

Connection of the WorkshopTabs



To connect the WorkshopTab with the DTCO 4.1x, please do the following:

- a) Fold up the calibration interface cover (1).
- b) Insert the WorkshopLink (2) in the calibration interface of the DTCO 4.1x.
The WorkshopTab (3) connects to the WorkshopLink.

IMPORTANT

Click on the respective entry in table of contents to directly view the fault message description.

You can also display the overview of the fault messages and switch to the respective display description by clicking on the [more](#) link.

For the overview of the displays, see:

Displays in the display of the DTCO (01 to 30) [▶ 2]

Displays in the display of the DTCO (31 to 50) [▶ 4]

Displays in the display of the DTCO (51 to 99) [▶ 5]

Displays in DTCO display (without number) [▶ 7]

Displays in the display of the DTCO (01 to 30)

Click on a display to open the description page of the corresponding error code.

IMPORTANT

The following warning messages lead to an entry in the data memory and will be in the printout of the DTCO:

- Warning message regarding events
- Warning message regarding security breaches
- Warning message regarding faults

IMPORTANT

The following warnings are not on a printout and are not saved in the data memory:

- Warning message regarding working time
- Warning message regarding operation
- Message regarding other events and faults

```
xA internal
fault           01
```

more ▶ 9]

```
xA internal
fault           02
```

more ▶ 10]

```
xA internal
fault           04
```

more ▶ 11]

```
xA internal
fault           05
```

more ▶ 12]

```
xA time fault
                06
```

more ▶ 13]

```
!01 security
breach          07
```

more ▶ 14]

```
xA calibration
fault           09
```

more ▶ 15]

```
xA internal
fault           10
```

more ▶ 16]

```
!01 security
breach          18
```

more ▶ 20]

```
!+ power
interruption   19
```

more ▶ 21]

```
xL sensor fault
                20
```

more ▶ 22]

```
xL sensor fault
                21
```

more ▶ 23]

```
xL sensor fault
                22
```

more ▶ 24]

```
!01 security
breach          23
```

more ▶ 25]

```
!01 security
breach          24
```

more ▶ 27]

```
!01 security
breach          25
```

more ▶ 28]

```
x↓ download  
fault 12
```

more [▶ 17]

```
x↓ sensor fault  
16
```

more [▶ 18]

```
!↓ security  
breach 17
```

more [▶ 19]

```
!o↓ drivins  
without card 28
```

more [▶ 29]

```
!↓↓ cards  
conflict 29
```

more [▶ 30]

```
>> overspeed  
30
```

more [▶ 31]

Displays in the display of the DTCO (31 to 50)

Click on a display to open the description page of the corresponding error code.

IMPORTANT

The following warning messages lead to an entry in the data memory and will be in the printout of the DTCO:

- Warning message regarding events
- Warning message regarding security breaches
- Warning message regarding faults

IMPORTANT

The following warnings are not on a printout and are not saved in the data memory:

- Warning message regarding working time
- Warning message regarding operation
- Message regarding other events and faults

```
!⚡ power
interruption 31
```

more [▶ 32\]](#)

```
⚡ ejection not
possible 34
```

more [▶ 33\]](#)

```
⚡ printout not
possible 36
```

more [▶ 34\]](#)

```
⚡ printout
delayed 37
```

more [▶ 35\]](#)

```
⚡ no paper
39
```

more [▶ 36\]](#)

```
x⚡ internal
fault 40
```

more [▶ 37\]](#)

```
x⚡ card fault
41
```

more [▶ 38\]](#)

```
!⚡ security
breach 42
```

more [▶ 39\]](#)

```
!⚡ security
breach 43
```

more [▶ 40\]](#)

```
!⚡ card not
closed 44
```

more [▶ 41\]](#)

```
!⌚ time
overlap 45
```

more [▶ 42\]](#)

```
!⚡ insertion
while driving 46
```

more [▶ 43\]](#)

```
!⚡ security
breach 47
```

more [▶ 44\]](#)

```
!⚡ card not
valid 48
```

more [▶ 45\]](#)

```
⚡? recording
inconsistent 49
```

more [▶ 46\]](#)

```
⚡ card error
50
```

more [▶ 47\]](#)

Displays in the display of the DTCO (51 to 99)

Click on a display to open the description page of the corresponding error code.

IMPORTANT

The following warning messages lead to an entry in the data memory and will be in the printout of the DTCO:

- Warning message regarding events
- Warning message regarding security breaches
- Warning message regarding faults

IMPORTANT

The following warnings are not on a printout and are not saved in the data memory:

- Warning message regarding working time
- Warning message regarding operation
- Message regarding other events and faults

```
4Q1 wrong card
type                    51
```

[more \[▶ 48\]](#)

```
4Qx1 card locked
                        52
```

[more \[▶ 49\]](#)

```
4A internal
fault                    53
```

[more \[▶ 50\]](#)

```
4Q1 please eject
the card                 54
```

[more \[▶ 51\]](#)

```
4A2 internal
fault                    58
```

[more \[▶ 54\]](#)

```
xQ2 card fault
                        59
```

[more \[▶ 55\]](#)

```
!Q2 security
breach                   60
```

[more \[▶ 56\]](#)

```
!Q2 security
breach                   61
```

[more \[▶ 57\]](#)

```
!A1 motion
conflict                 80
```

[more \[▶ 78\]](#)

```
xX internal GNSS
fault                    82
```

[more \[▶ 79\]](#)

```
!X GNSS is
missing                  83
```

[more \[▶ 80\]](#)

```
xY internal DSRC
fault                    84
```

[more \[▶ 81\]](#)

```
!Y DSRC comm.
error                    85
```

[more \[▶ 82\]](#)

```
!e time conflict
                        86
```

[more \[▶ 83\]](#)

```
x1 sensor fault
                        87
```

[more \[▶ 84\]](#)

```
4x1 workins time
* 04h15                  88
```

[more \[▶ 85\]](#)

```
!A2 card not
closed          62
```

more ▶ 58]

```
!o2 time
overlap        63
```

more ▶ 59]

```
!o2 insertion
while drivin 64
```

more ▶ 60]

```
!A2 security
breach         65
```

more ▶ 61]

```
!A2 card not
valid          66
```

more ▶ 62]

```
4?2 recordins
inconsistent  67
```

more ▶ 63]

```
4A2 card error
              68
```

more ▶ 64]

```
4A2 wrong card
type          69
```

more ▶ 65]

```
4Ax2 card locked
              70
```

more ▶ 66]

```
4A internal
fault         71
```

more ▶ 67]

```
4A1 please eject
the card      72
```

more ▶ 68]

```
4x1 workins time
24h 09h30    89
```

more ▶ 86]

```
4x1 workins time
| 58h30      90
```

more ▶ 87]

```
4o1 drivins time
24h 03h15    91
```

more ▶ 88]

```
4o1 rest in
→h 01h45     92
```

more ▶ 89]

```
4o1 drivins time
| 44h30      93
```

more ▶ 90]

```
4o1 drivins time
|| 89h45     94
```

more ▶ 91]

```
4o1 drivins time
24h hhhmm   95
```

more ▶ 92]

```
!x? GNSS anomaly
              96
```

more ▶ 93]

```
xA internal
sensor fault  97
```

more ▶ 94]

```
xè ITS fault
              98
```

098 - ITS/Bluetooth components fault ▶ 95]

```
4? recordins
inconsistent  99
```

more ▶ 96]

Displays in DTCO display (without number)

Click on a display to open the description page of the corresponding error code.

IMPORTANT

The following warning messages lead to an entry in the data memory and will be in the printout of the DTCO:

- Warning message regarding events
- Warning message regarding security breaches
- Warning message regarding faults

IMPORTANT

The following warnings are not on a printout and are not saved in the data memory:

- Warning message regarding working time
- Warning message regarding operation
- Message regarding other events and faults

```

4o1 break!
1e04h30   #00h15
  
```

056¹⁾/ 074²⁾

more [[▶ 52](#)]

```

4o1 break!
1e04h15   #00h15
  
```

057¹⁾/ 075²⁾

more [[▶ 53](#)]

```

Upgrade failed
Error #FFFFFFE
  
```

078¹⁾

more [[▶ 72](#)]

```

Upgrade failed
Error #00000003
  
```

078¹⁾

more [[▶ 73](#)]

```

#01 expires in
days           7
  
```

more [[▶ 99](#)]

```

#AS calibration
in days        28
  
```

more [[▶ 100](#)]

```

#01 download
in days        7
  
```

more [[▶ 101](#)]

```

#! end of normal
operation in 20
  
```

more [[▶ 102](#)]

```

Upgrade failed
Error #00000001
  
```

079¹⁾

more [[▶ 74](#)]

```

Upgrade failed
Error #00000002
  
```

079¹⁾

more [[▶ 75](#)]

```

Upgrade failed
Error #00000004
  
```

079¹⁾

more [[▶ 76](#)]

```

Upgrade failed
Error #FFFFFFFF
  
```

079¹⁾

more [[▶ 77](#)]

```

4Q wrong entry
  
```

more [[▶ 98](#)]

```

4v please
enter
  
```

more [[▶ 97](#)]

- 1) Number in the error memory.
- 2) Number in the error memory for drawer 2.

001 - Internal fault

Display in the DTCO-Display:

<pre>xA internal fault 01</pre>
--

EventFaultType*: 31

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding faults	<p>Meaning: A general but serious fault has occurred in the device.</p> <p>Measure(s): If the error message appears despite repetitive acknowledgement, replace the DTCO 4.1x.</p>	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

002 – Internal fault

Display in the DTCO-Display:

xA internal fault	02
----------------------	----

EventFaultType*: **31**

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding faults	<p>Meaning: A general but serious fault has occurred in the device.</p> <p>Measure(s): If the error message appears despite repetitive acknowledgement, replace the DTCO 4.1x.</p>	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

004 – Internal fault

Display in the DTCO-Display:

<pre> xA internal fault 04 </pre>

EventFaultType*: 31

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding faults	<p>Meaning: A general but serious fault has occurred in the device.</p> <p>Measure(s): DTCO 4.1x replace.</p> <p>Note: This warning message is not saved in the data memory and will never be reset.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

005 – Internal fault

Display in the DTCO-Display:

xA internal fault	05
----------------------	----

EventFaultType*: **31**

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding faults	<p>Meaning: A general but serious fault has occurred in the device.</p> <p>Measure(s): If the error message appears despite repetitive acknowledgement, replace the DTCO 4.1x.</p>	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

006 – Time fault

Display in the DTCO-Display:

```
xA time fault
                06
```

EventFaultType*: 31

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding faults	<p>Meaning: The time in the DTCO 4.1x is not correct.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – The clock has stopped or is advancing incorrectly. – An internal cyclical test has determined that the time is not plausible. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check UTC time on the DTCO 4.1x and use a test device to correct if needed. – Check the Time function of the DTCO 4.1x. – If the error message continues to appear despite these measures, replace the DTCO 4.1x. <p>Note: No driver or company cards will be accepted in order to prevent inconsistent data.</p>	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

007 – Security breach

Display in the DTCO-Display:



EventFaultType*: 10

IMPORTANT		
No workshop card necessary.		
Type of message	Description	Additional information
Warning message regarding faults	<p>Meaning: A general but serious fault has occurred in the device.</p> <p>Measure(s): If the error message appears despite repetitive acknowledgement, replace the DTCO 4.1x.</p>	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode.
Printout vehicle > event:	Printout driver > event:	
Security breach occurred without an inserted card.	Security breach occurred without an inserted card.	
	Explanations of error information in printouts: See Technical description of DTCO 4.1x.	
Security breach occurred with an inserted card.		

* EventFaultType according to Annex I C / **bold** = Multiple assignment

009 – Calibration fault

Display in the DTCO-Display:

```
xA calibration
fault          09
```

EventFaultType*: 31

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding faults	<p>Meaning: Fault in the calibration memory.</p> <p>Possible cause(s): An internal cyclical test of significant calibration parameters has found a check sum error.</p> <p>Overview of the significant calibration parameters:</p> <ul style="list-style-type: none"> – vehicle identification number (vin) – Vehicle registration number – Characteristic coefficient (w value) – Recording equipment constants (k value) – Effective wheel circumference (l value) – Tyre size – Maximum speed – UTC time – Odometer reading – Date of calibration <p>Measure(s): If the error message appears despite repetitive acknowledgement, replace the DTCO 4.1x.</p>	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

010 – Internal fault

Display in the DTCO-Display:

<pre> 4A internal fault 10 </pre>

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding faults	<p>Meaning: Fault at v-pulse output (B7)</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – The connection cable between the DTCO 4.1x and the attached control device is defective. – Attached control device at output B7 is defective. – Output B7 on DTCO 4.1x is defective. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check whether the attached recording equipment actively monitors the line and deactivate if necessary. – Check output B7 on DTCO 4.1x, if necessary deactivate B7 monitoring. – Check the connection cable between the DTCO 4.1x and the attached recording equipment: <ul style="list-style-type: none"> – Short-circuit to ground? – Short-circuit after +U_B? – Check the connected recording equipment (input). – Replace any defective components. <p>Note: Monitoring of this fault depends on the configuration of the DTCO 4.1x. Monitoring of this fault can be activated or deactivated (B7 recognise).</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

012 – Fault during download

Display in the DTCO-Display:

xT download fault	12
----------------------	----

EventFaultType*: 34

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding faults	<p>Meaning: A communication fault has appeared while downloading card or memory data.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Repeat download process. – Check connection cable to download station and plug (poor connection, loose contact, pin assignment). – Check download interface on the DTCO 4.1x. – Check download station. – Replace any defective components. 	This warning message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

016 – Sensor fault

Display in the DTCO-Display:

```
x/l sensor fault
      16
```

EventFaultType*: 35

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding faults	<p>Meaning: The internal sensor error of the KITAS 4.0 2185 announces an internal fault after a self-test.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check KITAS sensor. – Replace with KITAS sensor R1.10, if necessary. <p>ATTENTION from DTCO 4.0e with KITAS 4.0 R1.00: Occurs after a voltage interruption. Often in combination with SC 19. This is a required safety function.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check connection to the voltage interruption. – Replace with KITAS sensor R1.10, if necessary. 	This error message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

017 – Security breach

Display in the DTCO-Display:



EventFaultType*: 22

IMPORTANT		
No workshop card necessary.		
Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Internal sensor error; the motion sensor indicates an error in the data integrity.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check KITAS 4.0 2185. – Replace KITAS 4.0 2185 if necessary. 	This warning message is not saved in the mass memory during the Calibration mode.
Printout vehicle > event:	Printout driver > event:	
Security breach occurred without an inserted card.	Security breach occurred without an inserted card.	
Security breach occurred with an inserted card.		Explanations of error information in printouts: See Technical description of DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

018 – Security breach

Display in the DTCO-Display:



EventFaultType*: 21

IMPORTANT		
No workshop card necessary.		
Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Internal sensor error; the motion sensor indicates an error in the authenticity.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check KITAS 4.0 2185. – Use a test device to pair the KITAS 4.0 2185 with the DTCO 4.1x. – Replace KITAS 4.0 2185 if necessary. <p>ATTENTION with KITAS 4.0 from R1.10: Occurs after a voltage interruption. Often in combination with SC 19. This is a required safety function.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check connection to the voltage interruption. – KITAS 4.0 R1.10 may not be changed. 	This warning message is not saved in the mass memory during the Calibration mode.
Printout vehicle > event:	Printout driver > event:	
Security breach occurred without an inserted card.	Security breach occurred without an inserted card.	
	Explanations of error information in printouts: See Technical description of DTCO 4.1x.	
Security breach occurred with an inserted card.		

* EventFaultType according to Annex I C / **bold** = Multiple assignment

019 – Voltage interruption

Display in the DTCO-Display:

```
!⚡ power
interruption 19
```

EventFaultType*: 08

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding events	<p>Meaning: The motion sensor's voltage supply was interrupted.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check connection to the voltage interruption. – Check KITAS sensor cable and correct the following if necessary: <ul style="list-style-type: none"> – Pin assignment – Connection (loose contact) – Specification – Check voltage behaviour on terminals 30 and 15 during starting. Values in the specific area? – Check KITAS sensor. <p>ATTENTION</p> <p>After a long voltage interruption the KITAS 4.0 R1.00 can block the communication to the DTCO 4.1x for security reasons for a certain period.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check DTCO 4.1x. – Replace any defective components. 	This warning message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

020 – Sensor fault

Display in the DTCO-Display:

```
x/l sensor fault
                20
```

EventFaultType*: **09**

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding events	<p>Meaning: Error during sensor communication.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – KITAS 4.0 2185 was previously paired with another. DTCO 4.1x During the life cycle of the KITAS 4.0 2185, it can only be paired with one DTCO 4.1x. However, the manual pairing with the same tachograph is possible. – No data signal (B4). – KITAS 4.0 2185 not paired with the DTCO 4.1x. <p>With KITAS sensors up to Release 1.00:</p> <ul style="list-style-type: none"> – It indicates a security breach if the data signal is missing for more than two minutes. Check the KITAS 4.0 2185 thoroughly. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check connection to a voltage interruption SC 31. – If the KITAS 4.0 2185 was previously paired with another DTCO 4.1x, replace it. – Check KITAS 4.0 2185 sensor cable and correct the following if necessary: <ul style="list-style-type: none"> – Pin assignment – Connection (loose contact) – Specification – Check KITAS 4.0 2185. – Check DTCO 4.1x (input B4). – Use a test device to pair the KITAS 4.0 2185 with the DTCO 4.1x. – Replace any defective components. 	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – The event will be monitored only after activation of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

021 – Sensor fault

Display in the DTCO-Display:

```
x/l sensor fault
                21
```

EventFaultType*: 09

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding events	<p>Meaning: Error during sensor communication.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – No real-time signal. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check KITAS 4.0 2185 sensor cable and correct the following if necessary: <ul style="list-style-type: none"> – Pin assignment – Connection (loose contact) – Specification – Check KITAS 4.0 2185. – Replace any defective components. 	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – The event will be monitored only after activation of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

022 – Sensor fault

Display in the DTCO-Display:

```
x/l sensor fault
                22
```

EventFaultType*: **09**

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding events	<p>Meaning: Error during sensor communication.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Difference of the motion sensor impulses – Transmission error <p>Measure(s):</p> <ul style="list-style-type: none"> – Check KITAS 4.0 2185 sensor cable and correct the following if necessary: <ul style="list-style-type: none"> – Pin assignment – Connection (loose contact) – Specification. – Check KITAS 4.0 2185. – Check DTCO 4.1x. – Replace any defective components. 	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – The event will be monitored only after activation of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

023 – Security breach

Display in the DTCO-Display:

```
! 11 security
breach          23
```

EventFaultType*: 11

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Error during authentication of the motion sensor during operation or error during the pairing procedure.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Error during authentication of the motion sensor in operation. – Transmission error. – Multiple coupling with the KITAS 4.0 2185. – After pairing it three times, this function will be blocked for security reasons. The workshop card must then be removed and re-inserted; i.e, the workshop card must be re-authenticated. <p>Measure(s):</p> <ul style="list-style-type: none"> – Eject the workshop card and re-insert; repeat coupling. – Check KITAS 4.0 2185 sensor line. – Check KITAS 4.0 2185. – Check DTCO 4.1x (input B4). – Use a test device to pair the KITAS 4.0 2185 with the DTCO 4.1x. – Replace any defective components. 	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode. – The event will be monitored only after activation of the DTCO 4.1x.

Printout vehicle > event:

```
! XAT
```

```
-----
! 11 0 05.06.2023 07:03
! 11 ( 0) 00h15
-----
```

Security breach occurred without an inserted card.

```
-----
! 11 0 05.06.2023 08:03
! 11 ( 0) 00h15
DF000012323455 6 8
-----
```

Security breach occurred with an inserted card.

Printout driver > event:

```
! XAT
```

```
-----
! 11 05.06.2023 08:03
! 11 00h15
A D /VS SW 123
-----
```

Security breach occurred without an inserted card.

Explanations of error information in printouts:

See Technical description of DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

024 – Security breach

Display in the DTCO-Display:

```
! 01 security
breach          24
```

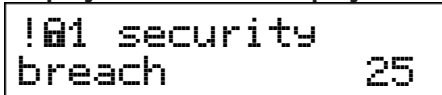
EventFaultType*: 13

IMPORTANT		
No workshop card necessary.		
Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Unknown serial number; error during comparison of the serial numbers of the motion sensor.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check sealing of the KITAS 4.0 2185 to the transmission. – Check KITAS 4.0 2185. – Check DTCO 4.1x. – Use a test device to pair the KITAS 4.0 2185 with the DTCO 4.1x. – Replace any defective components. 	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode. – The event will be monitored only after activation of the DTCO 4.1x.
Printout vehicle > event:	Printout driver > event:	
<pre>----- ! 0 05.06.2023 07:03 ! 13 (0) 00h15 -----</pre>	<pre>----- ! 05.06.2023 08:03 ! 13 00h15 A D /VS SV 123 -----</pre>	
Security breach occurred without an inserted card.	Security breach occurred without an inserted card.	
<pre>----- ! 0 05.06.2023 08:03 ! 13 (0) 00h15 e 0 /DF000012323455 6 8 -----</pre>	Explanations of error information in printouts: See Technical description of DTCO 4.1x.	
Security breach occurred with an inserted card.		

* EventFaultType according to Annex I C / **bold** = Multiple assignment

025 – Security breach

Display in the DTCO-Display:



EventFaultType*: 15

IMPORTANT		
No workshop card necessary.		
Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Error in the data memory of the DTCO 4.1x, data security is no longer ensured.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check DTCO 4.1x (test drive). – If the error message continues to appear, replace the DTCO 4.1x. 	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode.
Printout vehicle > event:	Printout driver > event:	
Security breach occurred without an inserted card.	Security breach occurred without an inserted card.	
	Explanations of error information in printouts: See Technical description of DTCO 4.1x.	
Security breach occurred with an inserted card.		

* EventFaultType according to Annex I C / **bold** = Multiple assignment

028 – Driving without valid card

Display in the DTCO-Display:

```
!o driving
without card 28
```

EventFaultType*: 04

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding events	<p>Meaning: Driving without or without valid driver or workshop card in card drawer 1 or driving with an invalid card combination in card drawers 1 and 2.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check whether a valid driver or workshop card is in card drawer 1 or 2 and insert a valid card if needed. – Check whether a company card or control card is inserted in the card drawer 1 and eject the card if found.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

029 – Card conflict

Display in the DTCO-Display:

!  cards conflict	29
---	----

EventFaultType*: 02

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding events	<p>Meaning: Invalid card combination in card drawers 1 and 2. The inserted tachograph cards must not be inserted at the same time.</p> <p>Measure(s): Check the combination of the inserted tachograph cards. See Technical description of DTCO 4.1x.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

030 – Speed too high

Display in the DTCO-Display:



EventFaultType*: 07

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding events	<p>Meaning: The programmed (Vset) maximum speed was exceeded for longer than 60 seconds.</p> <p>Measure(s): – Reduce speed.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

031 – Voltage interruption

Display in the DTCO-Display:

```
!⚡ POWER
interruption 31
```

EventFaultType*: **08**

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding events	<p>Meaning: The operating voltage of the DTCO 4.1x is outside the specified range.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Overvoltage – Voltage interruption <p>Voltage interruption If the voltage supply of the DTCO 4.1x drops below the following critical value of the specified range, the DTCO 4.1x recognises a "voltage interruption":</p> <ul style="list-style-type: none"> – 12 V version: typ. 7,5 V (min. 7,4 V; max. 8,0 V) – 24 V version: typ. 8,1 V (min. 8,0 V; max. 8,7 V) <p>If the supply voltage of the DTCO 4.1x rise once more above the following critical value, the DTCO 4.1x announces "Voltage interruption".</p> <ul style="list-style-type: none"> – 12 V version: typ. 8,4 V (min. 8,2 V; max. 9,0 V) – 24 V version: typ. 9,0 V (min. 8,9 V; max. 9,6 V) <p>Measure(s):</p> <ul style="list-style-type: none"> – Check the voltage supply of the DTCO 4.1x; correct the following if necessary: <ul style="list-style-type: none"> – Check connection plug and cable (pin assignment, loose contact, poor connection). – Voltage on terminals 30 and 15; within the specified range? – Voltage behavior on terminals 30 and 15 during starting; within the specified range? – Check the functionality of the DTCO 4.1x. – Replace any defective components. 	This warning message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

034 – Ejection not possible

Display in the DTCO-Display:

<pre> 4.1 ejection not possible 34 </pre>
--

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of mes- sage	Description
Operational mes- sage	<p>Meaning: A tachograph card cannot be ejected; the request is rejected.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Vehicle is moving. – Data download in progress. – Ignition is switched off (for ADR variant) – The tachograph card is being read or written on. – The tachograph card is requested within the same minute during which the tachograph card is correctly read in (after insertion or after restart during activation). <p>Measure(s):</p> <ul style="list-style-type: none"> – Check whether the DTCO 4.1x detects Drive If it does not, stop the vehicle and repeat the process. – Check whether data is currently being downloaded; if it is, repeat the process after the download is finished. – Check whether the ignition is switched on. If necessary, switch on the ignition (only GGVSE version). – Repeat process. – If the error message continues to appear despite these measures, replace the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

036 – Printout not possible

Display in the DTCO-Display:

```

47 printout not
possible      36
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Operational message	<p>Meaning: Printout (display) of the requested data is currently not possible or an printout in progress is cancelled.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Vehicle is moving. – Ignition is not switched on (necessary for GGVSE version). – Printing head has overheated. – Low voltage or overvoltage. – Internal printer interface is occupied by another active process, e.g. a printout in progress. <p>Measure(s):</p> <ul style="list-style-type: none"> – Repeat process. – Printout or display is only possible in a stationary vehicle with the ignition switched on (only GGVSE version). If necessary, stop the vehicle or switch on the ignition. – After a long printout, the print head temperature is too high; wait to cool. – Check the voltage supply of the DTCO 4.1x; correct the following if necessary: <ul style="list-style-type: none"> – Check connection plug and cable (pin assignment, loose contact, poor connection). – Voltage on terminals 30 and 15; within the specified range? – Voltage behaviour on terminals 30 and 15 during starting; within the specified range? – Wait until the other active process has been completed and the internal printer interface is free once more. – If the error message continues to appear despite these measures, replace the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

037 – Printout delayed

Display in the DTCO-Display:

<pre> 478 printout delayed 37 </pre>

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of mes- sage	Description
Operational mes- sage	<p>Meaning: An ongoing printout is interrupted or executed slowly.</p> <p>Possible cause(s): Printing head has overheated.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – During a long printout, the print head temperature is too high; wait to cool. – If the error message continues to appear despite these measures, replace the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

039 – No paper

Display in the DTCO-Display:



EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Operational message	<p>Meaning: It is determined during a printout or during a print request that there is no paper in the printer. The printout in progress is interrupted and the previously printed part automatically marked or the print request is rejected.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – No printer paper has been inserted. – All printer paper has been used. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check whether there is paper in the printer and insert a new roll if necessary. If a new roll of paper is inserted within one hour, the DTCO automatically continues the printout. A notice is given in the first two lines of the subsequent printout (line 1: starting time of printout; line 2: counter of the successive prints). – If the error message continues to appear despite this measure, replace the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

040 – Internal fault (drawer 1)

Display in the DTCO-Display:

<pre>x41 internal fault 40</pre>

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding fault	<p>Meaning: Fault in the card mechanics for drawer 1 (driver 1).</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Card lock not closed. – General error in the card mechanics. <p>Measure(s):</p> <ul style="list-style-type: none"> – Insert the tachograph card again. – Request the tachograph card again. – Interrupt continuous voltage (perform re-start). – If the error message continues to appear despite these measures, replace the DTCO 4.1x. <p>Note: Any inserted tachograph card is ejected. This error is reset when a tachograph card has been inserted correctly.</p>	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

041 – Card fault (drawer 1)

Display in the DTCO-Display:

```
x01 card fault
                        41
```

EventFaultType*: **40**

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding faults	<p>Meaning: Communication fault with inserted tachograph card in drawer 1 (driver 1). A communication fault has appeared during reading or writing of card data.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Contacts of the tachograph card dirty. – Tachograph card defective. – Contacts of the card drawer dirty. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check the tachograph card's contact points. – Check/clean tachograph card. – Check DTCO 4.1x, if necessary clean the contact of the card drawer – Replace any defective components. <p>Note: The inserted tachograph card will be ejected.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

042 – Security breach (drawer 1)

Display in the DTCO-Display:



EventFaultType*: 14

IMPORTANT		
No workshop card necessary.		
Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Authenticity of the data on the card in drawer 1 (driver 1) is not assured.</p> <p>Possible cause(s): Error during inspection of the data's authenticity.</p> <p>Measure(s): Check tachograph card.</p> <p>Note: Tachograph card is ejected.</p>	This warning message is not saved in the mass memory during the Calibration mode.
Printout vehicle > event:	Printout driver > event:	
Security breach occurred without an inserted card.	Security breach occurred without an inserted card.	
Security breach occurred with an inserted card.	Explanations of error information in printouts: See Technical description of DTCO 4.1x.	

* EventFaultType according to Annex I C / **bold** = Multiple assignment

043 – Security breach (drawer 1)

Display in the DTCO-Display:



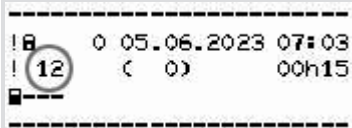
EventFaultType*: 12

IMPORTANT

No workshop card necessary.

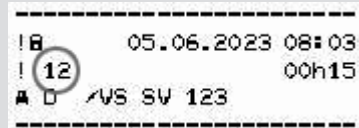
Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Tachograph card for drawer 1 (driver 1) is missing. The DTCO 4.1x no longer finds an inserted card.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – After a voltage interruption, an identity test determines that a previously inserted card is missing or another card is inserted. – When the card is inserted, the lock of the card mechanics is open. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check whether the tachograph card is properly inserted. – Eject tachograph card and re-insert. – Check functionality of the card lock. – If the error message continues to appear, replace the DTCO 4.1x. 	This warning message is not saved in the mass memory during the Calibration mode.

Printout vehicle > event:

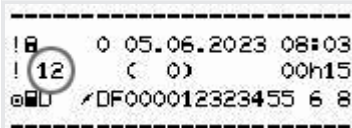


Security breach occurred without an inserted card.

Printout driver > event:



Security breach occurred without an inserted card.



Security breach occurred with an inserted card.

Explanations of error information in printouts:

See Technical description of DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

044 – Card not closed (drawer 1)

Display in the DTCO-Display:

```
!044 card not
closed          44
```

EventFaultType*: 06

IMPORTANT

No workshop card necessary.

Type of message Description

Warning message regarding events **Meaning:**
When a driver or workshop card (in card drawer 1) is read it is determined that the card was not properly removed in the last vehicle or the data was not saved properly.

Measure(s):

- Check tachograph card.
- Check previous EC recording equipment.

Note:

The source of the error is not located in the current DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

045 – Time overlap (drawer 1)

Display in the DTCO-Display:

!001 time overlap	45
----------------------	----

EventFaultType*: **03**

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding events	<p>Meaning: Negative time difference relative to last vehicle.</p> <p>Possible cause(s): The removal time saved on the card is later than the current system time (= time when card was inserted in the current DTCO 4.1x); in other words, the time of the current EC recording equipment comes after the time of the previous EC recording equipment.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check UTC time on the current DTCO 4.1x and use a test device to correct if needed. – Check UTC time on the previous EC recording equipment and use a test device to correct if needed.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

046 – Insertion while driving (drawer 1)

Display in the DTCO-Display:

```
! 01 insertion
while drivins 46
```

EventFaultType*: **05**

IMPORTANT

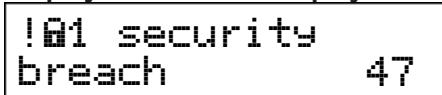
No workshop card necessary.

Type of mes- sage	Description
Warning mes- sage regarding events	<p>Meaning: A tachograph card was inserted in drawer 1 (driver) after driving has begun.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Motion sensor impulses detected before correct reading-in of a tachograph card. <p>Measure(s):</p> <ul style="list-style-type: none"> – In general, insert tachograph cards only when the vehicle is motionless. – No other measures are necessary.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

047 – Security breach (drawer 1)

Display in the DTCO-Display:



EventFaultType*: 12

IMPORTANT		
No workshop card necessary.		
Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Security breach when authorising the tachograph card in drawer 1 (driver).</p> <p>Possible cause(s): Error during inspection of a tachograph card's identity.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check tachograph card. – Check workshop card, enter correct PIN. 	This warning message is not saved in the mass memory during the Calibration mode.
Printout vehicle > event:	Printout driver > event:	
Security breach occurred without an inserted card.	Security breach occurred without an inserted card.	
	Explanations of error information in printouts:	
Security breach occurred with an inserted card.	See Technical description of DTCO 4.1x.	

* EventFaultType according to Annex I C / **bold** = Multiple assignment

048 – Card invalid (drawer 1)

Display in the DTCO-Display:

```
! 01 card not
valid          48
```

EventFaultType*: 01

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding events	<p>Meaning: The tachograph card inserted in drawer 1 (driver 1) has expired or is invalid.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – An invalid or expired tachograph card (a) is inserted. – During a day change-over (b) it was determined that an inserted tachograph card is no longer valid. <p>Measure(s): Check tachograph card for validity.</p> <p>Note:</p> <p>a) An expired tachograph card (tachograph card has expired but the certificate is still valid), can be inserted for printing or displaying the saved data; after having acknowledged the warning message, the tachograph card is read in with the read only status.</p> <p>b) If a day change takes place while the vehicle is not moving, the respective data will be saved on the tachograph card and the card will be ejected. If a day change takes place while the vehicle is moving, the respective data will be saved on the tachograph card after the end of the trip and the card will be ejected.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

049 – Recording inconsistent (drawer 1)

Display in the DTCO-Display:

```

49?1 recording
inconsistent 49
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Warning message regarding operation	<p>Meaning: While reading-in the tachograph card in drawer 1, an inconsistency was found in the links within the date data.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check tachograph card. – Analyse data structure on card.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

050 – Card defective (drawer 1)

Display in the DTCO-Display:



EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Operational message	<p>Meaning: The inserted card cannot be recognised, read or written to in card drawer 1.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Card inserted incorrectly. – Contacts of the tachograph card dirty. – Card is defective. – Contacts of the card drawer dirty. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check to make sure the tachograph card is valid. – Make sure the tachograph card was correctly inserted, if necessary re-insert. – Check the contacts of the tachograph card, clean them if necessary. – Check tachograph card. – Check if other tachograph cards are read correctly. – Clean the contacts of the card drawer.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

051 – Incorrect card (drawer 1)

Display in the DTCO-Display:

```

401 wrong card
type          51
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Operational message	<p>Meaning: Inserted card in drawer 1 (driver 1) is not a tachograph card.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – The card is not a valid tachograph card. – Contacts of the tachograph card dirty. – Card is defective. – Contacts of the card drawer dirty. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check to make sure the tachograph card is valid. – Make sure the tachograph card was correctly inserted, if necessary re-insert. – Check the contacts of the tachograph card, clean them if necessary. – Check tachograph card. – Clean the contacts of the card drawer.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

052 – Card locked (drawer 1)

Display in the DTCO-Display:

```

4x1 card locked
          52
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of mes- sage	Description
----------------------	-------------

Operational mes- sage	<p>Meaning: Inserted workshop card in drawer 1 (driver 1) is blocked!</p>
--------------------------	--

Possible cause(s):

- The workshop card has been blocked after five unsuccessful PIN entries.
- Workshop card is defective.

Measure(s):

- Check the workshop card.
- Insert a valid (not blocked) workshop card.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

053 – Internal fault (drawer 1)

Display in the DTCO-Display:

<pre> 4A internal fault 53 </pre>
--

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Operational message	<p>Meaning: Process not possible, tachograph card drawer 1 (driver 1) is not accepted and is ejected.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – DTCO 4.1x has detected a generally serious fault in the device. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check date/UTC time on the DTCO 4.1x and use a workshop card and a test device to correct if needed. – If the error message continues to appear, replace the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

054 – Eject card (drawer 1)

Display in the DTCO-Display:

```

401 please eject
the card      54
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Operational message	<p>Meaning: Fault during actualisation or new authentication of the tachograph card.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Contacts of the tachograph card dirty. – Tachograph card defective. – Contacts of the card drawer dirty <p>Measure(s):</p> <ul style="list-style-type: none"> – Request card ejection. – Check tachograph card. – Clean tachograph card. – Clean the contacts of the card drawer. <p>Note: If, as before, no communication with the card is possible when the card is ejected, a printout of the activities allocated to the card is automatically started. Other activities can be added in writing. Sign this printout and keep it for inspection.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

056 – Pause (drawer 1)

Display in the DTCO-Display:

```

4e1 break!
1e04h30  ■■00h15
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding work time	<p>Meaning: After an uninterrupted driving time of 4 hours 30 minutes, the DTCO 4.1x warns of the need for the required break.</p> <p>Possible cause(s): No legal minimum pause was taken.</p> <p>Measure(s): Find a place to stop and observe the required break.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

057 – Pause (drawer 1)

Display in the DTCO-Display:

```
4o1 break!
1o04h15  ■00h15
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding work time	<p>Meaning: After an uninterrupted driving time of 4 hours 15 minutes, the DTCO 4.1x warns of the need for the required break.</p> <p>Possible cause(s): No legal minimum pause was taken.</p> <p>Measure(s): Find a place to stop and observe the required break.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

058 – Internal fault (drawer 2)

Display in the DTCO-Display:

<pre> 4A2 internal fault 58 </pre>

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding faults	<p>Meaning: Fault in the card mechanics for drawer 2 (driver 2).</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Card lock not closed. – General error in the card mechanics. <p>Measure(s):</p> <ul style="list-style-type: none"> – Insert the tachograph card again. – Request the tachograph card again. – Interrupt continuous voltage (perform re-start). – If the error message continues to appear despite these measures, replace the DTCO 4.1x. <p>Note: Any inserted tachograph card is ejected. This error is reset when a tachograph card has been inserted correctly.</p>	<ul style="list-style-type: none"> – This error message will be displayed hourly until the cause is removed. – This error message is not saved in the mass memory during the Calibration mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

059 – Card fault (drawer 2)

Display in the DTCO-Display:

```
x[2] card fault
                    59
```

EventFaultType*: 40

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding faults	<p>Meaning: Communication fault with inserted tachograph card in drawer 2 (driver 2). A communication fault has appeared during reading or writing of card data.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Contacts of the tachograph card dirty. – Tachograph card defective. – Contacts of the card drawer dirty. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check the tachograph card's contact points. – Check/clean tachograph card. – Check DTCO 4.1x, if necessary clean the contact of the card drawer – Replace any defective components. <p>Note: The inserted tachograph card will be ejected.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

060 – Security breach (drawer 2)

Display in the DTCO-Display:



EventFaultType*: **14**

IMPORTANT		
No workshop card necessary.		
Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Authenticity of the data on the card in drawer 2 (driver 2) is not guaranteed.</p> <p>Possible cause(s): Error during inspection of the data's authenticity.</p> <p>Measure(s): Check tachograph card.</p> <p>Note: Tachograph card is ejected.</p>	This warning message is not saved in the mass memory during the Calibration mode.
Printout vehicle > event:	Printout driver > event:	
Security breach occurred without an inserted card.	Security breach occurred without an inserted card.	
	Explanations of error information in printouts: See Technical description of DTCO 4.1x.	
Security breach occurred with an inserted card.		

* EventFaultType according to Annex I C / **bold** = Multiple assignment

061 – Security breach (drawer 2)

Display in the DTCO-Display:

```
!02 security
breach      61
```

EventFaultType*: 12

IMPORTANT		
No workshop card necessary.		
Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Tachograph card for drawer 2 (driver 2) is missing. The DTCO 4.1x no longer finds an inserted card.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – After a voltage interruption, an identity test determines that a previously inserted card is missing or another card is inserted. – When the card is inserted, the lock of the card mechanics is open. <p>Measure(s):</p> <ol style="list-style-type: none"> 1. Check whether the tachograph card is properly inserted. 2. Eject tachograph card and re-insert. 3. Check functionality of the card lock. 4. If the error message continues to appear, replace the DTCO 4.1x. 	This warning message is not saved in the mass memory during the Calibration mode.
Printout vehicle > event:	Printout driver > event:	
Security breach occurred without an inserted card.	Security breach occurred without an inserted card.	
	Explanations of error information in printouts: See Technical description of DTCO 4.1x.	
Security breach occurred with an inserted card.		

* EventFaultType according to Annex I C / **bold** = Multiple assignment

062 – Card not closed (drawer 2)

Display in the DTCO-Display:

!A2 card not closed 62

EventFaultType*: **06**

IMPORTANT

No workshop card necessary.

Type of message Description

Warning message regarding events	<p>Meaning: When a driver or workshop card (in card drawer 2) is read it is determined that the card was not properly removed in the last vehicle or the data was not saved properly.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check tachograph card. – Check previous EC recording equipment. <p>Note: The source of the error is not located in the current DTCO 4.1x.</p>
----------------------------------	--

* EventFaultType according to Annex I C / **bold** = Multiple assignment

063 – Time overlap (drawer 2)

Display in the DTCO-Display:

!002 time overlap	63
----------------------	----

EventFaultType*: 03

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding events	<p>Meaning: Negative time difference relative to last vehicle (drawer 2: driver card) (EC recording equipment).</p> <p>Possible cause(s): The removal time saved on the card is later than the current system time (= time when card was inserted in the current DTCO 4.1x); in other words, the time of the current EC recording equipment comes after the time of the previous EC recording equipment.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check UTC time on the current DTCO 4.1x and use a test device to correct if needed. – Check UTC time on the previous EC recording equipment and use a test device to correct if needed.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

064 – Insertion while driving (drawer 2)

Display in the DTCO-Display:

```
!📄02 insertion
while drivins 64
```

EventFaultType*: **05**

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding events	<p>Meaning: A tachograph card was inserted in drawer 2 (driver 2) after driving has begun.</p> <p>Possible cause(s): Motion sensor impulses detected before correct reading-in of a tachograph card.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – In general, insert tachograph cards only when the vehicle is motionless. – No other measures are necessary.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

065 – Security breach (drawer 2)

Display in the DTCO-Display:



EventFaultType*: 12

IMPORTANT		
No workshop card necessary.		
Type of message	Description	Additional information
Warning message regarding security breaches	<p>Meaning: Security breach during the authentication of a tachograph card in drawer 2 (driver 2).</p> <p>Possible cause(s): Error during inspection of a tachograph card's identity.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check tachograph card. – Check workshop card, enter correct PIN. 	This warning message is not saved in the mass memory during the Calibration mode.
Printout vehicle > event:	Printout driver > event:	
Security breach occurred without an inserted card.	Security breach occurred without an inserted card.	
	Explanations of error information in printouts: See Technical description of DTCO 4.1x.	
Security breach occurred with an inserted card.		

* EventFaultType according to Annex I C / **bold** = Multiple assignment

066 – Card invalid (drawer 2)

Display in the DTCO-Display:



EventFaultType*: 01

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding events	<p>Meaning: The tachograph card inserted in drawer 2 (driver 2) has expired or is invalid.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – An invalid or expired tachograph card (a) is inserted. – During a day change-over (b) it was determined that an inserted tachograph card is no longer valid. <p>Measure(s): Check tachograph card for validity.</p> <p>Note:</p> <p>a) An expired tachograph card (tachograph card has expired but the certificate is still valid), can be inserted for printing or displaying the saved data; after having acknowledged the warning message, the tachograph card is read in with the read only status.</p> <p>b) If a day change takes place while the vehicle is not moving, the respective data will be saved on the tachograph card and the card will be ejected. If a day change takes place while the vehicle is moving, the respective data will be saved on the tachograph card after the end of the trip and the card will be ejected.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

067 – Recording inconsistent (drawer 2)

Display in the DTCO-Display:

```
4?2 recordings
inconsistent 67
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Warning message regarding operation	<p>Meaning: While reading-in the tachograph card in drawer 2, an inconsistency is found in the links within the date data.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check tachograph card. – Analyse data structure on card.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

068 – Card defective (drawer 2)

Display in the DTCO-Display:



402 card error
68

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Operational message	<p>Meaning: The inserted card cannot be recognised, read or written to in card drawer 2.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Card inserted incorrectly – Contacts of the tachograph card dirty. – Card is defective. – Contacts of the card drawer dirty. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check to make sure the tachograph card is valid. – Make sure the tachograph card was correctly inserted, if necessary re-insert. – Check the contacts of the tachograph card, clean them if necessary. – Check tachograph card. – Check if other tachograph cards are read correctly. – Clean the contacts of the card drawer.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

069 – Incorrect card (drawer 2)

Display in the DTCO-Display:

```

402 wrong card
type           69
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Operational message	<p>Meaning: The inserted card in drawer 2 (driver 2) is no tachograph card.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – The card is not a valid tachograph card. – Contacts of the tachograph card dirty. – Card is defective. – Contacts of the card drawer dirty. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check to make sure the tachograph card is valid. – Make sure the tachograph card was correctly inserted, if necessary re-insert. – Check the contacts of the tachograph card, clean them if necessary. – Check tachograph card. – Clean the contacts of the card drawer.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

070 – Card locked (drawer 2)

Display in the DTCO-Display:



4x2 card locked
70

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Operational message	<p>Meaning: Inserted workshop card in drawer 2 (driver 2) is locked!</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – The workshop card has been blocked after five unsuccessful PIN entries. – Workshop card is defective. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check the workshop card. – Insert a valid (not blocked) workshop card.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

071 – Internal fault (drawer 2)

Display in the DTCO-Display:

<pre> 4A internal fault 71 </pre>
--

EventFaultType*: --

IMPORTANT

No workshop card necessary.
Operational messages are not saved in the DTCO 4.1x data memory.

Type of mes- sage	Description
Operational mes- sage	<p>Meaning: Process not possible, tachograph card drawer 2 (driver 2) is not accepted and is ejected.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – DTCO 4.1x has detected a generally serious fault in the device. – An expired workshop card is used for pairing with the KITAS sensor. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check date/UTC time on the DTCO 4.1x and use a workshop card and a test device to correct if needed. – If the error message continues to appear, replace the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

072 – Eject the card (drawer 2)

Display in the DTCO-Display:

```

402 please eject
the card       72
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Operational messages are not saved in the DTCO 4.1x data memory.

Type of message	Description
Operational message	<p>Meaning: Fault during actualisation or new authentication of the tachograph card.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Contacts of the tachograph card dirty. – Tachograph card defective. – Contacts of the card drawer dirty. <p>Measure(s):</p> <ul style="list-style-type: none"> – Request card ejection. – Check tachograph card. – Clean tachograph card. – Clean the contacts of the card drawer. <p>Note: If, as before, no communication with the card is possible when the card is ejected, a printout of the activities allocated to the card is automatically started. Other activities can be added in writing. Sign this printout and keep it for inspection.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

074 – Pause (drawer 2)

Display in the DTCO-Display:

```
4o2 break!
1o04h30  ■00h15
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding work time	<p>Meaning: After an uninterrupted driving time of 4 hours 30 minutes, the DTCO 4.1x warns of the need for the required break.</p> <p>Possible cause(s): No legal minimum pause was taken.</p> <p>Measure(s): Find a place to stop and observe the required break.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

075 – Pause (drawer 2)

Display in the DTCO-Display:

```
4e2 break!
1e04h15  ■■00h15
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding work time	<p>Meaning: After an uninterrupted driving time of 4 hours 15 minutes, the DTCO 4.1x warns of the need for the required break.</p> <p>Possible cause(s): No legal minimum pause was taken.</p> <p>Measure(s): Find a place to stop and observe the required break.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

076 - Speed to high (advance warning)

Display in the DTCO-Display:



EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Warning message regarding events	<p>Meaning: Advance warning on the event "Speed too high".</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Speeding. – Faulty configuration. <p>Measure(s):</p> <ul style="list-style-type: none"> – Reduce speed. – Check the function / configuration of the DTCO 4.1x, correct if necessary. <p>Note: For this message there is a TCO status output (Handling Information = HI) on a CAN-Bus and information interface (customer-specific, deviating signal output possible). The pre-warning time (0 - 60 s) for this message can be configured.</p>	<ul style="list-style-type: none"> – For this message no memory code (MC) is shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

078 – Upgrade failed error

Displays in the DTCO-Display:

```
Upgrade failed
Error #FFFFFFE
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Message regarding other events	<p>Meaning: The integrity of the software upgrade module of or a security key is not ensured; the software upgrade was aborted.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check DTCO 4.1x. – Repeat software upgrade. – If the error message continues to appear despite these measures, replace the DTCO 4.1x. 	For this message the memory code (MC) is not shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

078-2 – Upgrade failed error

Displays in the DTCO-Display:

```
upgrade failed
Error #00000003
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Message regarding other events	<p>Meaning: The upgrade file is faulty or damaged; the software upgrade was aborted.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check upgrade file. – Repeat software upgrade with an intact upgrade file. <p>Note: The DTCO 4.1x is not the cause of this message.</p>	For this message the memory code (MC) is not shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

079 – Upgrade failed error

Displays in the DTCO-Display:

```
upgrade failed
Error #00000001
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Message regarding other events	<p>Meaning:</p> <p>The voltage supply was outside of the specified range during the software upgrade; the software upgrade was aborted.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check the voltage supply of the DTCO 4.1x; correct the following if necessary: <ul style="list-style-type: none"> – Connection plug and cable (pin assignment, poor connection, loose contact). – Voltage on terminals 30 and 15; within the specified range? – Make sure the DTCO 4.1x has a reliable voltage supply during the software upgrade, e.g. a lab power supply unit. Repeat software upgrade. – If the error message continues to appear, replace the DTCO 4.1x. <p>Note:</p> <p>The DTCO 4.1x may not be the cause of this message.</p>	For this message the memory code (MC) is not shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

079-2 – Upgrade failed error

Displays in the DTCO-Display:

```
Upgrade failed
Error #00000002
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Message regarding other events	<p>Meaning: The authentication of the management device has failed; the software upgrade was aborted.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check the function of the management device. – Repeat software upgrade. <p>Note: The DTCO 4.1x may not be the cause of this message.</p>	For this message the memory code (MC) is not shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

079-3 – Upgrade failed error

Displays in the DTCO-Display:

```
upgrade failed
Error #00000004
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Message regarding other events	<p>Meaning: Communication error; the software upgrade was aborted.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – Download interface of the DTCO 4.1x defective. – Data connection interrupted or data line defective. – Management device interface disturbed or blocked. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check download interface of the DTCO 4.1x. – Check data connection and data line. – Check the interface and the function of the management device. – Repeat software upgrade. <p>Note: The DTCO 4.1x may not be the cause of this message.</p>	For this message the memory code (MC) is not shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

079-4 – Upgrade failed error

Displays in the DTCO-Display:

```
Upgrade failed
Error #FFFFFFF
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Message regarding other events	<p>Meaning: The software upgrade module could not be stated; the software upgrade was aborted.</p> <p>Possible cause(s): Internal fault of DTCO 4.1x .</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check DTCO 4.1x. – Repeat software upgrade. – If the error message continues to appear, replace the DTCO 4.1x. 	For this message the memory code (MC) is not shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

080 – Movement conflict

Displays in the DTCO-Display:

```
!All motion
conflict      80
```

EventFaultType*: 0A

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Event message	<p>Meaning: Contradiction in the evaluation of the vehicle movement between sensor and an GNSS signal.</p> <p>Possible causes:</p> <ul style="list-style-type: none"> – Possible operating error during transport on a ferry/train. – KITAS 4.0 2185 defective and/or sensor line interrupted or defective. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check the connection cable between the DTCO 4.1x and the vehicle data bus (CAN). – Check KITAS 4.0 2185 sensor line. – Check KITAS 4.0 2185 – Replace any defective components. 	<ul style="list-style-type: none"> – This warning message will be displayed repetitively until the cause is removed. – This warning message is not saved in the mass memory during the "Calibration" mode. – This event will be monitored only after activation of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

082 - Internal GNSS fault

Displays in the DTCO-Display:

```
x: internal GNSS
fault      82
```

EventFaultType*: 36

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Fault message	<p>Meaning: GNSS receiver/antenna error</p> <p>Possible causes:</p> <ul style="list-style-type: none"> – GNSS receiver error. – External GNSS antenna not connected or short-circuited. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check GNSS function. – If necessary, check and correct the configuration of the DTCO 4.1x. – Check external GNSS antenna (if available) – Replace defective components 	<ul style="list-style-type: none"> – This warning message will be displayed repetitively until the cause is removed. – This warning message is not saved in the mass memory during the "Calibration" mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

083 - GNSS missing

Displays in the DTCO-Display:

```
!⊗ GNSS is
missina      83
```

EventFaultType*: 0D

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Fault message	<p>Meaning: GNSS signal error</p> <p>Possible causes:</p> <ul style="list-style-type: none"> – No GNSS signal is received. – No position data. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check GNSS function. – If necessary, check and correct the configuration of the DTCO 4.1x. – Replace defective components 	<ul style="list-style-type: none"> – This warning message will be displayed repetitively until the cause is removed. – This warning message is not saved in the mass memory during the "Calibration" mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

084 - Internal DSRC fault

Displays in the DTCO-Display:

```
xY internal DSRC
fault           84
```

EventFaultType*: 38

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Fault message	<p>Meaning: DSRC module/antenna error</p> <p>Possible causes:</p> <ul style="list-style-type: none"> – Internal DSRC component error. – DSRC antenna not connected or short-circuited. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check DSRC function. – If necessary, check and correct the configuration of the DTCO 4.1x. – Check DSRC antenna – Replace any defective components. 	<ul style="list-style-type: none"> – This warning message will be displayed repetitively until the cause is removed. – This warning message is not saved in the mass memory during the "Calibration" mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

085 - DSRC communication fault

Displays in the DTCO-Display:

!Y DSRC comm. error	85
------------------------	----

EventFaultType*: 0C

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Fault message	<p>Meaning: Communication with the DSRC module is not possible.</p> <p>Possible causes:</p> <ul style="list-style-type: none"> – Error during communication to the DSRC unit. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check DSRC functions. – Replace any defective components. 	<ul style="list-style-type: none"> – This warning message will be displayed repetitively until the cause is removed. – This warning message is not saved in the mass memory during the "Calibration" mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

086 - Time conflict

Displays in the DTCO-Display:



```
!@ time conflict
      86
```

EventFaultType*: 0B

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Fault message	<p>Meaning:</p> <p>There is a difference of more than one minute between the time of the internal clock of the DTCO 4.1x and the time information from the GNSS signal.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – Check UTC time on the current DTCO 4.1x and use a test device to correct if needed. – Check GNSS function. – Replace any defective components. 	<ul style="list-style-type: none"> – This warning message will be displayed repetitively until the cause is removed. – This warning message is not saved in the mass memory during the "Calibration" mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

087 - Sensor fault

Displays in the DTCO-Display:

```
x/l sensor fault
      87
```

EventFaultType*: **09**

IMPORTANT

No workshop card necessary.

Type of message	Description	Additional information
Fault message	<p>Meaning: Error during sensor communication.</p> <p>Possible cause(s):</p> <ul style="list-style-type: none"> – No data signal (B4). <p>Measure(s):</p> <ul style="list-style-type: none"> – Check KITAS sensor cable and correct the following if necessary: <ul style="list-style-type: none"> – a) Pin assignment – b) Connection (loose contact) – Check KITAS sensor. – New pairing of KITAS 4.0 2185 and DTCO 4.1x. – Replace any defective components. 	<ul style="list-style-type: none"> – This warning message will be displayed repetitively until the cause is removed. – This warning message is not saved in the mass memory during the "Calibration" mode.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

088 - Working time

Displays in the DTCO-Display:

```

4x1 working time
* 04h15      88
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Working time message	<p>Meaning: Warning for the continuous maximum permitted working time.</p> <p>Measure(s): – Drive to parking lot.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

089 - Working time

Displays in the DTCO-Display:

```

4x1 workins time
24h 09h30      89
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Working time message	<p>Meaning: Warning for the current daily working time.</p> <p>Measure(s): – Drive to parking lot.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

090 - Working time

Displays in the DTCO-Display:

<pre> 4x1 workins time 58h30 90 </pre>

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Working time message	<p>Meaning: Warning for the weekly working time.</p> <p>Measure(s): – Drive to parking lot.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

091 - Driving time

Displays in the DTCO-Display:

```

401 drivins time
24h 03h15      91
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Driving time message	<p>Meaning: Pre-warning for reaching the maximum permitted daily drive time.</p> <p>Measure(s): – Find a place to stop and observe the required break.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

092 - Break in

Displays in the DTCO-Display:

<pre> 401 rest in →h 01h45 92 </pre>

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Working time message	<p>Meaning: Pre-warning for reaching the maximum permitted daily/weekly rest period.</p> <p>Measure(s): – Find a place to stop and observe the required break.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

093 - Driving time

Displays in the DTCO-Display:

<pre> 001 drivins time I 44h30 93 </pre>

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Driving time message	<p>Meaning: Pre-warning for reaching the maximum permitted weekly drive time.</p> <p>Measure(s): – Find a place to stop and observe the required break.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

094 - Driving time

Displays in the DTCO-Display:

```

401 drivins time
II 89h45          94
  
```

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Driving time message	<p>Meaning: Pre-warning for reaching the maximum permitted bi-weekly drive time.</p> <p>Measure(s): – Find a place to stop and observe the required break.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

095 - Driving time

Displays in the DTCO-Display:

<pre> 401 drivins time 24h hhhmm 95 </pre>

EventFaultType*: --

IMPORTANT

No workshop card necessary.

Type of message	Description
Driving time message	<p>Meaning: Pre-warning for reaching the maximum permitted expanded driving time.</p> <p>Measure(s): – Find a place to stop and observe the required break.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

096 - GNSS anomaly

Displays in the DTCO-Display:

```
!?: GNSS anomaly
      96
```

EventFaultType*: 0F

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding events	<p>Meaning: Authentication of Galileo OS-NMEA is faulty or GNSS receiver detects an attack on the GNSS signal.</p> <p>Possible cause:</p> <ul style="list-style-type: none"> – This message indicates possible manipulation. – Faults due to other disturbance sources (e.g. CD player). – Manipulations or external attacks. <p>Measure(s):</p> <ul style="list-style-type: none"> – Check for manipulation reasons. – Check GNSS function. – Replace any defective components. – Eliminate disturbance sources.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

097 - VU-internal error motion sensor

Displays in the DTCO-Display:

```

xA internal
sensor fault 97
  
```

EventFaultType*: 3A

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding faults	<p>Meaning: Self-test faulty.</p> <p>Possible cause Communication between VU internal motion sensor failed more than 10 times and Reset faulty.</p>

* EventFaultType according to Annex I C / **bold** = Multiple assignment

098 - ITS/Bluetooth components fault

Displays in the DTCO-Display:



EventFaultType*: 39

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding faults	<p>Meaning: Error in internal Bluetooth component.</p> <p>Measures:</p> <ul style="list-style-type: none"> – Check the Bluetooth functionality in the workshop. – Carry out an update of the DTCO 4.1x (if available). – If the error message appears despite updating and several acknowledgments, replace the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

099 - Recording inconsistent

Displays in the DTCO-Display:

```

40? recording
inconsistent 99
  
```

EventFaultType*: 1C

IMPORTANT

No workshop card necessary.

Type of message	Description
Warning message regarding events	<p>Meaning: Inconsistency between movement data and stored driver activity data.</p> <p>Possible cause</p> <ul style="list-style-type: none"> – This message can be displayed until the faulty record has been overwritten by new data. <p>Measure</p> <ul style="list-style-type: none"> – If the message is displayed permanently, get the tachograph checked.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

Please enter

Displays in the DTCO-Display:



```
Please
enter
```

EventFaultType*: --

Type of mes- sage	Description	Additional information
Operational mes- sage	<p>Meaning: If no entry occurs during an entry process, this prompt is displayed after 30 seconds.</p> <p>Measure(s): Continue entry.</p>	For this message no memory code (MC) is shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

Wrong entry

Displays in the DTCO-Display:



EventFaultType*: --

Type of message	Description	Additional information
Operational message	<p>Meaning: A wrong PIN for the workshop card was entered.</p> <p>Measure(s): Repeat or abort the PIN entry.</p>	For this message no memory code (MC) is shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

Invalid in days

Displays in the DTCO-Display:

```

███1 expires in
days          7
  
```

```

███2 expires in
days          7
  
```

EventFaultType*: --

Type of message	Description	Additional information
Operational message	<p>Meaning: The released tachograph card will become invalid, for example, in 7 days!</p> <p>Measure(s): Apply for a new tachograph card in a timely manner before the expiry of the period of validity.</p> <p>Note: Monitoring of this message depends on the configuration of the DTCO 4.1x. Monitoring of this message can be activated or deactivated. The pre-warning time (0 - 92 days) for this message can be configured (WarnBeforeExpiryDate).</p>	For this message no memory code (MC) is shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

Calibration in days

Displays in the DTCO-Display:



OAS calibration
in days 28

EventFaultType*: --

Type of message	Description	Additional information
Operational message	<p>Meaning: The next periodical inspection is pending, for example in 28 days.</p> <p>Measure(s): Have the periodic inspections prescribed by law done by an authorised workshop in, for example, 28 days at the latest.</p> <p>Note: Monitoring of this message depends on the configuration of the DTCO 4.1x. Monitoring of this message can be activated or deactivated. The pre-warning time (0 - 92 days) for this message can be configured (WarnBeforeExpiry-Date).</p>	For this message no memory code (MC) is shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

Download in days

Displays in the DTCO-Display:

```

■■■1 download
in days          7
  
```

```

■■■2 download
in days          7
  
```

EventFaultType*: --

Type of message	Description	Additional information
Operational message	<p>Meaning: The next download of the driver card will, for example, be due in 7 days.</p> <p>Measure(s): Have the periodic download prescribed by law done in, for example, 7 days at the latest.</p> <p>Note: Monitoring of this message depends on the configuration of the DTCO 4.1x. Monitoring of this message can be activated or deactivated. The pre-warning time (0 - 249 days) for this message can be configured (NextMandatoryDriverCardDownloadPrewarningTime).</p>	For this message no memory code (MC) is shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment

End of normal operation

Displays in the DTCO-Display:

```

! end of normal
operation in 20
  
```

EventFaultType*: --

Type of message	Description	Additional information
Operational message	<p>Meaning: The DTCO 4.1x certificate expires.</p> <p>Measure(s):</p> <ul style="list-style-type: none"> – It is essential to perform a data download before the certificate expires. It is not longer possible after the expiration! – After expiry of the certificate, the DTCO 4.1x has to be replaced. <p>Note: A DTCO 4.1x can be used for a maximum of 15 years, after which period the certificate will expire. Once the certificate has expired, the tachograph must be replaced.</p>	For this message no memory code (MC) is shown in the display of the DTCO 4.1x.

* EventFaultType according to Annex I C / **bold** = Multiple assignment