



Contact information

Füll Systembau GmbH
Richard-Klinger-Straße 31
65510, Idstein (DE)
www.fuell-dispensing.com

General

[info@ fuell-dispensing.com](mailto:info@fuell-dispensing.com)
+49 6126 598-0 (phone)
+49 6126 54415 (fax)

Service

Service@fuell-dispensing.com
+49 6126 598-0 (phone)
+49 6126 54415 (fax)

Sales

Verkauf@fuell-dispensing.com
+49 6126 598-0 (phone)
+49 6126 54415 (fax)



Contents

1. Important precautions.....	3
2. Remove lower pump	4
3. Remove lower valve with fixed valve bridge	7
4. Remove lower valve with detachable valve bridge	10
5. Install lower valve with fixed valve bridge	13
6. Install lower valve with detachable valve bridge	15
7. Install lower pump	18
8. Remove upper valve with fixed valve bridge	20
9. Remove upper valve with detachable valve bridge.....	21
10. Remove upper pump	23
11. Clean pump.....	26
12. Install upper pump	27
13. Install upper valve with fixed valve bridge	28
14. Install upper valve with detachable valve bridge	29
15. Remove spindle pump drive unit	31
16. Install spindle pump drive unit	34
17. Remove canister	37
18. Install canister	38
19. Maintenance and Troubleshooting.....	39



1. Important precautions

At all times when servicing the VX5

- Wear the necessary safety equipment
- Before removing panels or opening covers fitted with a lock, disconnect the dispenser from the main power supply.
- Do not allow untrained personnell near the VX5
- Do not bypass sensors in a pemanent or semi-permanent way

When disconnecting parts containing colorant

- When disconnecting parts below the colorant level in the canister, colorant can leak. Reduce or limit leakage by:
 - Dispense all/most of the colorant out of the canister before service
 - With the 'easy click' canisters, you can push up the canister using the M8 screw below to largely block the canister outlet (see chapter "Remove 'easy click' canister").
- Colorant may spray. Wear eye protection

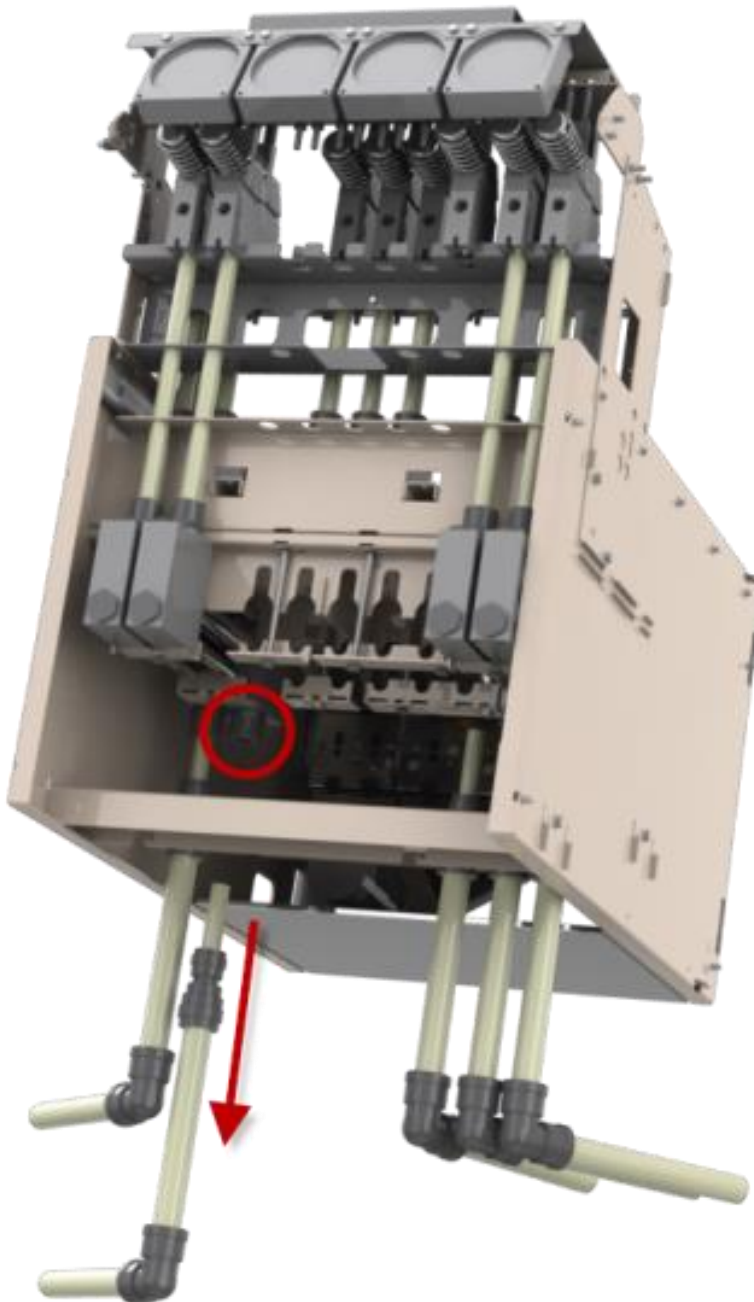
When connecting parts containing colorant

- Tubes must be pushed into their fittings as far as possible. Typically the tubes are marked with a label or line, which must be flush with the fitting when the tube is pushed in as far as possible.
- Check the locking mechanism of each tube after reconnecting it.



2. Remove lower pump

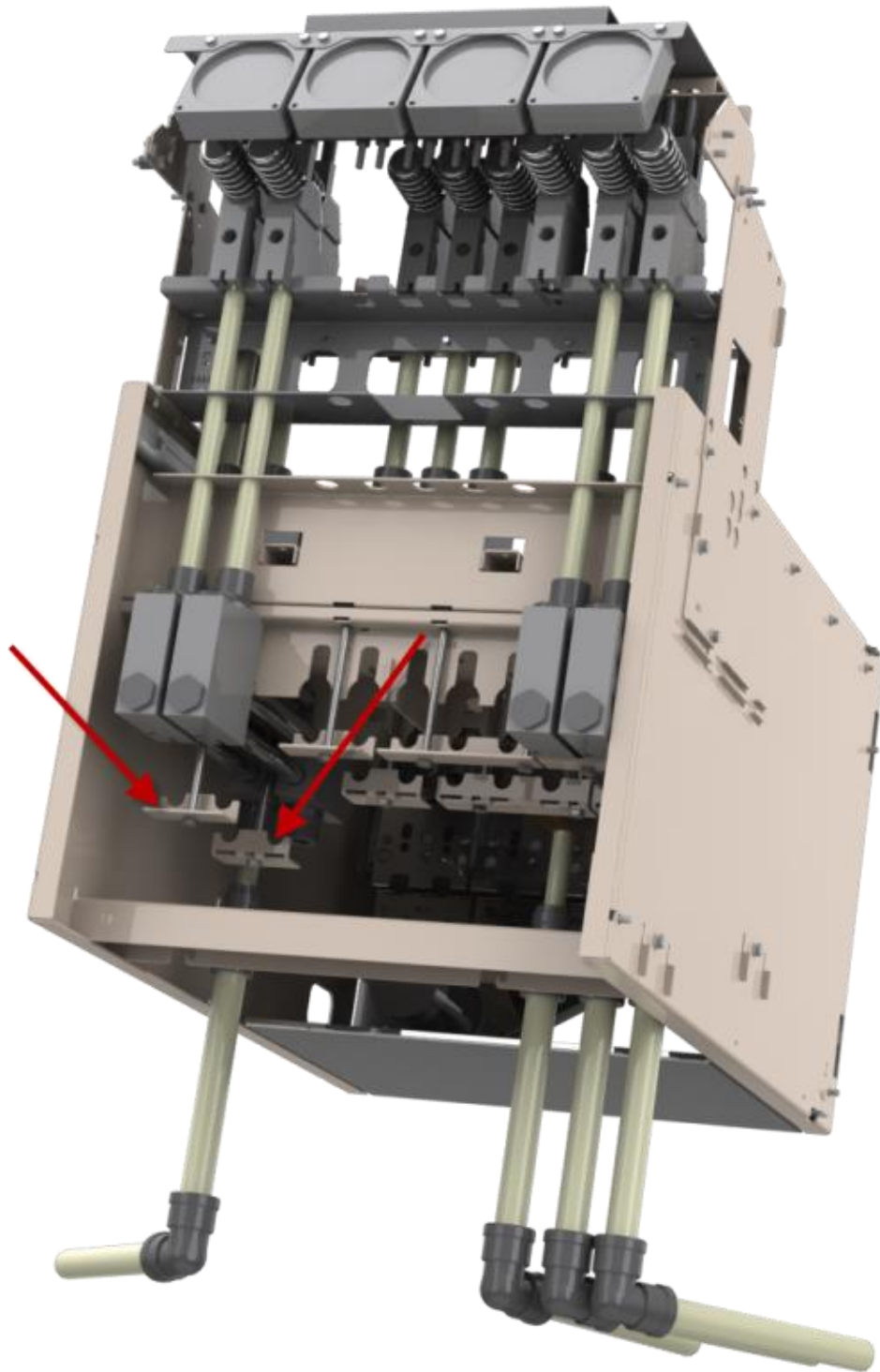
- Move the pump drive unit to the rear end position (100%) with the Dispenser Manager.
- Press (and NOT release) the red Stop button on the front of the dispense head and switch off the dispenser with the lower switch on the back panel of the control unit.
- Release 15 mm suction tube from pump coupling and immediately click it into the new pump to stop any leakage that may occur.





Service Manual VX5-Dispenser

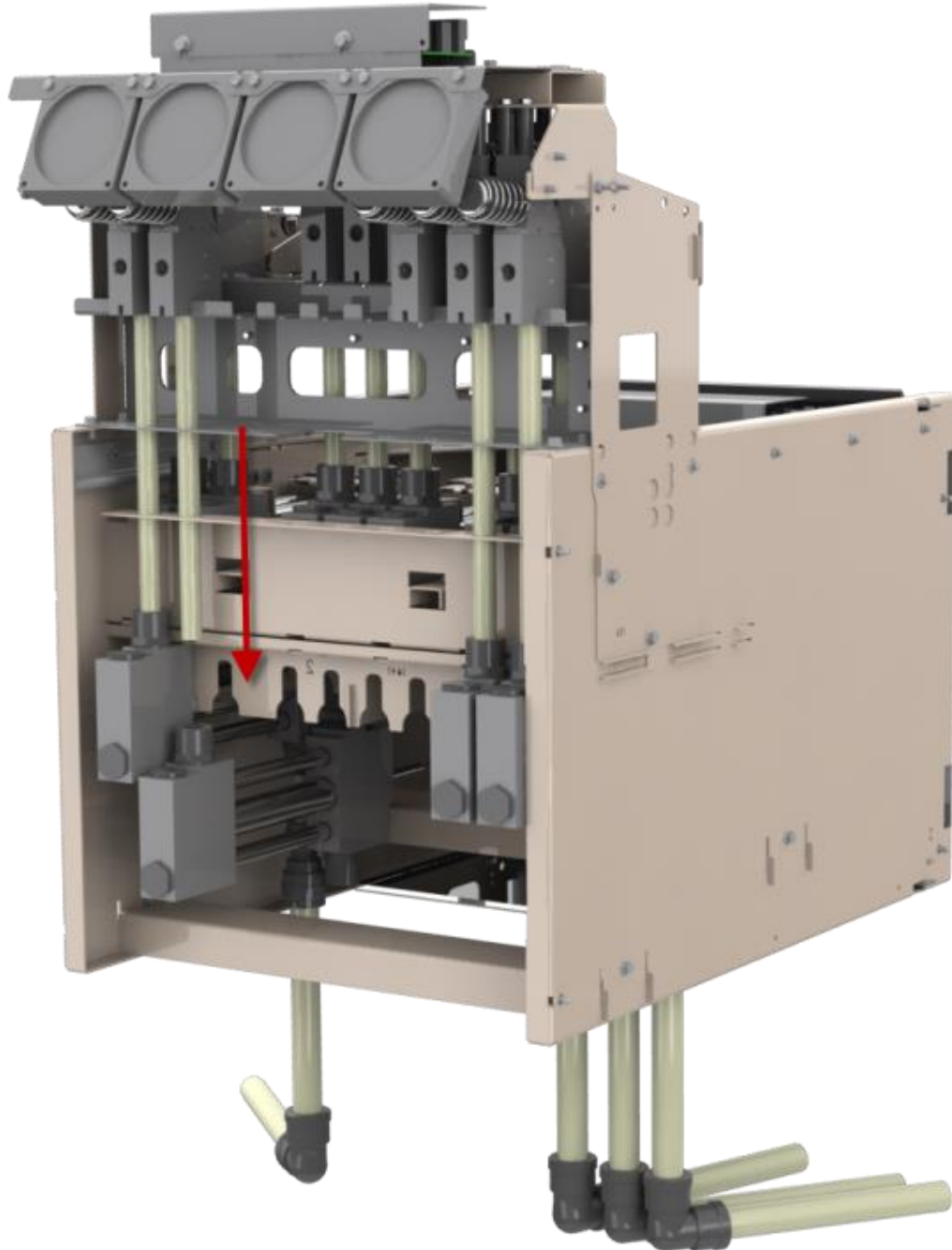
- Remove M6¹ bolts with the clamping brackets, using a 10 mm socket. Note that the front and back bracket of the lower pumps ARE identical.



¹ M5 for machines with serial number upto 2010.002. Use an 8 mm socket there.



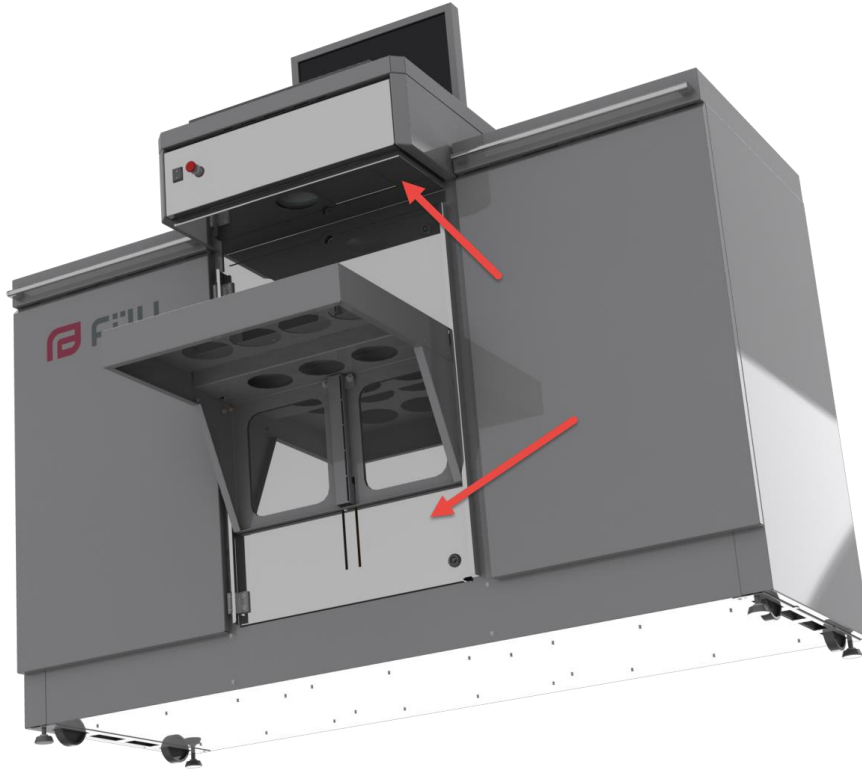
- Lower the pump and take it out of the machine



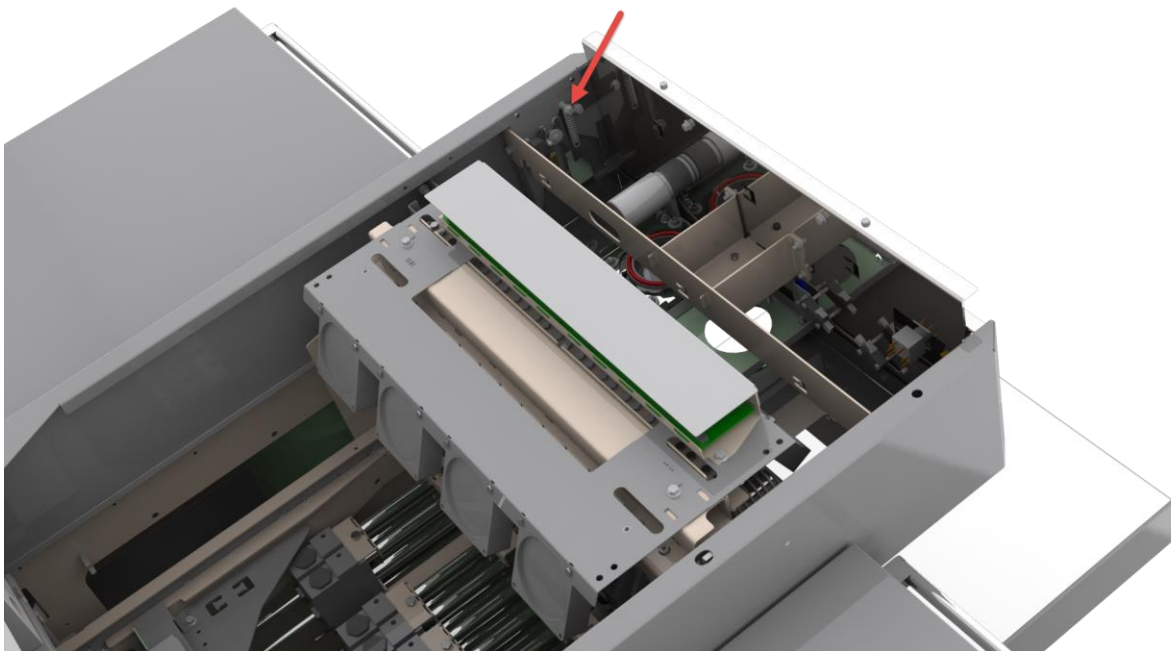


3. Remove lower valve with fixed valve bridge

- Open door and remove safety plate



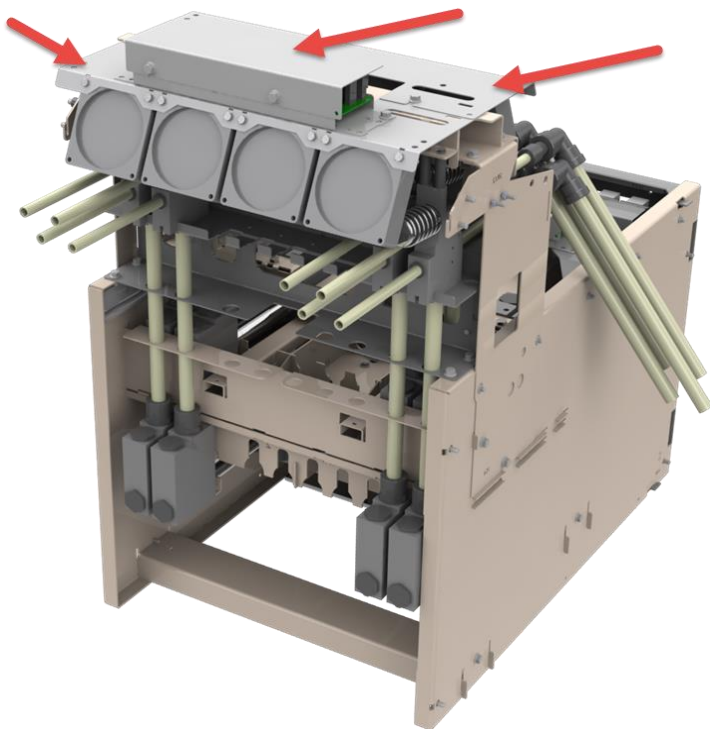
- Remove M5 bolt (2x) and take out safety plate



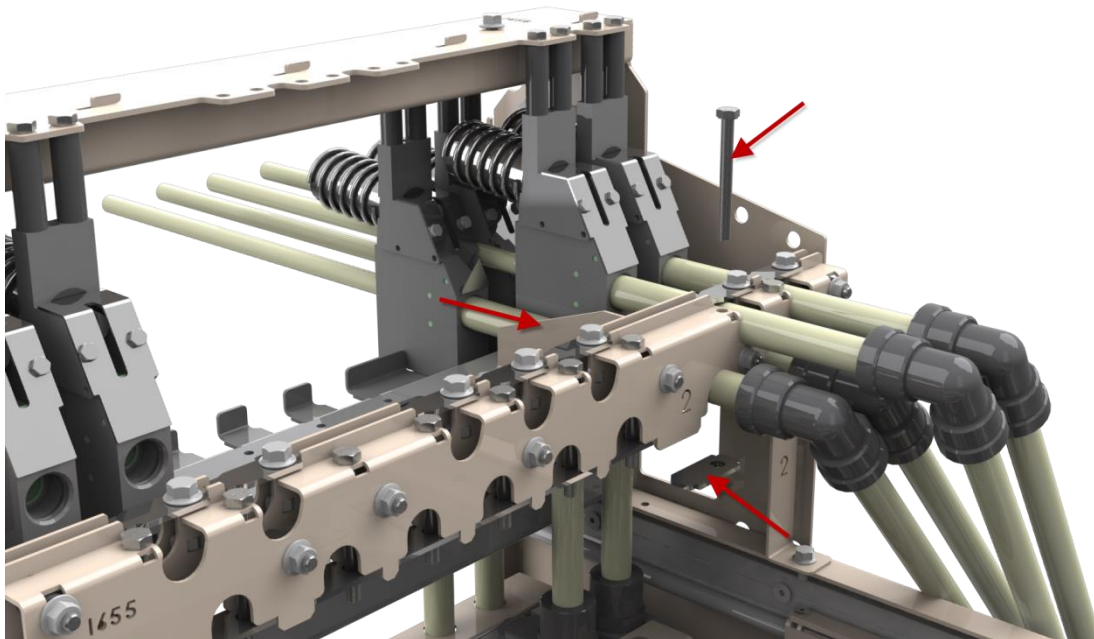


Service Manual VX5-Dispenser

- Remove blower assemblies and slaveboard unit.



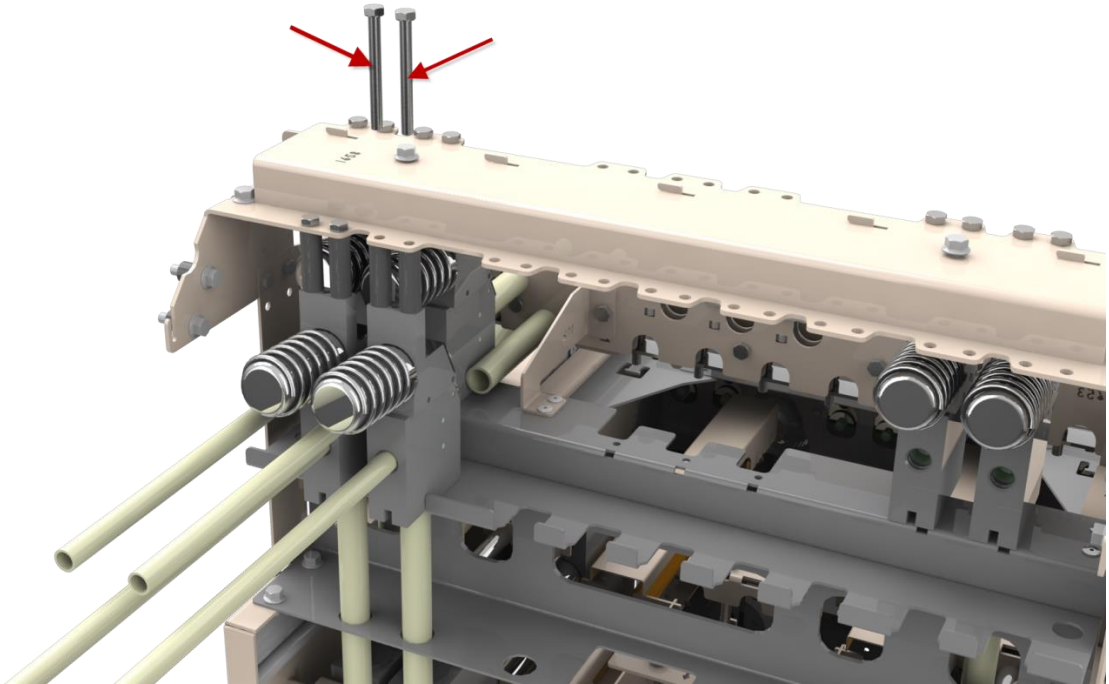
- Remove M5 bolt to release clamping plate. Pull the Ø15 mm return tube backwards (and somewhat upwards) out of the valve.



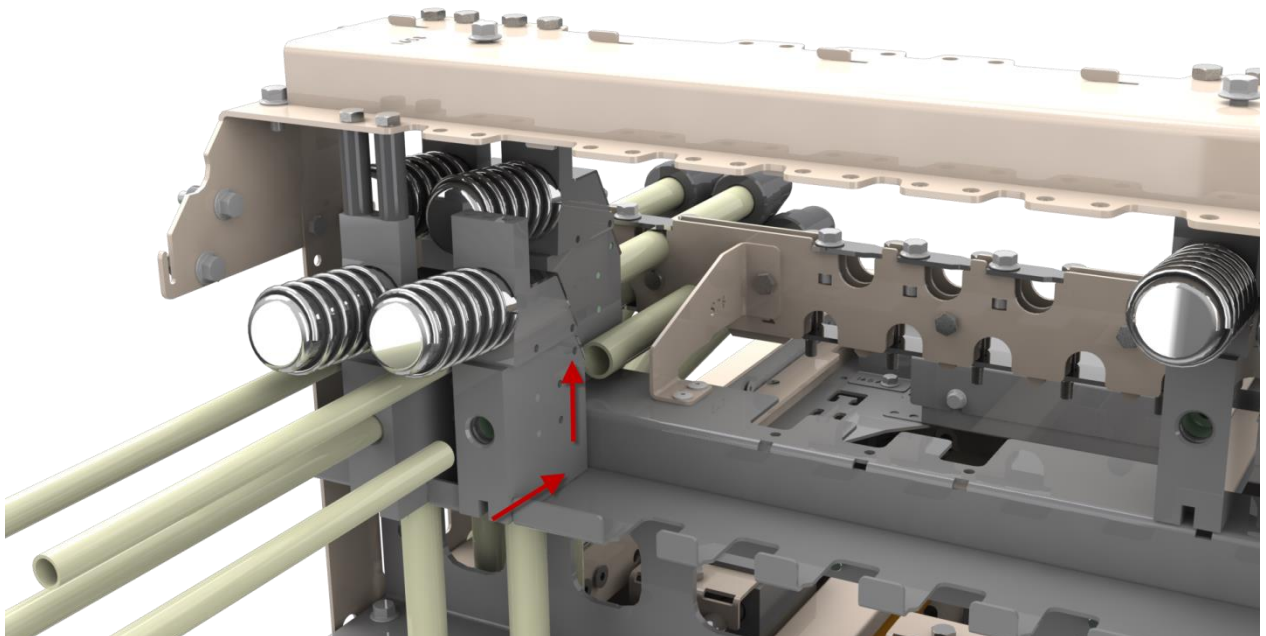


Service Manual VX5-Dispenser

- Remove M5 bolts and spacers from valve.



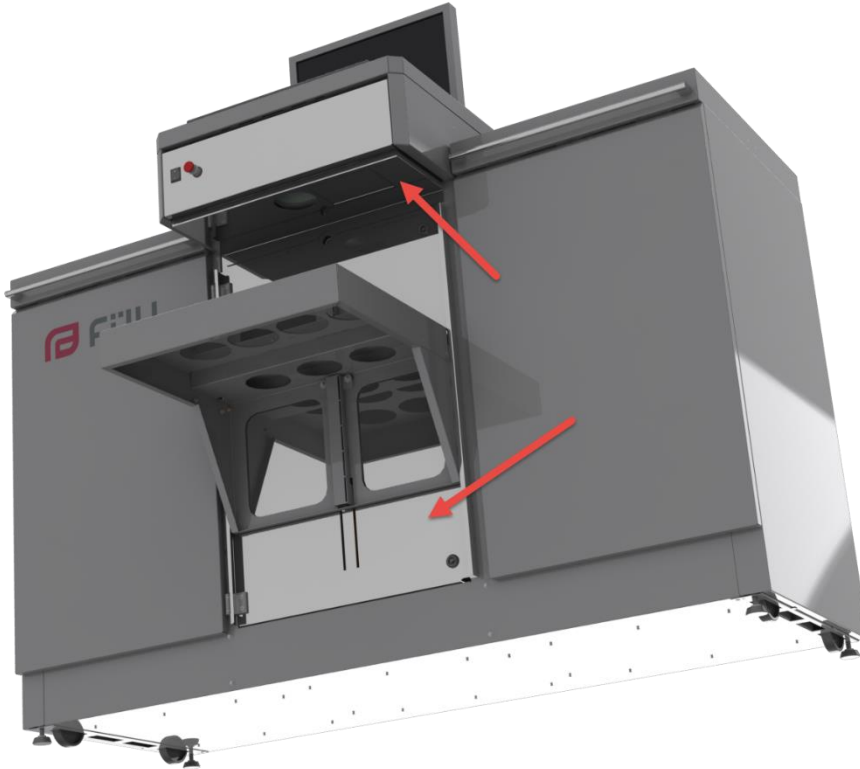
- Pull valve backwards and when the Ø10 mm tube is free. Take out the valve.



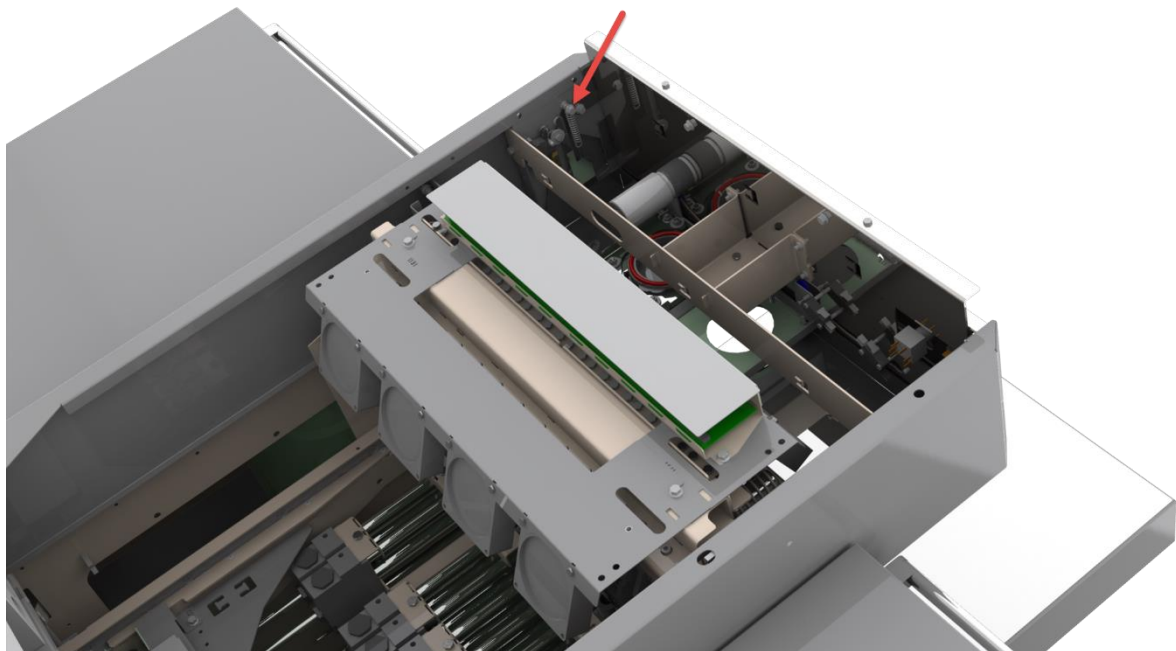


4. Remove lower valve with detachable valve bridge

- Open door and remove safety plate



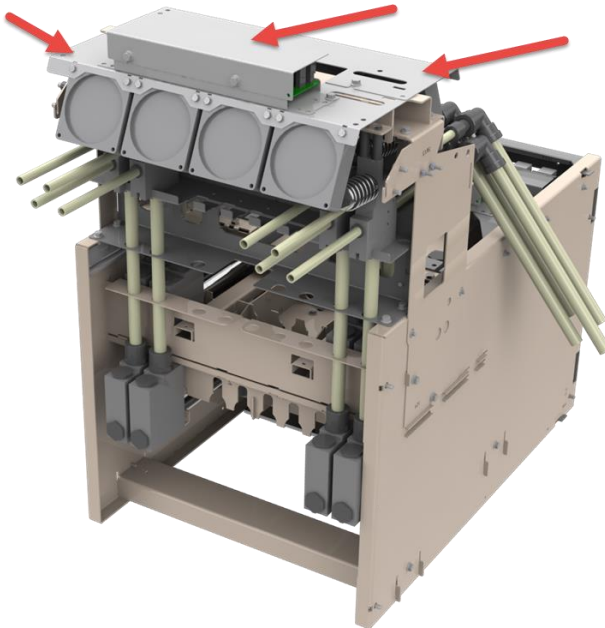
- Remove M5 bolt (2x) and take out safety plate



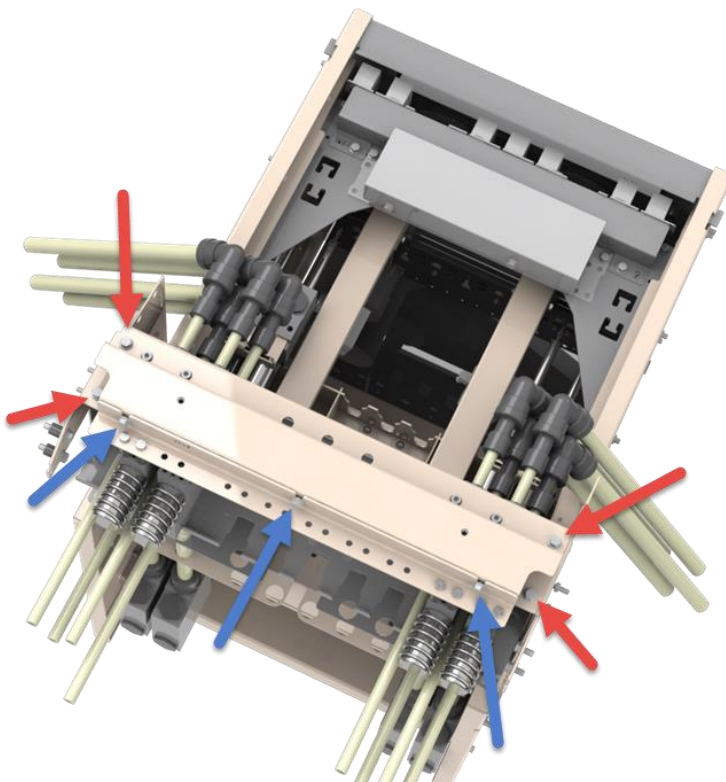


Service Manual VX5-Dispenser

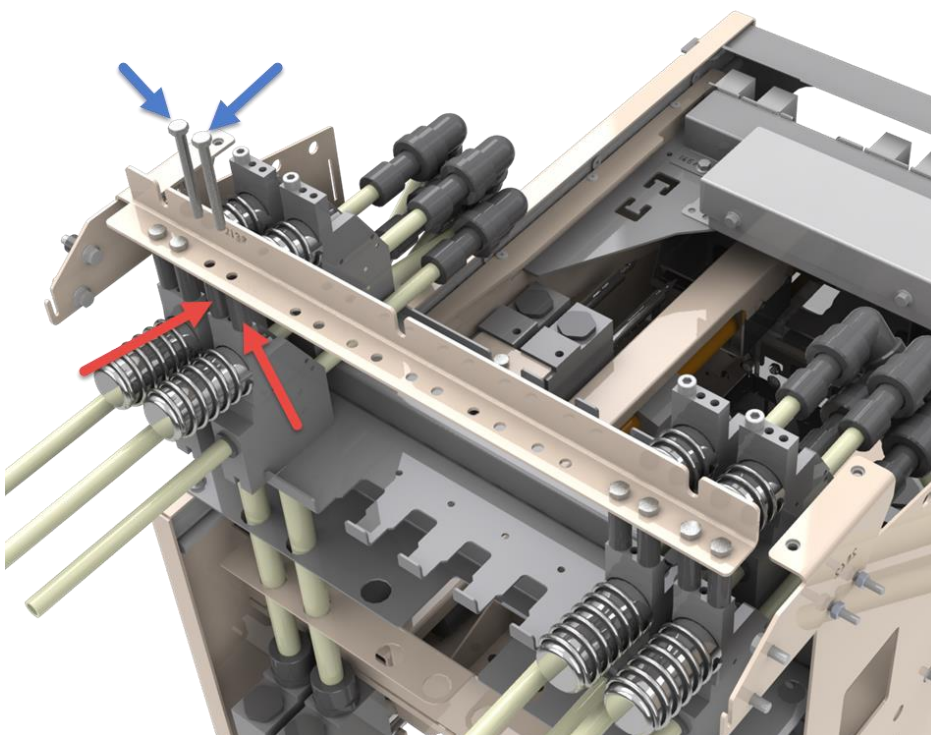
- Remove blower assemblies and slaveboard unit.



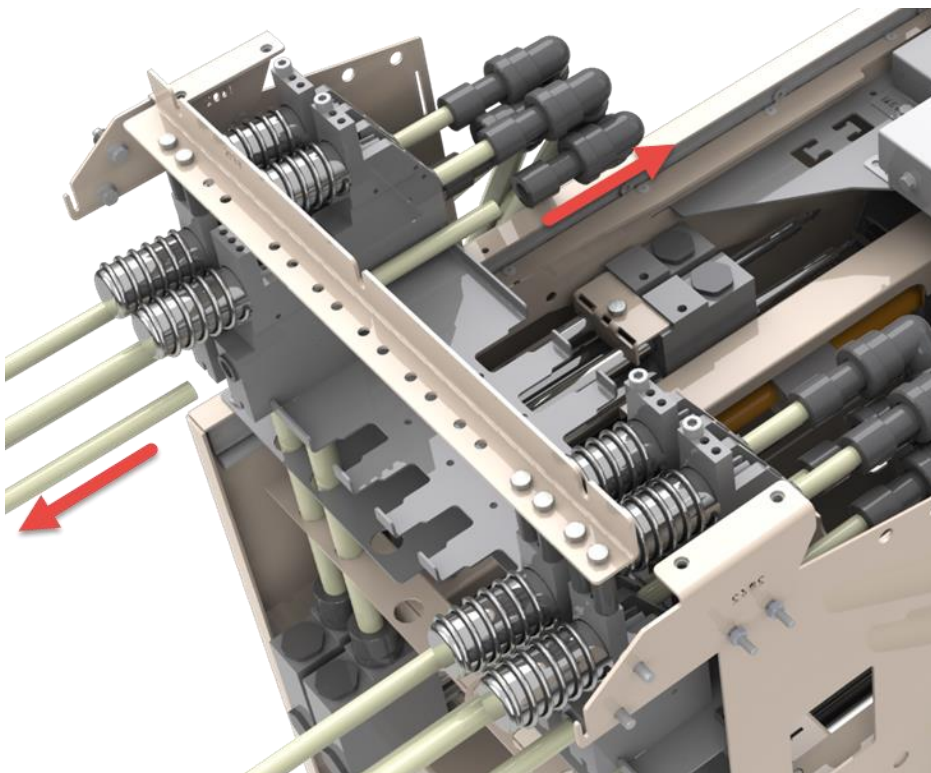
- Remove bolts M5 (4x) see red arrows, loosen bolts M5 (3x) see blue arrows, take out valve bridge.



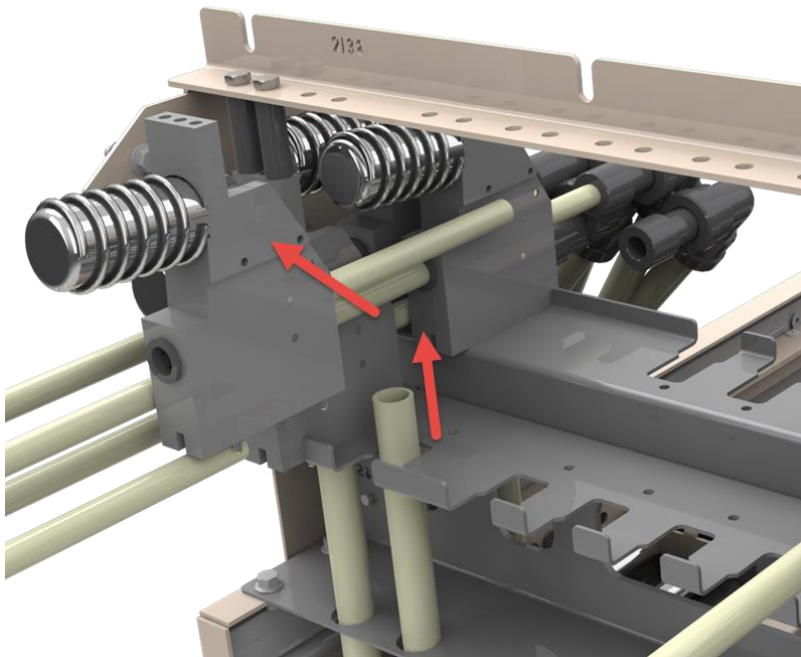
- Remove bolts M5 (2x) see blue arrows, remove spacers (2x) see red arrow.



- Take out tube on the front of the valve, remove the fitting on the tube of the back of the valve, leave the tube in the back of the valve.

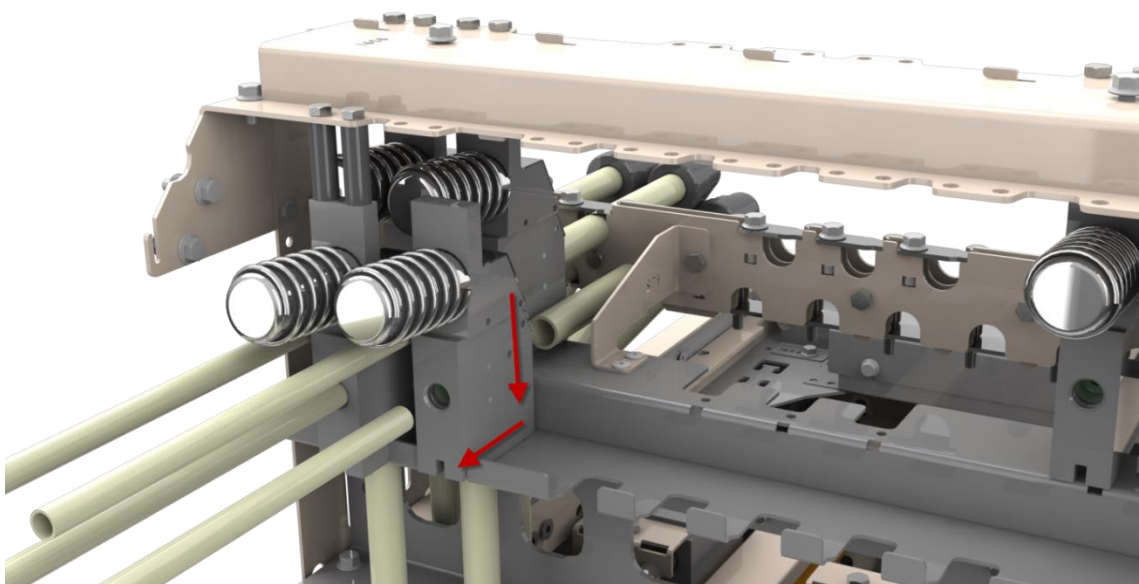


- Move the valve upwards and take it out, remove the tube on the back of the valve to re-use it on the new valve.

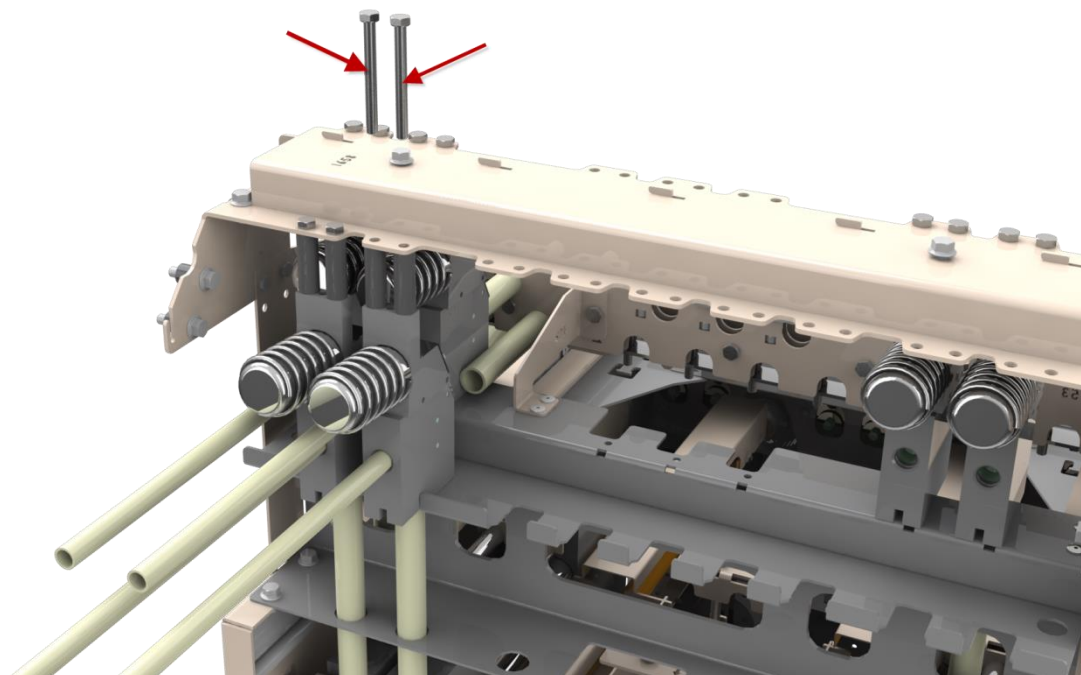


5. Install lower valve with fixed valve bridge

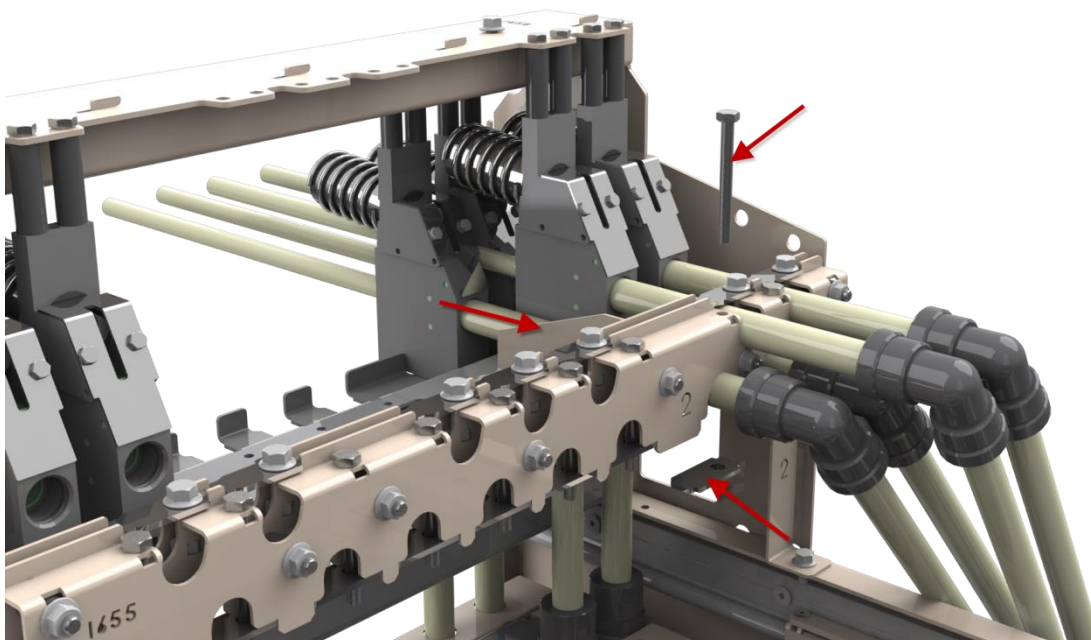
- Place valve and pull it forwards into the 10 mm tube.



- Install M5 bolts and spacers to mount the valve.



- Install Ø15 mm return tube into valve
- Mount tube locking plate with M5 bolt.

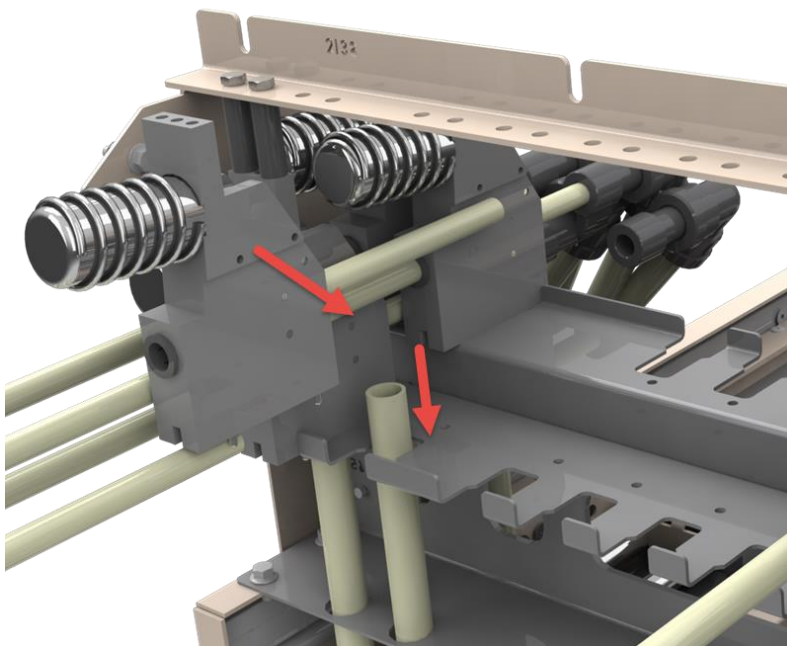


- Install blower assemblies and slaveboard unit.

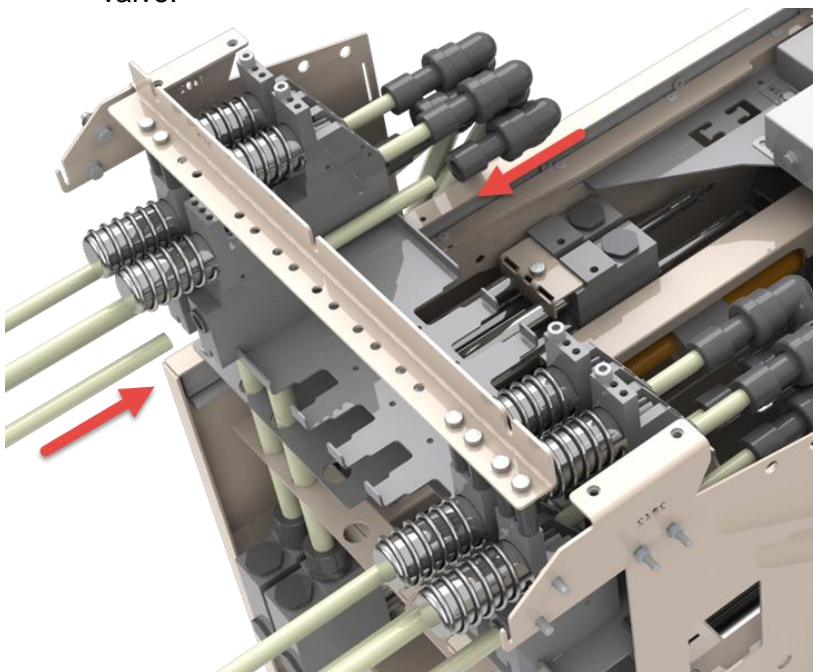


6. Install lower valve with detachable valve bridge

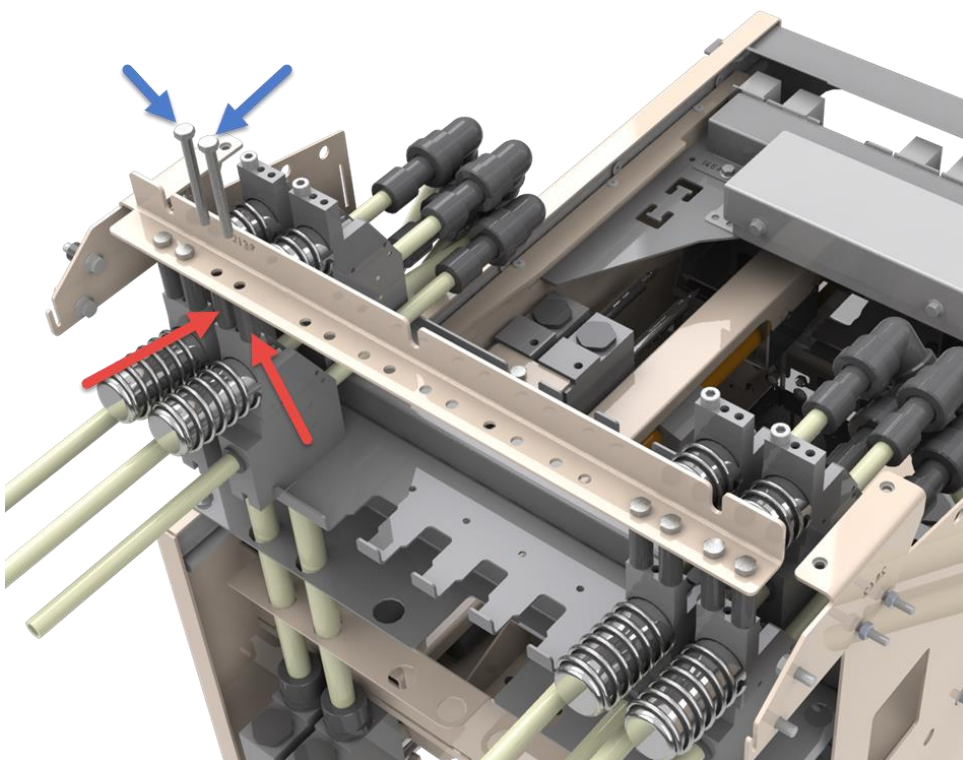
- Install the tube on the back of the valve and place the valve over the 15 mm tube



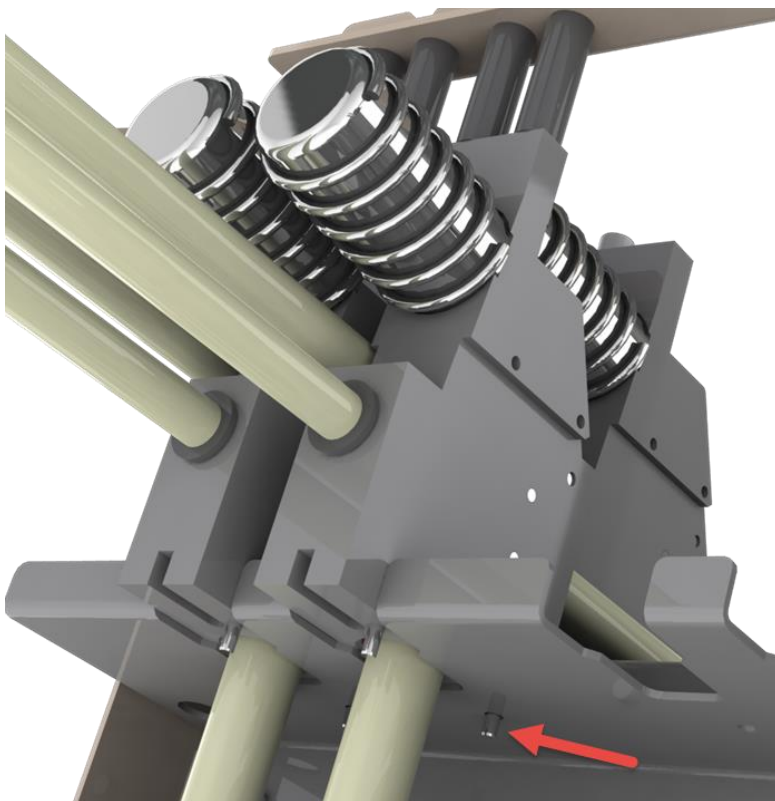
- Install the tube on the front of the valve, install the fitting on the tube of the back of the valve.



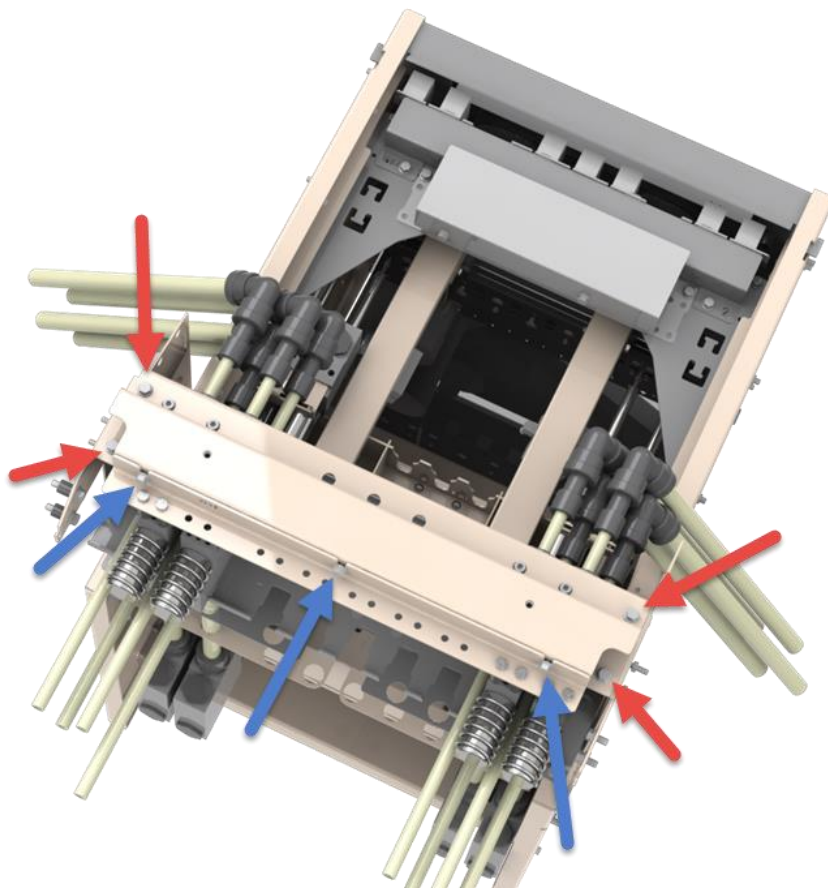
- Install bolts M5 (2x) see blue arrows, install spacers (2x) see red arrow.



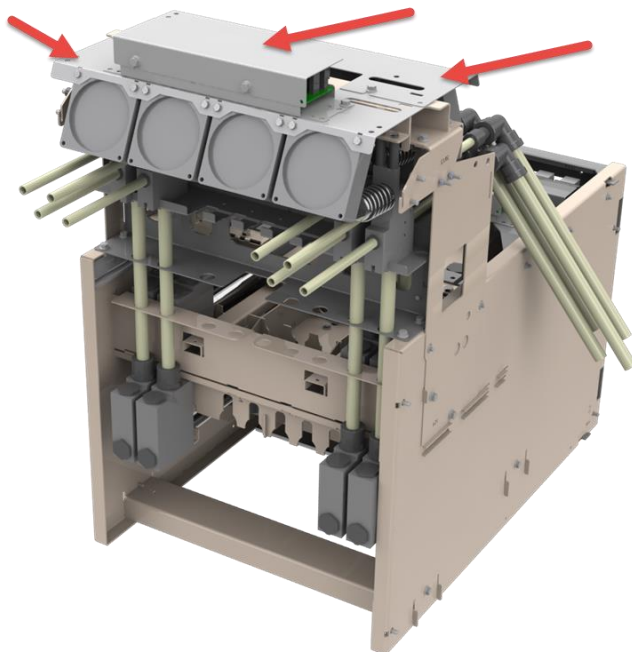
- Check that pin on the bottom of the valve is through the support of the valves.



- Place valve bridge, install bolts M5 (4x) see red arrows, tighten bolts M5 (3x) see blue arrows.



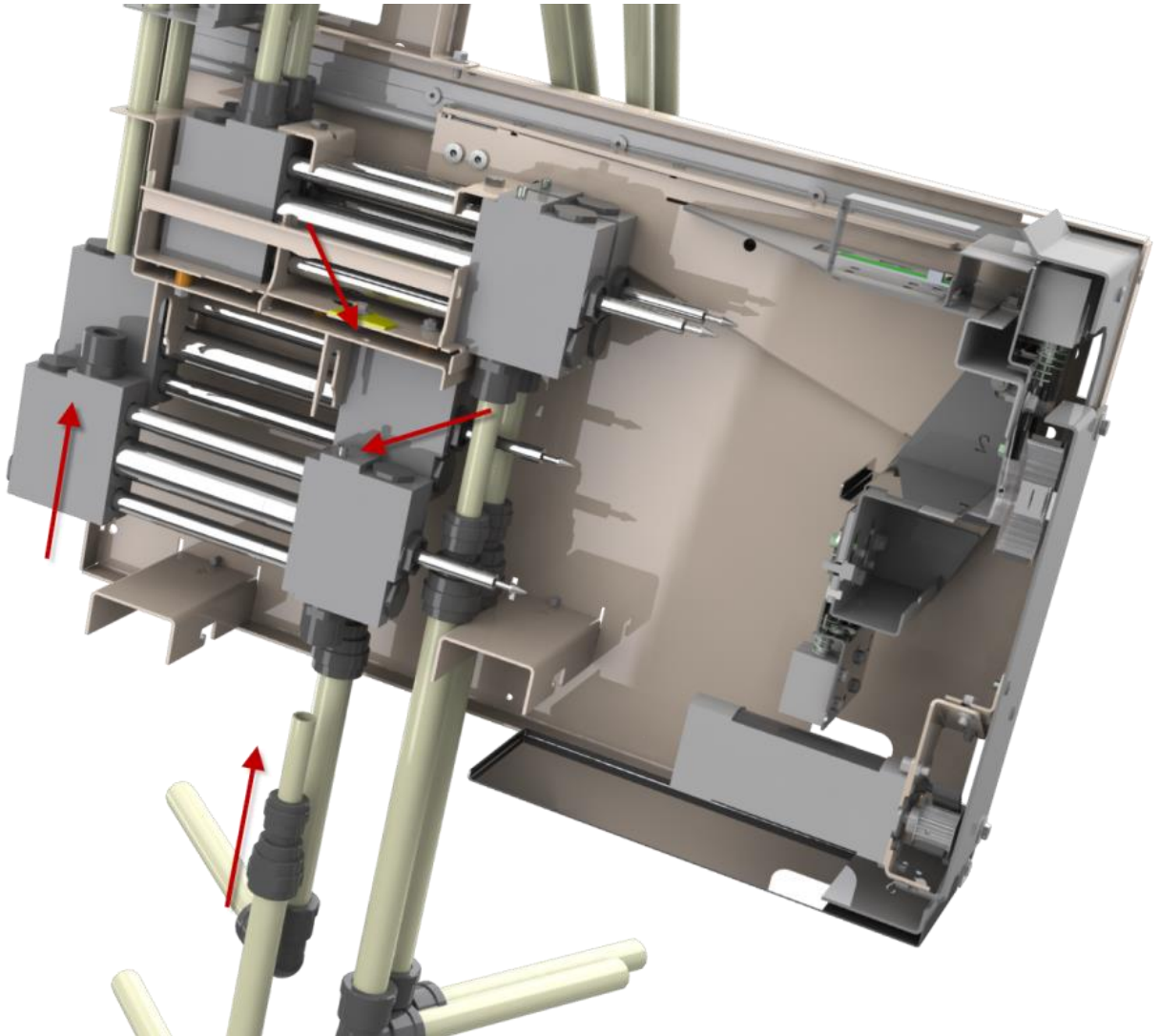
- Install blower assemblies and slaveboard unit.





7. Install lower pump

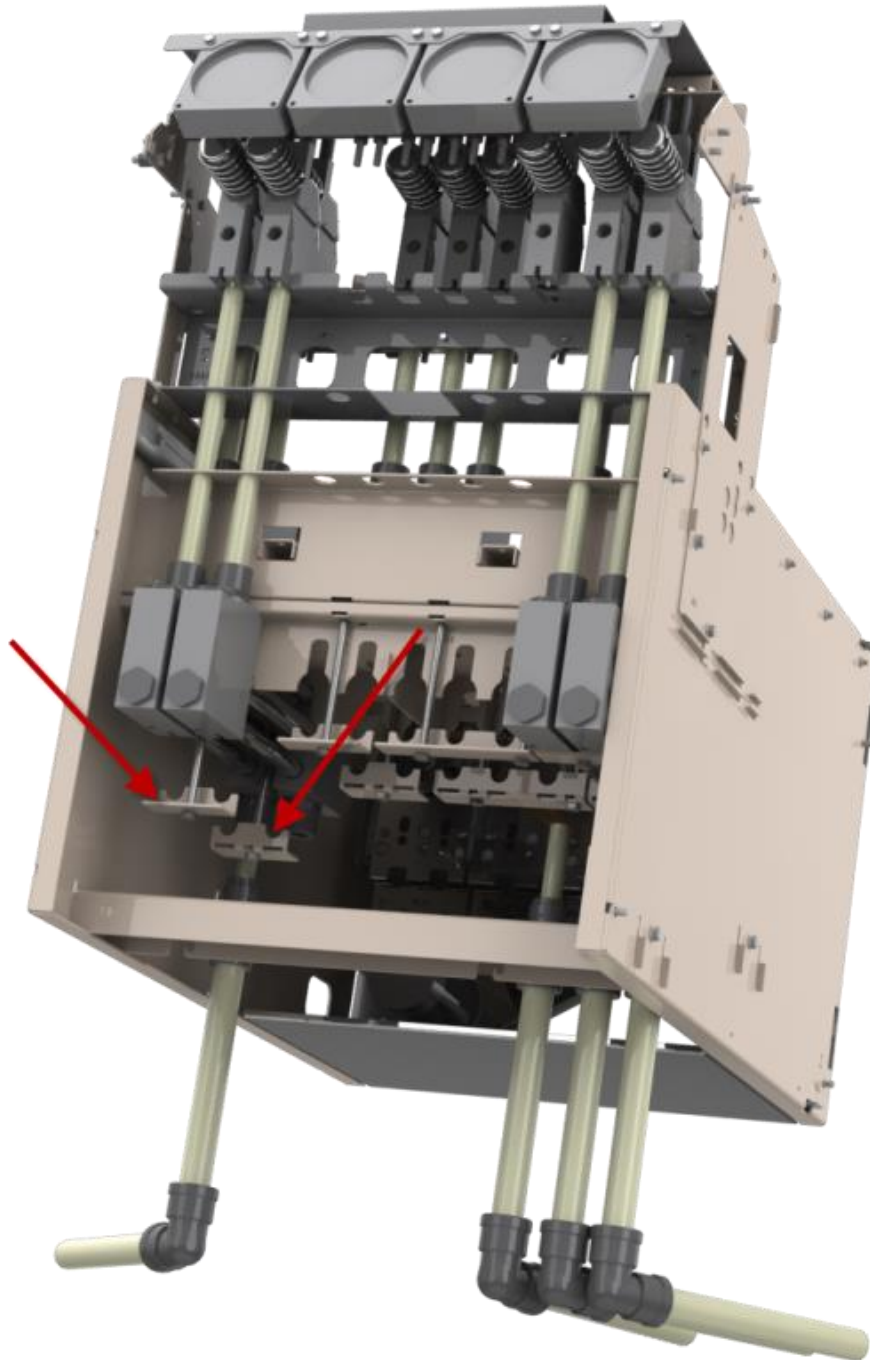
- In the pump is a 6 mm pin, this pin must be placed in the associated hole.
- Place pump tube into valve.





Service Manual VX5-Dispenser

- Install M6² bolts with the clamping brackets, using a 10 mm socket. Use a fastening torque of 9 Nm (or check the tightness of the bolts used for the other pumps). Note that the front and back bracket of the lower pumps ARE identical.

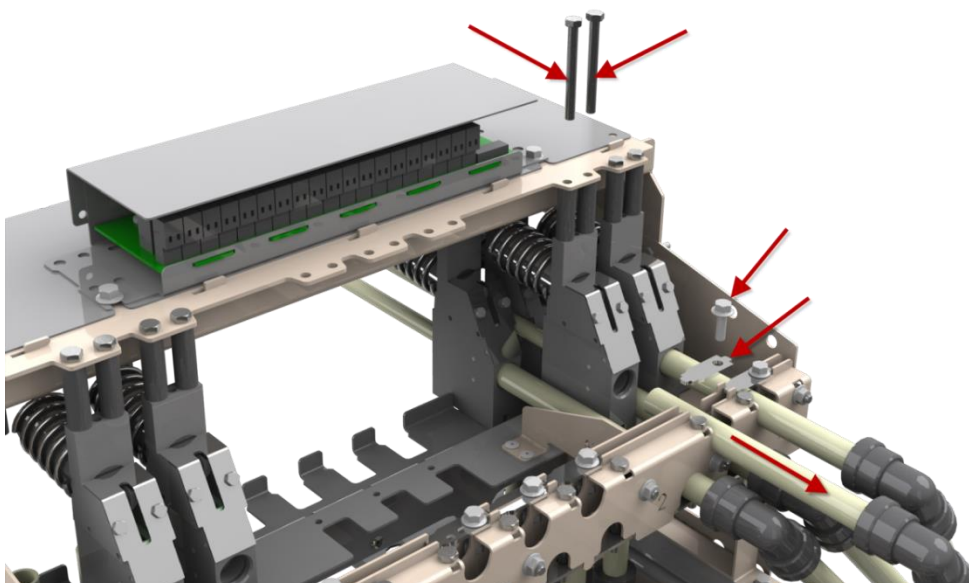


- Remove blanks and place Ø15 mm suction tube into pump.

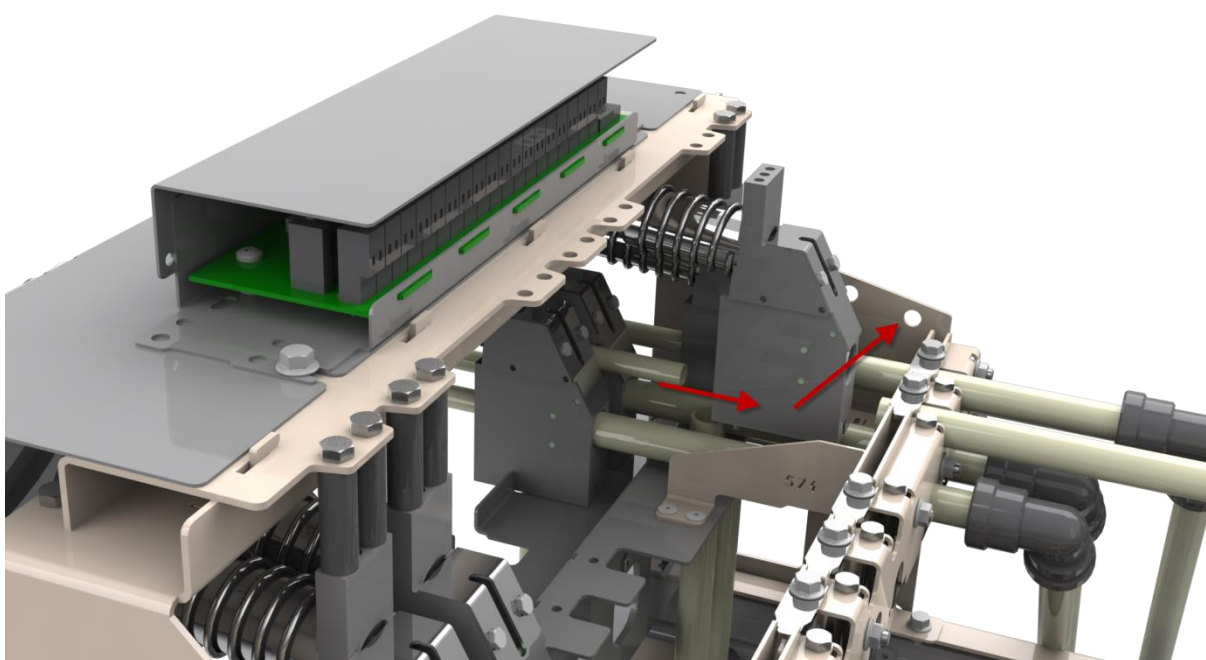
² M5 for machines with serial number upto 2010.002. Use an 8 mm socket and 6Nm there

8. Remove upper valve with fixed valve bridge

- Move the pump drive unit to the rear end position (100%) with the dispenser manager.
- Switch off the dispenser with the lower switch on the back panel of the control unit.
- Remove M5 bolt and clamping plate Ø15 mm return tube.
- Remove Ø15 mm return tube from valve.
- Remove M5 bolts and spacers valve.

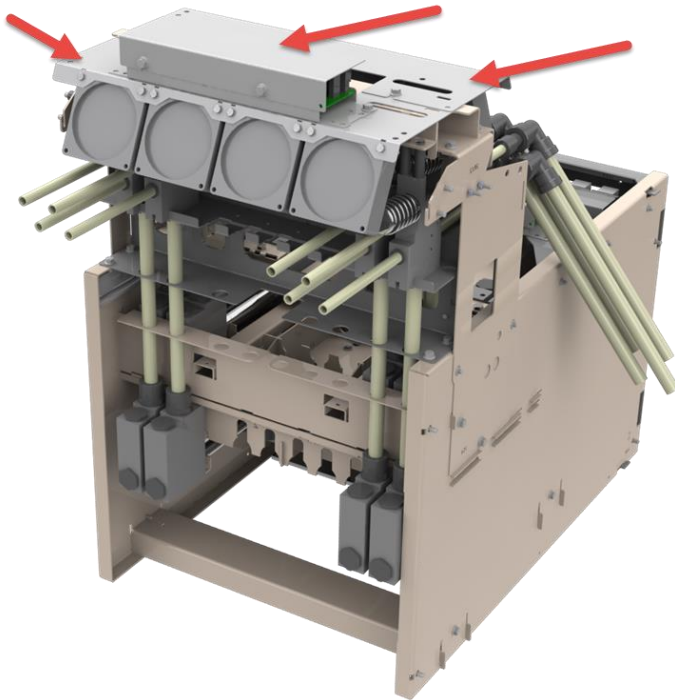


- Remove the valve by pulling it back and upwards.

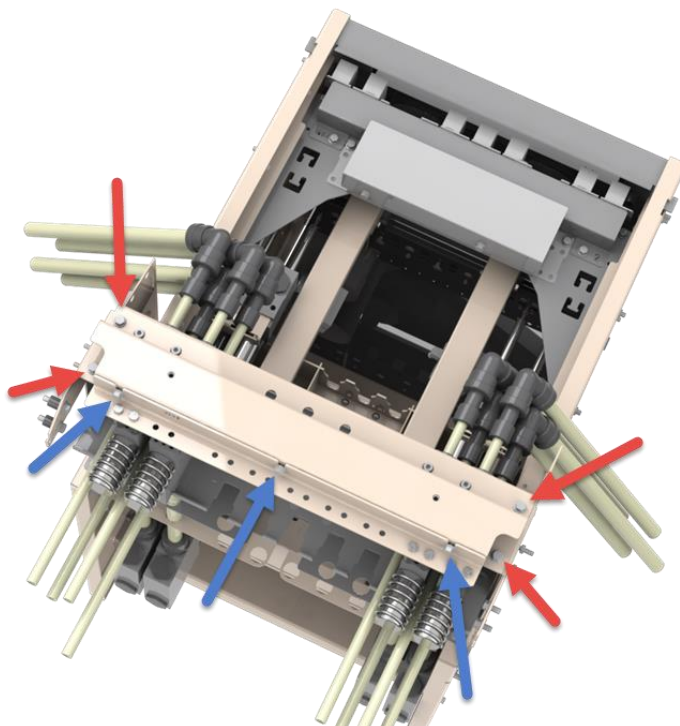


9. Remove upper valve with detachable valve bridge

- Remove blower assemblies and slaveboard unit.

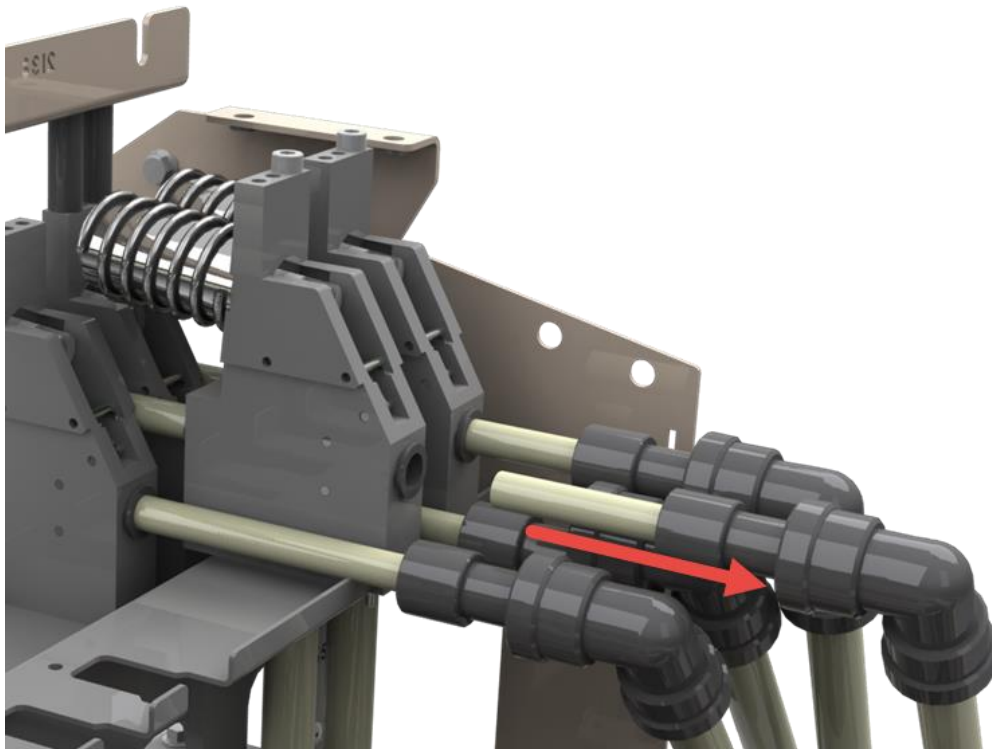


- Remove bolts M5 (4x) see red arrows, loosen bolts M5 (3x) see blue arrows, take out valve bridge.

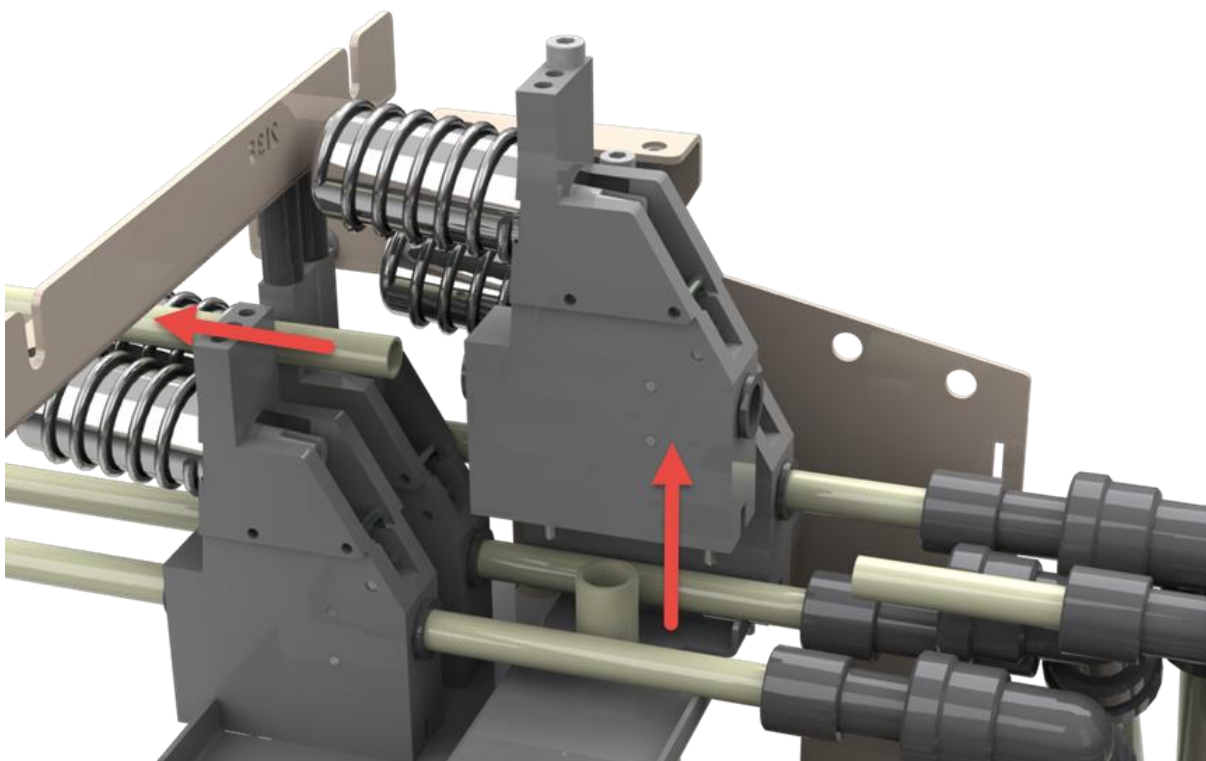




- Remove the tube from the back of the valve



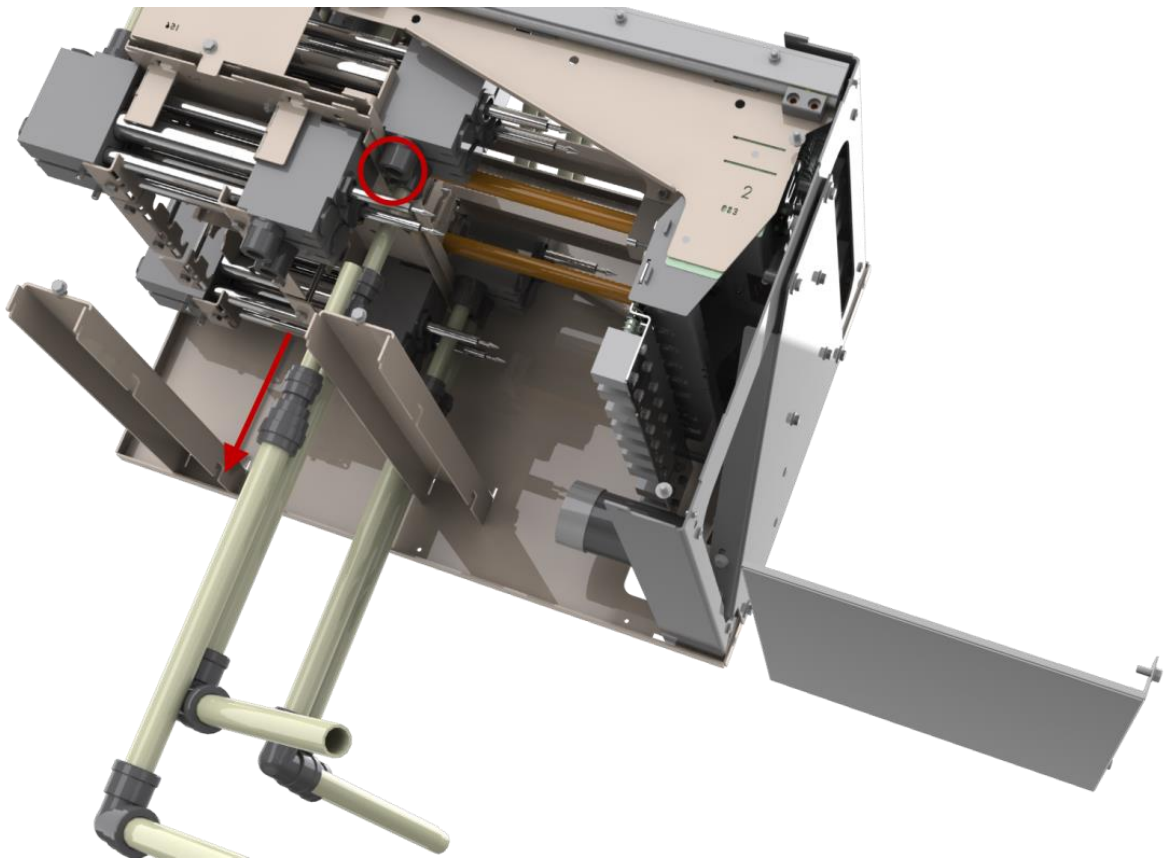
- Move the valve upwards, remove the tube on the front of the valve, take the valve out.





10. Remove upper pump

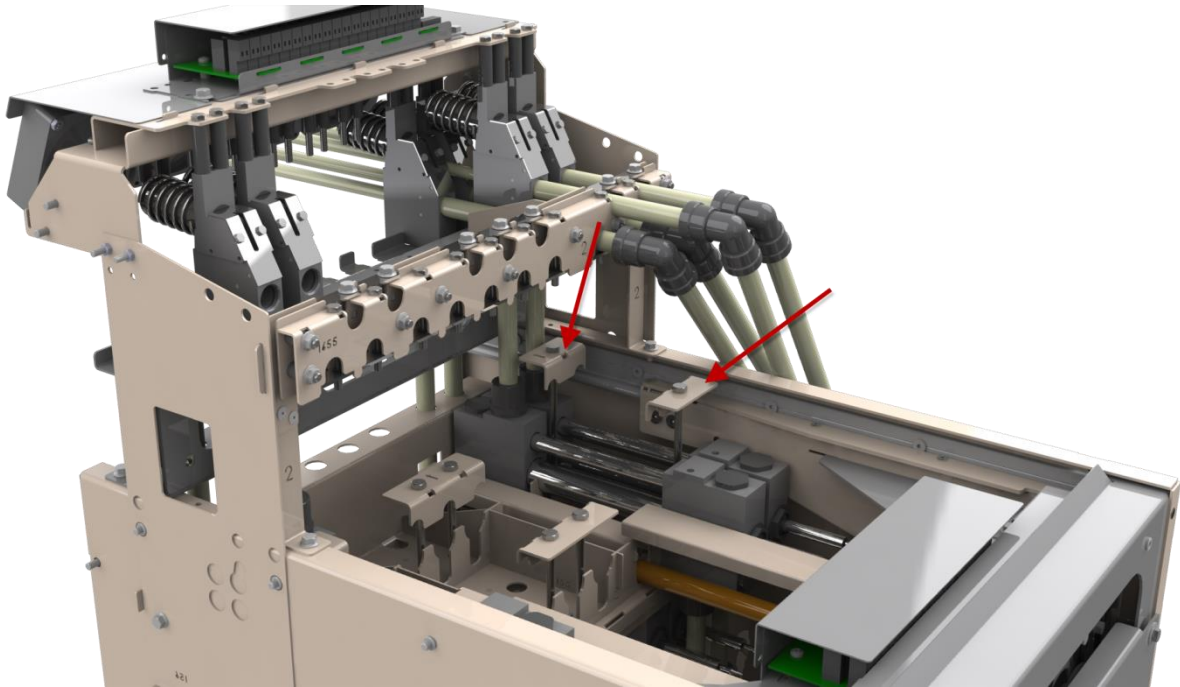
- Move the pump drive unit to the rear end position (100%) with the dispenser manager.
- Switch off the dispenser with the lower switch on the back panel of the control unit.
- Remove drip plate.
- Release Ø15 mm suction tube from pump. Place blanks on the end of the tube and fitting.



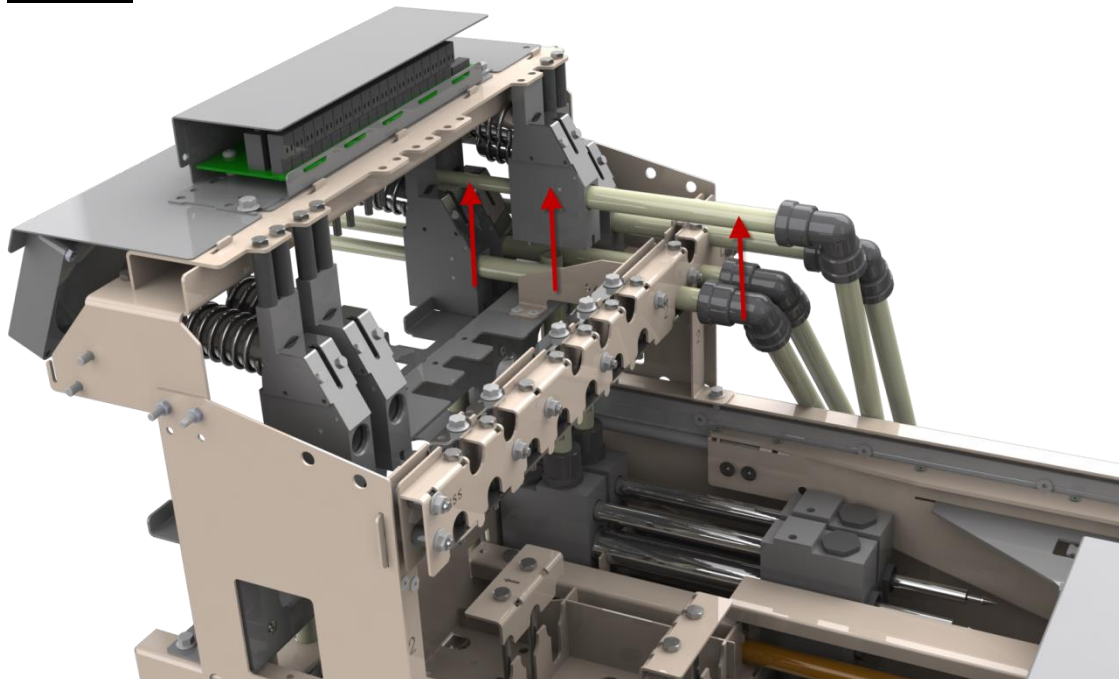


Service Manual VX5-Dispenser

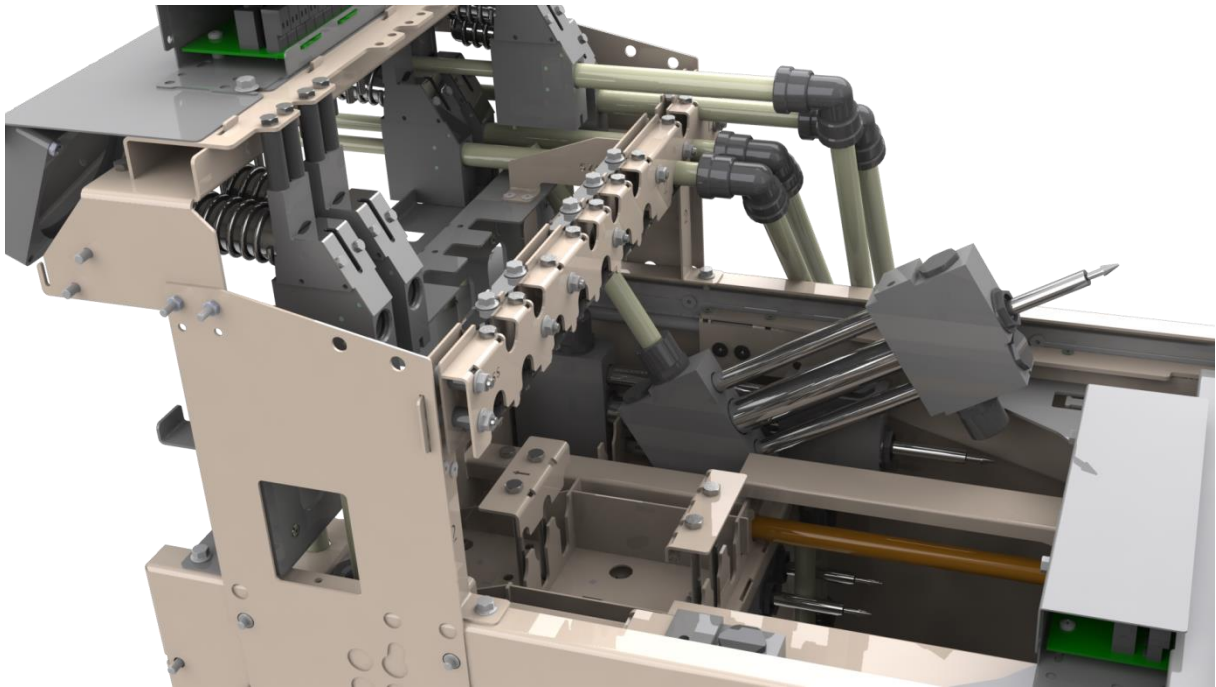
- Remove M6³ bolts with the clamping brackets, using a 10 mm socket.
Note that the front and back bracket of the upper pumps are NOT identical.



- Remove pump by pulling it up and slightly backwards. **Both horizontal tubes stay in the valve.**



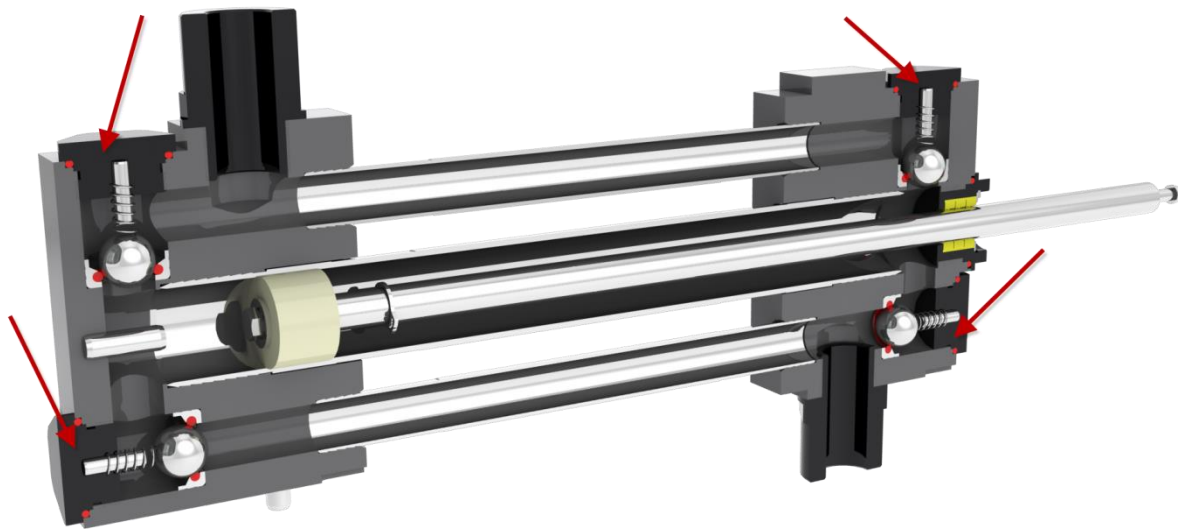
³ M5 for machines with serial number upto 2010.002. Use an 8 mm socket there





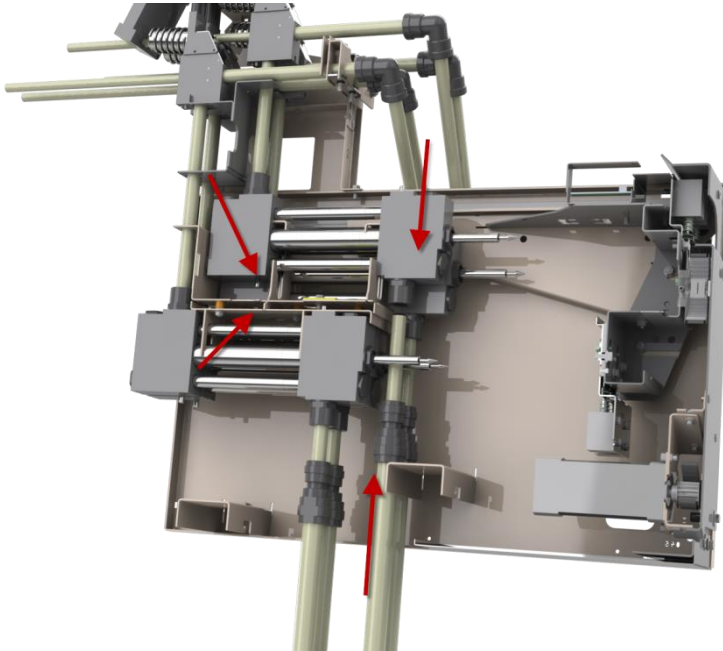
11. Clean pump

- Turn loose the 4 plugs holding the balls in place.
- Remove each plug and make sure the plug, ball, spring and O-ring are kept together
NOTE: Do NOT remove the seal-plug around the piston-rod.
- Flush the pump with a compatible, non-aggressive liquid. For optimal cleaning move the piston-rod forward and backwards while flushing.
- Inspect the inside of the pump through the holes from which the 4 plugs are removed.
- Place back the plugs and other parts. Make sure not to damage the O-rings and fasten the plugs gently (a low torque is sufficient)

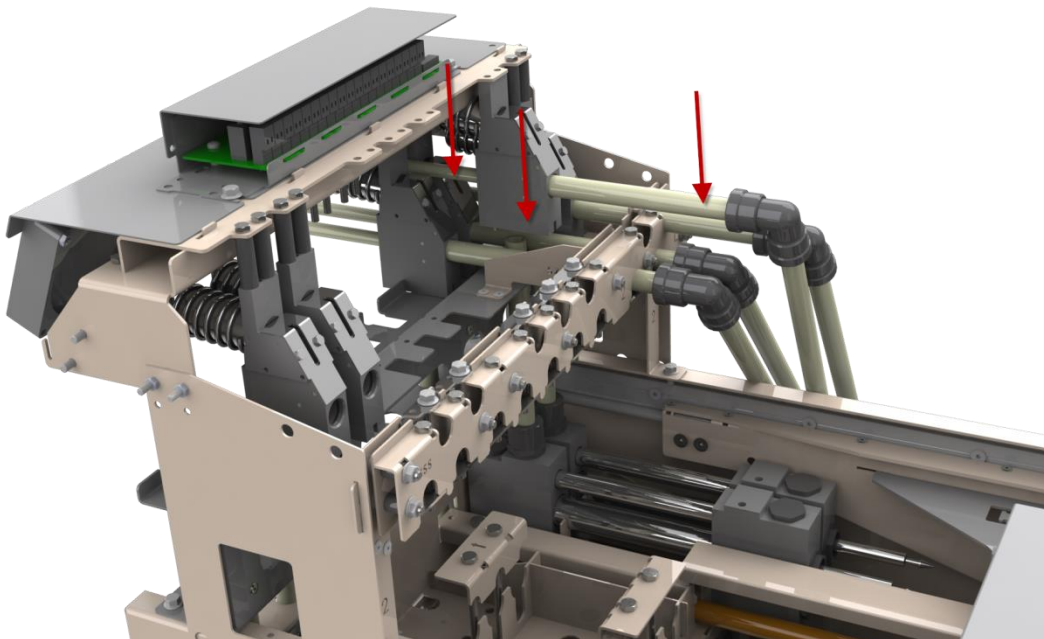




12. Install upper pump



- In the pump is a 6 mm pin, this pin must be placed in the associated hole.
- Install M6⁴ bolts with the clamping brackets, using a 10 mm socket. Apply a torque of 9Nm (or check the tightness of the bolts used for the other pumps). Note that the front and back bracket of the upper pumps are NOT identical.
- Install Ø15 mm tube.



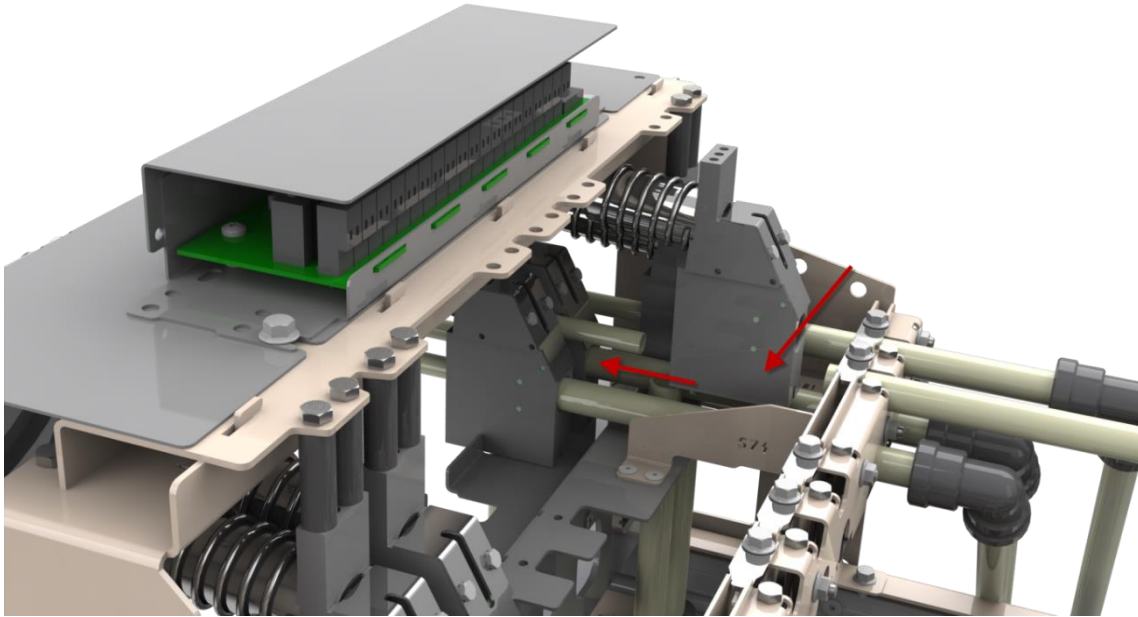
- Remove blanks on the end of the tube and fitting and place the tube in the fitting.

⁴ M5 for machines with serial number upto 2010.002. Use an 8 mm socket and 6Nm there

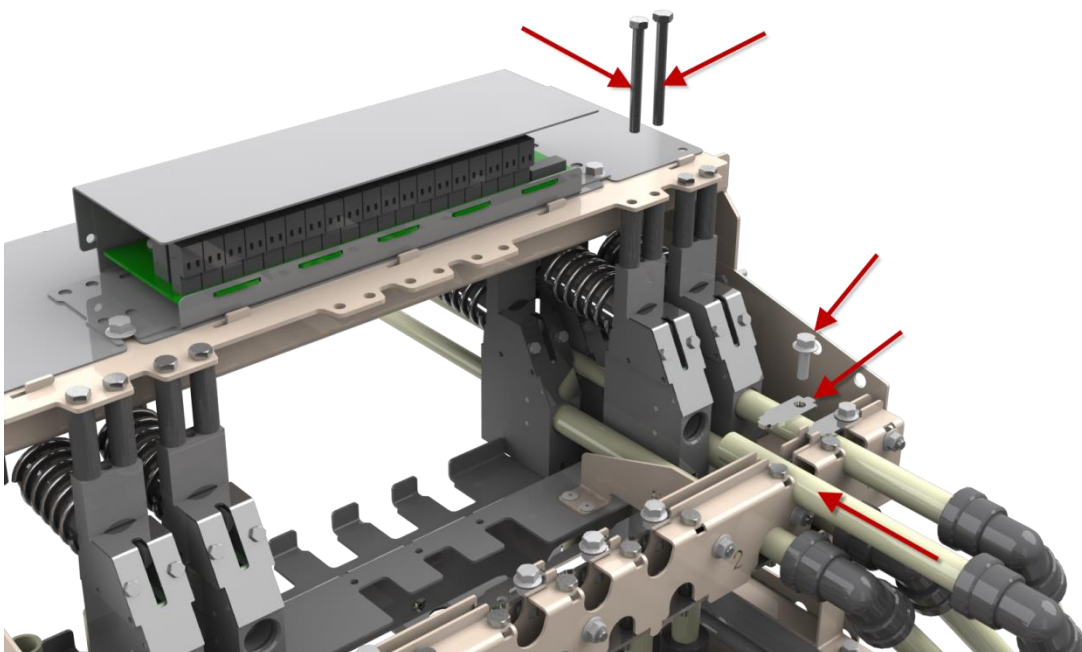


13. Install upper valve with fixed valve bridge

- Place the valve first over the Ø15 mm tube and then pull it forward into the small 10 mm tube.
- Install bolts and spacers to mount the valve.



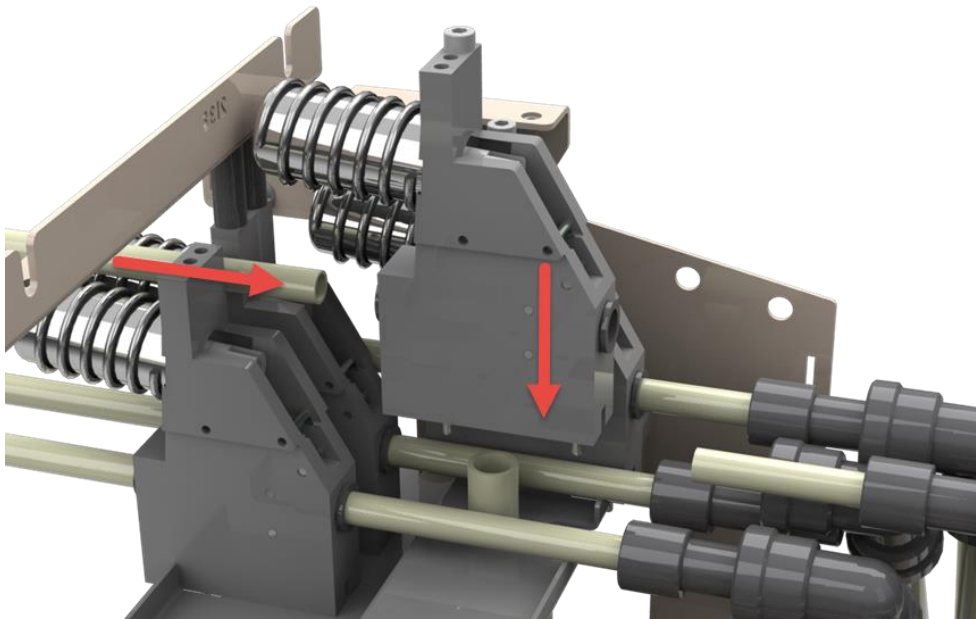
- Install Ø15 mm return tube into valve
- Mount tube locking plate with M5 bolt.



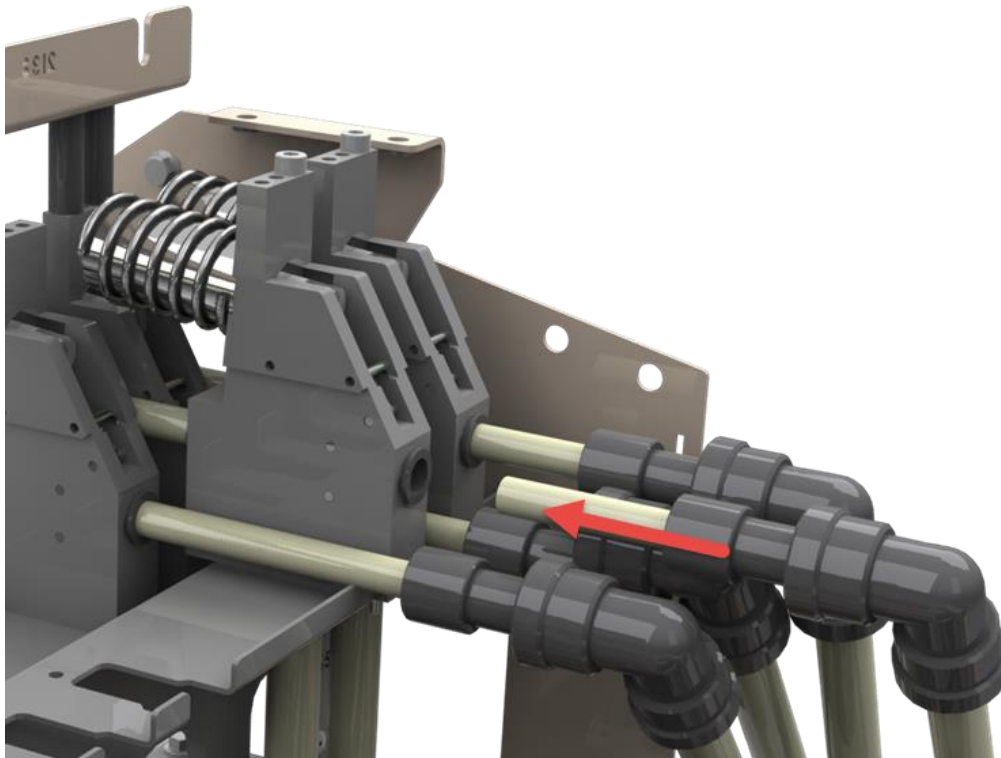


14. Install upper valve with detachable valve bridge

- Install the tube on the front of the valve and place the valve over the 15 mm tube

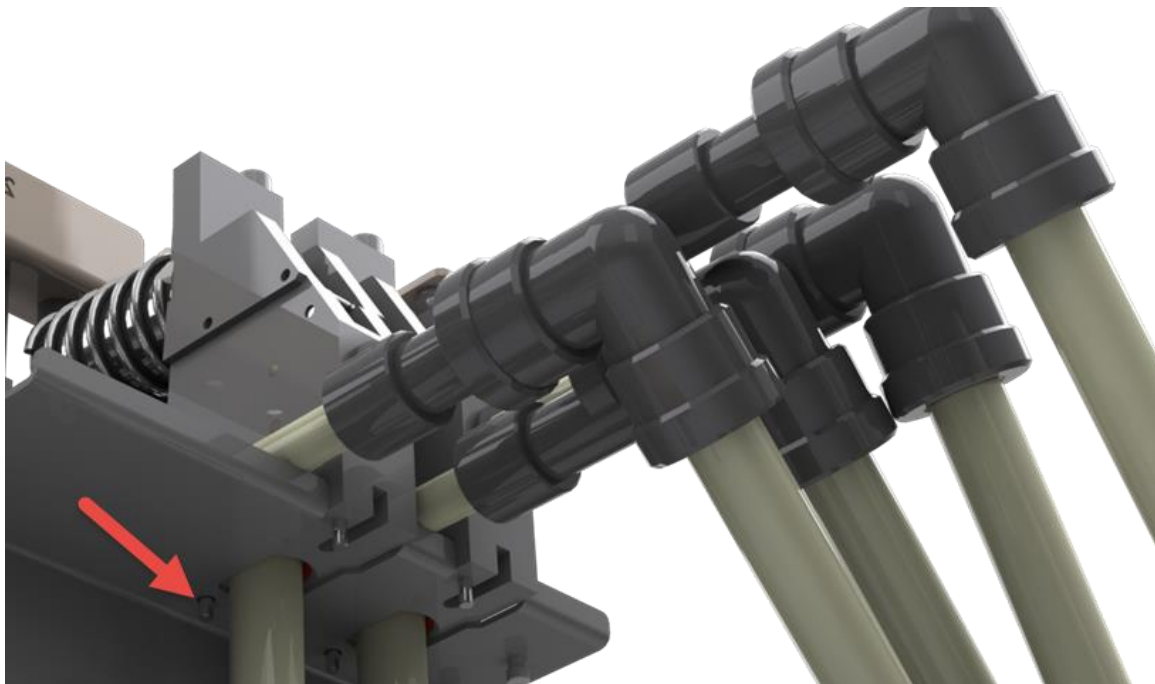


- Install the tube on the back of the valve.

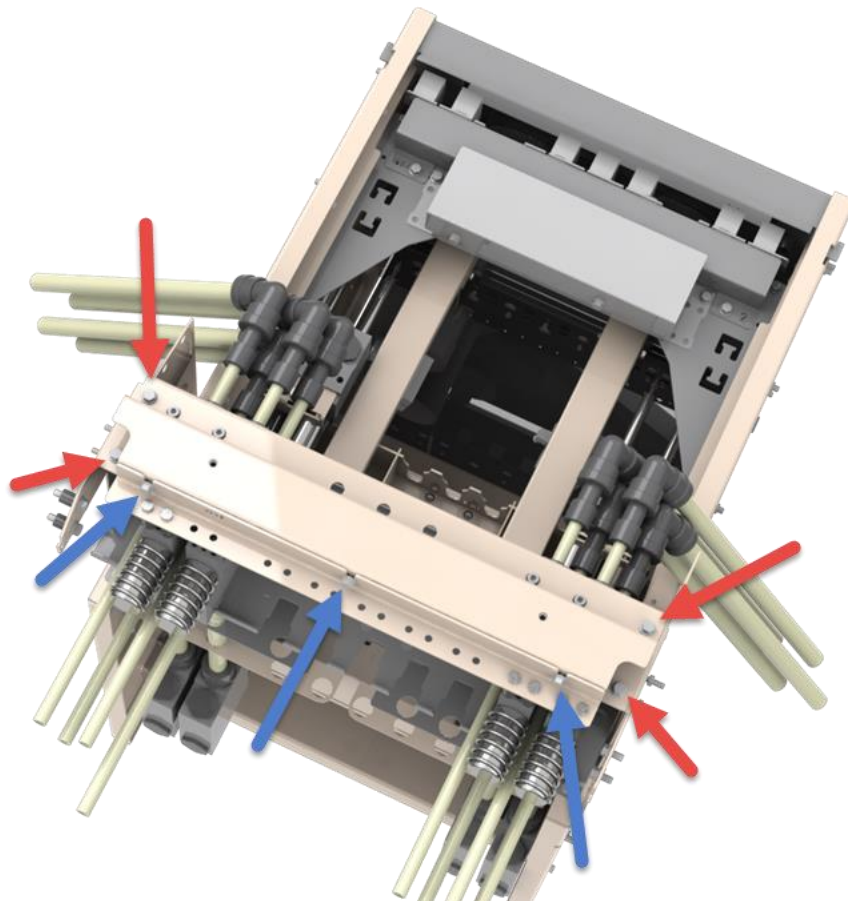




- Check that pin on the bottom of the valve is through the support of the valves.

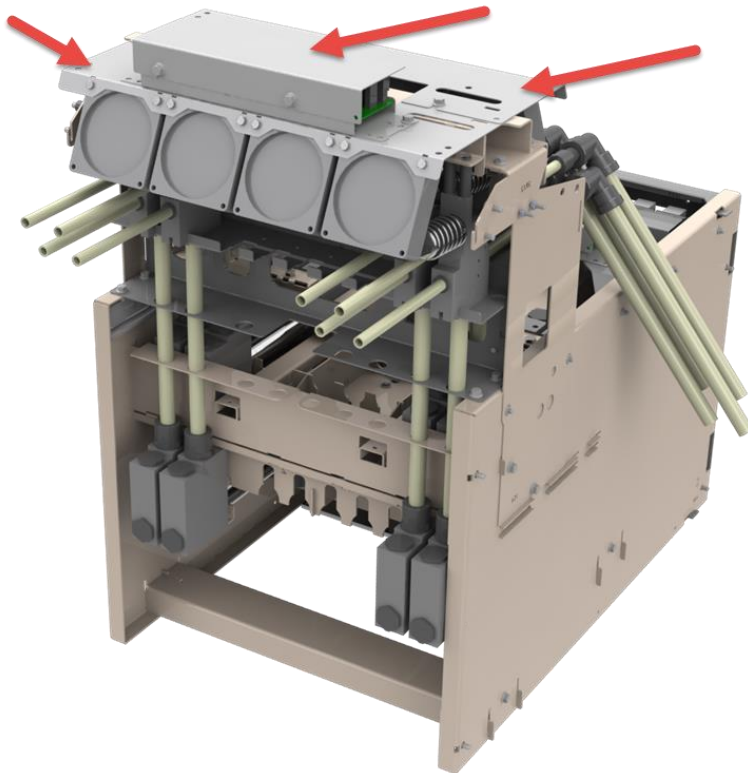


- Place valve bridge, install bolts M5 (4x) see red arrows, tighten bolts M5 (3x) see blue arrows.



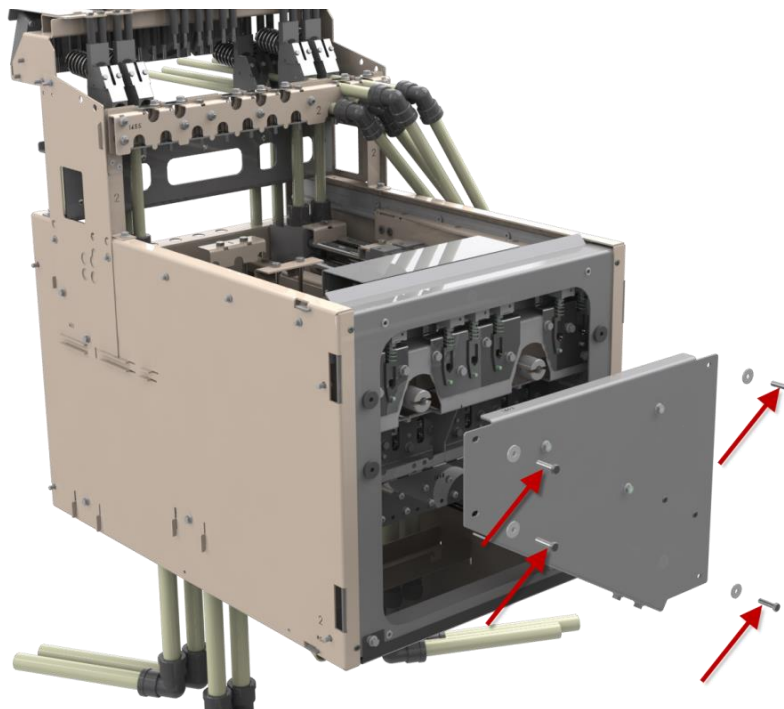


- Install blower assemblies and slaveboard unit.



15. Remove spindle pump drive unit

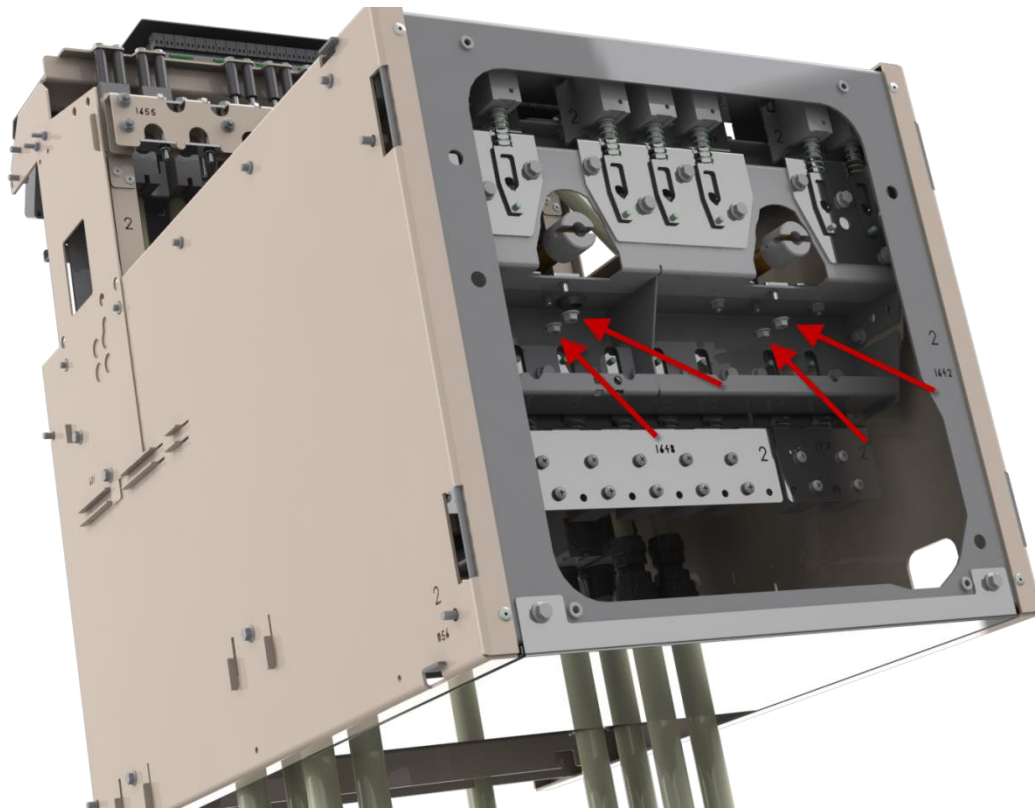
- Move drive-unit to 100% with the DM
- Remove M5 Bolt and washers, using an 8mm socket.



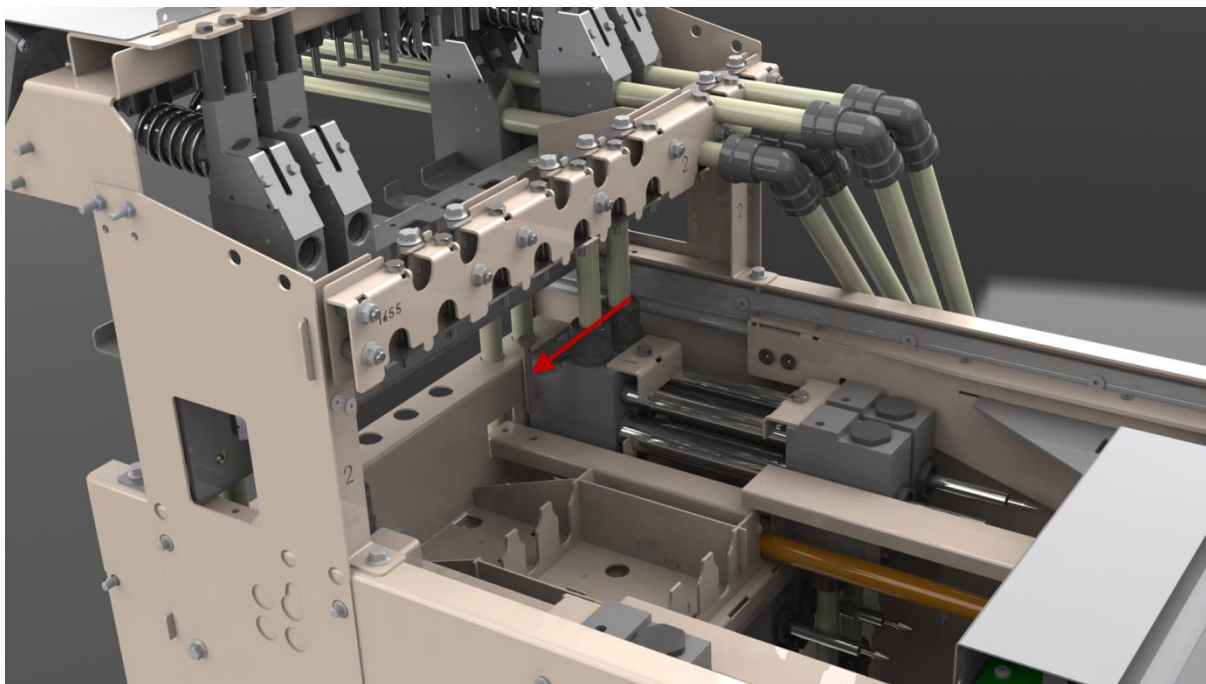


Service Manual VX5-Dispenser

- Remove nuts M5, using an 8mm socket.

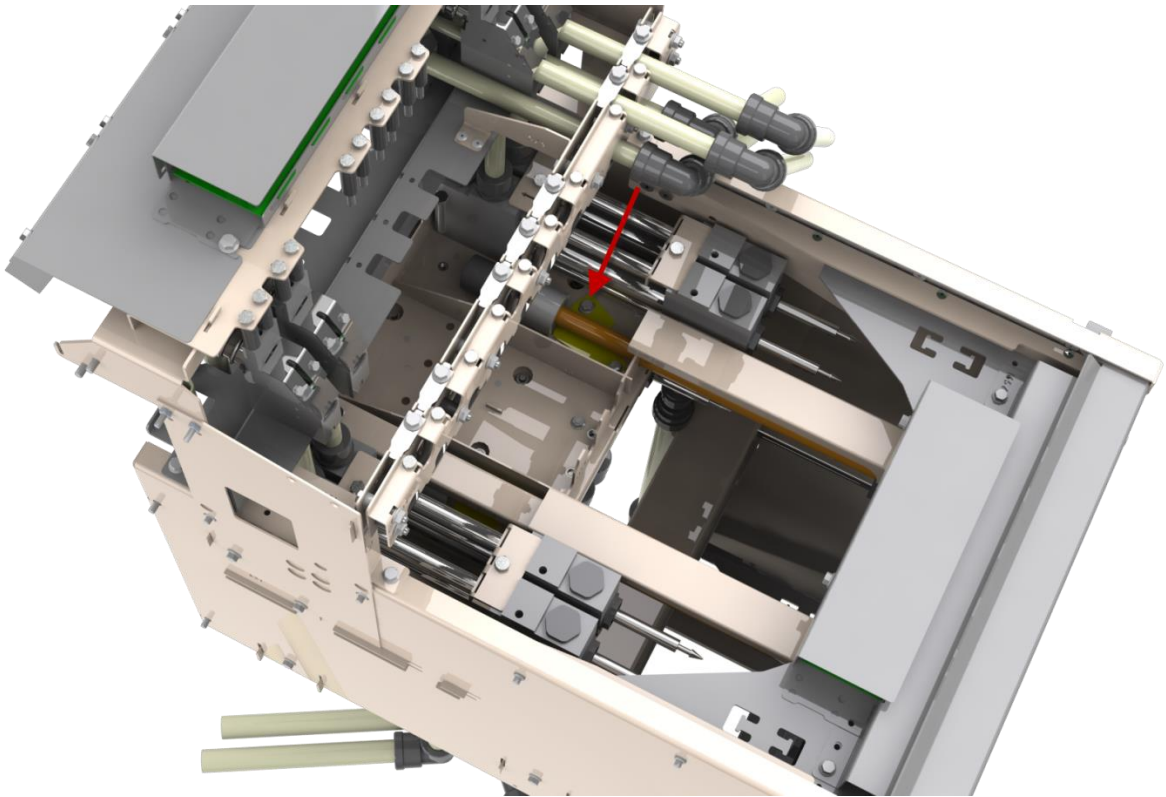


- Remove M6 bolt, using a 10mm socket, remove clamping bracket.

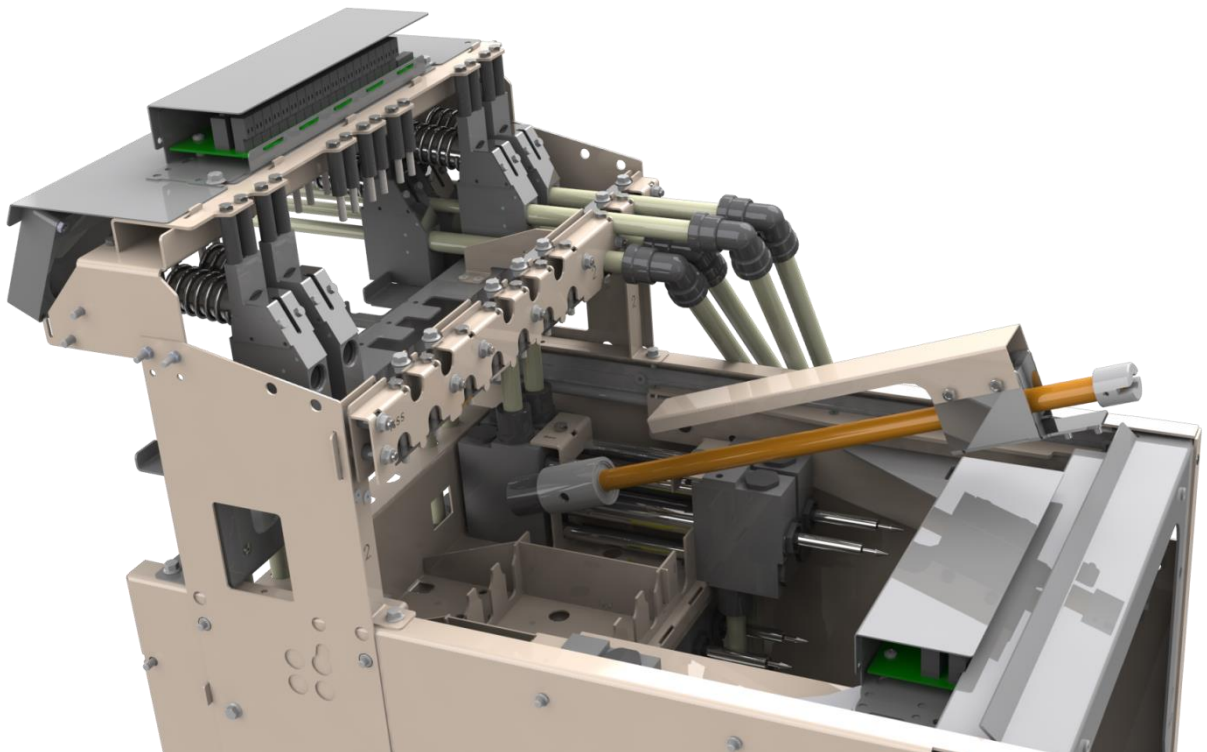




- Release tension plate.



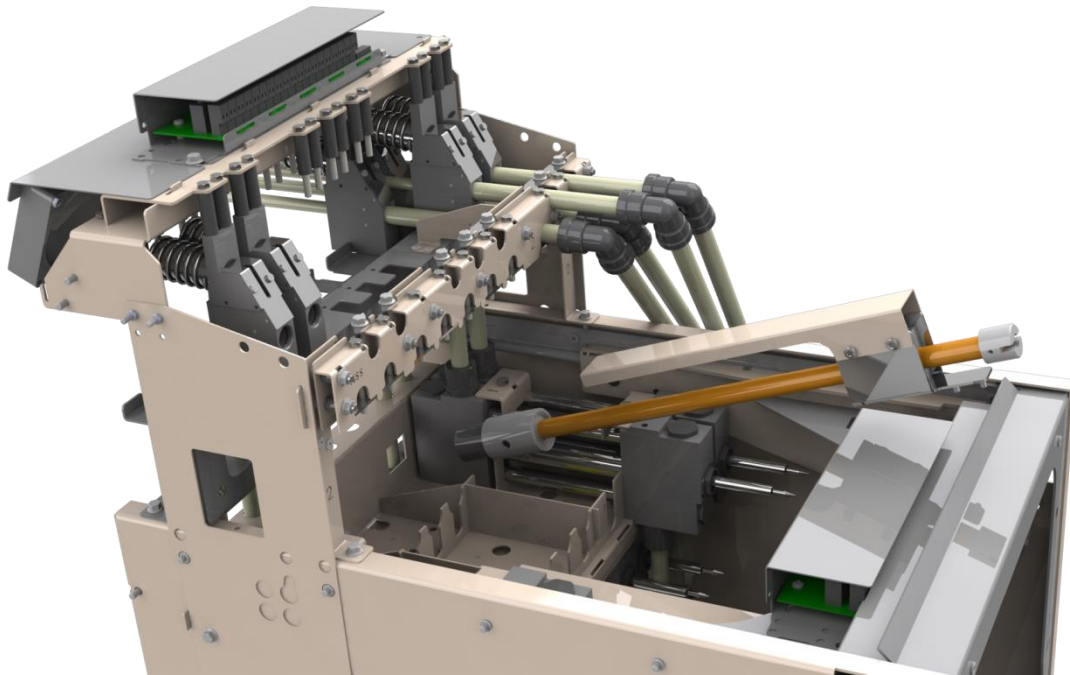
- Remove spindle assembly.



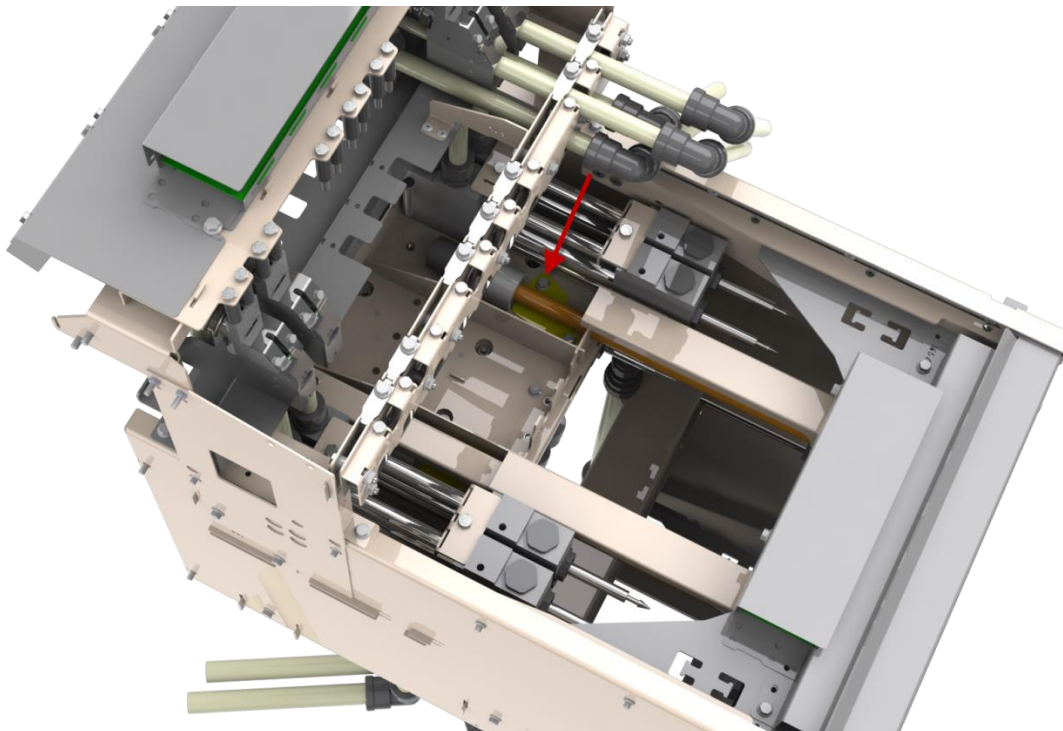


16. Install spindle pump drive unit

- Install spindle assembly



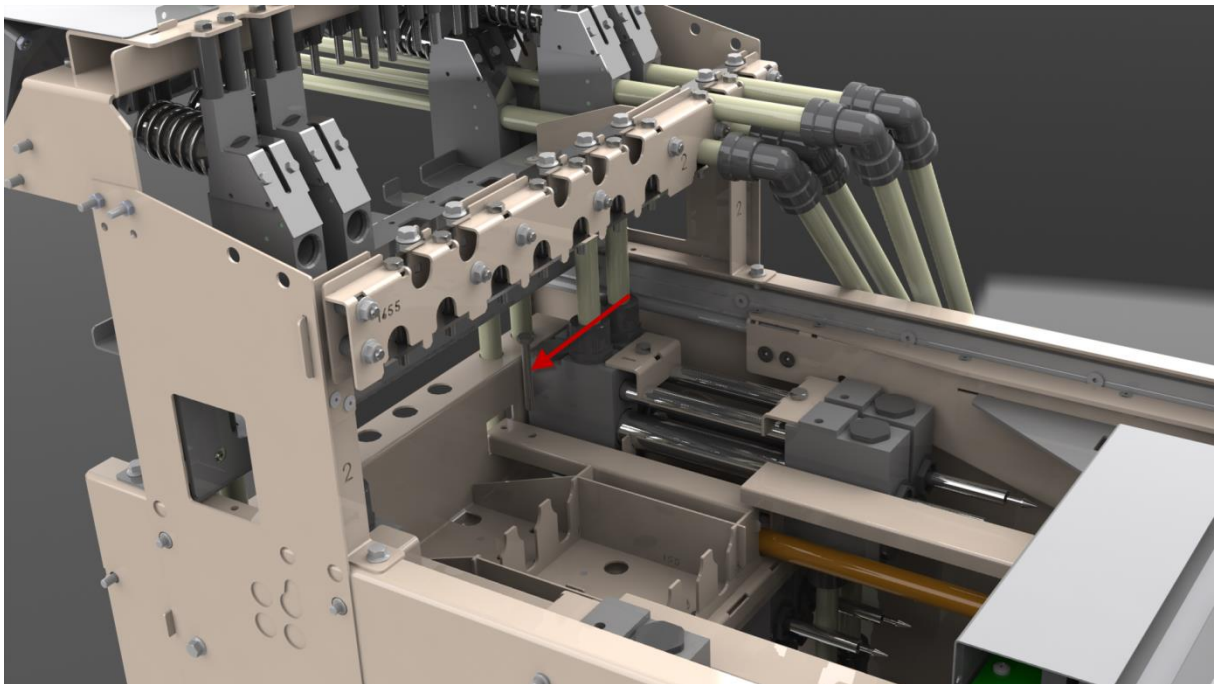
- Only when you install a new spindlehousing, reduce the clearance with this plate.



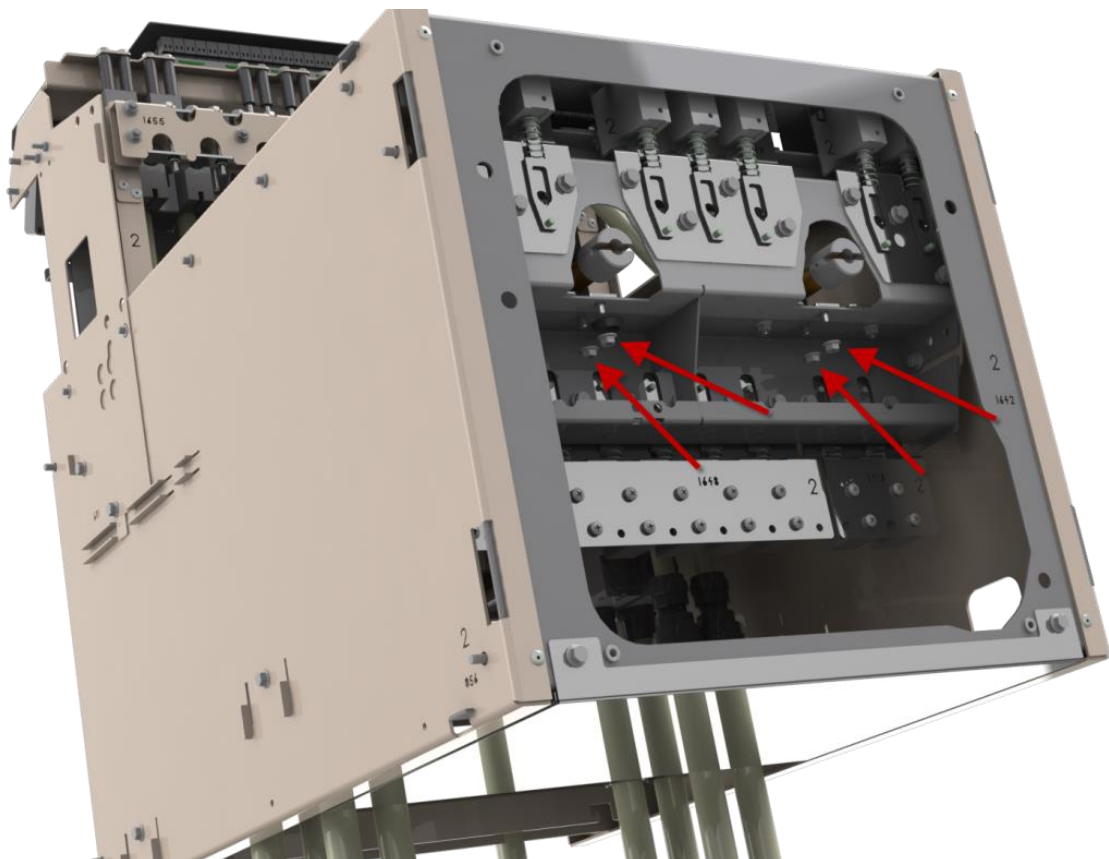


Service Manual VX5-Dispenser

- Install clamping bracket and M6 bolt, torque force 9 Nm



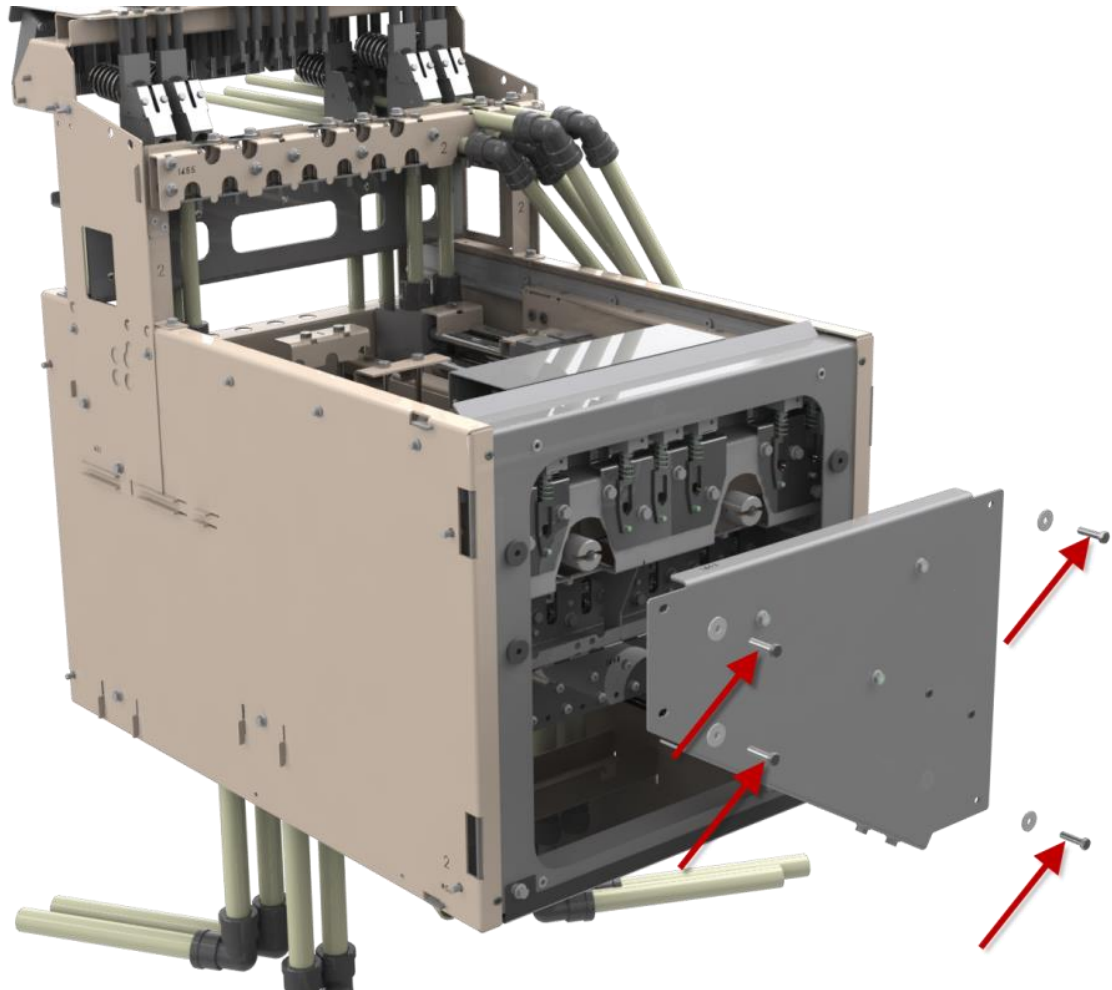
- Install M5 nuts





Service Manual VX5-Dispenser

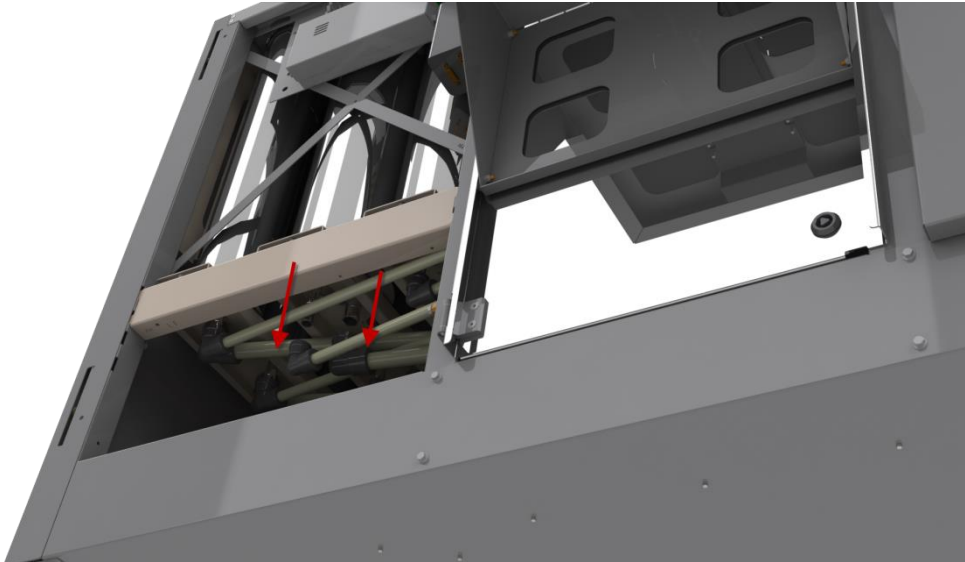
- Make sure the spindles fit into the couplings without force while the drive-unit is fully at the back.
- Install M5 Bolt and washers, using an 8mm socket.





17. Remove canister

- Remove the click-connect couplings of the canister, place a small bucket under the canister to catch the remaining paint.



- Take out the canister.



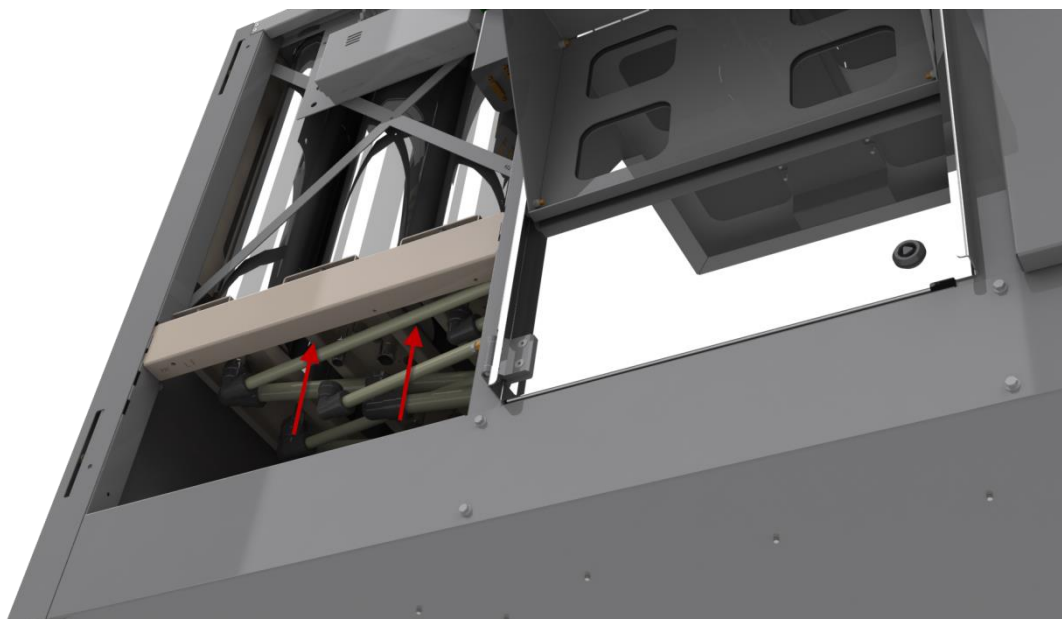


18. Install canister

- Place canister



- Press couplings on the canister





19. Maintenance and Troubleshooting

See the Operator Manual for regular maintenance details, a complete list of error codes, a troubleshooting guide and more.