

PRODUCT INFORMATION BULLETIN



PIB Number: 02.0311b
Date: March 11, 2002
Series Impact: D114 - E25-40XM2S
F108 - E45-65XM2
C098 - E70-120XL3
H160 - J30-40XMT2
C210 - N30XMH2
A216 - J40-60XM2
Subject: Auto Deceleration System (ADS)

DESCRIPTION:

Regenerative braking exists on all current production electric counterbalanced and warehouse products. Recognizing the significant advantages this feature provides us on the separately excited motor (SEM) control systems used on our products, we will soon employ another form of regenerative braking called Auto Deceleration.

The ***Auto Deceleration System*** or (ADS) is a standard feature built into each SEM motor controller being supplied to us by General Electric, Curtis Instruments and Zapi. Currently the default for this function is turned OFF at the factory for counterbalanced electric trucks and "ON" for all warehouse products. This bulletin is to inform you that the option will soon be set to the "ON" position in all electric products effective March 1, 2002

If your dealership desires to have the ADS feature turned OFF, for units built after March 1st, please refer to the Service Grams, or contact Hyster Resident Service Engineering for assistance.

An important benefit of the auto deceleration system is that it allows the operator to stop the truck in shorter distances without needing to apply the service brake. Auto Deceleration reduces motor overheating, extends brush life and extends life to the conventional friction braking system.

How the Auto Deceleration System works:

- **Foot off accelerator pedal but not on brake pedal** - In this mode, the operator lifts his/her foot up from the accelerator pedal and the vehicle slows down gradually without the operator applying the brake pedal. The truck comes to a more controlled stop with out the operator needing to take any additional actions such as depressing the brake pedal or selecting a directional change (lever or Monotrol® directional control).

- **When the operator activates the service brake** - The auto deceleration system continues to decelerate the truck thus assisting the friction brake system to bring the truck to a complete stop.

In an effort to increase awareness of the benefits that the Auto Deceleration System provides, below is a list of the effects for this change.

Auto Deceleration System ON:

- ***Reduces driver fatigue*** – Operators do not have to touch the brakes as often because the auto deceleration system will stop the unit's directional travel.
- ***Improves service brake and drive train life*** – Without auto deceleration on, the operator needs to select the opposite travel direction in order to get any type of plugging effect.
- ***Operators do not need to reverse direction for auto deceleration system to work*** – Auto ***deceleration*** system comes on with a single strength and only when the accelerator is fully released.
- ***Enhances the advantages Separately Excited Motor (SEM) technology provides us*** – Using auto deceleration system will reduce the heat build up in the motor(s) which will prolong the life of the brushes and other internal components.
- ***Field Proven*** - ADS Already exists on many other Hyster electric products. Narrow Aisle reach and Order Picker as well as the VNA Man-Up Turret trucks.

Actions:

- For optimal performance, the auto deceleration system feature will be factory set to its maximum position, which will provide a positive, but substantial braking mode.
- For specific customers that prefer to have this feature turned OFF, your factory-trained technician can disable or minimize the setting to customize it for the customer in the field.
(For use in industries where loads may be considered fragile)
- Because auto deceleration system already exists, a qualified dealer technician can activate the feature on older SEM products found in your customers fleet delivered from the factory with the option turned off. (Refer to Service Grams for details)

Service Gram FF00155 & FF00156 will be distributed to cover the service details of this change for three and four wheel counterbalanced electric trucks.

We appreciate your continued support. Thank you in advance for your attention in this matter.