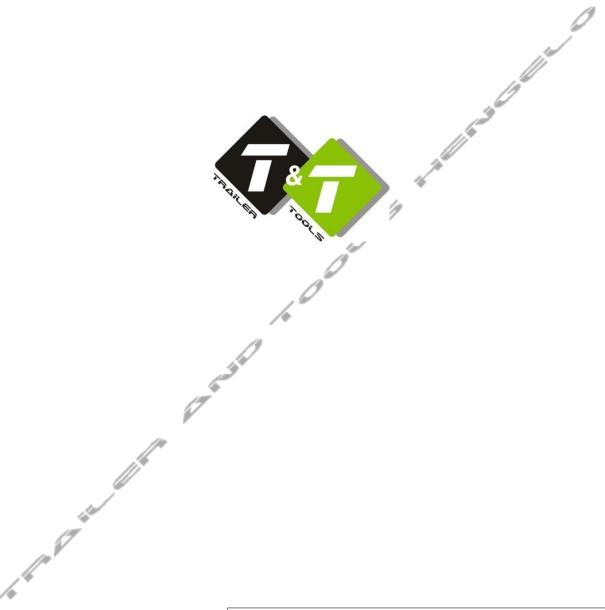
## Wiring diagrams for trailers



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#### Wiring diagrams for plugs of trailers

The construction, repair or maintaining of your trailer lights can be a difficult chore. Our wiring diagrams and explanation can make it a lot easier to understand.

Often a plug breaks or it will pulled loose from the cable. Sometimes the plug needs to be replaced due to corrosion or aging. This document makes the repair or replacement of a plug much easier. We also offer the possibility to download and print the wiring diagram, so you have it at hand at the trailer.

#### The different types of plugs on a trailer, caravan or boat trailer

There are different kinds of plugs for the connection of the trailer. Why is that?

Till 1996, all trailers had 7-pin connectors. Since 1996 it is required to mount a rear fog lights on new trailers. Because the constant power connection has now been used for the rear fog light, there was a problem in caravans. It was no longer possible to use for example a refrigerator on the move. For this, new 13-pin connectors were developed. There are three types on the market, Jaeger, Multicon and Multicon West.

The Multicon and Multicon West are quite similar, but they can not be used together. Because the pins of the connectors are different. Below you will find the wiring diagrams of the various plugs.

### Professional trailers with 13-point plugs

In 2010, the reverse light are also required with a new professional trailer. These trailers were also given their own license plate. These trailers were also equipped with 13-pin connectors. In most cases, these trailers use the Jaeger model (bayonet).

Cars with a towbar are still fitted with a 7-pin plug. We have a 7-pin plug adapter which converts it to a 13-pin plug.

#### Possible malfunctions of your trailer lights

Prevent malfunctioning or defective lighting.

Make sure you always have spare lamps and spare fuses with you. This prevents a fine and is certainly important for the safety of you and your fellow road users. To avoid oxidation and bad contact, it is best to spray the socket and plug one or two times a year with silicone spray or Vaseline spray. If there oxidation is present, clean the contacts with a contact cleaner.

If the plug is not connected, make sure it is in the holder on the trailer.

Make sure the socket to the car is properly closed with the cover, which prevents splashing water and mud from coming into the socket.

Do not repair cables with seperate terminal blocks, because this only causes extra malfunctions.

For welding cables we have special junction boxes in our range. A wire break is easiest to fix it with cable lugs and a heat shrink.

#### The trailer lighting works partially or not at all

If one light goes out, this first try to replace it with a new one. If everything does not work then check the plug. The fastest way you can test this is with a multimeter or a 12 volt voltage detector. If necessary, open the plug to see if any wires are still connected, or if the points are oxidized.

#### Step-by-step plan for malfunctions

#### The trailer lights work partially or not at all

- 1. Replace the lamp
- 2. Check if the wire is still intact
- 3. Clean the contacts
- 4. Check if there is power on the pole.
- 5. Check if the connection thread is connected properly
- 6. Bend and adjust contacts (CAREFULLY!)

If that fails, please contact your trailer dealer or garage.

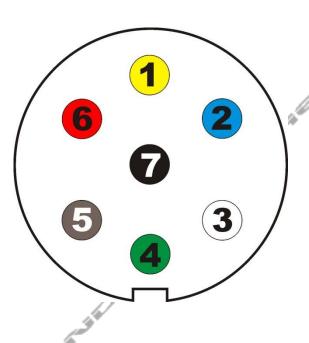
#### Lighting is not working at all

- 1. Make sure there is voltage on the pole
- 2. Check the inside of the plug
- 3. Clean the contact
- 4. Check for broken wire s
- 5. Bend and adjust contacts (CAREFULLY!)

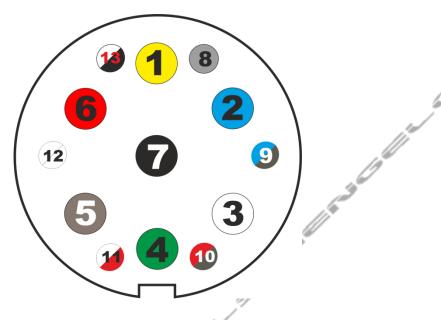
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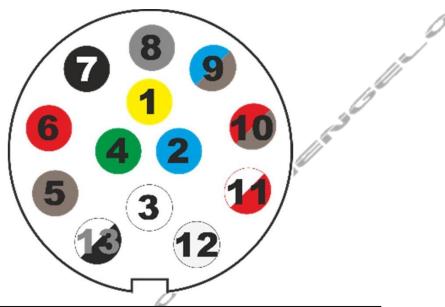
# **Wiring diagrams:**



Wiring diagram 7-pin						
No.	Code	Description	Wire color			
1	1/L	Left turn indicator	Yellow			
2	54G	Constant current supply wire	Brown/blue			
3.	31	Ground	White			
4	R	Right turn indicator	Green			
5	58R	Taillight and side marker light right +	Brown			
		license plate light				
6	54	Brake lights	Red			
7	58L	Taillight / side marker light left	Black			
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Wiring diagram 13-pin Multicon				
No.	Code	Description	Wire color	
1	1/L	Left turn indicator	Yellow	
2	54G	Fog light	Blue	
3	31	Ground	White	
4	R	Right turn indicator	Green	
5	58R	Taillight / Side marker light right +	Brown	
		License plate light		
6	54	Brake lights	Red	
7	58L	Taillight / Side marker light left	Black	
8	8	Reverse light	Gray	
9	9	Permanent current wiring for interior light	Brown/blue	
10	10	Charging cable for caravan battery / fridge	Brown/red	
11	11	No purpose(Potentially grounding)	White/red	
12	12	No purpose		
13	13	Grounding (for contacts 9 to 12)	Black/white	



Wiring diagram 13-pin Jaeger					
No.	Code	Description	Wire color		
1	1/L	Left turn indicator	Yellow		
2	54G	Fog light	Blue		
3	31	Ground	White		
4	R	Right turn indicator	Green		
5	58R	Taillight / Side marker light right +	Brown		
		License plate light			
6	54	Brake lights	Red		
7	58L	Taillight / Side marker light left	Black		
8	8	Reverse light	Gray		
9	9	Permanent current wiring for interior light	Brown/blue		
10	10	Charging cable for caravan battery / fridge	Brown/red		
11	11	No purpose(Potentially grounding)	White/red		
12	12	No purpose			
13	13	Grounding (for contacts 9 to 12)	Black/white		