

SECTION IV NEW TECHNOLOGY

NEW TRANSMISSIONS TECHNOLOGY

(Abstract)

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Pennsylvania Department of Transportation (PennDOT) was selected by Allison Transmission to pilot its World Transmission (WT). PennDOT is one of ten fleets worldwide selected by Allison and the only government fleet. WT was installed in five PennDOT single axle dump trucks in April and October, 1991. The five dump trucks are located in three separate locations. The locations were selected due to their severe winters and the mountainous terrain. The dump trucks have travelled between 6,000 and 12,000 miles since the transmissions have been installed. PennDOT has experienced no problems with the transmissions and equipment operators' evaluations have been positive.

WT product line consists of three basic model series - AD, MD and HD. The MD series, which covers medium duty applications, was the model installed in PennDOT dump trucks. The AD and HD series are slated for introduction over the next two years.

The new product features of the MD series of WT include: electronic controls, up to six forward speeds, torque converter lock-up clutch, engine driven PTO options and integral oil filters. Consumer benefits of the MD series transmission include improved performance, quieter operation, smooth and precisely timed shifts, reduced maintenance costs, and special electronics input and output features for controlling PTO operation.