

## 2010 43QGP Allegro Bus

## 11/26/2013

NINETY-FIFTH - coach modification – <u>TRIMARK KEYLESS ENTRY</u> <u>ANTENNA MODIFICATION</u>. Locking or unlocking the compartment doors and coach entry door on our coach is a hit and miss unless the entry switch is used. The key fob does not lock or unlock the locks if the key fob is more than a couple of feet from the coach.

The antenna on our coach is about 6 inches in length as are most other coaches I've checked. In a few cases the antenna has been found coiled up which prevented it from working as designed. Even when the antenna is straight the key fobs function can be a hit and miss when the key fob buttons are used.



As seen in the above photo, the Trimark Keyless Entry antenna when fully extended is only about 6 to 7 inches in length.

As a test a thirty inch long # 18 gauge section of insulated wire was added to the original antenna using a butt splice to join the two pieces of wire. After making that addition to the antenna the operational range of the key fob was tested. The actual additional operational range of the key fob was a great surprise to me. I thought this modification would possibly allow the range to be extended a few feet, to my surprise I can now lock or unlock the main

entry door from forty (40) plus feet from the door. The compartment door locks when tested using the key fob will respond at least twenty (20) feet from the coach.

I made a decision to protect the new extended antenna, in my opinion the best method was to design and construct a support for the antenna to prevent it from getting damaged by other items in the compartment.



The support was fabricated from a piece of ½" x 2" (poplar) hardwood. The backbone of the support was cut 26 ½" in length with three middle supports each cut 1 ½" long, the two ends supports were each cut 2" long. The supports were installed using a combination of finishing nails and wood glue. A ¼" hole was centered on the width of the five supports and drilled one inch below the backbone. After the support had been completed it was stained to add a little color. A ¼" diameter 29 inch length of ice maker tubing was slid over the new 18 gauge antenna extension wire to add support to the antenna wire then the antenna extension was threaded through the ¼" hole in the five supports.

The last step was to secure the new antenna extension support to the bottom of the saddle bag shelving in the passenger side second compartment with a couple of heavy duty tie wraps.

I'm extremely happy with the additional operating range of the four key fob functions.