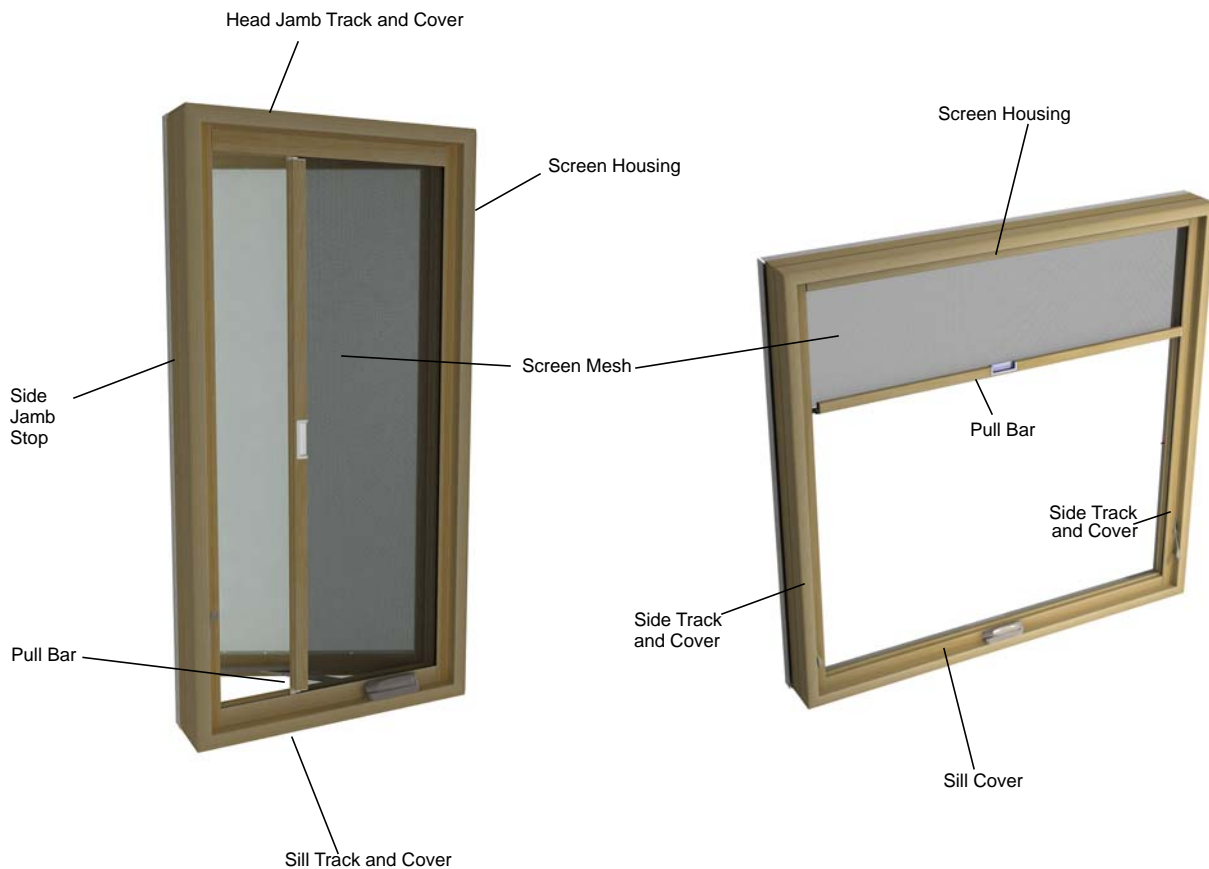


Retractable Screen

Installation and Service Instruction (2016)



Ultimate Casement

Ultimate Awning

These instructions are applicable for the following products produced after January 18, 2016:

Ultimate Casement (UCA)

Ultimate Awning (UAWN)

Ultimate Push Out Casement (UPCA)

Ultimate Push Out Replacement Casement (UPRCA)

Ultimate Replacement Casement (URCA)

Ultimate Replacement Awning (URAWN)

Ultimate Push Out Awning (UPAWN)

Ultimate Push Out Replacement Awning (UPRAWN)

If you receive the screen factory installed, follow the paint and stain instructions included with the window and refer to page 4 of this instruction for important steps on finishing. After finishing, remove cardboard finishing inserts from between the pull bar and housing. If the screen was ordered separately from the window, follow the steps on the next page for installation. If you need to retrofit the pull bar, please refer to page 9.

Part Identification: The following instruction applies to both Casement and Awning windows, however, the parts are located in slightly different locations. See the illustrations above for part identification.

Table of Contents

Standard Parts Shipped.....	2
Installing the Retractable Screen.....	2
Modifying an Existing Push Out Window.....	5
Standard Parts Shipped.....	5
Removing the Retractable Screen.....	7
Replacing the Screen Roll.....	8
Standard Parts Shipped.....	8
Removing Old Screen Mesh.....	8
Installing New Screen Mesh.....	9
Glide Block Adjustment.....	11

You Will Need to Supply

Safety glasses	Utility knife
Flat screwdriver	Pry bar
Rubber mallet	Shim or putty knife
Wood block	Allen wrench

Standard Parts Shipped

Units are sent with two tracks, two track covers, screen housing, a sill cover (UAWN), a side jamb stop (UCA), track end caps (UAWN), locking inserts (UCA) and two cardboard finishing inserts.

NOTE: Numbers listed in parentheses () are metric equivalents in millimeters rounded to the nearest whole number.



WARNING

Always practice safety! Wear the appropriate eye, ear and hand protection, especially when working with power tools.

ATTENTION

Push Out Windows: If retrofitting into an existing Push Out window, refer to the Modifying an existing Push Out unit section on page 5 prior to screen installation.

Installing the Retractable Screen

1. Unlock and open the sash. Using an Allen wrench, remove the operating handle and handle cover. Grasp the lock handle and pull firmly outward to remove. Detach the top of the lock escutcheon first then the bottom should be carefully removed. Do not remove the escutcheon by pulling it straight outward. Refer to the Marvin UCA/UAWN Supplemental Installation Instructions (19970261) for more information. See figure 1.

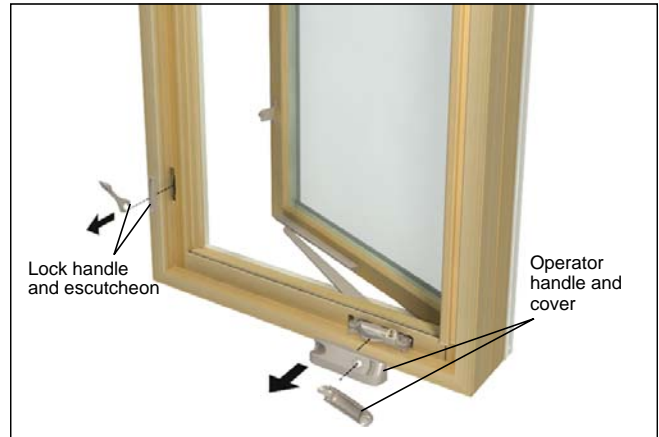


Figure 1

2. If not done already, remove the head jamb stop, sill cover, and side stops. Refer to the Marvin UCA/UAWN Supplemental Installation Instructions (19970261) for more information. See figure 2. These can be set aside as you will not be reusing them.



Figure 2

3. For **Ultimate Casement** windows: Locking inserts are already installed inside the side jamb stop. If one should come loose, snap the insert back into place as shown. See figure 3.

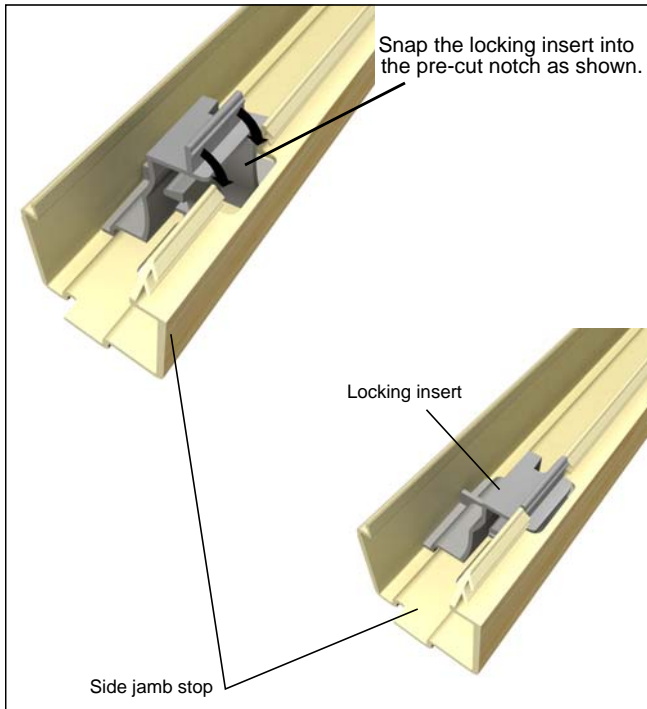


Figure 3

4. Some **Ultimate Awning** windows have Around the Corner (ATC) locks (Right Hand and Left Hand) which may need to be trimmed to fit the Retractable Screen track. Using a utility knife, trim the ATC locks (as shown) and apply the track end caps. See figure 4. This step is only applicable to the Ultimate Awning.

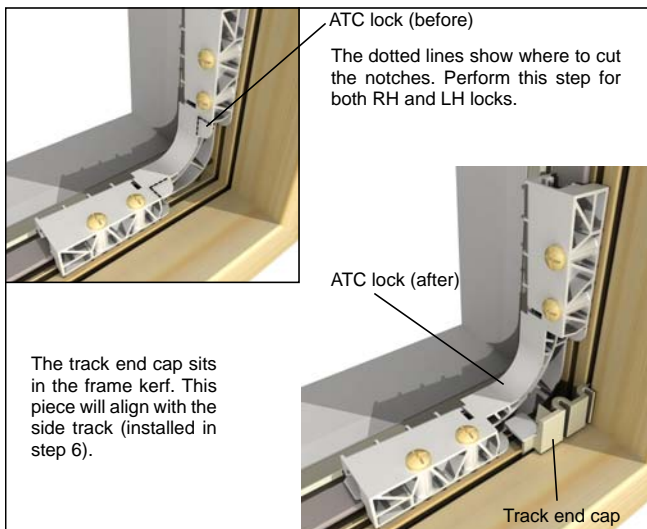


Figure 4 Notch the ATC locks if needed.

5. Install the screen housing on the hinged side of the window by inserting the barbs into the frame kerf. Repeat this step by installing the new jamb side stop (or sill cover for Awnings) on the opposite (locking) side. See figure 5.



Figure 5 Ultimate Casement shown. Screen housing for the Ultimate Awning is installed at the head jamb. An Awning part ID illustration is located on the cover page for reference.

NOTE: For Ultimate Awnings, be sure the housing end cap is aligned correctly before installing the screen housing.

6. Install the head jamb and sill tracks (for Casements) or side tracks (for Awnings) by tilting the tracks toward the hinge side and inserting them into the frame kerf. Use a wood block and rubber mallet as shown to fully secure the tracks into place. Be careful not to damage the screen mesh or scratch any wood parts during installation. See figure 6.



Figure 6 Ultimate Casement shown.

7. Insert the trailing edge of both glide blocks into the open pockets in the track and push the pull bar into its retracted position. Now, extend the screen mesh across the window. Retract the screen back to the housing. See figure 7.

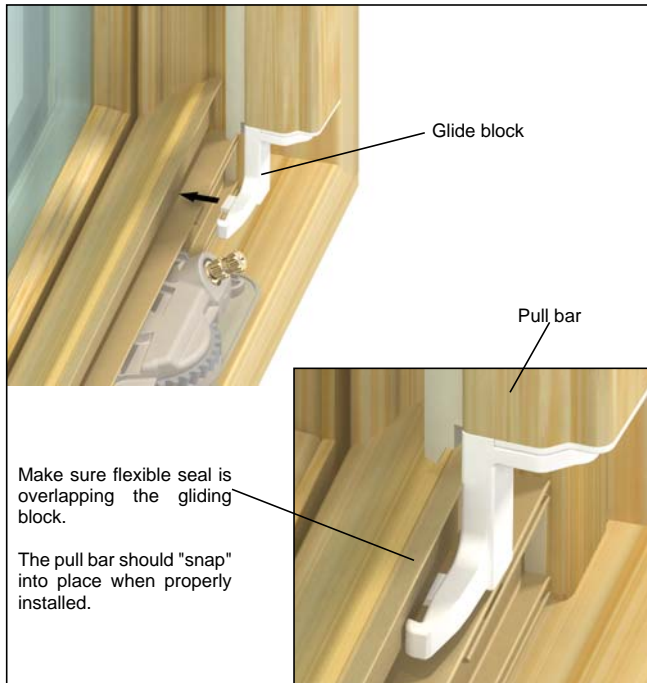


Figure 7

8. Install the track covers by inserting the barbs into the mating track kerf. See figure 8.



Figure 8 Ultimate Casement shown.

NOTE: For Ultimate Awnings, tuck the track covers flexible seal behind the screen housing as shown in figure 9.

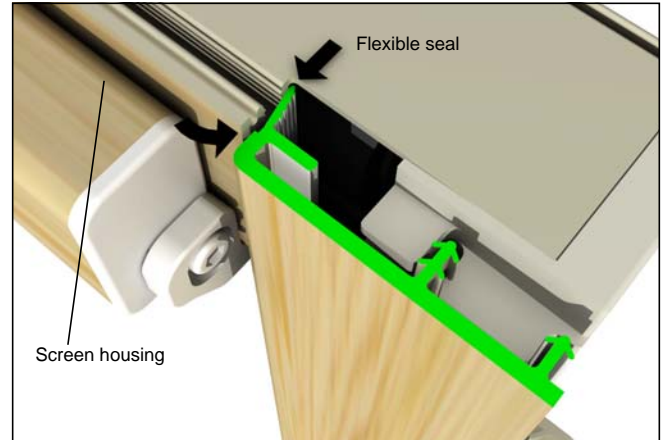


Figure 9

9. **Finishing the Retractable Screen.** Prior to finishing, install the cardboard finishing inserts on both sides of the pull bar as shown in figure 10.

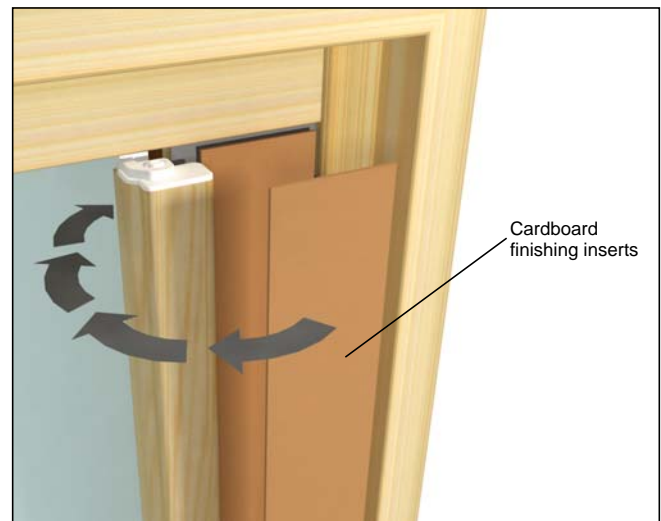


Figure 10

10. Apply finish according to the manufacturer's instructions with additional coats of finish applied until the desired color is achieved. Care should be taken to keep the finish from contacting non-wood parts. If applying stain, apply at least two coats of sealer.

! CAUTION

When applying a finish, it is imperative that the finish does NOT come in contact with weather strip, vinyl, plastic, mesh or any other non-wood parts. Solvents in paints, stains and varnishes will cause plastic or vinyl parts, in particular, to become brittle and require replacement.

NOTE: To minimize chances of screen roll contamination, DO NOT use a spray to finish your screen.



11. After finishing remove the cardboard between the pull bar and housing.
12. Finally, reinstall the lock escutcheon, lock handle, operator cover and operator handle. Refer to the Marvin UCA/UAWN Supplemental Installation Instruction (19970261) for more information. See figure 11 and figure 12.

NOTE: When re-installing the lock escutcheon, be sure the top of the escutcheon is applied first and then push on the face of the lock escutcheon from top to bottom with one motion until a firm "click" is heard. Push the lock handle on to the lock base until a firm "click" is heard.



Figure 11 Jamb stop not shown for illustrative purposes only.

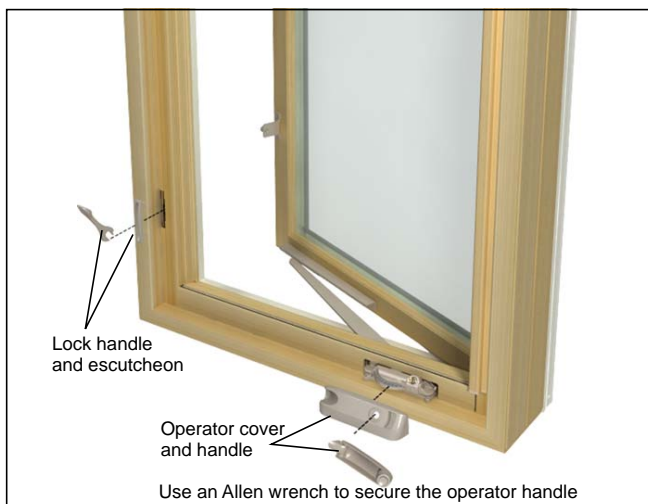


Figure 12

Modifying an Existing Push Out Window

The following section applies to the Ultimate Push Out Casement and Ultimate Push Out Awning retrofit unit application.

You Will Need to Supply

Safety glasses	1" Forstner bit
Drill	1/8" Drill bit
#2 Phillips screwdriver bit	Wood preservative*
Sealant**	

* Wood preservative must contain at least 0.5% IPBC. Apply as recommended by treatment manufacturer. Failure to retreat properly or adequately voids warranty.

** Sealant must be Grade NS Class 25 per ASTM C920 and compatible with building exterior and window surface

Standard Parts Shipped

- 2 - Left Hand and Right Hand Locking Plugs (Different between Awning and Casement)
- 1 - Retrofit Drill Jig (Labeled "Casement" or "Awning")
- 1 - #8 x 1 1/4" PH Full Thread Screw

Prior to installing the Retractable Screen, Push Out Casements will need a 1" hole drilled in the top and bottom corners of the locking jamb. Push Out Awnings will need a 1" hole drilled in the LH and RH corners of the sill. Follow the steps below.

1. Place the black retrofit jig using the kerfs to align the jig to the appropriate location. The jig should fit tight against the corner of the jamb or sill.

IMPORTANT

Ensure the retrofit jig is correct for your unit type. Jigs are labeled "Casement" or "Awning".

2. Drill a pilot hole in one hole of the jig and install the provided #8 x 1 1/4" fastener to secure the jig in place. See figure 13 for Casement and figure 14 for Awning.

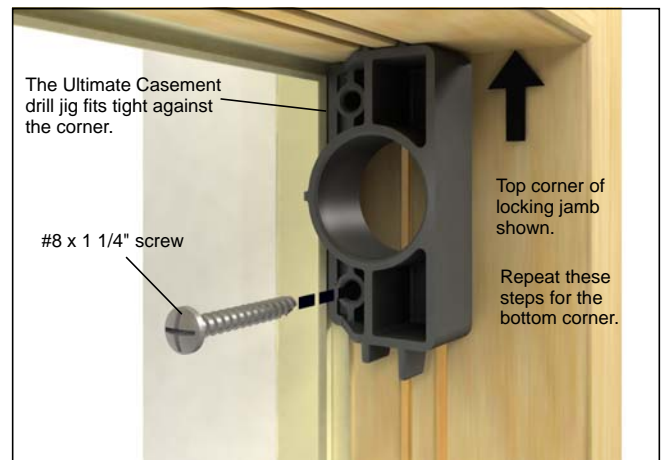


Figure 13

NOTE: Smaller units might need the hardware removed in order to drill the holes.

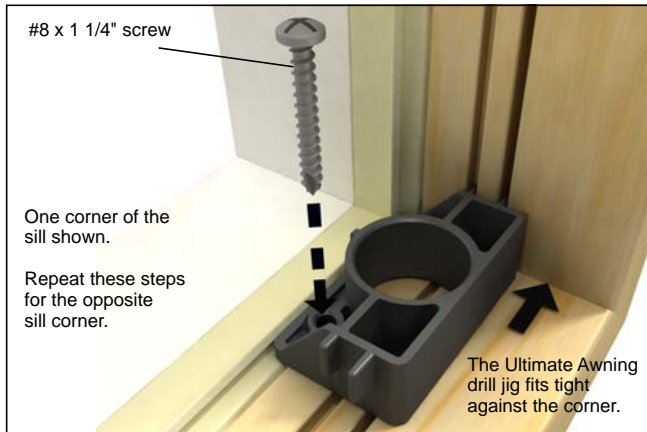


Figure 14

- Using a 1" Forstner bit and following the jig as a template, drill a hole through the jamb or sill. Mark the bit for a 1 3/32" hole depth. See figure 15.

NOTE: When complete, the locking plug's flanges should sit flush on the jamb or sill.

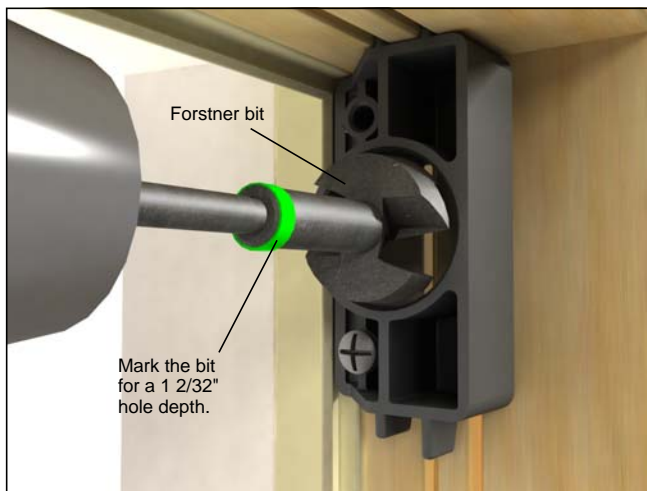


Figure 15



CAUTION

Do not drill completely through the jamb. If drilling through the jamb does occur, treat the wood and seal the hole with sealant and backer rod as needed.

- Remove the jig and apply wood preservative to the new holes in the jamb (or sill) as recommended by the treatment manufacturer. Allow to dry. See figure 16.



Figure 16

- Apply sealant to the bottom of each hole to seal off the rough opening. Be aware of sealant squeeze out and ensure no excess sealant obstructs the locking plug. See figure 17.



Figure 17

- Insert the locking plugs in both holes. See figure 18 for Casement and figure 19 for Awning.

IMPORTANT

Ensure the locking plugs are fully seated against the frame.

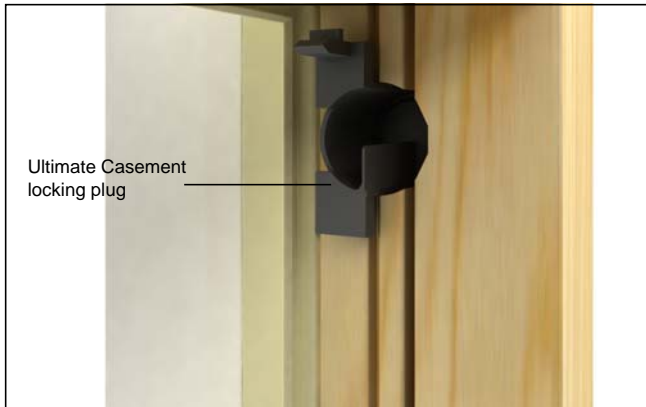


Figure 18 Ultimate Casement

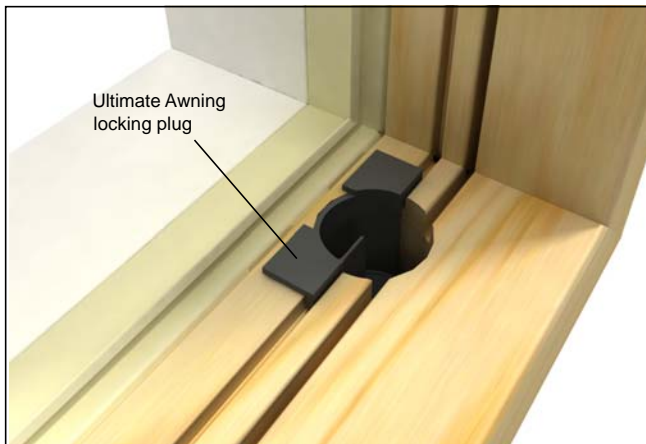


Figure 19 Ultimate Awning

The window is now ready for Retractable Screen installation. Please refer to page 2 for installation of the screen parts.

Removing the Retractable Screen

1. Retract the screen. Unlock and open the sash. Using an Allen wrench, remove the operating handle and handle cover. Grasp the lock handle and pull firmly outward to remove. Detach the top of the lock escutcheon first then the bottom should be carefully removed. Do not remove the escutcheon by pulling it straight outward. Refer to the Marvin UCA/UAWN Supplemental Installation Instructions (19970261) for more information. See figure 20.



Figure 20

2. Remove the track covers by gently pulling them out of the track. See figure 21.



Figure 21

NOTE: Ultimate Casement track covers shown. Step 2 also applies to the Awning side track covers.

3. Remove the tracks by using a pry bar and putty knife to gently pry the tracks away from the frame kerf while still protecting the wood (side tracks for Awnings). See figure 22.

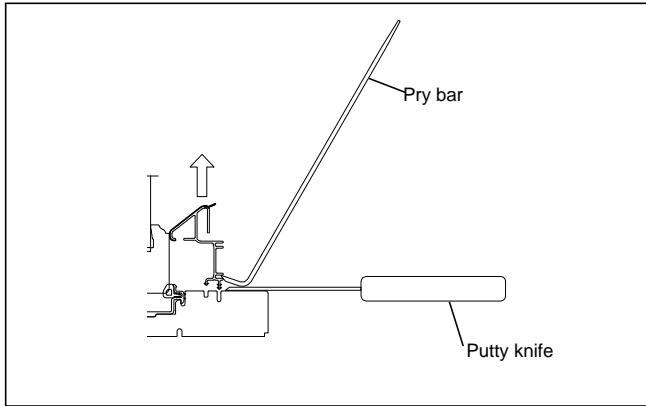


Figure 22

NOTE: Ultimate Casement sill track shown. Step 4 also applies to the head jamb track and Awning side tracks.

4. Remove the screen housing by rotating it out of the thermal break kerf and then pulling it out of the frame kerf. Be careful not to damage any wood parts with the ends of the housing. Remove locking jamb side stop (UCA) and sill cover (UAWN). See figure 23.



Figure 23

Replacing the Screen Roll

Should you find it necessary to replace the screen mesh in your Retractable Screen, follow the steps below.

You Will Need to Supply

Flat screwdriver 1/4" driver

Standard Parts Shipped

- 1 - Retractable screen mesh cartridge
- 1 - Field winder tool

Removing Old Screen Mesh

1. Remove the screen housing by following the steps noted in the *Removing the Retractable Screen* section.
2. Remove the interior housing by unsnapping each side and sliding off the ratcheting end. See figure 24.

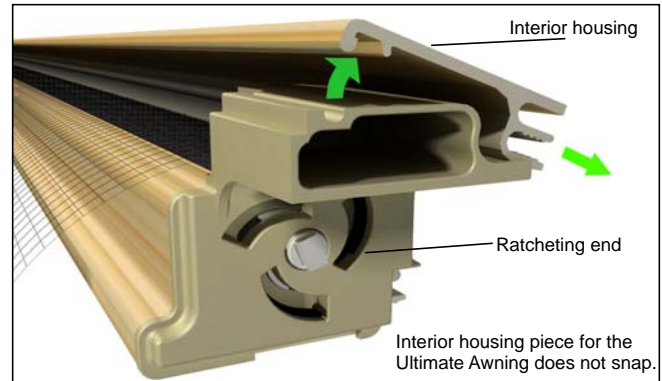


Figure 24 Ultimate Casement parts shown.

3. Using a flat screwdriver, apply pressure to the open slot of the free spin end (opposite the ratcheting end) and remove. It is normal to hear an uncoiling noise after the end is removed. See figure 25.

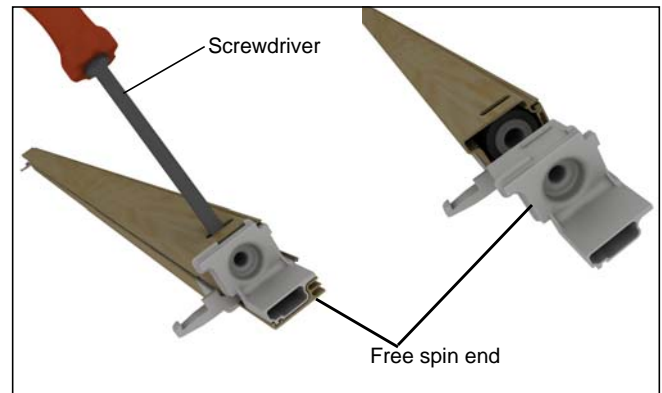


Figure 25

4. Remove screen roll from housing.
5. Slide mesh out of pull bar and discard. See figure 26.

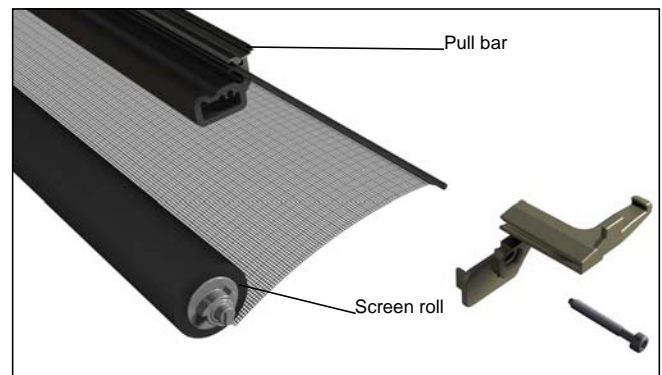


Figure 26

Installing New Screen Mesh

1. Slide the new screen mesh into the pull bar. See figure 27.

NOTE: This step must be completed before proceeding.

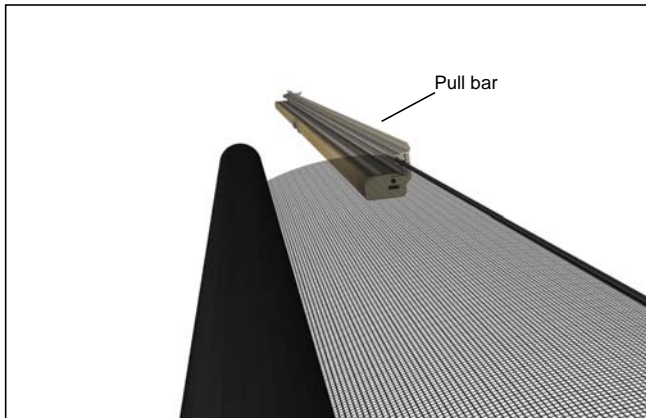


Figure 27 Roll the mesh up tightly.

2. Tighten the mesh by firmly rolling it by hand.
3. Insert the screen roll into the ratcheting end. See figure 28.

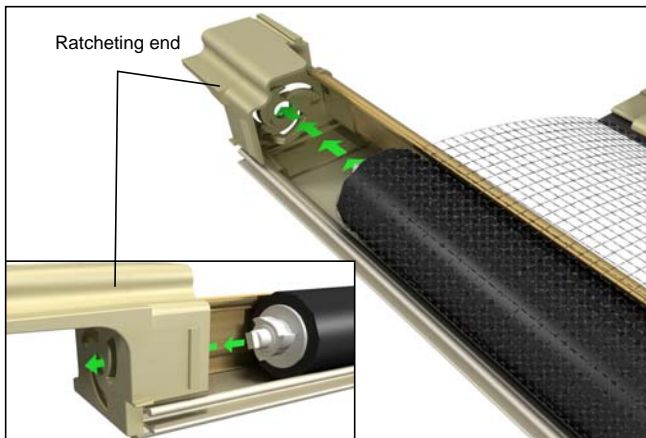


Figure 28

4. While keeping the screen roll engaged into the ratcheting end, insert the free spin end into the screen housing. See figure 29.



Figure 29

5. Reinstall the interior housing by sliding it into place (from ratcheting end) and snapping each end. See figure 30.

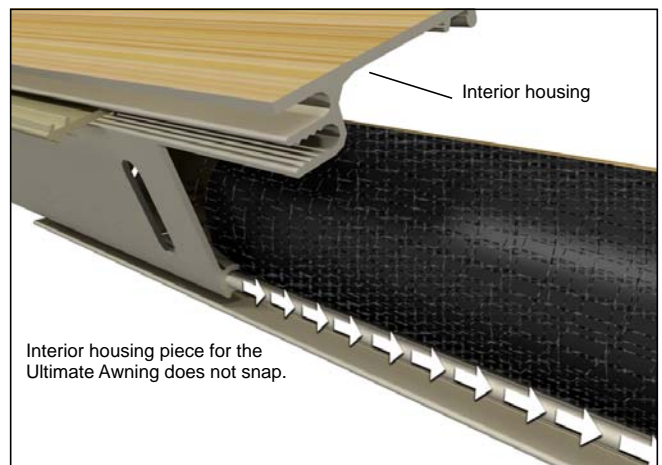


Figure 30 Ultimate Casement parts shown.

6. Once mesh is concealed within the housing, wind the spring by turning the field winder tool clockwise with the 1/4" driver for a certain number of "clicks". Casement units need 6-12 turns (18-36 clicks) depending on size; Awning units 8-22 turns (24-66 clicks) depending on size. Be sure the mesh is rolled tightly before using the winder tool. See figure 31.

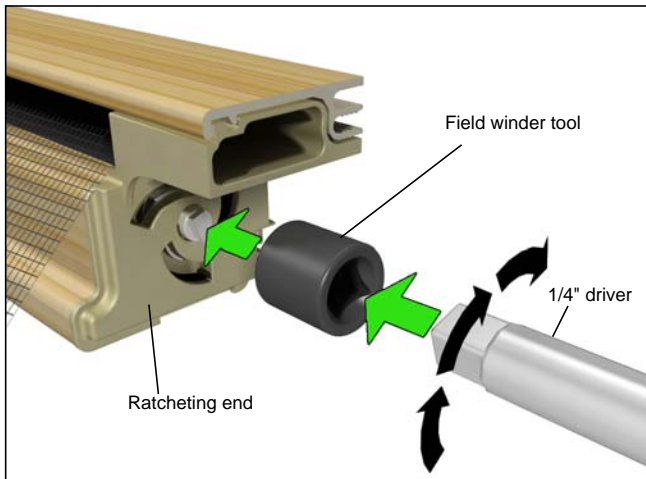


Figure 31

7. Extend and retract the screen mesh to ensure it is operating correctly. To reinstall the screen housing into the window, follow the steps from Installing the Retractable Screen section.

Retrofitting Retractable Screen Pull Bar

You Will Need to Supply

Safety glasses Flat screwdriver
 Small pry bar

7/64" (3) Ball hex Allen wrench

Parts Included in Kit

Pull bar 2-Glider blocks
 Screws

1. Retract the screen.
2. Unlock and open the sash. See figure 32.
3. Using a small flat screwdriver, remove the operating handle and handle cover. Grasp the lock handle and pull firmly outward to remove. Detach the top of the lock escutcheon first then the bottom should be carefully removed. See figure 32.



Figure 32

4. Remove head jamb stop cover and sill cover. You can use a small pry bar and small wood block to ease removal if necessary. Slowly slide covers off by working pry bar down the cover for removal.
5. Remove the pull bar from the track (gently pull the pull bar out of the track by rotating pull bar towards you).



Tip

Use a 3/8" (10) backer rod or small clamps to secure screen 4"-6" (102-152) outside of track.

6. Remove the glide block from one end of the pull bar by removing screw. See figure 33.

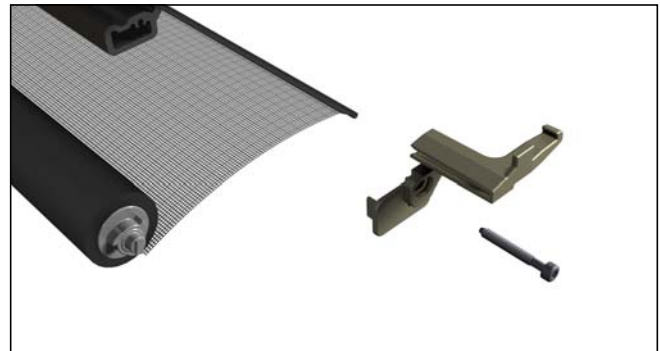


Figure 33

7. Slide mesh out of pull bar, discard old pull bar and glider block.



Tip

For ease of installation, file or sand the screen slot on the edge of the pull bar. This will ensure a smooth installation of the screen mesh.

8. Slide the new pull bar onto the screen mesh. See figure 34.

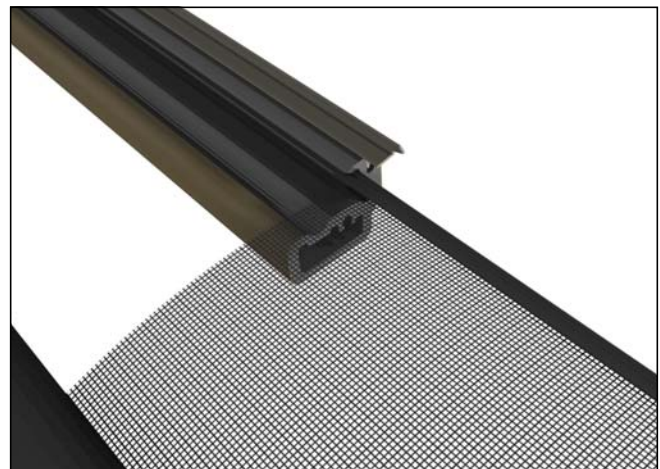


Figure 34

9. Apply new glide block to end of pull bar assembly. Ensure the screen spline is engaged in gliding block. Using provided screw, attach glider block to end of pull bar.
10. Insert the pull bar into the track.
11. Reinstall head jamb stop cover and sill cover.

Glide Block Adjustment

1. The glide block is pre-set at the factory but if, after unit installation, the space between the pull bar and the jamb is uneven, a $7/64$ " Allen wrench can be used to loosen the screw so the pull bar can be moved to give uniform spacing and then re-tightened. See figure 35.

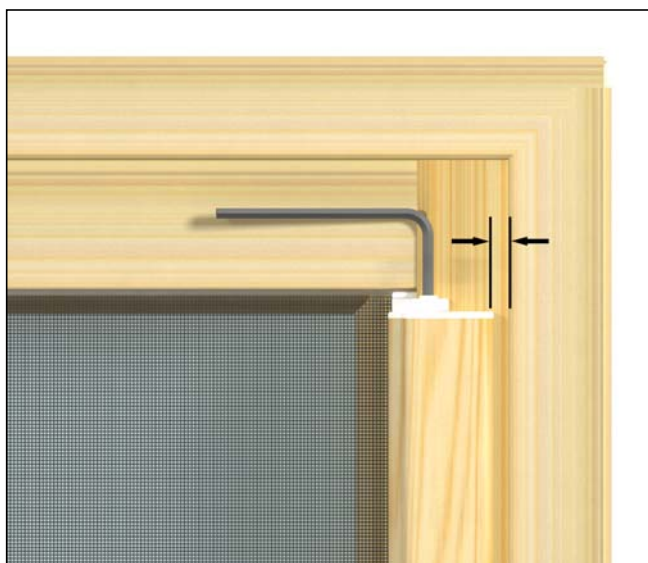


Figure 35