Installation and operating instructions

Instructions de montage et de d’utilisation

Istruzioni per il montaggio e l’uso

Instrucciones de montaje y funcionamiento
The JOST LubeTronic 5Point is an automatic relubrication system for fifth wheel couplings. The LubeTronic 5Point is supplied pre-assembled with the fifth wheel coupling. In terms of its mechanical and electrical properties, as well as its reliability, it complies with the high standards you would expect from JOST. The mechanical functions and the operation of the fifth wheel coupling are not altered by the use of the JOST LubeTronic 5Point. The assembly and operating instructions are abbreviated below as A&O. Further information can be found at www.jost-world.com.

<table>
<thead>
<tr>
<th>Table of contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Safety instructions</strong></td>
<td>18</td>
</tr>
<tr>
<td>1.1 Safety instructions for maintenance</td>
<td>18</td>
</tr>
<tr>
<td>1.2 Safety instructions for assembly</td>
<td>18</td>
</tr>
<tr>
<td><strong>2 Correct use</strong></td>
<td>19</td>
</tr>
<tr>
<td><strong>3 General information</strong></td>
<td>19</td>
</tr>
<tr>
<td><strong>4 Overview of components</strong></td>
<td>20</td>
</tr>
<tr>
<td>4.1 Overview of LubeTronic 5Point components</td>
<td>20</td>
</tr>
<tr>
<td>4.2 Cable set</td>
<td>20</td>
</tr>
<tr>
<td>4.3 Fifth wheel coupling with LubeTronic 5Point</td>
<td>20</td>
</tr>
<tr>
<td><strong>5 Assembly</strong></td>
<td>21</td>
</tr>
<tr>
<td>5.1 Assembling the fifth wheel coupling with LubeTronic 5Point</td>
<td>21</td>
</tr>
<tr>
<td>5.2 Routing the cable set</td>
<td>21</td>
</tr>
<tr>
<td>5.3 Connecting LubeTronic 5Point</td>
<td>22</td>
</tr>
<tr>
<td>5.3.1 Connecting LubeTronic 5Point for standard dispensing volumes</td>
<td>22</td>
</tr>
<tr>
<td>5.3.2 Connecting LubeTronic 5Point for a choice of dispensing volume (optional)</td>
<td>22</td>
</tr>
<tr>
<td>5.3.3 Connecting LubeTronic 5Point for special dispensing (optional)</td>
<td>23</td>
</tr>
<tr>
<td>5.3.4 Connecting LubeTronic 5Point for displaying the functional status in the driver's cab (optional)</td>
<td>23</td>
</tr>
<tr>
<td>5.4 Initial greasing</td>
<td>23</td>
</tr>
<tr>
<td><strong>6 Operation</strong></td>
<td>24</td>
</tr>
<tr>
<td>6.1 Function lights</td>
<td>24</td>
</tr>
<tr>
<td>6.2 Switching the system on</td>
<td>24</td>
</tr>
<tr>
<td>6.3 Special dispensing</td>
<td>24</td>
</tr>
<tr>
<td>6.4 Fault displays</td>
<td>25</td>
</tr>
<tr>
<td><strong>7 Maintenance</strong></td>
<td>27</td>
</tr>
<tr>
<td>7.1 Topping up the LubeTronic 5Point</td>
<td>27</td>
</tr>
</tbody>
</table>
1 Safety instructions

The relevant safety regulations in the respective country (for example statutory accident insurance body for transport) apply for working with fifth wheel couplings, tractor units, semi-trailers and the LubeTronic 5Point.

The appropriate safety information in the owner's handbook for the tractor unit and the semi-trailer are valid and must be followed. The following safety information must be borne in mind when operating, maintaining or assembling the LubeTronic 5Point.

Safety instructions directly linked to the activity are listed again in the following sections.

Warning information in the following sections is shown with the warning triangle symbol. You must comply with this warning information without fail.

1.1 Safety instructions for maintenance

- When carrying out maintenance work or topping up the LubeTronic 5Point, only use fully synthetic JOST high-performance lubricant (SKE005670000). If different greases are used, any warranty claims will be classed as null and void.
- Maintenance or exchange of the LubeTronic 5Point must only be carried out by a competent individual.

1.2 Safety information for assembly

- When setting up a fifth wheel coupling with LubeTronic 5Point, take care to ensure that the fifth wheel coupling is placed on the vehicle using a suitable lifting tool. Lifting a fifth wheel coupling with LubeTronic 5Point, e.g. with a forklift truck, can damage the LubeTronic 5Point.
- The LubeTronic 5Point must be assembled by trained personnel in suitable workshops. Follow the installation directive supplied by the vehicle manufacturer, the requirements of Appendix 7 of EC 94/20 and, if applicable, §§19, 20 and 21 of the German Road Traffic Act and the installation instructions.
- The LubeTronic 5Point must be connected to the vehicle's electrical system in accordance with the details in Section 5.2.
- The vehicle battery must be disconnected before starting any work on the vehicle's electrical system. The earth return of the electrical consumers is not through the chassis but through the cabling via the earth post on the fuse holder.
- Install all the cables so that they cannot be crushed or chafed.
- Do not fasten cables to brake lines.
- Route cables at an adequate distance from heat sources, such as the exhaust system.
- When installing the cables ensure that there is a sufficient length of cable between the fifth wheel coupling and the vehicle body.
- Ensure the connection of the power supply to the LubeTronic 5Point is at a location approved by the vehicle manufacturer.
- Protect the LubeTronic 5Point with a commercially-available 3 A blade terminal fuse.
- If assembled incorrectly, the type approval for the fifth wheel coupling and therefore the vehicle's operating permit will be rendered void.
- If assembled incorrectly, all warranty claims against the manufacturer and the supplier of the LubeTronic 5Point will be rendered void.
- For ADR/GGVS vehicles, the regulations and country-specific legislation must be observed. A parts report can be found at www.jost-world.com.
- On ADR/GGVS vehicles, only use an ADR/GGVS-suitable connecting cable to connect the LubeTronic 5Point to the vehicle's electrical system. Such as the LubeTronic 5Point connecting cable, for instance.
2 Correct use

The LubeTronic 5Point is an automatic relubrication system for fifth wheel couplings.

The lock jaw and top of the coupling plate are lubricated.

The permitted operating temperature range for LubeTronic 5Point is between -40 °C and +80 °C. Where ambient temperatures are below -25 °C, the LubeTronic 5Point will not dispense any grease. Modifications of any kind will render both the warranty and the design approval void and therefore also cancel the vehicle's operating licence.

3 General information

Each LubeTronic 5Point is marked with an article number, a type designation, the EC approval number and an ADR testing number. These details are used for unique identification of the part.

A parts report for using the LubeTronic 5Point in hazardous goods vehicles can be be found on the Internet at: www.jost-world.com.

The LubeTronic 5Point has an electronic control system. When the ignition is switched on, the LubeTronic 5Point is activated and automatically dispenses a defined quantity of grease every two hours. It is also possible to activate additional dispensing of grease or to operate the LubeTronic 5Point with different dispensing times, e.g. for use on construction sites.

When disposing of the LubeTronic 5Point, waste materials are produced that contain pollutant substances. On the housing of the LubeTronic 5Point, a symbol indicates that the component must not be disposed of in household waste.

When disposing of the LubeTronic 5Point, the current regulations regarding refuse and waste set down by the country in question must be taken into account. You can find out more via your local collection point or via JOST.
4 Overview of components

4.1 Overview of LubeTronic 5Point components

1 LubeTronic 5Point
2 Electrical connection
3 Refilling lubricating nipple (conical lubricating nipple)
4 Grease storage container
5 Function lights

4.2 Cable set

1 9 m long connecting cable
2 4-pin connecting plug

4.3 Fifth wheel coupling with LubeTronic 5Point

1 LubeTronic 5Point
2 Lubricant lines
3 Fifth wheel coupling
5 Assembly

5.1 Assembling the fifth wheel coupling with LubeTronic 5Point

To assemble the fifth wheel coupling with LubeTronic 5Point, see the JOST fifth wheel coupling A&O. Details of this can be found on the Internet at www.jost-world.com.

When assembling the fifth wheel coupling plate on a mounting plate, free mobility of the fifth wheel coupling plate must be checked and verified. The LubeTronic 5Point must not, in the event of the fifth wheel coupling plate tipping backwards, come into contact with the fastening screws of the pedestals. If necessary, shorter fastening screws must be used.

If the fifth wheel coupling with LubeTronic 5Point is subsequently painted, care must be taken to ensure that the electrical connection is masked.

If a paint dryer is used, or the paint is dried in a drying chamber, care must be taken to ensure that the LubeTronic 5Point is not subjected to direct exposure to the rays. Persistent heating of the LubeTronic 5Point to over 80°C must be avoided.

5.2 Routing the cable set

When installing the cable, ensure that there is a sufficient length of cable between the fifth wheel coupling and the vehicle body. Check that the cable is freely mobile by tilting the fifth wheel coupling all the way forwards and all the way backwards. When the fifth wheel coupling is tilted, the cable must not be crushed, kinked or stretched.

Install the cable set as follows:

Route the connecting cable (2) from the fifth wheel coupling (4) to the fuse box in the driver's cab. Guide the cable forwards under the fifth wheel coupling and secure the cable to the fifth wheel coupling using a cable tie.

Connect the plug connector on the connecting cable to the plug connector on the LubeTronic 5Point. The plug connector can only be connected in one position.

Connect the connecting cable (2) as per the following circuit diagram to the vehicle's fuse box.
5 Assembly

5.3 Connecting LubeTronic 5Point

5.3.1 Connecting LubeTronic 5Point for standard dispensing amounts

- Connect PIN 1 and PIN 3 according to the circuit diagram in Section 5.3.

The standard dispensing amount corresponds to the requirements of short and long-distance haulage. The LubeTronic 5Point automatically dispenses grease every two hours.

5.3.2 Connecting LubeTronic 5Point for a choice of dispensing volume (optional)

Various lubrication programs are stored in the LubeTronic 5Point. By default, the LubeTronic 5Point is delivered set for a lubrication interval of 2 hours. A different dispensing quantity can be necessary for certain applications such as on construction sites. It is therefore possible to select the lubrication interval in steps of 30 minutes, from every 30 minutes (program 1) up to a lubrication interval of every 2.5 hours (program 5)

- Connect PIN 1, PIN 2 and PIN 3 according to the circuit diagram in Section 5.3 (connect PIN 2 via a button with a normally open contact).
- Press and hold the button on PIN 2 and apply operating voltage (switch on the ignition) until the function light starts to flash rapidly.
- Release the button on PIN 2. The lubrication unit is now in programming mode. It is possible to select from programs 1 to 5.
- Press the button on PIN 2 the number of times corresponding to the program required. Example: Briefly pressing the button 4 times selects program 4 (lubrication interval every 2 hours).
- When the lubrication system detects that a program has been selected, the function light flashes to confirm the number of the program selected, then automatically changes to lubrication mode.

---

### PIN No. | Colour | Description
--- | --- | ---
1 | Black | + 24 V DC, voltage connection Terminal blade fuse 3 A protection
2 | White | + 24 V, special dispensing 3 A blade-type fuse protection
3 | Brown | – earth connection, terminal 31
4 | Red | Function lights signal output + 24 V/ 2.4 W, negative to earth

To prevent damage to the vehicle’s electrical system and LubeTronic 5Point in the event of a short circuit, a conventional 3 A blade-type fuse must be fitted in the connecting cable.
5 Assembly

5.3.3 Connecting LubeTronic 5Point for special dispensing (optional)

- Connect PIN 2 via a button with a normally open contact to +24 V.
- If possible, use a button in the cab that is appropriate for the specific type of vehicle.

Special dispensing is triggered by pressing the button for approx. 3 seconds until there is a response from the lubrication system via the function light (lights up for 1 second).
Special dispensing is a cycle of 5 individual dispensing events within a period of about 20 minutes.

5.3.4 Connecting LubeTronic 5Point to display the functional status in the driver's cab (optional)

- Connect PIN 4 according to the circuit diagram in Section 5.3.

Ideally, display lights from the accessories that are specific for the vehicle in question should be used.

5.4 Initial greasing

Prior to start-up, the fifth wheel coupling must be greased on its top and in the lock. Lubricating grooves and wells in the area marked yellow must be filled to the top. We recommend fully-synthetic JOST high-performance lubricant (SKE005670000) for this purpose.

**Effective lubrication of the upper surface of the fifth wheel coupling plate, the lock jaw and the king pin before commissioning and after each clean is essential for prolonging their service life.**
6 Operation

6.1 Function lights

The LubeTronic 5Point is equipped with an LED function light (see details in Section 4.1 and 5.3 of these A&O). The function lights can be used to determine the functional status of the LubeTronic 5Point.

The following functional statuses are displayed:

a. After ignition "on", the function light illuminates for 3 seconds. Internal system check of the LubeTronic 5Point.

b. In "normal mode", the function light does not illuminate.

c. The function light illuminates permanently. The grease stock has been used up and must be replenished.

d. If the function light is flashing, a fault has occurred or the LubeTronic 5Point is damaged.

6.2 Switching the system on

The LubeTronic 5Point is activated via the vehicle ignition. The LubeTronic 5Point then automatically triggers lubricant dispensing events at defined intervals (corresponding to the dispensing quantities set, see Section 5.3 "Connecting LubeTronic 5Point").

6.3 Special dispensing

To activate special dispensing, the special dispensing function must be connected in accordance with Section 5.3.3 "Connecting LubeTronic 5Point for special dispensing (optional)".

When the button is pressed for 3 seconds, 5 individual lubricant dispensing events are carried out over a period of around 20 minutes.
### 6.4 Fault displays

<table>
<thead>
<tr>
<th>No.</th>
<th>Fault</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The function light illuminates permanently after &quot;ignition on&quot;.</td>
<td>The grease stock in the grease stock container is used up.</td>
<td>Top up the grease stock with LubeTronic 5Point grease.</td>
</tr>
<tr>
<td>2</td>
<td>The function light flashes for 2 minutes after &quot;ignition on&quot;. After 2 minutes have elapsed, the function light illuminates permanently.</td>
<td>The control electronics of the LubeTronic 5Point are damaged.</td>
<td>Check the connection between the LubeTronic 5Point and the vehicle’s voltage supply. See Section 5.3 “Connecting LubeTronic 5Point” in these A&amp;O. Check the connecting cable for damage and repair if necessary. Check the routing of the connecting cable. See Section 5.2 “Routing the cable set” in these A&amp;O. The connecting cable must not become crushed or stretched if the fifth wheel coupling is tilted (forwards or backwards). Replace any damaged cables. Check the LubeTronic 5Point for damage and replace if necessary.</td>
</tr>
<tr>
<td>3</td>
<td>The LubeTronic 5Point is not lubricating or is not doing so adequately.</td>
<td>The environment in which the vehicle is being used requires a higher volume of lubricant, e.g. construction vehicles.</td>
<td>Activate a special dispensing at regular intervals. Shorten the LubeTronic 5Point dispensing quantity. See section 5.3. &quot;Connecting LubeTronic 5Point&quot; in these A&amp;O. The lubricating lines are damaged or crushed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The lubricating lines are damaged or crushed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The grease stock is used up.</td>
<td>See fault No. 1 in this table.</td>
</tr>
</tbody>
</table>
## 6 Operation

<table>
<thead>
<tr>
<th>No.</th>
<th>Fault</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>The LubeTronic 5Point is not lubricating or is not doing so adequately.</td>
<td>The ambient temperature has been below -25°C for a prolonged period.</td>
<td>The grease transfer of the LubeTronic 5Point is halted at ambient temperatures below -25°C, since the grease freezes at these temperatures and cannot be transported. If the temperature rises above -25°C, the LubeTronic 5Point automatically starts to transport grease again. See Section 2 &quot;Correct use&quot; in these A&amp;O. Carry out manual lubrication of the fifth wheel coupling.</td>
</tr>
<tr>
<td></td>
<td>The LubeTronic 5Point has been filled with grease not approved by JOST.</td>
<td></td>
<td>Replace the LubeTronic 5Point unit.</td>
</tr>
<tr>
<td></td>
<td>The connection of the LubeTronic 5Point to the vehicle's voltage supply is faulty or damaged.</td>
<td></td>
<td>Check the connection between the LubeTronic 5Point and the vehicle's voltage supply. See Section 5.3 &quot;Connecting LubeTronic 5Point&quot; in these A&amp;O. Check the connecting cable for damage and repair it if necessary. Check the routing of the connecting cable. See Section 5.2 &quot;Routing the cable set&quot; in these A&amp;O. The connecting cable must not become crushed or stretched if the fifth wheel coupling is tilted (forwards or backwards). Replace any damaged connecting cables.</td>
</tr>
<tr>
<td>4</td>
<td>The surface of the fifth wheel coupling is severely cracked or rusty.</td>
<td>When commissioning the LubeTronic 5Point or after cleaning the upper side of the fifth wheel coupling plate, no initial greasing was carried out.</td>
<td>Carry out an initial greasing of the fifth wheel coupling as per Section 5.4 &quot;Initial greasing&quot;.</td>
</tr>
<tr>
<td></td>
<td>The LubeTronic 5Point is not lubricating adequately.</td>
<td></td>
<td>See fault No. 3 in this table.</td>
</tr>
<tr>
<td>5</td>
<td>The function light does not illuminate when the ignition is switched on.</td>
<td>The connection of the LubeTronic 5Point to the vehicle's voltage supply is faulty or damaged.</td>
<td>See fault No. 3 in this table.</td>
</tr>
</tbody>
</table>
7 Maintenance

The relevant specifications from the JOST A&O Type JSK40, JSK42 still apply for the fifth wheel coupling.

The LubeTronic 5Point is maintenance-free; only the grease stock needs to be topped up after around a year (provided the special dispensing function has not been activated). If the LubeTronic 5Point runs empty, the function light on the LubeTronic 5Point indicates this; see Section 6.1. "Function lights".

The connecting cable and the lubricating lines of the LubeTronic 5Point should also be checked for damage once a year. Damaged parts must be replaced, since they cannot be guaranteed to function safely.

The grease cartridges are available commercially.

Further instructions on JOST products can be found at the JOST website - www.jost-world.com.

7.1 Topping up the LubeTronic 5Point

To use the refilling kit SKE005670000, a grease gun compliant with DIN 1283 is required. Using the excess grease from the second cartridge, the missing parts on the upper side of the fifth wheel coupling should be topped up.

Alternatively, a grease gun for large containers (e.g. 25 kg barrel, SKE 007090000) can be used.

To refill the LubeTronic 5Point, only use fully-synthetic JOST high-performance lubricant.

- Uncouple the tractor, fold the JSK 37 / JSK 42 fifth wheel coupling all the way forwards and fold JSK 38 all the way backwards.
- Clean the lubricating nipple on the LubeTronic 5Point with a clean cloth.
- Place the grease gun on the lubricating nipple and fill grease into the LubeTronic 5Point. Ensure that no grease leaks out of the lubricating nipple. Top up the grease until the piston has been moved to "Maximum Grease Level" mark.
- Wipe away any grease which has leaked out while filling.
- If present, actuate special dispensing until grease comes out of all the lubricating points on the fifth wheel coupling plate. Fill up any missing areas on the upper side of the fifth wheel coupling with grease.
- Fold the fifth wheel coupling to the normal position.
- Dispose of empty cartridges and packaging in accordance with national regulations.

Note

If the LubeTronic 5Point is over-filled, the excess grease will come out of a relief hole on the back of the grease container.