



Linde Material Handling

Linde

Series 1346

KION[™]
GROUP

KION North America

TOTAL
WAREHOUSE

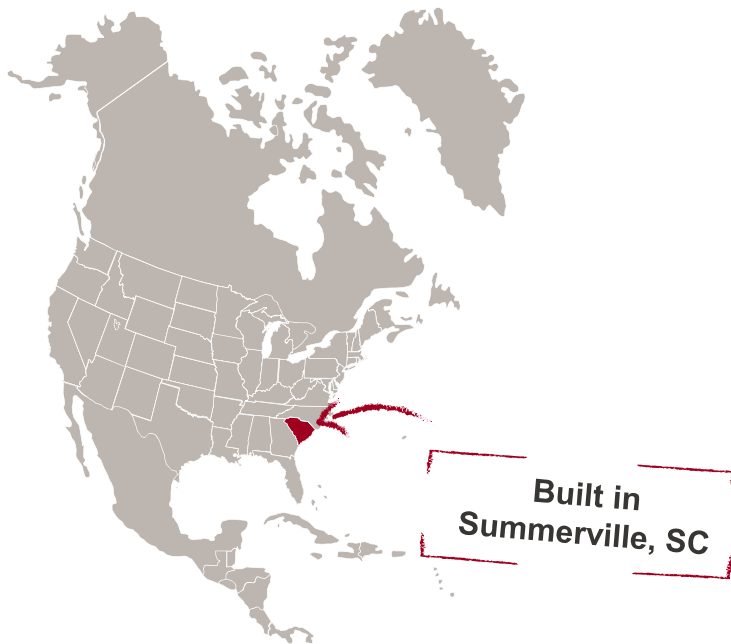
Series 1346 – E18S/E20S

Stand-up, Counterbalanced Electric Forklift

Linde Material Handling

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KION Group
Strategy 2020



Series 1346 – E18S/E20S

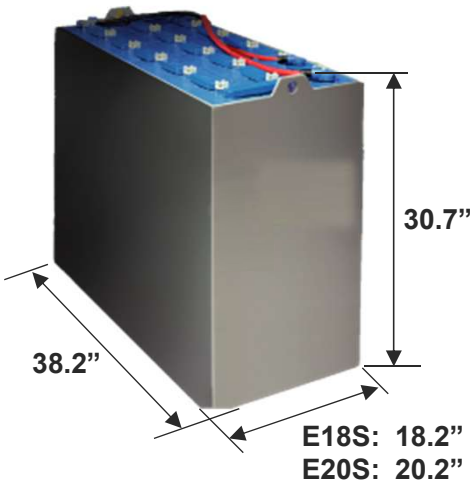
Basic dimensions

- 10-1/2' operating aisle
- 7" battery roller height
- 8" operator step height



Series 1346 – E18S/E20S **Batteries**

Batteries		
	E18S	E20S
Base capacity	3,500 lb	4,000 lb
Battery type	36v – 875 Ah	36v – 1000 Ah
Battery Compartment	38.5"x18.5"x31.0"	38.5"x20.5"x31.0"
Battery weight	2,178 lb (min.) 2,407 lb (max.)	2,513 lb (min.) 2,777 lb (max.)



Maximum battery
dimension



Rollers (standard)

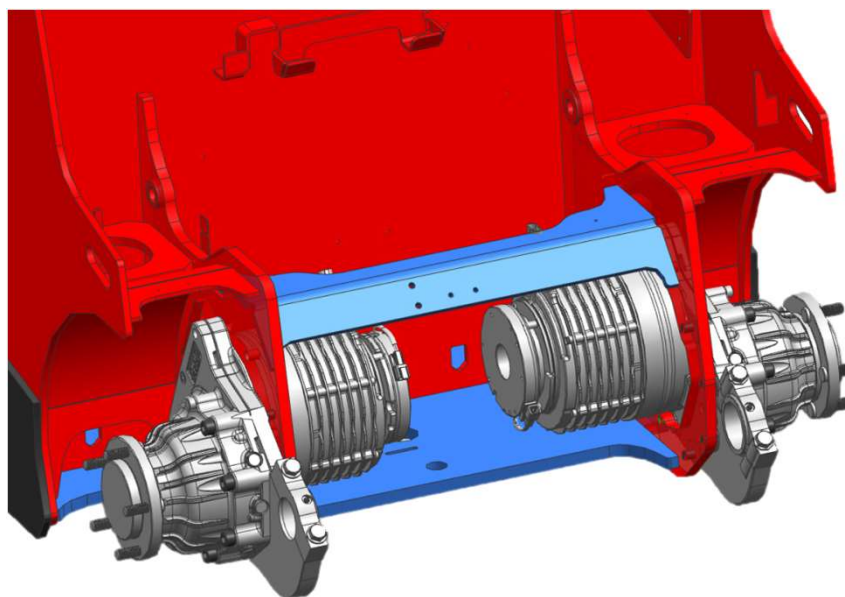
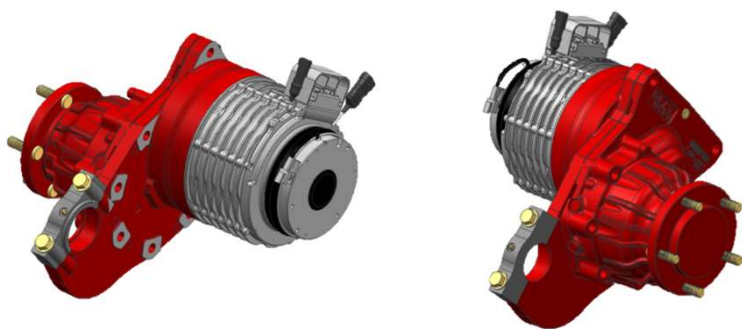
Common Features

Series 1346 – Common Features

Drive Motors

Traction drive units

- Twin units (left / right)
- High efficiency, 4.3kW AC drive motors
- IP54 dust and water ingress resistance
- Integrated gearbox and mast mounting
- Automatic parking brake with dust seal



Series 1346 – Common Features

Operator Comfort and Ergonomics Features



Series 1346 – Common Features

Operator Comfort and Ergonomics Features

Compartment sizing

- Largest operator compartment
- Clearance at driver hip height
- Low platform step (8-inch)
- Wide foot opening



Series 1346 – Common Features

Operator Comfort and Ergonomics Features

Height-adjustable components

- Flexible ergonomics concept
 - 5th percentile female
 - 95th percentile male
- Telescopic steering wheel
- Armrest/joystick sliding rail (5-positions)
- Cushioned contact surfaces
 - Backrest
 - Hip pad
 - Forearm cushion
 - Knee panel

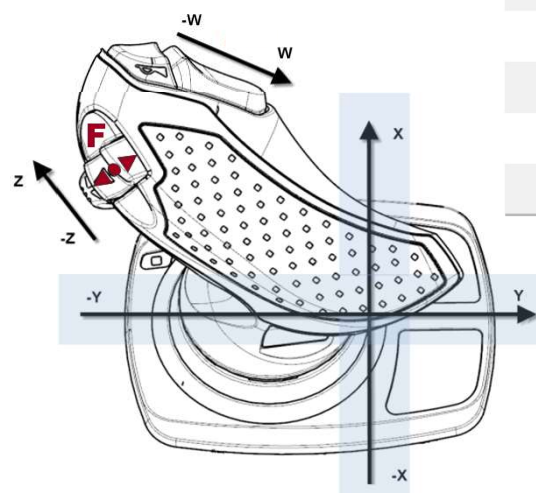


Series 1346 – Common Features

Standard configuration

Multi-function control lever

- Combined, proportional controls
- Factory standard setting only
- **Primary task:** Driving (*push/pull*)
 - Stronger muscles in arm and shoulder
- **Secondary task:** Lifting (*sideways movement*)
 - Smaller muscles in forearm
- Smaller movements; superior ergonomics



Input	Standard function
X	Forward (forks leading)
- X	Backward (forks trailing)
Y	Mast lowering
-Y	Mast lifting
Z / - Z	3 rd function aux.
W / - W	4 th function aux.
▲	Mast tilting

Conceptually
comparable to
CROWN for
travel function

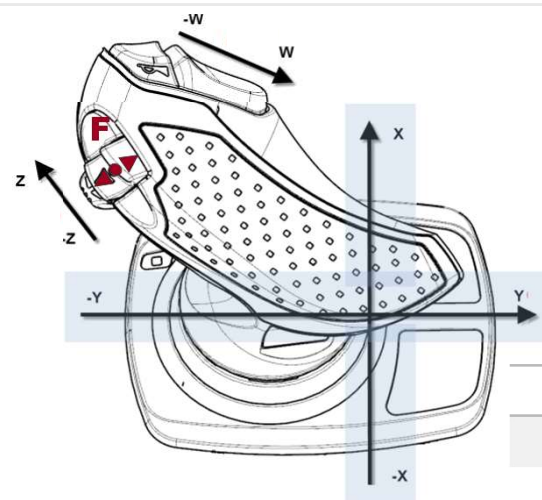
*Mast positioned to the right-side of diagram

Series 1346 – Common Features

Inverted-axis configuration

Multi-function control lever

- Concession for previous Raymond users
- Optional configuration (performed by dealer)
- Instruction page and new decals
- **Fork-leading travel** = handle **towards** forks
- **Fork-trailing travel** = handle **away** from forks



*Mast positioned to the right-side of diagram

Conceptually
comparable to
RAYMOND for
travel function

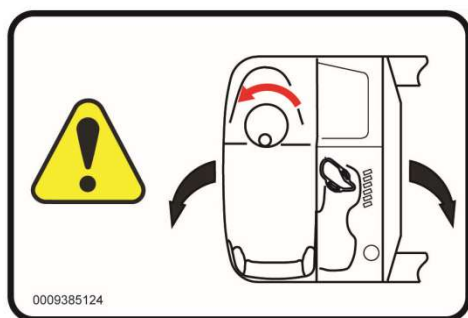
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Series 1346 – Common Features

Driving Characteristics

Forward and reversed steering

- **Forward steering:** forks-leading (standard)
- **Reverse steering:** forks-trailing (optional)
 - Dealer exchange of hydraulic hoses
 - New decal required
 - Parts kit delivered with truck

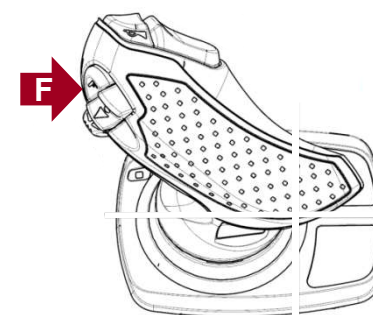
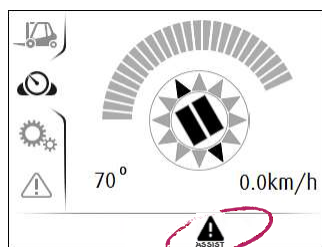


Series 1346 – Common Features

Driving Characteristics

Advanced tilt controls

- **Electronic tilt position sensor (standard)**
 - Cushioned tilting end stops
- **Tilt assistance (standard)**
 - Forward tilting limitation above free lift
- **Tilt memory function (optional)**
 - Driver-controlled position memory

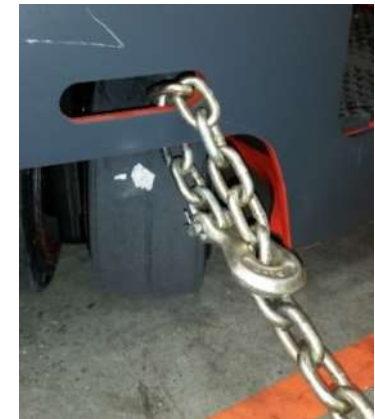


Series 1346 – Common Features

Productivity Highlights

Chassis tie-down points

- One tie-down point near each wheel
- 3/8-inch, Grade 70 transport chain compatible
- Possibility to hook, or use chain pass-through
- Commonly available chain/hook size



Series 1346 – Common Features

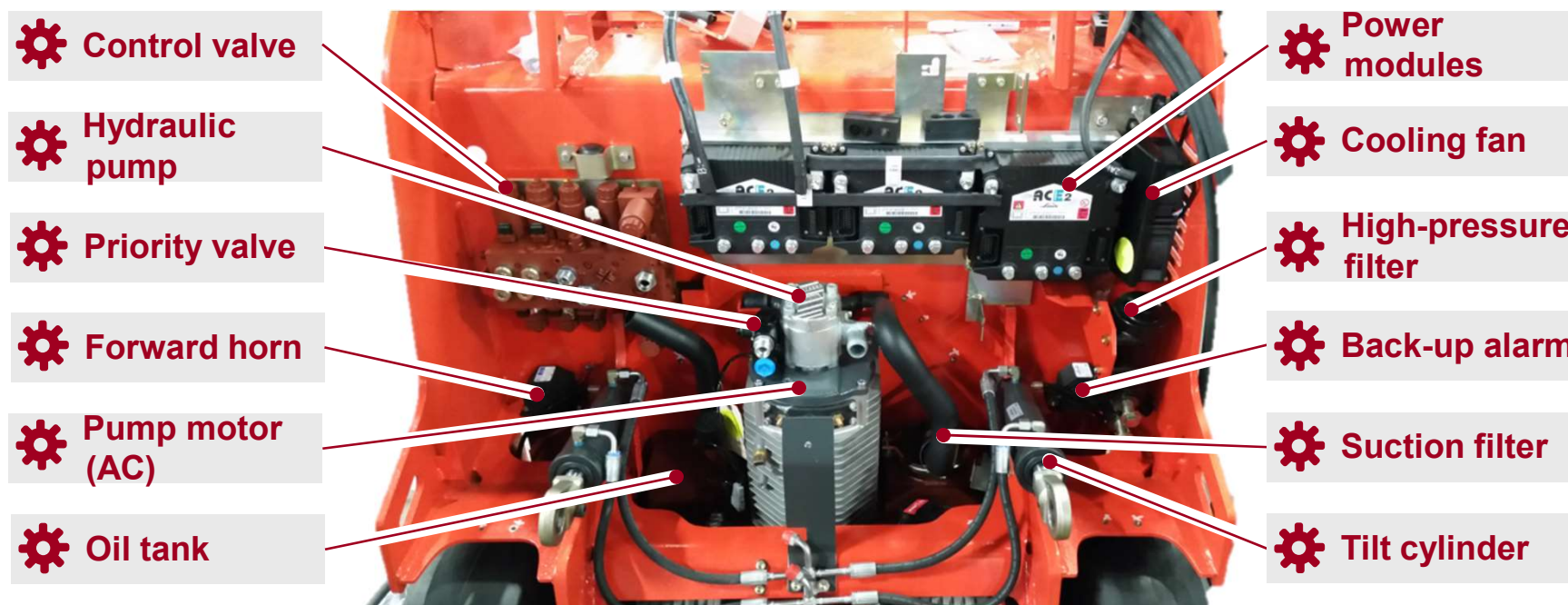
Productivity Highlights

Tool-free access panels

- **Front panel:** Three thumbscrews
- **Electrical panel:** Snap locking buttons
 - Fuses, relays, main contactor
 - Voltage converter and truck controller



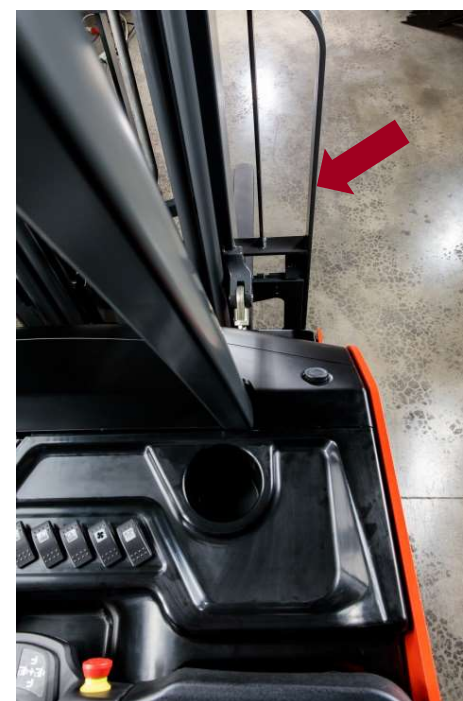
Series 1346 – Common Features Productivity Highlights



Series 1346 – Common Features Safety Enhancements

Superior visibility

- **Low profile front cover**
 - View of drive tire, carriage, and fork
- **Wide sight window between mast channels**
 - Optimized lines of sight
 - Avoidance of obstacles
 - Easy identification of pedestrians



Series 1346 – Common Features Safety Enhancements

Linde Curve Assist

- Curve Assist is standard equipment
- Automatic speed reduction based on steering angle
- Allows driver to focus on handling the load



Series 1346 – Common Features

Stand-up, Counterbalanced Electric Forklift

On/Off Often

- Widest Hip/Foot Opening
- No seat belt
- Automatic parking brake
- Presence pedal
- Brake switch on the left



Series 1346 – Common Features

Operator Comfort and Ergonomics Features

Operating platform

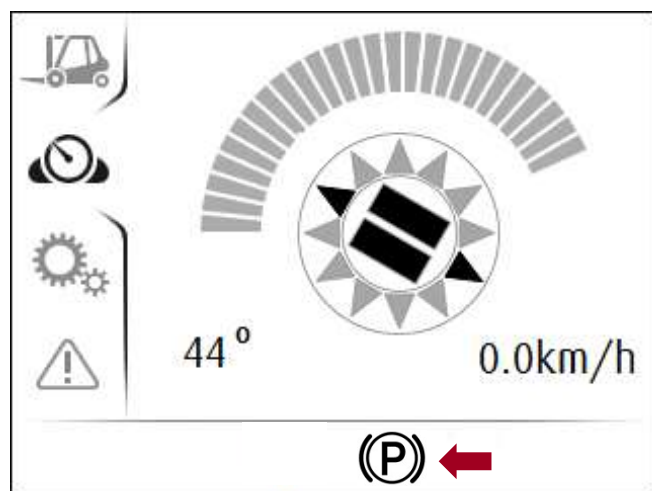
- Suspended floorplate for vibration isolation
- Low, 8” step height
- Large operator presence switch for comfort
- Additional toe pocket and “resting” step



Series 1346 – Common Features Safety Enhancements

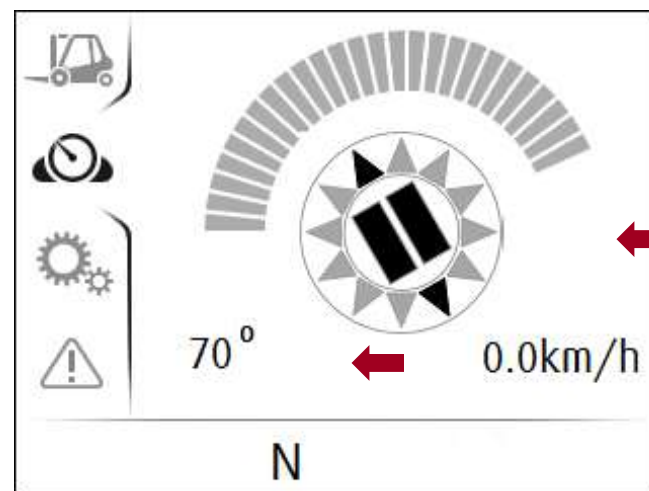
Automatic parking brake

- Set brake when truck speed is zero
- Automatic release upon travel command



Steering angle indication

- Displays angular wheel position
- Numerical value and graphical representation



Series 1346 – Common Features

Stand-up, Counterbalanced Electric Forklift

Dock work

- Side Stance
- Visibility
 - Right Side of Mast
 - Through Mast
 - Forks Trailing
- Toe Protection / Entry Bar
- Curve Assist



Series 1346 – Common Features

Stand-up, Counterbalanced Electric Forklift

Linde Material Handling

Linde

Warehouse

- Dock to Stock
- 10-1/2' – 11' Aisle
- 3rd Post Standard
- Glass OHG Option

