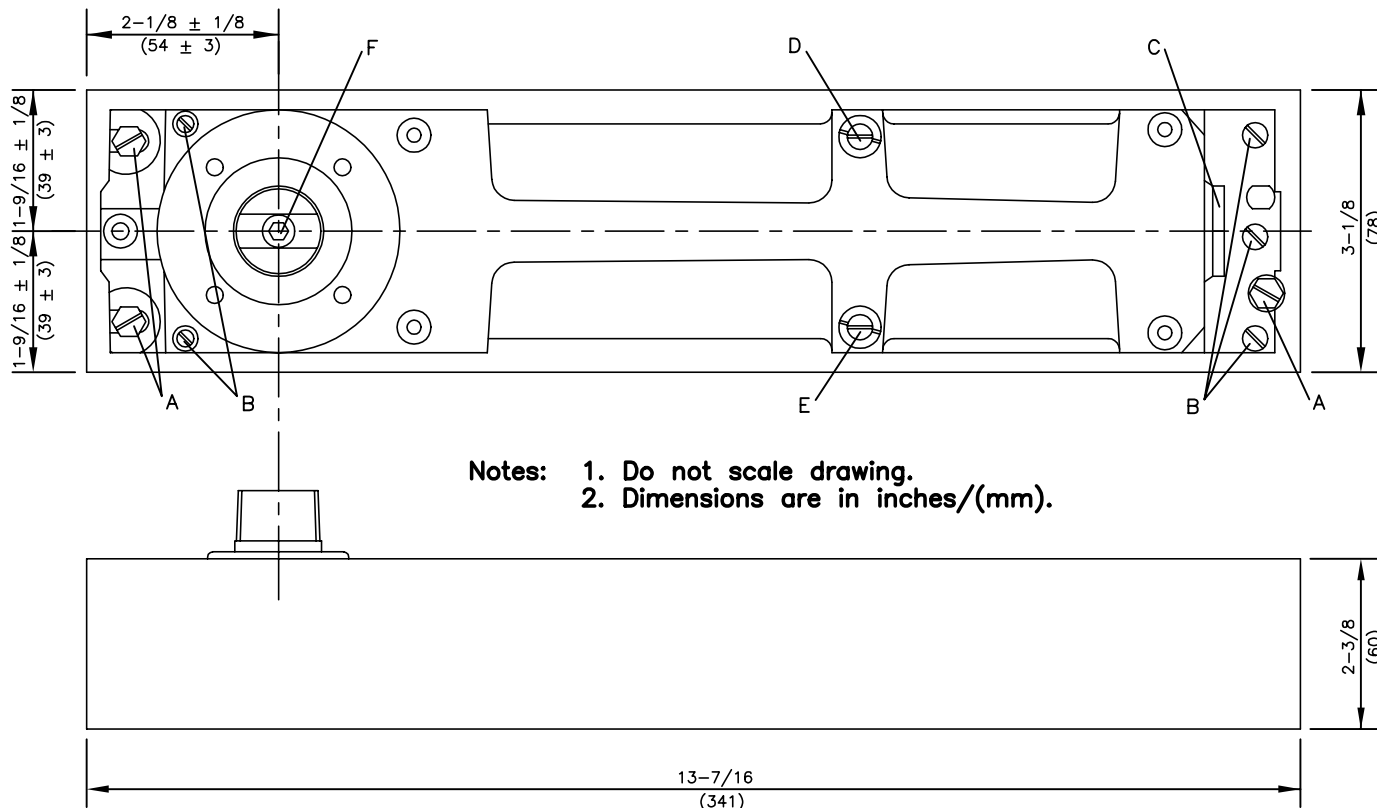


# BTS 80, BTS 80F

**WARNING:** Some information may vary depending on the package being used. Reference specific installation instructions for details.



**Notes:** 1. Do not scale drawing.  
2. Dimensions are in inches/(mm).

## BTS 80

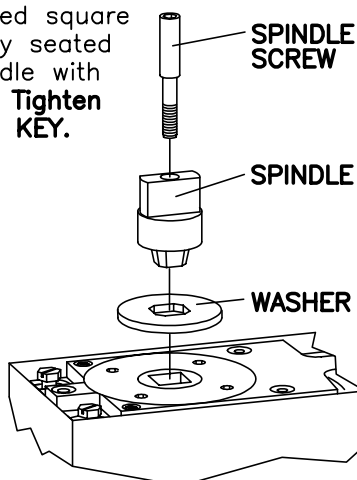
- A – Fastening screws
- B – Height adjustment screws
- C – Regulator for start of hold-open. (75°–105°)
- D – Closing speed adjustment valve (80°–0°)
- E – Closing speed adjustment valve (180°–80°), delayed action, and hold-open valve.
- F – Spindle screw

## BTS 80F

- A – Fastening screws
- B – Height adjustment screws
- C – N/A
- D – Closing speed adjustment valve (180°–0°)
- E – Closing speed adjustment valve (7°–0°)
- F – Spindle screw

- 1 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.**

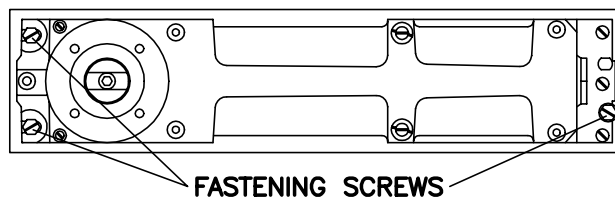
**CRITICAL**  
WASHER MUST  
BE INSTALLED.



- 2 **Replacing closer in existing installation:** Remove fastening screws and replace old closer with new closer. Spindle center line must be accurately located for the pivot point of the door. Reinstall and tighten fastening screws.

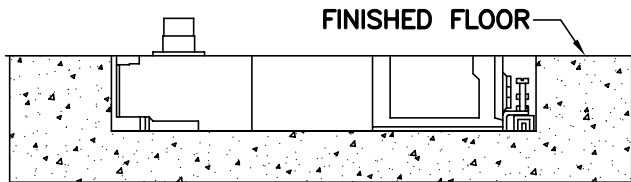
### New installations:

Center closer in cement case and tighten fastening screws.



### 3 (New installations only)

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.

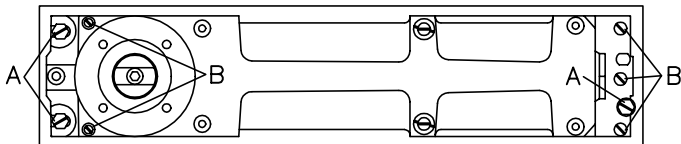


4

**REINSTALL DOOR, THEN PROCEED TO STEP #5.**

### 5 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. **Closer must remain level!** Re-tighten fastening screws "A". **If more clearance is necessary, change spindle to appropriate size.**



### 6 Adjust closing speed.

**BTS 80**



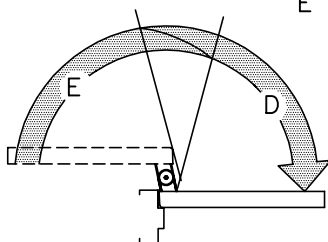
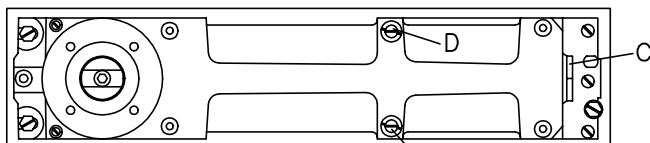
**VALVE "D"**— controls closing speed from approx.  $80^{\circ}$ – $0^{\circ}$ .

**VALVE "E"**— controls closing speed from approx.  $180^{\circ}$ – $80^{\circ}$ . (Opening conditions may limit maximum opening.)

**DELAYED ACTION:** Turn valve "E" clockwise until desired delay time (MAX. OPENING– $75^{\circ}$ ) is obtained.

**HOLD OPEN:** Turn valve "E" completely clockwise. Door will hold at any point beyond approx.  $80^{\circ}$ . Allow for approx.  $4^{\circ}$  fall away when considering hold open position. To release door, manually pull door closed a few inches.

**VALVE "C"**— controls position at which hold open or delayed action will begin to occur. Clockwise turns increase angle ( $105^{\circ}$  max.). Counterclockwise turns decrease angle ( $75^{\circ}$  min.).



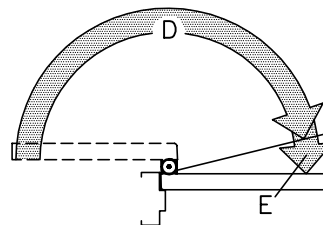
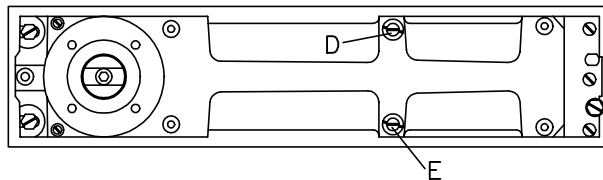
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**BTS 80F**

**VALVE "D"**— controls closing speed from approx.  $180^{\circ}$ – $0^{\circ}$ . Clockwise turns decrease closing speed. Counterclockwise turns increase closing speed.

(Opening conditions may limit max. opening.)  
**VALVE "E"**— increases closing speed from approx.  $7^{\circ}$ – $0^{\circ}$ . Counterclockwise turns increase closing speed. Clockwise turns return speed to that set by valve "D".



### 7 Sealing compound (Optional)

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.

### 8 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.

