



45532678
Edition 2
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Doser - GUN T2X-06-515-xxxxxx

Maintenance Manual



Save These Instructions



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1 Gun T2X-06-515-xxxxxx

Use the drawings and the component list for the specified unit. In the description below, the figures in bracket (xx) refer to the corresponding figures on the drawing.

WARNING

Always turn off the air and material supply & depressurize the entire system before installing, removing or adjusting any accessory on this product, or before performing any maintenance on this product or any accessory. Failure to follow these instructions can result in personal injury.

There are three types of sealings for the T2X gun. Vector seal, Mono-seal and HD seal (Heavy Duty, by extra difficult materials).

		
Picture. Sealing house with Vector-seal	Picture. Sealing house with Mono-seal	Picture. Sealing house with HD-seal

1.1 Check and/or Replace the Nozzle

- Drawing/Component list:

T2X-06-515-xxxxxx-IR

NOTICE

This operation requires the following special tools and preparations:
4 mm Allen key.

Grease.

Small straight screwdriver.

All parts have to be carefully cleaned immediately. Particularly if the hot melt material is tempered in the atmosphere.

Apply a small amount of grease to all threads.

- Set the system into "manual mode" (hand) and activate the "Open gun for nozzle change" on the page "Test functions".
- Unscrew the three Allen head screws (1) on the nozzle (2). Using the 4 mm Allen key.
- Remove the nozzle (2). Check that the new nozzle is of the same type and shape, and that the outlet diameter is the same as the old nozzle.
- Remove the seal (3) and check for damage. Mount the new nozzle. Then position the new nozzle onto the two guiding pins.
- Tighten the three Allen head screws (1). Apply grease to all threads.
- Deactivate the "Open gun for nozzle change" on the "Test functions" page
- Set the pressure regulator to approximately 100 bar. Clean the gun once and check for leakage.
- Lower the setting to approximately 30 bar. Dispense a couple of times.
- If OK, activate "Auto mode". The system is ready to start dosing.

1.2 Repair Guide for the Gun

- Drawing/Component list:

T2X-06-515-xxxxxx

1.2.1 To Dismantle the Gun

Drawing/Component list:

- | | | |
|---------------------------|----------|----------------------|
| • Gun | | T2X-06-515-xxxxxx-IR |
| • Doser assembly complete | S80 | T2X-01-803-IR, |
| | S250 | T2X-01-852-IR, |
| | R80 ATC | T2X-01-903-IR or |
| | R250 ATC | T2X-01-951-IR |

This operation requires, the following special tools and preparations:

NOTICE

- A Hot air gun
- Pointed tools for removing the old seals.
- 12 mm open ended spanner
- 4 mm Allen key
- 2 mm Allen key

All seals are replaced each time the gun is stripped down (except the seal between the nozzle and gun, which can be recycled after close inspection).

Dismantling the gun:

- Disconnect the gun from the doser. Loosen the four Allen screws (17 on *doser assembly complete*.)
- Remove the gun cylinder top (19) and remove the needle package (Pos. 21-26).
When changing the needle, see section 1.3.
- Loosen and remove the three lower Allen head screws (1) and remove the nozzle (2) with the Vari seal® (3).
- Remove the seal (7) from the house (21).
- Loosen the upper three Allen screws (1) holding the cylinder (2). Remove the cylinder. Remove the O-ring (10) between the house and the cylinder. Keep an eye on the sealing at the top of the sealing house.
- Undo the two fixing screws (5) and CAREFULLY remove the heating pin (9) and the (RTD) Pt100 sensor (8).
- The sealing house, (12) can now be unscrewed and removed.

NOTICE

The pointed tools can easily scratch and damage the sealing house.

- When removing the lower seal (11), carefully puncture it with a pointed tool and remove from the seat. The upper seal (14) and backup ring (15) can also be removed in the same way. Last, remove O-ring (13).

1.2.2 To Assemble the Gun, Mono seal and Vector seal

- Drawing/Component list:

T2X-06-515-xxxxxx-IR

NOTICE

This operation requires, the following special tools and preparations:

- Aluminium Paste
- High temperature grease, Uniway LIX 625 is recommended
- A special tool T2X-17-015-IR to insert the lower seal (Vector seal)
- A special tool T2X-17-016-IR to insert the lower seal (Mono seal)
- A special tool T2X-17-001-IR to tighten the sealing house.
- Torque Wrench
- 7 mm open ended spanner
- 2 mm Allen key
- 4 mm Allen key.

Before the gun can be assembled, check the internal diameter of the seating at the bottom of the sealing house, use the special tool T2X-17-015-IR /-16-IR as a gauge . Ensure the tool passes freely into the house, if it does not, the seal (20) will be damaged during assembly. This will require replacement of the sealing body.

Insert all seals carefully.

Handle the needle carefully, a damaged needle will cause damage to the seals and shorten the life of the gun.

Assembling seals is made easier by using grease.

- a) **Vector seal:** Put the new lower seal (20) with the opening downwards on a plane surface. Take the sealing house (3) and press it perpendicular against the surface over the sealing. Use the special tool (T2X-17-015-IR) to press the sealing to the bottom of the sealing house.

Mono seal: Apply grease on the seal. Insert the Mono seal with the mouth of the seal in the direction from the sealing house.

- b) Mount the O-rings (13) and (14) and the backup ring (15). Apply grease to the needle.
c) Screw the sealing body (3) into the house (1). Use special tool T2X-17-001-IR and the torque wrench to torque **8Nm**.

NOTICE

If the sealing body torque is higher than 3Nm or 6Nm there is a possibility of damage.

- d) Mount the nozzle (2) and ensure the seal (3) is in place. Secure it with the lower three Allen screws (1).
e) Insert the heating pin (9) and Pt100 sensor (8). Always use Aluminium paste. Tighten the fixing screws (5). *Note: Check that the cables lie in the groove and that no loose parts lie on the sealing surface between the cylinder and the house.*
f) Mount the O-ring (10) and the cylinder (16). Tighten the upper three Allen screws (1).
g) Insert and adjust a new needle. All according to section 1.3.

1.2.3 To Assemble the Gun, HD seal

- Drawing/Component list:

T2X-06-515-xxxxxx-IR

NOTICE

This operation requires, the following special tools and preparations:

- Aluminium Paste
- High temperature grease, Uniway LIX 625 is recommended
- A special tool T2X-17-001-IR to tighten the sealing house.
- Torque Wrench
- 7 mm open ended spanner
- 2 mm Allen key
- 4 mm Allen key.

Before the gun can be assembled! Check the internal diameter of the sealing house, using the special tool T2X-17-015-IR as a gauge. Ensure the tool passes freely into the house, if it does not, the seal (20) will be damaged during assembly. This will require replacement of the sealing body.

Insert all seals carefully.

Handle the needle carefully. A damage needle will damage the seals and will affect the life time of the gun.

Assembly of seals is made easier by using a little amount of grease.

- a) Mount the HD-seal in the sealing house (12) by pressing the two together on a plane surface.
- b) Mount the O-rings (13) and (14) and the backup ring (15).
- c) Mount and adjust the needle, see chapter 1.3. Grease the needle and carefully press the needle through the sealing house (12).
- d) Screw the sealing body (3) into the house (6). Use the torque wrench to torque **3Nm**. **Note:** Friction must be felt when the needle is moved forward and backward, without feeling too tight.

NOTICE

If the sealing body torque is higher than 3Nm or 8Nm there are is a possibility of damage.

- e) Replace the nozzle (2) and ensure the seal (3) is in-place. Secure it with the lower three Allen screws (1).
- f) Insert the heating pin (9) and the Pt100 sensor (8). Always use Aluminium paste. Tighten the fixing screws (5). Note: Check that the cables lie in the groove and no loose parts lie on the sealing surface between the cylinder and the house.
- g) Mount the O-ring (10) and the cylinder (16). Tighten the upper three Allen screws (1).
- h) Assemble the needle according to chapter 1.3

1.3 To Replace the Needle

- Drawing/Component list:

T2X-06-515-xxxxxx-IR

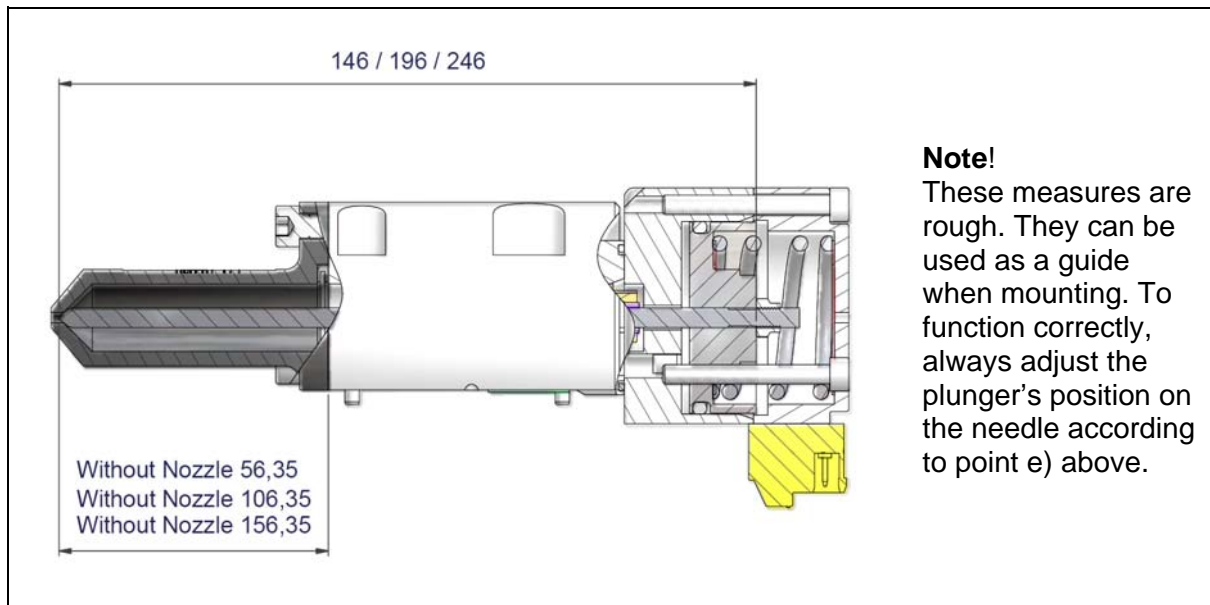
NOTICE

This operation requires, the following special tools and preparations:

- High temperature grease, Uniway LIX 625 is recommended
- 7 mm Open-ended spanner.
- 10 mm Open-ended spanner.

- Unscrew the gun cylinder top (19) by unscrewing the three screws (20) and pull out the needle package.
- Loosen the nut (23), use the 16 mm spanner to hold if needed, and unscrew the needle (21) from the plunger (23).
- NOTE!** Take care with the new needle. A damaged needle will damage the sealings and affect the function of the gun.
- Apply grease on the plunger and needle. Mount the needle in the sealing house.
- Important!** Adjust the needle length so that the back surface of the plunger is flush with the top of the cylinder when the needlepoint is "just" in contact with the nozzle. The plunger must under no circumstances be under the cylinder edge (19). Secure the plunger with the nut (26).
- Place the lower shim (24) and spring (25) onto the plunger (23).
- Check that the second shim (35) is still in the gun cylinder top (9). The gun cylinder top can be screwed back on hand.

Rough measures of the needle by mounting:



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