

RIXSON®
ASSA ABLOY

High-End Residential

High-Security or

Gate Solutions



Introduction

The closers in this section are for specific niche markets, from the high-end residential Duo-Chek® to the high-security SEC27-180 closers. No two have the same features.

Duo-Chek® Model 10, 12, 15, 16

The Duo-Chek® is for high-end residential applications, such as the double-acting door going from the kitchen to the dining room.

The weight of the door is supported at bottom

- Uses laws of gravity to its advantage
- Door swings with less resistance
- Reduced stress on frame

Fasteners are in shear, not tension

- Eliminates door sag

Hardened steel spindles

- Thrust bearing supports vertical load
- Needle bearings for lateral forces

Bottom arm directly attached to closer spindle

- A mechanical advantage that increases efficiency, ensuring that ADA compliant opening forces will still close the door
- One-to-one ratio of door swing to spindle rotation makes control more precise
- Floor closers are more efficient than a regular arm surface closer

Gate Closers Models 354, 355, 356, 357, 359

Closers that mount to the side jamb for small gates such as teller gates, courtroom gates.

- Closer mounts off the floor approximately 6" under the door
- Double acting with a hold open option
- Single acting when used with butts

High-Security Models SEC27-180

These closers are used on doors in detention areas in hospitals, detention centers and non-cell prison doors.

The weight of the door is supported at bottom

- Uses laws of gravity to its advantage
- Door swings with less resistance
- Heavier doors can be accommodated
- Reduced stress on frame

Fasteners are in shear, not tension

- Eliminates door sag
- Vertically adjustable

Heavy-duty hardened steel spindles

- Designed to provide positive dead stop
- Thrust bearing supports vertical load
- Needle bearings for lateral force

Bottom arm directly attached to closer spindle

- A mechanical advantage that increases efficiency
- One-to-one ratio of door swing to spindle rotation makes controls more precise
- Floor closers are more efficient than a regular arm surface closer

Helical torsion spring

- Operates in same direction as door movement and contributes to even higher closer efficiency
- A torsion spring has a much longer life than standard compression springs

Advantages of security concealed floor closers

- Vandal resistant – mechanism not exposed
- Supplied with Torx® screws

Exterior Gate Closers Model 1350 and 1351

Surface closers and tracks used on high-end residential and commercial ornamental iron fencing systems that must be self-closing.

- Extremely easy to install
- Uses surface closer technology

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Security Closers

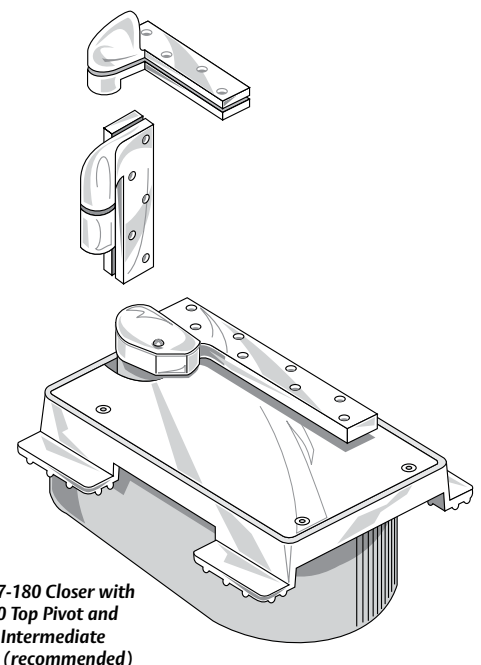
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Exterior Gate Closers

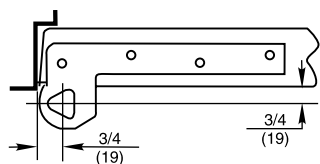
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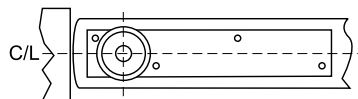


1. Offset vs. Center Hung Application



3/4" Offset

Pivot point located 3/4" from the heel edge of the door and 3/4" from face of door.



Center Hung

Pivot point centered in thickness of door. Distance from heel edge can vary 2-3/4 and up (Not for use on fire rated doors).

2. Size of Door (width, height, thickness)

Estimated door weights pounds per square foot (PSF)

Door Material	Door Thickness		
	1-3/4"	2-1/4"	3
Hollow Metal	6.5	7	-
Solid Core Wood	7	9	11.5
Aluminum/Glass Storefront	3.5	4	-
Tempered Glass	Glass Thickness		
	3/8"	1/2"	3/4"
	5	7	9.75

Example: 3/0 X 7/0 X 1-3/4" WD

Door: 21sq ft x 7lb/sq ft = 147lbs

Example: 3/6 X 8/0 X 1/2" Tempered Glass Door

Door: 28sq ft x 7lb/sq ft = 196lbs


For doors of other sizes consult factory

3. Expected Frequency of Door Operation

Application	Daily	Yearly	
Large department store entrance	5,000	1,500,000	High
Large office building entrance	4,000	1,200,000	
Theater entrance	1,000	365,000	
School entrance	1,250	225,000	
School restroom door	1,250	225,000	
Store or bank entrance	500	150,000	
Office building restroom door	400	118,000	
School corridor door	80	15,000	Average
Office building corridor door	75	22,000	
Store restroom door	60	18,000	
Residential entrance door	40	15,000	
Residential restroom door	25	9,000	Low
Residential hallway door	10	3,600	
Residential closet door	6	2,200	

Duo-Chek® Options

Physically Handicapped – Prefix PH

To comply with ICC/ANSI A117.1 and guidelines established by the Americans With Disabilities Act, PH prefix indicates 5# of opening force. 

Non-Hold Open – Suffix N

These closers do not hold the door open. This feature cannot be changed in the field.

Automatic Hold Open – Suffix A

These closers hold the door open at 90°. This feature cannot be changed in the field.

Extended Spindle – Suffix Extra Length

Any special floor coverings or severe door undercuts will affect spindle height. In these applications, an extended spindle may be required. See product template to determine if an extended spindle is needed. Extended spindles available in 1/2" increments up to 2" longer than standard.

Less All Parts – Suffix LAP

If a closer is needed for replacement, the arm, cover, cement case, top pivot and floor plate are omitted.

Less Floor Plate – Suffix LFP

When thresholds or cover pans are being used, the closer doesn't need the decorative floor plate.

Less Cement Case – Suffix LCC

For existing installations or when cement case has been sent earlier in construction. Closer will be packaged without the cement case.

Less Top Pivot – Suffix LTP

For unusual head conditions where the top pivot cannot be used, the closer is shipped without the top pivot.

Models 350 Gate Closers - No Options

SEC27-180 Options

Degree of Swing – Suffix -180

Single-acting heavy-duty floor closers have a deadstop. This means that the door cannot go past a certain point. The SEC27-180 allows the door to swing to 180°

Non-Hold Open – SEC closers are non-hold open

Less Cement Case – Suffix LCC

For existing installations or when cement case has been sent earlier in construction. Closer will be packaged without the cement case.

Less Top Pivot – Suffix LTP

For unusual head conditions where the top pivot cannot be used, the closer is shipped without the top pivot. An additional FA19 intermediate (side jamb) pivot is required.

Extended Spindle – Suffix Extra Length

Any special floor covering or severe door undercuts will affect spindle height. In these applications, an extended spindle may be required. See product template to determine if an extended spindle is needed. Extended spindles available in 1/2" increments up to 2" longer than standard.

Models 1350

Exterior Gate Closers - No Options

Specialty Closers Certifications Limited Warranty Suggested Specifications

Certifications

The Rixson® Duo-Chek, 350 gate closers and SEC27-180 closers are in compliance with ANSI/BHMA 156.4 standards. See individual products for sub-section.



Limited Warranty

Rixson® specialty closers, Duo-Chek, gate closers are warranted for 2-years against defect. Rixson® specialty closer SEC27-180 is warranted 10 years against defect. See Rixson® Price Book for specific details of the limited warranty.

Suggested Specifications

Double-Acting Floor Closer Specifications

All low-traffic double-acting doors shall use Duo-Chek® models 10,12,15, or 16. Closing speed adjustments can be made through the cover plate. Closers must be available in lighter springs for accessibility requirements.

Interior Gate Closer Specifications

All interior gates shall use model 350 closers. Closers shall be mounted above the floor and may be single or double acting, depending on hanging means. Closers shall have hydraulic closing speed adjustment. Units shall have built-in hold open.

Security Closer Specifications

Closer shall be model SEC27-180 concealed floor closer package. Cement case to be cast iron with cast-in integral anchor extensions. 1/4" thick steel cover plate to be recessed into lip on cement case. Closer mechanism to have individual hydraulic cylinders for closing functions and adjustable hydraulic backcheck and be operated by a torsion spring. Closing and latch speed to be controlled by two independent valves. Closer to have built-in dead stop. Bottom arm shall be 1/2" thick steel. Top pivot shall be asylum type with Torx® security fasteners.

Exterior Gate Closer Specifications

All exterior gates shall be Rixson® model 1350 or 1351. They shall be surface type with non-corrosive tracks. Track shall be two sided to keep debris from collecting. Must accommodate gates with top cross member or open spokes.

Models 10 & 12 Duo-Chek®

Application

- Double Acting, Non-handed
- Low/Medium Traffic Interior Doors
- Weight to 125 lbs.
- Sizes up to 2'10" x 7'0" (864x2134mm)

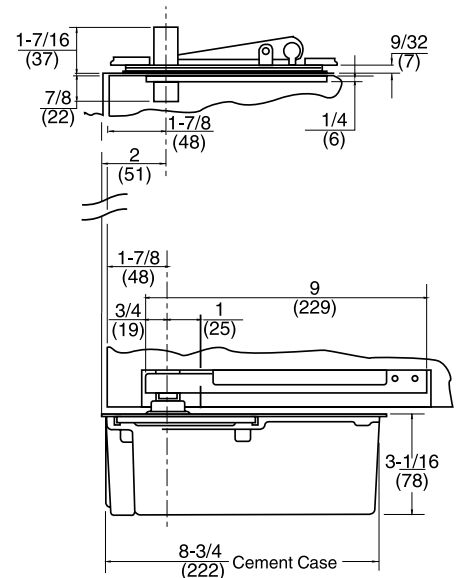
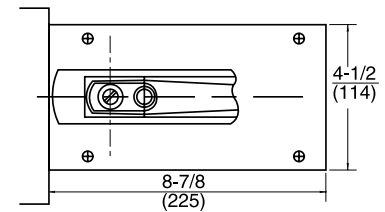


ANSI/CO6013
Shipping wt. 18 lbs.

Product Description & Features

- Model 10 is 90° automatic hold open; 12 is non-hold open
- Standard top pivot: 101020 walking beam type
- Not allowed for use on labeled fire doors
- Cast iron cement case
- Adjustable closing speed
- Centering arm for adjustment
- 105° maximum opening
- Models 10 and 12 available to meet ICC/ANSI A117.1 low opening force requirements. Prefix "PH"
- 1-3/4" door thickness
- Furnished with wood and machine screws
- Extended spindles available in 1/2" increments up to 2" longer than standard

Technical Information



Models 15 & 16 Duo-Chek®

Application

- Weight to 125 lbs.
- Sizes up to 2'11" to 3'6" x 7'0" (889 to 1067 x 2134mm)

ANSI/CO6013
Shipping wt. 18 lbs.

Product Description & Features

- Identical to Models 10 & 12 except:
- Stronger spring to accommodate wider door
 - 15 is 90° automatic hold open; 16 is non-hold open
 - "PH" not available

Model 354

Application

- Double Acting, Non-handed
- Maximum weight: 75 lbs.
- Dwarf doors from 2'2" to 3'0" wide (660 x 914mm)

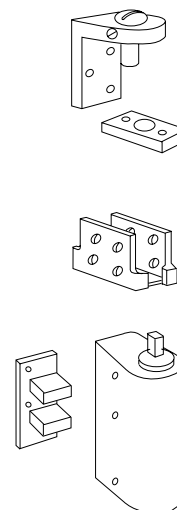


ANSI/C09503
Shipping wt. 6 lbs.

Product Description & Features

- Recommended for office rail gates, partitions, and lavatory stall doors
- Body mounts under gate
- Surface mounted top pivot: 3541020
- 1-3/4" door thickness
- Maximum opening 90°
- Arm adjustment door normally comes to rest at closed position. If door is to remain open, arm is set on spindle so door comes to rest at 90°
- Package also includes closer bracket and flange style arm
- Frame carries full weight of door
- Quiet control; no slamming or flapping
- All moving parts enclosed and fully immersed in lubricating checking fluid
- Painted finishes only

Technical Information



Model 355

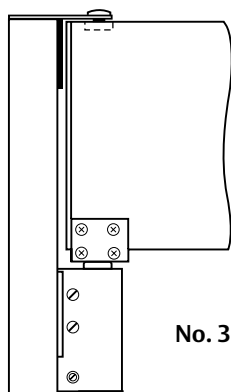
Application

- Double Acting, Non-handed

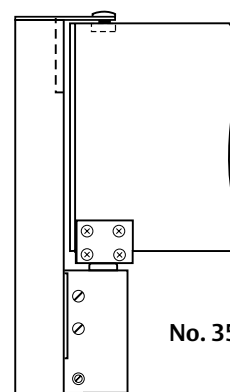
ANSI/C09503
Shipping wt. 6 lbs.

Product Description & Features

- Identical to 354 except:*
- Mortise top pivot: 3551020



No. 354



No. 355

Model 356

Application

- Double Acting, Non-handed
- Maximum weight: 75 lbs.
- Dwarf doors from 2'2" to 3'0" wide (660x914mm)

ANSI/CO9503

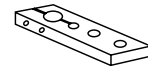


Shipping wt. 6 lbs.

Product Description & Features

- Recommended for office rail gates, partitions, and lavatory stall doors
- Body mounts under the gate
- Surface mounted top pivot: 3541020
- 1-3/4" door thickness
- Maximum opening 90°
- Arm adjustment door normally comes to rest at closed position. If door is to remain open, arm is set on spindle so door comes to rest at 90°
- Package also includes closer bracket and arm that may be surface mounted or mortised
- Frame carries full weight of door
- Quiet control; no slamming or flapping
- All moving parts enclosed and fully immersed in lubricating checking fluid
- Painted finishes only

Technical Information



Model 357

Application

- Double Acting, Non-handed

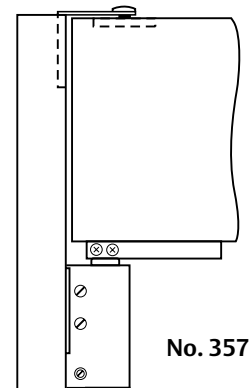
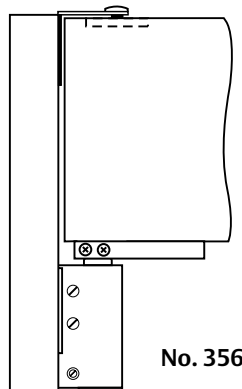
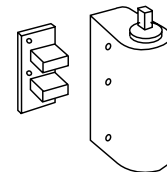
ANSI/CO9503

Shipping wt. 6 lbs.

Product Description & Features

Identical to 356 except:

- Mortise top pivot: 3551020



Model 359

Application

- Single Acting, Non-handed
- Maximum weight: 75 lbs.
- Dwarf doors from 2'2" to 3'0" wide (660x914mm)

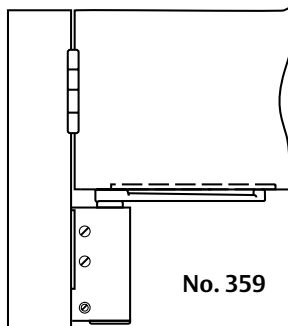
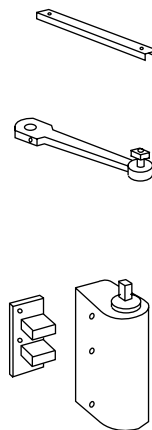


ANSI/C09503
Shipping wt. 5-1/2 lbs.

Product Description & Features

- Recommended for office rail gates, partitions, and lavatory stall doors
- Closer mounts under the door
- Closer mounts under the door
- 1-3/4" door thickness
- Maximum opening 140°
- Surface mounted to edge of partition with edge wide enough for 1-1/2" bracket
- Butt hinges by others
- Frame carries full weight of door
- Track style arm
- Package includes closer, bracket, and slide track arm
- Painted finishes only

Technical Information



No. 359

Model SEC27-180 3/4" Offset Hung

Application

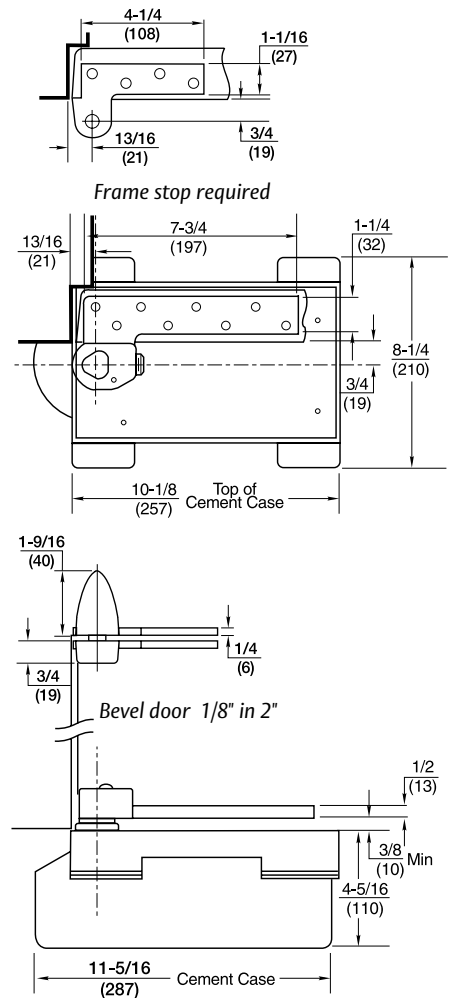
- Single Acting, Handed
- Interior Security Doors
- Weight to 650 lbs.
- Door Width up to 4'0" (1219mm)



Product Description & Features

Recommended for non cell doors in detention facilities or psychiatric centers

- Non-hold open only
- Standard top pivot: FA180 included
- Intermediate pivot recommended: FA19 (order separately), see page 23
- Door will swing to 180°, trim permitting
- Built-in hydraulic backcheck at 160°
- Cast iron cement case with cast-in extensions for positive anchorage in floor
- Solid 1/4" (6mm) thick steel floor plate
- Cast-in lip to provide positive containment of cement case in floor
- Sealed closer standard
- Heavy-duty forged bottom arm
- Adjustable closing speed
- Doors 60" (1524mm) to 90" (2286mm) in height should use one intermediate pivot. Every additional 30" (762mm) of door height warrants another intermediate pivot
- This closer is for fire-rated openings (up to 3 hour assemblies). Only non-hold open closers are used. Intermediate pivot required: FA19, order separately, see page 137
- Delayed action not available
- Furnished with Torx® screws
- Extended spindles available in 1/2" increments up to 2" longer than standard



Model 1350 Exterior Gate Closer

Application

- Single Acting
- Exterior Ornamental Iron Gates
- Weight to 150 lbs.
- Gate Maximum 3'6" x 7'0"

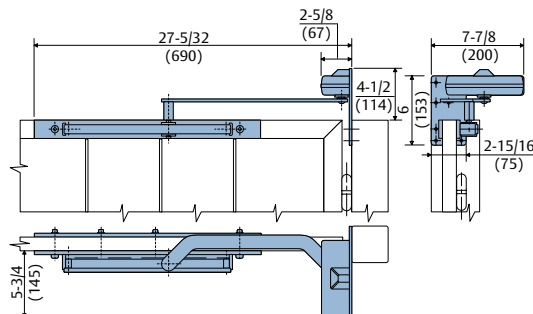


Product Description & Features

Recommended for exterior gates on high-end residences and commercial building campuses.

- Includes closer body, mounting bracket, arm and slide track
- Track has pass thru hole to avoid debris build-up
- Components are rust-resistant
- Surface closer has closing and latch speed controls
- May be mounted on cross-member or spokes
- Hanging means by others
- All-weather fluid
- All machine screws
- Black finish only

Technical Information



Model 1351 Exterior Gate Closer

Application

- Single Acting
- Exterior Ornamental Iron Gates
- Weight to 250 lbs.
- Gate Maximum 4'6" x 10'0"

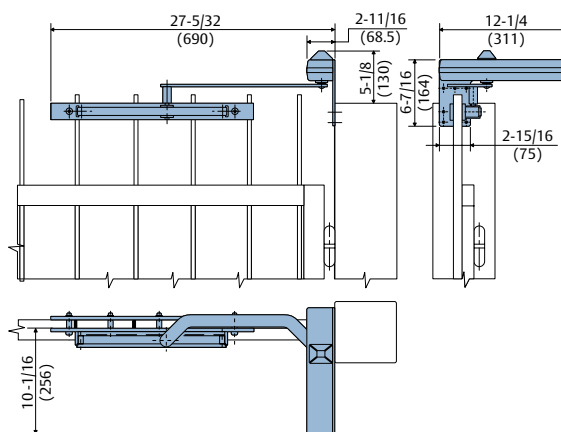


Product Description & Features

Recommended for exterior gates on high-end residences and commercial building campuses.

- Includes closer body, mounting bracket, arm and slide track
- Track has pass thru hole to avoid debris build-up
- Components are rust-resistant
- Surface closer has adjustable latch speed, closing speed and backcheck
- May be mounted on cross-member or spokes
- Hanging means by others
- All weather fluid
- All machine screws
- Black finish only

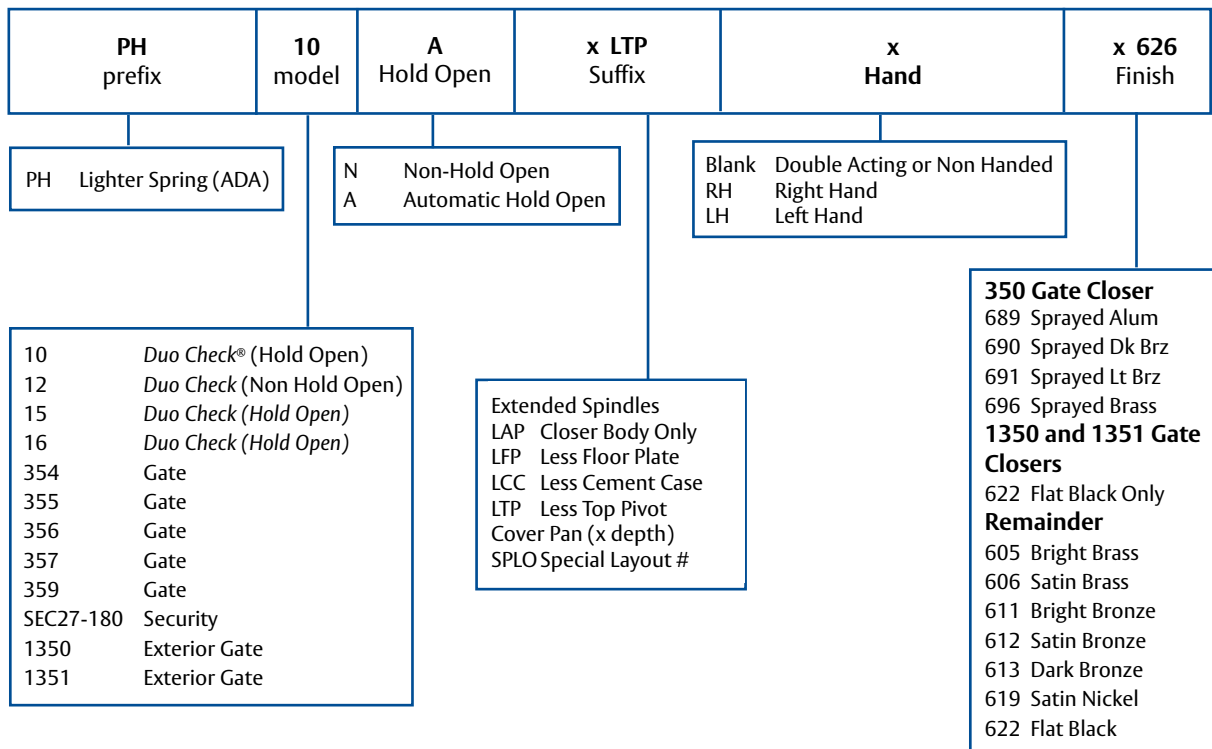
Technical Information



Quick Reference of Options

Prefix	Model	Degree of Hold Open	Holding Options	General Options	Fire Rated	Handed	Maximum Door Weight
PH	10	90	A	Extended Spindle	No	No	125
PH	12		N	Extended Spindle	No	No	125
	15	90	A	Extended Spindle	No	No	125
	16		N	Extended Spindle	No	No	125
	354	90	A		No	No	75
	355	90	A		No	No	75
	356	90	A		No	No	75
	357	90	A		No	No	75
	359		N		No	No	75
	SEC27-180		N	Extended Spindle	Yes	Yes	650
	1350		N				150
	1351		N				250

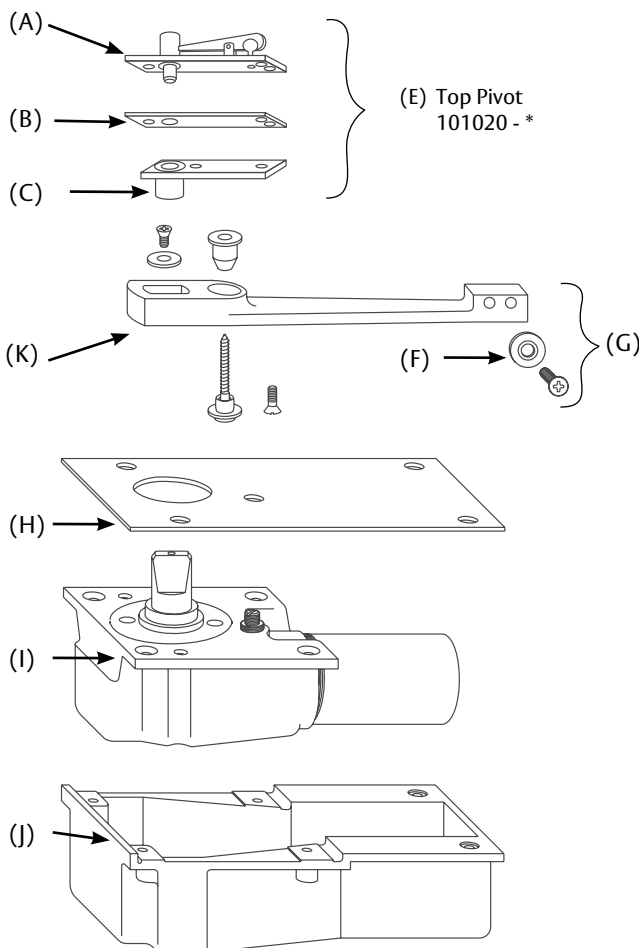
How to Order



*specify finish

Model 10, PH10, 12, PH12, 15, 16 Duo-Chek®

(A) Jamb Portion 3065
(B) Finish Plate 012202-*PK(BRS) 012204-*PK(SS)
(C) Door Portion 12716
(F) Alignment Screws & Washers 107032 - *
(K) Duo Arm 1004



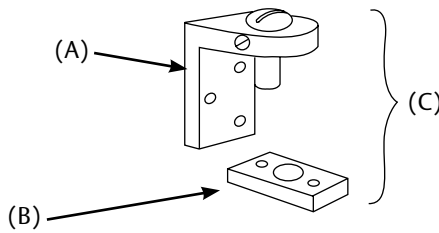
(G) Arm Package 102026 - * (Includes K and F)
(H) Floor Plate with Screws 104020 - *
(I) Closer Body (Specify Complete Model No. x LAP)
(J) Cement Case with Screws 103000

Screw Kits
Top Pivot Screw Kit 107329
Arm Screw Kit 107054
Floor Plate Screw Kit 107004-*

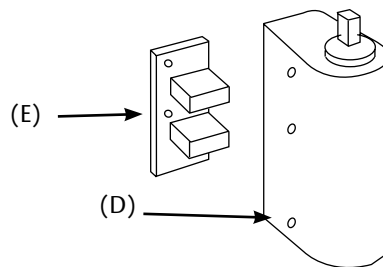
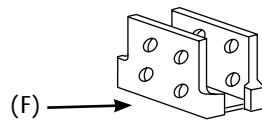
*specify finish

Model 354

(A) Jamb Portion 01960-*AS
(B) Gate Portion 35064-*AS
(E) Bracket 3549000-* (Includes Closer Mtg. Screw Kit)



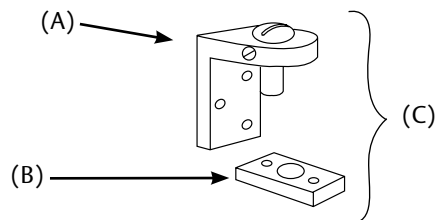
(C) Top Pivot Package 3541020-* (Includes A, B and attaching screws)
(F) Arm with Screws 3542026-*
(D) Closer Body X03540370-* (Includes E)



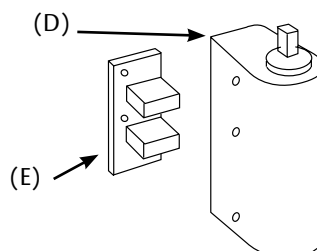
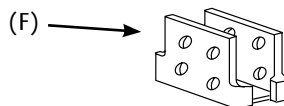
Screw Kits
Top Pivot Screw Kit 107017-*
Closer Mtg. Screw Kit 107350

Model 355

(A) Jamb Portion 0490-*AS
(B) Gate Portion 35064-*AS
(E) Bracket 3549000-* (Includes Closer Mtg. Screw Kit)



(C) Top Pivot Package 3551020-* (Includes A,B and attaching screws)
(F) Arm with Screws 3542026-*
(D) Closer Body X03540370-* (Includes E)

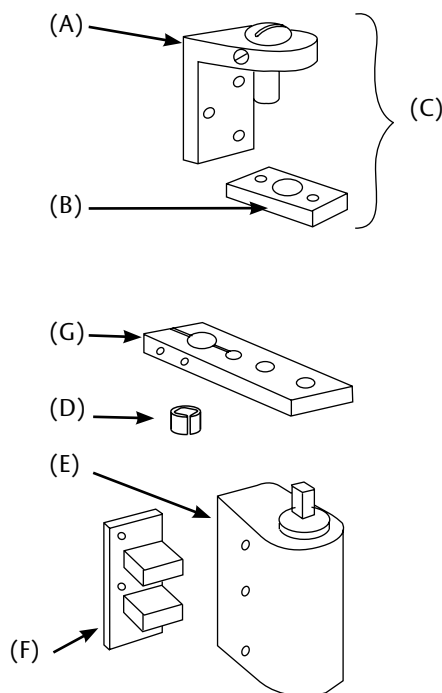


Screw Kits
Top Pivot Screw Kit 107017
Closer Mtg. Screw Kit 107350

*specify finish

Model 356

(A) Jamb Portion 01960-*AS
(B) Gate Portion 35064-*AS
(D) Bushing Only 35051 (Included in arm package)
(F) Bracket 3549000-* (Includes Closer Mtg. Screw Kit)

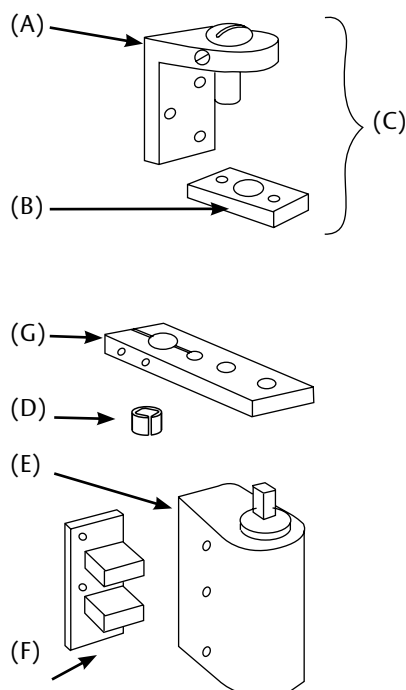


(C) Top Pivot Package 3541020-* (Includes A,B and attaching screws)
(G) Arm with Screws 3562020-* (Includes D and attaching screws)
(E) Closer Body X03540370-* (Includes F)

Screw Kits
Top Pivot Screw Kit 107017 -*
Arm Screw Kit 107359
Closer Mtg. Screw Kit 107350

Model 357

(A) Jamb Portion 0490-*AS
(B) Gate Portion 35064-*AS
(D) Bushing Only 35051 (Included in arm package)
(F) Bracket 3549000-* (Includes Closer Mtg. Screw Kit)



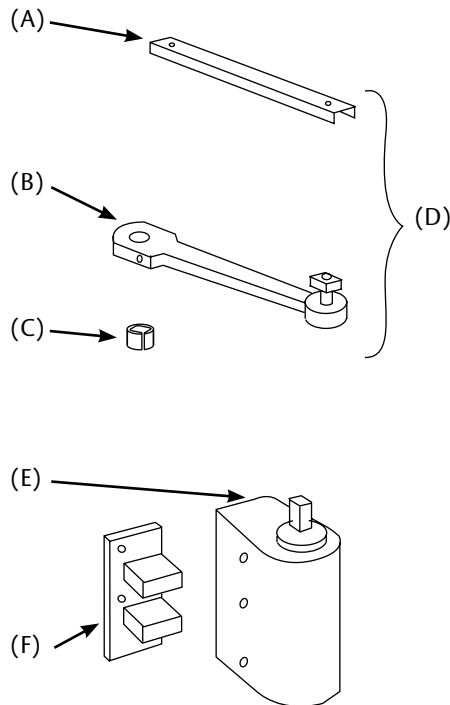
(C) Top Pivot Package 3551020-* (Includes A,B and attaching screws)
(G) Arm with Screws 3562020-* (Includes D and attaching screws)
(E) Closer Body X03540370-* (Includes F)

Top Pivot Screw Kit 107017-*
Arm Screw Kit 107359
Closer Mtg. Screw Kit 107350

*specify finish

Model 359

(A) Rail 35510-*
(B) Arm with Screw & Bushing 35535-*
(C) Bushing Only 35051 (Included in arm package)
(F) Bracket 3549000- (Includes Closer Mtg. Screw Kit)



(D) Arm & Rail Package 3592010- (Includes A, B, C and attaching screws)
(E) Closer Body X03540370- (Includes F)

Screw Kits
Arm Screw Kit 107003
Closer Mtg. Screw Kit 107350

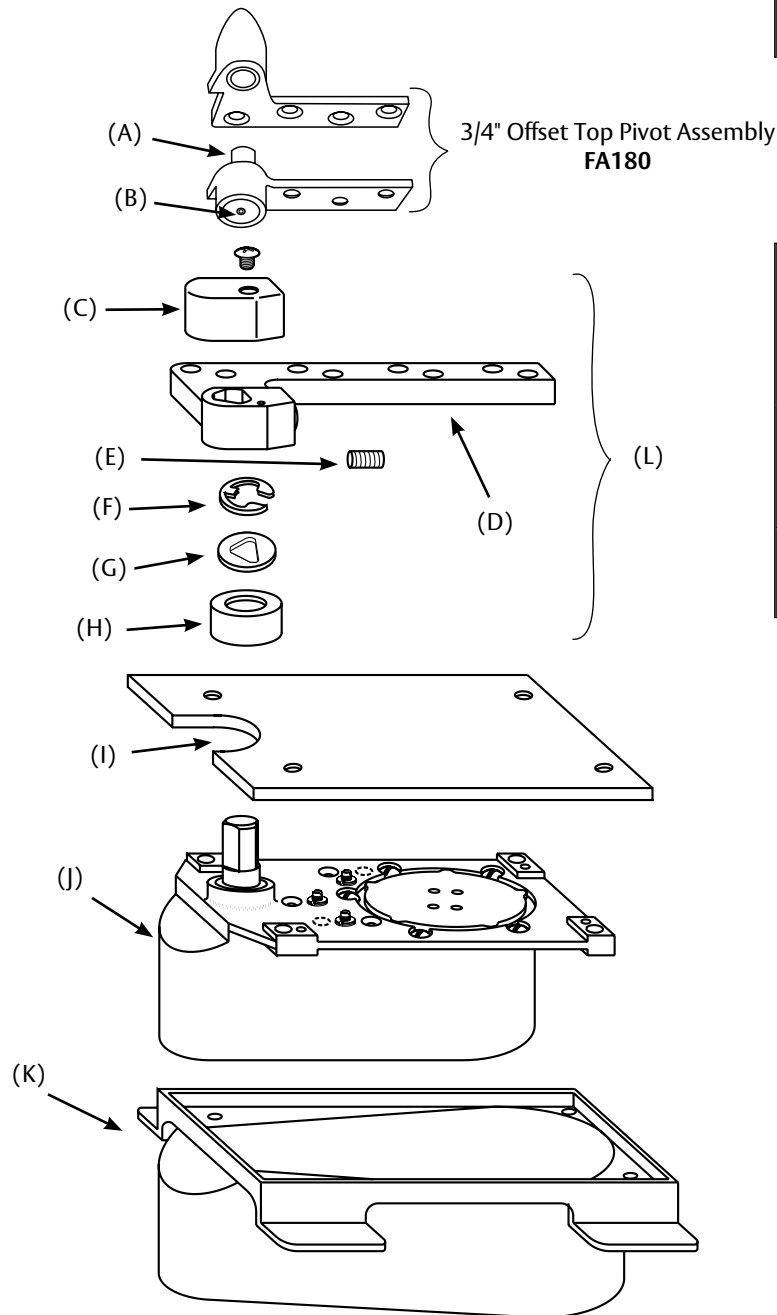
*specify finish

Models 1350 & 1351

No parts available

Model SEC27-180

(A) Pivot Stud 181770-Asy
(B) Finish Cap 181778 -*
(C) Arm Cap & Screw 012142R*T (RH, BRS) 012142L*T (LH, BRS) 012144R*T (RH, SS) 012144L*T (LH, SS)
(D) Arm x Locking Screw 18550-Asy (RH) 18650-Asy (LH)
(E) Arm Locking Screw Only) 88905-PKG (5)
(F) Arm Shims 275065-PKG (5)
(G) Arm Bearing Washer 275062-PKG (5)
(H) Spindle Shoulder Collar 259000 -*
(I) Floor Plate with Screws 274056 -*
(J) Closer Body (Specify Complete Model No. x LAP)
(K) Cement Case with Screws 253006R (RH) 253006L (LH)



(L) Bottom Arm Package
252056R* (RH)
252056L* (LH)
(Includes C, D, H and
attaching screws)

FA180 Torx® Screw Kit
107014 - *T Machine (2
required)
107114 - *T Wood (2
required)

Arm Screw Kit
107144 Machine (2
required)
107048 Wood (2 required)

Floor Plate Screw Kit
107021 -*

*specify finish