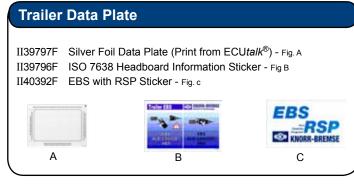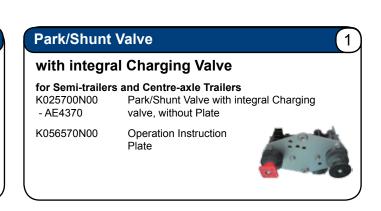# TEBS G2.1 - Component Overview, Semi-trailer /Centre-axle Trailer
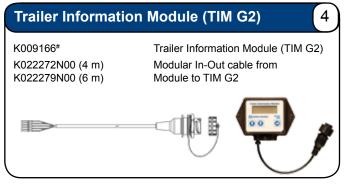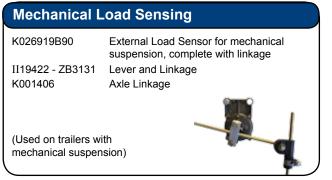
KNORR-BREMSE

Trailer Data Plate

II39797F	Silver Foil Data Plate (Print from ECUtalk®) - Fig. A
II39796F	ISO 7638 Headboard Information Sticker - Fig B
II40392F	EBS with RSP Sticker - Fig. c

A B C

Park/Shunt Valve 1

with integral Charging Valve

for Semi-trailers and Centre-axle Trailers

K025700N00 - AE4370	Park/Shunt Valve with integral Charging valve, without Plate
K056570N00	Operation Instruction Plate

Trailer Information Module (TIM G2) 4

K009166#	Trailer Information Module (TIM G2)
K022272N00 (4 m)	Modular In-Out cable from
K022279N00 (6 m)	Module to TIM G2

Mechanical Load Sensing

K026919B90	External Load Sensor for mechanical suspension, complete with linkage
II19422 - ZB3131	Lever and Linkage
K001406	Axle Linkage

(Used on trailers with mechanical suspension)

Trailer Roadtrain Module (TRM)

K036198# - EZ2085	Amplifier and/or Splitter of CAN Signals. For use on road trains/long trailers.
K027817N00	Closure Cap for unused Bayonet connections.
K015173	external Pressure Sensor (to measure pressure in the yellow line for TRM or for external load input to TEBS)

TEBS - PC Diagnostics

II39808F - EZ1034	24V-CAN-Adapter Cable - Fig. A
II39809F - EZ1031	Universal Diagnose Interface (UDIF) incl. Cable Z005474 - Fig. B
II39812F - EZ1032	Connecting Cable (UDIF - CAN) - Fig. C
Z007887	USB Adapter Cable (UDIF - PC)

A B C

Coupling Head with integral Filter 2

K000952 - KU1400	Supply (red)
K000954 - KU1410	Control (yellow)
K000956 - KU1412	Control (yellow), with Test Point

Raise/Lower Valve 5

K022847N00 - SV3801	Raise/Lower Valve with 'Speed Pulse' Function (reset to ride height)
II36226004	Handle Kit
Z006844	Operation Sticker
K022901K50	Solenoid Kit

SV32.. Raise/Lower Valves - please contact Knorr-Bremse

7 pin ISO 7638 Cable

K004098N00 - EK3150	ISO 7638 Connecting Cable Tractor to Trailer, with buckling protection

Levelling Valve 6

II19425 - SV1395	Levelling Valve - Fig. A
II36088 - SV1460	Levelling Valve with plastic body - Fig. B
II36114 - SV1465	Levelling Valve with height limitation and Datum Adjustment - Fig. C
II36115 - SV1466	Levelling Valve with Height Limitation - Fig. C
K001406	Lower Linkage

A B C

ISO 1185 - Pin Allocation

1 - white	Common Return
2 - black	L/H Side Lights
3 - yellow	L/H Indicators
4 - red	Stop Lamps
5 - green	R/H Indicators
6 - brown	R/H Side Lights
7 - blue	Trailer Braking Control

ISO 7638 - Pin Allocation

1 - red	Modulators (24V)
2 - black	ECU (24V)
3 - yellow	ECU (Ground)
4 - brown	Modulators (Ground)
5 - white	Warning lamp
6 - white/green	Data line CAN-Hi
7 - white/brown	Data line CAN-Lo

Lift Axle Valve 7

K035570N00 - AE1141	5/2 Way Lift Axle Valve, Solenoid controlled 24V (replaces K008546) - Fig. A
K015384N00 - AE1141	5/2 Way Lift Axle Valve, Solenoid controlled 24V - Fig. B
K017224N00 - AE1141	5/2 Way Lift Axle Valve, pneumatically controlled - Fig. C
II36167008	Solenoid Kit, only for K008546
K020018K50	Solenoid Kit for K035570N00 and K015384N00

A B C

Trailer EBS Brake Module 3

K01931.# - ES2060	TEBS G2.1 Module, 2S-6S/3M, Port P28 programmable
K01935.# - ES2060	TEBS G2.1 Module, 2S/2M, P28 Test Point.

For other TEBS G2 variants see Trailer Catalogue Y007570

K0000847K50	Silencer

Note:
All TEBS G2 brake modules must be programmed and an "End of Line Test" (EOL) carried out after installation!

P28

Wheel Speed Sensor and Extension Cable

Sensors

0486000126100	Radial (90°), Length 0,4 m
0486000134000*	Radial (90°), Length 0,4 m
0486000136000*	Radial (90°), Length 1 m
0486001033100	Axial, Length 1 m

*complete with Bush and Grease

Extension Cables EK3130

II367563000	Length 3 m
II367564000	Length 4 m
II367566000	Length 6 m
II367610000	Length 10 m

For other Sensors and Cables see Trailer Catalogue Y007570

In-Out

1	AUXIO 1
2	AUXIO 2
3	AUXIO 3
4	Sensor Supply [SENS_SUP] (5-V- or Tristate Input)
5	Sensor Input 1 [SENS_IN1] (analogue or Tristate)
6	Sensor Ground or Magic Eye or C3
7	Stop Lamp Supply (+)
8	Stop Lamp Ground (-)
9	TI CAN-L (J1939)
10	TI CAN-H (J1939)
11	AuxRet 12 (Return for AUXIO 1 & 2)
12	AuxRet 3

View X

TIM G2

BK-12
BR-10
WH- 9
3-YE
6-GR

Power

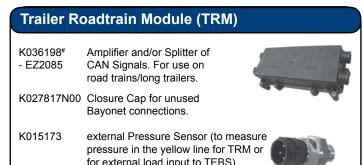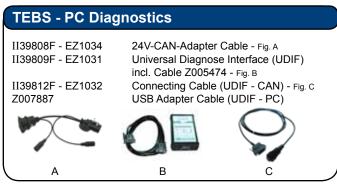| 1	Modulators Supply 24 V (+)
2	ECU Supply 24 V (+)
3	ECU Ground (-)
4	Modulators Ground (-)
5	Warning Lamp
6	TT CAN-H (ISO 11992)
7	TT CAN-L (ISO 11992)

Legend

- Supply
- Control/Service Brake
- Parking Brake
- Air Suspension
- CAN Connection and ISO 7638 Power Supplies
- ISO 1185 (24N) Stop Lamp Power
- Electrical Signals
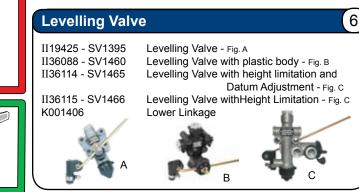
7 pin ISO 7638 Chassis Cable

K008430N00	ISO 7638 Socket + 10 m Cable (Semi-trailer) - Fig A
K008431N00	ISO 7638 Socket + 13 m Cable (Semi-trailer) - Fig A
K008432N00	ISO 7638 Socket (90° Connector) + 16m Cable (Semi-trailer) - Fig. B
K010710N00	ISO 7638 Socket + 10 m Cable (Centre-axle Trailer) - Fig. C
K010711N00	ISO 7638 Socket + 13 m Cable (Centre-axle Trailer) - Fig. C
K002290	ISO 7638 Socket, 7-pin, with Pins - Fig D

For other Power Supply Cables see Trailer Catalogue Y007570

A C D

In-Out Plug and Cable (Examples)

K021335N00	In-Out Cable for SP on Aux 1 - Fig. F
K021336N00	In-Out Cable for SP/LAC on Aux 1, Stop Lamp powering/TH, open ended - Fig. E
K021345N00	In-Out Cable Stop Lamp powering/TH, open ended - Fig. D
K002281N00	Connecting Cable (15 m) open ended, various possible connections - Fig. B
K002275N00	Aux Connecting Cable 2-pole (6,5 m), e.g. LAC, SP - Fig. A
K002287N00	12-Pin Deutsch Plug complete with blanking plugs - Fig. C

TH = Traction Help
LAC = Lift Axle Control
SP = Speed Pulse (e.g. signal for reset to ride height)

For other modular cables see Trailer Catalogue Y007570

A B C
F E D

Trailer Electro-Pneumatic Module (TEPM-S)

K021940# - ES2070	TEPM-S, Trailer Electro-Pneumatic Module Standard (without additional Inputs/Outputs) for trailers with 4S/3M Systems, e.g. with Steering Axle

Cables

K0583..	Connecting Cable TEPM-S to TEBS G2/G2.1 - Fig A
K027811N00	Wheel Speed Sensor Cable TEPM-S (2 m) - Fig. B
K044708N00	Connecting Cable TEPM-S to external Pressure Sensor (3 m) - Fig. C

For other modular cables see Trailer Catalogue Y007570

B C

Trailer Electro-Pneumatic Module (TEPM-P)

K027900# - ES2071	TEPM-P, Trailer Electro-Pneumatic Module Premium (with additional Inputs/Outputs) for trailers with 4S/3M Systems, e.g. with Steering Axle

Cables

K058249N00	Connecting Cable TEPM-P to TEBS G2/G2.1 (7 m) - Fig A
K058256N00	Connecting Cable TEPM-P to TEBS G2/G2.1 with additional Aux connection - Fig. B

For other modular cables see Trailer Catalogue Y007570

A B

The part number of the module will carry two suffices, firstly "V##" which represents the software revision of the product, e.g. V01, V02 etc., and secondly "N##" which defines the packaging requirements of different market sectors, e.g. N00, N50. Example: K021940V00N00 - is supplied with software to revision 00 and is supplied without packaging.

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