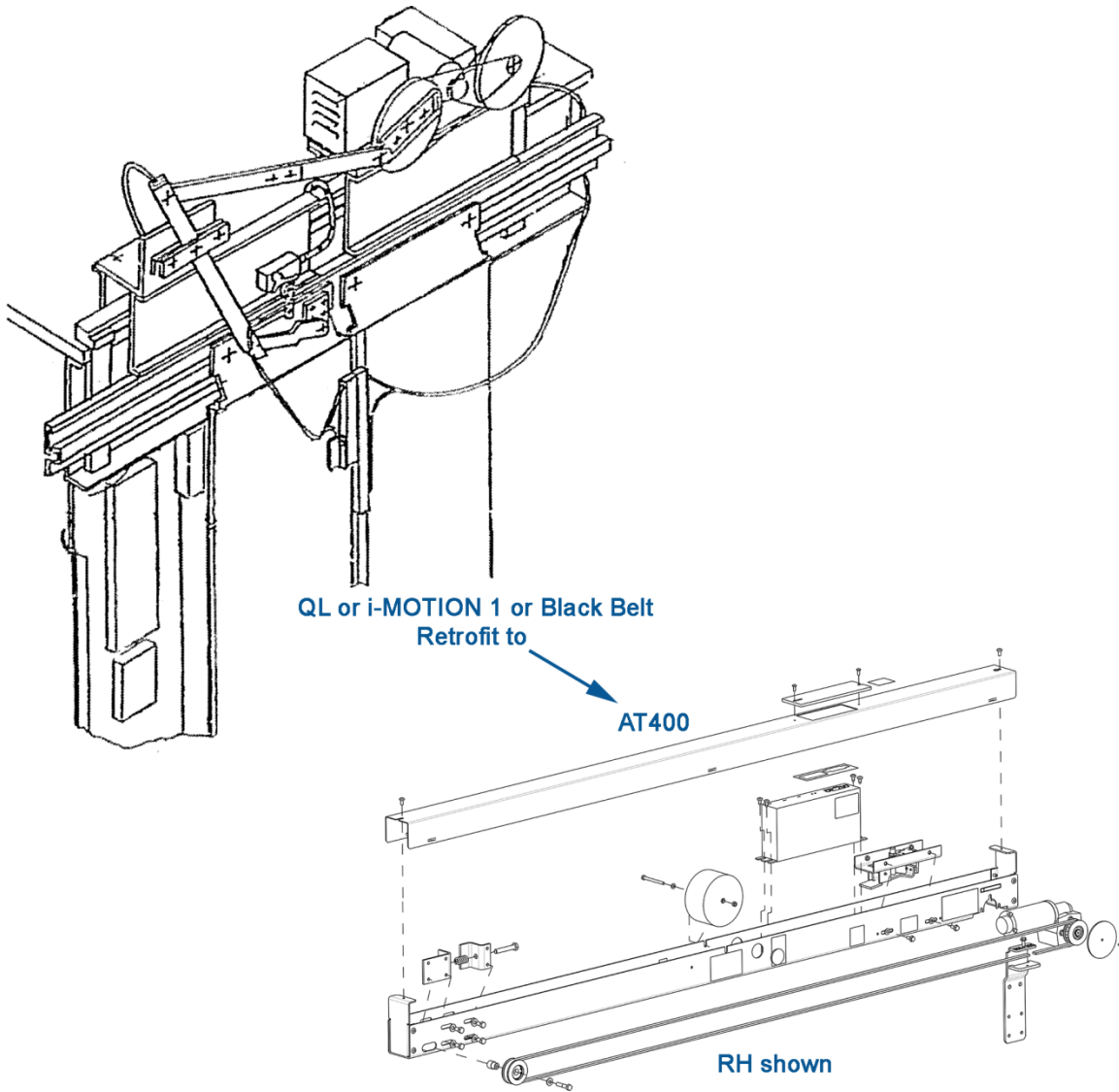


UT-ID 22.14-2



AT400 Confirmation of Equipment

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PUBLICATION CATALOGING DATA

First Issue: March 2017
Master Index Control Number:
Part Number: UT-ID 22.14-2

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Before Ordering and Before Installing

UNITEC customer should review the following sketches and suggestions to ensure the QL to AT400 door operator upgrade quote is as complete as possible to allow for smooth installation.

1. Confirm the Otis car front carries either the traditional Otis integral hanger door panel or the offset applied hanger shown next page.
2. Confirm you have a wiring diagram present on the job and that it matches with the one listed in this document.
3. Determine which car door vane type is present. Fixed (Stationary) or Movable (Monkey motion) vane. If movable vane is present, you must plan for proper additional labor time & for replacing or pinning that vane in place. The new fixed vane part number is AAA6940BZ1 (not included in the kit).

NOTE: With door operator replacement, having had a movable door vane, formerly operated using the old door operator linkage, you will lose the relative motion formerly present between vane and door lock rollers, allowing for a “Flush-Flush” look of the car doors upon full open position. This change and pinning of the vane in place to make it “fixed,” will now have the hall door lead the car door position by approximately 3/4 in. Be sure customer understands this change. No changes to the locks will be required. Expect car door to travel beyond jamb by approximately 3/4 in.

4. Determine if track back mounting method, as this kit assumes, will be the method used. Decide if this is the time to refresh commonly wearing door components: rollers, upthrusts, gibs, etc. and if this is the time to include a folding door restrictor.

Confirm Features

Prior to ordering equipment, confirm your existing installation carries the mechanical & electrical features shown in the following figures.

Your installation will typically have one of two door hanger types. Either this applied 388BA_ with offset, or see integral below.

QL, i-MOTION, and Black Belt operators should have carried the formed integral car header track shown.

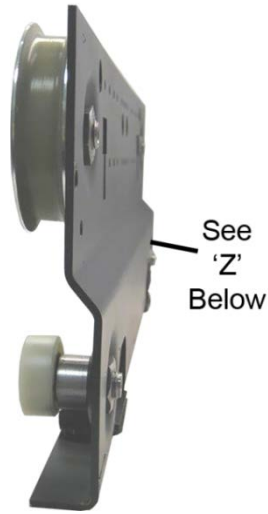


Figure 1: Applied Door Hanger 389BA_

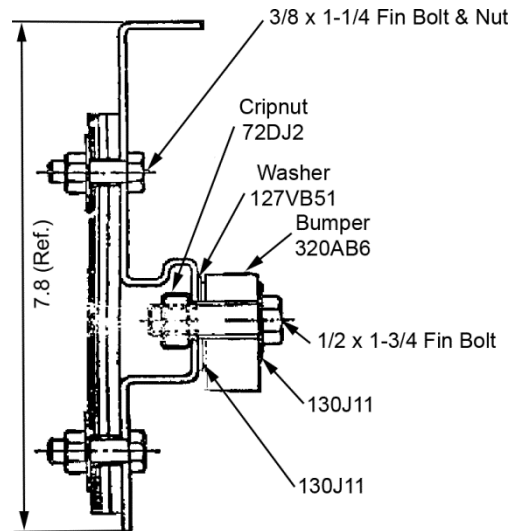
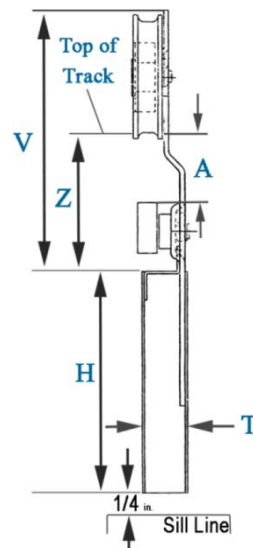


Figure 2: Formed Integral Car Header

More commonly your installation would have the offset integral door hangers. See example dimensions to confirm.



A = 2 in. Door Track Height

T = Usually 1.25 to 1.35 in.

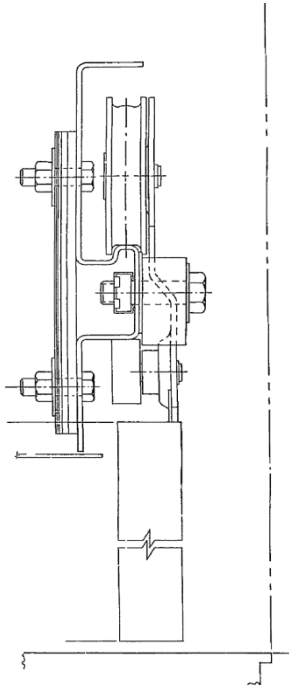
V = ~7.0 in.

Z = 3-3/4 in. (for integral)

Z* = For 389BA hangers = ~4-1/16 in.

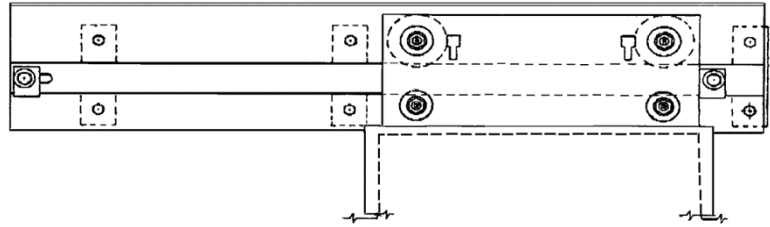
Figure 3: Integral Hangers Welded into Door Panel

UNITEC AT400 CONFIRMATION OF EQUIPMENT



Single-Slide Integral Shown –
C/O and Applied Similar

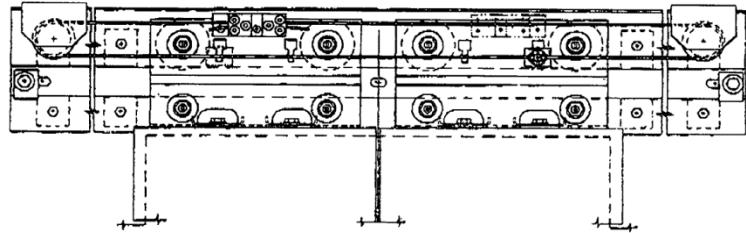
QL operators intalled for new elevators between ~1984 and ~2000. All utilized offset hangers of the integral or applied type as depicted here. Ensure your systems match per below before retrofitting to AT400 with this kit.



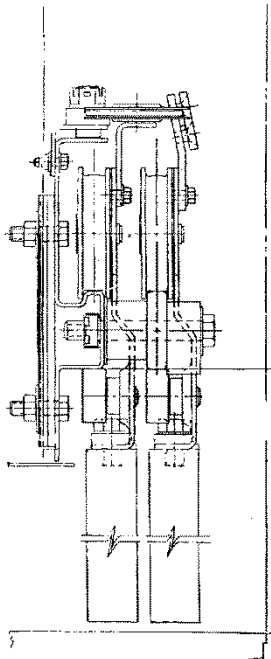
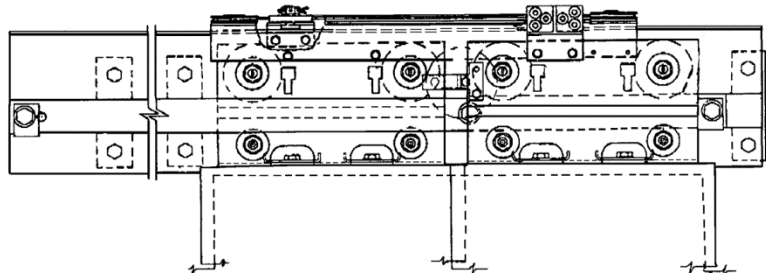
Single-Slide Integral Shown

NOTE: Hangers without bolts welded in.

Center-Opening w/ 389BA Applied Hangers Shown
(Integral Similar)



Two-Speed Applied Car Door System (Integral Similar)



Two-Speed Side-Opening
Shown w/ Offset 389BA Applied
Hangers

Two-Speed Aircord Related Device Always Used with
QL, i-MOTION I, and Black Belt

UNITEC AT400 CONFIRMATION OF EQUIPMENT

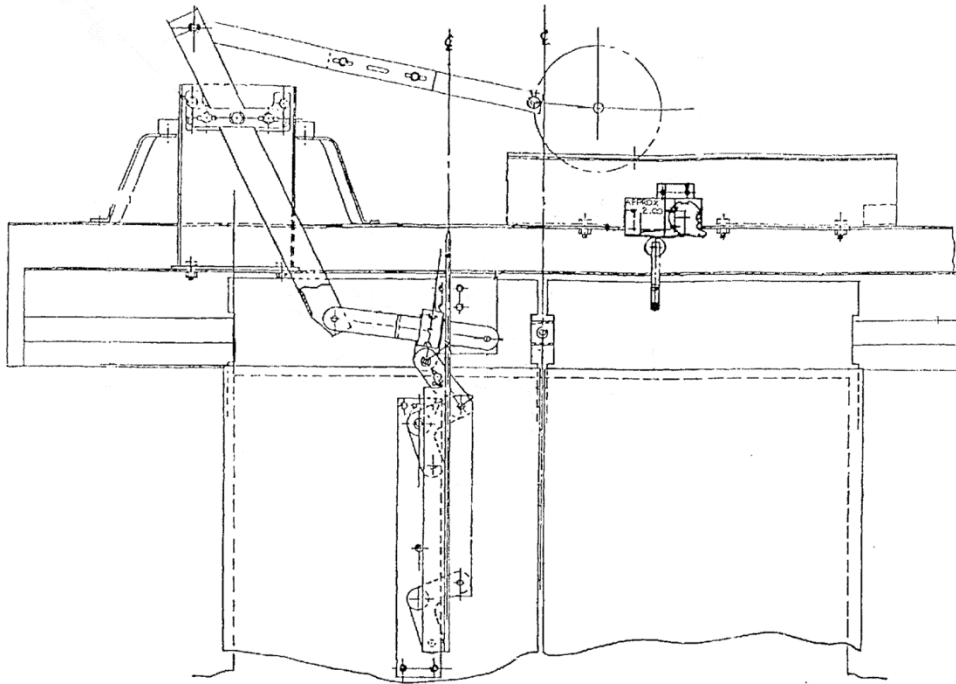
Confirm Features W/D

If your installation does not have one of the diagrams listed below, governing the main controller, contact UNITEC before ordering any parts or before beginning any installation or upgrade procedures.

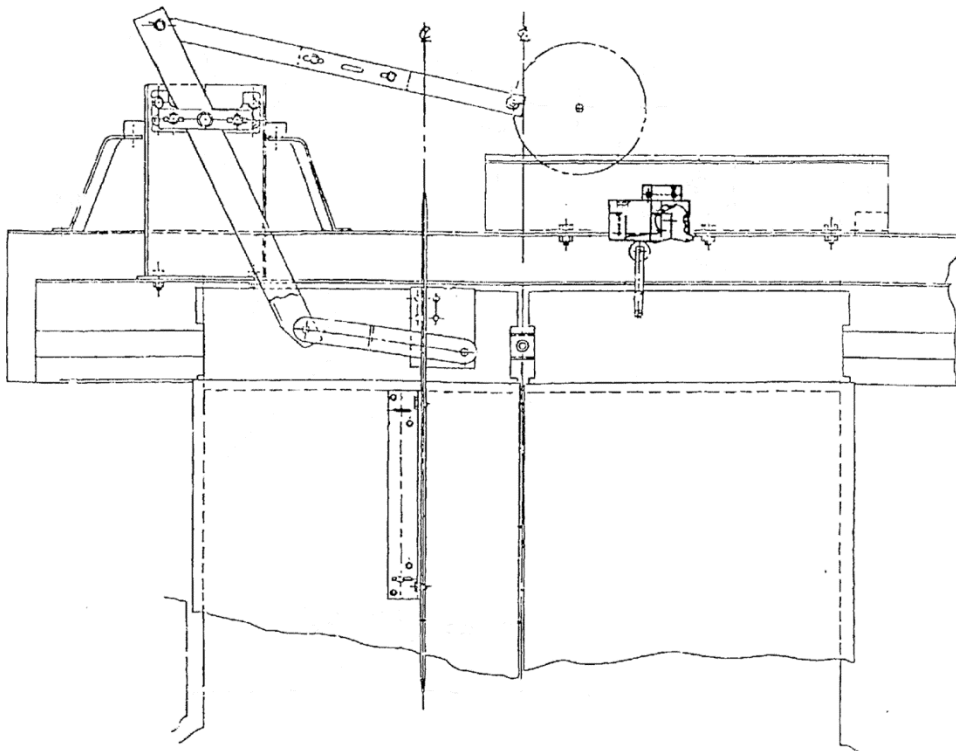
System / Model	Wiring Diagram or Document Number
211 / LVM1	A*A21241L
211 / LVM2	A*A21241V
LRV	SPL 10-2S7900AR
LRS-3	10-1S7900AS
SPEC 60(MRQ)	2-2S7417A
E311	AAA21380A
GEM	A*A21290T (WHERE * could be letters: A through M)
E411MHS	AAA21255A

***NOTE:** You will likely be able to use AT400 if wiring diagrams do not match one from above. UNITEC will be glad to check and confirm capability.

UNITEC AT400 CONFIRMATION OF EQUIPMENT



Shown is the QL setup for Otis 6940 door locks and movable (Monkey Motion) door vane. Upon operator removal and retrofit to AT400, you will lose the ability to translate vane motion. Plan to pin the vane in place using positioning to achieve equal running clearance to the door lock rollers.

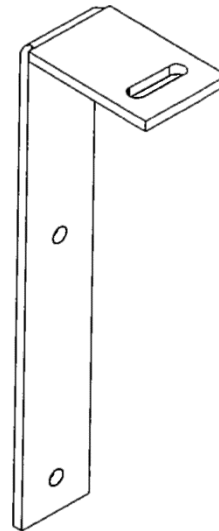
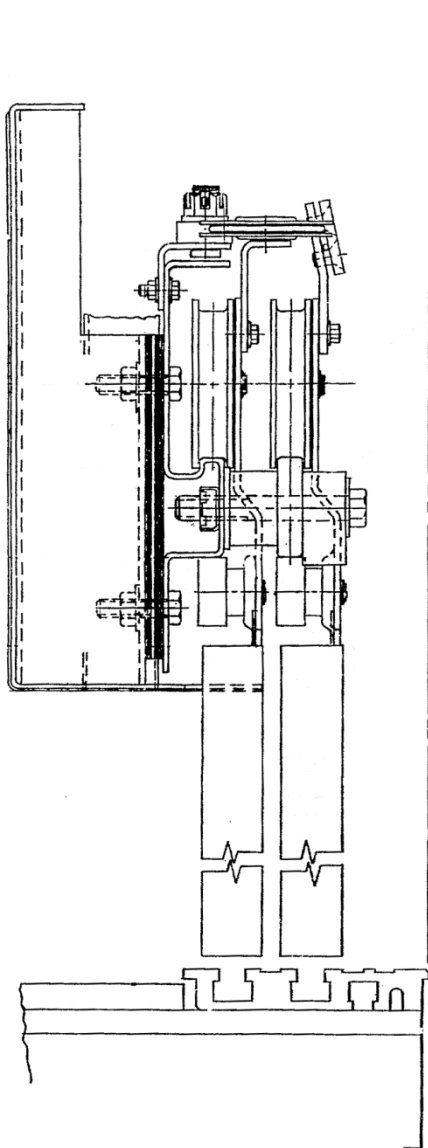


Shown is the QL setup for Otis 6940 door locks and fixed/stationary vane. Upon retrofitting QL to AT400, leave this vane in place as is.

Should a new solid 30 in. door vane (fixed type) be needed, order separately from UNITEC p/n AAA6940BZ1.

Mounting Method Confirmation

AT400 can be mounted in multiple ways. However, for traditional QL, Black Belt, or i-MOTION I installations, track back will yield least labor and time burden. So your team is fully aware of what will be encountered when installation commences, determine if car header track was originally installed with 3/8 in. or more space between the back of track and the cab front to fit two angle brackets 5/16 in. thick by 3 in. wide. 95% of cases should have sufficient space. If not, cab top mounting using unistrut per drawing AAA24430V is in order.



AT400 Track-Back Mounting Brackets

Typical Two-Speed car door equipment (QL, i-MOTION I, and Black Belt operators).

Car Door System Refresh Reminder

If you have an Otis QL operator, it is likely 25–30 years old as of 2017. Do not forget to ask UNITEC for a quote to, along with your new operator kit, provide new:

- Car Hanger rollers (typically 456EW1)
- Upthrust Roller (typically 456CP1 or EK1 for 2sp)
- Door Bottom Guides (typically 7593B1 or AAA24479C400)
- C/O Aircord Pulleys (typically B316CCB2)
- Aircraft Cable (Ordered by the foot: 174AS995)
- 2sp Door Relating Device Type 6178CG.

Ensure that you have a door restrictor in place. QL operator vintage equipment likely used an angle type restrictor mounted to the car door. If there is no angle present and there is no other electronic restrictor present, ask UNITEC quote you the folding door restrictor type ABA6940CD.