

1. A packing list will be found in crate No. 1 of each shipment. The parts in the crates should be checked with this list. If there is any discrepancy, notify Ellison Bronze at once.
2. All parts are numbered. Numbering starts from the left as you face the unit from the exterior side. Be sure that each part is erected in its proper position.
3. Place threshold in position as shown on blueprint. Shim threshold to a perfectly level position. ***This is very important.*** Do not fasten the threshold to the floor at this time.
4. Place rough side bucks in a perfectly plumb position. Mark holes for expansion bolts, remove rough side bucks, drill holes for bolts, replace bucks, bolt in place and check for perfect alignment, bolt head buck in place.
5. Place exterior jamb sections and head member in place fastening them loosely to gear box lugs and rough bucks with two or three screws for each section. If the unit has mullions and transom bar, these sections should also be loosely fastened in place.
6. Install hinge shaft and move bottom arm to a position lengthwise with the threshold.
7. Hang doors in open position, separate top arm part from fixed arm and place over the pinion so that point Mark "A" engages the pinion at the "notched point" as indicated in ILLUSTRATION 1. The bottom arm should be parallel with the threshold. The "0" mark on the bottom door pivot should face toward the jamb. Hold door in open tilted position to insert bottom pivot into the bottom arm then straighten door so that the guide roller on top of the door enters the guide box in the head member.
8. Part No. 4 should then be securely fastened to the top arm with the screws furnished for this purpose.

***Directions to take the door down: reverse above procedure.***

9. Remove the cover plate on the floor box. Insert the closer spring wrench in the gear and wind until sufficient tension to close the door is achieved. The minimum tension which will close the door is recommended. Adjust the closing speed of the door with the screw valves on the top of the door check. They are marked "F" for first speed and "S" for the speed of the final 10 degrees of closing.

10. Check carefully to be sure that door hangs in perfect alignment with the proper clearances and that all parts move freely without rubbing. If the door is not hanging perfectly true, shift threshold and jambs slightly, or re-level threshold until the door hangs properly. Mark holes for fastening threshold, remove doors and threshold, drill holes for expansion shields, replace and caulk the threshold and fasten it securely in place together with jambs, scribe mouldings and other parts. Replace the doors and glaze them. All glass stop mouldings should be replaced in their original positions so that they will fit properly.

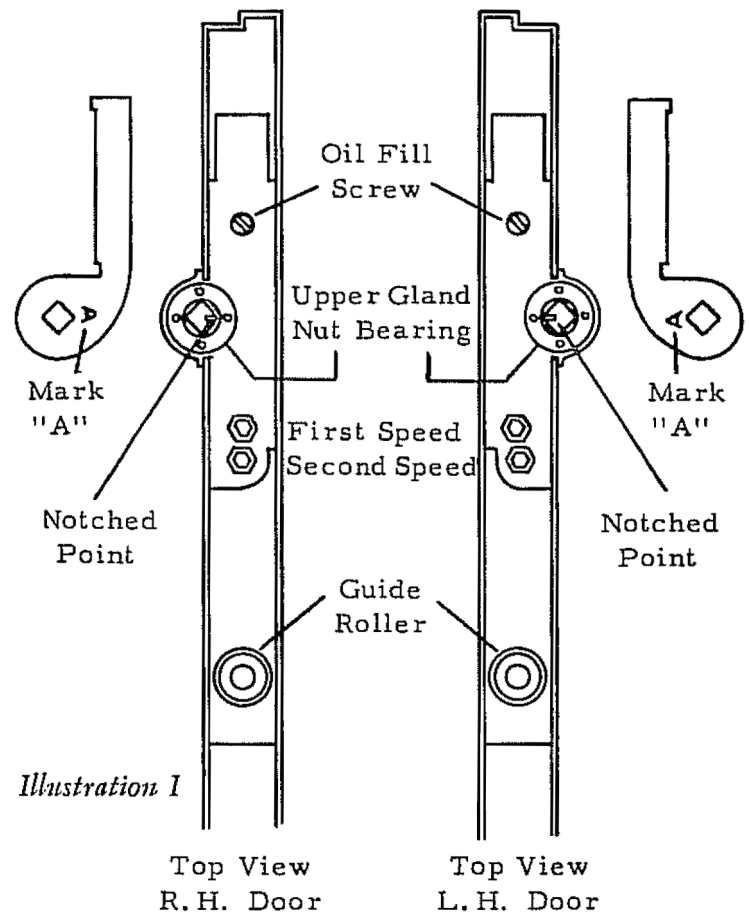
11. If plastering or other rough work is to be done, close to the frame and doors, they should be covered to protect the factory finish.

12. Be sure that all bearings are clean and well-oiled at all times. Door checks may be filled with additional oil through the oil hole in the top of the door check located nearest the hinged stile of the door. Use only Ellison check oil.

13. Should an oil leakage occur at the top of the door through either the adjustment valves or the pinion, it may be corrected as follows:

If either of the adjustment valves leak, unscrew the valve, remove the small neoprene washer, inserting new washer and replace the valve.

Should oil leak from around the pinion, use the spanner wrench furnished with each job and tighten down the upper gland nut bearing. Do not tighten excessively as this will cause the checks to bind, preventing free movement of the door.



14. After erection and glazing have been completed, the unit should be cleaned in accordance with instructions given on the back of this folder and a letter of acceptance should be received from the owner or his representative.
15. Replacement parts are furnished at a small cost. When ordering, specify part number as shown.
16. To install new check, remove door, reverse procedure given in paragraph 7, remove all screws holding check, lift out check, insert new check, replace all screws and reset door as explained in paragraph 7.
17. To replace broken spring, remove door as explained in paragraph 7, remove inside half of jamb, remove lower set screw at top of 1-3/4 diameter shaft, loosen upper set screw only enough to allow pivot pin to drop down sufficiently to lift out shaft assembly, pull out old spring and replace with new spring. Upper part of spring has a slot. This should engage in pin riveted through shaft. It may be necessary to change the location of the pin in the shaft as the springs are apt to vary in length. Replace shaft, jamb and door, then wind up spring to the desired tension.
18. To adjust height of door, if door sets too high and is rubbing against the head jamb, have doors in open position, place block of wood on bottom arm, hit block sharply with hammer to bend down arm slightly. If bottom arm has sagged and the door is rubbing on threshold, have door in open position, place block of wood on arm close to jamb, pry up on end of bottom arm with wrecking bar, strike sharp blow on wood block with hammer to bend arm upward.
19. To adjust meeting stile door clearance, if pair of doors are rubbing together at top of meeting stile, remove doors, remove screws holding check in place, move check 1/32" towards meeting stile, drill and tap new hole through check and door reinforcement, insert screw to pin check in place, retap other holes, insert screws and replace door. This will give 1/16" clearance between doors.