# **Conversion** Corner

## Engine Braking Power on a CC Conversion

Country Coach Conversions are powered by a beefy Detroit Diesel Series 60 DDEC IV, 500HP engine. With 1550 lbs.-ft. of torque at 1200 RPM this workhorse supplies plenty of power to get over those mountain grades. By harnessing it with a

Jacobs Engine Brake<sup>™</sup> you can put that same engine to work taking you safely and efficiently down the



other side. Here's how:

## Using the Engine To Brake

The Jacobs Engine Brake is a type of engine retarder. It is a hydromechanical device that mounts under the engine's valve cover. Its function is to turn your power producing diesel engine into a power absorbing air compressor.

The driver activates the system via a dashboard switch, which sends a command to the engine control computer. It in turn energizes solenoids that supply the engine oil pressure to activate the engine brake assemblies. The engine brake assemblies alter the normal timing of the engine's exhaust valves, causing them to open near the top of the compression stroke and release highly compressed air through the exhaust system. (See inset). The retarding power available to slow the vehicle increases with engine RPM.

On a Country Coach Conversion the driver has the ability to control the retarding power by selecting high or low stage retarding via a dashboard switch and controlling engine RPM by selecting the appropriate transmission gear. When the

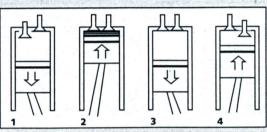
# How a Jacobs Engine Brake<sup>™</sup> Works

Below is a comparison of a four-cycle engine (for illustration purposes) with and without a Jacobs Engine Brake<sup>™</sup>.

## Without a Jacobs Engine Brake

 The intake valve opens and air is forced into the cylinder by boost pressure from the turbocharger.
Air is compressed by the engine piston. The energy required to compress this air is produced by the vehicle's driving wheels.

(3) When the piston passes over the top dead center and begins its downward stroke, the energy is returned to the piston (and to the



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driving wheels). Essentially no energy is absorbed and no net retarding work is done. (4) Normal exhaust stroke.

## With a Jacobs Engine Brake

(1A) The intake valve opens and air is forced into the cylinder by boost pressure from the turbocharger.

(2A) Air is compressed to approximately 500PSI by the engine piston. The energy required to compress this air is produced by the vehicle's driving wheels. Near top dead center, the Jacobs Engine

Brake<sup>™</sup> opens the exhaust valves, venting the high pressure air and dissipating the stored energy through the exhaust system. (3A) On the downward stroke, essentially no energy is returned to the piston (and to the driving wheels). There is a loss of energy. This loss is how the retarding work is done. (4A) Normal exhaust stroke.

Information used with the permission of Jacobs Vehicle Systems. See www.jakebrake.com for more information.

1A

Jacobs Engine Brake is activated, the Allison World Transmission receives a message to down shift with a preselection for fourth gear.

#### Features

- Automatic controls for easy operation
- Interface with electronic engines, transmissions, and Anti-Lock brake systems
- Optimized performance for highest retarding horsepower
- Serviced through Detroit Diesel's worldwide network of distributors and dealers
- A standard Warranty that is one of the best in the industry
- Lightweight design optimizes retarding and payload

• Field proven reliability of Jake Brake<sup>®</sup> brand products

### Benefits

- Faster, steadier, more efficient braking performance
- Reduced wear on engine, tires, and service brake
- Lower vehicle maintenance costs
- Less vehicle
- Enhanced driver confidence
- Increased value at trade in

(Information used with the permission of Jacobs Vehicle Systems. See www.jakebrake.com for more information.)



Change: A new surge protector is being used on all CC Conversions.

**Benefit**: These surge protectors increase the protection against low voltage or miswired outlets. The end result is peace of mind for the Country Coach owner.

**Change**: New driver and passenger seat packages available. **Benefit**: A new optional Relaxor Massage/Heated Seat Package is available offering both driver and passenger a regal and relaxing way to travel.

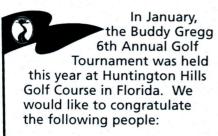
**Change**: The 10" leaf for the dining table is now standard on CC Conversions.

**Benefit**: This new feature allows the coach owner to conveniently accommodate more dinner guests.

**Change**: The entry door appearance has been improved. **Benefit**: An added ultraleather wrapped wood molding has been added to the entry door to make it more attractive and appealing.

For more information about EO's call the Country Coach Conversion Sales Team at (800)547-8015.

## **Buddy Gregg Golf** Tournament



**1ST PLACE** John Redmond Ernie Schumacher Lee Gowan

#### 2ND PLACE Scott Hamilton Tim Lozes Mike Bryan Dennis McBride

## **Change in Marketing** of CC Conversion Floorplans

As you may have noticed when visiting our web site, there have been some changes in the presentation of the floorplans, especially the ones that offer a wood and laminate choice. To make it clearer for customers we will be labeling floorplans with the cabinetry style available. We will also discontinue renaming floorplans that only differ by the cabinetry materials used. This approach will take effect first on the web site and eventually in all print material. Below is a comprehensive list of floorplans as of date of print:

#### XL 40'

- Sainte Claire (laminate or wood w/raised panel cabinets)
- Winnipeg (wood)
- Stratford (laminate or wood with European cabinets)

#### XL 45'

- Red Deer (laminate or wood w/raised panel or European cabinets)
- Mackenzie (laminate)
- Merritt (laminate)
- Saint John (laminate)
- Thunder Bay (laminate)
- Grand Centre (laminate)
- Dawson (laminate)
- Markham (wood w/raised panel cabinets)

#### <u>H3-45</u>

- Cartier (laminate)
- Kensington (laminate)

#### **3RD PLACE**

Joel Elmore Frank Elmore Steve Anderson \* Brian Thomson

#### BEST DRESSED Dan Larson

BRIGHTEST BALL Jeff Akens SHORTEST DRIVE Capt. Bob

# Web Page Alert

You many have noticed that we placed the new H3-45 Cartier floorplan on the Country Coach web page. Well, we've made the Conversion pages better than ever with the most current information including:

- Updated feature/benefits and specifications for the XL CC Conversions
- All new H3-45 specifications with a full color graphic of the coach
- Updated and colorized floorplans
- Check it out for yourself by going to:

www.countrycoach.com-/conversion.com.

Let us know what you think. It's important to us that this web site is a sales tool that you can use. Direct your email to ctc@countrycoach.com. Or, drop us a line at Country Coach, Inc., Marketing Department, P.O. Box 400, Junction City, Oregon 97448.

## Product Literature Available

The new Country Coach **Conversion Specification sheets** are available. Both the XL and H3-45 Models have their own color versions. These depart from the regular specification sheets that were a one color printed piece with engineering line drawing for the floorplans. Now these sheets feature colorized floorplan renderings that create a dimensional look. Haven't seen them yet or need more literature inventory? Then give Debbie Kelley a call at (800) 547-8015, ext. 144.

## New Mini Sales Books

Coming soon in the mail, you can expect the updated 6-hole punched mini-version of the XL, H3-45 specifications and floorplans. Retail and Wholesale pricing included.

Important News You Can Use From Country Coach