



## 2010 43QGP Allegro Bus

12/14/2013

### 96r1 - FYI – REPLACING THE CUMMINS ENGINE COALSECING FILTER.

Based on Cummins literature all EPA 2010 engines and newer coalescing filters are to be replaced after each third or fourth oil change interval. Prior to the EPA 2007 specifications the excess crankcase pressure was vented out to the atmosphere, after the change in EPA specification that crankcase pressure was caught in an in-engine filter located under a plastic cover on top of the engine, there are eleven (11) 8 MM bolts retaining the filter cover, those bolts are highlighted in YELLOW below.



BEFORE removing the cover, clean the area around the filter cover making sure dirt, grease or other debris is not allowed to get into the filter's cavity.

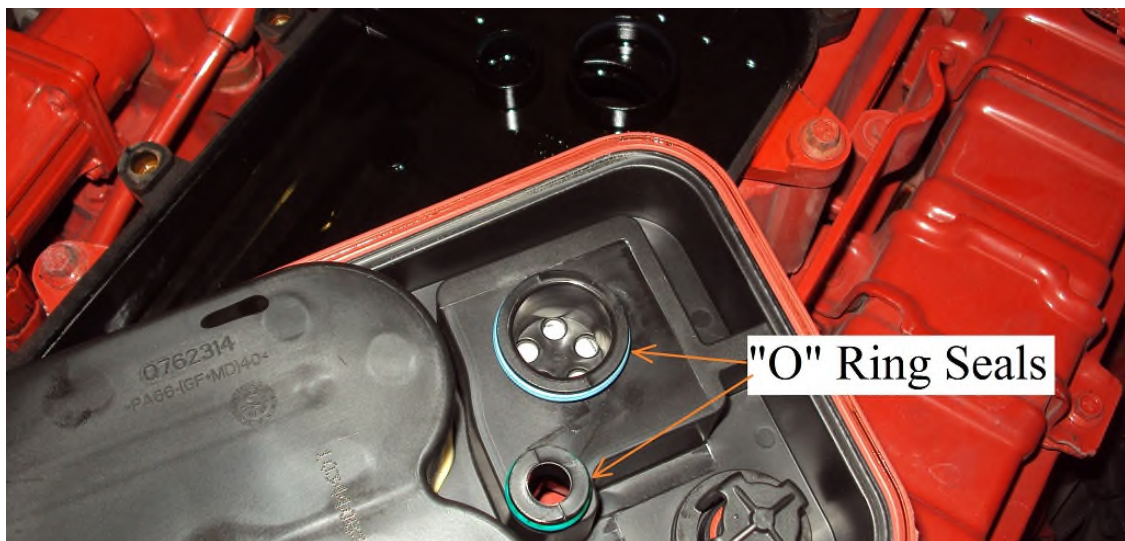


Coalsecing Filter filled or  
partically filled with oil

After the 11 bolts have been loosened the plastic cover is easily removed from the top of the engine exposing the old coalescing filter.

As noted in the previous photo careful handling of the old filter is necessary as it will be full or partially full of oil. Carefully lift the filter up and out level to prevent spilling the oil.

As noted below there are two "O" ring seals which mate to the filter cavity. If the new filter were to be just placed over the cavity the 11 cover bolts would have to push the "O" ring seals into place. Instead coat each "O" ring with clean oil then using the heel of your hand depress the new filter setting the filter into place, by installing the filter this way the cover is not used to seat the "O" rings.



After the cover has been set in place and the "O" rings have been set using the heel of your hand, each of the 11 bolts are started by hand. The cover is



plastic the new coalescing filter has a rubber gasket sealing between the engine and the coalescing filter cover.

After hand starting each of the 11 bolts, the next operation is to tighten the cover bolts in the sequence order shown in the following photo.



The final torque value for each bolt is **44 inch pounds**, starting at bolt 1 and working clockwise thru the 11 bolts as shown in the photo.