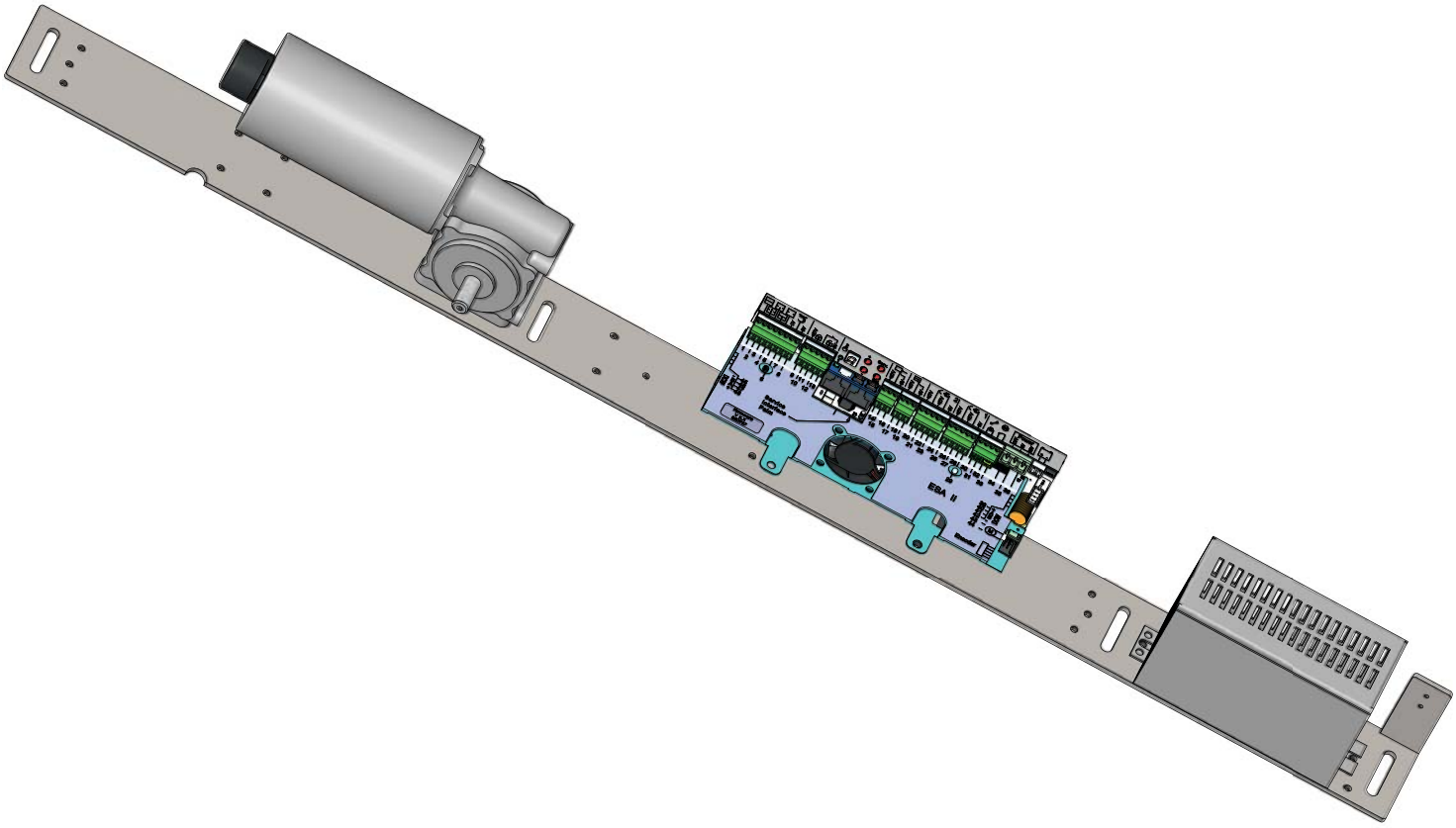


ESA II

I - Revive Slider Conversion Kit

Installation instructions

DL0658-060 – 05-2017

| EN |

dormakaba

Table of contents

1 General information

1.1 ESA II I-Revive Slider Conversion Kit installation.

This manual provides **an example** of the installation steps required to install the I-Revive Slider Conversion Kit into an existing sliding door system.

NOTICE

- **Modification of steps documented in this manual may be required due to configuration of manufacturer's sliding door installation.**
- Pictures and diagrams shown in this manual are representative of an installation of the ESA II I-Revive Slider Conversion Kit.
- Each sliding door installation may require different component locations, orientations or mounting methods.

WARNING

Check all mechanical components of the door system and replace any components not in satisfactory condition due to wear or other issues.

TIPS AND RECOMMENDATIONS

Initial startup and programming of the ESA II controller is contained in the ESA II Controller Commissioning, Troubleshooting, and Maintenance manual, see Chapter 20.

1.2 Symbols used in these instructions.

WARNING

This symbol warns of hazards which could result in personal injury or threat to health.

CAUTION

This symbol warns of a potentially unsafe procedure or situation.

NOTICE

Draws attention to important information presented in this document.

TIPS AND RECOMMENDATIONS

Clarifies instructions or other information presented in this document.

1.3 Dimensions

Unless otherwise specified, all dimensions are given in both inches (") and millimeters [mm].

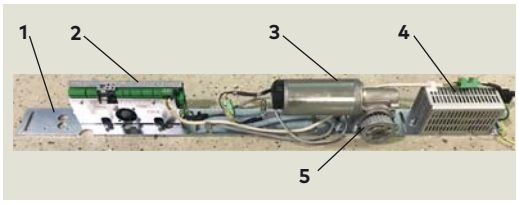
1.4 Abbreviations

- LH, Left hand
- RH, Right hand

2 Product description

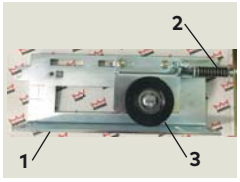
2.1 ESA II slider conversion kit components

Fig. 2.1.1 Backplate assembly



1 Backplate
2 ESA II controller
3 Motor gearbox
4 DC power supply

Fig. 2.1.2 Return pulley



1 Return pulley assembly
2 Belt tensioner
3 Return pulley
4 Belt

Fig. 2.1.3 Belt

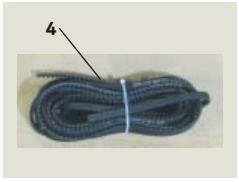


Fig. 2.1.4 Fastener packs

1 Fastener packs, belt and carrier bar brackets

2.1.1 I - Revive slider conversion kit

- DC1869-010

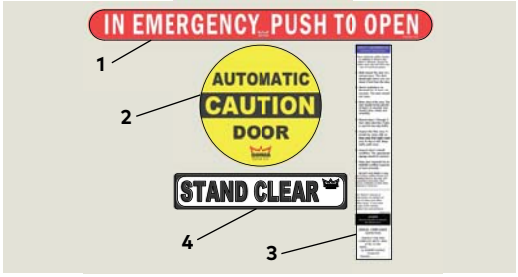
1. Backplate assembly
2. Return pulley and belt tension assembly

- Fig. 2.1.2 shows return pulley assembly as shipped, with tension adjustment on right hand side of assembly.
- Specific installations may require tension adjustment location on left hand side of assembly. This requires relocation of tension assembly along with installation of long tension adjustment bolt, see Chapter 7.

3. Belt
4. Fastener packs

2.2 Additional standard kit components

Fig. 2.2.1 ESA safety label kit



1 Decal quantity 2
2 Decal, double sided quantity 2
3 Decal quantity 1
4 Decal quantity 2

Fig. 2.2.2 BEA IXIO-DT1

1 BEA IXIO - DT1 quantity 2
2 Hole plug kit quantity 1

Fig. 2.2.3 Hole plug kit

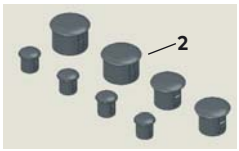
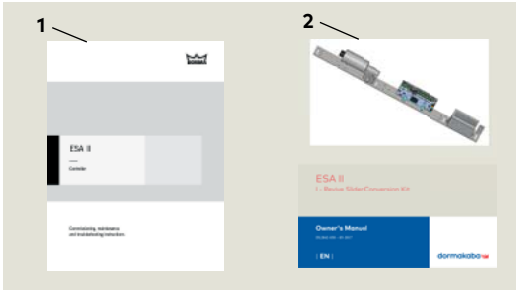


Fig. 2.2.4 Manuals



1 ESA II Commissioning, Troubleshooting and Maintenance manual
2 ESA II I-Revive Slider Conversion Kit Owner's manual

2.2.1 ESA safety label kit

- DK3112-030, Safety label kit, pair

2.2.2 Activation & safety sensor

- DX3336-012
- BEA IXIO - DT1

2.2.3 Hole plug kit

- DC0858

2.2.4 Manuals

1. ESA II Controller Commissioning, Troubleshooting and Maintenance manual

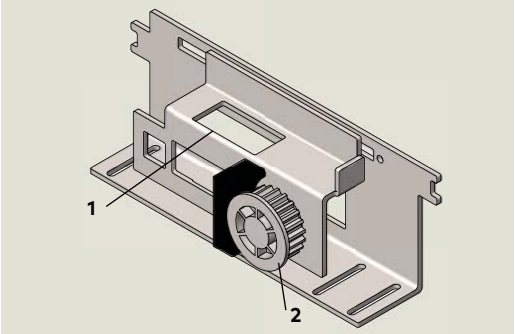
- DL2842-010

2. ESA II I-Revive Slider Conversion Kit Owner's manual

- DL2842-030

2.3 Optional components

Fig. 2.3.1 I-Revive standard lock, bistable

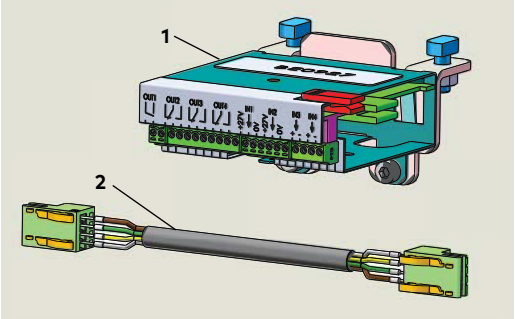


1 I-Revive standard lock, bi-stable
2 Return pulley

2.3.1 I-Revive standard lock, bistable

- DC3586-010
- Refer to ESA II Commissioning, Maintenance and Troubleshooting manual, Section 23-D for parameter setup.

Fig. 2.3.2 ESA expansion module and cable

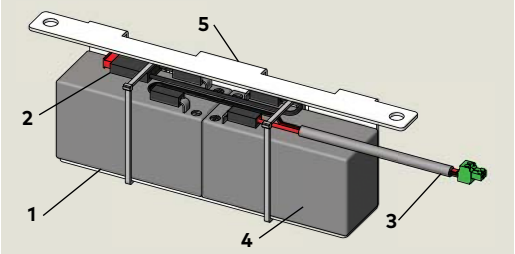


1 ESA expansion module
2 Expansion module cable

2.3.2 ESA II expansion module with cable

- DX2889-010
- Refer to ESA II Commissioning, Maintenance and Troubleshooting manual, Section 10 for installation and Sections 22 and 23 for wiring.

Fig. 2.3.3 ESA II battery backup assembly

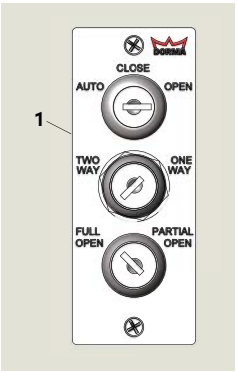


1 Battery backup assembly
2 10 amp blade and fuse holder
3 10 foot cable
4 12 V 1.2 AH battery
5 Bracket

2.3.3 ESA II battery backup

- DS2890-010
- Rechargeable battery pack with 10 ft [3 meter] cable.
- Refer to ESA II Commissioning, Maintenance and Troubleshooting manual, Section 24 G through K for functional test.

Fig. 2.3.4 Key switch panel assembly



1 Key switch panel

2.3.4 Key switch panel

- DX3281

3 Standard conversion kit contents

3.1 Standard conversion kit contents

3.1.1 Boxes containing kit hardware

Fig. 3.1 .1 Kit shipping boxes

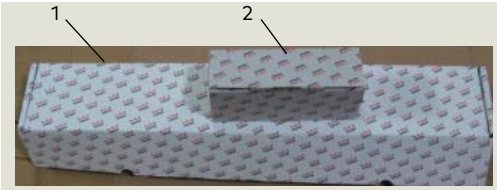
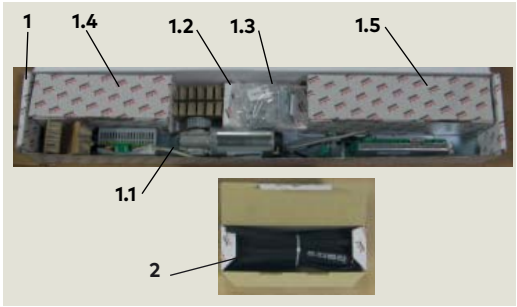


Fig. 3.1.2 Kit shipping boxes opened



Kit boxes and content will differ based on order.

- **1** Box containing conversion kit
- **1.1** Backplate assembly
- **1.2** Box containing 115 VAC wiring and plug for DC power supply
- **1.3** Fastening hardware packs
- **1.4** ESA II rechargeable battery pack (option)
- **1.5** Return pully and belt tension adjustment assembly
- **1.6** Special T-bolt and nut
- **1.7** Belt
- **2** Box containing belt

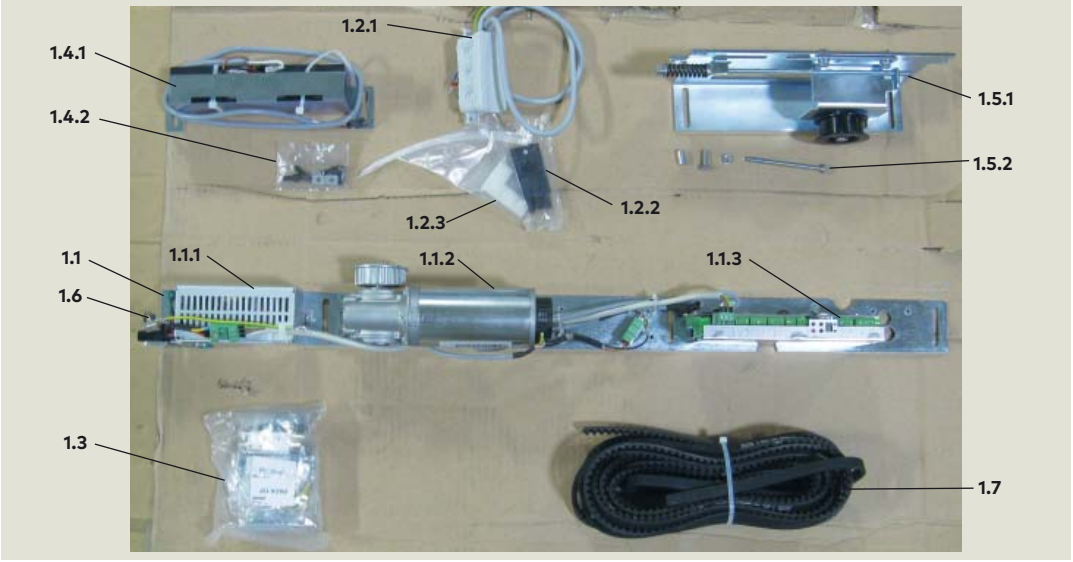
3.1.2 Kit contents removed from shipping boxes

Fig. 3.1.3 Kit contents removed from shipping boxes

- **1.1** Backplate
- **1.1.1** DC power supply
- **1.1.2** Motor gearbox
- **1.1.3** ESA II controller
- **1.2.1** 115 VAC cable
- **1.2.2** 115 VAC plug for DC power supply
- **1.2.3**
- **1.3** Fastening hardware packs
- **1.4.1** ESA II rechargeable battery pack (option)
- **1.4.2** Fastening hardware
- **1.5.1** Return pully and belt tension adjustment
- **1.5.2** Short tension adjusment bolt
- **1.6** Special T-bolt & nut
- **1.7** Belt

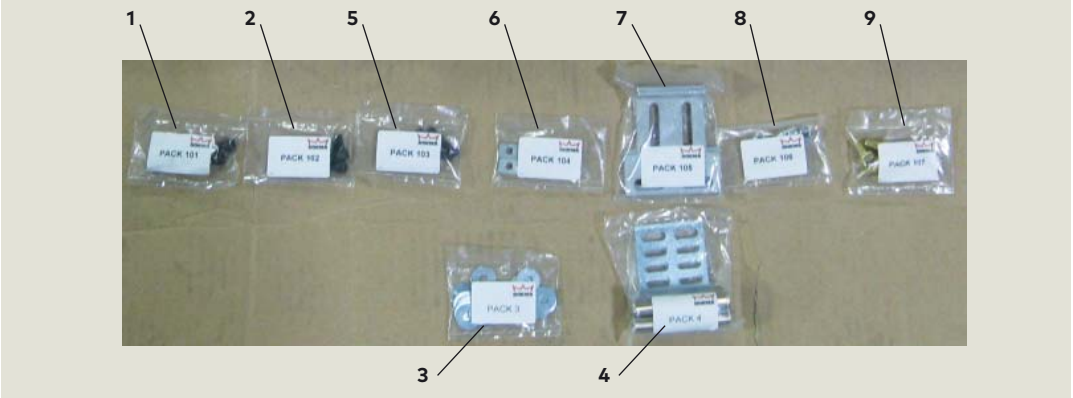
3.1.3 Kit hardware removed from all boxes

Fig. 3.1.4 Kit contents removed from all boxes



3.1.4 Fastening hardware pack numbers

Fig. 3.1.5 Fastening hardware packs and pack numbers



1 Pack 101
1/4" x 3/4" SHCS
2 Pack 102
1/4" x 1/2" SHCS
3 Pack 3
18 mm flat washer
4 Pack 4
Belt connection bracket parts
5 Pack 103
1/4" x 5/8" SHCS
6 Pack 104
T-nut
7 Pack 105
Carrier bar belt bracket
8 Pack 106
1/4" locking nut
9 Pack 107
5/16" x 1/4" HHCS

3.1.5 Fastening pack hardware views

Fig. 3.1.6 Pack 101

Fig. 3.1.7 Pack 102

Fig. 3.1.8 Pack 3

Fig.3.1.9 Pack 4

Fig. 3.1.10 Pack 103

Fig. 3.1.11 Pack 104

Fig. 3.1.12 Pack 105

Fig. 3.1.13 Pack 106

Fig. 3.1.14 Pack 107

Fig. 3.1.15 T-bolt & nut

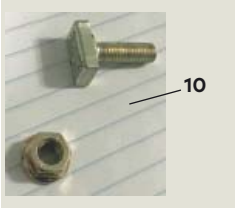
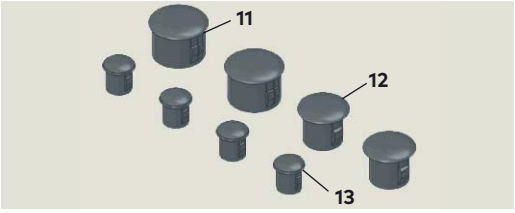


Fig. 3.1.16 DC0858 Hole plug kit



10 Special T-bolt and nut
11 1/2" hole plug
12 3/8" hole plug
13 1/4" hole plug

3.1.6 Fastening pack hardware quantities and descriptions

Pack number	Part quantities			Pack description	Reference chapter
	Pack	Stanley	Horton		
3	16	12	12	18 mm flat washer	6, 7, 12, 13, 14
4	2	2	2	Belt connection bracket parts	9, 11, 12, 13, 14
101	4	4	4	SHCS, 1/4 x 3/4"	12, 13, 14
102	6	0	6	SHCS, 1/4 x 1/2"	N/A
103	6	6	0	SHCS, 1/4 x 5/8"	6, 7

Pack number	Part quantities			Pack description	Reference chapter
	Pack	Stanley	Horton		
104	6	6	6	T-nut	6, 7
105	2	2	2	Carrier bar belt bracket	11, 12, 13, 14
106	4	4	4	Locking nut	12, 13, 14
107	4	4	0	HHCS, 5/16 x 1/4"	12, 13, 14
---	1	1		Special T-bolt & nut Fig.3.1.15	6

4 Remove all hardware from header

4.1 Identify devices wired to existing controller

4.1.1 Devices and wiring connections

1. Document devices wired to controller:

- Functions (security contacts, mag locks, etc.).
- Wire colors and connections to controller terminals (DC, signal).

4.1.2 Existing activation and presence sensors

1. IXIO-DTI presence and activation sensors and wiring provided with this kit (Para. 2.2) will replace any existing activation and presense sensors and wiring, disconnect and discard this sensor wiring.

4.1.3 Door beam sensors

1. Document any beam sensor wiring.

4.1.4 Floor mat wiring

1. Document any floor mat wiring.

TIPS AND RECOMMENDATIONS

Insure all wiring connections to existing controller are fully documented!

4.2 Disconnect 115 VAC wiring to existing controller

4.2.1 115 VAC power to controller

1. Locate customer circuit breaker supplying 115 VAC power to controller.
2. Turn circuit breaker OFF.

4.2.2 Disconnect 115 VAC wiring from controller.

1. Disconnect 115 VAC wiring from controller.
2. Install wire nuts or electrical black tape on ends of 115 VAC wiring.
3. If circuit breaker number and location not identified in header, affix label or tag with this information.

WARNING

115 VAC power wiring will be removed from existing controller (Para. 4.2.2).
Electric shock hazard if circuit breaker not turned OFF!

4.3 Disconnect all wiring and remove all hardware from header

4.3.1 Disconnect all wiring to controller.

1. Disconnect all wiring to existing controller referenced in Para. 4.1, including on/off/hold open switch wiring.

- Discard "power" switch wiring.
- Do not remove on/off/hold open switches.

2. Insure functions of all wiring are labeled.

4.3.2 Remove all hardware from header.

1. Remove hardware from header (controller, motor, gearbox, pulleys, belts, brackets).
2. Do not remove any physical door hardstops.

4.4 Door carrier bar belt brackets

4.4.1 Carrier bar belt brackets attached to door.

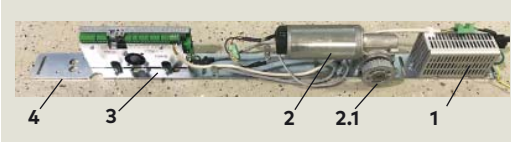
- Stanley doors, remove existing carrier bar belt brackets attached to doors (Chapter 11). Brackets will be replaced with brackets in Fastener pack 105.
- Horton doors, leave existing carrier bar belt brackets attached to doors.

5 Backplate component layout

5.1 Backplate components

1 DC power supply
2. Motor gearbox
2.1 Motor gearbox pulley
3 ESA II controller
4 Backplate

Fig. 5.1.1 Backplate components

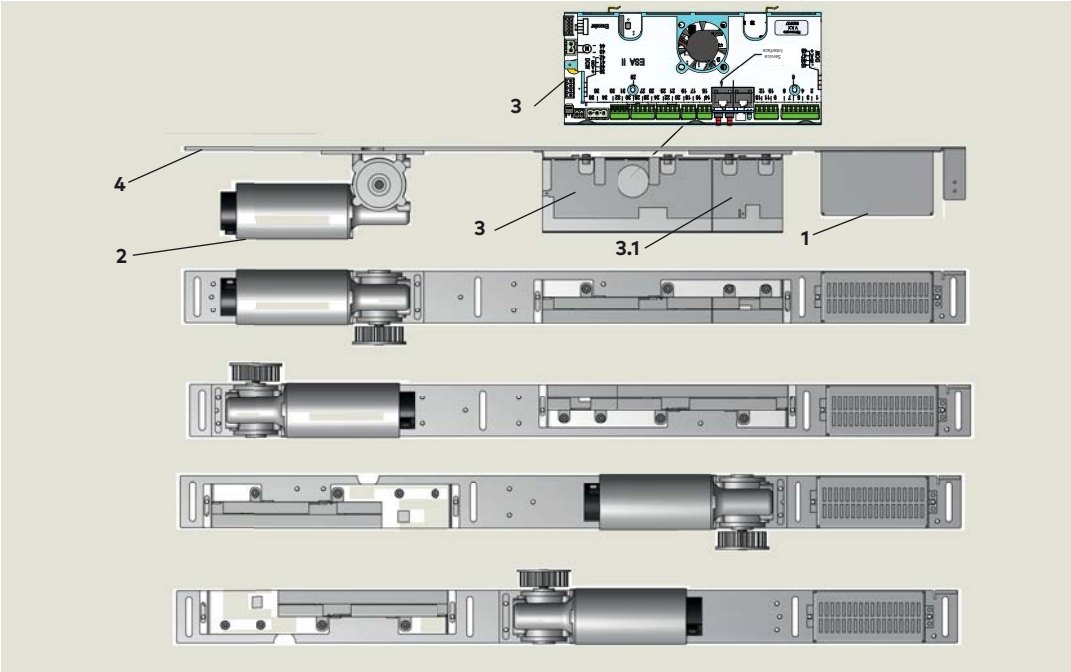


5.1.1 Backplate components

1. Components installed on backplate are shown in Fig. 5.1.1.

Fig. 5.1.2 Backplate component layouts

1 DC power supply
2. Motor gearbox
2.1 Motor gearbox pulley
3 ESA II controller
3.1 ESA Expansion module (option)
4 Backplate



5.1.2 Backplate location and layout

The manufacturer's sliding door installation may determine:

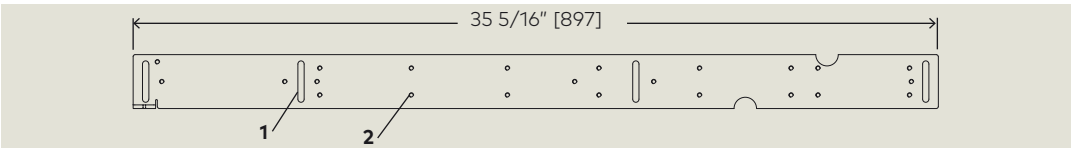
1. Backplate location in header.
2. Backplate component layout.
3. Motor gearbox orientation; pulley must be in line with belt.
4. DC power supply should be located at one side of backplate. Seven to eight inches of space between power supply and edge of header is required for installation and removal of 115 VAC plug and cable.

TIPS AND RECOMMENDATIONS

For top of header installation, ESA II controller must be mounted on backplate so that terminal connections and labeling face outward.

Fig. 5.1.3 Backplate detail

1 (4) slots for header mounting fasteners
2. (23) M5 x 0.8 holes for component mounting



6 Install backplate assembly in header

6.1 Modify header T-slot height

1 T-slot height modification
2 T-nut (Pack 104)
3 Header

Fig. 6.1.1 Header T-slot height modification

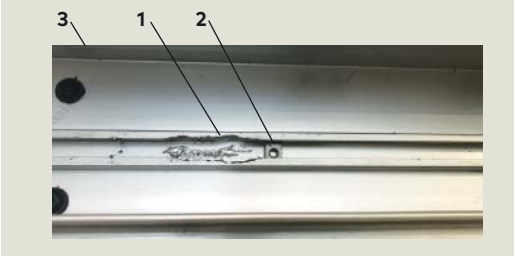
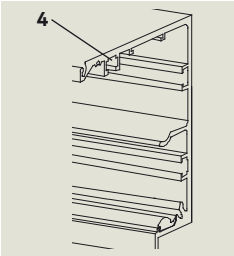


Fig. 6.1.2 Horton T-slot

4 Horton T-slot



6.1.1 Existing header T-bolts

Move exiting header T-bolts to right and left hand ends of header.

6.1.2 Increase height of header T-slot.

1. Increase height of T-slot in a location near one side of header.
- Recommended tool: 7/8" to 1-1/8" Unibit.
- Horton headers use top T-slot for mounting backplate and return pulley assemblies (Fig. 6.1.2), see Chapter 15.

TIPS AND RECOMMENDATIONS

Expansion of T-slot height is necessary to install T-nuts (Fig. 6.3.3).

6.2 115 VAC wiring termination location

6.2.1 Header 115 VAC wiring location.

1. 115 VAC wiring will terminate at backplate DC power supply location (Fig. 6.3.1 as an example).
2. If required, extend existing 115 VAC wiring to DC power supply location before proceding.

6.3 Insert T-nuts into header T-slot

1 Backplate slot for T-bolt (Fig. 6.3.4)
2.1 Backplate slot
2.2 Backplate slot
2.3 Backplate slot
3 Backplate
4 Header T-slot
5 DC power supply

Fig. 6.3.1 Backplate slots for T-nut locations

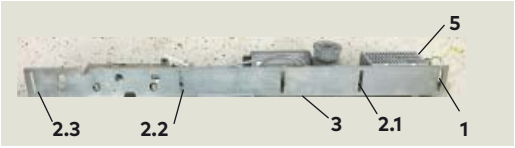
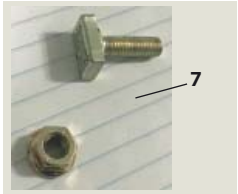


Fig. 6.3.2 Header T-slot

Fig. 6.3.3 Pack 104

Fig. 6.3.4 T-bolt, nut



6 Pack 104 T-nuts
7 Special T-bolt and nut

TIPS AND RECOMMENDATIONS

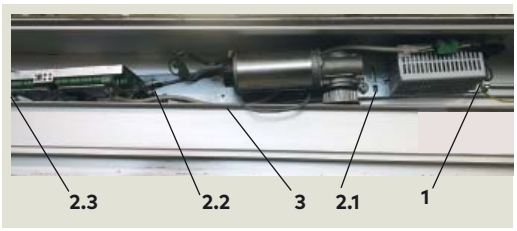
Backplate component layout may differ from Fig. 6.3.1.

6.3.1 Insert T-nuts for backplate mounting.

1. Insert (3) T-nuts (Fig. 6.3.3) into header T-Slot at height modification location (Fig. 6.1.1).
2. Position T-nuts at backplate assembly location in header (Para. 6.4).

6.4 Install backplate into header

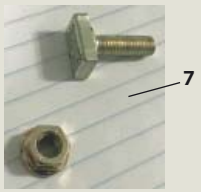
Fig. 6.4.1 Backplate T-nut locations in header



1 Backplate slot
2.1 Backplate slot
2.2 Backplate slot
2.3 Backplate slot (not shown)
3 Backplate

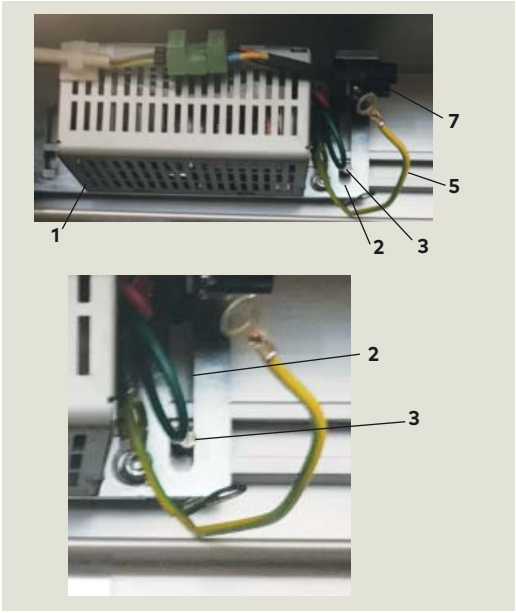
Fig. 6.4.2 Pack 104

Fig. 6.4.3 T-bolt, nut



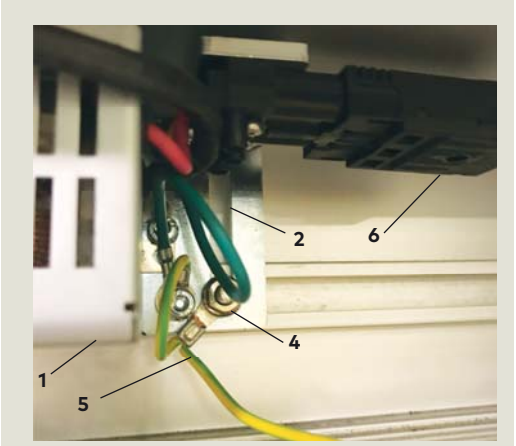
6 Pack 104 T-nuts
7 Special T-bolt and nut

Fig. 6.4.4 T-bolt in backplate slot



1 DC power supply
2 Backplate slot next to DC power supply 115 VAC connection
3 Special T-bolt
5 Backplate ground wire
7 115 VAC receptacle

Fig. 6.4.5 T-slot bolt nut



1 DC power supply
2 Backplate slot next to DC power supply. 115 VAC connection
4 T bolt nut
5 Backplate ground wire
6 115 VAC plug

6.4.1 Place backplate assembly (Chapter 5) into header.

1. Place backplate assembly into header.

CAUTION

Seven to eight inches of space next to DC power supply 115 VAC receptacle (Fig. 6.4.4.) is required for installing and removing 115 VAC plug (Fig 6.4.5) and wiring.

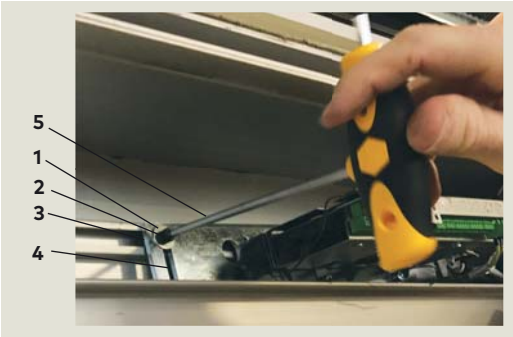
2. Position installed T-nuts (Para. 6.3.1) in approximate backplate T slot locations 2.1, 2.2, and 2.3 (Fig. 6.4.1).

6.4.2 Install backplate over special T-bolt.

Special T-bolt (Fig. 6.4.3) will be used as a ground connection.

1. Insert special T-bolt in header T-slot next to DC power supply (Fig 6.4.4).
2. Install backplate slot next to DC power supply 115 VAC connection (Fig. 6.4.4) over special T-bolt.
3. Place backplate ground wire lug over special T-bolt.
4. Thread nut (Fig. 6.4.5) onto special T-bolt but do not fully tighten.

Fig. 6.4.6 Securing backplate slot



1 Pack 3
18 mm flat washer
2 Pack 102
1/4 x 1/2" SHCS
(Horton)
2 Pack 103
1/4 x 5/8" SHCS
(Stanley)
3 Pack 104, T-nut
4 Backplate slot
5 5/32" T-handle hex key

Fig. 6.4.7 Pack 3

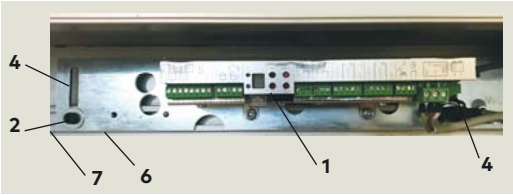
1 Pack 3
18 mm flat washer
2 Pack 102
1/4 x 1/2" SHCS
(Horton)
2 Pack 103
1/4 x 5/8" SHCS
3 Pack 104
T-nuts

Fig. 6.4.8 Pack 103

Fig. 6.4.9 Pack 104

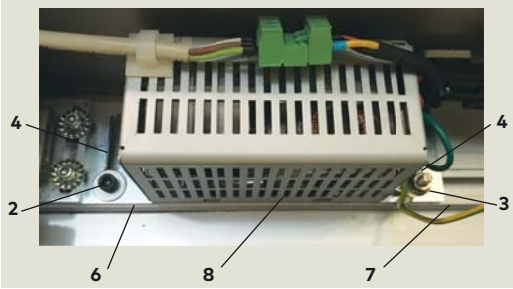
Fig. 6.4.10 Pack 102

Fig. 6.4.11 Backplate flush with header T-slot



1 ESA II controller
2 Pack 102
1/4 x 1/2" SHCS
(Horton)
2 Pack 103
1/4 x 5/8" SHCS
(Stanley)
3 Nut
4 Backplate slot
6 Bottom of backplate
7 Bottom of header T-slot
8 DC power supply

Fig. 6.4.12 Backplate flush with header T-slot



6.4.3 Install SHCSs into T-nuts.

1. Align the three T-nuts in header T-slot behind backplate slots (Fig. 6.4.1) before proceding with step 2.
2. Place 18 mm flat washer onto SHCS (2).
3. Using 5/32 T-handle hex key, thread SHCS (2) into T-nut. Do not tighten. LH backplate slot shown as reference.
4. Repeat for remaining two SHSCs.

6.4.4 Align backplate flush with header T-slot and tighten SHCSs (Stanley).

1. Lift backplate until bottom of backplate is flush with bottom of header T-slot.
2. Tighten (2) SHCS at ESA II controller backplate slots. Check for flush surfaces between bottom of backplate and bottom of header T-slot.
3. Tighten SHCS at DC power supply.
4. Check for flush surfaces between bottom of backplate and bottom of header T-slot.

6.4.5 Tighten nut on special T-bolt.

5. Tighten nut (3) at DC power supply.

6.4.6 Backplate mounted on top of header (Horton).

1. Position backplate on top of header as shown in Chapter 16, Fig. 16.1.2.
2. Insure backplate is parallel to header.
3. Tighten three SHCS and nut on special T-bolt.

7 Install return pulley assembly in header

7.1 Install return pulley assembly in header

1 Return pulley assembly
2 Return pulley
3 Tension adjustment, long bolt
4 3 slots for mounting assembly to header
5 Tension adjustment, short bolt

Fig. 7.1.1 Return pulley tension adjustment, short bolt.

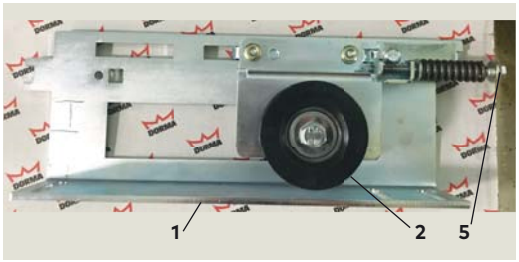


Fig. 7.1.2 Return pulley tension adjustment, long bolt.

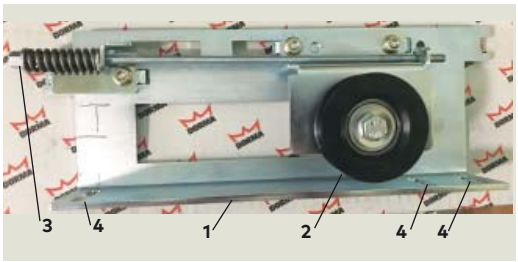
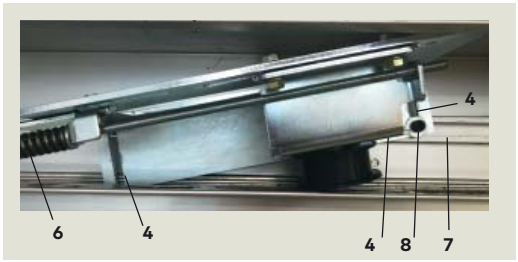
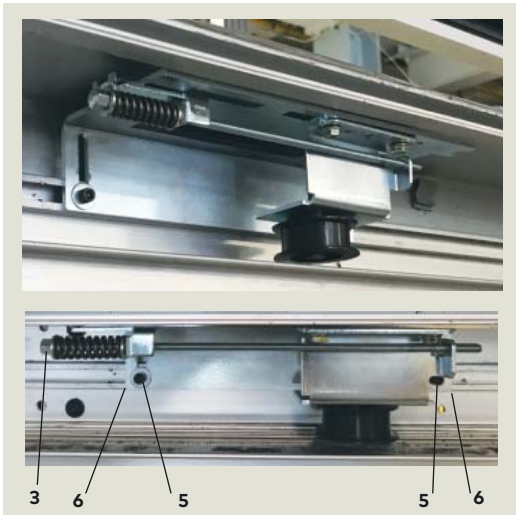


Fig. 7.1.2 Fasten return pulley assembly to header



4 Mounting slots
6 Belt tension adjustment bolt
7 Header T-slot
8 Pack 3, 18 mm flat washer
Pack 104, T-nut
Pack 103, 1/4" x 5/8" SHCS (Stanley)
Pack 102, 1/4" x 1/2" SHCS (Horton)

Fig. 7.1.6 Return pulley assembly installed in header



3 Belt tension adjustment bolt
5 SHCS with flat washer
6 Flush surface at header T-slot and return pulley assemlby

NOTICE

If installing return pulley with I-Revive standard lock, bi-stable option (Fig. 8.3.1), **belt must be routed around return pulley before installing assembly in header.**
Go to Para. 8.3.1.

7.1.1 Insert T-nuts into header T-slot

1. Insert three T-nuts (Pack 104) into header T-slot height modification (Para. 6.1).

7.1.2 Place return pulley assembly in header

1. Place return pulley assembly into header.

TIPS AND RECOMMENDATIONS

A minimum of four inches of space must be provided for adjustment of belt tension adjustment bolt.

7.1.3 Fasten assembly to header.

1. Slide T-nuts into position behind return pulley assembly mounting slots.
2. Place 18 mm flat washer (Pack 3) onto SHCS (8).
3. Using 5/32" T-handle hex key, thread SHCS (8) into T-nut behind slot, do not tighten.
4. Repeat steps 2 and 3 at remaining two slots.

7.1.4 Return pulley bracket flush with bottom of header T-slot (Stanley).

1. Lift return pulley assembly until bottom of bracket is flush with bottom of header T-slot.
2. Tighten the three SHCSs.
3. Check for flush surface of bottom of return pulley bracket and bottom of header T-slot.

7.1.5 Return pulley mounted on top of header (Horton).

1. Position return pulley on top of header as shown in Chapter 18, Fig. 18.1.2.
2. Insure return pulley is parallel to header.
3. Tighten three SHCS.

8 Install belt

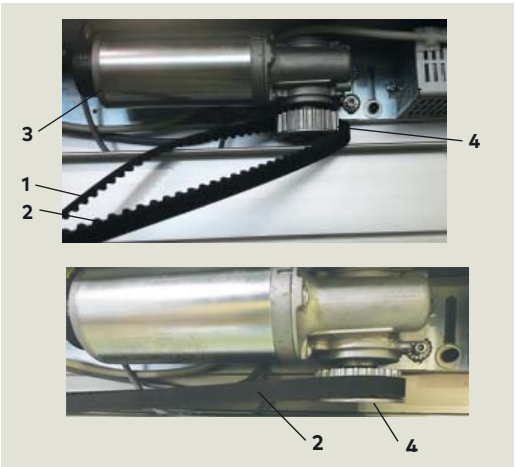
8.1 Route belt around motor gearhead pulley

9 Belt

Fig. 8.1.1 Belt

1 Rear of belt
2 Front of belt
3 Motor gearhead
4 Pulley

Fig. 8.1.2 Belt at motor gearhead



TIPS AND RECOMMENDATIONS

Motor gearhead position and location may be different than shown in Fig. 8.1.2

8.1.1 Route belt around motor gearhead pulley.

1. Place belt around pulley at motor gearhead.
2. Carry one belt end to return pulley location in header.

CAUTION

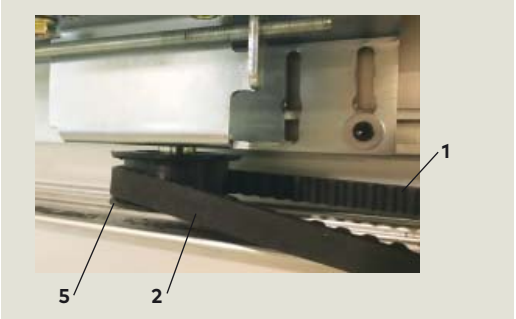
Insure belt is not twisted between the two pulleys!

3. Carry other belt end to center of header.

8.2 Route belt around standard return pulley

1 Rear of belt
2 Front of belt
5 Return pulley

Fig. 8.2.1 Belt at return pulley assembly



TIPS AND RECOMMENDATIONS

Return pulley configuration, position and location may be different than shown in Fig. 8.2.1.

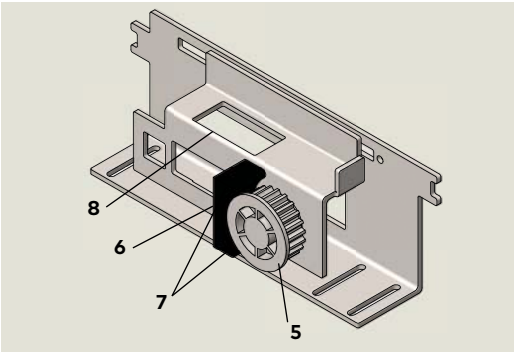
8.2.1 Route belt around return pulley.

1. Route belt end from gearmotor pulley around return pulley.
2. Carry belt end to center of header.

8.3 Route belt around return pulley, standard lock, bi-stable assembly (option)

5 Return pulley
6 Belt retainer
7 Hex screw
8 Bistable lock (not shown)

Fig. 8.3.1 I-Revive standard lock, bi-stable assembly



8.3.1 Route belt around return pulley

1. Orient assembly as shown in Fig 8.3.1.
2. Loosen (2) hex screws with a 4 mm T-hande hex key and remove belt retainer.
3. Route belt from motor gearhead around pulley.
4. Reinstall belt retainer and secure with the two hex screws.

8.3.2 Install assembly in header, go to Para. 7.1.2.

5. After assembly is installed in header carry belt to middle of header.

9 Belt connection bracket, ends of belt

9.1 Fasten ends of belt to belt connection bracket

1 Belt
2 Belt clamping plate
2.1 Clamping plate tab
3 Pack 4 Belt connection bracket
3.1 Bracket slot for clamping plate tab
4 Spring clip

Fig.9.1.1 Belt clamping plate and connection bracket

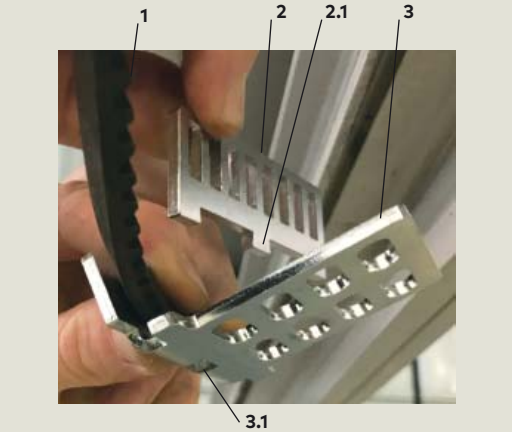
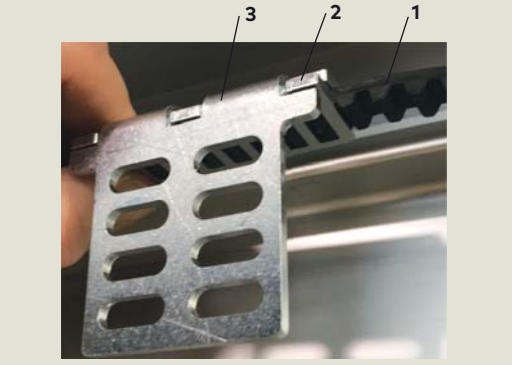


Fig.9.1.3 Belt teeth fully inserted in clamping plate



9.1.1 Secure belt ends in belt connection bracket.

TIPS AND RECOMMENDATIONS

This procedure secures belt ends to belt connection bracket.
If a bi-part door, Chapter 13 or 17 documents installation of second belt connection bracket.

TIPS AND RECOMMENDATIONS

Bracket orientation and belt may differ based on installation.

1. Place belt end surfaces against belt connection bracket, with belt ends against each other (Fig. 9.1.1).

Fig.9.1.2 Moving clamping plate toward belt

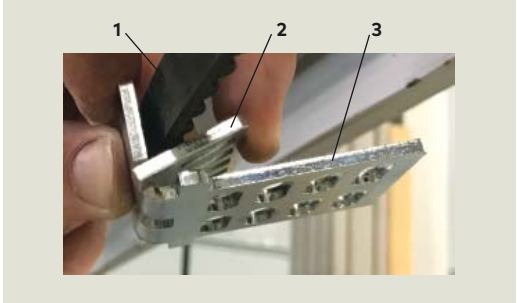
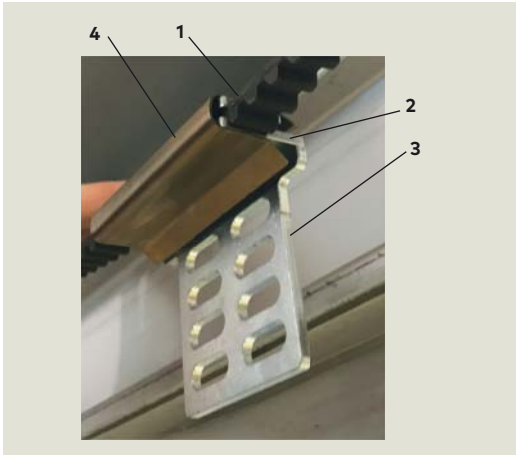


Fig.9.1.4 Spring clip installed, view of bracket reversed to show spring clip



CAUTION

Insure belt is not twisted between the two pulleys!

2. Insert three tabs in belt clamping plate (2) into corresponding slots in belt connection bracket (3).
3. Press four belt teeth at each end of belt into slots in belt clamping plate.
4. Press clamping plate against belt connection bracket until belt teeth are fully inserted in clamping plate slots and clamping plate is parallel to belt connection bracket surface (Fig. 9.1.3).

9.1.2 Install spring clip.

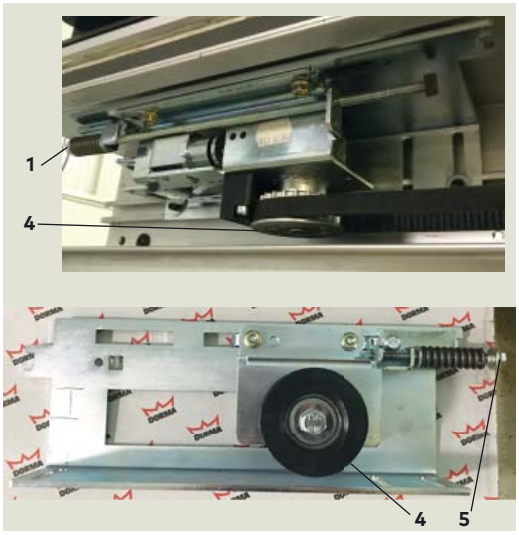
1. Press spring clip (4) over belt connection bracket and belt clamping plate until fully inserted as shown in Fig. 9.1.4.

10 Tension belt

10.1 Tension belt using tension adjustment at return pulley

1 Belt tension adjustment, long bolt
4 Return pulley
5 Belt tension adjustment, short bolt

Fig.10.1.1 Tension adjustment bolt



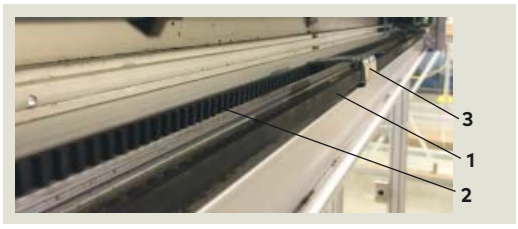
10.1.1 Tension belt.

1. Use 10 mm wrench or socket to adjust tension adjustment bolt on return pulley assembly (Optional standard lock, bi-stable assembly shown).
2. Adjust belt tension to obtain:

- Belt deflection at center of belt of 1/4" to 3/8" when squeezing front and rear of belts together with moderate effort.

1 Front of belt
2 Rear of belt
3 Front of belt, belt connection bracket

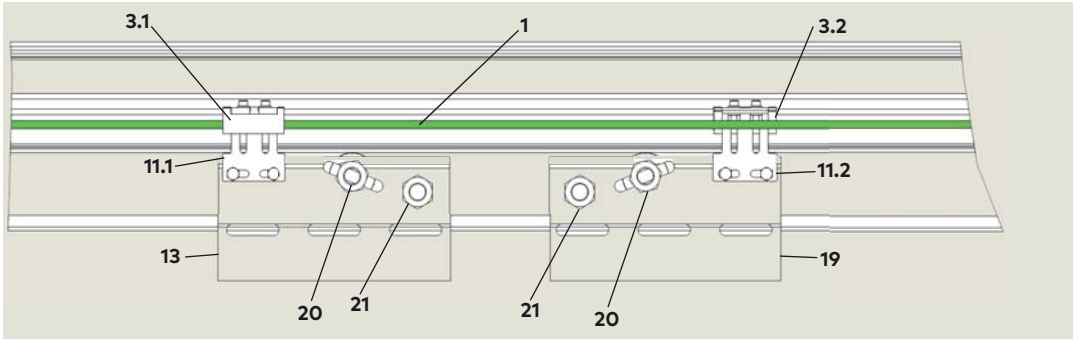
Fig.10.1.2 Belt tensioned



11 Stanley door installation, chapters 11 - 14

1 Front of belt
3.1 Belt connection bracket, front of belt
3.2 Belt connection bracket, rear of belt
11.1 Carrier bar belt bracket, single or LH bi-part door
11.2 Carrier bar belt bracket, RH bi-part door
13 Door carrier bar, Single or LH bi-part door
19 Door carrier bar, RH bi-part door
20 Anti-riser wheel
21 Load wheel

Fig.11.1 Door carrier bars, belt connection and carrier bar belt brackets



11.1.1 Stanley door installation
Chapters 11 through 14 document connecting header belt connection brackets to carrier bar belt brackets.

11.1.2 Reference installation chapters

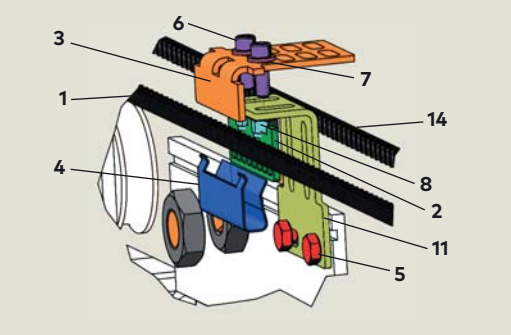
- Chapter 12, Front of belt connection to single or LH bi-part door.
- Chapter 13, Fasten belt connection bracket to rear of belt, RH bi-part door.
- Chapter 14, Rear of belt connection to RH bi-part door.

12 Front of belt connection to door

12.1 Fasten carrier bar belt bracket to belt connection bracket

1 Front of belt
2 Belt clamping plate
3 Belt connection bracket
4 Belt spring clip
5 Pack 107 5/16" x 1/4" HHCS
6 Pack 101 1/4" x 3/4" SHCS
7 Pack 3 18 mm flat washer
8 Pack 106 1/4" locking nut
9 Pack 104 T-nut
10 Pack 103 1/4 x 5/8" SHCS
11 Pack 105 Carrier bar belt bracket
12 Return pulley assembly, Chapter 7
13 Door carrier bar
14 Rear of belt
20 Anti-riser wheel
21 Load wheel
23 Carrier bar mounting hole centerlines

Fig.12.1.1 Front of belt bracket assembly



12.1.1 Carrier bar belt bracket fastening to front of belt.

Refer to Fig. 12.1.1 for bracket orientation.

1. Fasten carrier bar belt bracket (11) to belt connection bracket (3) using:
   - (2) 1/4" x 3/4" SHCS (6)
   - (2) 18 mm flat washer (7)
   - (2) 1/4" locking nut (8)
2. Do not tighten locking nuts.

12.2 Fasten carrier bar belt bracket to door carrier bar

Fig.12.2.1 Carrier bar bracket fastened to carrier bar

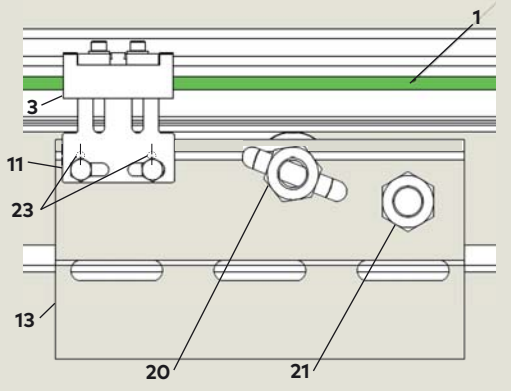
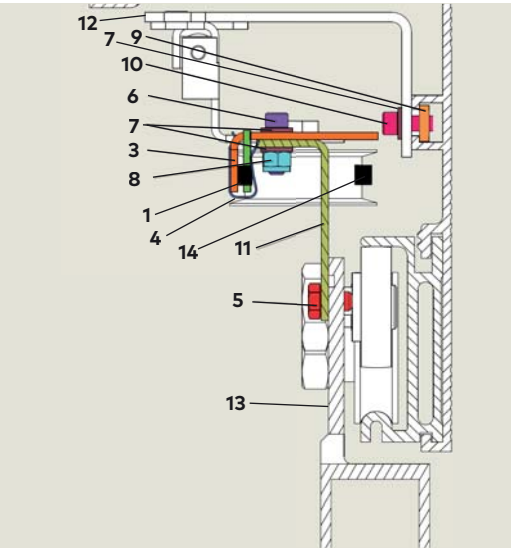


Fig.12.2.2 Front of belt bracket assembly to carrier bar



CAUTION

Check that all fasteners have been tightened.

12.2.1 Close door or bi-part doors.

12.2.2 Position carrier bar belt bracket.

1. Move front of belt until the two carrier bar belt bracket slots are on centerline of existing carrier bar bracket mounting holes (Fig 12.2.1).

12.2.3 Determine carrier bar mounting hole locations for carrier bar belt bracket.

Option 1: Existing carrier bar mounting holes line up with horizontal slots in carrier bar belt bracket; go to Para. 12.2.4.

Option 2: New mounting holes in carrier bar are required for carrier bar belt bracket.

1. Insure carrier bar belt bracket horizontal slots are on centerline of existing carrier bar mounting holes (Fig. 12.2.1).
2. Using the horizontal slots, mark location for two new holes in carrier bar.
3. Drill two holes in carrier bar using No. 7 drill.
4. Tap holes with 1/4-20 tap.

12.2.4 Fasten carrier bar belt bracket.

1. Fasten carrier bar belt bracket to carrier bar with (2) 5/16" x 1/4" HHCS (Pack 107).

12.2.5 Adjust belt connection bracket.

1. Adjust front-to-back position of belt connection bracket on carrier bar belt bracket so that front of belt is straight (Fig. 10.1.2, 12.2.2), then tighten the two 1/4" x 3/4" SHCSs (6).

12.2.6 Check door and installed components.

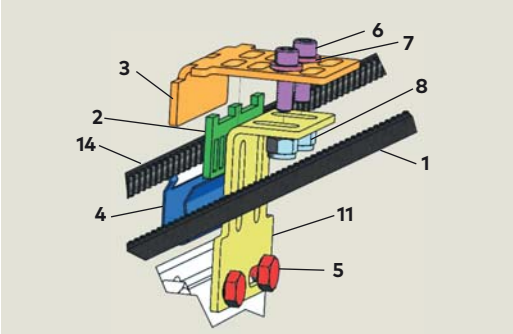
1. Slowly move door through full range of travel and check:
   - Belt does not "walk" on pulleys.
   - Alignment of all installed components.
   - Freedom of door movement.
   - Belt brackets do not contact ESA II controller.

13 Rear of belt bracket connection to belt

13.1 Fasten belt connection bracket to rear of belt, RH bi-part door

1 Front of belt
2 Belt clamping plate
3 Belt connection bracket
4 Belt spring clip
5 Pack 107 5/16" x 1/4" HHCS
6 Pack 101 1/4" x 3/4" SHCS
7 Pack 3 18 mm flat washer
8 Pack 106 1/4" locking nut
9 Pack 104, T-nut
10 Pack 103 1/4" x 5/8" SHCS
11 Pack 105 Carrier bar belt bracket
14 Rear of belt
19 RH door carrier bar
20 Anti-riser wheel
21 Load wheel
23 Carrier bar mounting hole centerlines

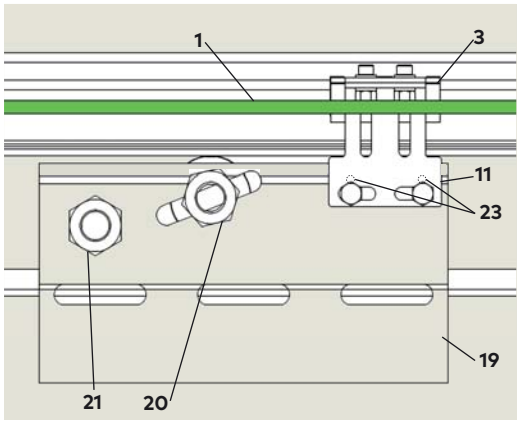
Fig.13.1.1 Belt bracket assembly, rear of belt



13.1.1 Locate position of belt connection bracket on rear of belt.

1. LH door carrier bar bracket must be fastened to LH door carrier bar (Para. 12.2).
2. **Close bi-part doors.**
3. Temporarily fasten belt connection bracket to carrier bar belt bracket (Fig. 13.1.1).
4. Place belt connection bracket on top of rear of belt with carrier bar belt bracket over the door carrier bar.
5. Align horizontal slots in carrier bar belt bracket with centerline of existing mounting holes (23) in RH door carrier bar (Fig. 13.1.2).
6. Mark both belt connection bracket edge locations on rear of belt.
7. Separate belt connection and carrier bar belt brackets.

Fig.13.1.2 RH bi-part door carrier bar



13.1.2 Secure belt connection bracket to rear of belt.

Refer to Para. 9.1 for pictures of assembly procedure.

1. Align belt connection bracket with marked bracket edge locations on rear of belt (Para. 13.1.1).
2. Insert three tabs in belt clamping plate (2) into corresponding slots in belt connection bracket (3).
3. Press eight teeth of belt into slots in belt clamping plate (2).
4. Press clamping plate against belt connection bracket until belt teeth are fully inserted in clamping plate slots and clamping plate is parallel to belt connection bracket surface.

13.1.3 Install belt spring clip.

1. Press belt spring clip (4) over ends of belt connection bracket and belt clamping plate until fully inserted as shown in Fig. 9.1.4.

13.2 Fasten carrier bar belt bracket to belt connection bracket

13.2.1 Carrier bar bracket fastening to belt connection bracket.

Refer to Fig. 13.1.1 for bracket orientation.

1. Fasten carrier bar belt bracket (11) to belt connection bracket (3) using:
- (2) 1/4" x 3/4" SHCS (6)
- (2) 18 mm flat washer (7)
- (2) 1/4" locking nut (8)

2. Do not tighten locking nuts.

14 Rear of belt connection to RH door

14.1 Fasten carrier bar bracket to RH door carrier bar

1 Front of belt
3 Belt connection bracket
4 Belt spring clip
5 Pack 107 5/16" x 1/4" HHCS
6 Pack 101 1/4" x 3/4" SHCS
7 Pack 3 18 mm flat washer
8 Pack 106 1/4" locking nut
9 Pack 104, T-nut
10 Pack 103 1/4" x 5/8" SHCS
11 Pack 105 Carrier bar belt bracket
13 Carrier bar
14 Rear of belt
15 Backplate assembly
19 RH door carrier bar
20 Anti-riser wheel
21 Load wheel
23 Carrier bar mounting hole centerlines

Fig.14.1.1 Carrier bar bracket fastened to carrier bar

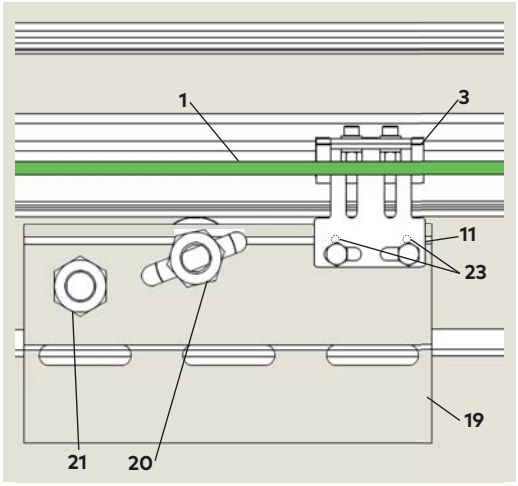
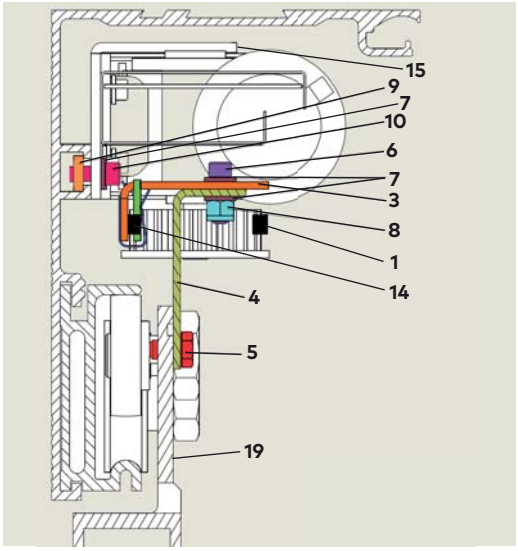


Fig.14.1.2 Rear of belt bracket assembly to carrier bar



14.1.1 Close bi-part doors.

14.1.2 Determine RH door carrier bar mounting hole locations for carrier bar belt bracket.

Option 1: Existing carrier bar mounting holes line up with horizontal slots in carrier bar belt bracket; go to Para. 14.1.3.

Option 2: New mounting holes in carrier bar are required for carrier bar belt bracket.

1. Insure carrier bar belt bracket horizontal slots are on centerline of existing carrier bar mounting holes (Fig. 14.1.1).
2. Using the horizontal slots, mark location for two new holes in carrier bar.
3. Drill two holes in carrier bar using No. 7 drill.
4. Tap holes with 1/4-20 tap.

14.1.3 Fasten carrier bar belt bracket.

1. Fasten carrier bar belt bracket to carrier bar with (2) 5/16" x 1/4" HHCS (Pack 107).

- Adjust lateral position of bracket so that the bracket assembly is perpendicular to the rear of belt then tighten HHCSs.

14.1.4 Adjust belt connection bracket.

1. Adjust front-to-back position of belt connection bracket on carrier bar belt bracket so that rear of belt is straight (Fig. 10.1.2, 14.1.2), then tighten the two 1/4" x 3/4" SHCSs (6).

14.1.5 Check doors and installed components.

1. Slowly move doors through full range of travel and check:

- Alignment of all installed components.
- Belt does not "walk" on pulleys.
- Freedom of door movement.
- Belt brackets do not contact ESA II controller.

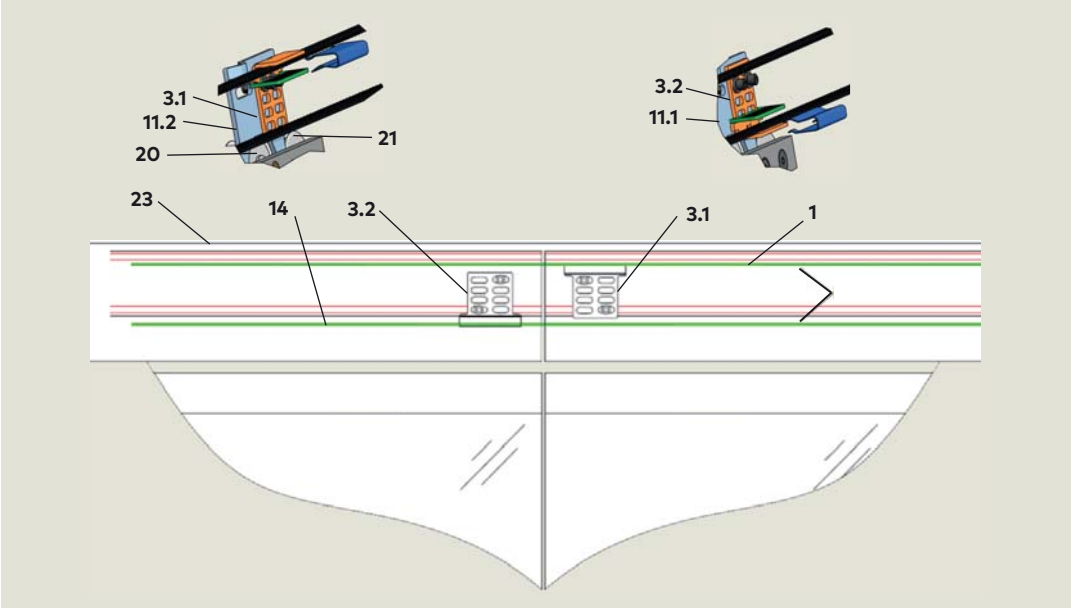
CAUTION

Check that all fasteners have been tightened.

15 Horton door installation, chapters 15 - 18

1 Top of belt
3.1 Belt connection bracket, top of belt
3.2 Belt connection bracket, bottom of belt
11.1 Carrier bar belt bracket, single or RH bi-part door
11.2 Carrier bar belt bracket, LH bi-part door
14 Bottom of belt
20 Anti-riser wheel
21 Load wheel
23 Horton header

Fig.15.1.1 Belt connection and carrier bar belt brackets



15.1.1 Horton door installation

Chapters 16 through 18 document belt connection bracket connections to belts and to carrier bar belt brackets.

TIPS AND RECOMMENDATIONS

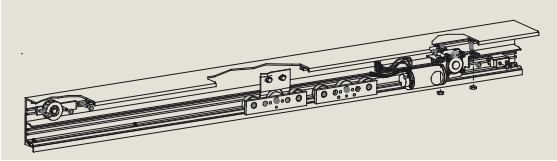
Bottom of belt will attach to belt connection bracket for:
- Single door
- Right hand bi-part door

Top of belt will attach to belt connection bracket for left hand bi-part door.

CAUTION

Doors as installed: verify top of belt and bottom of belt connections to doors match assignments in Para. 15.1.1.

Fig.15.1.2 Horton header



15.1.2 Reference installation chapters

- Chapter 16, bottom of belt connection to single or RH bi-part door.
- Chapter 17, fasten belt connection bracket to top of belt for LH bi-part door.
- Chapter 18, top of belt connection to LH bi-part door.

16 Bottom of belt connection to door

16.1 Fasten bottom belt connection bracket to carrier bar belt bracket

1 Top of belt
2 Belt clamping plate
3 Belt connection bracket
4 Belt spring clip
5 Pack 107 5/16" x 1/4" HHCS
6 Pack 101 1/4" x 3/4" SHCS
7 Pack 3 18 mm flat washer
8 Pack 106 1/4" locking nut
9 Pack 104 T-nut
10 Pack 102 1/4 x 1/2" SHCS
11 Horton carrier bar belt bracket
12 Return pulley assembly, Chapter 7
13 Door carrier bar
14 Bottom of belt
15 Backplate assembly
16 Motor gearhead
20 Anti-riser wheel
21 Load wheel

Fig.16.1.1 Bottom of belt bracket assembly

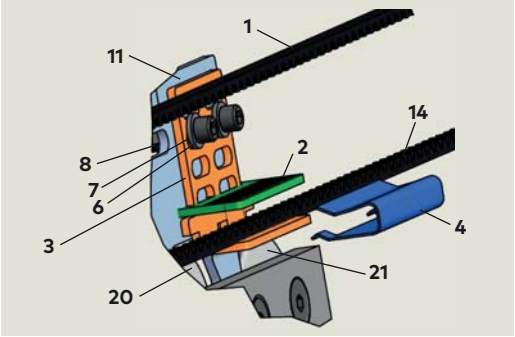


Fig.16.1.2 Bottom of belt bracket assembly to carrier bar belt bracket

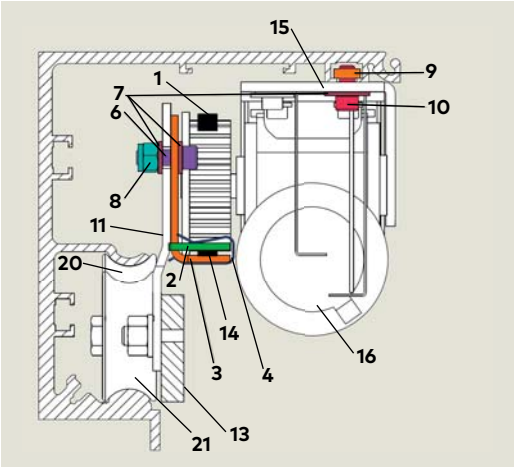
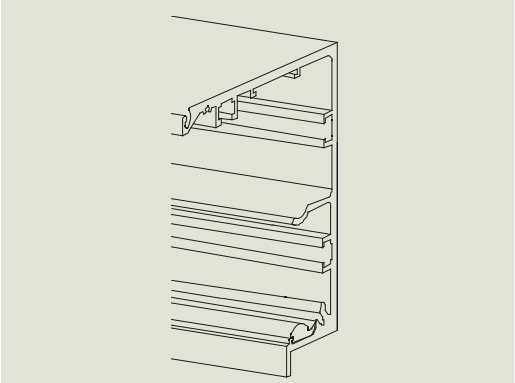


Fig.16.1.3 Header profile



TIPS AND RECOMMENDATIONS

Bottom of belt will attach to belt connection bracket for:
- Single door
- Right hand bi-part door

Top of belt will attach to belt connection bracket for left hand bi-part door.

16.1.1 Close single door or bi-part doors.

16.1.2 Position bottom belt connection bracket.

1. Move bottom of belt until slots in belt connection bracket (Fig 16.1.1) line up with carrier bar belt bracket slots on single door, or right hand bi-part door.

16.1.3 Fasten carrier bar belt bracket.

1. Fasten carrier bar belt bracket to belt connection bracket with:
- (2) 1/4" x 3/4" SHCS (pack 101)
- (2) 18 mm flat washers (pack 3)
- (2) 1/4" locking nuts (pack 106).

2. Do not tighten nuts.

16.1.4 Adjust belt connection bracket.

Adjust position of belt connection bracket so that bottom of belt is level and perpendicular to belt, then tighten the two 1/4" locking nuts (8).

16.1.5 Belt location adjustment

1. If required, adjust position of backplate or pulley assembly so that belt is straight.
2. Tighten fasteners after adjustment.

16.1.6 Check door and installed components.

1. Slowly move door through full range of travel and check:
- Alignment of all installed components.
- Belt does not "walk" on pulleys.
- Freedom of door movement.
- Belt brackets do not contact ESA II controller.

CAUTION

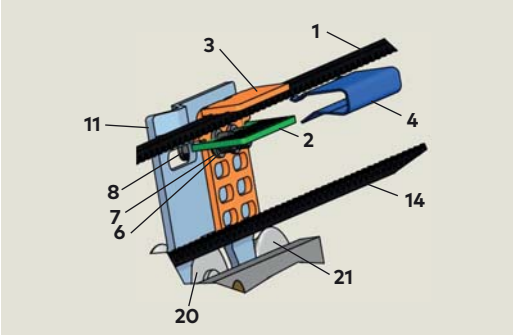
Check that all fasteners have been tightened.

17 Belt connection bracket, top of belt

17.1 Fasten belt connection bracket to top of belt, LH bi-part door

- **1** Top of belt
- **2** Belt clamping plate
- **3** Belt connection bracket
- **4** Belt spring clip
- **6** Pack 101 1/4" x 3/4" SHCS
- **7** Pack 3 18 mm flat washer
- **8** Pack 106 1/4" locking nut
- **11** Horton carrier bar belt bracket
- **13** Door carrier bar
- **14** Bottom of belt
- **16** Motor gearhead
- **20** Anti-riser wheel
- **21** Load wheel

Fig.17.1.1 Top of belt bracket assembly



17.1.1 Locate position of belt connection bracket on top of belt.

1. RH door carrier bar belt bracket must be fastened to RH door carrier bar (Chapter 16).
2. **Close bi-part doors.**
3. Temporarily fasten belt connection bracket to carrier bar belt bracket (Fig. 17.1.1).
4. Place belt connection bracket on top of top of belt.
5. Mark both belt connection bracket edge locations on top of belt.
6. Separate belt connection and carrier bar belt brackets.

17.1.2 Secure belt connection bracket to top of belt.

Refer to Para. 9.1 for pictures of assembly procedure.

1. Align belt connection bracket with marked bracket edge locations on top of belt (Para. 17.1.1).
2. Insert three tabs in belt clamping plate (2) into corresponding slots in belt connection bracket (3).
3. Press eight teeth of belt into slots in belt clamping plate (2).
4. Press clamping plate against belt connection bracket until belt teeth are fully inserted in clamping plate slots and clamping plate is parallel to belt connection bracket surface.

17.1.3 Install belt spring clip.

1. Press belt spring clip (4) over ends of belt connection bracket and belt clamping plate until fully inserted as shown in Fig. 9.1.4.

18 Top of belt connection to LH bi-part door

18.1 Fasten top of belt connection bracket to LH carrier bar belt bracket

1 Top of belt
2 Belt clamping plate
3 Belt connection bracket
4 Belt spring clip
5 Pack 107 5/16" x 1/4" HHCS
6 Pack 101 1/4" x 3/4" SHCS
7 Pack 3 18 mm flat washer
8 Pack 106 1/4" locking nut
9 Pack 104 T-nut
10 Pack 102 1/4 x 1/2" SHCS
11 Horton carrier bar belt bracket
12 Return pulley assembly, Chapter 7
13 Door carrier bar
14 Bottom of belt
15 Backplate assembly
16 Motor gearhead
20 Anti-riser wheel
21 Load wheel

Fig.18.1.1 Top of belt bracket assembly

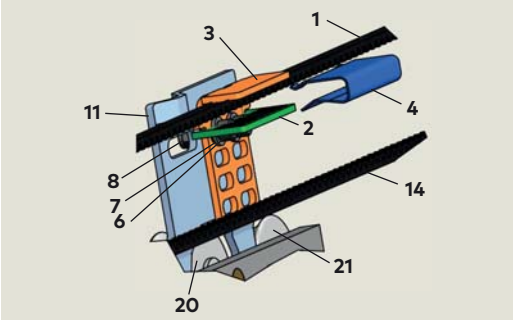


Fig.18.1.2 Top of belt bracket assembly to carrier bar belt bracket

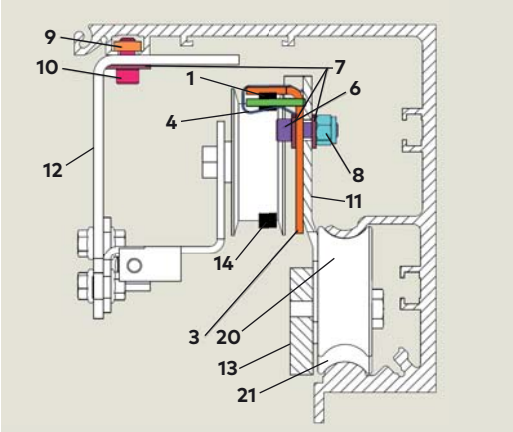
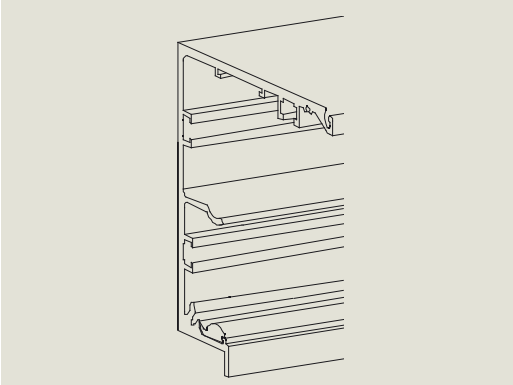


Fig.18.1.3 Header profile



18.1.1 Close bi-part doors.

18.1.2 Position top belt connection bracket.

1. Move top of belt until slots in belt connection bracket (Fig 18.1.1) line up with carrier bar belt bracket slots on left hand bi-part door.

18.1.3 Fasten carrier bar belt bracket.

1. Fasten carrier bar belt bracket to belt connection bracket with:
- (2) 1/4" x 3/4" SHCS (pack 101)
- (2) 18 mm flat washers (pack 3)
- (2) 1/4" locking nuts (pack 106).
2. Do not tighten nuts.

18.1.4 Adjust belt connection bracket.

1. Adjust position of belt connection bracket so that top of belt is level and bracket is perpendicular to belt, then tighten the two 1/4" locking nuts (8).

18.1.5 Belt location adjustment

1. If required, adjust position of backplate or pulley assembly so that belt is straight.
2. Tighten fasteners after adjustment.

18.1.6 Check door and installed components.

1. Slowly move door through full range of travel and check:
- Alignment of all installed components.
- Belt does not "walk" on pulleys.
- Freedom of door movement.
- Belt brackets do not contact ESA II controller.

CAUTION

Check that all fasteners have been tightened.

19 Header and sensor wiring

19.1 Connect existing control wiring to ESA II controller

19.1.1 Connect existing control wiring.

Connect existing control wiring to ESA II controller terminals.

- Reference Sections 8 and 9 of ESA II Controller Commissioning, Maintenance and Troubleshooting Instructions manual for terminal connections.

NOTICE

Remove any existing activaton and presence sensor wiring. New IXIO-DT1 sensors and wiring are supplied with this kit.

19.1.2 Door control switch wiring

	ESA II controller Program switch plug connection terminal				
Control switch	On	Partial open	Hold	Exit	Ground
On / Off	2				6
Partial open		4			6
Hold			5		8
Exit				3	8

NOTICE

Discard door control power switch wiring.

19.2 Connect 115 VAC wiring

19.2.1 Check that 115 VAC circuit breaker to header is off.

WARNING

Electric shock hazard if circuit breaker not turned OFF!

19.2.2 Connect 115 VAC wiring to 115 AC plug

Connect 115 VAC wiring to 115 VAC plug at DC power supply.

- Reference Section 14 of ESA II Controller Commissioning, Maintenance and Troubleshooting Instructions manual for 115 VAC wiring connections.

19.3 Header grounding

Insure header ground wires, including header cover ground are connected to special T-slot bolt (Para. 6.4).

WARNING

Special T-slot bolt must be connected to building ground.

19.4 BEA IXIO-DT1 activation and presence sensors

19.4.1 Install sensors.

Using BEA IXIO-DT1 documentation, install sensors on sliding door assembly.

19.4.2 Wire sensors.

- Reference Section 25 of ESA II Controller Commissioning, Maintenance and Troubleshooting Instructions manual for sensor wiring connections.

20 Initial startup and programming

20.1 Door signage

20.1.1 Place ESA door signage on door(s).

- Section 6, Door signage, sliding doors.

ESA door signage information can also be found in ESA II I-Revive Slider Conversion Kit Owner's manual, Chapter 6.

20.2 Commissioning

Refer to ESA II Controller Commissioning, Maintenance and Troubleshooting Instructions manual.

20.1.2 Commission ESA II I-Revive Slider Conversion Kit.

- Section 16, Installation requirements prior to commissioning
- Section 17, First commissioning
- Section 18, Perform learning cycle
- Section 19, Set door parameters
- Section 24, Functional tests

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