

PART II

J30-40XMT₂

■ Monotrol pedal (standard)



Hyster: The standard Monotrol pedal is a highly productive directional accelerator pedal. One pedal allows the operator to change direction and acceleration without the use of hands reducing operator movement resulting in increased productivity.
(optional column mounted directional control lever available)

Crown offers a foot direction control pedal as an option.

J30-40XMT₂ PARK BRAKE

- **Easy, step down foot actuated parking brake**
- **Hand released**
- **Park brake warning buzzer**



Hand and foot controls are similar to other Hyster electric products. The size and position are ergonomically placed and are easy to operate.

- The independent parking brake is mechanically linked to a pedal. It is operated by depressing the pedal with the left foot and released by pulling the handle located on the left side of the cowl.
- Visual and audible warnings inform the operator to release or engage the brake when entering or exiting the unit.

A seat activated park brake option is available.

CROWN SC 4000 SERIES PARK BRAKE

- Hand actuated and released

- Pinch point

- Park brake warning buzzer



Pinch Point

- Located on the right side of the cowl, the independent parking brake is mechanically linked to the service brake pedal. It is actuated by pulling the handle towards the operator and released by depressing the plunger with the right hand.

- The design and angle of the Crown hand actuated park brake provides a potential hand pinch point.

- Audible warnings inform the operator to release or engage the brake when entering or exiting the unit.

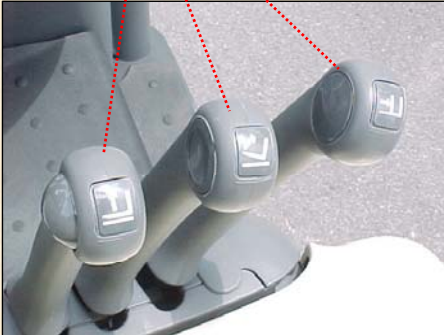
Located below the floor plate under the drive motors, adjustments to the mechanical linkage can prove to be a task.

A seat activated park brake option is available.

HYDRAULIC LEVERS

CROWN SC 4000 SERIES

- Urethane covered control handles
- Tactile feedback



HYSTER J30-40XMT₂

- Contoured
- Soft touch
- Low effort
- 3 spool - 2 handle (std)
- 3 spool - 3 Handle (opt)
- 4 spool - 4 handle detent 2nd aux (opt)



The Hyster hydraulic levers are positioned to the right side of the seat - within easy reach of the operator, and conform to the natural movement of the arm. The levers are ergonomically contoured and molded with a polyurethane compound maximizing grip that provide reliable load control while minimizing required force. The shorter handles provide less operator fatigue.

With the premium seat the operator can rest the elbow while activating the hydraulics.

Both Hyster and Crown offer a 3 spool - 2 handle valve as standard. The 3 spool - 3 handle and 4 spool - 4 handle detent (2 aux) valve are optional on both.

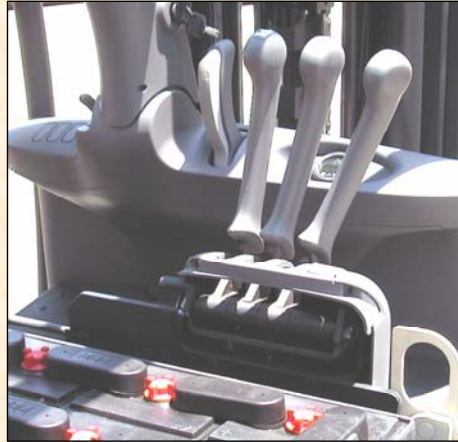
The Crown hydraulic levers are positioned to the right side of the seat - but are located perpendicular to the front battery compartment plate. This placement forces the operator to reach a little further than on the Hyster. In addition, with a shoulder type operator restraint, the operator has no where to rest the elbow while activating the hydraulics, promoting fatigue.

The levers are contoured and molded with a urethane compound maximizing grip. The tactile feedback allows the operator to know which handle is chosen without looking at it.

CROWN SC 4000 SERIES

- **Lever Pod**

- **Activates automatically when hood is raised for battery and component access**



The Crown hydraulic lever pod activates automatically when the hood is raised to move the levers out of the way when battery or electrical component servicing is required.

The Hyster is a simple one step operation, performed on the same side of the truck to service the battery and for daily operator checks.

OVERHEAD GUARD

Hyster J30-40XMT₂

- Low profile - 78" Height
- Rolled steel "Bar on edge" overhead guard
- Excellent Visibility
- Right side battery removal



CROWN SC 4000 SERIES

- One piece OHG/Cowl design
- Acceptable visibility
- Right side battery removal



The Hyster low profile overhead guard has an overall height of 78" (1978 mm) allowing the J30-40XMT₂ to be used in applications with low ceiling and doorway clearances. The rolled steel cross members and fore and aft reinforcing bars provide strength and excellent visibility. A right side battery removal slot was designed for the use of an overhead chain hoist for easy battery removal.

The overhead guard is easily removed by loosening six easy to access bolts and then lifting straight off.

An optional 29" OAW drive in rack OHG (47.75" to 75" above floor, 78" OAH) available. Not compatible with premium seat or OHG mounted lights.

The Crown one piece overhead guard design aesthetically looks good, however, removal appears to be very complicated. The OHG is part of the cowl, in fact it is welded, not bolted to it. In order to remove, the entire cowl, all components secured to the cowl, the hood, 2 hood gas springs, seat switch wiring, and the horn bracket require removal, this then leads you to the 2 bolts securing the rear OHG legs & cross member which are located slightly down into the counterweight . These bolts need to be accessed in the cramped control compartment to remove. After all this the OHG/Cowl assembly can be removed. This can be a very time consuming and costly procedure.

An optional drive in rack OHG 29' OAW from 47.5" to 74.5" measured from floor is available.

J30-40XMT₂ BATTERY COMPARTMENT

- **UL approved ABS plastic hood**
 - **Durable and light weight**
 - **Non-Corrosive**
 - **Gas spring assisted**
- ▶ **Hood tilts rearward for access**



Also serves as a battery restraint

The battery compartment cover is made from a durable, UL approved, ABS plastic, making it light weight, non-corrosive and less susceptible to noise amplification. The dual gas- spring assisted cylinders allows easy changing of the battery and reduced operator effort when opening the hood.

Hyster has easier battery removal - on Crown you must remove the battery side panels before you can remove the battery.

The battery compartment cover also serves as a battery restraint.

The standard 36 volt or an optional 48 volt system is available. Both systems are available in different compartment sizes to meet a variety of application requirements. The 48 volt system may be selected as a no charge option. This interchangeable option provides dealerships with added stocking flexibility.

Optional battery side removal with roller or slide removal is available in the standard price book. (Max battery height 22.8")

SC 4000 SERIES BATTERY COMPARTMENT

- Gas spring assisted
- Metal formed hood
 - Allows more noise
 - Susceptible to corrosion



The dual gas -spring assisted cylinders reduce operator effort when opening the heavier metal formed hood.

The Crown metal hood amplifies more noise from the control compartment and is susceptible to corrosion from battery acid and other application environmental conditions. In the event of damage, the hood is susceptible to deflection which could cause alignment problems resulting in replacement.

The battery compartment cover also serves as a battery restraint.

Optional battery rollers are available (Compartment height 23.13")

SC 4000 SERIES BATTERY COMPARTMENT

- ⌒ **Driveable with battery side plates removed**
- ⌒ **Battery side panels;**
 - **Heavy**
 - **Awkward to replace**



In the event that the battery side plates are removed and not replaced the Crown truck can still be driven, providing an opportunity for the battery to slide out from the compartment. The standard equipped Crown truck does not provide a battery restraint mechanism that disables traction.

J30-40XMT₂ FLOOR PLATE

- **Removable two-piece floor plate**
 - Provides access for the oil level check and components
- **Hand holes on each side provide ventilation**



The Hyster floor plate has an anti skid material on foot contact areas. The two piece design allows quick access to the motor compartment for servicing and operator daily checks. They are easily removed by hand without the use of tools.

Hydraulic oil level check is made easy by removing right floor plate.

Tilt cylinders are located below the floor plate providing increased and uncluttered foot space.

CROWN SC 4000 SERIES FLOOR PLATE

- Removable two piece
- Acceptable access
- Accelerator pedal designed into right hand floor plate



FLOOR PLATE VIDEO 3.0m



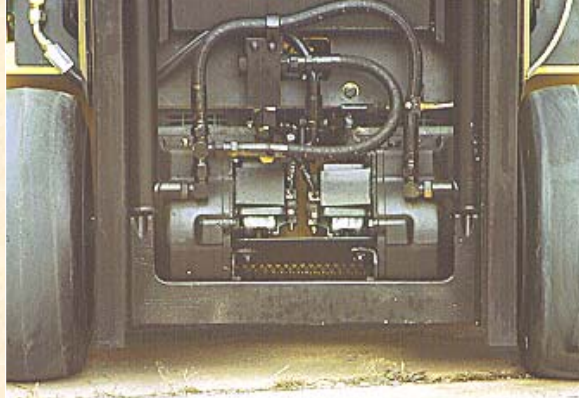
The Crown two piece floor plates are removed by sliding out and off. The tilt cylinders are located beneath the floor plate. Access to components for daily inspection is acceptable.

The accelerator pedal is designed into the right hand floor plate.

J30-40XMT₂ BRAKES

☞ **Hydraulically activated "Regenerative braking"**

- ☐ **Dual disc**
- ☐ **3.75 power amplification per wheel**
- ☐ **Low effort**
- ☐ **Self adjusting**



Mounted on each drive unit, the dual disc brake system is hydraulically activated with 3.75 power amplification per wheel to provide low effort braking. Braking is assisted by utilizing regenerative motor brake current. This design reduces heat and brake wear. Block the mast and brake rotor and friction pads are accessible through the mast for inspection and replacement. A large brake pedal is positioned for use by either foot. The sealed master cylinder reservoir contains a sensor, which lights a warning lamp on the dash panel if the fluid level becomes low. Self adjusting brake pads are made from non-asbestos materials.

SC 4000 SERIES BRAKES

- ☞ **Mechanically activated**
- ☐ **Dual disc**
- ☐ **5:1 brake multiplication factor**
- ☐ **Proportional to pressure applied**



The disc brake assemblies in the Crown are mounted to the drive unit intermediate shaft which creates a brake multiplication factor of about 5:1. Braking is assisted with regenerative motor brake current as well. Brake stopping distance is proportional to the amount of pressure applied to the foot brake. The more pressure applied to the foot brake, the shorter the stopping distance. The result of this design requires more operator effort which increases fatigue.

Mechanical linkage is hard to reach if adjustment is necessary and has the opportunity to become sloppy when parts wear.

J30-40XMT₂ COUNTERWEIGHT

- Designed to provide an easy access compartment for all major electrical and steer system components.

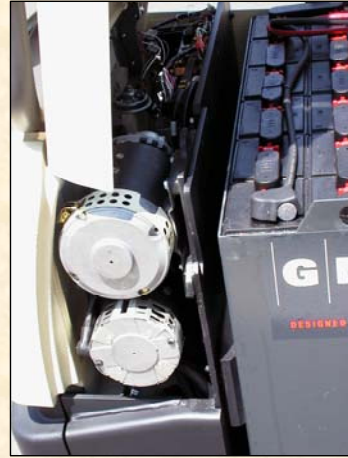


All major electrical and steer system components are accessible behind the cast counterweight cover. The cover is easily removed by loosening two bolts, this releases the counter weight cover from the truck frame giving full access to electric and steer components as well as basic truck fuses. The cover has a watertight internal seal to protect the components.

The lateral stabilizing stops molded into the counterweight provide added stability.

SC 4000 SERIES CONTROL COMPARTMENT

- ⌚ **Poor serviceability**
- ⌚ **Limited access to components**
- ⌚ **No counterweight access**



Serviceability to electrical components is poor. The counterweight, does not provide access through the back like the Hyster truck to service components. It appears that when servicing or removal of components is required, the counterweight, OHG and hood must be removed to gain access. The result is increased down time and higher labor costs.

END OF PART II