

[Metro.net](#) (web)

Resources

► [Safety](#)

► [Pressroom](#) (web)

► [CEO Hotline](#)

► [Metro Projects](#)

► [Facts at a Glance](#)
(web)

► [Archives](#)

► [Events Calendar](#)

► [Research Center/
Library](#)

► [Metro Cafe](#) (pdf)

► [Metro Classifieds](#)

► [Retirement
Round-up](#)

Metro Info

► [Strategic Plan](#) (pdf)

► [Org Chart](#) (pdf)

► [Policies](#)

► [Training](#)

► [Help Desk](#)

► [Intranet Policy](#)

Need e-Help?

Call the Help Desk
at 2-4357

[E-Mail Webmaster](#)

PHOTOS: SHANTAY IOSIA



Division 2 mechanics Dennis Calderone, left, and Ky Van helped develop and organize the Sacrificial Cage. It has proven to save space and time.

Div. 2 Mechanics' Inventions Will Improve Safety on the Job

By SHANTAY IOSIA

(Oct. 27, 2004) When you're trying to remove a 150-pound alternator from a bus, one slip could cost you a thumb.

That's the danger Mechanic Dennis Calderone and his colleagues at Crossroads Depot Division 2 had in mind when they invented several tools to reduce the risks of such injuries.

One tool is used to assist a mechanic during the removal of an alternator. It is mounted on the engine hoist, also known as the "cherry picker," to support most of the weight for easier removal.

"Before, it took about two or three guys to lift the alternator and maneuver it," says Calderone. "A lot of times you end up with back problems."

A collaboration



Calderon and Van use the Sacrificial Cart to transport the most frequently used sacrificial

Calderone and Mechanic Ky Van, in collaboration with other Division 2 personnel, used the same concept to create an enhanced tool to remove air compressors.

Although the air compressor is slightly lighter than the alternator, it has its unique challenges. The traditional method involved one mechanic under the bus pushing the compressor up, while another mechanic on the other end attempted to pull it out.

"It gets to be very dangerous because sometimes hoses get in the way, coolant leaks or you get tired and you just want to take a break," Calderone says.

The special fitting of the attachment allows access to the discharge outlet so it can be pivoted in a 360-degree motion to guide it along the hoses and other things blocking its removal, explains Van.

A lot safer job

"It won't save a lot of time," he says. "But it makes the job a lot safer."

One invention that has proven to save the division time is the "Sacrificial Cage."

The Sacrificial Cage is a storage case with some 30 compartments for sacrificial glass replacements. Each compartment is labeled with a number and diagram of the corresponding spot on the bus.

"It gets everything organized and saves space so the employees can just walk up and get what they need," says maintenance manager Donell Harris.

The previous method required several mechanics to search for the glass replacements stacked on wooden pallets.

'Moved to the bottom'

"Sometimes you have to lift through three or four shipments to get to what you want," says Calderone. "By the time you're done the next guy may want what you've just moved to the bottom of the pile."

In addition to the Sacrificial Cage, the staff of Division 2 developed the portable "Sacrificial Cart" to transport the most commonly used sacrificial glass replacements.

glass to and from the buses. This saves the employees time and reduces risks of injuries that occur when employees carry several replacements.



Division 2's attachment, shown here affixed to an air compressor, swivels at a 360-degree angle to allow for safer removal of the air compressor.



Calderone assists Van in removing an air compressor using the cherry picker and the attachment they invented. The tool, attached to the compressor, slides over the end of a "cherry picker" for lifting.

Additionally, the top of the cart is used for the discarded pieces, reducing the number of trips to the waste bin and improving efficiency.

Van and Calderone say the division's next project involves a tool that will be used to remove the radiator. It is in its experimental stages as they await a used radiator to test it out.

| [Home](#) | [Phone Directory](#) | [Forms Online](#) | [FIS Online](#)