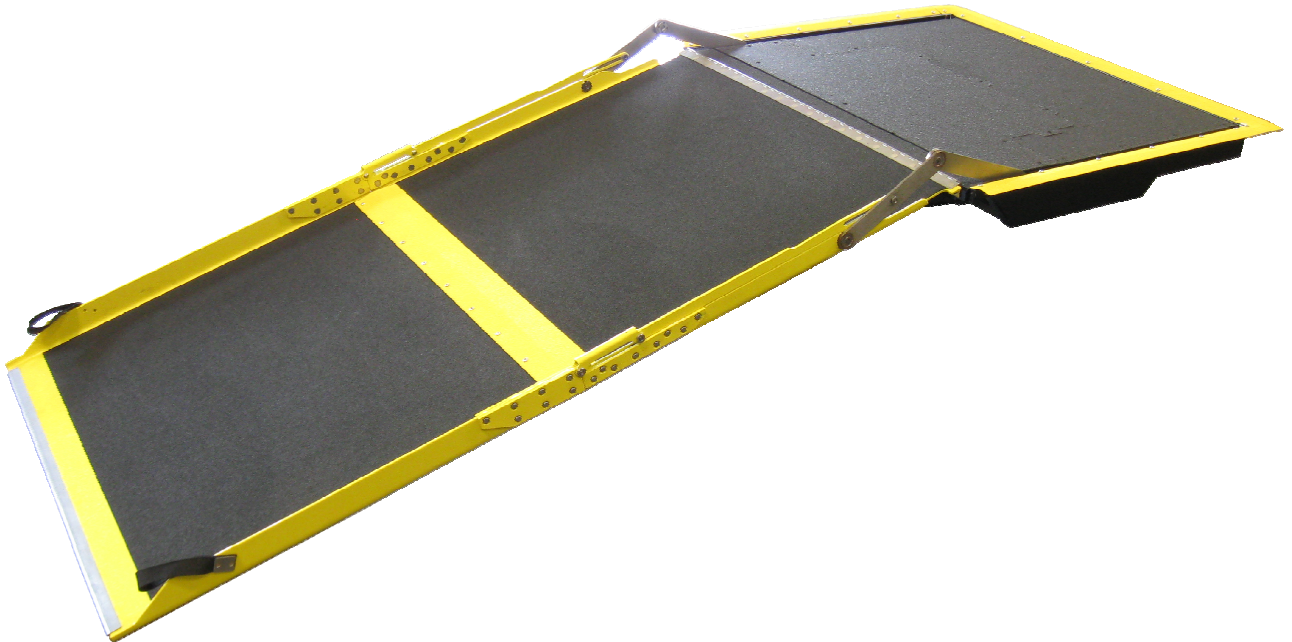




**BiFold®**  
**Electric BR2E-Series**  
**Low-Floor Vehicle Access Ramp**  
**for Transit Buses**



**Service Manual**

**This Ricon service manual is for use by Ricon dealers or qualified service technicians, and is not intended for use by non-professionals (do-it-yourselfers). The manual provides essential instructions and reference information, which supports qualified service technicians in the correct installation and maintenance of Ricon products.**

**Qualified service technicians have the training and knowledge to perform maintenance work properly and safely. For the location of a Ricon dealer or qualified service technician in your area, call Ricon Product Support at 1-800-322-2884.**

Customer Name: \_\_\_\_\_

Installing Dealer: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Serial Number: \_\_\_\_\_

**Revision Record**

REV	PAGES	DESCRIPTION OF CHANGE	ECO
32DBR202. A		New Release	6663

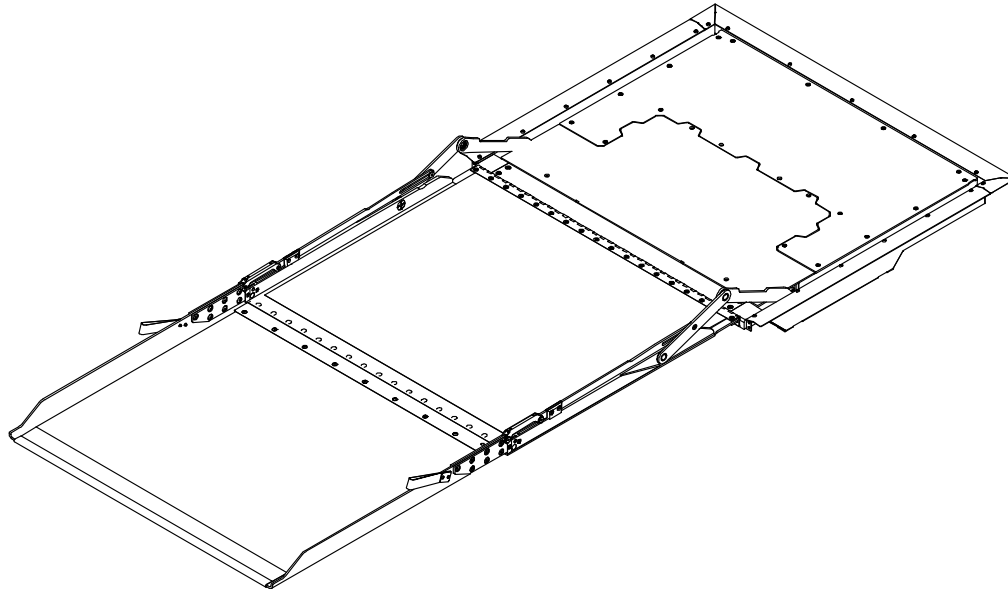
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### I. ELECTRIC BIFOLD® BR2E RAMP INTRODUCTION

This manual applies to the Ricon Electric BiFold® BR2E Series Low-Floor Vehicle Access ramp when installed in transit vehicles. The chapters in this service manual contain a product description, maintenance instructions and a spare parts list.



#### A. RICON PRODUCT SUPPORT

If you have questions about this manual, or you need additional copies, please contact Ricon Product Support at the locations listed. Also, refer to the Ricon website at: <https://ricondealer.wabtec.com>

Ricon Corporation  
1135 Aviation Place  
San Fernando, CA 91340 .....(818) 267-3000  
Outside (818) Area Code .....(800) 322-2884  
Website ..... <https://ricondealer.wabtec.com>

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Vapor Ricon Europe Ltd.  
Meadow Lane  
Loughborough, Leicestershire LE11 1HS .....0044 (9) 1509 635 920  
United Kingdom  
Website ..... <https://ricondealer.wabtec.com>

#### B. RICON TWO-YEAR LIMITED WARRANTY

The following warranty provides two years of limited coverage for the Ricon BR2E Low-Floor Vehicle Access ramp.

**RICON-FAIVELEY A WABTEC COMPANY**  
**ELECTRIC BIFOLD® BR2E RAMP TWO-YEAR LIMITED WARRANTY**

**Ricon Corporation (Ricon)** warrants to the original purchaser of this product that Ricon will repair or replace, at its option, any parts that fail because of defective material or workmanship as follows:

- Repair or replace parts for a period of two years starting from the date ramp is put into service. Obtain a complete list of parts covered by this warranty from Ricon Product Support.
- Labor costs for specified parts replaced under this warranty for a period of two years from the date put into service. A Ricon rate schedule determines parts covered and labor allowed.

***This Warranty Does Not Cover:***

- Malfunction or damage of product parts caused by accident, misuse, lack of proper maintenance, neglect, improper adjustment, modification, alteration, mechanical condition of vehicle, road hazards, overloading, failure to follow operating instructions, or acts of nature (i.e., weather, lightning, flood).

**NOTE:** Ricon recommends this product be inspected by a Ricon dealer or qualified service technician at least once every six months, or sooner if necessary. Perform required maintenance at this time.

**WARNING!**

THIS PRODUCT HAS BEEN DESIGNED AND MANUFACTURED TO EXACT SPECIFICATIONS. ANY MODIFICATION OF THIS PRODUCT CAN BE HAZARDOUS.

***This Warranty is Void If:***

- The product is not installed and maintained by a Ricon dealer or qualified service technician.
- The product is modified, in any respect from its original design, without written authorization from Ricon.

Ricon disclaims liability for any personal injury or property damage that results from operation or use of a Ricon product that is modified from the original Ricon design. No person or company is authorized to change the design of this Ricon product without written authorization from Ricon.

The Ricon obligation under this warranty is exclusively limited to the repair or exchange of parts that fail within the applicable warranty period.

Ricon assumes no responsibility for expenses or damages, including incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply.

*Important:* The warranty registration card must be completed and returned to Ricon within 20 days after product installation to validate this warranty. The warranty is not transferable.

The warranty gives specific legal rights. There may be other rights that vary in each state.

**C. SHIPPING INFORMATION**

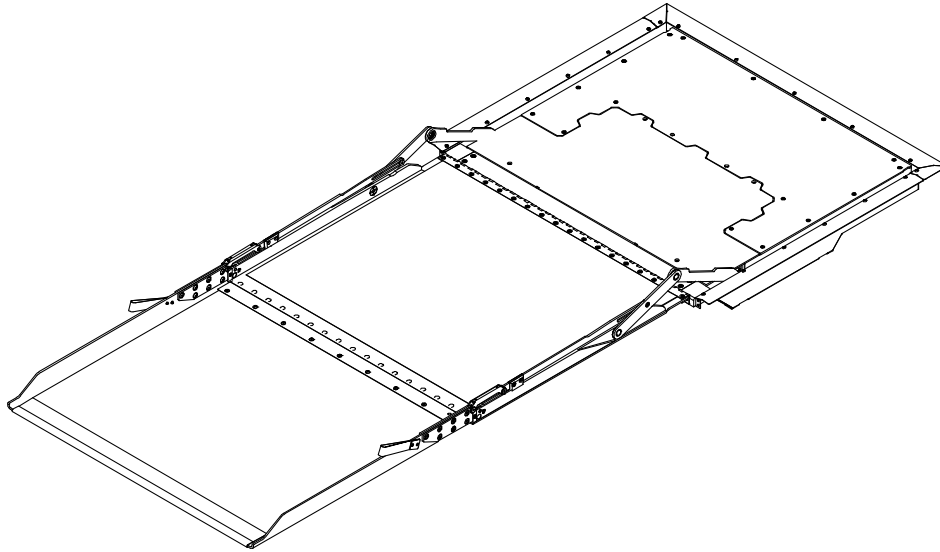
Check the received product for freight damage. Make damage claims immediately to the freight carrier.

Be sure the ramp assembly contains all items listed on the included bill of material. Please report any missing items immediately to Ricon Product Support. Save bill of material for later reference. Return the completed warranty and owner registration cards to Ricon within 20 days to validate warranty.

## II. ELECTRIC BIFOLD® BR2E RAMP DESCRIPTION

The descriptions in this chapter apply to the Ricon Electric BiFold® BR2E-Series Low-Floor Vehicle Access ramp when installed in transit vehicles. The Electric BiFold BR2E ramp is installed in transit vehicles to accommodate people with disabilities who cannot easily climb steps or are using mobility-aid equipment. The electrically powered ramp folds into the vehicle vestibule flooring when not in use.

Electric BiFold BR2E ramps have a 363 kg (800 lb) load limit. Passengers must use the ramp one at a time. Be certain that passenger mobility-aid equipment fits between the left and right side ramp barriers without any interference before allowing on ramp.



### A. RAMP FEATURES

#### 1. INTERLOCK SUPPORT

The ramp electronics can be interfaced with the vehicle interlock circuitry to prevent unintentional vehicle departure with the ramp deployed. The ramp interlock circuitry senses the position of the ramp, stowed or deployed, and provides this information at the J6 harness connector. A typical vehicle interlock circuit might require that the following conditions be met before operating power is supplied to ramp:

- Park vehicle and set parking brake.
- Place transmission in neutral.
- Open vehicle door adjacent to ramp.

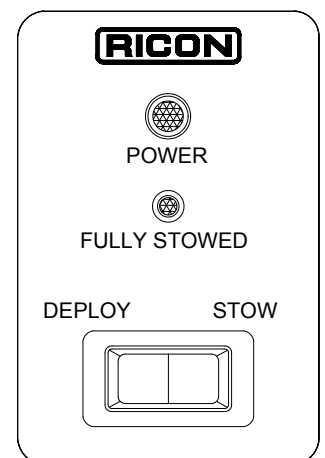
#### 2. AUDIBLE ALERT

The ramp supports an audible alert device that will sound while the ramp is in motion. This optional alert device is not present in every ramp installation.

#### 3. RAMP CONTROL PANEL

Refer to **Figure 2-1**. Ricon does not supply a ramp control panel because this device is typically installed by the vehicle builder.

The ramp can be operated with one similar to that shown; however, the actual panel will vary between transit authorities and vehicles. The control panel is normally installed in the driver area. As a minimum, it should have a power ON/OFF switch, a power on indicator light, and a three-position ramp control switch (center position is off). The ramp receives power from the vehicle when the interlock conditions are met and the power ON/OFF switch is on. The three-position ramp control switch can then be used to transmit a deploy or stow signal to the ramp hydraulic system.



**FIGURE 2-1: TYPICAL CONTROL PANEL**



#### **4. HEATER MAT (OPTIONAL)**

Some Electric BiFold BR2E ramp installations include an electrically heated mat that is incorporated into the ramp component access cover located on the upper surface of the ramp housing. The heater mat helps keep the ramp and vehicle vestibule area clear of snow and ice. A two-position HEATER POWER ON-OFF switch must be installed to operate the heater mat.

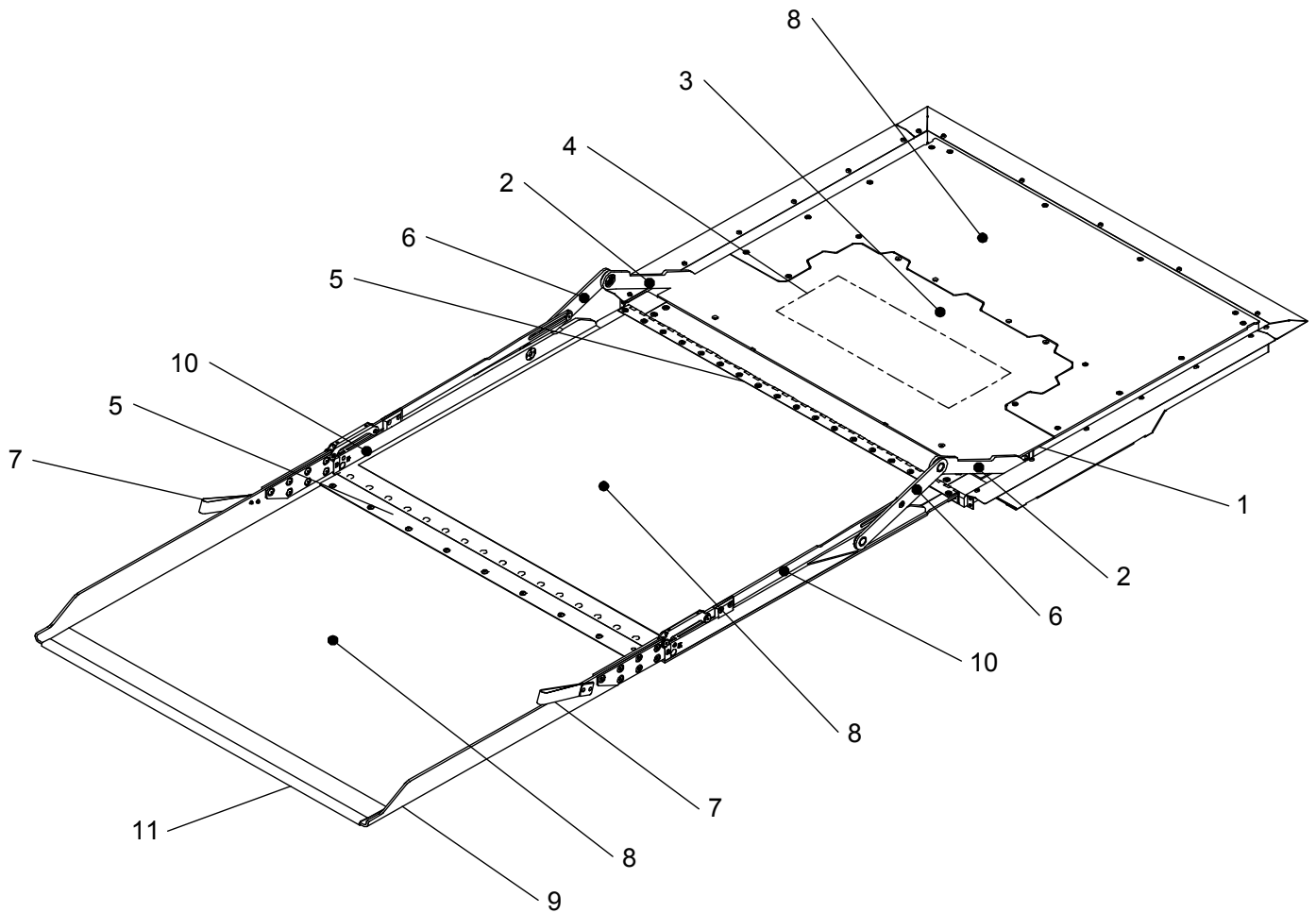
#### **B. RAMP CAPACITY AND SIZE**

The load bearing capacity for the ramp is 800 pounds, or 363kg. For that reason, passengers must use the ramp one at a time; **do not overload ramp**.

The Electric BiFold BR2E Series model is configured with a 34" usable platform width and a 62.4" sloped surface length. Be certain that passenger mobility-aid equipment fits easily between the ramps left and right side barriers before allowing use of ramp.

**C. MAJOR RAMP COMPONENTS**

**Figure 2-2** shows major components of the Electric BiFold BR2E Ramp. A description of each component is provided in **Table 2-2**.



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**FIGURE 2-2: ELECTRIC BIFOLD BR2E RAMP COMPONENTS**

**TABLE 2-2: ELECTRIC BIFOLD BR2E RAMP MAJOR COMPONENTS**

ITEM	DESCRIPTION
1	Component Access Cover - Provides access to ramp electrical components.
2	Drive Arms - Ramp linkage arms connected to driveshafts.
3	Electric Motor – Provides Torque for moving ramp plate
4	Heater Mat ( <i>Optional</i> ) - Electrically heated pad helps keep ramp clear of snow and ice.
5	Hinges - Pivoting connection between ramp and ramp frame.
6	Lifting arms (left & right side) - Ramp linkage arms connect drive arms to rear section of ramp; provide primary lifting force for entire ramp.
7	Lifting Straps ( <i>Optional</i> ) - Use to manually deploy or stow ramp.
8	Non-Slip Flooring - Bonded to upper ramp surface to reduce passenger slippage.
9	Ramp - Unfolds from vehicle floor (deploys) to provide access for handicapped passengers; divided into front and rear sections.
10	Side Barriers (left & right side) - Vertical curbs help confine passenger to ramp area.
11	Sensitive Edge ( <i>Optional</i> ) - Pressure sensitive edge signals controller when ramp strikes an object.
<b>END OF TABLE</b>	

### III. ELECTRIC BIFOLD® BR2E- RAMP MAINTENANCE

The maintenance information in this chapter applies to the Ricon Electric Bifold® BR2E-Series Low-Floor Vehicle Access Ramp when installed in transit vehicles. The information consists of safety precautions, a maintenance schedule, component information, and diagrams for the electrical system. This chapter is intended to supplement related sections of the vehicle manufacturer Owner Manual (32DBR201) and Quick-Start Guide (55461).

#### A. GENERAL SAFETY PRECAUTIONS

 <b>WARNING!</b>
THIS ELECTRIC RAMP IS DRIVEN WITH AN ELECTRIC MOTOR DRIVE SYSTEM. USE EXTREME CAUTION WHEN DOING MAINTENANCE AND REPAIRS. DO NOT DISCONNECT ELECTRICAL CABLES OR FITTINGS WHEN RAMP IS IN MOTION OR WHEN POWER IS APPLIED TO THE ELECTRIC RAMP.

Follow these safety precautions during service of the Ricon Electric BiFold BR2E ramp:

- Under no circumstances is maintenance, repair, or adjustment of the Electric BiFold BR2E ramp to be performed without the presence of an individual capable of giving aid.
- Give immediate attention to all injuries, and administer first-aid or seek medical attention as necessary.
- Protective eye shields and clothing should be worn during maintenance, repair, and adjustment of the Electric BiFold BR2E ramp.
- The user must be cautious when operating the ramp. Be certain that hands, feet, legs, and clothing are not in the path of ramp movement.
- Batteries contain acid that can burn. Wear protective clothing and eye protection at all times. If acid comes in contact with skin, immediately flush affected area with water and wash with soap. Do not place anything electrically conductive on top of battery. Do not smoke or use an open flame near battery.
- Work in a properly ventilated area.
- Read and understand all instructions before attempting to operate the Electric BiFold BR2E ramp.
- Inspect the ramp before use for unsafe conditions, unusual noises, or erratic movements. Do not use ramp if any of these are present, and arrange to have a Ricon dealer or qualified service technician inspect ramp.
- Keep others clear of the ramp while it is operating.
- Ricon strongly recommends that the vehicle be parked on level ground when using ramp. Using the ramp when vehicle is sloped may result in a ramp angle that is too steep for safe use. In addition, the sloped vehicle may not allow the ramp to make complete contact with the ground.
- The Electric BiFold BR2E ramp and other system components require periodic maintenance. Ricon recommends a thorough vehicle inspection by a Ricon dealer or qualified service technician at least once every six months. To maximize safety, the ramp and related components should be maintained at their highest level of performance.
- Read and comply with warning labels attached to ramp.

**B. DAILY INSPECTION**

Check ramp daily, following the Daily Inspection outlined in **Table 3-1**. Meet all inspection criteria before allowing passengers on ramp.

<b>TABLE 3-1: DAILY INSPECTION</b>	
<b>INSPECTION POINT</b>	<b>CHECK</b>
Ramp controller	<ul style="list-style-type: none"> <li>• Power ON/OFF switch operates correctly.</li> <li>• Power On indicator illuminates when Power ON/OFF switch is ON.</li> <li>• DEPLOY and STOW switches operate correctly.</li> <li>• No unusual noises or erratic movements when ramp is deploying or stowing.</li> </ul>
Ramp and surrounding area	<ul style="list-style-type: none"> <li>• Vestibule area is free of loose objects and trim pockets are free of debris.</li> </ul>
Ramp non-slip surfaces	<ul style="list-style-type: none"> <li>• Surface is clean and free of slippery or sticky substances that could compromise user safety.</li> <li>• Surface is intact and secure, and loose edges, if present, cannot create a stumbling hazard.</li> </ul>
<b>END OF TABLE</b>	

**C. MAINTENANCE SCHEDULE**

Regular maintenance and inspection of the Ricon Electric BiFold® BR2E-Series Low-Floor Vehicle Access Ramp provides optimum performance and reduces the need for repairs. Maintain the ramp as directed in **Table 3-2**. Perform ramp maintenance more frequently during heavy use (more than 20 cycles per day).

<b>⚠ CAUTION!</b>
~ This Ricon Product Is Complex ~
Required warranty period maintenance and repairs must be done at a Ricon dealer or qualified service facility. Improper maintenance, use of non-Ricon replacement parts, or product modification will void warranty and can result in unsafe operating conditions. We recommend that a Ricon dealer or qualified service facility continue maintenance inspections when warranty ends.

<b>TABLE 3-2: MAINTENANCE SCHEDULE</b>	
<b>INSPECTION POINT</b>	<b>ACTION</b>
<b>– 6,000 MILE INSPECTION –</b>	
Electrical System	Check all electrical cables and fittings; tighten or replace as necessary.
Cover Fasteners	Check all threaded fasteners for looseness, and retighten as necessary.
Non-slip surface	Visually check for damage to surface, and for loose or missing non-slip material.
Ramp Interior	Visually check ramp interior area and remove accumulated dirt and debris.
Setscrews	Check for loose or missing setscrews at these locations: <ul style="list-style-type: none"> <li>• Driveshaft couplers (2 x 4 ea)</li> <li>• Sensor target (1 ea)</li> <li>• Pillow blocks (2 x 2 ea)</li> </ul> Tighten, or replace, as necessary.
Decals	Visually check for illegibility or damage, replace as necessary.

**TABLE 3-2: MAINTENANCE SCHEDULE**

INSPECTION POINT	ACTION
<b>– 12,000 MILE INSPECTION –</b>	
Wiring harnesses	Check wiring insulation for heavy abrasions, and connectors for looseness. Replace as necessary.
Fasteners	Check all threaded fasteners for tightness and retighten as necessary.
Non-slip surfaces	Check non-slip surface for excessive wear or damage (rips, tears, peeling, etc.), and replace as necessary.
<b>– 24,000 MILE INSPECTION –</b>	
Self Aligning Assembly	Grease or oil to lubricate parts is NOT recommended. Keep components clean and free of debris. Refer to installation section for self-aligning assembly replacement.
<b>END OF TABLE</b>	

**D. RAMP COMPONENT INFORMATION**

Ricon Electric BiFold® BR2E-Series Low-Floor Vehicle Access Ramp uses electrical power from the host vehicle to deploy and stow the ramp. Vehicle electrical power is converted to mechanical force, which is used to move the ramp. Electrical components are described below. Please refer to **Figures 3-4** for electrical diagram.

**1. ELECTRIC MOTOR DRIVE SYSTEM**

The ramp employs an electro-mechanical motor drive system (contained within the ramp enclosure). Settings are programmed in the motor drive system and is preset at Ricon.

The motor drive system converts electrical power into mechanical force through the crank shafts when either the DEPLOY or STOW micro-switches are activated and controlled by an electronic controller. Ricon recommends operating the ramp while the vehicle engine is running in order to minimize current drain on the vehicle battery.

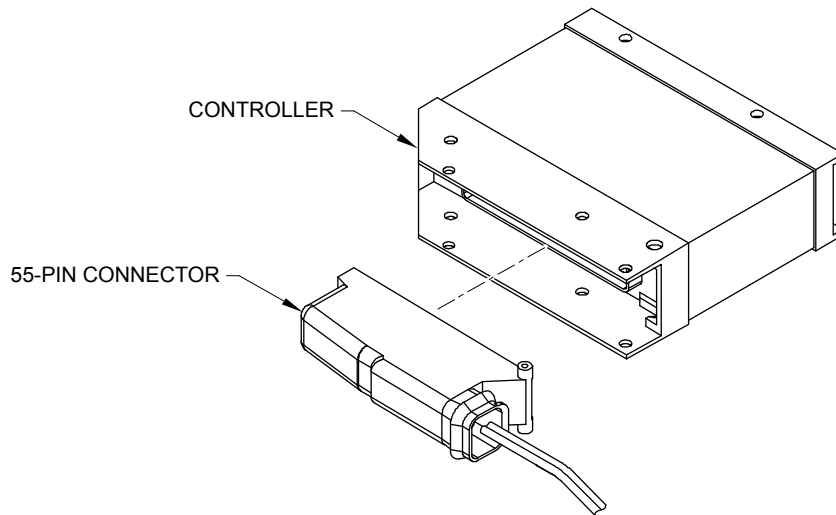
**2. TRAY POSITION SWITCH ASSEMBLY**

A factory adjusted tray position switch assembly identifies the DEPLOY or STOW position of the ramp tray as the electro-mechanical drive system transfers motion from the crank shaft, through the chain, onto the CAM shaft. The CAMs attached on the rotating CAM shaft activate the micro-switches which relay signals to the electronic controller that controls the functions of the ramp.

**3. ELECTRONIC CONTROLLER**

The electronic controller interprets input/output signals from the micro-switches and controls ramp functions by relaying signals to/from the control box. It contains integrated circuits (ICs), relays, fuses, and associated parts. The ICs cannot be accessed externally. The 55-pin ramp connector receives 12V/24V to power the controller and sends 12V/24V through the control box that controls power to the motor drive system.

Refer to **Figure 3-1** for connector and controller connection. Controller only requires one 55-pin connector connection.



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**FIGURE 3-1: CONTROLLER**

**NOTE:** Voltage levels are 24 to 28 VDC in this application.

**4. INTERLOCK OUTPUT STATUS**

The Electric BiFold BR2E ramp has two ramp positions that are monitored by the controller. This position is fully stowed to deployed position. The ramp must be in the fully stowed area before the electrical interlock output signal will turn on (24VDC). This is done to reduce the possibility of a passenger tripping on the front edge of the ramp when it is not stowed completely as well as preventing the bus from operating or moving when ramp is deployed. Refer to **Table 3-3**. The status of the interlock output (GND or 12VDC/24VDC) occur when the ramp is either STOWED or DEPLOYED. Note that the interlock output has both a normal and an inverted output. This table applies to the normal output.

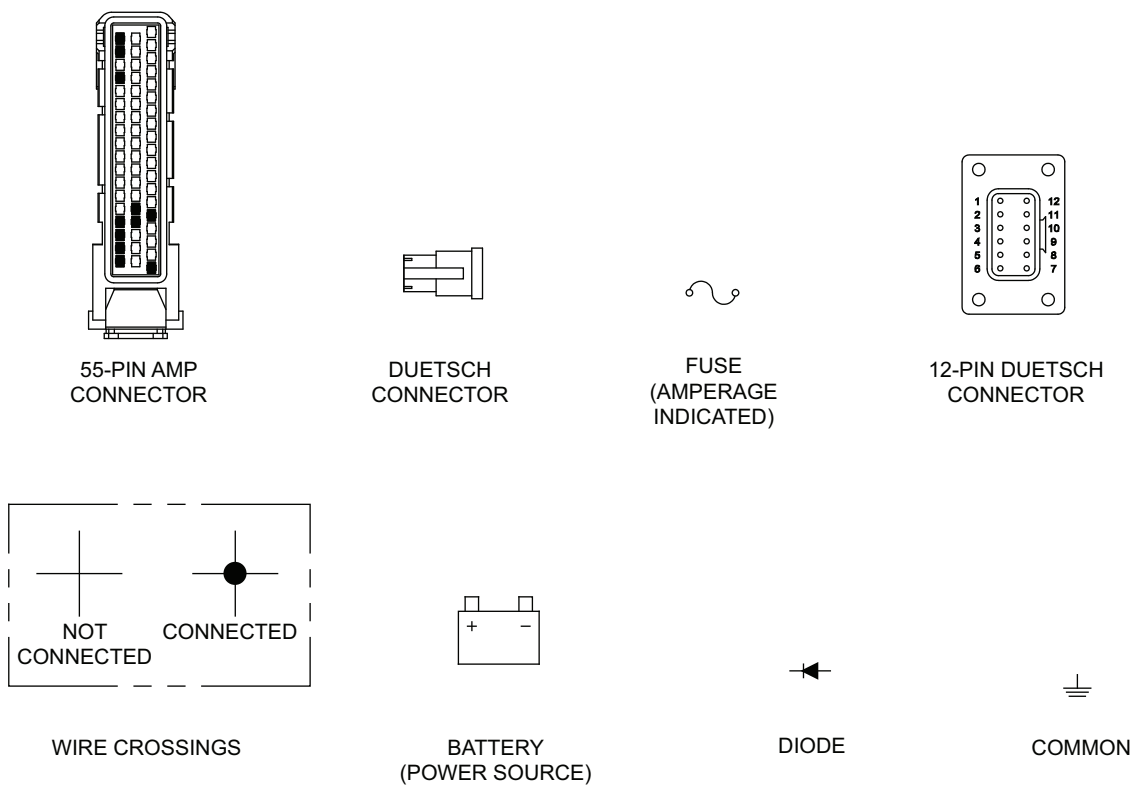
<b>TABLE 3-3: INTERLOCK OUTPUT STATUS</b>	
<b>POSITION</b>	<b>INTERLOCK OUTPUT</b>
<b>STOWED</b>	GND
<b>DEPLOYED</b>	12VDC/24VDC
<b>End of Table</b>	

**5. CIRCUIT BREAKERS AND FUSES**

The bus builder installs a 50-amp circuit breaker for 12V or 24V applications to protect ramp control circuits. Refer to **Table 3-4** for harness fuses.

**6. ELECTRICAL DIAGRAMS**

Refer to **Figure 3-2** for a description of plug and receptacle designations used on schematic.



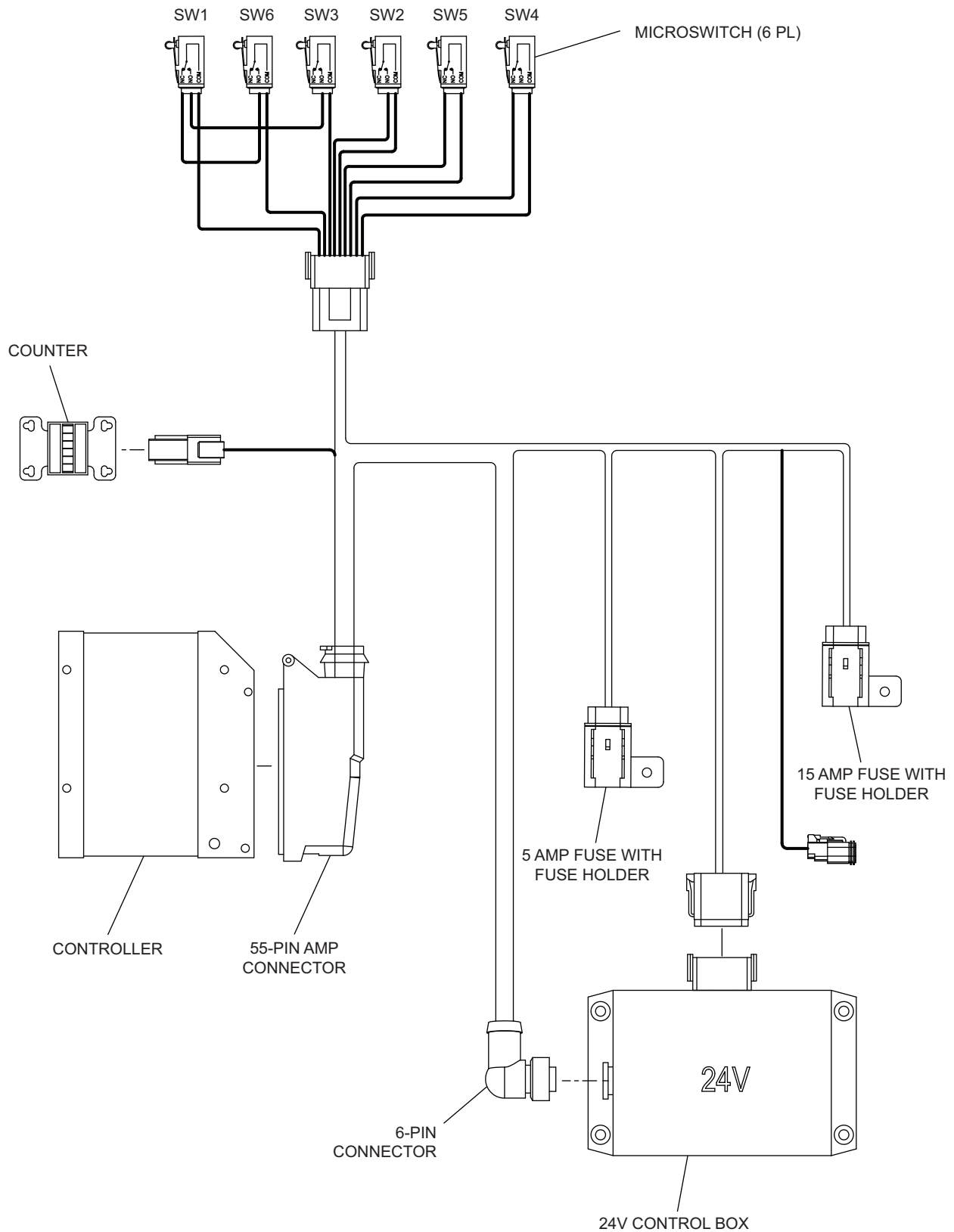
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**FIGURE 3-2: SCHEMATIC SYMBOLS**

TABLE 3-4: HARNESS FUSES		
FUSE	RATING	CIRCUIT
F1	5 AMP	Lift Enable (Ramp Switch)
F2	15 AMP	12V/24V High Voltage (Motor Power)
<b>END OF TABLE</b>		



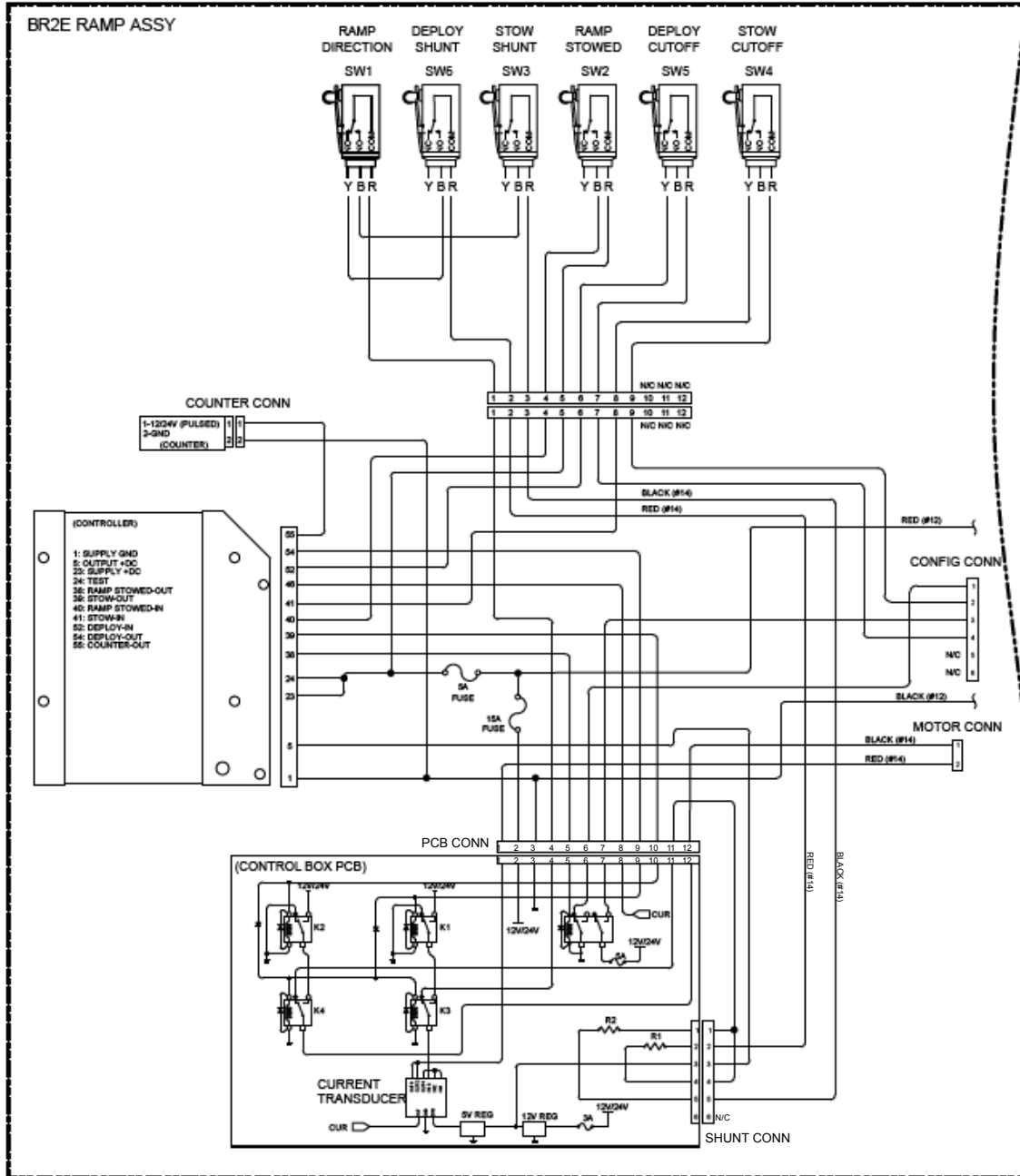
Refer to **Figure 3-3** for an overall wiring diagram of the ramp system. The wiring diagram is located at the end of this chapter.



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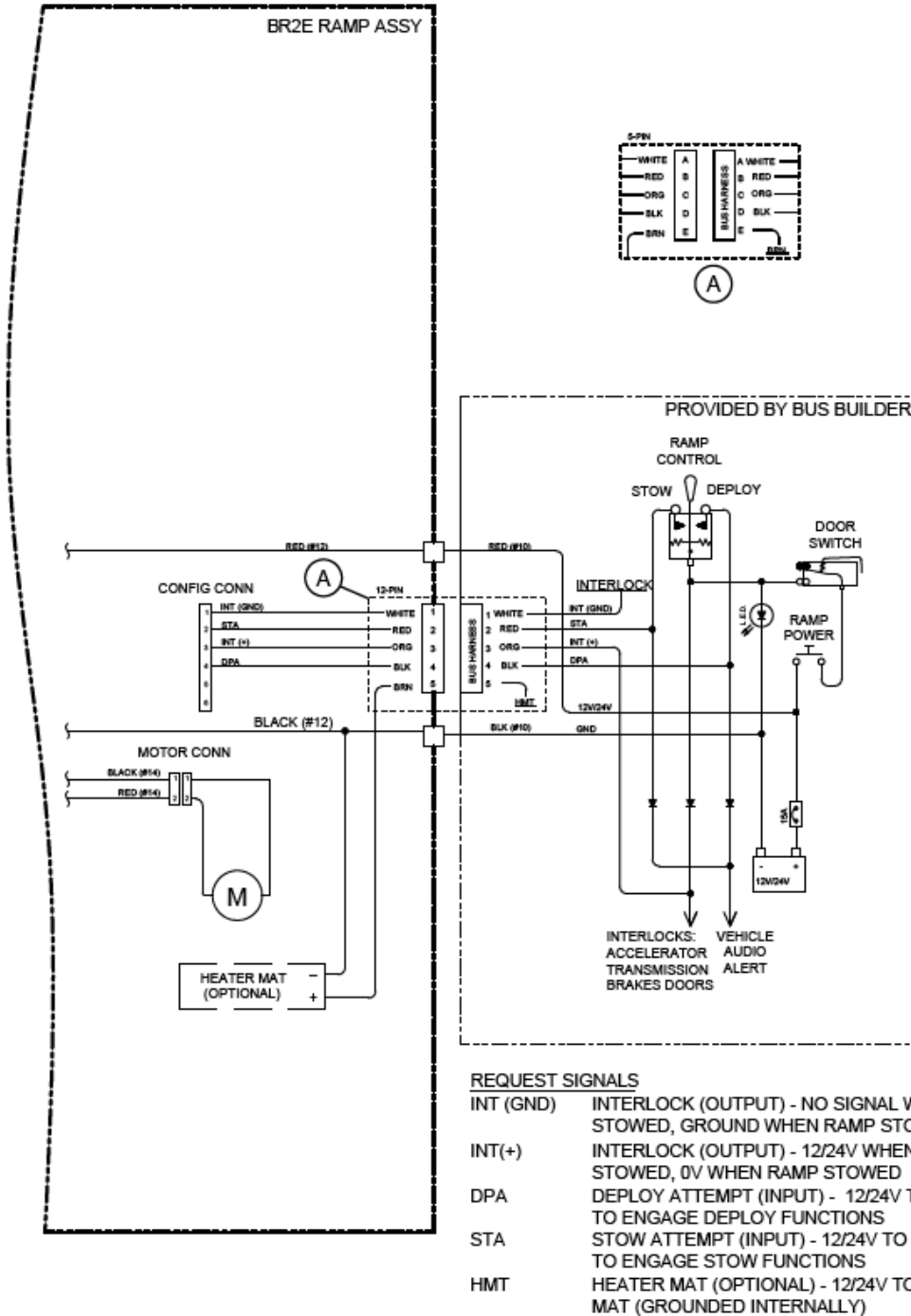
**FIGURE 3-3: CONNECTOR CONFIGURATION**

**E. WIRING DIAGRAM**



RSM0073300

**FIGURE 3-4.1: ELECTRIC BR2E RAMP HARNESS DIAGRAM (SHEET 1 OF 2)**



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FIGURE 3-4.2: ELECTRIC BR2E RAMP HARNESS DIAGRAM (SHEET 2 OF 2)

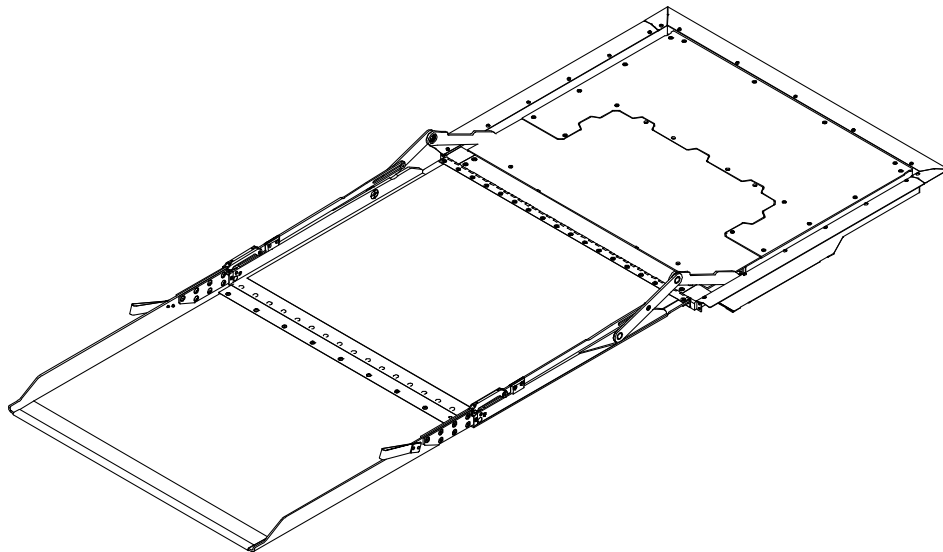
**IV. ELECTRIC BIFOLD® BR2E RAMP SPARE PARTS**

The parts layouts and lists in this chapter apply to the Ricon Electric BiFold® BR2E-Series Low-Floor Vehicle Access Ramp when installed in a transit vehicle. Replaceable ramp parts are illustrated in exploded views of major lift assemblies, which show smaller assemblies and components with reference numbers. Each associated parts list contains reference numbers, parts descriptions, and Ricon part numbers.

Each accompanying parts list contains figure item numbers, part descriptions, quantities used, configurations and the Ricon part number. To order parts, locate part on an appropriate diagram and note the figure item number. Find the figure item number on the accompanying parts list and use the part number in the far right column. Note that parts identified with (REF) in the QTY column of the spare parts list are for reference purposes only and are not sold for spare parts.

**NOTE:**

- Most items that are described as “kits” contain a single part (plus hardware). Therefore, you may need to order more than one kit if the part is used more than once on the assembly shown.
- Small, inexpensive hardware items are supplied in a minimum quantity of ten, and are packaged in a bag. A single bag may provide more parts than you need, or you may need multiple bags when working on a large assembly. The QTY column indicates how many individual parts are used on the assembly shown; you will need to determine the number of bags required for your task.
- The reference numbers for some parts have more than one part number listed. This occurs when variations of a part are used on different ramp models. These parts are followed by a model designation (BR2E00, etc).



PRODUCT MODEL AND KIT NUMBERS	
PRODUCT NUMBER	BR2E
DOCUMENTATION KIT NUMBER	55460
SPARE PARTS BOM	16707

**PARTS DIAGRAMS**

**PAGE**

FIGURE 4-1: ELECTRIC BIFOLD BR2E RAMP DECAL PART NUMBERS AND LOCATIONS ..... 4-2

FIGURE 4-2: ELECTRIC BIFOLD BR2E RAMP ASSEMBLY ..... 4-4

FIGURE 4-3: ELECTRIC BIFOLD BR2E RAMP MOTOR DRIVE ASSEMBLY ..... 4-12

FIGURE 4-4: ELECTRIC BIFOLD BR2E RAMP ELECTRICAL HARNESSES AND COMPONENTS ..... 4-14

**LIFT SPECIFICATIONS** ..... **4-17**

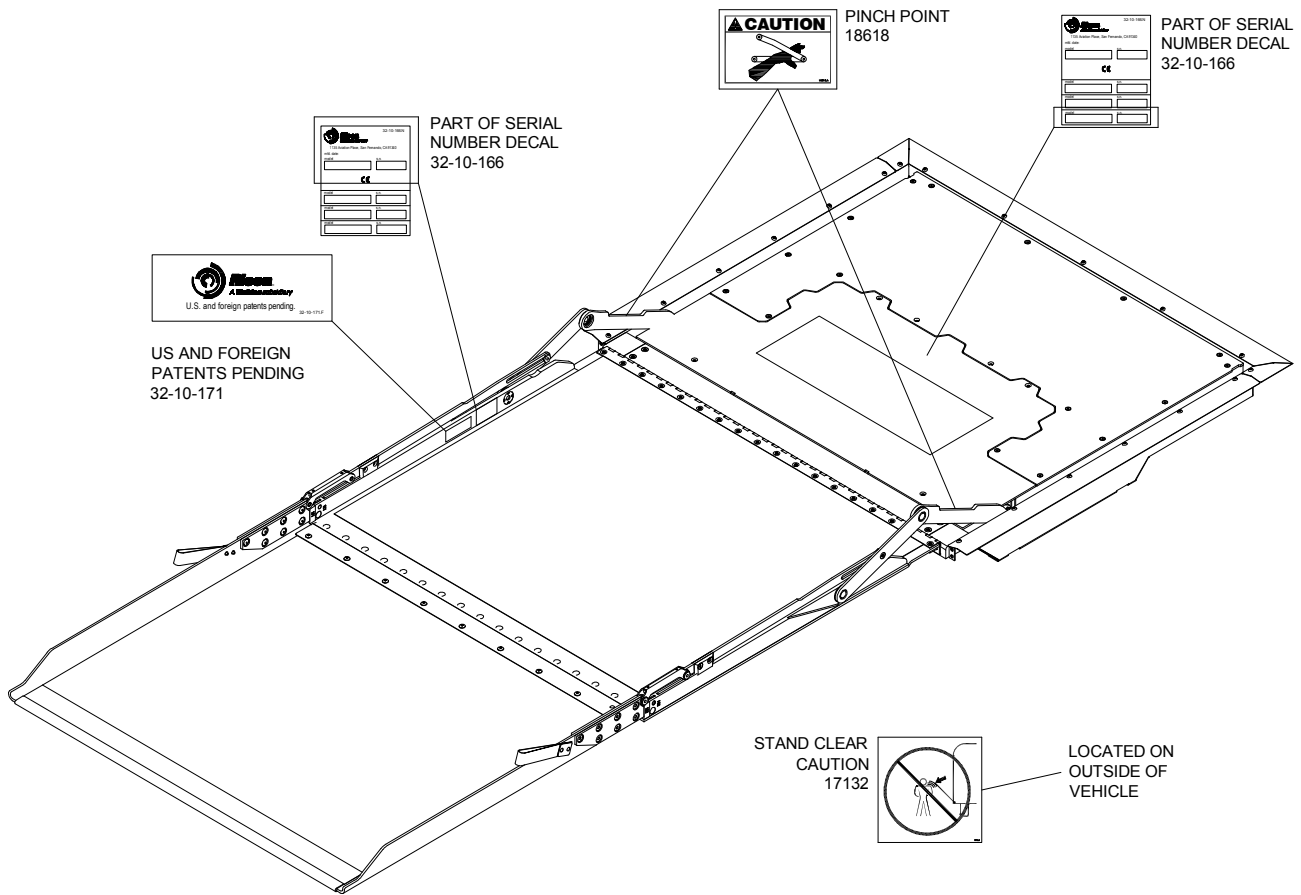


FIGURE 4-1: ELECTRIC BIFOLD BR2E RAMP DECAL LOCATIONS

**FIGURE 4-1: ELECTRIC BIFOLD BR2E RAMP DECAL LOCATIONS**

<b>FIG. ITEM</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>CONFIG.</b>	<b>PART NO.</b>
1	DECAL, SERIAL#, "CE" UNIVERSAL	2		32-10-166
2	DECAL, CAUTION, PINCH POINT, F/OVER RAMP	2		18618

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

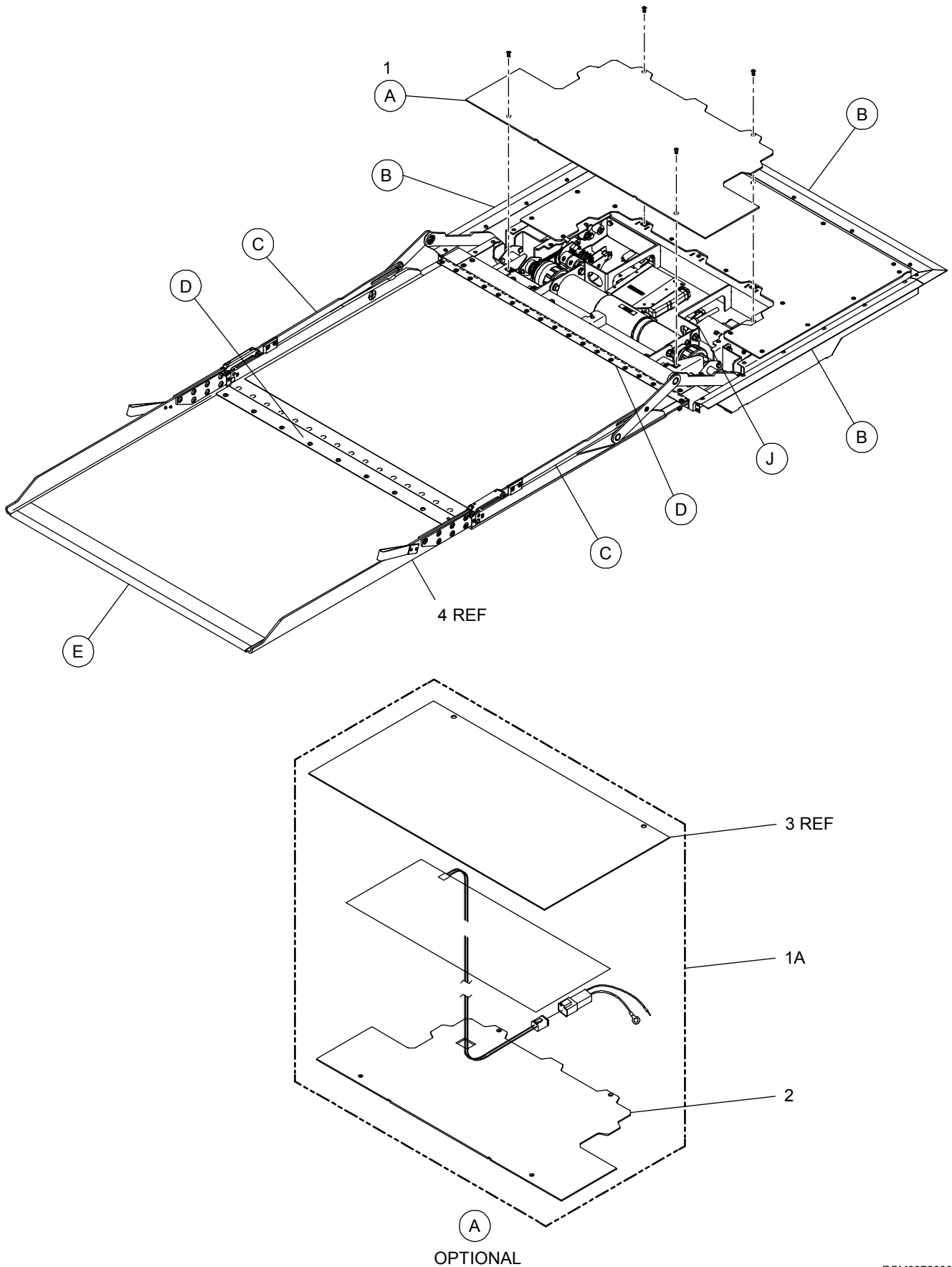
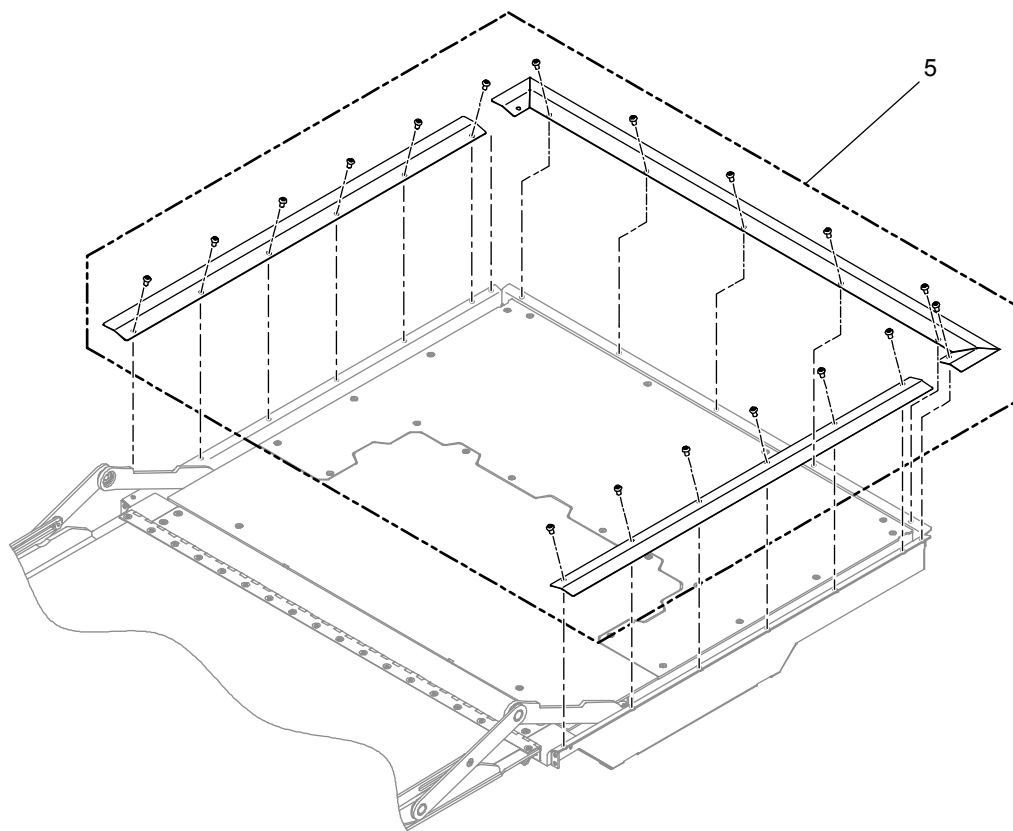
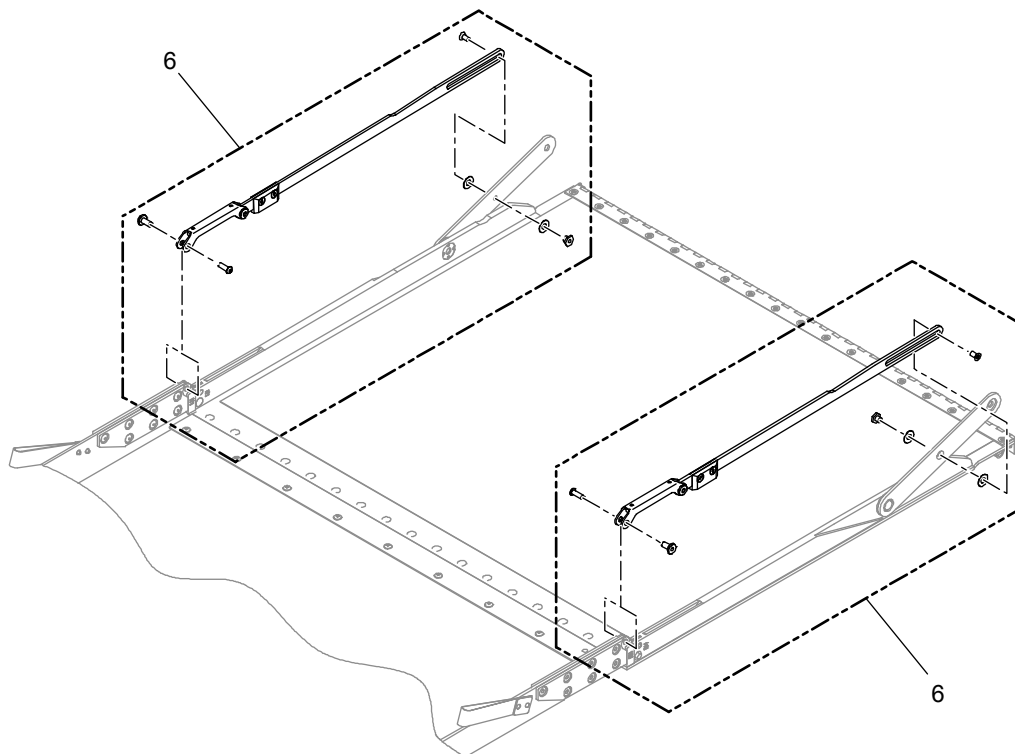


FIGURE 4-2.1: ELECTRIC BIFOLD BR2E RAMP ASSEMBLY (SHEET 1 OF 6)

RSM0072600



(B)



(C)

RSM0072700

**FIGURE 4-2.2: ELECTRIC BIFOLD BR2E RAMP ASSEMBLY (SHEET 2 OF 6)**



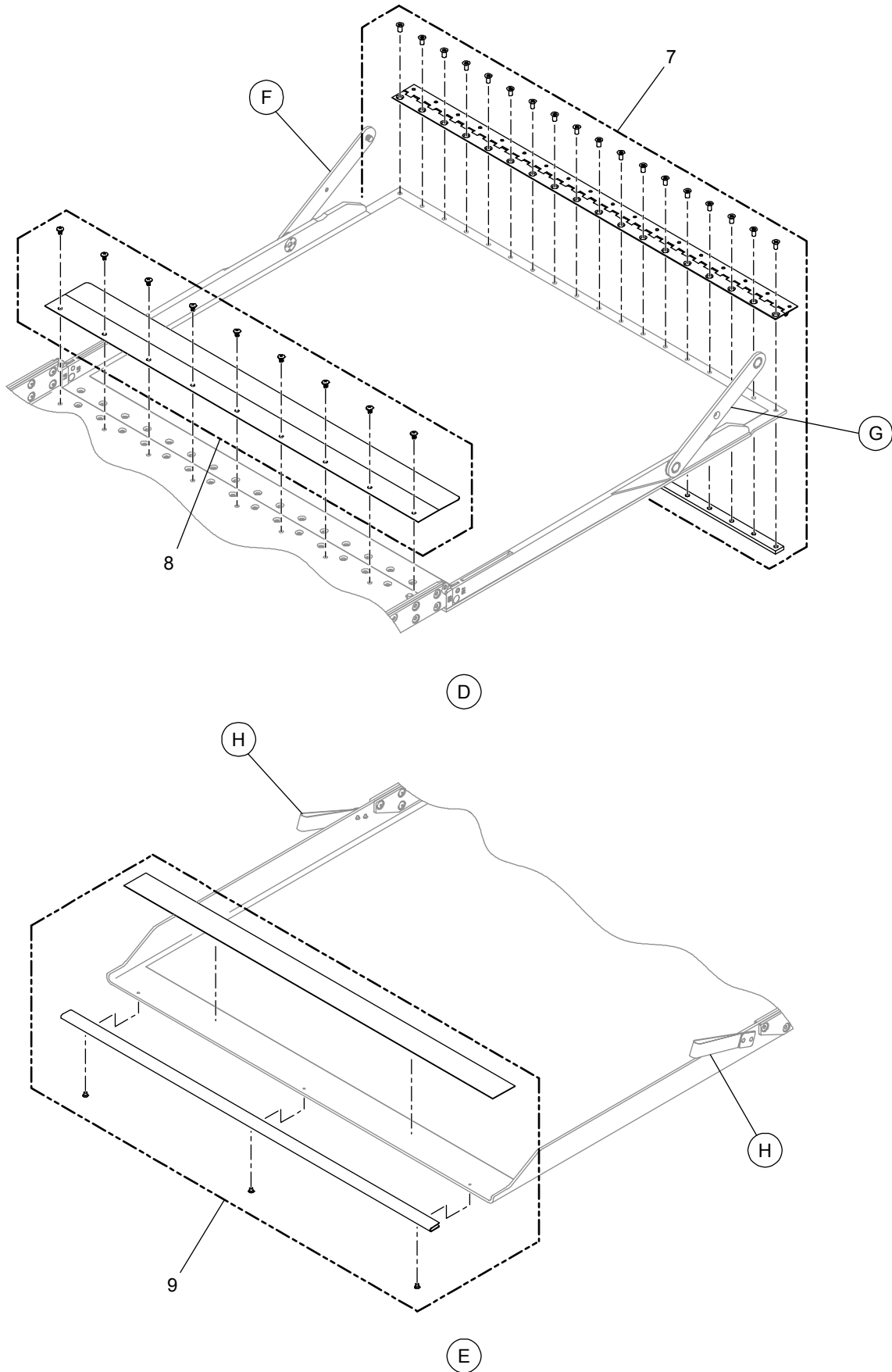


FIGURE 4-2.3: ELECTRIC BIFOLD BR2E RAMP ASSEMBLY (SHEET 3 OF 6)

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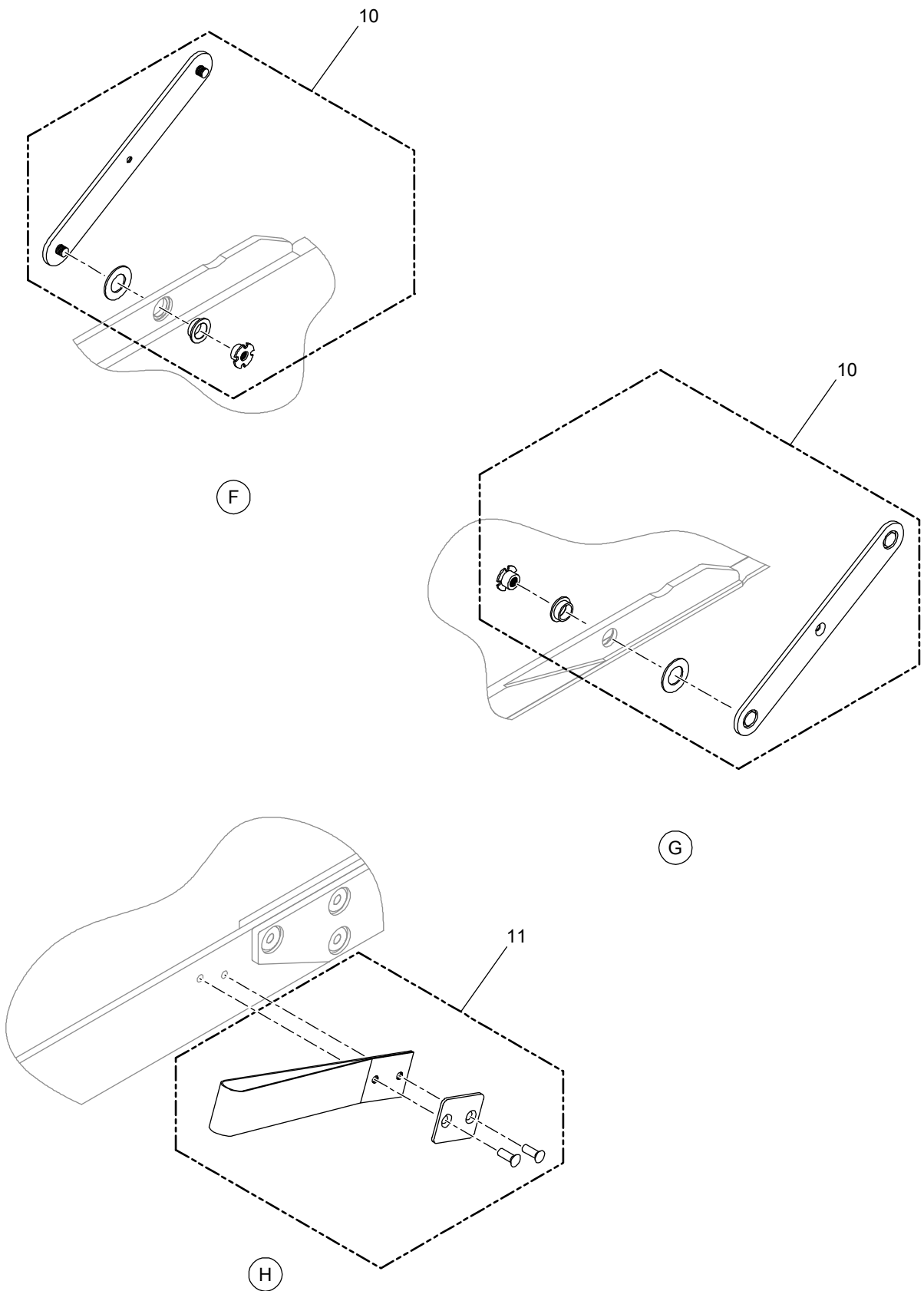


FIGURE 4-2.3: ELECTRIC BIFOLD BR2E RAMP ASSEMBLY (SHEET 4 OF 6)

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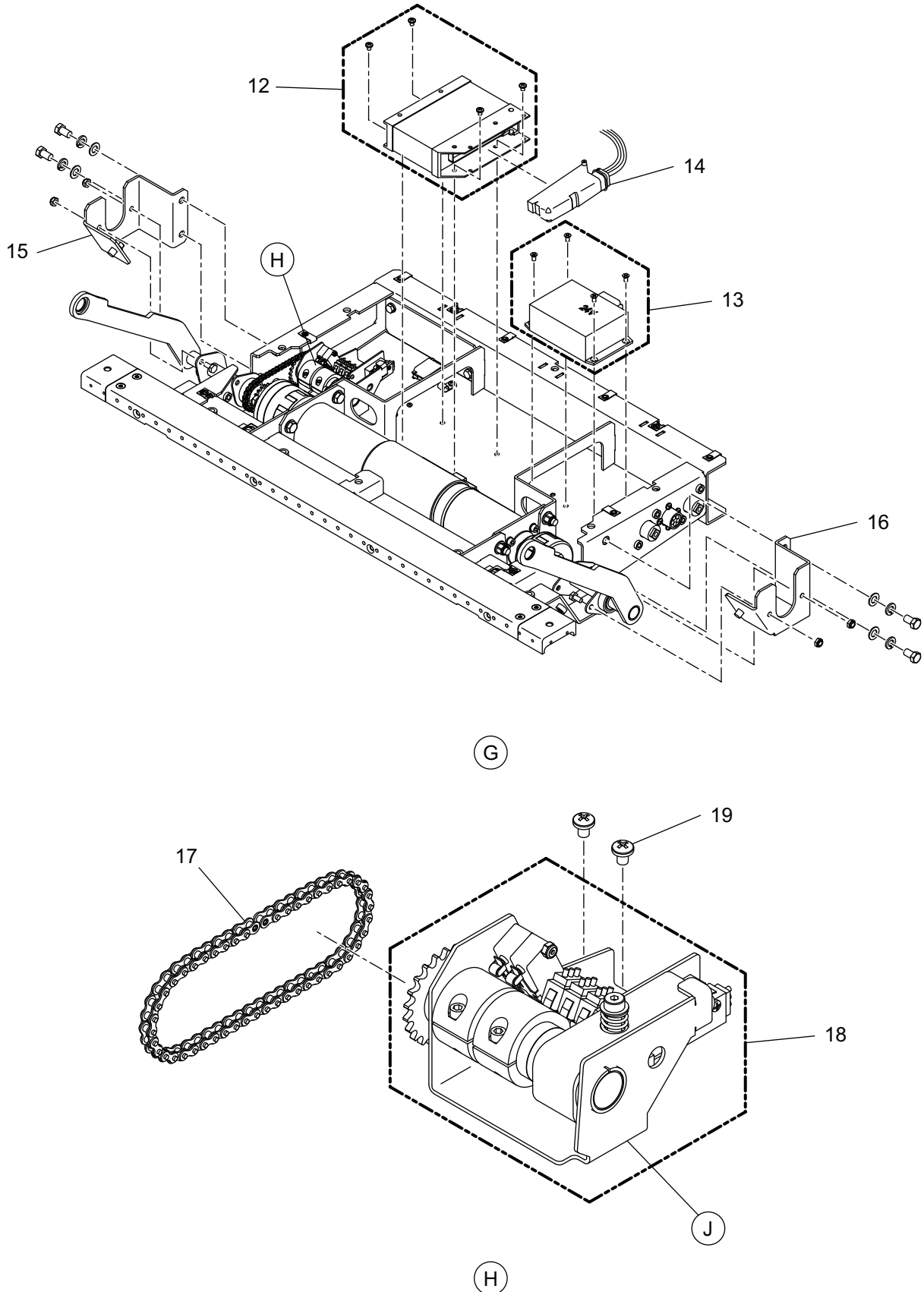
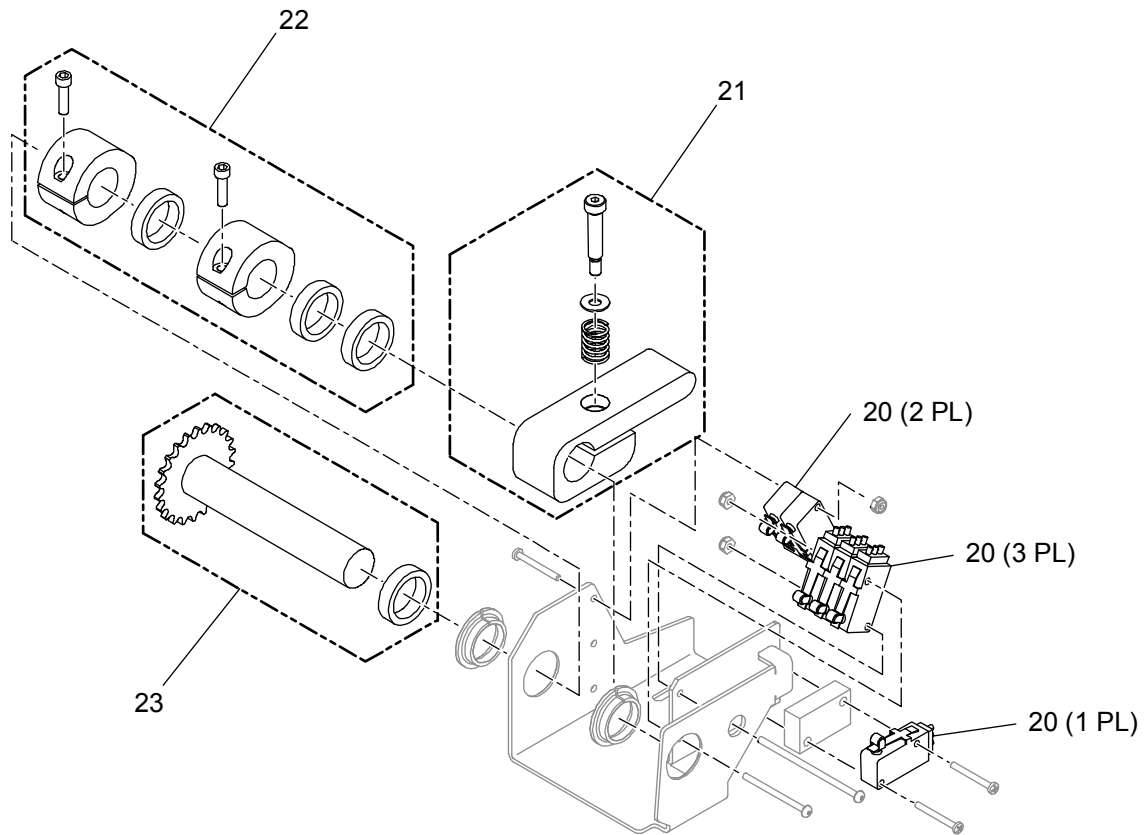


FIGURE 4-2.4: ELECTRIC BIFOLD BR2E RAMP ASSEMBLY (SHEET 5 OF 6)

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FIGURE 4-2.5: ELECTRIC BIFOLD BR2E RAMP ASSEMBLY (SHEET 6 OF 6)

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**FIGURE 4-2: ELECTRIC BIFOLD BR2E RAMP ASSEMBLY**

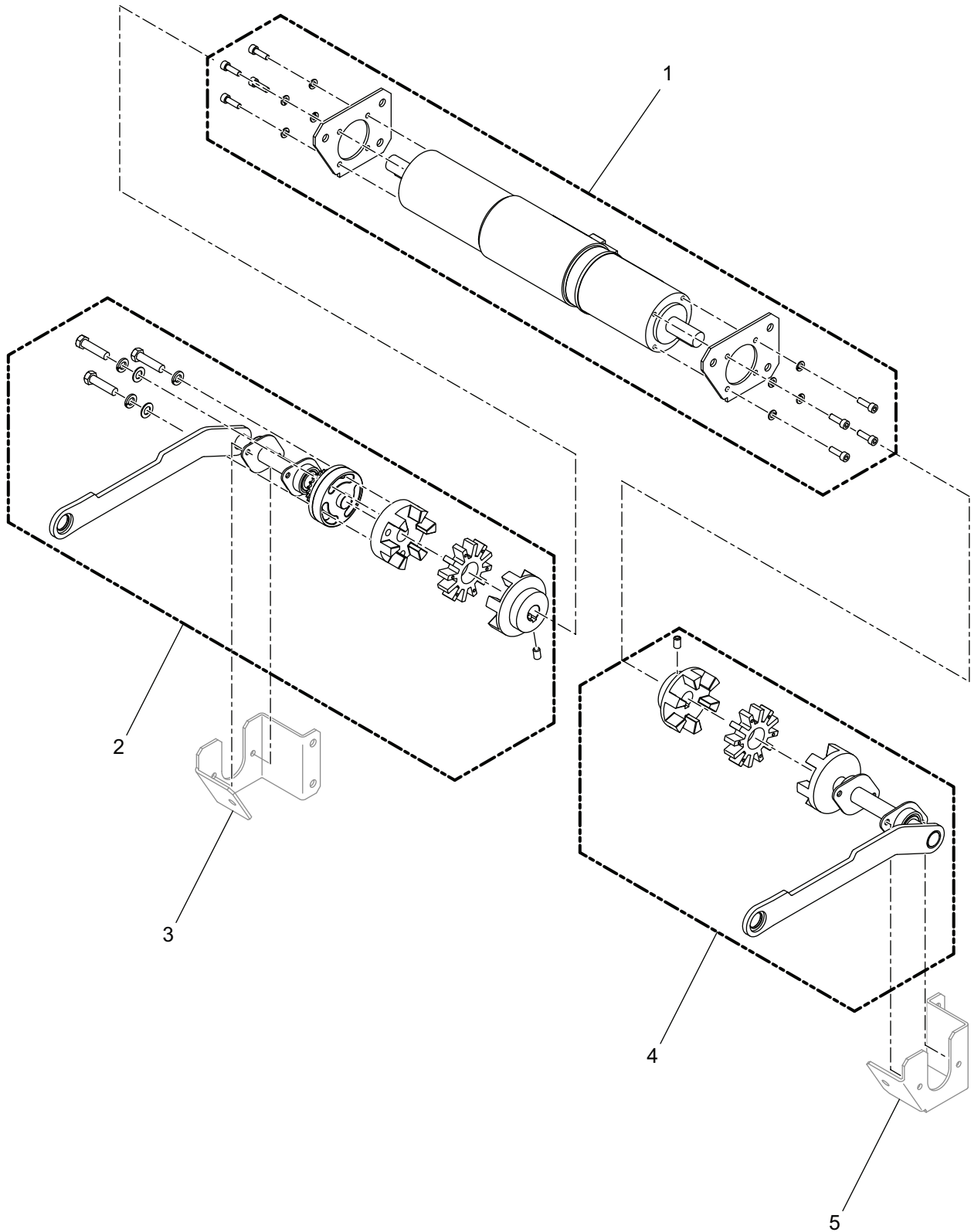
FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	FLOOR COVER	1		55497
1A	KIT, FLOOR COVER WITH HEATING MAT	1		55498
2	** FLOORING, ALTRO, META 27903 (STORM)	REF		57698
3	PLATE, FLOOR COVER	REF		48540
4	** RAMP TRAY ASSY, 34"W X 62" LONG	REF	BR2E02-010001000	56384
5	KIT, FLANGE TRIM	1		57684
6	*** SAFETREAD, 4FT x 60FT, BLK, 3M #310	REF		17792
7	KIT, PLATE, SKID	1		55499
8	KIT, RAMP HINGE	1		58500
9	KIT, HATCH HANDLE	1		58501
10	KIT, DRIVE ARM, LH	1		58502
11	KIT, DRIVE ARM, RH	1		58503
12	KIT, 24V IFM ELECTRIC CONTROLLER	1		58504
13	KIT, 24V ELECTRIC CONTROL BOX	1		58505
14	HARNESS ASSY, ELECTRIC (SEE FIG.4-4)	REF		51034
15	KIT, BEARING SUPPORT BRACKET, LH	1		58506
16	KIT, BEARING SUPPORT BRACKET, RH	1		58507
17	KIT, CHAIN, #25, SST, 11.75" LONG	1		58508
18	KIT, TRAY POSITION ASSY SWITCHES	1		58509
19	SCREW, PHP, 10-24 x 1/4 SST (BAG OF 10)	1		25633
20	KIT, SWITCH, LIMIT ROLLER, SPDT, 15A MAX	6		264104
21	KIT, DIRECTION SWITCH WITH HARDWARE	1		58510
22	KIT, CAM SWITCHES WITH HARDWARE	1		58511
23	KIT, CRANK-SLOTTED DISC ASSY, LH	1		58512

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

**NOTE:** \*\* Some applications require alternate flange trim for alternate applications. Refer to Config. Column for alternate applications.

**NOTE:** \*\*\* Platform Assembly for reference only. Flooring and extruded parts are assembled in the factory. Contact Product Support.



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FIGURE 4-3: ELECTRIC BIFOLD BR2E RAMP MOTOR DRIVE ASSEMBLY

**FIGURE 4-3: ELECTRIC BIFOLD BR2E RAMP MOTOR DRIVE ASSEMBLY**

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	KIT, 24V DRIVE ASSY	1		58513
1A	KIT, 12V DRIVE ASSY	1		58516
2	KIT, SLOTTED DISC CRACK WITH SPIDER COUPLING, LH	1		58514
3	BEARING SUPPORT BRACKET, LH (SEE FIG. 4-2)	1		58506
4	KIT, SPIDER COUPLING AND SHAFT, RH	1		58515
5	BEARING SUPPORT BRACKET, RH (SEE FIG. 4-2)	1		58507

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.



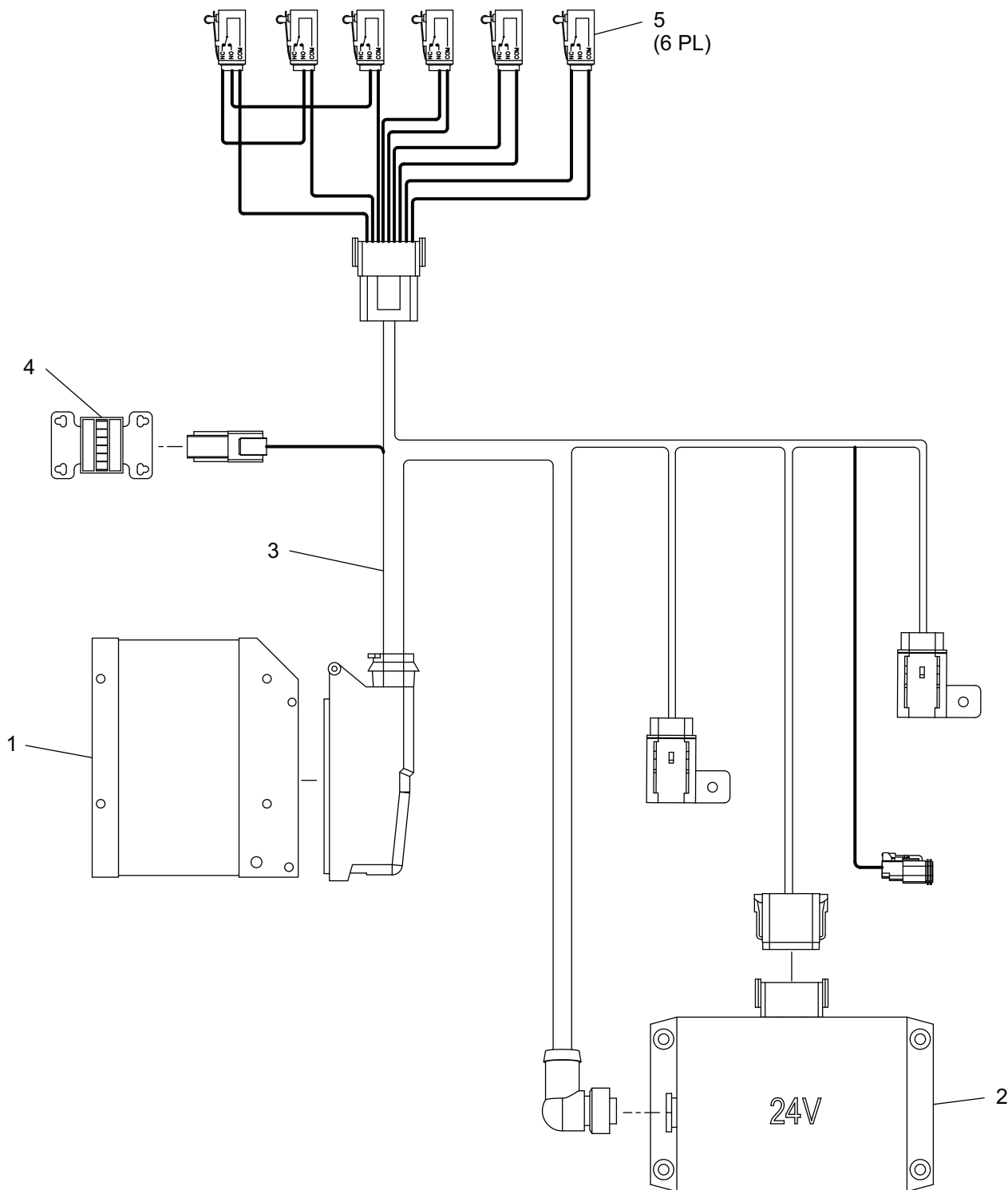


FIGURE 4-4: ELECTRIC BIFOLD BR2E RAMP HARNESSES AND COMPONENTS

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**FIGURE 4-4: ELECTRIC BIFOLD BR2E RAMP HARNESSSES AND COMPONENTS**

FIG. ITEM	DESCRIPTION	QTY	CONFIG.	PART NO.
1	24V ELECTRIC CONTROLLER (SEE FIG 4-2)	REF		55923
2	24V ELECTRIC CONTROL BOX (SEE FIG 4-2)	REF		55919
3	KIT, HARNESS ASSY	1		51034
4	KIT, COUNTER & CONNECTOR ASSY, WITH HARDWARE	1		44219
5	KIT, SWITCH, LIMIT ROLLER, SPDT, 15A MAX	6		264104
6	KIT, BLOCK, POSITIVE CONNECTION	1		46514

**NOTE:** (REF) in QTY column is for Referenced Parts Only and are not sold as spare parts.

**NOTE:** \* Item or configuration not shown.

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**APPENDIX 1**

**RICON ELECTRIC BIFOLD BR2E LOW-FLOOR-VEHICLE ACCESS RAMP**

Power System ..... Electro-mechanical motor drive system

Power Requirements:

- \* Electric ..... 24 VDC
- Continuous Current ..... 1.5 amps
- Operating Current ..... 5 amps

Rated Load Capacity ..... 800 lbs. (363kg)

Nominal Ramp Weight..... approx. 298 lbs. (135kg)

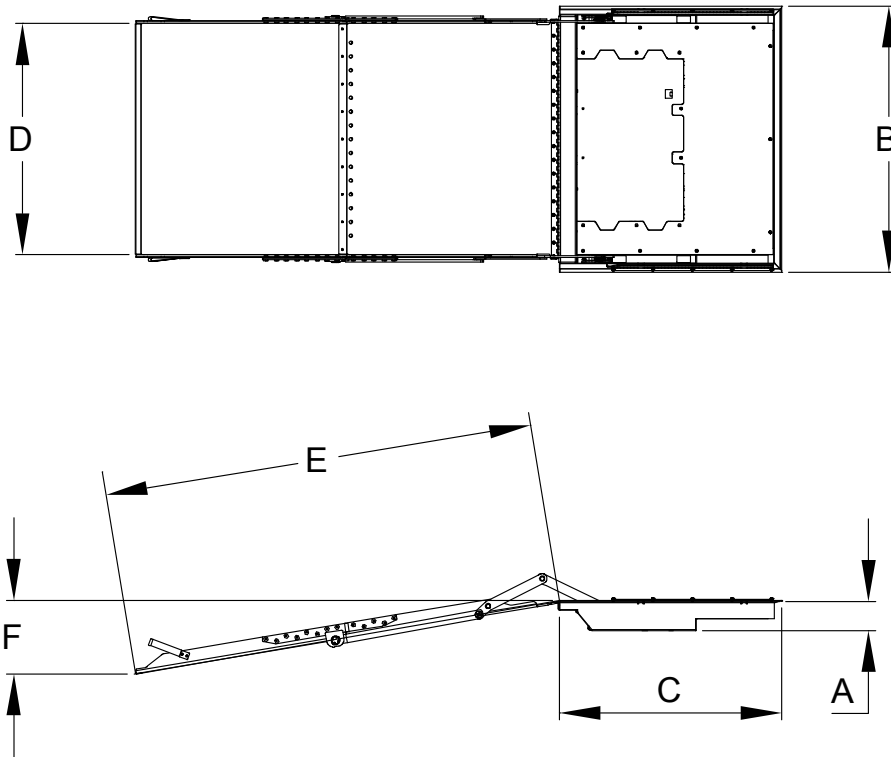
Cycle Times ..... Adjustable from 7 to 12 seconds

Operating Temperatures..... -20F to 120F

Max Usable Platform Length ..... 62 in. (1578.1 mm)

Max Usable Platform Width ..... 34 in. (863.6 mm)

\* Certain applications employ +12 VDC power, which have a maximum current draw of 50A.



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**DIMENSIONS – inches (mm)**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
MODEL	Ramp frame height	Ramp trim width	Ramp trim length	Useable platform width	Sloped surface length	Floor -to-Ground Travel
BR2E02	4.30 (109.2)	40 (1016)	34 (863.6)	34.0 (863.6)	62.4 (1585)	15.1 (383.5)

**END OF TABLE**

**NOTE:** Ramp may be configured to meet specific requirements.

**NOTE:** \* The effective ramp length takes into account the allowable vertical transitions. Actual length will be slightly shorter.

**NOTES:**