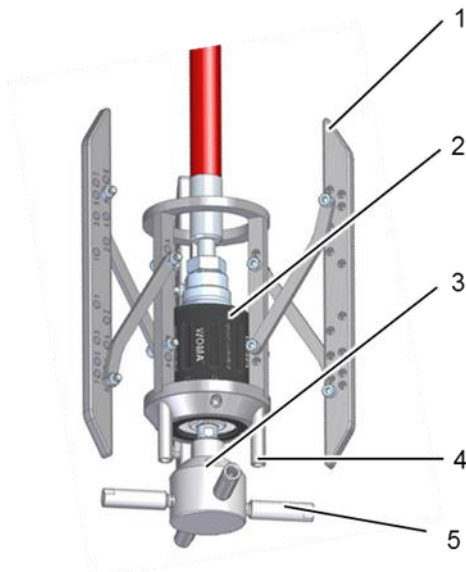


Pipe cleaning carriage

The WOMA pipe cleaning carriage is a turbo nozzle attachment set for cleaning the interior of pipes. The adjustable frame is used to adjust the pipe cleaning carriage to pipe inner diameters ranging from 100 to 350 mm. Extension arms can be fitted to the nozzle carrier head: these permit the adjustment of the nozzle to pipe wall distance.



Pipe cleaning carriage, complete

- 1 Pipe cleaning carriage
- 2 Turbo nozzle
- 3 Nozzle carrier head
- 4 Protective sleeve
- 5 Extension arm

Special features

- Adjustable between 100 mm and 350 mm
- Straightforward to use

Technical data	
Carriage material number	9.917-236.0
Weight (including/ excluding water tool)	approx. 3.5 kg approx. 1.0 kg
Length	approx. approx. 350 mm
Width	100–350 mm

Accessories

TD3000-SCS turbo nozzle	
Material number	9.917-677.0

Nozzle carrier head	
Material number	9.877-167.0
Number of radial nozzles	4
Number of impelling nozzles	2*
Nozzle	Model 21S/21LL


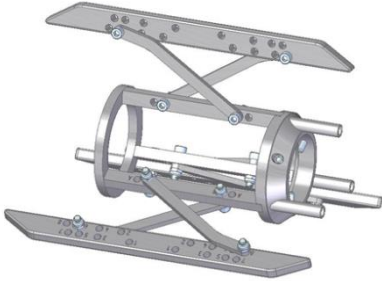
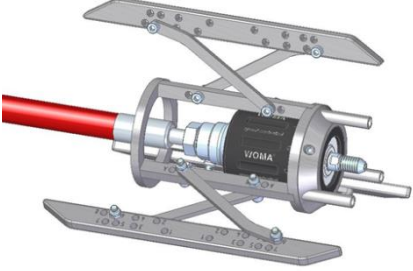
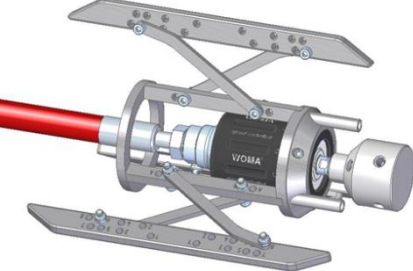
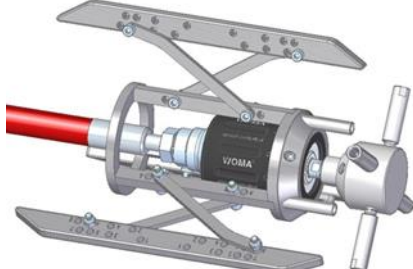
* Please note: the jets from the impelling nozzles also spray against the adjustable frame and the protective sleeves. Regular inspection is therefore recommended.

Protective sleeve	
Material number	9.917-442.0
Number	3

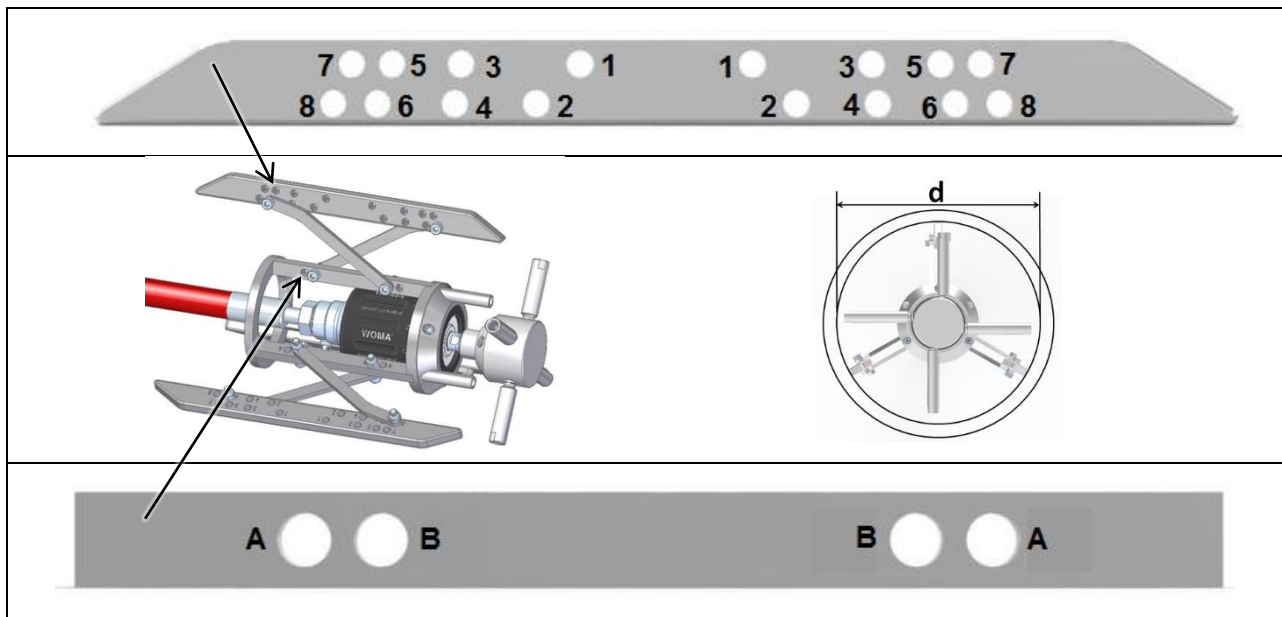
Extension arms		
Pipeline Ø [mm]	Length [mm]	Material number
> 125	25	9.917-243.0
> 145	37.5	9.917-242.0
> 170	50	9.917-241.0
> 220	75	9.917-239.0
> 270	100	9.917-238.0

* Extension arms must be ordered in pairs or fours.

Assembly instructions

Step	Description	Figure
I.	<ol style="list-style-type: none"> 1. Remove the protective cap from the turbo nozzle 2. Connect the high-pressure hose to the turbo nozzle with the pressure ring and pressure screw 	 <p>The figure shows a grey turbo nozzle with a red high-pressure hose attached to its side. The nozzle has 'WOMA' and 'speed controlled' printed on it, along with a pressure control dial.</p>
II.	<ol style="list-style-type: none"> 3. Adjust the attachment set to the pipe diameter (for details, see the enclosed settings table) 	 <p>The figure shows a metal attachment set consisting of a central frame with two adjustable arms and a mounting plate. It is designed to hold the turbo nozzle in place.</p>
III.	<ol style="list-style-type: none"> 4. Push the turbo nozzle into the attachment set from the rear 5. Fix the turbo nozzle to the attachment set with 3 M4x16 socket cap screws 	 <p>The figure shows the turbo nozzle from Figure 1 being inserted into the attachment set from the rear. The nozzle is now partially seated within the frame.</p>
IV.	<ol style="list-style-type: none"> 6. Screw the nozzle carrier head to the turbo nozzle from the front 	 <p>The figure shows the nozzle carrier head being attached to the front of the turbo nozzle. The head is a cylindrical component that fits over the nozzle's front end.</p>
V.	<ol style="list-style-type: none"> 7. Screw the extension arms for the nozzles into the mounting holes to match the pipe diameter 8. Use a symmetric nozzle pattern 9. Seal off any mounting holes not used with blind plugs 	 <p>The figure shows the final assembly with the extension arms attached to the mounting holes. The nozzle is now fully ready for use.</p>

Adjustment to pipe diameter



Inner hole front	Inner hole rear	Outer hole front	Outer hole rear	Skid circle diameter d [mm]
Without skids				100
A	A	8	8	145
A	A	7	7	175
A	A	8	6	200
A	A	5	5	225
A	A	8	4	246
A	A	3	3	274
B	B	7	1	297
A	A	1	1	325
B	B	2	2	343