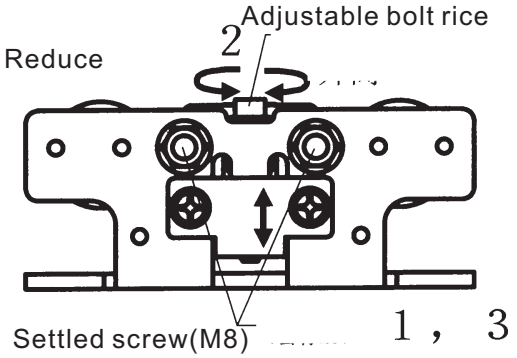
1、Loosen bolts.

2、Make construction and installation with the adjustable bolt

• Rise the revolving door in clockwise

• Reduce the revolving door in counter clockwise

The adjustment sequence of construction and installation height

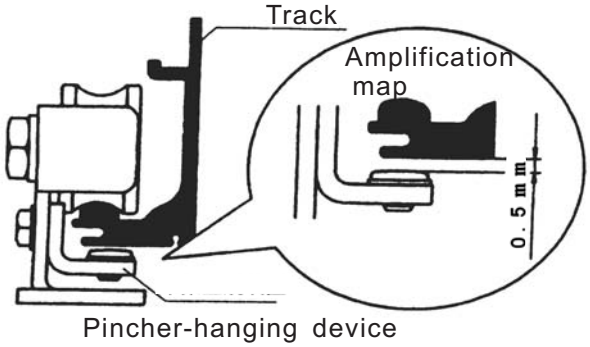


Notice: If there is something carelessly operation in the following steps3、4,it will create fall.

3、Tighten the fixed bolt

4、After confirming the gap between track lower part, fix the hanging bracket escapes, the gap is 0.5mm.

5、Confirm the walking resistance.confirm whether move the leaf with an forefinger, walking below resistance at 600g.move the door,confirm that the pulley of the hanging bracket device rolls in the track.
if the leaf migration is hard,confirms the following items in order to recover normal.



• Confirm items

1、Whether the hanging shelf install in the doors vertically.

2、Whather there is the friction between the lower stops of the door and the tracks.

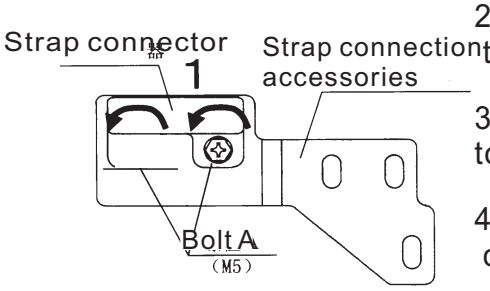
3、Whether there is the frictin between the pinch-hanger device and the track.

4、Whether there is the friction between the hanger and horizontal frame.

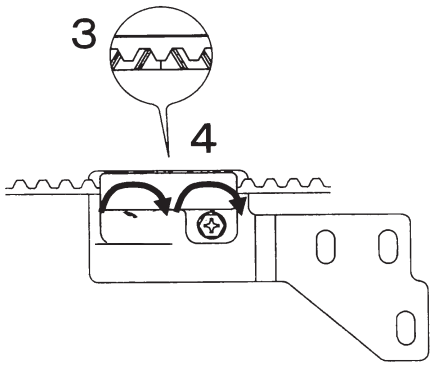
5、Whether there is the friction between doorframe and leaf.

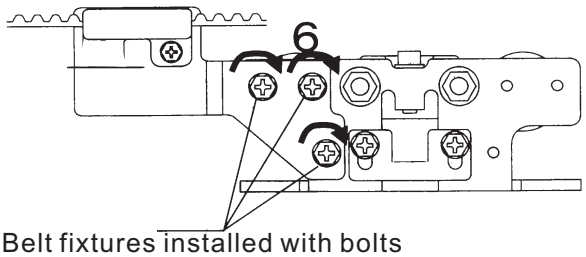
13、Installing belt

Single-open
*strap installed steps



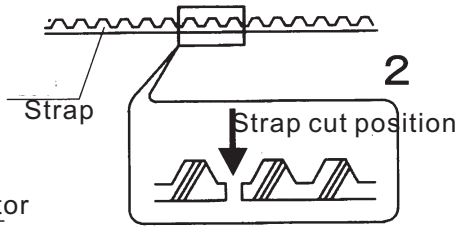
1、Dismantle bolt A (M5),and take the fixed strap off the strap connection accessorie.
2、Refer to the strap cutting off digram,cutting off the strap.
Notice:please cut off the strap in the centre of bottom.
3、Intersect the both sides of strap,and put them to the fixed machine.
Notice:Do not distort the strap when installing
4、Install the strap fixed machine to the strap connection accessories.
Notice:Please note the direction of the fixed strap.
5、Hang the strap to the motor besides the strap wheel,then hang to the tail wheel.
6、Refer to the above-mentionod picture,install the installation bolt ,and to fix the hanging shelf
Notice:Use the wrench to tighten the bolt.



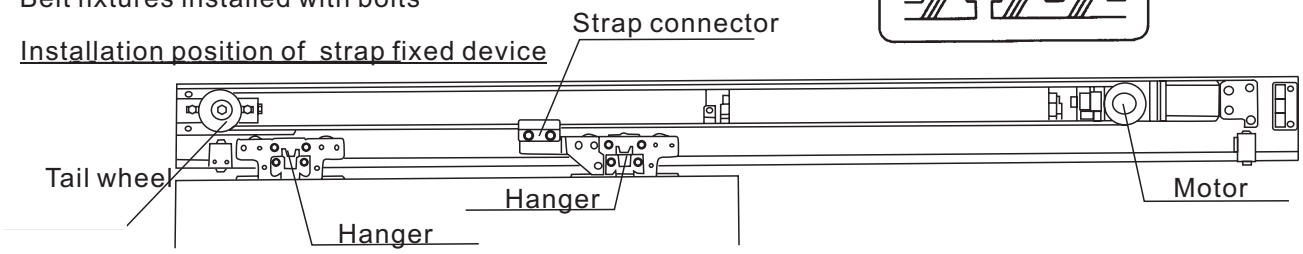


Belt fixtures installed with bolts

*Strap cut position



Installation position of strap fixed device



Strap cut-out diagram(single-open)

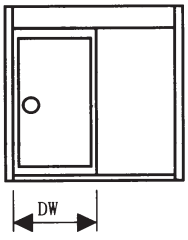
The stardard for strap cut-out size L

W=700～1，000

L=(DW−100)×4

DW=1,000～1 250

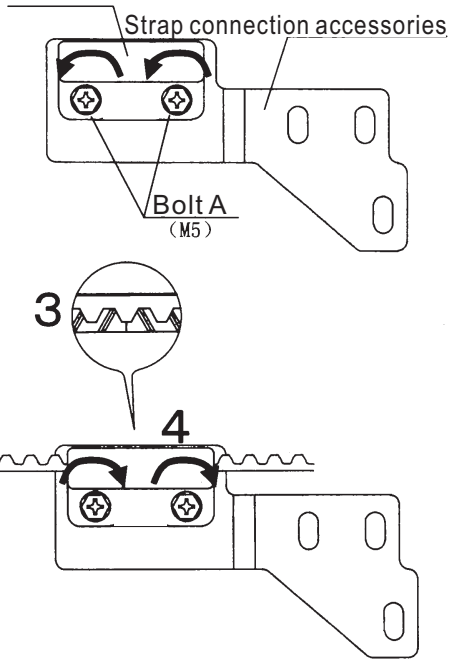
L=3,700



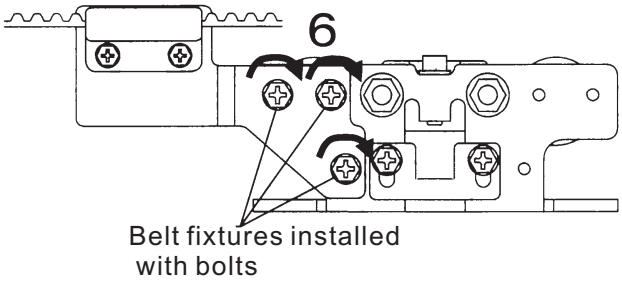
Notice:the above-mentioned caculation only is a standard, please adjust as confirm the real size.

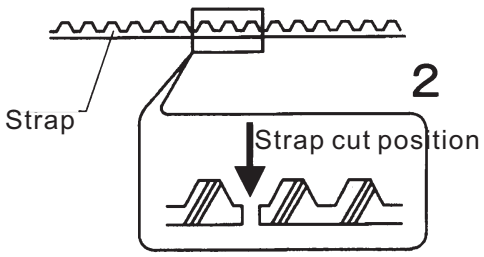
Double-open

*strap fixtures installed steps
strap fixed device



1、Dismantle bolt A (M5),and take the fixed strap off the strap connection accessorie.
2、Refer to the strap cutting off digram,cutting off the strap.
Notice:please cut off the strap in the centre of bottom.
3、Intersect the both sides of strap,and put them to the fixed machine.
Notice:Do not distort the strap when installing
4、Install the strap fixed machine to the strap connectionaccessories.
Notice:Please note the direction of the fixed strap.
5、Hang the strap to the motor besides the strap wheel,then hang to the tail wheel.
6、Refer to the above-mentionod picture,install the installation bolt which attached to the strap fixed device,and to fix the hanging shelf.
Notice:Use the wrench to tighten the bolt.





Strap cut-out diagram(double-open)

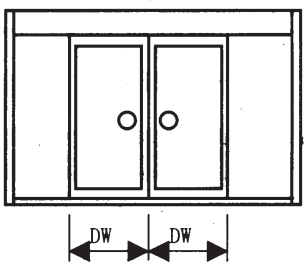
The stardard for strap cut-out size L

DW＝700～1,050

L＝(2 X DW－100)×4

DW＝1,050～1,250

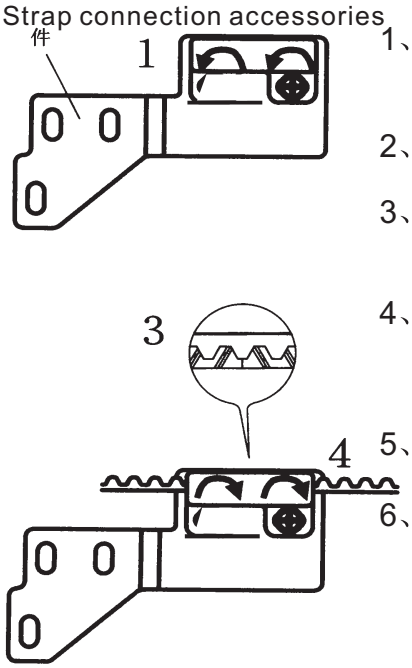
L＝8,200



Notice:the above-mentioned caculation only is a standard, please adjust as confirm the real size.

14、Installing double-open strap

*strap fixtures installed steps



1、Dismantle bolt A, take apart the strap fixed accessories from the strap connection accessories.

2、Refer to the diagram,cut off the strap.

Notice:separate the strap from the centre of bottom.

3、Crosswise two sides of strap,put it to the strap settled place

Notice:Do not distorte the strap when installing

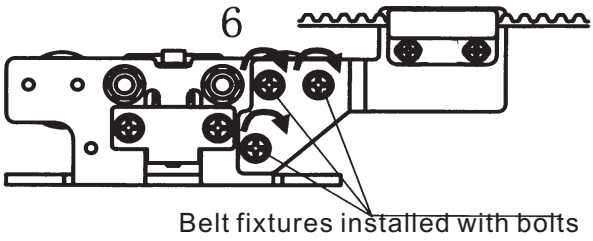
4、Put the strap fixed accessories to the strap connection accessories.

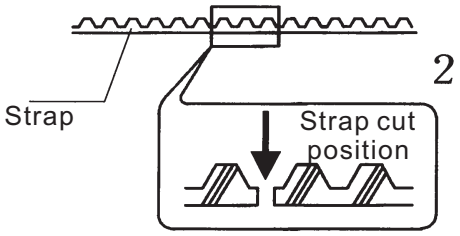
Notice:Note the direction of the strap fixed accessories.

5、Hang the strap to the tail wheel,then to the side of motor.

6、Install the installation bolt (M6*12)the attached strap fixed device to the position as the following picture.

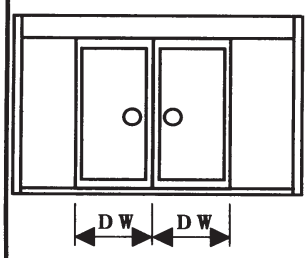
Notice:Tighten the bolt with wrench





Strap cut-off table(double-open type)

Strap length=(DW*3+250)*2(Unit:mm)



Strap correspondence table

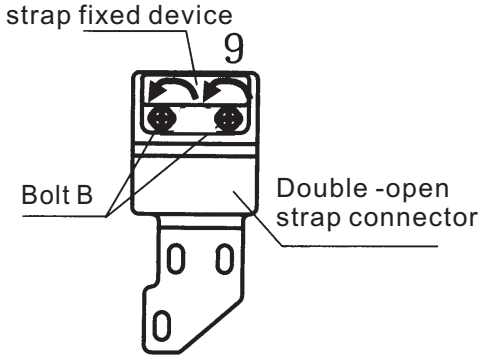
	DW （mm）	
Standard	600~1，067	The strap length which attached engine device
Special ordered strap	1，068~2，500	NKA8112041 Length is 21m

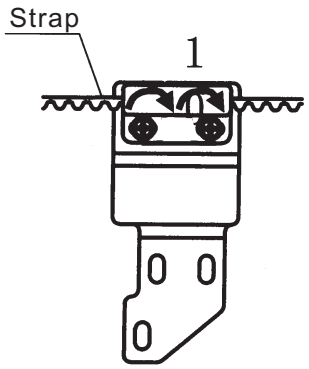
Strap cut-off table

DW （mm）	Strap length（mm）
600	4，100~4，150
750	5，000~5，050
800	5，300~5，350
850	5，600~5，650
900	5，900~5，950
950	6，200~6，250
1000	6，500~6，550
1067	6，900

15、Installing double-open strap(continue)

■*strap fixtures installed steps





7、Adjust strap tension Please refer to Page 15 adjuststrap tension

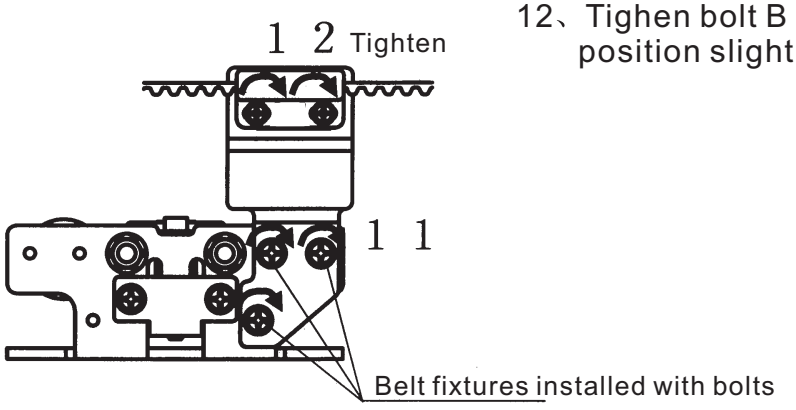
8、Make sure two doors be closed . If need lock by hand ,Please lock it.

9、Dismantle bolt B (M5),take it apart from the strap settled accessories.

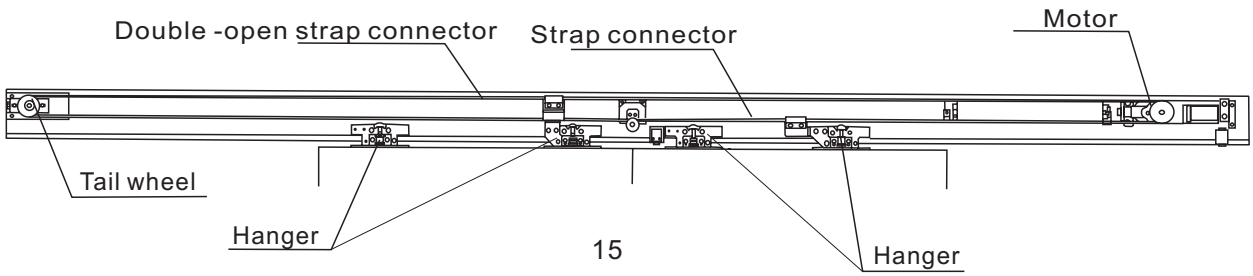
10、Install the strap fixed accessories to the strap,fixed on the double-open strap connection component.

11、Install the bolt of attached strap fixed accessories as the following picture.
Notice:Tighten the bolt.

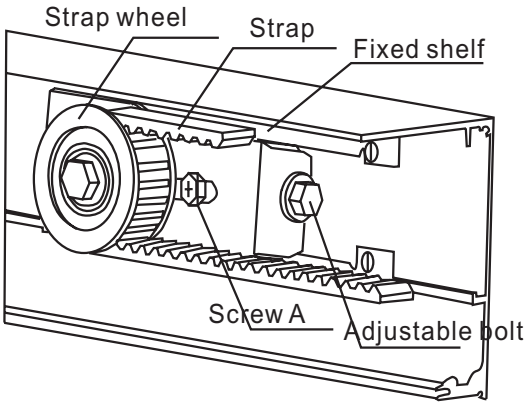
12、Tighen bolt B after changing the door position slightly



■Strap connection accessories of double-open type



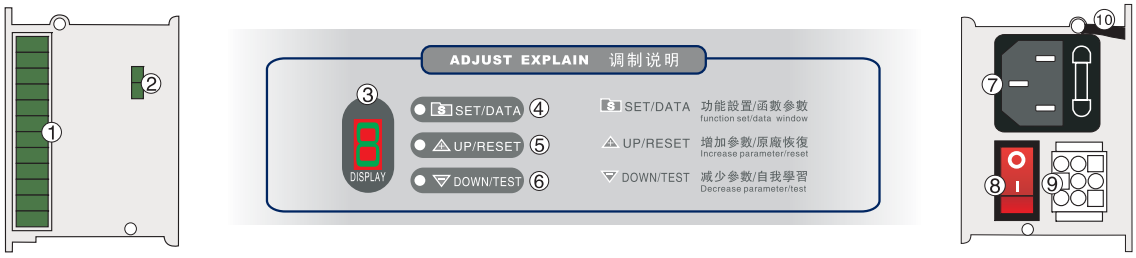
16、Installing double-open strap(continue)



1、Tighten the strap from the left of the tail wheel,and to install the bolts.
2、Loosen two screws A
3、Circumrotate the screw clockwise to adjust strap tensility,then make strap to be appropriate status.
4、At last,tighten two screws A in turn.

17、Adjusting strap tension

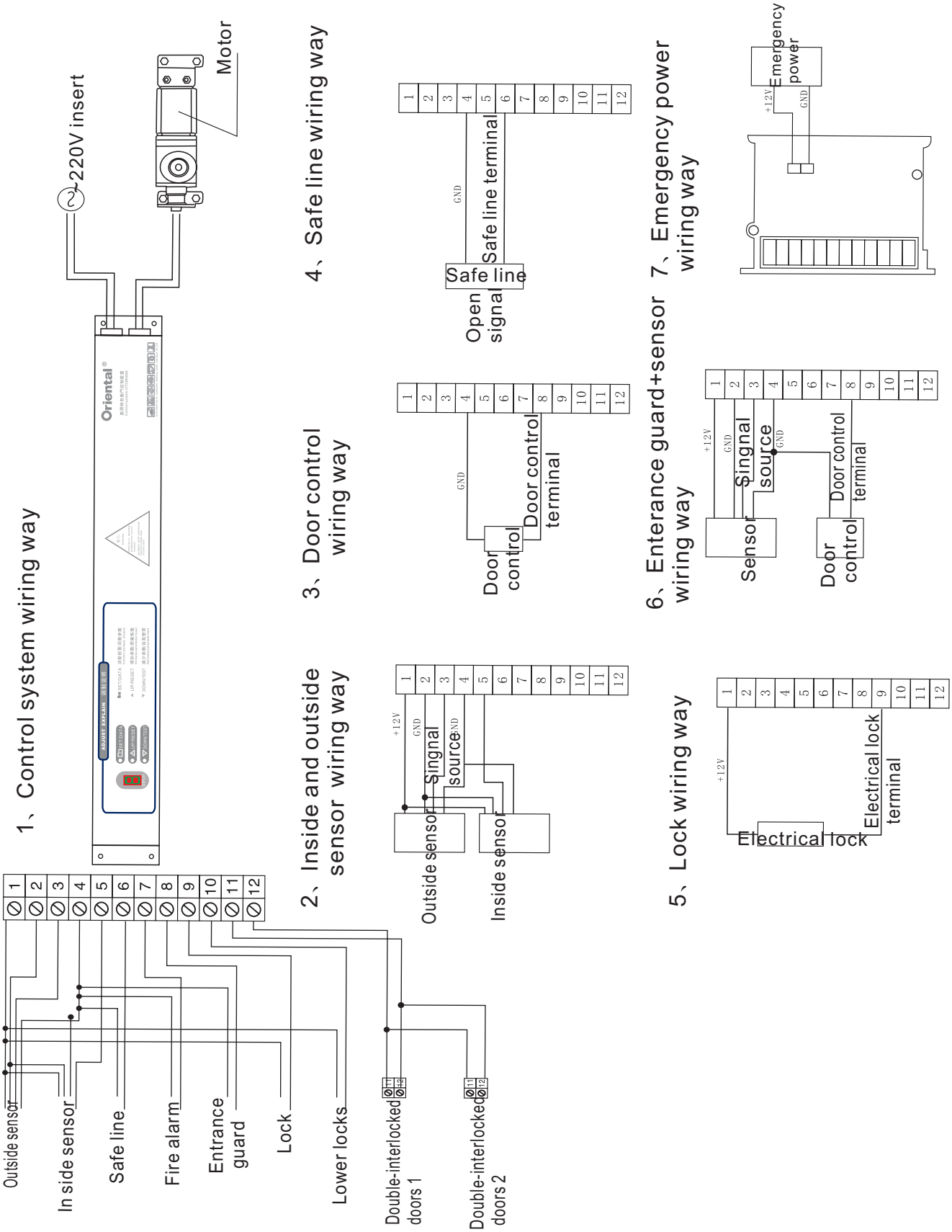
1、Controller connection



+12V	1
GND	2
Outsidesensor	3
GND	4
Inside sensor	5
Safe line	6
Fire alarm	7
Door control	8
Lock	9
Unlock	10
Interlocked receiver	11
Interlocked sent	12

1)、Autodoor controller function connection
2)、Emergency power supply connection
3)、Function display window
4)、Function choice Key/Function parameter choice key
5)、Parameter increasing Key/Original parame ter restore function key
6)、Parameter reduction Key/Self-learning key
7)、AC 220V/50HZ power connection(Single-phase belt joint protection)

18、Function components wiring diagram



19、Controller debugging explanation

⚠1、In order to ensure a good automatic door systems operation, Please use 220V~250V AC power correctly,and ensures that ground connection is fine.
2、Guaranteed that the wiring standard is good ,put through thepower source 220V,then start the control system right end cover power switch.(If carelessly, it will cause fires and electric to on-bad accident.)

■ Essential requirements

1、Install drive device completely.
2、Connect protection ground.
3、Use hand movement to examine that whether the leaf can move to the semi-open and flexible position.
4、Connect power sourec,start the first test.

■ Test explanation

OTDM-6088 control system has three kind of operation mode in accordance with user needs.

1、Automatic operation mode
when initial assembly autodoor put through electricity,the system carries out the entire journey idling speed examination .After a complete switch door,the system will load the fundamental parameter that the factory sets up voluntarily, such as the switch speed,the gate heavy,opning resident time etc. Upon completion of test,outo door enter normal operation in accordance with the parameters set by the factory.(*:for example In of electric power locked automatic locks must be run in accordance with the intelligent aperation mode

2、Intelligent operation mode
When initial assembly autodoor pass through electricituy,press DOWN/TEST Self-learn key SignificantWindow display E open auto door slowly,the window demonstrates the function code !,(Press function setted key SET/DATA Can check various funtions of operation parameters,also enter directly the artifical test mode).if there is no operation in 8 secends,the function data withdraws automatically,the control system starts to ekamine electric locking type,and a number of self-learning cycle,the microcomputer processer automaticly checks adjustment of this set of automatiic doors open,closed operating paraments.The control system automaticlly stored the best paraments during self-learning,after completing the study.demonstratin window display the code 0,And the auto door enters the Intelligen ce running status.

3、Manpower debugging operation mode

The control system for daily operation has been set up to the best condition. Unit if needs.after the auto door be in closed statues,press SET/DATA function setting key, demonstration window display the function code 1 ,then press it SET/DATA again, window display the function code 1 refer to the first content of table, adjust UP/RESET increased regulatory funtion key or reduced regulatory function ke DOWN/TEST for degugging .the first function parameters regulate,and then set up function keys SET/DATA to the next function . debug all kinds of operating parameters of auto door based on the following steps under the same table (please refer to the next table parameter hypothesis to debug the parameters) after debugging, the auto door will debug cycle according to the setted parameters .after learning control system, demonstratin window display function code 0 the auto door enter into operation.

⚠*1、If failure or interruption happened,during cycle learning,the auto door will put through the power to learn.
2、During the study,the telecontrol procedure switch devices are automation archives.
3、In the learning process,sensors、security lighting and other devices are set to be closed state.

20、Parameter list of control system function hypothesis

NO	Function explanation	Function code	Debugging scope	Unit	Original	Settings
1	Opening door speed	1	1-5	Gear	4	When open,adjust door speed
2	Closing door speed	2	1-5	Gear	3	When close,adjust door speed
3	Opening door tardo distance	3	1-10	Gear	2	Adjust the slow distancd for opening the door
4	Closing door tardo distance	4	1-10	Gear	2	Adjust the slow distance for closing the door
5	Opening resident time	5	1-15		1	The door is opened completely staying for the next closing door
6	Opening way for emergency power	6	1-3	Gear	2	1 Is regular open, 2 Is normal Open, 3 Is slow open.
7	Door weight	7	0-1	Gear	0	0 Is 35kg~75kg 1 Is 75kg~150kg
8	Openging door direction	8	0-1		1	0 Is open rigth 1 Is open left
9	Opening door width	9	0-1		1	0 Is full open 1 Is half open

21、Steps diagram of debugging control system

Normal operation display

Failure display,press menu to check.

Motor overflow

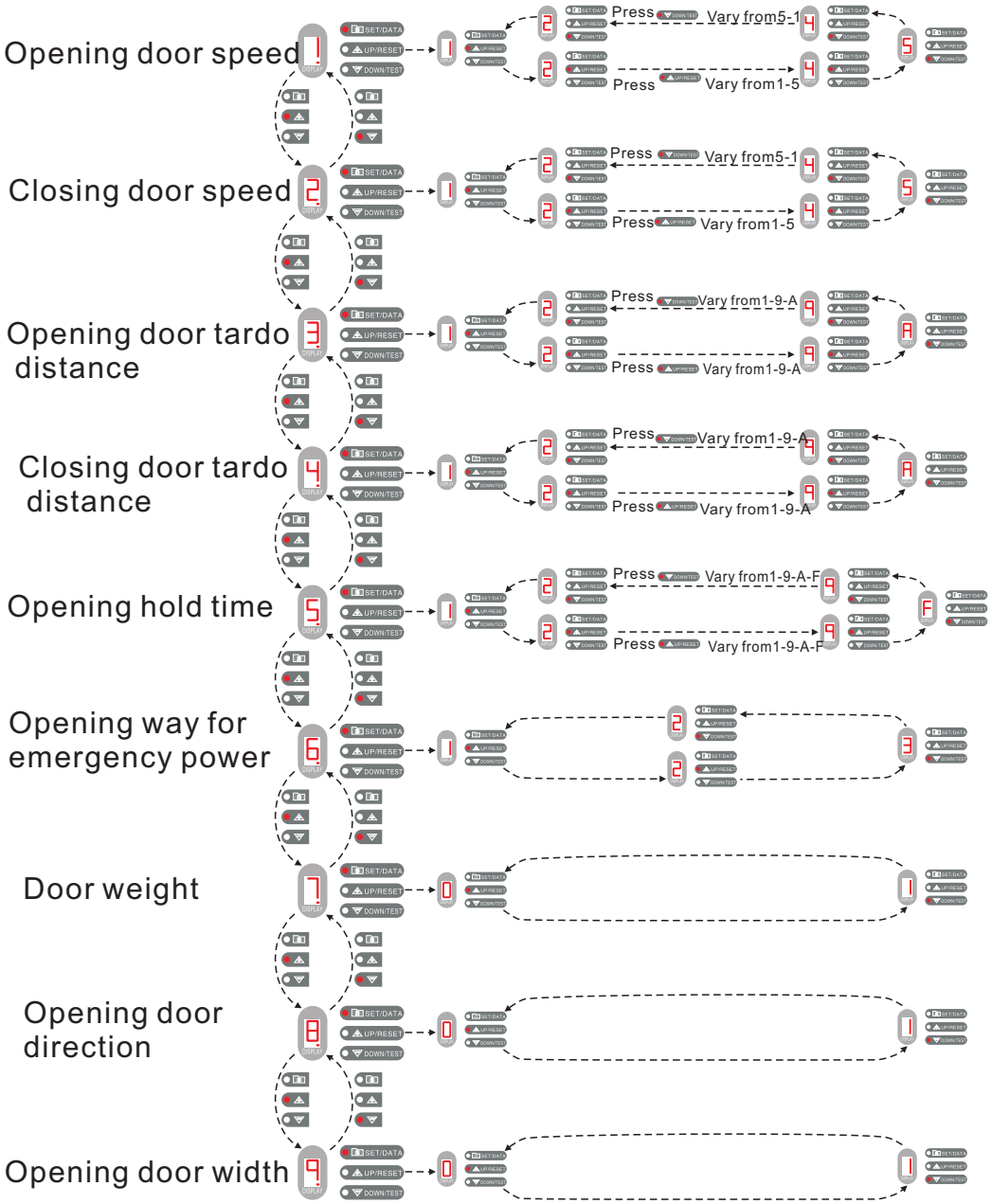
Beyond the scope of operation

Motor sensor failed

Choose function menu

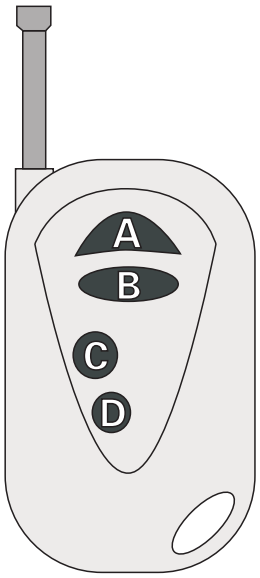
Choose the next menu

Choose the above menu



22、Control system function explanation

1、Telecontrol programmed switch operation direction



A、Auto

When the human or the object enter sensor dection range, the door leaf open autiomatioally.After pre-set opening hold time,the door leaf close.Hold time can be opened by setting the system parameter.

B、Open at one-way

When outside sensor fail,the auto door only receive the inside sensor sign,the auto door become one-way channel (for example , use it after business time).When the buman or the object enter the indoor sensor range,the door leaf open to the full-page position automatically.After pre-set opening hold time,the door leaf close.

C、Close

when the door leaf close,the auto door system keep on closed, For example,the sensor door system install the electrical lock,the door leaf will be locked.

D、Regular open

The door leaf open normal and be in the open state,until the process control mode switch to another program.

2、One-botton intelligent learning,adjust auto door various of operating parameters.When early-detection power working on the initial assembly door,it only need to press learning key DOWN/TEST ,The control system detect automatically and Adjust this sort of door function to be the best running

3、One-botton fast recover orginal parameter key.

If recover the orginal parameter, the auto door system be in closed, then press key UP/RESET ,maintain 3s, Demonstration window R display the code,and the auto door is running by the original parameter.

4、The advanced uninterruptted emergency power guarantee the auto door to operate normal after power off.

Equipped with a battary 24V/12Ah, control system will detect and charge compenstion aly automatically. The emergency power can supply the power automatically when cut off the city electricity, and electricity can be automatically switches to normal. Use the urgency power source, there are three kinds of running mode,can set up to:

1 The auto door open rgeular for-open statues,and keep in long-time opening

2 The auto door run on the mode of cut-off

3 The auto door run slowly on the mode of former cut-off.

5、Detect the flow of people automatically,adjust intelligently the auto door’s operating frequency.

Under normal operation condition,for example,the flow of people is too big,the auto door cannot be closed completely after 8 times, and the auto door will stay 30s after opening. Return to normal after peak flow

6、Set the partial opening width
the auto door can adjust the opening width according to the custamer′s need based on 8 pieces of function establishment table,and can set to full-open of partial. (E.g.decrease the wind power in winter)

7、 Set the opening resident time
the auto door can set separately according to the customer’s need based on 5 pieces of function establishment table (vary from1-15 seconds)(e.g.reduce to energy consumption at least in winter and summer)

8、Double-door interlock and multi-point security network connection According to the request,the auto door can double-door interlock, multi-door interaction,only come,only go etc.

9、Restart after power
Under not installed the emergency power,the electricity control system will carry out the self-debugging function after power failure,After one complete cycle detection,theauto door will revert to the “automatic” running state.

10、Safety function

⚠ Control system can check types of electrical lock automatically.Before installing the lock,must gurantee in the safe terms.

①.Security checking of auto door control system unit
when closing the autodoor,micro-computerized controller check the safety line and fire signal source etc.If not ,the auto door keep on opening.Please contact the enginer to check and restart.

②.Meet resistance safety stop function and back to the door function In the switch door process, the auto door stop after blocked by the high speed.The auto door alter to run slowly after blocked by the high speed.The auto door alter to run slowly after 1 second. If blocked by the low speed,the motor reverse,auto door will run reversely.The system stop automatically.stop if the door cat’t close completely. 2 minutes later,enter on the electricity self-checking program.

③.Connect with the fire centre control net.If fire sign,kinds of auto door function will be prority,the door open ,demonstration window display F code,After fire,the door revert to run automatically.

④.The doorleaf region monitor by safety line.If the safety line detect the obstacle objects when closing,the door will open to the adverse direction and stay at the open position.After removing,the door slose until the pre-set resistant time.

⑤ .No emergency power open function
If the auto door do not install the power off locking type electric lock.Push the door by hand slightly when power off.

11、Breakdown self-daignosing function

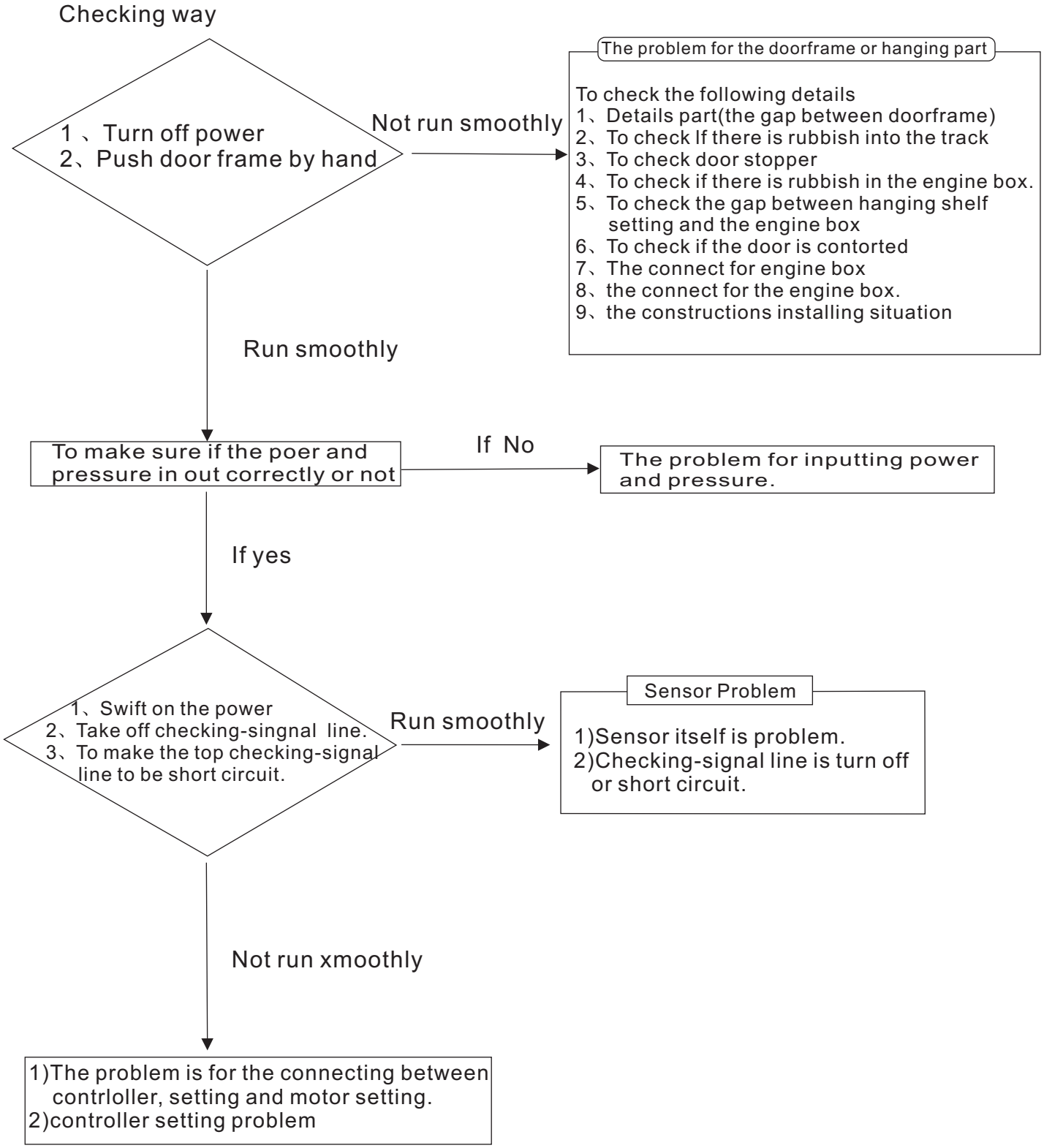
The auto door control system can check all kinds of breakdown modes by itself.After happening breakdown,demonstration window display E code, use the adjustable menu bottons to check the breakdown type.

Breakdown condition		Reason may cause breakdown	Breakdown handles
1	Motor overflow	Motor breakdown	Check、replace motor
		Control device breakdown	Check、replace motor
		Outside interfere	Eliminate the interferations and put through the power
2	The door exceed the use scope	Out of track(motor is running)	Check.replace motor
		Gear wheel box blocked	Check、replace motor
		Outside interfere	Eliminate the interferations and put through the power
3	Motor sensor breakdown	Motor connection bad	Check the connection and put through the power again
		Motor break down	Check、replace motor
		Control device breakdown	Check、replace motor
		Outside interfere	Eliminate the interferations and put through the power

12、Maintance

⚠ In order to guarantee the auto door be in well operation,after starting thedoor, twice a year to maintance by the professional staff.

23、Resolution



24、Resolution(continue)

Breakdown condition	Reason	Confirmation items	Handle
The door does not close	● Sensor continue working	There is misoperation goods in the examination region.	Clear away the objects
		There isn't misoperation goods in the examination region	Renew the sensor
	●Assistant light sensor continue working	Confirm whether rubbish in the sensor	Clear away the rubbish
		Whether the optical axis does deviate	Adjust the optical axis
	●Checking singnal line has break down	After confirming control sign which dismantled from the binding clamp. Check whether the door close.	Renew the singnal line
Sometimes the door does not operate	**Sensor misoperation** ● When use the light sensor,check whether ● the dust,waterdrop etc, in detection window	Check whether dust in the sensor examination window	Use the soft cloth which stained neuter detergent to erease
	● When use the hot sentitive sensor,the sensitivity is insufficient.	Puts the hand to the surface nearby, confirmed whether to check	Improve the sentivity to check
	● The temperaturre of the examination region close that of the human body		Renew kind of sensor
	●Carry-scraper,camion passed through		Adjust detectionregion, to make human enter.
	● The power source is unstable	Confirm the inserted voltage of sensor	Supply the steady voltage.
The door can autoswitch	**Sensor misoperation** ◆ When use the light sensor, ● Check whether the objects activities within the examinatin region.	Confirm whether objects activities in the examination region.For example,pot plant and cushion etc.	• Adjust detection region. • Remove the objects.
	●There puts the extremely intense machine near the door	Check whether intense machines near the door	Take away the intense machine
	● Cat、dog pass through		Normal
	● Overlaps with other sensor's controlled area		Change to anti-jamming switch
	● There is the fluorescent lamp,neon light in the controlled area.		• Adjust the examination region • Remove the fluorescent light. Lamp and the neon
	●There is something changed in the controlled region.For example,there left the footprint after snow in the region,		Normal
	● The door is in the examination region.	Confirmed whether the door move.	Adjust the sensor to be outside the examination region
	◆ Use door is in the examination region.	◆ Confirm the items when use the light sensor.	
	◆ When use the electon hot sentive sensor,too much sensitity cause the switch of the door to move the sensor.		Adjust the examination sensitivity

25、Resolution(continue)

Breakdown condition	Reason	Confirmation items	Handle
Switch the door is not smooth	● Set the switch speed is too slow,penetrating feeling is not fluently.	Confirm the tardo distance value	Revise the setting value
	Set up the tardo distance is too big,penetrating feeling is not fluently.	Set up the tardo distance value	Revise the setting value
	Someone bump into the door leaf when close,create the vnusoval pattern.		Sensor work by human accessment,let the door close temporarily.
	The walking resistance is too big	Cut off the power,open the door by hand • Confirm whether the rubbish in the track • Confirm whether the lock of the lower doorleaf loosen • Confirm whether track and keyhole loose owing to the stop suspend’s breakage • Confirm whether to have the obstacle	• Clear away the rubbish. • Fixed the lock • Install the stops suspend. • Clear away the obstacle
The door files are too tight	Tardo speed is too fast		Set up the slow speed
	Tardo speed is too small		Increase the tardo speed.
The door is not operated	The power source has not put through	Check the circuit breaker. Check the power switch of motor.	Put through the circuit breaker(Attention), Please contact with construction Deparment if the circuit breaker loose again. Put through the power switch
	The sensor hasbreakdown	Confirm whetner the short circuit examination en control device and function spreader’s push botton act.	Renew the sensor
	The examination signal line hascut off.		Renew the examination signal line.
	The door has locked	Confirm whether the locked is locked.	Turn on the lock of door
	There is rubbishin the track.	Confirm whether the door slip smoothly after turn off the power.	Clear away the obstacle and rubbish.
	The slipresistanceis too big		Clear away the obstacle and rubbish.
The door is unable to open entirely	The door is in half-open pattern.		Change to full-open pattern.
	Set up the weight of the door mistake		Alert to set up the weight of telecontroller.