Page 1 of 5

TEBS: Details for Installation / Storage / Maintenance

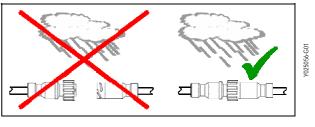
1 Electrical connections / Wiring

1.1 Bayonet Connection (7-pin)

The following references apply explicitly to each application (e.g. power supply, diagnosis, splitter, etc.) of the 7-pin bayonet Connection.

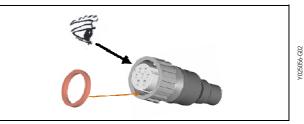
To avoid stress cracks, leakage and maybe corroded contacts, the following points should be considered:

• It must be guaranteed that in the disconnected condition the Connection is not exposed to direct exposure to rain, snow, dust, etc.

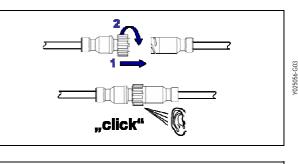


Y025056-EN-001

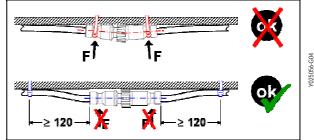
• the seal in the socket plug must be correctly fitted and show no signs of damage



• when assembling the Connection you must feel and hear that the nut has locked



- the bayonet Connection must be securely fixed, without tension, using cable straps ensuring that there are no bending forces created
- use as large a radius as possible during the laying of cables



Note: This publication is subject to alteration without notice. A printed copy of this document may not be the latest revision. Please check our website www.Knorr-BremseCVS.com for the latest update or contact your local Knorr-Bremse representative. KNORR-BREMSE Systeme für Nutzfahrzeuge GmbH · Moosacher Straße 80 · 80809 Munich · Germany · Tel: +49 89 3547-0 · Fax: +49 89 3547-2767 · <u>www.Knorr-Bremse.com</u> · <u>www.Knorr-BremseCVS.com</u> Copyright 2006 © Knorr-Bremse AG – all rights reserved, including industrial property rights applications. Knorr-Bremse AG retains any power of disposal, such as for copyrign and transferring.



Y025056-EN-001

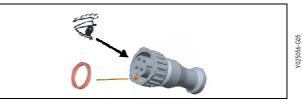
Page 2 of 5

1.2 DIN-bayonet Connection (2- to 4-pin)

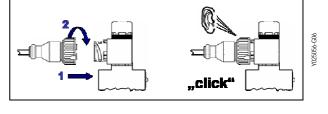
The DIN-bayonet Connection is mainly used as the electrical connection for electromechanical components (e.g. axle modulator, lift axle valve, etc.). The following references are explicitly valid for each application.

To avoid stress cracks, leakage and maybe corroded contacts, the following points should be considered:

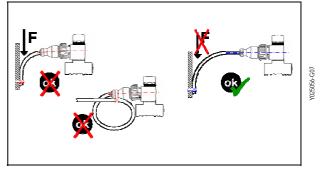
• the seal in the socket plug must be correctly fitted and show no signs of damage



• when assembling the Connection you must feel and hear that the nut has locked



- the bayonet Connection must be securely fixed, without tension, using cable straps ensuring that there are no bending forces created
- use as large a radius as possible during the laying of cables
- it is not necessary to create a loop for the avoidance of water entrance because the connector is a completely moulded

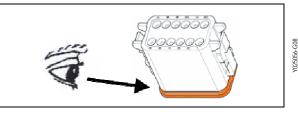


1.3 X1-/X2-connector (12-pin)

The X1 and X2-Connectors are used for the connection of the wiring harness to the EBS-module. The following references are explicitly valid for each application.

To protect the EBS-module against intrusion of water and foreign substances (e.g. sand) the following points should be considered:

• the seals of the X1 and X2-Connectors must be assembled and show no signs of damage



Note: This publication is subject to alteration without notice. A printed copy of this document may not be the latest revision. Please check our website www.Knorr-BremseCVS.com for the latest update or contact your local Knorr-Bremse representative. KNORR-BREMSE Systeme für Nutzfahrzeuge GmbH · Moosacher Straße 80 · 80809 Munich · Germany · Tel: +49 89 3547-0 · Fax: +49 89 3547-2767 · <u>www.Knorr-Bremse.com</u> · <u>www.Knorr-BremseCVS.com</u> Copyright 2006 © Knorr-Bremse AG – all rights reserved, including industrial property rights applications. Knorr-Bremse AG retains any power of disposal, such as for copying and transferring. Page 3 of 5

- · unused contact locations must be fitted with seal pins
- when assembling the Connection you must feel and hear that the nut has locked

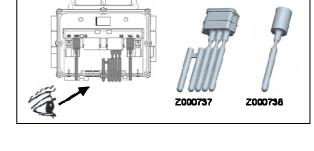
2 Components

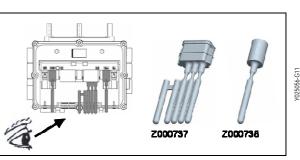
2.1 **EBS-module**

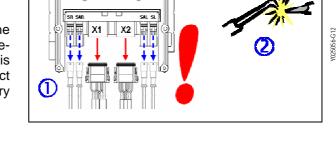
To avoid the destruction of the EBS-module (e.g. on electrical welding), and accordingly to protect the EBS-module against intrusion of water and foreign substances (e.g. sand) the following points should be considered:

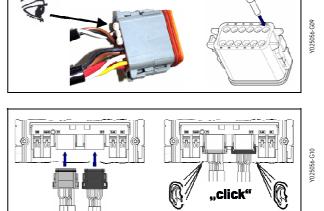
Note: This publication is subject to alteration without notice. A printed copy of this document may not be the latest revision. Please check our website www.Knorr-BremseCVS.com for the latest update or contact your local Knorr-Bremse representative. KNORR-BREMSE Systeme für Nutzfahrzeuge GmbH · Moosacher Straße 80 · 80809 Munich · Germany · Tel: +49 89 3547-0 · Fax: +49 89 3547-2767 · www.Knorr-Bremse.com · www.Knorr-Bremse.CVS.com Copyright 2006 © Knorr-Bremse AG - all rights reserved, including industrial property rights applications. Knorr-Bremse AG retains any power of disposal, such as for copying and transferring.

- unused cable entrances on the module must be closed by insertion of the locking plug. Required:
 - \rightarrow for slot X2: Z000737
 - → for wheel-speed-sensor-input SAR/SAL: Z000738
- the dust cover of the module (not shown) must be closed and locked
- in all cases first the X1- and then the X2connector must be removed ① before any electrical welding is started 2
- for the complete protection of the module, the sensor plugs must also be removed. On reinsertion of the plugs (in reverse order) it is essential that they are fitted in the correct places (sensor assignment) \rightarrow if necessary this must be checked by PC-diagnosis











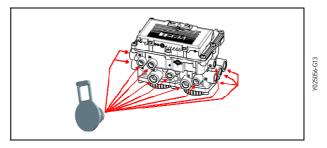


Page 4 of 5

Y025056-EN-001

 whilst there is no pneumatic pipework connected, the EBS-module must be protected against intrusion of water and foreign substances, such as sandblasting sand, by the use of e.g. by thread protective caps

 \rightarrow this protection must not be removed until connection of the pneumatic pipework



3 Pneumatic pipework / Components

3.1 Coupling heads

Coupling heads are available in two designs:

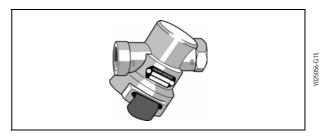
- Type number KU13.. : without integrated line filter
- Type number KU14.. : with integrated line filter \rightarrow maintenance see point 3.2
- in the uncoupled condition the plastic covers must always be closed so that the coupling heads are protected against direct water and dirt entrance
- for applications on full- and centre-axle-trailers you must pay attention additionally that the opening does not point upward and that the coupling heads are not laying on the ground



3.2 In-line filter

The function and protection of the piping system against particle contamination is only guaranteed if the line filter is regularly maintained.

• dependent on operating conditions in normal case the in-line filter (also coupling heads with integrated line filters) must be cleaned approximately every 3 - 4 months. The filterelement must be taken out, examined to ensure no damage and washed and blow-out with compressed air



Note: This publication is subject to alteration without notice. A printed copy of this document may not be the latest revision. Please check our website www.Knorr-BremseCVS.com for the latest update or contact your local Knorr-Bremse representative. KNORR-BREMSE Systeme für Nutzfahrzeuge GmbH · Moosacher Straße 80 · 80809 Munich · Germany · Tel: +49 89 3547-0 · Fax: +49 89 3547-2767 · <u>www.Knorr-Bremse.com</u> · <u>www.Knorr-BremseCVS.com</u> Copyright 2006 © Knorr-Bremse AG – all rights reserved, including industrial property rights applications. Knorr-Bremse AG retains any power of disposal, such as for copyrig and transferring.

Service Information

Page 5 of 5

Note: This publication is subject to alteration without notice. A printed copy of this document may not be the latest revision. Please check our website www.Knorr-BremseCVS.com for the latest update or contact your local Knorr-Bremse representative. KNORR-BREMSE Systeme für Nutzfahrzeuge GmbH · Moosacher Straße 80 · 80809 Munich · Germany · Tel: +49 89 3547-0 · Fax: +49 89 3547-2767 · <u>www.Knorr-Bremse.com</u> · <u>www.Knorr-BremseCVS.com</u> Copyright 2006 © Knorr-Bremse AG – all rights reserved, including industrial property rights applications. Knorr-Bremse AG retains any power of disposal, such as for copyrig and transferring.



Y025056-EN-001