



LEADING IN PRODUCTION EFFICIENCY

EcoGun 910 Manual Air Spray Gun Gravity-Feed

Operation manual

MSG00003EN, V06



Information about the document

This document describes the correct handling of the product.

- » Read the document prior to every activity.
- » Prepare the document for the application.
- » Pass on the product only together with the complete documentation.
- » Always follow safety instructions, handling instructions and specifications of every kind.
- » Illustrations can deviate from the technical construction.

Validity range of the document

This document describes the following product:

N36200003V
EcoGun 910



Hotline and Contact

If you have queries or would like technical information, please contact your dealer or sales partner.

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1 Product overview

1.1 Overview



Fig. 1: Overview

- 1 Cup connection
- 2 Flat jet control
- 3 Air cap conventional (CF)/LVLP (LF)
- 4 Self-adjusting needle package
- 5 Trigger
- 6 Air control
- 7 Locknut
- 8 Stop screw
- 9 Air connection

1.2 Short description

The spray gun is using compressed air to coat surfaces. The spray gun is handheld. The following factors influence the spray jet and the result:

- » Alignment of the air cap
 - ↳ 6.5 "Alignment of the air cap"
- » Material flow ↳ 5 "Commissioning"

- » Air pressure ↳ 5 "Commissioning"
- » Spray width ↳ 5 "Commissioning"

The spray gun uses a self-adjusting needle package. This self-adjusts for the material related wear of the sealing package.

2 Safety

2.1 Presentation of Notes

The following notes can appear in this instructions manual.



DANGER!

High risk situation that can lead to serious injuries or death.



WARNING!

Medium risk situation that can lead to serious injuries or death.



CAUTION!

Low risk situations that can lead to minor injuries.



NOTICE!

Situations that can lead to material damage.



ENVIRONMENT!

Situations that can lead to environmental damage.



Contains additional information and recommendations.

2.2 Intended Use

The spray gun **EcoGun 910** is used exclusively for spraying water-based paint and conventional solvent-based paint. It is hand guided and uses compressed air.

The **EcoGun 910** spray gun may only be operated in the approved EX-zones and within the approved technical data ↗ 10 "Technical data".


The **EcoGun 910** spray gun is only intended for use in application stations.

Misuse

There is a risk of death if not used properly. Misuses include, e. g.:

- » Aiming the spray gun at humans or animals.
- » Atomization of fluid nitrogen
- » Combination of the spray gun with components that are not approved by Dürr Systems for operation.
- » Use of unapproved materials, see safety data sheets
- » Making conversions or changes on your own
- » Use of spray guns not conforming to the device category in Ex zones.

EX labeling

 II 2G T60 °C X

- II - Device group II: all areas except mining
- 2G - Device category 2 for gas
- T60 °C - Surface temperature, max. 60 °C
- X - Specific operating conditions for safe operation

The following conditions must be observed for safe operation:

- » Ground the spray gun.
- » Only use conductive hoses.
- » Ensure that static electricity can be discharged.

- » Use exclusively compressed air quick couplings for water-based materials, where it is not necessary to keep discharging static electrical charges.

2.3 Residual risks

Explosion

Sparks, open flames and hot surfaces can cause explosions in explosive atmospheres. Serious injuries and death can be the consequence.

- » Before carrying out any work, ensure a non-explosive atmosphere.
- » Do not use sources of ignition and open light.
- » Do not smoke.
- » Ground the product.
- » Ground the work piece.
- » Only use conductive lines.

Flammable coating materials and their detergents and cleaning agents can cause a fire or an explosion.

- » Ensure that the flashpoint of the fluid is at least 15 K above the ambient temperature.
- » Note explosion group of the fluid.
- » Follow safety data sheets.
- » Ensure that forced ventilation and fire protection equipment are in operation.
- » Do not use any sources of ignition and open light.
- » Do not smoke.

Danger from harmful or irritant substances

Contact with hazardous liquids or vapors, can result in serious injury or death.

- » Ensure that the forced ventilation is operational.
- » Follow safety data sheets.
- » Wear specified protective equipment.

Escaping material

Material escaping under pressure can cause serious injuries.

Before working on the product:

- » Disconnect the system with the product from compressed air and material supply.
- » Relieve the lines.
- » Secure the system against reconnection.

Noise

The noise during normal operation may cause severe hearing damage.

- » Wear hearing protection.
- » Do not spend more time than necessary in the work area.

Hot surfaces

During normal operation the surfaces of components can get extremely hot. Contact with it can cause burns.

Before carrying out any work:

- » Check the temperature.
- » Do not touch hot surfaces.
- » Let components cool down.
- » Wear protective gloves.

2.4 Staff qualification



WARNING!

Inadequate qualification

Wrong estimation of dangers can cause serious injury or death.

- Only sufficiently qualified persons may execute all work.
- Some work requires additional qualification. Additional qualifications are marked with a "+".

This document is intended for qualified personnel in the industry.

Operator

The operator is trained specifically for the field of work in which he works.

Furthermore, the operator possesses the following knowledge:

- » Technical Measures for occupational safety and health

The operator is responsible for the following work:

- » Operate and monitor the system/ product.
- » Introduce measures in the event of faults.
- » Clean system/ product.

+ additional qualification explosion protection

In addition to the knowledge of the various specialist fields, the mechanic has knowledge of regulations and safety measures when working in potentially explosive areas.

Dürr Systems offers special product training for "Hotline and Contact".

2.5 Personal protective equipment

When working in explosive areas, the protective clothing, including gloves, must meet the requirements of DIN EN 1149-5. Footwear must meet the requirements of EN ISO 20344. The insulation resistor must not exceed 100 MΩ.

Wear the specified personal protective equipment when working. Provide the following personal protective equipment:



3 Transport, scope of supply and storage

3.1 Scope of delivery

The scope of supply includes the following components:

- » Spray gun
- » Tool kit ↪ 11.2 "Tools"

Inspect delivery on receipt for completeness and integrity.

Report defects immediately ↗ “Hotline and Contact”.

3.2 Handling of packaging material



ENVIRONMENT!

Incorrect disposal

Incorrectly disposed packaging material can damage environment.

- Dispose of material no longer required in an environment-friendly manner.
- Observe local disposal specifications.

3.3 Storage

Requirements for the warehouse:

- » Do not store outdoors.
- » Store in a dry and dust-free place.
- » Do not expose to aggressive media.
- » Protect from solar radiation.
- » Avoid mechanical vibrations.
- » Temperature: 10°C to 40°C
- » Relative humidity: 35% to 90%

4 Assembly

4.1 Requirements for the Installation point.

- » It must be possible to disconnect the compressed air supply to the spray gun and secure it against reconnection.
- » The compressed air supply must be adjustable.
- » Lines, seals and screw connections must be designed to conform to the spray gun requirements ↗ 10 “Technical data”.
- » The workplace must have technical ventilation.

Working environment and grounding

Flooring of the working areas must be anti-static, according to DIN EN 50050-1:2014-03, measurement according to DIN EN 1081:1998-04.

4.2 Assembly

Personnel:

- » Operator
- » + additional qualification explosion protection

Protective equipment:

- » Protective workwear
- » Protective gloves

1.



WARNING!

Sources of ignition may cause explosions!

Ensure a non-explosive atmosphere.



Fig. 2: Assembly

2. Screw the feed cup onto the thread of the cup connection (1).
3. Connect the air hose to the air supply (2).
4. Check air hose for correct connection.

5 Commissioning

Personnel:

- » Operator
- » + additional qualification explosion protection

Protective equipment:

- » Protective gloves
- » Safety boots
- » Protective workwear
- » Eye protection
- » Respiratory protection device
- » Use ear protection

Requirements:

- » Feed cup and air hose have been connected ↪ 4.2 "Assembly".

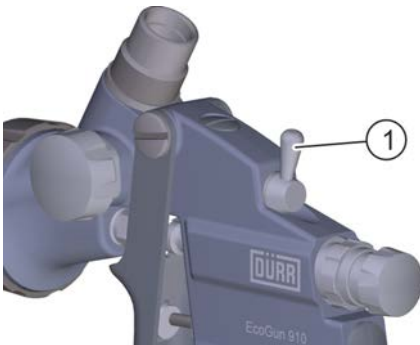


Fig. 3: Commissioning

1. Rinse the spray gun before filling it with paint ↪ 6.7 "Rinsing":
 - » use solvent for solvent-based paints
 - » use water for water-based paints
2. Set air control lever (1) into vertical position.

Setting the spray pattern

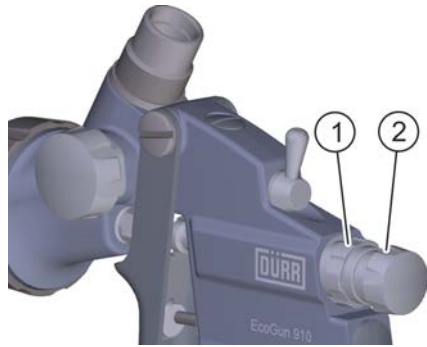


Fig. 4: Setting the material flow

1. Set the material flow.
 - » Loosen locknut (1).
 - » Turn set screw (2) in required direction.
 - » Right turn: less material
 - » Left turn: more material
 - » Tighten the locknut (1).

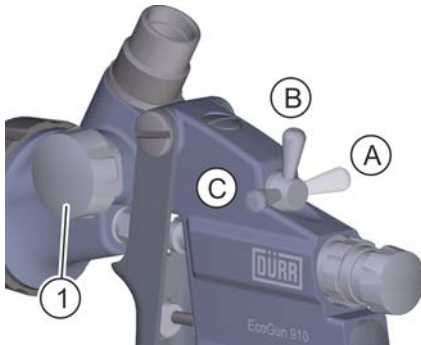


Fig. 5: Setting air flow

2. Set air flow.

- » Set air flow control lever (A) to “minimum”.
- » Increase flow slowly.

i You can regulate the air continuously from “minimum” (A) to “maximum” (C).

3. Set the spray width by turning the flat jet setting (1).

- » Right turn: Min. flat jet
- » Left turn: Max. flat jet

i You can turn the flat jet continuously 270° and adjust the spray from flat to round jet.

Characteristic curves

The characteristic curves show the air flow depending on the air pressure

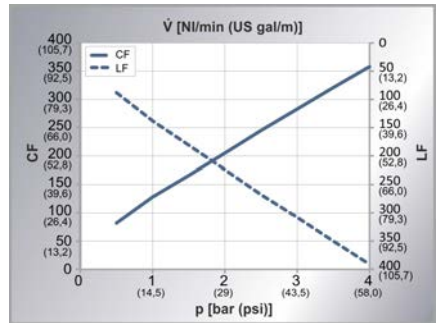


Fig. 6: Characteristic curve

CF Conventional air cap
LF Air cap LVLPL

6 Operation

6.1 Safety recommendations

! WARNING!

Danger of explosion due to chemical reactions

Material, halogenated hydrocarbon-based rinsing agent or cleaning agent can chemically react with aluminum components of the product. Chemical reactions can cause explosions. Serious injuries and death can be the consequence.

- Only use rinsing agents and cleaning agents that do not contain any halogenated hydrocarbons.

! NOTICE!

Material damage due to dried material residues

If material residues dry in the product, that can harm components.

- Rinse product immediately after each use.

6.2 Checks

1. Perform the following checks during operation:
 - » Check air connection for correct seat and leaks.
 - » Check air cap for cleanliness.
 - » Check nozzle for cleanliness.

6.3 Selecting air cap

You can convert the spray gun from a conventional spray gun to a LVLP spray gun by swapping the air cap.

Conventional air cap (CF)

The conventional air cap is used for decorative surfaces and an application with more focus on the atomization.

Conventional air cap features:

- » Mist arm
- » Fine atomization
- » Transfer rate > 65 %
- » Average air consumption 240 l/min

Air cap LVLP (LF)

The air cap LVLP is used for applications requiring a good transfer rate and spray pattern.

Air cap LVLP

- » Mist arm
- » Transfer rate > 75 %
- » Average air consumption 300 l/min

6.4 Changing the air cap

Personnel:

- » Operator
- » + additional qualification explosion protection

Protective equipment:

- » Protective workwear
- » Protective gloves

Removing the air cap

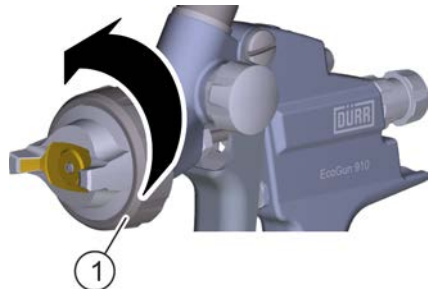


Fig. 7: Loosen cap nut.

1. Loosen the cap nut (1) by a ¼ turn counterclockwise.



Fig. 8: Removing the air cap

2. Remove the air cap (1).

Assembling the air cap



Fig. 9: Placing the air cap

3. Place the air cap (1).

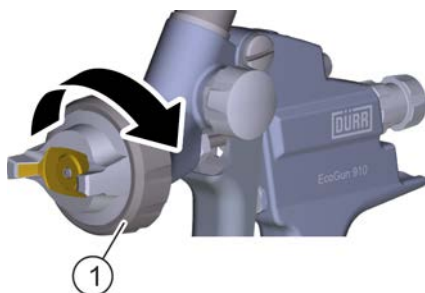


Fig. 10: Tightening the cap nut

4. Loosen the cap nut (1) by a ¼ turn clockwise.
5. Align the air cap as required ↪ 6.5 "Alignment of the air cap".

6.5 Alignment of the air cap

Personnel:

- » Operator
- » + additional qualification explosion protection

Protective equipment:

- » Protective workwear
- » Protective gloves

The position of the air cap determines the direction of the spray pattern.

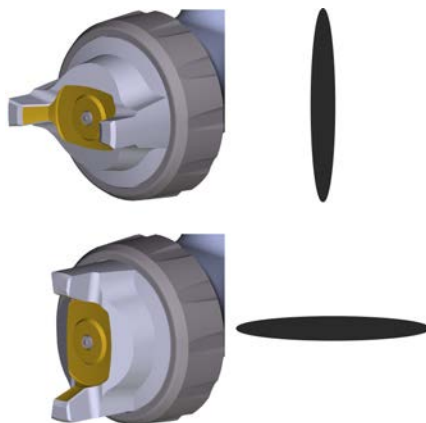


Fig. 11: Alignment of the air valve

1. Turn the air cap as required for the desired spray pattern.

6.6 Guiding the spray gun

Personnel:

- » Operator
- » + additional qualification explosion protection

Protective equipment:

- » Protective gloves
- » Safety boots
- » Protective workwear
- » Eye protection
- » Respiratory protection device
- » Use ear protection

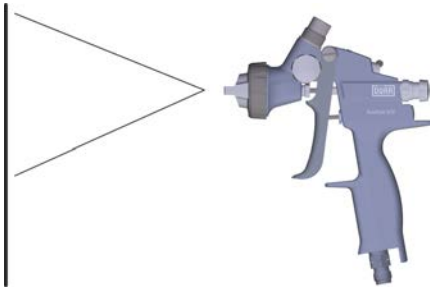



Fig. 12: Guiding the spray gun

1. Guide the spray gun as follows:
 - » Hold the spray gun at 90 degrees to the surface to be painted.
 - » Maintain a distance of 15 to max. 25 cm to the surface to be painted.

 The distance can vary for effect coatings.

6.7 Rinsing

6.7.1 Safety recommendations

! NOTICE!

Material damage due to unsuitable rinsing agent

If the rinsing agent reacts chemically with the components or the material, components get damaged.

- Use only the rinsing agents that are compatible with the components and the material.
- Refer to safety data sheet of material manufacturer.

6.7.2 General notes

When rinsing, use fluid to remove inner soiling from components.

6.7.3 Rinsing spray gun

! NOTICE!

Material damage due to unsuitable rinsing agent

If the rinsing agent reacts chemically with the components or the material, components get damaged.

- Use only the rinsing agents that are compatible with the components and the material.
- Refer to safety data sheet of material manufacturer.

! NOTICE!


Clogged air channels

If the material or rinsing agent reaches into the air channels, air channels can clog up. This can result in faulty painting results.

- Keep spray gun horizontal or directed downwards during the rinsing process.

Rinse the spray gun in the following cases:

- » After end of operation
- » Before every change of material
- » Prior to cleaning
- » Prior to dismantling
- » Before a long time of non-use
- » Before placing in storage

 Rinsing intervals depend on the material used.

Personnel:

- » Operator
- » + additional qualification explosion protection

Protective equipment:

- » Protective workwear
- » Respiratory protection device
- » Eye protection
- » Use ear protection
- » Safety boots
- » Protective gloves

1. Ensure proper disposal of the exiting material and rinsing agent.
2. Rinse the spray gun with an appropriate rinsing agent until the rinsing agent runs clean without any material residue.
3. Shut off detergent supply.
4. Drive trigger.
⇒ Air channels are blown free.

7 Cleaning and maintenance

7.1 Safety recommendations

WARNING!

Danger of fire and explosion

Flammable coating materials and their detergents and cleaning agents can cause a fire or an explosion.

- Ensure that the flashpoint of the fluid is at least 15 K above the ambient temperature.
- Note explosion group of the fluid.
- Follow safety data sheets.
- Ensure that forced ventilation and fire protection equipment are in operation.
- Do not use sources of ignition and open light.
- Do not smoke.

WARNING!

Risk of injury from unsuitable replacement parts in explosive areas.

Replacement parts not compliant with the specifications of the ATEX guidelines can cause explosions in an explosive atmosphere. Serious injuries and death can be the consequence.

- Use exclusively original replacement parts.

WARNING!

Danger to health from harmful or irritant substances

Contact with hazardous liquids or vapors, can result in serious injury or death.

- Ensure that the forced ventilation is operational.
- Follow safety data sheets.
- Wear specified protective clothing.

 **WARNING!****Risk of injury due to escaping material and compressed air**

Escaping compressed material can cause serious injury.


Before carrying out any work:

- Disconnect the system, in which the spray gun is installed, from compressed air and material supply.
- Secure the system against reconnection.
- Relieve the lines.

 **WARNING!****Danger of explosion due to chemical reactions**

Material, halogenated hydrocarbon-based rinsing agent or cleaning agent can chemically react with aluminum components of the product. Chemical reactions can cause explosions. Serious injuries and death can be the consequence.


- Only use rinsing agents and cleaning agents that do not contain any halogenated hydrocarbons.

 **NOTICE!****Unsuitable cleaning agents**

Unsuitable cleaning agents can damage the product.

- Only use cleaning agents approved by the material manufacturer.
- Follow safety data sheets.
- Place heavily soiled components in a cleaning bath.
 - Only place those parts in the cleaning bath, which are suitable for the cleaning bath.
 - Use only electrically conductive containers.
 - Ground the container.
 - Do not use ultrasound baths.

- » Use alcohols (isopropanol, butanol) for non-flammable coating materials.
- » Remove dried non-flammable coating materials using a material manufacturer-approved organic thinner.
- » When cleaning with flammable detergent, do not spray into a closed container. An explosive gas-air mixture can form inside closed containers.

 **NOTICE!****Damage due to unsuitable cleaning tools**

Unsuitable cleaning tools can damage the product.

- Only use cloths, soft brushes and paintbrushes.
- Do not use abrasive cleaning tools.
- Do not poke blocked nozzles with metallic objects.
- Do not use compressed air for cleaning.
- Do not use any thinner spray guns.
- Do not use high pressure for cleaning agents.

7.2 Cleaning

Personnel:

- » Operator
- » + additional qualification explosion protection

Protective equipment:

- » Protective gloves
- » Safety boots
- » Protective workwear
- » Eye protection
- » Respiratory protection device

» Use ear protection

1. Disconnect the air hose from the spray gun.
2. Ensure the ambient temperature is at least 15 K below the flashpoint of the cleaning agent.
3. Remove material residue with cloth or soft brushes.
4. Clean the spray gun carefully and dry it with a soft cloth.

7.3 Maintenance

7.3.1 Maintenance schedule

The maintenance intervals given below are based on experiential values. Adjust maintenance intervals individually if necessary.

Interval	Maintenance work
after each use	Cleaning ↪ 7.2 "Cleaning".
weekly	Lubricate O-rings ↪ 7.3.2 "Lubrication".
	Lubricate needle guide ↪ 7.3.2 "Lubrication".
	Lubricate needle seal ↪ 7.3.2 "Lubrication".
	Lubricate lever bearing ↪ 7.3.2 "Lubrication".

7.3.2 Lubrication

1. Lubricate the following parts with a silicone-free grease:

- » O-rings
- » Needle guide

- » Needle seal
- » Lever bearing

8 Faults

8.1 Defects table

Fault description	Cause	Remedy
Spray jet wavering	Air cap is not tightened. Nozzle is too far back.	Check position of air cap and clean if required. Properly aligned the nozzle protrudes approx. 0.3 mm from the air cap ↪ 6.4 "Changing the air cap".
	Nozzle not tightened.	Tighten the nozzle ↪ 8.2.1 "Replace needle and nozzle.".
	Nozzle worn or broken.	Replace nozzle ↪ 8.2.1 "Replace needle and nozzle.".
	Self-adjusting needle package is defect.	Clean parts ↪ 7.2 "Cleaning". Replace needle seal and O-ring if required ↪ 8.2.3 "Replace needle gland".
Spray gun is leaking paint at the needle seal screw.	Self-adjusting needle package is defect or worn out.	Replace needle seal and O-ring ↪ 8.2.3 "Replace needle gland".
Spray gun is leaking from nozzle.	Nozzle is broken.	Replace nozzle ↪ 8.2.1 "Replace needle and nozzle.".
Spray gun is leaking.	Valve is defect.	Replace valve ↪ 8.2.2 "Replacing valve seal".
	Valve seal worn out.	Replace valve seal ↪ 8.2.2 "Replacing valve seal".
	Valve gland tightened to fast.	Loosen valve gland by half a turn.
Spray gun is leaking at the flat jet control.	Flat jet control is worn out.	Replace flat jet control.
Quick Clip technology cannot be used as required.	Locknut and stop screw are not tightened together.	Tighten locknut and stop screw together.
	Material has leaked into Quick Clip closure and dried out.	Clean Quick Clip closure ↪ 7.2 "Cleaning".

8.2 Troubleshooting

8.2.1 Replace needle and nozzle.

! NOTICE!

Property damage due to improper replacement of needle and nozzle

Replacing only the needle or only the nozzle could damage spray gun components. This can compromise the tightness of the spray gun. The spray pattern deteriorates.

- Observe order of replacement steps (needle – nozzle).
- Observe order of assembly steps (nozzle – needle).
- Always replace nozzle and needle at the same time.

The integrated Quick Clip technology allows for removal and installation of the needle without changing the preset needle stop.

Personnel:

- » Operator
- » + additional qualification explosion protection

Protective equipment:

- » Protective gloves
- » Safety boots
- » Protective workwear
- » Eye protection
- » Respiratory protection device
- » Use ear protection

Removing the needle

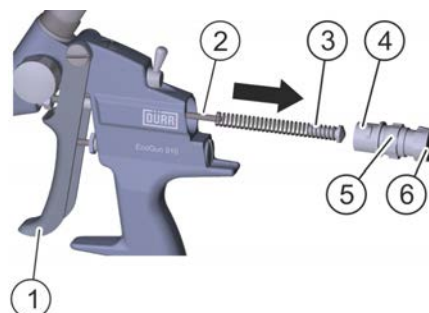


Fig. 13: Replacing the needle

1.

! NOTICE!

The stop screw is spring pretensioned. When you loosen the stop screw it might fall off.

Hold onto stop screw (6) while removing it.

2. Counter the locknut (5) on the clip (4).
3. Press the stop screw (6) on the face by about 1 mm into the spray gun.
4. Turn stop screw (6) ¼ turn counter clockwise.
 - ⇒ The spring on the needle (2) pushes the stop screw (6) out.
5. Pull out the stop screw (6).
6. Remove the compression spring (3).
7. Pull back the trigger (1).

- Pull out the needle (2) towards the back.

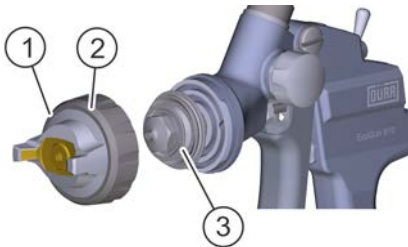
Dismantling the nozzle


Fig. 14: Dismantling the nozzle

- Loosen the cap nut (2).
- Pull off air cap (1).
- Loosen nozzle (3) using a hexagonal box wrench (13 mm) and remove it.

Installing the nozzle

- Screw-in new nozzle (3) and tighten it.
 - » Tightening torque: 18–20 Nm
- Assemble and align the air cap ↪ 6.4 “Changing the air cap”.

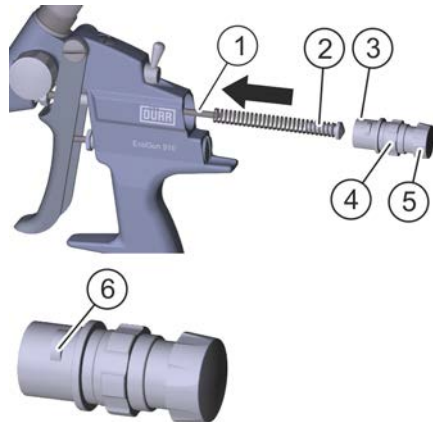
Inserting the needle


Fig. 15: Inserting the needle

- Insert the needle (1).
- Position compression spring (2).
- Press stop screw (5) against the compression spring into the body of the spray gun. One of the nibs (6) of the clip (3) must be in the 11 o'clock position.
- Turn stop screw (5) clockwise until fastened.
 - ⇒ Stop screw (5) is pushed back into its initial position.
- Set the material flow ↪ 5 “Commissioning”.

8.2.2 Replacing valve seal

Personnel:

- » Operator
- » + additional qualification explosion protection

Protective equipment:

- » Protective workwear
- » Protective gloves

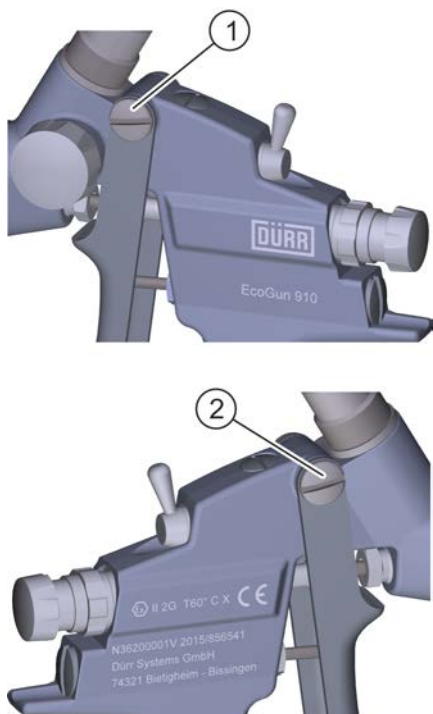


Fig. 16: Removing the lever screw and lever axle

1. Loosen and remove the lever screw (1).
2. Remove the lever axle (2).

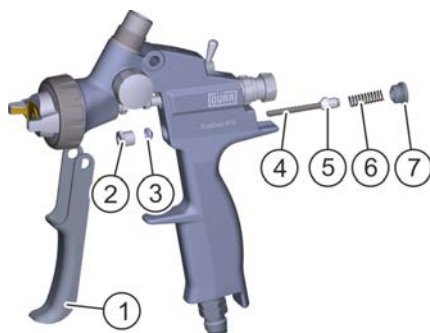


Fig. 17: Replacing the valve gland

3. Pull off the trigger (1).
4. Unscrew the valve gland (2) to the front.
5. Loosen the sealing screw (7).
6. Pull out the compression spring (6) towards the back.
7. Pull out valve pin (4) and seal (5) towards the back.
8. Pull out the valve gland (3) to the front.
9. Insert a new valve gland (3).
10. Insert the valve pin (4) and seal (5).
11. Insert the Compression spring (6).
12. Tighten locking screw (7).
13. Screw-in the valve gland (2).
14. Push the trigger (1) over the spray gun.

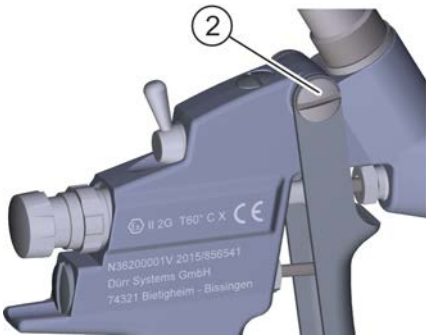
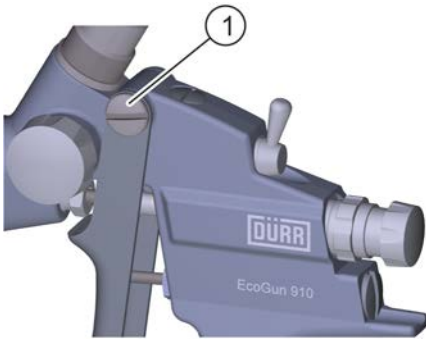


Fig. 18: Installing the lever screw and lever axle

15. Insert lever axle (2).
16. Tighten the lever screw (1).

8.2.3 Replace needle gland

Personnel:

- » Operator
- » + additional qualification explosion protection

Protective equipment:

- » Protective workwear
- » Protective gloves

1. Disassemble needle and nozzle ↪ 8.2.1 "Replace needle and nozzle."

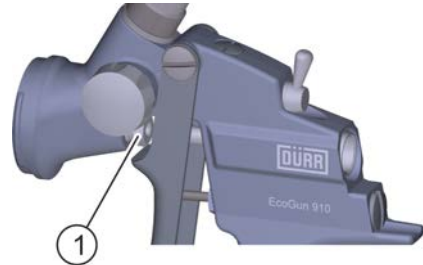


Fig. 19: Removing the needle gland

2. **CAUTION!**

The compression spring is pre-tensioned. Risk of injury!

Remove the needle gland (1) carefully and relieve the compression spring slowly.

3. Remove the compression spring.
4. Remove the pressure disc.

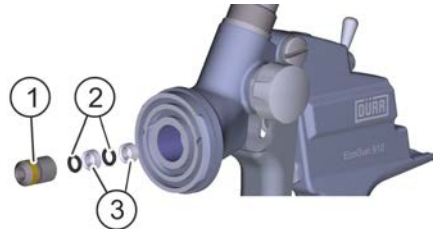


Fig. 20: Removing the needle guide

5. Unscrew the needle guide (1) to the front.
6. Remove the O-rings (2) and seals (3).
7. Install new O-rings (2) and seals (3).

Disassembly and Disposal

8. Screw-in needle guide (1).
9. Insert the pressure disc.
10. Insert the compression spring.



Fig. 21: Removing the needle gland

11. Insert the needle gland (1) and tighten it.
12. Install nozzle and needle ↪ 8.2.1 “Replace needle and nozzle.”.

9 Disassembly and Disposal

9.1 Safety recommendations



WARNING!

Risk of injury due to escaping material and compressed air

Escaping compressed material can cause serious injury.

Before carrying out any work:

- Disconnect the system, in which the spray gun is installed, from compressed air and material supply.
- Secure the system against reconnection.
- Relieve the lines.

9.2 Disassembly

Personnel:

- » Operator

- » + additional qualification explosion protection

Protective equipment:

- » Use ear protection
- » Eye protection
- » Respiratory protection device
- » Protective workwear
- » Protective gloves

1. Purge spray gun ↪ 6.7 “Rinsing”.
2. Avoid contact with the material and dispose of material professionally.
3. Disconnect compressed air supply.
4. Clean the spray gun.

9.3 Disposal



ENVIRONMENT!

Incorrect disposal

Improper waste disposal threatens the environment and prevents re-use and recycling.

- Always dispose of components in accordance with their characteristic. ↪ 10.7 “Materials used”
- Collect leaked out operating and auxiliary materials completely.
- Dispose of operating and auxiliary materials according to the disposal provisions in force.
- In case of doubt, refer to the local disposal authorities.

10 Technical data

10.1 Weight

Detail	Value
Weight without cup	490 g

10.2 Connections

↳ 11.1 "Spare part"

10.3 Operating conditions

Detail	Value
Maximum allowable material temperature when operating with protective gloves	40 °C
Maximum allowable material temperature when operating with heat-resistant protective gloves	60 °C

10.4 Emissions

Work environment sound pressure level

- » Test: according to EN 14462
- » Air cap: conventional
- » Material: Water
- » Air control: maximum
- » Air pressure: 2.5 bar

Circular jet

Detail	Value
A-weighted emission sound pressure level LpA	74 dB(A)
Uncertainty KpA	5 dB

Flat jet

Detail	Value
A-weighted emission sound pressure level LpA	77 dB(A)
Uncertainty KpA	5 dB

10.5 Operating values

Detail	Value
Max. air pressure	8 bar

Detail	Value
Recommended air pressure	2.0 – 3.0 bar

Air consumption

Example:

- » Nozzle bore: 1.4 mm
- » Air control: maximum

Circular jet

Detail	Value
Conventional air cap (CF)	2.5 bar = 10.3 m ³ /h = 171.0 NI/min
Air cap LVLP (LF)	2.5 bar = 10.7 m ³ /h = 178.0 NI/min

Flat jet

Detail	Value
Conventional air cap (CF)	2.5 bar = 16.7 m ³ /h = 278.0 NI/min
Air cap LVLP (LF)	2.5 bar = 18.7 m ³ /h = 311.0 NI/min

You can reduce these values via the air flow control by about 80 % (down to 20 %).

10.6 Type plate

The type plate is placed on the housing and features the following details:

- » Product designation
- » Material number
- » Year of manufacture
- » Serial number
- » EX labeling
- » Manufacturer
- » CE labeling

Technical data

10.7 Materials used

Component	Material
Housing	Aluminum anodized
Compression springs	Stainless steel
Materials in contact with material	Stainless steel, anodized aluminum
Seals in contact with material	FEPM, PTFE
Seals without material contact	FEPM, PE, POM

10.8 Operating and auxiliary materials

Material	Material no.
Grease Tube Syntheso Glep1, 100 g (for seals and threads)	W32020010

10.9 Material specification

Suitable material:

» Water-based or solvent based paints



No materials containing organochlorine compounds (e. g. trichloroethane, chloromethane).

11 Replacement parts and accessories

11.1 Spare part

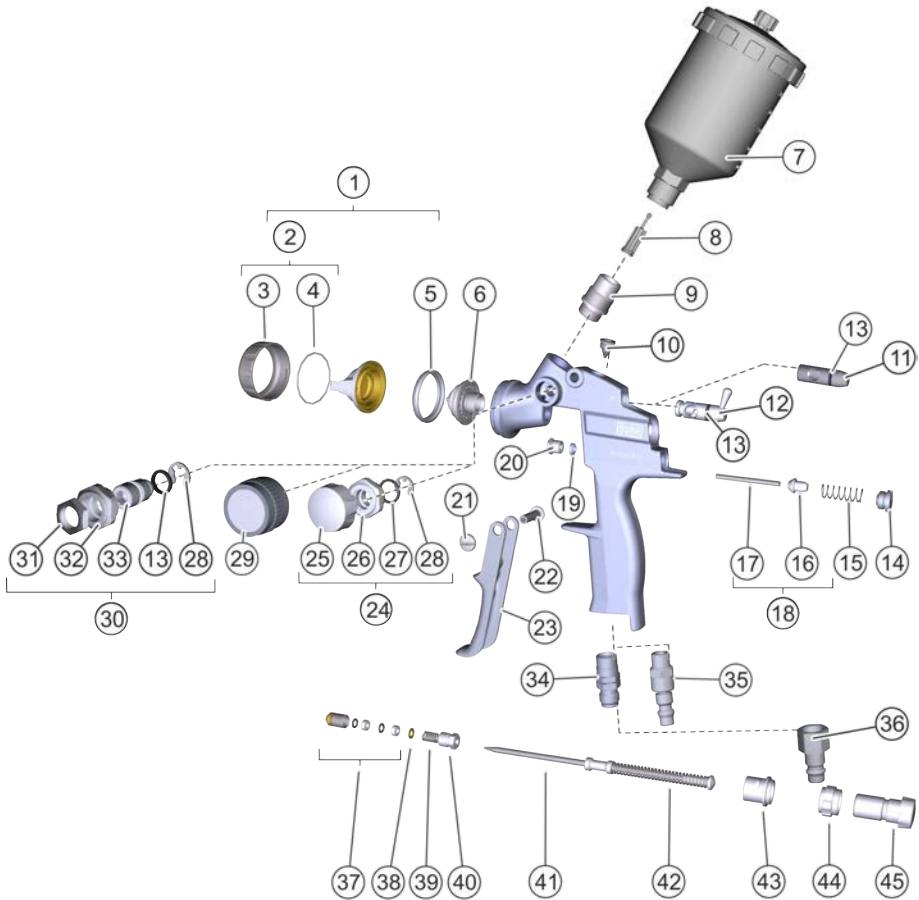


Fig. 22: Exploded view

Item	Description	Quantity	Material #
01	Air cap ↺ "Overview - Air caps and nozzles"		
02	Cap nut with seal	1	M30010309
03	Cap nut	1	
04	Slip seal	1	
05	Seal	1	M08280029
06	Nozzle ↺ "Overview - Air caps and nozzles"		
07	Feed cup aluminum G 3/8" with filter, 750 ml	1	N08010035
	Feed cup plastic G 3/8" with filter, 600 ml	1	N08010034
	Feed cup plastic G 3/8" with filter, 125 ml	1	N08010032
08	Filter	1	M13010029
09	Cup connection G 3/8"	1	
10	Locking screw	1	M41090173
11	Blind plug ↺ 11.3 "Accessories"		
12	Air control	1	M21200001
13	O-Ring 7.0 x 1.5	3	M08030771
14	Locking screw	1	
15	Compression spring	1	
16	Seals on valve	1	M08280031
17	Valve pin	1	M49150001
18	Valve EcoGun AS MAN	1	
19	Seal	1	M08280028
20	Valve gland	1	
21	Lever screw	1	
22	Lever axle	1	
23	Trigger	1	
24	Flat jet control	1	M21210001
25	Adjusting screw	1	

Item	Description	Quantity	Material #
26	Regulator insert	1	
27	O-Ring 9.5 x 1.5	1	
28	Safety washer	2	
29	Flat jet control with pressure gage	1	M21210002
30	Flat jet control ↪ 11.3 "Accessories"		
31	Locknut	1	
32	Regulator insert	1	
33	Adjusting screw	1	
34	Air connection, rotatable EU (G 1/4")	1	M01200001
	Air connection, rotatable USA (1/4 NPT)	1	M01200002
35	Air connection Turn/Tilt EU (10 mm)	1	M01300001
	Air connection Turn/Tilt US (8 mm)	1	M01300002
	Air connection Turn/Tilt ASIA (11 mm)	1	M01300003
36	Push-on nipple for quick-action coupling ↪ 11.3 "Accessories"		
37	Needle guide with packing seal	1	M12280002
38	Pressure disc	1	
39	Compression spring	1	M68010220
40	Needle gland	1	
41	Needle ↪ "Overview - Air caps and nozzles"		
42	Distance bolt with compression spring	1	M06070170
43	Clip	1	
44	Locknut	1	
45	Set screw	1	

Overview - Air caps and nozzles

Conventional air caps (CF)

Air cap conventional		Air cap LVLP (LF)	
A	M35030069	A	M35030073
B	M35030070	B	M35030074
C	M35030071	C	M35030075
D	M35030072	D	M35030076

Nozzle sets with air cap conventional (M35030069)/Air cap LVLP (M35030073)*

Nozzle	Nozzle set conventional	Nozzle set LVLP
0.5 mm	M09800002	M09800014
0.8 mm	M09800003	M09800015
1.0 mm	M09800004	M09800016
1.2 mm	M09800005	M09800017

*Every nozzle set contains an air cap, nozzle and needle.

Nozzle sets with air cap conventional (M35030070)/Air cap LVLP (M35030074)*

Nozzle	Nozzle set conventional	Nozzle set LVLP
1.3 mm	M09800006	M09800018
1.4 mm	M09800007	M09800019
1.5 mm	M09800008	M09800020
1.6 mm	M09800009	M09800021

*Every nozzle set contains an air cap, nozzle and needle.

Nozzle sets with air cap conventional (M35030071)/Air cap LVLP (M35030075)*

Nozzle	Nozzle set conventional	Nozzle set LVLP
1.8 mm	M09800010	M09800022
2.0 mm	M09800011	M09800023
2.5 mm	M09800012	M09800024

*Every nozzle set contains an air cap, nozzle and needle.

Nozzle sets with air cap conventional (M35030072)/Air cap LVLP (M35030076)*

Nozzle	Nozzle set conventional	Nozzle set LVLP
3.0 mm	M09800013	M09800025

*Every nozzle set contains an air cap, nozzle and needle.

Nozzle sets without air cap (consisting of nozzle (6) and needle (40))

Nozzle	Material #
0.5 mm	M09800308
0.8 mm	M09800309
1.0 mm	M09800310
1.2 mm	M09800311
1.3 mm	M09800312
1.4 mm	M09800313
1.5 mm	M09800314
1.6 mm	M09800315
1.8 mm	M09800316
2.0 mm	M09800317
2.5 mm	M09800318
3.0 mm	M09800319

Seal set N36960008

Description	Item no.	Quantity
Seal	05	1
O-Ring 7 x 1.5	13	2
Seals on valve	16	1
Seal	19	1
O-Ring 9.5 x 1.5	27	2
Needle guide with packing seal	37	1

Repair kit N36960007 including Sealing set N36960008

Description	Item no.	Quantity
Seal set N36960008	-	1
Compression spring	15	1
Valve pin	17	1
Valve gland	20	1
Lever screw	21	1
Lever axle	22	1
Pressure disc	38	1
Compression spring	39	1
Needle gland	40	1
Distance bolt with compression spring	42	1

Trigger set N36960025

Denomination	Item no.	Quantity
Trigger set	21, 22, 23	1

Valve pin set N36960026

Description	Item no.	Quantity
Valve pin set	14, 15, 18, 19, 20	1

Closure set N36960027

Description	Item no.	Quantity
Closure set	43, 44, 45	1

11.2 Tools

Denomination	Material number
Round brush for cleaning	Tool set N36960014
Flat brush for cleaning	
Box wrench SW 13	

11.3 Accessories



A complete overview of the accessories is available from the Dürr Webshop.

Description	Item no.	Quantity	Material no.
Cleaning set 21 parts	-	1	N36960038
Quick change coupling for air G1/4"-external threads	-	1	N40030046
Blind plug	11	1	N36960177

Flat jet control set N36960178, pre-assembled

Denomination	Item no.	Quantity	Material no.
O-Ring 7.0 x 1.5	13	1	M08030771
Safety washer	28	1	
Locknut	31	1	
Regulator insert	32	1	
Adjusting screw	33	1	

Push-on nipple for quick-action coupling

Denomination	Item no.	Quantity	Material no.
Push-on nipple for quick-action coupling, fixed D7.2 d10/12 (EU)	36	1	M01010185
Push-on nipple for quick-action fixed D5 d8/11 (US)	36	1	M01010186
Push-on nipple for quick-action coupling, fixed D7.5 d11/13 (ASIA)	36	1	M01010187

11.4 Order



WARNING!

Risk of injury from unsuitable replacement parts in explosive areas.

Replacement parts not compliant with the specifications of the ATEX guidelines can cause explosions in an explosive atmosphere. Serious injuries and death can be the consequence.

- Use exclusively original replacement parts.

Ordering replacement parts, tools and accessories as well as information on products that are listed without order number.

☞ "Hotline and Contact"

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Translation of the original operation manual

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