

By Carl Calvert

PHOTOGRAPHY: CARL CALVERT

Differential Covers and Transmission Pans from PML

Aftermarket differential covers and transmission pans not only look good under your SUV, they also offer substantial benefits. These covers and pans are fairly easy to install and are far superior to their stock counterparts.

PML, Inc., located in Inglewood, California, offers a variety of upgraded differential covers, transmission pans, and valve covers for a number of applications. The company's differential covers offer increased lubricant and cooling capacity, are thicker and more durable than many stock units, and use magnetic drain plugs to facilitate gear oil changes. The units are manufactured using cast 356 T6 aluminum with a 0.160-inch thickness (as compared to 0.035 inches on typical stock units), and a 0.350-inch-thick machined gasket flange, which provides a uniform clamping force. Additional features of the covers include unique cooling fins, and all the hardware is included. The machined mating surface requires no gasket or O-ring; simply add sealant and install.

PML's transmission pans offer many of the same advantages as the differential covers, including a 2- to 4-quart increased oil capacity, reduced oil temperature, and thicker walls than on the stock piece. A magnetic drain plug allows oil changes without removing the pan, and the 0.350-inch-thick gasket flange prevents leaks.

We took our project Avalanche to PML's facilities in Inglewood to have a differential cover and a transmission



1. Here, the stock differential on the Avalanche is ready to be swapped out for an upgraded unit from PML.



2. The first step is to unbolt the old cover.



3. Draining the gear oil from the differential is a messy step in the install.

oil pan installed. The entire process took less than two hours, and the only real problems encountered were providing enough room for the differential cover to clear the sway bar and pulling the transmission

cover down and around the exhaust. Both problems were minimal, however, and only added a few extra minutes of installation time. Follow along as we show the major steps involved in installing these products. •



4. Once the stock cover is taken off and the old gasket material stripped away, the differential is ready to receive the new cover.



5. There's a big difference between the PML cover on the left and the stock unit.



6. Since the PML cover is much thicker than stock, on our Avalanche application, the sway bar must be loosened and moved out of the way in order to install the new cover.



7. Sealant is applied to the inside flange of the PML cover to ensure a tight fit and no leaks.



8. The new cover is bolted into place. After installation, the differential is refilled with gear oil and checked for leaks.



9. The PML cover sits proudly in place. One of the advantages of the new unit is that it uses a drain plug, so draining the oil no longer involves taking off the entire cover.



10. The stock transmission pan is much smaller and plainer looking than the PML piece that will replace the unit.



11. Once the pan is unbolted, transmission fluid is drained from the pan.



12. The GM transmission pan gasket kit for the Avalanche comes with a new filter that we used to replace the old filter.



13. Prior to placing the gasket on the PML transmission pan, a gasket-sealing material is used to ensure a tight fit and no leaks.



14. The gasket, supplied with the GM kit (which also includes the replacement filter) is positioned into place.



15. The PML transmission pan is set into place, bolted up, refilled with transmission fluid, and checked for leaks.



16. The new pan holds approximately 2 additional quarts of fluid and certainly looks a lot better than stock. After the install, the spilled and splattered fluid was cleaned with solvent, ensuring that smoking does not occur when the engine is started and parts heat up.

