Unlock procedure for SFD (Vehicle Diagnostic Protection)

We wish to inform you that, as of 2020, Volkswagen AG will introduce a new procedure for Vehicle Diagnostic Protection (SFD). In order to utilise the SFD procedure, it is necessary for users to be registered in advance on the SFD back end.

The aim of SFD

Product analyses in the VW Group have shown that there is an increased requirement for protection of data in vehicles. This is also the case for Vehicle Diagnostic Protection. The previous procedure (activation of security access by way of a 5-digit login code) no longer conforms to the state of the art. As of 2020 – beginning with the market entry of the MQB37W (Golf 8) – there will be a cross-brand introduction of the SFD procedure in order to provide Vehicle Diagnostic Protection.

SFD will be introduced in two project stages:

Stage 1 comprises access protection of protected diagnostic objects in control units and the verifiability of this access on an individual level. The protection requirement will be defined for specific control units and diagnostic objects. The protection requirement is limited to specific writing services (codings, adjustments, parametrisations) and routines. Normal reading services (e.g. readout of control unit event memories) will not be SFD-protected. The functions of data string downloading with boot loader data strings, flashing and/or update programming as well as flash data security are also not affected by SFD.

Stage 2 includes, as a supplement to stage 1, tamper protection of diagnostic contents upon integration of the diagnostic contents by end-to-end safeguarding of diagnostic data between VAG IT back end systems and control units.

In order to be able to log access to diagnostic contents requiring protection in future, the IT security organisation requires strong user authentication to be enforced. It is therefore necessary to use two-factor authentication, which can be implemented, for example, by using

- " PKI-cards
- " SecurID-cards
- " Applications that generate one-time passwords (e.g. Google Authenticator or Microsoft Authenticator).

In a first transition phase, however, weak authentication by way of a username and password will initially be introduced when using the Dealer Portal. The transition to strong authentication by means of the Group Retail Portal will be developed in parallel.

The SFD process requires the vehicle diagnostic tester to have an online connection.

Functioning of SFD

Two methods will be offered: online activation and offline activation. The offline activation is a fall-back solution in the event that, for example, the online connection of the vehicle diagnostic tester in the workshop is unavailable at short notice.

1. Online activation (standard case)



Components involved:

- " The control unit in the vehicle contains the diagnostic objects to be protected and grants or refuses access.
- " The vehicle diagnostic tester is operated by the user in order to select diagnostic objects in the control unit.
- " The SFD back end contains the user database with authorizations and issues activation tokens.

Basic process:

- 1. It is a prerequisite that the user is registered in the SFD IT back end and in the Dealer Portal (in future, the Group Retail Portal).
- 2. The user would like to carry out SFD-protected services on one or more SFDprotected control units as part of a vehicle diagnosis.

- 3. The control unit reports that it is SFD-protected and asks for an activation token.
- 4. The vehicle diagnostic tester sends an activation request with the ID mark of the control unit and the desired scope to the SFD IT back end.
- 5. The SFD IT back end checks and authorizes the request and sends a signed activation token to the tester. The SFD IT back end logs the access (user ID, CU ID mark, time etc.).
- 6. The vehicle diagnostic tester sends the activation token to the control unit. The control unit checks the activation token and grants access to the relevant diagnostic object.

2. Manual SFD activation (offline – fall-back solution)

Process for an offline activation:

- 1. A direct online token generation with the vehicle diagnostic tester does not work.
- 2. The workshop employee saves the activation request structure of the control unit that will be necessary for the generation of the token.
- 3. The user logs into the Dealer Portal (in future, the Group Retail Portal) using a different computer and accesses the token generation website of the SFD back end via the SFD application.
- 4. The user enters the activation request structure of the control unit, generates an activation token with it, and copies this over to the vehicle diagnostic tester (e.g. using a USB stick).
- 5. The user executes a function on the tester in order to send the activation token manually to the control unit.
- 6. The control unit checks the activation token and grants access to the relevant diagnostic object.

Registration of users in the Dealer Portal and in the SFD IT back end

Upon the introduction of SFD in the first half of 2020, diagnostic users must be in a position to authenticate themselves in the SFD IT back end in accordance with the two activation options described above. In order to achieve this, it is necessary to register on the SFD back end in advance.

The local administrators of the Dealer Portal only have to assign the standard role in the "SFD" application to the affected users in the "Local user administration". Synchronisation with the SFD IT back end then takes place overnight, so the users are able to execute SFD-protected functions after no more than **24 hours**.

If there is no local administrator in your company, please contact the respective importer.

| VOLKSWAGEN AG | Dealer portal. | |
|--|--|---|
| Local administration Edit data of the organization Create new user | Portal Administration. | |
| Assign applications MyFavorites administrate | Allowed applications + Marketingportal - ODIS eShop | ^ |
| | + Online-Produkttraining (Volkswagen Welt) + Service Key - SFD | |
| | Standard-Rolle Volkswagen InfoNet Volkswagen Nutzfahrzeuge InfoNet | 1 |
| | Volkswagen ServiceNet Wartungskalender | v |
| | 🖬 Cancel 📰 Reset 🖬 Submit 📰 Portal 🔤 Logout | |

Authentication of users during the diagnostic session

1. Working with Guided Fault Finding (recommended)

In a diagnostic start-up via "Guided Fault Finding" (recommended), essentially nothing changes for the user, because upon logging into the Dealer Portal at the start of the diagnostic session, the login details are used automatically to generate the SFD activation tokens.

| orter: Jen: L | - | Vehicle identification no.: Engine: | - | 🧀 🛃 🐌 | |
|---------------------|---------------------------|---|--|--------|----------------------|
| | | | | | Operating modes |
| VIN | wvwz2 | | | | W Disgnoos |
| NO. | sing guided fault finding | 1 | | | Self-diagnosis |
| | | | | | Flash re-programming |
| Gro | up system login | | | | 🕰 Test instruments |
| Us | s name DP | | | | info |
| Pa | og in | | | | (@ Admin |
| Plea | ise log into the Group s | ystem in order to perform a task-based | dagnosis. FORMATION | | Protocol |
| | | | | | Data |
| Sta | t diagnosis Continue | diagnosis | | | Extras |
| | | | | | Help |
| | | | | | Information |
| | Copyright by Volks | wegen AD. All rights reserved, especially but not lim | sted to duplication, distribution and making publicly as | winth. | > 13 0 |

After this log in, necessary SFD activation tokens for work on the control units are generated automatically in the background.

After vehicle identification and reading DTCs you select an SFD-protected function (in the example, online coding) on an SFD-protected control unit (in example 15, Airbag):

| Importer: | | Vehicle identification no.: | WVW | 🧀 🛃 🗞 | |
|------------------|-----------------------------|-----------------------------|-----------------|-------|---------------------|
| Job: | - | cognic. | as ergine codes | 0 4 | |
| Control units J | obs DISS TPI Test plan | Special functions | | | Operating modes |
| Tests for the co | omplete vehicle | | | | Qr Diagnosis |
| Status | Tests | | | | 🗯 Self-diagnosis |
| | 0025 - immobilizer function | 8 | | | C Halt a production |
| - | 0025 - Adapt knm | obilizer | | | Test instruments |
| | 005F - Information electro | sics 1 J794 | | | into . |
| - | 005F - Build state | lestiveset fault memory | | | |
| | Software version manage | ment | | | 19 Admin |
| - | Adapt software (of | line) | | | Protocol |
| - | Adapting software | | | | Data |
| - | Code online control | a module | | | areas - |
| - | Control unit reset | | | | Extras |
| - | Carl. module softw | are configuration | | | Help |
| SYS,XX1. | 0711_X_SERVICE42_SG | CODIEREN@00011 | | | Information |
| Perform test. | Show documents | | | | > 2 |

Afterwards you have to log in again for online coding (Service 42 / SVM), as was also the case previously:

| uponter: ealer: Ac | Vehicle identification no.: Engine: | WVW all engine codes | 🧀 🔩 💊 0 💚 | |
|---|---|--|--------------|---|
| interim Acce DISS TPI | Territor Sequence Greated territoria | | | Operating modes * |
| ode control module online (S | 42) | | | St |
| ogin | | | | B out map on |
| ext the data will be transferrer or this, a connection must be | d online. set up | | | Contract of the second |
| Connect vehicle diagnostic te | ister with appropriate hardware to your online ne | ebwork: | | E in |
| Ione/Continue | assword | | | (Q same |
| | OM-Billion | (and the set of the se | | Protocol # |
| | Password ••••• | | | Data * |
| | Adopt | Cancel | | Extras * |
| | | | | Help T |
| | | | | Information = |
| | 12 2 S SI | 854 84.00 | | |

The SFD-protected airbag control unit has been automatically opened for the write operation and the coding has been carried out successfully:

| Officiand Diagnostic Information System 1 | Service - 52.1 | | and the second se | ini (Or and |
|---|--|-------------------------|---|----------------------|
| mporter: Dealer: Jobs | Vehicle identification no.: Engine: | WVW all engine codes | 🧀 🛃 🗞 0 💚 | |
| DISS TPI | Million Sequence Ministration | | | Operating modes * |
| Code control mode in online (Ed. | | | | Qr Diagnosis |
| Evaluate condition | e) | | Done/Continue | A Ser myres |
| Coding of the system Airbag war | s not successful. | | * | C Haltin proprieting |
| | | | | Ca Test instruments |
| | | | | 😭 Info |
| | | | | (Queen |
| | | | | Protocol # |
| | | | | Data = |
| | | | | Estras * |
| | | | | Help * |
| | | | | Information * |
| | K < > > | Help Cancel te | est | * 2 0 |
| | | | Execution of | Ter bed |

When using Guided Fault Finding SFD-protected control units are automatically locked at the end of the diagnostic session.

2. Working with Self-diagnosis: online activation

In a diagnostic start-up via "Self-diagnosis", after selecting a control unit you can establish whether the control unit is SFD-protected using the "Display measured values" function (Measured value [MAS 18157]_SFD activated status). In order to activate it, select the "Access authorization" option:

| Officiard Diagnostic Information System Service 132.8 | and the second | | and the second s | | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 20 - |
|---|--|-------------------------|--|--------------|---------------------------------------|------|
| imponer: V Dealer: E Jobs | /ehicle identification no.: ingine: | WVW all engine codes | | 0 | | |
| Control units Results | | | | | Operating modes | |
| Measured values - Show measured values | | | | | St Chapters | |
| 0015 - Arbao (UDS / ISOTP / 5WA969655A / 0 | 500 / 006 / EV. Airba/W405ME | WW38X / 001024) | Access authorisation | . 0 | 🇯 Set dagnosis | |
| Name | Value | | Fault memory | ish. | C Hattan | |
| [MAS18157]_SFD activated status | | | Actuator diagnosis | DYN | A Test instruments | ¢ |
| Role of vehicle diagnostic to be protected | No activation active | | Coding | cycles | 😭 info | |
| Type of vehicle diagnostic to be protected | No activation active | | Measured values | | Q Admin | |
| Status of vehicle diagnostic to be protected | SFD individualization featu | ire set | Access automsation | | | |
| Duration of vehicle diagnostic to be protect | ed No activation active | | Liata upload | _ | Protocol | , |
| | | | | | Data | ٠ |
| | | | | | Extras | |
| | | | | | Help | |
| + - | | | < | 1 | Information | |
| 0019 - MW 0015 - MW | | | | * | * 2 | 0 |
| Antwowershieverski opioze a | | | | Reading mean | and values: (JN) | - |

Then select the "Online activation" use case (standard case):

| importe: Dealer: Job: | Vehicle ider Engine: | effication no.: | WVW all engine codes | یم 0 | 0 | | |
|--|-------------------------|---|---|----------|-----------|----------------------|--|
| Control units Results | 6 | Access authorization | | | | Operating modes | |
| Measured values - Show measured values | ACS . | Information | | | | Q Distant | |
| 0015 - Arbag (UDS / ISOTP / SWA069666A | / 0500 / 00 | 0015 - Airbag: | | porisate | · · 0 | 🇯 Set dagnosis | |
| Name | Va | | | F | Refresh | C Hattan protocology | |
| [MAS18157]_SFD activated status | | | | | now | Test instruments | |
| Role of vehicle diagnostic to be protect | ed No | Activation information | | | In cycles | ohni 😭 | |
| Type of vehicle diagnostic to be protect | ed No | Activation type | No activation active No activation active | | 0 5 | Q Admin | |
| Status of vehicle diagnostic to be prote | cted SF | Minutes currently left Activation status | No activation active SFD individualization feature set | | | | |
| Duration of vehicle diagnostic to be pro | tected Nat | | | | | Protocol | |
| | | Configure function | | | | Data | |
| | - 1 | Use case Online actival Online actival Manual SED | ion ion activation | | | Extras | |
| | - 1 | 9 | Execute Block control unit E | at | | Help | |
| + - | L | | | | < > | Information | |
| 0019 - MW 0015 - MW | | | | | 26 | > 🛛 🔾 | |

Then log in with your Dealer Portal login details:

| mporter: Vefa Deater: Engl Not: | icle identification no.: Ine: | WVW all engine codes | 🧀 🛃 📎 | |
|--|----------------------------------|--|-----------------------|---------------------|
| Control units Results | | | | Operating modes |
| Measured values - Show measured values | | | | Q Depose |
| 0015 - Airbag (UDS / ISOTP / 5WA069666A / 0600 | /006/EV_AirbaVW40SME | VW38X / 001024) | ess authorisation • 🥥 | 🗯 Self-dagnosis |
| Name | Va Progress dialogue | (| Refresh | C Hatta proprietary |
| MAS18157[_SFD activated status | 0 | | now | Test instruments |
| Role of vehicle diagnostic to be protected | No | | In cycles | 😭 Info |
| Type of vehicle diagnostic to be protected | Application case Or | Ane activation' is being executed | 0 5 | Q Admin |
| Status of vehicle diagnostic to be protected | Se Da la | 977 100 100 | | |
| Duration of vehicle diagnostic to be protected | No activation act User | name DP12345 | | Protocol |
| | Pass | word | | Data |
| | Infor | mation IgnOn ligh_nessage security/access | | Extras |
| | - | | | |
| | | Adopt Cancel | | riep |
| + - | _ | | < > | Information |
| 015 - MW | | | * | * 2 0 |

The activation status displays the activated role and the remaining activation period:

| mporter: Veta Deater: Engl lob: | cle identification no. ne: | : WVW all engine codes | 🧀 🛃 | 0 | | |
|---------------------------------------|---|--|----------|----------------------|--|---|
| tob: | /006 / EV_Airbas Value Basic Short time-con SFD individual (VOL 89 min | Acres autoritation Information 0015 - Airbag: Activation information Role currently activated Basic Activation information Role currently activated Basic Activation information Role currently activation Minutes currently left (VOL 59 min Activation status SFD individualization fea Configure function Use case Online activation Execute Block co | dure set | sh row roycles | Operating modes Operating modes Operating modes Set-diagnosis Operating Test instruments Operating Admin Protocol Data Extras Help Information | |
| 2015 - MW | | | • | * | > | 0 |

3. Working with Self-diagnosis: manual SFD activation (offline)

If there is no online connection from the vehicle diagnostic tester to the workshop network, after selecting "Access authorisation" select "Manual SFD activation":

| Official Diagnostic Information System Service - 52.3 | | | | _ | 0 0 B |
|---|-------------------------------|---|--------------|---------------|---------------------|
| Importer: Veh Dealer: Eng Job: | icle identification n Incl | o: WVW all engine codes | 🧀 🛃 0 🔍 | 0 | |
| Control units Results | - | C Acres autoristan | | 1 | Operating modes * |
| Measured values - Show measured values 0015 - Arbag (UDS / ISOTP / 5WA859656A / 0500 | /006/EV_Airba | Information 0015 - Airbag: | | 0 | Chiprone Chiprone |
| Name | Value | | | esh | |
| [MAS18157]_SFD activated status | - | | | OVY | Ca Test instruments |
| Role of vehicle diagnostic to be protected | No activation a | Activation information | | cycles | 📦 info |
| Type of vehicle diagnostic to be protected | No activation a | Activation type No activation active | | | 🚱 Admin |
| Status of vehicle diagnostic to be protected | SFD individual | Minutes currently left No activation active Activation status SFD individualization fe | ature set | | Protocol * |
| Duration of vehicle diagnostic to be protected | No activation a | Configure function | | | Data E |
| | | Use case Manual SFD activation | - | | Line |
| | - | Online activation Minute SETS antivation | | | Extras « |
| | | St Execute Block : | ontolust Ext | | Help T |
| + - | | | < | 2 | Information * |
| 0015 - MW | | | | 26 | > 🖾 🧿 |
| EV_ArtwVW405NEVW38X_001028_# | | | | leading means | red values: (DN) |

If an activation token has not yet been generated, answer "No" to the following question:

| Importer: | /ehicle identification n | o.: WVW | 100 Ha | 0 | (TA) | |
|--|--------------------------|--|---------------------|----------------|---------------------|---|
| Dealer: | Engine: | all engine codes | 0 | - | | |
| ontrol units Results | | | • • | | Operating modes | |
| Measured values - Show measured values | | | | | Q Chapters | |
| Weatured Values - Show measured values | | | | - | Set dagoosis | 1 |
| J015 - Airbag (LIDS / ISOTP / SWA969666A / 0 | 500 / 006 / EV_Airba | /W405MEVW38X / 001024) | ccess authorisation | . 0 | and the second | - |
| Name | Va Progress d | lalogue Localita | Re | fresh | C Hattan Production | 9 |
| # [MAS18157]_SFD activated status | 0 | | | now | Ca Test instruments | |
| Role of vehicle diagnostic to be protected | No. | | 2 | in cycles | 😭 info | |
| Type of vehicle diagnostic to be protected | No | in case manual SFD activation is being executed | 0 | 5 | Q Admin | |
| Status of vehicle diagnostic to be protected | s | Manual VD activation | | | | |
| Duration of vehicle diagnostic to be protect | ed No activation | Do you have a valid SFD token for the following cont | ol unit? | | Protocol | * |
| | | ⊡ Yes # No | | | Data | * |
| | | Next | ancel | | Extras | |
| | | | | | Help | |
| + - | | | < | 1 | Information | * |
| 015 - MW | | | | 26 | > 🛛 🕻 | 3 |
| Autorowegenerowater golden a | | | | Security/Appen | FunctionAlia | |

The activation request structure generated by the control unit is required so that the SFD back end can generate an activation token. You can now either copy the structure to the clipboard or save it in a file:

| Officiard Diagnostic Information System | m Service - 523 | Second Second | | | | | | |
|---|------------------------|---|---|--|------------------------------------|--------------|------------------|---------|
| importer: Dealer: Job: | Vehicle Engine | identification no.: | WVW all engine co | ides | | 0 | 6 | |
| Control units Results | | Menual SFD activation | | | | - | Operating mi | odes * |
| Measured values - Show m 0015 - Arbag (UDS / ISOTP / | easured values | Use the SFD IT b To do this you mu Activation query s | ackend to generate an st have a valid account tructure: | SFD token from the activ in the SFD IT backend. | ation query structur Read again | | Sef-dag | nosis |
| (MAS18157]_SFD activates | d status | 6536733406002 332E313931353 | B06010401990A8D11 732303033300000000 | 0A01007153235453522 80000016DCFBA05E0 | D54535231392E30 | Der . | Test inst | ruments |
| Role of vehicle diagnosti | ic to be protected | | | | | cycles | 😭 info | |
| Type of vehicle diagnost | ic to be protected | | | | | | 🚱 Admin | |
| Status of vehicle diagnos | stic to be protected | | | | | | Destand | |
| Duration of vehicle diagn | nostic to be protected | N | | | | | Protocol | |
| | | | | | | | Data | * |
| | | | | | | | Extras | , |
| | | | Copy to clipboard | Save as file Back | Next Cancel | | Help | |
| + - | | | | | | 5 | Information | |
| 0015 - MW | | | | | | * | >> | |
| N_ARTERVWHOSHEVWSEX_001028_6 | | | | | | Reading mean | red values: (2%) | - |

Then open the "SFD" application in the Dealer Portal:

| VOLKSWAGEN AG | Dealer portal. | | | | |
|------------------------------------|-----------------------|--------------------------------|---------------|----------|---|
| My Favorites | Welcome. | | | | |
| administrate | Applications | Sestem messages | Motifications | | |
| Status: Data successfully saved | Please select one o | f the following applications: | | | |
| | DISS Monitor | | | | |
| | Elektronisches Servis | e Auskunftssystem (ELSA) | | | ^ |
| | ElsaPro | | | | |
| | Feedback Monitor | | | | |
| | Lokale Benutzerverw | altung | | | |
| | ODIS eShop | | | | |
| | SFD | | | | |
| | Volkswagen InfoNet | | | | |
| | Volkswagen Servicel | let | | | |
| | You can access the | se applications via internet : | | | |
| | Feedback Monitor | | | | ~ |
| | Lokale Reputzervers | altunn | | | |
| | | | Ma Broffle | T Locard | |

Then you can access the token generation website of the SFD back end. There you enter the previously determined activation request structure and the vehicle identification number and select the brand:

| Vehicle Diagnostics Protection | This system is classified as confidential! | Retail User | - |
|--|--|-------------------------|------------------------|
| TOKEN RETRIEVAL | | () | |
| A > Token retrieval > Manual SFD a | ctivation | | |
| This screen provides the failback solution t | o retrieve SFD tokens for unlock request structure | P5. | |
| O Here you can enter the unlock reque | t structure (hex) for the token: | | |
| 65367334060D2806010401990A8 | D1110A01007153235453522D54535231392E3 | D332E313931353732303033 | 300000000B0000016DCFB/ |
| Or upload the unlock request structu | re (bex). Only text files (.txt) can be uploaded: | CLEAN | UP REQUEST STRUCTURE |
| Please select the brand of the vehicle: | | | |
| Volkswagen × • | | | |
| Please enter the 17 digits VIN of the veh | icle: | | |
| WVWZ; | | | |
| | | | REQUEST & TOKEN |
| Token output (hes): | | | |
| | & DOWNLOAD | TOKEN COPY THE TO | MEN TO THE CLIPBOARD |

The required activation token is generated by clicking on "Request a token":

|) - Vehicle Diagnostics Protection | This system is classified as confidential! | Retail User | | en 🤃 |
|--|--|---|---|---|
| TOKEN RETRIEVAL | | (1) | | |
| Token output (hex): | | | REQUEST | A TOKEN |
| | | | | |
| 7f218201d17f4e495f290170420d44 2e30332e313931353732303033300 60c62d6b08e78f8cc5ac8641499fca 2688e31eea05b154567693dc1ee80 5f11e99aa820ada103b3454fa4f29a 47e615822bf8e64674371c9b72fefa b827f6072a61cde2de768f7d2a69f3 fd02954292c1ae0f6ade8616c1f8e5a 2371e857eb76de69b0272ba | 4555565747505346000000b7f4c33060d2b060 201010000016dd48b607e5f37820180360a75ec dbaf5dfc3623333bbdf96f9f481d08353b5d83d7 863508e51d4c26ca77c08feaf55080be3734f75 bd58216275e86bfc8fe53d7a0ab8ce0faf1a182b 15fe21a2421e2eb370a7c8066500716a52f70b 99c8a1f9b6de939c52b6dd7c5cd7b6dc1acbfd! 973be70f70a494c0d0857a6783c27b743d90bff | 010401990a8d110a01 da24e29177e077b2b2 f06a80db1adf800aa1 gfc1e8c2d872e3e953 c96f4440a1d541c865 dbb7ab66f16ce2cbdfb Se83cd6df21e3cbd6a5 [251ef8aea9a6701ac5 | 000153225453522d54 3d7a76a6852bcaf15da 8bc25b8ea8246859dc 4f340df8027fae57624c 2cf882ef67d614ecfee6 fa7983a5f9ca183637fe 6609975ab5006d3f2b7 d2ea8b7e845e3517a1b | 53523139 fd176019 4f0c54ed 569ada24e fe8dfe6b8 565cfe546 5c3afe955 51faa7a96 |

Back in ODIS, once you have the required activation token, answer "Yes" to the following question:

| Imponer: Dealer: Job: | Vehicle identification r Engine: | io: WVN all engline codes | 🧀 🛃 🗞 0 🕖 | |
|--|--|---|----------------------|--|
| Control units Results Measured values - Show measures 0015 - Akbag (UD5 / ISOTP / SWA050 Name * [MAS18157]_SFD activated status Role of vehicle diagnostic to be p Status of vehicle diagnostic to be Duration of vehicle diagnostic to be | d values 1655A / 0500 / 006 / EV_Airba 1665Cled Ne Applicate rotected Ne Applicate protected Se Applicate protected No addivation | VW405MEVW38X / 001024) Islogue on case 'Manual SFD activation' is being executed Mervel SFD activation Mervel SFD activation Do you have a valid SFD token for the following co 21 - Airbag * Yes © No Next | Access authorisation | Operating modes A Converse Image: Converse Set -diagnosis Image: Converse Converse Image: Converse |
| + - | | | | Help Findermation Findermation Findermation Findermation Findermatic Findermat |

Then enter the activation token, either via the clipboard or from a file:

| Importer: Dealer: | Vehicle identification no.: Engine: | WVW all engine codes | 🧀 🛃 💊 | |
|---|---|--|------------|-------------------------|
| Control units Results Measured values - Show measure 0015 - Airbag (LIDS / ISOTP / 5WA95 Name * [MAS18157]_SFD activated status Role of vehicle diagnostic to be Type of vehicle diagnostic to be Duration of vehicle diagnostic to be Duration of vehicle diagnostic to be | Manual UD activation Please copy the SFD token to the text to SFD token: Paste from clipboard. Past | eld and then activate the control unit. de from the | | Operating modes A |
| + - | x | Activate control unit | Back Cance | Help * Information * |

Please note:

Each activation token is specific to the control unit and usable only one time!!

4. Locking the control units again

When using Guided Fault Finding SFD-protected control units are automatically locked at the end of the diagnostic session. Otherwise they are also automatically locked again 90 minutes after activation.

Each control unit can also be locked again manually, however, by clicking the "Block control unit" button for an open control unit:

| Importer: Veh Dealer: Eng Job: | icie identifica Ine: | son no.: WVW all engine codes 0 | 1 × | |
|---|----------------------------|--|----------------|------------------------------|
| Control units Results Measured values - Show measured values 0015 - Arbag (UDS / ISOTP / 5WA859655A / 0500 Name [MAS18157]_SFD activated status Role of vehicle diagnostic to be protected |)/006/EV Value Basic | Altera automation | Refresh now | Operating modes * |
| Type of vehicle diagnostic to be protected Status of vehicle diagnostic to be protected | Short II SFD incl | Activation motivated Basic Activation type Short time-controlled Minutes currently left [VO]_89 min Activation status SFD individualization feature set | 0 8 | Admin Protocol F |
| Caration of vehicle obsprostic to be protected | IvoTae | Configure function Use case Online activation | | Data = Extras = Help = |
| + = | L | | < > | Information * |

Answer "Yes" to the corresponding enquiry:

| Importer: Dealer: Job: | Vehicle identifi Engine: | ation no.: WVW all engine codes | - 10 - 10 | 0 | |
|------------------------------|---|--|-----------|---|--|
| Job: | ues A / 0500 / 006 / EV Value ted Basic aed Short I scled SFD in otected [VO]_8 | Auero avhanorien Information 0015 - Arbag: | 0 J) | | Operating modes A Operating mod |
| + - | | Execute Block control unit | Exit | | Help * |

The activation status now shows that the control unit is locked. You can then activate it again:

| Impone: Ven Dealer: Eng Job: | icle identificat Inc: | on no.: WVW at engine codes | | ° 🛞 |
|---|---|---|-----------------------------|---|
| Control units Results Measured values - Show measured values 0015 - Arbag (UD5/ISOTP/5WA050656A/0500 Name [MAS18157]_SFD activated status Role of vehicle diagnostic to be protected Type of vehicle diagnostic to be protected Status of vehicle diagnostic to be protected Duration of vehicle diagnostic to be protected | Value No activ No activ SFD inte No activ | Activation information 0015 - Aribag: Activation information Role currently activated Activation type No activation active Activation status SFD individualization feature set Configure function Use case Online activation | Refresh now 2 in cycl | Operating modes * Operating modes * Operating modes * Set diagnosis * Test instruments * Info * Admin * Data * Extras * |
| + - | Į | Execute Block corest unit | | Information * |

Alternatively, all of the control units can also be locked at once by selecting "Block vehicle":

| ooner: aler: x | Vehicle identification no.: Engine: | all engine codes | | 0 | 1 | |
|---|--|---------------------|-----------|---------|-------------|------------------|
| ntol units Results | | | | | | Operating modes |
| hicle self-diagnosis: Complete fault me Complete fault me ystem Toessoot mode | emory Control unit self-diagr | nosis: Fault memory | - O SB | Event . | Retresh | Charloss Charles |
| 0019 - Gateway (UD Customer service Engine assembly | OBD | | | Event | now | Gimmon |
| 0001 - Engine Col Col Andrews | | | | Event + | 0 in cycles | info |
| 0003-Erakes 1 | | | | Event | | () Admin |
| 0008 - Air Conditioning | | | | Event | | Protocol |
| 0009 - Central Electrics (UDS / ISO) 0013 - Adaptive Cruise Control | TP///) | | | Event | | Data |
| 0015 - Airbag (UDS / ISOTP / SWAR | 958655A / 0500 / 006 / EV_AkbaVW405 | MEVW38X 001024) | | Event | | Extras |
| 0017 - Dash Board | | | | Event | | Help |
| 0017 - Dash Broard ck diagram Control unit list Installation I | ist Fault memory list Equipment list | | | OK S* | | Information |

Then the locking of the vehicle is confirmed by clicking on "Yes".

| orier: Ver: 4 | Vehicle identification no.: WVW Engine: all engine codes | | | |
|--|--|------------|----------|------------------|
| trol units Results | | | | Operating modes |
| nicle self-diagnosis: Elizak vehicle | Control unit self-diagnosis: Fault memory | O | | Q Chapters |
| atau | | PD Front * | Retesh | 🐞 Self-diagnosis |
| 0019 · Gateway (UDS/ISOTP///- | 13 | Event | now | C Harrison |
| 0001 - Engine Control Module 1 | Slock which | | C horter | Test instruments |
| 0002 - Transmission Control Module | Warning: If you do this, you will reset the activation control units for this workide. Would you like to rese | is of all | 0 s | 😭 info |
| 0003-Brokes 1 | of all SFD control units for this vehicle? | | | Q Admin |
| 0008 - Air Conditioning | | | | Destand |
| 0009 - Central Electrics (UDS / ISOTP / | | TON THU | | - FRANKLA |
| 0013 - Adaptive Cruise Control | | Event | | Data |
| 0015 - Aitbag (UDS / ISOTP / SWA959 | 855A / 0500 / 006 / EV_ArbaVW405MEVW38X 001024) | Event | | Extras |
| 0017 - Dash Board | | Event | | Heb |
| 0017 - Dash Brand | | ок - | | |
| ck diagram Control unit list Installation list | Fault memory list Equipment list | | | Information |
| | | | | |

You will receive a response as to which control units have successfully been locked:

| Importer: Dealer: Job: | Vehicle identification no.: WVW Engine: all engine codes | 0 | 1 > | Ø | D |
|--|---|--------------------|---------------|-----------------|-------|
| Control units Results | | | | Operating mode | ns A |
| Vehicle self-diagnosis: Block vehicle | Control unit self-diagnosis: Fault memor | y · · O | Retresh | Self-diagno | sis |
| 0019 - Gateway (UDS / ISOTP / / | (-/) C Block whice | ed to the blocking | row | C Halt Part | - |
| 0001 - Engine Control Module 1 | (successfully: 7 / incorrectly: T): | | • 🖸 in cycles | Ca Test instrum | nents |
| 0002 - Transmission Control Module | Successful SFD blocking: 0x0003 - Brakes 1 | â. | 0 8 | el Info | |
| 0000-Erakes 1 | 0x0009 - Central Electrics 0x0015 - Airban | | | (Q) Admin | - |
| 0008 - Air Conditioning | 1 | | | Protocol | |
| 0009 - Central Electrics (UDS / ISO | TP//-/ | OK | | Data | |
| 0013 - Adaptive Cruise Control | | | | LAND | |
| 0015 - Aitbag (UDS / ISOTP / SWA | 969655A / 0500 / 006 / EV_AkbaVW405MEVW38X 001024) | Event | | Extras | |
| 0017 - Dash Board | | Event | | Help | |
| 0017 - Daich Rosert | | OK . | <u>.</u> | | |
| Block diagram Control unit list Installation | ist Fault memory list Equipment list | | | information | |
| O Self-Bannosis | | | | 38 F | 10 |