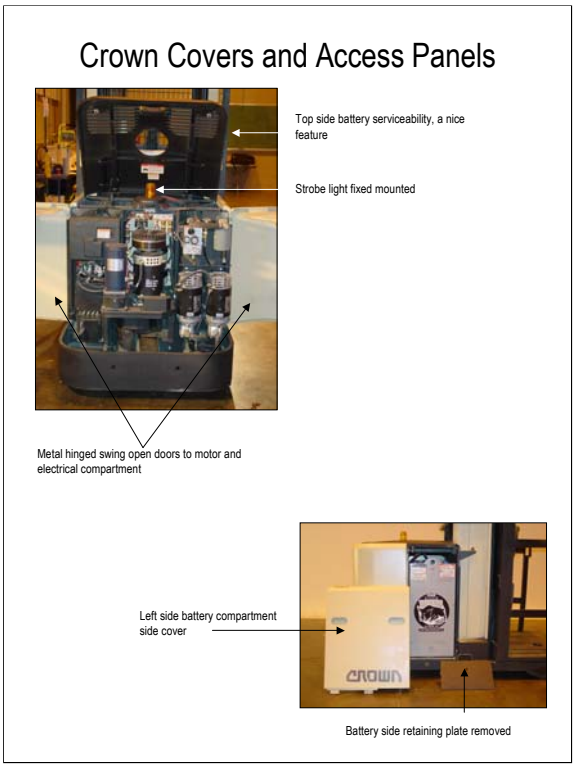
The Hyster R30XM$_2$ service compartment features swing open metal doors and a U.L. approved rear cover.

The doors are hinged for easy swing open access and are secured with two thumb screws, which require no tools to remove. Metal doors protect the motors and electrical compartment in the event the truck is backed into a rack. Additionally, raised forks from another lift truck will be prevented from protruding into the motor compartment.

The rear top cover is made of an ABS plastic. Four spring loaded quarter-turn fasteners secure the top cover. These screws are spring loaded for quick, easy removal and installation. The fasteners are secured to the cover with a small retaining clip so the fasteners are actually a part of the cover assembly, eliminating the chance of misplacing hardware.



Crown does a very good job on cosmetics. They go to great effort to cover and hide things. When someone walks up to a Crown order picker they see a clean, smooth, stylish looking truck. However, once the covers are removed, an older generation of electronics is exposed. The G.E. modified transistor control system, compared to the Hyster R30XM$_2$series, has a more complicated, maintenance intense electrical system.

The rear access doors are held on by two screws(require tools to remove). The rear doors swing open very much in the same manner as the Hyster R30XM$_2$, and provide good access to the motor and electrical compartment. The battery is hidden by a left hand and a right hand battery side cover. The battery side covers require no tools to remove.

The battery cover is vented and can be raised easily with no tools required. This feature allows battery topside access for quick and easy water/ acid level checks.

The strobe light is fixed mounted. The battery top cover is cut out to allow for the strobe light.

Hyster Electric Foot Switch

Flush mounted electric foot switch

Ergonomically positioned foot switch

View of operator activating the foot switch and pallet clamp release pedal

The Hyster R30XM$_2$ electric foot switch is ergonomically positioned on the operator platform. The operator can stand in his/her natural position and comfortably activate the foot switch.

The switch is counter-sunk into the platform's anti-slip floor mat. When the foot switch is activated, the operator's foot is cushioned by the rubber floor mat. The one inch thick rubber floor mat cushions the operator for a smooth, more comfortable ride.

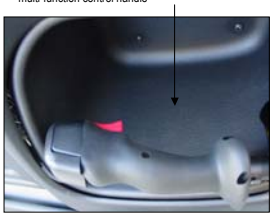
This innovative design by Hyster Company enhances operator comfort and productivity, while reducing operator foot and leg fatigue.

The Crown electric foot switch is located on the operator platform floorboard as is the R30XM$_2$. However, Crown's foot switch is a raised design. The switch mounted above the surface of the floor mat contributes to foot and leg fatigue and becomes quite uncomfortable to the bottom of one's foot throughout an entire shift.

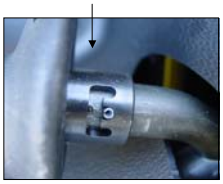
Hyster Accelerator Control Handle and Hydraulic Control Functions

Ergonomically positioned multi-function control handle

multi-function control handle



3 Adjustable handle positions



The Hyster multi-function control handle is ergonomically designed and positioned. The angle of the handle provides the operator the opportunity to drive the truck comfortably either MDU end first or fork end first. The handle is designed to fit in the palm. The slender handle body is shaped and contoured to comfortably fit in various hand sizes. The handle is scalloped at the bottom allowing the hand to stay in position and to provide a hand rest.

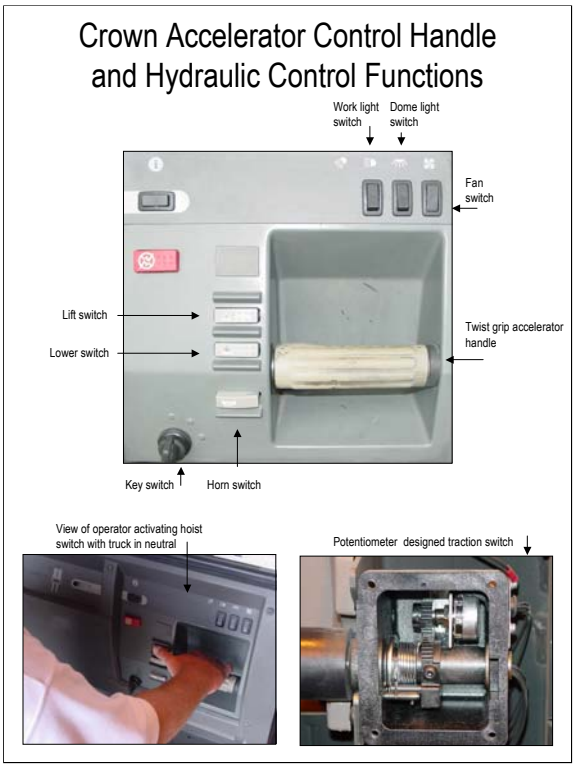
The multi-function handle is designed with three adjustable locking positions, or angles. This feature allows the operator to adjust the handle to a position that is the most comfortable and productive to them.

The multi-function handle is used in conjunction with the alphanumeric display during setup and/or to set or adjust truck performance parameters.

The accelerator switch is a hall effect sensor, an electrical solid state device. Hall effect sensors have fewer wearable parts, require much less adjustment, and are not as vibration sensitive as potentiometers.

Additionally, the adjustable console (optional) further enhances operator comfort and productivity by allowing six inches of vertical travel of the entire console assembly. This feature puts the controls and instrument panel in the position that works best for each individual.

These state-of-the art designs of the Hyster R30XM$_2$ provide the operator the opportunity to become one with the truck. Various size operators will enjoy the modern ergonomic advantages of this truck over the competition.



The Crown SP3020-30 order picker features a twist grip accelerator handle. This style accelerator handle design has several short-comings:

•Twist grip contributes to operator hand and wrist fatigue

•The accelerator handle is secured in a fixed position and is non-adjustable

•Difficult to accelerate in either direction and activate hydraulic functions

Crown uses a potentiometer to control and regulate accelerator speeds. Potentiometers have several short comings:

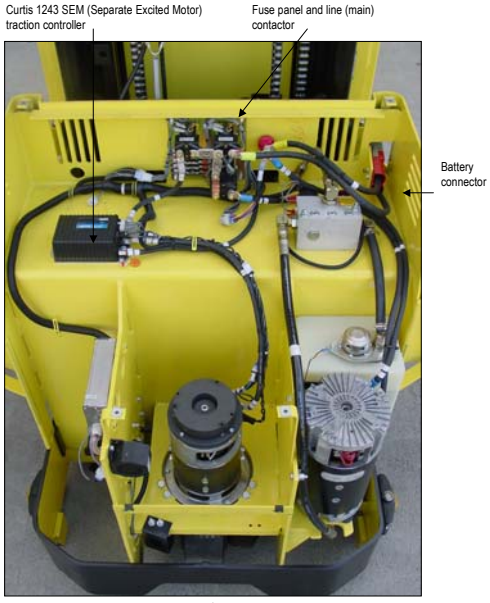
• They are vibration sensitive

• Potentiometers have more moving and wearable parts as compared to the Hall-effect sensor found on the R30XM$_2$.

• Require more adjustments

The hydraulic functions are push buttons located just to the left of the accelerator handle. As mentioned above, it is difficult to activate the hydraulic functions and engage the accelerator handle at the same time, especially in reverse.

Hyster Electrical System

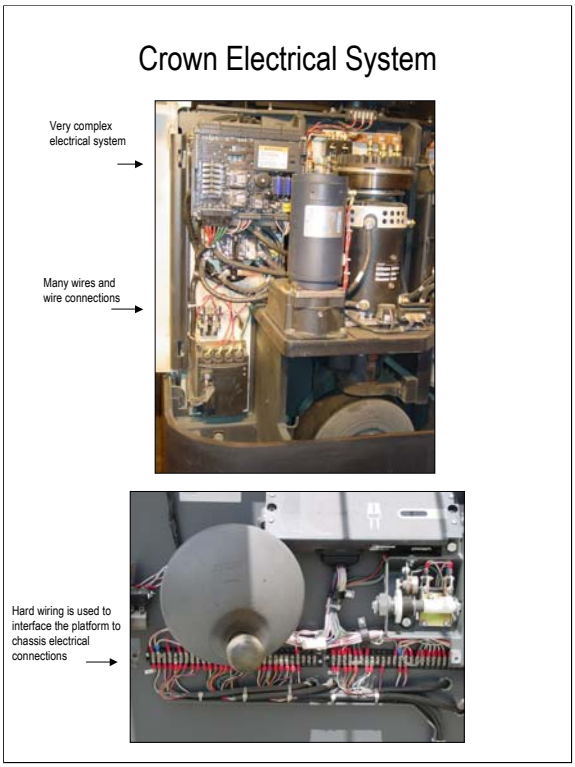


The Hyster Electrical control system features the Curtis 1310 Master Control Unit (MCU, the brains of the truck) and Controller Area Network (CAN bus) communications. This state of the art technology provides the R30XM$_2$ series with one of the industry's most advanced electrical systems.

The CANbus communication system reduces the number of, over the mast electrical conductors, from 27 'strands' down to 8, which greatly improves durability and reliability. The following solid state devices are connected by the CANbus link; the Curtis 1310 MCU and the Curtis 1243 traction contoller, the Inmotion APS (Advanced Power Steering) and the Inmotion Wire Guidance (optional) unit.

The traction system is controlled by a Curtis 1243 transistor controller which utilizes MOSFET (Metal Oxide Semiconductor Field Effect Transistor) technology. The 1243 controller changes direction of the current to the traction motor in response to directional changes via the operator through the multi-function control handle. The transistor traction controller eliminates the need for forward and reverse contactors, improving performance, reliability and reducing maintenance costs.

Curtis and Inmotion (formerly Atlas Copco) are manufacturers of electrical solid state devices used throughout the lift truck industry here in North America, as well as in Europe.

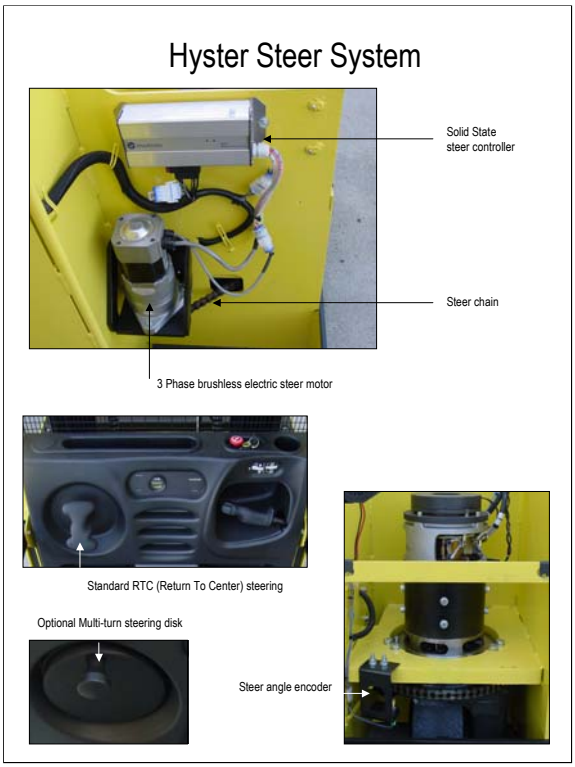


Crown utilizes a GE EVT 100 FL modified transistor control system. This is an older technology and has many more parts and components than the Hyster R30XM$_2$ electrical system. Crown utilizes color coded and numbered wires throughout the electrical system.

The Crown SP3020-30 order picker features hard wiring in lieu of plastic wire plug connectors to connect / secure the platform and chassis wire harnesses.

The Crown order pickers do not feature SEM technology or a CANbus type communication system. This is evident by the number of over the mast electrical cables (4 eight conductor electrical cables = 32 individual wire strands running over the mast) and the number of wires and wire harnesses used to interface the electrical components between the platform and chassis.

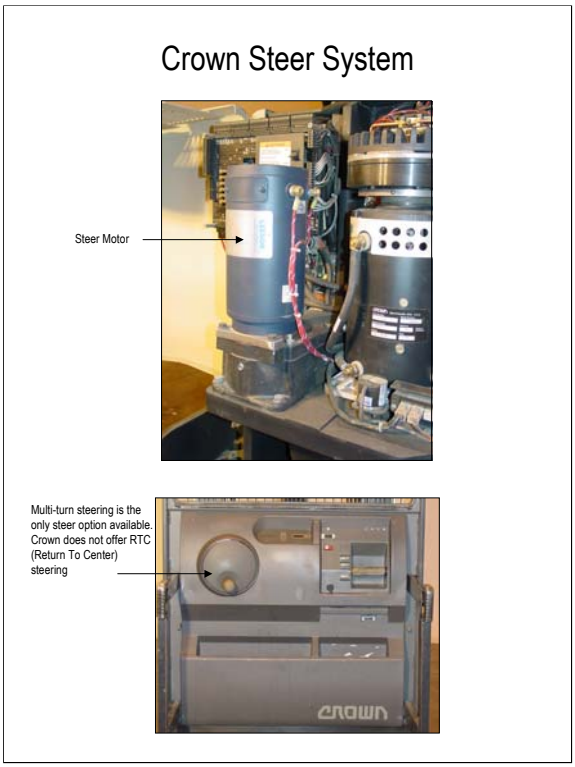
There are five contactors to maintain in the Crown electrical system: main / line contactor, forward and reverse contactors, hoist contactor and steering contactor. The main / line contactor is the only contactor used on the Hyster R30XM$_2$ advanced electrical system; reducing maintenance costs and increasing reliability.



The R30XM$_2$ features an Inmotion (formerly Atlas Copco) gear motor and transistor controller. This steer system utilizes a three-phase brushless DC motor with integral gear box assembly and a solid state steer controller which is linked to the CAN bus communication system. The brushless steer motor means there are no brushes to service (maintenance free), resulting in reduced maintenance costs and increased reliability.

This steer system is equipped with a proximity switch that automatically centers the steer-wheel at each start up. This assures the operator of the direction of travel each and every time the key switch is turned on, regardless of the steer tire position when the truck was turned off.

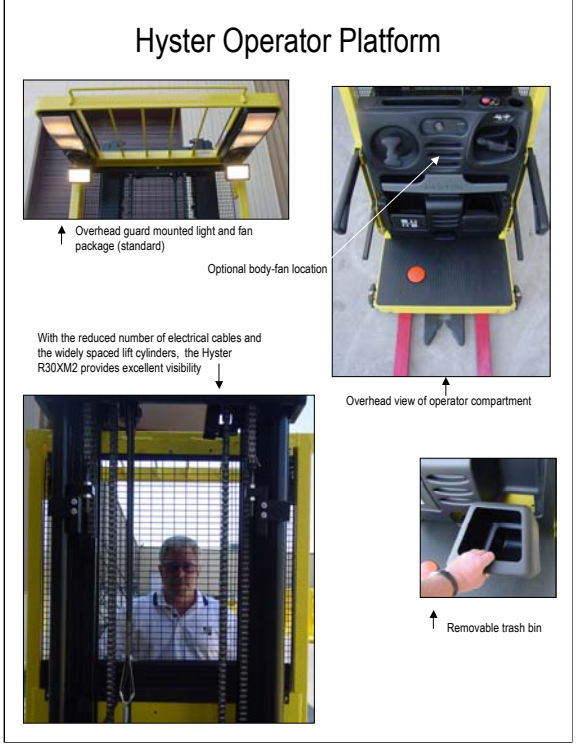
RTC (Return To Center) steering is standard on the R30XM$_2$. This unique electric steering design allows the steer tire to return-to-center whenever the operator releases the steer handle. Optional multi-turn steering is also available on the R30XM$_2$ at no charge for those individuals that prefer this style of steering.



Crown utilizes Electric Power Steering (EPS) as does the Hyster R30XM$_2$. However, the Crown steer motor requires motor brush inspection and replacement. As compared to the brushless / maintenance free electric steer motor used on the Hyster R30XM$_2$ the Crown SP3020-30 steer motor is more expensive to maintain and increases truck down time.

The Crown steer system features a gear driven steer motor to MDU (master drive unit) relationship. This is a quiet and reliable design.

Crown does not offer RTC (Return To Center) steer. With no RTC offering, the Crown SP 3020-30 will be more difficult to drive fork end first. Steering in a rail guided application also will prove to be more difficult and time consuming as compared to RTC steering.



The Hyster R30XM$_2$ operator compartment is full of operator and ergonomic amenities.

Standard is the overhead guard mounted light and fan package. Each light and fan package includes a fixed work light, a dome light and a 2 speed fan. The fan cover features adjustable louvers to provide ventilation to the operator.

The rubber coated gas-cylinder-assist retractable sidegates (standard) enhance operator safety and comfort while reducing operator fatigue.

The 2 speed full ventilation body fan (optional) provides maximum ventilation directed toward the operator's mid-section. This is especially beneficial for applications requiring the safety glass windshield in place of the standard wire mesh screen.

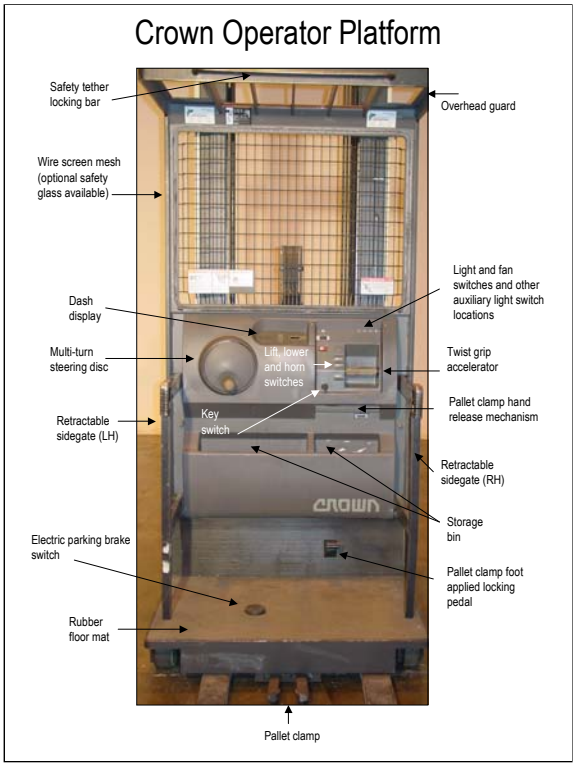
The adjustable console (optional) provides six inches of vertical travel to enhance operator comfort and put the controls just where each individual operator feels the most comfortable and productive. NOTE: The adjustable console option is strongly recommended when specifying a truck in which the operator drives the truck in the fork first direction as the primary direction of travel.

The adjustable 3 position multi-function control handle (standard) further enhances operator comfort.

The one inch thick floor mat provides a shock absorbent rubber that is ribbed for anti-slip protection as well as comfort.

The console cover features storage pockets, a removable trash bin, pencil tray and a cup holder.

Corner posts are available through the Application Engineering department, and offer the operator added protection. The corner post option is required in applications where the truck may be used in right angle stacking situations.



The Crown operator platform features many of the same amenities as the Hyster R30XM$_2$. The Crown operator platform consists of the following features:

• Instrument Panel - The dash features a MDU (Master Drive Unit) wheel position gauge, built in BDI(Battery Discharge Indicator) and a Diagnostic window.

• The standard steering system for the Crown is the multi-turn steer. Therefore, the steering disk is standard for the Crown. Return To Center steer is not available.

• The accelerator handle is a twist grip design. There is no ergonomic shape or design on the accelerator handle.

• There is no angle adjustment on the accelerator handle provided for operator preference.

• The Horn, lift and lower switches are not a part of the handle. The switches are mounted just to the left of the twist grip handle and are difficult to activate while engaging the accelerator handle in either direction.

• There is a pencil tray and storage compartment molded into the console cover which is standard. There is no cup holder.

• The electric parking brake switch is a dome type which is similar to but smaller than the Hyster parking brake switch. This Crown brake switch is not flush mounted. This design contributes to operator foot and leg fatigue.

• The pallet clamp mechanism must be manually engaged and manually released.

• An anti-slip rubber floor mat is only .75 inches thick as compared the Hyster floor mat that measures 1 inch thick. The Hyster R30XM$_2$ provides more cushion for a more comfortable ride while reducing operator fatigue.