

Installation and Operation Manual

**Veigel Commander Basic
for Hand Controls
Veigel Classic and Compact
Art.Nr.: BHA01-BS bis BHA06-BS
BZD02-BS bis BZD06-BS**



*Technology
Designed to Help*

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SYMBOLS



This sign refers to information which may lead to malfunction or security safety hazards when disregarded.



This sign refers to important, additional information



This sign refers to other recommendations.

VEIGEL HOTLINE

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GENERAL REMARKS

SECURITY ADVICE

This universal installation kit can be employed for almost all kinds of cars with automatic transmission. It has been designed according to the existing rules and standards and represents the current state of the art. If installed correctly, it will provide safe and trouble free operation.

Security can only be ensured if all necessary measures have been taken. It is the owner's responsibility to initiate and control this measures.

During installation please observe the following:



- • Installation and maintenance must be carried out by qualified personnel, using proper tools!
- • Carefully read this manual before installing the hand control.
- • Hand over this manual to the end user.
- • Observe all necessary safety-procedures!
- • The hand control must not be fitted with additional items that have not been tested and accepted by Veigel .
- • Modifications of hand control or installation kit are not permitted unless authorized by Veigel.

When using hand control and commander, please:



- • observe the existing rules for traffic and security!
- • do not use the hand control if any kind of malfunction is apparent. Let malfunctions be remedied without delay!
- • always keep installation and operation manual in the car.
- • remove/disengage the unit when a non-handicapped person is driving.



The hand control reduces the space in the foot well on the driver's side!



Observe the aforementioned rules, otherwise the manufacturers warranty will be void. We cannot accept any liability for problems caused by neglect or non-observance.

PRODUCT DESCRIPTION

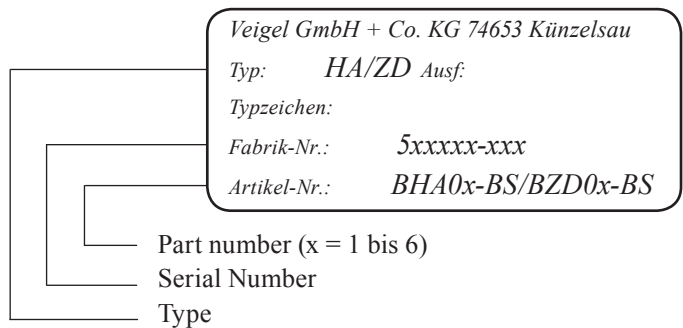
FUNCTION

The Basic Commander enables the driver to set the indicators while keeping his hand on the hand control.

This is achieved by means of a rocker switch that is integrated into the cover of the hand control.

The switch is connected to the indicators by means of a control box. This box is a universal kit, which has to be adapted to the respective car. Adaptation is done by means of resistors which suit the car's electronic circuit.

TYPE LABEL



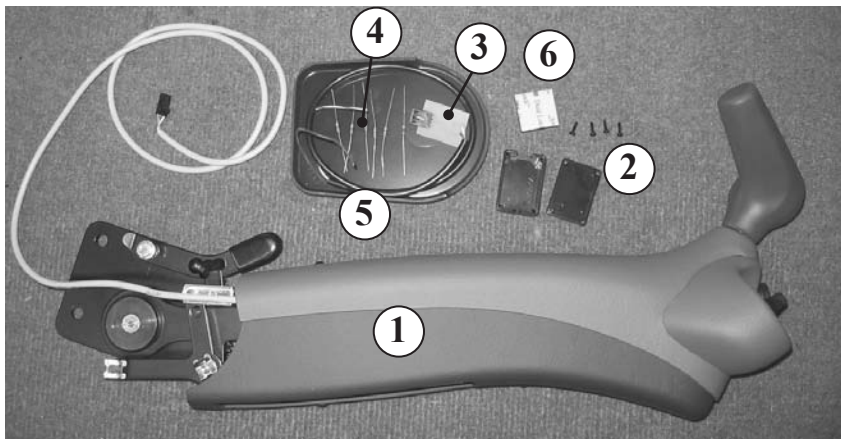
Please note down the serial number of the kit here:

FABR. NR.: _____

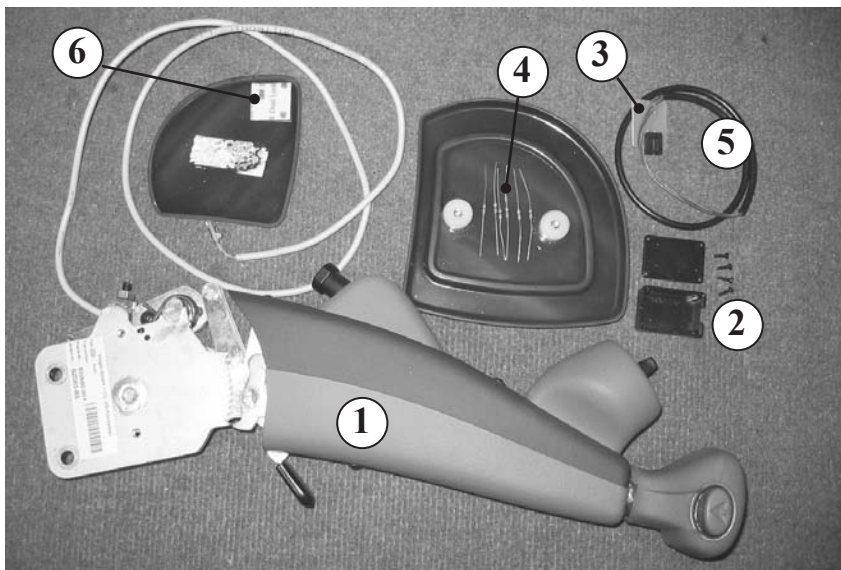


The serial no. is indispensable for any kind of query or request. Always state this number when contacting Veigel.

SCOPE OF DELIVERY



3-1: BHA0x-BS



3-2: BZD0x-B

Pos.	Part	Part No.
1	Hand Control Veigel Classic	
1	Hand Control Veigel Compact	
2	Circuit Board Box	110413
3	Circuit Board	231935
4	Resistors 160; 300;330; 680;1200: 2200 Ohm	
5	Wire Harness	
6	Velcro	302562

INTENDED USE:

Basic Commander ist an accessory for Veigel-Hand Controls Classic (BHA01 to BHA06) and Compact (BZD02 to BZD04).

It can be used in practically every car that is equipped with a Veigel Hand Control.



OPERATION

HOW TO USE THE BASIC COMMANDER

The Basic Commander is easy to use and complies with the safety standards of the car industry.



The function of the original indicator lever remains undisturbed!

Push switch to either left or right in order to set the indicators.

Push back switch to central position in order to switch off indicators.



The switch always remains in the selected position. It must be manually pushed back to central position in order to switch off the indicators!



The commander is operated likewise on Compact hand controls.



4-1: Basic Commander on Classic Hand Control



When pushing switch to L or R with the ignition turned off, the corresponding functions of the original indicator lever will be activated!

SECURITY ADVICE



Please carefully read the owners manual, provided with the transfer seat!

SAFETY ADVICE



Store Installation- and Owners Manual together with the car documents!

If somebody else is to drive the car, please notify him about the hand control and the restrictions caused by it.



Your car has been fitted with a Veigel driving aid, which has been manufactured in accordance with the highest quality standards. Please observe the advice given below in order to ensure proper function and trouble-free operation for many years.



The circuit box must not be opened by unauthorized persons. Noncompliance leads to nullification of warranty.

INSTALLATION

SECURITY ADVICE



Please Note:

- *this kit may be installed only by qualified personnel.*
- *follow the instruction step by step.*
- *when drilling, cutting or sawing, make sure that cables, tubes etc. remain unharmed.*
- *properly seal all drill holes.*



When working on the seats, please check for electric cables, especially when the seats are equipped with airbags. Electrical connections must not be separated!

Please Note:

Only specially trained personnel is allowed to work on airbags.

LOCKING TORQUE REQUIREMENTS



When mounting Veigel parts to the car, observe the carmaker's torque requirements. When connecting Veigel parts, DIN requirements apply unless otherwise stated in this manual.

Regular Thread			Fine Thread		
Size	Torque Requirements [Nm]		Size	Torque Requirements [Nm]	
	8.8	10.9		8.8	10.9
M4	3	4,4	M8x1	27	39
M5	5,9	8,7	M10x1	55	81
M6	10	15	M10x1,25	52	76
M8	25	36	M12x1,25	93	135
M10	49	72	M12x1,5	89	130
M12	85	125	M14x1,5	145	215
M14	135	200	M16x1,5	225	330
M16	210	310			



Install hand controls according to installation manuals BHA01 - BHA06 or BZD02 - BZD04.

INSTALLATION OF BASIC COMMANDER



Adapt circuit board to car's electronic circuit by means of the enclosed resistors.

In order to copy the functions of the original indicator lever, the circuit board can be assembled in three different ways. (see 5-1).

Darstellung 1:

Aside from potential, one cable leads to indicator switch.

The left and right functions are activated by means of different resistors

Darstellung 2:

Aside from potential, two cables lead to indicator switch.

One cable is guided through the circuit board. Therefore the board is fitted with a wire jumper.

The second cable is guided to the indicator through a resistor. It is necessary to cut a circuit path. (see 5-1)

Darstellung 3:

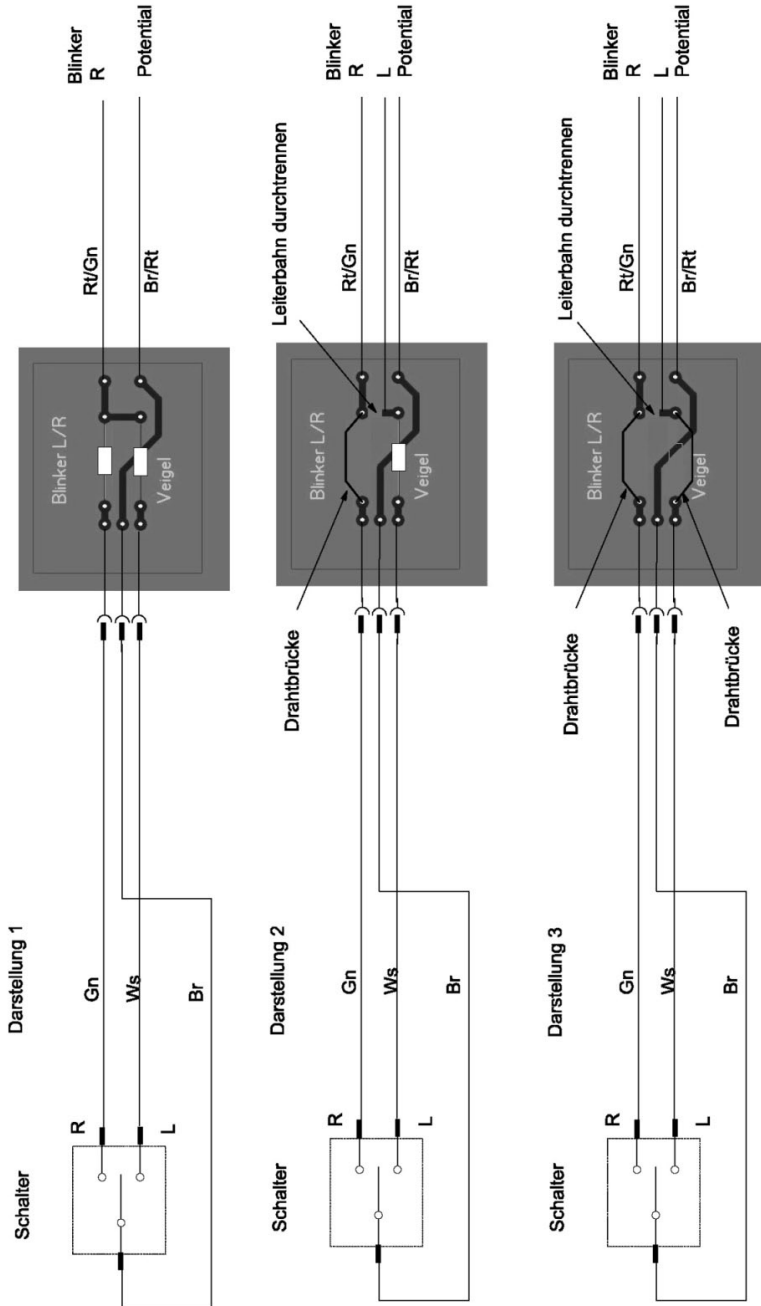
Aside from potential, two cables lead to indicator switch.

Both cables are guided through the circuit board. The board is fitted with two wire jumpers. It is necessary to cut one circuit path (see 5-1)



These variations are dependant on the car's electronics. They have been tested on current car models.

However, as cars are constantly being modified, none of these variations may work on a certain car. They are meant as examples only, Veigel cannot guarantee that one of these variations will always be applicable.



5-1: assembly

Colours
 Gn - green
 Br - brown
 Ws - white
 Rt - red

CONFIGURATION

			Darst.	Resistors	
Carmaker	Model	Typ	1	L	R
Volkswagen	Golf V	1K	1	2,2 kΩ	680 Ω
Volkswagen	Golf Plus	1KP	1	2,2 kΩ	680 Ω
Volkswagen	Passat	3C	1	2,2 kΩ	680 Ω
Volkswagen	Touran	1T	1	2,2 kΩ	680 Ω
Skoda	Oktavia	1Z	1	2,2 kΩ	680 Ω
Audi	TT	8J	1	2,2 kΩ	680 Ω
Audi	A3	8P	1	2,2 kΩ	680 Ω
Audi	A4	8K	1	2,2 kΩ	680 Ω
Audi	A6	4F	1	2,2 kΩ	680 Ω
Mercedes	E-Klasse	Br. 210	2	330 Ω	Potential
Mercedes	A-Klasse	Br. 168	2	330 Ω	Potential
Mercedes	Vaneo	Br. 414	2	330 Ω	Potential
BMW	3-er	E46	1	300 Ω	1,2 kΩ
Opel	Corsa	C	1	680 Ω	160 Ω

Table 5-1

HOW TO CONNECT THE CABLES

Place circuit board in box, close box and tighten bolts.

Connect cable from hand control to box.

Lay cables according to conditions in car: circuit box should be fixed with velcro.

Split velcro and attach one part to circuit box, the other one to car

Press together both parts.



The velcro is self-adhesive. Surfaces must be dry and free from dust or grease. Temperature range: +20 to -35 degr. Centigrade.

Fix cable with straps wherever necessary.



Cable must be free from chafing or squeezing.

FINAL CECK

Check functions of hand control/Basic Commander:

- in the workshop
- during a test drive

DE-INSTALLATION

- *de-installation is done in reverse order.*
- *carefully plug and seal all drill holes.*

TRANSFERRING THE KIT



- *Before transferring, check the unit for wear and tear. If there are damaged or worn out parts, replace them with original parts which can be ordered from Veigel.*
- *When ordering parts, please state serial number of the product.*

MAINTENANCE



Maintenance and repair work may be done by authorized and properly trained personnel only!

Have malfunctions remedied immediately by qualified personnel!

MAINTENANCE

The Veigel Commander is maintenance-free.

Check correct fit of plugs and overall condition of cables every 10.000 to 15.000 km

TRANSPORTATION, STORAGE AND DISPOSAL

TRANSPORTATION AND STORAGE



Transportation and Storage are permitted in original packaging only.

DISPOSAL



Observe the national legislation about disposal.

INSTALLATION PROTOCOL



To be filled in by authorized workshop

<i>Customer:</i> _____					
<i>Part:</i> _____	<i>Date of installation:</i> _____				
<i>Serial No.:</i> _____	<i>Time:</i> _____				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; text-align: right;"><i>new</i></td> <td style="width: 20%; text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="width: 80%; text-align: right;"><i>used</i></td> <td style="width: 20%; text-align: center;"><input type="checkbox"/></td> </tr> </table>	<i>new</i>	<input type="checkbox"/>	<i>used</i>	<input type="checkbox"/>	<i>Car:</i> _____
<i>new</i>	<input type="checkbox"/>				
<i>used</i>	<input type="checkbox"/>				
<i>License Plate</i> _____					

- | | |
|--|--|
| <p><i>Installation:</i> <input type="checkbox"/> <i>All bolts tightened and sealed</i></p> <p><input type="checkbox"/> <i>Connectors are secured</i></p> <p><input type="checkbox"/> <i>Linkage is moving freely</i></p> <p><input type="checkbox"/> <i>Sufficient pedal travel is achieved</i></p> <p><input type="checkbox"/> <i>Full throttle/idle position are reached</i></p> <p><input type="checkbox"/> <i>Rods are countered and secured, safety clips are installed</i></p> | <p><input type="checkbox"/> <i>Ball sockets are fitted with safety clips</i></p> <p><input type="checkbox"/> <i>All joints lubricated</i></p> <p><input type="checkbox"/> <i>Covers installed</i></p> <p><input type="checkbox"/> <i>Cables/wires free from chafing</i></p> <p><input type="checkbox"/> <i>Type label attached</i></p> <p><input type="checkbox"/> <i>Serial number noted</i></p> <p><input type="checkbox"/> <i>Customer has received installation and operation manual</i></p> |
|--|--|

<i>Additional Parts needed:</i>	<i>Part. No.:</i>
_____	_____
_____	_____
_____	_____

Remarks: _____ *Test drive completed*

_____ *Installation OK*

Signature: _____ *Signature:* _____

Technician *Supervisor*



