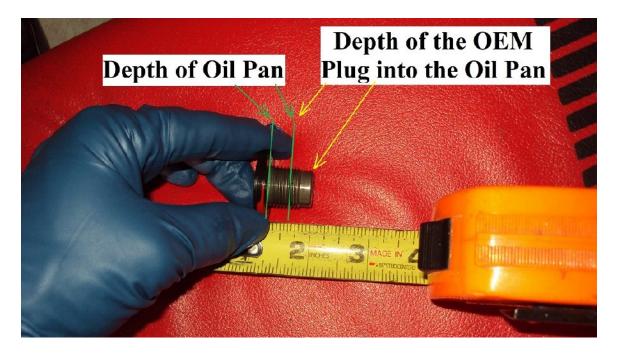


## 2010 43QGP Allegro Bus

## 1/28/2013

77 – FYI – <u>FUMOTO OIL DRAIN VALVE or NOT.</u> It is once again time for the annual chassis, engine and drive train maintenance. This year in preparation for the service I though this may be the year to install the Fumoto Oil drain valves for the Cummins ISL engine and the Onan 10KW generator.

First I needed to get answers to several questions about the valve, which specific valve by part number would I need for the engine and generator. After passing e-mails back and forth with Fumoto, I found the **F104 Fumoto Oil Drain Valve** would be the correct fit for **MOST** Cummins engines. In an effort to make sure I loosened the oil drain plug a couple of turns to measure the thread size, which appeared to be 18mm. After checking those two items I was almost ready to purchase the valve, almost but not quite ready. After asking questions of other engine owners there tended to be controversy over the Fumoto valve allowing the bottom of the pan to drain completely based on the end of the valve sticking up into the oil pan. After checking everything I finally decided to wait another year before making the oil drain plug change if at all. This year I would measure the OEM drain plug to determine if a Fumoto drain valve's length would need to be modified to completely drain the oil pan with the Fumoto drain installed.



The above photo shows the OEM drain plug, the plug is <sup>3</sup>/<sub>4</sub> inch in length with nearly 3/8 inch protruding into the oil pan's sump. Depending on the actual length of the Fumoto drain valve the length protruding into the oil pan **MAY** need to be modified to permit complete draining of the old oil. The standard **F104** valve has a smaller then 18mm drain hole which **WILL SLOW OIL DRAINING** and may cause contaminates to remain in the oil pan. The **F104N** valve has a <sup>1</sup>/<sub>2</sub>" long nipple which allows for the connection of a drain hose. The nipple **CANNOT** be removed as removal of the nipple would allow the valve's stainless steel ball to drop out of the fitting. Looking at the below photo you can see **IF** the Fumoto valve is the same length as the OEM valve contaminates **WILL BE** left in the oil pan. Neither of the two drain plugs has a magnet to catch metal particles in the oil.



During this research I was also thinking about the oil drain on the 10KW Onan generator's Kubota engine. Fumoto valves do not show a valve that would fit our 10KW Onan generator which has an approximate  $\frac{3}{4}$ " drain hole. Therefor the Onan also will not be getting a Fumoto drain valve.