

When your project requires hardware that looks like casement window from the turn of the century, turn to Truth Hardware for our new line of hardware for push-out windows which combines the aesthetic characteristics from yesteryear with the performance requirements of today.

Push-out window systems have seen a resurgence in recent times with the popularity of timber frame, log and craftsman style homes, and builders are also incorporating this manual style window into sidelights for doors.

Following extensive research and engineering, Truth is launching a full line of hinges, locks and related push-out hardware to meet the requirements of this popular market segment.

Available in both “classic” and “retro” looks, Truth’s hardware systems for push-out windows are designed to meet your historic application needs.

LOCK BAR SYSTEMS

Truth has designed two types of lock bar systems – one for standard push-out windows and the other specifically designed for French style double casement window applications.

The standard lock bar system is available in either steel or stainless steel and allows up to four locking points on sash heights up to 7 feet high. With a standard backset of 22mm, this lock bar is a single integrated unit which allows for quick installation by the window manufacturer.

The locking systems provide a range of handle activation heights which permits the manufacturer to place the handle wherever they would like, including centered low on the window sash to help comply with ADA restricted applications.

The French locking system is even more flexible since the lock drive box is separate from the driven lock bars. This allows the upper and lower lock bars to be selected from a wide range of lengths and then cut to specific size for applications. All French lock bars incorporate a shoot bolt for added security. The French locking system is available in steel with a coastal plating package as an option.



HINGES

Truth also offers special high friction hinges which were engineered to fit the standard hinge cavity to help provide resistance to wind moving the sash while in the open position. Available in stainless steel as a standard, these hinges are available in two sizes (10” and 14”). With egress or washability options to choose from, these hinges use the same snap-stud design as Truth’s standard 2-Bar hinges and optional hinge stops are available for larger window applications.

STAY BARS

If even more wind resistance is required, or the window sash is too large to reach the activation handle on the lock bar system, then Truth recommends using our sill mounted Stay Bars. Available in 2 lengths, this hardware provides more stability when open and will assist the homeowner when closing a wider sash. One unique feature of our stay bar is the ability to hold the sash in any position and not interfere with the closed screen.

OPTIONAL HARDWARE

Truth Hardware also offers a full complement of swing screen hardware including hinges which allow easy seasonal removal of the screens. In addition, Truth offers an assortment of screen handle options to complement the sash hardware.

PRODUCT APPLICATION ASSISTANCE:

If you are designing a new window profile, or are having difficulty selecting hardware for your window, please contact Truth. Our highly trained Product Specialists can assist you with the selection of the appropriate hardware to meet your performance requirements, as well as providing personalized application drawings.

WARRANTY:

Protected under the terms of the Truth Warranty for Window & Door Manufacturers & Authorized Distributors. Refer to Truth’s Terms & Conditions for further details.

MATERIALS:

Locking bars: Steel with zinc plating or 300 series Stainless Steel

Locking handles: High pressure zinc diecast, powder coated or decorative plate

Hinges: 300 series Stainless Steel

Stay Bars: Solid brass with powder coat or decorative plate

Screen Handles: High pressure zinc diecast, powder coated or decorative plate

Screen Hinges: Solid brass with powder coat or decorative plate

FINISH:

Available in a wide range of powder coat paint or decorative plating

ORDERING INFORMATION:

Because of the variety of push out window profile designs on the market, Truth suggests that you contact Truth Hardware's Product Specialists to help you identify the components that will best meet your requirements and to provide application assistance when requested. To assist us in helping you identify the product that need, please be prepared to provide Truth with the type and style of profile that you are mounting your hardware to.

RECOMMENDED SCREWS:

Types of screws required determined by material of profile used. See Tech Note #11. Refer to drawings for complete information on screw type and quantity needed (sold separately).

TRUTH TIPS

1. Screen hinges are designed to be detachable to allow seasonal screen removal, therefore orientation of the hinges must be considered when selecting and mounting hinge components.
2. The Stay Bar utilizes a loose rivet at the sash bracket to allow easy sash disconnection for maintenance. Orientation of the sash bracket and pin must be considered to avoid the pin falling out and becoming lost.
3. Friction hinges and Stay bars provide only limited resistance to wind driven sash movement. Push out windows using this hardware should not be left unattended in windy conditions.
4. A construction handle (PN 23377) is available for operation of the locking systems without having the decorative handles in place.

5. The tongued version of the "classic" or "retro" handles are intended for aesthetic purposes only, they are intended to be used in conjunction with a locking bar system to carry weather and forced entry loads applied to the sash. Use of these handles as single point locks is not recommended.

6. Truth recommends that when designing a casement window the sash width should be limited to no greater than 66% of the sash height. A sash width that exceeds 66% could develop sash sag over the life of the window. Refer to Truth Technical Note # 3 for more information dealing with sash sag prevention.

7. The Concealed Casement Hinge with snap stud attachment was designed to be used on a casement window only. Under no circumstances should a casement hinge with a snap stud be used on an awning window

8. With the flat bottom track, screw heads will be raised above the track when installed. Truth's Delrin shoe now has a higher bridge to clear screw heads (.060" high).

9. A standard 3/8" wrench can be used to adjust a hinge equipped with the adjustable stud, however this will require detaching the support arms from the track. To adjust this hinge without detaching the support arms it is necessary to use Truth's slim-line wrench #31887

10. When selecting mounting screws for Truth hardware, coating compatibility is one of the most important criteria. For best corrosion resistance the coating on the screws should be the same as the coating on the hardware. For more information see Tech Note #11.

11. On some window designs, binding can be experienced on the hinge side of the window between the outermost edge of the sash and the jamb. This problem often occurs when switching from standard to and "egress" hinge. If a window system is designed to work with an "egress" hinge, the window system will work with all other Truth Concealed Casement Hinges. When binding is encountered, three solutions are available: a) move hinge location toward outside of sash, b) increase the clearance between the sash and jamb, and c) decrease the thickness of the sash.

INCLUDE TRUTH SPECS ON YOUR NEXT WINDOW PROJECT

Push out window hinges shall be provided which allow easy adjustment of window position and maintain position in light wind conditions. The locking system will provide a craftsman period aesthetic with hidden multiple security points. The Stay bar must allow a 90° open sash projection and not interfere with the screen in any position.

Push out window hardware shall be provided by Truth Hardware, Owatonna, MN.

FIG. 1 CLASSIC MULTI-POINT 60.00.XX.001/.002

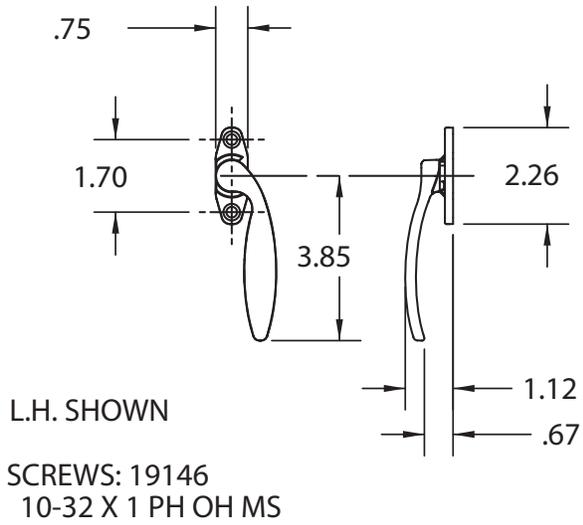


FIG. 2 CLASSIC SINGLE POINT 60.01.XX.001/.002

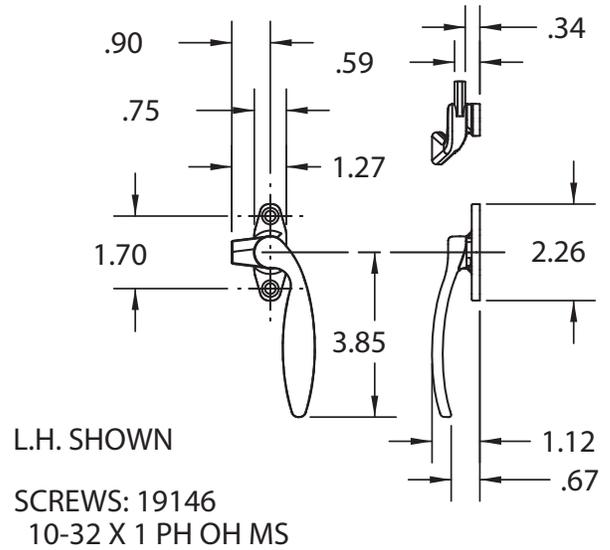


FIG. 3 RETRO MULTI-POINT 60.02.XX.001/.002

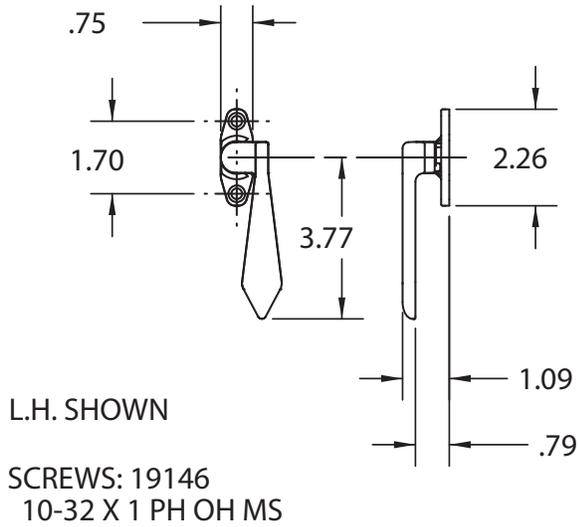


FIG. 4 RETRO SINGLE POINT 60.03.XX.001/.002

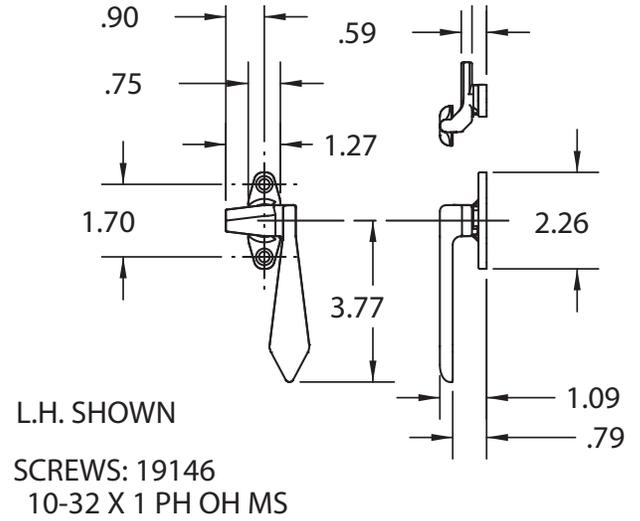
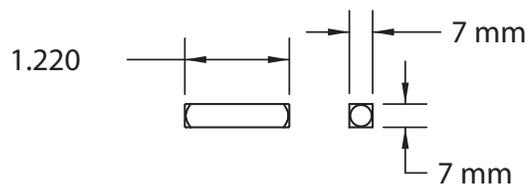


FIG. 5 SPINDLE 22852



NOTE: CUSTOM LENGTHS OFFERED
CLEARANCE HOLE IS Ø.4375

BAR LENGTH "A"		2 PT. LOCATIONS "B"	4 PT. LOCATIONS "C"	HDL SETBACK "D" = 22mm		Handle Height
mm	in			9mm ROLLER		
				STEEL	SST	
600	23.62	19.13		13750	13760	8.00
800	31.50	27.01		13751	13761	8.00
1000	39.37	34.88	11.57	13752	13762	8.00
1200	47.24	42.76	15.51	13753	13763	8.00
1400	55.11	50.62	19.45	13754	8.00	
1600	63.00	58.51	23.39	13755	13765	8.00

FIG. 8 LOCK BAR LOW HANDLE (SEE CHART ABOVE)

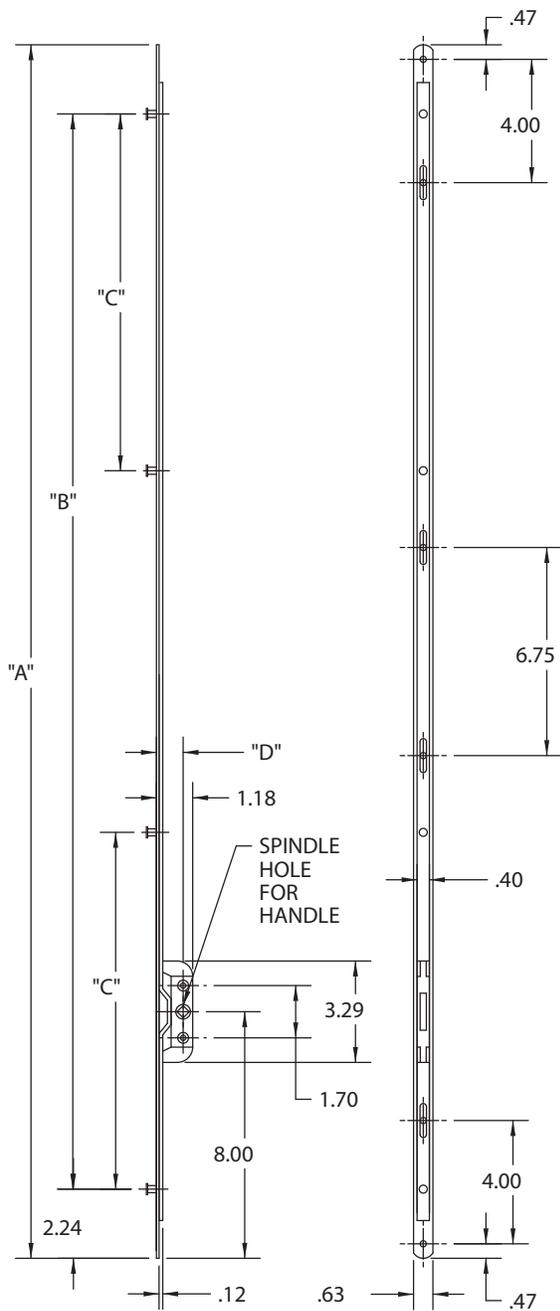


FIG. 9 APPLICATION OF LOCK BAR INTO SASH ROUTING AND DRILLING PATTERN

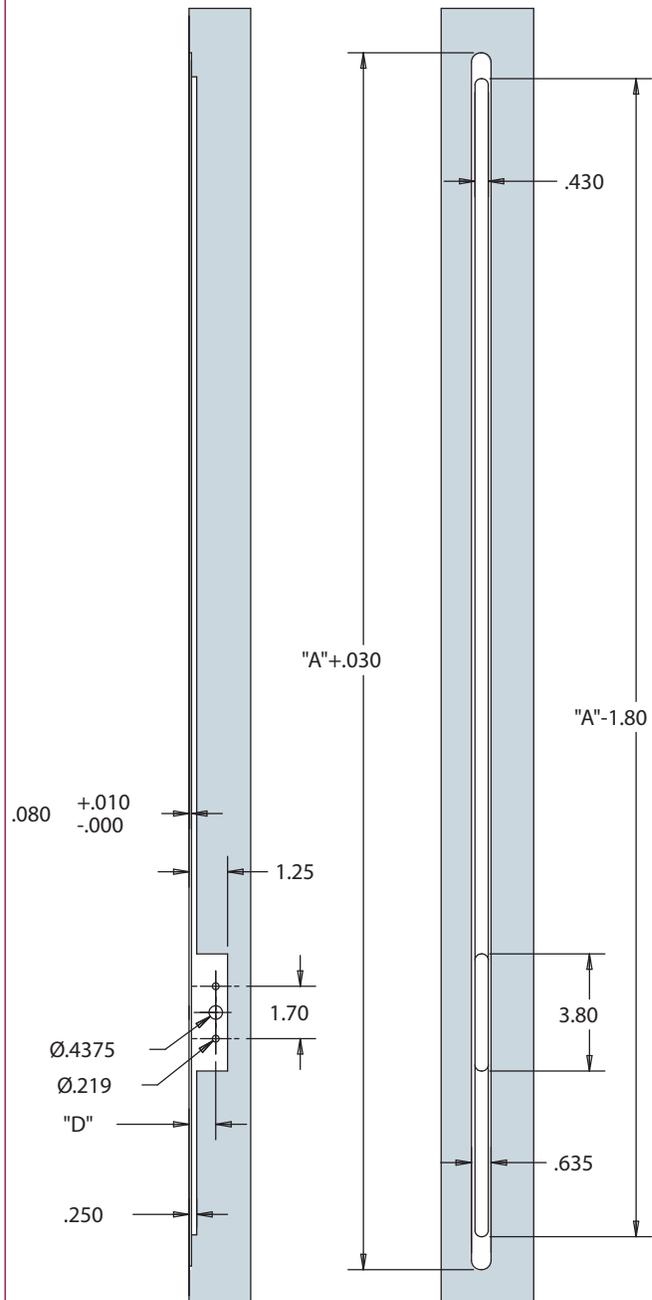
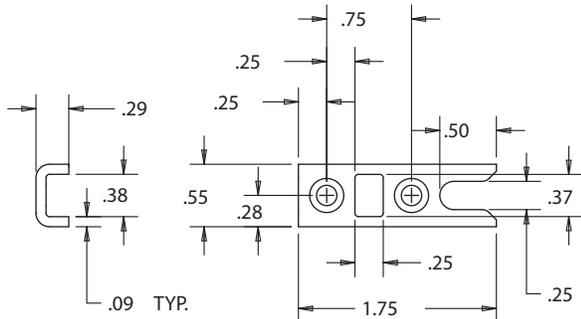
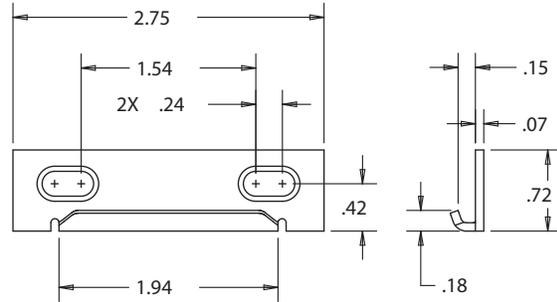


FIG. 10 KEEPER-JAMB 23230



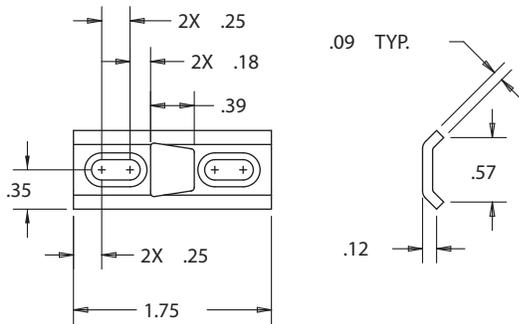
NOTE: ALSO FUNCTIONS AS SHOOT BOLT KEEPER
SCREWS: 19240 - 8 X 1 PH FH SMS

FIG. 11 KEEPER-JAMB 23321



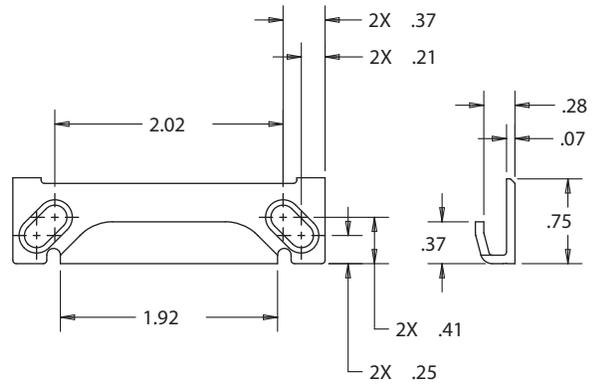
SCREWS: 19240 - 8 X 1 PH FH SMS

FIG. 12 SHOOT BOLT KEEPER 23323



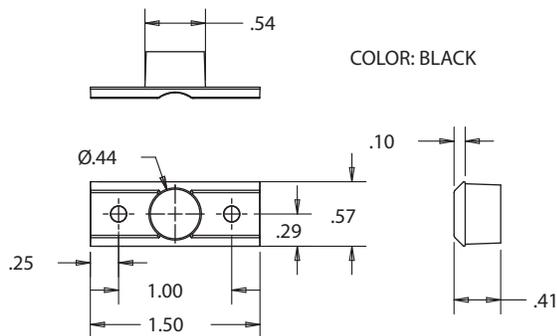
SCREWS: 19240 - 8 X 1 PH FH SMS

FIG. 13 KEEPER-JAMB 33004



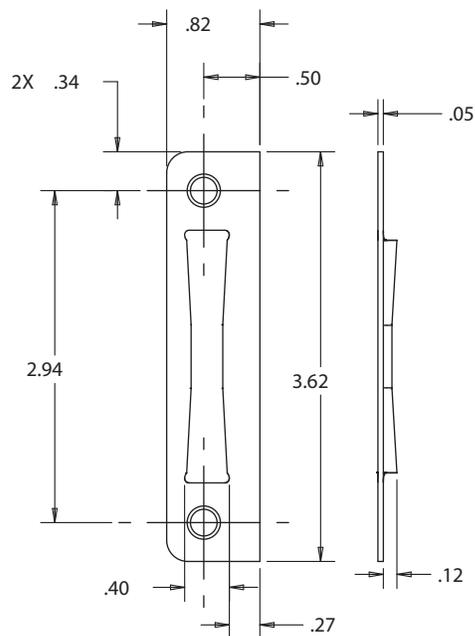
SCREWS: 19240 - 8 X 1 PH FH SMS

FIG. 14 SHOOT BOLT INSERT 23298



NOTE: FITS BELOW 23323 SHOOT BOLT KEEPER

FIG. 15 KEEPER-SINGLE POINT 30569



SCREWS: 19110 - 7 X 3/4 PH FH SMS

FIG. 16 FRENCH LONG LOCK BOX 13485

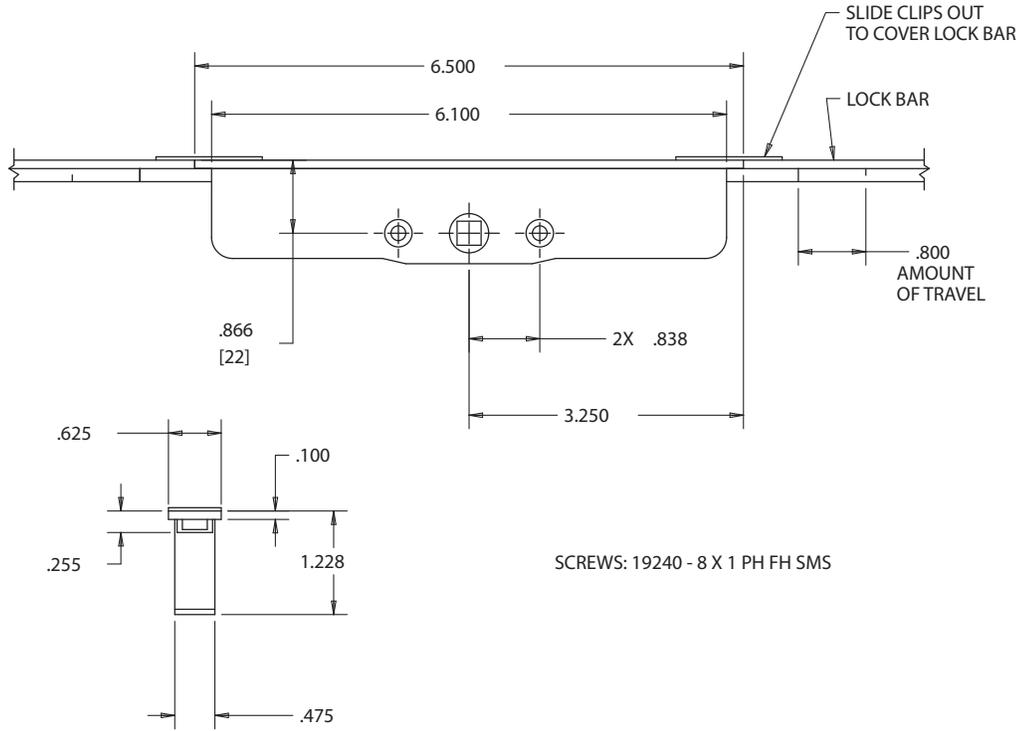
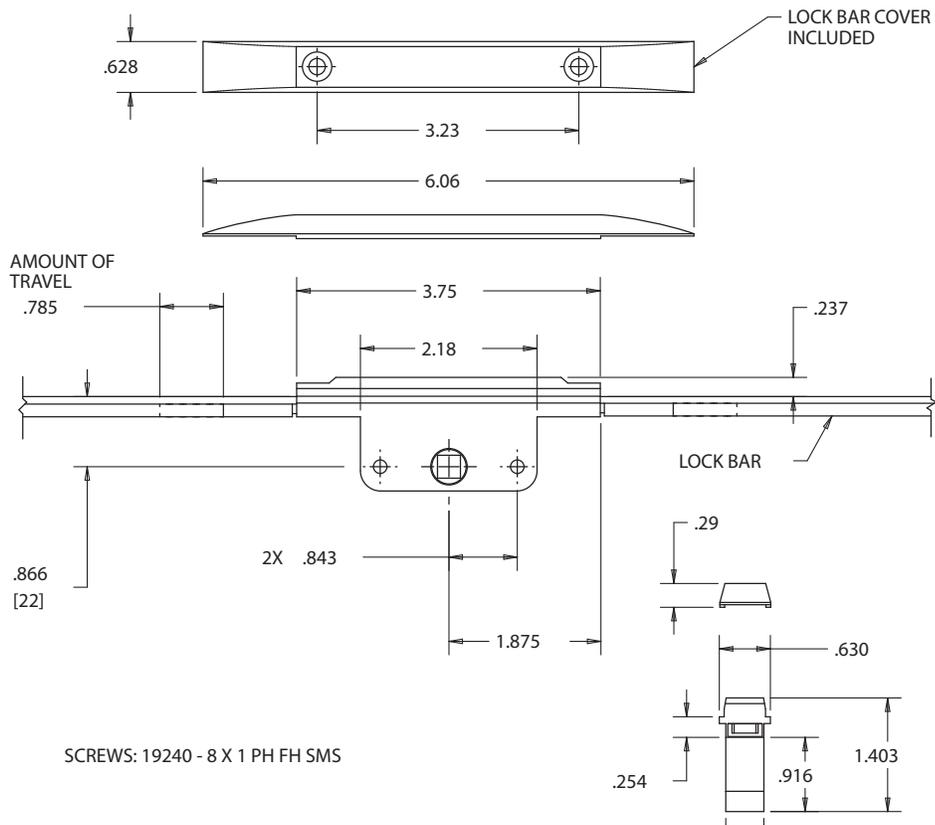


FIG. 17 FRENCH SHORT LOCK BOX 7 COVER 13875



PUSH OUT HARDWARE

SASH SIZE "A" Handle Centered	BAR LENGTH "B"			LOCK POINT HEIGHT "C"		HANDLE HEIGHT "D"	LOCKING POINTS		SCREW HOLES		
	MM	MAX	MIN	9MM			"E"	"F"	"G"	"H"	"I"
		IN	IN	ROLLER	NO ROLLER						
27.02	260	10.31	5.11	13860	13469	13.51		4.17	1.87		
37.26	390	15.43	10.23	13861	13470	18.63		9.30	1.87		6.98
47.36	520	20.48	15.28	13862	13471	23.68		14.21	1.87	5.70	12.04
57.76	650	25.68	20.48	13863	13472	28.88		19.44	1.87	8.36	17.26
67.86	780	30.73	25.53	13864	13473	33.93	4.38	24.65	2.06	12.12	22.36
78.12	910	35.86	30.66	13865	13474	39.06	4.23	29.63	2.06	14.68	27.47
88.38	1040	40.99	35.79	13866	13475	44.19	4.38	34.89	2.06	17.22	32.56

FIG. 18 FRENCH CASEMENT LOCK BAR - LONG BOX (SEE CHART ABOVE)

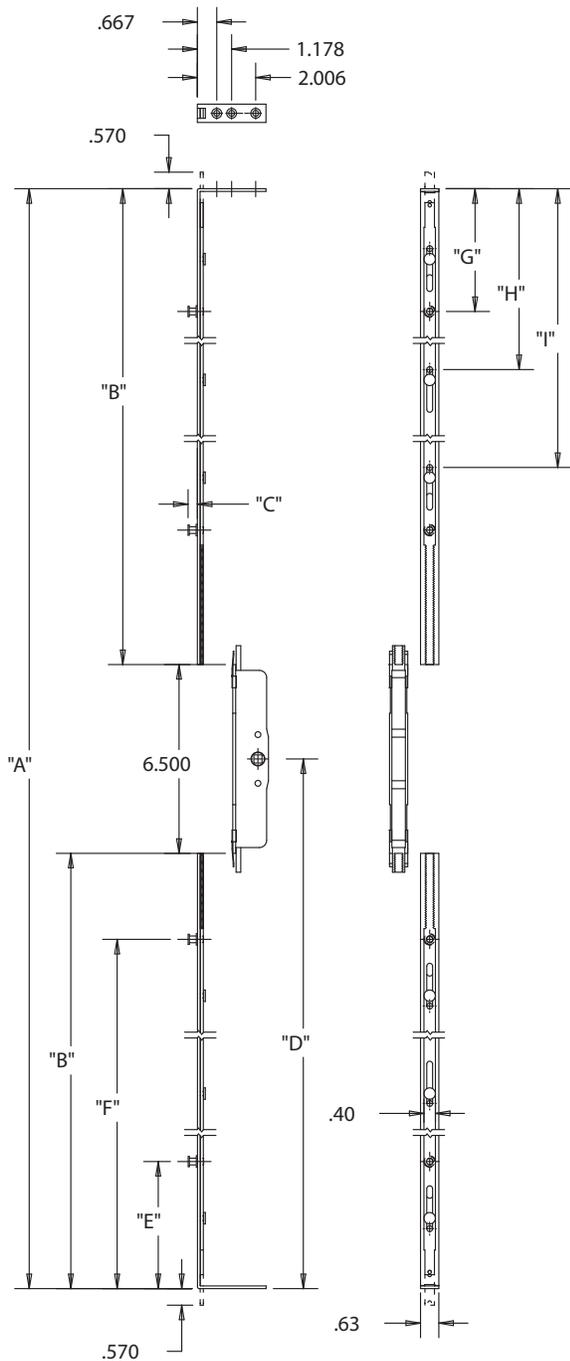
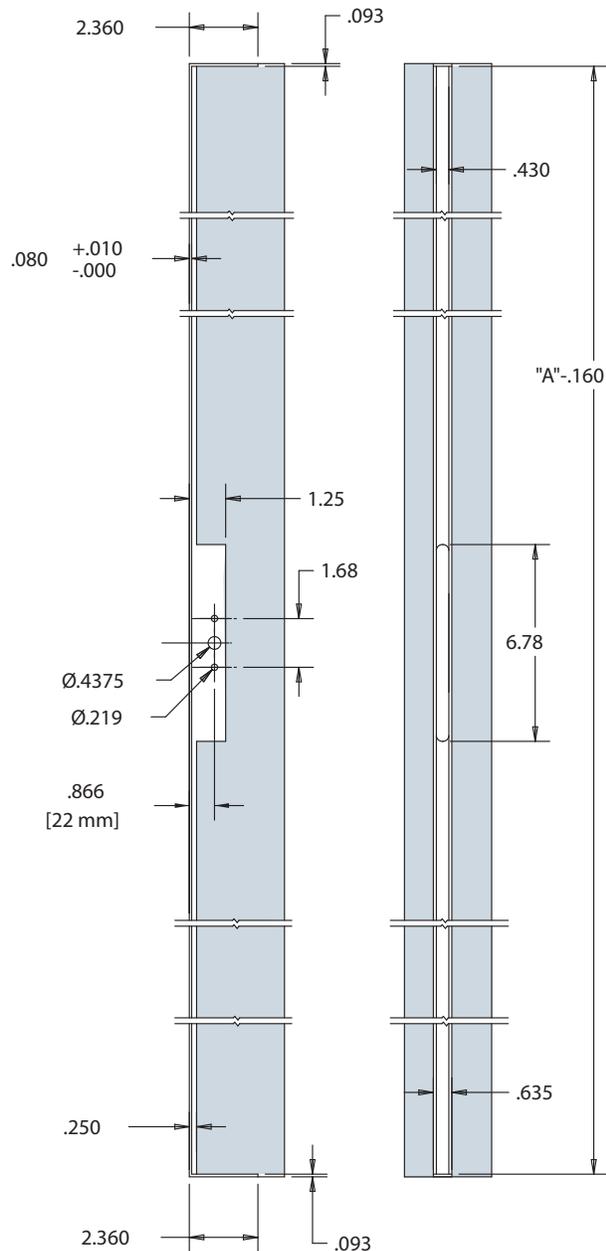


FIG. 19 APPLICATION OF LOCK BAR INTO SASH ROUTING AND DRILLING PATTERN



SASH SIZE "A" Handle Centered	BAR LENGTH "B"		LOCK POINT HEIGHT "C"		HANDLE HEIGHT "D"	LOCKING POINTS		SCREW HOLES			
	MM	MAX	MIN	9MM		"E"	"F"	"G"	"H"	"I"	
		IN	IN	ROLLER							NO ROLLER
24.38	260	10.31	5.11	13860	13469	12.19		4.17	1.87		
34.61	390	15.43	10.23	13861	13470	17.31		9.30	1.87		6.98
44.41	520	20.48	15.28	13862	13471	22.21		14.21	1.87	5.70	12.04
55.1	650	25.68	20.48	13863	13472	27.55		19.44	1.87	8.36	17.26
65.21	780	30.73	25.53	13864	13473	32.61	4.38	24.65	2.06	12.12	22.36
75.46	910	35.86	30.66	13865	13474	37.73	4.23	29.63	2.06	14.68	27.47
85.72	1040	40.99	35.79	13866	13475	42.86	4.38	34.89	2.06	17.22	32.56

FIG. 20 FRENCH CASEMENT LOCK BAR - SHORT BOX (SEE CHART ABOVE)

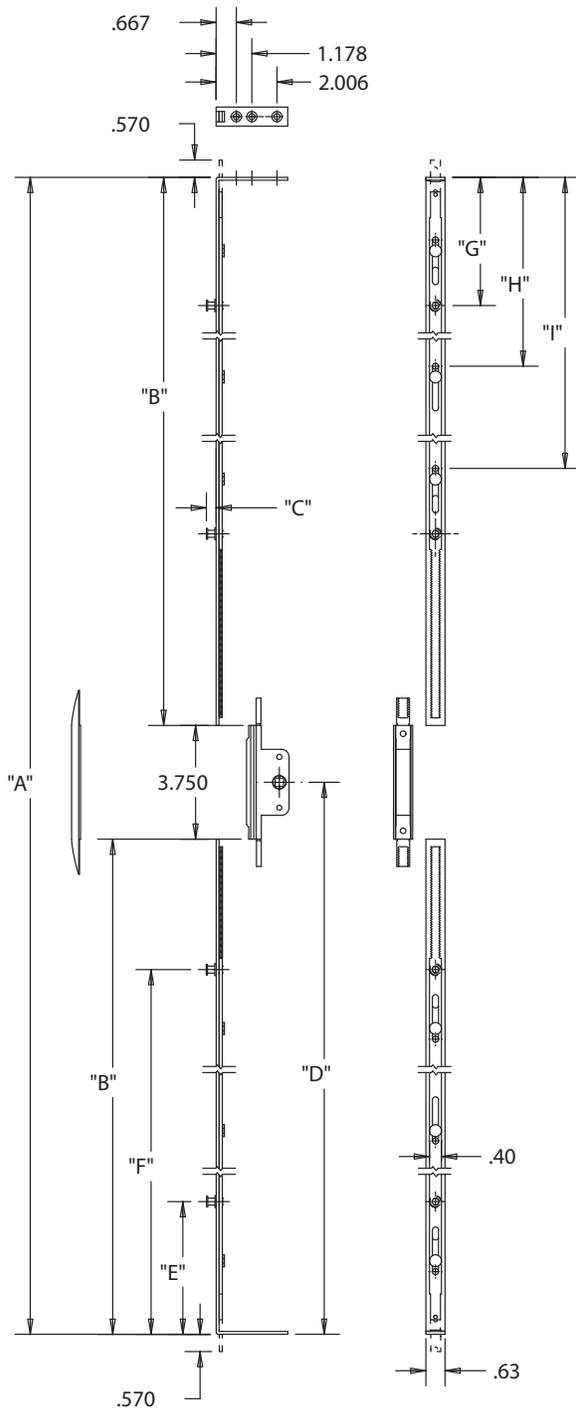
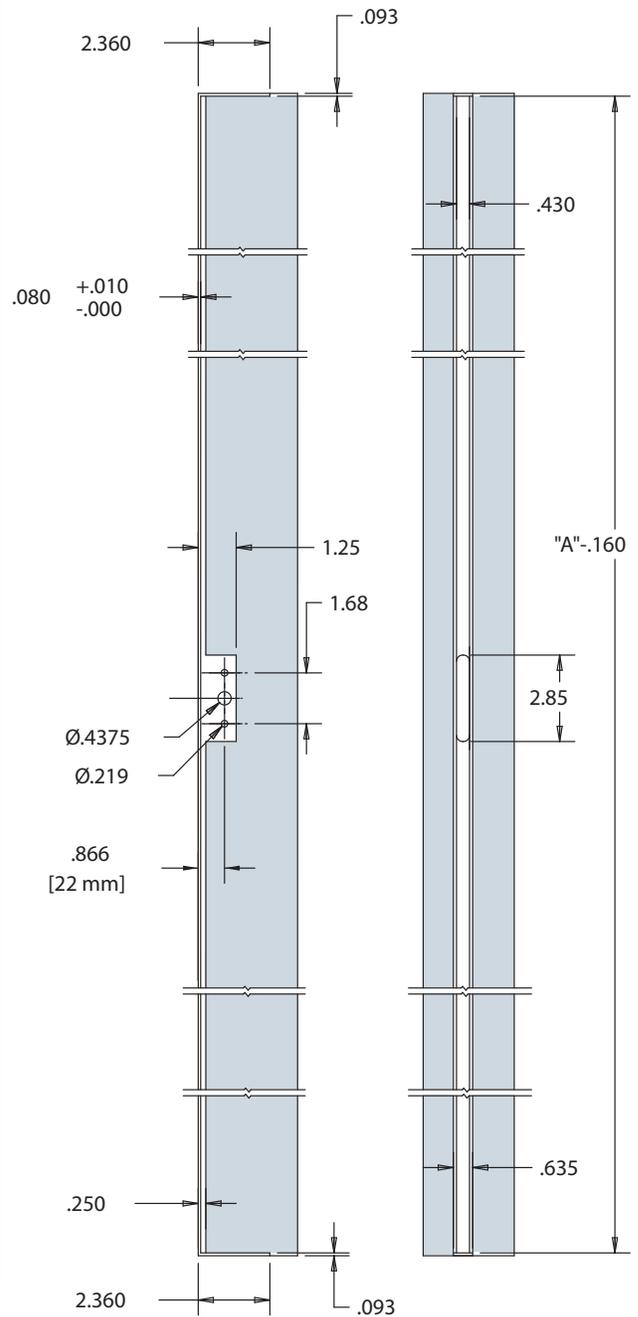


FIG. 21 APPLICATION OF LOCK BAR INTO SASH ROUTING AND DRILLING PATTERN



PUSH OUT HARDWARE

FIG. 22 SCREEN HINGE - METAL 29.20.XX.00/.002

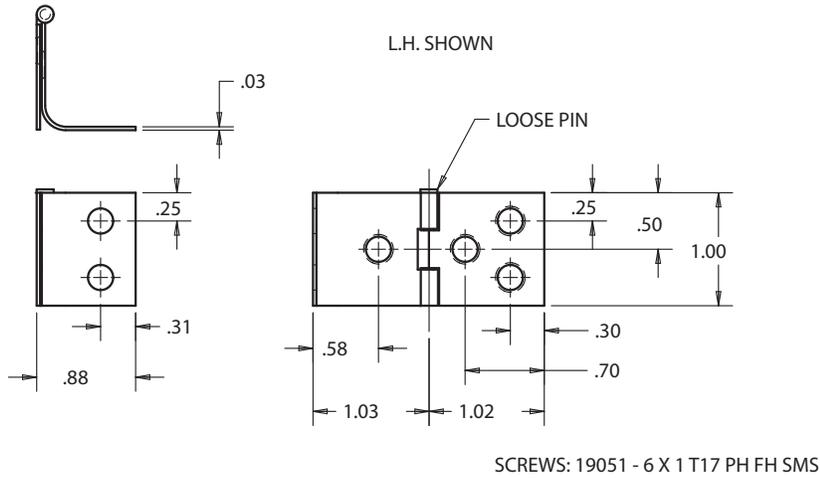


FIG. 23 SCREEN HINGE - WOOD 29.21.XX.001/.002

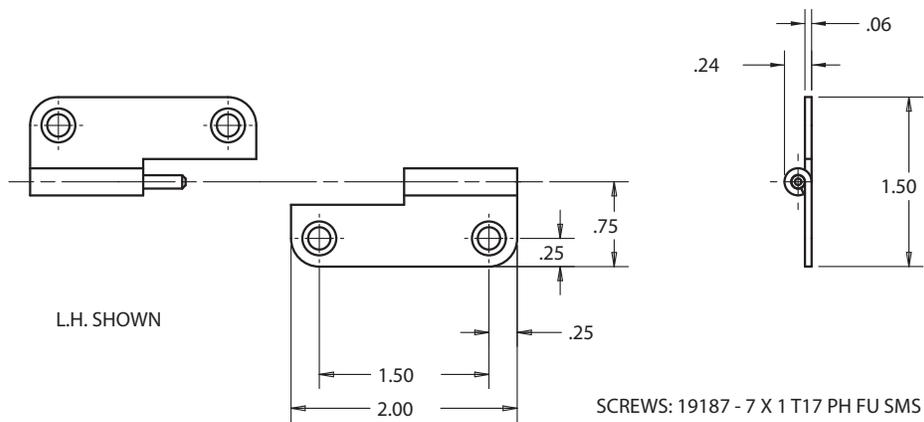


FIG. 24 SCREEN KNOB 13301.XX

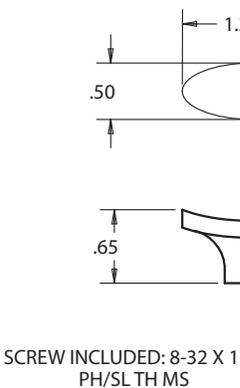


FIG. 25 SCREEN PULL 41678.XX/41679.XX

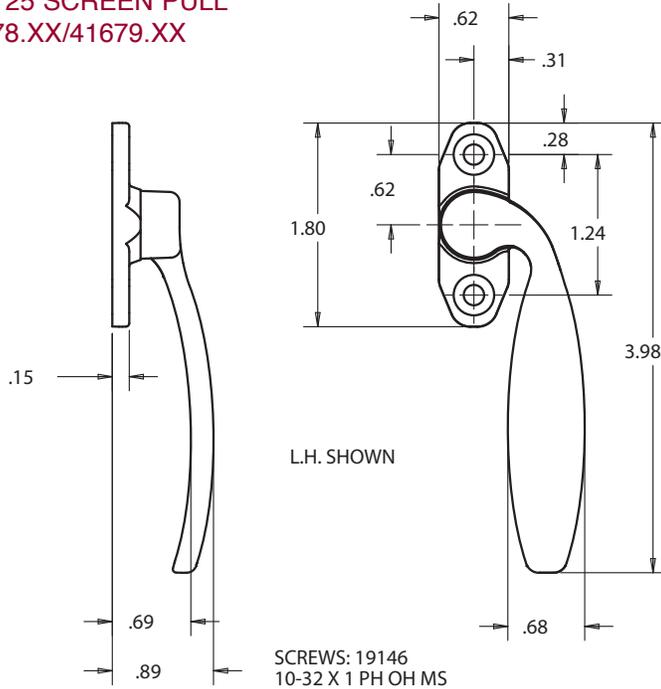
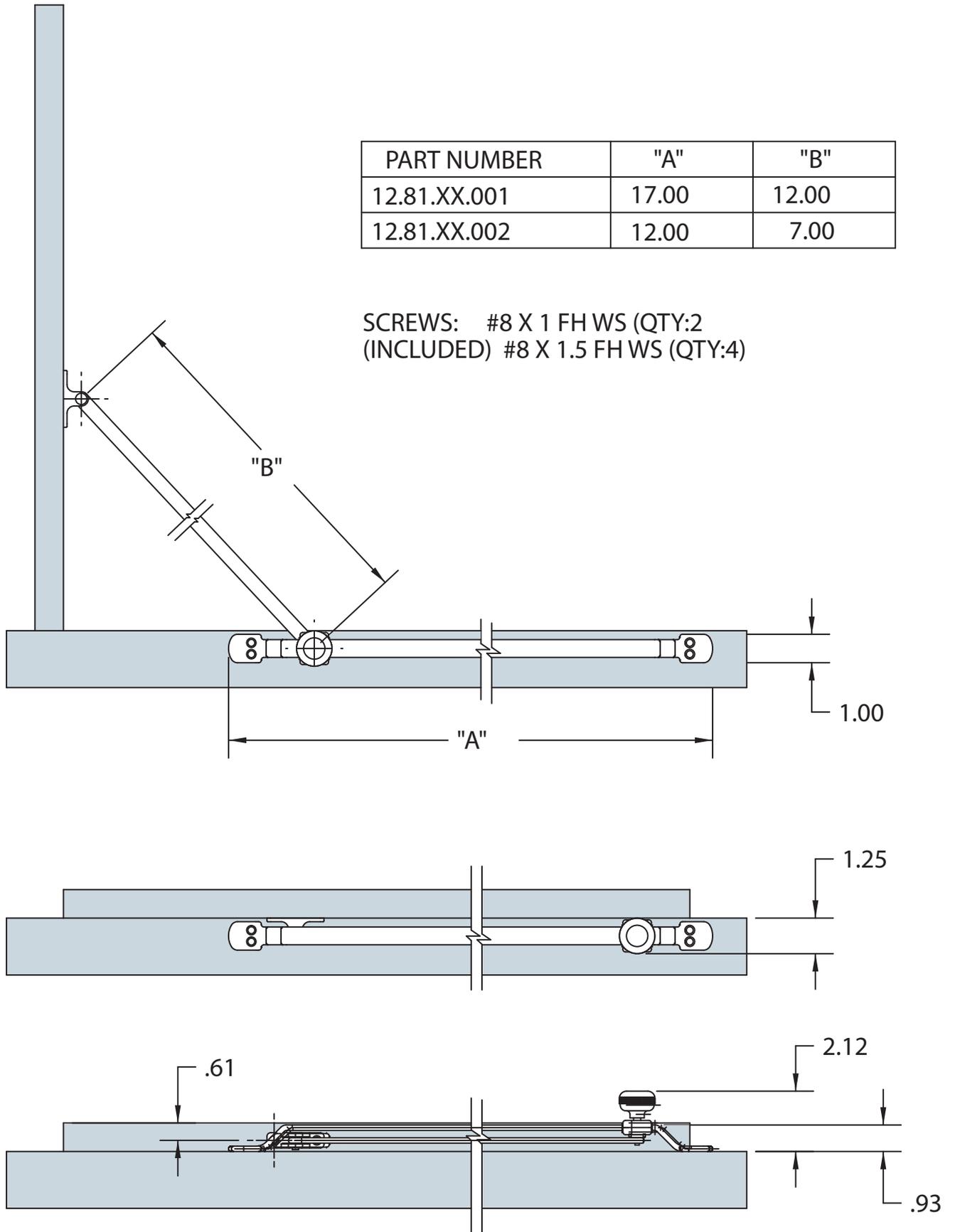


FIG. 26 12.81 STAY BAR

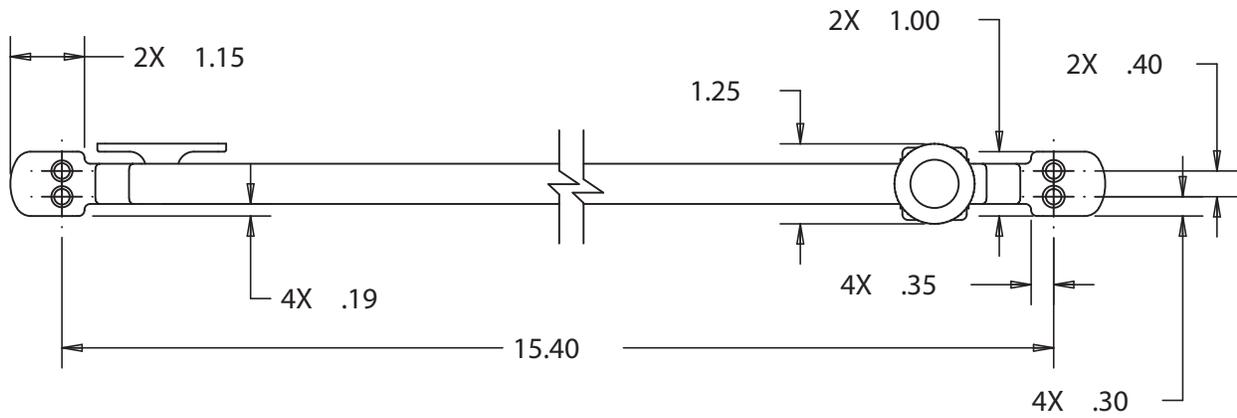
PART NUMBER	"A"	"B"
12.81.XX.001	17.00	12.00
12.81.XX.002	12.00	7.00

SCREWS: #8 X 1 FH WS (QTY:2
(INCLUDED) #8 X 1.5 FH WS (QTY:4)



PUSH OUT HARDWARE

FIG. 27 12.81 STAY BAR



PART NUMBER	"A"	"B"
12.81.XX.001	12.00	17.00
12.81.XX.002	7.00	12.00

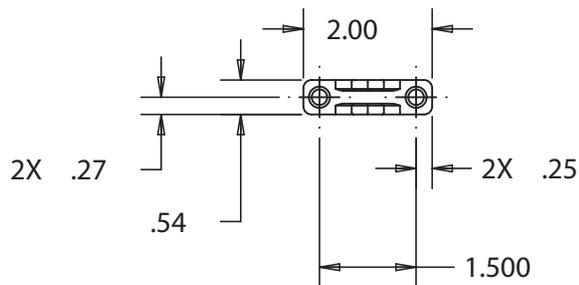
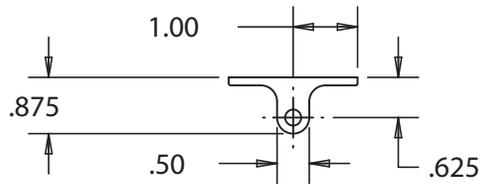
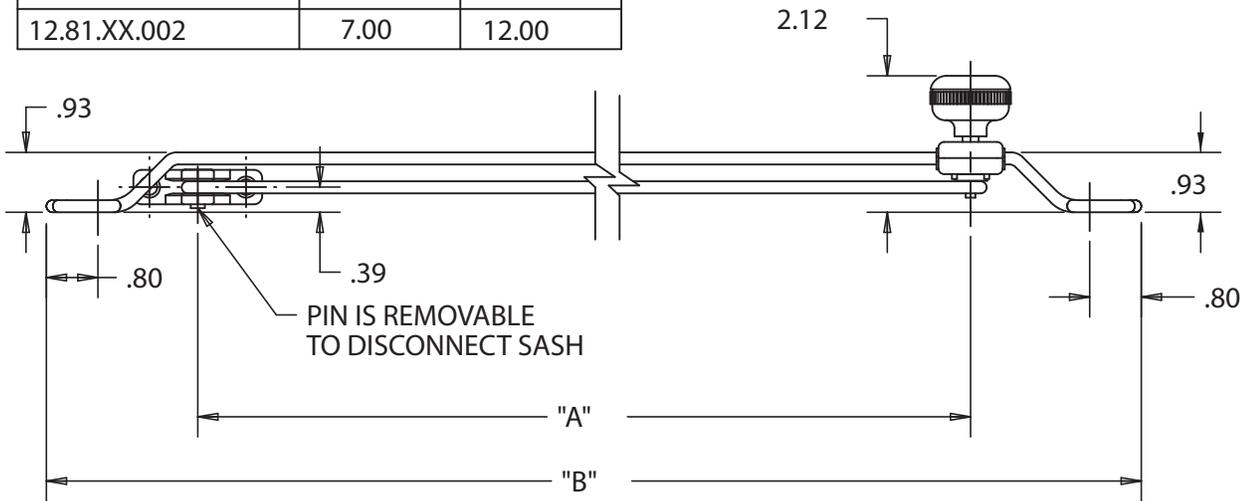
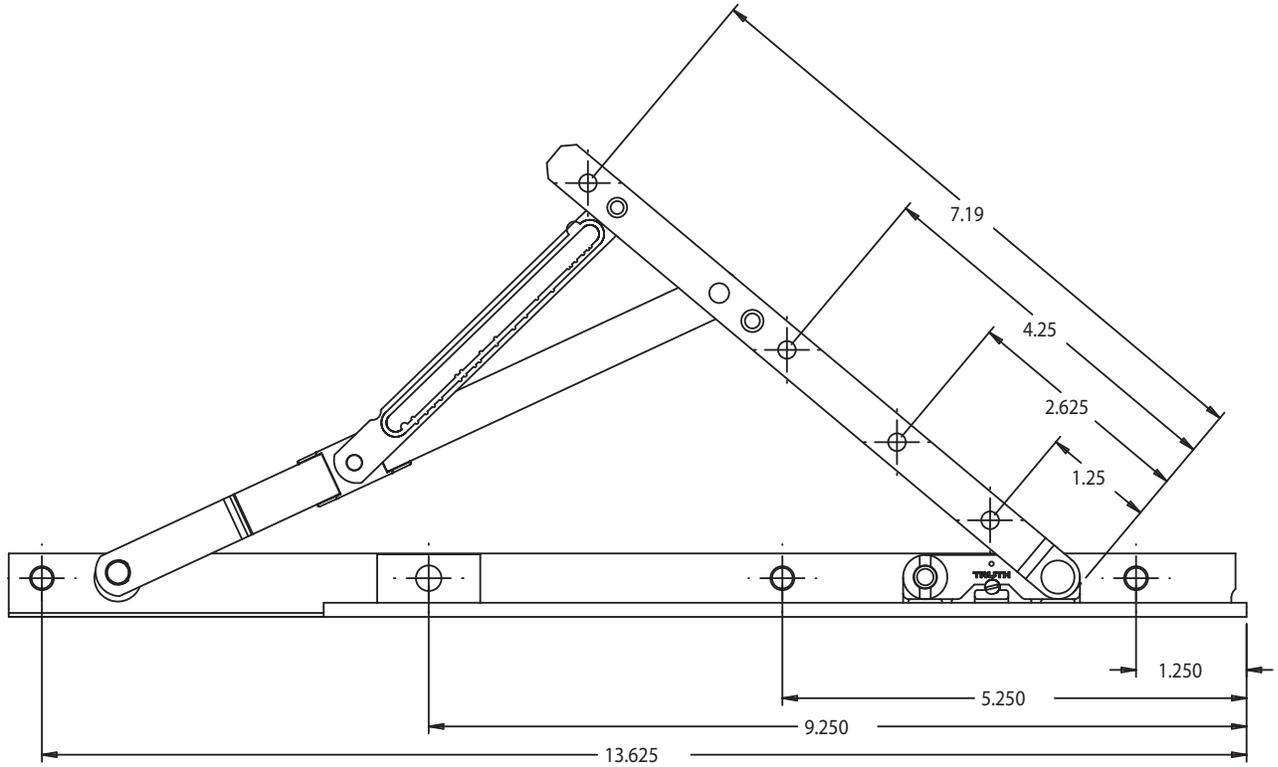


FIG. 28 14.61 FRICTION HINGE 14" - STANDARD WASH



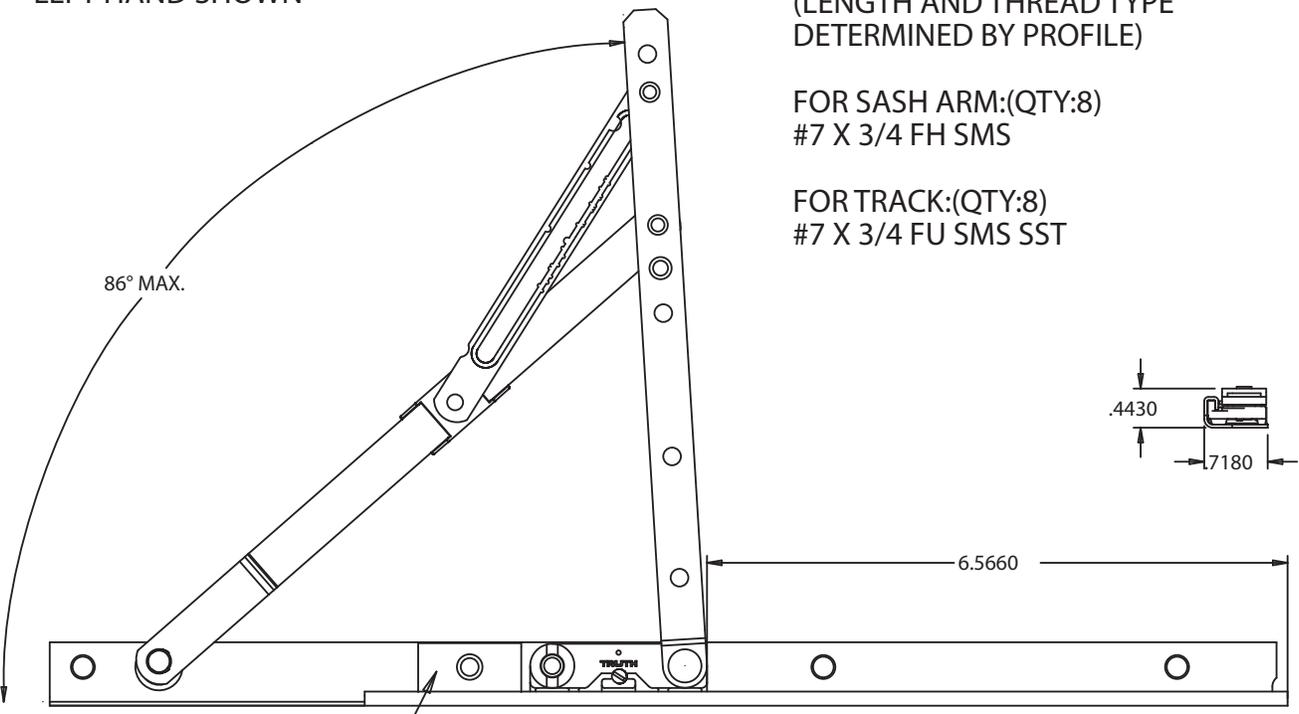
LEFT HAND SHOWN

RECOMMENDED SCREWS:

(LENGTH AND THREAD TYPE DETERMINED BY PROFILE)

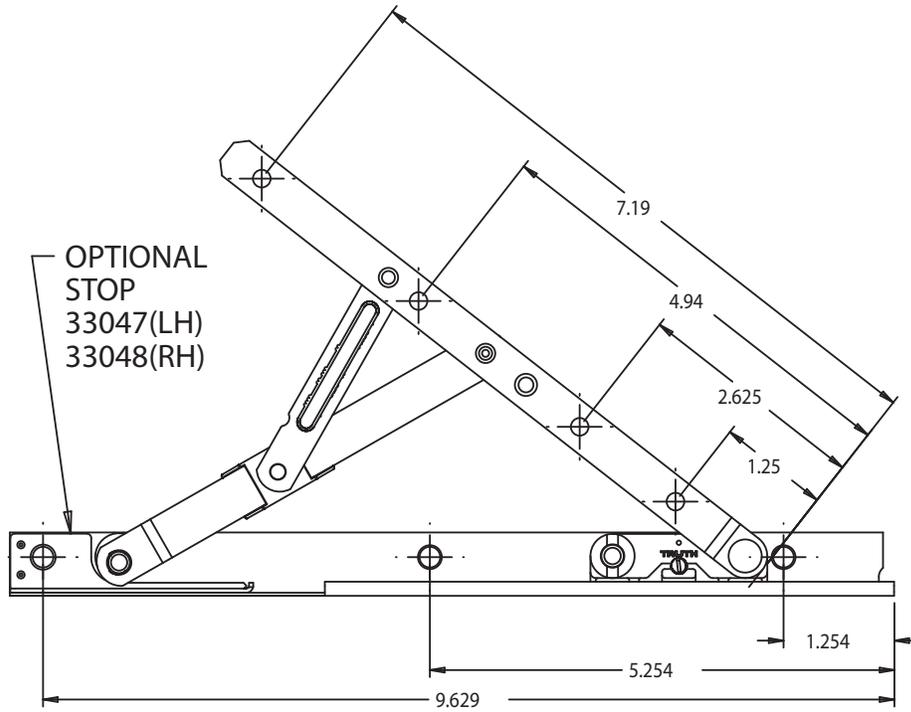
FOR SASH ARM:(QTY:8)
#7 X 3/4 FH SMS

FOR TRACK:(QTY:8)
#7 X 3/4 FU SMS SST



OPTIONAL
STOP
33045

FIG. 29 14.60 FRICTION HINGE 10" - STANDARD WASH



RECOMMENDED SCREWS:

(LENGTH AND THREAD TYPE DETERMINED BY PROFILE)

FOR SASH ARM:(QTY:8) #7 X 3/4 FH SMS

FOR TRACK:(QTY:8) #7 X 3/4 FU SMS SST

LEFT HAND SHOWN

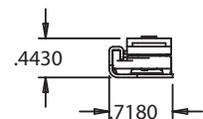
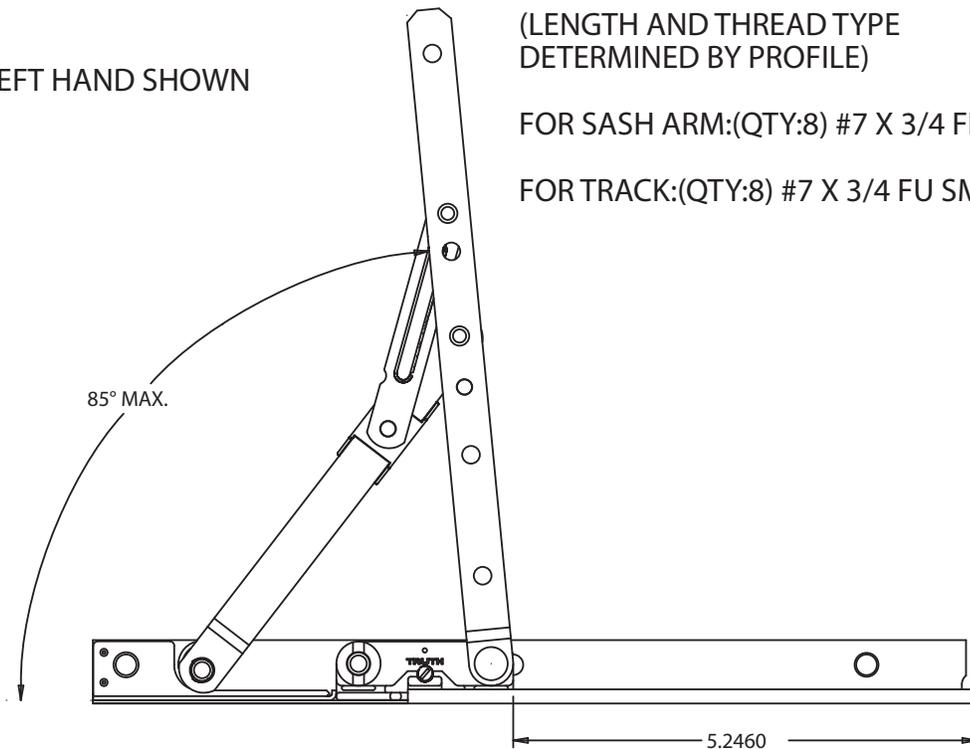
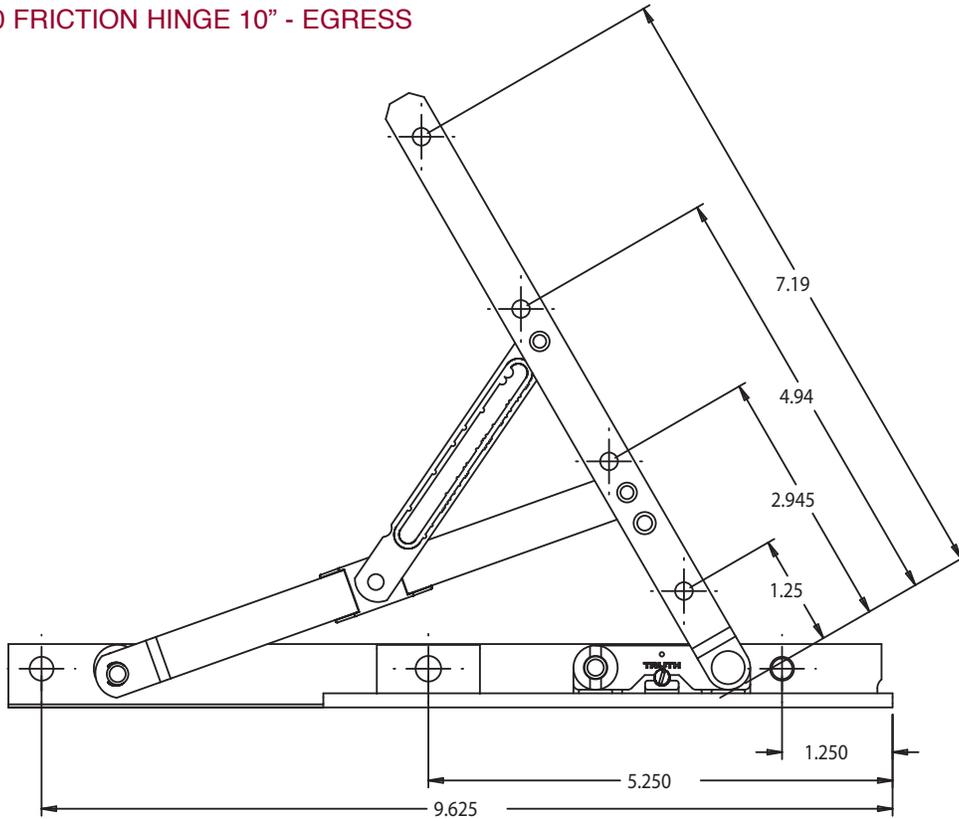
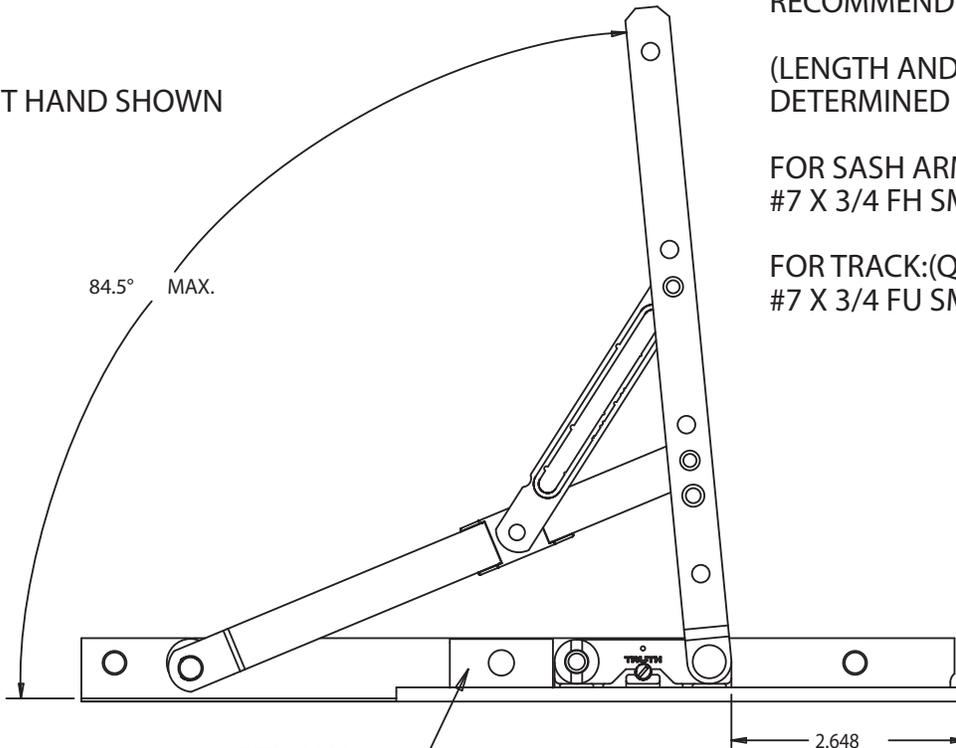


FIG. 30 14.60 FRICTION HINGE 10" - EGRESS



LEFT HAND SHOWN



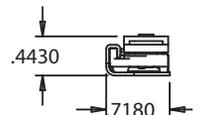
OPTIONAL
STOP
33045

RECOMMENDED SCREWS:

(LENGTH AND THREAD TYPE
DETERMINED BY PROFILE)

FOR SASH ARM:(QTY:8)
#7 X 3/4 FH SMS

FOR TRACK:(QTY:8)
#7 X 3/4 FU SMS SST



PUSH OUT HARDWARE

FIG. 31 HINGE SASH SIZE TABLE

HIGH FRICTION PUSHOUT HINGE (Stainless Steel is Standard)				Maximum Recommended (sash)			
Hinge Size/Type	Arm & Track Assembly P/N	KD Arm Assembly P/N	Stops Used	Width (in.)	Height (in.)	Weight (lbs)	To Meet AAMA
10" Egress	14.60.00.005/006	14.60.00.007/008	No Track Stops	18	38	29	Commercial
10" Egress	14.60.00.005/006	14.60.00.007/008	No Track Stops	20	42	29	Residential
14" Wash	14.61.00.005/006	14.61.00.007/008	No Track Stops	24	46	47	Commercial
14" Wash	14.61.00.005/006	14.61.00.007/008	No Track Stops	26	54	47	Residential
10" Wash	14.60.00.001/002	14.60.00.003/004	No Track Stops	24	54	54	Commercial
10" Wash	14.60.00.001/002	14.60.00.003/004	No Track Stops	28	56	54	Residential
10" Wash	14.60.00.001/002	14.60.00.003/004	33047/8	34	60	82	Commercial
10" Wash	14.60.00.001/002	14.60.00.003/004	33047/8	36	66	82	Residential
10" Egress	14.60.00.005/006	14.60.00.007/008	33045	36	66	90	Commercial
10" Egress	14.60.00.005/006	14.60.00.007/008	33045	36	72	90	Residential
14" Wash	14.61.00.005/006	14.61.00.007/008	26110	36	72	100	Commercial
14" Wash	14.61.00.005/006	14.61.00.007/008	26110	38	76	100	Residential