

Truth Pivot Shoe Roto Operators

ROBERT BROOKE AND ASSOCIATES

Designed for face-mount applications on single vent awning windows, this operator's unique pivot shoe design allows approximately 10" of opening. The double arm design also helps achieve corner pull-in and sash stability of ventilator. Nylon and stainless steel pivot shoes slide smoothly in the track assuring positive operation and creating a self-cleaning action. Available in both front-mount and rear-mount styles.

LOGO OPTIONS: Have you considered personalizing your window with your company name or logo? All of Truth's operator handles are capable of accepting your own "signature". Contact Truth for further details.

LIFETIME WARRANTY: Protected under the terms of the "Truth Lifetime Warranty". For a copy of this warranty, please contact Truth.

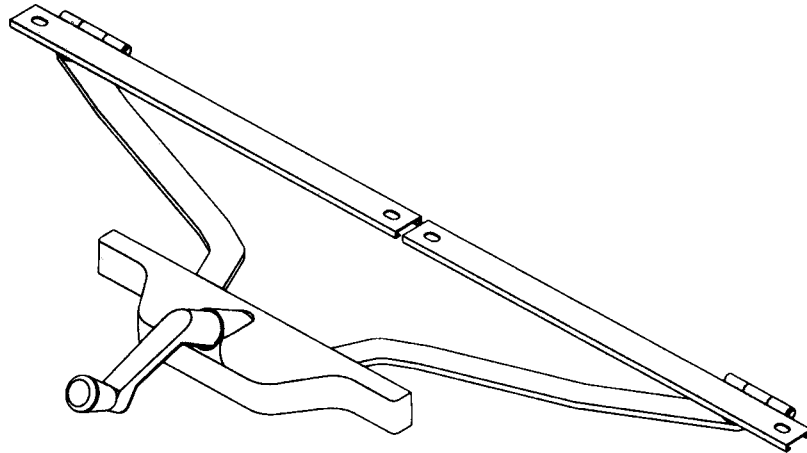
MATERIAL: High-pressure die-cast zinc case, crank handle and knob. Hardened steel worm and gear arm. Nylon and stainless steel pivot shoe. Non-magnetic stainless steel track.

CORROSION GARD® HARDWARE: All of Truth's steel components are protected with an enhanced plating process that increases their corrosion resistance by up to three times over common plating processes.

FINISH: Phosphate coated, electrostatically painted baked enamel resists chipping and flaking. Available colors are: 03 Bronze, 09 Gold, 22 Clay, 23 Chestnut Bronze, 24 Beige, 32 & 78 White. Also available in plated finish: 19 Brushed Copper Nickel or 13 Bright Brass (clear coat). Optional finishes are available upon request - contact Truth for additional information.

ORDERING INFORMATION & OPTIONS:

1. Choose Operator style desired - specify by part number. See table within drawings for details.
2. Specify finish number.
3. Select mounting hardware (sold separately):
#10024 - Die-cast zinc handle & knob (painted) **or**
#10579 - Die-cast zinc handle & knob - long version (painted).
Order Track separately - specify by part number. See table within drawings for details (2 per operator).



- #20947** - Mounting Plate.
- #20189** - Backing Grommet (optional).
- #21306** - Protective red plastic spline cap (optional).
- #30171** - Rubber-cork adhesive backed gasket (optional).

RECOMMENDED SCREWS:

Types of screws required determined by material of profile used. Refer to drawings for complete information on screw type and quantity needed (sold separately). For additional information regarding screw selection - see Truth Tips.

TRUTH TIPS:

1. Operator mounting screws must pass through one PVC wall and Truth Mounting Plate #20947 or one PVC wall and one insert wall. Track mounting screws must pass through two PVC walls or one PVC wall and one insert wall. For this reason, it is necessary to use a longer screw than is recommended.
2. Truth recommends that stainless steel screws be used to fasten stainless steel components to the window. If steel screws were to be used, a corrosion problem would develop between the dissimilar metals of the screw and the stainless steel component through a galvanic reaction. The result can be rusting of the screw heads which can eventually break off. This problem is not nearly as severe when a stainless steel screw is used to fasten the steel components because the screw head will not rust and break off, however, some degree of rusting will occur.
3. This operator is intended for single vent applications only, and should not be used on multi-vent applications.
4. For accurate hardware replacement, pre-drilling is recommended.
5. Truth recommends that a Mounting Plate (#20947) be used for added support to the operator in an effort to reduce the amount of flex experienced in many PVC Profile Systems.
6. For metal window profiles, Truth recommends stainless steel machine screws. However, in most applications, stainless steel sheet metal screws will provide adequate holding power.
7. Butt Hinges can be used with the pivot shoe operator, however, some degree of sash chatter will usually occur. Chatter is caused by the weight of the window pushing the operator closed rather than the operator pulling the window closed.
8. A window operator alone provides poor forced entry resistance and must always be used in conjunction with sash locks when forced entry resistance is required.
9. The Pivot Shoe Operator can be used with all Truth 13 Series Awning and 4-Bar Hinges. To insure maximum operator efficiency, it is important that operator, hinge, and sash height be properly matched. Consult sash size table found in the Hinge section of the catalog.

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INCLUDE TRUTH SPECS ON YOUR NEXT WINDOW PROJECT

Window operators shall be provided which allow easy adjustment of window position. The mechanism should be crank operated and provide wide range of open positions. Connection to the

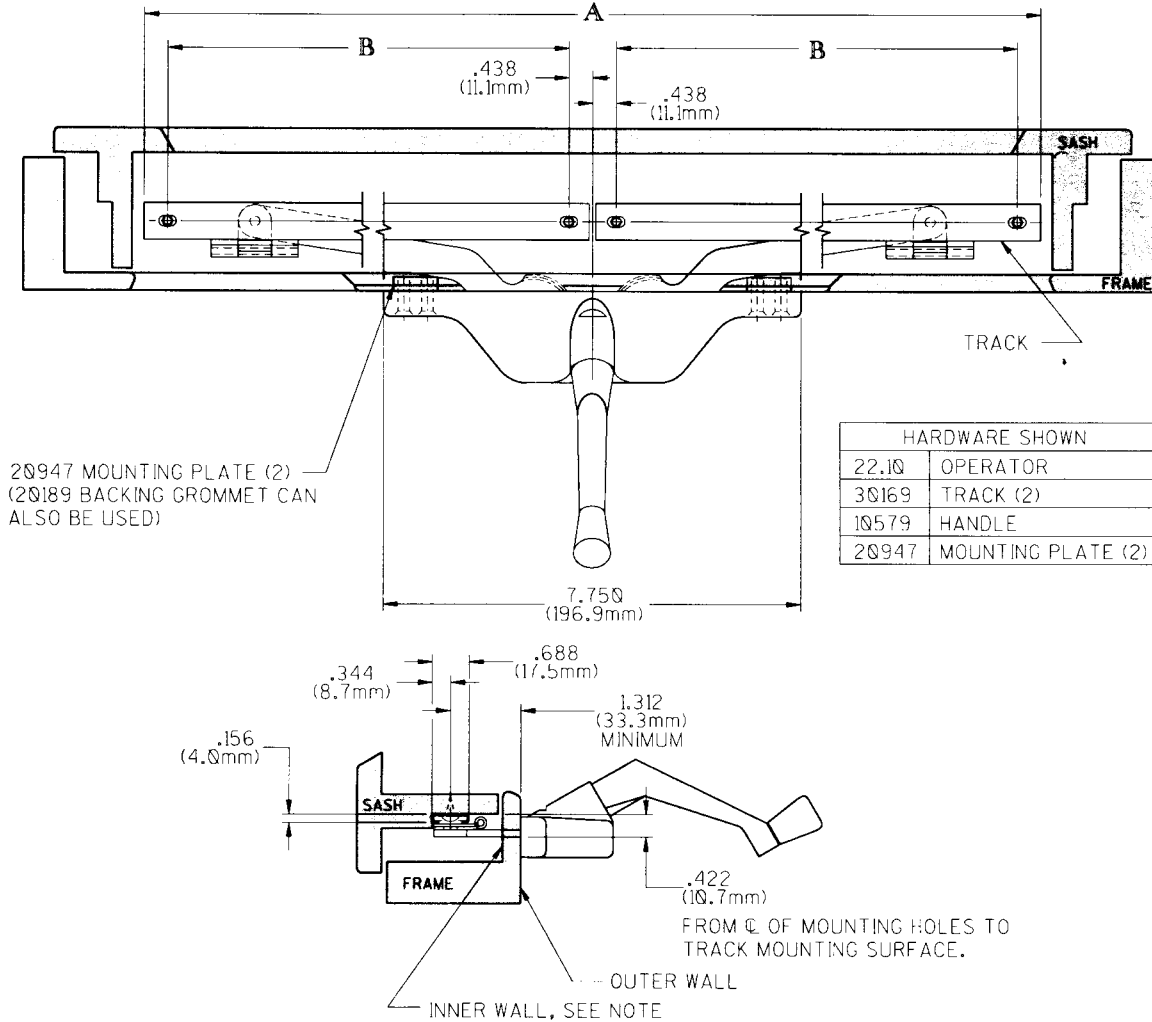
movable sash should use pivoting slide shoes and stainless steel guide tracks.

Window operators will be of twin push arm design driven by hand crank. The operator must be constructed of Corrosion Gard® components, hardened

steel worm and gear arms and high pressure zinc alloy die castings. Stainless steel shoe guide tracks.

Window Operators shall be 22 series Pivot Shoe Operator as manufactured by Truth Hardware, Owatonna, MN.

FIG. 1 APPLICATION OF 22 SERIES PIVOT SHOE OPERATOR



NOTE:
INNER WALL MAY BE RELIEVED TO ALLOW SUFFICIENT ARM CLEARANCE IN THE CLOSED POSITION. RELIEF REQUIRED FOR CLEARANCE WILL VARY DEPENDING ON THE TRACK MOUNTING POSITION RELATIVE TO THE OPERATOR.

OPERATOR PART NO.	ARM LENGTH	OVERALL LENGTH A	RECOMMENDED TRACK	TRACK LENGTH B
22.10	11.0 (279.4mm)	27.750 (704.9mm)	30169	13.0 (330.2mm)
22.17	5.500 (139.7mm)	15.0 (381.0mm)	31594	7.500 (190.5mm)
22.18	9.0 (228.6mm)	25.750 (654.1mm)	31322	12.0 (304.8mm)
* 22.19	11.0 (279.4mm)	27.750 (704.9mm)	30169	13.0 (330.2mm)

*REAR MOUNT WITH STABILIZING TAB, SEE FIG. 3.

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FIG. 4 GASKET 30171

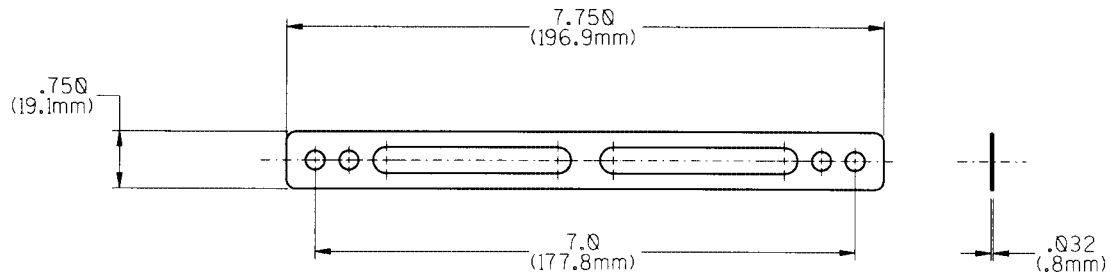
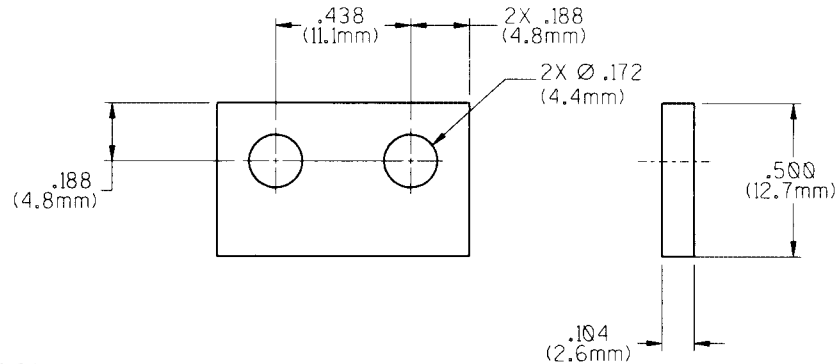
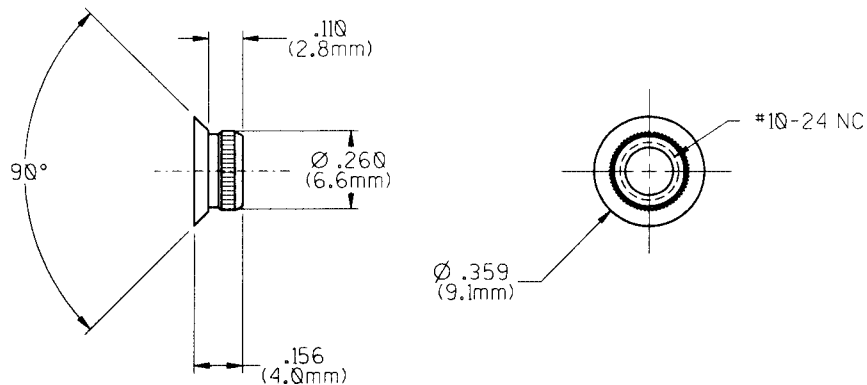


FIG. 5 BACKING PLATE 20947



NOTES:
 BACKING PLATE IS DESIGNED FOR #8 SCREW TO
 PASS THROUGH FOR REAR MOUNT APPLICATIONS
 AND FOR A #10 SCREW TO TAP INTO IT FOR A FRONT
 MOUNT APPLICATIONS.

FIG. 6 BACKING GROMMET 20189



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