Install Guide

D120 Automatic Door Closer XYZ Corp.

© 2014 Brian Dunn — BD TECH CONCEPTS LLC

Introduction

This automatic door closer may be installed in one of six different ways. Which to choose depends on which way the door opens, and whether the closer is to be mounted on the door or on the top jam overhead.

- If the closer is to be mounted with the door pulling inward, see section 1 or section 2. This requires the use of the small bracket.
- If the closer is to be mounted on the door with the door pushing outward, see section 3 or section 4. This requires the use of the large bracket, which must be able to attach to the underside of the top jam. See subsection 3.2 to verify fit before proceeding.
- If the closer is to be mounted on the top jam with the door pushing outward, see section 5 or section 6. This requires the use of the small bracket. The closer must fit on the top jam. See subsection 5.2 to verify fit before proceeding.

Contents

1	Closer On Door, Door Pulls In to the Left	2
2	Closer On Door, Door Pulls In to the Right	5
3	Closer On Door, Door Pushes Out to the Left	8
4	Closer On Door, Door Pushes Out to the Right	11
5	Closer On Top Jam, Door Pushes Out to the Left	14
6	Closer On Top Jam, Door Pushes Out to the Right	17
7	Closing Speed Adjustments	20

Section 1 — Closer On Door, Door Pulls In to the Left

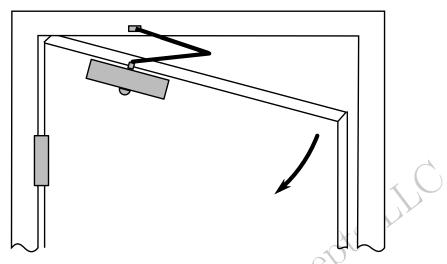


Figure 1.1 – Install Location

- Use this mounting location for a door which pulls inwards on the same side as the closer.
- Verify left or right opening direction before continuing.



1.2 Measurements and Installation

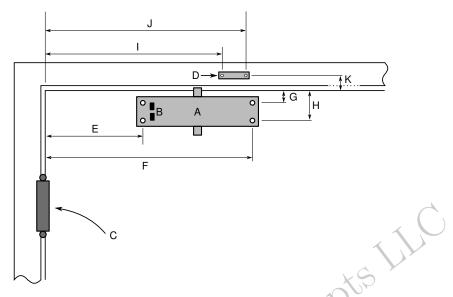


Figure 1.2 – Measurements — Front View

Item	Letter	Inch	mm
Closer	A	\bigcirc	_
Adjusting Screws	В		_
Hinge	C		_
Small Bracket	D		_
, y	\mathbf{E}	$5\frac{3}{16}$	132
	\mathbf{F}	$5\frac{3}{16}$	132
λ	G	$5\frac{3}{16}$	132
Y	Η	$5\frac{3}{16}$	132
	I	$5\frac{3}{16}$	132
	J	$5\frac{3}{16}$	132
	K	$5\frac{3}{16}$	132

 ${\bf Table~1.1}-{\bf Measurements}$

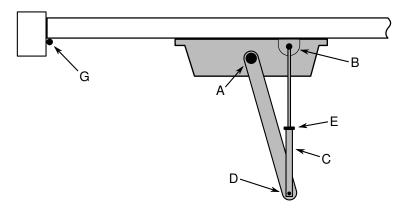


Figure 1.3 – Adjustment and Connection — Top View

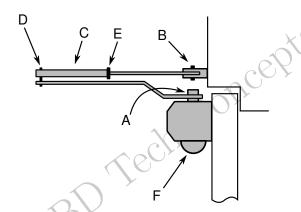


Figure 1.4 - Adjustment and Connection — Side View

- 1. Verify the location of the hinges at (G).
- 2. Place the fixed arm onto the closer at (A) such that the adjustable arm (C) will aim straight out from the wall when attached to the fixed arm at (D) and the small bracket at (B).
- 3. Attach the fixed arm onto the closer at (A) using the large locking washer and the large nut.
- 4. Adjust the length of the adjustable arm (C) so that it will attach to the fixed arm at (D) and the small bracket at (B).
- 5. Attach the adjustable arm to the bracket at (B) using a small locking washer and a small nut.
- 6. Attach the adjustable arm to the fixed arm at (D) using a small locking washer and a small nut.
- 7. Tighten the locknut at **(E)**.
- 8. Attach the cap onto the stud at (F).

Section 2 — Closer On Door, Door Pulls In to the Right

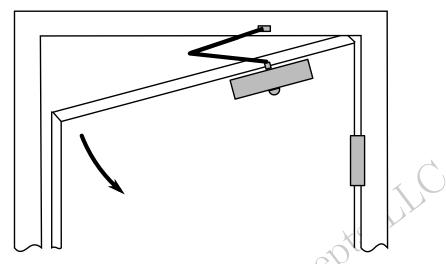


Figure 2.1 – Install Location

- Use this mounting location for a door which pulls inwards on the same side as the closer.
- Verify left or right opening direction before continuing.



2.2 Measurements and Installation

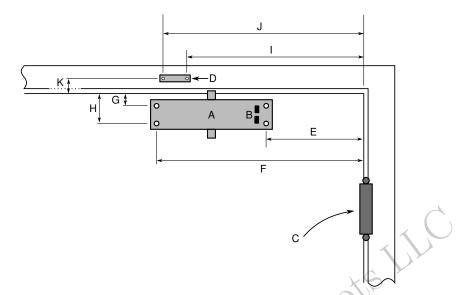


Figure 2.2 – Measurements — Front View

Τ.	т	4	12
Item	Letter	Inch	mm
Closer	A	\cup	_
Adjusting Screws	В		_
Hinge	C		_
Small Bracket	\bigcirc D	_	_
<i>y</i>	\mathbf{E}	$5\frac{3}{16}$	132
	\mathbf{F}	$5\frac{3}{16}$	132
\mathcal{O}_{λ}	G	$5\frac{3}{16}$	132
Y	Η	$5\frac{3}{16}$	132
	Ι	$5\frac{3}{16}$	132
	J	$5\frac{3}{16}$	132
	K	$5\frac{3}{16}$	132

 ${\bf Table~2.1}-{\bf Measurements}$

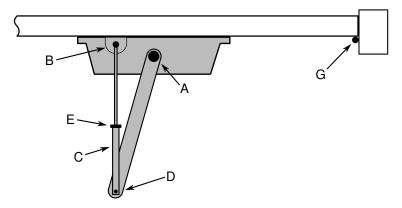


Figure 2.3 – Adjustment and Connection — Top View

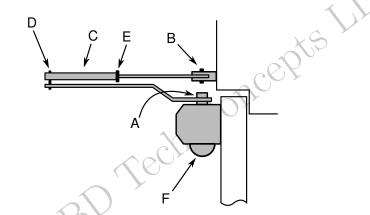


Figure 2.4 - Adjustment and Connection — Side View

- 1. Verify the location of the hinges at (G).
- 2. Place the fixed arm onto the closer at (A) such that the adjustable arm (C) will aim straight out from the wall when attached to the fixed arm at (D) and the small bracket at (B).
- 3. Attach the fixed arm onto the closer at (A) using the large locking washer and the large nut.
- 4. Adjust the length of the adjustable arm (C) so that it will attach to the fixed arm at (D) and the small bracket at (B).
- 5. Attach the adjustable arm to the bracket at (B) using a small locking washer and a small nut.
- 6. Attach the adjustable arm to the fixed arm at (D) using a small locking washer and a small nut.
- 7. Tighten the locknut at **(E)**.
- 8. Attach the cap onto the stud at (F).

Section 3 — Closer On Door, Door Pushes Out to the Left

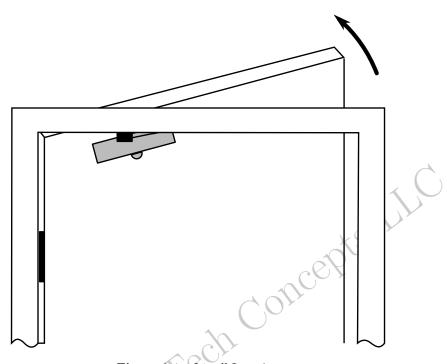


Figure 3.1 – Install Location

- Use this mounting location for a door which pushes outwards away the closer.
- This method is required when there is not enough room to fit the closer onto the face of the top jam.
- This mounting location uses a large bracket on the under-side of the top jam.
- See the note in the next section to verify that the large bracket will fit.
- Verify left or right opening direction before continuing.

3.2 Measurements and Installation

Note: Before proceeding, verify that the top jam is thick enough to attach the four screws of the large bracket (D) to the underside of the top jam while the door is closed. If the top jam is not deep enough to mount the large bracket, mount the closer onto the front face of the top jam (section 5 or section 6).

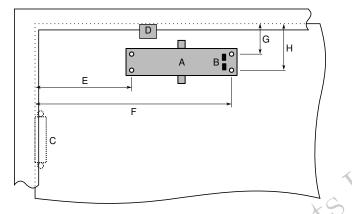


Figure 3.2 – Measurements — Front View

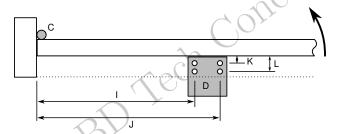


Figure 3.3 – Measurements — Top View

10	Item	Letter	Inch	mm
0)	Closer	A		
	Adjusting Screws	В	_	
7 27	Hinge	\mathbf{C}	_	_
	Large Bracket	D		
		\mathbf{E}	$5\frac{3}{16}$	132
		\mathbf{F}	$5\frac{3}{16}$	132
		\mathbf{G}	$5\frac{3}{16}$	132
		${ m H}$	$5\frac{3}{16}$	132
		I	$5\frac{3}{16}$	132
		J	$5\frac{3}{16}$	132
		K	$5\frac{3}{16}$	132
		L	$5\frac{3}{16}$	132

Table 3.1 – Measurements

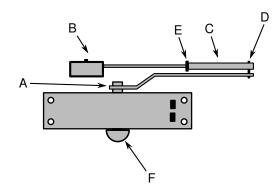


Figure 3.4 – Adjustment and Connection — Front View

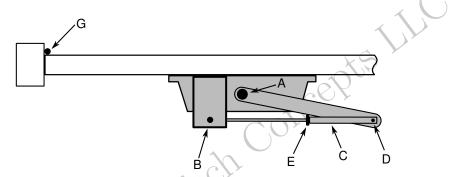


Figure 3.5 – Adjustment and Connection — Top View

- 1. Verify the location of the hinges at (G).
- 2. Place the fixed arm onto the closer at (A) such that the adjustable arm (C) will aim straight sideways across the door when attached to the fixed arm at (D) and the large bracket at (B).
- 3. Attach the fixed arm onto the closer at (A) using the large locking washer and the large nut.
- 4. Adjust the length of the adjustable arm (C) so that it will attach to the fixed arm at (D) and the large bracket at (B).
- 5. Attach the adjustable arm to the large bracket at (B) using a small locking washer and a small nut.
- 6. Attach the adjustable arm to the fixed arm at (D) using a small locking washer and a small nut.
- 7. Tighten the locknut at **(E)**.
- 8. Attach the cap onto the stud at **(F)**.

Section 4 — Closer On Door, Door Pushes Out to the Right

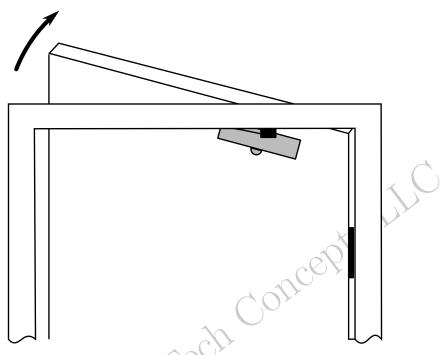


Figure 4.1 – Install Location

- Use this mounting location for a door which pushes outwards away the closer.
- This method is required when there is not enough room to fit the closer onto the face of the top jam.
- This mounting location uses a large bracket on the under-side of the top jam.
- See the note in the next section to verify that the large bracket will fit.
- Verify left or right opening direction before continuing.

4.2 Measurements and Installation

Note: Before proceeding, verify that the top jam is thick enough to attach the four screws of the large bracket (D) to the underside of the top jam while the door is closed. If the top jam is not deep enough to mount the large bracket, mount the closer onto the front face of the top jam (section 5 or section 6).

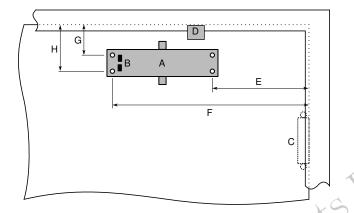


Figure 4.2 – Measurements — Front View

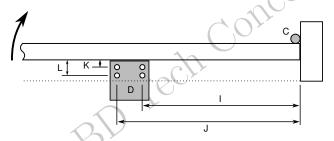


Figure 4.3 – Measurements — Top View

/				
10	Item	Letter	Inch	mm
	Closer	A		
	Adjusting Screws	В		_
4 27	Hinge	\mathbf{C}	_	_
	Large Bracket	D		
		\mathbf{E}	$5\frac{3}{16}$	132
		\mathbf{F}	$5\frac{3}{16}$	132
		G	$5\frac{3}{16}$	132
		Η	$5\frac{3}{16}$	132
		I	$5\frac{3}{16}$	132
		J	$5\frac{3}{16}$	132
		K	$5\frac{3}{16}$	132
		L	$5\frac{3}{16}$	132

Table 4.1 – Measurements

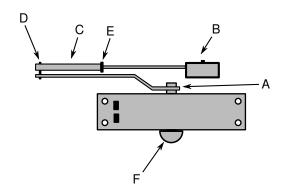


Figure 4.4 – Adjustment and Connection — Front View

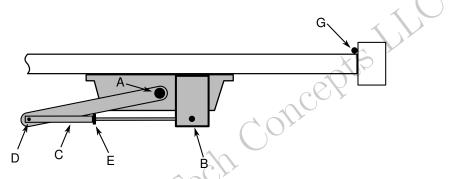


Figure 4.5 – Adjustment and Connection — Top View

- 1. Verify the location of the hinges at (G).
- 2. Place the fixed arm onto the closer at (A) such that the adjustable arm (C) will aim straight sideways across the door when attached to the fixed arm at (D) and the large bracket at (B).
- 3. Attach the fixed arm onto the closer at (A) using the large locking washer and the large nut.
- 4. Adjust the length of the adjustable arm (C) so that it will attach to the fixed arm at (D) and the large bracket at (B).
- 5. Attach the adjustable arm to the large bracket at (B) using a small locking washer and a small nut.
- 6. Attach the adjustable arm to the fixed arm at (D) using a small locking washer and a small nut.
- 7. Tighten the locknut at **(E)**.
- 8. Attach the cap onto the stud at (F).

Section 5 — Closer On Top Jam, Door Pushes Out to the Left

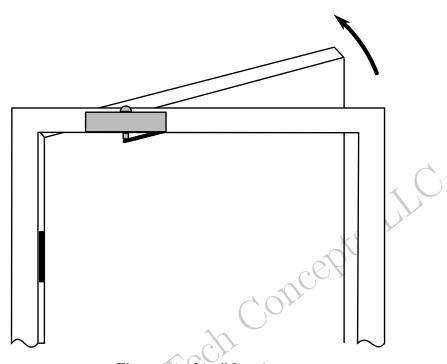


Figure 5.1 – Install Location

- Use this mounting location for a door which pushes outwards away the closer.
- This method is required when there is not enough room on the under-side of the top jam to mount the large bracket while the door is closed.
- This mounting location puts the closer onto the front face of the top jam. Verify that there is enough room to fit the closer on the top jam.
- See the note in the next section to verify that the adjustable length arm will be long enough.
- Verify left or right opening direction before continuing.

5.2 Measurements and Installation

Note: Before proceeding, verify that the adjustable length arm can be made long enough to reach from the small bracket to the connecting point with the main arm. An top jam which mounts the closer too far inward from the door may not allow the adjusting arm to reach far enough. If this is the case, mount the closer on the door (section 3 or section 4).

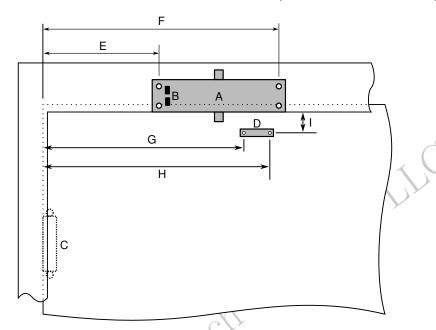


Figure 5.2 – Measurements — Front View

	Item	Letter	Inch	mm
	Closer	A	_	
	Adjusting Screws	В	_	
/	Hinge	\mathbf{C}	_	
	Small Bracket	D		_
		\mathbf{E}	$5\frac{3}{16}$	132
		\mathbf{F}	$5\frac{3}{16}$	132
		\mathbf{G}	$5\frac{3}{16}$	132
		\mathbf{H}	$5\frac{3}{16}$	132
		Ī	$5\frac{3}{16}$	132

Table 5.1 – Measurements

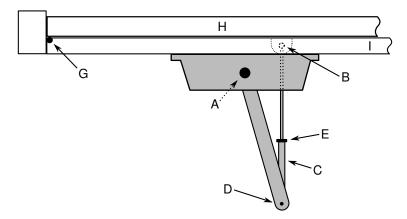


Figure 5.3 – Adjustment and Connection — Top View

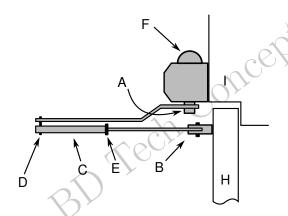


Figure 5.4 – Adjustment and Connection — Side View

- 1. Verify the location of the hinges at (G).
- 2. **(H)** is the door, and **(I)** is the top jam.
- 3. Place the fixed arm onto the closer at (A) such that the adjustable arm (C) will aim straight out from the wall when attached to the fixed arm at (D) and the small bracket at (B).
- 4. Attach the fixed arm onto the closer at (A) using the large locking washer and the large nut.
- 5. Adjust the length of the adjustable arm (C) so that it will attach to the fixed arm at (D) and the small bracket at (B).
- 6. Attach the adjustable arm to the bracket at (B) using a small locking washer and a small nut.
- 7. Attach the adjustable arm to the fixed arm at (D) using a small locking washer and a small nut.
- 8. Tighten the locknut at (E).
- 9. Attach the cap onto the stud at (F).

Section 6 — Closer On Top Jam, Door Pushes Out to the Right

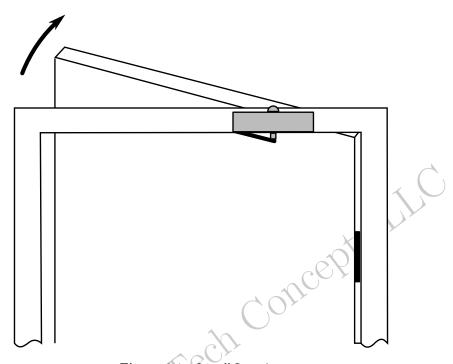


Figure 6.1 – Install Location

- Use this mounting location for a door which pushes outwards away the closer.
- This method is required when there is not enough room on the under-side of the top jam to mount the large bracket while the door is closed.
- This mounting location puts the closer onto the front face of the top jam. Verify that there is enough room to fit the closer on the top jam.
- See the note in the next section to verify that the adjustable length arm will be long enough.
- Verify left or right opening direction before continuing.

6.2 Measurements and Installation

Note: Before proceeding, verify that the adjustable length arm can be made long enough to reach from the small bracket to the connecting point with the main arm. An top jam which mounts the closer too far inward from the door may not allow the adjusting arm to reach far enough. If this is the case, mount the closer on the door (section 3 or section 4).

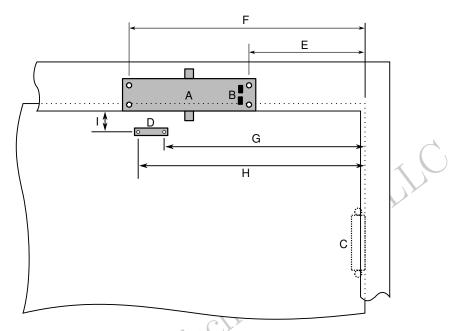


Figure 6.2 – Measurements — Front View

	Item	Letter	Inch	mm
	Closer	A	_	
	Adjusting Screws	В		
	Hinge	\mathbf{C}		
10	Small Bracket	D		
		\mathbf{E}	$5\frac{3}{16}$	132
MY.		\mathbf{F}	$5\frac{3}{16}$	132
		\mathbf{G}	$5\frac{3}{16}$	132
		\mathbf{H}	$5\frac{3}{16}$	132
		I	$5\frac{3}{16}$	132

Table 6.1 – Measurements

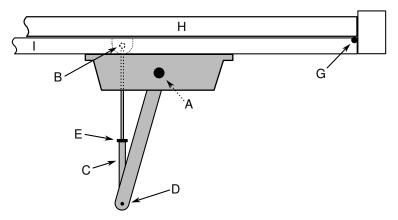


Figure 6.3 – Adjustment and Connection — Top View

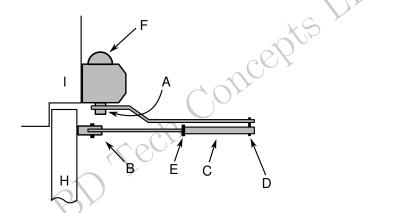


Figure 6.4 – Adjustment and Connection — Side View

- 1. Verify the location of the hinges at (G).
- 2. **(H)** is the door, and **(I)** is the top jam.
- 3. Place the fixed arm onto the closer at (A) such that the adjustable arm (C) will aim straight out from the wall when attached to the fixed arm at (D) and the small bracket at (B).
- 4. Attach the fixed arm onto the closer at (A) using the large locking washer and the large nut.
- 5. Adjust the length of the adjustable arm (C) so that it will attach to the fixed arm at (D) and the small bracket at (B).
- 6. Attach the adjustable arm to the bracket at (B) using a small locking washer and a small nut.
- 7. Attach the adjustable arm to the fixed arm at (D) using a small locking washer and a small nut.
- 8. Tighten the locknut at **(E)**.
- 9. Attach the cap onto the stud at (F).

Section 7 — Closing Speed Adjustments

The speed adjusting screws on the closer may be used to control how quickly the door closes.

• The 'S' screw controls how quickly the door starts to close. This may be set to a more user-friendly slow speed.

- The 'F' screw controls how quickly the door finishes closing the last few inches. This may be set for a faster speed in order to more successfully latch the door once it is about to close.
- For both speed adjusting screws, turn clockwise for a faster door, and counter-clockwise for a slower door.

