VERTICAL EXPRESS

Owner's Manual

Every attempt has been made to ensure that this documentation is as accurate and up-to-date as possible. However, Vertical Express assumes no liability for consequences, directly or indirectly, resulting from any error or omission. The material contained herein is subject to revision. Please report any problems with this manual to Vertical Express, P.O. Box 2019, Memphis, Tennessee 38101.

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In the event of normal power loss, limited elevator service is continued through an automatic transfer to an Emergency Power Operation. When normal power is restored, the elevators will automatically transfer back to normal operation. If there is not a standby power supply, elevators will stop in progress and remain at rest until normal power is restored.

Emergency Power Operation

An emergency power lowering system provides automatic or manual return of an elevator to a predetermined landing during a blackout or single-phase electrical condition. If there is a standby power supply, the elevators will automatically return to the lowest landing and the doors will open, allowing the passengers to exit. The doors will then close, and the elevator will shut down. The elevator will remain at this landing until the power is restored.

Stalled Elevator

If an elevator becomes stalled with passengers aboard, do not attempt a rescue. While all Vertical Express elevators have an emergency exit, this exit should remain locked at all times and used only during an emergency by trained personnel.

Carefully follow these instructions:

1. Establish and maintain communication with the passengers inside the elevator by using the elevator's phone or intercom, or simply by calling through the doors. Reassure the passengers that steps are being taken to remove them from the elevator, and encourage them to remain calm.
2. Find out if anyone is hurt or ill. If so, arrange for medical assistance or call 911.
3. Find out how many people are in the elevator.
4. Ask passengers to stand clear of the doors.
5. Ask passengers not to smoke.
6. Find out whether the regular elevator lighting or the emergency light is operating. This action will help determine the degree of power failure.

Fire Service

In the event of a fire, never use the elevators to evacuate the building—Use the stairways to get to a safe place. Under no circumstances should anyone except trained firefighters be allowed to use the elevators after a fire has been reported.

Fire Service Operation starts either automatically through the building's smoke detectors or manually through the Fire Service Keyswitch.

When Fire Service Operation starts, all hall and car calls are canceled, the elevators return to the main floor, and the doors open and remain open. Trained firefighters activate the Fire Service Keyswitch in the elevator and gain control of the car calls. Only authorized personnel are permitted to reset Fire Service Operation, after ensuring there is no fire in the building and the smoke/heat detectors are reset.

Maintenance

Before Calling for Service

To save time and money, check the items listed below before contacting Vertical Express. This action may save the cost of a service call and also place the elevator back in service faster. Consult your local Vertical Express representative for what is covered under the maintenance agreement and any maintenance operations that need to be performed between service calls.

1. Verify that all key operating switches are in normal operating or “RUN” position.

2. Check the hoistway sill and car door sill for debris. Both sills should be cleaned regularly. Foreign objects (gum wrappers, paper clips, etc.) can collect in the sills, preventing the doors from operating properly, which may shut down the elevator’s service.

3. Check for blown fuses or tripped circuit breakers in the machine room.

4. Verify that the elevator is not on Fire Service Operation.

5. Verify that the building has full power from the power company.

All maintenance and adjustment of the elevator should be performed by qualified Vertical Express personnel.

1. Visually inspect the car for burned out lamps, damaged flooring or carpeting, and damage to car fixtures.

2. Ensure that the hoistway door sill and the car sill are clean at all times, as trash in the sill grooves can affect proper door operation.

3. Check the car, the hoistway doors, and the door operator for ease of operation. Any binding or dragging of the doors indicates a need for alignment or adjustment.

4. Ensure that the car doors close completely and are plumb. Excessive looseness may constitute a safety hazard.

5. Ensure that the machine room is well ventilated and that proper clearance is provided for elevator equipment. Do not use the machine room to store any other materials.

Building Maintenance Personnel

1. All building maintenance personnel need to be familiar with the elevator keyswitch functions and pushbutton operations.

2. Only authorized personnel are allowed to use key operations.

3. Before servicing any component, always use a meter to check for voltage. Due to the nature of some internal controller power supplies, voltage may be present on some components even after the input power source has been removed.

4. Before touching any parts of the electronic controller or its peripherals, verify that all voltage is removed.

5. When access to the pit or hoistway is necessary, ensure that safety measures are used to protect the public as well as the servicing personnel.

6. Emergency exits should be locked at all times and used only by emergency personnel.

Cleaning Architectural Finishes

Cleaning and refinishing, other than routine, should be performed by qualified professionals.

Architectural Powder Coating

Clean all surfaces with a soft cloth or a soft natural bristle brush with a non-abrasive, pH neutral solution. Do not use strong solvents such as thinners, or solutions containing chlorinated hydrocarbons, esters, ketones, or any abrasive cleaners.

Plastic Laminate

Routine cleaning with a mild detergent will remove fingerprints, smears, and everyday spills. Do not use abrasives or harsh chemicals.

Stainless Steel

Routine cleaning with a mild detergent will remove fingerprints, smears, and everyday spills. Consumer glass cleaners and stainless steel cleaners may also be used. Do not use abrasives or harsh chemicals.

Muntz (Bronze)

These surfaces are coated with a lacquer finish. To prevent scuffing, use a paste wax (for clear coats finishes) every week. Routine cleaning with a damp, soft cloth will remove spills, smears, and fingerprints. Do not use abrasives or harsh chemicals.

Safety Precautions

IMPORTANT!

Read this page before any work is performed on elevator equipment. The procedures contained in this manual are intended for the use of qualified elevator personnel. In the interest of your personal safety and the safety of others, do not attempt any procedure that you are not qualified to perform.

All procedures must be accomplished in accordance with the applicable rules in the latest edition of the National Electrical Code, the latest edition of ASME A17.1, and any governing local codes.

Terms in This Manual

CAUTION

CAUTION statements identify conditions that may result in damage to the equipment or other property if improper procedures are followed.

WARNING

WARNING statements identify conditions that may result in personal injury if improper procedures are followed.

General Safety

CAUTION

Before applying power to the controller, check that all manufacturing wire connections are tight on relays, contactors, fuse blocks, resistors, and terminals on cards and DIN rail terminals. Connections loosened during shipment may cause damage or intermittent operation.

Other specific warnings and cautions are found where applicable and do not appear in this summary. See the *Elevator Employee Safety and Accident Prevention Program Manual* and the *Elevator Industry Field Employees' Safety Handbook* for electrical equipment safety information on installation and service.

Electrical Safety

All wiring must be in accordance with the National Electrical Code and be consistent with all state and local codes.

Use the Proper Fuse

To avoid fire hazards, use only a fuse of the correct type, voltage, and current rating. See the job specific drawings sheet (Power Supplies) for fusing information.

Electric shocks can cause personal injury or loss of life. Circuit breakers, switches, and fuses may not disconnect all power to the equipment. Always refer to the wiring diagrams. Whether the AC supply is grounded or not, high voltage will be present at many points.

Printed Circuit Cards

Printed circuit boards may be damaged if removed or installed in the circuit while applying power. Before installation and/or removing printed circuit boards, secure all power. Always store and ship printed circuit cards in separate static bags.

Mainline Disconnect

Unless otherwise directed, always Turn OFF, Lockout, and Tagout the mainline disconnect to remove power from elevator equipment. Before proceeding, confirm that the equipment is de-energized with a volt meter. Refer to the *Elevator Employees' Safety and Accident Prevention Program Manual* for the required procedure.

When Power Is On

To avoid personal injury, do not touch exposed electrical connections or components while power is ON.

Electrical Safety
(continued)

Test Equipment Safety

Always refer to manufacturers' instruction book for proper test equipment operation and adjustments.

Buzzer-type continuity testers can damage electronic components. Connection of devices such as voltmeters on certain low level analog circuits may degrade electronic system performance. Always use a voltmeter with a minimum impedance of 1M Ohm/Volt. A digital voltmeter is recommended.

Mechanical Safety

See the *Elevator Employees' Safety and Accident Prevention Program Manual* and the *Elevator Industry Field Employees' Safety Handbook* for mechanical equipment safety information on installation and service.

Power Unit Fluid System

If working on the power unit fluid system, the static car weight is applying pressure to the jack and valve system and this stored pressure is present at the power unit.

Before working on any component of the power unit, do one of the following:

- Manually lower the car onto the buffers to relieve the stored pressure.
- Close the machine room oil line shutoff valve, and then release the power unit pressure by momentarily opening the manual lowering adjuster valve.

Arrival of Equipment

Receiving

Upon arrival of the equipment, inspect it for damage. Promptly report all visible damage to the carrier. All shipping damage claims must be filed with the carrier.

Storing

During storage in a warehouse or on the elevator job site, precautions should be taken to protect the equipment from dust, dirt, moisture, and temperature extremes.

Asbestos Compliance

Vertical Express elevator personnel will no longer drill or modify any doors with asbestos containing materials (ACM) or possible asbestos containing materials (PACM). All elevator doors manufactured or installed 1980 and earlier will be treated as having ACM/PACM.

Doors with ACM/PACM should be replaced rather than modified. If replacement is not feasible, abatement modifications shall be done by a licensed asbestos abatement company. Vertical Express mechanics will safely stage equipment for the abatement team, or remove the doors and seal them with plastic for delivery or pick up by the asbestos abatement company.

Doors manufactured or installed 1980 and earlier may be modified by Vertical Express employees if a test is conducted by a licensed asbestos company prior to work showing zero evidence of ACM/PACM.

All employees that risk exposure to asbestos will complete the safety department approved asbestos awareness training.

All employees will stop any work that could expose them to ACM/PACM, and immediately contact their supervisor and their safety manager. All exceptions must be approved by the Director of Health and Safety.

Static Protection Guidelines

IMPORTANT!

Read this page before working with electronic circuit boards.

Elevator control systems use a number of electronic cards to control various functions of the elevator. These cards have components that are extremely sensitive to static electricity and are susceptible to damage by static discharge.

Immediate and long-term operation of an electronic-based system depends upon the proper handling and shipping of its cards. For this reason, manufacturing bases warranty decisions on the guidelines below.

Handling

- Cards shipped from manufacturing in separate static bags must remain in the bags until time for installation.
- Anti-static protection devices, such as wrist straps with ground wire, are required when handling circuit boards.
- Cards must not be placed on any surface without adequate static protection.
- Only handle circuit cards by their edges, and only after discharging personal static electricity to a grounding source. Do not touch the components or traces on the circuit card.
- Extra care must be taken when handling individual, discrete components such as EPROMS (which do not have circuit card traces and components for suppression).

Shipping

- Complete the included board discrepancy sheet.
- Any card returned to manufacturing must be packaged in a static bag designed for the card.
- Any card returned to manufacturing must be packaged in a shipping carton designed for the card.
- “Peanuts” and styrofoam are unacceptable packing materials.

Failure to adhere to the above guidelines will void the card warranty!

Section Information

Section numbers (1,2,3) are followed by a dash and a sequential page number. Example: 1-1. Figures and Tables are identified in sequential order, Table 1, Table 2,...etc.

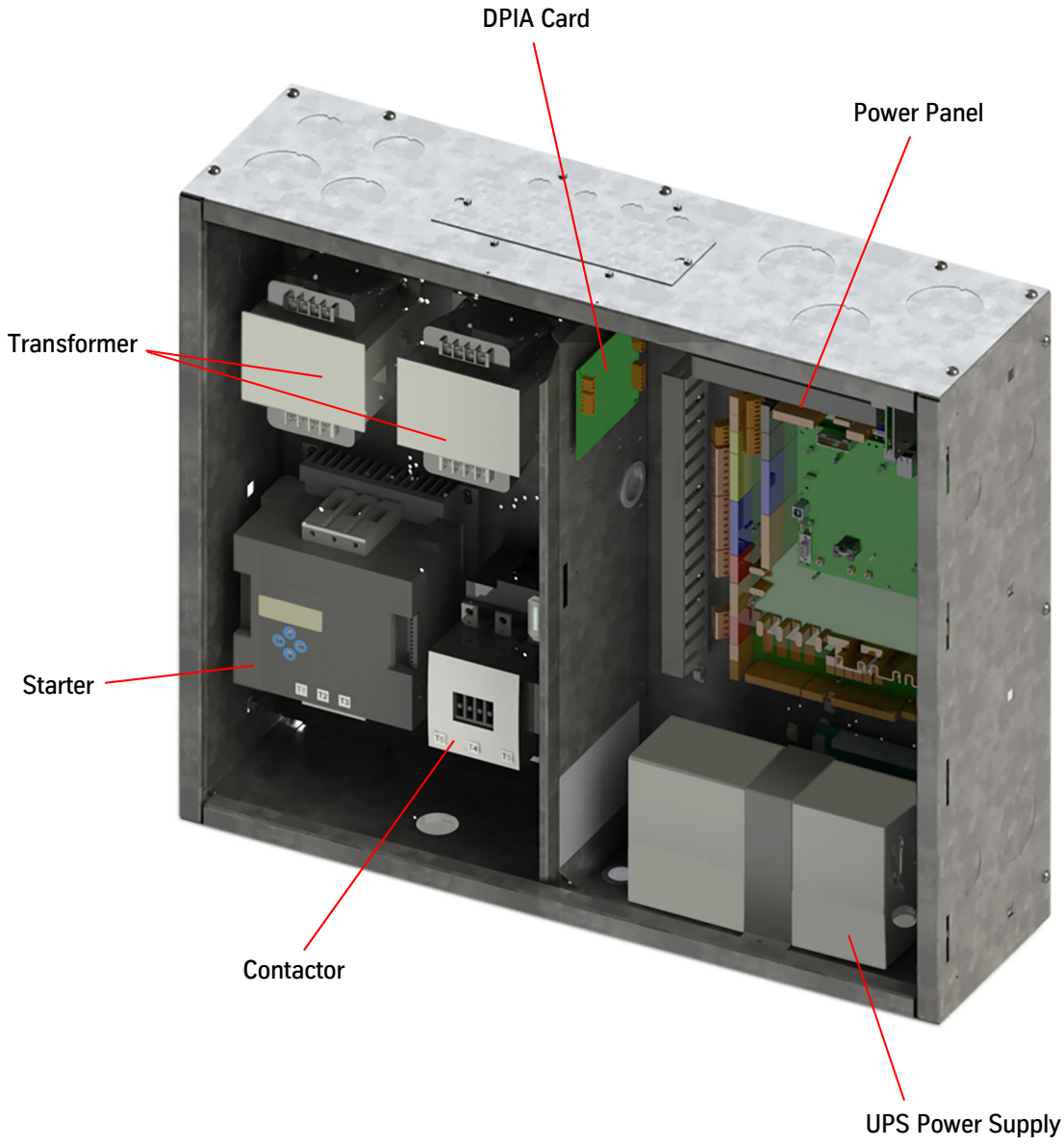
Before starting any procedure in this manual,

- read each procedure carefully and completely.
- give special attention to all Cautions and Warnings (see *Safety Precautions* for details).
- follow all procedures in the order written.
- make sure that all test equipment, supplies, and parts are on hand. Maintain these in or near the machine room for future use.

All standard safety precautions must be followed on the job site.

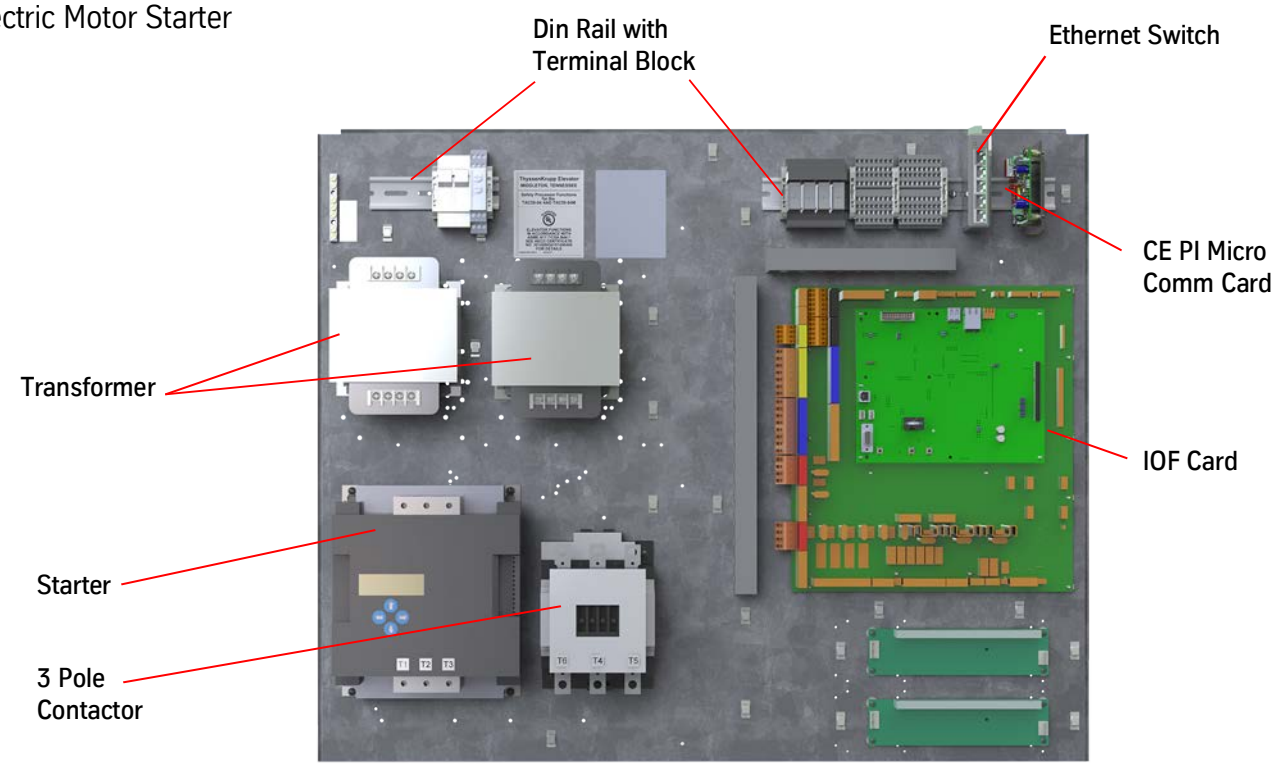
ELECTRICAL COMPONENTS

ICON32 Controller Assembly (2102BB)

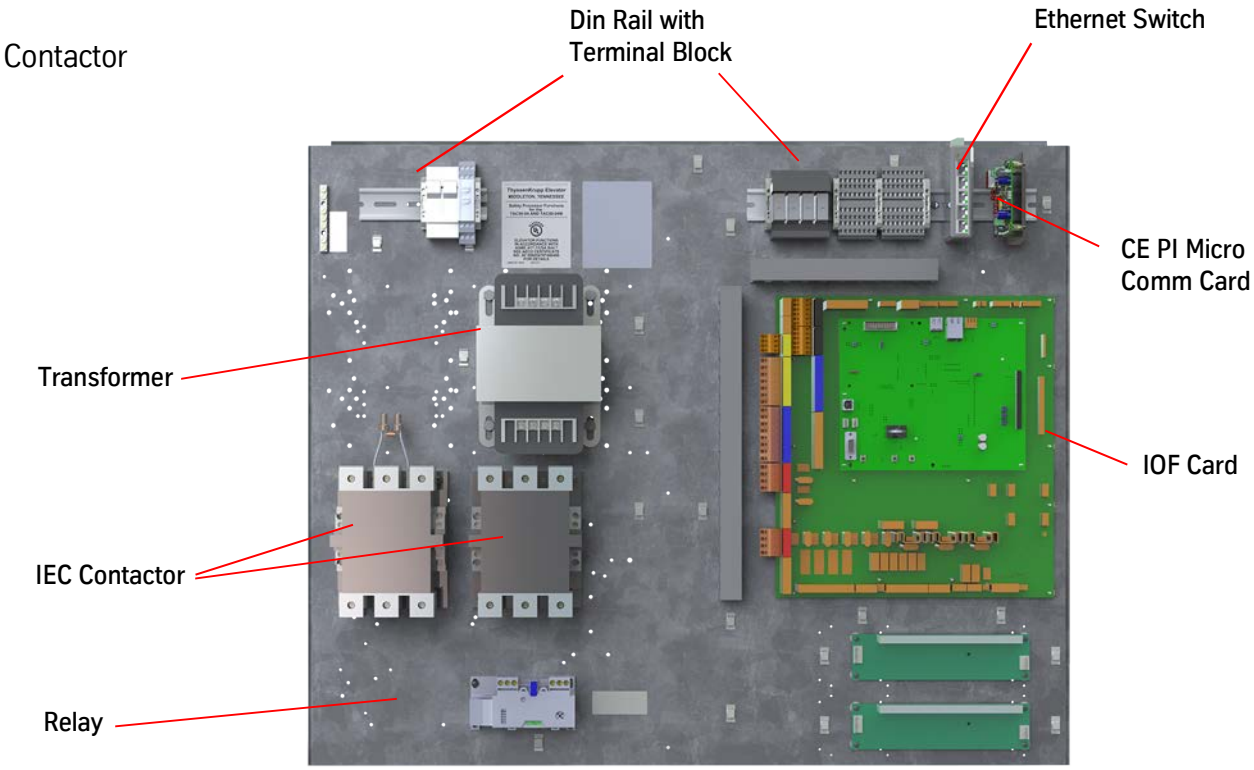


Power Panels

Electric Motor Starter

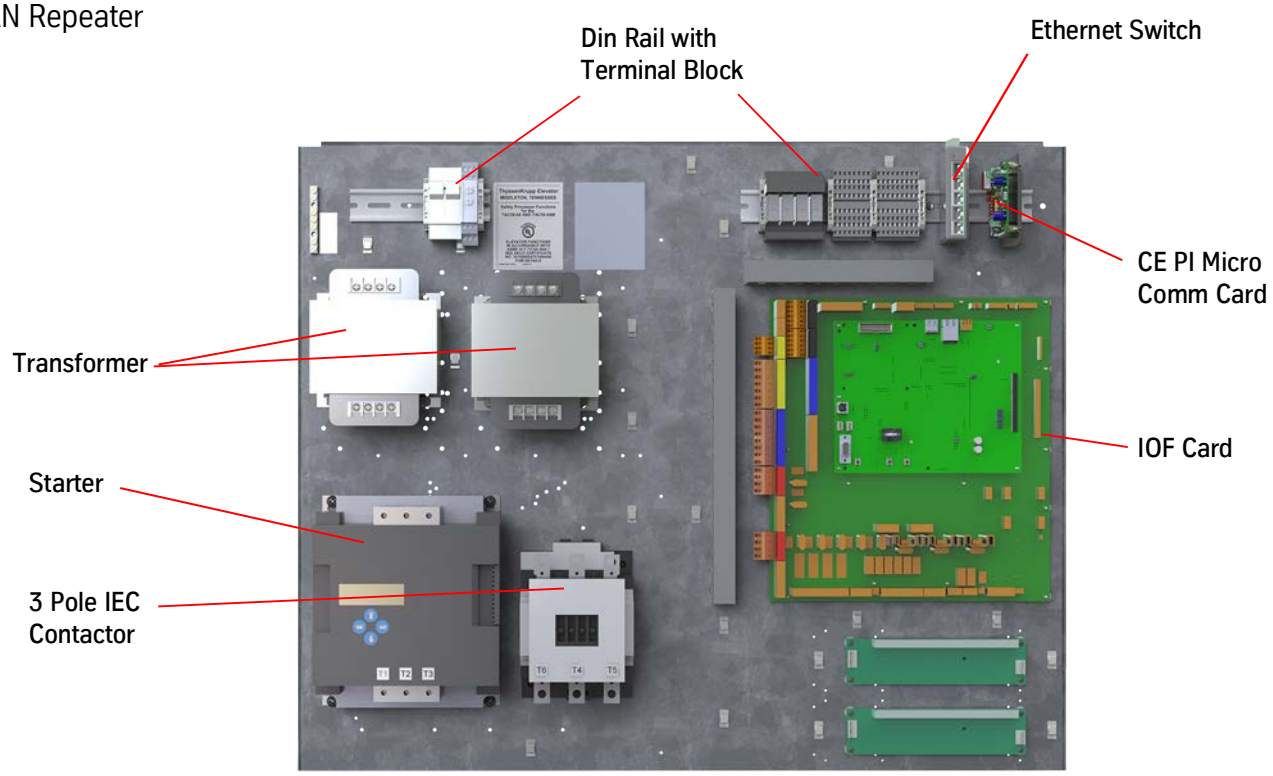


IEC Contactor

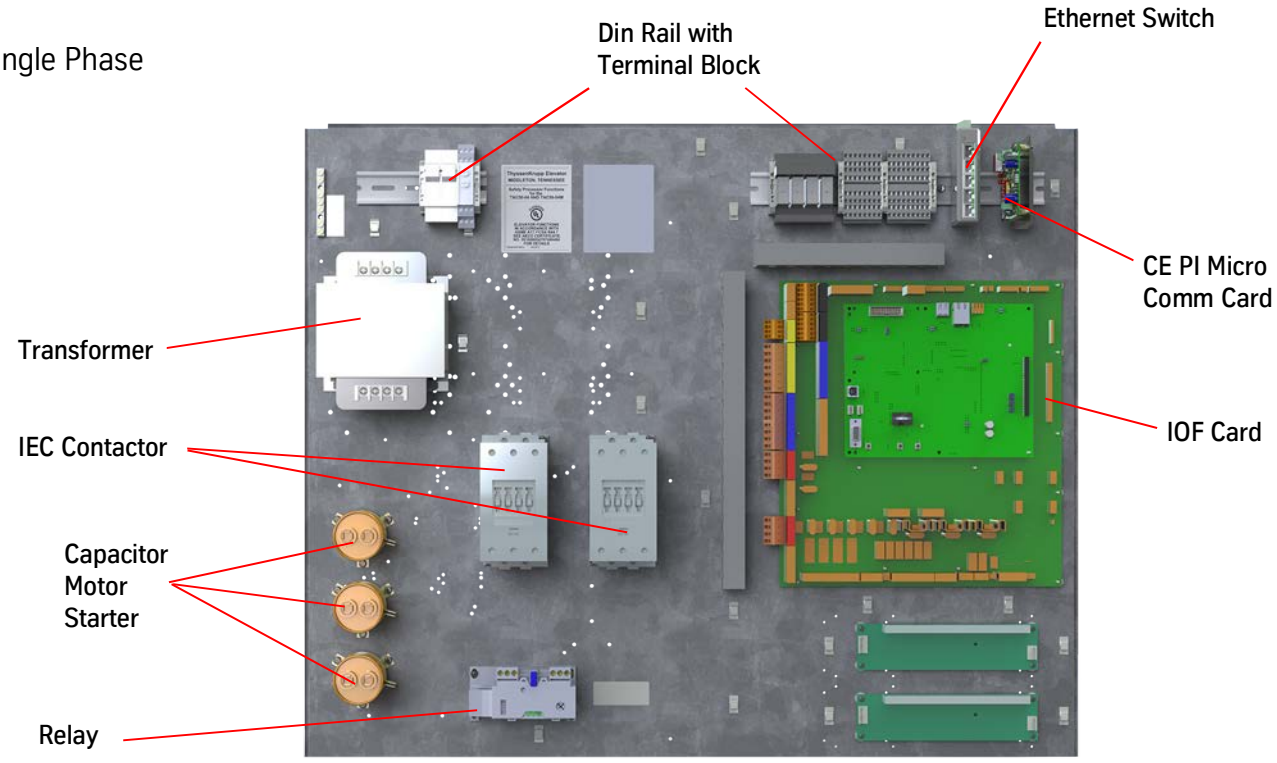


Power Panels
(continued)

CAN Repeater



Single Phase



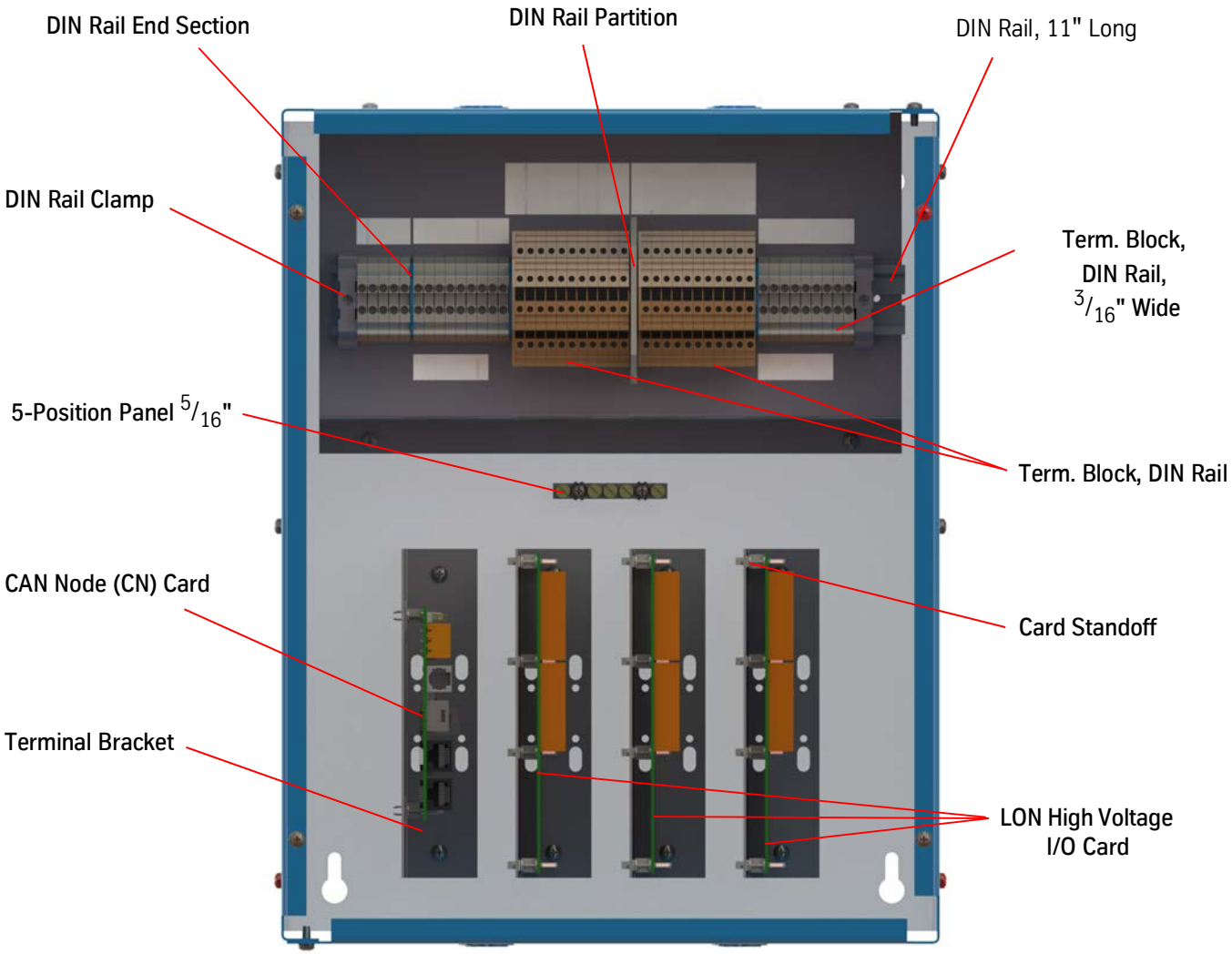
Replacement Parts List - Controller Assembly (2102BB)

For Replacement Cards, see Replacement Cards and Fuses on page 5-20.

ITEM	PRINT NO.	DESCRIPTION
Contactor	298BB1	Relay Contactor, 3NO/1NC, 24VDC
	298AH49	3 Pole IEC Contactor, 78A
	298AH28	3 Pole IEC Contactor, 157A
	298AH31	3 Pole IEC Contactor, 252A
	298AR101	IEC Contactor
	298AR104	IEC Contactor
Starter	787AF1	Electronic Starter, 200-460V, 22A
	787AF10	Electronic Starter, 575V, 157A
	787AF11	Electronic Starter, 200-460V, 68A
	787AF12	Electronic Starter, 200-460V, 80A
	787AF13	Electronic Starter, 575V, 68A
	787AF2	Electronic Starter, 575V, 22A
	787AF3	Electronic Starter, 200-460V, 55A
	787AF4	Electronic Starter, 575V, 55A
	787AF5	Electronic Starter, 200-460V, 105A
	787AF6	Electronic Starter, 575V, 105A
	787AF7	Electronic Starter, 200-460V, 130A
	787AF8	Electronic Starter, 575V, 130A
	787AF9	Electronic Starter, 200-460V, 157A
	787AF14	Electronic Starter, 200-230V, 252A
	238CF2	Single Phase Capacitor, 60Uf
Fuseblock/Fuse Panel	412BC1	Fuseblock DIN Rail, 1 Pole, $^1/_4$" x $1^1/_4$"
	412BD1	Fuseblock DIN Rail, End Plate
	412BE2	Fuseblock DIN Rail, 600V, 30A, 2 Pole
	412BE3	Fuseblock DIN Rail, 600V, 30A, 23 Pole
	409BP20	Fuse Panel, FNQ, 600V, 3A
	409BP23	Fuse Panel, FNQ, 600V, 4A
	409BP24	Fuse Panel, FNQ, 600V, 5A
	409BP25	Fuse Panel, FNQ, 600V, 6A
	409BP28	Fuse Panel, FNQ, 600V, 8A
	409BP30	Fuse Panel, FNQ, 600V, 10A
	409BP31	Fuse Panel, FNQ, 600V, 12A
	409CR200	Fuse, 600V, 0.2A
	409BR5	Fuse Panel, MDA, 1A
	409BR7	Fuse Panel, MDA, 2A
	409BR9	Fuse Panel, MDA, 3A
	409BR10	Fuse Panel, MDA, 4A
	409BR11	Fuse Panel, MDA, 5A
	409BR12	Fuse Panel, MDA, 6A
	409BR13	Fuse Panel, MDA, 7A
	409BR14	Fuse Panel, MDA, 8A
	409BR15	Fuse Panel, MDA, 10A

ITEM	PRINT NO.	DESCRIPTION (cont.)
Relays	690BB10	Overload Relay, Curovl Series, 5.5-21A
	690BB11	Overload Relay, Curovl Series, 22-39A
	690BB12	Overload Relay, Curovl Series 48, 40-51A
	690BB13	Overload Relay, Curovl Series 48, 52-99A
	690BB14	Overload Relay, Curovl Series 48, 100-199A
	558AX2	Ejector Relay
	770BK2	Rail Mount Socket Relay, DPDT
	690CA3	DPDT PCB Relay, 6A, 24VDC
	690CA5	DPDT PCB Relay, 6A, 110VDC
	690CJ1	DPDT RT Series Relay, 115VAC
	200ALN1	Michigan 2000 Fire Service Kit
	804BC2	Socket Relay Suppressor, Diode DC
	804BF1	Relay Contactor Suppressor, Diode DC
	690AJ8	Reverse Phase Relay, 208-480VAC
	690AJ7	Reverse Phase Relay, 575VAC
Power Supply	672BW1	Power Supply, 24VDC, 50W
	672BX1	Power Supply, 24VDC, 100W
	672BY1	Power Supply, 24VDC, 150W
	672AY3	Power Supply, UPS, 115VAC, 60Hz, 500VA, 300W
Terminal Block	834CC9	Terminal Block Rail, 180°, Gray
	834AN7	Terminal Block Panel, $^{5}/_{16}$"
	834CF11	Terminal Block Rail, End Plate, Black
	834CG1	Terminal Block DIN Rail, End Bracket
	834DF1	Terminal Block Rail, $^{3}/_{8}$", Green/Yellow with Ground
	834CX1	Terminal Block Rail Partition, Gray
	834DH1	Terminal Block Rail, $^{5}/_{8}$", Green/Yellow with Ground
	834AP1	Terminal Block, Ground Lug
Transformers	874DA1	Transformer, PR 208V, SEC 115/115V, .5KVA, 1PH, 60Hz
	874DA2	Transformer, PR 240/240V, SEC 115/115V, .5KVA, 1PH, 60Hz
	874DA4	Transformer, PR 380/400/415V, SEC 115/115V, .5KVA, 1PH, 50/60Hz
	874DA5	Transformer, PR 600V, SEC 115/115V, .5KVA, 1PH, 60Hz
	874DA6	Transformer, PR 200/220V, SEC 115/115V, .5KVA, 1PH, 50Hz Only
	874DB1	Transformer, PR 208V, SEC 115/115V, .75KVA, 1PH, 60Hz
	874DB2	Transformer, PR 240/240V, SEC 115/115V, .750KVA, 1PH, 60Hz
	874DB3	Transformer, PR 600V, SEC 115/115V, .750KVA, 1PH, 60Hz
	874DC1	Transformer, PR 200/220V, SEC 115/115V, .750KVA, 1PH, 50/60Hz
	874DC3	Transformer, PR 380/400/415V, SEC 115/115V, .750KVA, 1PH., 50/60Hz
Miscellaneous	200BWN001	ICON32 Front Inspection Station
	200BWN002	ICON32 Rear Inspection Station
	200BMR001	Selection Harness Extension
	196BMN001	Bracket Assembly, CAN Repeater (no CAN lobby panel)
	196BMN002	Bracket Assembly, CAN Repeater
	196BMK001	Bracket Assembly, MicroComm Card
	541AY1	Ethernet Switch Interface Module
	370AJ13	P24GS Module

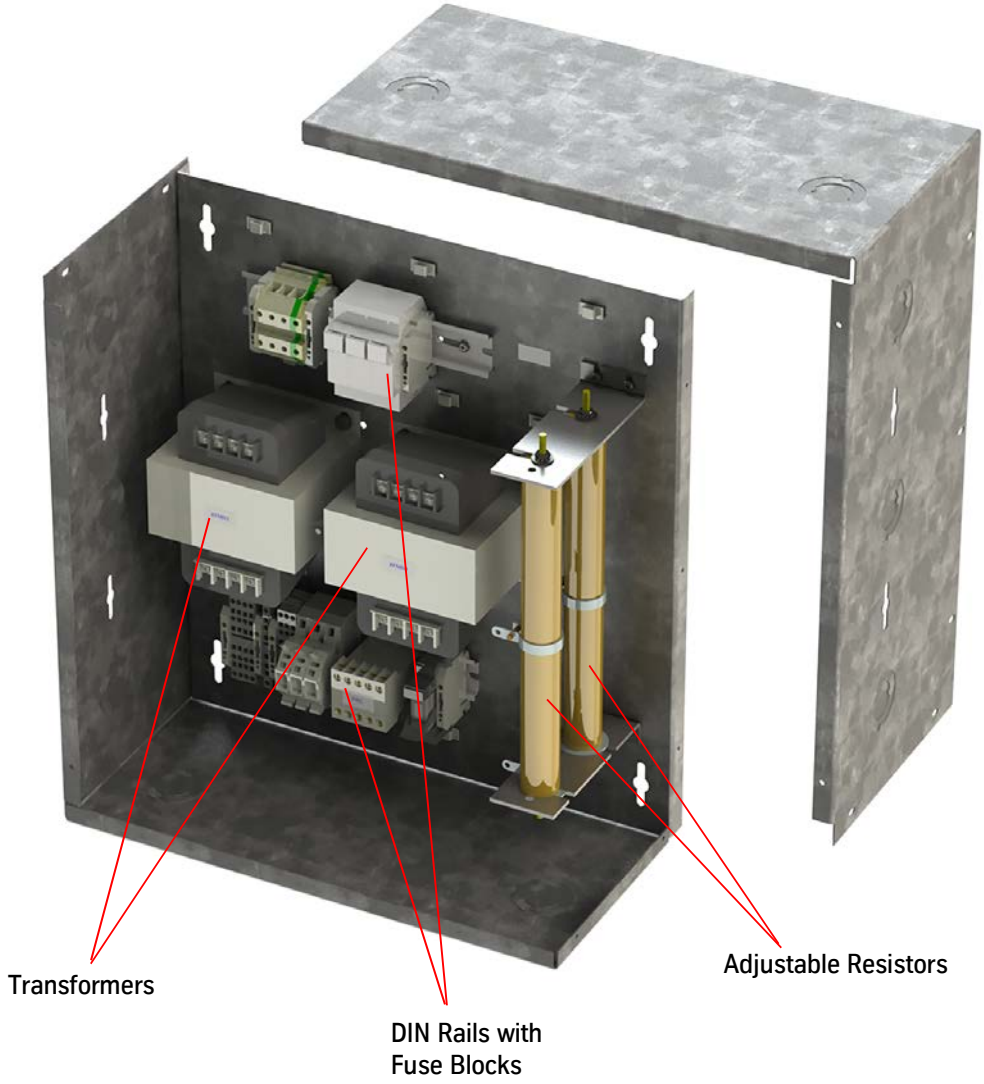
Freight Door Cabinet Assembly (2104AF)



Not Shown:

PRINT NO.	DESCRIPTION
220DK500	Cable Assembly, Modular, CAT-5 8-8, 6" Long
220DK1	Cable Assembly, Modular, CAT-5 8-8, 12" Long
200CCN001	CNA Freight Door Kit

Manual Freight Door Cabinet Assembly (2104BL)

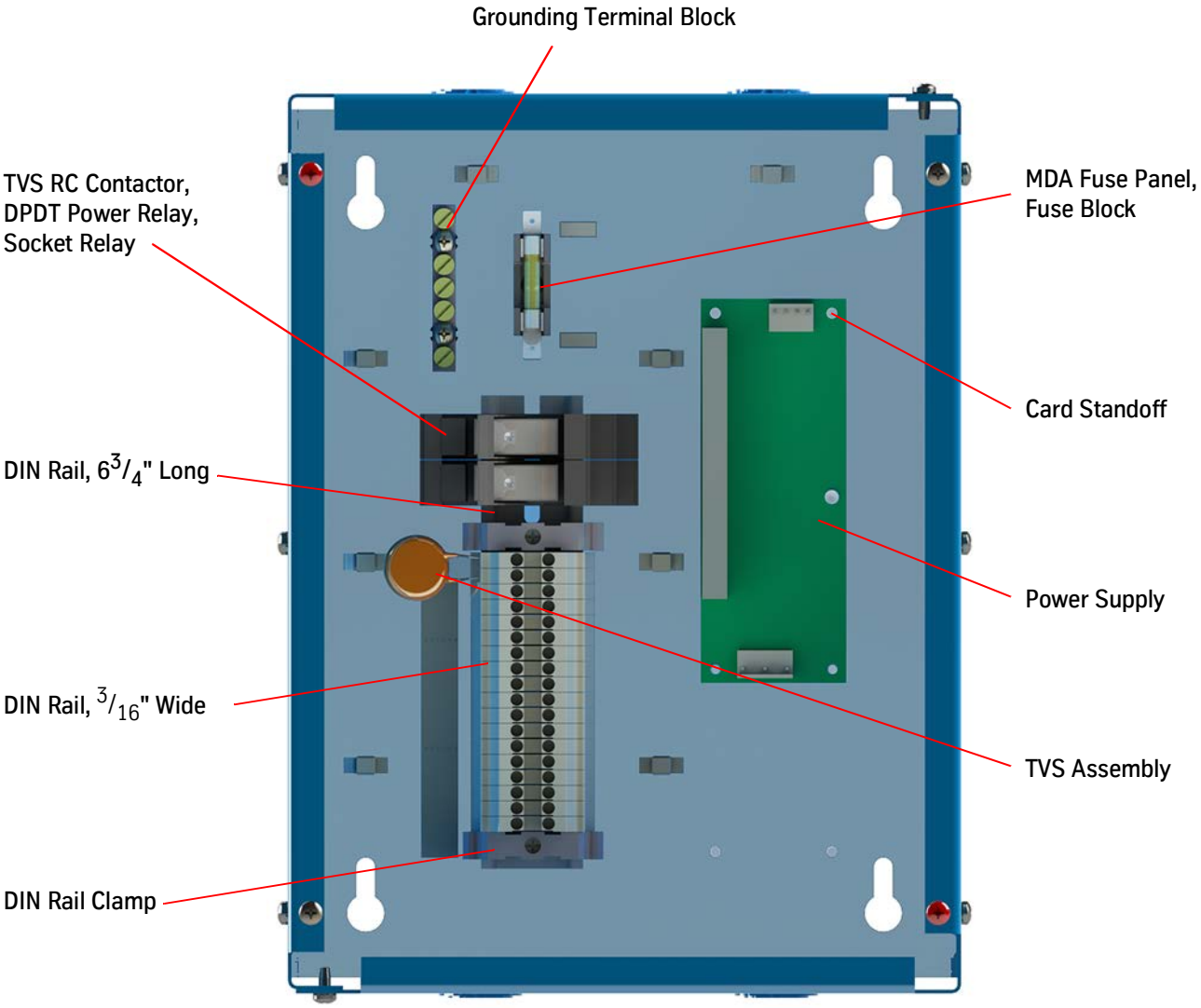


Not Shown:

Cover

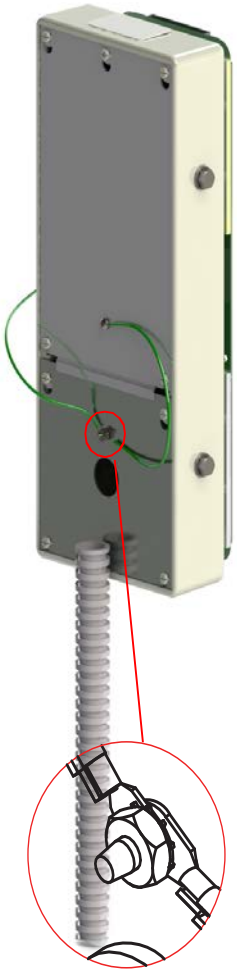
CNA Freight Door Kit (200CCN001)

Fire Service Cabinet Assembly (2104AE)

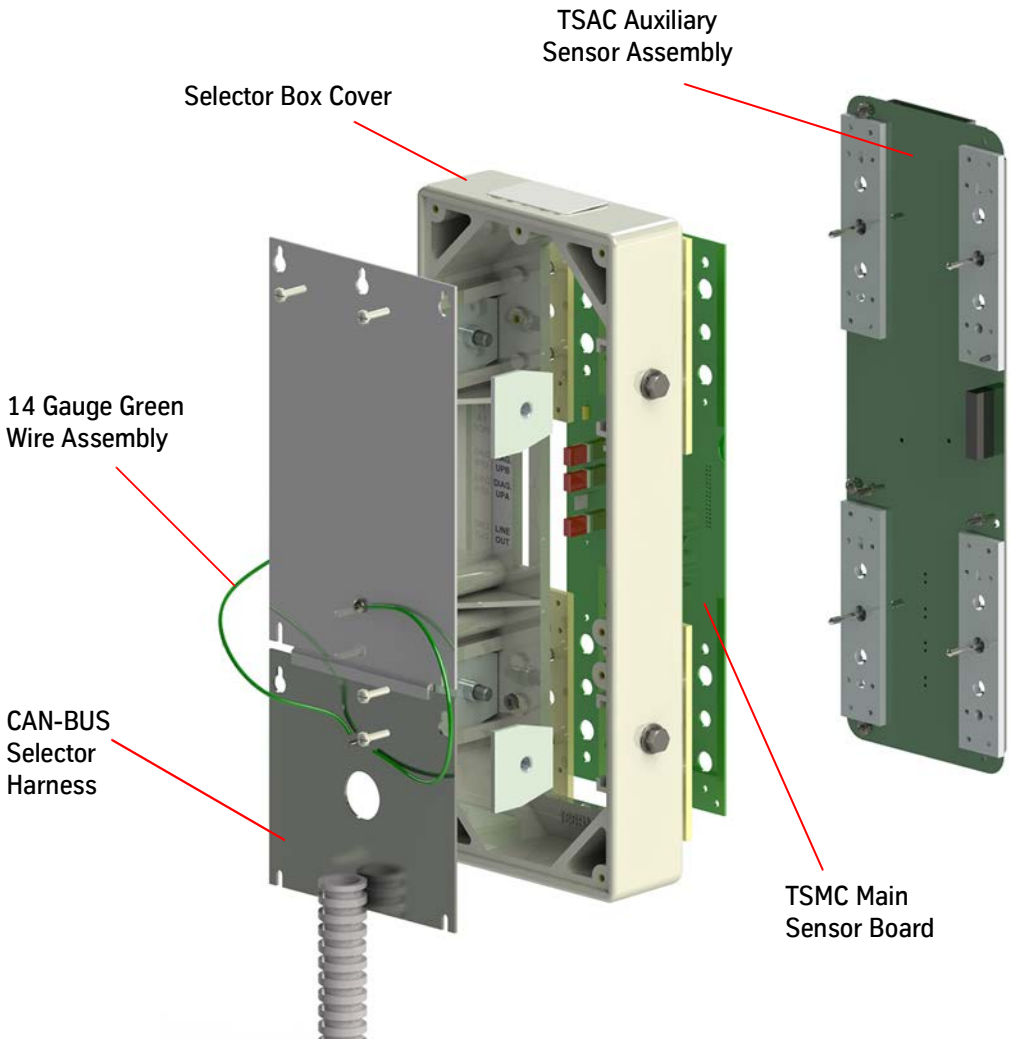


Not Shown:
Cover
CNA Freight Door Kit (200CCN001)

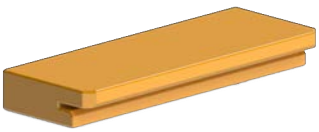
Selector Assembly (2105AG)



Tighten thumb screws just enough to flatten helical lock washers on the thumb screws.

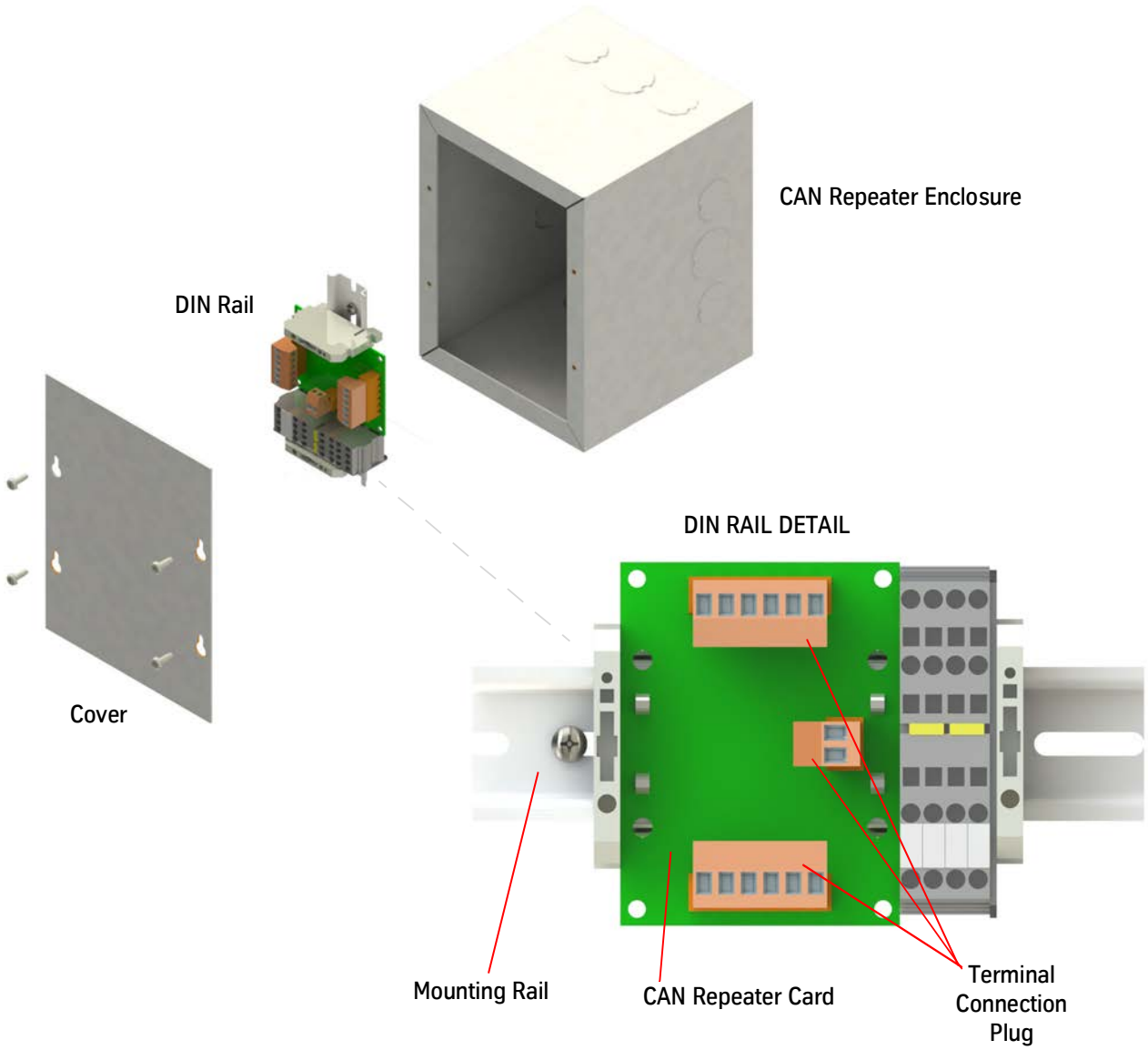


Magnet Alignment Tool

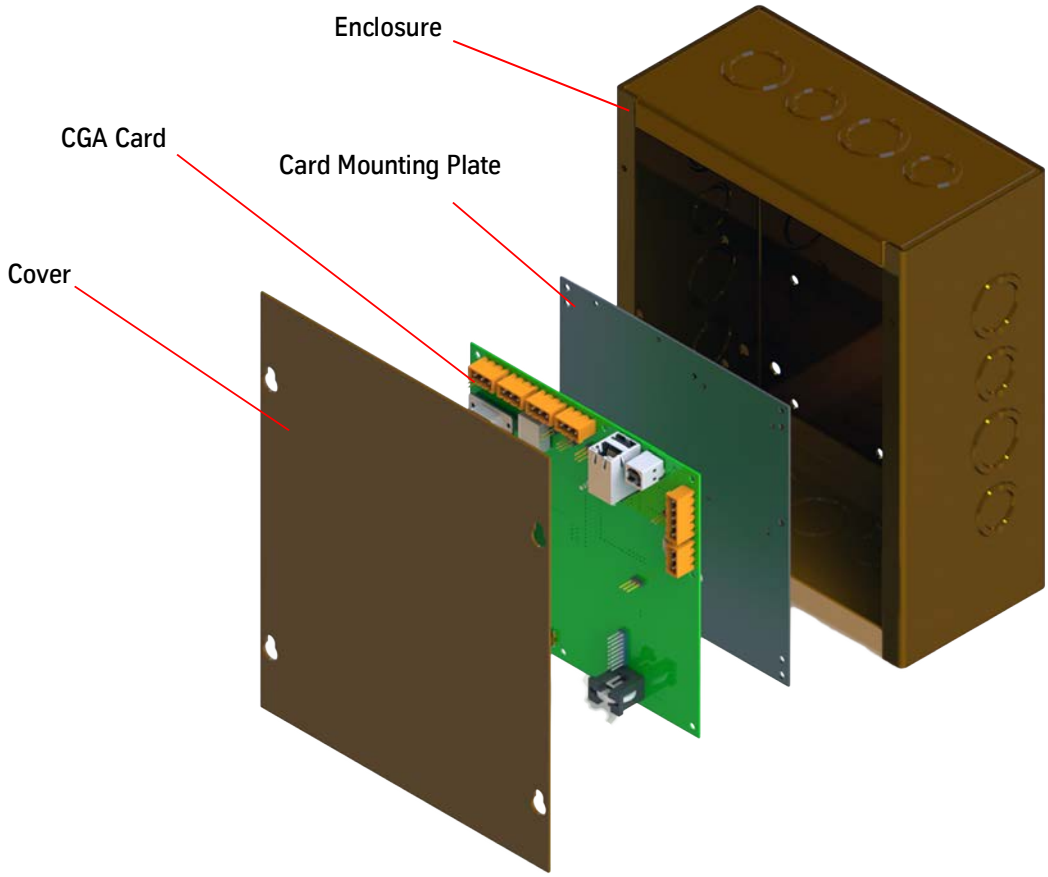


Floor Magnet Template

CAN Repeater Cabinet Assembly (2104AP)



CGA Assembly (2104AAA4)



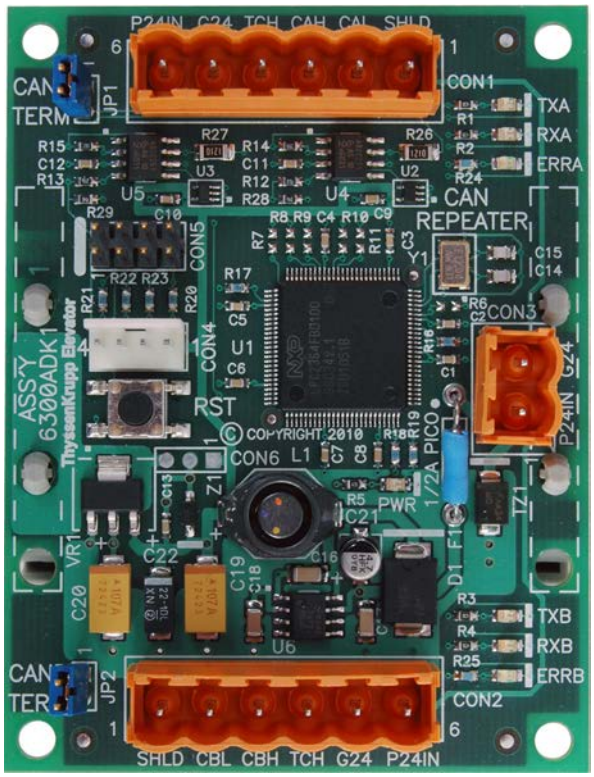
Not Shown:

CGA Router Software Kit (200AWL3)

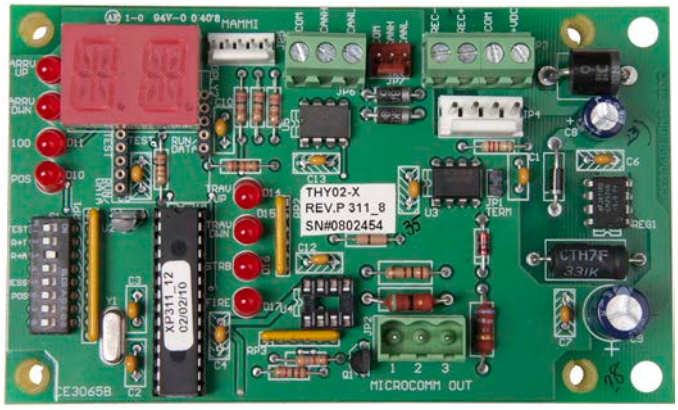
Replacement Cards and Fuses

Shown alphabetically by card name.

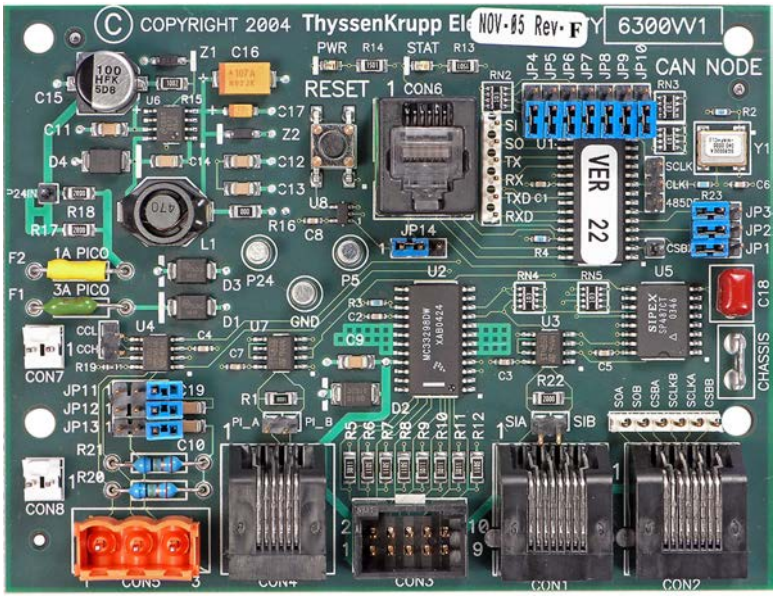
CAN Repeater Card (6300ADK)



CE PI MicroComm Card (6300ACA)

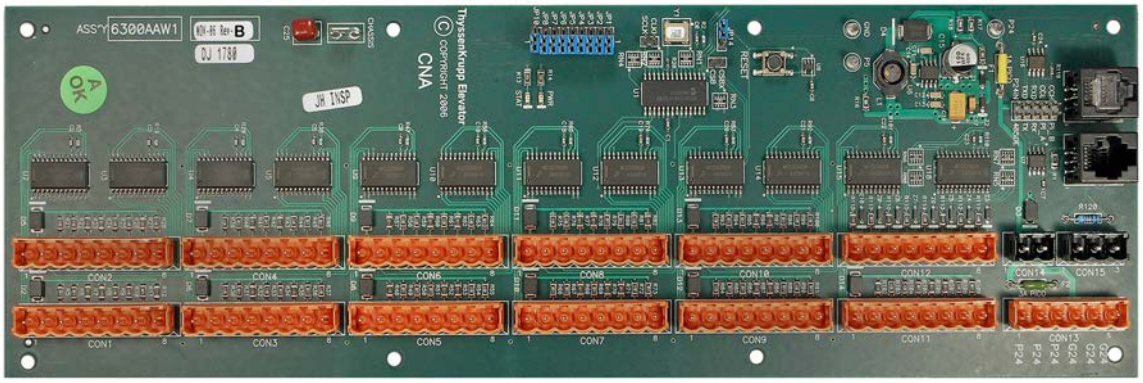


CN Card (6300VV)

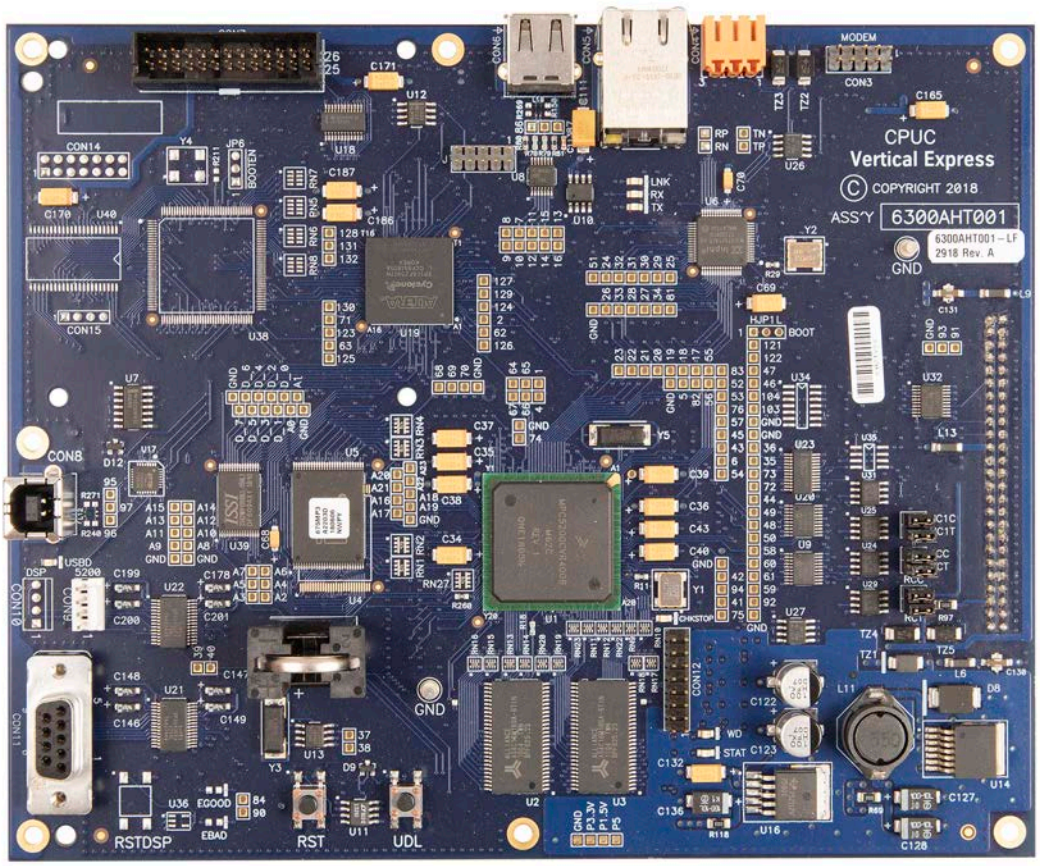


Cards and Fuses
(continued)

CNA Card (6300AAW)

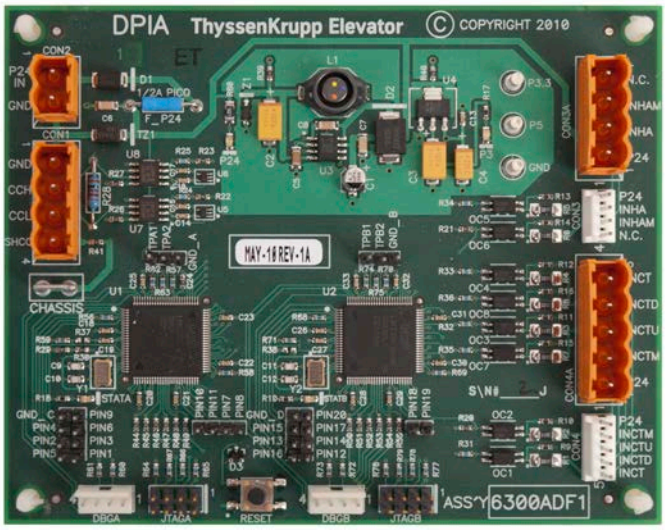


CPUC Card (6300AHT)

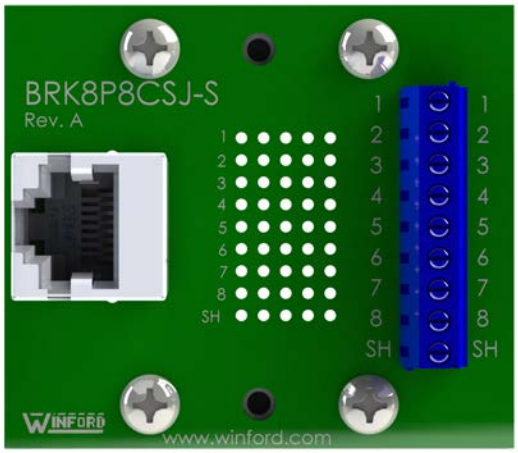


Cards and Fuses
(continued)

DPIA Card 6300ADF1

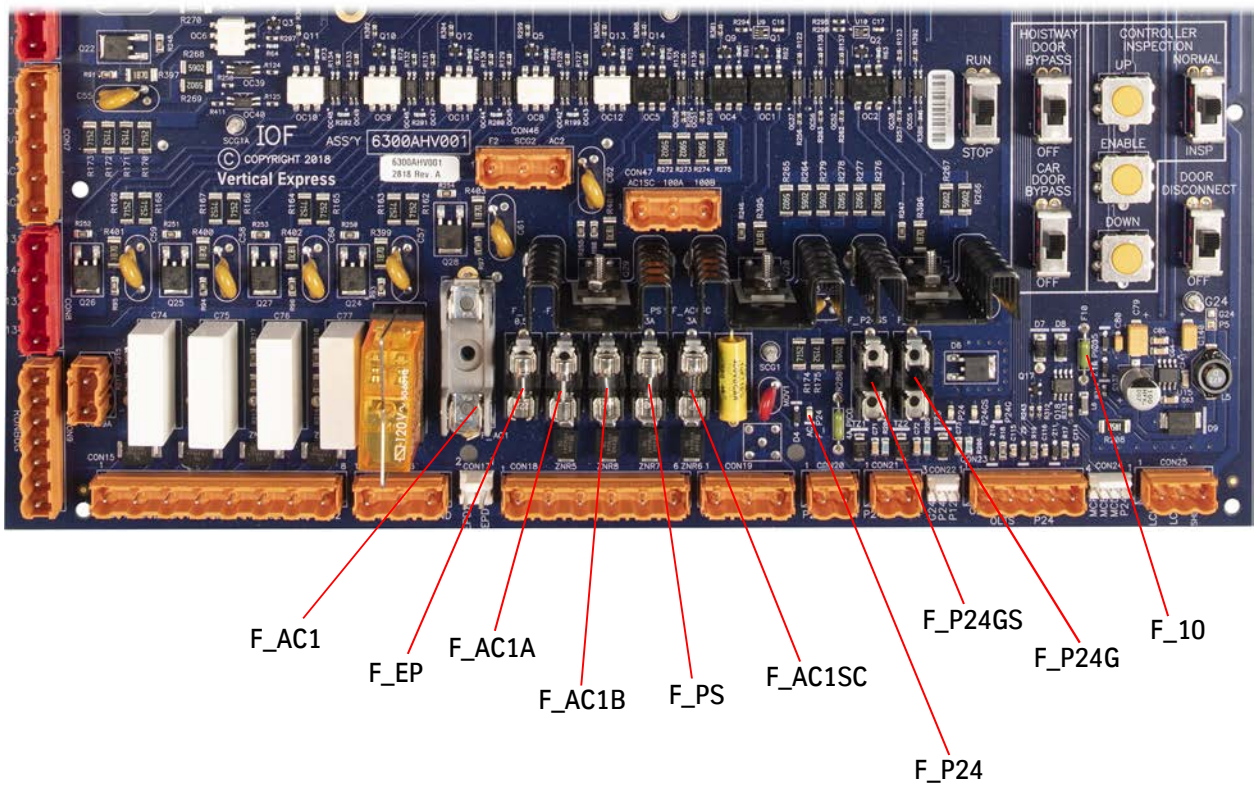


DIN Rail, RJ45 Shielded Jack Breakout Card (6300AJA001)



Cards and Fuses
(continued)

IOF Card (6300AHV001)

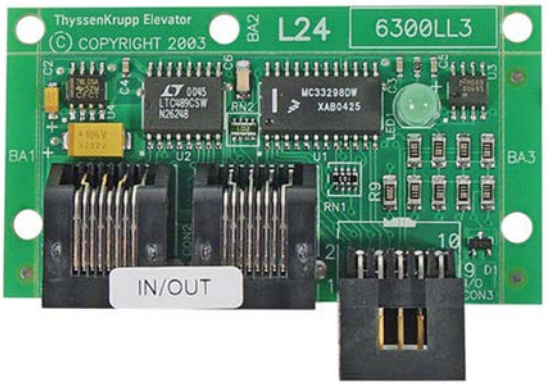


PRINT NO.	DESCRIPTION	DESIGNATOR
409CP3000	Fuse Panel, 2AG 350V Fast 3.0A	F_AC1SC
409CW500	Fuse Panel, 2AG 125V Slow 0.50A	F_AC1B, F_EP
409CW3000	Fuse Panel, 2AG 250V Slow 3.0A	F_PS
409CW6000	Fuse Panel, 2AG 250V Slow 6.0A	F_AC1A
409AE7	Fuse, PCB PICO 125V 1A	F10
409AE13	Fuse, PCB PICO 125V 4A	F_P24
409CW500	Fuse Panel, 2AG 250V Slow 0.50A	Varies by job. See label inside the controller.
409CW1000	Fuse Panel, 2AG 250V Slow 1.0A	
409CW2000	Fuse Panel, 2AG 250V Slow 2.0A	
409CW4000	Fuse Panel, 2AG 125V Slow 4.0A	
409CW5000	Fuse Panel, 2AG 125V Slow 5.0A	

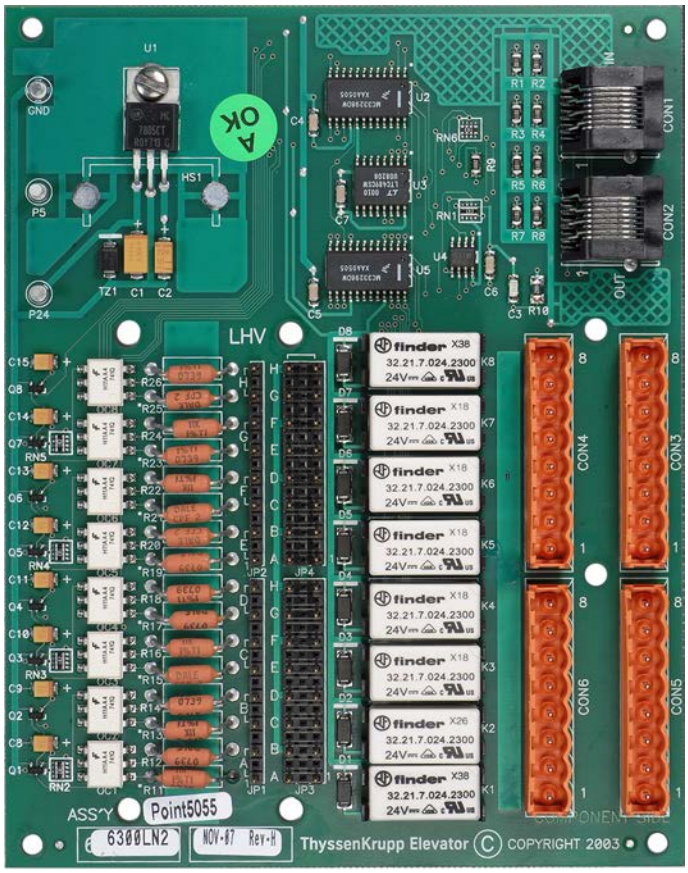
Cards and Fuses

(continued)

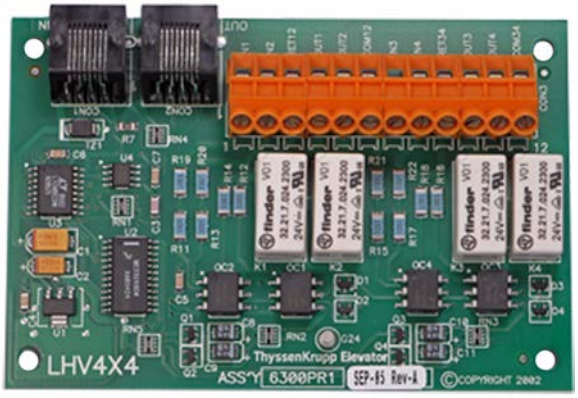
L24 Card (6300LL)



LHV Card (6300LN)

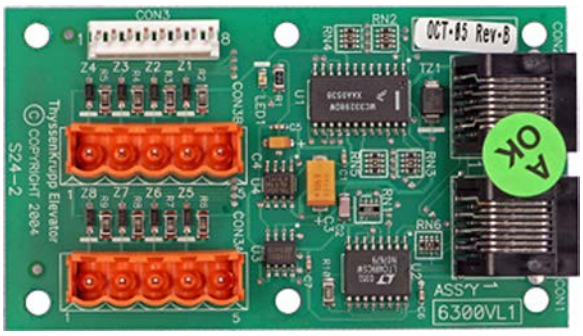


LHV 4X4 Card (6300PR)



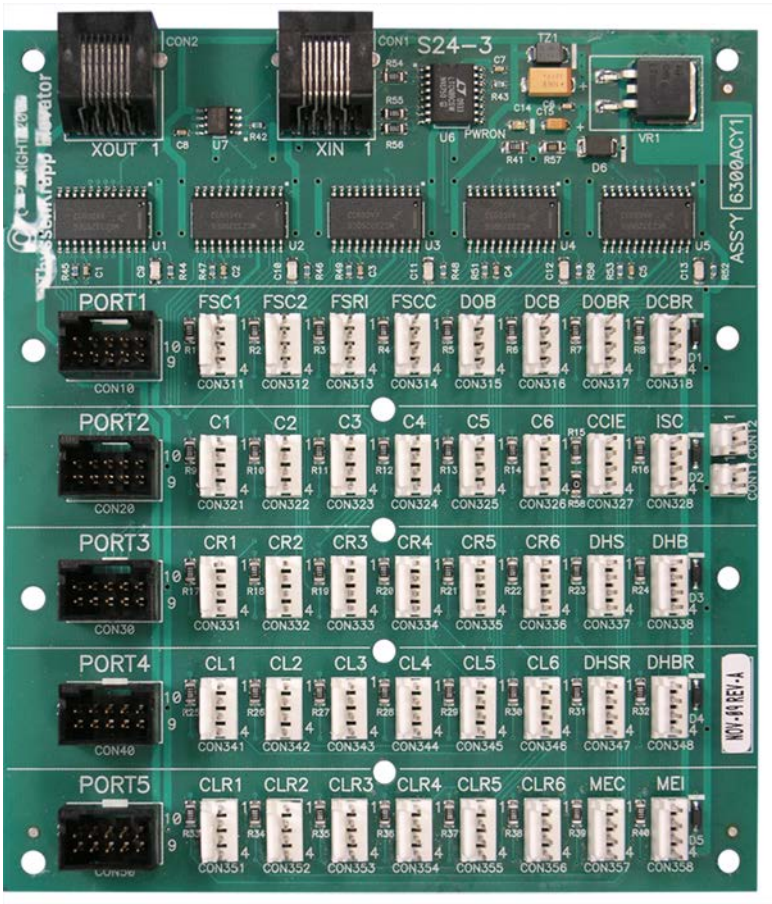
S24-1 Card (6300VC)

S24-2 Card (6300VL)

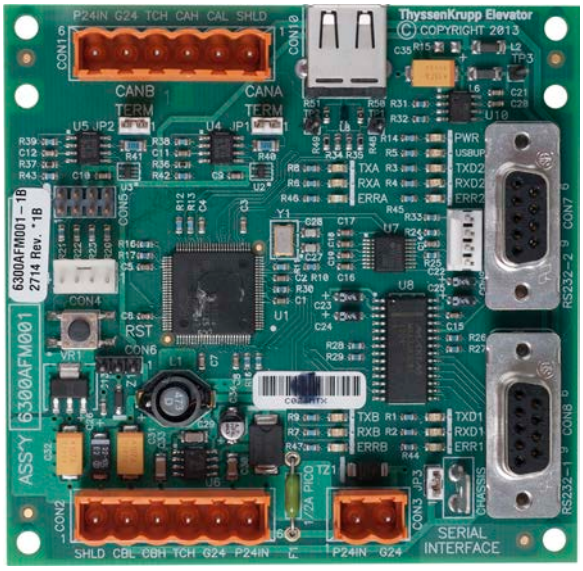


Cards and Fuses
(continued)

S24-3 Card (6300ACY)

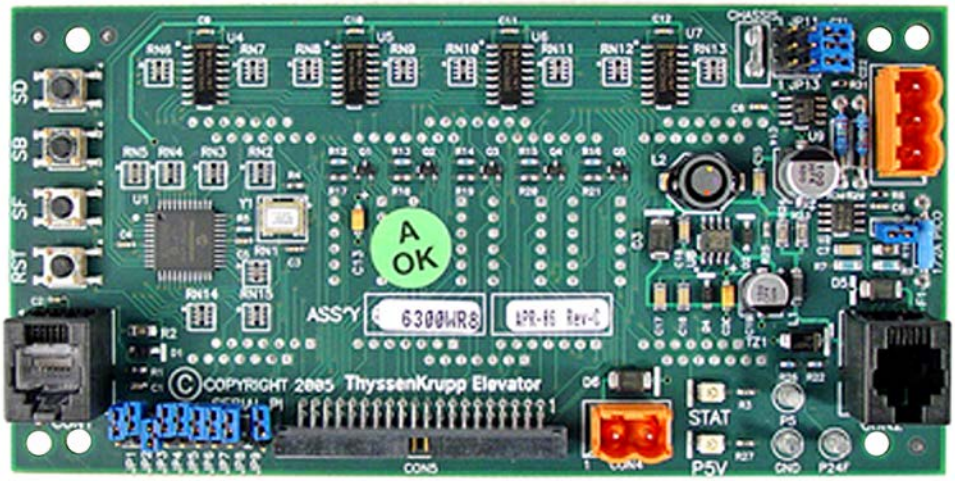


Serial Interface Card (6300AFM003)

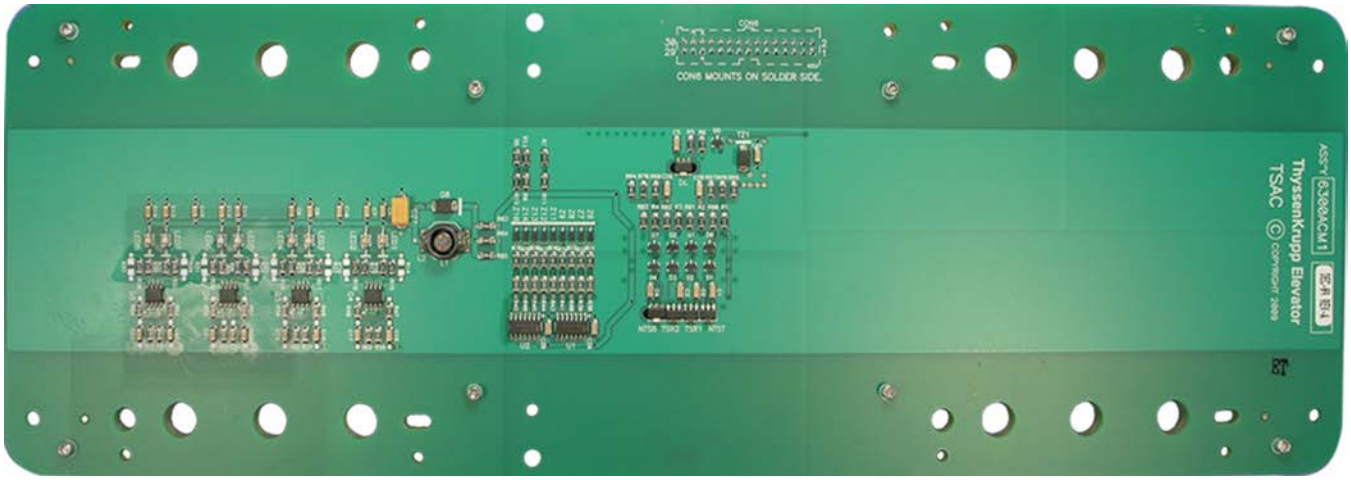


Cards and Fuses
(continued)

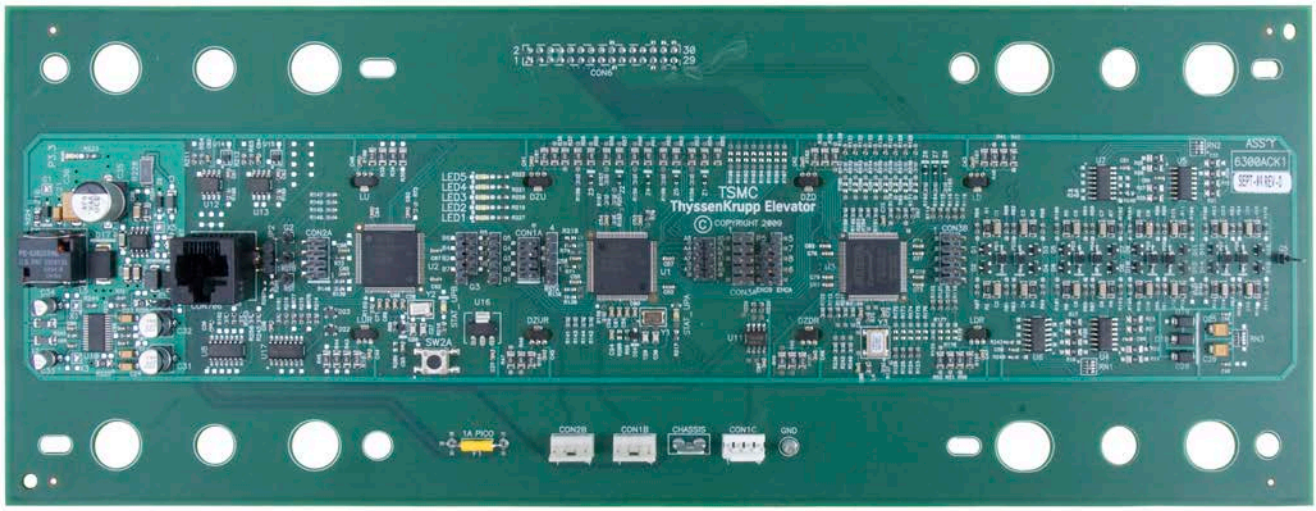
Serial PI Card (6300WR)



TSAC Card (6300ACM)

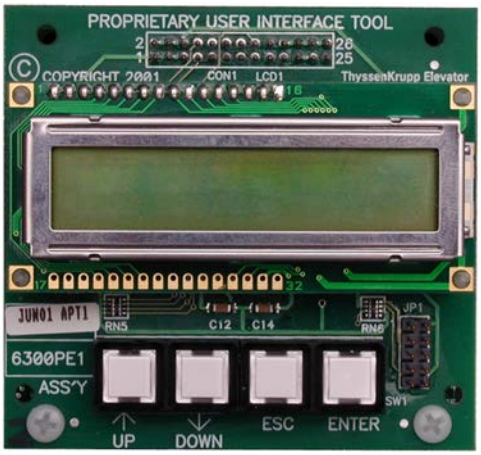


TSMC Card (6300ACK)



The User Interface Tool (UIT)

User Interface Tool
(6300PE1)
Order as an Owner's Service Tool (OST), which includes a new job image for the control system adjustment.



UP or DOWN - Scroll through menus, adjustments, and displays.

ESC - Exit the current level of a menu, adjustment, or display.

ENTER - Select a menu, adjustment, or display.

Overview of Adjustments, Parameters, and Commands

1. Make all adjustments when the doors are idle.
2. Before the card is reset or powered down, save any adjustment changes to Flash.
3. When the adjustment is a speed value:

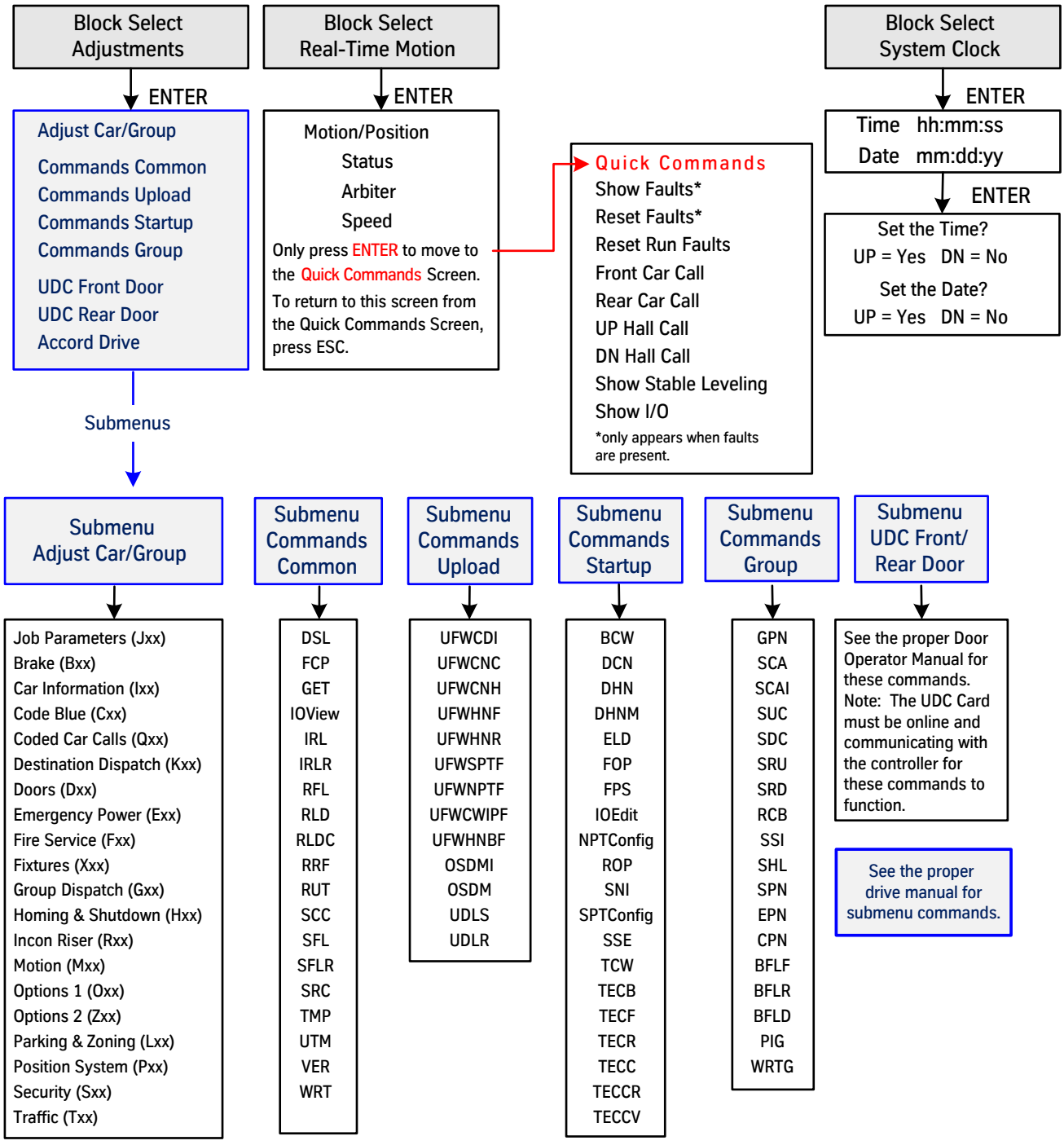
   Increase the value = The door runs faster.
   Decrease the value = The door runs slower.
4. When the adjustment is an acceleration or deceleration rate value:

   Increase the value = The door accelerates or decelerates faster.
   Decrease the value = The door accelerates or decelerates slower.
5. When the adjustment is a distance or point value:

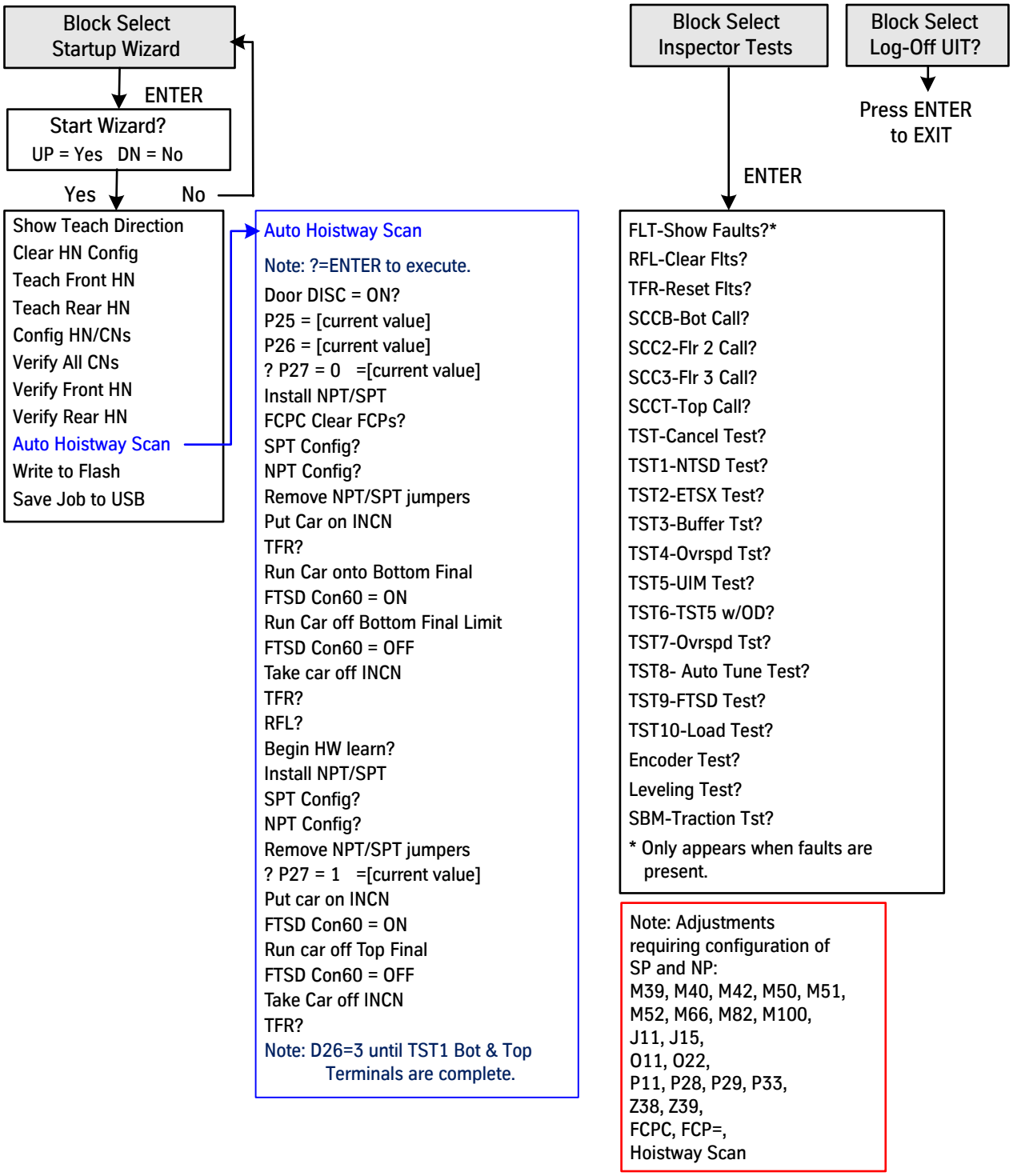
   Increase the value = The distance or point is further from either the Door Open Limit (DOL) or Door Close Limit (DCL), depending on whether the door is opening or closing.

   Decrease the value = The distance or point is closer to either the Door Open Limit (DOL) or Door Close Limit (DCL), depending on whether the door is opening or closing.
6. Store door position at 0 on DCL and at Travel (TRV) on DOL.
7. Speeds are (+) in the opening direction and (–) in the closing direction.

The UIT Menu Tree



UIT Menu Tree
(continued)

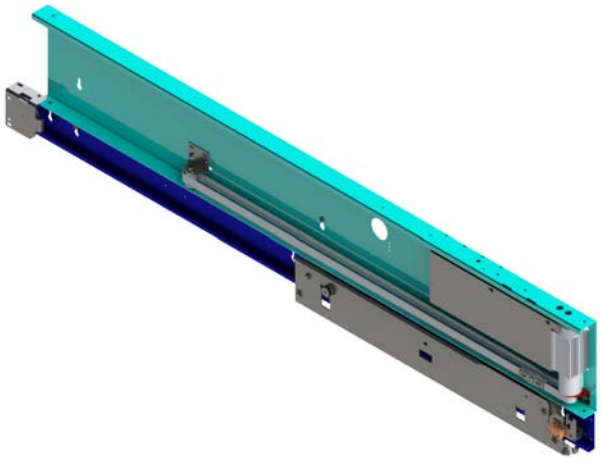


LD-16 Door Operator

Features

- Car Door Interlock (CDI)
- Fascia Reduction (Local AHJ)
- Positive Close Clutch
- 3 Phase PM induction motor
- 2 motors, 2 boards
- 2 power supply options: 110VAC, 230VAC
- Communications: CAN, 485, Discrete
- Diagnostic tools: IMS, UIT
- Driven from the hanger rather than the door panels.
- Leading edges of car and hatch doors must now align at closed position.
- Simple learn process requires minimal adjustment with given profile options.

Side-Opening Single-Speed Assembly (3002BG)



Side-Opening Two-Speed Assembly (3002BH)

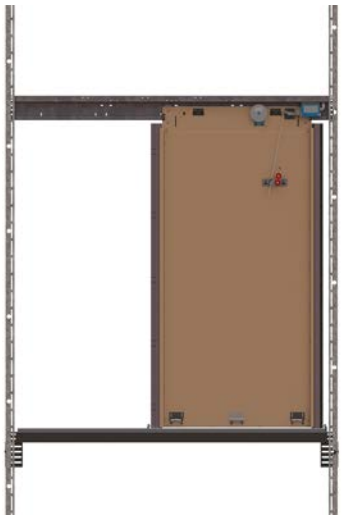
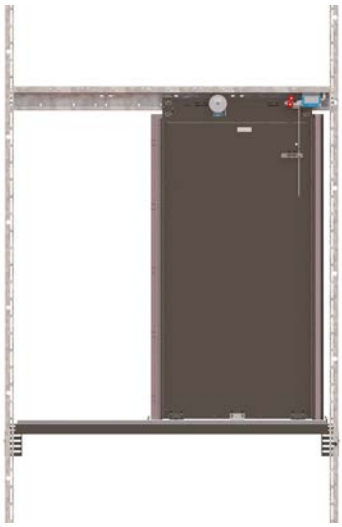
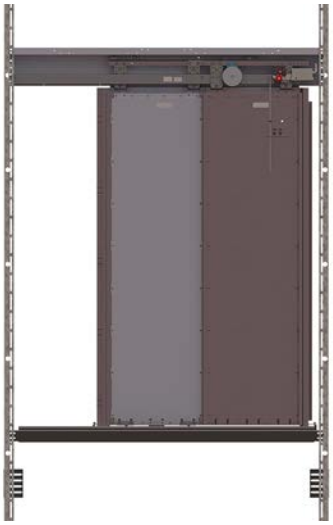
Center-Opening Single-Speed Assembly (3002BF)

Center-Opening Two-Speed Assembly (3002BJ)

Replacement Parts (3002BG, 3002BH, 3002BF, 3002BJ)

ITEM	PART NO.	DESCRIPTION
1	9732100	Hanger Roller, D94 x 19 mm with Bushing
2	9732202	Counter Roller, D30 x 9 mm with Shaft
3	9732305	Buffer Cup
4	9731714	Buffer
5	9731313	Door Contact
6	9731416	Door Contact Bridge
7	9731910	Synchronization Rope, L=5010
8	9732019	Synchronization Rope, L=1750 mm
9	9732317	Couple Contact Bridge
10	9732718	Rope Diverting Pulley, Left
11	9733012	Rope Diverting Pulley, Right
12	9747977	Rubber Puffer
13	9732240	Fixing Screw (for clutch), M8 x 20 mm
14	9733310	Belt, L=3000 mm, SS <=42"; SS-C/O,<=48"
15	9731325	Belt, L=3900 mm, All Others >46"
16	9731428	Belt Diverting Pulley
17	9731726	Belt Diverting Pulley, Left
18	9731829	Door Drive Control Box - Standard
19	9731921	Door Drive Control Box with CAN Interface
20	9732123	Motor Unit Midi, C/O, LH
21	9732226	Motor Unit Midi, C/O, RH
22	9732329	Motor Unit Supra, C/O, LH
23	9733127	Motor Unit Supra, C/O, RH
24	9733220	Motor Unit, Double Coupler Main, LH
25	9731349	Transformer (Universal Trafo)
26	9731337	Magnet Switch, L=220 mm
27	9731430	Magnet
28	9731933	Belt Fixing Clamp
29	9732238	Belt Fixing Clamp, Main Belt
30	9732330	Belt Fixing Clamp, Second Belt
31	9733139	Service Switch, Electrical Box
32	9736918	Wittur Programming Tool (WPT)

M721 Entrance

	Interlock Rollers Mounted to Door Panel	Interlock Rollers Mounted to Door Hanger
SINGLE SPEED		
2 SPEED		
CENTER OPENING		

Signal Fixtures

Traditional Fixtures

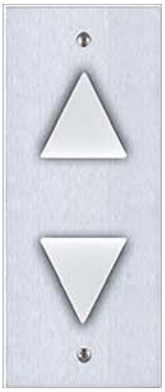
Car Operating Panel

Intermediate Hall Station with Fire Service Devices

Terminal Hall Station with Fire Service Signage

Intermediate Hall Station

Intermediate Hall Lantern



Push Buttons

Combination Hall Lantern & Dot Matrix Position Indicator

Signal Fixtures
(continued)

Signa4 Fixtures

Car Operating Panel

Intermediate Hall Station with Fire Service Devices and Signage

Intermediate Hall Station

Intermediate Hall Lantern

Terminal Hall Lantern

Combination Hall Lantern & Dot Matrix Position Indicator

Hall Position Indicator

Push Buttons

Signal Fixtures
(continued)

Vandal Resistant Fixtures

Car Operating Panel

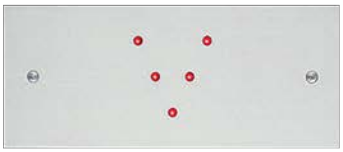
Intermediate Hall Station with Fire Service Devices and Signage

Terminal Hall Station with Fire Service Device

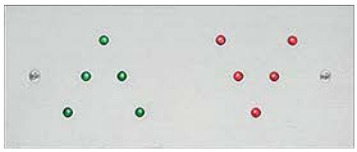
Intermediate Hall Station

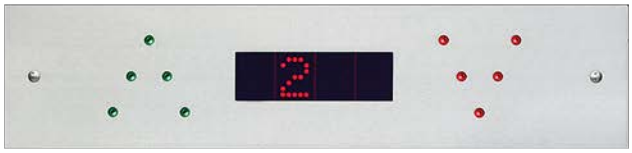
Push Buttons

Terminal Hall Lantern



Intermediate Hall Lantern



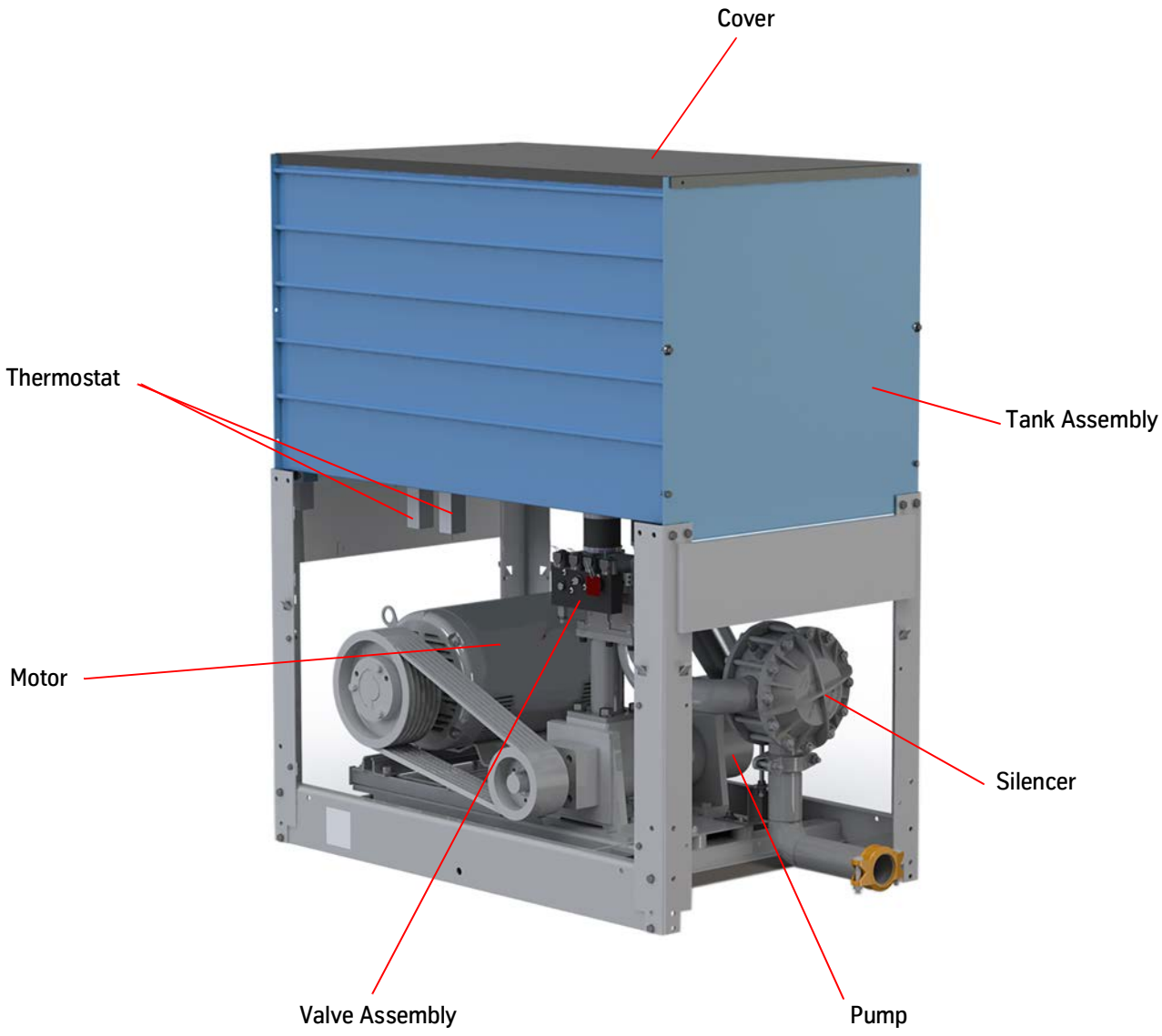


Combination Hall Lantern & Dot Matrix Position Indicator

MECHANICAL COMPONENTS

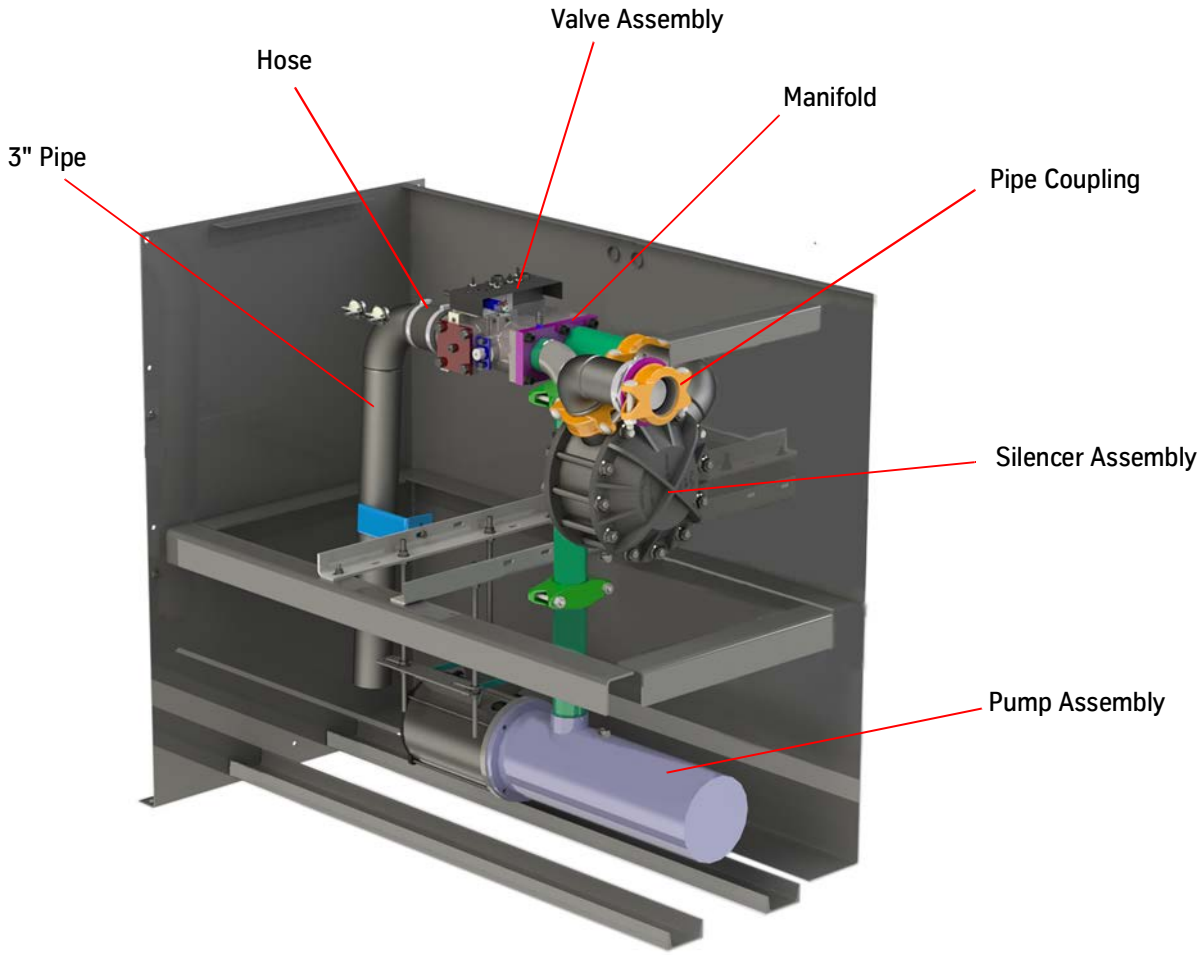
Dry Power Unit - AP

7501AE1 shown

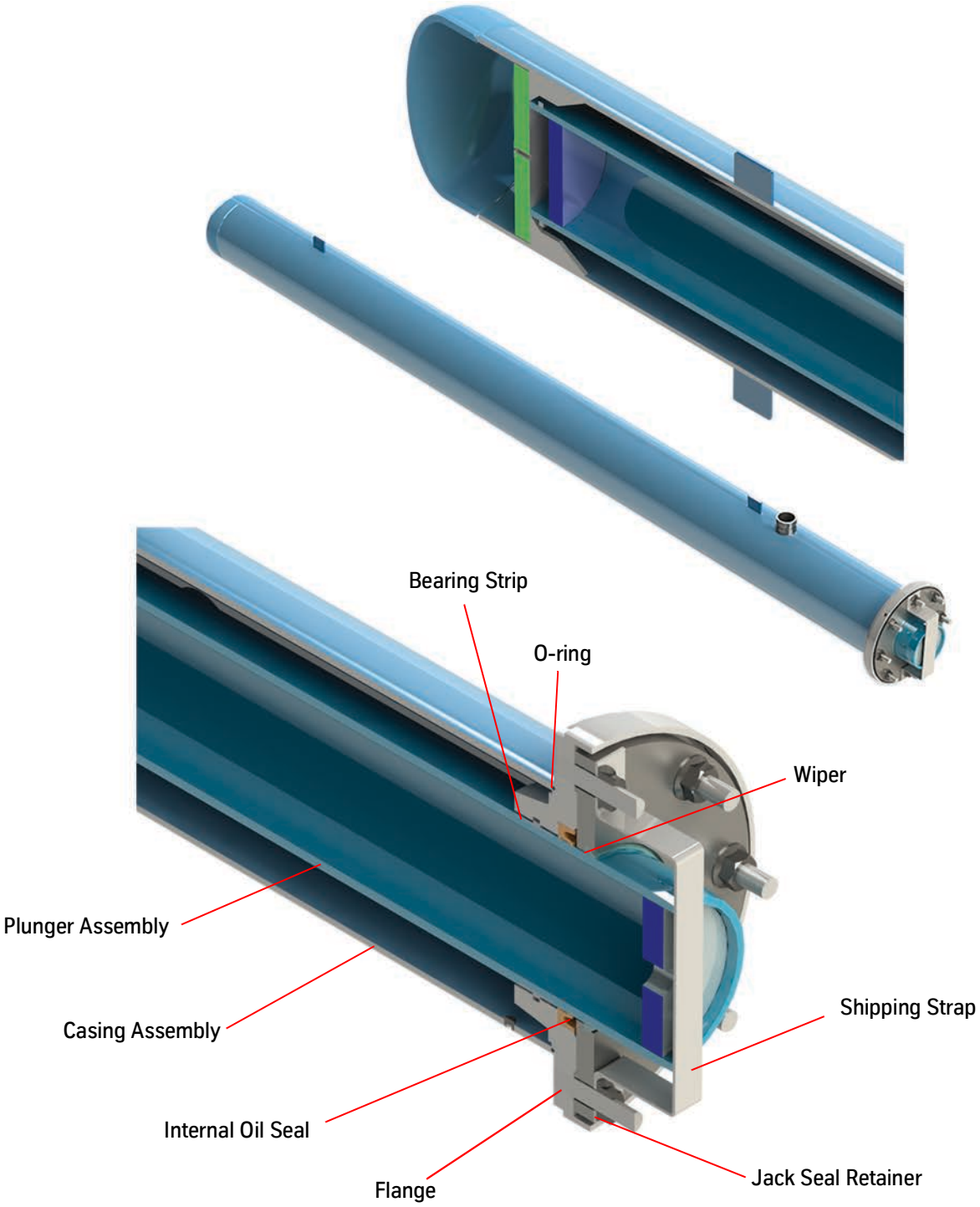


Submersible Power Unit - EP

7501AK1 shown



Conventional Jack

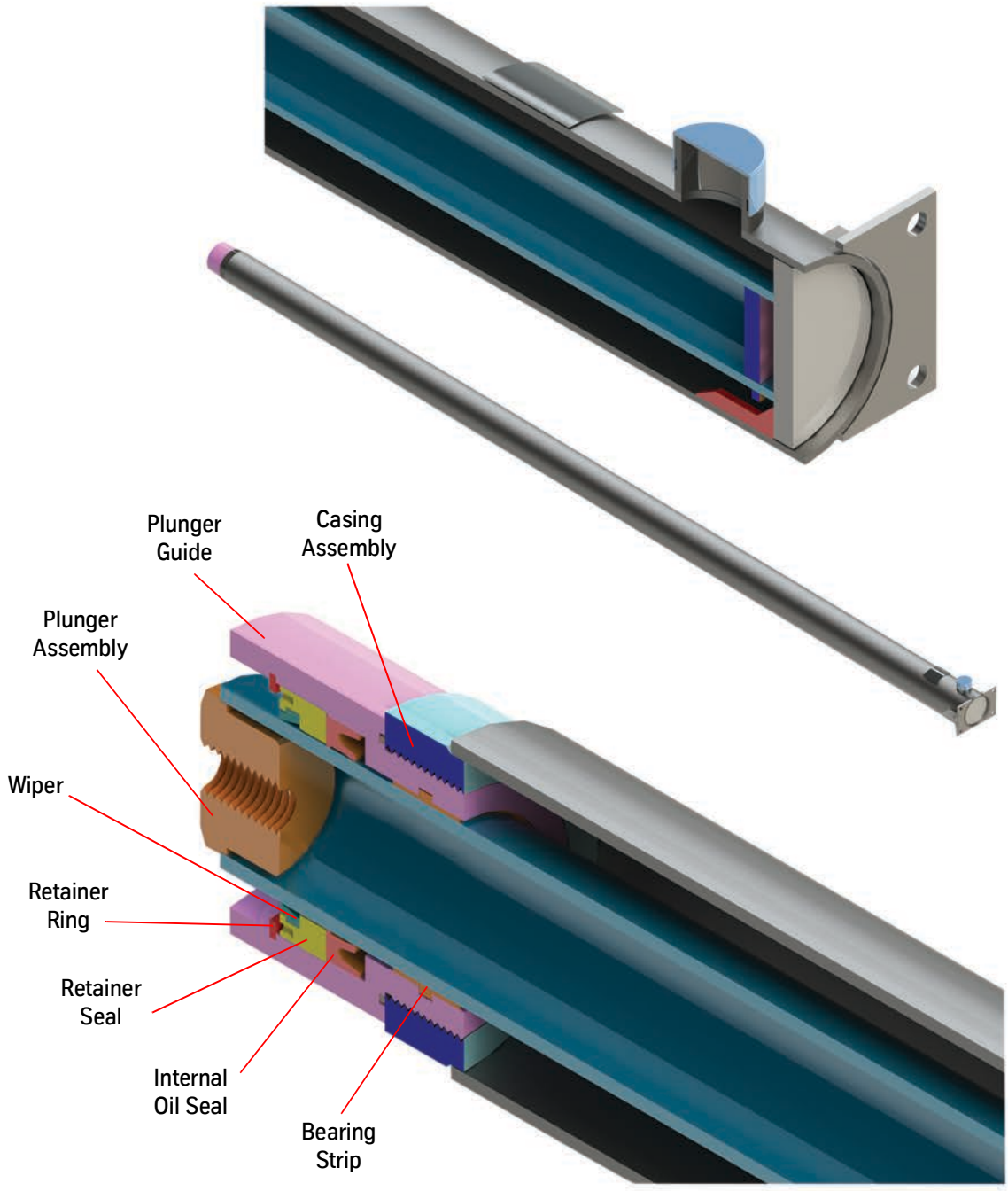


Not Shown:

Single-Section Jack (only) Bolt Kit (200BFK001)

Large Jack Hoisting Kit (200ATB3)

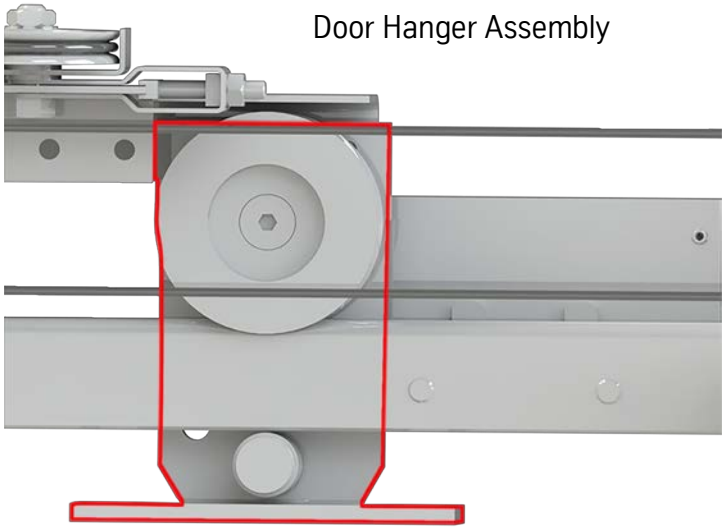
Twin Post Jack

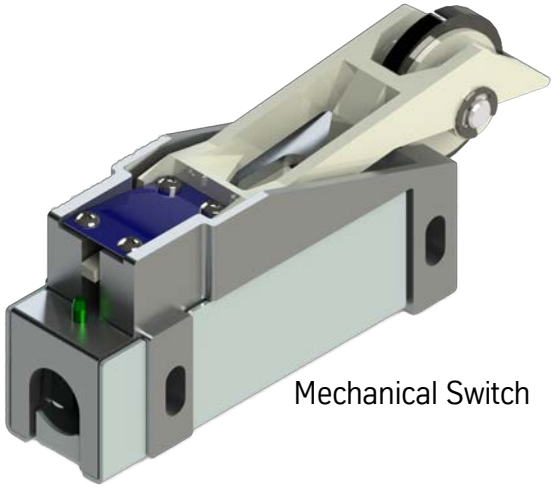


Common Elevator Components

Clutch

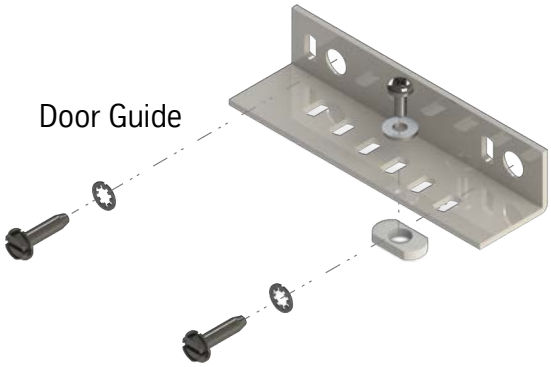
Door Hanger Assembly



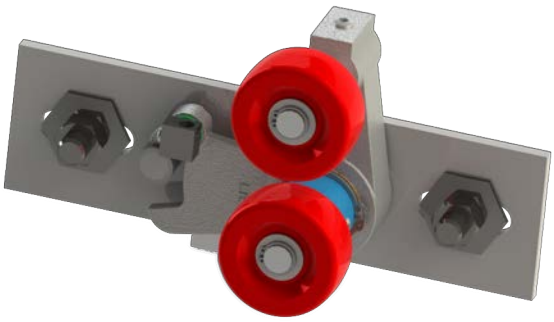


Mechanical Switch

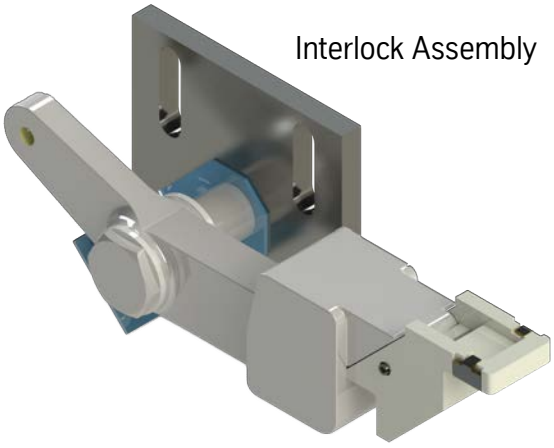
Door Guide



Pick-Up Roller Assembly



Interlock Assembly



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