SUPPLY CHAIN

AUTHOR David links



British innovation opens new doors to success

An ultra-light automatic rear door system robust enough to withstand the rigours of city deliveries is the answer to every delivery fleet manager's dreams. Aspray Transport is testing a new Centadrive door that opens the way for a new generation of urban delivery vehicles. David Jinks reports.

Queue the strains of 'Rule Britannia' and a fluttering Union Jack. British innovation has been at the heart of the nation's success for many years. It is not just about being the first to develop heavy industry, such as steam locomotives and powered looms, it is also about simple ideas, such as mounting a vacuum on a ball — not to mention incorporating a transparent dome in the vacuum so you can see all the bits of your kid's toys you have accidentally sucked up.

An automatic, reliable and very lightweight door for the back of delivery trucks is another concept so simple that you might think it would be already widely available. But as any fleet manager worth his or her salt will tell you, finding a lightweight automatic door system with the robustness needed for daily inner city delivery work has

been an elusive goal. Now a British manufacturer believes it has finally introduced a solution.

The long-established manufacturer Albert Jagger has just introduced its pioneering Centadrive Door System, which promises to give some big gains to delivery companies. The concept of an easy-to-fit door mechanism capable of being installed on new trucks and retrofitted to existing fleets is simple enough; but combining it with a door material light enough to keep down weight and yet robust enough to withstand the city delivery cycle has kept the boffins at Albert Jagger awake for nearly six years. After much designing and hard testing, Albert Jagger has now introduced its new Centadrive door system, and Aspray Transport has adopted the door for its new generation of urban delivery vehicles.

A standard DAF with A S Tronic

gearbox forms the base of

Asprav's new urban delivery

installation

Door step-by-step to successful door

New generation delivery vehicles

Aspray's latest DAFs feature A S Tronic gearboxes, reversing sensors, unbreakable mirrors and a host of other features designed to take the stress and physical pressure off its drivers. Key to the success of Aspray's new urban delivery vehicle is the weight saving achieved by using the lightweight system, which compensates for the added weight created by the A S Tronic gear box.

The problem for drivers undertaking multiple drops in inner city areas is that they continually have to take freight from their vehicle in tight areas while securing large barn-style doors. A simple key fob button – just like the one you locked your car with this morning – takes care of closing and securing the door automatically. That could mean improved insurance premiums, and an improvement in the speed and ease with which drivers can deliver.

Aspray Transport retrofitted a prototype Centadrive door to one of its fleet last year, and lan Barclay FCILT, Operations Director, has been impressed. 'We think we have gained at least two or three extra deliveries a day because of its speed of use,' he says. He also adds that his drivers have not exactly treated the new door like a delicate test instrument: 'It got the normal tough treatment all our vehicles get and it has been entirely reliable and secure.'

The secret is a material strong enough to withstand rough treatment and passing ne'er-do-wells. Garth Cooper, Managing Director, Albert Jagger, is understandably reluctant to give away the exact formula of the material used to make the door, but suffice to say it is a specially interwoven glass fibre-based material, and its honeycomb construction gives it added structural strength. One major advantage over similar materials from the past, he explains, is that it does not suffer from water penetration, which used to mean that, over time, such materials became dramatically heavier.

Smooth fitting

I went to see the first production door for Aspray Logistics being fitted at Supreme, a bodybuilder in the heart of Walsall. It was all very undramatic, with the two fitters installing the door on a standard modern curtainside frame, with the box of electronics fitting easily on its centre beam. It is a very simple fit new, and to retrofit it has not proved a difficult process.

A number of built-in safety mechanisms add to its effectiveness. The door will not operate with the engine running and if the vehicle is moved with the door partly up, an alarm will sound. Software can easily change the speed with which the door opens and closes, and there is also a sensor that stops the door if something is trapped in it, like that on your car's windows. Should the electric mechanism fail — and with a lifetime-of-vehicle guarantee on the Centadrive door system that should not be a common occurrence! — then the counterbalance means it can be operated manually by the driver without fear of injury to their back.

New ideas

Such a simple idea, but it had an interesting origin. Albert Jagger has annual planning sessions to create some 'blue sky' thinking (sorry to all those people who hate the phrase!). It tries to create three products a year related





The light glass fibre means the revolutionary new door is easily fitted by Supreme bodywork's fitters Simon Colley and Andrew Bawdery



The new door can stop in any position and has a multitude of safety measures to ensure problem-free operation



The new door is hard to break into and easy to retrofit into existing fleets



At the heart of the Centadrive door system is this small box of electronics



The key to the door's success is a simple fob-operated mechanism



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The Albert Jagger team that developed the new door (left to right): Terry Fryer; James Cooper; Garth Cooper; Geoff Eddows;

to transport and logistics that do not actually exist. Sometimes three new products will be launched in a year; sometimes just one might make it through to creation. As I mentioned above, the idea for these doors was born six years ago, so products are not always an instant success.

Tony Morgan of Supreme; and Mark Hilton

But as Garth Cooper says: 'It only needs one idea to be a winner and the meeting pays dividends.'

Behind the 'green' door

One final point to mention is that the new door is also beneficial for the environment. It saves weight, cutting needless fuel consumption; it cuts journeys; and it is produced from 100% recyclable material. All this and it is entirely British from conception to manufacturing. Small wonder it looks like an idea happily pushing at an open door!





A door into the future: the first of the new Centadrive doors is ready for some tough action



Information

Albert Jagger Limited manufactures and distributes industrial hardware to engineers, bodybuilders and associated industries.

Web site: www.albert-jagger.co.uk

Aspray Transport offers a nationwide next-day delivery service through its own network of depots, fleet and employees.

Web site: www.aspraytransport.co.uk

For more information on logistics developments, why not join our Freight Transport Forum? See our web site www.ciltuk.org.uk for more details.