

INSTALLATION INSTRUCTIONS

**BTS 75V/I, 80/I X BUTT HINGES
(PULL SIDE MOUNT)
MORTISED TRACK - 160° 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.

Labels: SPINDLE SCREW, SPINDLE, WASHER

CRITICAL
WASHER MUST BE INSTALLED.

2 Center closer in cement case. Tighten fastening screws.

Label: 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.

Label: FINISHED FLOOR

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

Labels: SHOULDER SCREW, SLIDE BLOCK, ARM

Labels: (RH DOOR), (LH DOOR)

Label: SLOT

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

Labels: (RH DOOR), TRACK, ARM ASSEMBLY

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

Label: TO CLOSE VALVES

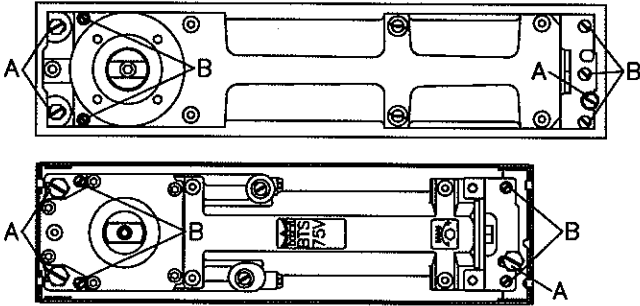
NOTE:
RIGHT HAND DOOR SHOWN IN #5 & #6.
LEFT HAND IS A MIRROR IMAGE.

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

Labels: SCREW, COVER WASHER, ARM, SPINDLE

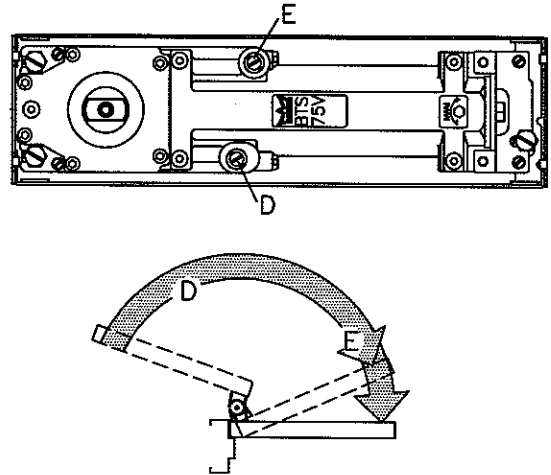
8 Adjust bottom door clearances. (If necessary)

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.**



BTS 75V

VALVE "D"— controls closing speed from approx. 160°-15°.
VALVE "E"— controls closing speed from approx. 15°-0°.



9 Adjust closing speed.



BTS 80

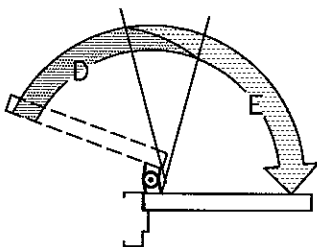
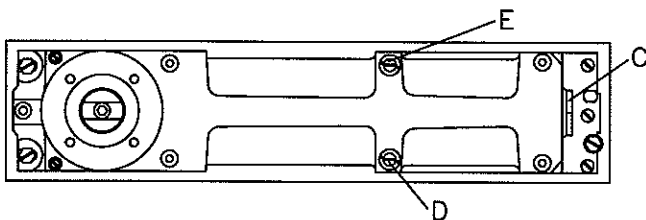
VALVE "D"— controls closing speed from approx. 160°-80°.

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. 85°. 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.).

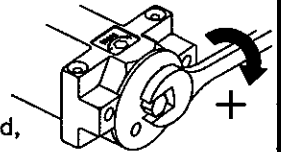


CONTINUED...

10 BTS 75V ONLY.

CRITICAL

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



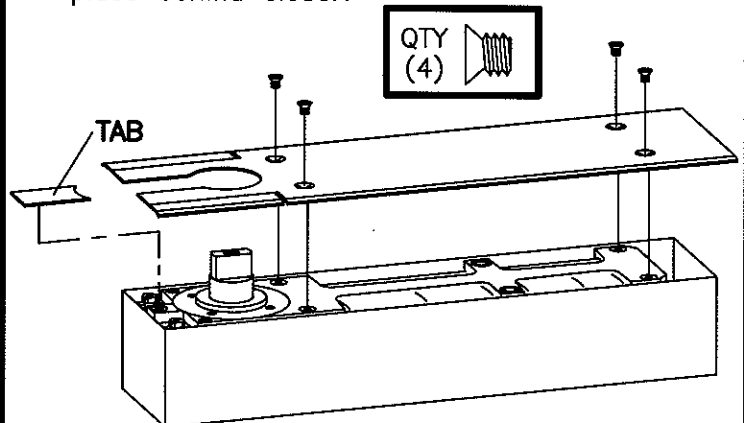
DOOR WIDTH				FULL TURNS OF SPRING ADJUSTING NUT
EXTERIOR INCHES	INTERIOR INCHES	EXTERIOR (MM)	INTERIOR (MM)	
-	2'-6"	-	762	5
2'-6"	3'-0"	762	914	8
3'-0"	3'-6"	914	1067	12

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:

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. BTS 80 HOLD OPEN STARTS AT 85°.
7. DOOR HUNG ON 4-1/2" WIDE BUTT HINGES.

