



*Pre-Installation Manual*

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# **GS Pinsetter Guarding Packages**

February 2017 / 10-095400-039

**Brunswick**   
CUSTOMER SERVICE  
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## **GS Pinsetter Guarding Packages Pre-Installation Manual**

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Reorder Part No. 10-095400-039

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## **INTRODUCTION**

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There are two types of guarding packages available for the GS-X pinsetter; Base (UL) and Advanced (CE) Guarding. The purpose of this manual is to provide a graphical explanation of the types of guarding packages and their individual electrical and non-electrical guard components.

Consider national and local codes to determine which Guarding Package will be necessary for your bowling facility. Consult with your Brunswick Representative for assistance in determining which package is appropriate for your location.

## BASE (UL) GUARDING PACKAGE

The Base (UL) Guarding Package consists of the wrap-around guards that cover each side of the pinsetter, pulley guards, elevator guards, and division guards located on the first and last pinsetters and any pinsetters installed at a lane break. Emergency stop switches are mounted on the left lane elevator and at the front of each pinsetter disconnects power from Nexgen Electronic Control Box when pressed.

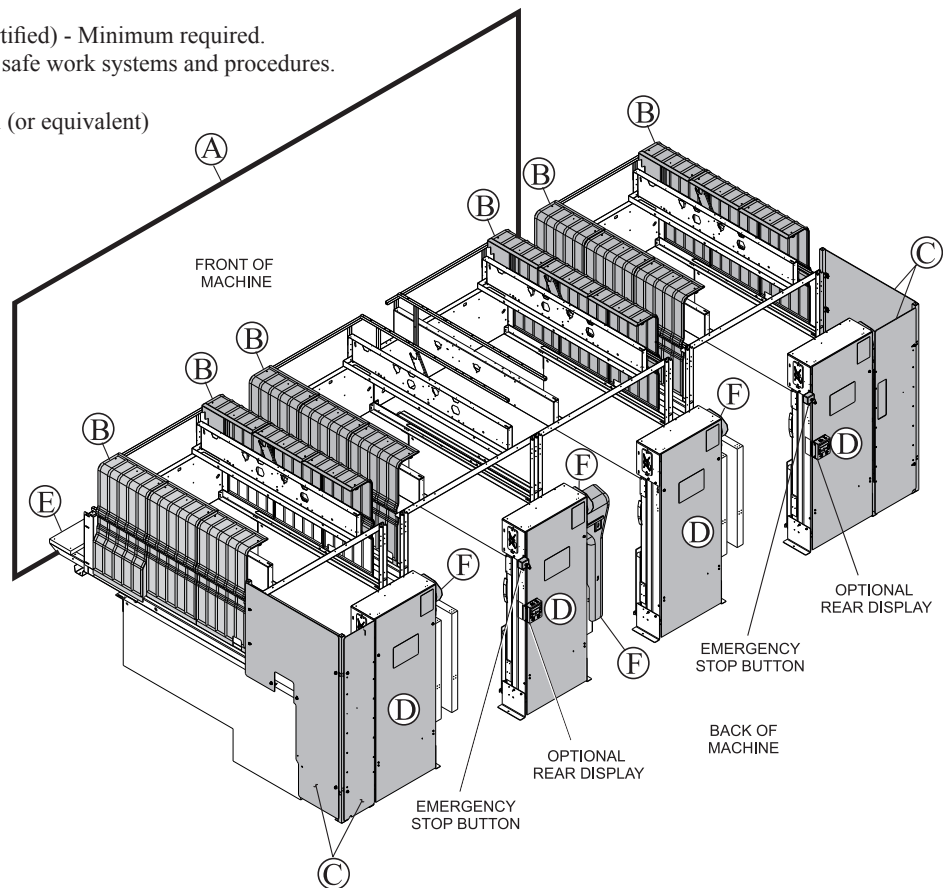
### Base (UL) Guarding Package - Overview



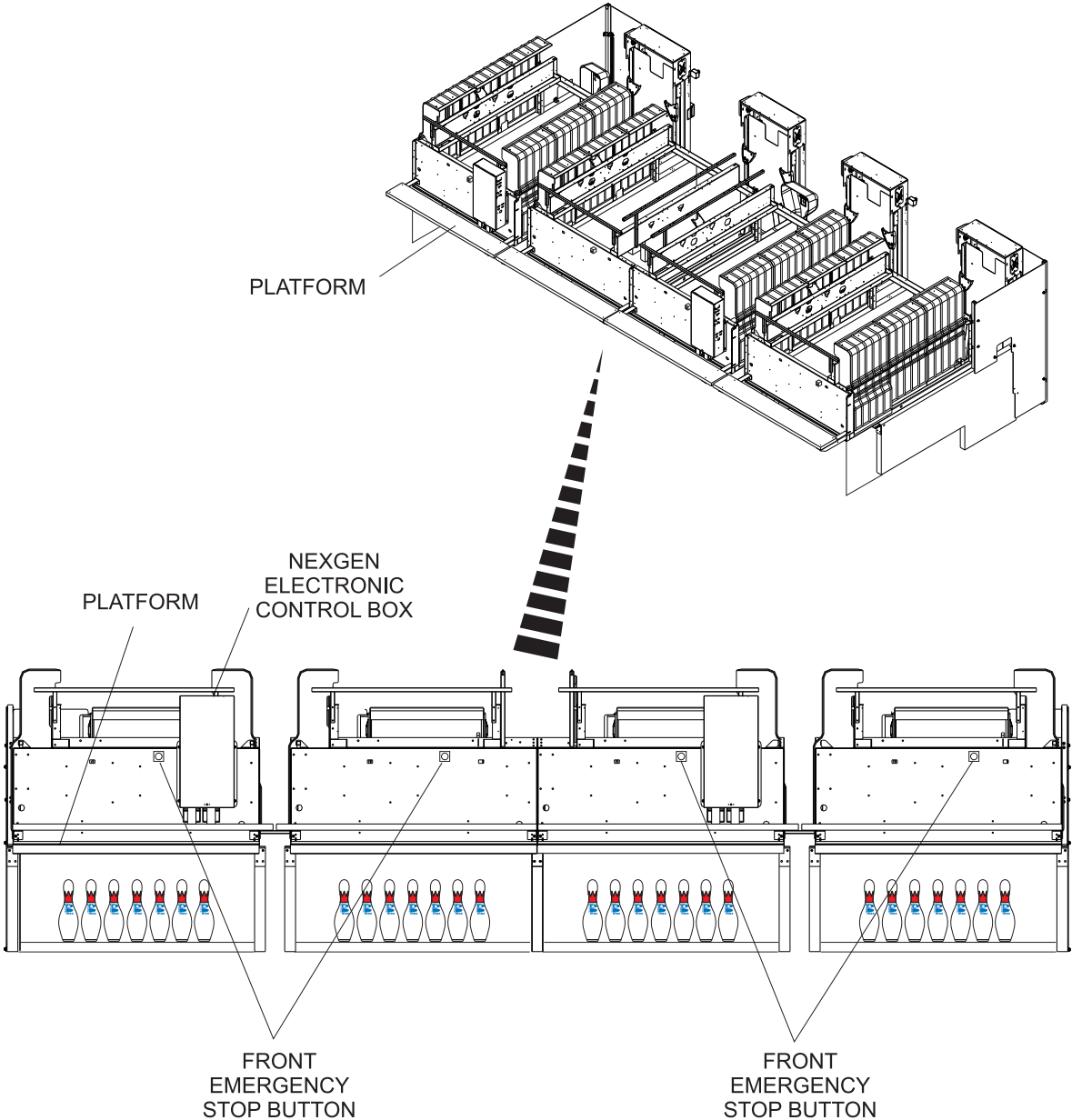
***Brunswick strongly encourages customers to consider upgrading to Brunswick's Advanced Guarding (CE Certified) system.***

BASE GUARDING (UL Certified) - Minimum required.  
For customers with adequate safe work systems and procedures.

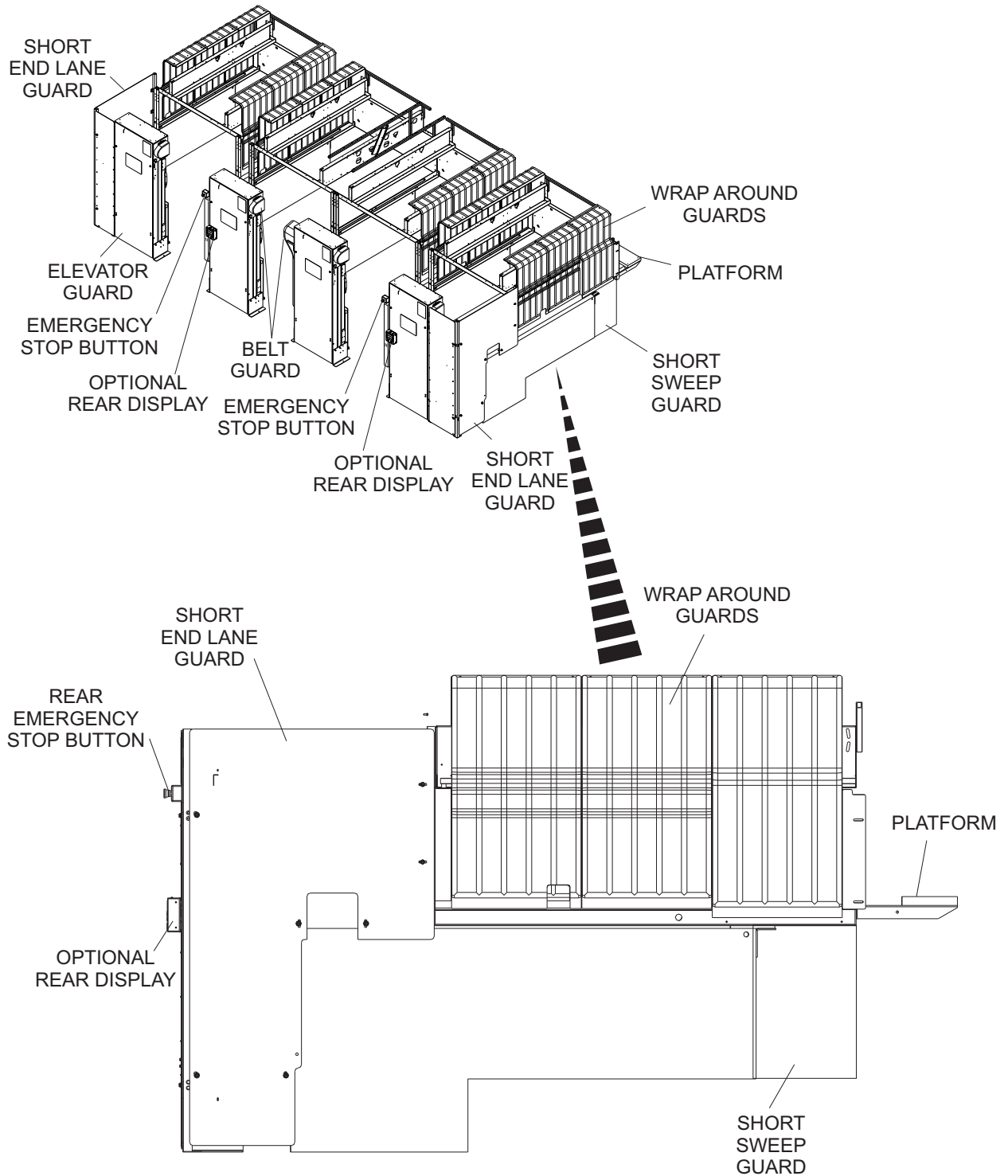
- A. Front masking unit panel (or equivalent)
- B. Side guards
- C. Rear end lane guards
- D. Elevator guards
- E. Front access platform
- F. Pulley belt guards



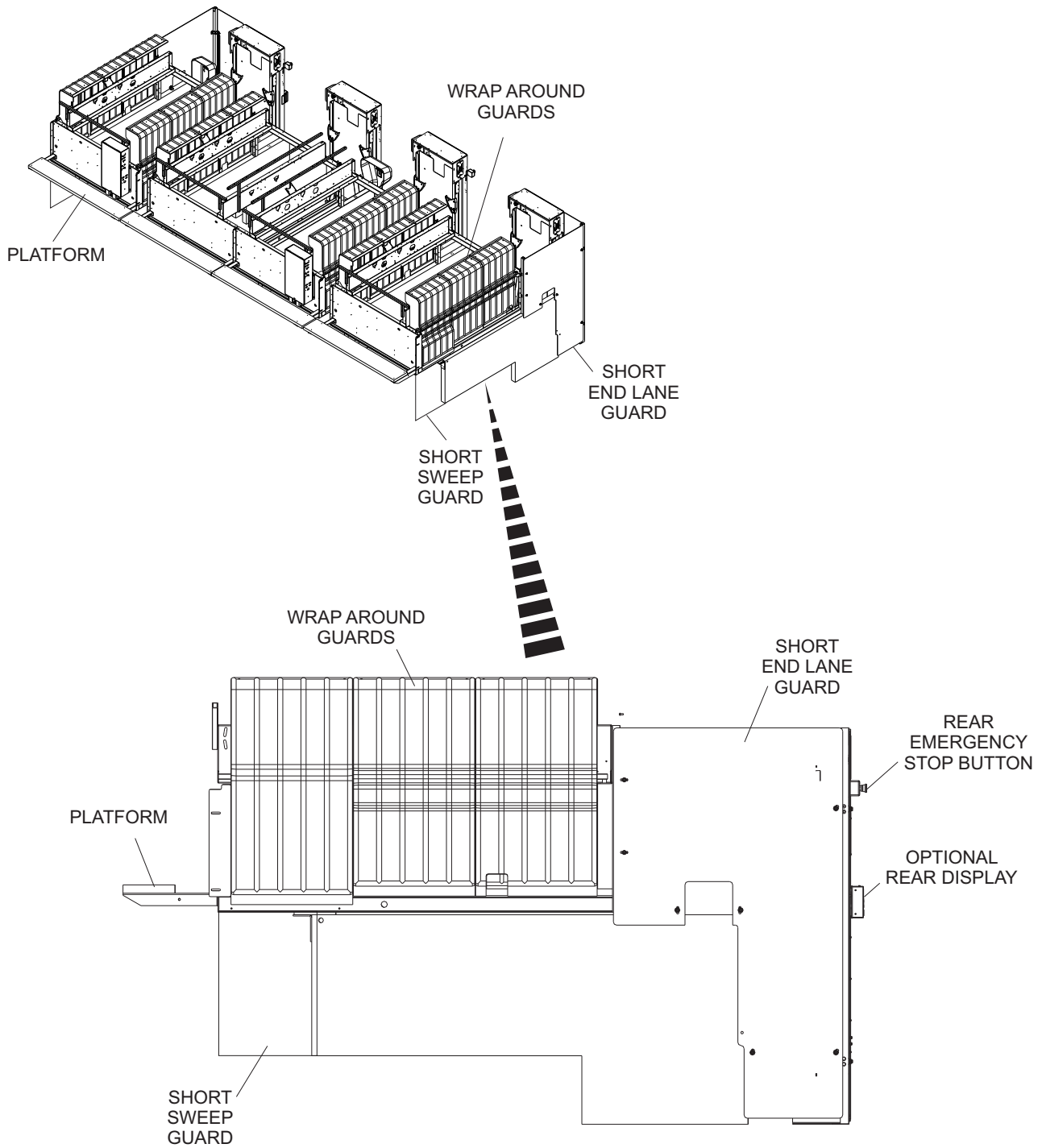
# Base (UL) Guarding Package - Front View



# Base (UL) Guarding Package - First Lane/End Lane View

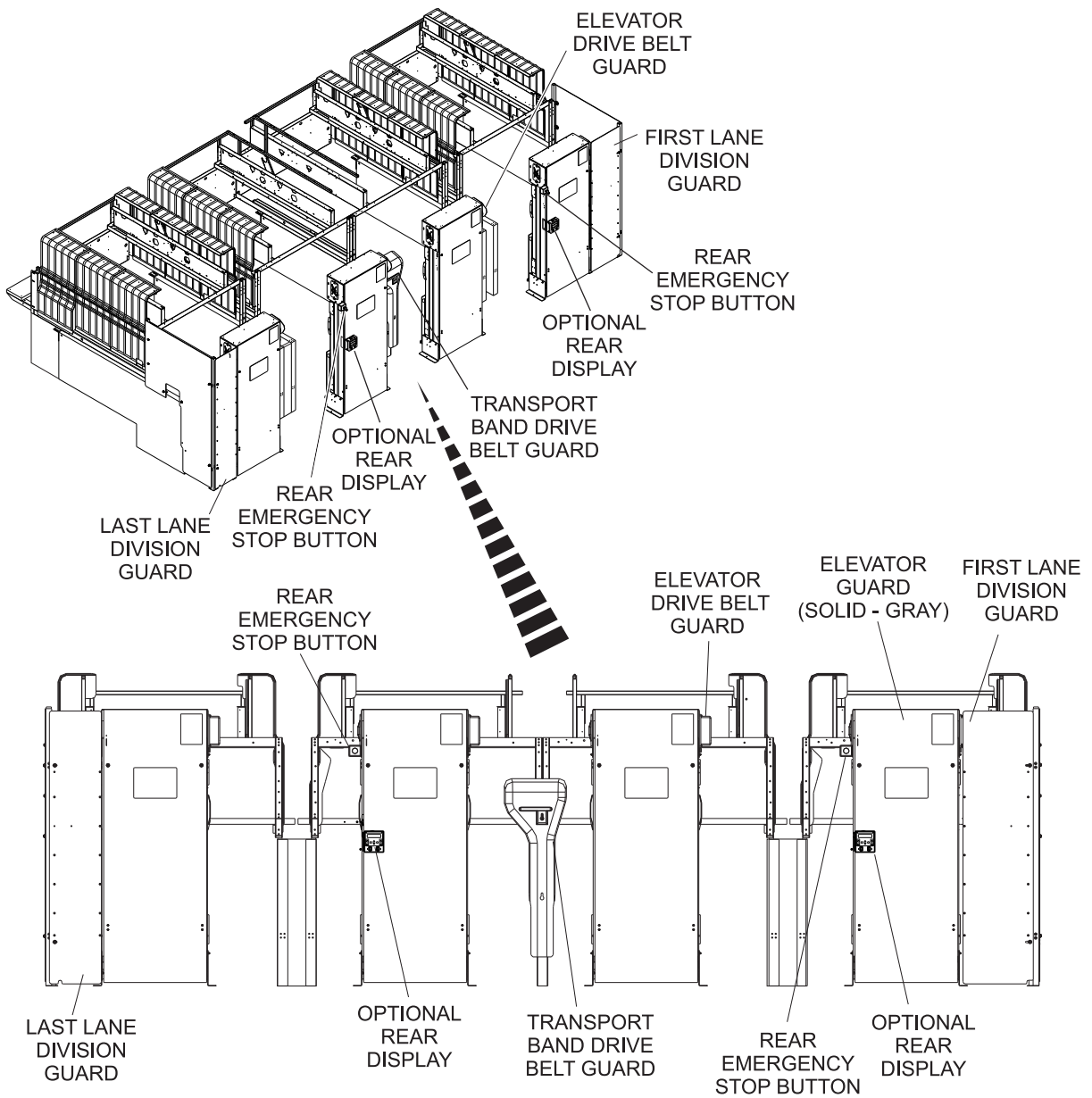


# Base (UL) Guarding Package - Last Lane/End Lane View





# Base (UL) Guarding Package - Rear View



## ADVANCED (CE) GUARDING PACKAGE

The Advanced (CE) Guarding package has been developed to meet national and local safety codes in various locations worldwide.

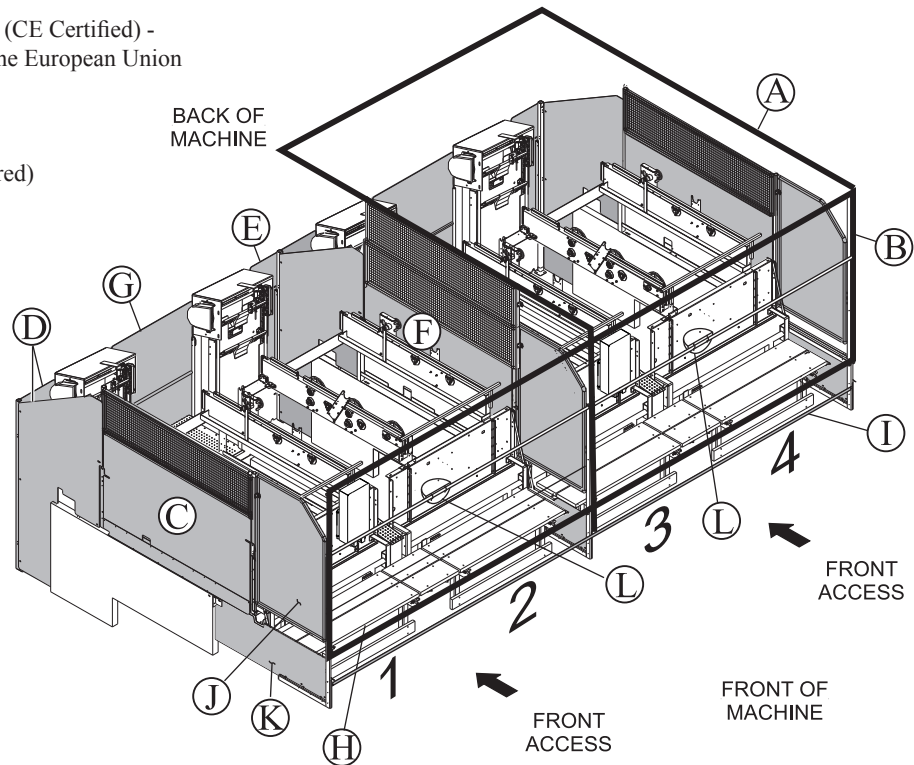
- Safety interlocks and sensors have been incorporated with the Masking Unit at the front of the pinsetters and in the rear guards to monitor and stop operation the lane pair in emergency or unsafe situations.
- A Safety Controller unit located at the back of the machine will shut off power to the entire lane pair if any safety interlock is triggered. It must be manually reactivated by a trained technician before either pinsetter can function.
- A Diagnostic Display is located next to the Safety Controller to assist the trained technician in troubleshooting and maintaining the pinsetters.
- Division guarding is positioned between each lane pair to prevent entry into areas where other pinsetters are operating.
- An folding platform is available to provide the trained technician a walkway equipped with a safety rail while allowing safe access to the lane surface.

### Advanced (CE) Guarding Package with Walkway - Overview

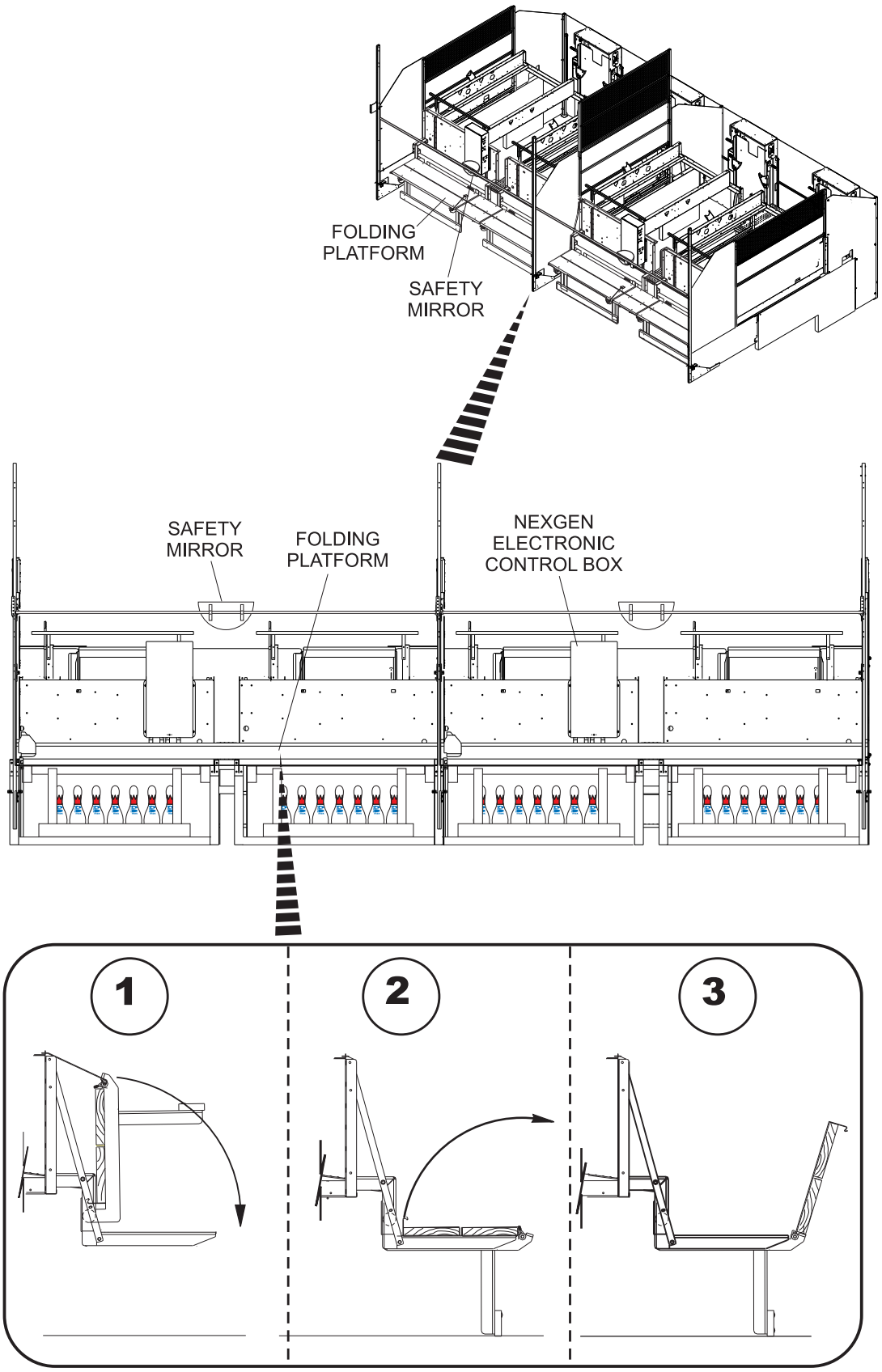


ADVANCED GUARDING (CE Certified) -  
Required for customers in the European Union  
& residential installations

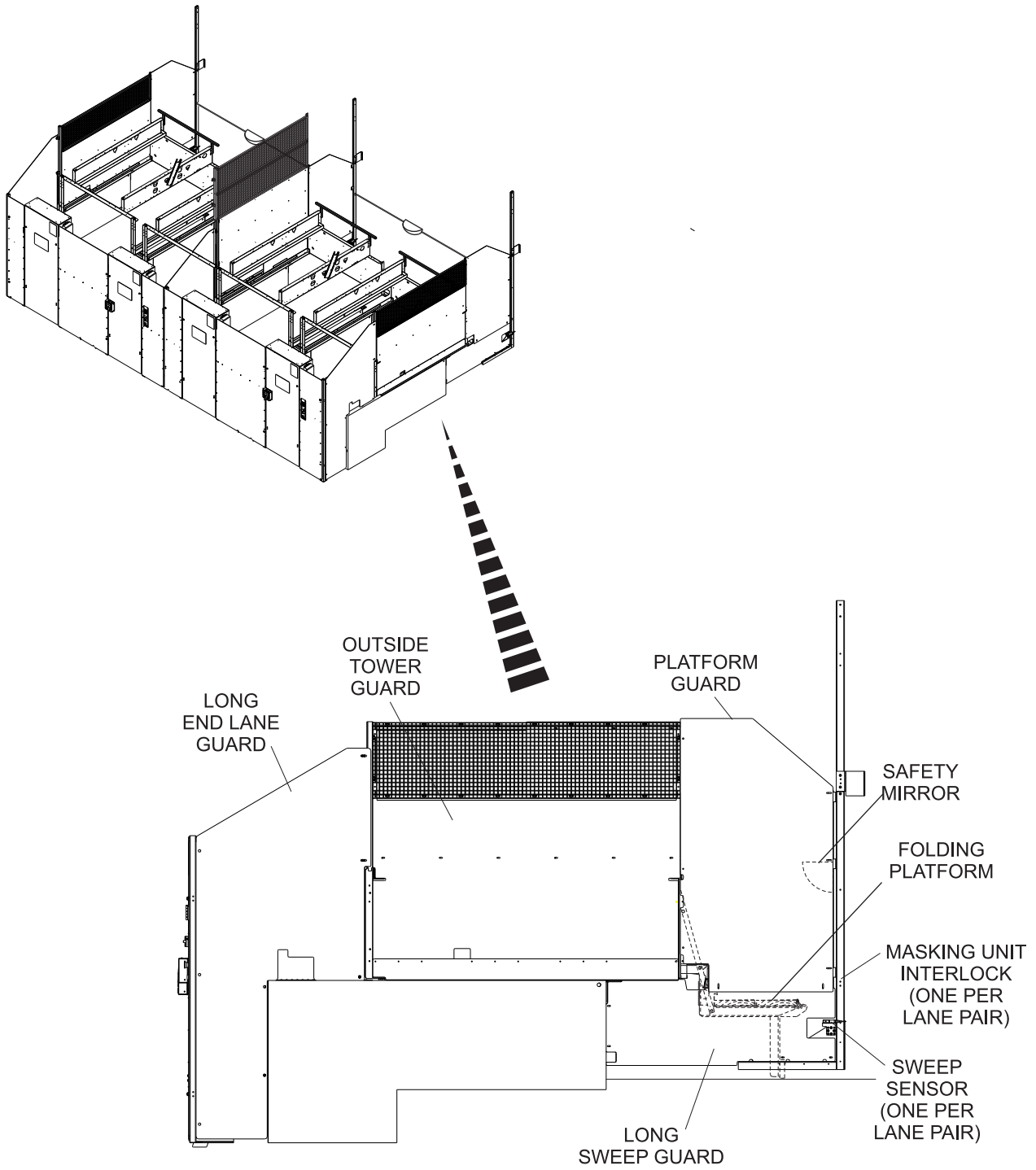
- A. 360 degree security perimeter
- B. Front masking unit panel (required)
- C. Side guards
- D. Rear end-lane guards
- E. Separated rear division guards
- F. Division guards
- G. Interlocked ball return door
- H. Front access folding platform
- I. Photo-sensor
- J. Platform guard
- K. Sweep guard
- L. Safety mirror



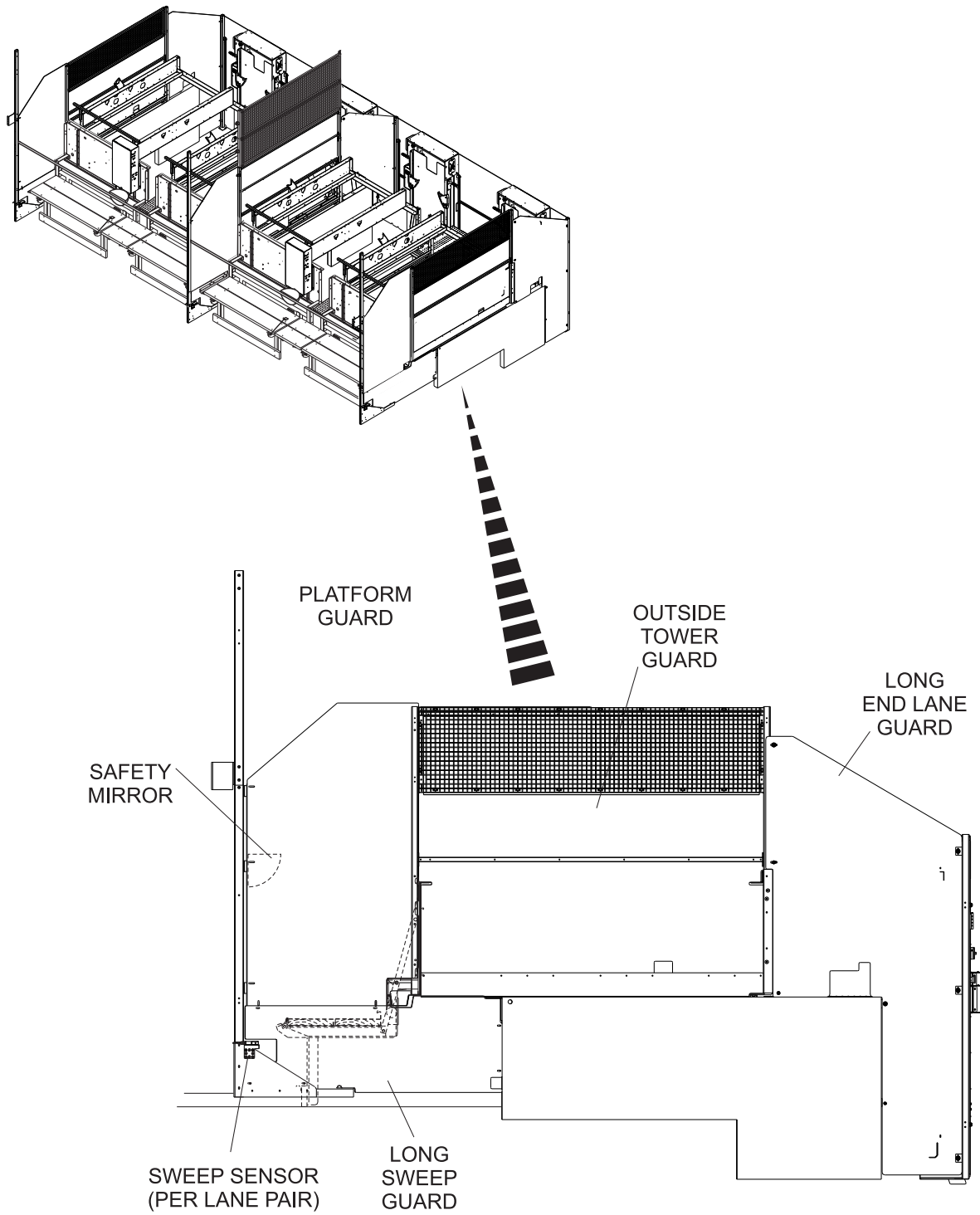
# Advanced (CE) Guarding Package with Folding Platform - Front View



# Advanced (CE) Guarding Package - First Lane/End Lane View



# Advanced (CE) Guarding Package - Last Lane/End Lane View



# Advanced (CE) Guarding Package - Rear View

