

New 2nd generation Vario Compact ABS System for trailer vehicles (VCS II)

Overview:

- What is new?
- System variants
- Diagnostics
- VARIO C + VCS I service



Today, a total of almost one million systems sold has contributed to the VCS being one of the most successful WABCO products in the range of trailer equipment. To sustain and expand this position in the age of evergrowing automation, WABCO has developed VCS II. Here, once again the modular principle is implemented because the VCS II technology is based on TCS II, the extremely robust ABS system for the North American market.

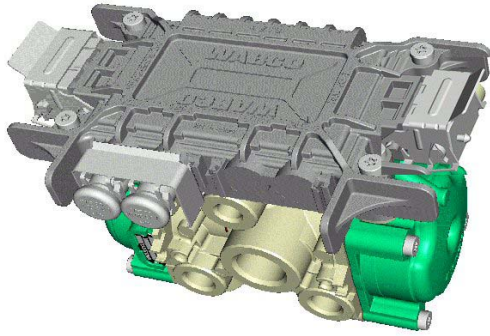
Moreover, the CAN data bus capability and the 8-pole connector principle of the T-EBS have been integrated. These efforts produced another powerful system of a smaller size and considerably lower weight compared with its former model.

What is new?

- lower weight \Rightarrow 2.3 kg (VCS I = 3.3 kg)
- smaller (mounting) size \Rightarrow by more compact model size 146 x 190 x 128 mm (VCS I = 172 x 248 x 340 mm)
- lapse of solenoid cables for modulators B and C \Rightarrow ECU mounted on dual channel modulator with internal connection to the solenoids
- 8-pin plug system \Rightarrow as successfully used with T-EBS and TCE
- Brake pad wear monitoring (optional)
- 3 extra electrical in/out ports (Generic IOs) \Rightarrow e.g. for brake pad wear monitoring, a speed-related switch or for other customized functions
- Truck - trailer interface (CAN to ISO 11992) \Rightarrow e.g. for plain text info for brake pad wear or ABS failure definition in an accordingly equipped motor vehicle

System variants

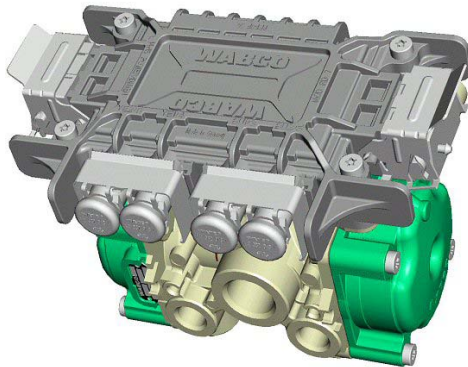
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Standard 400 500 070 0

2S/2M
ISO 7638 (24V)
ISO 1185 (supply by stop light / 24N)
Generic IO D1 / D2
Diagnostics via diagnostic plug

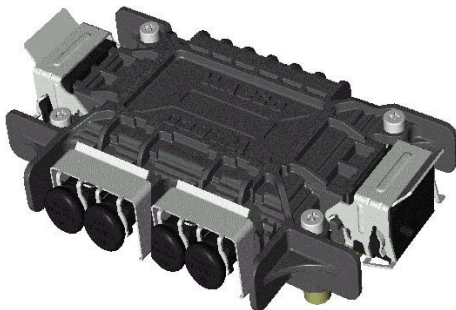
Application: semitrailer / central axle trailer
(optional with ECAS or ELM)



Premium 400 500 081 0
400 500 082 0 (painted)

2S/2M – 4S/3M
ISO 7638 (24V)
ISO 1185 (supply by stop light / 24N)
CAN (ISO 11992)
Ext. ABS relay valve (3rd modulator)
Generic IO D1 / D2 / A1
Diagnostics via diagnostic plug

Application: universal
(optional with ECAS or ELM)



Separate ECU 446 108 085 0

2S/2M – 4S/3M
ISO 7638 (24V)
CAN (ISO 11992)
External ABS relay or solenoid control valves
Generic IO D1
Diagnostics via supply plug

Application: special-purpose vehicles
(optional with ECAS)

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System package for 3-axle semitrailers (4S/2M):

VCS II PREMIUM	1x	400 500 081 0
Supply cable, 5-pin (12 m)	1x	449 125 120 0
Diagnostic cable (6 m)	1x	449 615 060 0
Sensor extension cable (3m)	4x	449 712 030 0
Sensor set (drum brake)	4x	441 032 921 2

System package for 2-axle drawbar trailers (4S/3M):

VCS II PREMIUM	1x	400 500 081 0
ABS relay valve (3rd modulator)	1x	472 195 031 0
Supply cable, 5-pin (10 m)	1x	449 225 100 0
Diagnostic cable & 3 rd modulator (6 m / 8 m)	1x	449 616 293 0
Sensor extension cable (3m)	2x	449 712 030 0
Sensor extension cable (10m)	2x	449 712 100 0
Sensor set (drum brake)	4x	441 032 921 2

Diagnostics

The VCS I diagnostic units can be used further to support the reading and clearing of the diagnostic memory and some of the function tests. However, to have access to the entire scope of diagnostic functions, startup and, specifically, the new functions, the VCS II diagnostic software is required.

As a subscriber, you already have the option to load some language variants of the software in the Downloads / Diagnostic Software area under www.wabco-auto.com.

Diskette versions are available for the following languages:

446 301 508 0 / de
446 301 510 0 / en
446 301 511 0 / fr
446 301 512 0 / it
446 301 513 0 / es

N.B.

To start up the software or set the special-function parameters, you first need to enter a PIN to enable the diagnostic functions. A PIN can be applied for after taking part in a current ABS training.

VARIO C and VCS I service

The new-generation VCS II has been introduced to the market since the beginning of 2004. It replaces the former systems, VARIO C and VCS I. VCS II is fully VCS I compatible and, like its predecessor, is an A-category ABS compliant to all requirements of ECE R 13 and/or 98/12/EC. A cabling adaptor will be available to serve the needs of the new connector system whenever a VCS I is to be replaced with a VCS II. Another prerequisite is a VCS II supply cable with a bayonet connection, depending on the vehicle configuration. These components allow an existing VCS I to be replaced with a new VCS II.

The adaptor cable will be available approx. as of 3rd quarter 2004 (order no. 894 607 811 0).

Some major commercial variants of VARIO C and VCS I (see list below) will be available up until the end of 2005 to just serve as spares for existing systems.

VARIO C:	446 105 023 0 (fording ability, 2S/1M...6S/3M)
	446 105 031 0 (Standard, 2S/1M...6S/3M)
	446 105 051 0 (VARIO C+, 2S/1M...6S/3M)
VCS I :	446 108 031 0 (VCS+, 2S/1M...4S/3M)
	446 108 032 0 (2S/1M...4S/3M and retarder)
	446 108 035 0 (mixed supply / 24 N, 2S/1M...4S/3M)
	446 108 050 0 (12 V, 2S/1M...4S/3M)

⇒ *New vehicles should be equipped with a VCS II system!*

To learn more about VCS II, please contact your WABCO Partner or browse our site at www.wabco-auto.com for the INFORM area.