



Mobility Maintainer

DC Matic Enterprises, Inc. (DCM) has created a 24-VDC, ¾ Inch Drive impact wrench (Model TL-900) specifically for U.S. and NATO forces use. During the tool's developmental stages DCM placed working models in the hands of veteran Texas National Guardsmen at FMS-15 in Fort Worth and gathered feedback. Powered by way of specially built cable set connected to the vehicle's NATO slave receptacle, the TL-900 quickly and easily removed HEMTT wheel nuts and tank drive sprocket nuts.

Veteran TX Guardsmen reported to DCM that they witnessed injuries to personnel from jumping up and down on tent poles used as "cheater" pipes to break loose nuts from all sorts of vehicles in the Middle East. They also told of instances where they had to wait for a chase truck only to have it arrive and the compressor not function due to sand and dust clogging its intake. Most concerning to DCM was hearing of convoys being stopped in hostile areas for extended periods of time while wheels had to be changed by using the standard issue hand tools.

Portable

DCM has also developed a portable, rechargeable power pack that allows their Model TL-900 to be used on trailers and other vehicles that do not have a NATO slave receptacle.

Spin-Off

When TX Guardsmen tested the tool's power pack they also used it to "jump start"

vehicles. They admitted that they already had equipment to perform jump starts but pointed out that what they had was heavier, more bulky, and could not be used in damp or rainy conditions. Based upon their feedback DCM created the NATO START™.

The Model TL-900 has proven that it will quickly and easily remove wheel and drive sprocket nuts when powered by a NATO slave receptacle. Not having to wait

for outside assistance will give our troops the advantage of speed and improved safety while performing repairs in hostile environments. Unlike other jump starting equipment now in military use, the NATO START™ is less costly, can be deployed in all types of weather conditions and doubles as a vehicle starting system diagnostic tool.

More info: dcmatic.com
natostart.com

JLTV Award

U.S. Army TACOM LCMC recently awarded Oshkosh Defense LLC a \$6.7 billion Low Rate Initial Production and Full Rate Production contract for the delivery of 17,000 vehicles. A&M spoke with Col. John Bryant (USMC, Ret.), Senior VP of Defense Programs, Oshkosh regarding sentiment following award.

A&M: What is your initial sentiment following the award decision?

Bryant: The U.S. Army conducted a thorough and highly-disciplined evaluation for the JLTV production program to reach a clear conclusion: the Oshkosh JLTV is the most capable vehicle for our troops, and the best value for the American taxpayer. Oshkosh is honored to be chosen for this critical program, which will provide protected, sustained and networked light tactical mobility for American troops across the full spectrum of military operations and missions anywhere in the world.

A&M: Speak to some key assets that Oshkosh's L-ATV platform brings to the fight.

Bryant: What our troops get with an Oshkosh JLTV is a vehicle that has been extensively tested and is proven to provide the ballistic protection of a light tank, the underbody protection of an MRAP-class vehicle, the network capability of a mobile command center, and the off-road mobility of a Baja racer. The Oshkosh JLTV allows troops to travel over rugged terrain at speeds 70% faster than today's gold standard, which is our Oshkosh L-ATV.

Further, the JLTV closes a capability gap that was identified in operations in Afghanistan and Iraq. In recent conflicts, our Warfighters have faced new, unconventional threats. Instead of the force-on-force fighting of the past, troops confronted a wide range of asymmetrical threats, including IEDs and other explosive devices. The U.S. Department of Defense's response to this type of warfare, as well as

our planning for future threats, surfaced a capability gap and defined critical need for lightweight, mobile and protected vehicles.

More info: oshkoshdefense.com

Cool Armor!

Uniform and equipment designers have been trying to solve the overheating problem with body armor for years. Undershirts composed of thick fishnet material just accumulated moisture, as did other undershirts with fabric tubes sewn on, both in an attempt to provide more air circulation between the vest and the user.

The American-made TacVent helps law enforcement stay cool when wearing body armor. It was designed by Jeff Shelton, a police officer and SWAT team member in Southern California. Jeff was one of those officers who frequently left his vest in his locker.

"Our SWAT team trained with full gear, as most did, but our exercises were usually 10-15 minutes long," he said. "After five hours of a real deployment, I was overheated and dehydrated under all the gear."

The TacVent is a corrugated panel that is perforated with vent holes, made of an injection-molded thermal plastic elastomer. The panel goes between the body armor carrier and an undershirt, which creates air channels between the armor carrier and the wearer's body for ventilation and evaporation of sweat.

Real-world testing has shown the TacVent can lower the temperature under the body armor by 7.2 to 14.6 degrees Fahrenheit.

The panel can be trimmed to fit the wearer's armor carrier with a knife or a pair of scissors. It will stay in place from the pressure of the armor carrier against the body, but users can also secure it with small plastic zip-ties. The panel can be worn for the front of the user's vest, as well as the back, while one panel increases chest circumference by about one-half-inch, with another half-inch added for a back panel.

The only maintenance required is an occasional wipe-down.

Ballistic testing with and without the TacVent shows that the panel adds slightly more protection to the body armor. Bullets fired into a vest mated with the TacVent and placed over a clay backing tore the carrier fabric and penetrated into the clay less than without the product.

More info: tacvent.com