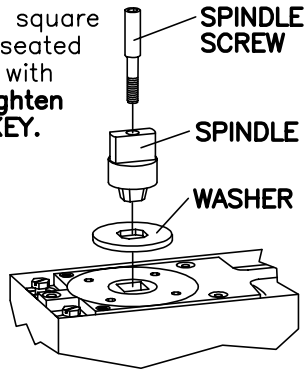


INSTALLATION INSTRUCTIONS  
**BTS 75V/I, 80/I X BUTT HINGES**  
**(PUSH SIDE MOUNT)**  
**MORTISED TRACK – 90° OPENING**

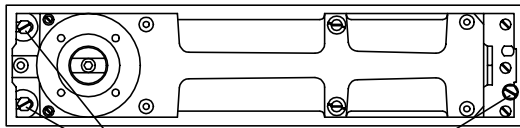


1 Slide washer over tapered square end of spindle until fully seated in groove. Fasten spindle with spindle screw provided. **Tighten securely with 5mm HEX KEY.**



**CRITICAL**  
**WASHER MUST**  
**BE INSTALLED.**

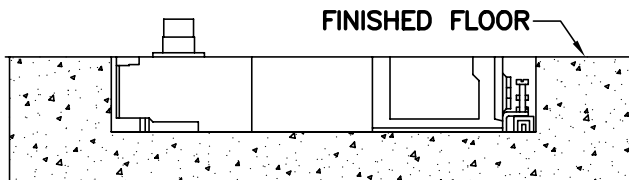
2 Center closer in cement case. Tighten fastening screws.



FASTENING SCREWS

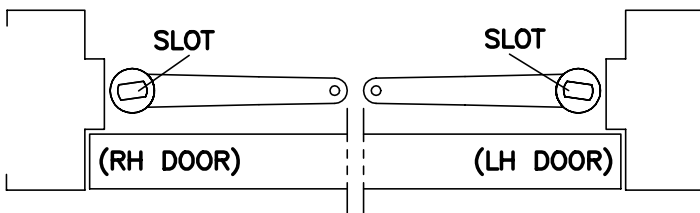
3 Install closer and cement case in floor.

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.



FINISHED FLOOR

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

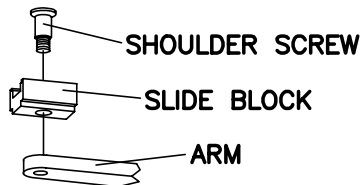


SLOT

SLOT

(RH DOOR)

(LH DOOR)

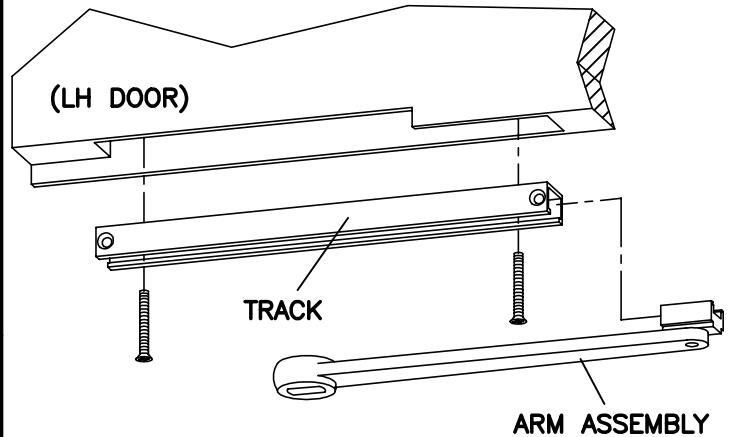


SHOULDER SCREW

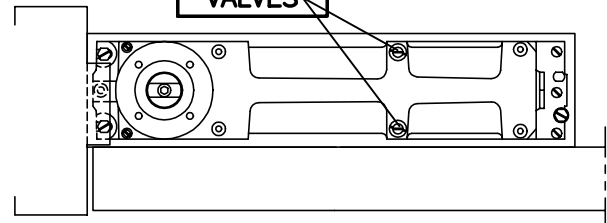
SLIDE BLOCK

ARM

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

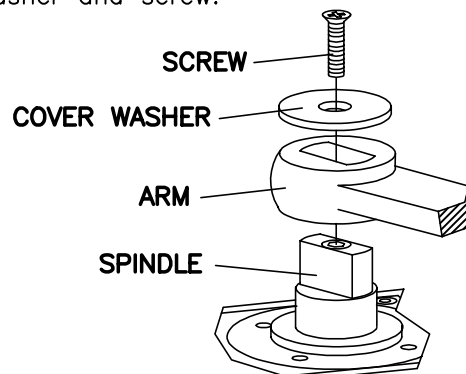


6 Close both closing speed valves. Align spindle with slot in arm, shown in step #4.



NOTE: RIGHT HAND DOOR SHOWN.  
 LEFT HAND IS A MIRROR IMAGE.

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



SCREW

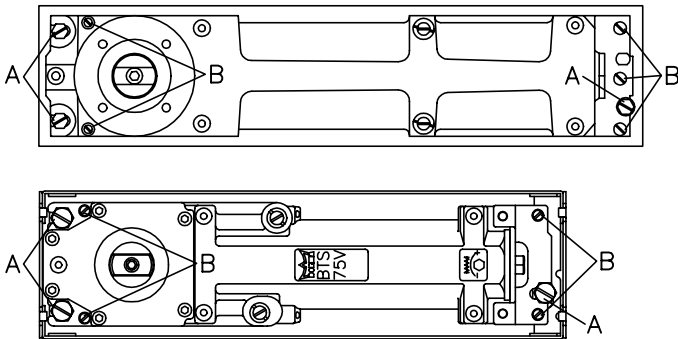
COVER WASHER

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



9 Adjust closing speed.



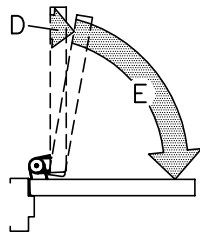
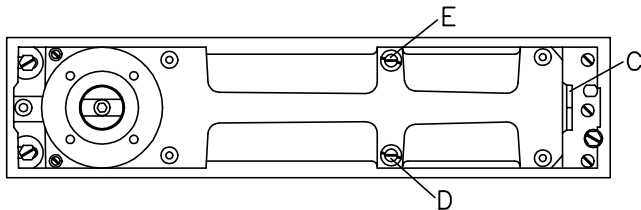
**BTS 80**

**VALVE "D"**—controls closing speed from approx. 90°–80°.  
**VALVE "E"**—controls closing speed from approx. 80°–0°.

**DELAYED ACTION:** Turn valve "D" clockwise until desired delay time is obtained.

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

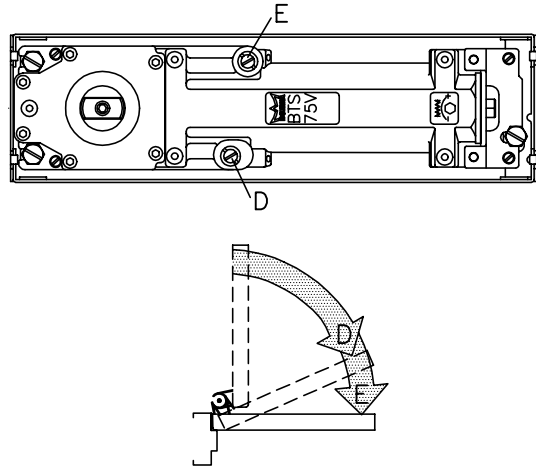
**VALVE "C"**—controls position at which hold open or delayed action will begin to occur. Clockwise turns increase angle (105° max.). Counter-clockwise turns decrease angle (75° min.).



CONTINUED...

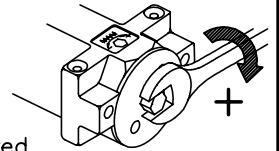
**BTS 75V**

**VALVE "D"**—controls closing speed from approx. 90°–15°.  
**VALVE "E"**—controls closing speed from approx. 15°–0°.



10 **BTS 75V ONLY.**

**CRITICAL**



Adjust spring tension, if required, according to the chart.

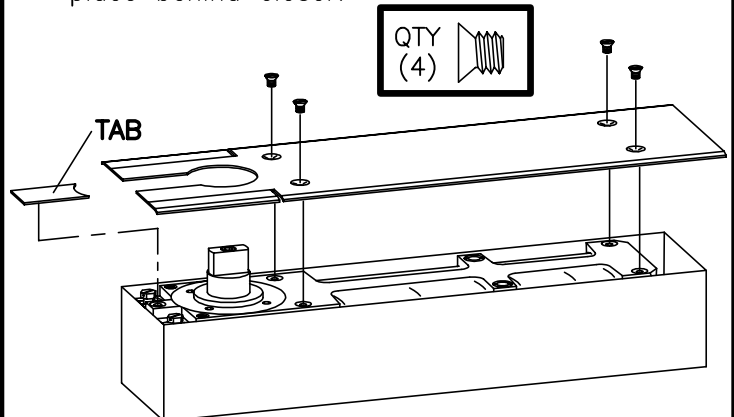
DOOR WIDTH				FULL TURNS OF SPRING ADJUSTING NUT
EXTERIOR		INTERIOR		
INCHES	(MM)	INCHES	(MM)	
—	—	2'-6"	762	5
2'-6"	762	3'-0"	914	8
3'-0"	914	3'-6"	1067	12

**NOTE: "MAX. 12 TURNS FROM MINIMUM SETTING".**

11 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.

12 Trim cover plate as required and fasten with four screws provided. Press tab into place behind closer.



- NOTE:**
- DO NOT SCALE DRAWING.
  - DIMENSIONS ARE IN INCHES/(MM).
  - RIGHT HAND DOOR SHOWN.
  - DOOR HUNG ON 4-1/2" WIDE BUTT HINGES.
  - MAXIMUM OPENING 90°. FOR DOORS OPENING OVER 90°, AN AUXILIARY STOP MUST BE USED.
  - SPINDLE No. 74003 SHOWN, FOR 1/2 THRESHOLD USE SPINDLE No. 74012 AND MEASURE MORTISE DEPTH FOR TRACK FROM TOP OF THRESHOLD.

