Sales Documentation

Doc. No. CVD0375 (EN- Rev. 001)

PRODUCT CATALOGUE

Knorr-Bremse Australia & New Zealand

KNORR-BREMSE

TRUCKSERVICES

Disclaimer

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Knorr-Bremse Australia

Knorr-Bremse is the global market and technology leader for braking systems and a leading supplier of other safety-critical rail and commercial vehicle systems. Knorr-Bremse's products make a decisive contribution to greater safety and energy efficiency on rail tracks and roads around the world.

With design, marketing and servicing centres, the range is represented in over 30 countries around the world including Australia, employing over 33,000 people globally and 450 people in Australia. As a technology leader, through its products the company has been making a decisive contribution to greater safety by road and rail since the company was founded in Germany in 1905.

Knorr-Bremse Australia was founded in 1987. In 2013 the Knorr-Bremse Group celebrated the inauguration of its new braking systems, doors and HVAC plant in Granville. In 2024, the Commercial Vehicles Division in Australia moved our production space from Granville to Dandenong South, increasing the total warehousing space available to service a growing heavy vehicle transport industry. The Knorr-Bremse Australia Rail, Mining and Industrial divisions still reside and continue to grow at the Granville Head Office in Sydney.

Knorr-Bremse Brands

The Knorr-Bremse group includes a wide range of corporate brands under a single logo and brand identity. In recent decades, Knorr-Bremse has developed continuously from a braking system manufacturer to a system supplier that creates added value for its customers beyond product boundaries. Both Knorr-Bremse Commercial Vehicles in Europe and Asia Pacific, and Bendix Commercial Vehicle Systems LLC North America, are held under Knorr-Bremse AG with headquarters based in Munich, Germany.

In Australia and New Zealand, the Knorr-Bremse Commercial Vehicles Systems division looks after and supports the following brands.

Knorr-Bremse

The Commercial Vehicles Systems division of the company offers system components for trucks, buses, trailers and agricultural machinery. Knorr-Bremse is a leader in brakes, electronic braking controls, driver assistance systems and air supply systems. In this way, Knorr-Bremse makes a key contribution to road safety.

Bendix Commercial Vehicle Systems LLC

Bendix Commercial Vehicle Systems LLC develops and delivers advanced driving safety technologies and energy management solutions for North American vehicles. Producing state-of-the-art air supply and braking systems, as well as components for medium and heavy-duty commercial vehicles, trailers, buses and other commercial vehicles, under the brand name Bendix®.

TruckServices

The TruckServices brand looks after our aftermarket offerings and services. Providing access to an extensive network of service partners and quality replacement parts, TruckServices ensures that you are supported throughout the lifetime of your Knorr-Bremse products.

Knorr-Bremse Japan

In 1996, JKC Truck Brake Systems was established in Japan as a joint venture between Allied Signal, JKC and Knorr-Bremse, later to become Knorr-Bremse Commercial Vehicle Systems Japan Co. Ltd. in 2001. Knorr-Bremse Japan offers a wide range of brake system components for Japanese produced vehicles with air supply, air treatment, brake control, chassis management, foundation brakes and brake chambers. Knorr-Bremse Japan is serving Japan's leading vehicle manufacturers such as Hino, Isuzu, Mitsubishi Fuso, Toyota, UD Trucks and Volvo with a strong After Market Sales & Service Network across the country. For more information regarding our Japanese offerings, contact your local Knorr-Bremse representative.

TruckServices

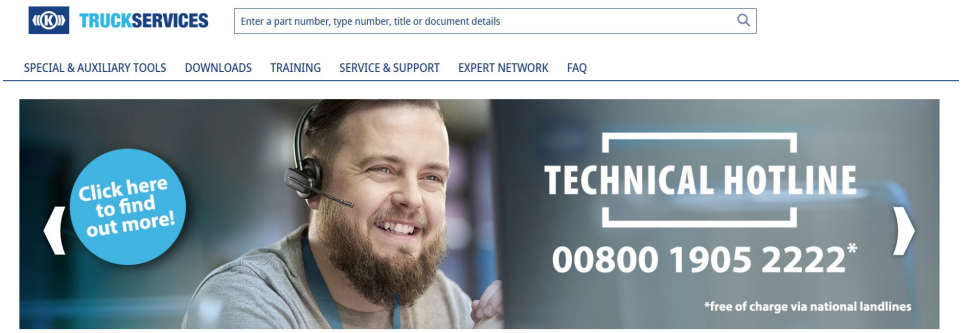
The TruckServices brand significantly expands Knorr-Bremse's portfolio for distributors, workshops and fleet operators. As the aftermarket brand of Knorr-Bremse, we supply vehicle owners, workshops and distributors with high-quality products and service solutions for commercial vehicles of all kinds and ages.

Fleet operators can rely on rapid and professional local assistance from the workshops and mobile partners that make up Knorr-Bremse's Expert Network.

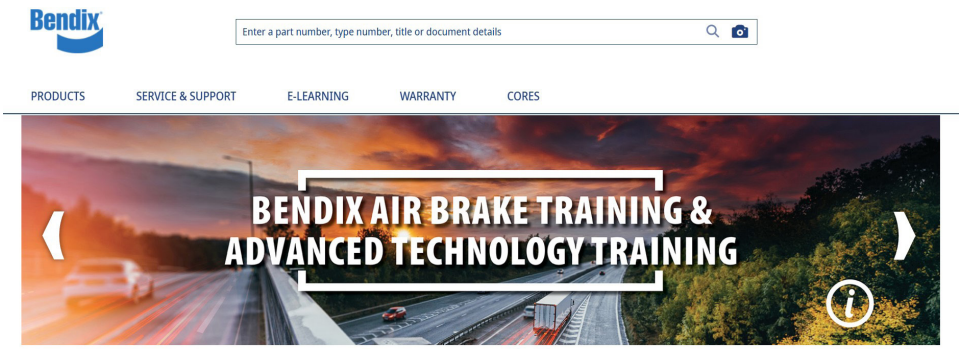
Parts can be purchased in Australia or New Zealand via Knorr-Bremse distributors or Expert Network partners. Fleets and operators should contact Knorr-Bremse TruckServices partners directly for part availability and pricing. This catalogue includes a range of the most common truck and trailer components, as well as retrofit kits available in the aftermarket.

The myTruckServices or B2Bendix websites can be utilised for further information on parts, part numbers and technical documentation. Brake-School.com by Bendix provides access to free online training and videos.

Currently the TruckServices Catalogue provides part number identification on key North American truck and trailer components utilised and supported in Australia and New Zealand. For European components, refer to the Knorr-Bremse mytruckservices.com website or specific European truck catalogues. Some Bendix North American truck components may only be sourced directly from the truck manufacturer such as chassis specific brake control units.



TruckServices Website



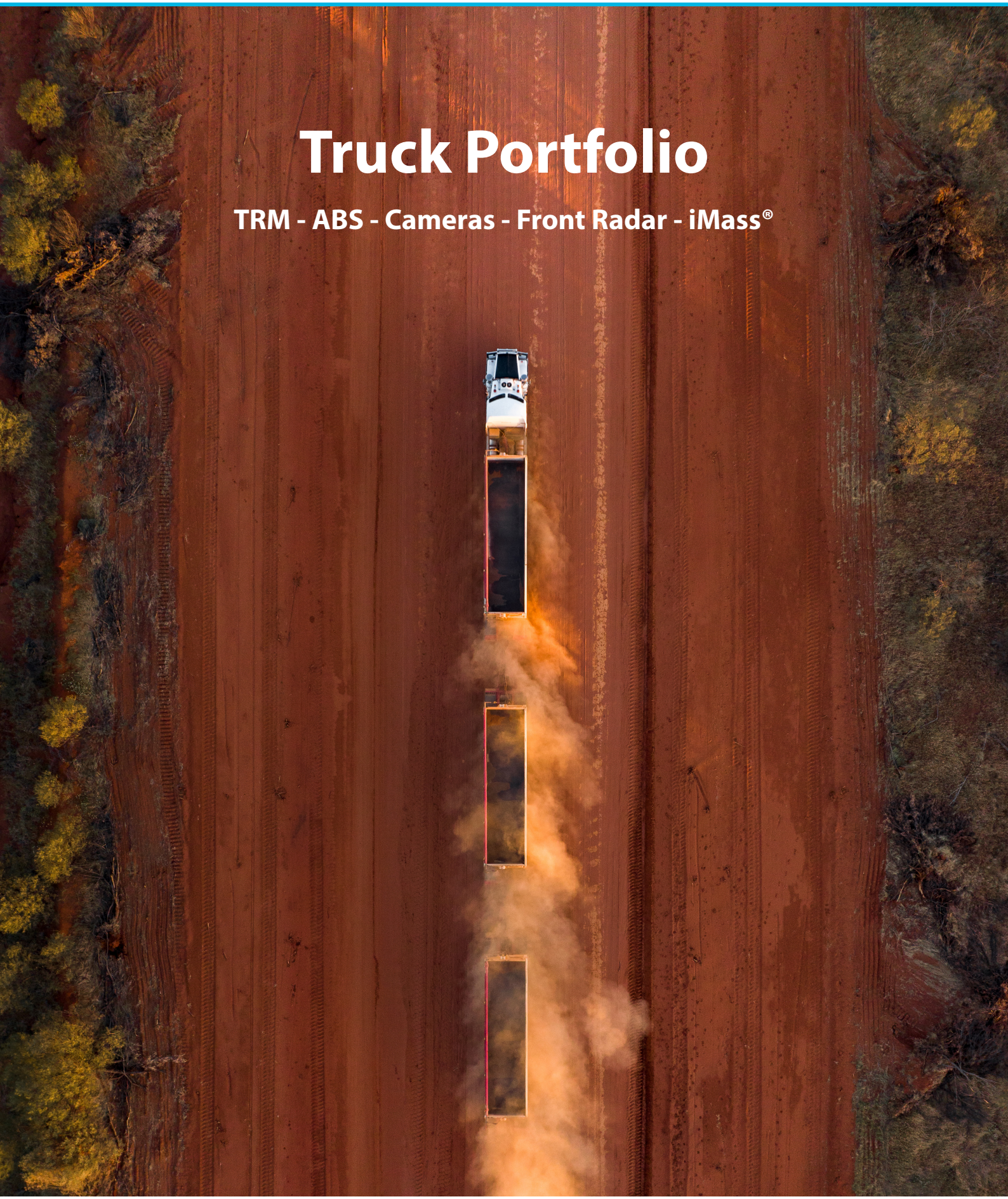
B2B Bendix Website

Drive School Website

December 2025
Doc. No. CVD0375 (EN- Rev. 001)

Truck Portfolio

TRM - ABS - Cameras - Front Radar - iMass®



KNORR-BREMSE

TRUCKSERVICES

TRM (Trailer Roadtrain Module) for Truck Retrofit Kits

The Knorr-Bremse Trailer Roadtrain Module (TRM) enables trucks that do not have an Electronic Braking System (EBS) to communicate with compatible Trailer Electronic Braking Systems (TEBS). The TRM system converts the pneumatic brake signal from the foot brake valve and reproduces it into an electronic braking signal required by TEBS units when installed on a non-EBS truck. The TRM provides quicker brake response times for electronically braked trailer combinations compared to those with conventional brake systems.

Why fit the TRM for Truck Retrofit Kit?

A Trailer Electronic Braking System (TEBS) is controlled by an electronic signal generated by a truck that is transmitted through a CAN line to a TEBS unit on the trailer. When a truck not fitted with an Electronic Braking System (EBS) is towing a TEBS equipped trailer, only a traditional pneumatic brake signal is used to control the trailer. This means that the improved braking response available from the TEBS via utilising electronic braking signals is lost!

The TRM for Truck Retrofit Kit will measure the pneumatic control line pressure for the trailer from the foot brake valve and generate an electronic representation of this value on the ISO11992 CAN bus. Because this electronic brake signal is considerably faster than the conventional pneumatic signal when transmitted over long distances, the brake apply and release times of a connected trailer or combination of trailers with compatible Trailer EBS will be significantly improved and stopping distances can be reduced.

TRM can be fitted onto a wide variety of truck brands and provides a CAN signal compatible with all brands of Trailer EBS. To ensure compatability in your vehicle combination, contact your local Knorr-Bremse representative.

TRM (Trailer Roadtrain Module) for Truck Retrofit Kits

Fig. 1

Part Number	FIG.	Description	Application
CV3241 *	1	Trailer Roadtrain Module	TRM (Trucks with Sensors)
CV2122		TRM Retrofit Kit	12V
CV2123		TRM Retrofit Kit	24V

*Pre-Programmed. Please order for part replacement only. Purchase applicable kit for retrofit.

Truck, TRM and Trailer Compatibility

Truck Voltage	Trailer EBS System		
	12 Volt	24 Volt	Multi Volt
12V	Not Suitable *	Not Suitable	Suitable
12V with Inverter	Not Suitable *	Suitable **	Suitable
24V without EBS	Not Suitable *	Suitable	Suitable
24V with EBS	Not Suitable *	Not Required ***	Not Required ***

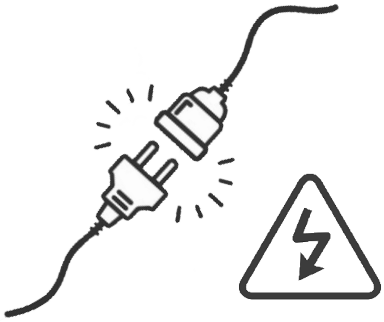
*12V trailer systems are not true EBS as they cannot handle necessary ISO11992 CAN messages between truck and trailer.

**A power inverter is required to be fitted before the TRM unit to convert the input voltage to 24V.

***CAN already supplied by the truck, TRM not required.

INFORMATION SHEET

VOLTAGE COMPATIBILITY ISSUES



In Australia, a rich variety of commercial vehicles can be found on the roads, including trucks from the United States, Europe, and Japan. This diverse transportation fleet incorporates various technologies, with trucks and trailers featuring both 12V and 24V systems, leading to potential voltage compatibility challenges.

Voltage Drop

On a long vehicle combination with several trailers, the problem of voltage drop occurs. Electrical resistance through long cables and across connectors reduces the voltage down the length of the combination, and electrical components at the tail of the vehicle combination don't get provided with the full voltage from the truck.

This issue is especially prominent with 12V trucks, and it is not uncommon to measure 10V or less at the tail of a B-double combination and even lower voltage on a road train. To ensure correct operation of electronical components, any vehicle combination longer than a B-double is recommended to run on a 24V power supply. For trucks towing road trains, an 24V electrical supply system is a legal requirement from 2022 as per ADR 35/07 (Clause 5.8.2).

Knorr-Bremse Electronic Braking System for Trailers (TEBS) is a multi-volt device that will operate between 9 and 32V. With a 12V truck in a long vehicle combination, it is possible that the voltage drops below the required threshold and the electronic components don't operate as intended due to an insufficient voltage supply.

Ensure Sufficient Voltage Supply to Trailers

To ensure that your TEBS modules on long vehicle combinations work properly, 12V trucks in the fleet can be fitted with a **voltage converter** that supplies the trailers with 24V.

Ensure your truck provides 24V in road train EBS combinations!

ABS Truck Retrofit Kits

An Anti-lock Braking System (ABS) is used to prevent the wheels of a vehicle locking whilst braking. Once a wheel has started to lock then it can no longer transmit the necessary torque for the desired braking and it is also unable to transmit effective lateral forces for steering or cornering, causing the wheels to slide. ABS retrofit kits keep the wheels from locking up, helping to prevent major accidents and providing a much safer driving experience.

Part Number	Description	Application
CV2110	ABS Retrofit Kit	12V Frame Mount ECU

ADR35 05 requires an ABS socket (ISO7638) connection where the truck is used for towing another trailer. This kit also includes this connection

Under VSB6 and the addition of an ABS system to an existing truck requires blue modification plate.

Front Radar Assembly

FIG. 1

OE Part Number	FIG.	Description	Replacement Part Number
K072848R001	1	Front Radar Assembly (FLR 20), Kenworth Wingman Advanced Fusion 2	K248112N001
K113242R001	1	Front Radar Assembly (FLR 21), Mack Fusion 1.0	CV3084
K203521R000	1	Front Radar Assembly (FLR 21), Mack Fusion 2.2	
K288900R000	1	Front Radar Assembly (FLR 21), Mack Fusion 2.2 (Different Bracket)	
K133412R001	1	Front Radar Assembly (FLR 21), Kenworth Fusion 1.0	CV3746
CV3602	1	Front Radar Assembly (FLR 21), Kenworth Fusion 2.2	
CV3739	1	Front Radar Assembly (FLR 21), Kenworth Fusion 2.2	

Front Radar Assembly

FIG. 1

FIG. 2

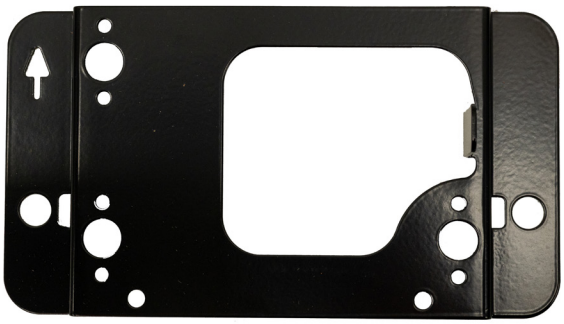


FIG. 3

OE Part Number	FIG.	Description	Replacement Part Number
CV3607 & CV3738	1	Front Radar Assembly (FLR 25), Kenworth Fusion 2.10	CV3709
K236198R000	1	Front Radar Assembly (FLR 25), Kenworth Fusion 3.0	CV3805
	2	Includes 3 x Stand-off Adjuster Assemblies and 6 x Mounting Screws	K073199
	3	Mounting Bracket for Radar (Exempting FLR 25)	K087381

Cameras

FIG. 1

FIG. 3

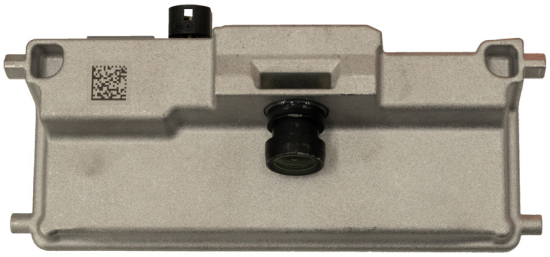


FIG. 2

FIG. 4

OE Part Number	FIG.	Description	Replacement Part Number
CV3620	1	Camera (FLC20), Mack Fusion 1	K129406SC003
K172006R001	1	Camera (FLC20), Mack Fusion 2	K185683SC001
K157891R001	1	Camera (FLC20), Kenworth Fusion 2.2 (Conventional)	K194042SC001
K211713R000	1	Camera (FLC20), Kenworth Fusion 2.2 (Cabover)	K158107SC002
K236199R001	2	Camera (FLC25), Kenworth Fusion 3.0	K236199SC001
K113247	3	FLC20 Bracket	K109285
CV3522	4	FLC20 Camera Cover	

Radar Alignment Tools

Applicable to Mack & Kenworth Trucks with Fusion

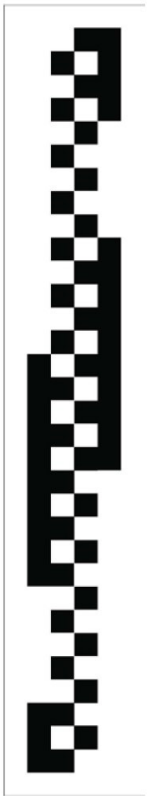


FIG. 1

FIG. 2

FIG. 3

Part Number	FIG.	Description	Application
CV3687	1	SPTAC Target	Camera Calibration, Camera or Windscreen Replacement
K096579*	2	Alignment Tool	Lateral Alignment for Replacement Radar/ Bracket
K073087*	3	Steel Clip	Lateral Alignment for Replacement Radar/ Bracket

* Both K096579 and K073087 plus additional equipment is required to complete alignment process. For instruction on use, see SD-61-4963 Pg. 43.

Knorr-Bremse iMass®

tca Type-Approved™
Smart OBM System (Category B)

The iMass® system, when calibrated, provides accurate mass data within 2% of a certified weighbridge allowing drivers to load their combinations to capacity, reducing the number of trips. This cost effective and reliable system can easily be made available to fleets fitted with Knorr-Bremse TEBS. The iMass® product is TCA Smart OBM Category B Type Approved allowing operators to meet various permit and local requirements for High Productivity Freight Vehicle (HPFV) schemes.

The **only TCA approved Smart OBM system incorporating TEBS** and the existing ISO11992 truck/trailer CAN network.

Easy to use, user-friendly interface with incorporated electronic fault recognition.

Accurate weight data, allowing the driver to maximise their payload, minimising the total number of trips required and **reducing operational costs.**

Highly reliable hardwired system, delivering accurate and **consistent results.**

Increased capability with trailer lift axle detection & road train capable up to 7 trailers.

Easily retrofittable for both European and North American trucks and more **sustainable** due to leveraging off existing hardware.

KNORR-BREMSE TRUCKSERVICES

Vehicle Kits iMass®

Fitment

Vehicle kits must be fitted in accordance with the iMass® Vehicle Installation Manual. This will be provided by Knorr-Bremse Australia on request and is additional to the drawing/schematic included in the Vehicle kit. iMass® vehicle kits should only be ordered for pre-qualified fleet applications. This is to ensure that both the vehicle and trailer can meet the pre-requisites for iMass® fitment and calibration such as air-suspended, drive configuration, vehicle make etc. Contact your local Knorr-Bremse representative to run through the Pre-qualification Checklist.

Calibration and Commissioning

All vehicles fitted with iMass® must be calibrated and commissioned by a Knorr-Bremse Authorised Partner prior to release of the system. This involves calibrating the pressure sensors utilizing NEO ELC5 Software (PIN required). Once calibrated, the iMass® system will meet the accuracy requirements as set out by TCA for a Category B Type Approved Smart OBM System. To maintain type approval, the iMass® system must be calibrated by an Authorised Partner at the specified interval.

Part Number	Description	Application
CV6329	iMass® Vehicle Kit	24V 2 Sensor
CV6342	iMass® Vehicle Kit	24V 4 Sensor
CV6354	iMass® Vehicle Kit	12V 2 Sensor

Trailer Kits iMass®

Fitment

Trailer kits must be fitted in accordance with the iMass® Trailer Installation Manual. This will be provided by Knorr-Bremse Australia on request and is additional to the drawing/schematic included in the related trailer kits for iMass® (TEBS, iMass® Trailer).

iMass® trailer kits should only be ordered for pre-qualified fleet applications. This is to ensure that both the vehicle and trailer can meet the pre-requisites for iMass® fitment and calibration such as air-suspended, trailer type etc. Contact your local Knorr-Bremse representative to run through the Pre-qualification Checklist.

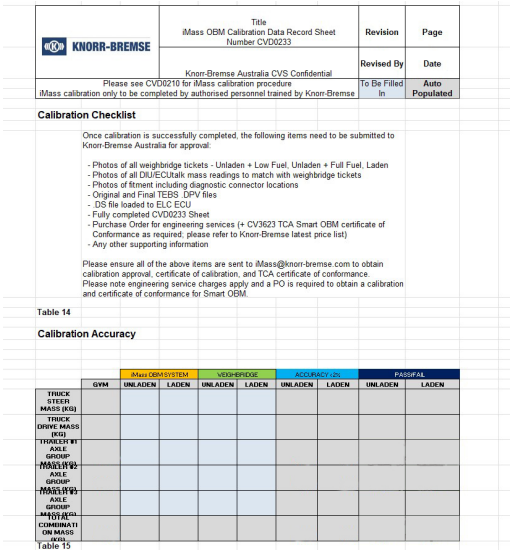
Calibration and Commissioning

All trailers fitted with iMass® must be calibrated and commissioned by a Knorr-Bremse Authorised Partner prior to release of the system. This involves calibrating the TEBS pressure sensor utilizing TEBS ECU Talk Software (PIN required). Once calibrated, the iMass® system will meet the accuracy requirements as set out by TCA for a Category B Type Approved Smart OBM System. To maintain type approval, the iMass® system must be calibrated by an Authorised Partner at the specified interval.

Part Number	Description	Application
CV6370	iMass® Trailer Kit	2, 3 & 4 Axle Semi Trailer
CV6376	iMass® Trailer Kit	2 & 3 Axle Dolly

iMass®

Certification



KNORR-BREMSE

Title	Revision	Page
iMass OBM Calibration Data Record Sheet Number CVD0233		
Knorr-Bremse Australia CVS Confidential	Revised By	Date
Please see CVD0210 for iMass calibration procedure	To Be Filled In	Auto Populated

iMass calibration only to be completed by authorised personnel trained by Knorr-Bremse

Calibration Checklist

Once calibration is successfully completed, the following items need to be submitted to Knorr-Bremse Australia for approval:

- Photos of all weighbridge tickets - Unladen + Low Fuel, Unladen + Full Fuel, Laden
- Photos of all DIU/ECUtalk mass readings to match with weighbridge tickets
- Photos of fitment including diagnostic connector locations
- Original and Final TEBS .DPV files
- .DS file loaded to ELC ECU
- Fully completed CVD0233 Sheet
- Purchase Order for engineering services (+ CV3623 TCA Smart OBM certificate of Conformance as required, please refer to Knorr-Bremse latest price list)
- Any other supporting information

Please ensure all of the above items are sent to iMass@knorr-bremse.com to obtain calibration approval, certificate of calibration, and TCA certificate of conformance. Please note engineering service charges apply and a PO is required to obtain a calibration and certificate of conformance for Smart OBM.

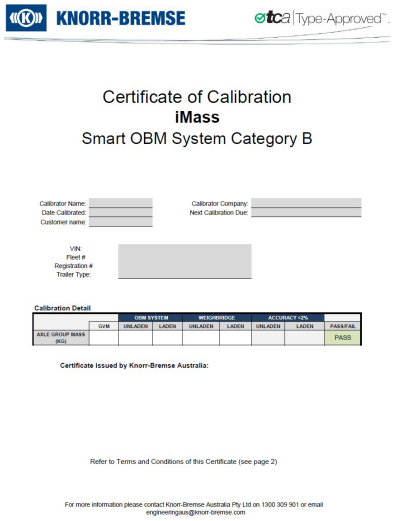
Table 14

Calibration Accuracy

	iMass OBM SYSTEM		WEIGHBRIDGE		ACCURACY +2%		PASS/FAIL	
	GVM	UNLADEN	LADEN	UNLADEN	LADEN	UNLADEN	LADEN	UNLADEN	LADEN
TRUCK STEER MASS (KG)									
TRUCK DRIVE MASS (KG)									
TRAILER #1 AXLE GROUP MASS (KG)									
TRAILER #2 AXLE GROUP MASS (KG)									
TRAILER #3 AXLE GROUP MASS (KG)									
COMBINATION MASS (KG)									

Table 15

FIG. 1



KNORR-BREMSE

tca | Type-Approved™

Certificate of Calibration
iMass
Smart OBM System Category B

Calibrator Name:
Date Calibrated:
Customer name:

Calibrator Company:
Next Calibration Due:

VIN:
Fleet #
Registration #
Trailer Type:

Calibration Detail

	OBM SYSTEM		WEIGHBRIDGE		ACCURACY +2%		
	GVM	UNLADEN	LADEN	UNLADEN	LADEN	UNLADEN	LADEN	PASS/FAIL
AXLE GROUP MASS (KG)								PASS

Certificate issued by Knorr-Bremse Australia:

Refer to Terms and Conditions of this Certificate (see page 2)

For more information please contact Knorr-Bremse Australia Pty Ltd on 1300 309 901 or email engineeringaus@knorr-bremse.com

FIG. 2

tca | Type-Approved™

Certificate of Conformance On-Board Mass System Category B

The Type-Approved OBM System supplied with this Certificate conforms to the following details:

Supplier:
ABN:
Type-Approved OBM System:
OBM System ECU Model:
OBM System MSU Model:
Specific OBM System Serial Number:

This Certificate of Conformance confirms that the Specific OBM System conforms to the OBM System Type-Approved by TCA as set out above.

SAMPLE

General Manager Corporate Operations
Transport Certification Australia

Date of Issue:
Certificate Number:

Refer to Terms and Conditions of this Certificate (see reverse)

Further information can be obtained from the Transport Certification Australia website tca.gov.au.

FIG. 3

Part Number	FIG.	Description	Application
XCV3677		Certification of Prime Mover & up to 3 Trailers	Engineering Review & Certification of Calibration Data & (Where Applicable) Registration of TCA Certificate of Conformance for Category B SMART OBM
CVD0233 (Excel Template – No Charge)	1	iMass® Calibration Data Record	To be Filled in by Authorised Partner & Supplied to imass@knorr-bremse.com*
	2	Certificate of Calibration iMass®	1 Per Vehicle/Trailer Every 6 Months
	3	Certificate of Conformance TCA Category B SMART OBM System iMass®	1 Per Vehicle for Life of Vehicle Supplied After Initial Calibration/Commissioning

*Additional information is required for vehicle certification such as programming files, weigh bridge tickets and other evidence. Contact your Authorised iMass® Partner for more information on certification and calibration requirements.

iMass®

Decals

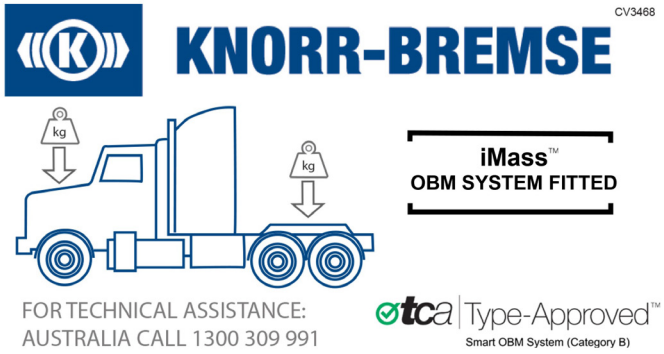


FIG. 1

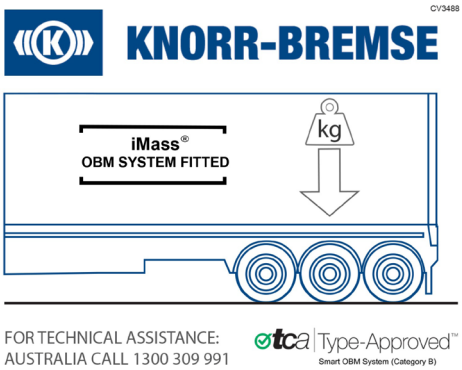


FIG. 2

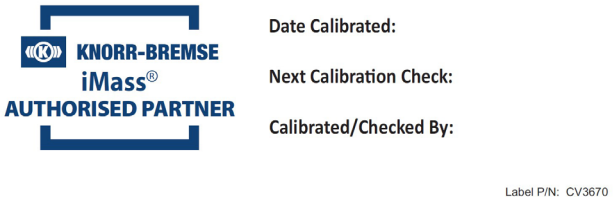


FIG. 3

Part Number	FIG.	Description	Application
CV3468	1	Decal iMass® Vehicle	
CV3488	2	Decal iMass® Trailer	
CV3670	3	Decal iMass® Calibration Record	Trailer (DIU in Vehicle to Capture Vehicle Calibration Dates Electronically)

iMass®

Driver Interface Unit

FIG. 1

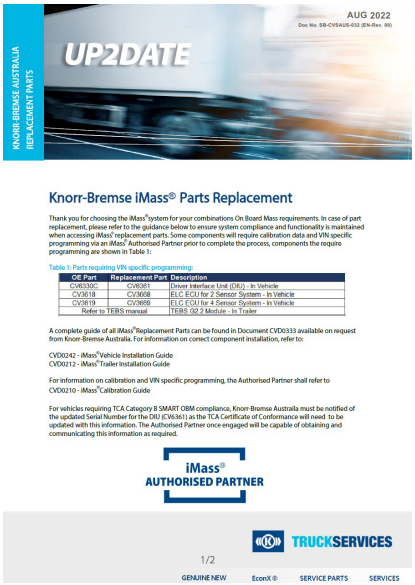


FIG. 2

OE Part Number	FIG.	Description	Part Number Replacement
CV6330C	1	Driver Interface Unit (Replacement)	CV6361
	2	Service Bulletin	SB-CVSAUS-032

Installation of a Replacement Truck ELC ECU must be completed by an Authorised Partner as programming is required to update the vehicle calibration details.

Service Bulletin SB-CVSAUS-032 shall be supplied with CV6361 and includes the special requirements for installation.

iMass®

Vehicle ELC (Electronic Levelling Control) ECU (Electronic Control Unit)

FIG. 1

FIG. 2

OE Part Number	FIG.	Description	Part Number Replacement
CV3618	1	Vehicle ELC ECU – 2 Sensor Dataset	CV3668
CV3619	2	Vehicle ELC ECU – 4 Sensor Dataset	CV3669

Installation of a Replacement Truck ELC ECU must be completed by an Authorised Partner as programming is required to update the vehicle calibration details.

Service Bulletin SB-CVSAUS-032 shall be supplied with CV3668 or CV3669 and includes the special requirements for installation.

iMass®

Cables & Harnesses

FIG. 1

FIG. 2

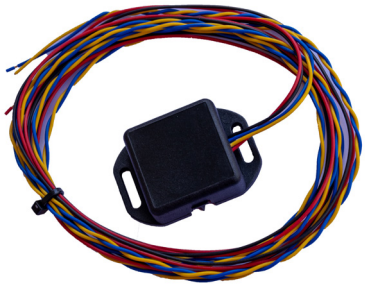


FIG. 3

FIG. 4

FIG. 5

Part Number	FIG.	Description	Length	Application
CV3477	1	Main Harness	4m	Main Power Harness iMass® Truck
CV3496	2	DIU Antenna	5m	GPS Cable & Antenna
CV7084	3	CAN Clamp	1.5m	In Cab Use
CV7083	4	CAN Clamp	8.5m	External Use
CV3649	5	IVU (In Vehicle Unit) Cable	5m	Cable Between OBM & Telematics

iMass®

Cables & Harnesses

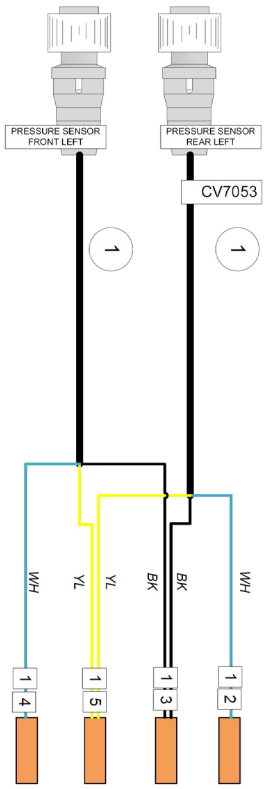


FIG. 1

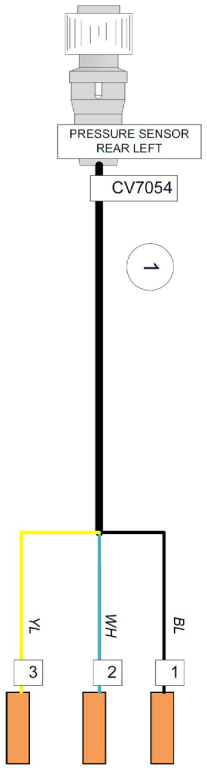


FIG. 2

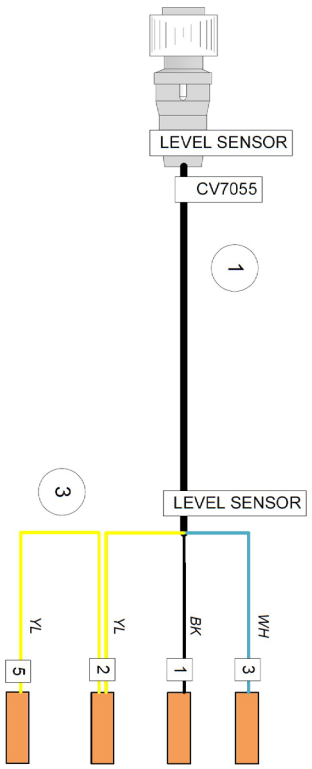


FIG. 3

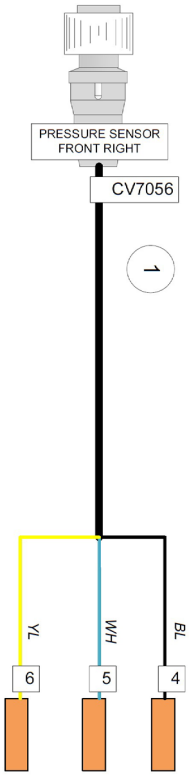


FIG. 4

Part Number	FIG.	Description	Length	Application
CV7053	1	ELC ECU Harness - Pressure Sensor 1 & 2	9m	Primary Sensor Harness
CV7054	2	ELC ECU Harness – Pressure Sensor 3	9m	Labelled for 3rd Sensor (If 4 Sensor System)
CV7055	3	ELC ECU Harness – Level Sensor	9m	Level Sensor Use
CV7056	4	ELC ECU Harness – Pressure Sensor 4	9m	Labelled for 4th Sensor (If 4 Sensor System)

iMass®

Brackets

FIG. 1

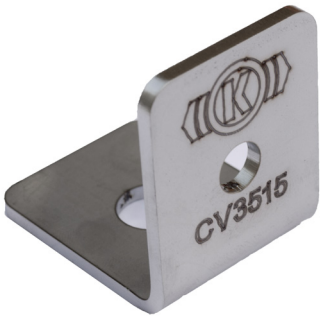


FIG. 2

FIG. 3

Part Number	FIG.	Description	Application
CV3514	1	Bracket Sensor Mount	Level Sensor Mounting Bracket
CV3515	2	Bracket Axle Mount	Level Sensor Mounting Bracket
CV3516	3	Wedge Plate	Level Sensor Mounting Bracket

iMass®

DIU Mounting Brackets & Voltage Inverter

FIG. 1

FIG. 3

FIG. 2

FIG. 4

Part Number	FIG.	Description	Application
CV3590	1	DIU Dash Mount	Dash Mount
CV3646	2	DIU Window Mount	Window Mount
CV3585	3	12/24-5A Isolated DC-DC Converter	For 12V Prime Mover Application
CV3586	4	Resistor Relay 12V 5 PIN	For 12V Prime Mover Application

iMass®

Connectors ELC ECU

FIG. 1

FIG. 3

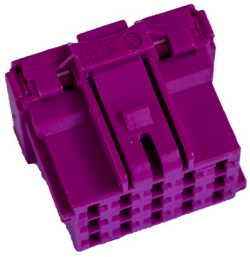


FIG. 2

FIG. 4

Part Number	FIG.	Description	Application
CV3483	1	18-Way Connector X2	ELC ECU – Used as Blanking Plug
CV3469	2	15-Way Connector X3	ELC ECU – To be Pinned Out for Sensors
CV3479	3	12-Way Connector X4	ELC ECU – Used as Blanking Plug
CV3480	4	Connector PIN	ELC ECU Connector PIN 1 – 2.5mm^2

Other items are not available at this time and may be purchased from an alternative supplier. Please contact Knorr-Bremse for some suggested options.

Part No: 927768-9
Earth Pin X1 -12 & 18

Part No: 1718091-1
X1 17 Way Connector

Part No: 967634
Terminal Lock

iMass®

Sensors & Levelling Components

FIG. 1

FIG. 2

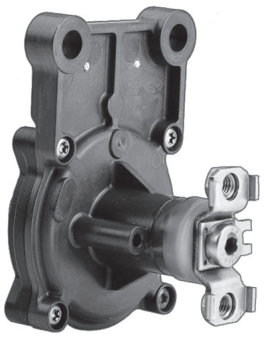


FIG. 3

FIG. 4

FIG. 5

Part Number	FIG.	Description	Application
K060758N00	1	External Pressure Sensor (Prime Mover)	iMass® Prime Mover
K193628	2	Linkage for Levelling Valve	Vehicle & Trailer Level Sensor Use*
K025259N00	3	Level Sensor	Vehicle & Trailer Level Sensor Use*
CV3214	4	Linkage Rod	Vehicle & Trailer Level Sensor Use*
K095917N00	5	Lever for Levelling Valve	Vehicle & Trailer Level Sensor Use*

*The level sensor utilized for iMass® vehicle is the same part as the level sensor utilized for iLvl for trailer.

December 2025
Doc. No. CVD0375 (EN- Rev. 001)

Trailer Portfolio

Retrofit Kits - TEBS - TIM - iReverse - Valves - Tanks

KNORR-BREMSE

TRUCKSERVICES

TEBS G2.2 Retrofit Kits

Enable electronic braking by upgrading conventionally braked trailers to optimise braking performance. Upgrade trailer braking to access anti-lock, load sensing, roll-stability, and electronic braking capabilities, as well as other auxiliary features and control options such as automatic reset to ride, additional trailer information and data recording, iMass® on board mass and more.

The Knorr-Bremse TEBS Retrofit Kit includes all essential components to retrofit a Knorr-Bremse TEBS G2.2 on a pneumatically braked trailer and enable the vehicle with electronic braking. The base-kit offering can easily be upgraded with additional product offerings and is easy to install thanks to the separation of pneumatic and electrical connections.

Opti-mise fleet capabilities by enabling **electronic braking**

Quicker braking control due to electronic timing

Modular solution that can **easily be up-graded with** additional kits

Improve fleet compatibility by incorporating **dual brake charac-teristics**

KNORR-BREMSE TRUCKSERVICES

TEBS G2.2 Retrofit Kits

TEBS G2.2 Trailer Retrofit Kit Range

Kit Number	Description
CV1700	2/3 Axle Towing
CV1701	2/3 Axle Non-Towing
CV1692	2 Axle Dolly
CV1686	3 Axle Dolly
CV1705	4 Axle Towing
CV1707	4 Axle Non-Towing
CV1706	3/4 Axle Drawbar
CV1704	5 Axle Drawbar
CV1693	6 Axle Drawbar

Add-On Kits

Kit Number	Description
CV6384	Pneumatic Valve Kit Non-Towing 2/3 Axle Semi
CV6385	Pneumatic Valve Kit Towing 2/3 Axle Semi
CV6386	Pneumatic Valve Kit Roadtrain 2/3 Axle Semi
CV6378	Towing Tralier Conversion Retrofit Kit (Including TRM)

Kit drawings available on request.
For New Zealand applications, please contact your local KB representative or distributer.

TIM G2 (Trailer Information Module)

The TIM G2 is a trailer-mounted or handheld diagnostic interface designed to provide direct access to Knorr-Bremse trailer systems without the need for a PC. It connects primarily to the TEBS G2 electronic braking system and is also compatible with additional systems such as SmarTire and iLevel.

TIM G2 displays real-time system data including fault codes, warnings, and operating parameters through a backlit graphical screen. The device allows activation of trailer input functions, including traction help and lift axle control, and enables reading of critical trailer system data such as tyre pressure, temperature, suspension height, and axle loads, depending on system configuration.

One of the key features of TIM G2 is the Smart Update functionality, which permits configuration parameters to be copied to a second ECU. This supports efficient setup or replacement of control units in the field. The device also includes a real-time clock for accurate time-stamping of diagnostic events and can be customised to display a user-defined initial menu on start-up. Where supported, it also offers access to the Trailer Data Recorder (TDR), allowing logging of operational data over time.

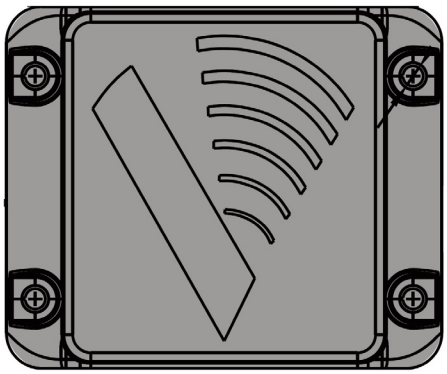
TIM G2 supports up to seven languages selectable from the menu, making it suitable for use in international fleets. It is primarily intended for use by maintenance technicians, fleet operators, and OEMs who require a reliable and portable means of accessing trailer diagnostic information and controlling system functions directly at the vehicle. These modules can be changed to a workshop mode for diagnostic purposes if required.

Kit Number	Description
CV6382	TIM Retrofit Kit with Lithium Battery
CV6383	TIM Retrofit Kit Dangerous Goods Approved

iReverse

The iReverse system is designed to detect any significant obstruction (such as a loading dock) behind a trailer when reversing. The TEBS G2.2 and iTEBS iReverse System utilises a radar sensor fitted on the rear of the trailer. When the distance to an obstruction reduces to a pre-set value, the TEBS module will apply the brakes to slow the movement of the vehicle.

The iReverse system provides the driver with physical feedback - both visual and audible - when detecting significant obstructions, such as a docking platform. The iReverse speaker will emit a tone that will vary its frequency based on the presence and distance of an object within the detection field of the sensors.



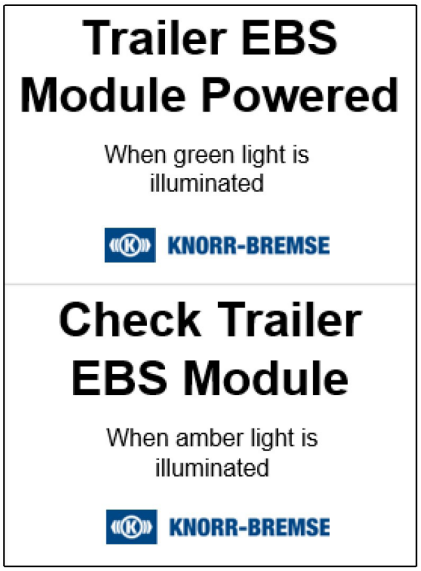
Part Number	Description	Application
CV6373	iReverse Kit	TEBS G2.2
CV6389	iReverse Kit with Marker Lamps	TEBS G2.2

TEBS G2.2 Warning Light Retrofit Kits

The Knorr-Bremse TEBS Warning Light Kit is a system to indicate whether the modules of the Trailer Electronic Braking System (TEBS) are working properly. This kit is a two light system which utilises a green light to indicate that the TEBS module on the trailer is powered and an amber light which will flash if there are any active faults. The kit is designed to work on any Knorr-Bremse TEBS equipped trailer when programmed accordingly.

Lights may be mounted on the side of the trailer near the Trailer Information Module (TIM) and raise lower valve or at the front of the trailer for monitoring via the driver side mirror. One Warning Light Kit is required per trailer in a combination to understand the operational status of each TEBS module fitted. TEBS Warning Light Kits are retrofittable by our TruckServices partners or Knorr-Bremse TEBS authorised service agents, as the TEBS module must be programmed to interact correctly with the Warning Light Kit.

The combination of a brightly lit green and flashing amber warning light will signify a fault. If a TIM module is fitted, operators can determine the cause of the fault via this device. TEBS Warning Light Kits are 12V and 24V compatible.



Warning Light Kit Variants

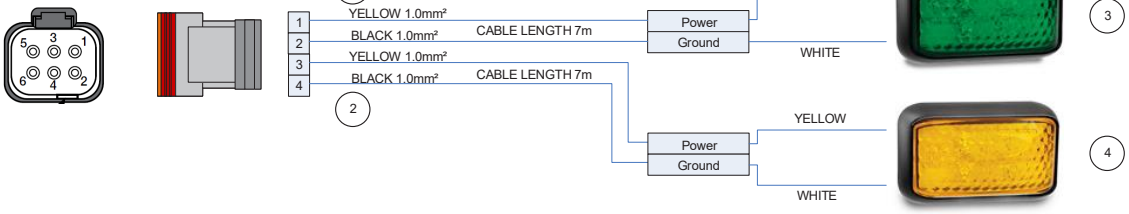
Part Number	Description
CV6336	TEBS G2.2 Premium
CV6336U	TEBS G2.2 Premium with TEPM
CV6366	TEBS G2.2 Standard

TEBS G2.2 Warning Light Retrofit Kits

Kit CV6336

For Trailers without TEPM-P:
Use CV6336 and connect to X2.3 port on TEBS
Program using AUXIO 4 & 5

Connect to TEBS G2.2 Module **X2.3** (AUXIO 4 & 5)

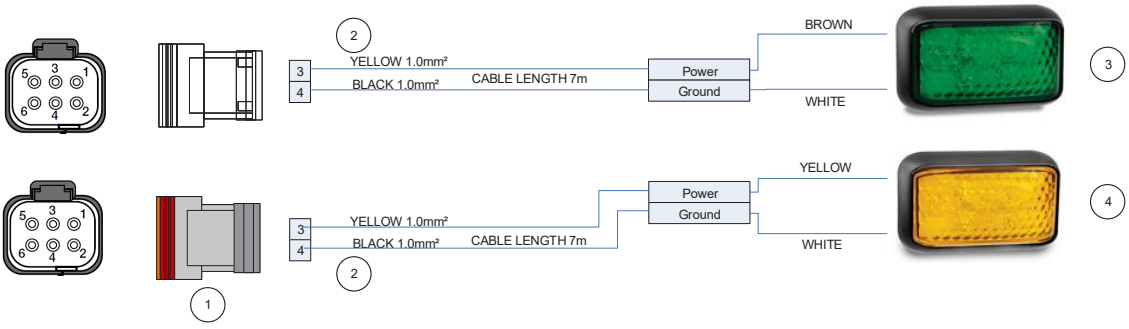


Kit CV6336U

For Trailers with TEPM-P:
Use CV6336U, insert pins into existing X2.3 connector and connect supplied connector to X2.4 port on TEBS.
Program using AUXIO 5 & 6

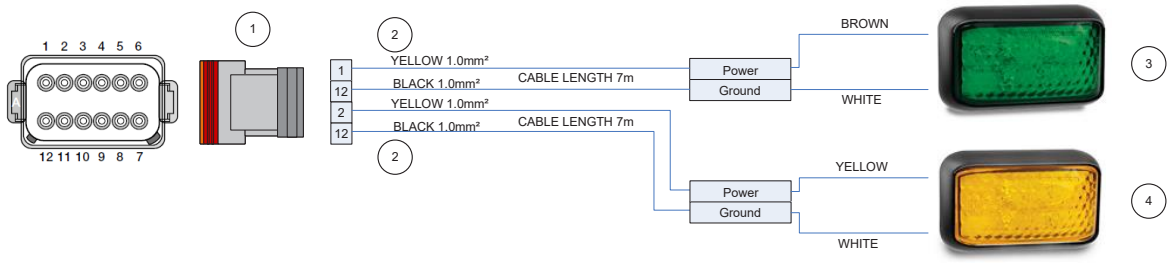
Connect to TEBS G2.2 Module **X2.3** (AUXIO5)

Connect to TEBS G2.2 Module **X2.4** (AUXIO6)



Kit CV6366

Connect to TEBS G2.2 Module **In/ Out Port** (AUXIO 1 & 2)



Kit drawings available on request.

TEBS G2 module auxiliaries must be programmed in the VIN specific DPV file to match the pinouts.

ADL (Auxiliary Design Language file) ADL2012 must be loaded within the VIN specific programming file. Knorr-Bremse can prepare the file or provide the required ADL on request.

Automated Reset to Ride Auxiliary Kit

Knorr-Bremse's Automated Reset to Ride function ensures trailers automatically return to their correct ride height after loading or unloading, no driver input required. By reducing the risk of driving with an incorrect suspension position, this smart feature helps protect equipment, improve handling, and maintain compliance. It's a simple automation that delivers lasting benefits for safety and efficiency.

Kit Number	Description
CV6013	Raise and Lower Valve (Pneumatic Reset) Kit 3/8" Nylon (Showing P28 TEBS Module)
CV6021	Raise and Lower Valve (Pneumatic Reset) Kit 8mm Nylon (Showing P28 TEBS Module)
CV6022	Raise and Lower Valve Kit 1/2in Nylon w/ Pneumatic Reset Push Button
CV6035	Raise and Lower Valve with Reset to ride kit (non tebs)
CV6315	Raise and Lower Valve (24V Electronic Reset) Kit 3/8" Nylon
CV6323	Independent Suspension Left to Right 2 x Height Control Valves, Raise Lower with reset to ride
CV6368	Raise and Lower Valve (Pneumatic Reset) Kit 3/8" Nylon (Showing P28 TEBS Module)
CV6377	Raise and Lower Valve (12V Electronic Reset) Kit 3/8" Nylon
CV6392	Raise and Lower Valve (Pneumatic Reset) Kit 10mm Nylon (Showing P28 TEBS Module)

TEBS G2 Valves

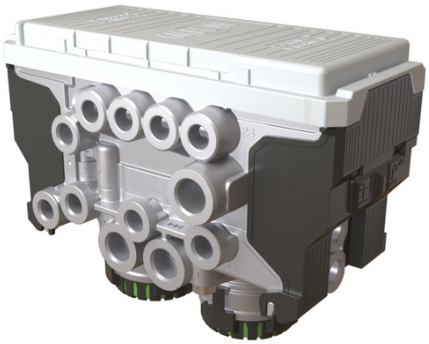


FIG. 1

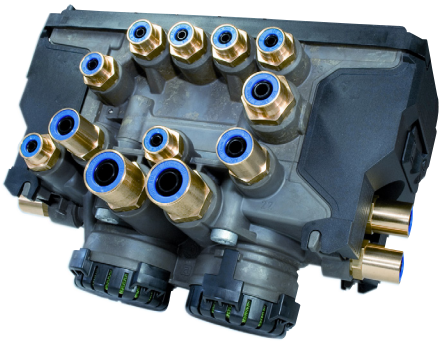


FIG. 2

FIG. 3

FIG. 4

Part Number	FIG.	Description	Application
K019309V**N50	1	TEBS G2.0 Module (Silver Top)	Previously Replaced K019300 & K019302
K019312V**N00	2	TEBS G2.1 Module (Black Top)	
K019319V**N**	2	TEBS G2.1 Module (Silver Top)	A/M Replacement for K019312
K055362V**N49	3	TEBS G2.2 Standard	
K055372V**N49	3	TEBS G2.2 Standard Plus	
K110610V**N49		TEBS G2.2 Premium (Black Top, No Fittings)	
K110612V**N49	4	TEBS G2.2 Premium (Black Top)	
K110619V**N**	4	TEBS G2.2 Premium (Silver Top)	A/M Replacement for K110610 & K110612

All TEBS valves require special programming.

Stock of G2.0/1 modules may be limited. TEBS G2.2 can be used as a replacement if required with some additional cabling, please refer to Service Bulletin SB-CVSAUS-045.

TEBS & ABS Modules 24V Only

FIG. 1

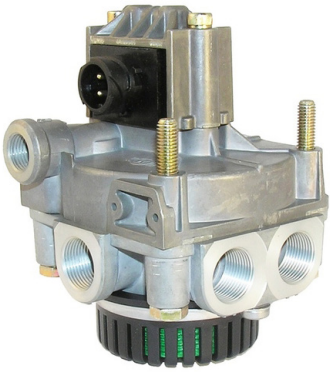


FIG. 2

FIG. 3

Part Number	FIG.	Description	Application
ii39782N50	1	TEBS4 Module	Requires Special Programming
ii37091N00	2	3rd Modulator	24V Modulator for TEBS4 & KB4TA
K004236	3	KB4TA	24V ABS Only Blue Top Plate

TEBS4 module no longer saleable. For replacement, purchase a TEBS G2.2 retrofit kit.

TEPM-P, TRM, Pressure Sensor & Splitter Box

FIG. 1

FIG. 2

FIG. 3

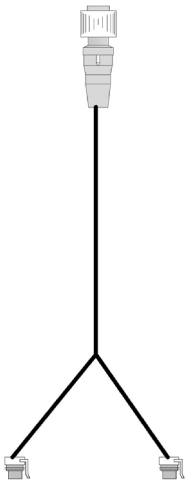


FIG. 4

FIG. 5

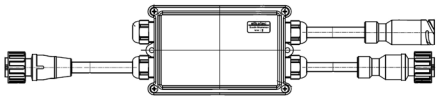


FIG. 6

Part Number	FIG.	Description	Application	TEBS G2.0/2.1	TEBS G2.2
K027900V**N00	1	TEPM-P Module	3rd Modulator	✓	✓
CV3353 *	2	Trailer Roadtrain Module	TRM (Trailers without Sensors)	✓	✓
K036198V**N00	2	Trailer Roadtrain Module	Requires Programming	✓	✓
5008677	3	Pressure Sensor	Used with Cable CV3239	✓	✓
CV3239	4	Connecting Harness	Pressure Sensors to TRM (4.0m Long)	✓	✓
K027817N00	5	Closing Cap	Used on TRM	✓	✓
O7850	6	Splitter Box (cables 0.5m)	“A” Trailer Power Splitter (No CAN Split)	✓	✓
CV3730	6	Splitter Box (cables 0.5m)	“A” Trailer Power Splitter (No CAN Split)	✓	✓

*Pre-Programmed.

Trailer Information Modules (TIM) & Diagnostic Connection Cables

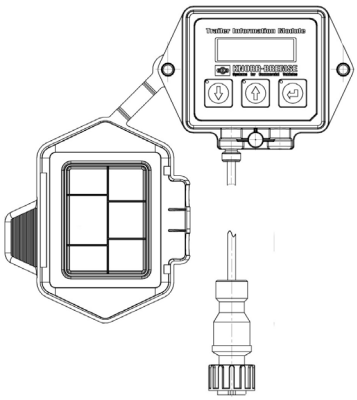


FIG. 1

FIG. 2

FIG. 3

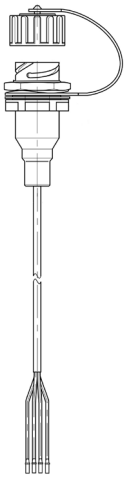


FIG. 4

FIG. 5

FIG. 6

Part Number	FIG.	Description	Length	Application	TEBS G2.0/2.1	TEBS G2.2
CV1103	1	TEBS4 TIM Module	Obsolete (Older Model)	Use G2 TIM with Downgraded Software (See Pg. 40 of Doc. No. Y051983, EN - Rev. 003)		
CV1103	2	TIM Module		Information Module Fixed to Trailer	✓	✓
CV1104	2	TIM Module		Information Module Diagnostic Tool	✓	✓
CV1108	2	TIM Module		Information Module DG Use	✓	✓
K005378	3	Diagnostic Socket Mounting			✓	✓
K022272	4	Diagnostic Cable	4m	Replacement Cable	✓	✓
K002271	5	Diagnostic Cable	6m	TEBS4 Replacement Cable		
K010714N00	6	CAN Extension Cable	11m	5 Core Cable Flange & Thread on Socket	✓	✓

Labels

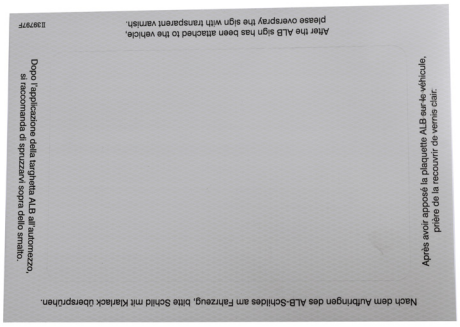


FIG. 1

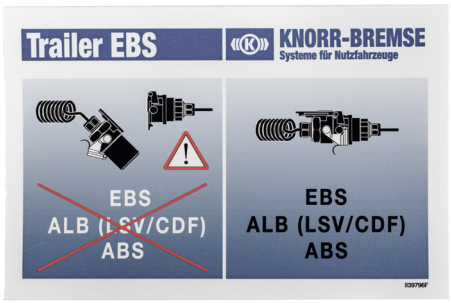


FIG. 2

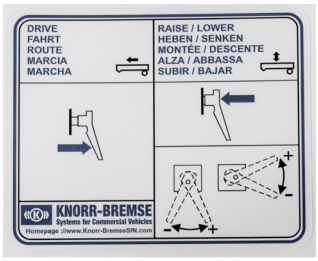


FIG. 3

FIG. 4

FIG. 5

Part Number	FIG.	Description	Use
ii39796F	1	DATA Label	EBS Suzi Lead Connection
ii39797F	2	DATA Label	TEBS Data (Affixed to Trailer)
Z006844	3	DATA Label	Raise / Lower Valve Operation Label
ii40392F	4	DATA Label	EBS /RSP Label
K112780	5	DATA Label	TEBS Label

EBS Power Cables

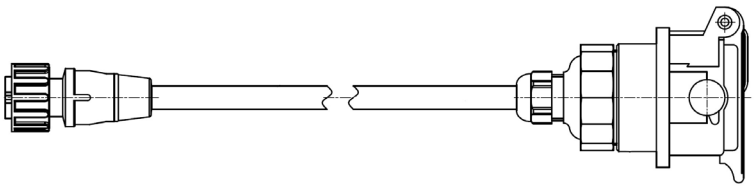


FIG. 1

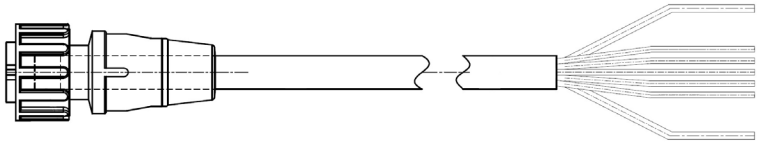


FIG. 2

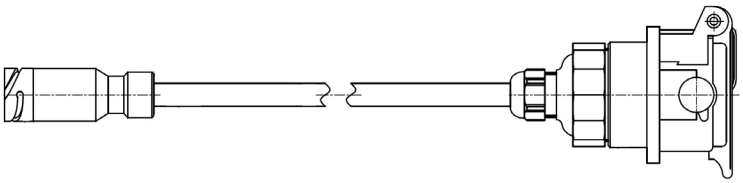


FIG. 3

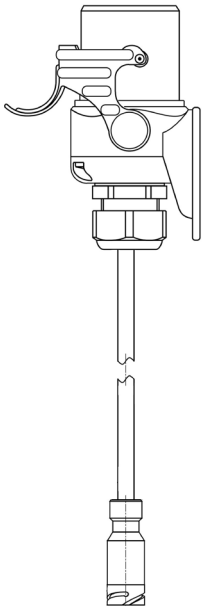


FIG. 4

Part Number	FIG.	Description	Length	Type
O6083	1	Power Cable	15m	Socket End 12V
O6084	1	Power Cable	9m	Socket End 12V
O6087	1	Power Cable	4m	Socket End 12V (TRM)
O6090	2	Power Cable	0.5m	Open End
O6091	2	Power Cable	4m	Open End
O6093	2	Power Cable	15m	Open End
O7857	3	Power Cable	4m	Socket End 24V (TRM or Splitter Box)
ii3674115000	3	Power Cable	15m	Socket End (Suits TEBS4 & KB4TA)
ii3979312000	4	Power Cable	12m	Plug End (Suits TEBS4 & KB4TA)

EBS Power Cables

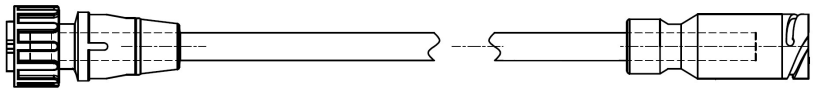


FIG. 1

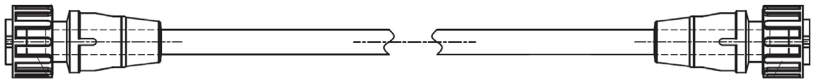


FIG. 2

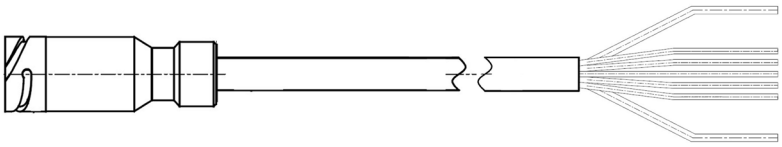


FIG. 3

Part Number	FIG.	Description	Length	Type
O7865	1	Power Cable	8m	Extension Cable (Plug to Socket)
O7868	1	Power Cable	10m	Extension Cable (Plug to Socket)
O7869	1	Power Cable	14m	Extension Cable (Plug to Socket)
O8020	2	Connecting Cable	0.5m	TRM to TEBS (Plug to Plug)
O8020-4	2	Connecting Cable	4m	TRM to TEBS (Plug to Plug)
O8020-9	2	Connecting Cable	11m	TRM to TEBS (Plug to Plug)
O8021	2	Connecting Cable	8m	TRM to TEBS (Plug to Plug)
O8022	2	Connecting Cable	1m	TRM to TEBS (Plug to Plug)
O6164	3	Power Cable	13.5m	Open Ended with Socket

Connecting Cables

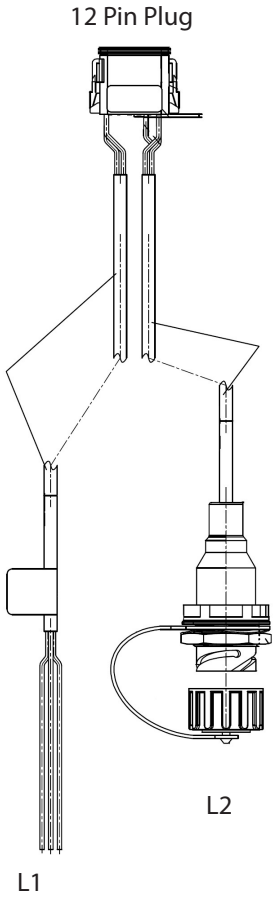


FIG. 1

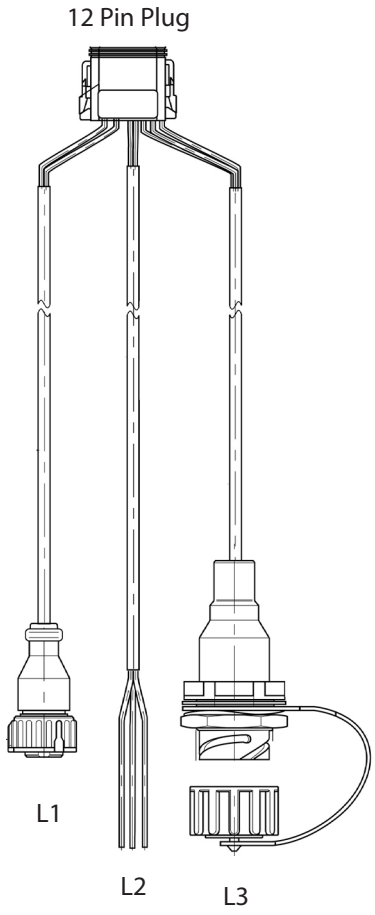


FIG. 2

Part Number	FIG.	Description	Length	Application	TEBS G2.0/2.1	TEBS G2.2
O8025	1	Connecting Cable	L1 - 15m L2 - 6m	In / Out Cable	✓	
K027867N00	2	Connecting Cable	L1 - 6.5m L2 - 7m L3 - 6m	In / Out Cable Diagnostic, Stop & 2 Wire Aux		✓
K027869N00	2	Connecting Cable	L1 - 2m L2 - 7m L3 - 6m	In / Out Cable Diagnostic, Stop & 3 Wire Aux		✓

Connecting Cables

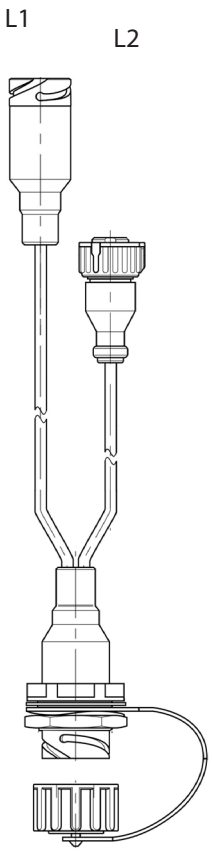


FIG. 1

FIG. 2

Part Number	FIG.	Description	Length	Application	TEBS G2.0/2.1	TEBS G2.2
K027815N00	1	Splitter Cable	L1 - 4m L2 - 4m	5V CAN Splitter Cable	✓	✓
O0520	2	7 Core Cable		Sold by Meter	✓	✓
O0516	2	2 Core Cable		Sold by Meter	✓	✓

Connecting Cables

18 Pin Plug

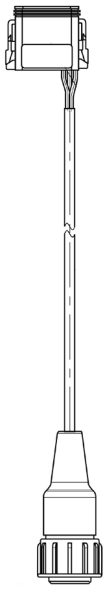
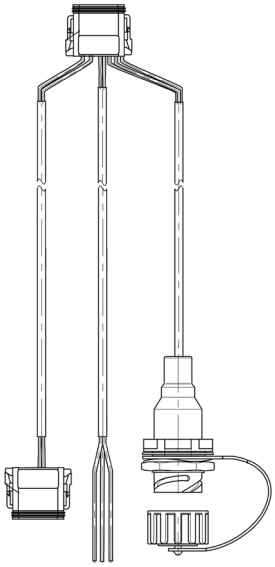


FIG. 1

12 Pin Plug



18 Pin Plug

L1 L2 L3

FIG. 2

18 Pin Plug

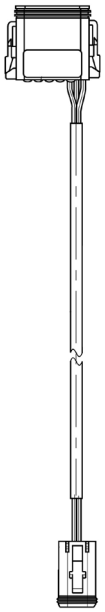


FIG. 3

Part Number	FIG.	Description	Length	Application	TEBS G2.0/2.1	TEBS G2.2
K027814N00	1	Connecting Cable	3m	TEPM Connecting Cable	✓	
K027831N00	1	Connecting Cable	6m	TEPM Connecting Cable	✓	
CV3371	2	Connecting Cable	L1 - 11m L2 - 15m L3 - 6m	TEPM Connecting Cable (Long Application Only)	✓	
K097065N00	3	Connecting Cable	3m	TEPM Connecting Cable		✓
K097066N00	3	Connecting Cable	9m	TEPM Connecting Cable		✓
CV3489	3	Connecting Cable	5m	TEPM Connecting Cable		✓
CV3372	3	Connecting Cable	11m	TEPM Connecting Cable (Long Application)		✓

Connecting Cables

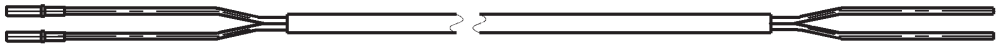


FIG. 1

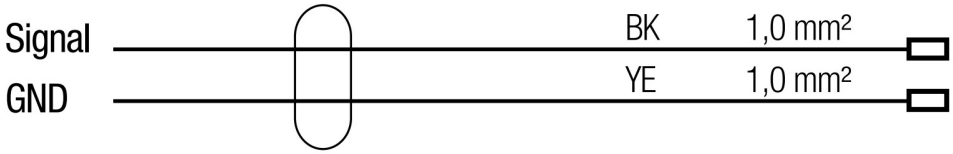


FIG. 2

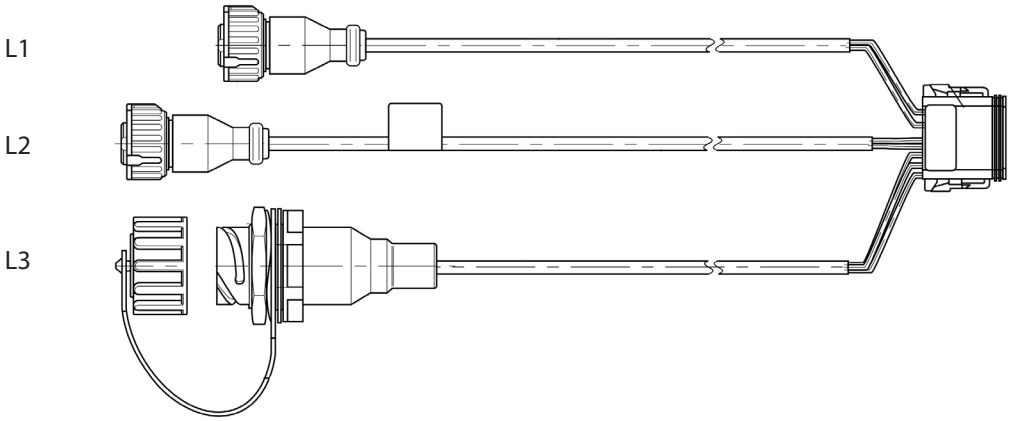


FIG. 3

Part Number	FIG.	Description	Length	Application	TEBS G2.0/2.1	TEBS G2.2
K002280N00	1	Connecting Cable	7m	2 Wire with Deutsch Pins 1 End (Stop Lamp Power 7m Long)	✓	✓
	2	Pinout Diagram		K002280N00	✓	✓
K097070N00	3	Connecting Cable	L1 - 3m L2 - 3m L3 - 6m	In /Out Cable for iLvl with Diagnostic Socket		✓

Connecting Cables

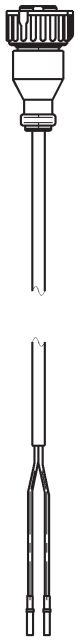


FIG. 1

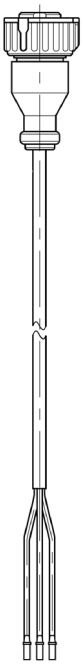


FIG. 2

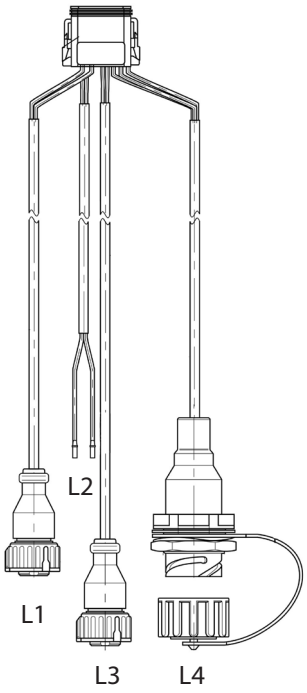


FIG. 3

Part Number	FIG.	Description	Length	Application	TEBS G2.0/2.1	TEBS G2.2
K002274N00	1	Connecting Cable	2m	Return to Ride / Lift Axle Control 2 Wire	✓	✓
K002275N00	1	Connecting Cable	6.5m	Return to Ride / Lift Axle Control 2 Wire	✓	✓
K002276N00	1	Connecting Cable	10m	Return to Ride / Lift Axle Control 2 Wire	✓	✓
K002277N00	2	Connecting Cable	3m	Return to Ride / Lift Axle Control 3 Wire	✓	✓
K002278N00	2	Connecting Cable	9m	Return to Ride / Lift Axle Control 3 Wire	✓	✓
CV3375	3	Connecting Cable	L1 - 3m L2 - 7m L3 - 6.5m L4 - 6m	In /Out Cable Suit Hydraulic / Mechanical Suspension		✓
CV3446	3	Connecting Cable	L1 - 3m L2 - 6m L3 - 3m L4 - 6m	iLvl w/Diagnostic, Stop & Park Light Backup Power		✓

TEBS4 & KB4TA Cables, Inverter & Plug

Grey Plug A Code

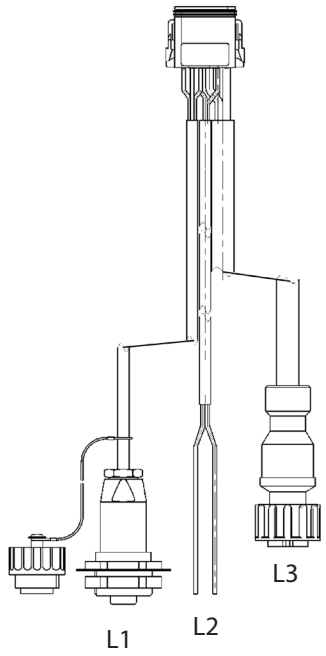


FIG. 1

Grey Plug A Code

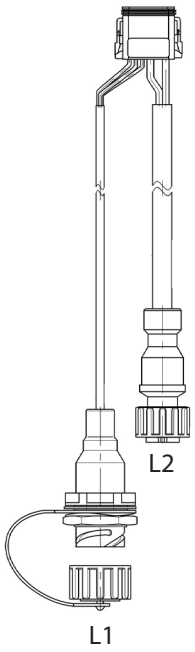


FIG. 2

Black Plug B Code

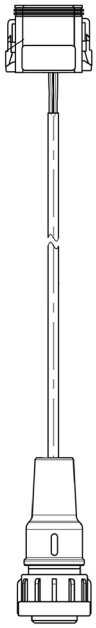
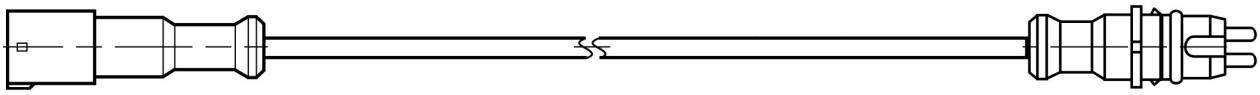


FIG. 3

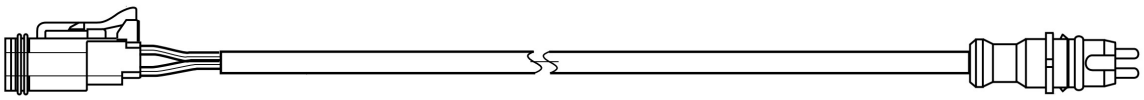
Part Number	FIG.	Description	Length	Application
ii367395	1	X-1 Harness	L1 - 4m L2 - 12m L3 - 0.5m	TEBS 4
K010838N00	2	Harness	L1 - 6m L2 - 0.5m	KB4TA Power, Diagnostics, 3rd Modulator
K002954	3	Cable	9m	TEBS 4 3rd Modulator Cable

Wheel Speed Sensor Extension Cables



Part Number	Description	Length	Application	TEBS G2.0/2.1	TEBS G2.2	TEPM
300257	Extension Cable	1m	WSS Extension Cable (Plug to Socket)	✓		✓
300258	Extension Cable	2m	WSS Extension Cable (Plug to Socket)	✓		✓
ii367563000	Extension Cable	3m	WSS Extension Cable (Plug to Socket)	✓		✓
ii367564000	Extension Cable	4m	WSS Extension Cable (Plug to Socket)	✓		✓
ii367566000	Extension Cable	6m	WSS Extension Cable (Plug to Socket)	✓		✓
ii3675610000	Extension Cable	10m	WSS Extension Cable (Plug to Socket)	✓		✓
ii3675612000	Extension Cable	12m	WSS Extension Cable (Plug to Socket)	✓		✓
ii3675615000	Extension Cable	15m	WSS Extension Cable (Plug to Socket)	✓		✓

Wheel Speed Sensor Extension Cables



Part Number	Description	Length	Application	TEBS G2.0/2.1	TEBS G2.2
K0278322000	Extension Cable	2m	WSS Extension Cable (Plug to Plug)		✓
K0278323000	Extension Cable	3m	WSS Extension Cable (Plug to Plug)		✓
K0278324000	Extension Cable	4m	WSS Extension Cable (Plug to Plug)		✓
K0278326000	Extension Cable	6m	WSS Extension Cable (Plug to Plug)		✓

Wheel Speed Sensor – 90 Degrees

Part Number	Description	Length
K144126K50	90 Deg. Wheel Speed Sensor	0.4m with Sleeve
K144128K50	90 Deg. Wheel Speed Sensor	1m with Sleeve
K144129K50	90 Deg. Wheel Speed Sensor	2m with Sleeve

Wheel Speed Sensor – Straight

Part Number	Description	Length
K051957	Wheel Speed Sensor	2m with Sleeve
K051959	Wheel Speed Sensor	1.5m with Sleeve
K145032K50	Wheel Speed Sensor	0.3m with Sleeve
K145033K50	Wheel Speed Sensor	1m with Sleeve
K145043K50	Wheel Speed Sensor	2m with Sleeve

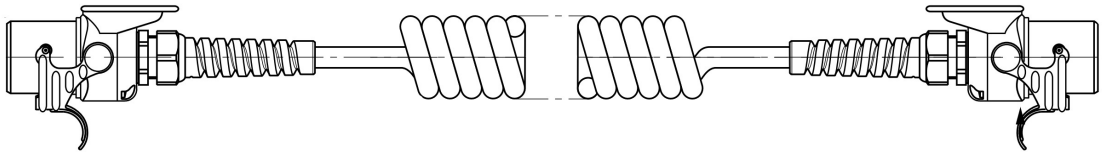
Wheel Speed Sensor Mount & Sleeve

FIG. 1

FIG. 2

Part Number	FIG.	Description	Application
CV3282	1	ABS Sensor Mounting Block	25mm x30mm x 35mm (LxWxD approx.)
K115645N00	2	Clamping Sleeve	Suits All Wheel Speed Sensors

EBS Suzi Cables



MAXIMUM Length Fully Extended 4 Meters

Part Number	Description	Application
CV3090	Suzi Cable	12V Suzi Cable (6mm Power Wires)
O3192	Suzi Cable	Multi Volt Suzi Cable
K004098N00	Suzi Cable	24V Suzi Cable (4mm Power Wires)

EBS Suzi Cable Plug & Socket 12 Volt (ISO 7638)

Keyway in between with Pin 3 & 4

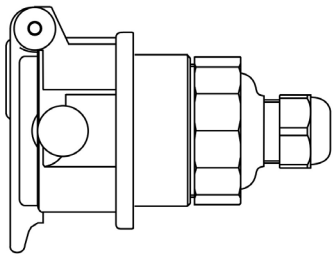


FIG. 1

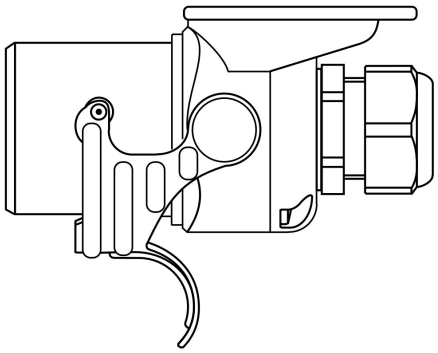


FIG. 2

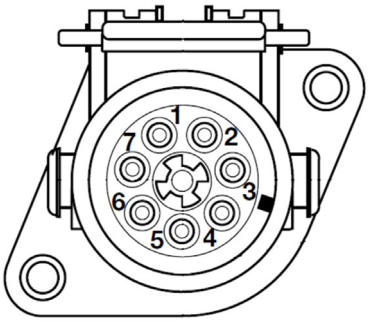


FIG. 1a

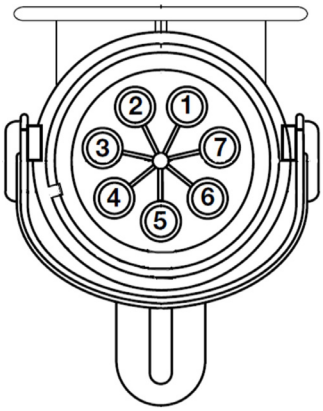


FIG. 2a

Pin #	Wire Colour	Description
Pin 1	Red	Valve upply voltage
Pin 2	Black	ECU supply voltage
Pin 3	Yellow	ECU ground
Pin 4	Brown	Valve ground
Pin 5	White	Warning lamp
Pin 6	White/Green	CAN-HI
Pin 7	White/Brown	CAN-LO

Part Number	FIG.	Description	Application
O0090	1	EBS Socket	12 Volt EBS Socket (7 Pin)
	1a	EBS Socket	12 Volt EBS Socket (Pin Configuration)
O0089	2	EBS Plug	12 Volt EBS Plug (7 Pin)
	2a	EBS Plug	12 Volt EBS Socket (Pin Configuration)

EBS Suzi Cable Plug & Socket 24 Volt (ISO 7638)

Keyway in line with Pin 5

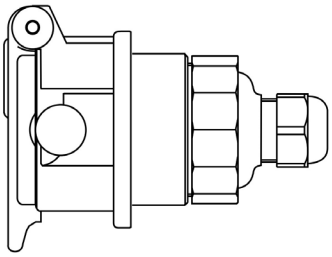


FIG. 1

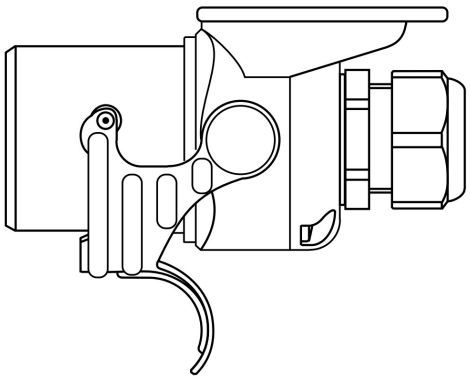


FIG. 2

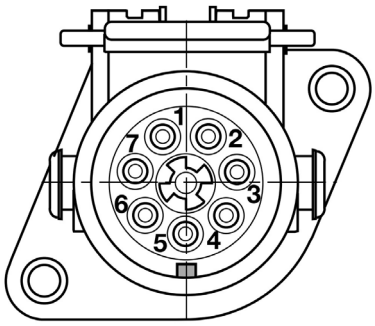


FIG. 1a

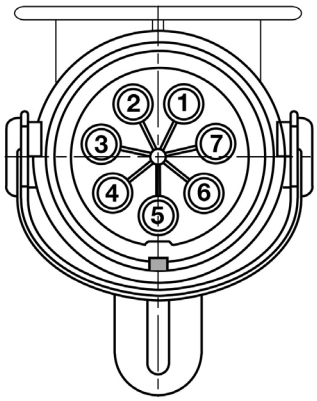


FIG. 2a

Pin #	Wire Colour	Description
Pin 1	Red	Valve supply voltage
Pin 2	Black	ECU supply voltage
Pin 3	Yellow	ECU ground
Pin 4	Brown	Valve ground
Pin 5	White	Warning lamp
Pin 6	White/Green	CAN-HI
Pin 7	White/Brown	CAN-LO

Part Number	FIG.	Description	Application
K002290	1	EBS Socket	24 Volt EBS Socket (7 Pin)
	1a	EBS Socket	24 Volt EBS Socket (Pin Configuration)
K002291	2	EBS Plug	24 Volt EBS Plug (7 Pin)
	2a	EBS Plug	24 Volt EBS Socket (Pin Configuration)

EBS Suzi Cable Plug Multi Volt (ISO 7368)

Keyways in line with Pin 5, and in between Pin 3 & 4

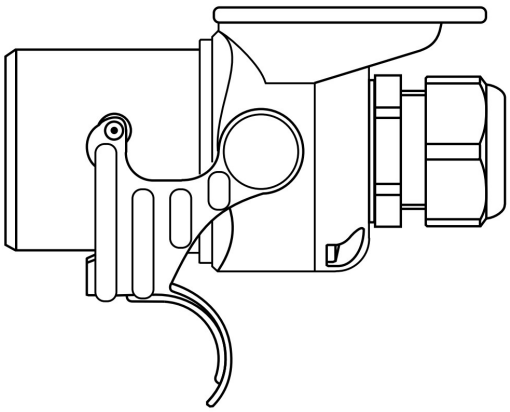


FIG. 1

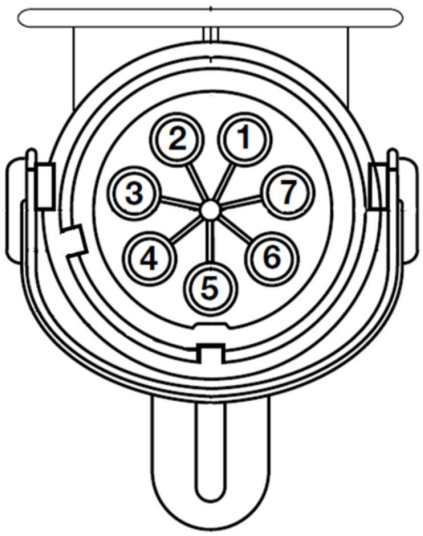


FIG. 1a

Pin #	Wire Colour	Description
Pin 1	Red	Valve supply voltage
Pin 2	Black	ECU supply voltage
Pin 3	Yellow	ECU ground
Pin 4	Brown	Valve ground
Pin 5	White	Warning lamp
Pin 6	White/Green	CAN-HI
Pin 7	White/Brown	CAN-LO

Part Number	FIG.	Description	Application
O0160	1	EBS Plug	12 / 24 Volt EBS Plug (7 Pin)
	1a	EBS Plug	12 / 24 Volt EBS Socket (Pin Configuration)

EBS Plug & Socket Terminals (Pins), Removal Tool & Dummy Socket

FIG. 1

FIG. 2

FIG. 3

FIG. 4

FIG. 5

FIG. 6

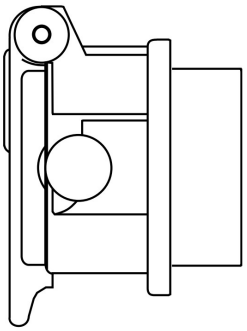


FIG. 7

Part Number	FIG.	Description	Cable Size	Application
CV3081	1	EBS Socket Terminal	1.2mm	Suits O0090 & K002290 EBS Socket
CV3082	2	EBS Socket Terminal	4.0mm	Suits O0090 & K002290 EBS Socket
O0014	3	EBS Plug Terminal	1.2mm	Suits O0089 & K002291 EBS Plug
O0024	4	EBS Plug Terminal	4.0mm	Suits O0089 & K002291 EBS Plug
CV3083	5	Pin Removal Tool Kit		Suits EBS Plugs & Sockets (with Ejector & Insert Sleeves)
O9903	6	Ejector Sleeve		Replacement Ejector Sleeve for CV3083
O0013	7	Dummy Socket		Holder for Plugs when Disconnected

EBS Blanking Plugs, Deutsch Plug & Terminal Removal Tools

FIG. 1

FIG. 2

FIG. 3

FIG. 4

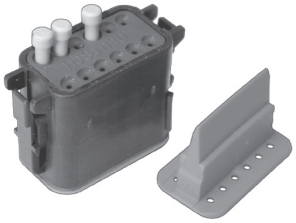


FIG. 5

FIG. 6

FIG. 7

FIG. 8

Part Number	FIG.	Description	Application
K026197V01N00	1	Blanking Plug	G2.2 Premium Blank Off X2.3 & 2.4 Sockets
Z005861	2	Blanking Plug	G2.2 Premium Blank Off X2.3 & 2.4 Sockets
Z005860	3	Blanking Plug	G2.2 Premium Blank Off Additional WSS SE & SF Sockets
CV3688	4	Blanking Plug	4 Pin Bayonet Blanking Plug
K091439N00	5	Deutsch Plug Kit (A Code, TEBS G2.2)	Includes 1x Deutsch Plug, 1x Locking Wedge & 10x Blanking Plugs (Grey)
K002287N00	5	Deutsch Plug Kit (B Code, TEBS G2.0/1)	Includes 1x Deutsch Plug, 1x Locking Wedge & 12x Blanking Plugs (Black)
K092215N00	6	4/6 Pin Deutsch Plug Kit (No Code)	G2.2 Premium for Connectors 2.3 & 2.4 Includes 1x Deutsch Plug, & 4 Blanking Plugs
19812	7	Blanking Plug	Blanking Plug for Deutsch Plug Wire Entry
CV3011	8	Deutsch Terminal	Receptacle Socket Terminal for Wire Size 1 – 2.5mm

TEBS Replacement Bayonet Cap, Side Covers & Filters

FIG. 1

FIG. 2

FIG. 3

FIG. 4

FIG. 5

Part Number	FIG.	Description	Application	TEBS G2.0/2.1	TEBS G2.2
19943	1	Bayonet Nut	Replacement Bayonet Nut for TEBS Cable Plugs	✓	✓
K027817N00	2	Closing Cap	Trailer Roadtrain Module (TRM)		
K023401K50	3	Side Cover	Suits Trailer Brake Module	✓	
K017877K50	3	Side Cover	Suits 3rd Modulator (TEPM)	✓	✓
K092404K50	3	Side Cover	Suits Trailer Brake Module		✓
K000847K50	4	Silencer	Exhaust Port Silencer Kit	✓	✓
K108643K50	5	Filter	Flat Filter for Port 4	✓	✓
K004904K50	5	Filter	Conical Filter for Ports 11 & 12		✓

iLevel Pneumatic Suspension (iLvl)

FIG. 1

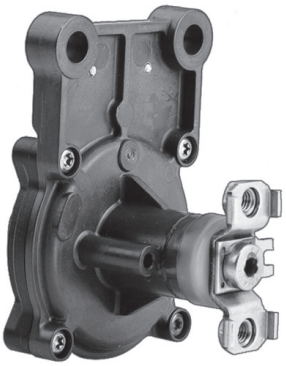


FIG. 2

FIG. 3

FIG. 4

FIG. 5

FIG. 6

Part Number	FIG.	Description	Application
K058032N00	1	iLvl Module	
K025259N00	2	iLvl Deflection Sensor	For Flat Bar Lever
K095917N00	3	Lever Kit	Lever & Joint with Bolts (Flat Bar)
K193627	4	Rubber Link	Replacement Link for Flat bar
K06489N00	5	Push Button	Pneumatic Push Button
CV3378	6	Label	Push to Raise / Push to Lower

Spring Suspension Deflection Sensor, Linkage Kit & Rod

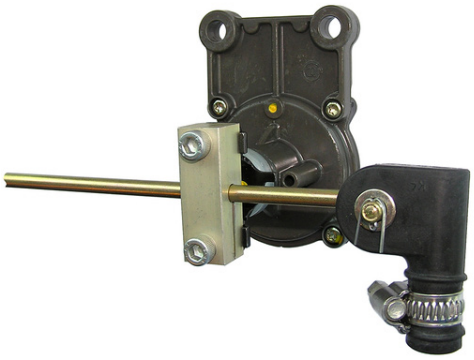


FIG. 1

FIG. 3

FIG. 2

FIG. 4

Part Number	FIG.	Description	Application	TEBS G2.0/2.1	TEBS G2.2
K026919B90	1	Deflection Sensor Includes Rod & Joint		✓	✓
K193628	2	Linkage Kit	Axle Connection	✓	✓
CV3214	3	Rod (Round)	0.64 x 400mm	✓	✓
ii19422	4	Rod & Joint		✓	✓
CV6055		Load Sensor Kit (G2.0/2.1)	Kit Includes Above & Harness	✓	
CV6308		Load Sensor Kit (G2.2)	Kit Includes Above & Harness		✓

Lift Axle & Raise / Lower Valves (Controlled by TEBS)

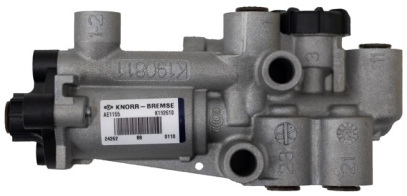


FIG. 1

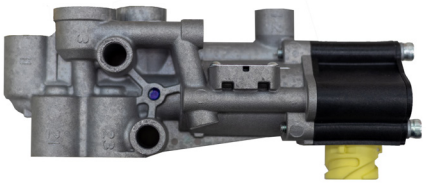


FIG. 2

FIG. 3

FIG. 4

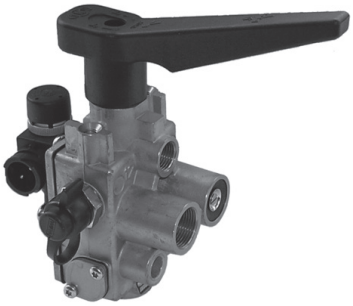


FIG. 5

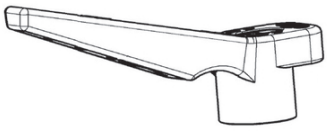


FIG. 6

Part Number	FIG.	Description	Application
K192610N00	1	Lift Axle Valve	Pneumatically Controlled Lift Axle Valve
CV3740	2	Lift Axle Valve	Electrically Controlled Lift Axle Valve 12 Volt
K192614N00	3	Lift Axle Valve	Electrically Controlled Lift Axle Valve 24 Volt
ii36151	4	Raise / Lower Valve	Pneumatically Operated Reset to Ride Valve
K054885N00	5	Raise / Lower Valve	Electrically Operated Reset to Ride Valve
ii36226004	6	Lever	Handle Kit to Suit ii36151 & K054885N00

Raise / Lower Valves (Manually Operated)

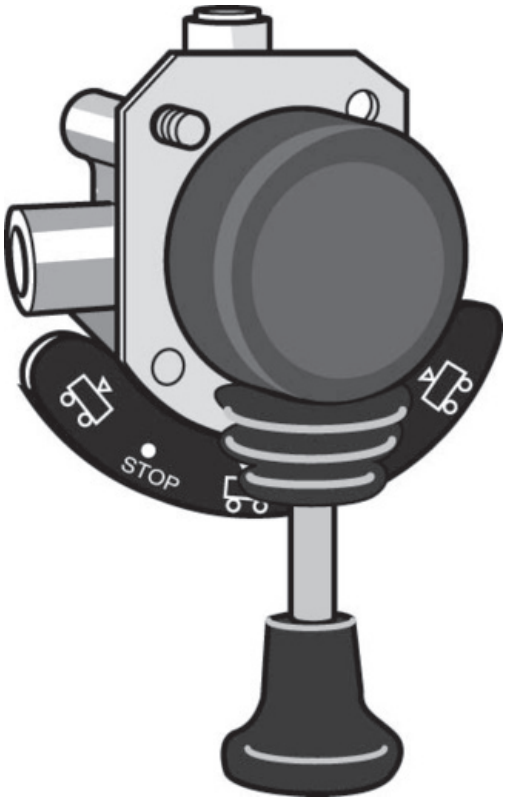


FIG. 1

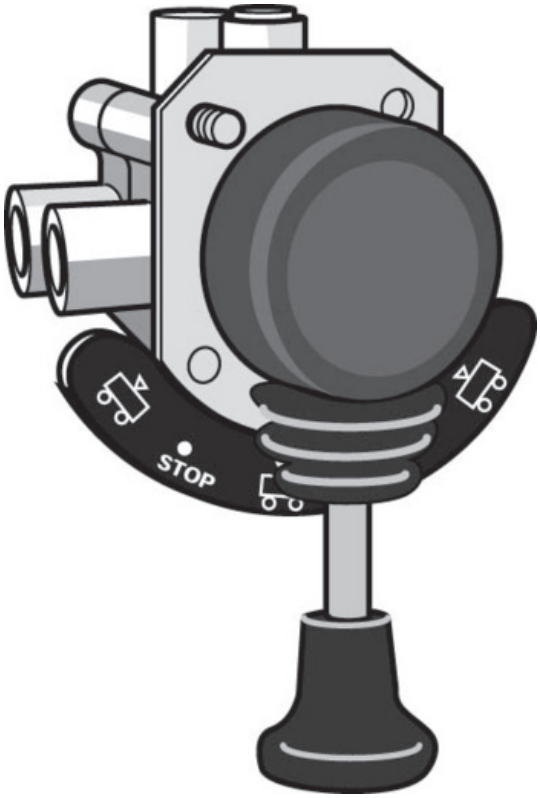


FIG. 2

Part Number	FIG.	Description	Application
i86024	1	Raise / Lower Valve	Single Circuit Valve (Manually Operated)
i83153	2	Raise / Lower Valve	Double Circuit Valve (Manually Operated)

Park Shunt Valves

FIG. 1

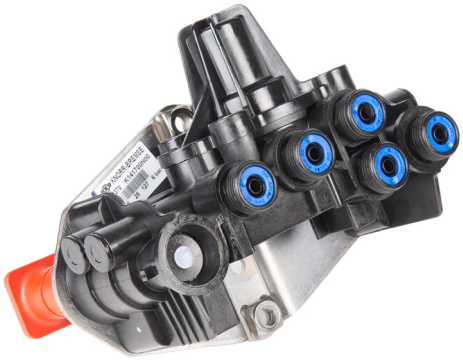


FIG. 2

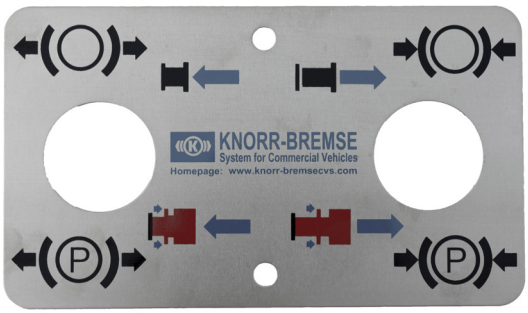


FIG. 3

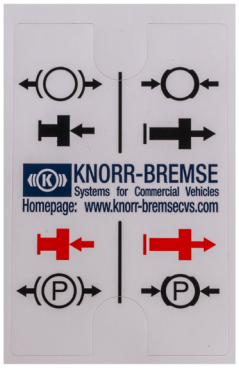


FIG. 4

Part Number	FIG.	Description	Application
K020123N00	1	Park/Shunt Valve Alloy Housing	TEBS G2.0 & TEBS4
K141700N00	2	Park/Shunt Valve Plastic Housing	TEBS G2.1 & G2.2
Z006845	3	Park/Shunt Valve Label (Alloy Plate)	Instruction Plate (K020123) Also Fits K141700
K056570N00	4	Park/Shunt Valve Label (Sticker)	Instruction Plate (K141700)

Load Sensing Valves & Fixed Ratio Valve

New Zealand Only

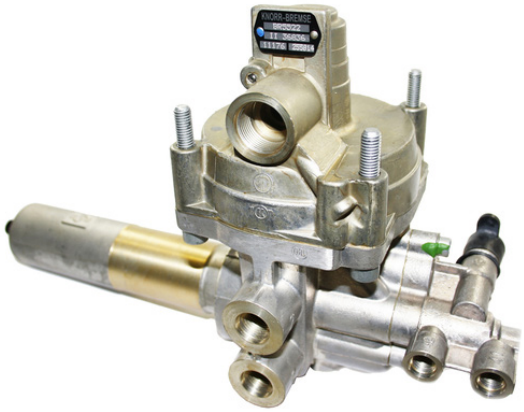


FIG. 1

FIG. 2

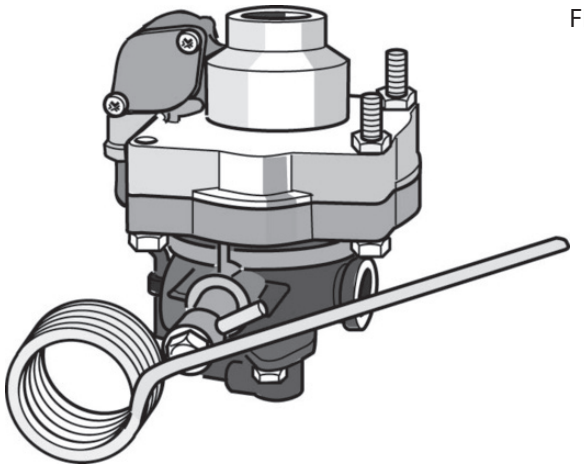


FIG. 3

Part Number	FIG.	Description	Application
ii36836	1	Load Sensing Valve Pneumatic	Requires Setting by Accredited Person
CV6099	1	Load Sensing Valve Kit Pneumatic / Air Suspension	Requires Setting by Accredited Person Includes Valve, Label, Tube & Fittings
SEB00933	2	Load Sensing Valve Mechanical	Requires Setting by Accredited Person
CV6100	2	Load Sensing Valve Kit Mechanical Suspension	Requires Setting by Accredited Person Includes Valve, Label, Tube & Fittings
KY1956/5	3	Fixed Ratio Valve (New Zealand)	Requires Setting by Accredited Person

Pneumatic Valves (Bendix)

FIG. 1

FIG. 3

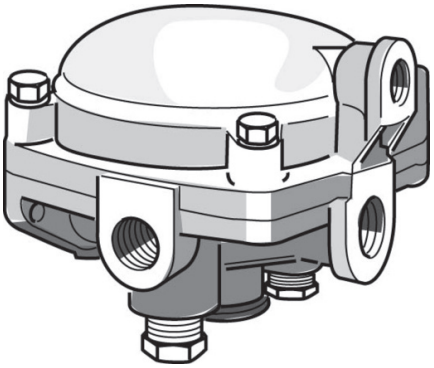


FIG. 2

FIG. 4

Part Number	FIG.	Description	Delivery Ports	Application
102277	1	R12 Relay Valve	1/2”Vertical Ports	Standard Application
102276	1	R12 Relay Valve	3/8"Vertical Ports	Standard Application
280375	2	R6 Pilot Valve	3/8” Horizontal Ports	Roadtrain Application
109001	3	R12 Pilot Valve	3/8” Horizontal Ports	Standard Application
278614N	4	Double Check Valve		

Pneumatic Valves (Knorr-Bremse)

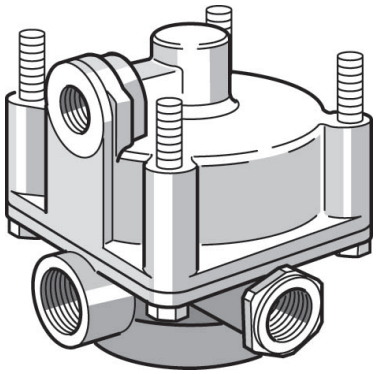


FIG. 1

FIG. 2

FIG. 3

Part Number	FIG.	Description	Delivery Ports	Supply Ports	Application
i76202	1	Relay Valve	M16 x 1.5	M22 x 1.5	Used for Select Low Operation
AC574AXY	2	Relay Valve	M22 x 1.5	M22 x 1.5	Used in Some Park Brake Applications with G2.x
K000643	3	Charging Valve	M22 x 1.5	M22 x 1.5	Opens 5.5 Bar Closes 4.6 Bar

Spring Brake & Levelling Valves

FIG. 1

Hole in Web for SR-5

FIG. 2

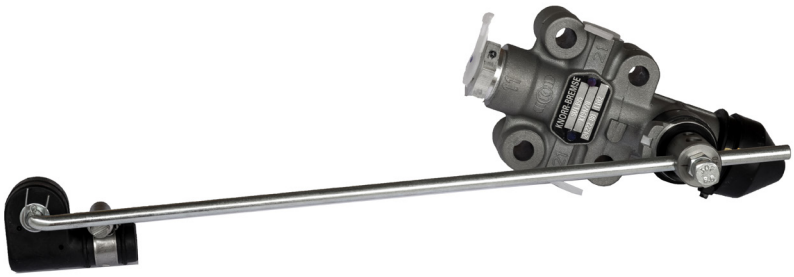


FIG. 3

Part Number	FIG.	Description	Details
K033128	1	SR-2 Spring Brake Valve	Service Brake Priority No Anti-Compounding
K033221	2	SR-5 Spring Brake Valve	Spring Brake Priority with Anti-Compounding (New Zealand Market)
K194770N00	3	Levelling Valve	Ride Height Control Valve (Replaces ii19425)

In-Line Filter, Duradrain & Couplings

FIG. 1

FIG. 3

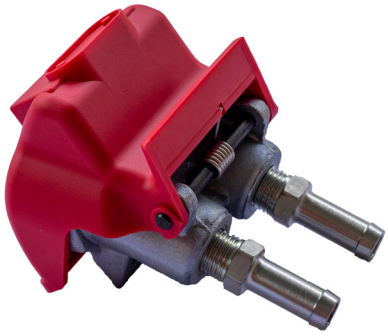


FIG. 2

FIG. 4

Part Number	FIG.	Description	Details
I99660	1	In-Line Air Filter	M22 x 1.5 Ports
CV3207	2	Duomatic Coupling	Trailer End
CV3221	3	Duomatic Coupling	Truck End
801747	4	Duradrain	Water Filter

Test Points

FIG. 1

FIG. 2

Part Number	FIG.	Description	Details
KW3405/2	1	Test Point	3/8" NPT Thread
KW4282/2	2	Test Point	M16 x 1.5 Thread

Raufoss Air Pipe Removal Tools & Plugs

FIG. 1

FIG. 2

FIG. 3

Part Number	FIG.	Description	Details
96606020	1	Raufoss Pro Release Tool	6 x 1mm Tube
96608020	1	Raufoss Pro Release Tool	8 x 1mm Tube
96610020	1	Raufoss Pro Release Tool	10 x 1.5mm Tube
96612020	1	Raufoss Pro Release Tool	12 x 1.5mm Tube
96615020	1	Raufoss Pro Release Tool	15 x 1.5mm Tube
96608010	2	Raufoss Release Tool	8 x 1mm Tube
96612710	2	Raufoss Release Tool	12 x 1.5mm Tube
96615010	2	Raufoss Release Tool	15 x 1.5mm Tube
96210008	3	Push in Plug	Plug for All Unused 8mm Ports
96210012	3	Push in Plug	Plug for All Unused 12mm Ports

Air Tanks

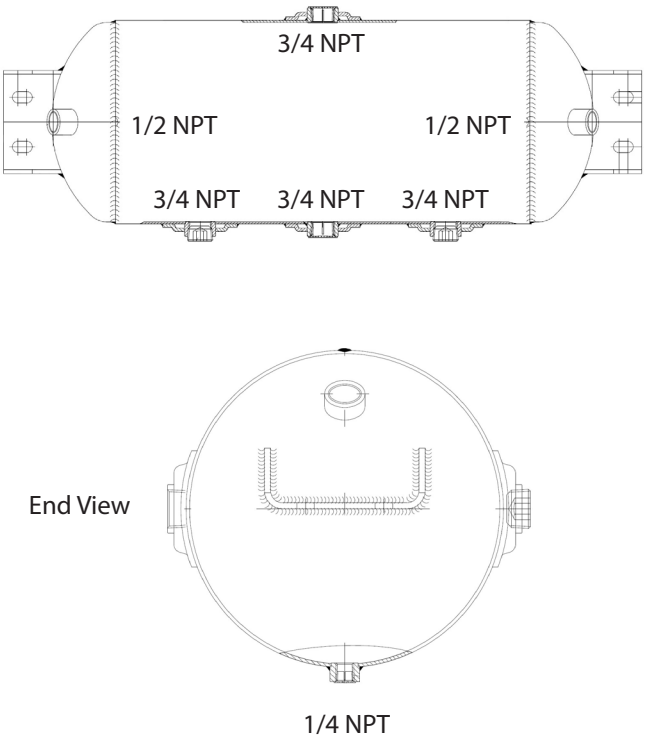


FIG. 1

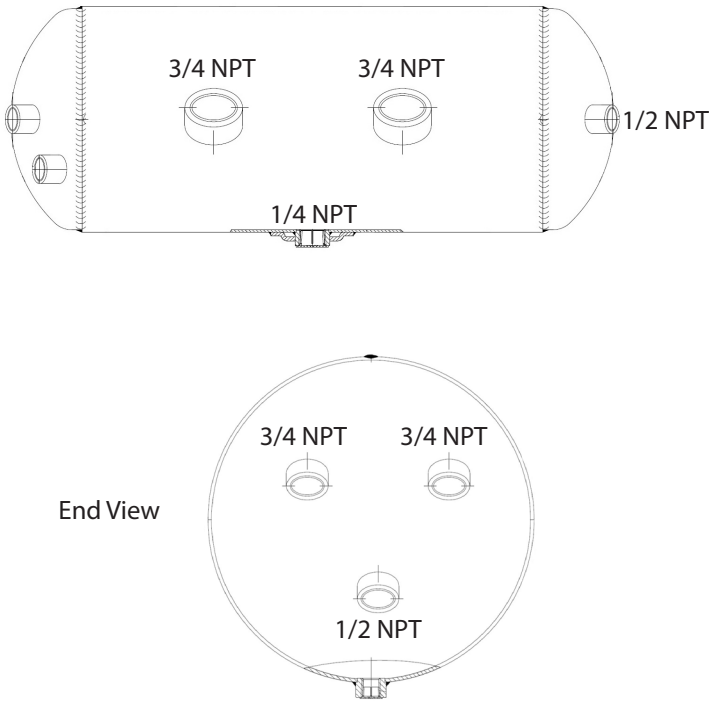
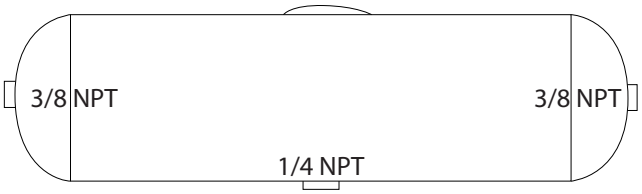


FIG. 2

Part Number	FIG.	Capacity	Diameter	Barrel Length	Overall Length
CV3065	1	48 Litres	330mm	626.5mm	738mm
CV3066	1	24 Litrres	241mm	626.5mm	738mm
CV3594*	2	72 Litres	310mm	1025mm	1025mm

*CV3594 available in bulk only. Minimum order quantity 192 pieces.
Includes brackets.
Dimension and port size drawings available from Knorr-Bremse Australia.

Air Tanks



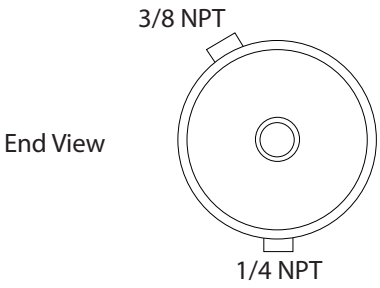


FIG. 1

FIG. 2

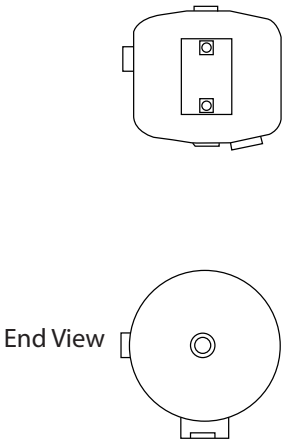
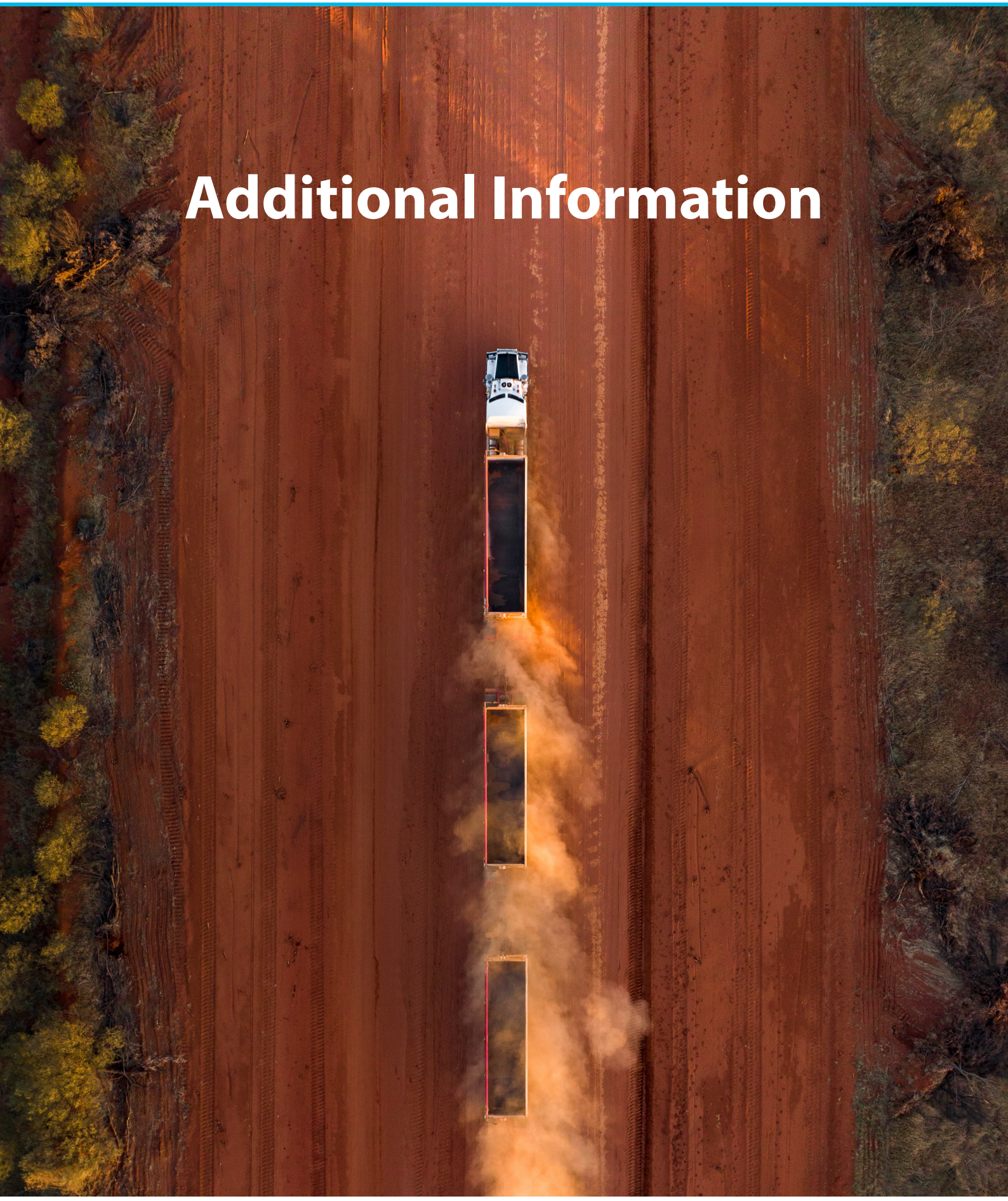


FIG. 3

Part Number	FIG.	Capacity	Diameter	Barrel Length	Overall Length
215660	1	13.7 Litres	178mm	610mm	690mm
CV3250	2	For 215660	178mm		2 x Brackets & Bolt
M64310	3	5 Litres		170mm	

Dimension and port size drawings available from Knorr-Bremse Australia.

Additional Information



Toolkits

FIG. 1

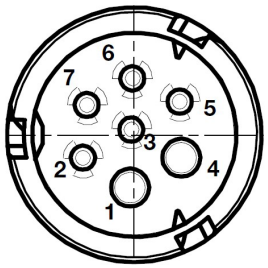
FIG. 2

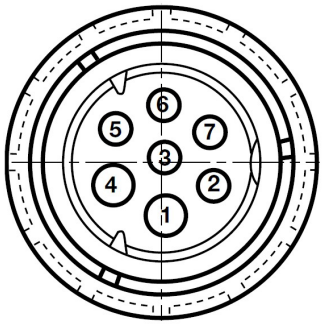
FIG. 3

Part Number	FIG.	Description	Application
K158880K50	1	Air Disc Brake Toolkit	Tools for the Repair & Maintenance of Air Disc Brakes
K148897K50	2	Deutsch Terminal Toolkit	Tools for Removal of Deutsch Plugs & Round Connector
2600970	3	Raufoss Removal Kit	Tools for Removal of Pipelines in Raufoss Fittings

Common Pin Outs

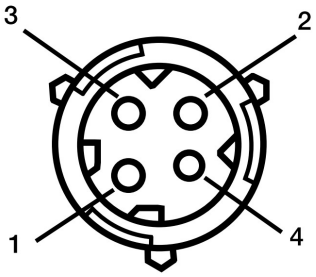
7-pin Bayonet Socket
(ISO 7638 Power)

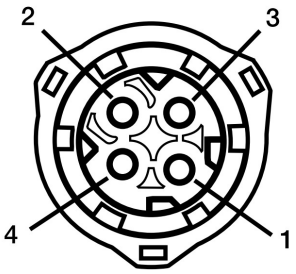




7-pin Bayonet Plug
(ISO 7638 Power)

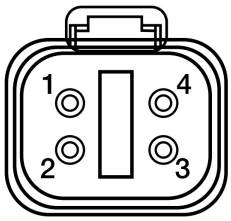
4-pin Bayonet Socket

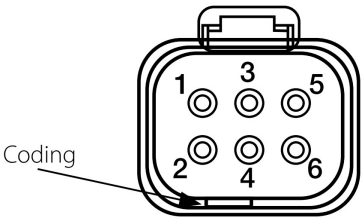




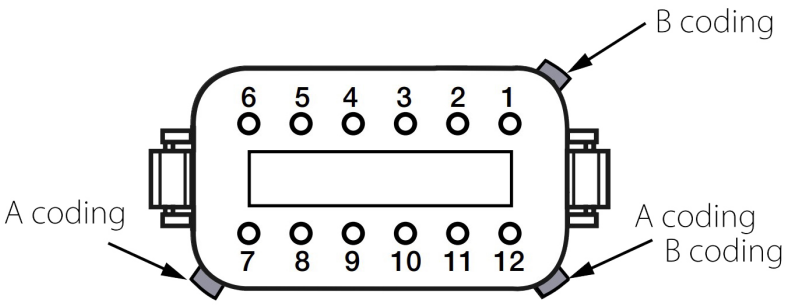
4-pin Bayonet Plug

Deutsch 4-way Plug





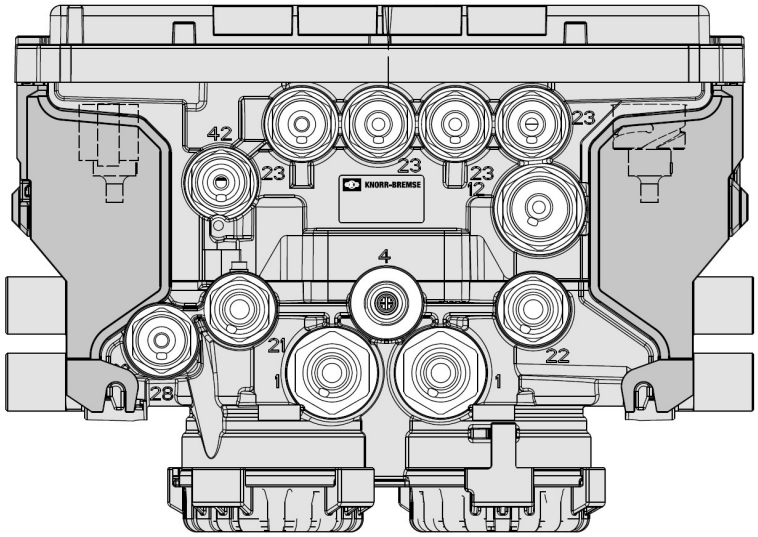
Deutsch 6-way Plug



TEBS G2.0/G2.1 uses a Code B Plug (Black)
TEBS G2.2 uses a Code A Plug (Grey)

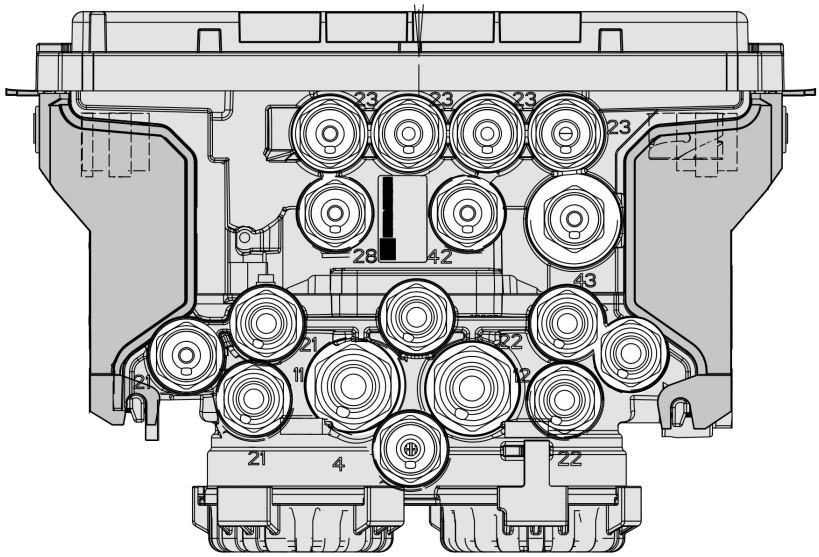
Pneumatic Connections

TEBS G2 & G2.1



Port	Thread	Used for
1.1	M22x1.5	Supply from Reservoir
1.2	M22x1.5	Supply from Reservoir
12	M16x1.5	Park Shunt Valve G2
21	M16x1.5	Delivery to Brake Chambers
22	M16x1.5	Delivery to Brake Chambers
23	M16x1.5	Delivery to Park Brake
4	M16x1.5	Brake Demand (Blue Line)
41	M16x1.5	Park Shunt Valve G2.1
42	M16x1.5	Air Spring Pressure
28	M16x1.5	Pneumatic Signal for RTR etc.

TEBS G2.2



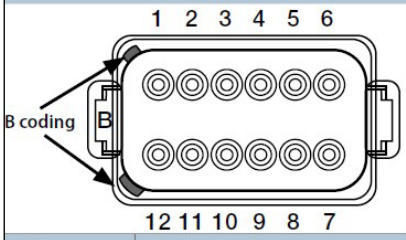
Port	Thread	Used for
11	M22x1.5	Supply from Reservoir
12	M22x1.5	Supply from Reservoir
21	M16x1.5	Delivery to Brake Chambers
22	M16x1.5	Delivery to Brake Chambers
23	M16x1.5	Delivery to Park Brake
28	M16x1.5	Pneumatic Signal for RTR etc.
29	M16x1.5	Test Point
4	M16x1.5	Brake Demand (Blue Line)
43	M16x1.5	Park Shunt Valve G2.2
42	M16x1.5	Air Spring Pressure

Electrical Connections

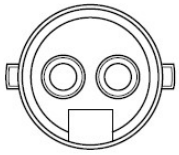
TEBS G2 & G2.1

Primary sensors SC and SD are on either side of ECU.
In / Out plug is B code and black in colour

In - Out Connector

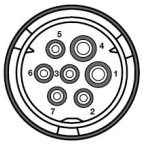


Wheel Speed Sensor Connector



Pin Number	Function	System	Connector	Function
1	AUXIO 1	2S/2M	S-C	Wheel Speed Sensor
2	AUXIO 2		S-D	
3	AUXIO 3		S-E	Optional Aux Input (digital or tri-state*)
4	Sensor Supply [SENS_SUP] (5 V or tri-state input)		S-F	
5	Sensor Input 1 [SENS_IN1] (analogue or tri-state)	4S/2M 4S/3M	S-C	Wheel Speed Sensor
6	Sensor Ground or Magic Eye or C3		S-D	
7	Stop Lamp Supply (+)		S-E	
8	Stop Lamp Ground (-)		S-F	
9	J1939 CAN (5 V) Low	* dependent on the software version		
10	J1939 CAN (5 V) High			
11	AuxRet 12 (return for AUXIO 1 & 2)			
12	AuxRet 3			

Power Connector



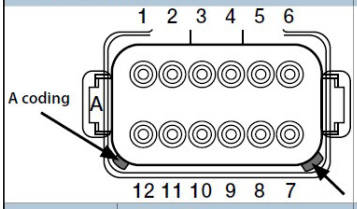
Pin Number	Function
1	Battery Supply (+)
2	Electronic Supply (+)
3	Electronic Ground (-)
4	Battery Ground (-)
5	Warning Lamp
6	ISO 11992 CAN (24 V) High
7	ISO 11992 CAN (24 V) Low

Electrical Connections

TEBS G2.2

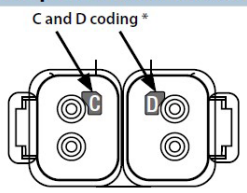
Primary sensors SC and SD are on the same side of ECU and behind the In / Out plug.
In / Out plug is A code and grey in colour.
3rd Modulator connection is x2.3.

In - Out Connector



Pin Number	Function
1	AUXIO 1
2	AUXIO 2
3	AUXIO 3
4	Sensor Ground
5	Sensor Input 1 [SENS_IN1] (tri-state or analogue input)
6	Sensor Supply [SENS_SUP] (tri-state or analogue input)
7	Stop Lamp Supply (+)
8	Stop Lamp Supply (-)
9	J1939 CAN (5 V) Low
10	J1939 CAN (5 V) High
11	AuxRet 3
12	AuxRet 12 (return for AUXIO 1 & 2)

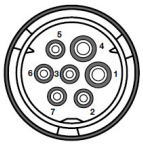
Wheel Speed Sensor Connector



System	Connector	Function
2S/2M	S-C	Wheel Speed Sensor
	S-D	
	S-E	Optional Aux Input (Digital or Tri-state)
	S-F	
4S/2M 4S/3M	S-C	Wheel Speed Sensor
	S-D	
	S-E	
	S-F	

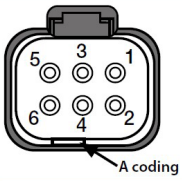
* Note: not all cables are coded, so take care to ensure the correct connection of the wheel speed sensors

Power Connector



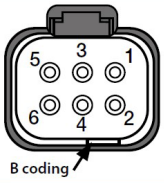
Pin Number	Function
1	Battery Supply (+)
2	Electronic Supply (+)
3	Electronic Ground (-)
4	Battery Ground (-)
5	Warning Lamp
6	ISO 11992 CAN (24 V) High
7	ISO 11992 CAN (24 V) Low

2.3 Connector



Pin Number	Function
1	AUXIO 4 (typically 3rd modulator)
2	AuxRet 4
3	AUXIO 5
4	AuxRet 5
5 (4*)	J1939 Brake CAN (5 V) Low
6 (3*)	J1939 Brake CAN (5 V) High

2.4 Connector



Pin Number	Function
1	Sensor Supply [SENS_SUP2] (tri-state or analogue input)
2	Sensor Ground
3	AUXIO 6
4	AuxRet 6
5	Sensor Input 2 [SENS_IN2] (analogue input)
6	Not connected

Knorr-Bremse Global Care

Knorr-Bremse Global Care is a company-financed organisation that supports aid projects and sees itself as a professional partner for funding development projects around the world. It relies on close cooperation with international and local partner organisations, which are responsible for on-site project management, for ensuring that project implementation focuses on results, and for documenting the projects.

Local Initiative - Healthy Heads

Knorr-Bremse Australia are a proud partner of Healthy Heads in Trucks and Sheds. Our brakes and safety systems may help to keep drivers safe from accidents but the health of drivers is just as important to us as keeping them on the road is. Healthy Heads works to address the specific mental health and physical wellbeing needs of the transport industry, bringing awareness and solutions to the difficulties surrounding a life in transport. They aim to create safer, more supportive working environments for all.

Learn More!

Healthy Heads

Knorr-Bremse Local Activities

KNORR-BREMSE TRUCKSERVICES

"Knorr-Bremse is a global leader in the development of pioneering mobility and transportation technologies in the commercial vehicle market. We are passionate about supporting our customers as a reliable, experienced systems partner."

Bernd Spies – Member of the Executive Board, responsible for the worldwide business of the Commercial Vehicle Systems division

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TRUCKSERVICES