



## Blasting Alert



**This blasting hazard alert pertains to Orica Uni tronic™ 500 electronic detonators date coded before November 15, 2009. Orica has issued a recall of these detonators. The Orica recall notice is included as part of this blasting alert.**

Since 2006, there have been six unplanned detonations involving the use of the Orica Uni tronic™ electronic detonator blasting system. Four of the unplanned detonations occurred at surface mines in the United States and two occurred at surface mines in Australia. Four of the unplanned detonations occurred upon the act of aborting the programming sequence and two occurred during programming of the detonators. The last unplanned detonation was in December 2009 at a surface coal mine in Alabama. The mines were using the Orica Uni tronic™ blasting system to set-up the blasts, check the circuitry, program and arm the electronic detonators for blasting, and to detonate the round. In each instance, once all personnel were off the blast area and at a point of safety (blast area secured), the blaster connected the circuit to the Orica Blast Box and then began the detection and programming process. While the detonators were being programmed or if an abort command was issued, one of the blast holes unexpectedly detonated. No injuries or property damage were reported.

The investigations of these incidents have determined the unplanned detonations occurred most likely because of faulty or damaged electronic devices on the electronic detonator boards used as an internal component of the Uni tronic™ 500 electronic detonator. Orica upgraded all Blast Boxes with a controlled abort procedure in July 2008 and with more than five million electronic detonators sold since then, there has not been an unplanned detonation during an abort. To address the unplanned detonations during programming, Orica implemented an enhanced test protocol in August 2009 to detect circuit boards in its manufacturing process that may have a faulty or damaged electronic device. Since implementing this new testing protocol, there has not been an unplanned detonation during the programming sequence using the tested electronic detonators in over one million that were sold.

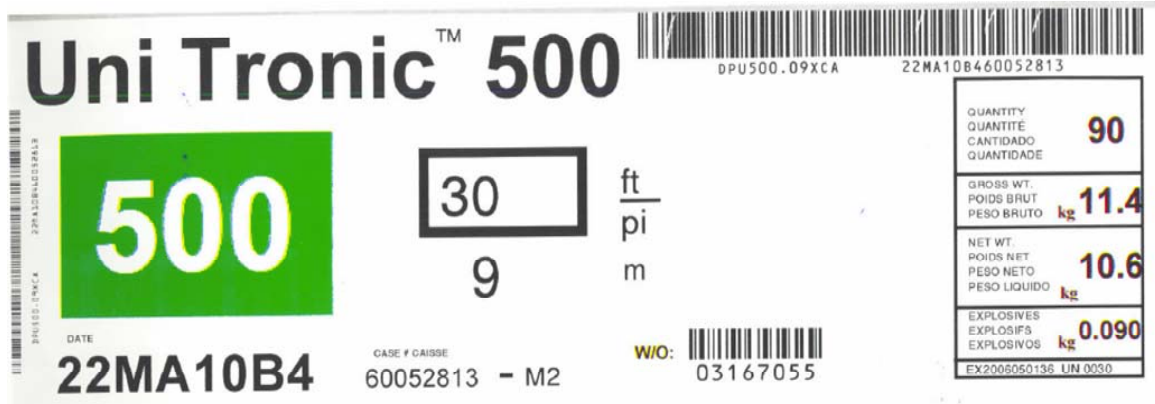
Means of identification to determine Uni tronic™ 500 electronic detonators date coded before November 15, 2009, are indicated in Figure 1 and 2. Figure 1 illustrates the Uni tronic™ 500 electronic detonator with a Flag Tag Code Date. The Flag Tag Code Date as shown in Figure 1 is read as YY MM DD (year-month-day) or September 18, 2009. Figure 2 illustrates a carton of Uni tronic™ 500 electronic detonators. The date code shown on the carton label in Figure 2 is read as DD MM YY or March 22, 2010 with the following two characters indicating the manufacturing location and country into which the detonators are imported.

Figure 1 --- Uni tronic™ 500 Electronic Detonator showing Flag Tag Date Code



Figure 2 – Carton of Uni tronic™ 500 electronic detonators showing date code

Uni tronic™ 500 Case Label



Case Code Date: Week of manufacture  
Format: DDMMYY

# Alert Bulletin

## Product Recall – Uni tronic™ 500 Electronic Detonators Date Code :15NO09B4 and before



Product Involved:	Uni tronic™ 500 Electronic Assemblies
Date Code:	15NO09B4 and earlier date codes
Assembly Length:	All length assemblies
Region:	North America
Reason for the Alert:	Product Recall
Issue with Product:	Unplanned detonation
Bulletin Issued on:	May 5, 2010

Effective May 5, 2010, Orica is recalling all Uni tronic™ 500 assemblies with date code 15NO09B4 and prior throughout North America. Orica continues to believe there is not a threat of injury or likelihood of property damage given the associated blast procedures which strictly follow Orica's UT Basis of Safety. However, at MSHA's request, we are conducting a product recall.

Since 2006, over 7 million Uni tronic™ assemblies have been safely used without any incidences of personal injury or property damage. However, there have been six unplanned detonations world wide. Four of the unplanned detonations occurred upon the act of aborting the programming sequence and two occurred during programming of the detonators. An investigation surrounding the aborted programming incidents resulted in an upgrade to the Blast Box. There has not been an unplanned detonation during an aborted programming procedure in over 5,000,000 Uni tronic™ 500 detonators since the Blast Box upgrade was instituted. To address the two incidents with unplanned detonation during the programming cycle, Orica has implemented an enhanced test protocol to detect faulty devices. Since implementing this new testing protocol, there has not been an unplanned detonation during the programming sequence using the tested electronic detonators in the over 1,100,000 Uni tronic™ 500 detonators sold since.

As a safety leader, Orica is committed to *No Injuries to Anyone Ever* and incorporates this commitment into all its products and procedures. Orica's UT Basis of Safety on a blast site requires that the blast area be cleared and guarded before sufficient energy to fire a detonator is applied and these safety guidelines were successfully implemented in each of the incidents above. A safety feature built-in to the Uni tronic™ 500 system is that the Uni tronic™ Network Tester and Scanner for use on bench equipment have neither the sufficient voltage nor current to fire a detonator regardless of the fault conditions that may exist within the detonator. Although the combination of Orica's UT Basis of Safety on blast sites coupled with the safety features built into the Uni tronic™ 500 system provide a very safe operating condition, Orica has decided to take the added step of recalling all Uni tronic™ 500 assemblies that have not been subjected to the additional test protocol as an additional safety measure.

### Actions Required

- **Quarantine.** Quarantine all Uni tronic™ 500 assemblies with a date code of 15NO09B4 and earlier and appropriately label them for non use.



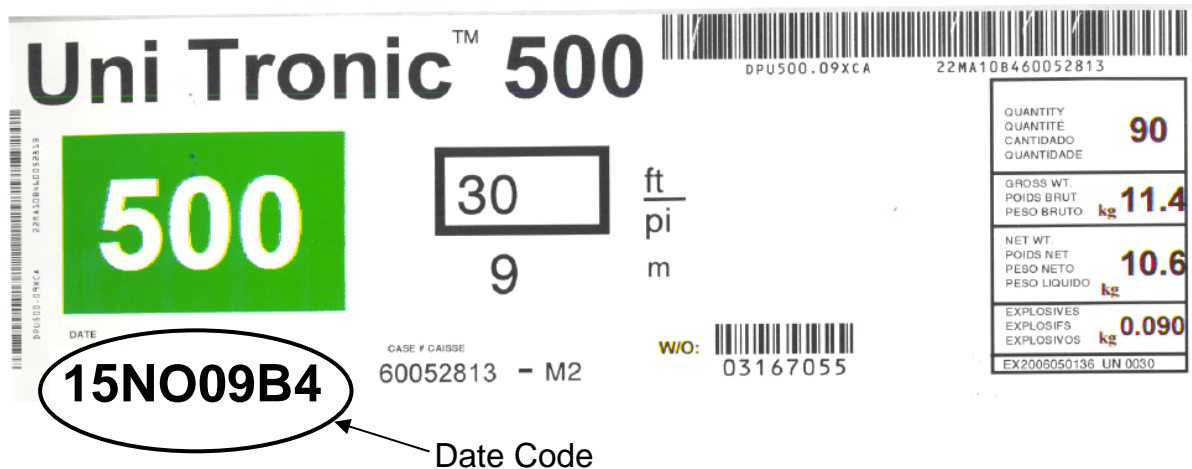
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## Product Recall – Uni tronic™ 500 Electronic Detonators Date Code :15NO09B4 and before

- **Contact CST.** Contact your Orica Client Support Technician to advise us of any partial cases and make arrangements for the return of all the full cases to Orica Brownsburg.
- **Destroy Partial Cases.** Because of the regulatory requirements around shipping opened cases, please safely destroy all partial cases after notifying your CST representative.

Orica will issue a full credit for all returned or destroyed product.

The illustration below shows where the date code can be located on the case label.



If there are any questions regarding this Alert Bulletin please contact either Joseph Haid, located at Watkins, Colorado, USA (Tel: 303-268-5220) or Royden Brown, located at Brownsburg, Quebec, Canada (Tel: 450-533-1340).

Regards,

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