WANGUARD

Powering Innovation.

What an extreme vehicle manufacturer looks for when choosing engine power.

Know No Boundaries is a promise ARGO makes to themselves and to their customers. These three simple words have helped them build the world's best amphibious XTVs and off-road ATVs. This mindset also drives their approach when developing new products and choosing major components such as engines.



Navigating the New Product Roadmap

ARGO Xtreme Terrain Vehicles go where others can't. To maintain this unique position in the market, ARGO is always looking for ways to improve their products.

When ARGO decided to create their next generation of XTV models, they sought out new thinking, new technology and reliable partners. One of those key partnerships is with their engine and battery supplier, Vanguard, a brand of Briggs & Stratton.

Jeremy Bauman, Product Team Manager – XTV, ARGO was heavily involved in the implementation and integration of Vanguard engines in the new lineup of XTVs. "Vanguard engines have been in the ARGO product line for many years, but the latest stint started with our 2019 model year," explains Bauman. "The engine and the powertrain are so critical to our vehicle, we really have to start thinking about that early on."

Vanguard not only delivers new engine technologies that help manufacturers like ARGO advance their product lines, they also help OEMs stay in compliance with emissions regulations. "We don't do engine design at ARGO, so that's where we really lean on engine manufacturers that are certified to meet emissions for small spark engines," says Bauman. Having the experience of Vanguard experts behind them, lets ARGO focus on other areas of product development.

Vanguard Engines

Vanguard V-Twin engines are designed to handle the most challenging applications with dependable engine power, performance and reliability. ARGO offers Vanguard

BIG BLOCK™ V-Twin engines in 33.0 and 40.0 Gross HP* and Small Block V-Twin engines at 18.0 and 23.0 Gross HP.* No matter what V-Twin engine ARGO customers choose, they provide plenty of power to push through mud, sand, rocks, water or thick brush.



Smarter Fuel Injection

One of the most popular engine features for ARGO customers is the Electronic Fuel Injection (EFI) system available on V-Twin engines. Adding electronic fuel injection drastically reduces fuel consumption compared to carbureted equivalents. It also provides no-choke, no-hassle starting regardless of temperature and pressure. The EFI system compensates for different air pressures so ARGO customers can take their vehicles to any altitude worry-free. The system also resists stale fuel, so the engine is ready when customers are — even after winter storage.

Higher Electrical Output

The high charging output of Vanguard engines is an important consideration for ARGO customers. Many of them add electrical accessories to their XTVs — whether they are lights or sirens on search and rescue vehicles, or electrically powered tools on construction utility platforms. "In years past, we had to add an accessory alternator to the engine to increase charging output," says Bauman. "Now we are getting that functionality built into the Vanguard engines."



Validating the Engine Decision

How did ARGO validate the performance of Vanguard engines before making the decision to install them in their vehicles? Briggs & Stratton operates an advanced Power Application Center to provide testing and integration assistance for OEMs. "It's an impressive

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facility," states Bauman. "When we were initially looking at Vanguard for our vehicles, they did baseline testing of all our prior engines in prototype vehicles and created reports for comparison between existing vehicles and Vanguard-powered vehicles. That data acquisition really helped our decision-making process."

Reputation Counts

"When you're talking about engines, you really need to consider the manufacturer's reputation in the marketplace," says Bauman. "We definitely felt the Briggs & Stratton and Vanguard names were well-known in the industry and in good standing as far as reliability and performance. I'll call it the homegrown aspect. They're a recognizable, strong North American manufacturer. So that's definitely attractive as well."

OEMs interested in prototyping Vanguard engines in their machines may contact us **here**.



