

# BTS 80EMB/I X BUTT HINGES (PULL SIDE MOUNT) TRACK MORTISED INTO DOOR – 160° OPENING



**1** Prepare closer for installation.  
Center closer in cement case. Tighten MOUNTING SCREWS.

**2** Install closer, cement case and conduit in floor.  
Pull solenoid wire thru conduit. (CONDUIT SUPPLIED BY OTHERS)  
Attach conduit to conduit connector on end of cement case.

Top of cement case must be flush with FINISHED floor.  
Cement case must be LEVEL and installed PARALLEL to frame.  
Spindle center line must be accurately located. Grout cement case in place.

**3** Slide washer over tapered square end of spindle until fully seated in groove. Fasten spindle with spindle screw provided. Tighten securely with 5mm HEX KEY.

**CRITICAL WASHER MUST BE INSTALLED.**

**4** Orient arm so angle of slot appears as shown. Attach slide block to arm with shoulder screw provided.

(RH DOOR) (LH DOOR)

SLOT

**5** Slide arm assembly into track and install track into door.

(LH DOOR)

TRACK

ARM ASSEMBLY

**6** Close both closing speed valves. Align spindle with slot in arm, shown in step #4.

(RIGHT HAND DOOR) (LEFT HAND DOOR)

VALVES

**7** Place arm over spindle. Seat arm properly on spindle by tapping with hammer. Install cover washer and screw.

SCREW

COVER WASHER

ARM

SPINDLE

**8** Adjust bottom door clearances. (If necessary)  
Closer can be raised approximately 5/32" within the cement case  
Loosen fastening screws "A". Turn height adjustment screws "B" clockwise until desired height is obtained.  
**(NOTE: CLOSER MUST REMAIN LEVEL.)**  
Re-Tighten fastening screws "A". If more clearance is necessary, change spindle to appropriate size.

**9** Adjust closing speed.

**INCREASE** ↗  
**DECREASE** ↘

VALVE "A" – controls closing speed from approx. 160°–0°.  
VALVE "B" – controls closing speed from approx. 7°–0°.

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

**11** Install cover plate or threshold.  
Trim cover plate as required to match profile of pivot jamb. Install cover plate with four screws provided. Press tab in place behind spindle. If threshold is installed, do not anchor threshold to closer body since closer is adjustable within cement case.

TAB

QTY (4)

**12** OPERATION:  
When BTS 80EMB is energized, door will hold open at any point between approximately 85° and 155°. Allow for approximately 4" of fall away when considering hold open position. To release door from hold open, manually pull door closed a few inches.  
When de-energized, the BTS 80EMB operates as a standard floor closer.

ELECTRICAL SPECIFICATIONS:  
Operating Voltage: 24 Volts DC ( 10% ) Max. allowable residual  
Input Current: 125 MA Ripple 30%

IMPORTANT: If the BTS 80EMB 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. The entire system must also be tested periodically after the initial installation test, in conjunction with the testing of the fire alarm system. The end user is also responsible for maintaining the door closing system.

**NOTE:**

1. RIGHT HAND DOOR SHOWN.
2. DO NOT SCALE DRAWING.
3. DIMENSIONS ARE IN INCHES/(MM).
4. FOR THRESHOLD APPLICATIONS, USE SPINDLE 74012 AND MEASURE MORTISE DEPTH FOR TRACK FROM TOP OF THRESHOLD, (1/2" THRESHOLD ONLY).
5. MAXIMUM DEGREE OF OPENING 160°. FOR DOORS OPENING OVER 160°, AN AUXILIARY STOP MUST BE INSTALLED.
6. DOOR HUNG ON 4-1/2" WIDE BUTT HINGES.
7. 1/2" RIGID CONDUIT BY OTHERS.

