

J80-120XN SERIES



**STRONG PARTNERS.
TOUGH TRUCKS.™**

COUNTERBALANCED ELECTRIC, PNEUMATIC TIRE

J80-120XN SERIES

WHO SAYS ELECTRIC ISN'T AS TOUGH AS IC?

When you're known for building some of the toughest internal combustion (IC) lift trucks on the market, you don't make excuses for electric. You work harder. And smarter. The result is the J80-120XN series from Hyster Company, available in 8,000, 9,000 and 10,000 lb. short wheelbase capacities and 10,000, 11,000 and 12,000 lb. long wheelbase capacities. It's the future of high performance electric trucks, designed with zero emissions, enhanced ergonomics and industry-leading innovations that excel indoors and outdoors. It's built to conquer tight deadlines and tough applications whenever, wherever the job calls.





■ **WORLD-CLASS DEPENDABILITY**

- Advanced Thermal Management System
- Oil-cooled wet disc brakes
- Hall-Effect sensors
- Leak-free O-ring face seal fittings

■ **MINIMAL COSTS, MAXIMUM TECHNOLOGY**

- Brushless AC technology
- Vehicle System Manager
- Efficient CANbus communication system
- Onboard diagnostics

■ **SERVICE ACCESS YOU CAN SEE**

- Simplified wiring
- Onboard diagnostics
- Easy access to components
- World-class support

■ **AS COMFORTABLE AS IT IS PRODUCTIVE**

- Low-effort hydraulic controls
- Uncluttered floor space
- Easy-to-use 3-point entry design
- Operator convenience station

■ **MOVE MORE PRODUCT THAN EVER**

- Vista™ mast
- Optional MONOTROL® foot direction control
- Operator selectable performance modes
- 80-volt electrical system

DEPENDABILITY

LOW MAINTENANCE. HIGH PERFORMANCE.

You've got enough to worry about. The J80-120XN series gets to work and stays working for uptime you can rely on. Forget about brake adjustments throughout the life of the truck. Forget about fuel. Plus, its advanced thermal management system practically takes care of the truck itself. The J80-120XN series has 80 years of materials handling experience behind it, and it shows.

■ ADVANCED THERMAL MANAGEMENT SYSTEM

- Advanced thermal management system continuously monitors the critical truck functions, while protecting the componentry by automatically adjusting truck performance.
- A heat sink is used to draw heat away from the motor controllers. Thermostatically controlled fans cool the heat sinks.

■ WORLD-CLASS DEPENDABILITY

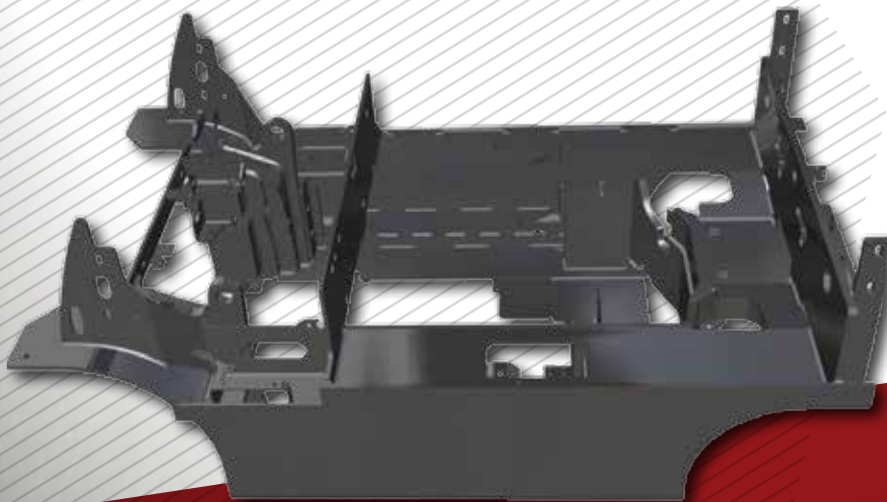
- Oil-cooled wet disc brakes are completely sealed from water and other contaminants for extremely long brake service life, even in outdoor elements.
- Auto deceleration system extends brake life by automatically slowing the truck through regenerative braking when the accelerator pedal is released.
- The power-assist braking feature improves brake life while reducing operator effort.
- Dash and steer column covers are injection-molded composite plastic designed for strength, impact resistance and environmental stability. Color is molded-in for durability.



Large air inlet ports in the rear of the truck are protected and strategically positioned to provide fresh air intake for controller cooling.



Easy-to-use onboard diagnostics through the multifunction display provide fast and accurate troubleshooting for first-time fixes.



Unitized frame construction provides excellent durability and strength, boosting driver confidence and enhancing productivity.

■ INDUSTRIAL-STRENGTH ELECTRONICS

- Proven, tough Pacesetter Vehicle System Manager (VSM) industrial onboard computer manages truck operation to maintain world-class dependability.
- CANbus communications network reduces wiring complexity, providing superior dependability.
- Non-contact, Hall-Effect sensors and switches are designed to last the life of the truck.
- Double-sealed electrical connectors provide a dustproof and waterproof connection to help prevent contamination-related failures.
- Smart, one-way routing path for wire harnesses ensures consistent, high-quality assembly while increasing durability and simplifying maintenance when needed.

■ HASSLE-FREE HYDRAULICS

- Leak-free O-ring face seal fittings reduce leaks for enhanced reliability.
- A 10-micron, high performance in-tank filtration system captures 99.5% of hydraulic system debris, significantly extending component life.



Our patented Hyster Stability System (HSS®) is built into the fundamental design of every truck—it's not "added on" like other manufacturers—to allow for articulation on uneven surfaces and to minimize truck lean for enhanced lateral stability. And unlike some competitors, the Hyster HSS® is virtually maintenance-free.



■ APPLICATION/ENVIRONMENTAL CONSTRUCTION OPTIONS

In response to customer requests for an electric truck that can be operated outside and in adverse environments, Hyster Company has released the following Application/Environmental options:

- Outdoor protection/wash-down package
- Front mud guards
- Tilt cylinder boots

These optional enhancements make the J80-120XN trucks suitable for outdoor use in applications where only internal combustion engine trucks have been successful in the past.



LOW COST OF OWNERSHIP

AS PREDICTABLE AS FUEL PRICES AREN'T.

By using AC motors and transistor controller technology for 100% of its traction and hydraulic systems, the J80-120XN series reduces maintenance requirements. Plus, its standard automatic park brake eliminates the maintenance and adjustments required of a manual park brake system, which means a lower cost of operations.

■ BRUSHLESS AC TECHNOLOGY

- Eliminates motor brushes.
- Requires no periodic maintenance.
- Eliminates scheduled downtime and the cost for parts and service.
- Eliminates the service requirements created by brush wear dust.
- No directional contactors; only one power contactor for traction and one for hydraulics.

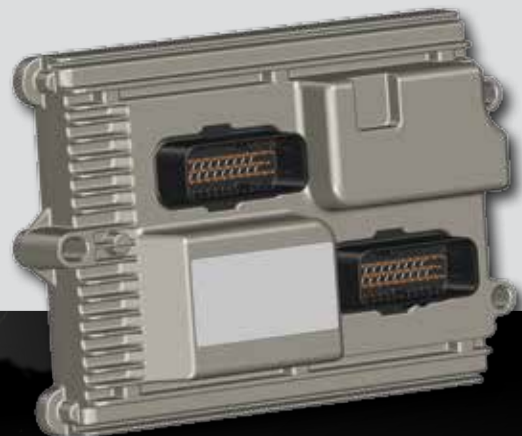
■ VEHICLE SYSTEM MANAGER

All vehicle systems are managed electronically to optimize performance and significantly increase overall reliability, enhancing diagnostic capabilities to maximize uptime. The Pacesetter VSM enables customization of truck performance to suit application needs.

- Communicates with motor controllers and operator display via CANbus.
- Monitors truck functions and stores data.
- Provides advanced thermal management and truck diagnostics.
- Interfaces service and diagnostic tools.
- Interfaces all operator control devices.
- Interfaces all onboard sensors.



AC traction motor significantly reduces maintenance requirements.



Pacesetter VSM manages all vehicle systems for optimized performance.

■ SUPERIOR SERVICEABILITY

- CANbus communications simplify wiring and improve serviceability.
- State-of-the-art onboard diagnostics reduce repair time and minimize expensive parts swapping.
- Direct access for service is a key element for easier daily checks or service resulting in improved productivity.
- Easy battery access is provided via the gas spring-assisted hood and quick release handle.



Easy-to-remove floor plates allow full-service access for simplified maintenance.

■ UNRESTRICTED SERVICE ACCESS

- Two-piece floor plate and side plates can be easily removed for access to:
 - Brake fluid reservoir
 - Hydraulic filter
 - Hydraulic valve
 - Pacesetter VSM
 - Tilt cylinders
- Lift-out floor plates require no tools for quick and easy daily operator checks.
- Removable side plates provide additional access to all major truck components.



A gas spring-assisted hood and quick release handle make battery access easier than ever.

■ SUPPORTING CUSTOMERS WITH WORLD-CLASS PARTS & SERVICE

Four Parts Distribution Centers strategically located around the world provide a full range of original equipment and aftermarket parts that help maintain our customers' uptime. G.A.P., our Guaranteed Availability Program, guarantees that if a covered part is not available the next business day it will be provided to you FREE of charge.*

We also take that commitment into the field with the Hyster CERTECH® Certification training program. This technical training program provides both systems level as well as product-specific education to ensure lift trucks are repaired right the first time.



**Contact your local dealer for program details.*

WHAT TOTAL CONTROL LOOKS LIKE.

Effortless productivity. This is the advantage of the J80-120XN series. Compared to conventional battery box designs, the drop battery box design allows for a lower center of gravity with better clearance. Operators thrive with the automotive feel of the truck, along with easy on/off access and one of the most customizable, intuitive compartment designs on the market.

■ SUPERIOR OPERATOR COMPARTMENT

- Choice of two configurations that employ seatside electro-hydraulic levers or TouchPoint mini-levers to provide you unsurpassed, low effort, tactile control of all hydraulic functions.
- Uncluttered floor area promotes operator comfort.
- Easy-to-use 3-point entry design of operator compartment uses a large molded hand grip, hip restraint and open anti-slip step with a low step height to minimize muscle and joint strain during entry/exit.
- The operator convenience station provides an industry-leading dash storage area with dedicated storage areas for markers, cell phone, PDA or 2-way radios, gloves, clipboards, pick tickets, beverages, flashlight, box-cutter— a place for almost anything an operator needs.
- Optional DC converter provides an automotive style 12-volt outlet in the operator convenience station and an auxiliary power tap under the floorplate for customer mounted accessories.
- Forward placement and angle of pedals provide more operator foot room.
- Thickest floormat in the industry provides greater operator comfort.
- Seat is rotated 3° to the right for a more natural operating position, and offers easy fore/aft adjustment. An optional full suspension seat offers adjustable weight control.



High-comfort seat conforms to the operator, not vice versa

12-volt automotive style outlet



Uncluttered floor space



Easy-to-Use 3-point entry design



Industry-leading operator convenience station

■ PRECISE, EFFORTLESS OPERATION

- Standard automatic park brake automatically applies the park brake when the truck is stationary and releases the park brake when the accelerator pedal is depressed, increasing productivity and reducing operator effort.
- Improved brake pedal layout and the minimal braking requirements of the auto deceleration system significantly reduce operator fatigue.
- Rear drive handle (optional) provides an excellent hand hold for reverse driving while giving ready access to the auxiliary horn button for use when approaching cross-aisles and pedestrian traffic areas.
- An infinitely adjustable steer column and optional telescopic steer column with tilt memory assure the right fit for any operator.
- A choice of six different seats enables a more customizable level of operator comfort through its enhanced design and adjustable features.
- Increased shoulder clearance—a result of the front curved overhead guard leg.
- The standard 12-inch steering wheel with integrated spinner knob reduces fatigue, provides more knee room and goes lock-to-lock in just 4.3 turns for superior efficiency, maneuverability and control.
- Optional key switch controlled lights turn work and taillights on and off with the key switch, and turn rear work lights on automatically when the truck travels in reverse, eliminating the need for the operator to control them manually.



Electro-hydraulic controls with TouchPoint mini-levers



Optional rear drive handle delivers effortless reverse driving.

■ HYDRAULIC CONTROLS

- Standard seatside mechanical levers are positioned for maximum operator comfort and offer an optional integrated thumb-actuated directional control switch.
- Optional electro-hydraulic controls with TouchPoint mini-levers provide precise fingertip control of all hydraulic functions. An adjustable armrest, mounted on the operator seat, positions the mini-levers in the most comfortable and efficient position. The armrest is cushioned and contoured to provide full forearm support. The hydraulic functions, seatside directional control switch, horn and power disconnect button are all incorporated in the armrest to maximize operator comfort and ease of use.

PRODUCTIVITY

THE ATTITUDE OF IC. THE EFFICIENCY OF ELECTRIC.

You've been asked to move more products while also cutting costs, no questions asked. No problem. The J80-120XN series is built for powerful performance, industry-leading maneuverability and maximum uptime. It has the attitude of an IC truck, but the efficiency of an electric truck. Win, win.

■ ENHANCED OPERATOR CONTROL

- Exclusive Vista™ mast provides fast lift and lower speeds combined with superb visibility to make the Vista mast the best the industry has to offer.
- Choose from the Hyster® exclusive MONOTROL® pedal or the ergonomically placed thumb actuated seat side directional control (at no extra charge) for quicker, smoother control of travel speed and direction, improving operator efficiency and bolstering productivity.
- The Multifunction Display's large, LCD backlit screen displays truck status and warning indicators for quick and easy diagnostic readings.
- The optional Hyster-designed integral sideshift provides excellent visibility and affords greater capacities than carriage mounted sideshifts.
- Choose from two configurations that employ seat side hydraulic levers or TouchPoint mini-levers to provide unsurpassed, low effort, tactile control of all hydraulic functions.
- Infinitely adjustable tilt steer column provides increased comfort and minimizes fatigue.
- On-demand hydrostatic steering provides low effort steering and superior control with reduced noise.
- Power-assist braking improves brake life while reducing operator effort.



MONOTROL® pedal



Electro-hydraulic controls
with TouchPoint mini-levers



Seat side hydraulic levers

■ AC TECHNOLOGY

- An 80-volt electrical system is standard on the Hyster® J80-120XN series, providing maximum performance in long-haul applications.
- Delivers quick and smooth changes in travel direction, offers precise speed control with excellent acceleration, significantly increasing productivity.
- The standard Extended Shift feature allows enhanced run time without recharging over longer periods.
- AC transistor hydraulic control enables precise load handling with greater efficiency and less noise.
- Hyster-designed thermal management system maximizes performance during continuous operation, while preventing damage to components due to heat.

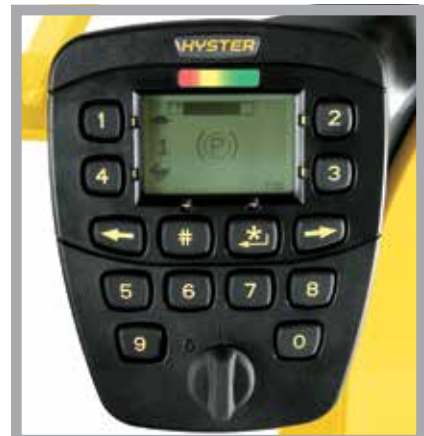
■ MULTIFUNCTION DISPLAY

Multifunction Display, located in the upper right corner of the operator's compartment, offers greater visibility for the operator with a large, LCD backlit screen for easy viewing and indicator icons for at-a-glance system status.

- Battery state of charge indicator
- Low battery lift interrupt program
- Hour meter
- Performance mode indicator
- Fault indicator
- 4 operator selectable, programmable performance modes

■ PERFORMANCE MODES

- Adjustment of customizable performance parameters to match your application needs is accessible via the multifunction display.
- A significant increase in loaded travel speeds and acceleration rates beyond the standard setting is possible when the "Extended Shift" setting is turned off.
- Our standard "Extended Shift" AC controller setting provides the optimum balance between performance needs and battery shift life.



Multifunction Display

Vista™ mast provides superb visibility.

An optional premium, fully integrated "quick connect" rapid charge system simplifies the charging operation. The side-mounted port is easy to access, making charging the truck a simple task.



APPLICATION-MATCHED PERFORMANCE

■ HANDLES THE HEAVIEST LOADS WITH EASE.

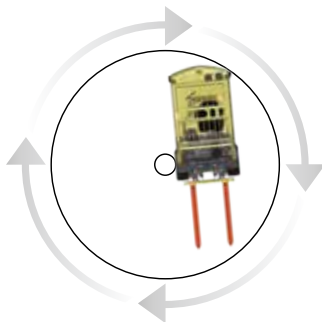
Hyster® J80-120XN series trucks are built for superior stability, so operators can trust them with tall loads, long loads and all loads in-between. Our patented Hyster Stability System (HSS®) is built into the fundamental design of every truck to allow for operation on uneven surfaces and to minimize truck lean for enhanced lateral stability.

- HSS® is a 100% maintenance-free design.
- Its passive mechanical system uses gravity to optimize steer-axle geometry.
- J-hook mounted masts provide easy mast service.
- Mast channels built with one-piece, high-strength rolled steel.
- Load rollers are canted at 3 degrees to resist forward/backward movement.

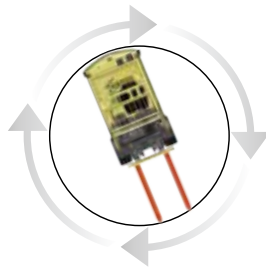
■ CUSTOMIZED PERFORMANCE FOR ANY APPLICATION.

No two working environments are exactly alike. That's why Hyster Company gives you the option of tailoring your lift truck's performance and features to your application. Customize speed settings and directional control methods. Take advantage of Extended Shift functionality to maximize productivity. No matter what truck configuration you choose, your Hyster® lift truck will work as long and as hard as you do.

■ EXCEPTIONAL MANEUVERABILITY



Conventional
Differential Drive
Axle Design



Hyster®
Dual Drive
Motor Design

The "Zero Turn" radius steer axle and dual AC drive motors combine to provide extraordinary maneuverability in congested areas and narrow aisles.



■ ZERO EMISSIONS. HIGH THROUGHPUT.

Any electric truck can give you a more fuel-efficient alternative to IC. Few can give you a dependable, high performance, fuel-efficient alternative. The J80-120XN series offers an accelerated return on your investment because it's built to last. Less maintenance. Less vibration, noise and heat. Low energy consumption. More uptime. All while offering zero emissions.

In the J80-120XN lift truck series, energy is recaptured during braking and then reused to reduce overall consumption. Non-productive energy is reduced through weight reduction, drive-train efficiency and hydraulic system efficiency. The standard Extended Shift setting provides the optimum balance to extend battery lift without sacrificing your performance needs.

■ SUPERIOR TRUCKS. SUPERIOR OPTIONS.

- Application/environmental construction
 - Standard construction: operating temperatures: +32°F to +120°F
 - Cooler/freezer package option: operating temperatures: -20°F to +120°F
- Return to set tilt option brings the forks to a preset position when tilting for easy operation.
- Operator selectable performance modes allow varying levels of truck performance.
- Extended Shift can be disabled for increased productivity levels.



INNOVATIVE TRUCKS ENGINEERED TO MEET THE MOST DEMANDING APPLICATIONS

For more than 80 years, Hyster has been conquering the world's most demanding applications. In the 1920's Hyster started as a manufacturer of lifting machines used in the rigorous logging industry of the United States' Pacific Northwest. A few years later the first forklift trucks were invented and the Hyster brand quickly gained its reputation for rugged quality. Hyster® lift trucks are designed to lower your cost of operations. Every truck we make — gasoline, LPG, diesel and electric — is purpose-built to excel in its application. Every truck is also backed by an unmatched network of specialists.



Dealer Network — Our Dealer Network can offer the expertise of fleet managers, parts suppliers, capital procurement specialists and trainers. Hyster's carefully chosen dealers fully understand customer applications, assist in selecting the right lift truck and provide fast, reliable support.



Hyster Fleet Services — Even if you operate other brands, we can manage your maintenance and replacement plan. We can offer complete fleet analysis, fleet history summary and a cost-effective proposal for replacement and scheduled maintenance.



Parts — With genuine Hyster replacement parts and UNISOURCE™ parts for all makes of lift trucks, we are your one-stop source for lift truck parts. In fact, we offer more than 2 million part number crosses for most brands of materials handling and other in-plant mobile equipment.



Rental Products — When leasing or buying isn't a practical option, we have access to more than 14,000 units for short- and long-term rental. We'll help you maintain output in a cost-effective manner.



Hyster Capital — We can arrange solutions for special financing requirements, taking the difficulties out of buying the equipment you need. Whether you purchase or lease a new or used lift truck, Hyster Capital offers superior service and competitive rates.



Special Products Engineering Department (SPED) — Different materials require different handling. That's why we can work with you to customize your lift trucks. From strobe lights to specially made forks, SPED has the tools to help you get the job done right.



Operator Training — Proper education in operating lift trucks minimizes the risk of injuries due to accidents while increasing productivity. Hyster offers OSHA-compliant materials that support the training of qualified operators.



Service — Your local Hyster® dealer offers a flexible, customized and comprehensive maintenance plan based on each lift truck's operation environment. Hyster service programs offer scheduled inspections and maintenance, along with quick, responsive service dispatched to your location.





Hyster Company
P.O. Box 7006
Greenville, North Carolina
27835-7006
Part No. J80-120XN/B
9/2014 Litho in U.S.A.

Visit us online at www.hyster.com or call us at 1-800-HYSTER-1.

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