## Crusingator

## 2010 43QGP Allegro Bus

6/2/2013

87 - FYI – DRAINING AND REFILLING THE ALLEGRO BUS
POWERGLIDE FAN DRIVE GEARBOX LUBE. The above title is a mouth full. Tiffin's Powerglide Bus chassis was built with a side radiator, the cooling fan is belt driven by the coach engine. That belt is connected between a two speed magnetic fan clutch and the engine's crankshaft pulley. The fan clutch is connected thru a short drive shaft to a fan drive gearbox where the output of the gearbox is turned 90 ° where it is then connected to the cooling fans hub.

While researching the coach maintenance I received mixed maintenance data on the lube in the gearbox, one source stated the lube is to be replaced on an annual interval while a second source states replacing the lube on a biannual interval. This maintenance will be performed on biannual interval. I found the easiest method to access the gearbox for draining the old lube was to remove the fan's lower protective shroud secured with eight bolts, after the shroud was removed I was able to access and remove the 3/8" hex plug and drain the old lube.



Tiffin installed Shell Spirex 75W90 synthetic gear lube when the coach was constructed the fluid capacity of the gearbox is 24 ounces or <sup>3</sup>/<sub>4</sub> quart. Locating a source for the synthetic lube took several months as most suppliers wanted to sell quantities too large for my needs. Finally located a source in Red Bay, Bay Diesel where 5 gallons was purchased at \$ 37.00 per

gallon. The Shell Spirex lube is also used in the coach's rear differential which will be serviced in January 2014 using 14.5 quarts of the remaining 19.25 quarts.



After the old lube had been allowed to completely drain the 3/8" plug was reinstalled. The engine access cover was removed to gain access to the 3/8" plug on the top of the gearbox where 24 ounces of new Shell Spirex 75W90 synthetic lube were poured in using the below funnel with a long flexible tube.

Can the gearbox be drained and re-filled without removing the fan shroud or the engine access cover yes it can, however I was performing other coach maintenance at the time making this method my choice.

