

## INSTALLATION INSTRUCTIONS

### JAMB MOUNT MODEL 4300

- A. Prop the door in the open position - usually a little over 90 degrees - to allow for compression of the roller and play in the linkage.
- B. Cycle the unit so that the arm of the opener is in the full open position - about 105 degrees. This is done by removing cover, supplying temporary power to unit and giving the unit an operate signal across the low voltage terminals marked : "SW IN" WHT and BLK, or if unit is setup with a receiver, give it a signal with a wireless control. Turn toggle switch to off and disconnect the power when the arm is in the full open position.

**CYCLING THE UNIT WHEN IT IS UNMOUNTED IS POTENTIALLY DANGEROUS AS HANDS AND OTHER OBJECTS COULD GET CAUGHT IN THE MECHANISM. PLEASE EXERCISE CAUTION**

- C. Install slide mounting bracket to upper part of the jamb (hinge side) with (2) #10 1-1/2" sheet metal screws provided. Next, slide unit onto slide mounting bracket until arm roller is snug against the propped open door. Install the remaining (3) #10 1-1/2" sheet metal screws through appropriate holes in opener frame into underside of door frame header. If doorframe is metal it is suggested that hole locations be marked with unit on the bracket, then remove unit, drill pilot holes and again slide unit onto bracket and secure with the sheet metal screws. In some cases "riv" nuts should be used with metal frame to assure a stable installation.

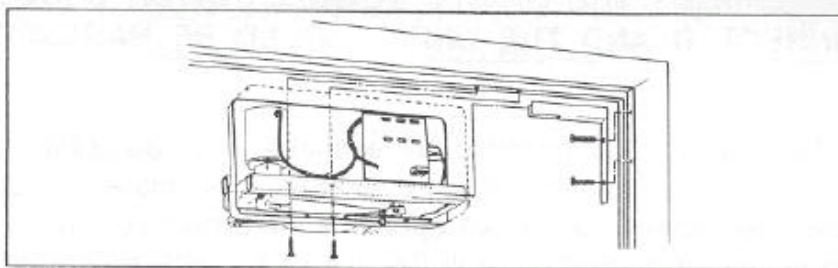


Fig. 3

- D. Install stainless steel scuff plate on door with the #8 x 1/2" sheet metal screws provided - as shown in drawing. Manually open door to be sure it opens to desired location (usually slightly more than 90 degrees) and moves freely. If the door binds, plane where necessary or shim the hinges. In the case of a heavy door with old hinges, replace with ball bearing type.
- E. If necessary replace the latch strike plate with the blank plate provided. If security is required, an electric strike may be interfaced with the opener control circuit.
- F. When using wall switches or touch controls, drill a small hole in the jamb or wall near the point where the power cord from the unit is located - and a small hole through the

back cover of the opener to permit routing of the low voltage wire from the controls to the unit.

- G. Thought should be given to control location to achieve desired objectives. In order to reduce usage of the opener to only those needing it, the controls should be located slightly out of the general traffic path. Wall mounted controls must be mounted so that the door to be powered is visible from the control location. Wireless Wall Controls simplify the installation because interconnecting wiring is not necessary.
- H. Electrical hook up can now be completed. Drawing 4265D illustrates the necessary wiring information. Be sure that the opener is provided with a 115 VAC grounded outlet - or hard wired in accordance with local codes. **Note** - for applications when the unit is located on the outside of a door in a public area and it is to be interfaced with an electric lock, the on/off switch should be disconnected and the unit should be hard wired.
- I. When power is first turned on you will hear unit cycle once. There are only two field adjustments on the unit printed circuit board. First is the "time hold open" (see step 2 ) and the second adjustment is for sensitivity (see step 3). This safety feature is to stop the arm from opening the door when the door hits an obstruction on the opening cycle. The unit is now ready to be tested and adjusted.
1. Signal for unit to open - (opening cycle takes about seven seconds).
  2. Set the "time hold open" potentiometer to desired time (0-30 seconds - clockwise for more time). See drawing 4265D. Unit comes preset with approximately a 7 second hold open. **Note** - the electronic timer which governs the hold open time starts its timing cycle when the opening cycle begins - thus a 7 second hold open, is in addition to the 7 second opening time for a total of 14 seconds.
  3. Set the load sensitivity adjustment to the proper position for the particular application.(The location of the sensitivity potentiometer is on the circuit board next to the transformer - see drawing 4265D). By turning the small brass screw counterclockwise to the minimum setting you will be at the most sensitive setting (door probably won't open). Turn the screw clockwise in increments until the door achieves a full open position. The door should be manually stopped during opening cycle to be sure the motor stops and recycles to the closed position. Note: the load sensitivity potentiometer has an adjustment range of 24 turns and a clicking sound will be heard at either end of the range.
  4. If a safety carpet is being used, hook the carpet leads to the inhibit (INH) terminals and check its operation with the unit. If someone is on the carpet the door will not open or close depending on the door position. If the door is moving and someone steps on the carpet and remains on it, the door will complete the cycle and then will be inoperative until the safety mat is cleared. These inhibit terminals can also be used to interface with an elevator or lift safety circuitry.
  5. The Model 4300 can be interfaced with an electric strike system: The strike output from the P.C. board is 115 VAC and is powered on the opening and closing cycle. Transformers for a variety of strike requirements are available and can be factory mounted in the unit. They come with a 10 foot, 2 wire lead to power the strike - either AC or DC. (AC strikes emit a buzz when operating while DC strikes are silent.)
  6. Two or more units may be hooked up to be used simultaneously from one input by wiring the black and white switch terminals in parallel. In the case of radio control output, one receiver can be used with the units wired as above. **Note** - when two or more units with radio controls

are installed in the same vicinity - and are to operate independently - be sure to set different codes for each door system so that only the proper unit(s) will respond to a given signal. (This is done by matching the code on the receiver in the unit and the code on the circuit board in the transmitter or wall control.)

J. Reinstall cover by means of (2) hex head screws securely tightened to avoid vibration noise.

### **DOOR MOUNT MODEL 4300D**

For a door mount installation, the following installation steps should be followed:

1. Be sure there is at least 8-1/2" clearance behind the door to accommodate the unit so that the door will be able to open at least to a full 90 degrees. (see drawing #4269)
2. Install the #4590 door mount bracket that comes with each door mount unit. The 2" x 2" angle bracket is mounted to the face of the door – 1" down from the top of the door and 1/2" in from the hinge side of the door. (see drawing #4269). The leg that mounts to the door has three round holes (9/32<sup>nd</sup>) and the horizontal leg has the slotted holes.
3. Unless the door is a solid core type or quite sturdy it would be advisable to use "through bolts" (which are provided in hardware package) to secure the mounting bracket to the door.
4. The unit is secured to the bracket using the slotted holes to allow for some adjustment. See drawing #4269. It may be necessary to drill new holes on the bracket or extend the slotted holes depending on unusual casing that might be around the frame. "C" clamps or vise grips are handy for temporarily securing the unit to the bracket while installing the hardware provided.
5. **Note** - in installations where there is clearance behind the door for the unit, but a very **tight space to work**, it is suggested that after the bracket has been properly mounted, i.e. holes located and drilled on the door, remove the bracket. Attach the unit to the bracket with the hardware provided; and with the arm in a closed position, mount the assembly to the door with the through bolts provided. A stubby screw driver or a right angle ratchet would be helpful.
6. The door arm roller will roll against the casing of the door jamb and push the door away from the frame to the full 90 degrees. **Note** - the door mount arm opens to about 112 degrees - 7 degrees more than the standard jamb mount door arm which opens to 105 degrees.
7. **Be sure to provide a strain loop** on the power cord coming out of the unit so as to reduce wire fatigue from the cord flexing as door opens and closes.

Follow the above steps "E" through "J" to complete the installation.

### **MAINTENANCE**

The opener requires very little maintenance. Once a year, the actuator screw should be wiped down and lubricated with a 90-lb. grease. Remove excess grease to prevent slinging.