

*Edition 4 - December 2010*



### Quick Access To TriMark Industry Solutions

- Off-Highway Vehicle
- Recreational Vehicle
- Specialty Vehicle
- On-Highway Vehicle
- Armored Vehicle
- Industrial Enclosures

**Would You Like to Have Your Company Featured in a Future TriMark Newsletter?**

If the answer is "yes", then we should talk! In future issues, we would like to feature some of our customers (one per issue) and talk about how they use TriMark products. If you would like your company to be considered, please contact TriMark by clicking here.

### Featured Product

**080-0400 CompOne™ Compression Lock**



This compression lock is a redesign of TriMark's West Alloy brand 6680

## From Caravan to Super Car!

In the TriMark e-newsletter for Europe [Edition Number 2](#), we explained the merits of the combination of TriMark KeyOne Plus® system combined with the high security offered by the the new "snake-cut" key or SecureOne as we call it at TriMark. This offers over one thousand key code options and a design that makes it virtually impossible to pick.

The "snake cut" key system (SecureOne) offers state-of-the-art in security for caravans entrance doors and TriMark West Alloy have this product fitted to some leading products in the UK. In the previous article, we predicted that this key design would spread into other markets but it is surprising to us the first application outside caravans is on a world class Super Car being designed and built in the UK and another top range sports car manufacturer is now also working on incorporating this product! I hope that we will be able to provide more information in a later newsletter when the cars are in the public domain.

Construction plant and farm machinery theft is an increasing problem but the [UK CESAR scheme](#) is having a real positive impact on this problem and I speak with some detailed knowledge as I am on the approvals committee of this scheme. Some of you in the UK might have seen this initiative featured on the BBC1 Countryfile programme on Sunday 26 September. If you missed the programme and would like to see the feature, please drop me an email at [keithdolbear@trimarkeu.com](mailto:keithdolbear@trimarkeu.com). This programme also illustrates the weakness of having a single key that works all vehicles from a manufacturer. The TriMark West Alloy SecureOne offers the opportunity to OEM and the operator to choose whether one key fits all vehicles, a fleet can have the same keys on all vehicles but different that other owners, a random (different) key code on all vehicles. I expected we would sell into this market before a Super Car but I am sure it will happen soon in any case!

On a different subject, when TriMark Europe bought West Alloy in 2007, our policy was to keep the two businesses separate. We accelerated some of the integration plans during the recession last year when we combined the accounts and customer service teams to serve both Companies. Now is the time to complete the process, so with effect from 1 January 2011, we will be merging the two Companies to simplify transactions. This will have no consequential direct effect on products, prices, terms and conditions, but may require some minor administrative changes. We are also consolidating the warehousing and distribution of both TriMark and West Alloy products at our site in Sutton. As a consequence, all deliveries after 4 January 2011 will be from:

TriMark West Alloy  
Unit 18, iO Centre  
20 Kimpton Park Way  
Sutton  
Surrey  
SM3 9BW  
UK

I apologise for any inconvenience this causes and thank you in advance for your cooperation. More information will be supplied to customers affected soon. In the meantime, if you have any questions, please ask your usual contact/s or inquire directly to me.

I hope you enjoy this newsletter and please let us know any features you would like included in the future.

## Keith Dolbear

General Manager

Compression Lock which was developed for light to medium on or off-highway panel and compartments where door gaskets require a compression lock to pull-in for a firm seal.

Featuring 5.5mm (.216 in.) of compression with a 180° turn of the key, this robust lock is intended for gasket-equipped doors, is fully adjustable, water resistant and easy to install.

The KeyOne™ Plus locking system allows the operation of multiple onboard locking hardware with a single key or the option to key differently. There are also a wide variety of accessories including cams, finger pulls and mounting hardware.

System kits are available and include handles, latches and accessories to provide a comprehensive access solution.

Please visit [www.trimarkcorp.com](http://www.trimarkcorp.com) for additional information.



#### bauma 2010 Shanghai



TriMark and TriMark (Xuzhou) approached bauma 2010

with very high expectations. Past exhibitions have resulted in a wave of product interest, customer projects and increased visibility in the marketplace. bauma 2010 Shanghai, it is safe to say, exceeded even our highest expectations!

First I would like to thank the many OEM Partners who stopped by to see our new product offerings and continue to build the relationships that make us both successful in business. It was wonderful to see so many familiar faces and welcome to the many new friends we made during the show. We look forward to a successful future in all of our partnerships.

During five days of exhibit there was never a dull moment. The organizers are reporting that more than 150,000 visitors from 165 countries attended this year's bauma China. That compares to 112,674 visitors from 124 countries in 2008. According to show organizers, these numbers represent an increase of 33% compared to the 2008 exhibition. After China, the top 10 countries and regions attending were Korea, India, Japan, Russia, Malaysia, Brazil, Singapore, Thailand, Indonesia and Australia - in that order. A good number of these attendees

## West Alloy – Providing Innovation Solutions

In the last issue of this newsletter, we gave you a brief overview of the full line of excellent West Alloy products. In future issues, we will take a more detailed look at the full product range but in this issue we want to share with you information on two areas where we feel West Alloy is head and shoulders above the competition – our product improvement process and our custom injection mouldings capabilities.

### West Alloy 7140 Interior Squeeze Lever Handrail Product Improvement

TriMark Company, West Alloy Ltd have been producing various forms of inside squeeze lever handrails for a number of years and with great success. This product was specifically designed for off-highway vehicle applications including agricultural and construction equipment that require a remote inside release. The construction is incorporated into rectangular tubing for support for the opening and closing functions of the door and provides for greater ease of operation (ergonomics) over direct releases.

Early in 2010, a leading cab builder asked if West Alloy could improve the product to give the mounting additional strength. Their application of the product was in a very robust environment and this led to some product damage in the area where the rectangular tube engaged with the latch.

Technical Sales Manager Pete McGuckian was able to visit the client within days, confirm the product choice and review the application. Discussions with the client led to an 11 point improvement plan being proposed, submitted and approved for production the following week.

Improvements to the product included replacing a plastic pivot bushing with a steel and plastic component, confirming mounting torque settings for installation, modification to the linear transfer components to help reduce disengagement issues, and the inclusion of a greasing procedure for mating internal components.



West Alloy displayed urgent and close co-operation with the client and were able to demonstrate customer service skills, design strategy and sound engineering practices to satisfy the product expectations of the client.

As a result of this improvement, West Alloy will incorporate this change across the whole range of this product range to all customers and although this change involves a small cost increase, it will be absorbed by West Alloy as part of our commitment to continual improvements. Further details will be supplied to customers in the very near future.

### West Alloy 7140 Features/Benefits:

- Robust designed remote inside release is incorporated into rectangular tubing which gives additional door structure support and assistance for the opening and closing functions of the door
- Provides for greater ease of operation (ergonomics). The inside release can be positioned at two points along the tube for convenient location to suit the door/cab design.
- Tube is variable in length and angle to suit customer requirements providing flexibility in the product application.
- Integrated Single Rotor Latch is West Alloy proven 4700 series and complies with FMVSS 206 in primary and secondary latching positions when tested with approved West Alloy striker bolts in accordance with SAE J839.
- Available as a complete modular system including exterior handle, direct release latch, latch striker, inside release, gaskets, mounting brackets, latch cover, door tube and all necessary fasteners.

**TriMark is a Leader in Providing Electronic Options for On and**

visited the TriMark exhibit.

On display were three brand new products that round out the KeyOne Plus product line making it possible for customers to install the revolutionary system on an entire machine. “One Key – One Machine” is now available for the entire machine, proven by the Lovol Small Hydraulic Excavator line, the World’s First complete KeyOne Plus enabled construction equipment.

Many other OEM’s are beginning to understand the advantages of our KeyOne Plus system and are eager to implement it on their equipment.

The coming months promise to be as busy for TriMark as bauma proved to be. We are excited for the opportunities that lie ahead as equipment manufacturer’s continue to innovate and adopt technologies which offer increased security, flexibility, and options for them as manufacturer’s and more importantly their customers and poised to offer the products that bring their vision to reality.

### Meet TriMark’s New Director of Global Quality Assurance



TriMark is delighted to announce the promotion of Kendra Knowlton to Director of Global Quality Assurance. Kendra is an 18 year veteran of TriMark and brings extensive experience in managing change across all areas of the company.

Kendra’s experience includes internal ISO auditor, implementation of the document control portion of the ISO Quality standard, being a charter member of TriMark’s RISC (Rapid Improvement Superior Commitment) team, setting the direction and deployment of TriMark’s Continuous Improvement efforts. Kendra completed her Six Sigma Black Belt training in September of 2003 and received the Tiger Award for Outstanding Performance. Working as a Black Belt for the past 7 years, she is passionate about continuous improvement of TriMark’s business processes and systems. In

## Off-Road Access Solutions

In September 2008, *OEM Off-Highway* magazine ran an article titled, [Access Granted – The expanding world of electronics offers convenience and safety benefits to access systems on off-road equipment.](#) The article covered all facets of how modern electronics is being integrated into the world of heavy equipment and what that means to the OEMs and operators of that equipment. While not so many years ago available electronics for access systems was something that was an “add-on” with little thought given to integration. This story makes the point that in today’s (2008) world it is more than likely that the access system electronics are being designed into the equipment or at least there is more of an accommodation for the future.

In this article, Dave Magner, TriMark’s advanced new products engineer, states, “With the use of electronics and the RFID (radio frequency identification) technology, end-users can have an inexpensive way to have both convenience and security at the same time.” While this story focused on off-road applications, TriMark has been designing and manufacturing electronic access solutions for on-road – trucks, RVs, utility vehicles and specialty vehicles – for many years.

### Overview

In this issue of the newsletter we will give you a broad overview of TriMark’s approach and involvement with the application of electronics to innovative access solutions. In future issues, we will “drill down” to specific products and applications and we will also take a look at the future when we look at some new products and technologies currently in development.

There are really three primary benefits to be derived from the application of electronics in access systems whether they are for on or off-road markets. Those benefits are:

- Security
- Safety
- Convenience

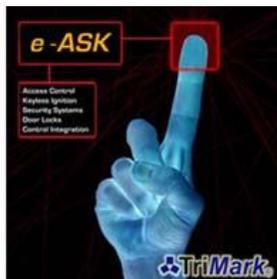
### Security

In the same *OEM Off-Highway* article referenced above, it was reported that a recent survey found that 70% of the respondents felt that, “security of the equipment was very or extremely important when considering purchasing equipment, and 38% rated the importance of electronic entry access very or extremely important.” Whether in off-road or on-road configurations, security is fast becoming an issue with more expensive electronics in the cab.

### Safety

If you’ve ever stood next to a large piece of equipment you realise almost immediately that just entering and exiting the equipment can present challenges and safety concerns. If a door can be opened remotely then the operator has both hands available to make a safe transition from the ground to the cab. Also, activation of the equipment lights can provide a safe path for an operator to approach the equipment when it is parked on rough ground.

### Convenience



The automotive industry really sets the pace when it comes to the use of keyless entry stems and other electronics. When the operator of a heavy truck or a large piece of construction equipment is comfortable in the work environment they are going to approach their work with a more positive attitude which makes them more productive.

In our next installment on electronics we will take a closer look at the wide range of current products such as TriMark’s exclusive eASK (Electronic Access & Security Keyless-entry) system. Here’s a quick example of just one of TriMark’s e-

FOB products:

### 530-0100 e-FOB Transmitter

Several options are available for e-FOB’s that are compatible with most TriMark eASK keyless entry systems:



addition, Kendra has led several process improvement project teams promoting the spirit of Lean, Kaizen and Six Sigma methods in both office and manufacturing environments.

Kendra's new responsibilities include leading TriMark's Global Quality Teams on a worldwide basis. Kendra will play a critical role in defining and leading the quality assurance strategy across all of TriMark's manufacturing locations in the US, UK and China. Kendra has a BA degree in Management from the University of Northern Iowa.

**Tradeshows**



[Con Expo 2011](#)

March 22-26, 2011  
Las Vegas Convention Center  
Las Vegas, Nevada

**EDITOR'S NOTE: If you would like to send a copy of this e-newsletter to a friend, colleague or associate, the *Send to a Friend* link at the bottom of this newsletter is a convenient method for providing them with their own personal copy.**

**Newsletter Suggestions**

- Value priced 2 button FOB and 2 button wall mount provides freedom and convenience of placement for remote.
- 2 Button key head FOB packages the ignition key inside the FOB for convenience
- 4- Button FOB (shown) is available in a standard and a cargo mode to allow for either traditional automotive features or independent control of main entrance vs. compartment doors. A sustained mode is also available that provides a continuous output control for various auxiliary functions.
- Functional customization for controlling many auxiliary features or equipment, such as motor control, lighting, hydraulics or pneumatics.
- High security – code hopping technology offers reliable radio frequency (RF) transmission and is FCC-Part 15 certified.
- Durable design that is compliant for on-road or off-road environments and demanding end users.
- Customized e-FOBs possible (Specialised styling/tooling or buttons and logos graphics)

Upgraded systems can include other user interfaces, such as keypads or RFID and additional security system peripherals. Kits are available and can include handles, latches and electronic accessories including custom wiring harnesses, relays, switches, door contacts, actuators, mounting hardware, sirens and lighting to provide a comprehensive electro-mechanical access solution.

## Off Highway Challenges – Latching Solutions for Tier 4 Enclosures

Marking the introduction of Tier 4 emissions standards for off-road engines in 2011, design engineers are facing yet another challenge in a never ending line of hurdles - the packaging of diesel exhaust after- treatment systems and the integration of those packages into off-highway equipment.

More than just emissions standards, Tier 4 translates into complete machine redesign, resulting in lengthened frames, movement of counterweights, revised driveline components, managing airflow and noise emissions, and forcing revisions to hood and access panels. The timeline and budget for Tier 4 integration is pushing the limits which leaves engineers searching for every opportunity to provide packaging solutions while trying to hold the line or reduce costs.

Some of the challenges faced by our OEM partners involve applications where multiple latches are needed to secure an access panel or a slam latch will not work because of heavy door seals. Because TriMark's latching and fastening solutions are designed to ensure rugged durability in off-highway's demanding conditions, many times those solutions are already at hand.



As a long-time partner with many of the off-road OEM's who are working to address these challenges, TriMark has been providing application assistance, easing the burden on OEM engineer's time searching for the right access solutions. We continue to demonstrate that we have the experience and product selection for heavy applications to solve enclosure latching and locking requirements, within budget and schedule.

For more information regarding TriMark's solutions for Tier 4 latching challenges or to learn more about TriMark's complete door system offerings, [email us with "Tier 4 Europe" in the subject line.](#)

---

TriMark Corporation  
500 Bailey Avenue  
PO Box 350  
New Hampton, IA 50659

Tollfree: 1-800-447-0343  
Phone: 1-641-394-3188

Fax: 1-641-394-2392

Email: [tips@trimarkcorp.com](mailto:tips@trimarkcorp.com)

Visit us on the web at [www.trimarkcorp.com](http://www.trimarkcorp.com)

This e-newsletter is a service of TriMark Corp. and is produced by [The Bearings Group](#)