



## **RECREATIONAL VEHICLE RECALL NOTIFICATION**

### **REASON FOR THIS RECALL**

Keystone RV Company has decided that a defect which relates to motor vehicle safety exists with the wheel installation of certain **2004 Montana and 2004, 2005 Everest** Fifth Wheels manufactured between May 1, 2003 and December 31, 2004 with the **6-LUG ALUMINUM WHEEL OPTION**. (Steel wheels and 8-lug Aluminum are **NOT** involved) The last six (6) digits of the Vehicle Identification Numbers (VIN) of the potentially affected Fifth Wheels are:

<b>2004 Montana VIN's:</b>	<b>506030-510774</b>
<b>2004 Everest VIN's:</b>	<b>481499-483328</b>
<b>2005 Everest VIN's:</b>	<b>483329-484888</b>

### **WHAT KEYSTONE RV WILL DO**

Keystone representatives have been in contact with the staff at your selling dealership regarding this situation. They stand ready to assist in addressing this condition by removing the **aluminum** wheels, cleaning any contamination which could affect the lug nuts ability to maintain proper torque, reinstalling the wheels with proper torque, reviewing/demonstrating proper torque techniques and **Owner maintenance requirements** to you. You will be required to sign an "Acknowledgement" which confirms the dealer provided you with the appropriate instruction in this regard.

In addition, we have also enclosed a DVD which demonstrates and documents proper wheel torque maintenance, as well as wheel reinstallation requirements which need to be followed to prevent the potential for wheel separation in the future. If you are unable to view this DVD, the content can be seen at [www.keystonerv.com](http://www.keystonerv.com). Should you need a paper version or have any questions regarding this program, please contact us at our newly dedicated Toll-free number established specifically for this program at 1-877-U-TORQUE (1-877-886-7783).

At your earliest convenience, please make an appointment to have your Fifth Wheel serviced by your dealership. The unit will need to be at the dealer to perform this service correction approximately one (1) day.

Your dealer is best equipped to obtain parts and provide service to ensure that your Fifth Wheel is corrected as promptly as possible. If, however, you take your Fifth Wheel to your dealer on the agreed service date, and they do not remedy the condition within a reasonable amount of time, please contact Keystone Customer Service by calling 1-877-U-TORQUE (1-877-886-7783).

***WARNING! Continued use of the Keystone RV without having this preventative action completed immediately could lead to a wheel separation, loss of control of the vehicle, property damage or personal injury.***

We regret any inconvenience this action may cause you. As we are sure you will appreciate, the safety of our customers and the quality of our products are of the utmost importance to us.

Should you have any questions or concerns regarding this correspondence, please feel free to contact one of our Customer Service Representatives at 1-877-U-***TORQUE*** (***1-877-886-7783***). If your dealer fails or is unable to remedy this defect without charge and within a reasonable time period, you may also submit a written complaint to:

**Administrator**  
**National Highway Traffic Safety Administration**  
**400 Seventh Street SW**  
**Washington DC, 20590**

You may call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153; or go to <http://www.safercar.gov>).



## A. Introduction



Figure A

The axle and wheel assemblies of your RV (Figure A) are designed differently than those on your car. The overall size, weight and center of gravity of a recreational vehicle subject the wheels to pressures unique to trailering. During normal cornering, the tires and wheels experience a considerable amount of stress called “side-load”. Therefore, the lug nuts on your recreational vehicle require periodic retorquing.

These instructions will show you how to maintain proper lug nut torque by following these important steps:

1. *Check torque before every trip*
2. *Use proper tools (Figures C and D)*
3. *Follow the appropriate star pattern sequence (Figure H)*
4. *Torque lug nuts in the correct stages and follow-up intervals after any wheel reinstallation (Figure L)*



Figure B

For further information on these steps, you may want to refer to the axle manufacturer’s owner’s manual that accompanied your unit. (Figure B)

Remember, torque is the amount of rotating force applied to a fastener, such as a lug nut. Proper torque of lug nuts can only be achieved by using a torque wrench and a socket.

## B. Preparation: Tools Required



Figure C: Dial indicator torque wrench



Figure D: Adjustable dial torque wrench

- Dial indicator (Figure C) or Adjustable dial torque wrench (Figure D)
- 7/8" or 13/16" socket



Figure E: DO NOT USE a 4-way socket

Note: Some wheel assemblies require an extension. **DO NOT USE a flexible extension.** Also, **DO NOT USE a 4-way socket or any other type of wrench (Figure E)**, which does not measure the actual pressure applied to the lug nut.

### Using Torque Wrenches

- Most torque wrenches are required to be set at "0" when not in use to maintain calibration.
- Please refer to the manufacturer's instructions for further information on use and maintenance.

### Setting Torque Value on a Dial Indicator Wrench (Figure F):

1. Make sure your indicator needle is set to "0".
2. As you apply clockwise pressure to the lug nut, both needles will show the current amount of torque being applied.
3. When you reach your desired torque value, stop applying pressure and your indicator needle will stay at the highest torque value reached.



Dial Indicator Torque Wrench

Figure F

### Setting Torque Value of Adjustable Dial Wrench (Figure G):

1. Unlock the handle and set the dial to your desired torque value.
2. Lock the handle back in place.
3. As you apply clockwise pressure to the lug nut, you will hear and audible "click" when the desired torque wrench value is reached. Do not apply further pressure once you hear the "click".



Adjustable Dial Torque Wrench

Figure G

## C. Pre-Trip Maintenance

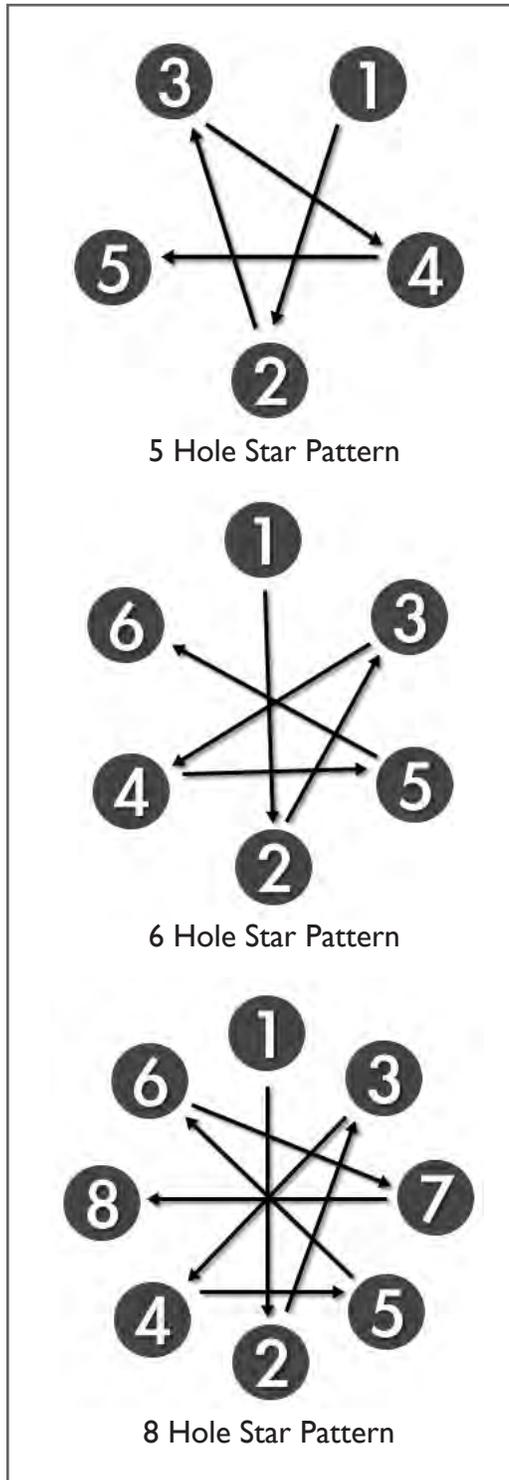


Figure H

Always remember:

- **Check lug nut torque before every trip.** Keystone RV recommends this maintenance procedure to ensure proper torque has been applied to lug nuts before heading out on the road.
- Lug nuts should be torqued to **110-120 ft/lbs on all units except for the Cambridge, which requires 140-150 ft/lbs.** This is due to the use of a 9/16" stud versus a half inch stud used on other units.
- **Always follow the appropriate star pattern** as indicated in these instructions (Figure H) or in your axle manufacturer's owner's manual (Figure B) to assure proper torque.

Pre-Trip Procedure:

1. Set your torque wrench to 110-120 ft/lbs (140-150 ft/lbs for the Cambridge).
2. Begin with the appropriate bolt for your wheel (12 o'clock position for 8 and 6 hole wheels and 2 o'clock position for 5 hole wheels, as illustrated) and apply torque to all lug nuts following the star pattern indicated.
3. Complete the procedure on each wheel. Before moving to each new wheel, be sure to verify your preset torque wrench value.

**WARNING: UNDER OR OVER-TORQUE OF WHEEL LUG NUTS CAN CAUSE THE WHEEL TO SEPARATE FROM THE AXLE AND COULD LEAD TO PROPERTY DAMAGE, SERIOUS INJURY OR LOSS OF LIFE.**

## D. Wheel Reinstallation

### 3 Stage Installation

- 1 20-30 ft/lbs  
50-60 ft/lbs (Cambridge)
- 2 55-60 ft/lbs  
90-100 ft/lbs (Cambridge)
- 3 110-120 ft/lbs  
140-150 ft/lbs (Cambridge)

Figure I



Figure J

After removing a wheel from your RV for any reason, you must carefully follow a 2 step process:

- 1) Wheel Reinstallation
- 2) Follow-up

#### Wheel Reinstallation Procedure: Step 1) Wheel Reinstallation

- **During wheel reinstallation, the lug nut torque must be applied in 3 stages. (Figure I)** This will ensure the wheel studs are centered in the wheel holes, and will help the lug nuts maintain proper torque.
  1. Start all lug nuts by hand.
  2. **Stage 1:** Set your torque wrench to 20-30 ft/lbs (50-60 ft/lbs for the Cambridge, which uses a 9/16" versus 1/2" inch stud).
  3. Begin with the appropriate bolt for your wheel (12 o'clock position for 8 and 6 hole wheels and 2 o'clock position for 5 hole wheels, as illustrated) and apply torque to all lug nuts following the star pattern indicated in Figure H.
  4. **Stage 2:** Increase your torque wrench setting to 55-60 ft/lbs (90-100 ft/lbs for the Cambridge).
  5. Begin with the appropriate bolt for your wheel and apply torque to all lug nuts following the star pattern indicated in Figure H.
  6. Following stage 2, the wheel can support the weight of the trailer and can be lowered off of the jack stands (Figure J).
  7. **Stage 3:** Increase your torque wrench setting to 110-120 ft/lbs (140-150 ft/lbs for the Cambridge).
  8. Begin with the appropriate bolt for your wheel (as illustrated) and apply torque to all lug nuts following the star pattern indicated in Figure H.

## D. Wheel Reinstallation (continued)



Figure K

### Step 2) Follow-Up: Retorque after 10, 25, and 50 miles (Figure K)

1. After the first 10 miles of your trip, pull your recreation vehicle off the road into a safe work area.
2. Set your torque wrench to 110-120 ft/lbs (140-150 ft/lbs for the Cambridge).
3. Begin with the appropriate bolt for your wheel and apply torque to all lug nuts following the star pattern indicated in Figure H.
4. **Reapply torque** (at 110-120 ft/lbs or 140-150 ft/lbs for the Cambridge) **and repeat steps 1, 2, & 3 again at 25 miles and at 50 miles of your first trip.**
5. The follow up process is complete and you should refer to the general lug nut torque maintenance process described in section C “Pre-Trip Maintenance”.

## E. Summary

### STEP 1 Wheel Reinstallation

- 1 20-30 ft/lbs  
50-60 ft/lbs (Cambridge)
- 2 55-60 ft/lbs  
90-100 ft/lbs (Cambridge)
- 3 110-120 ft/lbs  
140-150 ft/lbs (Cambridge)

### STEP 2 Follow-up

- 3 110-120 ft/lbs  
140-150 ft/lbs (Cambridge)

1. *Check torque before every trip*
2. *Use proper tools (Figures C and D)*
3. *Follow the appropriate star pattern sequence (Figure H)*
4. *Torque lug nuts in the correct stages and follow-up intervals after any wheel reinstallation (Figure L)*

Re-torque after first:

10 miles → 25 miles → 50 miles

Figure L

## For More Information

Visit: [www.keystonerv.com](http://www.keystonerv.com)

Or call Toll Free: 877-U-TORQUE (877-886-7783)