HOIST T-SERIES
TERMINAL TRACTOR
A new era of terminal tractor design is here - the Hoist T-Series. Revamping the modern terminal tractor while also elevating the experience of owning and operating the Hoist T-Series above all competitors’ was the mission. The Hoist T-Series combines efficiency, safety and ergonomics to create the ultimate vehicle for your port environment.

A number of notable features come together to raise the Hoist T-Series above the rest. One primary example is the Hendrickson AirTek suspension. Providing rollover protection, an industry first, the AirTek suspension absorbs movement to reduce operator fatigue and improve production.

Another highlight of the Hoist T-Series is the MD4 Smart Screen Technology onboard diagnostic software. Operators and technicians can now diagnose technical issues, engine status and pull up digital operators manuals from the seat of the terminal tractor cab.

The Hoist T-Series, along with Hoist’s other container handler models - the Loaded Container Handler (LCH), Empty Container Handler (ECH) and Reach Stacker (RS) - create a “one-stop shop” solution in port, intermodal and distribution applications.

KEY PERFORMANCE FEATURES
- Hendrickson AirTek suspension
- Military grade AxleTech rear axle
- Cummins tier 4F 6.7L engine (HP)
- Allison 3500 transmission

KEY ERGONOMIC FEATURES
- Sears premium air-ride seat
- Fifth wheel fingertip switch
- Digital instrumentation with stereo
- Premium HVAC
- Document, pen and clipboard storage
- Intelligent interior layout
### Featured Components

**Powertrain**
- Allison 6-speed, 3500 series transmission
- Smooth ranges between shifting
- Cummins 6.7L engine

**Tires**
- Trelleborg
- Maximum safety and productivity

**Chassis**
- Heavy-duty steel
- Securely fastened with huckbolts

**Fifth Wheel**
- Reduced vehicle stress by providing smoother hook-ups with trailers and distributing the load more evenly throughout the chassis
- Pin and bushing coverings preventing dirt, water and salt corrosion

**Mud Flap**
- Spring mounted
- Prevents bracket from bending into tire

**Suspension**
- Hendrickson AirTek
- Airbag provides ride height control
- Reduced rollover risk

**Fuel Tank**
- 50 Gallon steel tank

**Axle**
- AxleTech military grade
- Reduces stress from larger loads
- Bolted to leaf spring, combined with shocks and airbags

**Abs Panels**
- Keeps water/dust out
- Removable panels
- Easy access to components

**Headlights**
- LED

**Bumper**
- Heavy-duty
- Bolt-on
Operator comfort and improved ergonomics are the focus of the Hoist T-Series cab. Rather than straining to change gears or release the parking brake to the far right or behind the operator, all essential controls have been divided between the right and left sides of the dashboard, with the steering wheel serving as the dividing line. The left side includes the push button transmission controls, mirror controls and window wiper/washer switch. The right side has the radio system, USB ports, 12V plug, cab climate control switches, light switches (including front and rear work lights), parking brake, trailer air supply buttons and the fifth wheel lower/raise fingertip switch.

- Meets ANSI B56.1 FOPS operator protection standards
- Sears Atlas II Air Suspension cloth seat
- Rubber-mounted cab isolated from frame to reduce noise and vibration
- Master digital display provides all vehicle gauges (e.g. oil temperature, fuel level)
- Adjustable semi-suspension seat and retractable seat belts
- Sliding driver-side window
- Engine fault code diagnostic capability
- Soft-touch hydraulic levers
- Adjustable tilt-steering column
- Spring apply/hydraulic release parking brake
- Fifth wheel dial for lowering and raising fifth wheel
- Fifth wheel push button latch for easy release
- Push button parking brake
- Push button trailer air supply
- Eight (8) button CANbus switches
- Two (2) USB ports
- One (1) 12V plug
- Polk radio system with four (4) in-cab speakers
- Push button transmission controls (Reverse, Neutral, Drive)
- Electronic mirror controls
- Window wiper controls

OPTIONAL EQUIPMENT
- Training seat
- Dual west-coast mirrors - heated
- LED beacon lamp
A. Gear shift
B. Cup holder
C. Mirror controls
D. MD4 display
   - Touchscreen
   - Electronic diagnostics
E. Ignition
F. Radio
G. Climate control
   - Fan speed
   - On/off heat
   - AC/heat control
H. CANBus controls
   - Front working lights
   - Rear working lights
   - Marker lights
   - Beacon lights
   - Hazard lights
I. USB port
J. 12V power surge
K. Trailer air supply
L. Parking brake
   - Pull to apply
   - Push to release
M. Fifth wheel release
   - Automatic relatch
N. Fifth wheel switch
   - Lower
   - Raise
O. Steering wheel
P. Signal light/fog light switch
Q. Steering wheel column tilt
R. Windshield wiper controls
Manual diagnostics of competitors’ terminal tractors are time-consuming and therefore, costly, due to downtime. For example, rather than checking each individual fuse, relay and connection to diagnose an electrical issue, the Hoist T-Series comes standard with our Smart Screen Technology onboard diagnostics, allowing operators and technicians to immediately identify which component is faulty, all without exiting the terminal tractor. The Smart Screen Technology includes additional functionality such as error history logs, onboard operator and service manuals, passcode protection, icon library as well as full instrumentation and warnings.

All vital components, such as air filter, oil filter and dipsticks are placed in easily accessible areas around the terminal tractor. Operators can get to problem areas after reviewing the issues in the onboard interface and have the terminal tractor running again with minimal downtime.

- Use hydraulics to access reference information and troubleshoot the hydraulic system
- Diagnostics on all fuses and relays
- Monitor engine status and fuel consumption
- Reference the library which includes schematics, operator and service manuals and an indicator light directory
- Toggle between an optional camera and main display screen

- Access the menu to view system information as well as measure and adjust control values and set personal preferences
- Review logs
- Restrict access to the truck with an optional passcode or multiple passcodes
- Ensure OSHA compliance by adding optional integrated daily checklist
The Smart Screen Technology has changed the terminal tractor diagnostic process completely. The Hoist T-Series MD4 Smart Screen Technology onboard diagnostic software is a Hoist Liftruck standard, one of the numerous features that set our terminal tractor apart from the rest. The MD4 display is easy to use and has a variety of optional features, including Bluetooth capabilities.

The easy-to-use interface allows operators and technicians to switch from preference settings, to hydraulic diagnostics to an engine status report in real time.

The touch display sits directly in front of the steering wheel in the operator’s line of vision, so warning signs and alerts can be accounted for instantly, before a small issue becomes a big problem.

Check out a video overview of the Hoist T-Series Smart Screen Technology online at www.hoistlift.com
In order to handle containers and equipment safely, superior visibility from inside of the terminal tractor cab is a must. Visibility was a top priority in the design of the Hoist T-Series cab. The lowered dash design, wide front windshield and large side windows give the operator an excellent view of their surroundings. All controls for the terminal tractor are conveniently placed in front of the operator, but out of their direct line of vision, for easy access while allowing for a clean line of sight.

Large, side-mounted mirrors give even more viewing space - no bulky mirror post to get in the operator’s line of vision. Whether a trailer is attached or not, operators can still expect an exceptional view of everything around themselves and the Hoist T-Series while inside the cab. Electronic mirror controls are standard to adjust the view along the sides of the terminal tractor without the operator having to leave the cab.

Extended large, side-mounted mirror
- No bulky mirror post obstructing view

Standard electronic mirror controls
The Hoist T-Series’ fifth wheel reduces vehicle stress by providing smoother hook-ups with trailers and distributing the weight more evenly throughout the chassis. Rather than backing and lifting into a trailer, the Hoist T-Series’ fifth wheel moves up into the trailer, putting less stress on the trailer and drivetrain.

Not only does the fifth wheel mechanism reduce stress for the vehicle and trailer, but on the operator as well. Long days of maneuvering a fifth wheel lever meant operator fatigue along with a painful shoulder and wrist by the end of a shift. By replacing the industry standard bulky, cumbersome lever with a fingertip switch, operator shoulder strain is eliminated. Fifth wheel movement is now as simple as pressing a button.

Terminal tractors take a beating working day and night in demanding conditions. Designed and tested to provide maximum performance and durability, the fifth wheel’s 80,000 lbs. capacity is built specifically for these conditions. The quick and reliable twin lock jaws prevent king-pin bounce-out, for fast trailer coupling.

Designed for easy maintenance, the fifth wheel’s parts are quickly accessible for less downtime.
The Hoist T-Series terminal tractors are designed from the ground up to get the job done over and over again. Built to withstand constant contact with heavy trailers across rough yards, the Hoist T-Series features a high strength steel frame and military grade AxleTech drive axle.

An Allison 6-speed, 3500 Series transmission gives the Hoist T-Series smoother ranges between shifting with more torque. A torque converter gives more power to the wheels, allowing the tractor to get rolling faster and smoother, regardless of the weight of the trailer.

The Allison transmission is paired with a Cummins 6.7L HP engine. With a high-pressure common-rail fuel system, operators can expect reduced noise and engine vibration with a precise mixture of fuel and air at a constant pressure, regardless of engine rpm.

FEATURES
- 130 amp alternator
- Color-coded electrical wires enclosed with split-tubing wire loom wrap using sealed weather pack connectors
- Power steering
- Tier 4 final
- Planetary drive axle rated for durability in high-capacity, high-torque applications
- Double reduction gearing for increased torque
- Precision ground, heat-treated gears

HENDRICKSON STEER AXLE (See more on page 13)
- Lightweight STEERTEK NXT axle
- Provides increased stability, improved ride and comfort
- Reduced maintenance
- Up to 55 Degrees of wheel cut

STRENGTH AND POWER

STRONG FOUNDATION
- Modular design
- Chassis is forged from heavy-duty steel, securely fastened with huckbolts
Terminal tractors are put to the test every day with extreme working environments. Rain, snow, sleet or heat, the Hoist T-Series is capable of withstanding the elements. Stainless steel hardware protects against rust and corrosion. Improper treatments can leave exterior components of the terminal tractor vulnerable to breakdown and a fast deterioration.

**PAINT/FINISH**

- Two-part rust-inhibiting polyurethane base coat and two-part polyurethane top coat
- Powder-coating treatment up to 10 times thicker than traditional spray paint for greater scratch and chip resistance
- Environmentally friendly; produces virtually no volatile organic compounds (VOCs)

Protects against outside elements such as dirt, extreme weather and rust.

Not properly treated
The Hoist Liftruck engineering team integrated advanced technology to incorporate the latest design and safety features on the Hoist T-Series. From the safety yellow painted 3-points of contact, to the high-strength steel chassis, the Hoist T-Series is filled with impressive make-up both inside and out:

Safety Features:

- High-strength steel cab with rollover protection system
- Cab mounted on four isolators, protecting the driver from neck and back injuries
- Power tilt cab for safe service access with secondary safety lock when in open position
- Metal cage enclosures protect gas tank and other vital components
- Extended large, side-mounted mirrors
- Amber LED strobe light
- Muffler guard to protect operator from high heat
- Grab handles on both sets of stairs for 3 points of contact
- Easy access stairs painted bright yellow for optimal visibility
The cab is mounted on four isolators, curtailing nearly any and all vibrations. Paired with a Sears Air Ride cloth seat, the Hendrickson AirTek suspension absorbs movement, greatly reducing operator fatigue and improving production.

The Hendrickson suspension simultaneously provides rollover protection, an industry first. The Hoist T-Series chassis is mounted on “airbags” on top of the suspension, giving immediate ride height control. This allows the air springs to support a majority of the load, improving the overall ride quality.

The unique design of the Hendrickson AirTek suspension provides significant weight savings compared to traditional forged axles and steel springs.

**A. LEAF SPRING**
- Attached shock improves the overall ride of the terminal tractor

**B. AIRBAGS**
- Provides immediate ride height control, even while making sudden stops, sharp turns while braking
- Prevents rollover

**C. BRAKE CHAMBER**
- Self-adjusting brake chamber makes it easy to adjust brakes

**Reduced Maintenance**
Not only is the Hendrickson AirTek suspension a major safety and ergonomic feature on the Hoist T-Series terminal tractor, it is also designed to improve serviceability. Technicians benefit from the following features:

- Kingpin removal for knuckle service eliminated with unique two-piece knuckle design
- Longer bushing life and increased protection from the elements with premium kingpin bushings and seals
- Lasting rubber front and rubber rear bushings; no lubrication required
- Efficient air spring and height control valve removal and “snap” installation with “push-to-connect” air supply design

*Source: Hendrickson AirTek Brochure, Features and Benefits
*Compared to two-leaf spring suspension*
Serviceability is made easy thanks to a powered tilt cab with a reinforced prop rod for safety. Operators and service technicians can easily get to vital components such as the Cummins engine, charge air cooler, air lines and electrical wiring in mere seconds. The tilt cab design paired with the Smart Screen Technology onboard display allows for virtually instant diagnostics should any problems come up, so technicians can quickly get the machine back up and running, limiting downtime. The Smart Screen Technology can help to reduce the guesswork of where the terminal tractor needs service. For instance, operators and technicians can track exactly where the problem is in a faulty fuse situation, all while the operator sits comfortably in the driver’s seat.

The Hoist T-Series’ modular design means unbolting rather than unwelding. For all areas of service not located underneath the cab, a technician can simply remove bolts to get to enclosed service points, such as the hydraulic tank, def fluid, air tanks and fuel tank. The Hoist T-Series is a modular design to simplify service. Unwelding parts of the terminal tractor can require machinery, additional servicemen and time spent in a shop to re-weld parts back on. All the while costing you money while operations are down thanks to an unusable terminal tractor.
TE-SERIES

Built on the same heavy-duty frame and with the same industry-best air ride suspension as the diesel version, Hoist TE-Series customers can expect:

- Zero emissions (indoor use)
- Fuel savings of up to 90%
- Extended run times (up to 15 hours)
- Quick charging times
- Minimal battery degradation even after thousands of cycles
- Increased efficiency
- Lower total cost of ownership

The Hoist TE-Series electric terminal tractor is designed to blend innovation with proven standards.

- Reduced maintenance costs and less downtime
- Instantaneous torque
- Smooth acceleration and deceleration
- Increased driver satisfaction with low noise/low vibration
- Cooler operation/cooler operator environment
- Greater reliability from fewer moving parts
- Reduced brake wear/service
- Financial incentives to switch

With over 120 years of experience in the design and development of electric forklifts, applying that knowledge to the Hoist TE-Series terminal tractor was the next logical step. The 100% electric-powered terminal tractor offers certain benefits that cannot be realized by their diesel counterparts.

Hoist TE-Series terminal tractors are powerful and reliable. We feature an industry-proven drivetrain with AC motors and military grade AxleTech rear axle. The Hoist TE-Series comes standard with a Hendrickson AirTek air ride front and rear suspension. The fifth wheel lift path reduces stress on the drivetrain and ensures consistent performance.

Electric-powered terminal tractors are used round the clock, so durability and up-time is a priority. The Hoist TE-Series is designed from the ground up to get the job done over and over again.

These terminal tractors are designed with the operator in mind. The Hoist TE-Series' standard ergonomic features allow the operator to focus on the task at hand while feeling comfortable in the cab for long periods of time. From proper document storage to an intelligent cab layout, the focus is on driver comfort and maximum efficiency.

For more information on the Hoist TE-Series terminal tractor, visit us online at www.hoistlift.com or email us at sales@hoistlift.com.
RED, WHITE & BLUE COLLAR

All Hoist Liftruck products are manufactured and assembled entirely in the United States. Our roots date back more than 95 years and we take great pride in being a true U.S. manufacturer of material handling equipment.

We have a diverse and dedicated workforce who strive for excellence in representing not only Hoist Liftruck, but also America.