



# Accessories - Installation Instructions

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## **Digital Antitheft Alarm System (DDWA III) BMW 3 Series E36 (Coupé / Saloon / Compact / Convertible / Touring) Right-Hand Drive (Export)**

(Only intended for use in BMW dealership network (HO).  
Installation time approx. 3 - 4 hours which can vary depending upon condition and equipment of vehicle.  
Technical knowledge of the system is required.

## Tools and auxiliaries required

Phillips screwdriver	Screwdriver for slotted head screws
1/2 inch reversible ratchet	Hammer
1/2 inch socket wrench insert WAF 10 mm, 13 mm	Drill
1/2 inch extension	Side cutters
Twist drill Ø 3 mm, 3.5 mm, 6.5 mm, 8 mm	Centre punch
Ring spanner WAF 7 mm, 10 mm, 13 mm	Multiple slip-joint gripping pliers
Box spanner WAF 8 mm, 10 mm	Priming stick
Inspection lamp	General-purpose knife
Insulation stripping pliers	Multimeter
Cable pliers BMW No. 81 24 9 408 449	Water-soluble pen
Crimp pliers BMW on-board electrical kit I - IV	Press-out tools

## Contents

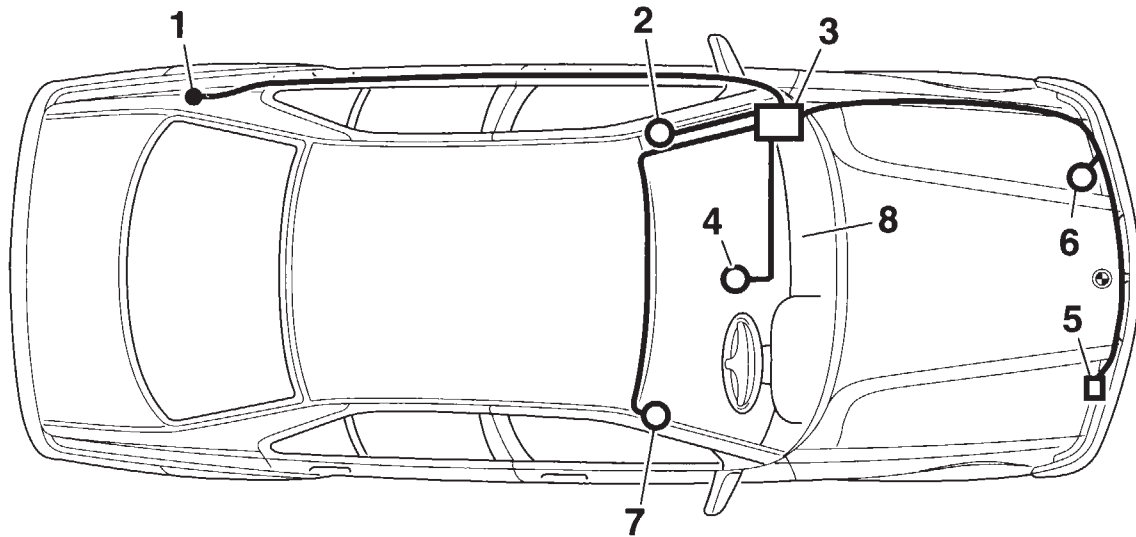
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## 1. Necessary Preliminary work on Vehicle

- Print out defect code memories of various control units.
- Disconnect vehicle battery.
- Remove bottom left dashboard trim.
- Remove cover under glovebox.
- Remove glovebox.
- Remove A-pillar trim.
- Models with control unit support bracket:  
Remove control unit support bracket under glovebox area.
- Release ABS control unit.
- Remove sill strips (rocker panels) on driver's side.

## 2. Installation Overview of Components



F 36 82 558 R

### Key

1. Rear lid contact connection
2. Ultrasonic sensor at top of left-hand A-pillar
3. Central alarm module in area of glovebox
4. LED in oddments tray of centre console
5. Front lid contact switch in area of RH light cluster
6. Siren in area of LH light cluster
7. Ultrasonic sensor at top of right-hand A-pillar
8. Alarm system wiring harness

### Note

Insulate all wires not required and tie back.

Deburr any holes which may be necessary in the body and coat with zinc paint to protect from corrosion.

Seal cable leadthroughs to engine compartment with suitable sealing compound.

### Caution

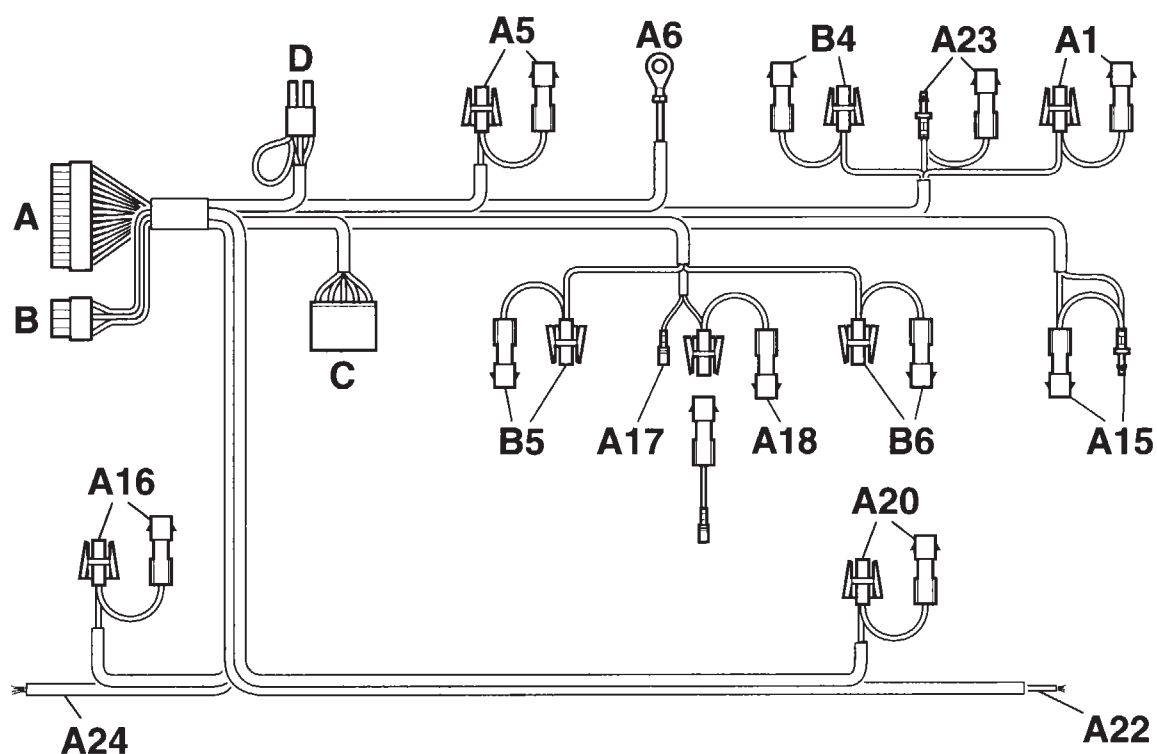
Use the AMP connectors provided in the installation kit for making all electrical connections.

Cut through wires and crimp on the AMP connectors.

**Components:** The support bracket (8292 9404 615) must be ordered separately for vehicles with 1.8 l diesel engine (M 41) (see accessories microfiche).

The control unit support bracket (8292 3404 688) must be ordered separately for the E36/5 RHD.

### 3. Connection Overview of Alarm System Wiring Harness



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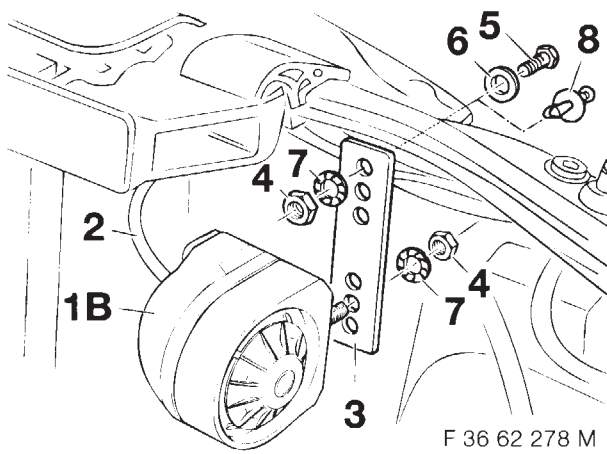
Item	Designation	Wire colour	Connection location in vehicle
A	White 24-pin connector	—	Central alarm module
A1	Branch, door contact switch, driver's side	brown/grey	<b>Only models without central locking (ZV)</b> Wiring harness for interior lighting/door contact switch in glovebox area (brown/black wire) <b>Only models with central locking (ZV) module</b> ZV module A30, white, 26-pin connector X13012, plug-in slot No. 4 (brown/grey/yellow wire) <b>Only models from 9/93 with general module (ZKE)</b> Behind glovebox, general module A104, green 26-pin connector X13254, plug-in slot No. 2 (brown/grey/yellow wire)
A5	Branch, terminal R	violet/white	<b>Only models without central locking (ZV)</b> At lower right of steering column, black 12-pin connector X33, plug-in slot No. 2 (violet wire) (Make wire and extend alarm system wiring harness) <b>Only models with central locking (ZV) module</b> ZV module A30, white 26-pin connector X13012, plug-in slot No. 7 (violet/white wire) <b>Only models from 09/93 with general module (ZKE)</b> Behind glovebox, comb connector X1235 (violet/white wire) <b>or</b> 6-pin black connector X322, pin 2 (violet/black wire) in left footwell.
A6	Branch, ground	brown	Ground terminal point X1166 in passenger footwell under carpet
A15	Branch, terminal 30	red	<b>Only models without central locking (ZV)</b> Wiring harness for interior lighting/door contact switch in glovebox area (red/white wire) <b>Only models with central locking (ZV) module</b> ZV module A30, black 5-pin connector X13013, plug-in slot No. 2 (red/green/yellow wire) <b>Only models from 09/93 with general module (ZKE)</b> Behind glovebox, general module A104, black 15-pin connector X13252, plug-in slot No. 10 (red/green/yellow wire)

Item	Designation	Wire colour	Connection location in vehicle
A16	Branch, hazard warning lights	blue/red	Hazard warning light switch, black 5-pin connector X516, plug-in slot No. 2 (brown/blue wire)
A17	Branch, central locking system (central arrest)	yellow/blue	<b>Only models with central locking (ZV) module</b> ZV module A30, white 26-pin connector X13012, plug-in slot No. 24 <b>Only models from 09/93 with general module (ZKE)</b> Behind glovebox, general module A104, yellow 26-pin connector X13253, plug-in slot No. 17 (white/red/yellow wire)
A18	Branch, central locking system (open)	green/blue	<b>Only models with central locking (ZV) module</b> ZV module A30, white 26-pin connector X13012, plug-in slot No. 25 <b>Only models from 09/93 with general module (ZKE)</b> Behind glovebox, general module A104, yellow 26-pin connector X13253, plug-in slot No. 4 (blue/red/yellow wire)
A20	Branch, terminal 61	blue/white	<b>Models without blue 30-pin SA connector X1020B</b> Comb connector X213 on driver's side, at top below dashboard (blue wire) <b>Models with blue 30-pin SA connector X1020B</b> SA connector plug-in slot No. 3 (blue wire)
A22	Branch, luggage compartment switch	brown/white	Luggage compartment switch in rear lid <b>or</b> below cover in luggage compartment, rear left; Convertible and Compact: Rear right tail light, (brown/white wire)
A23	Branch, rear door contact switch (4-door models only)	brown/black	<b>Only models with central locking (ZV) module</b> ZV module A30, black 4-pin connector X13014, plug-in slot No. 2 (brown/black wire) <b>Only models from 09/93 with general module (ZKE)</b> Behind glovebox, general module A104, green 26-pin connector X13254, plug-in slot No. 4 (rear door contact, driver's side) and plug-in slot No. 5 (rear door contact passenger's side) (brown/white wire)
A24	Branch, engine compartment contact switch	brown/violet	Engine compartment contact switch in area of right-hand light cluster.
B	White 8-pin connector	—	Central alarm module
B4	Branch, door contact switch, passenger's side	brown/blue	<b>Only models without central locking (ZV)</b> Branch is not connected <b>Only models with central locking (ZV) module</b> ZV module A30, white 26-pin connector X13012, plug-in slot No. 2 (brown/blue/yellow wire) <b>Only models from 09/93 with general module (ZKE)</b> Behind glovebox, general module A104, green 26-pin connector X13254, plug-in slot No. 3 (brown/blue/yellow wire)
B5	Branch, central locking (synchronisation for opening)	white/green	<b>Only models with central locking (ZV) module</b> ZV module A30, white 26-pin connector X13012, plug-in slot No. 18 (white/green wire) <b>Only models from 09/93 with general module (ZKE)</b> Behind glovebox, general module A104, yellow 26-pin connector X13253, plug-in slot No. 1 (white/green wire)
B6	Branch	white/black	Not required
C	Black 6-pin connector	—	Siren wiring harness
D	White 4-pin connector	—	LED wiring harness

### Caution

In the course of continuous updating of the electrical systems of individual models, it is possible that connector designations (X designation) and/or wire colours may change. For these reasons, when installing an alarm system, always ensure you have the latest edition of the inspection manual.

## 4. Installing Siren



### Key

1. Siren (8-pin plug connector)
2. Siren wire
3. Bracket
4. Hexagon nut (self-locking)
5. Hexagon screw
6. Spring washer
7. Serrated washer
8. Expanding rivet

### Installation note

Illustration shows installation on the right-hand side of the vehicle. Install siren in the same way on the left-hand side of the vehicle.

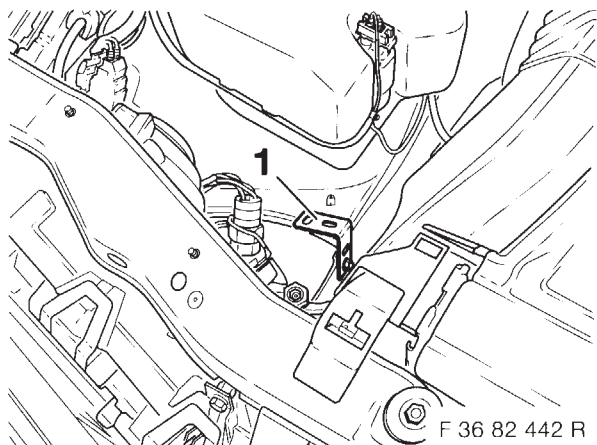
When installing the siren, note the following points: Remove expanding rivet (8).

If there is any deviation from the proposed installation location for the siren, select a location which does not impair the engine cooling system and does not obstruct the front (engine compartment) lid.

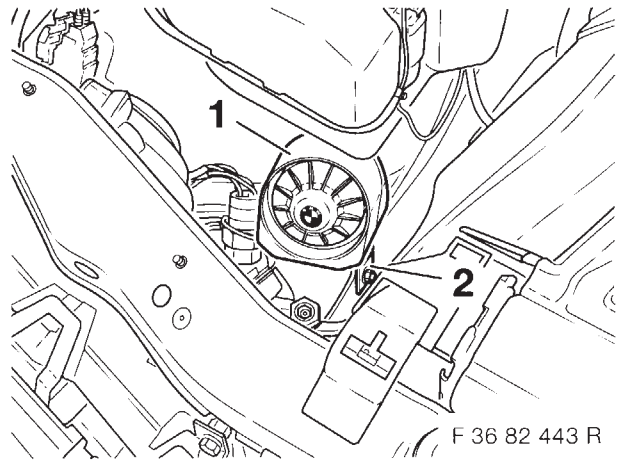
Install siren (1B) as illustrated and route siren cable (2) into passenger footwell.

### Only vehicles with M41 diesel engine

#### Installation option 1

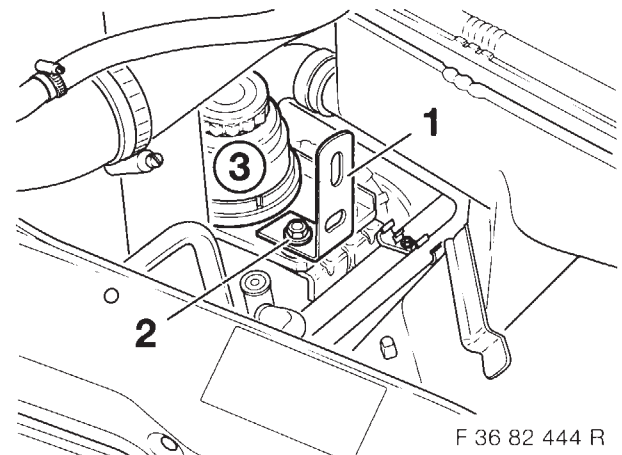


Secure support bracket (1) as illustrated with hexagon screw M6 x 16, washer B6.4 and lock nut M6 at the square hole provided on the right-hand frame side member.

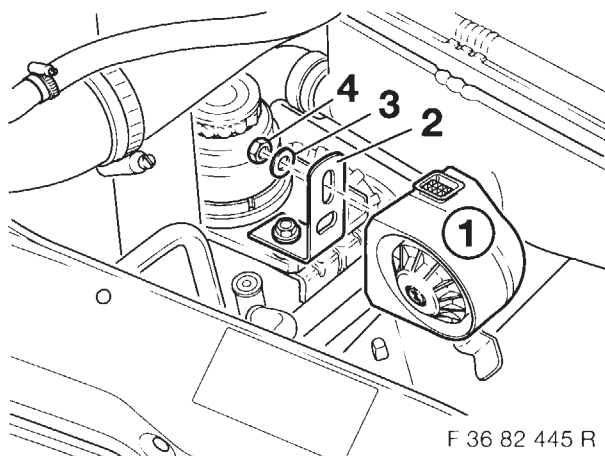


Fit emergency current siren (1) on support bracket (2) and secure with lock nut M6 and washer B6.4. Connect siren cable to emergency current siren and route along the headlight cable to the SA grommet under the battery tray.

#### Installation option 2



Secure support bracket (1) as illustrated with retaining nut (2) for power steering oil reservoir (3).



Secure emergency current siren (1) as illustrated on support bracket (2) with lock nut (4) and washer (3).

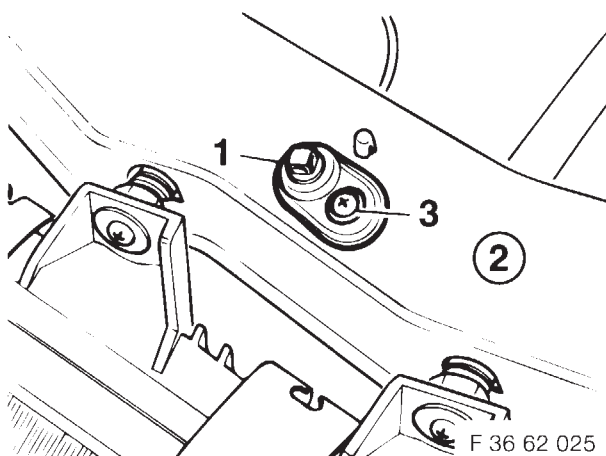
#### Caution

Ensure emergency current siren can move freely.

Connect siren cable to emergency current siren and route along the frame side member to the power distribution box.

From here, route siren cable along main wiring harness to the SA grommet under the battery tray.

## 5. Installing Engine Compartment Contact Switch



Insert engine compartment contact switch (1) in the hole provided in the body in the area (2) of the right-hand light cluster and secure with Phillips screw (3).

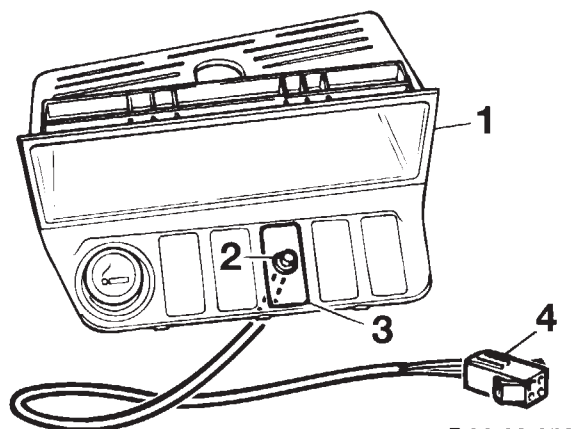
#### Caution

##### Models with standard engine compartment contact switch

Remove engine compartment contact switch and install contact switch from installation kit with two connection terminals.

**A24** Route branch engine compartment contact switch brown/violet wire to engine compartment contact switch and connect.

## 6. Installing LED

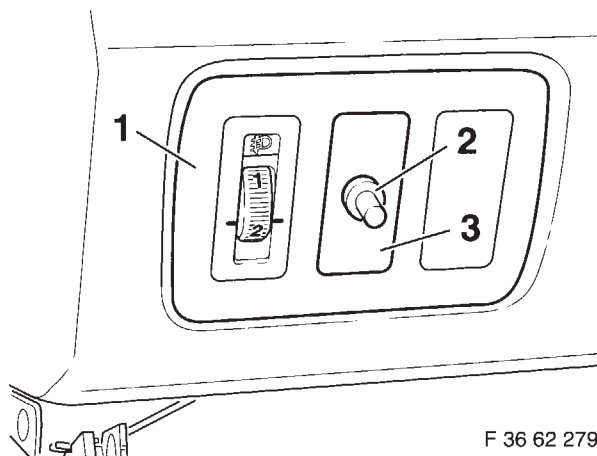


#### All E36 models except E36 Compact

Pry centre cover out of oddments tray insert (1) and insert LED (2) in cover (3).

Route LED wiring harness into passenger footwell. Install cover (3) in oddments tray insert (1).

Plug in wires of same colour as connector D on alarm system wiring harness in housing (4). Join together housing and mating connector.



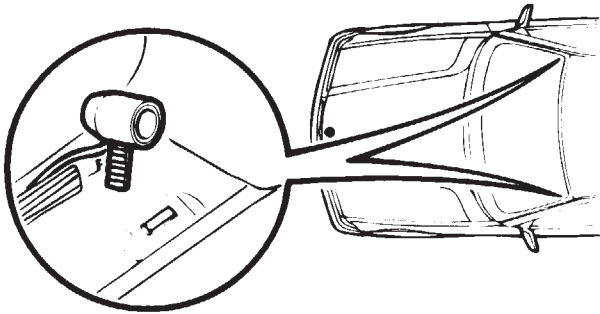
#### Only E36/5 (Compact)

Pry centre cover (3) out of switch carrier (1) and insert LED (2) in cover (3).

Route LED wiring harness on passenger side and connect same wire colours as branch D on alarm system wiring harness.



## 7. Installing Ultrasonic Sensors



F 36 82 521 R

### Left and right A-pillar

Remove trim panel on left and right A-pillar to lay wires for the ultrasonic sensors.

### Caution

The wires of the ultrasonic sensors are identified by colours (colour coded).

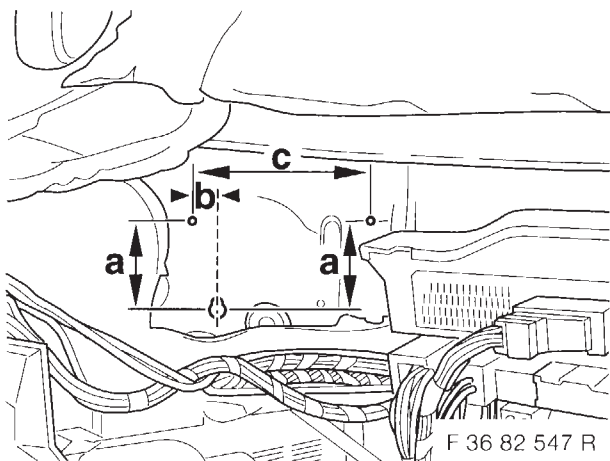
White colour code = A-pillar on passenger side  
 Red colour code = A-pillar on driver side  
 Secure ultrasonic sensors under trim panel of corresponding A-pillar.  
 Route wires for ultrasonic sensors into the passenger footwell.

### Note

Not included in scope of delivery for E36/C (Convertible).

## 8. Installing Central Alarm Module

All models apart from E36 compact

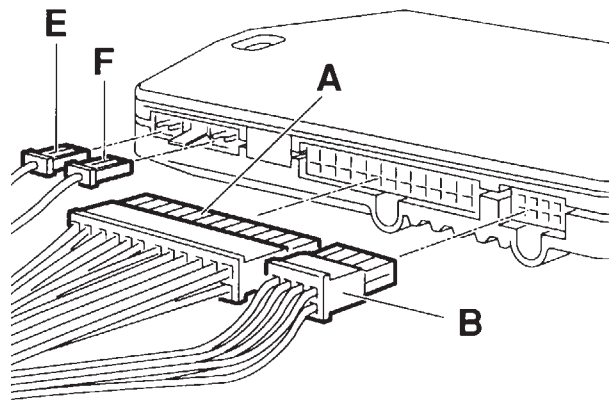


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Remove soundproofing as illustrated.  
 Mark holes and drill out in body with angle drill and 3 mm twist drill.

Dimensions: a = 50 mm  
 b = 40 mm  
 c = 155 mm

Secure central alarm module with self-tapping screws at the two drilled holes.

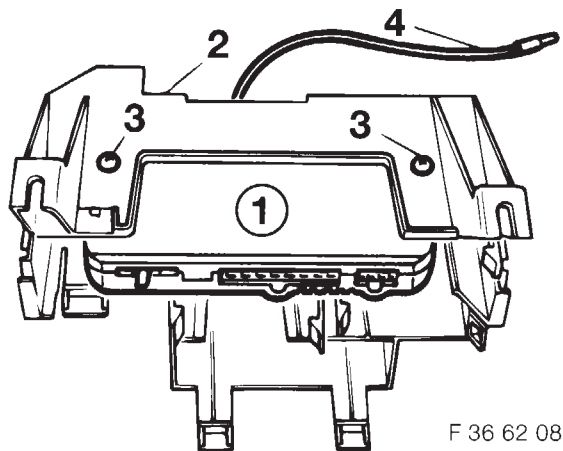


F 34 62 222

### Caution

Plug in connector E (red) on outer right.  
 Plug in connector F (white) on inner right.  
 Jumper must be fitted between connector E and F otherwise interior monitoring will not function.

**Only models with free space in control unit support bracket**



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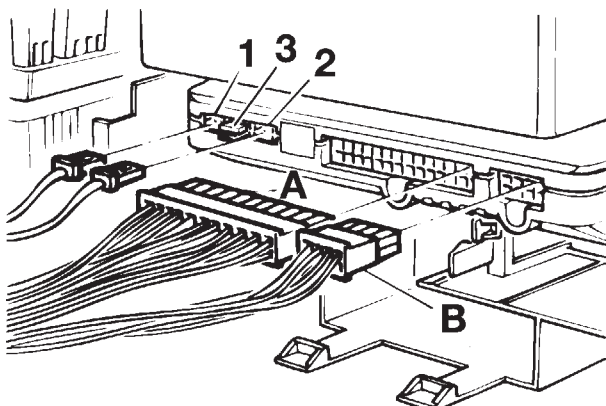
### Caution

Do not bend, jam or roll in radio antenna (4).  
 Slide central alarm module (1) in top compartment of control unit bracket (2). Measure and mark drilling points.

### Caution

Hole diameter 3.5 mm.  
 Drill through marked drilling points and secure central alarm module (1) with Phillips screws (3).



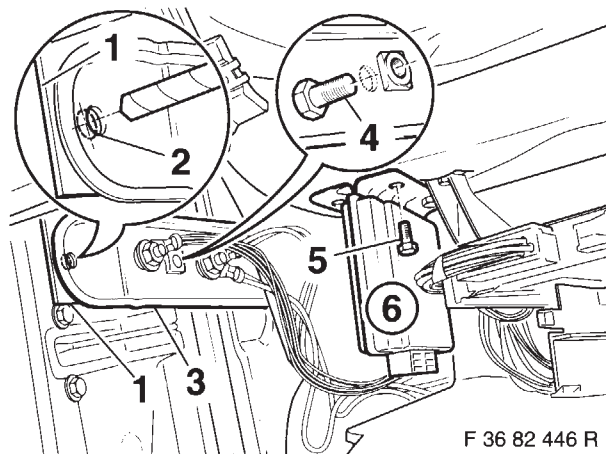


F 36 82 522 R

Connect wires from ultrasonic sensors to central alarm module as follows:  
 Connect cable connector with red colour code at plug-in slot (1).  
 Connect cable connector with white colour code at plug-in slot (2). Plug in connectors (A and B) from alarm system wiring harness corresponding to their encoding.  
 A jumper must be connected at plug-in slot (3).

### E36 Compact

Due to the modified installation conditions, a separate support bracket is necessary for mounting the central alarm module in the E36 compact RH. The support bracket must be ordered separately under the order number 82 92 9 404 688.

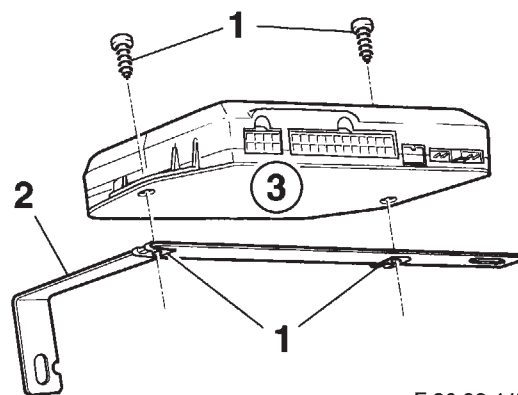


F 36 82 446 R

Drill through plastic tab (1) with 6.5 mm twist drill through the existing hole (2) in dashboard carrier (3).

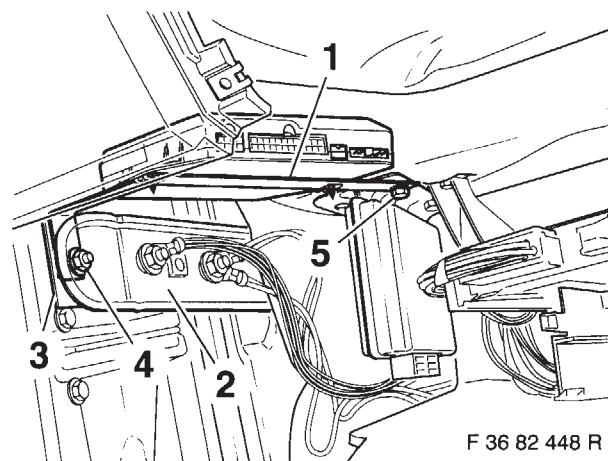
Remove hexagon screw (4).

Remove hexagon screw (5) at ABS control unit (6).



F 36 82 447 R

Fit speed nuts (1) as illustrated on support bracket (2).  
 Secure central alarm module (3) with retaining screws (4) on support bracket (2).



F 36 82 448 R

Fit support bracket (1) as illustrated between dashboard carrier (2) and plastic tab (3) of dashboard.

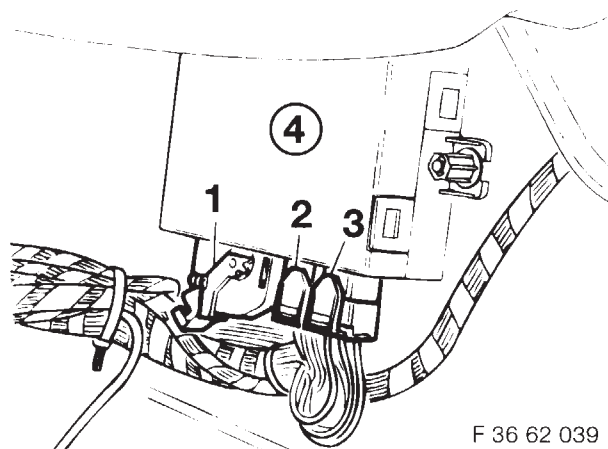
### Note

The recess on the support bracket must be fitted in the centring pin of the dashboard carrier.  
 Secure support bracket with hexagon screw M6x16 (4), washer, spring washer and hexagon nut M6.

Secure other end of support bracket together with ABS control unit and with hexagon screw (5) at top of dashboard.

Reinstall dashboard retaining screws.

## 9. Connecting Alarm System Wiring Harness



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### Only models with central locking (ZV) module

Unplug connectors (1, 2, 3) from ZV module A30 (4).

#### Note

- |                             |          |
|-----------------------------|----------|
| Connector (1) white, 26-pin | = X13012 |
| Connector (2) black, 4-pin  | = X13014 |
| Connector (3) black, 5-pin  | = X13013 |

### Connection to plug connector (1), white 26-pin X13012

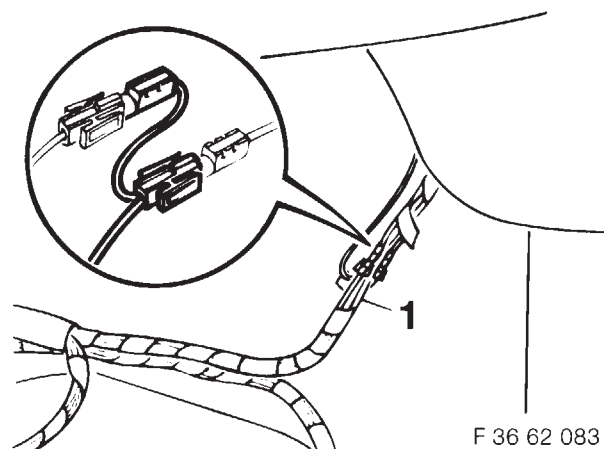
- A1** Connect branch, door contact switch, driver's side, brown/grey wire, to wire at plug-in slot No. 4, brown/grey/yellow wire.
- A5** Connect branch for terminal R, violet/white wire to plug-in slot No. 7, violet/white wire.
- A17** Connect branch for central locking system (central arrest), yellow/blue wire to wire at plug-in slot No. 24
- A18** Connect branch of central locking system (open), green/blue wire to plug-in slot No. 25.
- B4** Connect branch, door contact switch, passenger's side, brown/blue wire to plug-in slot No. 2, brown/blue/yellow wire.
- B5** Connect branch for central locking system (opening synchronisation), white/green wire to plug-in slot No. 18, white/green wire.

### Connection to plug connector (3), black 5-pin X13013

- A15** Connect branch for terminal 30, red wire to plug-in slot No. 2, red/green/yellow wire.

### Connection to plug connector (2), black 4-pin X13014

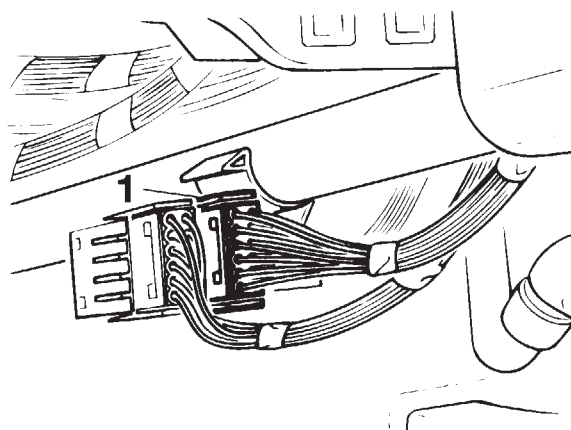
- A23** Connect branch, rear door contact switch (4-door models only), brown/black wire to plug-in slot No. 2, brown/black wire.



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### Only models without central locking ZV

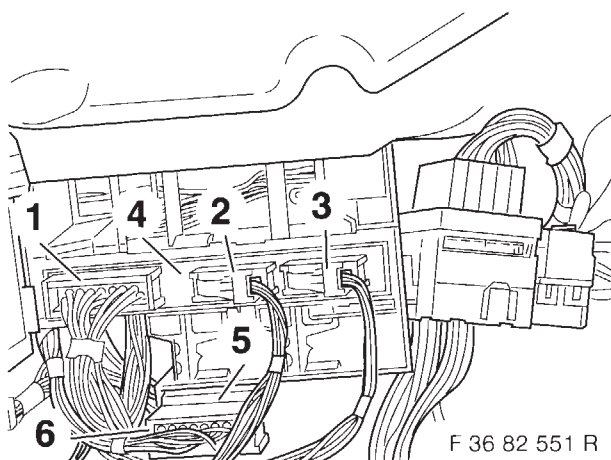
- A15** Connect branch for terminal 30, red wire to wiring harness for interior lighting/door contact switch (1), red/white wire.
- A1** Connect branch, door contact switch, driver's side, brown/grey wire to wiring harness for interior lighting/door contact switch (1), brown/black wire.



F 36 62 084

- A5** Connect branch for terminal R, violet/white wire to wire in black 12-pin connector X33 (1) on bottom right of steering column, plug-in slot No. 2, violet wire.

**Only models from 09/93 with general module (ZKE)**



**Note**

- Connector (1) black, 15-pin = X13252
- Connector (2) yellow, 26-pin = X13253
- Connector (3) green, 26-pin = X13254
- General module (4) = A104
- Connector (5) black, 18-pin = X10182

**Connection to plug connector (1), black 15-pin X13252**

**A15** Connect branch for terminal 30, red wire to plug-in slot No. 10, red/green/yellow wire.

**Connection to plug connector (2), yellow 26-pin X13253**

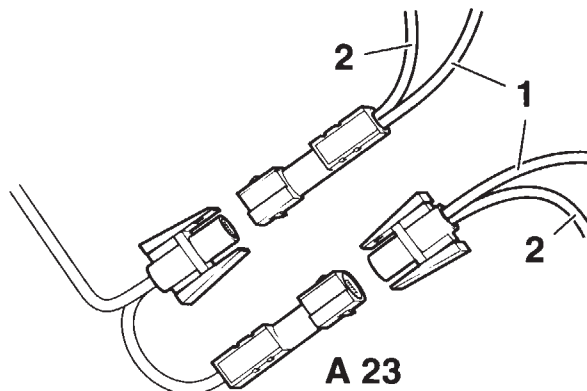
**Caution**

If vehicle is equipped with infrared remote control, branches A17 and A18 must be connected directly to wires using single pin (1-pin) plug-and-socket connections.

- A17** Connect branch for central locking system (lock), yellow/blue wire at plug-in slot No. 17, white/red/ yellow wire or connect to white/red/yellow wire.
- A18** Connect branch for central locking (open), green/blue wire at plug-in slot No. 4, blue/red/ yellow wire (adapter lead) or connect directly to blue/red/yellow wire.
- B5** Connect branch for central locking (opening synchronisation), white/green wire to plug-in slot No. 1, white/green wire.

**Connection to plug connector (3), green 26-pin X13254**

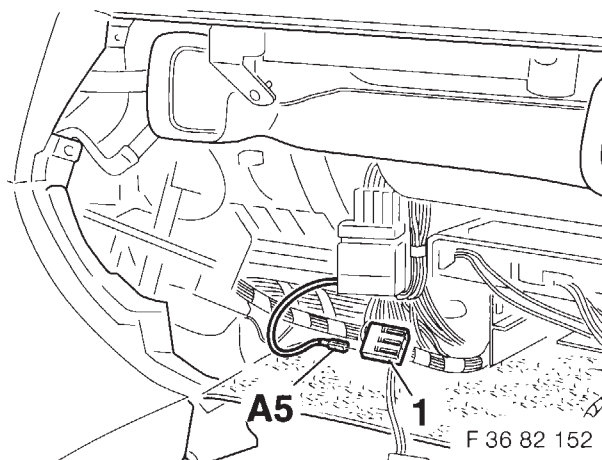
- A1** Connect branch, door contact switch, driver's side, brown/grey wire to plug-in slot No. 2, brown/grey/yellow wire.
- B4** Connect branch from door contact switch, passenger's side, brown/blue wire to plug-in slot No. 3, brown/blue/yellow wire.



F 36 82 160

**Only 4-door models**

**A23** Cut open branch for rear door contact switch at plug-in slot No. 4, brown/black wire and strip insulation at both ends. Cut open brown/white wire at plug-in slot No. 5 and strip insulation at both ends. Crimp together wires (1) (plug-in slot No. 4) and (2) (plug-in slot No. 5) coming from connector using contact bushes. Fit bush housing. Crimp together wires (1) and (2) coming from standard wiring harness using pin contact. Fit pin housing. Connect branch for rear door contact switch (A23).

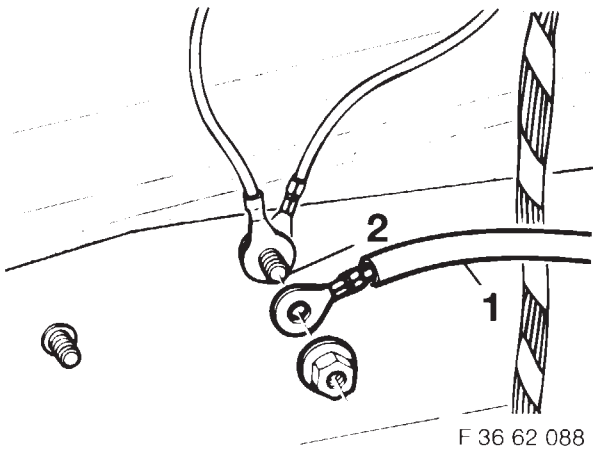


**Caution**

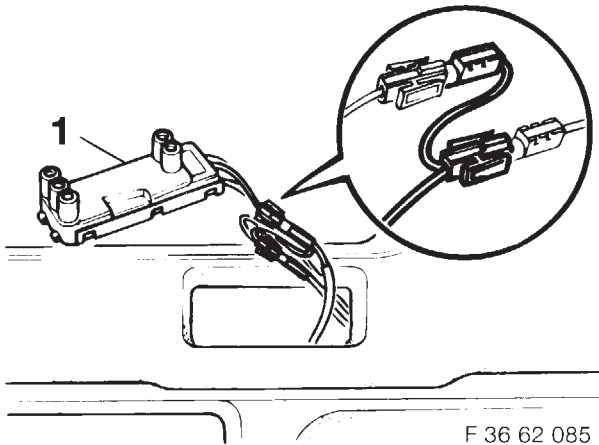
One comb connector has a violet/white wire and one comb connector has a white/violet wire. Turn ignition key to radio setting and check comb connector with respect to ground using tester. Connect test lead to comb connector. The tester now indicates a reading.

**A5** Connect branch for terminal R, violet/white wire to comb connector X1235 (1), violet/white wire, or connect to 6-pin black connector X322, pin 2, violet/black wire.

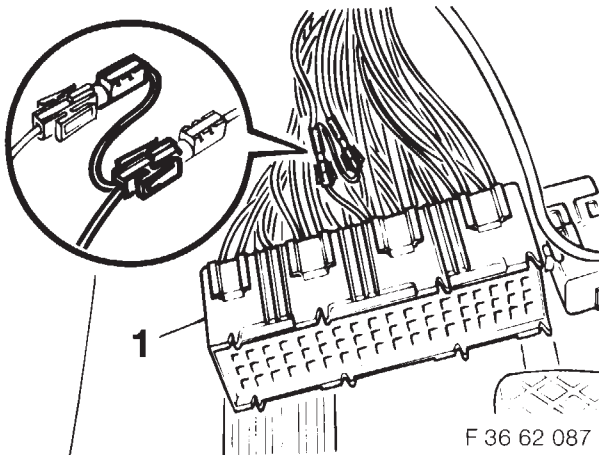
## All models



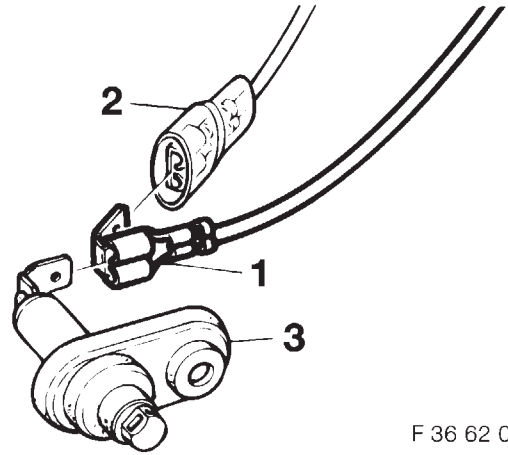
- A6** Connect ground branch (1), (brown wire) to ground terminal point X1166 under carpet on passenger side (2).



- A16** Connect branch for hazard warning lights, blue/red wire to wire in connector X516 (1), plug-in slot No. 2, brown/blue wire.



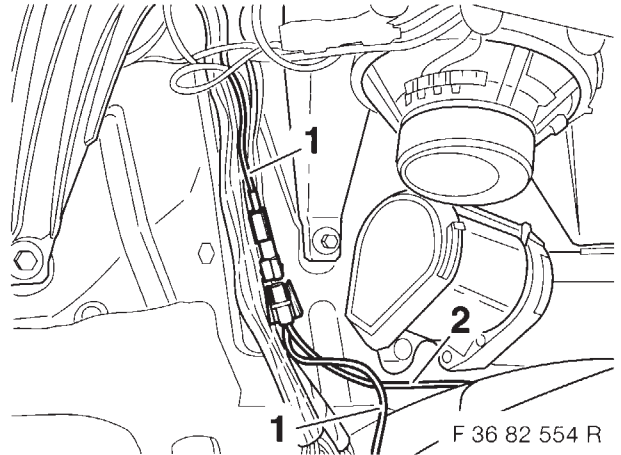
- A20** Connect branch for terminal 61, blue/white wire to blue wire in comb connector X213.



F 36 62 090

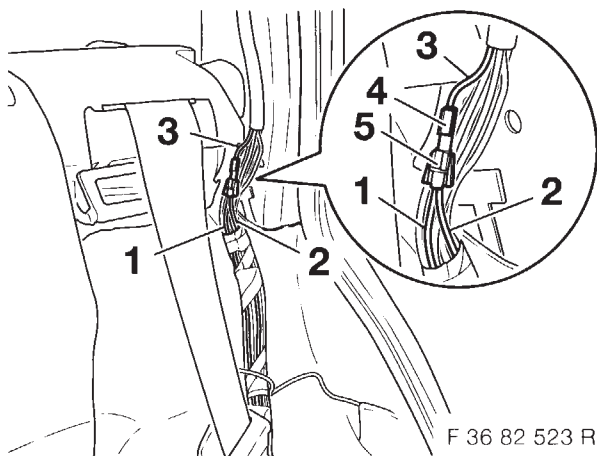
### Only E36/2 (Coupé) and E36/4 (Saloon)

- A22** Branch for luggage compartment switch  
Remove cover in rear left luggage compartment. Locate brown/white wire and connect, or remove luggage compartment switch, crimp contact (1) to branch for luggage compartment switch, connect to standard wire (2) on luggage compartment switch and install luggage compartment switch.



### Only E36/5 (Compact)

- A22** Route branch luggage compartment switch, brown/white wire, on left-hand side of vehicle along main vehicle wiring harness back into the luggage compartment. Locate wire (1) from wiring harness and cut through, connect branch **A22** as illustrated to wire (1).



F 36 82 523 R

**Only E36/3 (touring)** Area of left rear seat backrest

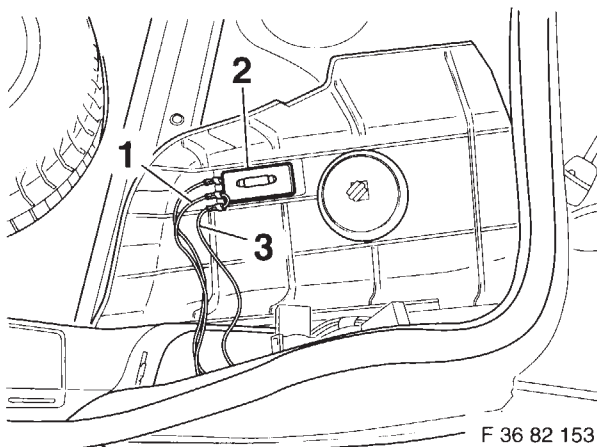
Route branch **A22** (1), brown/white wire along vehicle wiring harness to left-hand back seat backrest.

Cut through brown/white wire of vehicle wiring harness and strip insulation.

Crimp together wires (1) and (2) with plug contact from the installation kit.

Crimp plug contact onto wire (3).

Fit connector housings (4) and (5) and connect together.



F 36 82 153

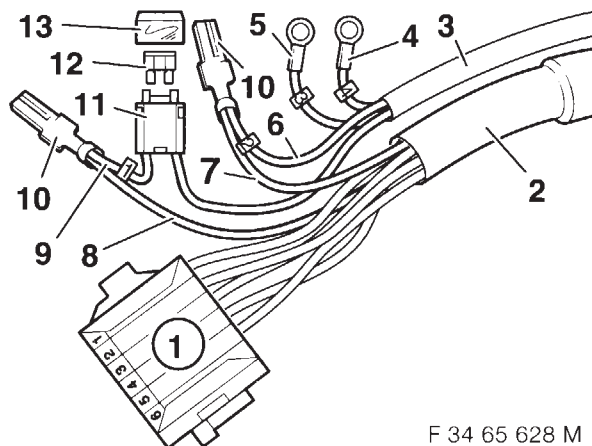
**Only E36/C (Convertible)**

**A22** Route branch luggage compartment switch (1), brown/white wire, to luggage compartment lamp (2) on rear right and connect to brown/white wire (3) or locate brown/white wire from wiring harness on left-hand side of vehicle coming from rear lid and connect branch **A22** alternatively.

**All models**

**A24** Crimp contact onto branch for engine compartment switch, brown/violet wire, fit housing and connect to engine compartment contact switch.

## 10. Connecting Emergency Current Siren



F 34 65 628 M

**Only vehicles with emergency current siren**

**Caution**

In agreement with the customer, install emergency lock in a suitable position (e.g. glovebox) and route connection wire to plug connector (1) of siren wiring harness (2) in left passenger footwell. Strip insulation at wire ends of siren wiring harness (2).

Connect wire (9) identification number 1 of emergency lock wiring harness (3) with fuse holder (11) as illustrated to red wire (8) of siren wiring harness (2) and crimp on plug contact (10). Fit fuse (12) in fuse holder (11) and fit protective cap (13).

Connect wire (6) identification number 2 of emergency lock wiring harness (3) to red/black wire (7) of siren wiring harness (2) and crimp on plug contact (10). Connect wires (4 and 5) identification numbers 3 and 4 from emergency lock wiring loom (3) to suitable ground terminal points.

**Note**

If possible, connection cables (4 and 5) identification number 3 and 4 of emergency lock wiring harness (3) should be connected to two different ground terminal points.

Crimp a plug contact (10) onto remaining wire ends of siren wiring harness (2).

Plug in contacts (10) in plug connector (1) as follows:

Plug-in slot 1 = brown wire

Plug-in slot 2 = not used,

Plug-in slot 3 = white/black wire

Plug-in slot 4 = violet/grey wire

Plug-in slot 5 = red/black wire

Plug-in slot 6 = red wire

**Note**

Inform customer of installation location of emergency lock.

Demonstrate the procedure to be taken in the case of emergency.



## 11. Important Information

### Initial operation

After disconnecting the battery, switch ignition on and off.

Open and close (any) door.

The antitheft alarm system (DWA) now responds to the remote control. Program antitheft alarm system according to customer requirements and legal stipulations (see programming handbook enclosed with programming unit for digital antitheft alarm systems).

## 12. Re-encoding from Hand-Held Transmitters with Change Code

Each DDWA III is capable of learning four different codes, i.e. if the original is lost, new hand-held transmitters (82 92 9 407 876) can be programmed and used as a replacement.

Carry out following steps in order to change the transmit codes (activation codes):

- a** Close driver's door and deactivate antitheft alarm system (DWA). (Driver's door must be closed otherwise feedback to the central locking system is not possible.)

### Note

If no hand-held transmitter is available in order to deactivate the DWA, the DWA can also be programmed in active status (see Step c).

- b** The pink wire for encoding is fitted within the control unit of the central alarm system. The control unit must be opened in order to re-encode hand-held transmitters. For this purpose, the cover of the control unit with the fixed receiver stage of the central alarm module must be removed and the pink wire taken out. The control unit cover must then be clipped on again in order to re-establish contact with the receiver stage. Take particular care to ensure that the pc-board is not damaged when opening the control unit! Strip insulation on pink wire of receiver stage of the central alarm module and connect to ground.

### Caution

On no account crimp on any contacts or cable shoes. Connect wire to ground by hand. Do not interrupt the ground connection during transfer of the code.

- c** Activate central alarm module with new hand-held transmitter by pressing the red ON button once.

### Note

If the DWA has not been deactivated before, press the OFF button (grey) instead of the ON button.

- d** The central locking system is activated as a sign indicating the new code has been detected and stored correctly (the central locking system closes or opens depending on the initial status of the DWA).

### Note

To program another hand-held transmitter, follow the steps **c** and **d** with the new hand-held transmitter.

The other hand-held transmitters must be operated corresponding to the status of the central locking system after coding the first hand-held transmitter:

Example:

DWA deactivated and ground connection established:

Transmitter 1 activated with ON button.

Activate transmitter 2 with OFF button.

Activate transmitter 3 with ON button.

Activate transmitter 4 with OFF button.

Up to 4 hand-held transmitters can be used in this way.

- e** Disconnect pink wire from vehicle ground without causing a loose contact and insulate carefully.

### Caution

If, when releasing the ground connection, a further short to ground occurs, the antitheft alarm system (DWA) will be reset and all stored codes will be lost. The programming procedure must be repeated from the beginning.

Re-insert the pink wire in the control unit and clip control unit closed taking care not to bend the contact pins otherwise malfunctions can occur.

### Note

Hand-held transmitters with fixed codes for earlier DDWA generations must still be ordered as before from BMW Sales Centres with specification of the code (82 11 9 401 529).

However, they cannot be used for the DDWA III system.

## 13. Function Check

### Note

DDWA III system cannot be armed if terminal R, terminal 15 or terminal 61 are activated by the ignition/starter switch or if the DWA system has been connected to the vehicle electrical system for the first time (refer to Important Information on Page 14).

Procedure	Feedback
Arm DDWA III with hand-held transmitter.	LED in hand-held transmitter must light brightly. Doors and luggage compartment are locked at the same time.
2. Hazard warning lights flash twice together with tone signal of emergency current siren.	All current circuits (door contacts, luggage compartment or engine compartment switch) connected correctly.
3. Hazard warning lights flash twice together with tone signal of emergency current siren followed by one 3 second long tone.	One or several current circuits (door contacts, luggage compartment or engine compartment switch) open or not connected correctly.
4. After DDWA LED lighting permanently for approx. 45 sec in the centre console, it flashes at the clock ration (1:1)	The arming phase is completed, the antitheft alarm system is activated.
5. Activate US sensors during 45 second arming phase with windows open by means of manual movement	DWA LED in centre console lights distinctly brighter. Initial tone signal if emergency current siren installed.
6. Check emergency current siren a) by disconnecting battery b) by disconnecting siren wiring harness from DDWA wiring harness (6-pin black connector). Note: Alarm is stopped: By connecting battery or by connecting DDWA wiring harness to siren wiring harness	Alternating tone signal because siren is equipped with batteries(Alarm in the event of break in vehicle electrical system)
7. Check tilt sensor, raise vehicle at side with DDWA activated.	Tone signal (alarm) triggers.

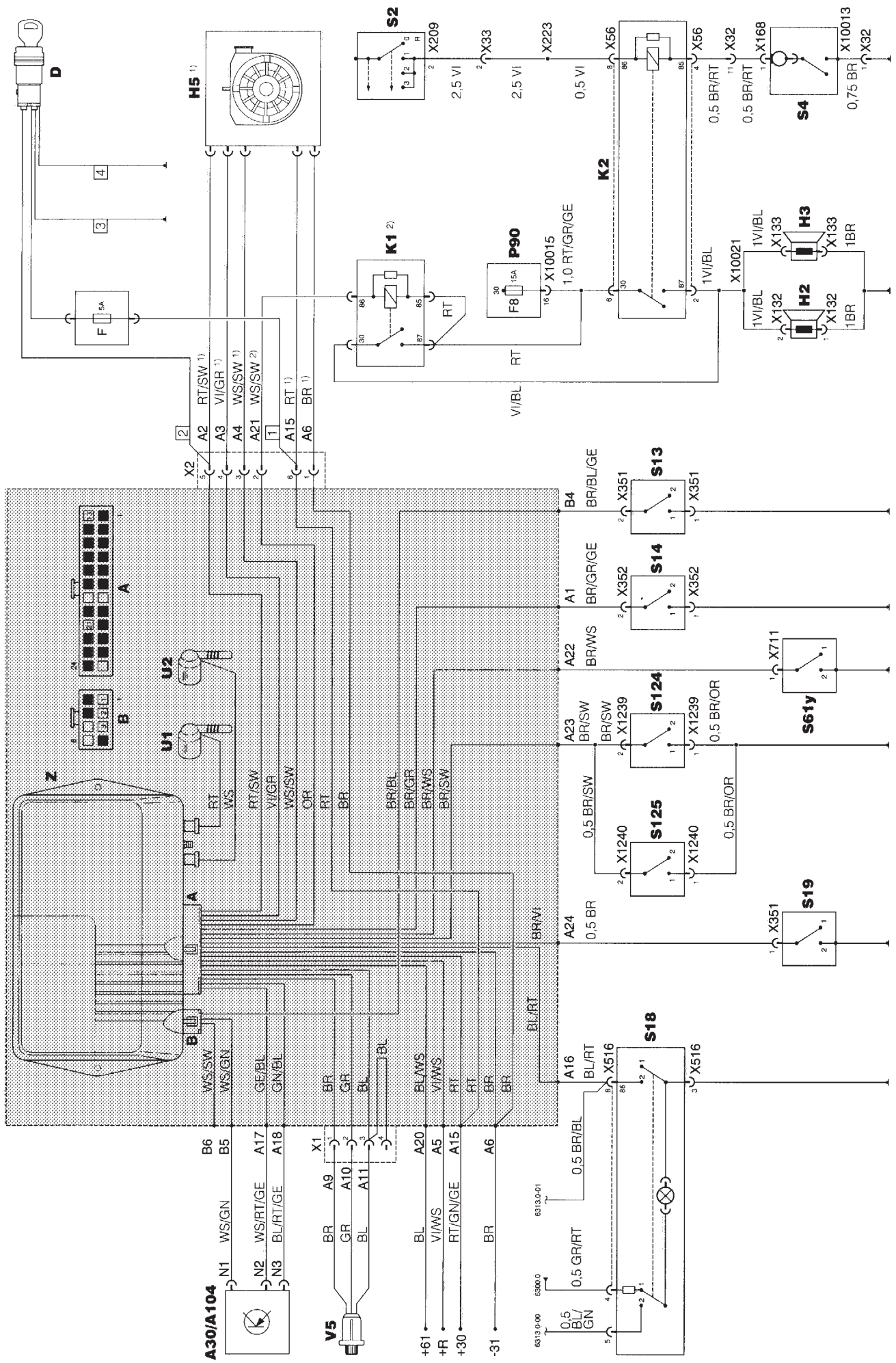
### Caution

On vehicles equipped with an emergency lock, the siren can be switched off by setting the emergency lock to the "OFF" position. If no trigger is to be alarmed **when disconnecting the battery**, wait approx. 3 min after deactivating the DWA on vehicles equipped with siren but without emergency lock.

## 14. Troubleshooting Table

Problem	Possible cause	Corrective measures
DWA cannot be armed	1. Hand-held transmitter/remote control 2. Positive connection terminal 30 to central alarm module 3. Ground connection to central alarm module	1. Replace battery for remote control, LED must light brightly when operating remote control 2. Measure voltage at DWA wiring harness branch A15. Replace fuse F35 if necessary. 3. Check DWA wiring harness branch A6 to body ground with ohmmeter. Specified value: 0 Ohm
Car check tone (tone signal after double confirmation tone while arming) sounds only on vehicles with emergency current siren	1. One door not closed 2. Rear (luggage compartment) lid open 3. Front (engine compartment) lid open 4. Check programming (are door contacts switched negative?)	Check corresponding wire connections  Carry out programming procedure Luggage compartment contact E34 saloon positive, E32 and E34 touring negative.
Window regulators do not regulate (convenient closing)	Check convenient closing by means of door lock.	1. Check connections A17, A18 2. Check programming: US sensitivity: min 1 BMW window regulator: Yes 3. Replace battery in hand-held transmitter if too weak 4. Interference signals, change location
Battery constantly discharged	Closed-circuit current too high	Maximum closed-circuit current of vehicle should be 25 mA. Check all connections.
LED of DWA does not emit light	LED defective	Check connections and supply wires of LED. Replace LED if necessary.





# 15. Schematic

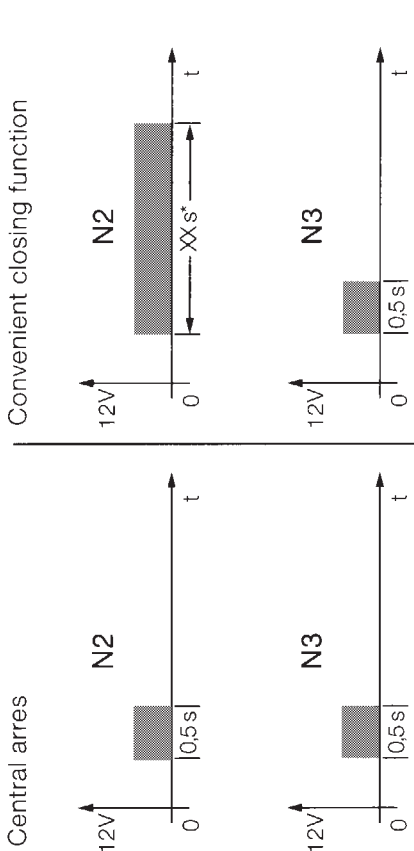
## Key

A 30/A 104	ZV module/general module ZKE
D	Emergency lock
F	Fuse, siren
F8	Fuse, horn
H2	Left horn
H3	Right horn
H5	Siren for DDWA III
K1	Auxiliary relay, horn
K2	Fanfare relay
P90	Power distribution box
S2	Ignition/start switch
S4	Horn switch
S13	Passenger door contact switch
S14	Driver door contact switch
S18	Hazard warning switch
S19	Front lid contact switch
S61y	Luggage compartment light switch
S124	Rear right door contact
S125	Rear left door contact
U1	Ultrasonic sensor, driver's side
U2	Ultrasonic sensor, passenger's side
V5	LED, DDWA III
Z	Central alarm module DDWA III
X1	Plug connector, 4-pin, LED DDWA III
X2	Plug connector, 6-pin, siren/horn
X32	Plug connector, 12-pin, white, left footwell, bottom of steering column
X33	Plug connector, 12-pin, black, left footwell, bottom of steering column
X56	Plug connector, 9-pin, black, power distribution box, rear left engine compartment

X132	Plug connector, 2-pin, black, front engine compartment
X133	Plug connector, 2-pin, black, front engine compartment
X161	Plug connector, 1-pin, white, near front right headlight
X168	Plug connector, 1-pin, black, left steering column
X351	Plug connector, 2-pin, black, in top of right B-pillar
X352	Plug connector, 3-pin, black, in top of left B-pillar
X516	Plug connector, 5-pin, black, centre console
X711	Plug connector, 1-pin, natural, underside of left read lid
X1239	Plug connector, 2-pin, black, right C-pillar
X1240	Plug connector, 2-pin, natural, under LH side of rear seat

## Connections A30/A104

- N1 Opening synchronisation
- N2 Central locking (ZV) - central arrest
- N3 Central locking (ZV) - open



Controlled by remote control

\*

## **Wichtige Information!**

Verwenden Sie zu Ihrer eigenen Sicherheit ausschließlich

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hält Ihr BMW-Händler für Sie bereit.**

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will provide you with a wide range of BMW  
accessories.**