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ALLISONTRANSMISSION.COM

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distribution

An automatic solution to
enhancing productivity,
profitability and
environmental performance



distribution

At Allison Transmission, we are committed to making life easier - day in, day out.

With increasing pressure on productivity, emissions, safety and a vast range of other areas, fleet operators need solutions that work, and keep working. That's why over 80 percent of the world's commercial vehicle automatic transmissions are Allison - because Allison is trusted by more vehicle manufacturers, more fleets and more drivers than any other supplier in its sector.

We have been developing, building and supporting automatic transmissions for the distribution sector for more than 40 years, bringing benefits in productivity, reliability and operating costs. Today we offer the largest selection of fully automatic transmissions available from any supplier and are specified by more than 200 vehicle manufacturers worldwide.

- **Trusted by more operators than any other automatic transmission**
- **Smooth, continuous power increases efficiency & productivity**
- **More than 40 years commitment to the distribution industry**

Increased productivity

High efficiency

Makes the most of the power you pay for



Allison automatic transmissions with adaptive electronic control are ideally suited to the increasingly challenging demands made on distribution vehicles.

Whether carrying out stop/start operations in a quiet urban street, driving at speed along a highway or manoeuvring into a distribution centre, Allison transmissions will make a significant contribution to the effective and efficient operation of any distribution fleet.

Available in a wide range of ratings and configurations, Allison transmissions bring all the benefits of proven, hydraulic torque converter gearboxes as well as many advantages specific to our own unique technologies. With powerful electronics, additional built-in features and easy integration with drivelines and bodies, Allison transmissions open many new opportunities for enhancing productivity, reducing operating costs and improving safety.

Automatically better

With constant drive to the wheels, a vehicle equipped with an Allison transmission can complete its route an average of ten percent faster than one equipped with a manual or automated manual transmission. Once on the move,

electronic control of shift points and early engagement of lock-up helps the powertrain operate in its most efficient mode at all times, reducing engine speeds to deliver improved efficiency, lower emissions, less noise and reduced wear - big savings that go straight to the bottom line.

An Allison transmission also helps make the best possible use of the engine power you have paid for. Operators can choose smaller, more fuel-efficient engines while continuing to enjoy the performance benefits that help complete delivery schedules faster. With low whole-life costs, proven by the rigorous analysis of many fleet operators, Allison transmissions can make a significant contribution to the productivity and efficiency of fleet operations.



With so many benefits over manuals and AMTs, it is not surprising that drivers prefer Allison. Navigating through narrow roads, reversing into tight spaces, making progress through congested traffic: all part of every-day operations for distribution operators.

Yet with some gearboxes, poor control of automatic clutches, harsh change quality and difficult low-speed control make every manoeuvre an unwelcome challenge.

Allison automatic transmissions eliminate all of these issues as well as preventing driveline shocks that could damage a fragile payload. Drivers can keep both hands on the wheel and changes are always smooth, while totally progressive drive from stationary allows precise manoeuvres to be conducted safely and effortlessly, whatever the gradient.

Medical tests have proven that drivers of Allison-equipped vehicles enjoy both a lower heart rate and lower blood pressure than those driving vehicles with manual

transmissions. As well as the welcome health benefits, this could lead to fewer days off work, reduced staff turnover and improved concentration, leading to better productivity and safety.

The productivity, durability and operating costs of the fleet are also less dependent on driver skill, making it easier and faster to find and train new drivers. Through their ease of operation, choosing automatic transmissions from Allison will add welcome flexibility to your workforce.

**Progressive low-speed control
Both hands on the wheel
Reduces driver stress**





At Allison, our sector specialists are always looking for ways to add more value for end users, body builders and engine/vehicle manufacturers.

Our engineers are available to help customers develop vehicles that offer greater functionality, better performance and reduced costs. We use our electronics expertise to make this possible quickly and affordably and our service expertise to keep vehicles on the road, however demanding their schedule.

Better by design

Thoughtful design and continuous improvement deliver outstanding reliability combined with low whole-life costs. Powertrain and body integration are simplified and servicing becomes faster and more efficient. Independent research shows that vehicles equipped with Allison transmissions experience substantially less downtime than those equipped with manuals.

Advanced electronics help to protect the entire driveline from inappropriate shifts, engine overspeeds, lugging (under speeds) and torque shocks, while closed-loop logic allows the control system to automatically optimise every shift. Further driveline protection is provided by the torque converter, which cushions the driveline from shocks in both directions.

Allison transmissions are compatible with Electronically-controlled Braking Systems (EBS) and their sophisticated Transmission Control Modules and CAN-based data communications allow closer engine / body integration with far greater functionality and processor speed.

There is a choice of gear ratios available across our range to ensure that the engine is always operating at the optimum speed, whatever your drive cycle. Our optional, integral Output Retarder, which fits comfortably within the transmission output housing without changing the overall length, will slow the vehicle smoothly, quietly and with the minimum use of conventional brakes. In some drive cycles, the life of friction brake components can be increased by up to five times.



High reliability
Fast integration
Low whole-life costs

**High reliability and reduced
down time gives you
improved customer service,
reduced workshop costs,
better fleet utilisation and
lower capital requirements.**



Allison's investment in developing and training more than 1,500 service outlets worldwide - more than any other automatic commercial duty transmission manufacturer - shows how committed we are to supporting our customers.

Reducing service costs

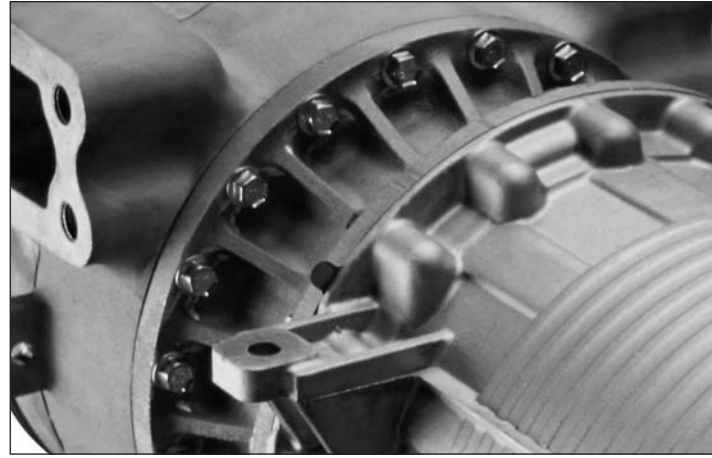
That commitment continues throughout the operational lives of your vehicles. Customers tell us that our transmissions will typically perform effortlessly throughout the expected life of the vehicle with just routine oil and filter changes. But that hasn't stopped us taking a hard look at how we can reduce your service costs even further and keep your vehicles on the road for even longer.

Take our transmission fluid, TranSynd, as an example; developed with Castrol, it can substantially extend oil life, reducing change intervals by up to six times and can also increase the life of the transmission. The reduced service requirement means a huge saving in up-time for the vehicle and a big reduction in the garage resources needed to support the fleet. For added convenience, the built-in oil level sensor allows the transmission's oil level to be checked quickly from the cab. And of course there is no dry clutch to wear, slip and need replacement.

Further savings are achieved through Allison's unique troubleshooting diagnostics, which alert the driver if maintenance is required and provide an accurate descriptor if there is an issue that requires attention. Only with Allison can you receive an immediate indication of the fault, often enabling a solution to be found without waiting for a specialist service technician to arrive.

If a significant problem should occur out on the road, the Allison control system will usually keep your vehicle moving - back to base or to a safe location. Most other transmissions automatically disable the vehicle, creating safety and recovery issues. At Allison, we understand how important it is to keep your vehicle moving.





'Allison has won many environmental awards including the prestigious **Clean Air Award** from the American Lung Association'.

Reducing vehicle emissions is critical for every responsible fleet operator, but environmental protection reaches far beyond the gasses leaving the tailpipe.

At Allison, we have a five point strategy to ensure that we support our customers' environmental initiatives at a range of levels:

- **Allison automatic transmissions, with advanced electronic controls, are designed to reduce fuel consumption and tailpipe emissions**
- **Allison transmission fluids cut the amount of waste oil and filters by up to six times**
- **Most Allison transmissions are more than 98 percent recyclable**
- **Allison offers cost-effective remanufactured products that save up to 80 percent of the energy used manufacturing a new transmission**
- **Innovative fuel-saving technologies such as hybrid drives are already available from Allison and will form an increasingly important part of our activities**

Into the future, Allison will continue to focus on technology evolution to help its customers improve their commercial and environmental performance.

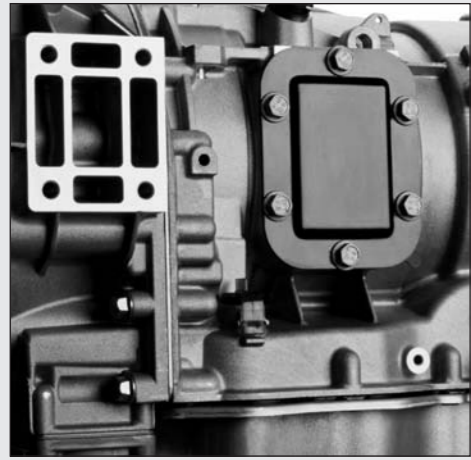
Already we have introduced sophisticated electronics to improve productivity and safety, reduce costs and simplify the integration of many new features. We are now working with vehicle manufacturers on hybrid drives and supporting their energy-efficient drivetrain strategies. They know that with Allison Transmission, they have a partner they can trust.

Reducing noise

In the cab, low noise helps keep operators fresh and alert. Outside the vehicle, it makes every run less intrusive.

For distribution operators, low noise is socially responsible and carries an increasingly important commercial message too. All of our transmissions sold in Europe use the latest computer-developed helical gears to substantially reduce noise levels both inside and outside the cab. Sophisticated electronic control ensures that the transmission is always in the highest appropriate gear, delivering smooth and uninterrupted engine power to the wheels and automatically keeping engine noise to a minimum.





Substantial maintenance savings
Double digit productivity improvement
Enhanced safety
High driver flexibility

Through independent real-world testing with customer fleets, Allison has proven that its transmissions bring substantial life-cycle value benefits.

Back-to-back comparisons with a European distribution fleet, completing an average of 13 stops per vehicle per day, showed maintenance savings exceeding £3,000 every year, totalling more than £25,000 over the vehicle's life. A second fleet, using larger trucks in an urban environment, reported a 17.5 percent productivity improvement during a collection round with a 10% reduction in accidents.

The operator calculated a saving of nearly £10,000 per vehicle every year. Other benefits demonstrated in the test dramatically improve fleet management. A ten percent reduction in accidents and lower driver turnover (reducing recruitment and training costs) combine to further enhance the exceptional 'Lifecycle Value' of an Allison.

