

CR441 SERIES

ANSI A156.4 Grade 1, Full Cover Multi-Size, Full Feature Closer
UL Listed, Conforms to Standards UL10C and UBC7-2-1997
BHMA Certified Lifetime Warranty



MEETS
The Buy American Act
(SPECIFY **MADE IN KOREA** WHEN ORDERING)

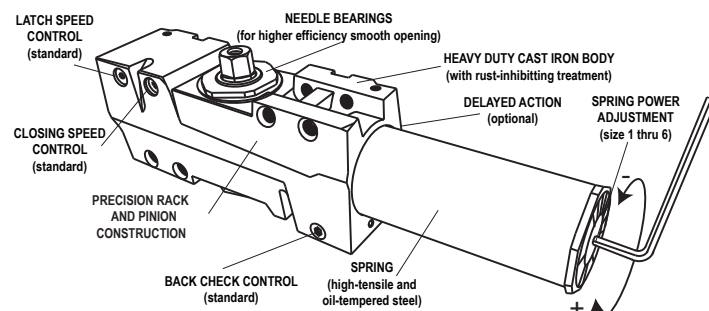
LIFETIME
WARRANTY



- Cal-Royal's Finest Hydraulic Door Closer Series Meeting the Highest Industry Standards, Grade 1
- Heavy-Duty Double Lever Arm with Extra Smooth Action Full Feature Multi-Size Commercial Door Closer for Use In Office Buildings, Shopping Centers and other Commercial Buildings
- Standard Back-Check Function
- Standard Packaging includes Full Plastic Cover with Sex Bolts and Screws. (Metal Optional)
- Optional Plated Metal Decorative Covers Including 32D
- Optional Adjustable Delayed Action / Barrier Free for Handicapped Or Elderly

FEATURES

- Universal Application. Non-Handed for Standard, Top Jamb or Parallel Arm Installation
- Non-Sized, 1 thru 6 FACTORY PRESET SIZE 3 Meets ADA
- Door Weights: 30-260 lbs
- Hydraulic Door Closer with Standard Adjustable Back-Check Function
- Adjustable Closing and Latching Speed by Two Separate Regulating Valves
- Optional Adjustable Delayed Action (DA) Preset at the Factory for Approximately 20 Seconds, Between 70° and 0° Delay Time Easily Adjusted up to 1 Minute. **CR441 DA**
- Standard Full Plastic Cover (**CR441COV**)
- Self-Tapping Screws and Closer Gauge for Easy Adjustment is Standard Feature
- Available in Alum, Duro, Gold, US3, 26, 26D, 10B and 32D



REDUCED OPENING FORCE CR441 DOOR CLOSERS

IMPORTANT Any door closer, including those certified by **BHMA** to conform to **ANSI Standard A156.4**, that is chosen, installed and adjusted based on ADA or other reduced opening force requirement may not provide sufficient power to close and latch a door. Location of door could also affect action and efficiency of door closer.

DOOR WIDTH	36"	42"	48"
**8.5 lbs.	CR441	CR441	CR441
**5.0 lbs.	CR441	CR441	CR441

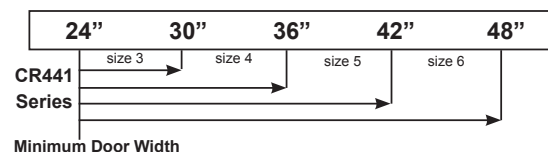
**** Maximum Opening Force**

TABLE OF SIZES

Closing power of CR441 closers may be adjusted 50%

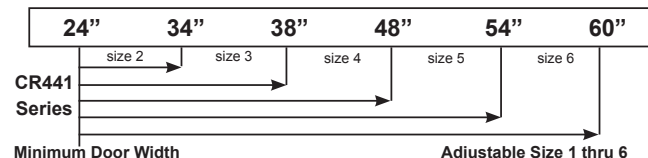
→ Shows recommended range of door width for closer size.

EXTERIOR (and VESTIBULE) DOOR WIDTH



Minimum Door Width

INTERIOR DOOR WIDTH

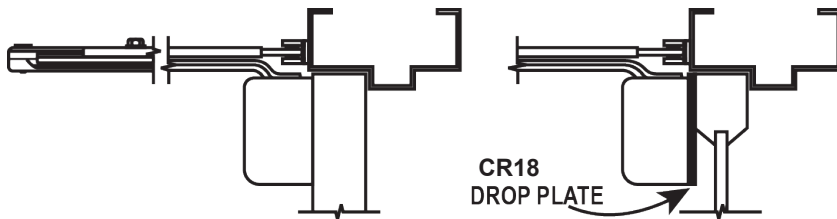
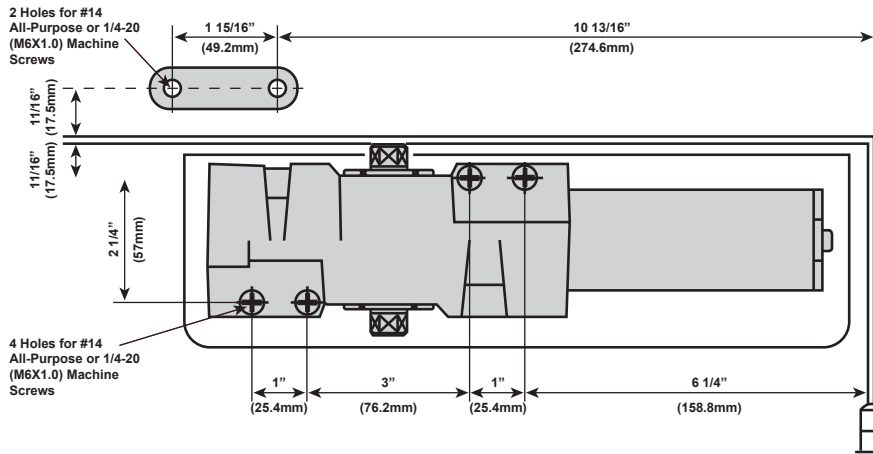


Minimum Door Width

Adjustable Size 1 thru 6

DESCRIPTION	SIZE	
A. Length of Closer Body	11"	
B. Horizontal Mounting Holes	5"	
C. Vertical Mounting Holes	1"	
D. Width of Closer Body	2 3/4"	
E. Projection from Door	2"	

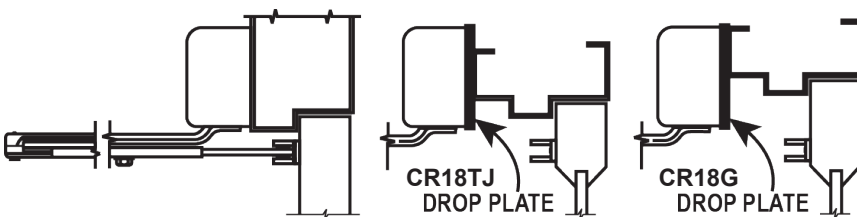
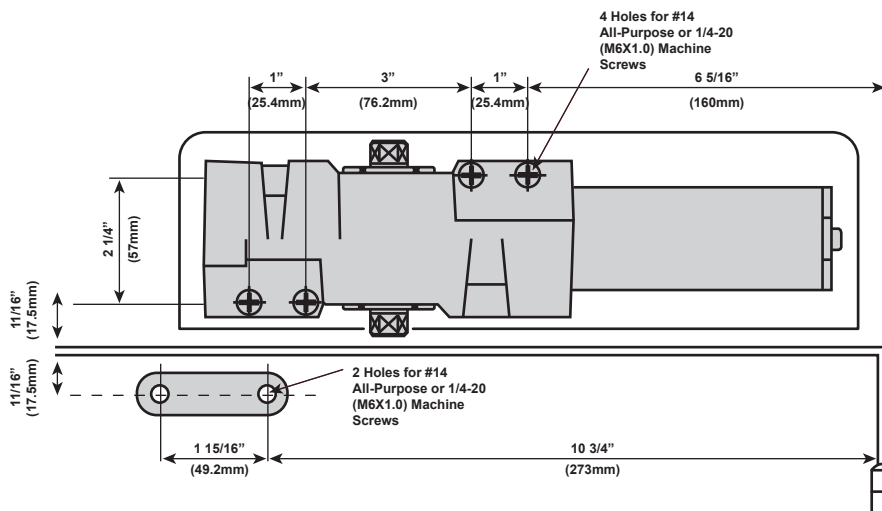
CR441 SERIES : REGULAR ARM INSTALLATION (PULL SIDE)



- **Butt Hinges** should not exceed 5" (127mm) in width.
- **Auxiliary Stop** is recommended at hold-open point or where a door cannot swing beyond 120°
- **Reveal** should not exceed 3/4" (19mm) for regular arm or hold-open arm.
- **Top Rail** less than 3 3/4" (19mm) requires PLATE, CR18. Plate requires 2" (51mm) minimum.
- **Clearance** of 2 3/8" (60mm) behind door required for 90° installation.
- **Delayed Action** - Delays closing from 120° to 70°. Delay time adjustable up to approximately 1 minute.
- See **Optional Installation** for ARMS and BRACKETS available on the next page.

- **RIGHT HAND DOOR SHOWN**
- **SURFACE MOUNTED**
- **ADJUSTABLE AND PRE-SET BACKSET**
- **NON-HOLD OPEN / HOLD OPEN**

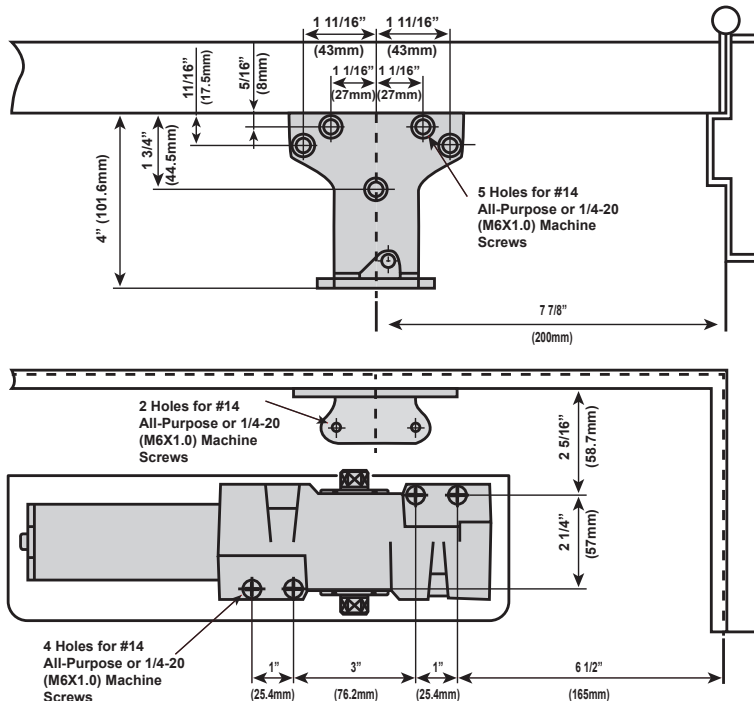
CR441 SERIES : TOP JAMB INSTALLATION (PUSH SIDE)



- **Butt Hinges** should not exceed 5" (127mm) in width.
- **Auxiliary Stop** is recommended at hold-open point or where a door cannot swing beyond 120°
- **Reveal** of 2 9/16" (65mm) allows 120° opening for regular or standard hold-open arm. 8" (203mm) allows up to 120° opening with CR441EXT.
- **Top Rail** requires 1 1/4" (32mm) minimum. 2 1/4" (57mm) minimum with closer on PLATE, CR18TJ. 3" (76mm) minimum with closer on PLATE, CR18G.
- **Head Frame** less than 3 1/2" (89mm) requires PLATE, CR18TJ. With flush ceiling, use PLATE, CR18G. Either plate requires 1 3/4" (44mm) minimum.
- **Delayed Action** - Delays closing from 120° to 70°. Delay time adjustable up to approximately 1 minute.
- See **Optional Installation** for ARMS and BRACKETS available on the next page.

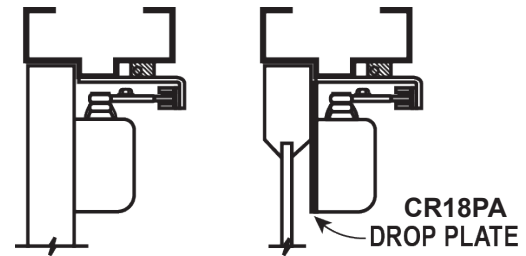
- **LEFT HAND DOOR SHOWN**
- **SURFACE MOUNTED**
- **ADJUSTABLE AND PRE-SET BACKSET**
- **NON-HOLD OPEN / HOLD OPEN**

CR441 SERIES : PARALLEL ARM INSTALLATION (PUSH SIDE)



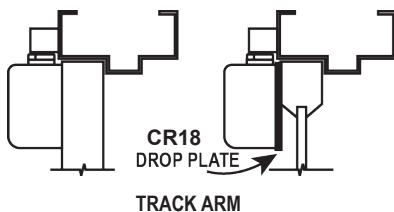
- RIGHT HAND DOOR SHOWN
- SURFACE MOUNTED
- ADJUSTABLE AND PRE-SET BACKSET
- NON-HOLD OPEN / HOLD OPEN

- **Butt Hinges** should not exceed 5" (127mm) in width.
- **Auxiliary Stop** is recommended at hold-open point or where a door cannot swing beyond 180°, or where **CR3077SPAS** arm is not used.
- **Top Rail** less than 5 3/8" (137mm) measured from the stop requires **PLATE, CR18PA**. Plate requires 2" (51mm) minimum from the stop.
- **Stop Width** minimum 1" (25mm). **CUSH** arm requires minimum 1 1/2" (38mm).
- **Delayed Action** - Delays closing from 120° to 70°. Delay time adjustable up to approximately 1 minute.
- See **Optional Installation** for ARMS and BRACKETS available on the next page.

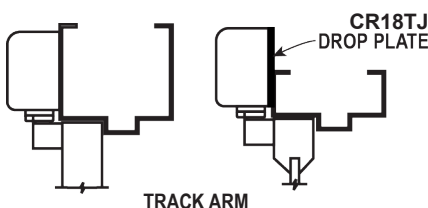


CR441 SERIES : OPTIONAL INSTALLATION

REGULAR ARM (PULL SIDE)



TOP JAMB (PUSH SIDE)



MAXIMUM OPENING: 180° (Standard), 120° (Hold Open)

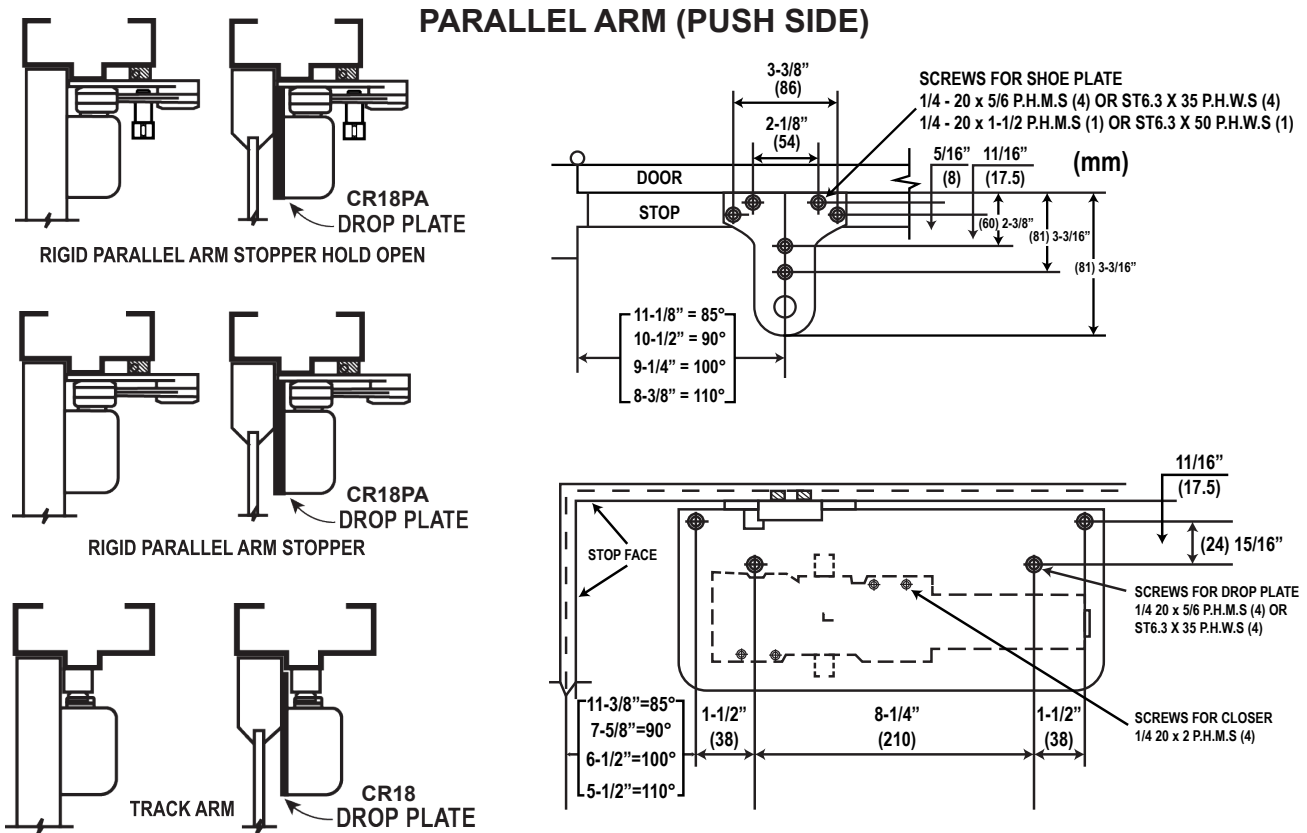
OPTIONAL INSTALLATION

ARMS

- **CR3049HO** - Non-Handed Hold Open Arm with Parallel Bracket
- **CR441ARM** - Door Closer Arm (Main and Regular Forearm)
- **CR441EXT** - Extended Long Arm (3" extension) for Top Jamb with reveals
- **TRACK441** - Slide Track Arm with Hold-Open

- **CR18PA** - Drop Plate for Parallel Arm Mounting Top Rail is less than 5 1/2" Measured from Stop. Plate Requires 2" Minimum Top Rail
- **CR18** - Drop Plate used where Top Rail is less than 3 3/4"
- **CR18TJ** - Drop Plate for Top Jamb where Face is less than 3 1/2"
- **CR18G** - Drop Plate for Top Jamb Mounted Closer Flush with Top of Head Frame Face in Flush Ceiling Condition. Plate Requires 1 3/4" Minimum Head Frame

CR441 SERIES : OPTIONAL INSTALLATION



MAXIMUM OPENING: 180° (Standard), 120° (Hold Open)

OPTIONAL INSTALLATION ARMS

- **CR3049HO** - Non-Handed Hold Open Arm with Parallel Bracket
- **CR441ARM** - Door Closer Arm (Main and Regular Forearm)
- **CR441EXT** - Extended Long Arm (3" Extension) for Top Jamb with Reveals
- **TRACK441** - Slide Track Arm with Hold-Open
- **CR3049HOSPRING** - Super Rigid Parallel Arm Stopper Hold-Open, Non-Handed with Spring Loaded Stop in Soffit Shoe
- **CR3077SPRING** - Super Rigid Non-Handed Parallel Arm with Spring Loaded Stop in the Soffit Shoe
- **CR3049HOSRPS** - Super Rigid Parallel Arm Stopper Hold-Open, Non-Handed with Stop in Soffit Shoe
- **CR3049SPAS** - Super Rigid Parallel Arm Stopper, Non-Handed with Stop in Soffit Shoe
- **CR3077HDAR** - Non-Handed Parallel Arm Features Forged, Solid Steel Main and Forearm for Potentially Abusive Installations

BRACKETS

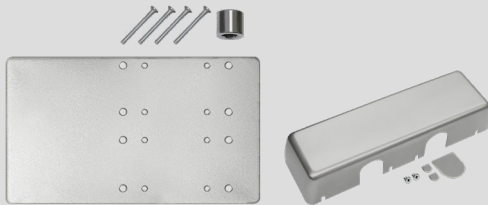
- **CR18PA** - Drop Plate for Parallel Arm Mounting Top Rail is less than 5 1/2" Measured from Stop. Plate Requires 2" Minimum Top Rail
- **CR18** - Drop Plate Used Where Top Rail is less than 3 3/4"
- **CR18TJ** - Drop Plate for Top Jamb where Face is less than 3 1/2"
- **CR18G** - Drop Plate for Top Jamb Mounted Closer Flush with Top of Head Frame Face in Flush Ceiling Condition. Plate Requires 1 3/4" Minimum Head Frame
- **CR441PA** - Parallel Arm Bracket

CONCR441 - DUAL CLOSER CONNECTOR KIT

CONCR441KIT

Includes:

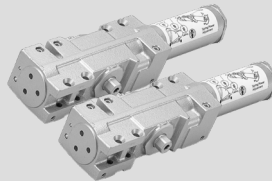
Steel Connector, Sleeve Nut, Steel Mounting Plate, Screws and Primary Closer Cover
(Does not include closers)



CR441 / TNDM

Includes:

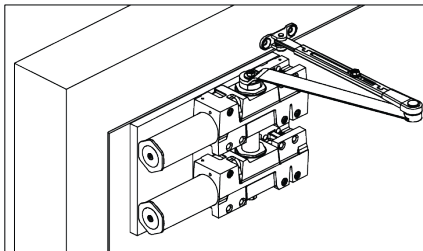
CONCR441KIT,
2 x CR441 Door Closers
(Includes 2 complete boxes of regular door closers)



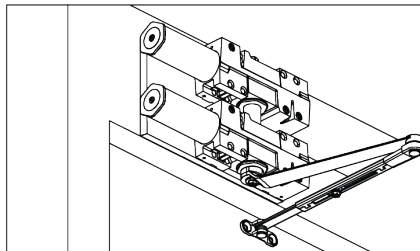
3 HOUR FIRE RATED
UL10C, UBC7-2-1997



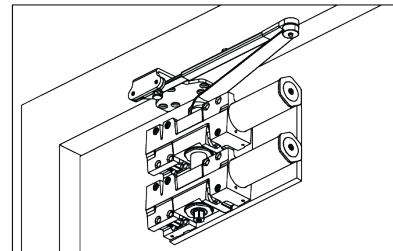
**REGULAR ARM
(PULL SIDE) MOUNTING**



**TOP JAMB
(PUSH SIDE) MOUNTING**



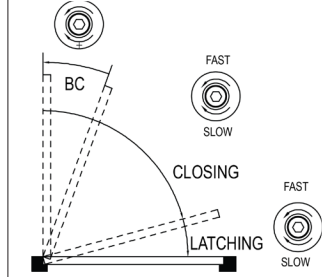
**PARALLEL ARM
(PUSH SIDE) MOUNTING**



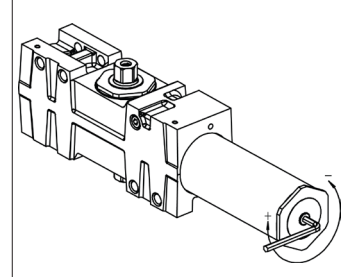
POWER ADJUSTMENT AND DOOR WIDTH

DOOR MAX WIDTH		ADJUSTING NUT AND TURNS
EXTERIOR	INTERIOR	
-----	5 lb-f	-5 (counter clockwise)
8 lb-f	34" (864)	-2 (counter clockwise)
30" (762)	38" (962)	0
36" (914)	48" (1219)	+5 (clockwise)
42" (1067)	54" (1372)	+10 (clockwise)
48" (1219)	60" (1524)	+15 (clockwise)

RUNNING AND BC ADJUSTMENT



POWER ADJUSTMENT



When a single door closer is not strong enough to close a door weighing 260 ~ 520 lbs, the **CONCR441KIT** allows two CR441 Series Grade 1 Door Closers to work as one, by connecting them together with the high-tensile strength steel connector sleeve nut on a steel mounting plate, doubling the strength and the door weight capacity while maintaining the opening force.

FEATURES

- Connects Two CR441 Series Door Closers
- For Doors 260 ~ 520 lbs Weight
- Can be Used for Regular Arm, Top Jamb or Parallel Arm Mounting
- Easy Mounting
- High Tensile Strength Steel Connector Sleeve Nut
- 12 1/8" x 7" x 3/16" Steel Mounting Plate
- 4" x 1/4" - 20" x 2 1/8" Mounting Screws

TABLE OF SIZES

Closing power of CR441 closers may be adjusted 50%

→ Shows recommended range of door width for closer size.

EXTERIOR (and VESTIBULE) DOOR WIDTH

	24"	30"	36"	42"	48"
CR441 Series	size 3	size 4	size 5	size 6	

Minimum Door Width

INTERIOR DOOR WIDTH

	24"	34"	38"	48"	54"	60"
CR441 Series	size 2	size 3	size 4	size 5	size 6	

Minimum Door Width

Adjustable Size 1 thru 6

CR441EHO - CR441 WITH ELECTRONIC HOLD-OPEN TRACK

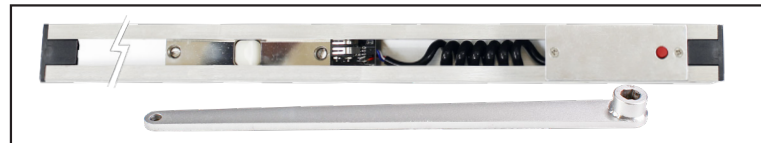
DOOR CLOSER BODY FEATURES

- Full Cover Multi-size
- Full Feature Closer
- ANSI A156.4 Grade 1
- UL Listed, Conforms to Standards
- UL10C and UBC7-2-1997
- BHMA Certified Lifetime Warranty
- Electronic Hold-Open Track



CR441 EHO FEATURES

- Heavy Duty Electronic Closer / Holder Track for CR441 Door Closers
- Designed for Single Point Hold-Open for Fire and Smoke Barrier Doors
- Designed to Hold Doors Open in Normal Use and Close Under Fire Conditions
- Adjustable Hold-Open Force
- Functions as a Full Rack and Pinion Closer when Hold-Open is Not Engaged or Current is Interrupted
- Door Opening can be Adjusted on the Track Arm
- Concealed or Surface Wiring
- Interfaces with Alarm Systems
- Mounts on Either Head Frame or Stop
- Non-Handed
- Non-Sized
- 24V AC / DC Input for Holding Solenoid
- Includes Test Switch for Integrity Cycle Test



The **CR441EHO** is a Grade 1 heavy duty door closer with electrically controlled hold-open track arm. It is designed to provide adjustable hold-open for fire and smoke barrier doors.

Door is held open until current interruption releases mechanism and the door closes. It can also be interfaced to any alarm systems and has a built-in switch for integrity cycle testing.

Single lever (track) arm closer is specifically designed for interior doors.

The **CR441EHO** series door closer body is UL & cUL listed for smoke barrier or labeled fire doors. Tested and certified under ANSI Standard A156.15. Conforms to life safety code, NFPA 101. **BHMA** Certified Lifetime Warranty.

CR271PC - CR441 POCKET DOOR CLOSER APPLICATION

FEATURES

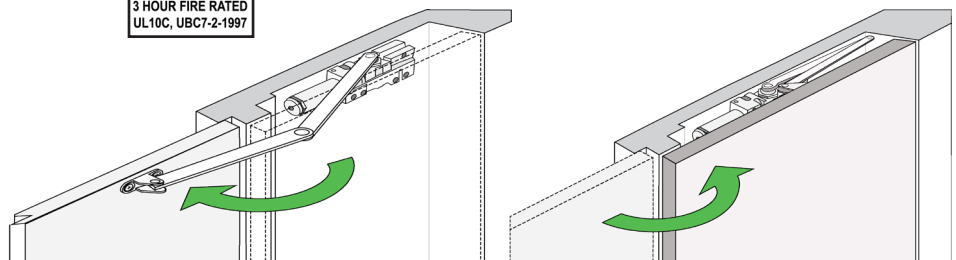
- Cal-Royal's **EXTRA POWERFUL** Hydraulic Door Closer Series
- Meeting The Highest Industry Standards
- ANSI A156.4, Grade 1, UL and cUL Listed
- Cast Iron, Non-Handed
- **High Performance Hydraulic Fluid**
- **Higher Tensioned Steel Spring**
- **High-Demand Performance Applications**
- **Heavy Duty Double Lever Forged Steel Arm** with Extra Smooth Action

CR271PC is the CR441 Series' Pocket Door Closer. It is the same CR441 (cylinder) body specially re-engineered for pocket door closer applications. It uses a higher tensioned steel spring, combined with a high-performance hydraulic fluid to withstand high-demand performance applications. Due to the higher force required to open the door 180 degrees, a heavy duty lever forged steel arm was designed 1" longer than the standard CR441 arm for an extra smooth action.



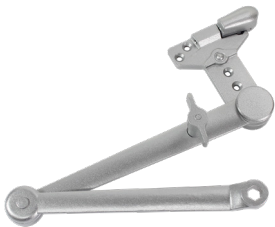








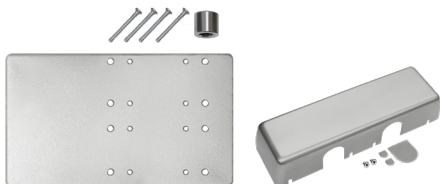


✓ For **180 DEGREES** opening in a **Pocket Door ONLY** Application

✗ **NOT FOR USE** with conventional hinges or latching hardware



CR441 SERIES ACCESSORIES

CAL-ROYAL
PRODUCTS, INC. U.S.A.

		
3049HOSPRING	CR3077SPRING	CR3049HOSRPS
<ul style="list-style-type: none"> • Super rigid parallel arm stopper with hold-open • Forged Steel Constructions • Non-handed • Spring loaded stop in soffit shoe • Handle controls hold-open function • Equivalent to LCN SPRING H-CUSH ARM 	<ul style="list-style-type: none"> • Super rigid parallel arm stopper • Forged Steel Constructions • Non-handed parallel arm • Spring loaded stop in soffit shoe • Equivalent to LCN SPRING CUSH ARM 	<ul style="list-style-type: none"> • Super rigid parallel arm stopper with hold-open • Forged Steel Constructions • Non-handed with stop in soffit shoe • Handle controls hold-open function • Equivalent to LCN H-CUSH ARM
		
CR3077SPAS	CR3049HO	CR3077HDAR
<ul style="list-style-type: none"> • Super rigid parallel arm stopper • Forged Steel Constructions • Non-handed with stop in soffit shoe • Equivalent to LCN CUSH-N-STOP ARM 	<ul style="list-style-type: none"> • Hold-open arm with parallel bracket • Forged Steel Constructions • Non-handed with stop in soffit shoe 	<ul style="list-style-type: none"> • Non-handed parallel arm • Forged Steel main arm and forearm • For potentially abusive installations
		
CR441ARM	CR441EXT	TRACK441
<ul style="list-style-type: none"> • Forged Steel main arm and forearm • Non-handed • Door closer arm (Main and regular forearm) 	<ul style="list-style-type: none"> • Extended long arm (3" extension) • Non-handed • For top jamb with deep reveals 	<ul style="list-style-type: none"> • Slide track arm • With removable hold-open clip • Non-handed
		
CONCR441KIT	CR441 / TNDM	CR441EHO
<ul style="list-style-type: none"> • CR441 Tandem Connector Sleeve Nut • Mounting Plate • Master Cover • Universal use for regular arm, top jamb, or parallel arm mounting 	<ul style="list-style-type: none"> • 1 each CONCR441KIT • 2 each of CR441 door closers • Universal use for regular arm, top jamb, or parallel arm mounting 	<ul style="list-style-type: none"> • Electronic Hold Open Arm with door closer • Mounts on either head frame or stop • Non-handed • Non-sized • 24V AC / DC input for holding solenoid

CR441 SERIES ACCESSORIES

CAL-ROYAL
PRODUCTS, INC. U.S.A.

					
CR18PA		CR18		CR18TJ	
<ul style="list-style-type: none"> • Drop plate for parallel arm where mounting and top rail is less than 5 1/2" measured from stop • Plate requires 2" minimum top rail • Non-handed 		<ul style="list-style-type: none"> • Drop plate used where top rail is less than 3 3/4" • Non-handed 		<ul style="list-style-type: none"> • Drop plate for top jamb where face is less than 3 1/2" • Non-handed 	
					
CR18G		CR441PA		CRWRENCH	
<ul style="list-style-type: none"> • Drop plate for top jamb mounted closer flush with top of head frame face in flush ceiling condition • Plate requires 1 3/4" minimum head frame • Non-handed 		<ul style="list-style-type: none"> • Parallel Arm Bracket 		<ul style="list-style-type: none"> • Variable-sized hexagonal wrench for CR3049HO Arm 	
					
CR441COV		CR441COV US32D		CR441COVMET28	
<ul style="list-style-type: none"> • Plastic material cover • Non-handed 		<ul style="list-style-type: none"> • Stainless Steel material cover • Non-handed 		<ul style="list-style-type: none"> • Steel material cover • Non-handed • Aluminum stock finish 	
					
CUSSS-61	BLASS-30	970138	970	706	
CUSH Shoe Support <ul style="list-style-type: none"> • Provide anchorage for fifth screw used with CUSH arms where reveal is less than 3-1/16" (78 mm) 	Blade Stop Spacer <ul style="list-style-type: none"> • Lower parallel arm shoe to clear 1/2" (13 mm) blade stop 	<ul style="list-style-type: none"> • Sex bolts for 1 3/8" doors • Female part only • 1/4" – 20 (set of 4) • For Steel Door Application 	<ul style="list-style-type: none"> • Sex bolts • Female part only • 1/4" – 20 (set of 4) • For Steel Door Application 	<ul style="list-style-type: none"> • Thru bolts and grommet nuts • Set of 4 • For Wood and Aluminum Door Application 	