The article below appears in the March 2007 of JEMS Magazine's EMS Insider newsletter

Ford Announces Discontinuation of E-Series Diesel Vehicles

Chassis used for most Type II & Type III ambulances

Ford Motor Co., which makes the majority of ambulance chassis used in the United States, announced Feb. 7 that it would no longer make E-series diesel vans and cutaways, used for Type II and Type III ambulances.

"Ford is experiencing a supply issue related to the E-series diesel offering, and once the supply of 6.0-liter engines has been depleted, E-series will only be offered with gasoline engine options," Ford said in a statement. "At this time, we have enough engines to meet our production needs through the first quarter of 2007."

The company declined to elaborate on this statement. However, Ford spokesperson Kristen Kinley stressed that the decision to discontinue distributing E-series diesels "is not a part of the lawsuit" that Ford recently filed against International Truck & Engine Co. (a division of Navistar), which manufactures the Power Stroke diesel engines used in Ford E-series and F-series vehicles.

"Ford Motor Company has debited funds from ITEC, the company that supplies our 6.0-liter diesel," Ford said in a statement about the lawsuit. "Immediately following the debit, [Ford] filed a lawsuit regarding the debit and other commercial issues with ITEC. ...We have made several attempts to get ITEC to accept responsibility ... and live up to its contractual obligations. ...We would not be taking this action today if we felt progress could be made and the situation could be resolved through discussions. It can't."

Marc McEver, an owner of Olathe (Kan.) Ford, which supplies 80% of all Ford ambulance chassis sold in the United States, said, "I understand there's still hope this could be worked out between the two companies, although there might be a gap [in production] for awhile."

Several sources who spoke with Ford insiders report that the problem stems from the fact that the new 6.4L engines produced by ITEC do not fit into 2007 model E-series Fords (although they do fit Ford F-series vehicles, which are used for Type I ambulances). New federal emissions standards forced Ford to switch from the 6.0L to the 6.4L engine Jan. 1.

Some background
Ambulance services have experienced a lot of problems with the 6.0L diesel engines, which power 2003–2006 Type II and Type III units, and some services recently filed a class action lawsuit against Ford as a result of those problems, seeking replacement vehicles, reimbursement for repairs and employee costs and punitive damages. (For more on that lawsuit, see "Class Action Suit Filed Against Ford," January EMS Insider.)

"The industry was doing fine until 2003 with the Power Stroke 7.3L diesel engine, but new federal emission standards went into effect [Jan. 1, 2003], and Ford went to the 6.0L," said Mark Van Arnam, president and chief executive officer of AEV/American Emergency Vehicles, Jefferson, N.C.
"Ford is between a rock and a hard place," said Mel Globerman, who purchased all ambulances for the U.S. government for many years until he retired in 2004 from his position as director of vehicle engineering and commodity management for the General Services Administration. "Customers may have some problems with the 6.0L, but they want the benefits of the diesel engines."

Globerman said Ford captured much of the ambulance market because its diesel vehicles "had a longer chassis that was more suitable to conversion to an ambulance." In the mid-1980s, "99.9% of the ambulance engines were gas, but because of more stringent federal emissions standards, Ford had a lot of problems with those gas engines in ambulances, [resulting in] heat, electrical, air conditioning, reliability and fire problems," he said.

"In ’86–’87 when we were formulating the C revision to the [federal] KKK specs [for ambulances], we made diesel the standard engine to eliminate the heat, fire and related problems with both Ford and GM [-based ambulances]," he said.

Chuck Drake, president of ambulance manufacturer McCoy Miller in Elkhart, Ind., said, "A solid 50% of the ambulances [in the United States] are Type III, and approximately 28% are Type II." According to the Ambulance Manufacturers Division of the National Truck Equipment Association, he said, "1,656 Type III ambulances were delivered during the first half of 2006, and 1,552 of them were on an E-series chassis. During the same period, 730 Type IIIs were delivered, and 720 of them were E-series."

**Replacement parts & engines**
According to McEver, ambulance services shouldn't worry about replacement parts or engines for their existing units even if Ford never resumes production of the E-series. "Whenever a manufacturers builds a vehicle to sell, the federal government requires them to warranty the vehicle and have parts available for 10–15 years," he said.

**Where does this leave ambulance makers?**
"We have enough chassis to take us to mid spring; in the meantime, we'll be working on other chassis platform alternatives," Van Arnam said. "In most cases, we will need to work with services to switch their entire fleet to another chassis. This is a huge change a multimillion dollar issue for many providers, both public and private."

According to Drake, "For 20 years, the industry has engineered and designed ambulances around the E-series, so there's no quick fix. My fear is that in the long run, we will be unable to provide products to communities that need them."

Although some other companies do make chassis comparable to the lighter E-350 chassis used for Type II units, added Drake, "no other manufacturer offers something comparable to the E-450," which is used in the Type III.

"There could be some shifting from an E-450 to an F-450," Drake noted, "But that will change the engineering, the design and the price."

According to Globerman, "The Type III is more popular because it rides better and has better maneuverability than the Type I, which uses the F-series. The E-series was designed to carry people, and the F-series [was] not."

Ford will continue making gasoline-powered E-series vehicles, and several sources predicted that Ford might begin offering ambulance "prep" packages for gasoline-based E-series chassis.
But Globerman said, "It would be a gross mistake to go back to a gas-based ambulance package. There have been some problems with the 6.0L engines, but they're still a fraction of the problems we had with the gas engines. Diesel engines also have substantially better fuel economy and are much less likely to overheat."

Globerman noted that GM recently began producing a diesel "ambulance prep package" for its van chassis, and he predicted "GM vans and cutaways will become the number one ambulance chassis." According to Globerman, the combination GM Duramax diesel engine "appears reliable, with no problems that I know of."

Ambulance manufacturers also use chassis made by Freightliner, Navistar, Sterling and other companies for the larger modular ambulances.