PRODUCT GUIDE

HC3452A

DOCUMENT NUMBER

REVISION DATE
20161024

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

U.S. Patent No. 8,856,780
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WELCOME

Congratulations on the purchase of your iDataStart HC solution. You are now a few simple steps away from enjoying your new remote starter unit with enhanced features.

Before starting your installation, please ensure that your iDataStart HC module is programmed with the correct firmware for your vehicle and that you carefully review the install guide.

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NEED HELP?

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idatalink.com/support
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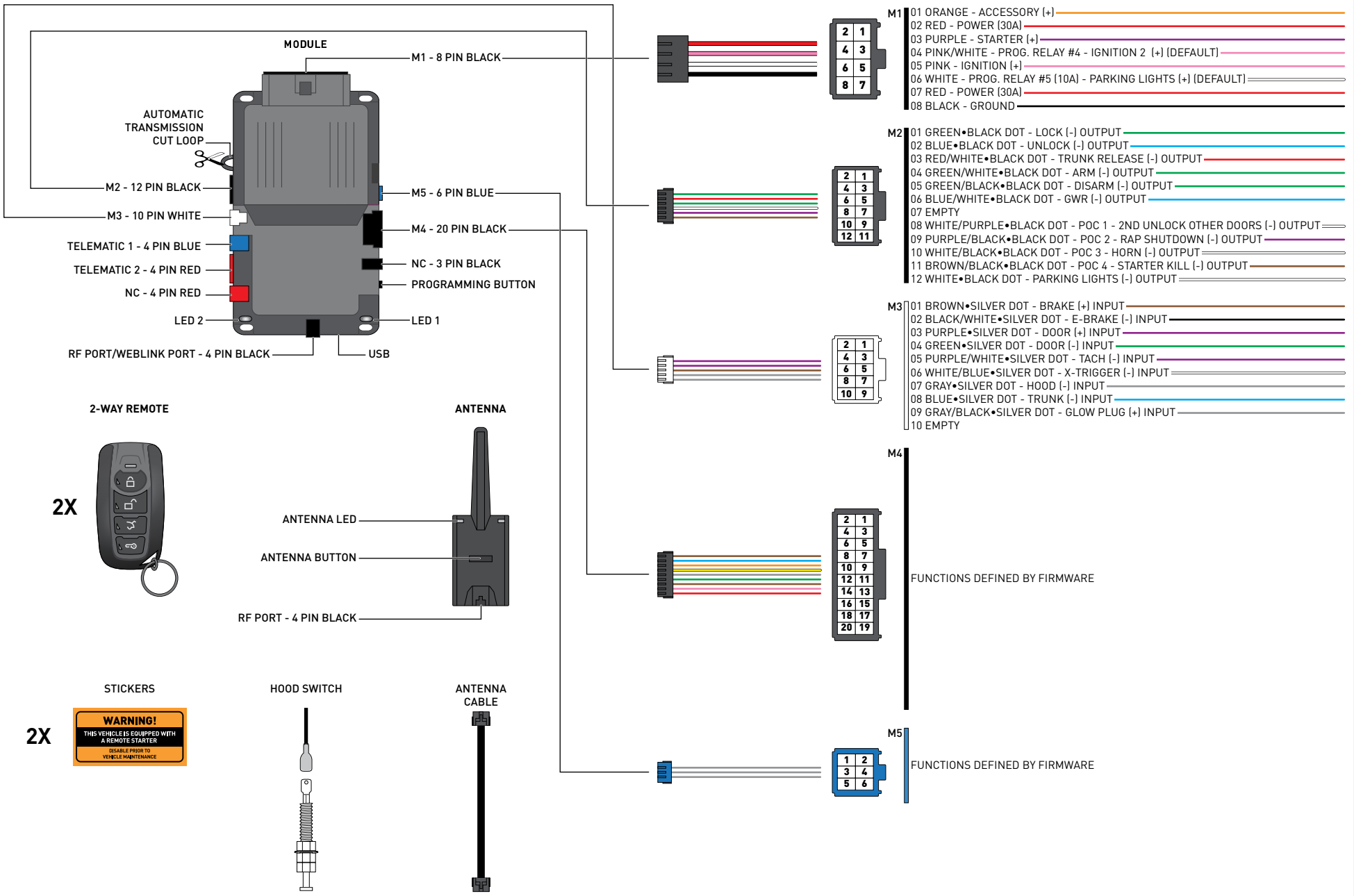
BOX CONTENTS



01

START vehicle for 15 seconds.

02

Press and hold the brake pedal.

03

Press and release the module's programming button. (OR if the remotes are already programmed to the vehicle, press and hold the start button of the remote for 2.5 seconds.)

04

Wait, LED 2 will flash GREEN. (See the Module Diagnostics page)

05

Release the brake pedal.

06

Module Programming Procedure completed.

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01

WARNING: Complete the module programming procedure and tach programming procedure before programming the remotes. A maximum of four [4x] remotes per system.

02

Set ignition to ON position.

03

Press and release the antenna button, then press and hold the antenna button. The antenna's leds will turn solid BLUE.

04

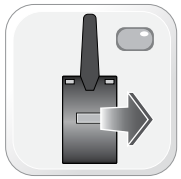
Parking Light will flash once [1x].

05

Press once [1x] on the LOCK button of each remote.

06

The antenna's leds will flash BLUE once [1x] for each successful pairing.

07 

Release the antenna button. The antenna's leds will turn OFF.

08

Set ignition to OFF position.

09

Remote Programming Procedure completed.

>>

To program an additional remote as second vehicle mode: Follow steps 1 to 4. Press twice [2x] on the "F" button then press once [1x] on the LOCK button of the remote. Follow steps 6 to 9.

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>>

NOTE: In Valet Mode, the Remote starter is not functional. Keyless entry, Lock and Unlock will remain functional. See RF kit user manual for alternate valet mode programming.

01

Time restriction. Complete next step within 7 seconds.

02

Cycle ignition ON twice [2x OFF/ON] rapidly.

03

Press and release the BRAKE pedal three times [3x].

04

Parking Light will flash once [1x] then will flash twice [2x].

05

Set ignition to OFF position.

06

Valet Mode Programming Procedure completed.

>>

To exit valet mode: repeat steps 1 to 5.

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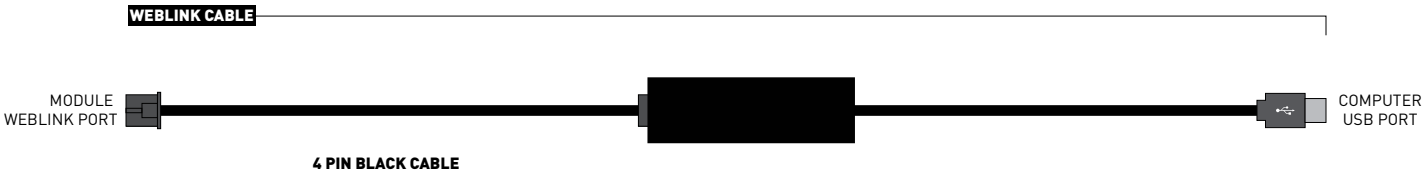
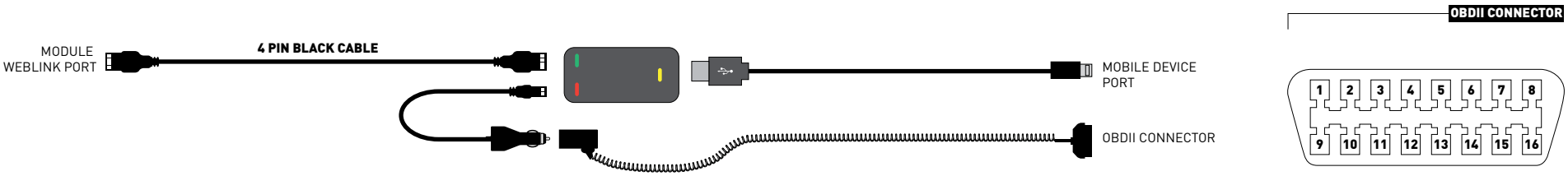
WEBLINK CABLE (required accessory sold separately)



WEBLINK MOBILE (accessory sold separately)



TELEMATIC KIT (accessory sold separately)

*For SmartStart, use the module's RED Telematic port.

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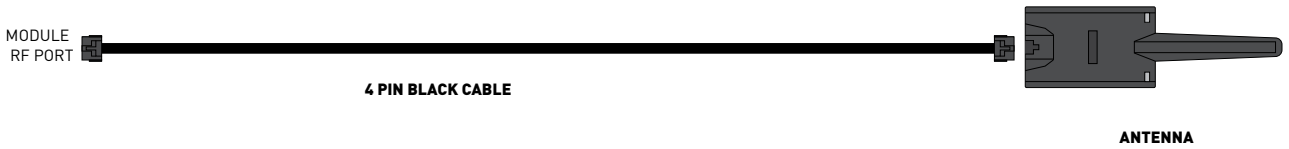
RF KIT (included)



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WEB PROGRAMMABLE MENUS	DESCRIPTION
MENU 1 – Remote Starter	RS related configuration options
MENU 2 – Doorlock Options	Convenience feature configuration options
MENU 3 – Security Options	Alarm activation and settings
MENU 4 – AUX function assignments	Set transmitter AUX buttons controls
MENU 5 – Programmable outputs (POC)	Set actions for programmable outputs
MENU 6 – Pulse Timer Output Configuration (PTO)	Set duration for pulse timer outputs (if used)
MENU 7 – Input Configurations	Set inputs for Auto by firmware/Data/Analog
MENU 8 – Output Configurations	Set outputs for Auto by firmware/Data/Analog

Programming options are avaible through Weblink and Weblink Mobile only.

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TEST MODULE		LED 1 STATUS	DIAGNOSTIC
I	DURING MODULE PROGRAMMING	Flashing RED	Missing/wrong information from firmware or vehicle.
		Solid RED	Module waiting for more vehicle information.
		Flashing GREEN	Additional steps required to complete module programming.
		Solid GREEN then OFF	Module correctly programmed.
		OFF	No activity or module already programmed.
II	DURING TACH PROGRAMMING	1 GREEN flash	Tach signal programmed in Analog
		2 GREEN flashes	Tach signal programmed in Data
		3 RED flashes	No tach signal detected
		4 RED flashes	System is in valet mode
		5 RED flashes	Tach set for 'VTS'. No tach programming required
		6 RED flashes	Tach set for 'assumed start'. No tach programming required
III	DURING REMOTE START	Flashing RED	Module incorrectly programmed.
		Solid RED	Module incorrectly programmed.
		Flashing GREEN	Module correctly programmed and operational.
		Solid GREEN then OFF	Reset in progress.
		OFF	Invalid ground when running status from remote starter.
IV	WITH IGNITION OFF	Flashing RED	Module incorrectly programmed or connected.
		Solid RED	Module not programmed. Waiting for more vehicle information.
		Flashing GREEN	False ground when running status from remote starter.
		Solid GREEN then OFF	Reset in progress.
		OFF	Module at rest and ready for a remote start sequence.

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REMOTE STARTER ERROR CODES: NOTES	[X] NUMBER OF PARKING LIGHT FLASHES	DIAGNOSTIC
I WARNING: The following applies only when the parking lights are connected and supported by the system. II After a remote starter failure, the parking lights will flash three [3x] times, then will flash [X] number times to indicate an error code. See table.	01	Engine running.
	02	Key in ignition at ON position.
	03	Door is open.
	04	Trunk is open.
	05	Foot brake is ON.
	06	Hood is open.
	07	The reservation is OFF. (Manual transmission only)
	08	Tach failure.
	09	The vehicle is moving (VSS).
	10	System is in Valet Mode.
	11	CAN communication failure
	12	RS not synchronized. Start vehicle with OEM key for 15 sec before trying a new RS sequence.
	13	Bypass problem.

REMOTE STARTER SHUTDOWN ERROR CODES: NOTES	[Y] NUMBER OF PARKING LIGHT FLASHES	DIAGNOSTIC
I WARNING: The following applies only when the parking lights are connected and supported by the system. II If the engine shuts down after a remote starter sequence: Press and hold the Trunk button and the Start button at the same time for 2.5 seconds when using a 1-WAY remote. OR Press once [1x] on button "4" when using a 2-WAY remote. The parking lights will flash four [4x] times, then will flash [Y] number times to indicate an error code. See table.	01	Engine tach signal is lost.
	02	Emergency brake is lost.
	03	Foot brake is ON.
	04	Hood is open.
	05	Engine RPM limiter is ON.
	06	Glow plug timeout error.
	07	Vehicle is moving (VSS).
	08	N/A
	09	N/A
	10	Door is open.
	11	CAN communication failure during RS sequence.
	12	RS not synchronized. Start vehicle with OEM key for 15 sec before trying a new RS sequence.
	13	Takeover is not allowed.
	14	Shutdown error, board overheat protection.

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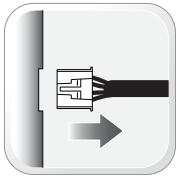
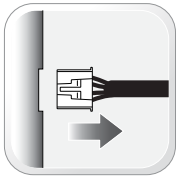
The following procedure resets the module programming to the vehicle. It does not reset any settings configured online.

01



Disconnect all connectors from module except the M1 BLACK 8-pin connector and the M4 BLACK 20-pin connector.

02



Disconnect the M1 BLACK 8-pin connector and the M4 BLACK 20-pin connector.

03

PRESS AND HOLD the module's programming button while connecting the M1 BLACK 8-pin connector and the M4 BLACK 20-pin connector.

04

Wait, LED 1 will flash RED. RELEASE programming button.

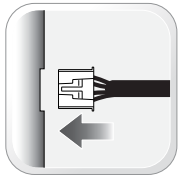
05

LED 1 will turn RED for 2 seconds.

06

Module RESET completed.

07



Reconnect all connectors.

08

Repeat programming procedure.

>>

Failure to follow procedure may result with a DTC or a CHECK ENGINE error message.

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INSTALL GUIDE

2009-2016 AUDI A4 ALLROAD KEYPORT WITHOUT PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
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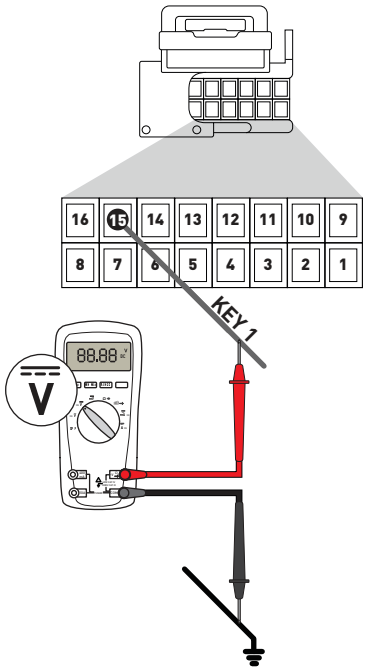
IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

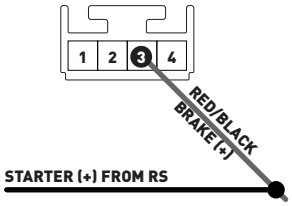
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

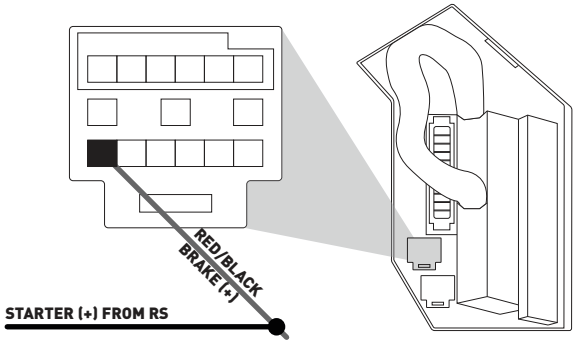
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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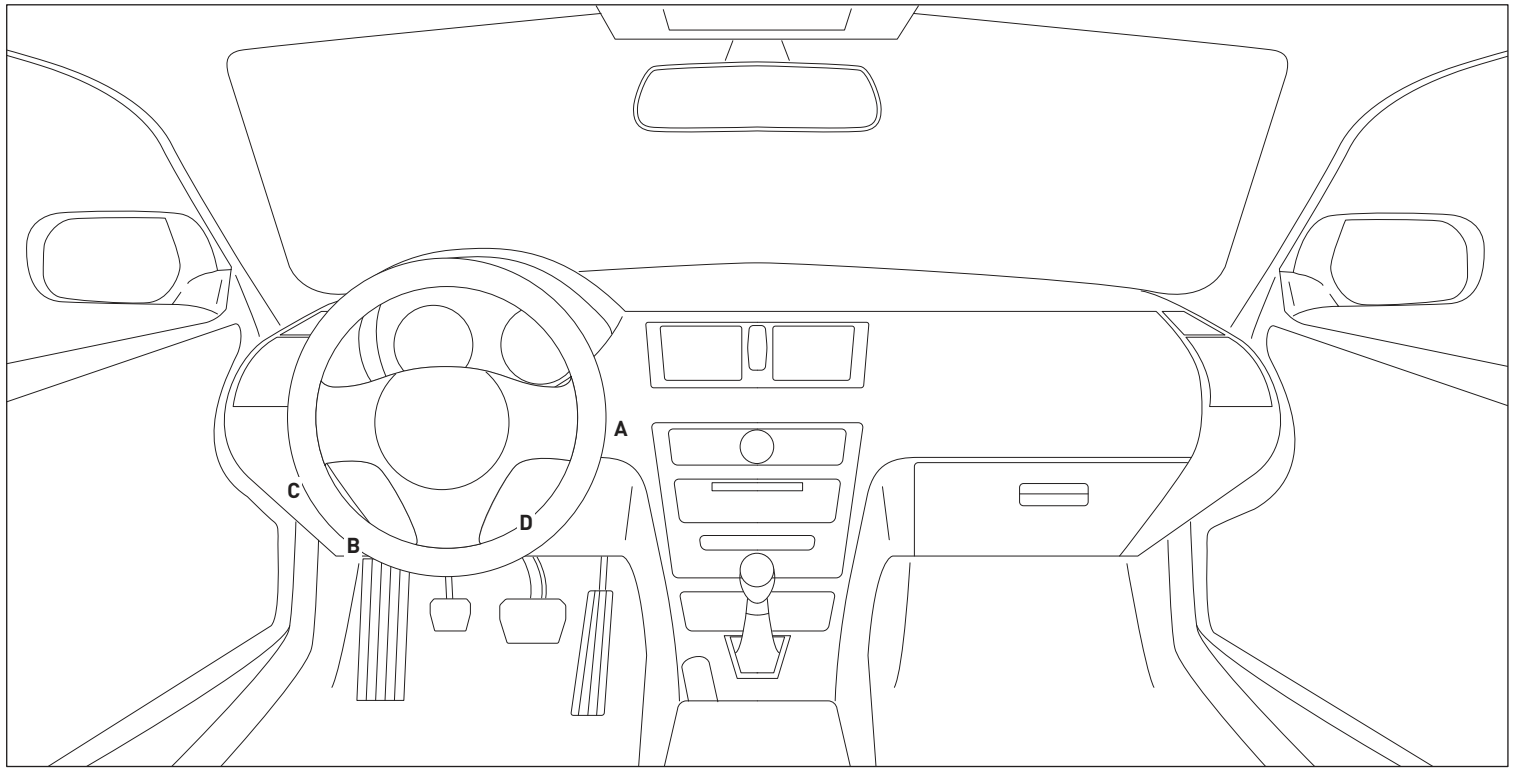

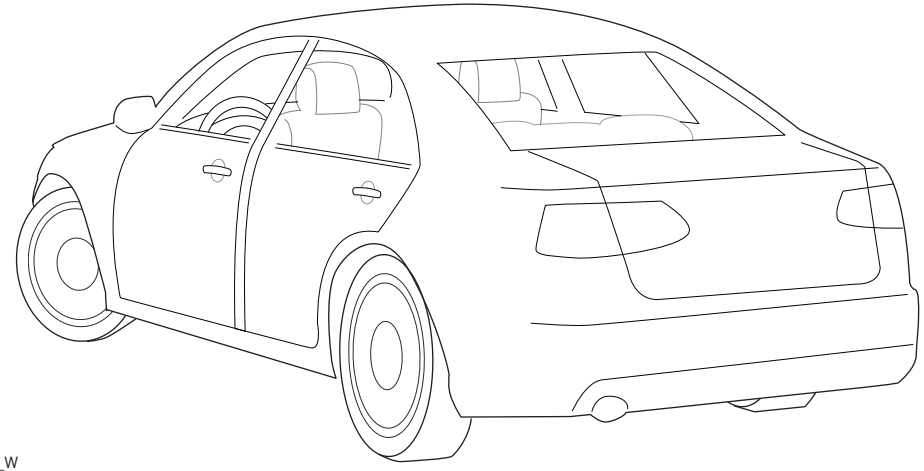

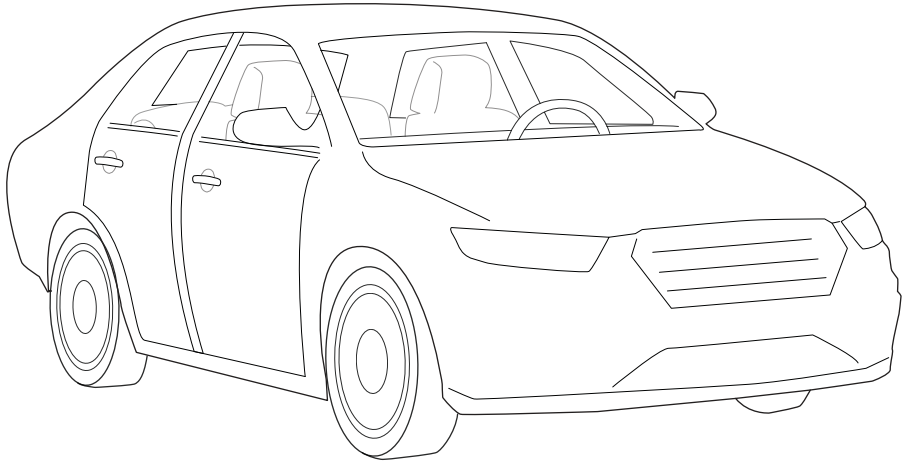

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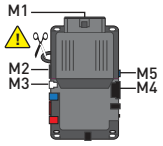


⚠ CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED - GROUND (-) INPUT
- 12 GRAY/YELLOW
- 13 GREEN/RED
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK - KEY 2/3/4
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
HORN (-)
HOOD SWITCH ⚠2

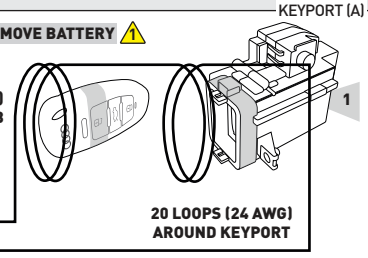
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

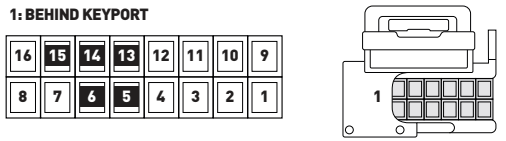
REMOVE BATTERY ⚠1

20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT

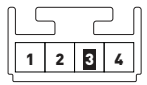


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



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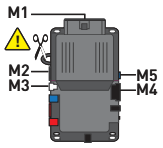

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07 RED
08 BLACK

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01 GREEN•BLACK DOT
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05 GREEN/BLACK•BLACK DOT
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07 EMPTY
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09 PURPLE/BLACK•BLACK DOT
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11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED
12 GRAY/YELLOW
13 GREEN/RED
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK - KEY 2/3/4
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT
05 GRAY•BLUE DOT - IMMOBILIZER
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KEY 3 (-) GRAY/BLUE - 13
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KEY 1 (+) GRAY/YELLOW - 15

CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN

IGNITION (+) BLACK
12V (+) RED/BLACK

BRAKE (+) RED/BLACK - 03

HORN (-)
HOOD SWITCH ⚠2

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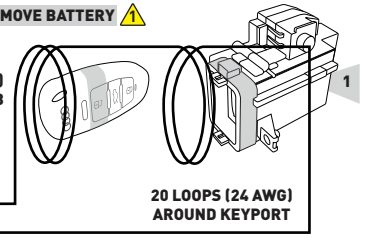

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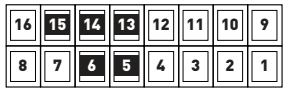
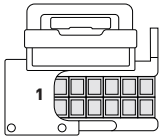




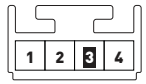
DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)

1



T001_W

U.S. Patent No. 8,856,780
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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

U.S. Patent No. 8,856,780
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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

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	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2009-2016 AUDI A4 ALLROAD KEYPORT WITH PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

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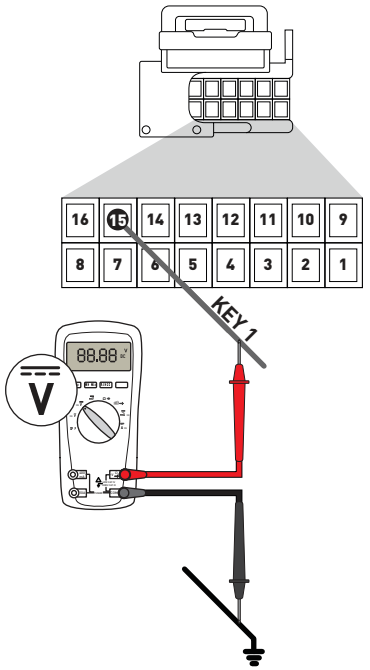
IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

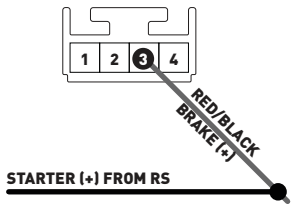
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

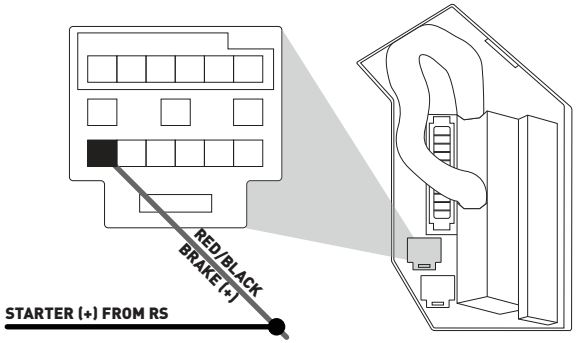
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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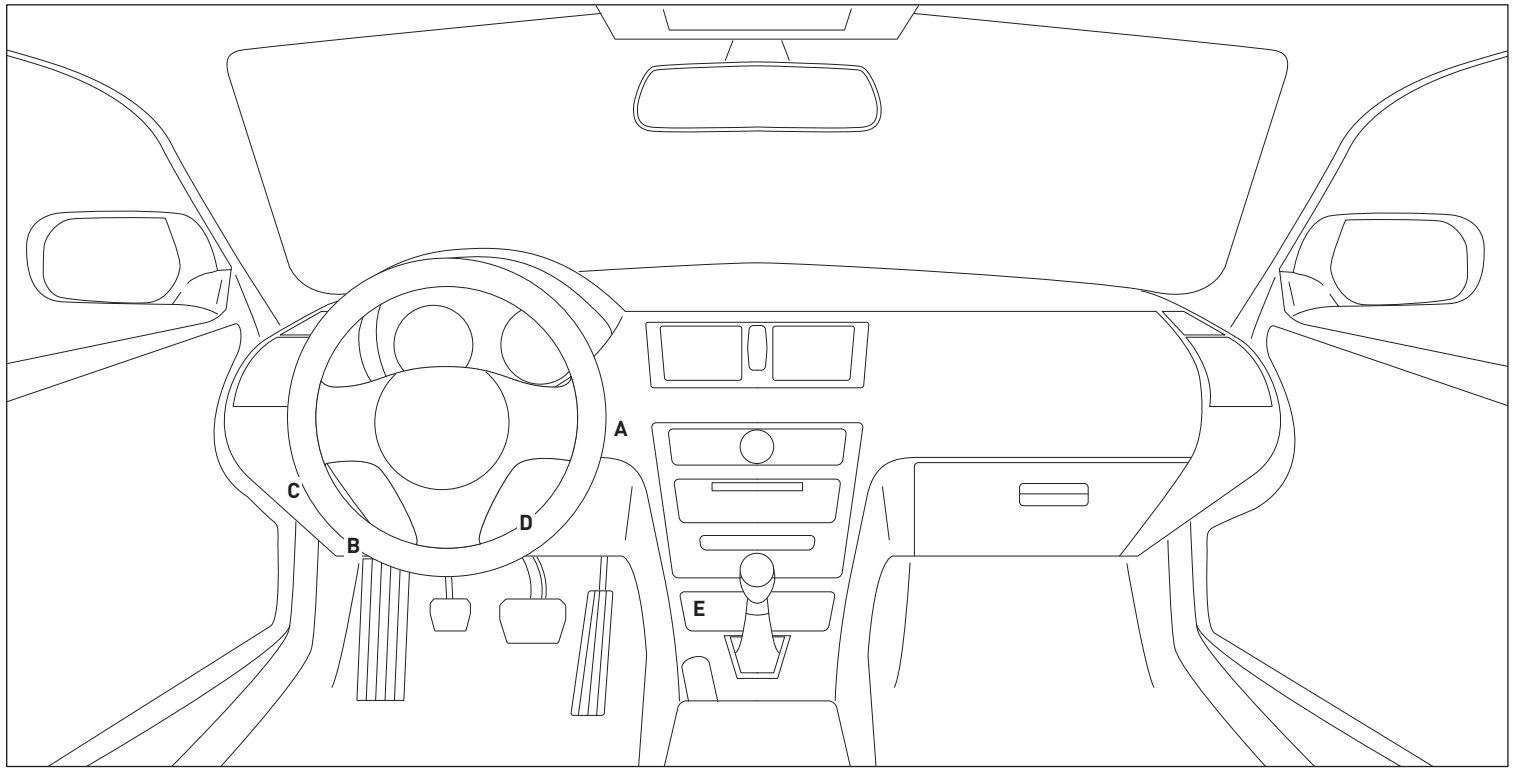

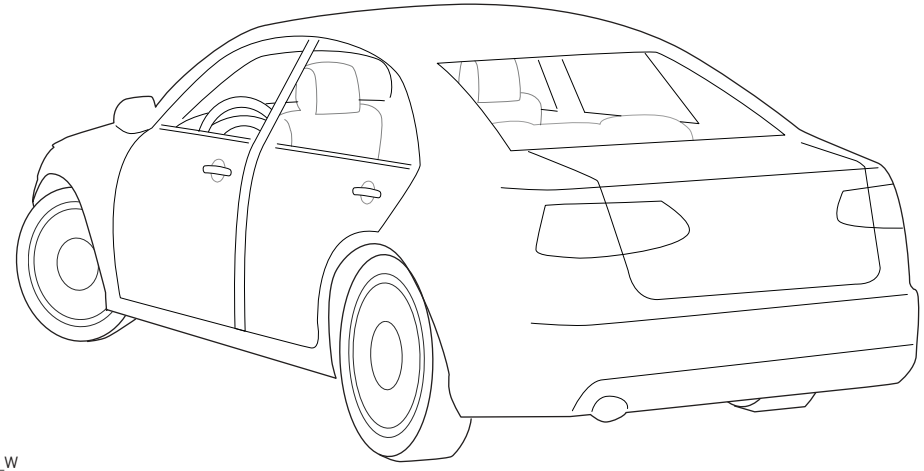

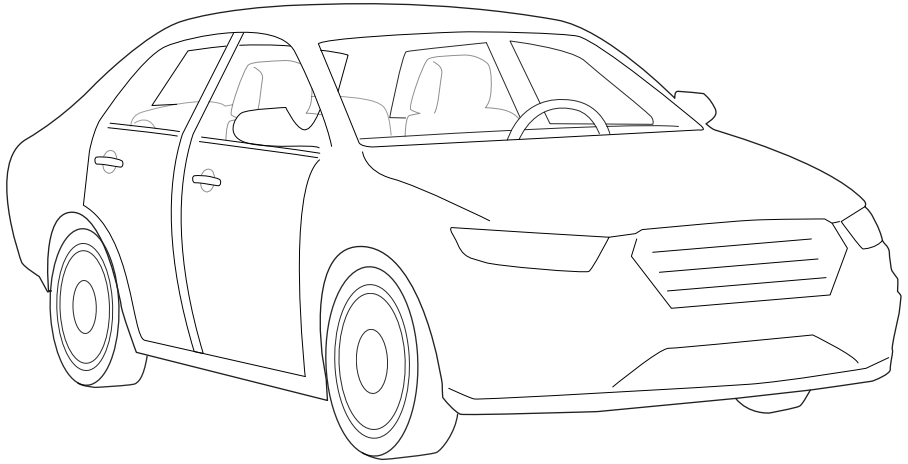

T002_W

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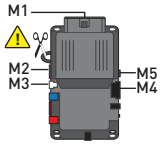


⚠1 CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
01 ORANGE
02 RED
03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

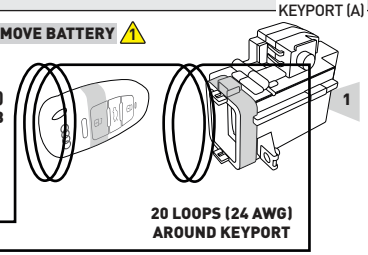
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

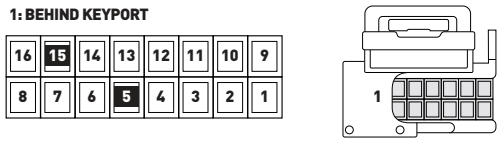
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

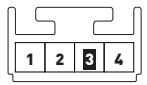


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

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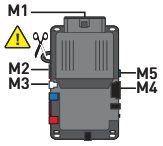

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03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

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01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

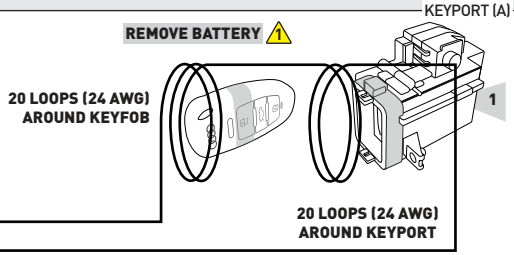
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

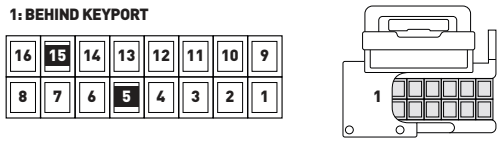
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

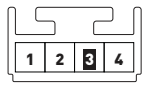


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

U.S. Patent No. 8,856,780
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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

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	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2009-2016 AUDI A4 SEDAN KEYPORT WITHOUT PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

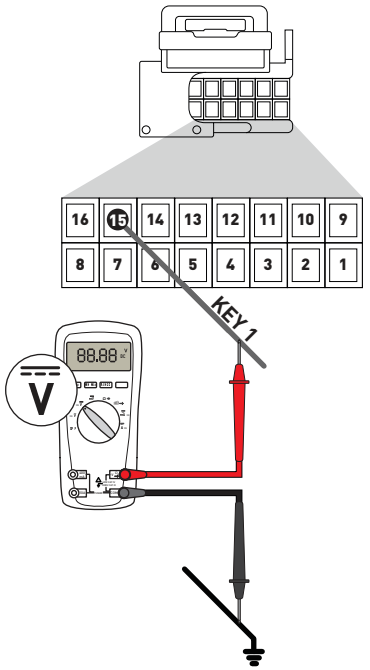
ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

U.S. Patent No. 8,856,780
Automotive Data Solutions Inc. © 2016

IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

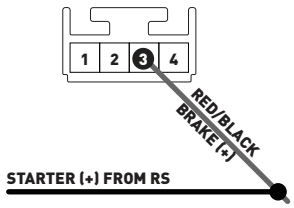
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

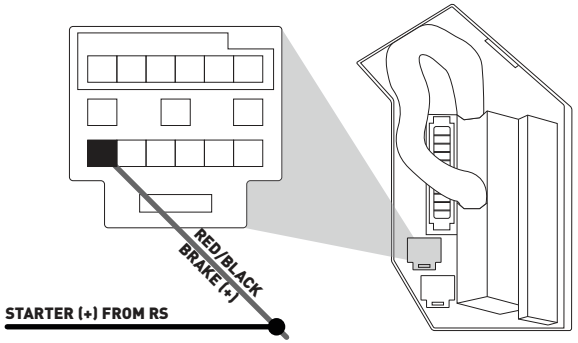
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



U.S. Patent No. 8,856,780
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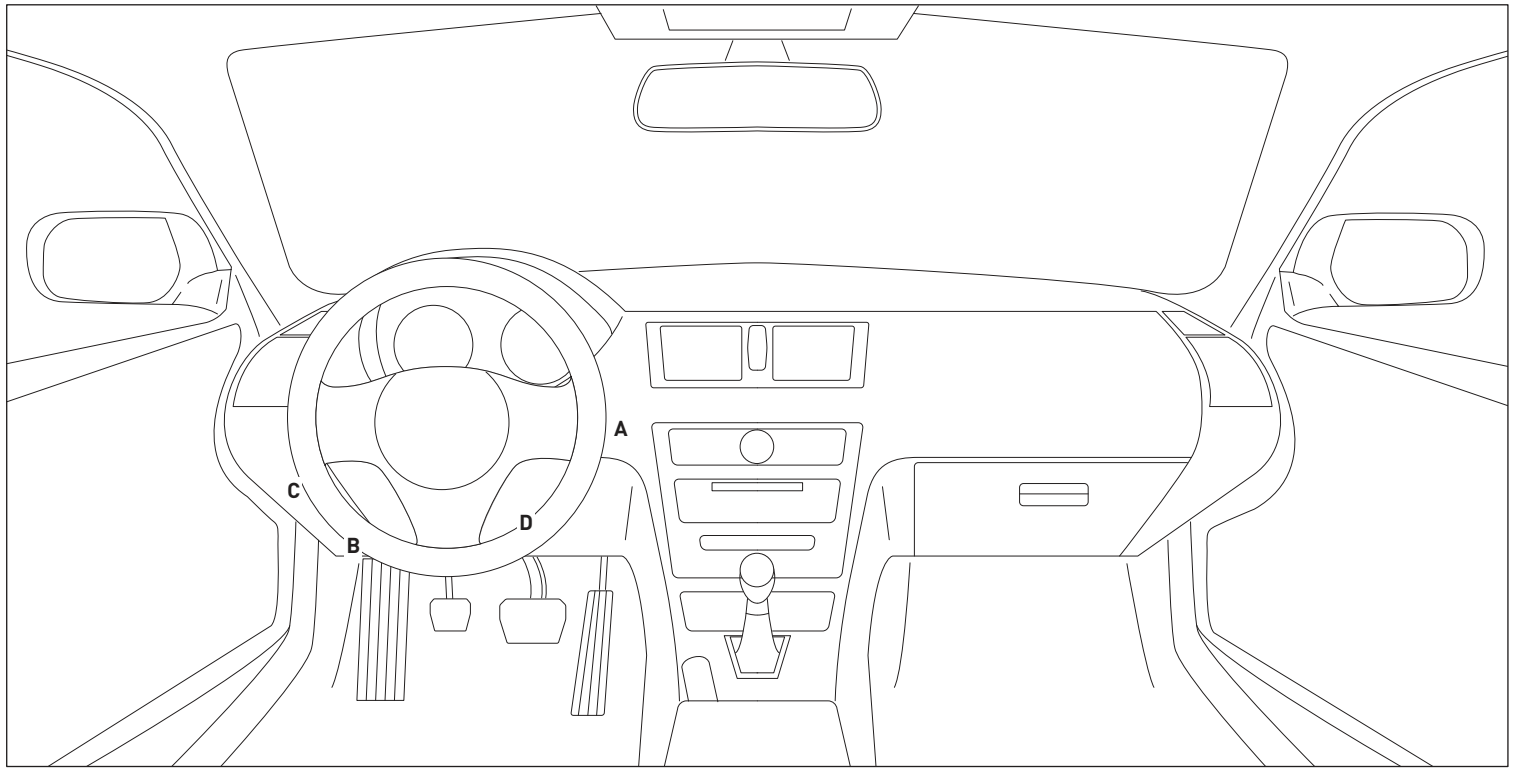

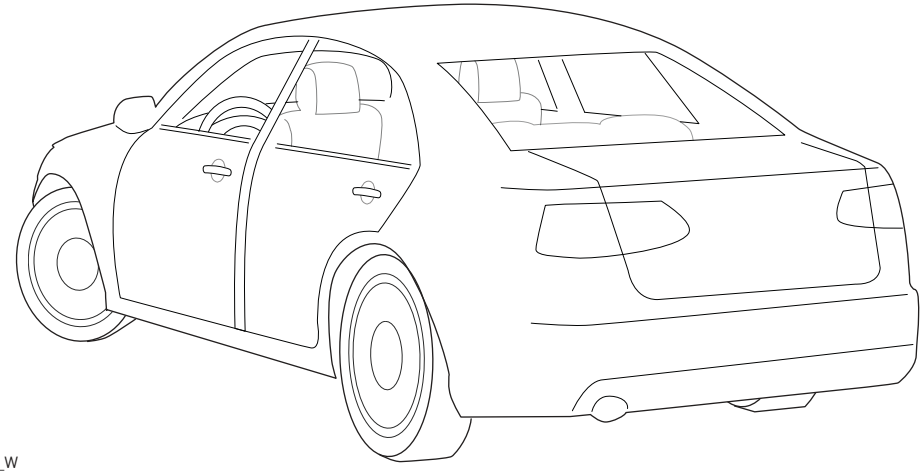

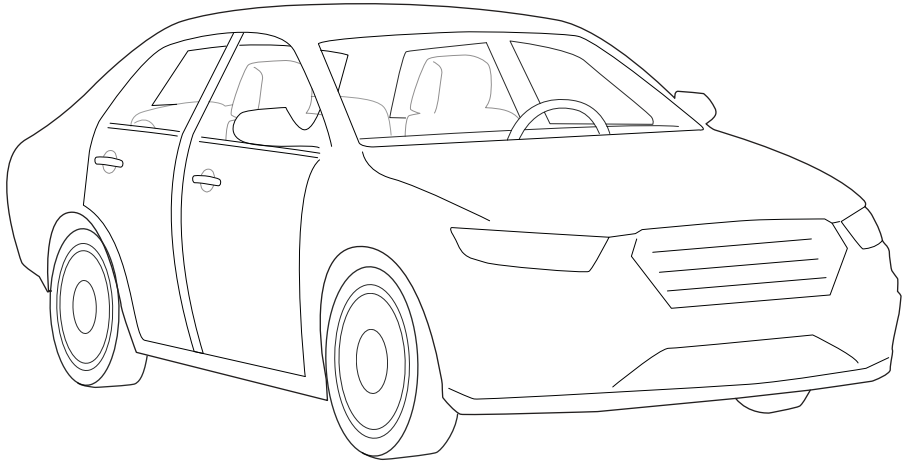

T001_W

U.S. Patent No. 8,856,780
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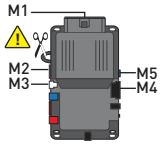


⚠ CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED - GROUND (-) INPUT
- 12 GRAY/YELLOW
- 13 GREEN/RED
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK - KEY 2/3/4
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
HORN (-)
HOOD SWITCH ⚠2

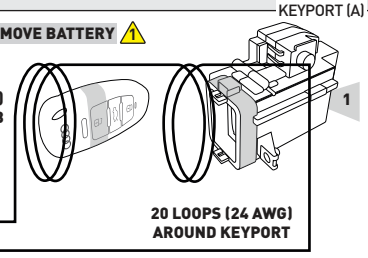
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

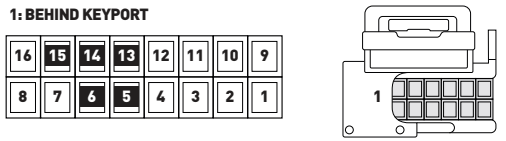
REMOVE BATTERY ⚠1

20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT

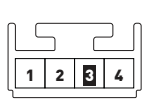


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



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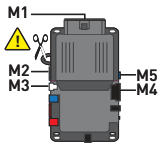

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- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

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- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
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- 06 BLUE/YELLOW
- 07 EMPTY
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KEY 4 (-) BLACK OR BLACK/BLUE - 06
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KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15

CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN

IGNITION (+) BLACK
12V (+) RED/BLACK

BRAKE (+) RED/BLACK - 03

HORN (-)
HOOD SWITCH ⚠2

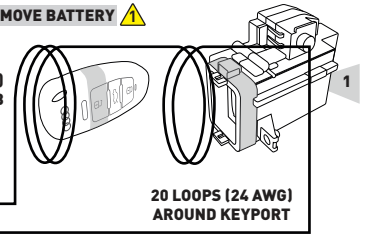
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

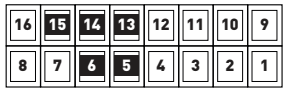
REMOVE BATTERY ⚠1

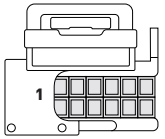
20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT



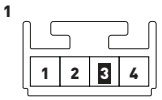


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



T001_W

U.S. Patent No. 8,856,780
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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

U.S. Patent No. 8,856,780
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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2009-2016 AUDI A4 SEDAN KEYPORT WITH PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

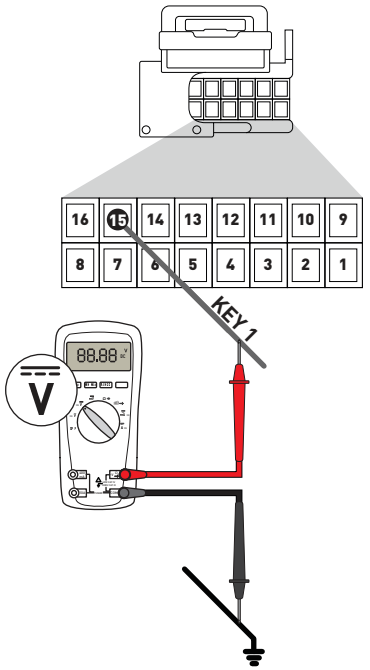
ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

U.S. Patent No. 8,856,780
Automotive Data Solutions Inc. © 2016

IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

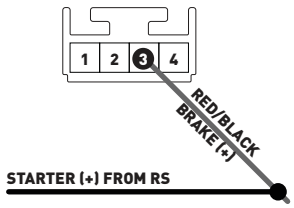
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

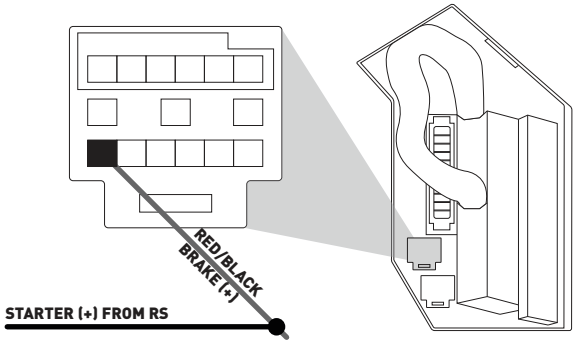
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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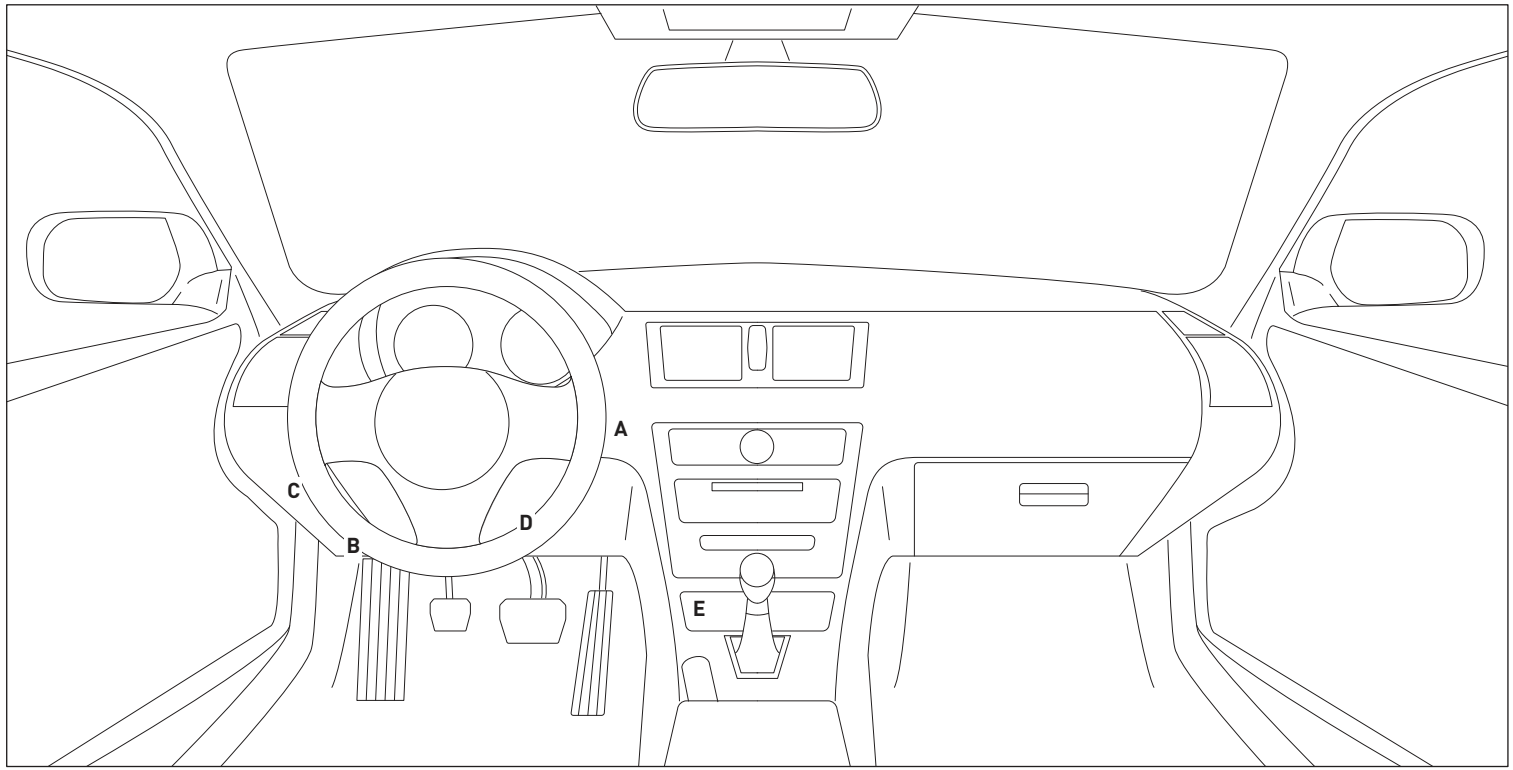

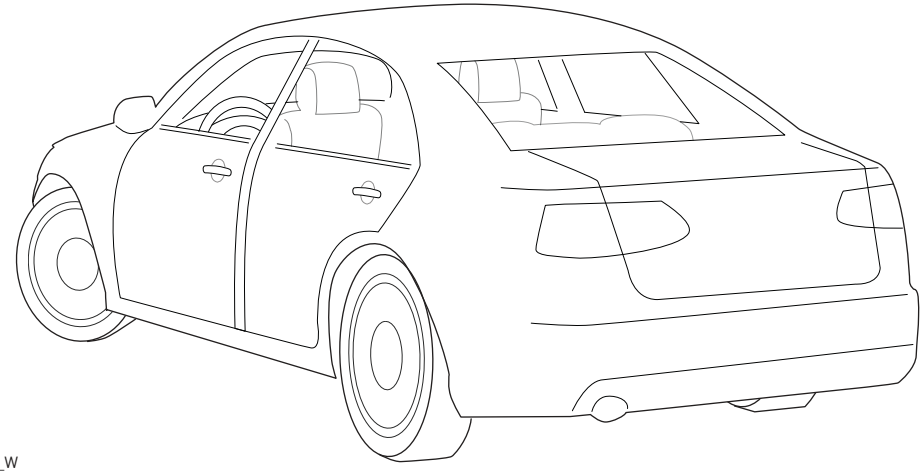

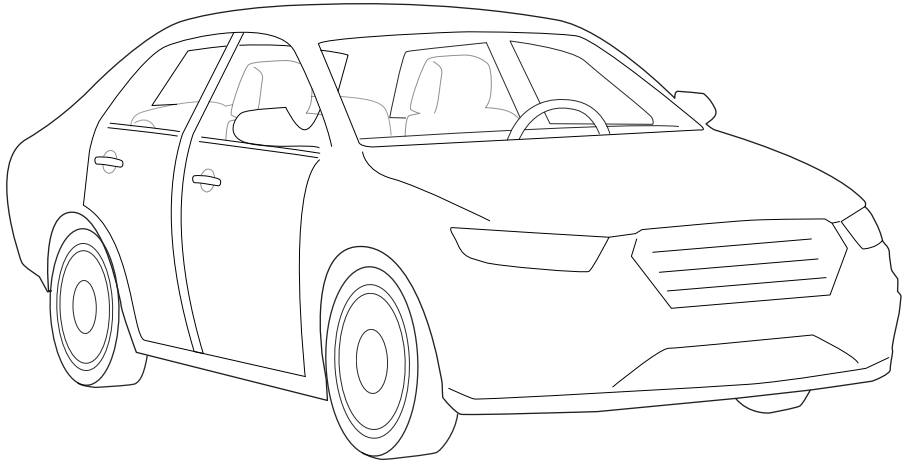

T002_W

U.S. Patent No. 8,856,780
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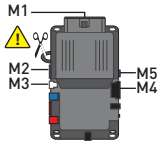


⚠1 CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
01 ORANGE
02 RED
03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

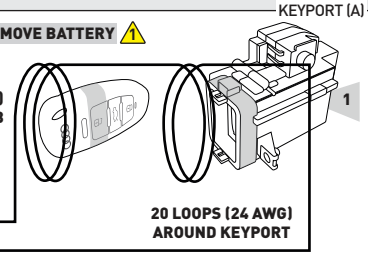
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

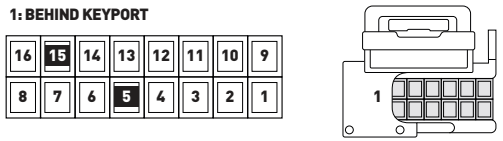
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

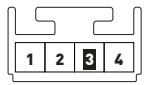


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

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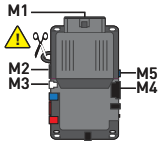

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05 PINK
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07 RED
08 BLACK

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02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

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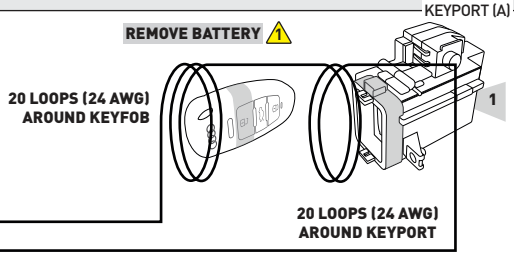
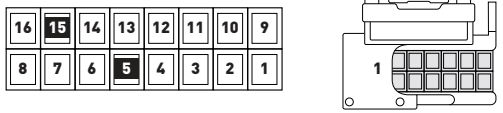


1: BEHIND KEYPORT

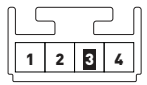


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

U.S. Patent No. 8,856,780
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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

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	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2008-2016 AUDI A5 KEYPORT WITHOUT PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

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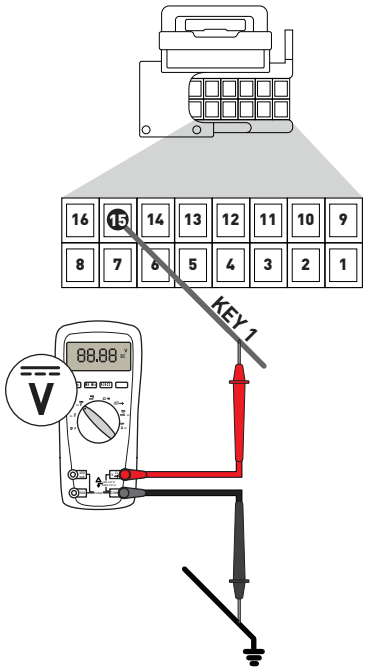
IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

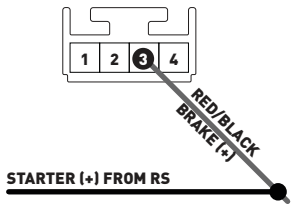
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

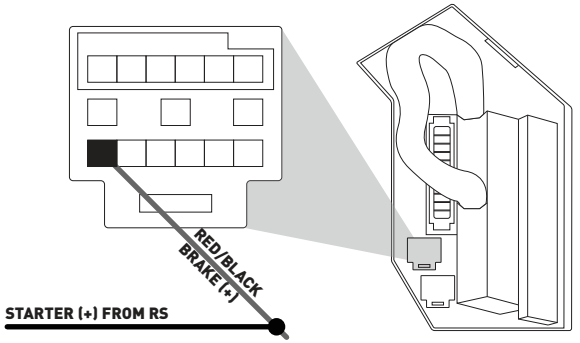
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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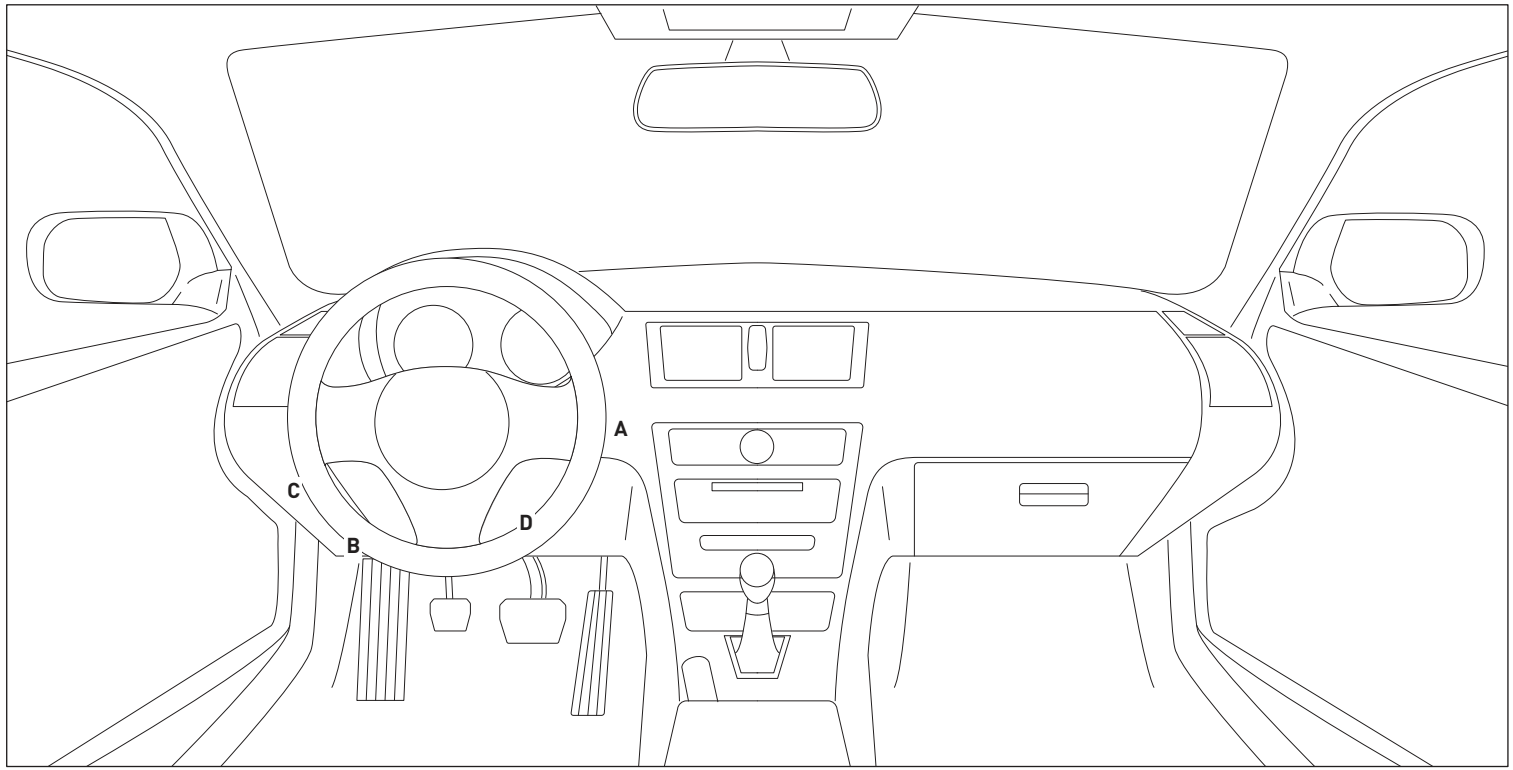

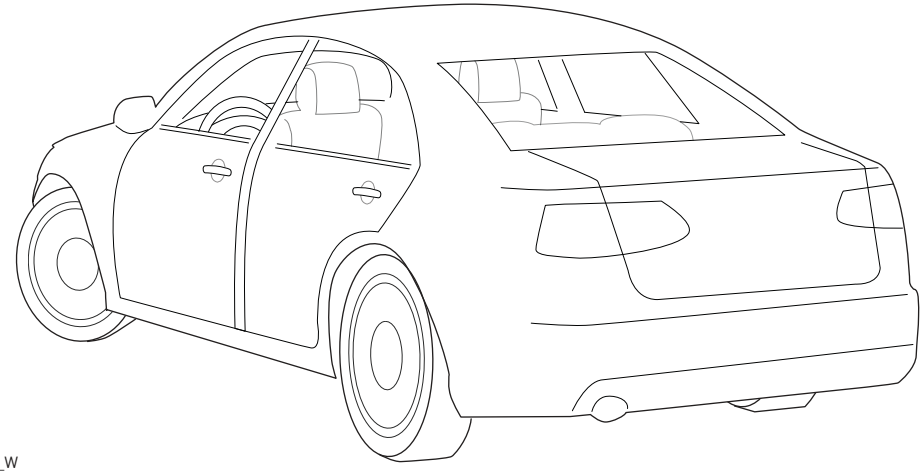

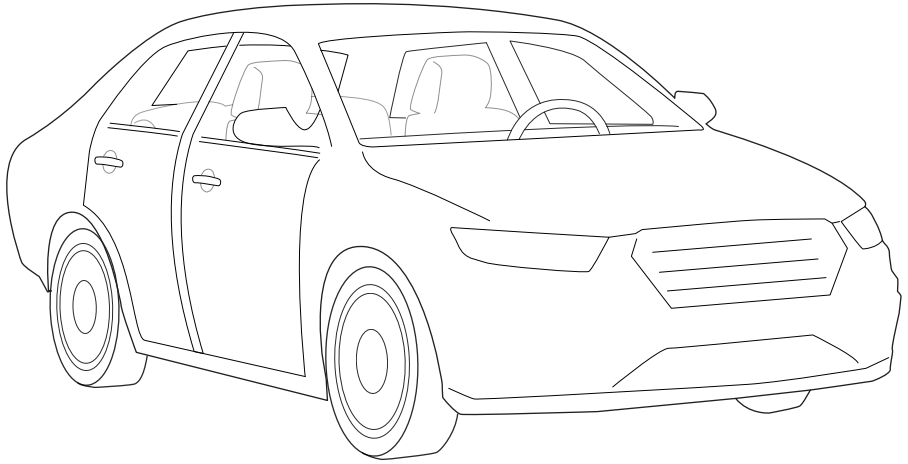

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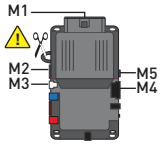

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- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED - GROUND (-) INPUT
- 12 GRAY/YELLOW
- 13 GREEN/RED
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK - KEY 2/3/4
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
HORN (-)
HOOD SWITCH ⚠2

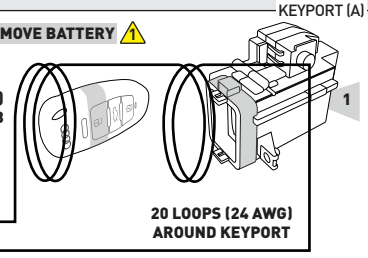
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

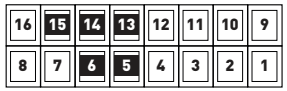
REMOVE BATTERY ⚠1

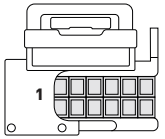
20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT



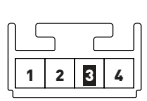


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



T001_W

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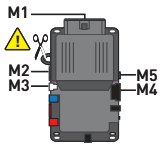


⚠ CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED
- 12 GRAY/YELLOW
- 13 GREEN/RED
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK - KEY 2/3/4
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT - KEY 1

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15

CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN

IGNITION (+) BLACK
12V (+) RED/BLACK

BRAKE (+) RED/BLACK - 03

HORN (-)
HOOD SWITCH ⚠2

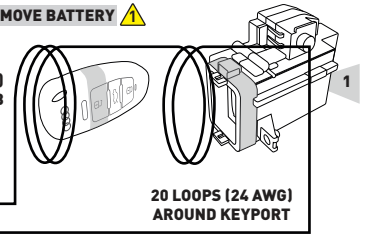
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1

20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



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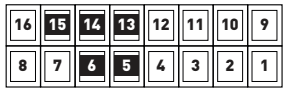
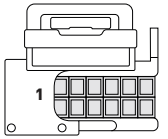


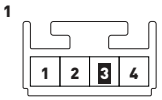


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



T001_W

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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2008-2016 AUDI A5 KEYPORT WITH PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

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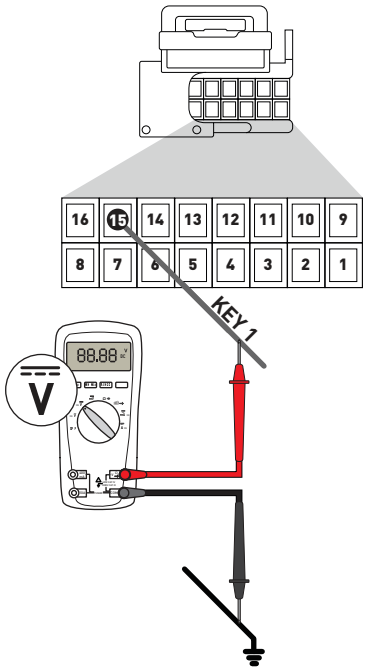
IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

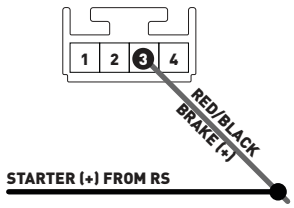
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

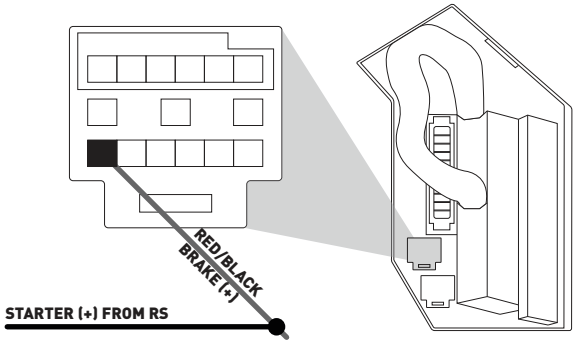
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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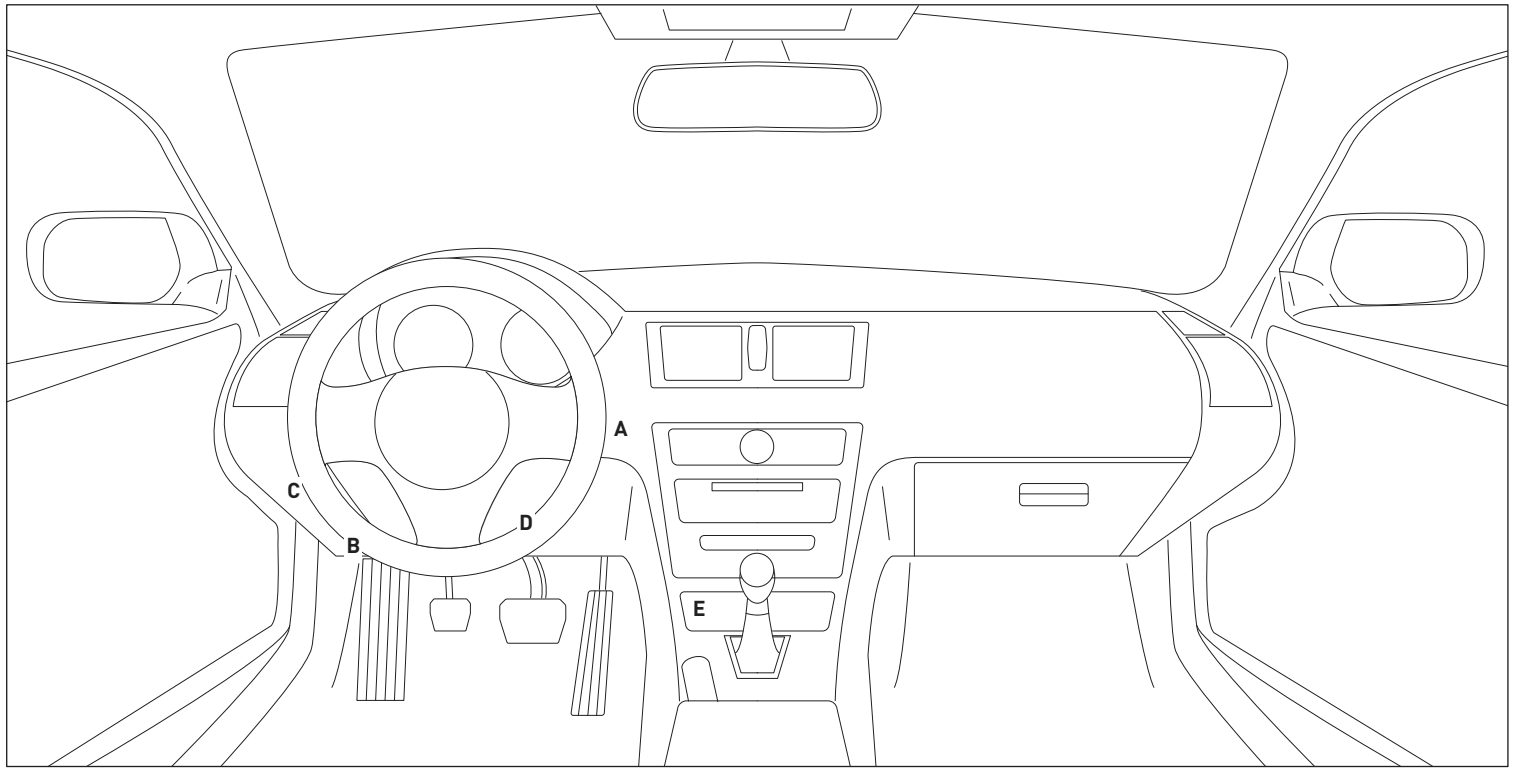

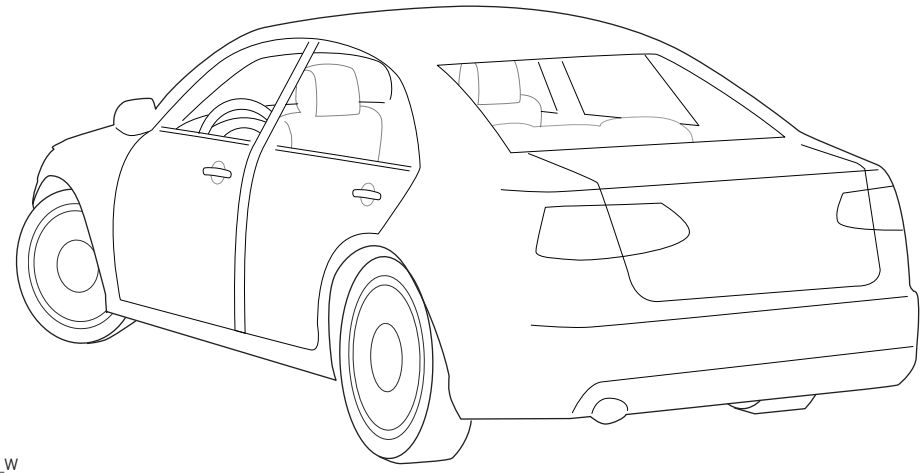

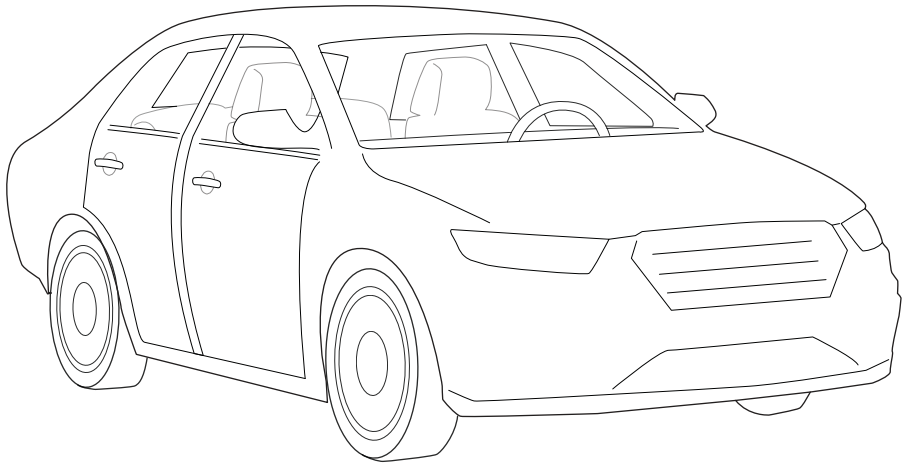

T002_W

U.S. Patent No. 8,856,780
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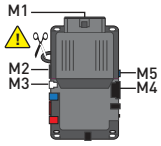

⚠1 CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

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IT WILL THEN BE RETURNED TO THE OWNER.

M1
01 ORANGE
02 RED
03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

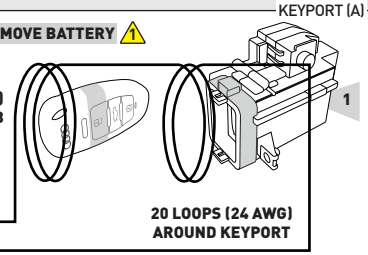
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



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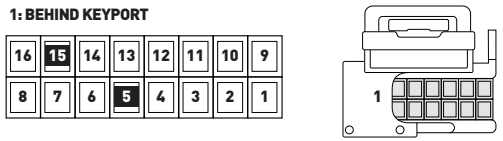
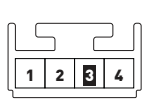


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

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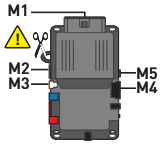

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07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

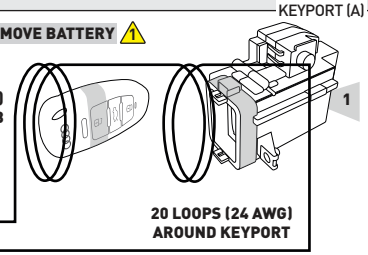
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

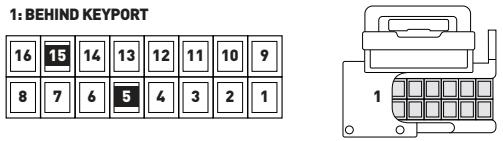
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

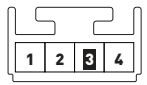


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

U.S. Patent No. 8,856,780
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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

U.S. Patent No. 8,856,780
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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

U.S. Patent No. 8,856,780
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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2009-2016 AUDI Q5 KEYPORT WITHOUT PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

U.S. Patent No. 8,856,780
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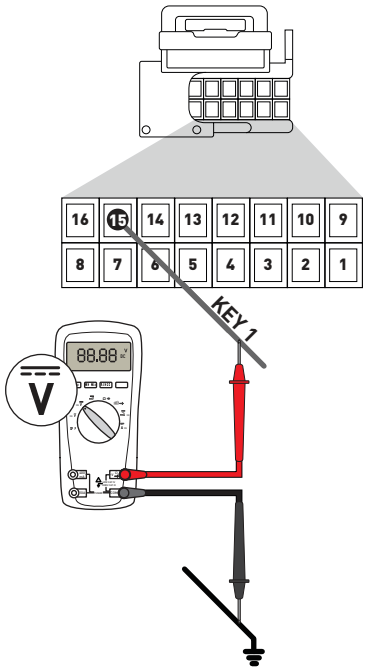
IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

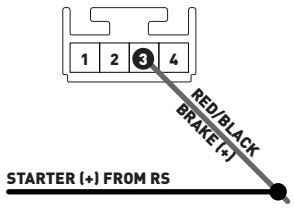
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

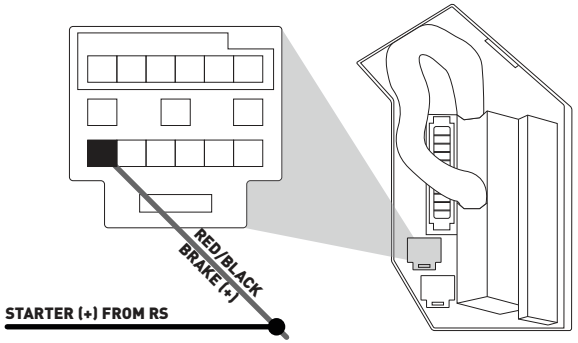
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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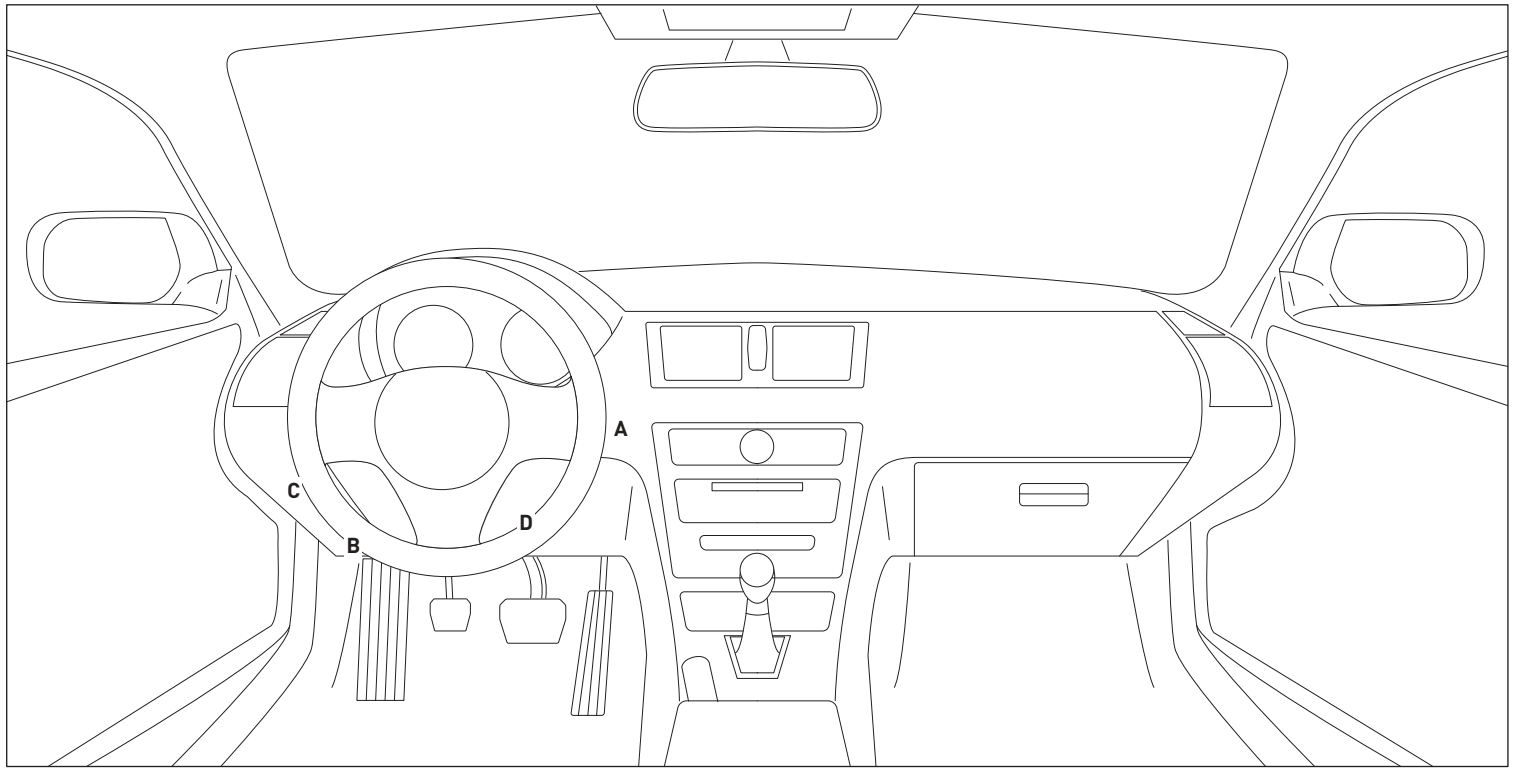

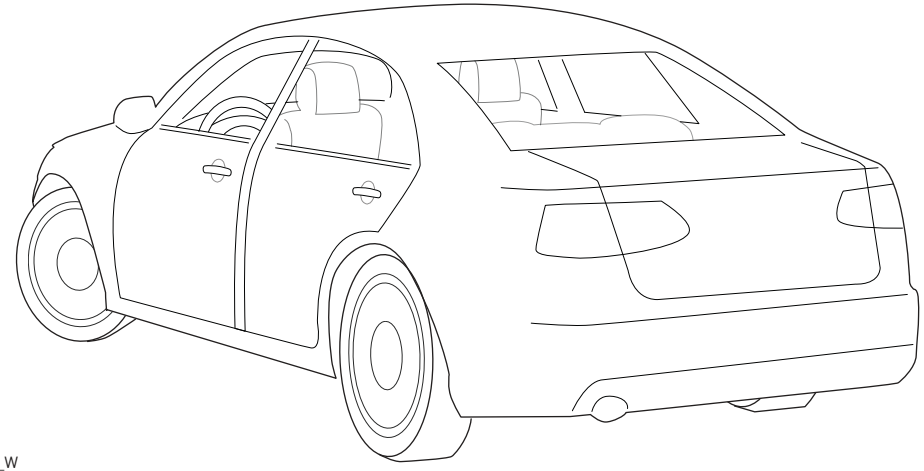

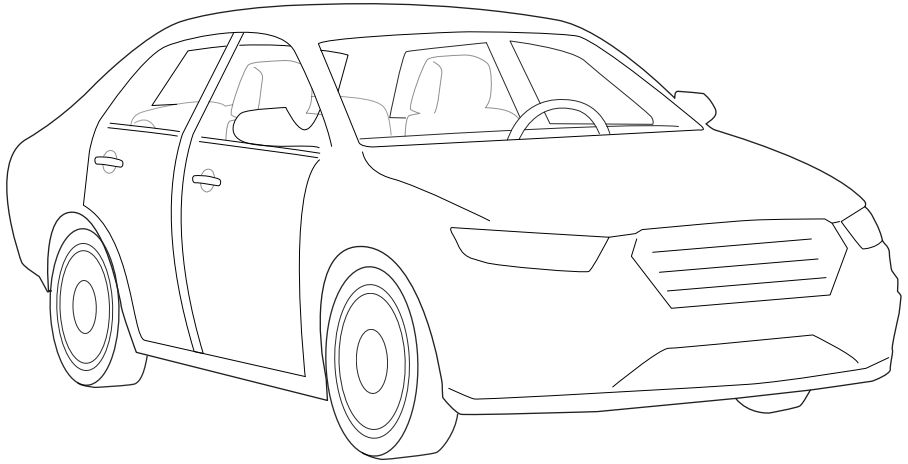

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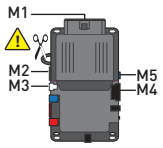


⚠ CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED - GROUND (-) INPUT
- 12 GRAY/YELLOW
- 13 GREEN/RED
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK - KEY 2/3/4
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
HORN (-)
HOOD SWITCH ⚠2

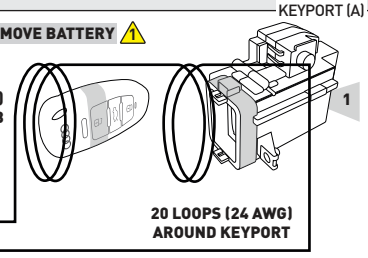
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

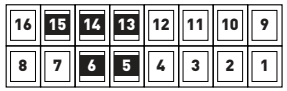
REMOVE BATTERY ⚠1

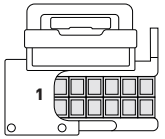
20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT





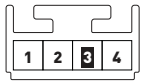
DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)

1



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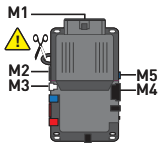

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M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED
- 12 GRAY/YELLOW
- 13 GREEN/RED
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK - KEY 2/3/4
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT - KEY 1

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15

CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN

IGNITION (+) BLACK
12V (+) RED/BLACK

BRAKE (+) RED/BLACK - 03

HORN (-)
HOOD SWITCH ⚠2

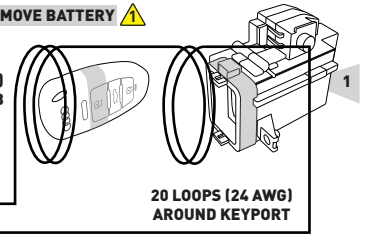
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

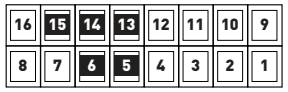
REMOVE BATTERY ⚠1

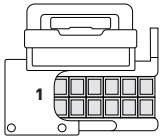
20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT





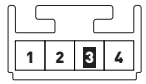
DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)

1



T001_W

U.S. Patent No. 8,856,780
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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

U.S. Patent No. 8,856,780
Automotive Data Solutions Inc. © 2016

>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

U.S. Patent No. 8,856,780
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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2009-2016 AUDI Q5 KEYPORT WITH PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

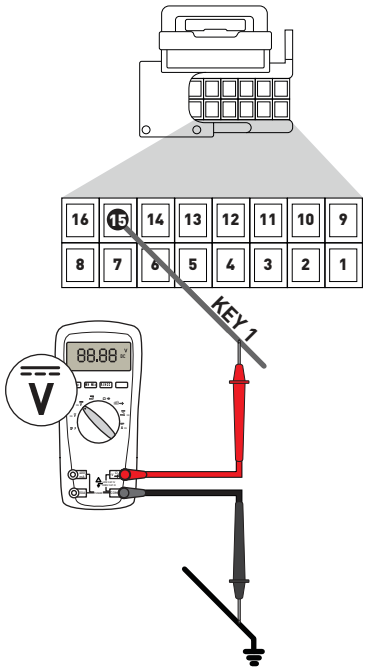
ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

U.S. Patent No. 8,856,780
Automotive Data Solutions Inc. © 2016

IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

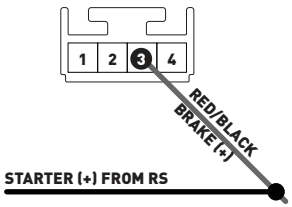
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

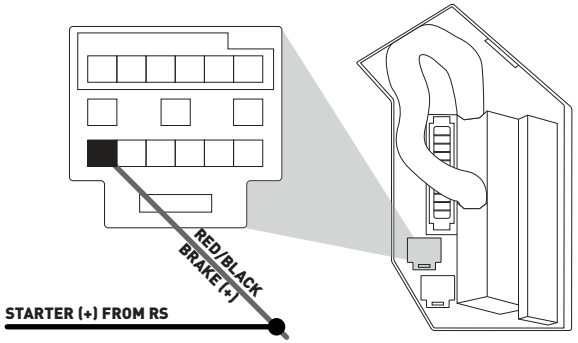
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



U.S. Patent No. 8,856,780
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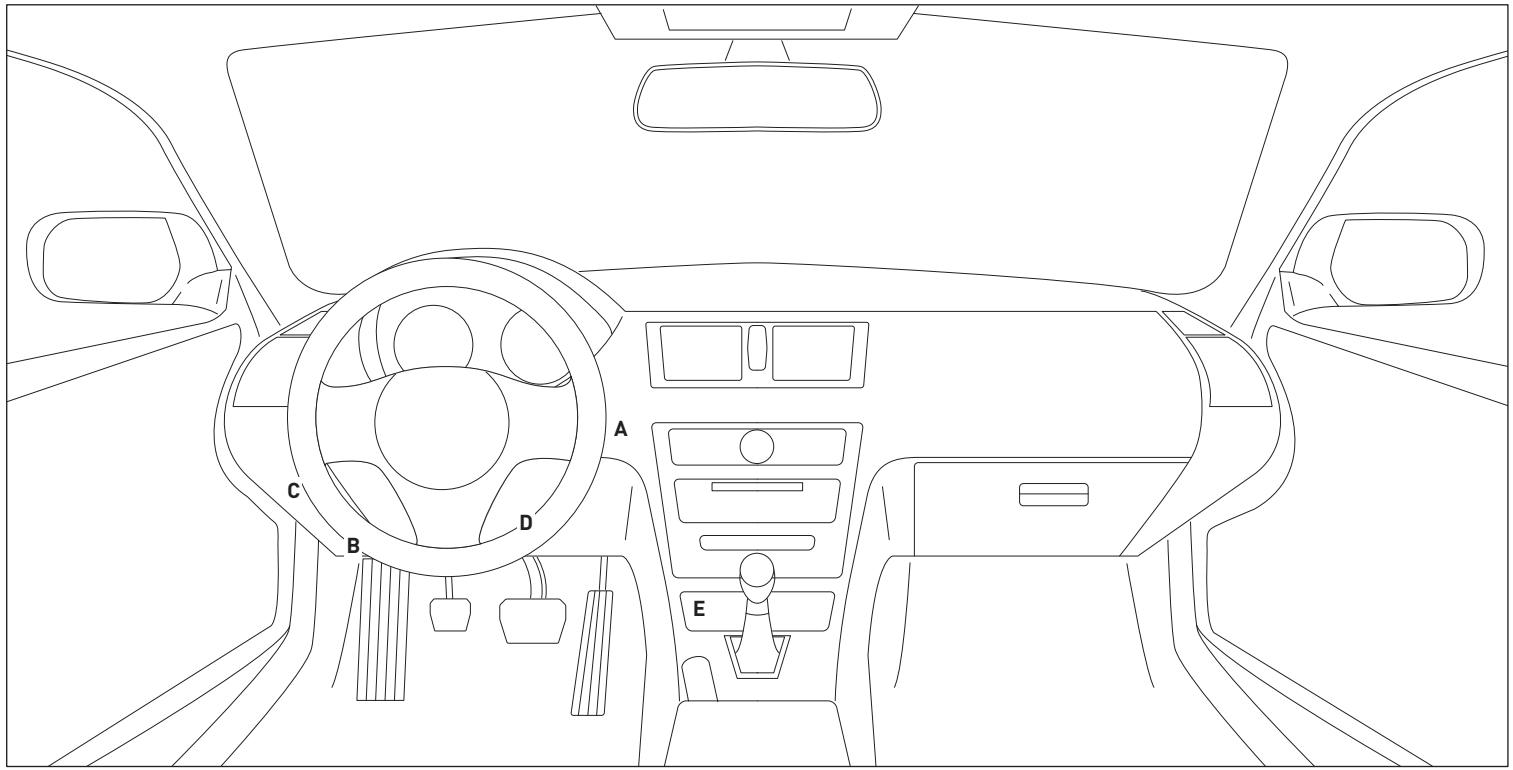

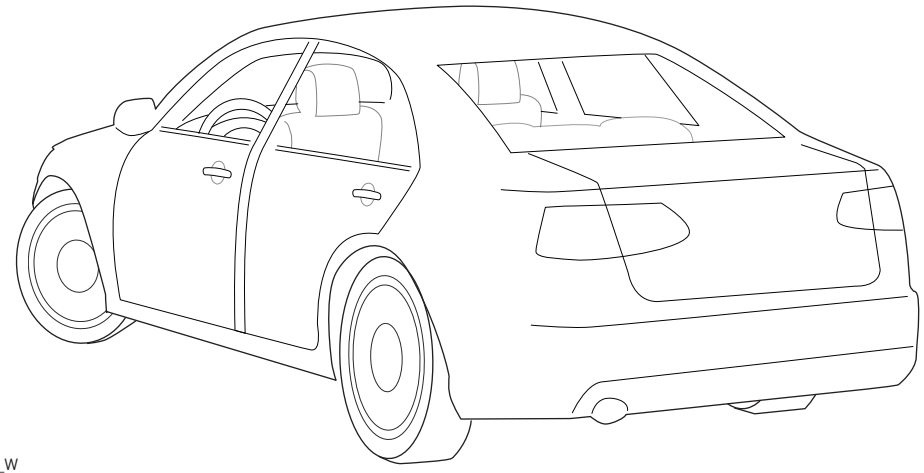

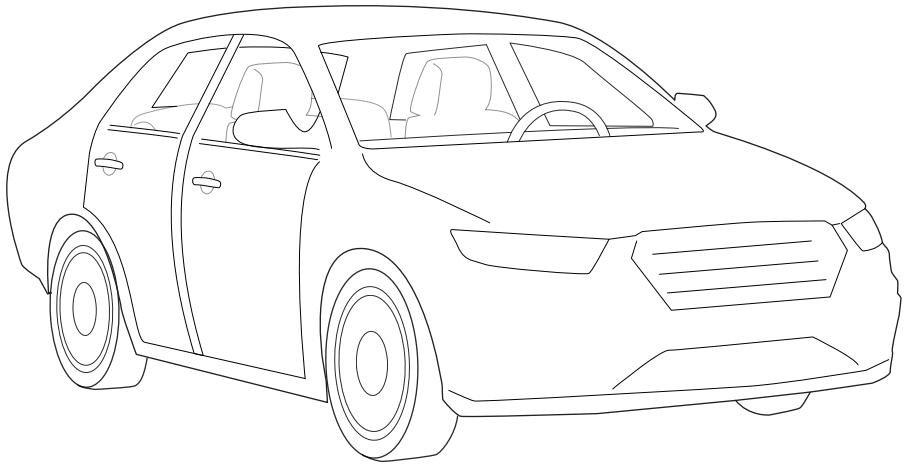

T002_W

U.S. Patent No. 8,856,780
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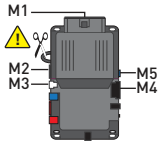


⚠1 CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
01 ORANGE
02 RED
03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

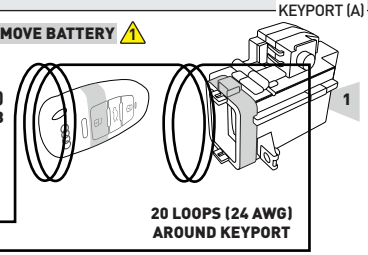
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

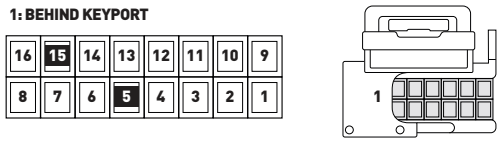
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

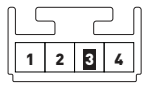


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

U.S. Patent No. 8,856,780
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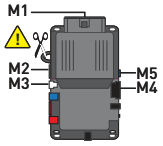

⚠ CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

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02 RED
03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
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03 RED/WHITE•BLACK DOT
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05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

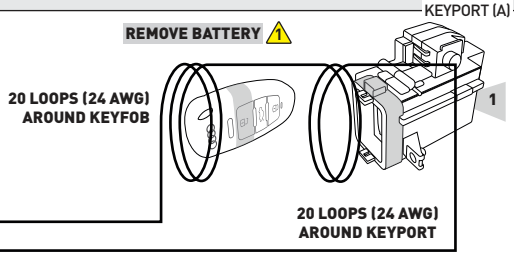
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

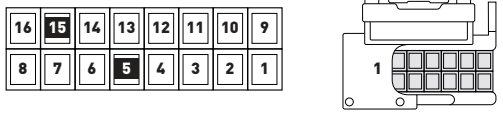
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

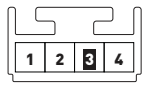


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

U.S. Patent No. 8,856,780
Automotive Data Solutions Inc. © 2016

01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

U.S. Patent No. 8,856,780
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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

U.S. Patent No. 8,856,780
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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2013-2016 AUDI RS5 KEYPORT WITH PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

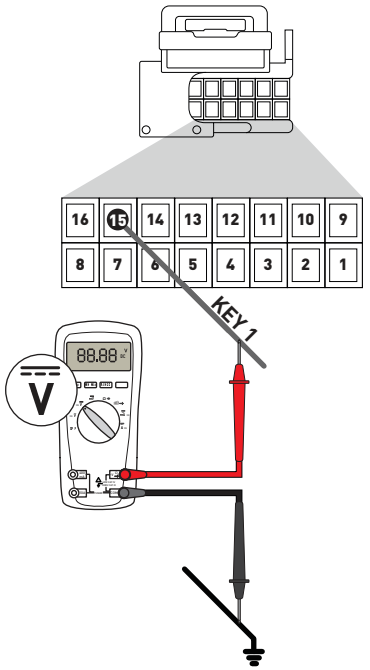
ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

U.S. Patent No. 8,856,780
Automotive Data Solutions Inc. © 2016

IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

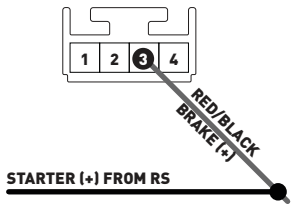
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

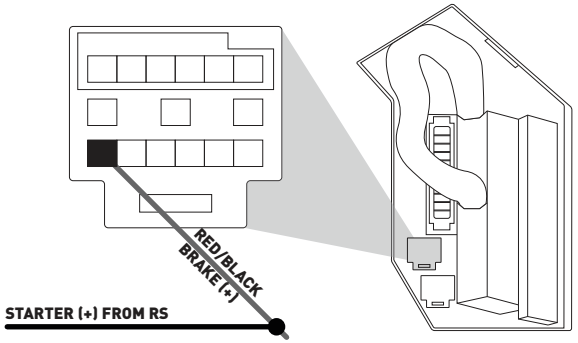
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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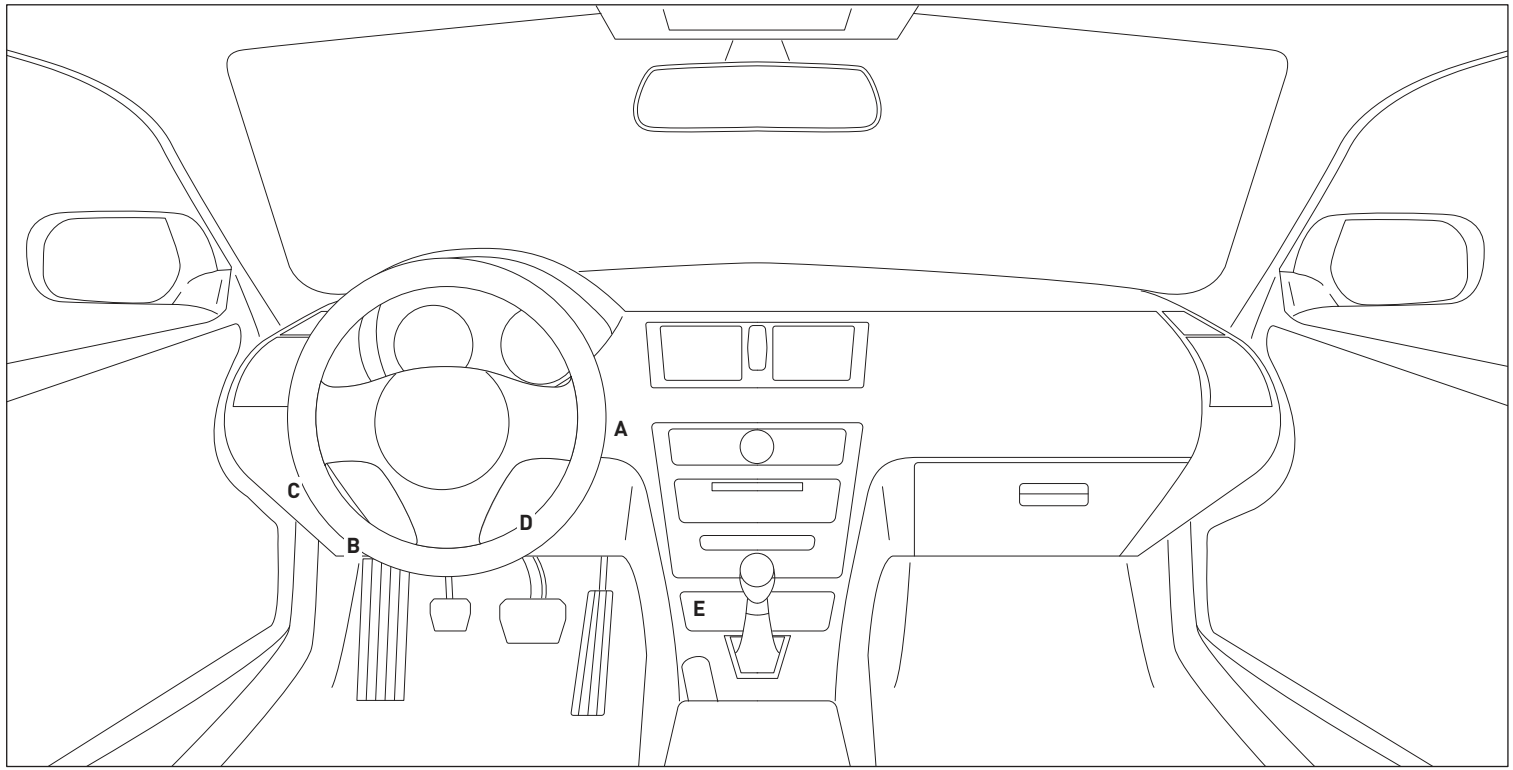

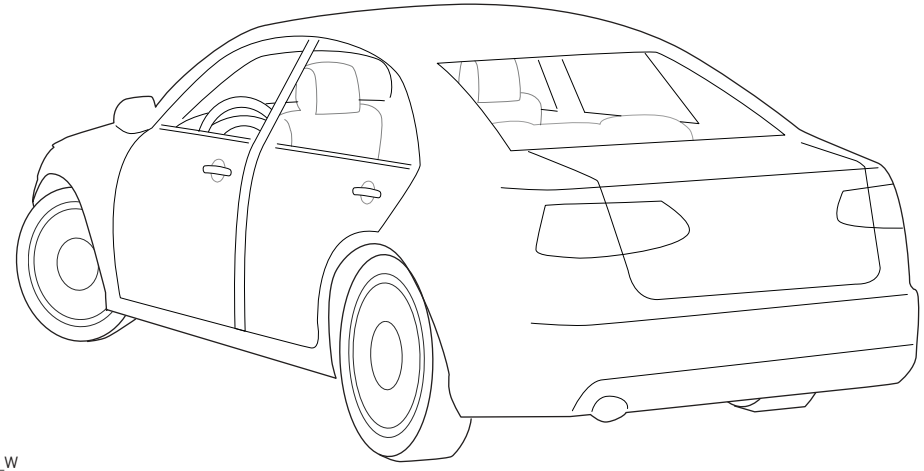

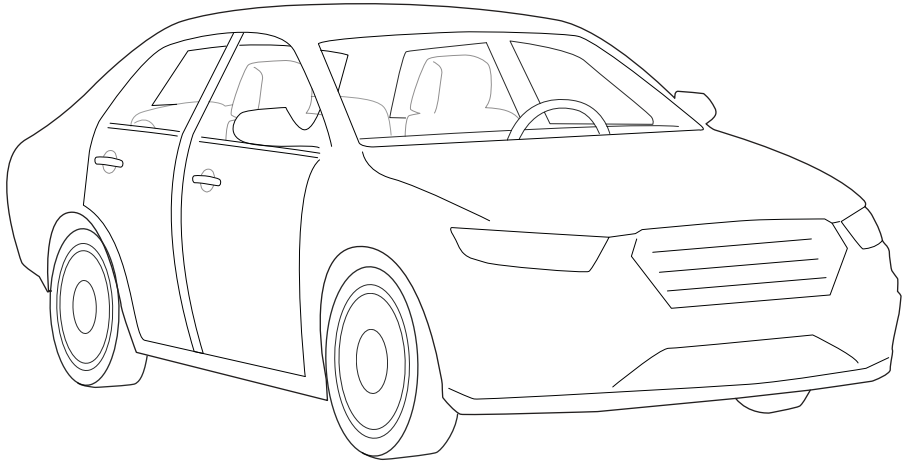

T002_W

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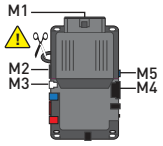

⚠1 CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

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ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
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IT WILL THEN BE RETURNED TO THE OWNER.

M1
01 ORANGE
02 RED
03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

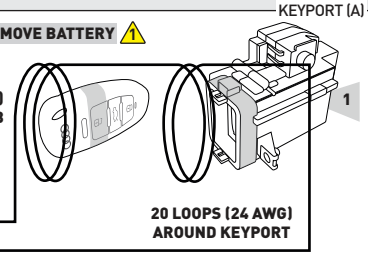
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

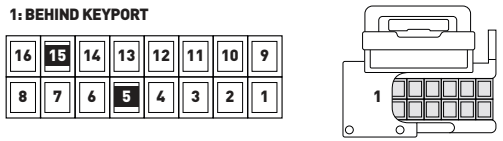
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

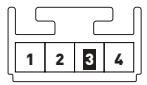


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

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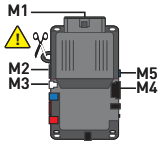

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02 RED
03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

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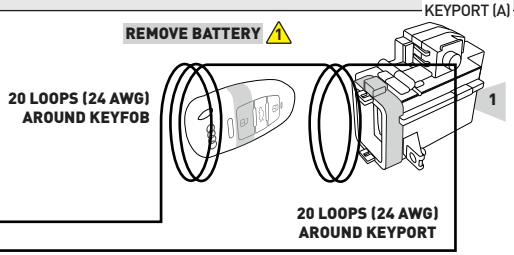
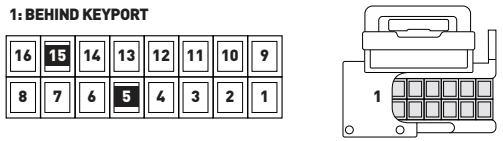


1: BEHIND KEYPORT

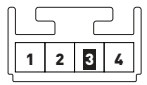


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2009-2016 AUDI S4 SEDAN KEYPORT WITHOUT PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

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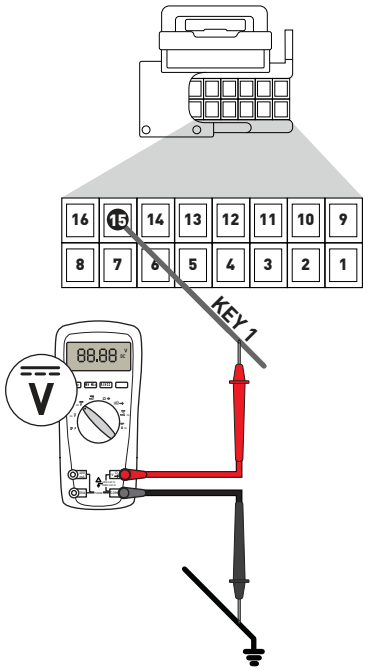
IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

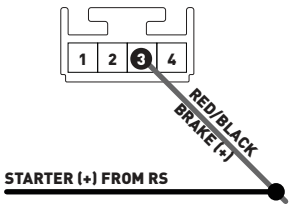
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

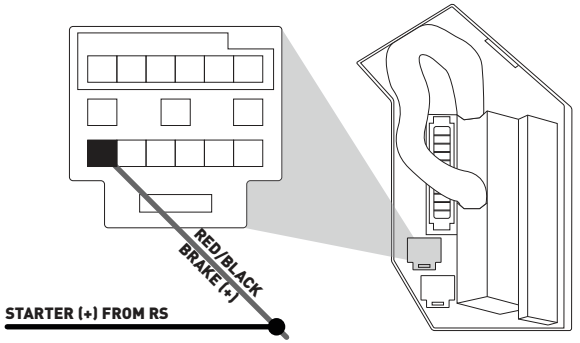
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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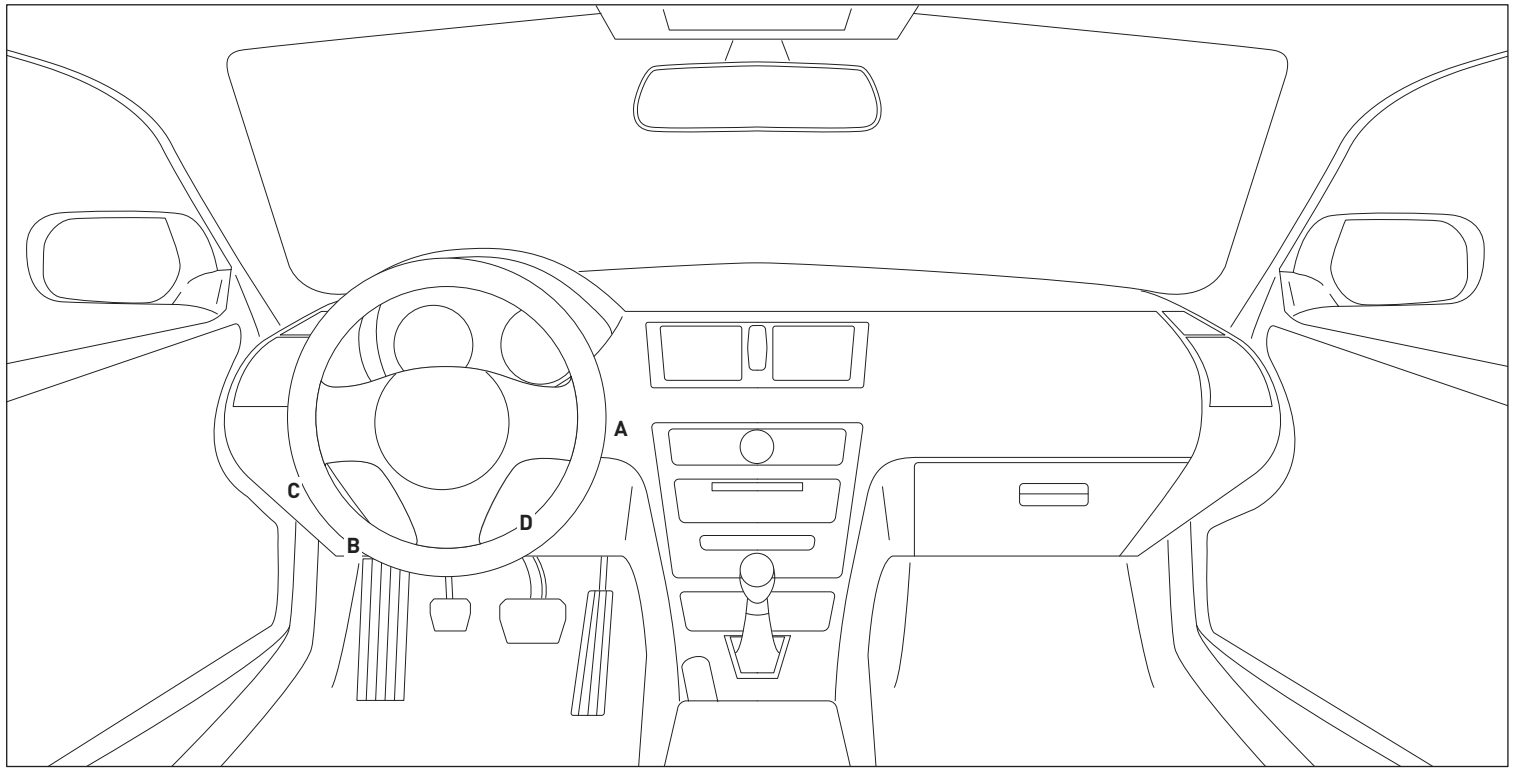

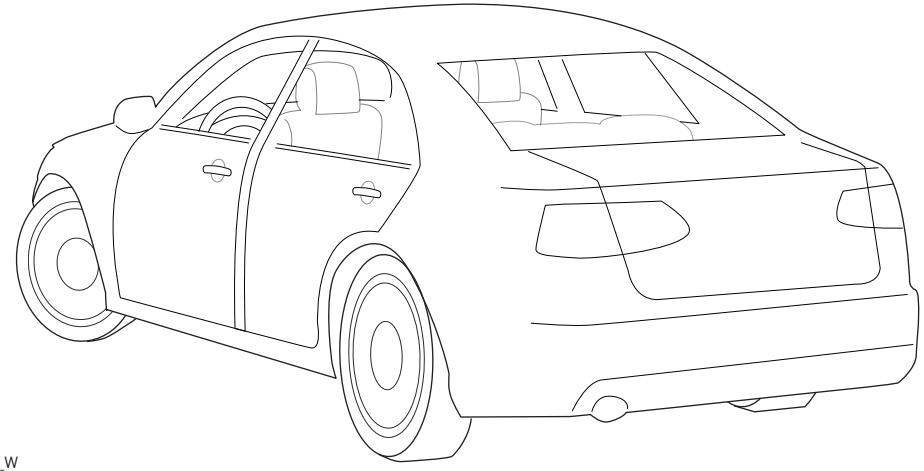

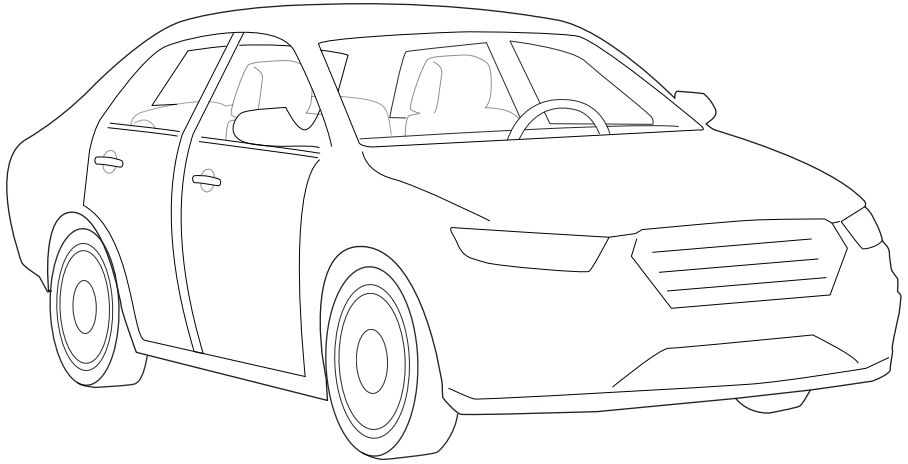

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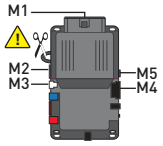

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M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED - GROUND (-) INPUT
- 12 GRAY/YELLOW
- 13 GREEN/RED
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK - KEY 2/3/4
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
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HOOD SWITCH ⚠2

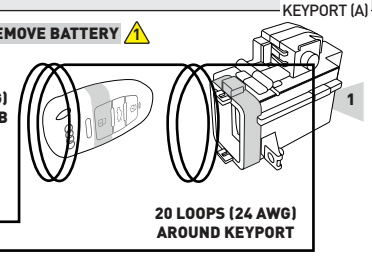
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

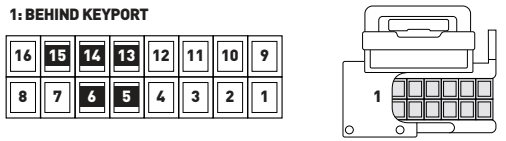
REMOVE BATTERY ⚠1

20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT

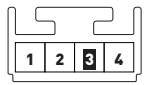


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



T001_W

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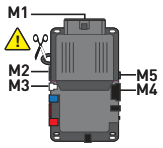

⚠1 CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED
- 12 GRAY/YELLOW
- 13 GREEN/RED
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK - KEY 2/3/4
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT - KEY 1

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15

CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN

IGNITION (+) BLACK
12V (+) RED/BLACK

BRAKE (+) RED/BLACK - 03

HORN (-)
HOOD SWITCH ⚠2

⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

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REMOVE BATTERY ⚠1

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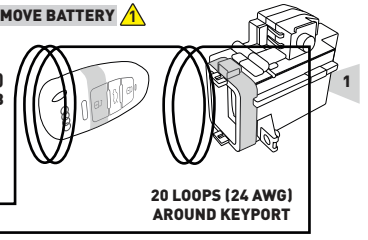
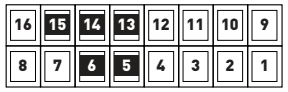
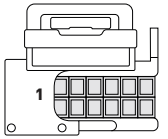


1: BEHIND KEYPORT





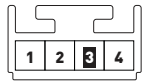
DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)

1



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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

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	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2009-2016 AUDI S4 SEDAN KEYPORT WITH PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

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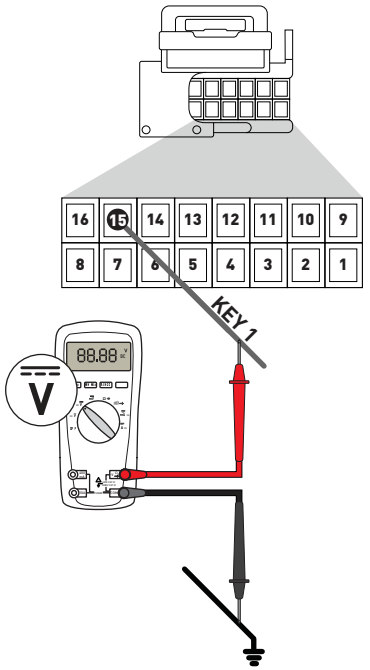
IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

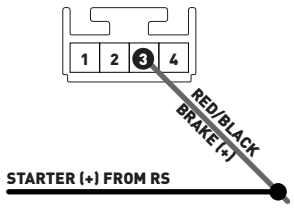
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

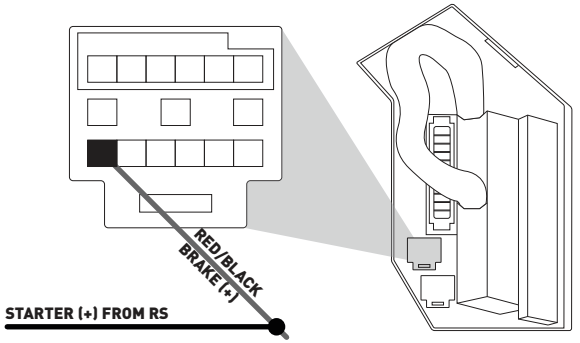
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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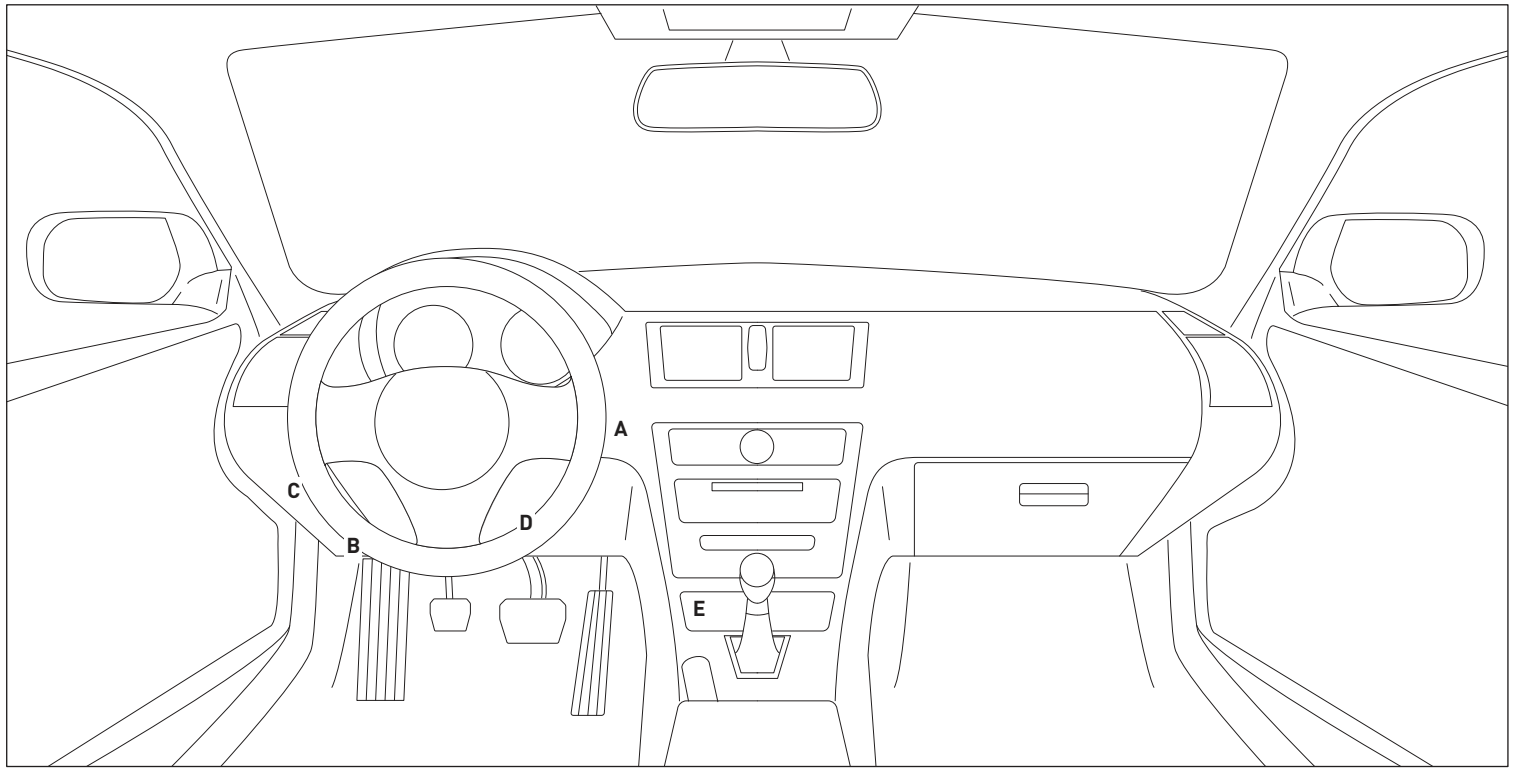

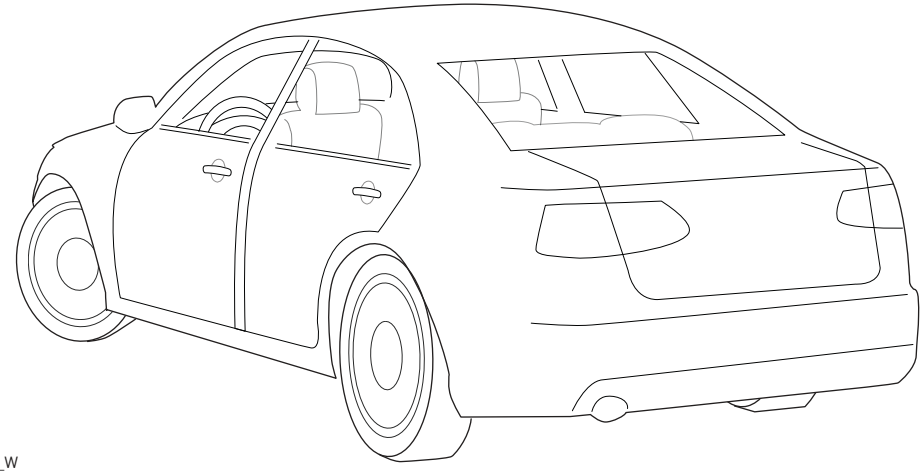

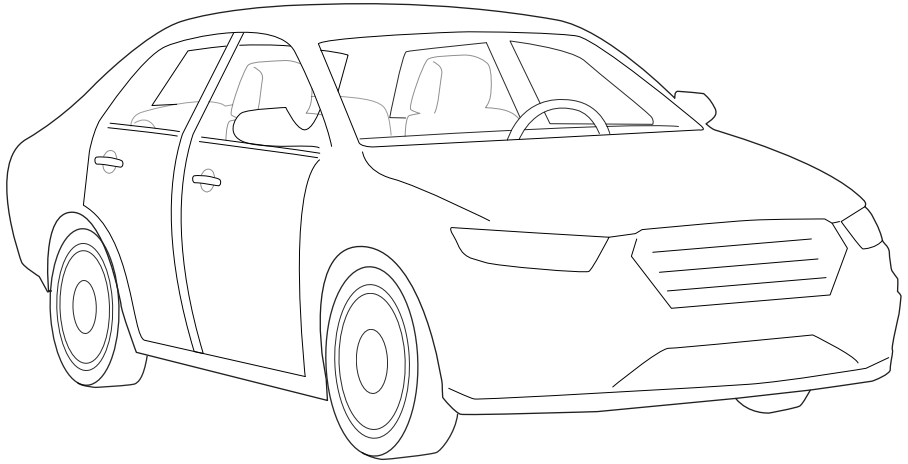

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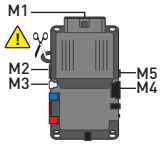

⚠1 CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

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M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED - GROUND (-) INPUT
- 12 GRAY/YELLOW
- 13 GREEN/RED - PTS (-) OUTPUT
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1

20 LOOPS (24 AWG) AROUND KEYFOB

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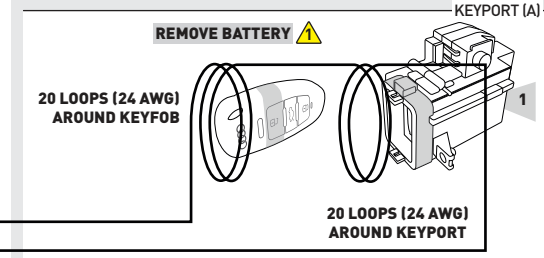

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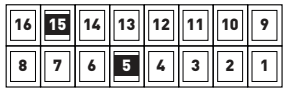

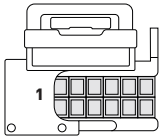

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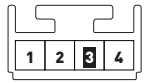
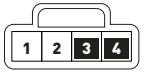
1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)



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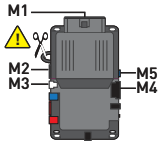

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03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
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06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

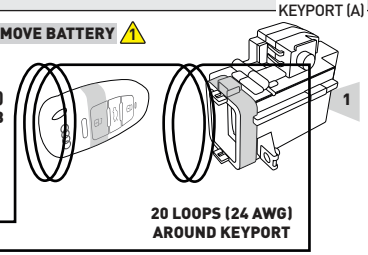
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

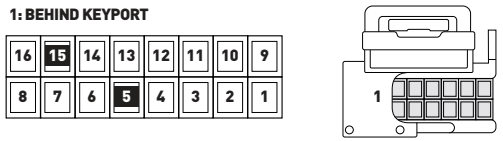
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

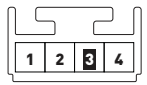


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

U.S. Patent No. 8,856,780
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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

U.S. Patent No. 8,856,780
Automotive Data Solutions Inc. © 2016

>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

U.S. Patent No. 8,856,780
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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2008-2016 AUDI S5 KEYPORT WITHOUT PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

U.S. Patent No. 8,856,780
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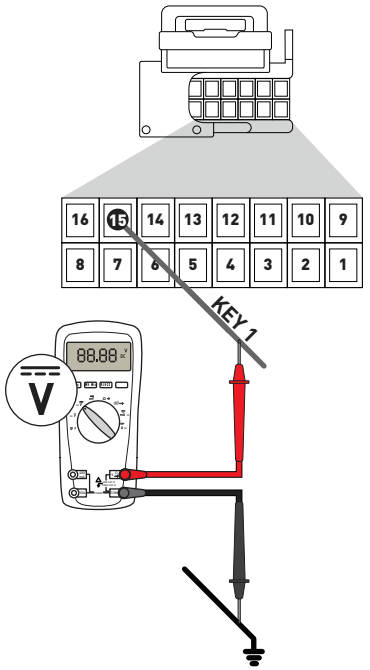
IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

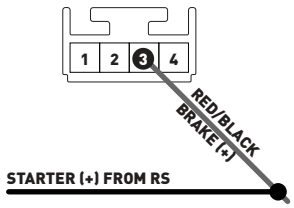
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

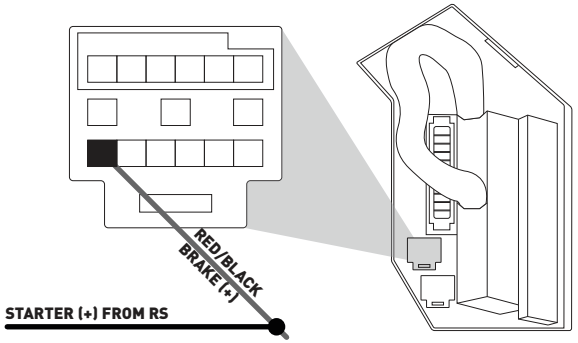
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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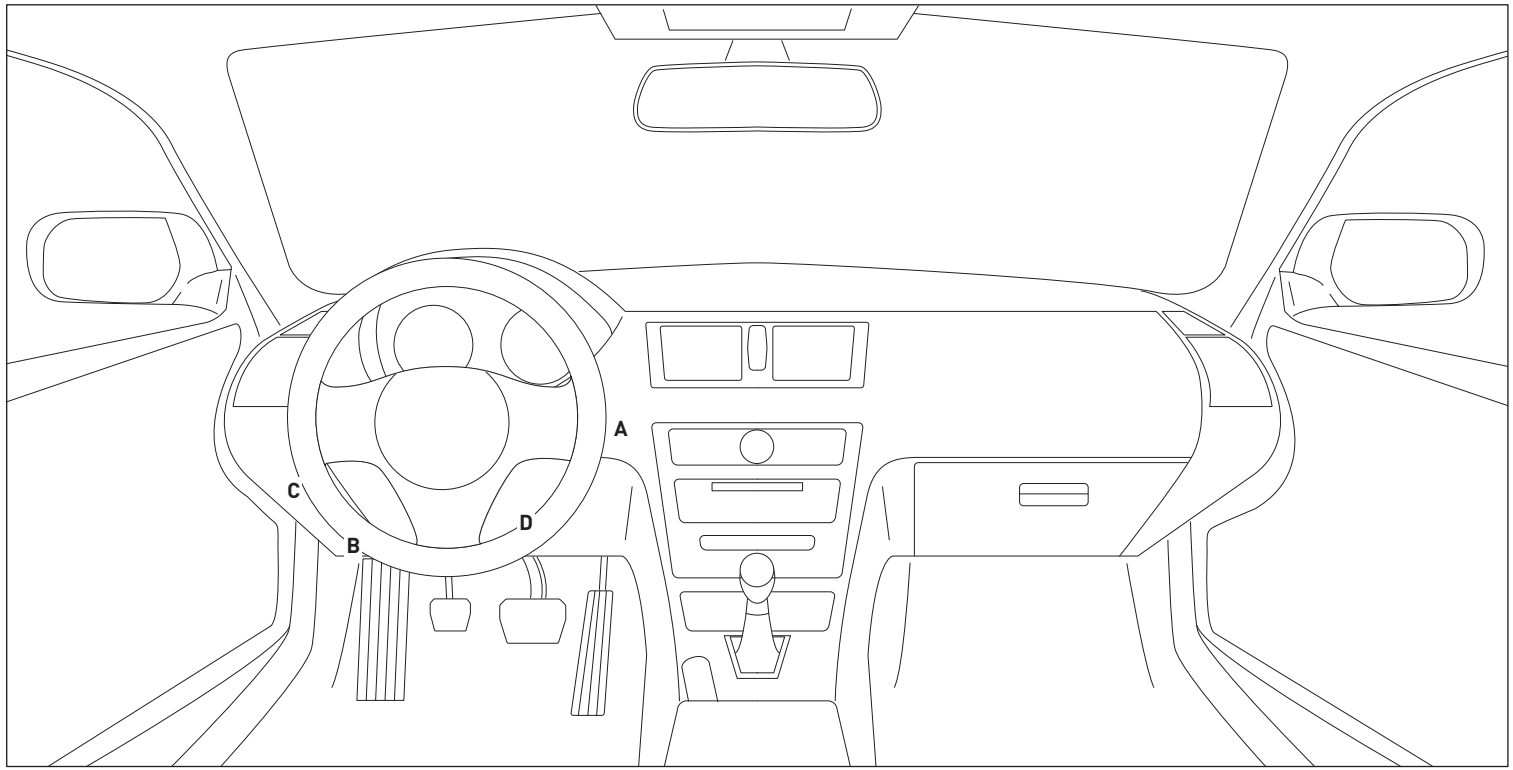

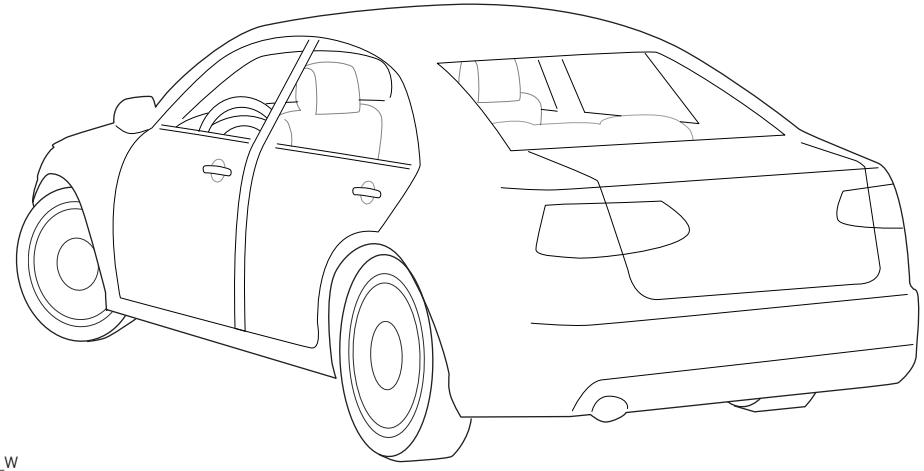

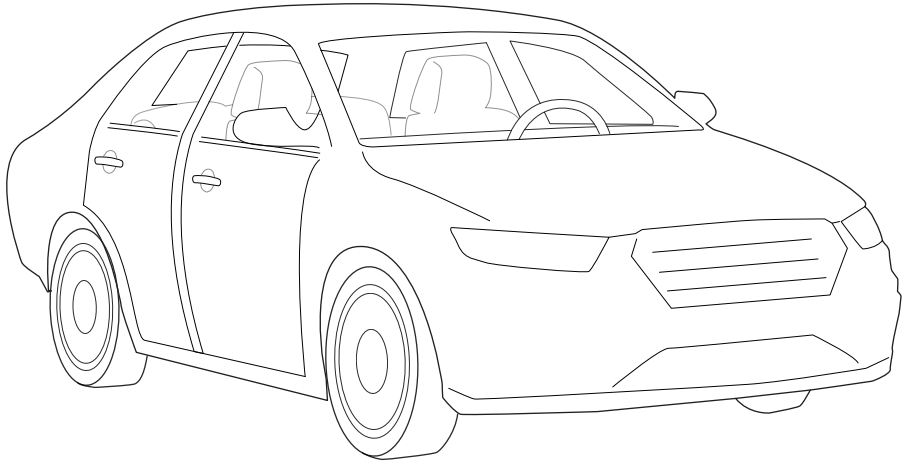

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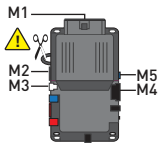


⚠ CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED - GROUND (-) INPUT
- 12 GRAY/YELLOW
- 13 GREEN/RED
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK - KEY 2/3/4
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
HORN (-)
HOOD SWITCH ⚠2

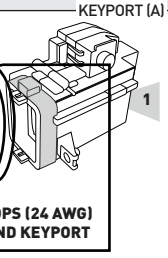
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1

20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



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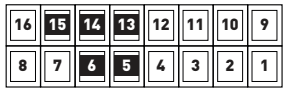
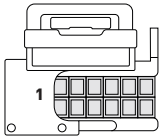


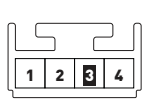


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



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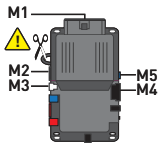

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03 PURPLE
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05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED
12 GRAY/YELLOW
13 GREEN/RED
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK - KEY 2/3/4
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT - KEY 1

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15

CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN

IGNITION (+) BLACK
12V (+) RED/BLACK

BRAKE (+) RED/BLACK - 03

HORN (-)
HOOD SWITCH ⚠2

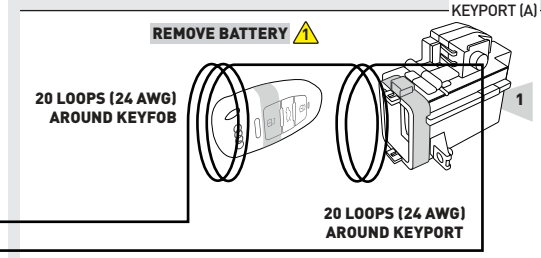
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

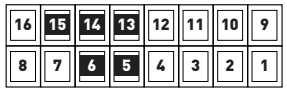
REMOVE BATTERY ⚠1

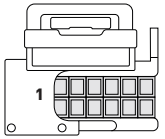
20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT



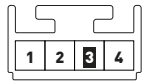


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



T001_W

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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

U.S. Patent No. 8,856,780
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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

U.S. Patent No. 8,856,780
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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2008-2016 AUDI S5 KEYPORT WITH PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

U.S. Patent No. 8,856,780
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IMPORTANT: VOLTAGE TEST

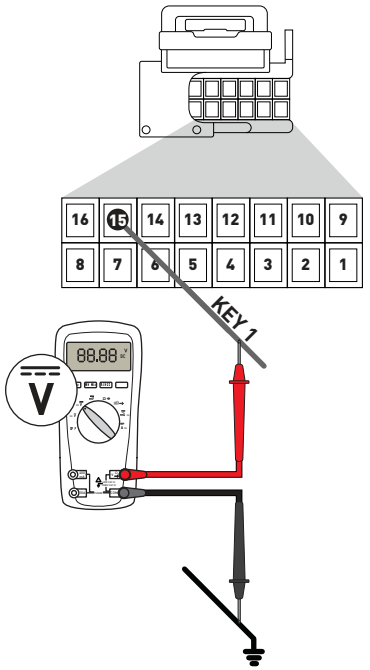
To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.

HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

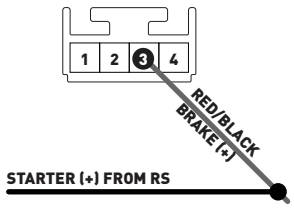


IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

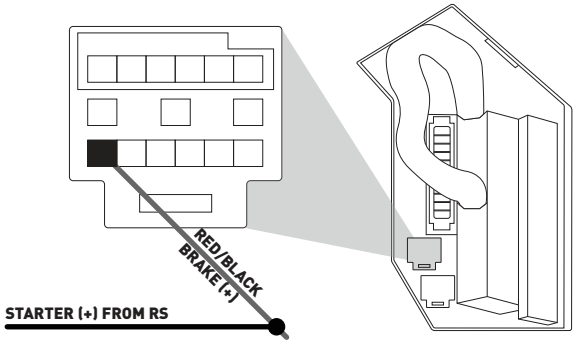
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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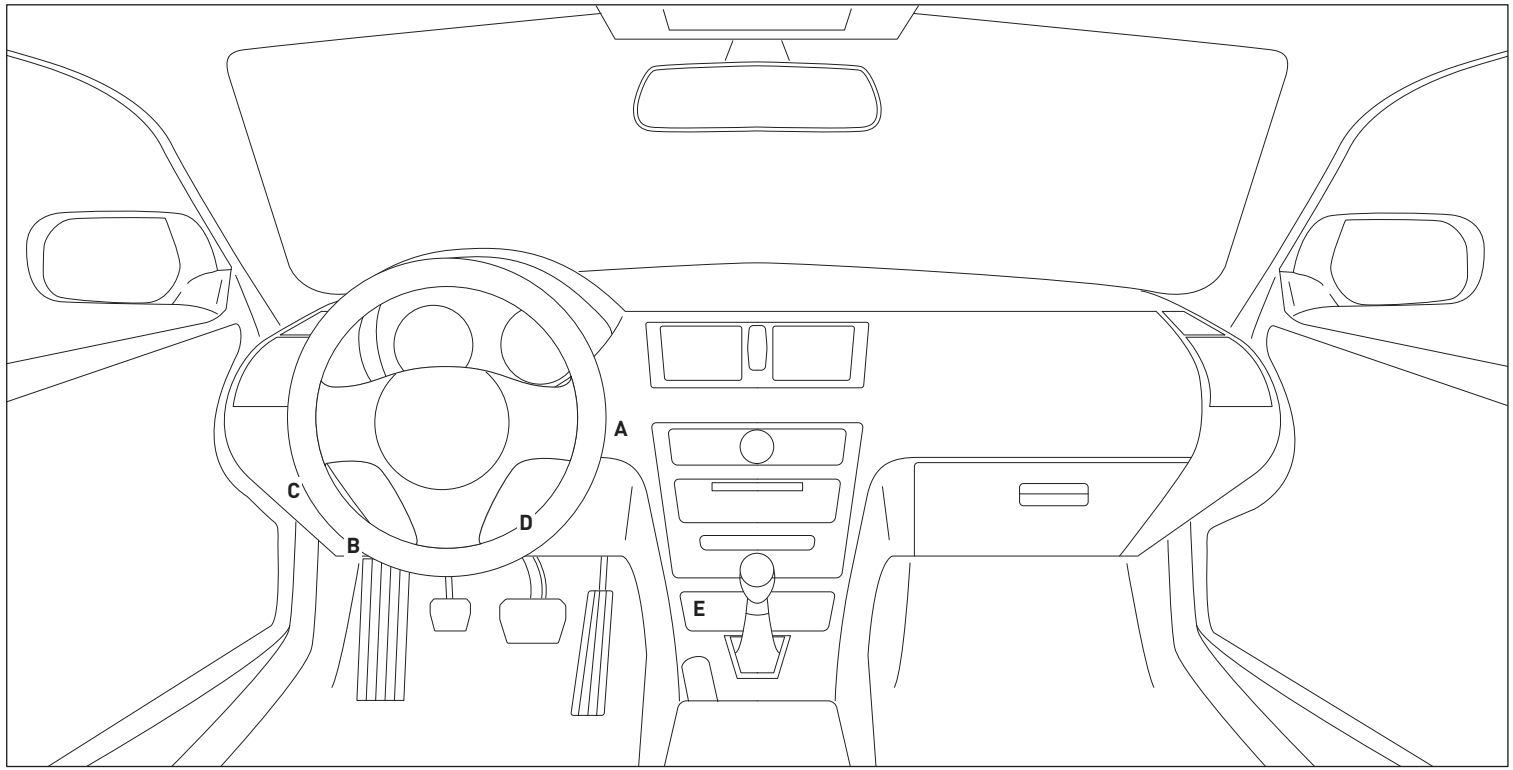

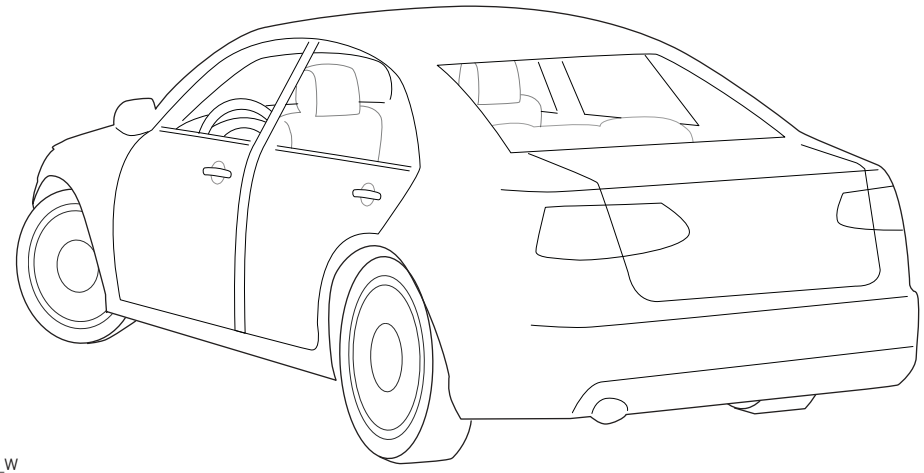

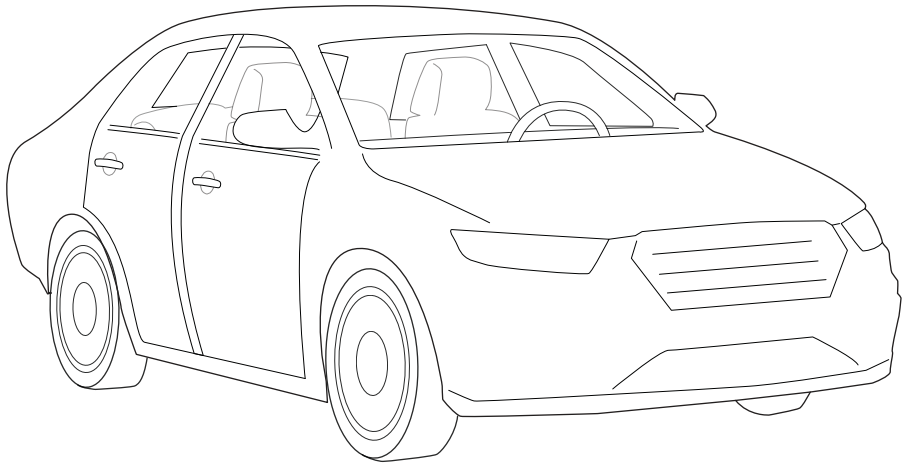

T002_W

U.S. Patent No. 8,856,780
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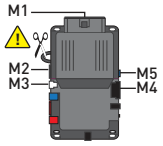


⚠1 CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
01 ORANGE
02 RED
03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

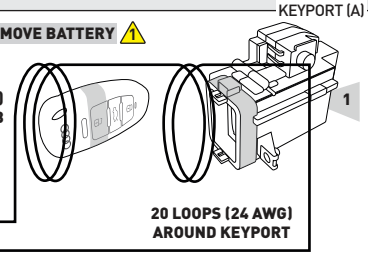
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

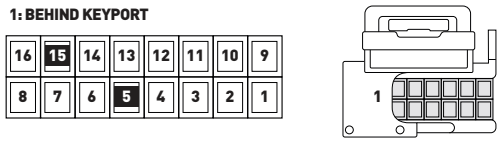
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

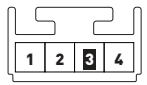


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

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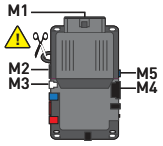

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03 PURPLE
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05 PINK
06 WHITE
07 RED
08 BLACK

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01 GREEN•BLACK DOT
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03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

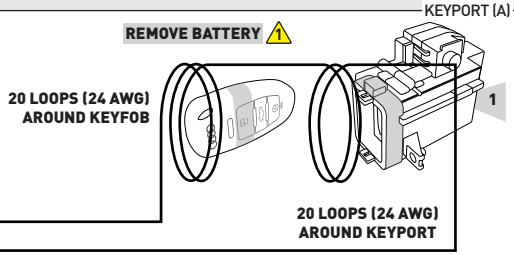
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

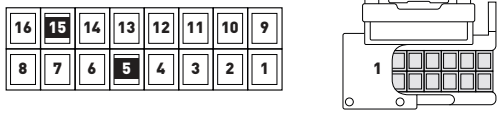
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

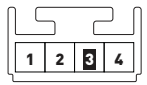


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

U.S. Patent No. 8,856,780
Automotive Data Solutions Inc. © 2016

01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

U.S. Patent No. 8,856,780
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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

U.S. Patent No. 8,856,780
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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
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☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2009-2016 AUDI SQ5 KEYPORT WITHOUT PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

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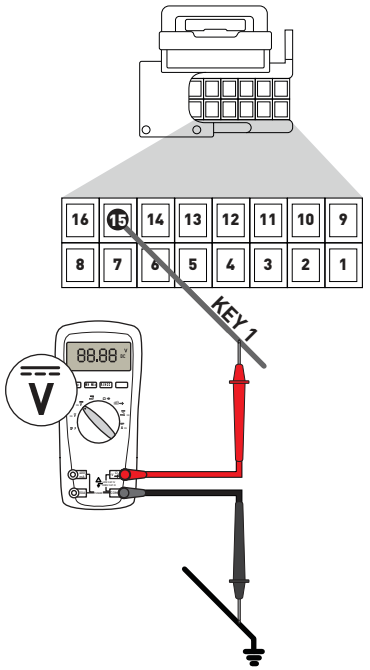
IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

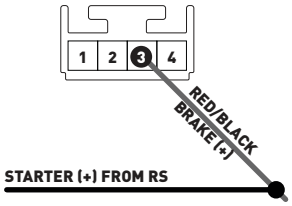
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

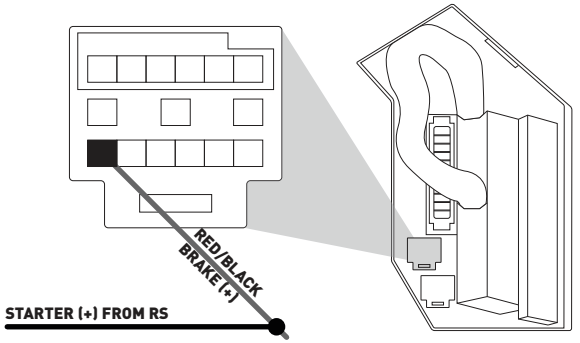
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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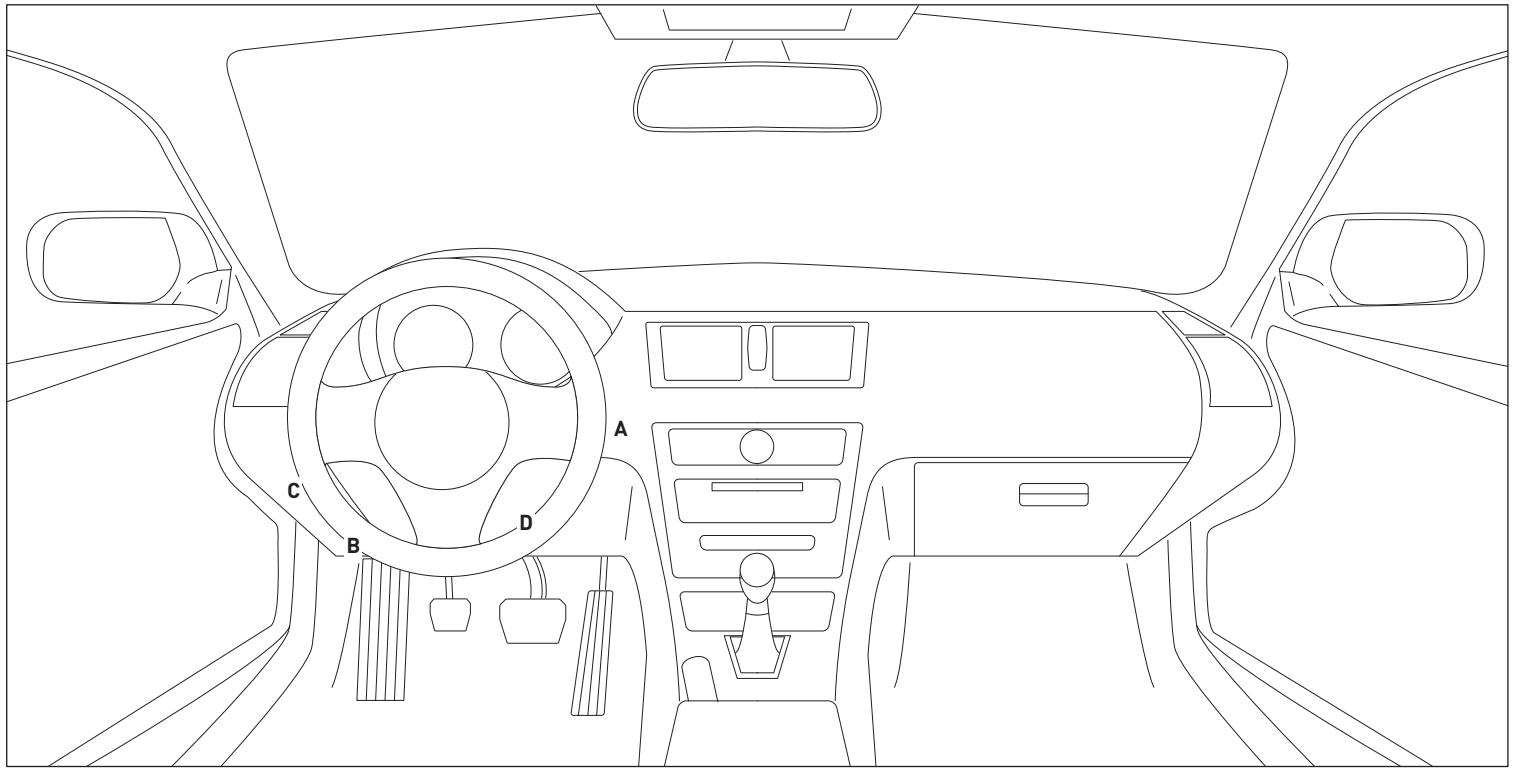

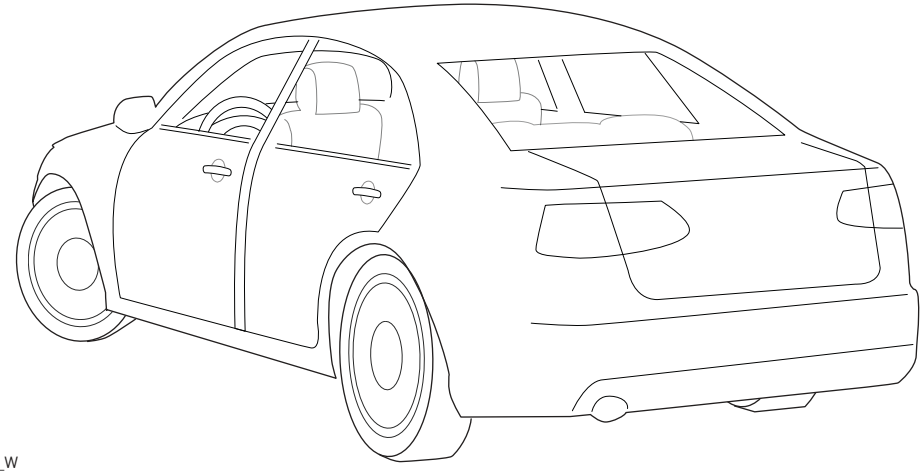

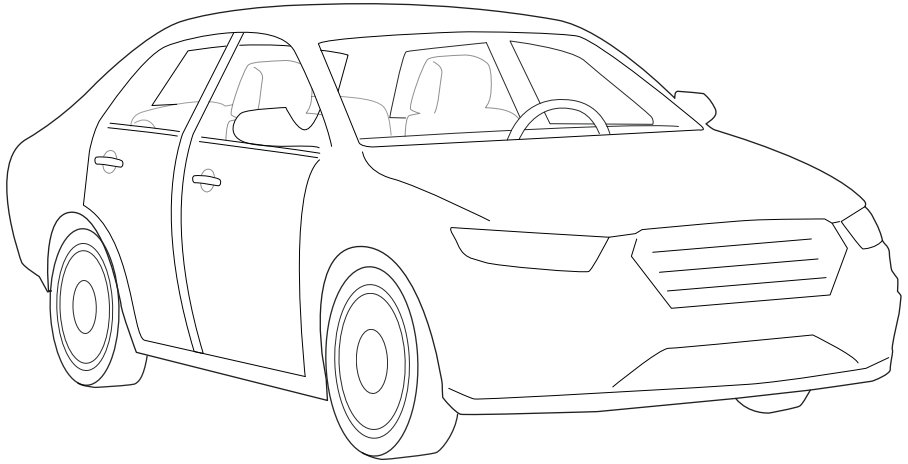

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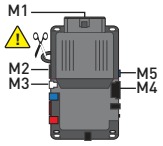


⚠ CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
01 ORANGE
02 RED
03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK - KEY 2/3/4
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
HORN (-)
HOOD SWITCH ⚠2

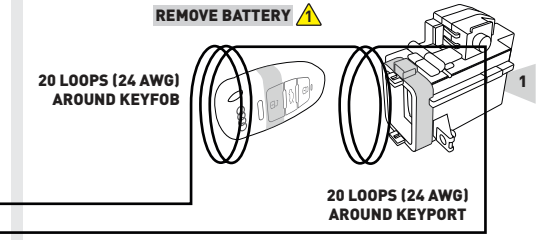
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

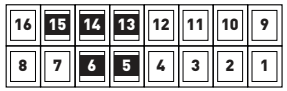
REMOVE BATTERY ⚠1

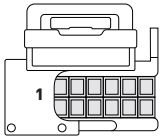
20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT



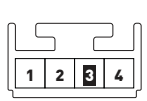


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



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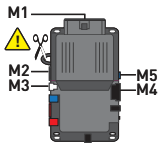

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M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
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- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED
- 12 GRAY/YELLOW
- 13 GREEN/RED
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK - KEY 2/3/4
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- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT - KEY 1

KEY 5 (-) BLACK/YELLOW - 05
KEY 4 (-) BLACK OR BLACK/BLUE - 06
KEY 3 (-) GRAY/BLUE - 13
KEY 2 (-) BLACK/RED - 14
KEY 1 (+) GRAY/YELLOW - 15

CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN

IGNITION (+) BLACK
12V (+) RED/BLACK

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⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

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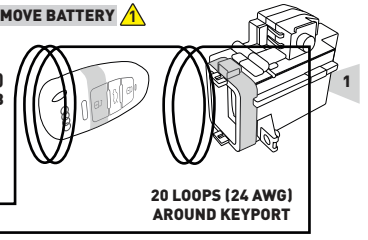
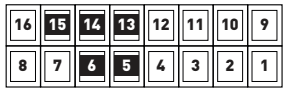
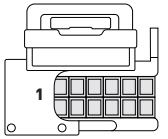
20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT





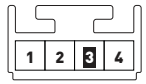
DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)

1



T001_W

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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

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	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.

INSTALL GUIDE

2009-2016 AUDI SQ5 KEYPORT WITH PTS AT

DOCUMENT NUMBER

REVISION DATE
20161109

FIRMWARE
ADS-RSD-VW2-[HC3452A]

HARDWARE
HC3452A

ACCESSORIES
ADS-USB (OPTIONAL)
ADS-WLM-AN1/ADS-WLM-AP1 (OPTIONAL)
DRONE MOBILE DR-2000 (OPTIONAL)
COMPATIBLE RF-KIT (OPTIONAL)

NOTICE
The manufacturer will accept no responsability for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

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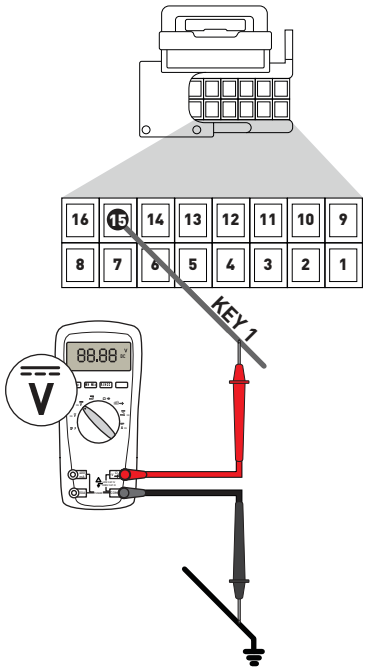
IMPORTANT: VOLTAGE TEST

To determine which install type is required for your vehicle, it is mandatory to perform a voltage test on the KEY 1 wire located at pin 15 of the keyport connector. Use the following procedure to test your wire.



HOW TO TEST VOLTAGE ON A WIRE:

Set the Digital Multimeter (DMM) to DC volts.
Connect the BLACK test probe to Common (-) input.
Connect the RED test probe to Voltage (+) input.
Put the BLACK test probe tip on ground (-).
Put the RED test probe tip on the wire you wish to test.
Insert the key into the keyport and turn the ignition ON.

If your DMM reads 0 volts with ignition OFF and 0 volts with ignition ON:
Use wiring diagram 2 . (without cut)

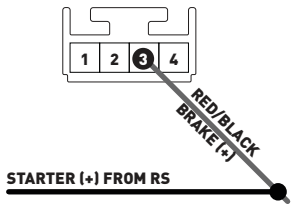
If your DMM reads 0 volts with ignition OFF and 12 volts with ignition ON:
Use wiring diagram 1 . (with cut)

IMPORTANT: STARTER WIRE

STARTER WIRE CONNECTION FOR VEHICLES WITH AUTOMATIC TRANSMISSION.

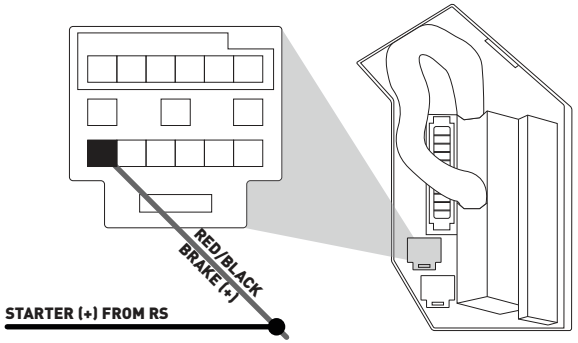
Black connector at brake switch under the dashboard, near the brake pedal.

(IF PRESENT)



OR

At the ECU under the wiper cowl, located under the hood, in the engine compartement.



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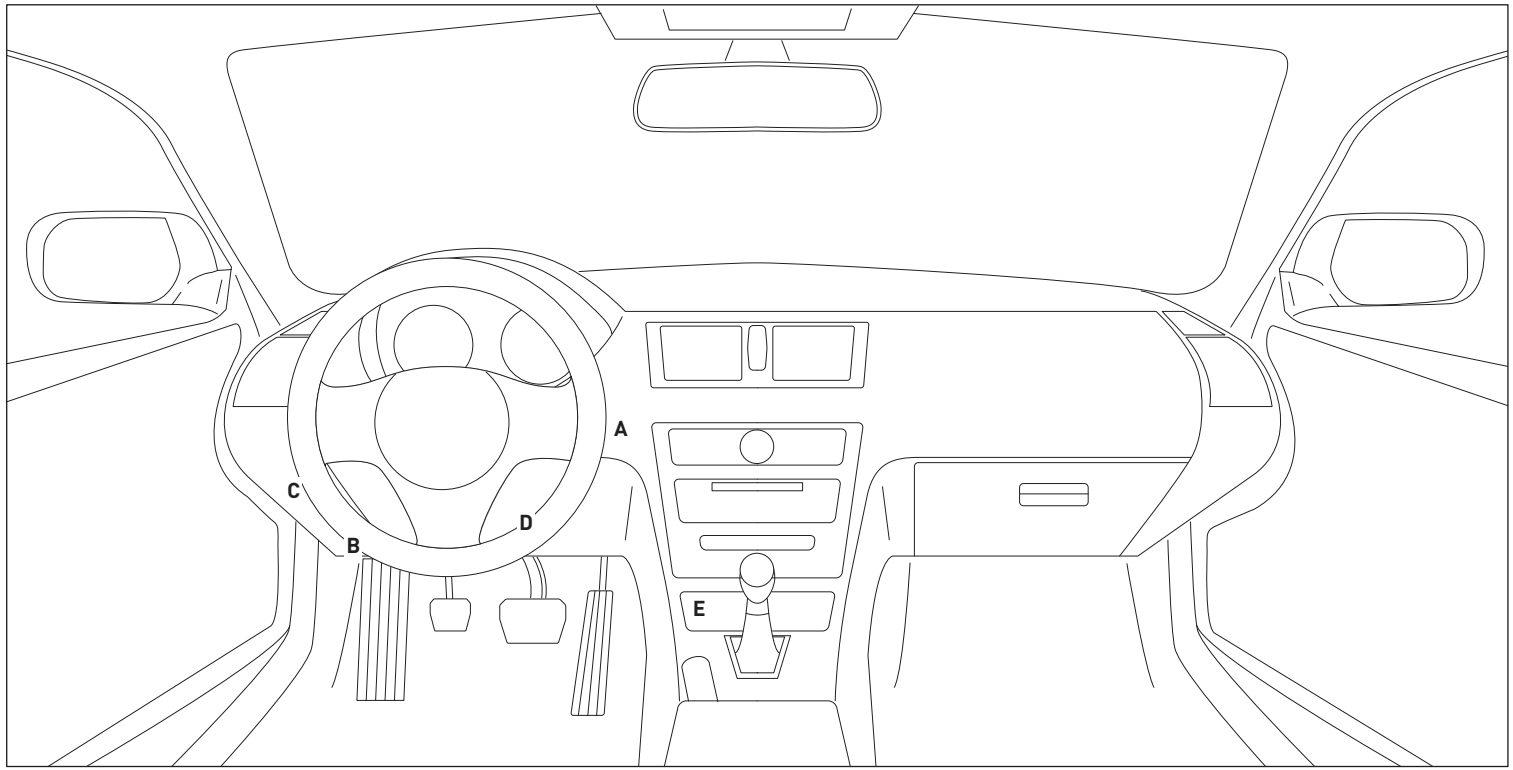

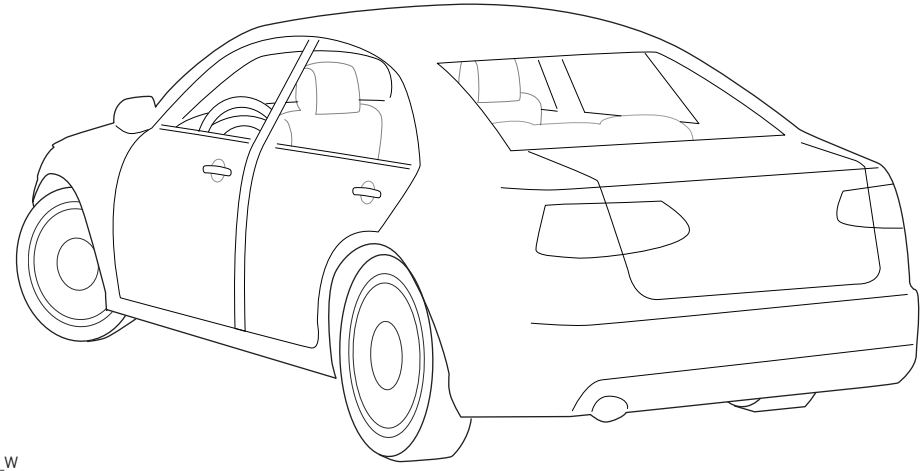

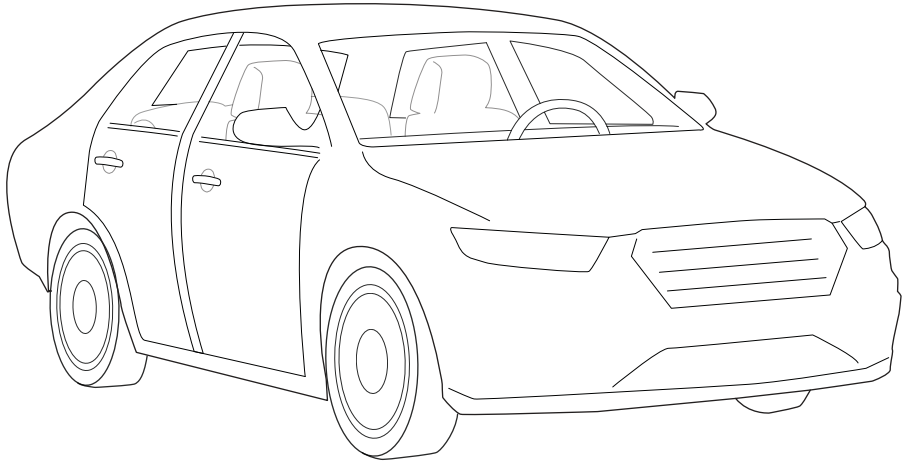

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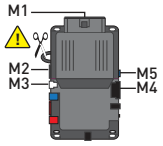

⚠1 CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

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ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
- 01 ORANGE
- 02 RED
- 03 PURPLE
- 04 PINK/WHITE
- 05 PINK
- 06 WHITE
- 07 RED
- 08 BLACK

M2
- 01 GREEN•BLACK DOT
- 02 BLUE•BLACK DOT
- 03 RED/WHITE•BLACK DOT
- 04 GREEN/WHITE•BLACK DOT
- 05 GREEN/BLACK•BLACK DOT
- 06 BLUE/WHITE•BLACK DOT
- 07 EMPTY
- 08 WHITE/PURPLE•BLACK DOT
- 09 PURPLE/BLACK•BLACK DOT
- 10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
- 11 BROWN/BLACK•BLACK DOT
- 12 WHITE•BLACK DOT

M3
- 01 BROWN•SILVER DOT
- 02 BLACK/WHITE•SILVER DOT
- 03 PURPLE•SILVER DOT
- 04 GREEN•SILVER DOT
- 05 PURPLE/WHITE•SILVER DOT
- 06 WHITE/BLUE•SILVER DOT
- 07 GRAY•SILVER DOT - HOOD (-) INPUT
- 08 BLUE•SILVER DOT
- 09 GRAY/BLACK•SILVER DOT
- 10 EMPTY

M4
- 01 EMPTY
- 02 EMPTY
- 03 BROWN/RED - CANH 1
- 04 BROWN/YELLOW - CANL 1
- 05 BLUE/RED
- 06 BLUE/YELLOW
- 07 EMPTY
- 08 ORANGE
- 09 YELLOW
- 10 EMPTY
- 11 GRAY/RED - GROUND (-) INPUT
- 12 GRAY/YELLOW
- 13 GREEN/RED - PTS (-) OUTPUT
- 14 ORANGE/WHITE - KEY 5
- 15 BROWN
- 16 ORANGE/BLACK
- 17 PINK - IGNITION (+) IN/OUT
- 18 PURPLE - BRAKE (+) OUTPUT
- 19 RED - 12V (+) INPUT
- 20 BLACK - GROUND (-)

M5
- 01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
- 02 WHITE/BLACK•BLUE DOT - KEY 1 VEHICLE SIDE
- 03 GRAY/RED•BLUE DOT
- 04 WHITE/RED•BLUE DOT - KEY 1 CONNECTOR SIDE
- 05 GRAY•BLUE DOT - IMMOBILIZER
- 06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

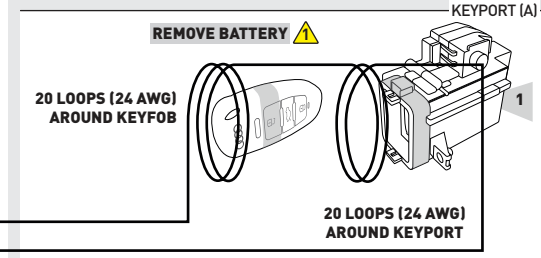
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

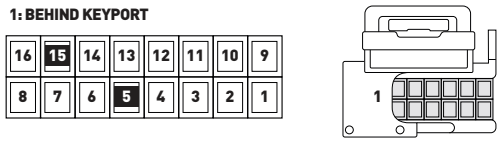
REMOVE BATTERY ⚠1

20 LOOPS (24 AWG) AROUND KEYFOB

20 LOOPS (24 AWG) AROUND KEYPORT



1: BEHIND KEYPORT

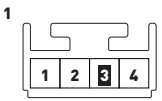


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

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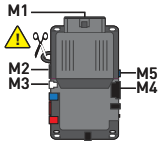


⚠1 CUT LOOP FOR AUTOMATIC TRANSMISSION ONLY

⚠1 TWO KEYS ARE REQUIRED FOR THIS INSTALLATION.
ONE KEY WILL REMAIN PERMANENTLY IN THE VEHICLE.
THE OTHER KEY WILL BE USED FOR THE PROGRAMMING PROCEDURE.
IT WILL THEN BE RETURNED TO THE OWNER.

M1
01 ORANGE
02 RED
03 PURPLE
04 PINK/WHITE
05 PINK
06 WHITE
07 RED
08 BLACK

M2
01 GREEN•BLACK DOT
02 BLUE•BLACK DOT
03 RED/WHITE•BLACK DOT
04 GREEN/WHITE•BLACK DOT
05 GREEN/BLACK•BLACK DOT
06 BLUE/WHITE•BLACK DOT
07 EMPTY
08 WHITE/PURPLE•BLACK DOT
09 PURPLE/BLACK•BLACK DOT
10 WHITE/BLACK•BLACK DOT - HORN (-) OUTPUT
11 BROWN/BLACK•BLACK DOT
12 WHITE•BLACK DOT

M3
01 BROWN•SILVER DOT
02 BLACK/WHITE•SILVER DOT
03 PURPLE•SILVER DOT
04 GREEN•SILVER DOT
05 PURPLE/WHITE•SILVER DOT
06 WHITE/BLUE•SILVER DOT
07 GRAY•SILVER DOT - HOOD (-) INPUT
08 BLUE•SILVER DOT
09 GRAY/BLACK•SILVER DOT
10 EMPTY

M4
01 EMPTY
02 EMPTY
03 BROWN/RED - CANH 1
04 BROWN/YELLOW - CANL 1
05 BLUE/RED
06 BLUE/YELLOW
07 EMPTY
08 ORANGE
09 YELLOW
10 EMPTY
11 GRAY/RED - GROUND (-) INPUT
12 GRAY/YELLOW
13 GREEN/RED - PTS (-) OUTPUT
14 ORANGE/WHITE - KEY 5
15 BROWN
16 ORANGE/BLACK
17 PINK - IGNITION (+) IN/OUT
18 PURPLE - BRAKE (+) OUTPUT
19 RED - 12V (+) INPUT
20 BLACK - GROUND (-)

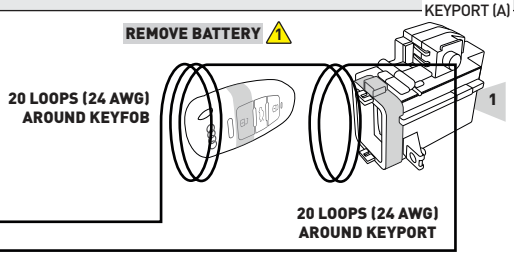
M5
01 GRAY/BLACK•BLUE DOT - IMMOBILIZER
02 WHITE/BLACK•BLUE DOT - KEY 1
03 GRAY/RED•BLUE DOT
04 WHITE/RED•BLUE DOT
05 GRAY•BLUE DOT - IMMOBILIZER
06 WHITE•BLUE DOT

KEY 5 (-) BLACK/YELLOW - 05
KEY 1 (+) GRAY/YELLOW - 15
CANH (DATA) ORANGE/LTGREEN
CANL (DATA) ORANGE/BROWN
IGNITION (+) BLACK
12V (+) RED/BLACK
BRAKE (+) RED/BLACK - 03
PTS 1 (-) BLUE/YELLOW - 03
PTS 2 (-) BLUE/WHITE - 04
HORN (-)
HOOD SWITCH ⚠2

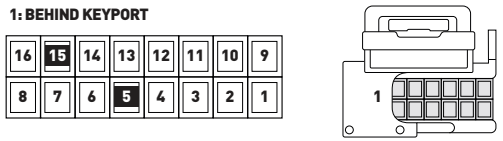
⚠2 INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

KEYPORT (A)

REMOVE BATTERY ⚠1



1: BEHIND KEYPORT

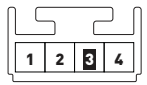


DOOR HARNESS IN DRIVER KICK PANEL (B)

1: TWISTED WIRES

BEHIND FUSEBOX (C)

BRAKE SWITCH (D)



PTS SWITCH (D)

T002_W

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01

Set ignition to ON position.

02

Wait, LED 1 will turn solid GREEN for 2 seconds.

03

Set ignition to OFF position.

04

START vehicle for 15 seconds.

05

Press and hold the brake pedal.

06

Press and release the module's programming button.

07

Release the brake pedal.

08

Wait, LED 2 will flash GREEN.

09

Module Programming Procedure completed.

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>>

All vehicle doors must be closed and locked prior to remote start sequence.

01

Time restriction. Complete steps 2 to 5 within 45 seconds.

02

Press unlock on OEM or aftermarket remote or request switch.

03

Open driver door and enter vehicle.

04

Close driver door.

05

Press and release BRAKE pedal.

06

Take over procedure completed.

>>

Failure to follow procedure will result in vehicle engine shutdown.

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CHECKLIST - WITH AFTERMARKET KEYFOB	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press the LOCK button once [1x] on the aftermarket keyfob.
	Question 1: Do the doors lock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
4	Press the UNLOCK button once [1x] on the aftermarket keyfob.
	Question 2: Do the doors unlock?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired door lock/unlock connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
5	Press the TRUNK release button once [1x] on the aftermarket keyfob if supported.
	Question 3: Does the trunk or hatch open/unlock?
☐	YES: Close trunk or hatch and go to next step.
☐	NO: Verify the remote programming, the RF connections and the wired trunk/hatch connections as illustrated in the wiring diagram, if applicable. Repeat the test and call technical support, if the problem persists.
6	Press the AUX 1 button once [1x] on the aftermarket keyfob if supported.
	Question 4: Does the driver side sliding door open?
☐	YES: Press the AUX 1 button once [1x] to close the driver sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
7	Press the AUX 2 button once [1x] on the aftermarket keyfob if supported.
	Question 5: Does the passenger side sliding door open?
☐	YES: Press the AUX 2 button once [1x] to close the passenger sliding door and go to next step.
☐	NO: Verify the remote programming and the RF connections. Repeat the test and call technical support, if the problem persists.
8	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 6: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: Verify the remote programming, the RF connections and check the remote start error codes. Repeat the test and call technical support, if the problem persists.
9	Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle.
	Question 7: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If problem persists, press the brake pedal once [1x] to shut down the vehicle and call technical support.
10	RAP and auto light shutdown test
	Question 8: Did the radio, interior controls and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support if the problem persists.
11	Open hood.
12	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
13	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
	Question 9: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
14	Close hood.
15	Enter vehicle and close the doors.
16	Press the START/STOP button once [1x] on the aftermarket keyfob to remote start vehicle.
17	Wait for the vehicle to start.
18	Press brake pedal.
	Question 10: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press the START/STOP button once [1x] on the aftermarket keyfob to shut down vehicle, check connection as illustrated in the wiring diagram, if applicable, and call technical support.
19	Exit vehicle.
20	Installation checklist completed.

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	CHECKLIST - WITH OEM KEYFOB
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
☐	YES: Go to next step.
☐	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5	RAP Shutdown test
	Question 3: Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
☐	YES: Go to next step.
☐	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6	Open hood.
7	If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 4: Does the vehicle remote start?
☐	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
☐	NO: Go to next step.
9	Close hood.
10	Enter vehicle and close the doors.
11	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12	Wait for the vehicle to start.
13	Press brake pedal.
	Question 5: Does the vehicle shut down?
☐	YES: Go to next step.
☐	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14	Exit vehicle.
15	Installation checklist completed.