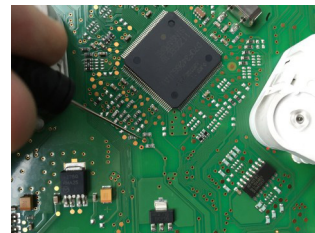![Advanced Diagnostics logo](AD ADVANCED DIAGNOSTICS™)

VAG Instrument Cluster Reset Cable
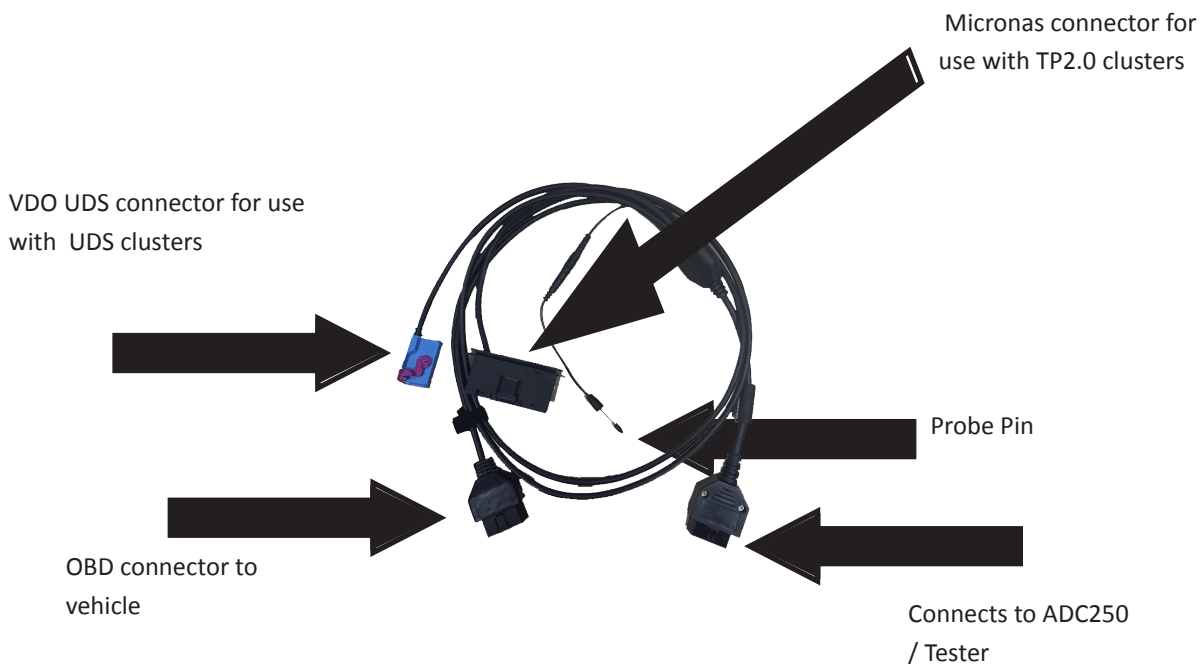
ADC219

User Guide V1.1

Introduction

Thank you for your purchase.

ADC219 VAG cable connects to the AD pro tester and the vehicle's OBD port and is specifically used in a lost key situation for various VAG group vehicles. See Iinfo Quest for full list of models supported.

You will also require ADS230 software (VAG Instrument Reset) for use with ADC219 cable. The transponder type used will depend on the brand and geographic region where you are working, and precode data may be unique to each vehicle chassis.

Micronas connector for use with TP2.0 clusters

VDO UDS connector for use with UDS clusters

Probe Pin

OBD connector to vehicle

Connects to ADC250 / Tester

VAG - Lost key situation for CAN TP2.0 and UDS protocol vehicles

Purpose of the product

The purpose of the ADC219 cable and ADS230 software is to produce a working key when all keys are lost on specific Volkswagen, Seat and Skoda vehicles. This is done by removing the instrument cluster, connecting to a specific point on the circuit board of the rear of the cluster and using the tester software to place the instrument cluster into Service Mode. This then allows the user to add a working key to the vehicle by turning on the ignition with a new key and transponder.

Vehicle applications

Vehicle applications fall into two initial categories, those using the CAN protocol TP2.0 and those using the CAN protocol UDS. Within those two generic applications are additional families of systems which are CAN TP2.0 Micronas and CAN UDS VDO.

It must be remembered that those instrument clusters then have their own algorithms which must be accessed where possible. Connecting to the rear of the instrument cluster does NOT bypass the need for an access algorithm and therefore any restrictions of use created by a lack of algorithm bypass is still in place. Under these circumstances you will see "unrecognised dashboard"

Process

The process of producing a working key for VAG must start with verifying the application by using the iQ. Once you have done this, you will need to remove the instrument cluster. Because of the wide variation in vehicle applications there are many different procedures required, but it will normally require you to move the steering wheel to its lowest possible position and pull it towards you to move it as far from the cluster as possible. You will then need to remove the trim covering from the bottom of the instrument cluster to gain access to the two retaining Torx screws.

You can then remove the cluster after unplugging its single blue or black electrical connector.

Technical Support do have the specific instrument cluster removal process photos for each individual vehicle, so if you are not sure please contact your support team for details.
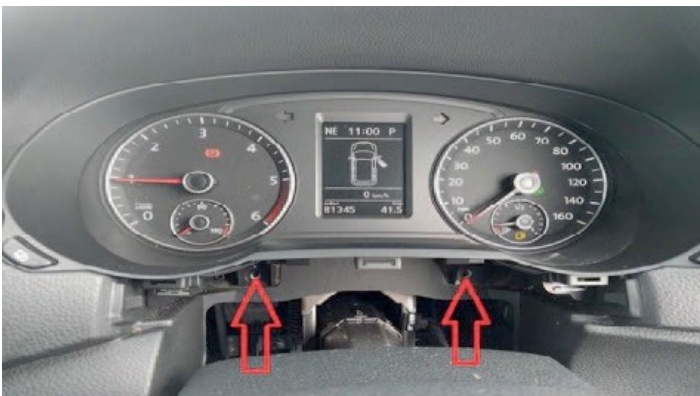

Tools Required

- Pro Tester
- Smart Dongle
- Smart Aerial
- ADC219 Adapter cable
- Torx T20 screwdriver
- Torx T10 screwdriver
- Flat blade screwdriver
- Correct or correctly prepared ID48

Once the instrument cluster is removed you need to connect the ADC219 cable to the rear of it, plug the male 16-pin DLC socket into the vehicle's diagnostic socket (whilst remembering that you must have good, stable battery voltage for any process of programmation) and connect the female DLC socket to your Advanced Diagnostics tester.

From here you need to navigate through the manufacturers menu to By System and choose the protocol identified in the initial process (CAN TP2.0 or UDS VDO) and select the "No working key" item from the menu. The tester will then communicate with the instrument cluster and ask you to place the ADC219 probe on the correct pinpoint of the instrument cluster, and this equates to pin 67 of UDS cluster and 8 on Micronas clusters.

Note: use of this cable/software does not require the instrument cluster needles to be detached and the front fascia removed, the only part that needs to be removed on UDS clusters is the rear cover of the cluster. Micronas clusters require more disassembly.

Please pay attention to the processor orientation denoted in the pictures below:
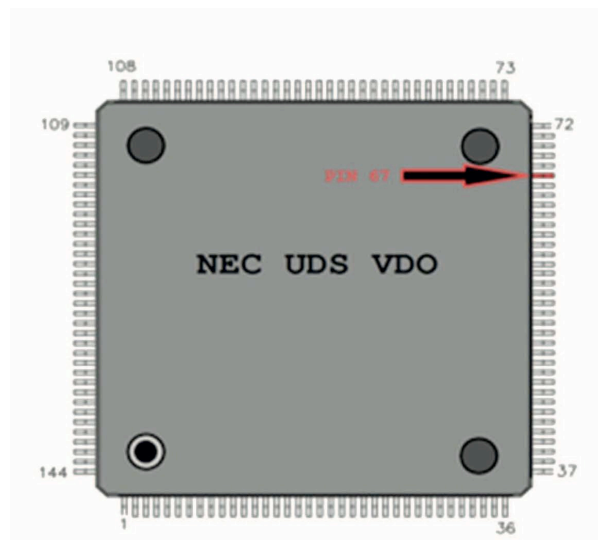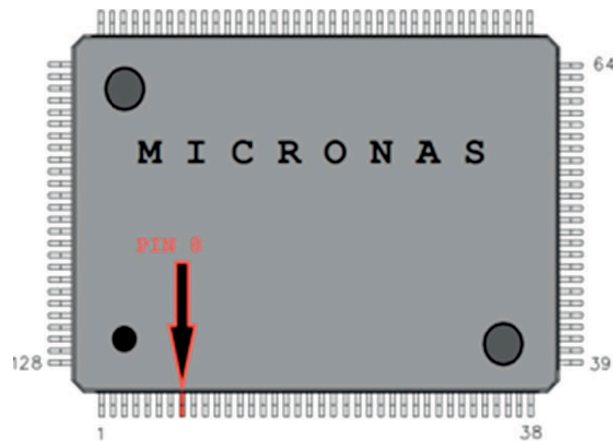
Once you have identified the correct pin of the microprocessor, place the pin probe on the nearest point of the circuit board that is easily accessible, such as this:

and continue with the software prompts on the tester screen. If you have placed the probe in the correct position the software will ask you to remove the probe, it will then get security access and the cluster will be placed into service mode.

Once this happens the cluster will either add a key to the number of transponders already programmed in the cluster, or it will erase all known transponders and add a transponder to that amount.

Note: Please ensure you read the ABS Coding for UDS clusters before refitting the cluster to the vehicle.

Under these circumstances the cluster display will change at the bottom (where the mileage is displayed) to show the number of transponders programmed and the number of transponders requested, in the case below, zero transponders programmed of 1 transponder requested:

Once you refit the instrument cluster to the vehicle and cycle the ignition with a valid transponder the instrument cluster will change to show the new value:

Notes:

As with most UDS transponder programming, once the instrument cluster has been requested to add a transponder (and the cluster changes to 0-1 or 1-2 or 2-3 for example) the tester is then not required to add a transponder and indeed will normally not be allowed to access the programming functions from that point onwards. All that is required is for a valid transponder to be cycled in the ignition, so if the cluster display remains as above and does not increment to 1-1, 2-2 or 3-3 then the transponder you are using is incorrect or faulty.

(TP2.0) - ADC219 PROBE PROCEDURE - ADS230 SOFTWARE

VEHICLE SELECTION
MAZDA
MITSUBISHI
NISSAN
TOYOTA
SEAT
VOLKSWAGEN

VEHICLE SELECTION
+ 2003 - 2007
+ 2007 - 2009

VEHICLE SELECTION
+ AUTODETECT IMMO
+ AUTODETECT REMOTE
+ READ PINCODE
+ BY SYSTEM
+ BY VEHICLE

VEHICLE SELECTION
+ WITH WORKING KEY
+ KEYS LOST (ADC219)

VEHICLE SELECTION
+ ISO KW1281
+ ISO KW2000
+ TP2.0
+ UDS

CONNECT ADC219 TO CLUSTER
PRESS ENTER KEY

VEHICLE SELECTION
+ READ PIN /PRE
+ PROGRAM KEYS
+ PROGRAM REMOTES

PLEASE WAIT TRYING
TO COMMUNICATE

ECU IDENTIFICATION

VIN: WVWVZZZ1KZW180311 PART:

VWZ7Z0G8018972

ID: 1K6 920 962

TYPE: KOMBIINSTRUMENT

PRESS ENTER KEY

DIAGNOSTIC MENU

ECU IDENTIFICATION

> **SPECIAL FUNCTIONS**

PRESS ENTER KEY

DIAGNOSTIC MENU

> ENTER SERVICE MODE
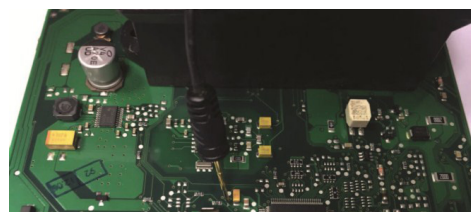
PRESS ENTER KEY

ENTER SERVICE MODE

PLEASE WAIT

HOLD TEST PROBE

PRESS ENTER KEY

PLACE PROBE ONTO THE
MICROPROCESSOR PIN AS PER
INSTRUCTION IMAGES,
INDIVIDUAL TO EACH CLUSTER TYPE.

RELEASE TEST PROBE

PRESS ENTER KEY

PLEASE WAIT TRYING

TO COMMUNICATE

ENTER SERVICE MODE

PLEASE RECONNECT DASHBOARD TO

VEHICLE AND SWITCH IGNITION ON

WITH THE NEW KEY

ENTER SERVICE MODE

PROCEDURE COMPLETE

REASSEMBLE THE CLUSTER AND REFIT TO THE VEHICLE. CYCLE IGNITION WITH A VALID KEY TO ADD A NEW TRANSPONDER.

THE CLUSTER WILL READ

0-1, 1-2, 2-3 ETC UNTIL A NEW TRANSPONDER IS ADDED.

ADDITIONAL KEYS CAN NOW BE ADDED TO THE VEHICLE VIA THE TESTER SOFTWARE.

ABS CODE (READING) PROCEDURE - ADS230 SOFTWARE

IN SOME CASES WHEN RESETTING A **UDS CLUSTER** THE ABS CODING DATA COULD BE OVER WRITTEN BY THE CLUSTER.

IT IS ADVISED TO READ THE ABS CODING DATA FROM THE VEHICLE BEFORE THE CLUSTER IS REMOVED FROM THE VEHICLE.

THE ABS CODING DATA IS STORED ON THE TESTER AND CAN BE WRITTEN BACK TO THE ABS MODULE IF REQUIRED.

VEHICLE SELECTION

MITSUBISHI

NISSAN

TOYOTA

SEAT

VOLKSWAGEN

VEHICLE SELECTION

+ AUTODETECT IMMO

+ AUTODETECT REMOTE

+ READ PINCODE

+ BY SYSTEM

+ BY VEHICLE

VEHICLE SELECTION

+ ISO KW1281

+ ISO KW2000

+ TP2.0

+ UDS

VEHICLE SELECTION

+ PROGRAM KEYS

+ PROGRAM REMOTES

VEHICLE SELECTION

+ VDO DASH

+ MARELLI DASH

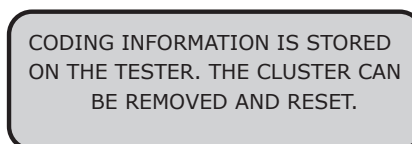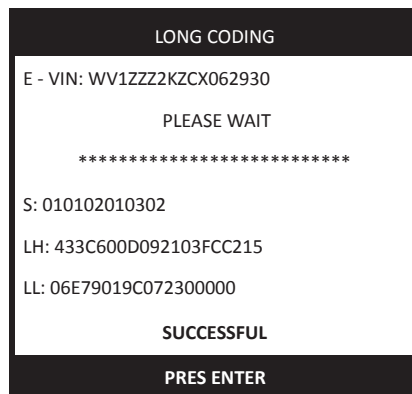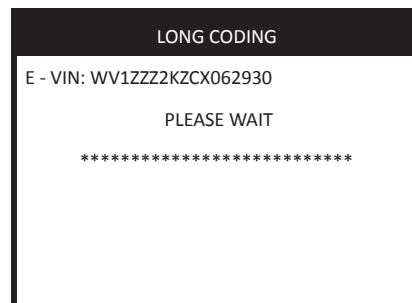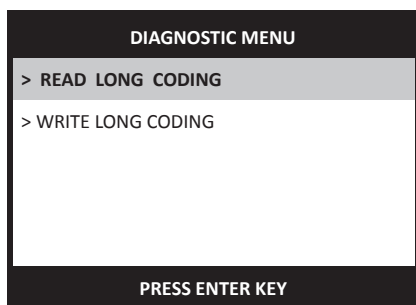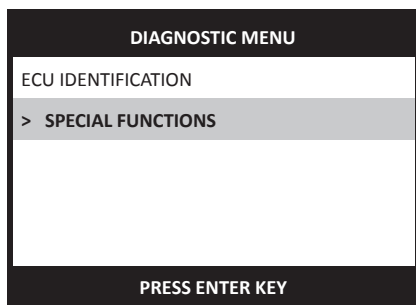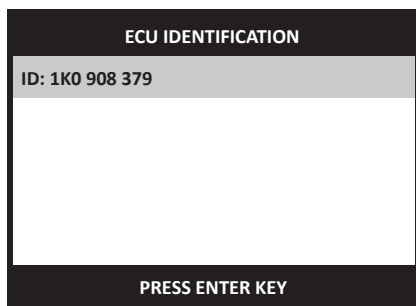VEHICLE SELECTION

+ WITH WORKING KEY

+ KEYS LOST (ADC219)

VEHICLE SELECTION

+ ABS CODING

+ KEYS LOST (ADC219)

ABS CODE (READING) PROCEDURE - ADS230 SOFTWARE—CONTINUED

```
PLEASE WAIT

TRYING TO COMMUNICATE
```

```
LONG CODING
E - VIN: WV1ZZZ2KZCX062930

PLEASE WAIT

***************************
```

```
ECU IDENTIFICATION
ID: 1K0 908 379




PRESS ENTER KEY
```

```
LONG CODING
E - VIN: WV1ZZZ2KZCX062930

PLEASE WAIT

***************************

S: 010102010302

LH: 433C600D092103FCC215

LL: 06E79019C072300000

SUCCESSFUL
PRES ENTER
```

```
DIAGNOSTIC MENU
ECU IDENTIFICATION

>  SPECIAL FUNCTIONS




PRESS ENTER KEY
```

CODING INFORMATION IS STORED ON THE TESTER. THE CLUSTER CAN BE REMOVED AND RESET.

```
DIAGNOSTIC MENU
>  READ  LONG  CODING

> WRITE LONG CODING




PRESS ENTER KEY
```

ABS CODE (WRITING) PROCEDURE - ADS230 SOFTWARE

IF THE ABS AND TRACTION CONTROL WARNING LIGHTS ARE ILLUMINATED AFTER REINSTALLING THE CLUSTER, THE ABS CODING DATA WILL NEED TO BE WRITTEN BACK TO THE VEHICLE.

DIAGNOSTIC MENU
> **READ LONG CODING**
> WRITE LONG CODING
PRESS ENTER KEY

LONG CODING
E - VIN: WV1ZZZ2KZCX062931
PLEASE WAIT
****

LONG CODING
E - VIN: WV1ZZZ2KZCX062931
PLEASE WAIT
****
R– VIN WV1ZZZ2KZCX062931
SUCCESSFUL
PRES ENTER

(UDS VDO) - ADC219 Probe Procedure - ADS230 SOFTWARE

VEHICLE SELECTION
MAZDA
MITSUBISHI
NISSAN
TOYOTA
SEAT
VOLKSWAGEN

VEHICLE SELECTION
+ WITH WORKING KEY
+ KEYS LOST (ADC219)

VEHICLE SELECTION
+ AUTODETECT IMMO
+ AUTODETECT REMOTE
+ READ PINCODE
+ BY SYSTEM
+ BY VEHICLE

VEHICLE SELECTION
+ ABS CODING
+ KEYS LOST (ADC219)

VEHICLE SELECTION
+ ISO KW1281
+ ISO KW2000
+ TP2.0
+ UDS

CONNECT ADC219 TO CLUSTER

ENSURE THE ABS CODING HAS BEEN READ

BEFORE REMOVING THE CLUSTER FROM

VEHICLE

PRESS ENTER KEY

VEHICLE SELECTION
+ VDO DASH
+ MARELLI DASH

PLEASE WAIT

TRYING TO COMMUNICATE

ECU IDENTIFICATION

VIN: WVWVZZZ1KZ9W828257

PART: VWZ7Z0G8018975

ID: 1K6 920 970E

TYPE: KOMBIINSTRUMENT

PRESS ENTER KEY

ENTER SERVICE MODE

PLEASE WAIT

DIAGNOSTIC MENU

ECU IDENTIFICATION

> **SPECIAL FUNCTIONS**

PRESS ENTER KEY

DASHBOARD TYPE #2
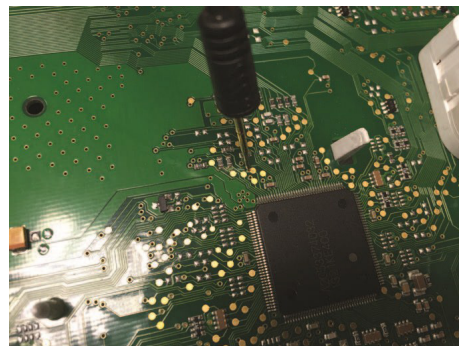
HOLD TEST PROBE IN CORRECT

POSITION

ENTER SERVICE MODE

> ENTER SERVICE MODE

PLACE PROBE ONTO THE
MICROPROCESSOR PIN AS PER
INSTRUCTION IMAGES,
INDIVIDUAL TO EACH CLUSTER TYPE.

RECONNECTING THE DASHBOARD AFTER

RESET COULD CAUSE THE ABS CODING TO BE

LOST AND A FAULT PRESENT. ENSURE

THAT YOU READ THE ABS CODING

DATA BEFORE CONTINUING.

PRESS ENTER KEY

PLEASE WAIT

RELEASE TEST PROBE

REASSEMBLE THE CLUSTER AND REFIT TO THE VEHICLE. CYCLE IGNITION WITH A VALID KEY TO ADD A NEW TRANSPONDER.

THE CLUSTER WILL READ

0-1, 1-2, 2-3 ETC UNTIL A NEW TRANSPONDER IS ADDED.

ADDITIONAL KEYS CAN NOW BE ADDED TO THE VEHICLE VIA THE TESTER SOFTWARE.

PLEASE WAIT

****

FETCHING SECURITY DATA

****

ENTER SERVICE MODE

PROCEDURE COMPLETE

ENSURE THAT THE ABS CODING DATA IS RESTORED AFTER THE DASHBOARD HAS BEEN RECONNECTED

CLUSTER TYPES AND PROBE POINTS

NOTE: (A OR B) POINTS CAN BE PROBED WITH THE PIN ON ADC219 CABLE

FOR ENHANCED PICTURES - PLEASE SEE DIGITAL VERSIONS ON USB PROVIDED
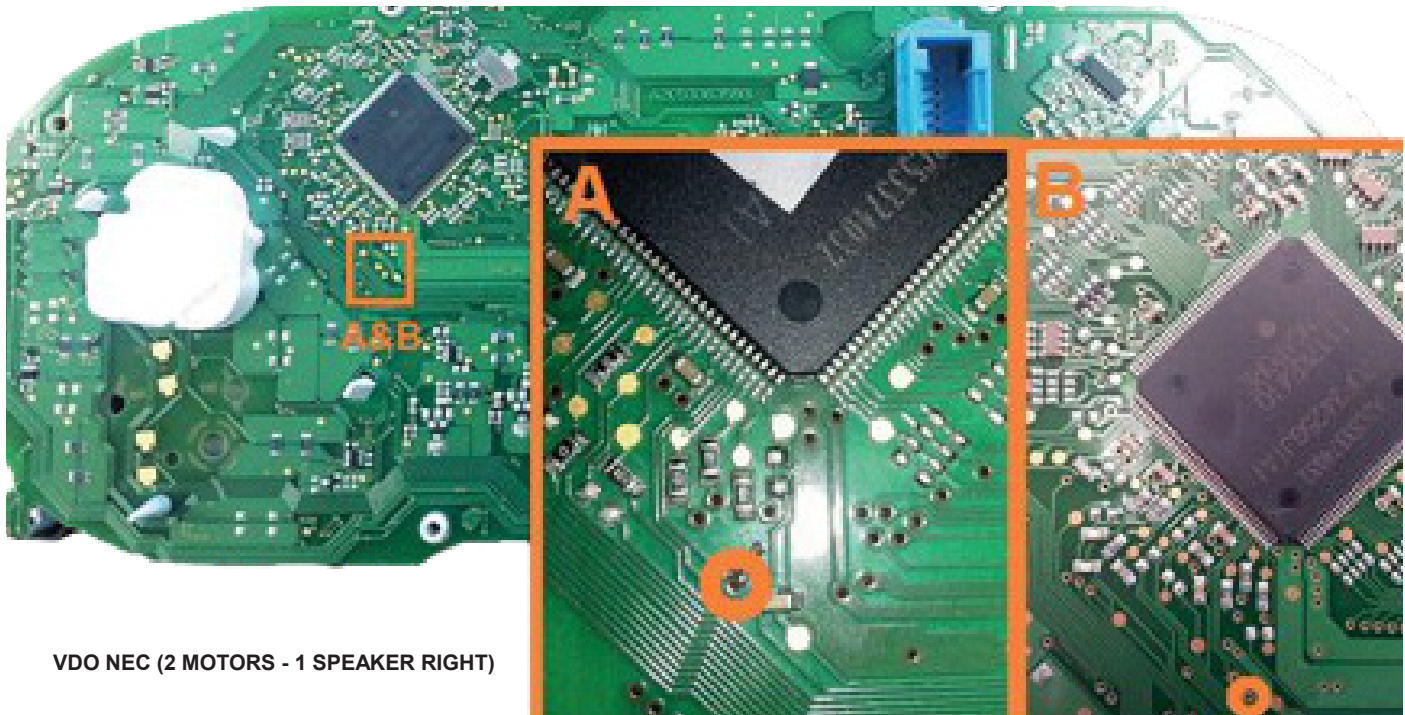
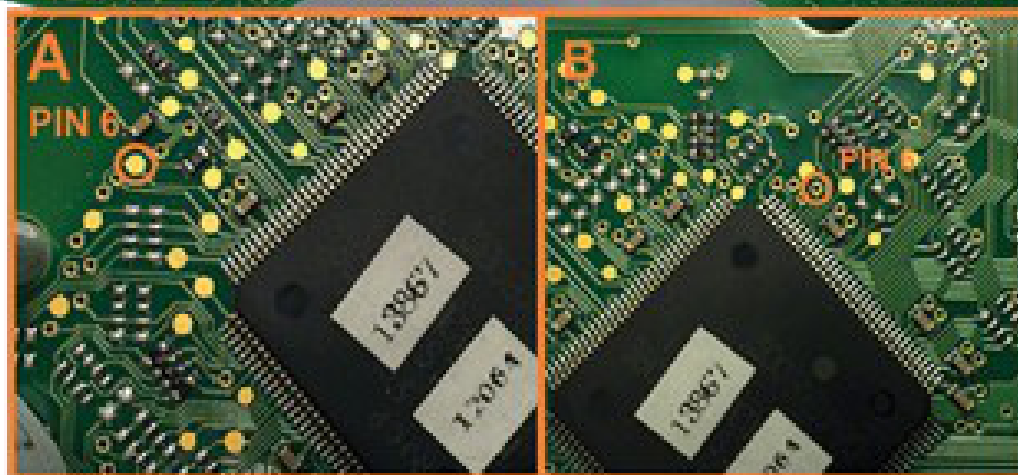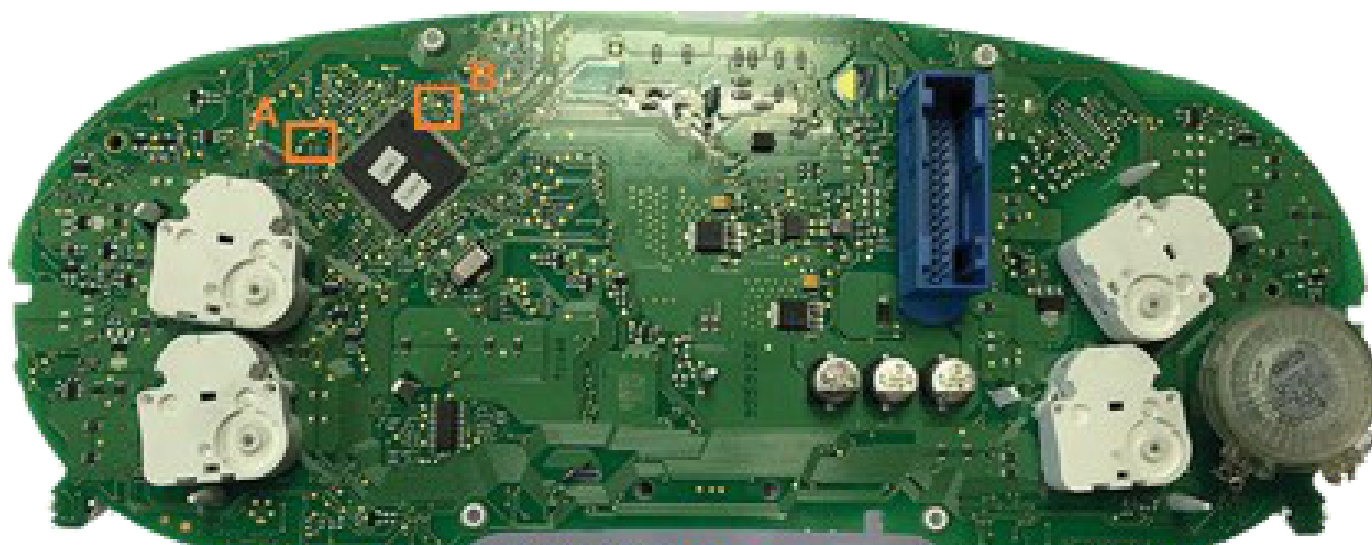
VDO NEC (2 MOTORS - 1 SPEAKER RIGHT)

VDO NEC (2 MOTORS - 1 SPEAKER LEFT)
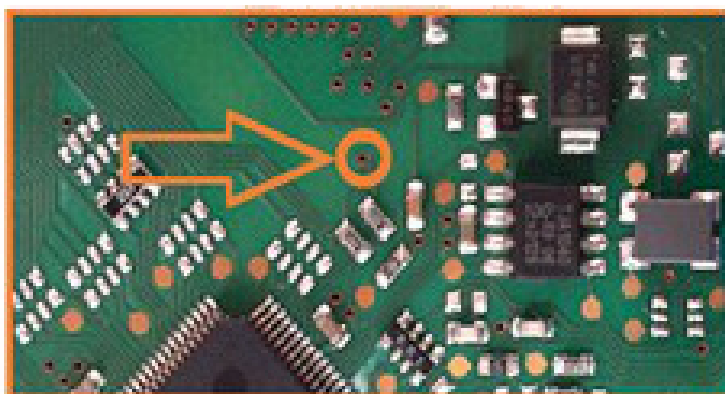
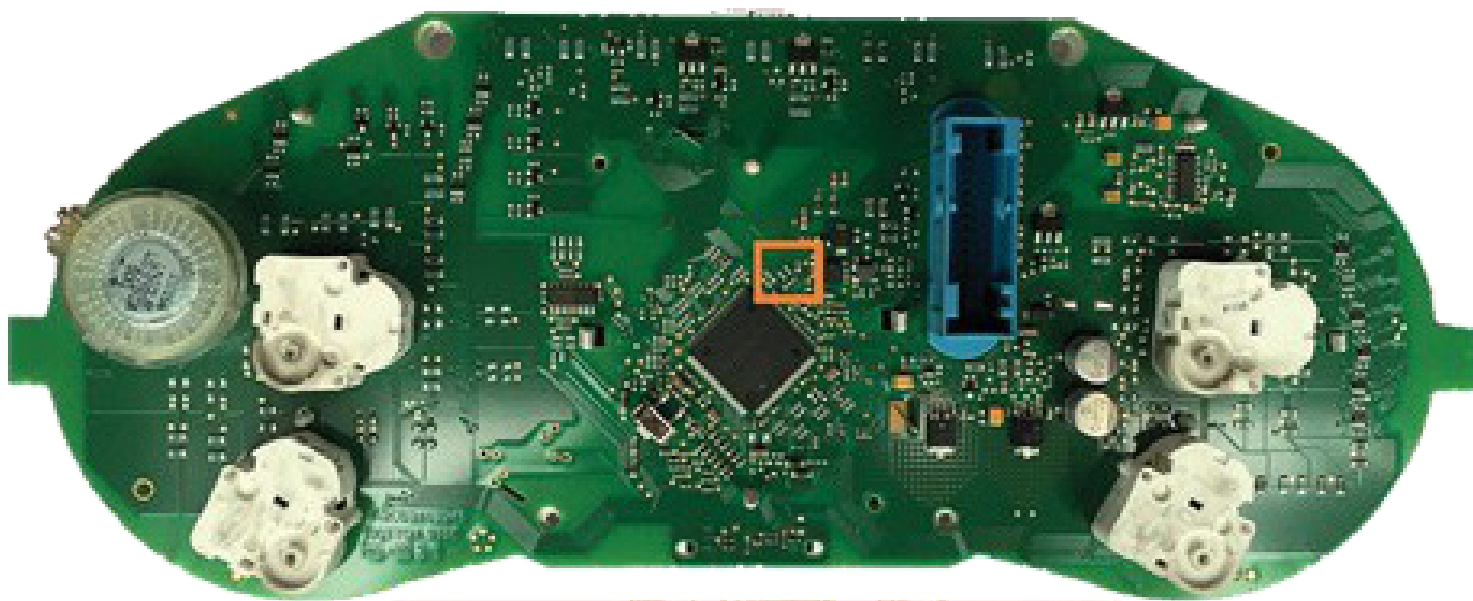# CLUSTER TYPES AND PROBE POINTS
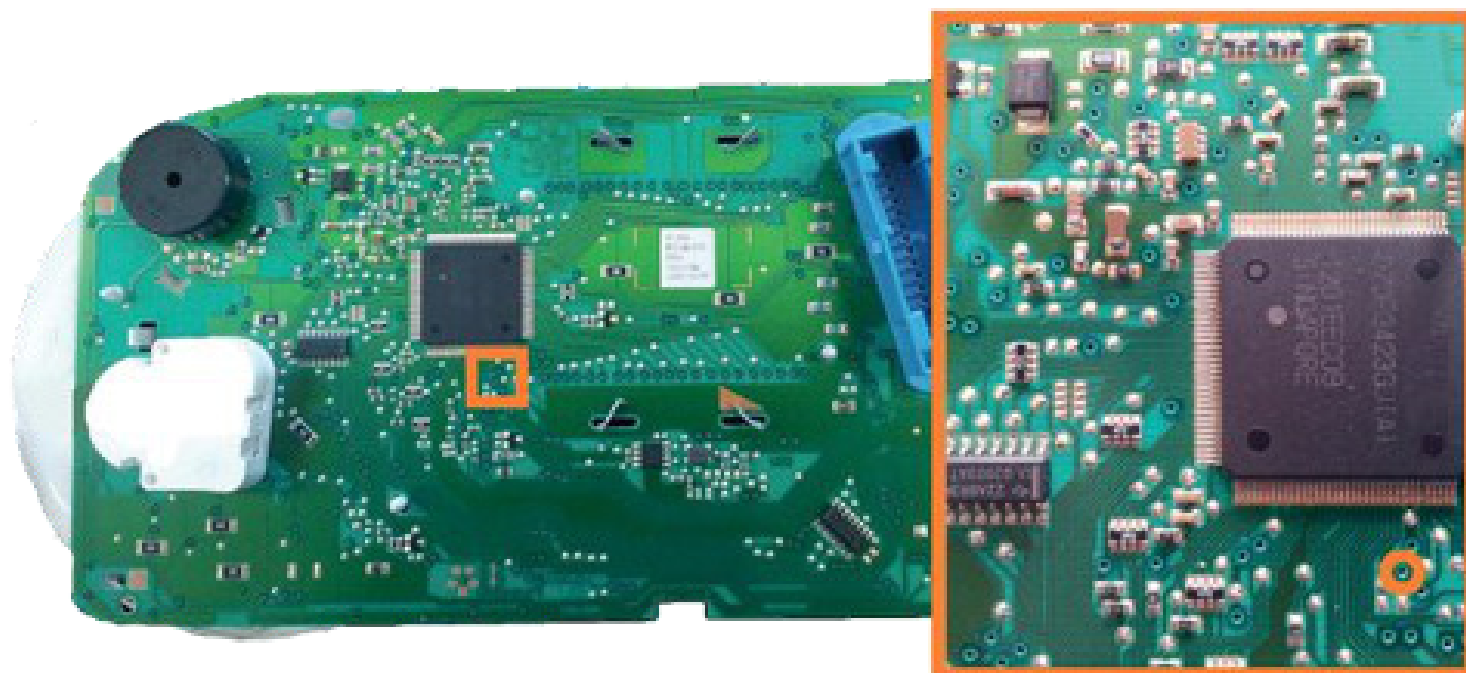
VDO NEC (2 MOTORS - 1 SMALL SPEAKER LEFT)
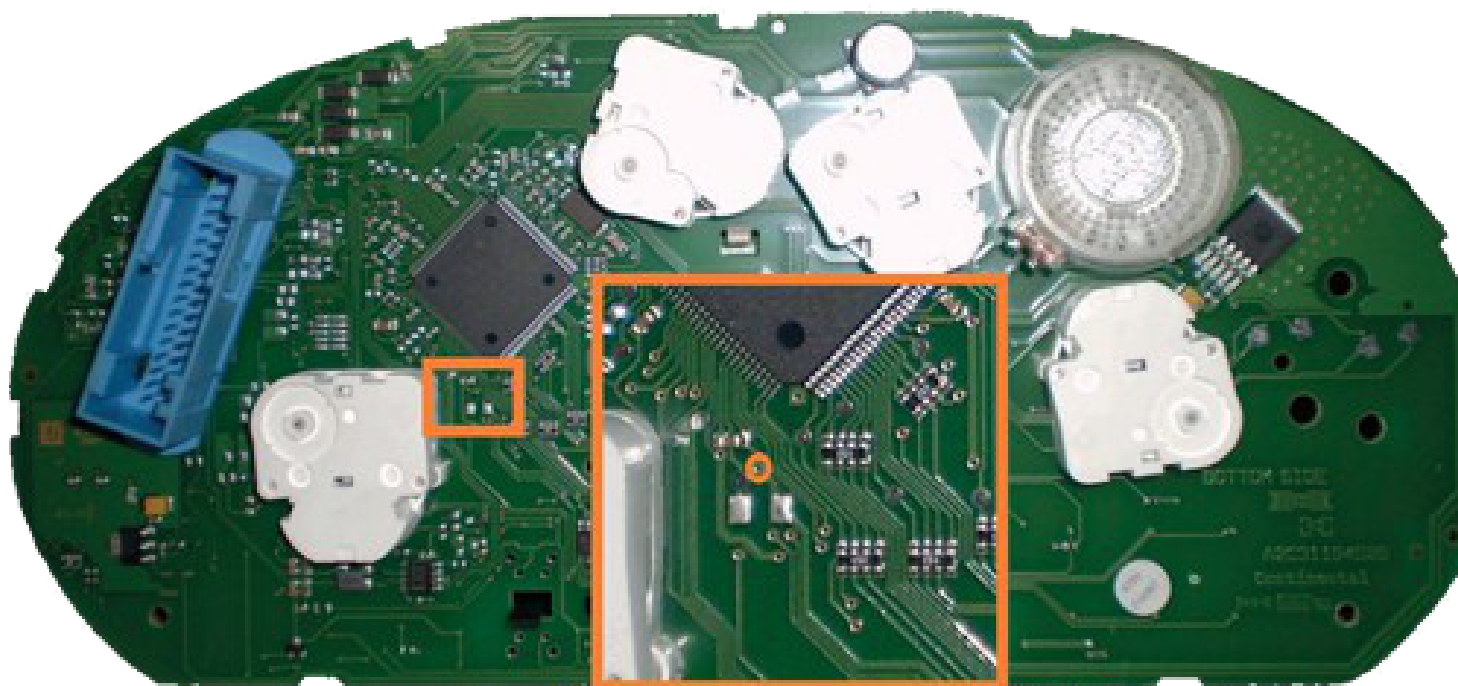

VDO NEC (4 MOTORS - 1 SPEAKER RIGHT)

CLUSTER TYPES AND PROBE POINTS

VDO NEC (4 MOTORS - 1 SPEAKER LEFT)

VDO NEC (4 MOTORS - 1 SPEAKER UPPER RIGHT)
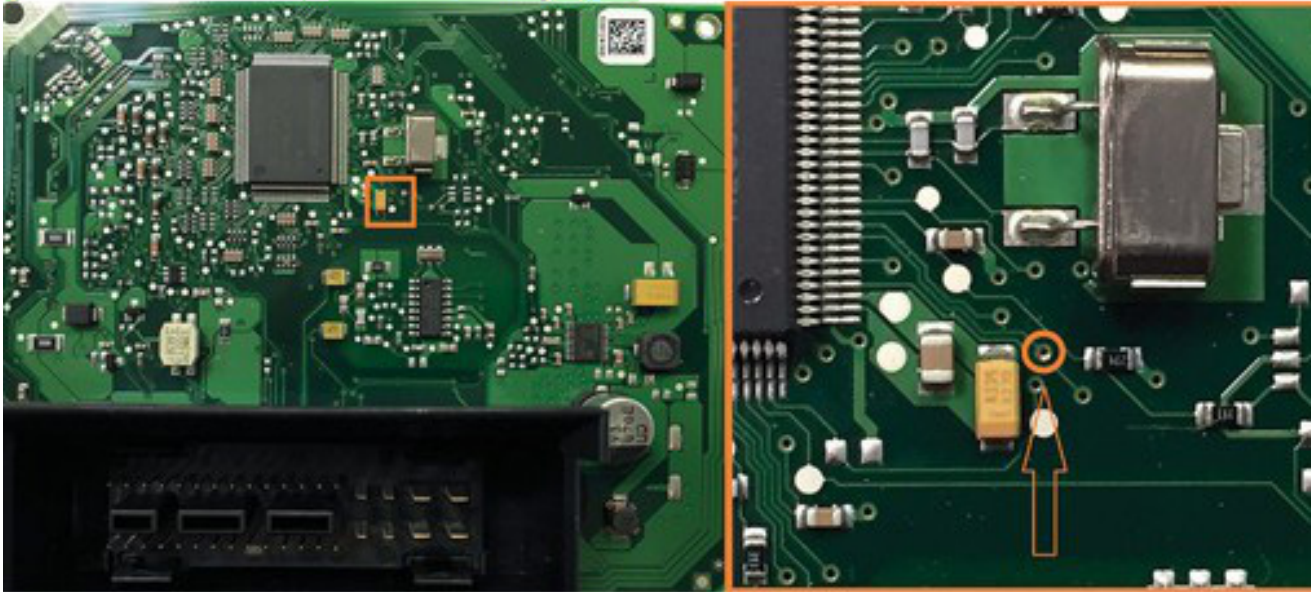
CLUSTER TYPES AND PROBE POINTS

VDO NEC (4 MOTORS - 1 SPEAKER LEFT)

VDO NEC (4 MOTORS - 1 SPEAKER LEFT)

CLUSTER TYPES AND PROBE POINTS

MICRONAS PIN OUT

NOTES:

Due to the number of cluster variations fitted to VAG Group vehicles, AD cannot guarantee 100% coverage for ADC219 / ADS230 in a lost key situation for the vehicles listed in the application list.

The has been designed for advanced auto locksmiths who have a good working technical knowledge of removing, disassembling and re-fitting instrument clusters from vehicles.

For a full list of VAG vehicles supported for lost keys situation please visit info Quest via the AD website or download the ADIQMOBILE app from the Google Play Store or App Store.