1. Access the roller adjustment from the exterior by removing the roller adjustment hole covers (Fig. 1a) and fully lower the panel by turning the adjustment screws counterclockwise. (Fig. 1b)

2. Remove sash stop. (Fig. 2a) Remove the jamb cover from the frame. This is the cover located on the operating track of the side jamb. Start by using a putty knife to carefully pry the cover away from the jamb. Exercise caution while doing this to ensure you don’t damage it. (Fig. 2b)

3. Remove the two screws attaching the shootbolt keeper to the sash retainer and top of the panel. (Fig. 3a) It will be necessary to move the operating panel to the fully closed position to access the screws. Once the screws are removed, you will need to slip the keeper in between the clearance at the top of the panel. (Fig. 3b) If there is not enough clearance, verify the rollers are fully retracted or push upward on the head to provide additional clearance. The other option is to lift the handle side of the operable panel upward and tilt the panel to gain more clearance while inserting the keeper.

Please confirm that you’ve received all required parts before proceeding with the installation.

For proper operation, the parts must be installed in the sequence shown.

Please note that the installation photos were taken with a sample size door.

Warning: While removing the sash retainer in Step 5, the operating panel must be held in the frame. Otherwise, the panel may fall causing damage and/or injury.

**TOOLS REQUIRED**
- Philips Screwdriver
- Putty Knife
- Drill
- Flat Head Screwdriver, Crescent or 1/2” Box End Wrench

**KIT CONTENTS**

- Shootbolt Base (HD-1013) | Qty: 1
- Shootbolt Rod/Tip (HD-1060 - 9-3/4”) (HD-1061 - 20-1/4”) | Qty: 1
- Shootbolt Spacer (HD-1018) | Qty: 1
- Shootbolt Cover (HD-1019) | Qty: 1

**EXERCISE CAUTION WITH POWER TOOLS. THEY CAN STRIP OUT THE SCREW Holes.**
4. Open the door panel fully to access and remove the visible sash retainer screws. Then fully close the panel and remove the remainder of the screws. (Fig. 4)

5. **CAUTION:** As the sash retainer is removed, you must hold the operating panel in the frame. Otherwise, the panel may fall and cause damage and/or injury. Position the operating panel halfway open (Fig. 5a) and carefully unsnap the sash retainer from the head of the frame starting at each end first. (Fig. 5b)

6. With the sash retainer removed, tilt the top of the operating panel inward and remove completely from the frame. (Fig. 6) Lay the panel down on a clean flat work surface with the shootbolt facing up.

7. Function the shootbolt toggle to ensure that the bolt extends above the top of the panel. (Fig. 7a) With the 1/2” box end wrench, rotate the square shootbolt tip counter-clockwise until free and remove the tip and rod from the end of the panel. (Fig. 7b)

8. Using a putty knife, slip the edge under the shootbolt cover and gently pry it away from the operating panel. (Fig. 8a) There are six injection molded snaps that hold the cover to the panel. (Fig. 8b)

9. Position the shootbolt operating lever to the halfway position and hold while the 2 screws are removed securing the shootbolt base to the operating panel. (Fig. 9)
10. With the shootbolt base free, slide it to one side and tilt one end out of the panel fabrication to remove it completely from the door. (Fig. 10)

11. Once the shootbolt base is completely removed from the door, a new shootbolt can be installed in the rectangular fabrication on the operating panel. (Fig. 11a) Using the new components, take the shootbolt spacer and snap it onto the shootbolt base (as shown in Figs 11b and 11c).

12. Move the shootbolt operating lever to the halfway position and install the shootbolt base into the fabricated opening by tilting one end in first and then slide it over to drop the other end in. (Fig. 12a) Center the shootbolt base in the opening while aligning the holes and hold in place. (Fig. 12b) CAUTION — ensure that the threaded end of the shootbolt base is pointed to the top of the panel door where the opening for the threaded rod is located.

13. Install the provided screws and tighten with a screwdriver. (Fig. 13)

14. Insert the threaded rod and tip into the fabricated hole at the top of the operating panel. (Fig. 14) Once the threaded rod is fully inserted in the door, use a flashlight to engage the mating threaded hole on the shootbolt base. Make sure that the shootbolt operating lever is in the locked position so that the red indicator is NOT showing. CAUTION - IT IS STRONGLY RECOMMENDED THAT THE INSTALLATION OCCURS WITH THE PANEL IN A HORIZONTAL ORIENTATION OTHERWISE THE THREADED ROD COULD BE DROPPED INSIDE THE PANEL.
15. Using a 1/2” box end wrench, turn the square bolt clockwise until the bolt is no more than 1/2” above the top of the panel when in the locked position. (Fig. 15a) In addition, the square faces of the bolt must be parallel to the panel edges. (Fig. 15b)

16. The shootbolt cover can now be snapped into place by aligning the snaps on the cover and centering in the fabricated opening while gently applying hand pressure over the cover surface. (Fig. 16) Verify that there are no gaps under the cover and that it’s tight against the operating panel.

17. Function the shootbolt toggle to ensure that the bolt extends and retracts into the top of the panel.

18. Lift the operating panel and place the bottom edge on the sill track. (Fig. 18a) Once the panel is on the track, tilt the panel fully into the frame and slide into the closed position. (Fig. 18b)

19. With the door panel in the closed position, install the sash retainer into the frame. (Fig. 19a) You must properly engage the tongue and groove feature in the sash retainer and frame. (Fig. 19b)

20. Once the sash retainer is fully snapped into the frame, reinstall the screws which were removed in Step 3. Make sure to install all the screws by fully opening the operable panel and then fully closing it for access (do not over tighten as you will strip out the screws).

21. Slip the shootbolt keeper into the clearance between the sash retainer and top of the panel. Make sure that the keeper is in the correct orientation with the bent legs pointing upwards and install the #8 x 3/4” screws into the existing holes. (Fig. 21a & 21b) If there is not enough clearance, verify the rollers are fully retracted or push upward on the head to provide additional clearance. The other option is to lift the handle side of the operable panel upward and tilt the panel to gain more clearance while inserting the keeper.
22. Lock the operating panel in place via the handle and move the shootbolt lever to the locked position where the red indicator is not visible. If the shootbolt lever is not flat in the housing, an additional adjustment is required — see troubleshooting section in this document. *(Fig. 22)*

23. Carefully open the door and close several times each time locking the door and shootbolt to check for function. The shootbolt must move freely to the locked position. Once this is verified, re-install the second #8 x 3/4” screw. *(Fig. 23)*

24. Unlock both the door and shootbolt then move the edge of the operating panel to the shootbolt keeper edge. At this point, move the shootbolt to the locked position. *(Fig. 24a)* The operable panel is now in the venting location and should be open approximately 3-inches. *(Fig. 24b)*

25. Reinstall the jamb cover from Step 1 starting at the sill and working your way up to the head by applying force to the cover. *(Fig. 25)* Replace the roller adjustment hole covers in the exterior of the panel.

26. Reinstall sash stop as originally installed.

**TROUBLESHOOTING/ADJUSTMENT OF SHOOTBOLT PANEL**

Due to manufacturing tolerances, adjustment of the shootbolt may be required to achieve proper function.

1. If the shootbolt lever does not fully seat flush in the housing *(Fig. A)*, either the operable panel needs to be adjusted lower or the shootbolt tip needs to be lowered. In some cases, a combination of both may be required.

2. Lower the operable panel by repeating Step 1 and Step 2. Check for shootbolt function and verify that the lever is flat in the housing and in the locked position which will prevent the panel from moving.

3. If the shootbolt lever is still not flush with the housing in the locked position, then the shootbolt tip will need to be screwed into the panel as detailed in Step 7. In order to accomplish this, the panel will need to be removed from the door as detailed in Steps 2-5.