

Universal Motion

Bottom Center Hung Self-Closing Patching Fitting
with or without hold open

Installation instructions

833006 – 06-2020

| EN |

dormakaba 

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1 Technical specifications

1.1 Overview

These instructions are for installation of the Universal Motion Self-Closing Patch Fittings for the following mounting and style versions:

1. Glass mounting

1.1.1 General information

- dormakaba requires use of tempered monolithic glass.
- dormakaba glass hardware is not suitable for harsh environment; for example, applications where chemicals (e.g. chlorine) are used such as indoor swimming pools, saunas, or salt-water pools.
- Do not swing doors with excessive force. Install limiting stop to prevent door from opening too far.

1.1.2 Intended use

- For pivoting doors in indoor or covered areas only.
- For manual slowly opening and closing only.

1.1.3 Glass requirements/fittings/mounting

- The substructure/wall must be able to bear permanent loads, and be level (max. tolerance: 1/16" [2] per 39" [1m]).
- Fasteners must be sufficiently dimensioned for the substructure/wall and weight of the door.
- When adjusting glass elements, always stick to the required clearance for the respective hardware. Adjust clearance so glass does not come in contact with any hard surfaces such as glass, metal or concrete.
- Do not use excessive force when installing the glass (avoid over tightening screws.)

1.1.4 Requirements for glass panel

- dormakaba requires use of fully tempered glass, which complies with ASTM C 1036 and ASTM C 1048. Secondary heat soaking processes are optional but not required.
- Clamping area must be flat and uncoated (no self-cleaning coating!)
- Never use glass with conchoidal fractures and/or damaged edges.

1.1.5 Safety instructions

- Installation requires two people.
- Always wear protective clothing.

- Only properly qualified and specially trained staff are authorized to mount dormakaba glass hardware.
- Due to crushing hazards and possible injury caused by breakage of glass during mounting, corresponding protective clothing (especially gloves and protective goggles) is required.
- Never clamp metal fitting hardware directly to glass surface.

1.1.6 Symbols used - Safety/Installation



CAUTION

Mounting components must meet the requirements of substructure/wall and door weight. Please read the technical information for fittings.



WARNING

Risk of breaking glass. When installing the door, support the door panel with a block of wood or similar object.



CLOSING EDGE OF DOOR

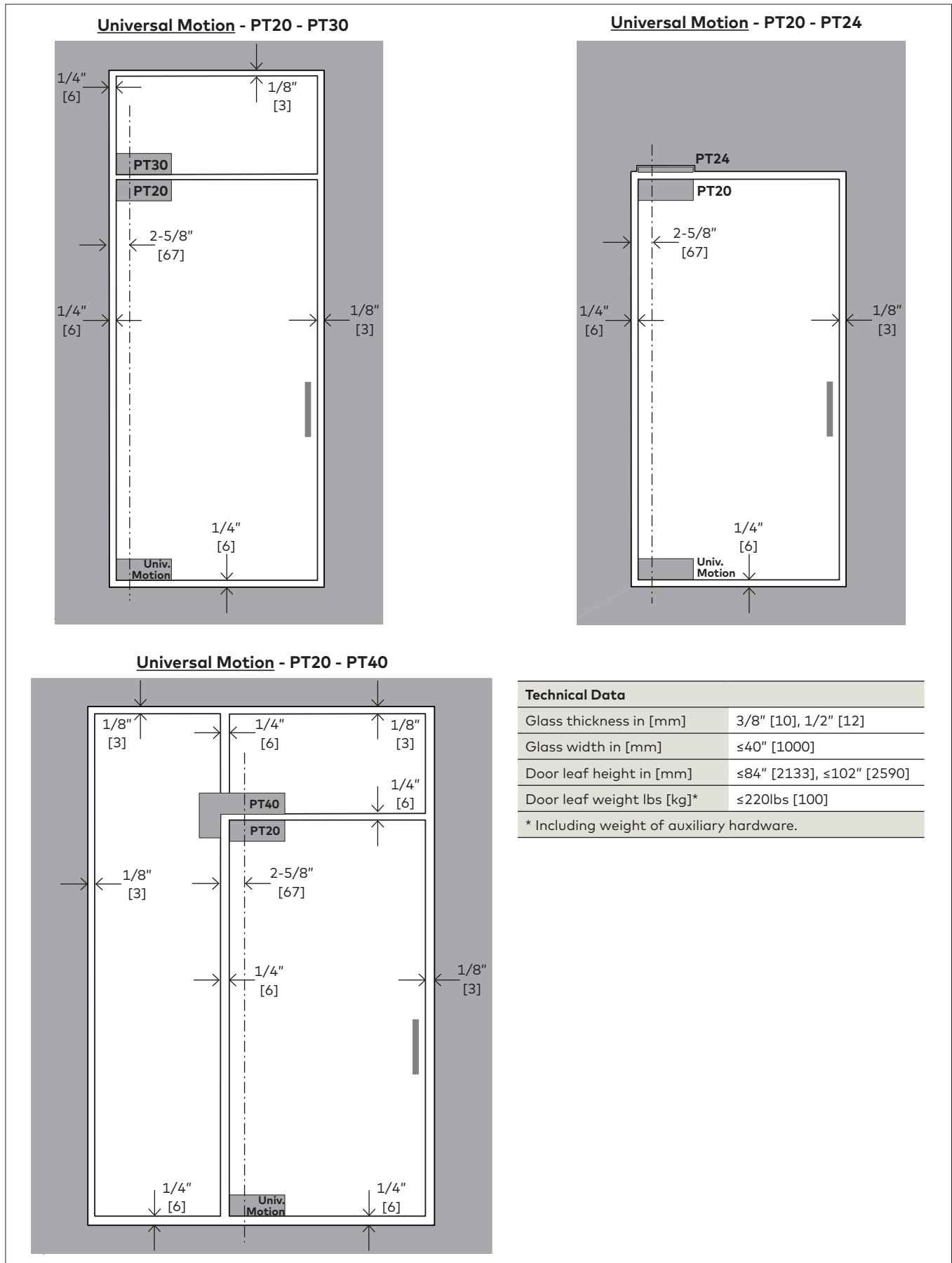
1.1.7 Maintenance, care, repair

- Immediately replace damaged parts.
- Always use original dormakaba parts.
- Clean clamping area with alcohol-based standard commercial cleaning agent before mounting the glass hardware.
- Use a damp cloth for occasional cleaning.
- Always use silicone - and oil-free cleaners (e.g. acetone).
- Check glass hardware at regular intervals for proper positioning, smooth operation and correct adjustment.
- High traffic door systems require inspection by properly qualified staff (specialized companies or installation firms.)
- Function of fittings is recommended to be inspected every 500,000 movements by a specialist.

1.1.8 Disposal

Disposal in accordance with local, state and national regulations.

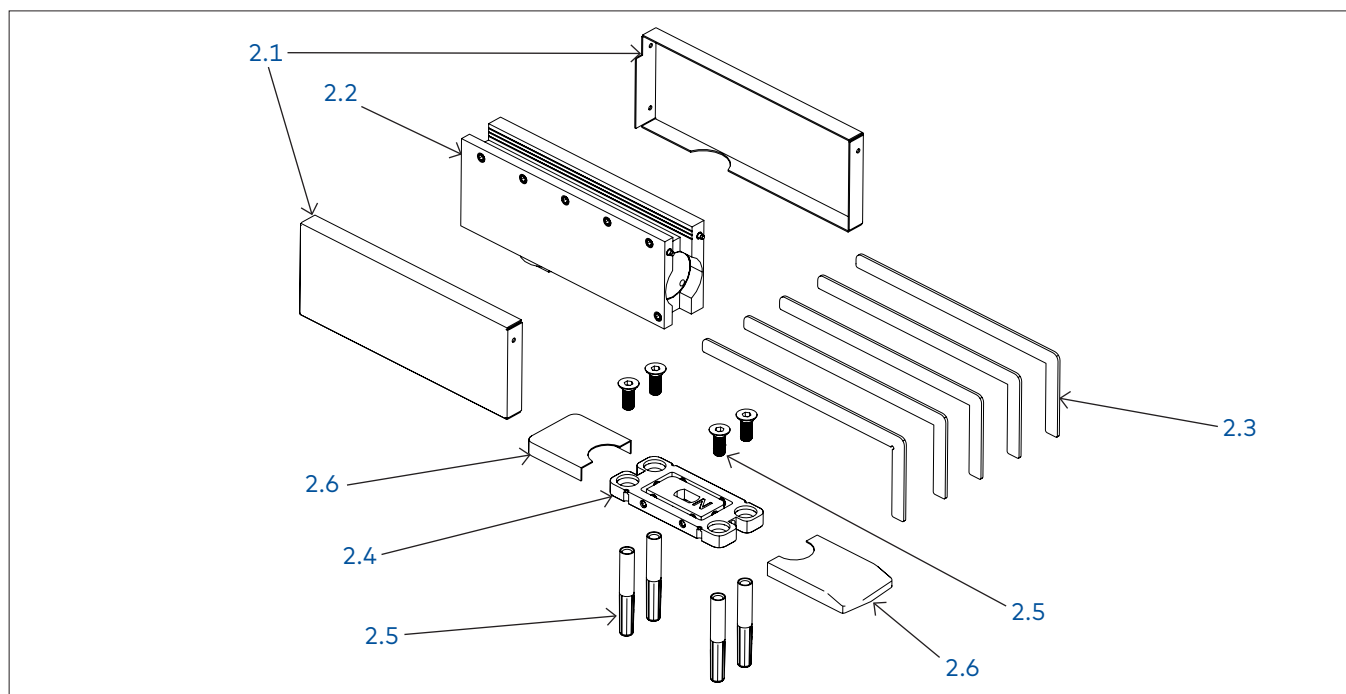
1.2 Door dimensions & options



2 Installation instructions

2.1 Overall

Fig. 1



- 2.1 Covers
- 2.2 Self-closing patch fitting
- 2.3 Gaskets
- 2.4 Pivot plate
- 2.5 Pivot plate fasteners
- 2.6 Pivot plate covers

2.2 Prepare floor and install pivot plate

Fig. 2

Center section of pivot plate

Hex key size
3mm

Fasteners

Pins

Anchors

2.2.1 Mark and drill holes in floor surface.

- Drill 2-3/4" [70] deep holes, using 3/8" [10] drill bit

2.2.2 Insert anchors.

2.2.3 Slide pins into anchors.

2.2.4 Ensure center of pivot plate is aligned and plumb.

2.2.5 Secure pivot plate to floor surface using included fasteners.

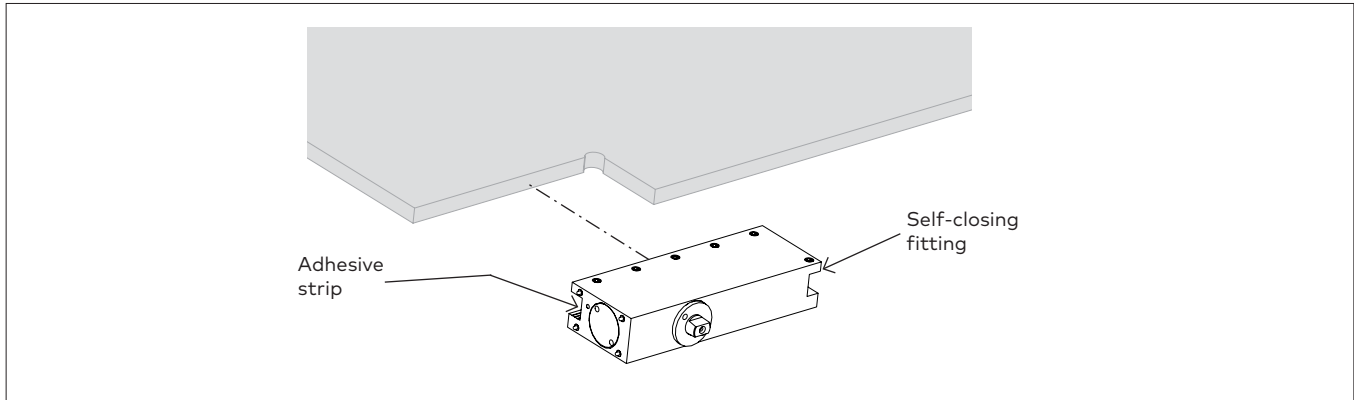
Adjustments:

2.2.6 Move center section of pivot plate in any direction, via set screws, until correct pivot alignment is met.

- Use a 3mm hex key.

2.3 Install self-closing patch fitting on glass

Fig. 3



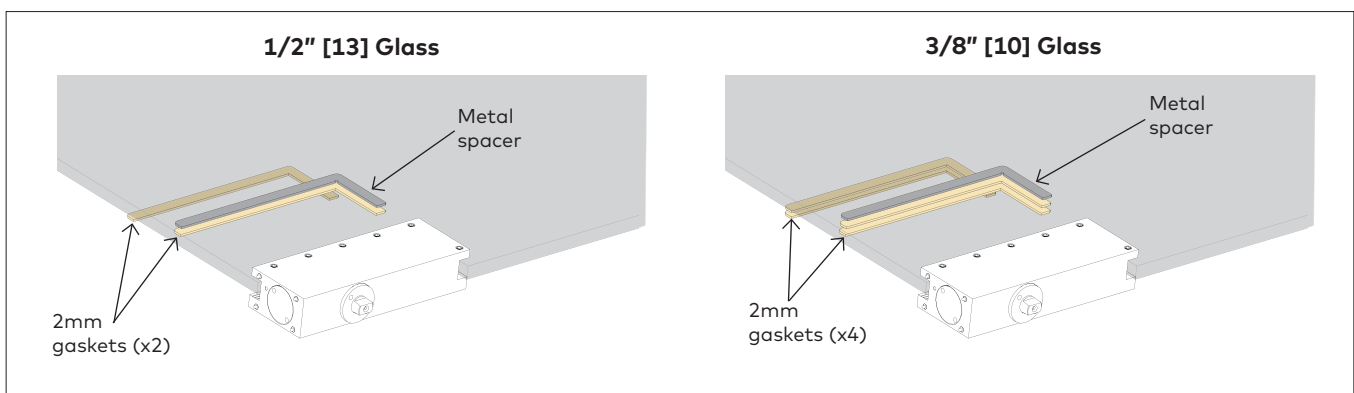
2.3.1 Remove backing from adhesive strip inside fitting.

2.3.2 Slide the fitting onto glass.

2.3.3 Press glass against adhesive strip.

2.4 Install gaskets

Fig. 4



2.4.1 **If have 1/2" [13] glass:**

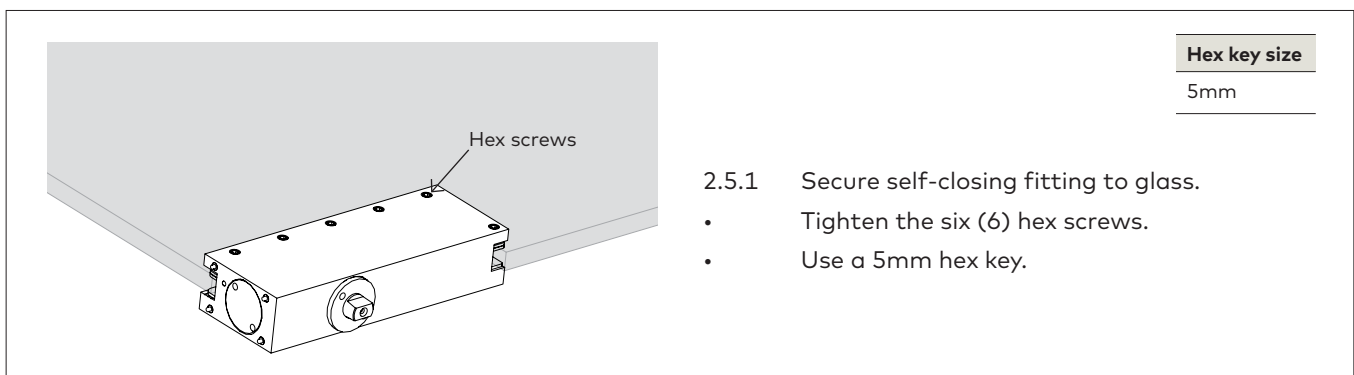
- Use one 2mm gasket on each side of the glass.
- Plus the included metal spacer.

2.4.2 **If have 3/8" [10] glass:**

- Use two 2mm gaskets on each side of the glass.
- Plus the included metal spacer.

2.5 Secure self-closing patch fitting to glass

Fig. 5



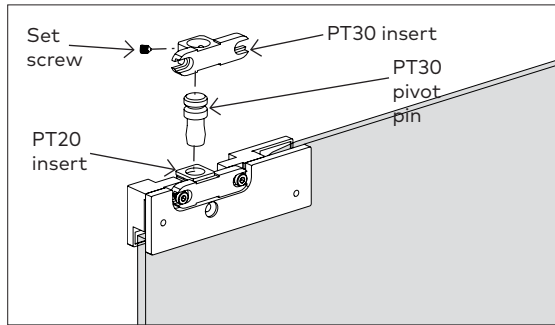
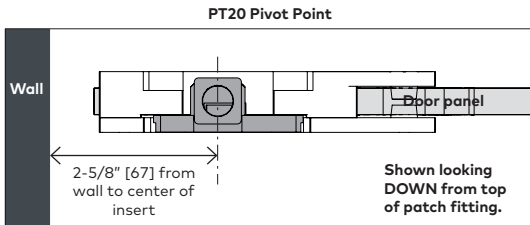
2.5.1 Secure self-closing fitting to glass.

- Tighten the six (6) hex screws.
- Use a 5mm hex key.

2.6A Option 1: Install door panel (with PT20/PT30)

Fig. 6

PLEASE NOTE ALL PT20 AND PT30 PATCH FITTING INSERTS' ORIENTATION MAY NEED TO BE REVERSED TO MEET THE NON-U.S.-STANDARD 2-5/8" [67] BACK SET WHICH IS NEEDED IN CONJUNCTION WITH A UNIVERSAL MOTION SELF-CLOSING PATCH FITTING. ENSURE TO FOLLOW THE DIRECTIONS BELOW CLOSELY.



| Torque value | |
|--------------|-----------------|
| PT20 insert | 9 ft lbs [12Nm] |
| PT30 insert | 9 ft lbs [12Nm] |

Hex key size
5mm

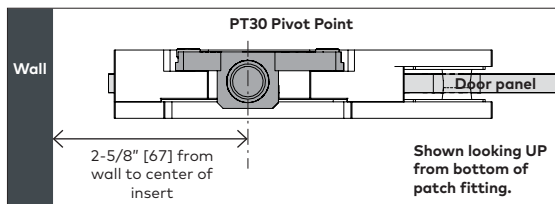
2.6.1 Mount PT20 and PT30 patch fittings to glass door and glass transom per PT20 and PT30 installation instructions.

2.6.2 Place PT20 insert into fitting, oriented as shown above.

NOTE: ENSURE INSERT IS ORIENTED CORRECTLY.

2.6.3 Secure insert with included fasteners.

- Tighten and torque accordingly.

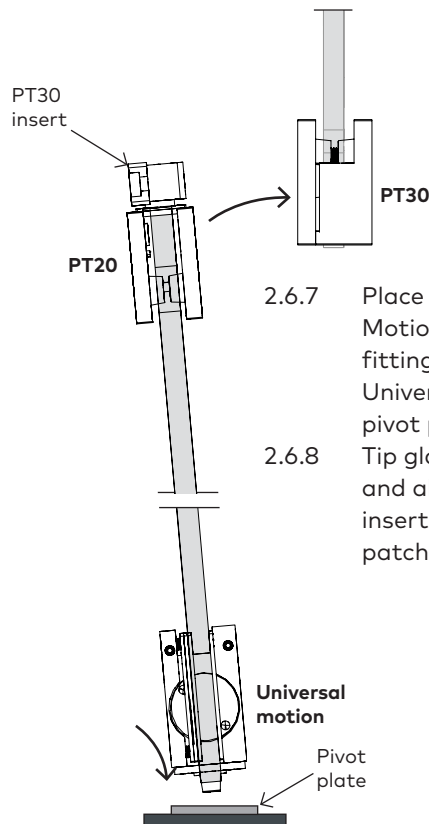


2.6.4 Place PT30 pivot pin into PT30 insert.

2.6.5 Secure with set screw.

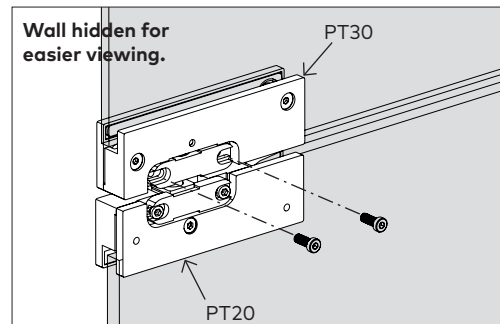
2.6.6 Place PT30 insert assembly into top of PT20, oriented as shown above.

NOTE: ENSURE INSERT IS ORIENTED CORRECTLY.



2.6.7 Place Universal Motion patch fitting into Universal Motion pivot plate.

2.6.8 Tip glass panel up and align PT30 insert with PT30 patch fitting.

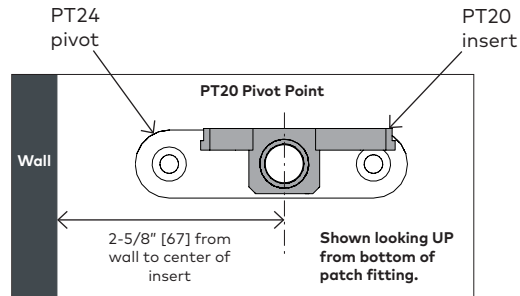
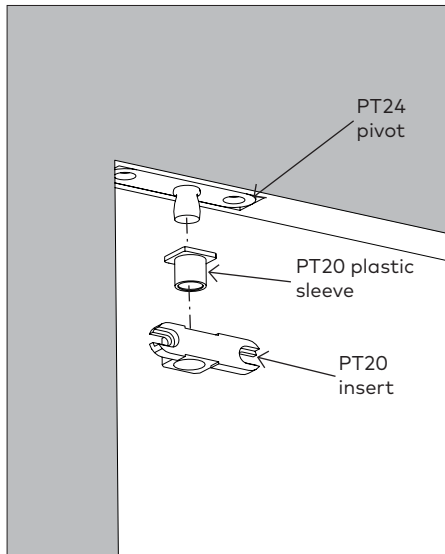


2.6.9 Secure insert with included M6x16 socket head screws.

2.6B Option 2: Install door panel (with PT20/PT24)

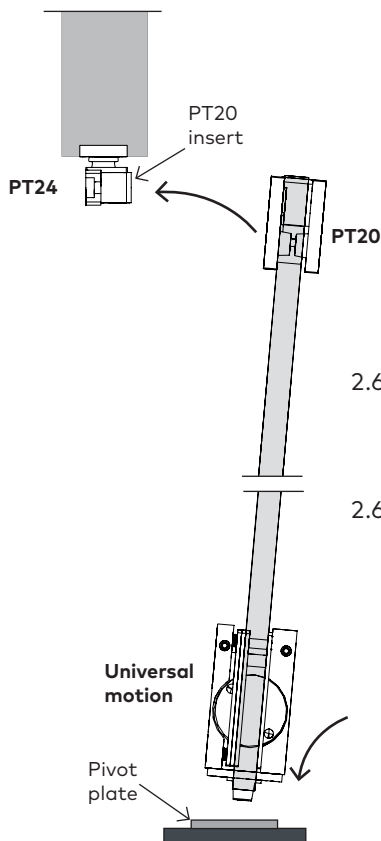
Fig. 7

PLEASE NOTE ALL PT20 PATCH FITTING INSERTS AND PT24 PIVOT ORIENTATION MAY NEED TO BE REVERSED TO MEET THE NON-U.S.-STANDARD 2-5/8" [67] BACK SET WHICH IS NEEDED IN CONJUNCTION WITH A UNIVERSAL MOTION SELF-CLOSING PATCH FITTING. ENSURE TO FOLLOW THE DIRECTIONS BELOW CLOSELY.

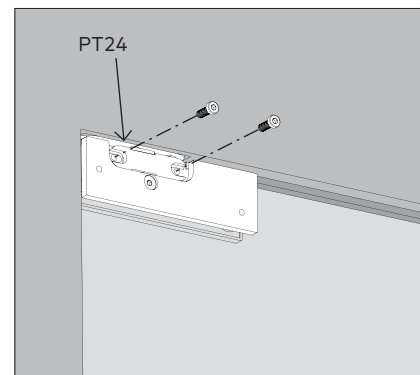


- 2.6.1 Mount PT20 patch fitting to glass door per PT20 installation instructions.
- 2.6.2 Mount PT24 pivot to door frame per PT24 installation instructions.
- 2.6.3 Slide PT20 plastic sleeve and PT20 insert onto PT24 pivot.

NOTE: ENSURE INSERT IS ORIENTED CORRECTLY.



- 2.6.4 Place Universal Motion patching fitting into Universal Motion pivot plate.
- 2.6.5 Tip glass panel up and align PT20 patch fitting with PT20 insert.



- 2.6.6 Secure PT20 insert with included M6x16 socket head screws.

Hex key size

5mm

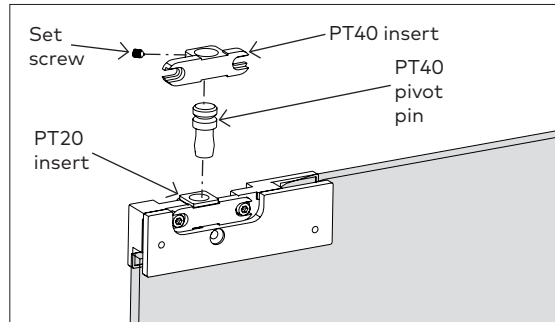
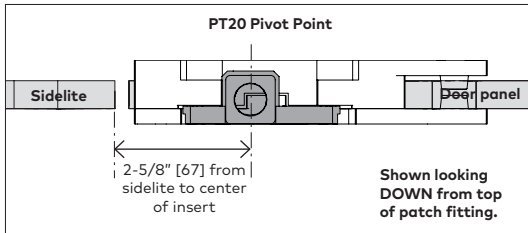
Torque value

| | |
|-------------|-----------------|
| PT20 insert | 9 ft lbs [12Nm] |
|-------------|-----------------|

2.6C Option 3: Install door panel (with PT20/PT40)

Fig. 8

PLEASE NOTE ALL PT20 AND PT40 PATCH FITTING INSERTS' ORIENTATION MAY NEED TO BE REVERSED TO MEET THE NON-U.S.-STANDARD 2-5/8" [67] BACK SET WHICH IS NEEDED IN CONJUNCTION WITH A UNIVERSAL MOTION SELF-CLOSING PATCH FITTING. ENSURE TO FOLLOW THE DIRECTIONS BELOW CLOSELY.



| Torque value | |
|--------------|-----------------|
| PT20 insert | 9 ft lbs [12Nm] |
| PT40 insert | 9 ft lbs [12Nm] |

| Hex key size | |
|--------------|--|
| 5mm | |

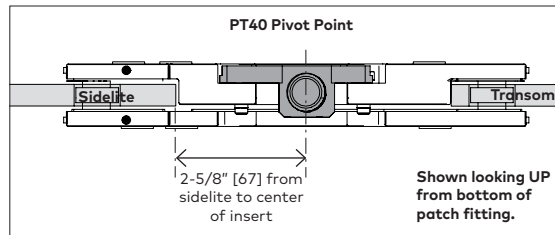
2.6.1 Mount PT20 and PT40 patch fittings to glass door and glass transom per PT20 and PT40 installation instructions.

2.6.2 Place PT20 insert into fitting, oriented as shown above.

NOTE: ENSURE INSERT IS ORIENTED CORRECTLY.

2.6.3 Secure insert with included fasteners.

- Tighten and torque accordingly.

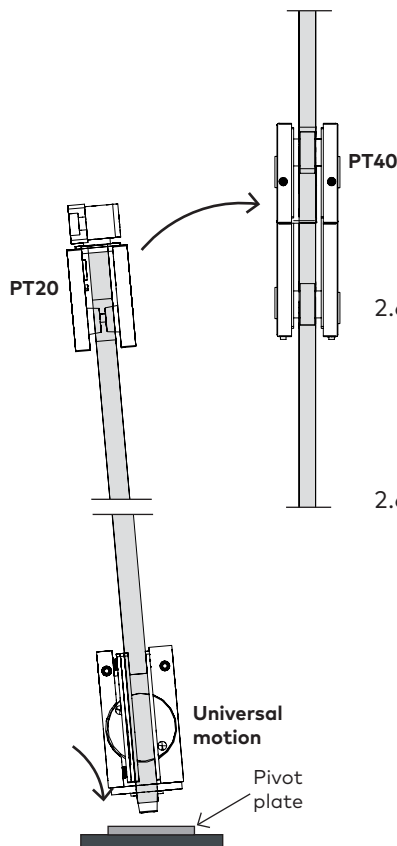


2.6.4 Place PT40 pivot pin into PT40 insert.

2.6.5 Secure with set screw.

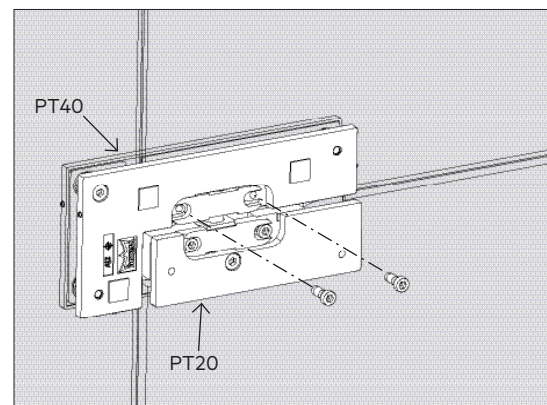
2.6.6 Place PT40 insert assembly into top of PT20, oriented as shown above.

NOTE: ENSURE INSERT IS ORIENTED CORRECTLY.



2.6.7 Place Universal Motion patching fitting into Universal Motion pivot plate.

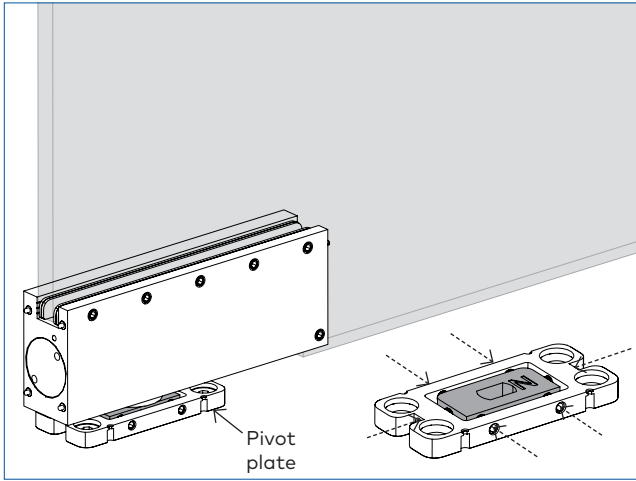
2.6.8 Tip glass up and align PT40 insert with PT40 patch fitting.



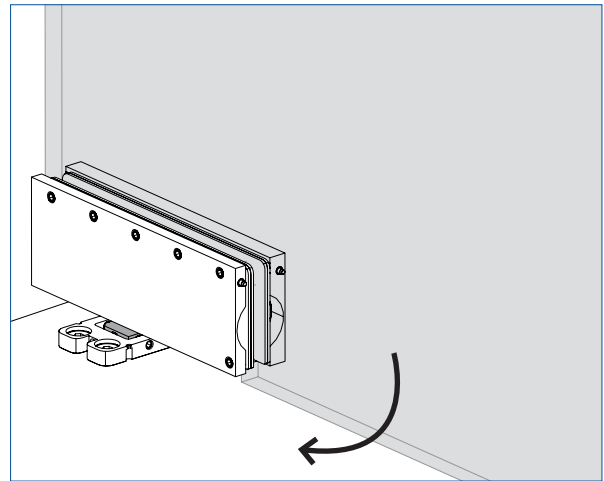
2.6.9 Secure insert with included M6x16 socket head screws.

2.7 Securing floor pivot plate

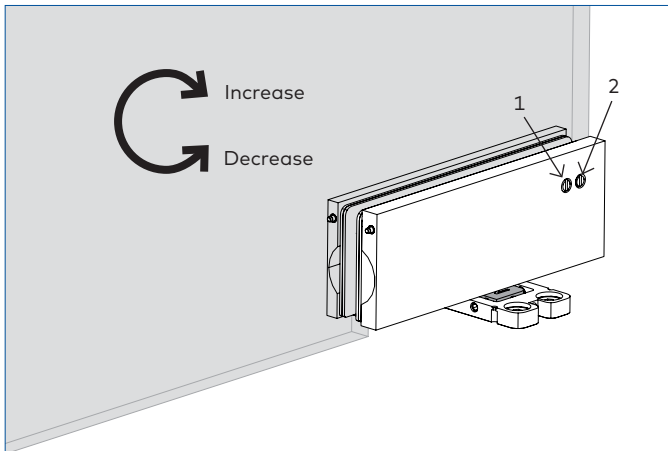
Fig. 9



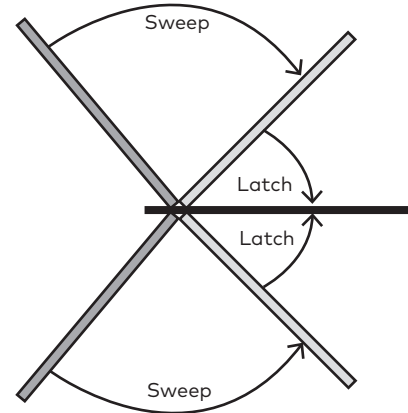
- 2.7.1 Adjust Universal Motion pivot plate center section to ensure pivot pin correctly aligns with center section.
- Adjust via set screws (see dashed arrows above for reference).



- 2.7.2 Rotate door 90° to gain access to side of patch fitting.



- 2.7.3 Adjust sweep and latch speeds as needed.
- Use valves #1 or #2.



| Valve # | Action | Action opening angle |
|---------|--------------|----------------------|
| 1 | Sweep degree | 140° - 45° |
| 2 | Latch degree | 45° - close |

2.8 Install covers

Fig. 10

2.8.1 Snap covers onto pivot plate.

2.8.2 Door must be rotated 90° to allow access for pivot plate covers.

2.8.3 Align holes in cover with pins on end of fitting.

2.8.4 Snap covers onto patch fitting.

2.8.5 **To remove:**

- Depress spring pins and pop cover off.

2.9 Add door stop (optional)

Fig. 11

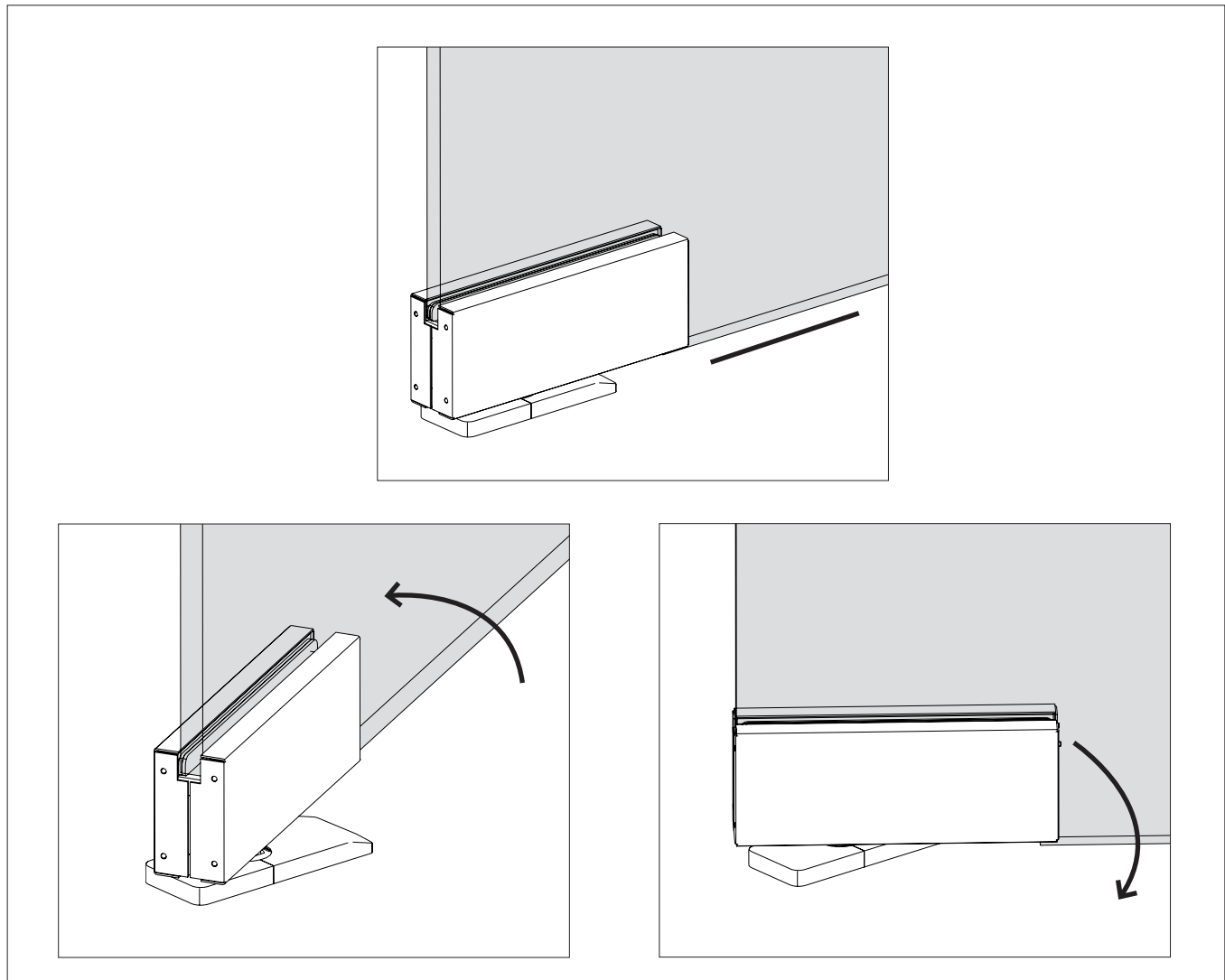
2.9.1 Install limiting door stop in preferred location.

NOTE: Ensure door does not open farther than 140° maximum.

3 Adjustments

3.1 Adjusting hold open (optional)

Fig. 12



- 3.1.1 To engage hold open:
- Push door open in either direction until hold open engages.

- 3.1.2 To disengage hold open:
- Pull door to pop door out of hold open.
 - Maximum hold open 90° in either direction.

