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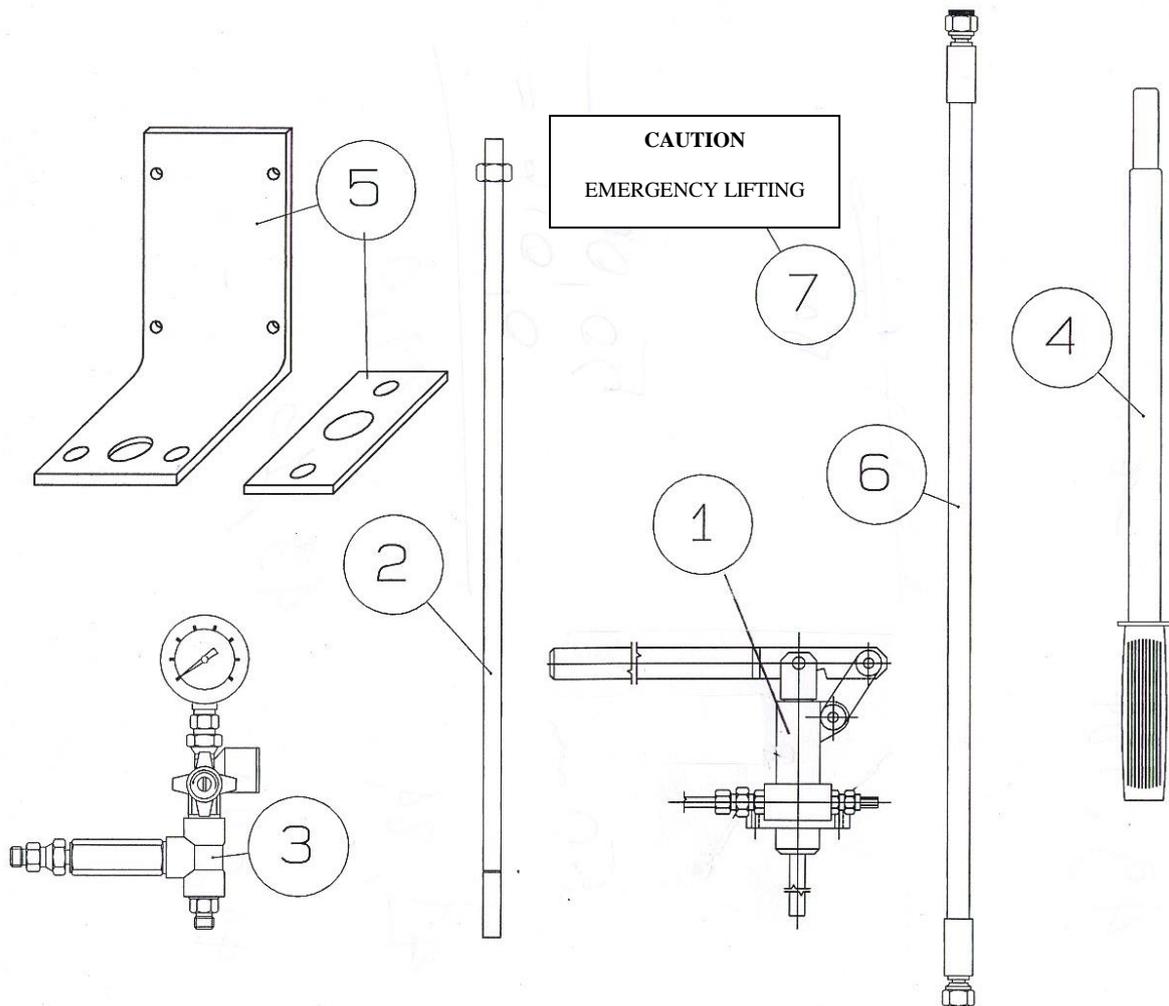
**INSTRUCTION MANUAL**  
**FOR THE MODIFICATION**  
**OF EXISTING SYSTEMS**

**ASSEMBLY KIT FOR HAND PUMP**

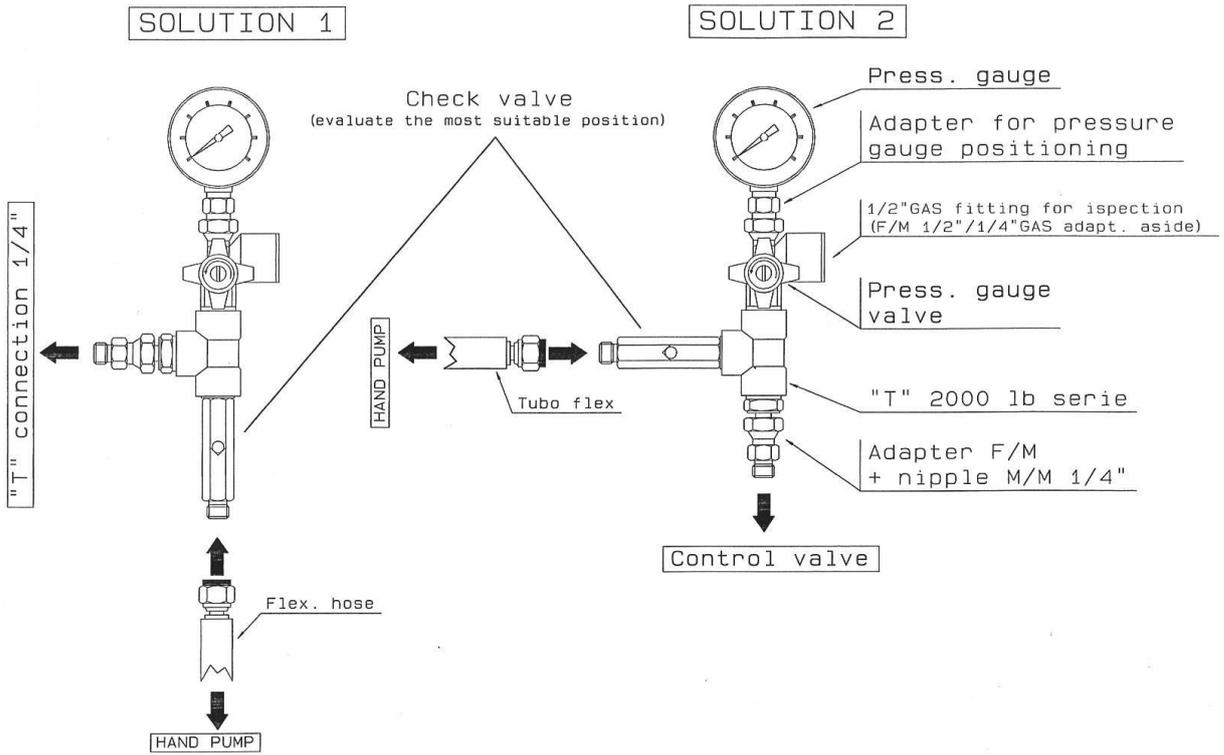
**CODE HF - 699001G07**

## **MATERIALS SUPPLIED IN THE KIT**

- Hand pump (part N. 1), suction pipe L=800 mm (part N. 2).
- Hose type SAE 100 R1AT 1/4" L=800 mm to connect the hand pump / non-return valve (part N. 6).
- Fittings for pressure gauge with valve, 1/2" or 1/4" fitting for inspections (1/2" - 1/4" M/F Adapter + sealing ring in a separate package), check valve, F/M 1/4" swivel fitting, 1/2" T-fitting (part N. 3 at page 3).
- Lever actuating the hand pump (part N. 4).
- Package with connecting screws, bulkhead fitting.
- Brackets for fastening the hand pump to the power unit (part N. 5).
- Hydraulic diagram.
- "Caution emergency lifting" hand pump tag (part N. 7).
- Instruction reference manual for the modification of existing systems.



# Valve-pressure gauge assembly



### **Field of application**

The hand pump must be connected to the circuit between the check or descent valve and the gate valve.

The hand pump is equipped with a relief valve that limits the pressure to 2.3 times the maximum static pressure.

This assembly kit (code 699001G07 hand pump) can be mounted on all types of hydraulic power units, both with the valve assembly inside and outside the fluid tank.

For HYDRONIC 300  $\leq$  0.63 m/s type power units, the relevant hand pump kit can be ordered using the code 699001G06.

On the following pages two kit installation examples for power units present on the market.

## **WARNING**

An incorrect installation of the device may cause uncontrolled movements of the system.

In case of leaks or malfunctioning, immediately stop the system and check once again the correct installation and operation of the valve-pressure gauge assembly.

Carry out the hand pump check and activation procedure (page 7).

If necessary contact Hydronic Lift S.p.A., using the following phone numbers or e-mail address, for any clarification.

## **Hydronic Lift S.p.A.**

Tel.: 0332.773134

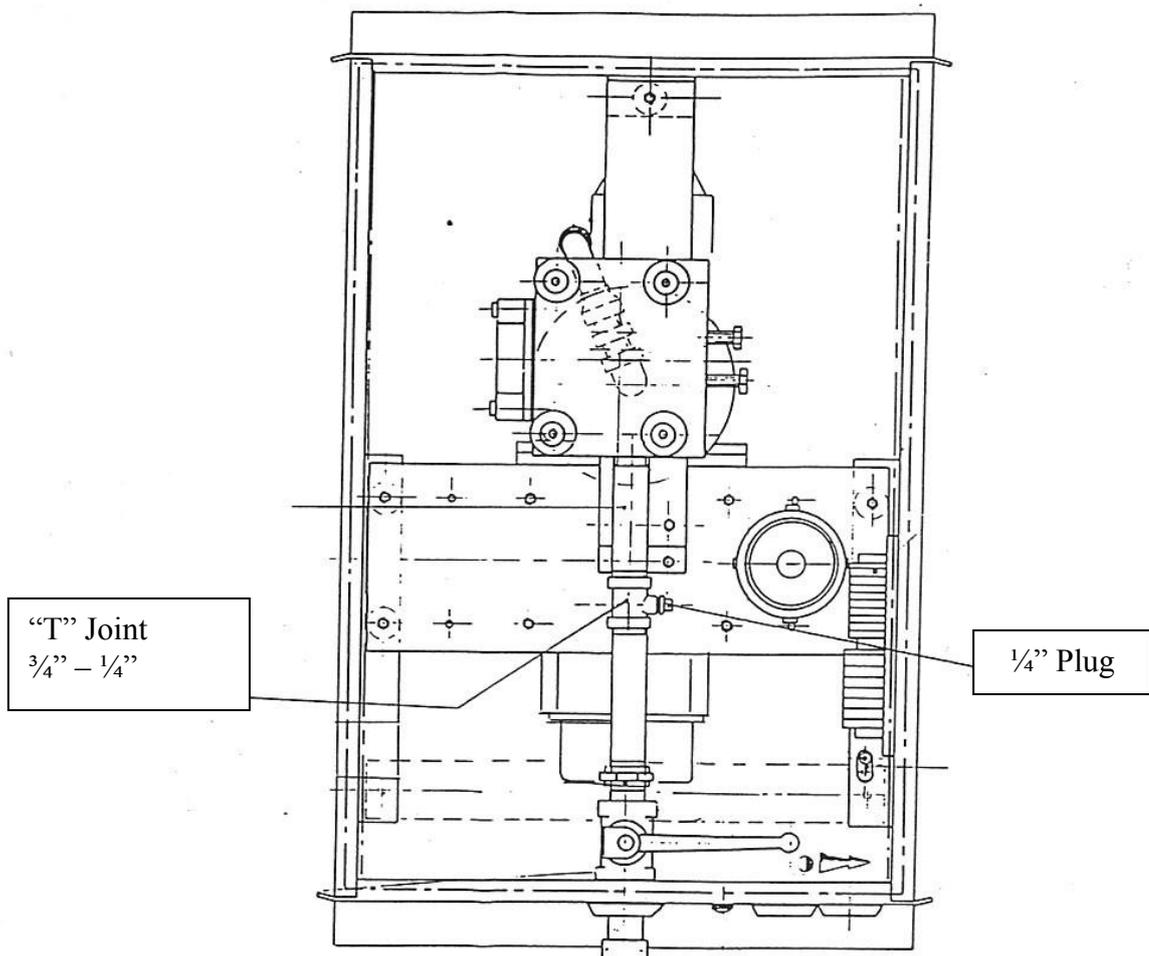
Fax: 0332.773157

E-mail: [hydronic@hydroniclift.it](mailto:hydronic@hydroniclift.it)

## HAND PUMP KIT ASSEMBLY INSTRUCTIONS

### F229 - COAM Systems

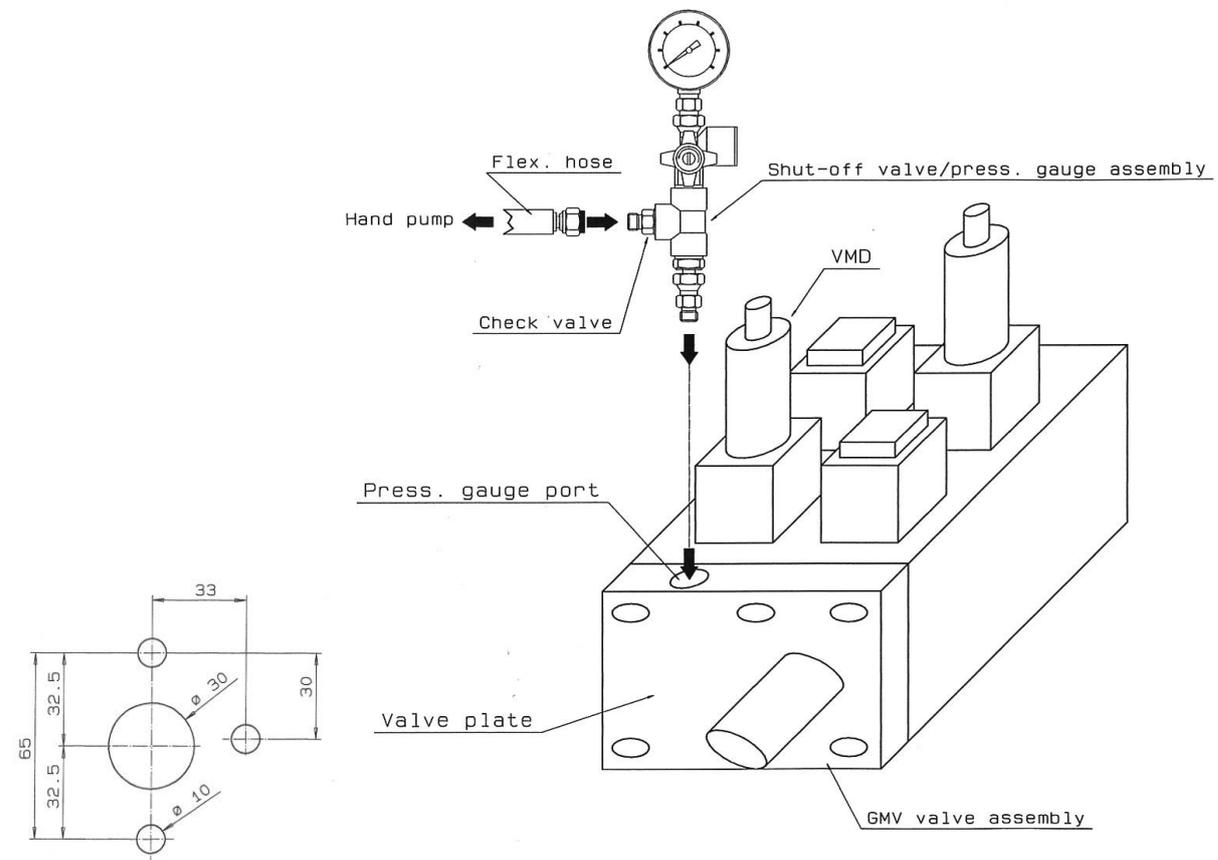
1. Drive the lift car down to the ground floor, completely closing the shut-off valve during the down run, to discharge the pressure in the valve.
  2. Open the pressure gauge valve.
  3. Make the system safe, by turning off the general switch.
  4. Evaluate the best position for the valve-pressure gauge assembly on the 3/4"/1/4" T-fitting, considering the possibility of turning around the check valve using the 1/4" swivel fitting to be able to position the assembly for easy operation.
  5. Unscrew the 1/4" cap from the T-fitting (see drawing 1).
  6. Fit the valve-pressure gauge assembly to the 3/4"/1/4" T-fitting.
  7. Evaluate the best position for the assembly. Consider the ease of operation when actuating the hand pump, with possible interference between the lever and the edge of the fluid tank. Also make sure that the connecting hose easily reaches the hand pump and the check valve.
  8. Drill holes in the fluid tank to attach the bracket supporting the hand pump, making sure of placing magnetic strips and a clean cloth under the holes to prevent any chips from falling inside the tank.
- NOTE: Make sure you do not drill holes below the max. fluid level.
9. Fasten the bracket to the fluid tank using M6x30 screws, nuts and washers provided with the kit.
  10. Take the rigid loading pipe and fit it to the proper fitting on the pump body, making sure that the gasket seals tight to prevent air from seeping inside.
  11. Fasten the hand pump body to the bracket using two M8 x 25 screws and flat washers.
  12. Screw the hose on the valve-pressure gauge assembly (on the side of the non-return valve) and connect it to the hand pump making sure that the pipe is not bent or pinched shut.
  13. Proceed to check and activate the system (see page 7).



## HAND PUMP KIT ASSEMBLY INSTRUCTIONS

### GMV systems

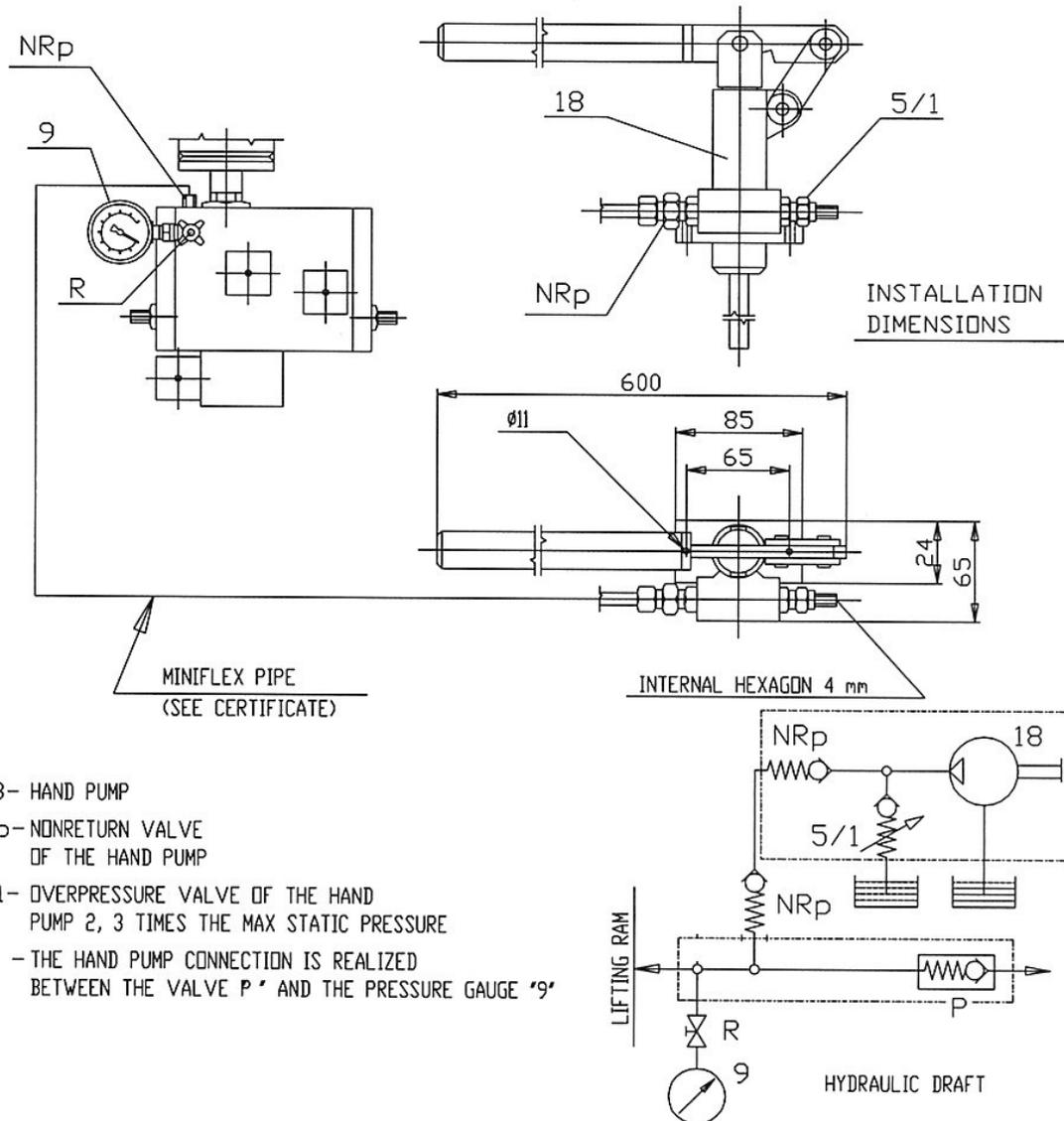
1. Drive the lift car down to the ground floor, completely closing the shut-off valve during the down run, to discharge the pressure in the valve.
2. Discharge the pressure from the valve by pressing the VMD solenoid valve pushbutton (see drawing 2).
3. Make the system safe, turning off the general switch.
4. Remove the pressure gauge fitted to the power unit and the shut-off valve, if any.
5. Install the valve-pressure gauge assembly in place of the old pressure gauge (see drawing 2), taking care of tightening the swivel fitting on the T-fitting, according to the design. If necessary, remove the VMD solenoid valve temporarily, to make it easier to install the new valve-pressure gauge assembly.
6. Tighten all fittings.
7. Remove the cover from the power unit and drill holes to attach the hand pump, providing suction and draining holes (see drawing at bottom of page).
8. Clean the cover, making sure that any burr is removed.
9. Place the hand pump and fasten it to the fluid tank cover using the flat bracket (part N. 5, page 2) (drawing 3, page 8, pos.1).
10. Take the rigid loading pipe and fit it to the proper fitting on the pump body, making sure that the gasket seals tight to prevent air from seeping inside.
11. Close the fluid tank.
12. Screw the hose on the valve-pressure gauge assembly and connect it to the hand pump making sure that the pipe is not bent or pinched shut.
13. Proceed to check and activate the system (see page 7).



**DRAWING 2**

## CHECKING AND ACTIVATING THE HAND PUMP

TECHNICAL DATA: FLOW RATE FOR EVERY CYCLE 12 cm<sup>3</sup>  
MAX. ADMISSIBLE PRESSURE 110 bar



### NOTES FOR THE HAND PUMP REGULATION SET

- BEFORE GIVING TENSION TO THE MOTOR, IT IS NECESSARY TO ACTUATE THE HAND PUMP, IN THE FOLLOWING WAY:
  - LOOSEN THE SCREW N°5/1 (ACTING ON THE HEXAGONAL NUT IN ORDER TO KEEP CONSTANT THE PROTRUDING LENGTH OF THE NUT SCREW) FOR ABOUT 2 ÷ 5 TURNS.
  - OPERATE THE HAND PUMP IN ORDER TO OBTAIN THE OIL FLOW IN A REGULAR WAY (NO AIR), FROM THE N°5/1 SCREW OUTLET.
  - BRING BACK THE N°5/1 SCREW IN THE ORIGINAL POSITION, VERIFYING THE PRESSURE VALUE SET BEFORE (2, 3 TIMES THE MAX. STATIC PRESSURE).
  - FOR DIFFERENT PRESSURE VALUES, SET THE N°5/1 SCREW (ROTATING CLOCKWISE THE PRESSURE INCREASES)

### DRAWING 3

*Suggested positions for hand pump/bracket fastening*

