This operating manual includes the initial adjustment instructions after installation and routine maintenance instructions of the doors. The operation of the doors should be checked and adjusted to ensure a smooth operation and the operation ease can be increased by adjusting the fittings as prescribed below. The force needed for locking and unlocking of the doors are defined according to ASTM standard E2068-00.

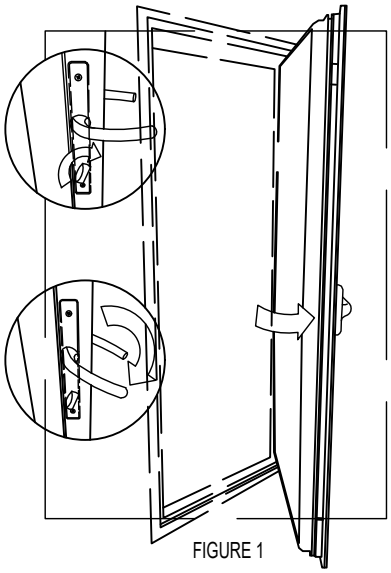


FIGURE 1

1. SASH OPERATION

Unlock door sash by turning lock cylinder clockwise if handle is on left, and counter clockwise if lock cylinder is on right (Figure 1) and push down door handle to open sash. Push sash in an outward motion to open for 1450 series and pull inward for 1460 series. To close door, leave the handle in the same open position, and push sash to close against frame. Once the sash is in close tight position, pull handle upward, and turn lock cylinder 180^{o} to lock door (see Figure 2).

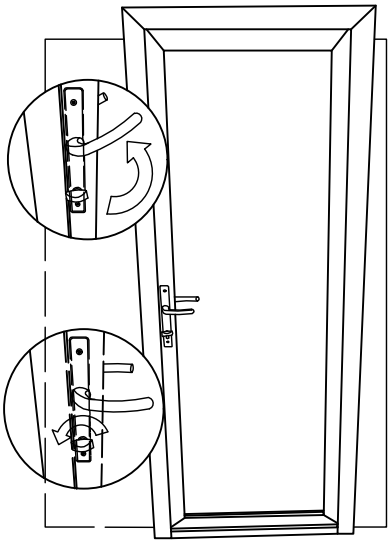


FIGURE 2

2. ANTI SLAM LATCH

Doors will be delivered with a blue cover piece to temporarily cover the anti slam latch (see Figure 3) and must only be removed once alignment and installation are complete. First please ensure that the anti slam latch is aligned against the latch and dead bolt strike plate (see Figure 4). Failure to do so may result in the anti slam latch falling into the void of the strike plate and keeping the door stuck in the closed position. When the blue cover is removed please make sure the anti slam latch is orientated the same direction as the latch bolt. If this is not the case then gently pull the anti slam latch and rotate it until it is facing the same direction.

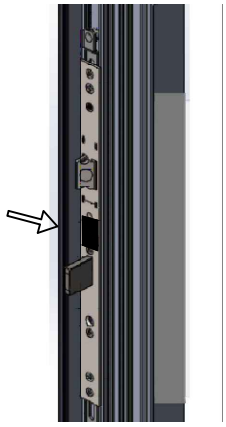


FIGURE 3

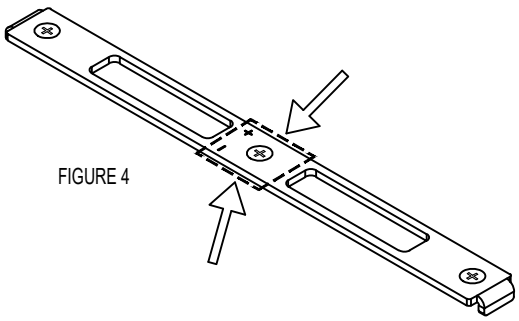


FIGURE 4

3. KEEPER ADJUSTMENT

To adjust keeper position, release keeper with 2.5mm allen key by turning counter clockwise and slide keeper up or down to the desired position (see Figure 5).

To adjust frontward or reverse for compression, insert 2.5mm allen key at the middle of the keeper where the screw to release keeper leg is located. Pull keeper leg towards positive sign indicator of the keeper for more compression (see Figure 5). Push toward negative sign indicator if sash is too tight. Adjusting the keeper is important not only for sash operation but for security. The door locks securely using keeper and pawls in unison. When the door handle is set to open the pawls on the door sash shift up or down to avoid colliding with the keeper on the frame and when the handle is set to close the pawls and keeper align to keep the sash from being opened or closed (see Figure 6).

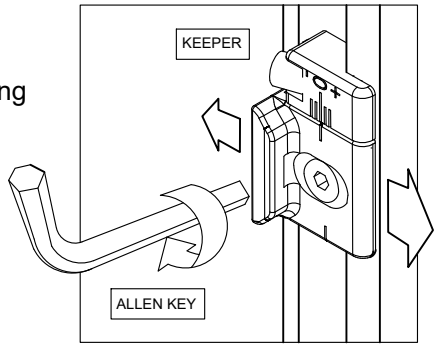


FIGURE 5

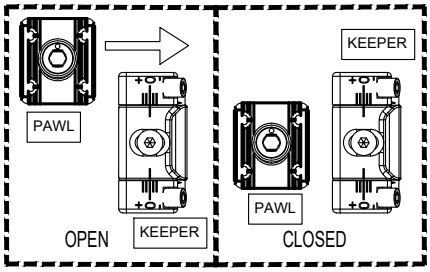


FIGURE 6

4. HANDLE ADJUSTMENT

To install or adjust the handle please insert the spindle into one handle bar, but not completely. Insert the spindle through the back plate making sure that the handle is facing away from the door panel edge (see Figure 7). The spindle must protrude between 5/8" to 7/8" from the opposite back plate otherwise the handle may be pulled off. In case the spindle needs to be readjusted remove the handle bars with the quick release tool. Insert the tool into the hole located on the side of the handle bar and rotate the tool towards the handle bar to separate the handle from the spindle. Reinsert the shaft and measure the protrusion so that it falls in the 5/8" to 7/8" range, position the other handle accordingly. Push the handle bars together making sure both are secured to the shaft. For more information please watch the "Crystal Windows 1450 Outswing Door Handle Installation" video on our YouTube page.

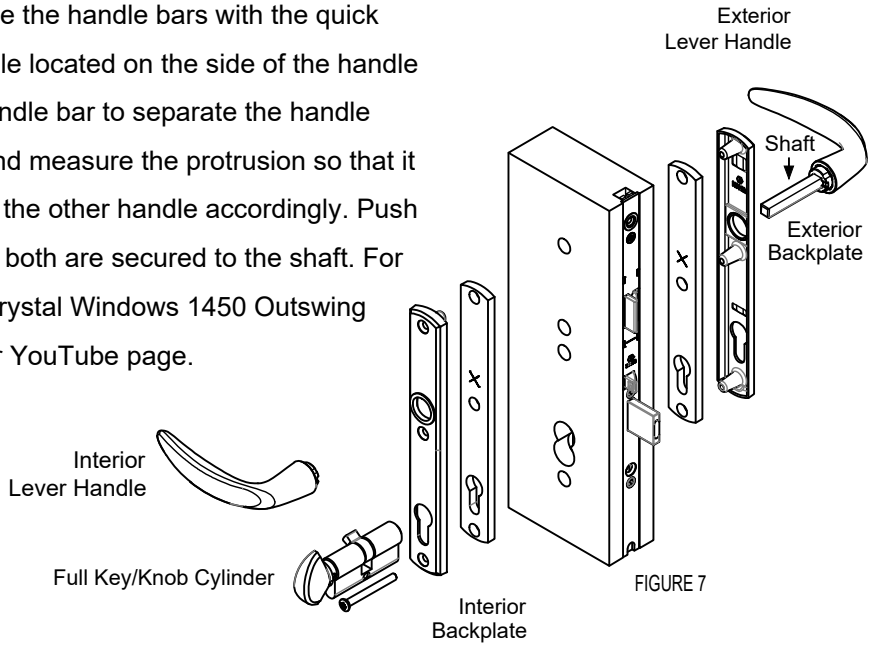


FIGURE 7

5. CLEANING

Remove any visible residue on the door frame and sashes. Use a vacuum cleaner to pickup loose debris. Inspect and clean all weep holes to ensure proper drainage. Use lukewarm water and a damp cloth. Start from the top, working your way to the bottom of the door, cleaning horizontally then vertically. Cloth must be frequently rinsed and cleaned. Use soft sponge or squeegee and scrub gently to remove tough dirt while applying water to the surface. Use a mild detergent to remove other tough stains. Dry with clean cloth. Never use liquid grease removers, paint removers, chlorine bleach, acid, abrasive cleaners or any other harsh chemicals. Never use abrasive pads to clean finished surfaces. Do not use excessive abrasive rubbing to remove stubborn stains for it may damage finished surfaces. Do not clean on sun-heated surfaces, only in shaded areas, or areas not exposed to sunlight. Do not use razor sharp blades to clean glass. Do not leave masking tapes, for when sun-baked, it will be permanently attached and impossible to remove without damaging the surface.

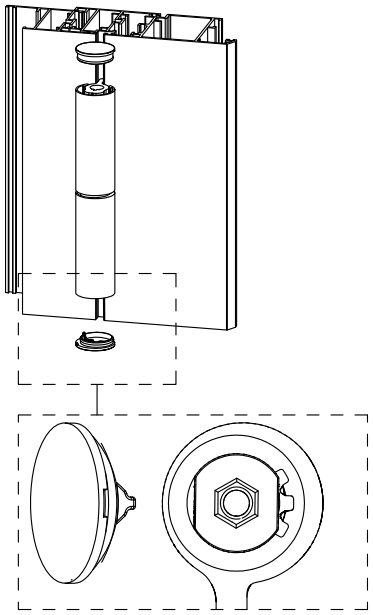
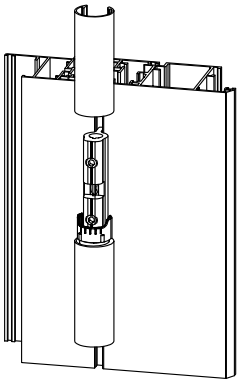
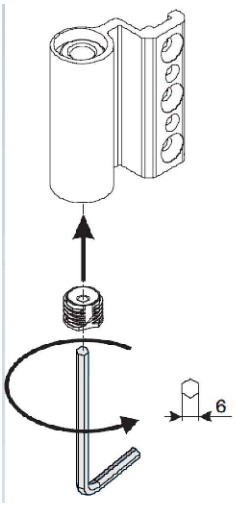


FIGURE 8

6. SASH ADJUSTMENT

Remove the hinge cap and hinge cover with flat head screw driver. Be careful not to scratch the paint (See Figure 8). To adjust sash upward or downward on a vertical motion (See Figure 9); Insert 6mm Allen key on the grub screw integral with the frame hinge body at the bottom of the hinge. This will provide (0/+3mm) vertical adjustment.





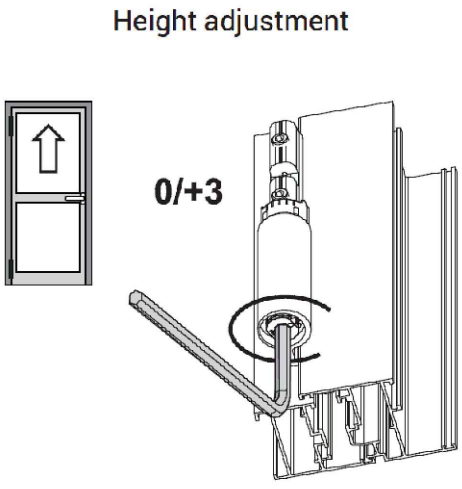


FIGURE 9

To adjust the sash sideways (see Figure 10) use an Allen key on the eccentric pin, then locking it the desired position by means of two grub screws. This will provide (-2/+2mm) horizontal adjustment.

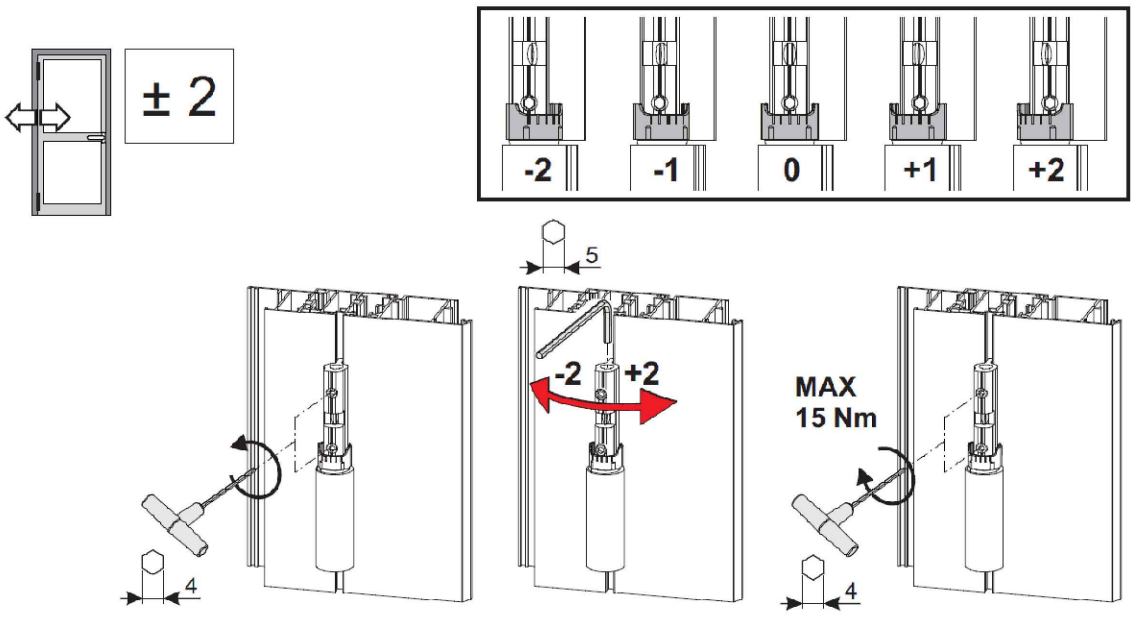


FIGURE 10

To adjust sash compression on hinge side to forward or reverse motion (see Figure 11), obtainable by turning the eccentric bush in the frame hinge body. This will allow (-0.5/+0.5mm) lateral pressure adjustment.

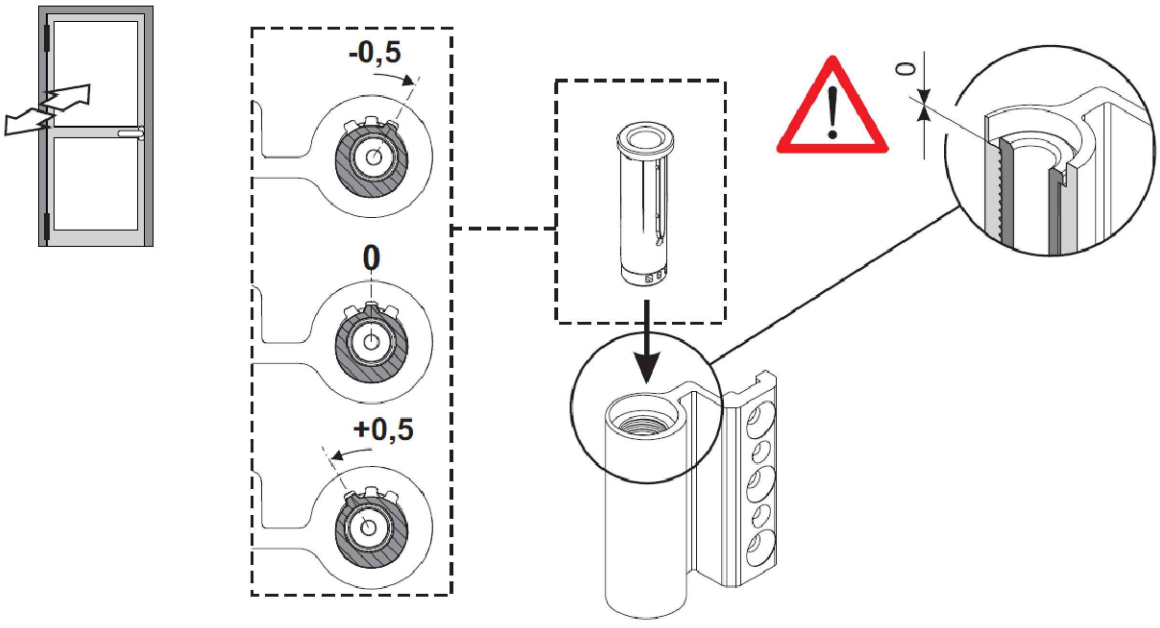


FIGURE 11