Service Tech
TIPS & TRICKS

TIMELESS

windows & doors

BY GORELL

CHANGE FOR THE BETTER WITH ENERGY STAR

TABLE OF CONTENTS

DOUBLE-HUNG, SINGLE-HUNG AND PICTURE WINDOW BLINDSTOP INSTALLATION INSTRUCTIONS

1. Check the rough opening dimension(s) and new window dimension(s) to ensure that the window is the size you ordered and that it will be a proper fit.
2. Using a pry bar or similar tool, carefully remove the interior stops from the existing window and set the stops aside. They can be re-used once the window is replaced, if you choose.
3. When replacing a hung unit, disengage the balance system from the bottom sash. If the system is weighted and concealed behind the window jambs, cut the cord and let the weight(s) fall into the stud wall.
4. Remove the bottom sash from the frame and discard.
5. Again using a pry bar, remove and discard the parting bead from both jambs and head. This is the narrow wood strip that creates the separation between the bottom and top sashes.
6. Lower the top sash and disengage it from the balance system *(as in step #3).*
7. Remove the top sash from the frame and discard.
8. Clean the window opening so that it is clear of all debris. Make sure you remove anything in the pocket where the window will be installed.
9. Remove or pound in the balance rope pulleys and fill any voids with insulation.
10. If necessary, apply coil stock material over any severely deteriorated portion(s) of the original window opening.
11. Carefully remove the plastic stretch wrapping from the new window and dispose of it properly. Leave the plastic banding at the center of the window in place.
12. With the banding in place, set the new window into the opening against the blindstop to check for fit and the length required of the sill angle.
13. Check your tolerances and remove the window from the opening.
14. Using a razor knife and rubber mallet or a block of wood, trim the sill angle, tap it into the groove at the bottom of the window and attach the head expander (if desired) to the window.
15. Re-set the window into the opening, then adjust and fix the head expander position.
16. *Optional*: Remove the window once more, apply a bead of good quality silicone (recommended for vinyl) to the interior of the blindstop, and re-set the window into the opening.
17. Adjust all four adjustable alignment (jack) screws in the jambs to set the new window plumb and square into the opening.
18. Remove or slide the sash stops, which are located at the top of each inner jamb of the window and at the bottom of each outer jamb, and install the alignment screws. Be careful not to pull the unit out of square or alignment. Replace the sash stops.
19. If you siliconed the blindstop, cut the banding and slide it out from around the window opening to the exterior. Trowel any silicone that may pull out with it.
20. Check the operation of the new window.
21. Apply a bead of caulking around the exterior perimeter, where the new window meets the existing opening.
22. Recheck that the new window is plumb and square. Adjust if necessary.
23. Reattach the interior stops that were removed in Step 2 or make and install new stops as desired.

TIMELESS
windows & doors
BY GORELL

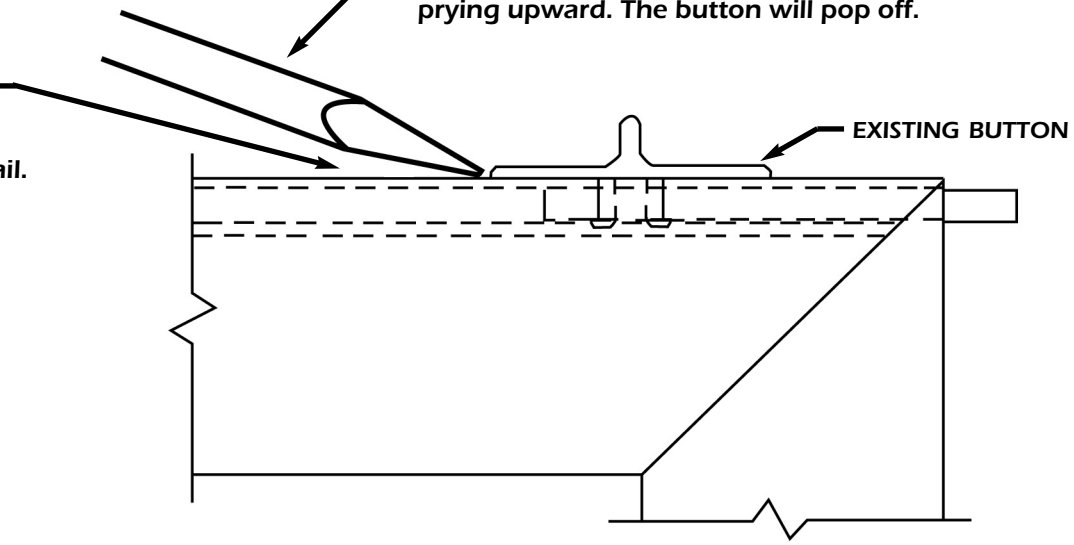
TILT LATCH BUTTON REMOVAL INSTRUCTIONS 5004, 5305

1.

Place strips of tape onto top rail prior to using screwdriver to guard against damaging sash rail.

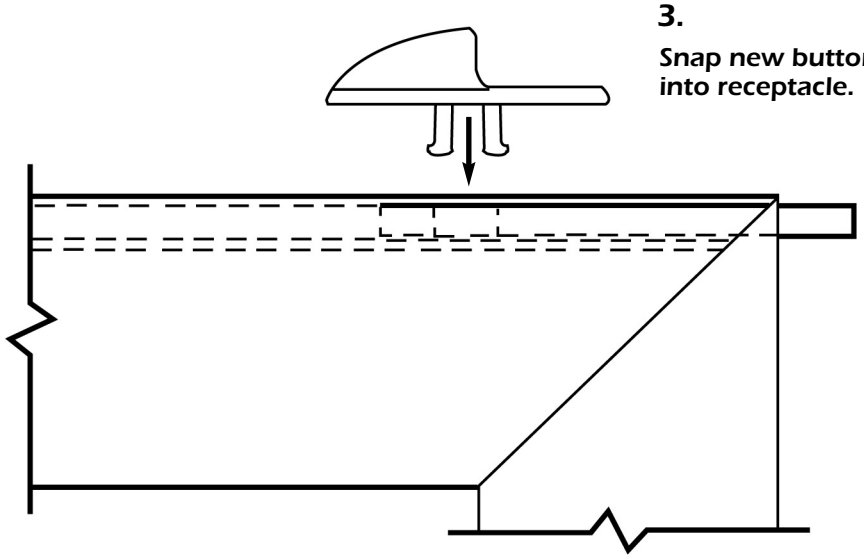
2.

Using a wide-flange screwdriver, slide the screwdriver under the button flange, prying upward. The button will pop off.



3.

Snap new button into receptacle.



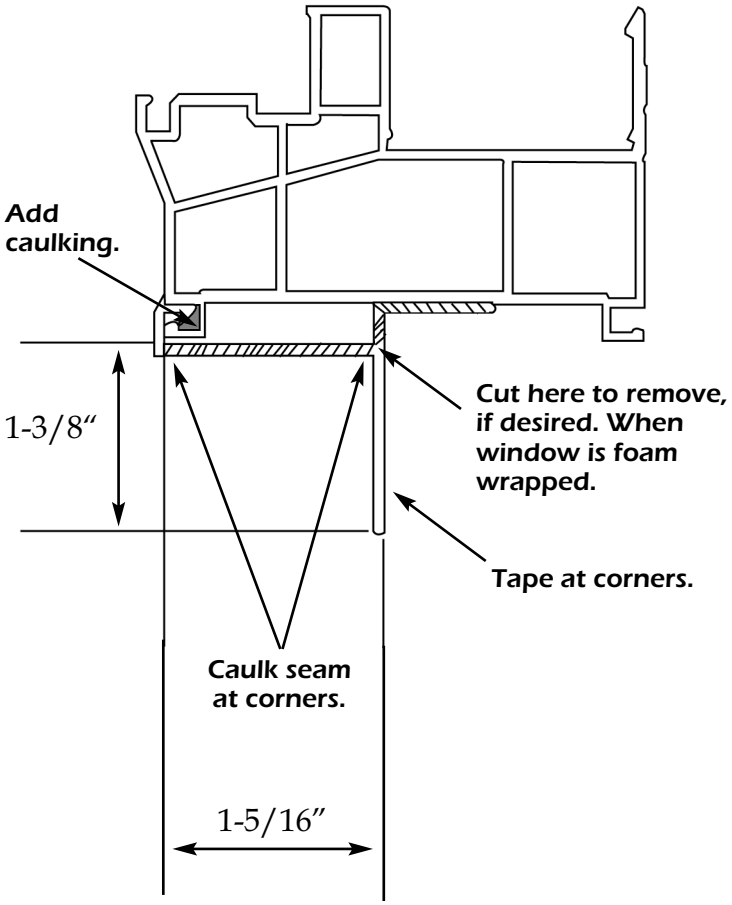
TIMELESS
windows & doors
BY GORELL

INSTRUCTIONS FOR APPLYING NAILING FIN TO WINDOWS

Tools you will need: Miter saw, scrap wooden blocks, utility knife or similar tool, rubber mallet or regular hammer with a block of wood.

1. If nailing fin is factory fabricated on ends, disregard steps, 2, 3 and 4.
2. Miter cut one end of the nailing fin to 45 degrees. Place wooden blocks under the material in the miter saw to keep the material level when cutting your angles. This will ensure a good miter joint when the nailing fin is applied to the window.
3. Measure the width and height of the window(s), and add 2-3/4" to both width and height. This new measurement is the length to which you will need to cut the nailing fin.
4. Miter cut the opposite end of the nailing fin. Cut all four pieces as stated in Step 2.
5. *Optional*: To apply the nailing fin without removing the foam insulation wrap, remove the 3/4" x 1/4" L-shaped portion of the nail fin that is directly across from the "J" hook. To remove this, use a utility knife or similar tool and score the vinyl down the length of the part. Work the portion being removed until it snaps off.
6. Take the nailing fin and apply it to the window, tapping the small "J" hook into the outside euro-groove. To do this, use either a rubber mallet or a block of wood with a regular hammer. Remember to caulk the fin in the euro-groove.
7. At the corners, apply white duct tape over the back side of the nailing fin at all four corners.
8. Install the window(s) into the openings.
9. It is recommended that you shim the jambs and anchor the unit to the existing frame, because the nailing fin is not an integral part of the window and does not serve as a structural support. A drip cap and flashing should be added to assure shedding of water off the top of the window head.

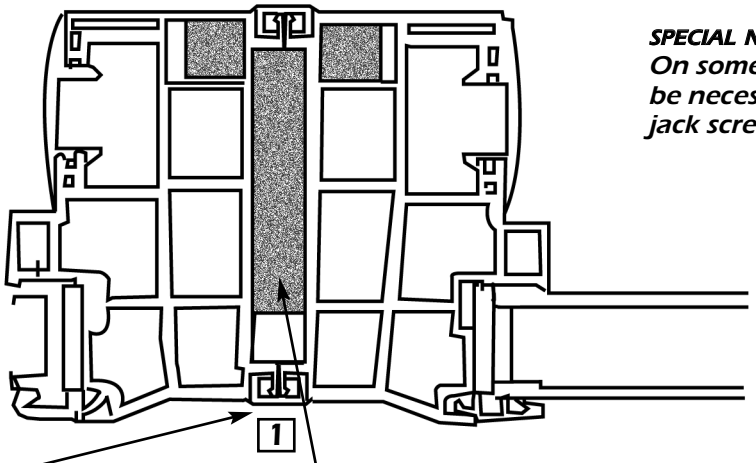
Section 12110 nailing fin applied to window frame



TIMELESS windows & doors BY GORELL

INSTRUCTIONS FOR APPLYING MULLION TO GORELL PRODUCTS

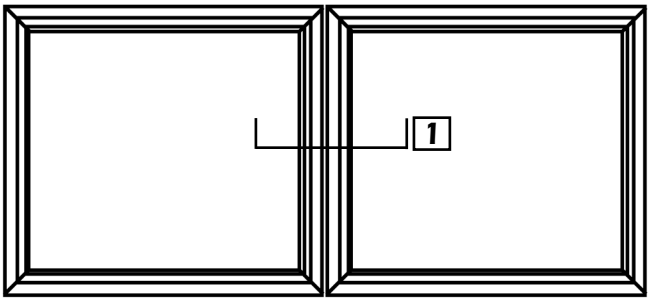
Interior mullion can be left at full window height. A small bead of caulking can be applied to the grooves to help seal the joint. Do NOT use excessive sealant, and be sure to squeeze out excess sealant and clean the area thoroughly.



SPECIAL NOTE:
On some products, it may be necessary to remove the jack screws prior to mulling.

Cut exterior mullion (part # 12012) 1/4″ under o.a. window height. Then apply, starting at the bottom of the window and keeping the mullion up 1/4″ so the sill extender can be snapped across under it.

OPTIONAL:
A 1/2″ x 2-1/2″ strip of plywood can be added here for extra support on long joints (over 72″).

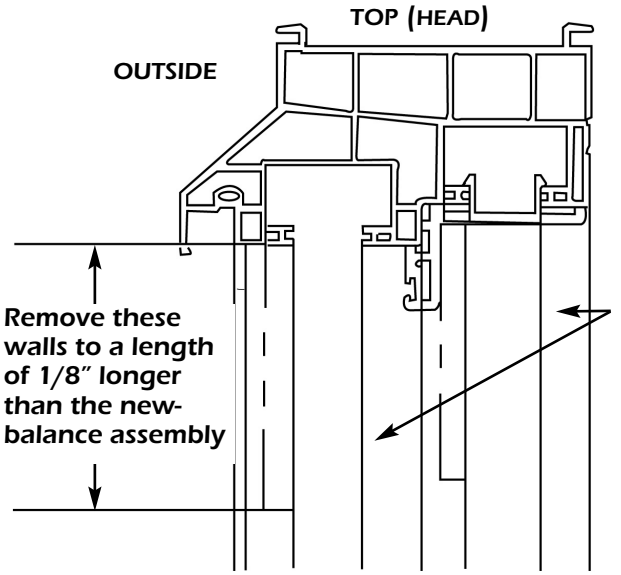


EXTERIOR ELEVATION

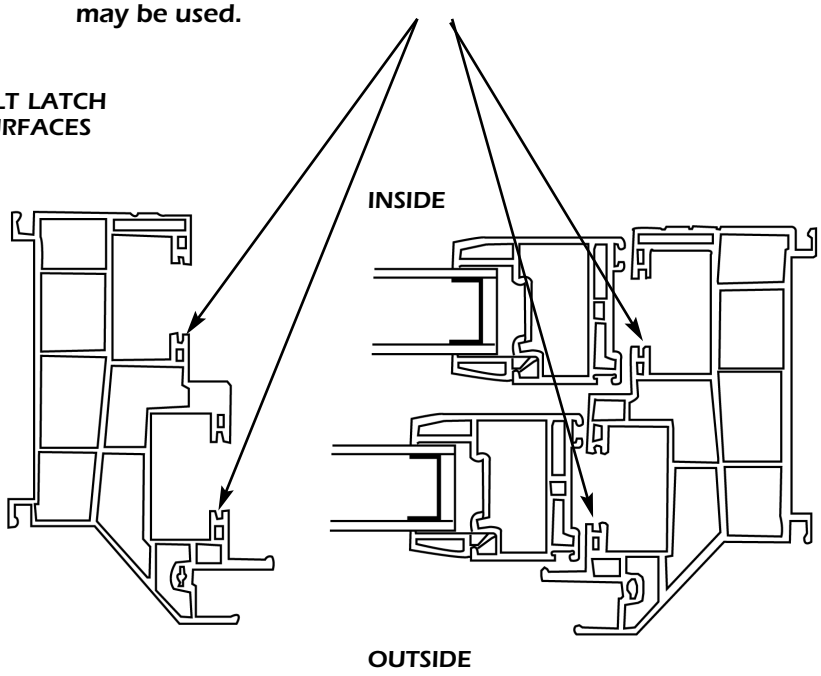
Note: *This mulling detail is adequate for R30 residential applications within 15'of grade, less than 70 sq/ft of total opening and 144" maximum of any one dimension. For other mulling applications please see a design professional.*

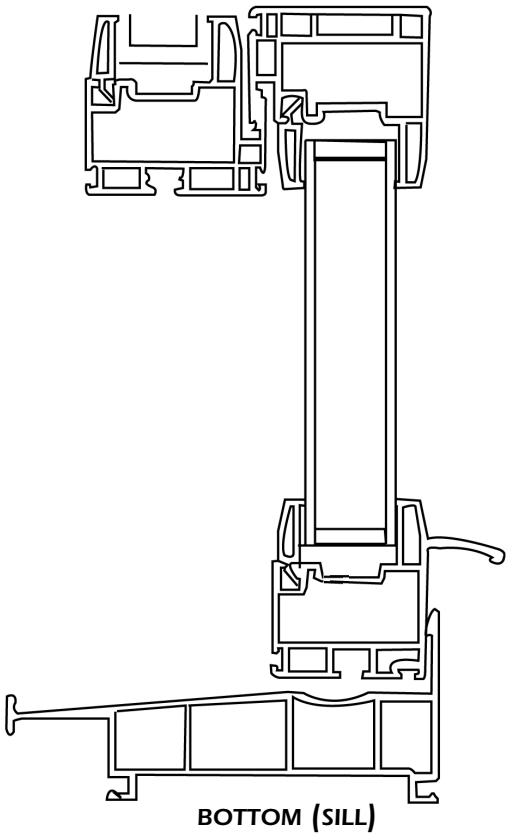
TIMELESS
windows & doors
BY GORELL

BALANCE REPLACEMENT INSTRUCTIONS



Cut away only the area required to replace the balance. The best cut can be achieved with a Dremmel tool. However, side cutters, a hacksaw blade or a razor knife may be used.





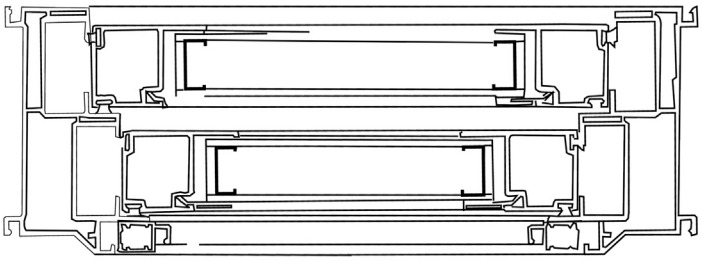
***Note:** The sash stops provided with your new balance may be trimmed to suit. They should be at least 1/2" longer than the cutout.*

The standard sash-stop length is 3" up to the window height of 71". To calculate the lower-sash daylight opening use: (1/2 window height minus 6-1/2"). The maximum opening is 29", regardless of height. For units over 71" in height, cut your new sash stops to **allow only a 29" opening**. This ensures that the balance coil will remain engaged in the carriers.

***Note:** DO NOT remove material from the inner side of the balance pocket. This area is required for tilt latch engagement.*

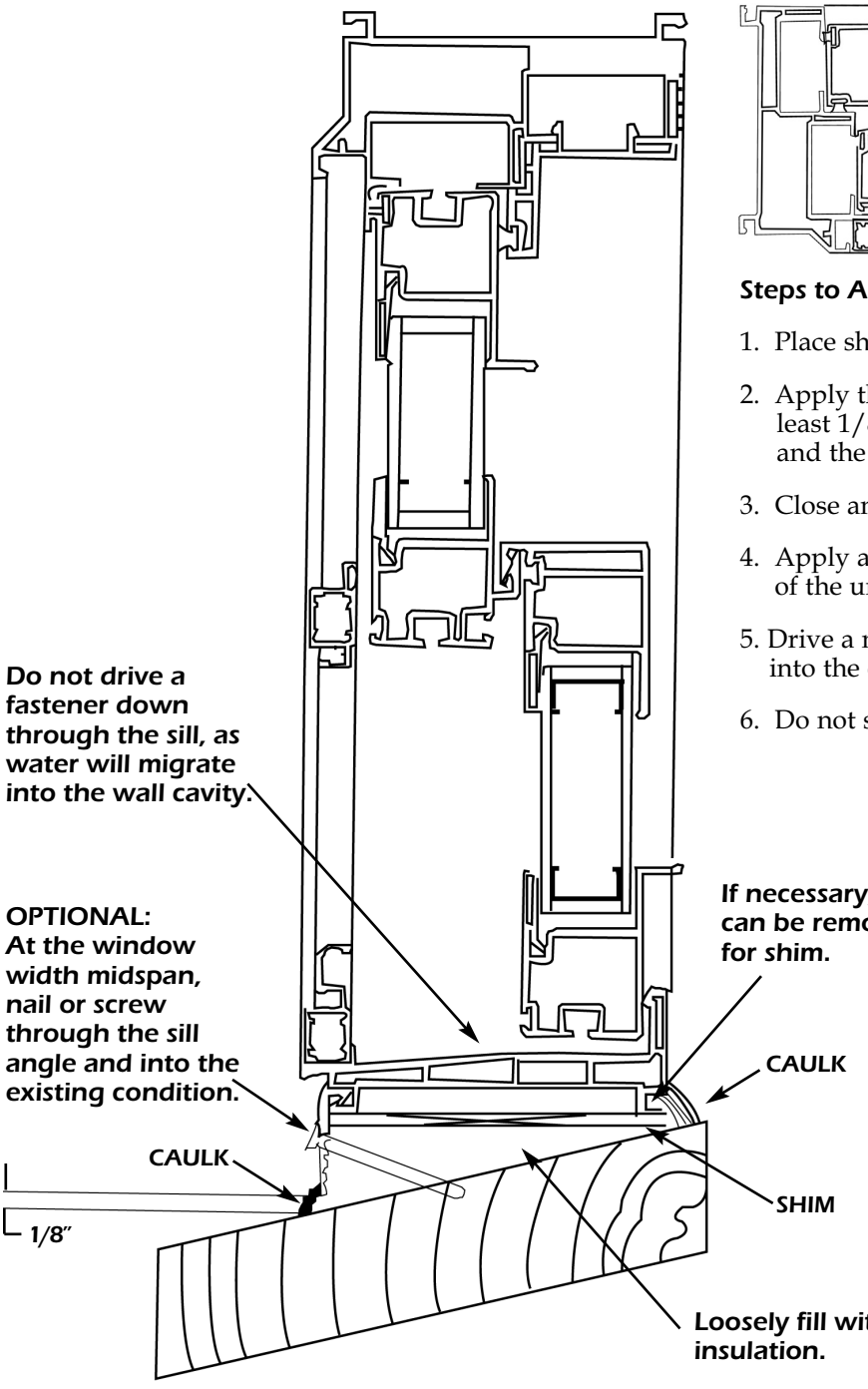
TIMELESS
windows & doors
BY GORELL

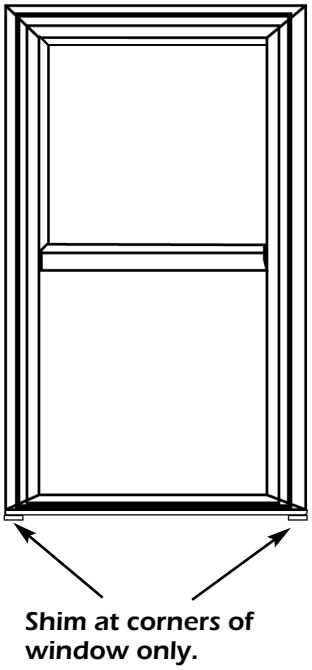
INSTRUCTIONS TO ALLEVIATE BOWED SILLS



Steps to Alleviate Bowed Sills on Model TMDHS

1. Place shims at each corner of the window at the sill.
2. Apply the sill angle, trimming off so that there is at least 1/8″ of space between the end of the sill angle and the existing condition.
3. Close and lock the window.
4. Apply a bead of caulk to both the interior and exterior of the unit.
5. Drive a nail or screw through the sill angle and into the existing condition.
6. Do not stuff insulation tightly at the sill.





TIMELESS
windows & doors
BY GORELL

REALIGNMENT OF BALANCES IN A DOUBLE- OR SINGLE-HUNG UNIT

If, during the raising or lowering of sashes on a double- or single-hung unit, there is resistance or if one side of the sash drags behind the other side, chances are the balances are not aligned. This normally occurs when a sash is removed from the frame and the balance moves. A balance that has traveled up the balance channel of the masterframe must be brought back down in line with the balance on the opposite side and locked into place. Turning the balance cam in the wrong direction will cause resistance.

How to tell if balance alignment is the problem:

1. Raise the lower sash as far as it will go.
2. Look under the sash(es) and you will see the balance cases in the jamb track(s).
3. If a black space is visible between the two case halves, the balance cam is not in its proper position.

How to repair the problem:

1. Lower sash(es) by 3" to 4".
2. Grasp the tilt-latch buttons, pull them toward the center of the meeting rail and pull the top of the sash inward.
3. Rotate the sash downward. At the lower corner of the sash, the balance shoe should be visible.
4. On the mispositioned side, loosen the pivot bar using a Phillips screwdriver.
5. Slide the pivot bar free of the balance shoe.
6. With another person's assistance, move the sash corner away from the balance area.
7. Insert a flat screwdriver into the black balance cam ("U" shaped slot) and rotate it 180 degrees.
8. *Use caution when you rotate the cam. It will free the shoe and the balance may pull the shoe upward. Maintain downward pressure on the screwdriver to avoid this.*
9. Move the sash corner back in line with the balance shoe and slide the pivot bar into the balance shoe cam.
10. Tighten the screw to the pivot bar in place.
11. Swing the sash back into the frame, ensuring that the tilt tabs snap into the window track.
12. Check the operation of the window.
13. Close and lock the window.

REGLAZING INSTRUCTIONS

For this procedure you will need: 1 sharp 1/2" wood chisel, enough paper to go around the sash perimeter, isopropyl alcohol, new PVC glazing tape (GEI # 14000), 1 sharp razor-type Exacto knife and a water spray bottle.

1. Measure the replacement glass and verify that the size is correct.
2. From the inside of the window, carefully push the Exacto knife blade between the top sash frame and the glass. Be sure to press the knife edge toward the glass so you do not cut the vinyl.
3. Pull the knife along this joint to the opposing corner. Keep the pressure outward toward the glass and insert paper between the glass and the glazing tape you are cutting loose. Repeat on the other three sides of the frame. This will cut the old glazing tape loose from the glass and free it for removal.
4. From the outside of the window, start at the middle of one side and press the edge of the wood chisel into the joint between the glazing bead and sash frame. Using careful pressure so that you do not distort or break the bead, press the chisel toward the center of the glass. Carefully repeat this toward the corner to loosen and remove the bead. It will come out slowly until it gets started, then you can pull it out with your hands. Repeat this on all sides of the window, doing the top bead last to keep the glass in place until you are ready to remove it.
5. Stay on the outside to catch the glass (wear a good pair of appropriate gloves) and have someone inside apply slow, even pressure starting at the top of the glass, to push it out of the frame.
6. Once the old glass is removed and safely disposed of, use the wood chisel to remove the black portion of the glazing tape that remains on the frame, being careful not to scratch or gouge the vinyl frame. You can peel it off by using steady pressure with the tapered edge of the chisel.
7. Use isopropyl alcohol to wipe down the frame where you removed the old tape. Once the surface is clean and dry, apply new tape (face the sticky side away from you and the blue protective cover toward you). Make sure the tape extends the full length of each side and that the tape ends touch at the corners. DO NOT OVERLAP THE TAPE AT THE CORNERS. Use the knife to trim as necessary.
8. Make sure the new glass is clean, and again verify the size.
9. Check to see that the black setting blocks are still in place. If they are not, make sure to reinstall them.
10. Remove the protective blue cover from all the tape and lightly spray the tape with water, which allows you to position the glass properly before the tape adheres firmly.
11. Carefully place the new glass into the frame, making sure the rivet in the spacer is in an upper corner. Push the glass against the tape, centering it in the opening. CAUTION: THE GLASS WILL FALL OUT UNTIL THE GLAZING BEAD IS RE-INSTALLED.
12. Starting at both corners and working toward the center, insert the top glazing bead into the snap channel. Repeat this process for the remaining three sides and your job is complete.

TIMELESS
windows & doors
BY GORELL

REMOVAL OF A SASH FROM A TMPW/TPPW

1. Using a flat-blade screwdriver, work the screwdriver into the seam where the frame adapter meets the master frame to the innermost side of the window unit. Start near the end of the adapter.
2. Carefully pry the adapter upward to completely free it from the masterframe.
3. Repeat step 2 with the remaining frame adapters.

   Use caution - the sash could be blown in once the stops are removed.
4. With the frame adapters removed, the sash can now be removed from the frame in one of two ways:

   a. If the unit is rather large, you may want to utilize suction cup devices to the glass to remove the sash.

   b. Otherwise, using a flat-blade screwdriver, insert the screwdriver blade in the space between the top of the sash and the masterframe. With the screwdriver inserted into the space at the top of the window, lift upward on the screwdriver and the sash will begin to tilt inward.
5. Grasp the sash as it tilts inward and guide it out and away from the masterframe.

REPLACEMENT OF A SASH ON A TMPW/TPPW

1. Place the bottom end of the sash into the master frame first.
2. Tilt the sash toward the outside until it rests against the outside leg of the masterframe.
3. Take one of the frame adapters removed earlier and, starting with the end of the adapter, snap the adapter into place.
4. Continue snapping in the adapter along its length, using either a rubber mallet or a block of wood with a regular hammer.
5. Repeat Steps 3 and 4 with the frame adapter for the opposite side of the window.

SLIDER WINDOW BLINDSTOP INSTALLATION INSTRUCTIONS

1. Check the rough opening dimension(s) and new window dimension(s) to ensure the window is the size you ordered and will be a proper fit.
2. Using a pry bar or similar tool, carefully remove the interior stops from the existing window and set the stops aside. They can be reused once the window is replaced, if you choose.
3. Remove the bottom sash from the frame and discard.
4. Again using a pry bar, remove and discard the parting bead from both jambs and head. This is the narrow wood strip that creates the separation between the bottom and top sashes.
5. Remove the top sash from the frame and discard.
6. Clean and remove anything in the the window opening so that it is clear of all debris.
7. If necessary, apply coil stock material over any severely deteriorated portion(s) of the original window opening.
8. Carefully remove the plastic stretch wrapping from the new window and dispose of it properly. Leave the plastic banding at the center of the window in place.
9. With the banding in place, set the new window into the opening against the blindstop to check for fit and the length required of the sill angle.
10. Check your tolerances and remove the window from the opening.
11. Using a razor knife and a rubber mallet or a block of wood, trim the sill angle and tap it into the groove at the bottom of the window and attach the head expander (if desired) to the window.
12. Optional: Remove the window once more, apply a bead of good quality silicone, (recommended for vinyl) to the interior of the blindstop, and reset the window into the opening.
13. Reset the window into the opening, then adjust and fix the head expander position.
14. Check to be certain that the head and sill are parallel to each other. If not, shim the sill or head and fasten. **DO NOT PLACE** any fasteners down through the sill.
15. Check the operation of the new window. Around the exterior perimeter, where the new window meets the existing opening, apply a bead of caulking.
16. Recheck the new window for plumb and squareness; adjust if necessary.
17. Reattach the interior stops that were removed in Step 2 or make and install new stops as desired.

TIMELESS
windows & doors
BY GORELL

REMOVAL OF THE SASH FROM GORELL LIFT-OUT SLIDERS MODELS TPHS, TPTS, TMHS, AND TMTS

1. Unlock the sash by rotating the sweep lock handle(s) counter-clockwise.
2. Grasp the pull rail and slide the innermost sash until it is clear of the anti-lift-out block(s) situated in the header of the window.
3. Grasp the sides of the sash, lift it up into the header and swing the bottom of the sash out. Once it is clear of the sill, pull it down and away from the window.
4. To remove the outer sash, repeat Steps 2 and 3 above.
5. To replace the sashes, just reverse the above.

Note: *Prior to reinstalling the sash(es), check and make sure the roller assemblies are fully clipped into the bottom rail of the sash. If one or both of the roller assemblies have dropped slightly from the recess(es), take a mallet or regular hammer handle and tap the roller assembly back into place. Due to handling, the roller assemblies may shift out of location slightly.*

TIMELESS
windows & doors
BY GORELL

STEPS TO REPLACE A CASEMENT SASH VENT

1. Remove the screen.
2. Crank the vent outward about 30 degrees.
3. With someone supporting the locking side of the vent, release the connecting arm from the roto arm. To do this, retract the metal clip (1-1/4" long, two-pronged) from the Phillips-head stud. The vent is no longer connected to the operator mechanism.
4. Have the second individual rotate the vent outward 90 degrees while still maintaining support.
5. Use a flat-blade screwdriver to unsnap the hinge arm from the hinge track.
6. Repeat Step 5 on the top side of the vent.
7. Slide the vent toward the lock side until the hinge glides pop free.
8. Once the vent has been removed from the frame, remove the corner bracket and connecting arm from the vent. This will be used on the new vent unless the new brackets and connecting arms were supplied.
9. Attach the corner brackets and the connecting arm to the new vent.
10. Place the new vent in the window frame at the 90-degree opening and reattach the vent to the hinges.
11. Reconnect the arm to the roto operator by snapping two-pronged metal clips to the stud on the operator window.

STEPS TO REPLACE A CASEMENT PICTURE WINDOW SASH VENT

1. On the interior side of the unit you will notice 7/16" diameter plugs located at the jambs and sill on the masterframe of the unit. Using a small flat screwdriver, carefully remove the plugs and set them aside.
2. Behind the plugs, on one side, are screws that fasten the sash vent to the masterframe. Using a Phillips screwdriver, remove these screws and set them aside.
3. Once the screws have been removed, push the sash vent outward and follow the directions above.
4. Close the vent frame against the masterframe and drive the screws that were removed in Step 2 back into the anchor brackets, locking the window closed.
5. Replace the hole plugs.

CASEMENT SCREEN PLUNGER REPLACEMENT INSTRUCTIONS

1. Remove the screen from the window.
2. Pull on the plunger so that the shaft is visible and take a pair of side cutters or a similar tool to cut through the shaft. The plunger assembly can now be taken away from the screen.
3. The new plunger assembly set consists of a cap, a 1/2" spring and a tapered shaft. Place the 1/2" spring into the tapered shaft.
4. Slide the spring and shaft combination through the hole that was punched into the side of the casement screen. The tapered end of the shaft should be behind the flange of the screen rail.
5. Press the cap over the end of the shaft directly behind the screen mesh until it snaps.
6. Reinstall the screen.

STEPS TO REMEDY A BOWED CASEMENT VENT

1. With a mallet—or a regular hammer and a block of wool—tap on the vertical rails of the vent (from the inside of the vent), away from the glass edge, to straighten the vent.
2. If bumping the rails out doesn't work, then remove the vertical glazing beads by inserting a flat screwdriver or similar tool between the vent rail and the glazing bead at the mid-point of the sash, and pry upward.
3. At the vent mid-point, wedge one setting block (7/8 x 7/8 x 1/8 semi-rigid black block with adhesive backing) between the glass edge and the track of the vent rail.
4. Repeat on the opposite side of the vent.
5. After satisfactorily leveling off the sides of the vent, replace the glazing beads.
6. To do so, insert the ends of the bead into the corners first.
7. With a mallet—or regular hammer and a block of wood—tap in the glazing bead, down the length of the sash vent.
8. Repeat on the opposite side. The vent is now ready for installation into the casement masterframe.

TIMELESS
windows & doors
BY GORELL

No. T161

STEPS TO REPLACE A CASEMENT SASH VENT WITH TRUTH™ HARDWARE

1. Remove the screen.
2. Crank the vent outward about 30 degrees.
3. With someone supporting the locking side of the vent, release the connecting arm from the Truth™ sash bracket. To do this, use a flat-blade screwdriver, place the screwdriver under the bar and pry off of the stud. The vent is no longer connected to the operator mechanism.
4. Have the second individual rotate the vent outward 90 degrees while still maintaining support.
5. Use a flat-blade screwdriver to unsnap the hinge arm from the hinge track.
6. Repeat Step 5 on the top side of the vent.
7. Slide the vent toward the lock side until the hinge glides pop free.
8. Once the vent has been removed from the frame, remove the corner bracket and connecting arm from the vent. This will be used on the new vent unless new brackets and connecting arms were supplied.
9. Attach the corner brackets and the connecting arm to the new vent.
10. Place the new vent in the window frame at the 90-degree opening and reattach the vent to the hinges.
11. Reconnect the arm to the operator by snapping it to the stud on the window.

TIMELESS
windows & doors
BY GORELL

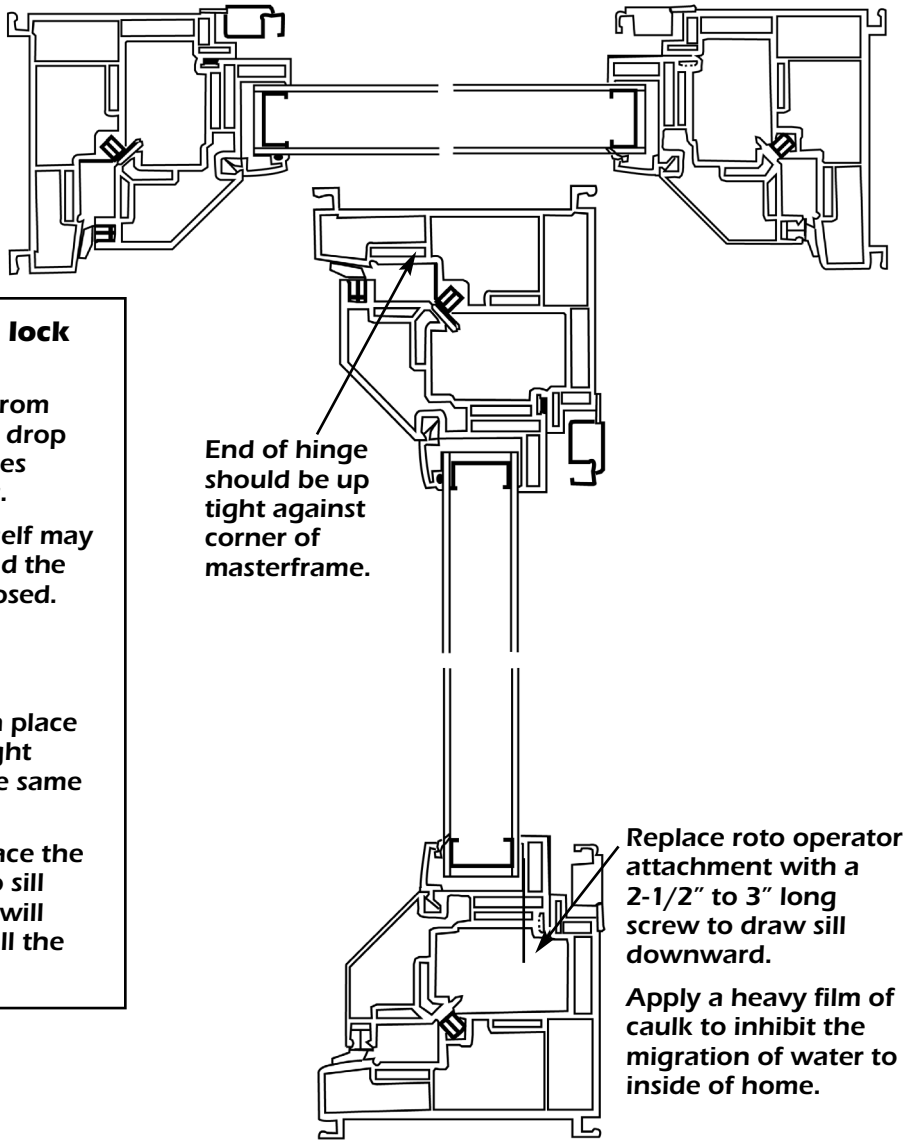
CASEMENT FRAME ROUTING GUIDE INSTRUCTIONS

Instructions on how to elongate the holes in the casement masterframe to accept the new screen style:

1. Remove the existing screen and crank out the sash the entire way. Then loosen the knob on the routing guide.
2. Place the guide into the masterframe. The groove in the routing guide will slip over the flange that is along side the existing holes in the frame.
3. Align the grooves on the face side of the guide with the existing hole that accepts the screen plunger.
4. Tighten down the knob on the guide—be careful not to over tighten. This knob is designed to help secure the guide in place, but if over-tightened it could damage the frame.
5. Place the supplied drill bit into a Dremmel tool. If no such tool is available, a standard drill can be substituted.
6. Use the drill bit and the guide to route out the hole to the proper size. There is no need to plunge into the frame farther than 1/4".
7. Repeat steps 3 through 8 for the remaining three holes, then place the screen back into the frame.

TIMELESS
windows & doors
BY GORELL

AWNING TIPS



Reasons why awning units may not lock and unlock properly:

1. *Weight of vent may pull hinges away from corner of masterframe, causing vent to drop and drag on the sill which in turn makes unlocking and locking the unit difficult.*
2. *If awning unit is rather wide, the sill itself may have an upward hump at the center, and the vent will catch on it as it is opened or closed.*

To remedy these problems:

1. *Loosen screws which hold the hinge in place on the masterframe and push hinge tight against corner. Reattach screws. Do the same with the other hinge.*
2. *To pull sill down so that it is level, replace the screws which hold the roto operator to sill with 2-1/2" or 3" screws. These screws will drive into an existing condition and pull the sill down to a level position.*

AWNING WINDOWS—RELEASING VENT FROM FRAME TO CLEAN EXTERIOR GLASS

1. If the screen is in the unit, remove it.
2. Crank the awning vent out as far as it will go.
3. There is a release lever where the roto operator mechanism attaches to the keeper on the underside of the vent. Rotate the lever toward the interior of the window.
4. Crank the vent inward approximately 1".
5. Grasp the operator arms and work them off the keeper, being sure to hold the vent in place while doing so.
6. Once the vent is released from the masterframe, swing the vent outward to the 90-degree position. The exterior of the vent can now be cleaned from the interior.

Note: *Depending on the size of the window unit, a second person may be needed to hold the vent open during the cleaning process.*

7. After cleaning, rotate the vent downward and re-hook the vent to the operator mechanism.
8. To lock, rotate the release lever back to the locked position, rotating the lever toward the outside of the window.
9. Reinstall the screen.
10. Close the window.

TIMELESS
windows & doors
BY GORELL

No. T175

REPLACING A VENT IN AN AWNING WINDOW

1. If there is a screen on the unit, remove it.
2. Crank the awning vent out as far as it will go.
3. There is a release lever where the roto operator mechanism attaches to the underside of the vent. Rotate this lever toward the interior of the window.
4. Crank the vent inward approximately 1 inch.
5. Grasp the operator arms and work these arms off of the keeper on the vent.
6. Once the vent is released from the roto operator, swing the vent outward 90 degrees. In the 90-degree position, the screws that hold the hinge to the vent will be visible.

   Note: When removing the screws, a second person will need to hold the vent open.

7. Using a Phillips screwdriver, remove the four hinge to vent screws at the sides of the vent. Set these screws aside for later use.

8..Take the new vent and align the dimple punches with the hinge holes and attach the screws that were removed from the original vent. Do both sides of the unit.

9. After screwing the vent to the hinges, rotate the vent down and rehook the vent to the operator mechanism.
10. Rotate the release lever toward the outside of the window, back to the locked position. This locks the vent to roto operator mechanism.
11. Reinstall the screen.
12. Crank the window closed.

TIMELESS
windows & doors
BY GORELL

REPLACING A VENT IN AN AWNING WINDOW WITH TRUTH™ HARDWARE

1. If there is a screen on the unit, remove it.
2. Crank the awning vent out as far as it will go.
3. There are two black plastic snaps where the Truth™ operator arms attach to the vent. Slide the plastic snaps back to release them from the vent.
4. Remove the awning track with slide guides (held on by four screws) from the bottom of the vent, using a Phillips screwdriver, unless new awning track with guides was supplied.
5. Remove single-point keepers from both sides of vent unless already supplied.
6. Once the vent is released from the Truth operator, swing the vent outward 90 degrees. In the 90-degree position, the screws that hold the hinge to the vent will be visible. When removing the screws, a second person will need to hold the vent open.
7. Using a Phillips screwdriver, remove the four hinge-to-vent screws at the sides of the vent. Set these screws aside for later use.
8. Take the new vent and align the dimple punches with the hinge holes and attach the screws that were removed from the original vent. Do both sides of the unit.
9. After screwing the vent to the hinges, rotate the handle to bring the vent down, and rehook the vent to the operator mechanism.
10. Reinstall single-point keepers unless already supplied.
11. Reinstall the screen.
12. Crank the window closed and lock.

TIMELESS
windows & doors
BY GORELL

SLIDING PATIO DOOR INSTALLATION INSTRUCTIONS

1. Check the rough opening dimensions and the new door frame size to ensure proper fit of the new door.
2. Ensure that the opening is clear of all debris, nails, screws, etc.
3. Remove all plastic stretch wrap material from the door and dispose of it properly. Do not remove the center band from the door.
4. With the center band still in place on the door, set the door into the opening.
5. Using wood shims, wedge the door frame tight to the opening.
6. Remove the banding and threshold blocking at the head and the threshold—both are labeled "Remove."
7. Use a level and a square to set and anchor the door frame to the opening. It is recommended that a screw or screws be driven through the header and into the existing frame to ensure the masterframe stays level across the head of the new door.
8. For added security, 1- #8 X 1" pan head screw has been driven into the parting beads, 3" up from the sill end of the fixed side jamb, through the fixed panel and covered with a color matched cap. If unit is woodgrain, screw is situated behind the jamb liner. If the fixed panel needs to be removed for any reason, this screw will have to be removed first.
9. Assemble and attach the door handle hardware, per the instructions provided with the handle kit.
10. On the inside track of the jamb, drill two holes into the jamb and fasten the keeper into place.
11. The door panel can be adjusted vertically by adjusting the roller height. The roller adjustment cam can be found behind the caps at the bottom of the exterior side of the door panel.
12. Slide the door panel to the latch side and activate the lock lever, making sure the latch catches the keeper. If the latch does not catch, adjust the keeper either up or down.
13. Insulate and trim off the interior and exterior of the door as required. Seal it with a quality sealant. **Make sure the weep holes are kept clear at the threshold.**

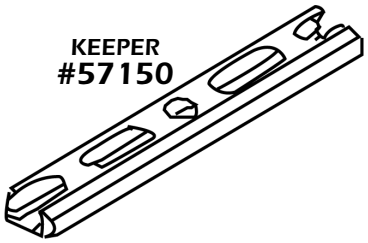
Troubleshooting:

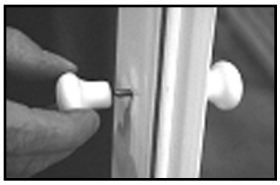
Problem: The door panel is rolled to the closed position and, at about 6" or so from closing all the way, it stops or seems to catch on something.

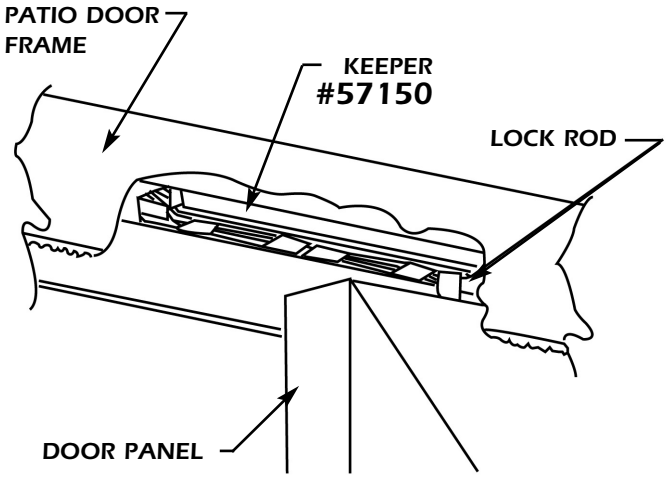
Solution: Remove the operating door panel from the frame and check to see if the snap on the interlock hook is on all the way in the fixed door panel near the threshold end. This snap on the interlock hook needs to be snapped back into place. To do this, heat the section using a hair dryer or similar device. Then, using a mallet or a block of wood with a regular hammer, carefully bump the section back into place. Also, check to ensure the roller cap is in all the way.

Placement of the secondary lock keeper:

1. With the patio door completely installed, close the operating door and lock at the jamb.
2. A secondary lock is located at the mid-span of the interlock rail. Rotate the lever of this lock into the locked position.
3. Take part #57150, patio door secondary lock keeper, and place the keeper in the interior track of the frame head against the innermost wall of the frame.
4. Slide the keeper toward the operating door panel until it rests against the rod of the secondary lock. Pull the keeper back slightly and then anchor as in step #5.
5. Using a 9/64" drill bit, drill holes through the keeper anchor door frame header holding the keeper against the innermost wall of the frame.
6. Drive two 1" long screws into the keeper.
7. After screen is installed, insert the knob with threaded rod into the hole provided, then screw on the other knob.





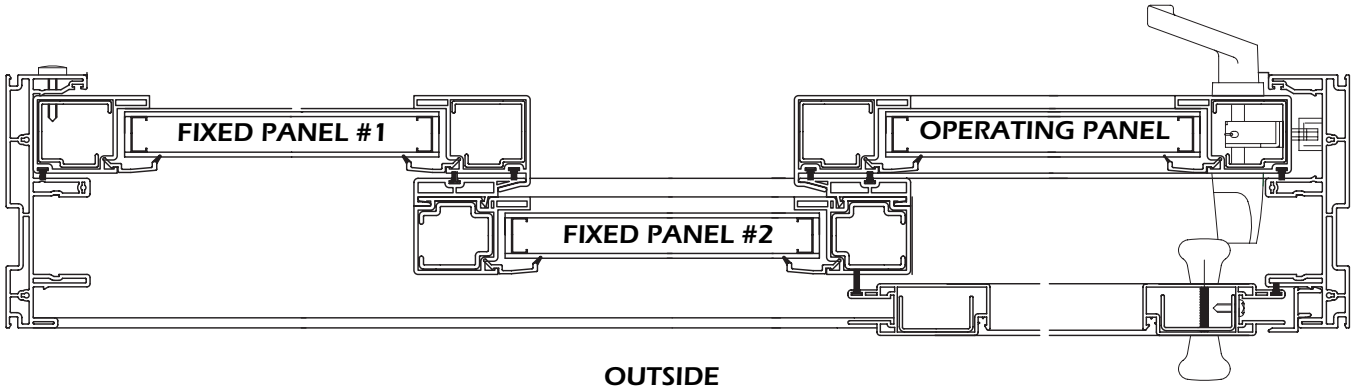


TIMELESS
windows & doors
BY GORELL

3-LITE SLIDING PATIO DOOR INSTALLATION INSTRUCTIONS

1. Before assembling your new 3-lite door, identify the position of the operating panel.
2. Snap in the fixed panel support blocks (part # 12058). These blocks should be placed in the inside track and spaced directly under the corners of fixed panel #1. **Do not place them in front of the 3/8" diameter holes in the sill frame.**
3. To help control air movement through the door, place foam baffles (part #57162) in the same track, directly in line with the 3/8" diameter holes.
4. Lift fixed panel #1 into the door frame header, then swing the bottom into the frame to rest on top of the support blocks.
5. Slide the panel fully into the door jamb.
6. Snap the sash bumpers into the frame (part #57129). Place one against each of the corners of fixed panel #1, with one at the top and one at the bottom.
7. Now snap in the support blocks for fixed panel #2 (part #12058). Snap them into the outer track so that they rest at the corners of fixed panel #2.
8. Again ensure that there are foam baffles (part #57162) located directly behind the 3/8" weep holes.
9. Insert fixed panel #2 into the top or head of the door, swinging it in place to rest on the support blocks. Position it roughly 4" off center, toward the first panel side, then slide it over to engage the first interlock.

   Note: *All assembly is done prior to setting the door into the opening. The head of the door must be allowed to flex upward when fixed panel #2 is inserted.*
10. Snap the outside threshold spacer (part #12068) into the outer frame track, directly in front of fixed panel #1. In order to hold the extruded interlock joint between panels #1 and #2 tightly in place, put one spacer in the top of the frame and one in the sill or bottom of the frame.
11. Again locate and install baffles (part #57162) and remaining thresholds (part #12068) into the top and bottom of the frame. They should fit snugly between the corners of fixed panel #2 and the opposing main frame corners.
12. Set the door into the opening, then shim and anchor. Use fixed panels #1 and #2 to square and align the frame of the door. **Do not use fasteners down through the door sill.**
13. Once you are satisfied with the placement, install the operating stainless steel sill track (part #12056). Snap it into place between sash stop (part #57129) and the opposing frame jamb.
14. Install the remaining operating panel and hardware as you would on a 2-lite Gorell sliding patio door. See tip #255 for handle assembly. See tip #255 for handle assembly.



TIMELESS
windows & doors
BY GORELL

3-LITE SLIDING PATIO DOOR INSTALLATION INSTRUCTIONS (CONT.)

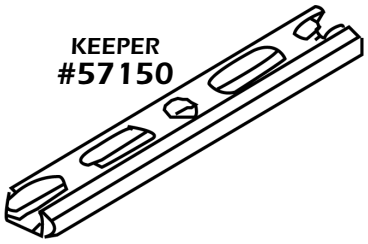
Troubleshooting:

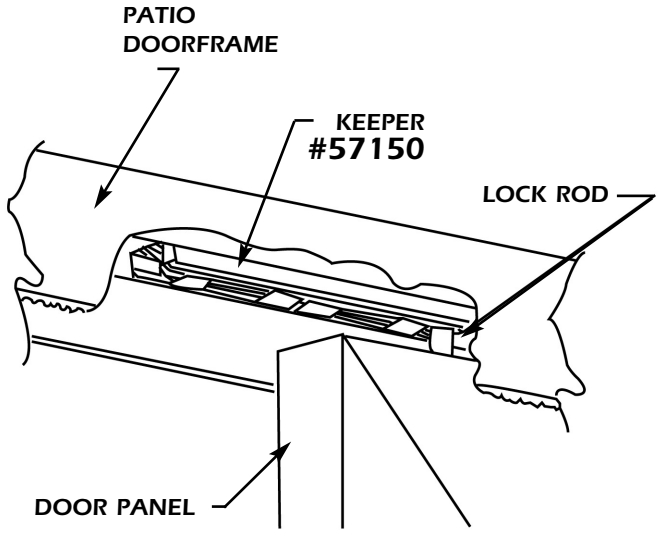
Problem: When the door panel is rolled to the closed position and, at about 6" or so from closing all the way, it stops or seems to catch on something.

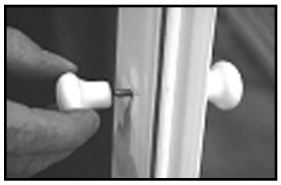
Solution: Remove the operating door panel from the frame and check to see if the snap on the interlock hook is all the way in the fixed door panel near the threshold end. The interlock hook needs to be snapped back into place. To do this, heat the section using a hair dryer or similar device. Then, using a mallet or a block of wood with a regular hammer, carefully bump the section back into place. Also, check to ensure the roller cap is in all the way.

Placement of the secondary lock keeper:

1. With the patio door completely installed, close the operating door and lock at the jamb.
2. A secondary lock is located at the mid-span of the interlock rail. Rotate the lever of this lock into the locked position.
3. Take the patio door secondary lock keeper (part #57150), and place it in the interior track of the frame head against the innermost wall of the frame.
4. Slide the keeper toward the operating door panel until it rests against the rod of the secondary lock. Pull the keeper back slightly and then anchor as in step #5.
5. Using a 9/64" drill bit, drill holes through the keeper anchor doorframe header holding the keeper against the innermost wall of the frame.
6. Drive two 1" long screws into the keeper.
7. After screen is installed, insert the knob with threaded rod into the hole provided, then screw on the other knob.







TIMELESS
windows & doors
BY GORELL

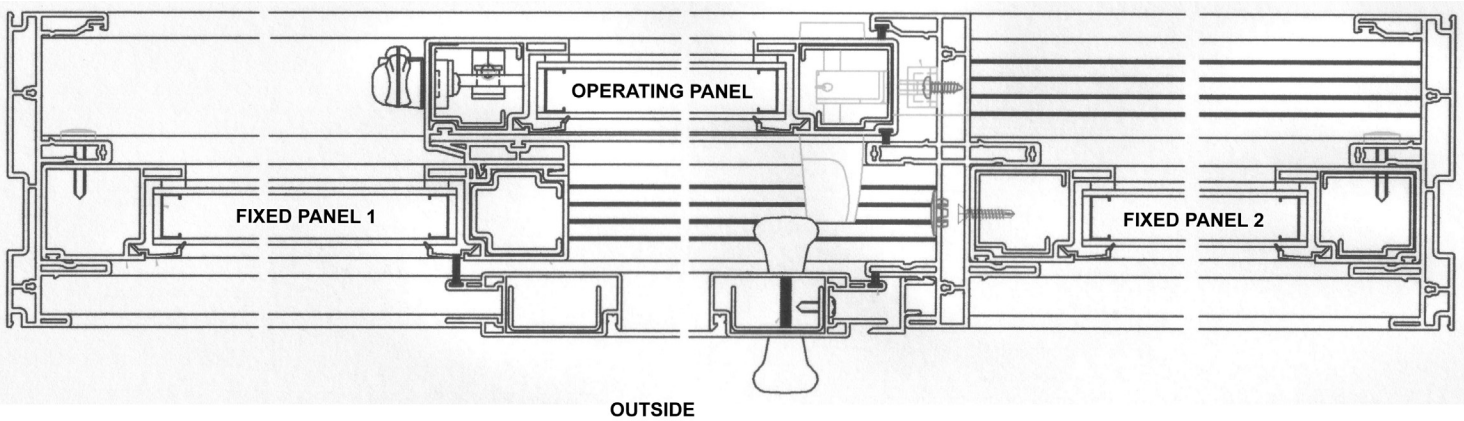
3-LITE SLIDING PATIO DOOR INSTALLATION INSTRUCTIONS WITH CENTER-SLIDE DOOR

1. Identify the position of the fixed-lite panels. These panels will go in the outside track of all center-slide doors.
2. Snap in the fixed panel support blocks (part # 12058). These blocks should be placed in the outside track and spaced directly under the corners of fixed panels #1 and #2. **Do not place them in front of the 3/8" diameter holes in the sill frame.**
3. Place foam baffles (part # 57162) in the same track, directly in line with the 3/8" diameter holes.

   Note: *Baffles are used to control air movement through the door.*
4. Lift fixed panel #1 up into the door frame header and swing the bottom into the frame to rest on top of the support blocks. Then install panel #2 the same way and slide the panels fully into the door jamb.
5. Install astragal tightly against the panel, then fasten astragal to panel with three 1" tek screws (part # 48082) and cover the holes with plugs (part # 47024).
6. Install interlock clip (part # 12055) on fixed panel.
7. Next install thresholds (part # 12068) to the outside track on top and bottom of frame. This will hold the astragal and the fixed panel tightly in place.

   Notes:
   1. *Make sure there are foam baffles (part # 57162) located directly behind the 3/8" weep holes.*

   2. *All this assembly is done prior to setting the door into the opening. The head of the door must be allowed to flex upward when fixed panel #1 is inserted.*
8. Now snap inside frame filler (part # 12069) into the interframe track, directly in front of fixed panel #2. One filler will be placed in the top of the frame and one in the sill or bottom of the frame. These will hold the astragal on the inside of the frame in place.
9. Slide part # 57130 antilift-out clips (located in head of frame) to the side of operating panel and lift panel into door. Slide clips back over the center of operating panel and close panel.
10. Now set the door into the opening, then shim and anchor it. Use the fixed panels #1 and #2 to square and align the frame of the door. Do not use fasteners down through the door sill.
11. Install the remaining operating panel and hardware as you would on a 2-lite Gorell sliding patio door. See tip #255 for handle assembly.



TIMELESS
windows & doors
BY GORELL

3-LITE SLIDING PATIO DOOR INSTALLATION INSTRUCTIONS WITH CENTER-SLIDE DOOR (CONT.)

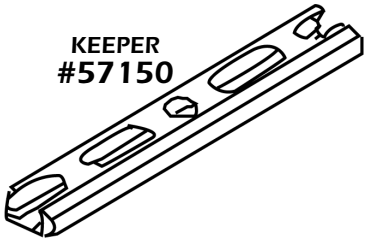
Troubleshooting:

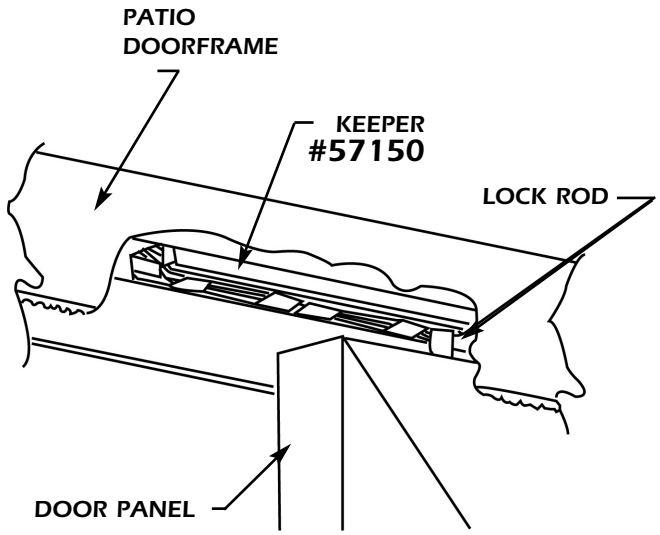
Problem: The door panel is rolled to the closed position and, at about 6" or so from the complete close position, it stops or seems to catch on something.

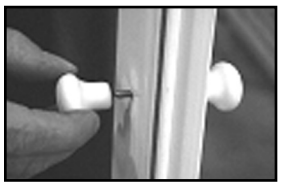
Solution: Remove the operating door panel from the frame and check to see if the snap on the interlock hook is all the way in the fixed door panel, near the threshold end. The interlock hook needs to be snapped back into place. To do this, heat the section using a hair dryer or similar device. Then, using a mallet or a block of wood with a regular hammer, carefully bump the section back into place. Also, check to ensure the roller cap is in all the way.

Placement of the secondary lock keeper:

1. With the patio door completely installed, close the operating door and lock at the jamb.
2. A secondary lock is located at the mid-span of the interlock rail. Rotate the lever of this lock into the locked position.
3. Take the patio door secondary lock keeper (part # 57150), and place it in the interior track of the frame head against the innermost wall of the frame.
4. Slide the keeper toward the operating door panel until it rests against the rod of the secondary lock. Pull the keeper back slightly and then anchor as in step #5.
5. Using a 9/64" drill bit, drill holes through the keeper anchor door frame header, holding the keeper against the innermost wall of the frame.
6. Drive two 1" long screws into the keeper.
7. After the screen is installed, insert the knob with threaded rod into the hole provided, then screw on the other knob.

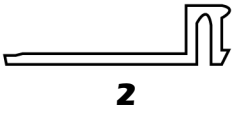


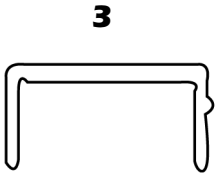


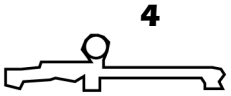


TIMELESS windows & doors BY GORELL

FIELD REVERSING A SLIDING PATIO DOOR







This door is reversible by moving the following parts to the opposite side:

1. 57129 Door bumpers
2. 57130 Anti-theft blocks
3. 57146 Fixed-lite spacer blocks
4. 12056 Sill track

1. Unlock the door and slide the active door panel clear of the anti-theft blocks.
2. Lift the door panel out of the main frame of the door and set it aside.
3. Remove the screws located in the parting bead, approximately two inches from the fixed interlock at the head and sill. Set them aside for later use.
4. Remove the threshold material that runs against the fixed door panel in the outer track at the head and threshold. Use a flat screwdriver to pry it out of the track.
5. Lift the fixed-door panel out of the main frame and set it aside.
6. Move the fixed-lite spacer blocks (part # 57146) to the opposite side, spacing them out the same way they were originally positioned.
7. Load the fixed panel back into the frame on the side where the spacer blocks were placed.
8. Replace the threshold up against the fixed panel. The notched threshold goes at the bottom.
9. Using a drill with a 7/64" drill bit, drill—at an angle—a hole into the parting bead of the masterframe and into the threshold at the head and sill, approximately two inches from the fixed interlock toward the operating side; 1/4" from the top edge of the parting bead.
10. With a #2 Phillips screwdriver, drive the 1" long flat-head screws removed in Step 3 into the holes drilled at the parting bead. Make sure the screw heads are down far enough so that the operating door panel does not drag on the screw heads.
11. Remove the door handle hardware, latch mechanism and rollers from the active door panel.
12. Reattach the rollers to the opposite end of the door panel.
13. Reverse the attachment of the door handle and latch mechanism. Follow the steps below for attachment of the latch mechanism.
14. Move the primary door lock keeper and door bumpers (part # 57129) to the opposite side.
15. Move the secondary lock keeper to the sill, following the steps on tips #180 for locating the secondary lock keeper.
16. On the exterior side of the door, reverse the screen in the same manner as the active door panel.

Attachment of the Patio Door Latch Part No. 57144

1. Insert a flat-head screwdriver tip into the slot of item "A."
2. With the screwdriver in the slot, rotate the screwdriver counterclockwise until the hook "B" pops out of the mechanism, then remove the screwdriver.
3. Firmly grasp the hook catch "B" with the hook catch pointing toward the top of the door, then feed one end of the mechanism into one end of the 3-1/4" x 1/4" slot in the door rail.
4. Push one end of the mechanism into the slot far enough to allow the other end of the mechanism to pass through the slot in the door rail. Hold onto the latch mechanism at all times.
5. Once the latch mechanism is entirely within the door rail, align the holes in the latch with the punched holes in the door rail.
6. Fasten the latch in place, using the two 3/8" long screws provided.

TIMELESS
windows & doors
BY GORELL

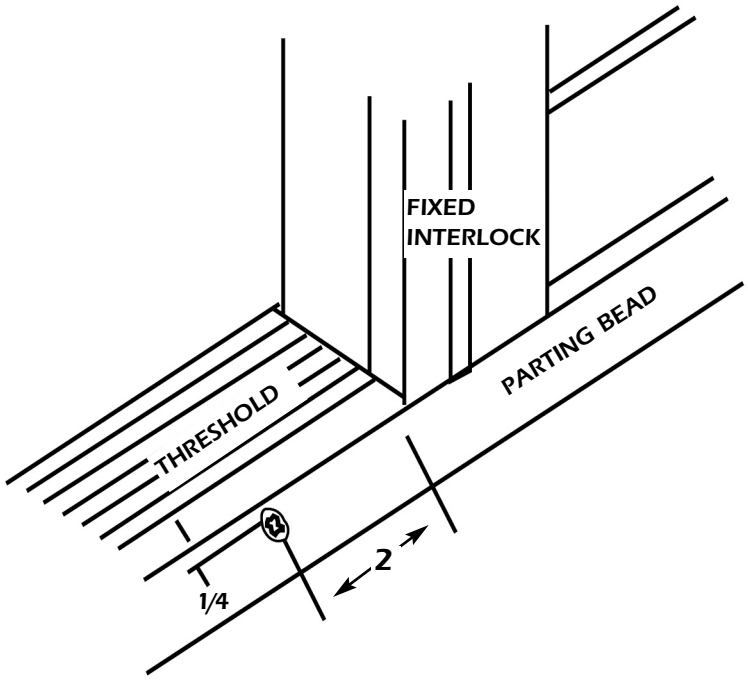
No. T190

FIELD APPLICATION OF FIXING SCREWS FOR THE SLIDING PATIO DOOR

Tools you will need: Drill, 7/64" drill bit and #2 Phillips screw driver

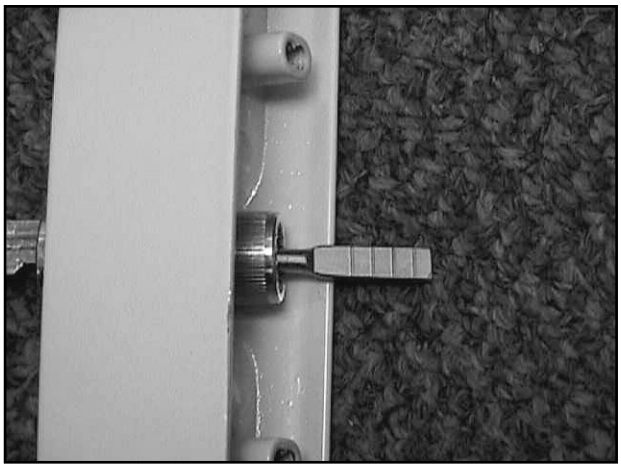
Supplied to you: 2 #6 x 1" Phillips flat-head screws

1. Unlock the operating panel.
2. Slide the operating door panel clear of the anti-lift-out blocks and remove the door panel from the master frame. Set the door panel aside.
3. Using the drill with a 7/64" bit, drill—at an angle—a hole into the parting bead of the masterframe and into the threshold at the head and sill—approximately 2" from the fixed interlock toward the operating side and 1/4" from the top of the parting bead. (See detailed drawing at right).
4. Using a #2 Phillips screwdriver, drive the 1" long screws provided into the holes that were drilled into the parting beads. Ensure that the screw heads are down far enough so that the operating door panel does not drag on the screw heads.
5. Reinstall the operating door panel.
6. Close and lock the door.

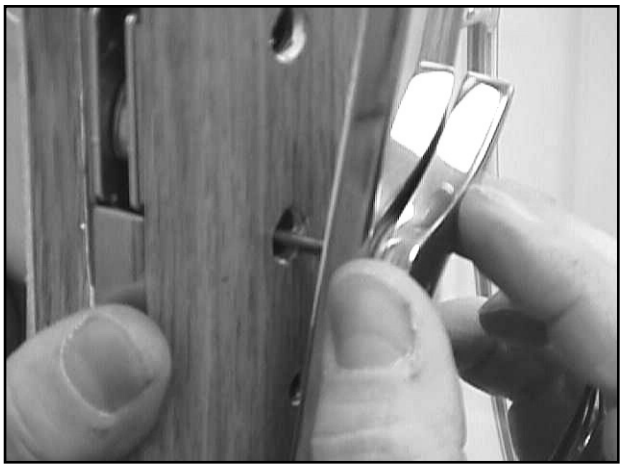


TIMELESS
windows & doors
BY GORELL

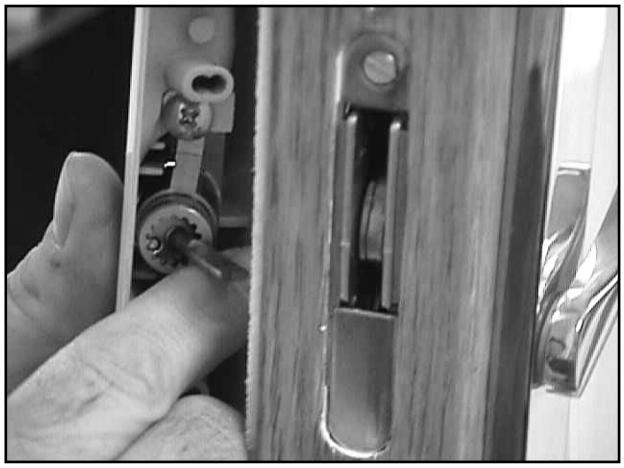
SLIDING PATIO DOOR HANDLE ASSEMBLY—ANGLED KEYLOCK



1. Locate the exterior handle (with the keylock).



3. Mount the inside handle using the two provided screws. These will pass through the panel and into the outside handle.



2. Insert the tab through the door and into the rectangular slot in the pre-mounted lockset. Be sure that the back of the cylinder and the actuating bar are in this position; the small pin must be at the 8 o'clock position when the bar is horizontal. If they aren't, the key won't come out of the cylinder.

4. Mount exterior handle with angle away from the jamb. If the lock operates, but is tight, remove the handle and file the end of the tab to add additional clearance. Light lubrication will also help.

   The keylock is now installed and operational. Test the lock to ensure it operates properly.

TIMELESS
windows & doors
BY GORELL

No. T200

VINYL SWING DOOR INSTALLATION INSTRUCTIONS

1. First, unwrap your new door and verify that you have all of the components. DO NOT CUT THE BANDS.
2. Check the opening and the new door size. The opening must be at least 1/2" larger than the new door's width and height.
3. Check to determine whether the opening is level and square, and look for any uneven surfaces that may inhibit proper shimming.
4. Cut and install filler pieces to correct uneven surfaces and/or to correct any opening problems.

   Note: *You must have a strong, solid surface to mount to.*

5. Measure the locations of the hinge and lock-point shim pads on the new door and transfer these locations to the opening.
6. Tack shims at all of these hinge and lock points so that mating shims can be slid in later. ALWAYS USE TAPERED SHIMS IN PAIRS. This will keep the frame from twisting.
7. Dry set the new door into the opening. Ensure that you have at least 1/2" height clearance between the new door and the opening in height. Later, you will use 1/4" shims at the sill. Make sure you have room to use the tapered shims. If the clearance is too tight, then you must either cut away the opening or remove the shims from the new door frame and trim the eurogroove to allow this clearance.
8. With the door placed in its proper position, mark a line on the floor along the new door sill to guide you for later shim and caulking placement.
9. Remove the door and apply two 3/8"-diameter continuous beads of compatible sealant outward of the scribed line along the sill and up the jambs at least 6 inches.
10. Now place a 4" x 4" x 1/4" thick shim of non-porous, non-absorbent material on the sill, roughly one to two inches from each corner, and seal again over top of the shim with two 3/8" beads of sealant.
11. These shims are extremely important. They provide the height to allow the built-in weep system to drain properly. They also allow for thermal movement of the frame and keep the doors from binding.
12. Cut the **vertical** banding only, so it doesn't smear the caulking, and reset the door into the opening on top of the shims.
13. Plumb the door and apply shims at all the pre-located points so that the door is snug in the opening.
14. Now, using the #12 x 3" screws, anchor the door into the wall at all the hinge and lock points through the pre-drilled holes on the exterior side of the frame.
15. Cut the remaining **horizontal** band.
16. Locate the handle kit and ensure that all of the components are included.
17. Use the square drive bar and a handle to open the door.
18. Insert the dead bolt and assemble the handle hardware. Be sure to drive the handle set screws into the chamfered side of the drive bar. Using the opposite side will allow the handle to slip free.
19. Check the operation of the door as well as the fit of the panels to the frame. Then install the remaining #12 x 3" anchor screws through the pre-drilled holes.
20. Check the operation and fit of the door again. Now install the remaining screws into the head and sill, shimming with tapered shims in pairs to enable the door to swing freely.
21. Trim and snap in the sill angle and insert the screw covers on the exterior.
22. Any screws that are driven down through the sill must be caulked by filling the drilled hole with sealant and then driving the screw tight.
23. Once all the anchors are installed and you are satisfied with the door's operation, trim off the exposed shims.
24. Then loosely pack the gap around the perimeter with insulation. Do not pack tight.
25. Seal the perimeter of the door to the weather barrier surface of the home. Be careful to leave the weep holes open at the sill.
26. Snap the screen into the head track.
27. Adjust the screen hangers and bottom glides so that the screen hangs parallel to the frame. Applying a light lubricant to the head screen track ensures smoother operation.
28. Mark and mount the screen keeper if optional latch was purchased.
29. Finally, re-apply all exterior rigid flashings, flexible flashings and trims to integrate with wall conditions.

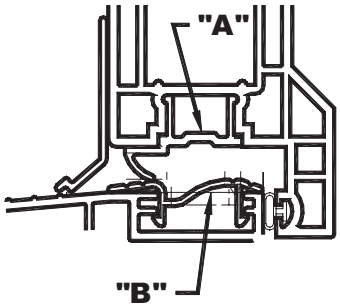
TIMELESS
windows & doors
BY GORELL

VINYL SWING DOOR INSTALLATION INSTRUCTIONS (CONT.)

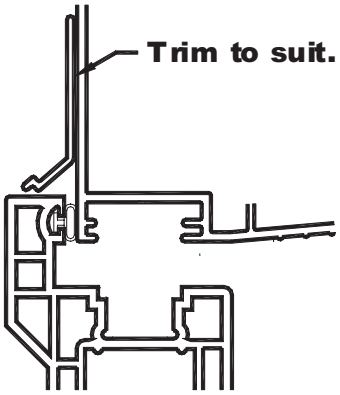
You have been supplied with the above pictured watershed. This watershed must be used when door(s) are subject to full exposure to the elements. Remove blue backing from tapes & apply watershed to operating door panels, as shown below, after doors are installed & properly adjusted.

On inswing doors, remove items "A" & "B" at threshold.

Inswing door @ sill:



Outswing door @ head:



TIMELESS
windows & doors
BY GORELL

BOW/BAY INSTALLATION INSTRUCTIONS

Measuring for a bow/bay window:

1. Remove interior casings from the old window to get the measurement of the rough opening. This allows for true accuracy. All measurements, widths and heights, should be taken in three places, ordering the smallest of the three measurements. This will assure a better fit for out-of-square openings. All openings should be checked for squareness.
2. Measure the wall thickness from the inside wall to the outside of the frame. For installation with exterior siding, measure from the interior plaster opening to outermost tip of the siding. For installations with brick exterior, measure from the interior plaster opening to the old caulk line.

Installation of a bow/bay window:

1. Your new bow/bay window unit is completely wrapped with plastic stretch wrap. Before removing any existing windows, and before all wrapping and protective materials have been removed from your new bow/bay window unit, make sure it is the size you ordered to ensure proper fit.
2. Also, check each window installed into the wood buck of your new bow/bay unit, and make sure the operating windows are handed properly. This also should be done prior to removing existing windows. You may then remove and dispose of all plastic wrap.
3. Remove the protective wood cross-bracing—and the 3/8" plywood—that is located on the jambs and on the edges of the unit. If the window unit includes an extended seat board, there will be 3/8" plywood tacked along the edges of the seat board for protection during shipment. Remove this plywood also.
4. Strapped to the two vertical strips of plywood at the middle of the unit are the interior jamb closure boards and the installation hardware kit. Remove these from the plywood and set aside first, then remove plywood strips and discard.
5. Place the unit in the opening and utilize a temporary support (knee braces or 2x4's) to prevent sagging. Install the bow/bay with the sill of the unit tilted slightly toward the exterior to allow for proper drainage. Failure to do so will result in windows not operating properly. To help with this, we have includ ed two level bulbs (one on each jamb) that have been fac tory set to automatically tip the unit to the proper out side angle when they read level.
6. Install shim shingles to ensure the jamb is straight, then install screws to fasten the bow/bay frame through the sides of the rough opening. Shim and trim the wood buckframe to the opening as required.
7. Check the window unit and make sure it is plumb and square. Shim the unit as required.
8. Each bow/bay frame is equipped with an installation hardware kit, which was removed from the window frame earlier. The hardware package is engineered for attachment of the bow/bay to the house at the top. The kit includes:
   a) Two 6-1/2" turn buckles (eye bolt at one end; hook at the other end)
   b) Two 1/8" cables (1-1/2 feet)
   c) Four 1/8" cable clamps
   d) Two 7" long-eye bolts (for use through masonry)
   e) Two 4-1/2" long-eye bolts (for use through siding)
   f) Two 5/16" hex nuts
   g) Two 1/8" thick-angled steel eyelets
9. At the top of your bow/bay unit, there are two (2) threaded rods protruding from the wooden buck. Place one end of the steel eyelets onto threaded rod and then tighten the 5/16" hex nut down against the eyelet. Make sure the eyelet is angled toward the house. ***Note:*** *To ensure the hex nut's holding power, peen the ends of threaded rod against the hex nut.*
10. Take the turn buckle from the kit and insert the hook end through the eyelet on window unit. Attach the turn buckle to both eyelets.
11. Loop 1/8" cable through the eye bolt end of turn buckle and anchor it in place, using one of the four cable clamps in the hardware kit. Do the same with the other turn buckle.

TIMELESS
windows & doors
BY GORELL

BOW/BAY INSTALLATION INSTRUCTIONS (CONT.)

12. With the cable in place on the turn buckle, determine the location of the eye bolt placement on the house. The location of the house anchor above the bow/bay unit should be greater than the depth of the bow/bay unit. Also be sure that the cable anchors are squared back to the wall from the center line of the mullion tie rods and allow for pitch of the hip rafter. Mark this position and drill required holes. ***Note:*** *Your kit contains two sizes of eye bolts – one is 7", for use through masonry; the other is 4-1/2", for use through siding.*

13. Thread the eye bolts into the house; loop the other end of the 1/8" cable through the eye bolt. Using the remaining cable clamps, secure the cable at the eye bolt.

14. To remove slack in the cable, tighten the cable at the turn buckle **by hand only**. Do not use screwdrivers, wrenches, etc. to adjust. Be careful not to over tighten and wrap the frame.

15. After tightening the cable, proceed to the inside of the house and check the unit to see if it is still plumb and square and that the level bulbs still indicate the outside tilt. Check and make sure window units are operating properly. If operating casements tend to not close completely, go back to the turnbuckle system and adjust the cable until it brings the casement jambs into plane. Again, check operation of units.

16. Once the unit is squared, and the units operate properly--using a good grade of caulk--caulk the unit completely and finish off the unit at top.

17. Install jamb closure boards to the inside of the unit. ***Note: The headboard of the bow/bay unit is not completely weathertight. A roofing system or other means of head protection must be installed.***

    Note: *It is recommended that, if projection exceeds 12" or where the turnbuckle system is not incorporated, knee braces be used to support the weight of the unit.*

    All interior wood or veneer products included in the assembly of this product MUST be protected completely—as soon as possible after window installation—with a waterproof finish such as polyurethane. Failure to do so will void the warranty.

TIMELESS
windows & doors
BY GORELL

BOW/BAY INSTALLATION WINDOW REPLACEMENT

1. Using a small nail bar or a straight screwdriver, carefully pry out and remove the outside mull cover and the outside jamb closure from around the window you are replacing.
2. Using a Dremmel tool, cut away the outside head and sill retaining leg of the buck cover, cutting along the surface of the cover but not down through the cover, to expose the plywood seat.
3. From inside, use the Dremmel to cut and remove the interior mull strip from the adjoining window.
4. Using a metal-cutting hacksaw blade, reach in between the window head and the window sill and cut off the retaining screws that hold the window in place. The window should now be free of the bay buck to tilt outward and remove.
5. Set the new window into the cleared opening and snap on the outside mull covers and the outside jamb closure.
6. Make sure the window is tight against the inner leg of the buck liner, set square and operating properly. Fasten it in place at the head and sill with the provided installation screws.

   Note: *These screw heads must be caulked to prevent water leakage.*

7. Replace the inner mullion with a new replacement part. Snapping this in will require a wooden block and a mallet.
8. Check window operation, and readjust if necessary.
9. Clean and re-caulk all the outer mullions and window to buckliner joints.

FIELD INSTALLATION OF A BOW/BAY INSULATED SEAT BOARD PRIOR TO INSTALLATION

1. Place the bow/bay unit on saw horses, or a similar apparatus, with the interior face of the unit against the saw horses.
2. At the underside of the bow/bay, a vinyl seat cover is stapled through the 15/16" flange of the extrusion and into the plywood of the bow/bay. Remove these staples.
3. Clean the area completely of the sealant where the flange meets the plywood.
4. Take the insulated seatboard adapter (a Z-shaped vinyl extrusion, which has been pre-notched to conform to the bow/bay angles), and slip the J-shaped end under the flange of the vinyl seat cover.
5. Staple both shapes into place.
6. Slide the pre-cut insulated board with foil backing away from the plywood and into the L-shaped receptor of the insulated seat board adapter.
7. With the insulated board in place, butt the furring strip against the raw edge of the insulated seat board toward the interior of the bow/bay.
8. Using board nails no longer than 1-1/2", fasten the furring strip into place.
9. Caulk at all joints with a good grade of sealant.

CONDENSATION CAUSES AND CURES No. T235

What is condensation?

Humidity (invisible water vapor) is present in almost all air. When this water vapor comes in contact with a surface that is cooler, the vapor can condense into visible droplets of liquid. Condensation frequently occurs on glass surfaces first because they normally have a lower temperature than other interior surfaces in your home. You've often seen this happen to bathroom mirrors and walls after a hot shower, or on a glass of iced tea. These glass surfaces do not cause the condensation; they simply reflect the presence of moisture.

What causes condensation?

It's natural to believe that your windows are the cause of condensation, but they aren't. Windows don't cause condensation; they simply prevent moisture from escaping to the outside and provide a highly visible surface on which to notice it. In fact, the "warm-edge" technology of Gorell windows and doors can actually help reduce typical condensation buildup on glass. Nonetheless, while weather-tight, thermally efficient Gorell windows keep cold air outside, they also keep moisture in. Occasional, mild condensation is a normal event and causes no real problems. Even so, when you see excessive condensation on glass surfaces, take it as a warning that you may have excess humidity in your home.

Problems caused by excess humidity:

Humidity, water vapor, moisture and steam are all a form of water. This water in the air tries to flow toward drier air and mix with it. This process manifests itself as a force scientists describe as vapor pressure. Often a very powerful force, it can act independently of the flow of air that holds the moisture. Vapor pressure can force moisture easily through most of the materials used in building—wood, plaster, brick and cement. That's exactly what happens when excess humidity seeks to escape from the air inside your home to the drier winter air outside. If you experience this kind of condensation in your home, you have good reason to be concerned.

Excess humidity and condensation can pose serious threats to your home, from heavy droplets running off windows and staining woodwork to, in serious cases, less visible condensation penetrating and collecting in your walls and ceilings. This can damage wallpaper, paint or plaster and cause rotting wood, buckling floors, insulation deterioration, mildew and moisture spots and even structural damage to your home.

What causes excess humidity?

The first step in eliminating excess humidity is to understand some of its causes. Every activity that uses water adds moisture to the air. Condensation problems increasingly result from the operation of everyday labor-saving appliances—gas furnaces, humidifiers, showers, ovens, dishwashers and washing machines. All these create much more water vapor in your home than was created in former years. For example, 1000 cubic feet of gas burned will produce about ten gallons of water as the hydrogen in the water combines with the oxygen in the air. According to *Heating and Ventilating* magazine, which provides reference data on sources of water vapor for builders, cooking for a family of four adds 4.5 pounds of moisture a day to a house. Each shower contributes half a pound, weekly laundry adds 30 pounds, dishwashing adds 1.2 pounds. The average four-person household can easily release 150 pounds of water (more than 18 gallons) per week into the air at home! And most of the moisture must eventually escape outdoors to avoid excess humidity in your home.

Controlling condensation:

According to the American Architectural Manufacturers Association (AAMA), controlling the amount of water vapor in your home is the most effective action you can take to prevent condensation problems. This begins with monitoring your home's humidity, using an accurate sling psychometer or a humidistat. The following table shows recommended safe Relative Humidity levels to maintain for a 70° F indoor air temperature during the cold, winter season, based on extensive engineering studies at The University of Minnesota Laboratories:

Outside Air Temperature	Inside Relative Humidity
-20° F or below	Not over 15%
-20° F to -10° F	Not over 20%
-10° F to 0° F	Not over 25%
0° F to 10° F	Not over 30%
10° F to 20° F	Not over 35%
20° F to 40° F	Not over 40%

In most cases, reducing your humidity to these levels will cure troublesome condensation. Remember that these levels are for a 700 °F indoor air temperature. For higher indoor temperatures, lower humidity levels are required. Likewise, a warmer outside temperature permits higher indoor Relative Humidity.

Reducing humidity: The best steps you can take for reducing excessive humidity levels and condensation in your home involve controlling sources of moisture and increasing ventilation:

Use exhaust fans in your kitchen, laundry and bathrooms. Vent all gas burners, clothes dryers, etc. to the outdoors. Shut off furnace humidifiers and other humidifying devices in your home. Be sure that louvers in your attic or basement crawl spaces are open and amply sized. Open fireplace dampers to allow an escape route for moisture-laden air. Air out your house a few minutes every day.

For more information, call the PA Better Business Bureau (412) 456-2720 on a touch-tone telephone. Select Option 3, Automated Information Service; selection #3, Tell Tips; selection #2 Transfer to Tell Tips List; key in Tell Tip #51421 "Condensation on Windows."

No. T240

PATIO DOOR SCREEN INSTALLATION

—MODELS MADE BEFORE NOVEMBER 2001

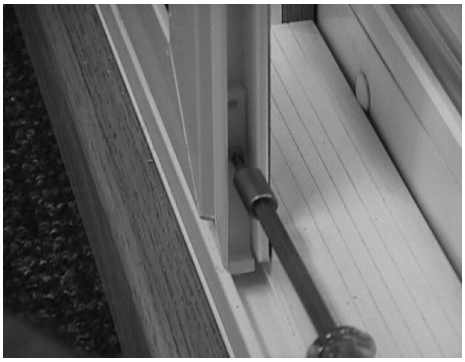
To adjust your door screens:

At the top corners of your screen, you will see two screws. The upper screw is the clamp used to hold the screen in position. The lower screw is used as a handle to hold the glide down as you adjust the screen.

Loosen the top screw. Then with one hand, lift or lower the screen to the desired height while pulling downward on the glide to hold it against the top track. ***Note:*** *Do not remove the top screw.*

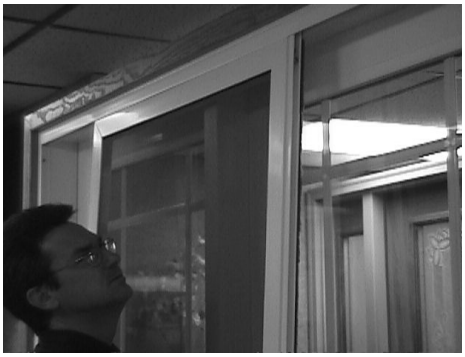
Once the screen is in the desired position, you can retighten the upper clamp screw to hold it in place. This can be done on both upper corners of the screen and will allow perfect alignment of the screen to the door frame. Once you have the screen adjusted, you can drive the lower screws into the screen to permanently set the glides.

To remove screens:



On sliding doors, you must remove the lower track glides. On swing doors, simply lift the screen and pull outward.

Continue to swing the bottom edge of the screen away from the door until it snaps out of the vinyl head track.



To reinstall the screen, simply insert the top glides into the head track and push upward until it snaps into place and replace the lower glides. Or lift the screen over the sill track on a swing door.

TIMELESS
windows & doors
BY GORELL

PATIO DOOR SCREEN INSTALLATION

—MODELS MADE AFTER NOVEMBER 2001

1. Place the 2 glide blocks located at the top of the screen into the screen channel.

2. Angle screen slightly as shown above and push screen upward into screen channel.

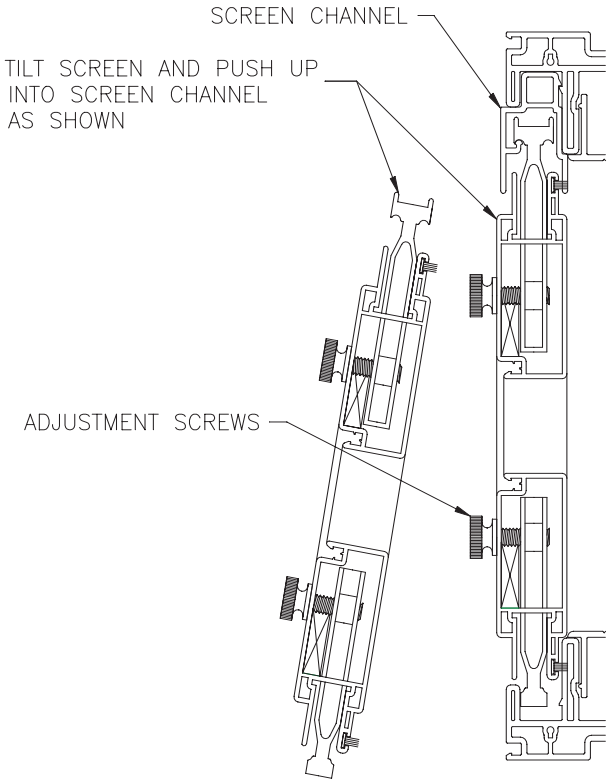
3. Let screen hang free, look at the bottom of the screen. To see if it is in the bottom screen channel, if not, loosen adjustment screw and lift up to raise glide blocks to clear channel.

4. Push screen inward into channel and lower glide blocks till they stop.

5. Slide screen back and forth to insure smooth operation.

6. Check to see if screen is plumb and square.

7. If your screen does not slide smoothly, apply a film of Vaseline across track, at head, where glide blocks rest upon.

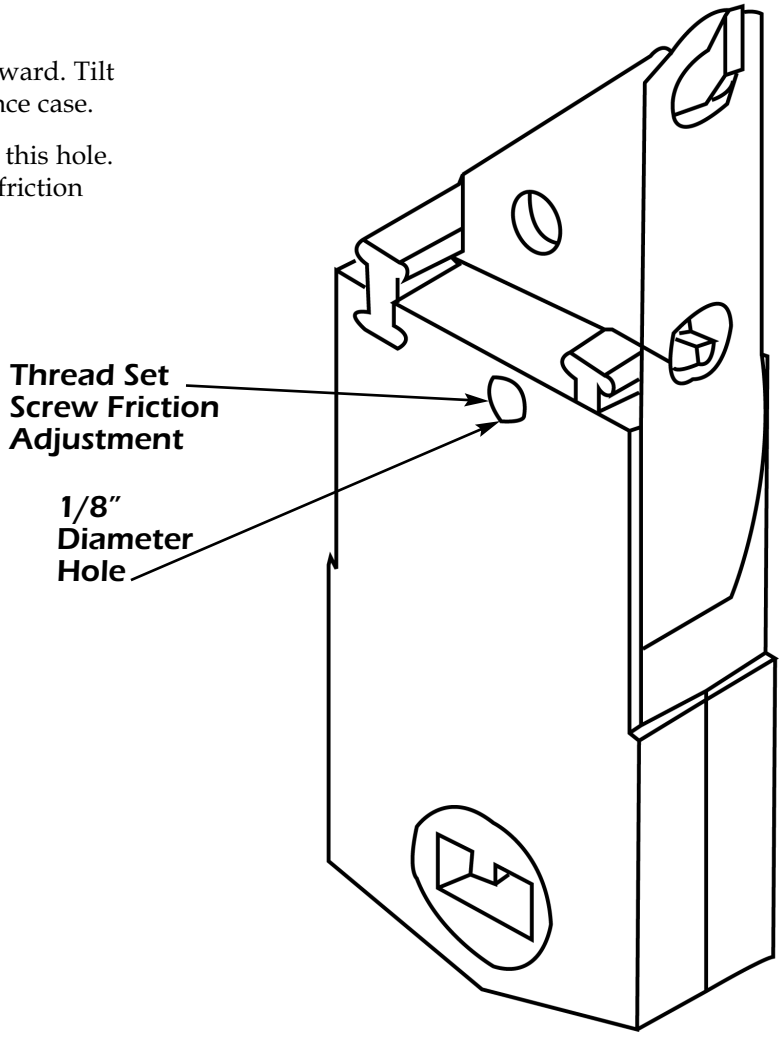


TIMELESS
windows & doors
BY GORELL

No. T245

INSTRUCTIONS FOR APPLYING FRICTION ADJUSTMENT SET SCREW

1. Raise lower sash about 6″.
2. Grasp and retract tilt latches to tilt the sash inward. Tilt until 1/8″ diameter hole is visible on the balance case.
3. Use Allen wrench to thread the set screw into this hole. This forces the case halves apart by applying friction against jambs.
4. Adjust until sash no longer drifts.



TIMELESS
windows & doors
BY GORELL

ALUMINUM SCREEN DOOR INSTALLATION

Removing the old screen

Remove the lower nylon glides. Then pull the screen out at the bottom until it snaps free.

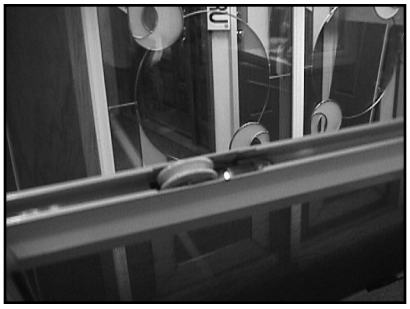
Remove the top and side screen tracks with a Phillips screwdriver.

Installing the new screen

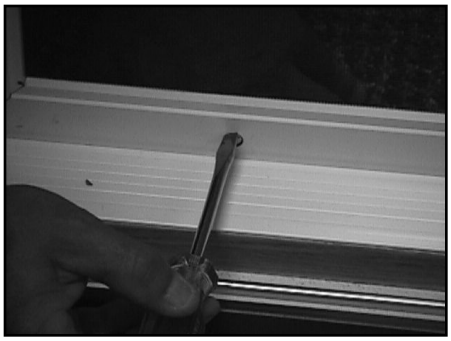
Now snap in the new lower sill track and drill a 1/4-inch diameter hole through the existing weep holes to allow water to drain past the new track legs.

TIMELESS
windows & doors
BY GORELL

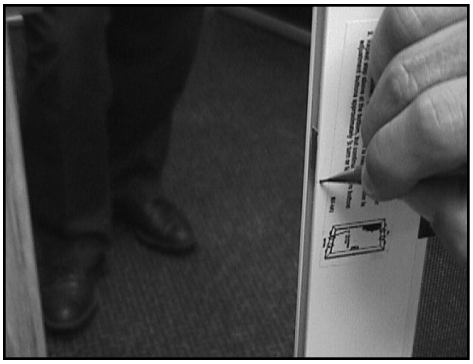
ALUMINUM SCREEN DOOR INSTALLATION (CONT.)



Next place the new screen up into the top channel and swing the bottom edge into the lower sill. The rollers must be fully collapsed to allow the screen to fit.



Adjust the bottom rollers so that the screen rolls free and aligns with the frame.



Then mark the location of the screen latch and mount it to the frame.

Trim and align the flexible fin to allow for free movement

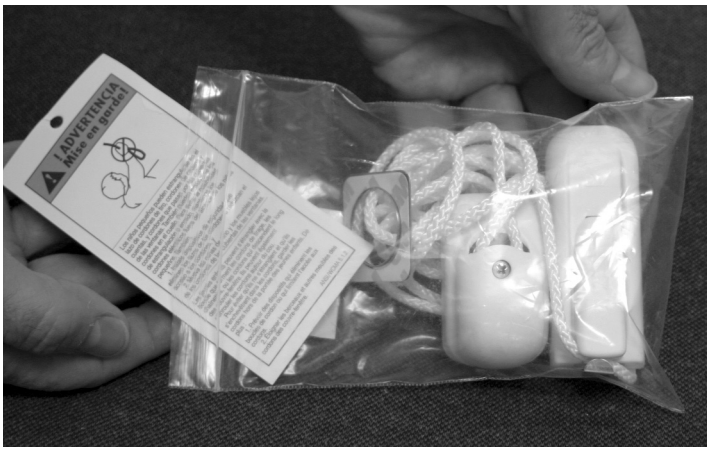
TIMELESS
windows & doors
BY GORELL

INTERBLINDS™ SLIDING PATIO DOOR INSTALLATION No. T260

It is extremely important that you review this information thoroughly before attempting to install the Magnetic Operator Assembly. Failure to do so may result in the improper installation of the Magnetic Operator Assembly, which could severely alter the operation of the internal blind system.

Step 1. Review the photo below.

This photo identifies the various components utilized in the InterBlinds system.



Step 2. Match the appropriate Magnetic Operator Assembly with the correct window or door.

Written on the outside of each poly bag containing the Magnetic Operator Assembly is the overall cord length. The number refers to the overall length of the Magnetic Operator Assembly, which is measured from the top of the Magnetic Operator Assembly to the bottom of the tensioner when the cord is properly tensioned.

Once you've determined that the correct unit cord length is associated with each particular product type, proceed to the installation instructions.

Warning: Do not attempt to install the Magnetic Operator Assembly until you've read the installation instructions read thoroughly.

Step 3. Install the Magnetic Operator Assembly.

3.1 Ensure that the glass surface around the operator location is clean and free of dust. Failure to clean the glass will result in improper adhesion to the interior glass surface.

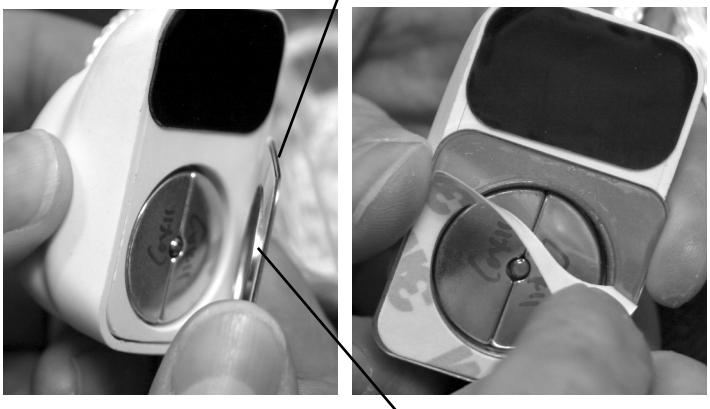
3.2 Prior to removing the adhesive protective film from the back of the Operator Locator Plate, ensure that the Operator Locator Plate fits properly. The hole in the Operator Locator Plate must be lined up directly over the round internal magnet of the blind assembly.

3.3 Remove the adhesive protective film from the back of the Operator Locator Plate and place it on the glass surface. Ensure that the inner hole is lined up with the internal blind assembly magnet and that it is square. Apply slight pressure to the Operator Locator Plate against the glass for approximately 15 seconds. This helps ensure that the Operator Locator Plate will adhere properly to the glass surface. **CAUTION: Once the adhesive backing comes in contact with the glass, it is very difficult to relocate the Operator Locator Plate.**

3.4 Prior to removing the adhesive protective film on the back of the Magnetic Operator Assembly, place the external magnetic operator on the glass surface next to the internal magnet.

The Raised Ring of the Operator Locator Plate (see photo below) will fit around the magnet of the Magnetic Operator Assembly. Verify proper operation of the Magnetic Operator Assembly.

3.5 Remove the adhesive protective film from the back of the Magnetic Operator Assembly and apply to the Locator Plate. Make sure the internal magnet and the external magnet are centered and properly interfaced. Apply slight pressure to the Magnetic Operator Assembly against the Locator Plate for approximately 15 seconds. This helps ensure that the Magnetic Operator Assembly will adhere properly to the Locator Plate surface. **CAUTION: Once the adhesive backing comes in contact with the plate, it is very difficult to relocate the Magnetic Operator Assembly.**

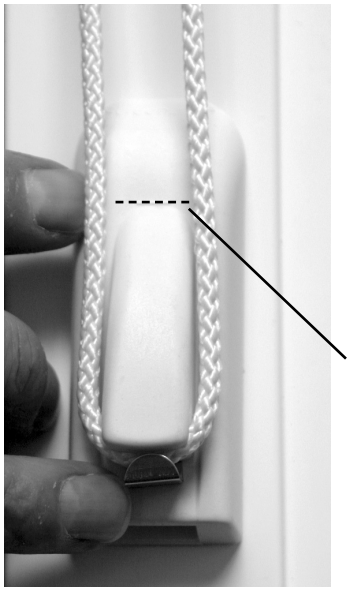


The Operator Locator Plate as it aligns with the Operator Assembly.

TIMELESS
windows & doors
BY GORELL

Step 4. Install the cord tension device.

4.1 Lower the provided tensioner until the cord is tensioned properly. Make sure that the spring-loaded clip is raised to the tension line located near the top of the tensioner. This ensures the correct amount of tension on the cord. Also make sure the cord is not twisted. You can attach the tensioner at a slight angle to the vinyl sash rail, or directly below to the glass—whichever you prefer.



Please note that attaching the tensioner to the vinyl extrusion may provide a more aesthetically pleasing view from the exterior.

4.2 Ensure the surface area where the tensioner will be mounted is clean and free of dust.

4.3 Remove the adhesive film from the back of the tensioner and apply to the surface for approximately 15 seconds. This helps ensure that the tensioner will adhere properly to the surface. **CAUTION: Once the adhesive backing comes in contact with the surface, it is very difficult to relocate the tensioner.**

Operating InterBlinds:

Your blinds are controlled by magnetic force passing through the glass. The blind is controlled by pulling downward on the cord. A slight downward force on the cord tilts the blind slats. A continued downward force will lower and raise the blinds. Exercise care when pulling on the cord. Rapid pulling of the cord, especially as the blind reaches the fully raised or lowered position, could damage the internal blind components.

Facts About InterBlinds:

Interblinds are designed to control light and give an acceptable degree of privacy. The "standard" for closure on any venetian blind is that an observer outside the building structure—watching in parallel through a closed venetian blind—must not see any object inside. If the observer's vantage point is above or below parallel, it may be possible, in some instances, to see into the interior of a structure with the blinds in the closed position.

TIMELESS
windows & doors
BY GORELL