

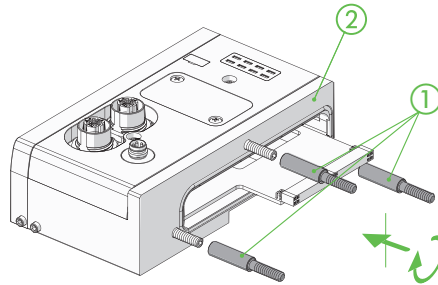
Required Tools:

When assembling the Pneumatic Automation Link (PAL) system we recommend using the following tools:

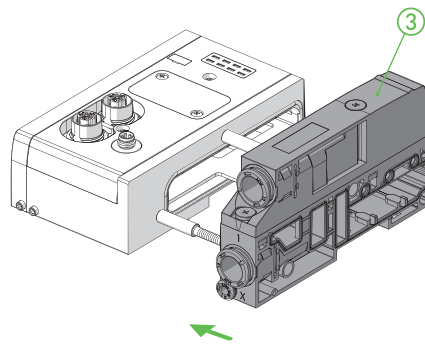
- M4 open end wrench
- PH1 screwdriver
- 4mm hex wrench
- 3mm hex wrench
- 2mm hex wrench
- 3mm slotted screwdriver

Assembling the Bank:

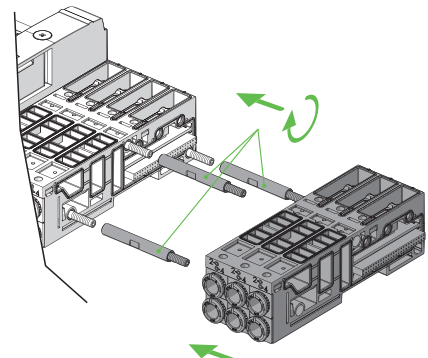
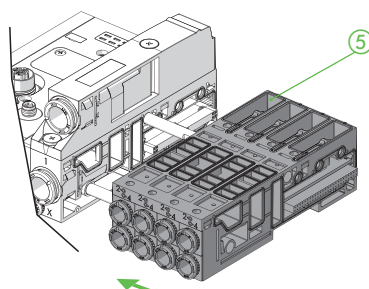
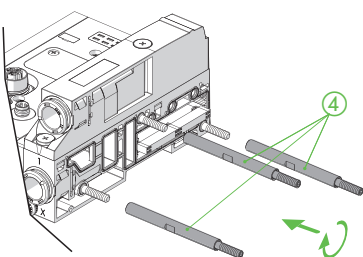
Hand tighten the three tie rods (1) of the compressed air supply input/output module for connection to the bus coupler (2).



While aligning the tie rods, carefully mate the compressed air module (3) onto the electrical module. Make sure the electronic board fits into the slots provided. **DO NOT FORCE!**



Hand tighten the three tie rods (4) and mate the base (5). Make sure the electronic board is fitted properly. Should there be any binding, gently move the board to facilitate its insertion or gently push the end plate board downwards. Repeat the operation for all the bases.

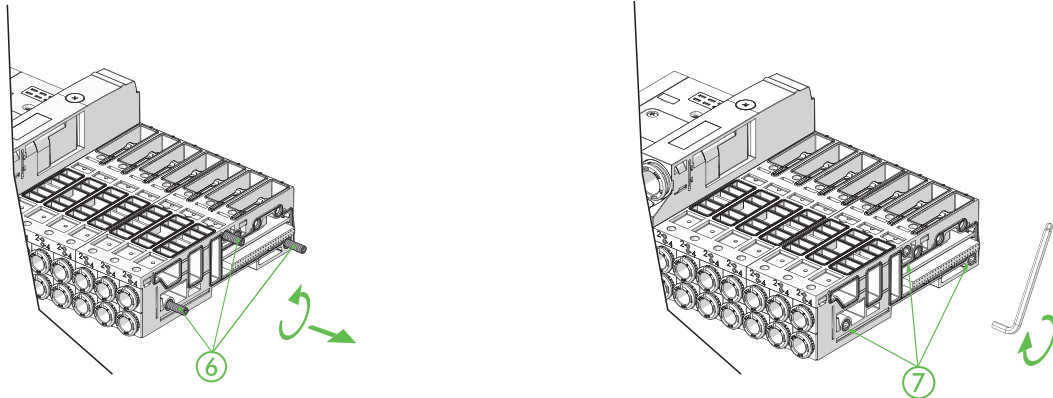


Assembling the Bank (Cont.):

Unscrew the three M4 set screws on the end base (6).

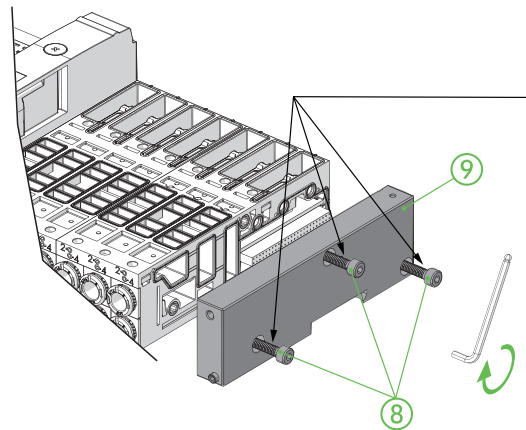
Tighten the three tie rods (7) using a 4mm hex wrench at a torque of 2Nm [18 lb-in].

Note: For the optimal alignment of the boards, it is advisable to install the bases WITHOUT the valves assembled.



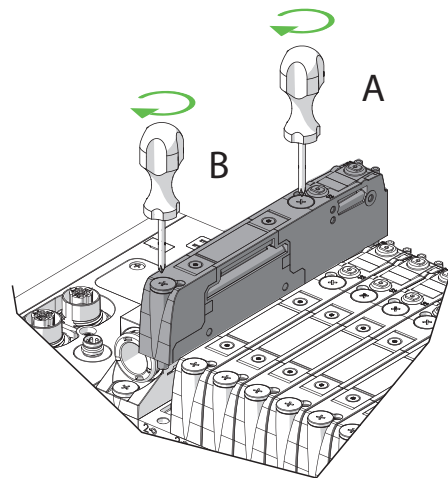
Place the bank on a flat surface, insert the closed end plate (9) and tighten the three screws (8) using 3mm hex wrench at a torque of 2Nm [18 lb-in]. In the versions with electronic board (PAL-C2 & C3), make sure the boards are properly aligned.

DO NOT FORCE.



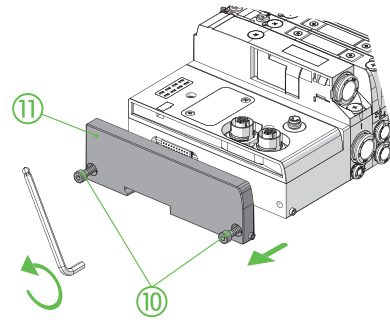
After checking that the seals are positioned properly, install the valves and tighten the Phillips screws with a PH1 driver at a torque of 1.1 - 1.3 Nm [9.7 - 11.5 lb-in].

First tighten screw A and then screw B.

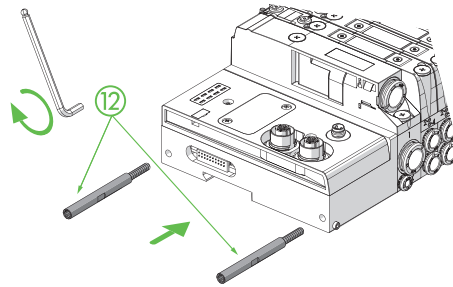


Assembling the I/O Modules:

Unscrew the two M4 SHCS (10) on the bus coupler end plate (11) and remove.

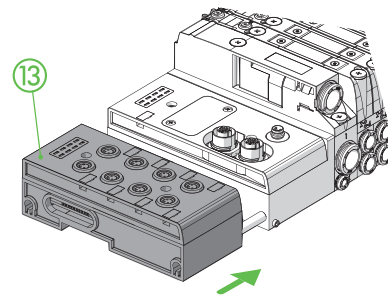


Hand tighten the two tie rods (12) of any I/O module.



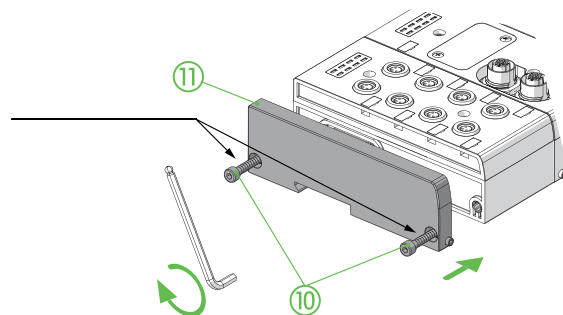
Insert the I/O module (13), making sure the electronic board is aligned properly. **DO NOT FORCE.**

Repeat the operation for all the I/O modules.



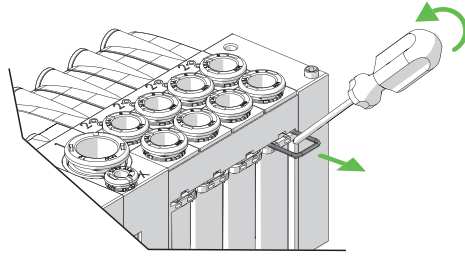
Carefully refit the plate (11), making sure the electronic board is aligned properly.

DO NOT FORCE. Using a 3mm hex wrench tighten the two M4 SHCS (10) at a torque of 2Nm [18 lb-in].

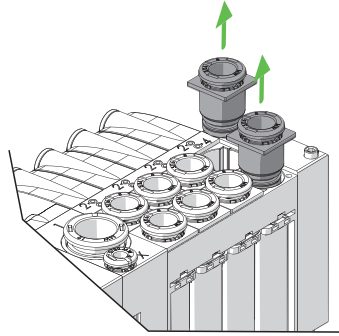


Replacing the Fittings:

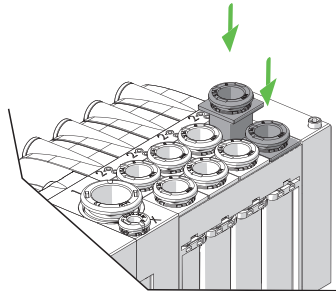
Use a 3mm slotted screwdriver to remove the clips.



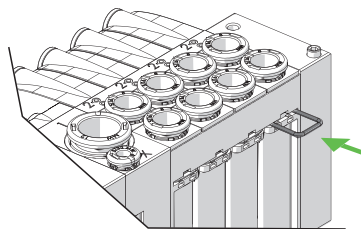
Remove the push-to-connect cartridges.



Insert the new cartridges until they are fully seated into the base.

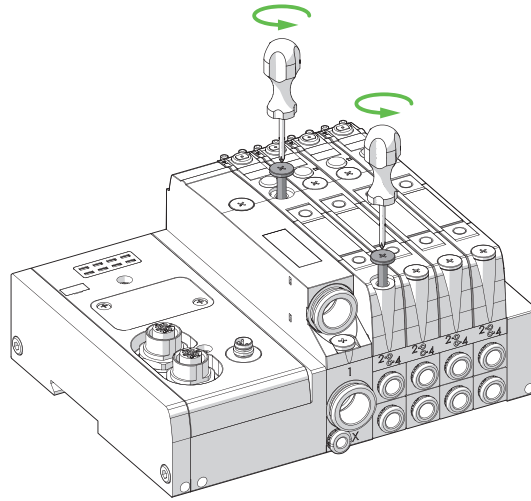


Reinsert the clip completely.

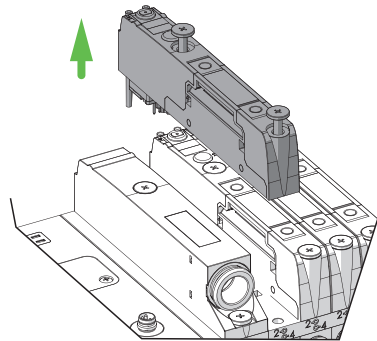


Replacing the Valves:

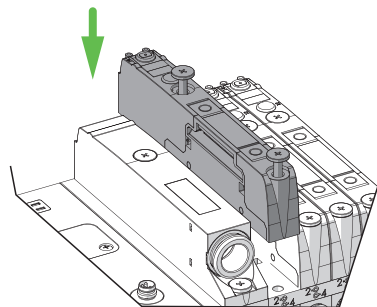
Unscrew the two Phillips head screws using a PH1 driver.



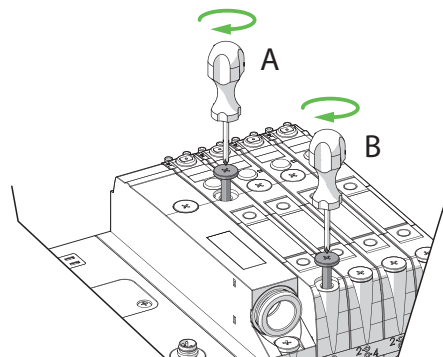
Gently lift the valve, perpendicular to the base, in order to remove the valve.



Check that the seals are positioned properly and lower to insert the new valve.

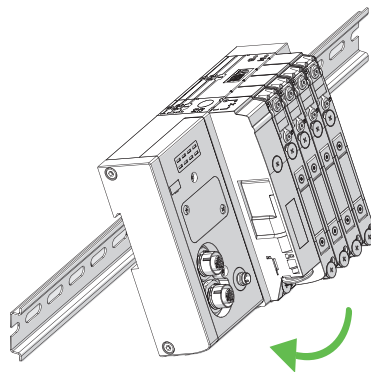


Tighten the two Phillips head screws using a PH1 driver at a torque of 1.1 - 1.3 Nm [9.7 - 11.5 lb-in]. **First tighten screw A and then screw B.**

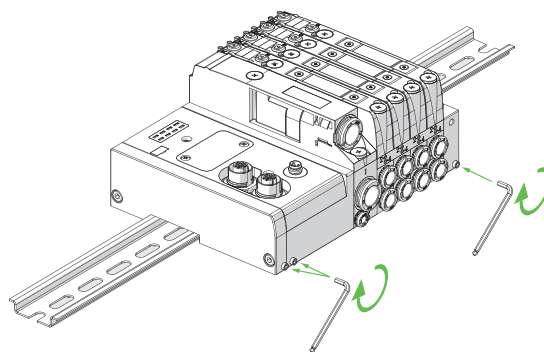


Mounting the Bank to DIN Rail:

Mount the bank to the designated side of the DIN rail dovetail first.



Using a 2mm hex wrench tighten the set screws at a torque of 0.5 Nm [4.4 lb-in].



Notes: