# DOOR CLOSER REGULATION & POWER ADJUSTMENT

**NOTE:** Do not back regula screws out of closer or an oil leak will occur

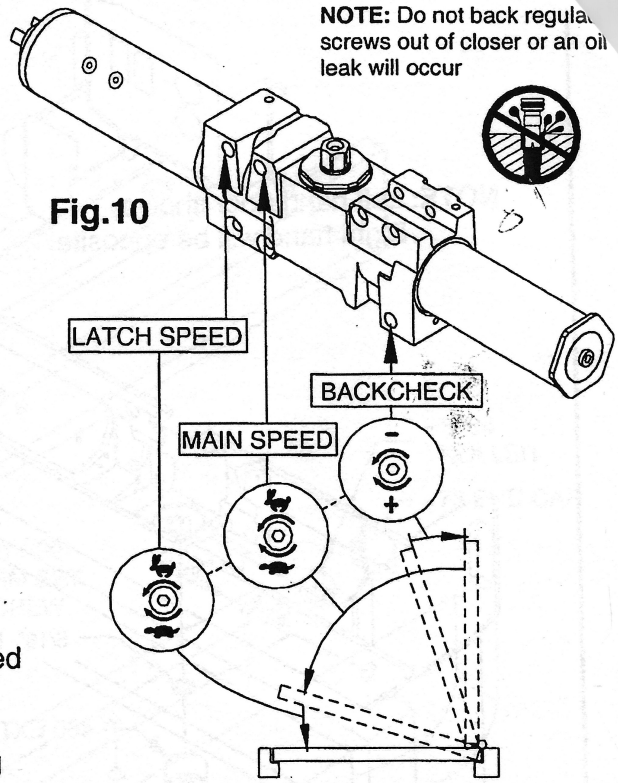



Fig.10

1. **CLOSING SPEED ADJUSTMENT:** (See **Fig. 10**) The 4600 series has been regulated prior to shipment. If adjustments are necessary, use 3/32 allen key provided and refer to door diagram shown in **Fig. 10**. Turn **MAIN SPEED & LATCH SPEED** screws clockwise to slow door speed, counter-clockwise to increase speed.

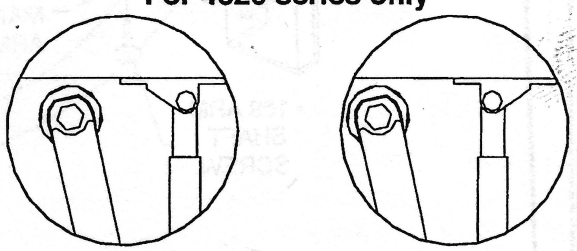
2. **BACKCHECK ADJUSTMENT:** Backcheck slows the door swing as it approaches full opening. Increase the backcheck setting only if necessary. Adjust by turning **BACKCHECK** screw clockwise by quarter turns. **DO NOT USE AN ABRUPT BACKCHECK SETTING.**

3. Open door to at least 90°, and observe closing of door. Make sure the spring power and closing speed are adequate. Make any final adjustments before proceeding. The installation of the controller board will make the **MAIN** and **LATCH SPEED** regulating screws inaccessible.

**FOR 4620 SERIES ONLY:** To adjust for additional closing power at latch:

- **A.** Remove forearm set screw and open door, separating rod from forearm tube.
- **B.** Remove shoe screws and flip shoe 180° as shown in **Fig. 11** at right. Re-attach shoe to door.
- **C.** Re-assemble arm, as in steps 3 & 4 on page 7.

**Fig. 11**
**For 4620 series only**



STANDARD INSTALLATION

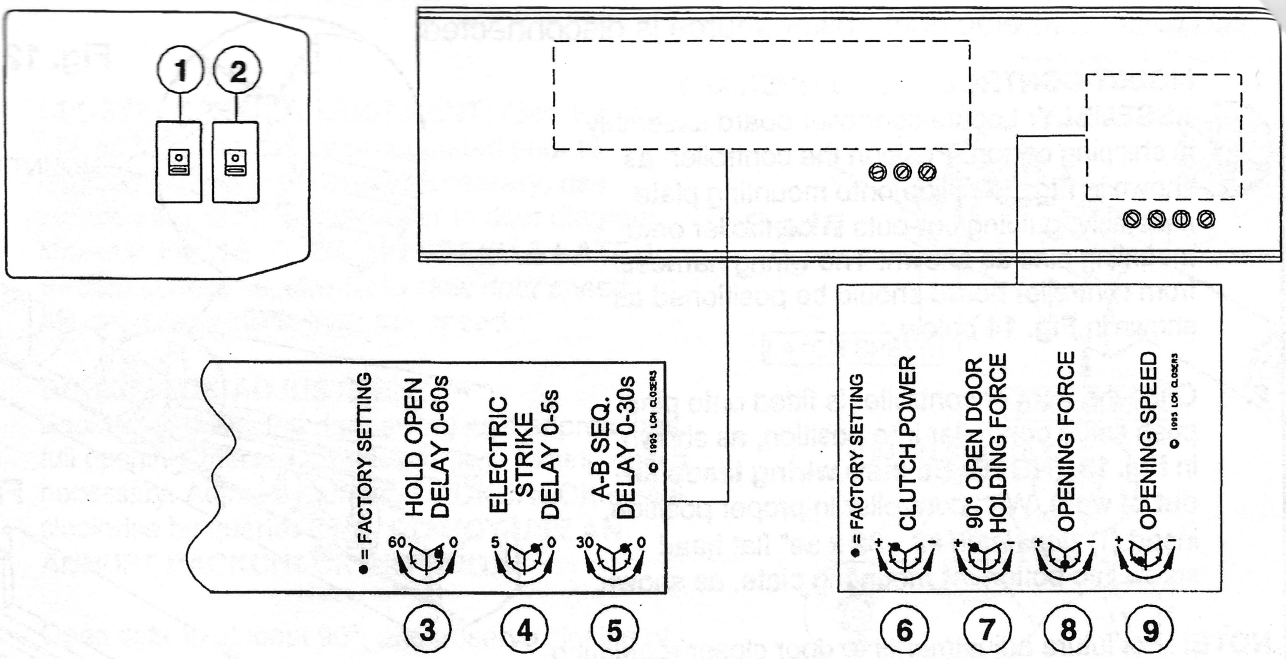
SHOE POSITIONED FOR INCREASED POWER AT LATCH

## LOCATING CAUTION / AUTOMATIC DOOR DECAL

1. Locate one decal on each side of door, near latch area. Decal must be located a minimum of 15" to a maximum of 48" above the floor. The decal location must be visible without interference from door trim or auxiliary door hardware.

2. Clean the 6" x 6" area where decal is to be placed. Apply decal by removing the backing and "rolling" it onto door. This will help prevent air bubbles from being trapped under decal.

# CONTROLLER SETTING ADJUSTMENTS




Consult diagram above. Each setting is labeled #1 - #9, which correspond with numbers below. All adjustments can be made with a small slotted screwdriver. Adjustments for #3 - #9: turn clockwise to increase force / speed or counterclockwise to decrease force / speed. Controller functions are preset before shipment. **Adjustments should be made only if necessary.** Factory pre-set positions are shown in above diagrams and on controller labels.

1. **ON / OFF SWITCH-** Allows operator to be turned on & off without disconnecting power.
2. **HOLD OPEN SWITCH -** Provides option to keep door in hold open position (fire alarm signal will overide).
3. **HOLD OPEN DELAY (0 - 60 sec.)** - Adjusts amount of time the door will pause after opening to 90° position. This delay always occurs.
4. **ELECTRIC STRIKE DELAY (0 - 5 sec.) -** This setting should only be adjusted if using an electric strike. It controls time delay before door opens, allowing electronic strike to fully release before operator opens door.
5. **A-B SEQUENTIAL DELAY (0 - 30 sec.) -** This setting should only be adjusted if operator is being used in a sequential door application. This function adjusts amount of time before the controller sends a signal to the second operator of a sequential pair of doors.
6. **CLUTCH POWER -** Adjusts effective holding power of clutch. When adjusted down (-), the ability of the clutch to rotate without slipping is reduced, which is good in applications where abusive conditions are likely. If this setting is adjusted too low, the clutch may not reliably engage and door will not open.
7. **DOOR HOLDING FORCE -** Adjusts force required to hold door open after reaching 90° of opening. At this point, the operator is in HOLD OPEN DELAY (see #3) and controller reduces motor power to hold door open. If this setting is adjusted too low, the door will creep closed while in the HOLD OPEN DELAY mode.
8. **OPENING FORCE -** Adjusts amount of force the door exerts when opening (15 lbs. max). Normal adjustment is for door to open 90° or encounter an auxiliary door stop, where controller will engage the *SECOND CHANCE* function and motor will stop. If clutch slips more than 1/4 turn when door stops, adjust down until there is minimal or no clutch slippage. If OPENING FORCE is increased too much, it may overpower clutch & motor will stop running after 15 seconds. It will then go into HOLD OPEN DELAY and then the closing sequence. The *SECOND CHANCE* feature will not work if clutch is overpowered.
9. **OPENING SPEED -** Adjusts opening speed of door. Most installations will be within ANSI 156.19 specifications at maximum adjustment (see **TABLE 3** on pg. 15). Large, heavy doors and / or strong door closer backcheck settings may require a slower speed adjustment for proper operation. As a general rule, a slower door speed and / or use of an auxiliary door stop will provide smoother operation.