VDO compact tempostat®, 12 Volt
Operating Manual
1. Notes on Safety

2. Operation

3. Maintenance
1. Notes on Safety

The product described in this Manual was developed, manufactured and tested in line with recognized technical standards and in compliance with the fundamental safety requirements of EU directives.

Nevertheless, there are residual risks!

It is therefore important to read this Manual before using the product. Keep the Manual in a place that is readily accessible to all users at all times.

Explanations of Symbols

The types of warning given in this Manual are graduated according to the extent of the associated risk. All warnings are printed in bold type and attention is drawn to them by a symbol in the margin.

The warnings are given in the following sequence:

1. WARNING
2. CAUTION
3. ATTENTION

A WARNING gives notice of an immediate danger. Possible consequences are death or serious injury.

A CAUTION gives notice of a potentially dangerous situation. Possible consequences are death, serious or slight injury, or damage to property or the environment.

An ATTENTION gives recommendations concerning use. The possible consequences of noncompliance are damage to property, such as the engine or the product itself.

Target Group

This Manual is intended for the driver who

- Must be familiar with the operating instructions in this Manual and have understood the described functions;
- Must have a valid driving licence for the vehicle;
- Is not under the influence of alcohol or drugs and has not taken any medicines that could in any way affect his driving ability;
- Is not overtired.

Improper handling can lead to injury to the driver or third parties, or damage to property or the environment.

Modifications to the Product

The VDO compact tempostat® is designed and manufactured with due regard to safety and reliability.

Modifying or tampering with the product can affect its safety. This can lead to death, serious or slight injury to the driver or third parties, or damage to property or the environment. For this reason, the product must not be modified or tampered with!

Repairs

Never carry out any repair work on the product.

Inform the User

Hand the enclosed Operating Manual for the VDO compact tempostat® over to the user. The Operating Manual is an integral part of the product!

If the VDO compact tempostat® has not been fitted with a clutch switch:

Please inform the user that the engine speed briefly increases when the tempostat® function is switched off via the clutch.

Use other than as intended can lead to injury to the driver or third parties or damage to property or the environment. For this reason, the product must be used only according to the intended purpose!

Use according to Intended Purpose

Governed by various input signals, the VDO compact tempostat® Cruise Control System influences the position of the engine throttle lever via a motor actuator and an actuating cable (bowden cable).

The VDO compact tempostat® is intended for use as follows on flat or uphill roads:

- To regulate the vehicle speed to a value determined by the driver, provided that this value is greater than or equal to the vehicle-specific minimum speed \( v_{\text{min}} \). Depending on the vehicle, \( v_{\text{min}} \) ranges from 30-50 km/h.

On downhill roads the above function can be used as described only if the braking effect of the engine is sufficient to slow down the vehicle when the accelerator pedal is eased back!

Use other than as intended can lead to injury to the driver or third parties or damage to property or the environment. For this reason, the product must be used only according to the intended purpose!
2. Operation

Function

The VDO compact tempostat® enables driving at constant speed without having to press the accelerator pedal. In the case of long motorway journeys, for instance, this function avoids premature tiredness or cramp in the right foot. Once the desired speed is programmed, the VDO compact tempostat® assumes control of the throttle lever. The desired speed must be greater than or equal to the minimum speed \( v_{\text{min}} \).

Sudden changes in the traffic situation can give rise to danger! It is therefore essential to concentrate fully on driving the vehicle even when the VDO compact tempostat® function is selected. Always be ready to brake.

Use the VDO compact tempostat® only in suitable traffic and weather conditions!

Selector Switch

The selector switch can be used to control the functions described in the following.

Switching on: (Setting of the speed)

(Method 1)
- Acceleration up to the desired speed.
- Push the selector switch towards “set↑” or “set↓” and release.

The VDO compact tempostat® stores the vehicle’s current speed and maintains it without the accelerator pedal being pressed.

(Method 2)
- The speed is at least \( v_{\text{min}} \).
- Push the selector switch towards “set↑” and hold it depressed.

The vehicle accelerates without the driver having to press the accelerator pedal.
- When the desired speed is reached, release the selector switch.

The VDO compact tempostat® stores the vehicle’s current speed and maintains it without the accelerator pedal being pressed.

Overriding: (Increase of the set speed)

Even when the VDO compact tempostat® is active, the vehicle can be accelerated to highest speed by pressing the accelerator pedal.

When you override the VDO compact tempostat® by increasing the vehicle’s speed with the accelerator pedal, there is a risk of forgetting that the VDO compact tempostat® is still switched on. This applies especially if you maintain a higher speed with the accelerator pedal for a long time.

When the speed set with the VDO compact tempostat® is exceeded, the VDO compact tempostat® speed remains stored. As soon as the accelerator pedal is eased back, the vehicle is automatically accelerated back to the speed set with the VDO compact tempostat®.

For this reason, switch off the VDO compact tempostat® if you wish to drive faster for an extended period!

To set increased speed:
- Accelerate to the desired speed.
- Push the selector switch towards “set↓” and release.

To increase set speed continuously: (“set↑” function)
- Push the selector switch towards “set↑” and hold.

The vehicle’s speed increases without the accelerator pedal being pressed.
- Once you reach the desired speed, release the selector switch.

The VDO compact tempostat® stores the vehicle’s current speed and maintains it without the accelerator pedal being pressed.

To increase speed by 1 km/h: (tip-up function)
- Briefly push the selector switch towards “set↑” and release.
To decrease set speed continuously: ("set ↓" function)
- Push the selector switch towards "set ↓" and hold.

The vehicle’s speed decreases.
- Once you have reached the desired speed, release the selector switch.

The VDO compact tempostat® stores the vehicle’s current speed and maintains it without the accelerator pedal being pressed.

To decrease speed by 1 km/h: (tip-down function)
- Briefly push the selector switch towards “set ↓” and release.

To switch off: (off function)
- Push the selector switch towards “off” and release
  or
  - Depress the brake pedal
  or
  - Depress the clutch

If the VDO compact tempostat® is not fitted with a clutch switch, it must be taken into account that the engine speed briefly increases before the VDO compact tempostat® switches off.

In either case the VDO compact tempostat® stores the current set speed. Until the ignition is switched off, this speed can be reactivated at any time by pushing the selector switch towards “memo”.

To reactivate the VDO compact tempostat® with the previous set speed: (memo function)

(only if the ignition has not been switched off since the VDO compact tempostat® was last selected and the vehicle’s current speed is greater than or equal to the minimum speed $v_{min}$)

Risk of damage caused by the engine overspeeding!
Select “memo” only in the gear in which you were driving with the previous set speed.

- Push the selector switch towards “memo” and release.

The VDO compact tempostat® gradually accelerates the vehicle to the set speed and then maintains this speed.

Risk of damage caused by the engine overspeeding!
Select “memo” only in the gear in which you were driving with the previous set speed.

ATTENTION

- Push the selector switch towards “memo” and release.

The VDO compact tempostat® gradually accelerates the vehicle to the set speed and then maintains this speed.

Risk of damage caused by the engine overspeeding!
Select “memo” only in the gear in which you were driving with the previous set speed.

ATTENTION

- Push the selector switch towards “memo” and release.

The VDO compact tempostat® gradually accelerates the vehicle to the set speed and then maintains this speed.

Risk of damage caused by the engine overspeeding!
Select “memo” only in the gear in which you were driving with the previous set speed.

ATTENTION

- Push the selector switch towards “memo” and release.

The VDO compact tempostat® gradually accelerates the vehicle to the set speed and then maintains this speed.
3. Maintenance

The following measures are required in addition to the regular vehicle maintenance routine:

- Examine the actuating cable for kinks or breaks
- Lubricate the actuating cable with commercially available petroleum or silicone grease.

No other maintenance is necessary.

![CAUTION]

Damaged actuating cables impair operating safety!
For this reason, have damaged actuating cables renewed immediately!
VDO compact tempostat®, 12 Volt

Installation Instructions
1. Notes on Safety

The product described in this Manual was developed, manufactured and tested in line with recognized technical standards and in compliance with the fundamental safety requirements of EU directives.

Read these installation instructions before installing and connecting the product.

Explanations of Symbols

The types of warning given in this Manual are graduated according to the extent of the associated risk. All warnings are printed in bold type and attention is drawn to them by a symbol in the margin.

The warnings are given in the following sequence:

1. WARNING
2. CAUTION
3. ATTENTION

A WARNING gives notice of an immediate danger. Possible consequences are death or serious injury.

A CAUTION gives notice of a potentially dangerous situation. Possible consequences are death, serious or slight injury, or damage to property or the environment.

An ATTENTION gives recommendations concerning use. The possible consequences of noncompliance are damage to property, such as the engine or the product itself.

Use according to Intended Purpose

Governed by various input signals, the VDO compact tempostat® Cruise Control System influences the position of the engine output lever via an actuating motor and an actuating cable (bowden cable).

The VDO compact tempostat® is intended for use as follows on flat or uphill roads:

- To regulate the vehicle speed to a value determined by the driver.

On downhill roads the above function can be used as described only if the braking effect of the engine is sufficient to slow down the vehicle when the accelerator pedal is eased back!

Use other than as intended can lead to injury to the driver or third parties or damage to property or the environment.

For this reason, the product must be used only according to the intended purpose!

Prerequisites for the installation

- 12-volt supply, negative ground (earth).
- Available speed signal in sine-wave or square-wave form (automobiles with a mechanical speedometer have to be retrofitted with a frequency sensor/generator).

Target Group/Installation by Qualified Personnel

This description is intended for those persons who install the product in the motor vehicle.

In order to be able to operate properly, the VDO compact tempostat® must be correctly installed. The system may therefore be installed and wired only by persons who

- Know and have understood the installation instructions in this manual
- Are familiar with automotive electrical and mechanical systems

Installation by nonqualified personnel can lead to injury to the driver or third parties, or damage to property or the environment.

Modifications to the Product

The VDO compact tempostat® is designed and manufactured with due regard to safety and reliability.

Modifying or tampering with the product can affect its safety.

This can lead to death, serious or slight injury to the driver or third parties, or damage to property or the environment.

For this reason, the product must not be modified or tampered with!

Repairs

Never carry out any repair work on the product.

Inform the User

Hand the Operating Manual for the VDO compact tempostat® over to the user. The Operating Manual is an integral part of the product!

2. Settings before Installation

The electronics of VDO compact tempostat® is designed for universal use and can be tailored to your car by means of the programming switch.

1. Open the rubber cover of the control element housing.

2. Set the programming switch in such a way that all switch settings correspond to the data of your vehicle. Always take the data closest to those of your vehicle. Addressed switches are highlighted in black.

- Distance constant (pulses per km; adaptation to existing speed signal) – It is computed according to the following formula:
  \[ K_w = \frac{n_W \cdot PG}{1200} \]

  \[ K_w = \text{Distance constant \ [pulses/Km]} \]
  \[ n_W = \text{Ratio of speedometer \ [number of revolutions or pulses per unit of the distance travelled]} \]
  \[ PG = \text{Sensor pulses of the of speedometer \ [Impulse/Km]} \]

The ratio of the speedometer (n_w) and the signal output of the sensor (P_s) can be obtained from your authorized workshop or your installation partner.

Pulses per km

1200 - 1599
- **Type of gearbox**

  Manual

  Automatic

- **Amplification**

  This switch influences the aggressiveness of the system. If the setting is not ideal, the system will "hunt". For high-power automobiles, set first to "small" or "medium".

- **Pulses per km**

<table>
<thead>
<tr>
<th>Range</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1600 - 2249</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2250 - 3124</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3125 - 3874</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3875 - 4499</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4500 - 5499</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5500 - 6124</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6125 - 6624</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6625 - 7749</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7750 - 8999</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9000 - 10 624</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10 625 - 11 624</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11 625 - 13 499</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13 500 - 16 499</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16 500 - 20 999</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21 000 - 24 000</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

- **Speed signal form**

  (depends on the type of sensor)

  Your authorized workshop or your installation partner will tell you what type of sensor your vehicle uses.

  - Sine-wave (inductive encoder)
  - Square-wave
    - (Hall-effect sensor, reed sensor, blocking oscillator)

- **Selector switch version**

  Standard VDO selector switch (X39-397-106-149) and vehicle-specific selector switch ("normally open")

  If other selector switches from the VDO Kienzle range are used, please see the installation instructions included with the particular item.
3. **Installation**

**Risk of short circuit!**
Short circuits in the electrical system of the automobile can cause smouldering cables, battery explosions and damage to other electronic systems.

**For this reason, disconnect the negative terminal of the vehicle battery before starting work!**

- If the vehicle has supplementary batteries, the negative terminals of these batteries may also have to be disconnected!

**Loss of data possible!**
When the negative terminal of the battery is disconnected, all volatile electronic memories lose the values entered.

**ATTENTION**
Before disconnecting the battery, please note all relevant data, and point out to the customer that reprogramming will be necessary!

### 3.1 Installation of the Electronics and Control Element

The electronics and the control element are integrated together in a housing. The housing is installed in the engine compartment using the installation accessories.

**ATTENTION**

- The device can be damaged if water enters it.
- For this reason, ensure that the rubber cover fits properly.

#### 4 or 5 cylinders, great

<table>
<thead>
<tr>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

#### 4 or 5 cylinders, small

<table>
<thead>
<tr>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

#### 4 or 5 cylinders, extra small

<table>
<thead>
<tr>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

#### 6 cylinders, great

<table>
<thead>
<tr>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

#### 6 cylinders, small

<table>
<thead>
<tr>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

#### 6 cylinders, extra small

<table>
<thead>
<tr>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

#### 8 cylinders, great

<table>
<thead>
<tr>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
</tr>
</tbody>
</table>

#### 8 cylinders, small

<table>
<thead>
<tr>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
</tr>
</tbody>
</table>

#### 8 cylinders, extra small

<table>
<thead>
<tr>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
</tr>
</tbody>
</table>

3. Replace the rubber cover of the control element housing.

**ATTENTION**

- The device can be damaged if water enters it.
- For this reason, ensure that the rubber cover fits properly.

2. The device may be installed with or without mounting element.

Depending on the installation site, the mounting element may be fixed to the device in different positions.
3.2 Installing the Actuating Cable

Malfunctions possible! The actuating cable can be damaged if the bending radius is too small.

ATTENTION The bending radius must not be less than 150 mm.

Hand-tighten the mounting sleeve of the actuating cable. Engage the nipple of the control cable in the shaft of the control element and snap the sleeve in on the control element. Adjust the actuating cable length to the configuration of the vehicle. To do this, remove the cable from the cable cover and shorten the outer cover to the appropriate length. Then re-insert the cable into its cover. Route the actuating cable so that it forms a downward bow after the actuating motor. Make sure that the internal cable can easily move in the cover.
Installation in Cars with Electronically Controlled Throttle Valve or Injection Pump

It is only possible to actuate the unit directly via the accelerator pedal or the set-point sender. The regulating distance from the idling position to the full-power position should be between 36 mm and 42 mm.

Set-point sender and accelerator pedal as one unit

With this mode of communicating accelerator pedal positions, the actuating cable must be routed from the installation site of the actuating motor/electronics into the interior of the car under the dashboard and on to the accelerator pedal in a 180° bend. Install the cable support so that the actuating cable forms a straight line to the place of actuation.

Make sure that the actuating cable cannot snag or get caught. The function of the accelerator pedal must not be impaired.

CAUTION
3.3 Adjusting the Regulating Distance

The control element of the VDO compact tempstat® has a fixed regulating distance of 41 mm. An adjustment to the regulating distance of the engine power lever may be required.

If the regulating distance of the engine output lever is 36 - 41 mm (see mechanism "A"):
- Adjust the difference to 41 mm as a control cable overhang. Maximum permitted overhang: 5 mm.

If the regulating distance of the engine output lever < 36 mm:
- Adjust the regulating distance in accordance with "C".

If the regulating distance of the engine output lever is 42 - 46 mm (see mechanism "A"):
- Full throttle is not reached. If this behaviour is not acceptable, you must use mechanism "B".

If the regulating distance of the engine output lever > 46 mm:
- Adjust the regulating distance in accordance with "B".
3.4 Installing the Selector Switch
(Only valid for VDO selector switch no. X39-397-106-149. When using another selector switch from the VDO Kienzle product range or a vehicle-specific selector switch, please observe the relevant installation instructions.)

The selector switch can be flush- or surface-mounted.

Risk of injury!
In the event of an accident, the selector switch can cause serious injuries.

For this reason, install the selector switch
- outside the possible head impact areas of driver and passenger
- in such a way that it does not point directly at the driver or passenger.

1. Select a suitable installation site. Condition:
   - Easy to operate, without changing the sitting position

2. Shorten the operating lever to the required length (but minimum length 30 mm).

3. Install the operating lever. For examples see “D” to “F”.

4. Push on the grip (secure with adhesive if necessary).

3.5 Installation of the Clutch Switch
(Only required for manual gearboxes)

1. Select a suitable installation site. Conditions:
   - Switch is pressed when the clutch pedal is in its initial position
   - Switch opens when the clutch pedal is pressed
   - For clutch pedals without a firm point in initial position: the switch lever must be in lateral contact with the pedal arm (see “G”)

2. Bolt the switch onto the bracket provided.

3. Shape and shorten the bracket and the switch lever accordingly.
   For different installation variants see “G” to “J”.
After completing the installation work, connect up the negative terminal of the battery again and then check the system for correct functioning.

Connect up the electronics (10-wayplug), selector switch (5-wire harness) and, if required, clutch switch in accordance with the wiring diagram. Insulate cables that are not required.

Risk of short circuits due to incorrect connections or pinched cables!
Short circuits in the electrical system of the automobile can cause smouldering cables, battery explosions and damage to other electronic systems.
For this reason, all connections to the voltage supply must be either soldered or fitted with fusible butt joints and must be suitably insulated.
Make sure that the cables cannot be pinched or otherwise damaged.

Connect up the cables of the same colour (the pins must audibly click into position)

Connect up cables out of sight and tie them to existing looms as far as possible.
You can identify the assignment of the individual cables by the colour coding. The appropriate colour is given for each relevant lead in the wiring diagram.

3.6 Electrical Connection

CAUTION
An incorrectly connected cable may cause damage. Connect the cable according to the wiring diagram.

ATTENTION
Risk of short circuits due to incorrect connections or pinched cables!
Short circuits in the electrical system of the automobile can cause smouldering cables, battery explosions and damage to other electronic systems.
For this reason, all connections to the voltage supply must be either soldered or fitted with fusible butt joints and must be suitably insulated.
Make sure that the cables cannot be pinched or otherwise damaged.

Connect up the electronics (10-wayplug), selector switch (5-wire harness) and, if required, clutch switch in accordance with the wiring diagram. Insulate cables that are not required.

After completing the installation work, connect up the negative terminal of the battery again and then check the system for correct functioning.
Wiring Diagram

Control element motor with electronics

Bowden cable

Linkage

Throttle control cable or throttle rod assembly

Throttle cable or control rod

Selector switch

Output

Input

Brake light

Brake-light and clutch switch

Connection of the standard selector switch (X39-397-106-149)

bk = black
bl = blue
br = brown
gn = green
gr = grey
pk = pink
rd = red
wh = white
ye = yellow

*Lead not supplied

For Automatic Gearbox

For Manual Gearbox
4. **Functional Test**

1. Keep the selector switch pressed in the “memo” position and switch on the ignition. Now release the selector switch.

   This causes the VDO compact tempostat® to activate the diagnostics mode. In this mode, the device informs you about malfunctions by means of a red LED beside the programming switches in the control element housing.

2. For each of the four lever positions, check whether the LED lights up when the selector switch is actuated.

3. Check whether the LED lights up when the brake pedal is actuated.

4. Only for vehicles with built-in clutch switch: check whether the LED lights up when the clutch pedal is actuated.

5. Only for vehicles with speed signal in square-wave form:
   - Push the vehicle approx. 2 m and check whether the LED flashes.
   - The flashing only stops when the ignition is “off”.

   If the LED lights up for every test procedure, the VDO compact tempostat® is correctly connected.
   If not, please check the correct functioning of the appropriate connections or switches. If the connections or switches are in order, then there is a fault in the electronics of the device. In this case, please contact your dealer.

6. Check the tempostat® functions in a test-drive (not on a floor jack or a roller type test stand).

   If the test shows that different programming switch settings are required, change the settings according to chapter 2.

   When handing over the car, please observe the sections “Inform the User” in the chapter “Notes on Safety”.

![Selector Switch Diagram](image-url)
VDO compact tempostat®, 12 Volt

Montageanleitung
Installation Instructions
2. Operation

Function

The VDO compact tempostat® enables driving at constant speed without having to press the accelerator pedal.
In the case of long motorway journeys, for instance, this function avoids premature tiredness or cramp in the right foot.
Once the desired speed is programmed, the VDO compact tempostat® assumes control of the throttle lever. The desired speed must be greater than or equal to the minimum speed \( v_{\text{min}} \).

Sudden changes in the traffic situation can give rise to danger!
It is therefore essential to concentrate fully on driving the vehicle even when the VDO compact tempostat® function is selected. Always be ready to brake.
Use the VDO compact tempostat® only in suitable traffic and weather conditions!

CAUTION

![CAUTION Icon]

Overriding: (Increase of the set speed)

Even when the VDO compact tempostat® is active, the vehicle can be accelerated to highest speed by pressing the accelerator pedal.

When you override the VDO compact tempostat® by increasing the vehicle's speed with the accelerator pedal, there is a risk of forgetting that the VDO compact tempostat® is still switched on. This applies especially if you maintain a higher speed with the accelerator pedal for a long time.
When the speed set with the VDO compact tempostat® is exceeded, the VDO compact tempostat® speed remains stored. As soon as the accelerator pedal is eased back, the vehicle is automatically accelerated back to the speed set with the VDO compact tempostat®.
For this reason, switch off the VDO compact tempostat® if you wish to drive faster for an extended period!

Selector Switch

The selector switch can be used to control the functions described in the following.

Switching on: (Setting of the speed)

(//Method 1//)
- Acceleration up to the desired speed.
- Push the selector switch towards "set↑" or "set↓" and release.
The VDO compact tempostat® stores the vehicle's current speed and maintains it without the accelerator pedal being pressed.

(//Method 2//)
- The speed is at least \( v_{\text{min}} \).
- Push the selector switch towards "set↑" and hold it depressed.
The vehicle accelerates without the driver having to press the accelerator pedal.
- When the desired speed is reached, release the selector switch.
The VDO compact tempostat® stores the vehicle's current speed and maintains it without the accelerator pedal being pressed.

To set increased speed:
- Accelerate to the desired speed.
- Push the selector switch towards "set↓" and release.

To increase set speed continuously: ("set↑" function)
- Push the selector switch towards "set↑" and hold.
The vehicle's speed increases without the accelerator pedal being pressed.
- Once you reach the desired speed, release the selector switch.
The VDO compact tempostat® stores the vehicle's current speed and maintains it without the accelerator pedal being pressed.

To increase speed by 1 km/h: (tip-up function)
- Briefly push the selector switch towards "set↑" and release.
To decrease set speed continuously: (“set↓” function)
- Push the selector switch towards “set↓” and hold.

The vehicle’s speed decreases.
- Once you have reached the desired speed, release the selector switch.

The VDO compact tempostat® stores the vehicle’s current speed and maintains it without the accelerator pedal being pressed.

To decrease speed by 1 km/h : (tip-down function)
- Briefly push the selector switch towards “set↓” and release.

To switch off: (off function)
- Push the selector switch towards “off” and release
or
- Depress the brake pedal
or
- Depress the clutch

If the VDO compact tempostat® is not fitted with a clutch switch, it must be taken into account that the engine speed briefly increases before the VDO compact tempostat® switches off.

In either case the VDO compact tempostat® stores the current set speed. Until the ignition is switched off, this speed can be reactivated at any time by pushing the selector switch towards “memo”.

To reactivate the VDO compact tempostat® with the previous set speed: (memo function)

(only if the ignition has not been switched off since the VDO compact tempostat® was last selected and the vehicle’s current speed is greater than or equal to the minimum speed \( v_{\text{min}} \))

Risk of damage caused by the engine overspeeding!
Select “memo” only in the gear in which you were driving with the previous set speed.

- Push the selector switch towards “memo” and release.

The VDO compact tempostat® gradually accelerates the vehicle to the set speed and then maintains this speed.

3. Maintenance

The following measures are required in addition to the regular vehicle maintenance routine:

- Examine the actuating cable for kinks or breaks
- Lubricate the actuating cable with commercially available petroleum or silicone grease.

No other maintenance is necessary.

Damaged actuating cables impair operating safety!
For this reason, have damaged actuating cables renewed immediately!