

Version 1.01

(11.08.2017)

Installation instruction

Park Distance Control Front + Heck*

Park Distance Control Front*

Park Distance Control Heck*

Audi A4 8K, A5 8T, Q5 8R

Single license CAR-TRONIC ANDRZEJ DOMINIK - CHRUSLICKA 61 - 33-300 Nowy Sacz

*For the installation of sub-systems you need only
excerpts from this installation instruction.

Contents

Disclaimer	2
Copyright.....	3
General advice	3
Safety instructions	4
References of legal regulations for operation	4
Installation instruction front and rear	5
Installation instruction only front	11
Installation instruction only rear	16
Codierung.....	20

Single license CAR-TRONIC ANDRZEJ DOMINIK - CHRUSLICKA 61 - 33-300 Nowy Sącz

Disclaimer

Dear Buyer,

our cable harnesses are developed with the help of the circuit diagrams and wiring schemes of the particular vehicle producer and they are tested and adjusted to the original vehicle before the serial production. Therefore the integration into to the on-board electric and electronic system follows the information of the vehicle producers. Our installation instructions are consistent, in course of the necessary pre-understanding and the precision of the presentation in text and picture, with the staff usual in vehicle electrics / electronic and they have proven their value already hundredfold in practice.

If during the installation of our products drench occur difficulties, so we are any time ready to provide you support by phone or E-Mail. Additionally we offer you to use the installation in our workshop in Bad Segeberg.

The costs arising from the third parties assigned with the installation of our products, bears the Buyer. Only when it proves that there is a failure of our product we will compensate the evidenced costs of the assembly and the costs of the dismantling of the defective product, whereby we limit the cost reimbursement up to 110 EURO gross and we reserve our right to check the claimed defect in our workshop in Bad Segeberg. The costs of dispatch will be refunded in case of a justified claim.

We made the experience that each professional workshop which is equipped with a necessary diagnosis devices, diagnosis software and the circuit diagrams of the producer, can find the possible defects in our products within a short period of time, so the assembly and disassembly including failure diagnosis, can take place in maximum 60 minutes.

We also made the experience that many workshops are not able to cope with the producer's circuit diagrams and cannot read the common wiring schemes, so for simplest installation labors several hours are calculated. You will understand that we neither take the risk to find a reliable workshop nor we finance the training for the workers of the workshop of your confidence.

The costs that arise from the acquisition of the missing parts or replace for defective parts from another suppliers, we reimburse to the amount of the costs which would have arisen in case of subsequent delivery (saved expenditure). In this case according to the legal warranty law there would be no reimbursement right of any kind, as long as no deadline was set for the supplementary performance or a deadline for supplementary performance has not expired.

So if you have any problems during the installation or operation of our products call us write us an E-Mail, send us the product or come to our workshop in Bad Segeberg with your vehicle. We are sure to find a solution for concern of every kind.

Kind regards

Your Kufatec GmbH & Co. KG Team

Copyright

Our assembly and operation manuals, assembling diagrams and additional documentation in text or picture form are protected by law.

Disclosure and distribution of this documentation through print or online media is permitted only after previous written acceptance from Kufatec GmbH & Co. KG.

General advice

While developing this product, your personal safety combined with the best operating service, modern design and an up-to-date production technique was especially taken into account.

Unfortunately, despite the utmost care injuries and/or damages might occur due to improper installation and/or use.

Therefore please read with great care and completely this operating manual and store it appropriately!

For your safety all our products pass through a 100% control check.

We reserve the right to carry out technical changes which serve the improvement at any time.

According to each article and purpose, it is sometimes necessary to check each country's legal regulations before installing and starting the unit.

In case of guarantee claims, the device has to be sent back to the seller in the original packaging with the attached bill of purchase and detailed defect's description. Please pay attention to the manufacturer's return requirements (RMA). The legal warranty directions are valid.

The warranty claims as well as the operating permissions become invalid due to:

- a) unauthorized changes to the device or accessories which have not been approved or carried out by the manufacturer or its partners
- b) opening the device's frame
- c) self-made repairs on the device
- d) improper use / operation
- e) brute force to the device (drop, willful damage, accident etc.)

During installation, please pay attention to all safety relevant and legal directions.

The device has only to be installed by trained personnel or similarly qualified people.

Please limit the failure search to ca. 0,5 hour for the mechanical resp. 1.0 hour for electric labors during the assembly or functioning problems.

To avoid unnecessary additional expenses please send immediately an inquiry to our technical support using the Kufatec form (<http://www.kufatec.de/shop/de/infocenter/>).

Please provide always the following information:

- chassis number
- part number of the add-on kit
- exact description of the problem
- already executed labor

Safety instructions

The installation can be executed only by trained qualified personnel. Before the installation disconnect the power supply. Therefore cut off the battery from the vehicle electric system, follow the manufacturer's specification.

- *Never use bolts, screws and other fastening elements from car's safety devices or steering wheel, brakes because it may influence your driving safety and cause accidents.*
- *Connect the device only to a 12V vehicle voltage with chassis ground to the car body. This unit cannot be used in large trucks or other vehicles which use a DC 24 V battery wiring system voltage.*
- *Avoid to install the device in places where it could hinder the safe driving or functional efficiency of the other units installed in the vehicle.*
- *This unit is only for the use with the following vehicles and model line; Only connections described within this instruction manual are allowed or required to use for installation.*
- *For damage impact caused by faulty installation, unsuitable connections or assembling in inappropriate vehicle types or models Kufatec GmbH & Co.KG assumes no liability.*
- *We advise you that these units process data out of the MOST protocol from the vehicle. During the assembly of this unit we as supplier have access to a specific model and we as producer don't know the overall system you work with.*
- *Especially in case of changes within the same model line and the same model year we don't guarantee the usability of our products. In case of the usability of our products with the manufacturer's changes Kufatec GmbH assumes no liability.*
- *Kufatec GmbH assumes no liability that the assembly of the unit described in this manual is approved according the warranty regulations of the single car manufacturers. Please check your manufacturer's conditions and warranty before you begin the installation.*
- *Kufatec GmbH reserves the right to change the device specification without further notice.*
- *Errors and changes excepted.*

References of legal regulations for operation

Use this unit in the intended domain only.

If you use the unit in a foreign domain, if the unit is not installed properly, or if the unit will be reconstructed the operating permit and warranty will expire.

Installation instruction front and rear

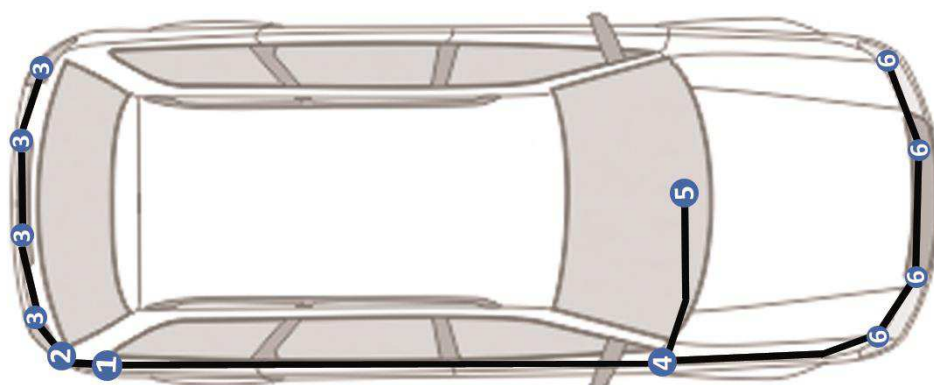


Fig. 1

1 – PDC control unit

2 –Boot

3 – Sensors rear

4 – CAN High & Low, Power Supply, Ground

5 – Push button

6 – Sensors Front

Dismantle the lining from the fig. 2. This is only inserted. The hook (fig. 3) has to be angled first and then taken out. The screw situated behind has to be loosened (fig. 4).



Fig.2



Fig. 3

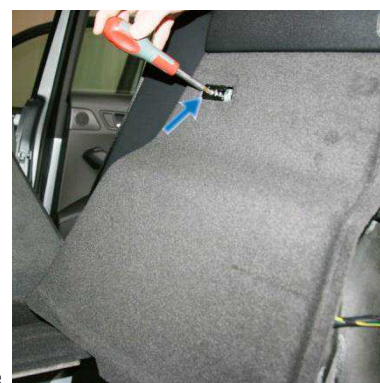


Fig. 4

Loosen the screws of the lashing eyes and the screw behind the lever for the backrest (fig. 5). Place the PDC control device in position (fig. 6).



Fig. 5



Fig. 6

Loosen the upper trim as in Fig 7 marked. Loosen the screw as well as the plastic clip of the D-Pillar trim and remove it (fig. 8 & 9)



Fig. 7



Fig.8



Fig.9

Install the warning buzzer at the marked position. (Fig.10).



Fig.10

Loosen the necessary screws and take the rear bumper out of the holder.

Put down the bumper on a soft underlay. Drill from the inside (3 mm drill bit) a hole on the marked spots. Now from the outside carefully drill holes for the sensors.

Place the sensors in position and adjust them equally. The sensors should be adjacent with the upper surface from the outside. Glue the sensors on the inside using hot glue.

Lay the wire harnesses through the boot into the outer area (fig. 12) – **use a support wire.**



Fig.11

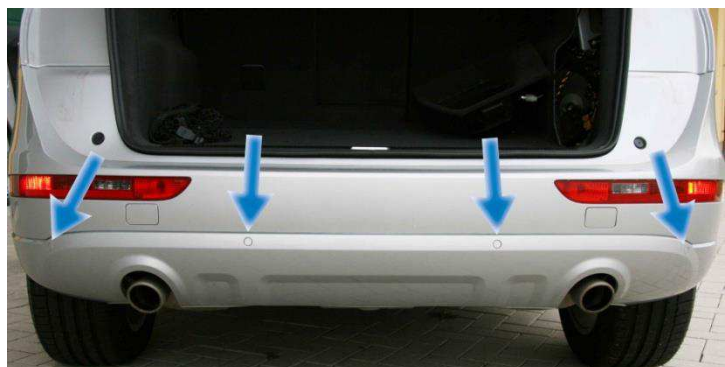


Fig. 12

Remove the housing of the 16-pin plug (fig. 13). Integrate the single wires (fig. 14) as follows (wire imprint). Connect the cable sets with the PDC control device.

PIN 13

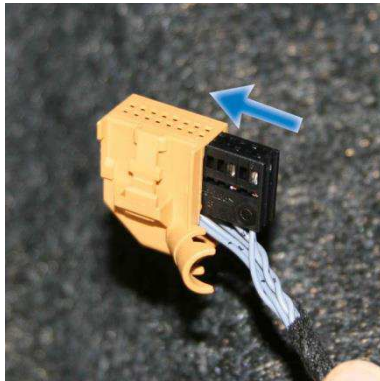


Fig.13

PIN 4

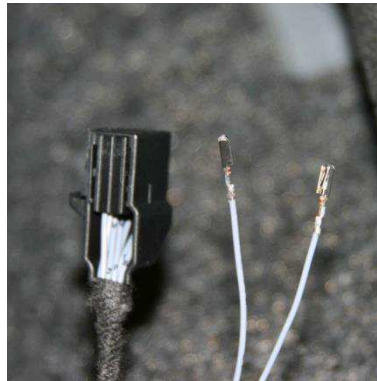


Fig. 14

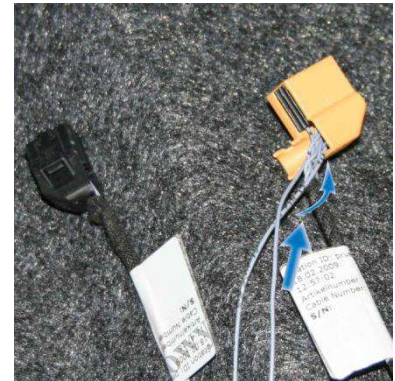


Fig. 15

Begin with the cable laying into the front area of the vehicle.



Fig.16



Fig.17



Fig.18

Dismantle the glove compartment (fig. 19, 20). Take out the CD-changer resp. the MMI unit using a suitable unlocking hook (fig. 21).



Fig.19



Fig.20



Fig.21

Loosen the necessary screws and take the front bumper out of the holder.

Put down the bumper on a soft underlay. Drill from the inside (3 mm drill bit) a hole on the marked spots. Now from the outside carefully drill holes for the sensors.

Place the sensors in position and adjust them equally. The sensors should be adjacent with the upper surface from the outside. Glue the sensors on the inside using hot glue.



Fig. 22



Fig. 23

Lay the wires to the breaking plug for the front sensors (fig. 24). Integrate the single wires in the plug (see the wire imprint – consider the locking) and connect it to the cable set of the front sensors (fig. 25).



Fig.24



Fig. 25

Connection CAN High & Low / Ignition / Ground

CAN High - PIN 6

CAN Low - PIN 6

NOTE: If the PINs are occupied please use a free slot on the same cable link.

Take out the CAN-breaking plug (fig. 26) – consider the locking. Actuate the locking from the fig. 27 and take out the CAN-breaking plug backwardly. Connect the wiring for Ignition plus to a free fuse slot at the fuse carrier. Afterwards secure this place with 7,5 Ampere Fuse. Measure by using a Multimeter which fuse slot has ignition plus (clamp 15).

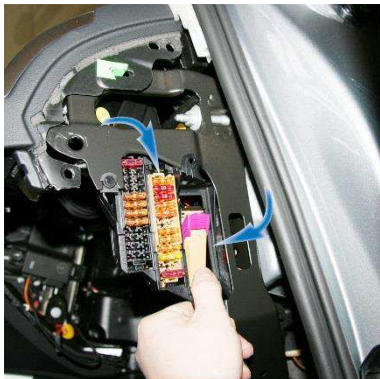


Fig.26

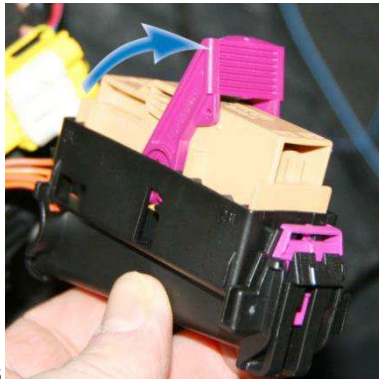


Fig.27

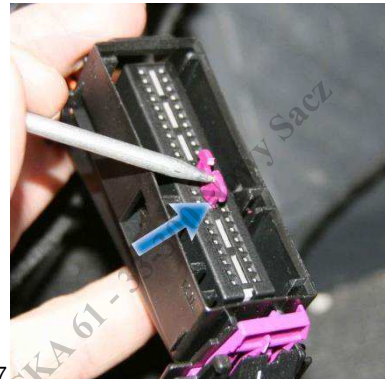


Fig.28

Connect the wiring for ground to the marked ground point (Fig.29) at the bottom of the A-pillar at the passenger's side.

Lay the wires for the push button further toward the centre console (fig. 30).

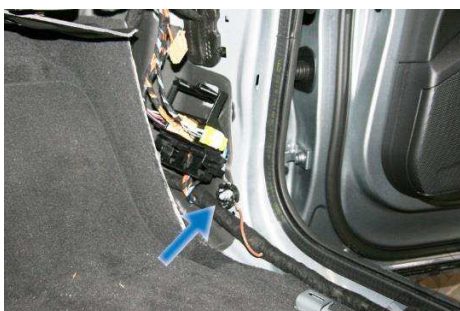


Fig. 29

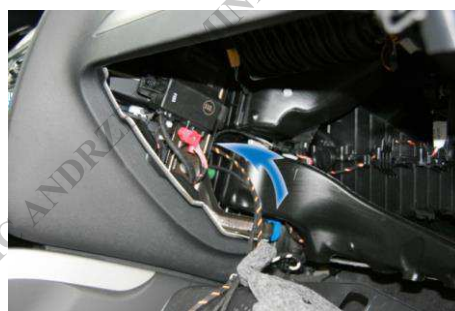


Fig. 30



Fig. 31

Connection push button

PIN 1

PIN 3

Take out the casing of the 8-pin plug (fig. 32) and integrate the single wires.



Fig. 32

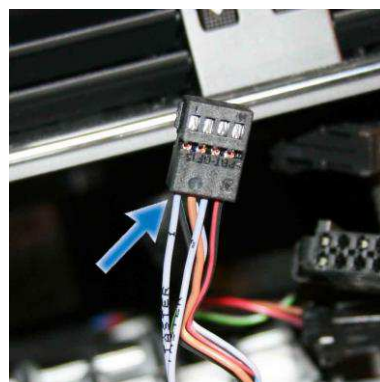


Fig. 33

Loosen the screws shown in fig. 34-36 and remove the covering under the steering wheel.

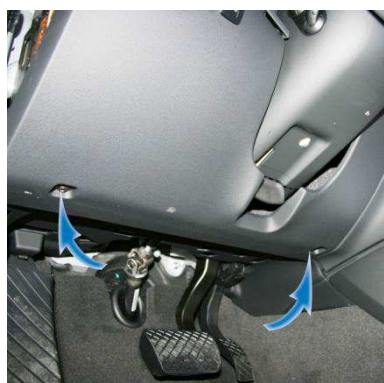


Fig.34

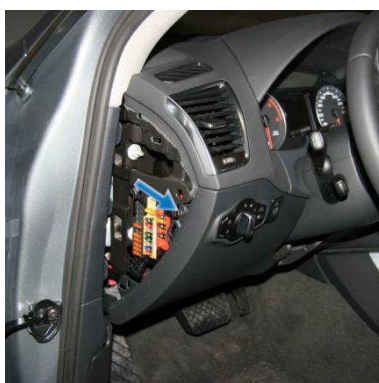


Fig.35

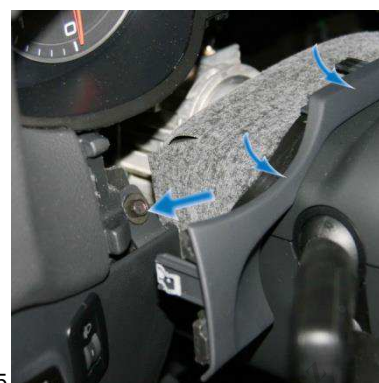


Fig.36

Install the warning buzzer at the marked place (Fig.37) and connect it to the wiring set.

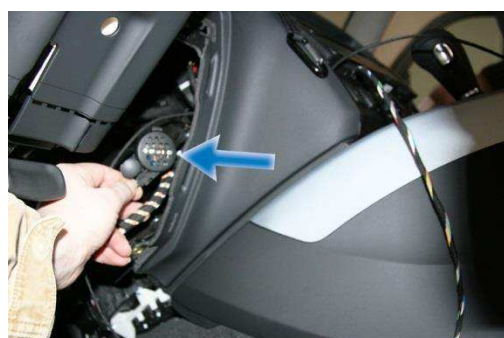


Fig.37

Single license CAR-TRONIC ANDRZEJ DOMINIK - CHRUSLICKA 61 - 33-300 Nowy Sa

Installation instruction only front

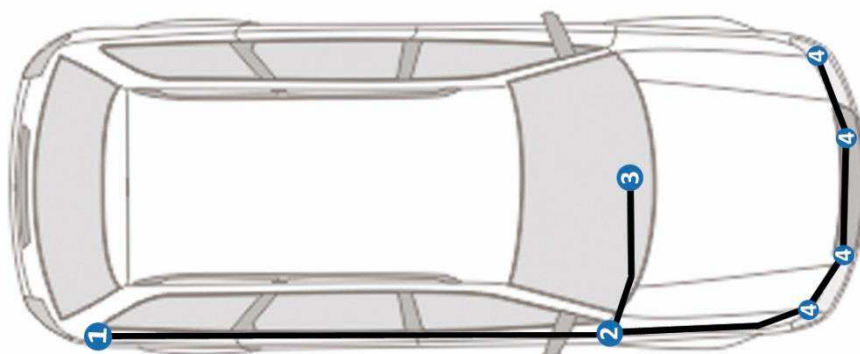


Fig. 38

1 – PDC control unit

2 – CAN High & Low, Power Supply, Ground

3 – Push button

4 – Sensors Front

Dismantle the lining from the fig. 39. This is only inserted. The hook (fig. 40) has to be angled first and then taken out. The screw situated behind has to be loosened (fig. 41).



Fig.39

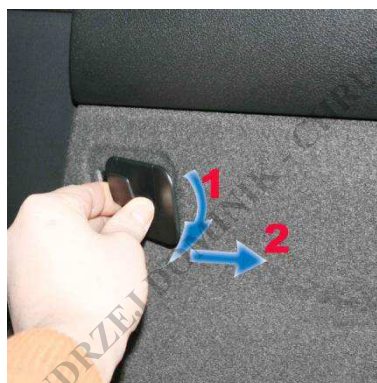


Fig.40

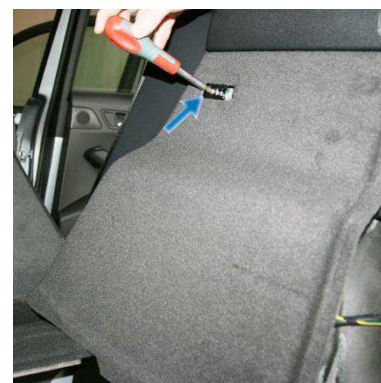


Fig.41

Loosen the screws of the lashing eyes and the screw behind the lever for the backrest (fig. 42). Place the PDC control device in position (fig. 43). Loosen the plug connection in the fig. 43 and insert the enclosed adapter between the plug connection and the control unit, fig. 44. On vehicle, which has not PDC control unit installed, please mount the control unit at the marked position (fig 43)

Not require at:

Audi Q5 up to Model year 2012

Audi A5 up to Model year 2011

Audi A4 up to Model year 2012



Fig. 42



Fig.43



Fig.44

Remove the housing of the 16-pin plug (fig. 45). Integrate the single wires (fig. 46) as follows (wire imprint). Connect the cable sets with the PDC control device.

PIN 13

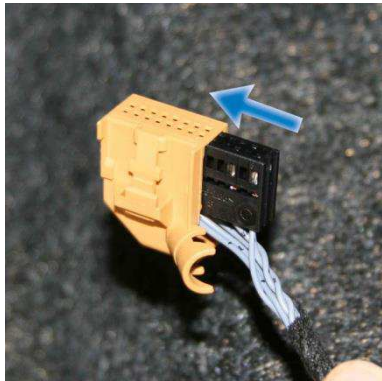


Fig. 45

PIN 4

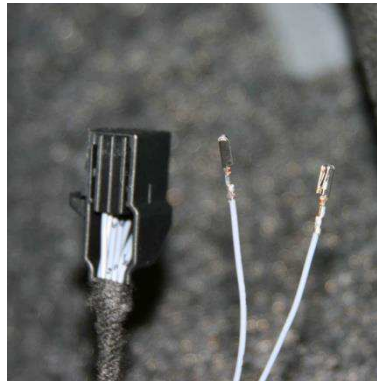


Fig. 46

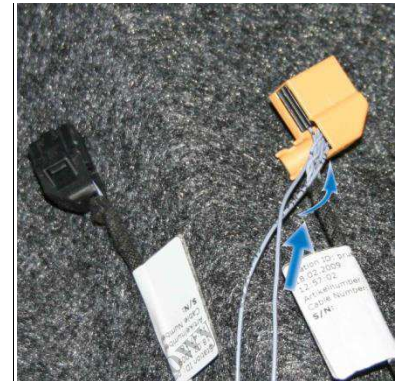


Fig. 47

Begin with the cable laying into the front area of the vehicle.



Fig. 48



Fig. 49



Fig. 50

Dismantle the glove compartment (fig. 51, 52). Take out the CD-changer resp. the MMI unit using a suitable unlocking hook (fig. 53).



Fig. 51



Fig. 52



Fig. 53

Loosen the necessary screws and take the front bumper out of the holder.

Put down the bumper on a soft underlay. Drill from the inside (3 mm drill bit) a hole on the marked spots. Now from the outside carefully drill holes for the sensors.

Place the sensors in position and adjust them equally. The sensors should be adjacent with the upper surface from the outside. Glue the sensors on the inside using hot glue.



Fig. 54



Fig. 55

Lay the wires to the breaking plug for the front sensors (fig. 55). Integrate the single wires in the plug (see the wire imprint – consider the locking) and connect it to the cable set of the front sensors (fig. 56).



Fig. 55



Fig. 56

Connection CAN High & Low / Ignition / Ground

Not require at:

- Audi Q5 up to Model year 2012**
- Audi A5 up to Model year 2011**
- Audi A4 up to Model year 2012**

CAN High - PIN 6

CAN Low - PIN 6

NOTE: If the PINs are occupied please use a free slot on the same cable link.

Take out the CAN-breaking plug (fig. 57) – consider the locking. Actuate the locking from the fig. 58 and take out the CAN-breaking plug backwardly. Connect the wiring for Ignition plus to a free fuse slot at the fuse carrier. Afterwards secure this place with 7,5 Ampere Fuse. Measure by using a Multimeter which fuse slot has ignition plus (clamp 15).

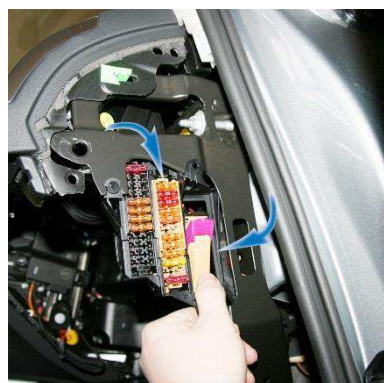


Fig. 57

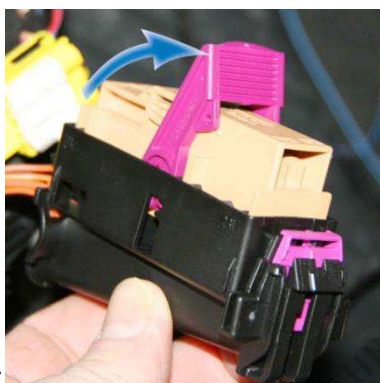


Fig. 58

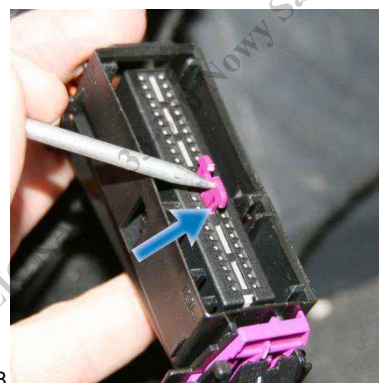


Fig. 59

Connect the wiring for ground to the marked ground point (Fig. 60) at the bottom of the A-pillar at the passenger's side.

Lay the wires for the push button further toward the centre console (fig. 61).

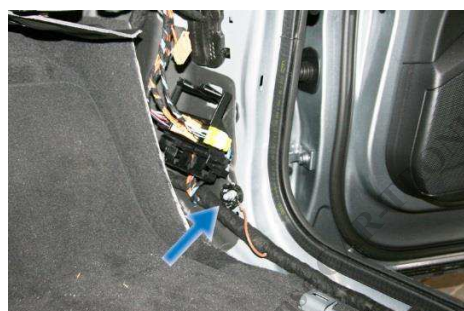


Fig. 60



Fig. 61



Fig. 62

Connection push button

PIN 1

PIN 3

Take out the casing of the 8-pin plug (fig. 63) and integrate the single wires.



Fig. 63

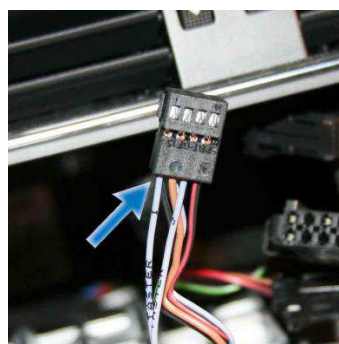


Fig. 64

Loosen the screws shown in fig. 65-67 and remove the covering under the steering wheel.

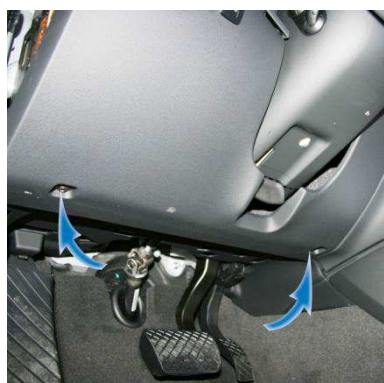


Fig. 65

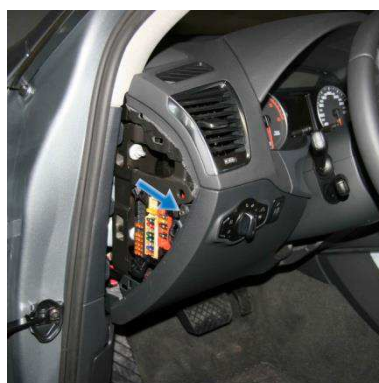


Fig. 66

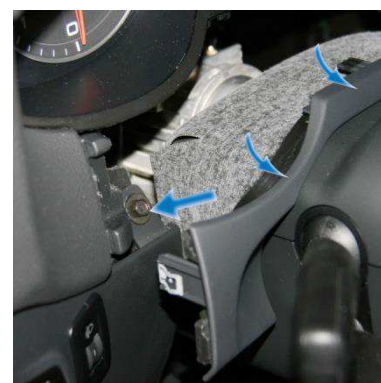


Fig. 67

Install the warning buzzer at the marked place (Fig.68) and connect it to the wiring set.

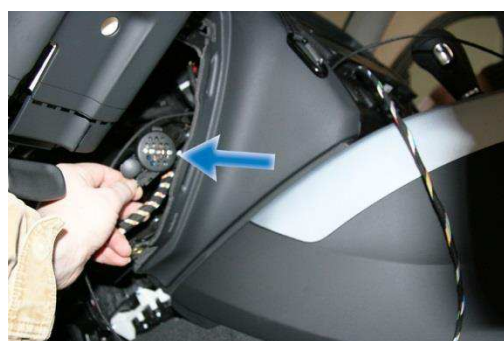


Fig.68

Single license CAR-TRONIC ANDRZEJ DOMINIK - CHRUSLICKA 61 - 33-300 Nowy Sącz

Installation instruction only rear

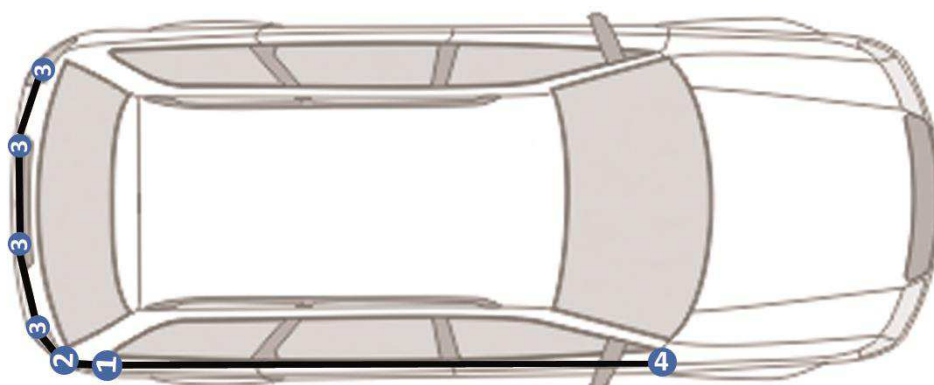


Fig. 69

1 – PDC control unit

2 –Boot

3 – Sensors rear

4 – CAN High & Low, Power Supply, Ground

Dismantle the lining from the fig. 70. This is only inserted. The hook (fig. 71) has to be angled first and then taken out. The screw situated behind has to be loosened (fig. 72).



Fig. 70



Fig. 71



Fig. 72

Loosen the screws of the lashing eyes and the screw behind the lever for the backrest (fig. 73). Place the PDC control device in position (fig. 74).



Fig. 73



Fig. 74

Loosen the upper trim as in Fig 75 marked. Loosen the screw as well as the plastic clip of the D-Pillar trim and remove it (fig. 76 & 77)



Fig. 75



Fig. 76



Fig. 77

Install the warning buzzer at the marked position. (Fig.78).



Fig. 78

Loosen the necessary screws and take the rear bumper out of the holder.

Put down the bumper on a soft underlay. Drill from the inside (3 mm drill bit) a hole on the marked spots. Now from the outside carefully drill holes for the sensors.

Place the sensors in position and adjust them equally. The sensors should be adjacent with the upper surface from the outside. Glue the sensors on the inside using hot glue.

Lay the wire harnesses through the boot into the outer area (fig. 79) – **use a support wire.**



Fig. 79

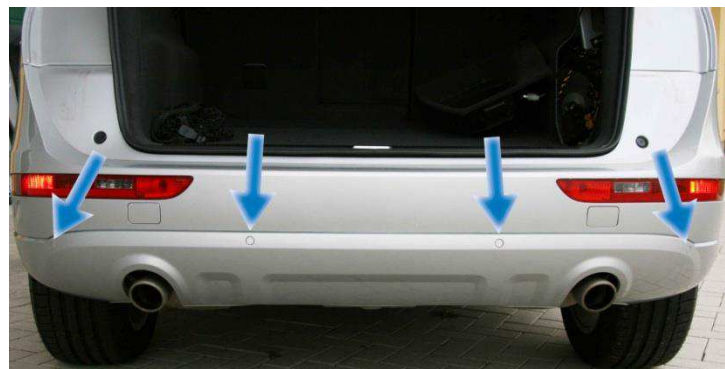


Fig. 80

Begin with the cable laying into the front area of the vehicle.



Fig. 81



Fig. 82



Fig. 83

Dismantle the glove compartment (Fig 84 & 85).



Fig. 84



Fig. 85

Connection CAN High & Low / Ignition / Ground

CAN High - PIN 6

CAN Low - PIN 6

NOTE: If the PINs are occupied please use a free slot on the same cable link.

Take out the CAN-breaking plug (fig. 86) – consider the locking. Actuate the locking from the fig. 87 and take out the CAN-breaking plug backwardly. Connect the wiring for Ignition plus to a free fuse slot at the fuse carrier. Afterwards secure this place with 7,5 Ampere Fuse. Measure by using a Multimeter which fuse slot has ignition plus (clamp 15).

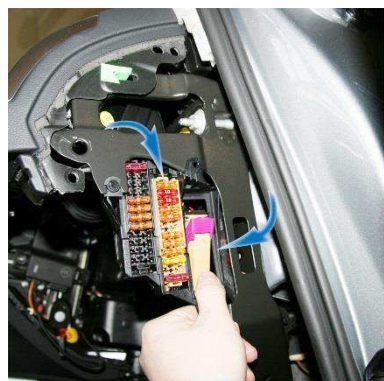


Fig.86

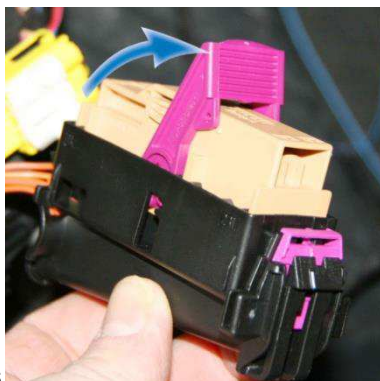


Fig.87

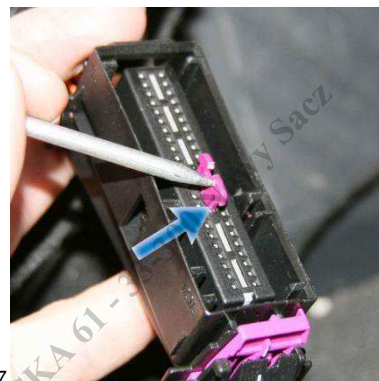


Fig.88

Connect the wiring for ground to the marked ground point (Fig.89) at the bottom of the A-pillar at the passenger's side.

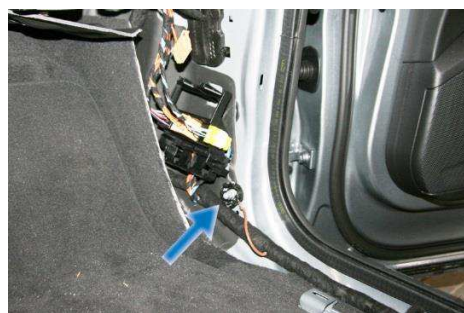


Fig. 89

Codierung

Adresse 19

Fügen Sie der Adresse 19 die Adresse 10 wie folgt hinzu:

Fahrzeug-Eigendiagnose	
Systemauswahl	
Wählen Sie ein System:	
Eigendiagnose	
Eigendiagnose - Verbundsysteme	
LT2 Eigendiagnose	
Crafter Eigendiagnose	

Fahrzeug-Eigendiagnose	
Fahrzeugsystem auswählen	
55 - Leuchtweitenregulierung 5C - Spurassistent 16 - Lenkradelektronik 46 - Zentralmodul Komfortsystem 56 - Radio 10 - Einparkhilfe II 07 - Anzeige-/ Bedieneinheit 17 - Schalttafeleinsatz 37 - Navigation 47 - Soundsystem 77 - Telefon 0E - Mediaplayer Position 1 08 - Klima-/Heizungselektronik 19 - Diagnoseinterface für Datenbus	

Eigendiagnose

Adresse 19 Diagnoseinterface für Datenbus

Fahrzeug-Eigendiagnose	
Unterstützte Funktionen	
Diagnosefunktion auswählen	
001 - Identifikation (Dienst \$1A)	
004 - Fehlerspeicherinhalt	
008 - Codierung (Dienst \$)	
011 - Messwerte	
014 - Lange Anpassung	
015 - Zugriffsberechtigung	
017 - Sicherheit	
022 - Ausgabe beenden	
Alle Diagnosefunktionen anzeigen	

Fahrzeug-Eigendiagnose	
Unterstützte Funktionen	
Diagnosefunktion auswählen	
008.01 - Codierung	
008.02 - Codierung Verbauliste	

Codierung

Verbauliste

Fahrzeug-Eigendiagnose	
Unterstützte Funktionen	
Diagnosefunktion auswählen	
10 - Einparkhilfe II	codiert
20 - Fernlichtassistent	nicht codiert
30 - Sonderfunktion	nicht codiert
07 - Anzeige-/Bedieneinheit	codiert
17 - Schalttafeleinsatz	codiert
37 - Navigation	codiert
47 - Soundsystem	codiert
57 - TV-Tuner	nicht codiert
67 - Sprachsteuerung	nicht codiert
77 - Telefon	codiert
6C - Rückfahrkamera	codiert

Einparkhilfe auf codiert setzen – Codierung bestätigen

During the coding we will tell you only which bits should be altered. Leave the other bits as they were before. The "X" in case of the binary spelling means that this bit is not changed.

Address 56

Coding value Byte	Bit	Binary spelling	Note
Byte 09	Bit 1 on 1	XXXXXX1X	NUR BEI Radio Concert, Symphonie

Address 09

Not require at:

- Audi Q5 up to Model year 2012
- Audi A5 up to Model year 2011
- Audi A4 up to Model year 2012

Address 09

Codierwert Byte	Bit	Binärschreibweise	Hinweis
Byte 35	HEX	00	Einparkhilfe (falls vorhanden)

Address 10

Codierwert Byte	Bit	Binärschreibweise	Hinweis
Byte 0	Bit 0 on 1	XXXXXXXX1	AHK manuell
Byte 0	Bit 1 on 1	XXXXXXXX1X	AHK elektrisch
Byte 0	Bit 4 on 1	XXX1XXXX	Optische Anzeige
Byte 0	Bit 5 on 1	XX1XXXXX	Rückfahrkamera
Byte 1	Bit 0 on 1	XXXXXXXX1	Automatik
Byte 2	Bit 0 & 2 on 1	XXXXX1X1	Q5 8R
Byte 2	Bit 0 on 1	XXXXXXXX1	A5 8T
Byte 2	Bit 1 on 1	XXXXXXXX1X	S5 8T
Byte 2	Bit 2 on 1	XXXXX1XX	A4 8K Avant
Byte 2	Bit 0 & 1 on 1	XXXXXX11	A4 8K Limo
Byte 2	Bit 3 on 1	XXXX1XXX	NUR BEI S-Line (Pr.Nr. 2K7)

