# **Newmar Corporation**

PO Box 30 Nappanee, IN 46550

# NEWMAR WHEN YOU KNOW THE DIFFERENCE.

# TSB 547 Aug. 22, 2019 Amended September 14, 2021

# **TECHNICAL SERVICE BULLETIN**

#### AFFECTED MODELS

2020 New Aire, Mountain Aire, London Aire, Essex, King Aire (early production coaches only)

#### DESCRIPTION

Due to some ceiling light changes, dimming the lights may cause the lights to flicker.

**UNITS AFFECTED** 

Please refer to the attached population list for affected coach production numbers and VINs.

**CORRECTIVE ACTION** 

Count the front ceiling lights that are activated when the entry door is opened. Check to see if the coach has recliners with two overhead reading lights. Contact your Newmar Service Account Manager to obtain authorization and to order parts. Follow the attached instructions to replace the KIB boards and the specific lights.

PARTS NEEDED										
	Item Description	Quantity	Newmar Part #							
	KIB Circuit Board	1	150014							
	KIB Circuit Board	1	150015							
	KIB circuit board	1	150016							
	Bell Caps	2	41969							
	Recessed Ceiling Light with Leaf Spring Clips	2-4	150081							
	Reading Light	0 or 2	150078							
	Brown Scotchlok Connectors	2 per light	18511							

#### FLAT RATE CODE: TSB 547

LABOR TIME: 1.0 hr for the KIB replacement boards; .1 hr for each replacement light

Νοτε

Total time authorization will depend on the amount of lights requiring replacement based on the instructions. Final payment will be based on the returned parts.

**IMPORTANT**: Please read this bulletin in its entirety prior to beginning any diagnosis or repairs.

Problem: Flickering ceiling lights in early-production 2020 coaches Affected Coach Models: New Aire, Mountain Aire, London Aire, Essex, King Aire Solution: Replace 3 KIB circuit boards and various lights (depending on configuration)

# **Necessary Tools**

- Phillips Screwdriver
- 7/16" Nut Driver <u>OR</u>, 7/16" Socket with <sup>1</sup>/<sub>4</sub>" Drive, and <sup>1</sup>/<sub>4</sub>" Ratchet
- 7/16" Wrench
- Cordless Screw Gun with Phillip's and Square Bits

# **Necessary Parts**

- 1 Circuit Board (Newmar part #150014)
- 1 Circuit Board (Newmar part #150015)
- 1 Circuit Board (Newmar part #150016)
- 2-4 Front Entry Door Lights with Leaf Spring Clips (Newmar part #150081)
- 2 Reading lights (on select coaches only, Newmar part #150078)
- 2 Bell Caps (Newmar part #41969)
- 2 Scotch Locks (2 per light; Newmar part #18511)

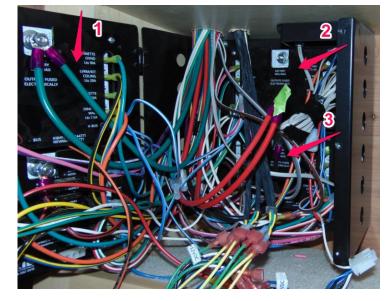
# **Work Instructions**

# **Removing the Old Circuit Boards**

- 1. Turn off the battery disconnect.
- 2. Locate and open the KIB box (normally located in the rear closet area) by removing the three screws across from the hinges.
- 3. Locate the three circuit boards located in the KIB box. One is located on the door, and the other two are located on the back wall of the KIB box.



 Mark the wire location for each board (suggestion L1- 4+ common and R1- 4+ common). You can also group the wires by putting a piece of tape around them or a zip tie. Take a picture for reference, just in case the wire markings come off.



- 5. Remove the old boards gently, as they must be returned undamaged for credit. Save the cover, spacers, and screws to reinstall with the new board.
- 6. Verify that the replacement board has the same part number (i.e.: #144771-MOD replaces #144771). See note on after step 12.



# **Installing the New Boards**

- Hook up the wire(s) with the ring terminals that were removed when taking off the circuit board. Using a backer wrench, tighten the nut with a nut driver or socket and ratchet.
  - Caution: Do not over tighten the nuts, as damage to the circuit board may occur.
  - Note: A backer wrench cannot be used on the back two boards if they are mounted before the wire(s) are connected.
- 8. Install the center screw and align the other screw holes before tightening.
  - Caution: Do not over tighten the screws, as damage to the circuit board may occur.
- 9. Use the plastic spacers when installing the black cover at each corner screw.
- 10. Install the light circuit wiring on the new circuit board just as it was when the wires were removed.
- 11. Repeat the process for the two remaining circuit boards.
- 12. Once all three circuit boards are mounted, take the orange wire at the bottom of each new board, and connect them together with a bell cap. Then do the same for the black wires.

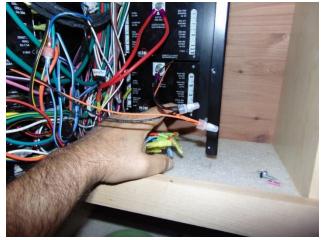
Note: The circuit board's parts listed in this bulletin are being phased out. You may receive a newer circuit board that does not have a black and orange wire present. In this case, all the wires will be hooked up the same way; however, it is also necessary to add an orange wire with a spade terminal to the terminal labeled "sync." The sync wire (-mod board) or sync terminal (newer replacement board) provides the ability to connect the three (3) boards together.

If you have a mixture of boards with the orange and black wire and some without the orange and black wire, the orange wire(s) that you added to the sync terminal(s) and

Example of a newer board with the sync terminal.

the orange wire(s) on the -mod board(s) need to be connected, which will allow the boards to communicate. The black wire on the -mod board is a ground wire. Any of the -mod board(s) with the black wire need to be grounded. The newer version of the board only needs the ground connected to the GND terminal.





Example of -Mod board with orange and black wires.

# **Testing the New Circuit Boards**

- 1. Turn on the disconnect switch.
- 2. Test the function of all the lights to make sure that all of the wires are hooked up correctly.
- 3. Close the cover to the KIB box and secure it with screws.

### **Replacing the Lights**

- 1. Depending on the coach and floor plan, replace either two or four lights. The ceiling lights that require replacement are determined by checking the ceiling light operation. They are the lights that operate automatically when the entry door opens and closes.
- 2. Replace the two eyeball lights (on coaches equipped with the recliner options). There are likely two lights in the overhead cabinet above the recliners that are dimmable.



3. Wrap the old circuit boards in plastic. Then package and return the circuit boards and lights to Newmar.



Production #	VIN Number	Year	Brand	Туре	Floor Plan	Chassis Brand	Date In Production	Date Off Production
501674	4VZVU1E94LC086325	2020	LA	DP	4543	S	12/5/2018	12/11/2018
501682	4UZFCTFG4LCLL6157	2020	LA	DP	4559	) FL	2/19/2019	2/26/2019
501692	4UZFCTFG8LCLX0022	2020	LA	DP	4543	FL	5/21/2019	6/3/2019
501693	4UZFCTFG1LCLW3736	2020	LA	DP	4551	FL	5/29/2019	6/7/2019
501707	4VZVU1E93LC087546	2020	LA	DP	4543	S	6/3/2019	6/11/2019
501715	4UZFCTFG9LCLW7677	2020	LA	DP	4543	FL	6/6/2019	6/13/2019
530568	4VZVU1E92LC086324	2020	KG	DB	4549	S	11/29/2018	12/6/2018
530575	4VZVU1E91LC086329	2020	KG	DB	4531	S	2/11/2019	2/18/2019
530584	4VZVU1E94KC087408	2020	KG	DB	4531	. S	5/20/2019	5/31/2019
530590	4VZVU1E94KC087425	2020	KG	DB	4531	S	5/28/2019	6/6/2019
710592	4UZACEFC8LCLL5967	2020	NA	DP	3343	FL	11/27/2018	12/4/2018
710610	4UZACEFE3LCLH3717	2020	NA	DP	3545	FL	2/8/2019	2/15/2019
710637	4UZACEFC8LCLW2389	2020	NA	DP	3343	FL	5/22/2019	6/3/2019
710641	4UZACEFC3LCLW7676	2020	NA	DP	3343	FL	5/24/2019	6/4/2019
710642	4UZACEFC4LCLW2387	2020	NA	DP	3341	. FL	6/5/2019	6/12/2019
710728	4UZACEFE8LCLX0025	2020	NA	DP	3545	FL	6/6/2019	6/13/2019
801353	4UZFCTFG3LCLL5968	2020	EX	DP	4533	FL	12/12/2018	12/19/2018
801356	4VZVU1E98LC086327	2020	EX	DP	4569	S	1/29/2019	2/7/2019
801362	4VZVU1E94KC086887	2020	EX	DP	4533	S	5/22/2019	6/4/2019
904747	4UZFCTFM5LCLL6156	2020	MA	DP	4551	. FL	1/11/2019	1/24/2019
904752	4VZVU1E98LC086330	2020	MA	DP	4002	S	2/7/2019	2/15/2019
904763	4VZVU1E96LC087170	2020	MA	DP	4551	S	5/20/2019	5/29/2019
904764	4UZFCTFM2LCLW3735	2020	MA	DP	4543	FL	5/24/2019	6/5/2019
904765	4VZVU1E9XLC087544	2020	MA	DP	4543	S	5/31/2019	6/7/2019
904772	4UZFCTFM0LCLX7424	2020	MA	DP	4551	. FL	6/5/2019	6/12/2019
904783	4UZFCTFM2LCLX7425	2020	MA	DP	4551	. FL	6/7/2019	6/14/2019