

Subject: 7777A (Otis Screw Drive Operator) Transition to Upgrade Only Support

Vintage 1983–1984

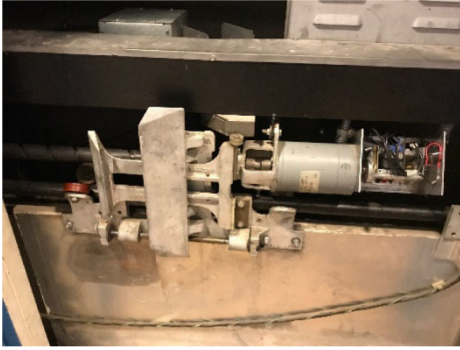
Document References: UNITEC Parts—UT-IDs: 22.16-1, 23.6-500, and 21.3-500; Dwg: AAA24430Q; Surveys: Door Panel Survey, Door Operator Survey, and Folding Door Restrictor Survey.
(Otis (internal documents)—SPLs: 23-C-3049 and 23-1F-C7777A

Overview: Otis Elevators (early LRV & MRV), installed around 1983–1984, carrying Otis Screw Drive (type 7777A) door operators, used on center-opening and single-slide car fronts, having the tubular type car track, unique clamping clutch, and light-weight honeycomb construction door panels, have been formally transitioned to Upgrade Only Support by UNITEC Parts. To replace these products and the related components, UNITEC Parts now **only** offers complete new door operator replacements along with mandatory replacement of: hall door locks, car door vane, car door panel set, car door header/track and hanger set. The only original type of serviceable component for the 7777A that UNITEC Parts will continue to offer are the original car door hanger rollers, which glide on the original tubular track.

Description: Otis Screw Drive operators have been steadily changed out since the late 1980s. Only a few remain in service today. Per ANSI code requirements, any modernizations that occur to the main control system mandate the installation of a Closed Loop Control door operator. Typical failures of the original operator include sagging door tracks, dragging car doors, structurally compromised car door panel, and wear to the clamping door clutch, screw shaft, knuckle and drive motor, which powers the doors open. Diminishing population, compromised performance and dwindling service part support for the ~1984 equipment has driven UNITEC Parts to **one** consistent, standard Service Upgrade Solution approach. This new service solution approach involves more than just changing out the door operator due to:

- The incompatibility of the new door operator with the original clamping clutch
- The compromised nature of the original clutch & honeycomb construction car door panel
- The resulting problematic nature of mounting any additional masses to the existing car door panel
- The new bending forces created on the existing car door panel exerted by car door vane and door restrictor angle.

In addition, since many screw operators had been changed out already in the 1990s and retrofitted to an Otis QL operator or other competitor operator, while retaining the old car clutch and the original door locks, this Service Upgrade Solution approach also applies to any existing door operators that replaced the Otis Screw Operator in the past but retained the original 7740A door locks.



Original 7777A Setup with Original Clutch
(aluminum skin clad car door)



1990s Retrofit of a QL Operator on a Screw Operator
Tubular Track Car Front
(w/ original hanger, clutch & track)

Service Upgrade Solutions

Beginning in 2020, UNITEC Parts' standard Service Upgrade Solution approach will specifically involve quoting and mandating installation of the following items:

- Pre-Engineered AT400 (or Glide A) Door Operator Upgrade
- Car door Panel or Set AAA23000F (Single-Slide or Center-Opening)
- Car Door Unlocking Vane AAA6940BZ_ (for 6940 door locks)
- Trackless Car Header (for mounting new car tracks)
- Car Track & Hanger Set
- Folding Door Restrictor (FDR) Device*
- Hall Door Interlocks & Closers at All Landings (type E6940AP)

Estimated Installation Time: 2–4 days for Hydros, longer for Geared

- Options:**
- *If the control system is not being modernized, then the FDR is technically not required. However, UNITEC Parts standard quoting will always include the FDR (it can be removed if necessary). UNITEC Parts strongly recommends the installation of a door restriction device for public safety reasons. ANSI Code requires its use upon controller modernization.
 - Consider UNITEC Hall Entrance Refresh kits for your single-slide (C6178Y410) or your center-opening (F6178T410) systems for each landing on which new door locks are installed.
 - Consider hall sill and hall door panel condition. To keep running clearances consistent for the new locks, evaluate the condition of the slide or roller guides on the car frame. UNITEC Parts can provide replacement sliding gibs and roller guide rebuild kits.

We at **UNITEC Parts Co.** appreciates your business. For questions, please contact us at **(800) 328-7840**.