

Turret Trucks

Features, Benefits and Comparisons

Hyster V30XMU

Raymond 537CSR

Crown 30TSP



August 2001

Operator Compartment Floor Space

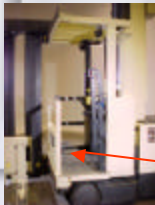
HYSTER



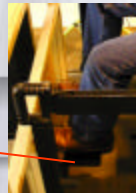
RAYMOND



CROWN

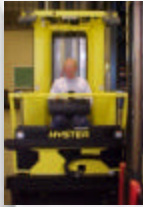


All three trucks have a liberal amount of floor space. Crown and Raymond both, however, have two foot pedals that the operator must depress in order to operate the truck. The Hyster truck has only one, giving the operator more flexibility of movement. In addition, the Crown foot pedals are elevated and protrude into the operator compartment, creating an obstruction and possible trip hazard for the operator. They fold up to be out of the way during standing operation.



Operator Compartment Seated

HYSTER



The **Hyster** truck offers a full suspension seat with adjustable height to accommodate most operators regardless of stature. The 2001 upgrade features a high seat back to provide maximum back support. Seat folds up and serves as a backrest for standing operation.

RAYMOND



The **Raymond** truck features a swivel seat with adjustable heights. The seat back is lower than the Hyster truck. Seat folds up and serves as a backrest for standing operation.

CROWN



The **Crown** truck seat is higher than either the Hyster or Raymond truck and can give the operator an uncomfortable feeling of sitting up too high. Seat height is adjustable. Seat folds up and serves as a backrest for standing operation.

Operator Compartment Standing

HYSTER



The **Hyster** truck features an adjustable operator console that can be raised and lowered and tilted backward or forward to accommodate operator preference. Operator controls are located conveniently directly in front of the operator for ease of operation. The seat folds up to serve as a backrest during standing operation.

RAYMOND



The **Raymond** truck controls are on the right and left-hand side of the operator and swing up and back and lock into position to facilitate operation in the standing position. They are not adjustable beyond that. Both feet must remain on both foot switches during travel. The seat folds up to serve as a backrest during standing operation. Seated or standing, a belt and harness is required.

CROWN



The **Crown** truck controls are on the right and left-hand side of the operator and are in a fixed position. They do not adjust for operator position. Feet must be on both foot switches during travel. The seat folds up to serve as a backrest during standing operation.

Operator Controls

HYSTER



Hyster

Telescoping console raises and lowers, tilts forward and back to accommodate most operators regardless of size. All controls are directly in front of the operator which enables the operator to continually look forward when traveling.

RAYMOND



Raymond

Swivel seat has adjustable heights. Right and left joystick controls at fixed heights. Adjustable armrests.

CROWN



Crown

Fixed position controls on right and left-hand side of operator.

Operator Compartment

Ergonomics / Controls

HYSTER



Hyster

Right butterfly controls traction and forward/reverse direction. Left butterfly controls hydraulics. Paddle switches change hydraulic functions. All controls are in easy reach standing or sitting.

RAYMOND



Raymond

Right joystick controls traction. Thumb controls on both joysticks control hydraulic functions. Joysticks fold up and back for use in standing operation

CROWN



Crown

Motorcycle style twist grip controls traction. Switch on twist grip must be depressed to actuate traction or hydraulics. Hydraulics controlled by levers on operator's left-hand side.

Steering

RTC and Multi-Turn

HYSTER



Hyster

Return-to-Center Steering is standard. $\frac{1}{4}$ turn in either direction gives full range of steering. Works extremely well in rail-guided applications. Multi-turn steering is optional.

RAYMOND



Raymond

The Raymond truck is only available with a multi turn steer tiller that is mounted on the left-hand side of the operator. **No return to center steering.**

CROWN

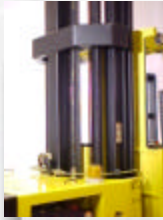


Crown

The Crown truck is only available with a multi turn steer tiller that is mounted on the left-hand side of the operator. **No return to center steering.**

Mast Stability

HYSTER



Hyster

Triform design provides good stability at all elevations.

Inner Mast features; Two side channels. Two vertical steel tubes. Rolled steel tube spine

Outer Mast; Two side channels. Single rolled steel tube spine

RAYMOND



Raymond

Rectangular frame design provides less torsional resistance than Triform. Increased deflection at elevated heights. Lower lift heights than Triform design.

CROWN



Crown

Single tower-type design provides less torsional resistance than Triform. Increased deflection at elevated heights. Lower lift heights than Triform.

Mast Visibility

HYSTER



Hyster
Good visibility through mast. 2001 upgrade puts all cables on right side of mast improving visibility. Large rectangular rear-view mirrors give operator good all around visibility when seated.

RAYMOND



Raymond
Very good visibility through mast at lower elevations. When cab is raised, however, lower rearward visibility is poor.

CROWN



Crown
Very small rear window mostly blocked by mast provides poor visibility. Long, narrow rear-view mirror provides some compensation.

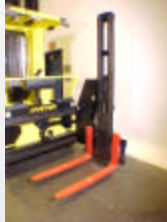
Mini-Mast Overview

Hyster

The free lift mast located at the rotator allows unobstructed case picking. Side stability is enhanced because the center of gravity is shifted into the wider part of the stability triangle.

Load rollers are provided in the side channels and spine to reduce wear.

HYSTER



RAYMOND



CROWN



Traverse Frame Rack and Pinion

HYSTER



RAYMOND



CROWN



Hyster Rack and Pinion design features wider, thicker splines than either Raymond or Crown providing a beefier, more robust design. This design provides smooth traverse operation with minimal deflection.

Turret Attachment Locking Mechanism

HYSTER



Hyster offers an exclusive S-shaped locking mechanism that locks the turret head in position at the end of the traverse and rotation stroke. This increases the stability of the turret attachment and load. Neither competitor has this design.

RAYMOND



CROWN



Attachment Forks

HYSTER



Hyster
Hook type forks facilitate easy adjustment and replacement and offer greater fork spread than Raymond or Crown.

RAYMOND



Raymond
Pin-type forks not as easy to replace.

CROWN



Crown
Optional Kooi style reach forks. Complex design. More parts to wear out. Expensive to service or replace. Pin-type forks are standard.

Attachment Extend Forks

HYSTER



Hyster

Optional extending forks automatically extend when the attachment is fully traversed. The extending forks automatically retract prior to traverse.

The Raymond truck is equipped with pin-type forks.

RAYMOND



CROWN



The Crown truck is equipped with pin-type forks as standard. Kooli style extend forks are optional.

Controls Service Access

HYSTER



- The Hyster major components are contained in the rear of the truck. These components and assemblies are easily accessed by one thumb screw and two Allen-head screws. Once the rear doors are opened and easily lifted off of their hinges the entire compartment is unobstructed for ease of service. All wiring is labeled and color coded for ease of trouble-shooting.

RAYMOND



Raymond's service compartment is accessed by removing two thumb screws and lift off the plastic cowl cover.

CROWN



Crown's service compartment is contained by bi-parting steel doors and is accessed by using a 3/8" ratchet driver.

Controls Lowering Valve

HYSTER



RAYMOND



CROWN



All three trucks are equipped with lowering valves. They are designed to allow the operator compartment to be lowered from the ground in the event that the truck loses power while elevated. The Hyster lowering valve is easy to access, unobstructed in the upper part of the main service compartment. An Allen wrench is chained to the valve so that the technician doesn't have to look for the right tool. In addition, the Hyster has manual traverse buttons in the event that the forks are extended into the rack if the truck loses power.

The Raymond truck's lowering valve is down low in the front of the service compartment, slightly harder to reach. It is actuated with an Allen wrench, but one is not provided.

The Crown truck's lowering valve is in the side service compartment, very difficult to access, if the truck is stuck in an aisle. It is also actuated with an Allen wrench, but one is not provided.