#### **RECALL SERVICE BULLETIN MODEL YEAR(S) AFFECTED** RSB # **DATE ISSUED** 12/09/2016 2017 470 BRAND Bay Star Sport Ventana Essex Bay Star П Dutch Star King Aire |X|п П Canyon Star Mountain Aire Other Ventana LE London Aire DESCRIPTION Newmar Corporation has decided that a defect relating to motor vehicle safety exists in specific motorhomes. NHTSA # 16v 756

On certain motorhomes, the WABCO OnGuard Radar may have been mounted upside down in the front lower bumper.

**Issue**: If the collision mitigation radar is mounted upside down, it will function, but with degraded performance. This could potentially increase the risk of a crash and/or damage to personal property.

**<u>Correction</u>**: Authorized service facilities will check the orientation of the radar and correct it when needed.

<u>Note</u>: The service facility must have a laptop with the TOOLBOX<sup>TM</sup> Software (version 12) installed to perform the *OnGuard*<sup>TM</sup> alignment.

### **RECOMMENDED ACTION**

**<u>Customer Action</u>**: Contact the Newmar service department at (800)731-8300. An associate will assist you with scheduling an appointment to complete this repair at Newmar or an Authorized Service Facility.

**Dealer Action:** Inspect the coach according to the recall instructions to determine if any parts are needed. Call the Newmar service department at (866)290-5371 to obtain authorization for recall 16v 756 and appropriate parts. If parts are necessary, they will be sent to the Authorized Service Facility. Follow the attached work instructions to correct the radar orientation, add a backer (if needed), and test the system.

### Flat Rate Code: 16v 756

### Labor Time:

Perform backer and orientation inspection only = .1 hour (one-tenth) Perform backer and orientation inspection + add backer = .5 hour (one-half) Perform backer and orientation inspection + correct orientation + calibration + test drive = 1.0 hour Perform backer and orientation inspection + add backer + correct orientation + calibration + test drive = 1.5 hours

<u>Please read this bulletin in its entirety prior to beginning any diagnosis or repairs.</u>



Dear Valued Customer,

Enclosed you will find information pertaining to Newmar recall campaign 16v 756. If for any reason the repair cannot be completed in a timely manner, contact our Customer Service Department at (800)731-8300, or email us at <u>customerservice@newmarcorp.com</u> to request instructions for disconnecting the system until the repair is completed.

Thank You, Newmar Corporation Customer Service Department 1301 Stahley Drive Nappanee, IN 46550



### NEWMAR CORPORATION

## Date:November 1, 2016Re:Newmar Corporation – Motor Vehicle Recall Notification

#### Subject:Recall Campaign No.: 16V 756

This notice is sent to you as a Newmar Dealer in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Newmar Corporation has decided that a defect which relates to motor vehicle safety exists in specific Newmar recreational vehicles.

The National Traffic and Motor Vehicle Safety Act requires that each vehicle which is subject to a recall campaign of this type must be satisfactorily repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. To avoid providing these problematic solutions, every effort must be made to promptly schedule an appointment with each owner and to repair their vehicle as soon as possible. Vehicle owners are being notified of this recall. If the condition is not remedied within a reasonable time, they are instructed on how to contact the National Highway Traffic Safety Administration.

### **REASON FOR THIS RECALL**

Newmar Corporation has decided that a defect which relates to motor vehicle safety exists in specific motorhomes.

On certain motorhomes the WABCO OnGuard Radar may have been mounted upside down in the front lower bumper. If the collision mitigation radar is mounted upside down they will perform but with degraded performance, this could increase the risk of a crash and/or damage to personal property. Correction: Dealers will check the orientation of the radar and correct if needed.

Motorhomes included in this recall include: 2017 King Aire with OnGuard option built between 1/22/2016 and 10/04/2016.

These motor homes require immediate service. Continued use poses a potential safety hazard.

#### DEALER CAMPAIGN RESPONSIBILITY

Dealers are to provide to all customers/owner vehicles the service of completing this campaign at no charge to the customer/owner regardless of vehicle age, vehicle mileage, or ownership at the time of repair.

#### **REPAIR PROCEDURE**

Newmar will provide the work instructions.

If you should have any questions please contact the Newmar service department at: 1-866-290-5371.

Thank you for your cooperation.

Sincerely,

Newmar Corporation

## How to Correct the Orientation of the OnGuard<sup>™</sup> System

### **Relevant Coaches**

Model: King Aire Year(s): 2017 Floorplan: All with 7C115 Option

### Issue

Recall 16v 756 for correcting the orientation of the OnGuard<sup>™</sup> system.

### Action

Follow the service procedure below to correct the condition. The approximate time to complete this repair is:

- Perform backer and orientation inspection only = .1 hour (one-tenth)
- Perform backer and orientation inspection + add backer = .5 hour (one-half)
- Perform backer and orientation inspection + correct orientation + calibration + test drive = 1.0 hour
- Perform backer and orientation inspection + add backer + correct orientation + calibration + test drive = 1.5 hours

### **Necessary Tools & Replacement Parts**

7/16" Wrench

Ratchet with 7/16" socket

Small level

Part Name	Part Quantity	Newmar Part Number	
* Backer Block	* 2 ea.	102346L	
* Black Sikaflex	* 1 ea.	52760	
* 3m tape	.03 ea.	85466	

\* May not be needed, inspect before calling for authorization and ordering parts. The parts listed above will be necessary if backer blocks need to be added.



### **Newmar Service Procedure**

### **Checking the Orientation**



1. Open the lower section of the front cap.

2. From the backside of the cap (near the front of the generator), locate the OnGuard radar in the middle lower section.

3. Check to see if the wire harness is plugged into the radar on either the driver or passenger side.

4. If the harness is plugged into the driver side of the radar, the orientation of the radar is correct. Proceed to the section entitled "Checking for backer."

#### **Correcting the Orientation**

5. If the harness is plugged into the passenger side of the radar, the radar will need to be unbolted (four bolts total, two on each side) and rotated 180 degrees such that the connector is now oriented to the driver side.

6. Do not remount the radar yet. Proceed to the next step.

### Checking for a Backer



7. While the radar is still unbolted, check the cap for a backer that looks like either of the two photos. You may not be able to clearly see the backer as pictured, but the cap will be over 1/2" thick. If there is no backer present in the cap or added behind the brackets, you will need to add a backer.

8. If the backer is in place, proceed to the section about remounting the radar. However if the technician went to this section from # 4 that the radar should not be remounted as it should not have been disconnected in the first place.



### Adding a Backer and Remounting the Radar



9. If a backer needs to be added, remove the black plastic radar cover from the front cap to expose the mounting bracket screws.

10. Remove the screws, and add black Sikaflex to the plastic backer blocks.

11. Reinstall the screws through the brackets, front cap, and into the backer blocks.

12. Then, proceed to the section about remounting the radar.

13. Rebolt the radar, and snug the bolts with the coach at ride height.

14. With the coach at ride height and on a level surface, verify the radar sensor is level both vertically (plumb) and horizontally. Adjust as needed, and then tighten the bolts.

#### Preparing the Cap for Front Cover Installation

15. Remove any remaining 3M mounting tape, then remove any remaining adhesive with a paint prep cleaner suitable for clear coat finishes.

# **IMPORTANT**

Do not allow any of the cleaner or primer to touch the radar. Any such material on the radar face may require the radar unit to be replaced.

- 16. Prime the cap where you removed the adhesive, and prime it with 3M 94 primer.
- 17. Remove any remaining tape from the cover, and prepare it with 3M 94 cover.
- 18. Install the cover.

### **Meritor Wabco OnGuard Service Procedure**

(Source: Meritor Wabco OnGuard<sup>TM</sup> Collision Mitigation System Maintenance Manual MM-1306, Revised 02-16)

#### **Performing the Sensor Alignment**

Using the laptop with the TOOLBOX<sup>™</sup> Software (version 12) connected, initiate the service alignment to complete the alignment process.

RADAR ALIGNMENT Radar Not Aligned Start Alignment Process	N ATT FUEL DEF				
·····	ALIGNMENT		DIST	KPH	
0%	ACC CRUISE	50	0	0	
078	CURVATURE	0	0	0	
4010385a	DIST SET NO AC	00			
re 2.19	UNLISTED F	AULT			
nple from Meritor Wabco	Example from Newmar (	Glass Dash Di	splay		



If the radar sensor needs to be aligned, the radar sensor mounting system has become damaged or has loosened, or new radar sensor software has been installed, a Radar Sensor Service Alignment will need to be performed.

If a Radar Sensor Service Alignment is required, the Radar Not Aligned Screen may be displayed as shown in Figure 2.19.



While the OnGuard<sup>™</sup> system is in Service Alignment mode, the OnGuard<sup>™</sup> system does not track vehicles or operate until the Service Alignment procedure is completed. Due to this, the system will set a DTC SPN 5606 FMI 19. This can be cleared by cycling the key off for a few minutes and then back ON.

1. Before starting the alignment procedure, verify that the radar sensor and its mounting are secured by firmly grasping the radar sensor and attempting move it in all directions. There must not be any physical or visual movement in the radar sensor or radar sensor mounting bracket.

2. Verify there is at least 1/4-inch (6.35 mm) clearance between the radar sensor and the bumper opening in all directions. Contact with the bumper may result in a damaged radar sensor or limited OnGuard<sup>™</sup> system function.

3. Verify the radar sensor is level both vertically (plumb) and horizontally.

4. Using TOOLBOX<sup>™</sup> Software, send a command to the OnGuard<sup>™</sup> system to begin Service Alignment mode. While in this mode, the OnGuard<sup>™</sup> display will show the progress of the alignment process as shown in Figure 2.20.

5. Drive the vehicle on a straight road above 30 mph (48 kph). The road should have telephone poles, signposts and other non-moving objects along the roadside. There must be other traffic on the road, either on coming or lead vehicles at distances greater than 150 ft.



Example from Newmar Glass Dash Display



Stopping the vehicle while traveling in traffic is acceptable but will increase the time needed to complete the alignment procedure.

6. Drive until the Radar Aligned screen in Figure 2.21 appears in the OnGuard<sup>™</sup> display. This typically takes 10 to 30 minutes of driving time to complete.

7. After completing the OnGuard Service Alignment procedure, the system returns to one of the normal operating screens.







After the Radar Sensor Service Alignment is complete, bring the vehicle to a complete stop at the nearest safe area. The key must now be cycled off for at least three minutes to save the alignment. Cycling the key off for less time may trigger a fault.

NOTICE

If the radar alignment fails, a specific radar alignment error appears indicating the direction in which the sensor is incorrectly aimed. If this occurs, review the radar sensor installation, determine if the radar sensor needs to be repositioned (or in some way serviced) and then repeat the Radar Sensor Service Alignment procedure. Contact the Meritor OnTrac<sup>™</sup> Customer Call Center at 866-668-7221 if the radar service alignment fault cannot be resolved.



Before calling OnTrac<sup>™</sup>, please download the OnGuard<sup>™</sup> DTC report and the parameter (par) file or Fleet Data Report using TOOLBOX software. Email the files to OnTrac at: OnTrac@meritor.com with the case number (if known) and DTC Report in the subject line.

As the vehicle is driven following the Radar Sensor Service Alignment, the OnGuard<sup>™</sup> system performs continuous adjustments to the radar sensor alignment. Further service alignments are generally not necessary unless the radar sensor mounting assembly is disturbed, becomes loose, or the radar sensor requires replacement.

### Radar Sensor Service Alignment Will Not Initiate

If the OnGuard<sup>™</sup> Radar Service Alignment will not initiate, perform the following procedure.

- 1. Turn off the ignition for 90 seconds.
- 2. Start the vehicle and drive above 10 mph.
- 3. Pull to the side of the road and come to a complete stop and leave the key on.
- 4. With the TOOLBOX<sup>™</sup> Software connected, initiate the service alignment to complete the alignment process.



### **Newmar Service Procedure (Cont'd)**

### **Checking Operation of the Radar**



19. Start the coach, and press the service brake with your foot. Release the park brake, and press the diagnostic button twice on the glass dash controller.

• If the radar alignment displays less than 100, it needs to be realigned. As you drive the coach, the numbers will increase until it reaches 100.

• After the radar displays 100, stop and set the park brake. Then turn off the coach for at least three minutes, or until the display reads "ACC DISABLED." The cruise control will not activate until after these three minutes.

• If the radar alignment displays "100," test drive the coach to verify proper operation. The system will not need to be shut down for 3 minutes.

• The display will read "CMS Unavailable" until the coach is driven at least 15 miles per hour.

#### **Testing the Adaptive Cruise**

20. Test drive the coach to check the adaptive cruise. To do so, it is recommended to drive in a safe, non-congested area.

21. Set the cruise control to a safe speed.

22. With someone you know driving a second vehicle, have them safely pass you while the coach cruise is actively maintaining the set speed. The person passing you should not hit the brakes after changing lanes in front of the coach. This action should cancel the cruise control and activate the brakes on the coach when the radar senses the new vehicle being too close with out the driver touching the brake pedal. However the coach driver must be ready to apply brakes and maintain safe control of the coach in the event the radar does not activate.



Do not test the system on unsupecting traffic, as the driver of the unsuspecting vehicle may stop suddenly, increasing the risk of a collision.



VIN Number	Production Number	Model Year	Brand	Туре	Floor Plan	Chassis Brand	Date In Production	Date Off Production
4VZVU1E9XHC082559	530379	2017	KG	DB	4533	S	8/30/2016	9/8/2016
4VZVU1E94HC082797	530380	2017	KG	DB	4553	S	9/21/2016	9/29/2016
4VZVU1E91HC082370	530382	2017	KG	DB	4519	S	9/16/2016	9/26/2016
4VZVU1E96HC082803	530383	2017	KG	DB	4519	S	9/26/2016	10/4/2016
4VZVU1E98HC082804	530384	2017	KG	DB	4519	S	9/29/2016	10/7/2016
4VZVU1E94HC082833	530385	2017	KG	DB	4519	S	10/13/2016	10/21/2016
4VZVU1E95HC082887	530386	2017	KG	DB	4584	S	10/11/2016	10/19/2016
4VZVU1E9XHC082805	530388	2017	KG	DB	4519	S	10/5/2016	10/13/2016

#### **Canadian Units**

None