

# Manual for truckstart Jump Leads

## Version clamp/clamp

Please pay close attention to the data in the vehicle operating instructions when using the jump leads.

1. The nominal voltage of both batteries has to be identical. Further the capacity (AH) of the battery giving power cannot be significantly lower than the capacity of the discharged battery.
2. The cubic capacity of the vehicles involved has to be located within the permissible limits of the jump leads.
3. A discharged battery can already freeze at  $-10^{\circ}\text{C}$ . It must be thawed before being connected with the battery.
4. Avoid contact between both vehicles, otherwise current might already be flowing while connecting the positive poles. Keep inflammatory substances away (danger of explosion). Do not bend over the battery due to danger of cauterization. The discharged start-up battery cannot be separated from the according on-board power supply during or for jump-start. Turn off the vehicles' ignitions before connecting the jump leads.
5. Use parking brake, change into neutral / position "P". Lay jump leads out of the way of rotating parts in the engine compartment.
6. Connect jump leads in this order: first connect red cable (+) with the positive pole of the discharged battery, then the positive pole of the battery giving power. Connect black cable (-) with the negative pole of the battery giving power first, and then with the body of the stopped vehicle, e.g. with the ground strap or another bare part of the engine block. Connect as far as possible from the battery to avoid the ignition of oxyhydrogen that might have developed. It is important that the red cable (+) is not connected with vehicle parts that conduct electricity and that the cable clips do not touch due to danger of short-circuit.
7. Bring engine of the vehicle giving power to average engine speed. Now start the stopped vehicle. After starting, which should not take longer than 15 seconds, a waiting period of at least 1 minute must be allowed.
8. After successful starting and before disconnecting, a device that needs electricity (light or rear window heater) must be turned on in the stopped vehicle.
9. The jump leads have to be taken off in opposite order while the engine is running.

## Version connector/clamp

First of all please take note of all points of version clamp/clamp. Connect the jump leads to the flat battery first and afterwards to the supplying battery. The connecting nuts have to be screwed securely. After jump aid connections have to be removed from the broke down car first.

## Version connector/connector

First of all please take note of all points of version clamp/clamp. Connect the jump leads to the socket flat battery first and afterwards to the socket supplying battery. The connecting nuts have to be screwed securely. After jump aid connections have to be removed from the broke down car first.

## Use of the coupling for extension

The coupling with the respective extension is only allowed to be connected to the truckstart cable in currentless condition. The maximum length of 14 m must not be exceeded. The connecting nuts have to be screwed securely.