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Automotive | Hybrid & EV

Automotive Electric and Electronic Trainer



Automotive Electric and Electronic Trainer

A modern vehicle is characterised by its high degree of electrification. This means that most open and closed-loop control processes are carried out using electro-mechanical systems. These systems, as well as all those designed to enhance driver comfort and drivability, require a stable and fail-safe power supply to ensure the finest quality of driving, leading to utmost comfort for drivers.

Lucas-Nülle training systems for automotive technology offer trainees the outstanding opportunity to learn about the various aspects of how on-board vehicle networks are supplied with electrical power at an authentic practical level. They also get a vivid and detailed look at how the lighting systems work and how they can subsequently be enhanced.

Lighting Trainer



Lighting Trainer

Hardly any other design element is as distinctive to a vehicle as its headlights. New shapes and light sources are continually emerging. Nevertheless, they all have one thing in common. They need electricity and have to be connected to the on-board network. Learn the difference between conventional wiring and a lighting system using a CAN bus. Control of rear lights by means of pulse-width modulation is also explained in great detail.

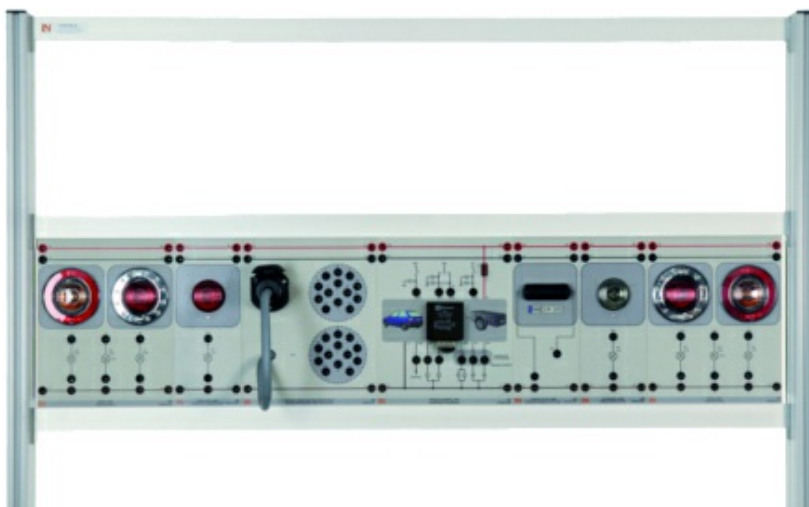
Training Panel Systems



Training Panel Systems

Please choose your product:

ALC 1.3 Trailer Lighting Trainer



ALC 1.3 Trailer Lighting Trainer

Once upon a time trailer lighting was simple to explain, but those days are over. Now the demands being made on teachers have grown in step with the complexity of the electrical system in question. In today's classroom it is not just how the plug's 7-pin or 13-pin socket assignment works but also how to protect the towing vehicle from overloading and whether or not the control functions on the trailer comply with legal stipulations.

Supplement to basic set, consisting of:

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Pos.	Product name	Bestell-Nr.	Anz.
1	<p>Trailer socket and plug, 13 pole</p> <p>The trailer attachment allows the lighting unit to be extended.</p> <ul style="list-style-type: none"> Operating voltage: 12 V Operational elements: 13-pole trailer socket Inputs /outputs: 4mm safety sockets Dimensions: 297 x 228 x 120 mm 	CO3216-1L	1
2	<p>Tail light unit with LED rear light (right)</p> <p>Complete tail light unit with modern LED rear light and stipulated reflector</p> <ul style="list-style-type: none"> Operating voltage: 12 V Operational elements: LED rear light 1.8W Brake P21W Indicator light PY 21W Reflector Inputs/outputs: 4mm safety sockets Dimensions: 297 x 228 x 120 mm 	CO3216-3D	1



3 Tail light unit with LED rear light (left)

CO3216-2P

1

Complete tail light unit with modern LED rear light and stipulated reflector

- Operating voltage: 12 V
- Operational elements: LED rear light 1.8W
Brake P21W
Indicator light PY 21W
Reflector
- Inputs/outputs: 4mm safety sockets
- Dimensions: 297 x 114 x 120 mm



4 Rear fog lamp

CO3216-2E

1

The rear fog lamp is suitable for subsequent installation and for supplementing the overall lighting system.

- Operating voltage: 12V
- Power: 21W
- Inputs and outputs: 4mm sockets
- Dimensions: 297x114x120mm
- Weight: 1.0kg



5 Reversing lamp

CO3216-2F

1

The reversing light is suitable for subsequent installation and for supplementing the overall lighting system.

- Operating voltage: 12V
- Power: 21W
- Inputs and outputs: 4mm sockets
- Dimensions: 297x114x120mm
- Weight: 1.0kg



6 Licence plate Illumination

CO3216-3A

1

Illumination of a licence plate means providing lighting for the plate so that it can be easily read in the dark.

- Operating voltage: 12V
- Power: 5W
- Inputs and outputs: 4 mm sockets
- Dimensions: 297 x 114 x 120mm
- Weight: 1.0kg



7 Trailer control unit

CO3221-3K

1

The trailer control unit serves to switch the indicator lamp and warning blinker signals as well as the brake lamp signals through to the trailer. Furthermore, it activates the disabling of the park distance control via the back-up or reverse lamp when the trailer has been connected. An additional application for this disabling is in its use as a car theft alarm system. With the appropriate connections it activates the horn system of the vehicle pulling the trailer if someone attempts to illicitly remove the connected trailer.

- Operating voltage: 12 V
- Inputs/outputs: 4-mm safety sockets
- Park-Boy function
- Dimensions: 297 x 114 x 120 mm
- Weight: 1.0 kg

