Assembly instructions
VOSS quick connect system 301 *EFSP*

Electric-Fluidic Separation Point

Separation point for electrically heated SCR lines

A. Important notices

Please observe before using the quick connect system

- VOSS quick connect system 301 *EFSP* is suitable for electrically heated SCR systems in passenger cars.
- The temperature range is -40 °C to +120 °C.
- The maximum operating pressure is 10 bar.

Please observe during assembly of the quick connect system

- The assembly of the quick connect system must be conducted by professional mechanics subject to these assembly instructions.
- Incorrectly assembled connections can result in leakage or failure of the system.
- VOSS quick connect system 301 *EFSP* may only be used with connections and tubes described in chapter B (“Components”).
- Before connecting both sides, components must be checked. They have to be clean and must not show any signs of damage.

System properties

- VOSS quick connect system 301 *EFSP* is an electric-fluidic plastic connection for electrically heated AdBlue®/DEF lines in passenger cars.
- You can connect AdBlue® line and heating wires with one single process step.
- This quick connect system is only used with polyphtalamide tube 4x1.
- VOSS quick connect system 301 *EFSP* is equipped with secondary lock (SL) for additional visual connection indicator.
- A Poka Yoke design guarantees a secure and proper connection.
- This quick connect system is compatible with high temperature lines.

B. Components of quick connect system 301 *EFSP*

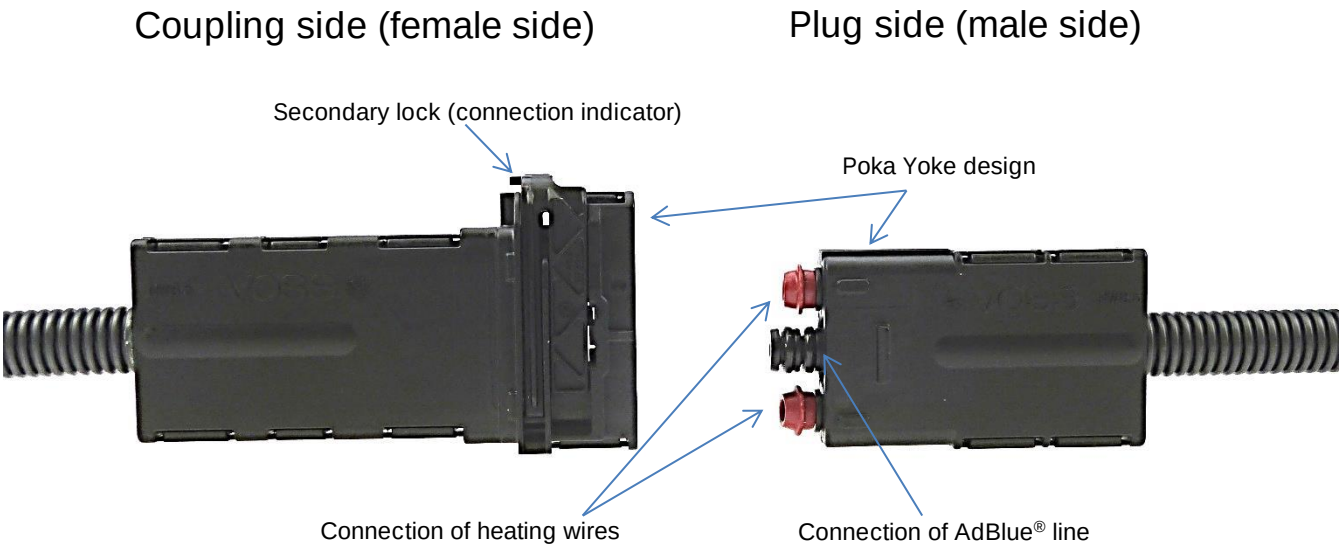

Fig. 1: Components of quick connect system 301 *EFSP*

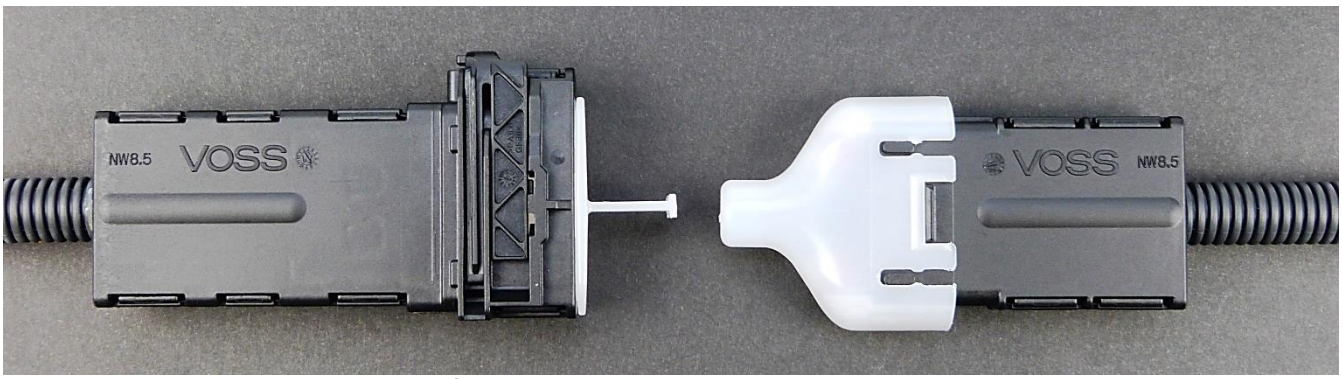

Fig. 2: VOSS quick connect system 301 *EFSP* with protection caps (as-delivered condition)

C. Assembly instructions

Use of arrow symbols in pictures:

Indicates special points of interest described in the text.

Indicates required manual actions and their direction.

Indicates operations that should be avoided.

1. Assembly

Before connecting both sides, components must be checked. They have to be clean and must not show any signs of damage.

Step 1

Coupling and plug sides separated without protection caps (starting situation).

Fig. 3: Coupling and plug side separated

Due to Poka Yoke design, only one assembly position possible.

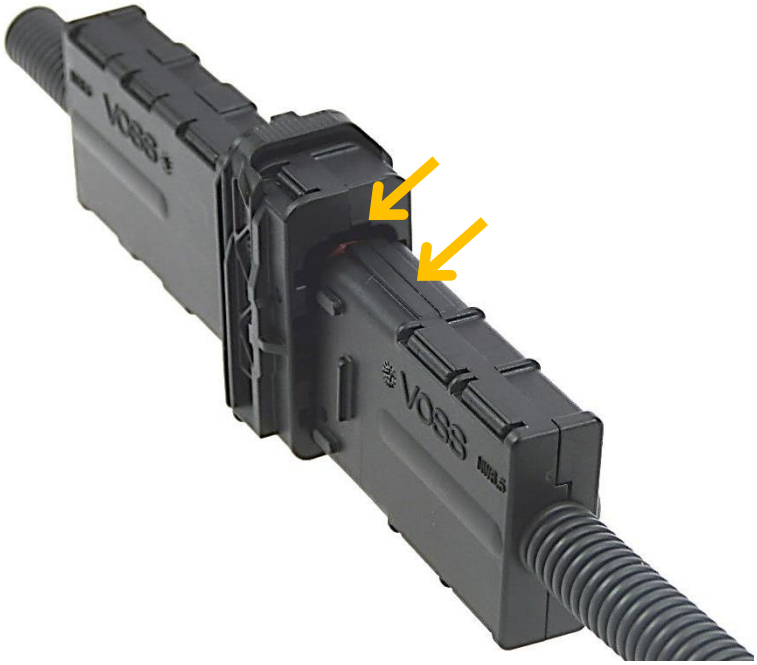

Fig. 4: Poka Yoke design

Step 2

Completely plug coupling and plug sides, until they engage (end position reached) (acoustic signal audible). – Fluidic and electric connections are now established, but system is not yet locked.

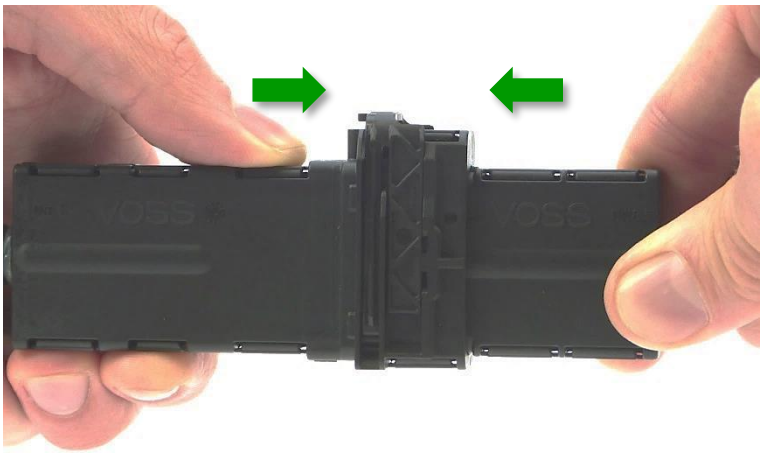

Fig. 5: Engaged quick connect system 301 *EFSP*

Step 3

Activate secondary lock with flat finger …

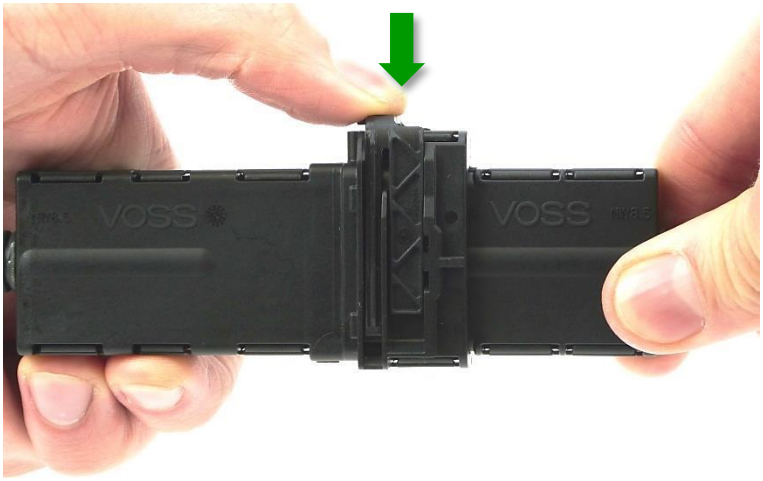

Fig. 6: Activation of secondary lock

… until it engages and is flush with the housing of the coupling (system locked).

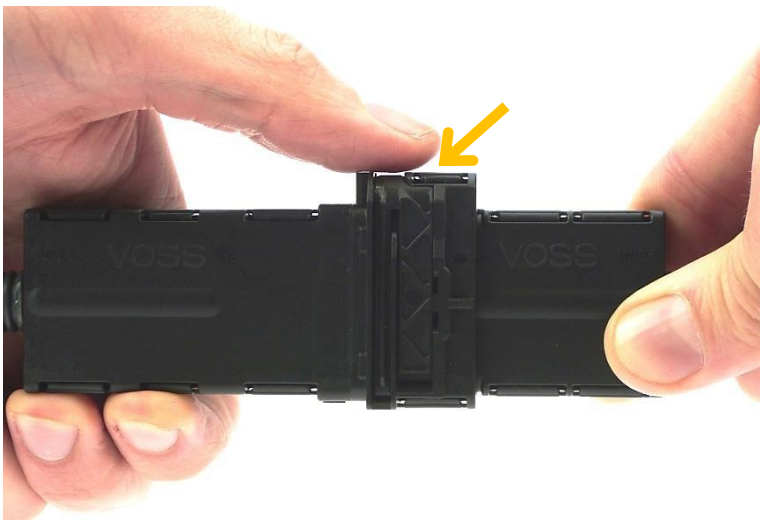

Fig. 7: Activated secondary lock

In case of incomplete connection operation (end position not reached), secondary lock cannot be activated.

→ Quick connection system must be put together until it engages (end position) (see Step 2, Fig.5).

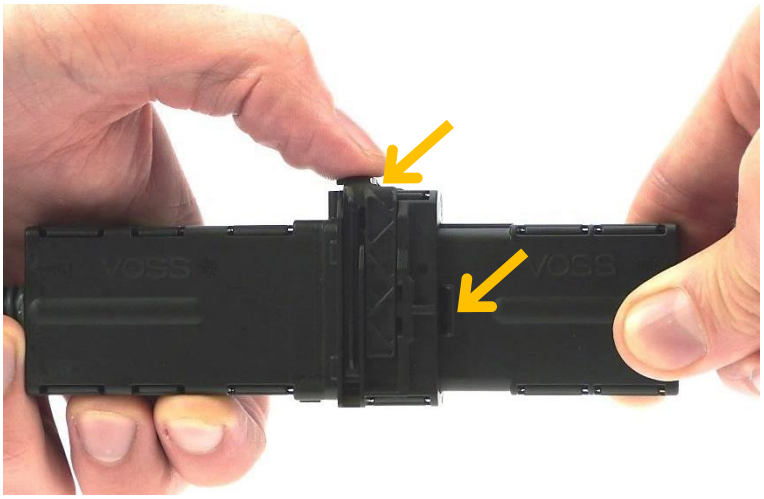

Fig. 8: Still blocked secondary lock

Step 4

Completely assembled and locked quick connect system 301 *EFSP* (end situation).

Fig. 9: Completely assembled and locked quick connect system 301 *EFSP*

2. Disassembly

Before disconnecting, the line must be free of pressure, and the area around the secondary lock must be free of dirt.

Step 1

Press secondary lock with fingertip (push down until it stops).

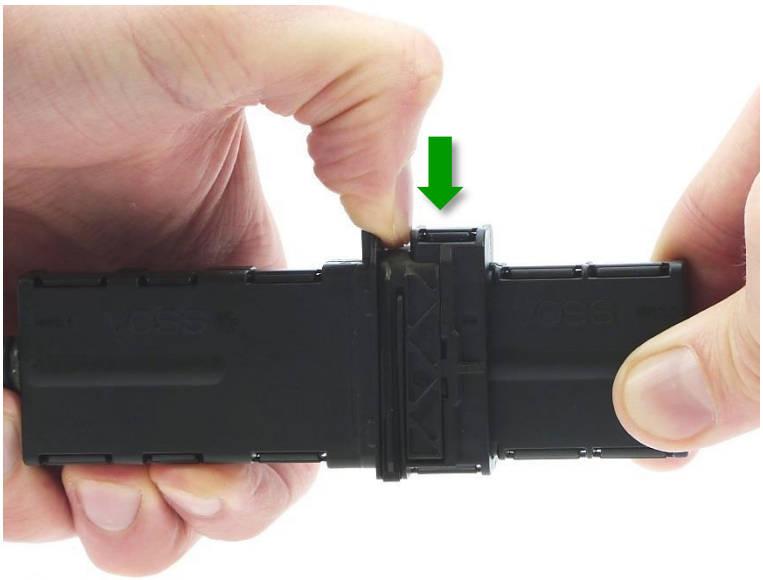

Fig. 10: Pressing the secondary lock

Step 2

Pull the coupling and plug side apart …

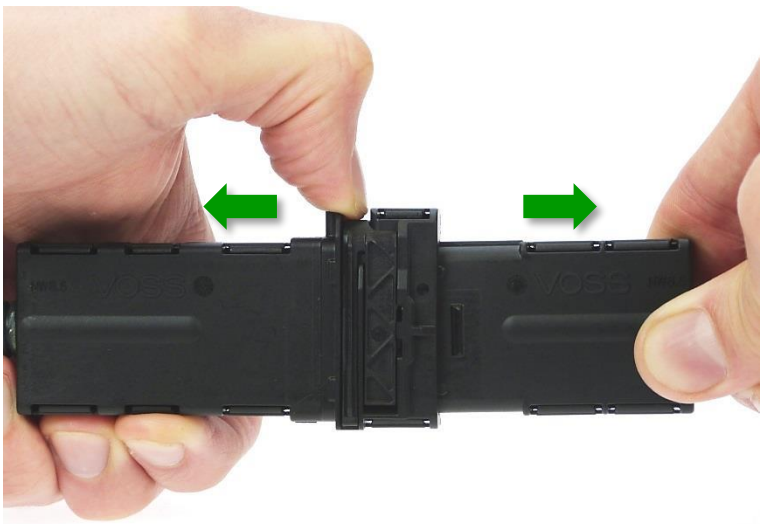

Fig. 11: Pulling coupling and plug side apart

… until both sides are completely separated.

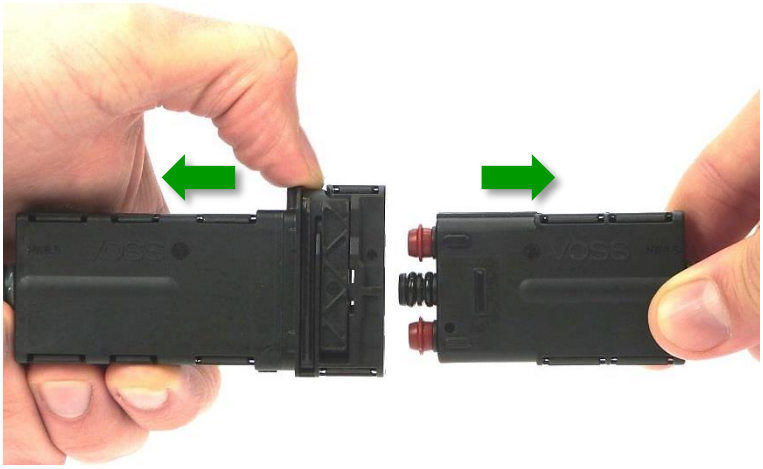

Fig. 12: Separation of coupling and plug side

Step 3

Completely separated coupling and plug side. – Secondary lock is in the lower position (locked position).

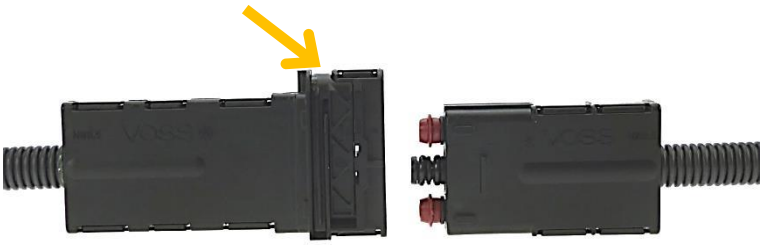

Fig. 13: Completely separated coupling and plug side

3. Subsequent assemblies

Before connecting both sides, components must be checked. They have to be clean and must not show any signs of damage.

Step 1

Completely separated coupling and plug side. – Secondary lock is in the lower position (locked position).

Fig. 14: Completely separated coupling and plug side (Subsequent assemblies)

Step 2

Plug both sides together. – The secondary lock jumps back in the upper starting position (unlocked position) (visual connection indication).

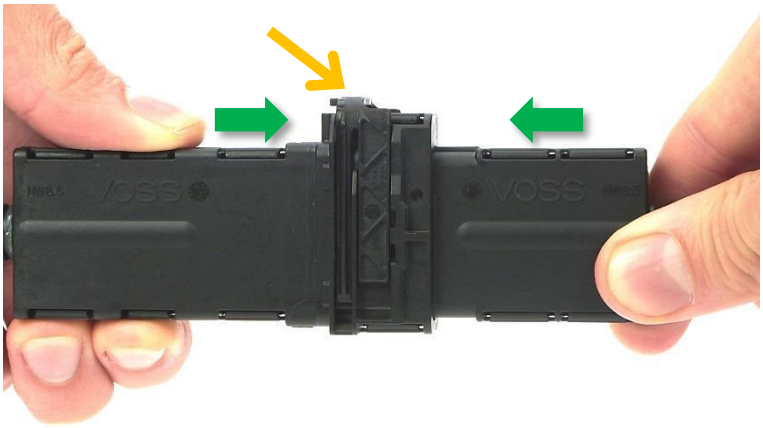

Fig. 15: Visual connection indication at subseqent assemblies

Step 3

Completely plug coupling and plug side, until they engage (end position reached) (acoustic signal audible). – Fluidic and electric connections are now established, but system is not yet locked.

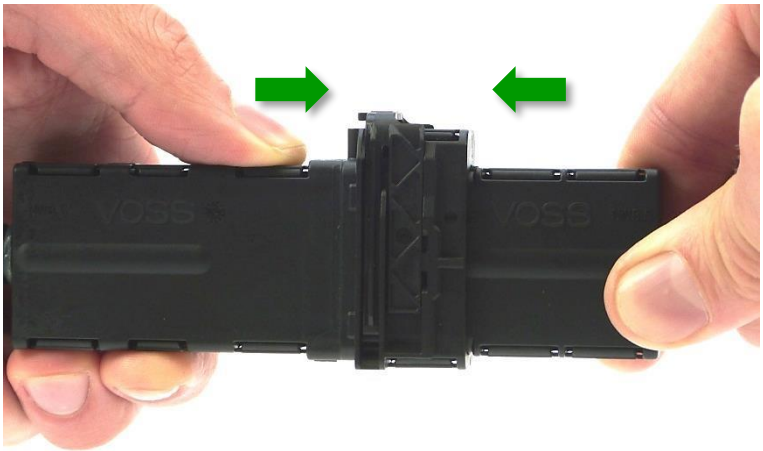

Fig. 16: Engaged quick connect system 301 *EFSP*

Step 4

Activate secondary lock with flat finger …

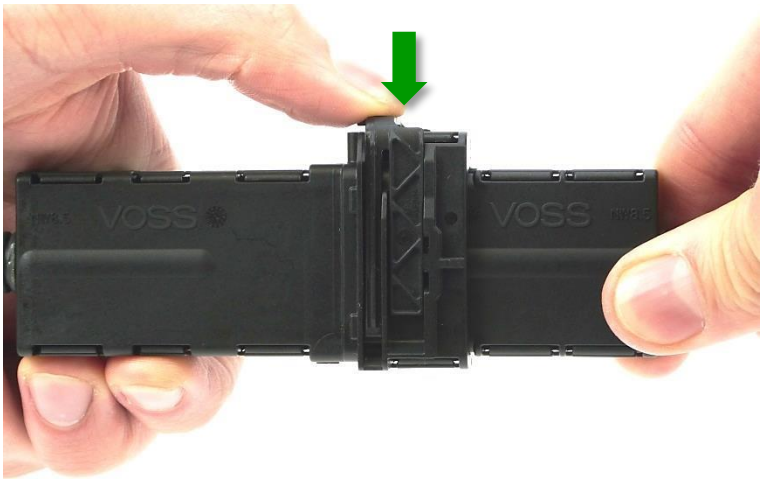

Fig. 17: Activation of secondary lock

… until it engages and is flush with the housing of the coupling (system locked).

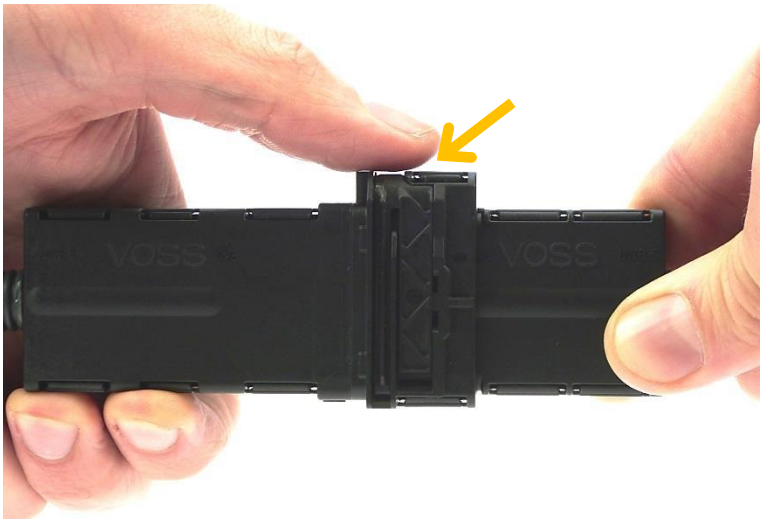

Fig. 18: Activated secondary lock

In case of incomplete connection operation (end position not reached), secondary lock cannot be activated.

→ Quick connection system must be put together until it engages (end position) (see Step 2, Fig.5).

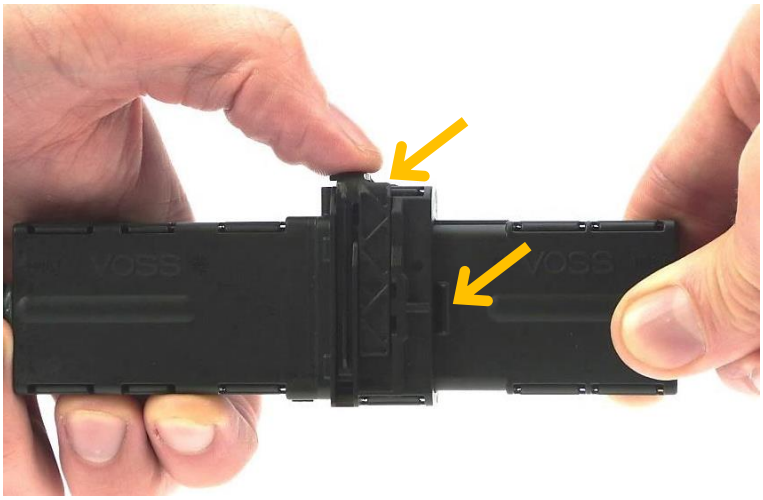

Fig. 19: Still blocked secondary lock

Step 5

Completely assembled and locked quick connect system 301 *EFSP* (end situation).

Fig. 21: Completely assembled and locked quick connect system 301 *EFSP*

Customer service

Contact VOSS for questions concerning quick connectors, nylon tubes, line routing, etc.

Property rights

Technical modifications and errors excepted.

Contact

VOSS Automotive, Inc.
4640 Hillegas Road
Fort Wayne, IN 46818
USA
Phone: +1 260-373-2277
customersvc@us.voss.net
www.vossusa.com

VOSS Automotive GmbH
P. O. Box 15 40
51679 Wipperfürth
Leiersmühle 2-6
51688 Wipperfürth
Germany
Phone: +49 2267 63-0
Fax: +49 2267 63-5982
automotive@voss.net
www.voss.net