BTS80 EMB/H

Package H

Wood or steel door & frame, center hung

Single acting

Installation instructions

08059429 – 03-2021

| EN |

dormakaba

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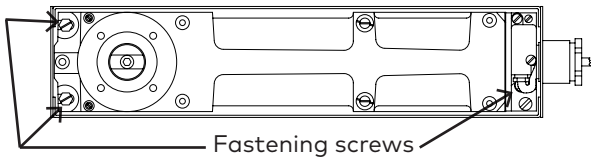
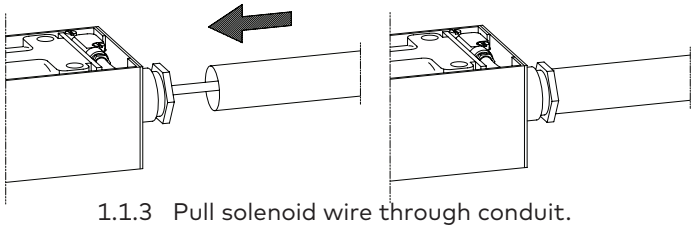
1 Installation

1.1 Install closer

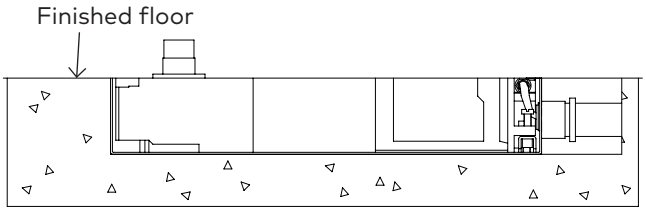
Fig.1



1.1.1 Center closer in cement case.
1.1.2 Tighten fastening screws.



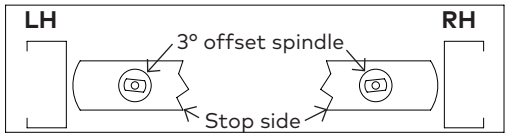
1.1.3 Pull solenoid wire through conduit. (CONDUIT SUPPLIED BY OTHERS.)
1.1.4 Attach conduit to conduit connector on end of cement case.



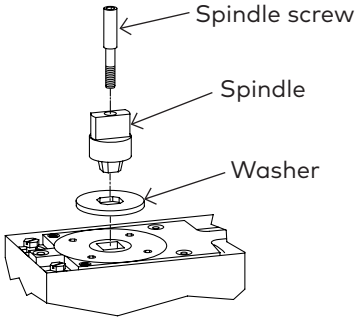
NOTE: Top of cement case must be flush with finished floor.
NOTE: Cement case must be level and installed parallel to frame.
NOTE: Spindle center line must be accurately located.
NOTE: Grout cement case in place.

1.2 Attach spindle and install closer

Fig.2

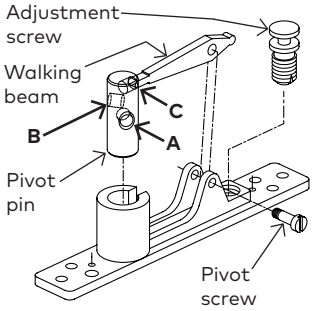


1.2.1 Slide washer over tapered square end of spindle until fully seated in groove.
1.2.2 Fasten spindle with spindle screw provided.
1.2.3 Tighten securely with 5mm hex key.



1.3 Adjust pivot for door clearance

Fig.3



Position	Stnd pin	Extended pin
A	1/8" [3]	3/4" [19]
B	3/8" [10]	1" [25]
C	3/4" [19]	1-5/16" [33]

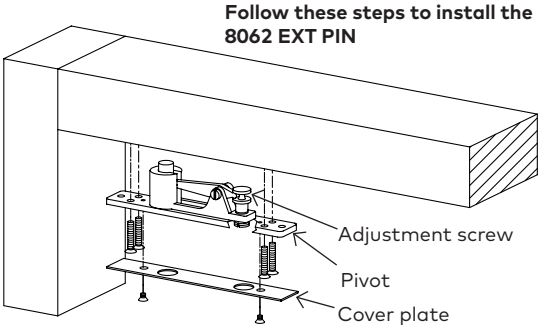
1.3.1 Determine clearance between door and frame, and adjust projection of pivot pin, if required.

NOTE: Pivot pin projection allows 1/8" clearance as shipped from the factory.

1.3.2 Remove walking beam pivot screw.
1.3.3 Push pivot pin out until walking beam is disengaged.
1.3.4 Install extended pivot pin and engage walking beam into appropriate hole in pivot pin to obtain required projection.

NOTE: Be sure opposite end of walking beam is engaged in adjustment screw.

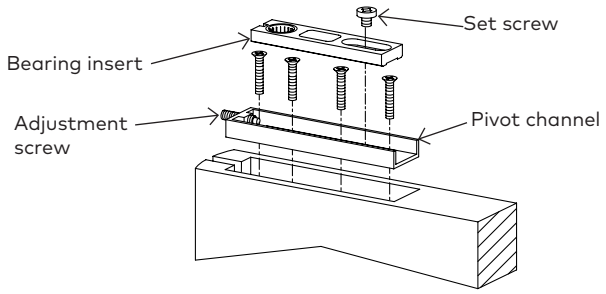
Follow these steps to install the 8062 EXT PIN



1.3.5 Reinstall walking beam pivot screw.
1.3.6 Retract pivot pin: turn adjustment screw CCW and install pivot into header.
1.3.7 Install cover plate.

1.4 Install pivot channel in top of door

Fig.4



1.4.1 Fasten pivot channel in top of door.

1.4.2 Place bearing insert into pivot channel.

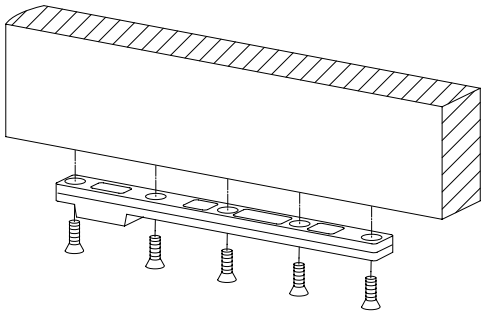
1.4.3 Turn adjustment screw approximately halfway into pivot channel.

1.4.4 Adjust pivot point accordingly.

1.4.5 Lock bearing insert in place with set screw.

1.5 Install bottom arm in bottom of door (7421)

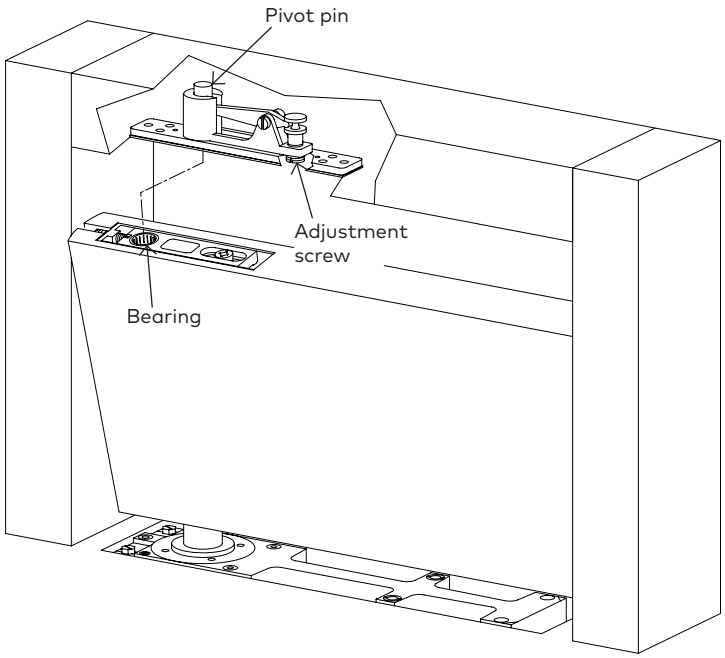
Fig.5



1.5.1 Attach arm to bottom of door with 5 wood or machine screws.

1.6 Install the door

Fig.6



1.6.1 With door parallel to frame, place bottom arm onto spindle.

1.6.2 Rotate door approximately 90°.

1.6.3 Align bearing with pivot pin.

1.6.4 Engage pivot pin by turning adjustment screw CW.

1.6.5 Check to make sure pivot pin is fully engaged in door portion of pivot.

2 Templates

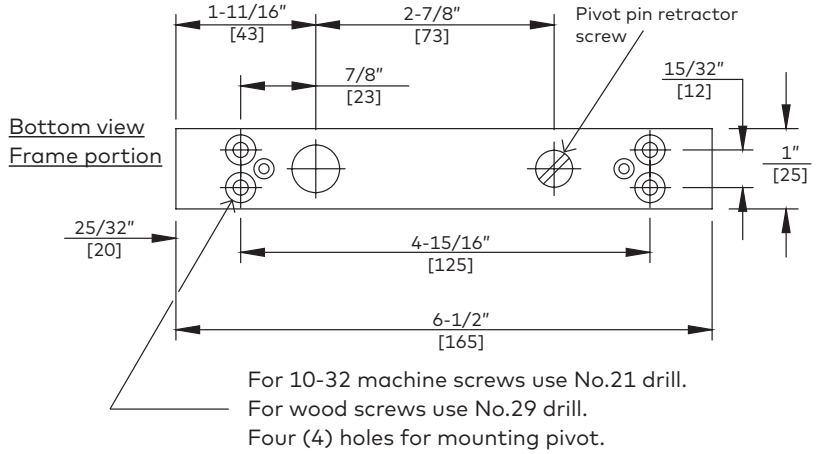
2.1 Top pivot template

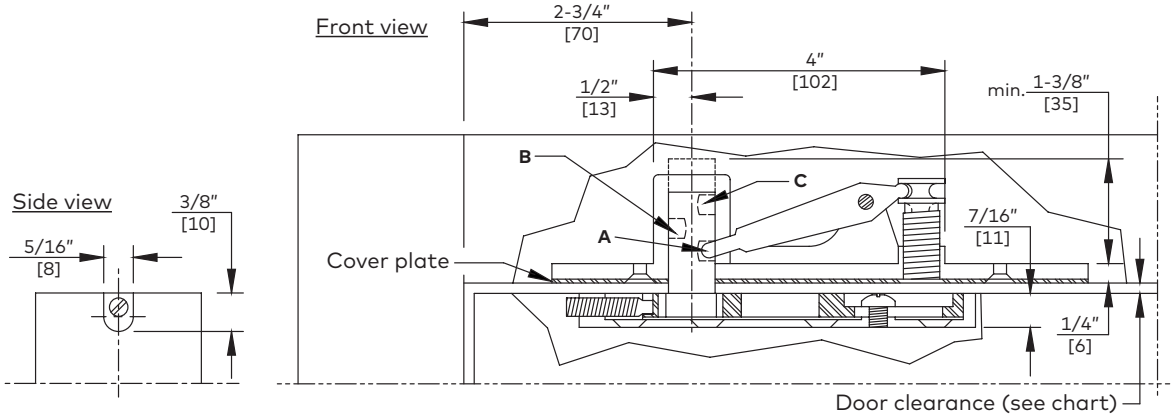
Fig.7

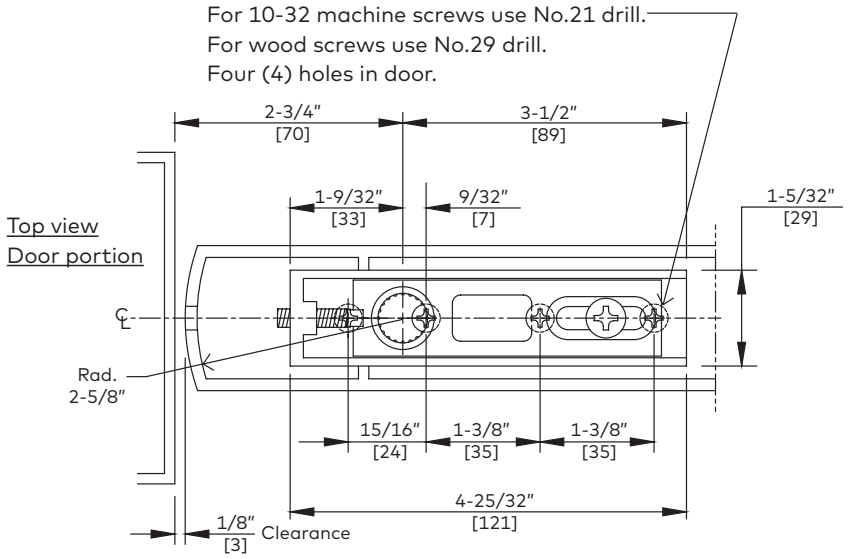
NOTES:

1. **Do not scale drawing.**
2. **Dimensions are in inches/[mm]**
3. **All necessary reinforcing for pivots by others.**
4. **Pivot pin diameter .591/[15]**
5. **Pivot pin projection is adjustable. See chart for door clearances.**

Door clearance		
Position	Stnd pin	Extended pin
A	1/8" [3]	3/4" [19]
B	3/8" [10]	1" [25]
C	3/4" [19]	1-5/16" [33]





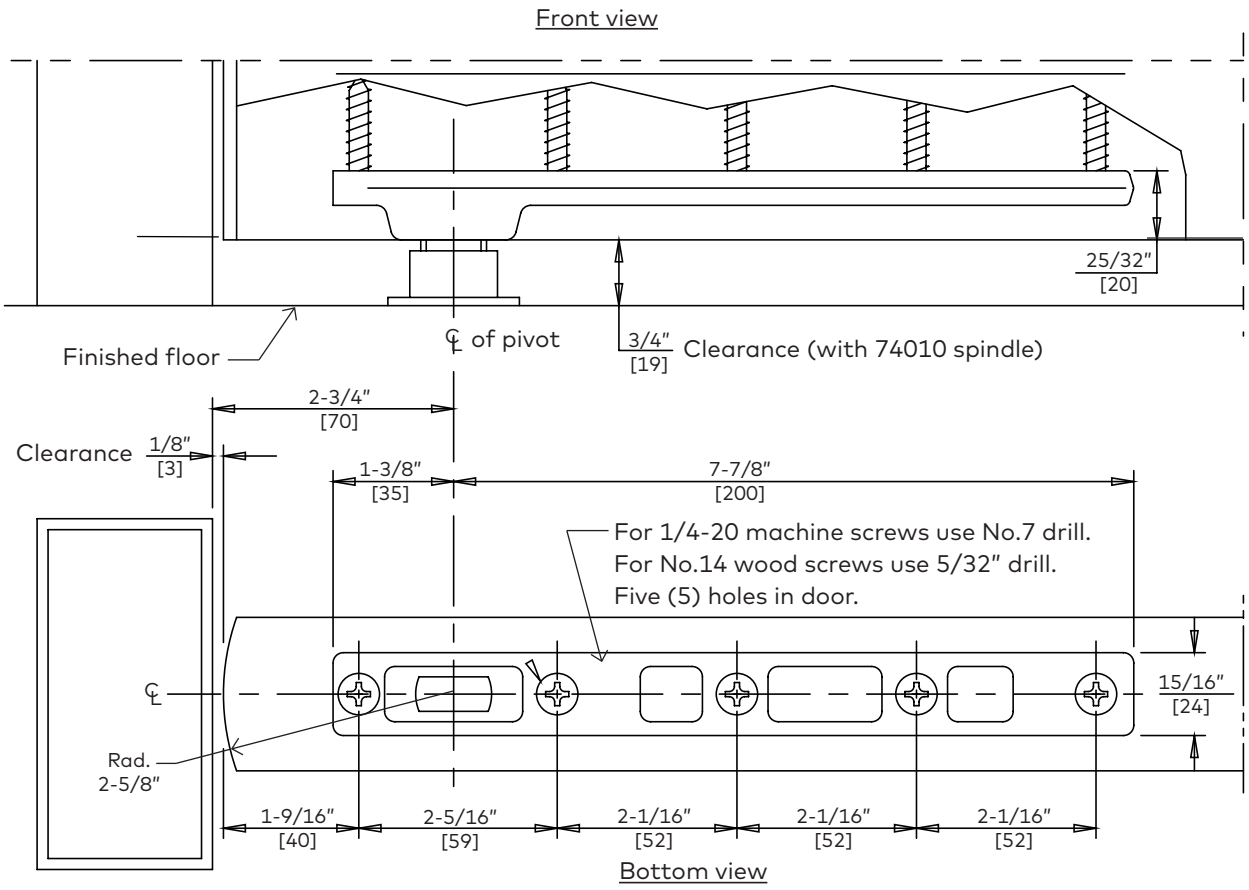


MODEL NO. 8062, 8062 EXT PIN
CENTER HUNG TOP PIVOT
FOR USE WITH BTS 75, BTS 80, BTS 80EMB

BTS-59

2.2 Bottom arm (7421) template

Fig.8



NOTES:

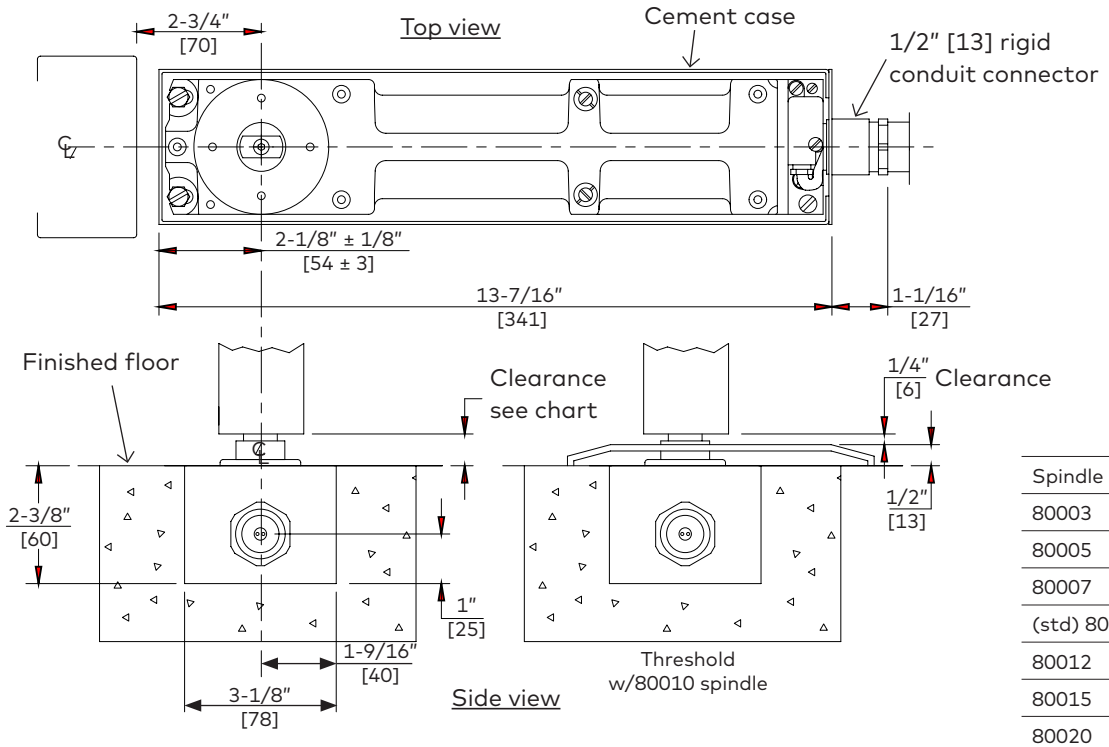
1. **Do not scale drawing.**
2. **Dimensions are in inches/[mm]**
3. **All necessary reinforcement for arm by others.**

ITEM NO. 7422
CENTER HUNG BOTTOM ARM
FOR USE WITH BTS 75, BTS 80, BTS 80EMB

BTS-61

2.3 Cement case template

Fig.9



Spindle no.	Clearance
80003	5/16"
80005	1/2"
80007	5/8"
(std) 80010	3/4"
80012	13/16"
80015	7/8"
80020	1-1/8"
80025	1-5/16"
80030	1-1/2"
80035	1-11/16"
80040	1-7/8"
80045	2-1/16"
80050	2-5/16"

NOTES:

1. **Do not scale drawing.**
2. **Top of cement case must be flush with finish floor line.**
3. **Celement case must be level and parallel to frame.**
4. **Install cement case with closer centered in case.**
5. **1/2" rigid conduit by others.**
6. **Chart valid only if corresponding door portion is installed per template.**

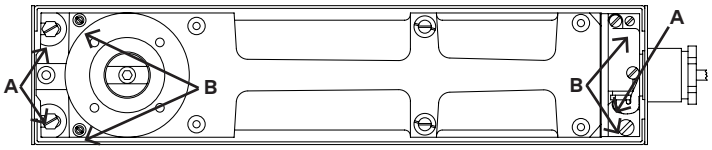
FLOOR CLOSER MODELS: BTS 80EMB/G, BTS 80EMB/H
CENTER HUNG 2-3/4" BACKSET
CEMENT CASE PLACEMENT

BTS-62

3 Adjustments

3.1 Adjust bottom door clearances (if necessary)

Fig.10



3.1.1 Closer can be raised approximately 5/32" with the cement case.

3.1.2 Loosen fastening screws "A".

3.1.3 Turn height adjustment screws "B" CW until desired height is obtained.

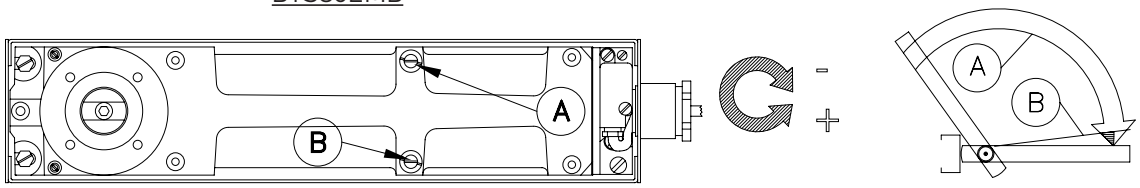
NOTE: Closer must remain level!

3.1.4 Re-tighten fastening screws "A".

3.1.5 If more clearance is necessary, change spindle to appropriate size.

3.2 Adjust closing speeds

Fig.11



Valve "A"	Controls closing speed from max opening to 0°
Valve "B"	Controls closing speed from approximately 7°-0°

3.3 Sealing compound (optional)

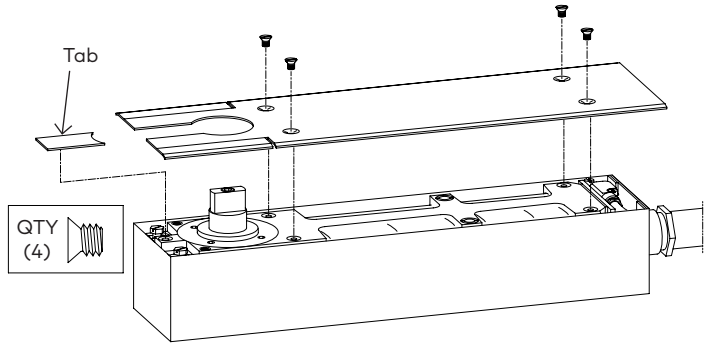
Fig.12

Sealing compound is recommended for exterior doors or areas with excessive moisture. Make all final adjustments before adding compound. Refer to instructions packed with compound for full details.

4 Covers

4.1 Install cover

Fig.13



4.1.1 Install cover plate or threshold.

4.1.2 Trim cover plate as required to match profile of pivot jamb.

4.1.3 Install cover plate with four screws provided.

4.1.4 Press tab in place behind spindle.

4.1.5 If threshold is installed, do not anchor threshold to closer body, since closer is adjustable within cement case.

5 Operation

5.1 Operating the BTS80 EMB

Fig.14

5.1.1 When BTS80 EMB is energized, door will hold open at any point between approximately 65° and max opening.

5.1.2 Allow for approximately 4° of fall away when considering hold open position.

5.1.3 To release door from hold open, manually pull door closed a few inches.

5.1.4 When de-energized, the BTS80 EMB operates as a standard floor closer.

5.2 Electrical specifications

Fig.15

Operating voltage: 24 Volts DC (10%) max. allowable residual ripple 30%

Input current: 125 MA

5.2.1 **Important: If the BTS80 EMB is connected to a fire alarm system, the unit must be tested after installation, by the end user, to be certain that the door closer unit functions properly when the alarm system is activated.**

5.2.2 The entire system must also be tested periodically after the initial installation test, in conjunction with the testing of the fire alarm system.

5.2.3 The end user is also responsible for maintaining the door closing system.

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