

ECX

20/25/30/32

ELECTRIC 36/48 VOLT
4000 / 5000 / 6000 / 6500 lbs.
(2000 / 2500 / 3000 / 3000 kg)



CLARK[®]
THE FORKLIFT

- The low overhead guard height facilitates **easier trailer access** while providing the operator ample headroom.

- Rear posts add support to the overhead guard and help prevent objects from entering the operator compartment, keeping your employees as **safe** as possible.

- The **low step height** means frequent entry and exit is easy and less tiring for the operator.



100%

Recognizing the benefit of AC technology, CLARK developed the ECX with not just AC traction motors – but ALL AC MOTORS.

- Nested Upright Rails & Overhead Guard Safety Bars (running parallel to operator's line of sight) expand the vision window, **reduce product damage** and decrease pick times.

Maximum Visibility + Minimum Fatigue = Ultimate Safety & Product Integrity



Highly Maneuverable, Easily Serviceable, Broadly Flexible, Extremely Dependable

The CLARK ECX series of electric lift trucks is the ideal choice for demanding manufacturing and distribution applications. Superior **ergonomic design**, **operator comfort** and **safety** and **outstanding truck performance** are backed by the oldest and most trusted name in lift trucks.

ECX STANDARD FEATURES & BENEFITS



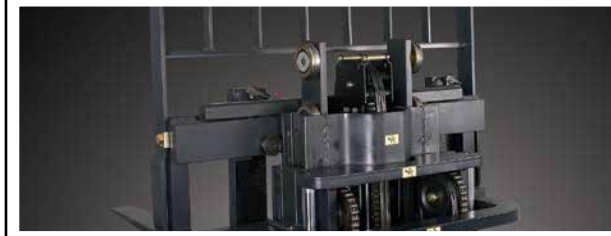
PROVEN DRIVE AXLE

- **CLARK ED30**
 - One-piece housing reduces the possibility of leaks.
- **Utilizes Durable Helical Gears**
 - Provides smooth, quiet operation.



RUGGED CAST STEER AXLE

- **Maximum Protection**
 - Offers maximum protection for the dual-action steer cylinder and fittings while still allowing easy access to the components.



RUGGED UPRIGHT AND CARRIAGE

- **Hydraulic Cushioning Valves**
 - Silent staging reduces shock & vibration.
- **Shimmable, Sealed & Canted Load Rollers**
 - Maximize load distribution & reduce free play.



TRACTION CONTROL

- **Fully Programmable**
 - Up to 20 performance parameter settings such as acceleration, creep speed, and regen braking rate can be adjusted to meet your requirements.
- **Speed Limiting**
 - Maximum travel speed can be programmed to your requirements and if necessary, forward and reverse can be set independently.
- **Controlled Descent**
 - When the controller senses movement but no accelerator pedal input, it signals the drive motors to apply counter torque allowing the truck to slowly descend an incline in a controlled manner.
- **Ramp Start**
 - Added torque limits roll back when starting on an incline.



100% AC SYSTEM

- **Fewer Parts & Minimum Wear = Less Downtime and Cost = Higher ROI**
 - Enclosed • Brushless • Thermal protection
 - Stall protection • Smart lift lock out
 - One motor for both steering & hydraulics.
- **No Brushes To Change or Commutator to Turn...Ever**
- **Heavy-Duty, High Torque Drive Motor**
 - Produces twice the draw bar pull of some competitors.
 - Climb grades previously limited to IC trucks.
- **Stall Protection**
 - Circuitry helps protect the motors should the truck be stalled.
- **Three Forms of Regenerative Braking**
 - Returns energy into the battery.



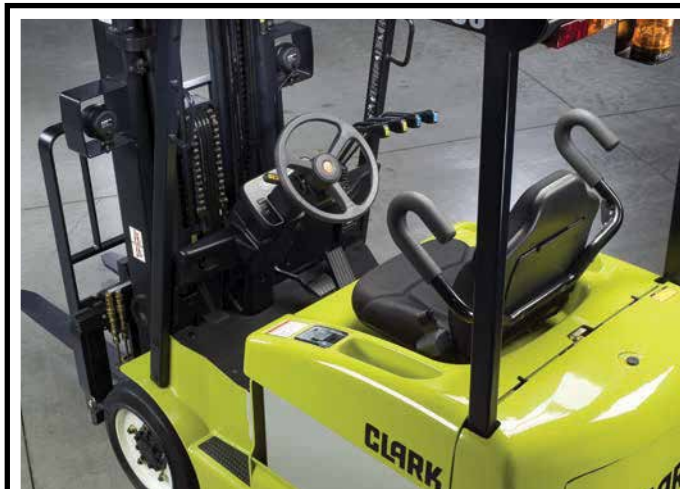
DASH DISPLAY

- **Parking Brake Reminder**
 - Sounds alarm if operator does not set parking brake.
- **Back-Lit**
 - Turns on with key switch.
 - Excellent visibility in direct sunlight.
- **Battery Discharge Indicator**
 - 10-segments used to display battery state of charge.



FULLY ADJUSTABLE/PROGRAMMABLE

- A properly trained mechanic can completely customize parameters to operator's preference such as acceleration rate, deceleration rate, maximum speed (separate forward and reverse).



OPERATOR COMPARTMENT

- **Low Step Height**
 - Steel grab handle and a low step height allow for easy entry/exit from either side.
- **CLARK Safety Seat**
 - 6" fore / aft adjustment
 - Molded for support
 - Non-cinching, retractable seat belt
 - Side safety wings
- **Visibility**
 - A clear, unobstructed view protects your product and your employees.

Available Equipment

- UL EE classification
- Cold storage specifications
- Unitrol foot operated direction control
- Various lights, audible alarms & mirrors
- Rear handle with horn button

STANDARD SPECIFICATIONS

ECX 20/25/30/32

| | | | | Clark | Clark | Clark | Clark |
|----------------------------|--------------------|--|--|--------------------------------|--------------------------------|---------------------------------|------------------------------|
| General Information | 1 | Manufacturer | | Clark | Clark | Clark | Clark |
| | 2 | Model | Manufacturer's Designation | ECX 20 | ECX 25 | ECX 30 | ECX 32 |
| | 3 | Load Capacity | | 4000 (2000) | 5000 (2500) | 6,000 (3000) | 6,500 (3000) |
| | 4 | Load Center | Fork Face to Load CG | 24 (500) | 24 (500) | 24 (500) | 24 (500) |
| | 5 | Power Unit | Electric | 36 volt / 48 volt | 36 volt / 48 volt | 36 volt / 48 volt | 36 volt / 48 volt |
| | 6 | Operator Type | | Rider Counterbalanced | Rider Counterbalanced | Rider Counterbalanced | Rider Counterbalanced |
| | 7 | Tire Type | | Cushion Electric Compound | Cushion Electric Compound | Cushion Electric Compound | Cushion Electric Compound |
| | 8 | Wheels (x=driven) | Front/Rear | 2X / 2 | 2X / 2 | 2X / 2 | 2X / 2 |
| Basic Dimensions | 9 | Upright ¹ | Maximum Lift Height, Full Capacity | 189 (4800) | 189 (4800) | 170 (4318) | 164 (4166) |
| | 10 | | Lift Height (Preferred Upright) | 189 (4800) | 189 (4800) | 189 (4800) | 189 (4800) |
| | 11 | | Freelift | 59.1 (1562) | 59.1 (1562) | 59.1 (1562) | 59.5 (1511) |
| | 12 | Upright Tilt | Back/Forward (Triple Stage Upright) | 5 / 6 | 5 / 6 | 5 / 6 | 5 / 6 |
| | 13 | Fork | Std. Fork Size (T x W x L) | 1.5 x 4 x 42 (40 x 100 x 1067) | 1.5 x 4 x 42 (40 x 100 x 1067) | 1.75 x 5 x 42 (45 x 125 x 1067) | 2 x 5 x 42 (50 x 125 x 1067) |
| | 14 | Carriage | Width of Carriage ⁵ | 37 (940) | 37 (940) | 41 (1041) | 41 (1041) |
| | 15 | Overall Dimensions | Length to Fork Face (TSU) ² | 82.8 (2104) | 86.2 (2190) | 87.7 (2228) | 92.2 (2342) |
| | 16 | | Width Over Tires ⁴ | 41.9 (1063) | 43.9 (1114) | 43.9 (1114) | 45.4 (1154) |
| | 17 | | Width Over Frame | 41.8 (1061) | 41.8 (1061) | 41.8 (1061) | 41.8 (1061) |
| | 18 | | Height, Upright Lowered | 83.5 (2121) | 83.5 (2121) | 83.5 (2121) | 83.5 (2121) |
| | 19 | | Height, Upright Extended | 237 (6020) | 237 (6020) | 237 (6020) | 237 (6020) |
| | 20 | | Height, Overhead Guard | 88 (2235) | 88 (2235) | 88 (2235) | 88 (2235) |
| | 21 | Step Height | Ground to Top of Step Plate | 18.1 (460) | 18.1 (460) | 18.1 (460) | 18.1 (460) |
| | 22 | | | | | | |
| | 23 | Turning Radius | | 70.2 (1783) | 72.6 (1845) | 73.9 (1877) | 78.3 (1989) |
| | 24 | Load Center Distance | Center of Drive Axle to Fork Face ² | 16.7 (424) | 16.7 (424) | 16.9 (429) | 17.5 (445) |
| | 25 | Right Angle Stack Aisle | Add Load Length and Clearance ² | 86.8 (2204) | 89.7 (2279) | 91.3 (2319) | 96.2 (2444) |
| | 26 | | | | | | |
| Performance | 27 | Stability | According to ANSI | Yes | Yes | Yes | Yes |
| | 28 | Speeds | Travel Speed, Max, With Load | 8.8 (14.2) / 10.8 (17.4) | 8.5 (13.7) / 10.6 (17.1) | 8.2 (13.2) / 9.8 (15.8) | 7.5 (12.1) / 9.4 (15.1) |
| | 29 | | Travel Speed, Max, Without Load | 9.2 (14.8) / 11.3 (18.2) | 9.1 (14.6) / 11.0 (17.7) | 8.7 (14.0) / 10.8 (17.4) | 8.0 (12.9) / 10.4 (16.7) |
| | 30 | Lift Speeds, Loaded | Triple Stage Upright | 59 (0.30) / 96 (0.49) | 55 (0.28) / 90 (0.46) | 49 (0.25) / 82 (0.42) | 45 (0.23) / 80 (0.41) |
| | 31 | Lift Speeds, Unloaded | Triple Stage Upright | 100 (0.51) / 114 (0.58) | 100 (0.51) / 114 (0.58) | 84 (0.43) / 104 (0.53) | 84 (0.43) / 104 (0.53) |
| | 32 | Lower Speeds, Loaded | Triple Stage Upright | 88 (0.45) | 90 (0.46) | 92 (0.47) | 92 (0.47) |
| | 33 | Lower Speeds, Unloaded | Triple Stage Upright | 80 (0.41) | 80 (0.41) | 80 (0.41) | 80 (0.41) |
| Weights³ | 34 | Service Weight, TSU | W/Min Battery Weight | 9348 (4240) | 10582 (4800) | 11155 (5060) | 11828 (5365) |
| | 35 | Axle loading | With Load, Front | 11810 (5357) | 13422 (6088) | 15181 (6886) | 16219 (7357) |
| | 36 | | With Load, Rear | 1537 (697) | 2161 (980) | 1975 (896) | 2108 (956) |
| | 37 | | W/O Load, Front | 4766 (2162) | 4621 (2096) | 4594 (2084) | 5027 (2280) |
| | 38 | | W/O Load, Rear | 4581 (2078) | 5961 (2704) | 6561 (2976) | 6801 (3085) |
| Chassis | 39 | Tires | Number, Front/Rear | 2 / 2 | 2 / 2 | 2 / 2 | 2 / 2 |
| | 40 | | Size, Front | 21x7x15 (533x178x381) | 21x8x15 (533x203x381) | 21x8x15 (533x203x381) | 21x9x15 (533x229x381) |
| | | | Size, Rear | 16x6x10.5 (406x152x267) | 16x6x10.5 (406x152x267) | 16x6x10.5 (406x152x267) | 16x6x10.5 (406x152x267) |
| | 41 | Wheelbase | | 53 (1346) | 53 (1346) | 53 (1346) | 57 (1448) |
| | 42 | Track | Front, Cushion | 34.8 (884) | 35.8 (909) | 35.8 (909) | 36.5 (927) |
| | 43 | | Rear Cushion | 34.2 (869) | 34.2 (869) | 34.2 (869) | 34.2 (869) |
| | 44 | Ground Clearance | Min w/o Load | 2.8 (71) | 2.8 (71) | 2.8 (71) | 2.8 (71) |
| | 45 | | At Center of Wheelbase | 4.5 (114) | 4.5 (114) | 4.5 (114) | 4.5 (114) |
| | 46 | Service Brake | Type | Drum and Shoe | Drum and Shoe | Drum and Shoe | Drum and Shoe |
| | 47 | Parking Brake | Type | Pedal Actuated | Pedal Actuated | Pedal Actuated | Pedal Actuated |
| | Steering | Type | Hydrostatic | Hydrostatic | Hydrostatic | Hydrostatic | |
| Drive Line | 48 | Battery | Type | Lead-Acid | Lead-Acid | Lead-Acid | Lead-Acid |
| | | | Max Capacity (6 hr. Rate) 30.5 in compt. | 41.8 | 41.8 | 41.8 | 48.6 ⁶ |
| | | | Weight, Min | 2600 (1180) | 2600 (1180) | 2600 (1180) | 3100 (1407) |
| | 49 | Motors, Controls | Drive Motor, Diameter | 10.6 (270) | 10.6 (270) | 10.6 (270) | 10.6 (270) |
| | | | Hydraulic Motor, Diameter | 7.9 (200) | 7.9 (200) | 7.9 (200) | 7.9 (200) |
| | | | Drive Motor Control | Inverter | Inverter | Inverter | Inverter |
| | | | Speed Control | Solid State | Solid State | Solid State | Solid State |
| | | Hydraulic Motor Control | Inverter | Inverter | Inverter | Inverter | |
| 57 | Hydraulic Pressure | | Adjustable | Adjustable | Adjustable | Adjustable | |
| 58 | Sound Level | Avg. at Operator's Ear Per ANSI B56.11.5 | dB(A) | 64 | 64 | 64 | 64 |

Notes: 1 See upright table for other available uprights.
 2 Dimensions are for TSU and standard forks – make the following adjustments for other uprights: +2.74" for Quad, -1.2" for STD, +0.9 for HiLo. Add 2.3" for SS.
 3 Specifications are given with preferred triple stage upright on line 10 and minimum battery weight.

4 OAW with wide drive tires is 48.7in for all models with quad uprights above 222.5in. and with triple stage uprights above 240in.
 5 36in. max fork spread w/37in. carriage. 40in. fork spread w/41in. carriage.
 6 Standard compartment size on ECX32 is 34.5" (876mm).

GENERAL DATA & STANDARD DIMENSIONS

Upright Table

| Maximum Fork Height in mm | Overall Height Lowered | | Free Lift w/o LBR | | Std. Tilt B°/F° |
|------------------------------|---------------------------|------|----------------------|-------|-----------------------|
| | in | mm | in | mm | |
| Standard Two Stage | | | | | |
| ECX 20/25/30 | | | | | |
| 83 | 2120 | 60 | 1525 | 4.3 | 110 |
| 106 | 2680 | 71 | 1805 | 4.3 | 110 |
| 117 | 2980 | 77 | 1955 | 4.3 | 110 |
| • 130 | 3300 | 83 | 2115 | 4.3 | 110 |
| 146 | 3725 | 95 | 2405 | 4.3 | 110 |
| 152 | 3860 | 98 | 2480 | 4.3 | 110 |
| 164 | 4165 | 108 | 2750 | 4.3 | 110 |
| 172 | 4380 | 116 | 2950 | 4.3 | 110 |
| 182 | 4620 | 125 | 3180 | 4.3 | 110 |
| 203 | 5170 | 136 | 3445 | 4.3 | 110 |
| ECX 32 | | | | | |
| • 128 | 3250 | 83 | 2115 | 4.5 | 115 |
| 144 | 3650 | 95 | 2405 | 4.5 | 115 |
| Hi-Lo Two Stage | | | | | |
| ECX 20/25 | | | | | |
| 115 | 2935 | 77 | 1955 | 55 | 1402 |
| • 128 | 3255 | 83 | 2115 | 61.5 | 1562 |
| 139 | 3530 | 89 | 2255 | 67 | 1702 |
| 148 | 3760 | 95 | 2405 | 73 | 1852 |
| 154 | 3910 | 98 | 2480 | 76 | 1927 |
| ECX 30 | | | | | |
| 115 | 2935 | 77 | 1955 | 53 | 1342 |
| • 128 | 3255 | 83.3 | 2115 | 59 | 1502 |
| 139 | 3530 | 88.8 | 2255 | 64.6 | 1642 |
| 148 | 3760 | 94.7 | 2405 | 70.6 | 1792 |
| 154 | 3910 | 97.6 | 2480 | 73.5 | 1867 |
| Triple Stage | | | | | |
| ECX 20/25 | | | | | |
| 152 | 3860 | 71 | 1805 | 49 | 1252 |
| 170 | 4320 | 77 | 1955 | 55 | 1402 |
| • 189 | 4800 | 83 | 2115 | 61.5 | 1562 |
| 205 | 5210 | 89 | 2255 | 67 | 1702 |
| 217 | 5520 | 95 | 2405 | 73 | 1852 |
| 226 | 5740 | 97.6 | 2480 | 76 | 1927 |
| 240 | 6100 | 104 | 2640 | 82 | 2087 |
| 251 | 6370 | 108 | 2750 | 86.5 | 2197 |
| 269 | 6830 | 116 | 2950 | 94.4 | 2397 |
| 288 | 7315 | 125 | 3180 | 103.4 | 2627 |
| ECX 30 | | | | | |
| 152 | 3860 | 71 | 1805 | 47 | 1192 |
| 170 | 4320 | 77 | 1955 | 53 | 1342 |
| • 189 | 4800 | 83 | 2115 | 59 | 1502 |
| 205 | 5210 | 89 | 2255 | 64.6 | 1642 |
| 217 | 5520 | 95 | 2405 | 70.6 | 1792 |
| 226 | 5740 | 97.6 | 2480 | 73.5 | 1867 |
| 240 | 6100 | 104 | 2640 | 80 | 2027 |
| 251 | 6370 | 108 | 2750 | 84 | 2137 |
| 269 | 6830 | 116 | 2950 | 92 | 2337 |
| 288 | 7315 | 125 | 3180 | 101 | 2567 |
| ECX 32 | | | | | |
| 146 | 3700 | 71 | 1805 | 45 | 1146 |
| 164 | 4160 | 77 | 1955 | 51 | 1296 |
| • 189 | 4800 | 85 | 2170 | 59 | 1511 |
| 199 | 5050 | 89 | 2255 | 63 | 1596 |
| 211 | 5360 | 95 | 2405 | 69 | 1746 |

Quad Four Stage All Models

| | | | | | | |
|-------|------|----|------|----|------|-----|
| 216 | 5486 | 77 | 1956 | 52 | 1321 | 5/3 |
| • 240 | 6096 | 83 | 2108 | 58 | 1473 | 5/3 |
| 258 | 6553 | 89 | 2261 | 64 | 1626 | 5/0 |

- Indicates preferred standard sizes. For overall height raised with load backrest, add 48 in. (1220 mm) to maximum fork height. Other uprights available, contact a CLARK representative.
- ** All free lift dimensions shown without standard 48 in. (1220 mm) high load backrest.

Battery Compartment Dimensions

| Width (W) | | Length (L) | | Height (H) | |
|--|----|------------|----|------------|----|
| in | mm | in | mm | in | mm |
| ECX 20/25/30 | | 39.25 997 | | 23.5 597 | |
| ECX 32 (available option on ECX 20/25/30) | | 39.25 997 | | 23.5 597 | |

Battery without cover, termination: A-18", Connector: 6320 (SB 350 Gray)

Dimensions with Optional Battery Compartment

| Compartment Size | 39.25 in W x 34.5 in. L x 23.5 in H 997 mm W x 876 mm x 597 mm H | | | | | |
|--------------------------------------|---|------|--------|------|--------|------|
| | ECX 20 | | ECX 25 | | ECX 30 | |
| Length to fork face (in/mm) | 86.8 | 2206 | 87.9 | 2233 | 90.2 | 2292 |
| Turning radius (in/mm) | 74.2 | 1885 | 74.8 | 1901 | 76.7 | 1948 |
| Right angle stack (in/mm) | 90.9 | 2309 | 91.9 | 2335 | 94.1 | 2390 |
| Service wt., TSU (lb/kg) | 9811 | 4450 | 10307 | 4675 | 11122 | 5045 |
| Axle loading w/load, front (lb/kg) | 11918 | 5406 | 13636 | 6185 | 15373 | 6973 |
| Axle loading w/load, rear (lb/kg) | 1892 | 858 | 1671 | 758 | 1748 | 793 |
| Axle loading w/o load, front (lb/kg) | 4877 | 2212 | 4833 | 2192 | 4786 | 2171 |
| Axle loading w/o load, rear (lb/kg) | 4934 | 2238 | 5474 | 2483 | 6336 | 2874 |
| Max. capacity (6 hr. rate) (kWh) | 48.6 | | 48.6 | | 48.6 | |
| Weight, minimum (lb/kg) | 3000 | 1361 | 3000 | 1361 | 3000 | 1361 |
| Grade clearance (D%) | 45% | | 42% | | 36% | |

Notes

Performance may vary +5% and -10% due to motor and system efficiency tolerance. The performance shown represents nominal values which may be obtained under typical operating conditions of a standard machine.

ANSI/ITSDF and Insurance Classification

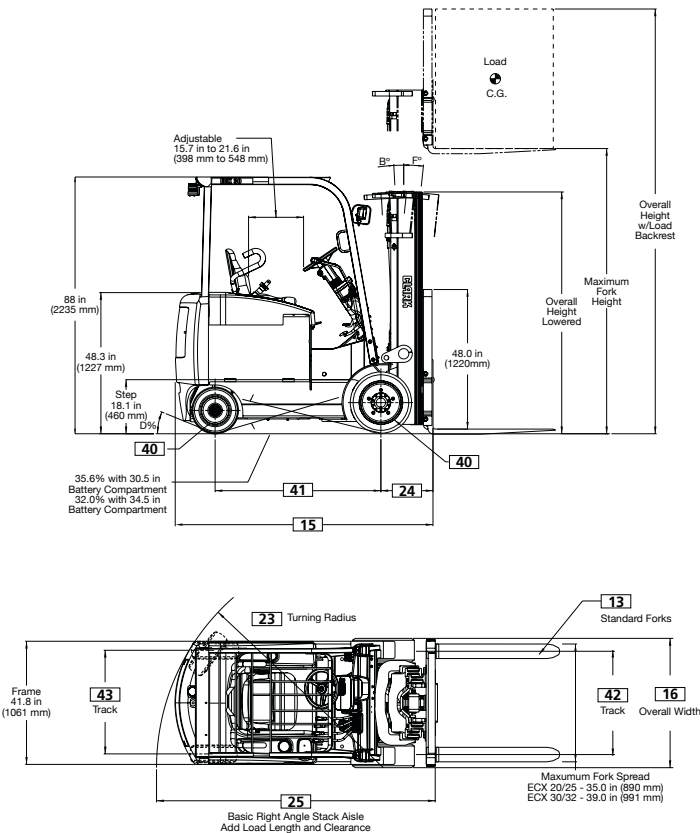
Standard truck meets all applicable mandatory requirements of Part III-ANSI/ITSDF B56.1 Safety Standard for Powered Industrial Trucks (latest edition at time of manufacture) and Underwriters Laboratories requirements as to fire and electrical shock hazard only for "E" classification. For further information contact a Clark representative.

Users should be aware of, and adhere to, applicable codes and regulations regarding operator training, use, operation and maintenance of powered industrial trucks, including:

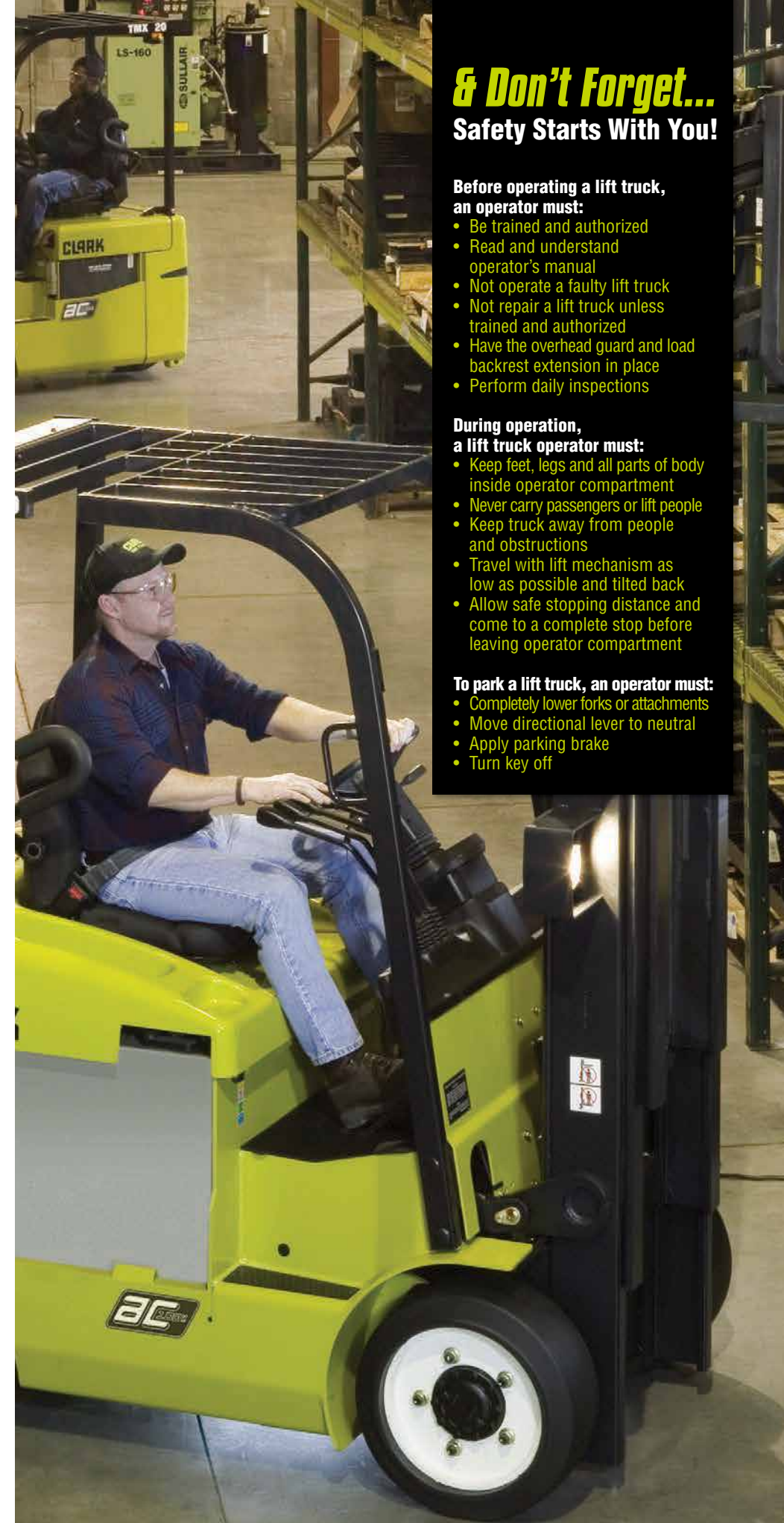
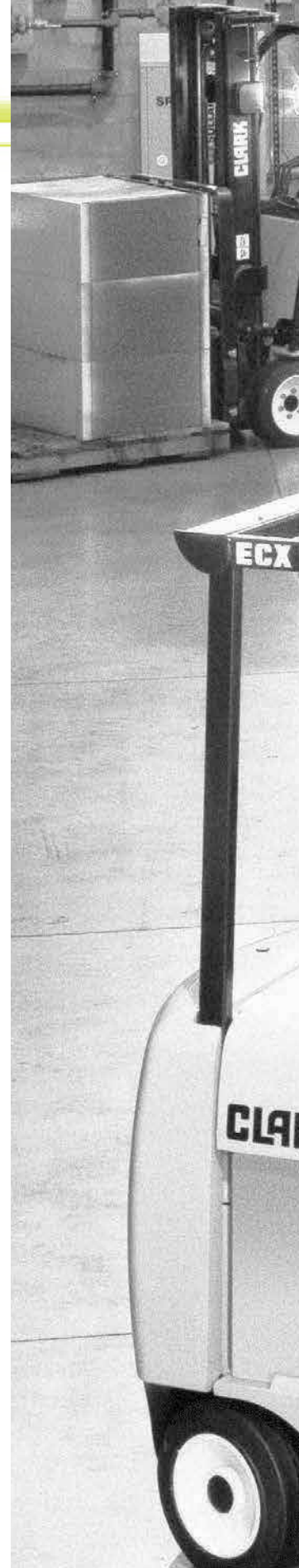
- ANSI/ITSDF B56.1
- NFPA 505, fire safety standard for powered industrial trucks - type designations, areas of use, maintenance and operation.
- Occupational Safety and Health Administration (OSHA) regulations that may apply.

Contact your authorized CLARK forklift truck dealer for further information including operator training programs and auxiliary visual and audible warning systems, fire extinguishers, etc., as available for specific user applications and requirements.

Specifications, equipment, technical data, photos and illustrations are based on information at time of printing and are subject to change without notice. Some products may be shown with optional equipment.



For corresponding data see Specification Chart



& Don't Forget... Safety Starts With You!

Before operating a lift truck, an operator must:

- Be trained and authorized
- Read and understand operator's manual
- Not operate a faulty lift truck
- Not repair a lift truck unless trained and authorized
- Have the overhead guard and load backrest extension in place
- Perform daily inspections

During operation, a lift truck operator must:

- Keep feet, legs and all parts of body inside operator compartment
- Never carry passengers or lift people
- Keep truck away from people and obstructions
- Travel with lift mechanism as low as possible and tilted back
- Allow safe stopping distance and come to a complete stop before leaving operator compartment

To park a lift truck, an operator must:

- Completely lower forks or attachments
- Move directional lever to neutral
- Apply parking brake
- Turn key off

- We don't just build forklifts. As a company, we are also focused on providing our customers with the best possible technical service support and aftermarket parts available.
- Even though our business starts with a quality, cost-effective product, our organization understands that it is the support and services we provide after the sale that help keep your business running at peak efficiency.
- **THE CLARK PartsPRO® SYSTEM** is our industry-leading electronic parts and service documentation tool that provides dealers with a quick and accurate method of identifying parts for every CLARK forklift built since 1961. PartsPRO® ensures the availability of the most current technical information and has the unique capability to create parts manuals specific to your mixed CLARK fleet, making it simple to positively identify and order the correct part(s) from your local CLARK dealer. The right CLARK part —
The First Time, Every Time.
- **UNRIVALED PARTS SUPPORT** Our Aftermarket Distribution Center provides parts to over 250 North American CLARK dealers and many international dealers. This CLARK operated 184,000 square foot facility is dedicated to supporting the CLARK models built over the last 90 years. This facility is focused on providing excellent off-the-shelf availability, quality parts, quick response time and competitive pricing.

DEPENDABLE PARTS = DEPENDABLE TRUCKS



BUILT TO LAST.®



CLARK MATERIAL HANDLING COMPANY
North American Headquarters
700 Enterprise Drive • Lexington, KY 40510
866-252-5275 • www.clarkmhc.com

ECX 20/25/30/32
59-894-0988 Printed in USA MP02125M
© 2015 CLARK Material Handling Company