# **Application Specification**

# For Adam Opel AG, their suppliers and system manufacturers only

#### **Contents**

- **Product Description**
- 1.1 Description of the Components
- 2 **Assembly**
- 2.1 Equipping the socket housing with MQS contacts
- Inserting the socket housing into the protective cover 2.2
- Securing the wires to the protective cover 2.3
- Inserting the socket connector (with protective cover) into the pin header 2.4
- 2.5 Closing the connector
- 2.6 Opening the connector
- 2.7 Removing the socket connector from the pin header
- 2.8 Removing the cable tie
- 2.9 Removing the socket housing from the protective cover
- 2.10 Removing the socket contacts from the housing

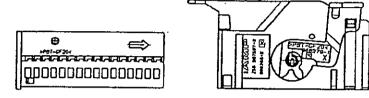
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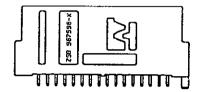
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#### **Product Description** 1

### 1.1 Description of the Components





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b

С

Fig. 1

The MQS connector system shown in Fig. consists of three main assemblies:

a. MQS socket housing

AMP Part No.: 968265-1

b. Protective cover

AMP Part No.: 967597-1/2

c. Pin header

AMP Part No.: 967598-1/2

## 2 Assembly

### 2.1 Equipping the socket housing with MQS contacts

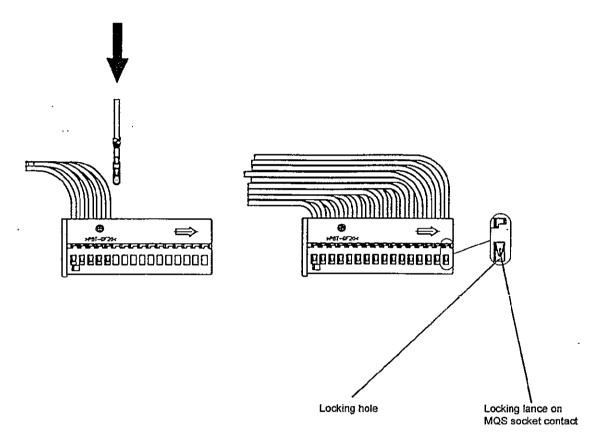


Fig. 2

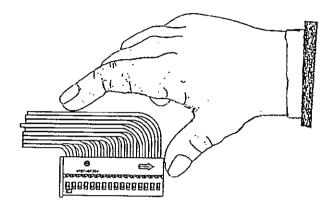
The MQS socket contacts, in accordance with the AMP customer drawing, must be oriented correctly (see Fig. 2) before insertion into the contact cavities of the socket housing.

The flags on the MQS contacts assist in correct orientation.

The locking lances of the contacts must snap audibly and tangibly into the locking holes in the contact cavities.

Check correct locking by pulling lightly on the wire in the direction opposite to the insertion direction.

# 2.2 Inserting the socket housing into the protective cover



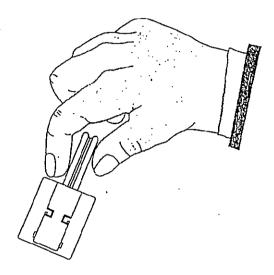
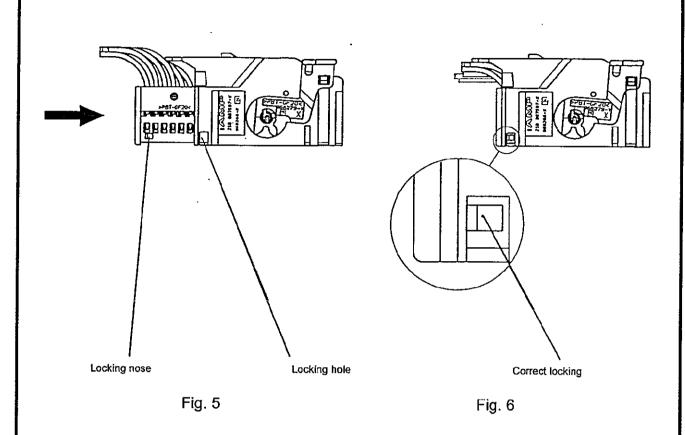


Fig. 3

Fig. 4

Before the socket housing (equipped with contacts) is inserted into the protective cover, all wires must be bent in the direction **opposite** to the insertion direction (see Fig. 3). The insertion direction is indicated by an arrow on the socket housing (see Fig. 3). Ensure that the bent wires lie in **only two layers** during the subsequent insertion operation.



Slide the socket housing (with contacts) in the direction of the arrow (see Fig. 5) into the protective cover. This is possible only if all contacts are correctly locked as described in Section 2.1.

The final position is reached when the resistance which is felt at the end of the insertion movement is overcome and the locking noses of the socket housing are visible in the locking holes of the protective cover (see Fig. 6).

#### **Caution!**

Ensure that no wires lie between the protective cover and the socket housing.

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# 2.3 Securing the wires to the protective cover

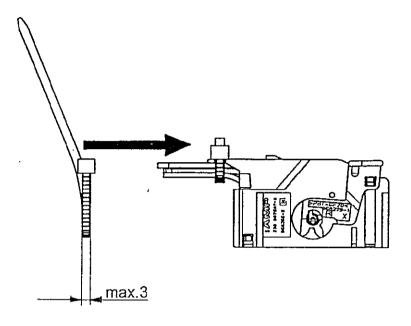


Fig. 7

Use a cable tie with a width of not more than 3 mm.

Secure the wires to the protective cover with the cable tie (see Fig. 7).

Keep the cable free of insulating tape for a distance of 30 mm from the protective cover.

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#### 2.4 Inserting the socket connector (with protective cover) into the pin header

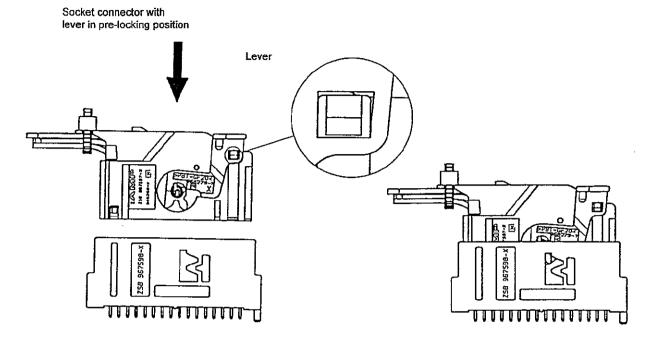


Fig. 8

Ensure that the lever is in the pre-locking position. This is the case when the two prelocking securing elements are visibly engaged behind the lever.

Slide the assembled protective cover in the direction of the arrow into the pin housing until is hits the stop (see Fig. 8). This causes the pre-locking securing elements to release the lever so that it can be locked.

#### Caution!

It is possible that excessive force has moved the lever from the pre-locking position. If this is the case, move the lever back to the pre-locking position before inserting the socket connector by pushing the two locking latches on the front inwards and moving the lever to the correct position

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# 2.5 Closing the connector

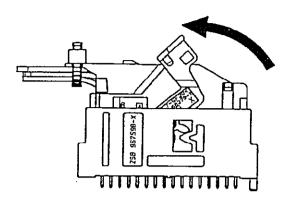


Fig. 9

Move the lever in the direction of the arrow until it locks (see Fig. 9). This pulls the socket connector into its final position in the pin header.

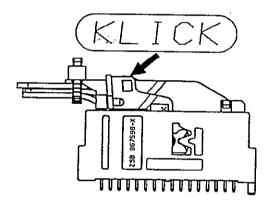


Fig. 10

The final locking position is indicated by the mechanical stop and an audible click (see Fig. 10).

In this position, the lever is secured by the locking knub on the protective cover.

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## 2.6 Opening the connector

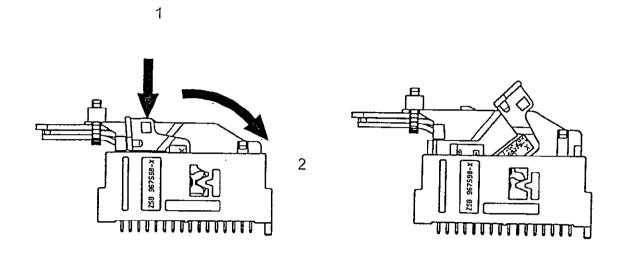


Fig. 11

To open the connector, press down the locking knub of the protective cover and move the lever in the direction of the arrow until it hits the stop (see Fig. 11). The two prelocking securing elements engage automatically with the lever to hold it in this position.

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# 2.7 Removing the socket connector from the pin header

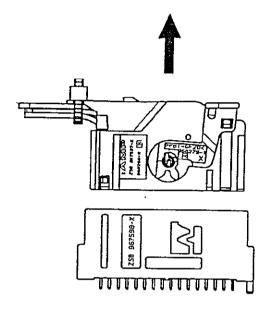


Fig. 12

The locking lever must be secured in the pre-locking position (see Fig. 12) before the protective cover is pulled out of the pin header. The socket connector can then be pulled axially upwards out of the pin header.

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# 2.8 Removing the cable tie

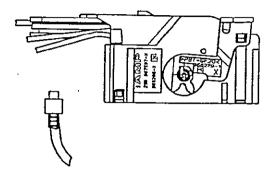


Fig. 13

### Caution!

Take care not to damage the wires when removing the cable tie.

## 2.9 Removing the socket housing from the protective cover

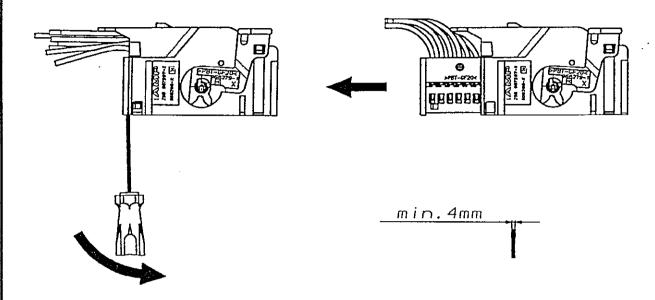


Fig. 14

A screwdriver with a blade at least 4 mm wide is required for removal of the socket housing from the protective cover.

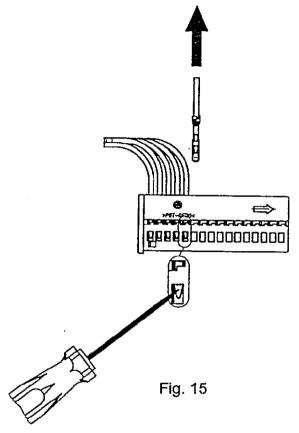
First, carefully release the socket housing from the locking elements with the screwdriver. Then pull it out or insert the screwdriver through the opening in the cover and push it out.

#### Caution!

Take care to insert the screwdriver in the center, and not in the area of the protective ribs.

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## 2.10 Removing the socket contacts from the housing



To remove an MQS socket contact from the housing, press down the locking lance with a suitable screwdriver (see Fig. 15) and carefully pulling the related wire until the contact emerges from its cavity.

When inserting a new contact, observe the instructions in Section 2.