



## Meritor Wabco Vehicle Control Systems

(Please save your work.)

## Equipment Report

Transaction No.: 14-005341-15900-10

Required fields indicated with \*

### Manufacturer: Meritor Wabco Vehicle Control Systems

2135 West Maple Road  
Troy MI 48084[Anne Balkcom](#) Director, Quality & Compliance  
248-435-6604,

This is a Safety Defect Report.

### Equipment Information

#### WABCO Quick Release Valve with Double Check (QRDC) 473 505 003 0

\* **Brand/Trade:** WABCO\* **Model:** Quick Release Valve with Double Check (QRDC)**Production Dates** Begin: 02/06/2013

End: 04/19/2014

\* **Part No.:** 473 505 003 0**Size:****Function:**

PARKING BRAKE

**Descriptive Information:**

Suspect quick release valves with double check (QRDC), part number 473 505 003 0, are identified with date codes between 1813 through 1614. The QRDC is an air brake system control valve utilized in heavy duty, commercial vehicle braking system applications to control the parking/emergency spring brakes. During normal vehicle operation, when the yellow knob on the dash valve is pressed in, the QRDC supplies air pressure to compress the spring in the brake actuators and release the parking/emergency spring brakes. This quick release valve is normally subject to full system air pressure. The diaphragm seals the exhaust to hold off the parking brake spring and so results in a much higher duty cycle and normal operating pressures than other similar quick release valves used in service brake applications.

**Number potentially involved:** 3721**Estimated percentage of involved with defect:** 100%

### Defect / Noncompliance Description

For this Defect/Noncompliance:

\* **Describe the defect or noncompliance:**

Certain WABCO quick release valves with double check (QRDC), part number 473 505 003 0, identified with date codes between 1813 through 1614 could have a potentially defective valve seat installed. Sharp edges on valve seat ribs may damage the rubber diaphragm in the valve over time causing leakage levels through the diaphragm in excess of permissible specifications. This increase in leakage levels could exceed the capacity of the compressor and reduce pressure in the air tanks. The increased QRDC valve leakage and reduced air pressure levels could eventually progress to the point that vehicle braking performance could be degraded or parking/emergency brakes could begin to reapply.

**If a noncompliance, provide the applicable FMVSS:****Describe the cause:**

Sharp edges and flash on valve seat ribs were produced from a single cavity tool and not properly removed during manual deflash operation.

**This Recall affects all vehicles.**\* **Describe the safety risk:**

If this condition is not detected and normal warnings are not heeded, it could eventually affect the performance of the vehicle's braking system, increasing the risk of a vehicle crash.

**Identify any warning which can precede or occur:**

Higher QRDC leakage can be detected by driver as a an audible leak when park brake is released and may result in noticeably prolonged or frequent air compressor run time. Commercial vehicles are equipped with air pressure dash gages and low pressure warning indicators and most include park brake warning indicators.

If applicable, identify the manufacturer of the defective or noncompliant component. If the manufacturer of the component is unknown, provide the information for the company that supplied the subject component.

Component manufacturer

Company Information

**Company Name:** WABCO**Country:** India

**Address 1:** Auto Ancillary SEZ, Nattham Sub Post  
**Address 2:** Mahindra World City, Chenglaput  
**City:** Tamil Nadu, IN  
**State:** FOREIGN STATES  
**Zip/Postal Code:** 603002  
 Company Contact Information

**First Name:**  
**Last Name:**  
**Position:**  
**Email:**  
**Phone:**

#### Purchaser Information

**Company:** Peterbilt Denton  
**Country:** United States  
**Address 1:** 3200 Airport Rd.  
**Address 2:**  
**City:** Denton  
**State:** TEXAS  
**Zip/Postal Code:** 76207  
**First Name:** Rod  
**Last Name:** Curbo  
**Position:** Peterbilt Product Safety & Compliance Manager  
**Email:**  
**Phone:** 940-566-7771

**Company:** Daimler Trucks North America LLC  
**Country:** United States  
**Address 1:** 4747 N Channel Avenue  
**Address 2:**  
**City:** Portland  
**State:** OREGON  
**Zip/Postal Code:** 97217  
**First Name:** Nasser  
**Last Name:** Zamani  
**Position:**  
**Email:**  
**Phone:** (503) 745-6910

**Company:** KENWORTH MEXICANA SA DE CV  
**Country:** United States  
**Address 1:** 10630 NE 38th Place  
**Address 2:**  
**City:** Kirkland  
**State:** WASHINGTON  
**Zip/Postal Code:** 98033  
**First Name:** Gordon  
**Last Name:** Lance  
**Position:** Product Safety and Compliance Engineer  
**Email:**  
**Phone:** (425) 828-5505

**Company:** Spartan Motors, Inc  
**Country:** United States  
**Address 1:** 1165 Reynolds Road  
**Address 2:**  
**City:** Charlotte  
**State:** MICHIGAN  
**Zip/Postal Code:** 48813  
**First Name:** Wes  
**Last Name:** Chestnut  
**Position:**  
**Email:**

**Phone:** 517-543-6400 x3275  
**Company:** J.B. Hunt  
**Country:** United States  
**Address 1:** 705 North Bloomington  
**Address 2:**  
**City:** Lowell  
**State:** ARKANSAS  
**Zip/Postal Code:** 72745  
**First Name:** Tommy  
**Last Name:** Cottingham  
**Position:** Director of Maintenance  
**Email:**  
**Phone:** 479.283.7489 (C)

### Chronology of Defect / Noncompliance Determination

**Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.:**

July 22, 2014: Meritor WABCO was contacted by a carrier regarding leaking QRDC valves (audible) and began investigation. August, 2014: Analysis of plastic valve seat found sharp edges and flash on valve seat ribs as other potential causes were eliminated. Sept. 12, 2014: Laboratory evaluation indicated sharpness of plastic valve seat ribs could cut the diaphragm. Sept. 14, 2014: Meritor WABCO contained (quarantined) all parts with date codes before 1714 (1106 parts) in Hebron facility. Oct. 1, 2014: Additional tests confirmed root cause and validated corrective action. Oct. 17, 2014: Meritor WABCO and WABCO jointly decided to conduct a voluntary safety recall on certain QRDC valves even though slower diaphragm degradation associated with this defect (failure mode) should normally allow driver ample warning to arrange repair. There have been no reports of incidences related to this condition.

### Identify the Remedy

**Describe the defect/noncompliance remedy program, including the manufacturer's plan for reimbursement.**

Meritor WABCO will reimburse inspection and replacement of suspect QRDC valves with date codes between 1813 through 1614 with WABCO original equipment QRDC valves at certified dealers at no cost to the vehicle owner. Copies of the reimbursement plan will be submitted with draft customer notification letter.

**Describe what distinguishes the remedy component from the recalled component.**

Suspect QRDC valves are identified with date codes between 1813 through 1614 (week 16 of 2014). Replacement QRDC valves have a date code of 1714 (week 17 of 2014) and higher.

**Identify and describe how and when the recall condition was corrected in production.**

The tool originally used to produce the plastic valve seat was changed from a single cavity tool to double cavity that eliminated the manual de-flashing operation on March 14, 2014. Valves assembled from week code 1714 onward contain plastic valve seats after this tool change that eliminates the sharp edges and flash on the valve seat ribs.

### Identify the Recall Schedule

**Describe the recall schedule for notifications.:**

Meritor WABCO will notify affected OEM customers by end of October, 2014 including service instructions. Additional stock of replacement WABCO original equipment QRDC valves to support campaign is expected to be available in late November.

<b>Planned Dealer Notification Begin Date:</b>	12/12/2014
<b>Planned Dealer Notification End Date:</b>	12/12/2014
<b>Planned Owner Notification Begin Date:</b>	12/12/2014
<b>Planned Owner Notification End Date:</b>	12/12/2014
<b>Manufacturer's identification code for this recall (if applicable):</b>	C15AA

Please be reminded that owner notification letters must be mailed no more than 60 days from submission of this report.

### Manufacturer Comments to NHTSA Staff

### Document Upload

There are 0 documents associated with this report.

1200 New Jersey Avenue, SE, West Building Washington DC 20590 USA 1.888.327.4236 TTY 1.800.424.9153

This application works best in IE9 and above and recent versions of Firefox, Chrome and Safari