Assembly Instructions

Basic Vehicle Harness – with ISOBUS in-cab-connector

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30322575-02-EN

Read and follow these operating instructions.

Keep these operating instructions in a safe place for later reference.

Company details

Document

Assembly Instructions
Product: Basic Vehicle Harness – with ISOBUS in-cab-connector
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Müller-Elektronik GmbH & Co.KG
Franz-Kleine-Straße 18
33154 Salzkotten
Germany
Phone: ++49 (0) 5258 / 9834 - 0
Fax: ++49 (0) 5258 / 9834 - 90
Email: info@mueller-elektronik.de
Homepage: http://www.mueller-elektronik.de

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1 For your safety

1.1 Basic safety instructions

Carefully read the following safety instructions before installing the basic vehicle harness.

- Only install the product if you are specially trained in the field of electronics. Otherwise, ask an expert.
- Install the product as described in these instructions.
- Replace defective fuses only with fuses with the same amperage.

1.2 Intended use

The product is intended exclusively for use in agriculture. The manufacturer shall not be held responsible for any other use of the system.

The manufacturer cannot be held liable for any personal injury or property damage resulting from such non-compliance. All risk arising from improper use lies with the user.

The operating instructions form part of the product. The product may only be used in accordance with these operating instructions.

All applicable accident prevention regulations and all other generally recognized safety, industrial, and medical standards as well as all road traffic laws must be observed. Any unauthorized modifications made to the equipment will void the manufacturer's warranty.

1.3 Layout and meaning of warnings

All safety instructions found in these Operating Instructions are composed in accordance with the following pattern:

	⚠ WARNING
	This signal word identifies medium-risk hazards, which could potentially cause death or serious physical injury, if not avoided.

	⚠ CAUTION
	This signal word identifies hazards that could potentially cause minor or moderate physical injury or damage to property, if not avoided.

NOTICE
This signal word identifies hazards that could potentially cause damage to property, if not avoided.

There are some actions that need to be performed in several steps. If there is a risk involved in carrying out any of these steps, a safety warning will appear in the instructions themselves.

Safety instructions always directly precede the step involving risk and can be identified by their bold font type and a signal word.

Example

1. NOTICE! This is a notice. It warns that there is a risk involved in the next step.
2. Step involving risk.

1.4 Disposal

When it has reached the end of its service life, please dispose of this product as electronic scrap in accordance with all applicable waste management laws.

2 Product description

With the ISOBUS basic vehicle harness, you can establish an interface on the tractor between the terminal and the ISOBUS job computer of the agricultural implement. This allows you to transmit data between the terminal and the job computer.

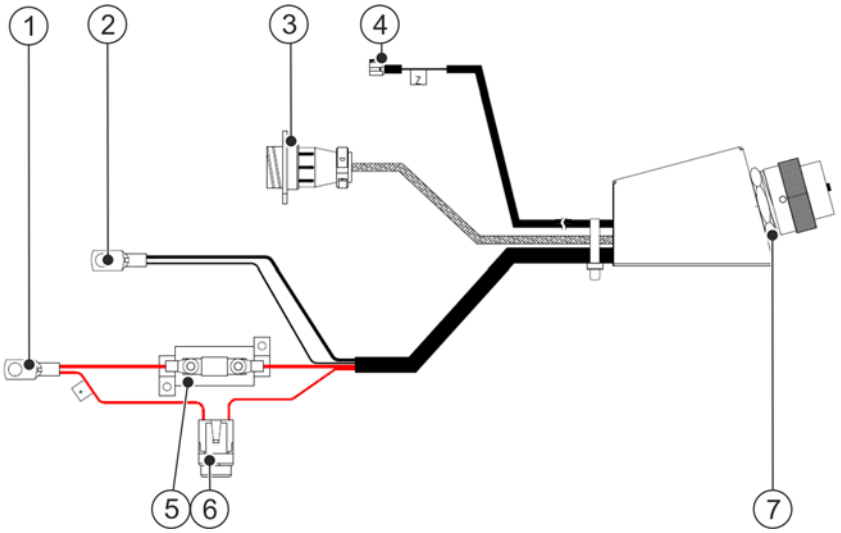
With the integrated ISOBUS in-cab-connector, this basic vehicle harness is suitable for vehicles that do not have their own ISOBUS in-cab-connector.

Scope of delivery

The basic vehicle harness consists of the following parts:

- ISOBUS socket
- ISOBUS in-cab-connector
- Battery cable with fuse holder for connection to the vehicle battery
- Ignition cable
- Enclosures pack with parts for installing the components

3 Assembly instructions



1	Ring tongue for connection to the positive terminal of the vehicle battery	5	Prepared fuse holder with 50A fuse
2	Ring tongue for connection to the negative terminal of the vehicle battery	6	Prepared fuse holder with 15A fuse
3	ISOBUS in-cab-connector	7	ISOBUS socket
4	Ignition cable		

For installation, you must perform the following steps:

- Install the ISOBUS socket
- Connect the battery cable
- Connect the ignition cable
- Connect the basic vehicle harness with a terminal
- Insert the ISOBUS plug
- Use the dust protection cap

3.1 Install the ISOBUS socket

Procedure

1. Install the ISOBUS socket firmly on the outside of your vehicle at an accessible location. Use all 4 bolts. Pay attention to the cable length of 3 metres for connection to the terminal later.

3.2 Connecting the battery cable

⚠ WARNING

Risk of injury caused by short circuit

Connecting the positive terminal and the vehicle mass when working on the battery terminals can cause a short circuit. This can cause burn injuries to persons.

- When working on the battery terminals, ensure that no connection is created between the vehicle battery and the vehicle mass.
- Remove metallic items such as watches and rings before starting work.
- When disconnecting the terminals, always begin with the negative terminal.
- Always begin reconnecting the terminals with the positive terminal.

⚠ WARNING

Danger of injury from explosion of the vehicle battery

If the battery terminals are loose fitting, starting the vehicle can cause the vehicle battery to overheat. The vehicle battery may then explode.

- Always tighten the battery terminals firmly after assembly.

NOTICE

Damage to the vehicle's electrical system

Switching the polarity of the cables can cause damage to the vehicle's electrical system.

- Pay attention to the polarity of the cable cores and the terminals!

Procedure

To connect the battery cable:

☑ The vehicle is switched off.

1. Connect the ring tongue to the battery terminal of the vehicle battery. Pay attention to the polarity, start with the positive terminal.
2. Fasten the battery cable with the cable ties. You may not shorten the cable. When fastening, pay attention to sufficient distance from moving parts and parts that get very hot.

3.3 Connecting the ignition cable

	⚠ CAUTION Risk of injury due to cable fire If the terminal is protected with the wrong fuse, there is a risk of cable fire. Only use suitable fuses.

Procedure

1. Connect the ignition cable to one of the terminals of the ignition. Ensure that the terminal is protected by a 5A fuse.

3.4 Connecting the basic vehicle harness with a ME terminal

To connect the basic vehicle harness with a Müller-Elektronik terminal, you need the adapter cable: 30322541.

Procedure

1. Connect the adapter cable to the terminal and the integrated ISOBUS in-cab-connector of the basic vehicle harness.

3.5 Insert the ISOBUS plug

Procedure

1. Insert the ISOBUS plug into the ISOBUS socket and turn to tighten firmly.

2. Connect the dust protection caps of the ISOBUS plug and the ISOBUS socket:

3.6 Using the dust protection cap

Always keep the dust protection cap closed if you do not have a job computer connected to the ISOBUS socket.

Left: open; right: closed

4 Technical specifications

Operating voltage	9-16 V
Operating temperature	-20 – +70°C

Plug assignment – overview

Pin no. ISOBUS in-cab-connector	Signal name	Comment	Pin no. ISOBUS socket
1			
2	CAN_L_In		9
3	CAN_L_Out	on the bus termination	
4	CAN_H_In		8
5	CAN_H_Out	on the bus termination	
6	TBC_PWR	Supply voltage for the bus termination, via external "Z" ignition line and 5A* fuse on terminal 15	6
7	ECU_PWR	via 15A fuse on B+	
8	TBC_GND	Supply voltage for the bus termination	7
9	ECU_GND	on battery B-	2
	ECU_PWR	via 15A fuse switched on B+ (terminal 15)	4
	PWR	via 50A fuse on B+ (terminal 30)	3
	GND	on battery B-	1
	TBC_DIS		5

*not included in scope of delivery