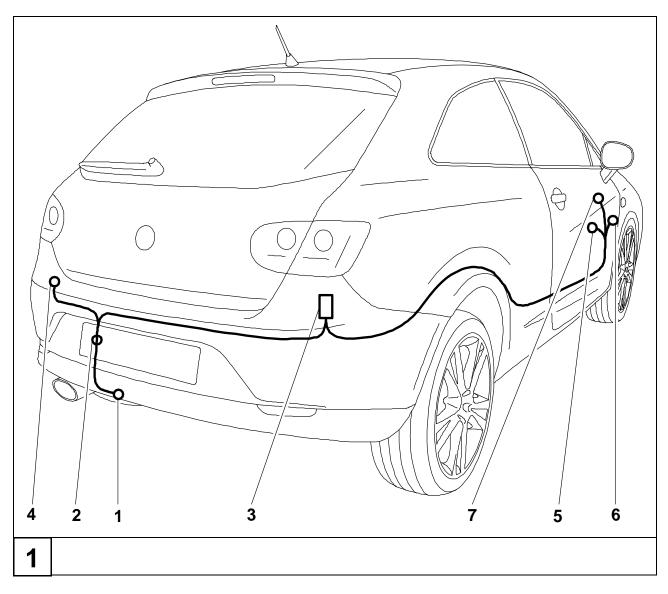




Installation Instructions: Electrical System for Towing
Hitch3



Westfalia		
321 525 300 143		VW Polo V RHD, 06/09 – 04/14
321 527 300 143	VW Polo V RHD, 06/09 – 04/14	







# Installation Instructions: Electrical System for Towing Hitch

#### Important notes

Read the installation manual prior to starting work.

The electrical kit should only be installed by qualified personnel.



#### Caution – Disconnect the battery!

Danger of damage to the vehicle's electronic system. Data which are stored electronically may get lost.

Read out the fault storage prior to starting work.

Use a closed-circuit current conservation unit if necessary.

# Note

During installation special attention has to be paid to the following points:

- Cables must not be pinched or damaged.
- All sealing elements have to be installed properly.
- The socket gasket has to be positioned on the insulating sleeve and not on the individual wires.
- Lay the cables such that they do not rub on the vehicle and are not bent.
- Do not lay any cables near the exhaust system.

When a trailer lamp fails (including direction indicator lights, but not back-up light and rear fog lamp), this is indicated by the light failure indicator in the instrument cluster. An additional indicator light (C2) for monitoring the direction indicators on the trailer is not provided in the vehicle.

When a trailer is used, the rear fog lamp of the traction vehicle is deactivated.

In the case of trailers without rear fog lamp, a rear fog lamp has to be retrofitted.

A socket adapter may only be used in conjunction with a trailer. When the trailer is no longer used, remove the socket adapter.

Correct trailer operation has to be checked using a trailer or a test instrument with load resistors.

Subject to technical alterations!



## Installing the electrical kit

- 1. Disconnect the negative battery terminal.
- 2. If necessary, remove the following coverings and panels:
  - In the luggage trunk
    - Covering of luggage trunk bottom
    - Loading edge covering
    - Covering of the left and right side of the luggage trunk
    - On the right-hand side of the vehicle
      - Access strips
      - Cover of the fuse carrier
      - Fuse carrier

#### Note

In case the device support 6R0 971 362 B (Fig. 1/3) is not fitted in the vehicle for the trailer control unit, this could be ordered via VW Kassel.

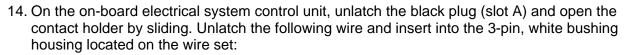
- 3. Or fasten the trailer control module to the left-hand side of the luggage trunk (Fig. 1/3) using velcro tape provided. Make sure it is securely fastened!
- 4. Remove the 40 mm hole cover in the vehicle, to the left next to the middle (Fig. 1/2) in rear body panel.
- 5. Starting in the luggage trunk, lead the cable end through the cable leadthrough (Fig. 1/2) to the outside to the socket holder plate (Fig. 1/1).

#### Installing the socket

- 6. Insert the rubber grommet into the cable leadthrough (Fig. 1/6).
- 7. If there is already a rubber grommet, take it away and put this wires through the small whole of the rubber grommet at the cable harness. Pay attention to tightness!
- 8. Press the contact insert into the socket housing and push the rubber grommet towards the socket.
- 9. Screw the socket onto the holding plate (Fig. 1/1) using the supplied screws.
- 10. Secure the cable harness using cable ties.

### Installing the electrical kit

- 11. Insert the red 12-fold connector housing and the black 16-fold connector housing into the intended slots of the trailer connection unit (Fig. 1/3) and let them lock into place.
- 12. Connect the brown wires with the eyelets to the vehicle's ground point (Fig. 1/4) at the back on the left.
- 13. Lay the cable set along the vehicle's cable harnesses / ducts to the area of the network control unit on the right side at the front of the vehicle (Fig. 1/6).



- Wire black/red from chamber 43 in chamber 2 enclosed white housing.
- 15. From the wire set, insert the single wire black/red into the proper coloured, vacated chamber 43 of the black plug.
- 16. Reconnect the black contact holders with each other by sliding, snapping in the black cover cap and plugging the plug back on the on-board electrical system control unit (slot A) and latching.
- 17. On the on-board electrical system control unit, unlatch the white plug (slot B) and open the contact holder by sliding. Unlatch the following wires and insert into the 3-pin, black bushing housing located on the wire set:
  - Wire orange/brown from chamber 21 in chamber 1 enclosed black housing.
  - Wire orange/green from chamber 20 in chamber 3 enclosed black housing.
- 18. From the wire set, insert the single wires orange/brown and orange/green into the proper coloured, vacated chambers 20 and 21 of the white plug.
- 19. Reconnect the black contact holders with each other by sliding, snapping in the black cover cap and plugging the plug back on the on-board electrical system control unit (slot B) and latching.
- 20. Fit the now open 3-pin black and white housings together.
- 21. Vehicles with light-/sight-package (BCM high) or BlueMotion go ahead with point 24. For these vehicles, the blue and gray lines have no further use and must be properly insulated.
- 22. Remove the light switch unit (Abb. 1/7) and take the big, black connector off. Unlatch the grey/black wire from chamber 9 and insert it into the 1-pin housing located at the counterpart at the cable set.
- 23. Insert the single blue wire from the cable set in chamber 9 of the big, black housing. Fit the now open 1-pin black housings together and the big, black housing on the light switch unit.
- 24. Remove the black cover of the fuse carrier (Fig. 1/5) and open the lilac latch by shifting it.
- 25. Take the fuse-protected cable out of compartment 3 (terminal 15) and insert it into the 1-pin housing on the cable set. Re-insert the individual black/blue cable of the cable set into comportment 4 of the fuse carrier. Fit the now open 1-pin housings together.
- 26. Insert the red/black and red/blue single wires into the fuse-protected sides of fuse compartments that are already equipped with terminal 30.
- 27. If there is not a sufficient number fuse compartments that are already equipped with terminal 30, the supplied cable adapter can be used.
- 28. Insert the supplied 15A fuses into these fuse compartments.
- 29. Close the lilac latch on the fuse carrier by shifting it and refit the black cover.

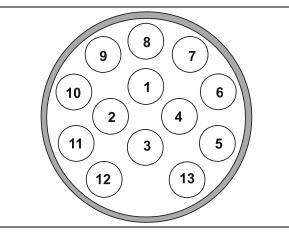


### Checking the correct operation

- 30. Reconnect the battery of the vehicle.
- 31. The vehicle's gateway has to be coded as follows using a service tester to extend its functionality to the use of a towing hitch:
  - Address word "19", diagnosis interface for data bus.
    - Select function 008 coding (service \$22).
      - Select function 008.02 coding.
        - Select address word "69", trailer function.
          - o Change to "Coded".
            - Continue the coding according to the menu.
              - Function "022" Exit output.
- 32. For vehicles fitted with parking assistance II or parking steering assistant, code the control unit using the VAS tester via "Guided trouble shooting" to "with a towing hitch".
- 33. Finally, as at the beginning, perform a system request regarding the "Guided error location" and delete error codes if necessary.
- 34. Check the trailer function with the help of a suitable test instrument (with load resistors) or with the help of a trailer.
- 35. If necessary, bind back any excess cables, fasten all cables with cable ties and reinstall all the parts that were removed.
- 36. Using the 3-pin connector for the constant plus extension kit, the functions "Constant plus", "Charge lead" and "Ground for charge lead" can be retrofitted. The constant plus extension kit is available from specialist shops under the Westfalia part no. 300 025 300 113.



# **Socket allocation**



	Circuit	Cable colour
1	Turn signal indicator, left	black/white
2	Rear fog light	blue
3	Ground (Circuit 1-8)	brown
4	Turn signal indicator, right	black/green
5	Tail light, right	grey/red
6	Brake light	black/red
7	Tail light, left	grey/black
8	Reversing light	black/blue
9	Uninterrupted positive	red
10	Charge line	yellow
11	Ground (circuit 10)	brown/white
12	Trailer detection	
13	Ground (circuit 9)	brown