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!

(RH DOOR)   (LH DOOR)

3" OFFSET SPINDLES

2. Center closer in cement case. Tighten fastening screws.

3. Install closer in floor.

**CRITICAL**
Top of cement case must be flush with FINISHED floor. Cement case must be LEVEL and installed PERPENDICULAR to frame. Spindle center line must be accurately located. Grout cement case in place.

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

5. Slide arm assembly into track and install track to door with screws passing through end blocks.
6. Close both closing speed valves. Align spindle with slot in arm, shown in step #4.

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

8. Adjust closing speed.

**BTS 75V**
- VALVE "D"—controls closing speed from 90'-70'.
- VALVE "E"—controls closing speed from approx. 70'-0'.

**BTS 80**
- VALVE "A"—controls latch speed from approx. 20'-0'.
- VALVE "B"—controls sweep speed from approx. 90'-20'.
- HOLD OPEN: Turn valve "B" completely clockwise. Door will hold at any point beyond approx. 20'. 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 of latch range. Clockwise turns increase latch range to a maximum of 45'-0'. Counterclockwise turns decrease latch range to a minimum of 7'-0'.

**BTS 80F**
- VALVE "A"—controls closing speed from approx. 90'-0'.
- Valves turn decrease closing speed.
- Counterclockwise turns increase closing speed.
- VALVE "B"—increases closing speed from approx. 7'-0'.
- Counterclockwise turns increase closing speed.
- Clockwise turns return speed to that set by valve "A".

9. **BTS 75V ONLY.**

**CRITICAL**

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

<table>
<thead>
<tr>
<th>DOOR WIDTH</th>
<th>FULL TURNS OF SPRING ADJUSTING NUT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXTERIOR INCHES (MM)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2'-6&quot;</td>
<td>762</td>
</tr>
<tr>
<td>3'-0&quot;</td>
<td>914</td>
</tr>
</tbody>
</table>

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.

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

1. DO NOT SCALE DRAWING.
2. DIMENSIONS ARE IN INCHES (MM).
3. RIGHT HAND DOOR SHOWN.
4. MAXIMUM OPENING 90°.
5. SPINDLE No. 80003 SHOWN. FOR APPLICATIONS WITH THRESHOLDS USE SPINDLE No. 80012 AND ADD 1/2" TO VERTICAL DIMENSIONS NOTED.
6. FOR DOORS HUNG ON DORMA 75520/75523, DOROMATIC 91105/91105F OR RIXSON 519 POCKET PIVOTS.
7. MINIMUM POCKET DEPTH 4-1/2".
8. SED NUTS ARE RECOMMENDED FOR ATTACHMENT OF COMPONENTS ON UNREINFORCED, COMPOSITE, OR LABELED FIRE DOORS.
FOR 1/4-20 MACHINE SCREWS USE No.7 DRILL
FOR WOOD SCREWS PROVIDED USE 5/32" DRILL
FOR SEW NUTS USE 3/8" DRILL
TWO (2) HOLES IN DOOR FOR TRACK