3029A-6

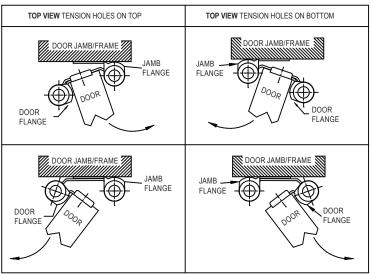
DOUBLE ACTION SPRING HINGE (ADJUSTABLE)

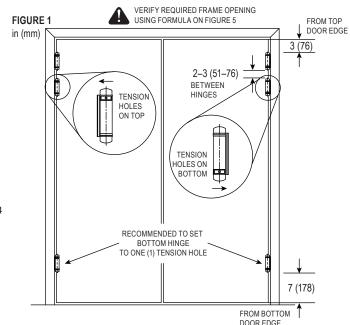
PHYSICAL INSTALLATION

- 1. Remove or relieve the tension of the spring hinges.
 - a. Insert adjustment tool (rod) into the tension adjustment hole
 - b. Rotate in the direction of the stamped arrow.
 - c. Remove spring tension pin and release the tension to zero.
- 2. Install the spring hinges securely to the door and frame.
 - Use recommended number of hinges and positions as shown in Figure 1 and do not exceed the maximum recommended door size, weight, or thickness as shown.
 - b. Determine if the hinges will be surface mounted or mortised.
 - c. Adjustment end (with holes) should face upward. On double door installatons, mount hinges on one door leaf with the adjustment end facing down. See Figure 2.
 - d. Align hinge door leaf to the edge of the door and secure with supplied screws.
 - e. Align centerline of the door edge with the centerline of the door frame. See Figure 4.

 Use wedges (not supplied) to ensure door is plumb, then secure hinges to the frame using supplied screws.
 - f. For wood, drill pilot holes and use #14 wood screws. For metal, drill and tap for #12-24 machine screws. All screws should be properly seated and flush with the hinge leaf.
 - g. Spacers (not supplied) may be required to reduce the space between the door and frame, or between double doors.
- 3. Ensure door freely swings, then adjust spring tension see Spring Tension Adjustment.

FIGURE 2





	LIGHT TRAFFIC		HEAVY TRAFFIC			
	2 Hinges		3 Hinges		Door	Min. Door
	Door Wt. lbs (kg)	Door Width in (mm)	Door Wt. lbs (kg)	Door Width in (mm)	Thickness in (mm)	Height in (cm)
	75 (34)	32 (813)	107 (49)	36 (914)	1 3/4 (44.5)	84 (214)

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CAUTION

- DO NOT EXCEED FIVE (5) HOLES OF TENSION.
- Top hinges must share the same tension level.
- $\bullet\,$ Do not exceed the maximum recommended door size, weight, or thickness

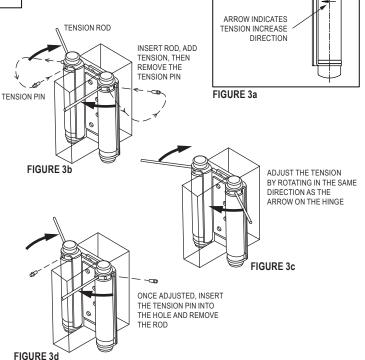
STARTING HOLE

- Do not use on doors with beveled hinge edge
- · Lubrication may be applied to hinges, if needed.

SPRING TENSION ADJUSTMENT

To adjust the spring tension, follow the instructions below and use Figures 3a, 3b, 3c, and 3d as reference.

- 1. Close the door.
- 2. Insert tension rod into the starting hole on the adjustment collar.
 - The starting hole is the hole is the first exposed immediately above or below the stamped arrow. See Figure 3a.
- Rotate the tension tool in the direction of the arrow to increase the tension. You can only increase or decrease the tension by one (1) or two holes (2) at a time. DO NOT INCREASE TENSION MORE THAN FIVE (5) HOLES.
 - a. For the top hinge(s), rotate until the fourth (4th) hole is exposed, then insert the Tension Pin into the fourth (4th) hole. Once the pin is inserted, release the tool and remove it.
 - b. For the bottom hinge, rotate until the first (1st) hole is exposed, then insert the Tension Pin into the first (1st) hole. Once the pin is inserted, release the tool and remove it.
- 3. After tensioning, check door opening and closing action.
 - a. If the door is too fast, decrease the tension one top hinge at a time. Set tension to three (3) holes. Do not adjust the bottom hinge.
 - b. If the door is too slow, increase the tension one top hinge at a time.
 Set tension to five (5) holes. Increase the tension of the bottom hinge to a maximum of three (3) holes.



3029A-6 FRAME OPENING SINGLE DOOR DOUBLE ACTION SPRING HINGE (ADJUSTABLE) FIGURE 5 DOOR FLANGE FRAME OPENING = DOOR WIDTH + (A) MOUNTING IS: FIGURE 4 IN (MM) NOT MORTISED 1/2 in 15/16 in (SURFACE MOUNTED) (12.7 mm) (24 mm) 3/8 in 3/4 in MORTISED 1/8 in (9.5 mm) (19 mm) DOOR 1.250 TO 1.750 0.325 (3 mm) (31.8) TO (44.50) (8.26)DOOR THICKNESS FRAME OPENING DOUBLE DOOR (PAIR OF DOORS) FRAME OPENING = WIDTH OF BOTH DOORS COMBINED + (B) - 0.850 (21.6) DOOR LEAF 3/16 in 0.113 (2.87) 0.113 (2.87) MORTISE DEPTH (4.8 mm) JAMB LEAF - 0.114 (2.90) LIGHT TRAFFIC HEAVY TRAFFIC .325 (8.26) 1.215 (30.8) 2 Hinges 3 Hinges Door Min. Door 1.250 Door Wt. Door Width Thickness Height Door Wt. Door Width (31.8)FIGURE 6 in (mm) in (cm) lbs (kg) in (mm) lbs (kg) in (mm) 7.91 IN (MM) (20.6) 0.625 1 1/4 (31,8) (15.88)0.375 75 (34) 32 (813) 107 (49) 36 (914) 84 (214) REF. (9.53)1 3/4 (44.5) REF. **NOTES** .937 1. ALL DIMENSIONS ARE INCH (MILLIMETER) UNLESS STATED OTHERWISE. 2. RECOMMENDED FOR DOORS FROM 1-1/4IN (31,8MM) TO 1-3/4IN(44.5MM) THICK. 3. DO NOT USE ON DOORS WITH BEVELED HINGE EDGE. 1.437 4. DO NOT EXCEED THE MAXIMUM DOOR SIZE, WEIGHT, OR THICKNESS. 6.00 (152.4) 7.05 5. ON DOUBLE DOORS, INVERT HINGES ON ONE DOOR. 6. FOR WOOD DOOR/FRAME: PRE-DRILL AND USE #14 X 1-1/4IN WOOD SCREWS. 1.437 7. FOR METAL DOOR/FRAME: DRILL AND TAP FOR 12-24 X 1/2IN MACHINE SCREWS. .937 VERIFY PREPARATION WITH PHYSICAL HARDWARE BEFORE STARTING ANY MASS PREPARATION, MANUFACTURING OR INSTALLATION WORK. DRAWINGS ARE NOT TO SCALE. DO NOT USE AS TEMPLATE. 1.312 1.509 (33.3) (38.33) DOCUMENT PROVIDED AS-IS, MANUFACTURER RESERVES THE 1.500 1.688 RIGHT TO MAKE TECHNICAL CHANGES WITHOUT PRIOR NOTICE. (38.07) (42.8) 2.000 (44.48) (50) 2.375 (85.6)

(55.5)

(60.25)