

INSTALLATION INSTRUCTIONS
CENTER HUNG PACKAGE
BTS 80EMB\G



1 Prepare closer for installation.
 Center closer in cement case. Tighten MOUNTING SCREWS.

2 Install closer, cement case and conduit in floor.
 Pull solenoid wire thru conduit. (CONDUIT SUPPLIED BY OTHERS)
 Attach conduit to conduit connector on end of cement case.

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.

3 Attach spindle to closer.
 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.

(LEFT HAND DOOR) (RIGHT HAND DOOR)
 3" OFFSET SPINDLE
 STOP SIDE

4 Determine clearance between door and frame and adjust projection of pivot pin, if required. Pivot pin projection allows 1/8" clearance as shipped from the factory.

To change projection of pivot pin or to install (8062 EXT PIN) extended pivot pin, the following is recommended:
 Remove walking beam pivot screw (2). Push pivot pin (4) out until walking beam (1) is disengaged. Install extended pivot pin and engage walking beam into appropriate hole in pivot pin to obtain required projection. Be sure opposite end of walking beam is engaged in adjustment screw (3). Reinstall walking beam pivot screw (2).

DOOR CLEARANCE		
POSITION	STANDARD PIN	EXTENDED PIN
A	1/8"(3)	3/4"(19)
B	3/8"(10)	1"(25)
C	3/4"(19)	1-5/16"(33)

5 Retract pivot pin by turning adjustment screw counterclockwise and install pivot into header. Install cover plate.

6 Fasten pivot channel in top of door. Place bearing insert into pivot channel. Turn adjustment screw approximately halfway into pivot channel. Adjust pivot point accordingly. Lock bearing insert in place with set screw.

7 Install bottom arm #7422.
 Install four lateral support screws in arm. Turn in screws completely. Fasten arm to door with four pan head machine screws. Secure end of arm with flat head machine screw. Turn the four lateral support screws counterclockwise until head of screws firmly contact door.

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.
(NOTE: CLOSER MUST REMAIN LEVEL.)
 Re-Tighten fastening screws "A". If more clearance is necessary, change spindle to appropriate size.

9 Install door.
 With door parallel to frame, place bottom arm onto spindle. Rotate door approximately 90°. Align bearing with pivot pin. Engage pivot pin by turning adjustment screw clockwise. Check to make sure pivot pin is fully engaged in door portion of pivot.

10 Adjust closing speed. **INCREASE** **DECREASE**

VALVE "A" - controls closing speed from max. opening to 0°.
 VALVE "B" - controls closing speed from approx. 7"-0°.

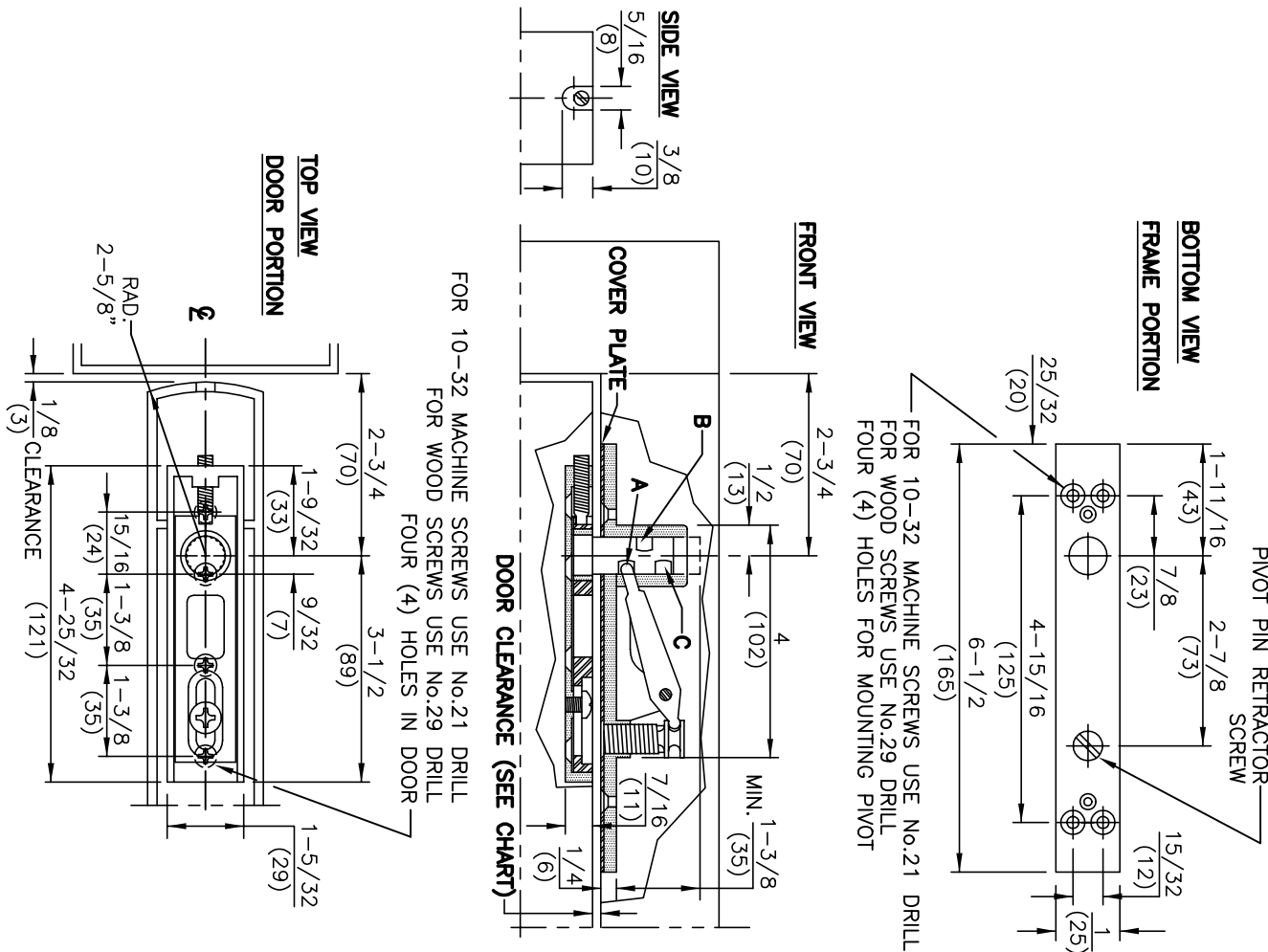
11 Sealing compound. (OPTIONAL)
 Sealing compound is recommended for exterior doors or areas with excessive moisture. Make all final location adjustments before adding compound. Refer to instructions packed with compound for full details.

12 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.

13 OPERATION:
 When BTS 80EMB is energized, door will hold open at any point between approximately 80° and MAX. OPENING. Allow for approximate 4" of fall away when considering hold open position. To release door from hold open, manually pull door closed a few inches.
 When de-energized, the BTS 80EMB operates as a standard floor closer.

ELECTRICAL SPECIFICATIONS:
 Operating Voltage: 24 Volts DC (10") Max. allowable residual
 Input Current: 125 MA Ripple 30"

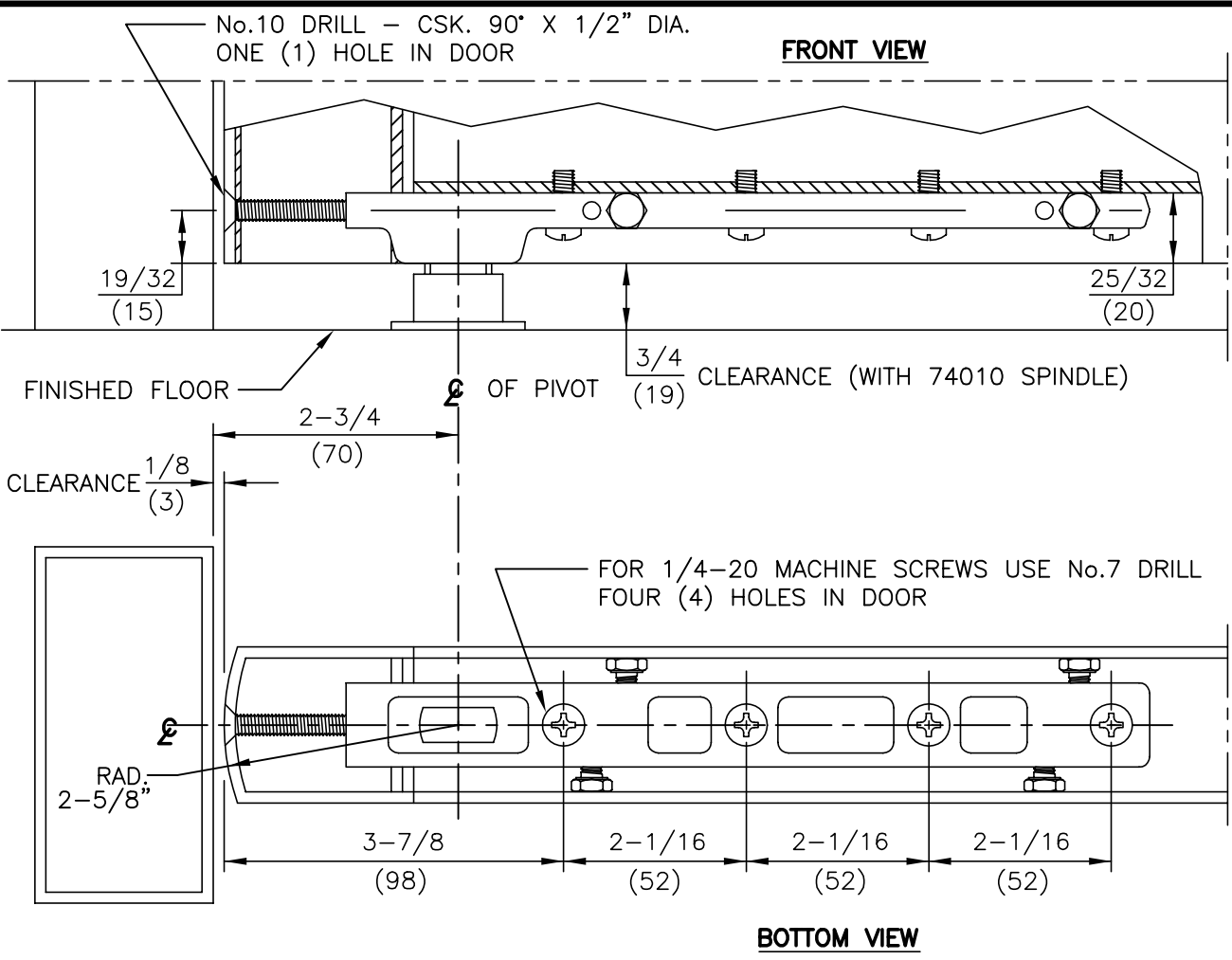
IMPORTANT: If the BTS 80EMB is connected to a fire alarm system, the unit must be tested after installation, by the end user, to be certain that the door closer unit functions properly when the alarm system is activated. The entire system must also be tested periodically after the initial installation test, in conjunction with the testing of the fire alarm system. The end user is also responsible for maintaining the door closing system.



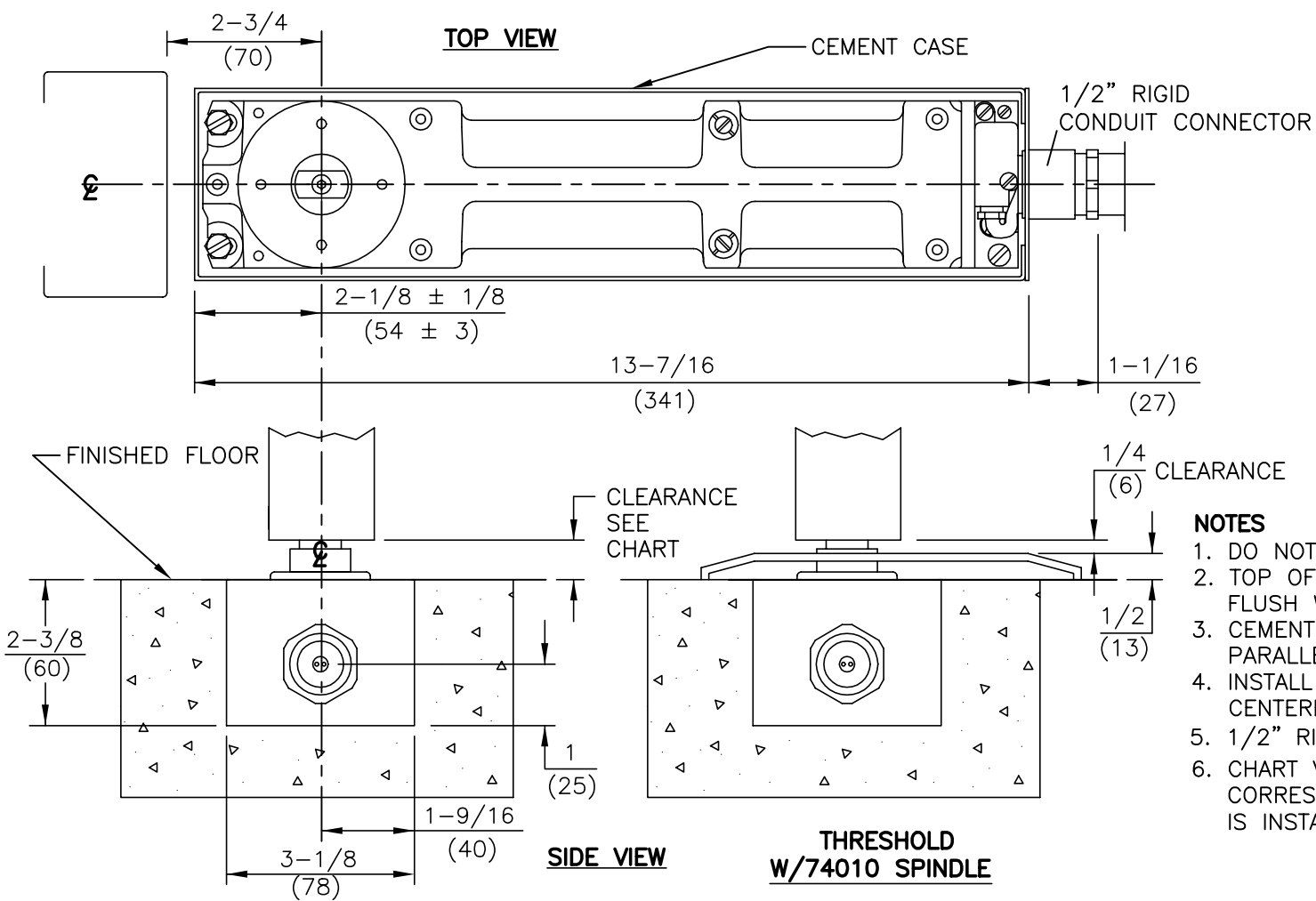
- NOTES**
- DO NOT SCALE DRAWING.
 - DIMENSIONS ARE IN INCHES/(MM).
 - ALL NECESSARY REINFORCING FOR PIVOTS BY OTHERS.
 - PIVOT PIN DIAMETER .591/(15MM).
 - PIVOT PIN PROJECTION IS ADJUSTABLE.
 - SEE CHART FOR DOOR CLEARANCES.

DOOR CLEARANCE

POSITION	STANDARD PIN	EXTENDED PIN
A	1/8" (3)	3/4" (19)
B	3/8" (10)	1" (25)
C	3/4" (19)	1-5/16" (33)



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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"

- NOTES**
- DO NOT SCALE DRAWING.
 - TOP OF CEMENT CASE MUST BE FLUSH WITH FINISH FLOOR LINE.
 - CEMENT CASE MUST BE LEVEL AND PARALLEL TO FRAME.
 - INSTALL CEMENT CASE WITH CLOSER CENTERED IN CASE.
 - 1/2" RIGID CONDUIT BY OTHERS.
 - CHART VALID ONLY IF CORRESPONDING DOOR PORTION IS INSTALLED PER TEMPLATE.