

COMPETITIVE REVIEW



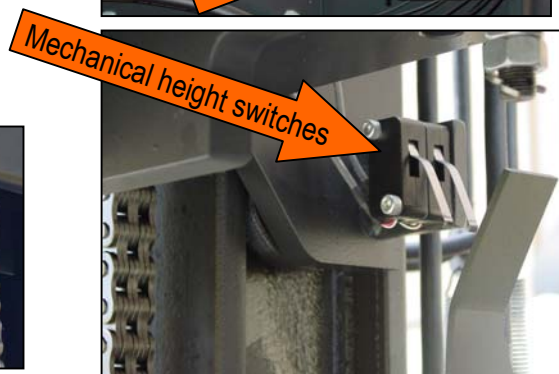
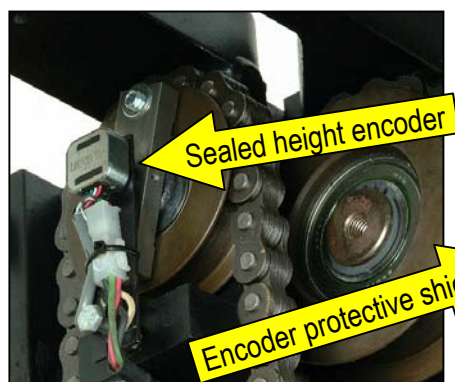
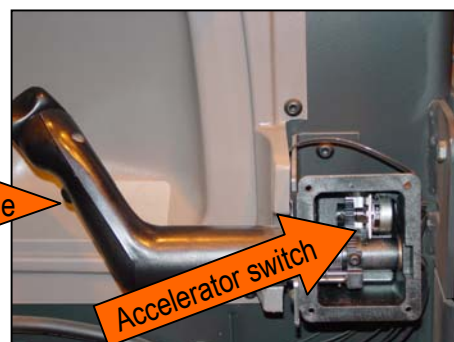
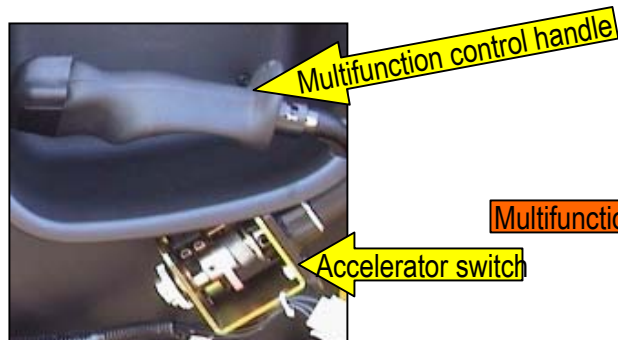
HYSTER R30XM₂

VS



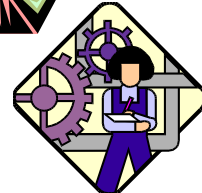
RAYMOND OPC30TT

REDUCED MAINTENANCE COSTS, RELIABILITY



Hyster multifunctional control handle and mast height encoder

Raymond multifunctional control handle and mechanical mast height switches

FEATURE	HYSTER	RAYMOND	BENEFIT
Accelerator Switch	The R30XM ₂ accelerator switch is a hall effect sensor. Hall effect sensors are sealed to protect against moisture and other contamination. Hall effect sensors have no wearable electrical parts and require no adjustments.	The Raymond OPC030TT accelerator switch is a potentiometer. Potentiometers have more wearable parts and require more adjustments as compared to Hall effect sensors. Potentiometers are also more prone to vibration and moisture contamination.	  The state-of-the-art electrical devices used on the Hyster R30XM₂ are more reliable and require less maintenance and service requirements as compared to the Raymond OPC030TT order picker.
Height Sensing	The Height encoder found on the Hyster R30XM ₂ monitors the operator platform height by counting the number of mast chain pulley rotations; which is a direct relationship to platform height. The height encoder requires no adjustments. The height encoder is used on standard and freezer construction trucks.	The OPC030TT order picker features mechanical switches (standard) that control platform height. Compared to the height encoder, mechanical switches have more wearable parts, require more adjustments and are more susceptible to physical damage than the encoder. Raymond offers an optional flow sensor for mast height measurement in lieu of mechanical switches.	

OPERATOR COMFORT / INCREASED PRODUCTIVITY

Multi-function control handle



Multi-function control handle



Adjustable console push butt



Hyster multi-function control handle and adjustable console

No adjustable console



Raymond multifunction control handle and operator console

FEATURE	HYSTER	RAYMOND	BENEFIT
Multi-function Control Handle	The multi-function control handle found on the R30XM ₂ has a palm rest and is scalloped at the bottom of the handle for hand comfort and positioning. The handle also pivots to allow three different angled positions depending on operator preference.	The Raymond OPC030TT also features a multi-function control handle. However, the control handle design does not feature a palm rest and is not adjustable. In addition, the hand is not in its natural position when gripping the control handle as compared to the R30XM ₂ hand grip.	
Adjustable Console	The R30XM ₂ order picker features an (optional) adjustable console that has a full six inches of vertical travel. The adjustable console is an industry first, and is unique in that it allows a comfortable operator stance for various size operators.	The Raymond OPC030TT does not offer an adjustable console.	Innovative designs such as the adjustable console and the adjustable multi-function control handle reduce operator fatigue, enhance operator comfort while contributing to higher productivity levels.

REDUCED MAINTENANCE COSTS, RELIABILITY



Access doors provide component protection and quick access

Motor compartment access with rear cover removed



Hyster's 3-phase brushless steer motor

Power steering motor requires brush maintenance

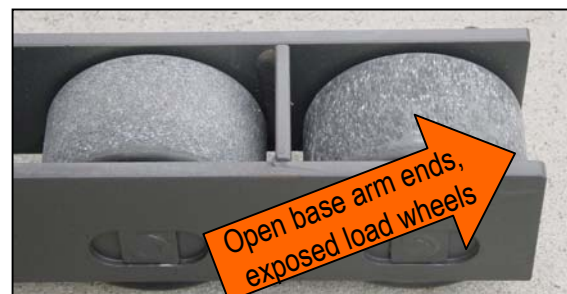
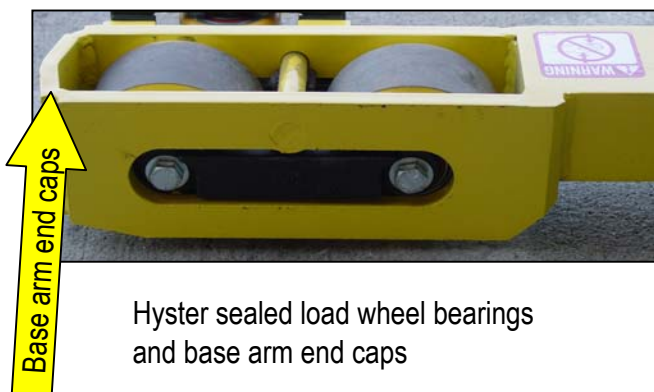


Hyster service compartment and

Raymond service compartment and

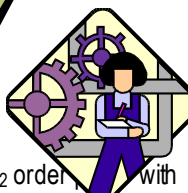
FEATURE	HYSTER	RAYMOND	BENEFIT
Steer Motor	The Hyster R30XM ₂ features a three-phase brushless steer motor. Utilizing a brushless steer motor enhances reliability and requires no servicing, which reduces maintenance costs.	The Raymond OPC030TT uses a typical DC steer motor. With the standard DC motor design, brush servicing and replacement is inevitable. Compared to the Hyster product, the Raymond steer motor is less reliable and more expensive to maintain.	  The Hyster motor
Motor Compartment Access	The Hyster motor compartment features dual hinged metal doors that provide protection and quick, easy access to the motor compartment. The Hyster R30XM ₂ features a plastic top motor compartment cover and is easily removed by 4 spring loaded quarter-turn fasteners.	The Raymond OPC030TT motor compartment is accessed by lifting off the rear cover (no tools required). The rear cover is made of a non breakable plastic, and when removed, good motor compartment access is achieved.	The Raymond motor compartment features dual hinged metal doors that provide protection and quick, easy access to the motor compartment. The Raymond OPC030TT featuring a 3 phase brushless steer motor, enhances reliability while reducing maintenance costs.

REDUCED MAINTENANCE COSTS, RELIABILITY



Hyster sealed load wheel bearings and base arm end caps

Raymond load wheel bearings and base arm end caps

FEATURE	HYSTER	RAYMOND	BENEFIT
Seald Load Wheel Bearings	The load wheel bearings used on the Hyster R30XM ₂ are a pre-lubed double sealed bearing. Pre-lubed double sealed bearings are greased when manufactured and sealed to keep lubricants in and contamination out. Basically, this produces a maintenance free wheel bearing.	The Raymond OPC030TT does not utilize pre-lubed double sealed wheel bearings. The load wheels must be inspected / greased during maintenance PM's (preventative maintenance) checks. Non sealed bearings are much more susceptible to contamination.	  The R30XM₂ order with double sealed, pre lubricated wheel bearings eliminate bearing greasing and protect the wheel bearings from moisture, dirt and other contamination. The protective load wheel end-caps protect the load wheels from damage. These innovative designs reduce maintenance costs and improve reliability.
Load Wheel Endcaps	The Hyster R30XM ₂ basearms feature protective load wheel end-caps. The end-caps help protect the load wheels from damage.	The Raymond OPC030TT basearms do not feature load wheel end-caps. Without the end-caps, the load wheels are left exposed and are prone to damage, especially with the platform raised.	