

2010 43QGP Allegro Bus

6/13/2013

89 - FYI - <u>REPLACING THE POWERGLIDE COOLANT TUBING.</u>

Our coach is nearing its 3 year chassis warranty expiration date. Therefor I decided it was time to make a list of chassis items we were unhappy with. At the top of the list WAS the black powder coat painted coolant tubing. From the first day of ownership the upper powder coated coolant tube was peeling and has continued to peel.

After being this matter to Tiffin's attention, I was asked to send photos of the problem which I did. I told Tiffin I would perform the work if Tiffin would send me the supplies. Yesterday after lunch UPS delivered the following components for my installation.



Three black powder coat painted coolant tubes, twelve constant tension "T" bolt clamps, and three feet of 2 $\frac{1}{4}$ " silicone water/heater hose.



Two hours were consumed draining 11 gallons of coolant into three five gallon buckets thru the engine mounted coolant drain petcock near the water pump. Next item on the list remove the three coolant tubes, starting with the lowest tube first (above photo) in order to drain the remainder of the coolant still collected in a few low points. Next removal of the tube in below photo.



The condition of the three old coolant tubes can be seen in the photo below. This photo also shows the new upper coolant tube with hoses attached.



Cutting the new silicone hose into lengths matching the length of the old hoses was next in line. Time to begin re-assembly of the three coolant tubes, began installing the tubes in the same order they had been removed, with the water pump tube first, the radiator tube second leaving the upper tube for last. Installation of the upper tube requires lying over the coolant reservoir, two days of lying on that tank had my chest and ribs sore.

Those twelve clamps are a new type recently being used by Tiffin. They are Constant Tension clamps which maintain a constant tension on the hose when it is cold or hot. The torque spec for these clamps is 72 in. lbs. With this low torque on the clamp I rechecked all clamps several times to make sure the hose when it compressed still retained the correct torque.

Next step, pump back into the coolant reservoir those same 11 gallons of coolant. After four gallons had been pumped in I checked for any coolant leaks, not finding any I pumped the balance of the eleven gallons of coolant into the reservoir.

Next step, crank the engine, warm it up then check for any coolant leaks. Start to finish for this project required almost eight hours of hard labor.