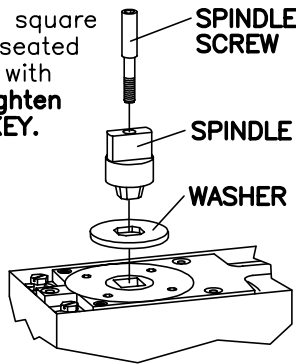


# BTS 80/L 3/4" OFFSET LEAD LINED PACKAGE

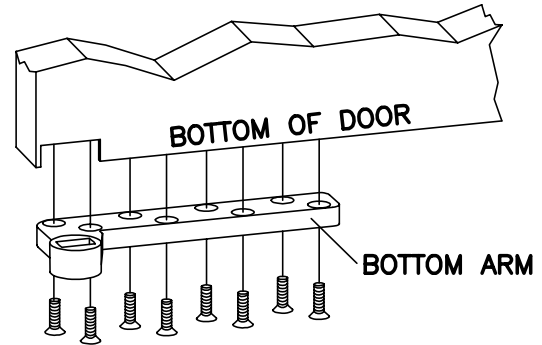


1 Slide washer over tapered square end of spindle until fully seated in groove. Fasten spindle with spindle screw provided. **Tighten securely with 5mm HEX KEY.**

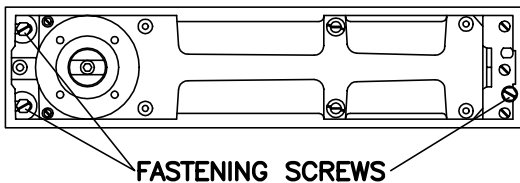


**CRITICAL  
WASHER MUST  
BE INSTALLED.**

5 Install bottom arm.

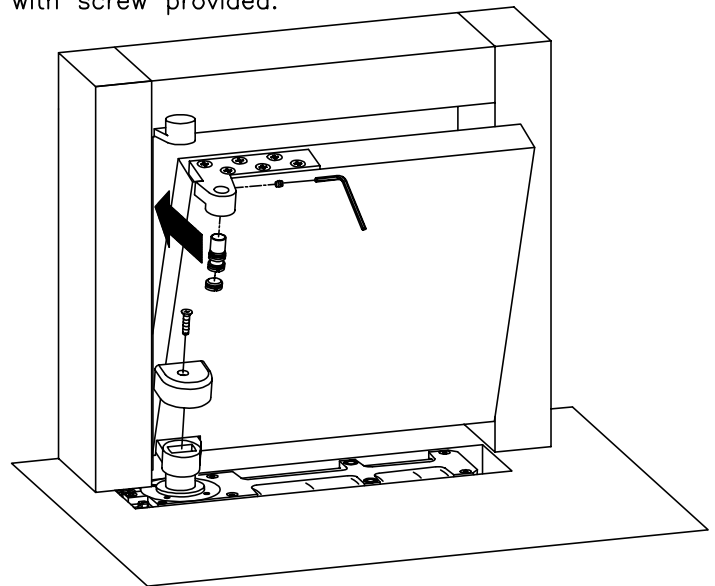


2 Center closer in cement case. Tighten fastening screws.



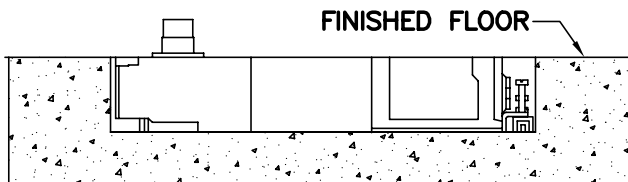
6 Install door.

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.



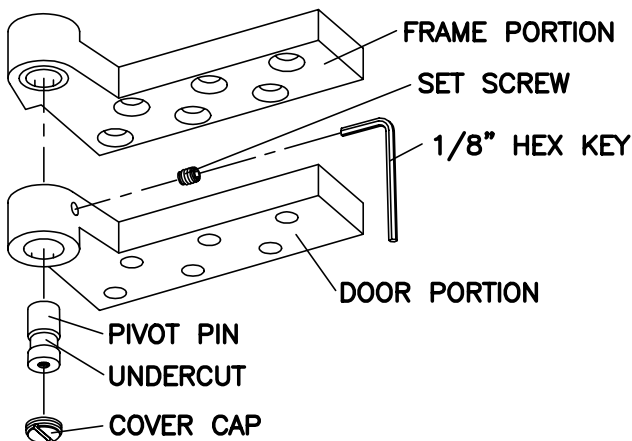
3 Install closer and cement case in floor.

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.



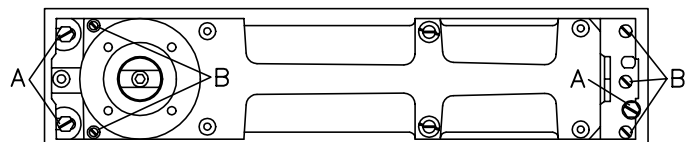
4 Install top pivot.

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



7 Adjust bottom door clearances. (If necessary)

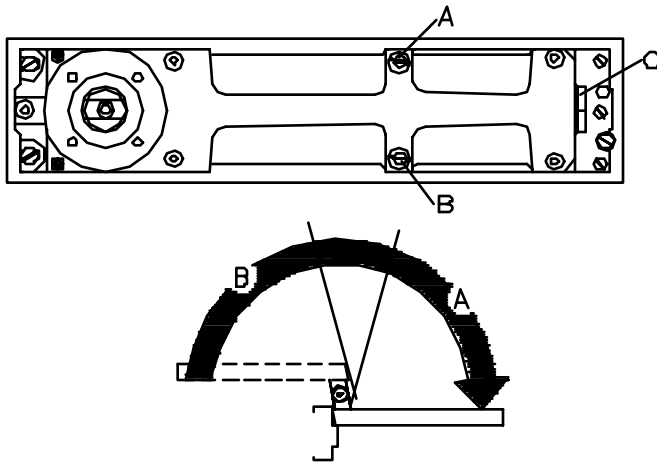
Closer can be raised approximately 5/32" within the cement case. Loosen fastening screws "A". Turn height adjustment screws "B" clockwise until desired height is obtained. **Closer must remain level!** Re-tighten fastening screws "A". **If more clearance is necessary, change spindle to appropriate size.**



**8** Adjust closing speed.



VALVE "A" - controls closing speed from approx. 80°-0°.  
 VALVE "B" - controls closing speed from approx. 180°-80°.  
 DELAYED ACTION: Turn valve "B" clockwise until desired delay time is obtained.  
 HOLD OPEN: Turn valve "B" 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.).

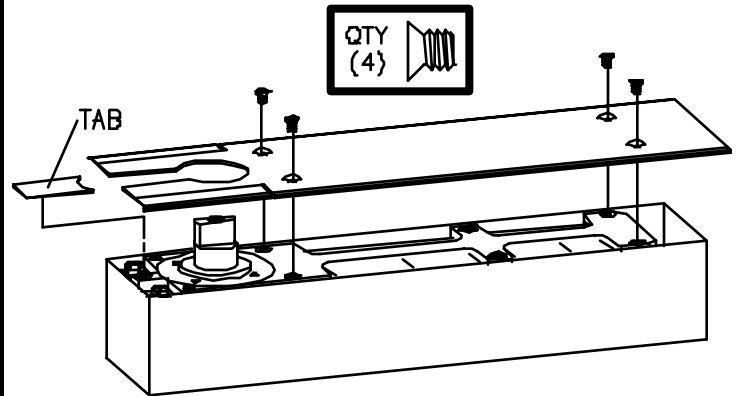


**9** Sealing compound (Optional)

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.

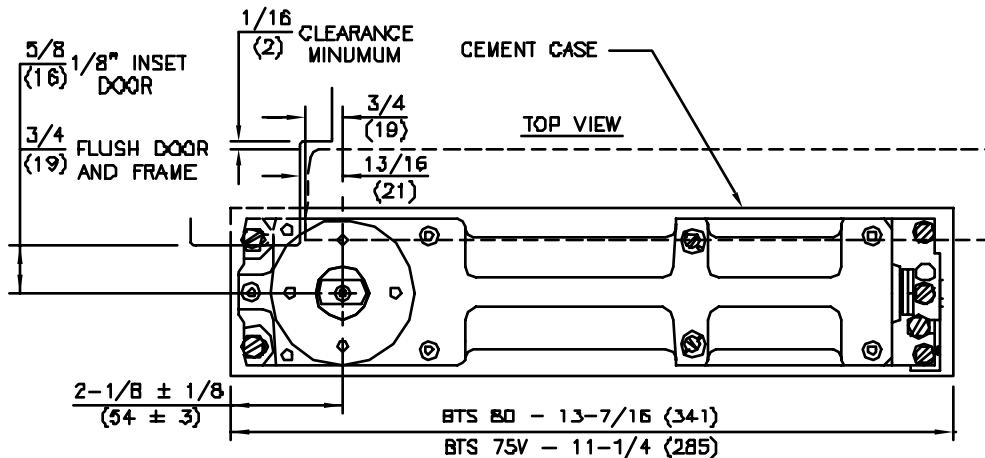
**10** Install cover plate or threshold.

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.



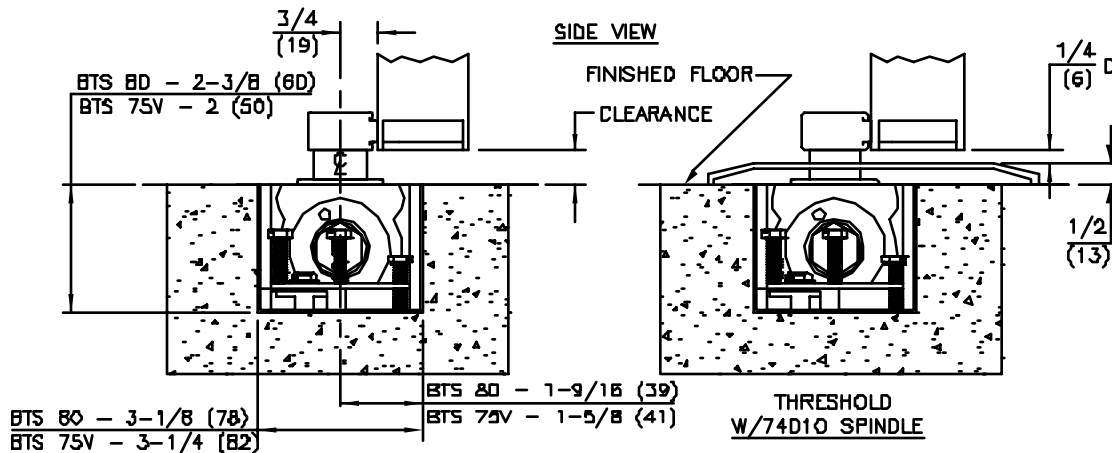
**11** If intermediate pivot is to be used, refer to installation instructions packed with pivot.

## CEMENT CASE



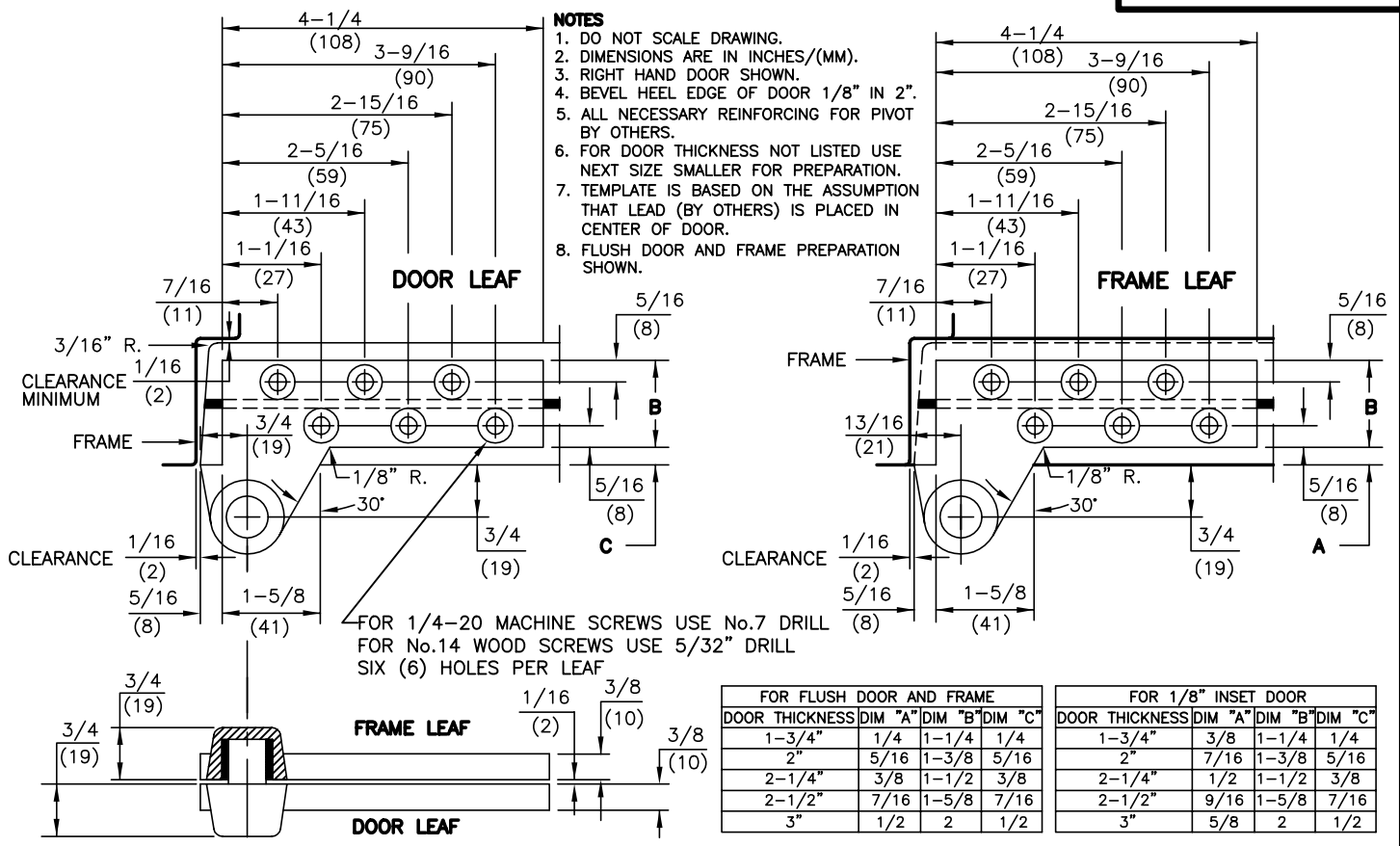
**NOTES**

1. DO NOT SCALE DRAWING.
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.
6. 1/8" INSET INSTALLATION SHOWN.

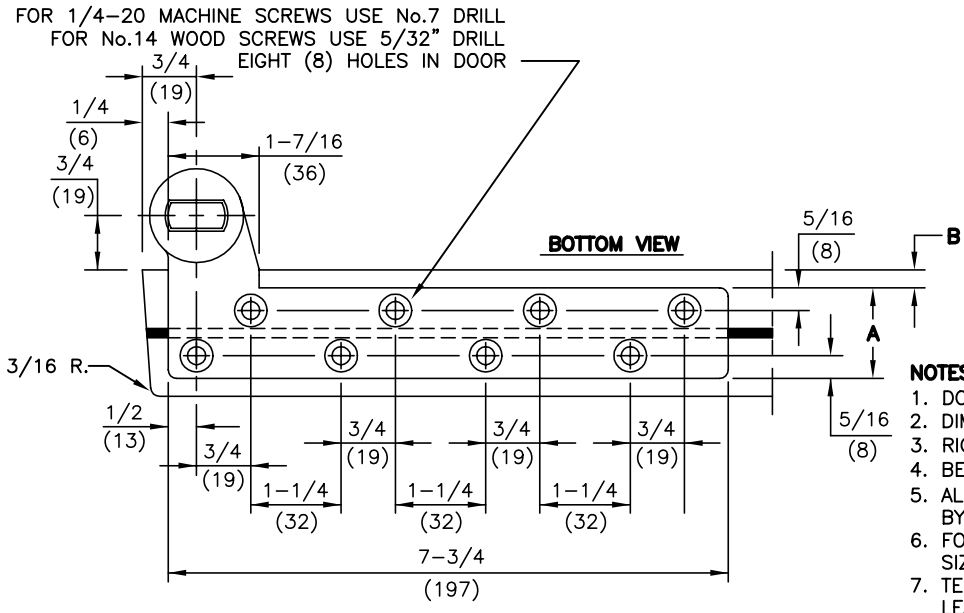


SPINDLE NO.	CLEARANCE
74003	5/16"
74005	1/2"
74007	5/8"
(STD.) 74010	3/4"
74012	13/16"
74015	7/8"
74020	1-1/8"
74025	1-5/16"
74030	1-1/2"
74035	1-11/16"
74040	1-7/8"
74045	2-1/16"
74050	2-5/16"

# TOP PIVOT



# BOTTOM ARM



DOOR THICKNESS	DIM "A"	DIM "B"
1-3/4"	1-1/4	1/4
2"	1-3/8	5/16
2-1/4"	1-1/2	3/8
2-1/2"	1-5/8	7/16
3"	2	1/2

