



The Maxim Series is a window operating “system” where the hinges and operators are developed to work together to meet or exceed the “maximum” performance requirements of larger more versatile casement and awning windows.

HANDLE & COVER OPTIONS

The Maxim Operators are available with a unique combination of aesthetic options.

- Standard is Maxim’s zinc die-cast case and handle. Each of which are available in a wide variety of standard and plated finishes.
- An optional Folding Handle can be added to minimize interference with window treatments, and a plastic nesting cover designed to cradle Truth’s Folding Handle is also available.
- The uniqueness of this Folding Handle and Nesting Cover combination is such that it allows the homeowner to easily change the color of their window hardware after the windows have been installed in the home.

SEALABLE HOUSING/GASKET

The Maxim Operator’s streamlined design helps:

- Reduce water/air infiltration and eliminates need for caulking.
- Minimize mounting surface damage in punching or routing of operator cut-out.
- Create a more stable mounting surface and improves seal endurance with its overlapping lip design.
- Enclosed gear train keeps dirt and construction debris out of the operator for smoother operation and longer life.

STANDARDIZATION OF PRODUCT & PROCESSES

- Allows manufacturer to use same operator mounting location on every window size whether it be a small window with a dyad operator or a larger window with a dual arm, thus helping to reduce manufacturing and inventory costs.
- Dual arm is specially designed to support both washability and egress applications while mounted in a consistent location.
- Brackets and track have been standardized and include features designed to reduce installation time.



*Maxim® Dual Arm Operator
with Folding Handle and
Nesting Cover option shown*

SMOOTH & EFFICIENT

- 33% less effort to operate than EntryGard style operators
- Provides “Maxim-size” large window operation
- Allows larger applications to meet ADA requirements
- Certified to meet AAMA 901-07 cycle test at commercial rating
- Based on application, the Maxim and Encore systems provide reduced sash play - thus reducing the tendency of the window to “walk” in buffeting wind conditions when compared to EntryGard® and similar style operators.
- Time proven design.

LOW PROFILE AND REAR MOUNT OPERATOR STYLES AVAILABLE

Designed to fit a wider range of profiles and window types, Truth’s Maxim Operators design options greatly increase the mounting stability of the system.

While sill mounting is standard, dual-axis mounting (sill and rear mounting

in same operator) is available on certain models for companies manufacturing both wood & vinyl windows. Other benefits include:

- Easily mounts to thin wall profiles such as fiberglass, aluminum, and steel
- Increases gasket compression resulting in enhanced water and air tightness on rear mount.

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 Technical Service Staff can assist you with the selection of the appropriate hardware to meet your performance requirements, as well as providing personalized application drawings.

LOGO OPTIONS:

Have you considered personalizing your window? Contact Truth for further details on how you can add your own “signature” to the Maxim handle and cover.

MAXIM® SYSTEM OPERATORS

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

MATERIAL:

High-pressure die-cast zinc operator housing, crank handle and knob. Hardened steel drive worm and gear. 300 series stainless steel packages are available for most models.

CORROSION RESISTANCE:

Truth’s E-Gard® Hardware has a multi-stage coating process that produces a superior physical and aesthetic finish. Plus, it is resistant to a wider range of corrosive materials, including industrial cleaning materials and environmental pollutants. This proprietary process has been tested to be approximately three times better than common zinc plated finishes. For coastal applications, Truth also has stainless steel packages available (see Tech Note #7).

FINISH:

Electrostatically applied, durable coatings provide excellent resistance to chipping, scratching and corrosion while maintaining color stability for years in direct sunlight. Please refer to Truth’s Color Chart for examples of Truth’s most popular finish options. Truth also offers a wide range of decorative “plated” finishes – contact Truth for additional information on availability of these finishes on specific product lines (see Truth Tip #9).

RECOMMENDED SCREWS:

All Maxim Operator components have been designed to use the same standardized screw style and size, please refer to the drawings for further details. Coating compatibility between the screws and the operator components is very important in order to optimize the corrosion resistance performance. Refer to drawings for complete information on screw type and quantity needed (sold separately). For additional information regarding screw selection – see Truth Tips and Tech Note #11.

TRUTH TIPS:

1. Operator base handing is determined by the window hinge side when viewed from the outside.

2. Handing of the optional Maxim Nesting Cover is determined by the direction the handle points when in the nested position.

3. For accurate hardware placement, pre-drilling of the screw holes in the window profile is recommended.

4. For PVC and composite window applications, mounting screws should pass through two profile walls, or one wall and one insert wall. For this reason, it may be necessary to use a longer screw than is recommended.

5. For metal window profiles, Truth recommends machine screws.

However, in most applications, sheet metal screws will provide adequate holding power.

6. When operator is installed in high-rise applications over two stories, a Truth Limit Device, to restrict the amount of opening, is recommended. Contact Truth for wind load information.

7. A Spline Cap (#21306) is available to protect the operator splines from dirt and other windows from damage during shipping, installation, and final building construction.

8. Truth recommends that Snubbers be used on the hinge side on any casement window that has a tendency to bow outwardly at the center in the closed position. Adding Snubbers may increase the negative air pressure rating of a casement window.

9. Decorative plated finishes are not recommended for coastal or highly corrosive environments.

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.

The operator must be constructed of E-Gard® coated components. High-pressure die-cast zinc operator base, crank handle and knob. Hardened steel drive worm and gear.

Window Operators shall be Maxim® Series Operators as manufactured by Truth Hardware, Owatonna, MN.



MAXIM® DUAL ARM OPERATOR

Drawings begin on pg. 25d.

- Provides for egress or washability with the same operator in the same location thereby minimizing sill cover inventory.
- Operates sash sizes up to 24" to 40" wide, and 84" high and weighing up to 108 lbs. No need to change operators for standard and custom-sized windows.
- Maxim Dual Arm provides over 7" of washability with the standard Maxim® 13" hinge and is compatible with Truth’s standard 10" hinge, with reduced washability.
- Maxim Dual Arm and Dyad Operators share standardized bracket and mounting location reducing inventory and manufacturing complexities.

ORDERING INFORMATION:

1. Specify “standard” or “coastal” package.
 2. Order item number:
#50.00 or
#50.01 (low profile) or
#50.02 (rear-mount)
 3. Specify finish number.
 4. Specify right- or left-hand (determined by the side the hinge is on when viewed from the outside).
 5. Select mounting hardware (sold separately).
#12510.XX – LH Bracket
#12511.XX – RH Bracket, or
#11661.XX – LH Bracket (low profile)
#11662.XX – RH Bracket (low profile)
- NOTE:** Handing of Brackets does not



necessarily match handing of Operator – refer to table within application drawing page, or contact Truth’s Technical Service Department for further information.

Optional brackets for unique profile applications are available – see Truth’s Stud Bracket & Track section, or contact Truth Hardware for further details.

#11576.XX – Track & Slider, or
#32384.92 – Low profile track

Optional Accessories:

#11329.XX Folding Handle
#41211.XX LH Nesting Cover
#41212.XX RH Nesting Cover
#31882 – Gasket
#31883 – Gasket Applicator
#23058.92 – Backplate (required for Rear Mount options)
#21306 – Protective red plastic spline cap.

MAXIM® DYAD OPERATOR



Drawings begin on pg. 25l.

- Designed for narrow windows, but will operate a frame width from 16" to 32", and up to 72" high and a sash weight of 55 lbs.
- Fits in all profiles currently using the EntryGard® or Encore® Dyad operators.
- Maxim Dyad provides over 7" of washability with the standard Maxim® 13" hinge and is compatible with Truth’s standard 10" hinge, with reduced washability.

ORDERING INFORMATION:

1. Specify “standard” or “coastal” package.
 2. Order item number:
#50.50 or
#50.51 (low profile) or
#50.52 (rear-mount)
 3. Specify finish number.
 4. specify right- or left-hand (determined by the side the hinge is on when viewed from the outside).
 5. Select mounting hardware (sold separately).
#12510.XX – LH Bracket
#12511.XX – RH Bracket, or
#11661.XX – LH Bracket (low profile)
#11662.XX – RH Bracket (low profile)
- NOTE:** Handing of Brackets does not necessarily match handing of Operator – refer to table within application drawing page, or contact Truth’s Technical Service Department for further information.

Optional brackets for unique profile applications are available – see Truth’s Stud Bracket & Track section, or contact Truth Hardware for further details.

Optional Accessories:

#11329.XX Folding Handle
#41211.XX LH Nesting Cover
#41212.XX RH Nesting
#31882 – Gasket
#31883 – Gasket Applicator
#23058.92 – Backplate (required for Rear Mount options)
#21306 – Protective red plastic spline cap.

MAXIM® REVERSE DYAD OPERATOR

Drawings begin on pg. 25r.



- Uniquely designed for narrow windows and specialty windows like round tops, half round, trapezoid, garden, octagon and windows that require Butt Hinges.
- Will work on frame widths down to a minimum of 12" depending upon the thickness of the frame.
- Uses a non-handed bracket which will help reduce inventory issues.

ORDERING INFORMATION:

1. Specify “standard” or “coastal” package.
2. Order item number:
#50.70 or
#50.71 (low profile) or
#50.72 (rear-mount)
3. Specify finish number.
4. specify right- or left-hand (determined by the side the hinge is on when viewed from the outside).
5. Select mounting hardware (sold separately).

#11674.XX – Non-Handed Bracket

Optional brackets for unique profile applications are available – see Truth’s Stud Bracket & Track section, or contact Truth Hardware for further details.

Optional Accessories:

#11329.XX Folding Handle
#41211.XX LH Nesting Cover
#41212.XX RH Nesting Cover
#31882 – Gasket
#31883 – Gasket Applicator

MAXIM® SYSTEM OPERATORS

#23058.92 – Backplate (required for Rear mount options)

#21306 – Protective red plastic spline cap.

MAXIM® SINGLE ARM OPERATOR

Drawings begin on pg. 25x.



- Created for casements which are 20"-32" wide up to 72" high and with a 73lb. sash weight.
- Fits in all profiles currently using the EntryGard® or Encore® Single Arm operators.

ORDERING INFORMATION:

1. Specify "standard" or "coastal" package.

2. Order item number:

#52.01 or

#52.03 (low profile)

NOTE: Rear-mount version available upon request.

3. Specify finish number.

4. Specify right- or left-hand (determined by the side the hinge is on when viewed from the outside).

5. Select mounting hardware (sold separately).

#11576.XX – Track & Slider, or

#30175 – Low profile track

Optional Accessories:

#11329.XX Folding Handle

#41211.XX LH Nesting Cover

#41212.XX RH Nesting Cover

#31882 – Gasket

#31883 – Gasket Applicator

#21306 – Protective red plastic spline cap.

MAXIM® AWNING OPERATORS



Drawings begin on pg. 25see Maxim Narrow Awning Operator Shown

- Allows the manufacturer to offer the same look throughout the home on both casements and awnings.
- Will provide for maximum opening combined with wide "pull-in" connection to sash.
- Operates frame widths from 20" to 60", reducing inventory requirements for operator sizes.
- New narrow gauge version (#51.01) fits smaller cavity profiles and smaller window sizes.
- "Quick disconnect" feature on operator arms does not require tools.

ORDERING INFORMATION:

1. Specify "standard" or "coastal" package.

2. Order Operator item number:

#51.00 or

#51.02 (rear-mount) or

#51.01 (Narrow Awning Operator)

3. Specify finish number.

4. Select mounting hardware (sold separately).

#11577.XX – Track and Pivot Slides

Optional Accessories: