**DOTTO DTIS – Automatic Tire Inflation System**

**Installation & Service Manual**

Directory

## 1. Important information

Dear customer,

We are pleased to provide you with the DOTTO Automatic Tire Inflation System(DTIS),which is from Shenzhen DOTTO AUTO TECH CO., LTD , it will help you improve road safety (reduce flat tires, and breakdown on highway), increase the profitability of your vehicle (by reducing fuel consumption, reducing tire consumption, reducing downtime, reducing towing cost due to flat tires, repair costs, late-arrival fines, etc.), and being more environmentally friendly.

The current manual will provide you with an overview of the product and its fair use. Read the full manual, along with important instructions for safety information and proper operation. By following these instructions, the normal working hours and life of the system will also be maximized.

The manual should be readily available to the vehicle user and should therefore be stored in the vehicle.

### General information

This manual is designed for users to understand features, structures, and how to operating systems. The installation and initial use guidelines included are limited to the manufacturer of the vehicle or through proven partners and trained professionals.

We recommend that all pressure changes and maintenance be completed by certified partners and trained professionals.

Please read the manual carefully! Failure to comply with warnings and instructions may result in personal or property damage.

2.1. Security icon

This manual uses different icons to identify important information. It is necessary to read and observe this information carefully.

This icon indicates that the vehicle must stop safely as soon as possible.


This icon is a warning of possible personnel and property security risks.


This icon is used to identify special installation requirements. Unlawful use can result in personal and property damage, as well as system failure or damage.


This icon is used to indicate important and useful information for installation, efficiency, and system life.

2.2. Security information


Warning:

- Please read the manual carefully! Failure to comply with warnings and instructions may result in loss of life and property.

- Save this manual for future reference!

2.2.1. Overview


Warning:

- Physical changes to the system are not allowed without notifying DOTTO. All changes to be made on the system must be confirmed in writing to DOTTO.

- DOTTO DTIS parts are not allowed to be smeared.

- Transportation and storage should be carried out under original packaging conditions and kept in room temperature and dry.

- Semi-trailers or full trailer axles are safety-related components. Therefore, installation should only be done by the vehicle manufacturer or certified partner and by trained professional personnel.

- The system uses compressed air. Therefore, safety goggles must be worn during installation and after-maintenance.

- Damaged or missing parts must be replaced immediately by certified partners and trained professionals.

- The system switch must be switched off and the pressure relief valve outside the control box released compressed air before the system can be serviced.

- The company provides the corresponding system components for different axle models and registered model numbers. System components must not be used for non-corresponding axles and registered model numbers.

- System Operation requires at least 6 BAR inlet pressure.

- The operating pressure is between the inlet pressure (minimum 6BAR) and 9.8BAR.

- When the pump is operating, excess air is released from the control box and vented through the exhaust valve port at the bottom of the control box, see Section 4.2, Figure 15: Control box internal structure.

2.2.2. Check around the vehicle before departure.

 Warning:

- Before departure, it is necessary to check around the vehicle.

- Check that the system switch is on so that DOTTO DTIS works properly.

- Check the tire condition for external damage and sufficient tire pattern depth.

- Incorrect pressure settings can lead to tire wear and increased fuel consumption, and in the worst case, the tire will burst out.

2.2.3. Installation

 Warning:

- Improper installation can lead to serious accidents and may result in loss of life and property.

**- Before installation, the trailer should be parked on a flat and safe place, with landing gear in place, block the tires on both sides, and the vehicle will not move when used. If you need to disassemble and install tires, with jacks to support vehicles, according to the factory's requested position to support, during the operation under the trailer, it is strictly prohibited that single side or two sides to use jack support only, to prevent accidents.**

- All mounting positions must be checked before drilling to ensure that there are no parts such as power, air, or bearings passing by the drill bit.

- The control box air pressure is set according to the tire side pressure value plus 0.2BAR.

- There must be a gap of at least 5 cm between the air outlet of the control box and the trailer beam or other structural parts.

- The control box outlet must not be pushed into the control box.

- ADR guidelines must be observed when wiring ADR vehicles.

- Cables connected to the control box must be protected from any damage.

- All wireheads must not be covered with dirt, grease or oil.

- Air lines installation must be cautious to avoid damage, twisting or rubbing to other lines.

- When installing the air lines, there must be sufficient relaxation for the spring to elongate and compress.

- The air lines must be exhausted and the system must be switched off before working on the air lines.

- The rotary union must be installed after the hub cap has been installed to prevent the tubing from kinking inside the hubcap and to prevent misalignment at the quick screw connector.

- The tire hose must not be twisted, covered or exposed to the wheel cover.

- Damage to the tire hose may cause the air in the tire to be completely exhausted.

2.2.4. System Initial Operating Status

Warning:

- All components must be checked for any damage or leakage before the system is put into operation. In addition, the pressure on the control box and all tires must be checked.

- The pressure setting of the pressure regulator valve must be 0.2 BAR higher than the tire pressure recommended by the tire manufacturer to compensate for the opening pressure of the tire valve.

2.2.5. System working status

Stop:

- When the warning light is continuously on, the driver must stop as soon as possible. The system cannot fully compensate for air leakage and there is a risk of a flat tire if it continues to drive.

2.2.6. Maintenance

Warning:

- Maintenance intervals must be shortened in the event of bad weather and terrain conditions.

- Failure to comply with maintenance interval requirements will result in no warranty.

- We provide maintenance spare parts for specific tire and axle models, such as tire hose assembly, which must not be used for non-corresponding tire types.

## 2.3. **General terms and conditions and quality assurance terms**

Current general terms and conditions, as well as quality guarantee terms, can be downloaded from our website.

## 2.4. **Responsibility**

DOTTO DTIS uses the general terms and quality warranty terms of our current version.

DOTTO is not responsible for personal or property damage if:

- Use an inappropriate system.

- Manuals and safety information are not followed.

- Physical changes have been made to the system.

- Poor maintenance of wearable parts.

- Use damaged parts.

- The system is not properly installed.

- Use unauthorized aftermarket parts.

- Any disaster caused by external influences or an act of nature.

**2.5. Material Disposal**

To protect our environment, waste generated during installation or maintenance, such as parts and labor supplies, must be disposed of correctly.

All recyclable waste, which does not contain special wastes such as oil and grease, must be reused as much as possible. All local regulations must be observed.

**3. Product descriptions and specifications**

**3.1. Proper use**

The company's product development and manufacturing through rigorous testing and testing, including a variety of materials, testing benches, road tests and other comprehensive testing to ensure the realization of the desired performance and safety. Nevertheless, improper use of the product may pose a risk to the persons and property using the product. DOTTO DTIS is only designed for control of heavy-duty semi-trailer and full trailer tire pressure. The system ensures that the tire is continuously at or slightly above the set cold pressure value, which is pre-set according to load and tire specifications.

The driver will be informed of the automatic inflating by installing a warning light mounted on a semitrailer (or container) or a full trailer (or container) that can be seen from the rear view mirror. The warning light flashes at different speeds, depending on the severity of the air pressure leak. If the warning light continues to flash until it is almost always on, the vehicle must stop as soon as possible to make the necessary checks on the tires and system.

Depending on the axle manufacturer and axle model, the system will have different product configurations. A product configuration is only allowed to be used with the corresponding axle.

Appropriate use includes:

- The installation service manual and the working procedures and installation instructions contained therein must be observed.

- Guides to system inspection must be observed.

- Environmental disposal guidelines must be observed to properly dispose of waste from installation or repair.

- Only compliance with all valid system settings ensures reliable use of the product.

**3.2. Improper use**

DOTTO DTIS is only designed for control of heavy-duty semi-trailer and full trailer tire pressure.

Inappropriate use includes:

- Inflate and pressurize equipment, air tank or parts that are not part of the system.

- Use components that are not of the axle model.

- Installed by unauthorized workshops or non-professionals.

- All uns recommended range of applications.

### 3.3. System construction

Figure 1: System schematic

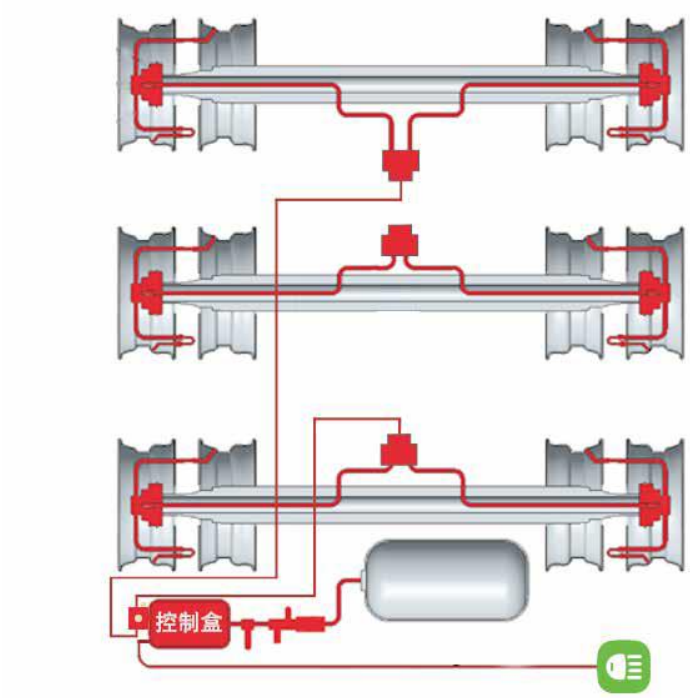


Figure 2: Major components Photos:

1） Figure 3: Control box

2） Rotary union (including quick screw nut, 2 bolts with seals).

Figure4/5/6: Single-tire rotary union /Dual tire rotary union/ gasket for V2.0

Figure 4.1/5.1 Rotary union V3.0 of Single tire and Dual tire


3） Dedicated hubcaps (in order: FUWA, BPW, VALX).

Figure 7: Dedicated hubcaps

4） Tire hose assembly (dual tire external, dual tire internal, single tire, depending on the tire model, different length, see the part number table followed)

Figure 8: Tire hose assemblies

5) Warning light and the harnesses: Figure 9/10.

6) Pressure protection valve, in case of serious tire leakage, when system pressure drops to a certain level, in order to ensure that the brake system works, will stop the compressed air to supply the automatic tire inflation system. Pre-installed quick-plug connector M22 x 1.5 / 6x 4 Nylon tubing. The pressure protection valve has an intake direction with an arrow sign to follow.

Figure 11: Pressure protection valve.

7) Air lines of the system itself: including several nylon tubing and quick-plug connectors.

8) Compressed air source (Air tank) *

9) Other accessories, including waterproof strain relief, etc.

Figure 12:

* The components are not included in the delivery.

**4. Installation**

This chapter describes the installation of the DOTTO DTIS Automatic Tire Inflation System. The working procedures and related notes described must be followed.

Warning:

- Please read all the safety information that can be found in the section.

- Non-compliant actions can result in personal and property damage!

Note:

- DOTTO DTIS system, the compressed air is distributed from the control box dispenser to each axle tube, and then through the quick coupling tee fitting to the air tubing inside each trailer axle tube, and then through the spindle, through the quick screw fitting connected the rotary union. When wiring the air tubing inside the axle tube, a steel wire will be used, two people need to cooperate, trained personnel generally use less than one minute to complete the work.

1) Spindle of American trailer axles, such as HENDRICKSON, SAF-HOLLAND, FUWA AXN, MERITOR, CIMC, and others are hollow, there will be Welsh plug, which needs to be drilled in its center, on the hole installed rubber protective sleeve, so as not to cut the air tubing.

2) Spindle of German trailer axles, such as BPW, SAF-Holland and others are mostly solid, while solid part length varies. If it is a new trailer, you can specify DOTTO DTIS – Automatic Tire Inflation System, the axle factory will get the axle prepped, with holes in both spindles and two threaded holes in the middle of the shaft, so that installation would be very convenient. If it is retrofitting, you need to use DOTTO dedicated drilling jig to drill the 11.5 mm hole in the spindle, and drill and tap 2 holes in the middle of axle tube, by using 220V power outlet. The 2 holes would be at least 150mm apart, as far as it can be to facilitate the air tubing connection.

3) In order to prevent foreign materials such as solder slag and oxidizing skin from entering the hub cavity and hubcap, and contaminating grease or lubricants, 2 sponge filters should be placed in the spindle holes each side. Figure 13:

Depending on your axle type,  the installation procedure will vary slightly.

**4.1. Tools needed for the installation**

| The axle type | Part to install | The tools you need | Possible size |
|---|---|---|---|
| BPW/SAF-Holland solid spindle, holes prepped<br><br>FUWA KHITCH, AXN, ordinary / VALX / CIMC | Rotary union | Allen wrench | 4 |
| | Quick screw nut | 2 Open end wrenches | 12 |
| | Air tubing through the axle tube | 2 pieces of thin steel wire, with end bent | 2 m, 0.3 m |
| | Control box | Drilling template | |

| | | | |
|---|---|---|---|
| and other hollow spindle axles | | Drill bit<br>Wrench | 10. 5mm<br>14 |
| | Tire hose | Wrench | 12 |
| | Warning light | The hole opener | ø 18.5 |
| | Waterproof strain relief | Open end wrench | 16/19 |
| BPW/SAF-Holland solid spindle, drilling on site | Spindle plug | Driver or Sleeve wrench | 12 |

**4.2. Installation of the control box**

- Under the exhaust port at the bottom of the control box, there needs to be a 5CM gap so that the booster pump in the control box can exhaust the excess air.

Note:

- The lid of the control box must be openable for later maintenance and possible repairs.

The control box contains:

Figure1 4:The internal structure of the control box

-System switch,- Automatic drain filter, - booster pump,- pressure regulator valve, - self-generator, - Pressure relief valve (Safety Valve),

- Warning light Harness and its connectors,- pressure gauge, - Internal air lines.

Installation procedures:

1) To install the control box, holes must be drilled according to the drawing or bolt hole template.

2) The installation position needs to be protected against the control box with room to work.

3) The installation of the control box must use the included screws, flat washers, and spring washers.

**4.3. Installation of the warning light.**

Figure 15:

Note:

- The warning light should be installed in a position where the driver can see from the rearview mirror, taking into account that it is not easily scratched.

- There are two cables required to connect the warning light, one connected to the harness inside the control box and the other to the warning light harness.

-Caution:

If the trailer is not integrated with the chassis, the connector should be removed during the annual vehicle inspection or when the container/chassis separation is required, and the connector should be re-connected after the container is mounted on the chassis.

Figure1 6: Warning light harness connector


Note:

The harness requirements for European trailers are different from those in China and require harnesses and lamps that comply with European specifications.

Figure 17/18: Warning light (on steel/aluminum container).

Installation procedures:

1) To install the warning light, drill the 19 mm diameter hole with a suitable hole cutter.

2) The warning light should be installed where the driver can see it from the rearview mirror.

3) To use protection when wiring, including the use of tie straps and grommet in appropriate locations.

4) To create a leak by releasing the tire pressure or rotary union check valve to test the warning light.

**4.4. Installation of waterproof strain relief**

-Caution:

- After wiring the air tubing and setting the position, tighten it manually with a wrench, while removing the attached retaining nut.

- Different air tubing standards in different countries, for example, using air tubing according to European standards when sold there. a

**4.5. Installation of the air lines**

Installation procedures:

1) Measure the length of the air tubing and install it under the vehicle. The air lines are divided into several segments:

1．1 If the air tank is aluminum, it is recommended that the air outlet to the pressure protection valve need a separate air tubing connection, pressure protection valve installed in the nearby body structure, to ensure that the air tubing between them will not be easy to suffer collision or scratching; Both the pressure protection valve inlet and outlet threads are M22 x 1.5.

Figure 19/20: When a steel-made air tank has an extra hole, how the pressure protection valve is installed / the aluminum air tank or the tank without extra threaded hole

1．2 Pressure protection valve to control box air intake, 6x4 air tubing.

2) From the distributor of the control box (three axles for 3 holes, two axles for 2 holes, one hole for a single axles, with three axes as an example) exits, 3 pcs of air tubing of 6x4 mm connect a tie-in three-way quick coupling for each axle. On the way through the hole need to use grommet and straps with the original vehicle air lines and harnesses to tie well.

3) Inner air line routing. Two people use a long steel wire and a short steel wire (Figure 20/21) to hook each other inside the axle tube. Two M12 x 1.5 threaded holes in the middle of the axle, and then pull out the long wire from the hole, Press the bended lead of the long wire into the 6x4 air tubing about 5mm, the other person from the axle spindle side to draw the wire with air tubing out of the spindle. The air tubing has been wrapped in with spring protective sleeve. Repeat this procedure on the other side of the axle and wire the air tubing through the other axle. Take the BPW10 ton square axle (1,840 wheelbase), for example, the length of the air tubing is 1.4 m per side. The length of tubing inside the axle depends on hole position and the track length.

Figure21/22: Use a short steel wire to connect a long wire out of the hole in the middle of the axle tube / the short steel wire (can be bent like below for easier use).

Figure 23: The air tubing inside the axle tube, with a spring protective sleeve.

3) Outside the middle hole of the axle, wire the waterproof strain relief onto the 6x4mm air tubing, first cut the air tubing to the length with the quick coupling tee fitting, then tighten the waterproof strain relief by hand, and finally tighten it with a suitable opening wrench (16 or 19).

Figure 24: Tightening of waterproof strain relief

4) Connect the two pieces of air tubing through a dedicated quick coupling tee fitting.
Figure 25: The tie-in of the quick coupling tee fitting.
Figure26: Tubing Cutter (Caution to cut flat).


5.1) If a threaded hole is prepared for a solid axle spindle such as BPW/SAF-HOLLAND, put two sponge filters onto the air tubing out of each axle spindle, then install it with a 12mm socket spanner and tighten the 1/4NPT threaded plug (Or just a blind rubber protective sleeve in some case), pull the air tubing out of spindle a little bit, install the dedicated hubcap, pull the tubing out of the hubcap hole about 5CM, cut the tubing with a cutter, and make sure to cut flat. (Figure 26) Install the quick screw nut, thread outboard, clamp the air tubing with a special tubing clamp, and insert the quick screw head of the rotary union into the tubing, tighten the quick screw nut with two 12mm open end wrench. The flange O-ring is pre-installed onto the rotary union. To align the copper fitting of the rotary union with the tire valve, and then the two long studs (with the rubber washer each) are tightened to the hubcap with an Allen wrench of 4mm.

Figure 27/28/29: Connection of rotary union to air tubing / installation of quick screw nut / tightening of quick screw nut



5.2) If it is a hollow spindle such as FUWA, drill a hole with a diameter of 12 on the Welsh plug, the air tubing reaches the spindle through the hole, the tubing passes through the spindle plug, wearing a rubber blind plug, glue the surface of the spindle plug with the rubber protective sleeve so that it does not move back and forth. Pull the air tubing out of spindle a little bit, install the dedicated hubcap, pull the air tubing out of the hubcap hole about 5CM, install the quick screw nut, thread outboard, with a special tubing clamp, push the rotary union quick screw plug into the tubing, with two 12mm open end wrench tightening quick screw nut. The flange O Ring is pre-installed on the rotary union. The copper fitting of the rotary union is aligned with the tire valve, then the two long studs are tightened to the hubcap with Allen Wrench of 4mm.

Figure 30/31/32: FUWA axle Welsh plug drilling / bruising / Wiring and installation rubber protective sleeve



5） If the Rotary union inner surface is not the O-Ring type, it is gasket type, V2.0. Then need to apply a continuous circle of Loctite 596 (or other RTV glue) to the contact surface of the rotary union and the hubcap for waterproof purpose. After maintenance of the wheel end, remove the original glue cleanly and repaint it.
Figure 33/34: Loctite SI596 glue (or RTV glue) / glue process


If the Rotary Union is the fully-round type V3.0 as below, just use Allen wrench of 4mm to tighten while make sure the O ring fully seated into the slot.

7) Depending on the tire as dual or single, screw the tire hose to the tire valve at one end, tighten it by hand and then tighten it by the wrench for another half turn, and tighten the other end by hand to the rotary union. Use RTV glue to seal the small hole in the flange surface and outer surface of the rotary union after leaking test.

**4.6. Installation of the rotary union**

Caution:

- Tighten it with the recommended torque of up to 3. 16Nm. Too much torque can damage the studs.

Installation procedures:

1) Turn the rotary union to the right direction to align with the tire valve .

2) Tighten the rotary union to the hubcap with the two M5-35 long studs attached, with a maximum of 3.16Nm as recommended torque.

3) Apply a continuous circle of Loctite 596 (or other RTV glue) to the contact surface of the rotary union and the hubcap for waterproof purpose if it is V2.0. After maintaining the wheel end, remove the original glue cleanly and repaint it.

4) Check that the accessories are correctly installed.

**4.7. Installation of the tire hose**

Caution:

- The tire hose must be tightened by hand (no tools required) to the rotary union.

- The tire hose is fitted to one end of the tire valve and must be tightened by hand, then tightened by half turn with a wrench (12mm).

Note:

- Functional test of tire hose - > Install and tighten the tire hose to the tire valve and push the tire hose on the valve core (which is low opening pressure type, not interchangeable with the regular valve core), the air should flow out.

Installation procedures:

1) Install the tire hose on the valve nozzle.

2) Test the function of the tire hose.

3) Install the tire hose onto the rotary union.

4) Check the tire valve for leaks with soap water!

Figure 35: Test leak by soap water

**5. Initial operation**

Warning:

- Please read all the safety information that can be found in the section.

- Non-compliant actions can result in personal and property damage!

**5.1. Check the pressure setting**

Caution:

- It is highly recommended to use a digital pressure gauge for calibration.

Installation procedures:

1) Switch off the system and open the relief valve (safety valve) to release the compressed air from the system.

Figure 36: Pressure relief valve (Safety valve)

2) The air route from the control box to the axle should be disconnected, i.e. the air tubing is removed with a special quick-coupling fitting removal tool.

3) Install the gauge into one of the three outlets of the control box dispenser.

4) Bridge the 2 outlets with an piece of air tubing or plug two other vents with a plug each.

5) Pull the relief valve open.

6) After the pump starts to pulse, the pressure can be read from the pressure gauge.

7) Release air on the relief valve and repeat the inspection process twice.

8) To reconnect the air tubing to the axle.

**5.2. Adjust the pressure setting**

Caution:

- Digital calibration pressure gauges are highly recommended.

Installation procedures:

1) Switch off the system and open the relief valve to release the compressed air from the system.

2) The air route from the control box to the axle should be disconnected, i.e. the tubing is removed with a special quick-coupling fitting removal tool.

3) Install the gauge into one of the three outlets of the control box dispenser.

4) Bridge 2 outlets with a tubing or plug the two outlets with a plug each.

5) Pull the relief valve open.

6) After the pump starts to pulse, the pressure can be read from the pressure gauge.

7) To reduce the pressure, pull out the pressure control valve adjustment knob （loosen the nut on top the regulator valve） and turn the knob or adjustment bolt counterclockwise lower than the new setting value, then turn the knob (adjustment bolt) clockwise till the new setting value.

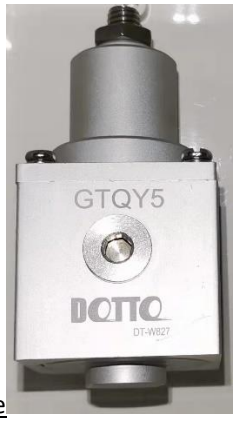


Figure 37: Regulator valve

8) To increase the pressure, loosen the nut and turn the adjustment bolt of the regulator valve clockwise with the Allen wrench until the appropriate pressure is set.

9) Release air from the relief valve and repeat the inspection process twice.

10)Tighten the nut to lock the regulator valve.

11)Carefully cover the lid of the control box and fasten the box.

12)After closing the lid of the control box, check the pressure again with a pressure gauge. If the pressure is correct, continue to the next step or repeat the steps above.

13)To re-connect the tubing to the axle.

14)Record changes in pressure settings in the table followed. (see page 25).

**5.3. Warning light function**

Caution:

- Flashing warning lights indicate that the system is in use and can compensate for air loss.

- Before putting into use, to check if the warning light is working properly, release the air at a rotary union, and if the booster pump is operating to compensate for air leaking, the warning light is flashing, indicating that it is working properly.

**5.4. The warning light flashes**

Inspection procedures:

1.) If the warning light flashes, the driver can continue driving.

2.Tires and systems must be checked when parking.

**5.5. The warning light is** continuously on

Inspection procedures:

1) When the warning light is on continuously, the driver must stop as soon as possible.

2) Damage causing the leak must be repaired by an authorized repair workshop or person before proceeding.

**6. Tire replacement**


Warning:

- Please read all the safety information that can be found in the section.

- Non-compliant actions can result in personal and property damage!


Caution:

- The tire hose must be tightened by hand (no tools required) to the rotary union.

- The tire hose fitting to tire valve must be tightened by hand, then tightening half turn.


Note:

- Tire Hose Function Test - > Install the tire hose on the tire valve and push the valve core on the tire hose, when there should be air coming out.

**6.1. Tire replacement**

Installation procedures:

1) First to disconnect the tire hose from rotary union.

2) Release the tire hose from the tire valve.

3) Replace the tires according to the manufacturer's guidelines.

**6.2. Installation**

Installation procedures:

1) Connect the tire hose to the tire valve.

2) Functional testing of tire hose.

3) Attach the tire hose to the rotary union.

4) Check the tire hose for leaks in the two ends!

**7. Overview of spare parts**

All necessary spare parts for your system and its inventory are available from DOTTO or its certified partners.

It is recommended to use only the original equipment of DOTTO DTIS. The use of unauthorized spare parts can affect normal up time and can lead to risks to personnel and property, which will result in loss of warranty.

## 8. Maintenance

 Warning:

- Please read all the safety information that can be found in the section.

- Non-compliant actions can result in personal and property damage!

### 8.1. Check before your departure

Check procedures:

1) During the driver's walking inspection around the vehicle, the wheel end components must be checked for damage.

2) Check the system switch on the left side of the control box, the switch must be on.

### 8.2. Maintenance intervals

In order to ensure the function and long life of the system, the system must be checked regularly.

In order to obtain a quality guarantee, the following inspection intervals must be observed:

| Visual inspection | |
|---|---|
| Check the rotary union | Before departure |
| Check the tire hose | Before departure |
| Check that the system switch is on | Before departure |
| Check the cable | Annually |
| Check the air route | Annually |
| Functional testing | |
| Check the set pressure of the control box. - Make the initial check after installation | Annually |
| Check the warning light. - Make the initial check after installation | Annually |
| Check all hubcaps for leaks (soapy water test). - Make the initial check after installation | Annually |

### 8.3. Maintenance Of frequently used parts

 Warning:

- Please read all the safety information that can be found in the section

- Non-compliant actions can result in personal and property damage!

Caution:

**Consumables: rotary union assembly, tire hose assembly.**

1) Rotary union assembly has two types: Dual tire and Single tire models: XZJTZC-SKST-01; XZJTZC-DKDT-01.

2) The tire hose assembly is determined by the combination of single, dual, and tire models, as shown in the table below.

| Tire type | Tire model | Hose assembly P/N |
|---|---|---|
| Dual tire | 12R22.5 | Inner Tire: LTRGZC-390<br>Outer Tire: WTRGZC-275 |
| | 285/70R19.5 | Inner Tire: LTRGZC-320<br>Outer Tire: WTRGZC-220 |
| | 265/70R19.5 | Inner Tire: LTRGZC-320<br>Outer Tire: WTRGZC-220 |
| Single tire | 425/65R22.5 | DTRGZC-240 |
| | 445/45R19.5 | DTRGZC-190 |

## 9. Pressure setting change record sheet

| Set the pressure | Reason | Date | signature |
|---|---|---|---|
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## 10. Drilling template

To make it easier and faster to install the control box, you can make a drilling template by the installation hole position as shown below.

Figure 38: Drilling template dimensions

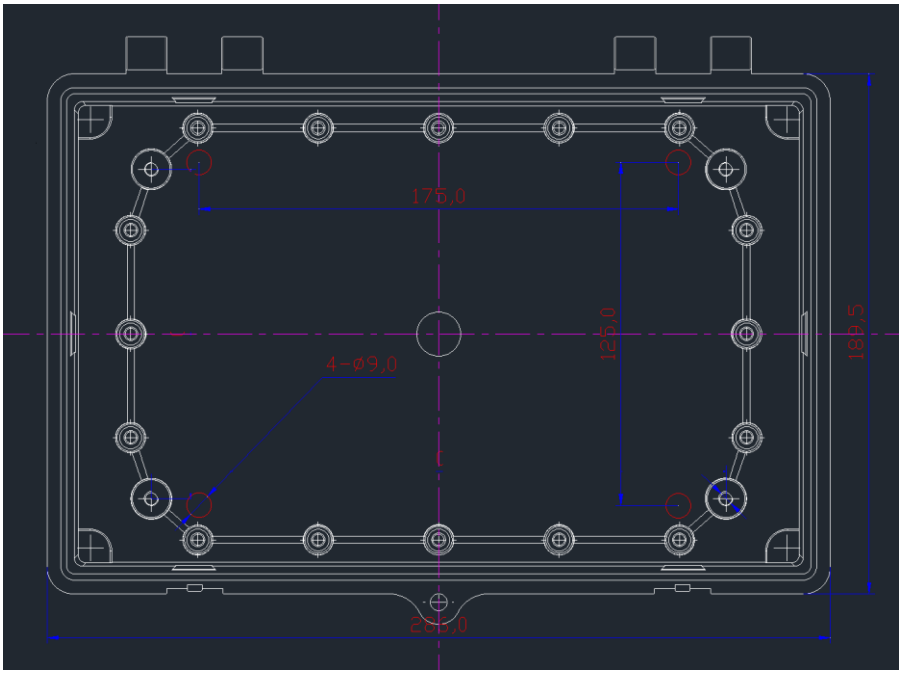
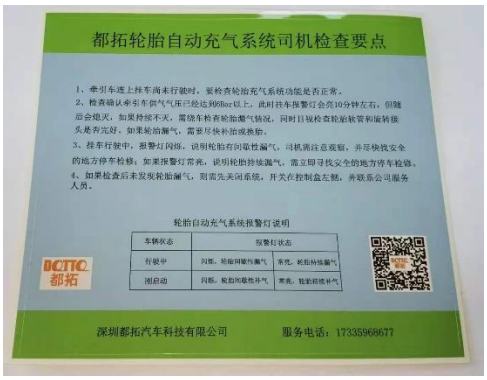



Figure3 9/40: Where the control box is installed. Normally at the rear of the beam, find the right position to drill 4 holes of diameter 10.5mm, equipped with 4 sets of flat washers, cushions, nuts, tighten to 22-30Nm. At least 5CM clearance under the vents to facilitate the air exhaust.

**11. Sticker of Driver check list, affixed to easy-to-see locations next to the warning lights.**

Figure 41/42: Sticker of Driver check list/ Where to put




**12. The location of the system sticker, easy to be seen, where the QR code can be scanned in order to obtain updated technical information, contact information.**

Figure4 3/44: System sticker / location.



## DOTTO DTIS – Better Fuel-efficiency; Tire saving; Safer!

**13. Contact:**

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