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.

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. 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 into door.

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

   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.

(RH DOOR)  (LH DOOR)  (RH DOOR)  (LH DOOR)  (RH DOOR)  (LH DOOR)  (RH DOOR)  (LH DOOR)
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**

VALUE "D" - controls closing speed from approx. 160°-90°.
VALUE "E" - controls closing speed from approx. 90°-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. 90°. Allow for approx. 4° fall away when considering hold open position. To release door, manually pull door closed a few inches.

VALUE "G" - 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.).

**CRITICAL**

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

<table>
<thead>
<tr>
<th>DOOR WIDTH</th>
<th>FULL TURNS OF SPRING</th>
<th>EXTERIOR INCHES (MM)</th>
<th>FULL TURNS</th>
<th>INDOOR INCHES (MM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1/2</td>
<td>762</td>
<td>3-1/2</td>
<td>762</td>
<td>3-1/2</td>
</tr>
<tr>
<td>2-1/2</td>
<td>762</td>
<td>3-1/2</td>
<td>1067</td>
<td>3-1/2</td>
</tr>
</tbody>
</table>

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

Sealing compound is recommended for exterior doors or areas with excessive moisture. Make all final adjustments before applying 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.

**CONTINUED...**
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.

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

<table>
<thead>
<tr>
<th>DOOR WIDTH</th>
<th>EXTERNAL INCHES (MM)</th>
<th>FULL TURNS OF SPINDLE</th>
<th>INFRONT OF ADJUSTING NUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'-0&quot;</td>
<td>902</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3'-6&quot;</td>
<td>914</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

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

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.

**CONTINUED...**