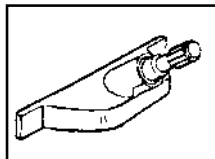


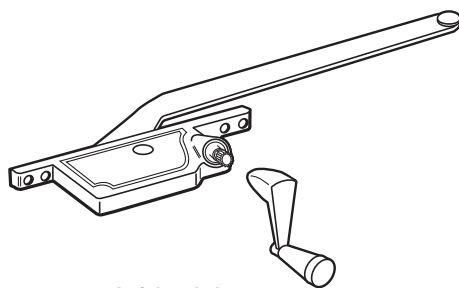
Square Type	Teardrop Type	Arm Length	Painted Finish	Hand*
H-3585	H-3581	6"	Aluminum	Left
H-3586	H-3582	6"	Aluminum	Right
H-3587	H-3583	6"	Bronze	Left
H-3588	H-3584	6"	Bronze	Right
—	H-3907	6"	White	Left
—	H-3908	6"	White	Right
H-3512	H-3500	7"	Aluminum	Left
H-3518	H-3506	7"	Aluminum	Right
H-3515	H-3503	7"	Bronze	Left
H-3521	H-3509	7"	Bronze	Right
—	H-3909	7"	White	Left
—	H-3910	7"	White	Right
H-3513	H-3501	8"	Aluminum	Left
H-3519	H-3507	8"	Aluminum	Right
H-3516	H-3504	8"	Bronze	Left
H-3522	H-3510	8"	Bronze	Right
H-3832	H-3830	8"	White	Left
H-3833	H-3831	8"	White	Right
H-3514	H-3502	9"	Aluminum	Left
H-3520	H-3508	9"	Aluminum	Right
H-3517	H-3505	9"	Bronze	Left
H-3523	H-3511	9"	Bronze	Right
H-3710	H-3708	9"	White	Left
H-3711	H-3709	9"	White	Right
H-3886	—	9"	Brass Plated	Left
H-3887	—	9"	Brass Plated	Right

* Hand determined by window hinge location from inside home looking out.



Spindle (For crank)

Square Type = 3/8" Diameter
Teardrop Type = 5/16" Diameter



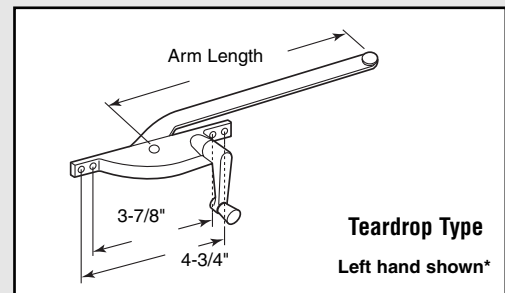
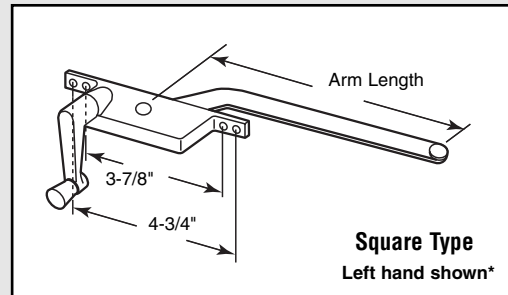
Left hand shown

Casement Operators (Diecast - face mount)

Contents: 1 operator; 1 crank handle and 1 set of installation screws.

Description: Worm gear mechanism driven; steel arm; square type has 3/8" diameter spindle and teardrop type has 5/16" diameter spindle; used on steel framed windows.

You may also wish to stock these related parts: H-3529, H-3531 thru H-3534, H-3536, H-3537, H-3712 thru H-3715.



Casement Operators (Diecast - face mount)

Contents: 1 operator; 1 crank handle and 1 set of installation screws.

Part No.	Painted Finish	Hand*
H-3921	Aluminum	Left
H-3922	Aluminum	Right
H-3923	Bronze	Left
H-3924	Bronze	Right

Call for Availability

* Hand determined by window hinge location from inside home looking out.

Description: Worm gear mechanism driven; steel arm; this style was used extensively in the Florida market.

Window Hardware

Casement Operators (Diecast - surface mount)

Contents: 1 operator; 1 crank handle and 1 set of installation screws.

Painted Part No.	Finish	Spindle Hand*	Dia.
H-3524	Aluminum	Left	3/8"
H-3525	Aluminum	Right	3/8"
H-3526	Bronze	Left	3/8"
H-3527	Bronze	Right	3/8"
H-3914 (Deluxe)	Bronze	Left	3/8"
H-3915 (Deluxe)	Bronze	Right	3/8"

* Hand determined by window hinge location from inside home looking out.

Description: Worm gear mechanism driven; **steel arm**; used on **wood window frames** by many manufacturers.

You may also wish to stock these related parts: **H-3531** thru **H-3534**, **H-3595**.

Casement Operators (Diecast - surface mount)

Contents: 1 operator; 1 crank handle and 1 set of installation screws.

Part No.	Arm Length	Painted Finish	Hand*	Spindle Dia.
H-3568	9-1/2"	Bronze	Left	11/32"
H-3569	9-1/2"	Bronze	Right	11/32"
H-3570	13-1/2"	Bronze	Left	11/32"
H-3571	13-1/2"	Bronze	Right	11/32"

* Hand determined by window hinge location from inside home looking out.

Description: Worm gear mechanism driven; **steel arm**; used on **wood and vinyl framed windows**.

You may also wish to stock these related parts: **H-3531** thru **H-3534**, **H-3530**, **H-3572**, **H-3573**.

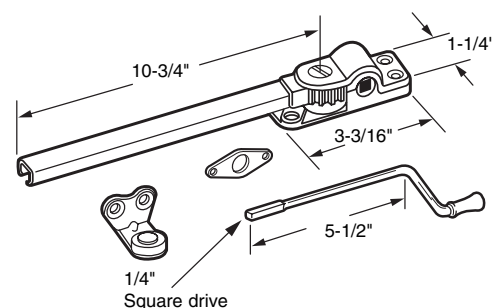
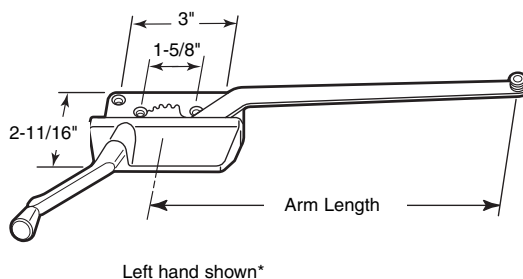
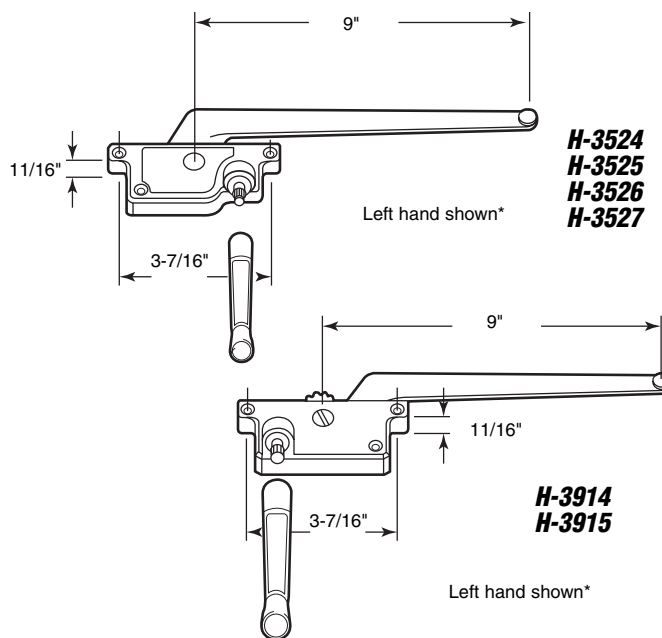
Casement Operators (Diecast - surface mount)

Contents: 1 operator; 1 crank handle and all mounting hardware

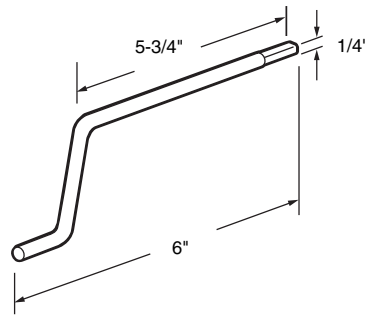
Part No.	Arm Finish	Package
H-3528	Uni-chrome	Skin card
H-3680	Uni-chrome	Display box
H-3687	Brass plated	Skin card
H-3688	Brass plated	Display box

Description: Reversible; non-handed; requires 1-3/8" space between screen and sash; **heavy cast worm gear with steel arm**; full 90° motion in both directions; fits on **Parlyn** and others on wood framed windows.

You may also wish to stock these related parts: **H-3575**.



H-3575



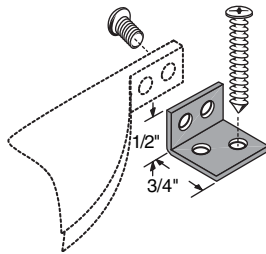
H-3575

Casement Operator Handle (Diecast)

Contents: 1 handle.

Description: Brass plated; 1/4" square shank; fits on *Wesco* and other type operators.

You may wish to stock these related parts: **H-3528, H-3580, H-3687, H-3688.**



**H-3702
H-3703**

H-3702 (Aluminum)

H-3703 (Bronze)

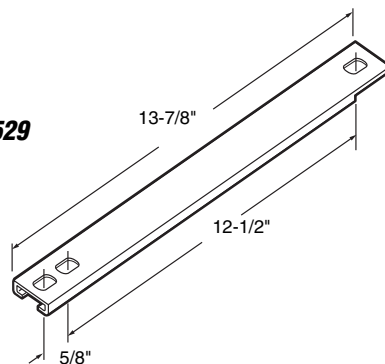
Casement Operator Mounting Brackets

Contents: 2 brackets; 1 set of installation screws.

Description: Used to convert face mounted operator to surface mounted operator for wood windows; **stamped steel construction**; 2 holes are threaded to provide machine screw assembly to operator.

You may wish to stock these related parts: **H-3500 thru H-3523, H-3581 thru H-3588.**

H-3529



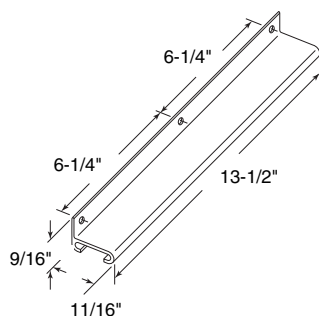
H-3529

Casement Track (For steel casements)

Contents: 2 tracks with mounting screws.

Description: Aluminum track attaches to steel window; channel accepts guide rivet on end of operator arm to accommodate opening and closing of window.

You may wish to stock these related parts: **H-3500 thru H-3523, H-3581 thru H-3588, H-3708 thru H-3711.**



H-3595

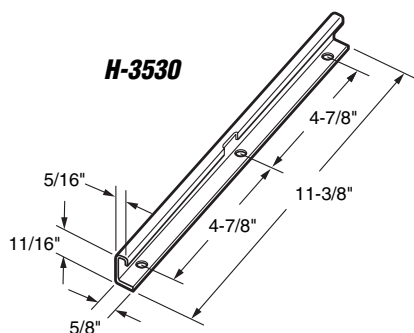
H-3595

Casement Track (For wood casements)

Contents: 1 track with mounting screws.

Description: Extruded aluminum track attaches to wood window; channel accepts guide roller on end of operator arm to accommodate opening and closing of window.

You may wish to stock these related parts: **H-3524 thru H-3527, H-3914, H-3915.**



H-3530

H-3530

Casement Track (For wood or vinyl casements)

Contents: 1 track with mounting screws.

Description: Stamped steel track attaches to wood or vinyl windows; channel accepts guide roller on end of operator arm to accommodate opening and closing of window.

You may wish to stock these related parts: **H-3568 thru H-3571.**

Window Hardware

H-3572 (Left hand)

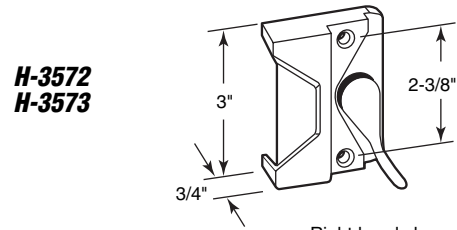
H-3573 (Right hand)

Casement Lock (Bronze finish)

Contents: 1 locking unit; 1 keeper; 1 set of installation screws.

Description: Diecast housing with steel locking mechanism and keeper; use by many manufacturers of wood and vinyl framed windows.

You may wish to stock these related parts: **H-3568 thru H-3571**.



Right hand shown*

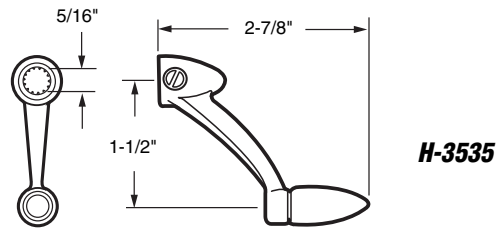
* Handing determined by window hinge location from *inside* home looking *out*, when unit is in the locked position.

H-3535 (Aluminum)

Casement Operator Crank Handle

Contents: 1 handle.

Description: Zinc diecast handle; 5/16" bore; fits on *Parlyn*.



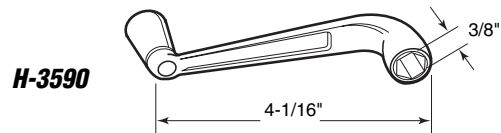
H-3590 (Aluminum)

Awning Operator Crank Handle (3/8" Hex)

Contents: 1 handle with set screw.

Description: Zinc diecast handle; used with H-3591 operator and H-3632 hex drive bar.

You may wish to stock these related parts: **H-3589, H-3591, H-3632**.



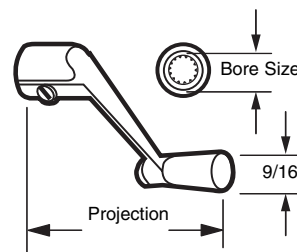
Casement Operator Crank Handle

Contents: 1 handle.

Part No.	Painted Finish	Bore Size	Projection
H-3531	Aluminum	5/16"	2-11/16"
H-3532	Bronze	5/16"	2-11/16"
H-3712	White	5/16"	2-11/16"
H-3686	Bronze	11/32"	3"
H-3533	Aluminum	3/8"	2-11/16"
H-3534	Bronze	3/8"	2-11/16"
H-3713	White	3/8"	2-11/16"
H-3685*	Aluminum	3/8"	3-1/2"

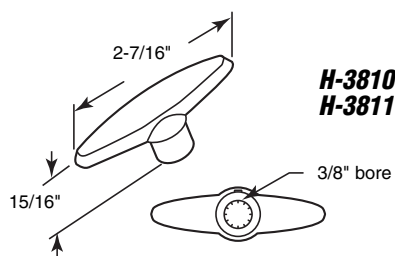
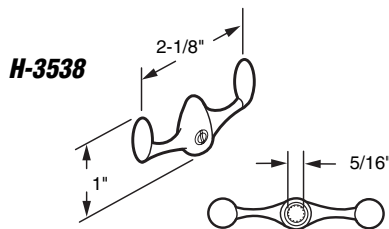
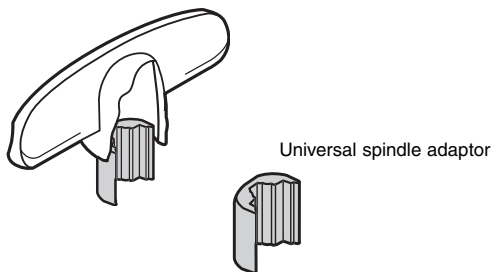
*Fits awning operators only.

Description: Diecast handle; universal design; this crank style handle offers excellent torque for easiest opening and closing of window.



Part No.	Painted Finish	Bore Size	Fits on
H-3536	Aluminum	5/16"	Many Mfrs.
H-3537	Aluminum	3/8"	Many Mfrs.
H-3624	Bronze	5/16"	Many Mfrs.
H-3625	Bronze	3/8"	Many Mfrs.
H-3714	White	5/16"	Many Mfrs.
H-3715	White	3/8"	Many Mfrs.
H-3823	Light Brass	5/16"	Many Mfrs.
H-3801	Coppertone	11/32"	Truth
H-3802	Bronze	11/32"	Truth
H-3803	Star Brown	11/32"	Truth
H-3804	White	11/32"	Truth
H-3805	Chestnut Bronze	11/32"	Truth
H-3806	Light Brass	11/32"	Truth
H-3825	Beige	11/32"	Truth
H-3826	Gold	11/32"	Truth
H-3807	Star Brown	5/16"	Many Mfrs.
H-3808	Star Brown	3/8"	Many Mfrs.
H-3809	Light Brass	3/8"	Anderson
H-3812	Driftwood	9/32"	Peachtree
H-3813	Copper	3/8"*	Pella
H-3814	White	3/8"*	Pella
H-3824	Bronze	7/16"	Marvin

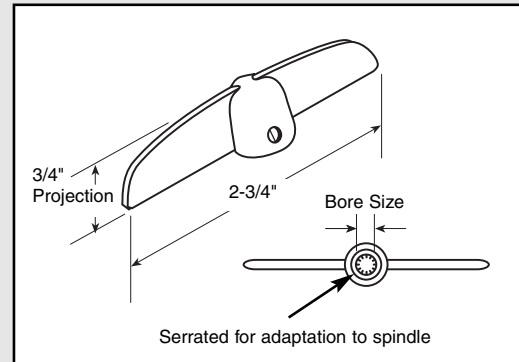
* This 3/8" bore has a special deep inset serration.



Casement Operator Tee Handle

Contents: 2 handles.

Description: Diecast handle; supplied with set screw; replaces most crank style handles and does not interfere with blinds, shades and shutters, etc; colors vary to various manufacturers' specifications.



H-3885 (Aluminum)

H-3892 (White)

H-3893 (Satin bronze)

H-3894 (Dark brown)

H-3895 (Driftwood)

H-3896 (Champagne)

Casement Operator *Universal* Tee Handles

Contents: 2 handles; 2 universal spindle adapters.

Description: Diecast handles; 2 diecast adapters for different popular bore sizes; adapter fits over spindle on operator; tee-handle then fits over adapter and is locked on to spindle with set screw.

H-3538 (Aluminum)

Jalousie Operator Tee Handle

Contents: 1 handle.

Description: Diecast handle; fits 5/16" spindle as fits on *Parlyn*.

H-3810 (Gray)

H-3811 (White)

Awning Operator Tee Handle

Contents: 2 handles.

Description: Diecast handle; universal design with 3/8" bore size.

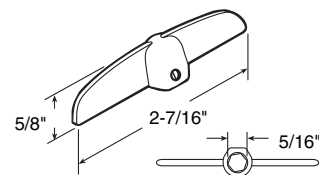
H-3592

Awning Operator Tee Handle

Contents: 1 handle.

Description: Diecast handle; uniquely designed for 5/16" hex drive operators.

H-3592



H-3596 (Aluminum - left hand)

H-3597 (Aluminum - right hand)

H-3598 (Bronze - left hand)

H-3599 (Bronze - right hand)

H-3820 (White - left hand)

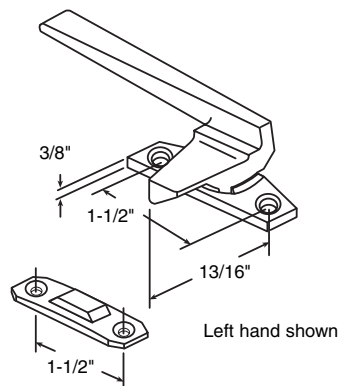
H-3821 (White - right hand)

Casement Locking Handle (Offset base)

Contents: 1 locking handle; 1 keeper; 1 set of installation screws.

Description: Diecast locking handle and keeper with 1-1/2" hole centers; similar to *Truth* hardware; uses #10 flat head machine screws commonly used on metal framed windows.

You may wish to stock these related parts: **H-3604**, **H-3605**.



H-3853 (Aluminum - left hand)

H-3854 (Aluminum - right hand)

H-3855 (Bronze - left hand)

H-3856 (Bronze - right hand)

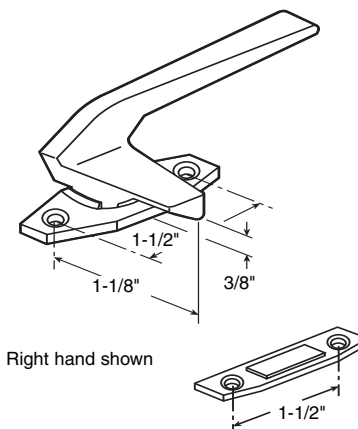
H-3857 (White - left hand)

H-3858 (White - right hand)

Casement Locking Handle (In-line base)

Contents: 1 locking handle; 1 keeper; 1 set of installation screws.

Description: Diecast locking handle and keeper with 1-9/16" hole centers; uses #8 sheet metal screws for application to wood framed windows.



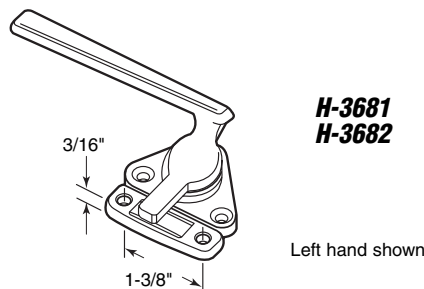
H-3681 (Left hand)

H-3682 (Right hand)

Casement Locking Handle

Contents: 1 handle; 1 strike; 1 set of installation screws.

Description: Zinc diecast locking handle; aluminum finish.



H-3600 (Left hand)

H-3601 (Right hand)

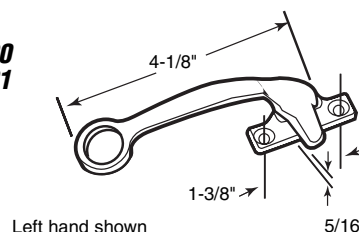
Casement Locking Handle

Contents: 1 handle.

Description: Heavy bronze casting; 1-3/8" hole centers for steel windows; hole in lock handle allows it to be used, in elevated location, for pole operation.

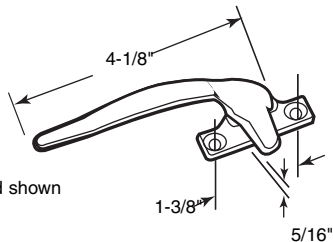
You may wish to stock these related parts: **H-3659**.

H-3600 H-3601



H-3602
H-3603

Left hand shown



H-3602 (Left hand)
H-3603 (Right hand)

Casement Locking Handle

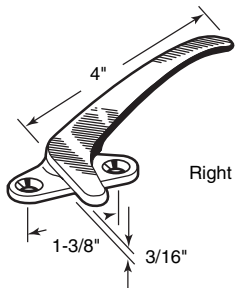
Contents: 1 handle.

Description: Heavy bronze casting; polished finish; 1-3/8" hole centers for steel windows; used by many commercial window manufacturers.

You may wish to stock these related parts: **H-3659**.

H-3640
H-3641

Right hand shown



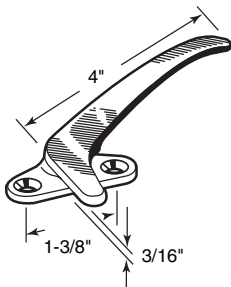
H-3640 (Left hand)
H-3641 (Right hand)

Casement Window Handle

Contents: 1 handle; 1 set of installation screws.

Description: Polished red bronze (85% copper); 1-3/8" hole centers; used on many casement windows.

H-3642



H-3642

Hopper Window Locking Handle

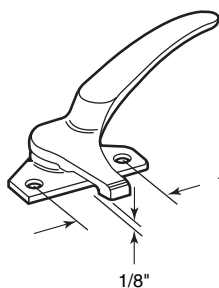
Contents: 1 handle; 1 set of installation screws.

Description: Heavy bronze casting; dark bronze finish; 1-3/8" hole centers; used as top handle on project-out windows.

You may wish to stock these related parts: **H-3643**.

H-3644
H-3645

Right hand shown



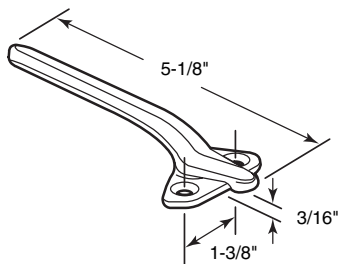
H-3644 (Left hand)
H-3645 (Right hand)

Casement Locking Handle

Contents: 1 handle; 1 set of installation screws.

Description: Heavy bronze casting; dark bronze finish; used on steel projecting and casement windows; 1-1/4" hole centers.

H-3643



H-3643

Hopper Window Locking Handle

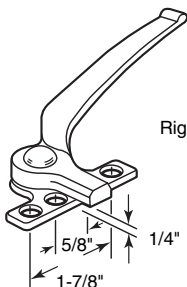
Contents: 1 handle; 1 set of installation screws.

Description: Heavy bronze casting; dark bronze epoxy finish; used as bottom handle on hopper windows.

You may wish to stock these related parts: **H-3642**.

H-3646
H-3647

Right hand shown



H-3646 (Left hand)
H-3647 (Right hand)

Casement or Projecting Window Locking Handle

Contents: 1 handle; 1 set of installation screws.

Description: Heavy bronze casting; dark bronze finish; 4 hole mounting bracket; used as a top handle on dual hopper windows.

You may wish to stock these related parts: **H-3648**.

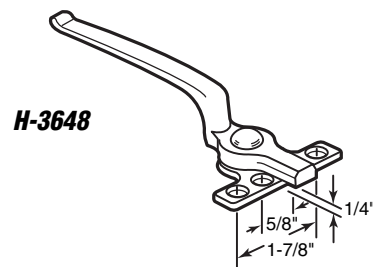
H-3648

Casement or Projecting Window Locking Handle

Contents: 1 handle; 1 set of installation screws.

Description: Heavy bronze casting; dark bronze finish; 4 hole mounting bracket; used as a **bottom handle** on dual hopper windows.

You may wish to stock these related parts: **H-3646, H-3647.**



H-3649 (Left hand)

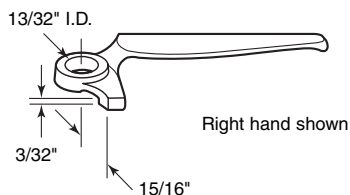
H-3650 (Right hand)

Casement or Projecting Window Locking Handle

Contents: 1 handle.

Description: Heavy bronze casting; dark bronze finish; locking handle fits on old style *Fenestra* windows.

You may wish to stock these related parts: **H-3658.**



**H-3649
H-3650**

H-3651 (Left hand)

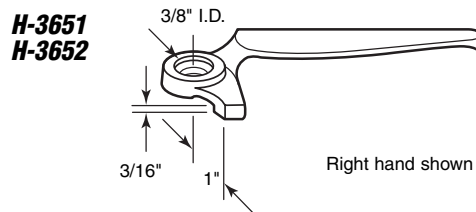
H-3652 (Right hand)

Casement or Projecting Window Locking Handle

Contents: 1 handle.

Description: Heavy bronze casting; dark bronze finish; locking handle fits on *Fenestra* windows.

You may wish to stock these related parts: **H-3658.**



**H-3651
H-3652**

H-3653 (Red bronze - left hand)*

H-3654 (Red bronze - right hand)*

H-3704 (Zinc - left hand)

H-3705 (Zinc - right hand)

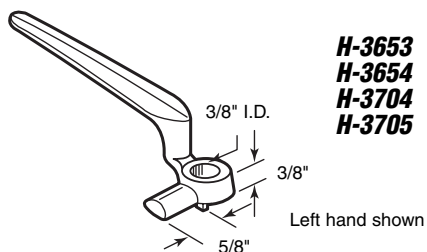
Casement or Projecting Window Locking Handle

Contents: 1 handle.

Description: Zinc & red bronze castings; locking handle used on old style casement windows; fits on *Fenestra* and others.

*Call for availability on these items.

You may wish to stock these related parts: **H-3658.**



**H-3653
H-3654
H-3704
H-3705**

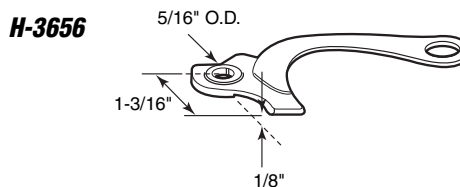
H-3656

Casement or Projecting Window Locking Handle

Contents: 1 handle.

Description: Red bronze casting (81% copper); locking handle used on old style steel windows.

You may wish to stock these related parts: **H-3658.**



H-3656

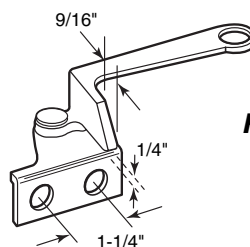
H-3655

Casement or Projecting Window Locking Handle

Contents: 1 handle.

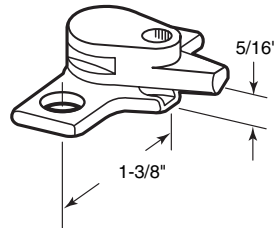
Description: Polished red bronze casting (81% copper); fits in upper position on *Lupton* dual projecting windows.

You may wish to stock these related parts: **H-3661.**



H-3655

H-3633



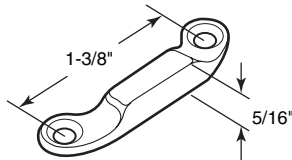
H-3633

Casement Security Lock

Contents: 1 lock; 1 set of installation screws.

Description: Heavy bronze casting; used to prevent accidental opening; often referred to as an air conditioner lock; 1-3/8" hole centers; fits most steel windows.

You may wish to stock these related parts: H-3638, H-3659, H-3926.



H-3659

H-3659

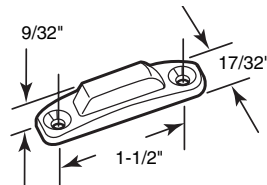
Casement Locking Handle Strikeplate

Contents: 1 strike; 1 set of installation screws.

Description: Heavy bronze casting; strike used with many different types of locking handles.

You may wish to stock these related parts: H-3600 thru H-3603.

**H-3604
H-3605**



H-3604 (Aluminum)

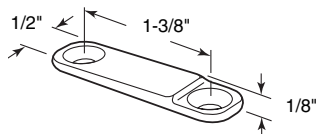
H-3605 (Bronze)

Casement Locking Strikeplate

Contents: 1 strike housing; 1 strike insert; 1 set of installation screws.

Description: Nylon strike insert provides long lasting, trouble free wear; diecast base in painted finishes.

You may wish to stock these related parts: H-3596 thru H-3599.



H-3663

H-3663

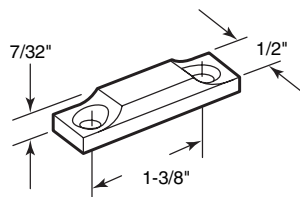
Casement Locking Handle Strikeplate

Contents: 2 strikes.

Description: Extruded aluminum strike has angled surface plate; 1-3/8" hole centers; 3/16" maximum height.

You may wish to stock these related parts: H-3659, H-3660.

H-3660



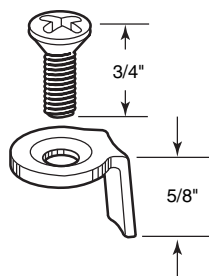
H-3660

Casement Locking Handle Strikeplate

Contents: 1 strike; 1 set of installation screws.

Description: Heavy bronze casting; used with many different types of locking handles.

You may wish to stock these related parts: H-3600 thru H-3603.



H-3658

H-3658

Single Hole Locking Clevis & Screw

Contents: 1 clevis; 1 screw with washer.

Description: Assembly used to attach one hole locking handles; dark bronze finish.

You may wish to stock these related parts: H-3649 thru H-3654, H-3656.

H-3539 (Aluminum)
H-3540 (Bronze)
H-3716 (White)

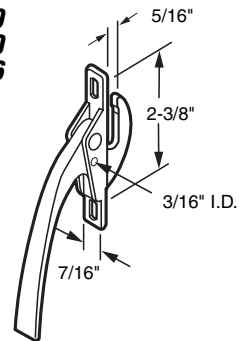
Casement Locking Handle

Contents: 1 handle; 1 set of installation screws.

Description: Painted diecast window lock for aluminum or steel windows; accepts a 1/8" security pin, **S-4071**.

You may wish to stock these related parts: **H-3545, S-4071**.

H-3539
H-3540
H-3716



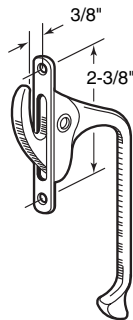
H-3561

Casement Locking Handle

Contents: 1 handle.

Description: Dark bronze casting; non-handed; 2-3/8" hole centers.

You may wish to stock these related parts: **H-3545**.



H-3561

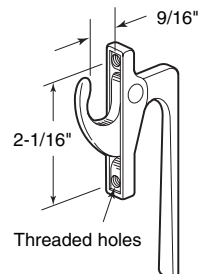
H-3562

Casement Locking Handle

Contents: 1 handle.

Description: White bronze casting; dark bronze finish; internally threaded #12-24 mounting holes; fits on *Fenestra* windows.

H-3562



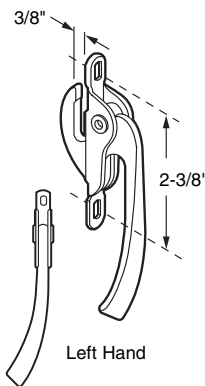
H-3541 (Aluminum)
H-3543 (Bronze)
H-3717 (White)
H-3902 (Red - for emergency exits)

Casement Locking Handle (Left hand)

Contents: 1 handle; 1 set of installation screws.

Description: Left hand; painted diecast locking handle used on double windows with narrow center rail.

You may wish to stock these related parts: **H-3544, H-3545**.



H-3541
H-3543
H-3717
H-3902

H-3542 (Aluminum)
H-3544 (Bronze)
H-3718 (White)
H-3903 (Red - for emergency exits)

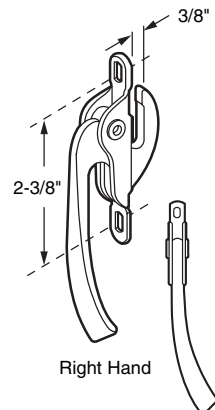
Casement Locking Handle (Right hand)

Contents: 1 handle; 1 set of installation screws.

Description: Right hand; painted diecast locking handle used on double windows with narrow center rail.

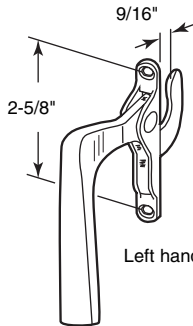
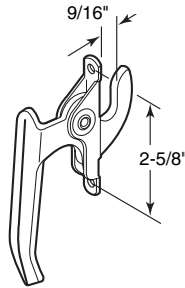
You may wish to stock these related parts: **H-3543, H-3545**.

H-3542
H-3544
H-3718
H-3903



H-3559
H-3560

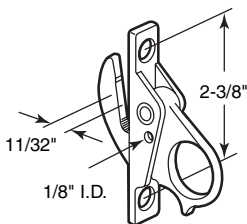
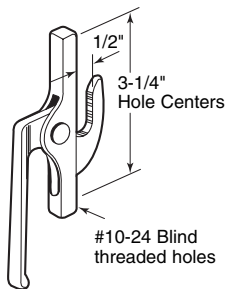
Left hand shown



H-3563
H-3564

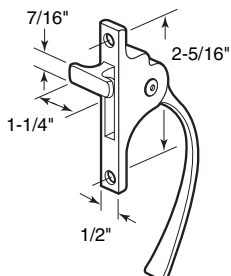
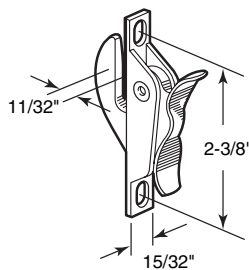
Left hand shown

H-3639



H-3576

H-3631



H-3565

H-3559 (Left hand)

H-3560 (Right hand)

Casement Locking Handle

Contents: 1 handle.

Description: Stamped steel construction; aluminum finish; fits on *Fenestra* windows.

You may wish to stock these related parts: **H-3563, H-3564.**

H-3563 (Left hand)

H-3564 (Right hand)

Casement Locking Handle

Contents: 1 handle.

Description: White bronze casting; polished finish; 2-5/8" hole centers; fits on *Fenestra* and *Ceco* windows.

H-3639

Casement Locking Handle

Contents: 1 handle; 1 set of mounting screws.

Description: Heavy bronze casting; 3-1/4" hole centers; no. 10-24 blind mounting holes; fits on *Thorn* on steel windows.

You may wish to stock these related parts: **H-3545, H-3562.**

H-3576 (Aluminum)

Casement Locking Handle

Contents: 1 handle; 1 set of installation screws.

Description: Ring type locking handle; zinc diecast painted finish; 2-3/8" hole centers.

You may wish to stock these related parts: **H-3545, S-4071.**

H-3631 (Bronze)

Casement Cam Lock

Contents: 1 lock; 1 set of installation screws.

Description: Painted zinc diecast; thumb operated; for aluminum, steel or wood windows.

You may wish to stock these related parts: **H-3545.**

H-3565 (Bronze)

Casement Dual Locking Handle

Contents: 1 handle.

Description: Painted diecast locking handle; dual latch engages 2 windows at once; fits on *Lupton* windows.

You may wish to stock these related parts: **H-3566, H-3567.**

H-3612 (Bronze)

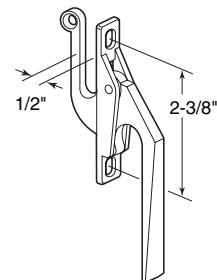
Casement Window Bottom Latch (Dual Locking)

Contents: 1 handle; 1 set of installation screws.

Description: Painted zinc diecast bottom latch used on dual locking windows; connects to H-3611 top latch with a tie bar.

You may wish to stock these related parts: H-3545.

H-3612



H-3611 (Bronze)

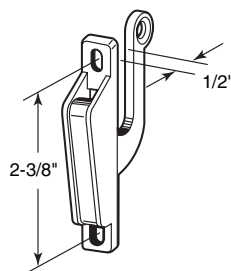
Casement Window Top Latch (Dual Locking)

Contents: 1 handle; 1 set of installation screws.

Description: Painted zinc diecast top latch used on dual locking windows; connects to H-3612 bottom latch with a tie bar.

You may wish to stock these related parts: H-3545.

Call for
Availability



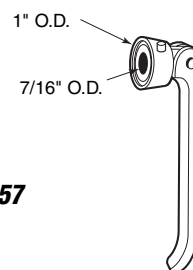
H-3611

H-3657 (Bronze)

Casement Locking Handle

Contents: 1 handle.

Description: Painted zinc diecast locking handle fits on very old *Fenestra* windows; handle is spring loaded and pulls out.



H-3657

H-3606 (Left hand)

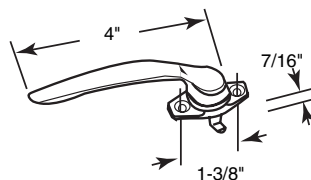
H-3607 (Right hand)

Casement Project-In Locking Handle (7/16")

Contents: 1 handle; 1 set of installation screws.

Description: 7/16" hook projection; heavy bronze casting; 1-3/8" hole centers; used on steel windows.

You may wish to stock these related parts: H-3608, H3609, H3634 thru H-3637, H-3659, H-3660.



H-3606
H-3607

Left hand shown

H-3608 (Left hand)

H-3609 (Right hand)

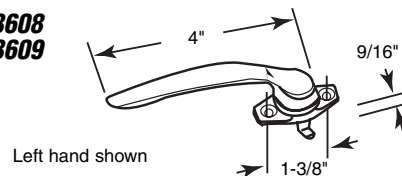
Casement Project-In Locking Handle (9/16")

Contents: 1 handle; 1 set of installation screws.

Description: 9/16" hook projection; heavy bronze casting; 1-3/8" hole centers; used on steel windows.

You may wish to stock these related parts: H-3606, H-3607, H-3634 thru H-3637, H-3659, H-3660.

H-3608
H-3609



Left hand shown

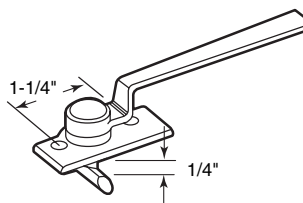
H-3661

Casement or Projecting Window Locking Handle

Contents: 1 handle.

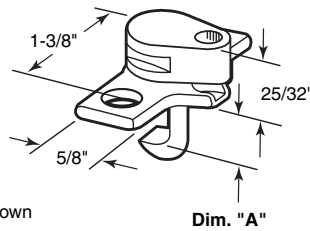
Description: Red bronze casting (81% copper); bottom locking handle fits on old style projecting windows manufactured by *Lupton*.

You may wish to stock these related parts: H-3655.



H-3661

**H-3634
H-3635
H-3636
H-3637**



Right hand shown

Dim. "A"

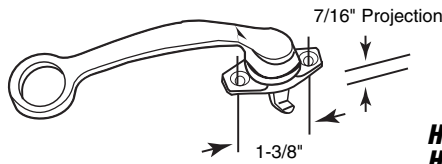
Casement Project-In Security Lock

Contents: 1 lock; 1 set of installation screws.

Part No.	Dim. "A"	Hand
H-3634	7/16"	Left
H-3635	7/16"	Right
H-3636	9/16"	Left
H-3637	9/16"	Right

Description: Heavy bronze casting; used to prevent accidental opening; often referred to as an air conditioner lock; 1-3/8" hole centers; fits most steel windows.

You may wish to stock these related parts: H-3659, H-3660, H-3926.



Left hand shown

**H-3911
H-3912**

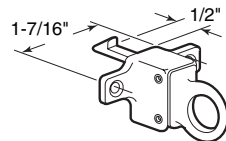
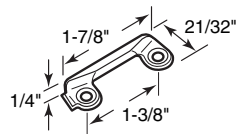
H-3911 (Left hand)
H-3912 (Right hand)

Casement Project-In Locking Handle

Contents: 1 handle; 1 set of installation screws.

Description: Cast white bronze locking handle; 7/16" hook projection; 1-3/8" hole centers; used on steel windows.

H-3594



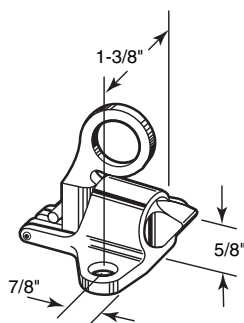
H-3594 (Bronze)

Project-In Transom Latch

Contents: 1 latch; 1 keeper; 1 set of installation screws.

Description: Steel pole ring and latch hook; cast bronze housing; used on project-in windows; used by many manufacturers.

You may wish to stock these related parts: H-3626 thru H-3628.



H-3610

H-3610

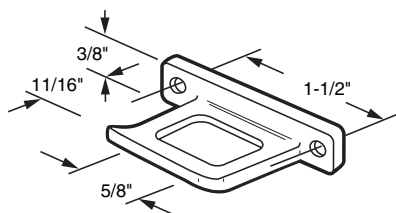
Projecting Window Spring Catch

Contents: 1 catch; 1 set of installation screws.

Description: Spring catch with ring is used on project-in or project-out windows; brushed white bronze finish; heavy bronze casting.

You may wish to stock these related parts: H-3626 thru H-3628.

H-3913



H-3913

Keeper

Contents: 1 keeper.

Description: White bronze casting; used with H-3610 spring catch.

H-3629 (Bronze)

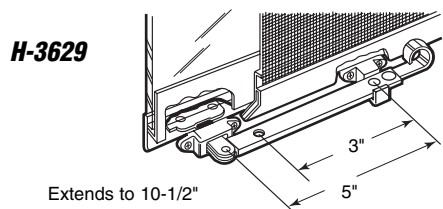
Call for Availability

Project-Out Push-Bar Operator

Contents: 1 operator; 1 thru frame guide; 1 arm holder; 1 set of installation screws.

Description: Painted steel operator used to open old style projecting windows; extends to 10-1/2"; used by many window manufacturers.

You may wish to stock these related parts: **H-3626** thru **H-3628**.



H-3906 (Bronze)

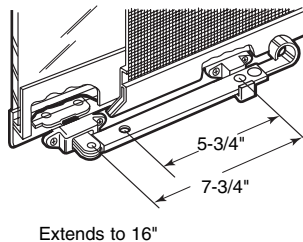
Call for Availability

Project-Out Push-Bar Operator

Contents: 1 operator; 1 thru frame guide; 1 arm holder; 1 set of installation screws.

Description: Painted steel operator used to open old style projecting windows; extends to 16"; used by many window manufacturers.

You may wish to stock these related parts: **H-3626** thru **H-3628**.



H-3553 (Brass)

H-3683 (Antique brass)

H-3684 (Chrome)

H-3836 (White)

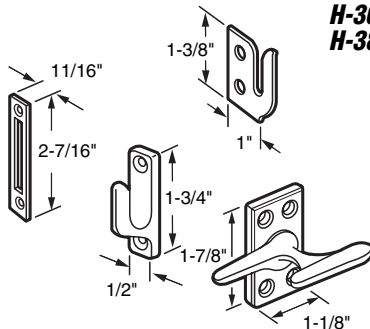
Casement Lock

Contents: 1 lock; 3 keepers; 1 set of installation screws.

Description: Painted or plated zinc diecast locking handle has 3 different keepers for special mounting applications; used on old style wood casement windows.

You may wish to stock these related parts: **H-3528**, **H-3575**, **H-3680**.

H-3553
H-3683
H-3684
H-3836



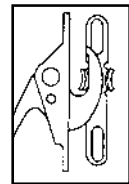
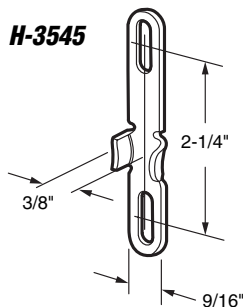
H-3545 (Aluminum)

Universal Casement Lock Keeper

Contents: 2 keepers; 2 sets of installation screws.

Description: Stamped aluminum keeper works on many types of casement windows.

You may wish to stock these related parts: **H-3539**, **H-3540**.

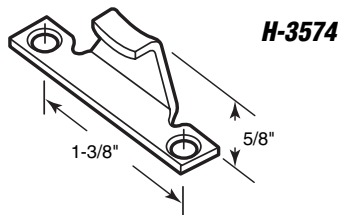


H-3574 (Gold irridite finish)

Casement Lock Keeper

Contents: 1 keeper; 1 set of installation screws.

Description: Keeper for **H-3572** and **H-3573** casement locks; stamped steel construction.



H-3888

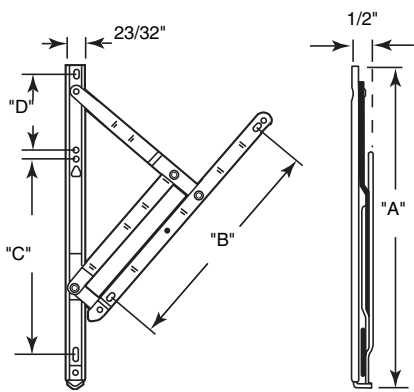


H-3888

Casement Lock Keeper

Contents: 1 keeper; 1 set of installation screws.

Description: **Stainless steel keeper**; may be used on a variety of casement locks; reverse for left or right hand locks.



**H-3626
H-3627
H-3628**

Casement And Projecting Window Hinge (4-Bar)

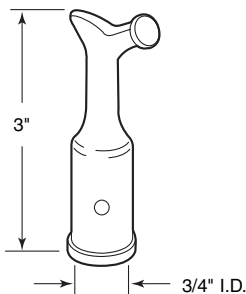
Contents: 2 hinges; 1 set of installation screws.

Part No.	Dim. A	Dim. B	Dim. C	Dim. D
H-3626	8"	4-3/4"	5-5/32"	1-5/8"
H-3627	10"	5-3/4"	6-1/32"	2-3/4"
H-3628	12"	6-3/4"	6-15/16"	3-7/8"

Description: **Stainless steel**, non-handed 4 bar hinge with stop and adjustable friction pad; used by many window manufacturers; standard duty.

You may also wish to stock these related parts: **H-3596 thru H-3598**.

H-3662



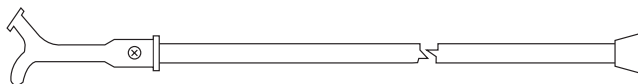
H-3662

Transom Latch Hook

Contents: 1 hook.

Description: **White bronze casting**; fits a 3/4" diameter pole; for ring pull handles and latches on upper story windows.

You may wish to stock these related parts: **H-3600, H-3601, H-3610**.



**H-3753
H-3905**

H-3753

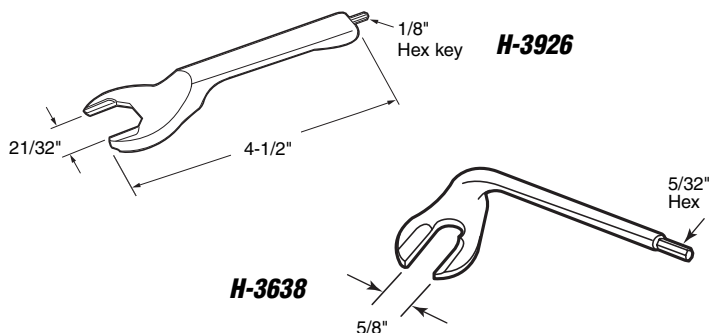
H-3905 (With storage hanger)

Transom Pole & Hook

Contents: 1 - 6' pole; 1 hook; 1 rubber tip; 1 screw.

Description: **Cast white bronze hook**; 3/4" diameter **aluminum** pole; ideal for reaching and actuating ring latches on upper story windows.

You may wish to stock these related parts: **H-3600, H-3601, H-3610**.



H-3926

H-3638

H-3638 (5/32" hex wrench)

H-3926 (1/8" hex wrench)*

Security Lock Wrench

Contents: 1 wrench.

Description: **Heavy bronze casting**; used to lock and unlock "project-in" security locks; also has hex tool to secure set screw; polished finish.

*Call for availability on this item.

You may wish to stock these related parts: **H-3633 thru H-3637**.

Universal Louver Operator

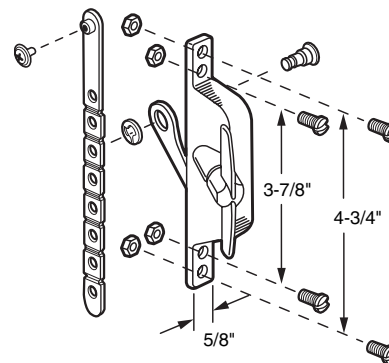
Contents: 1 operator with link; 1 set of installation fasteners.

Bulk: 25 per display box.

Finish	Carded Part No.	Bulk Part No.
Aluminum	H-3546	CCEP-3546
Bronze	H-3547	CCEP-3547
White	H-3818	CCEP-3818

Description: Replaces most operators currently in use; **diecast** construction; reversible; non-handed; universal break-off link has 1/2" hole spacings up to 5-5/16"; has a 5/16" spindle and **diecast** "T" handle.

You may wish to stock these related parts: **H-3552, H-3557, S-4070, S-4072.**



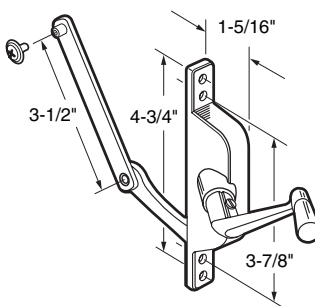
H-3548 (Carded) CCEP-3548 (Bulk)

Jalousie Operator (Aluminum)

Contents: 1 operator with link; 1 set of installation fasteners.

Bulk: 25 per display box.

Description: **Diecast** operator with crank handle at the center position; 3-1/2" link.



**H-3548
CCEP-3548**

H-3549 (Left hand - carded) CCEP-3549 (Left hand - bulk) H-3550 (Right hand - carded) CCEP-3550 (Right hand - bulk)

Jalousie Operator (Aluminum)

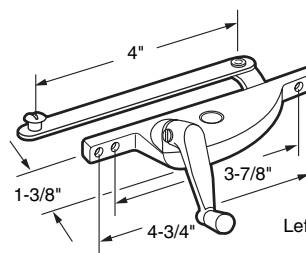
Contents: 1 operator with link; 1 set of installation fasteners.

Bulk: 25 per display box.

Description: **Diecast** operator with crank handle at the offset position; 4" link.

You may wish to stock these related parts: **S-4070, S-4072.**

H-3549 CCEP-3549 H-3550 CCEP-3550



Left hand shown

Jalousie Operator

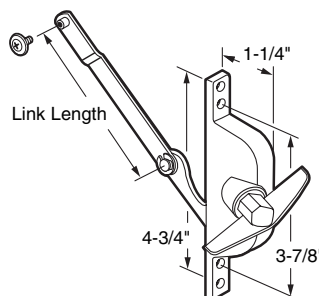
Contents: 1 operator with link; 1 set of installation fasteners.

Bulk: 25 per display box.

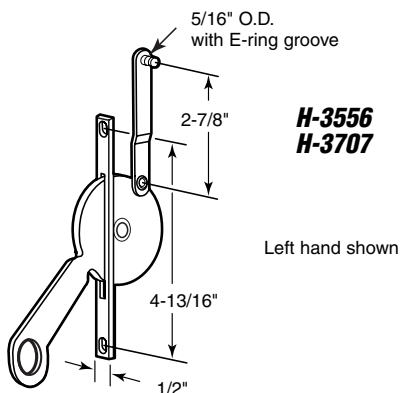
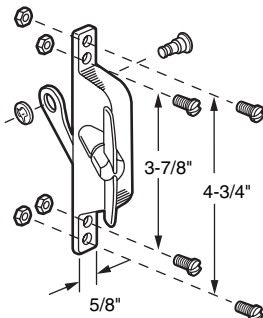
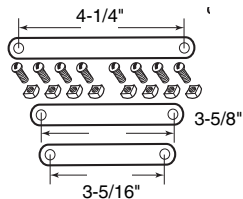
Finish	4-1/4" Link	3-5/8" Link
Aluminum	H-3551	H-3932
Bronze	H-3890	H-3933
White	H-3891	H-3938
Aluminum (Bulk)	CCEP-3551	—

Description: **Diecast** operator fits on **Daryl** windows; **offset** link; center position "T" handle.

You may wish to stock these related parts: **S-4070, S-4072.**

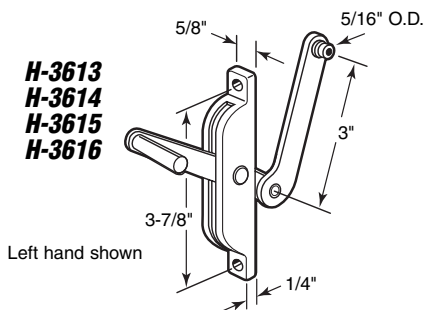


H-3557
H-3558
H-3819
CCEP-3557



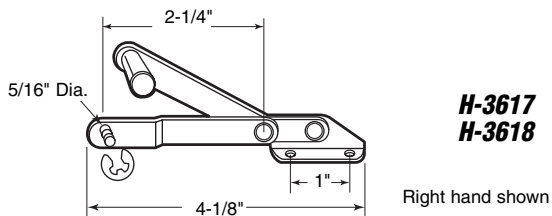
H-3556
H-3707

Left hand shown



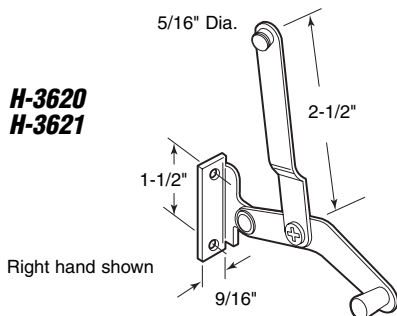
H-3613
H-3614
H-3615
H-3616

Left hand shown



H-3617
H-3618

Right hand shown



H-3620
H-3621

Right hand shown

H-3557 (Aluminum - carded)
CCEP-3557 (Aluminum - bulk)
H-3558 (Bronze - carded)
H-3819 (White - carded)

Jalousie Operator

Contents: 1 operator; 3 links; 1 set of installation fasteners.
Bulk: 25 per display box.

Description: Diecast operator with 3 link assortment; center position "T" handle; designed to replace most jalousie operators.

You may wish to stock these related parts: **S-4070, S-4072.**

H-3556 (Left hand)

H-3707 (Right hand)

Jalousie Operator

Contents: 1 operator with link; 1 set of installation fasteners.

Description: Stamped aluminum operator; slim-line design; with 2-7/8" offset link arm.

You may wish to stock these related parts: **S-4070, S-4072.**

H-3613 (Aluminum - left hand)

H-3614 (Aluminum - right hand)

H-3615 (Bronze - left hand)

H-3616 (Bronze - right hand)

Louver or Jalousie Operator

Contents: 1 operator; 1 set of installation fasteners.

Description: Plastic housing with 3" aluminum link arm; fits on *Visualite* and *Premiere*.

H-3617 (Left hand)

H-3618 (Right hand)

Louver or Jalousie Operator

Contents: 1 operator; 1 set of installation fasteners.

Description: Aluminum construction; grooved stud attaches to moving arm; complete with steel "E" ring; fits on *International* windows.

You may wish to stock these related parts: **H-3619.**

H-3620 (Left hand)

H-3621 (Right hand)

Louver or Jalousie Operator

Contents: 1 operator; 1 set of installation fasteners.

Description: Aluminum construction; attaches to moving arm of window to open glass vents.

H-3552

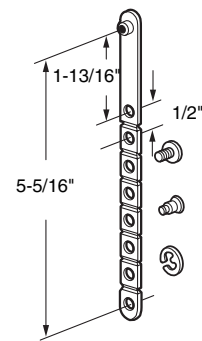
Universal "Break-Off" Link

Contents: 1 link with attaching hardware.

Description: Break-off link is designed to be used with most jalousie operators to provide many selections for linkage hole patterns; **cadmium plated steel**; adjustment holes at 1/2" spacing.

You may wish to stock these related parts: **H-3546, H-3547.**

H-3552

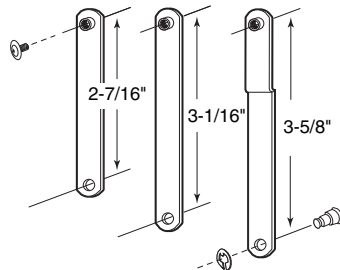


H-3925

Universal Jalousie Link Assortment

Contents: (1) 2-7/16" link; (1) 3-1/16" link; (1) 3-5/8" link; 1 link stud screw; 1 grooved pin with "E" clip.

Description: Stamped steel links with threaded pivot studs; steel grooved pin with "E" clip for jalousie window linkage.



H-3925

H-3619

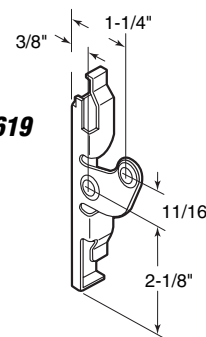
Louver or Jalousie Glass Clip

Contents: 1 left hand clip; 1 right hand clip.

Description: Stamped aluminum construction; fits 4" glass; fits on *International* windows.

You may wish to stock these related parts: **H-3617, H-3618.**

H-3619



H-3622

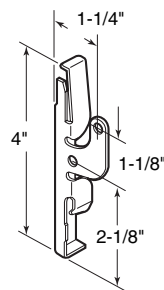
Louver or Jalousie Glass Clip

Contents: 1 left hand clip; 1 right hand clip.

Description: Stamped aluminum construction; fits 4" glass.

You may wish to stock these related parts: **H-3620, H-3621.**

H-3622



H-3623

Louver or Jalousie Clip

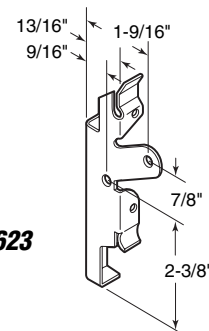
Contents: 1 left hand clip; 1 right hand clip.

Description: Stamped aluminum construction; fits 3/4" thick wood slats.

You may wish to stock these related parts: **H-3620, H-3621.**

Call for
Availability

H-3623



H-3852 (For 4" glass)

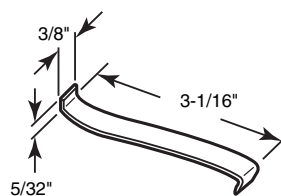
Jalousie Window Security Clip

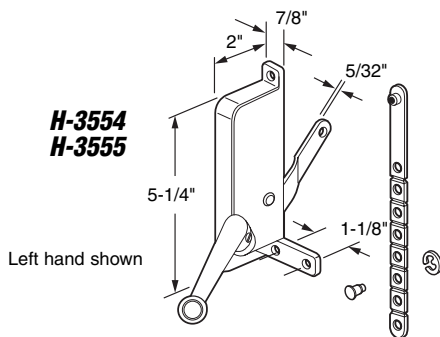
Contents: 20 clips.

Description: Plated spring steel clips; slip under louver glass clip to secure glass in position; deters easy removal of glass panels; no tools required.

Note: See **S-4072** in security section for 4-1/2" glass clip.

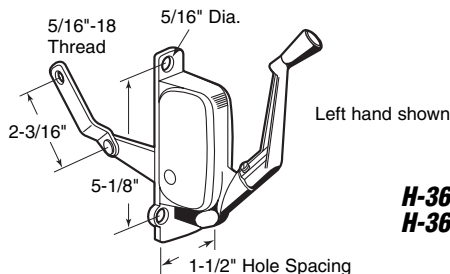
H-3852





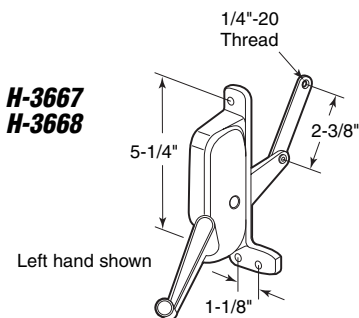
H-3554
H-3555

Left hand shown



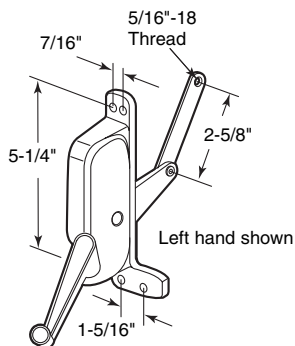
H-3665
H-3666

Left hand shown



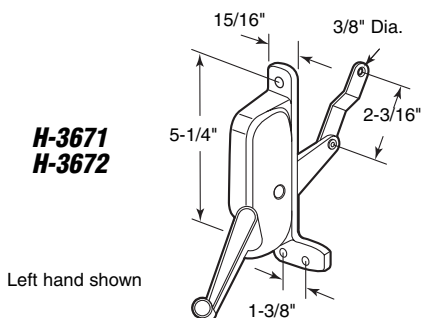
H-3667
H-3668

Left hand shown



H-3669
H-3670

Left hand shown



H-3671
H-3672

Left hand shown

H-3554 (Left hand)
H-3555 (Right hand)

Universal Awning Operator (Aluminum)

Contents: 1 operator; 1 universal link; 1 set of installation screws.

Description: Diecast awning window operator with multi-hole link is designed to replace many popular styles; with crank handle.

You may wish to stock these related parts: **H-3665 thru H-3678**.

H-3665 (Left hand)
H-3666 (Right hand)

"Miami" Awning Operator (Aluminum)

Contents: 1 operator with link and link screw.

Description: Diecast awning window operator for *Miami* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.

H-3667 (Left hand)
H-3668 (Right hand)

"Air Control-Keller" Awning Operator (Aluminum)

Contents: 1 operator with link and link screw.

Description: Diecast awning window operator for *Air Control-Keller* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.

H-3669 (Left hand)
H-3670 (Right hand)

"Pan-American" Awning Operator (Aluminum)

Contents: 1 operator with link and link screw.

Description: Diecast awning window operator for *Pan-American* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.

H-3671 (Left hand)
H-3672 (Right hand)

"Stanley-C & E" Awning Operator (Aluminum)

Contents: 1 operator with link.

Description: Diecast awning window operator for *Stanley-C & E* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.

Window Hardware

H-3673 (Left hand)

H-3674 (Right hand)

"Stanley" Awning Operator (Aluminum)

Contents: 1 operator with link.

Description: Diecast awning window operator for *Stanley* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.

H-3675 (Left hand)

H-3676 (Right hand)

"A.B.C." Awning Operator (Aluminum)

Contents: 1 operator with link.

Description: Diecast awning window operator for *A.B.C.* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.

H-3677 (Left hand)

H-3678 (Right hand)

"Tucker" Awning Operator (Aluminum)

Contents: 1 operator with link.

Description: Diecast awning window operator for *Tucker* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.

H-3693 (Left hand)

H-3694 (Right hand)

"Look-Rusco" Awning Operator (Aluminum)

Contents: 1 operator with link and link screw.

Description: Diecast awning window operator for *Look-Rusco* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.

H-3695 (Left hand)

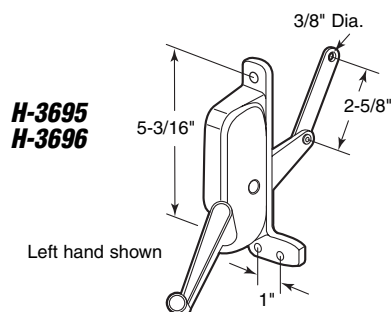
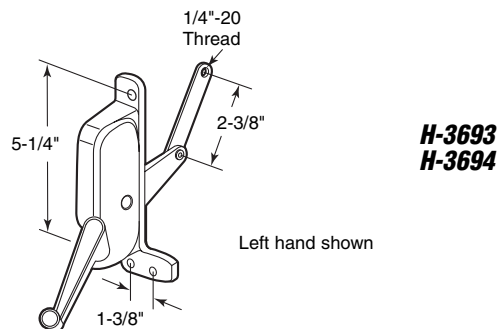
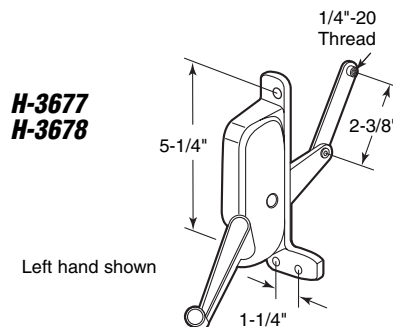
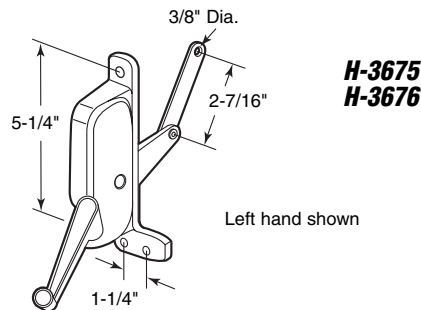
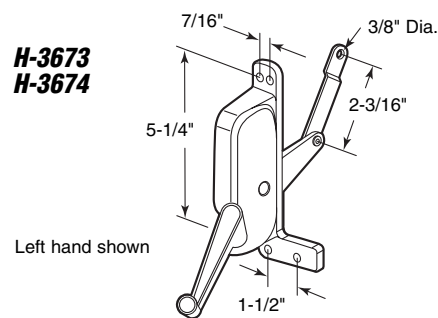
H-3696 (Right hand)

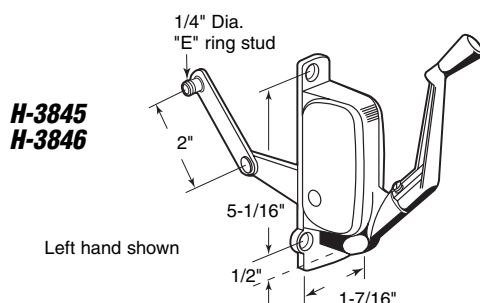
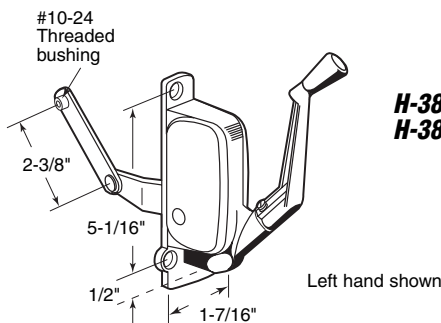
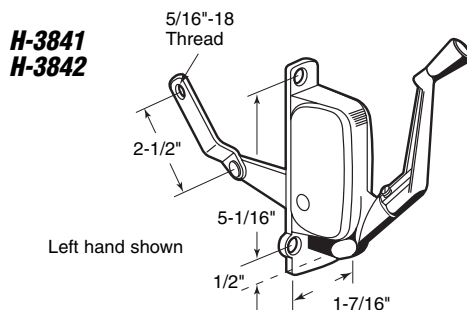
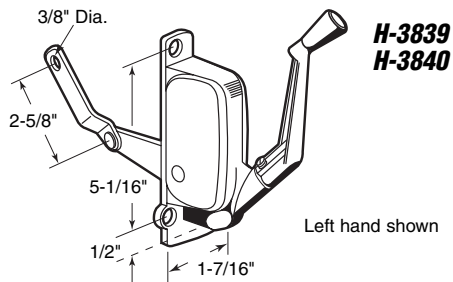
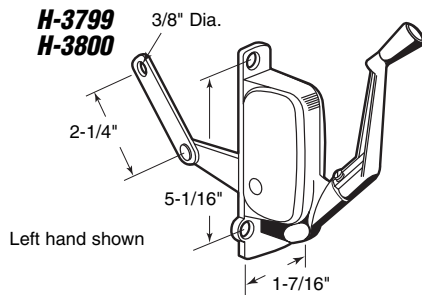
"Nu-Aire" Awning Operator (Aluminum)

Contents: 1 operator with link.

Description: Diecast awning window operator for *Nu-Aire* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.





H-3799 (Left hand)
H-3800 (Right hand)

"Crown" Awning Operator (Aluminum)

Contents: 1 operator with link.

Description: Diecast awning window operator for *Crown* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581.**

H-3839 (Left hand)
H-3840 (Right hand)

"Anderson" Awning Operator (Aluminum)

Contents: 1 operator with link.

Description: Diecast awning window operator for *Anderson* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581.**

H-3841 (Left hand)
H-3842 (Right hand)

"Harcar" Awning Operator (Aluminum)

Contents: 1 operator with link and link screw.

Description: Diecast awning window operator for *Harcar* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581.**

H-3843 (Left hand)
H-3844 (Right hand)

"Old Tucker" Awning Operator (Aluminum)

Contents: 1 operator with link.

Description: Diecast awning window operator for *Old Tucker* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581.**

H-3845 (Left hand)
H-3846 (Right hand)

"A.B.C." Awning Operator (Aluminum)

Contents: 1 operator with link.

Description: Diecast awning window operator for *A.B.C.* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581.**

H-3847 (Left hand)

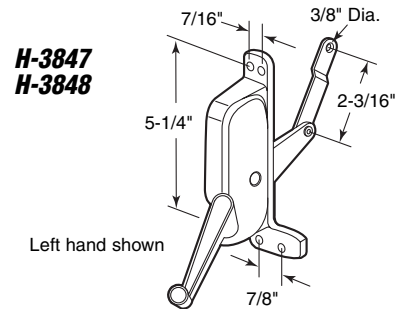
H-3848 (Right hand)

"Ware" Awning Operator (Aluminum)

Contents: 1 operator with link and link screw.

Description: Diecast awning window operator for *Ware* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.



H-3861 (Left hand)

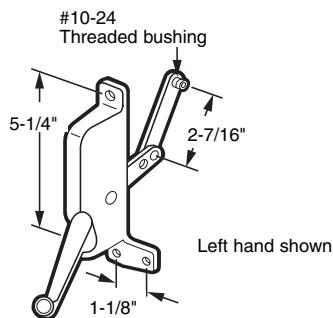
H-3862 (Right hand)

"T.M." Awning Operator (Aluminum)

Contents: 1 operator with link.

Description: Diecast awning window operator for *T.M.* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.



H-3899 (Left hand)

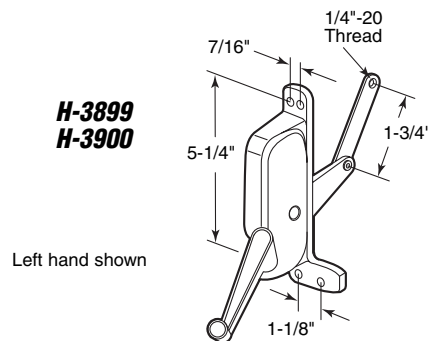
H-3900 (Right hand)

"Air Control" Awning Operator (Aluminum)

Contents: 1 operator with link and link screw.

Description: Diecast awning window operator for *Air Control* windows; case hardened gears; baked-on enamel finish; with crank handle.

You may wish to stock these related parts: **L-5578 thru L-5581**.



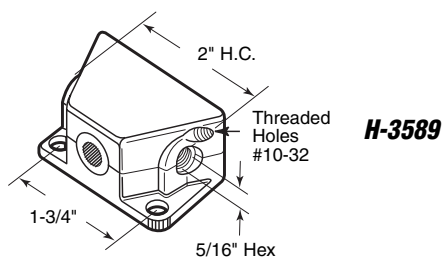
H-3589

"Stanley" Awning Operator

Contents: 1 operator.

Description: Zinc diecast operator used at the center position on awning windows; **5/16" hex drive**; fits on *Stanley*; threaded holes are #10-32.

You may wish to stock these related parts: **H-3590, H-3591, H-3632**.



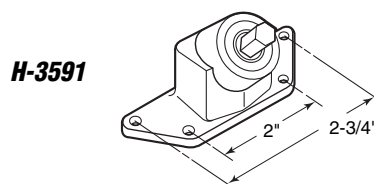
H-3591

Awning Operator Angle Adaptor

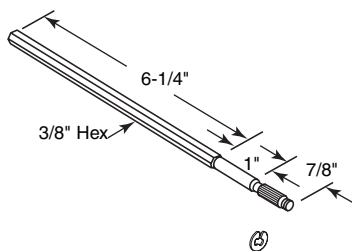
Contents: 1 operator.

Description: Zinc diecast housing; used with **H-3589** operator to adapt angle of crank handle; **3/8" hex drive** at rear of housing, accepts **H-3632** drive rod.

You may wish to stock these related parts: **H-3589, H-3590, H-3632**.



H-3632



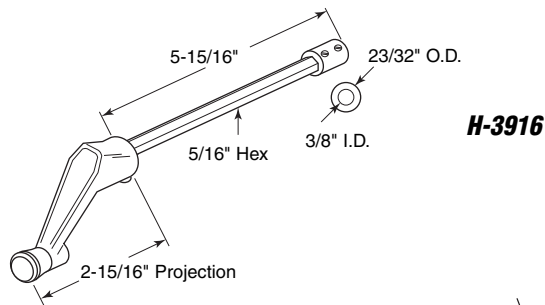
H-3632

Awning Operator Hex Drive Bar

Contents: 1 drive bar; 1 "E" ring.

Description: Machine steel; 8-1/8" long; 3/8" hex; used with H-3589 and H-3591 operators.

You may wish to stock these related parts: H-3589, H-3590, H-3591.



H-3916

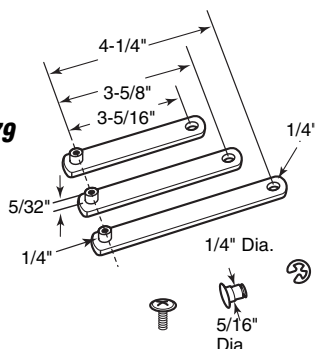
Awning Crank & Extension

Contents: 1 crank; 1 extension; 1 socket.

Description: Zinc diecast crank and socket; extruded aluminum extension; allows for extended operation of most awning operators with a 3/8" spindle.

Call for Availability

H-3679



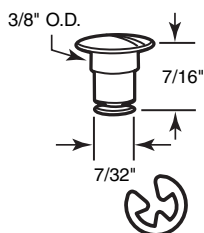
H-3679

Universal Awning Operator Link Assortment

Contents: (1) 3" link; (1) 3-5/8" link; (1) 4-1/4" link; 1 link stud screw; 1 grooved pin with "E" clip.

Description: Stamped steel links with threaded pivot studs; steel grooved pin with "E" clip; for awning window linkage.

You may wish to stock these related parts: H-3665 thru H-3678.



H-3689

H-3689

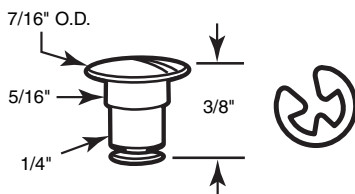
Jalousie & Awning Link Grooved Pin & "E" Clip

Contents: 4 grooved pins; 4 "E" clips.

Description: Aluminum grooved pin with "E" clip is used to connect link end of operator to jalousie or awning window.

You may wish to stock these related parts: H-3690 thru H-3696.

H-3690



H-3690

Jalousie & Awning Link Grooved Pin & "E" Clip

Contents: 4 grooved pins; 4 "E" clips.

Description: Aluminum grooved pin with "E" clip is used to connect link end of operator to jalousie or awning window.

You may wish to stock these related parts: H-3690 thru H-3696.



H-3927
H-3928

H-3927 (3/16")

H-3928 (1/4")

Jalousie & Awning Link "E" Clip

Contents: 4 "E" clips.

Description: Steel "E" clip as used on H-3689 & H-3690.

H-3691

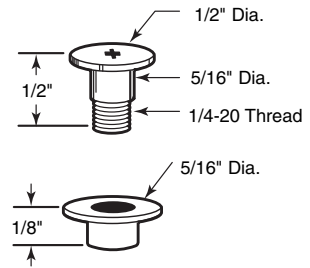
Awning Link Repair Bolt & Bushing

Contents: 4 bolts; 4 bushings.

Description: Zinc-plated steel bolt and nylon bushing; used to repair connection of link end of operator to awning window.

You may wish to stock these related parts: **H-3689, H-3690, H-3692, H-3693, H-3694.**

H-3691



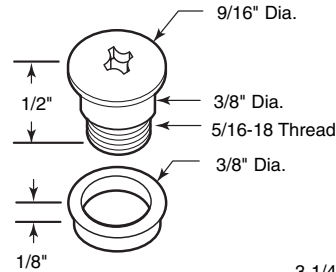
H-3692

Awning Link Repair Bolt & Bushing

Contents: 4 bolts; 4 bushings.

Description: Diecast bolt and nylon bushing; used to repair connection of link end of operator to awning window.

You may wish to stock these related parts: **H-3689, H-3690, H-3691.**



H-3692

H-3577 (4-1/2 Pound)

H-3578 (6 Pound)

H-3579 (8 Pound)

H-3580 (10 Pound)

H-3630 (12 Pound)

H-3834 (14 Pound)*

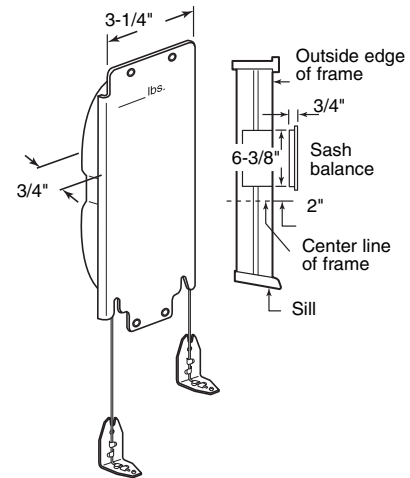
H-3835 (16 Pound)*

Wood Window Sash Balance

Contents: 1 sash balance with attaching hardware.

Description: All steel construction; coil spring retraction; aircraft cable lifters; fits *Duplex, Superior, Preset* and *Fabco*.

*Call for availability on this item.



H-3867 (#1)

H-3868 (#2)

H-3869 (#4)

H-3870 (#5)

Call for
Availability

Double Hung Adjustable Sash Balance

Contents: 1 adjustable sash balance with attaching hardware.

Description: All steel construction; coil spring retraction; aircraft cable lifters.

H-3871 (4-1/2 Pound)

H-3872 (6 Pound)

H-3873 (8 Pound)

H-3874 (10 Pound)

H-3875 (12 Pound)

H-3876 (14 Pound)

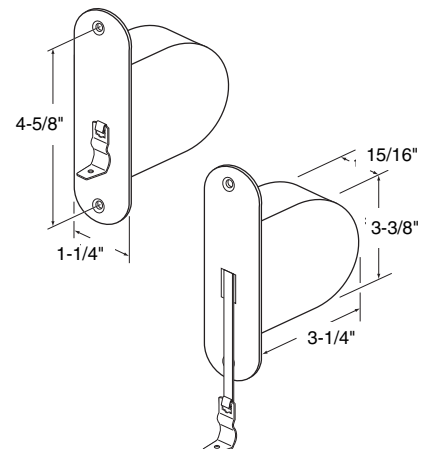
H-3877 (16 Pound)

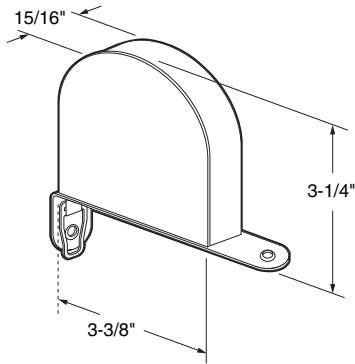
Call for
Availability

Side Mount Sash Balance

Contents: 2 sash balances with attaching hardware.

Description: All steel construction; coil spring retraction; steel tape lifters.





- H-3878** (4-1/2 Pound)
- H-3879** (6 Pound)
- H-3880** (8 Pound)
- H-3881** (10 Pound)
- H-3882** (12 Pound)
- H-3883** (14 Pound)
- H-3884** (16 Pound)

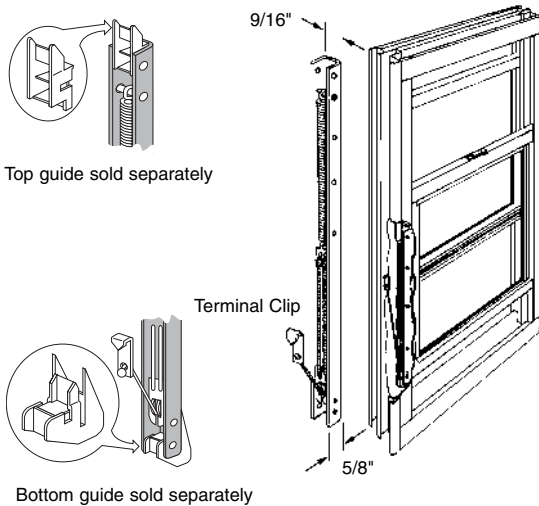
*Call for
Availability*

Overhead Mount Sash Balance

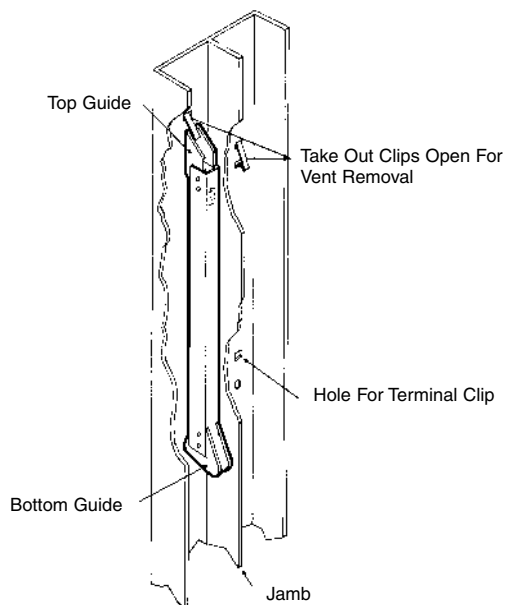
Contents: 2 sash balances with attaching hardware.

Description: All steel construction; coil spring retraction; steel tape lifters.

Used On Single Or Double Hung Sash



Balance Shown Installed In Jamb With Vent Removed



5/8" Channel Balances (Block & tackle style)

Selection Chart (All balances sold individually in bulk)

Balance* Number	Alternative Number	Balance Height	Vent Weight
FA-1210	12A	13"	3 - 6
FA-1220	12B	13"	6 - 9
FA-1230	12C	13"	9 - 11
FA-1240	12D	13"	11 - 12
FA-1310	13A	14"	3 - 6
FA-1320	13B	14"	6 - 9
FA-1330	13C	14"	9 - 11
FA-1340	13D	14"	11 - 12
FA-1410	14A	15"	4 - 6
FA-1420	14B	15"	6 - 10
FA-1430	14C	15"	10 - 12
FA-1440	14D	15"	12 - 13
FA-1510	15A	16"	4 - 6
FA-1520	15B	16"	6 - 10
FA-1530	15C	16"	10 - 12
FA-1540	15D	16"	12 - 13
FA-1610	16A	17"	5 - 8
FA-1620	16B	17"	8 - 12
FA-1630	16C	17"	12 - 14
FA-1640	16D	17"	14 - 19
FA-1710	17A	18"	5 - 8
FA-1720	17B	18"	8 - 12
FA-1730	17C	18"	12 - 14
FA-1740	17D	18"	14 - 17
FA-1810	18A	19"	5 - 8
FA-1820	18B	19"	8 - 12
FA-1830	18C	19"	12 - 14
FA-1840	18D	19"	14 - 17
FA-1910	19A	20"	5 - 8
FA-1920	19B	20"	8 - 12
FA-1930	19C	20"	12 - 14
FA-1940	19D	20"	14 - 17
FA-2010	20A	21"	5 - 8
FA-2020	20B	21"	8 - 12
FA-2030	20C	21"	12 - 15
FA-2040	20D	21"	15 - 23
FA-2110	21A	22"	5 - 8
FA-2120	21B	22"	8 - 12
FA-2130	21C	22"	12 - 15
FA-2140	21D	22"	15 - 23

Continued on the following page

***Top and bottom guides are not included.**
Please see the following accessory page to determine what guides may be required.

Window Hardware

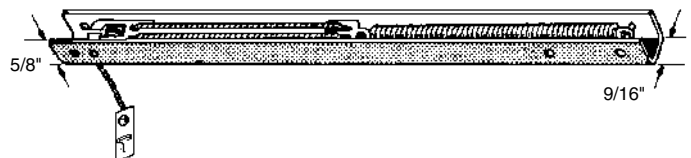
Balance* Number	Alternative Number	Balance Height	Vent Weight
FA-2210	22A	23"	5 - 8
FA-2220	22B	23"	8 - 12
FA-2230	22C	23"	12 - 19
FA-2240	22D	23"	19 - 23
FA-2310	23A	24"	5 - 9
FA-2320	23B	24"	9 - 15
FA-2330	23C	24"	15 - 18
FA-2340	23D	24"	18 - 23
FA-2410	24A	25"	5 - 9
FA-2420	24B	25"	9 - 15
FA-2430	24C	25"	15 - 19
FA-2440	24D	25"	19 - 24
FA-2510	25A	26"	5 - 9
FA-2520	25B	26"	9 - 15
FA-2530	25C	26"	15 - 19
FA-2540	25D	26"	19 - 25
FA-2610	26A	27"	5 - 9
FA-2620	26B	27"	9 - 13
FA-2630	26C	27"	13 - 19
FA-2640	26D	27"	19 - 26
FA-2710	27A	28"	5 - 9
FA-2720	27B	28"	9 - 13
FA-2730	27C	28"	13 - 19
FA-2740	27D	28"	19 - 26
FA-2810	28A	29"	7 - 12
FA-2820	28B	29"	12 - 16
FA-2830	28C	29"	16 - 23
FA-2840	28D	29"	23 - 28
FA-2910	29A	30"	7 - 12
FA-2920	29B	30"	12 - 16
FA-2930	29C	30"	16 - 23
FA-2940	29D	30"	23 - 28
FA-3010	30A	31"	7 - 12
FA-3020	30B	31"	12 - 16
FA-3030	30C	31"	16 - 23
FA-3040	30D	31"	23 - 28
FA-3110	31A	32"	7 - 12
FA-3120	31B	32"	12 - 16
FA-3130	31C	32"	16 - 23
FA-3140	31D	32"	23 - 28

Balance* Number	Alternative Number	Balance Height	Vent Weight
FA-3210	32A	33"	8 - 13
FA-3220	32B	33"	13 - 18
FA-3230	32C	33"	18 - 23
FA-3240	32D	33"	23 - 28
FA-3310	33A	34"	8 - 13
FA-3320	33B	34"	13 - 18
FA-3330	33C	34"	18 - 23
FA-3340	33D	34"	23 - 28
FA-3410	34A	35"	8 - 13
FA-3420	34B	35"	13 - 18
FA-3430	34C	35"	18 - 23
FA-3440	34D	35"	23 - 30
FA-3510	35A	36"	8 - 13
FA-3520	35B	36"	13 - 18
FA-3530	35C	36"	18 - 23
FA-3540	35D	36"	23 - 30
FA-3610	36A	37"	8 - 13
FA-3620	36B	37"	13 - 18
FA-3630	36C	37"	18 - 23
FA-3640	36D	37"	23 - 30
FA-3710	37A	38"	8 - 13
FA-3720	37B	38"	13 - 18
FA-3730	37C	38"	18 - 23
FA-3740	37D	38"	23 - 30
FA-3810	38A	39"	9 - 14
FA-3820	38B	39"	14 - 19
FA-3830	38C	39"	19 - 24
FA-3840	38D	39"	24 - 30
FA-3910	39A	40"	9 - 14
FA-3920	39B	40"	14 - 19
FA-3930	39C	40"	19 - 24
FA-3940	39D	40"	24 - 30
FA-4010	40A	41"	9 - 14
FA-4020	40B	41"	14 - 19
FA-4030	40C	41"	19 - 23
FA-4040	40D	41"	23 - 30
FA-4110	41A	42"	9 - 14
FA-4120	41B	42"	14 - 19
FA-4130	41C	42"	19 - 24
FA-4140	41D	42"	24 - 30
FA-4210	42A	43"	9 - 14
FA-4220	42B	43"	14 - 19
FA-4230	42C	43"	19 - 24
FA-4240	42D	43"	24 - 30

***Top and bottom guides are not included.**
Please see the following accessory page to determine what guides may be required.

Channel Window Balances (Overhead)

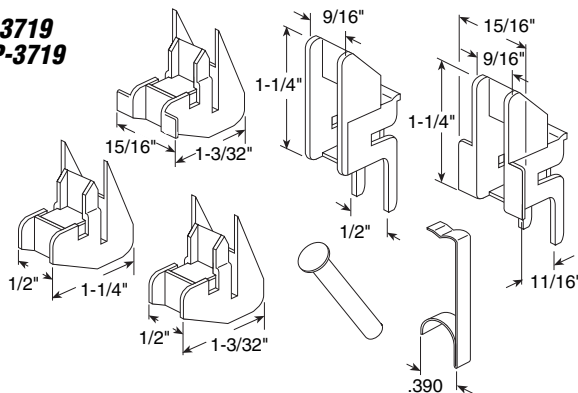
Balance Number	Balance Length	Vent Weight
FC-111	12-3/4"	4 - 7
FC-112	12-3/4"	7 - 11
FC-121	15-1/4"	4 - 8
FC-122	15-1/4"	8 - 12
FC-151	19-1/4"	5 - 9
FC-152	19-1/4"	9 - 13
FC-153	19-1/4"	13 - 16
FC-162	23-1/4"	9 - 14
FC-163	23-1/4"	14 - 20
FC-183	27-1/4"	17 - 22



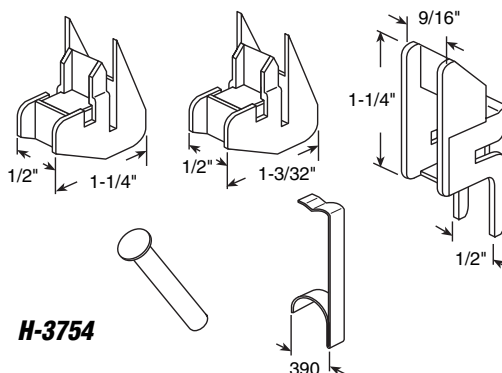
Ordering Tips:

- Check the back side of channel for stamped numbers (i.e.; 1410, 28A, 3620, etc.).
 - The first two digits indicate the actual glass height
 - The balance is **1" longer** than the part number indicates (i.e.; #1410 is **15" long**).
 - The second two digits or letter designation (A, B, C, D) denote the weight series of the balance (i.e.; #1410 or 14A is for light weight sash, 1420 or 14B is medium, 1430 or 14C is medium to heavy and 1440 or 14D is heavy. Please see the enclosed Selection Chart for actual weight variations).
- The **balance number, by itself, does not include top or bottom guides.**
 - Determine the correct guides required from pages H-28 & H-29. You may use the existing guides from the defective balance, however, this will require drilling out the attaching rivets.
 - Two rivets are supplied** with each balance to allow for replacement.
 - New guides may be ordered by the set (1 top and 1 bottom per bag, includes 2 rivets & 1 take-out clip) or in bulk (50 pack of each item, includes 50 rivets). You may also buy a universal kit (**EP-3719**) which includes an assortment (2 top guides, 3 bottom guides, 2 rivets and 1 take-out clip).
 - We will attach the top and bottom guides of your choice, to the balance, on minimum orders of 10 or more (See pages H-28 & H-29 for **installed part numbers**).
- A rivet set tool (**EP-3740**) is available to expedite installation of guides to balance.

H-3719
EP-3719



H-3754



Installation Hints:

(Vents must be removed in order to replace the balance assemblies).

To remove vent: Close vent to expose take-out clips. Open both clips for vent removal. Raise vent until top guide engages take-out clip. Continue to raise vent, 2 to 3 inches more. Move vent right or left as far as possible. Removal is then accomplished by swinging the opposite side of vent inward.

To replace balance assembly: Push down on balance until top guide is clear of take-out clip. Hold firmly and slowly lift up and away from jamb. Remove terminal clip and install new balance assembly using the reverse installation procedure. Be sure that top guide is secured under take-out clip. It is recommended that both balance assemblies be replaced in order to allow for efficient operation.

To replace vent: Position right or left side of vent into jamb, 2 to 3 inches above take-out clip and swing opposite side into alignment with frame. Then lower vent to engage balances and on down to clear take-out clips. This will automatically center the vent. Snap take-out clips into jamb to facilitate normal operation.

H-3719 (Carded)
EP-3719 (Bagged)

Repair Kit (For 5/8" channel balance)

Contents: 2 top guides; 3 bottom guides; 2 rivets; 1 take-out clip.

Description: An **assortment** of the most frequently used **nylon** top and bottom guides; including **aluminum** rivets for assembly and take-out clip for window sash removal.

H-3754 (Carded)

Repair Kit (For 5/8" channel balance)

Contents: 2 top guides; 2 bottom guides (1-3/32"); 2 bottom guides (1-1/4"); 4 rivets; 2 take-out clips.

Description: A **mini-assortment** of **glass filled nylon** top and bottom guides; will repair (2) 5/8" channel balances; a very popular assortment.

Repair Kit (For 5/8" channel balance)

H-3929 (Carded)

Contents: 2 top guides; 2 bottom guides; 4 rivets; 2 take-out clips.

FS-290B (Bagged)

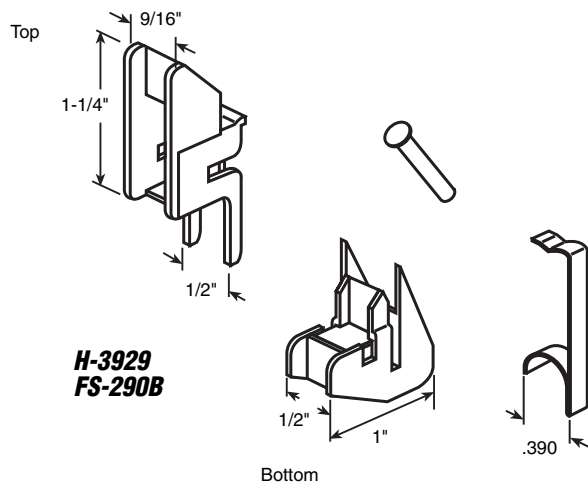
Contents: 1 top guide; 1 bottom guide; 2 rivets; 1 take-out clip.

Description: Commonly used **glass filled nylon** guides, but not necessarily universally applied to all 5/8" channel balances.

Bulk: FS-100PB (Top only - 50/bag)
FS-150PB (Bottom only - 50/bag)

Individually installed: FS-100** (Top)
FS-150** (Bottom)

** = Installed to balance of your choice (no minimum order).



Repair Kit (For 5/8" channel balance)

H-3706 (Carded)

Contents: 2 top guides; 2 bottom guides; 4 rivets; 2 take-out clips.

FS-291B (Bagged)

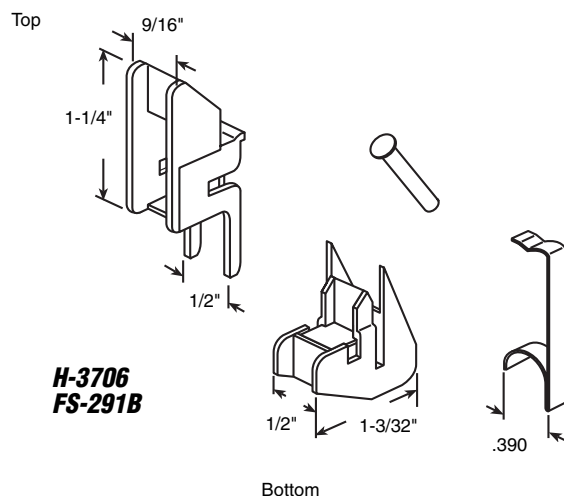
Contents: 1 top guide; 1 bottom guide; 2 rivets; 1 take-out clip.

Description: Commonly used **glass filled nylon** guides, but not necessarily universally applied to all 5/8" channel balances.

Bulk: FS-100PB (Top only - 50/bag)
FS-151PB (Bottom only - 50/bag)

Individually installed: FS-100** (Top)
FS-151** (Bottom)

** = Installed to balance of your choice (no minimum order).



Repair Kit (For 5/8" channel balance)

H-3930 (Carded)

Contents: 2 top guides; 2 bottom guides; 4 rivets; 2 take-out clips.

FS-292B (Bagged)

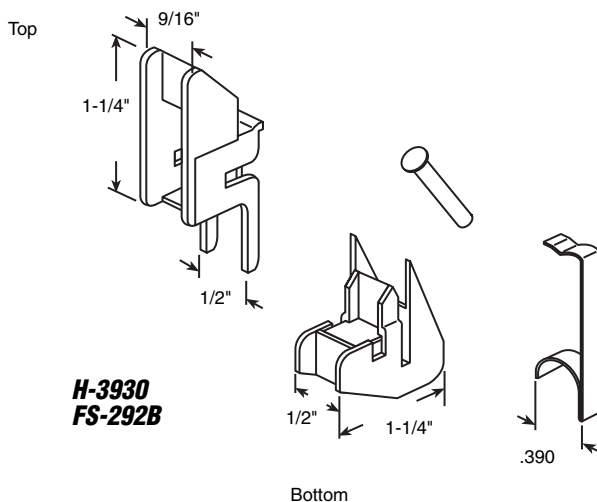
Contents: 1 top guide; 1 bottom guide; 2 rivets; 1 take-out clip.

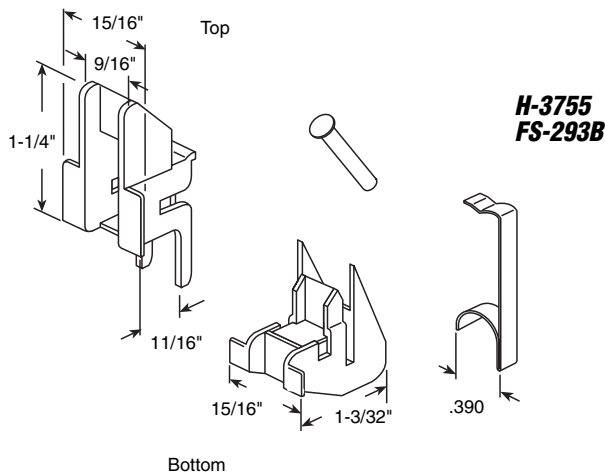
Description: Commonly used **glass filled nylon** guides, but not necessarily universally applied to all 5/8" channel balances.

Bulk: FS-100PB (Top only - 50/bag)
FS-152PB (Bottom only - 50/bag)

Individually installed: FS-100** (Top)
FS-152** (Bottom)

** = Installed to balance of your choice (no minimum order).





Repair Kit (For 5/8" channel balance)

H-3755 (Carded)

Contents: 2 top guide; 2 bottom guides; 4 rivets; 2 take-out clips.

FS-293B (Bagged)

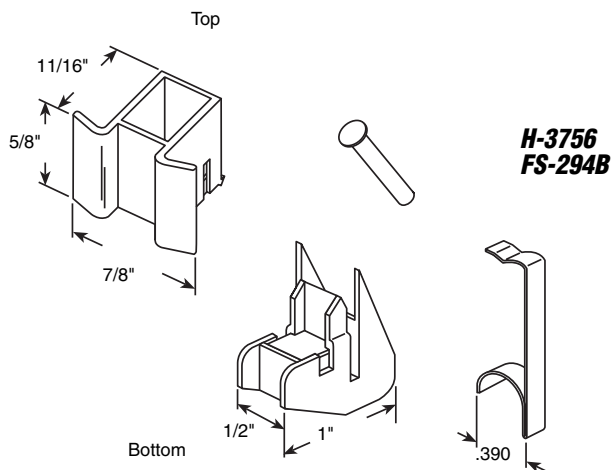
Contents: 1 top guide; 1 bottom guide; 2 rivets; 1 take-out clip.

Description: Commonly used **glass filled nylon** guides; used by many manufacturers on their 5/8" channel balances.

Bulk: FS-101PB (Top only - 50/bag)
FS-153PB (Bottom only - 50/bag)

Individually installed: FS-101** (Top)
FS-153** (Bottom)

** = Installed to balance of your choice (no minimum order).



Repair Kit (For 5/8" channel balance)

H-3756 (Carded)

Contents: 2 top guides; 2 bottom guides; 4 rivets; 2 take-out clips.

FS-294B (Bagged)

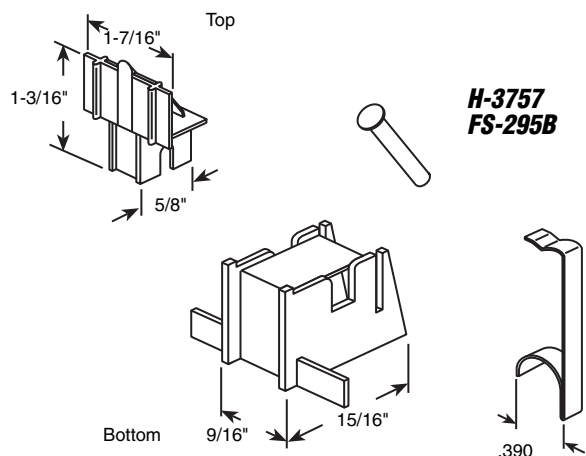
Contents: 1 top guide; 1 bottom guide; 2 rivets; 1 take-out clip.

Description: Commonly used **glass filled nylon** guides; used by many manufacturers on their 5/8" channel balances.

Bulk: FS-102PB (Top only - 50/bag)
FS-150PB (Bottom only - 50/bag)

Individually installed: FS-102** (Top)
FS-150** (Bottom)

** = Installed to balance of your choice (no minimum order).



Repair Kit (For 5/8" channel balance)

H-3757 (Carded)

Contents: 2 top guides; 2 bottom guides; 4 rivets; 2 take-out clips.

FS-295B (Bagged)

Contents: 1 top guide; 1 bottom guide; 2 rivets; 1 take-out clip.

Description: Commonly used **glass filled nylon** guides; used by many manufacturers on their 5/8" channel balances.

Bulk: FS-103PB (Top only - 50/bag)
FS-154PB (Bottom only - 50/bag)

Individually installed: FS-103** (Top)
FS-154** (Bottom)

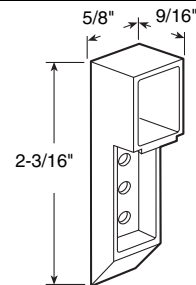
** = Installed to balance of your choice (no minimum order).

H-3837 (2/card)
EP-3837 (25/bag)

Sash Cam

Contents: Sash cams.

Description: Nylon cams attach to top edge of vent and provides for proper operating clearance.



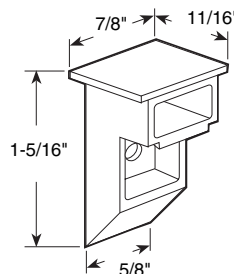
H-3837
EP-3837

H-3838 (2/card)
EP-3838 (25/bag)

Sash Cam

Contents: Sash cams.

Description: Nylon cams attach to top edge of vent and provides for proper operating clearance.



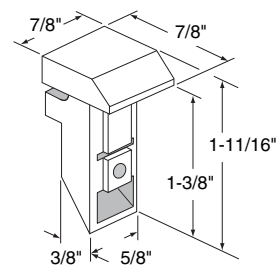
H-3838
EP-3838

H-3898 (2/card)
EP-3898 (25/bag)

Sash Cam

Contents: Sash cams.

Description: Nylon cams attach to top edge of vent and provides for proper operating clearance.



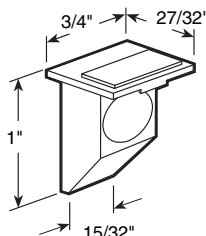
H-3898
EP-3898

H-3917 (2/card)
EP-3917 (25/bag)

Sash Cam

Contents: Sash cams.

Description: Nylon cams attach to top edge of vent and provides for proper operating clearance.



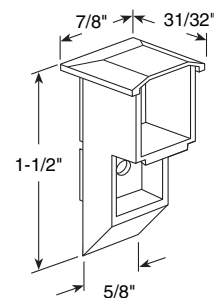
H-3917
EP-3917

H-3918 (2/card)
EP-3918 (25/bag)

Sash Cam

Contents: Sash cams.

Description: Nylon cams attach to top edge of vent and provides for proper operating clearance.



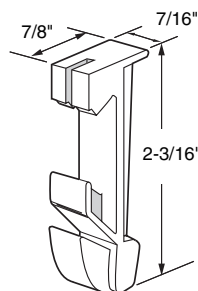
H-3918
EP-3918

H-3904 (2/card)
EP-3904 (25/bag)

Lift Hook

Contents: Lift hooks.

Description: Black nylon hooks; fits on *International* on single hung, overhead window balances; attaches balance cord to sash.



H-3904
EP-3904

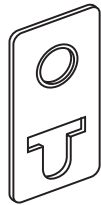


FS-250B (100/bag)

Terminal Clips

Contents: 100 terminal clips.

Description: Used by many manufacturers to attach balance cord to window frame.



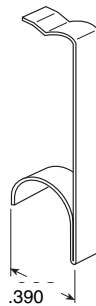
FS-253B

FS-253B (100/bag)

Terminal Clip (For overhead 5/8" channel balance)

Contents: 100 terminal clips.

Description: Stamped steel clip attaches to end of cord and is then secured to top of window sash; used on overhead channel balances.



FS-260B

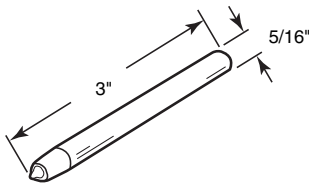
FS-260B (100/bag)

Take-Out Clip

Contents: 100 take-out clips.

Description: Spring steel clips used on block and tackle type sash balances.

You may wish to stock these related parts: **H-3720 thru H-3729.**



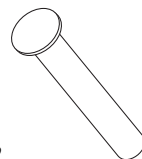
EP-3740

EP-3740

Rivet Installation Tool

Contents: 1 tool per bag.

Description: Steel tool with hardened steel rivet setting tip; used to set rivets when installing guides to channel balances.



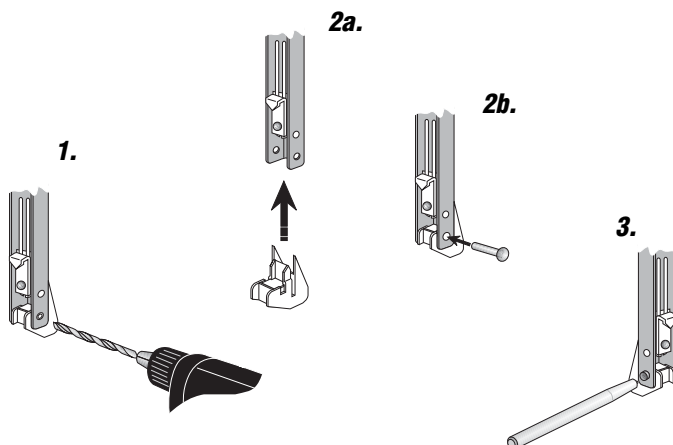
FS-261B

FS-261B

Rivets

Contents: 1000 rivets per bag.

Description: Aluminum, hollow-tip rivets are used to install guides to channel balances.



Channel Balance Accessories Easy Replacement Guide

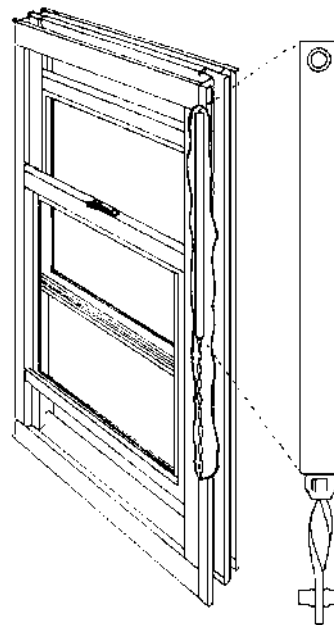
1. Drill out existing rivet using 3/32" bit (drill thru crimped side of rivet).
2. Slide new self locating guide (top or bottom) on to appropriate end of balance. Align holes and insert rivet thru the drilled out hole in balance.
3. Place balance on solid surface with rivet head down. Locate pointed end of rivet installation tool in open end of rivet. Tap end of tool firmly with hammer to crimp rivet.

Spiral Window Balances

HOW TO ORDER:

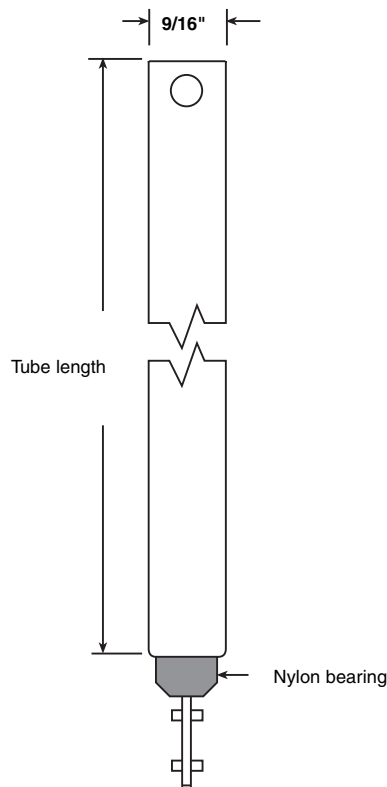
1. Determine series designation.
2. Measure tube length.
3. Specify nylon bearing color to indicate spring weight: (white-standard, red-medium, blue or black-heavy).
4. **These balances are all metal tube.**
5. All balances are sold individually in bulk.

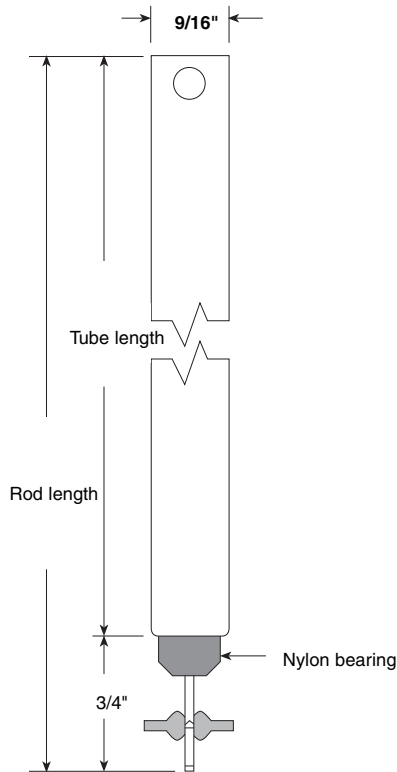
- Great new category of replacement items.
- Customer demand is growing steadily.
- Special order or stock your region's specific needs.



Spiral Window Balance (9/16" Dia.) Series FH (Tilt)

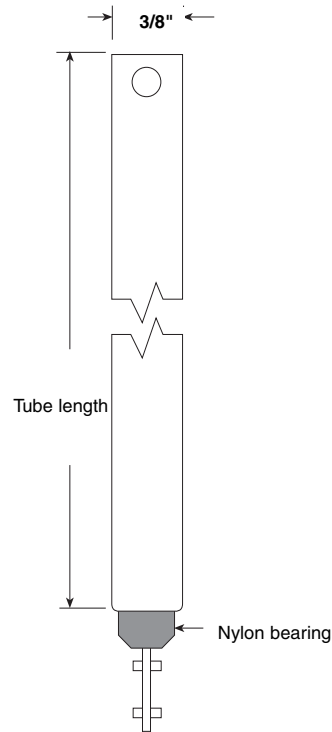
Tube Length	Bearing Color		
	White	Red	Blue
15"	FH-1510	FH-1520	FH-1530
16"	FH-1610	FH-1620	FH-1630
17"	FH-1710	FH-1720	FH-1730
18"	FH-1810	FH-1820	FH-1830
19"	FH-1910	FH-1920	FH-1930
20"	FH-2010	FH-2020	FH-2030
21"	FH-2110	FH-2120	FH-2130
22"	—	FH-2220	FH-2230
23"	—	FH-2320	FH-2330
24"	—	FH-2420	FH-2430
25"	—	FH-2520	FH-2530
26"	—	FH-2620	FH-2630
27"	—	FH-2720	FH-2730
28"	—	FH-2820	FH-2830
29"	—	FH-2920	FH-2930
30"	—	FH-3020	FH-3030
31"	—	FH-3120	FH-3130
32"	—	FH-3220	FH-3230
33"	—	FH-3320	—
34"	—	FH-3420	—
35"	—	FH-3520	—
36"	—	FH-3620	—
37"	—	FH-3720	—
38"	—	FH-3820	—
39"	—	FH-3920	—





Spiral Window Balance (9/16" Dia.) Series FJ (Non-tilt)

Tube Length	Bearing Color	
	Red	Blue
15"	FJ-1520	FJ-1530
16"	FJ-1620	FJ-1630
17"	FJ-1720	FJ-1730
18"	FJ-1820	FJ-1830
19"	FJ-1920	FJ-1930
20"	FJ-2020	FJ-2030
21"	FJ-2120	FJ-2130
22"	FJ-2220	FJ-2230
23"	FJ-2320	FJ-2330
24"	FJ-2420	FJ-2430
25"	FJ-2520	FJ-2530
26"	FJ-2620	FJ-2630
27"	FJ-2720	FJ-2730
28"	FJ-2820	FJ-2830
29"	FJ-2920	FJ-2930
30"	FJ-3020	FJ-3030
31"	FJ-3120	FJ-3130
32"	FJ-3220	FJ-3230
33"	FJ-3320	—
34"	FJ-3420	—
35"	FJ-3520	—
36"	FJ-3620	—
37"	FJ-3720	—
38"	FJ-3820	—
39"	FJ-3920	—



Spiral Window Balance (3/8" Dia.) Series FL (Tilt)

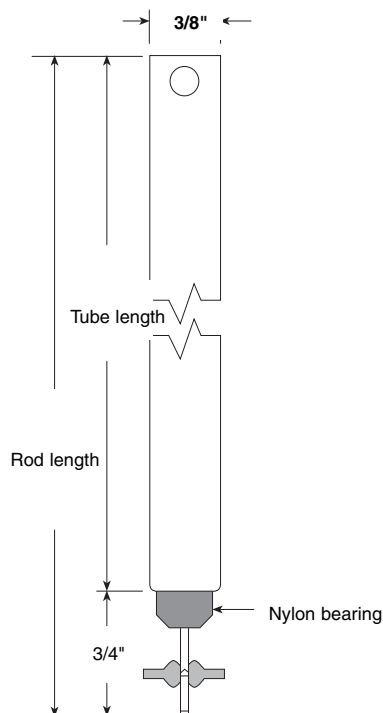
Tube Length	Bearing Color Red
18"	FL-1820
19"	FL-1920
20"	FL-2020
21"	FL-2120
22"	FL-2220
23"	FL-2320
24"	FL-2420
25"	FL-2520
26"	FL-2620
27"	FL-2720
28"	FL-2820
29"	FL-2920
30"	FL-3020

Window Hardware

Spiral Window Balance (3/8" Dia.) Series FM (Non-tilt)

Tube Length **Bearing Color**
Red

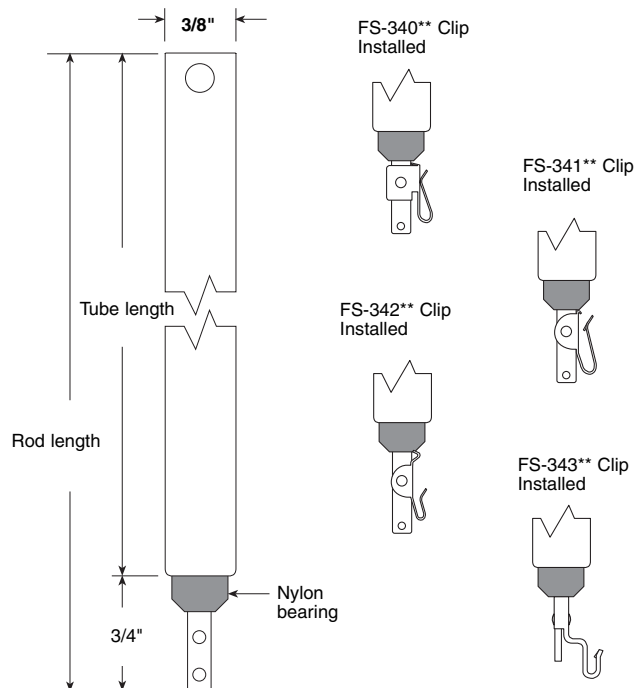
18"	FM-1820
19"	FM-1920
20"	FM-2020
21"	FM-2120
22"	FM-2220
23"	FM-2320
24"	FM-2420
25"	FM-2520
26"	FM-2620
27"	FM-2720
28"	FM-2820
29"	FM-2920
30"	FM-3020



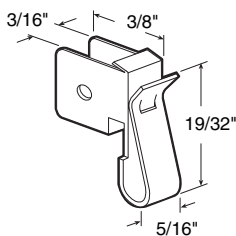
Spiral Window Balance (3/8" Dia.) Series FR (Non-tilt - with clip installed)

Bearing Color - Red

Tube Length	Bearing Color - Red			
	Clip FS-340**	Clip FS-341**	Clip FS-342**	Clip FS-343**
18"	FR-1820-340	FR-1820-341	FR-1820-342	FR-1820-343
19"	FR-1920-340	FR-1920-341	FR-1920-342	FR-1920-343
20"	FR-2020-340	FR-2020-341	FR-2020-342	FR-2020-343
21"	FR-2120-340	FR-2120-341	FR-2120-342	FR-2120-343
22"	FR-2220-340	FR-2220-341	FR-2220-342	FR-2220-343
23"	FR-2320-340	FR-2320-341	FR-2320-342	FR-2320-343
24"	FR-2420-340	FR-2420-341	FR-2420-342	FR-2420-343
25"	FR-2520-340	FR-2520-341	FR-2520-342	FR-2520-343
26"	FR-2620-340	FR-2620-341	FR-2620-342	FR-2620-343
27"	FR-2720-340	FR-2720-341	FR-2720-342	FR-2720-343
28"	FR-2820-340	FR-2820-341	FR-2820-342	FR-2820-343
29"	FR-2920-340	FR-2920--341	FR-2920-342	FR-2920-343
30"	FR-3020-340	FR-3020-341	FR-3020-342	FR-3020-343



FS-340**



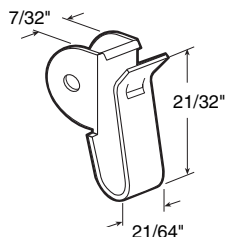
FS-340**

Clip (For 3/8" spiral balance)

Contents: Individually installed to Series FR spiral balance of your choice.

Description: Stamped steel clips are required to attach spiral balance to window sash.

** = Installed to balance of your choice (no minimum order).



FS-341**

FS-341**

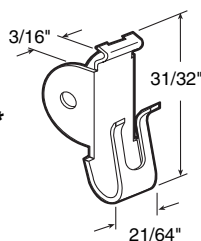
Clip (For 3/8" spiral balance)

Contents: Individually installed to Series FR spiral balance of your choice.

Description: Stamped steel clips are required to attach spiral balance to window sash.

** = Installed to balance of your choice (no minimum order).

FS-342**



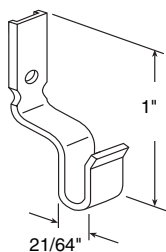
FS-342**

Clip (For 3/8" spiral balance)

Contents: Individually installed to Series FR spiral balance of your choice.

Description: Stamped steel clips are required to attach spiral balance to window sash.

** = Installed to balance of your choice (no minimum order).



FS-343**

FS-343**

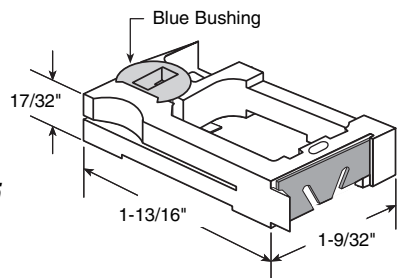
Clip (For 3/8" spiral balance)

Contents: Individually installed to Series FR spiral balance of your choice.

Description: Stamped steel clips are required to attach spiral balance to window sash.

** = Installed to balance of your choice (no minimum order).

**H-3785
EP-3785**



H-3785 (2/card)
EP-3785 (4/bag)

Pivot Lock Shoe

Contents: Lock shoes.

Description: Nylon shoes with blue bushing; fits on Caldwell 5/8" spiral balances on tilt style systems.

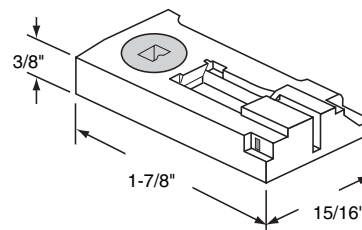
H-3786 (2/card)
EP-3786 (4/bag)

Pivot Lock Shoe

Contents: Lock shoes.

Description: Nylon shoes; used on $3/8$ " spiral balances on tilt style systems.

H-3786
EP-3786

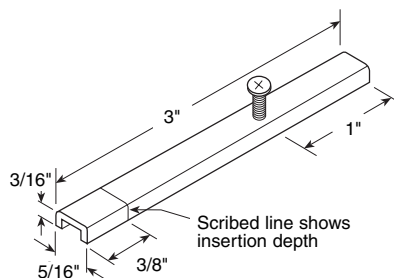


H-3758 (2/card)
EP-3758 (25/bag)

Pivot Bar

Contents: Pivot bars with screws.

Description: Stamped steel pivot bar used with $5/8$ " spiral balances on tilt style systems.



H-3758
EP-3758

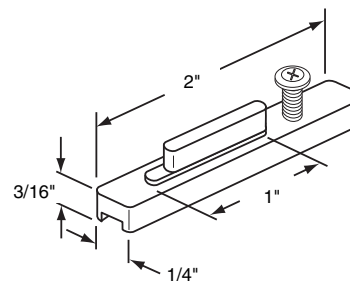
H-3897 (2/card)
EP-3897 (25/bag)

Pivot Bar

Contents: Pivot bars.

Description: Zinc diecast pivot bar used with $3/8$ " spiral balances on tilt style systems.

H-3897
EP-3897

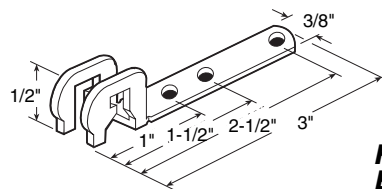


H-3759 (2/card)
EP-3759 (25/bag)

Balance Foot

Contents: Balance feet.

Description: Stamped steel foot as used to attach $5/8$ " spiral balances to bottom of non-tilt sash.



H-3759
EP-3759

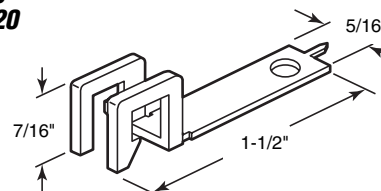
H-3920 (2/card)
EP-3920 (25/bag)

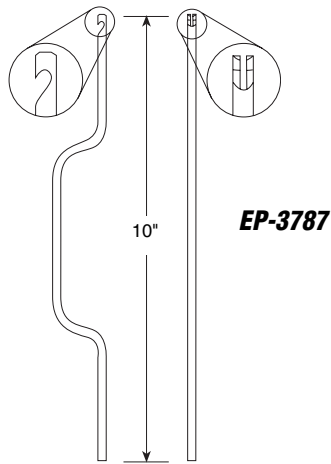
Balance Foot

Contents: Balance feet.

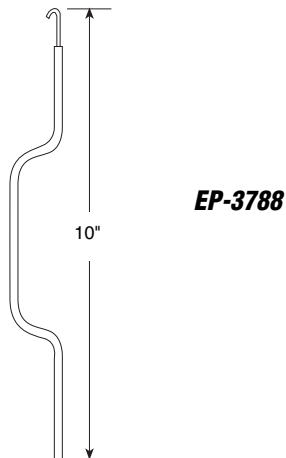
Description: Stamped steel foot as used to attach $3/8$ " spiral balances to bottom of non-tilt sash.

H-3920
EP-3920

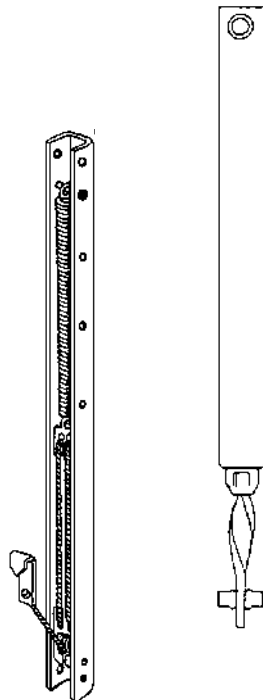




EP-3787



EP-3788



EP-3787

Tension Tool (For tilt balance)

Contents: 1 tool per bag.

Description: Plated steel tool used to crank necessary balance spring tension when installing new balance on **tilt type systems**.

EP-3788

Tension Tool (For non-tilt balance)

Contents: 1 tool per bag.

Description: Plated steel tool used to crank necessary balance spring tension when installing new balance on **non-tilt type systems**.

Channel and Spiral balances are available in many different configurations. We stock a large array of the most popular balances, however, you may come up with a special requirement. Don't hesitate to contact us for those special needs.