

Installation Instructions for Trocal Doors

It is important to make sure the door is installed in the opening plumb, square and level in order for the door to operate properly some intolerance can be corrected through the many adjustments in the door hardware.

The rough stud opening should be chalked with a good quality chalking to ensure a weather tight seal between the brickmould and the sheathing.

The Trocal door can be installed in two ways.

A) Install Brackets

Using installation brackets which clip into the side of the frame of the door and are screwed onto the rough stud opening. One bracket within 6" of every corner and then every 12" there on.

B)Pre-drill Header

Pre drill the frame with a 3/8" hole then a 1/8" pilot hole through the last layer to accommodate a #8 x 2 1/2" screw and install screws through the frame and into the rough stud opening. Cover the 3/8" hole with a plug to finish the job. (the pre drill option can be done by the factory)

Shimming the door properly is important to ensure the door is plumb, square and level.

On double doors with an aluminium sill shim under the jambs with a 1/8" shim to allow the sill some room to be adjusted down if necessary.

Finally fasten through the brickmould around the perimeter of the door to ensure a solid installation.

Install brackets or Predrill at these locations

Double Doors Only



Hardware adjustments are completed as shown below

The following pieces of hardware can be adjusted to allow for proper operation of the door

- 1)top keeper (double door only) inactive side
- 2)bottom keeper (double door only) inactive side
- 3)roller cams (operating doors)
- 4)striker plate keeper (operating doors)
- 5)hinges (all doors)

On a double door the top and bottom keepers may have to be adjusted so the shoot bolt will travel into it to secure the inactive side. This is done by loosening the screw on the keeper and sliding it one way or the other so the tongue of the shoot bolt enters the keeper properly. If the tongue does not line up properly then the handle will not operate as it should. (see drawings below)

Also on the keeper where the shoot bolt goes in there is an insert that can turned in 90 degree increments to give a tighter fitting sash if desired.

Sash positioning is important for proper hardware operation

The hinges can be adjusted in two different directions to position the sash for a properly operating door. These adjustments will allow you to move the sash up (5mm) and left or right (+ or – 5mm).

These adjustments are sometimes necessary for the hardware to operate properly and for a tight weather seal.

The left- right adjustments is performed by accessing the adjustment by removing the plastic cover that covers the adjustment bolt and turning with a 5mm allen wrench watching to see which way the sash moves.

The up-down adjustment is performed by turning the adjustment on the bottom of the hinge with a 5mm allen wrench.

See examples below

Door hardware adjustments

The final adjustments are done to ensure a tight operating sash for easy operation and a good weather seal.

The operating gear has adjustments on the Roller Cams that will allow you to adjust the door so it will pull the sash in tighter or to loosen it off. This adjustment is performed using a 4mm allen wrench by turning the centre of the cam and watching which way it moves. This will move the cam in or out 1mm.

See drawing below.

The striker plate has an adjustable keeper that can be moved in or out so that the door will be snug when closed. This adjustment is performed with a philips screwdriver by loosening the two screws that secure the keeper and moving the keeper in or out and then re-tightening the two screws. See drawing below.

Troubleshooting Guide

Be certain the sash is square and then also square in the frame before adjusting the hardware.
(see hinge adjustment)

With the door in the open position, engage the system by lifting the handle and activate the deadbolt by turning the thumb turn. If the system operates in this position then the system is fully functional.

1) Lever is stiff or won't return to centre position

Check to make sure the holes that the hardware passes through line up with the gearing in the door.

If not, remove handle set and enlarge the holes slightly with a drill, then install handle set again making sure the handle is not binding again.

2) System operates in the open position when you lift the handle but not when the door is in the closed position.

Check relationship of door in frame and adjustment of hardware.

If the hardware cannot **fully** engage in all the keepers then the system will not function properly.

3) Lever does not fully engage on Inactive side (double door)

Check relationship of shootbolt to top and bottom keeper. The shootbolt has to fully engage the keeper or the system won't allow you to lock the door with the thumb turn.

Readjust the keeper that is out of alignment, You may have to change the position of the plastic insert in the keeper to allow you improve the alignment.

Sometimes the hole in the frame that the keeper sits on has to be enlarged for proper shootbolt penetration. Remember: the lever won't lock unless the shootbolt can fully engage.

4) Lever does not fully engage on active side (all doors)

Check the relationship of the roller cams to the keepers on the frame. The keepers can be moved up or down by removing the screw, repositioning the keeper and reinstalling the screw. The proper position for the keeper is when the locking roller cams (in the open position) are between 6-8mm above the keeper.

Remember: the lever won't lock unless the roller cams are properly engaged in the keepers

5) Thumbturn will not turn full 360 degrees to lock

If the thumbturn will not turn the full amount the most likely problem will be the hardware is out of adjustment. Remember: the lever has to be fully engaged before the lock will work.

Another problem could be that the dead bolt is jamming up in the pocket in the striker plate.

Mishandling Device

The operating hardware is protected by a Mishandling Device (see drawing below) that will prevent the lever from activating the roller cams when the door is open so as to prevent damage to the hardware if the door was shut with the lock activated. You can operate the lock with the door in the open position by holding the Mishandling Device in with your finger and at the same time work the lever. Remember: move the roller cams to the open position before closing door.