## **Features Brochure**

For The Raymond® Orderpicker and Swing-Reach® Trucks

## **A** ATTENTION

You may want to consider one or more of the following features if one or more of your order picking forklifts operate in certain environments.

Please note: Some of these features create potential hazards that would not exist in their absence. Accordingly, these features should be selected only after careful consideration.

## Purpose of this brochure:

Raymond products are designed to comply with the American National Standards Institute Safety Standard For Low Lift and High Lift Trucks, ANSI/ITSDF B56.1, The United States Department of Labor's Occupational Safety and Health Standards for Powered Industrial Trucks, 29 C.F.R. 1910.178, and Underwriters Laboratories, Inc.'s Standard for Safety Electric-Battery-Powered Industrial Trucks, UL 583. In their standard configuration, Raymond products minimize overall operational risk across the entire range of anticipated environments of use. For particular environments of use, however, modifications to this standard configuration may further decrease risk for those particular applications. This brochure is designed to acquaint the customer with some of the features available for use with Raymond order picking equipment. (Other brochures provide information regarding available features for pallet handling, sit-down counterbalanced, and sideloader material handling equipment.) Please carefully review this brochure and discuss with your Raymond Dealer those features which may have utility in your specific application. These features may be ordered with a new truck or may be added to forklifts already in operation.

## **Scope of Brochure:**

The following features are discussed in this brochure:

Lights and Alarms

- Audible Alarm
- · Warming Lights
- Work Lights
- Compartment Light
- · Travel Light

Barrier and Guard

· Pallet Handling Unit Platform Barrier

Fall Protection System

- Guard Rail System With 3-Bar Sidegate
- Retractable Tether

Miscellaneous

- Pallet Clamp and Centering Device
- Sidegate Power Disconnect Switch
- Lift Limit Switch With Bypass
- iWarehouse™

Training

• Safety On The Move® Operator Training Program

This list may be revised and individual items added or withdrawn at any time. Not all features offered by The Raymond Corporation are included in this brochure.

Additional features/configurations may also be available from Raymond. Specific inquires will be evaluated upon request. Additionally, these features may also have application to other than the particular models listed.

Ask your Raymond Dealer for more information.



### **Audible Alarm:**

(Motion or Back-up, Fixed or Variable Sound Levels)



Raymond forklifts are designed to provide excellent visibility to the operator when traveling in either the forks leading or forks trailing mode. Each forklift is equipped with a horn as standard equipment. The horn serves as a device to warn pedestrians and other truck operators of the presence of a truck. Accordingly, an operator is normally able to see pedestrians or other truck operators and warn them of a truck's presence. In certain environments of use, however, there may be a high level of pedestrian traffic, some of whom may be unfamiliar with forklifts and their operational characteristics. Depending on operating environment ambient noise levels, an alarm may help to increase recognition of a forklift by pedestrians and the operators of other trucks. This feature is available in the forks leading or forks trailing travel modes. The alarm is high-pitched and automatically activates when the operator places the truck in the designated travel mode.

#### **Application Considerations:**

- Multiple alarms may be distracting and create confusion and indifference
- Effectiveness depends on environment of use including proximity of non-operators and/or pedestrians, ambient noise level in area, and numbers and types of equipment in use
- Habitual use over time can reduce effectiveness of the alarm
- May decrease operator and pedestrian vigilance and attentiveness
- May distract or annoy adjacent property owners, operators, other operators, and pedestrians

#### Models

All

#### Warning Light: (Colors Other Than Amber Available)



Raymond forklifts are designed to provide excellent visibility when an operator is traveling in either the forks leading or forks trailing mode. Each forklift is equipped with a horn as standard equipment. The horn serves as a device to warn pedestrians and other truck operators of the presence of a truck. Accordingly, an operator is normally able to see pedestrians or other truck operators and warn them of a truck's presence. In certain environments of use, there may be a high level of pedestrian traffic, some of whom may be unfamiliar with forklifts and their operational characteristics. Additionally, some environments present high levels of ambient noise, making the horn and/or an audible travel alarm feature difficult to hear. The warning light may assist in providing an indication of a forklift's presence.

#### **Application Considerations:**

- Multiple lights in the same area may create confusion or indifference
- Effectiveness depends upon environment of use, including proximity of non-operators and/or pedestrians, light level in area, and numbers and types of equipment in use
- On certain trucks the overhead clearance is decreased
- · Habitual use over time can reduce the effectiveness of the light
- May decrease operator and pedestrian vigilance and attentiveness
- May distract or annoy other forklift operators and pedestrians

#### Models

### **Work Lights:**



Certain load handling situations require more light than that provided by existing warehouse lighting systems. Work area lights are normally mounted in pairs, providing light to illuminate dimly-lit storage areas. As a consequence, work lights may thereby reduce operator eyestrain and increase productivity. The lights are individually adjustable by the operator to the application requirements.

#### **Application Considerations:**

- May distract other operators or pedestrians in the same area
- · May interfere with other operations in adjacent aisles

#### Models

All

### **Compartment Light:**



The quality of warehouse lighting may vary throughout the warehouse. In this situation, an operator may have difficulty reading paperwork. Auxiliary lighting may be mounted across the overhead guard to ensure adequate lighting for the operator.

#### **Application Considerations:**

· May not be appropriate for use in cold storage environments

#### Models

• All

### **Travel Light:**



In certain environments of use, an operator must travel from a well lit area to an area of low light. In such environments, travel lights may be of assistance to an operator by illuminating the path of travel. Lights also assist visibility when loading and unloading over the road trucks. Operation travel lights are available singly or in pairs and are automatically activated to illuminate the aisle when the operator activates travel control.

#### **Application Considerations:**

- May distract other operators or pedestrians in the same aisle or area
- May interfere with other operations in adjacent aisles

#### Models

## Pallet Handling Unit Platform Barrier:

(Other Configuration Available)



Raymond Swing-Reach® trucks are dual purpose trucks. These trucks can be used for full pallet handling and the full range of order picking tasks such as case picking, inventory, and product verification. In certain applications, however, the order picking capability is not necessary. For these applications, a Pallet Handling Unit Platform Barrier may be added to enhance an operator's feeling of security at elevated heights and may further inhibit materials from entering into the operator's compartment. The barrier comes in two different configurations: wide barrier and narrow barrier. Also see "Guard Rail System With 3-Bar Sidegate."

#### **Application Considerations:**

- · Reduces and restricts platform space
- Impairs order picking
- · Difficult to dismount the truck when in a narrow aisle

#### Models

9000 Series, and EASi Swing-Reach®

## Guard Rail System With 3-Bar Sidegate:



Platforms used for elevating personnel shall have a Fall Protection System consisting of either a restraining means such as a guard rail system or means for securing personnel such as a belt or harness and tether. Accordingly, every *Raymond Swing-Reach* vehicle comes equipped with a Fall Protection System. Traditionally, a belt or harness and a fixed length tether have been provided to meet this requirement. As an alternative, however, a Guardrail System with a 3-bar sidegate is available to serve as the mandated Fall Protection System. For additional potential utility, also see Pallet Handling Unit Platform Barrier.

#### **Application Considerations**

- · Reduces and restricts platform space
- Impairs order picking
- If the sidegate is raised when elevated the operator must have their belt or harness and tether in place
- Difficult to dismount the truck when in a narrow aisle

#### Models

• 9000 Series, and EASi Swing-Reach®

### **Retractable Tether:**



Platforms used for elevating personnel shall have a Fall Protection System consisting of either a restraining means such as a guard rail system or means for securing personnel such as a belt or harness and tether. Accordingly, every *Raymond* Orderpicker and *Swing-Reach* vehicle comes equipped with a Fall Protection System. Traditionally, a belt or harness and a fixed length tether have been provided to meet this requirement. In certain applications using this type of Fall Protection System, however, an operator may need enhanced freedom of movement without resorting to frequent repositioning of the tether. In these applications, a retractable tether may make the operator more productive and efficient.

#### Models

### **Pallet Clamp:**



Raymond Orderpickers in their standard configuration are equipped with a pallet clamp that will accommodate a center stringer width of 1.25" to 2". This clamp will accommodate the standard pallet found in most applications. In certain applications, however, customers may use other than these standard pallets. These non-standard pallets include those that are of composite composition or are a block pallet, which contain larger than normal center stringers. To enhance orderpicker interface with these non-standard pallets and to promote operator productivity, a Pallet Clamp accommodating a larger stringer width of 1.25" to 5" is available.

#### **Application Considerations:**

· Can interfere with use of pick cart or other non-standard pallets

#### Models

All

## Sidegate Power Disconnect Switch:



Raymond order picking products are equipped with sidegates, some of which are the flip-down type (For the Model 5200, flip-down sidegates are available as an added feature). The sidegates serve as an assist in defining the operator platform/compartment and to the operator in determining the outline of the platform/compartment. The design of Raymond order picking products facilitate the operator assuming the proper operating position through the placement of operator controls: multifunction control handle, steering wheel, and deadman brake pedal. In the standard configuration of Raymond order picking products, the deadman pedal must be depressed in order to travel, lift, lower, or perform load handling and flip-down sidegates need not necessarily be in the down position for the truck to function. The positioning of the sidegates during operation should be determined by the customer. In certain applications uniformity of multi-manufacturer fleet is of importance and a customer may determine that the flip-down sidegate should always be down during operations. Therefore, this feature is available which will prevent lift, lower, travel, and load handling if this sidegate is not in the lowered position. In neither the standard configuration nor the optional configuration are the single bar sidegates part of the provided Fall Protection System.

#### **Application Considerations**

• Affects efficiency of order picking operation

#### Models

# Lift Limit Switch With Bypass:



In some operating environments, trucks must operate in areas having more than one clear stacking height dimension such as bi-level warehouses where there are other forms of varying height clearance including doorways and overhead obstructions. Operating at improper heights in these areas can result in truck, material, or building damage and could cause a truck to tip over. Under normal circumstances an operator operating a truck with caution, attentiveness, and diligence can ensure avoidance of these situations. In order to help ensure that an operator does not accidentally encounter overhead obstructions, a lift limit switch may be added to the truck. This feature will cut-out the lift when the switch is activated. To lift beyond this cut-out; a bypass switch mounted on the operator control panel must be activated while the standard lift control is activated.

#### **Application Considerations:**

- · Lift above the bypass height needs the use of both hands
- Elevated height of the lift limit must be greater than the overall collapsed height of the truck

#### Models

• All

#### *iWarehouse*™:



The Raymond iWarehouse fleet optimization system is a customizable solution to monitor, analyze, and secure material handling assets. iWarehouse uses valuable truck data which assists a customer in making informed decisions about their fleet. The iWarehouse system also allows customers to take action against equipment abuse and unauthorized usage by limiting access, configuring vehicle parameters by operator, and messaging key personnel with important information. iWarehouse is not limited to information taken from the truck, the addition of iTrack or iWarehouse Premium Services enables you to monitor cost of ownership. A wide view of fleet information is provided in a single screen that offers more details by pointing and clicking on interactive reports that will even allow you to view part-level information.

#### **Application Considerations:**

• Infrastructure cost to implement on smaller fleets may not provide a significant return on investment

#### Models

## Safety On The Move®:

(Operator Training Program)



The safe and efficient use of forklifts depends, among other things, upon operators being properly trained. The United States Department of Labor Occupational Safety and Health Administration (OSHA) requires that employers ensure that only trained operators operate powered industrial trucks. OSHA further requires that employers implement methods to train operators. This training must address both the specific type of equipment they will use and the conditions and characteristics unique to their place of work. Safety On The Move is a training program that focuses on the most frequent hazards experienced by vehicles in the workplace: ramps, loading docks, corners, loads, lifting procedures, and pedestrian areas. Using a series of videos, this program takes the trainee through all aspects of the topic. The operator will learn how to control and operate forklifts and how to abide by the "rules of the road" around the plant or warehouse.

#### **Application Considerations:**

- · Assists employers in complying with their duty to ensure that lift truck operators are properly trained
- · Assists in proper operation of equipment

#### Models



The pictures in this brochure are merely demonstrative and do not necessarily depict the exact  $characteristics \ of the \ feature \ described. \ Your \ authorized \ Raymond \ dealer \ can \ provide \ you \ with \ the \ exact$ specifications of this feature. Vehicle shown may contain additional features which are not standard equipment. Above. And beyond., EASi, iWarehouse, Raymond, Safety On The Move, and Swing-Reach are registered trademarks of The Raymond Corporation.

©2009 The Raymond Corporation, Greene, NY. Printed in USA. MISC-0067A 709RAY-06

RAYMOND

Above. And beyond.®

The Raymond Corporation P.O. Box 130 Greene, New York 13778-0130 Toll free 1 (800) 235-7200 Fax 1 (607) 656-9005

www.raymondcorp.com