



**Record HA7**  
**Swing Operator**  
Installation & Service Manual

Copyright 2022 ©ASSA ABLOY, Part of ASSA ABLOY. All rights reserved. Reproduction in whole or in part without the express written permission of Record is prohibited.

*Technical data subject to change without notice.*

# CONTENTS - Original instructions

1	Revision .....	5
2	Instructions for safe operation .....	6
3	Important information .....	7
3.1	Intended use .....	7
3.2	Safety precautions .....	7
3.3	Electronic equipment reception interference .....	8
3.4	Environmental requirements .....	8
4	Technical specifications .....	9
4.1	Permitted door weight and door width for Record HA7 .....	10
5	How the Record HA7 works .....	11
5.1	Control switch .....	11
5.1.1	HOLD/AUTO/OFF switch .....	11
5.2	Modes and functions on app .....	11
5.2.1	Off / Closed .....	11
5.2.2	Exit only .....	11
5.2.3	Auto .....	11
5.2.4	Hold .....	11
5.2.5	Opening .....	11
5.2.6	Closing .....	12
5.2.7	Wireless controlling .....	12
5.2.8	Log .....	12
5.2.9	Extended closing torque .....	12
5.2.10	Power assist .....	12
5.2.11	Push and go .....	12
5.2.12	Function of locks .....	12
5.2.13	Impulses .....	12
5.2.14	Statistics .....	12
5.2.15	Factory reset .....	12
6	Part identification .....	13
7	Arm systems .....	15
7.1	Pushing installation with PUSH arm .....	15
7.1.1	Drive shaft extension kits for PUSH arm .....	15
7.2	Pulling installation with PULL arm .....	16
7.2.1	Drive shaft extension kits for PULL arm .....	16
8	Options .....	17
8.1	Push plates .....	17
8.1.1	Push plates .....	17
8.1.2	Remote transmitter push plates .....	17
8.2	Labels .....	18
9	Pre-installation .....	19
9.1	General tips/Safety concerns .....	19
9.2	Installation examples .....	20
9.3	Fastening requirements (but not included) .....	20
10	Mechanical installation .....	21
10.1	PUSH arm system .....	21
10.2	PULL arm system .....	28
11	Electrical connection .....	35
11.1	Mains connection .....	35
11.2	Control unit (CU) .....	37
12	Start-up .....	38
12.1	Spring pre-tension .....	38

12.2	App .....	39
12.2.1	Install the app.....	39
12.2.2	Log in to the app with owner .....	39
12.2.3	Learn .....	40
12.2.4	Test.....	41
12.2.5	Settings .....	41
12.2.6	Add user.....	42
12.2.7	Remove user .....	42
12.2.8	Log into the app with user.....	43
12.2.9	Configuration parameters.....	44
13	Cover .....	45
14	Troubleshooting.....	46
15	ANSI / BHMA A156.19 (LOW ENERGY APPLICATION).....	47
15.1	REQUIREMENTS FOR POWER OPERATED DOORS.....	47
15.1.1	Activation.....	47
15.1.2	Opening.....	47
15.1.3	Closing .....	47
15.1.4	Force and Kinetic Energy .....	47
15.1.5	Signage .....	48

---

# 1 Revision

**Following pages have been revised:**

<b>Page</b>	<b>Revision</b>
9,10	Changed weight notes
21, 25	Changed fastener specifications
39, 43	Changed app images
44	Changed configuration parameters

## 2 Instructions for safe operation



- Failure to observe the information in this manual may result in personal injury or damage to equipment.
- To reduce the risk of injury to persons - use this operator with single swinging only.
- Do not use the equipment if repair or adjustment is necessary.
- Disconnect power when cleaning or other maintenance is to be carried out.
- The operator can be used by children only when supervised by a person responsible for their safety.
- The operator can be used by persons with impaired physical, sensory or mental capacity if they have been instructed by a person in charge of their safety.
- Cleaning and user maintenance shall not be made by children.
- Do not let anyone climb on or play with the door or the fixed/remote controls.
- In all instances, where work is being done, the area is to be secured from pedestrian traffic, and the power removed to prevent injury.
- The doorset can be operated automatically or manually by activators. It can also be used manually as a door closer.

## 3 Important information

### 3.1 Intended use

The Record HA7 is an automatic swing door operator developed to facilitate interior entrances to buildings and within buildings through swing doors. The Record HA7 is an electromechanical operator approved for fire door applications. It is to be installed indoors where it is suitable for almost all types of internal swing doors. This widely-used operator can be found in applications ranging from handicapped-access in private homes to commercial establishments.

Door operator used in escape routes shall be installed so that the door opens in the escape direction unless the system allows break-out in this direction.

The motor and gear box are combined into a compact unit mounted alongside the control unit within the cover. The operator is connected to the door leaf with arm systems.

The door is designed to offer continuous use, a high degree of safety and maximum lifetime. The system is self-adjusting to the effects caused by normal variations in the weather conditions and to minor friction changes caused by e.g. dust and dirt.

For escape in emergency situations the doorset is opened manually.

This manual contains the necessary details and instructions for the installation, maintenance and service of the Swing Door Operators Record HA7.

Make sure that the connection to the source of supply by a flexible cord shall not be allowed to become entrapped in moving parts of the operator or door system.

The glazing material in unframed swinging doors and/or framed swinging doors except that glazing material is less than 1 ft<sup>2</sup> (0.9 m<sup>2</sup>) and having no dimension greater than 18" (457 mm) shall be comply with the requirements of ANSI Z97.1.

Please use the adaptor provided with the operator in the packaging, other adaptor may result in risk of fire.

For use see User manual 1020879.

Save these instructions for future reference.

### 3.2 Safety precautions

To avoid bodily injury, material damage and malfunction of the product, the instructions contained in this manual must be strictly observed during installation, adjustment, repairs and service etc. Factory authorized training is required to carry out these tasks safely. Only Record-trained technicians should be allowed to carry out these operations.

### 3.3 Electronic equipment reception interference

The equipment generates and uses radio frequency energy and if not installed and used properly, it may cause interference to radio, television reception or other radio frequency type systems.

If other equipment does not fully comply with immunity requirements, interference may occur.

There is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the antenna.
- Relocate the receiver with respect to the equipment.
- Move the receiver away from the equipment.
- Plug the receiver into a different outlet so that equipment and receiver are on different branch circuits.
- Check that protective earth (PE) is connected.

If necessary, the user should consult the dealer or an experienced electronics technician for additional suggestions.

### 3.4 Environmental requirements

Record products are equipped with electronics and may also be equipped with batteries containing materials which are hazardous to the environment. Disconnect power before removing electronics and battery and make sure it is disposed of properly according to local regulations (how and where) as was done with the packaging material.

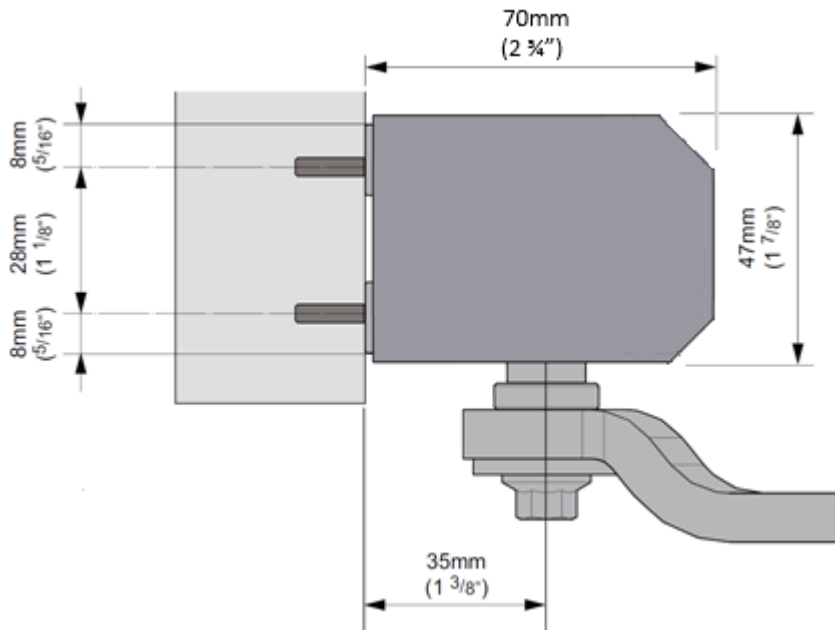


## 4 Technical specifications

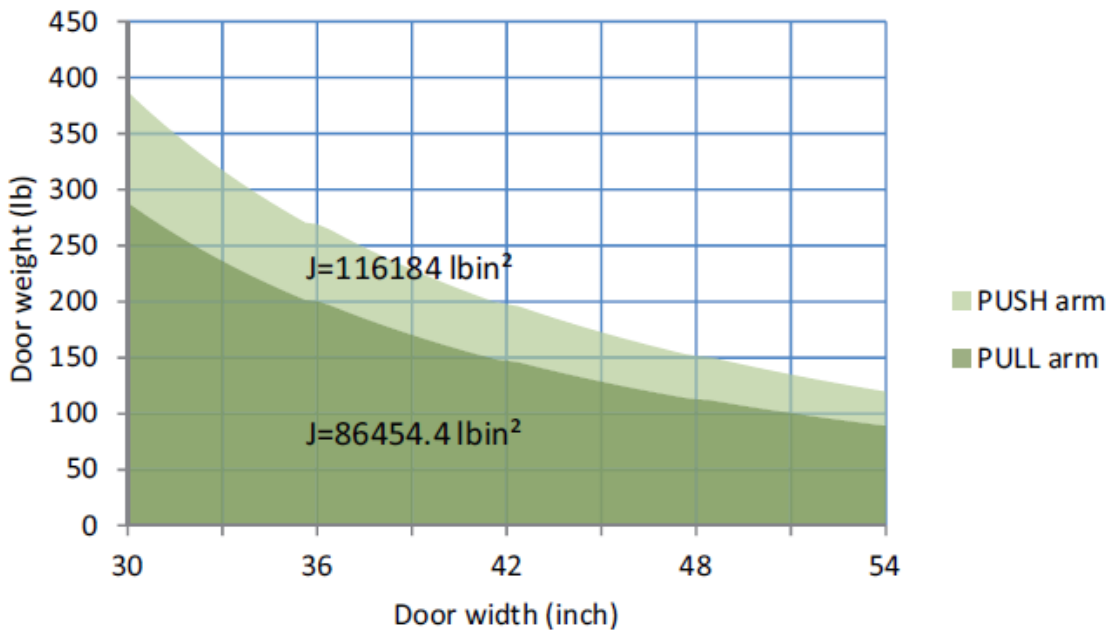
Ensure that the door operator with technical specification below is suitable for the installation.

Manufacturer:	Record U.S.A Inc.
Address:	221A Racco Parkway Vaughan Canada
Type:	Record HA7
Power supply:	120 V AC +10/-15%, 50/60 Hz, mains fuse max 10A (building installation)
Power consumption:	Max. 90 W
Auxiliary voltage:	24 V DC, max. 400 mA (max. 1000 mA including lock)
Max. weight/width:	200 Lbs.  <b>Note!</b> Refer to section 4.1 and the appropriate standard (ANSI/BHMA A156.19) for door forces and speeds as related to door weight and width.
Door width:	762 - 1219 mm (30 - 48")
Electro-mechanical locking device:	Selectable: 12V DC, max. 1200 mA or 24 V DC, max. 600 mA
Door opening angle:	PUSH arm: 80° - 110°, with reveal 0 - 130 mm (0 - 5 1/8") PULL arm: 80° - 110°, with reveal 0 - 51 mm (0 - 2")
Opening time (0° - 80°):	Variable between 4.5 - 9 s
Closing time (90° - 10°):	Variable between 4.5 - 9 s
Impulse time delay:	2 s - 6 h
Ambient temperature:	-4 °F to +113 °F (-20 °C to +45 °C)
Relative humidity:	Max. 95%
Drive unit weight:	7.5 lb. (3.4 kg)
Class of protection:	IP20
Approvals:	Third party approvals from established certification organizations valid for safety in use, see Declaration of Conformity.
Complies with: UL 10C, ANSI/BHMA A156.19 and UL 325	

This product is to be installed internally.



4.1 Permitted door weight and door width for Record HA7:



Push arm: 150 Lbs. / 48" or 266 Lbs. / 36"

Pull arm: 112 Lbs. / 48" or 200 Lbs. / 36"

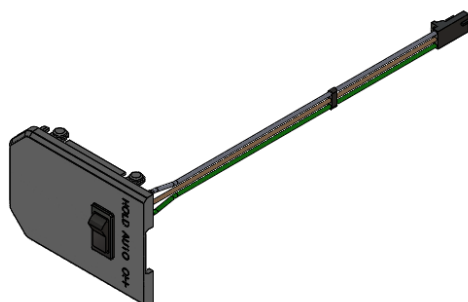
**Note:** Complies with UL 325.

## 5 How the Record HA7 works

The swing door operator Record HA7 uses a motor which is connected to the output shaft. The push or pull arm system that is connected to the output shaft opens the door in a surface mounted application.

### 5.1 Control switch

#### 5.1.1 HOLD/AUTO/OFF switch



Function	Program
HOLD	The door can be held at any position when opening or closing.
AUTO	Impulses from activation units connected to IIMP or OIMP are forwarded into inner impulse.
OFF	Only KEY Impulse can open the door.

### 5.2 Modes and functions on app

#### 5.2.1 Off / Closed

The door is closed. The door cannot be opened with the inner / outer wall or jamb-mounted contact switches. The door is locked if an electromechanical locking device has been fitted.

#### 5.2.2 Exit only

Passage from inside only. The door is normally locked if an electromechanical locking device has been fitted. The door can only be opened with the inner wall or jamb-mounted contact switches (if fitted).

#### 5.2.3 Auto

The door can be opened with the inner / outer wall or jamb-mounted contact switches.

#### 5.2.4 Hold

The door can be held at any position when opening or closing.

#### 5.2.5 Opening

When an opening signal is received by the control unit, the door is opened at the operator-adjusted opening speed. Before the door is fully open at back check, it slows automatically to low speed. The motor stops when the selected door opening angle has been reached. The open position is held by the motor.

If the door is obstructed while opening, it will stop on stall which can be selected with the app (see page 35).

### 5.2.6 Closing

When the hold open time has elapsed, the operator will close the door automatically, using spring force and motor. The door will slow to low speed at latch check before it reaches the fully closed position. The door is kept closed by spring power or combined with extended closing torque by the motor.

### 5.2.7 Wireless controlling

The door can be controlled by the app on a smartphone or a tablet.

### 5.2.8 Log

Events and errors can be displayed.

### 5.2.9 Extended closing torque

The motor will increase the closing torque when the door is closed or during closing. If the parameter is set to "0", the door will close with normal spring power.

### 5.2.10 Power assist

The motor will give/increase power assist when the door is opened manually. If the parameter is set to "Off", the door will give no power assist.

### 5.2.11 Push and go

When the door is manually pushed it will perform an open / close cycle. Push and go is not active in mode "Off/Closed".

### 5.2.12 Function of locks

- The control unit has an available output of DC for external locks
- The lock output is short circuit proof and can supply a lock with 12 V DC, max. 1200 mA or 24 V DC, max. 600 mA. Lock function is active in mode "Off / Closed" and "Exit Only".
- Select 12 V DC or 24 V DC, locked with or without power
- Lock release and opening delay
- Lock kick to overcome binding in the locking device during closing

### 5.2.13 Impulses

- Input for INNER / OUTER / KEY impulse.

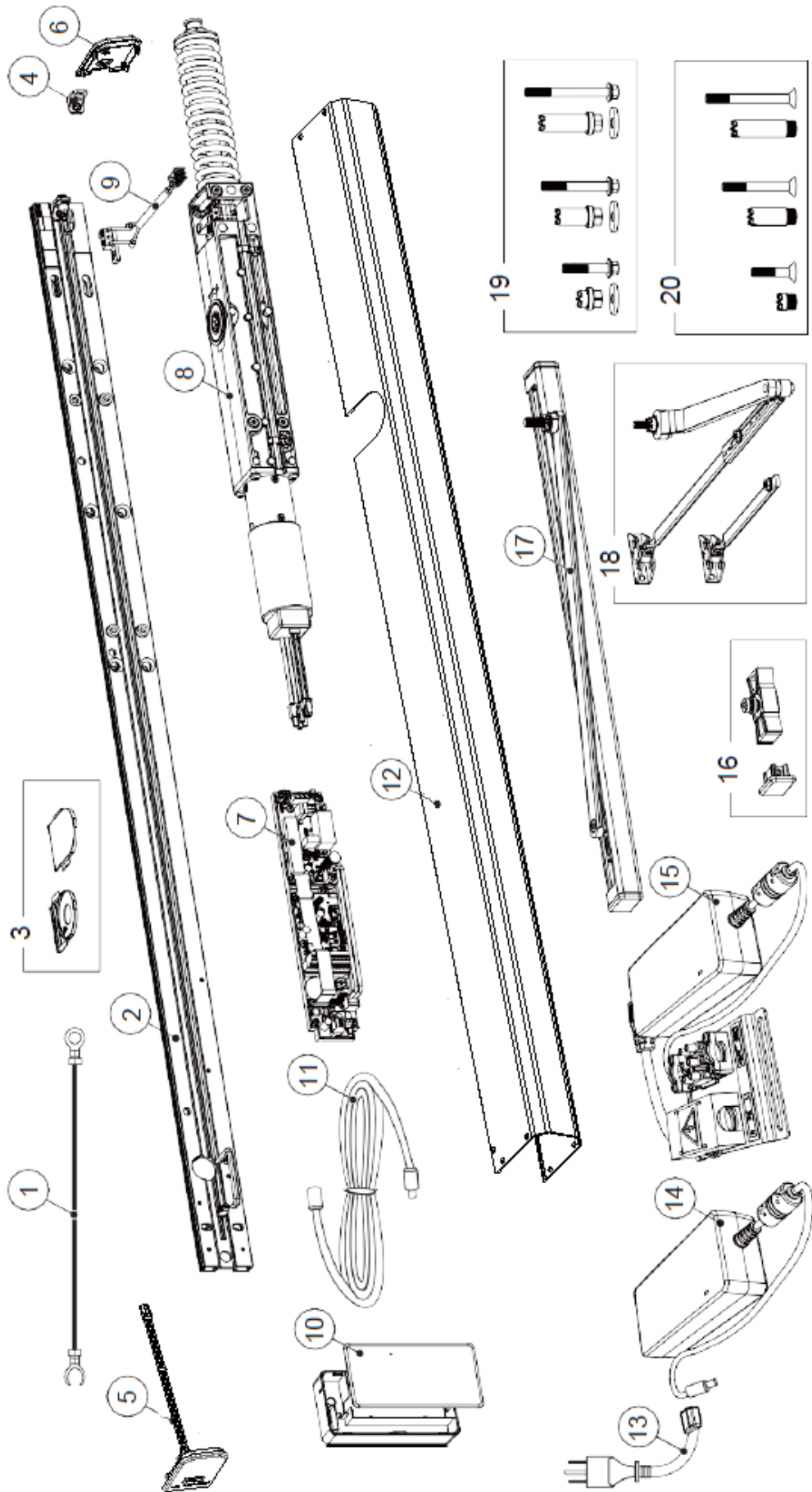
### 5.2.14 Statistics

- Record data of the action for the door.

### 5.2.15 Factory reset

- Will restore all settings with factory default settings.

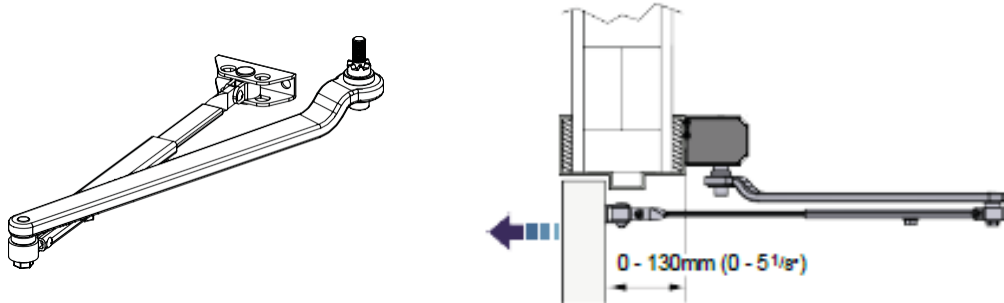
# 6 Part identification

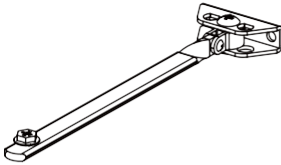
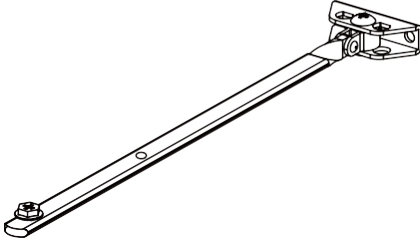


<b>Item No.</b>	<b>Art. No.</b>	<b>Description</b>
1	W7-331020157	Ground wire
2	W7-330000828	Back plate with power cable
3	W7-331020445BK	Spindle cover kit (Black)
	W7-331020445PD	Spindle cover kit (Grey)
4	W7-331019785	Bracket power plug
5	W7-331020704BK	Endplate with control switch (Black)
6	W7-331020393BK	Endplate (Black)
7	W7-331018537	Control unit (CU)
8	W7-330000841	Transmission unit kit
9	W7-330000829	Lock kick for PUSH & PULL
10	W7-331020253	Adaptor holder
11	W7-331704236	Extension power cable
12	W7-331020396DB	Cover (Black)
	W7-331020396NA	Cover (Silver)
13	W7-331018859	Power cord
14	W7-331703711	Power adaptor
15	W7-331020293	Power box adaptor kit (internal components only, box not included)
16	W7-330000830BK	PULL arm service kit (Black)
	W7-330000830PD	PULL arm service kit (Grey)
17	W7-331020226BK	PULL arm kit (Black)
	W7-331020226PD	PULL arm kit (Grey)
18	W7-331020857BK	PUSH arm kit (Black)
	W7-331020857PD	PUSH arm kit (Grey)
19	W7-330000831BK	Drive shaft kits for PUSH arm (Black)
20	W7-330000832BK	Drive shaft kits for PULL arm (Black)

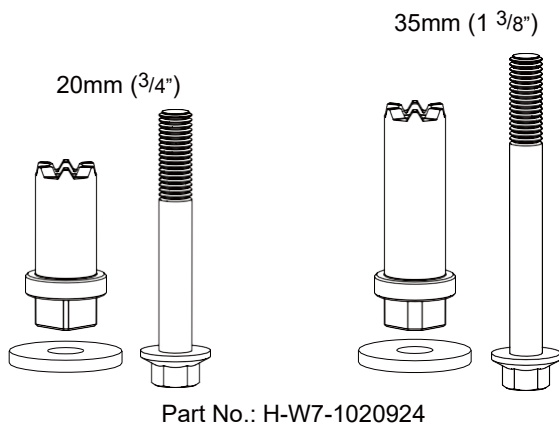
# 7 Arm systems

## 7.1 Pushing installation with PUSH arm



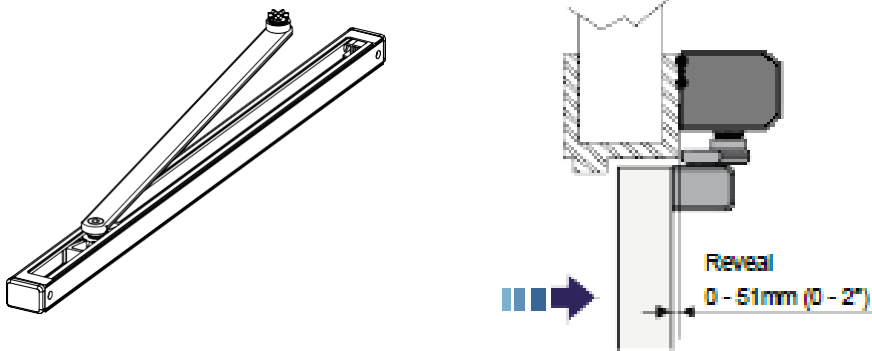
	<b>Reveal</b>
Part No.: 	0 - 68mm (0 - 2 11/16")
Part No.: 	56 - 130mm (2 1/4 - 5 1/8")

### 7.1.1 Drive shaft extension kits for PUSH arm

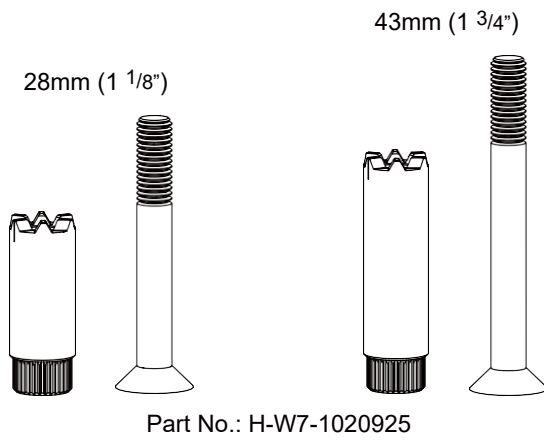


## 7.2 Pulling installation with PULL arm

Part No.: W7-331020226BK



### 7.2.1 Drive shaft extension kits for PULL arm





## 8 Options

### 8.1 Push plates

For ADA compliance, center of push plate(s) must be 34"-48" above finished floor or height required by local AHJ.

#### 8.1.1 Push plates



P/N: W6-115



P/N: W6-124-1



P/N: W6-110



P/N: W6-110-2



P/N: W6-105

#### 8.1.2 Remote transmitter push plates




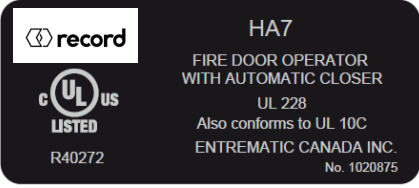

P/N: W6-114



P/N: P-CM-45/4

8.2 Labels

<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <b>PUSH TO ACTIVATE</b> </div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <b>PULL TO ACTIVATE</b> </div>
<p>Push side "PUSH TO ACTIVATE"</p>	<p>Pull side "PULL TO ACTIVATE"</p>
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <b>ACTIVATE SWITCH TO OPERATE</b> </div>	
<p>Dual Side "Activate Switch to Operate"</p>	<p>Dual Side "AUTOMATIC DOOR / CAUTION"</p>
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="text-align: center; font-size: small;">ANNUAL COMPLIANCE INSPECTION</p> <p style="text-align: center; font-size: x-small;">Inspected for and complies with ANSI A156. _____</p> <p style="text-align: center; font-size: x-small;">DATE: _____</p> <p style="text-align: center; font-size: x-small;">by AAADM Certified Inspector</p> <p style="text-align: center; font-size: x-small;">Number: _____</p> <p style="text-align: center; font-size: x-small;">#US24-0542-01</p> </div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="font-size: x-small; margin: 0;"><b>SAFETY INFORMATION</b> Low Energy Swinging Doors</p> <p style="font-size: x-small; margin: 0;">These minimum safety checks, in addition to those in the Owner's Manual, should be made each day and after any loss of electrical power:</p> <ol style="list-style-type: none"> <li>1. Activate the door. Door should open at a slow smooth pace (4 or more seconds), and stop without impact.</li> <li>2. Door must remain fully open for a minimum of 5 seconds before beginning to close.</li> <li>3. Door should close at a slow smooth pace (4 or more seconds), and stop without impact.</li> <li>4. Inspect the floor area. It should be clear of any loose parts that might cause user to slip or fall. Keep traffic path clear.</li> <li>5. Inspect door's overall condition. The appropriate signage should be present and the hardware should be in good condition.</li> <li>6. Have door inspected by an AAADM certified inspector at least annually.</li> </ol> <p style="font-size: x-small; margin: 0;"><b>DO NOT USE DOOR</b> if it fails any of these safety checks or if it malfunctions in any way. Call a qualified automatic door service company to have door repaired or serviced.</p> <p style="font-size: x-small; margin: 0;">See Owner's Manual or instructions for details on each of these and other safety items. If you need a copy of the manual, contact the manufacturer.</p> <div style="text-align: center; font-size: x-small; margin: 5px 0;"> <b>AAADM</b>  <small>American Association of Automatic Door Manufacturers</small> </div> <p style="font-size: x-small; margin: 0;">PLACE COMPLETED ANNUAL COMPLIANCE INSPECTION LABEL HERE</p> </div>
<p>"Certified Inspector"</p>	<p>"AAADM safety"</p>

	
---	--

## 9 Pre-installation

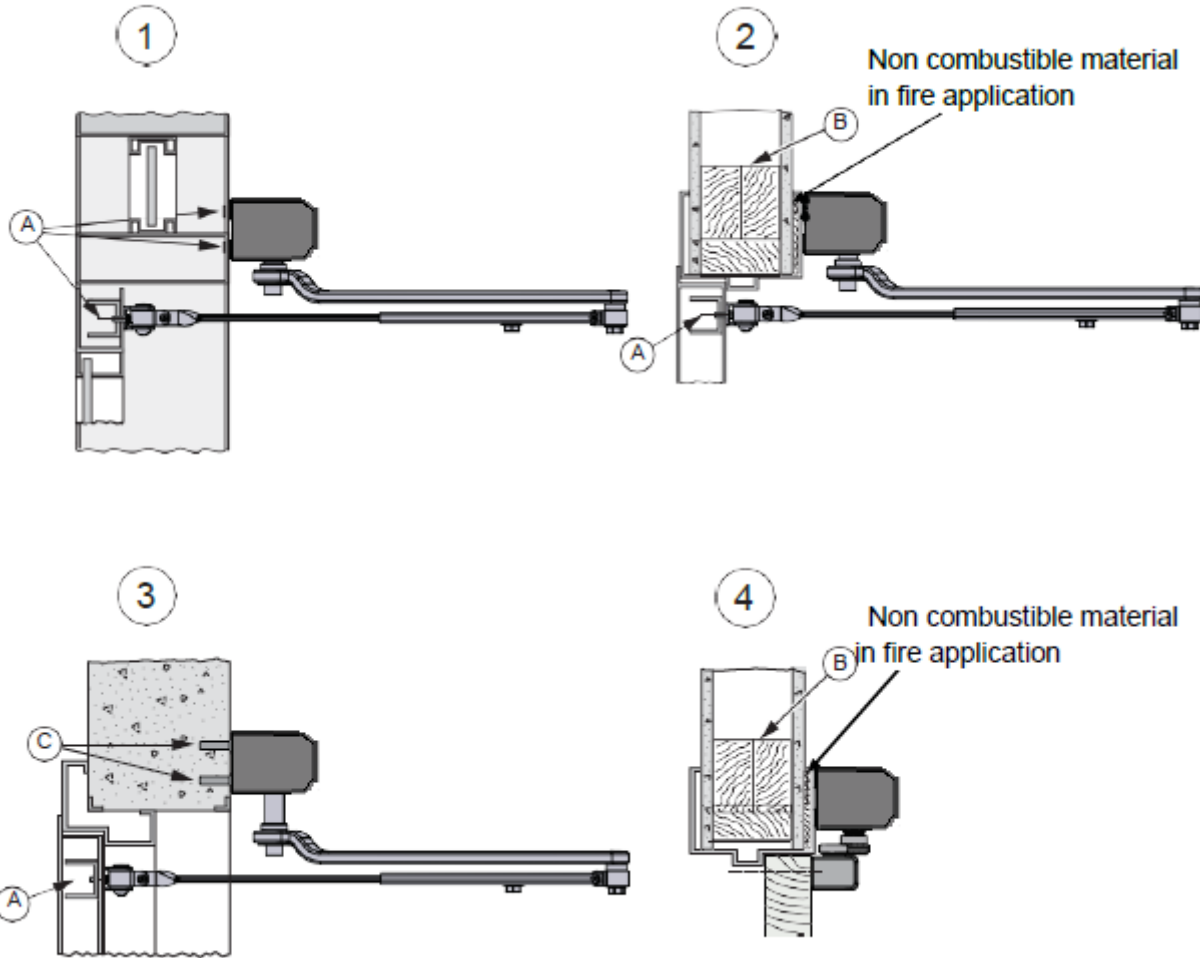
### 9.1 General tips/Safety concerns



In all instances, where work is being done, the area is to be secured from pedestrian traffic, and the power removed to prevent injury.

- Make sure that the power is off before installing.
- If there are sharp edges after drilling the cable outlets, chamfer the edges to avoid damage to the cables.
- For enhanced security and vandalism protection, always mount the operator access in the interior of a building whenever possible.
- Make sure the ambient temperature is in the range specified in section [Technical specifications](#).
- Make sure that the door leaf and the wall are properly reinforced at the installation points.
- Unpack the operator and make sure that all parts are delivered in accordance with the packing note and that the operator is in good mechanical condition.
- Ensure proper material is being used for the door leaves and that there are no sharp edges. Projecting parts shall not create any potential hazards. If glass is used bare glass edges shall not come in contact with other glass. Toughened or laminated glass are suitable glasses.
- Ensure that entrapment between the driven part and the surrounding fixed parts due to the opening movement of the driven part is avoided. The following distances are considered sufficient to avoid entrapments for the parts of the body identified;
  - for fingers, a distance greater than 25 mm (15/16") or less than 8 mm (5/16")
  - for feet, a distance greater than 50 mm (1 15/16")
  - for heads, a distance greater than 200 mm (7 7/8")
  - and for the whole body, a distance greater than 500 mm
- Danger points shall be safe guarded up to a height of 2.5 m (98 7/16") from the floor level.
- The operator shall not be used with a offset pivot door.

9.2 Installation examples



- 1 Aluminum profile system
- 2 Plasterboard wall
- 3 Reinforced concrete wall and brick wall
- 4 Plasterboard wall
- A Steel reinforcement or rivet nut
- B Wood reinforcement
- C Expansion-shell bolt (for brick wall min. M6x85, UPAT PSEA B10/25)

9.3 Fastening requirements (but not included)

Base material	Minimum requirements of wall profile*
Steel	5mm (3/16")**
Aluminum	6mm (1/4")***
Reinforced concrete	min. 50mm (2") from the underside 50 mm (2")
Wood	Expansion-shell bolt, min. M6x85, UPAT PSEA B10/25, min. 50mm (2") from the underside
Brick wall	

\* Record minimum recommended requirements. Building Codes may give different specifications.

\*\* Thinner wall profiles (3-5 mm) must be reinforced with rivet nuts.

\*\*\* Thinner wall profiles (4-6 mm) must be reinforced with rivet nuts.

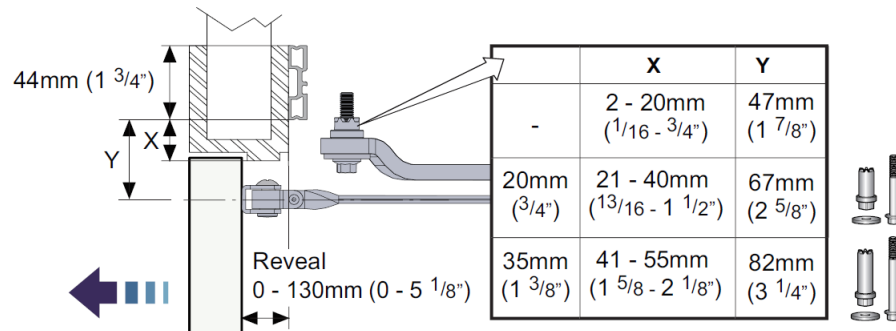
## 10 Mechanical installation

The operator is mounted on either side of the door header depending on type of doors. The door is controlled with a push or pull arm system.

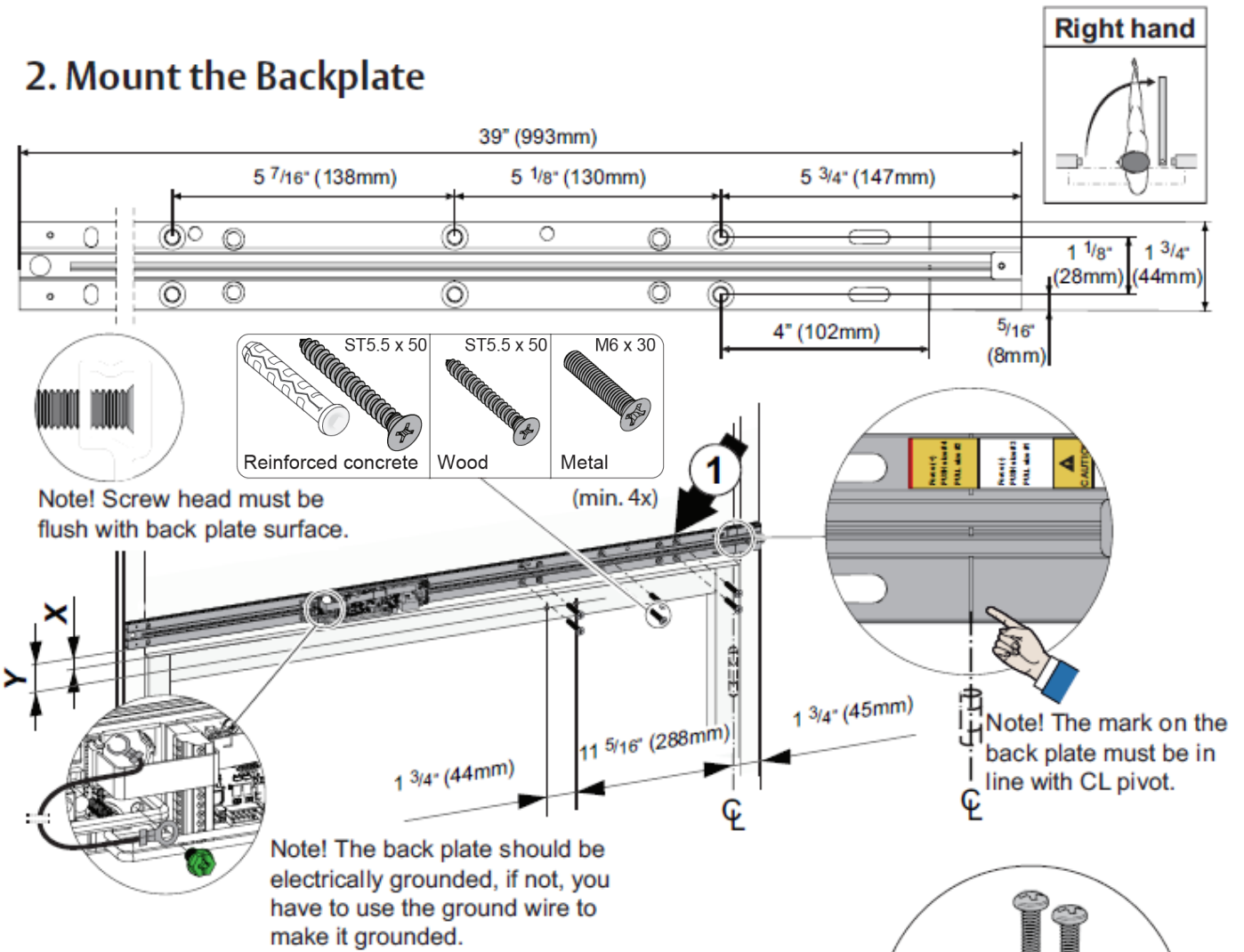
**Note!** Consider all power wire entry locations and signaling wires before preparing back plate.

### 10.1 PUSH arm system

#### 1. Determine the Door Hand (push instructions)

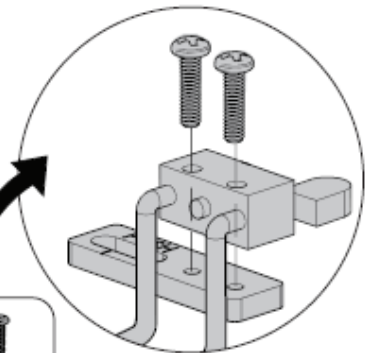
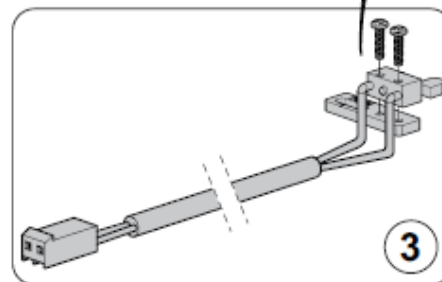
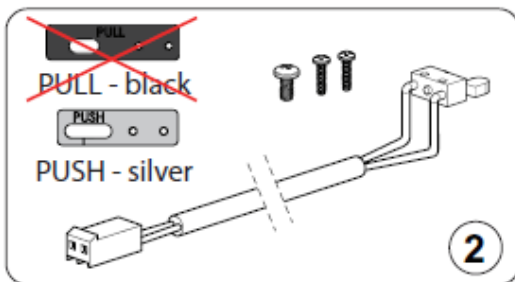


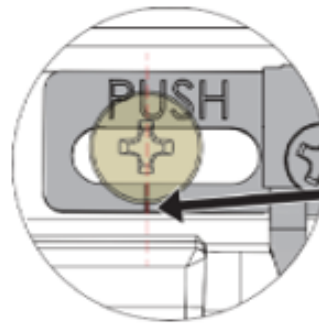
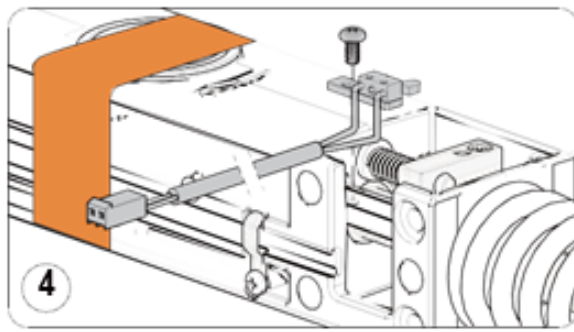
## 2. Mount the Backplate



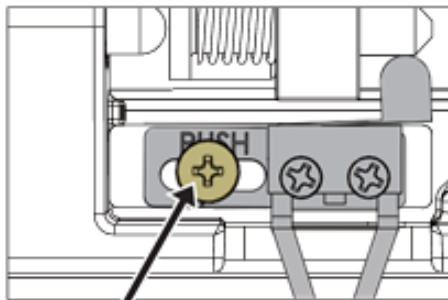
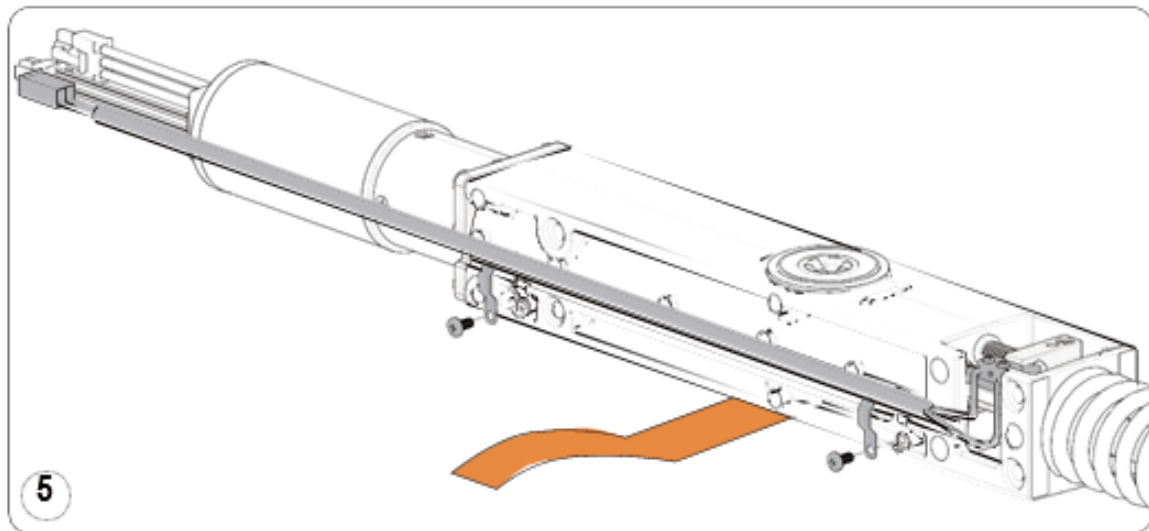
## 3. Mount the Lock kick (Optional)

**!** Note! Install lock kick for all fire-rated doors.



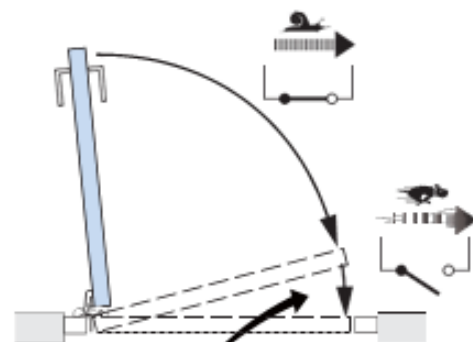


Refer to the picture for recommended location of lock kick.



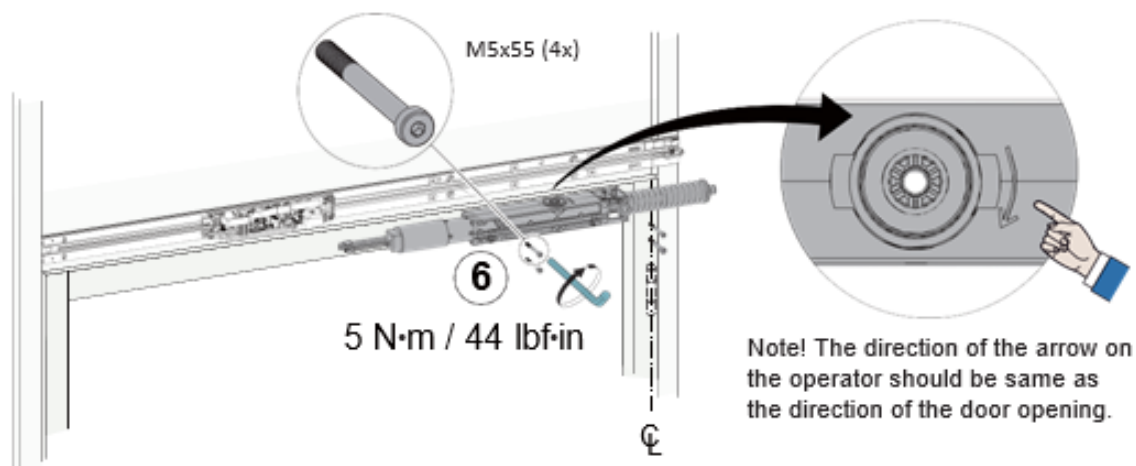
Unscrew this screw to move the lock kick and adjust angle of lock kick.

+ Max. - Min.



Lock kick

#### 4. Mount the Operator



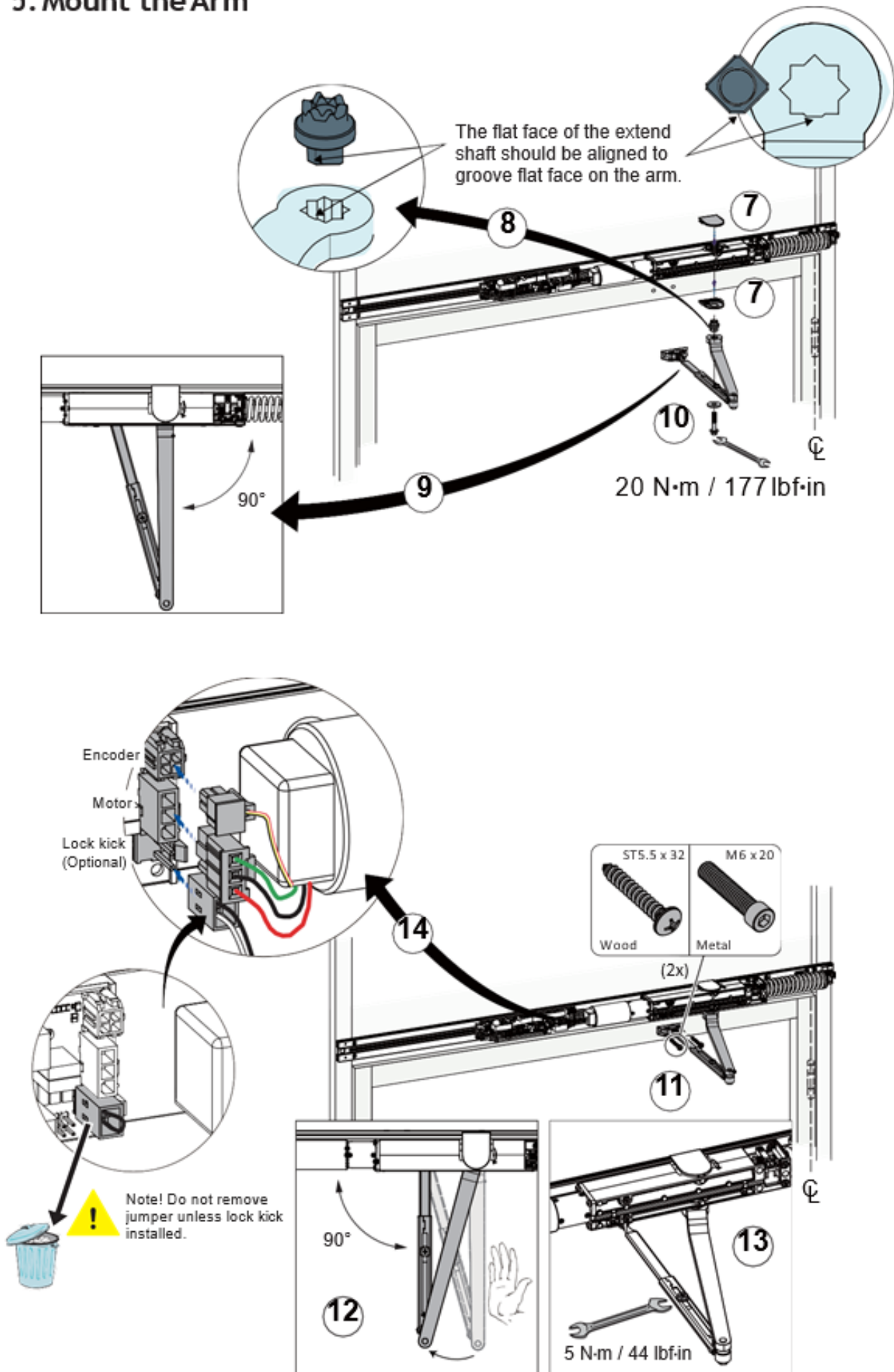
M5x55 (4x)

6

5 N·m / 44 lbf·in

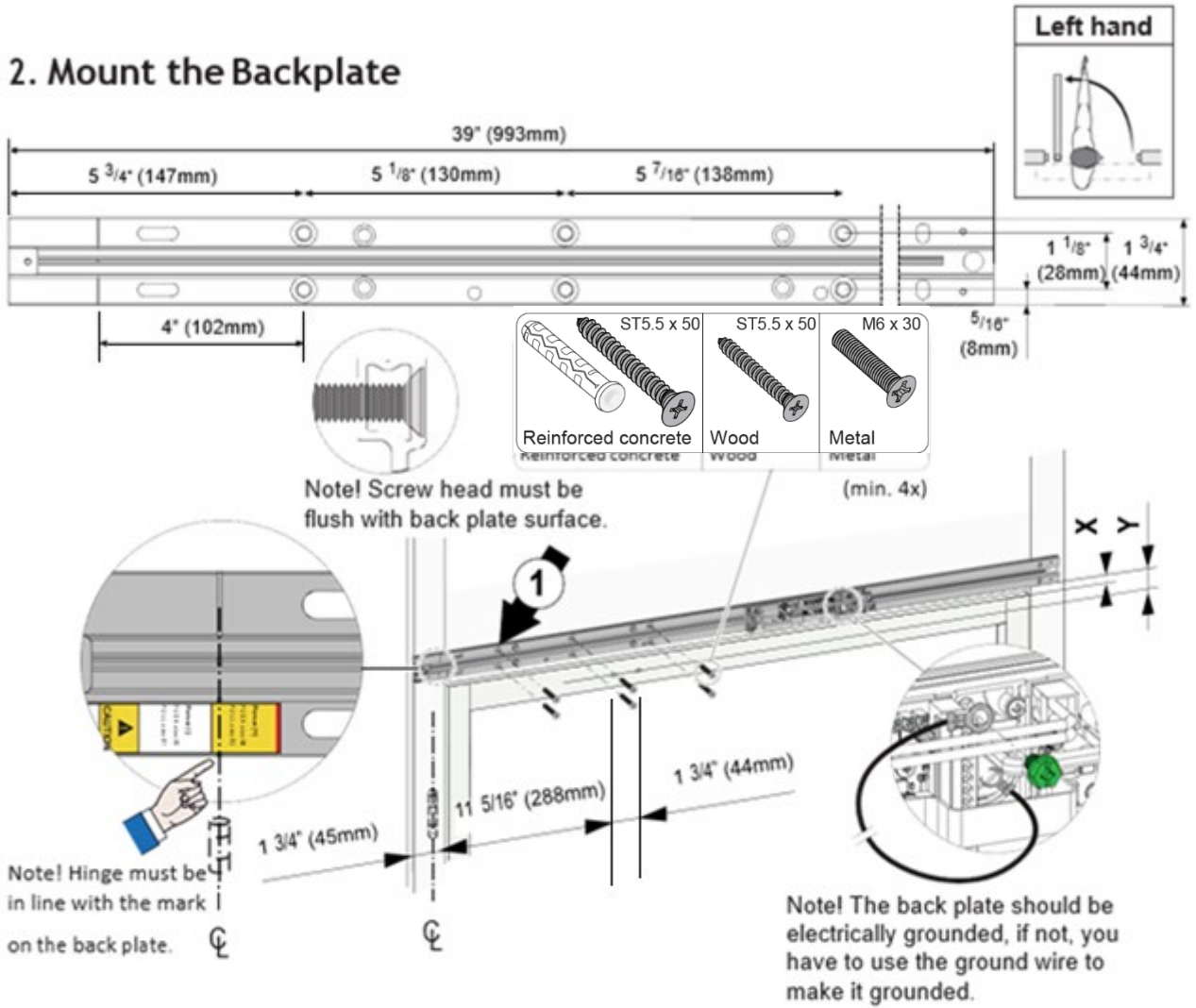
Note! The direction of the arrow on the operator should be same as the direction of the door opening.

## 5. Mount the Arm



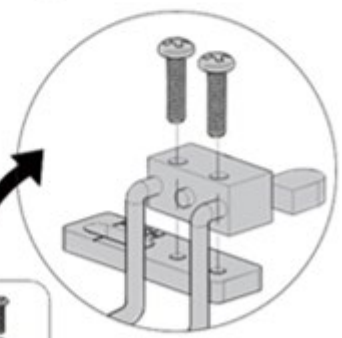
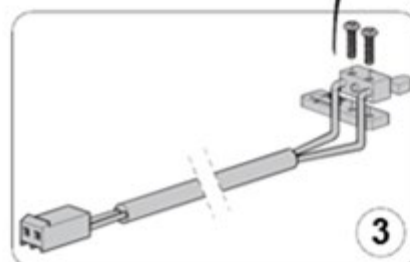
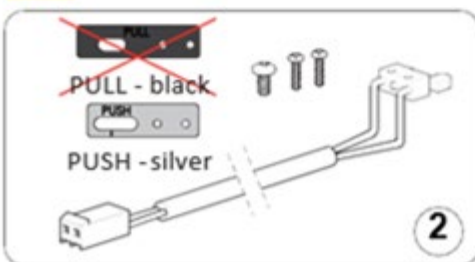


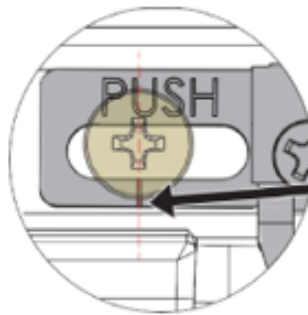
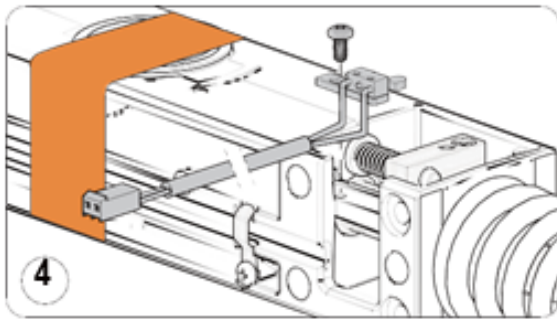
## 2. Mount the Backplate



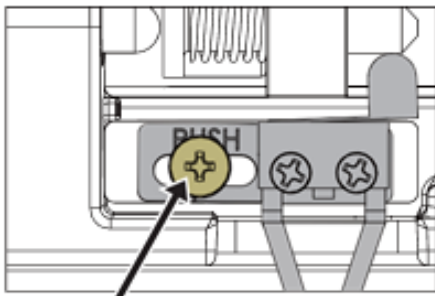
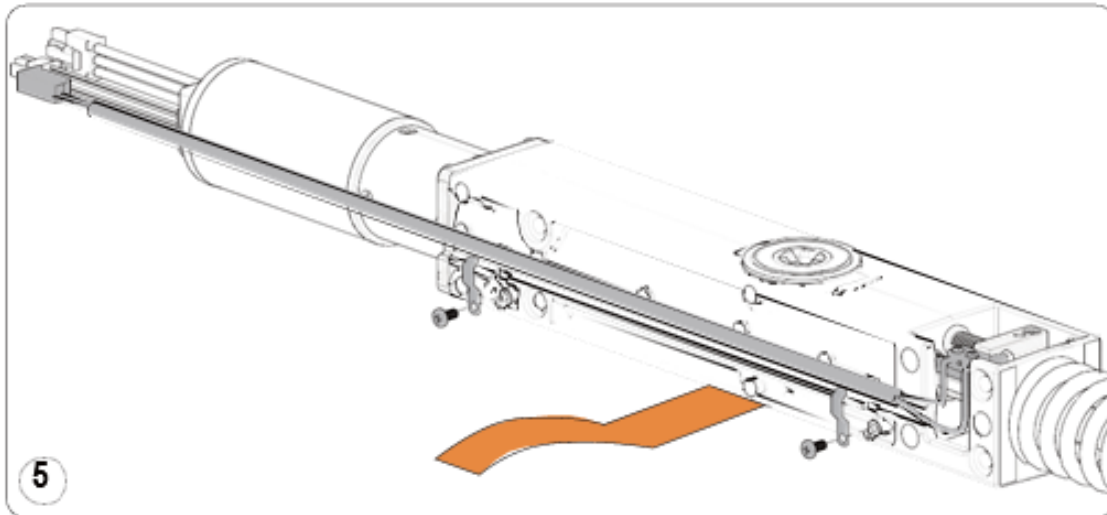
## 3. Mount the Lock kick (Optional)

**!** Note! Install lock kick for all fire-rated doors.



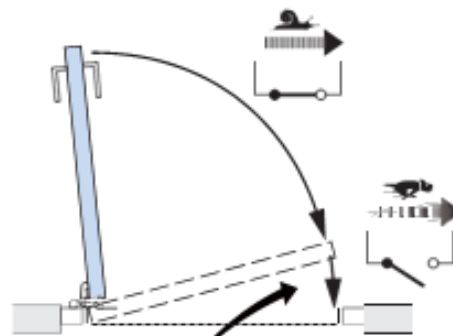


Refer to the picture for recommended location of lock kick.



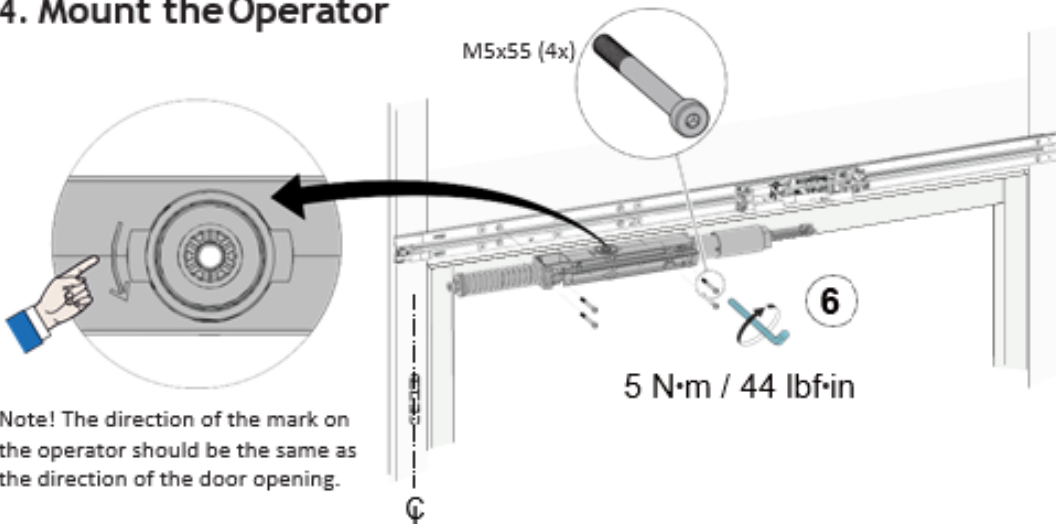
Unscrew this screw to move the lock kick and adjust angle of lock kick.

+ -  
Max. Min.



Lock kick

#### 4. Mount the Operator

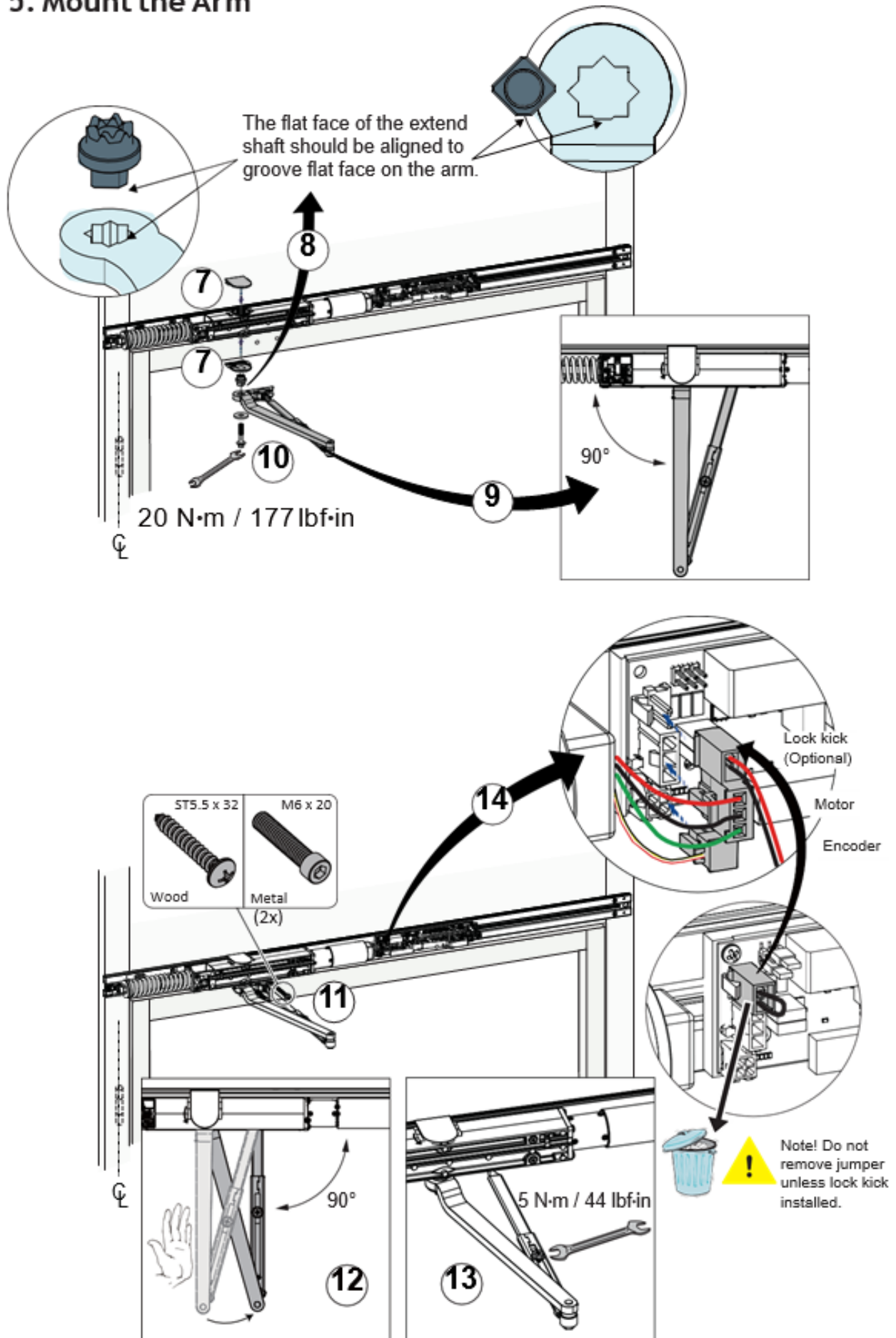


Note! The direction of the mark on the operator should be the same as the direction of the door opening.

M5x55 (4x)

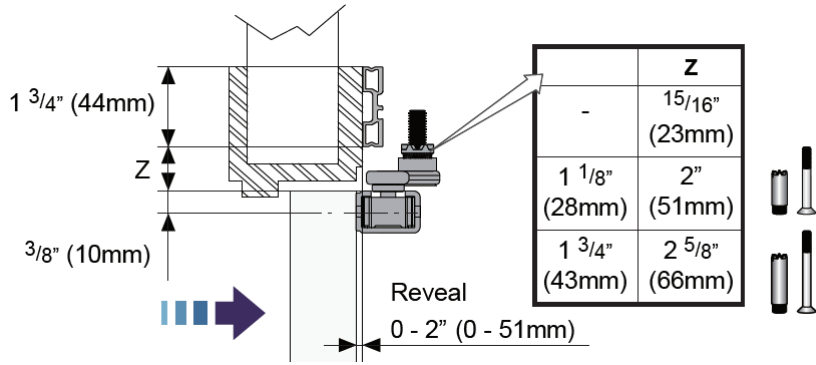
5 N·m / 44 lbf·in

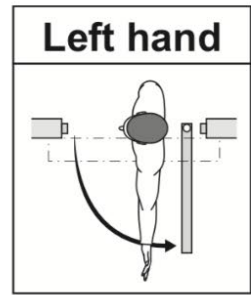
## 5. Mount the Arm



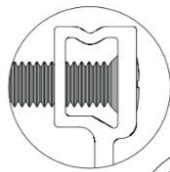
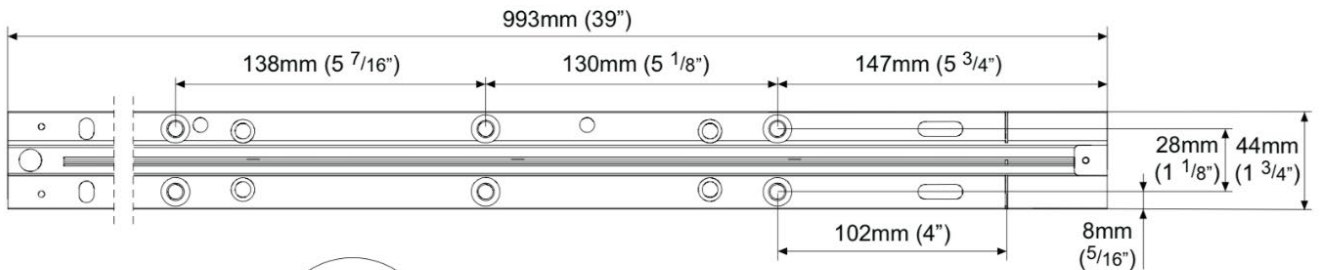
10.2 PULL arm system

**1. Determine the Door Hand (pull instructions)**

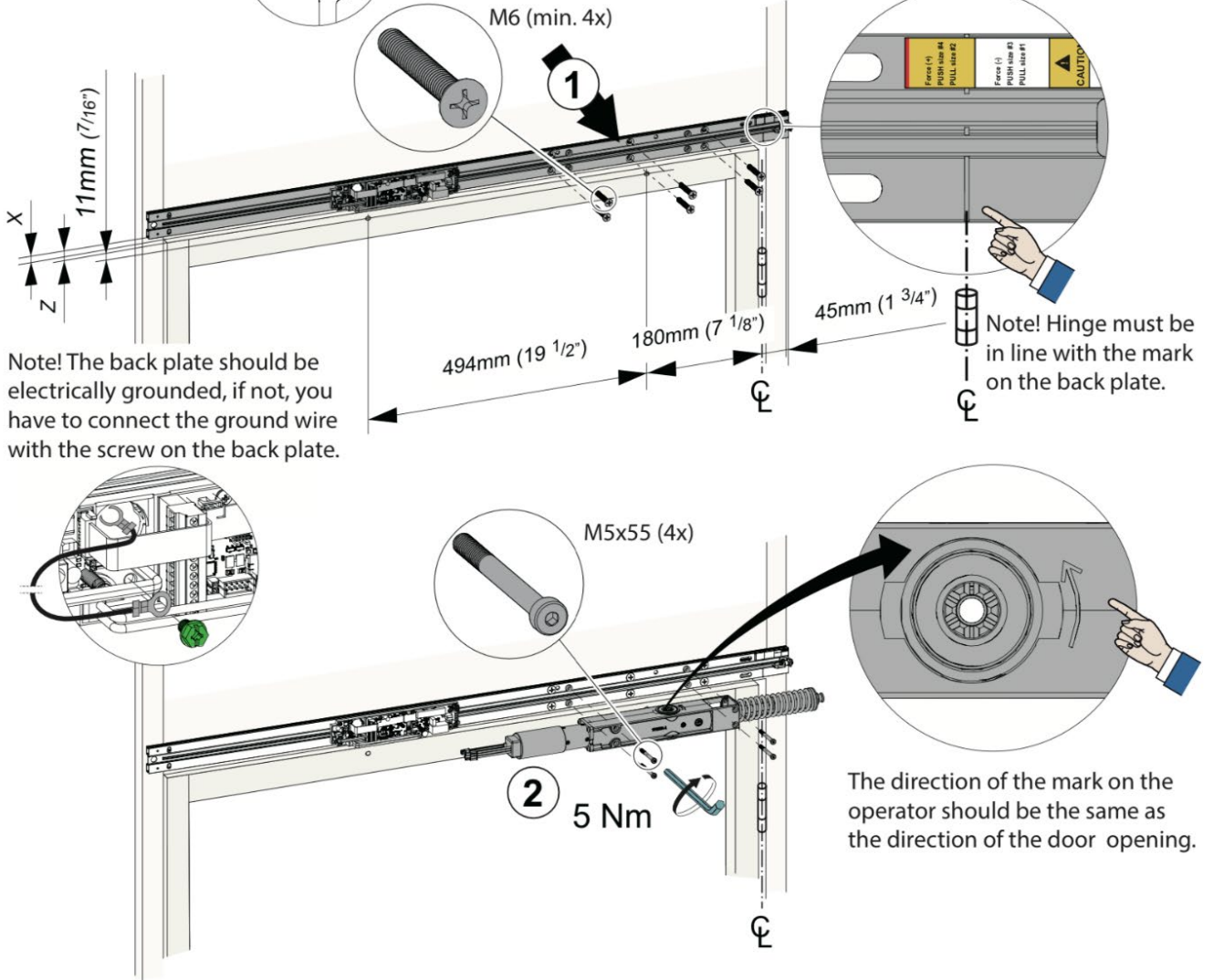


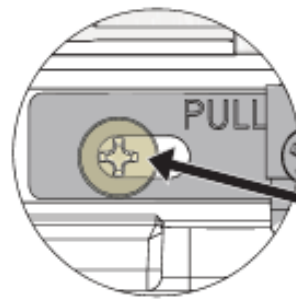
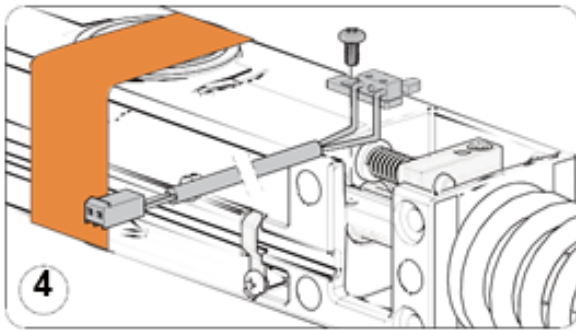


## 2. Mount the Backplate / Operator

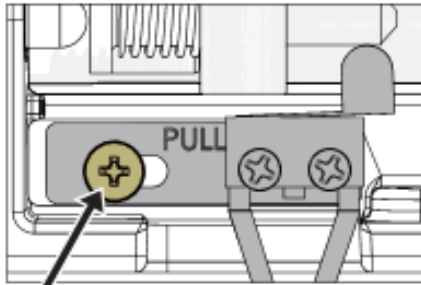
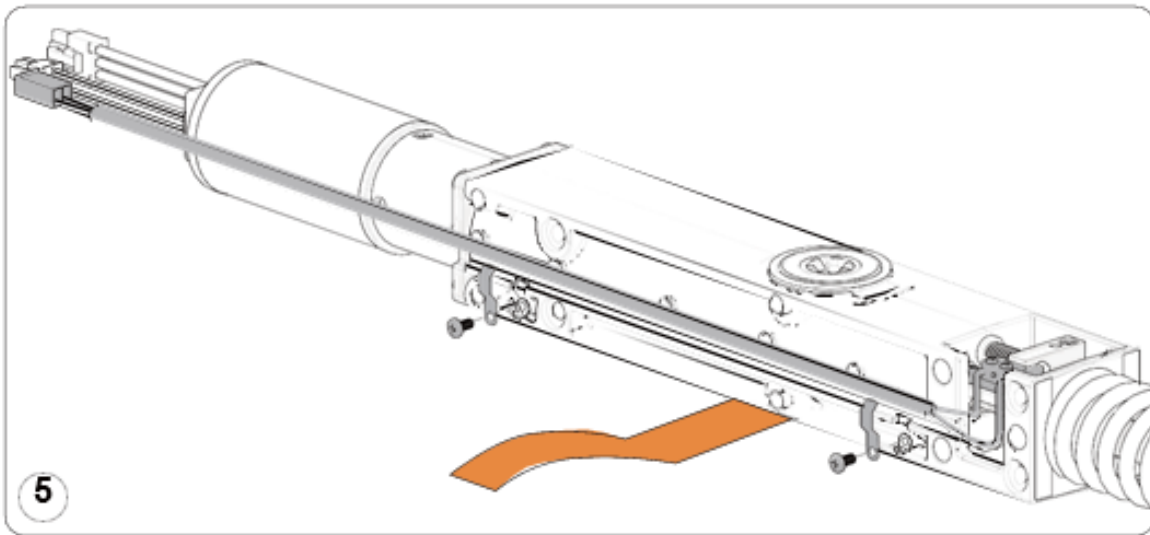


Note! Screw head must be flush with back plate surface.

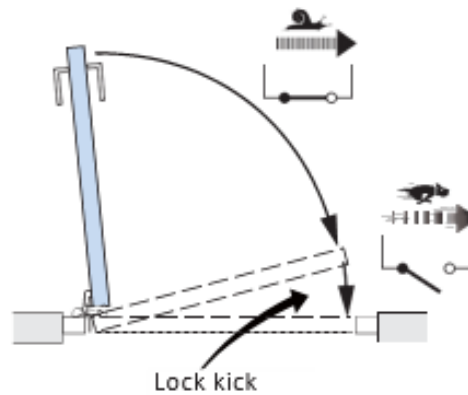
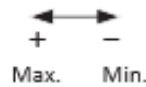




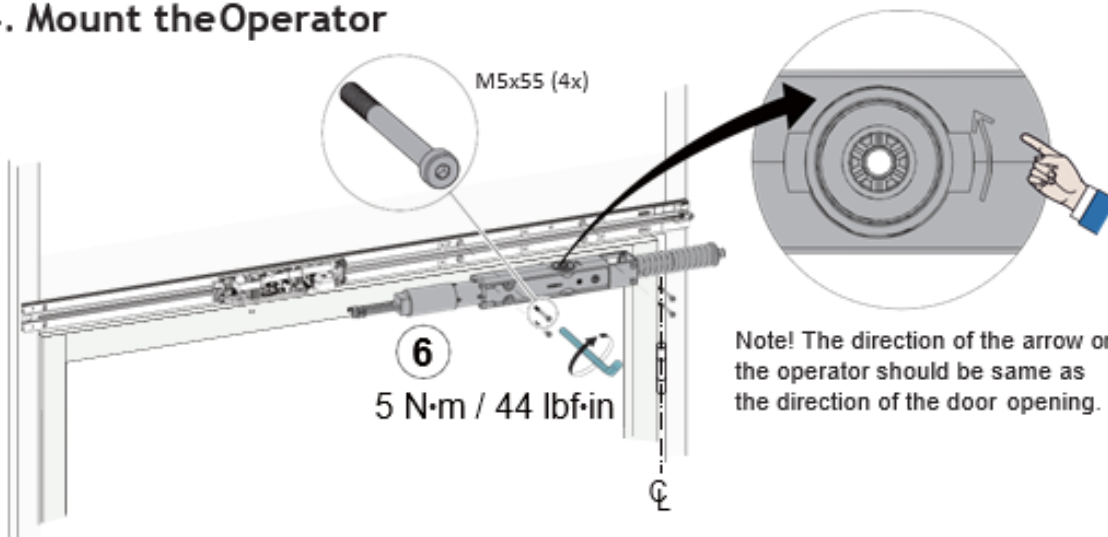
Refer to the picture for recommended location of lock kick.



Unscrew this screw to move the lock kick and adjust angle of lock kick.

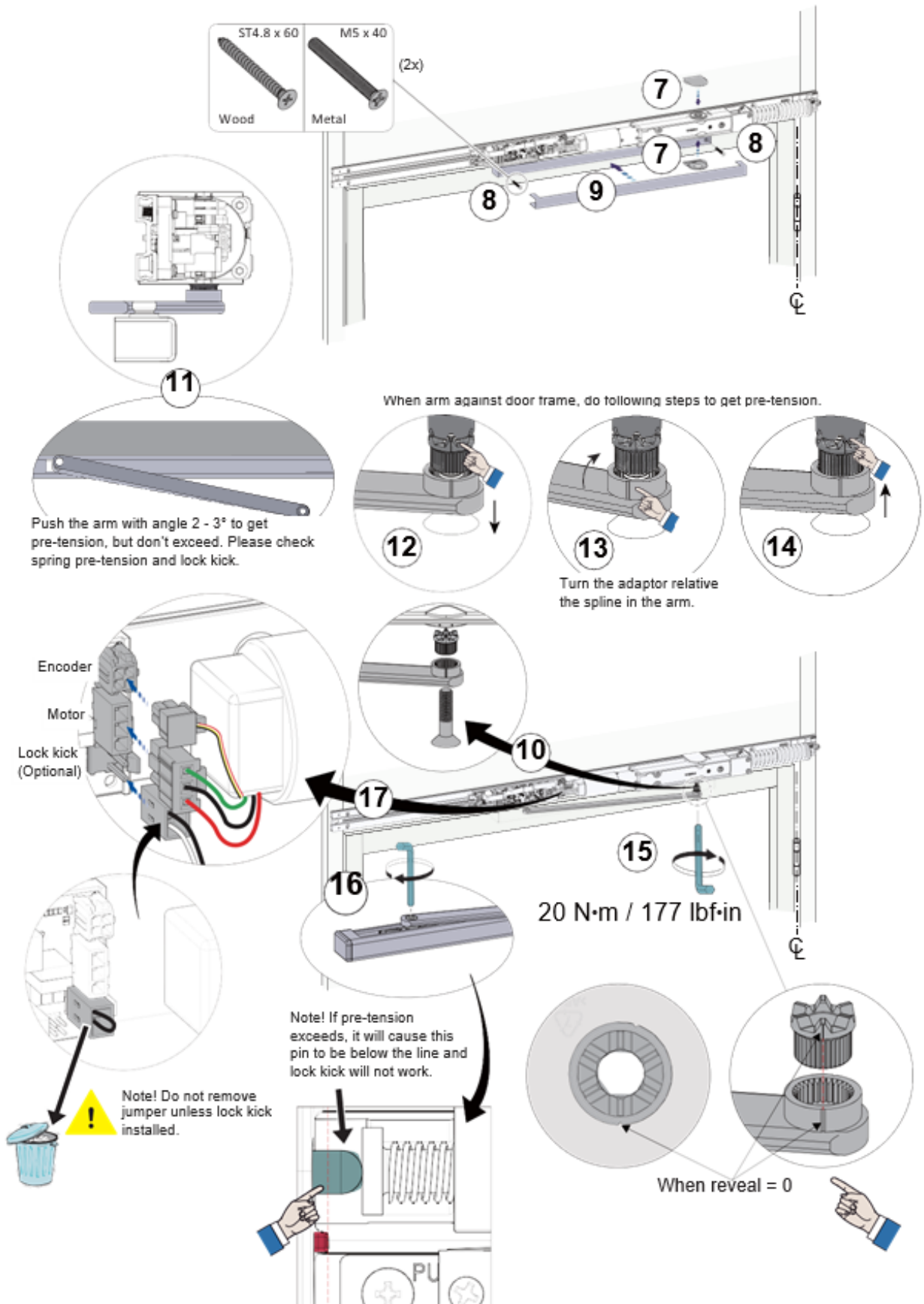


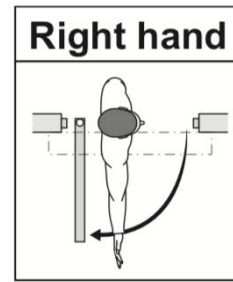
#### 4. Mount the Operator



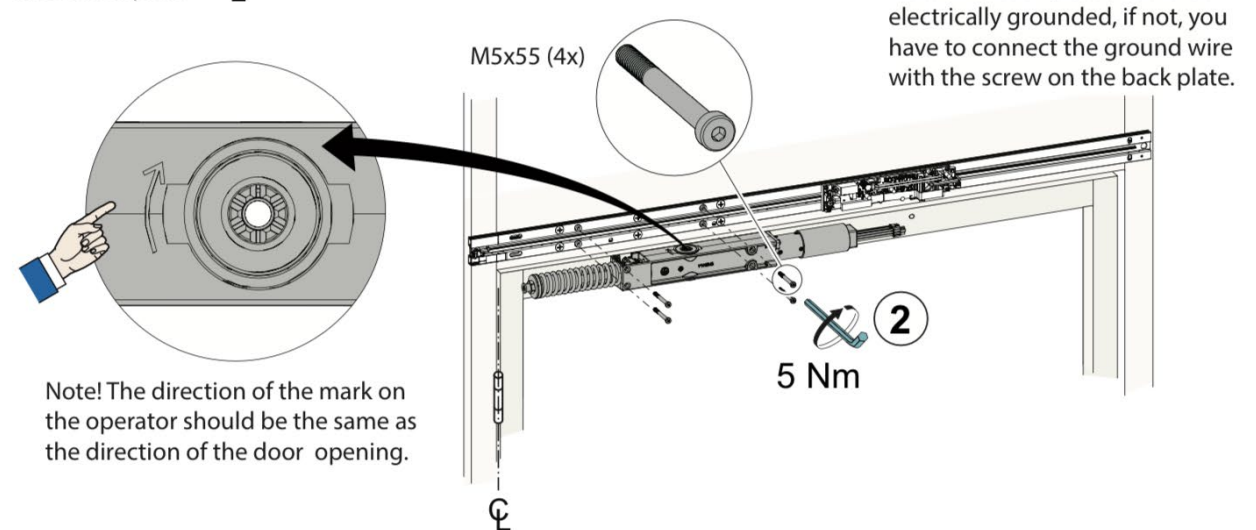
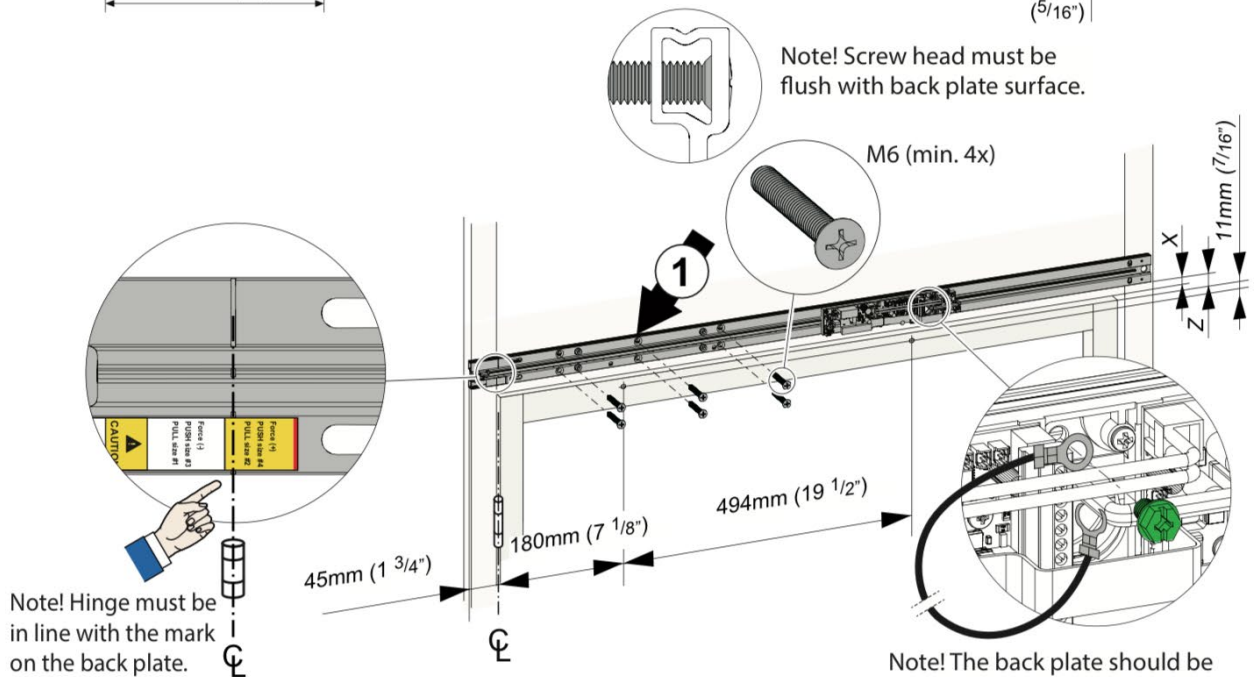
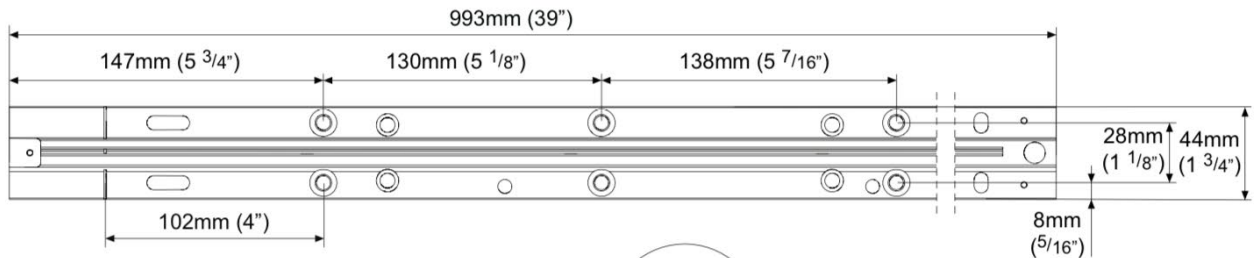
Note! The direction of the arrow on the operator should be same as the direction of the door opening.

## 5. Mount the Arm

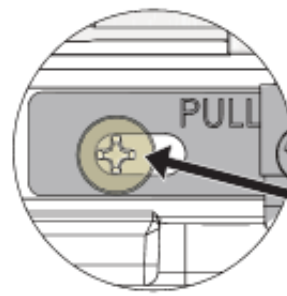
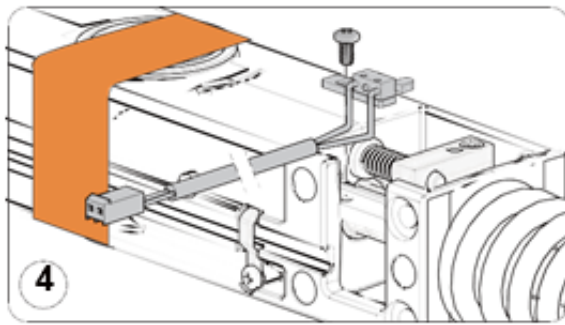




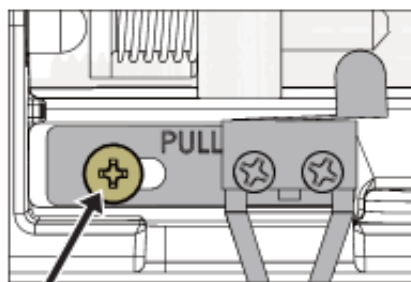
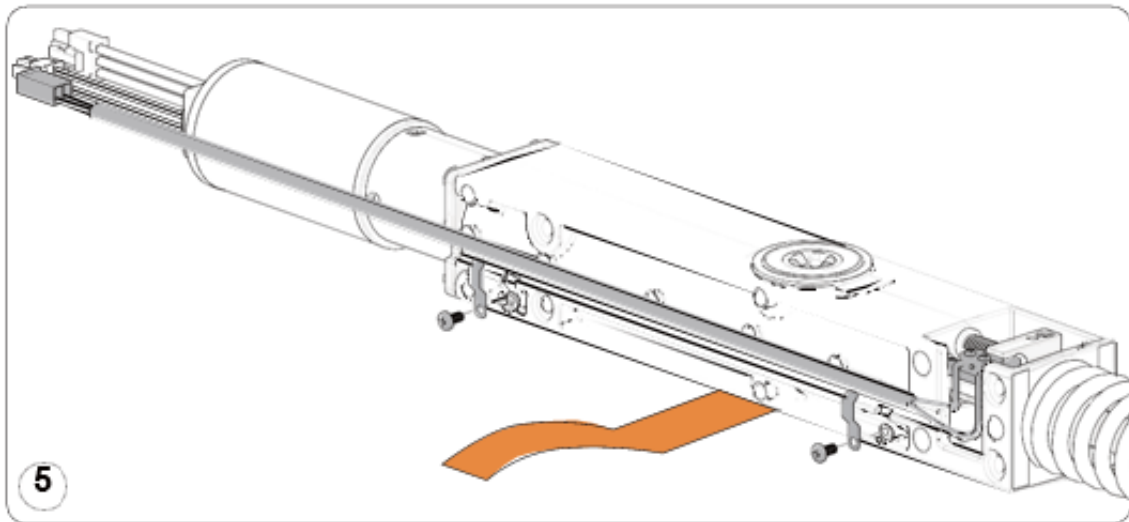
## 2. Mount the Backplate / Operator





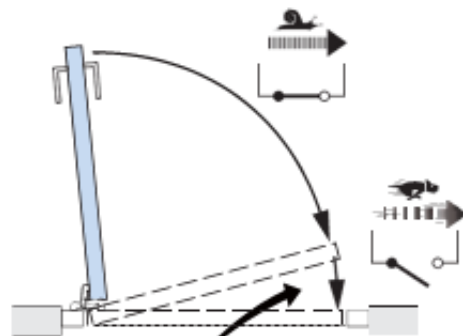


Refer to the picture for recommended location of lock kick.



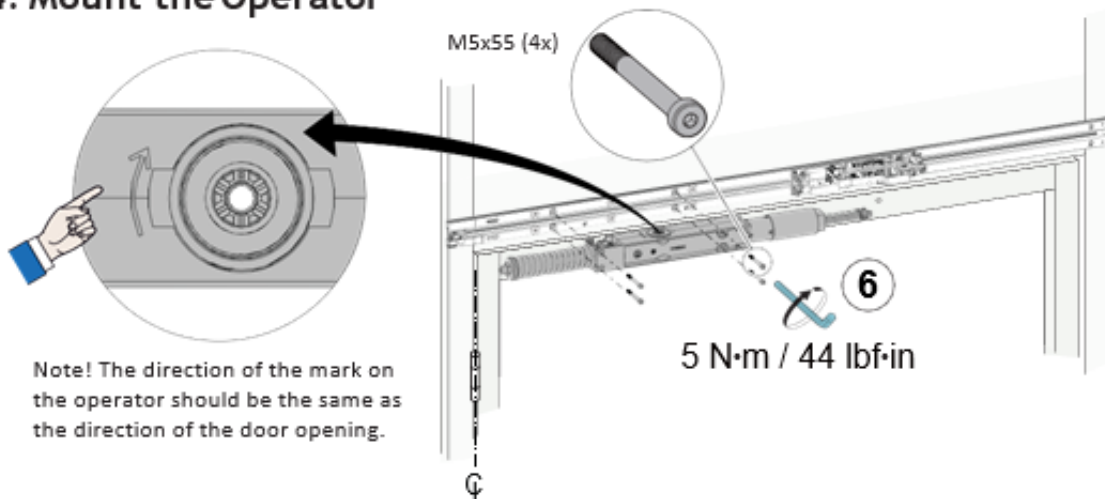
Unscrew this screw to move the lock kick and adjust angle of lock kick.

← + - →  
Max. Min.



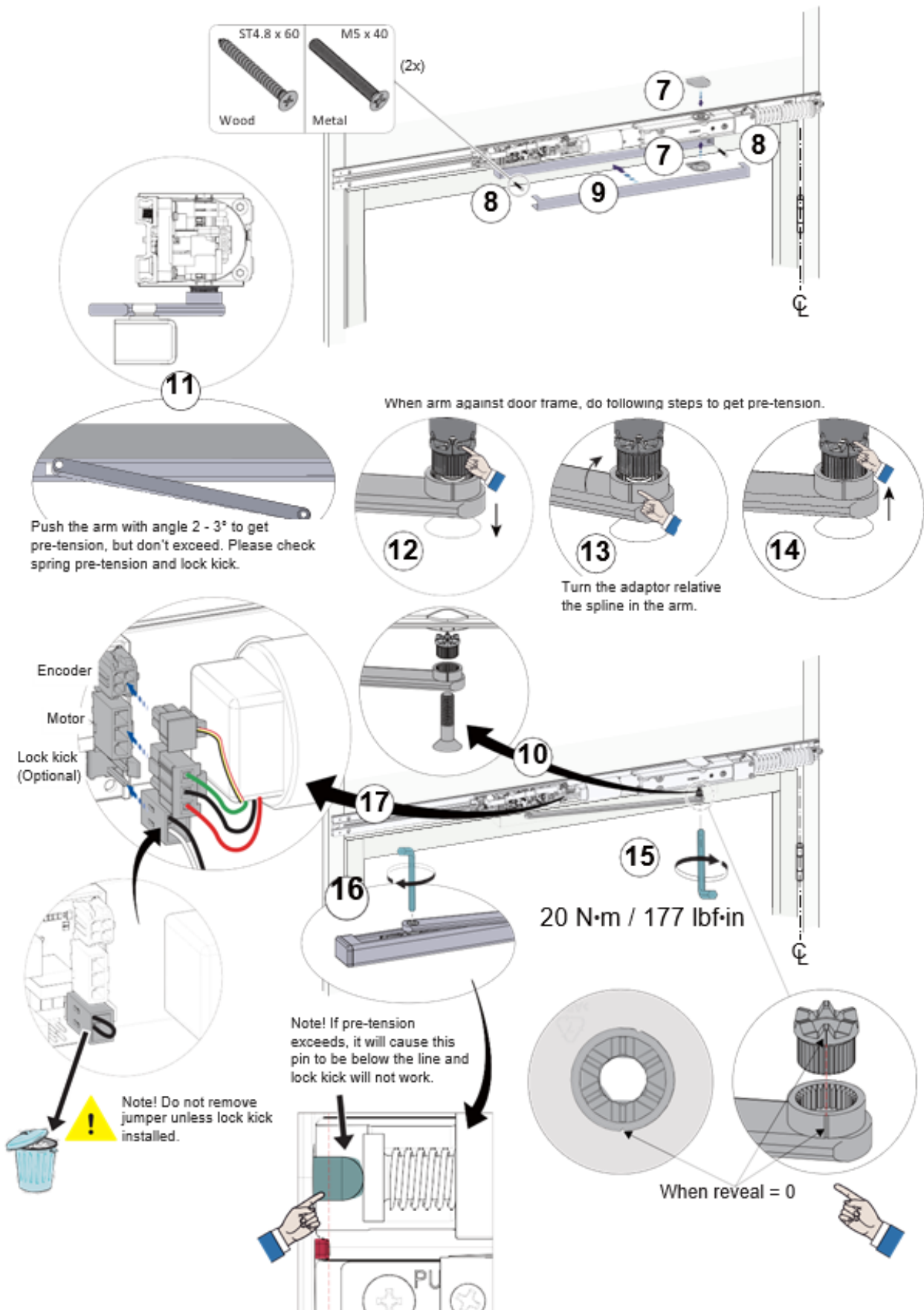
Lock kick

#### 4. Mount the Operator



Note! The direction of the mark on the operator should be the same as the direction of the door opening.

## 5. Mount the Arm



## 11 Electrical connection

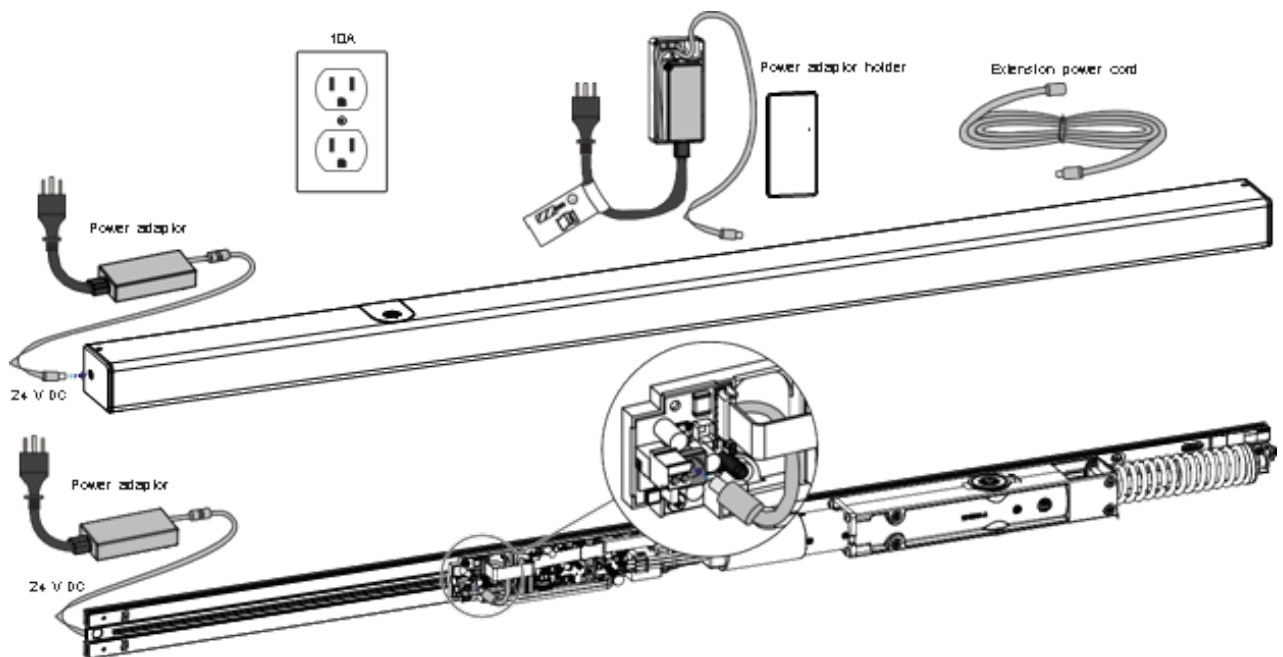
**Note!** The installation shall be made according to local codes.

During any work with the electrical connections the mains must be disconnected.

- Place the electric switch easily accessible from the operator. If a plug contact is used in the installation the wall socket shall be placed easily accessible from the operator.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

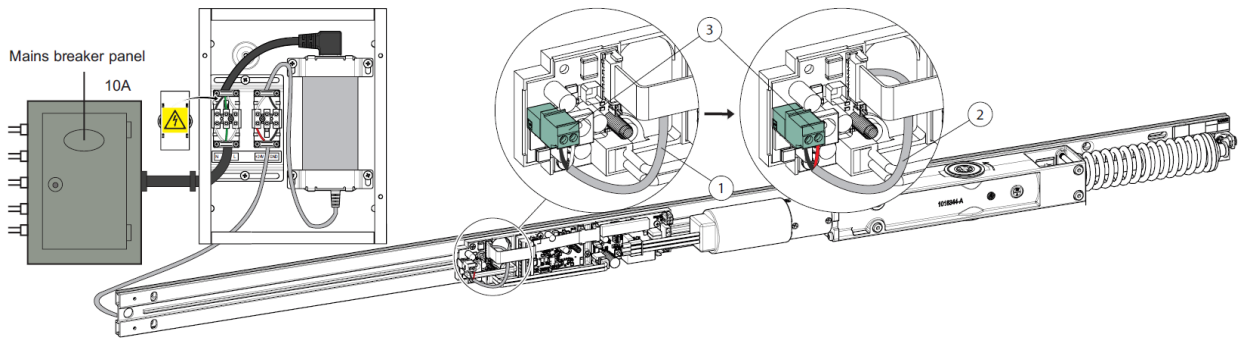
### 11.1 Mains connection

#### Alt. 1



- Disconnect the mains power.
- Connect the adaptor to the CU. (Use the power adaptor holder or the extension power cord if needed.)
- Connect mains power to the adaptor.

**Alt. 2**

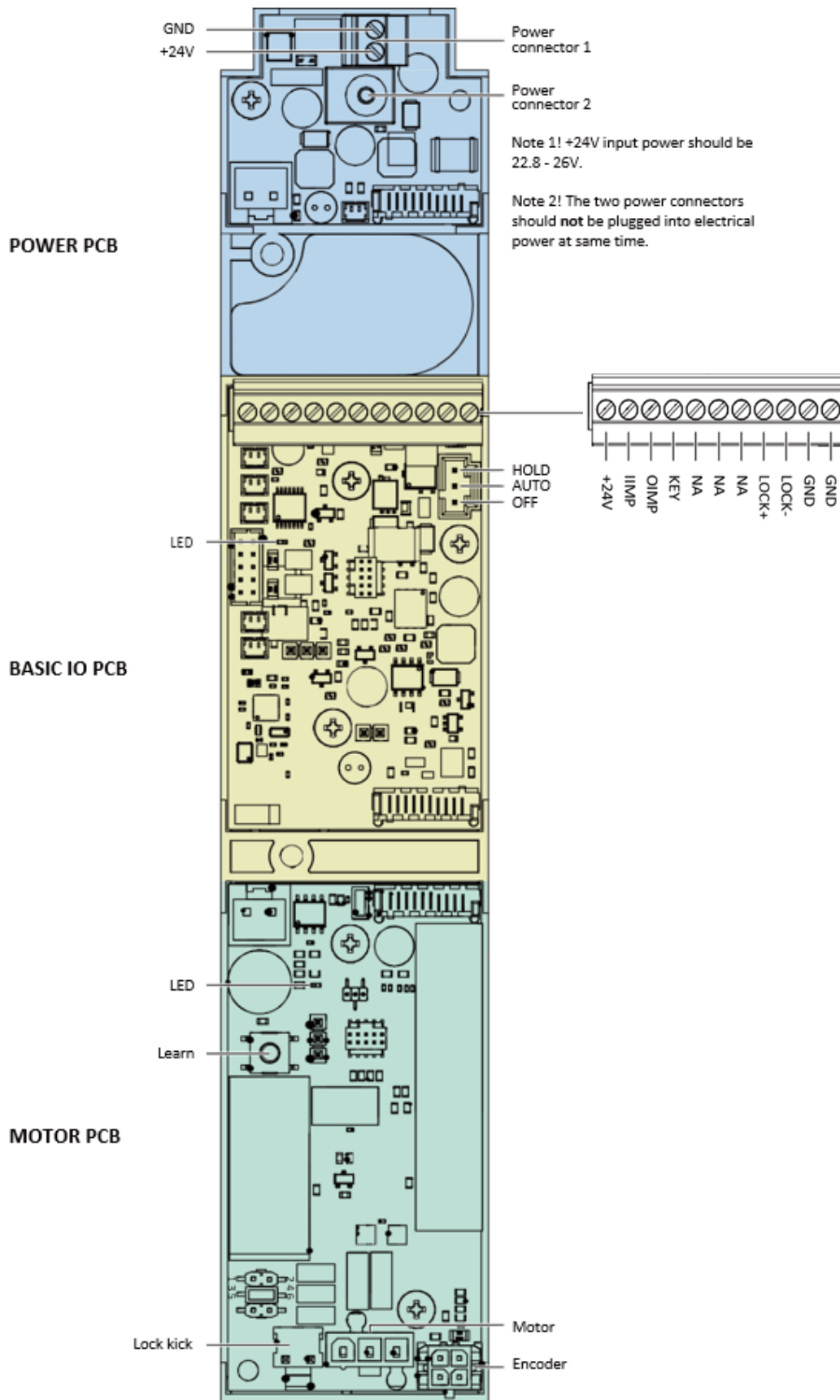


- a Disconnect the mains power.
- b Fix the adaptor in the box.
- c Disconnect the power wire (1) from the terminal (3), and protect the power with insulated tapes.
- d Connect the adaptor wire (2) to the terminal (3).
- e Connect mains power to the adaptor.

Note: This setup must be performed by a licensed electrician.

- 1 Power wire
- 2 Adaptor wire
- 3 Terminal

11.2 Control unit (CU)



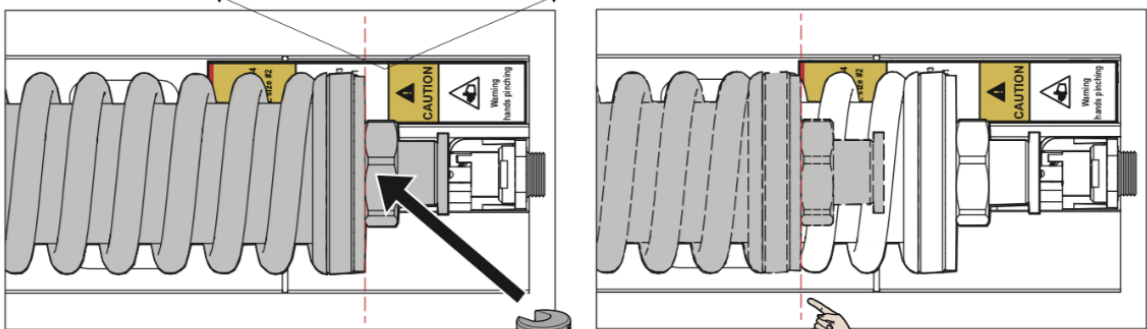
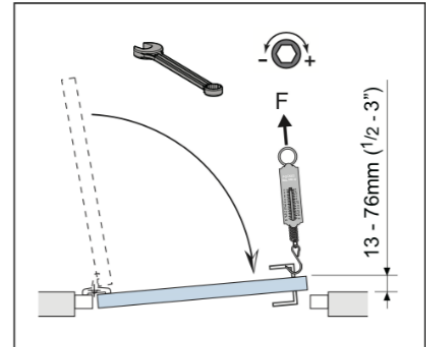
# 12 Start-up

**Note:** An external door stop is to be installed to prevent the door from over travel.

## 12.1 Spring pre-tension

The spring pre-tension is factory set to either size #2 PUSH / PULL or size #4 PUSH. Adjust the spring according to the following information.

Door closer power size according to ANSI 156.4	Closing force between 13mm (1/2") and 76mm (3")		Door weight
	F (lbf)	F (N)	
Size #1 PUSH / PULL	2 - 3	9 - 13	50 lbs / 23 kg
Size #2 PUSH / PULL	3 - 5	13 - 22	80 lbs / 36 kg
Size #3 PUSH	5 - 8	22 - 36	100 lbs / 45 kg
Size #4 PUSH	8 - 11	36 - 49	125 lbs / 57 kg



18 mm

Spring shall not be over pre-tensioned. Make sure that the spring does not exceed the red line on the sticker.

## 12.2 App

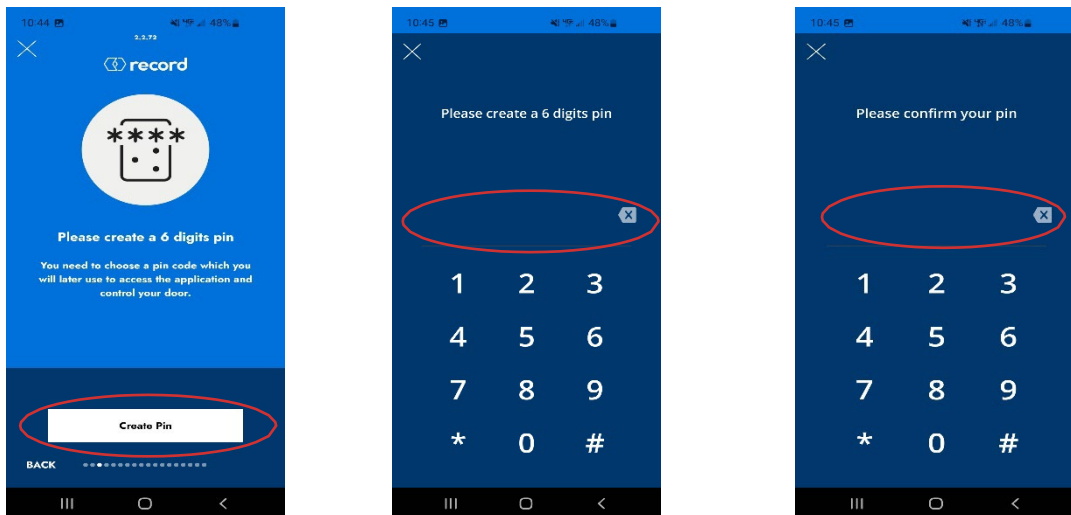
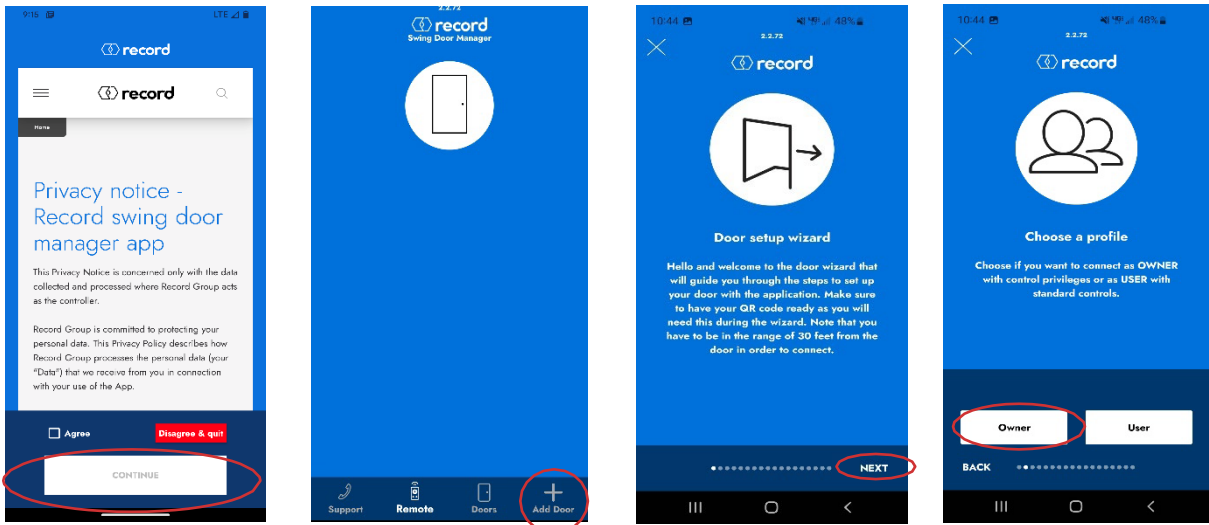
Connect mains power (the operator will find its closed position) and make sure the LED is on. Before the learning procedure starts, make sure that the door has been properly closed i.e., not by force.

### 12.2.1 Install the app

Download the app **ENTREMATIC Swing Door Manager** at App Store or Google Play.

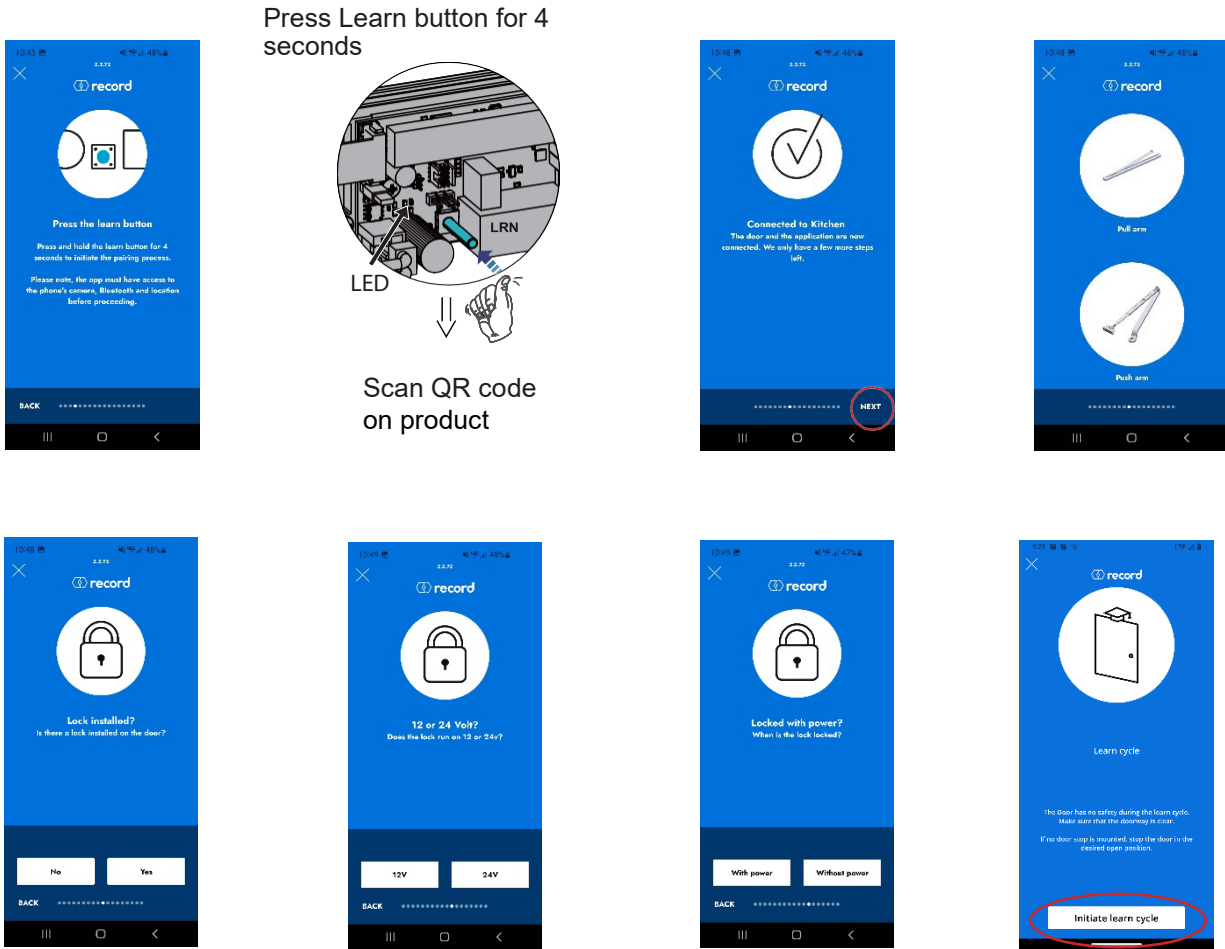


### 12.2.2 Log into the app with owner



12.2.3 Learn

Connect mains power (the operator will find its closed position).



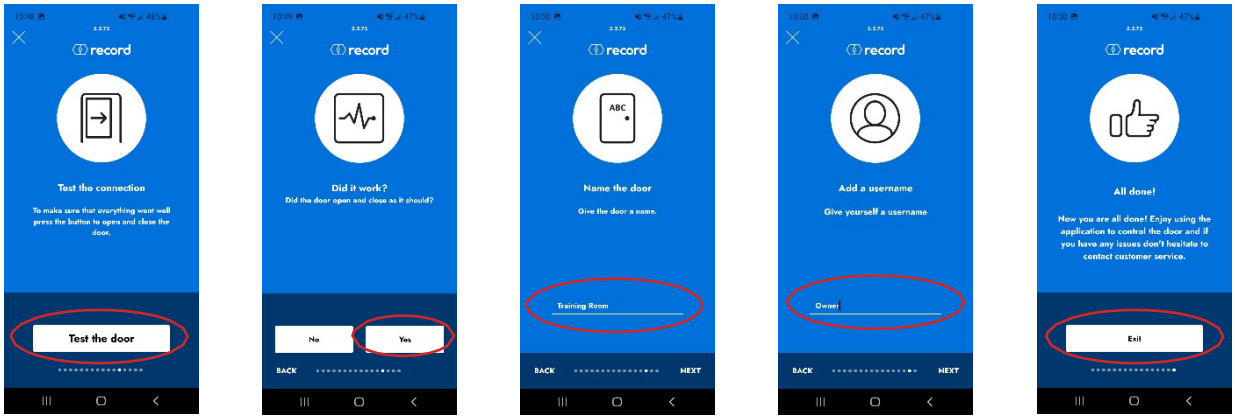
**Note!** If any of the parameters SPRING PRE-TENSION are changed after performing a learn, a new learn must be carried out.



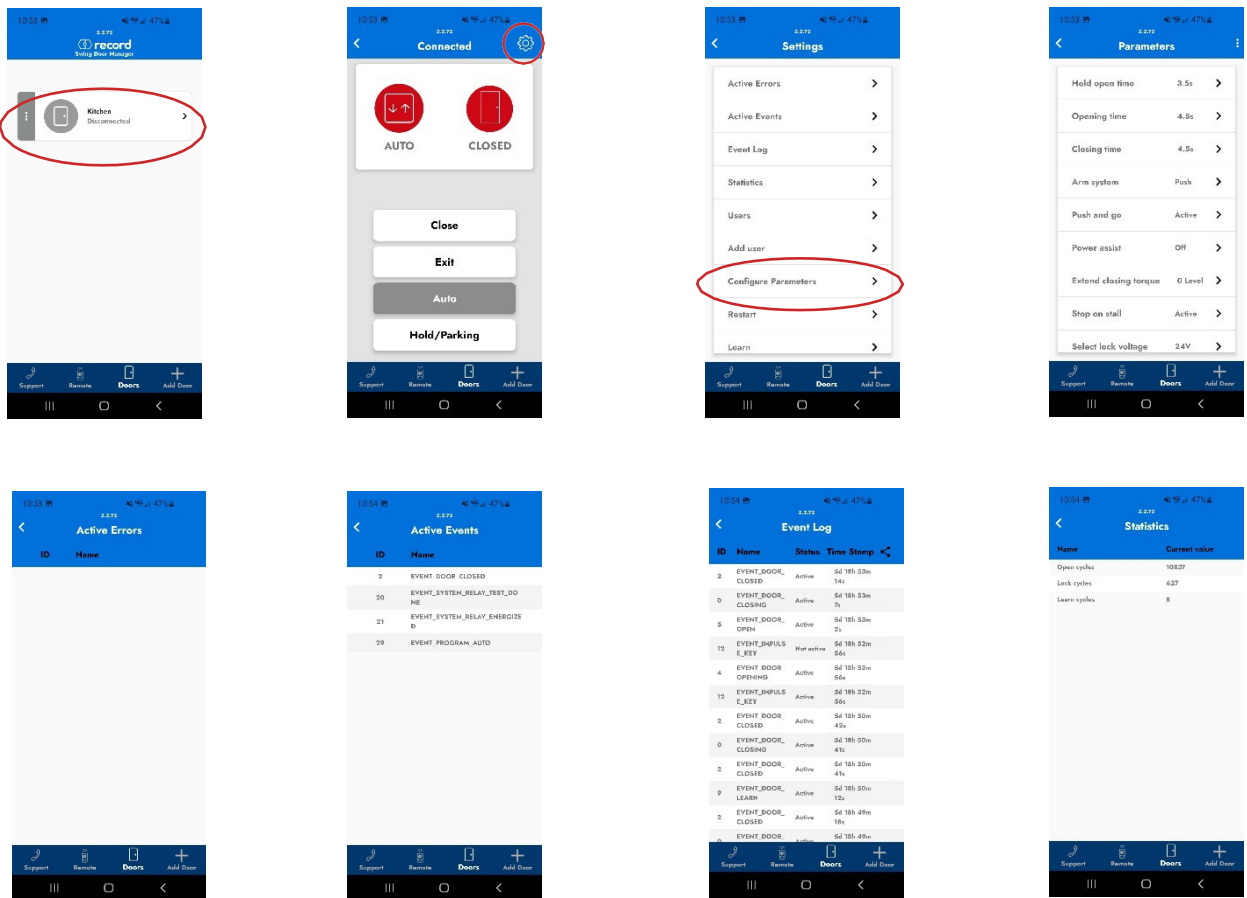
The back-check will be automatically adjusted to 10° and 1 second before open position. The latch-check will be automatically adjusted to 10° and 1.5 seconds before closed position.

12.2.4 Test

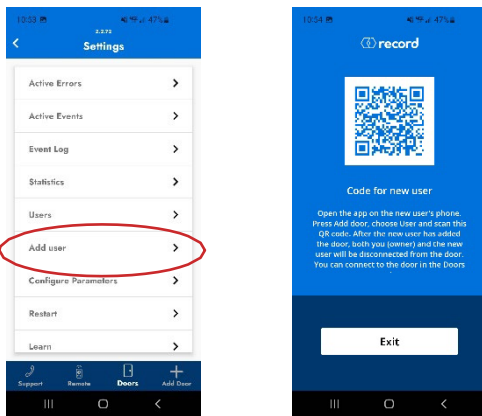




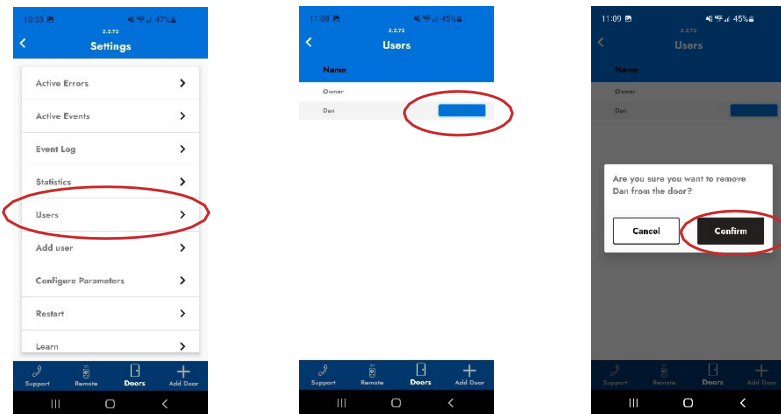
12.2.5 Settings



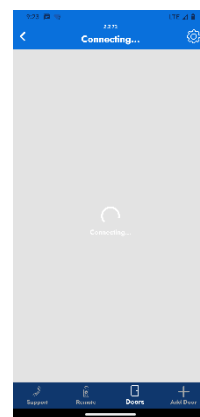
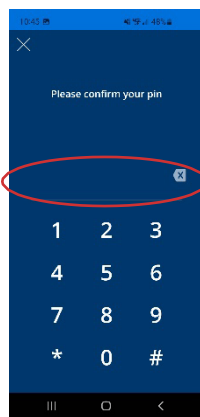
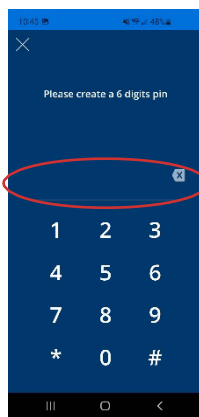
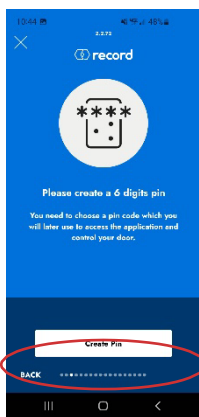
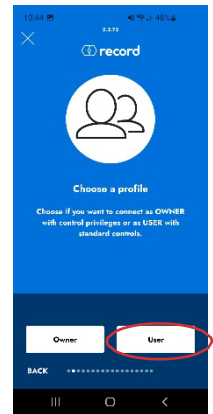
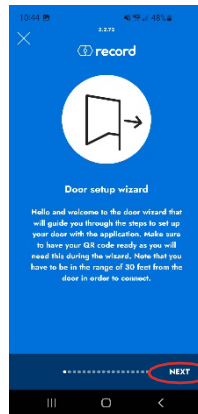
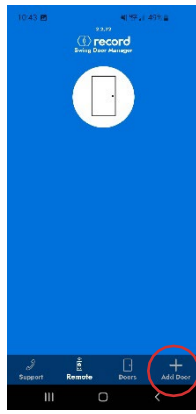
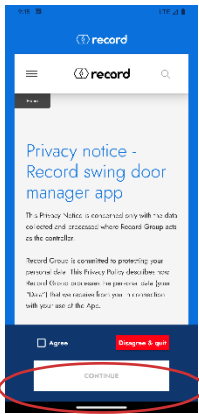
### 12.2.6 Add user



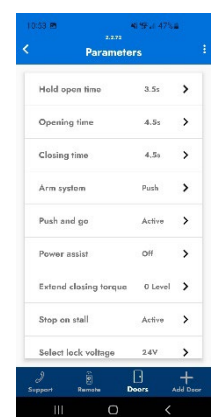
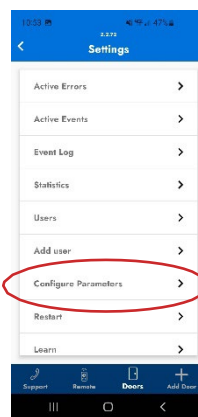
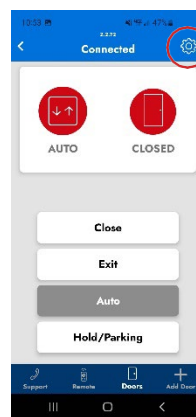
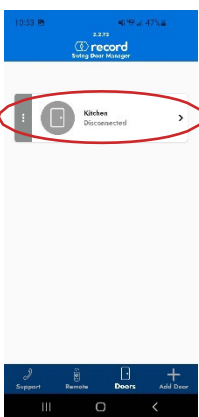
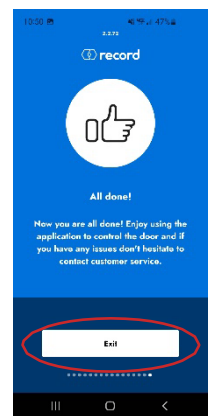
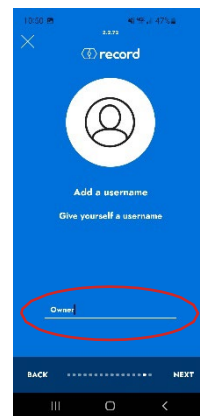
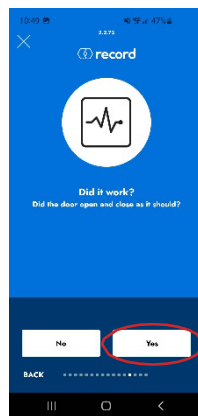
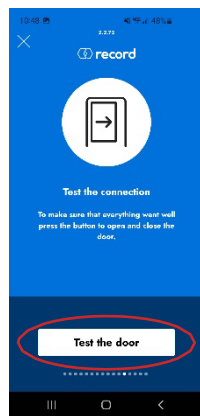
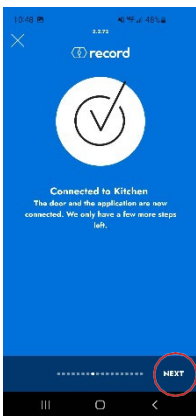
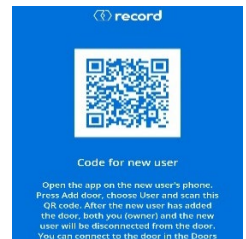
### 12.2.7 Remove user



12.2.8 Log into app with user



At the same time, owner should select "Add user" and show the QR code. User scan the QR code from owner

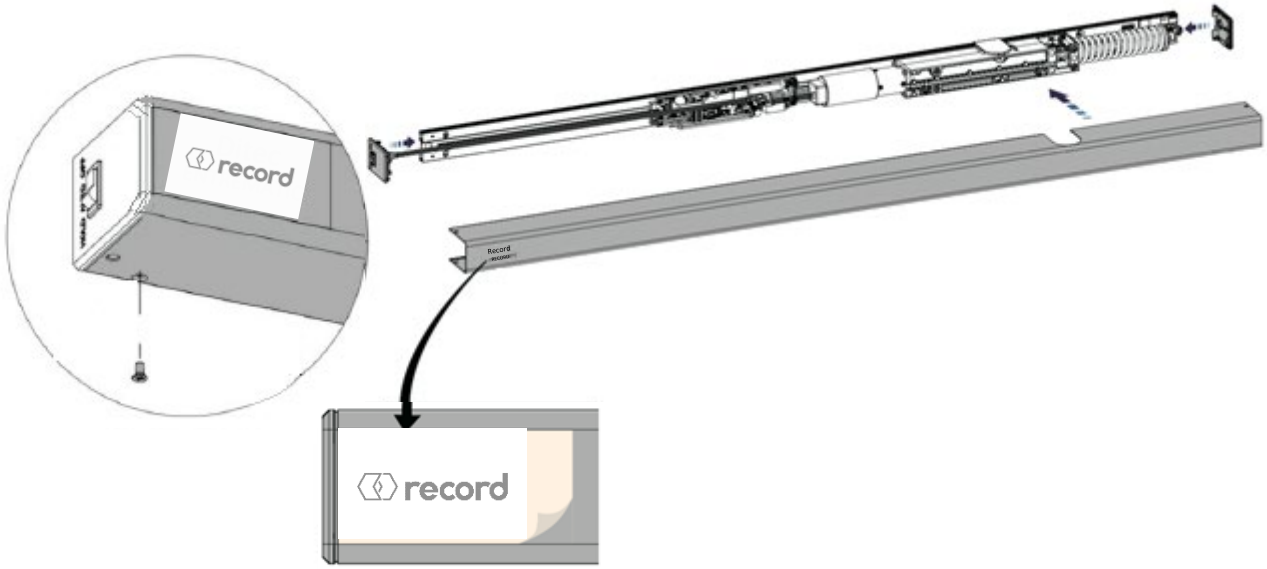


## 12.2.9 Configuration parameters

Parameter name	Default settings	Value
Hold open time	5s	2s- 6h
Opening time	4.5s	4.5s - 9s
Closing time	4.5s	4.5s - 9s
Arm system	Push	Push / Pull
Push and go	Not active	Not active / Active
Power assist	Off	Off / Low / Medium / High
Extend closing torque	0 (Lowest)	0 (Lowest) - 10 (Highest)
Stop on stall	Active	Not active / Active
Select lock voltage	12V	12V / 24V
Select lock power	Lock with power	Lock with power / Lock without power
Push and close	Not active	Not active / Active
Key impulse hold open time	5s	2s - 25s
Number of lock retries	1 time	0 - 2 times
Lock kick	Not active	Not active / Active
Reverse upon obstruction	Active	Not active / Active
Lock release time	0.5s	0s- 5s
Ratchet function	Not active	Not active / Active

## 13 Cover

- Secure cover with screw.
- Apply the Record/Record logotype to the cover, see below.
- Apply the labels to the underside of the cover, see below.



## 14 Troubleshooting

<b>Fault</b>	<b>Possible reasons why</b>	<b>Remedies/Explanations</b>
<b>The door does not open</b> The motor does not start	Control switch or is set to OFF	Change the setting of the control switch
	Mains power is missing	Check the mains power and fuse in the building
The motor starts but the door does not open	Mechanical lock is locked	Unlock the lock
	Something jammed beneath the door	Remove object
	Electric striking plate is binding	Select lock release
		Adjust striking
Arm system has come loose	Tighten the arm system by installation steps	
<b>The door does not close</b>	Control switch is set to HOLD	Change the setting of the control switch
	Something jammed beneath the door	Remove object

## 15 ANSI / BHMA A156.19 (LOW ENERGY APPLICATION)

### 15.1 REQUIREMENTS FOR POWER OPERATED DOORS

The following texts are excerpts from American National Standard for power-operated doors. Please refer to the full standard if necessary.

#### 15.1.1 Activation

The operator shall be activated by a knowing act.

#### 15.1.2 Opening

Doors shall open from closed to back check, or 80 degrees which ever occurs first, in 3 seconds or longer as required in Table I. Backcheck shall not occur before 60 degrees opening. Total opening time to 90 degrees shall be as in Table II. If the door opens more than 90 degrees, it shall continue at the same rate as backcheck speed. When powered open, the door shall remain at the open position for not less than 5 seconds.

#### 15.1.3 Closing

Doors shall close from 90 degrees to 10 degrees in 3 seconds or longer as required in Table I. Doors shall close from 10 degrees to fully closed in not less than 1.5 seconds.

#### 15.1.4 Force and Kinetic Energy

The force required to prevent a stopped door from opening or closing shall not exceed 15 lbf (67 N) measured 1" (25 mm) from the latch edge of the door at any point during opening or closing. The kinetic energy of a door in motion shall not exceed 1.25 lbf-ft (1.69 Nm). Table I provides minimum times for various widths and weights of doors for obtaining results complying with this kinetic energy.

Doors shall open with a manual force not to exceed 15 lbf (67 N) to release a latch, if equipped with a latch, 30 lbf (133 N) to set the door in motion, and 15 lbf (67 N) to fully open the door. The forces shall be applied at 1" (25 mm) from the latch edge of the door.

**Table I**

Minimum Opening Time to Back Check or 80 degrees, which ever occurs first, and the Minimum Closing Time from 90 degrees to Latch Check or 10 degrees.

"D" Door Leaf Width - Inches (mm)	"W" Door Weight in Pounds (kg)				
	100 (45.4)	125 (56.7)	150 (68.0)	175 (79.4)	200 (90.7)
*30 (762)	3.0	3.0	3.0	3.0	3.5
36 (914)	3.0	3.5	3.5	4.0	4.0
42 (1067)	3.5	4.0	4.0	4.5	4.5
48 (1219)	4.0	4.5	4.5	5.0	5.5

\* Check applicable Building Codes for clear width requirements in Means of Egress.

**Table II**

Total Opening Time to 90 Degrees

Backcheck at 60 degrees	Backcheck at 70 degrees	Backcheck at 80 degrees
Table I plus 2 seconds	Table I plus 1.5 seconds	Table I plus 1second
If the door opens more than 90 degrees, it shall continue at the same rate as backcheck speed.		

**Note!** To determine maximum times from close to full open, the operator shall be adjusted as shown in the chart. Back check occurring at a point between positions in Table II shall use the lowest setting. For example, if the backcheck occurs at 75 degrees, the full open shall be the time shown in Table I plus 1.5 seconds.

15.1.5 Signage

Doors shall be equipped with signage visible from either side, instructing the user as to the operation and function of the door. The signs shall be mounted 50" +/- 12" (1270mm +/- 305mm) from the floor to the center line of the sign.

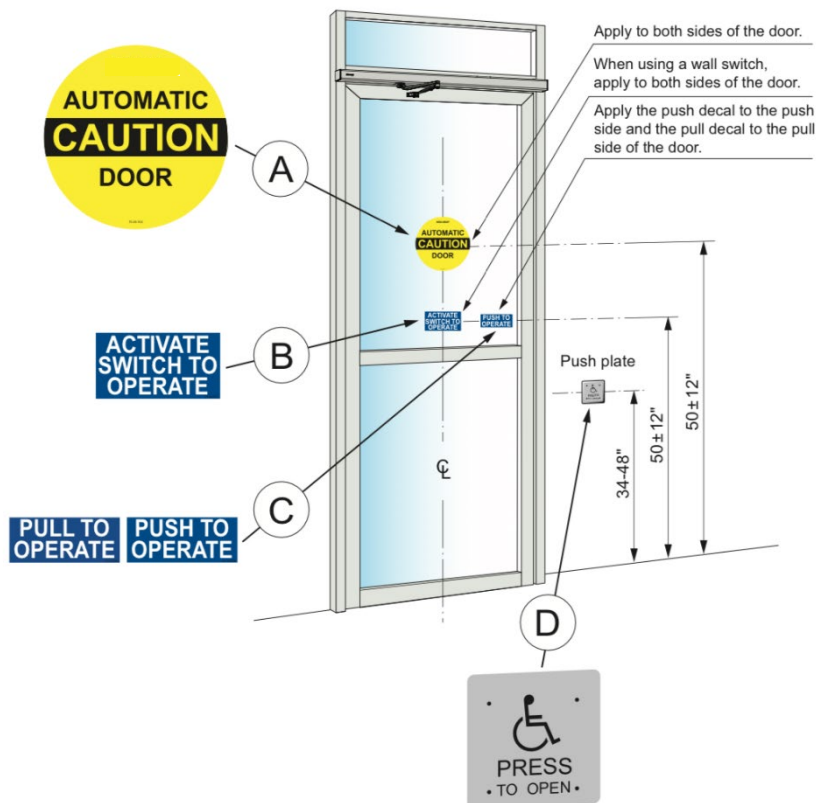
The letters shall be 5/8 inch (16 mm) high minimum.

**Doors** All doors shall be marked with signage visible from both sides of the door, with the words "AUTOMATIC CAUTION DOOR" (see illustration below). The sign shall be a minimum of 6" (152 mm) in diameter with black lettering on a yellow background. Additional information may be included.

Additionally one of the following knowing act signs shall be applied:

When a **Knowing Act Switch** is used to initiate the operation of the door operator, the doors shall be provided with signs on both sides of the door with the message "ACTIVATE SWITCH TO OPERATE". The lettering shall be white and the background shall be blue.

When push/pull is used to initiate the operation of the door operator, the doors shall be provided with the message "PUSH TO OPERATE" on the push side of the door and "PULL TO OPERATE" on the pull side of the door. The lettering shall be white and the background shall be blue.







**Record Canada Inc.**

Toll Free: 1-877-348-6837  
Email: [info.ditec.ca@recorddoors.com](mailto:info.ditec.ca@recorddoors.com)  
Web: [www.recorddoors.ca](http://www.recorddoors.ca)

(formerly Entrematic)

**Record U.S.A. Inc.**

Toll Free: 1-866-901-4284  
Email: [info.ditec.us@recorddoors.com](mailto:info.ditec.us@recorddoors.com)  
Web: [www.recorddoors.com](http://www.recorddoors.com)

(formerly Entrematic)