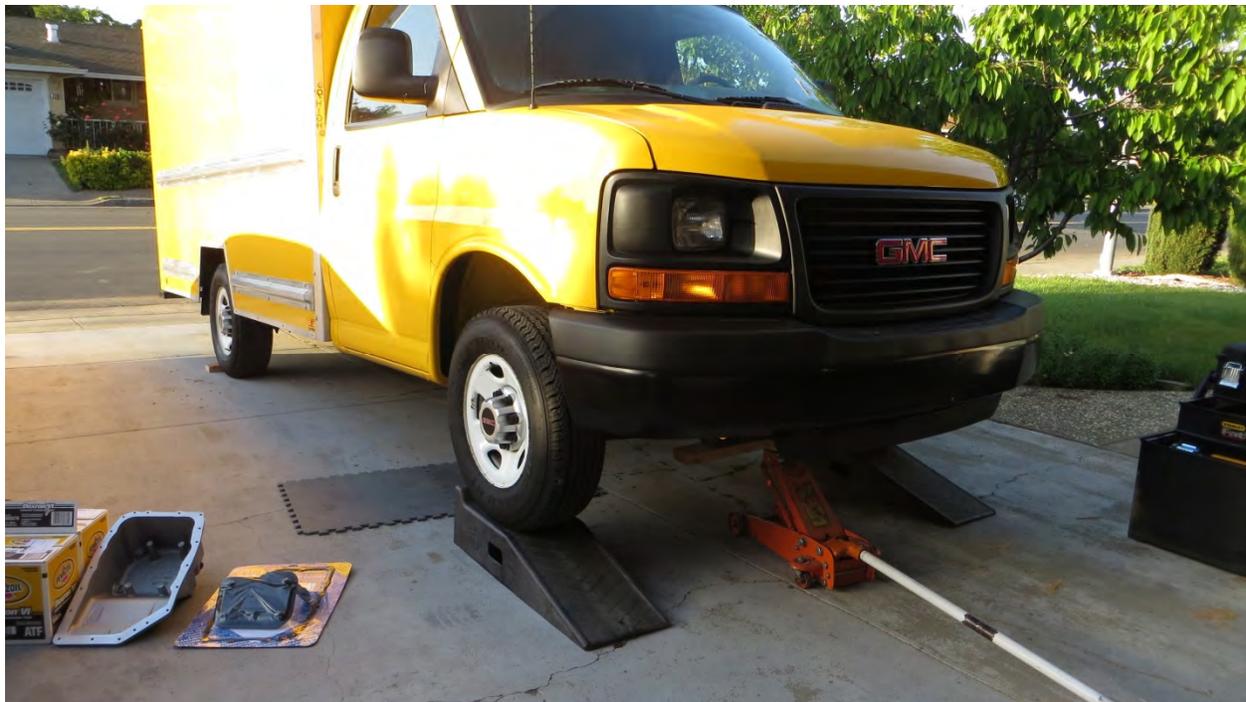


## Reason for installing a PML 11036 transmission pan on my 2010 GMC Savana 3500:

1. My 2010 GMC 3500, 12 foot box truck is placed under heavy hauling condition (construction tools and building material) at 80 to 90 percent of its rated load capacity 80 percent of the time.
2. This vehicle transverse mountain roads and high elevation as its normal operating condition for hundreds of miles.
3. The PML 11036 transmission pan has a drain plug, so I can increase my transmission oil changes with greater ease.
4. This transmission pan also has a provision for installing a transmission temperature sensor, so I can monitor and take action if a transmission over temperature condition should ever occur.
5. This pan allows for 3 additional quarts of transmission fluid; something I feel that would help increase the transmission life and reliability.



## The parts and material needed to for this installation:

1. A 10 millimeter socket and wrench to remove the existing hardware securing the oil pan.
2. A 5 millimeter Allen wrench to install the new oil pan.
3. An oil drain pan to catch the existing 8 quarts of oil during the pan's removal.
4. A transmission jack, transmission stand or ramp to safely perform this maintenance.
5. 11 quarts of Dexron VI oil.
6. A new transmission filter and gasket. In this case, I purchased a NAPA 1-5950 kit.
7. A PML 11036 transmission pan.



## The installation process

The total removal and installation time took 2 hours; this included lifting the vehicle, and installing the ramps for a safe access to the under carriage to perform this work. The steps are as follow:

1. Remove the 14 of the 18, 10 millimeter bolts securing the existing factory transmission pan with a socket and ratchet. The three bolts towards the rear adjacent to exhaust pipe will require a 10 millimeter wrench to remove.



2. Allow 4 of the 18, 10 millimeter bolts to be removed to remain loosely in each corner, so the fluid can be allow to drain onto the oil drain pan below.



3. Remove move the old transmission filter and install the new replacement unit. There are no tools needed for this process. It is merely a push fit installation.



4. Clean the transmission mating surface; this is important to insure a leak free installation. I cleaned it with a rag; no abrasive material was used for this.
5. Install the new pan gasket along with the PML 11036 transmission pan with the supplied hardware(s). These hardware are longer then the factory ones as the cast transmission flange is thicker; the old factory mounting bolts would not even reach the mating threads on the transmission. A 5 millimeter allen wrench was used to torque the supplied allen head bolts.
6. Toward the rear of the oil pan is where I encounter my first problem. It seems the three bolts securing location towards the rear of the transmission pan by the exhaust had a clearance issue which prevented the proper torqueing of supplied hardware. There was simply no clearance to attach a 5 millimeter allen wrench to the bolt heads to torque it. Normally a Chapman allen set will resolve this type of mechanical issue (as these tools are made to resolve clearance issue), but even that did not work. Eventually, I resorted to using a mini vise grip to torque these remaining fasteners in place. Not a great feeling to do this, but that was the only option I had at the time to get my vehicle back on the road. I will eventually replace these three fasteners with a hex head style bolts like the factory originally had, so I can properly secure it. There must have been a good reason why the OEM chose that style of hardware. In any case, this was not a big setback, but it did slow the installation process down a bit.



7. Fill the transmission back up with 11 quarts of Dexron VI fluid; I made sure to use the proper type of oil as recommended by the factory. Their wisdom and engineering expertise is there for a reason. The factory recommendation indicated 7.8 quarts of automatic transmission fluid replacement if the torque converter is not removed; this along with the PML 11036 pan having a greater oil capacity of 3 quarts brought the total fluid replacement to 11 quarts.

## **Future plans:**

1. Replace the factory external transmission cooler with a larger size unit.
2. Install an external transmission oil filter.
3. Install a transmission temperature gauge.

## **Review retrospect**

Without a doubt, the PML 11036 transmission pan is a quality piece. In this application, it is one element of the solution(s) to provide transmission longevity when it is placed under extreme use. The factory unfortunately does not provide a solution such as this, but fortunately there are companies such as PML that does. While the supplied allen head bolts looks nice, it would probably be in PML best interest to include factory style mounting bolts with their pans. The average person most likely will have a set of combination wrenches to install the hardware. Along with this, it would also be nice for PML to include the gasket and the filter with this oil pan. The GM 6L90 6 speed transmission filter and gasket is hard to come by at the auto parts store in my area; they normally do not have it in stock, and they will indicate that the lead time for the parts is one day. This only adds to the overall time needed to install the pan. Would it not be nice if everything was supplied, so it was simply a plug and play solution? Ultimately, I ordered it from the Napa auto parts supplier, for their reputation in supplying quality parts (not cheap- kit cost over \$100.00); it was still a one day lead time nevertheless.