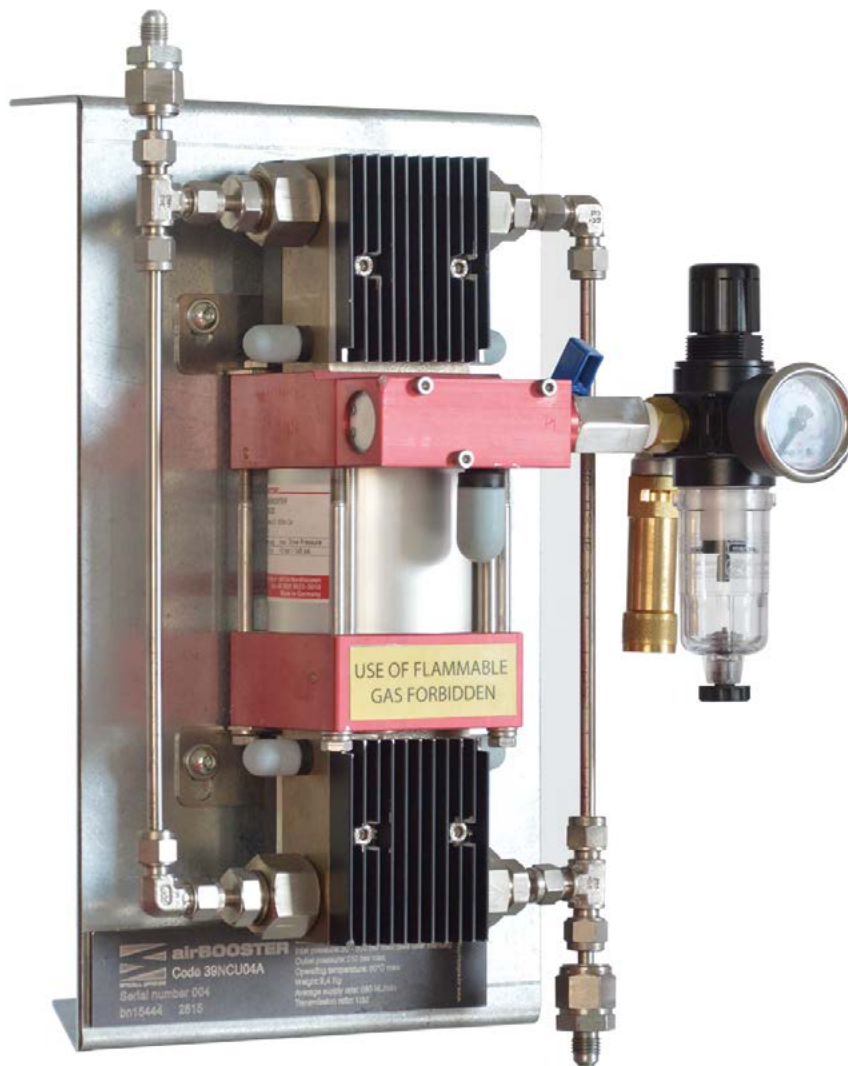


Pneumatic booster for charging nitrogen gas



Code

39NCU04A - with bottle adapter for : CHINA - SOUTH COREA

39NCU05A - with bottle adapter for : JAPAN - INDONESIA

39NCU06A - with bottle adapter for : GERMANY

39NCU07A - with bottle adapter for : FRANCE

39NCU08A - with bottle adapter for : INDIA

39NCU09A - with bottle adapter for : RUSSIA

39NCU26A - with bottle adapter for : USA

39NCU27A - with bottle adapter for : USA

39NCU28A - with bottle adapter for : SPAIN

Compact and portable pneumatic booster for the filling of self-contained nitrogen gas cylinders and linked systems

TECHNICAL DATA

Inlet air pressure 1 - 6 bar / 14,5 - 87 psi

Safety relief valve 210 bar

Nitrogen inlet pressure 30 - 300 bar / 436 - 4351 psi (see note)¹⁾

Nitrogen output maximum pressure 210 bar / 3045 psi (see note)²⁾

Average supply flow 280 NL / min (see note)³⁾

Compression ratio 1: 32

Compressed volume per cycle - double effect 11,6 cm³ / 0,7 in³

Maximum working temperature 60 °C

Dimensions 270 x 350 x 230 ca.

Weight 9,4 Kg

note

- 1) The use of nitrogen bottle with pressure 210 - 300 bar is **ONLY** allowed in combination with pressure reducer - code 39RP.. (see fig IV)
- 2) This value is intended with inlet maximum nitrogen pressure of 210 bar
- 3) The average flow is related to the inlet compressed air value

THE SUPPLY INCLUDES

- I) Pneumatic booster with nitrogen bottle mounting support
- II) Connecting hose for nitrogen bottle with discharging valve - length 1m
- III) Nitrogen bottle connections (specific for country of destination - 1 pz)

I



II



III



OPTIONAL

- IV) Pressure reducer with nitrogen bottle connection specific for country of destination

IV



DESCRIPTION OF THE SYSTEM

Hose for connecting nitrogen bottle

Nitrogen bottle connection
(specific for country of destination)

Pneumatic booster

Nitrogen bottle
(not included)

Discharging valve for nitrogen

Nitrogen pressure reducer (optional)

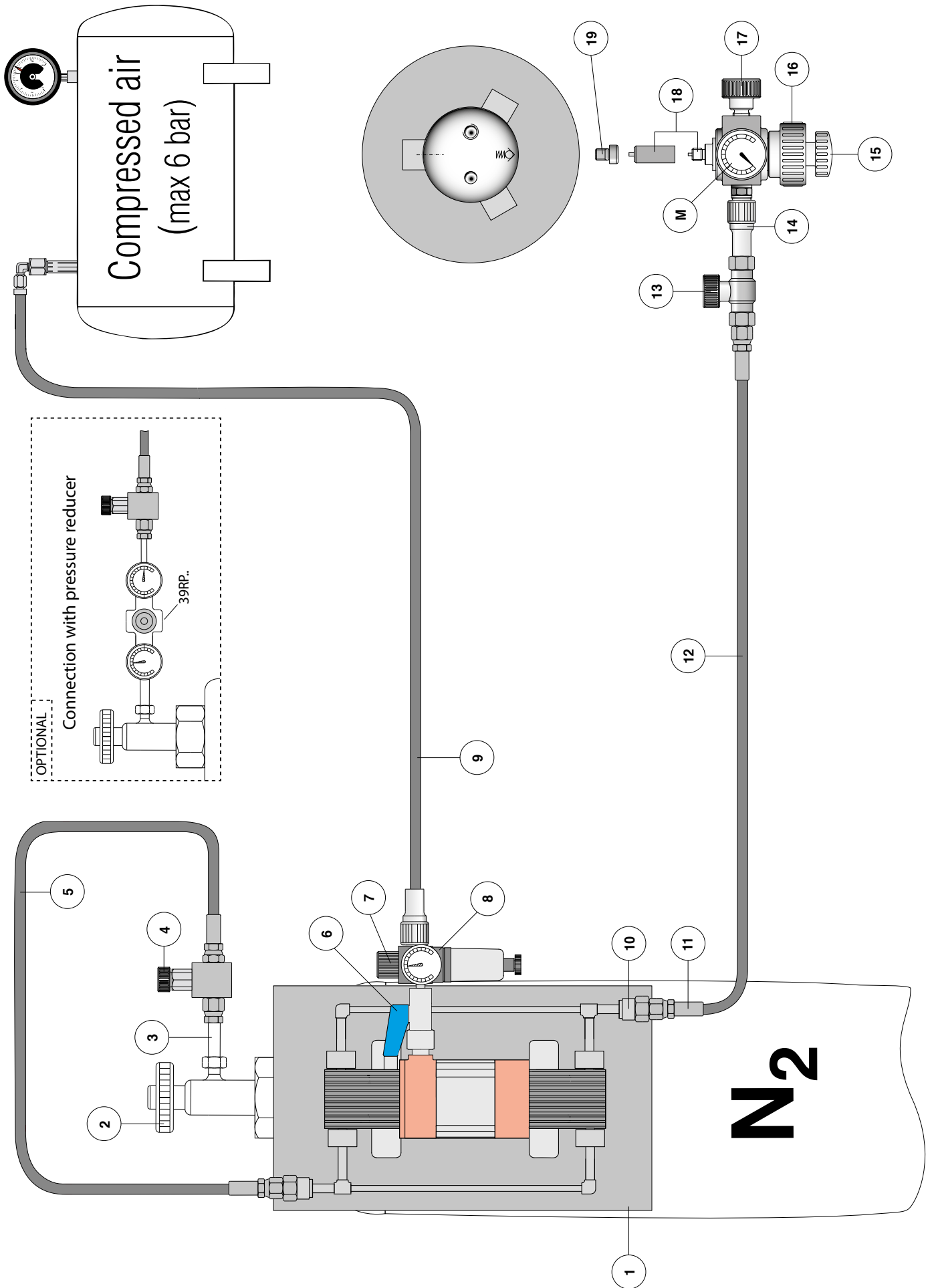
Compressed air hose
(not included)

39DMCPVA
(not included)

39DMCILA
(not included)



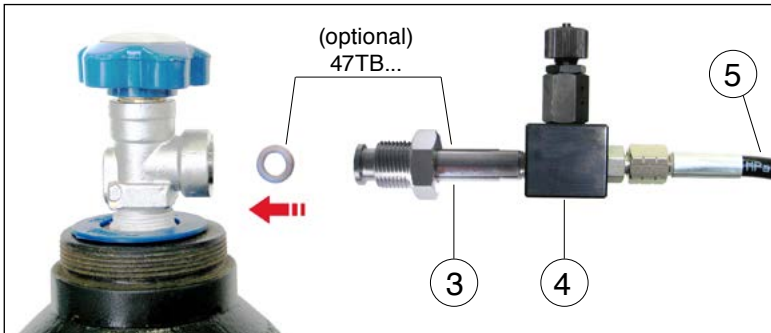
CONNECTION SCHEME FOR CHARGING SELF-CONTAINED CYLINDERS



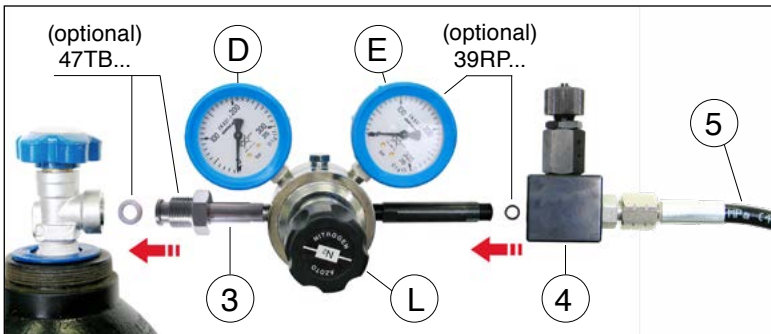
INSTRUCTION FOR CONNECTING THE PNEUMATIC BOOSTER



Position the support plate (1) with the mounted booster on the nitrogen bottle.



For direct connection, connect the hose (5) with discharging valve (4) and the adapter (3) - code 47TB... (specific for country of destination) on the nitrogen bottle.



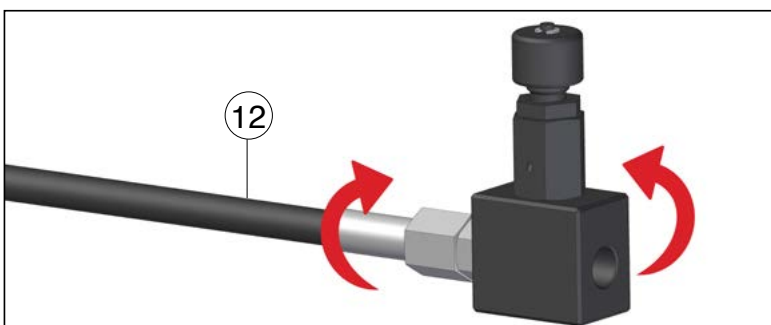
OPTIONAL CONNECTION*

For a easy functioning, it is recommended to connect the hose (5) with the discharging valve (4) to the pressure reducer - code 39RP... (optional) - connected to the nitrogen bottle with the adapter (3) code 47TB... (specific for country of destination).

*Suggested mounting

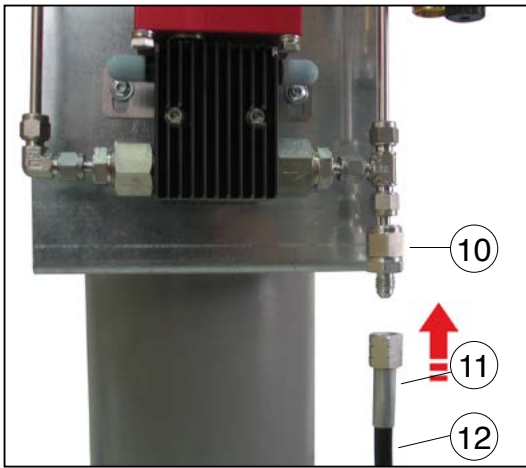


For adjusting the pressure output from the bottle, turn clockwise or counterclockwise the knob (L) of the pressure reducer up to desired pressure value which is indicated on the gauge (E). The gauge (D) shows pressure in the bottle.

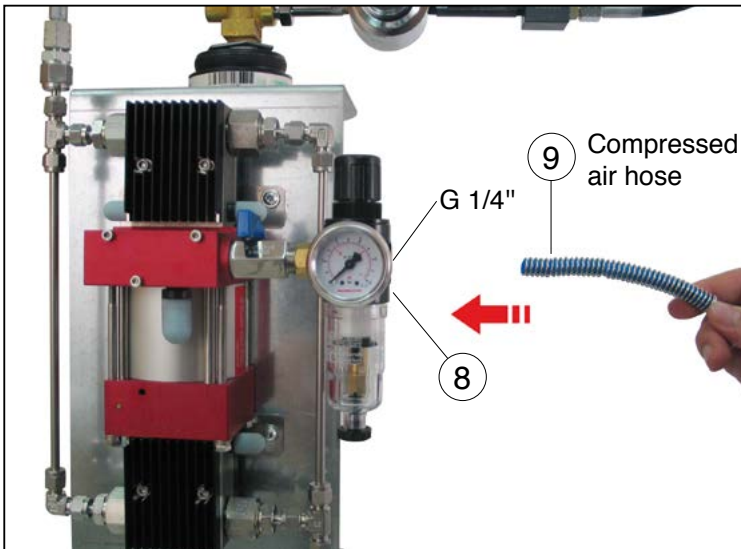


From the hose (12) of the charging device 39DMA, unscrew the distribution block with the gas venting valve.

Connect the adaptor (11) type 7/16-20 UNF of the hose (12) to the connector (10) type 7/16-20 UNF of the booster unit.

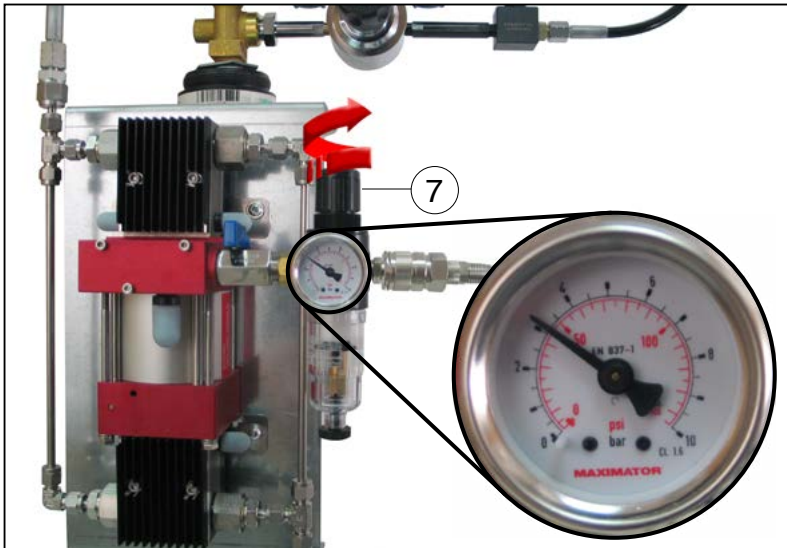


Connect the hose of compressed air (9) with the air unit (8) through the connection hole G1/4".



Inlet AIR pressure
1 - 6 bar / 14,5 to 87 psi max.

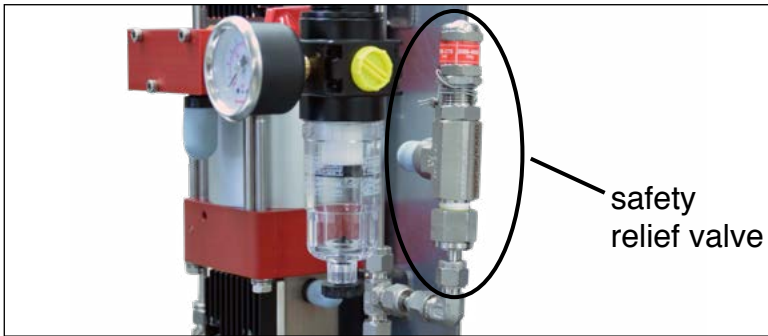
INSTRUCTION FOR CHARGING SELF-CONTAINED CYLINDERS



Through the air pressure regulator (7) set first the compressed air pressure approx. 2 ÷ 3 bar, and then depending from the nitrogen gas pressure in the bottle and the speed of charging, adjust the air pressure up to 6 bar max.



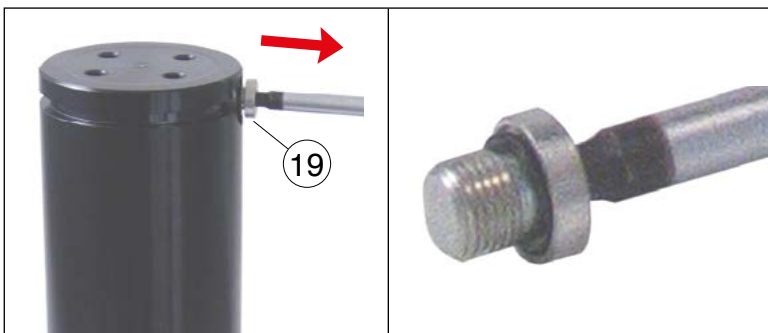
Pull the knob (7) **upwards** and turn it **clockwise** to increase the pressure. Rotate **counterclockwise** to decrease the pressure, push down to lock the knob (7).



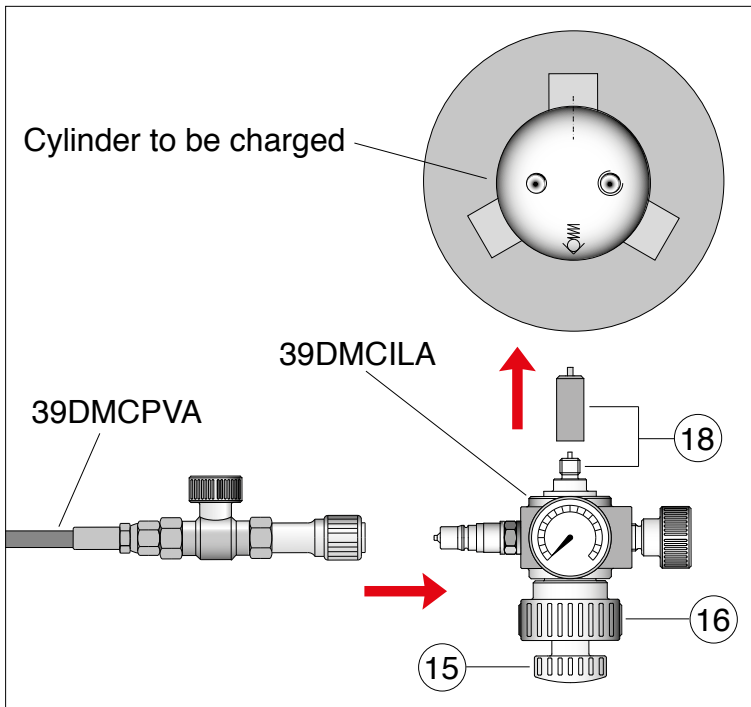
The pneumatic booster is equipped with a safety relief valve 210 bar.



Extract the piston rod from the cylinder body and place it upside down in a self-centering holder.



Remove the plug (19) from the gas port of the cylinder.



I) Connect devices 39DMCILA and 39DMCPVA.

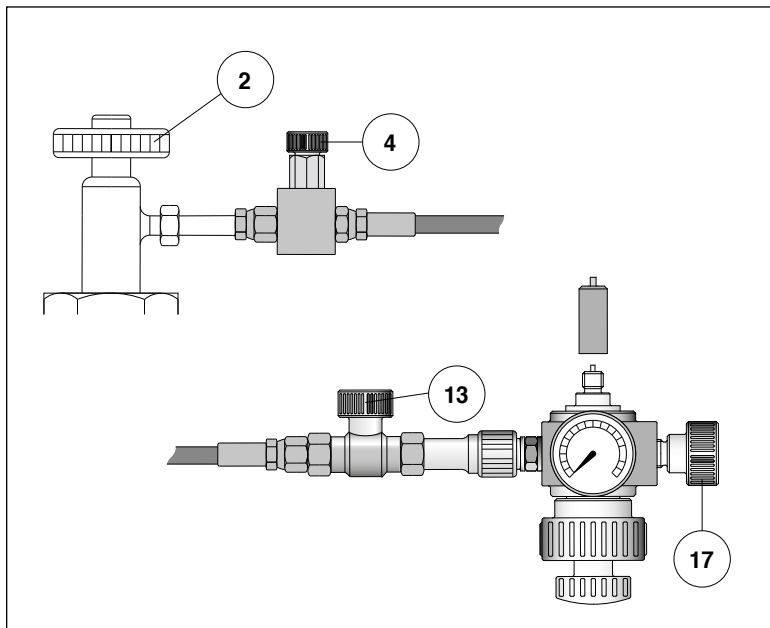
II) Turn counterclockwise the knob (15) of 39DMCILA device until it stops.

III) Through the knob (16) screw the adapter (18) on the cylinder charging port.



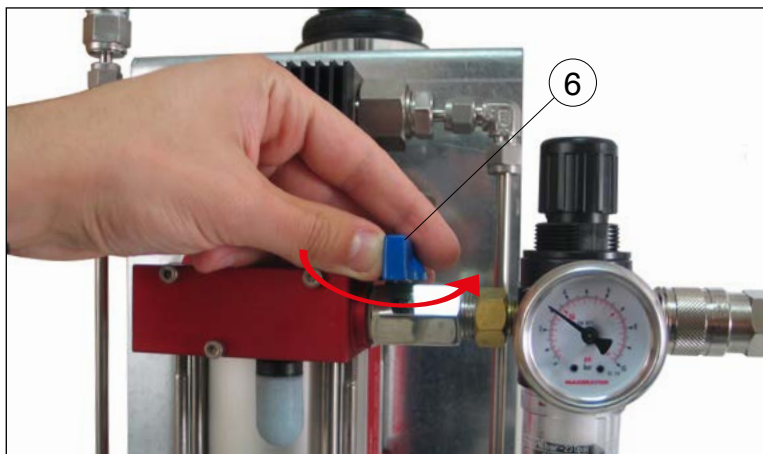
Select and use the adapter (18) suitable for the cylinder.

See instruction sheet of the 39DMA set and available also on the section of maintenance manuals of the website www.specialsprings.com



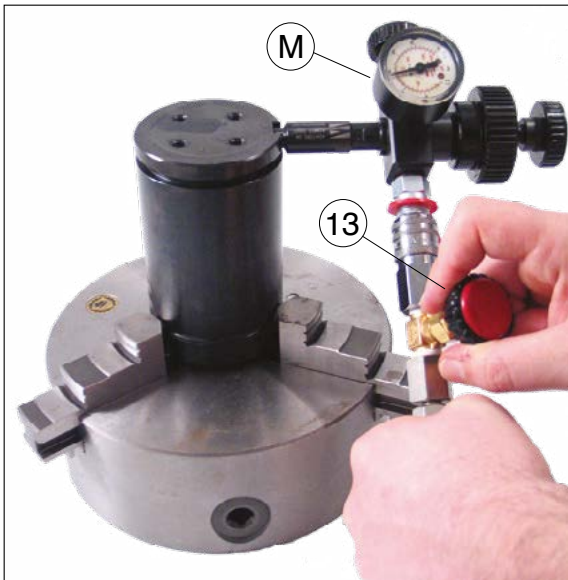
I) Make sure that venting valves (4), (17) and valve (13) are closed.

II) Slowly open the valve (2) of the nitrogen bottle.

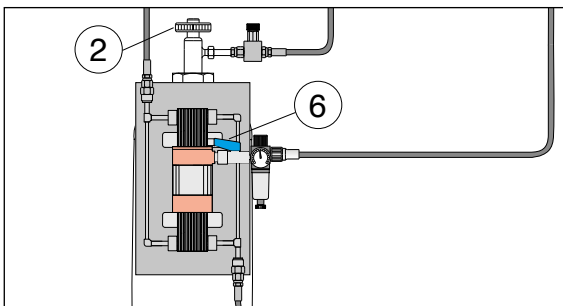


Activate the pneumatic booster by opening the valve (6).

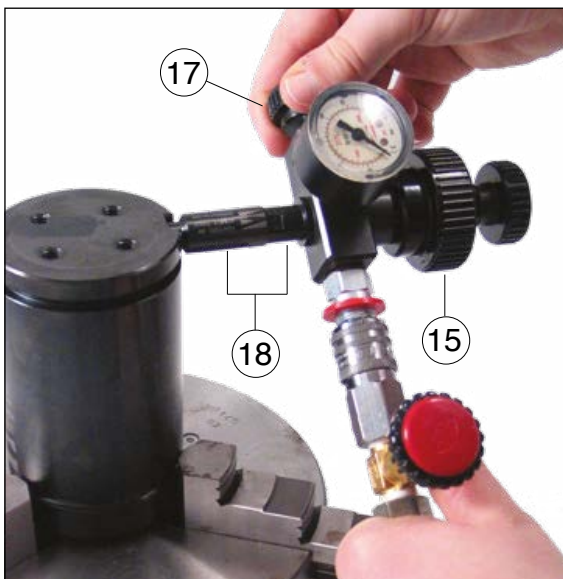
The booster unit will begin to pressurize the nitrogen gas.



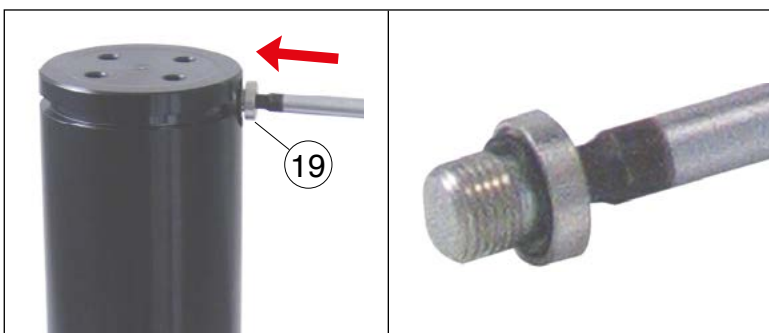
- I) Slowly open the valve (13) up to the desired pressure. Read the pressure value on gauge (M).
- II) Reached the desired pressure, close the valve (13) and the valve (6) of the booster.
- III) At the end, turn off the valve (2) of the nitrogen bottle.



Always verify the maximum charging pressure allowed before charging the cylinder.



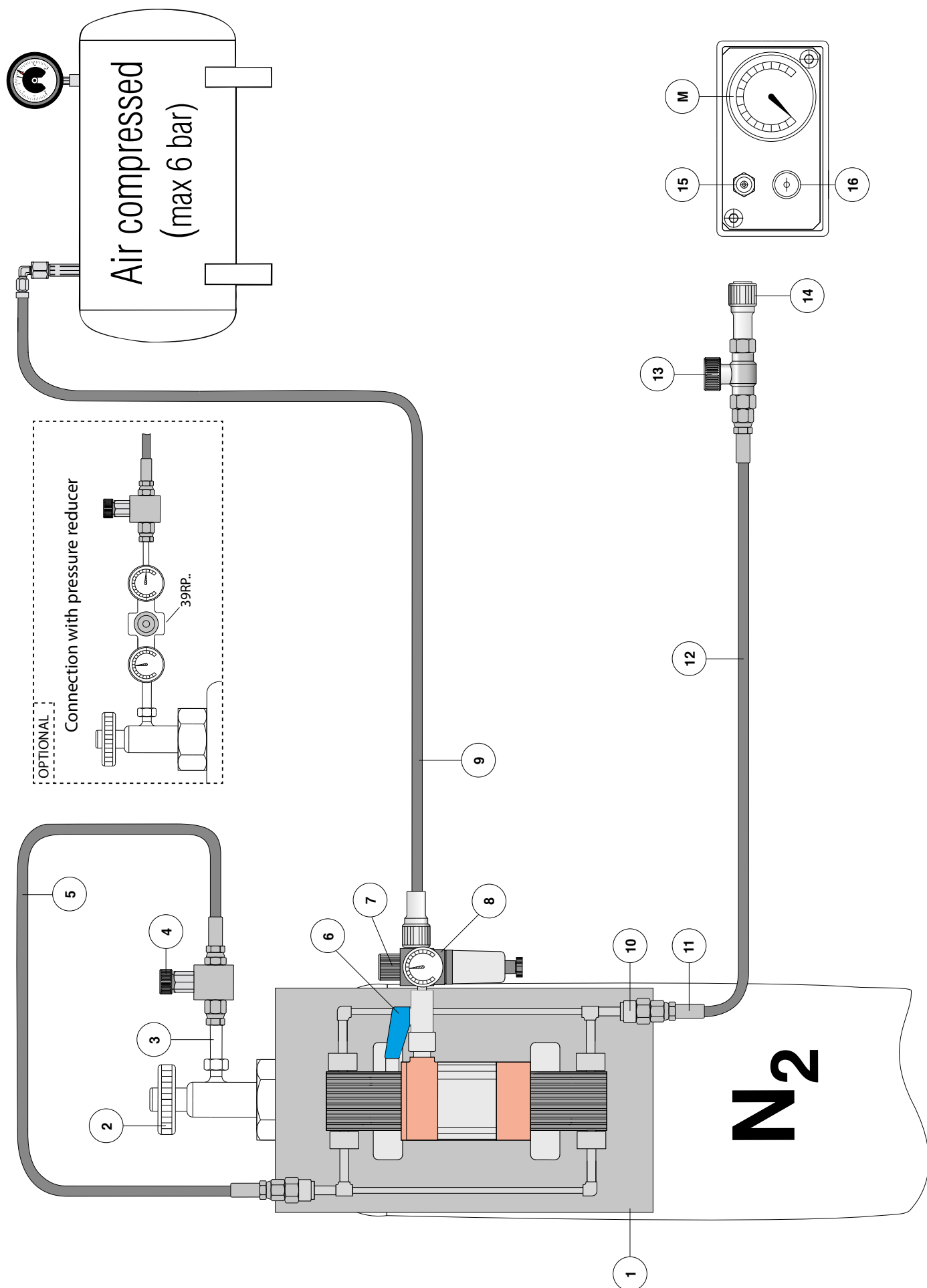
- I) Open the valve (17) to release the residual gas pressure.
- II) Unscrew the adapter (18) through the knob (15).



Reposition the plug (19) on the charging port of the cylinder, do not exceed torque force indicated :

Plug M6	5,6 Nm
Plug G1/8"	16,4 Nm

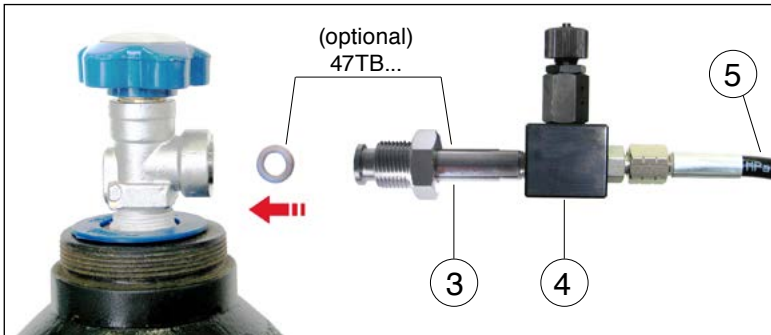
CONNECTION SCHEME FOR CHARGING NITROGEN GAS SPRING - LINKED SYSTEM



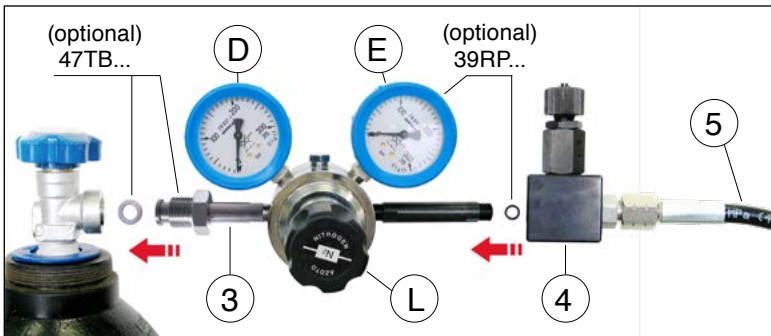
INSTRUCTION FOR CONNECTING THE PNEUMATIC BOOSTER



Position the support plate (1) with the mounted booster on the nitrogen bottle.



For direct connection, connect the hose (5) with discharging valve (4) and the adapter (3) - code 47TB... (specific for country of destination) on the nitrogen bottle.



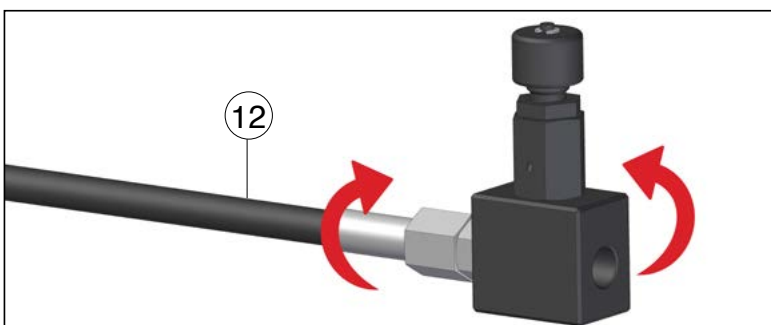
OPTIONAL CONNECTION*

For a easy functioning, it is recommended to connect the hose (5) with the discharging valve (4) to the pressure reducer - code 39RP... (optional) - connected to the nitrogen bottle with the adapter (3) code 47TB... (specific for country of destination).

*Suggested mounting

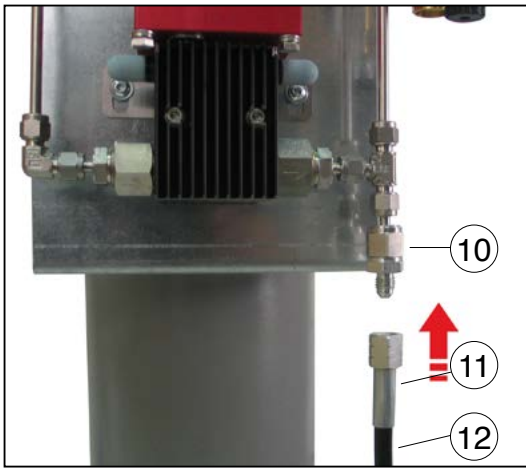


For adjusting the pressure output from the bottle, turn clockwise or counterclockwise the knob (L) of the pressure reducer up to desired pressure value which is indicated on the gauge (E). The gauge (D) shows pressure in the bottle.

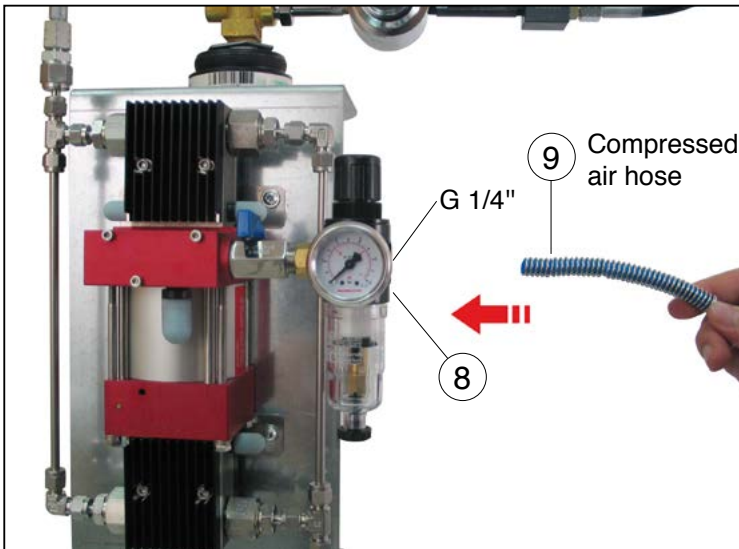


From the hose (12) of the charging device 39DMA, unscrew the distribution block with the gas venting valve.

Connect the adaptor (11) type 7/16-20 UNF of the hose (12) to the connector (10) type 7/16-20 UNF of the booster unit.

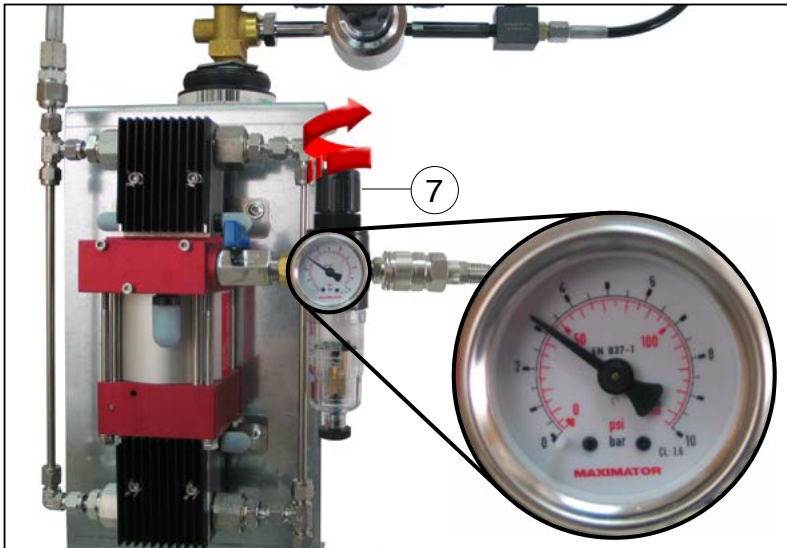


Connect the hose of compressed air (9) with the air unit (8) through the connection hole G1/4".



Inlet AIR pressure
1 - 6 bar / 14,5 to 87 psi max.

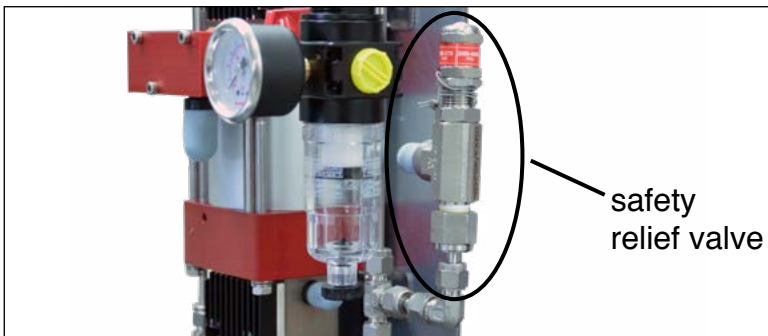
INSTRUCTION FOR CHARGING NITROGEN GAS SPRINGS LINKED SYSTEMS



Through the air pressure regulator (7) set first the compressed air pressure approx. 2 ÷ 3 bar, and then depending from the nitrogen gas pressure in the bottle and the speed of charging, adjust the air pressure up to 6 bar max.



Pull the knob (7) **upwards** and turn it **clockwise** to increase the pressure. Rotate **counterclockwise** to decrease the pressure, push down to lock the knob (7).



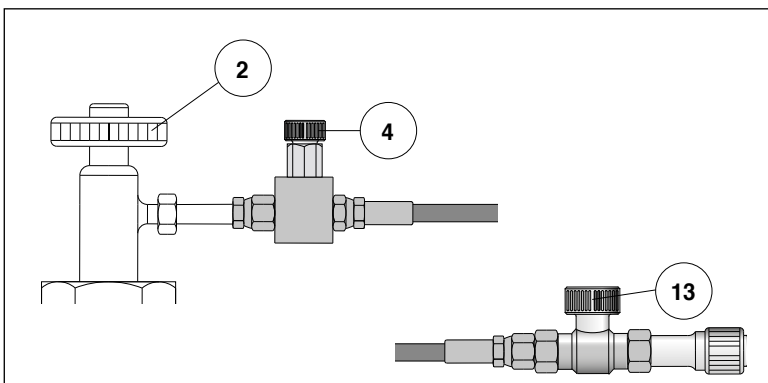
The pneumatic booster is equipped with a safety relief valve 210 bar.



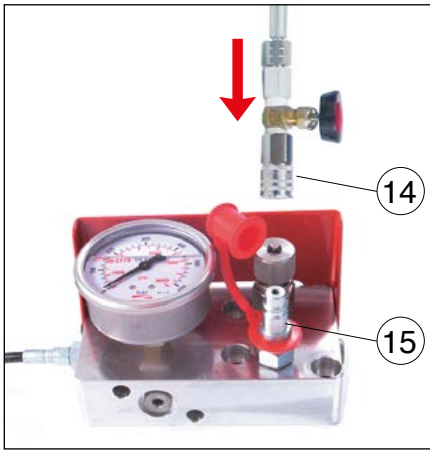
Verify that piston rods are fully extended.



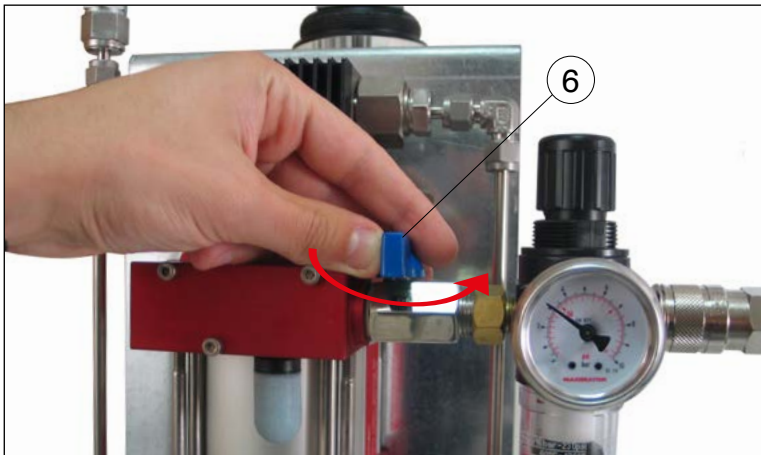
Always verify the maximum charging pressure allowed before charging the cylinder.



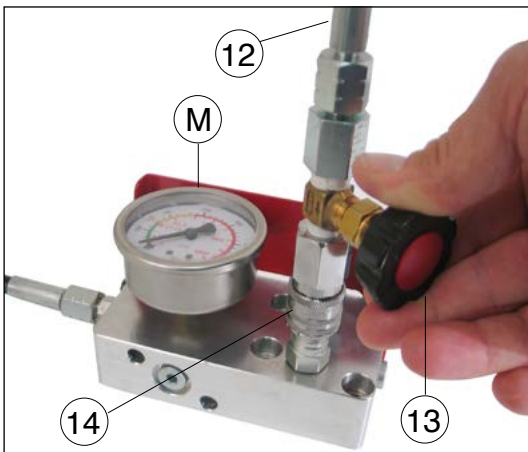
- I) Make sure that venting valve (4) and valve (13) are closed.
- II) Slowly open the valve (2) of the nitrogen bottle.



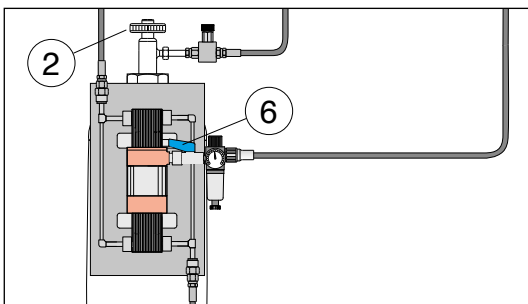
Connect the quick female connector (14) to the quick male connector (15) installed on the control panel.



Activate the pneumatic booster by opening the valve (6).
The booster unit will begin to pressurize the nitrogen gas.



- I) Slowly open the valve (13) on the hose (12) and charge the linked system to desired pressure. Read the pressure value on the gauge (M)
- II) Reached the desired pressure, close the valve (13) and the valve (6) of the booster.
- III) At the end, turn off the valve (2) of the nitrogen bottle.
- IV) Disconnect the quick female connection (14) from the control panel.



Always verify the maximum charging pressure allowed before charging the cylinder.

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