Service Information

Tachographs, Telematics & Services

То:	Technical managers / Service technicians	SI-No.:	1000009
Subject:	DTCO 4.1 Retrofit Instructions	07.03.2024	Page: 1

The service information note is to explain how to perform a DTCO 4.1 retrofit, with the support of Flexible Universal Programming (FUP).

Since the 21st February 2024, a 'full' smart tachograph 2 or 'transitional' smart tachograph 2 must be fitted into all newly registered in-scope vehicles regardless of journey types ie. National or International.

From the 31st December 2024, any 'in-scope' vehicle that performs International journeys and is currently fitted with an analogue or an Annex 1B ('non-Smart') tachograph system must have the tachograph system replaced with a Smart Tachograph version 2 (G2V2).

There can be technical difficulties when replacing older model tachographs with newer ones. When using a Universal Tachograph as the replacement unit, it is necessary to program the new tachograph to the vehicle. This can be performed using Universal Programming in the Workshop Tab.



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However, due to advances in vehicle technology, the current parameter sets may not be compatible with older vehicles. To assist in overcoming compatibility issues that may occur with these retrofits, Continental/VDO have developed Flexible Universal Programming (FUP) in the Workshop Tab.

This requires the WTab to have minimum of v4.10 software and the License Feature Package 4.10 (item number: 2910003247100). This update is essential for retrofitting the tachographs DTCO 2.0-4.0 with DTCO 4.1.

Flexible Universal Programming (FUP)

Flexible Universal Programming currently allows all vehicles with a DTCO 2.0 to 4.0 to be retrofitted to DTCO 4.1. It transfers and converts relevant parameters from the old tachograph to the new DTCO 4.1, so no additional adjustments are necessary. The function is accessed via Parameterisation and Exchange Device.

Using Exchange Device:



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1. Select retrofit (e.g. DTCO X.X to DTCO 4.1) or standard replacement (e.g. DTCO 3.0 to 3.0). The screen below shows a retrofit to DTCO 4.1 selected.

\langle	E	Exchang	e device	11:53	*	98 %	
	Choose exchange method		Choose exchange method Tachograph Software Version: 030.037				
	Send PIN		4.1 DTCC Any other device				
	Read parameter						
	Download mass memory data						
	Remove tachograph						
	Install tachograph						
	Program universal parameter						
	Program parameter					Next	
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2. Send Workshop Card PIN to DTCO (if you haven't already done so) and read parameters of the old DTCO to the Workshop Tab. To do this, select the "Continue with new data" button.

Exch	ange device	11:55 🚸 🧧 98 % 🔳
Choose exchange method	Read parameter	
Send PIN	Current Tachograph Version: 030.037 Target Tachograph Version: 041.026	
Read parameter		
Download mass memory data		
Remove tachograph		
Program parameter		
	Description: ParameterSet_3.0/a4.1	Continue with previous data Continue with new data
💩 🛥 💿	TCO1381 (%)	9 / 10
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<u>uk@vdo.com</u> Tel: 0121 725 1234 3. Before removing the old DTCO, back up (download) the data from the old tachograph via Mass Memory download. This is a legal requirement under DVSA rules.

<	Exch	ange device 11:56	• 1	98 %	
	Choose exchange method	Mass memory download Use existing download for checking 3a Parlorm new mass memory download			
	Send PIN				
	Read parameter	Click next to start download.	3b		
	Download mass memory data	Constant data	Sel	ect do	wnload
	Remove tachograph	Controlling Contr		optio	ons
	Program parameter	Detailed Speed			
		DL Certificate NON-DL Certificat	3	C Next	
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4. Install the new DTCO 4.1 into the vehicle and transfer the parameters from the Workshop Tab to the new tachograph.

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Send PIN		
Read parameter		
Download mass memory data		
Remove tachograph		
Program parameter		
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5. The replacement of the DTCO is then completed.

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In future, this process may be integrated into the Calibration Wizard.

For retrofitting DTCO 4.1 in older vehicles (fitted with DTCO 1.4 or earlier, or analogue systems) or when the tachograph parameters cannot be read via Exchange Device, please contact Continental/VDO Support:

- Tel: 0121 725 1313
- Email: tacho-support@continental-corporation.com

Additional Considerations

In addition to changing the DTCO a new sensor must be installed and a DSRC module/antenna must be fitted.

<u>Sensor</u>

A KITAS 4 (2185) or equivalent sensor must be used with a Smart tachograph.

DSRC Installation Wizard

If an Analogue or Annex 1b tachograph is retrofitted with a new DTCO 4.1, a DSRC antenna or module must also be mounted. The DSRC Installation Assistant within the Workshop Tab guides the user through the entire process.



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Follow the DSRC Install Assistant through 'step-by-step' by selecting each of the functions in turn or by using the Next button on each screen. At the end of the process, a functional test is carried out to verify the correct installation of the DSRC module or antenna. A detailed report is generated, which serves as documentation of the retrofit.



Please note that the Stoneridge DSRC module on a Smart Tachograph Version 1 is not compatible with a Smart Tachograph Version 2. As the Stoneridge RTM/DSRC module is separate to the tachograph, being combined with the antenna, if the tachograph is updated to SMART Tachograph Version 2, the Stoneridge RTM/DSRC module must also be upgraded or replaced.

To identify a Stoneridge Smart 2 DSRC module, the certificate number can be checked: 900620C. A production Smart 2 module is marked with a Rxx number equal or above:

	VAR:	REV:
OEM	21	R07
OEM	22	ROS
OEM	25	ROS
OEM	26	R06
OEM	31	R04
OEM	32	R04
OEM	35	R04
AM	11	R12
AM	40	R07
AM	41	R05

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To access the DSRC certificate number, on the tachograph, scroll through to the INFO menu and press Enter. Then scroll through the screen to the DSRC Display (see below).



- DSRC pictogram
 DSRC extended serial number
- 3. DSRC certification number

DSRC MODULE 24V 900620.40R07 toneridae 23222-1432 19381-0489 Stoneridge 10R-05 0379 For type approved vention of product refer to Tachograph or other device via CAN **e**5 118R-03 0035 0201 10R-05 0379 UK e (E5) 118R-03 0035 C Stoneridge Electronics Stoneridge Electronics S-702 27 Örebro, Sweden S-702 27 Örebro, Sweden





Should you fit an OEM or Universal DTCO?

There have been reports that, in some vehicle makes, only OEM tachographs can be used for retrofitting. In our experience, if the Flexible Universal Programming is used, Universal DTCO 4.1 can be used for retrofitting.

A pop-up message appears on the Workshop Tab advising technicians to use Flexible Universal Programming.



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On the module itself, the Variant / Revision can be found as shown below: