Nitrogen gas charging instruction manual with booster



Operation and Instruction Manual Model: PT118+GCH10+S86JN (When using a booster)



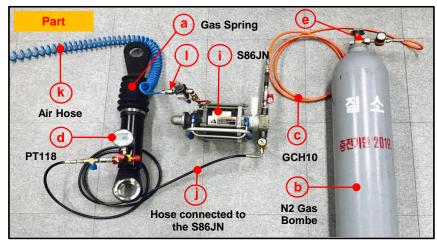
BOOSTER: S86JN

(Compression ratio : 30 : 1)

Warning

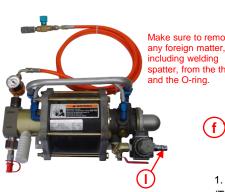
- √ Follow the safety regulations of the corresponding countries because nitrogen gas charging is high pressure.
- ✓ Nitrogen gas should be charged and inspected by a trained operator according to the manual.
- √ Charge nitrogen gas only.

 (Do not charge gasses other than nitrogen and liquid nitrogen.)
- ✓ Wear safety glasses during work.
- ✓ Do not look into the gas inlet and pressure gauge directly.
- ✓ If there is any problem (assembly, damage, etc.), release the gas completely and then remove the gas spring that has a different stroke.
- ✓ Separation and assembly of the internal parts of the gas spring can be done by using the designated standard working tools and equipment while a user receives a proper training and fully understands the products to consider safety and preserve the quality of the products. Contact us for questions with regard to this.
- √ Follow the manual because false operation or mistake can cause gas pressure loss during the measurement of gas pressure.
- ✓ Make sure to refill or charge gas while the gas spring is assembled in the robot.
- ✓ Set the posture of H-axis(second axis) of the robot at 90° and cut the power of the controller.



The specifications are different for each manufacturer of screws and couplings in connecting the gas bombe to (e). (1) so make sure to order products that are compatible (option).





Air hose connection of booster (S86JN)

① Coupling specifications : Air coupler PM-20



1. Check whether the @ is locked. (Turn clockwise to close)

2. Turn (h) counterclockwise to open it so that the pin of (f) does not protrude.



Position the PT118 in the center of gas inlet/outlet spring and then turn the base knob clockwise to connect it completely.

(% The state of PT118 @ Handle: Close f) Handle:Open)





Check if the handle of the bombe is locked by turning it clockwise and then connect GCH10 to the N2 gas bombe. (Use a 30 mm spanner.)



Connect GCH10 to the gas inlet of S86JN. (Make sure that it cannot be disconnected manually.)

★ If the connection is poor, the hose can be suddenly disconnected by high pressure and cause personal injury so make sure to check it.



 \times Pull the coupling strongly in the direction of the arrow to tighten the hose.



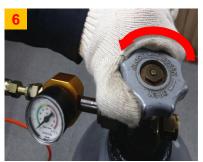
Check if the handle of the GCH10 is locked by turning it clockwise, and then connect the hose coupling to S86JN to charge the PT118 plug.

(Make sure that it cannot be disconnected manually.)

★ If the connection is poor, the hose can be suddenly disconnected by high pressure and cause personal injury so make sure to check it.



Connect the coupling of air hose to the air inlet of S86JN. (Make sure that it cannot be disconnected manually.)



Open the handle of the N2 gas bombe (counterclockwise).



Open the handle of the GCH10 (counterclockwise).



Open the handle of the hose connected to the S86JN (counterclockwise).



The S86JnN starts to work when the air valve is open. (Before opening the air valve, recheck the connection/lock of the valve and hose.)



When the defined pressure is reached, close the air valve in step 9 to stop the booster (S86JN).



Close the handle of the hose connected to the S86JN (clockwise) and pull out the coupling to disconnect it from the charging plug of the PT118.



Close the handle of the N2 gas bombe (counterclockwise).



Turn the release pin knob of the PT118 clockwise slowly to check the pressure. (Do not turn the release pin excessively because it will insert the release pin too far and cause damage to the check valve inside the spring.)



Open and close the bleed valve repeatedly and slowly to set to your desired pressure.



Turn the release pin knob counterclockwise to retract the release pin from the check valve.



Turn the bleed valve (counterclockwise) to remove residual gas in the PT118.



Turn the base knob of the PT118 counterclockwise to separate it from the gas spring.



Turn the plug of gas inlet/outlet spring clockwise to tighten it. Make sure to remove any foreign matter on the plug before connecting it.