

# CONTROL PANELS OPERATING INSTRUCTIONS



Manufactured by

# TECAPRES®



Service and distribution in  
countries D, A and CH by

# STRACK®

# NORMALIEN

### Control panels SN 2960 / SN 2962 / SN 2963 / SN 2965

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### Control panels SN 2960 / SN 2962 / SN 2963 / SN 2965

## Safety instructions

Please absolutely observe!



Please read and observe the following operation instructions before installation and start-up and all further works with the control panel SN 2960 / SN 2962 / SN 2963 / SN 2965.

Special designs of the STRACK control panels must be used according to these operating instructions. Upon release of a new version, these operating instructions lose their validity.

### **ATTENTION!**

If the control panel is improperly used or dismantled, the following things threaten:

- Risks to health,
- Dangers for the product and other assets of the user,
- Dangers for the efficiency of the product,
- Loss of warranty.

During all works with the STRACK control panel, the applicable operating safety regulation paragraph 3 must be considered.

Press, tool and peripheral equipment must be suitable, prepared and adapted for the use of the control panels.

Damaged components may not be reused.

The exchange of individual components must be discussed with STRACK.

### Control panels SN 2960 / SN 2962 / SN 2963 / SN 2965

## After receipt of delivery

Examine the delivery for external damages before opening.  
Please immediately submit a complaint to the transport company which delivered the consignment in the event of damage.

Compare the content of your delivery with the bill of delivery respectively ensure that all parts are included and unpacked.

**Only then dispose the transport- and packing material.**

In the case of damages to the content without externally visible damage of the packaging, please do not send it back for repair or replacement.

Please contact STRACK NORMA GmbH & Co.KG in Lüdenscheid to get further information:

**Phone: +49 2351 / 8701 - 0** (head office)

## Control panels SN 2960 / SN 2962 / SN 2963 / SN 2965

### 1. Features

Differently charged gas springs can cause a canting of the tool.

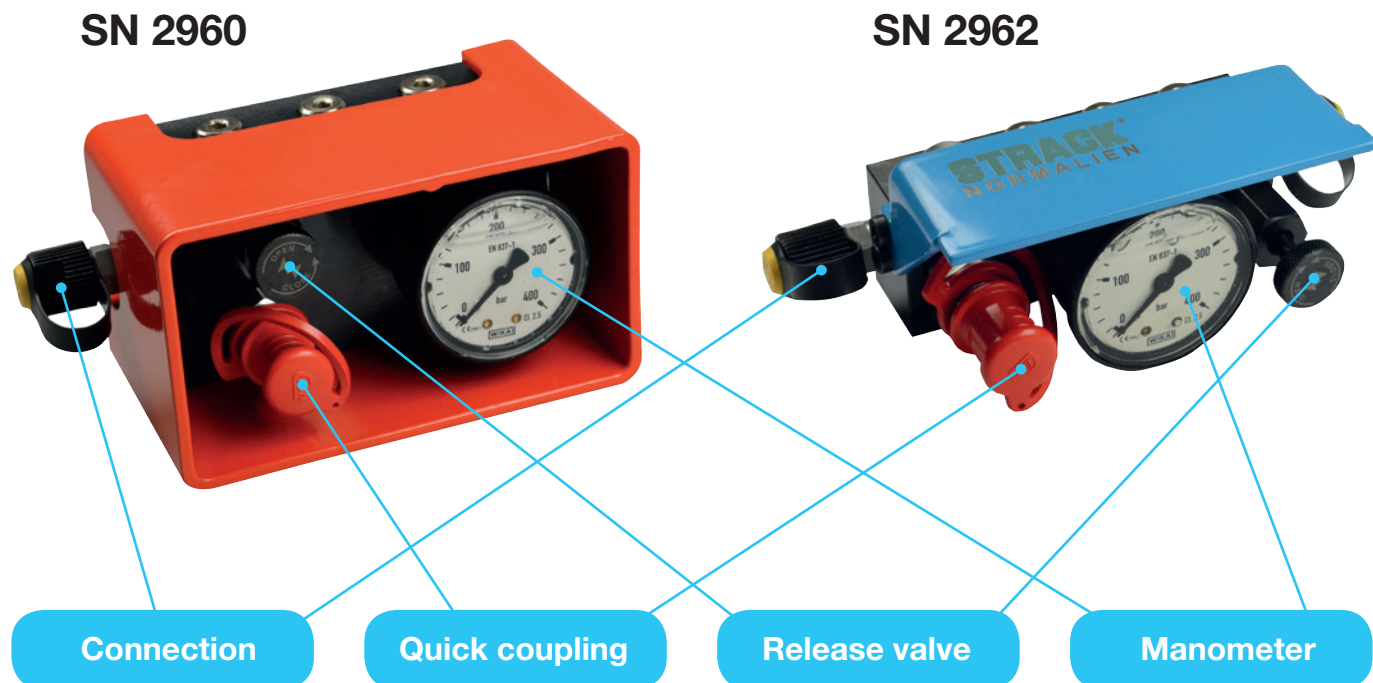
By connecting of the gas springs with high-pressure hoses, it is guaranteed that all gas springs have the same pressure.

Due to a control panel (SN 2960 / SN 2962 / SN 2963 / SN 2965) fitted on the tool, all gas springs are simultaneously filled or released.

By using the manometer in the control panel, the filling pressure can be controlled at each time.

### 2. Types

The program of STRACK NORMA includes different types for such applications.

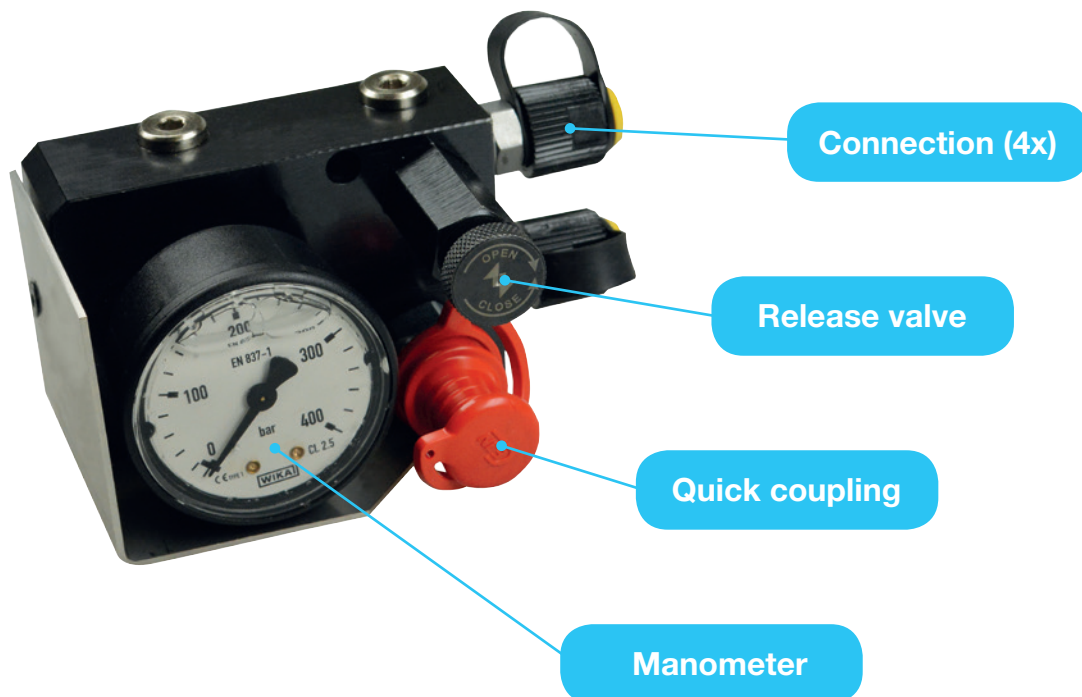


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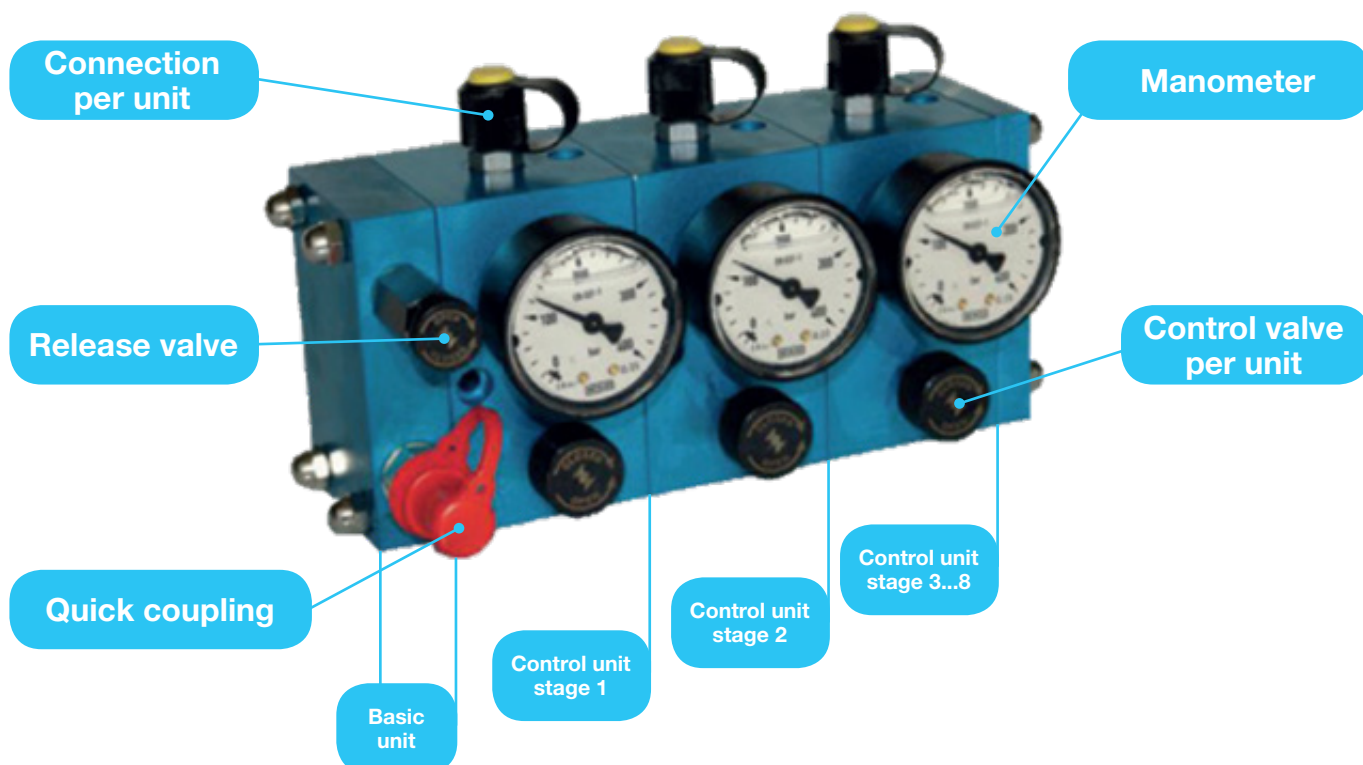
## Control panels SN 2960 / SN 2962 / SN 2963 / SN 2965

### SN 2963



### SN 2965

This multi-control panel has 2 up to 8 connection possibilities and can call the pressure at individual gas springs.



## Control panels SN 2960 / SN 2962 / SN 2963 / SN 2965

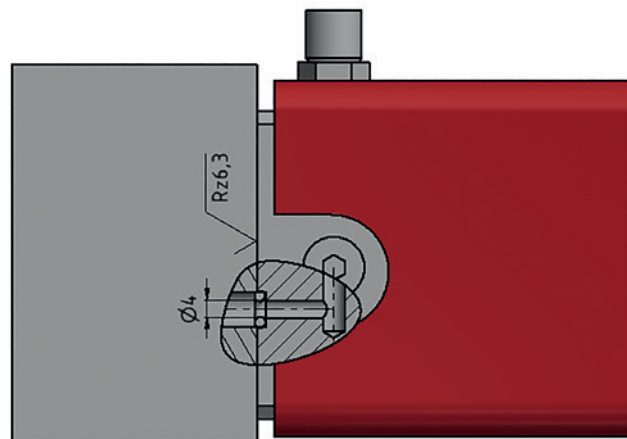
### 3. Installation

The control panels SN 2960 / SN 2962 / SN 2963 and SN 2965 can be connected with a plate by means of screw-fixing.

During the installation of the control panel in the upper part of the tool, the screws must be secured with screw-locking adhesive (medium-strength) due to arising vibration exposure.

#### 3.1 Installation with special design

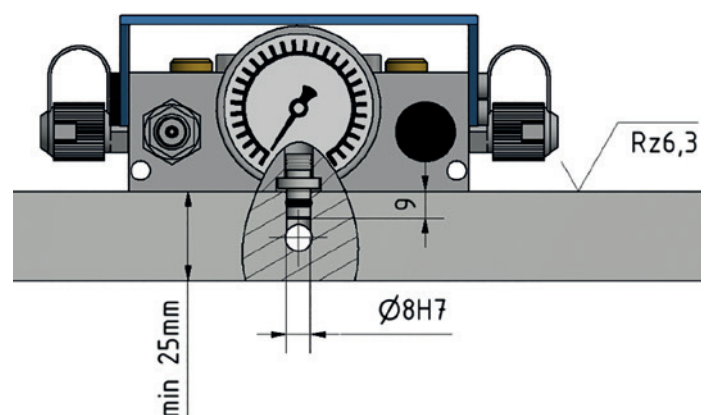
##### 3.1.1 SN 2960



During the installation of a special design, the panel is also fixed by means of screw bore holes, the filling of the plate is effected by means of the boring in the rear side (example at SN 2960).

##### 3.1.2 SN 2962

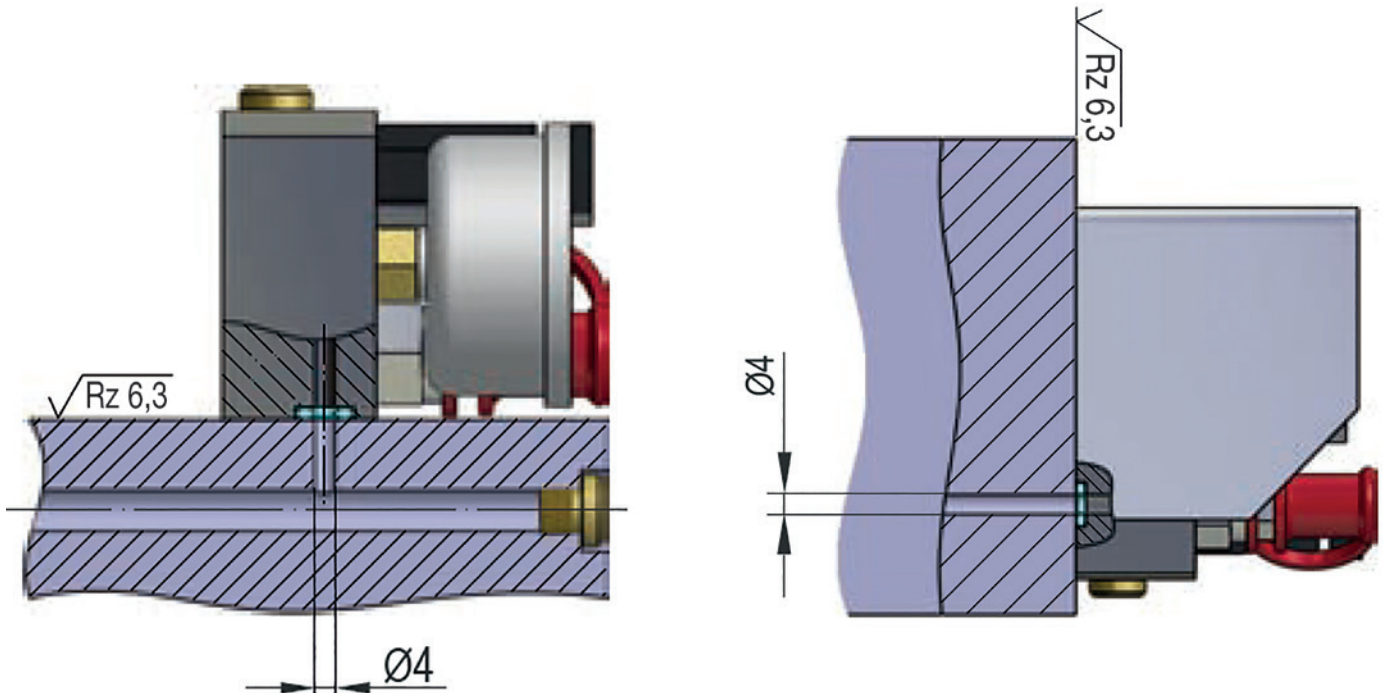
Here the filling of the plate is effected by means of an additional connecting piece.



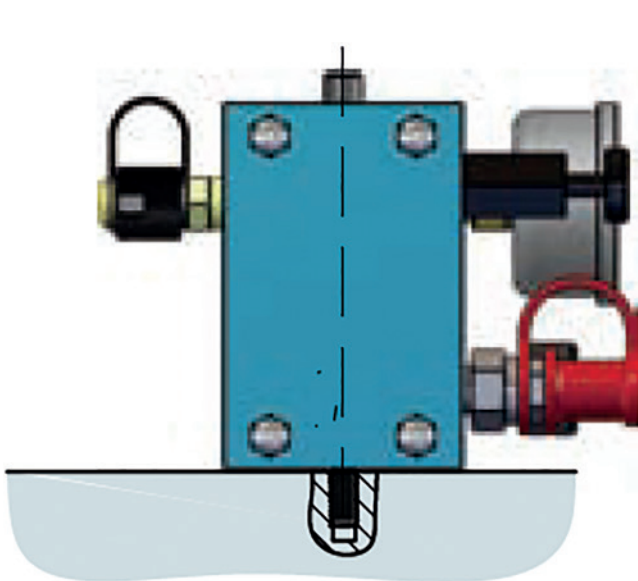
## Control panels SN 2960 / SN 2962 / SN 2963 / SN 2965

### 3.1.3 SN 2963

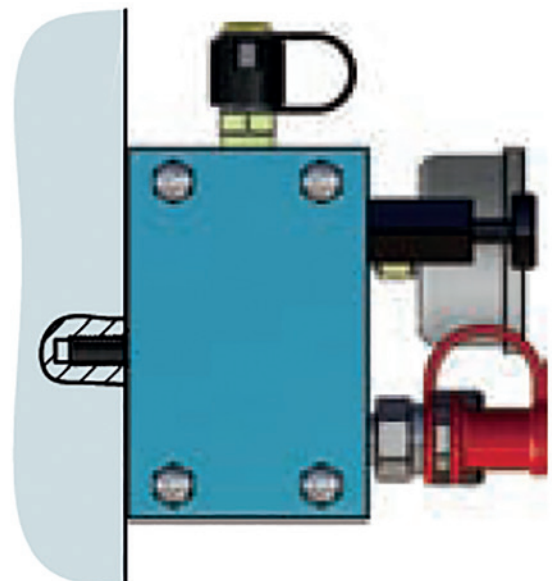
The filling of the tankplate over the control panel SN 2963 can be effected as well as it is the case at the control panel SN 2960 by means of a boring with o-ring sealing directly on the plate.



### 3.1.4 SN 2965



Horizontal fixing of the control panel SN 2965 with safety valve on the rear side.



Vertical fixing of the control panel SN 2965 with safety valve on the upper side.



## Control panels SN 2960 / SN 2962 / SN 2963 / SN 2965

### 4. Initial set-up

#### 4.1 Filling of the system pressure

At the initial start-up after the installation of the STRACK nitrogen gas spring systems, the system must be filled.

Proceed as follows:

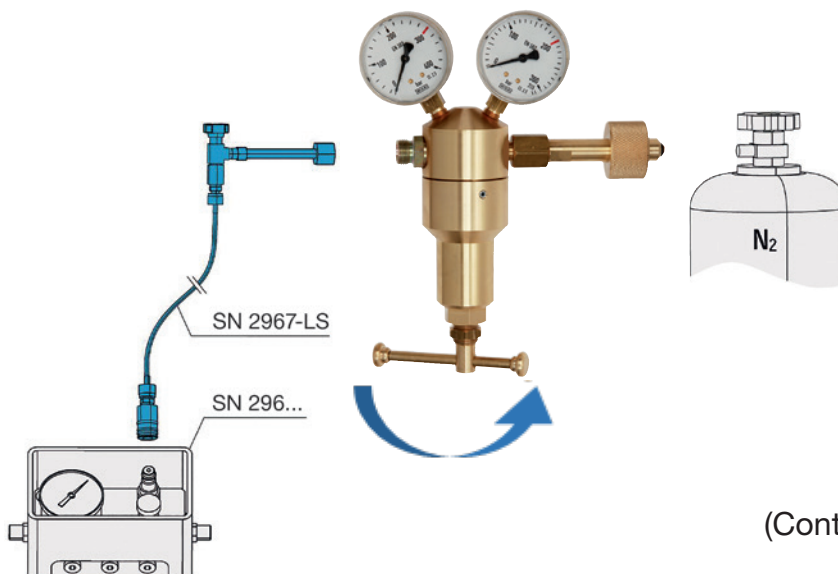
**ATTENTION!** During all works at the STRACK nitrogen gas spring system, the applicable operating safety regulation paragraph 3 must be considered. The initial start-up and operation of the STRACK gas spring system must exclusively be done by personnel which has been trained and instructed by STRACK.



1. Drive the press in the top dead centre and stop it there.
2. Close the release valve of the used control panel.



3. Connect the charging hose SN 2967 LS on the one side with the quick coupling of the control panel and on the other side with the pressure reducer of the nitrogen bottle. Adjust the pressure reducer to maximal gas spring filling pressure, e.g. 150 bar.



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4. Open the shut-off valve of the nitrogen bottle.
5. Open slowly the valve (1) at the charging hose.



Now fill the whole system with nitrogen. After the piston rods are completely extended, you can continue to open the valve (1) at the charging hose to accelerate the charging process.  
Adjust the pressure how you need it later.  
This pressure must lie between 50 and 200 bar.  
Observe that the system pressure can slightly decrease after the initial filling due to system constraints.

6. Close the valve (1) at the charging hose (2) as well as the valve at the nitrogen bottle.
7. Decouple the charging hose from the control panel.

Now the system pressure is the same in all gas springs.

### NOTE



Decouple the nitrogen bottle during the operation of the gas spring system.

## 4.2 Modification of the system pressure of the gas springs

The control panels allow a simultaneously control of several gas springs.

## Control panels SN 2960 / SN 2962 / SN 2963 / SN 2965

### 4.3 Release of the pressure at a gas spring bloc

Now open slowly the release valve and observe the manometer of the gas spring, which should be reduced in pressure.

Close the release valve at the desired pressure.

#### ATTENTION!

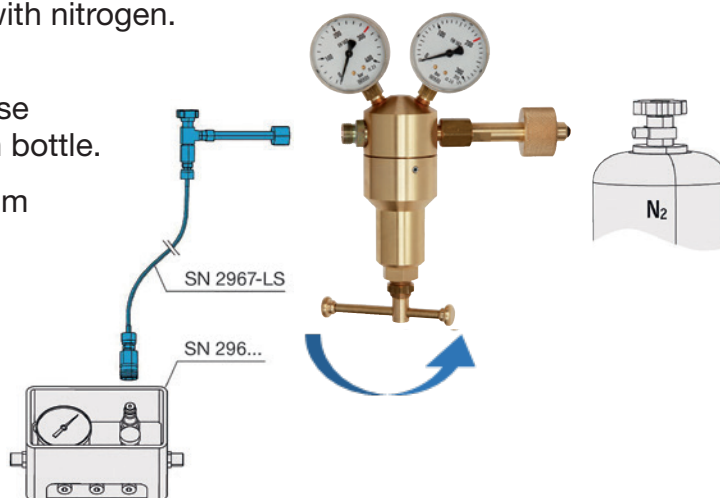
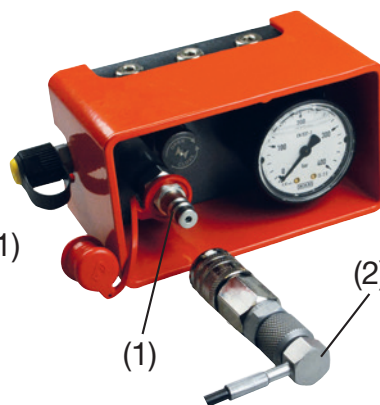


Please consider the respective indicated minimal- and maximal filling pressure for the gas springs contained in the catalogue.

Now the gas spring has the selected initial force.

### 4.4 Increase of the pressure at a gas spring

- Connect the charging hose (a) of the charging equipment SN 2967-LS including the pressure reducer and the nitrogen bottle closely to the filling valve (quick coupling) (1) of the control panel SN 2960.
- Open the release valve of the nitrogen bottle.
- Open slowly the valve at the charging hose. Now fill the selected gas springs with nitrogen. (Force see table in annex)
- Close the valve at the charging hose as well as the valve at the nitrogen bottle.
- Decouple the charging hose (2) from the control panel.



#### NOTE



If the control panel SN 2960 is equipped with a pressure controller, disturbances can occur, if the adjusted pressure at the control panel is under the adjusted minimum pressure of the pressure controller. Thus, the press can be blocked.

In such a case, you have either to increase the pressure again or to adjust the pressure controller to this new value.

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