



1900 Series

Traditional Door Control



the engineer's choice

The Yale® 1900 Series Traditional Surface Closer offers conventional closer styling in combination with contemporary closer control and the installation convenience of a one-size closer shell. Only two spring sizes are required to provide control for the complete range of door sizes. The 1900 Series Door Closers are designed for traditional and period decor while at the same time meeting the strict requirements of engineers worldwide.

The Yale® 1900 Series Traditional Closers are available for standard arm, parallel arm or corner bracket installation. Rigid heavy-duty arms are available for Parallel Rigid and UNI Stop™ Parallel arm installations. Each type of installation is available with non-hold open or hold open arms. A variety of accessories is available to meet most installation requirements.

contents

- Introduction 2
- Overview 3
- Features 4
- Applications 5-6
- Technical Details 7-10
- Accessories 11-16
- Parts List 17-21
- How To Order 22

finishes

Product will be painted with a combination of waterborne acrylic and polyester powder coat. Closers will withstand 100 hours of salt spray. (The ANSI requirement is 25 hours.)

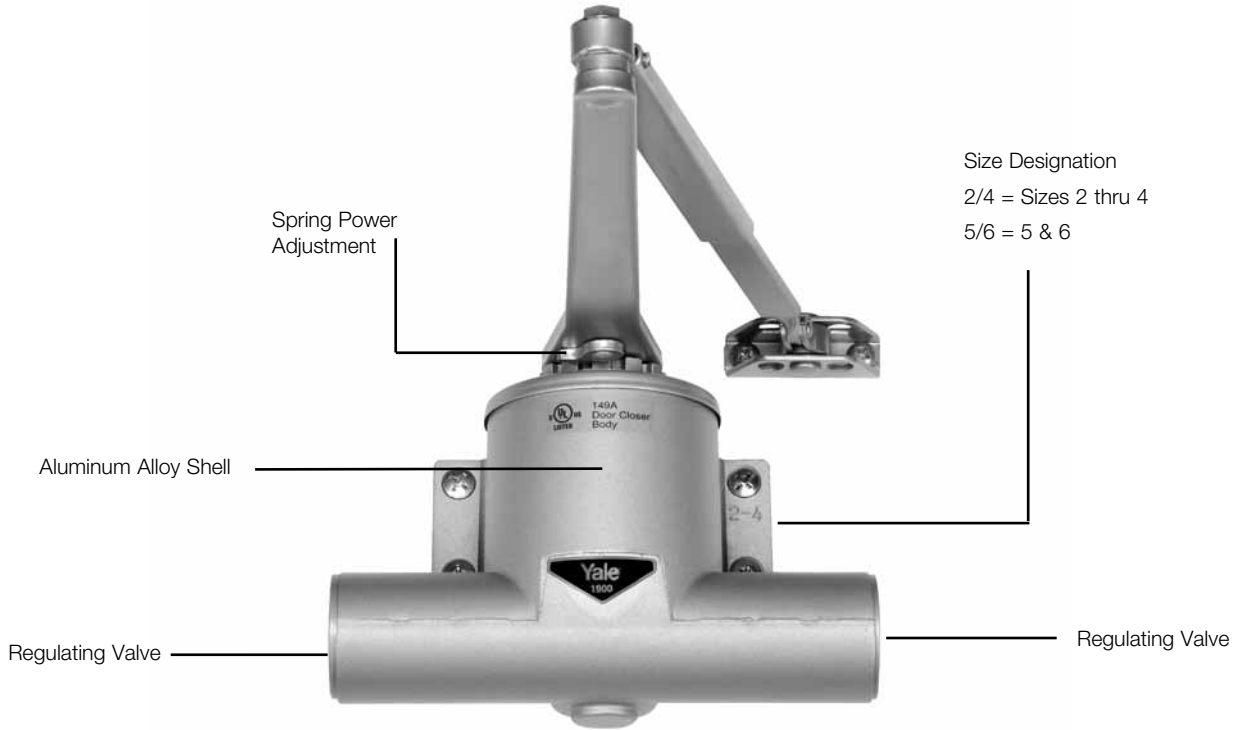
Sprayed Finishes			
Description	Specify Designation (ANSI/BHMA)	Complements the following finishes	Old Designation
Aluminum	689	625, 628, 629, 630, 651, 652	SB
Statuary Bronze	690	613, 640, 695	STAT
Dull Bronze	691	612, 637, 639	BL
Black	693	315	315
Medium Amber	694	312	312
Gold	696	605, 606, 632, 633	GB
Prime Coat*	600	—	SRI

***600 is a special rust-inhibiting prime coat. Closers can be ordered prime coat only (specify closer x 600). An additional charge applies if finish coat is required over prime coat (ex: 1902/4 x 600 x 690).**




1900 series | door closer

overview



compliance standards

All 1900 Series closers comply with ANSI/BHMA A156.4 Grade 3 Specifications.  All Yale® series 1900 closers with non-hold open arms are listed by Underwriters Laboratories for labeled fire doors. This includes compliance to UL10C and for 3-hour assemblies. The product is manufactured in an ISO 9001 facility.

specifications

Closer for interior (and) exterior doors shall be rack-and-pinion type enclosed in a cast aluminum alloy shell. Closer spring shall be clock-type coil spring and shall be adjustable through a range of closing power. Closer fluid shall maintain lubricity and contain anti-oxidation agents. Closer shall be equipped with a single hex-key operated regulating valve for control of both closing and latch speeds. Closer shall have adjustable backcheck. Closer shall be Yale® 1900 Series Traditional Surface Closer or equivalent.



features

One-Size Aluminum Housing

Closer is housed in special aluminum alloy shell selected for its ability to provide optimum performance. One body size provides simplified templating and installation.

Adjustable Spring Power

Clock-type coil spring allows incremental adjustment of closer power to meet individual installation needs. Permits a fine adjustment of the closer to the environment.

Rack and Pinion Design

Provides a smooth constant control of the door through its full opening and closing cycle.

Adjustable Closing Speed/Latch Speed

A dual-purpose regulating valve, hex-key operated, permits independent adjustment of both sweep and latch speed.

Adjustable Backcheck Cushioning

An independent regulating valve, hex-key-operated, provides an adjustable hydraulic cushion to the door opening speed toward the end of the opening cycle. This feature is standard with all but delayed action closers. Backcheck is not available with delayed action closers.

Non-Hold Open Arms

Standard closer will be supplied with a non-hold open arm. This arm is non-handed.

Adjustable Power Standard Installation Jamb Bracket

Provides a $\pm 7\frac{1}{2}\%$ power adjustment by relocation of the forearm pin in the jamb bracket. Supplied standard with all standard installation and corner bracket installation non-hold open closers.

Hold Open Arms

Closer arm has adjustable hold open feature (90° to 180°). This arm is non-handed for regular arm application only. It is handed for all friction hold open parallel arm installations.

Field Reversible

Closer spring can be reversed to accommodate the hand of the door. It is recommended that wherever possible the closer be ordered handed. Parallel hold open arms and delayed action closers are not reversible.

Adjustable Delayed Action Closing

Closer's initial closing speed at the beginning of the closing cycle (from full open down to approximately 70°) is adjustable, allowing slow-moving traffic to pass through the opening before the closer begins its normal closing speed. For regular arm non-hold open closers only. Delayed action closers are not available with backcheck cushioning. Delayed action closers are handed.

optional features

Adjustable Delayed Action Closing*

(Supplied in lieu of backcheck feature) An optional hydraulic feature that adds a third speed range to the closing cycle. This feature becomes effective when the door is opened and released at any point beyond 70°. The amount of time delay depends upon the combination of the angle of door release and valve adjustment. The valve can be adjusted with a 1/8" (3mm) hex key from no delay time up to maximum delay times of:

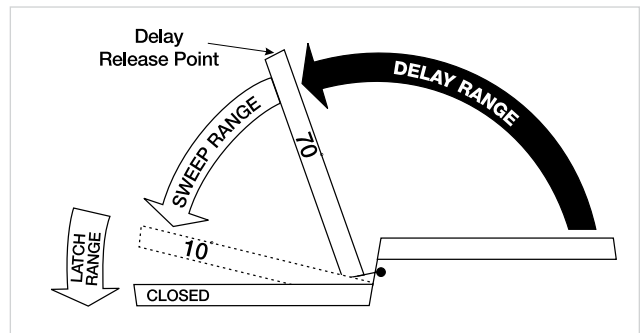
Door Opened and Released at	Approximate Time of Delay Cycle
180°	4-5 minutes
120°	2-3 minutes
90°	25-30 seconds

***Note: Regular arm (NHO units only) are handed - not reversible**

Suggested Applications

Delayed action closing allows slow-moving traffic to clear the opening before the door closer's normal closing cycle begins. This feature can be helpful in health care facilities such as hospitals and nursing homes. It provides sufficient time for persons on crutches or in wheelchairs to pass through a door without concern of it closing. At the same time, it can accommodate

the facility's staff with movement of food service carts, beds, and other wheeled traffic. Use of delayed action closers on many doors throughout industrial and commercial buildings can also assist the flow of traffic. Locations where additional time to clear the opening is advantageous are doors between office and factory/warehouse facilities, doors to workshops or laboratories, to kitchen and food processing areas, etc.



applications



Regular Arm

This is the only pull-side application where a double lever arm is used. It is the most power-efficient application for a door closer. Sufficient frame, door and/or ceiling clearance must be considered. Since the arm assembly projects directly out from the frame, this application may present an aesthetics issue or be prone to vandalism.



Parallel Arm

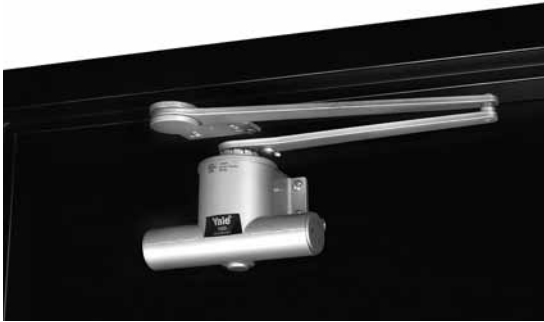
This application provides the most appealing design appearance for a surface-mounted door closer having a double lever arm. This also makes it beneficial in vandalism-prone areas. It is on the push side of the door and the arm assembly extends almost parallel to the door. In the closed position, there is very little or no hardware projecting beyond the frame face in most situations.

Due to the geometry of the arm it is approximately 25% less power-efficient than a regular arm application.

The entire closer and arm assembly are mounted below the frame stop, requiring a top rail of 5-3/8" (137mm) to mount the body. Clearance to the bottom of the closer body from the top of the door is 7-3/8" (187mm). (Based on a 5/8" (16mm) high frame stop.)

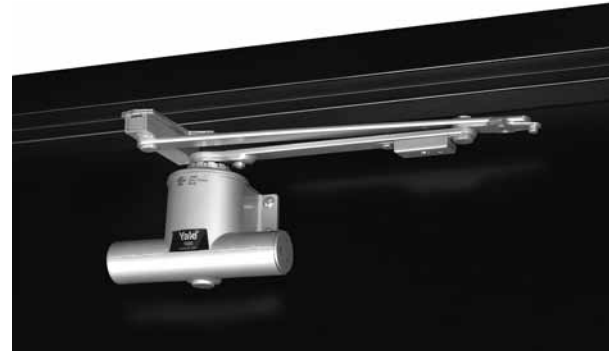


applications



Parallel Rigid Arm

An enhanced variation of the standard parallel arm assembly that is intended for use in heavy traffic areas where auxiliary door stops are installed. Hold open available - specify hand when ordering.

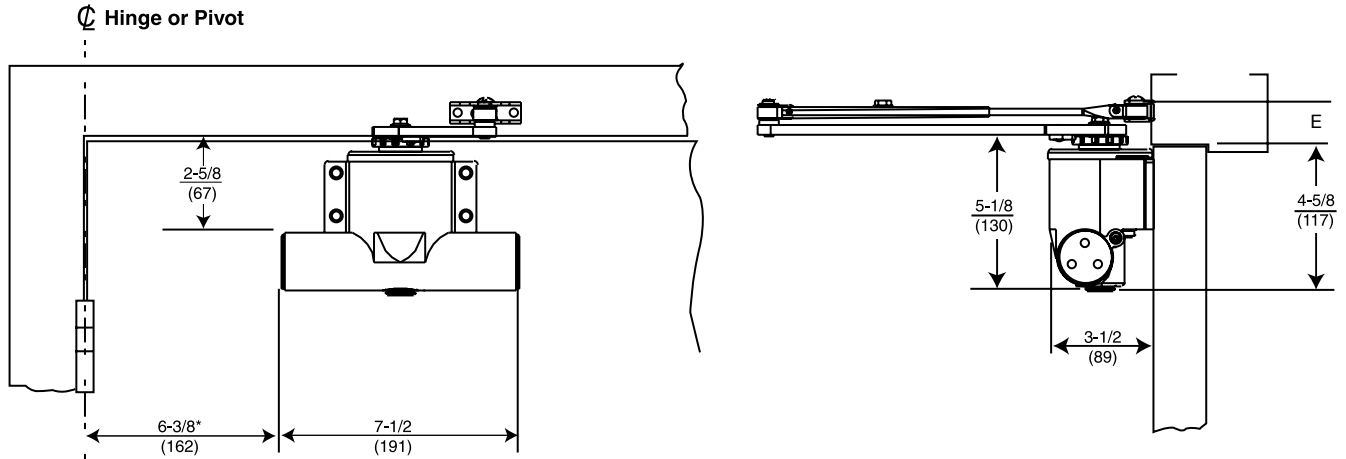


UNI Stop™ Arm (Parallel Arm applications only)

UNI Stop™ arms combine the features of a double-lever arm overhead door stop/holder with the backcheck feature of the door closer to reduce door stopping shock loads to a minimum. The *UNI Stop* arm uses a compression spring buffer at the soffit plate/arm shoe that will absorb 30 lbs. of force, 5° prior to the door's dead stop. Coupled with the door closer's backcheck feature, this arm provides the most controlled stop available with a surface door closer.

There are three different length arm assemblies. Each length is designed for a specific range of door widths to provide precise door control. This further lessens the dead stop impact on the door's hinges/pivots.

regular arm installation



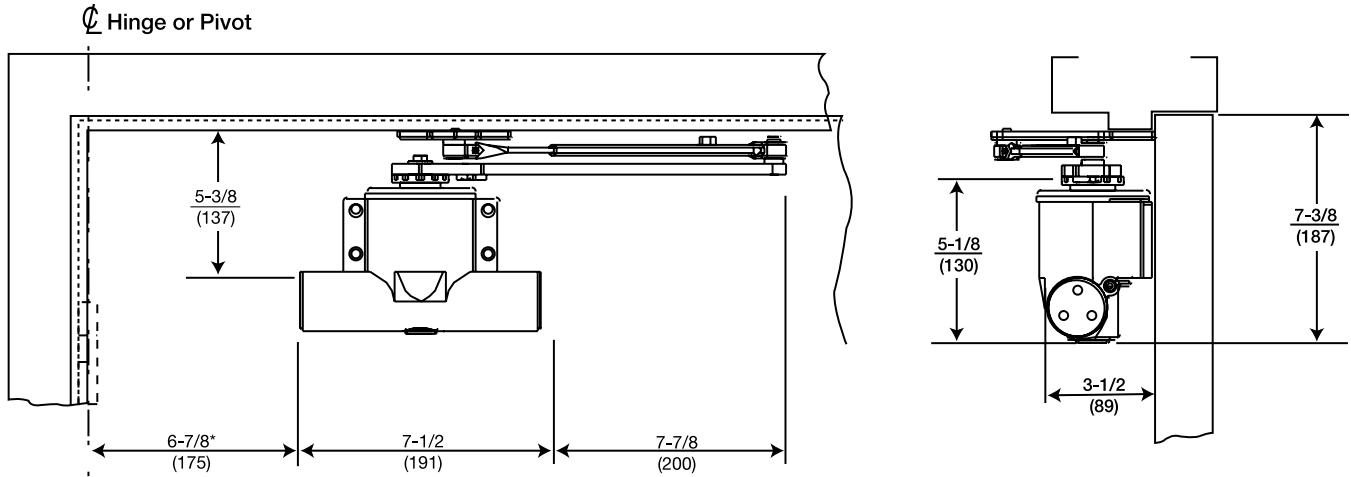
* Template position for 100° door opening
 Body mounting holes are spaced 4-1/8" (105mm) horizontally and 1-3/8" (76mm) vertically.

Maximum Door Size Wood or Metal Inches (cm)		Model Number		E Minimum Ceiling Clearance Inches (mm)	
Interior	Exterior	Non-Hold Open	Hold Open	Non-Hold Open	Hold Open
48" (122)	36" (91)	1902/4	1912/4	1-1/2" (38)	2-1/8" (54)
—	44" (112)	1905/6	1915/6		

All dimensions are for reference only. Dimensions are given in inches (mm) unless otherwise noted. Door sizing information is based on installation on standard weight doors, 7'0" (2.13m) high x 1-3/4" (44mm) thick, hung on anti-friction hinges and operating under normal conditions.



parallel arm installation

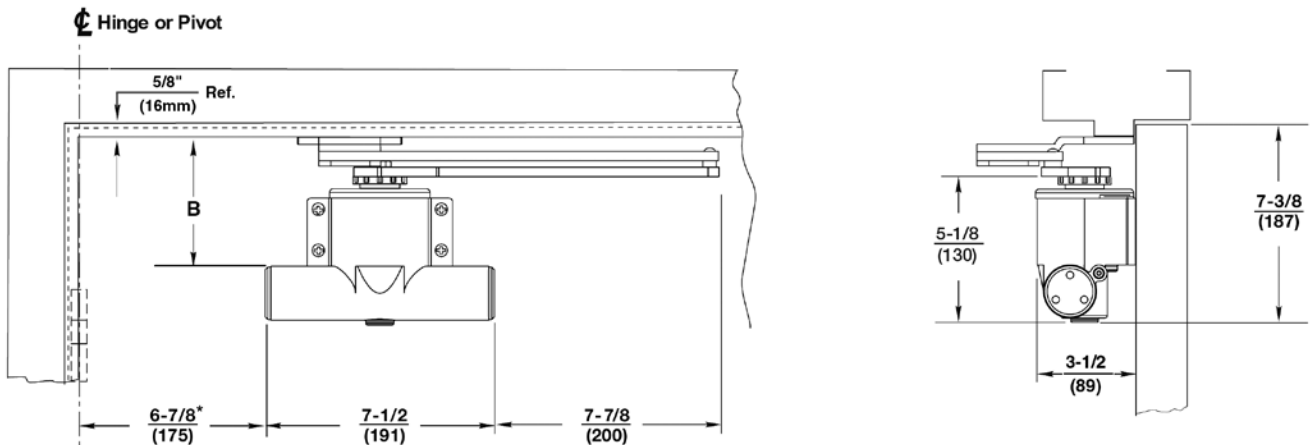


* Template position for 130° door opening
 Body mounting holes are spaced 4-1/8" (105mm) horizontally and 1-3/8" (76mm) vertically.

Maximum Door Size Wood or Metal Inches (cm)		Model Number		B Minimum Top Rail with 5/8" (16mm) frame stop Inches (mm)	
Interior	Exterior	Non-Hold Open	Hold Open	Without Drop Plate	With 1988 Drop Plate
42" (107)	36" (91)	PA1902/4	PA1912/4	5-3/8" (137)	2-1/2" (64)
—	44" (112)	PA1905/6	PA1915/6		

All dimensions are for reference only. Dimensions are given in inches (mm) unless otherwise noted. Door sizing information is based on installation on standard weight doors, 7'0" (2.13m) high x 1-3/4" (44mm) thick, hung on anti-friction hinges and operating under normal conditions.

parallel rigid arm



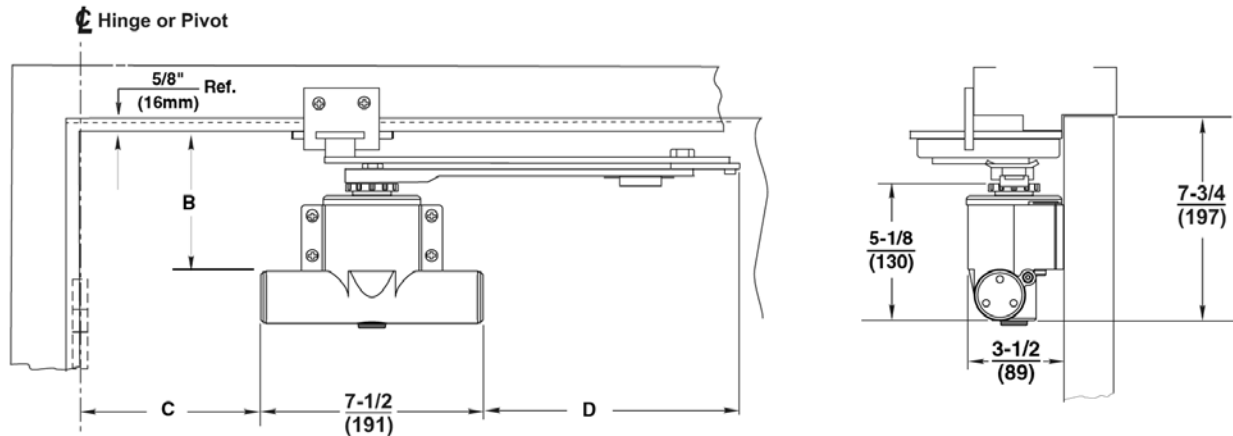
* Template position for 130° door opening
 Body mounting holes are spaced 4-1/8" (105mm) horizontally and 1-3/8" (76mm) vertically.

Maximum Door Size Wood or Metal Inches (cm)		Model Number		B Minimum Top Rail with 5/8" (16mm) frame stop	
Interior	Exterior	Non-Hold Open	Hold Open	Without Drop Plate	With 1988 Drop Plate
48" (122)	36" (91)	PR1902/4	PR1912/4	5-3/8" (137)	2-1/2" (64)
—	44" (112)	PR1905/6	PR1915/6		

All dimensions are for reference only. Dimensions are given in inches (mm) unless otherwise noted. Door sizing information is based on installation on standard weight doors, 7'0" (2.13m) high x 1-3/4" (44mm) thick, hung on anti-friction hinges and operating under normal conditions.



uni stop™ arm



Body mounting holes are spaced 4-1/8" (105mm) horizontally and 1-3/8" (76mm) vertically.

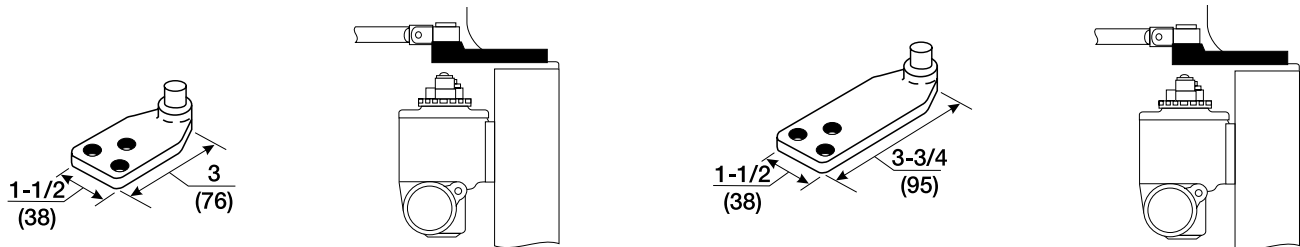
Door Width Inches (cm)	B Minimum Top Rail 5/8" (16mm) Frame Stop		C Template Position for Hold Open at Listed Angle or Dead Stop at Listed Angle plus 5°						D Arm Extension Beyond Closer
	Without Drop Plate	With 1988 Drop Plate	85°	90°	95°	100°	105°	110°	
			28-32" (71-81)			10" (254)	9-3/8" (238)	8-3/4" (222)	
33-41" (84-104)	5-5/8" (143)	2-3/4" (70)	12-1/4" (311)	11-5/8" (295)	11" (279)	10-1/2" (267)	10" (254)	9-5/8" (244)	10-3/8" (264)
42-48" (107-122)			14-5/8" (371)	13-7/8" (352)	13" (330)	12-1/2" (318)	12" (305)	11-1/2" (292)	11-7/8" (302)

Maximum Door Size Inches (cm)		Model Number		
Interior	Exterior	Non-Hold Open	Hold Open	x Specify Door Width
28-41" (71-104)	28-36" (71-91)	UNI1902/4	UNI1912/4	
42-48" (107-122)	37-48" (94-122)	UNI1905/6	UNI1915/6	

All dimensions are for reference only. Dimensions are given in inches (mm) unless otherwise noted. Door sizing information is based on installation on standard weight doors, 7'0" (2.13m) high x 1-3/4" (44mm) thick, hung on anti-friction hinges and operating under normal conditions.

regular arm

brackets for non-hold open arms



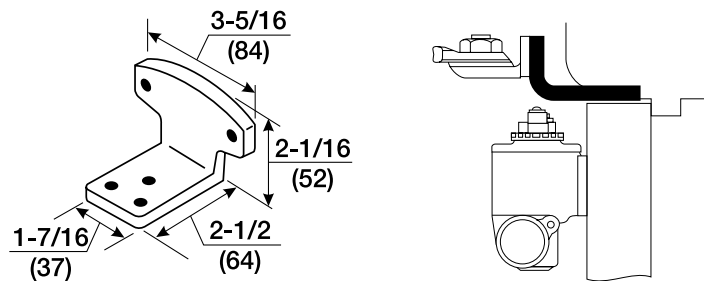
Molded/Bull Nose Trim - #291 Bracket:

For use where the door frame has molded or bull nose trim which will not accept a standard non-hold open shoe. The bracket is mortised into the frame rabbet and projects beyond the face of the frame. It will accommodate a frame rabbet up to 2" (51 mm) deep.

Molded/Bull Nose Trim - #291A Bracket:

This bracket is similar to - but longer than - the 291 bracket. It is designed to accommodate frame rabbets from 2" to 2-7/8" (51 to 73mm) deep.

bracket for hold open arms

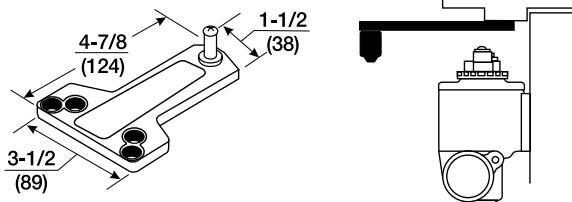


Molded/Bull Nose Trim - #292

Bracket: For use where the door frame has molded or bull nose trim which will not accept a standard hold open shoe. It is mortised into the frame rabbet, and projects beyond the face of the frame. It will accommodate a rabbet up to 2" (51mm) deep. This bracket is used in combination with the standard hold open mounting shoe.

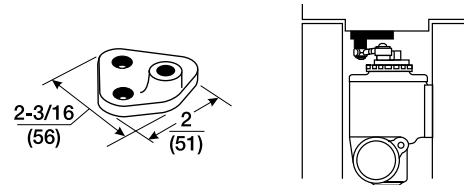
parallel arm

brackets for non-hold open arms



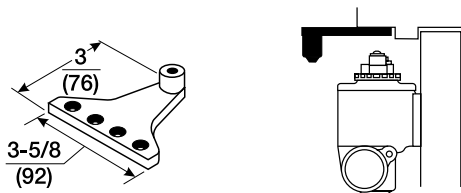
Standard Installation - #289 Soffit Plate:

This soffit plate is supplied standard with parallel arm closers. It can be mounted where the frame soffit is as narrow as 1" (25mm).



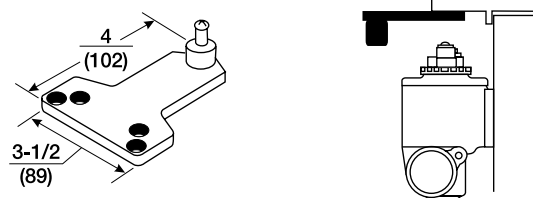
Mounting Between Doors - #413A Soffit Bracket:

For use where insufficient space between companion doors does not permit use of other soffit plates. This bracket permits mounting of the closer between doors with as little as 4-1/8" (105mm) of header space. Permits closer arm to clear up to a 5/8" (16mm) high stop.



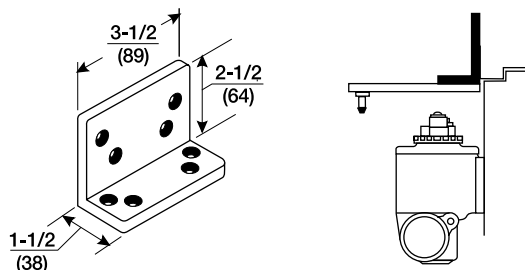
Narrow Frame/Removable Stop - #297 Soffit Plate:

For use where a narrow frame or frame with removable stop does not permit use of the standard soffit plate. This plate may be mounted on the frame soffit or the frame rabbet where the stop does not exceed 5/8" (16mm) in height. All of the screw holes are in a straight line, requiring as little as 1-1/4" (32mm) of frame reveal to mount bracket and maintain good closer arm geometry. Where the frame soffit is as wide as 2" (51mm), this soffit plate may be used to clear weatherstripping that is up to 1-3/8" (35mm) wide and 5/8" (16mm) in height.

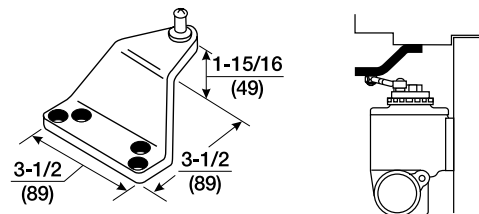


Blade/Applied Stop - #299 Soffit Plate:

For use where a blade or applied stop does not permit installation of the standard soffit plate. Mounts to either the frame soffit or rabbet. Since this soffit plate projects 7/8" (22mm) less than a standard soffit plate, it requires a minimum frame reveal of 2" (51mm). Permits closer arm to clear up to a 5/8" (16mm) high stop.



Flush Transom - 589L Angle Bracket: For use where rabbeted or flush transom conditions prevent installation of a soffit plate. Used in combination with the 289 soffit plate, or it may be used in combination with the 290 soffit plate when it is necessary for the closer arm to clear a separate overhead door holder.

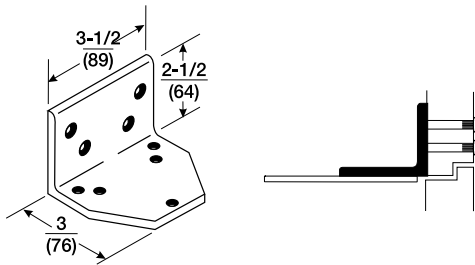


Extra-Clearance - #290 Offset Soffit Plate:

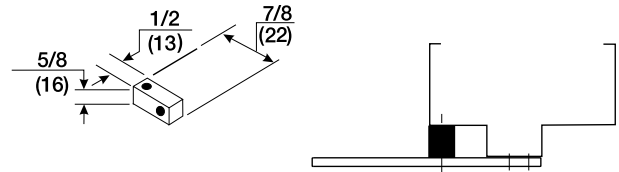
For use where the need for additional clearance prevents use of the standard soffit plate. This plate mounts to the frame soffit to provide up to 2" (51mm) of clearance when a separate overhead door holder is used. Standard mounting requires a 2-5/8" (67mm) wide frame soffit. It may also be used where unusually high frame stops or weatherstripping prevents the use of other soffit plates.

parallel rigid arm

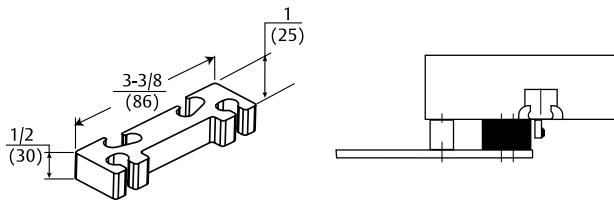
brackets for non-hold open and hold open arms



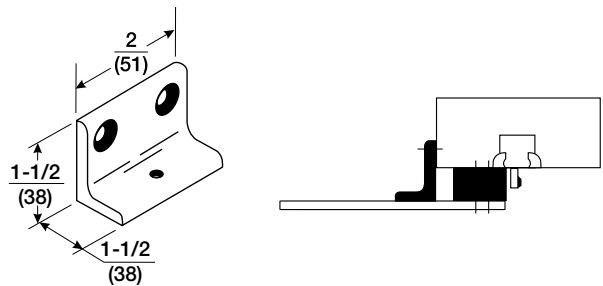
Flush Transom - #293L Angle Bracket: For use where flush transom conditions prevent installation of the standard hold open soffit plate. Used for parallel hold open arms.



Standard - #293S Spacer Block: For use where a narrow frame soffit does not provide adequate support for the soffit plate. Supplied as standard with all rigid parallel arm closers.

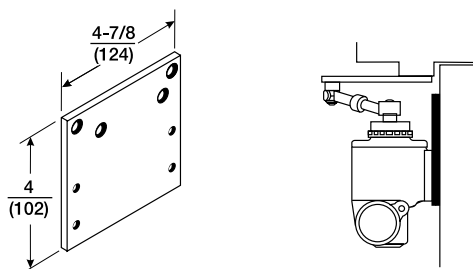


Clearance/Support Blade Stop - #891 Spacer Block: For use where the frame has a blade stop and the soffit plate must be mounted on the frame rabbet. This accessory is used in combination with the standard Spacer Block to provide clearance of the blade stop.



Narrow Frame - #890 Support Bracket: For use where the frame is narrow, and the soffit plate cannot be mounted directly to the frame soffit or rabbet. Used in combination with the #891 Spacer Block on blade stop frames to provide extra support and needed clearance of the blade stop.

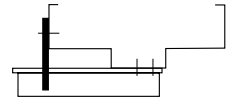
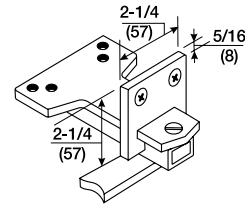
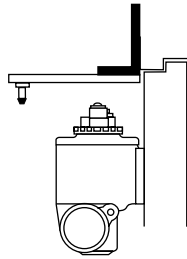
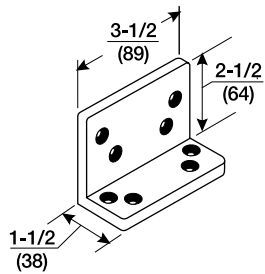
closer mounting plates



Narrow Top Rail - #1988 Drop Plate: For use where a narrow top rail prevents the closer from being mounted directly to the door surface.

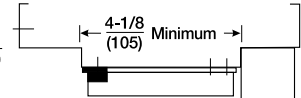
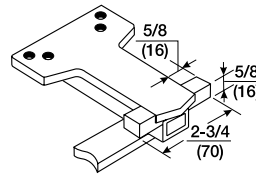
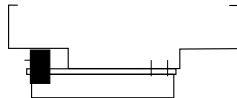
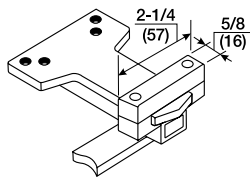
uni stop™ arm

brackets



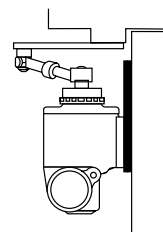
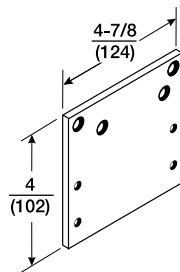
Flush Transom - 589L Angle Bracket: For use where rabbeted or flush transom conditions prevent installation of a soffit plate. Used in combination with the 289 soffit plate, or it may be used in combination with the 290 soffit plate when it is necessary for the closer arm to clear a separate overhead door holder.

Additional Support - #6190 Reinforcing Bracket: Standard for use with all parallel arm *UNI Stop* door controls. Provides additional support to the soffit plate on installations with door frame reveals from 1-7/8" to 4-5/8" (48 to 117mm).



Wide Frame - #6191 Reinforcing Kit: Optional for use with all parallel arm *UNI Stop* door controls. Used to support the soffit plate on installations with wide frames. Clamps may be used with or without the spacer block, depending on frame conditions.

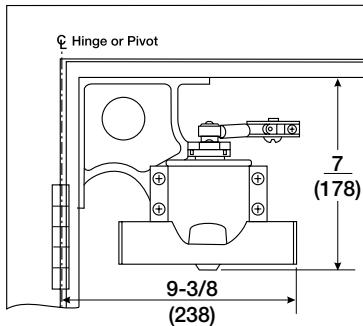
closer mounting plates



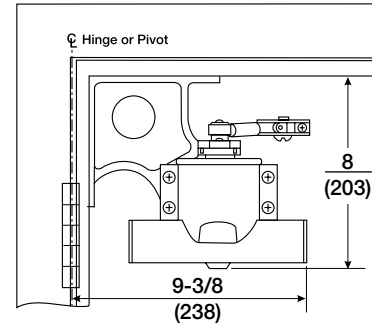
Narrow Top Rail - #1988 Drop Plate: For use where a narrow top rail prevents the closer from being mounted directly to the door surface.

corner brackets

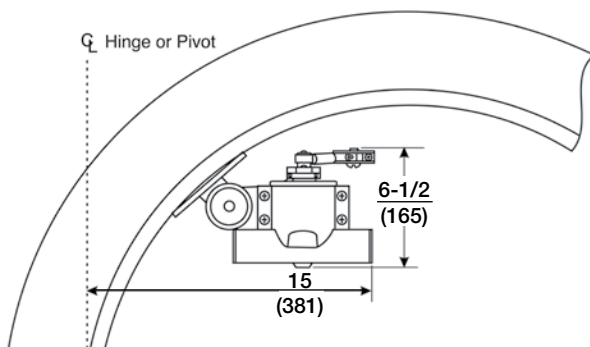
The following frame-mounted brackets, 1950, 2950 and 964, require the use of a door closer of the opposite hand from the hand of the door. Use the Parallel Arm Sizing Chart to select the correct size of closer to use, when the closer is to be mounted on a corner bracket.



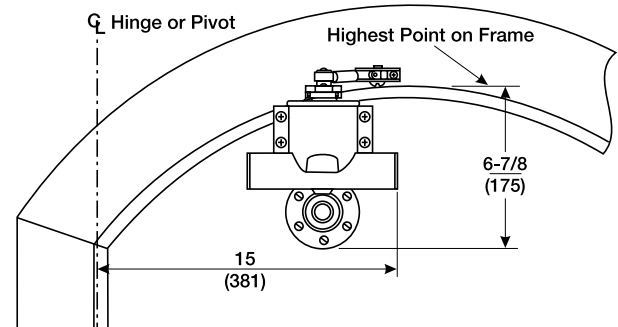
Corner Mounting, Standard Drop - #1950 Corner Bracket: For use where door is required to open to 180°. Minimum soffit width 1-3/8" (35mm).



Corner Mounting, Extra Drop - #2950 Corner Bracket: For use with a separate overhead door holder. Drops closer 1" (25mm) lower than #1950 Standard Drop Corner Bracket to permit mounting of an overhead holder. Permits door openings to 180°. Minimum soffit width 1-3/8" (35mm).



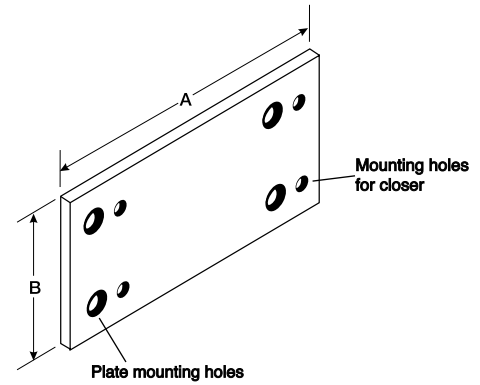
Arched or Circular Top Door - #964 Adjustable Bracket: For opposite hinge side application on arched or circular top doors. This frame-mounted bracket can be adjusted to accommodate virtually any radius of frame. Minimum soffit width 2-1/2" (64mm). This bracket requires the use of a door closer of the opposite hand from that of the door.



Arched or Circular Top Door - #974 Offset Adjustable Bracket: For hinge side application on arched or circular top doors. This door-mounted bracket is adjustable to accommodate virtually any radius of frame. Base diameter 3-5/8" (92mm).

adapter plates

Size Closer Being Replaced	Adapter Plate Catalog Number	Dimensions	
		A	B
992/993	1983	5-1/2" (140)	2-5/8" (67)
994	None Required	—	—
995/996	1986	5-1/2" (140)	2-5/8" (67)

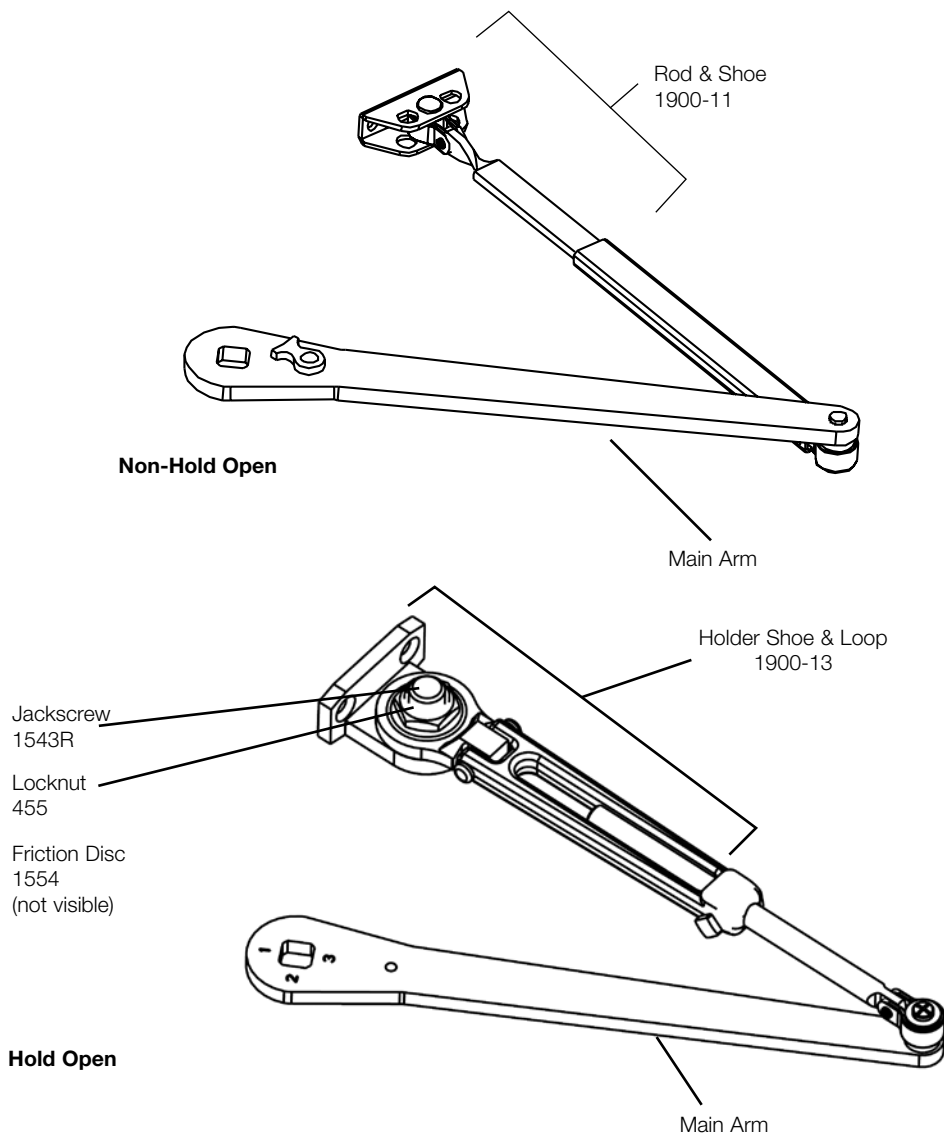


1980 Series Adapter Plate

For use when replacing a discontinued old style 990 Series surface closer with a series 1900 Traditional Surface Closer. The plate selected will employ the existing holes in either door or corner bracket. The Series 1900 closer will mount to the plate. These plates can be used to convert regular arm, parallel arm or bracket mount installations. Order by model number.

parts list

regular arm



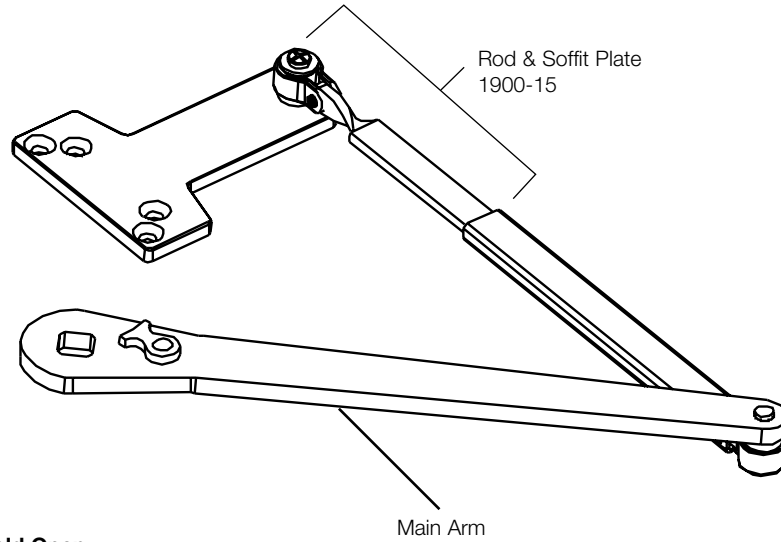
Note: Mounting hardware included with all parts ordered

Arm Function	Complete Arm Assembly	Main Arm	Main Arm Less Rod & Shoe	Main Arm & Rod Less Holder Shoe & Loop Assy.
Non-Hold Open	Y1900-1	1900-1M	Y1900-1W	N/A
Hold Open	1900-3		N/A	1900-3W

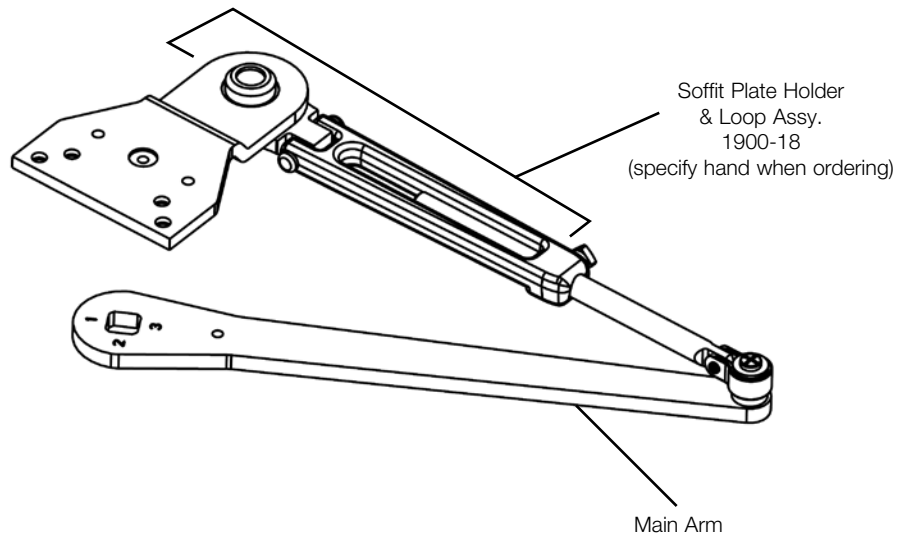


parts list

parallel arm



Non-Hold Open



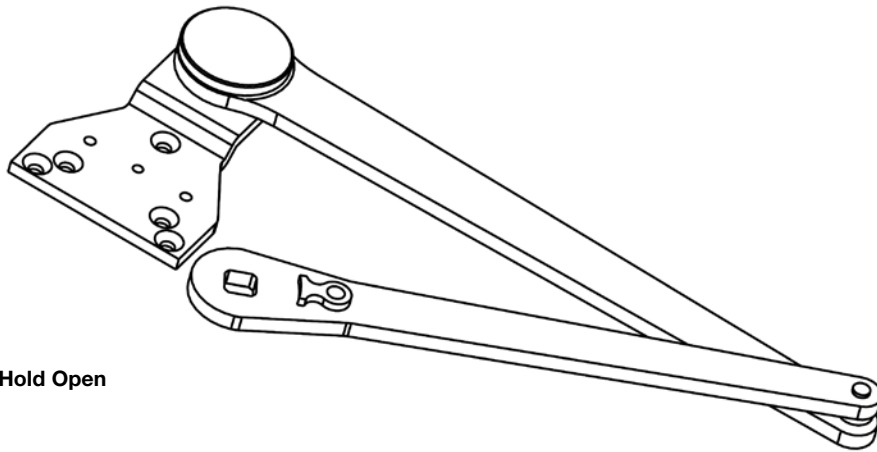
Hold Open

Note: Mounting hardware included with all parts ordered

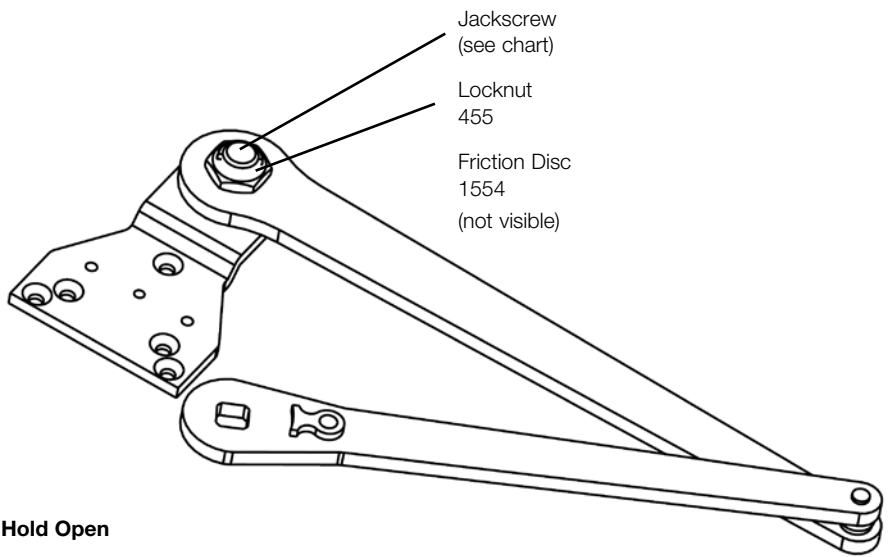
Arm Function	Complete Arm Assembly	Main Arm	Main Arm Less Rod & Soffit Plate	Main Arm & Rod Less Soffit Plate Holder Assy. & Loop Assy.
Non-Hold Open	Y1900-5		Y1900-1W	N/A
Hold Open	1900-8R (Right Hand)	1900-1M	N/A	1900-3W
	1900-8L (Left Hand)			

parts list

parallel rigid arm assemblies



Non-Hold Open



Hold Open

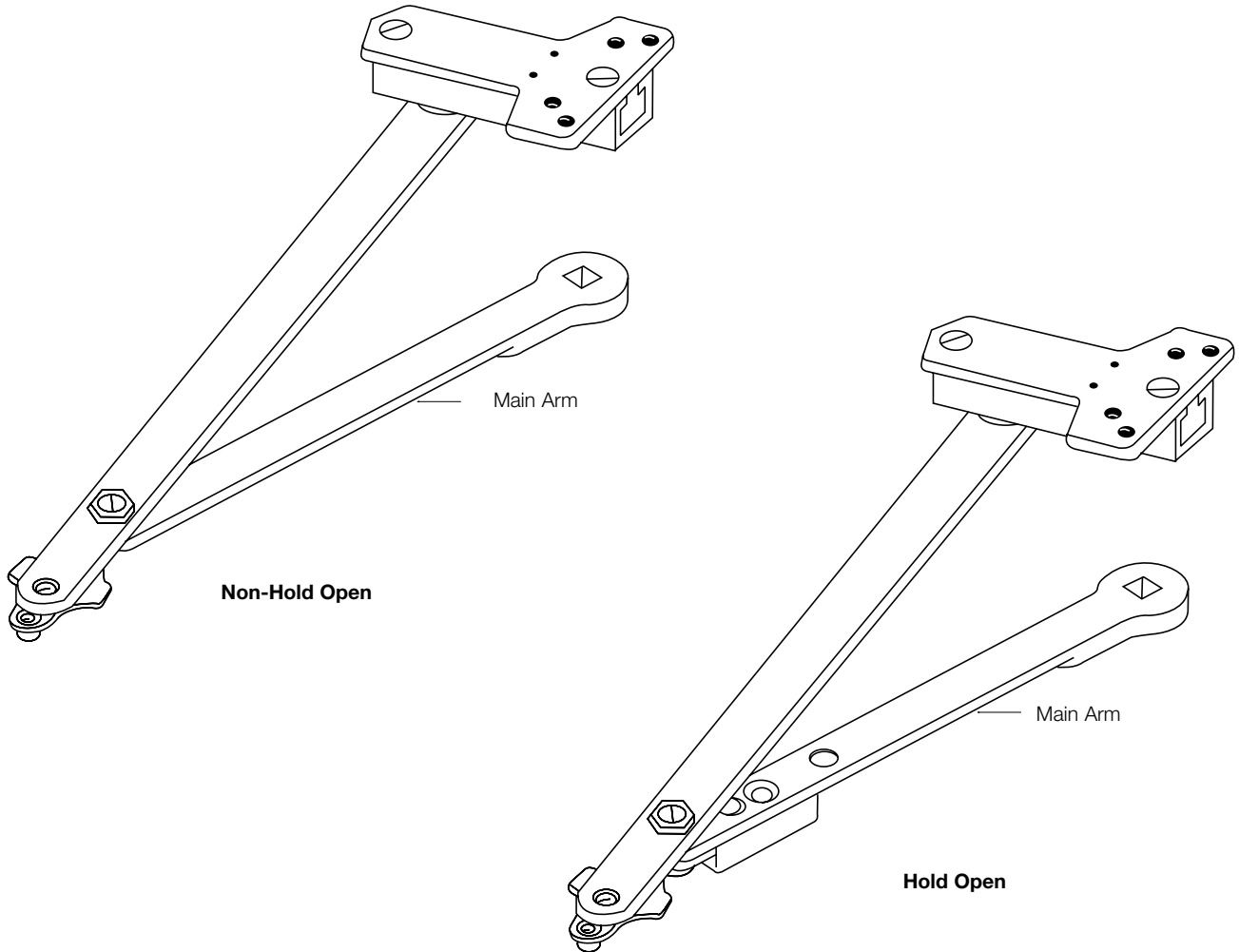
Note: Mounting hardware included with all parts ordered

Arm Function	Complete Arm Assembly	Jackscrew
Non-Hold Open	PR1900-5	N/A
Hold Open	PR1900-8R (Right Hand)	1543R
	PR1900-8L (Left Hand)	1543L



parts list

uni stop™ arm assemblies



Note: Mounting hardware included with all parts ordered

Door Width (cm)	Main Arm Length* (mm)	Complete Arm Assembly	
		Non-Hold Open	Hold Open
28" - 32" (71 - 81)	9-1/2" (241)	6130-17	6130-7
33" - 41" (84 - 104)	11" (279)	6130-18	6130-8
42" - 48" (107 - 122)	12-1/2" (318)	6130-19	6130-9

* Center to center length

parts list

miscellaneous parts

Springs	
24BD	B/D Spring
56EF	E/F Spring
230BC	Spring (prior to 1978 model)
230D	Spring (prior to 1978 model)
230EF	Spring (prior to 1978 model)

Closer Bodies	
1902/4 LAP	Size 2-4 body
1905/6 LAP	Size 5/6 body

screw packs

Sex Nuts	
SN-134	1-3/4" door
SN-214	2-1/4" door

Thru Bolts & Grommet Nuts	
TBGN138-38	1-3/8" door
TBGN134-38	1-3/4" door
TBGN214-38	2-1/4" door

fasteners

Type	Description	Arm			
		RA	PA	PR	UNI STOP™
DOOR					
SDST	Self-Drilling Self-Tapping	S	S	S	S
MS	Machine Screw	S	S	S	S
SN	Sleeve Nut	O	O	S	S
TBGN	Thru Bolts & Grommet Nuts	O	O	O	O
FRAME					
SDST	Self-Drilling Self-Tapping	S	S	S	S
MS	Machine Screw	S	S	S	S

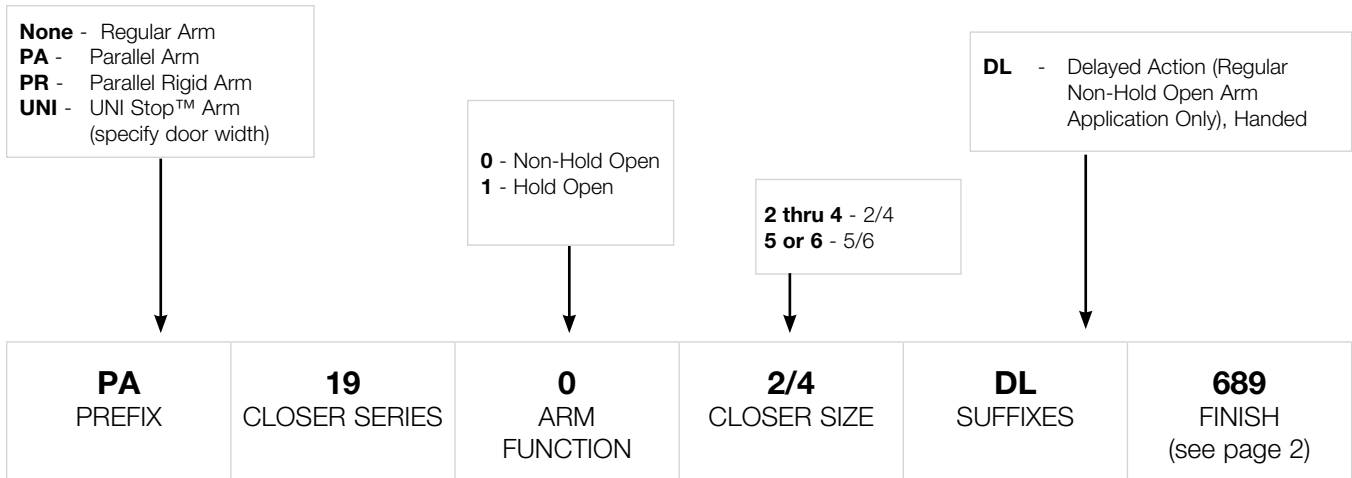
S = standard; O = optional

SN are for use on unreinforced hollow metal doors or to prevent any hollow metal door from collapse/dimpling. They can also be used for thru bolting on wood doors. SN are supplied for 1-3/4" (44mm) thick doors unless specified for 2-1/4" (57mm).

TBGN are an alternative to SN for wood doors. TBGN are supplied standard for 1-3/4" (44mm) thick doors. They can be specified for 1-3/8" (35mm) thick doors.



how to order



Note: Contact factory if door weight exceeds 250 lbs.



1900 series | door closer

notes



online literature and templates

For the latest information on Yale Locks & Hardware products, visit our website at: www.yalelocks.com

Click on the "Product Information" button to find:

- Catalogs
- Parts manuals
- Templates
- Specifications
- Installation instructions

Yale® customers can click on the ebusiness symbol  on the website to register for an ebusiness account to:

- Check the status of orders
- Check availability of QuickShip items
- Track your order and confirm delivery
- Receive email notification of template changes
- And More...

Or contact us at:

U.S.A.

Yale Locks & Hardware

Address: 225 Episcopal Road, Berlin, CT 06037-4004
Tel: 1-800-438-1951 • Fax: 1-800-338-0965 • www.yalelocks.com

Canada:

ASSA ABLOY Door Security Solutions Canada

Address: 160 Four Valley Drive, Vaughan, Ontario L4K 4T9
Tel: 1-800-461-3007 • Fax: 1-800-461-8989 • www.assaabloy.ca

International:

ASSA ABLOY Americas International

Tel: 1-905-821-7775 • Fax: 1-905-821-1429 • www.assaabloyai.com

Yale Locks & Hardware is a division of Yale Security Inc., an ASSA ABLOY Group company.

Yale® is a registered trademark of Yale Security Inc., an ASSA ABLOY Group company. Uni Stop™ is a trademark of Yale Security Inc., an ASSA ABLOY Group company. Other products' brand names may be trademarks or registered trademarks of their respective owners and are mentioned for reference purposes only. These materials are protected under U.S. copyright laws. All contents current at time of publication. Yale Security Inc. reserves the right to change availability of any item in this catalog, its design, construction, and/or its materials. Copyright © 2001, 2014, Yale Security Inc., an ASSA ABLOY Group company. All rights reserved. Reproduction in whole or in part without the express written permission of Yale Security Inc., an ASSA ABLOY Group company is prohibited.

YALE, with its unique global reach and range of products, is the world's favorite lock.

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience.

42066-2/14RE