Defense Applications

A Global Force
A Shared Vision

Today’s forces face a variety of missions in addition to traditional armed conflict. Troops are keeping the peace and innocents out of harm’s way. No matter the goal, you need a partner who is dedicated to creating innovative propulsion solutions that put reliable performance in the hands of those who need it most.

Mission-Ready Propulsion Solutions for Wheeled and Tracked Vehicles

Whatever your vehicle—light, medium or heavy, tracked or wheeled—we have the perfect fit. Allison delivers solutions that stand up to the severe duty-cycles associated with everything from disaster relief to military action. For more than 100 years, we’ve made sure our partners worldwide are always ready. Today, a unique spirit of collaboration helps us quickly take ideas from concept to the field.

The field is our proving ground. From the command perspective reliability is crucial and our enhanced uptime means crews have more time to spend on training, which translates to increased mission readiness. When vehicles are called into action, commanders can remain confident that an Allison transmission will respond, assisting them in the completion of their mission. Increased uptime also results in lower operation and support costs and drives value into the total cost of ownership equation.
Creating Innovative Solutions

Whether you need an existing transmission adapted to fit a particular vehicle or an innovative propulsion solution built from the ground up, our engineering team is ready to work with you.

Once fielded, Allison stands ready to support the product throughout the extended life of the vehicle. Support can be tailored to best fit your needs and procedures.

Superior Performance

Do more with Allison higher torque ranges and gross vehicle weight capacities by optimizing higher horsepower engines with advanced electronic controls. When Allison is built in, teams experience:

• Precision mission execution with increased mobility on all terrains, especially hills and soft ground. Tracked vehicles also experience exceptional braking and steering
• Increased mission range with improved fuel economy
• Improved capability with built-in Power Take-Off (PTO) provisions to deliver power to vehicle-mounted mission equipment
Unbeatable Shifting vs. Manuals and AMTs

An Allison Automatic makes the right shift at the right time for faster starts, greater control, better maneuverability and exceptional driveline protection.

Unlike manual and automated manual transmissions (AMTs), there are no power interrupts with Allison Automatics; just smooth, seamless, full-power shifts that contribute to improved vehicle mobility. Plus, Allison’s heavy-duty torque converter allows extremely high torque to be transmitted gradually to the drivetrain. This enables the vehicle to accelerate smoothly and steadily for superior startability on hills and soft ground. There are no jerks, spins, bounces or stalls. Lugging and rollback are virtually eliminated.

The Power of Allison

Allison’s torque converter efficiently multiplies engine torque, delivering more power to the wheels. An Allison Automatic increases engine power, while a manual or AMT loses power with every shift.
Ease of Operation
Allison automatics use a torque converter that absorbs shock loads and spikes, reducing wear and tear on everything from the vehicle’s crew to the engine to the wheels or tracks. With our Continuous Power Technology™, smooth engine acceleration at launch and during shifts protects the drivetrain, differential, axles and wheels. Because a torque converter is used for launch, there are no mechanical clutches to wear out.

Driven to Succeed
Simplified operation allows drivers to perform better:
• Reduced fatigue improves alertness and mission concentration
• Operator inexperience neutralized, cutting training time and costs
• Lower possibility of accidents thanks to superior control and maneuverability

Driving Down Support Costs
Allison helps keep vehicles mission ready:
• Reduced repair costs
• No mechanical clutch to wear out or replace
• Less drivetrain shock, minimizes wear and tear on vehicle and crew
• Extended service intervals, which often require only periodic fluid and filter changes
The Allison Promise
Provide the most reliable and valued propulsion solutions in the world to enable our customers to work more efficiently.

Corporate Values
- Quality
- Customer Focus
- Integrity
- Innovation
- Teamwork

A History of Military Success
Allison has a proud heritage of supporting the military that stretches back more than a century. Our early work involved aircraft; however, tracked and wheeled ground vehicles equipped with Allison transmissions have been mission critical for more than 70 years.

Tracked Vehicles
During World War II, Allison used its engineering expertise to begin designing automatic cross-drive transmissions for tracked ground vehicles. Our first cross drive went into production in the late '40s. Today, you’ll find Allison transmissions deployed around the world in a variety of vehicles, including the U.S. Army’s M1 Abrams main battle tank.

Wheeled Vehicles
For over 40 years, the U.S. Army has utilized Allison’s fully automatic transmissions for nearly all of its medium- and heavy-duty combat and combat support wheeled vehicles because of how fuel efficient and reliable they are. Following that lead, armed forces outside of North America have also adopted Allison products.
A World of Support

From our headquarters in Indianapolis, Indiana, USA, to our manufacturing plants in Hungary and India, to approximately 1,400 Allison Authorized Distributors and Dealers around the globe, you are never far from the products, training, service and support you demand.

Our support starts from the moment an Allison transmission is specified. We work with you to ensure that the model and ratings fit your engine to create a tailored package of powerful performance and reliable efficiency. When you need parts or service, you can count on global access to factory-trained specialists and Allison Genuine Parts™.