#### **Model 91DCP Overhead Concealed Closer**

### Non-Hold Open and Hold Open Metal Frame Installation Instructions

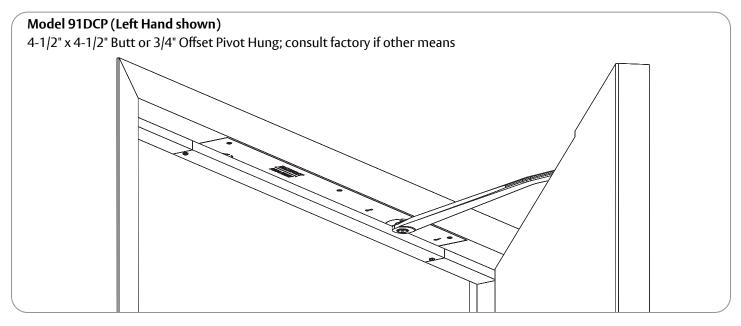


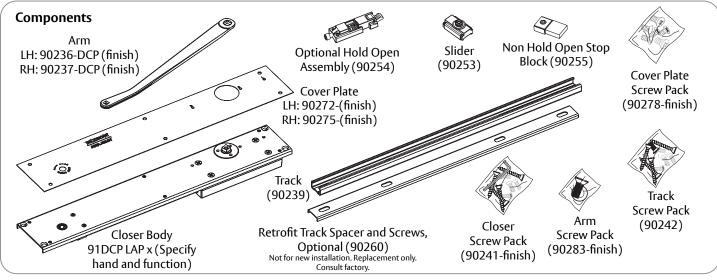


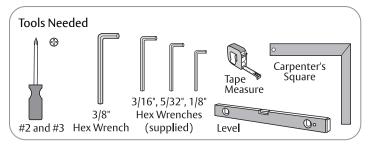
#### / WARNING

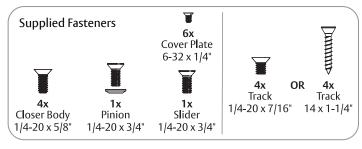
This product can expose you to lead which is known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.

Pour la version française voir www.nortondoorcontrols.com. READ AND FOLLOW ALL INSTRUCTIONS. SAVE THESE INSTRUCTIONS.











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#### **IMPORTANT:**

- An improperly installed or incorrectly adjusted door closer may cause **property damage** or **personal injury** and will void product warranty.
- To avoid personal injury, DO NOT DISASSEMBLE THIS DOOR CLOSER BODY.
- Door closers must be securely fastened to a prepared door and frame with fasteners provided.
- HOLD OPEN option not permitted to be installed in fire door assemblies.

#### **Before You Begin:**



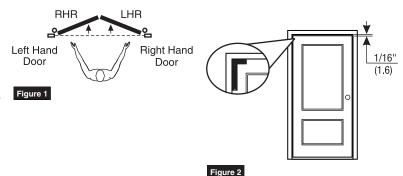
- The Americans with Disabilities Act (ADA) requires that doors having door closers have an opening force not to exceed 5 lbf.
- Door closer's power size adjustment feature may require adjustment to its lowest setting to comply with ADA opening force guidelines.
- ADA compliant closers may not latch doors, manufacturer does not guarantee latching on lower opening force settings.
- A separate Rixson Surface Checkmate® or other door stop, supplied by others, is strongly recommended to avoid damage to door closer and adjacent property.
- Doors should be hung on ball bearing or anti-friction hinges/pivots. Door must swing freely. For other hanging means a special layout may be required, consult factory.
- Door and frame must be reinforced for attaching screws.
- All dimensions are given in inches (millimeters).



#### Installation

#### A. Verify frame and door installation.

- Determine if right hand or left hand installation. (Figure 1)
- 2. Verify frame is square by using a carpenter's square. (Figure 2)
- Note if gaps between door and frame are consistent. Gap should be 1/16" (1.6) at jamb and header.
- Using supplied templates, confirm all dimensions of cut-outs.

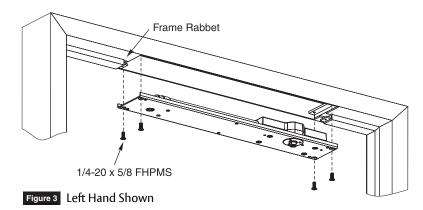




#### B. Install closer.

1. Install closer in prepped frame with four (4) 1/4-20 x 5/8" FHPMS mounting screws provided. (Figure 3)

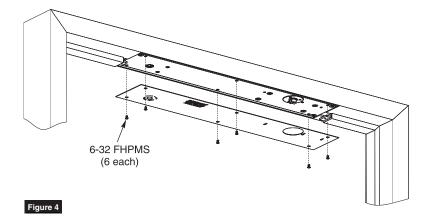
NOTE: Mounting plate should be flush with frame rabbet.





#### C. Install cover plate.

 Install cover plate to closer mounting plate with six (6) 6-32 x FHPMS mounting screws provided. (Figure 4)



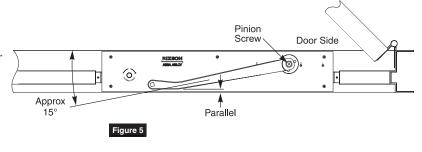


#### D. Attach arm.

. Using provided 5/32" hex wrench and 1/4-20 x 3/4" Allen Drive with Patch screw and washer, attach arm to closer spindle. (Figure 5)



IMPORTANT: Arm should rest at 15° away from door side of closer mounting plate. Arm always rotates in direction of door.





#### E. Assemble track.

 Slide track components into track. (Figure 6)

#### NOTE:

- All track components must be placed in track before installing track into door.
- Stop block (or optional hold open) should be last component at hinge side of track.
- The longer end of slider should be pointed towards hinge end of track.

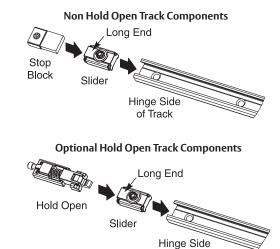
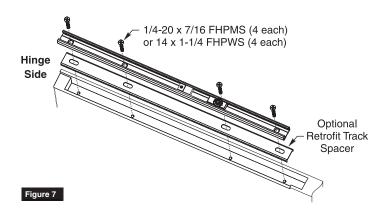


Figure 6



#### F. Install track to door.

- 1. Make sure slider and track components are installed prior to installing track to door.
- 2. Install track and, if necessary, optional retrofit spacer (replacement application only, consult factory) using either four (4) provided 1/4-20 x 7/16" FHPMS screws for metal door or four (4) provided #14 x 1-1/4" FHPWS screws for wood door. (Figure 7)



of Track



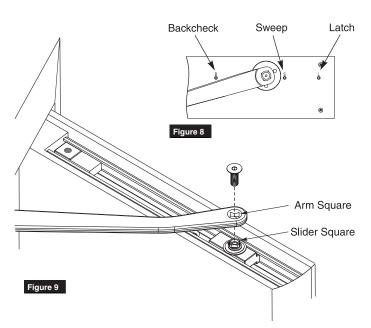
#### G. Attach arm to track.

- With provided 1/8" hex wrench, completely tighten latch and sweep valves by turning screws clockwise. This will allow for an easier closer-to-door connection. (Figure 8)
- Open door to about 45° then rotate arm over to door.

NOTE: Arm should maintain position because latch and sweep valves have been tightened.

 Align slider square with arm square and connect using provided 5/32" hex wrench and 1/4-20 x 3/4" Allen Drive with Patch screw. (Figure 9)

NOTE: If you choose to open door beyond 45°, backcheck may need to be adjusted counter clockwise to easily rotate arm to door position.





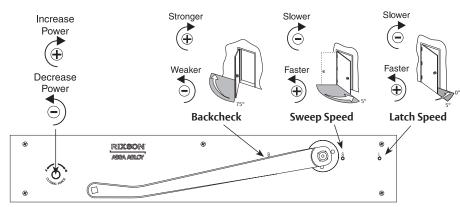
#### **Adjustments**

#### **Speed Adjustment**

Use provided 1/8" hex wrench to adjust sweep, latch and backcheck valves to control speed of door.



NEVER completely close backcheck valve. NEVER use backcheck as a dead stop. NEVER fully open valves. Valves will leak. **Do not use a power drill. Warranty will be void.** 



#### **Closing Force Adjustment**

If additional force is needed, use 3/8" hex wrench to adjust closing force. Refer to chart.



Do not use a power drill. Warranty will be void.

(i)

All 91DCP Series closers are factory set to minimum force. Adjust closer as necessary for more force taking into consideration door size, weight, positive room pressure, etc.

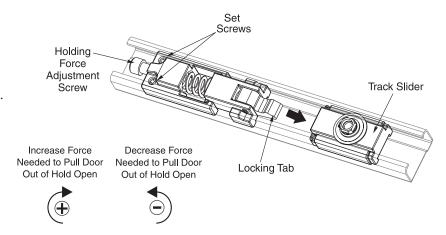
Spring Power Adjustment for Closing Force (Closer shipped at lowest setting)					
Model F	Model PH91DCP Model		91DCP		
Closer Size	Approx # of 360° Turns	Closer Size	Approx # of 360° Turns		
ADA	0	3	0		
1	15	4	17		
2	30	5	25		
3	55	6	32		

#### **Optional Hold Open Adjustment**

Insert locking tab of hold open assembly into track slider.

NOTE: Hold open assembly should be on hinge side of track slider.

- 2. Open door to desired hold open position.
- 3. Tighten hold open set screws to lock down hold open assembly.
- Pull door in closing direction to disengage hold open assembly and track slider.
- 5. Adjust hold open by turning adjustment screw with provided 3/16" hex wrench.





NOTE: THIS FEATURE CANNOT BE USED ON FIRE-RATED DOORS

The ASSA ABLOY Group is the global leader in access solutions. Every day we help people feel safe, secure and experience a more open world.

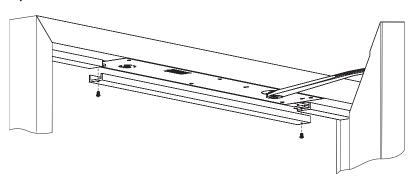


#### H. Install removable stop.

After closer is installed and all adjustments are complete, install removable stop.



NOTE: DO NOT drill holes into closer cover plate.



You've now installed the Model 91DCP Overhead Concealed Closer.

#### **Troubleshooting**

Symptom	Cause	Remedy
Door won't latch	Spring tension not strong enough	Increase opening force. See <b>Adjustments</b> section.
	Latch speed control not fast enough	Adjust latch speed valve. See <b>Adjustments</b> section.
	Door hung on products other than 4-1/2 x 4-1/2 butts or 3/4 offset pivots	Send template for hanging means to factory. A new installation sheet is required. Closer will need to be relocated.
	Arm is not preloaded	See Step <b>G. Attach Arm to Door</b>
Door is too difficult to open	Spring tension is set too strong	Decrease opening force. See <b>Adjustments</b> section.

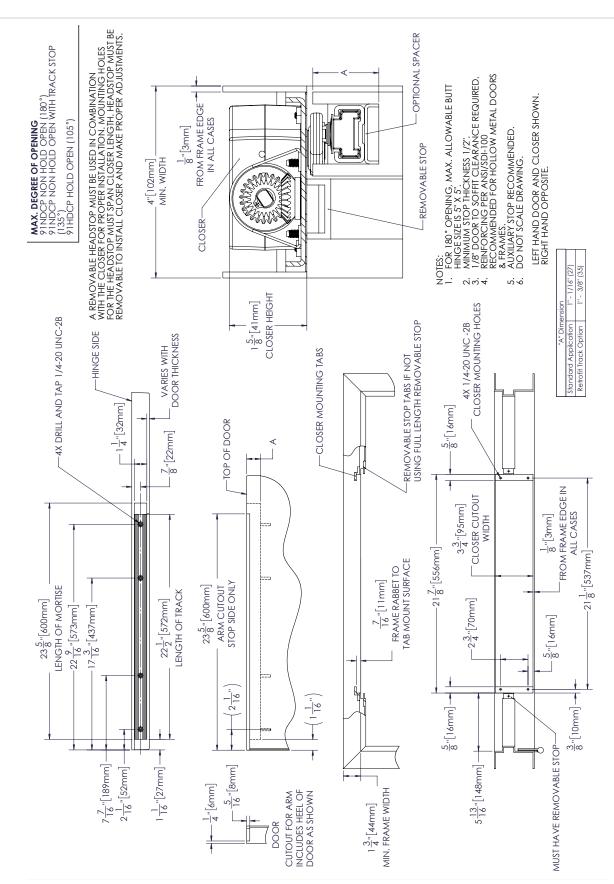
Rixson Technical Product Support: Monroe, NC 28112 USA Phone: 800.438.1951 ext: 6030 TechSupport.Rixson@assaabloy.com rixson.com

# Model 91DCP Overhead Concealed Closer Template

Butt Hinge, Metal Frame Left Hand Shown, Right Hand Opposite



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# Model 91DCP Overhead Concealed Closer Template 3/4" Offset Pivot, Metal Frame Left Hand Shown, Right Hand Opposite



## ASSA ABLOY

