

MGF

Professional Plumbing Tools

CE

Art. 904XXX

High Pressure

Test Pump

User Manual

rev. 1.0 del 12/02/2014



The present manual has been realised, where possible, in accordance with Rule 98/37/CE "Direttiva Macchine", 2006/42/CE "Nuova Direttiva Macchine" UNI Rule 10893 "User instruction - "order of contents".

Introduction

This manual, supplied with the pump and remaining installation material (pipes, nozzles, fittings, electronics, tools...) provides important informations about the correct installation, use and maintenance.

Read this manual carefully to respect all the directives provided, are important conditions for warranty validity and correct use and functioning of the whole system.

The installer must inform the end user about the correct use of the system.

The manufacturer declines every responsibility for damages caused by wrong installation, or misuse of the system.

General Informations

MACHINE TECHNICAL DATA

Find out the label on the machine providing the informations about technical data

TECHNICAL ASSISTANCE

call number: +39521818301 (4 lines)

fax: +39521818202

email: info@mgftools.com

Shipment of defective parts must be authorized by **MGF** RMA module. Otherwise we cannot accept arriving goods.

WARRANTY TERMS

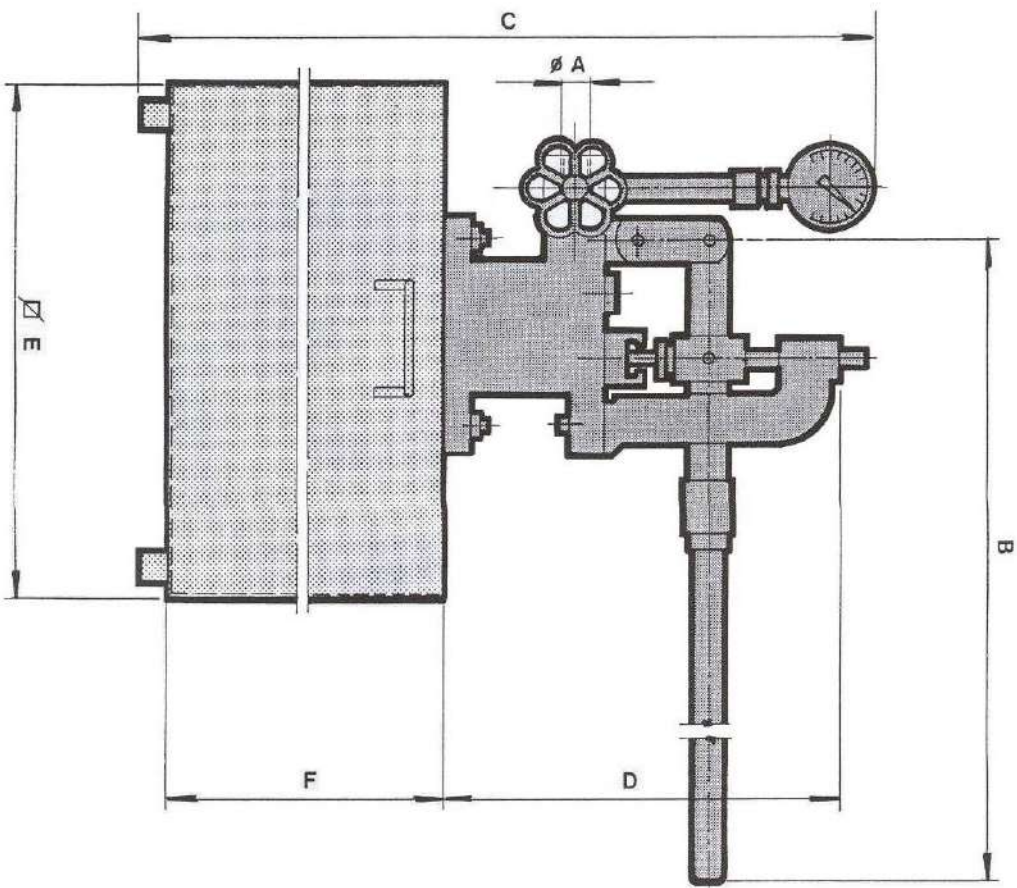
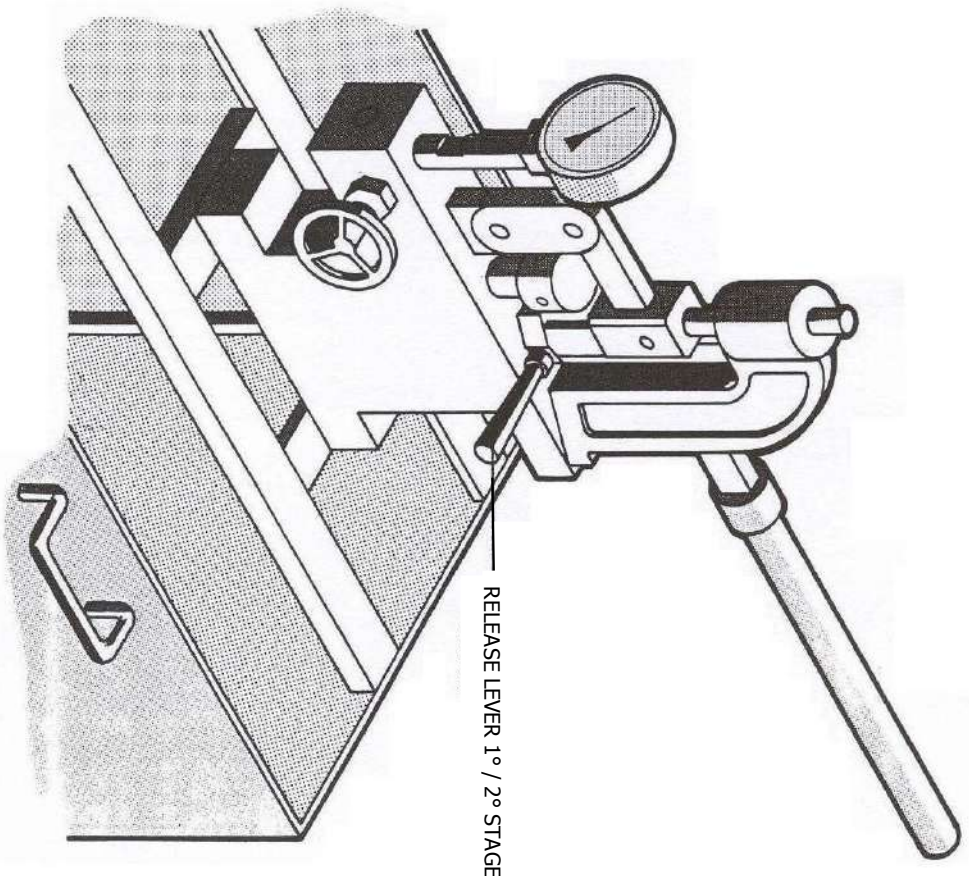
Warranty on these machines is on every manufacturing defect for a time of 2 years from manufacturing. Manufacturing time is indicated on label on the pump.

The warranty doesn't cover:

- Consumable parts: nozzles, gaskets, orings after first run installation and test.
- Problems caused by misuse
- Bad maintenance
- Machines or parts modified or changed

MGF is not responsible besides for damages caused by: system stop (lost of productivity, plant stops...), misting of dangerous liquids or polluted water, vandalisms.

The warranty doesn't cover substitution damages, since **MGF** is not the installation maker.



Art.	Pressure	A	B	C	D	E	F	weight
904700	300 bar	1/2" GAS	800mm	800mm	400mm	500mm	400mm	50Kg
904800	500 bar							
904900	1000 bar							

High pressure pipe available on demand

Assembly and Operating Instructions

High pressure test pumps are easy to use and can be used by anyone without undue fatigue.

Pumps should be assembled as follows, using PTFE tape on all threads to ensure air tight connections.

1. Screw suction pipe into the base of the pump.
2. Mount the pump on the bridge of the tank.
3. Screw in the valve unit, ensuring the connection hole for the gauge tube is opposite the outlet and is vertical.
4. Screw the gauge tube.
5. Mount gauge.
6. Connect hose.
7. Check all connections are tight.
8. Fill tank with enough water, or oil mixed with water, to cover suction pipe inlet and check pump operation.
9. Connect the pump to the appliance.
10. If necessary re-seal any threads which show signs of leakage.
11. If pump refuses to prime, pour liquid into the outlet to wet the valve area.
12. To start test, close the discharge valve and open the flow-valve. There are two handwheels on the control valve block for these two valve. A light alternating movement of the handle creates a steady flow of liquid after a few initial priming strokes; keep up the movement which gradually becomes stiffer until the desired pressure is read on the gauge.
13. Next close the discharge valve, isolating the appliance being tested. To end the operation, open both valves and surplus liquid will run back into the tank via the drain hole in the valve control block.

Instructions for Use

Manual hydraulic high pressure test pump are piston type, two-stage (high and low pressure), self-priming and double acting.

ASSEMBLY

Before you start any operation of pump, make sure that all the accessories has been fitted correctly: suction tube with nut and filter, manual lever, pressure gauge and pressure gauge supply, delivery hose for high pressure (usually not included).

In order to favour the immediate reading during the test, orient the pressure gauge in the direction of the operator. Remember to apply the seals necessary to all components.

Since there are threads, it will be necessary to interpose those products that prevent any leakage: PTFE (Teflon) tape or in liquid or fillets paste.

CONNECTION TO THE APPLIANCE TO BE TESTED

After screwing the delivery hose to the pump, connect the same to the appliance to test (pipe, tank, valve, etc..), paying attention to the "hydraulic seal".

FILL UP THE APPLIANCE TO BE TESTED

Whatever is the appliance to test, it has to be filled up in advance with the same liquid that will be used for the test.

FILLING THE TANK

The pump has a tank with a capacity of 100 liters. Fill up the tank making sure the suction tube is completely submerged. Use a mixture of water and emulsifiable oil in order to prevent oxide formation inside the machine.

If you can not find the liquid, use water or common oil.

SAFETY

Before shipment, all the pumps are tested in firm, are tough and very robust and therefore very safe.

The operator should wear gloves and protective screen, and people not involved with the testing should leave test bench.

FIRST STAGE

The machine has two coaxial pistons. The first piston in action is the brass one, with a larger diameter. For this purpose, verify that the release lever is adjacent to the pump body.

Check that the drain flyer is tight, otherwise close it turning in a clockwise way.

Pumping moving the lever from the bottom on the top. Due to the low flow rate, the pressure gauge will not begin to rise immediately, but after a few cycles.

The pump is self - priming, so it will come into operation by taking the fluid from the tank below and sending it in the appliance to be tested.

When you reached 100/120 bar, skip to second stage.

SECOND STAGE

Place the release lever in opening position (at 90° respect the pump body), to position the brass piston with greater diameter and to free the steel piston with smaller diameter. This piston allows the attainment of high pressures.

Pumping regularly and quickly, moving the lever from the bottom on the top.

Check the pressure shown in the gauge, and do not exceed the maximum pressure.

DISCHARGE THE PRESSURE

At the end of the test, you will have to relieve the pressure acting on the flyer's tap that is on the side of the pump body. Turning in anticlockwise way the faucet opens the valve by draining the emulsifiable oil (or water) through the drain hole, located under this tap.

From this hole ejects the liquid to the tank below.

Maintenance

Periodically lubricate the piston, clean the suction filter and valves.

Periodically check the pipe.

Use original parts and accessories and make do the repair by qualified personnel.

If you decide not to use the machine, it is recommended to keep it in any case out of the reach of children.

In case of scrapping, disassemble the machine and collect the homogeneous parts for disposal in accordance with local regulations.

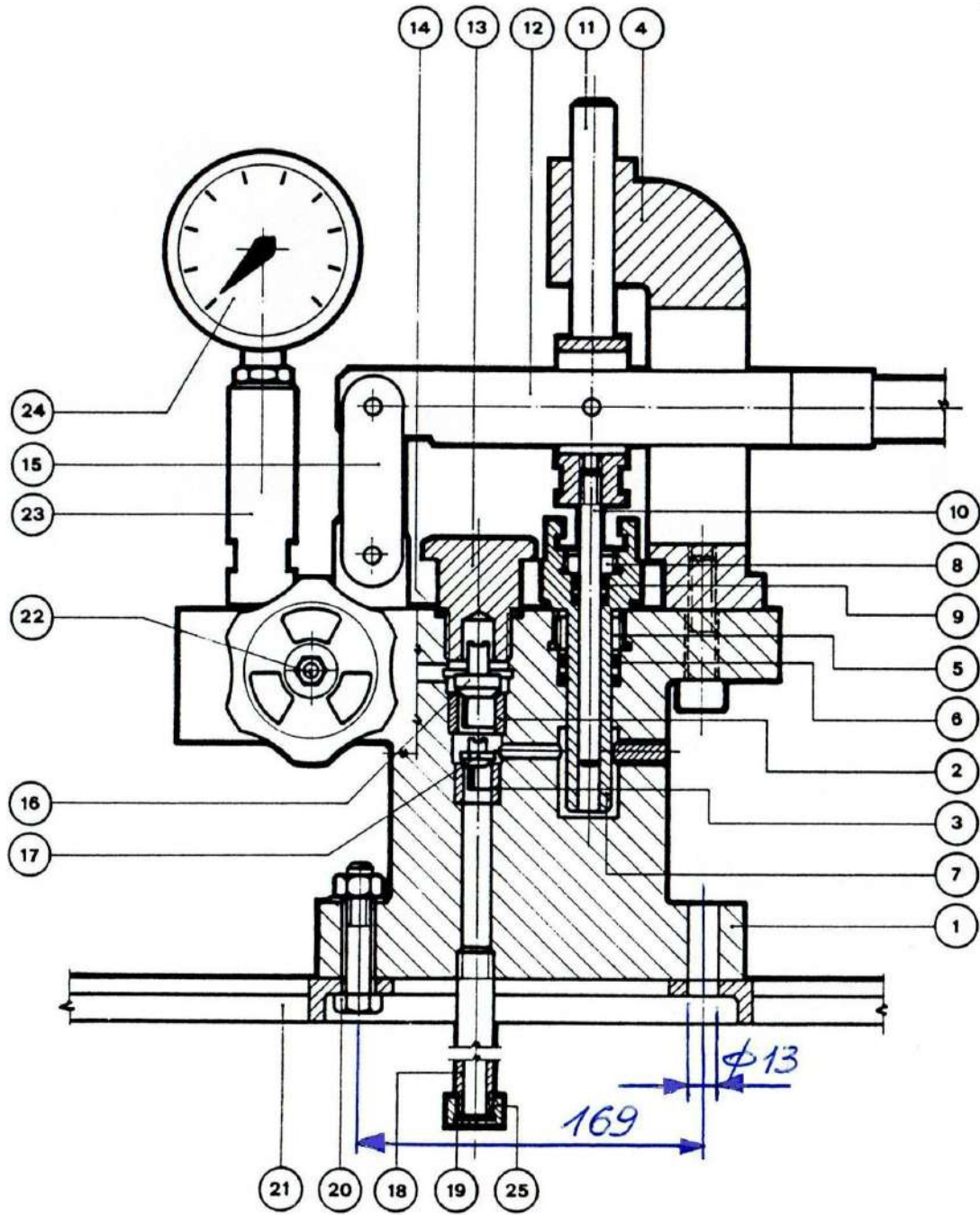
Do not use the parts scrapped as spare parts.

Warnings

- Use the pump only for the purpose for which it is intended and in full compliance with the general safety regulations. Be sure that the machine and all its parts are placed out of reach of children. Keep clean and well lit work area.
- Position the pump so that the filling of the system can be in operated safety. Do not use the pump resting on uneven surfaces or horizontal. Avoid working in hazardous environments (eg, in the presence of flammable liquids or gases).
- Use a clothing appropriate to the work to be performed. Do not use loose clothing, long hair pick, remove rings and necklaces.
- Ensure that there is an optimal grip of the handle. Do not work with greasy hands, if necessary, clean the handle before using the pump.
- Noise level during use is less than 80dbA

The manufacturer declines all responsibility for any damage that may arise from non-compliance with the intended use, the instructions and warnings contained in this document.

Spare Parts



Pos.	Description	Pos.	Description
1	Body pump	14	Seal cap
2	Seat upper shutter	15	Joint
3	Seat lower shutter	16	Higher shutter
4	Support	17	Lower shutter
5	Large packing gasket	18	Suction tube
6	Seal for large piston	19	Stainless steel filter
7	Large piston	20	Bolt
8	Small packing gasket	21	Tank
9	Seal for small piston	22	Faucet
10	Small piston	23	Gauge holder
11	Guide for piston	24	Pressure Gauge
12	Lever with handle	25	Filter cap
13	Plug		

Declaration of Conformity

MGF srl - Via Mendes, 8 - 43055 Mezzani (PR) - Italy declares that pressure testers art. 904700, 904800, 904900 are complying directive 2006/42/CEE.

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