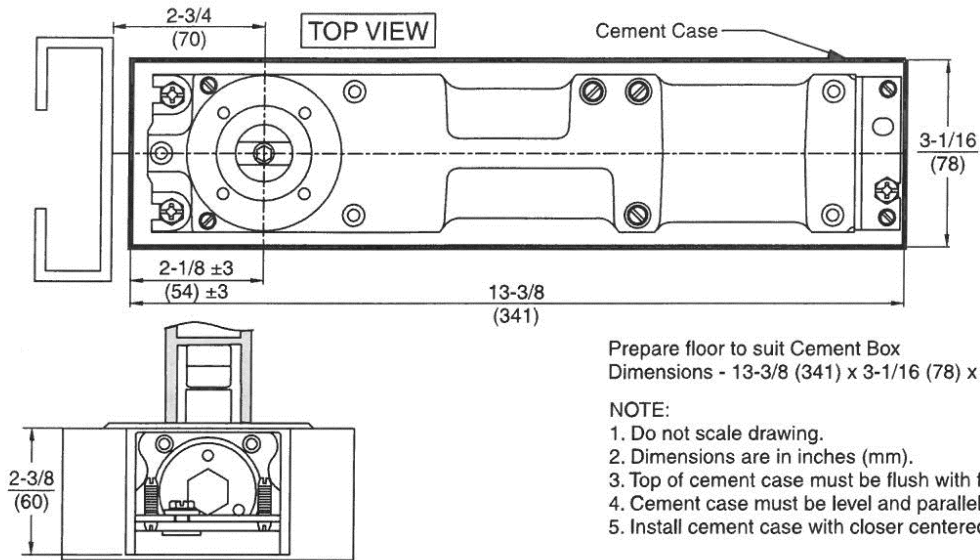


ST80 Floor Spring Installation Instructions

1 Door and Floor Preparation - Cement Case



Prepare floor to suit Cement Box
Dimensions - 13-3/8 (341) x 3-1/16 (78) x 2-3/8 (60)

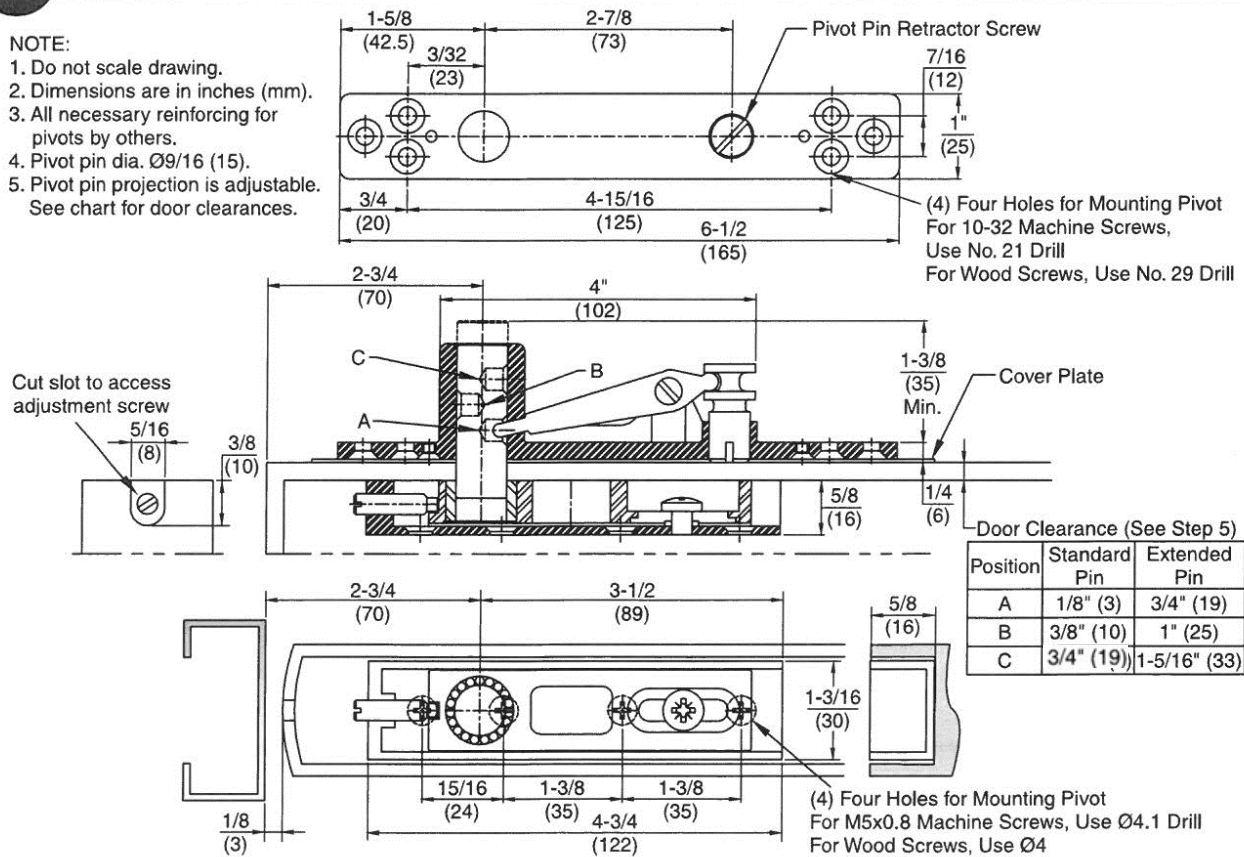
NOTE:

1. Do not scale drawing.
2. Dimensions are in inches (mm).
3. Top of cement case must be flush with finish floor line.
4. Cement case must be level and parallel to frame.
5. Install cement case with closer centered in case.

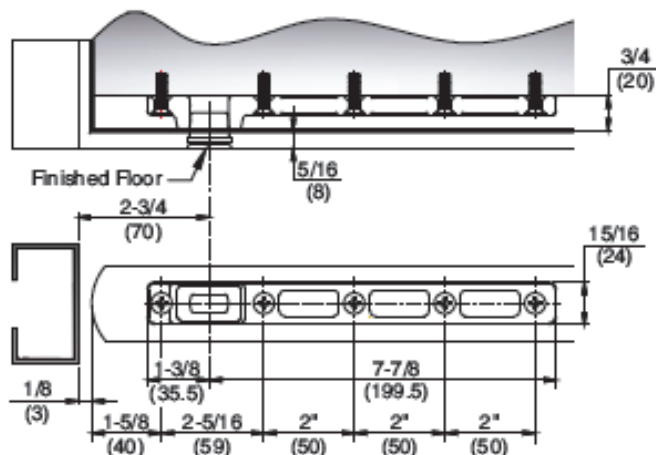
2 Door and Floor Preparation - Top Pivot

NOTE:

1. Do not scale drawing.
2. Dimensions are in inches (mm).
3. All necessary reinforcing for pivots by others.
4. Pivot pin dia. $\varnothing 9/16$ (15).
5. Pivot pin projection is adjustable. See chart for door clearances.

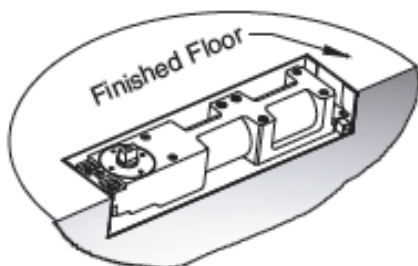


3 Door and Floor Preparation - Bottom Arm

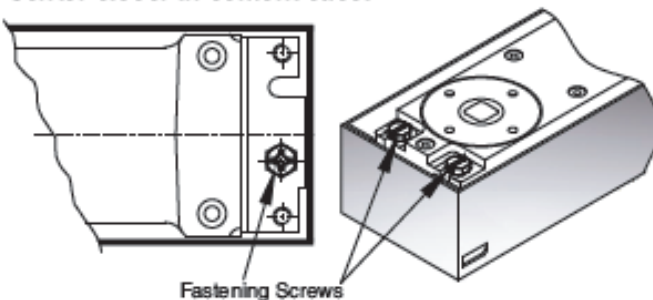


4 Install Closer and Cement Case In Floor

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.



Center closer in cement case.



Tighten fastening screw.

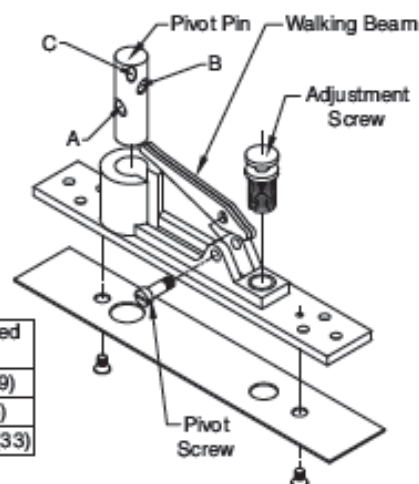
5

Determine clearance between door and frame and adjust projection of pivot pin, if required. Pivot pin projection allows 3/8" (10mm) clearance as shipped from the factory.

To change projection of pivot pin or to install extended pivot pin, the following is recommended:

1. Remove walking beam pivot screw.
2. Push pivot pin out until walking beam is disengaged.
3. Install extended pivot pin and engage walking beam into appropriate hole in pivot pin to obtain required projection. Be sure opposite end of walking beam is engaged in adjustment screw.
4. Reinstall walking beam pivot screw.

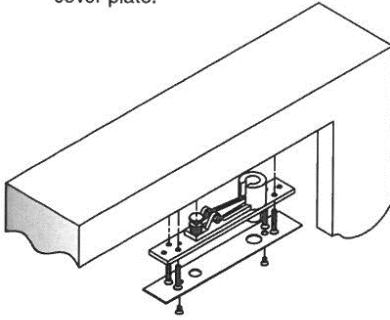
Door Clearance		
Position	Standard Pin	Extended Pin
A	1/8" (3)	3/4" (19)
B	3/8" (10)	1" (25)
C	3/4" (19)	1-5/16" (33)



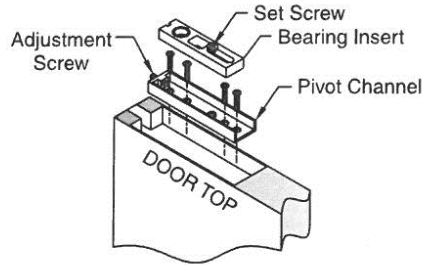
ASSA ABLOY, the global leader in door opening solutions

6

Retract pivot pin by turning adjustment screw counter clockwise and install pivot into header. Install cover plate.

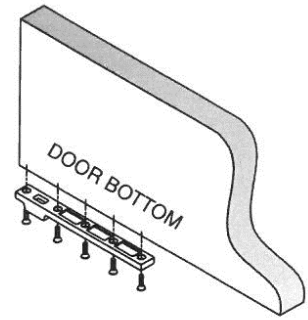


Fasten pivot channel in top of door. Place bearing insert into pivot channel. Turn adjustment screw approximately halfway into pivot channel. Adjust pivot point accordingly. Lock bearing. Insert in place with set screw.



INSTALL BOTTOM ARM

Attach arm to bottom of door with five wood or machine screws provided.



7 Power Adjustment

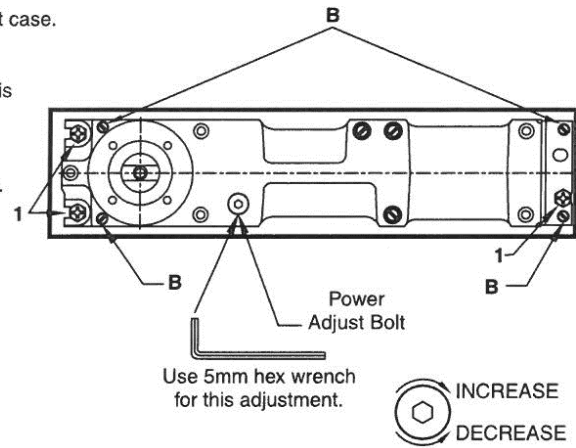
Adjust bottom door clearances. (if necessary)
Closer can be raised approximately 5/32" (4mm) within the cement case.

1. Loosen fastening screws "1".
2. Turn height adjustment screw "B" clockwise until desired height is obtained. Closer must remain level.
3. Re-tighten fastening screws "1".

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

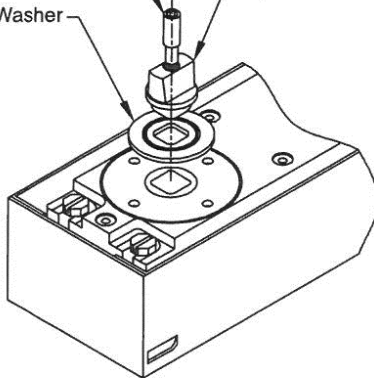
#POWER ADJUSTMENT

Power Adjustment Chart	
Floor Spring Size	Turns of Power Adjusting Screw
3	-14
4	0 (Preset)
5	+14
6	+12



8 Attach Spindle To Closer

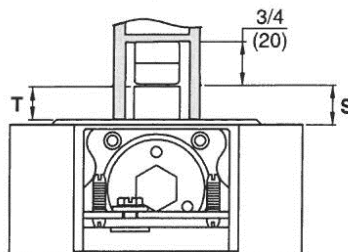
Spindle Screw
Washer
Spindle



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

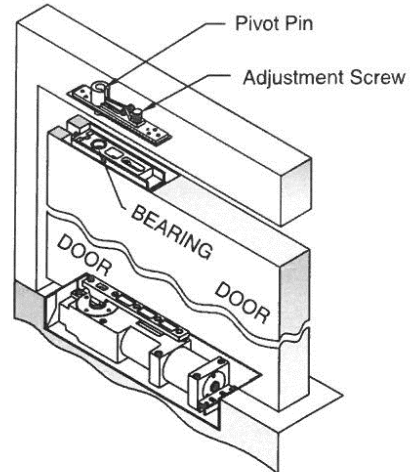


Spindle No.	Door Cl. Dim. "S"	Dim. "T"
10	5/16" (8)	1/8" (3.2)
20	1/2" (12.7)	5/16" (7.9)
30	5/8" (15.9)	7/16" (11)
40	3/4" (19)	1/2" (12.7)
50	13/16" (20.5)	5/8" (15.9)

ASSAABLOY, the global leader in door opening solutions

9 Install Door

1. With door parallel to frame, place bottom arm onto spindle.
2. Rotate door approximately 90°.
3. Align bearing with pivot pin.
4. Engage pivot pin by turning adjustment screw clockwise.
5. Check to make sure pivot pin is fully engaged in door portion of pivot.



10 Adjust Closing Speed

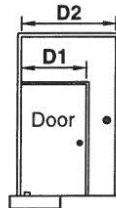
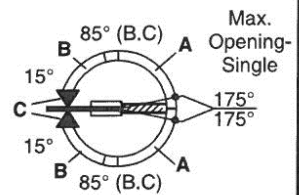
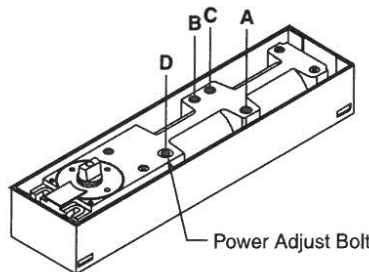
- VALVE "A" - controls closing speed from MAX. OPENING - 85°
- VALVE "B" - controls closing speed from approx. 85° - 15°
- VALVE "C" - controls closing speed from approx. 15° - 0°
- VALVE "D" - adjustable closing force (EN3-6)

DELAYED ACTION

Turn valve "A" clockwise until desired delay time is obtained.

HOLD OPEN

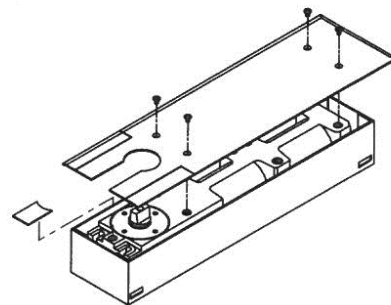
Turn valve "A" completely clockwise. Door will hold at any point beyond approx. 85°. Allow for approx. 4° fall away when considering old open position. To release door, manually pull door closer a few inches.



		ST8011
Spring strength (EN)		3-6
Spring strength adjustment		●
Standard and External Doors (D1, D2)	≤ 950	●
	≤ 1100	●
	≤ 1250	●
	≤ 1400	●

11 Install Cover Plate or Threshold

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



ASSA ABLOY, the global leader in door opening solutions