BTS 75V/C, 75V BF/C, 80/C 1-1/2" OFFSET PACKAGES

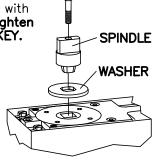


Slide washer over tapered square end of spindle until fully seated in groove. Fasten spindle with spindle screw provided. Tighten securely with 5mm HEX KEY.

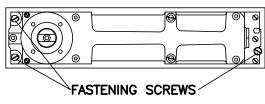
SPINDLE

WASHER

CRITICAL WASHER MUST BE INSTALLED.

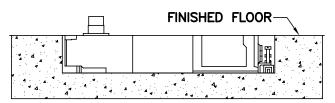


Center closer in cement case. Tighten fastening screws.



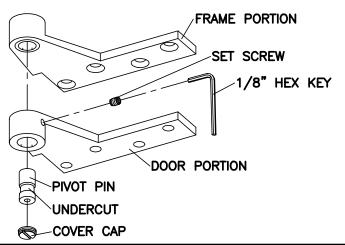
3 Install closer and cement case in floor.

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.

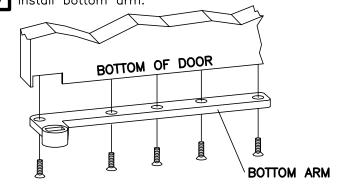


4 Install top pivot.

Remove set screw, cover cap, pivot pin and then install top pivot.

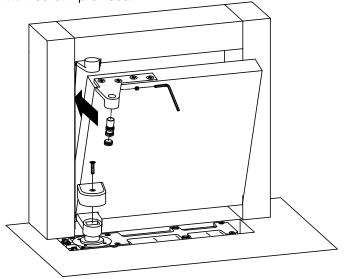


SPINDLE 5 Install bottom arm.



6 Install door.

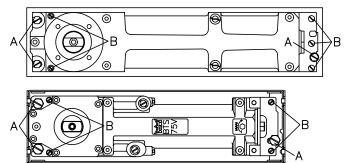
With door parallel to frame, place bottom arm onto closer spindle. Align door and frame portions of top pivot. Install pivot pin, set screw and cover cap (See step #4). Install cover over bottom arm with screw provided.



7 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.



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Adjust closing speed.

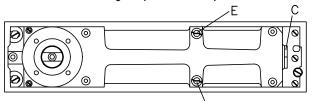
BTS 80

VALVE "D"— controls closing speed from approx. $180^{\circ}-80^{\circ}$. **VALVE "E"**— controls closing speed from approx. $80^{\circ}-0^{\circ}$.

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.). Counterclockwise turns decrease angle (75° min.).



BTS 75V

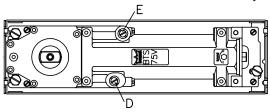
VALVE "D"— controls closing speed from approx. $175^{\circ}-15^{\circ}$. **VALVE "E"**— controls closing speed from approx. $15^{\circ}-0^{\circ}$.

BTS 75V BF

VALVE "D" - controls closing speed from approx. 175°-70°.

VALVE "E" - controls closing speed from approx. 70°-0°.

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



75V BF

HOLD OPEN: Mechanical hold open is available at 90° or 105° as an option when ordering closer.

BTS 75V/75V BF ONLY.

Adjust spring tension, if required.

BTS75VBF-Adjust only if more spring tension is required to positively close and latch the door. Depending on opening conditions, a door adjusted to meet barrier-free forces may not have sufficient power to reliably close and latch the door.

BTS75V-Adjust according to chart.

BTS75V	DOOR WIDTH				FULL TURNS
	EXTERIOR		INTERIOR		OF SPRING
	INCHES	(MM)	INCHES	(MM)	ADJUSTING NUT
	_	1	2'-6"	762	3
	2'-6"	762	3'-0"	914	6
	3'-0"	914	3'-6"	1067	10

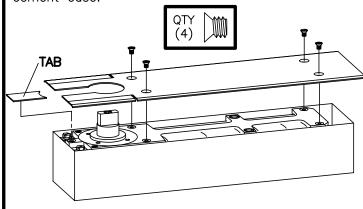
NOTE: "MAX. 12 TURNS FROM MINIMUM SETTING".

10 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.

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.



If intermediate pivot is to be used, refer to installation instructions packed with pivot.

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. 5. 1/8" INSET INSTALLATION SHOWN. SPINDLE NO. CLEARANCE 4 NOTES 1. DO NOT SCALE DRAWING. STD.)74010 74025 74030 74035 74040 74005 74012 74015 74020 74045 74003 74007 $\frac{1/4}{(6)}$ CLEARANCE $\frac{1/2}{(13)}$ 6 5 4. THRESHOLD W/74010 SPINDLE (O 0 FINISHED FLOOR--CLEARANCE SIDE VIEW BTS 75V - 11-1/4 (285) 13-7/16 (341) 0 -1-9/16(39)1-5/8 (41) 0 TOP VIEW CEMENT CASE BTS 75V BTS 80 BTS 80 CLEARANCE MINIMUM 0 0 13/16 (21) $\frac{3/4}{(19)}$ 0 -1/2(38)-2-3/8 (60) 1/16 -2 (50)CEMENT CASE BTS 80 - 3-1/8 (78) BTS 75V - 3-1/4 (82) $\frac{1-1/2}{(38)}$ FLUSH DOOR 1-3/8 1/8" INSET (35) DOOR $2-1/8 \pm 1/8$ BTS 75V (54 ± 3) BTS 80

TOP PIVOT FOR 1/4-20 MACHINE SCREWS USE No.7 DRILL FOR No.14 WOOD SCREWS USE 5/32" DRILL FOUR (4) HOLES PER LEAF 4-1/4 4 - 1/4(108)(108)1-5/32 1 - 5/32(29)DOOR LEAF 25/64 (29)-5/32FRAME LEAF -5/32(10)25/64 (29) MINIMUM 1/16 CLEARANCE (2) (29)-5/3211/32 -5/32 11/32 (10)(2) (9) (9) (29)(29)3/16" R.-1-1/16 \bigoplus \bigoplus FRAME- \oplus FRAME: 1-1/16 \oplus ⊕ (27) \oplus \bigoplus (27) 3/16 23/64 1-1/2 23/64 (5) (38) (9) (9)3/16 FOR FLUSH DOOR (5) AND FRAME CLEARANCE 1/16 CLEARANCE 1/16 5/16 (2)5/16 (2)5/16 FOR 1/8" INSET DOOR (10) (8) 3/4 (8) 3/4 (19)2 (19)(51) (51) 3/4 5/16 (19) (8) **NOTES** FRAME LEAF 1. DO NOT SCALE DRAWING. 2. DIMENSIONS ARE IN INCHES/(MM). 3. RIGHT HAND DOOR SHOWN. 4. BEVEL HEEL EDGE OF DOOR 1/8" IN 2". 5/16 DOOR LEAF 5. ALL NECESSARY REINFORCING FOR PIVOT BY OTHERS. 3/4 (8) (19)

NOTES

- 1. DO NOT SCALE DRAWING.
 2. DIMENSIONS ARE IN INCHES/(MM).
- 3. RIGHT HAND DOOR SHOWN.4. BEVEL HEEL EDGE OF DOOR 1/8" IN 2".5. ALL NECESSARY REINFORCEMENT FOR ARM
- BY OTHERS.

BOTTOM ARM

