



chemical solutions to concrete problems

PERFECT FORM & CONCRETE SPRAYER

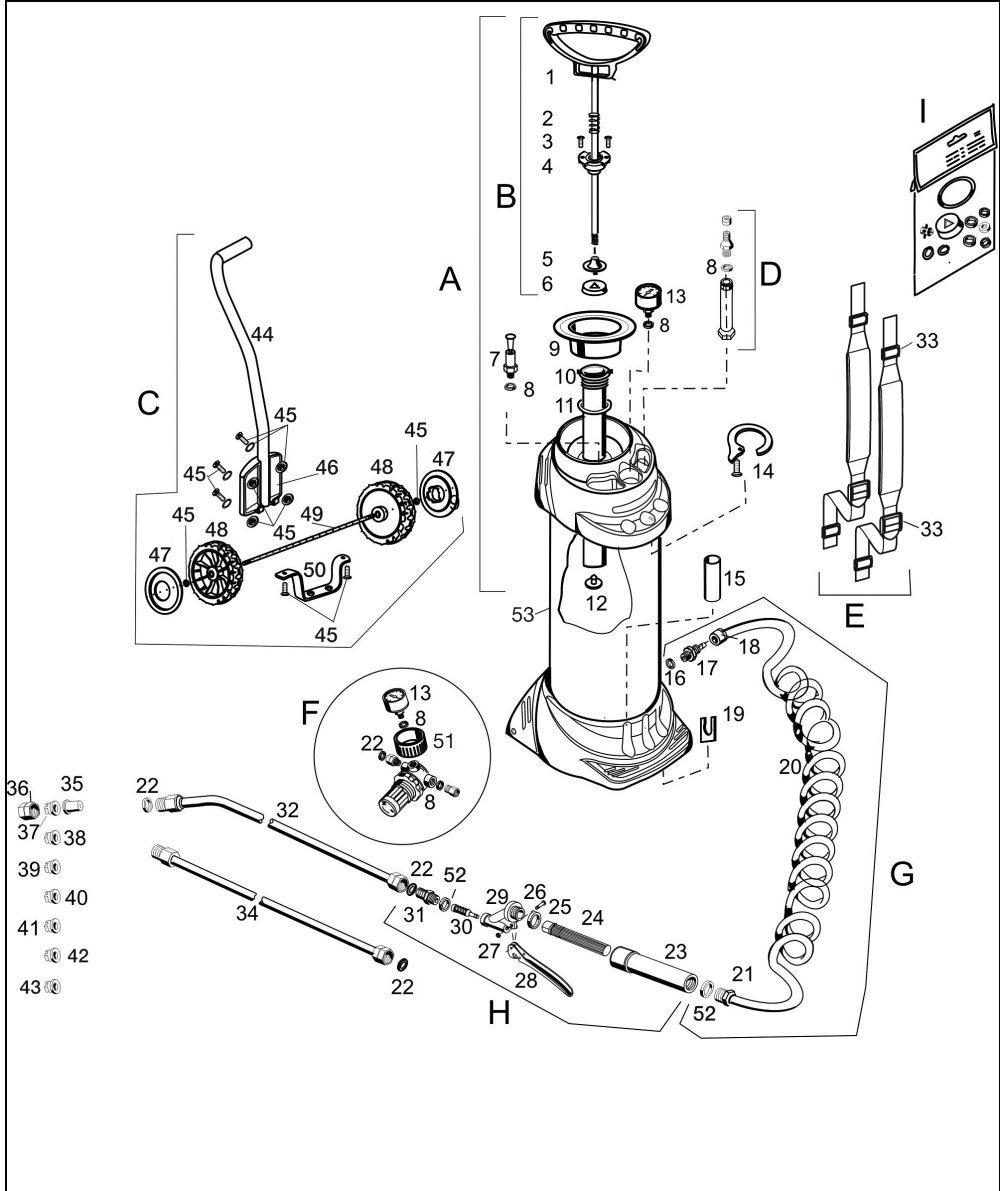
PFCS 3615 FN
PERFECT SPRAYER

2.7 GAL
(10 L)

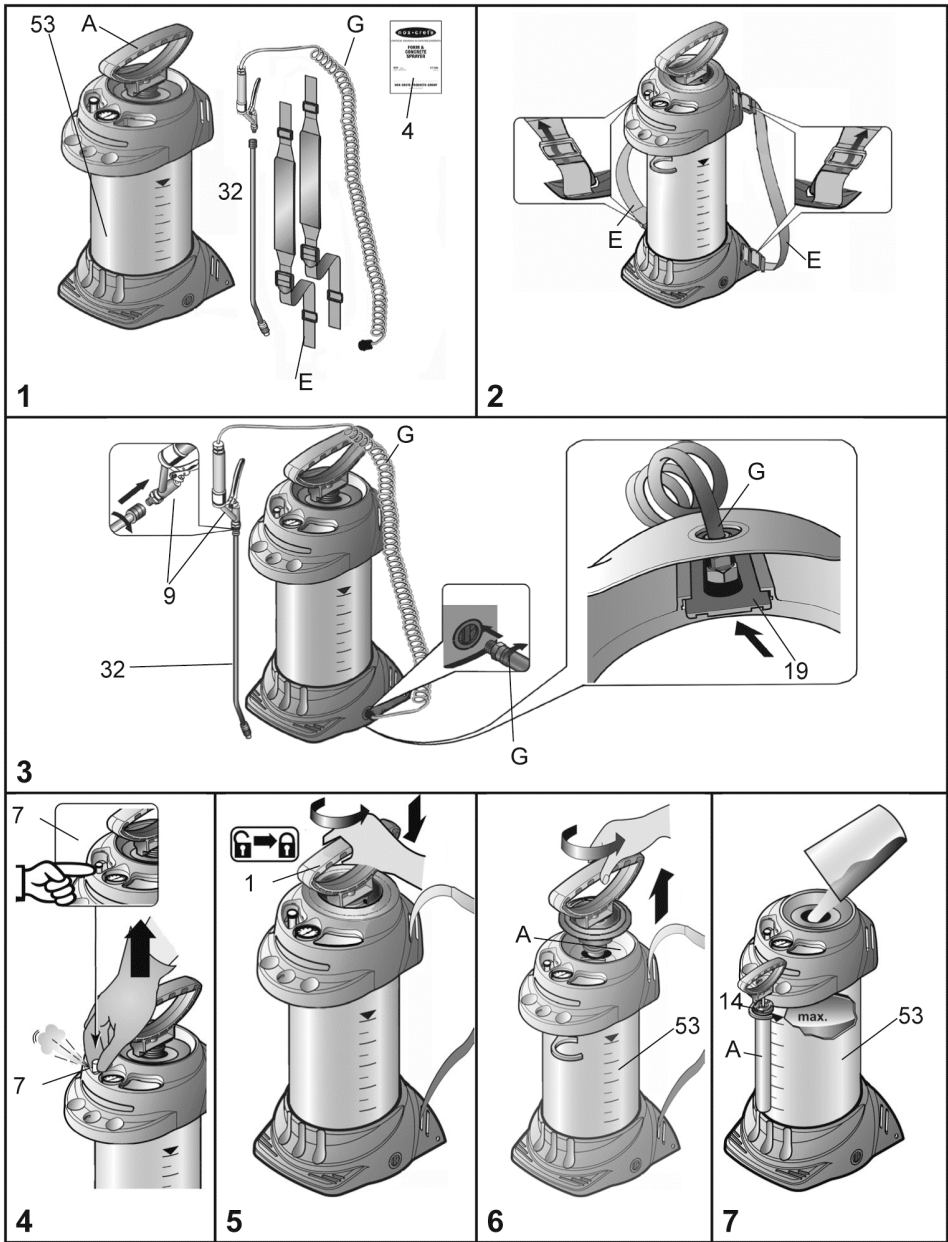
NOX-CRETE PRODUCTS GROUP

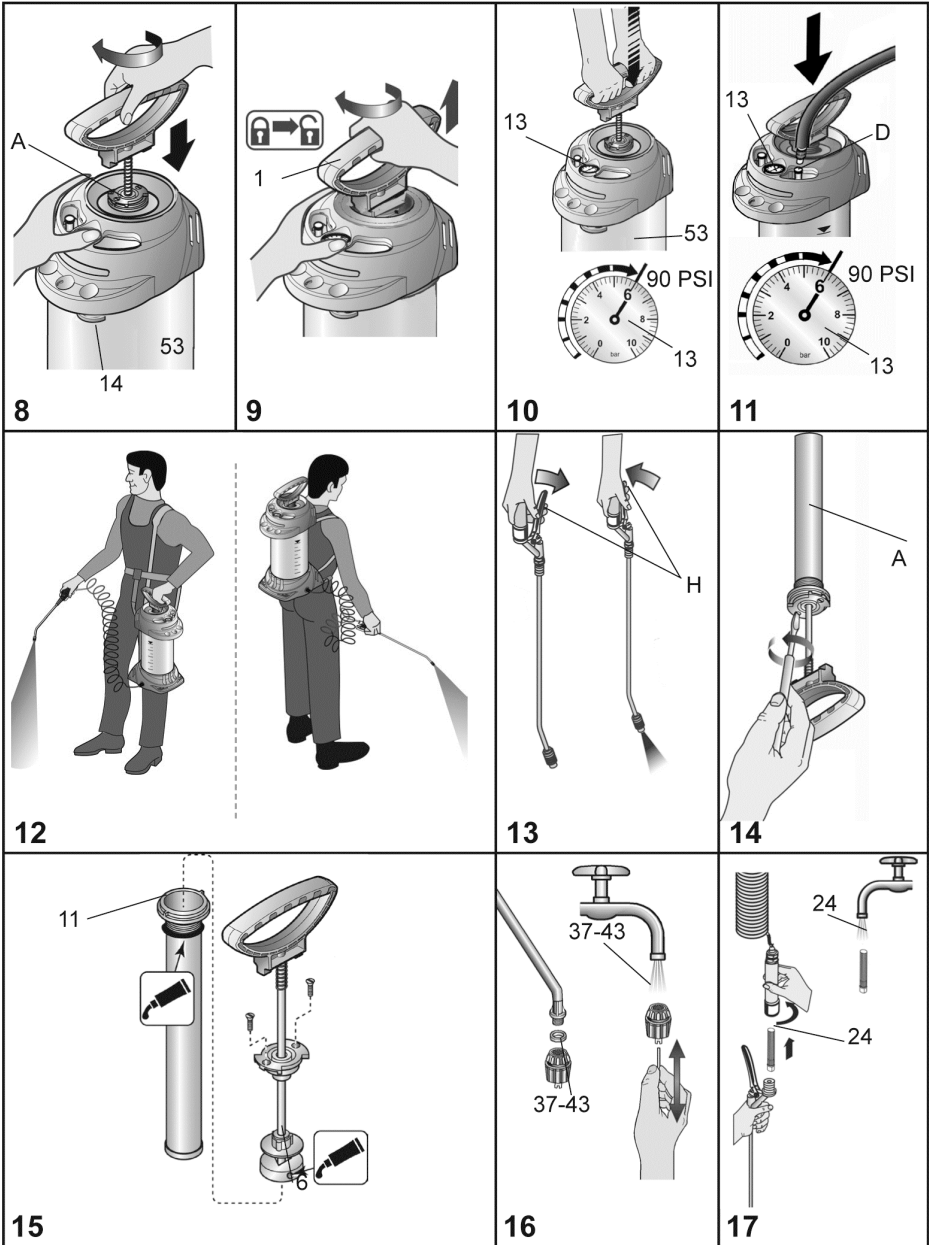
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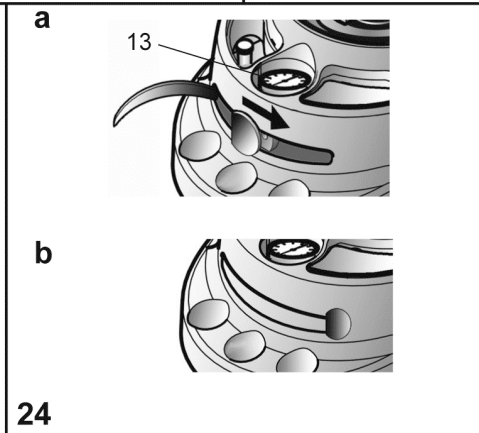
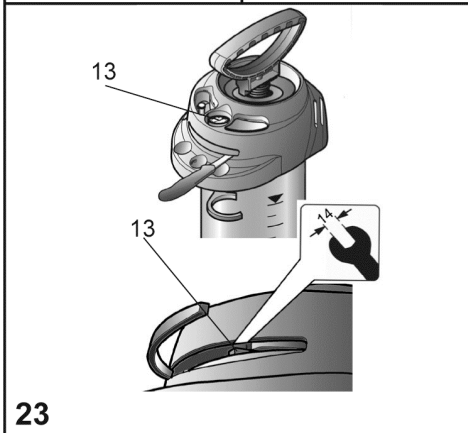
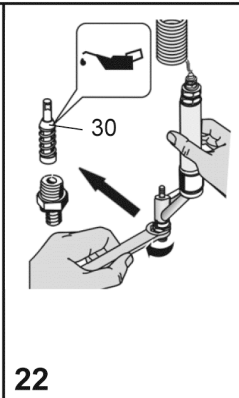
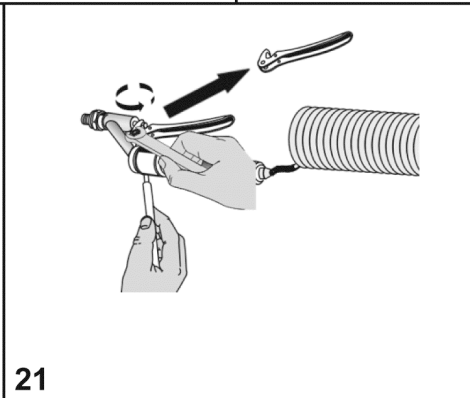
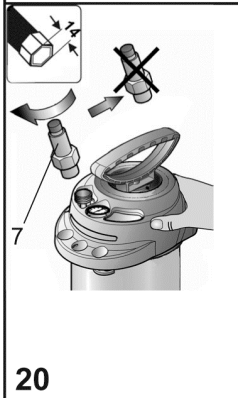
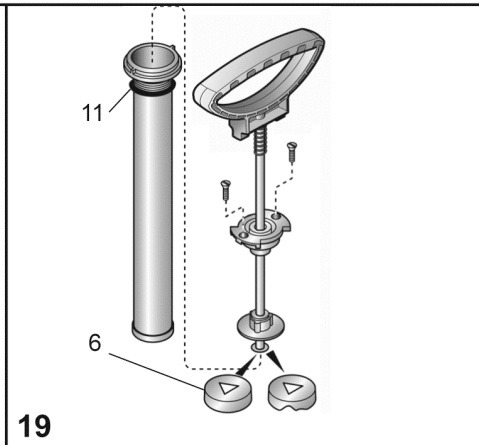
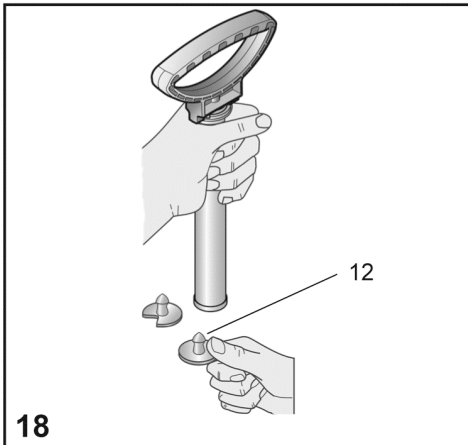
Spare Parts	Piezas de repuesto	Pièces de Rechange
	Ersatzteile	



Ref Part #		Ref Part #	
A	Air pump, brass	23	Filter housing R.25 in., brass
B	Piston rod assembly	24	100 mesh filter
C	Transport cart	25	Gasket D23 x D18 x 2 mm
D	Air compressor fill valve	26	Screw M3 x 12 mm
E	Carrying strap	27	Hex. Nut M3
F	Pressure regulator, brass with pressure gauge	28	Trigger
G	Spiral hose with couplings	29	Valve body, brass
H	Trigger valve	30	Valve pin assembly
I	Service Kit	31	Screw seat
1	Piston rod with handle	32	Brass spray wand
2	Bumper spring	33	Buckle
3	Screw D3.5 x 16 mm	34	Wand extension (24 in. 61 cm)
4	Cylinder cap	35	200 mesh anti-siphon filter *
5	Piston 38 mm	36	Cap nut, brass
6	Piston cup washer 38 mm	37	80005 Spray tip
7	Safety valve 6 bar with gasket	38	800067 Spray tip
8	Gasket D14 x D9.7 x 2 mm	39	8001LP Spray tip
9	Funnel cover	40	8002LP Spray tip
10	Cylinder tube with gasket and valve disk	41	8003LP Spray tip
11	O-ring D47 x 5.33 mm	42	8004LP Spray tip
12	Foot valve disk	43	8005LP Spray tip
13	Pressure gauge 6 bar w/ gasket	44	Holding rod
14	Pump holder with screw	45	Assembly kit for transport trolley
15	Spare parts container with lid	46	Holding rod attachment
16	O-ring D10 x 3 mm	47	Hubcap
17	Coupling M10 (spiral hose), with gasket	48	Wheel
18	Cap nut, brass	49	Axle for transport trolley
		50	Stand
20	Spiral hose 2.5 m (PUR)	51	Protective cup
21	.25 in. adapter	52	Gasket D17 x D13 x 2 mm
22	Gasket D15 x D11 x 2 mm	53	Stainless Steel Tank







Welcome

Congratulations for purchasing your new Perfect Form and Concrete Sprayer. Your satisfaction with NOX-CRETE products and services is very important to us. If you are not satisfied or have questions and concerns not covered in these instructions, please contact Nox-Crete at:

Nox-Crete Products Group

(800) 669-2738 | 1444 S 20th St. | Omaha, NE | 68108 | customerservice@nox-crete.com



Read these instructions before using the sprayer.
Keep the use instructions in a safe and convenient place.

Usage

This sprayer is designed for NOX-CRETE products and other construction chemicals that can be applied with a sprayer.

Read Nox-Crete's sprayer usage instructions before each application. This sprayer is designed only for use in exterior applications.



Improper use may result in personal injury.

Not suitable for

- Flammable liquids with a flashpoint below 100°F (38°C)
- Hydrogen peroxide or other strong oxidizers
- Corrosive substances (acids and bases)
- Products containing ammonia
- Products containing acetone
- Extremely viscous liquids
- Use with food

Under no circumstances should you use

- External pressure sources without the optional NOX-CRETE compressed air valve
- With flammable liquids
- For storing hazardous substances
- As an eyewash

Safety



Read sprayer instruction manual thoroughly prior to use.



Keep sprayer out of reach of children.



Never spray on people, animals, electrical devices and lines, into the wind, or into bodies of water.



Repairs and modifications to the sprayer tank can result in serious injury.
Do not bypass or disable the sprayer safety valve.



Contact between the sprayer and hydrogen peroxide or other oxidizing agents may result in increased pressure similar to an explosion. Never place strong oxidizing agents in the sprayer.



Remove and replace damaged and nonfunctioning parts.



Avoid ignition sources when spraying combustible liquids.



Do not allow the sprayer to remain under pressure and/or be exposed directly to sunlight for extended periods of time. Make certain the sprayer is not heated beyond the maximum operating temperature (→ *Table 1 below*).



Never blow through the sprayer tip or valves with your mouth.



Use only Nox-Crete replacement and accessory parts.



Wear suitable protective equipment when working with hazardous substances.



When hand pumping or filling sprayer tank with compressed air, always observe the pressure gauge to ensure the maximum spraying pressure is not exceeded. (→ *Table 1 below*).

Before filling, after use and before maintenance work, allow the residual pressure in the tank to dissipate completely (→ *Section “After Use,” Section 1*).


Technical data

TABLE 1

Device Name	PERFECT Form and Concrete Sprayer
Type	Pressurized Tank
Max. usable volume	2.7 gal (10.2 l)
Total volume	3.4 gal (12.9 l)
Max. spraying pressure	87 psi (6 bar)
Max. operating temperature	122 °F (50°C)
Weight when empty	10.4 lb (4.7 kg)
Material of tank	Stainless steel
Where device is carried	Shoulder or backpack
Technical residual quantity	0.008 gal (0.03 l)


 Refer to the illustrations on pages 4-6 for the following instructions.

Assembly

1. Fasten the carrying strap(s) [E] on the tank [53]. (Fig. 2)
2. Screw the hose [G] tightly into the tank outlet port. (Fig. 3).
 Note the location of the spigot in order to be able to insert the lock.
3. Insert the lock [19]. (Fig. 3)
 - ▶ The lock closes and the hose is secured from unscrewing out of the tank.
4. Screw the spray wand [32] onto the trigger valve [H]. (Fig. 3)

Checks

Visual inspection: Are the tank [53], pump [A], hose [G] with trigger valve [H], pressure gauge [F] and spray wand [32] undamaged? (Figs. 1, 10, 11)

 Pay special attention to the connections between the tank – hose and the hose – trigger valve and to the condition of the pump threading and hose.

No leaks: Pump up the empty device to 30 PSI (2.1 bar).

- ▶ The pressure must not decrease more than 7 PSI (.5 bar) within 30 minutes.


Function: Pull the red button on the safety valve [7]. (Fig. 4).

- ▶ The pressure must dissipate.
Activate the trigger valve [H] (Fig. 13).
- ▶ The trigger valve must open and close.


Sprayer Preparations



Observe the instructions in the section entitled “Safety”.

1. Pull up the red button on the safety valve [7] until all excess pressure is released from the tank. (Fig. 4).
2. Press the pump handle [1] down and turn it counterclockwise.
3. The pump handle is locked in place. (Fig. 5).
4. Unscrew the pump [A] from the tank [53]. (Fig. 6).
 To ensure the pump remains clean during storage, we recommend you attach the pump to the pump holder [14]. (Fig. 7)
5. Pour the liquid to be sprayed into the tank. (Fig. 7)
6. Screw the pump [A] into the tank [53]. (Fig. 8)
7. Swivel in the pump holder [14]. (Fig. 8)

Pressurizing with manual Pump

1. Press the pump handle [1] down and turn it clockwise.
 - ▶ The pump handle is unlocked. (Fig. 9).
2. Manually pump until the required pressure is generated. (→ Table 2) in the tank [53] (Fig. 10).
 The maximum pressure should not exceed 90 PSI (red line on the pressure gauge [13], Fig. 10). If the maximum pressure is exceeded, the safety valve will engage and release the excess pressure.

- Press the pump handle [1] down and turn it counterclockwise.
 - The pump handle is locked in place. (Fig. 5).

Pressurizing with an air compressor / external pressure source

- Connect the compressed-air hose to the compressed-air filling valve [D]. (Fig. 11).
 - Pressurize to the desired pressure - maximum pressure 87 PSI (6 bar).



Ensure that the pressure of your air compressor is regulated to a maximum of 87 PSI (6 bar).

Spraying



Observe the instructions in the section entitled “Safety”.
 Operate the sprayer only while it is vertical or suspended upright and nearly vertical.
 Avoid allowing drops of spray to drift onto areas not being treated.
 Review the product to be sprayed health and safety warnings.

- Carry the sprayer in your hand or place it on your back. (Fig. 12)
 - To prevent dripping, purge the sprayer by holding the spray wand in the air before spraying and open the trigger valve until no liquid mixed with air is released.
- Begin spraying.

Table 2

Spray Tip Recommendation Guide

Products	Recommended Spray Tip
Cures and Sealers	8003LP, 8004LP or 8005LP
Water Repellant Sealers	8003LP, 8004LP or 8005LP
Form Release Agents	
Chembeton & Pro Release	8003LP
All other release agents	80005, 800067 or 8001LP
Liquid Floor Hardeners	8004LP or 8005LP
Tilt-Up Cures and Bondbreakers	8003LP, 8004LP or 8005LP

- If the spraying pressure decreases more than 10 PSI (.7 bar) from the optimum level, increase the pressure by hand pumping or with compressed air.



If liquid mixed with air emerges from the nozzle, the tank is empty.

After Usage



Observe the instructions in the section entitled “Safety”.

- Pull up the red button on the safety valve [7] until all excess pressure is released from the tank. (Fig. 4).
- Lock the pump handle in place [1]. (Fig. 5).
- Unscrew the pump [A] from the tank [53]. (Fig. 6).



Collect and dispose of the residual liquid according to all applicable laws, requirements and regulations. Review the liquid manufacturer's health, safety and disposal warnings!

4. Rinse out the sprayer with the appropriate solvent or water.
5. Wipe off all solvent or water residue.
6. To store the sprayer, separate the tank and pump and store in a dry place protected from sunlight and freezing temperatures.

Care and maintenance



Observe the instructions in the section entitled "Safety".

After using the device 50 times or at least once a year:

- Disassemble the sprayer [A] and grease the piston cup washer [6]. (Fig. 14 -15).
- Clean the spray tip [37-43] with the appropriate cleaning solvent or water. If required use a needle. (Fig. 16).
- Remove the 200 mesh anti-siphon filter [35] from the end of the wand and the 100 mesh filter location inside the trigger valve filter house [24] and clean thoroughly with the appropriate solvent or water. (Fig. 17).
- Grease the seals [6] and [11 and 30]. (Fig. 19 and 22)
- Visually check the sprayer before each use for signs of leakage. Replace all worn parts. Replace the tank if any holes are observed.

Troubleshooting



Use only NOX-CRETE spare and accessory parts (you will find some in the spare parts container (page 2 and 3).

Problem	Cause	Remedy
No pressure builds up in the device	The pump is not screwed on tightly.	Screw the pump on tightly
	O-ring [11] on the pump is faulty.	Replace the O-ring. (Fig. 19).
	Foot valve disk [12] defective.	Replace the foot valve. (Fig. 18).
	Piston washer [6] is defective.	Replace piston washer.
Liquid flows out of the pump.	Foot valve disk [12] defective.	Clean or replace the foot valve disk. (Fig. 18).
The sprayer does not spray even though pressure is present.	Filters [24 and 35] and / or spray tip [37-43] blocked.	Clean the filters or / and spray tip. (Fig. 16 +17)
	Pressure regulator [F] is set too low.	Turn pressure regulator dial clockwise to increase pressure.

Problem	Cause	Remedy
Safety valves blows off too early.	Safety valve [7] is defective.	Replace safety valve. (Fig. 20).
The trigger valve does not close. Liquid emerges without the lever being activated.	Seal [30] on the pressure bolt not greased. Defective valve pin assembly or seal [30].	Grease the seal of the pressure bolt. (Fig. 22). Replace the valve pin assembly or seal. (Fig. 22).
Pressure gauge is not indicating any tank pressure.	Pressure gauge [16] defective.	Replace pressure gauge. (Fig. 23 & 24)

Warranty

We guarantee that from the time it is first purchased for a period of the legally valid required warranty period (maximum 3 years) this sprayer will not exhibit any material or processing errors. If defects are discovered during the warranty period, Nox-Crete, Inc. or the distributor in your area will repair the sprayer without charging for the labor or material or (at the discretion of Nox-Crete, Inc.) replace the sprayer itself or its defective parts.

If such defects are discovered, please contact us immediately. We require a copy of the invoice or cash register receipt for purchase of the device.

The warranty does not include wearing parts (seals, O-rings, diaphragm, etc.) or defects which have occurred due to improper use or unforeseeable circumstances.

CE Declaration of Conformity

Products of series PERFECT (3615) meet the requirements of Pressure Equipment Directive 97/23/EC and bear the CE marking.