



NEOMETRIX
DEFENCE



Working Manual

Hydraulic Spreader



-
- Please use the rescue tool by professionally trained person.
 - It is a prohibited strictly to use rescue tool near the combustible gas and liquid.



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Technical Specification

SMART HYDRAULIC SPREADER

Make	NEOMETRIX
Model	SHS-600
Spreading Distance	740 mm
Spreading force	840 KN
Pulling Length	600 mm
Pulling Force	71 Kn
Weight	17 Kg
Working Pressure	720 Bar
Test Pressure	750 Bar

Hydraulic Spreader

Safety operation:

M/s Neometrix product can do the best only. When used correctly, our company considers the product safety operation fully while designing it. In spite of this any mistake or improper operation may lead to the occurrence of an accident. Therefore, only through the product training and understanding the safe operation personnel can operate product.

Please use the tools in strict accordance with the safety signs of the equipment.

In the process of equipment use in addition to compliance with the relevant provision of the operation manual the domestic and International related accident prevention Methods and environmental protection laws should be observe.

Instruction for proper operation:

Neometrix hydraulic tool is specially designed for the rescue operation such as road accident, Railway accident, aircraft, building collapse, and so on, Rescue tool can break the door, window, roof beam and so on with the function of cutting or spreading also can save people through dismantle vehicles.





Warning:

- Never make any modification, addition or conversion which might affect safety without the approval. This also applies to the installation and adjustment safety device and valve.
- Aggressive material (acid, lye, solvent, and vapor) can damage the tool, it is necessary to clean the whole tool, if it must be exceptionally operated under such condition or gets into touch with this material.

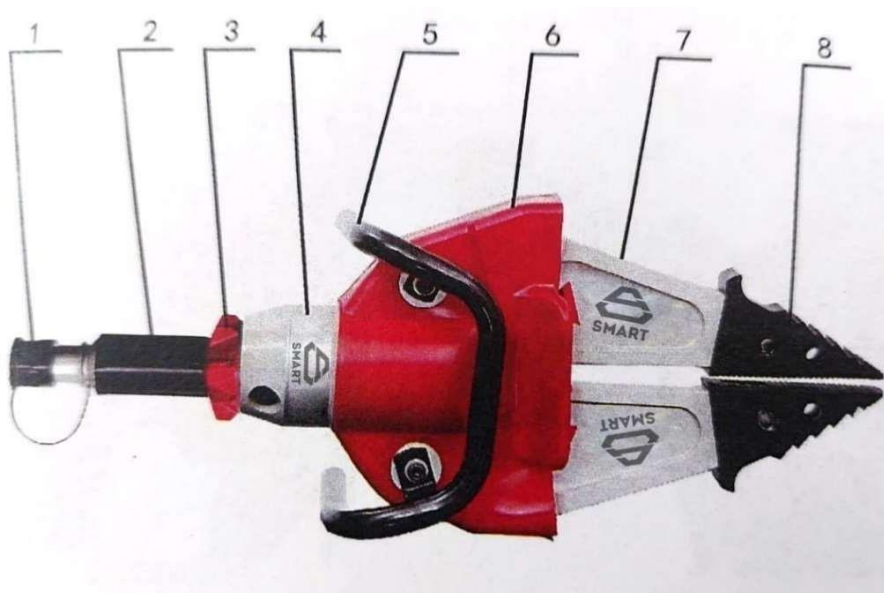
Function Hydraulic Spreader

Principal:

Hydraulic Spreader is powered by high pressure hydraulic fluid.
Work through powerful spreading.

Parts -

E.g.



- 1) Coupler
- 2) handle
- 3) Control valve
- 4) Hydraulic cylinder
- 5) handle
- 6) Protective hose
- 7) Spreading arm
- 8) Spreading head

Operation Hydraulic Spreader

Interface connection:

	Before connection	After connection
Single hose with mono coupler 1		
Single hose with mono coupler 2		
Two hose with male – female coupler 1		
Two hose with male – female coupler 2		

Before the connection, please open the dust proof cap. To protect the coupler please use the dust protection cover after the rescue operation.

Operation:

1) After connected with the pump keep turning the valve drive the blade open or close. The control valve have the function of automatic return, the blades won't work when the valve at the middle position.



2) Connecting the pulling adapter and hauling chain to the blades then the Spreader will have hauling function.

Precautions:

- 1) Before the rescue operation begins the object to be worked upon must be Stabilized.
- 2) During the spreading operation, please make sure that the spreading tips fully touch with the spread(or squeezed) object, avoid the spreading tips take off and bring dangerous.
- 3) During the hauling operation, please pay attention to the adapter and hook, avoid any dangerous from something take off.

Cleaning and Storage:

After operation close the blades to a distance of few mm. This relaxes unit hydraulically and mechanically.

Clean the blades if there are acidic or alkaline things wash the blades with water and dry it with fabric, coated with anti-rust oil. Maintain the tools to avoid rusting and aging.

Attention: The blade should never be completely opened or closed.



Inspection and Maintenance:

All the tool are controlled by the inside hydraulic parts, but visual check has to be accomplished normally tool should be inspected both before and after the use. To find the problem and maintain it in time, avoid any accident during the rescue operation. In addition, Central bolt also should be check from time to time.

Item	Operation	Every time	Every month or after working 20 hours	Every three month or after working 50 hours	Every six month or after working 100 hours	Every year or after working 200 hours
Coupler	Inspect, clean, lubricate	√				
Dust protection cover	Inspect	√				
Hose	Inspect	Every two year (if necessary)				



Hand valve	Inspect	√				
Check valve	Inspect clean					√
Fixed Pin	Inspect (1)	√				
Central bolt	Tighten			√(2)		
Spreading Head	Inspect Clean	√			√	

Note:

- 1) The tip clearance of the blade should not exceed 3mm.
- 2) Tighten center nut needs to be exceeded

Common fault and troubleshooting:

Fault	Inspect	Cause	Remedy
Blade open and closed slowly	Hoses correctly connected power pack operating pump work well	There is air in the hydraulic system	Open and closing of the blades for some times to remove any air. If it doesn't work contact the manufacturer
Control handle doesn't rotate smoothly or gets stuck	Apparently hurts or control valve doesn't rotate smoothly	There is something wrong with the return spring The valve or control valve has	Replace the spring or contact the manufacturer



		foreign object The valve is broken There is something wrong with other parts	
Leakages on the piston rod		Seal defective piston rod defective Malfunction of the piston rod	Maintenance required by company technician

Note:

- All tools can only be repaired by company technician.
- Company does not bear any responsibility for the accident caused by the customer's unauthorized use or replacement of parts.

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