# Yale

DOOR CONTROL DESIGNED FOR TRADITIONAL AND PERIOD DECOR

# 1900 SERIES





### 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 Rigid Parallel 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.

#### **FINISHES**

Product will be painted with a combination of waterborne acrylic and polyester powder coat. Closers will withstand 120 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	628, 625, 629, 630, 651, 652	SB			
Statuary Bronze	690	640, 613, 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 (Beige)*	600		SRI			
Corrosion Inhibitor Prime Coat	SRI		SRI			
* A!  - - 44	01	and a mail and an area at a standard and a silver	- (CDI)			

<sup>\*</sup> Available at extra cost. Closers can be ordered prime coated only, i.e. (SRI) or prime coated with finish, i.e. SRI x 690.

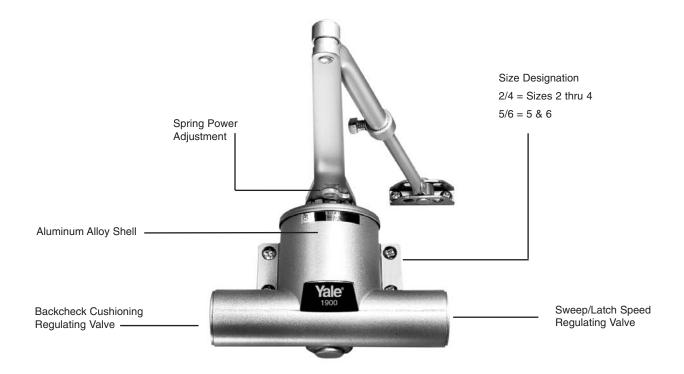


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### **OVERVIEW**



#### **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 UBC-72 (1997) for 3-hour assemblies. The product is manufactured in an ISO 9001 facility. These closers are also listed by the New York City Materials and Equipment Acceptance Division.

#### **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.

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### 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. The closing force can be increased by at least 50% over the minimum closing force for each closer size. A spanner wrench is provided with each closer for power adjustment.

#### 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 is provided for increasing or decreasing the strength of the backcheck cushioning with a 1/8" (3mm) hex key.

#### Non-Hold Open Arms

Supplied standard with closer.

#### Adjustable Power Standard Installation Jamb Bracket

Provides a  $\pm 7$ -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

Permit door to be held open at any point between 90° and 180° by using different closer mounting locations. Hold open arms are non-handed for standard arm and corner bracket installations. Hold open arms are handed for parallel arm and rigid parallel arm installations.

#### Field Reversible

Closer spring can be reversed to accommodate the hand of the installation when arms are non-handed. To save time and costs on the job site, it is recommended to order the closer for the proper hand of door. 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 handed. They are not available with backcheck cushioning.

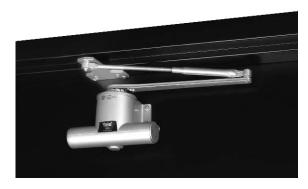


### **APPLICATIONS**



#### 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.

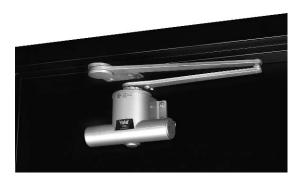
Due to the geometry of the arm it is approximately 25% less power-efficient than a regular arm application.

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).

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### **APPLICATIONS**



#### Rigid Parallel 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.



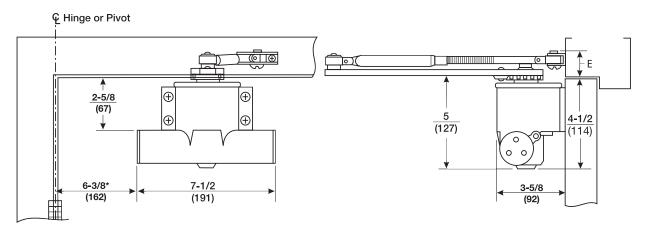
#### UNI Stop™ Arm (Parallel Arm applications only)

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 is 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**

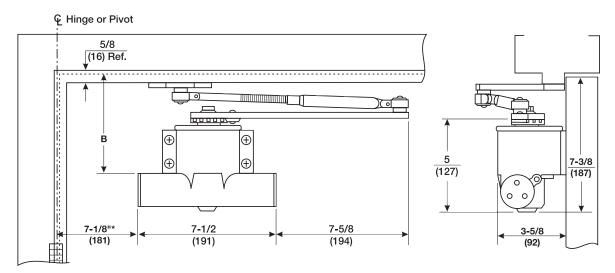


<sup>\*</sup> Template position for 100° door opening

Wood o	Maximum Door Size Wood or Metal Inches (cm)		Model Number Ceilin		E mum learance s (mm)
Interior	Exterior	erior Non-Hold Hold Open Open		Non-Hold Open	Hold Open
48" (122)	36" (91)	1902/4	1912/4	1-1/2"	2-1/8"
_	44" (112)	1905/6	1915/6	(38)	(54)



### **PARALLEL ARM INSTALLATION**

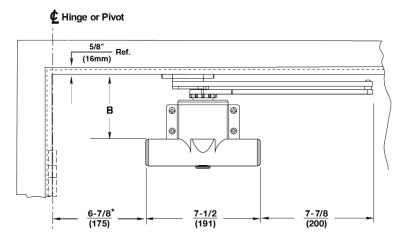


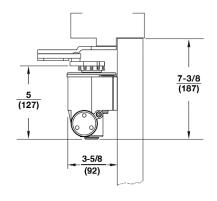
<sup>\*</sup> Template position for 130° door opening

Wood	Maximum Door Size Wood or Metal Inches (cm)		Number	B Minimum Top Rail with 5/8" (16mm) frame 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"	2-1/2" (64)
_	44" (112)	PA1905/6	PA1915/6	(137)	



# **RIGID PARALLEL ARM**



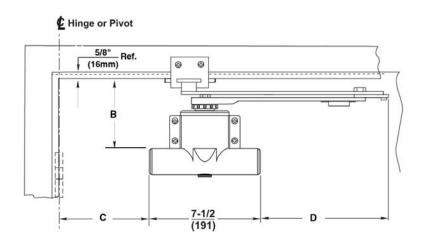


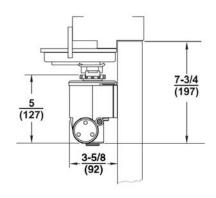
<sup>\*</sup> Template position for 130° door opening

Wood	Maximum Door Size Wood or Metal Inches (cm)		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"	2-1/2" (64)
_	44" (112)	PR1905/6	PR1915/6	(137)	



# UNI STOPTM ARM





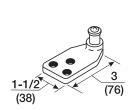
Door Width	Minimum	B n Top Rail Frame Stop	C Template Position for Hold Open at Listed Angle or Dead Sto		Stop at	D Arm			
Inches (cm)	Without	With 1988		Listed Angle plus 5°			Extension Beyond		
	Drop Plate	Drop Plate	85°	90°	95°	100°	105°	110°	Closer
28-32" (71-81)			10" (254)	9-3/8" (238)	8-3/4" (222)	8-1/4" (210)	7-3/4" (197)	7-1/2" (191)	8-7/8" (225)
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)

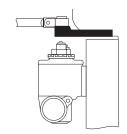
	Door Size s (cm)	Model Number		,	
Interior	Exterior	Non-Hold Hold Open Open			
28-41" (71-104)	28-36" (71-91)	UNI1902/4	UNI1912/4	x Specify Door Width	
42-48" (107-122)	37-48" (94-122)	UNI1905/6	UNI1915/6		

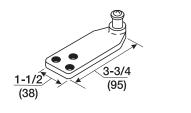


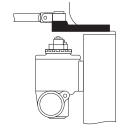
### **REGULAR ARM**

#### **BRACKETS FOR NON-HOLD OPEN ARMS**









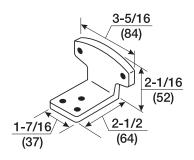
#### Molded/Bull Nose Trim - #291 Bracket:

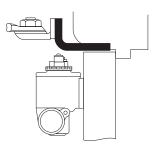
For use where the door frame has molded or bull nose trim which will not accept a standard non-hold open shoe. The bracket is mortised into the frame rabbet and projects beyond the face of the frame. It will accommodate a frame rabbet up to 2" (51 mm) deep.

#### 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 mm to 73 mm) deep.

#### **BRACKET FOR HOLD OPEN ARMS**





#### Molded/Bull Nose Trim - #292

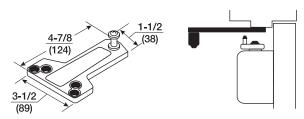
Bracket: For use where the door frame has molded or bull nose trim which will not accept a standard hold open shoe. It is mortised into the frame rabbet, and projects beyond the face of the frame. It will accommdate a rabbet up to 2" (51 mm) deep. This bracket is used in combination with the standard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

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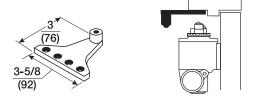


### **PARALLEL ARM**

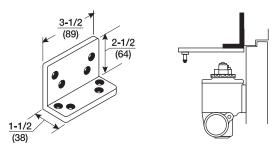
#### **BRACKETS FOR NON-HOLD OPEN ARMS**



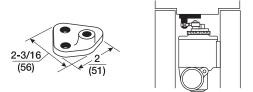
Standard Installation - #289 Soffit Plate: This soffit plate is supplied standard with parallel arm closers. It can be mounted where the frame soffit is as narrow as 1" (25 mm).



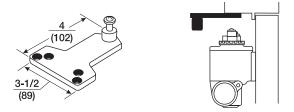
Narrow Frame/Removable Stop - #297 Soffit Plate: For use where a narrow frame or frame with removable stop does not permit use of the standard soffit plate. This plate may be mounted on the frame soffit or the frame rabbet where the stop does not exceed 5/8" (l6mm) in height. All of the screw holes are in a straight line, requiring as little as 1-1/4" (32 mm) of frame reveal to mount bracket and maintain good closer arm geometry. Where the frame soffit is as wide as 2" (51 mm), this soffit plate may be used to clear weatherstripping that is up to 1-3/8" (35mm) wide and 5/8" (l6mm) in height.



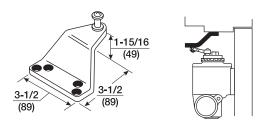
Flush Transom - 589L Angle Bracket: For use where rabbeted or flush transom conditions prevent installation of a soffit plate. Used in combination with the 289 soffit plate, or it may be used in combination with the 290 soffit plate when it is necessary for the closer arm to clear a separate overhead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



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" (105 mm) of header space. Permits closer arm to clear up to a 5/8" (16 mm) high stop.



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" (22 mm) 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" (16 mm) high stop.

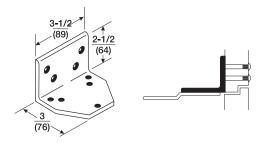


Extra-Clearance - #290 Offset Soffit Plate: For use where the need for additional clearance prevents use of the standard soffit plate. This plate mounts to the frame soffit to provide up to 2" (51mm) of clearance when a separate overhead door holder is used. Standard mounting requires a 2-5/8" (67mm) wide frame soffit. It may also be used where unusually high frame stops or weatherstripping prevents the use of other soffit plates.

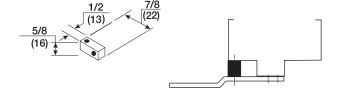


### **RIGID PARALLEL ARM**

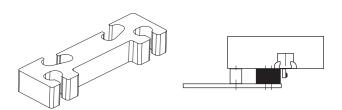
#### BRACKETS FOR NON-HOLD OPEN AND HOLD OPEN ARMS



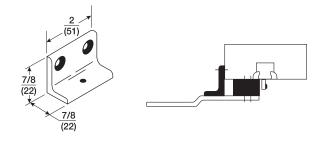
Flush Transom - #293L Angle Bracket: For use where flush transom conditions prevent installation of the standard hold open soffit plate. Used for parallel hold open arms.



**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.

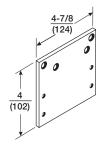


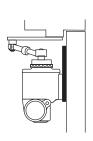
Clearance/Support Blade Stop - #891 Spacer Block: For use where the frame has a blade stop and the soffit plate must be mounted on the frame rabbet. This accessory is used in combination with the standard Spacer Block to provide clearance of the blade stop.



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**



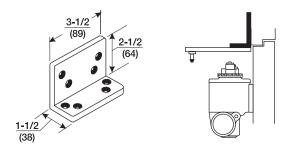


Narrow Top Rail - #1988 Drop Plate: For use where a narrow top rail prevents the closer from being mounted directly to the door surface.

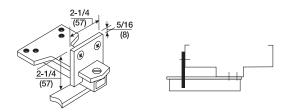


### **UNI STOPTM ARM**

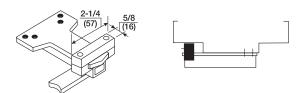
#### **BRACKETS**

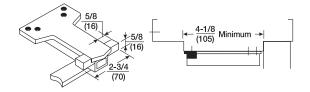


Flush Transom - 589L Angle Bracket: For use where rabbeted or flush transom conditions prevent installation of a soffit plate. Used in combination with the 289 soffit plate, or it may be used in combination with the 290 soffit plate when it is necessary for the closer arm to clear a separate overhead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



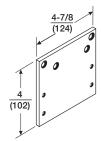
Additional Support - #6190 Reinforcing Bracket: Standard for use with all parallel arm *UNI Stop* door controls. Provides additional support to the soffit plate on installations with door frame reveals from 1-7/8" to 4-5/8" (48mm to 117mm).

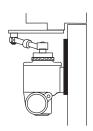




**Wide Frame - #6191 Reinforcing Kit:** Optional for use with all parallel arm *UNI Stop* door controls. Used to support the soffit plate on installations with wide frames. Clamps may be used with or without the spacer block, depending on frame conditions.

#### **CLOSER MOUNTING PLATES**



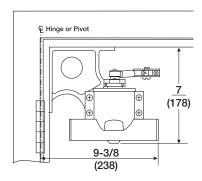


Narrow Top Rail - #1988 Drop Plate: For use where a narrow top rail prevents the closer from being mounted directly to the door surface.

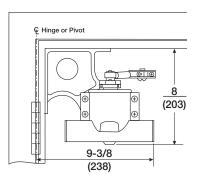


### **CORNER BRACKETS**

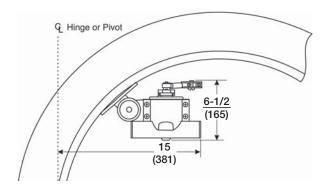
The following frame-mounted brackets, 1950, 2950 and 964, require the use of a door closer of the opposite hand from the hand of the door. Use the Parallel Arm Sizing Chart to select the correct size of closer to use, when the closer is to be mounted on a corner bracket.



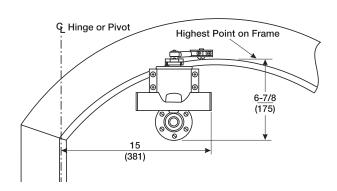
Corner Mounting, Standard Drop - #1950 Corner Bracket: For use where door is required to open to 180°. Minimum soffit width 1-3/8" (35mm).



Corner Mounting, Extra Drop - #2950 Corner Bracket: For use with a separate overhead door holder. Drops closer 1" (25 mm) 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.

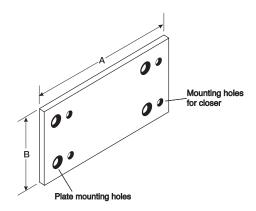


Arched or Circular Top Door - #974 Offset Adjustable Bracket: For hinge side application on arched or circular top doors. This door-mounted bracket is adjustable to accommodate virtually any radius of frame. Base diameter 3-5/8" (92mm).



### **ADAPTER PLATES**

Size Closer Being	Adapter Plate Catalog	Dimer	nsions
Replaced	Number	Α	В
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)

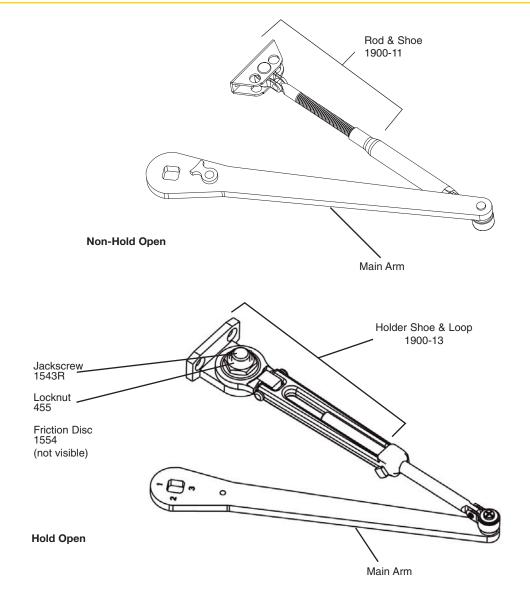


#### 1980 Series Adapter Plate

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.



#### **REGULAR ARM**

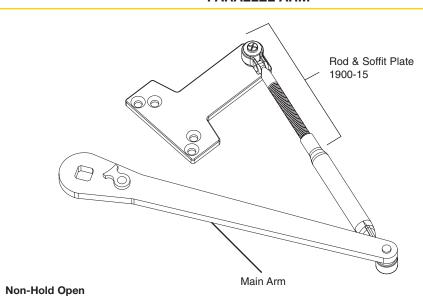


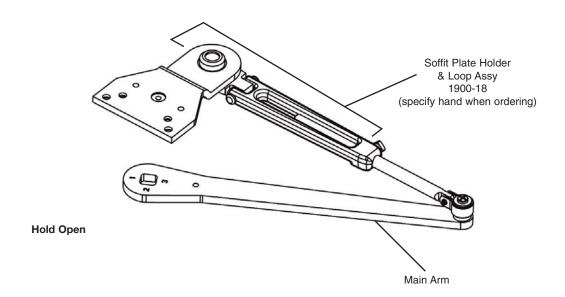
Note: Mounting hardware included with all parts ordered

Arm Function	Complete Arm Assembly	Main Arm	Main Arm and Adjusting Tube	Main Arm & Rod Less Holder Shoe & Loop Assy.
Non-Hold Open	1900-1	1900-1M	1900-1W	N/A
Hold Open	1900-3	1900-1101	N/A	1900-3W



#### **PARALLEL ARM**



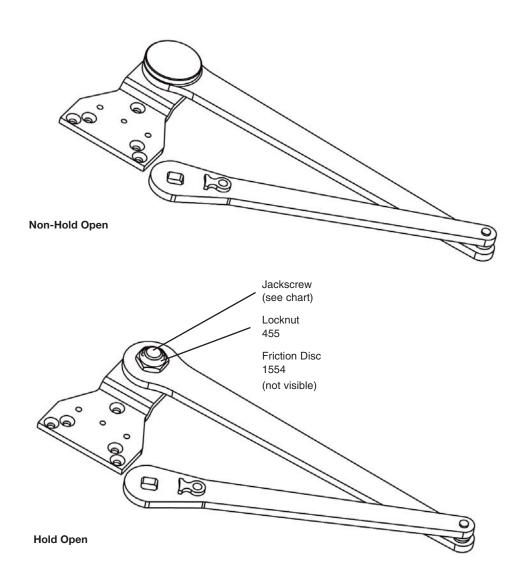


Note: Mounting hardware included with all parts ordered

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	1900-5		1900-1W	N/A
Hold Onen	1900-8R (Right Hand)	1900-1M	N/A	1900-3W
Hold Open	1900-8L (Left Hand)		IN/A	1900-3W



#### **RIGID PARALLEL ARM ASSEMBLIES**

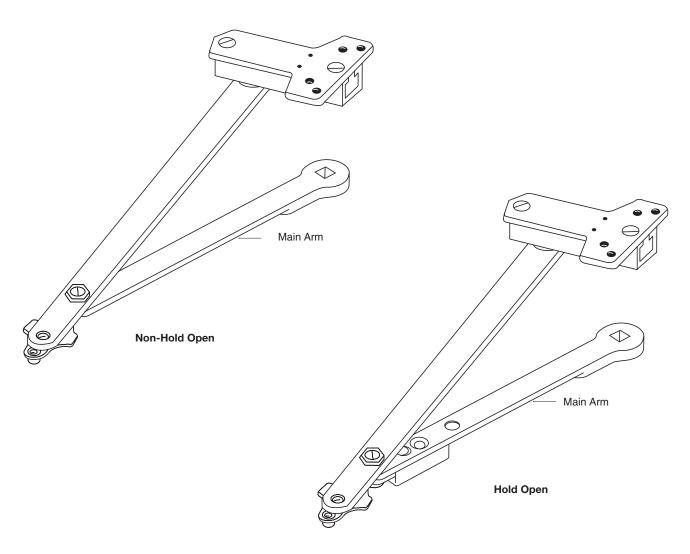


Note: Mounting hardware included with all parts ordered

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



#### UNI STOP™ ARM ASSEMBLIES



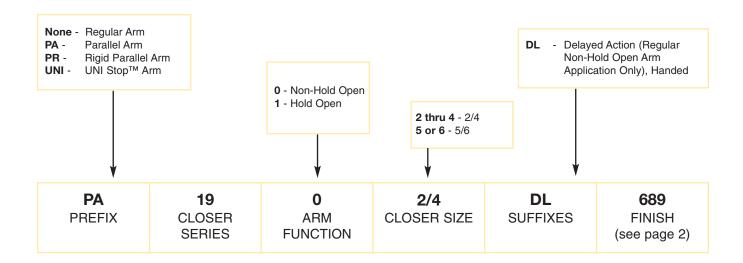
Note: Mounting hardware included with all parts ordered

Door Width	Main Arm	Complete Arn	n Assembly
(cm)	Length* (mm)	Non-Hold Open	Hold Open 6130-7 6130-8
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

<sup>\*</sup> Center to center length



# **HOW TO ORDER**





# NOTES



# **NOTES**

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### online literature

## and templates

For the latest information on Yale Commercial Lock and Hardware products, visit our website at www.yalecommercial.com.

Click on the "Literature" 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 Quick Ship items
- Track your order and confirm delivery
- Receive email notification of template changes

And More...

### www.yalecommercial.com



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