

Robert Bosch GmbH




Y 928 F00 101-E


Assembly Specification

Connector

56-way

BOSCH 	Assembly specification	Number	Sheet	Date
		Y 928 F00 101-E	2/16	10.11.03
GS-CP/ENG2	56-pole wiring-harness plug cable exit straight and 30°	Technical support Buschle		Telephone 2961


Stand	Date	Modification	Technical support	GS-CP/ENG2
1	04.09.2001	New edition	Sign.: Schönfeld	Sign.: Steinhauser
2	30.03.2001	Pt.: 3.5, 3.6, 3.7 added	Sign.: Buschle	Sign.: Schönfeld
3	02.08.2001	Pt.: 3.3.1 and 3.3.2 added	Sign.: Buschle	Sign.: Schönfeld
4	07.12.2001	Pt.: 3.5; 3.6 ; 3.7 cancelled 2.3 Text added	Sign.: Buschle	Sign.: Schönfeld
5	10.11.2003	New Lever added; Pt.: 1; 2.2; 2.3; 3.1; 3.3 revised	<i>H. Buschle</i>	<i>S. Schönfeld</i>

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Reference: - Wiring-harness plug according to offer drawing A 928 000 502 and
A 928 000 502 – 006 Sh.1 and 2

- Content:**
- 1. Summary variants of wiring-harness plug**
 - 2. Component insertion of the wiring-harness plug**
 - 3. Assembly of the wiring-harness plug**
 - 4. Accessories wiring-harness plug**
 - 5. Removal of contacts**
 - 6. Removal the wiring-harness plug off the control device**
 - 7. Notes**

Further information can be found in application specification Y 928 V03 005 for the contact BMK 0,6-D and Y928 V03 004 for the contact BMK 1.5-D.

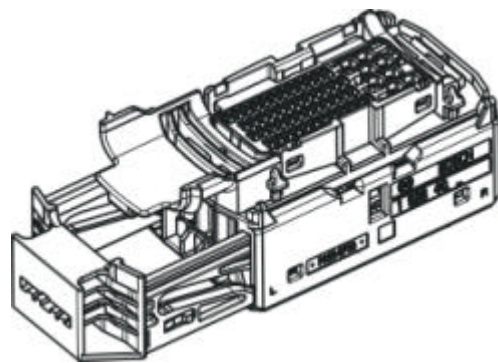
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1. Summary of the variants of wiring-harness plug

1.1 *Wiring-harness plug with cable exit straight.*

For example, cable exit left and slide left is shown.

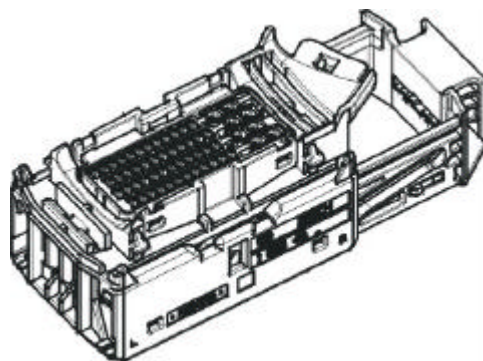
fig 1



1.2 *Wiring-harness plug with cable exit 30°.*

For example, cable exit left and slide left is shown.

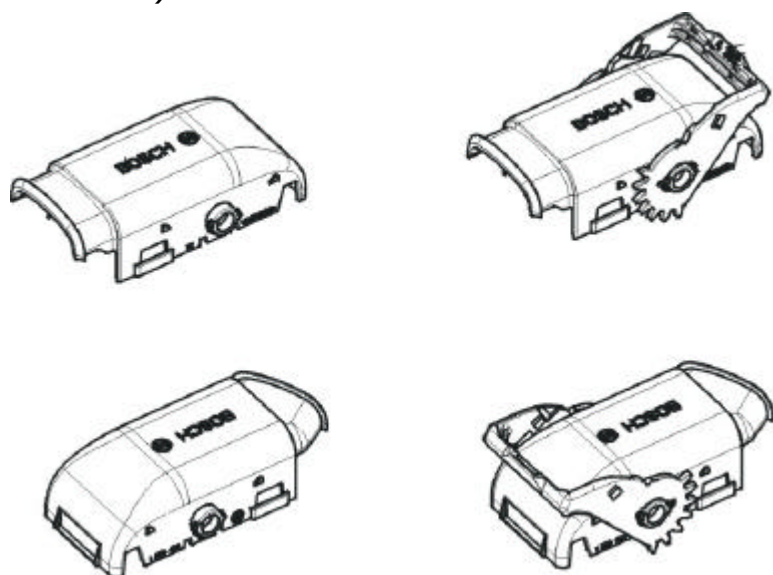
fig 2




1.3 *Variants of covers (with/without lever)*

Further variants of covers:
see Offerdrawing A 928 000 502
and A 928 000 502-006

fig. 3



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In the following captures the process of assembling is represent by way of example with the variant „cable exit straight“ and „cap with lever“. The description of the assembling process according to all variants of 56 way-connector

2 Component insertion of the wiring-harness plug

2.1 Delivery condition of the premounted handle cover

The different plug variants, cable exit left resp. right, slide left resp. right and the different coding you can see in the offer drawing A 928 000 502 and A 928 000 502 – 006 Sheet 1, 2.

The slide must be positioned opposite the cable exit, that the slide has engaged in the locating device of the handle cover.

By the delivery of the finished wiring-harness plug you must see to it that the slide must be in the delivery condition.

2.2 Component insertion of the premounted handle cover

Prior to its insertion in the pressure plate/contact cavity, the made-up contact BMK 0,6-D resp. BMK 1,5-D must be aligned in such a way that the coding lugs are lined up with the corresponding grooves in the pressure plate/contact cavity (see detail drawing: fig.: 5).

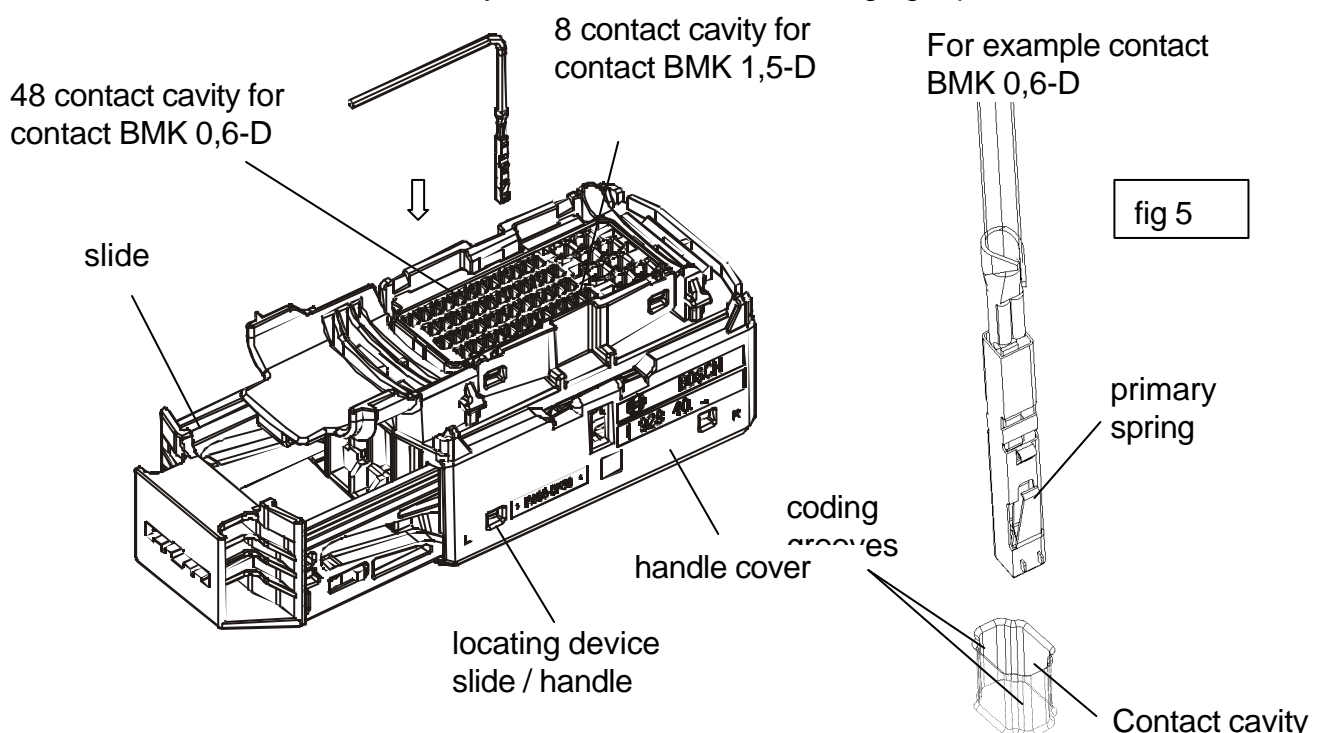
The contact can also be inserted turned through 180°.

The contact is in the correct end position if the primary spring of the contact has engaged **noticeably** in the cavity of the contact housing.

Any contact is to be tested by a short and soft pull at the cable.

(see extract from the processing specification Y 928 V03 004 and Y 928 V03 005.)

Attention: Don't damage the wire on the insertion of the contacts by extreme bending or by use of not correct tools in any case. In the case of damaging replace the wire.






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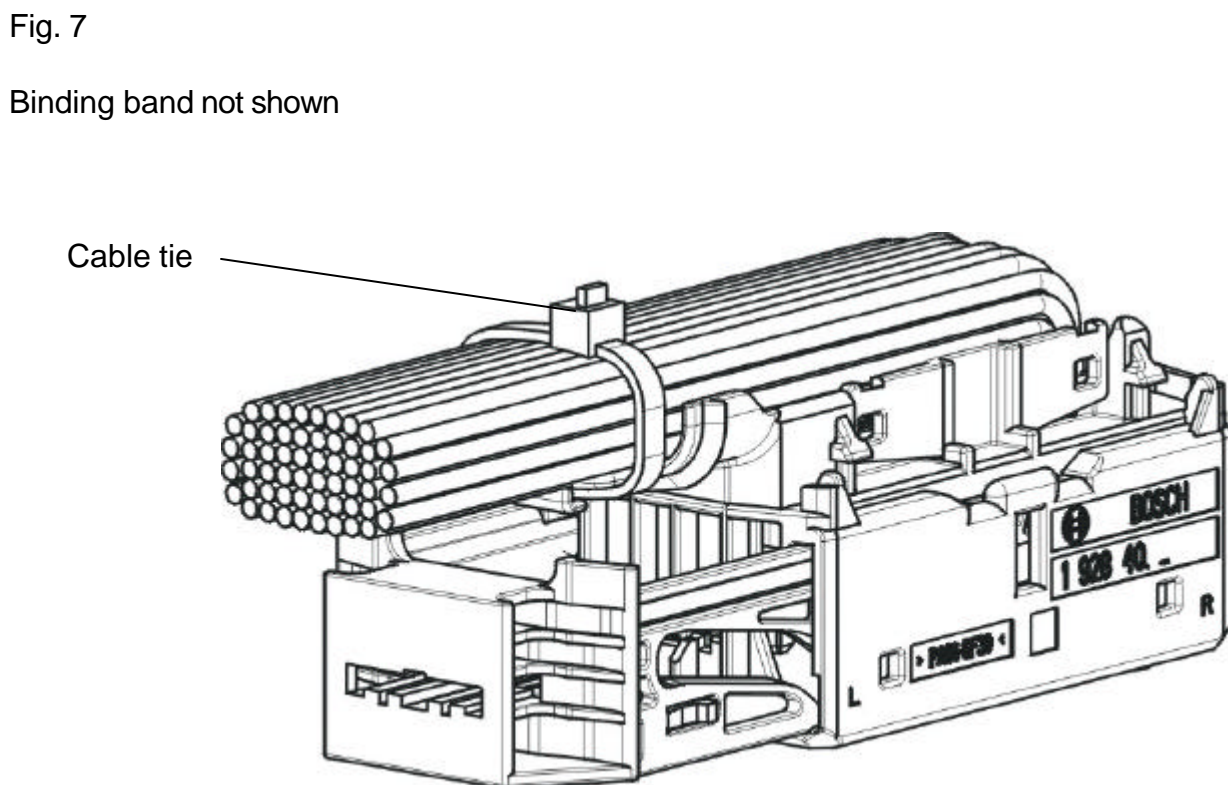
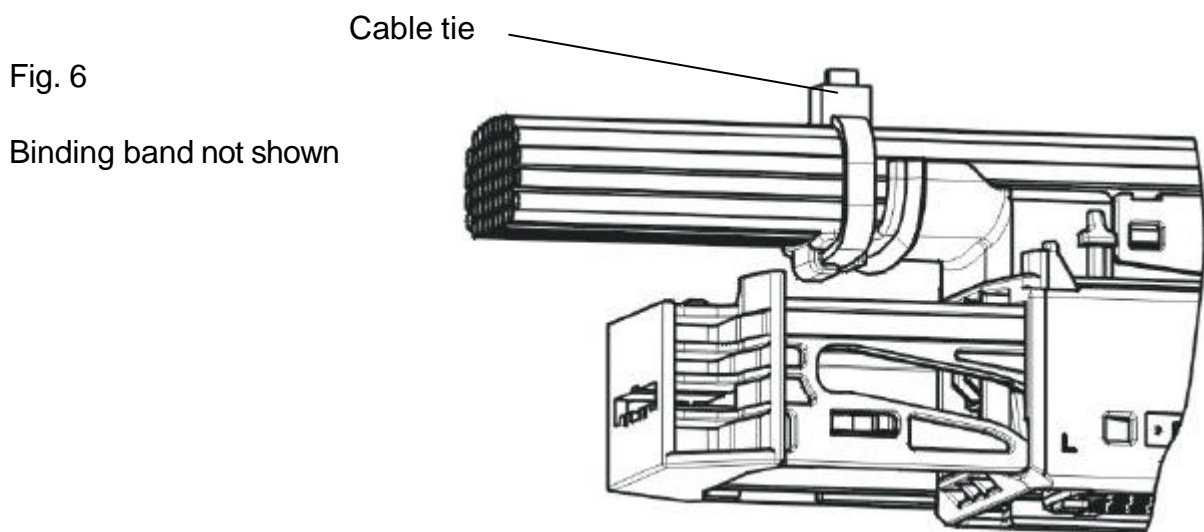
Fig. 4


 coding lugs

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2.3 Mounting the cable tie

The cables to be installed under traction, so that scrub at the cover are avoided.
The cables to be winded round with a binding band in the area of the cable tie.
After inserting the made-up contacts in the premounted handle cover, the cable tie must be fitted around the cables resp. to the handle cover (see fig. 6 and 7).



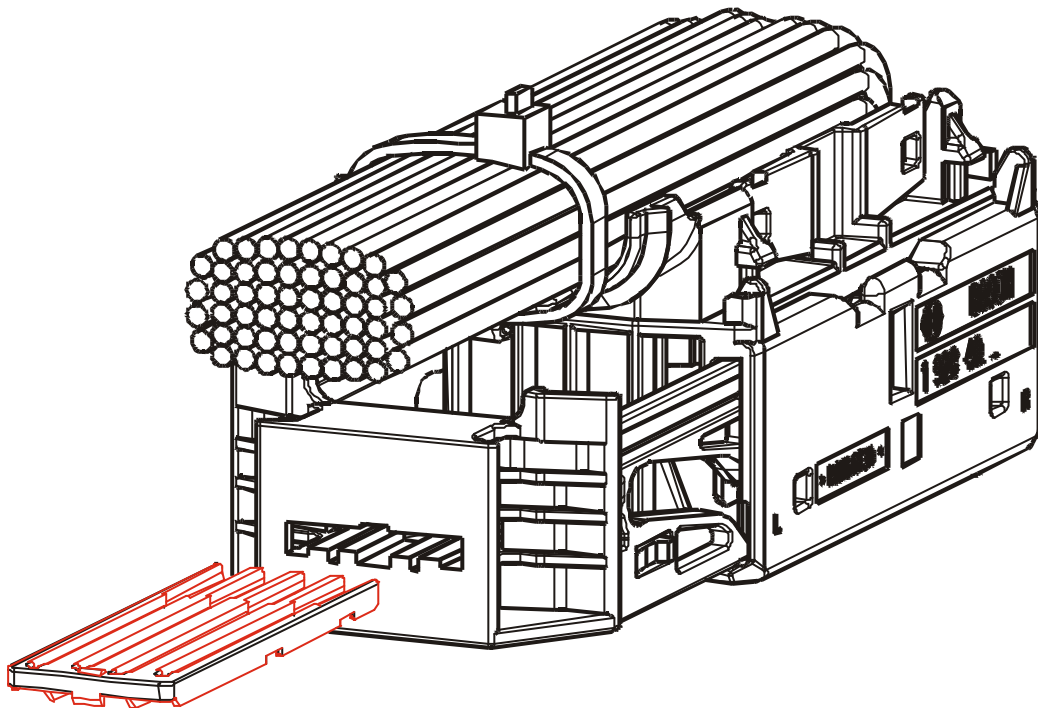
BOSCH 	Assembly specification	Number	Sheet	Date
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3 Assembly of the wiring-harness plug

3.1 Mounting of the secondary locking

- The secondary locking is to be pushed into the opening of the handle cover (only one side is allowed). As required of model (slide left or slide right) the secondary locking can be pushed through the opening of the slide too.
A sloping assembly of the secondary locking is not allowed.
If the made-up contacts are correctly installed, the secondary locking can easily be pushed into the casing until it locks into place.
- If the secondary locking cannot be pushed further in or only with difficulty, this means that one or more contacts have not been inserted far enough into the contact cavity, or a contact has been inserted the wrong way round.
- In this case, the corresponding contact(s) must be changed (See item 5: "Removal of contacts"). Further information are in the processing specification Y 928 V03 005 for the contact BMK 0,6-D and Y 928 V03 004 for the contact BMK 1,5-D.

fig. 8

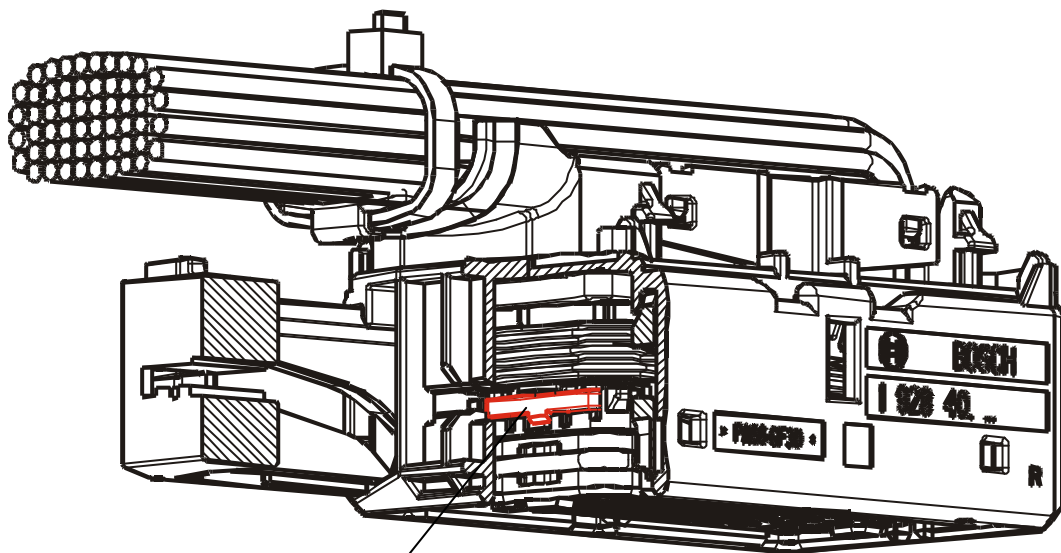


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3.2 End position of secondary locking


The secondary locking is in its end position when its plastic lugs have engaged in the contact housing and it is flush with the outer wall of the contact housing.

fig. 9



Secondary locking is flush with contact housing

Description: straight wiring outlet left and slide left

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3.3 Mounting the cap

For the assembly off the “premounted cap” (1 928 404 392 or 1 928 404 882) on the handle cover, it is imperative that the lever is in the correct position.

For caps without lever, point 3.3.1 and 3.3.2 is not applicable

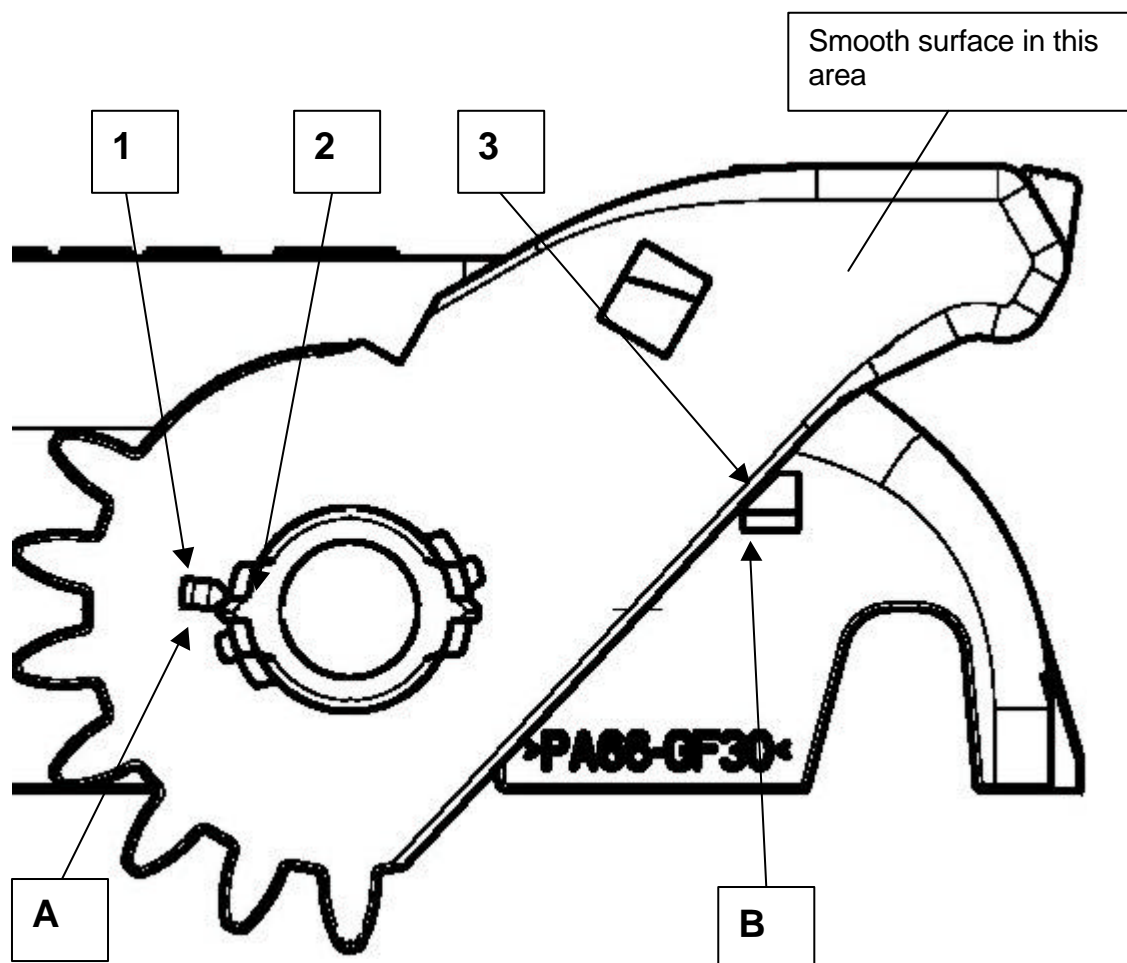
3.3.1 Mounting position of the lever


For 1 928 404 392; “Premounted cap” see following items:

Point **A**: The nose (1) snaps after rotating the lever to the right behind the nose (2)

Point **B**: The lever is in a stop position at point (3)

fig. 10



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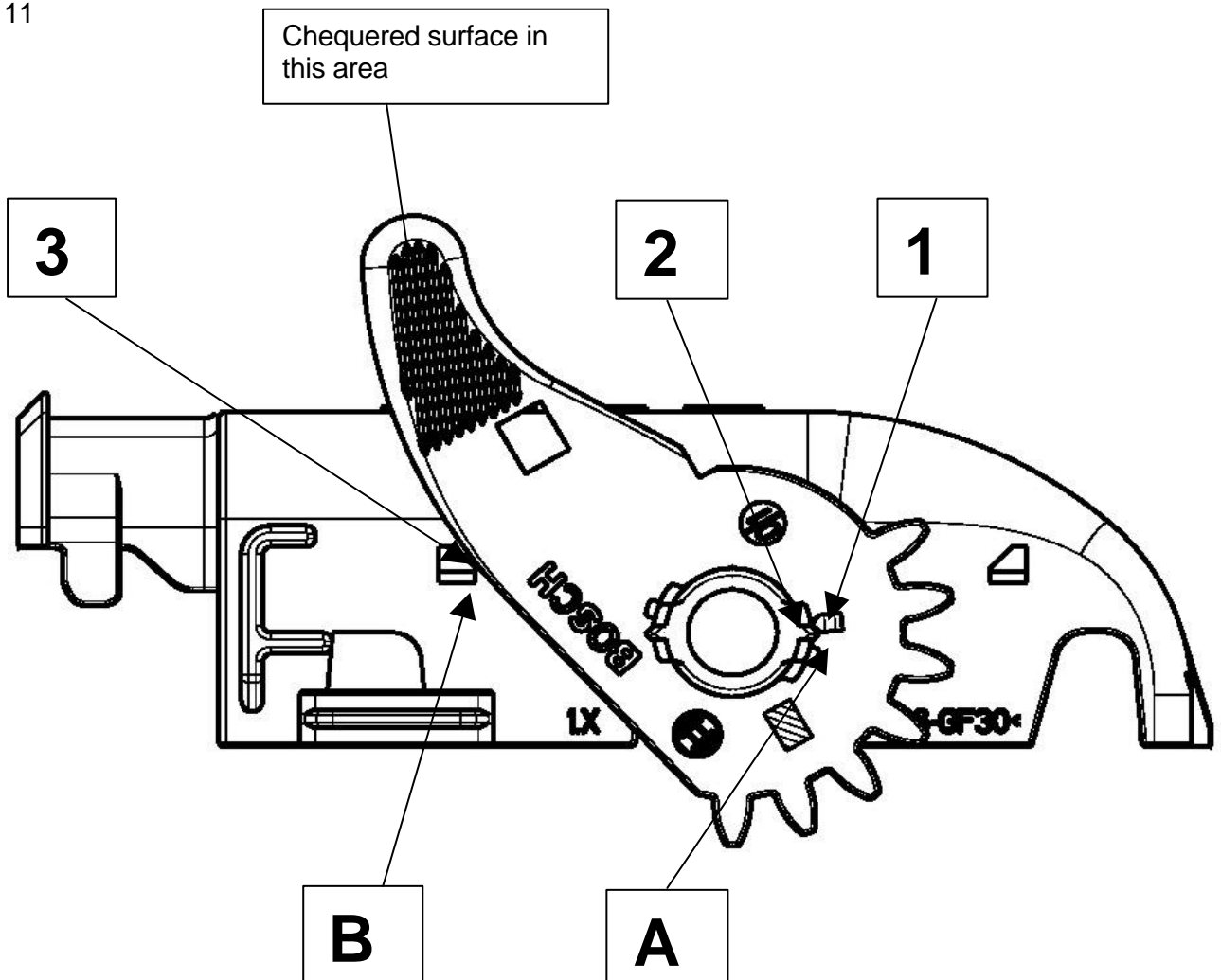
3.3.2 Mounting position of the lever


For 1 928 404 882; "Premounted cap" see following items:

Point **A**: The nose (1) snaps after rotating the lever to the left behind the nose (2)

Point **B**: The lever is in a stop position at point (3)

fig. 11



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3.3.3 Mounting position of the slide

The slide is in stop position: see fig. 12

See Offerdrawings: A 928 000 502; D 928 002 76A

3.3.4 Mounting the cap

- Other variants of cable and slide exit resp. "Premounted caps" got to be assembled in the same manner as described
- The cap got to be put against the handle cover like fig. 12 and then installed in direction of the cable outlet.
- The mounting force of the cap is at maximum **150 N**

Please note:

- direction of cable exit in cap = direction of cable exit in handle cover.
- During this the locking hooks of the handle cover must clip in the window of the cover (see detail drawing: fig. 13).

fig. 12

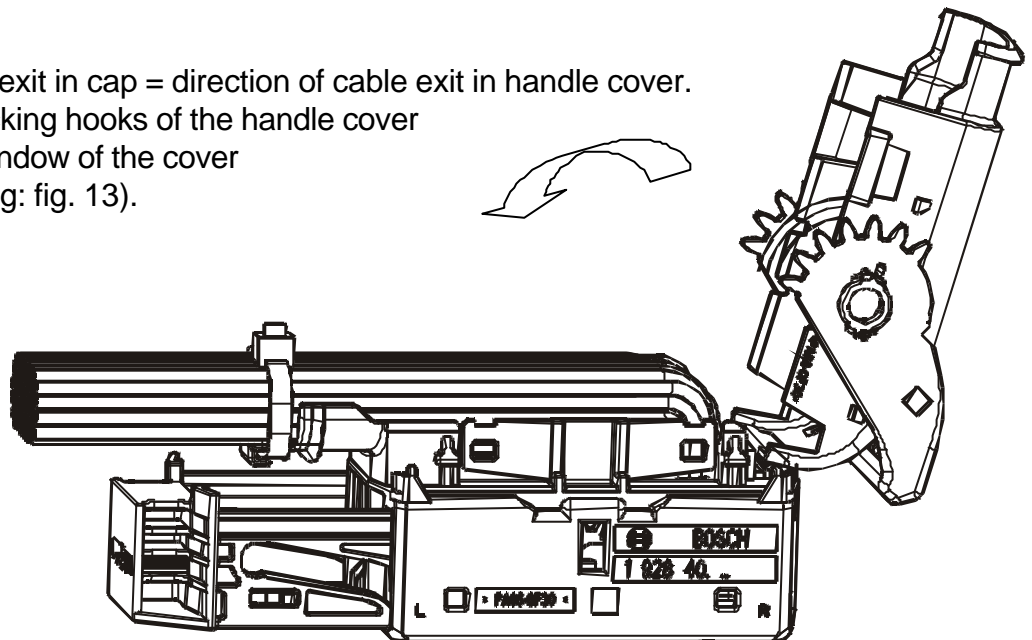
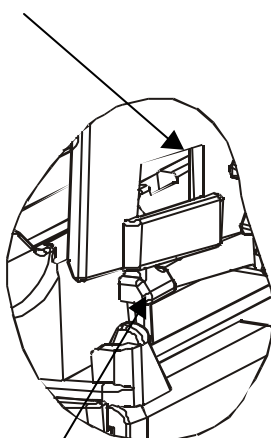
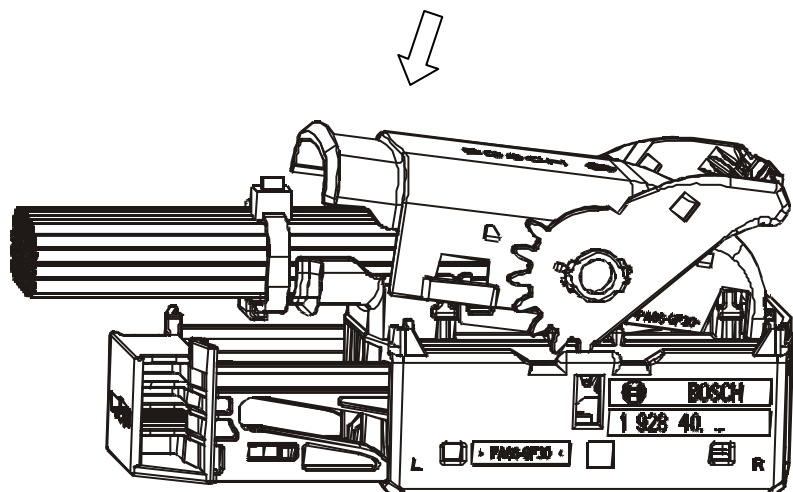



fig. 13

window



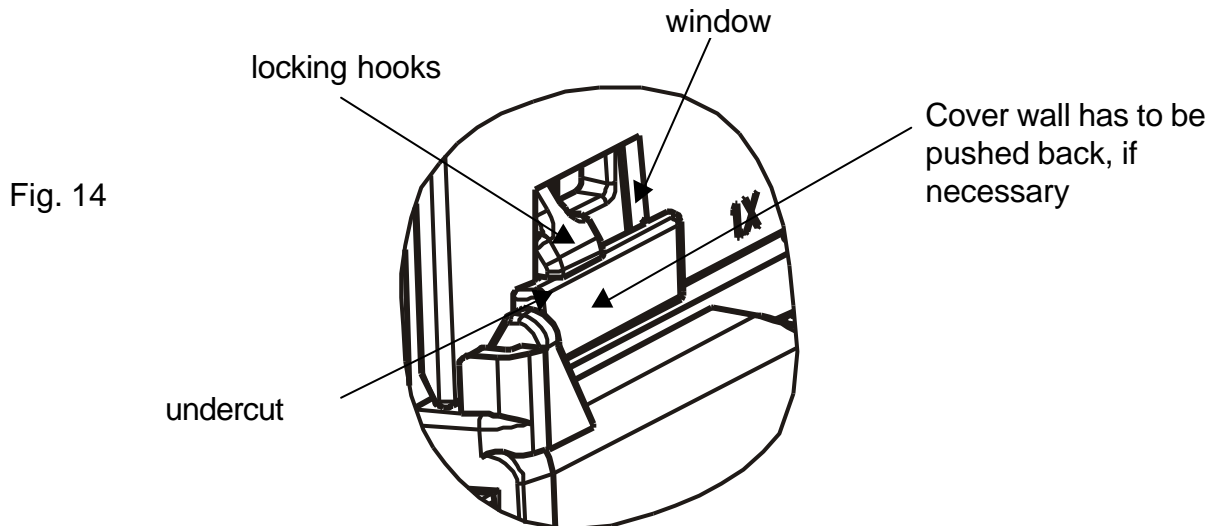
Locking hooks



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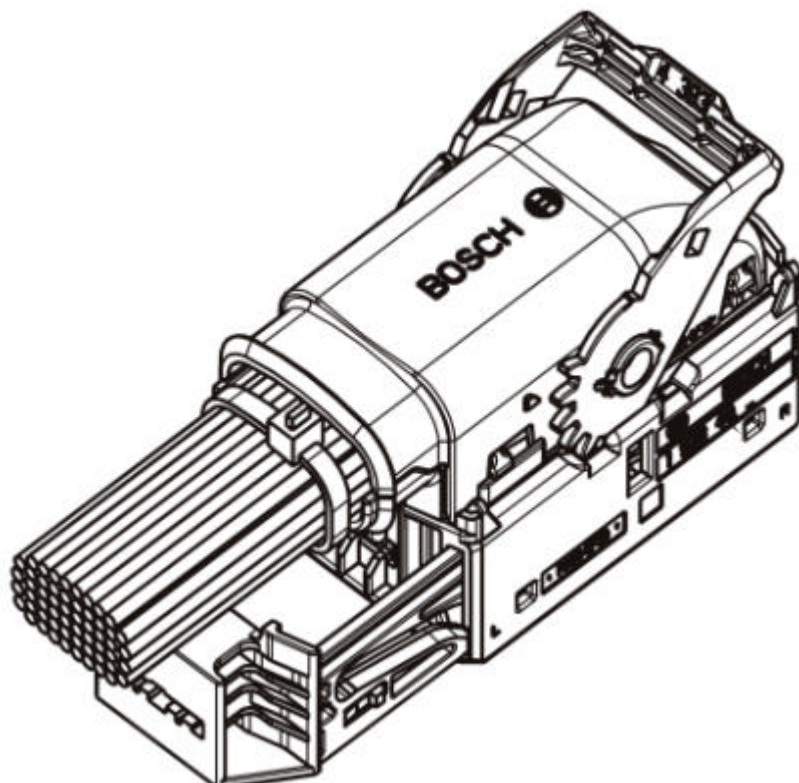
3.4 End position of cap


It has to be verified that the locking hooks have an undercut with the edge of the window.
(otherwise the cover wall has to be pushed back)



- The wiring-harness plug is now fully assembled.

Fig. 15



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4 Accessories wiring-harness plug

4.1 Grommet / Grooved tube

The cable outlet is designed for mounting a grommet.

Grommets for grooved tube are at this moment not at one's disposal.

5 Removal of contacts

5.1 Removal of contacts BMK 0,6-D

The number of inserting and removing of the contacts BMK 0,6-D is restricted.

Either :

1. Insert contact BMK 0,6-D for the first time
2. Remove contact BMK 0,6-D once
3. Insert contact BMK 0,6-D again

Or :

1. Insert contact BMK 0,6-D for the first time
2. Remove contact BMK 0,6-D once
3. Contact BMK 0,6-D is not reinsert

The procedure described above (Either / Or) may be performed only once for each position of the 56-pole wiring-harness plug.

5.2 Removal of the contacts BMK 1,5-D


Removal of contacts BMK 1,5-D is not allowed. You must use a new premounted handle cover, if you place it wrong.

5.3 Removal of contacts in the garage

Removal of contacts BMK 0,6-D and BMK 1,5-D by the garage is not planned, an additional insertion is allowed.

Repairing the wiring-harness plug is only allowed with new premounted handle covers and new made-up contacts.

Impurity of contacts and wiring-harness plug in the case of repairing is to prevent in any case.

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5.4 Disassembly tool (Extract)

The contact BMK 0,6-D and BMK 1,5-D can be removed from the chamber in the event of incorrect fitting for repairs to the connector in consideration of Pt. 5.1 and 5.2.

The use of a disassembly tool (Fig. 2) is a prerequisite.

- BMK 0,6-D: 1 928 498 113
- BMK 1,5-D: 1 928 498 114

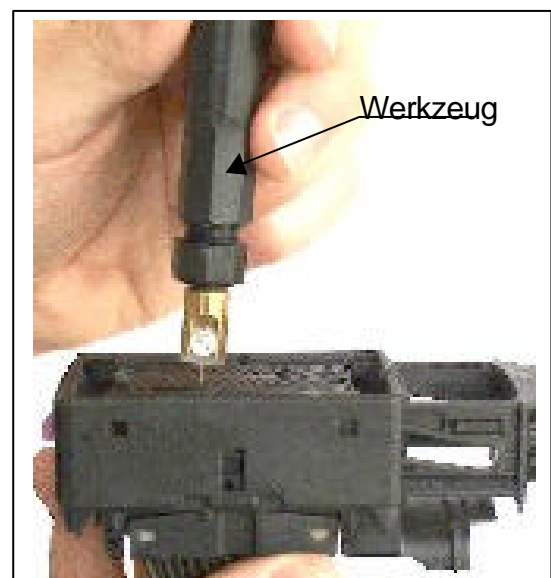
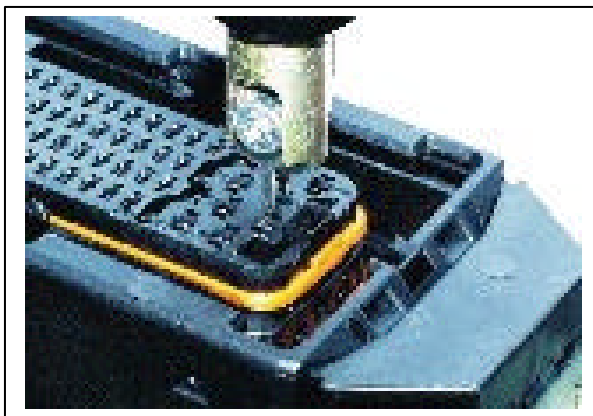
Instructions for use:


1. Prepare the connector for removal of the contact. The secondary locking has to be disassembled
2. Insert the disassembly tool into the unlocking holes in the connector. Do not push it all the way in yet (Fig. 15).
3. Push the contact by the cable towards the disassembly tool and hold in this position (Fig. 16).
4. Press the disassembly tool all the way in (Fig. 16).
5. Carefully pull out the contact by the cable. If it is difficult to move, repeat the whole procedure.

Caution :

- If the contact is difficult to remove, do not pull hard on the cable otherwise the primary spring of the contact will stick.
- Contacts may be fitted twice only and disassembled once only (only contact BMK 0,6-D).
- Disassembled contacts must be replaced by new contacts.
- The usage of disassembly jig (1 928 C00 158) is recommended in case of damaged contacts by the disassembly tool which is placed wrong.

Fig. 16




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Further informations see 1 928 F00 001 and 1 928 F00 002

fig. 17

Abb. 1

Abb. 2

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6 Removal of the wiring-harness plug of the control device

To remove the wiring-harness plug of the control device you must push the slide out off the locating device up to mounting location resp. opening of the lever up to mounting location (see Fig. 17).

In this position you can take off the wiring-harness plug (see Fig. 18) out off the control device.

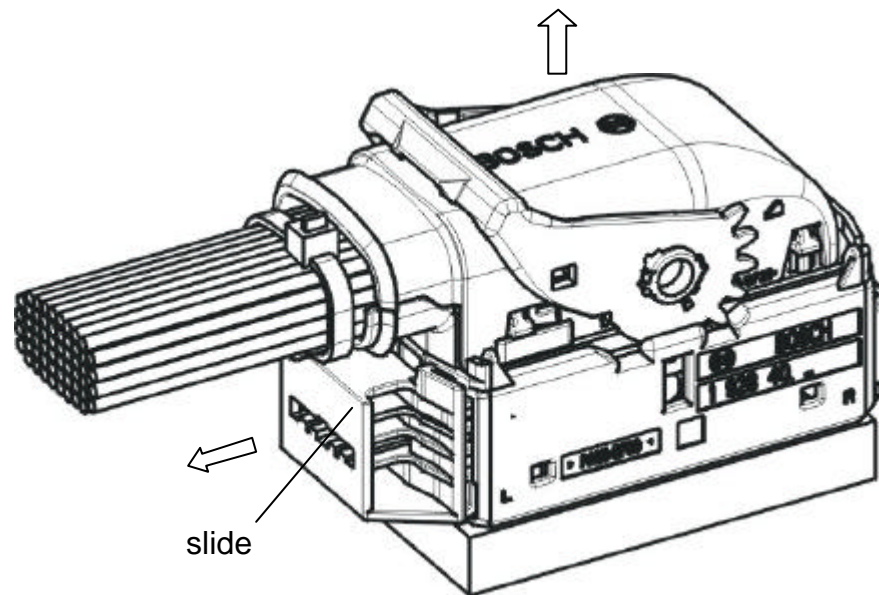
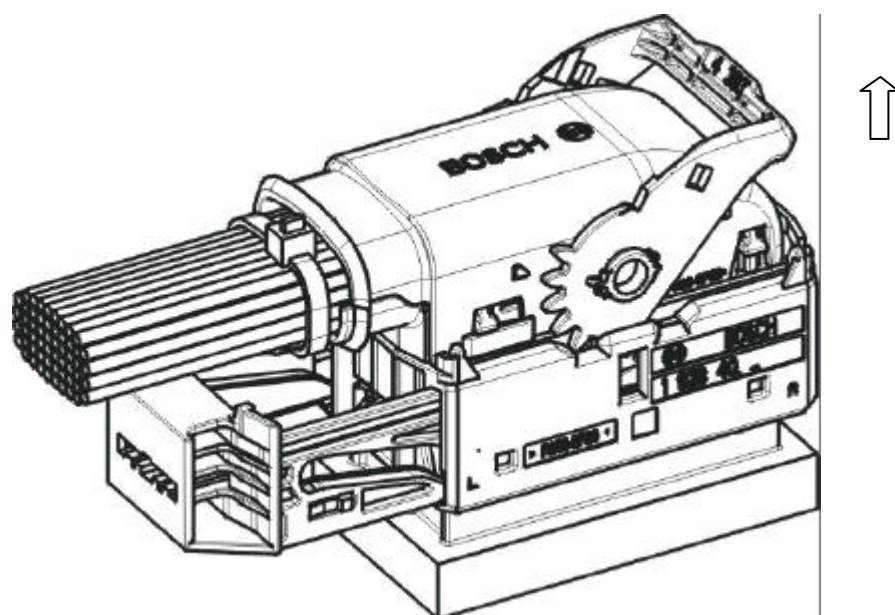


Fig. 18 Wiring-harness plug closed on interface





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Fig. 19 Wiring-harness plug opened on interface

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7 Notes

7.1 *Repair of silicone-gel seal*

- The silicone-gel seal cannot be repaired.
If the silicone-gel seal is damaged, or the contacts are inserted more than the permitted number of times, a new handle cover must be used.

7.2 *Function test for tightness*

- We recommend that a leak test is carried out during assembly of the wiring harness, following the insertion of the made-up contacts.
This leak test is especially important if contacts have been incorrectly inserted.

Suggestion : Overpressure test

- Apply a test pressure of 0,3 bar.
- Pressure must not drop below 0,2 bar after 15 seconds.
(length of electric cables at least 300 mm)
(length of pressure hose approx. 900 mm)