



2010 43QGP Allegro Bus

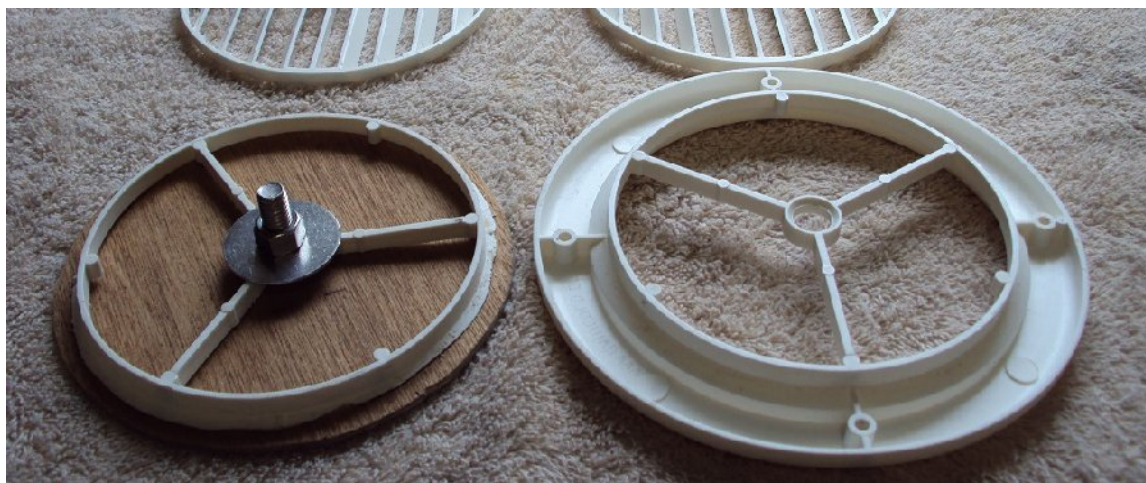
6/8/2013

EIGHTY-SECOND - coach modification – **INSTALLATION OF CLOSABLE AC-HP VENTS**. Not long after our coach purchase Cathey complained of the AC blowing on top of her head while styling her hair. Shortly after we were visiting the service center for warranty work when I found the slightly larger vents which could be rotated, opened or closed. I purchased four of them and went about installing two in our rear bathroom as seen in Crusingator's Modification file #26.

<http://www.tiffinrvnetwork.com/crusingator/ABmod/MOD-26.pdf>

It's not often Cathey complains about something when she does I make it a point to listen. Her usual reading locations are to recline on the passenger side couch or when getting ready to sleep reading in bed. Both locations seem to direct the air conditioning right on her head. In an effort to reduce that simple complaint I undertook installing rotational closable supply vents thru the length of the coach. Our 2010 43QGP Allegro Bus has a total of thirteen (13) supply vents routed down the passenger side of the coach. One smaller vent in the closet five (5) deeper vents located thru the coach and seven (7) shallow vents in the two raised portions of the ceiling, the main salon and the bedroom.

The first part of the modification was to remove the ten (10) OEM supply vents located in the salon, hall and bedroom. The new vents require a slightly larger hole in the ceiling, to make enlarging those holes easy yet keeping them centered I decided to destroy one of the old vents to make a template for enlarging the ten holes.



The previous photo shows two of the OEM vents. The outer portion of the left vents plastic was removed using an air powered body saw. Next I used a compass to draw a 6" diameter circle on a thin piece of Luan. A 3/8" hole was drilled thru the center of the Luan then a washer and nut were added to complete the template.

With the template in hand, the template was inserted into the OEM vent hole, held centered with one hand then a sharp razor knife was used to cut around the template thru the vinyl and 1/4" foam pad. Next carefully remove the cut vinyl ring and foam pad exposing the Luan ceiling.



The above opening is one of the seven (7) shallower openings because it is in one of the two raised ceiling this one is located in the salon. One area usually damaged by Tiffin while cutting the vent openings is to allow the hole saws pilot bit to cut into the duct board as seen above in the **RED** circle. I always patch this hole with the aluminum tape.

In an attempt to prevent as much dust and debris from flying around and into the coach I use a large vacuum cleaner with its hose taped as near the opening I am enlarging as possible. The coach is still going to get messy in my opinion there is no way to really avoid making some mess.

The next step is to get the air powered body saw back out it is used to cut thru the Luan ceiling panel enlarging the hole to slightly over 6 inches in diameter where I had cut the vinyl previously. Now that the hole has been enlarged the next step is to tape the exposed Luan and duct board with aluminum foil tape to prevent damage from any moisture or condensation. I found Tiffin workers did not use the aluminum tape on a single one of the

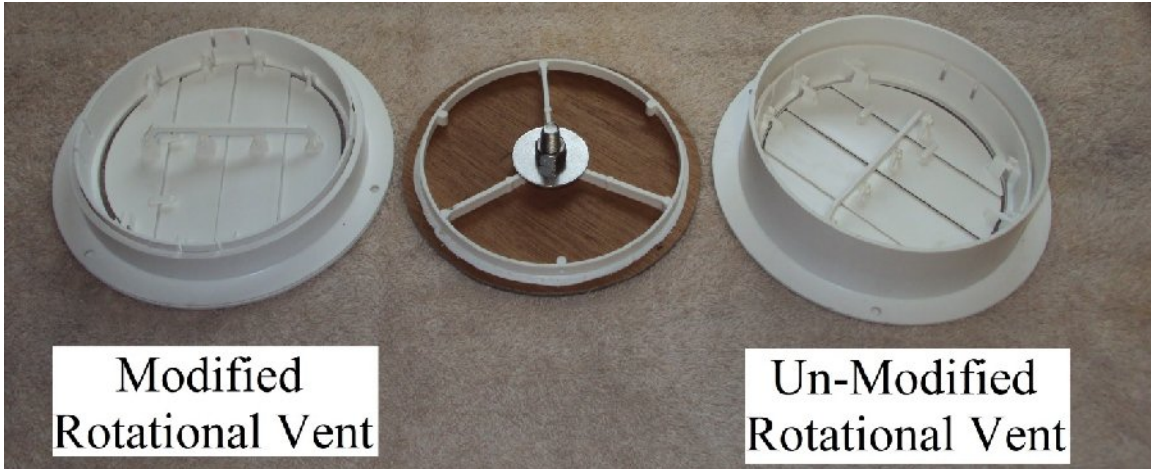
seven shallower locations. The duct board and Luan had been allowed to separate. This oversight on Tiffin's part could have been costly for them and aggravating for us.



As seen above this is just one of the seven untaped openings. I used tape to pull the duct board and Luan together prior to installing the aluminum foil tape in the openings as shown below.



Now at this point what can I do with the new vents? They are about 3/4 inch too tall for the shallower mount raised ceiling? If I install the new vents into the salon and bedroom ceilings the air flow will be sharply impeded. That required the modification of the new vents height or depth when used in those two raised or recessed portions of the ceiling, seven vents total. If it is found necessary in the future and additional 1/4 inch can be removed from the already modified rotational vents.



The above photo shows the height difference of the modified vent (left vent) versus the un-modified vent (right vent). The air tools below were used to modify the holes in the ceiling and the height of seven new vents.



The finished ceiling supply vent modification.

