

**Norton**<sup>®</sup>

ASSA ABLOY

# 9000 Series Trinity<sup>™</sup>

*The world's most intelligent door closer*



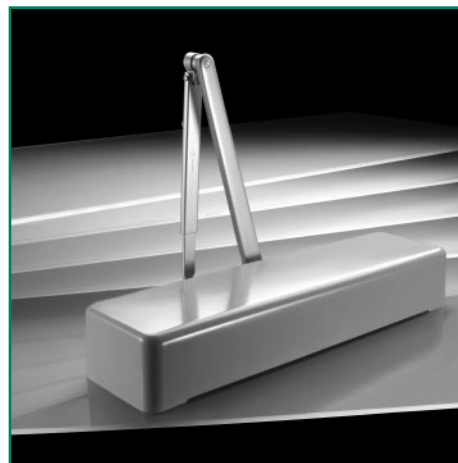
ASSA ABLOY, the global leader  
in door opening solutions

**INTRODUCTION**

Designed for doors that are subject to changing conditions, the Norton 9000 Series Trinity™ offers customers an intelligent door closer option. Controlled by a built-in computer, *Trinity* allows the door to consistently close and latch at the same speed. It is ideal for doors that are subject to changing conditions that may cause the door to close too fast or too slowly.

*Trinity* constantly adjusts itself. The onboard generator supplies power for electric sensing and automatic valve operation, which monitors the speed through the sweep and latch zones. On other closers, several valves must be adjusted manually, with limited accuracy and often repeat corrections. *Trinity* has one self-adjusting valve, saving time, eliminating guesswork and ensuring consistency.

Ideal for exterior or interior doors, *Trinity* can be used in hospitals, schools, universities, office buildings and auditoriums.



**Benefits:**

**Energy savings**

- No external energy source required.
- Prevents higher utility fees due to unnecessary heat/air loss when door does not close properly.

**Added security**

- Self-adjusting mechanism ensures doors close consistently.
- Reduces security concerns.

**Reduced maintenance**

- Eliminates readjustments by maintenance staff.
- Frees staff to pursue other tasks.

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## FEATURES

- One automatic valve controls backcheck, delayed action, sweep and latch speeds
- Automatic valve senses and continually adapts to changing environmental conditions
- Onboard generator supplies power for electric sensing and smart valve
  - No external power supply
  - No external energy consumption
  - No external wiring
- One-piece, reinforced body construction
- Improved rack and pinion design
- Specially designed seals replace traditional o-rings
- Self-adjusting latch transition
- Proprietary pinion bearing material
- Multi-sized spring (1-6)
- Fits 7500/7700 series door closer footprint
- Non-handed
- Optional heavy-duty arms: Regular Rigid, Parallel Rigid, CloserPlus® and CloserPlus Spring™

## CERTIFICATIONS

- 10-year limited warranty (control module and motor)
- Lifetime warranty – door closer body only
- UL228 Certified
- UL10c Certified
- Meets requirements for Americans with Disabilities Act (A.D.A.)

## PATENTS

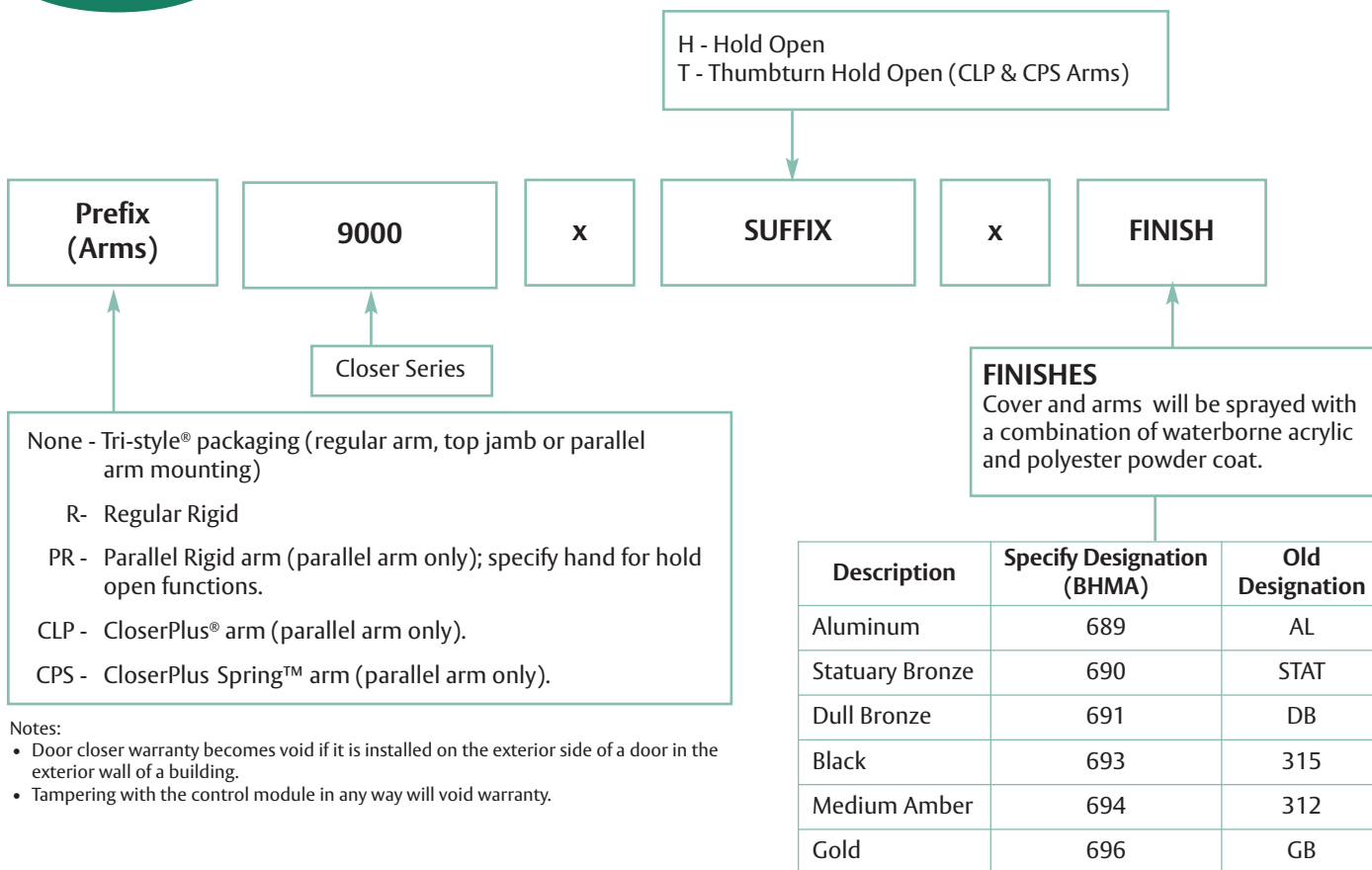
- Patents pending

## SPECIFICATIONS

Closers for interior and exterior doors shall be full rack-and-pinion type with one-piece cast aluminum alloy body. Closers shall be surface mounted and shall project no more than 2-3/4" (70mm) from the surface of the door. Closers shall be non-handed to permit installation on the doors of either hand. Closer fluid shall contain lubricity and anti-oxidation agents. Closer fluid shall maintain stable viscosity at room temperatures (+/- 40° F).

Closers shall have multi-size spring power adjustment to permit setting of spring from size 1 through size 6. Closers shall have independent switches to adjust latch and sweep speeds. Closer shall have switch to adjust backcheck resistance. Closer shall have self-adjusting and auto adapting valve to maintain set sweep and latch speeds. Closers shall have delayed action switch with multiple settings. Closer shall have on-board generator.

Regular arm and top jamb closers shall have a non-hold open shoe permitting 15% (+/- 7-1/2%) power adjustment. Closers shall be enclosed in a molded resin cover. Closers to be Norton 9000.

**HOW TO ORDER**

**Notes:**

- Door closer warranty becomes void if it is installed on the exterior side of a door in the exterior wall of a building.
- Tampering with the control module in any way will void warranty.

**FASTENERS**

Type	Description	Arm				
		RA	PA	TJ	PR	CLP/ CPS
<b>DOOR</b>						
SDST	Self Drilling Self Tapping	S	S	S	S	S
MS	Machine Screw	S	S	S	S	S
SN	Sleeve Nut	O	O	O	S	S
TBGN	Thru Bolts & Grommet Nuts	O	O	O	O	O
SMS	Sheet Metal Screws	O	O	O	O	O
<b>FRAME</b>						
SDST	Self Drilling Self Tapping	S	S	S	S	S
MS	Machine Screw	S	S	S	S	S
SMS	Sheet Metal Screws	O	O	O	O	O

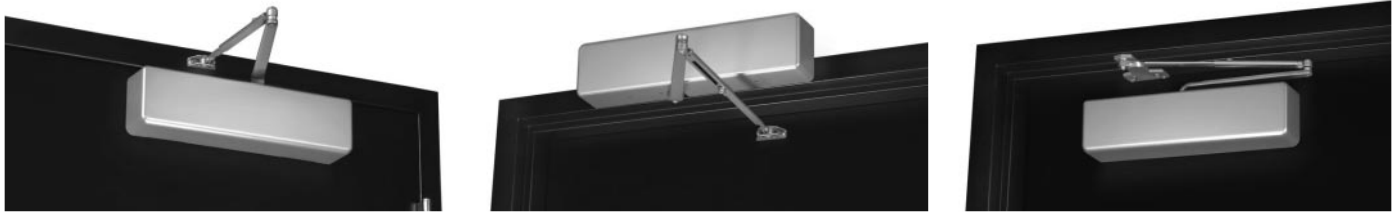
**S = standard; O = optional**

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) thick doors.

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.

SMS - when specified, closer will be packed with sheet metal screws for the door AND sheet metal screws plus machine screws for the frame.

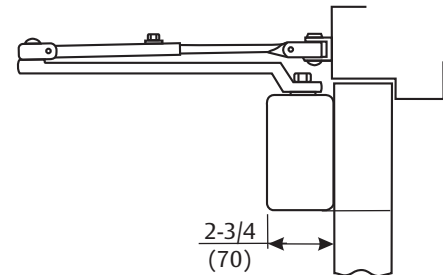
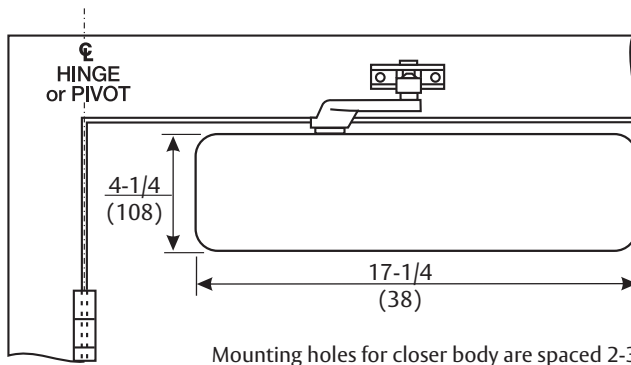
APPLICATIONS



Regular Arm

Top Jamb

Parallel Arm



Mounting holes for closer body are spaced 2-3/8" (60m) vertically x 6-3/4" (171mm) horizontally.

Regular Arm Illustration Shown

- Notes: Minimum ceiling clearance (measuring from rabbet): 5" (127mm) (top jamb application)
- Minimum frame face: 3-3/8" (86mm)
- Minimum top rail (measuring from frame stop): 6-1/2" (165mm) (parallel arm applications)
- Maximum door weight: 250 lbs.
- Door widths: Minimum 30"
- Maximum 48"

For additional technical information, the 9000 series installation instructions are available online.

ARM ASSEMBLIES

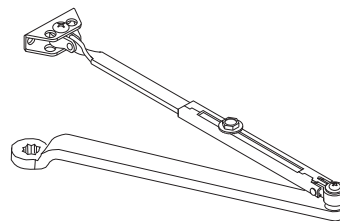
Non-Hold Open

Hold Open

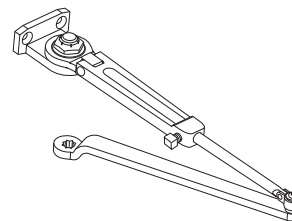
Tri-style® Packaging

Regular Arm

Closer is mounted on the hinge (pull) side top rail of the door.



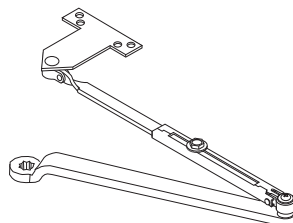
7701-1



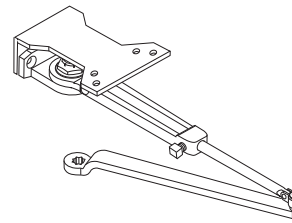
7701-3

Top Jamb Mounting

Closer is mounted on the push side frame face, above the door.



7701-5



7701-8

Parallel Arm

Closer is mounted on the push side, top rail of the door.

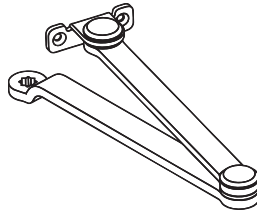
ARM ASSEMBLIES

**Heavy-Duty Arms**

**Regular Rigid Arm**

Closer is mounted on the pull side of the door. Non-adjustable secondary arm; riveted joints prevent tampering or disassembly.

Non-Hold Open



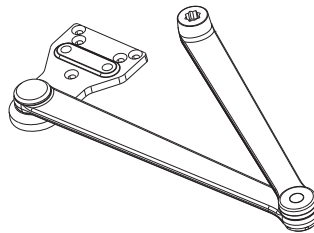
R7701-1

Hold Open

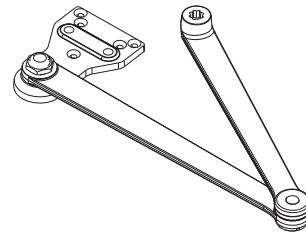
N/A

**Parallel Rigid Arm**

Enhanced variation of the standard parallel arm assembly. Intended for use in heavy traffic areas where auxiliary door stops are installed.



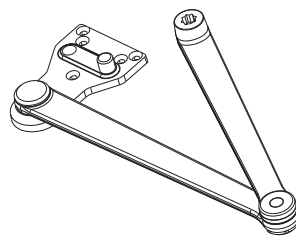
PR7701-5



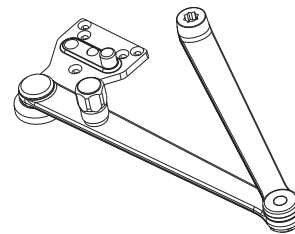
PR7701-8R (Right Hand)  
PR7701-8L (Left Hand)

**CloserPlus® Arm**

Similar to the Parallel Rigid arm, this arm incorporates a stop at the arm's soffit plate to dead stop the door at a predetermined degree of door swing. Intended for use where auxiliary door stop cannot be utilized.



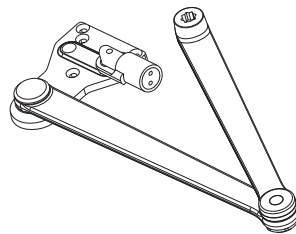
6770-5



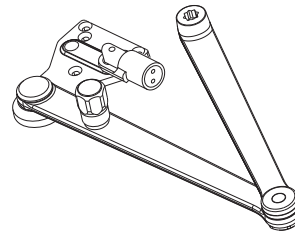
6870T-8

**CloserPlus Spring™ Arm**

Same characteristics as the CloserPlus arm with an additional steel buffer spring that provides greater protection at the end of the door.



CPS6770-5

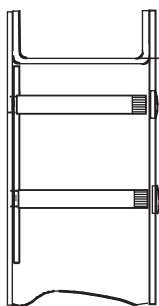


CPS6870T-8

PARTS LIST

**Steel Door Application**

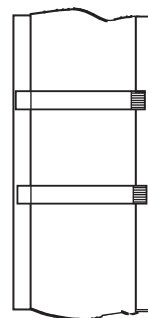
Sex Nut/Sleeve Nut: "SN" (4 per pack)  
 or  
 Sex Nut/Sleeve Nut & Screw: "SNB" (4 per pack)



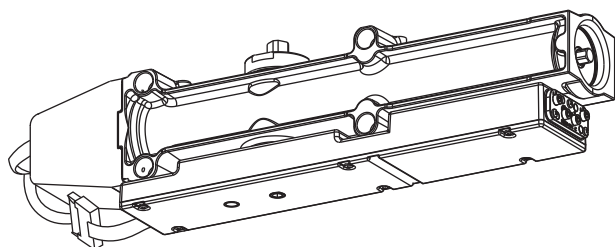
Door Thickness	SN's	SNB's
1-3/4"	SN-134	SNB134-47
2"	NA	SNB200-47
2-1/4"	SN-214	SNB214-47

**Aluminum and Wood Door Application  
 (Aluminum Door Shown)**

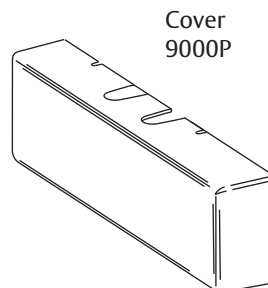
Through-Bolt & Grommet Nut:  
 "TBGN" (4 per pack)



Door Thickness	TBGN's
1-3/8"	TBGN138-47
1-3/4"	TBGN134-47



Closer  
 Assembly  
 9000LAP



Cover  
 9000P

Miscellaneous Parts	
Description	Part #
Backplate (RA & TJ mounting)	9086
Drop Plate (TJ mounting/low ceiling clearance)	9087
Drop Plate (PA mounting)	9088
Retrofit Plate - 4040	RP90-4040
Retrofit Plate - 4010	RP90-4010



ASSA ABLOY

**For a complete listing of products and applications please visit our web site.**  
[www.nortondoорcontrols.com](http://www.nortondoорcontrols.com)  
[www.assaabloy.ca](http://www.assaabloy.ca)

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**ASSA ABLOY Door Security Solutions Canada**  
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Fax: 1-905-738-2478

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