

Memo No	21/23 version 2.0
Title	Tachograph K Factor Matching
Subject area	Statutory Testing
From	Vehicle Testing and Roadworthiness
Contact details	Email VTR@dvsa.gov.uk
To (Action required)	Testing Staff
Copy to (for information)	VEs, VEMs, TEs, TEM's, TSMs, TNMs, NBMs, REO, SVSAs, VSAs, TTLs, TQL, Training Services, ODM's, Press Office, Testing & Support Services, Specialist vehicles & Approvals, Commercial Vehicle Service, Technical Quality Team, Gordon Thomson, RHA, logistics UK, CPT, RMI, SMMT, BVRLA, VBRA and NPCC.
Expiry date	31 December 2024
Supersedes Memos	21/23 version 1.0

### Purpose:

The purpose of this memo is to inform staff of the standards and process to apply when comparing the K factors displayed on the tachograph installation plaque and tachograph technical printout.

### Process Users:

Testing Staff  
Assurance Team  
Testing & Support Services  
Training  
Technical Quality Lead Team

### Initiating Inputs:

Heavy Goods and Public Service Vehicles presented for statutory test or subject to a prohibition clearance.

### Outputs:

To ensure DVSA applies consistent processes during vehicle statutory annual testing.

## Procedure and General Rules:

### 1. Tachograph printout

The purpose of producing a tachograph technical data printout at statutory test is to:

- check that a printout can be produced and
- to compare the tachograph constant or K factor reading on the printout with that recorded on the tachograph installation plaque.

There may be occasions where several differing K factors are displayed on the printout, which can cause confusion. This memo explains which K factor to use for the comparison.

The information on the printout is displayed in what is known as data blocks. Next to the date within this block will be a number in brackets, for example **(04)** or **(4)**, this number represents a description of the activity carried out at that time i.e. a periodic calibration.

#### **Where there are multiple data blocks on the printout with varying numbers which one do you use to compare to the plaque?**

For statutory annual test where the printout contains multiple data blocks we are interested in those representing calibration events – usually identified by the descriptor 03 (initial calibration) or 04 (periodic calibration).

Printouts and the data blocks should be assessed in the following order for the correct K factor value to use for comparison against the calibration plaque on the vehicle:

- Firstly, look for the 04 (or 4) data block with the most recent date (see Example 1) and use this K factor value.
- Where there is no 04 data block on the printout then the K factor displayed in the 03 block must be used instead.
- On occasion printouts may only show a data block with the descriptor 01 or data blocks with 01 and 02, these represent the activation/installation of the tachograph. The K factor value contained in these may be used but only in the absence of the 03 or 04 data blocks.

## Example 1

The image displays three data blocks from a Volvo truck's diagnostic system, arranged vertically on the left. Each block contains the following information:

- Block 1 (Descriptor 03):** T 09.08.2023 (03), A YV2XTY0C4PB432867, UK /KY23JHV, W 4 687 Imp/km, K 4 687 Imp/km, L 3 158 mm, 315/70R22.5, 90km/h, 317 km.
- Block 2 (Descriptor 04):** T 09.08.2023 (04), A YV2XTY0C4PB432867, UK /KY23JHV, W 4 858 Imp/km, K 4 858 Imp/km, L 3 046 mm, 315/70R22.5, 90km/h, 317 km.
- Block 3 (Descriptor 80):** T 09.08.2023 (80), A YV2XTY0C4PB432867, UK /KY23JHV, W 4 687 Imp/km, K 4 687 Imp/km, L 3 158 mm, 315/70R22.5, 90km/h, 317 km.

On the right, a close-up of an installation plaque provides technical details:

- k-factor=4858 imp/km (circled in red)
- w-factor=4858 imp/km
- l-factor=3046 mm
- Date of Calibration=09 Aug 2023
- Tyre size=315/70R22.5
- Workshop Number=GBE410
- VIN=YV2XTY0C4PB432867
- Sensor S/N=22251687032307A1
- VU Serial No=11389138
- Technician Surname=
- VRN=KY23JHV
- Technician Forenames=
- Load type=Goods
- Workshop=VOLVO WELLINGBOROUGH
- Address=Rutherford Drive NN8 6AQ Wellinborough
- Location of Adaptor=
- Location of Sensor=Gearbox
- Impulse Cable Colour=
- Remote Com S/N=11389138052306A1
- GNSS S/N=Internal GNSS
- Seal S/Ns=UN 0184 7902

Looking at the above example the data blocks with the (03) and (80) descriptors must be ignored and the block with the latest periodic calibration (04) must be used which as you can see the K factor matches the installation plaque.

2. To ensure all staff see this memo and apply the standards by the correct implementation date line managers should ensure that this memo is emailed to all staff working at any Authorised Testing Facility. The email should be marked for the attention of all DVSA examiners and sent as soon as possible.

Russell Hall

Policy Manager (Vehicle Testing and Roadworthiness)  
December 2023

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