



MINIMATIK  
AIRLESS  
Automatic Spray Gun



DETE

Manufacturer: Dr. Tettenborn GmbH

No..

Year  
2008

## Operating Manual



60270000



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## Standards / Regulations

EN 1953:1998 Spraying equipments for coating material. Safety rules. ZH1/406 guide lines for liquid radiators ( Spraying devices ) VBG 23 working of coating material.

## Putting into operation

Screw automatic spraygun with retaining bolt onto gun mount.

**Attention:** chose stable mount as recoil power occurs.

Screw air screw into control air connection and assemble control air hose (NW4).

Seal and assemble material connection nipple according to material connection (stich or circulation connection).

Install hose connection between pressure generator (airless pump) and material connection nipple.

**Attention** hose connection must stand three-fold static operating pressure of automatic spray gun.

**Attention** outgoing spraying jet is dangerous.

After having cleaned all wetted parts fill airless system with corresponding coating material.

After filling procedure, descrew nozzle nut and assemble corresponding airless nozzle with nozzle sealing.

Align airless-nozzle to spraying object and fix nozzle nut with open-end wrench SW 22.

Material pressure which is necessary for optimum processing is dependant from the applied material as well as the chosen material nozzle.

It must be destined for each material/ nozzle combination. The material nozzle is destined by the geometry of the works piece which has to be coated.

## Interruption of operation

During material change or putting out of operation you have to rinse automatic spray gun with suitable cleansing agent (ask your material supplier), until it clearly emerges out of gun.

For cleaning please disassemble nozzle with nozzle sealing and clean separately.

If there are longer breaks of operation let cleansing agent in spraying unit until re-putting into operation.

## Cleaning and Maintenance

**Attention:** Never dive automatic spray gun completely into cleansing agent. Gaskets could be destroyed and lubricant be washed out. Do not clean material nozzle with hard, sharp edged objects. We recommend our cleaning needles (art.No. 94010000) in order to clean nozzle bore.

Complete cleaning as described under section interruption of operation. Clean automatic spray gun externally with a cloth soaked with cleansing agent.

## AIRLESS – NOZZLES

### Important piece of advice for applicants / users Airless-Nozzle Chart ( next page )

Nozzles must only be used according to their determined application.

To a determined application also belong obedience to the important pieces of advice of these instructions and keeping of all regulations of the trade association.

Operating personnel have to be instructed with handling.

Before each taking into operation convince yourself

- of the ability of function
- of the firm fitting of the nozzle connection
- of the safety

Nozzles are subject to a natural wear and have to be examined regularly, respectively changed.

Increased volume stream and / or unregular spraying image ( e.g. because of wear, damage, or contamination) can lead to defects, or if chemical material is used can lead to damages.

Binary nozzles can produce Aerosol according to adjustment of the parameters. During dispersion of chemicals, personnel is in danger of inhalation.

Never direct liquid jet to persons!

Chemical additives, high temperatures and / or high pressures lead to injuries.

## List of parts 60270000

Item	Art. - No.:	Designation	Quantity	
1	40201602	Counter nut galvanized	1	
2	60230232	Set of seals compl. Consisting of:	1	*
		3 x item 17 and 3 x item 18		
3	60230242	Seal screw	1	
4	60230250	Screw ring	1	
5	60230251	O-ring	1	*
6	60230416	Valve spring	1	*
		with disc item 12 max. 250 bar		
		Without disc item 12 max. 400 bar		
7	60230434	QUAD-RING	1	*
8	60230438	Control piston complete consisting of	1	
		item 1 / 7 / 9 / 20		
9	60230453	Control piston	1	
10	60230458	Locking cap	1	
11	60270003	Gun body stainless steel	1	
13	60513201	Threaded insert	1	
14	60513300	Valve seat screw complete	1	*
15	60513400	O-ring	1	*
16	60513500	Nozzle nut	1	
17	60513601	Sealing ring	3	*
18	60513602	Cap collar made of PTFE	3	*
19	60600752	Tightening nut	1	
20	60620565	Valve needle 69 mm	1	*
21	61903015	Sealing washer DELRIN	1	*
22	61 . . . . .	Airless - nozzle upon choice	1	*
		Not included in delivery		

## Exchange of parts

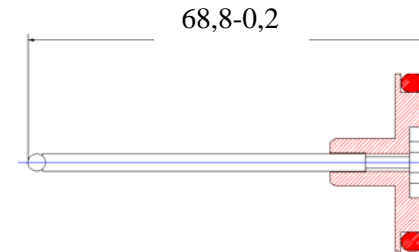
During maintenance works you principally have to put away automatic spray gun after cleaning from pressure generator.

**Attention: Valve needle 60620565 and valve seat screw 60513300 should always be exchanged together**  
**Exchange valve needle:**

Descrow tightening nut 60600752 .  
 Take locking cap 60230458 and spring 60230416.

Pull out control piston compl. 60230438 unscrew nut 40201602 and screw out valve needle 60620565 from control piston 60230453.

Assembly to be done in reverse order.  
 Attention: please pay attention to correct adjustment of length of valve needle.



## Valve seat screw and Airless-nozzle

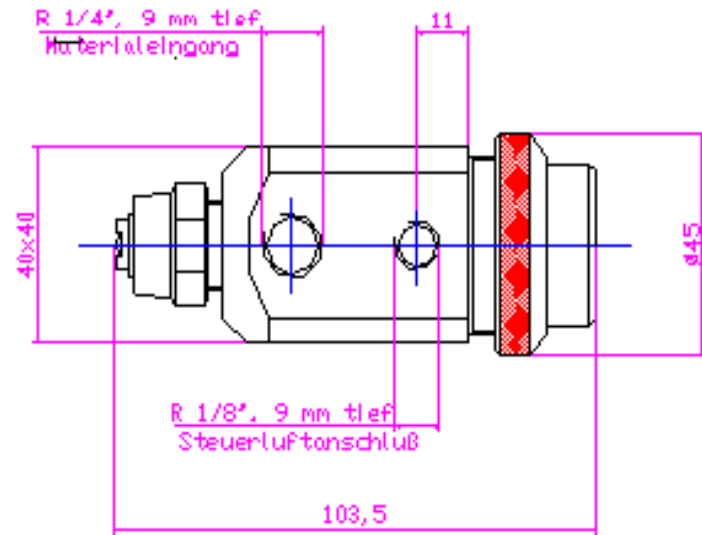
Unscrew nozzle nut 60513500.  
 Take airless nozzle 61\_\_\_\_\_ and nozzle sealing 61903015.  
 Screw out valve seat screw compl. 60513300 from main body 60270003 and remove O-Ring 60513400.  
 Assembly to be done in reverse order.

## Change set of sealing 60230232.

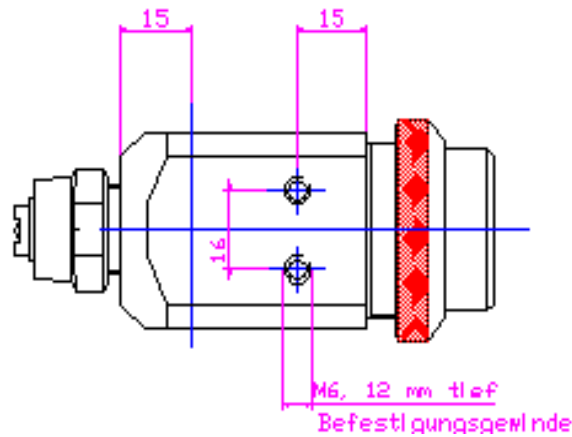
Pull out control piston compl. 60230438 ( see description exchange of valve needle), unscrew nozzle nut 60513500 Airlessdüse 61\_\_\_\_\_ and take nozzle sealing 61903015.

Screw out valve seat screw compl. 60513300,  
 Screw out from head side sealing screw 60230242 with suitable screw driver  
 Pull out set of sealing compl. 60230232 .  
 Assembly to be done in reverse order.

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MINIMATIK AIRLESS VA ART.-NR.: 60270000

