

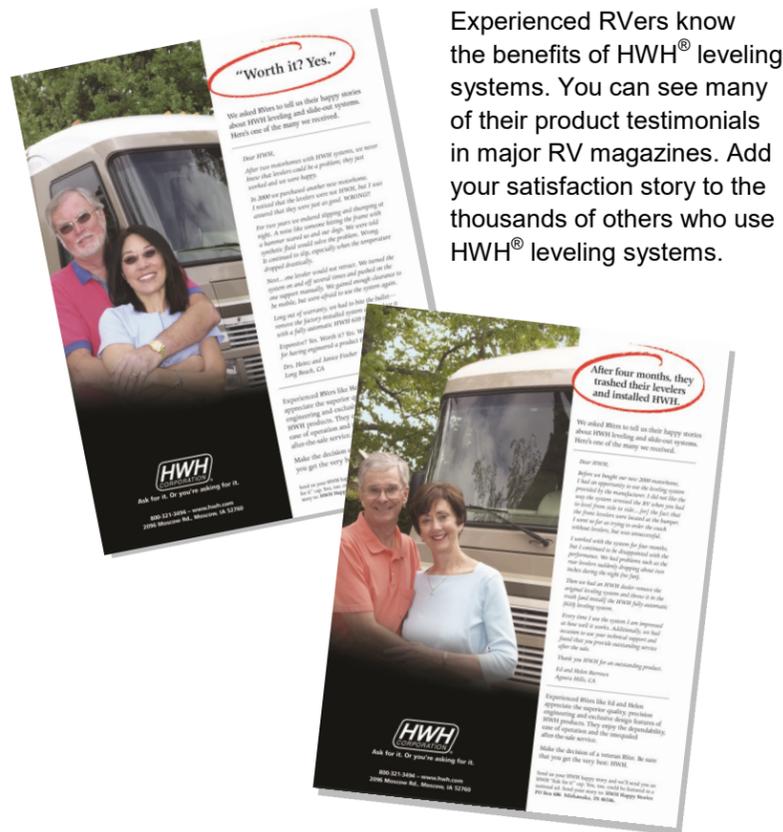
# Proven HWH® products keep you level and comfortable when parked, too.

One size doesn't fit all. HWH® leveling systems perform better because their individual components are carefully matched to meet the needs of *your* vehicle.

Only HWH® makes pre-engineered mounting brackets for virtually every common chassis/suspension combination used in the RV industry. Our brackets place jacks at the ideal suspension points for proper leveling. Plus, we provide hydraulic jacks in straight-acting or kick-down styles with the option of power-retraction or spring-retraction. Jack lift capacities range from 3,000 to 24,000 pounds *per jack*. Our unmatched choice of controls completes selecting the ideal system for your vehicle.

BI-AXIS® design raises sides or ends of the vehicle rather than single corners. That keeps chassis rails within a common plane, minimizing twist to the coach structure. It also provides greater stability.

Why compromise? Your HWH® dealer's MATCHMAKER Leveling System Configurator makes selecting the perfect system fast and easy.



Experienced RVers know the benefits of HWH® leveling systems. You can see many of their product testimonials in major RV magazines. Add your satisfaction story to the thousands of others who use HWH® leveling systems.

# Active Air



Web Video  
[hwh.com/ml35458.wmv](http://hwh.com/ml35458.wmv)



**The Ride of the Future!**

2096 Moscow Road, Moscow, Iowa 52760

800-321-3494 | 563-724-3396

Fax: 563-724-3408

Visit us online at [www.HWH.com](http://www.HWH.com)

## More Enjoyable RV Travel

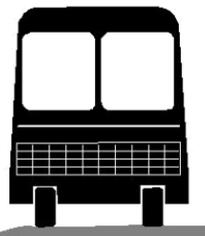
Since 1967, HWH® has kept RVs level when parked. Now it has developed the technology to keep you comfortable while traveling, too.



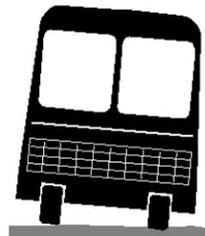
[www.HWH.com](http://www.HWH.com)

# HWH® Active Air Keeps You Comfortable

## Lane Changing



With HWH® Active Air



Without HWH® Active Air

HWH® Active Air Suspension, a four-point electronically controlled suspension system, provides ride comfort by rapidly adjusting the suspension system toward proper height.

Windy conditions and curvy roads can cause an RV to lean. HWH® Active Air senses such movements and adjusts the individual suspension air bags creating the proper ride height.

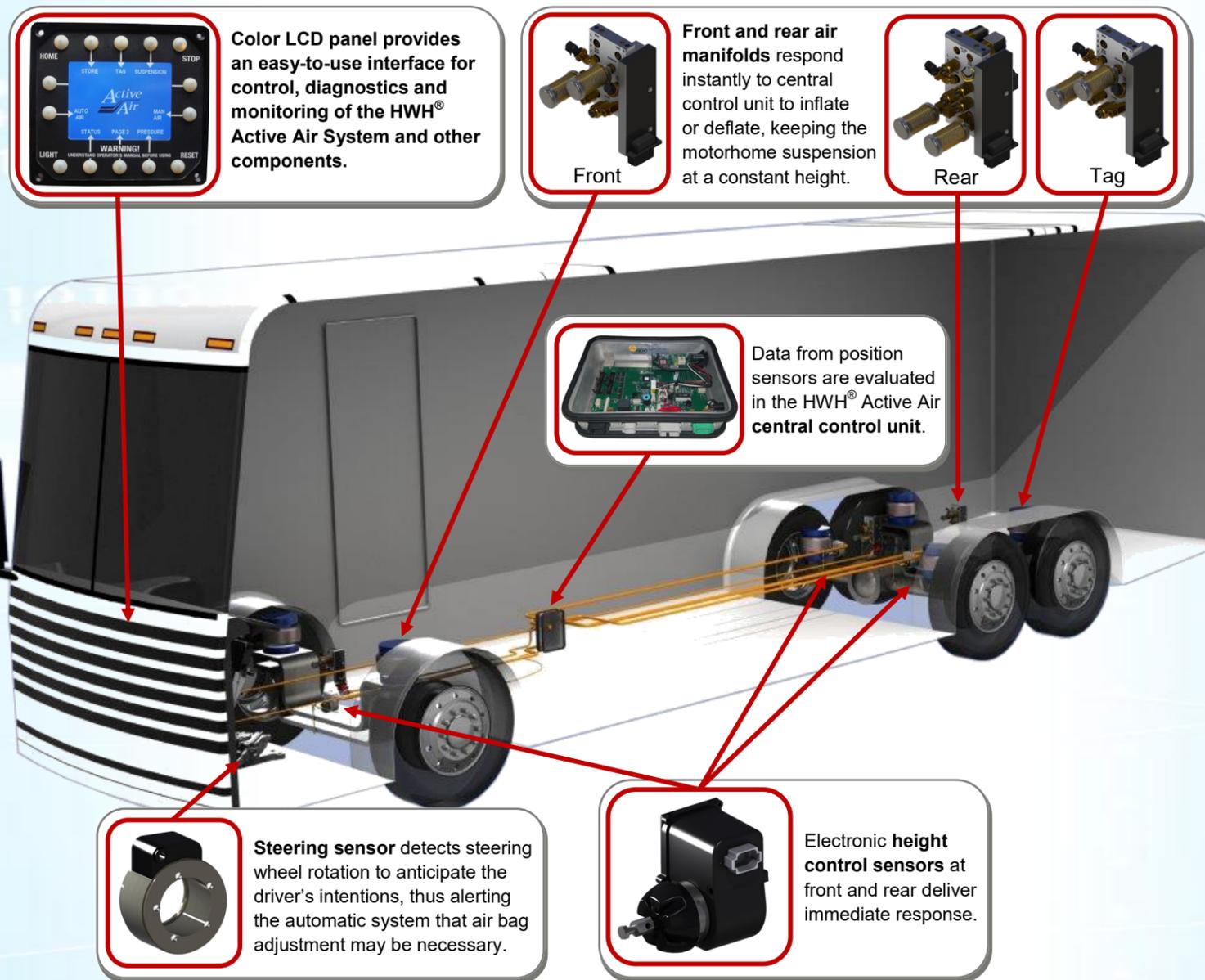
For example, when driving on a straight, flat road, the settings remain comfortably soft. But when cornering, the system automatically reduces roll by adding air to the outside bag and removing air from the inside bag, thus maintaining a soft, comfortable ride.

**Patent 6,665,597 B1**

## Take the Scenic Route

HWH® Active Air Suspension allows RVers to smoothly take the scenic route full of curves and winding paths. The suspension system reduces roll when rounding curves and turning corners, and enhances passenger comfort through:

- **Curve Anticipation:** The key to making a successful system is to anticipate a curve. Drivers anticipate turns by turning the steering wheel just before reaching the turn. With a sensor on the steering shaft, these reactions can be measured. This data is sent into the CPU. When the vehicle enters the turn a height control sensor activates a high flow air valve. This rush of air into the bag minimizes the sway of the vehicle. **Patent 6,665,597 B1**
- **Advanced Design Height Control Sensors:** HWH® height control sensors are ruggedly built to withstand the effects of running on roads with ice, snow, rocks, etc. (no need to carry a spare sensor).



**Color LCD panel provides an easy-to-use interface for control, diagnostics and monitoring of the HWH® Active Air System and other components.**

**Front and rear air manifolds** respond instantly to central control unit to inflate or deflate, keeping the motorhome suspension at a constant height.

**Front** **Rear** **Tag**

Data from position sensors are evaluated in the HWH® Active Air central control unit.

**Steering sensor** detects steering wheel rotation to anticipate the driver's intentions, thus alerting the automatic system that air bag adjustment may be necessary.

**Electronic height control sensors** at front and rear deliver immediate response.

**Each sensor provides four channels of data:**

**Max High setting** for getting out of rough terrain (campgrounds etc.)

**High and Low settings** to allow driver to adjust for high crowns, rough surfaces and windy conditions.

**Medium setting** for normal use.

- **Four-Point Stability:** It is critical while traveling down the road, that the front air bags operate at the same pressure (example, in a sudden stop situation, equal air pressure keeps the same braking force on

both wheels). If the coach is heavier on one side, it does not overload the front tire, instead, it spreads the load over three rear tires (if tag axle).

- **Wheel Height Averaging Bar:** Keeps the front of the vehicle at the proper ride height while counteracting the roll forces by adding air to the outside bag and removing air from the inside bag. This keeps the proper front height in long curves with rough roads. Unlike using stiff shock absorbers, tires have more freedom to track the road adding to driver comfort. The arrangement provides the stability of a four-point suspension without the inherent problems caused by a four-point suspension. **Patent 7,806,417**

## Enjoy Added Benefits

HWH® Active Air adds comfort to the ride and peace of mind through these features:

- **Automatic Air Leveling Included:** HWH® Active Air Suspension systems include our BI-AXIS® Automatic Air Leveling package. This allows you to level your coach, with the touch of a button, when parked.
- **Fuel Economy Mode:** Saves fuel while on straight-aways by reducing the response, resulting in less air consumption.
- **Manual Over-Ride:** Can be used when traveling below approximately 10 mph to raise the vehicle to clear obstacles such as steep driveways or lower vehicle to enter garages.
- **Driver Selectable:** High, medium and low heights for front, right side or left side allow increased comfort on roads with high crowns, rough surfaces and windy conditions
- **Self-Monitoring System:** Notifies the driver of conditions that need addressing.

## A Total RV Control System

The HWH® Systems Control Module provides self-monitoring and control of the HWH® Active Air Suspension system. The module can control the suspension system, slide-outs, leveling systems, automatic steps and more. It offers features such as:

- **Self-Diagnostic Capability**  
Aids in system diagnostics.
- **Compatibility of RV Components**  
For seamless communication.