

- GB** Technical Manual
- DE** Technisches Handbuch
- FR** Manuel technique
- SE** Teknisk manual

DRESTER GP 24



DRESTER

HEDSON

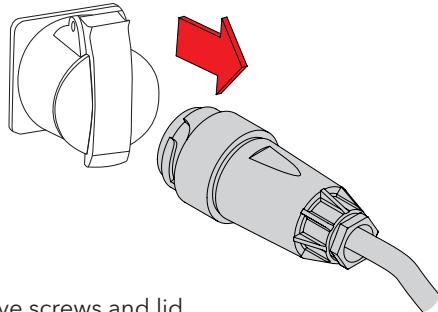
1. Safety precautions

1.1 Tools

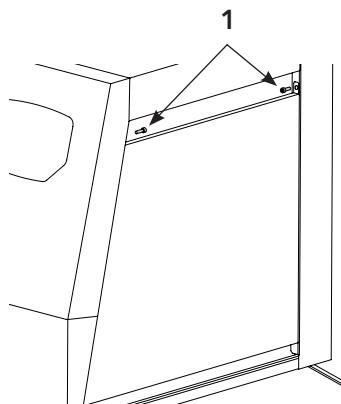


5mm

WARNING! Always perform the steps below, before doing any work on the machine.

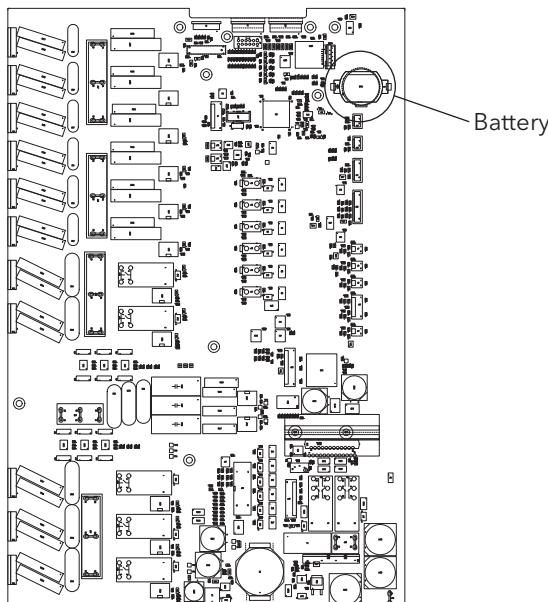


1. Remove screws and lid.



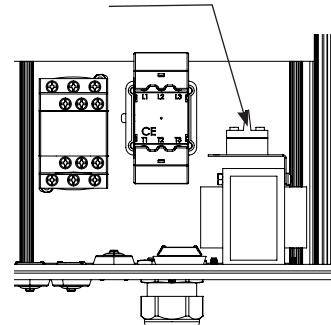
2. Battery

Battery type is: CR 2032 3V.

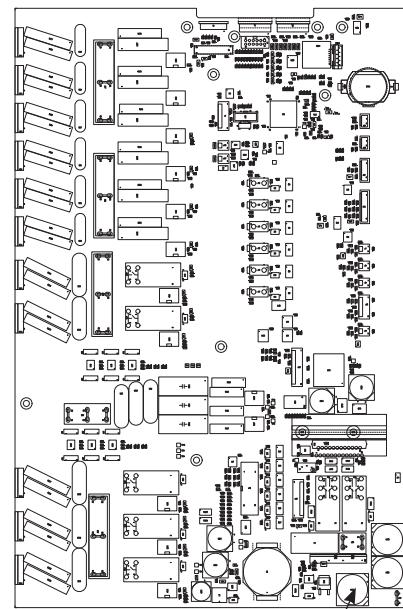
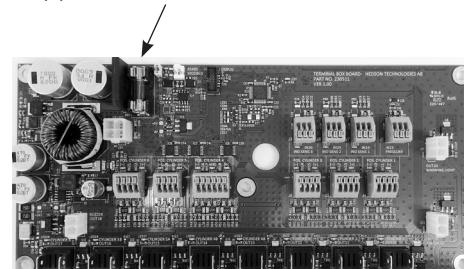


3. Fuses

The machine has three fuses. One fuse is located on top of the transformer in the main control box, 500mA 440V slow fuse.



The second fuse is located in the terminal control box on the upper left, 3.15A 250V slow fuse.



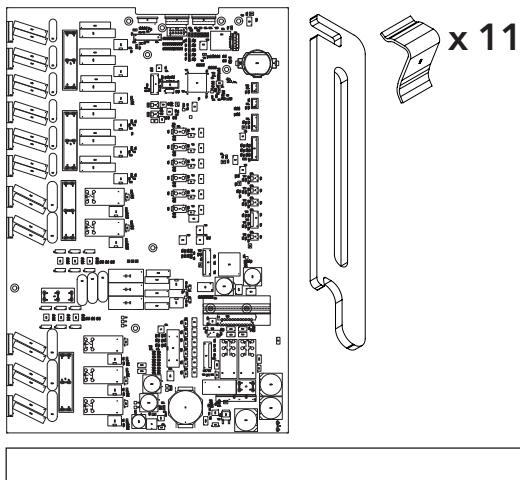
The third fuse is located on the bottom right of the control card.

4. Warning lamp

The rating of the lamp is 24 V/5 W.

5. Control card PCD replacement

5.1 Components

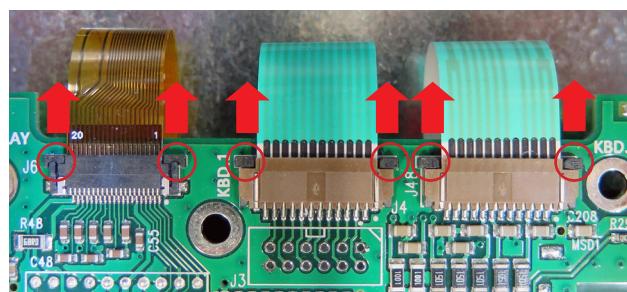
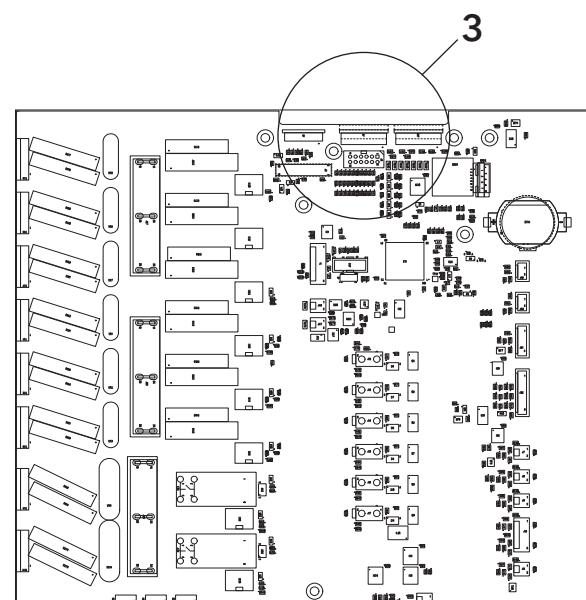
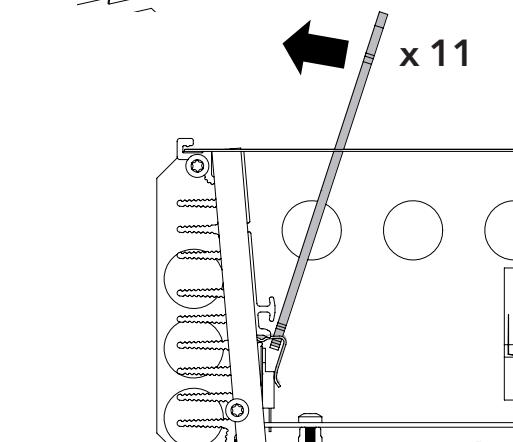
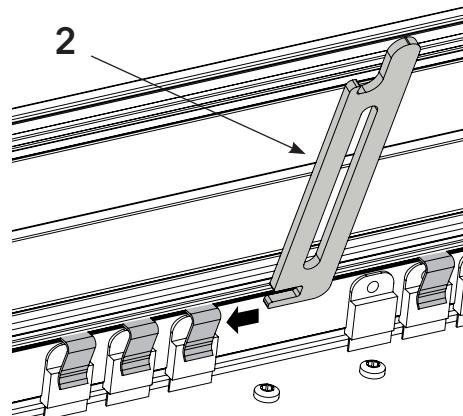
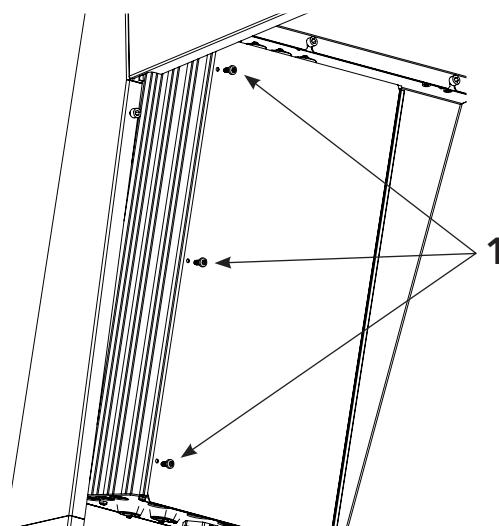


5.2 Tools

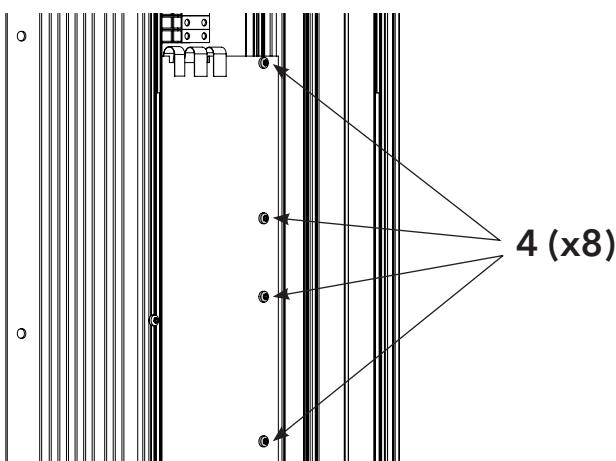


NOTE: Start instruction with chapter 1 safety precautions

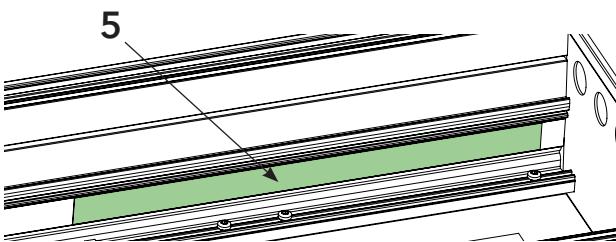
1. Remove screws and lid.
2. Use the special tool to loosen the clips that hold the circuit board to the aluminum profile.
3. Remove ALL cables for motors, heaters, sensors etc. Ribbon cables released by pushing the pins upwards like illustrated on picture. Mark cables for reassembling.



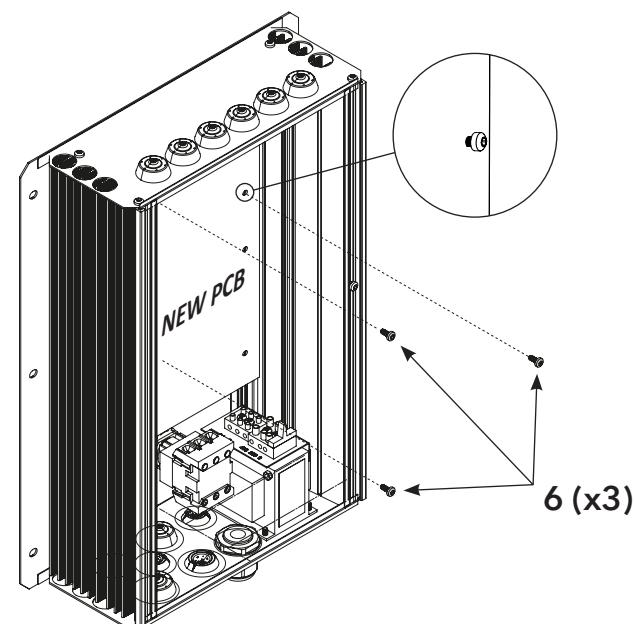
4. Remove screws and the PCB



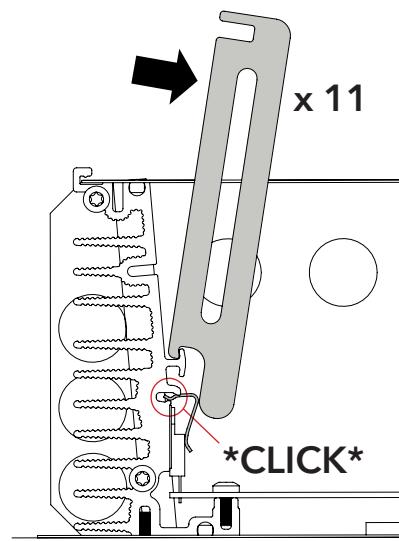
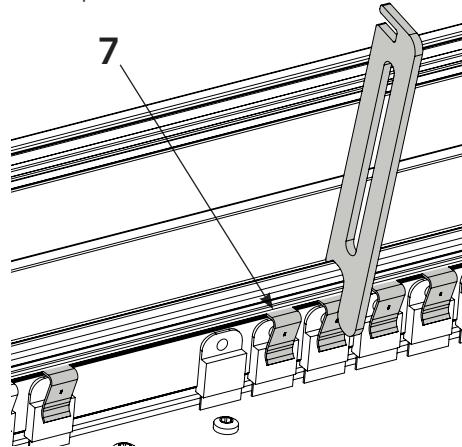
5. Check that the tape on the aluminium profile is positioned as shown in picture or replace it.



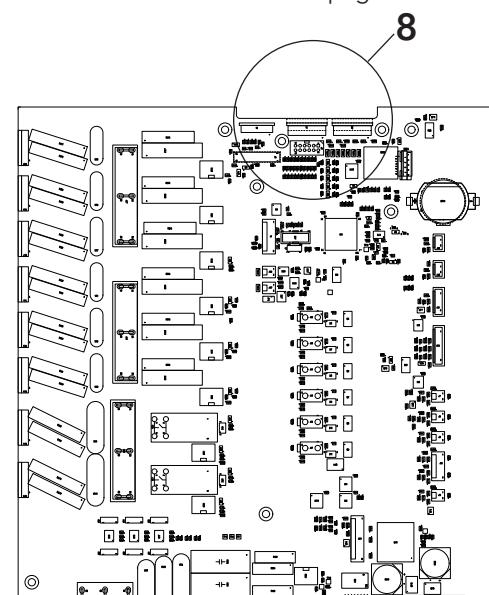
6. Position new PCB and fasten three screws without tightening PCB.

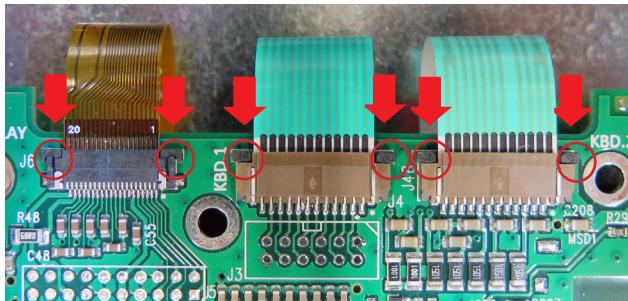


7. Use the supplied clips to lock the card against the aluminum profile.

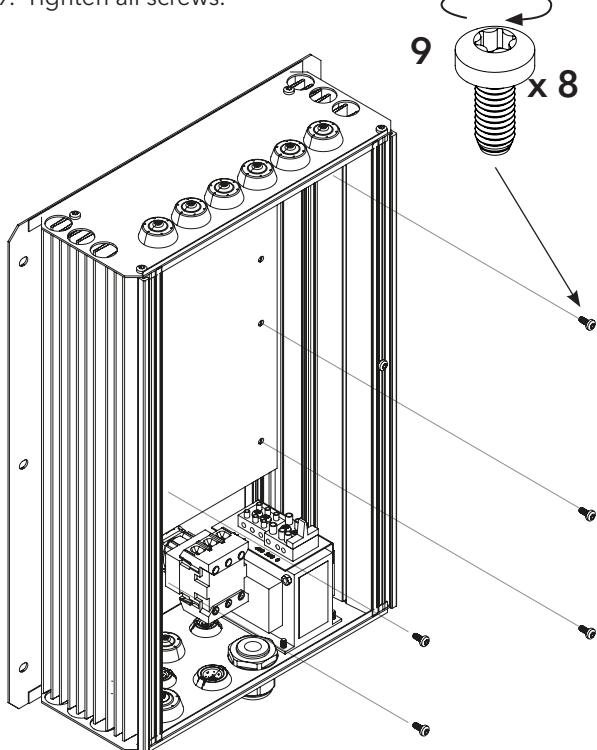


8. Fasten ALL cables. Reassemble as previously marked. Ribbon cables fasten by pushing the pins downwards like illustrated below and on next page.

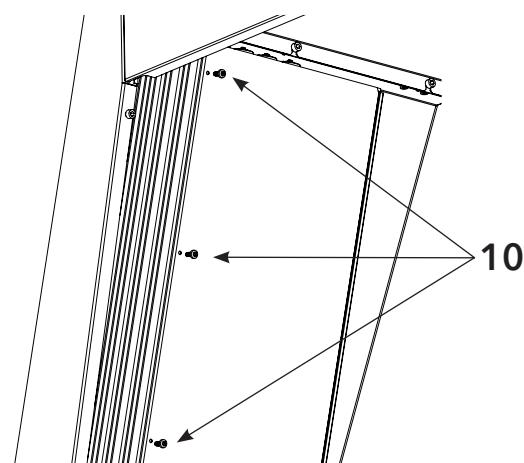




9. Tighten all screws.



10. Position lid and fasten screws.



11. Perform Configuration (chapter 6).

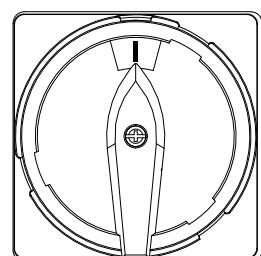
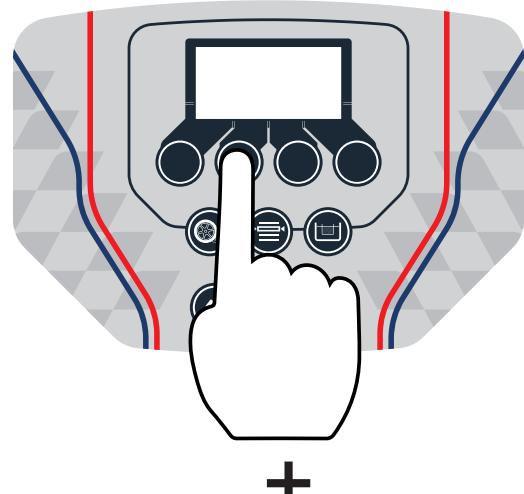
12. Perform Self test.

12 /8.Self test/....



6. Configuration menu

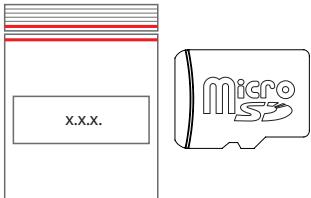
Choose settings according to machine configuration.



PIN CODE	1632	
VOLTAGE	400V	
MACHINE TYPE	24	
HEATER	INTELLIGENT	
CLEAN RINSE	NO	YES
MIXER MOTOR	NO	YES
TEMPERATURE	°C	°F

7. Software update

7.1 Components

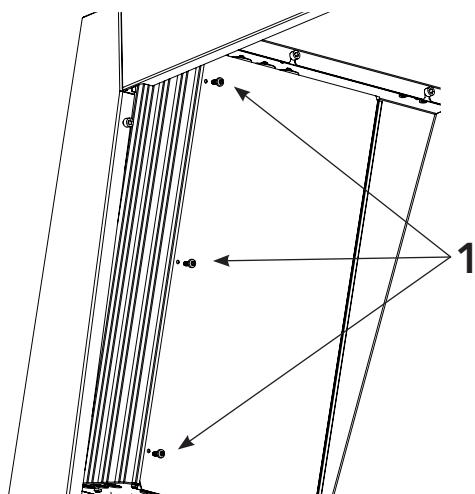


7.2 Tools

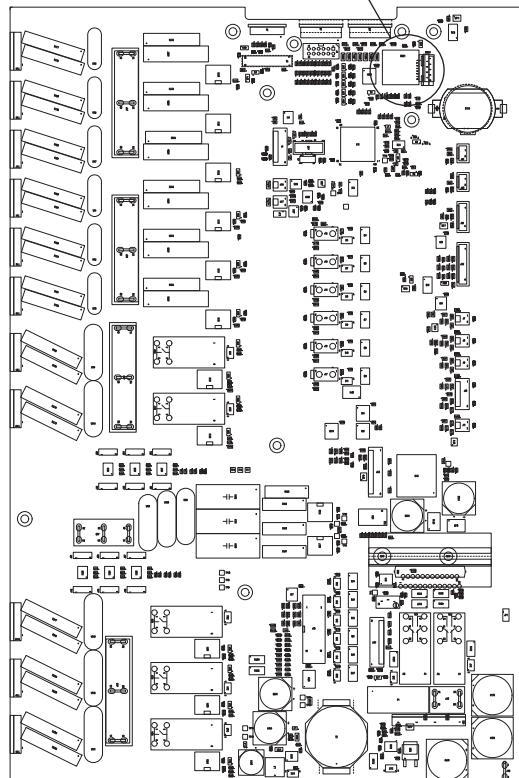
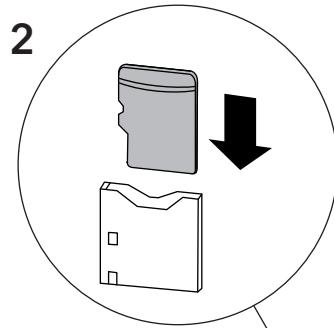


NOTE: Start instruction with chapter 1 safety precautions

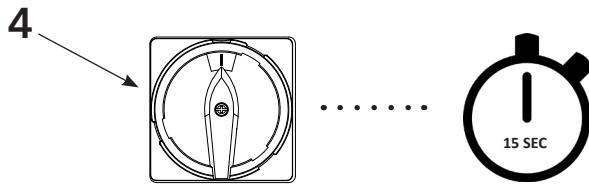
1. Remove screws and lid.
2. Place sd card in slot.



3. Assemble in reverse order.

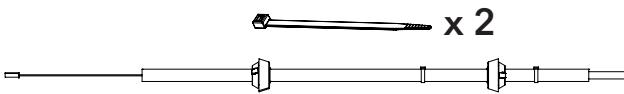


4. Start with main switch, wait 15s, open settings, navigate to (/7.Version/Model/Sw/x.x.x) and check that x.x.x correspond with the number on the bag.
5. Repeat instruction to remove sd-card.



8. Replacing temperature sensor

8.1 Components

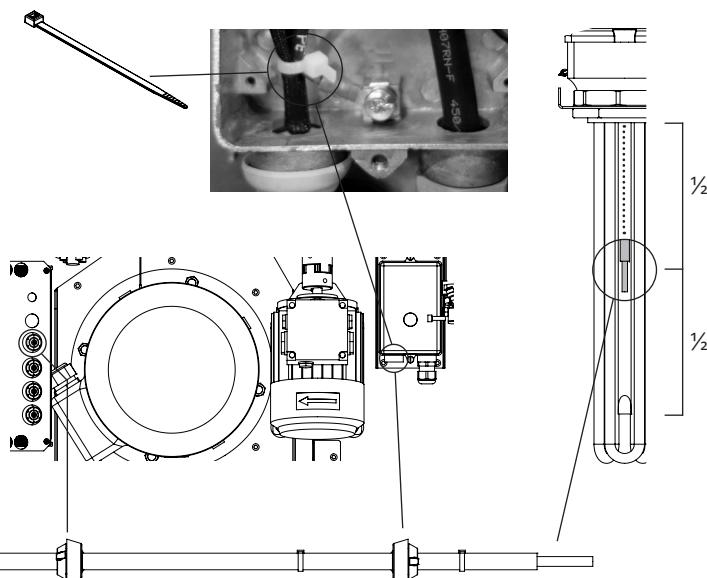
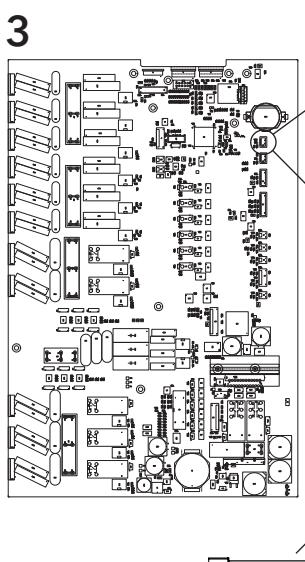
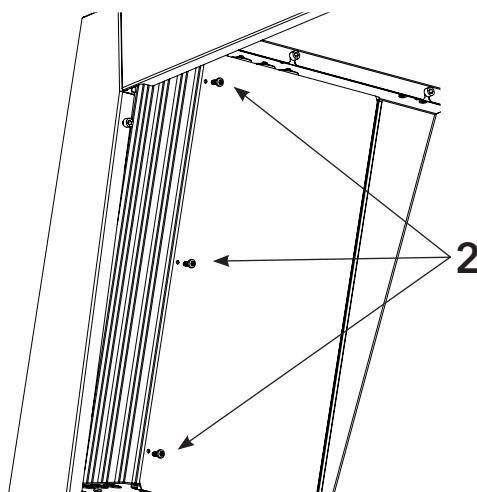
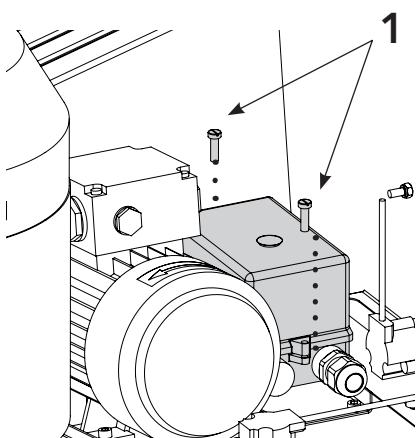


8.2 Tools



NOTE: Start instruction with chapter 1 safety precautions

1. Remove screws.
2. Remove screws and lid.



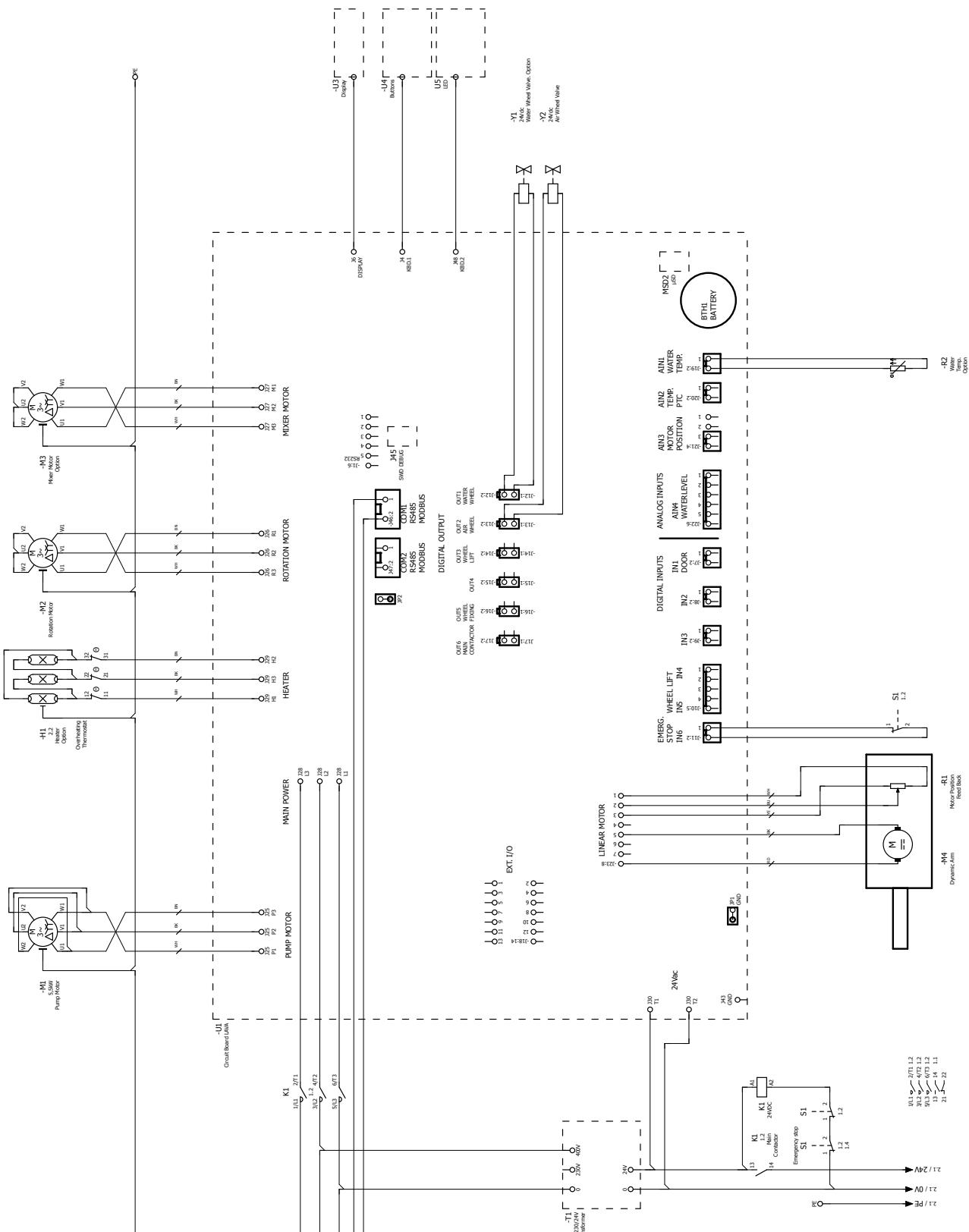
3. Disconnect the old temp. sensor and then connect the new sensor.
4. Assemble in reverse order.
5. Start machine and check that the temp. sensor is working (/8. Selftest/Water temperature/....).

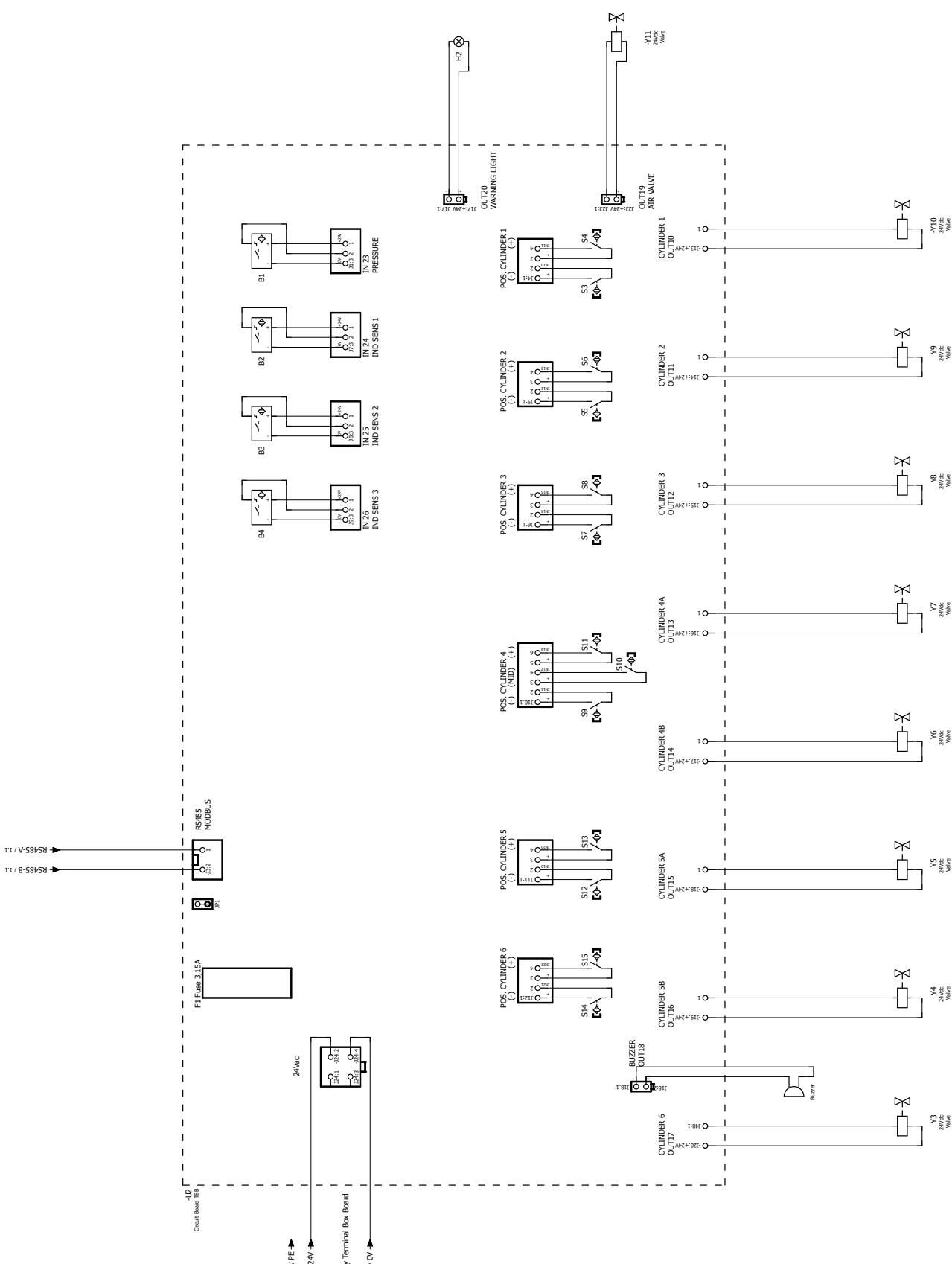
/8.Self test/...../Water Temperature/....

5



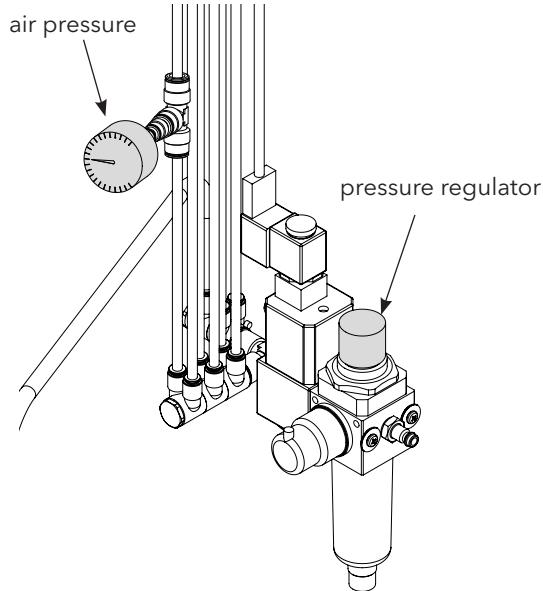
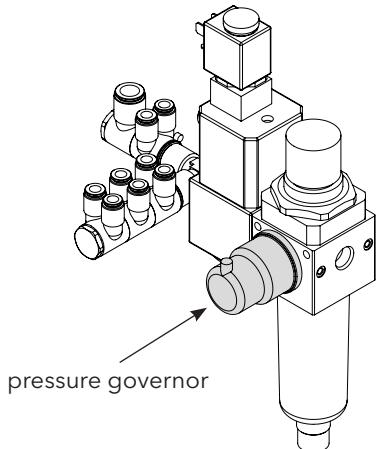
9. Wiring diagram



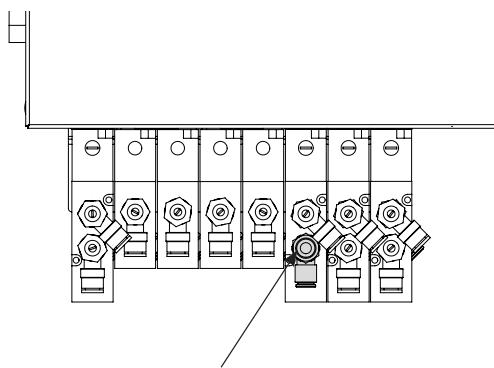


10. Pressure governor

The pressure governor detects if air supply pressure drops below 6 bar. This will cause a B-type alarm, see alarm codes chapter 9 in the user manual. The pressure governor must not be set to a different value, if broken it needs to be replaced to maintain the right level of machine safety.



The lid regulator for cylinder 3 should be set to 2 bars when the lid is closed. Regulator is found on the terminal box. Open and close four turns. (Illustrated on picture below)

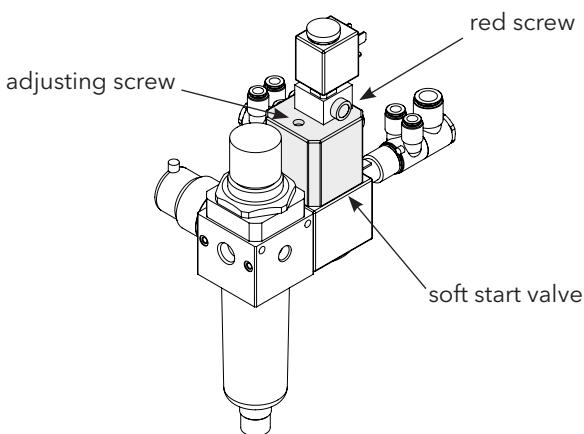


Open and then close 4 turns.

11. Adjustment of the soft start valve

On the top of the soft start valve there is an adjusting screw with which you can set how fast the pressure is to rise. The screw should be tightened down completely and then loosen 12 turns.

On the rear of the soft start valve there is a red plastic screw. This should be positioned horizontal.



12. Adjustment of the pressure regulators

These settings should not be changed. If the regulators aren't working properly check the following settings:

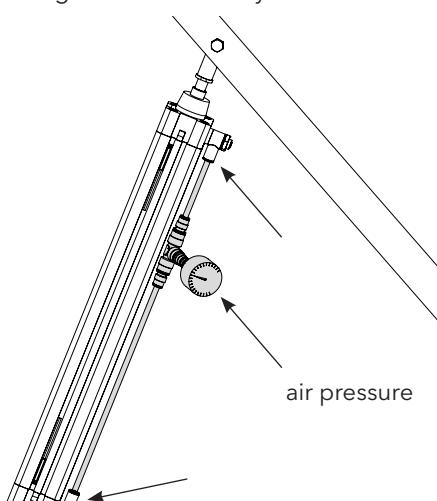
The intake air regulator (picture below) should be set to 7.5 bars.

Note: Always decrease pressure and then increase to wanted level.

1. Turn ON the machine. After ~10 seconds the air pressure value is stabilized. Adjust the regulator if necessary.

If uncertain connect the calibration kit 230753 to cylinder 3.

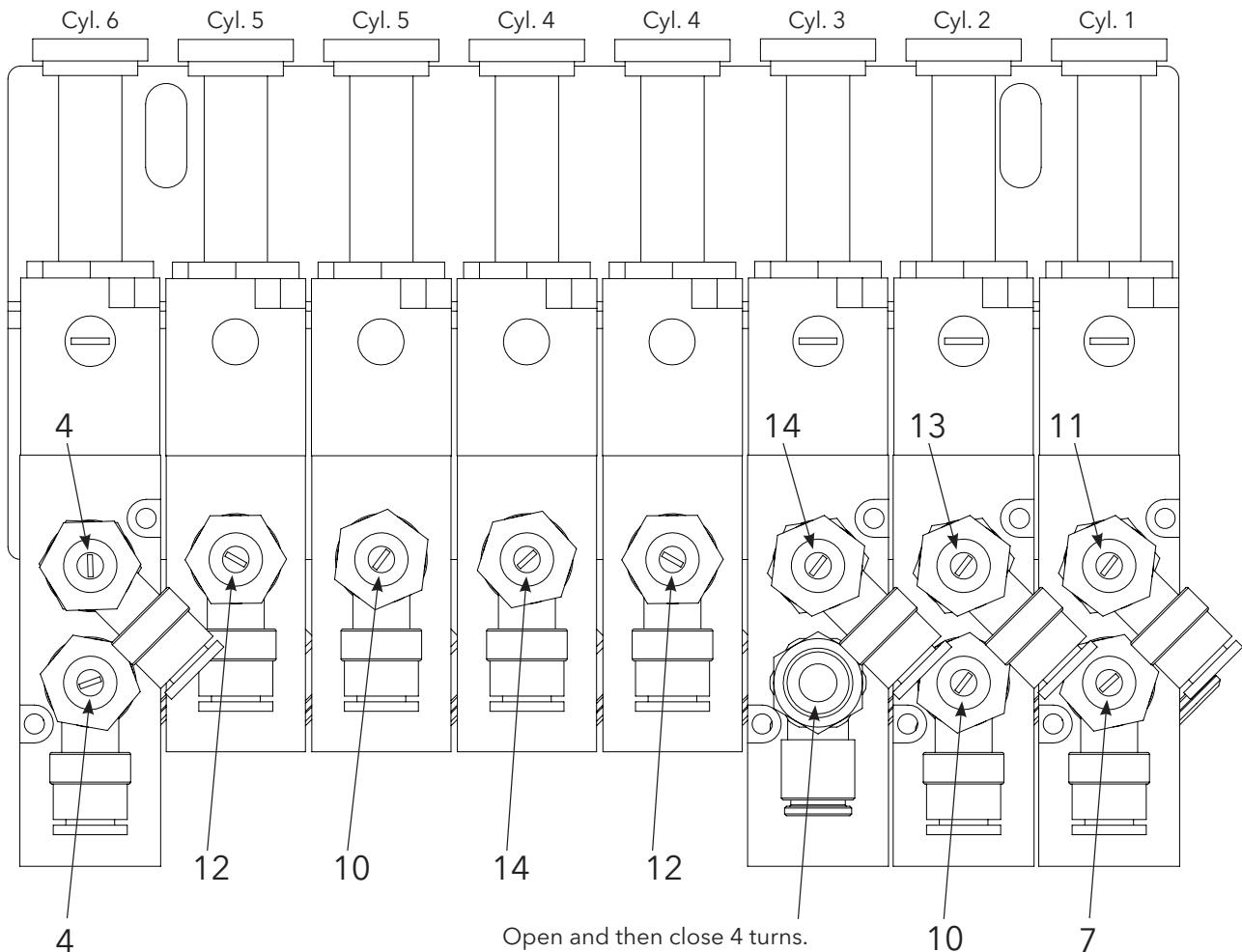
2. Turn OFF the machine.
3. Disconnect the hose to cylinder 3.
4. To connect the calibration kit, remove the red plug and connect it as seen in the picture.
5. Turn ON the machine. After ~10 seconds the air pressure value on the calibration kit is stabilized. Adjust the regulator if necessary.



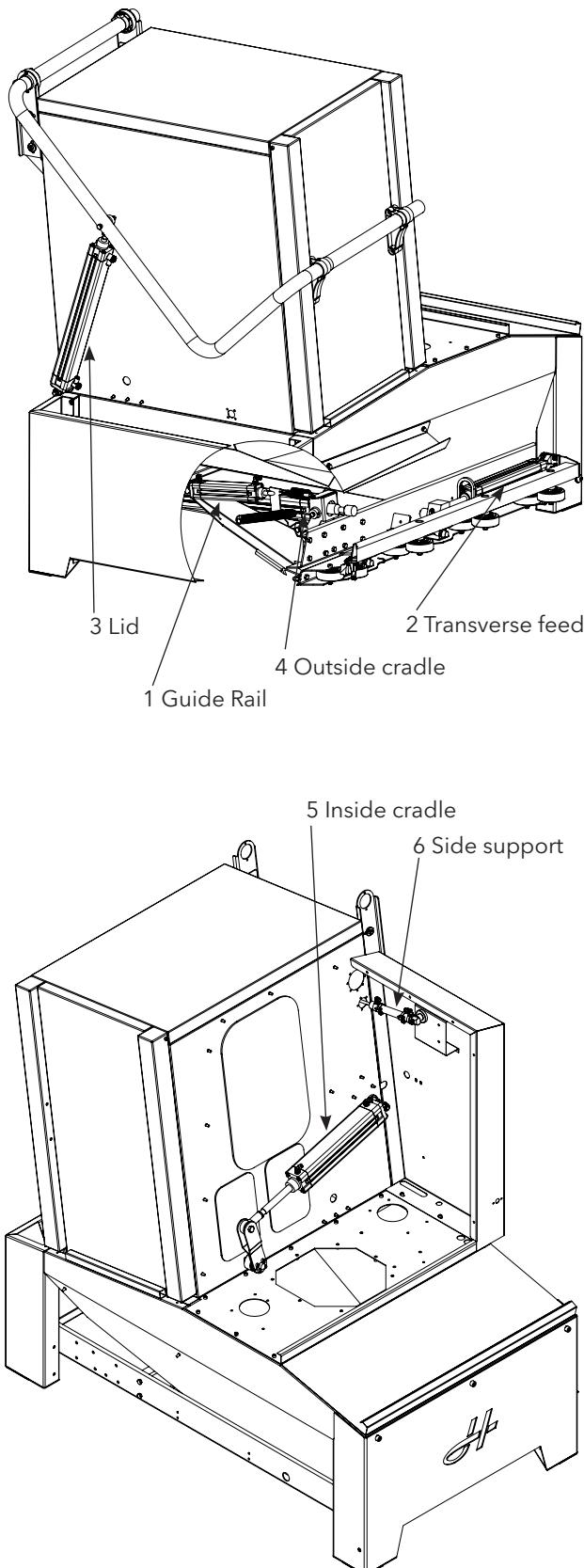
13. Adjustment of solenoid valves

When one or more solenoid valves are changed the flow restrictors needs to be set properly.

Tighten the adjustment screw completely, open the number of turns as indicated in the picture below.



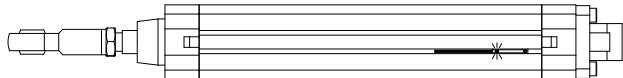
14. Numbering and names of cylinders



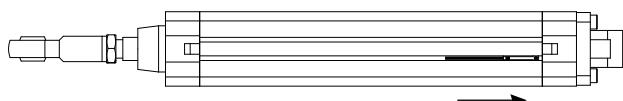
15. End position sensors on the cylinders

To set the position of the sensors the machine needs to be turned ON with the compressed air connected. Start Self test (see chapter 28) to move the cylinder to correct position for the sensor that will be set.

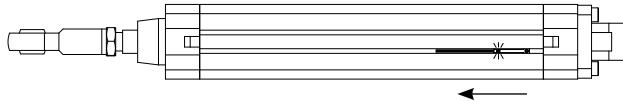
1. Place sensor in the slot, slide it left or right until the LED turns ON.



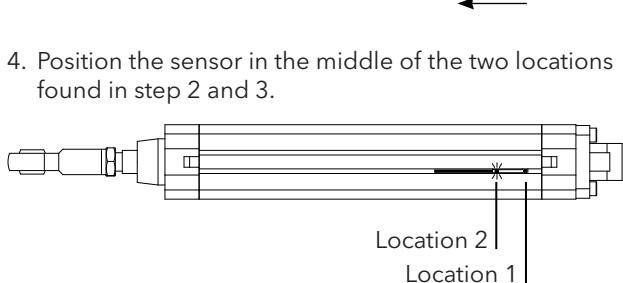
2. Slide sensor to the right until the LED turns OFF and remember the location.



3. Slide sensor to the left until the LED turns OFF and remember the location.

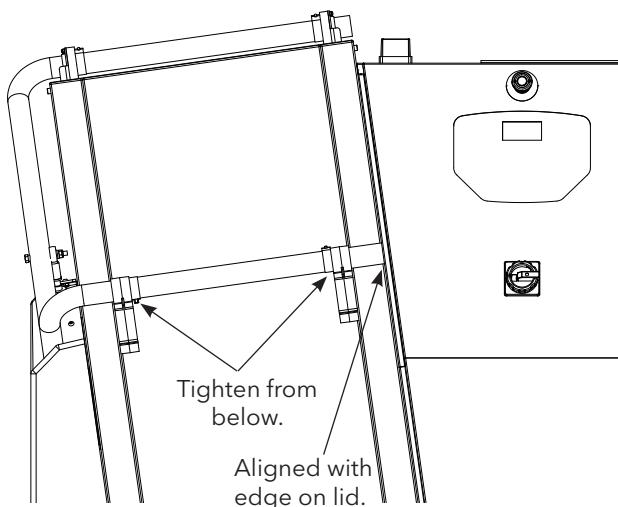


4. Position the sensor in the middle of the two locations found in step 2 and 3.

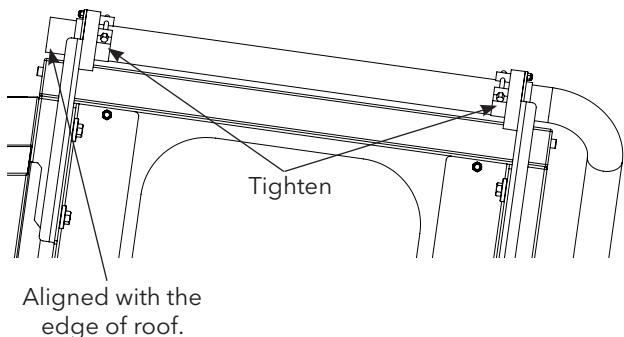


16. Adjust the lid

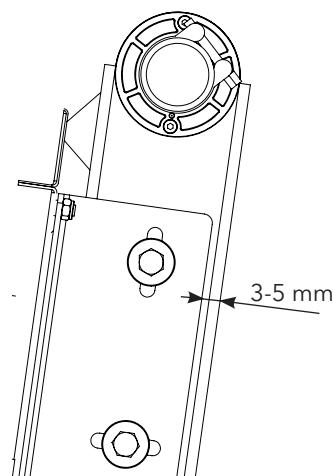
1. Tighten the hose clamps at the front when the swing is in the correct position.



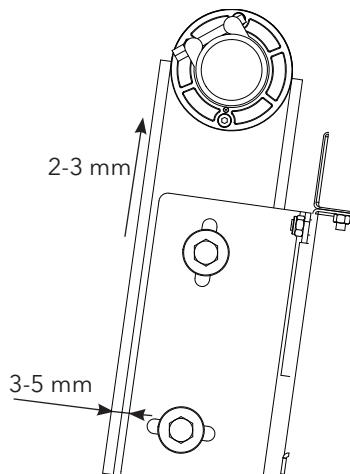
2. Tighten the rear hose clamps when the swing is in the correct position.



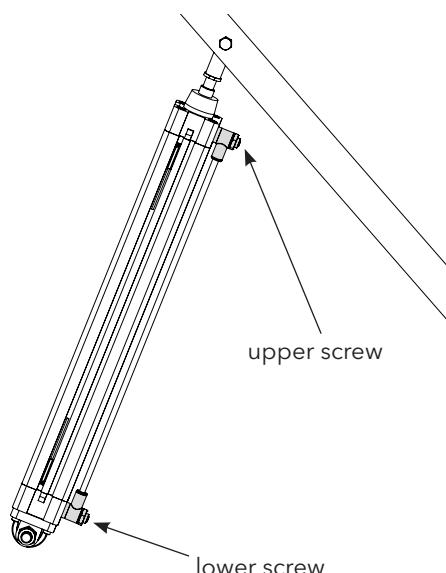
3. Stand behind the machine and tighten the right-hand screw union according to picture.



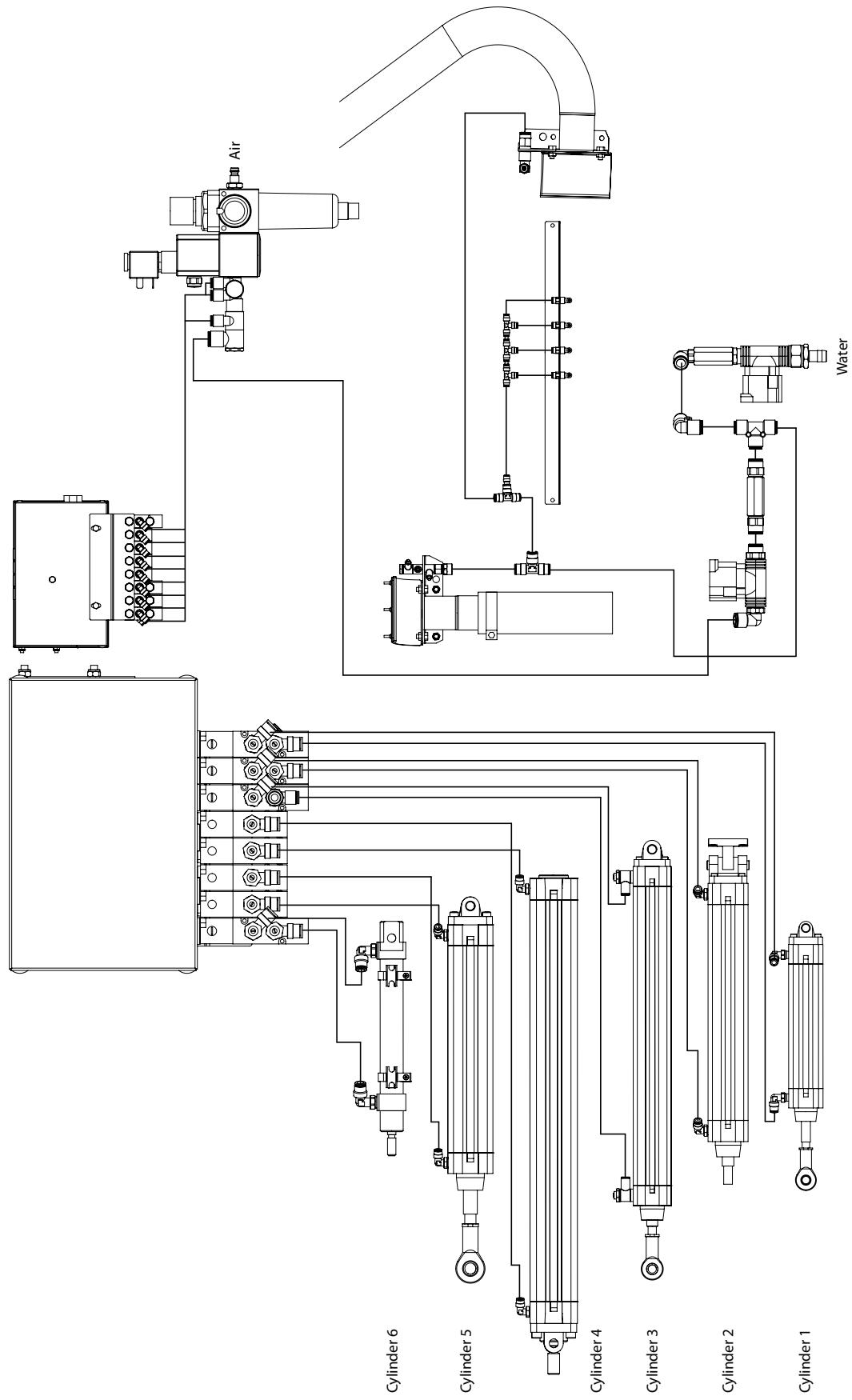
4. Lift up the left screw union 2-3 mm and tighten the screws.



5. The upper valve screw should be tightened down completely and then loosen 1,5 turns. The lower valve screw should be tightened down completely and then loosen 6 turns.

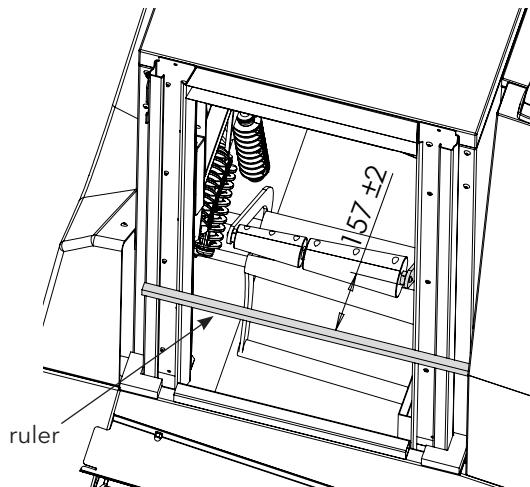


17. Pneumatic circuit diagram

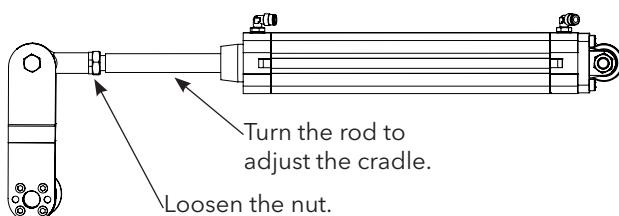


18. Adjustment of inside cradle

1. Place the inside cradle in its outer position and with the help of a piece of straight metal i.e a ruler, measure between the ruler and the inside cradle, see picture below. The measurement should be 157 ± 2 mm.

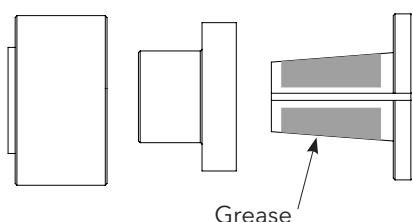


2. If the measurement is incorrect, loosen the nut on the cylinder rod, see picture below. Then try to adjust the inside cradle by turning the cylinder rod.



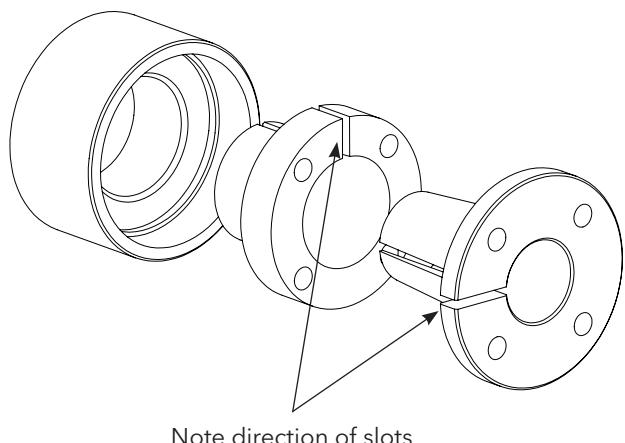
3. Check the measurement again. If it's not possible to adjust the cradle so the measurement is 157 ± 2 mm in step 2 turn back the cylinder rod and tighten the nut again.

4. Loosen the four screws and pull out the coupling.
5. Clean the shaft carefully from any grease.
6. Disassemble the coupling and clean all parts.

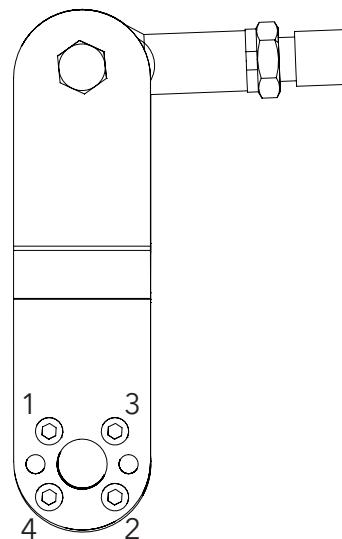


7. Put a SMALL amount of grease on the surface, stay 3mm inside the edge.
8. Put grease on the threads.

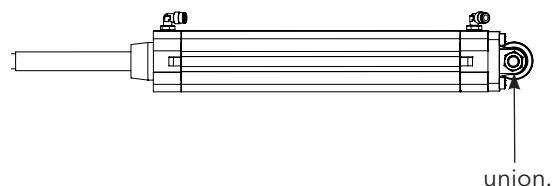
9. Assemble the coupling, note the direction of the parts.



10. Place the inside cradle in its outer position and measure the distance, 157 ± 2 mm before tightening the four screws. The screws should be tightened in order to 14Nm.

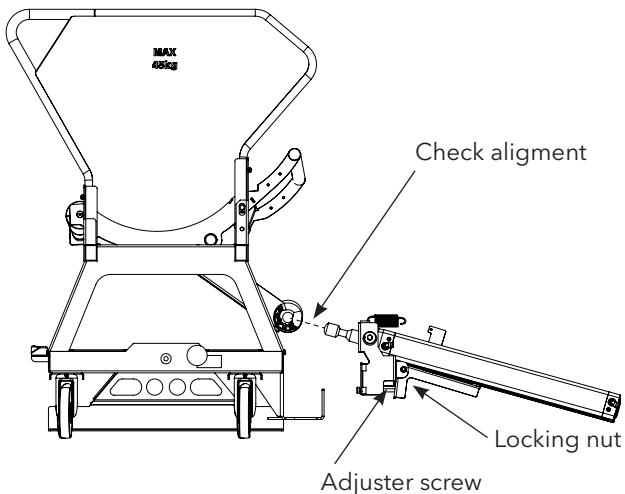


11. Check that the union between the cylinder and the pin bolt is greased and can move smoothly. Otherwise it can seize and lock.



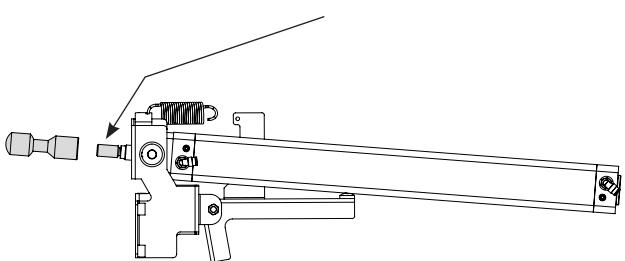
19. Adjust the height of cylinder 4 outside cradle

1. Dock the trolley.
2. Open **SELF TEST**, see chapter 28
3. Run cylinder 4 and make sure the cylinder hits the center of the guide.
4. If necessary, adjust the height with the adjuster screw.



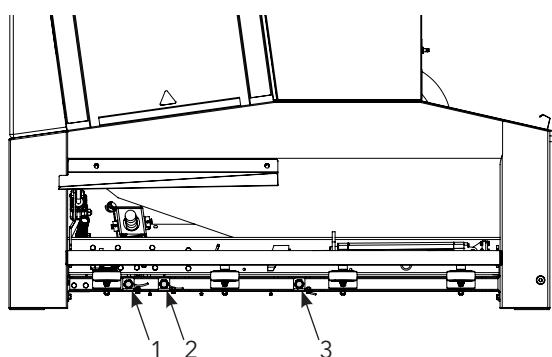
20. Changing swivel head on cylinder 4

Secure the swivel head with Loctite 222.

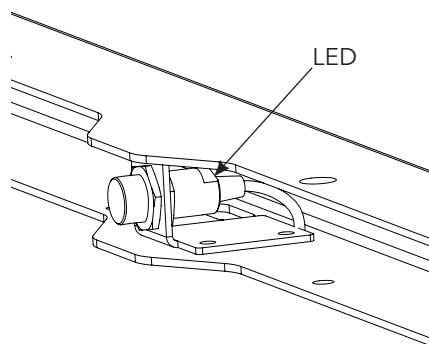


21. Inductive trolley sensors

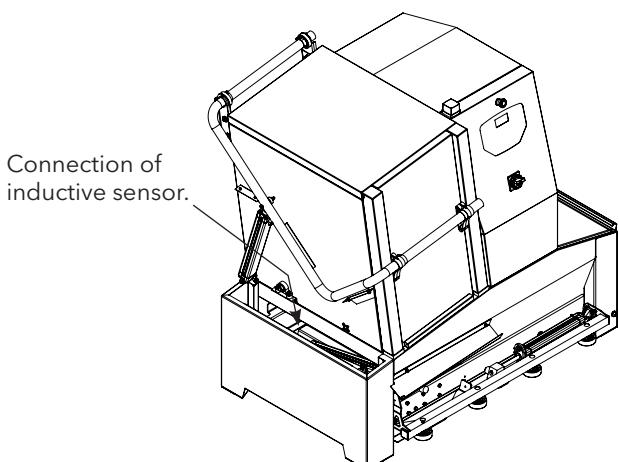
The machine has 3 inductive sensors that sends signals about where the trolleys are located during the wash cycle.



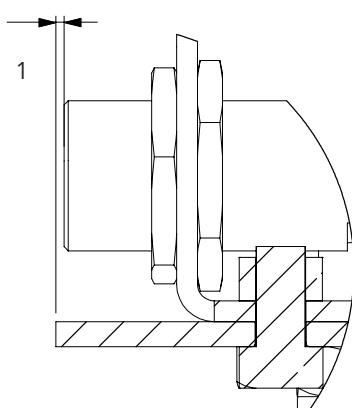
When a sensor detects steel, it sends a signal while the LED on the back of the sensor is lit.



If the LED on the back of the sensor is lit continuously, the sensor is defective and should be replaced. The cable is connected on the left side of the machine, see picture below.



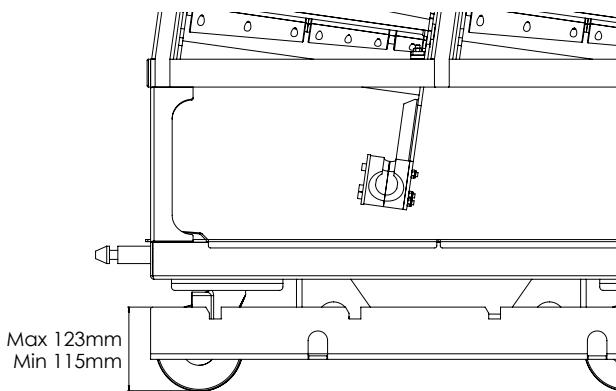
Note that the sensor should be installed 1 mm inside the protective edge.



To verify the sensors function perform a Self test, see chapter 28.

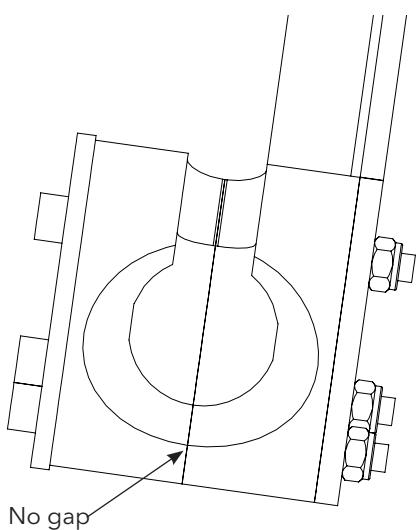
22. Control measurement of the trolley

Place the trolley on a level floor and measure from the floor up to the top of the guide on the trolley.



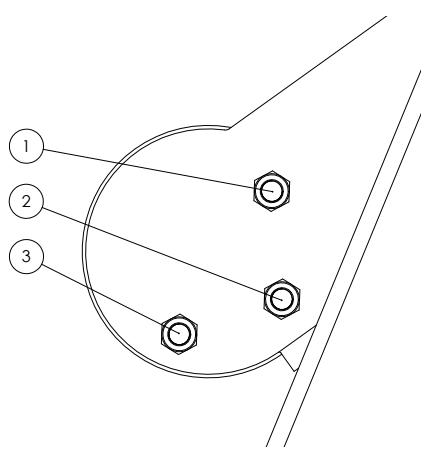
23. Installation of the hinged bearing on the trolley

1. Install and tighten the nuts lightly and make sure that there is no gap between the two bearing pieces.



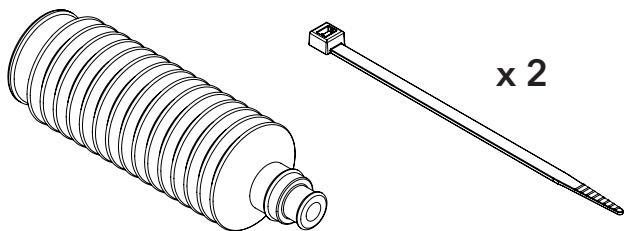
2. Tighten the nut in the following order:

Nut 1: $\frac{1}{4}$ turn
Nut 3: $\frac{1}{4}$ turn
Nut 2: $\frac{1}{4}$ turn



24. Replacing shaft protection cyl 6

24.1 Components

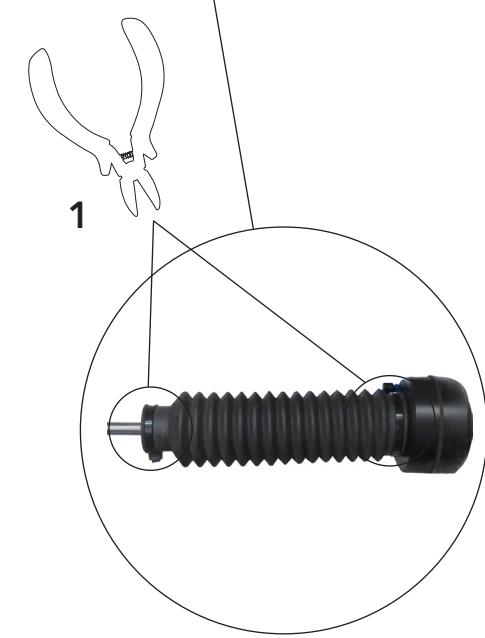
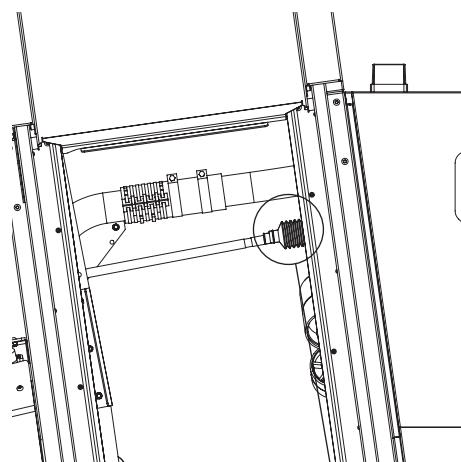


24.2 Tools

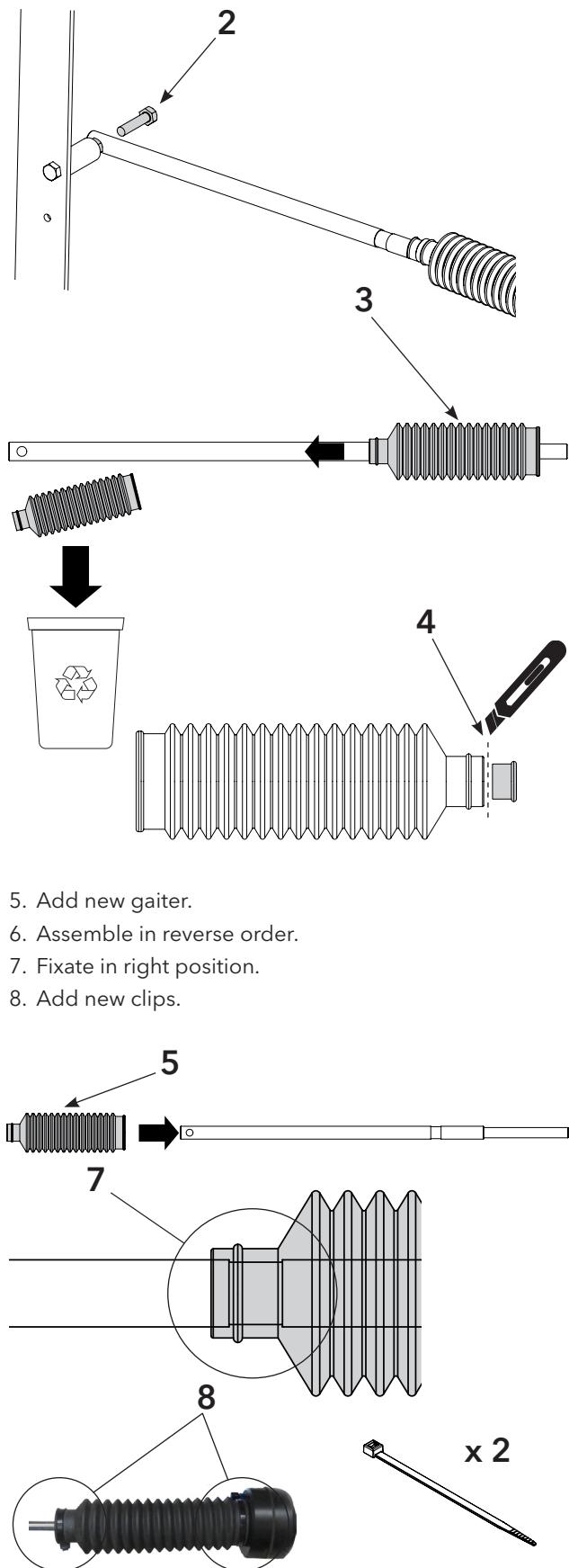


NOTE: Start instruction with chapter 1 safety precautions

1. Remove clips.

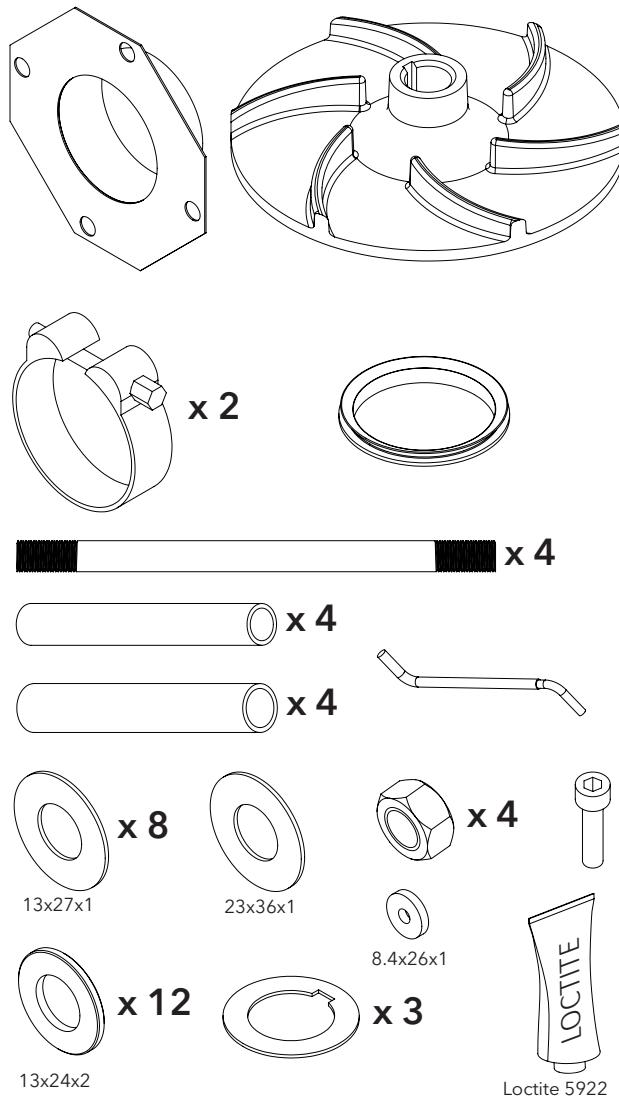


2. Remove screw.
3. Remove and discard gaiter.
4. Cut off the top of the new gaiter.



25. Pump replacement

25.1 Components



IMPORTANT!

Not included:
Order Spare part: R2892

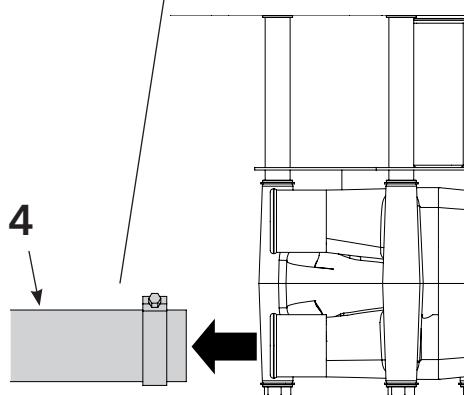
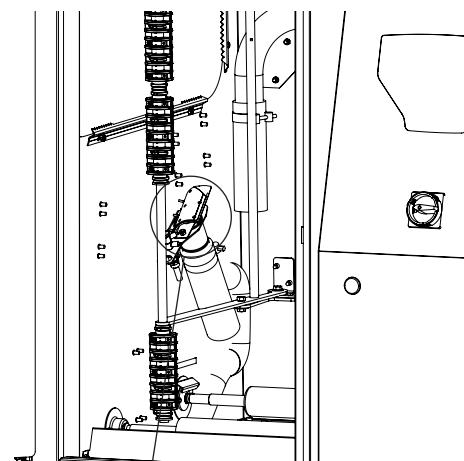
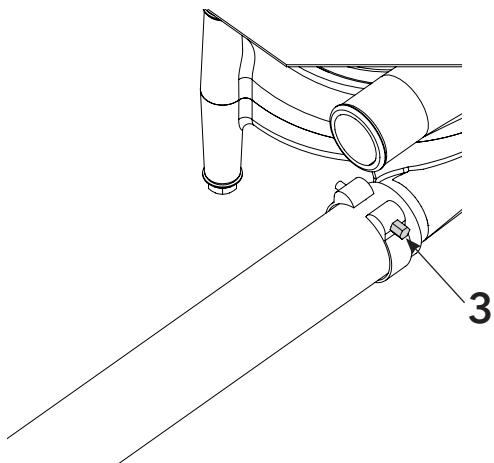
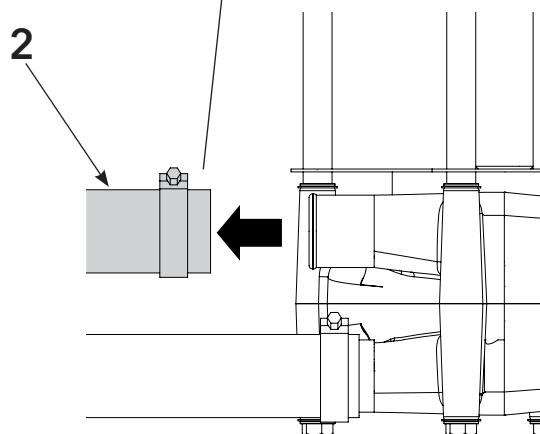
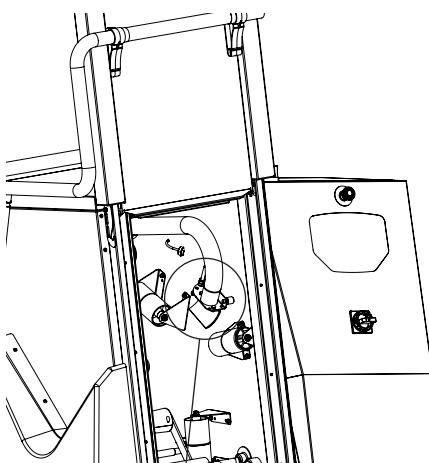
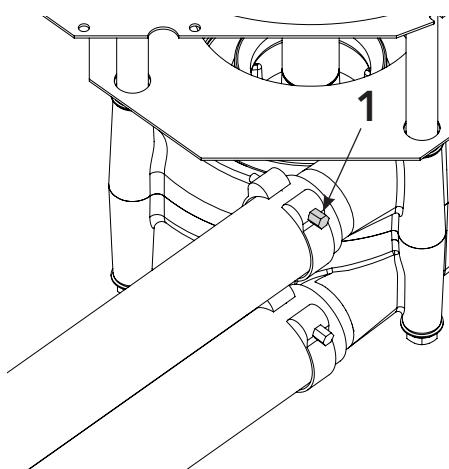
OBS: loctite 222 and 8009 not included

25.2 Tools

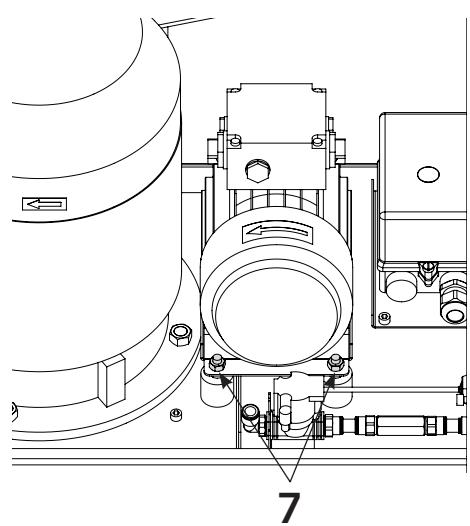
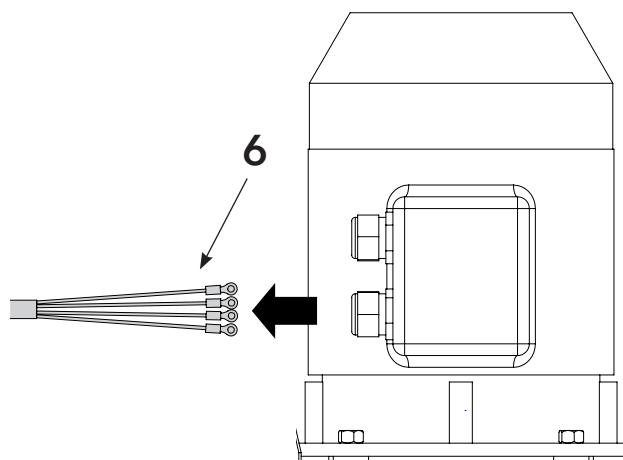
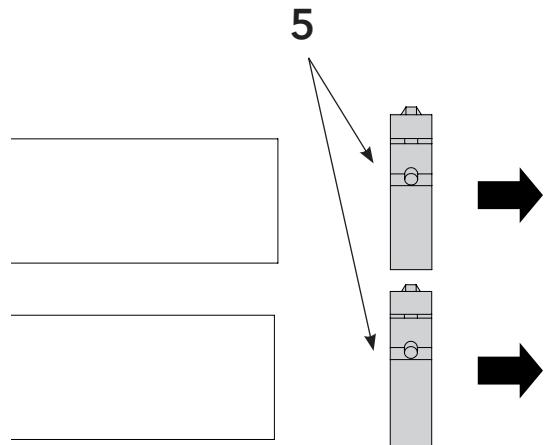


NOTE: Start instruction with chapter 1 safety precautions.

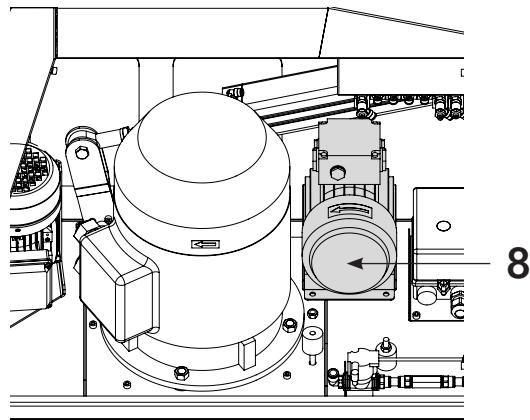
1. Loosen screw.
2. Remove hose.
3. Loosen screw.
4. Remove hose.



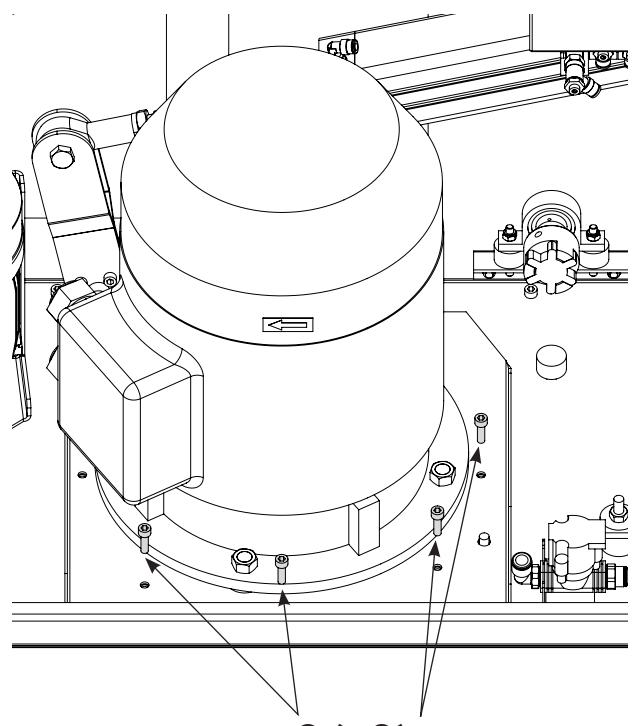
5. Discard rings.
6. Disconnect power cord, when assembling check chapter 9.
7. Remove nuts.



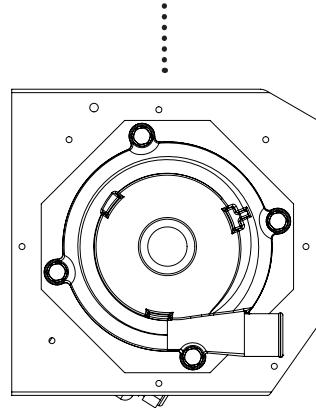
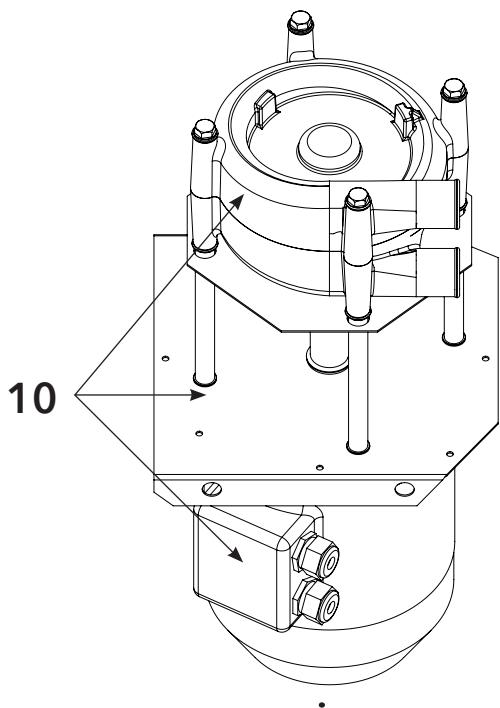
8. Remove motor.



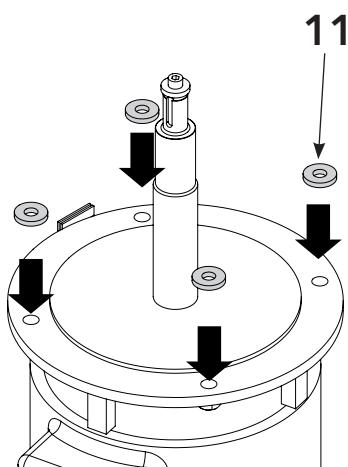
9. Remove screws.



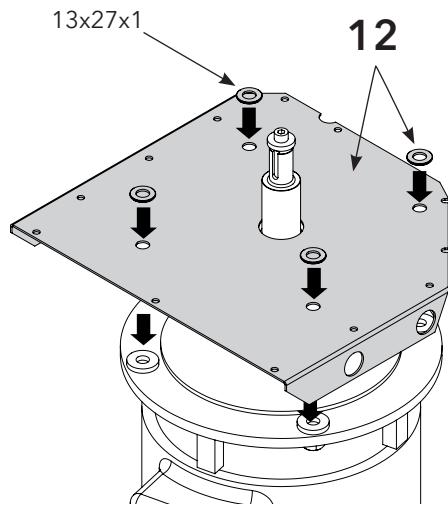
10. Before dismantling the old pump: Please note the orientation of the pump outlets and the pressing in relation to the pump motor connection box, so that the new pump is fitted in the correct position.



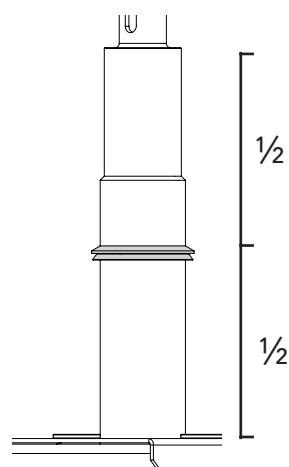
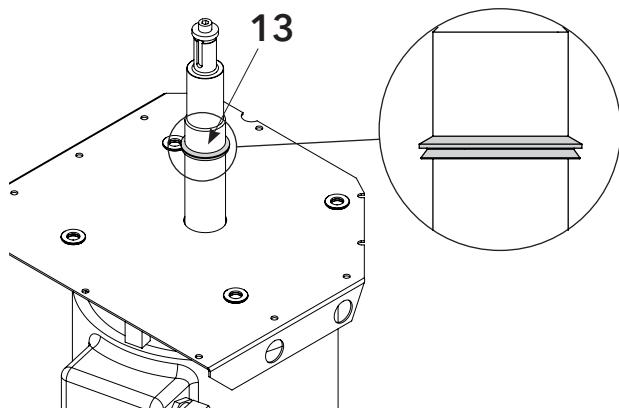
11. Place the spacers on the pump motor (new spacers **not** included in the spare part)

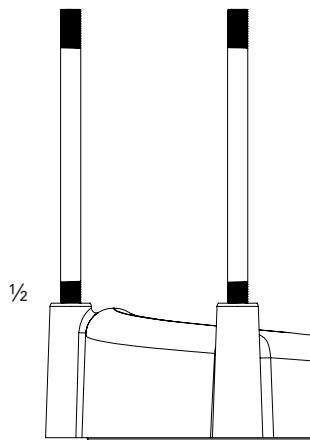
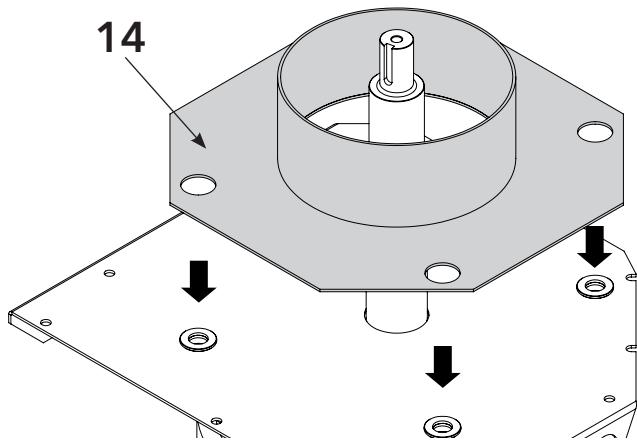


12. Place the metal plate and then the rings on top.

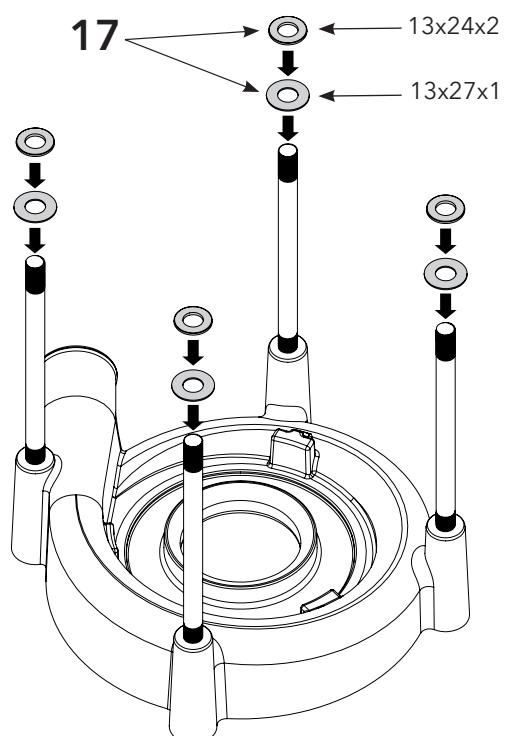
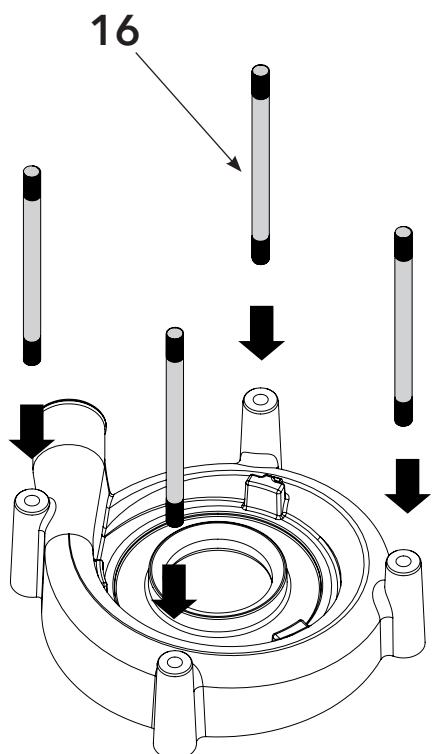
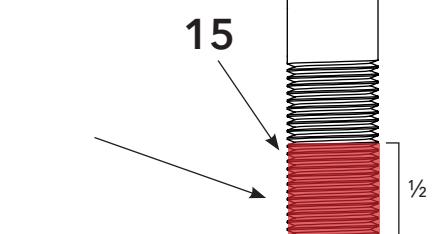


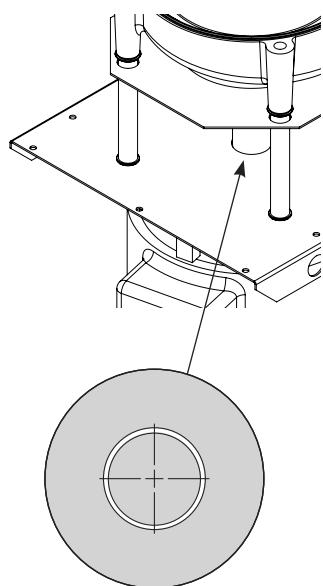
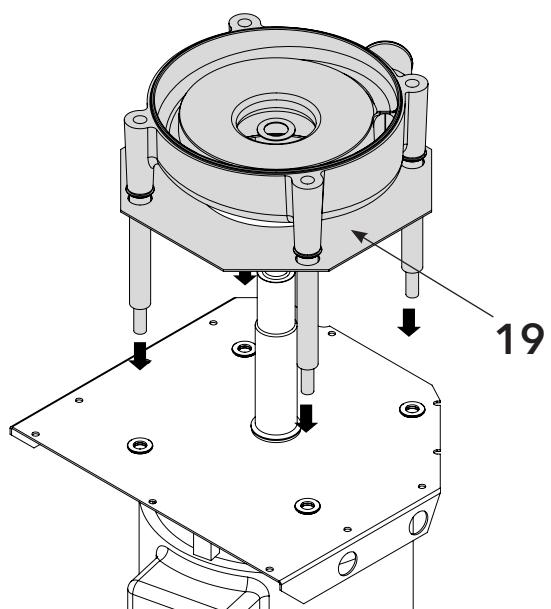
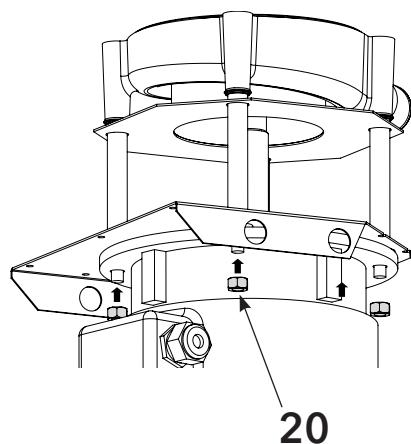
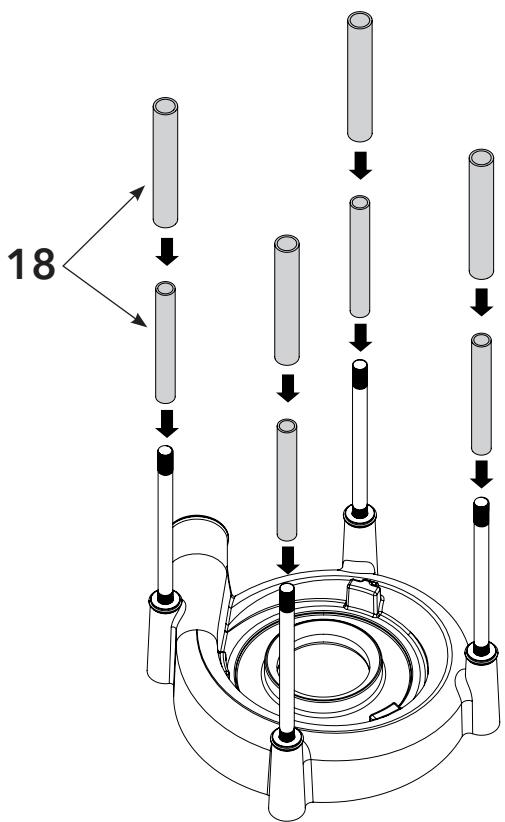
13. Place the rubber ring according to the illustration, halfway down to the cylinder.

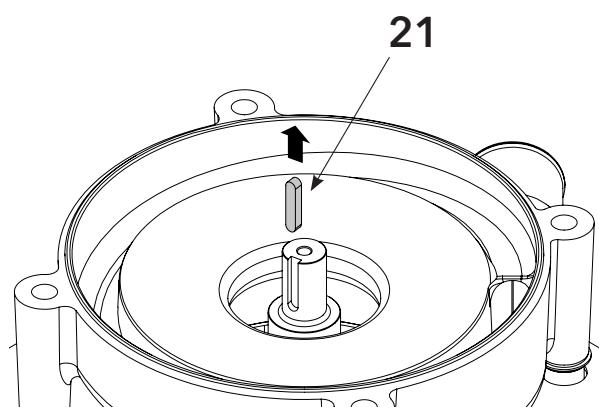




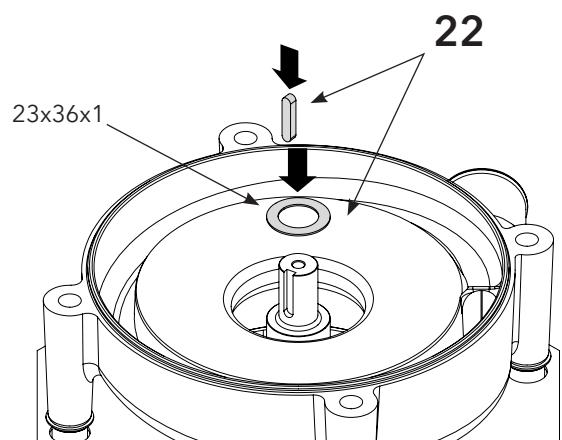
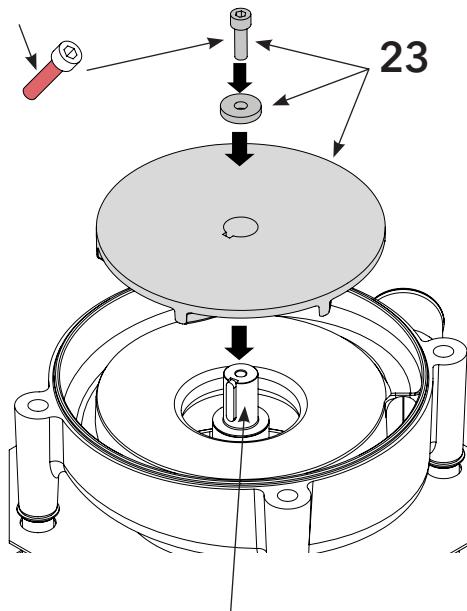
loctite 222



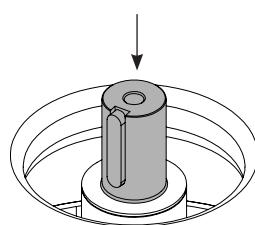




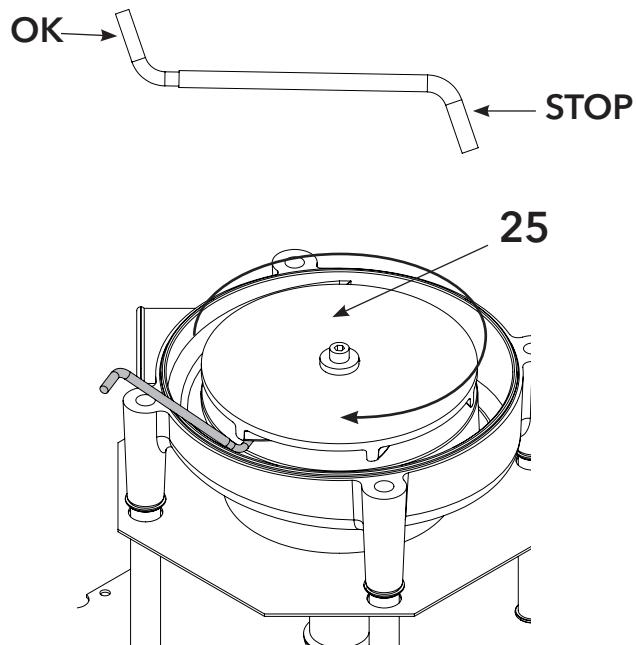
loctite 222



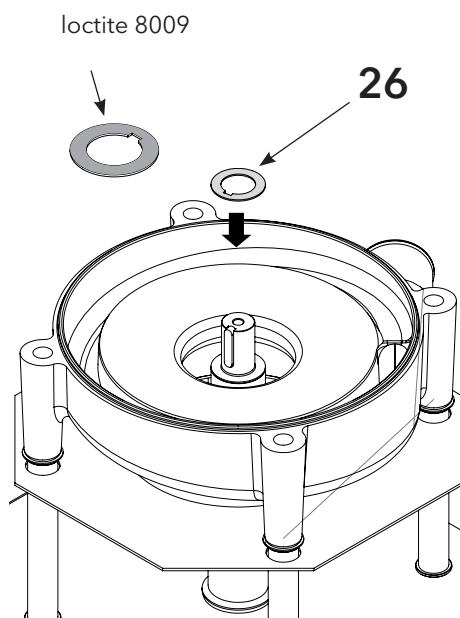
loctite 8009



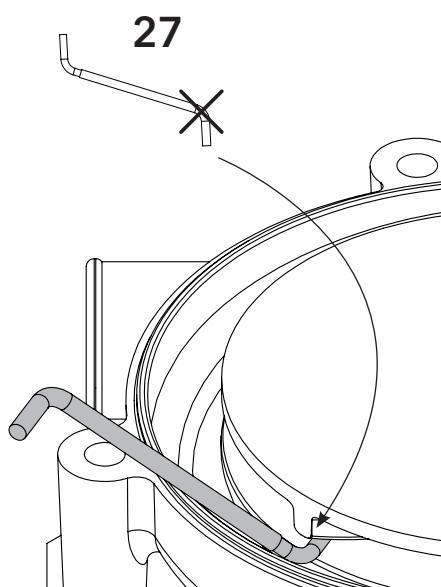
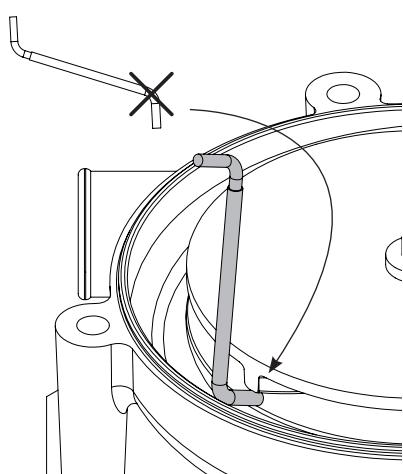
25. "OK-side" must pass freely, "STOP-side" must not pass anywhere.

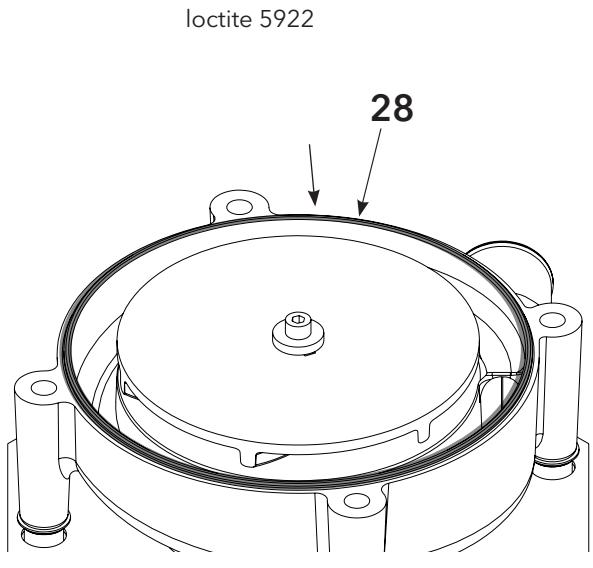


26. If needed, remove the impeller and fit a smeared shims as shown.

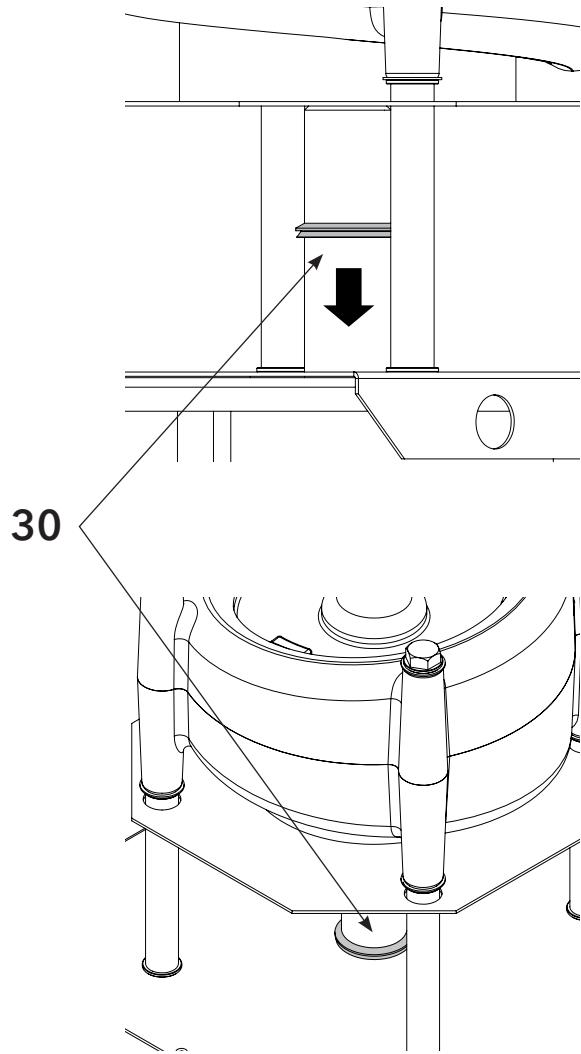
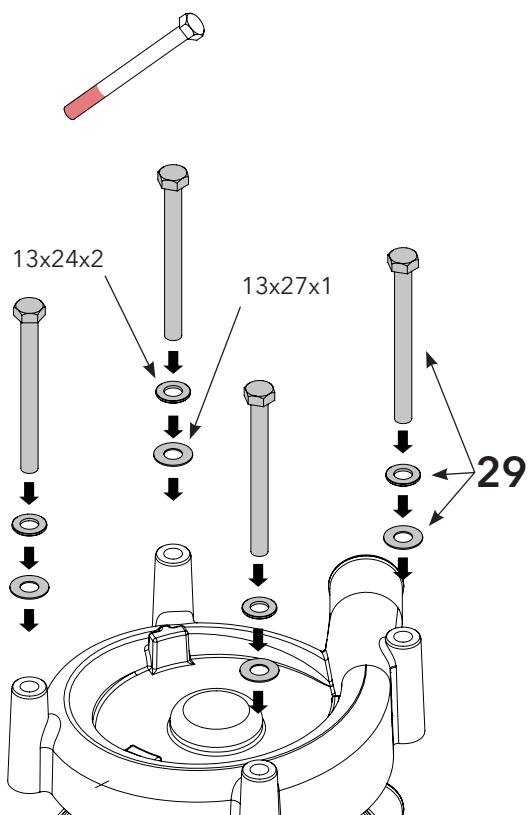


27. Refit the impeller and re/check the distance. The OK side must pass under all shovels of the impeller.



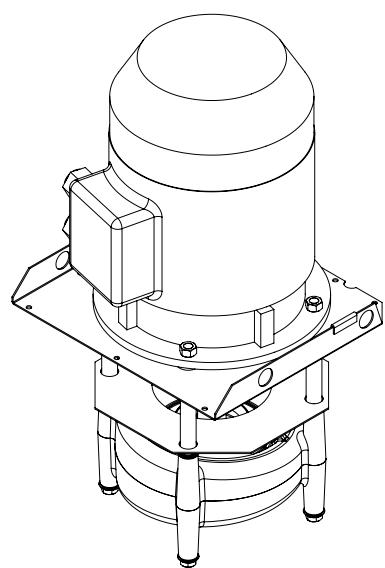


loctite 222

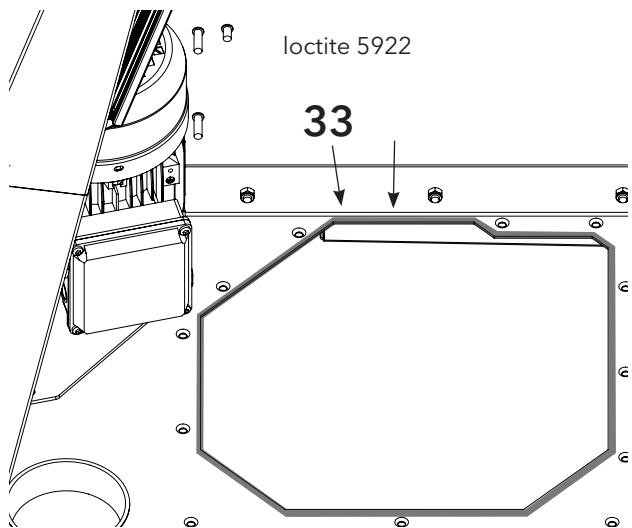


31. Completed and ready to be mounted into the Wheel Washer.

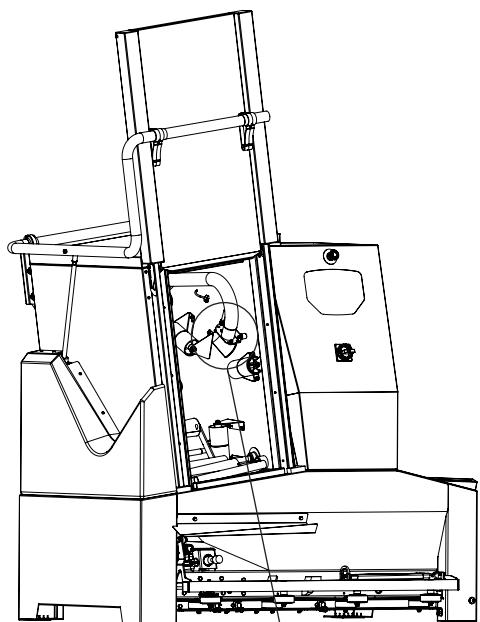
32. Assemble in reverse order step 9-1.



33. Note at step 9, add loctite before mounting the pump motor.

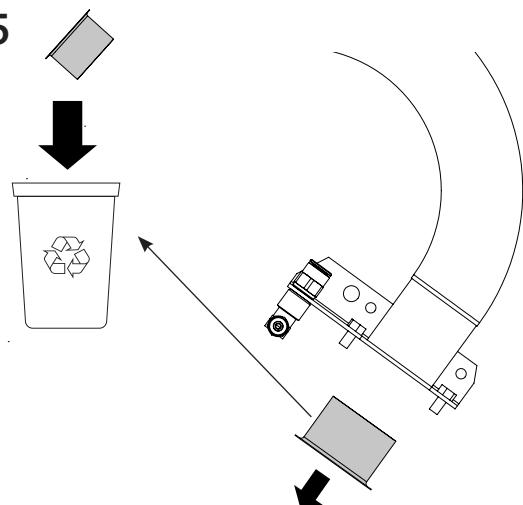


33

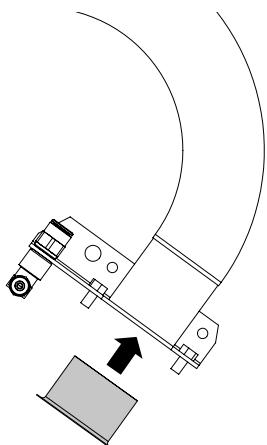


34

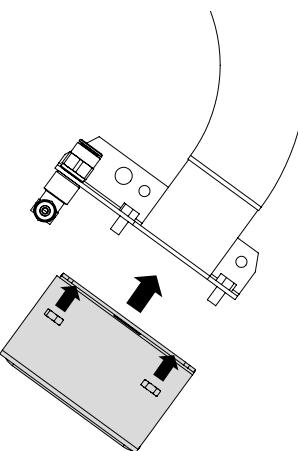
35

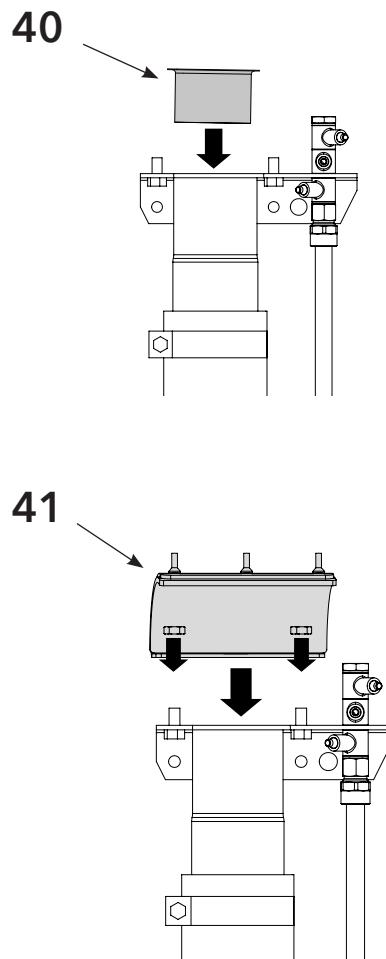
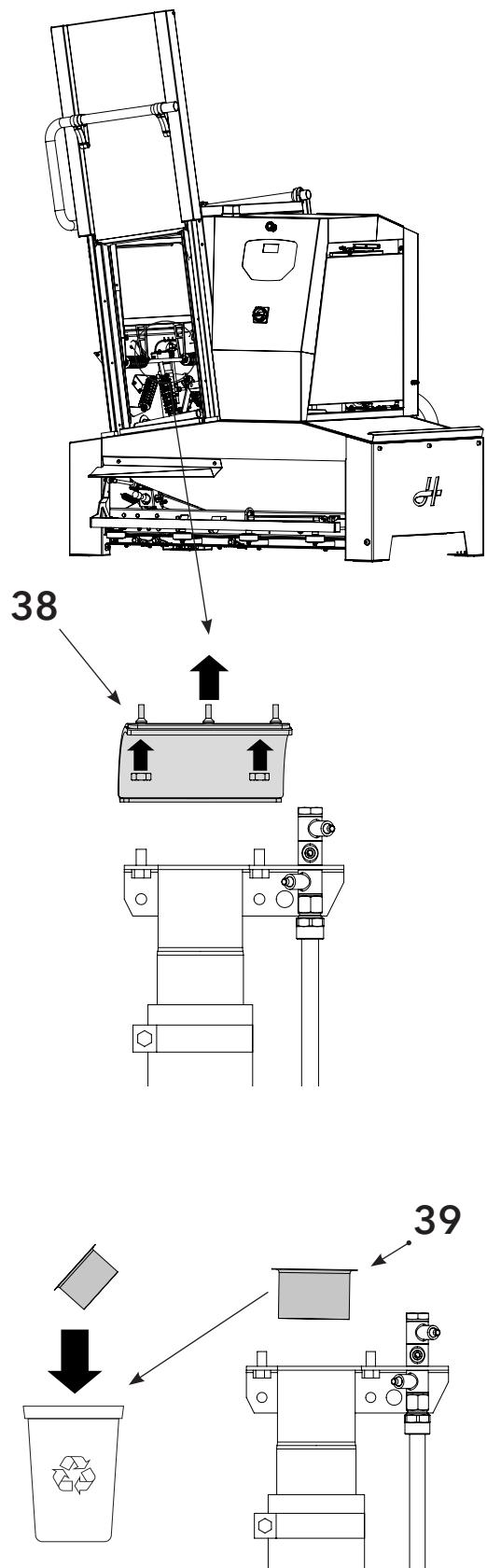


36

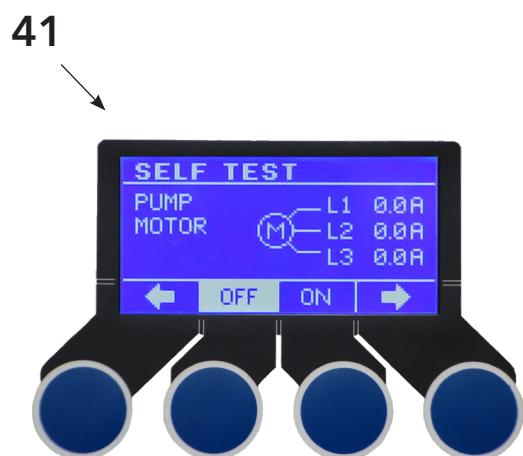


37

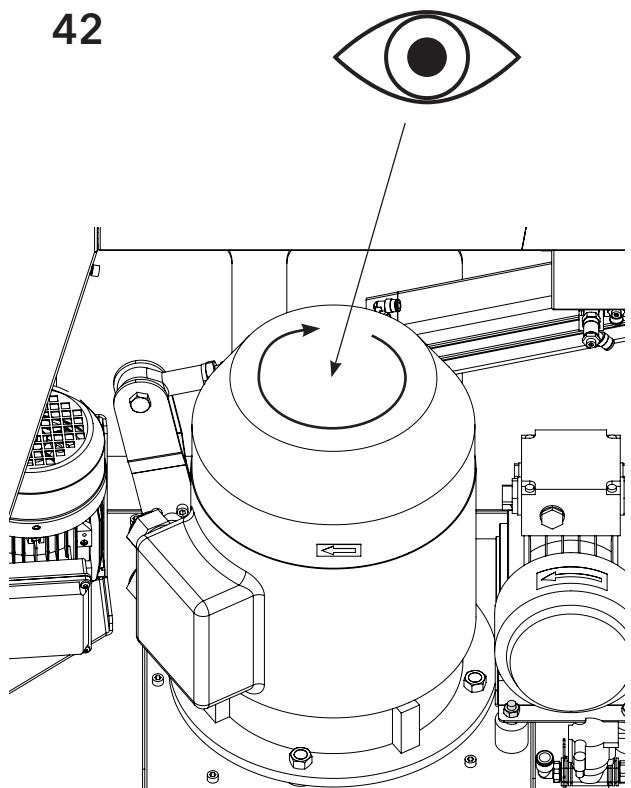




8.Self test/...../PUMP MOTOR/ON

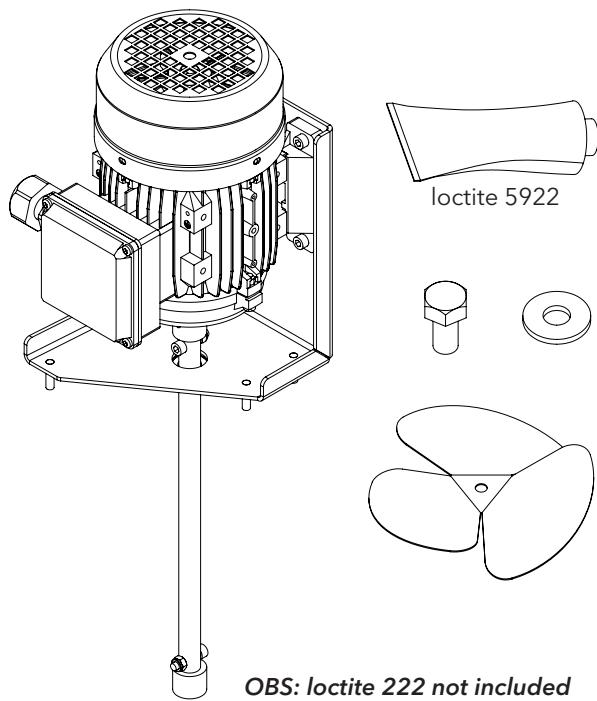


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26. Mixer motor installation

26.1 Components

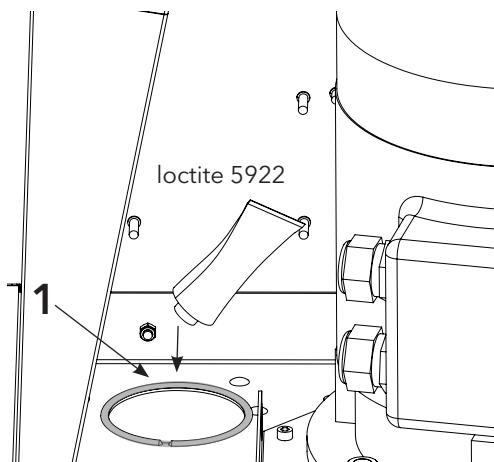


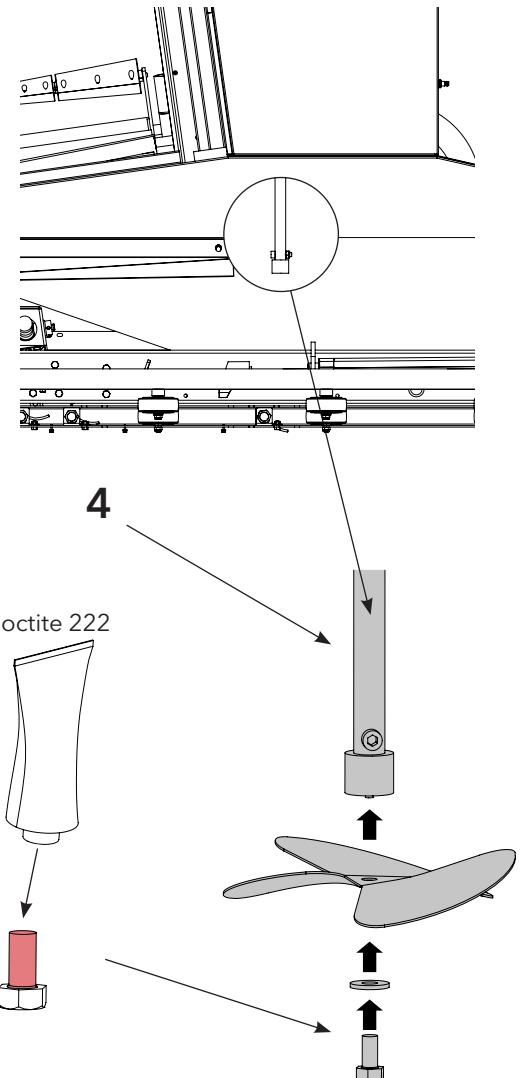
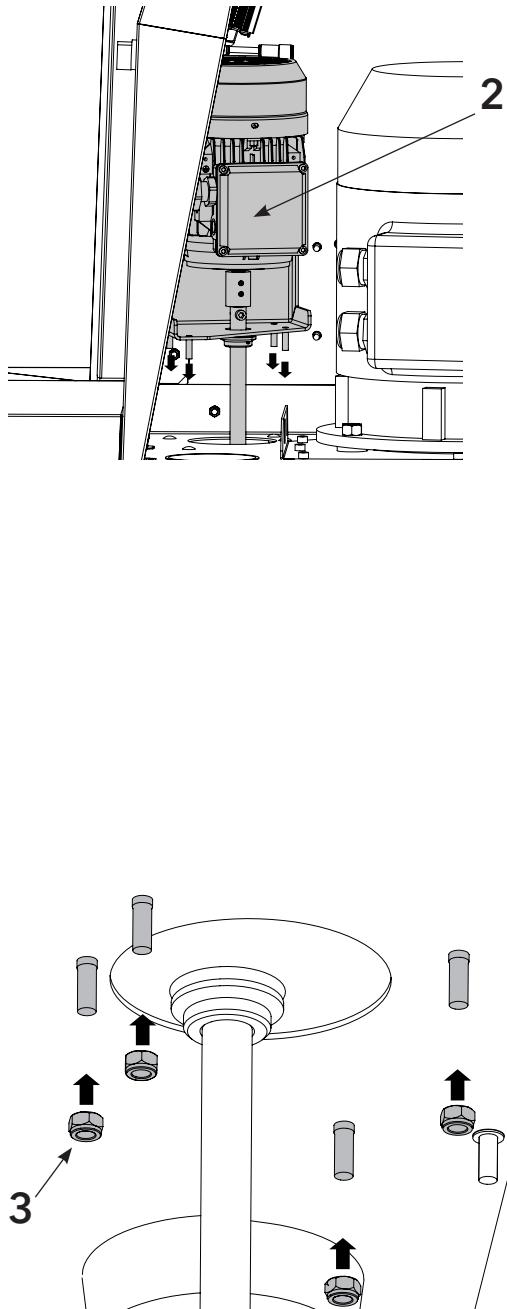
OBS: loctite 222 not included

26.2 Tools

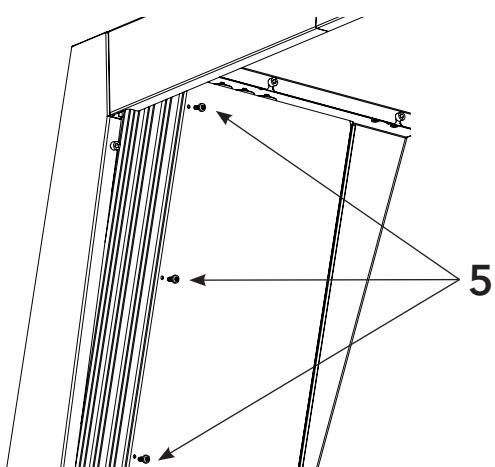


NOTE: Start instruction with chapter 1 safety precautions.

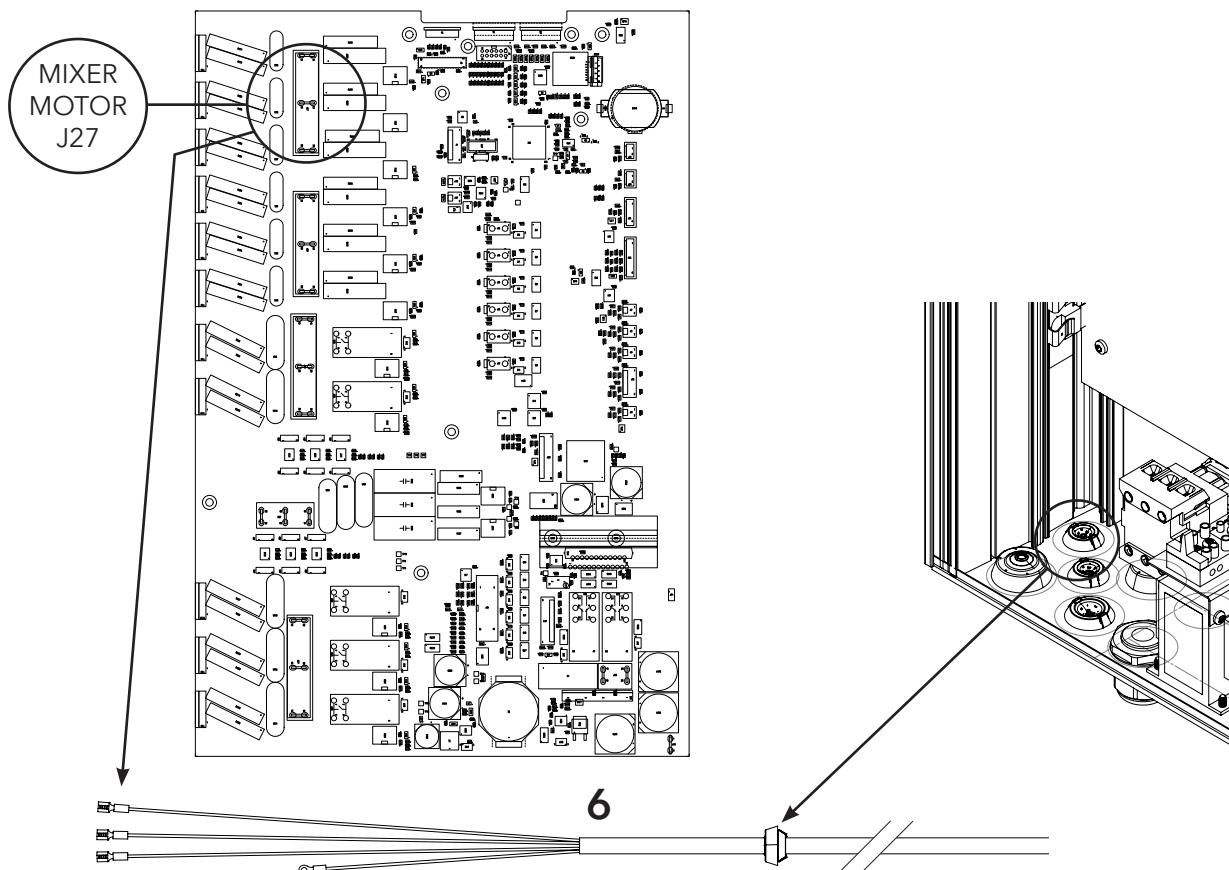




5. Remove screws and lid.

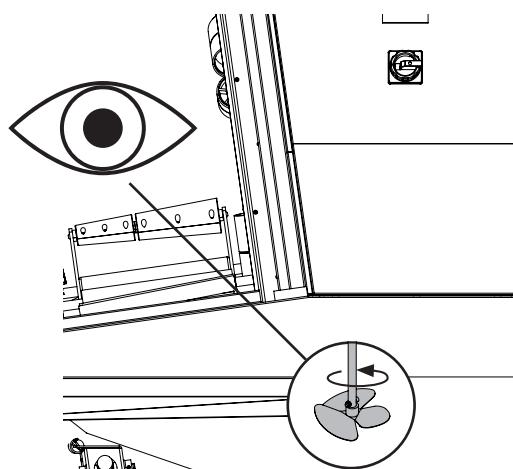
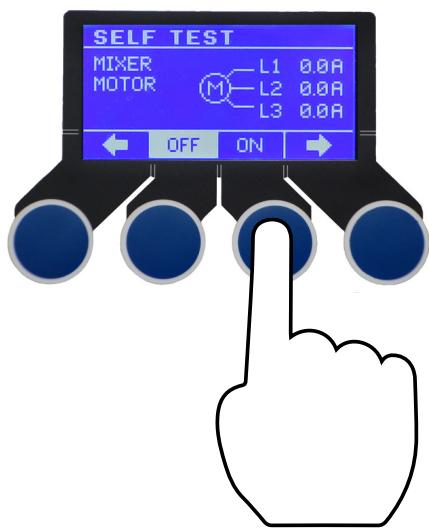


6. Connect according to the wiring diagram in chapter 9.



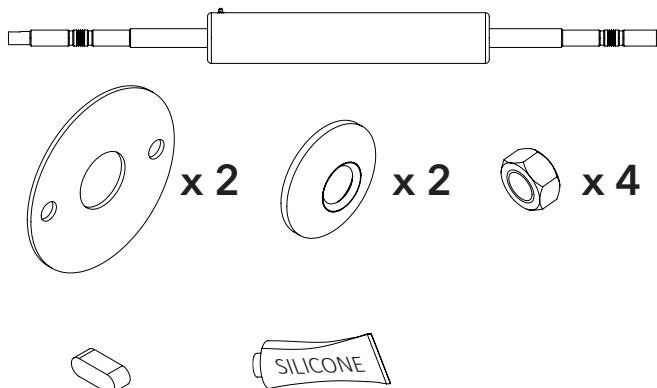
7. Perform chapter 6 and choose YES at Mixer motor option.

/8.Self test/...../MIXER MOTOR/ON



27. Drive shaft replacement

27.1 Components

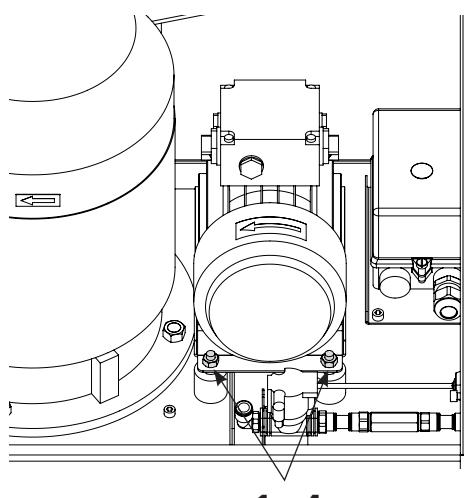


27.2 Tools

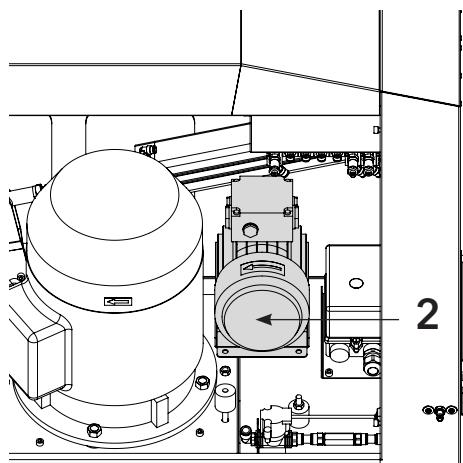


NOTE: Start instruction with chapter 1 safety precautions.

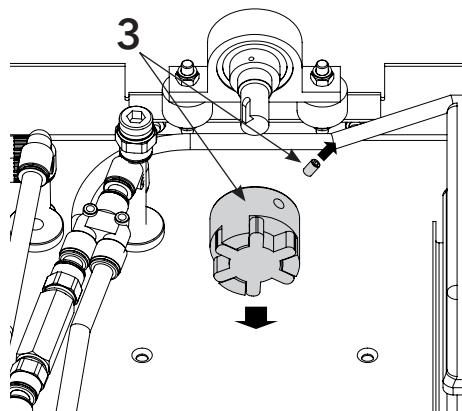
1. Remove nuts.



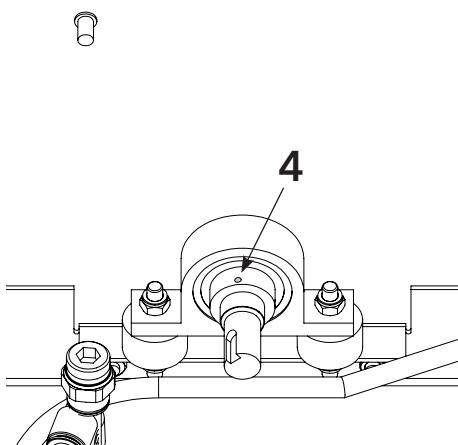
2. Remove motor.



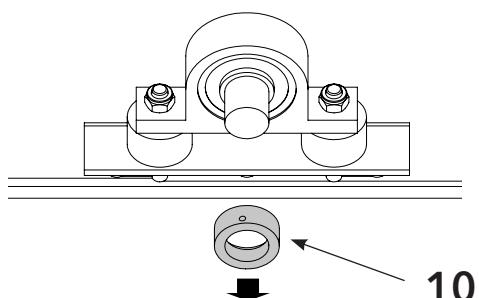
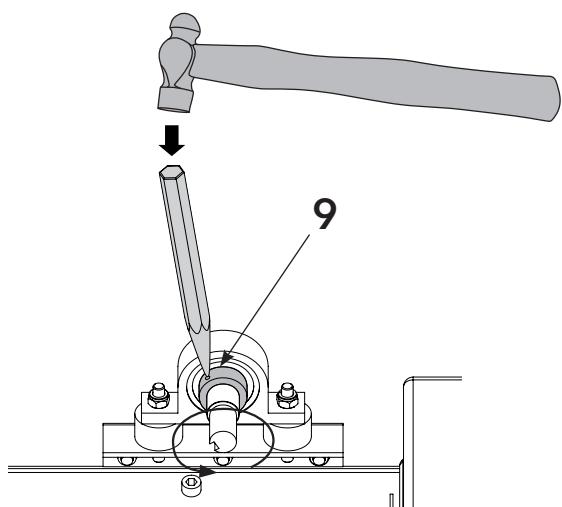
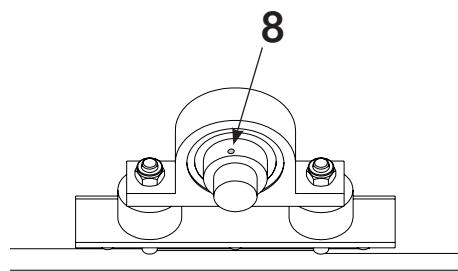
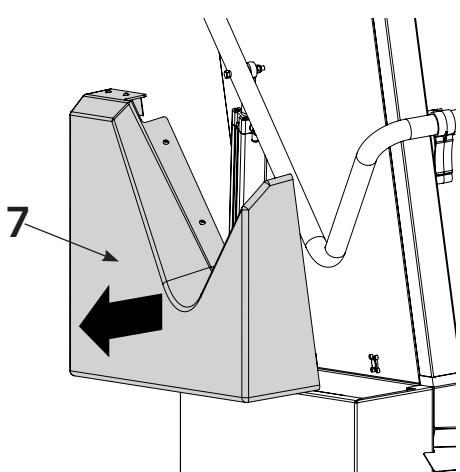
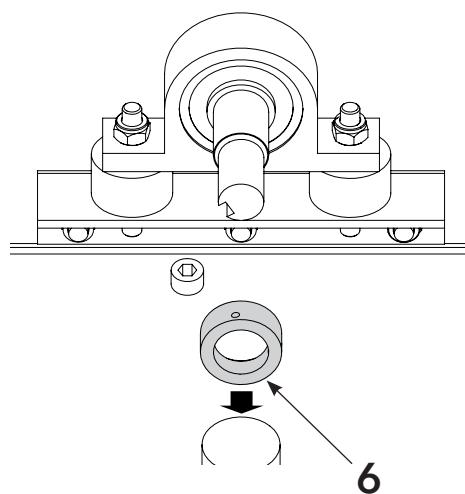
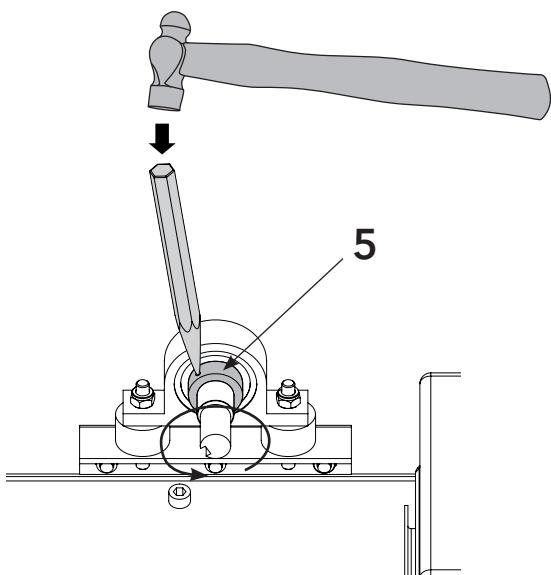
3. Loosen screw.

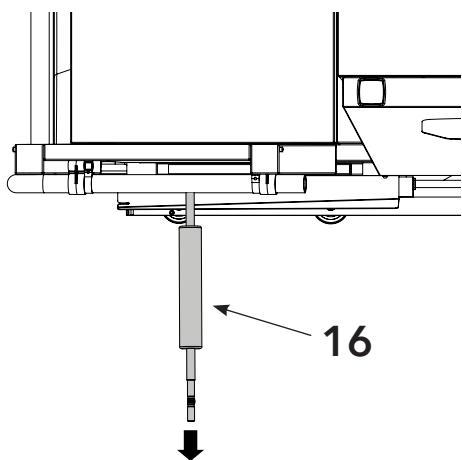
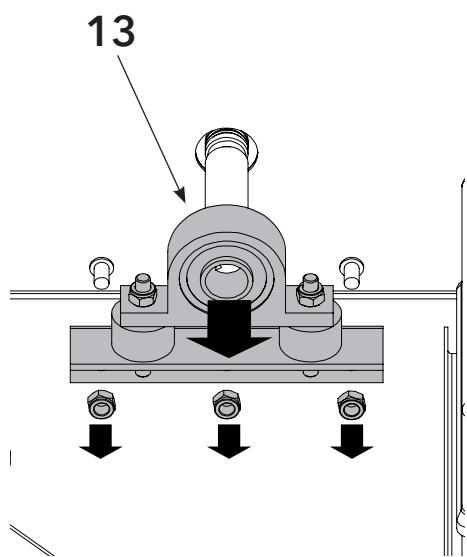
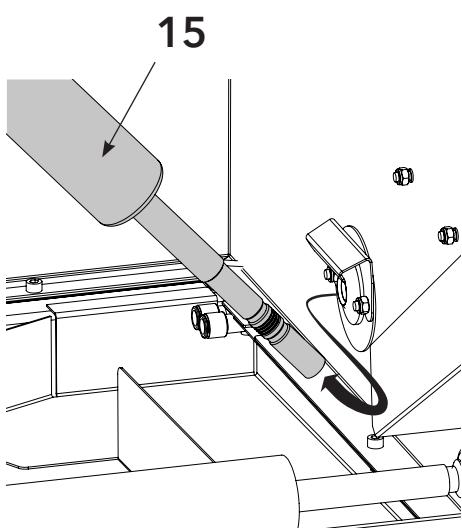
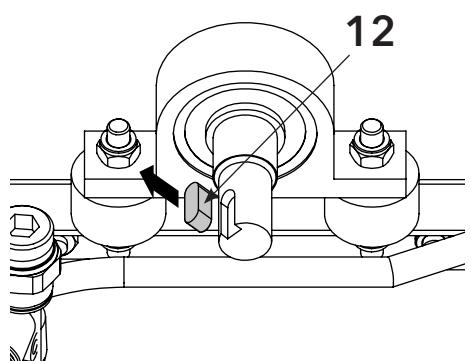
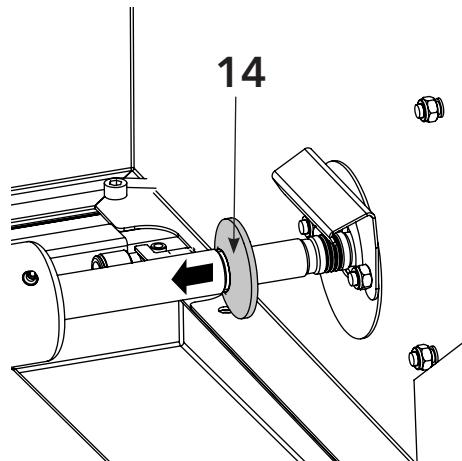
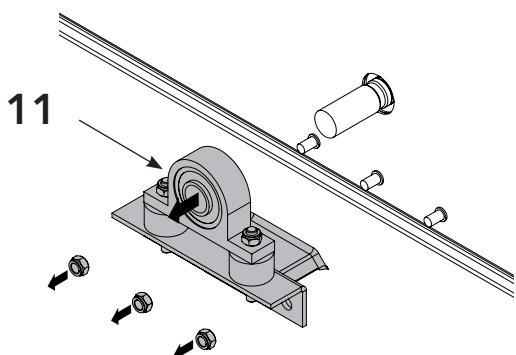


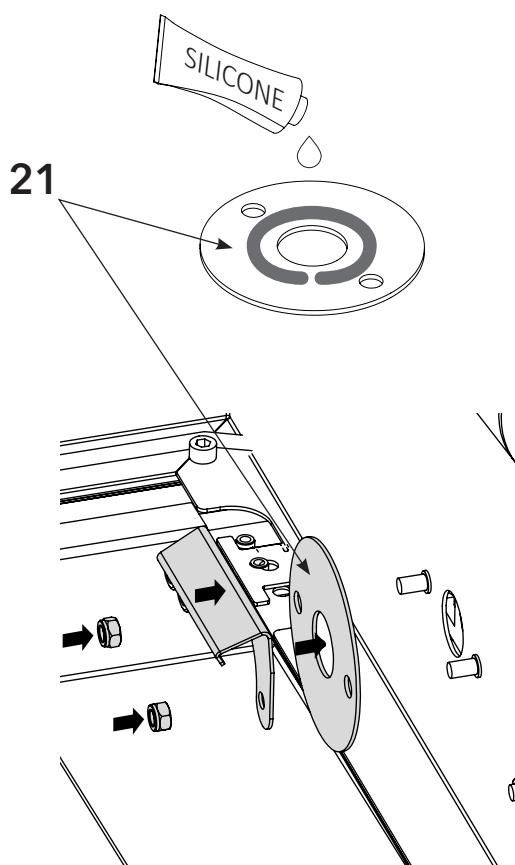
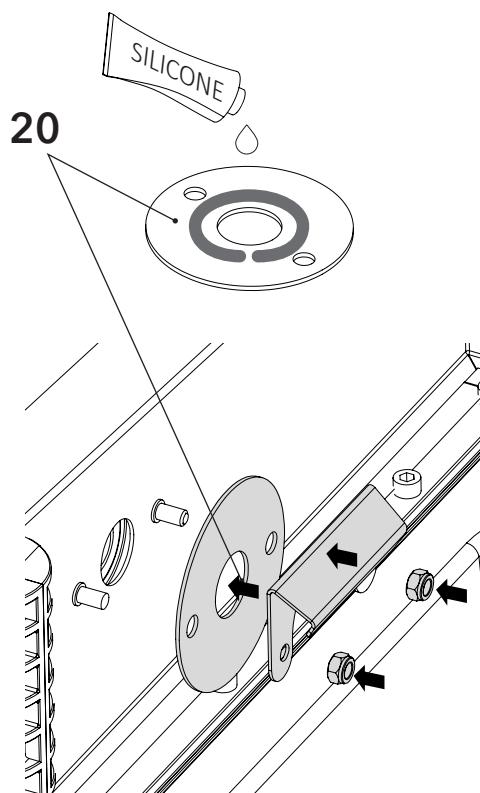
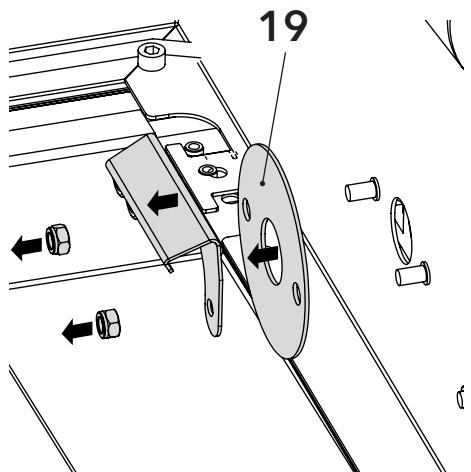
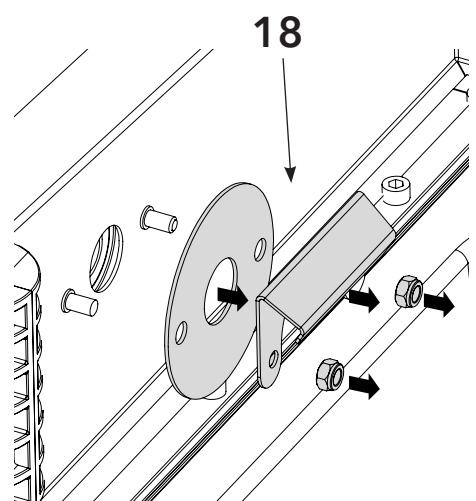
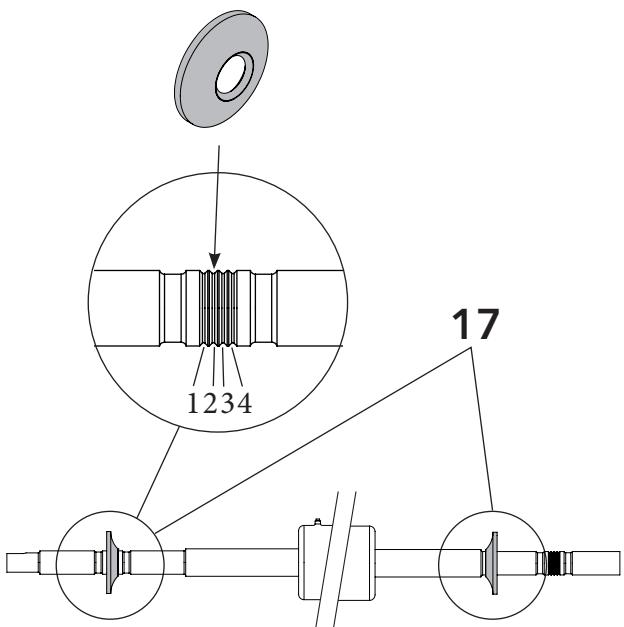
4. Loosen screw.



8. Loosen screw.





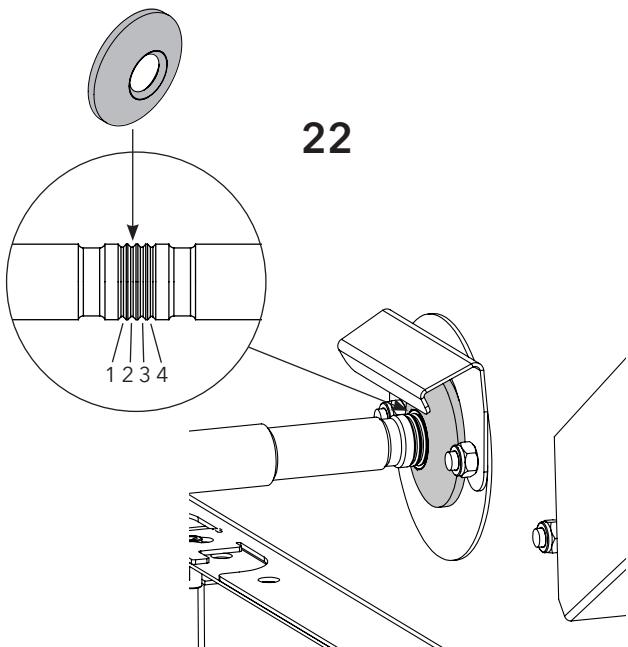


22. Assemble in reverse order from step 16-1.

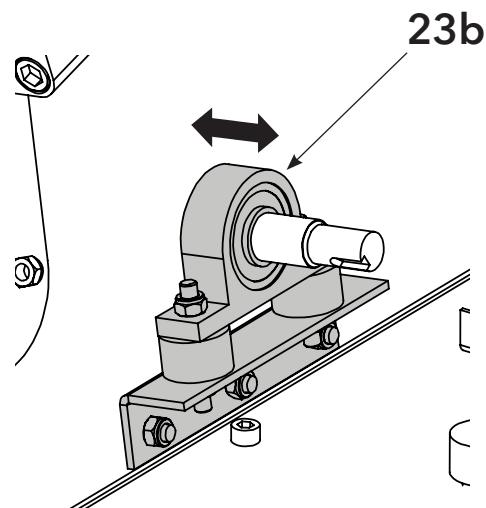
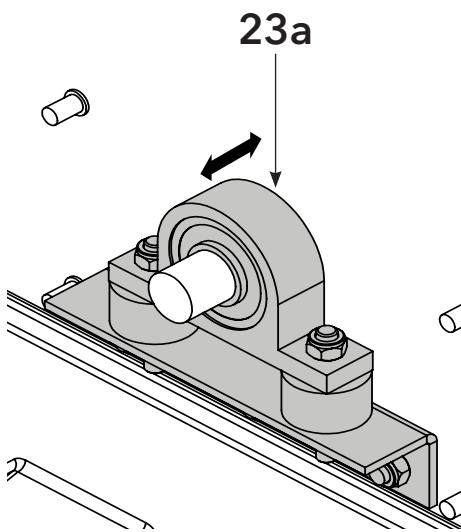
Note at step 14 place according to 22.

After step 11 make step 24 and 25.

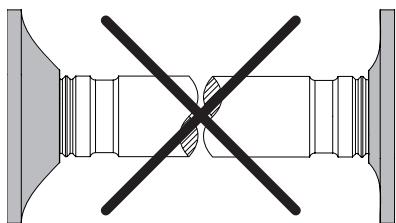
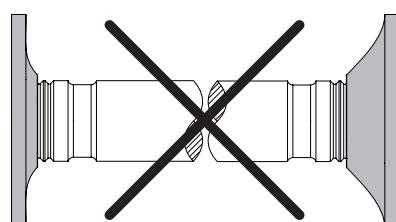
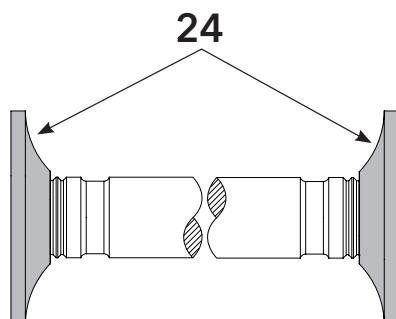
After step 1 check step 26-27.



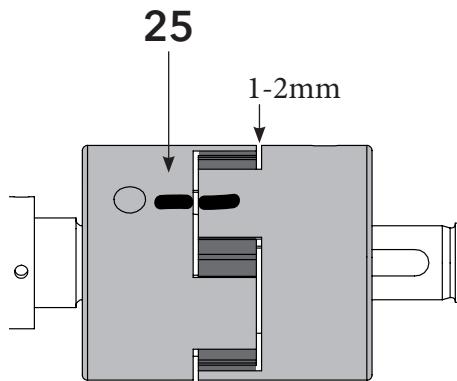
23. Make sure both bearings can move freely on the drive shaft.



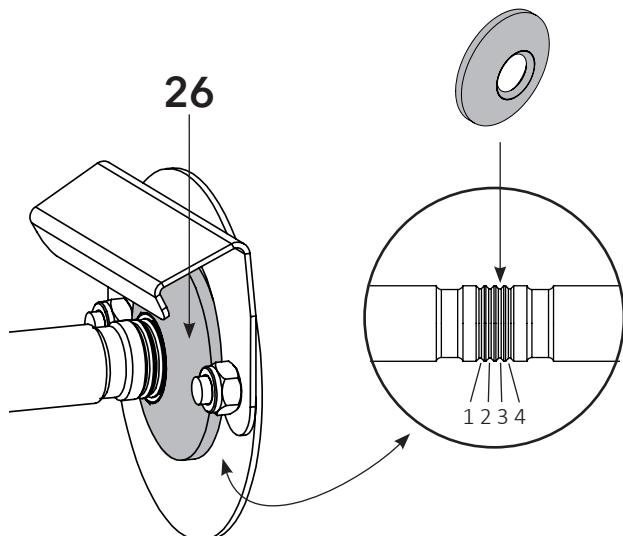
24. Make sure that the sealing rings on each side still has the equal angle against the sheet metal.



28. Self test



26. If the machine leaks from the sealing's: Replace the right sealing ring in the third slot. Check the alignment according to step 25.



1

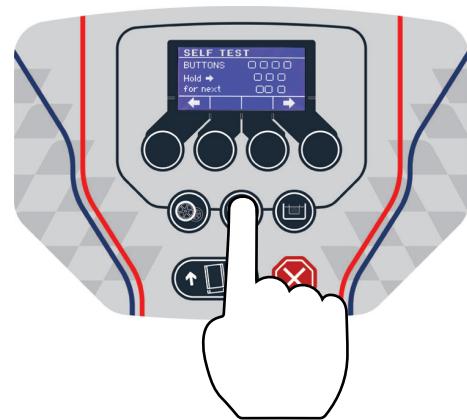


2



3. Press all buttons and control the display if they respond and work. Hold ➔ to continue.

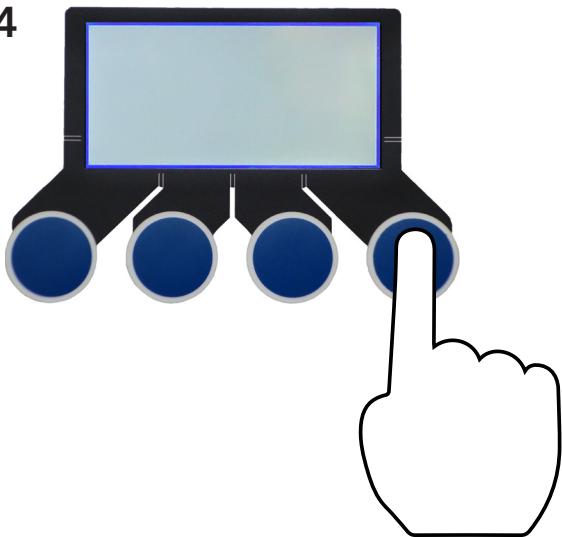
3



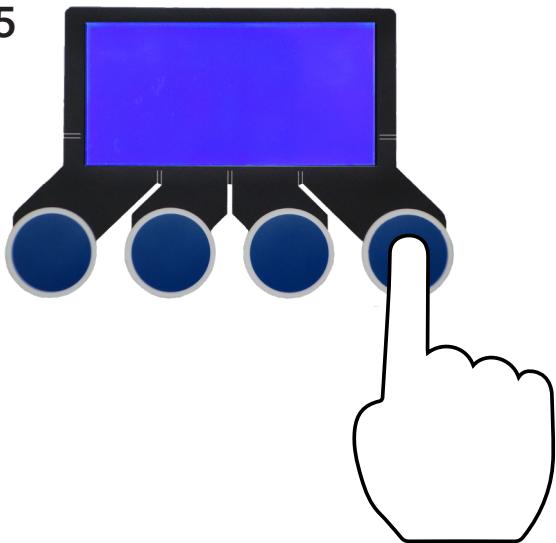
4. Check that ALL pixels are lit. Continue by pressing the right button. ➔

5. Check that NO pixels are lit, continue by pressing the right button.

4

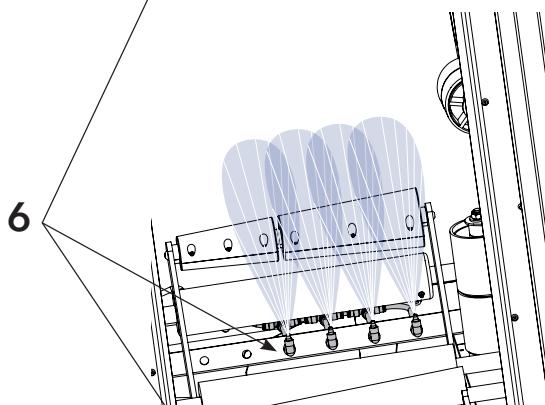
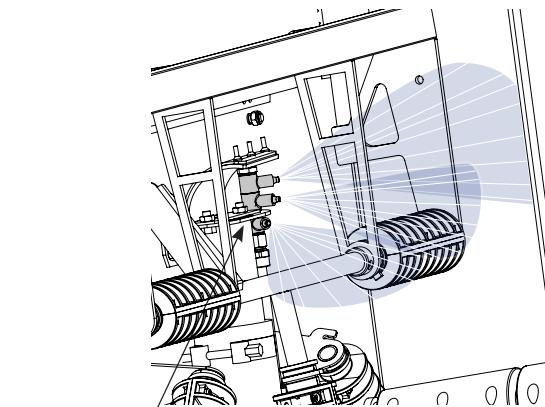


5

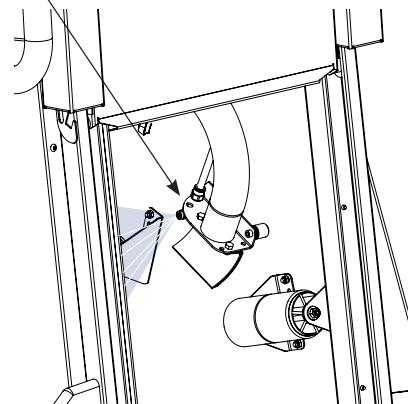


IMPORTANT!
OPEN THE DOOR, WATER SPLASHING POSSIBLE.

6. Check that all eight nozzles work.



6



7. Shows the temperature inside the control box, Max allowed temperature 61°C. If machine has not been used, it should roughly correlate to room temperature.

7

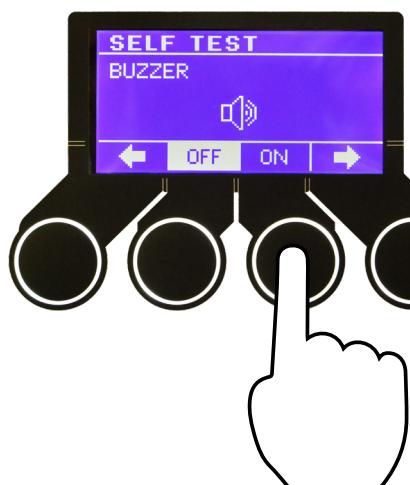
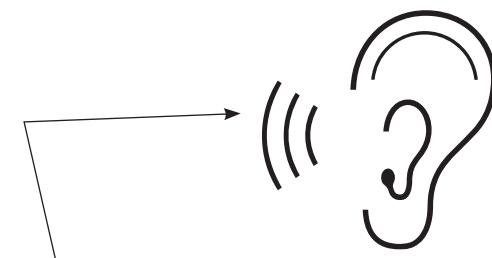


8. Shows water temperature. Temperature sensor located inside heater, max allowed temperature 65°C.

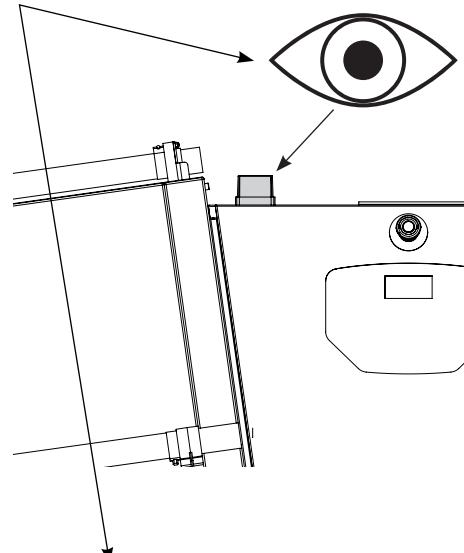
8



9

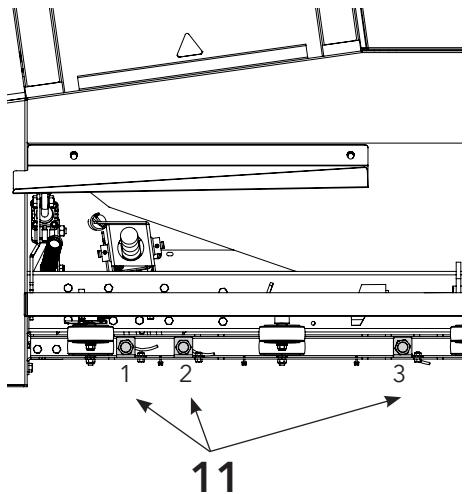


10

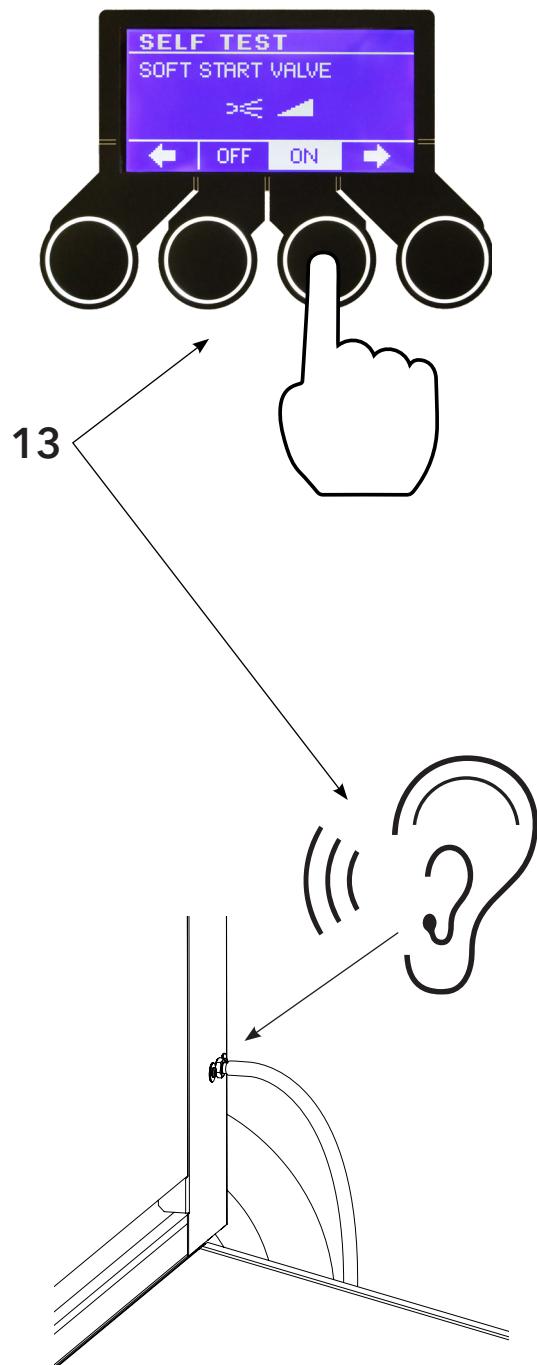


11. Hold a piece of metal in front of the sensor and check for a signal, one sensor at a time.





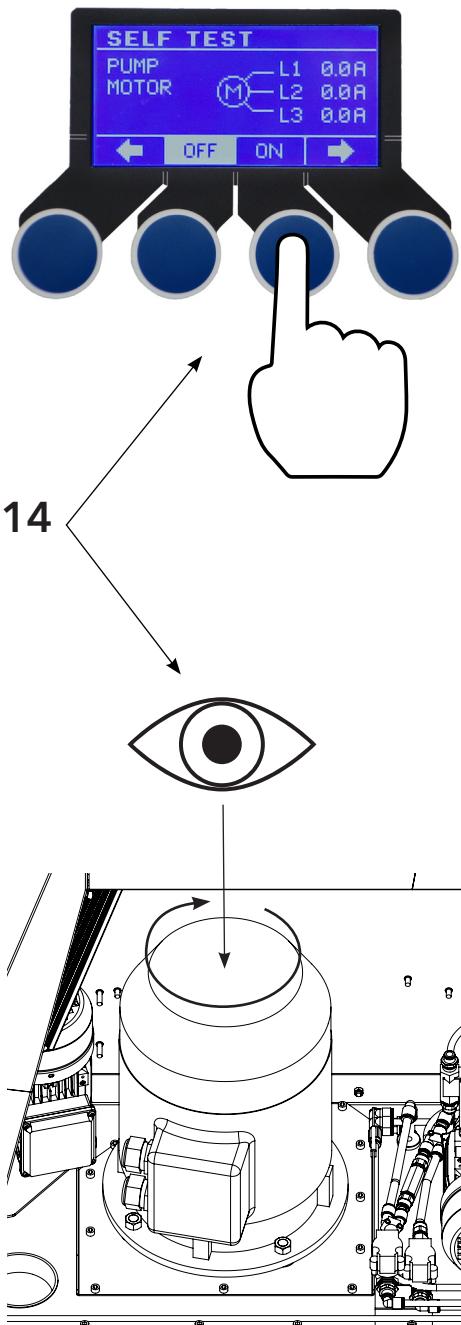
12. Check that the shaft of the cylinder 1-6 operates according to the screen.



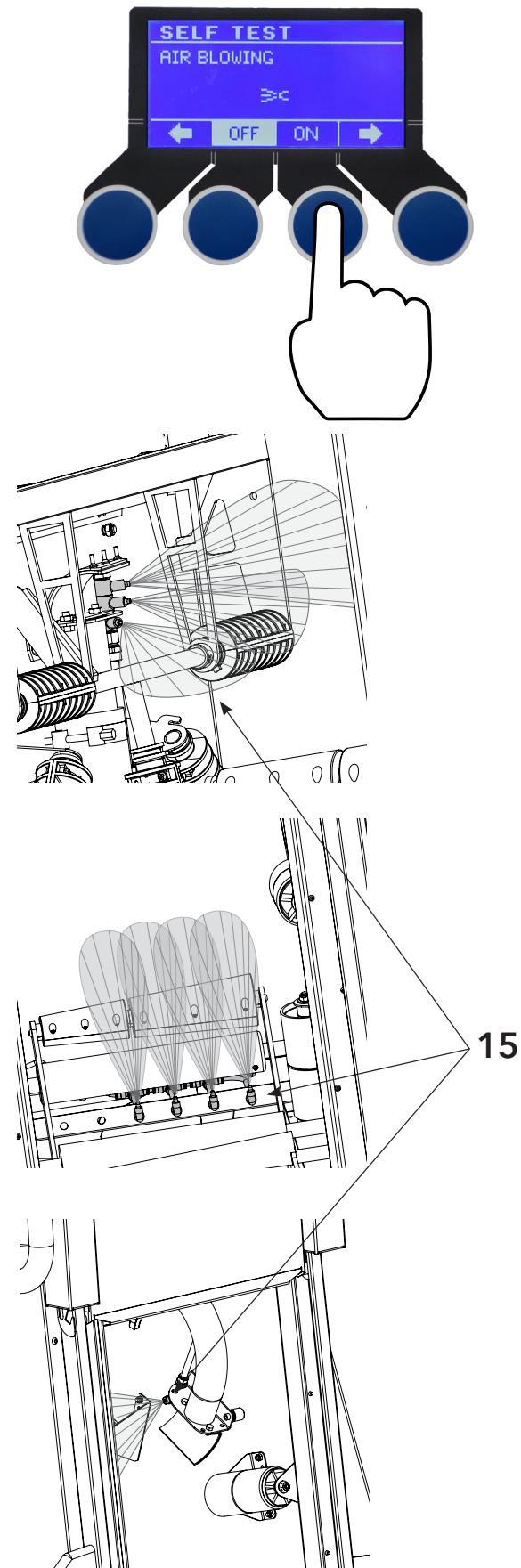
IMPORTANT!

CLOSE LID BEFORE TEST, PUMP MOTOR IS POSSIBLE TO START WITH DOOR OPEN.

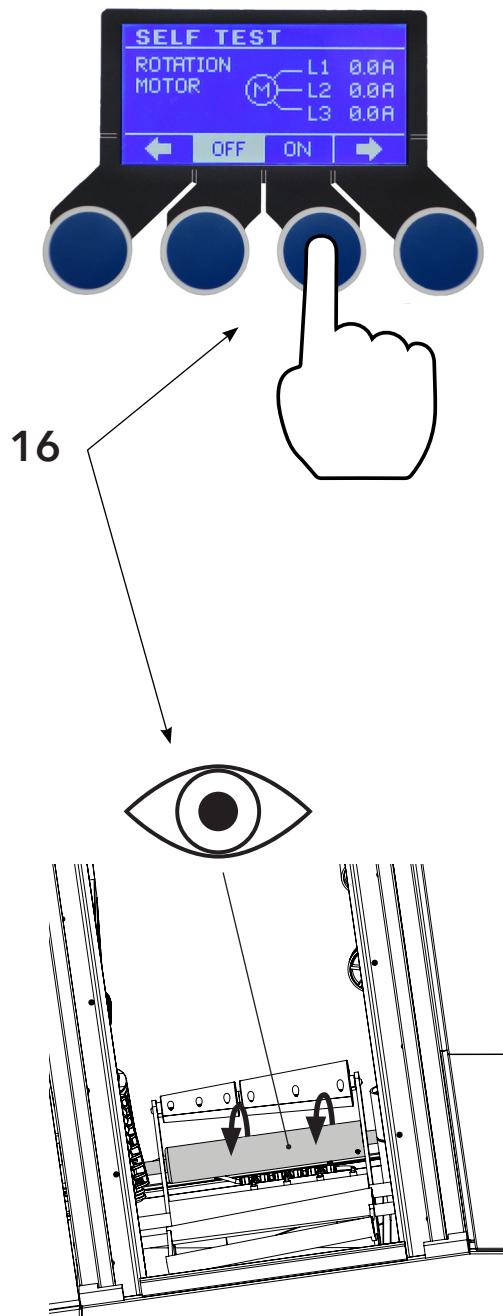
14. Check pump motor rotation. Current consumption should be ~11-14A at 400V. On a brand new pump current consumption should be 12.5-14A at 400V.



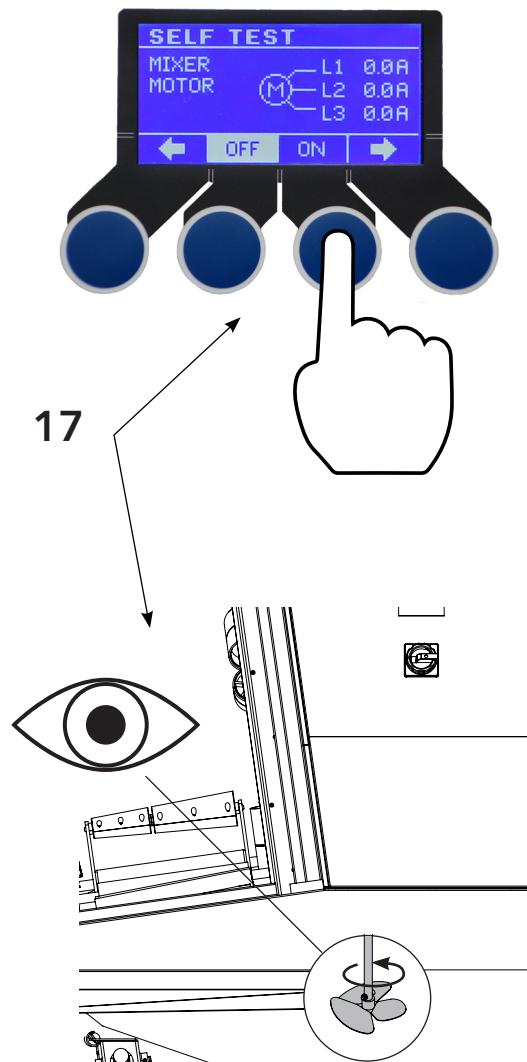
15. Check that all eight nozzles work.



16. Check drive shaft rotation. Current consumption should be ~0.5-1.2A at 400V.



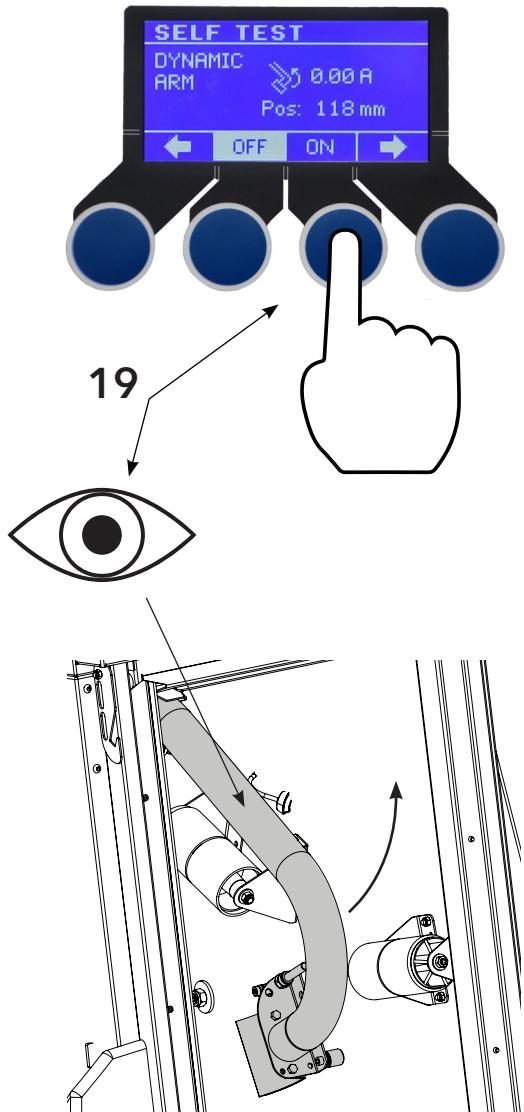
17. Open the lid and check the rotation of the mixer motor.



18. On-mode will after 15 seconds automatically switch to off-mode to prevent overheating. Current consumption should be ~1.5-2.5A at 400V.



19. Check position, 0 - 121 mm ± 3



20. Shows the current software and hardware version.

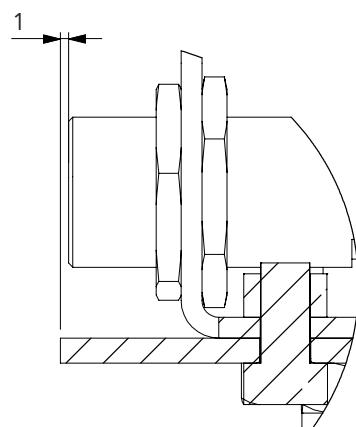
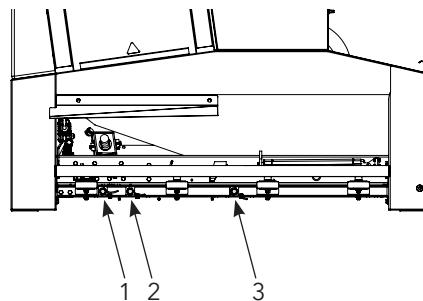


29. Factory Reset

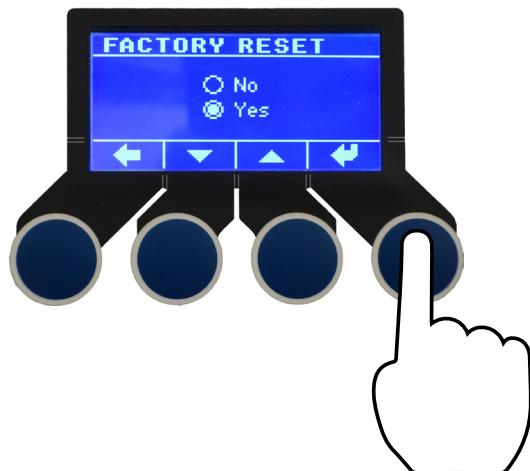
1. Adjust sensors.

Note that the sensor should be installed 1 mm inside the protective edge.

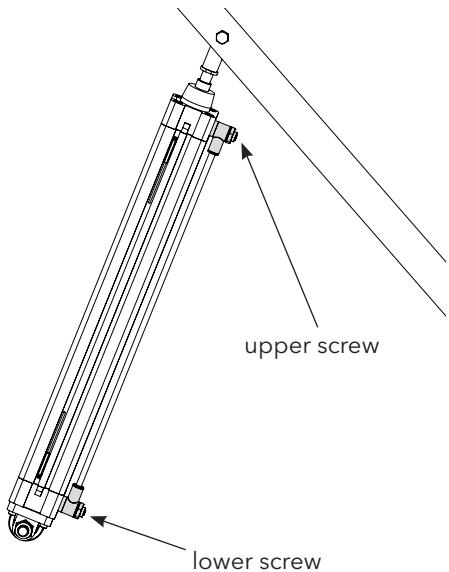
To verify the sensors function perform a Self test, see chapter 28.



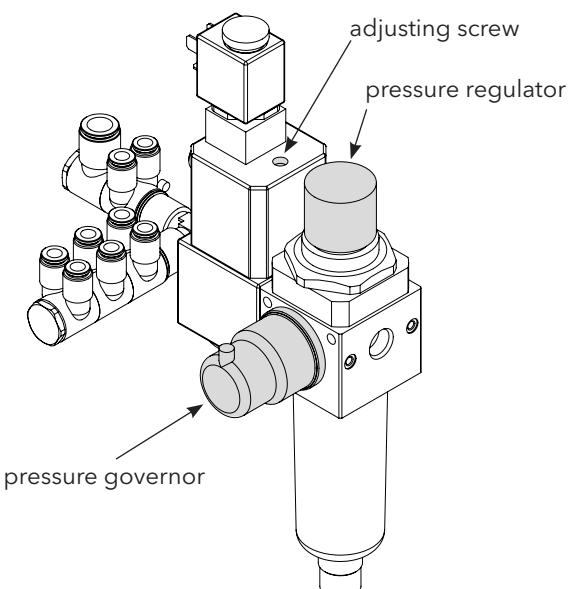
/6.Factory reset/Factory reset



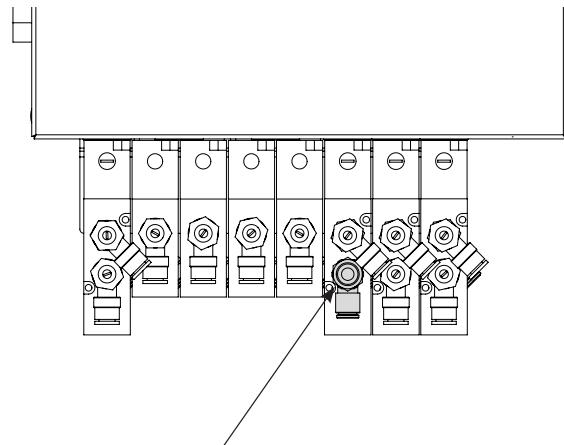
- The upper valve screw should be tightened down completely and then loosen 1,5 turns. The lower valve screw should be tightened down completely and then loosen 6 turns.



- The pressure governor should be set to 6 bar. The intake air regulator should be set to 7.5 bars. To reset soft start the screw should be tightened down completely and then loosen 12 turns.

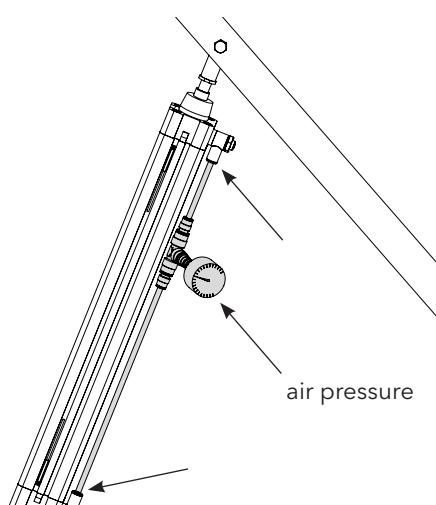


- The lid regulator for cylinder 3 should be set to 2 bars when the lid is closed. Regulator is found on the terminal box. Open and close four turns. (Illustrated on picture below)



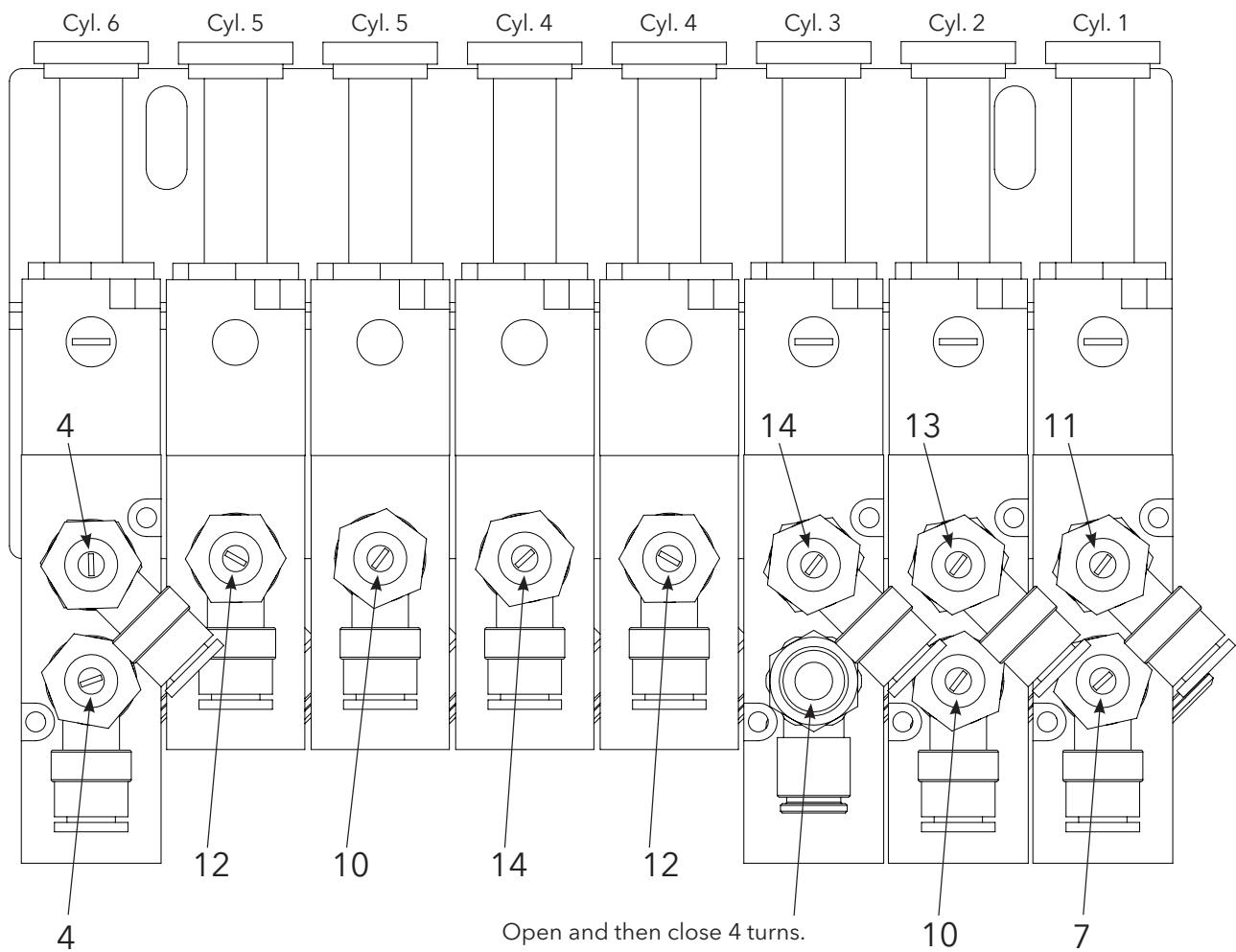
Open and then close 4 turns.

- If uncertain connect the calibration kit 230753 to cylinder 3.
- Turn OFF the machine.
- Disconnect the hose to cylinder 3.
- To connect the calibration kit, remove the red plug and connect it as seen in the picture.
- Turn ON the machine. After ~10 seconds the air pressure value on the calibration kit is stabilized.



11. Adjust the regulator if necessary. When one or more solenoid valves are changed the flow restrictors needs to be set properly.

Tighten the adjustment screw down completely, open the number of turns as indicated in the picture below.



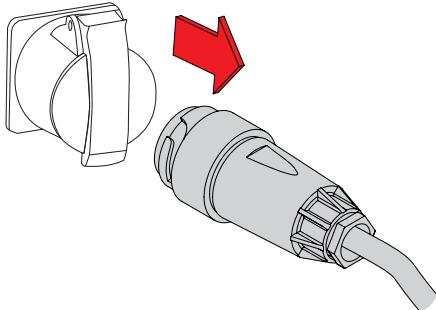
1. Sicherheitshinweise

1.1 Werkzeuge

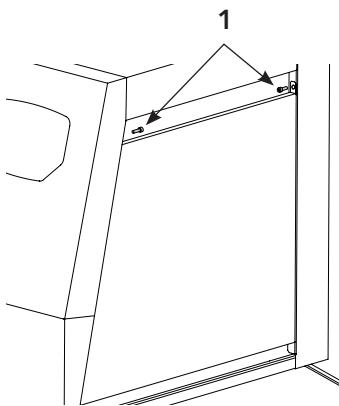


5 mm

WARNUNG! Führen Sie immer die folgenden Schritte aus, bevor Sie irgendwelche Arbeiten an der Maschine vornehmen.

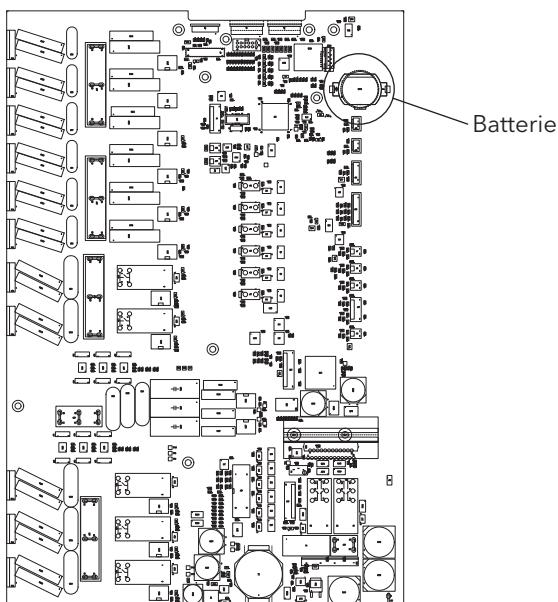


1. Entfernen Sie die Schrauben und den Deckel.



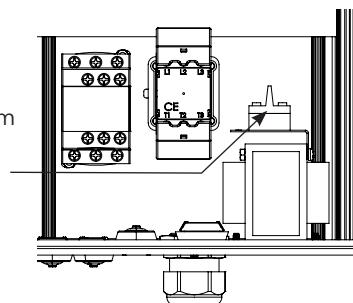
2. Batterie

Batterietyp: CR 2032, 3 V.

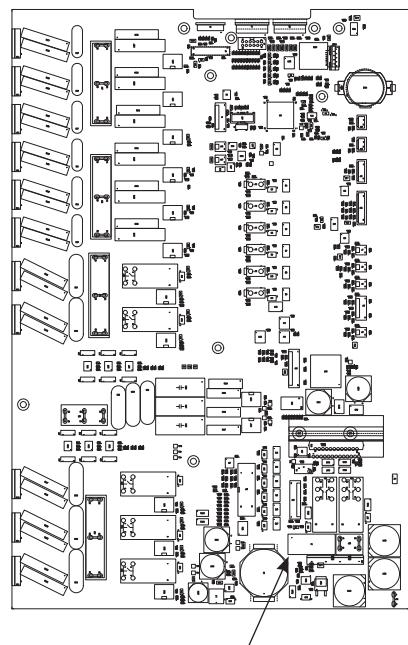
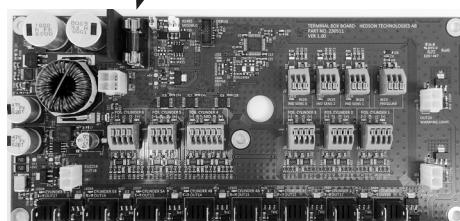


3. Sicherungen

An der Maschine gibt es drei Sicherungen. Eine Sicherung befindet sich auf dem Transformator im Hauptschaltkasten (500 mA, 440 V, träge).



Die zweite Sicherung befindet sich im Klemmenkasten oben links (3,15 A, 250 V, träge).



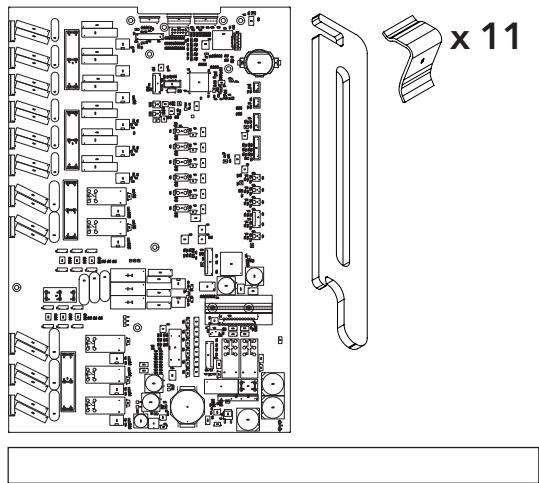
Die dritte Sicherung befindet sich unten rechts von der Steuerplatine.

4. Warnlampe

Die Leistung der Lampe beträgt 24 V/5 W.

5. Austauschen der Steuerplatine

5.1 Komponenten

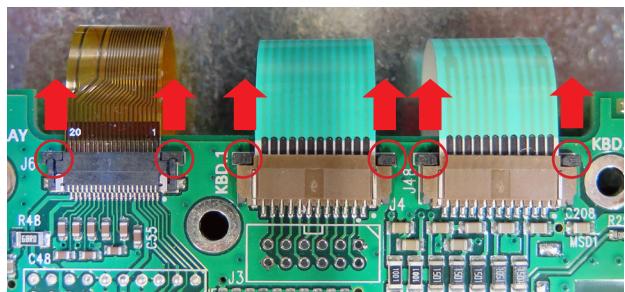
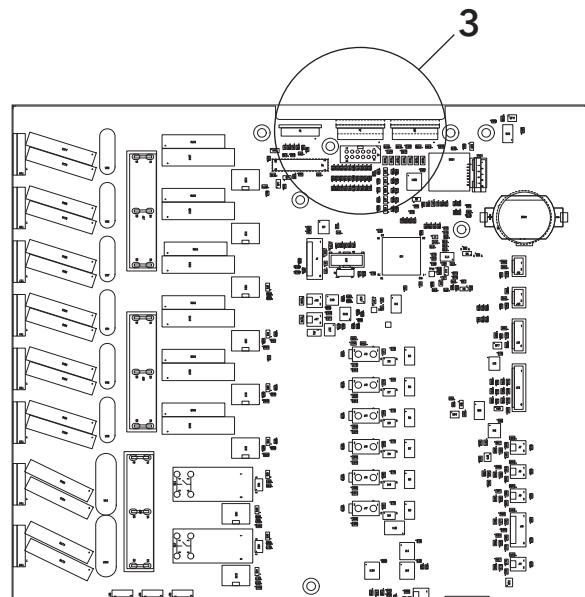
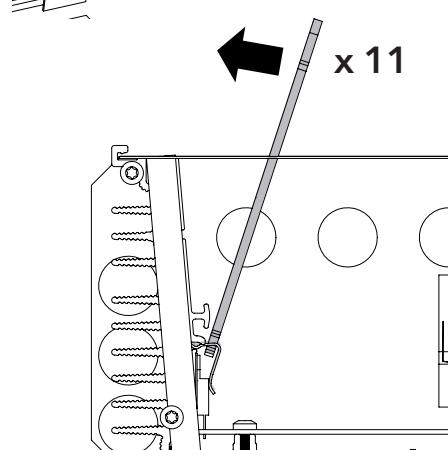
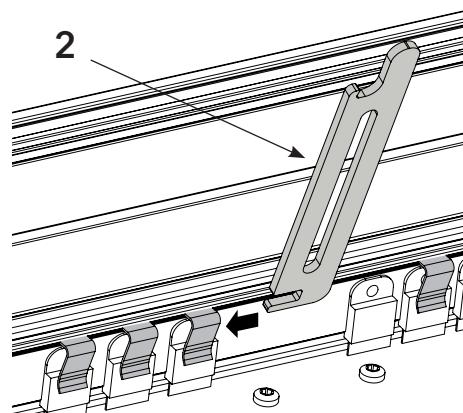
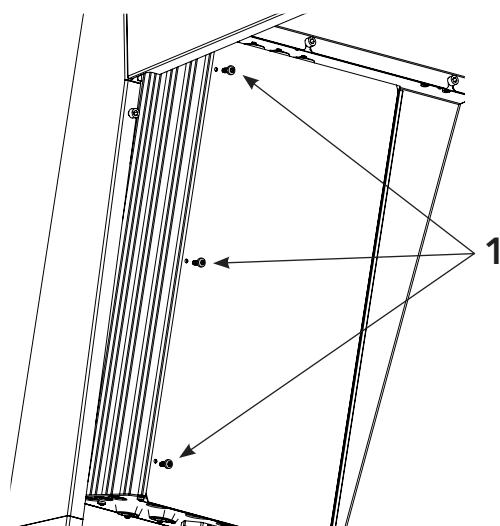


5.2 Werkzeuge

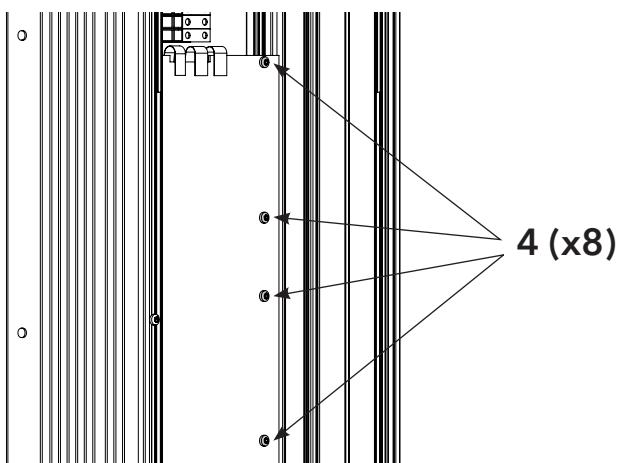


HINWEIS: Befolgen Sie zunächst die Anweisungen in Kapitel 1, Sicherheitshinweise.

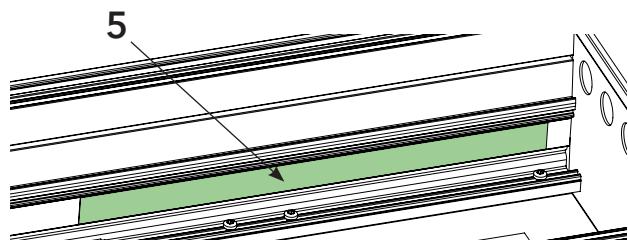
1. Entfernen Sie die Schrauben und den Deckel.
2. Lösen Sie mit dem Spezialwerkzeug die Klammer, mit denen die Platine am Aluprofil befestigt ist.
3. Lösen Sie ALLE Kabel für Motoren, Heizungen, Sensoren usw. Flachbandkabel lassen sich lösen, indem die Stifte wie in der Abbildung gezeigt nach oben gedrückt werden. Kennzeichnen Sie die Kabel für den Wiederschluss.



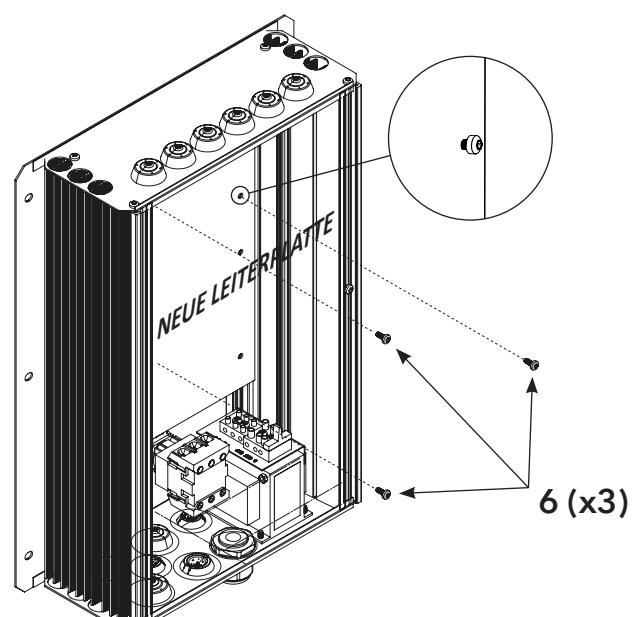
4. Entfernen Sie die Schrauben und die Leiterplatte.



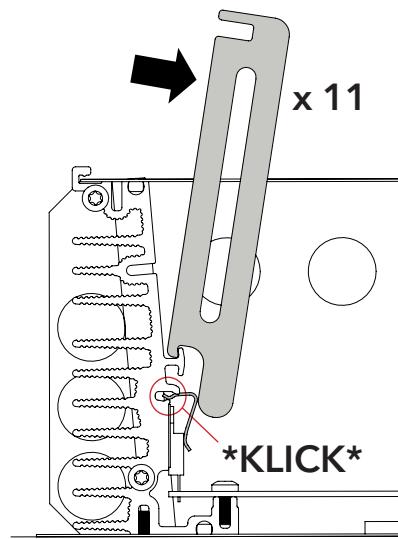
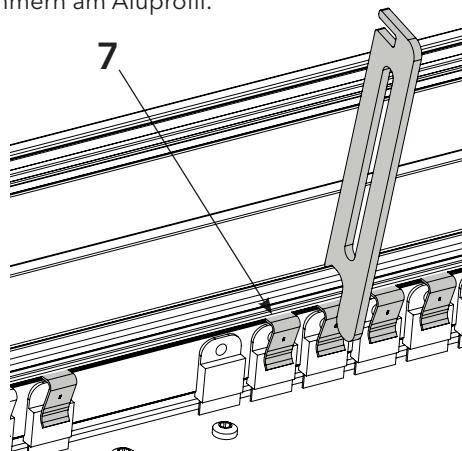
5. Vergewissern Sie sich, dass das Klebeband auf dem Aluprofil wie in der Abbildung dargestellt positioniert ist oder bringen Sie es entsprechend an.



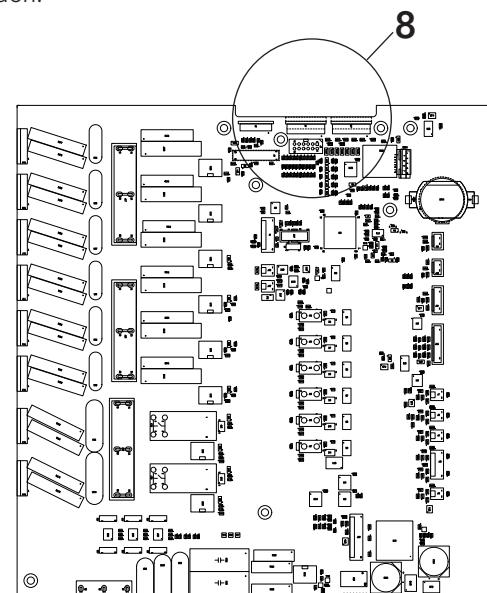
6. Setzen Sie die neue Leiterplatte ein und drehen Sie die drei Schrauben ein, ohne die Leiterplatte festzumachen.

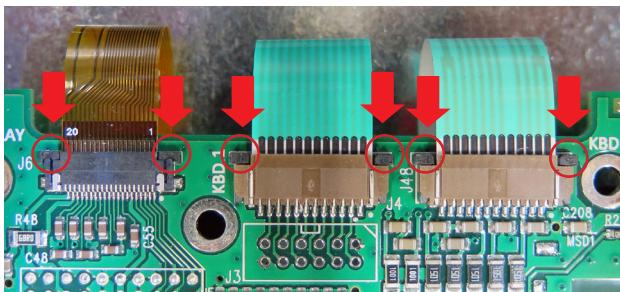


7. Arretieren Sie die Platine mit den mitgelieferten Klemmen am Aluprofil.

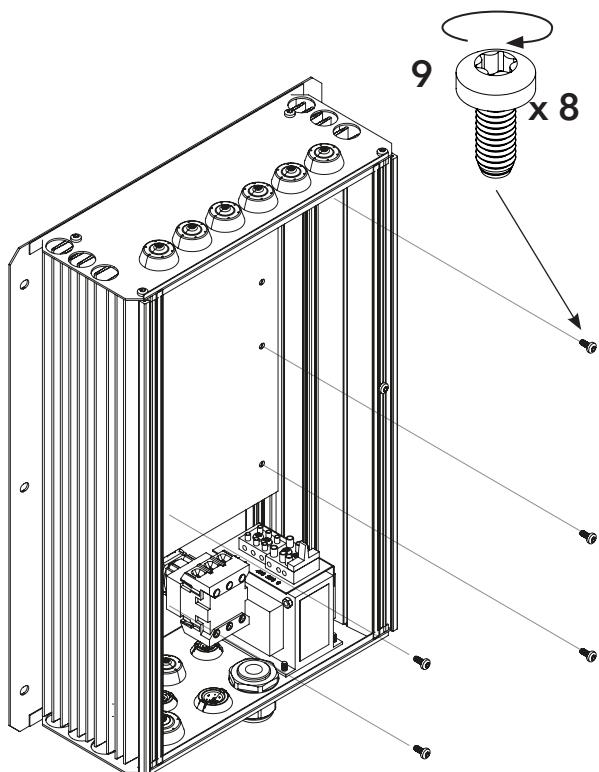


8. Schließen Sie ALLE Kabel an. Schließen Sie sie anhand der vorherigen Kennzeichnungen wieder an. Flachbandkabel lassen sich befestigen, indem die Stifte wie in der Abbildung unten und auf der nächsten Seite dargestellt nach unten gedrückt werden.

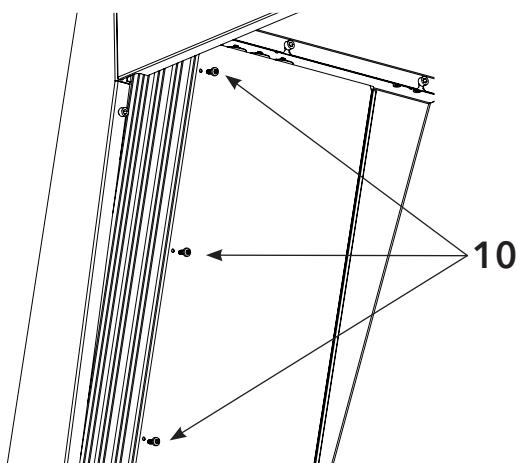




9. Ziehen Sie alle Schrauben fest.



10. Setzen Sie den Deckel ein und befestigen Sie ihn mit den Schrauben.



11. Führen Sie die Konfiguration aus (Kapitel 6)

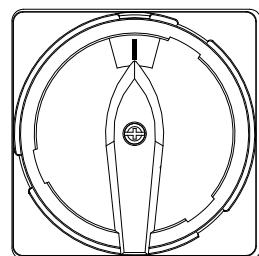
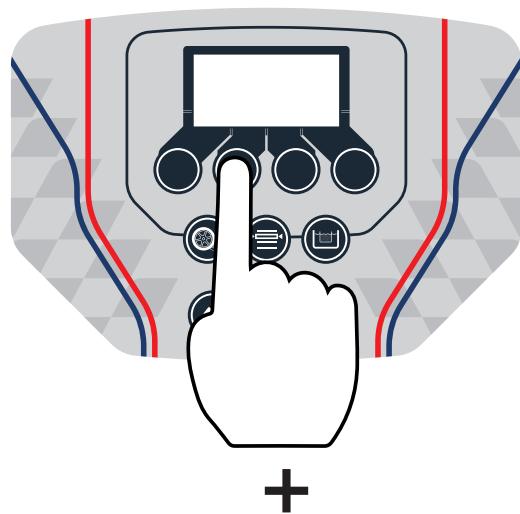
12. Führen Sie den Selbsttest durch

12 /8.Self test/....



6. Konfigurationsmenü

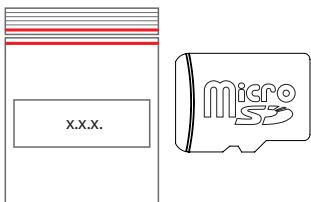
Wählen Sie die Einstellungen je nach Maschinenkonfiguration aus.



PIN-CODE	1632	
SPANNUNG	400 V	
GERÄTETYP	24	
HEIZUNG	INTELLIGENT	
KLARSPÜLEN	NEIN	JA
MISCHERMOTOR	NEIN	JA
TEMPERATUR	°C	°F

7. Softwareaktualisierung

7.1 Komponenten

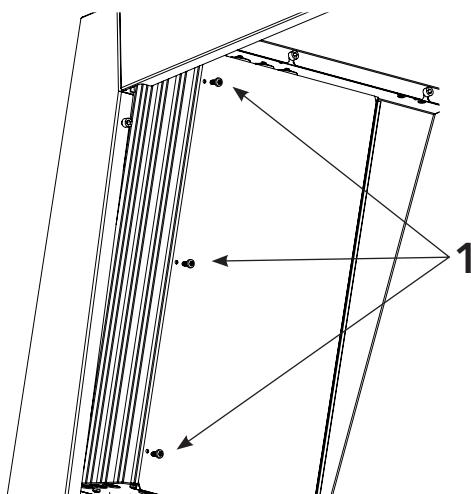


7.2 Werkzeuge

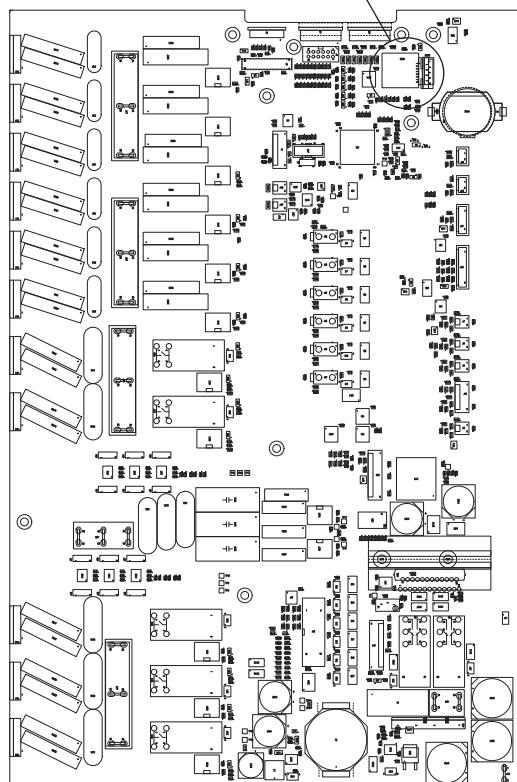
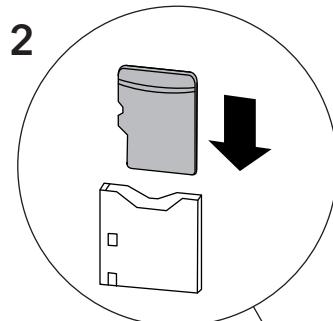


HINWEIS: Befolgen Sie zunächst die Anweisungen in Kapitel 1, Sicherheitshinweise.

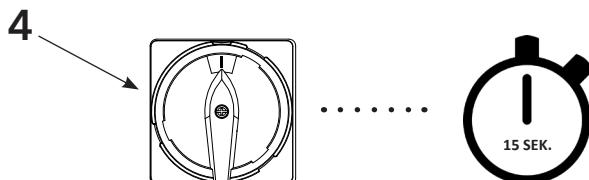
1. Entfernen Sie die Schrauben und den Deckel.
2. Setzen Sie die SD-Karte in den Steckplatz ein.



3. Gehen Sie für die Montage in umgekehrter Reihenfolge vor.

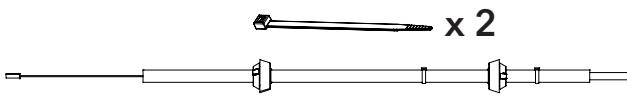


4. Betätigen Sie den Hauptschalter, warten Sie 15 Sek., rufen Sie die Einstellungen auf, navigieren Sie zu (/7. Version/Model/Sw/x.x.x) und überprüfen Sie, ob x.x.x mit der Nummer auf dem Beutel übereinstimmt.
5. Gehen Sie zum Entfernen der SD-Karte wie oben erläutert vor.



8. Austauschen des Temperatursensors

8.1 Komponenten

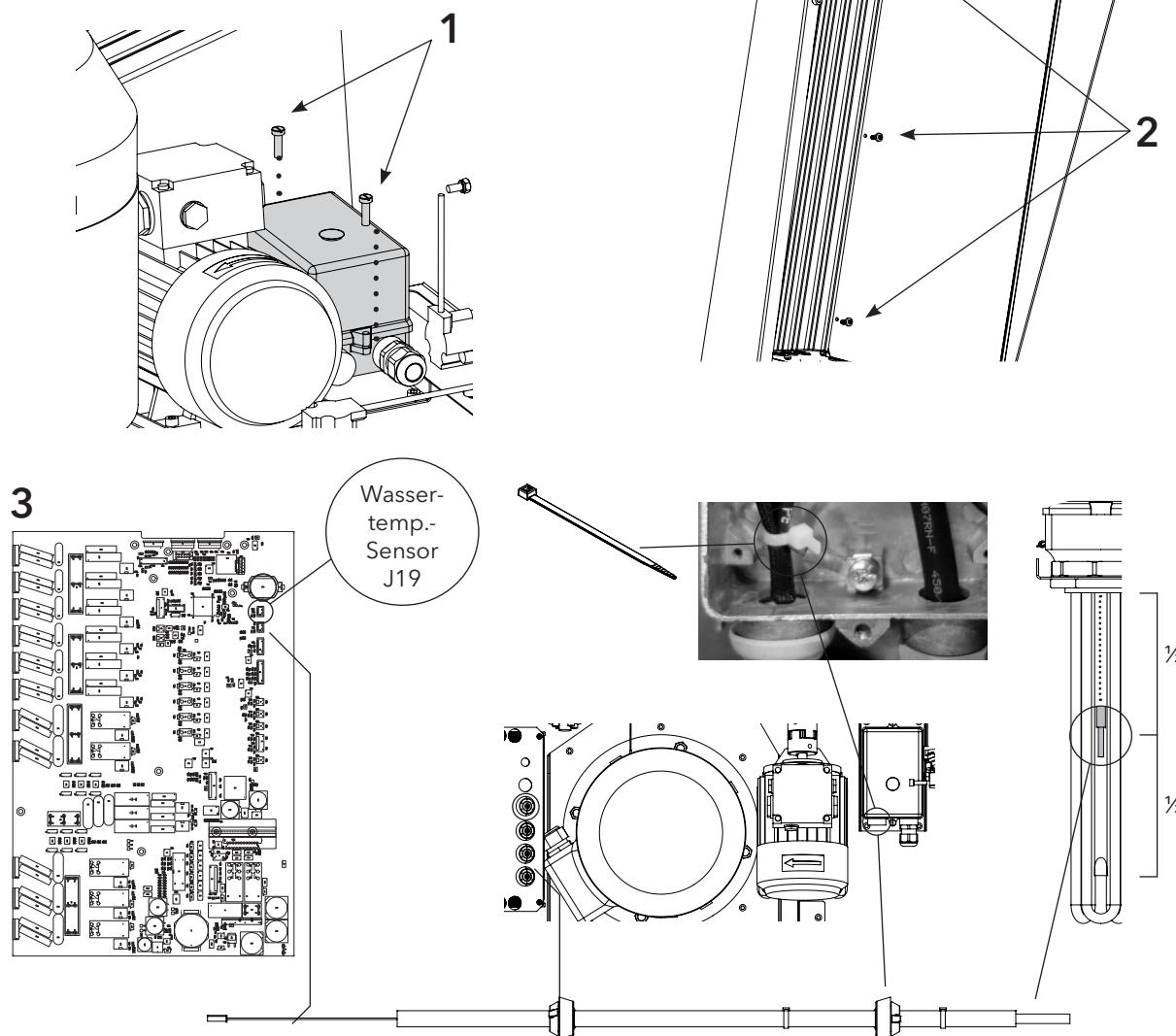


8.2 Werkzeuge



HINWEIS: Befolgen Sie zunächst die Anweisungen in Kapitel 1, Sicherheitshinweise.

1. Entfernen Sie die Schrauben.
2. Entfernen Sie die Schrauben und den Deckel.

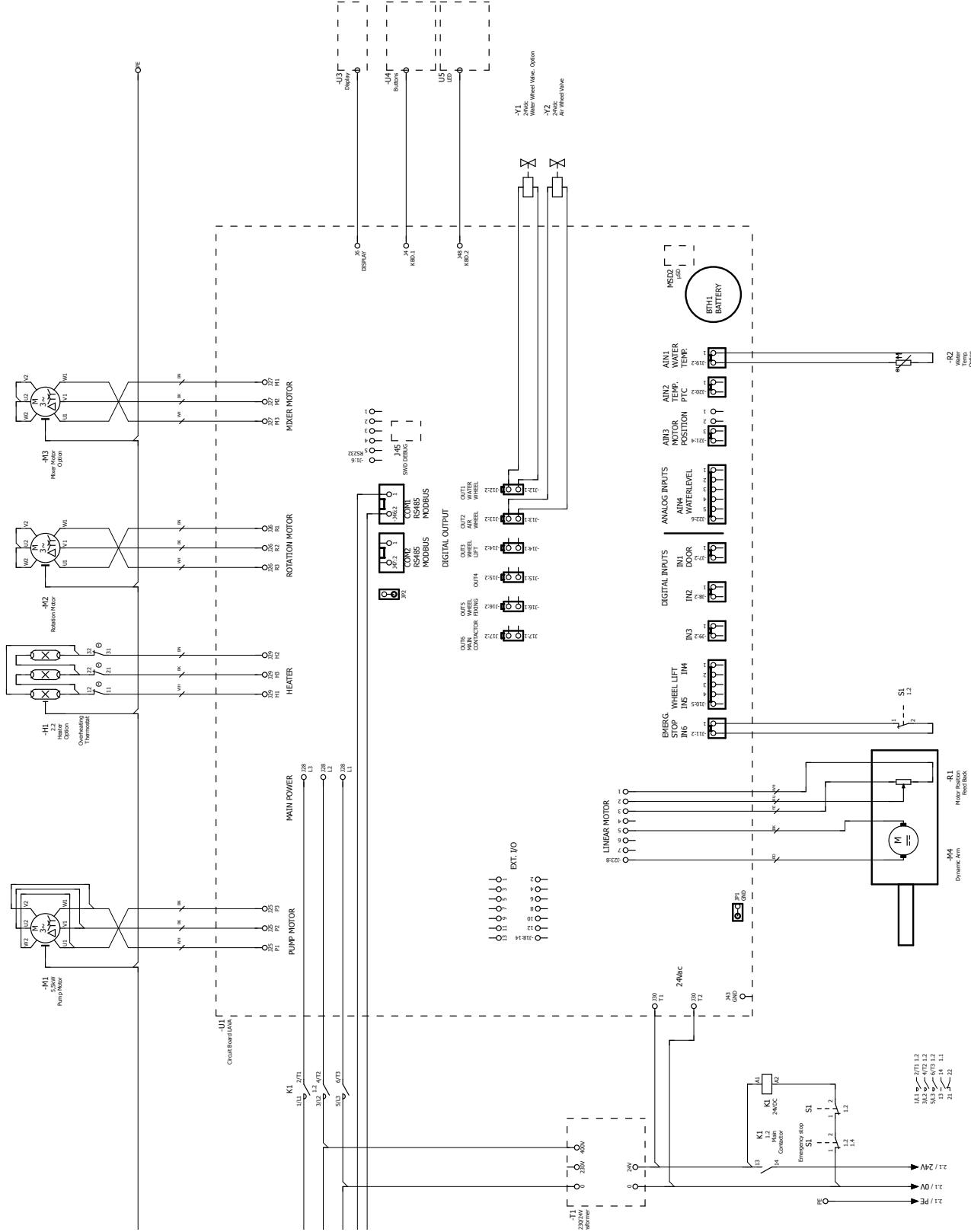


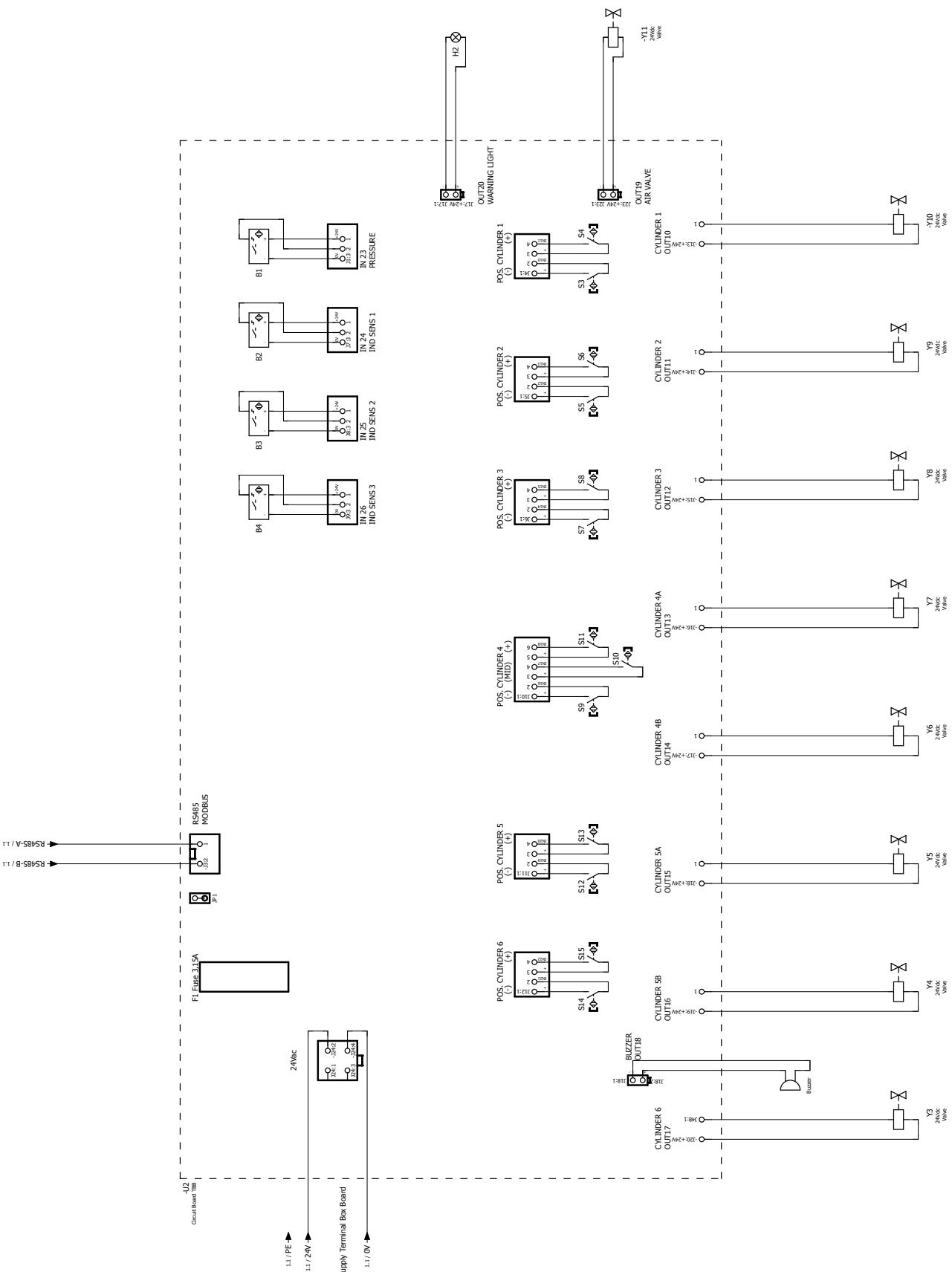
/8.Self test/...../Water Temperature/....

3. Trennen Sie den alten Temperatursensor vom Gerät und schließen Sie den neuen Sensor an.
4. Gehen Sie für die Montage in umgekehrter Reihenfolge vor.
5. Starten Sie die Maschine und prüfen Sie, ob der Temperatursensor funktioniert (/8. Selftest/Water temperature/....).



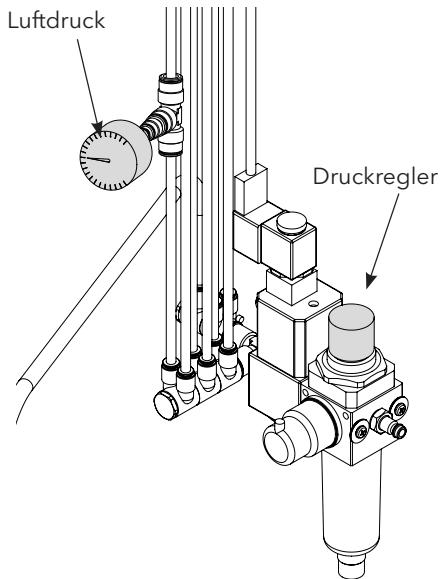
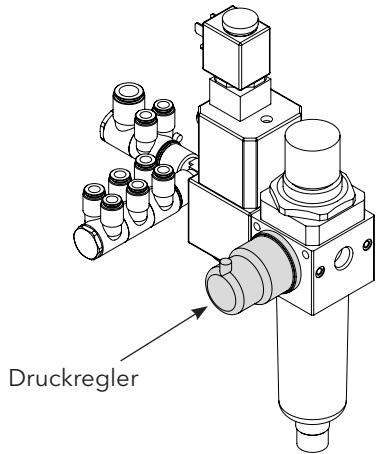
9. Schaltplan





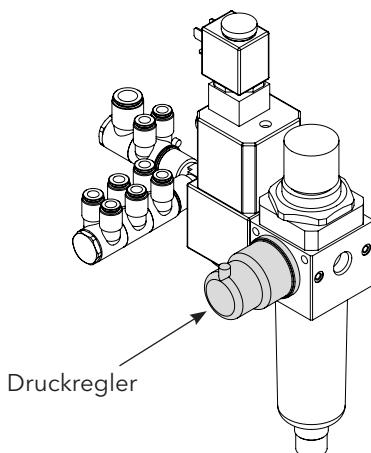
10. Druckregler

Der Druckregler erkennt, wenn der Zuluftdruck unter 6 bar abfällt. Dadurch wird ein Alarm vom Typ B ausgelöst (siehe die Alarmcodes in Kapitel 9 in der Bedienungsanleitung). Der Druckregler darf nicht auf einen anderen Wert eingestellt werden. Wenn er defekt ist, muss er ausgetauscht werden, um die Maschinensicherheit aufrechtzuerhalten.

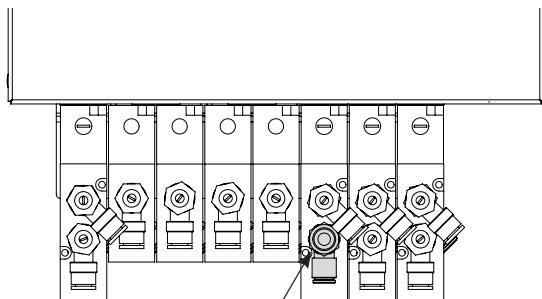


11. Einstellen des sanftanlaufventils

Oben am Sanftanlaufventil befindet sich eine Einstellschraube, mit der Sie festlegen können, wie schnell der Druck ansteigen soll. Ziehen Sie die Schraube vollständig an und lösen Sie sie dann mit 12 Drehungen. Auf der Rückseite des Sanftanlaufventils befindet sich eine rote Kunststoffschraube. Diese muss in der Horizontalen stehen.



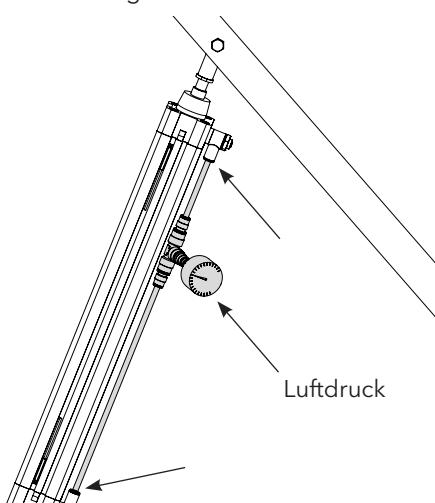
Der Deckelregler für Zylinder 3 muss bei geschlossenem Deckel auf 2 bar eingestellt sein. Der Regler befindet sich auf dem Klemmenkasten. Öffnen und schließen Sie ihn mit vier Drehungen (siehe Abbildung unten).



Öffnen und dann mit 4 Drehungen schließen.

Wenn Sie nicht sicher sind, schließen Sie das Kalibrierkit 230753 an Zylinder 3 an.

2. Schalten Sie die Maschine aus.
3. Trennen Sie den Schlauch von Zylinder 3.
4. Zum Anschließen des Kalibrierkits entfernen Sie den roten Stopfen und schließen es wie in der Abbildung gezeigt an.
5. Schalten Sie die Maschine ein. Nach ~10 Sekunden hat sich der Luftdruckwert am Kalibrierkit stabilisiert. Stellen Sie den Regler bei Bedarf ein.



12. Einstellen der druckregler

Diese Einstellungen dürfen nicht geändert werden.

Wenn die Regler nicht einwandfrei arbeiten, überprüfen Sie die folgenden Einstellungen:

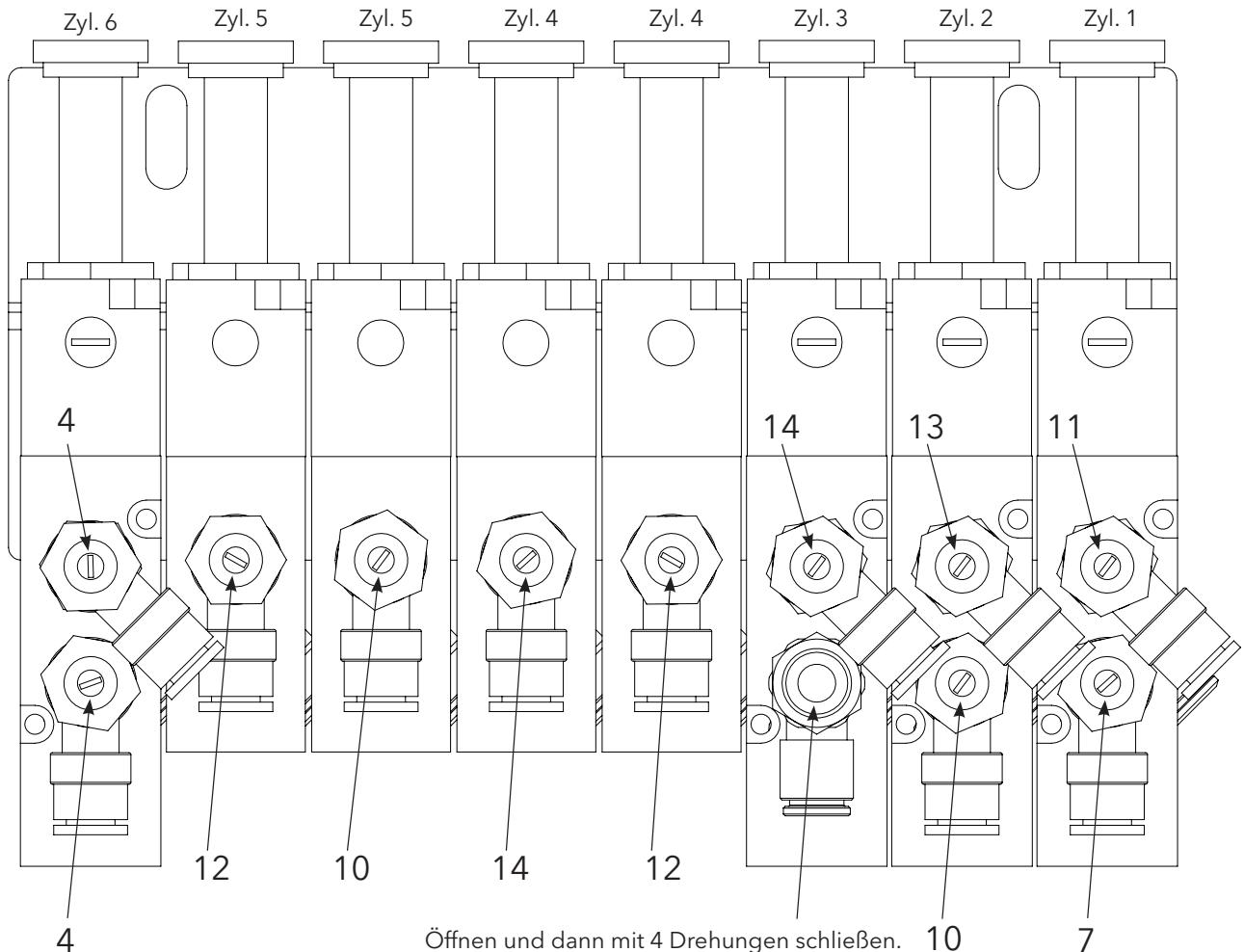
Der Zuluftregler (Abbildung unten) muss auf 7,5 bar eingestellt sein. **Hinweis: Verringern Sie immer den Druck und erhöhen Sie ihn dann auf den gewünschten Pegel.**

1. Schalten Sie die Maschine ein. Nach ~10 Sekunden hat sich der Luftdruckwert stabilisiert. Stellen Sie den Regler bei Bedarf ein.

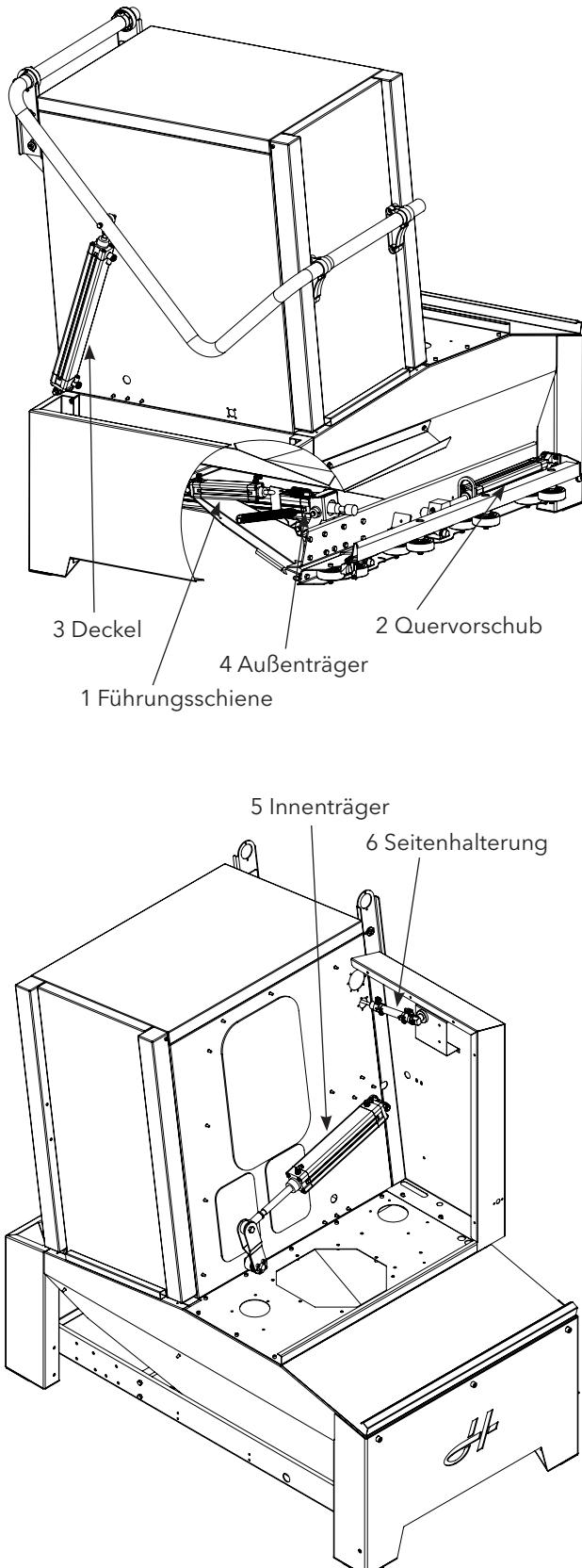
13. Einstellen von Magnetventilen

Wenn ein oder mehr Magnetventile geändert werden, müssen die Durchflussbegrenzer ordnungsgemäß eingestellt werden.

Ziehen Sie die Einstellschraube bis zum Anschlag an und öffnen Sie sie mit der Anzahl der in der Abbildung unten angegebenen Drehungen.



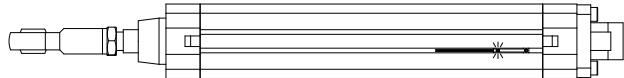
14. Nummerierung und Namen der Zylinder



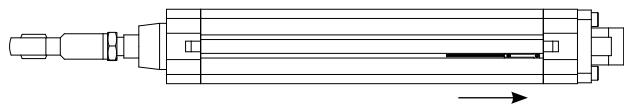
15. Endlagensensoren auf den zylindern

Zum Einstellen der Position an den Sensoren muss die Maschine eingeschaltet und die Druckluft angeschlossen sein. Starten Sie den Selbsttest (*siehe Kapitel 28*), um den Zylinder in die richtige Position für den einzustellenden Sensor zu bewegen.

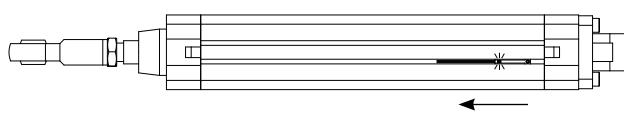
1. Platzieren Sie den Sensor in der Kerbe und schieben Sie ihn nach links oder rechts, bis die LED leuchtet.



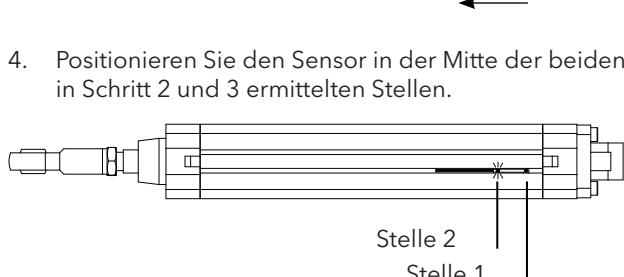
2. Schieben Sie den Sensor nach rechts, bis die LED erlischt, und merken Sie sich die Stelle.



3. Schieben Sie den Sensor nach links, bis die LED erlischt, und merken Sie sich die Stelle.

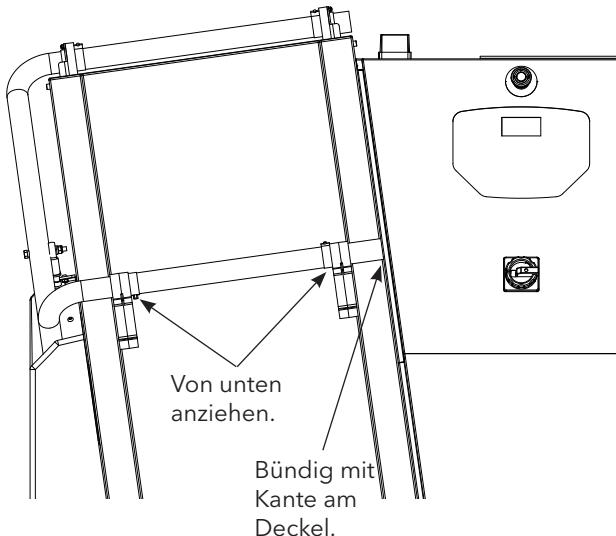


4. Positionieren Sie den Sensor in der Mitte der beiden in Schritt 2 und 3 ermittelten Stellen.

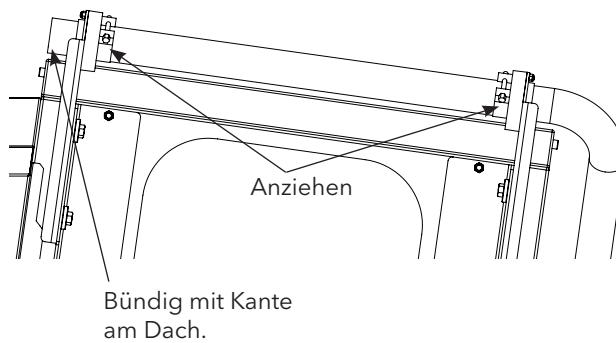


16. Einstellen des deckels

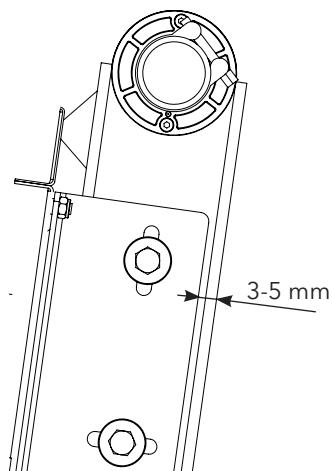
- Ziehen Sie die vier Schlauchklemmen an der Vorderseite an, wenn sich das Lager in der richtigen Position befindet.



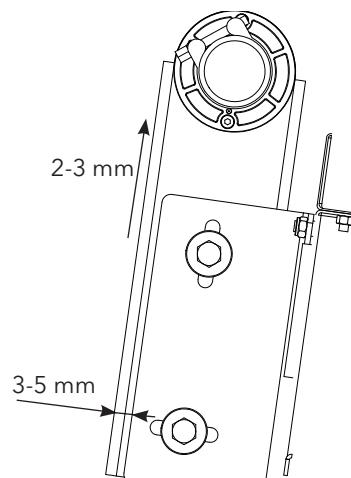
- Ziehen Sie die vier Schlauchklemmen an der Rückseite an, wenn sich das Lager in der richtigen Position befindet.



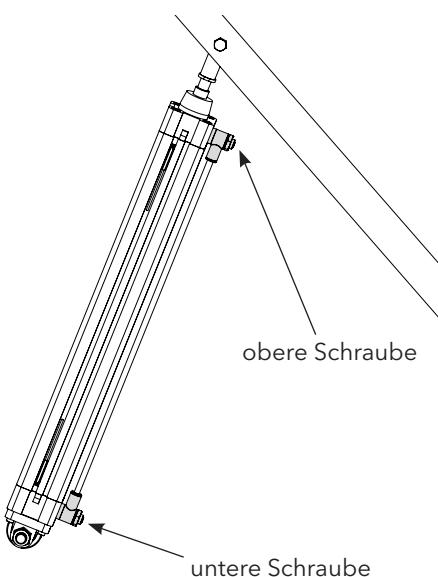
- Stellen Sie sich hinter die Maschine und ziehen Sie die rechte Verschraubung wie in der Abbildung gezeigt an.



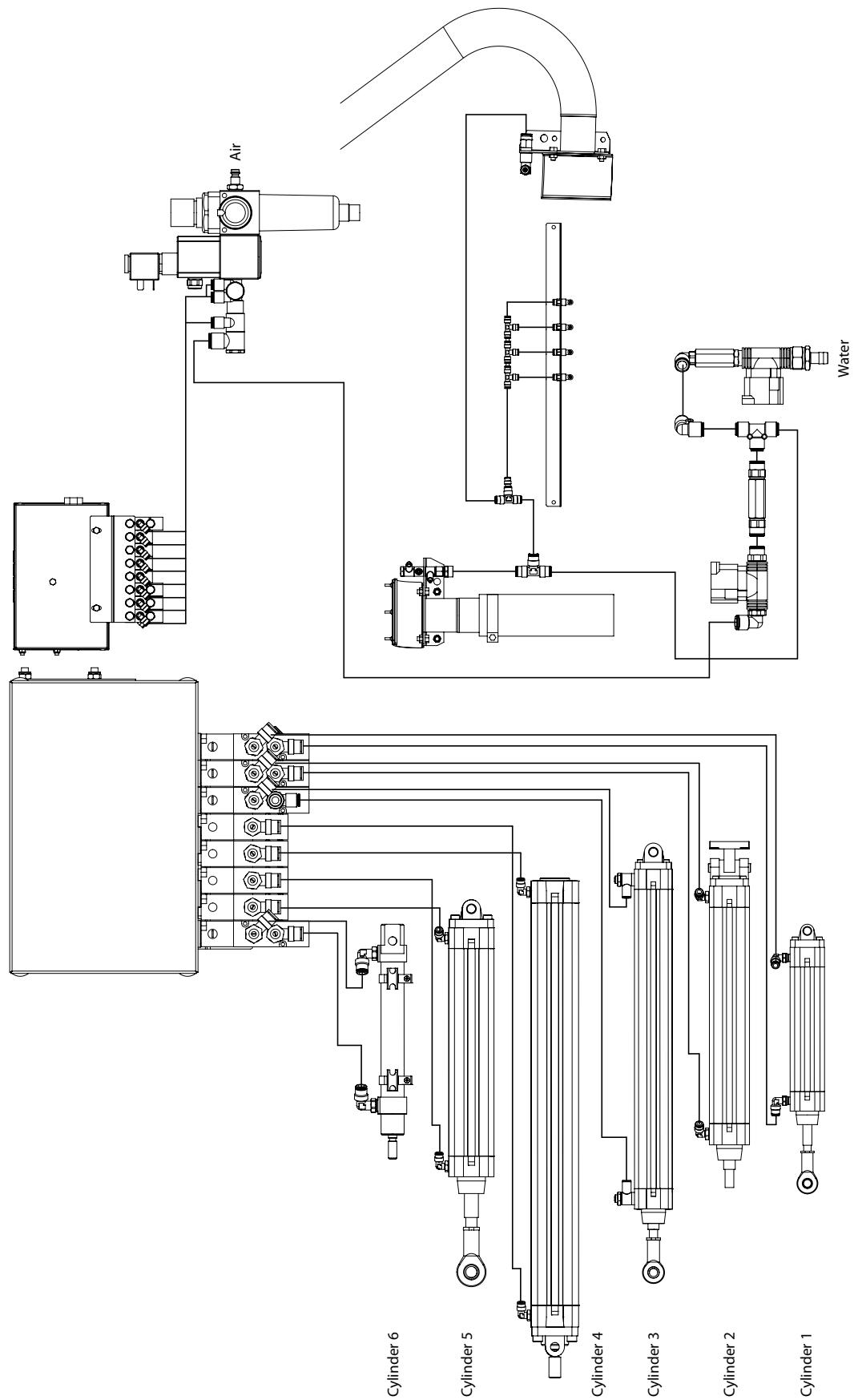
- Heben Sie die linke Verschraubung um 2-3 mm an und ziehen Sie die Schrauben an.



- Ziehen Sie die obere Ventilschraube vollständig an und lösen Sie sie dann mit 1,5 Drehungen. Ziehen Sie die untere Ventilschraube vollständig an und lösen Sie sie dann mit 6 Drehungen.

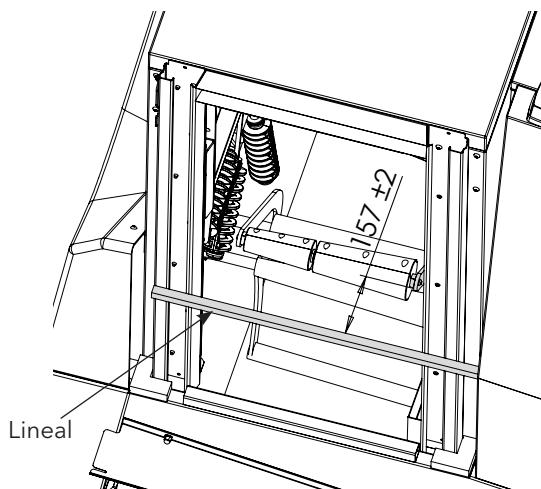


17. Pneumatischer Schaltplan

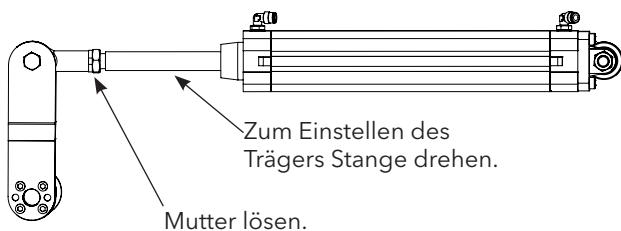


18. Einstellen des Innenträgers

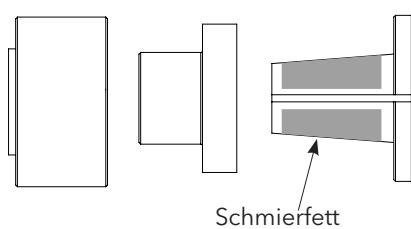
- Bringen Sie den Innenträger in seine äußere Position und messen Sie mit einer geraden Metallstange wie einem Lineal den Abstand zwischen Lineal und Innenträger (siehe Abbildung unten). Der Abstand sollte 157 ± 2 mm betragen.



- Andernfalls lösen Sie die Mutter an der Zylinderstange (siehe Abbildung unten). Versuchen Sie dann, den Innenträger durch Drehen der Zylinderstange einzustellen.

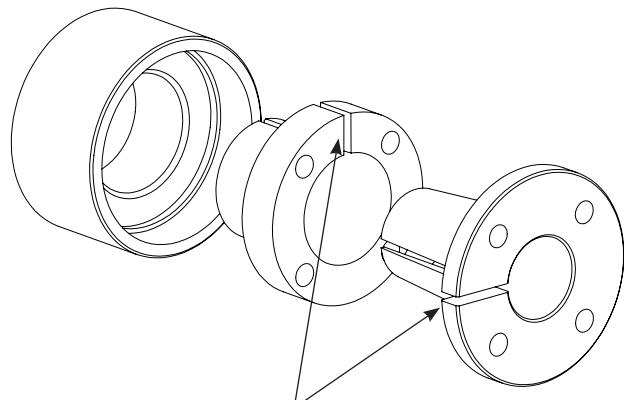


- Prüfen Sie den Abstand erneut. Wenn der Träger nicht so eingestellt werden kann, dass der Abstand in Schritt 2 157 ± 2 mm beträgt, drehen Sie die Zylinderstange zurück und ziehen Sie die Mutter wieder an.
- Lösen Sie die vier Schrauben und ziehen Sie das Verbindungsstück heraus.
- Entfernen Sie gründlich jegliches Fett von der Welle.
- Zerlegen Sie das Verbindungsstück und reinigen Sie alle Teile.

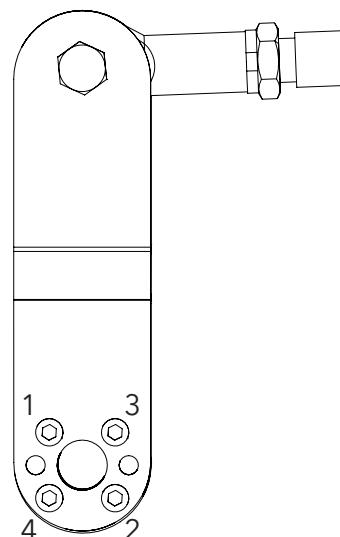


- Geben Sie eine KLEINE Menge Fett auf die Oberfläche und beachten Sie dabei einen Abstand von 3 mm vom Rand.
- Fetten Sie das Gewinde ein.

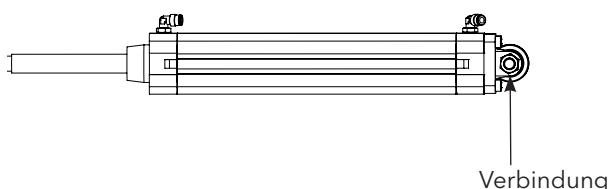
- Bauen Sie das Verbindungsstück zusammen und achten Sie dabei auf die Ausrichtung der Teile.



- Bringen Sie den Innenträger in seine äußere Position und messen Sie den Abstand (157 ± 2 mm), bevor Sie die vier Schrauben anziehen. Die Schrauben müssen mit einem Drehmoment von 14 Nm angezogen werden.

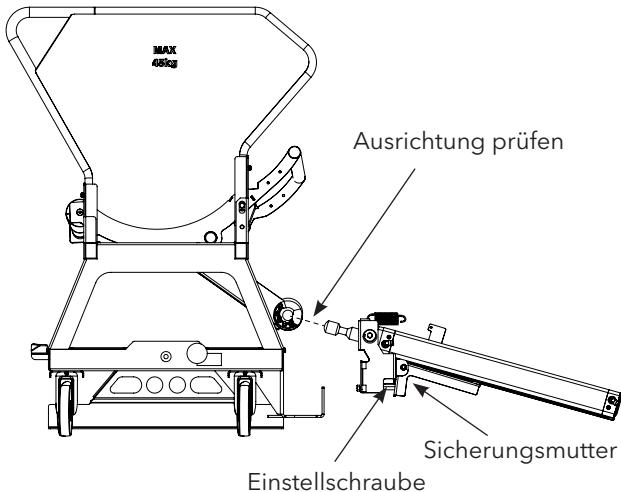


- Prüfen Sie, ob die Verbindung zwischen Zylinder und Bolzen eingefettet ist und sich einwandfrei bewegen lässt. Andernfalls kann sie sich festfressen und blockieren.



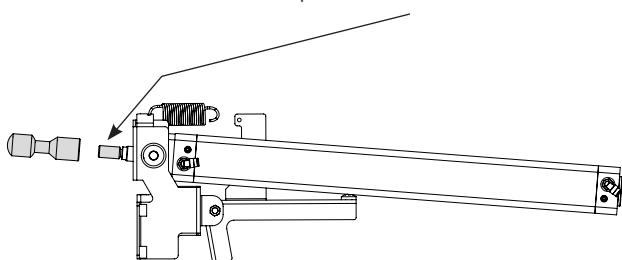
19. Einstellen der Höhe von zylinder 4 am aussenträger

1. Docken Sie den Rollwagen an.
2. Rufen Sie den **SELBSTTEST** auf (siehe Kapitel 28).
3. Lassen Sie Zylinder 4 laufen und stellen Sie sicher, dass der Zylinder an der Mitte der Führung anschlägt.
4. Stellen Sie die Höhe gegebenenfalls mit der Einstellschraube ein.



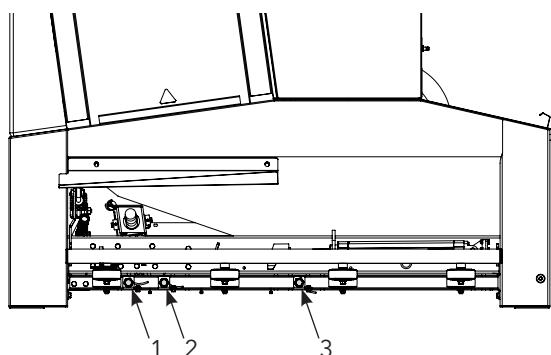
20. Wechseln des schwenkkopfs an zylinder 4

Sichern Sie den Schwenkkopf mit Loctite 222.

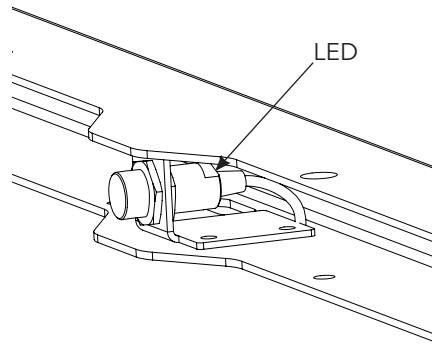


21. Induktive rollwagensensoren

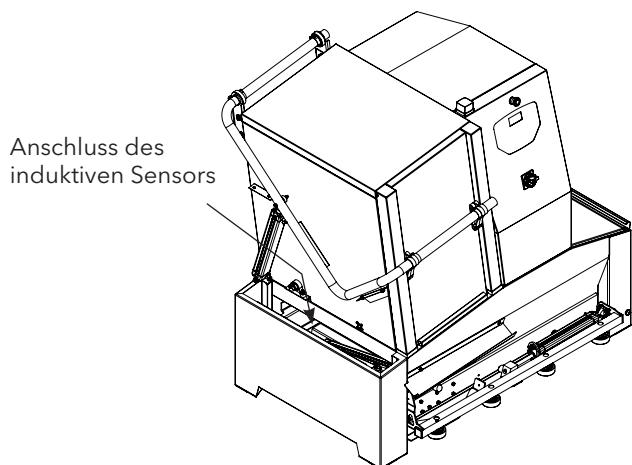
Die Maschine verfügt über 3 induktive Sensoren, die während des Waschzyklus Signale senden, wo sich die Rollwagen befinden.



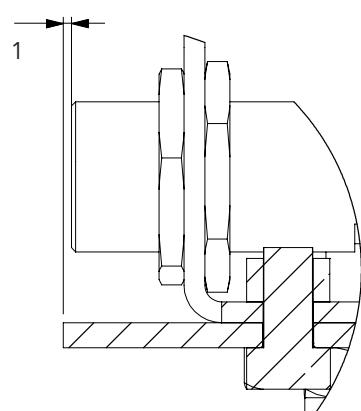
Wenn ein Sensor Stahl erkennt, sendet er ein Signal und die LED auf der Rückseite des Sensors leuchtet.



Wenn die LED auf der Rückseite des Sensors stetig leuchtet, ist der Sensor defekt und muss ausgetauscht werden. Das Kabel ist auf der linken Seite der Maschine angeschlossen (siehe Abbildung unten).



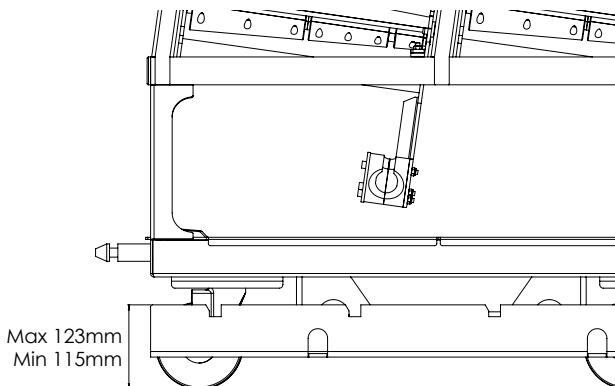
Beachten Sie, dass der Sensor im Abstand von 1 mm von der Schutzkante installiert werden muss.



Um zu überprüfen, ob die Sensoren funktionieren, führen Sie einen Selbsttest aus (siehe Kapitel 28).

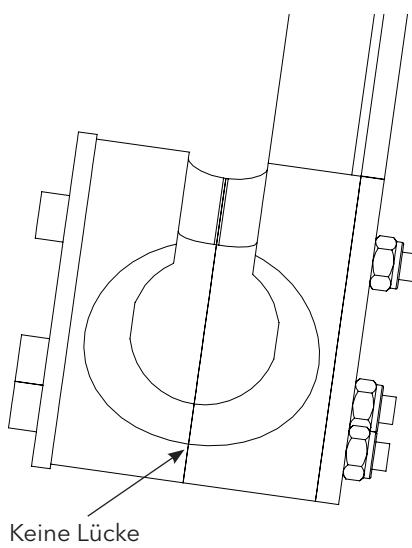
22. Kontrollmessung des Rollwagens

Stellen Sie den Rollwagen auf einen ebenen Boden und messen Sie den Abstand zwischen Boden und Oberkante der Führung auf dem Rollwagen.



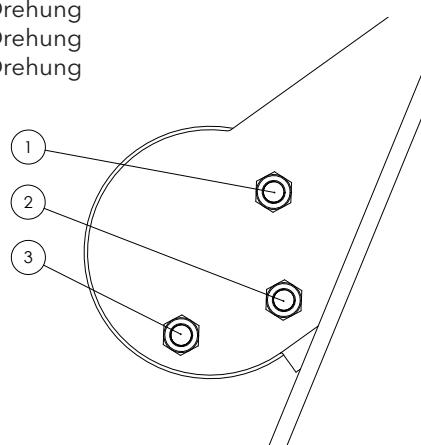
23. Installation des scharnierlagers am Rollwagen

1. Montieren Sie die Muttern, ziehen Sie sie leicht an und vergewissern Sie sich, dass zwischen den beiden Lagerteilen keine Lücke entsteht.



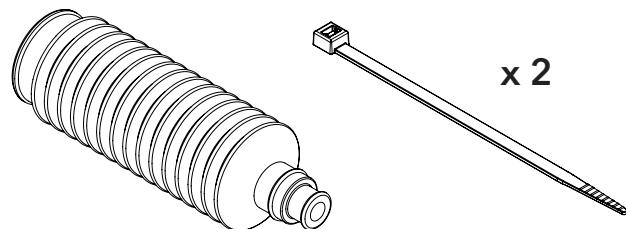
2. Ziehen Sie die Muttern in folgender Reihenfolge an:

Mutter 1: $\frac{1}{4}$ Drehung
Mutter 3: $\frac{1}{4}$ Drehung
Mutter 2: $\frac{1}{4}$ Drehung



24. Austauschen des wellenschutzes an zyl 6

24.1 Komponenten

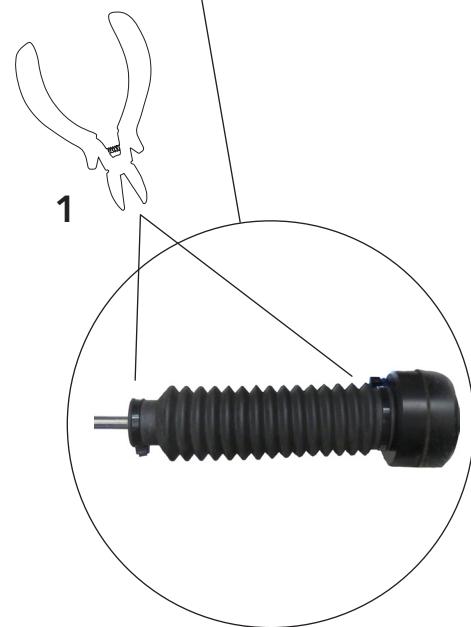
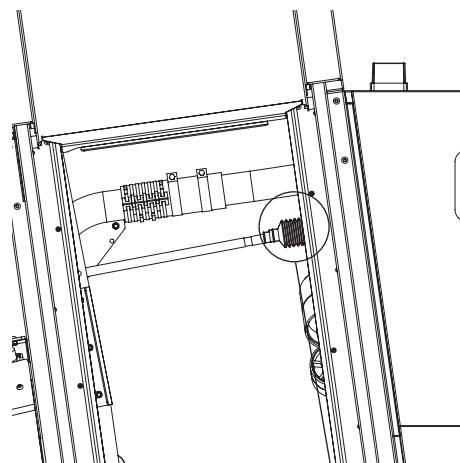


24.2 Werkzeuge

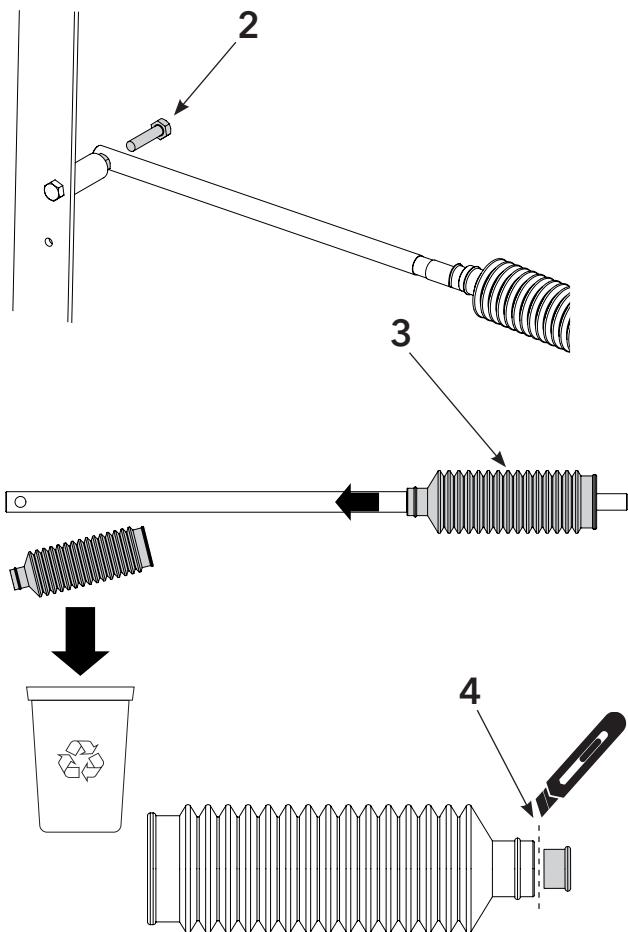


HINWEIS: Befolgen Sie zunächst die Anweisungen in Kapitel 1, Sicherheitshinweise.

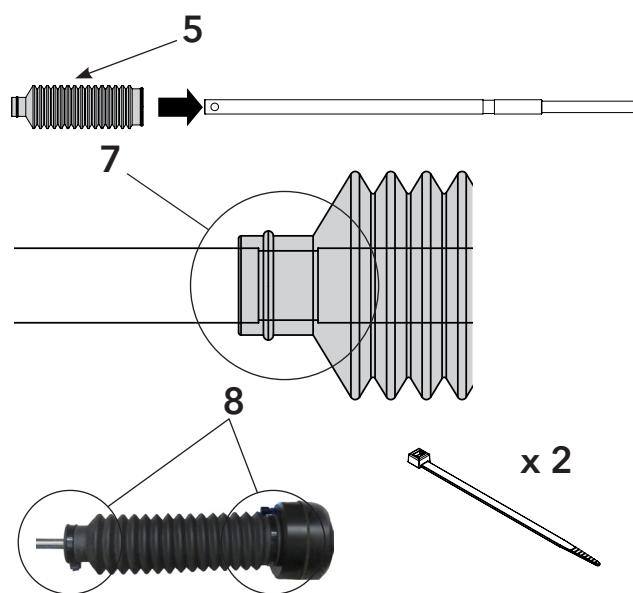
1. Entfernen Sie die Klammern.



2. Entfernen Sie die Schraube.
3. Entfernen und entsorgen Sie den Faltenbalg.
4. Schneiden Sie die Spitze des neuen Faltenbalgs ab.

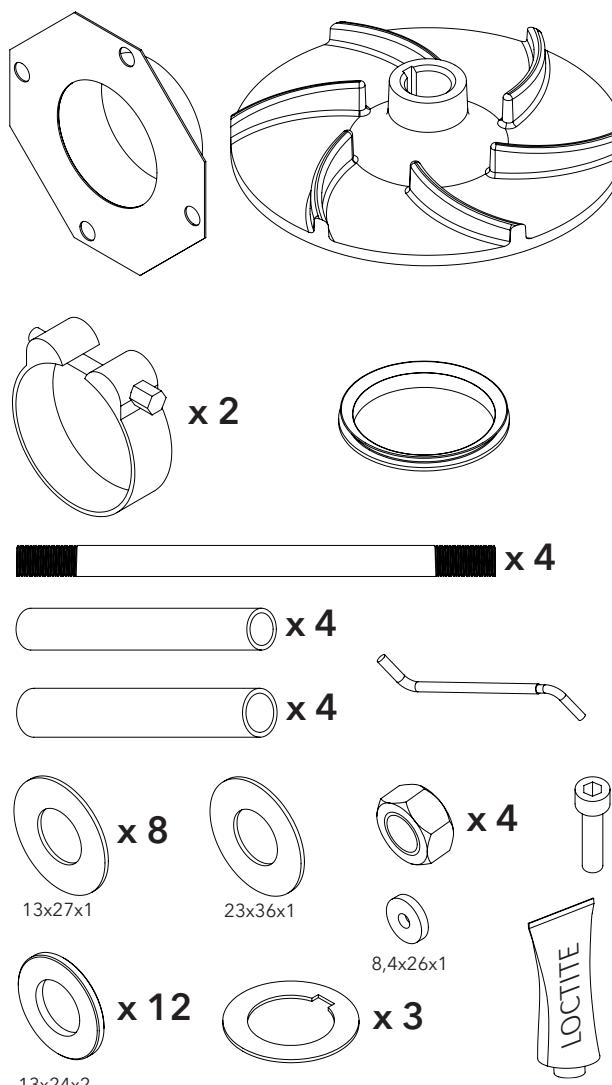


5. Bringen Sie den neuen Faltenbalg an.
6. Gehen Sie für die Montage in umgekehrter Reihenfolge vor.
7. Befestigen Sie ihn in der rechten Position.
8. Bringen Sie neue Klammern an.



25. Austausch der pumpe

25.1 Komponenten



WICHTIG!

x 2 Nicht mitgeliefert:
Ersatzteil bestellen: R2892

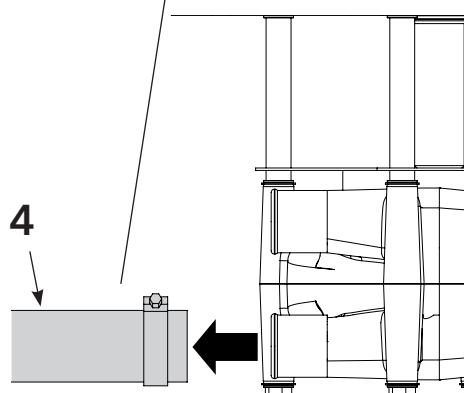
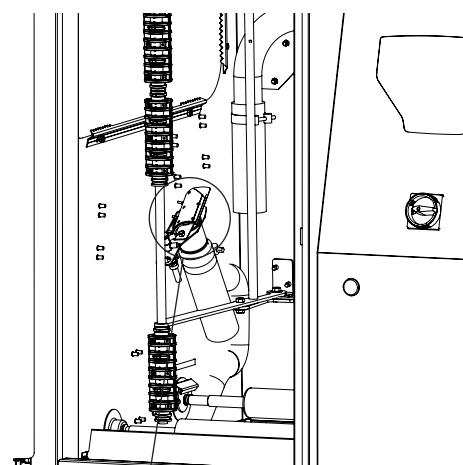
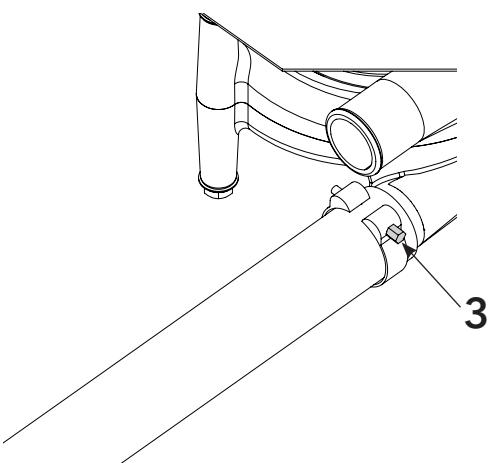
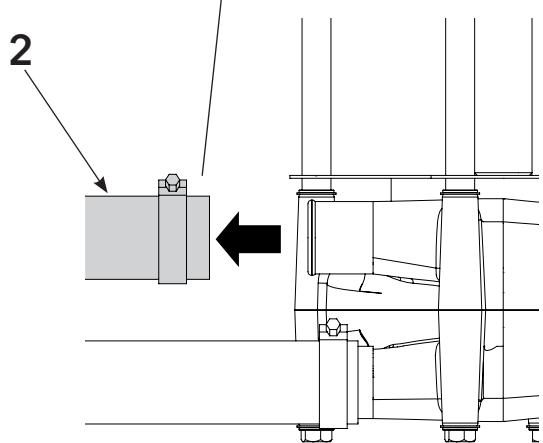
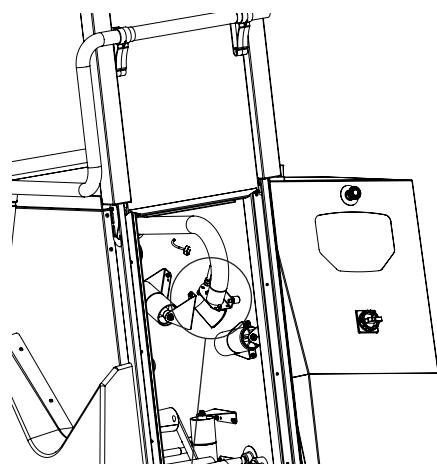
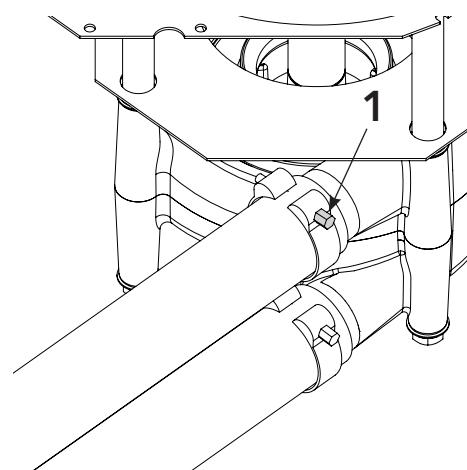
Hinweis: Loctite 222 und 8009 nicht mitgeliefert

25.2 Werkzeuge

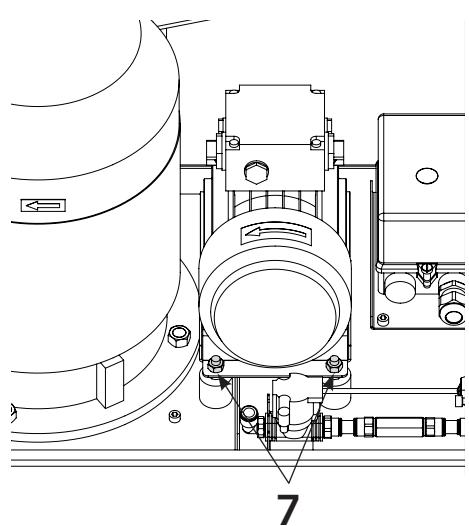
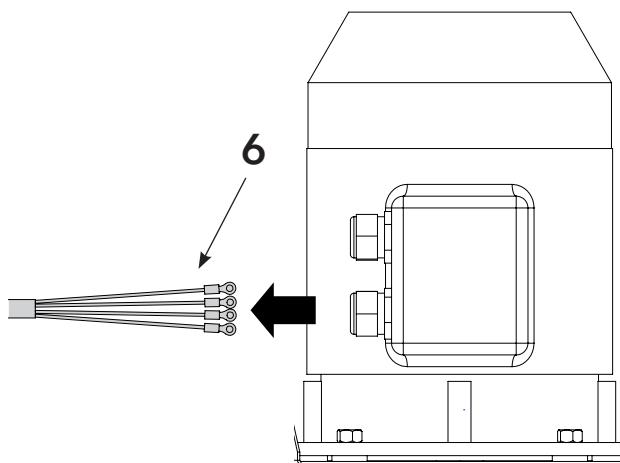
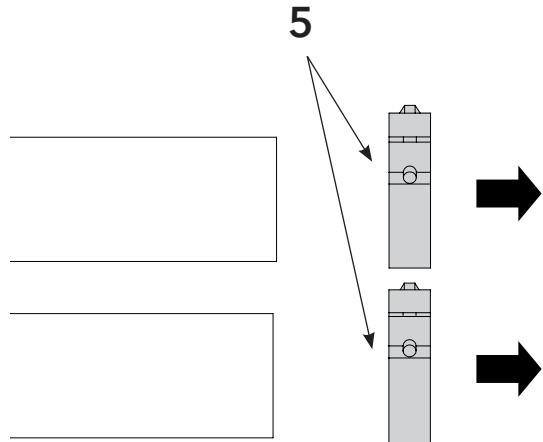


HINWEIS: Befolgen Sie zunächst die Anweisungen in Kapitel 1, Sicherheitshinweise.

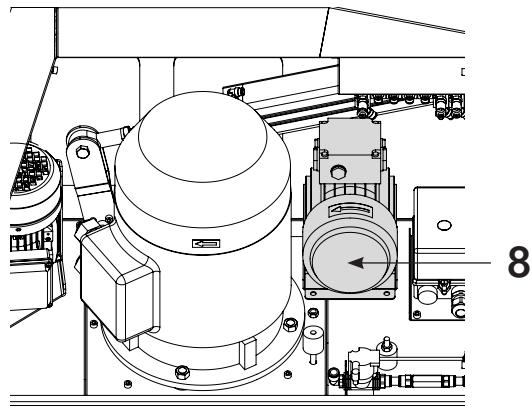
1. Lösen Sie die Schraube.
2. Entfernen Sie den Schlauch.
3. Lösen Sie die Schraube.
4. Entfernen Sie den Schlauch.



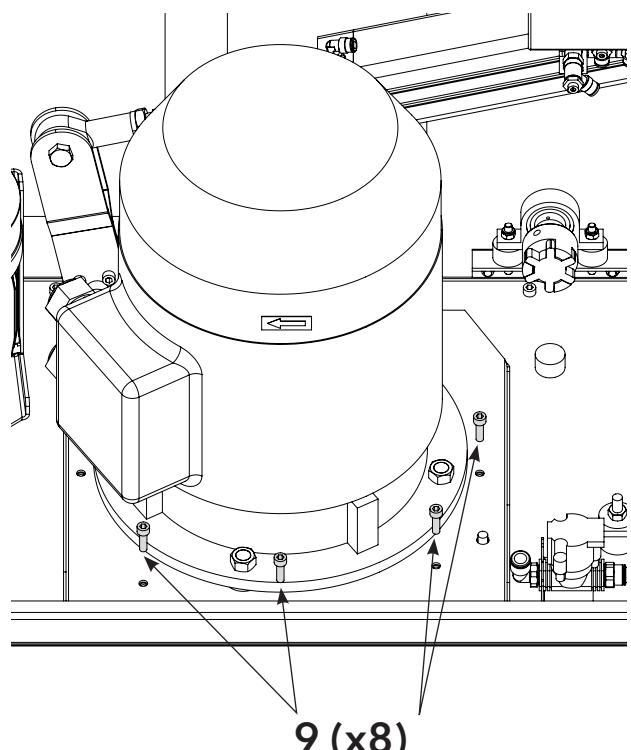
5. Entsorgen Sie die Ringe.
6. Trennen Sie das Netzkabel und beachten Sie beim Anschließen Kapitel 9.
7. Entfernen Sie die Muttern.



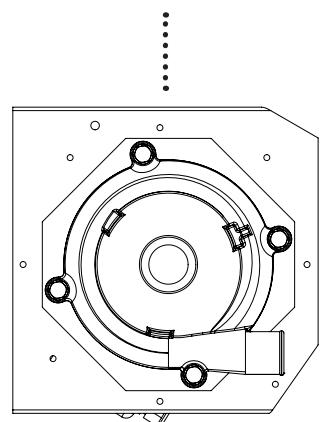
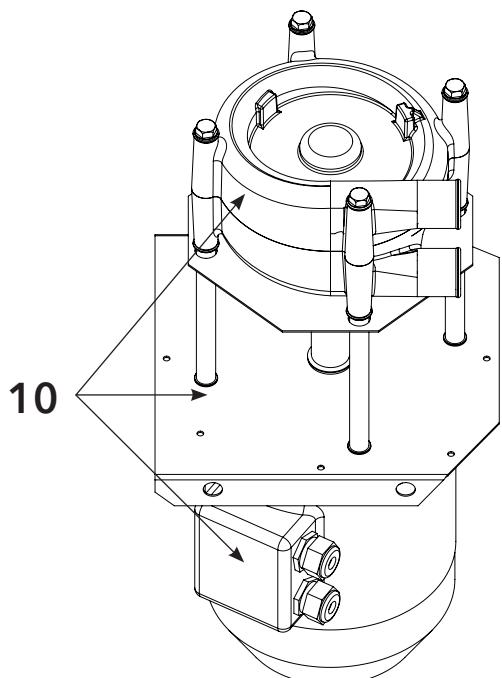
8. Bauen Sie den Motor aus.



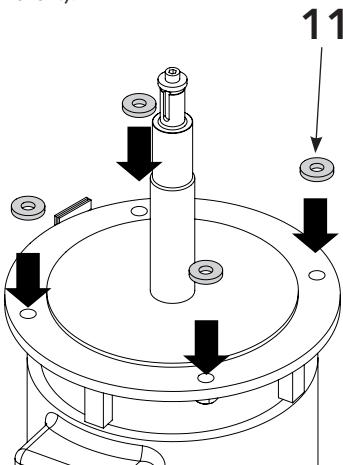
9. Entfernen Sie die Schrauben..



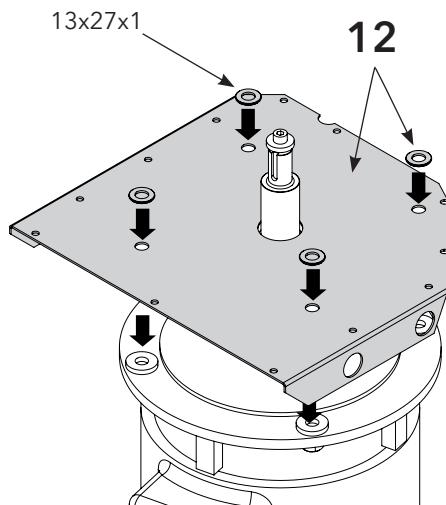
10. Vor dem Zerlegen der alten Pumpe: Beachten Sie bitte die Ausrichtung der Pumpenausgänge und den Druck in Richtung Anschlusskasten des Pumpenmotors, sodass die neue Pumpe richtig eingesetzt wird.



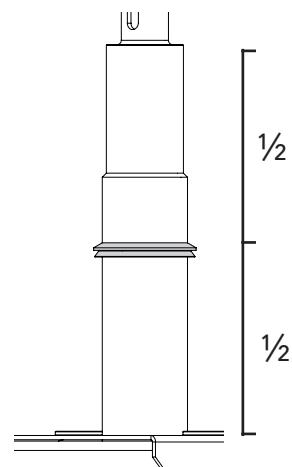
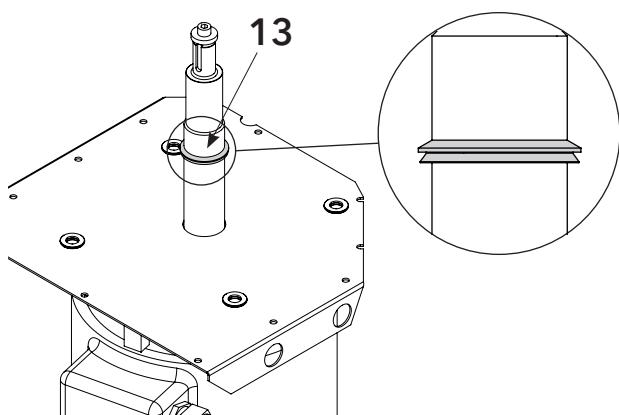
11. Platzieren Sie die Abstandhalter am Pumpenmotor (**keine** neuen Abstandhalter beim Ersatzteil mitgeliefert).

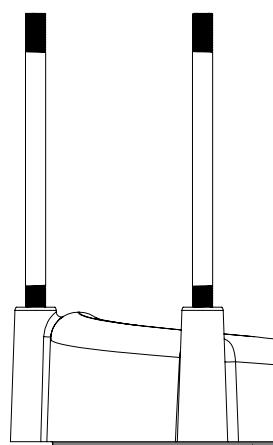
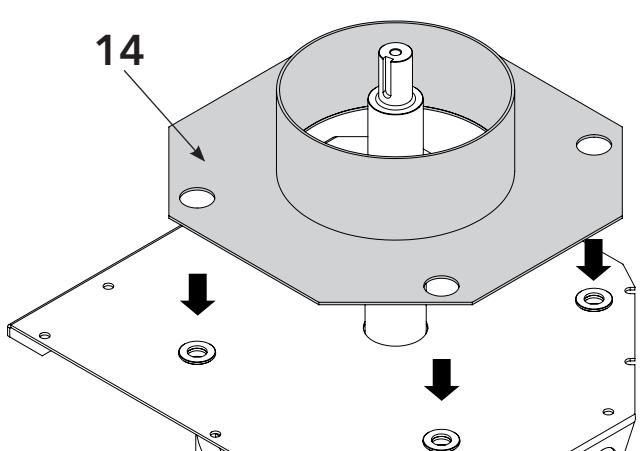


12. Bringen Sie die Metallplatte und darauf dann die Ringe an.

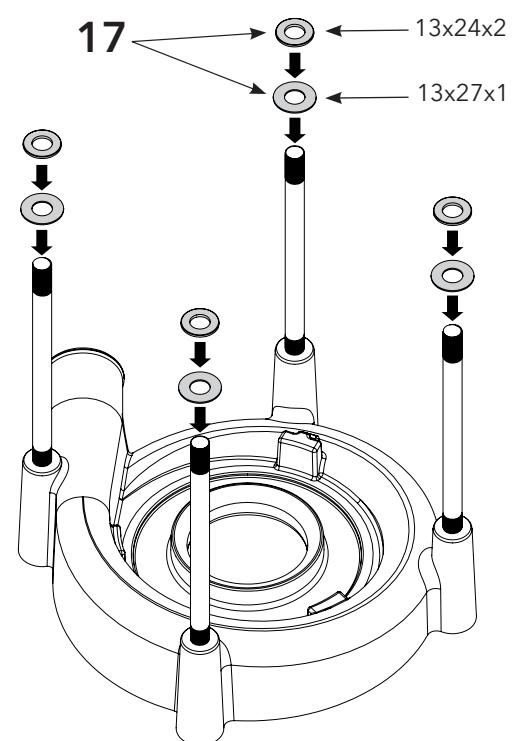
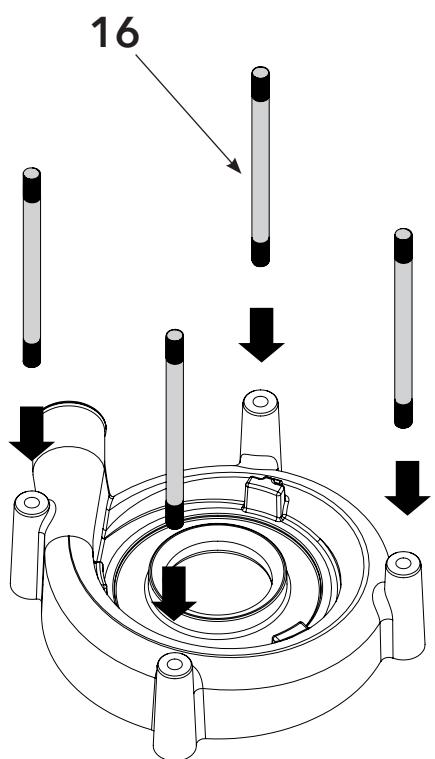
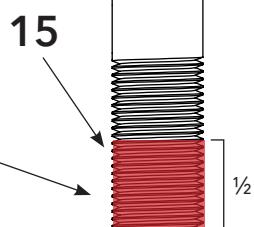


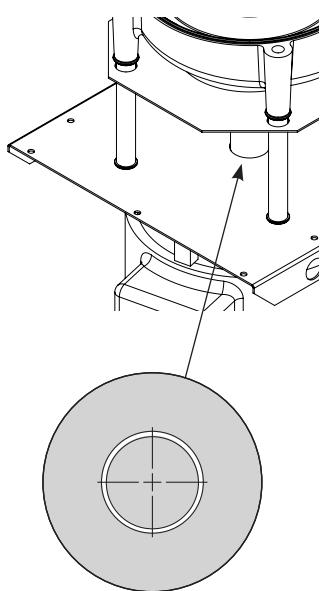
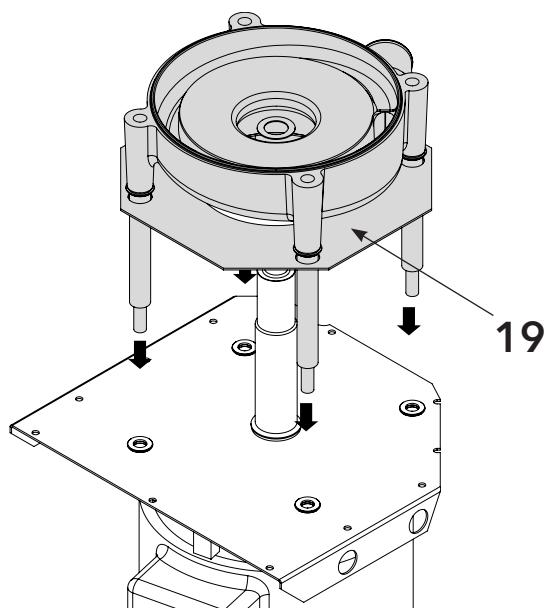
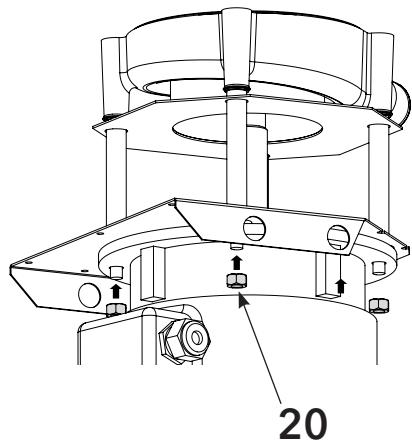
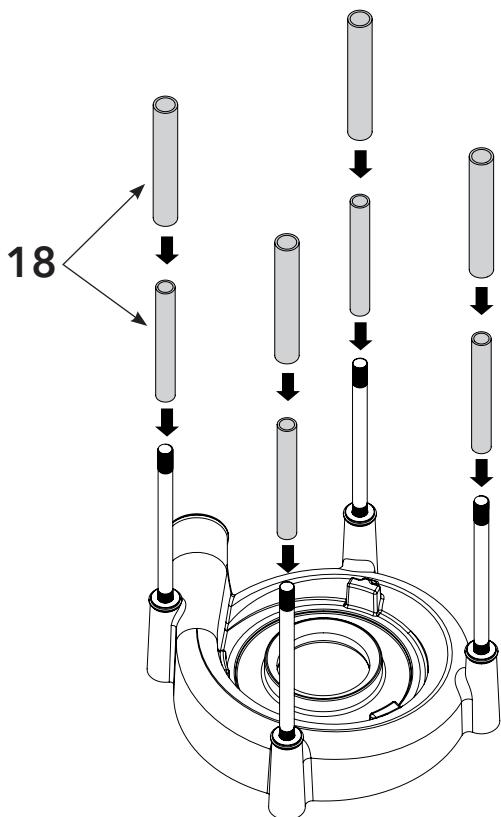
13. Platzieren Sie den Gummiring wie in der Abbildung dargestellt auf halber Höhe des Zylinders.

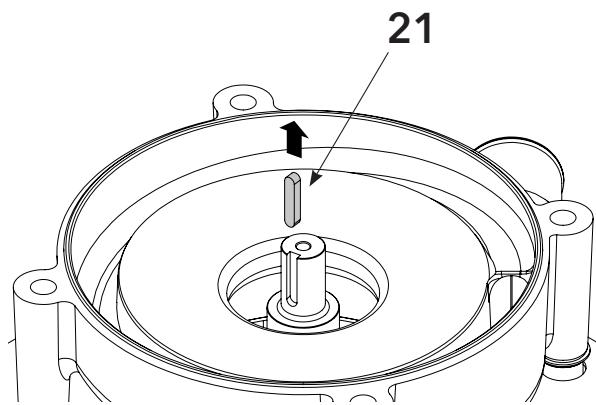




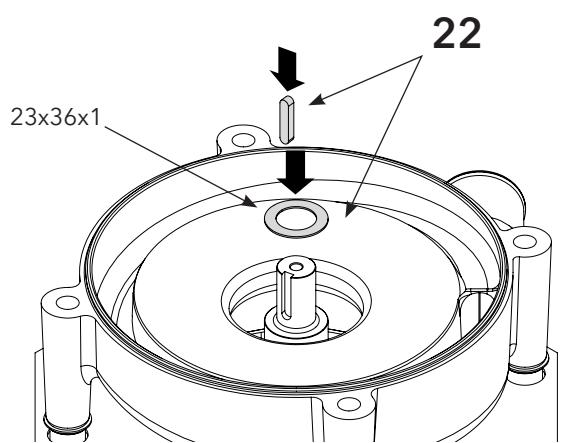
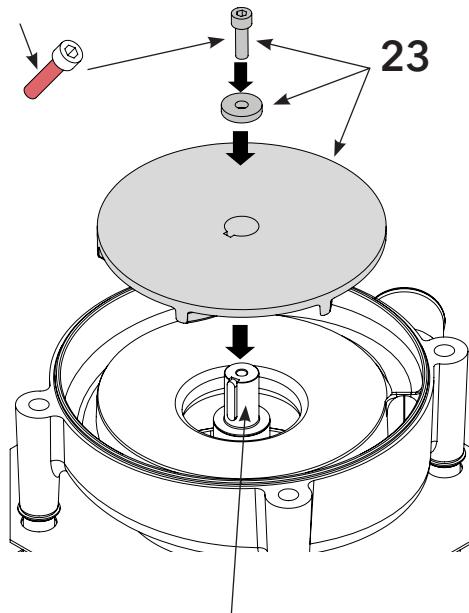
Loctite 222



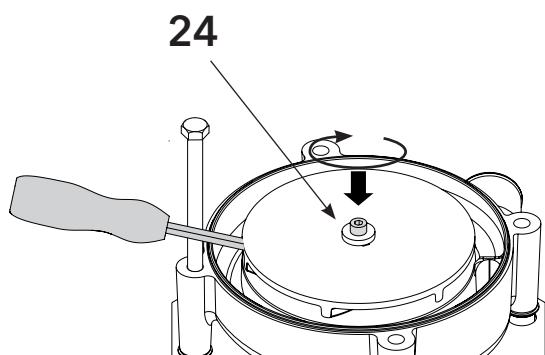
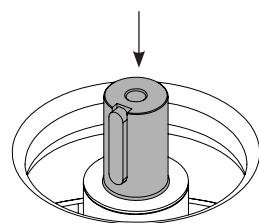




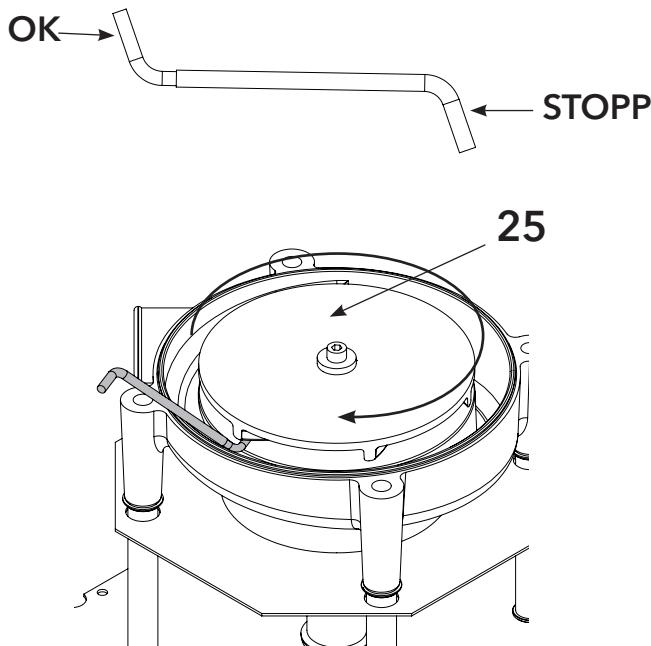
Loctite 222



Loctite 8009

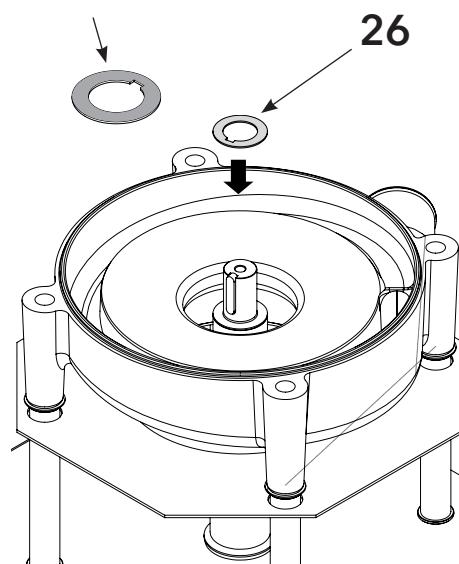


25. „OK“-Seite muss ungehindert passieren, „STOPP“-Seite darf nicht passieren.

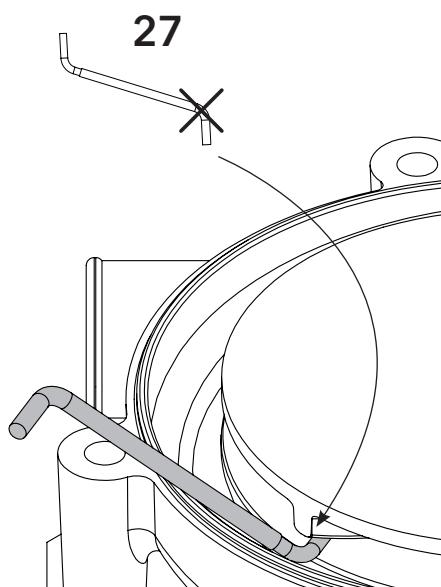
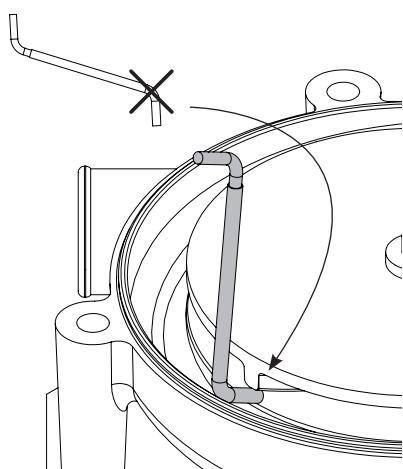


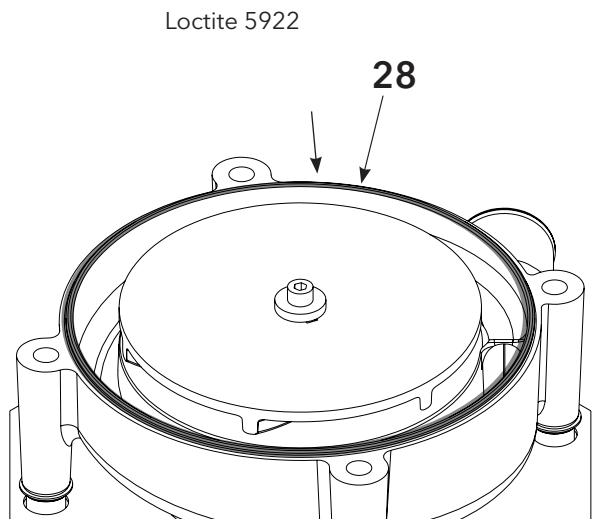
26. Entfernen Sie gegebenenfalls das Laufrad und setzen Sie wie in der Abbildung dargestellt eine geschmierte Unterlegscheibe ein.

Loctite 8009

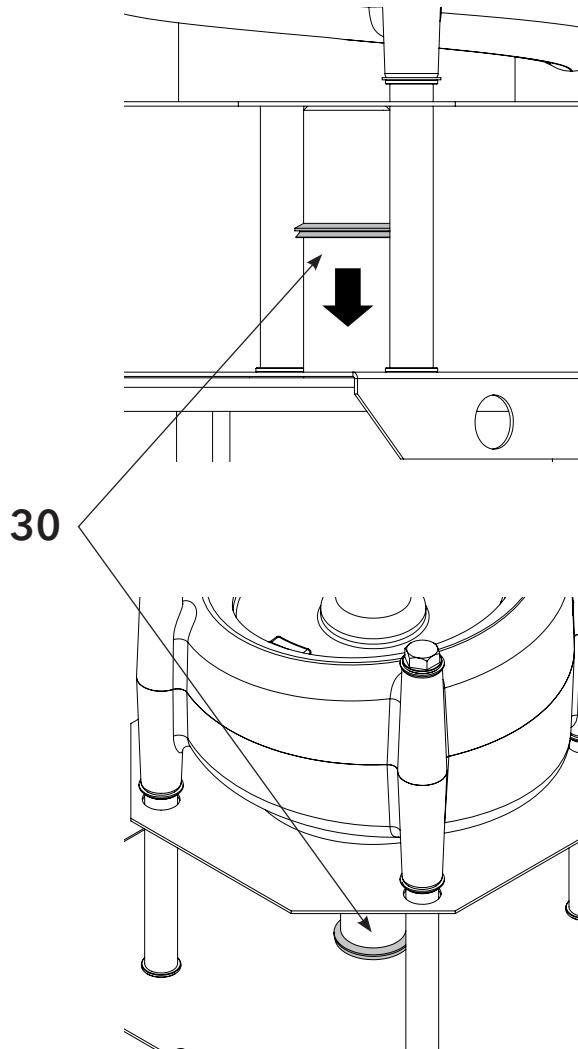
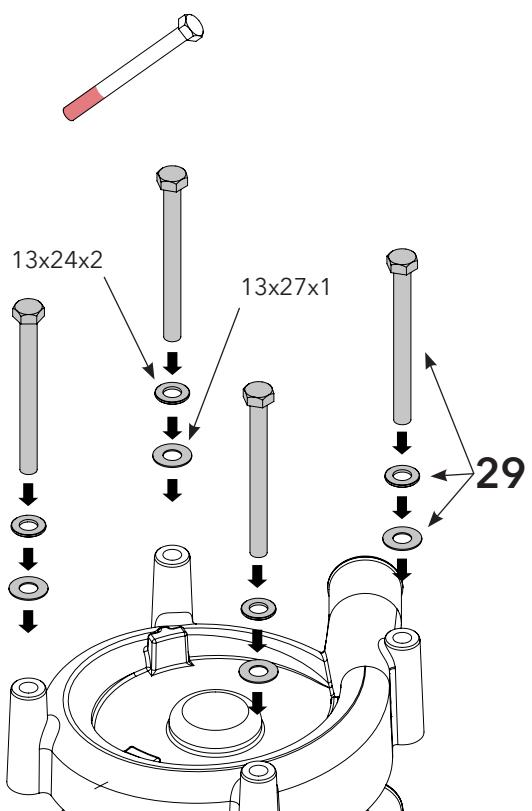


27. Setzen Sie das Laufrad wieder ein und prüfen Sie den Abstand. Die OK-Seite muss unter allen Schaufeln des Laufrads passieren.

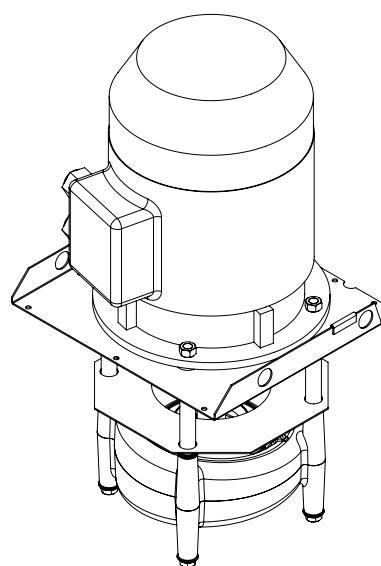




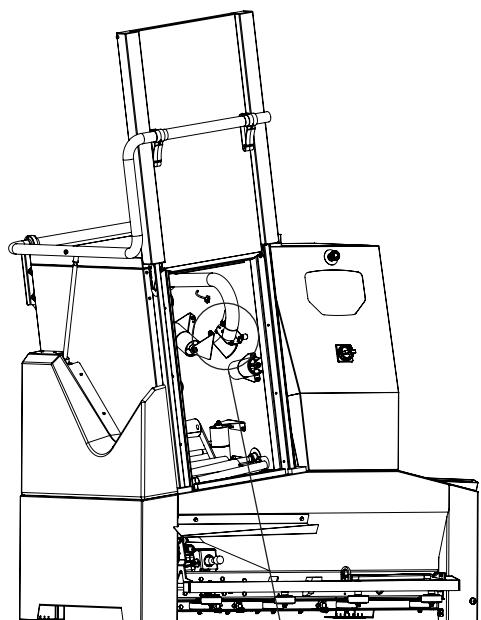
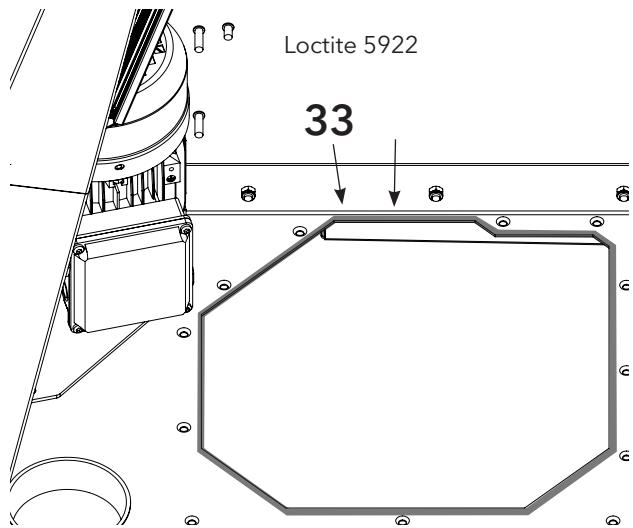
Loctite 222



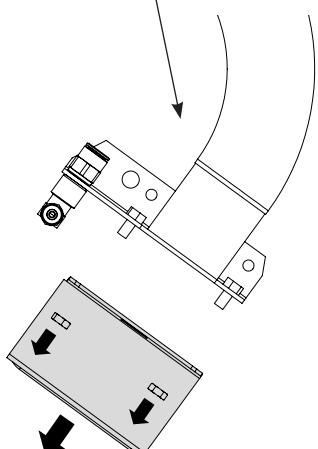
31. Fertiggestellt und bereit für Montage in Radwaschanlage.
32. Gehen Sie für die Montage in umgekehrter Reihenfolge der Schritte 9-1 vor.



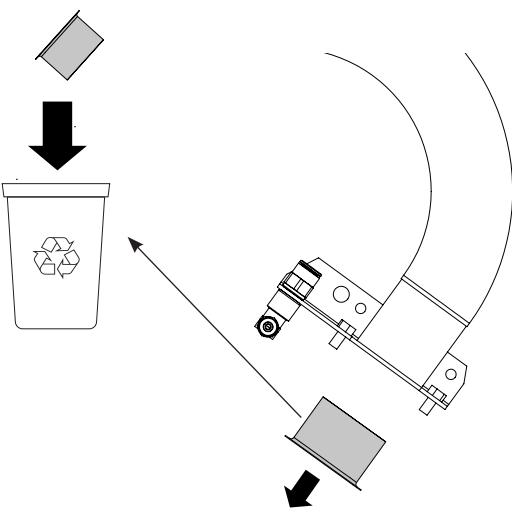
33. Tragen Sie in Schritt 9 vor der Montage des Pumpenmotors Loctite auf.



34

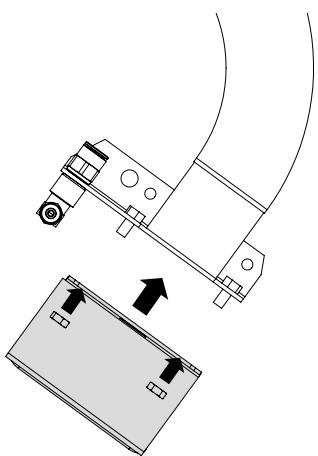


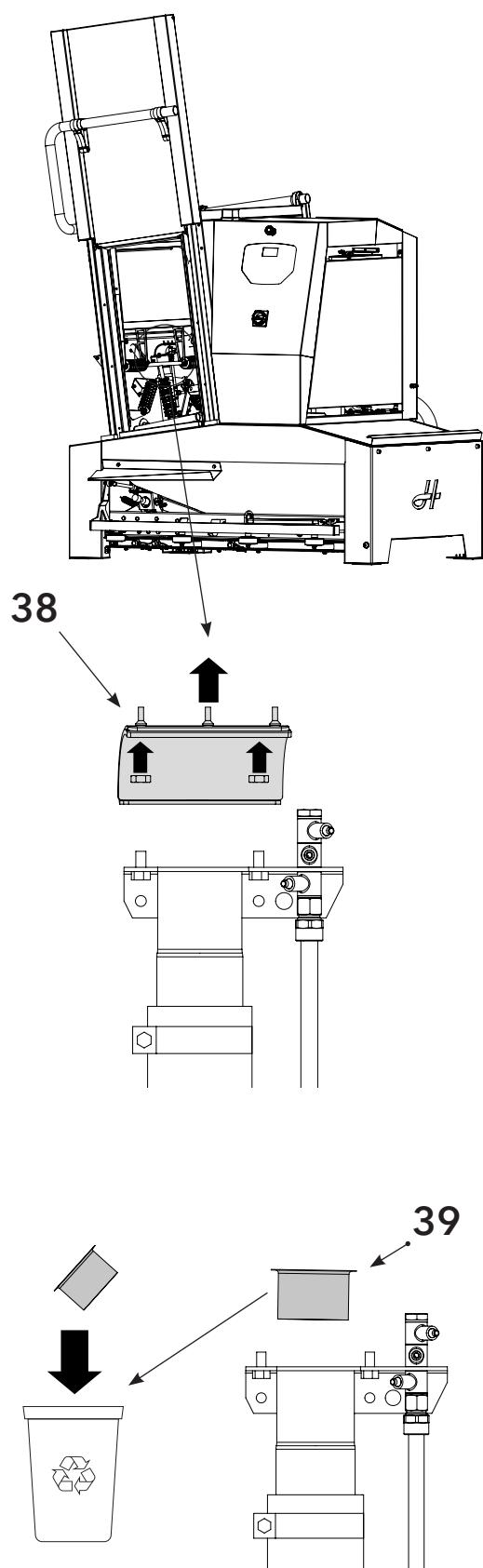
35



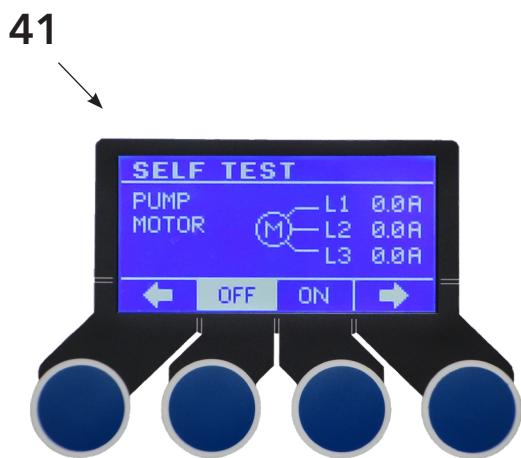
36

37

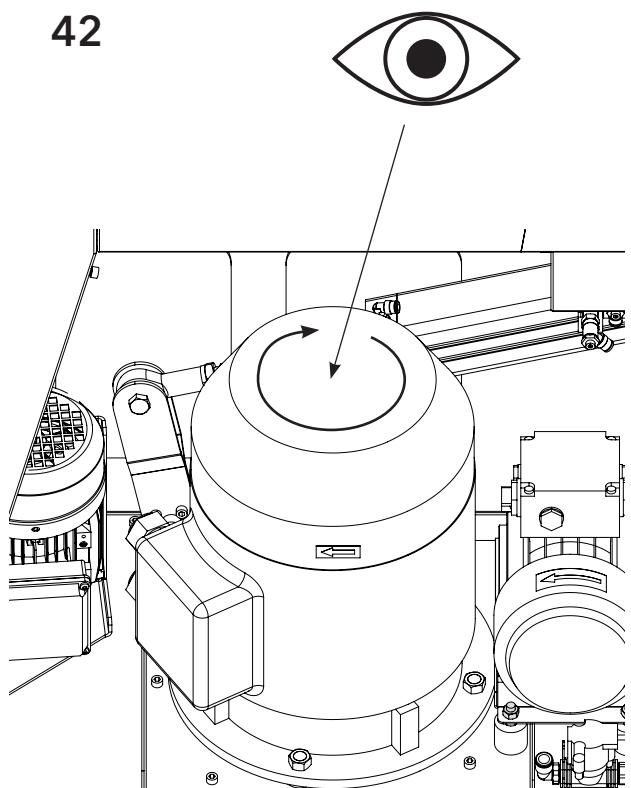




 /8.Self test/...../PUMP MOTOR/ON

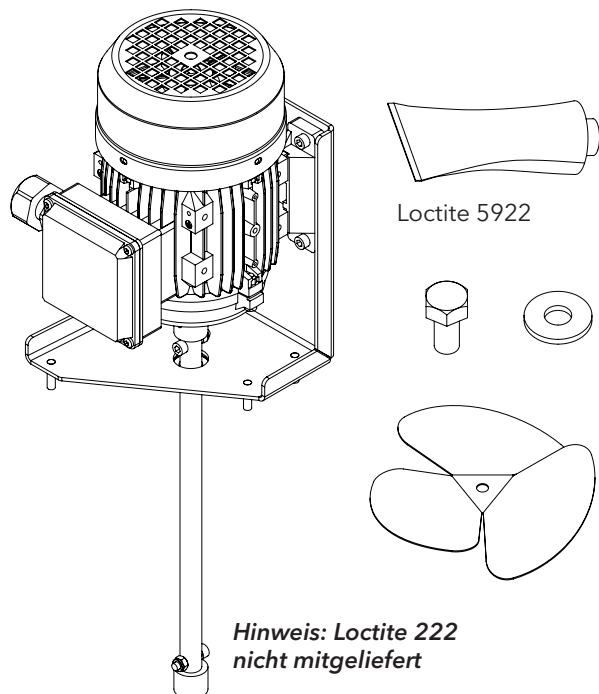


42



26. Installation des Mischermotors

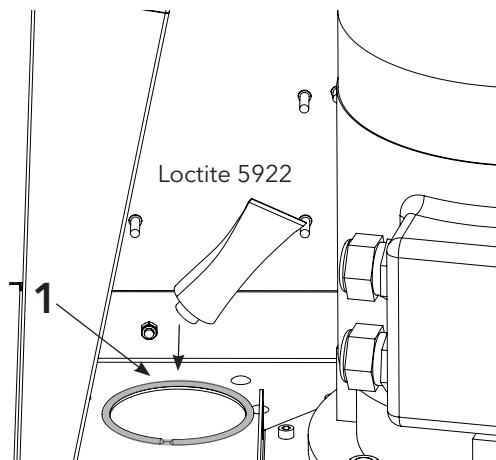
26.1 Komponenten

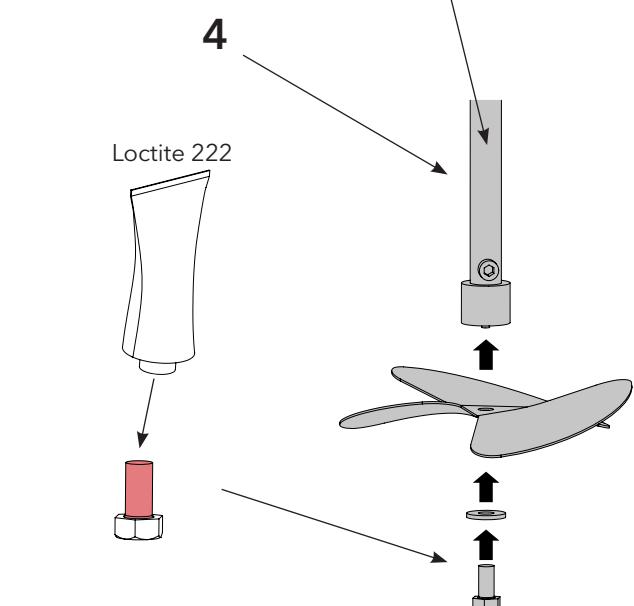
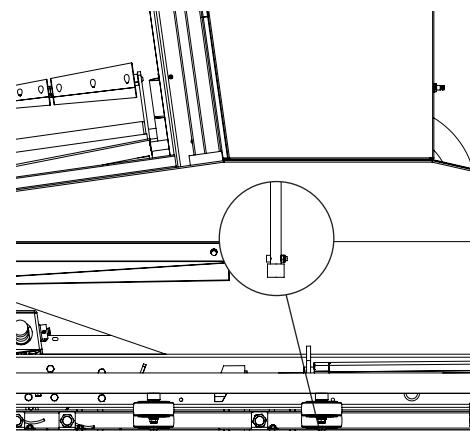
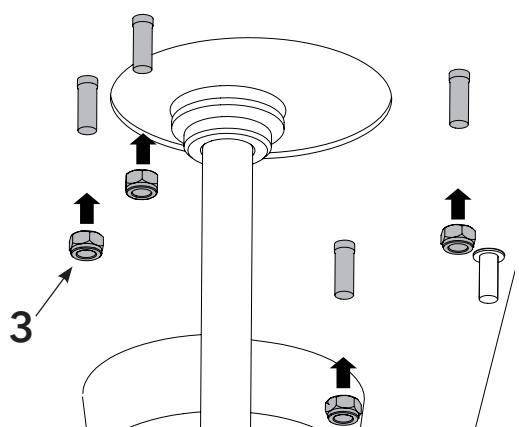
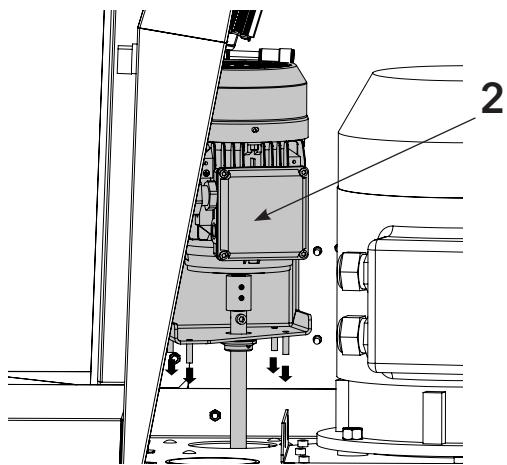


26.2 Werkzeuge

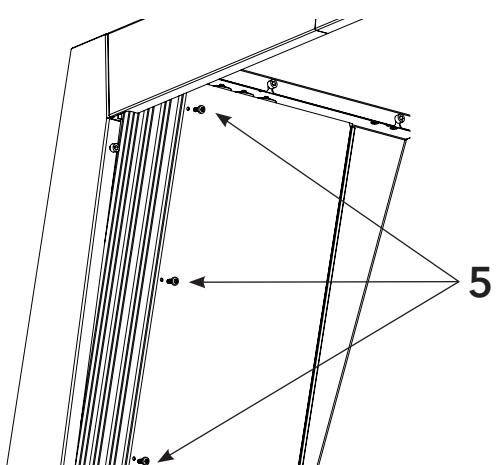


HINWEIS: Befolgen Sie zunächst die Anweisung in Kapitel 1, Sicherheitshinweise.

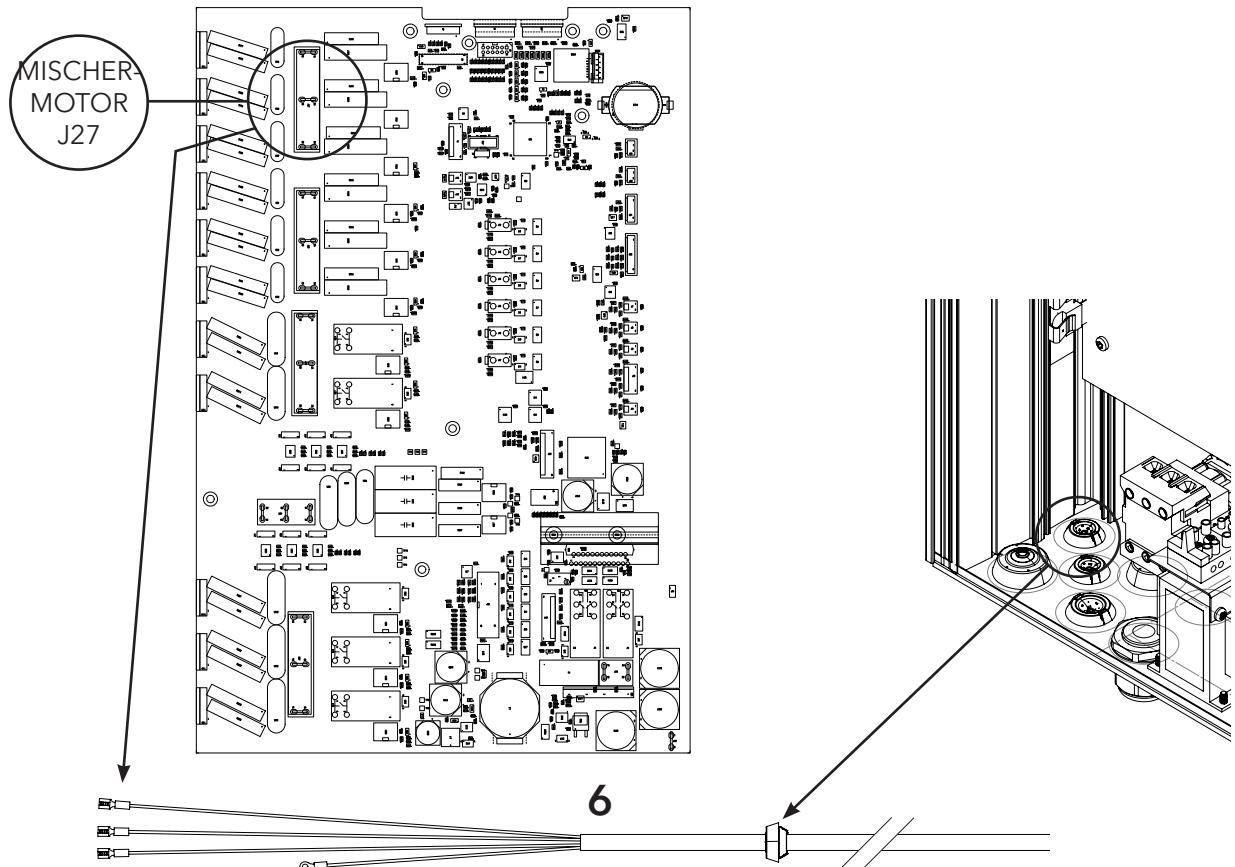




5. Entfernen Sie die Schrauben und den Deckel.

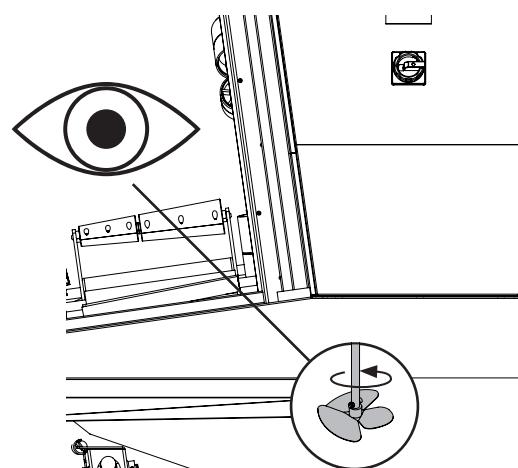
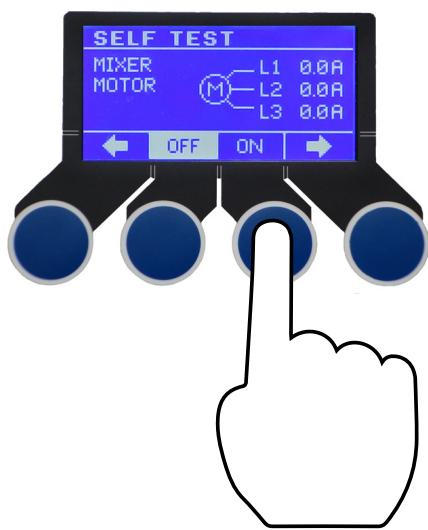


6. Nehmen Sie den Anschluss gemäß dem Schaltplan in Kapitel 9 vor.



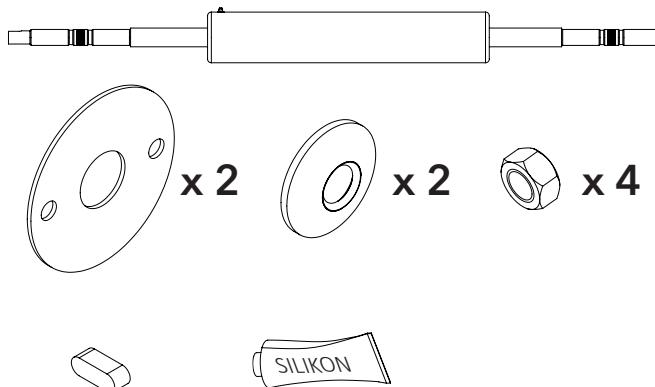
7. Gehen Sie wie in Kapitel 6 beschrieben vor und wählen Sie YES als Mischermotoroption.

/8.Self test/...../MIXER MOTOR/ON



27. Austauschen der Antriebswelle

27.1 Komponenten

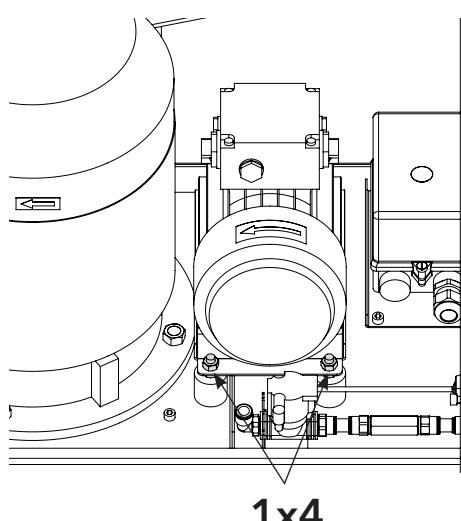


27.2 Werkzeuge

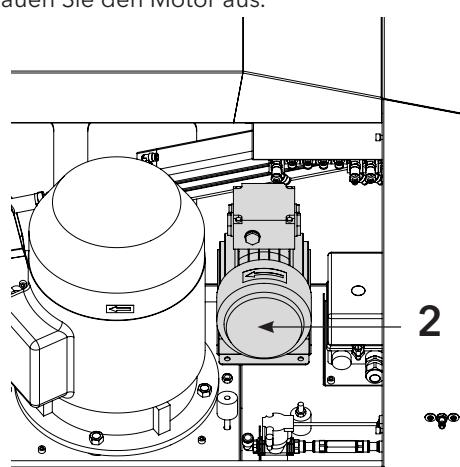


HINWEIS: Befolgen Sie zunächst die Anweisung in Kapitel 1, Sicherheitshinweise.

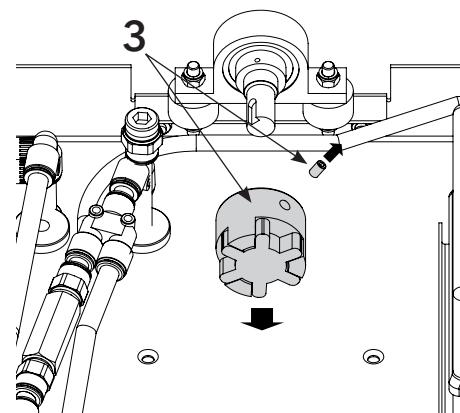
1. Entfernen Sie die Muttern.



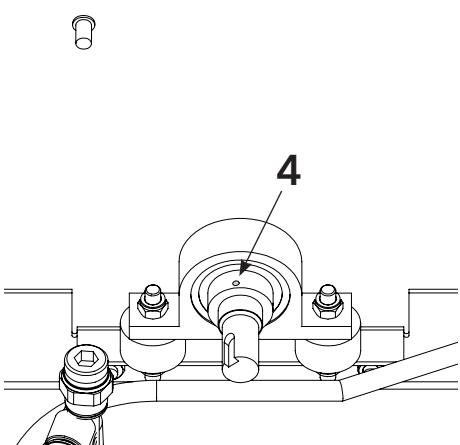
2. Bauen Sie den Motor aus.



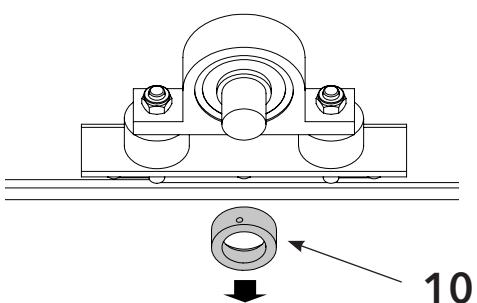
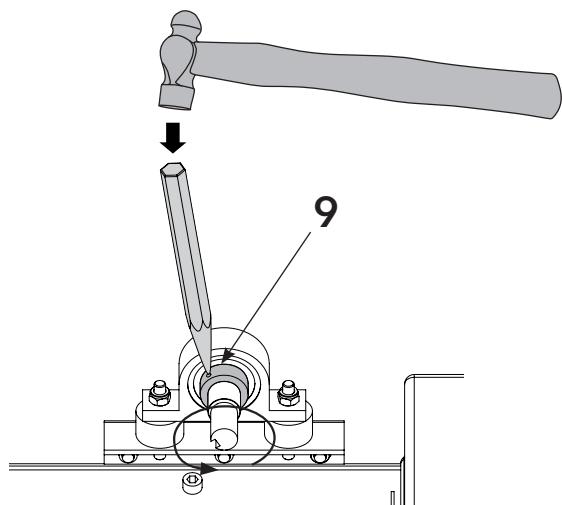
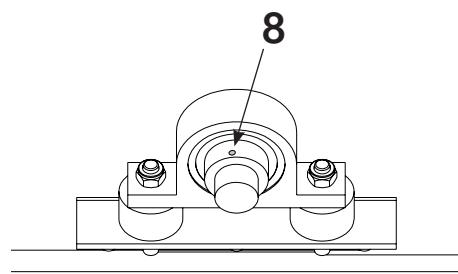
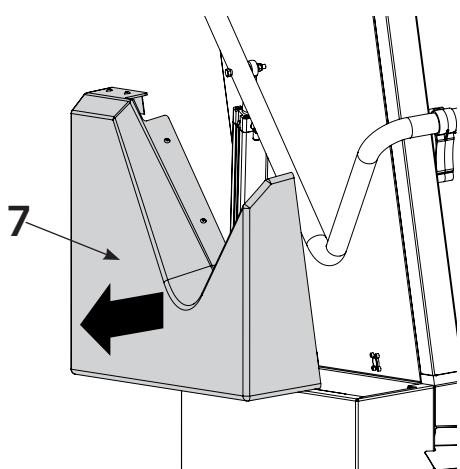
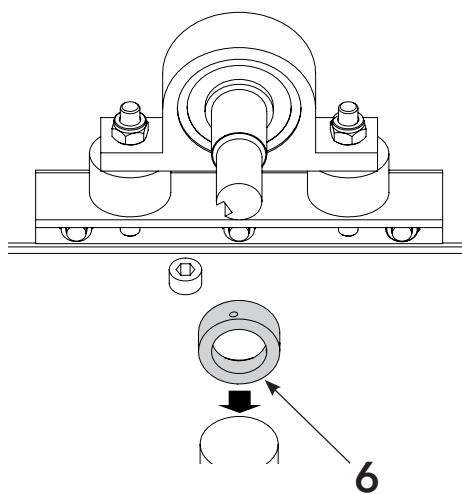
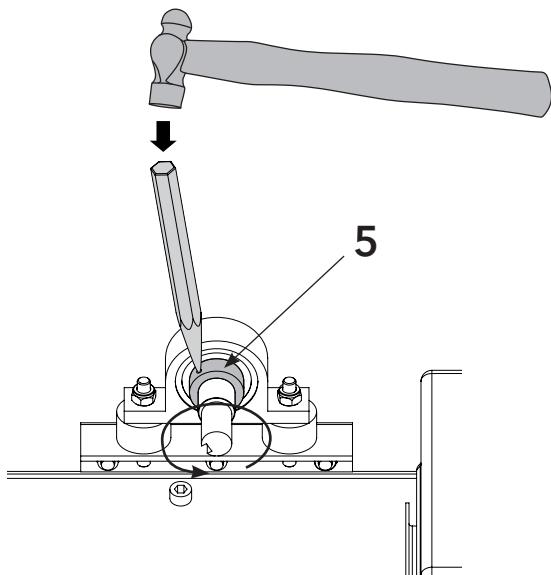
3. Lösen Sie die Schraube.

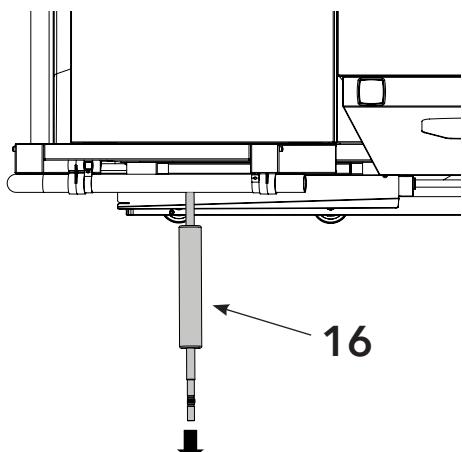
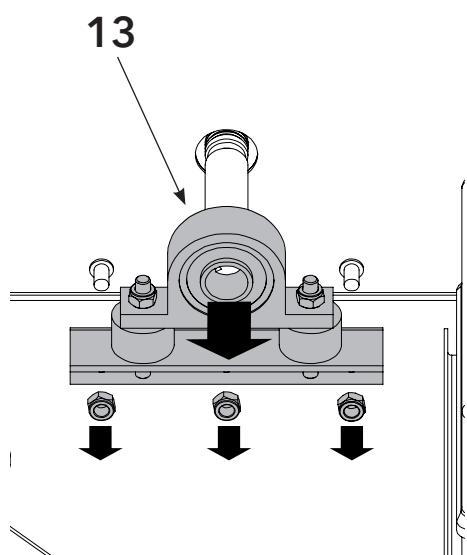
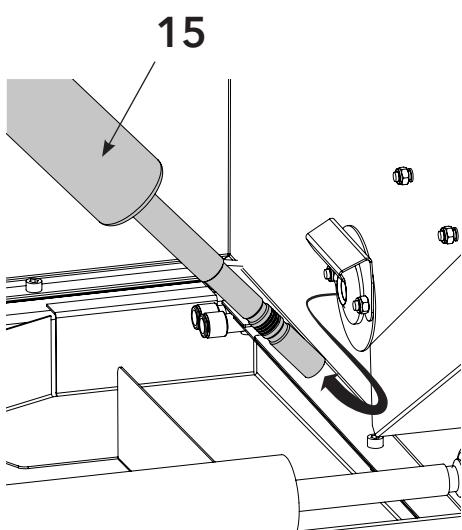
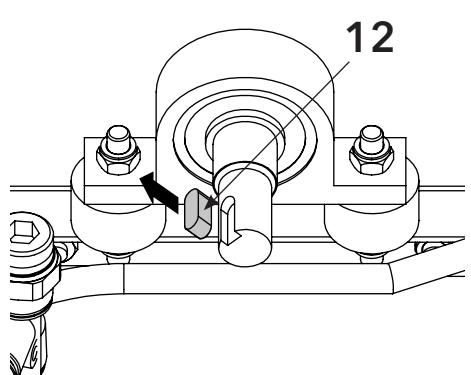
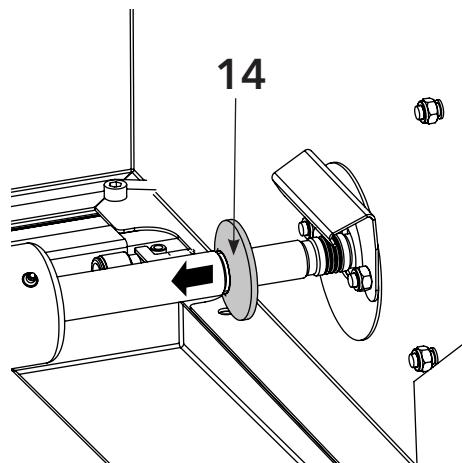
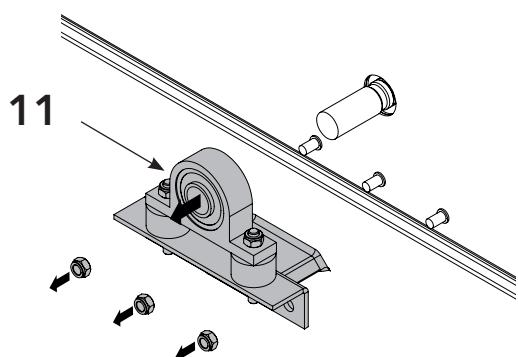


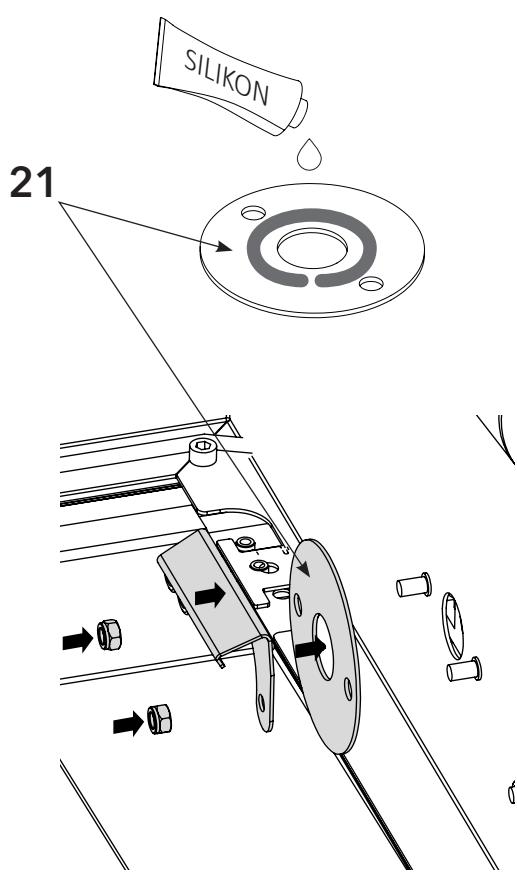
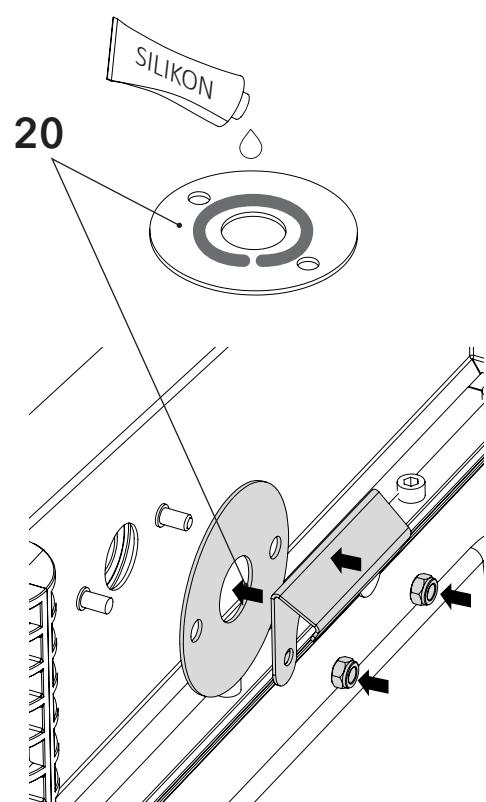
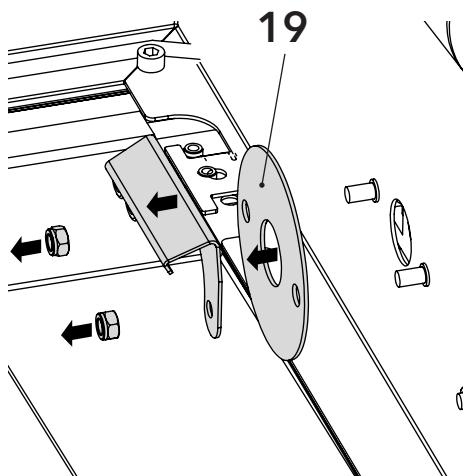
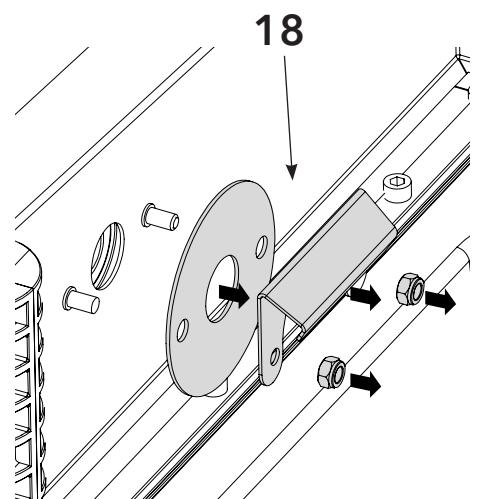
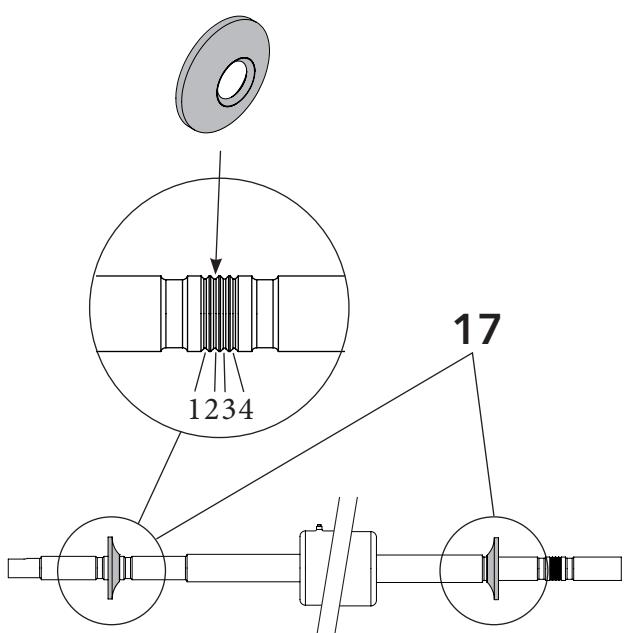
4. Lösen Sie die Schraube.



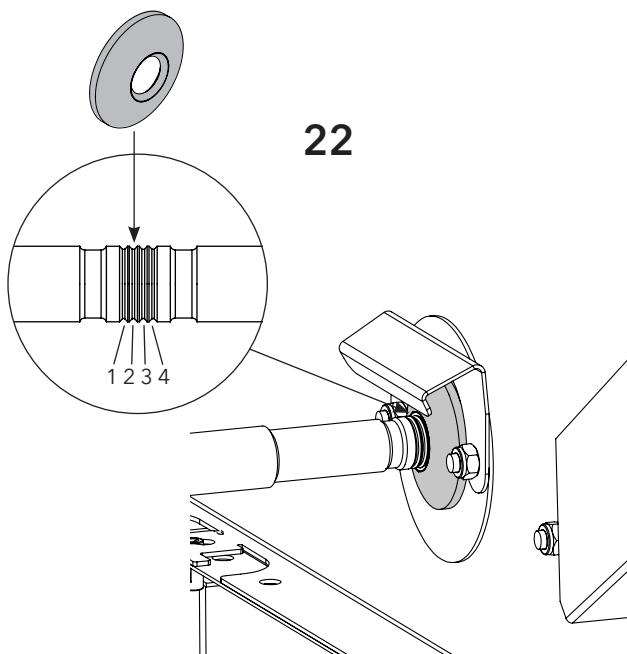
8. Lösen Sie die Schraube.



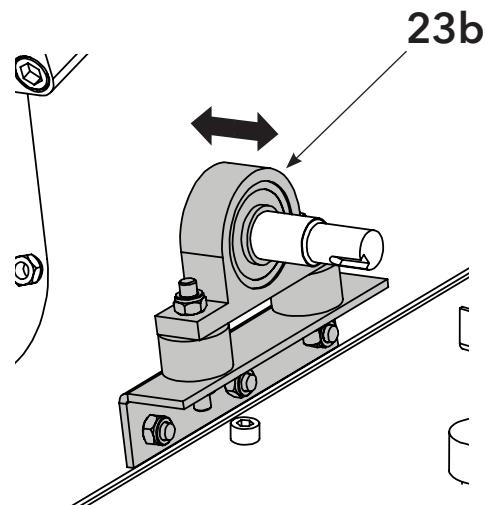
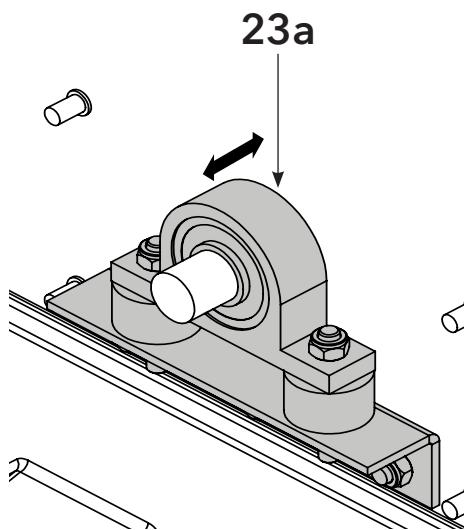




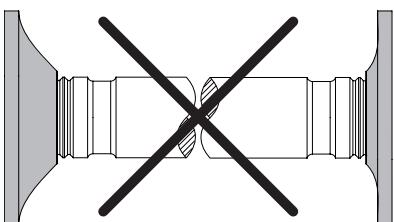
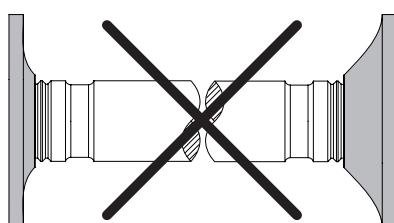
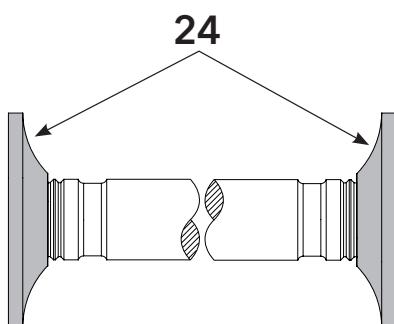
22. Gehen Sie für die Montage in umgekehrter Reihenfolge der Schritte 16-1 vor.
 Beachten Sie in Schritt 14 die Abbildung 22.
 Führen Sie nach Schritt 11 die Schritte 24 und 25 aus.
 Prüfen Sie nach Schritt 1 wie in Schritt 26-27 erläutert.



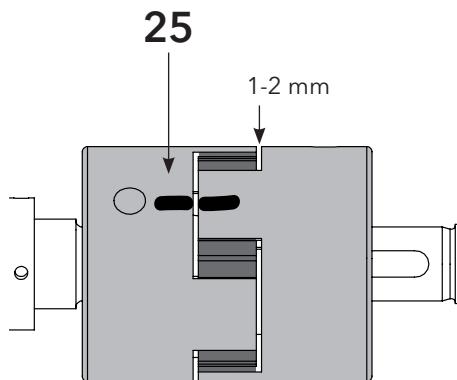
23. Stellen Sie sicher, dass sich beide Lager auf der Antriebswelle frei bewegen lassen.



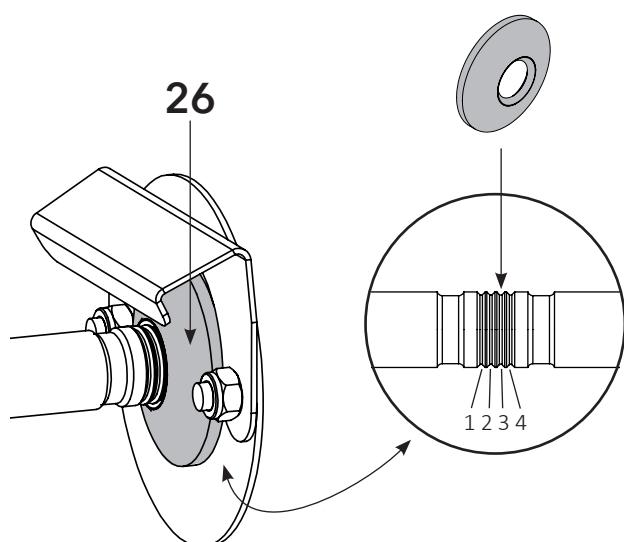
24. Stellen Sie sicher, dass die Dichtringe auf beiden Seiten den gleichen Winkel zum Blechteil aufweisen.



28. Selbsttest



26. Bei einer undichten Stelle an der Abdichtung:
Tauschen Sie den rechten Dichtring an der dritten
Nut aus. Prüfen Sie die Ausrichtung wie in Schritt 25
erläutert.



1

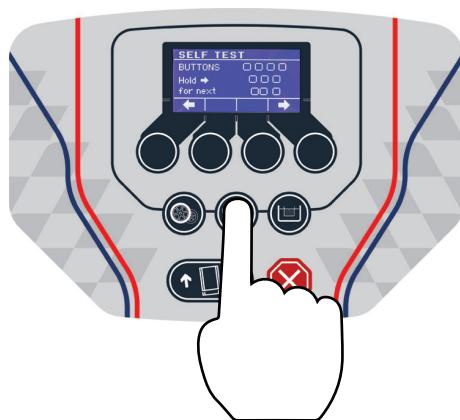


2

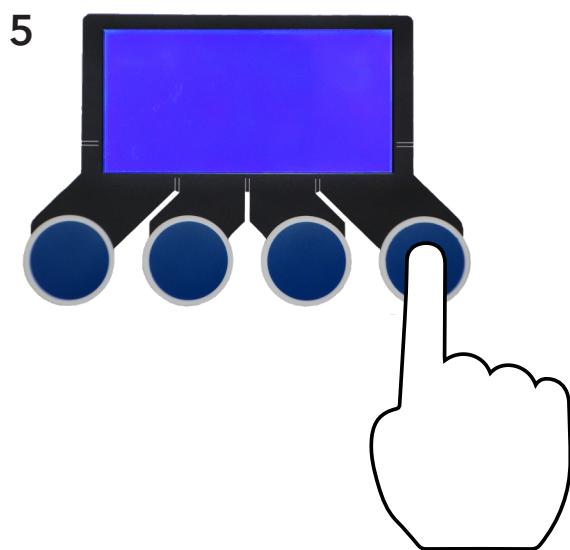
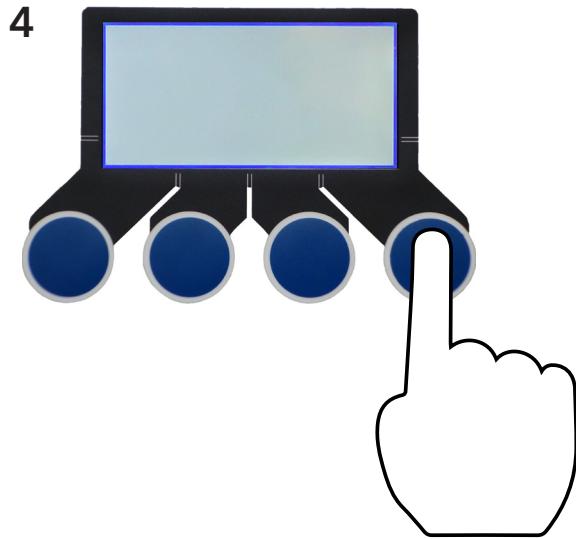


3. Drücken Sie alle Tasten und kontrollieren Sie im
Display, ob sie reagieren und funktionieren. Zum
Fortfahren halten Sie → gedrückt.

3

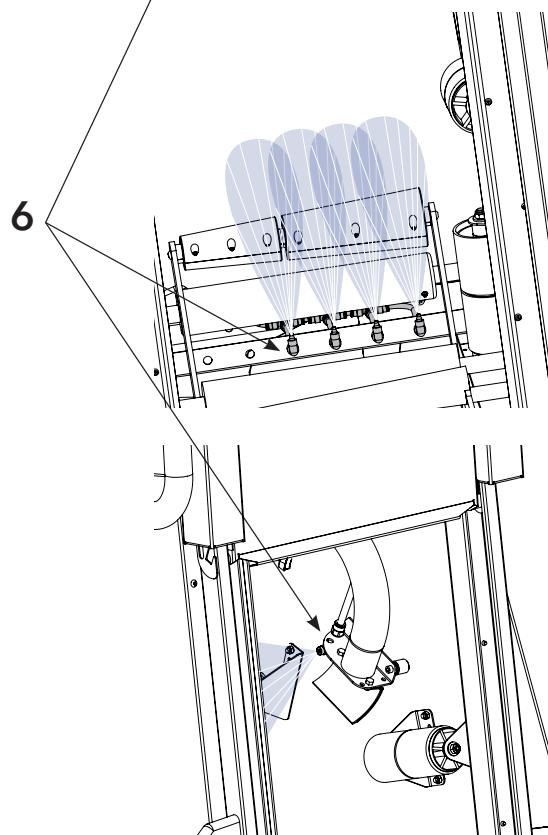
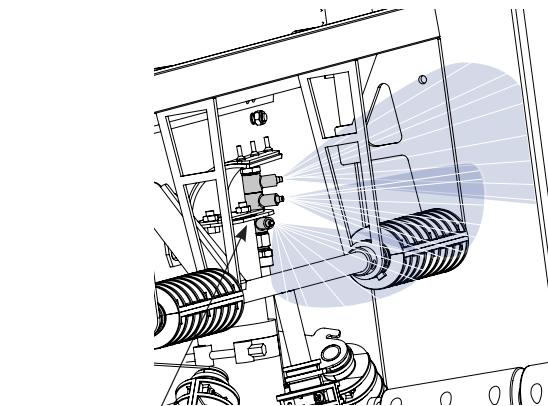


4. Überprüfen Sie, ob ALLE Pixel leuchten. Drücken Sie zum Fortfahren die rechte Taste. ➡
5. Vergewissern Sie sich, dass KEINE Pixel leuchten. Drücken Sie zum Fortfahren die rechte Taste.



WICHTIG!
TÜR ÖFFNEN, EVENTUELL SPRITZWASSER.

6. Überprüfen Sie, ob alle acht Düsen funktionieren.



7. Die Temperatur im Schaltkasten wird angezeigt, maximal zulässig sind 61 °C. Bei Nichtgebrauch der Maschine sollte die Temperatur in etwa der Raumtemperatur entsprechen.

7

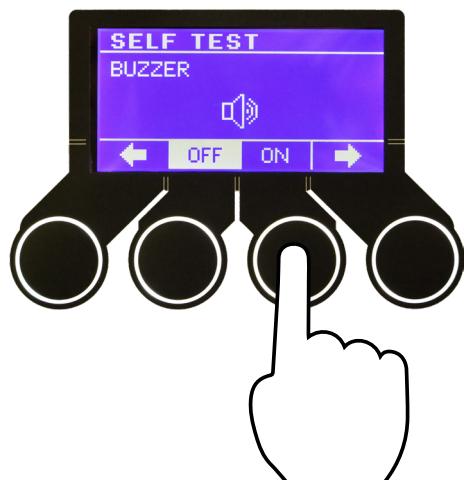
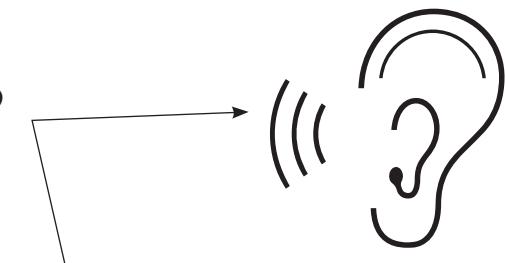


8. Die Wassertemperatur wird angezeigt. Der Temperatursensor befindet sich in der Heizung, maximal zulässig sind 65 °C.

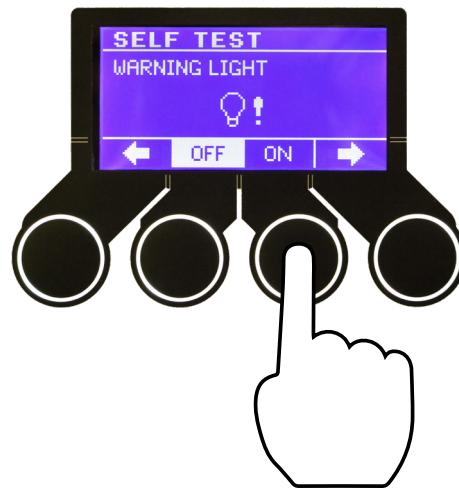
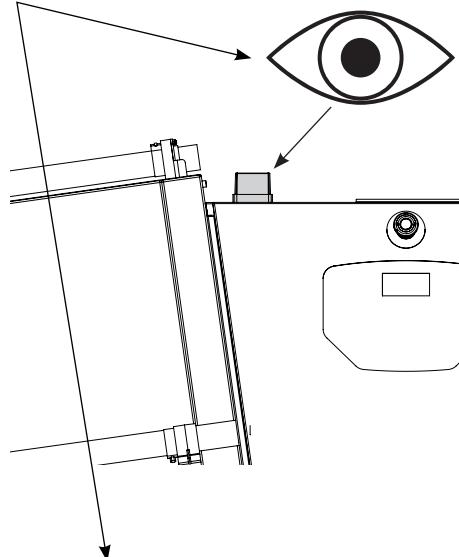
8



9

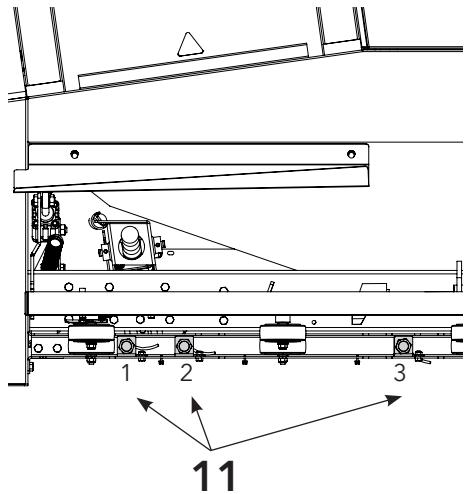


10

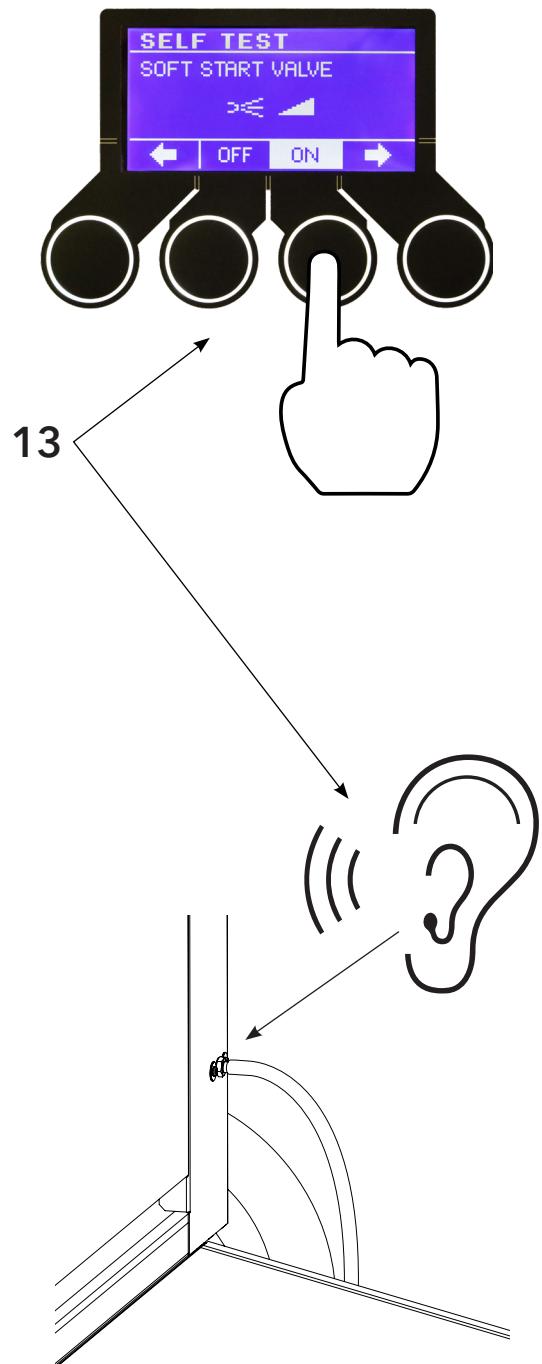


11. Halten Sie nacheinander ein Metallteil vor die Sensoren und prüfen Sie, ob ein Signal ausgegeben wird.





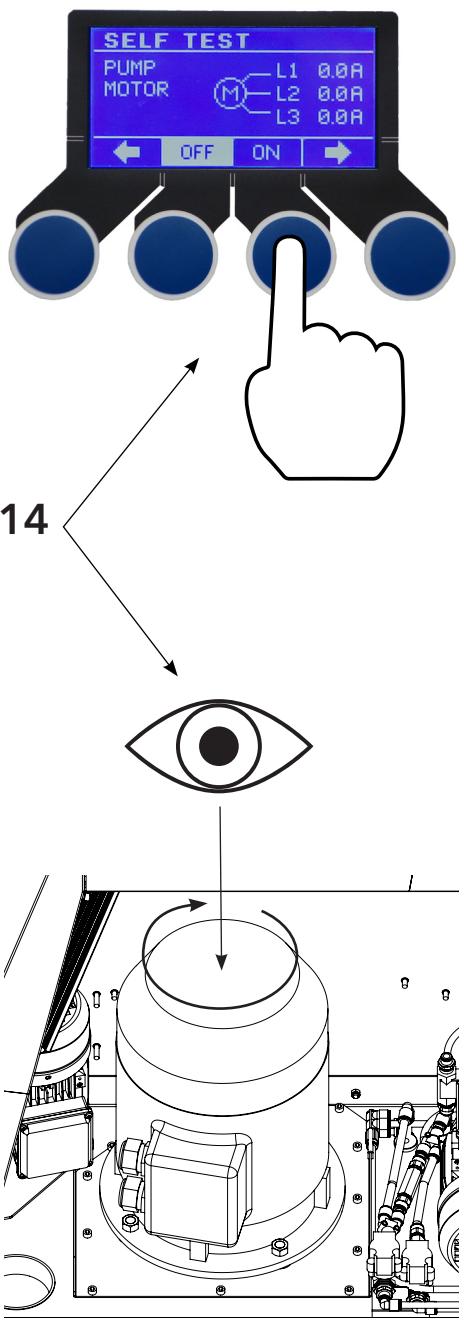
12. Prüfen Sie, ob die Zylinderwelle 1-6 wie im Display zu sehen funktioniert.



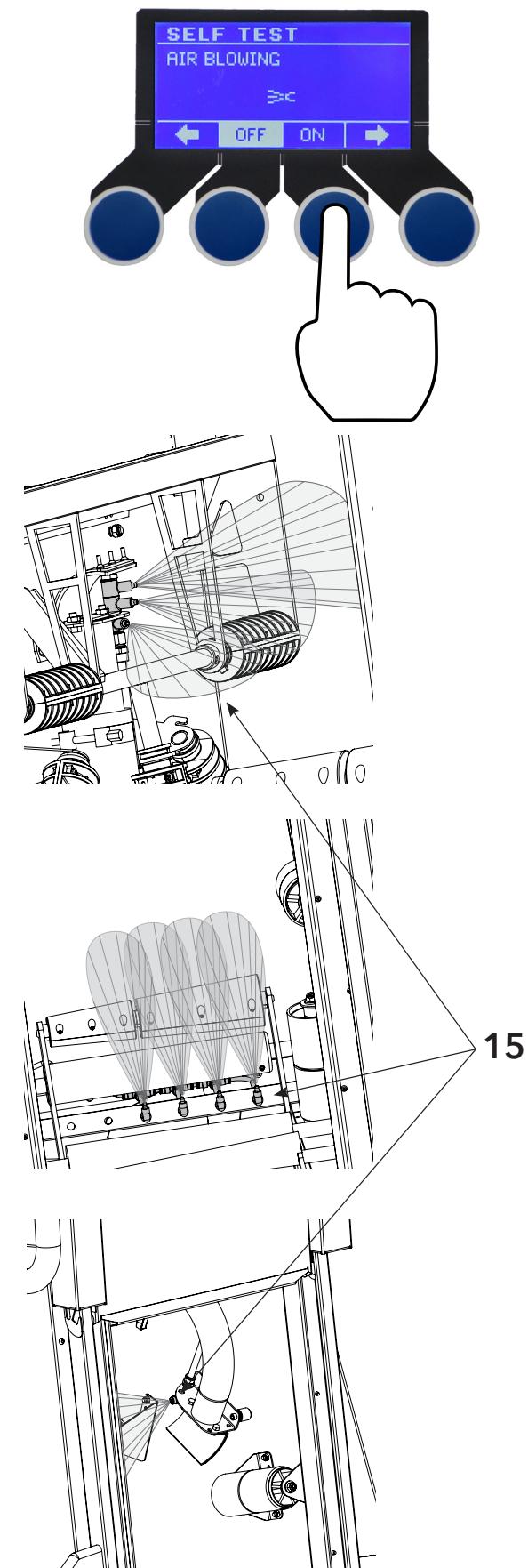
WICHTIG!

**VOR DEM TEST DECKEL SCHLIESSEN,
PUMPENMOTOR STARTET BEI GEÖFFNETER TÜR
MÖGLICHERWEISE.**

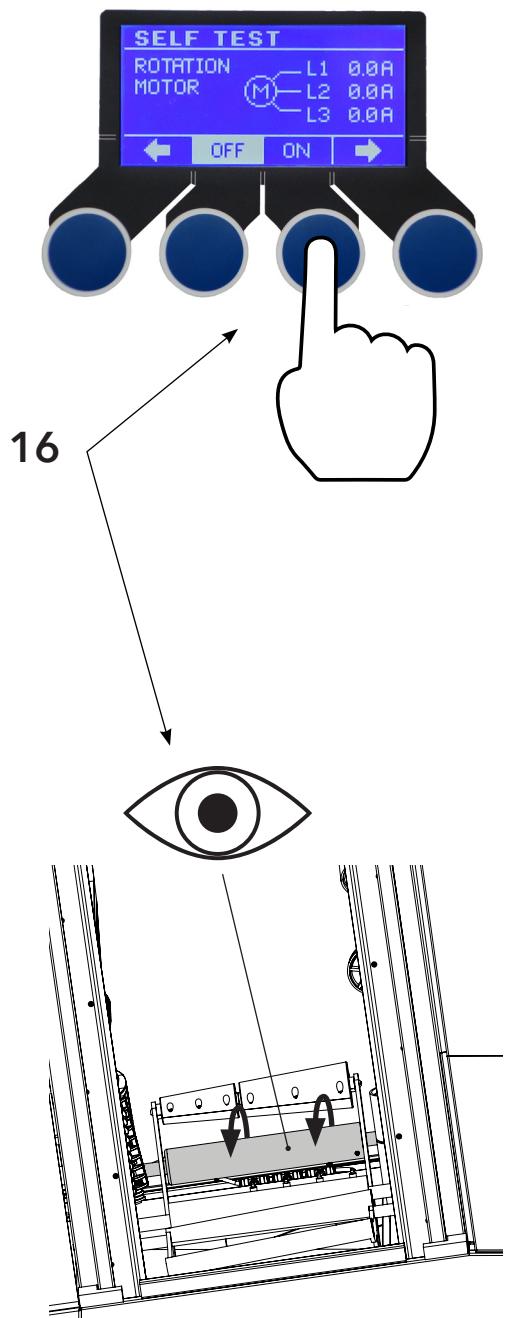
14. Überprüfen Sie die Pumpenmotorrotation.
Die Stromaufnahme muss ~11-14 A bei 400 V betragen. Bei einer ganz neuen Pumpe muss die Stromaufnahme 12,5-14 A bei 400 V betragen.



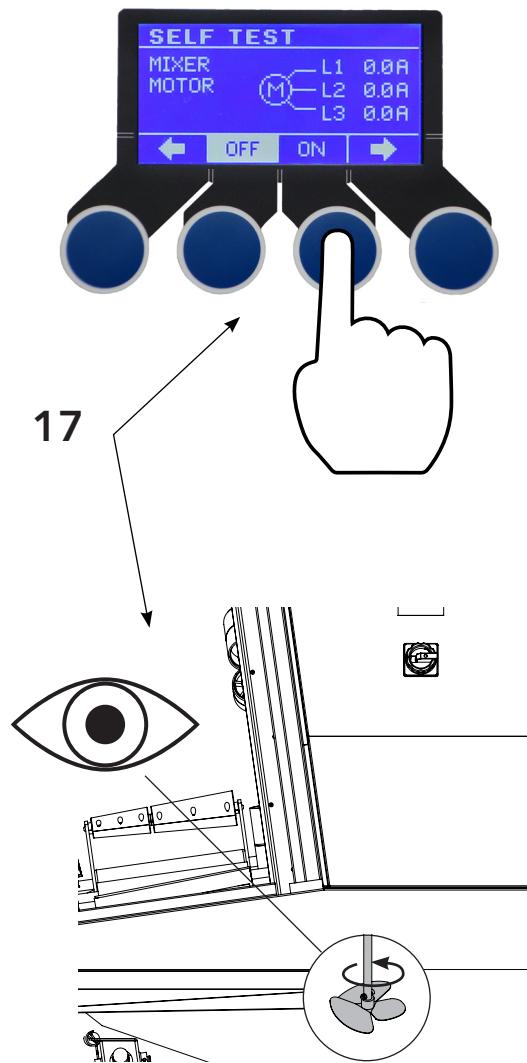
15. Überprüfen Sie, ob alle acht Düsen funktionieren.



16. Überprüfen Sie die Antriebswellenrotation. Die Stromaufnahme muss ~0,5-1,2 A bei 400 V betragen.



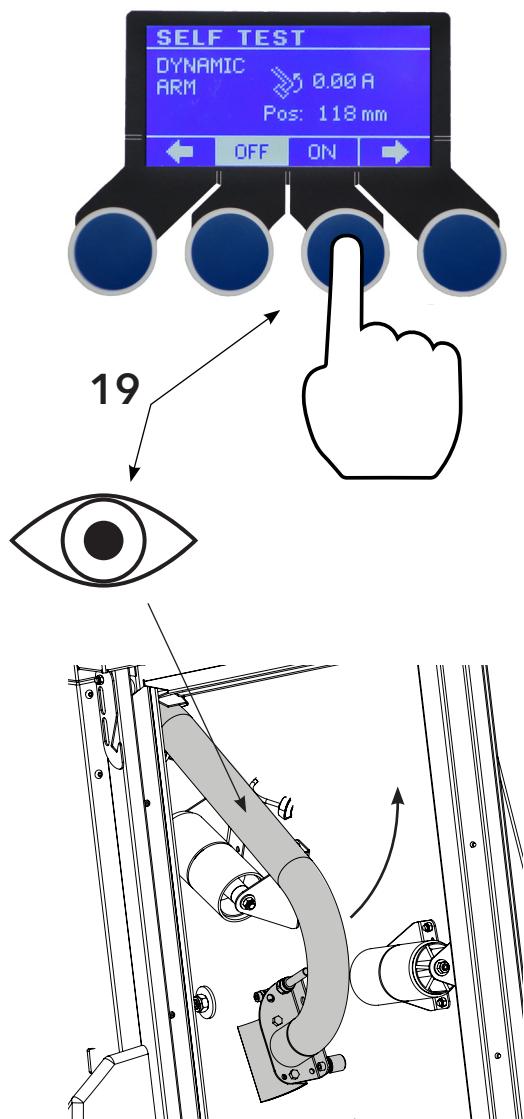
17. Öffnen Sie den Deckel und überprüfen Sie die Rotation des Mischermotors.



18. Der Modus wechselt nach 15 Sekunden automatisch von Eingeschaltet zu Ausgeschaltet, um eine Überhitzung zu verhindern. Die Stromaufnahme muss ~1,5-2,5A bei 400 V betragen.



19. Überprüfen Sie die Position (0 - 121 mm ± 3).



20. Die aktuelle Software- und Hardwareversion werden angezeigt.

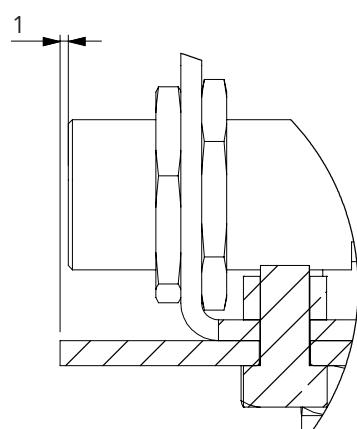
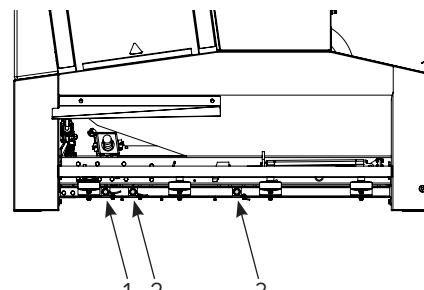


29. Werkseinstellungen

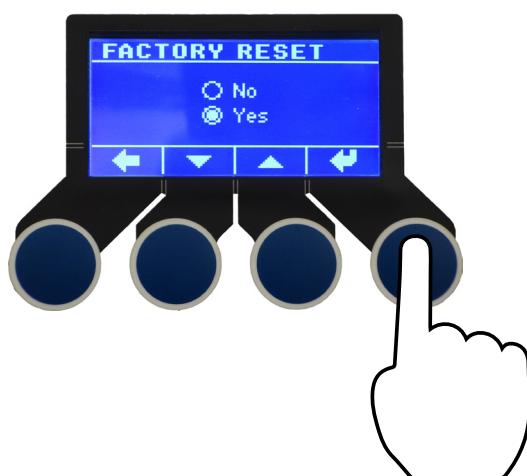
1. Stellen Sie die Sensoren ein.

Beachten Sie, dass der Sensor im Abstand von 1 mm von der Schutzkante installiert werden muss.

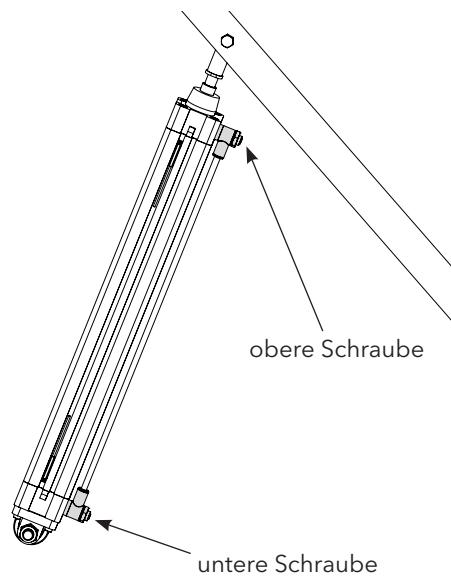
Um zu überprüfen, ob die Sensoren funktionieren, führen Sie einen Selbsttest aus (siehe Kapitel 28).



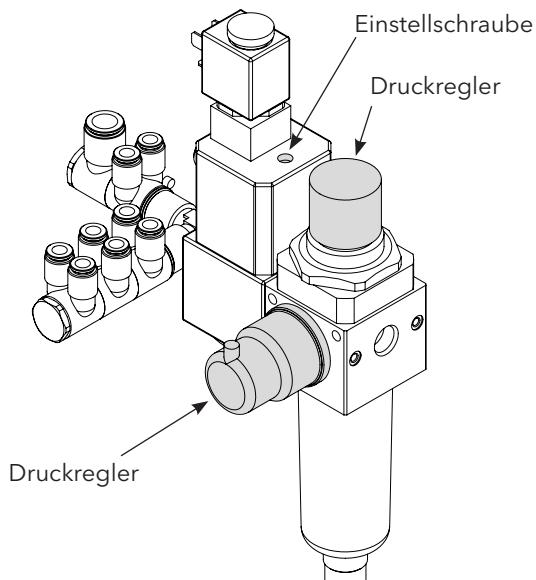
/6.Factory reset/Factory reset



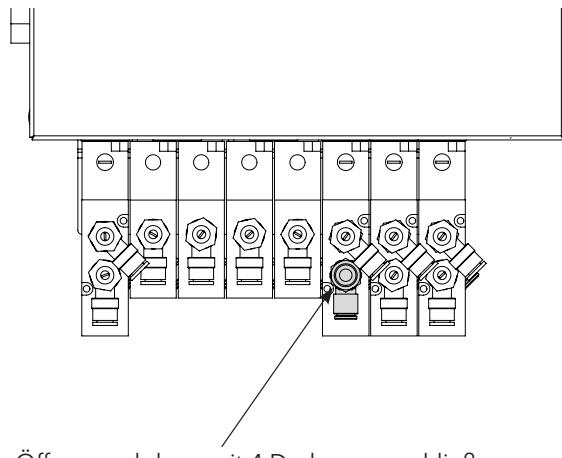
- Ziehen Sie die obere Ventilschraube vollständig an und lösen Sie sie dann mit 1,5 Drehungen. Ziehen Sie die untere Ventilschraube vollständig an und lösen Sie sie dann mit 6 Drehungen.



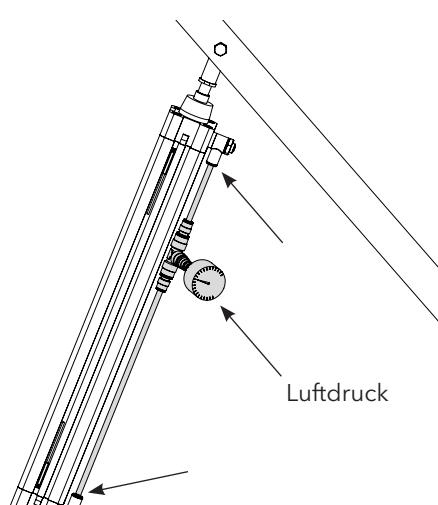
- Der Druckregler muss auf 6 bar eingestellt sein. Der Zuluftregler muss auf 7,5 bar eingestellt sein. Zum Zurücksetzen des Sanftanlaufs ziehen Sie die Schraube vollständig an und lösen Sie sie dann mit 12 Drehungen.



- Der Deckelregler für Zylinder 3 muss bei geschlossenem Deckel auf 2 bar eingestellt sein. Der Regler befindet sich auf dem Klemmenkasten. Öffnen und schließen Sie ihn mit vier Drehungen (siehe Abbildung unten).

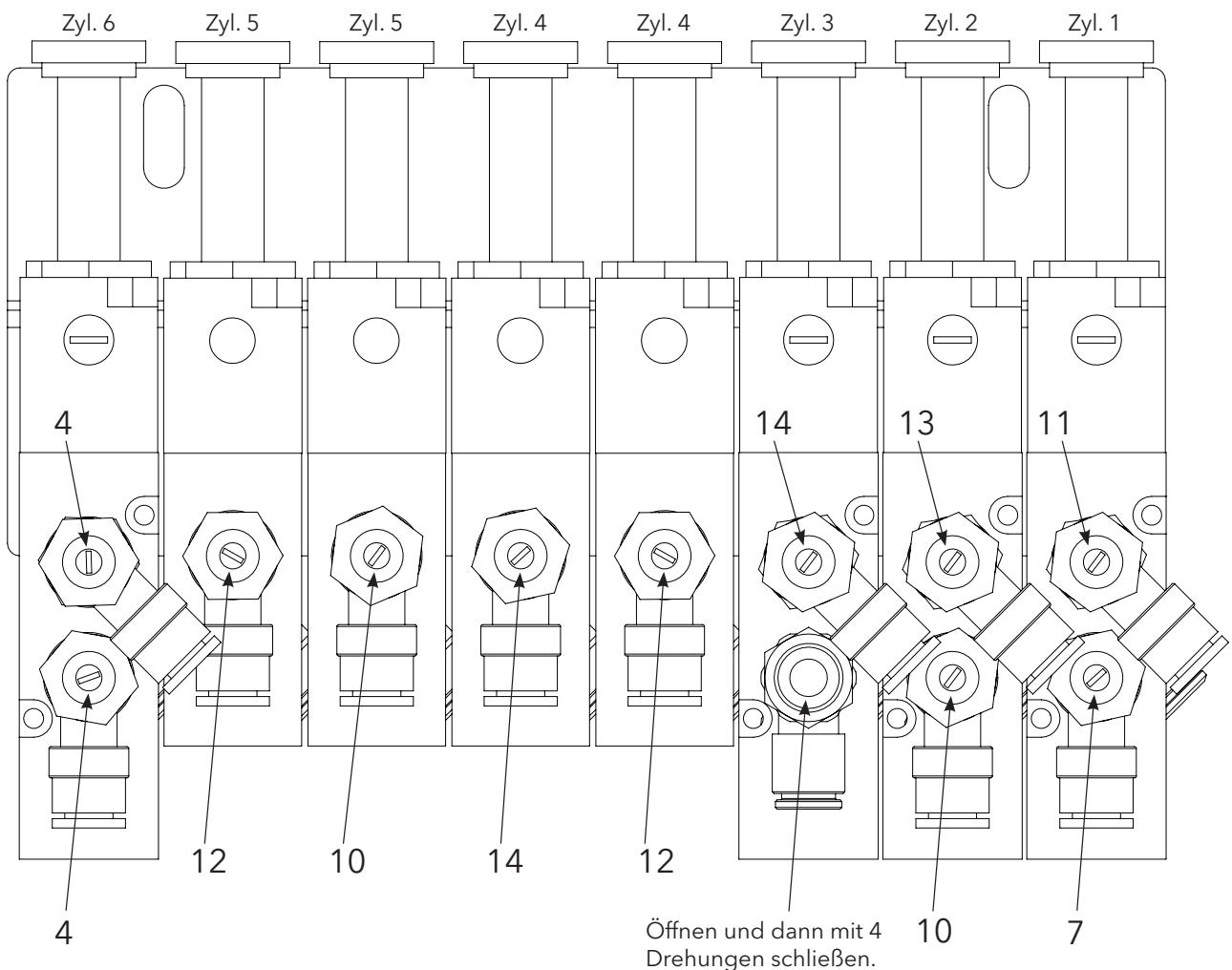


- Wenn Sie nicht sicher sind, schließen Sie das Kalibrierkit 230753 an Zylinder 3 an.
- Schalten Sie die Maschine aus.
- Trennen Sie den Schlauch von Zylinder 3.
- Zum Anschließen des Kalibrierkits entfernen Sie den roten Stopfen und schließen es wie in der Abbildung gezeigt an.
- Schalten Sie die Maschine ein. Nach ~10 Sekunden hat sich der Luftdruckwert am Kalibrierkit stabilisiert.



11. Stellen Sie den Regler bei Bedarf ein. Wenn ein oder mehr Magnetventile geändert werden, müssen die Durchflussbegrenzer ordnungsgemäß eingestellt werden.

Ziehen Sie die Einstellschraube vollständig an und öffnen Sie mit der Anzahl der in der Abbildung unten angegebenen Drehungen.



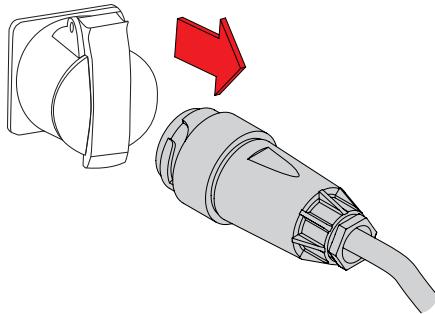
1. Consignes de sécurité

1.1 Outils

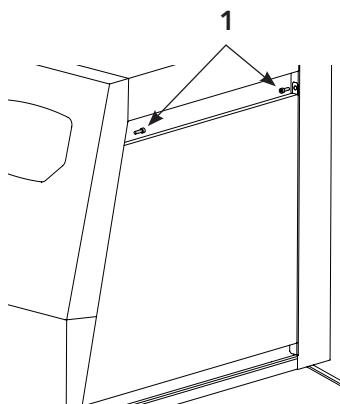


5mm

ATTENTION ! Effectuez toujours les étapes suivantes, avant toute intervention sur la machine.

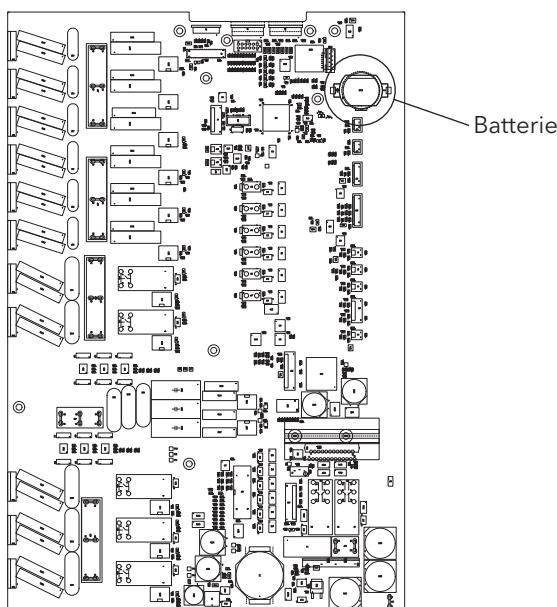


1. Retirez les vis et le capot.



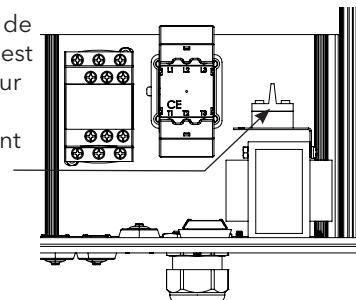
2. Batterie

Type de batterie : CR 2032 3V.

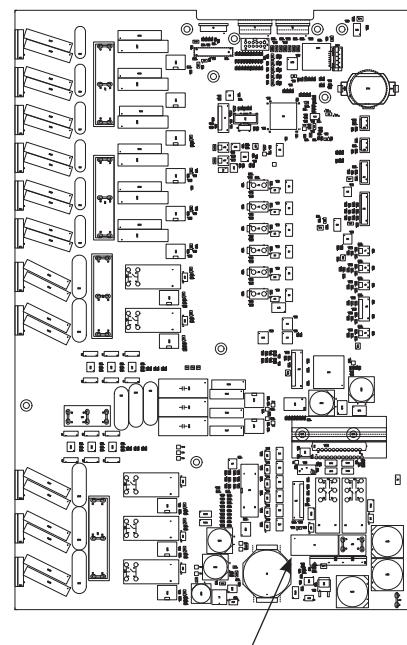
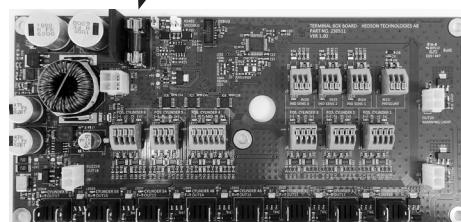


3. Fusibles

La machine est équipée de trois fusibles. Un fusible est situé sur le transformateur dans le boîtier de contrôle principal, fusible lent 500 mA 440 V.



Le deuxième fusible est situé sur le boîtier à borne en haut à gauche, fusible lent 3,15 A 250 V.



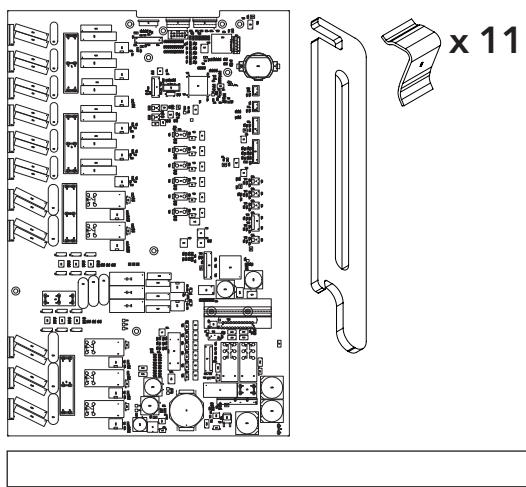
Le troisième fusible est situé en bas à droite de la carte de contrôle.

4. Témoin lumineux

La puissance de la lampe est 24 V/5 W.

5. Remplacement de la carte de contrôle PCD

5.1 Composants

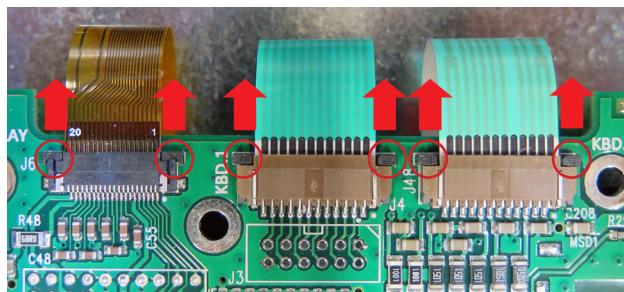
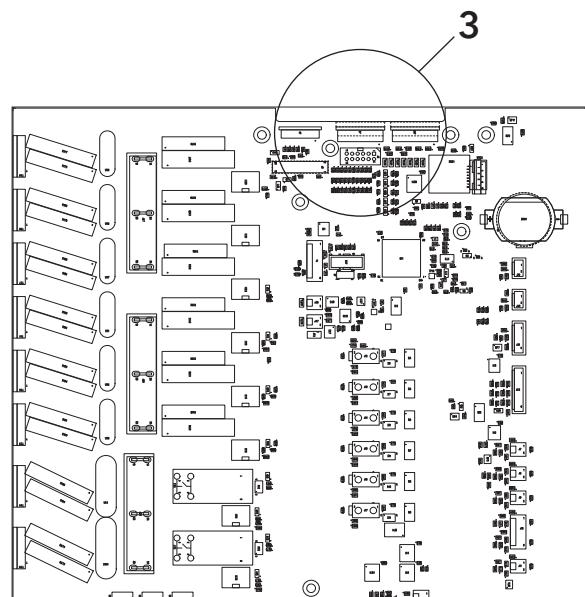
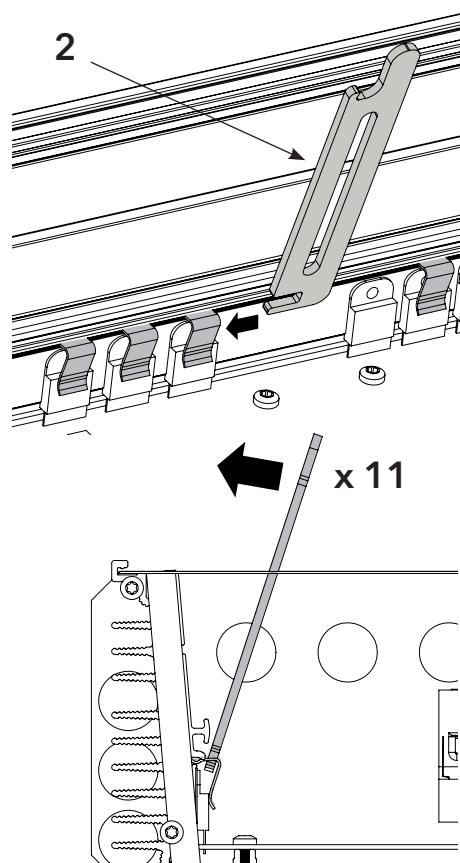
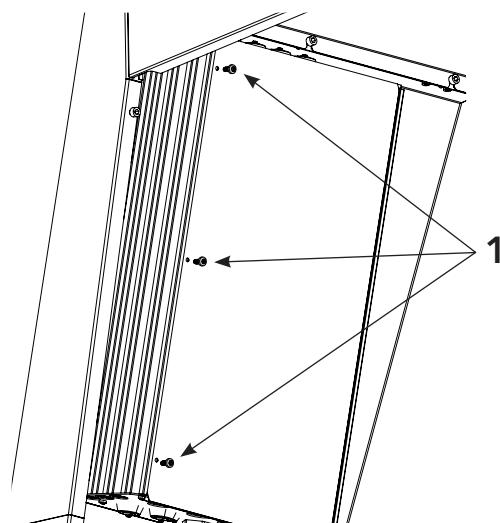


5.2 Outils

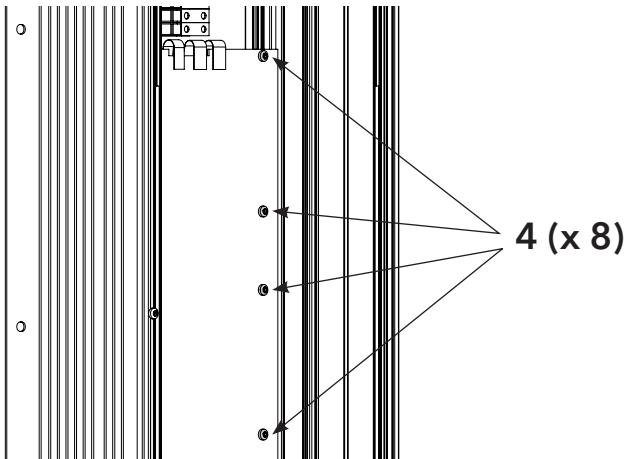


REMARQUE : Commencez les instructions par le Chapitre 1 - Consignes de sécurité

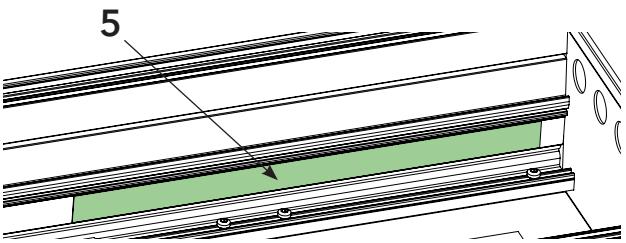
1. Retirez les vis et le capot.
2. Utilisez l'outil spécial pour desserrer les clips maintenant la carte de circuit imprimé sur le profil en aluminium.
3. Retirez TOUS les câbles des moteurs, chauffages, capteurs etc. Les câbles ruban se détachent en poussant les broches vers le haut comme illustré. Marquez les câbles en vue du remontage.



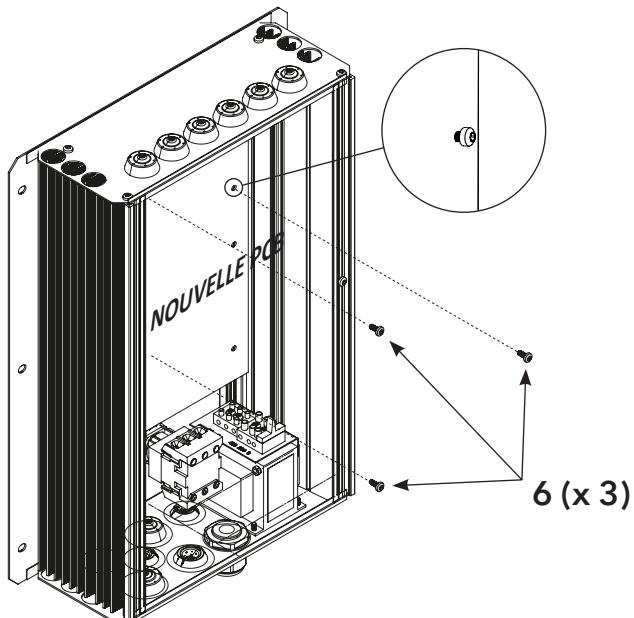
4. Retirez les vis et le PCB



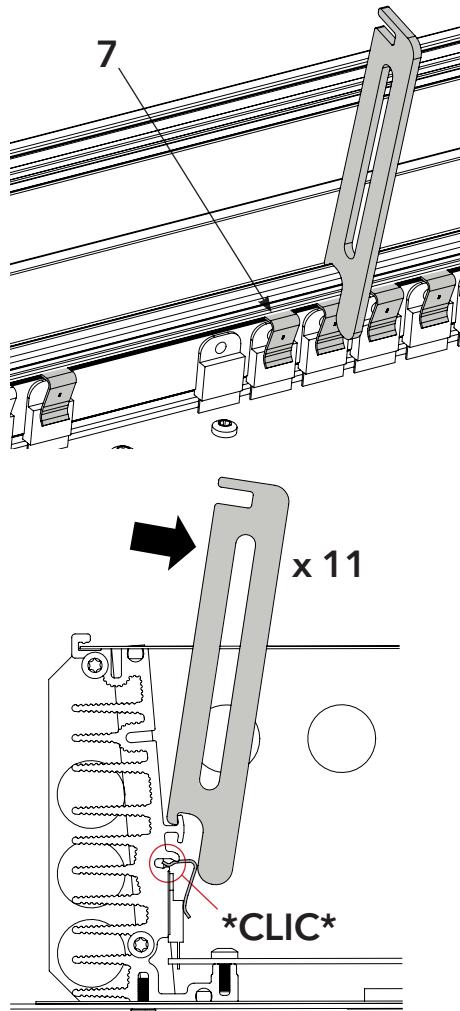
5. Vérifiez que le ruban sur le profil aluminium est positionné comme illustré, ou remplacez-le.



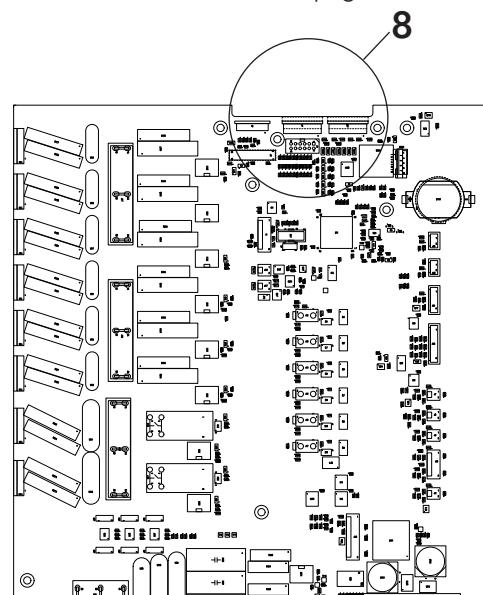
6. Positionnez le nouveau PCB et serrez les trois vis sans serrer le PCB.

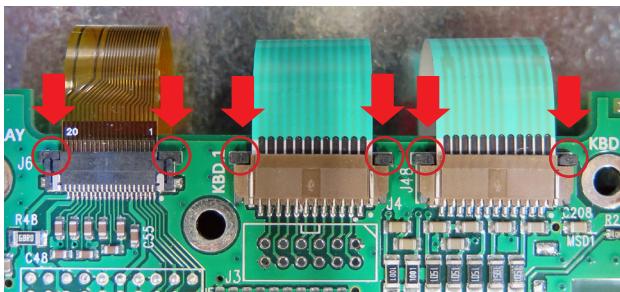


7. Utilisez les clips fournis pour fixer la carte sur le profil aluminium.

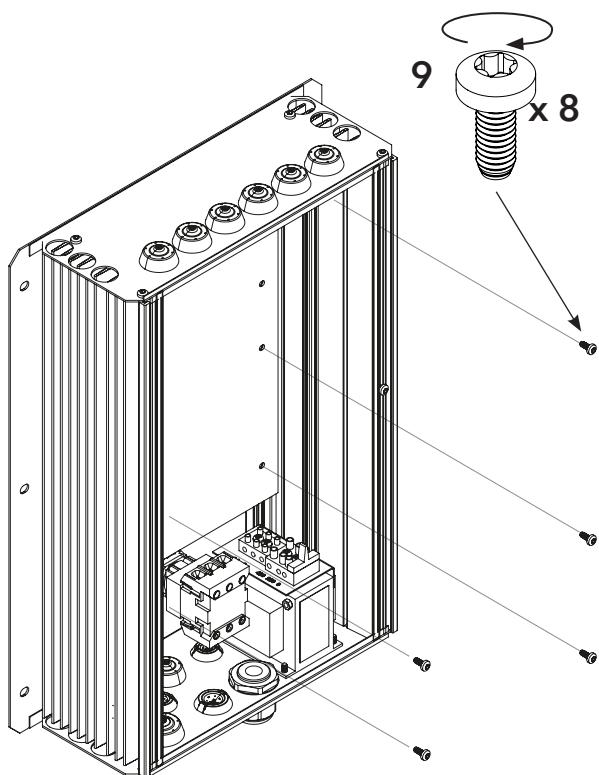


8. Fixez TOUS les câbles. Remontez selon le marquage. Pour fixer les câbles ruban, appuyez sur les broches comme illustré ci-dessous et en page suivante.

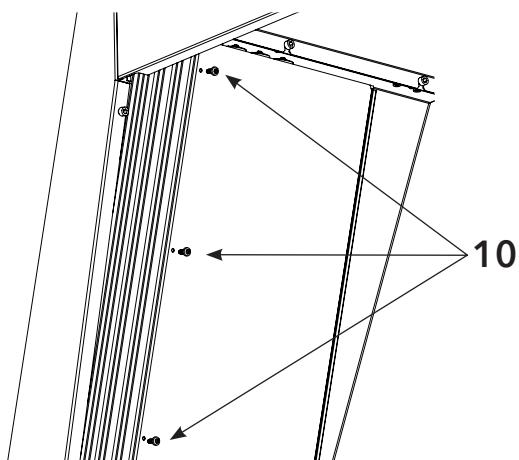




9. Serrez toutes les vis.



10. Positionnez le capot et serrez les vis.



11. Effectuez la configuration (chapitre 6).

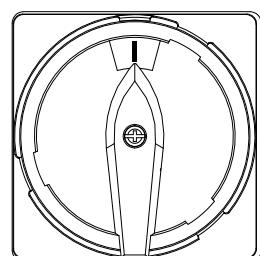
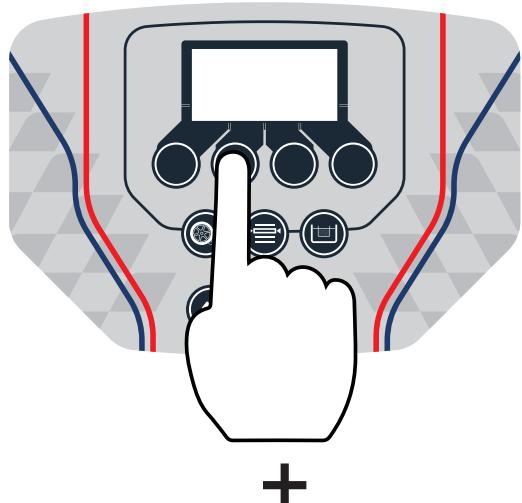
12. Effectuez un autotest.

12 /8. Autotest/....



6. Menu de configuration

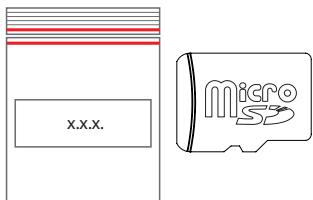
Selectionnez les paramètres selon la configuration de la machine.



CODE PIN	1632	
TENSION	400V	
TYPE DE MACHINE	24	
CHAUFFAGE	INTELLIGENT	
RINÇAGE COMPLET	NON	OUI
MOTEUR MÉLANG.	NON	OUI
TEMPÉRATURE	°C	°F

7. Mise à jour logicielle

7.1 Composants

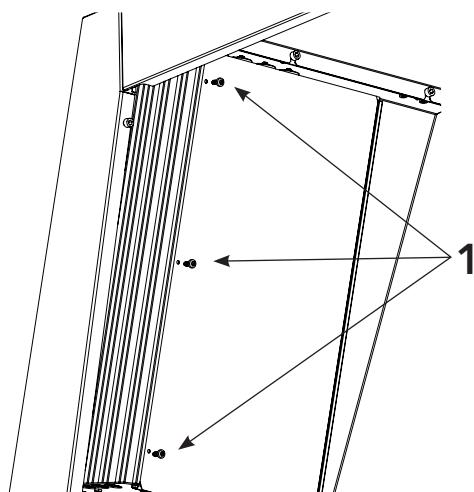


7.2 Outils

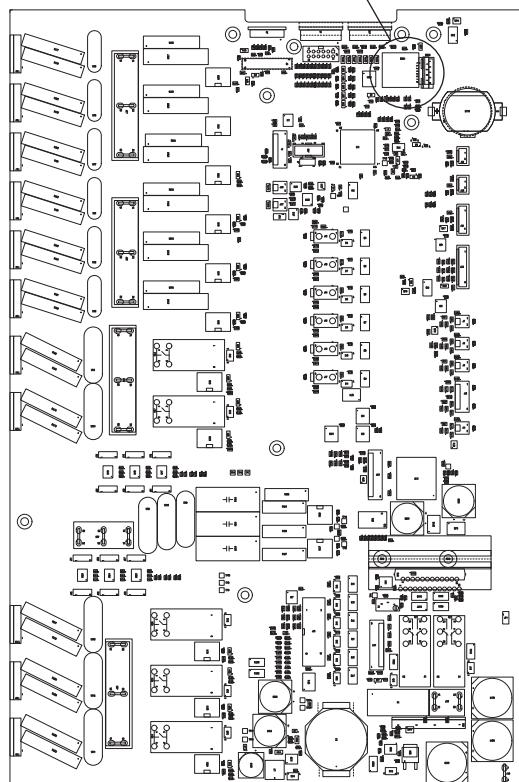
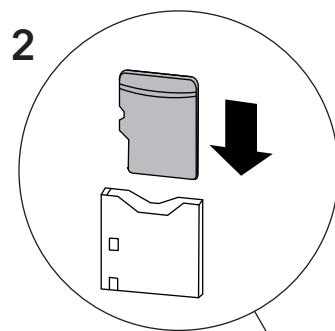


REMARQUE : Commencez les instructions par le Chapitre 1 - Consignes de sécurité

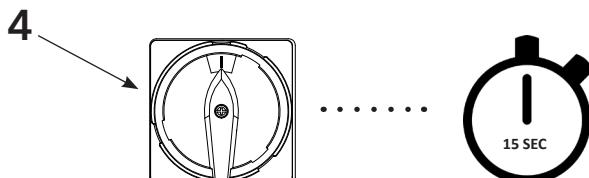
1. Retirez les vis et le capot.
2. Insérez la carte SD dans la fente



3. Remontez en sens inverse.

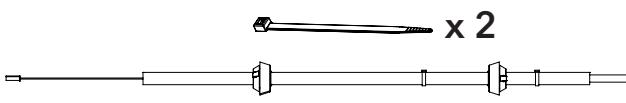


4. Commencez par l'interrupteur principal, patientez 15 secondes, ouvrez les paramètres, allez jusqu'à (/7. Version/Modèle/Sw/x.x.x) et vérifiez que x.x.x correspond au numéro sur le sachet.
5. Répétez les instructions pour retirer la carte SD.



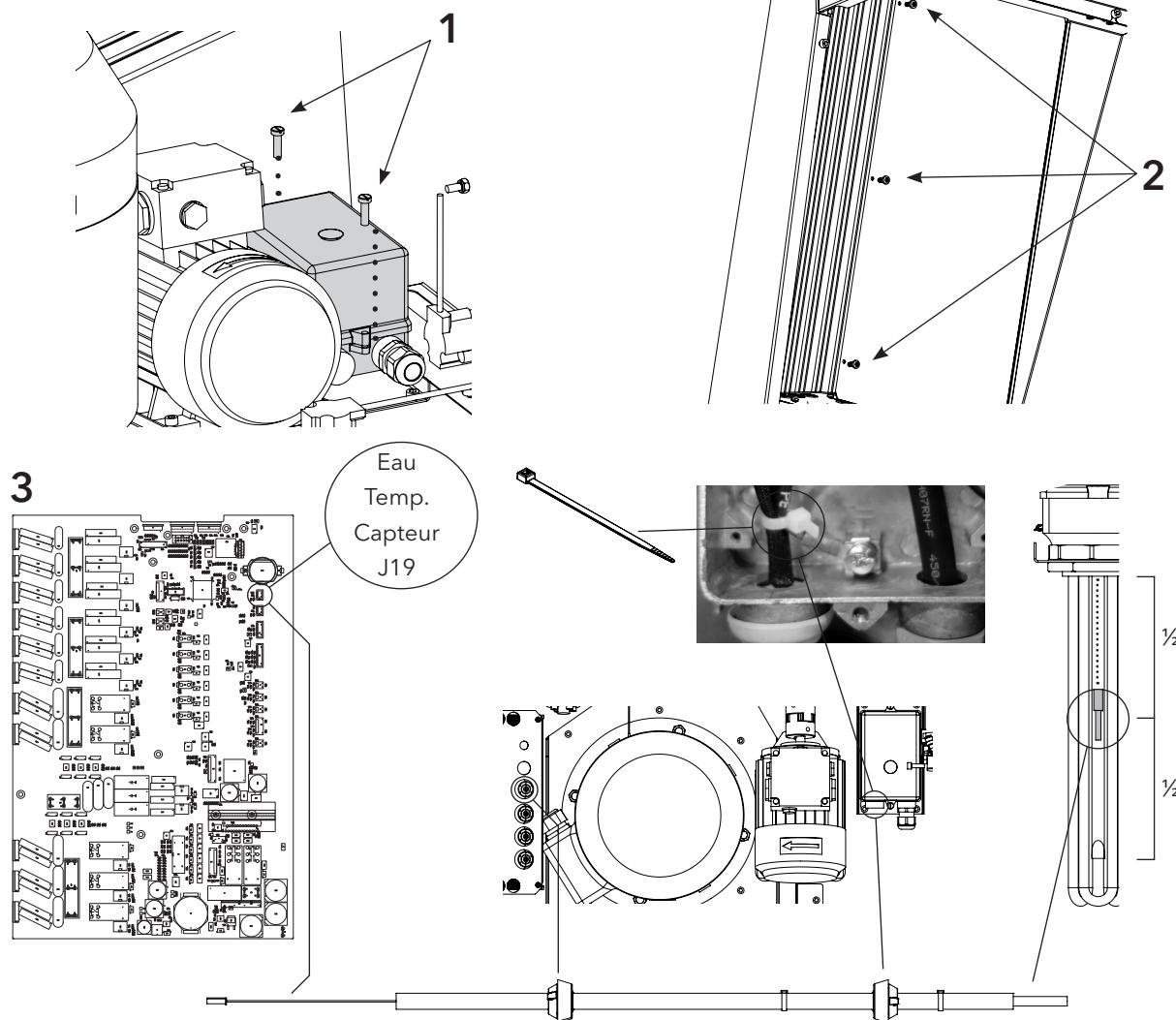
8. Remplacement du capteur de température

8.1 Composants



REMARQUE : Commencez les instructions par le Chapitre 1 - Consignes de sécurité

1. Retirez les vis.
2. Retirez les vis et le capot.



8.2 Outils

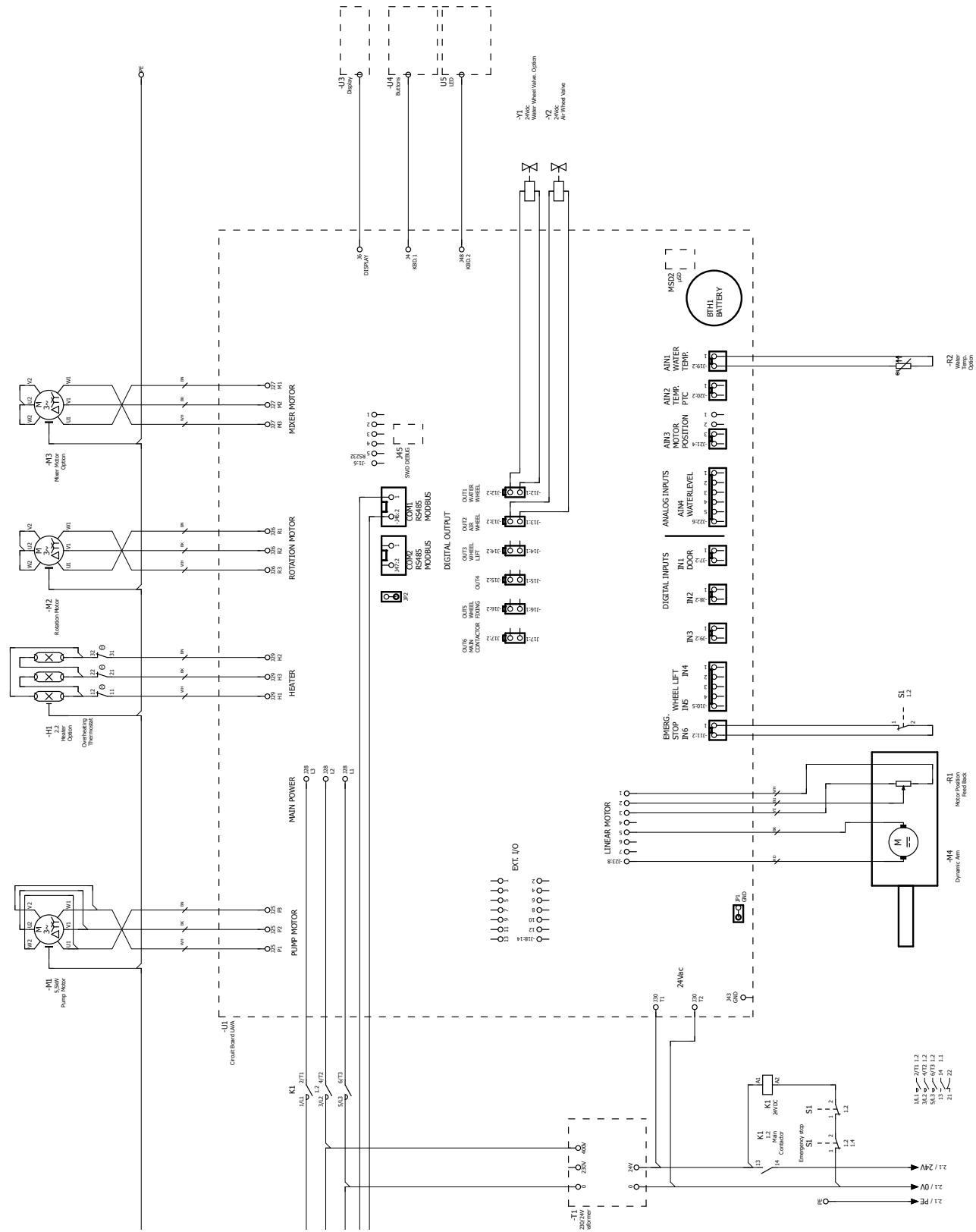


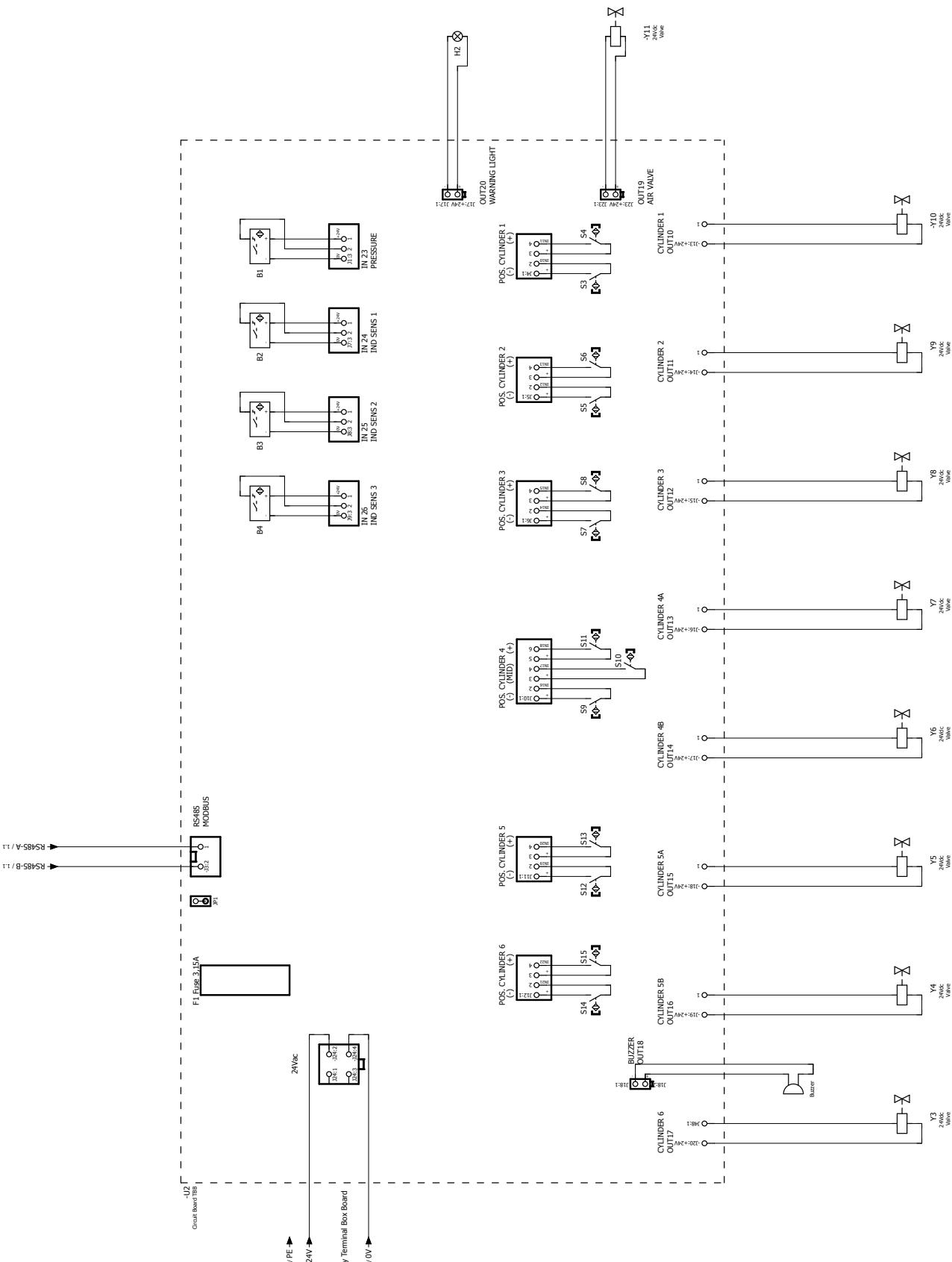
3. Débranchez l'ancien capteur de température puis connectez le nouveau capteur.
4. Remontez en sens inverse.
5. Démarrlez la machine et vérifiez que le capteur de température fonctionne (/8. Autotest/Température de l'eau/....).

5



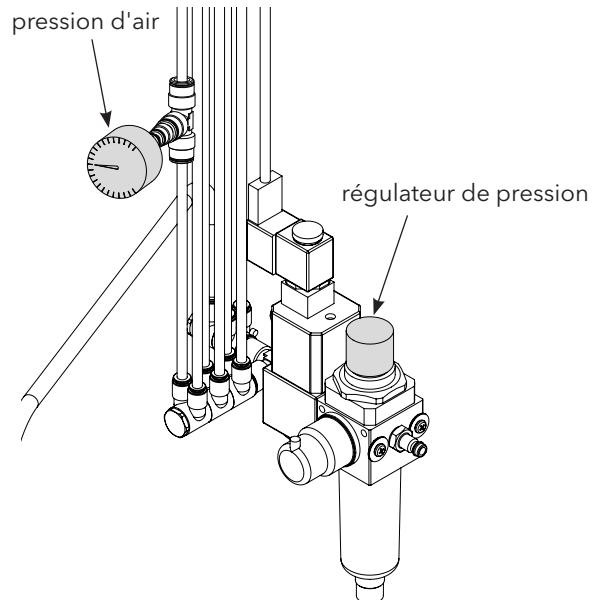
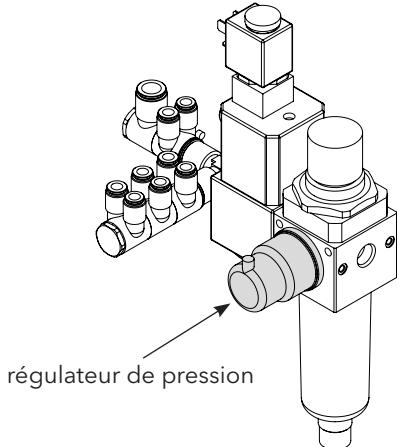
9. Schéma de câblage





10. Régulateur de pression

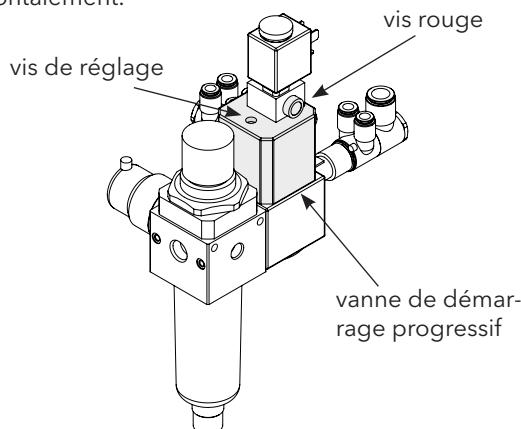
Le régulateur de pression détecte si l'alimentation en air chute en-dessous de 6 bars. Cette chute déclenche une alarme de type B. Reportez-vous aux codes d'alarme dans le Chapitre 9 du manuel de l'utilisateur. Le régulateur de pression ne doit pas être réglé sur une valeur différente. S'il est défectueux, il doit être remplacé pour maintenir le niveau de sécurité nécessaire sur la machine.



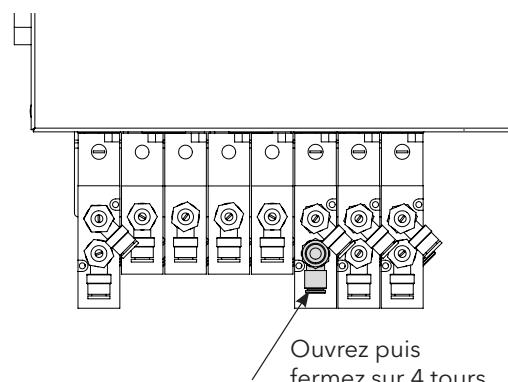
11. Réglage de la vanne de démarrage progressif

Une vis de réglage se trouve sur le dessus de la vanne de démarrage progressif. Elle permet de définir la rapidité de la mise en pression. La vis doit être serrée complètement puis desserrée sur 12 tours.

A l'arrière de la vanne de démarrage progressif se trouve une vis en plastique rouge. Celle-ci doit être positionnée horizontalement.

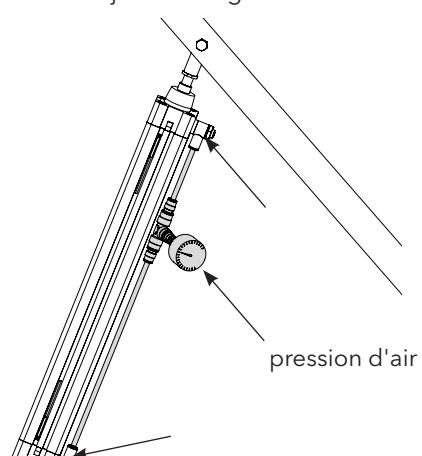


Le régulateur de capot pour le vérin 3 doit être réglé sur 2 bars lorsque le capot est fermé. Le régulateur se trouve sur le boîtier à bornes. Ouvrez et fermez quatre tours. (Illustration ci-dessous)



En cas de doute, connectez le kit d'étalonnage 230753 sur le vérin 3.

2. Mettez la machine hors tension.
3. Débranchez le flexible du vérin 3.
4. Pour connecter le kit d'étalonnage, retirez la protection rouge et raccordez-le comme illustré.
5. Mettez la machine sous tension. Après environ 10 secondes, la valeur de pression sur le kit d'étalonnage est stabilisée. Ajustez le régulateur si nécessaire.



12. Réglage des régulateurs de pression

Ces réglages ne doivent pas être modifiés. Si les régulateurs ne fonctionnent pas correctement, vérifiez les paramètres suivants :

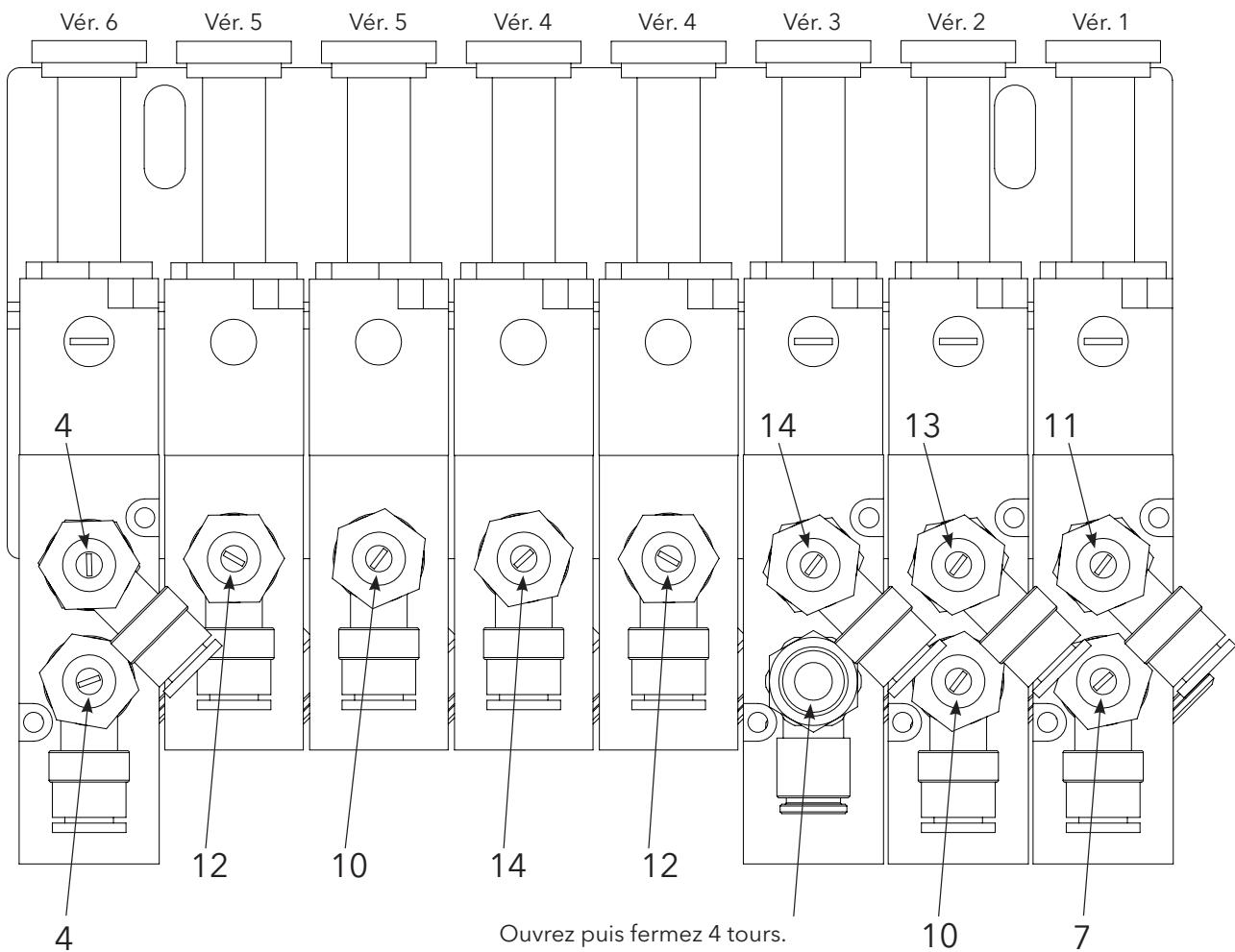
Le régulateur d'admission d'air (illustration ci-dessous) doit être réglé sur 7,5 bars. **Remarque : Commencez toujours par réduire la pression puis augmentez-la au niveau souhaité.**

1. Mettez la machine sous tension. Après environ 10 secondes, la valeur de pression de l'air est stabilisée. Ajustez le régulateur si nécessaire.

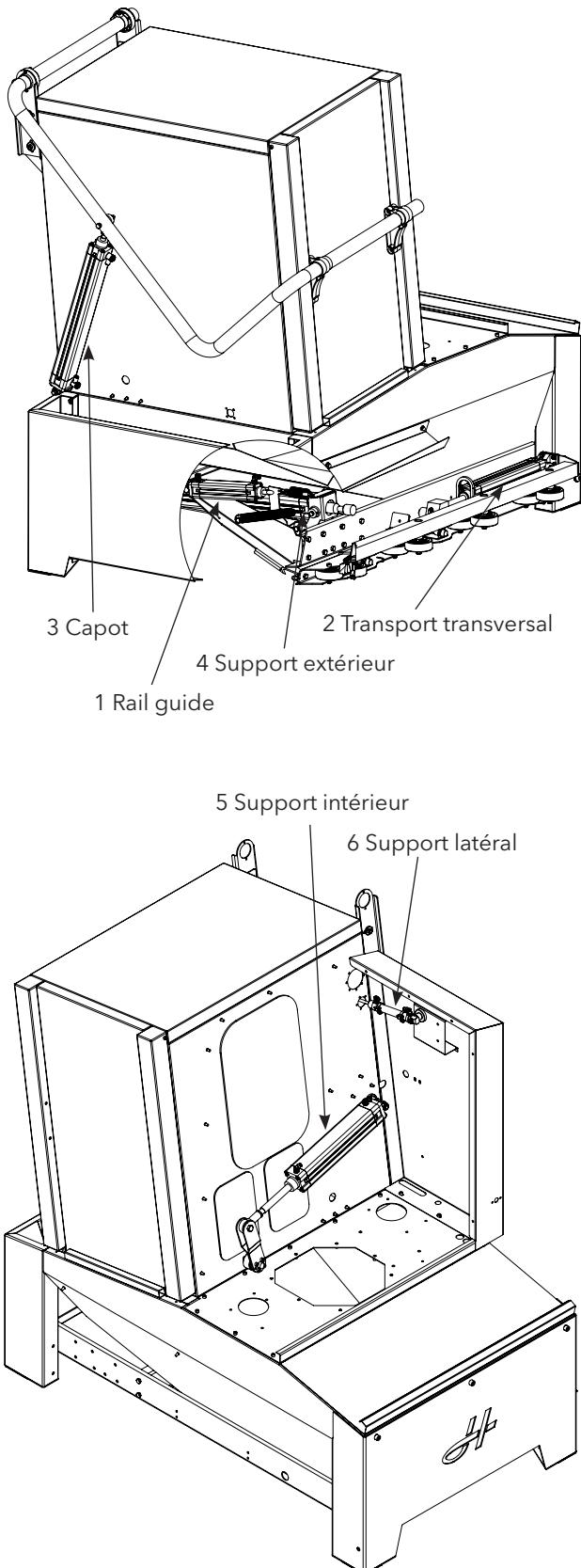
13. Réglage des électrovannes

Quand une ou plusieurs électrovannes sont changées, les réducteurs de flux d'air doivent être réglés correctement.

Serrez complètement la vis de réglage, ouvrez du nombre de tours indiqué dans l'illustration ci-dessous.



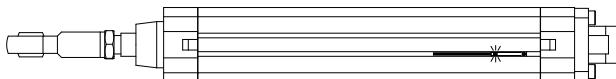
14. Numérotation et noms des vérins



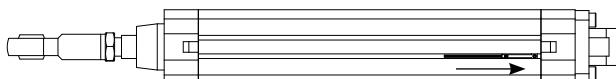
15. Capteurs de fin de course sur les vérins

Pour régler la position des capteurs, la machine doit être mises SOUS TENSION lorsque l'air comprimé est connecté. Lancez l'auto-test (*voir chapitre 28*) pour déplacer le vérin dans la bonne position pour le capteur à régler.

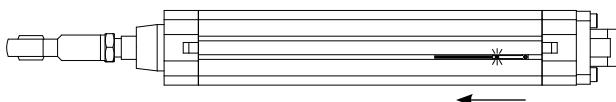
1. Placez le capteur dans la fente, faites-le glisser vers la gauche ou vers la droite jusqu'à ce que la LED s'allume.



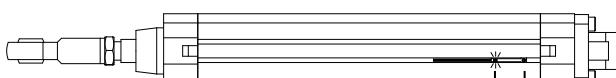
2. Faites glisser le capteur vers la droite jusqu'à ce que la LED s'éteigne, et mémorisez l'emplacement.



3. Faites glisser le capteur vers la gauche jusqu'à ce que la LED s'éteigne, et mémorisez l'emplacement.

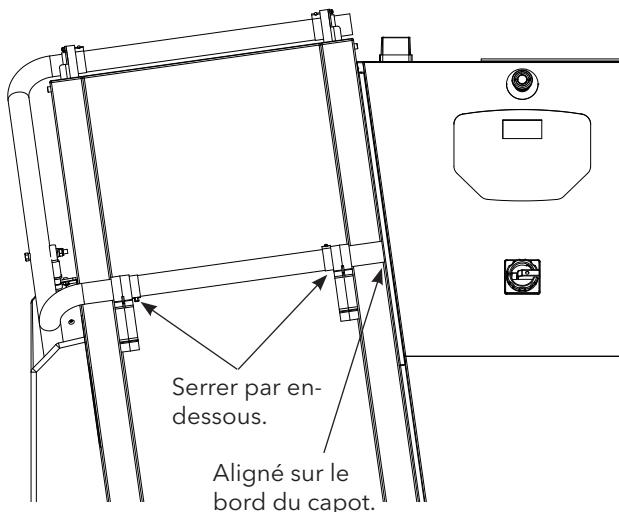


4. Positionnez le capteur au centre des deux emplacements déterminés dans les étapes 2 et 3.

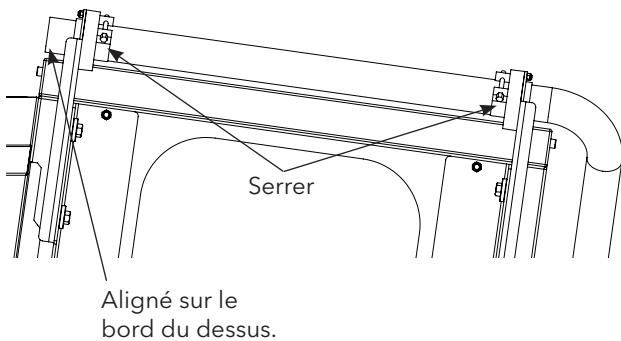


16. Réglage du capot

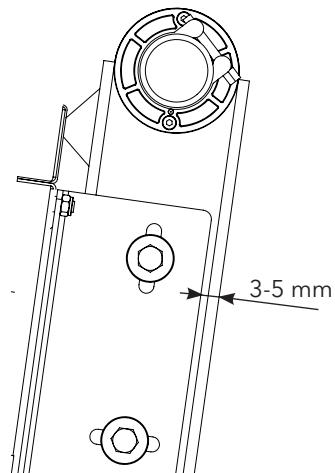
1. Serrez les colliers de flexible avant lorsque la bascule est dans la bonne position.



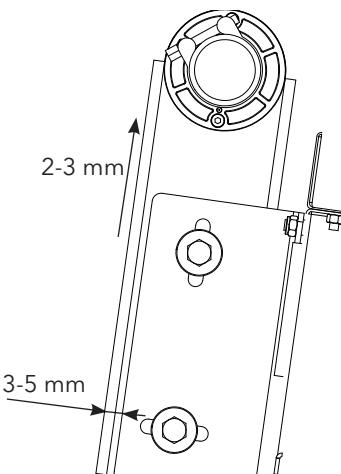
2. Serrez les colliers de flexible arrière lorsque la bascule est dans la bonne position.



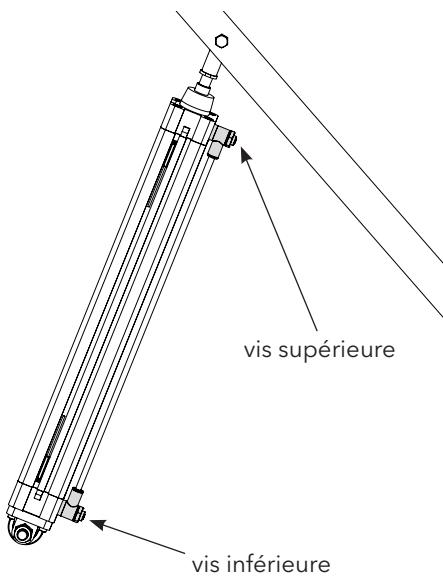
3. Placez-vous derrière la machine et serrez le raccord à vis de droite comme illustré.



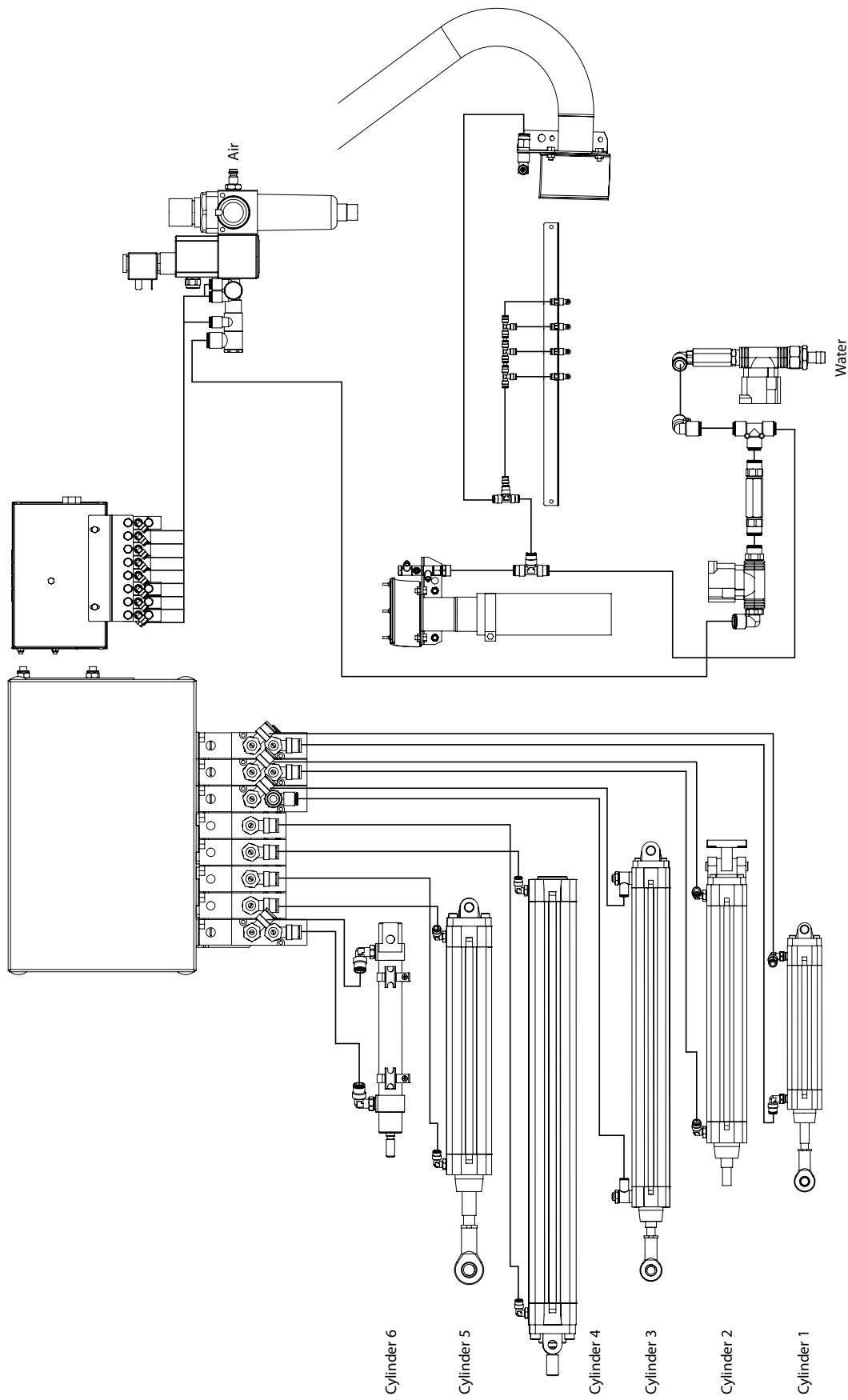
4. Soulevez le raccord à vis de gauche de 2 à 3 mm et serrez les vis.



5. La vis supérieure de la vanne doit être serrée complètement puis desserrée sur 1,5 tour. La vis inférieure de la vanne doit être serrée complètement puis desserrée sur 6 tours.

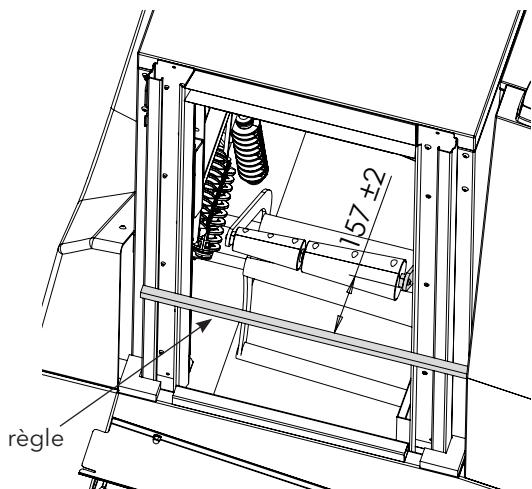


17. Schéma du circuit pneumatique

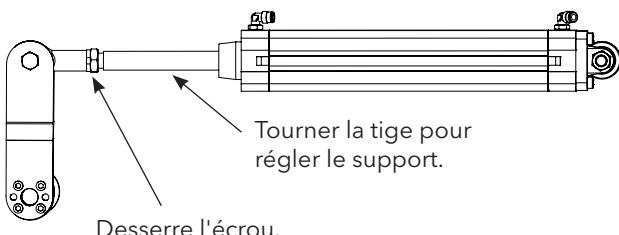


18. Réglage du support intérieur

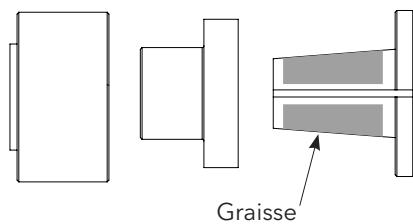
- Placez le support inférieur en position extérieure et à l'aide d'un ustensile métallique droit, type règle, mesurez l'espace entre la règle et le support intérieur. Voir illustration. La distance entre les deux doit être de 157 ± 2 mm.



- Si la mesure n'est pas correcte, desserrez l'écrou sur la tige du vérin, voir illustration ci-dessous. Puis essayez de régler le support intérieur en tournant la tige du vérin.

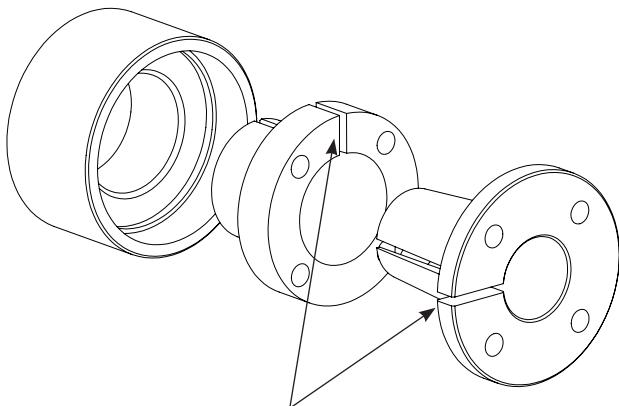


- Vérifiez à nouveau les mesures. S'il est impossible de régler le support pour que la mesure soit de 157 ± 2 mm dans l'étape 2, tournez la tige du vérin dans la position initiale et serrez à nouveau l'écrou.
- Desserrez les quatre vis et tirez le raccord.
- Nettoyez soigneusement l'arbre pour qu'il soit dépourvu de toute graisse.
- Démontez le raccord et nettoyez toutes les pièces.

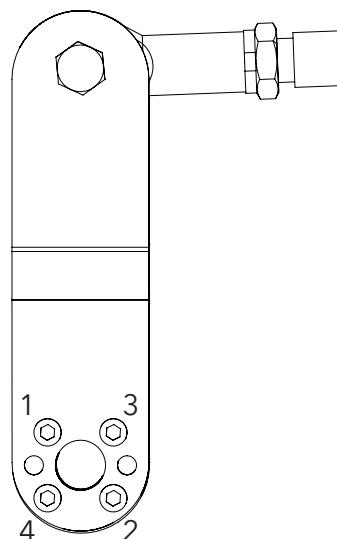


- Mettez une PETITE quantité de graisse sur la surface, restez 3 mm à l'intérieur du bord.
- Mettez de la graisse sur le filetage.

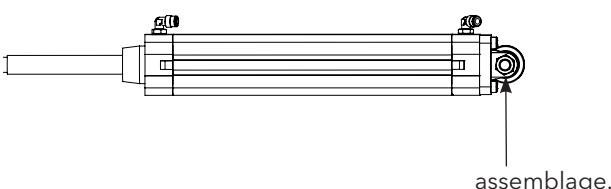
- Assemblez le raccord, notez la direction des pièces.



- Placez le support intérieur en position extérieure et mesurez la distance, 157 ± 2 mm avant de serrer les quatre vis. Les vis doivent être serrées dans l'ordre à 14 Nm.

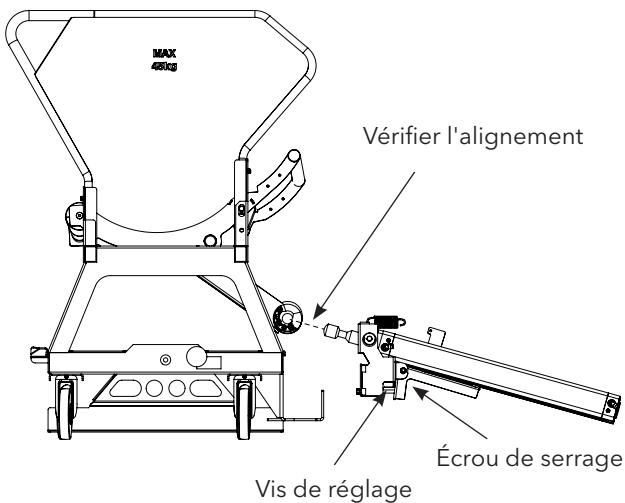


- Vérifiez que l'assemblage entre le vérin et le boulon est graissé et peut bouger de façon fluide. Sinon, il peut se bloquer.



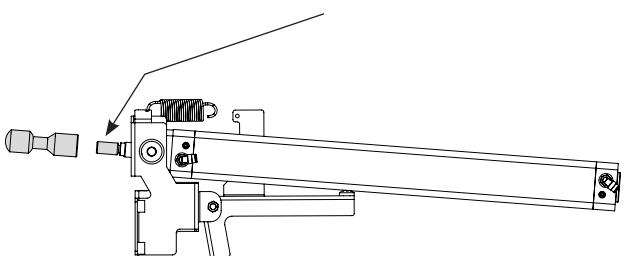
19. Réglage de la hauteur du support extérieur du vérin 4

1. Connectez le charriot.
2. Ouvrez l'**AUTOTEST**, voir chapitre 28.
3. Faites fonctionner le vérin 4 et vérifiez qu'il atteint le centre du guide.
4. Si nécessaire, réglez la hauteur à l'aide de la vis de réglage.



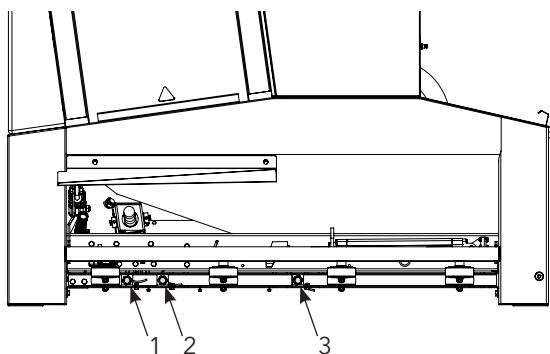
20. Replacement de la tête pivotante sur vérin 4

Visez la tête pivotante avec de la pâte Loctite 222.

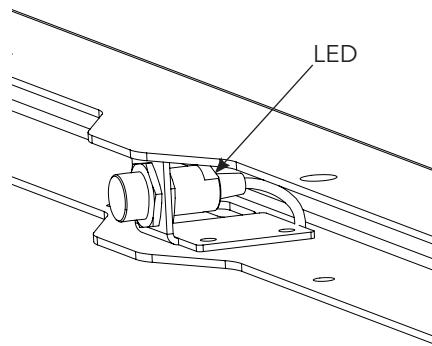


21. Capteurs de charriot inductifs

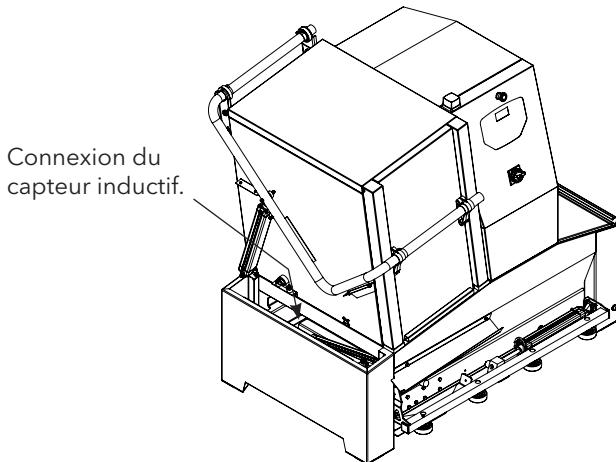
La machine comprend 3 capteurs inductifs qui envoient des signaux sur le positionnement des charriots pendant le cycle de lavage.



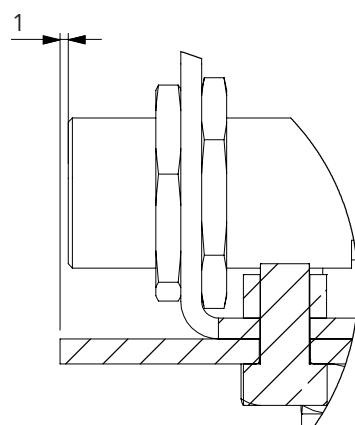
Lorsqu'un charriot détecte du métal, il envoie un signal et la LED située derrière le capteur s'allume.



Si la LED derrière le capteur reste allumée, le capteur est défectueux et doit être remplacé. Le câble est branché sur le côté gauche de la machine (voir figure ci-dessous).



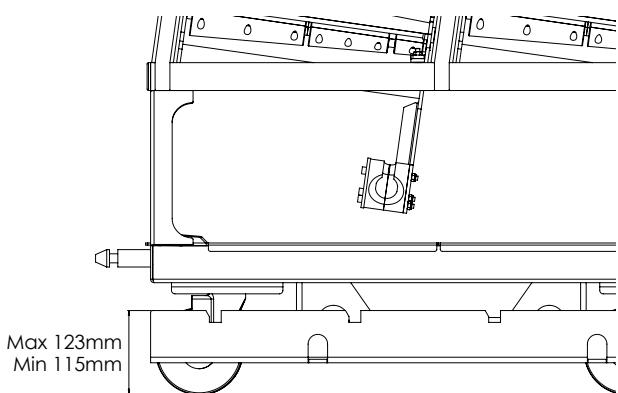
Remarque : le capteur doit être installé à 1 mm à l'intérieur du bord de protection.



Pour vérifier que les capteurs fonctionnent, effectuez un Autotest. Voir chapitre 28.

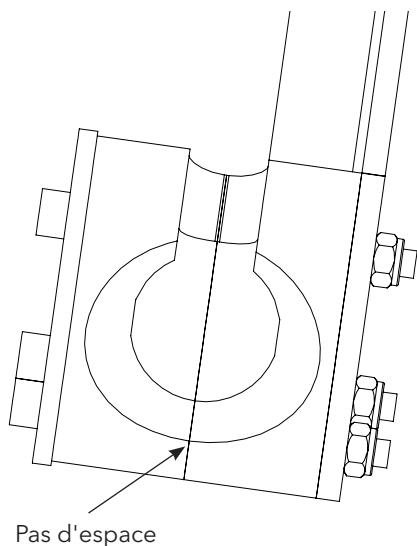
22. Mesure de contrôle du chariot

Placez le chariot sur un sol plan et mesurez du sol jusqu'au haut du guide sur le chariot.



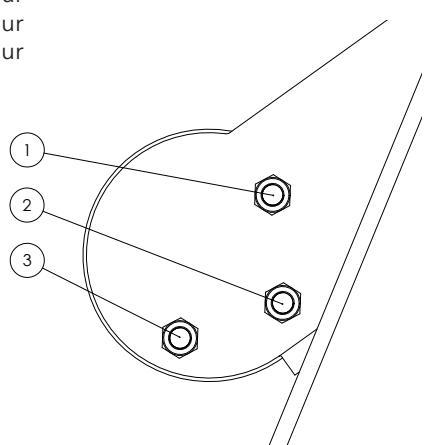
23. Installation du palier-bascule sur le chariot

- Installez et serrez légèrement les écrous pour vous assurer qu'il n'y a aucun espace entre les deux pièces d'appui.



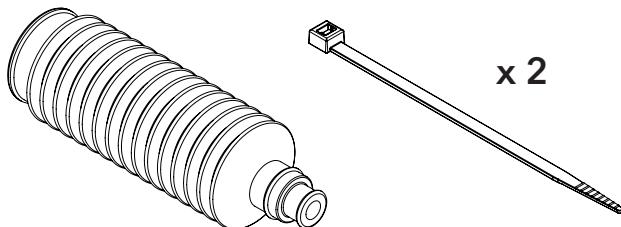
- Serrez les écrous dans l'ordre suivant :

Écrou 1 : $\frac{1}{4}$ tour
Écrou 3 : $\frac{1}{4}$ tour
Écrou 2 : $\frac{1}{4}$ tour



24. Remplacement de la protection de l'arbre vér. 6.

24.1 Composants



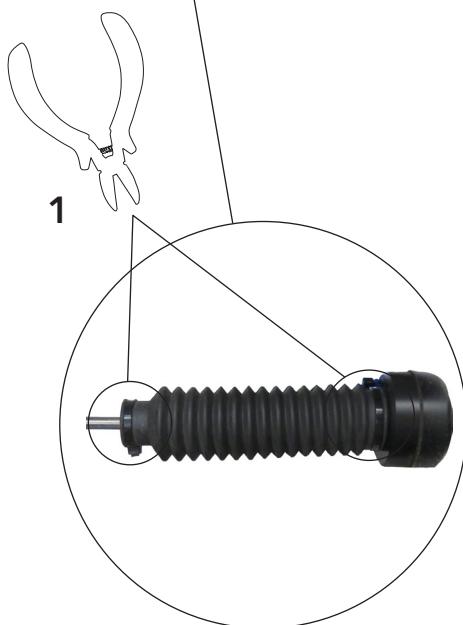
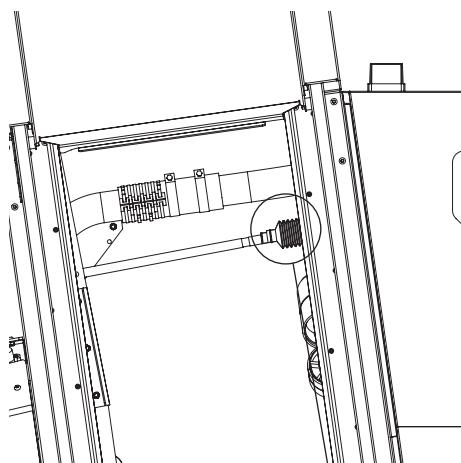
24.2 Outils



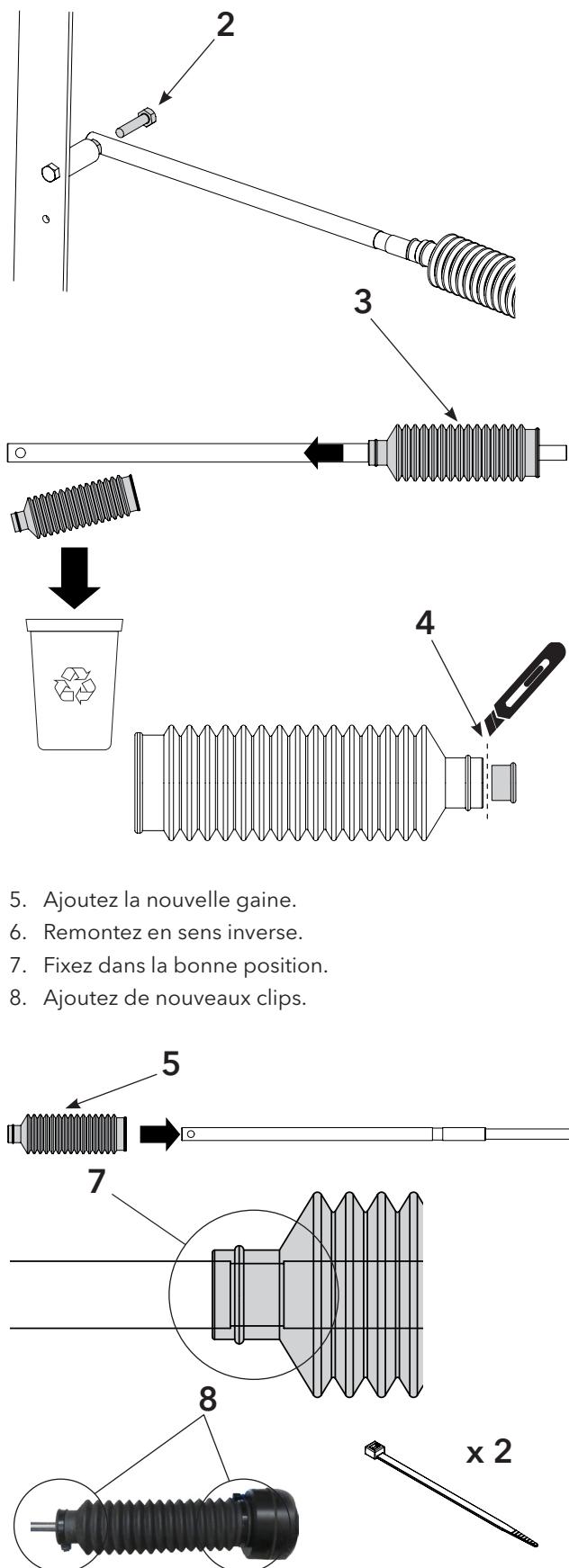
13 mm

REMARQUE : Commencez les instructions par le Chapitre 1 - Consignes de sécurité

- Retirez les clips.



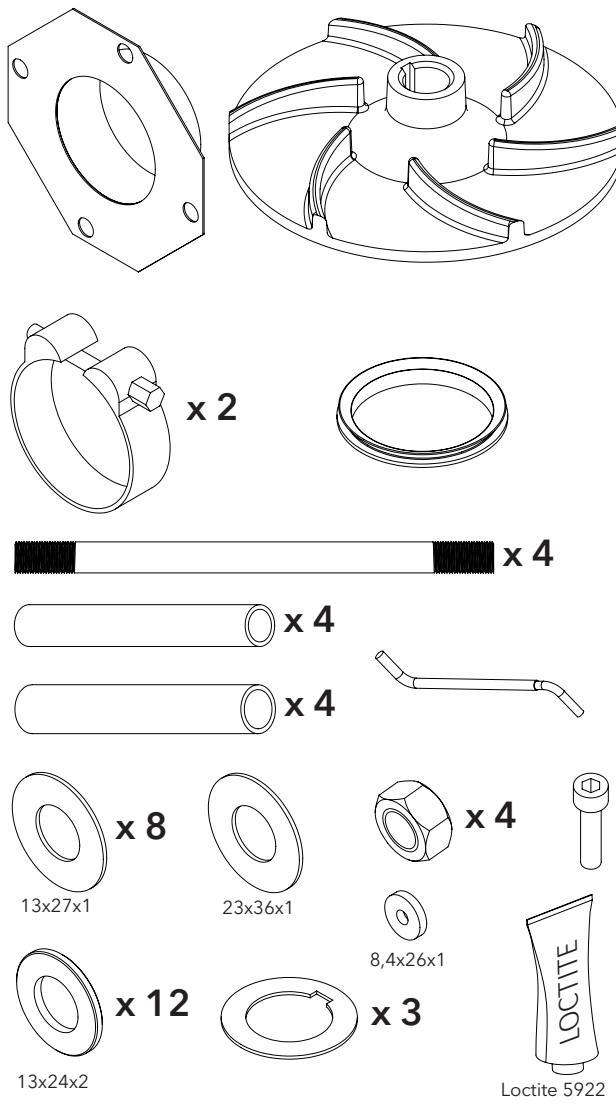
2. Retirez la vis.
3. Retirez et jetez la gaine.
4. Coupez le haut de la nouvelle gaine.



5. Ajoutez la nouvelle gaine.
6. Remontez en sens inverse.
7. Fixez dans la bonne position.
8. Ajoutez de nouveaux clips.

25. Remplacement de la pompe

25.1 Composants



IMPORTANT :

x 2 Non inclus :
Commandez la pièce de
rechange : R2892

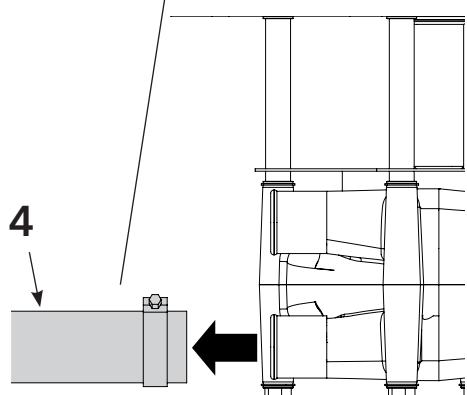
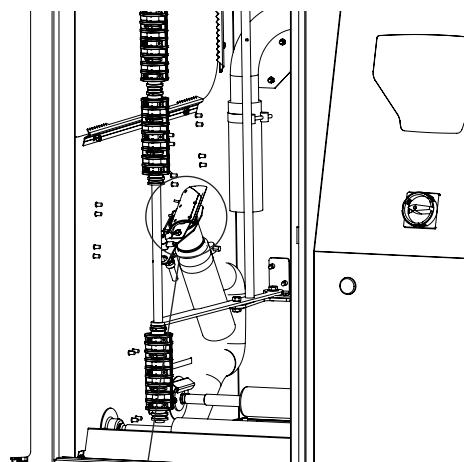
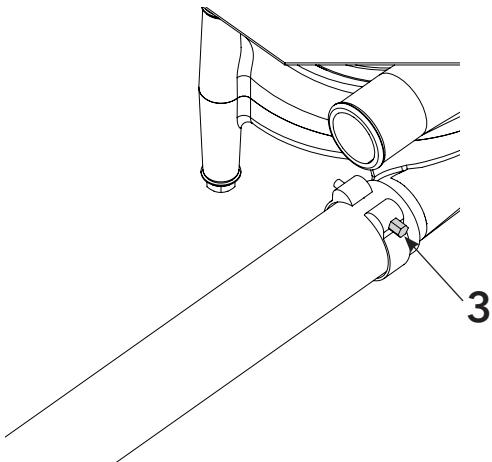
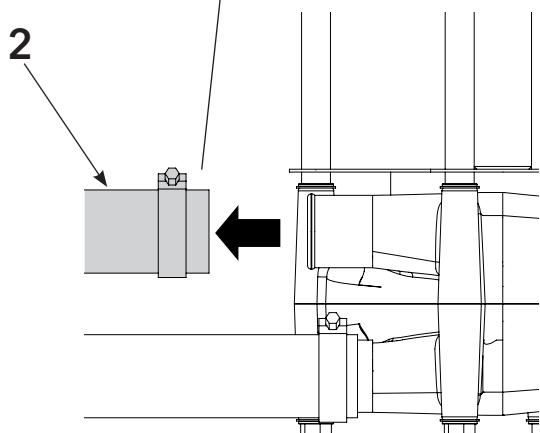
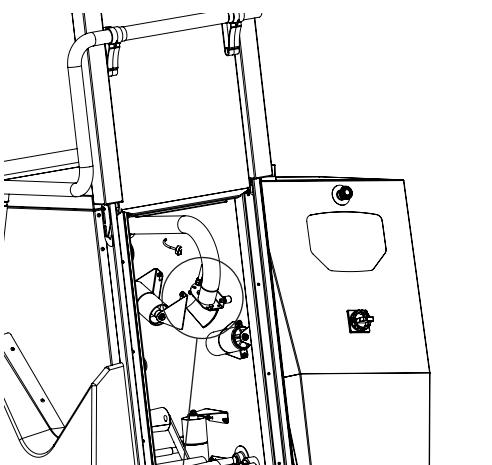
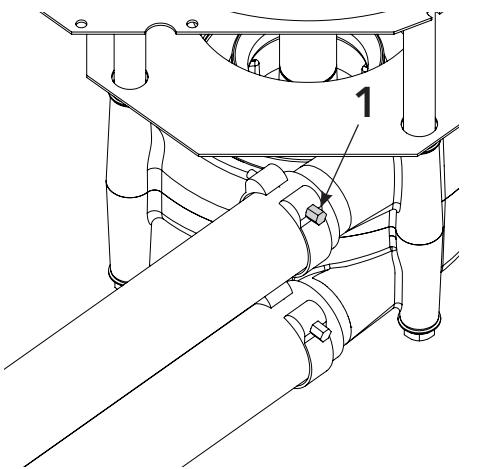
REM.: Loctite 222 et 8009 non inclus

25.2 Outils

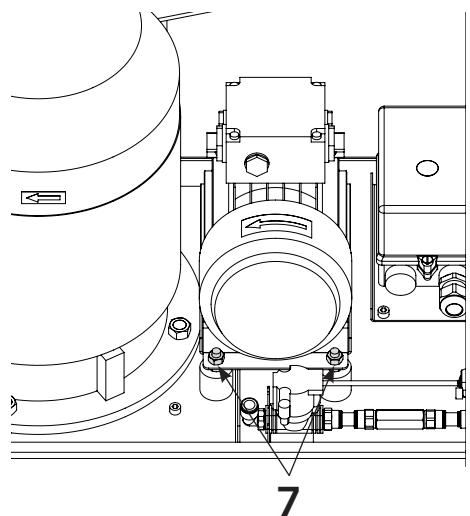
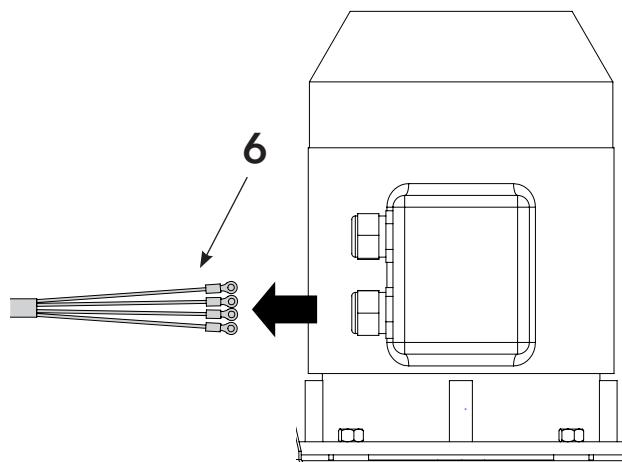
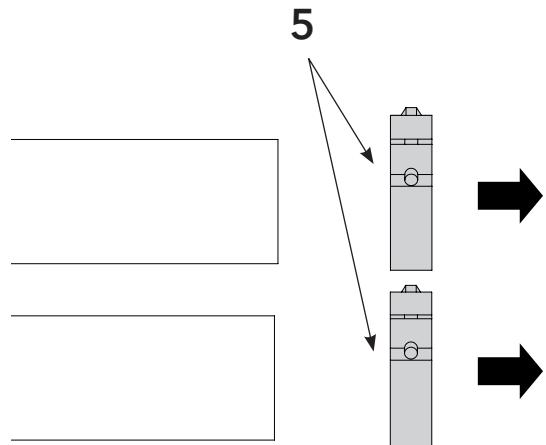


REMARQUE : Commencez les instructions par le Chapitre 1 - Consignes de sécurité.

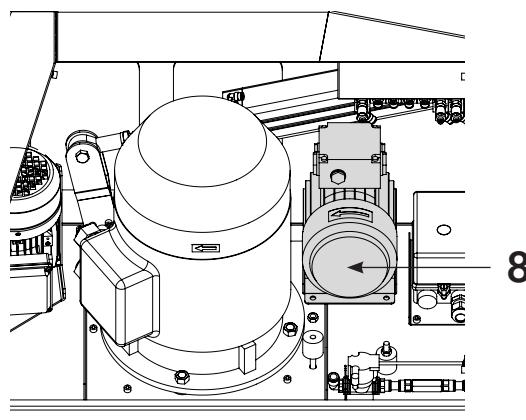
1. Desserrez la vis.
2. Retirez le flexible.
3. Desserrez la vis.
4. Retirez le flexible.



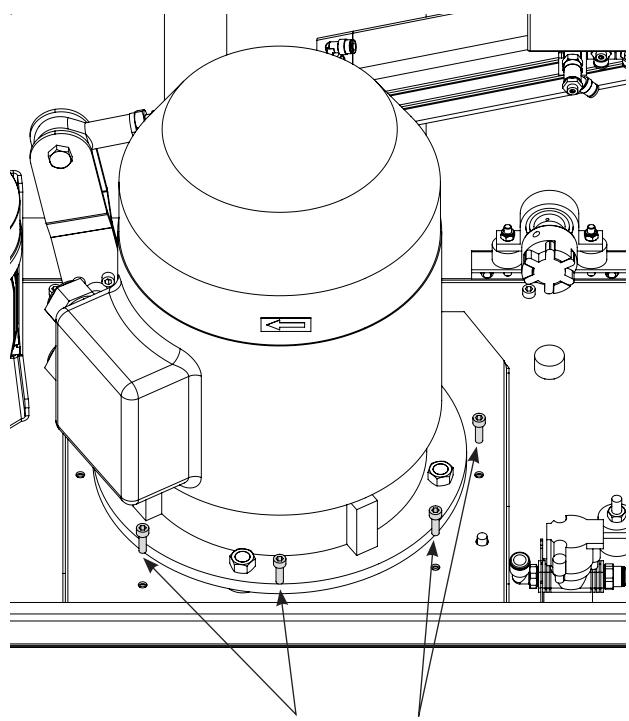
5. Jetez les bagues.
6. Débranchez le cordon d'alimentation. Pour le montage, reportez-vous au chapitre 9.
7. Retirez les écrous.



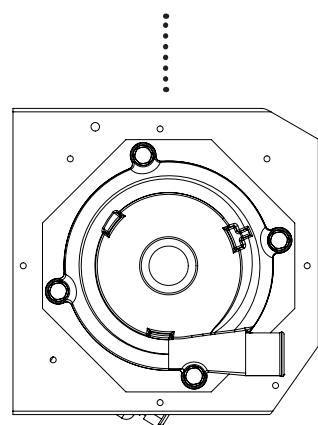
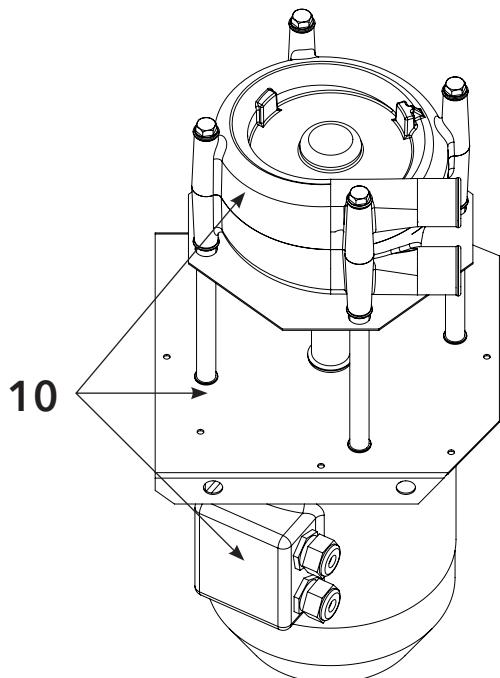
8. Déposez le moteur.



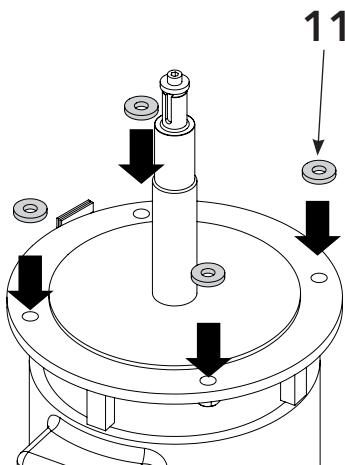
9. Retirez les vis.



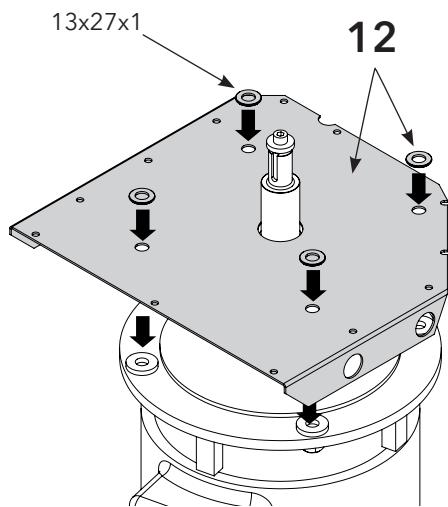
10. Avant de démonter l'ancienne pompe : Notez l'orientation des orifices de refoulement de la pompe et les branchements du boîtier de connexion du moteur de façon à ce que la nouvelle pompe soit installée dans la bonne position.



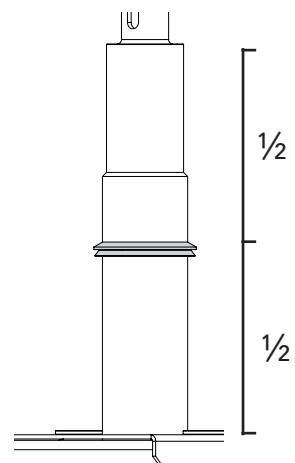
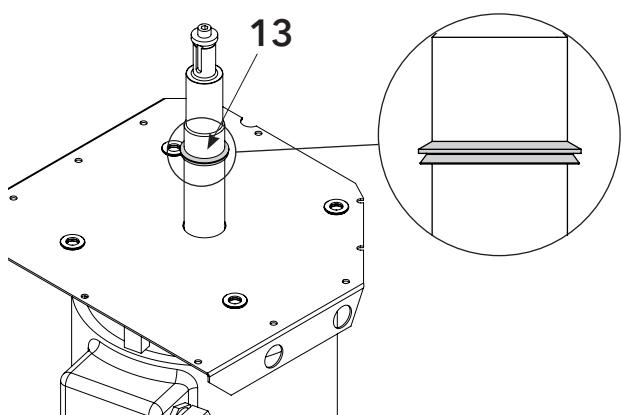
11. Placez les entretoises sur le moteur de la pompe (la pièce détachée **n'est pas** livrée avec de nouvelles entretoises).

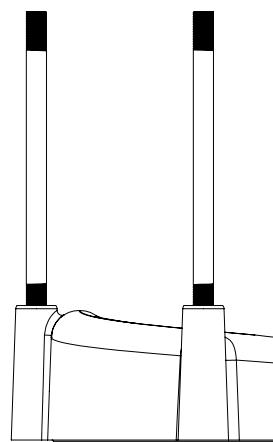
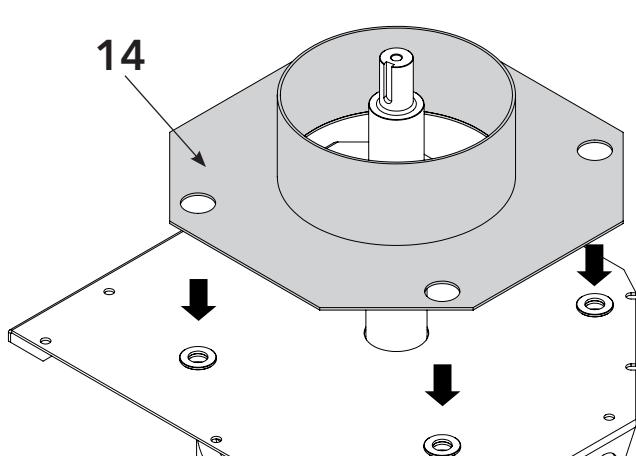


12. Placez la plaque métallique et les bagues en haut.

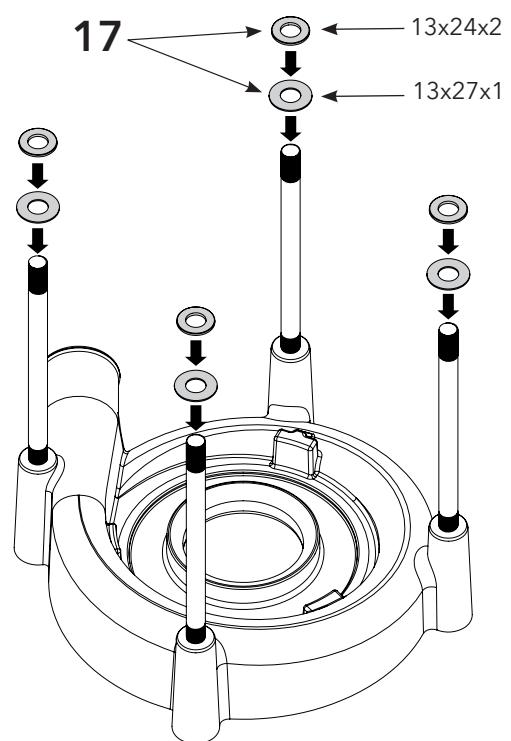
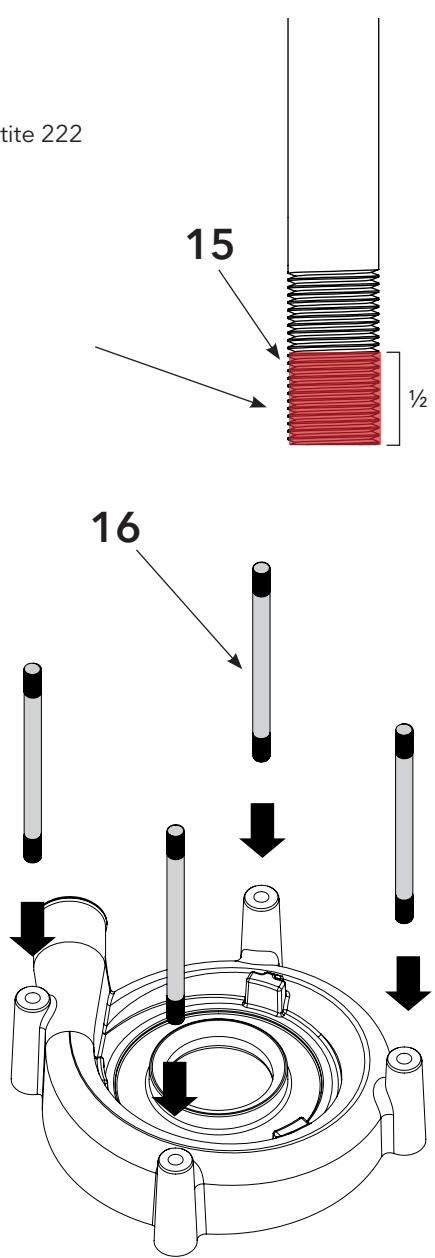


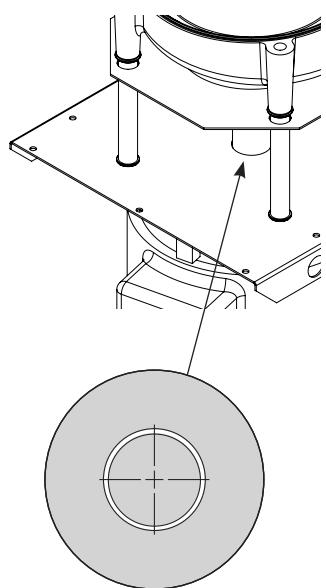
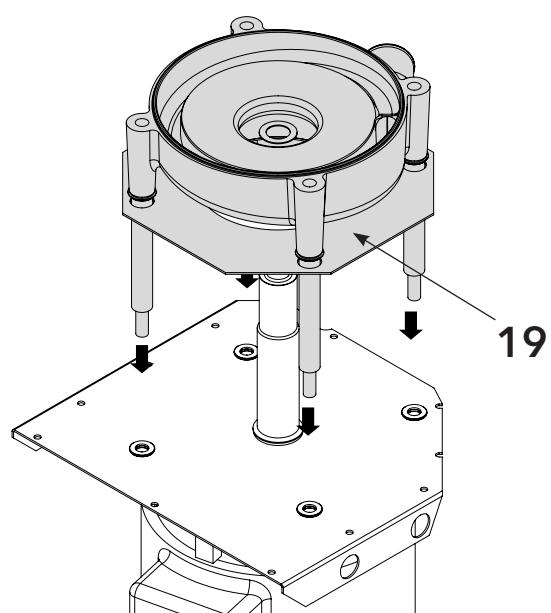
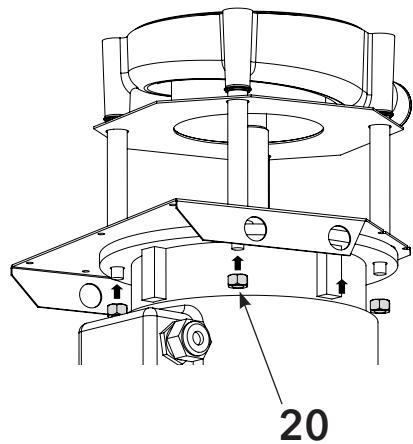
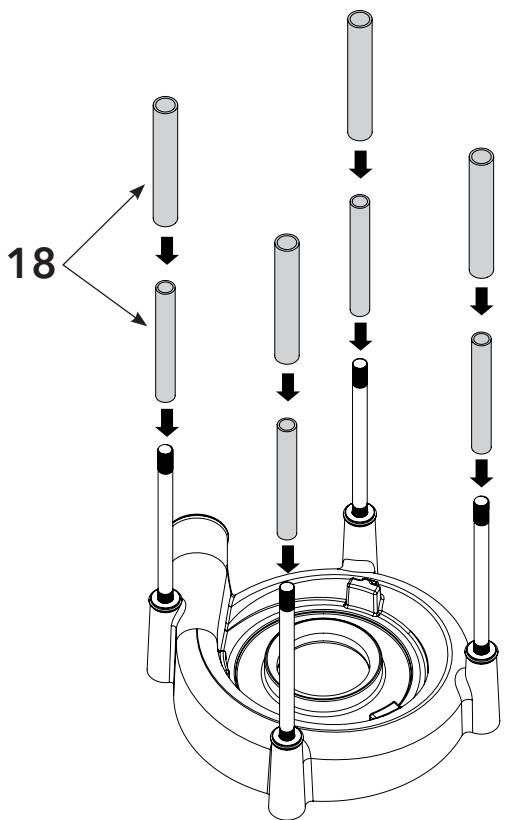
13. Placez la bague en caoutchouc comme illustré, à mi-hauteur du vérin.

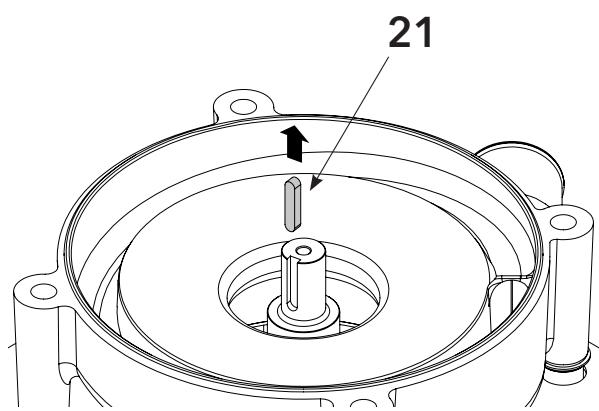




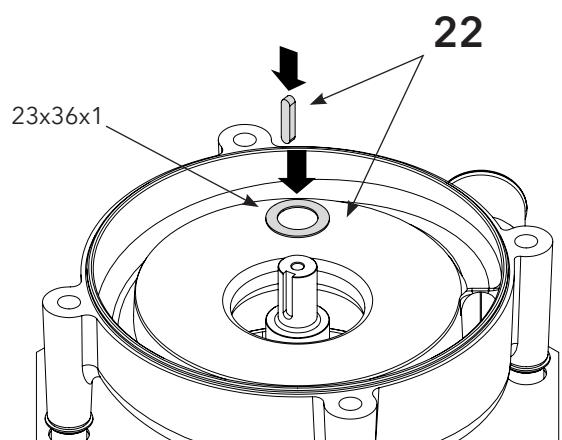
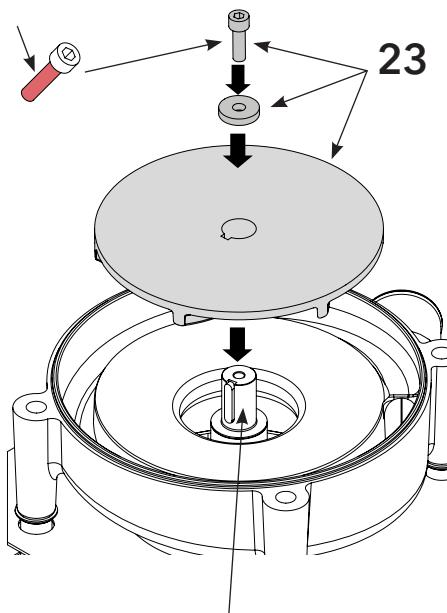
Loctite 222



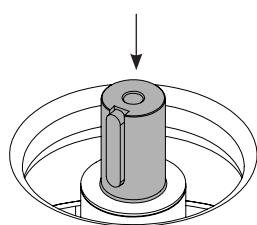




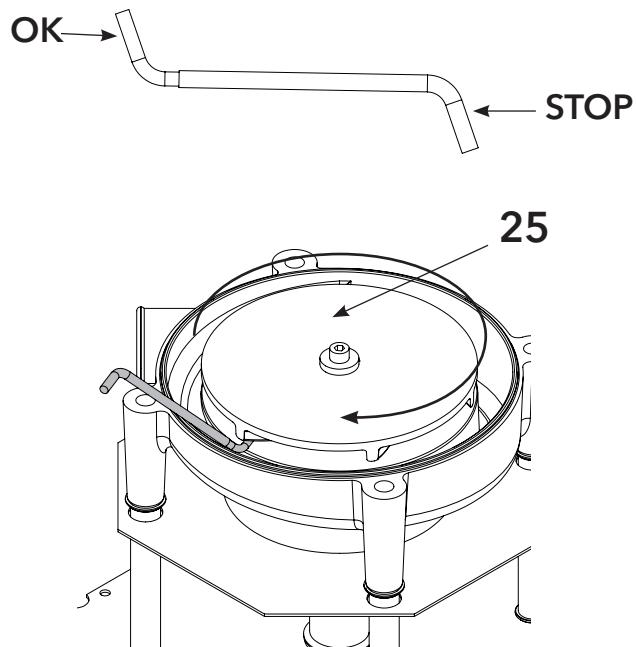
Loctite 222



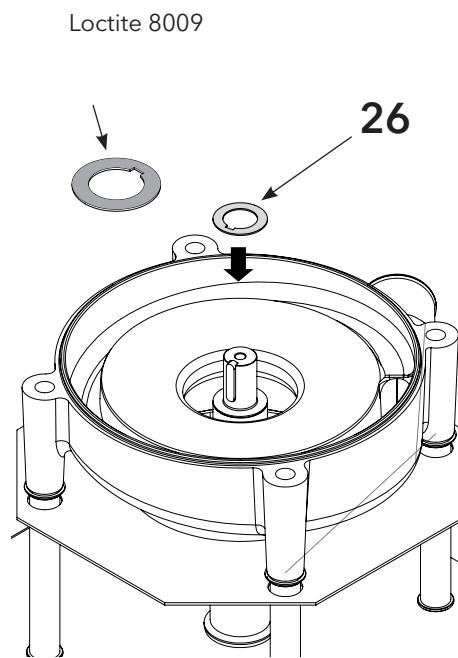
Loctite 8009



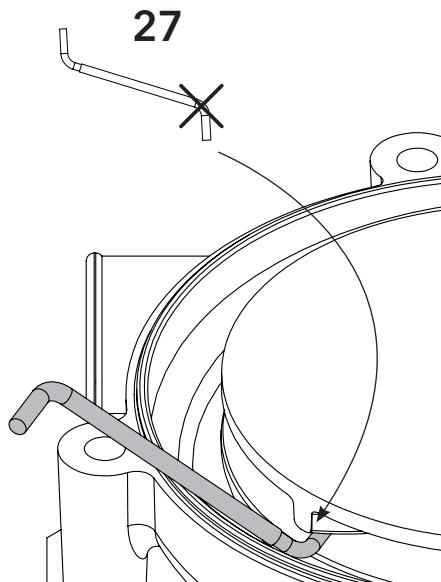
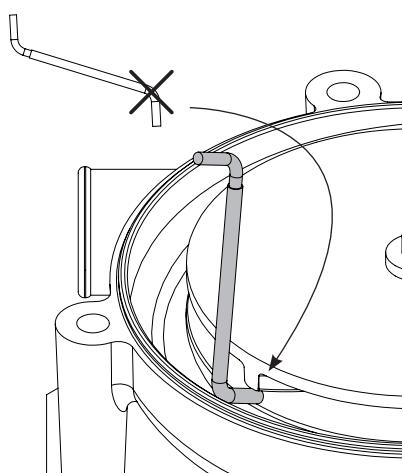
25. Le "côté OK" doit passer librement, le "côté STOP" ne doit passer nulle part.



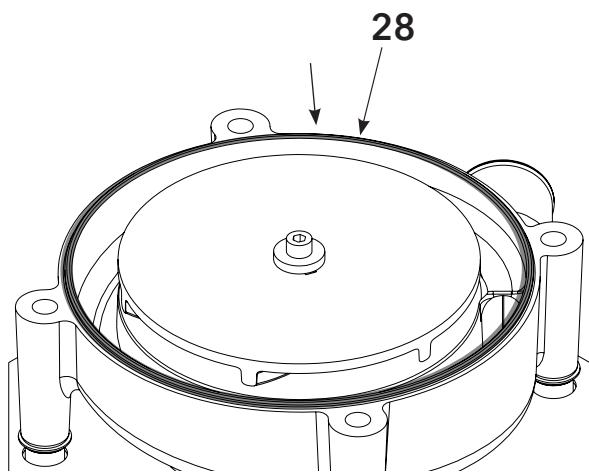
26. Si nécessaire, retirez la roue et ajoutez des cales comme illustré.



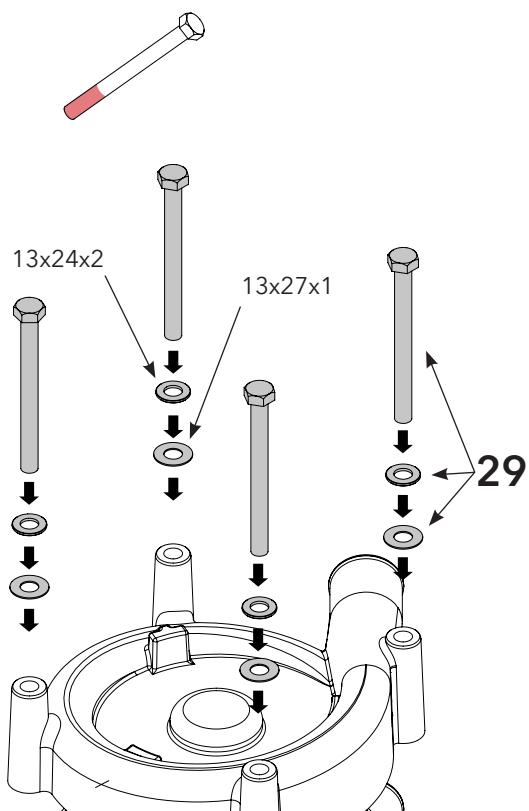
27. Replacez la roue et (re)vérifiez la distance. Le côté OK doit passer sous toutes les pales de la roue.



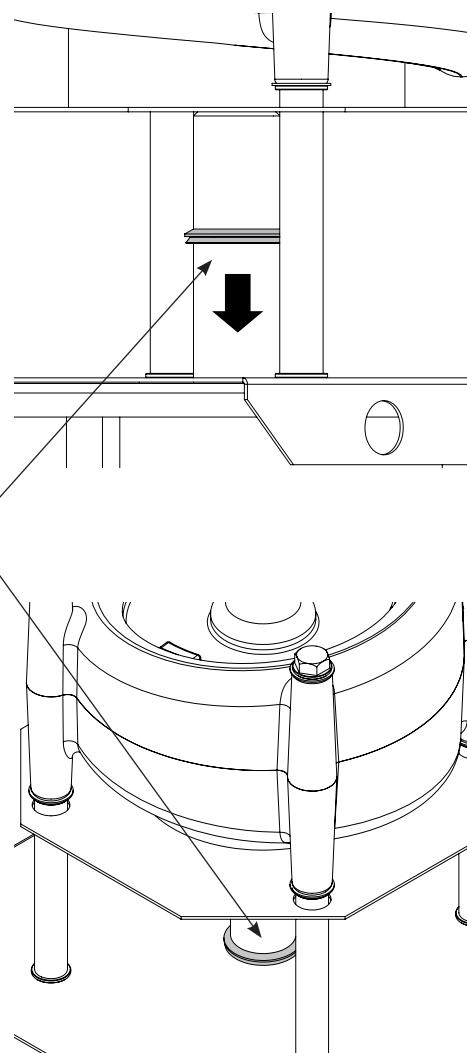
Loctite 5922



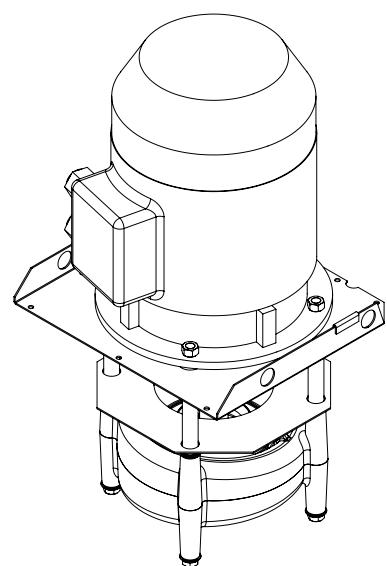
Loctite 222



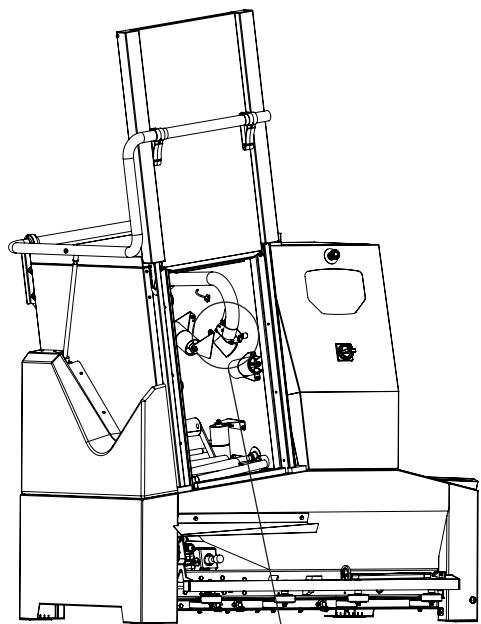
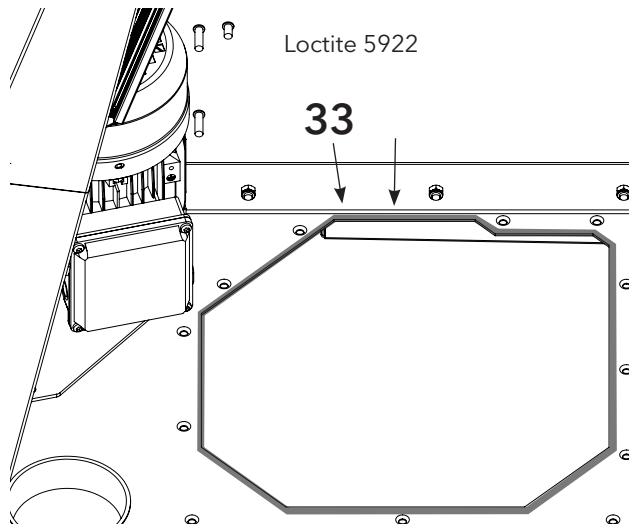
30



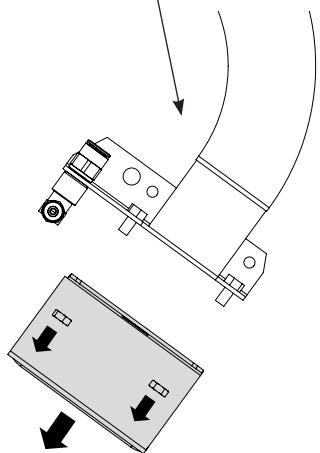
31. Terminé et prêt à monter sur le lave-roues.
32. Remontez en sens inverse (étapes 9 à 1).



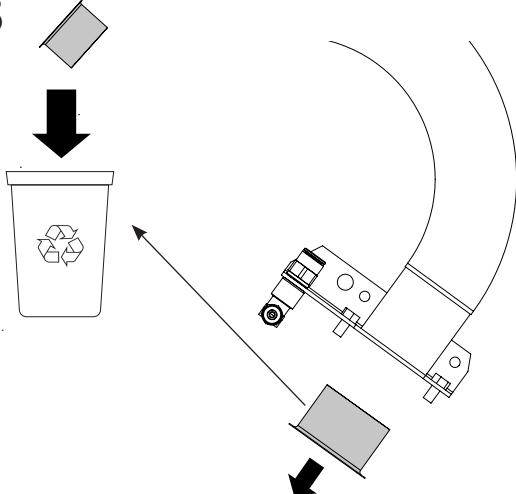
33. Remarque : étape 9, ajoutez du Loctite avant de monter le moteur de la pompe.



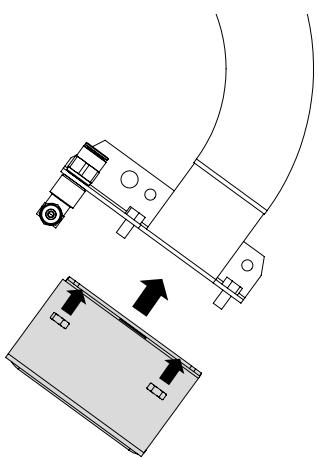
34



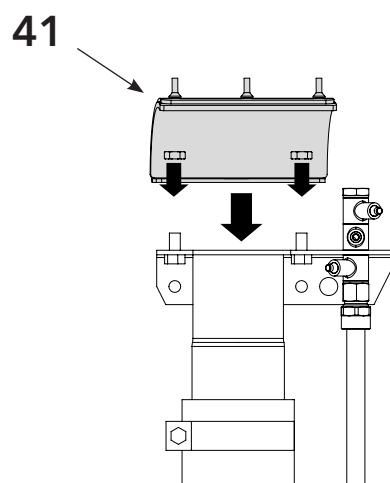
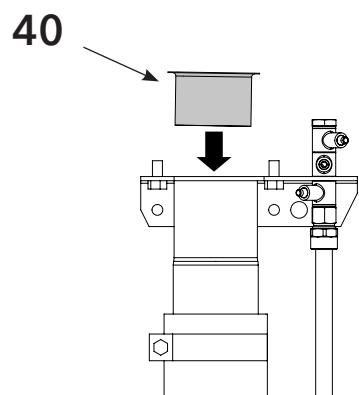
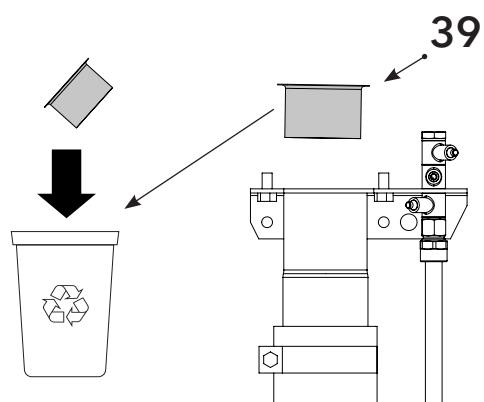
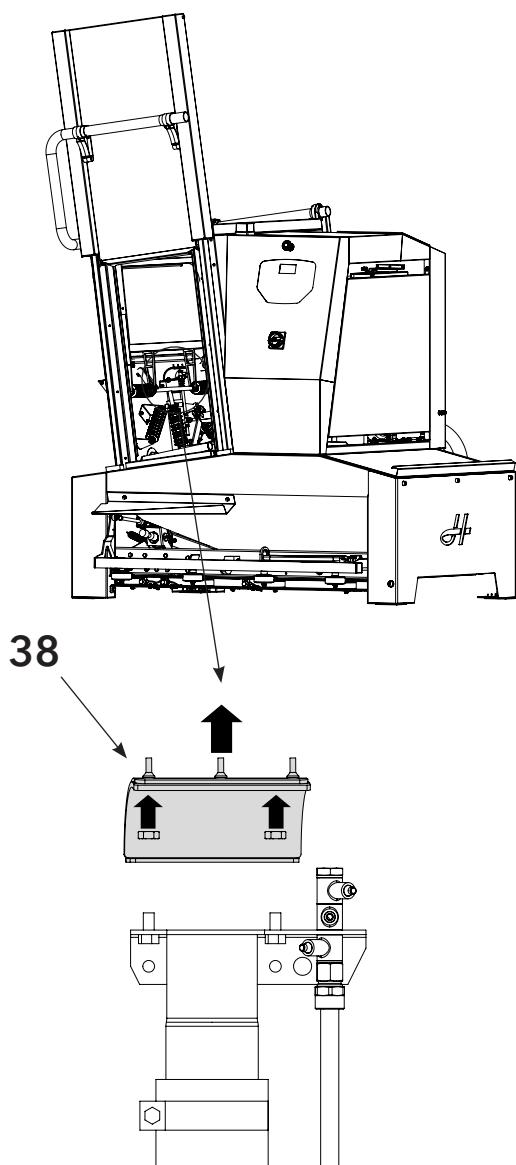
35



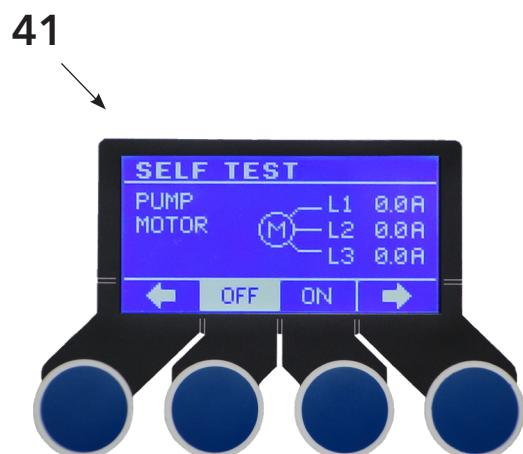
36



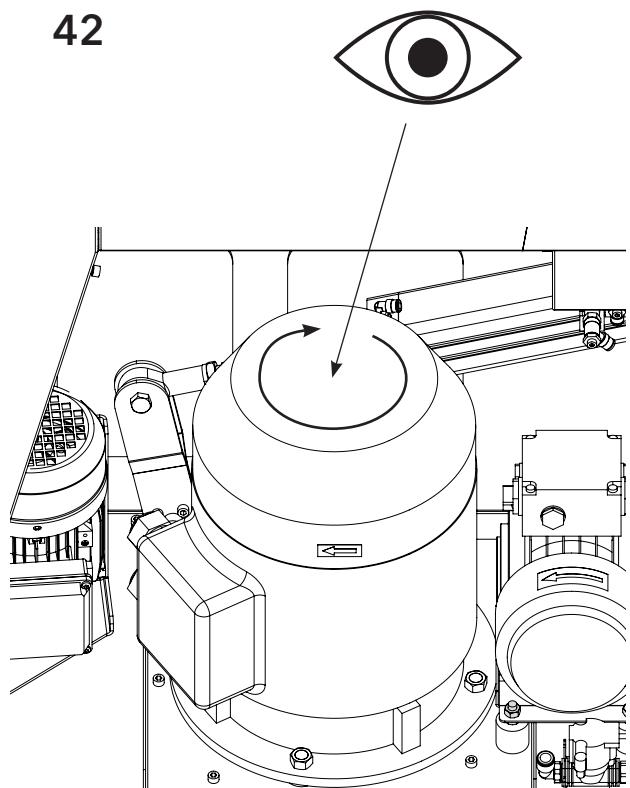
37



8. Autotest/....../MOTEUR POMPE/ON

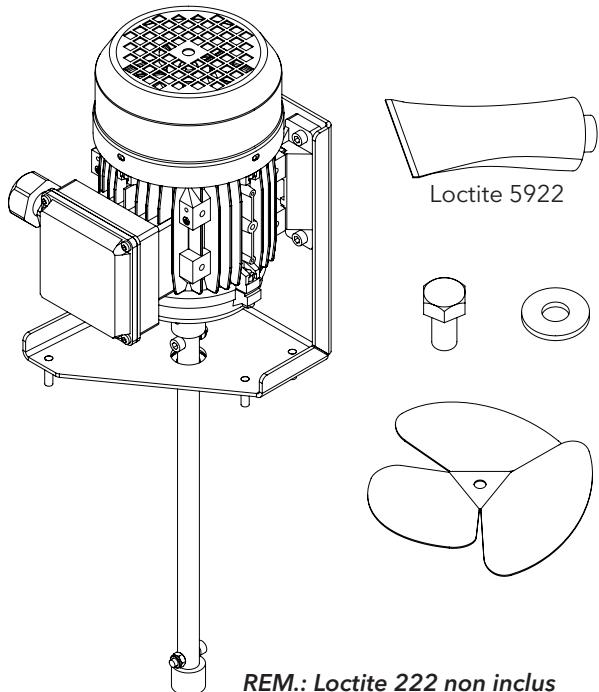


42



26. Installation du moteur du mélangeur

26.1 Composants

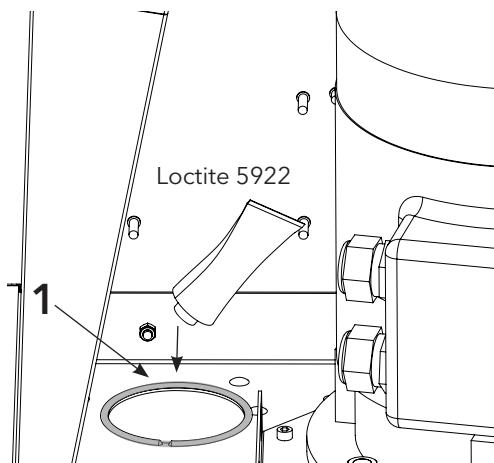


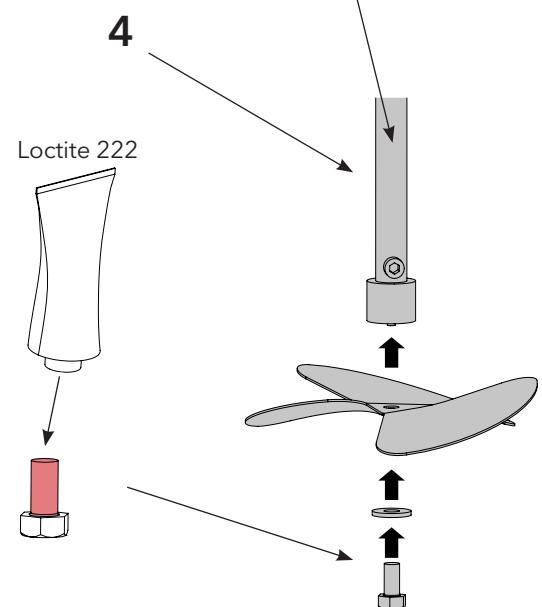
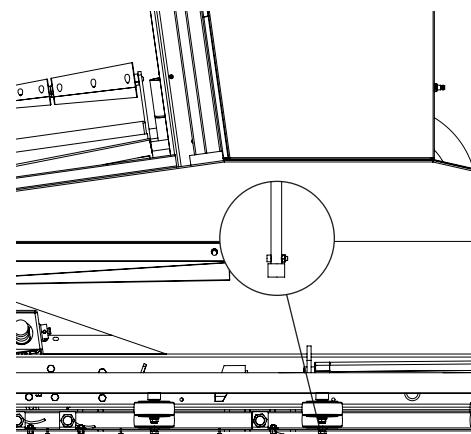
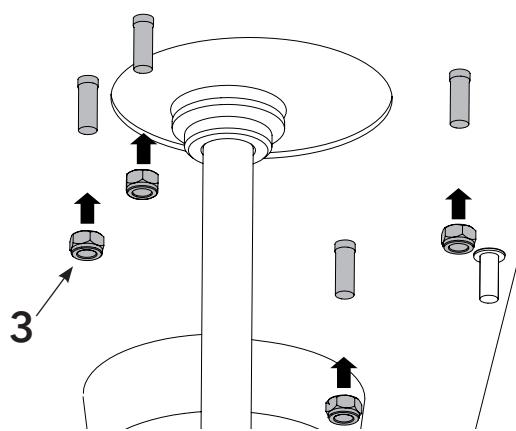
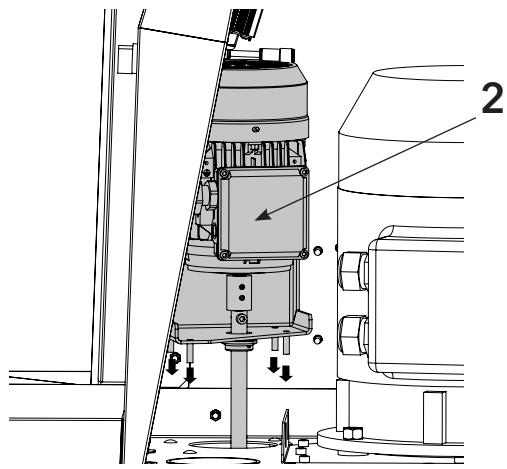
REM.: Loctite 222 non inclus

26.2. Outils

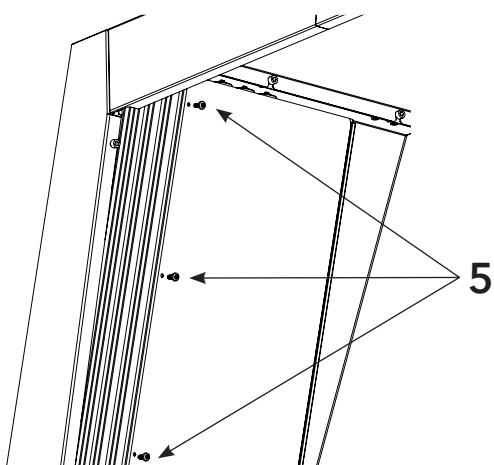


REMARQUE : Commencez les instructions par le Chapitre 1 - Consignes de sécurité.

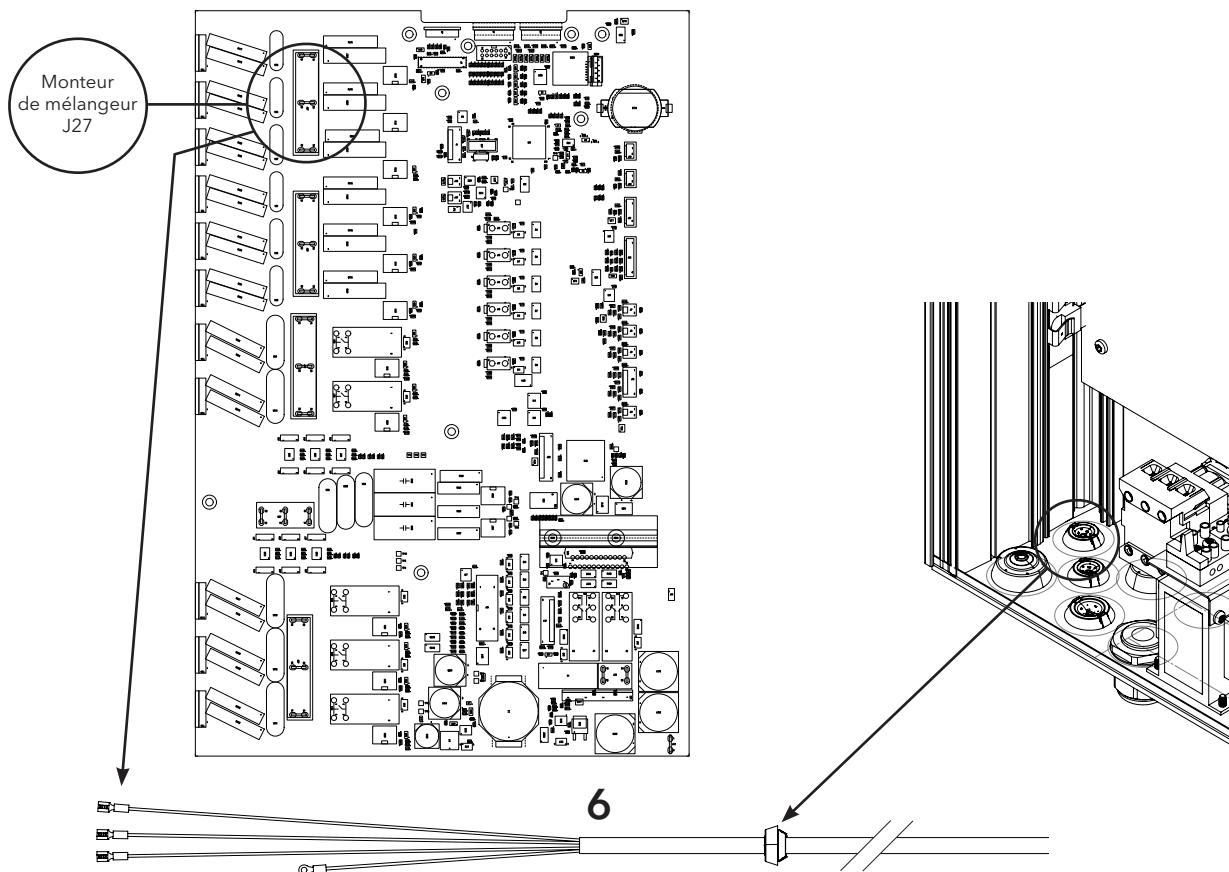




5. Retirez les vis et le capot.

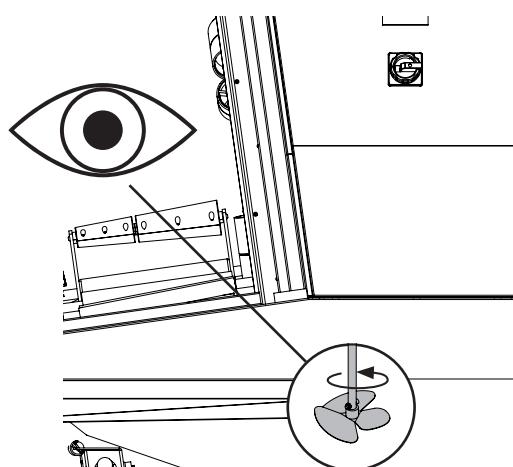
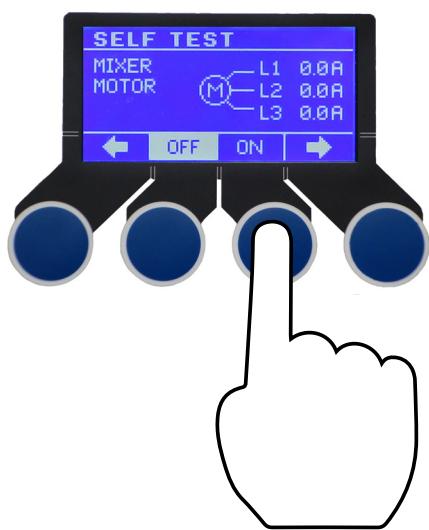


6. Raccordez selon le schéma de câblage du chapitre 9.



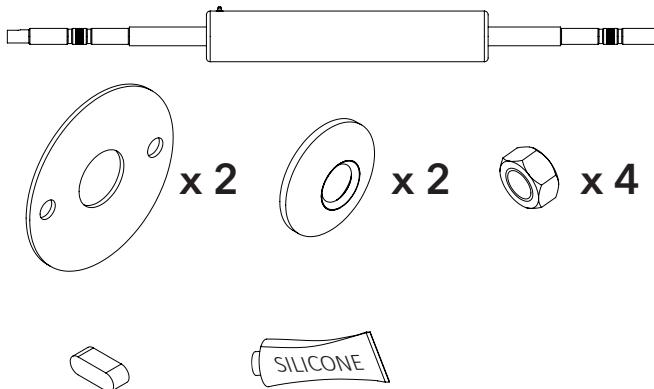
7. Effectuez le chapitre 6 et sélectionnez OUI dans l'option de moteur de mélangeur.

/8. Autotest/...../MOTOR MÉLANGEUR/ON



27. Remplacement de l'arbre d'entraînement

27.1 Composants

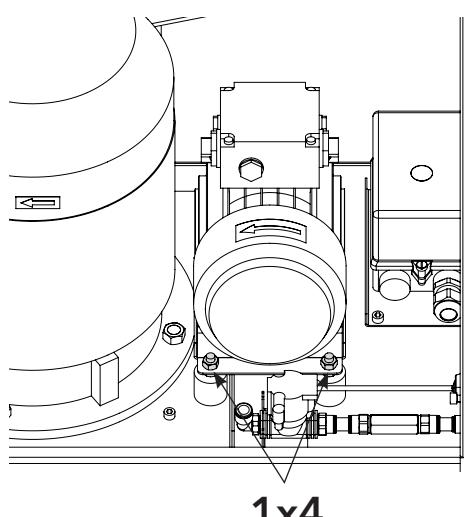


27.2 Outils

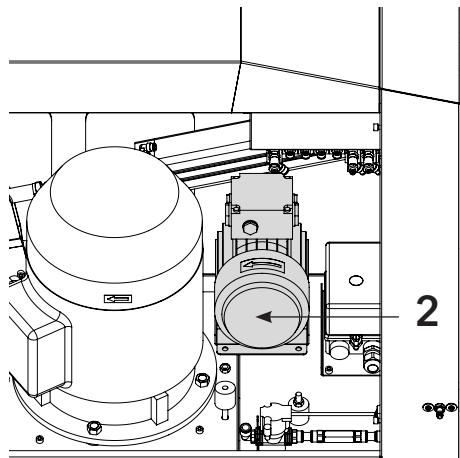


REMARQUE : Commencez les instructions par le Chapitre 1 - Consignes de sécurité.

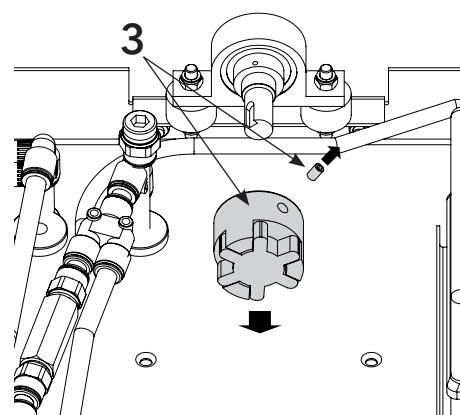
1. Retirez les écrous.



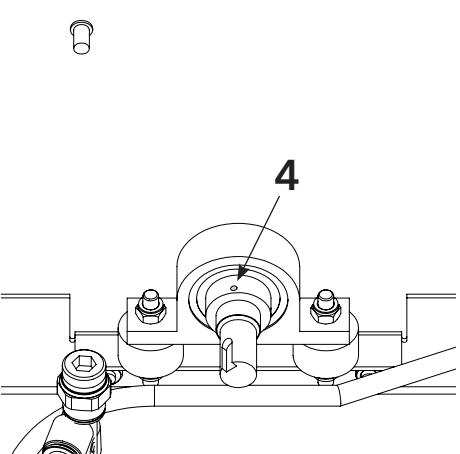
2. Déposez le moteur.

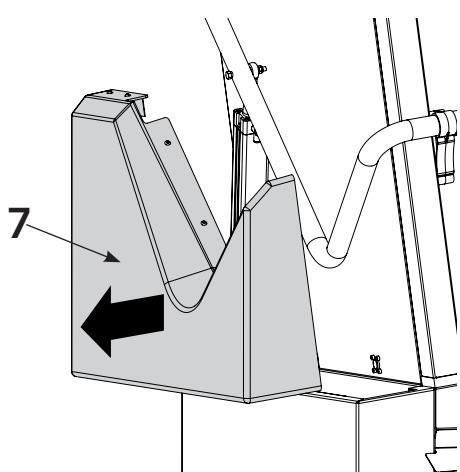
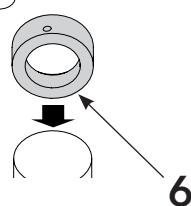
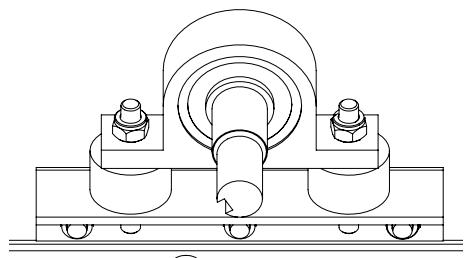
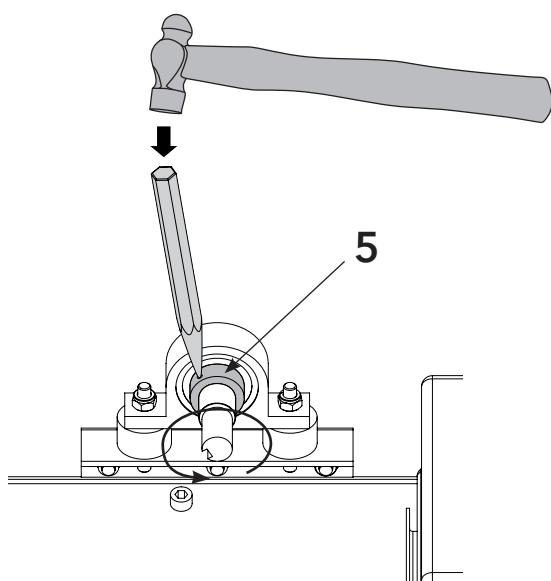


3. Desserrez la vis.

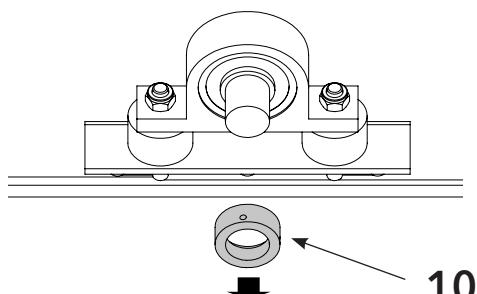
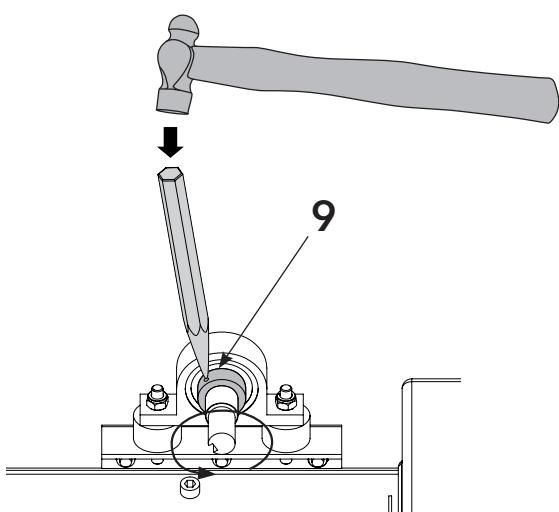
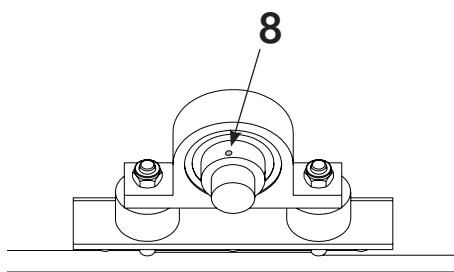


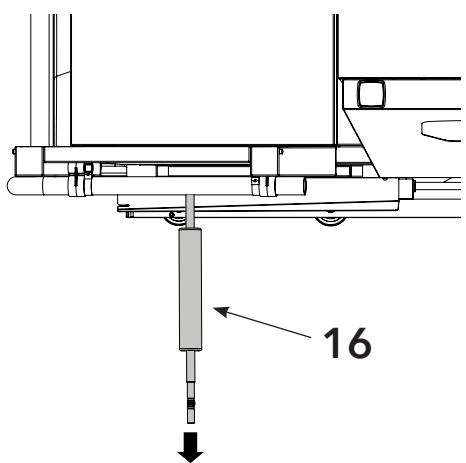
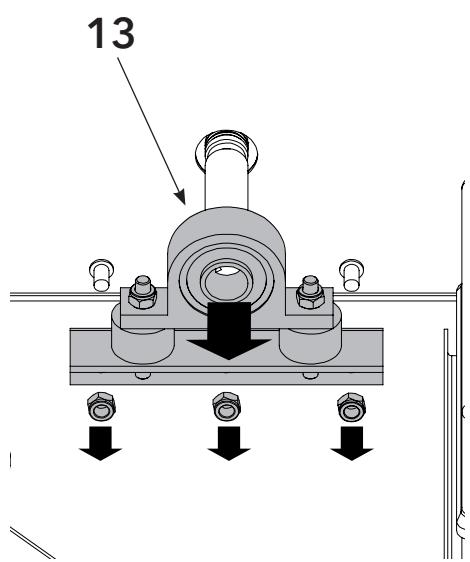
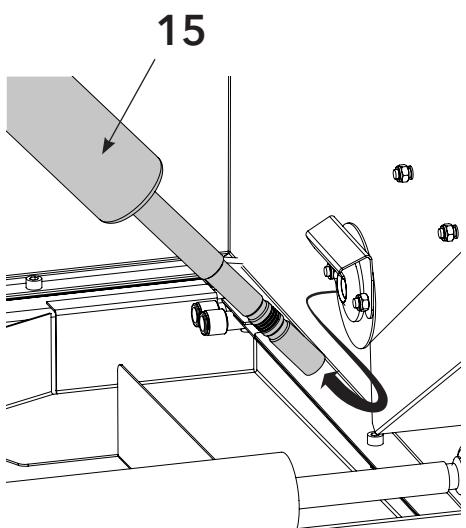
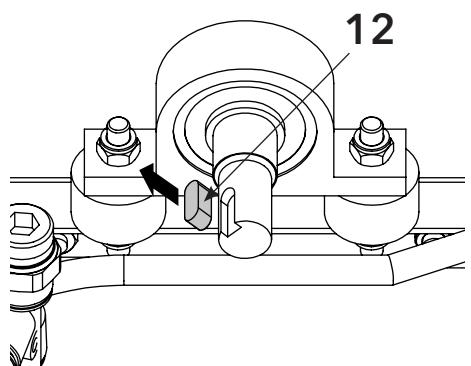
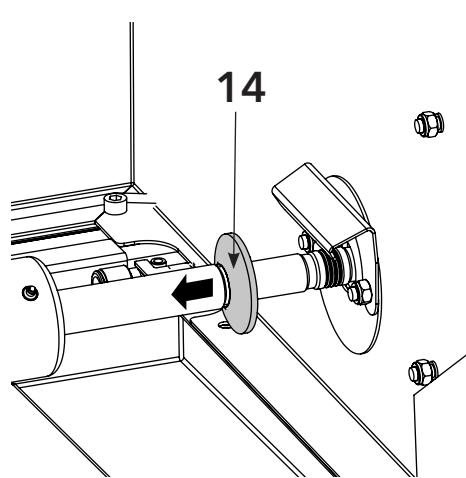
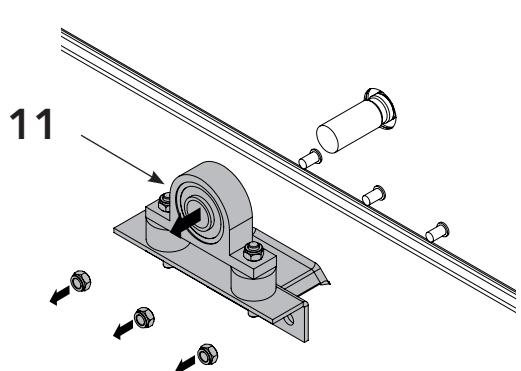
4. Desserrez la vis.

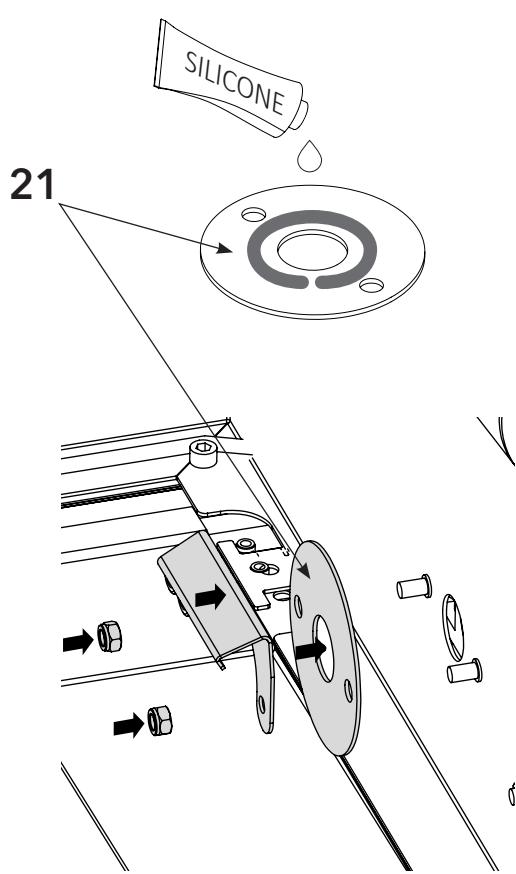
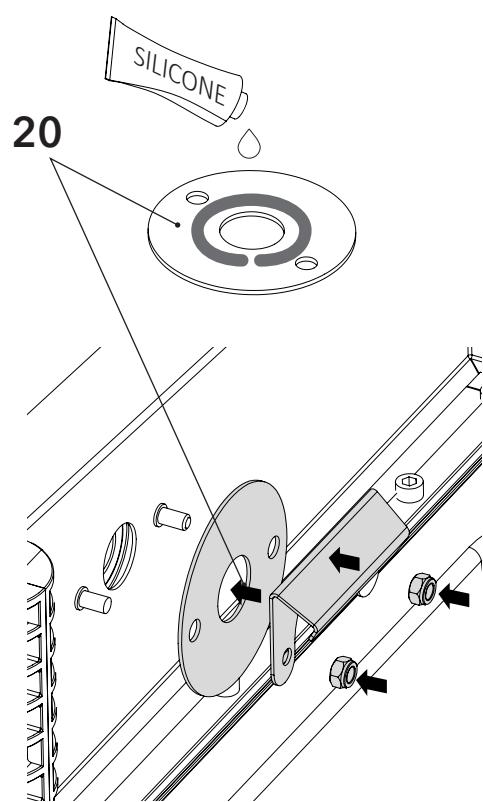
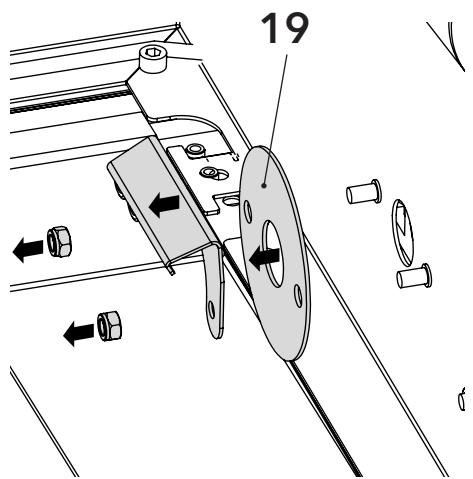
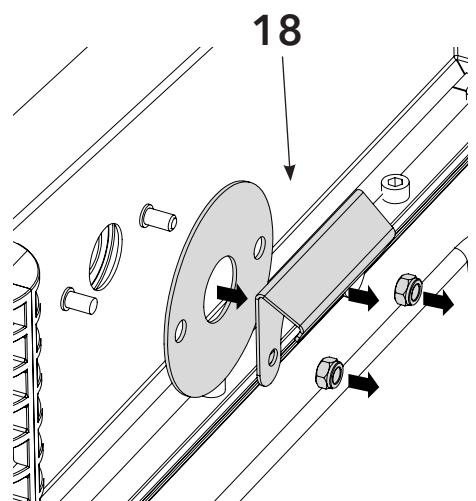
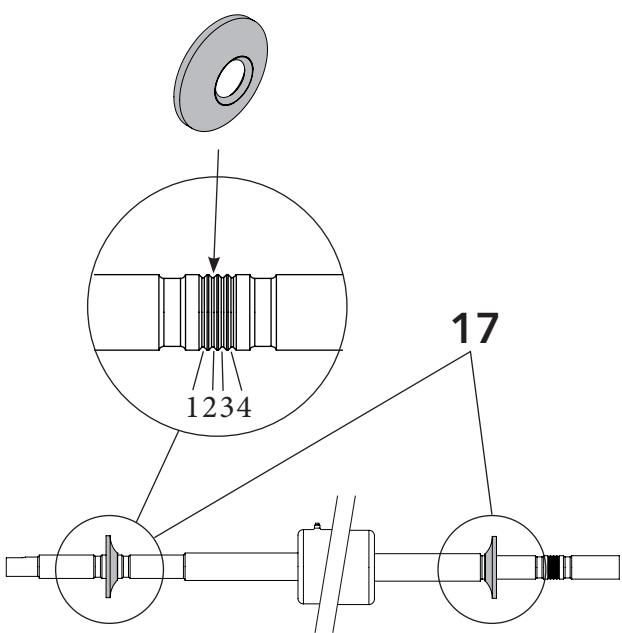




8. Desserrez la vis.





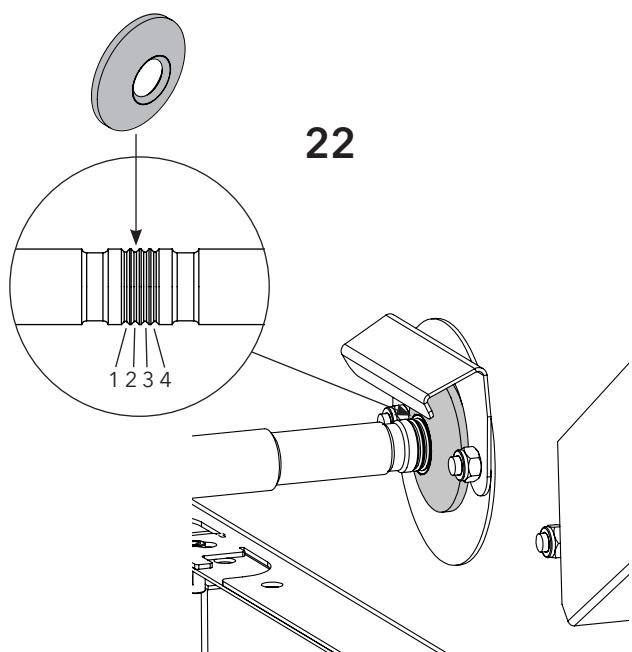


22. Remontez en sens inverse (étapes 16 à 1).

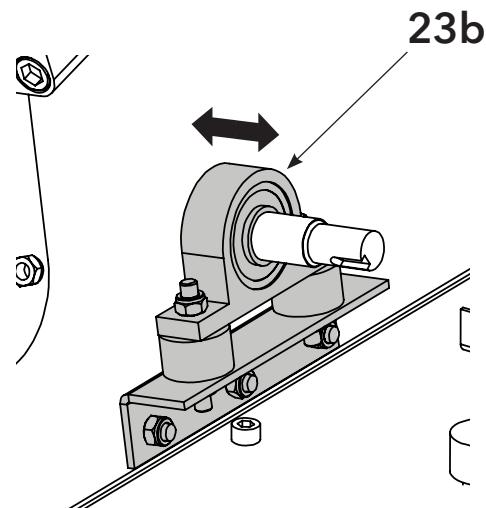
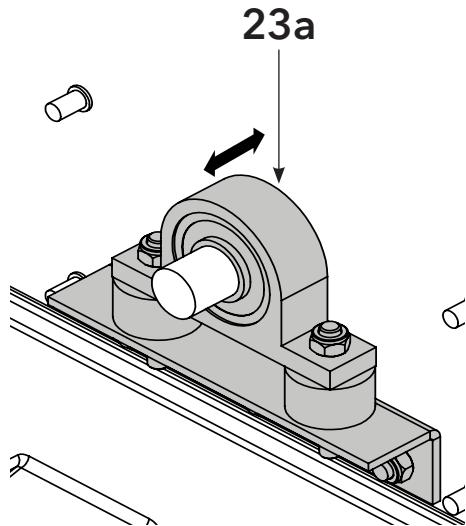
Remarque : étape 14, positionnez comme illustré en 22.

Après l'étape 11, procédez aux étapes 24 et 25.

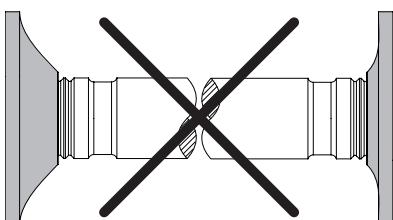
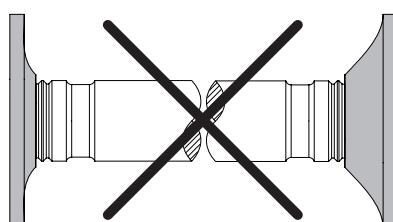
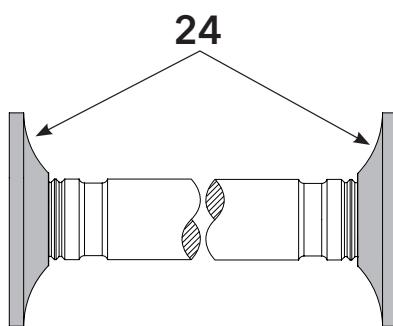
Après l'étape 1, vérifiez les étapes 26 et -27.



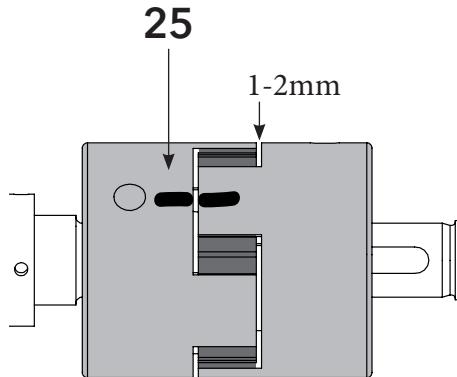
23. Vérifiez que les deux paliers peuvent bouger librement sur l'arbre d' entraînement.



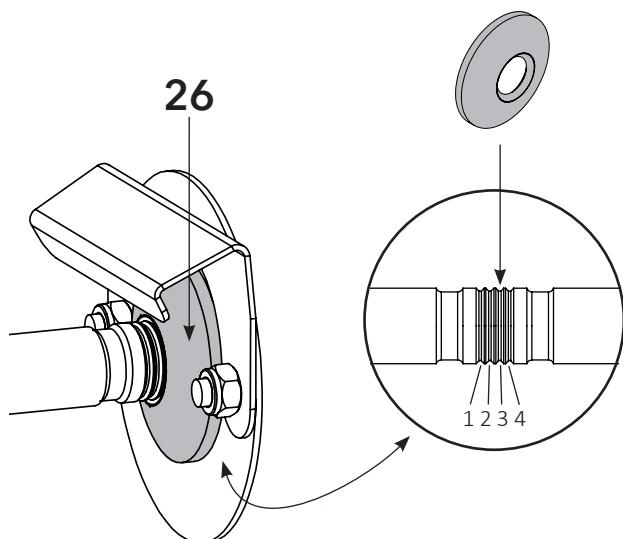
24. Vérifiez que les bagues d'étanchéité des deux côtés conservent un angle identique par rapport à la tôle.



28. Autotest



26. Si vous constatez une fuite au niveau de l'étanchéité : Remplacez la bague d'étanchéité de droite dans la troisième fente. Vérifiez l'alignement comme expliqué dans l'étape 25.



8. Autotest/....

1

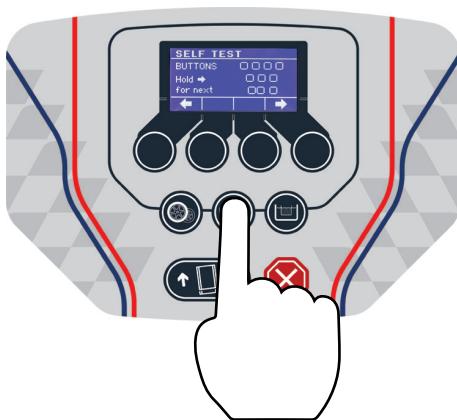


2



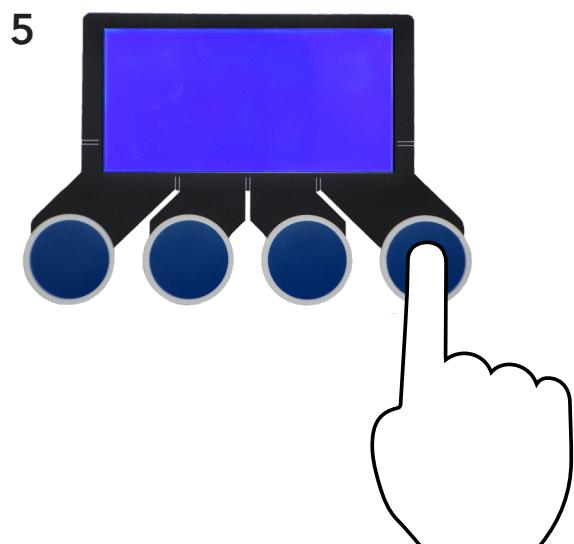
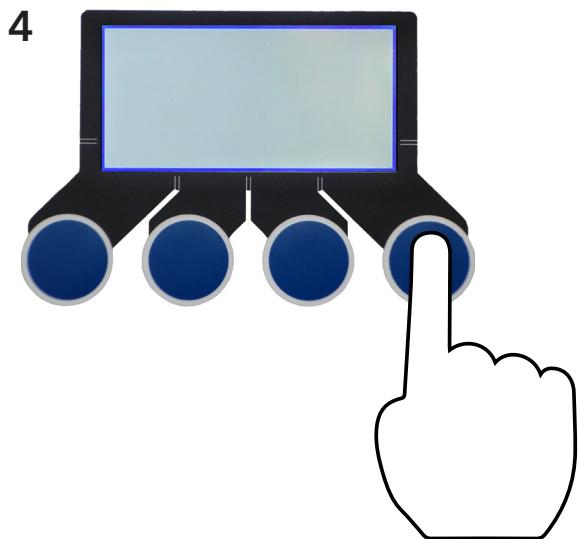
3. Appuyez sur tous les boutons et vérifiez sur l'écran s'ils répondent et fonctionnent. Maintenez → pour continuer.

3



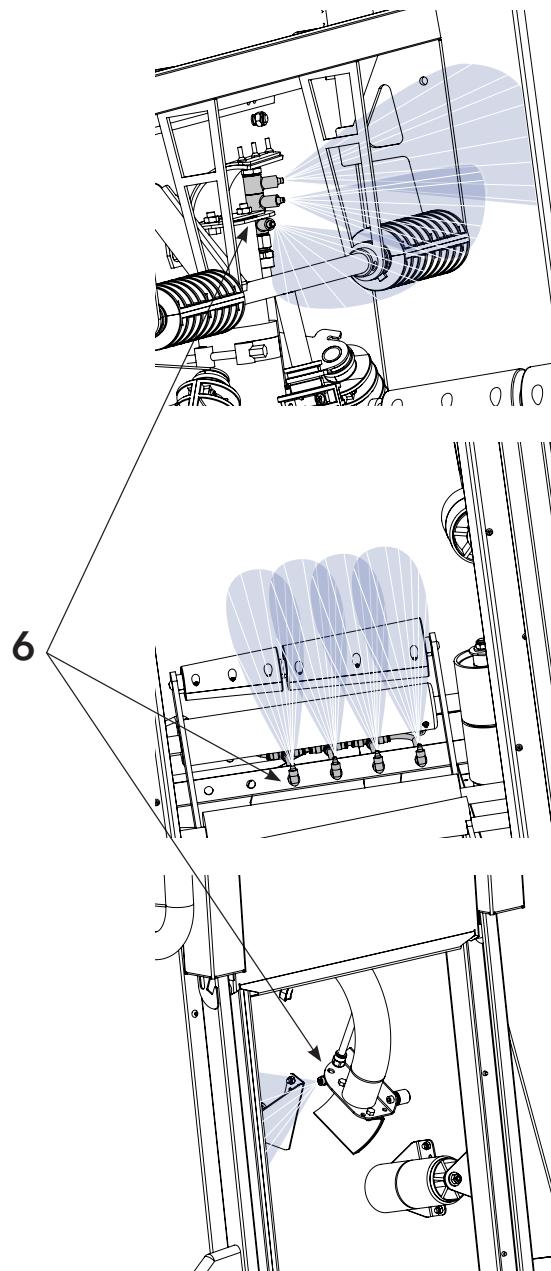
4. Vérifiez que TOUS les pixels s'allument. Continuez en appuyant sur le bouton de droite. ➡

5. Vérifiez qu'AUCUN pixel n'est allumé, continuez en appuyant sur le bouton de droite.



IMPORTANT :
RISQUE D'ÉCLABOUESSURES À L'OUVERTURE DE LA PORTE.

6. Vérifiez que les huit buses fonctionnent.



7. Indique la température à l'intérieur du boîtier de contrôle. Température max. autorisée 61 °C. Si la machine n'a pas été utilisée, elle doit correspondre à peu près à la température ambiante.

7

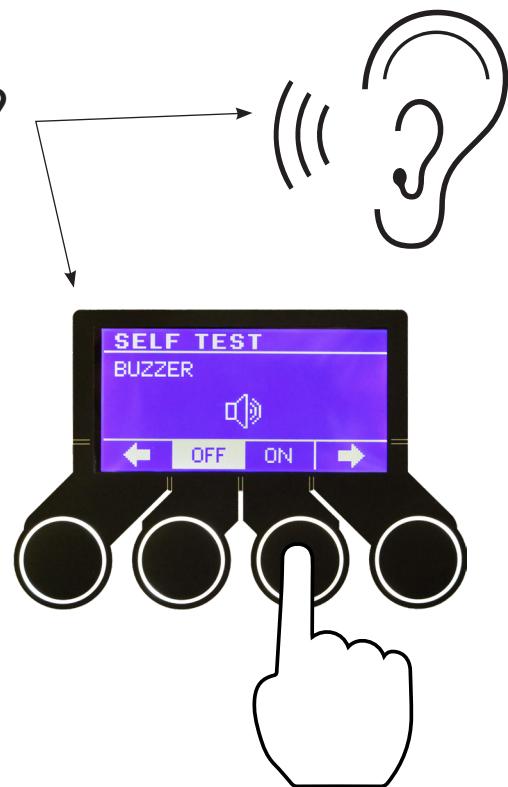


8. Indique la température de l'eau. Le capteur de température est situé à l'intérieur de la résistance de chauffage et permet une température maximale autorisée de 65 °C.

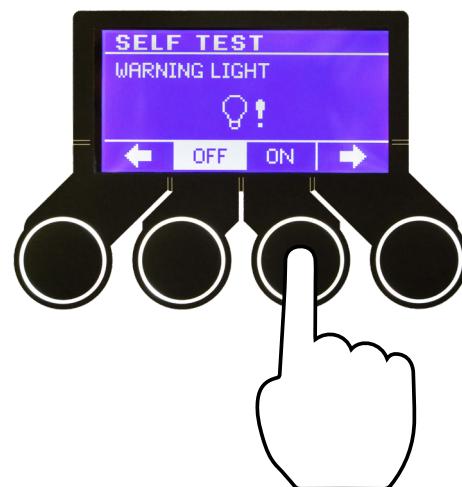
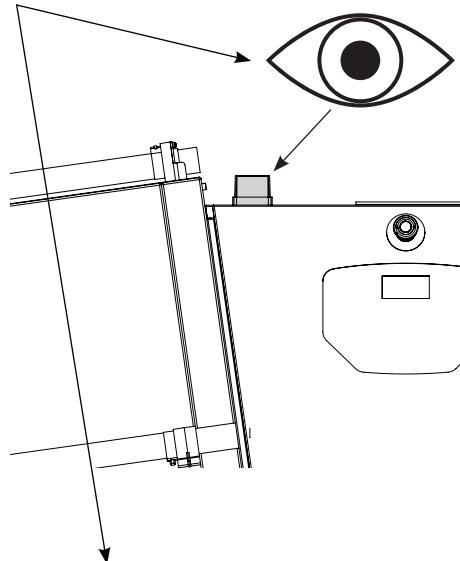
8



9

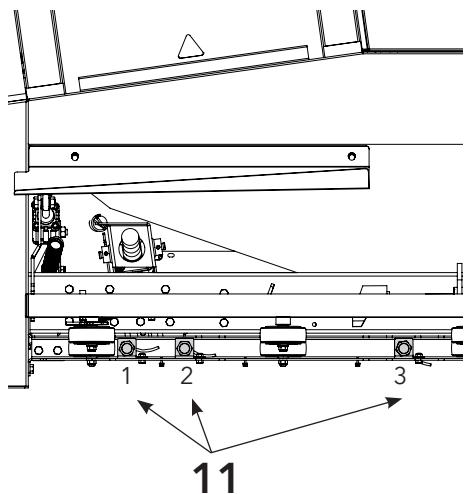


10

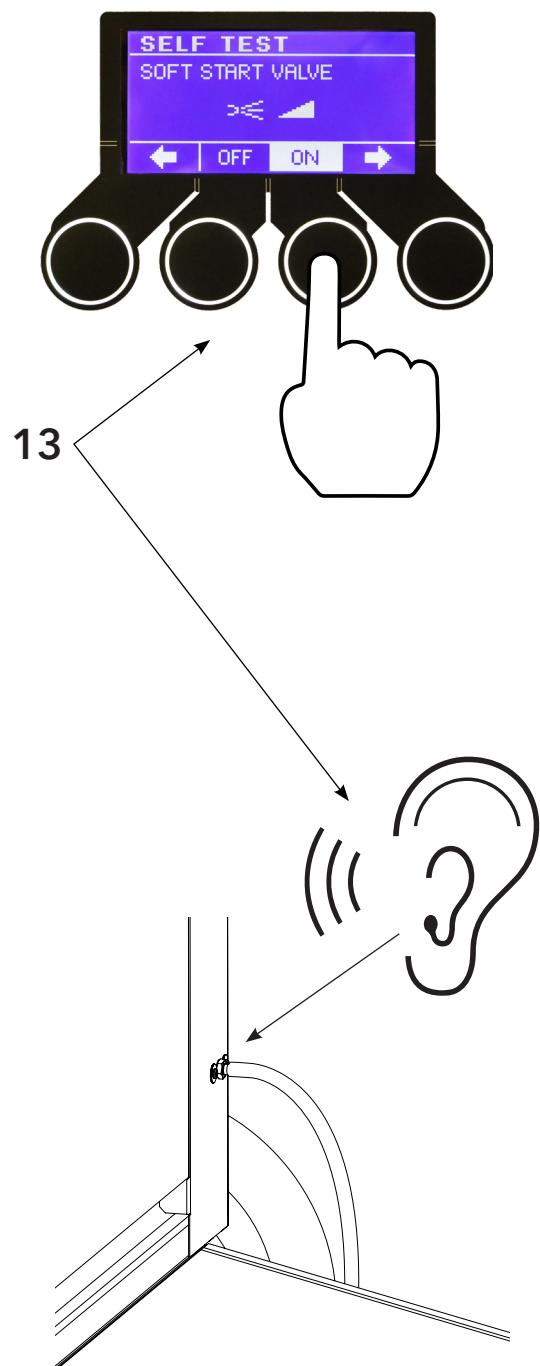


11. Maintenez une pièce métallique devant le capteur et vérifiez qu'il émet un signal. Procédez de la même manière pour chaque capteur.





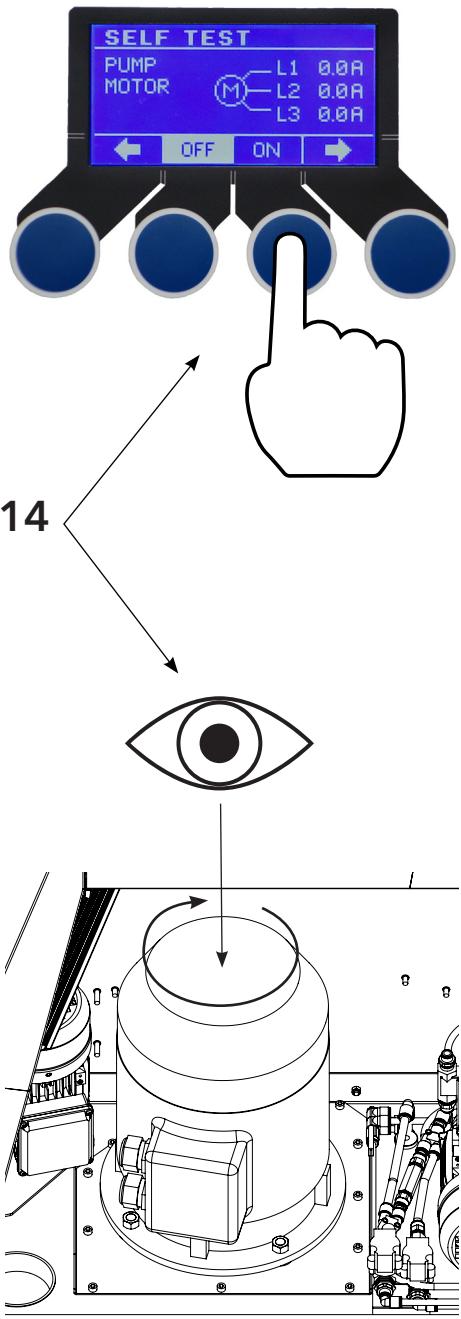
12. Vérifiez que l'arbre des vérins 1 à 6 fonctionne comme indiqué sur l'écran.



IMPORTANT :

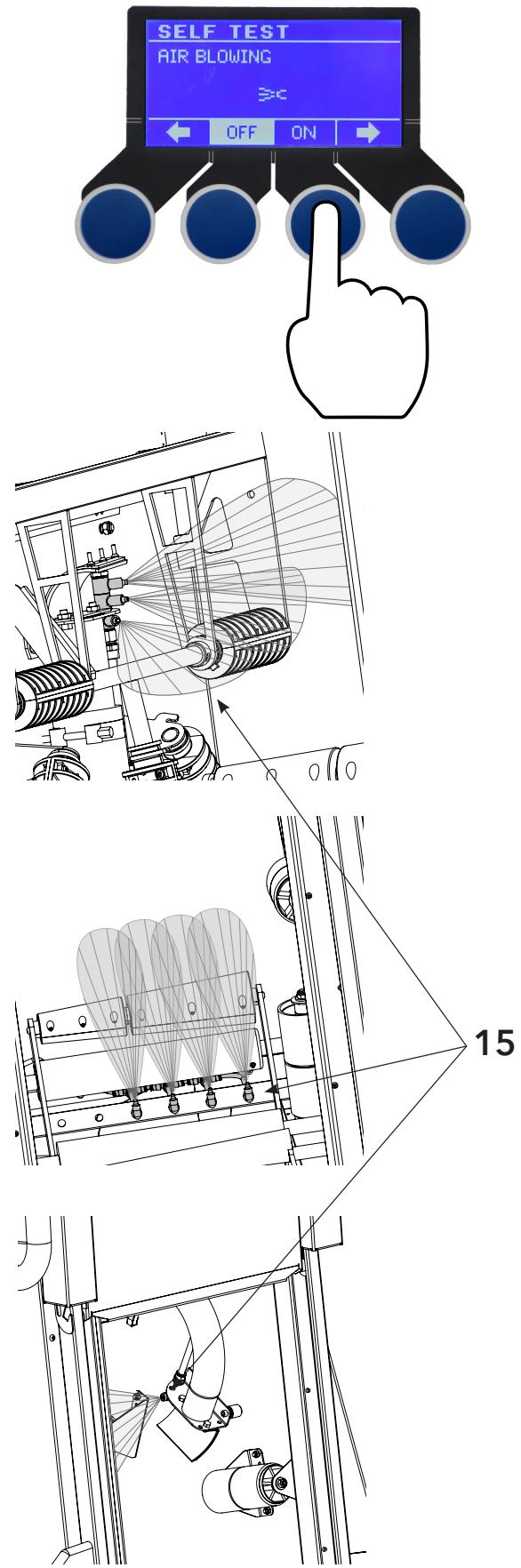
FERMEZ LE CAPOT AVANT LE TEST : LE MOTEUR DE LA POMPE PEUT DÉMARRER PORTE OUVERTE.

14. Vérifiez la rotation du moteur de la pompe. La consommation électrique doit être ~11-14 A à 400 V. Sur une pompe neuve, la consommation électrique doit être de 12,5-14 A à 400 V.



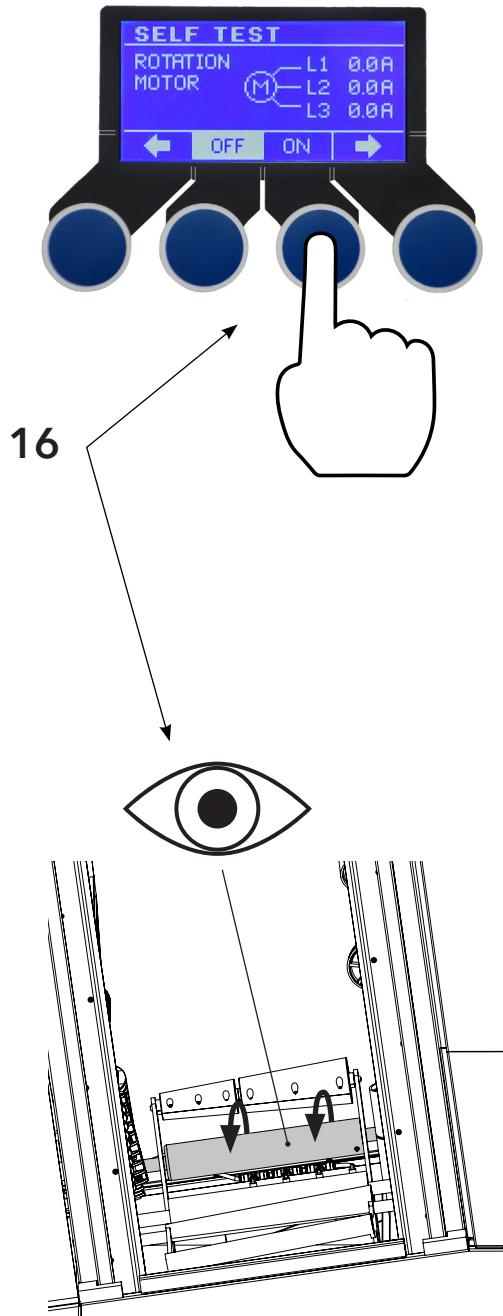
14

15. Vérifiez que les huit buses fonctionnent.

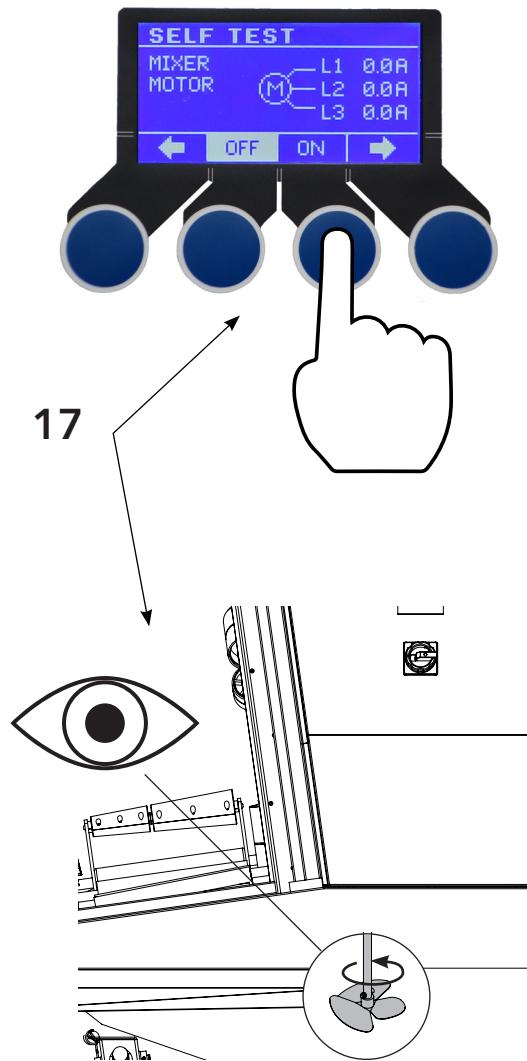


15

16. Contrôlez la rotation de l'arbre d'entraînement.
La consommation électrique doit être ~0,5-1,2A à 400 V.



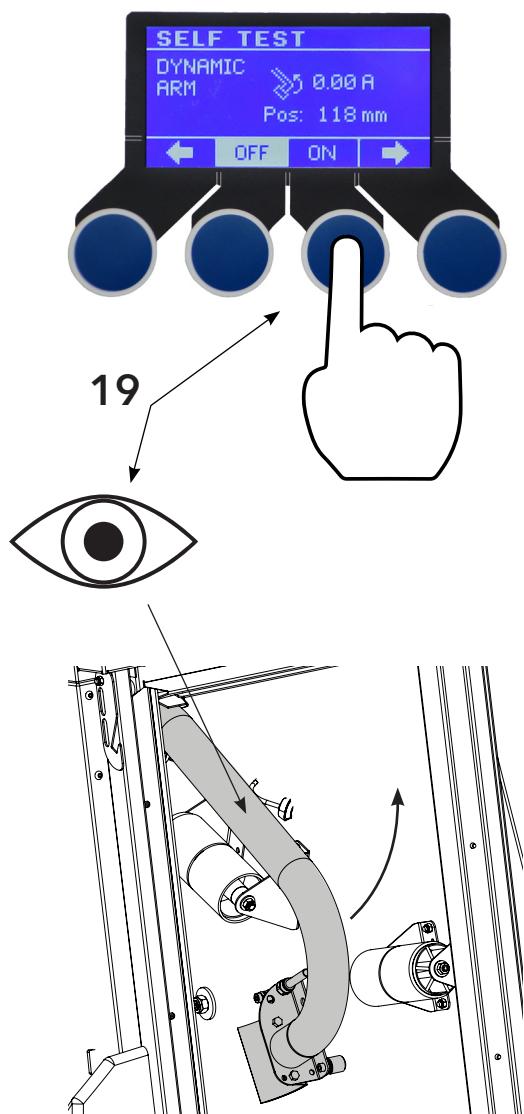
17. Ouvrez le capot et vérifiez la rotation du moteur du mélangeur.



18. Le mode ON passera automatiquement en mode OFF après 15 secondes pour éviter tout risque de surchauffe. La consommation électrique doit être ~1,5-2,5A à 400 V.



19. Vérifiez la position, 0 - 121 mm ± 3



20. Affiche la version logicielle et matérielle actuelle.

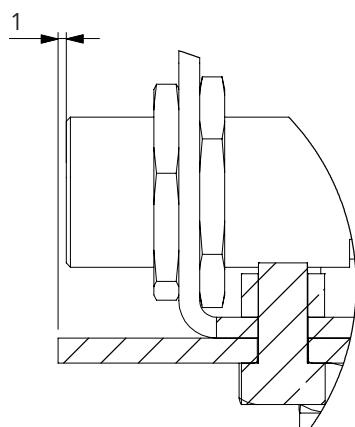
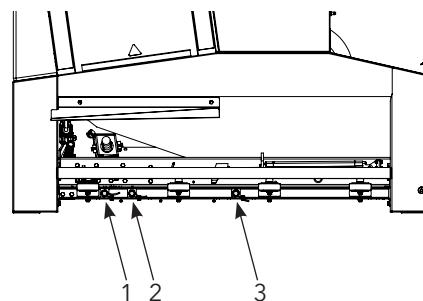


29. Réinitialisation aux valeurs d'usine

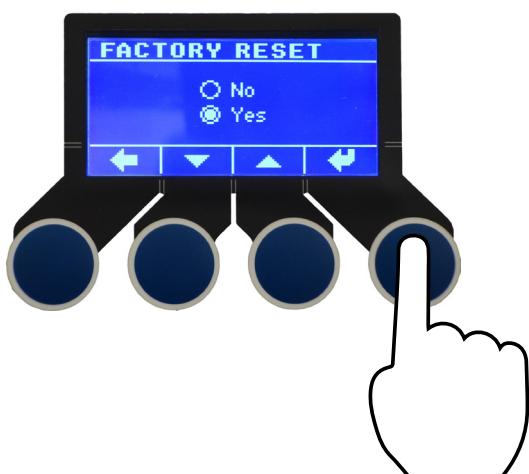
1. Réglez les capteurs.

Remarque : le capteur doit être installé à 1 mm à l'intérieur du bord de protection.

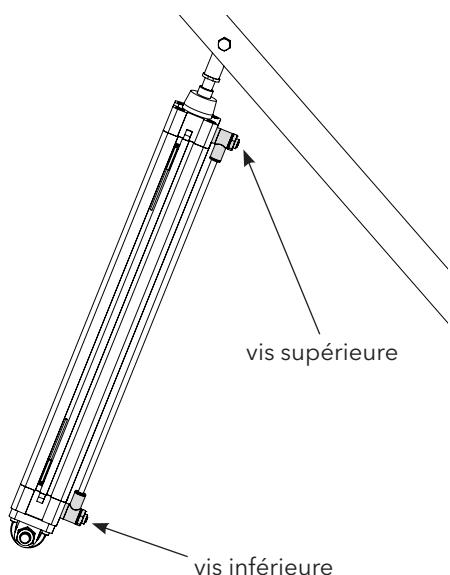
Pour vérifier que les capteurs fonctionnent, effectuez un Autotest. Voir chapitre 28.



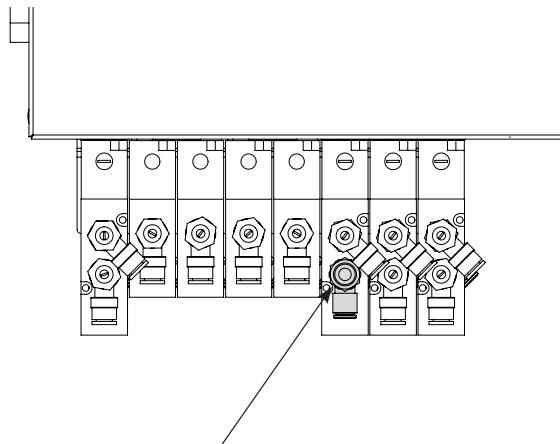
/6. Réinitialisation/Réinitialisation aux valeurs d'usine



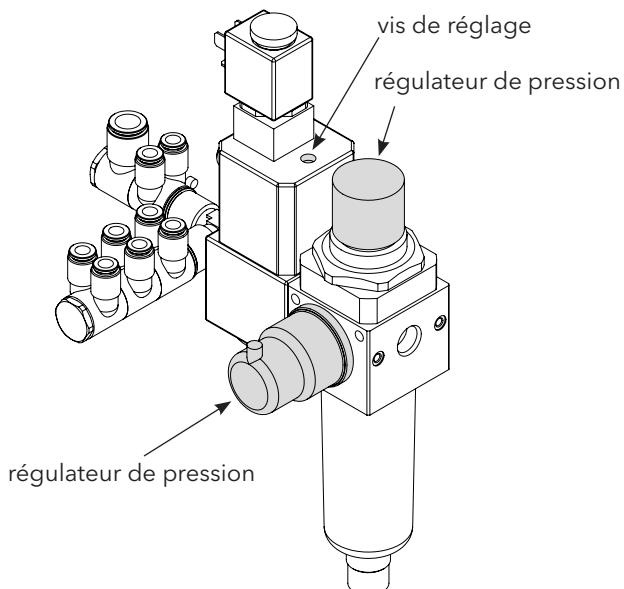
- La vis supérieure de la vanne doit être serrée complètement puis desserrée sur 1,5 tour. La vis inférieure de la vanne doit être serrée complètement puis desserrée sur 6 tours.



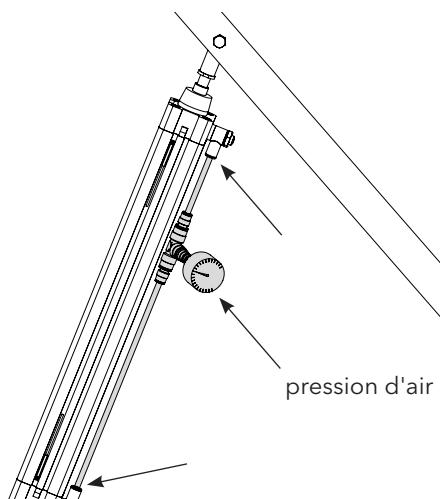
- Le régulateur de capot pour le vérin 3 doit être réglé sur 2 bars lorsque le capot est fermé. Le régulateur se trouve sur le boîtier à bornes. Ouvrez et fermez quatre tours. (Illustration ci-dessous)



- Le régulateur de pression doit être réglé sur 6 bar. Le régulateur d'admission d'air doit être réglé sur 7,5 bars. Pour réinitialiser le démarrage progressif, la vis doit être serrée complètement puis desserrée sur 12 tours.

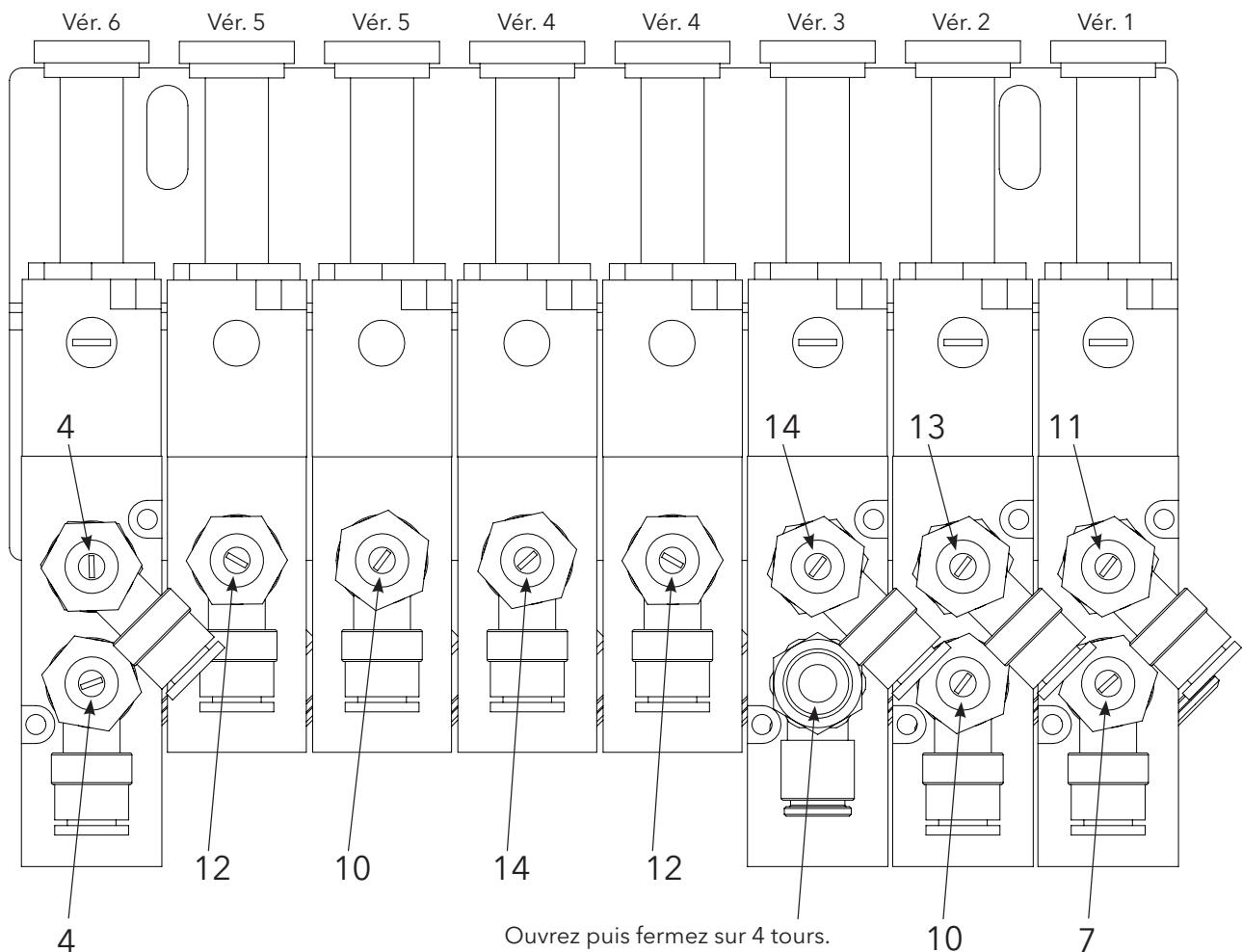


- En cas de doute, connectez le kit d'étalonnage 230753 sur le vérin 3.
- Mettez la machine hors tension.
- Débranchez le flexible du vérin 3.
- Pour connecter le kit d'étalonnage, retirez la protection rouge et raccordez-le comme illustré.
- Mettez la machine sous tension. Après environ 10 secondes, la valeur de pression sur le kit d'étalonnage est stabilisée.



11. Ajustez le régulateur si nécessaire. Quand une ou plusieurs électrovannes sont changées, les réducteurs de flux d'air doivent être réglés correctement.

Serrez complètement la vis de réglage, ouvrez du nombre de tours indiqué dans l'illustration ci-dessous.



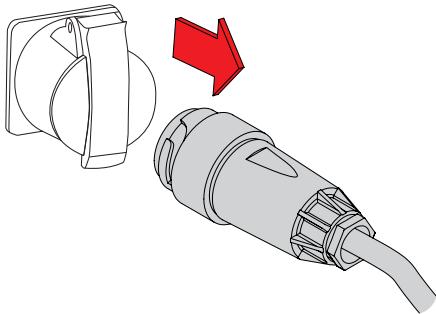
1. Säkerhetsföreskrifter

1.1 Verktyg

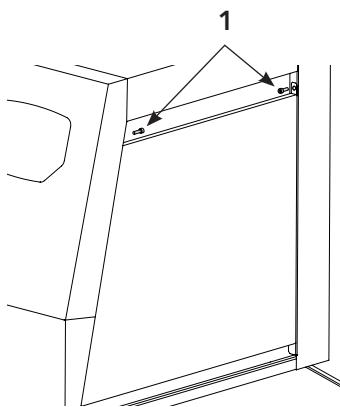


5 mm

VARNING! Utför alltid stegen nedan innan du påbörjar något arbete på maskinen.

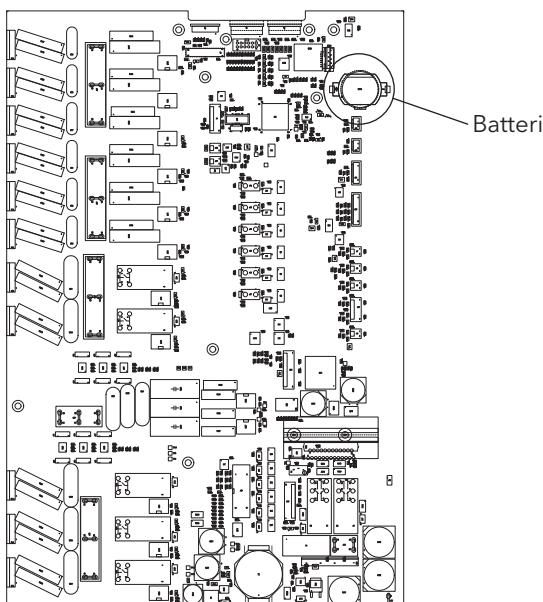


1. Avlägsna skruvar och kåpa.



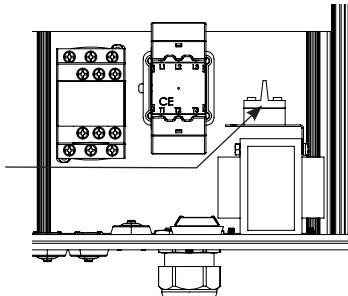
2. Batteri

Batterytyp: CR 2032 3V.

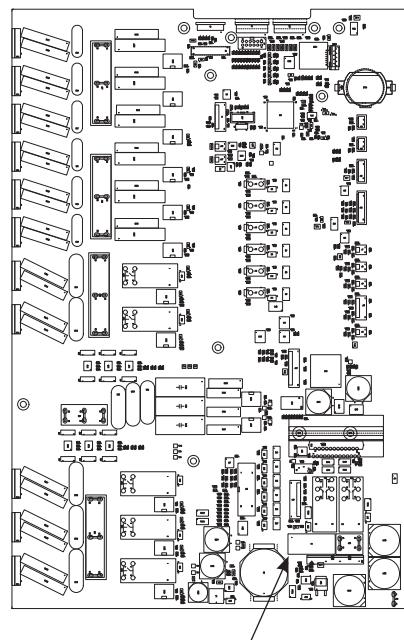
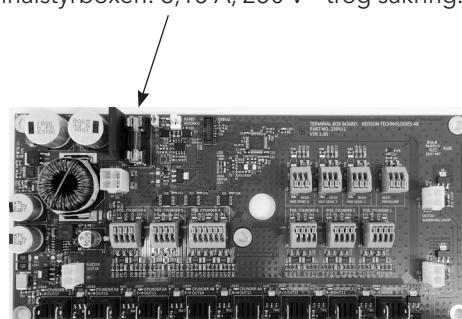


3. Säkringar

Maskinen har tre säkringar. En säkring finns ovanför transformatorn i huvudstyrboxen: 500 mA, 440 V - trög säkring.



Den andra säkringen finns överst till vänster i terminalstyrboxen: 3,15 A, 250 V - trög säkring.



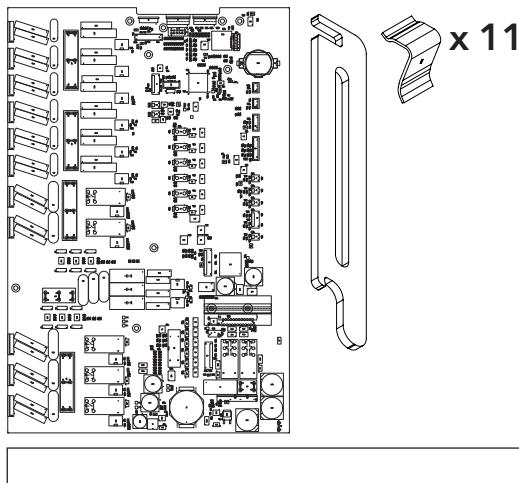
Den tredje säkringen finns längst ned till höger på styrkortet.

4. Varningslampa

Lampans märkdata är 24 V/5 W.

5. Byte av styrkort

5.1 Komponenter

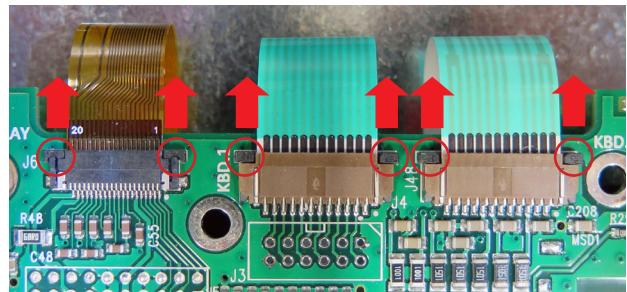
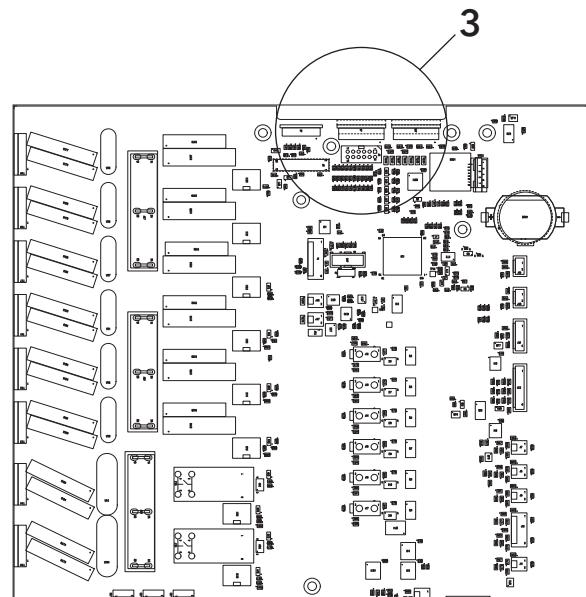
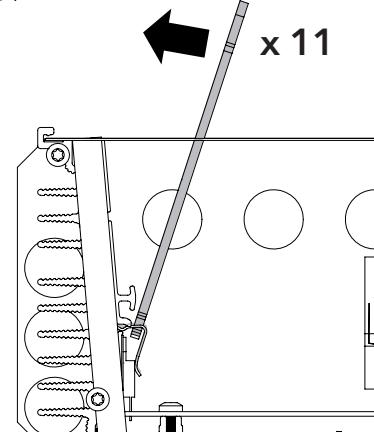
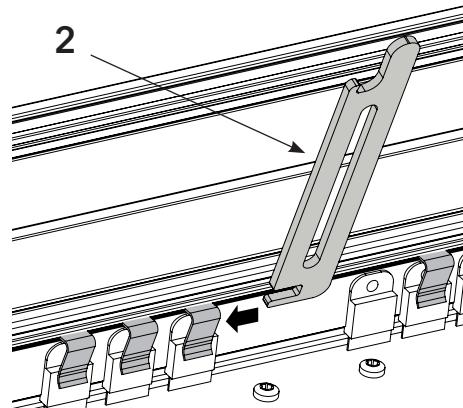
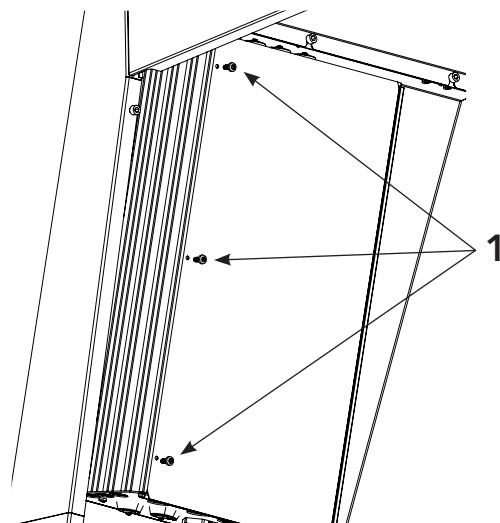


5.2 Verktyg

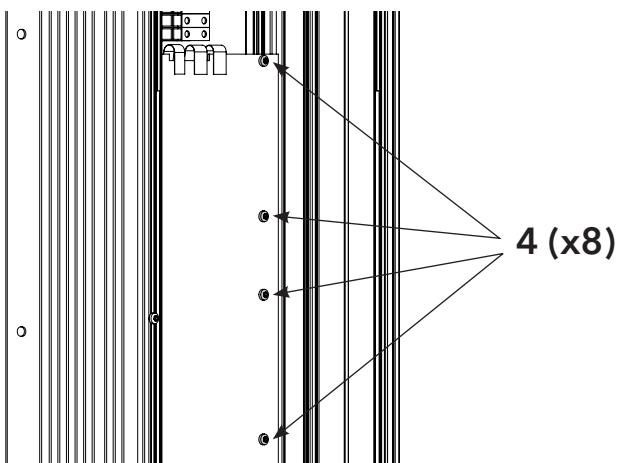


OBS! Läs först kapitel 1 - Säkerhetsföreskrifter

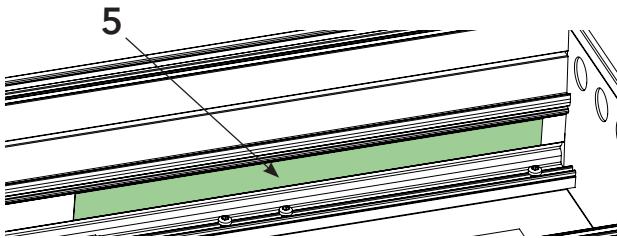
- Avlägsna skruvar och kåpa.
- Använd specialverktyget för att lossa klämmorna som fäster kretskortet till aluminiumprofilen.
- Ta loss ALLA kablar till motorer, värmare, sensorer osv. Flatkablarna lossas genom att trycka stiften uppåt enligt bilden. Märk kablarna för återmontering.



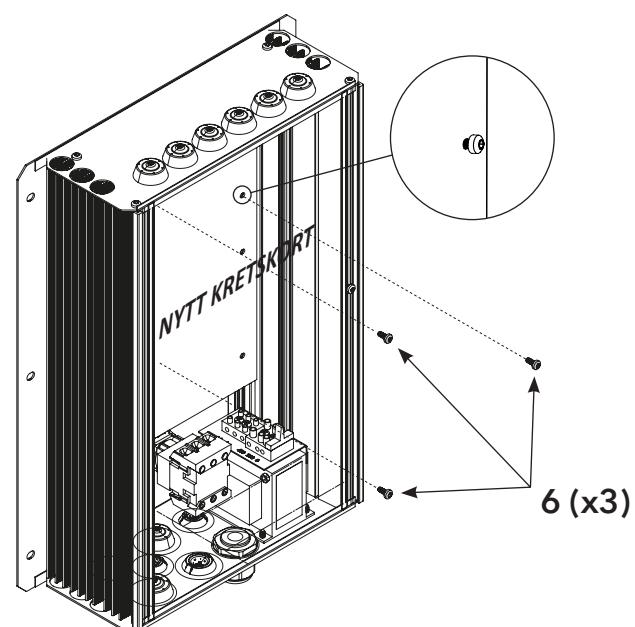
4. Lossa skruvarna och ta bort kretskortet



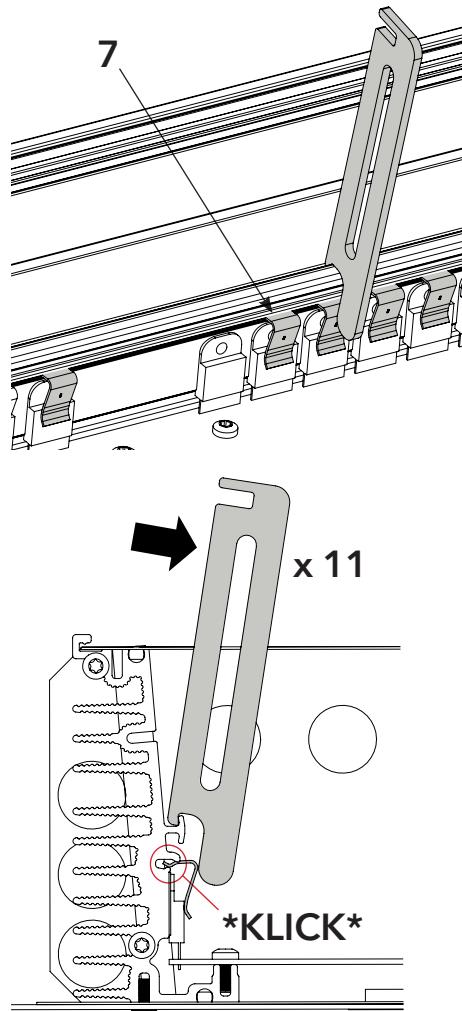
5. Kontrollera att tejpen på aluminiumprofilen är placerad enligt bilden eller byt ut den.



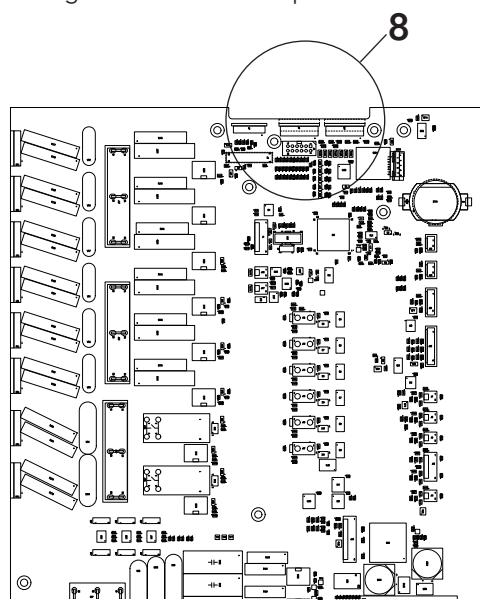
6. Placera det nya kretskortet och fäst med tre skruvar utan att dra åt dem ordentligt.

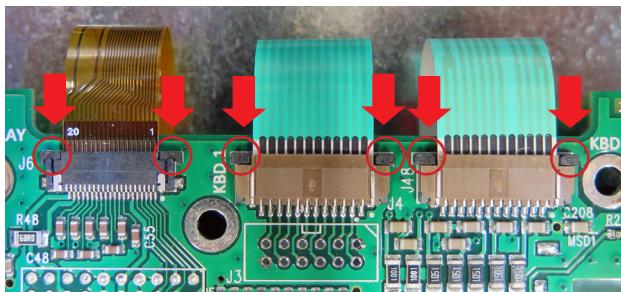


7. Använd de medföljande klämmorna för att låsa kortet mot aluminiumprofilen.

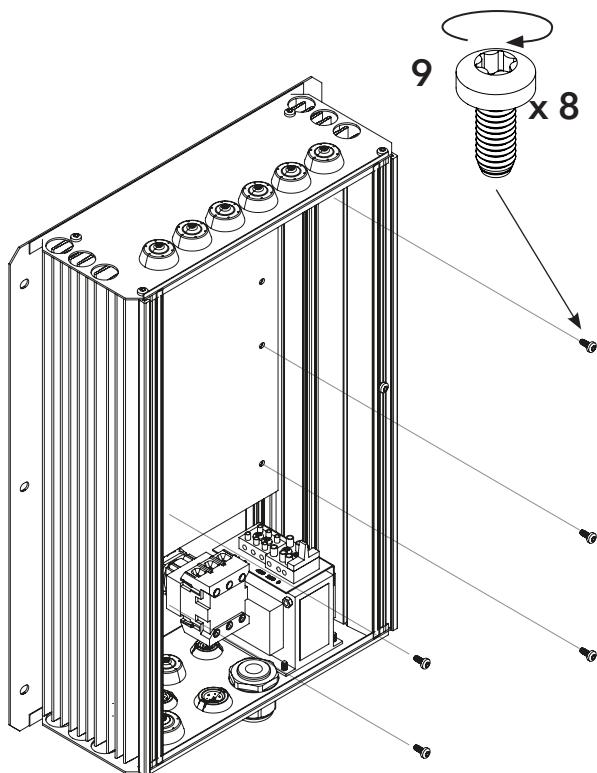


8. Sätt fast ALLA kablar. Återmontera enligt tidigare märkningar. Flatkablarna fästs genom att trycka stiften nedåt enligt bilden nedan och på nästa sida.

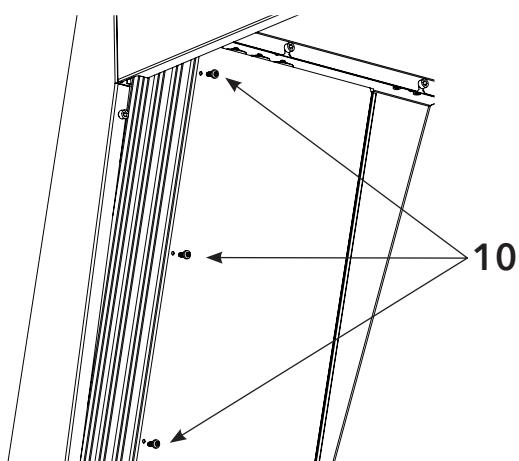




9. Dra åt alla skruvar.



10. Sätt på kåpan och fäst med skruvorna.



11. Konfigurera enheten (kapitel 6).

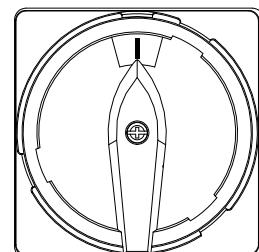
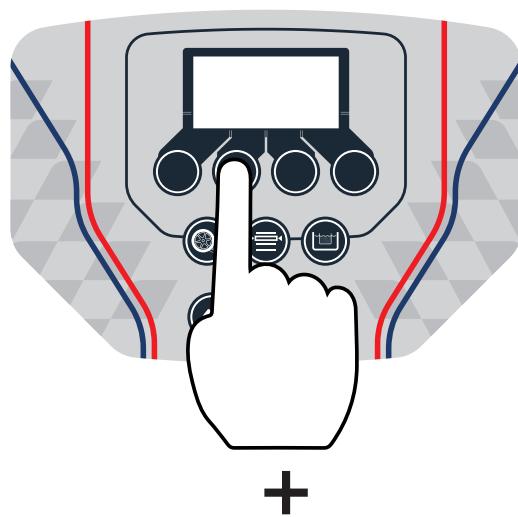
12. Utför självtest.

12 /8.Self test/....



6. Konfigurationsmeny

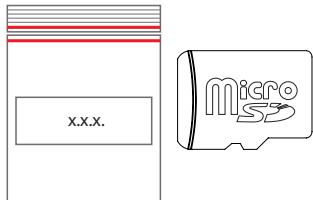
Välj inställningar enligt maskinkonfiguration.



PIN CODE	1632	
VOLTAGE	400 V	
MACHINE TYPE	24	
HEATER	INTELLIGENT	
CLEAN RINSE	NO	YES
MIXER MOTOR	NO	YES
TEMPERATURE	°C	°F

7. Programuppdatering

7.1 Komponenter

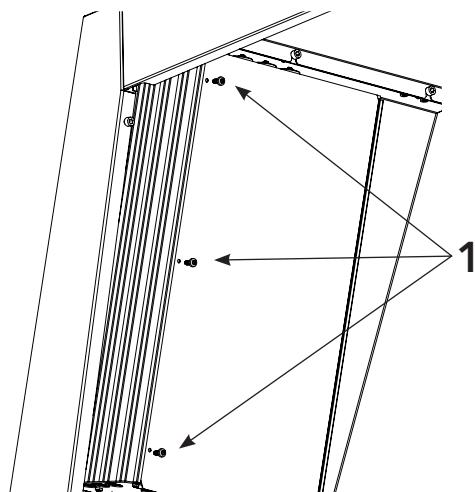


7.2 Verktyg

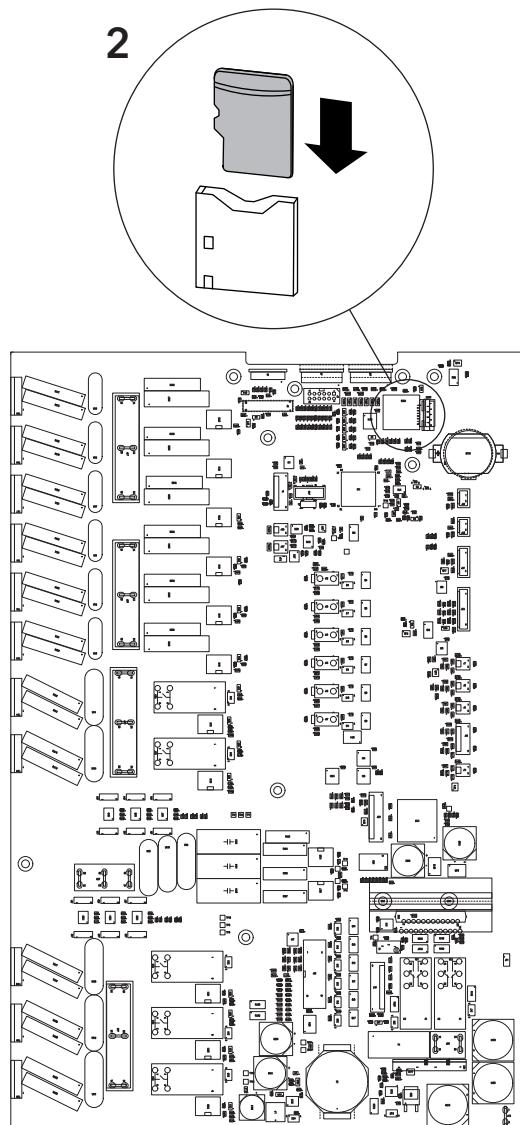


OBS! Läs först kapitel 1 - Säkerhetsföreskrifter

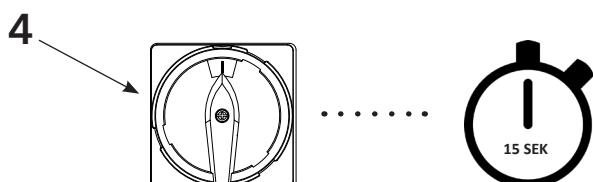
1. Avlägsna skruvar och kåpa.
2. Placera sd-kortet i kortplatsen.



3. Återmontera i omvänt ordning.

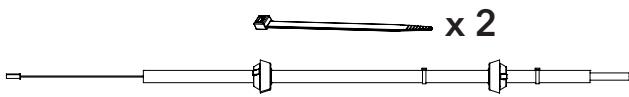


4. Börja med huvudbrytaren, vänta 15 s, öppna inställningarna, gå till (/7.Version/Model/Sw/x.x.x) och kontrollera att x.x.x motsvarar numret på påsen.
5. Upprepa anvisningarna för att ta bort sd-kortet.



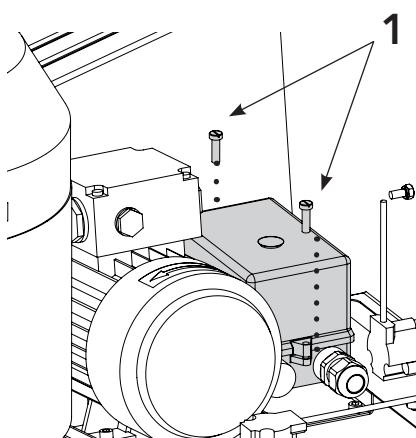
8. Byta ut temperatursensorn

8.1 Komponenter

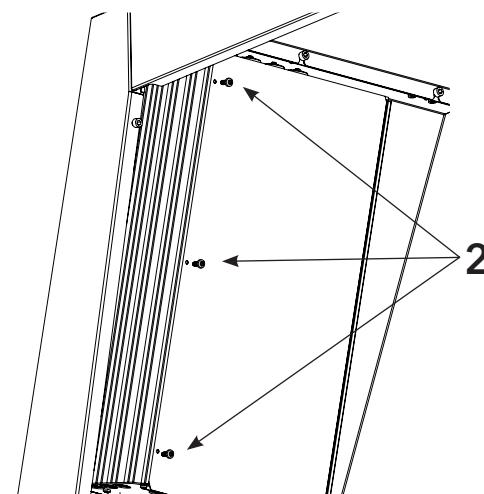


OBS! Läs först kapitel 1 - Säkerhetsföreskrifter

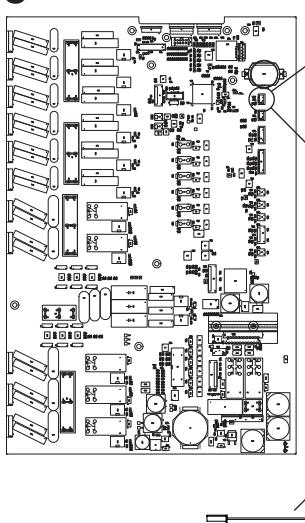
1. Ta bort skruvarna.
2. Avlägsna skruvar och kåpa.



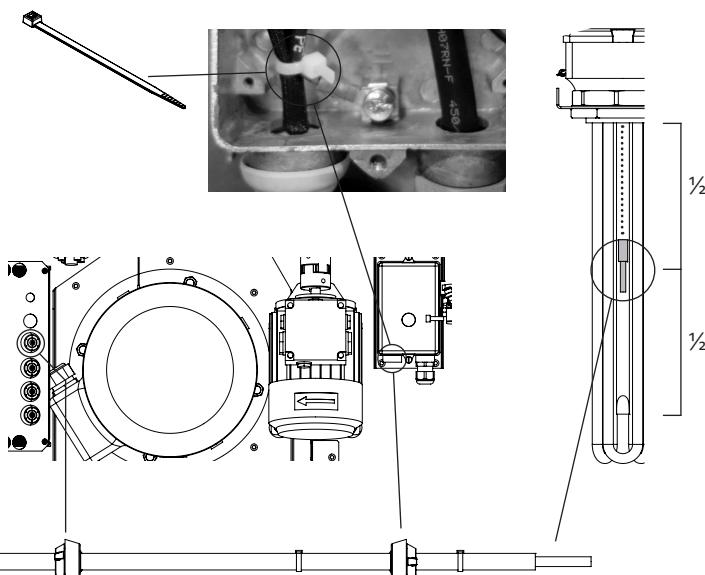
8.2 Verktyg



3



Vatten-temp.
sensor
J19



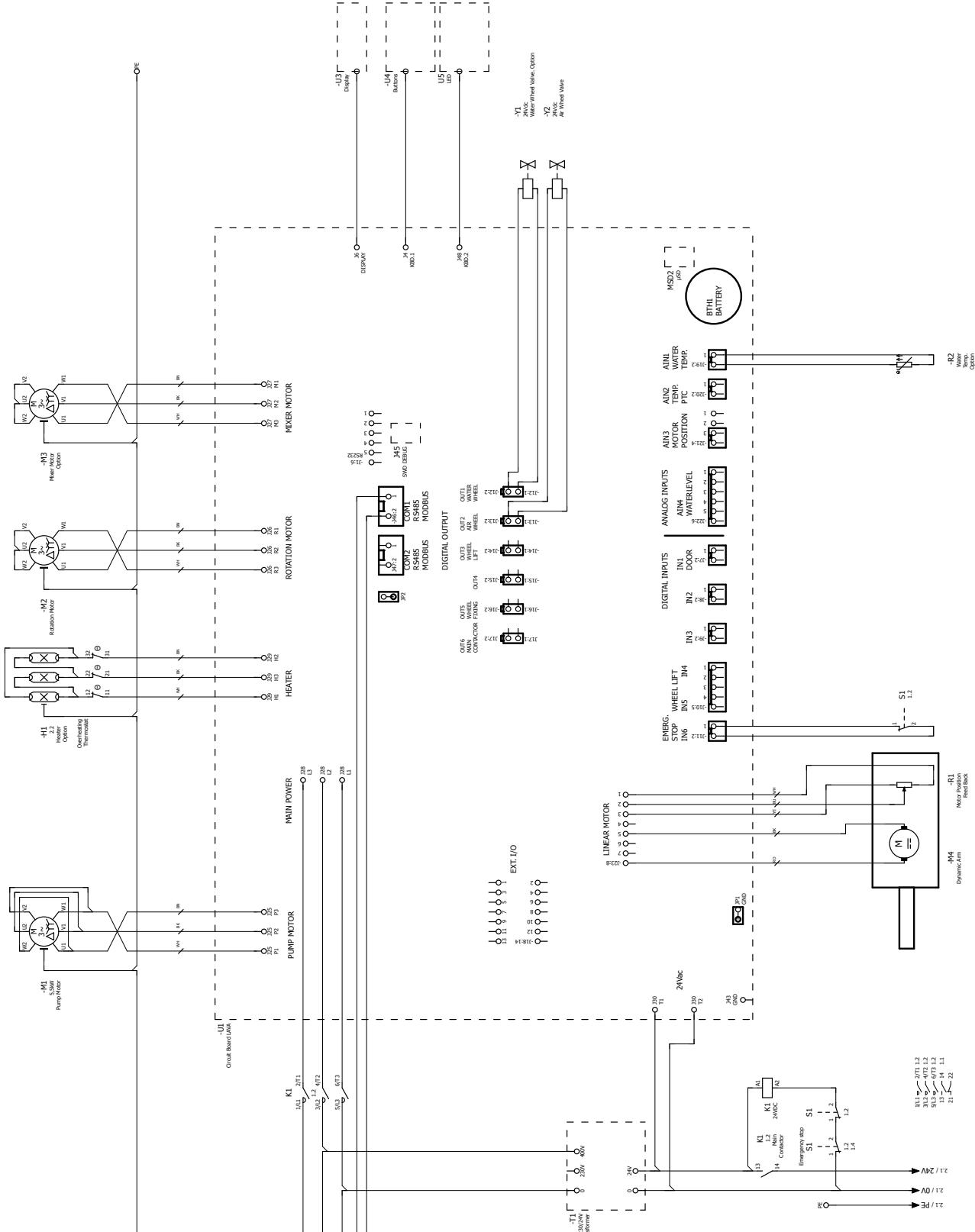
3. Ta bort den gamla temperatursensorn och koppla in den nya.
4. Återmontera i omvänt ordning.
5. Starta maskinen och kontrollera att temperatursensorn fungerar (/8. Selftest/Water temperature/....).

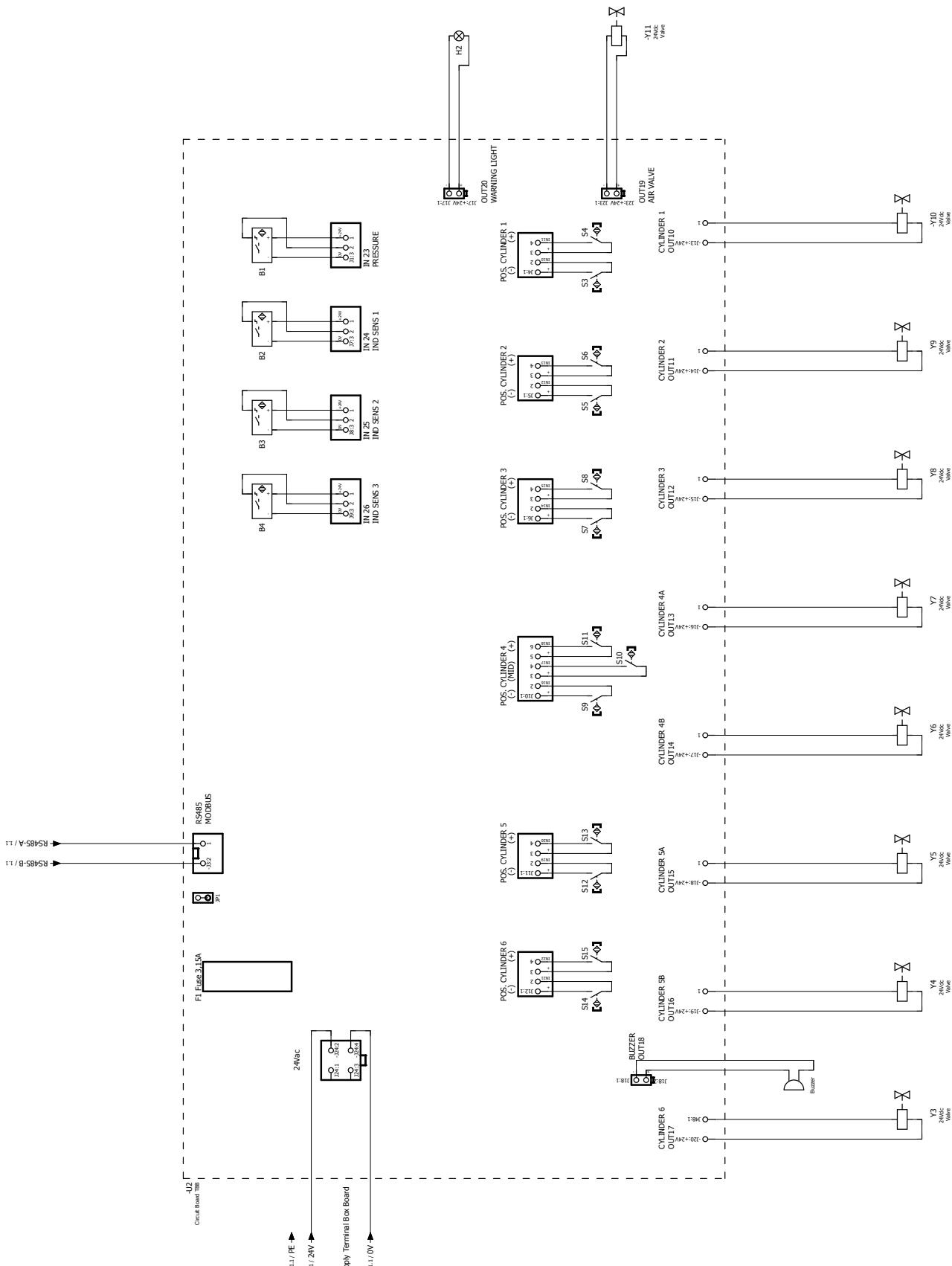
8. Self test/...../Water Temperature/....

5



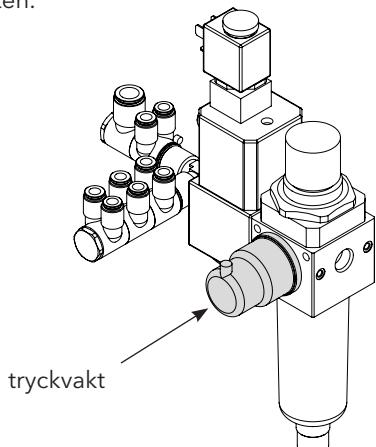
9. Kopplingsschema





10. Tryckvakt

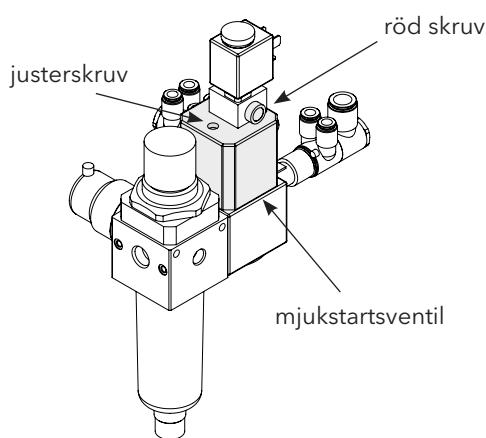
Tryckvakten registrerar om lufttillförselns tryck sjunker under 6 bar. Detta utlöser ett larm av B-typ. Se larmkoden i kapitel 9 i användarmanualen. Tryckvakten får inte ställas in på något annat värde. Om tryckvakten går sönder måste den bytas ut för att upprätthålla maskinsäkerheten.



11. Justering av mjukstartsventilen

Det finns en justerskruv på mjukstartsventilen som du kan använda för att ställa in hur snabbt trycket ska stiga. Skruven ska dras åt helt och hållt och sedan lossas 12 varv.

På baksidan av mjukstartsventilen finns en röd plastskruv. Den ska vara placerad horisontellt.



12. Justering av tryckregulatorerna

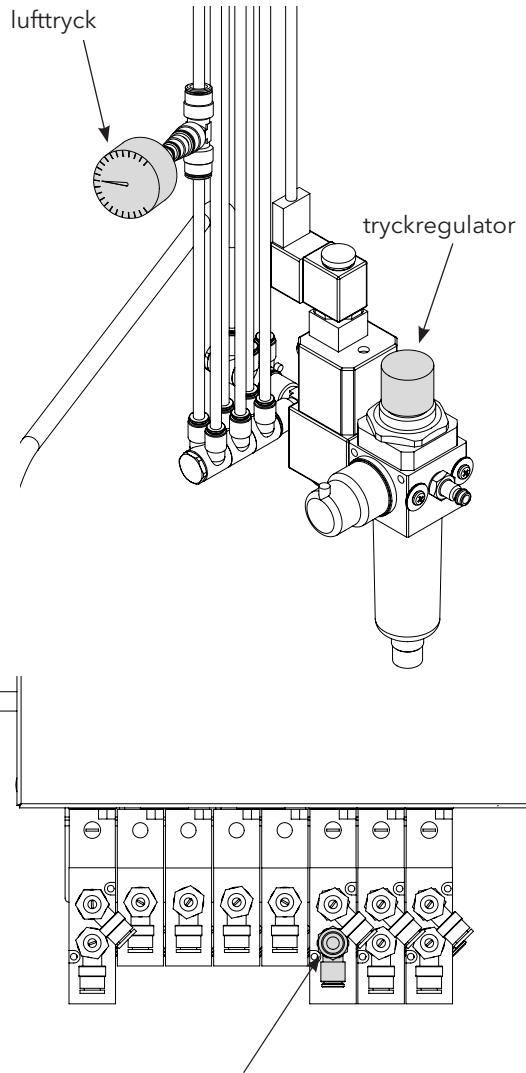
Dessa inställningar ska inte ändras. Kontrollera följande inställningar om tryckregulatorerna inte fungerar som avsett:

Regulatorn för inloppsluft (bilden nedan) ska sättas till 7,5 bar.

Obs! Minska alltid trycket först och öka sedan till önskad nivå.

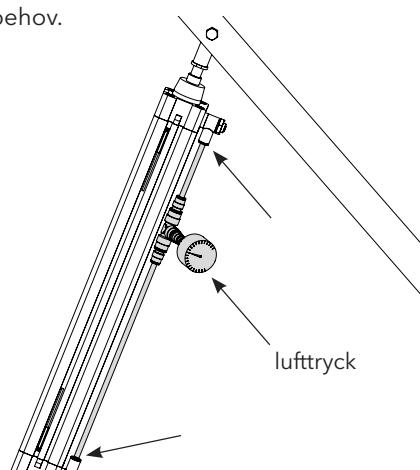
- Slå på maskinen. Luftrycksvärdet stabiliseras efter cirka 10 sekunder. Justera regulatorn vid behov.

Luckregulatorn för cylinder 3 ska vara inställd på 2 bar när luckan är stängd. Regulatorn finns på terminalboxen. Öppna och stäng fyra varv. (Visas på bilden nedan)



Vid osäkerhet, anslut kalibreringssatsen 230753 till cylinder 3.

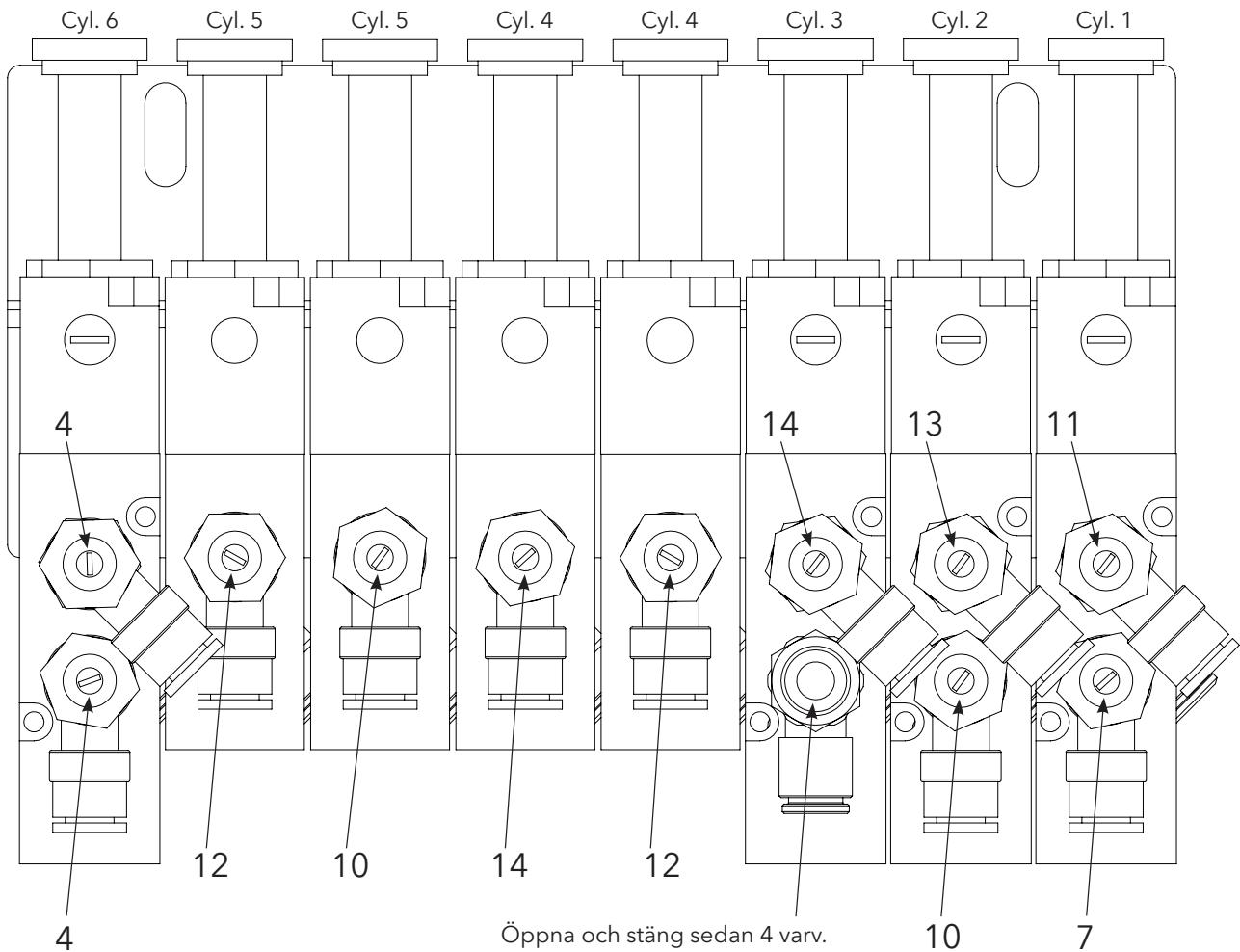
- Stäng av maskinen.
- Koppla loss slangens till cylinder 3.
- Ta bort den röda pluggen och anslut kalibreringssatsen enligt bilden.
- Slå på maskinen. Kalibreringssatsens luftrycksvärde stabiliseras efter cirka 10 sekunder. Justera regulatorn vid behov.



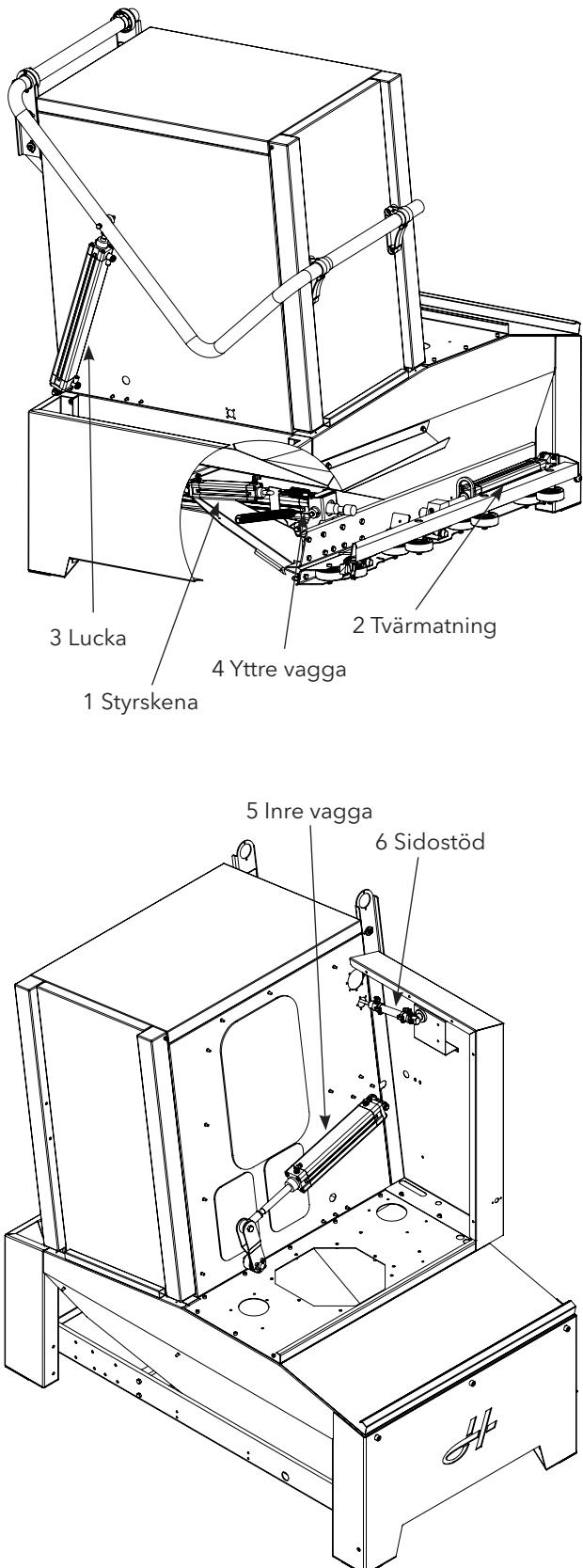
13. Justering av magnetventilerna

Vid byte av en eller flera magnetventiler måste flödesgränsarna ställas in.

Dra åt justerskruven helt och öppna sedan antalet varv som anges på bilden nedan.



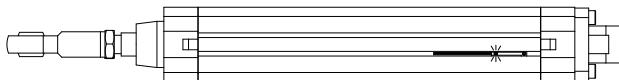
14. Cylindrarnas nummer och namn



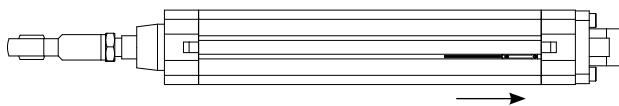
15. Cylindrarnas ändlägessensorer

För att ställa in sensorernas läge måste maskinen sättas på med tryckluften ansluten. Starta självtestet (se kapitel 28) för att flytta cylindern till rätt läge för den sensor som ska ställas in.

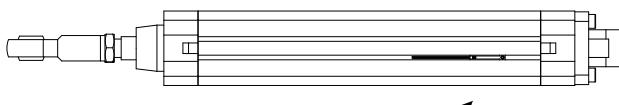
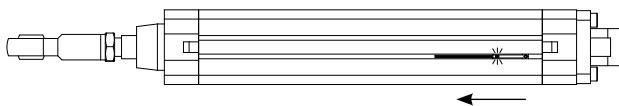
1. Placer sensorn i spåret och skjut den åt vänster eller åt höger tills LED-lampan tänds.



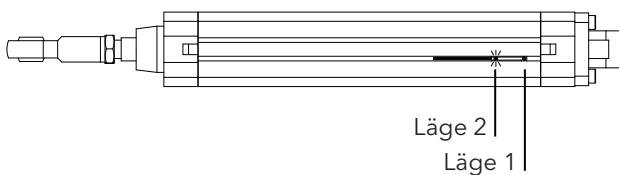
2. Skjut sensorn åt höger tills LED-lampan släcks och kom ihåg läget.



3. Skjut sensorn åt vänster tills LED-lampan släcks och kom ihåg läget.

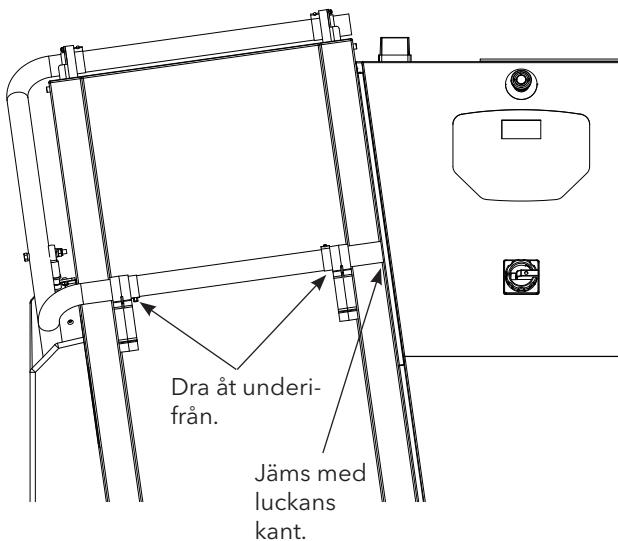


4. Placer sensorn i mitten av de två lägena i steg 2 och 3.

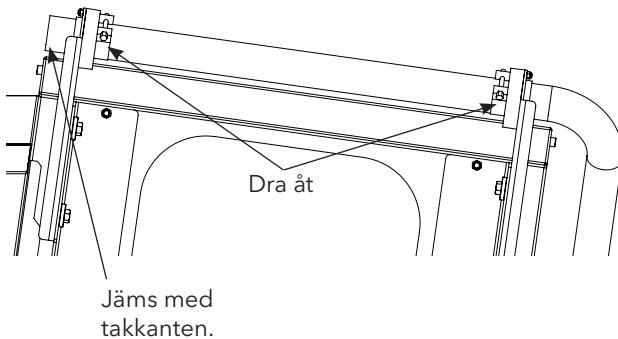


16. Justera luckan

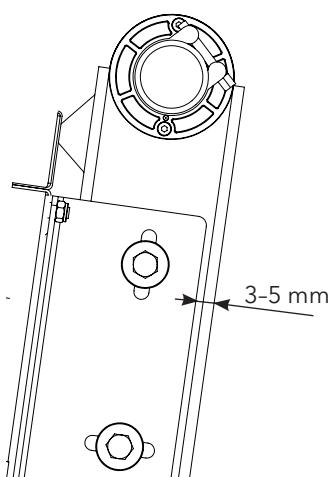
- Dra åt slangklämmorna på framsidan när svängarmen är i rätt läge.



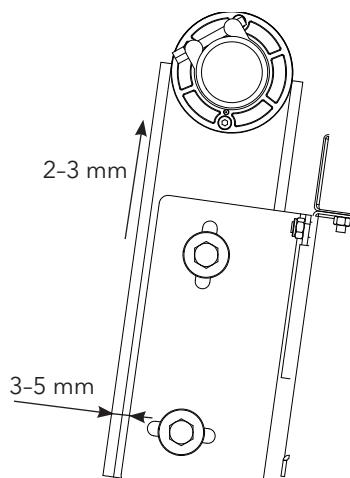
- Dra åt de bakre slangklämmorna när svängarmen är i rätt läge.



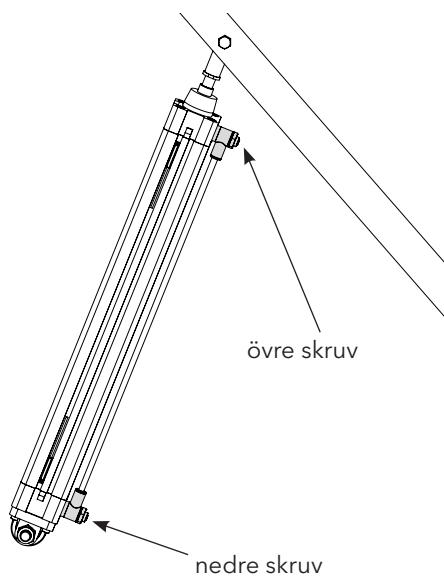
- Stå bakom maskinen och dra åt höger skruvförband enligt bilden.



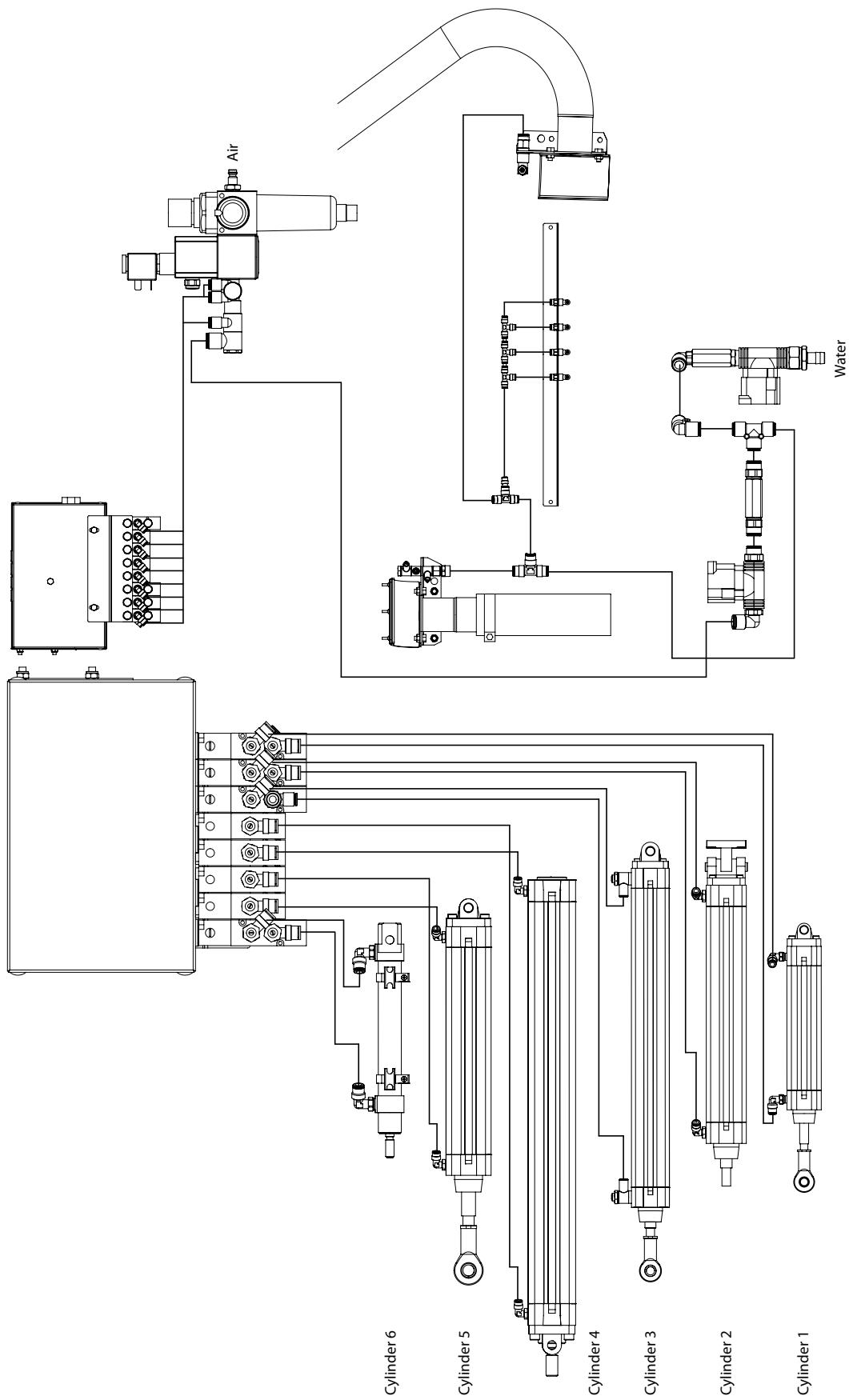
- Lyft upp skruvförbandet 2-3 mm och dra åt skruvarna.



- Den övre ventilskruven ska dras åt helt och hållt och sedan lossas 1,5 varv. Den nedre ventilskruven ska dras åt helt och hållt och sedan lossas 6 varv.

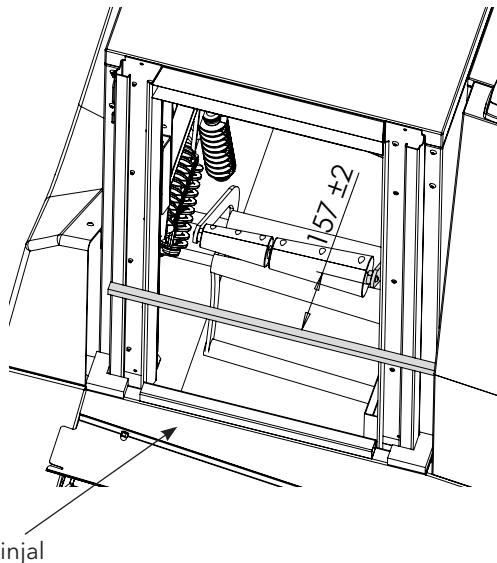


17. Pneumatiskt kopplingsschema

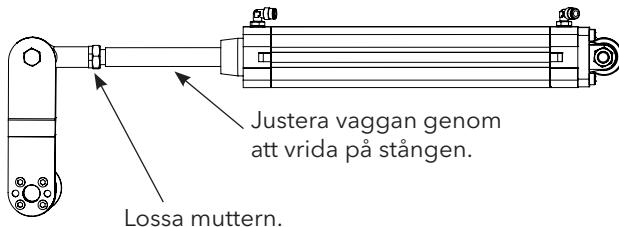


18. Justering av inre vagga

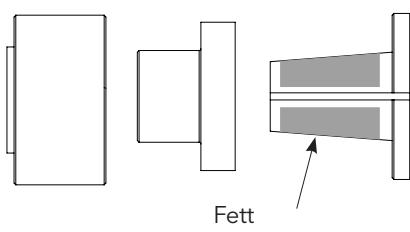
- Placera den inre vaggan i sitt yttre läge och mät med hjälp av en rak metallstång, t.ex. en linjal, avståndet mellan linjalen och den inre vaggan - se bilden nedan. Avståndet ska vara 157 ± 2 mm.



- Om avståndet är fel är lossar du muttern på cylinderstången - se bilden nedan. Försök sedan justera den inre vaggan genom att vrida på cylinderstången.

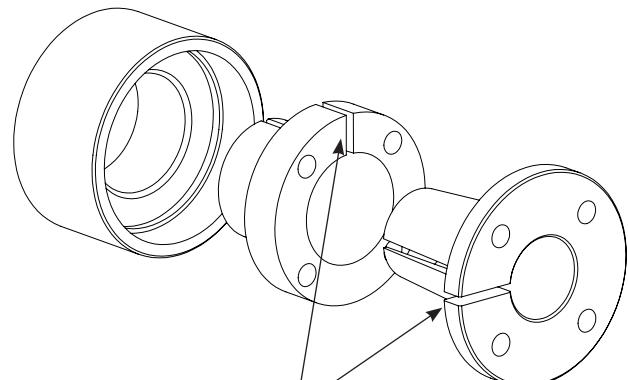


- Kontrollera avståndet på nytt. Om det i steg 2 inte går att justera vaggan så att avståndet är 157 ± 2 mm vrider du tillbaka cylinderstången och drar åt muttern igen.
- Lossa de fyra skruvarna och dra ut kopplingen.
- Rengör axeln noggrant från eventuellt fett.
- Demontera kopplingen och rengör alla delar.



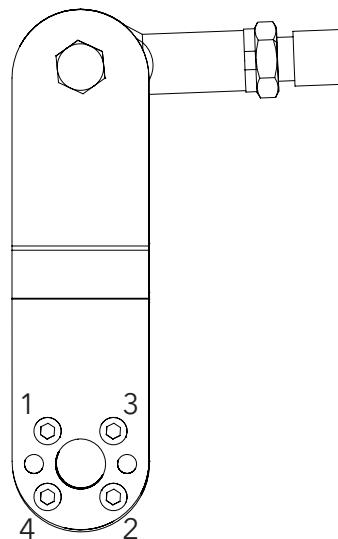
- Applicera en LITEN mängd fett på ytan. Smörj inte längre ut än 3 mm från kanterna.
- Smörj även gängorna.

- Montera kopplingen och se till att delarna är korrekt orienterade.

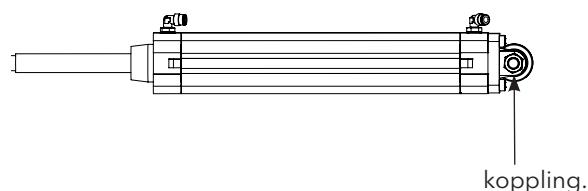


Observera urtagens riktning

- Placera den inre vaggan i sitt yttre läge och mät upp avståndet 157 ± 2 mm innan skruvarna dras åt. Skruvarna ska dras åt i tur och ordning till 14 Nm.

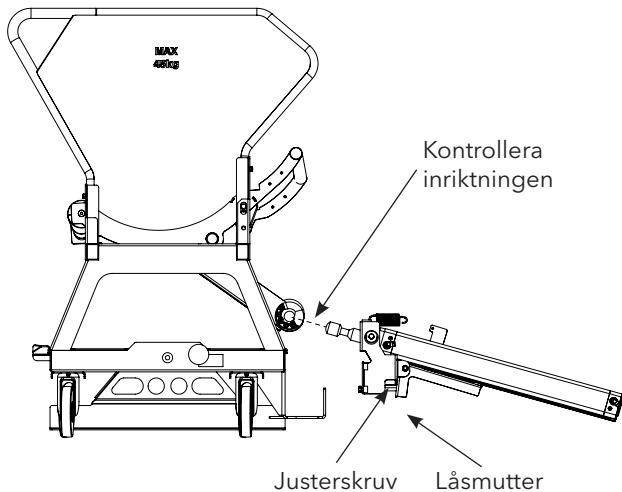


- Kontrollera att kopplingen mellan cylindern och pinnbullen är smord och smidigt rörlig. Annars kan den kärva och fastna.



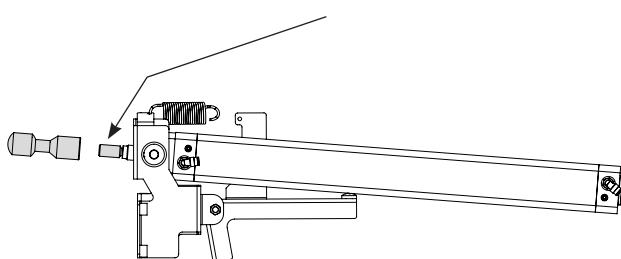
19. Justera höjden på cylinder 4 för yttre vagga

1. Docka vagnen.
2. Öppna självtestet - se kapitel 28
3. Aktivera cylinder 4 och se till att cylindern träffar mitt i styrningen.
4. Justera vid behov höjden med justerskruven.



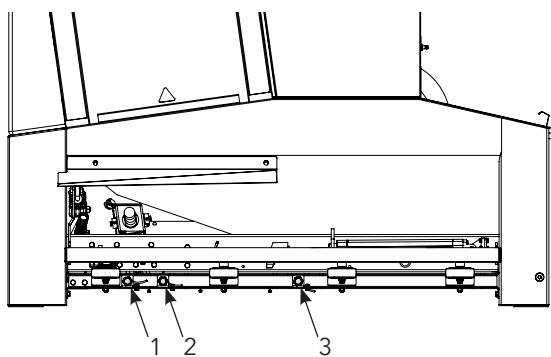
20. Byta svänghuvud på cylinder 4

Fäst svänghuvudet med Loctite 222.

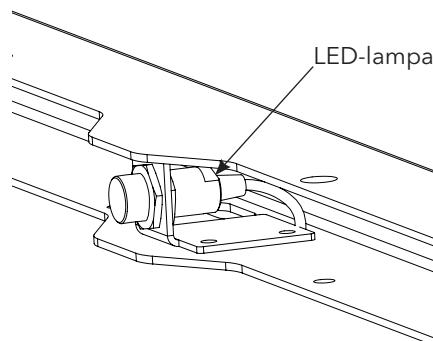


21. Induktiva vagnsensorer

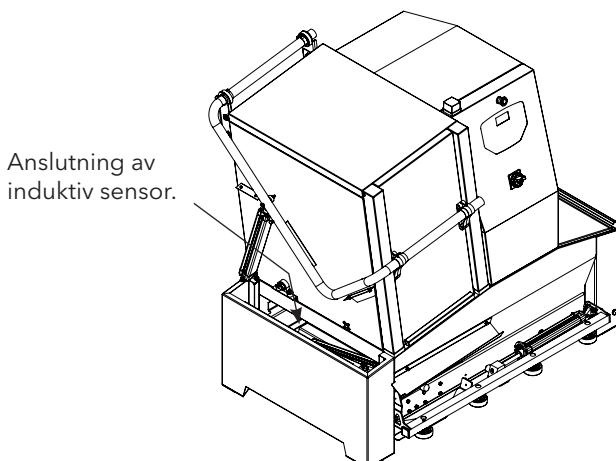
Maskinen har 3 induktiva sensorer som skickar signaler om vagnarnas läge under tvättcykeln.



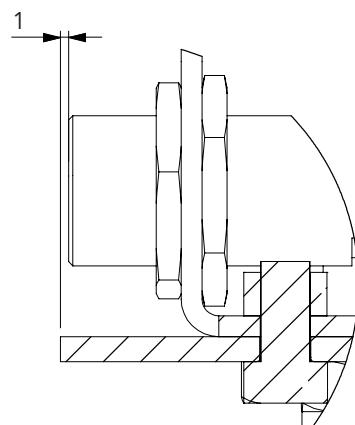
När en sensor detekterar stål sänder den en signal och LED-lampan på sensorns baksida tänds.



Om LED-lampan på sensorns baksida lyser kontinuerligt är sensorn defekt och bör bytas ut. Kabeln ansluts på maskinens vänstra sida - se bilden nedan.



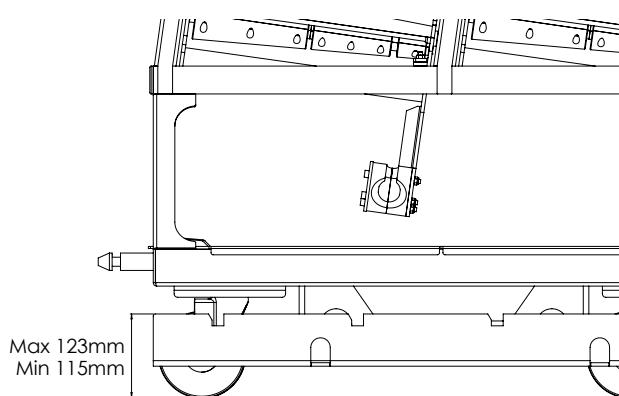
Observera att sensorn ska installeras 1 mm innanför skyddskanten.



Verifiera sensorns funktion via ett självtest - se kapitel 28.

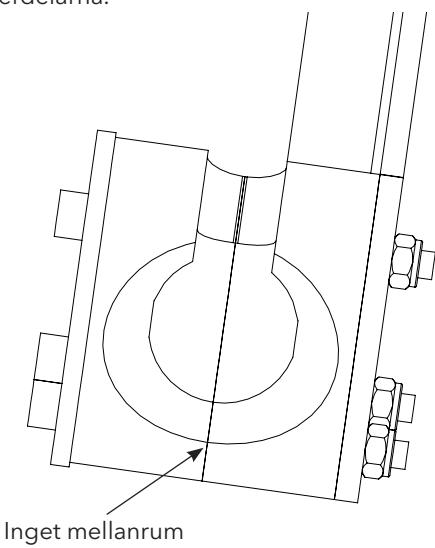
22. Kontrollmätning av vagnen

Placera vagnen på ett jämnt golv och mät från golvet upp till ovansidan av styrningen på vagnen.



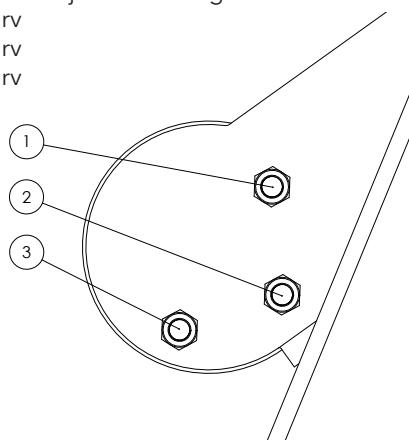
23. Installation av vagnens gångjärnsförsedda lager

- Montera och dra åt muttrarna lätt och se till att det inte finns något mellanrum mellan de båda lagerdelarna.



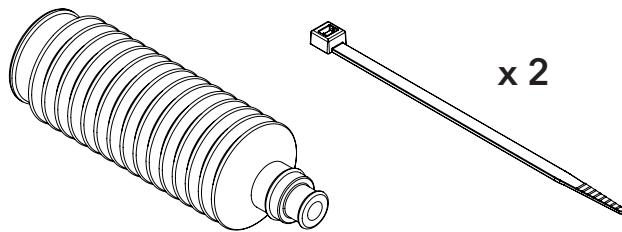
- Dra åt muttrarna i följande ordning:

Mutter 1: ¼ varv
Mutter 3: ¼ varv
Mutter 2: ¼ varv



24. Byta axelskydd cylinder 6

24.1 Komponenter

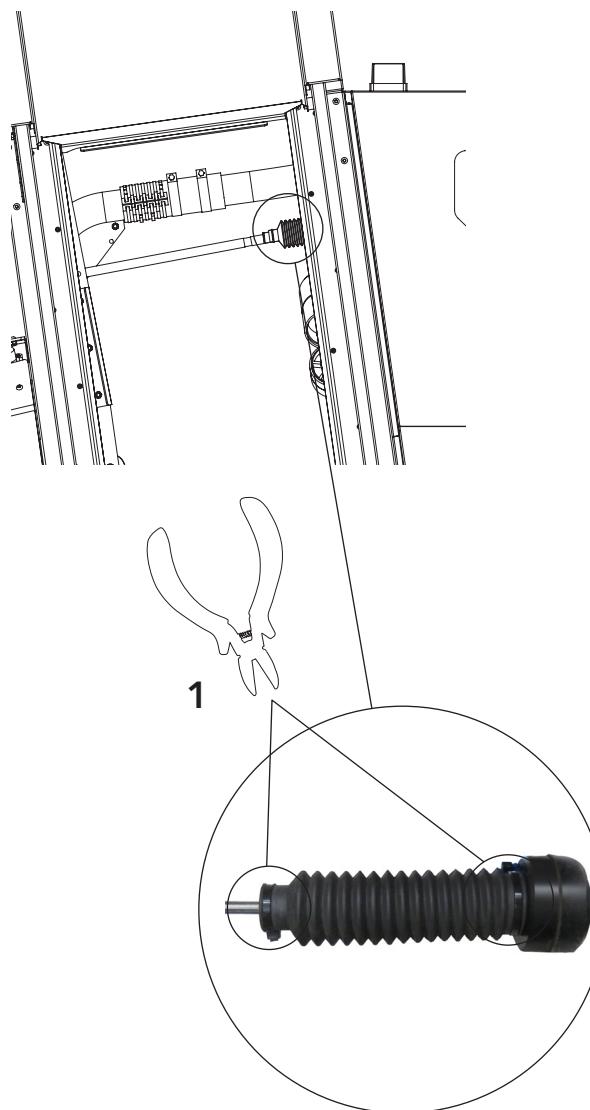


24.2 Verktyg

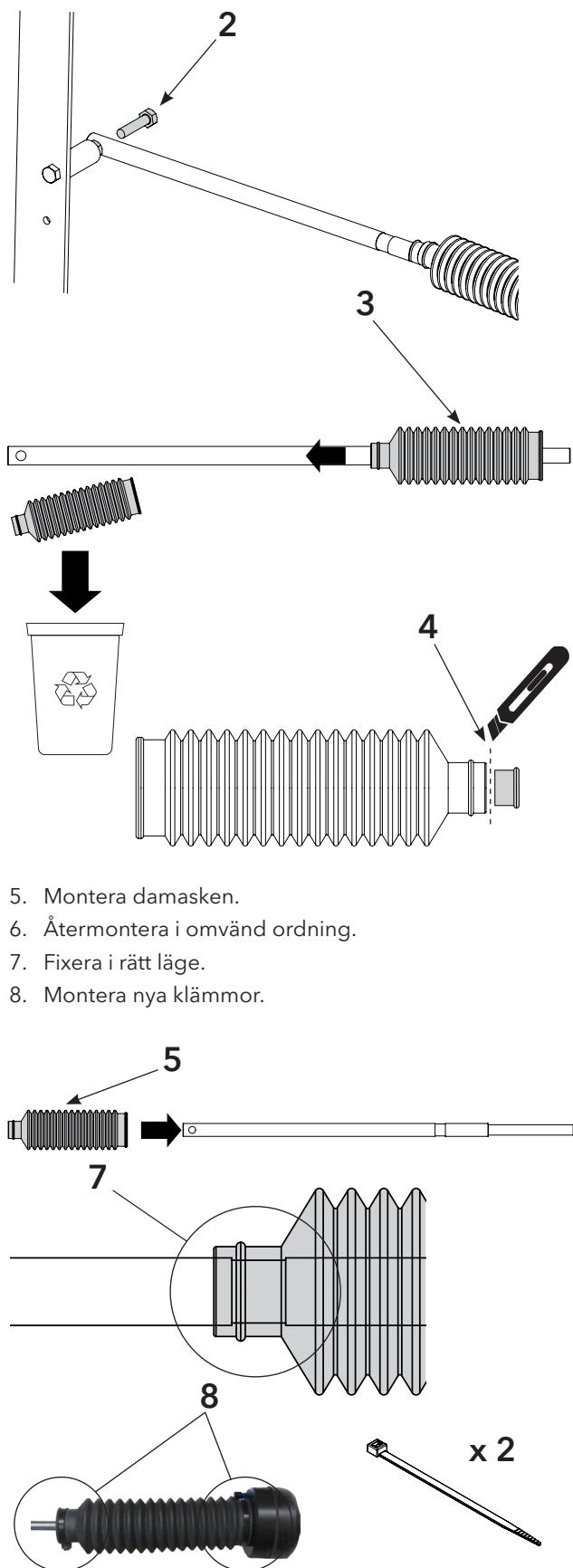


OBS! Läs först kapitel 1 - Säkerhetsföreskrifter

- Ta bort klämmorna.



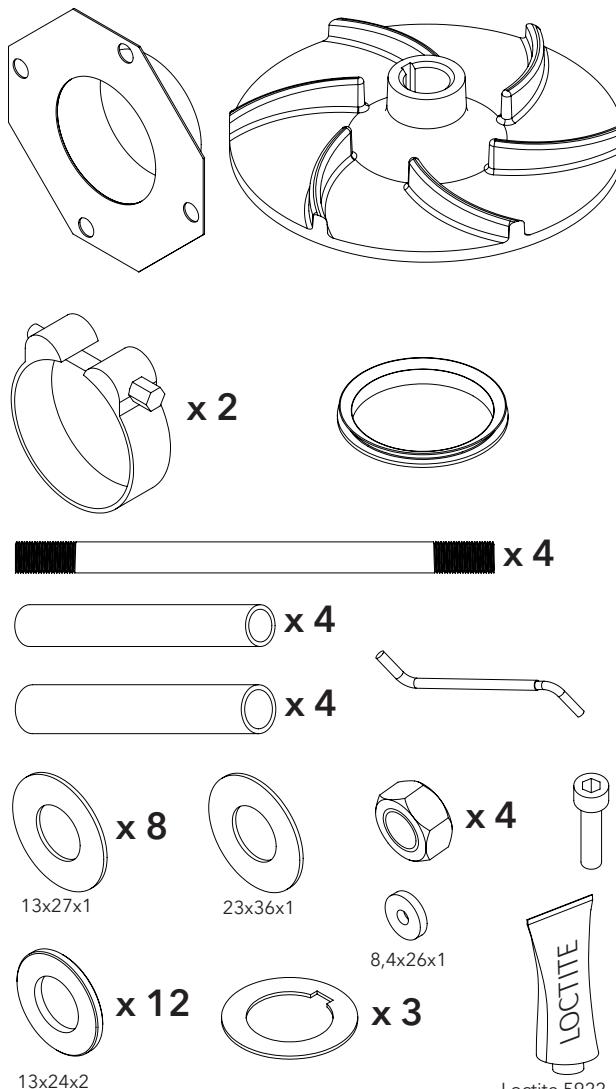
2. Ta bort skruven.
3. Ta bort och kassera damasken.
4. Klipp av toppen på den nya damasken.



5. Montera damasken.
6. Återmontera i omvänt ordning.
7. Fixera i rätt läge.
8. Montera nya klämmor.

25. Byta pump

25.1 Komponenter



VIKTIGT!

x 2 Ingår inte:
Beställ reservdel: R2892

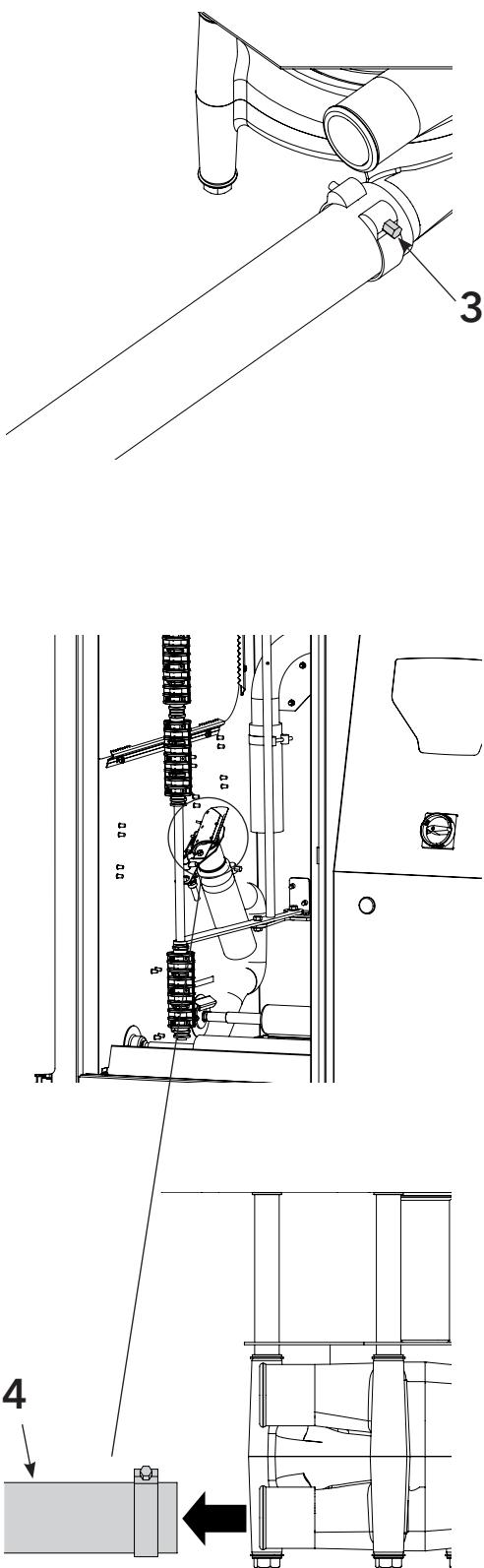
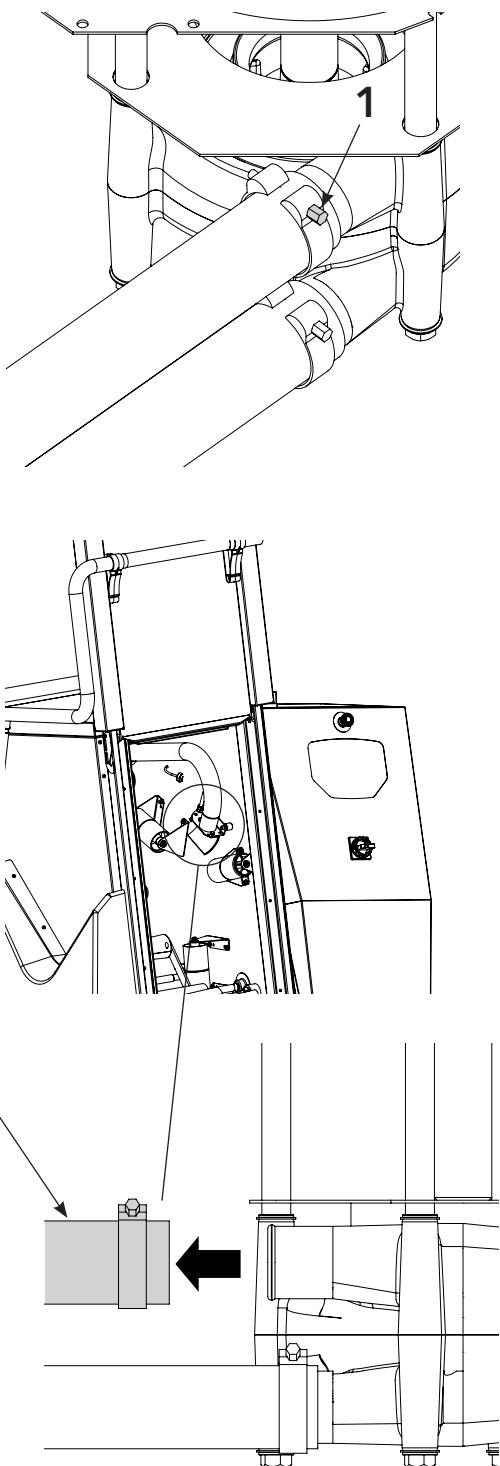
OBS! loctite 222 och 8009 ingår inte

25.2 Verktyg

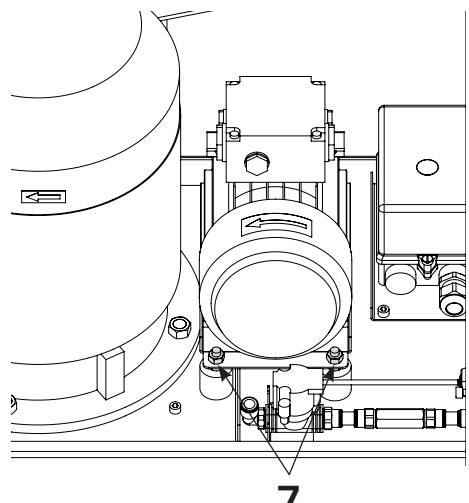
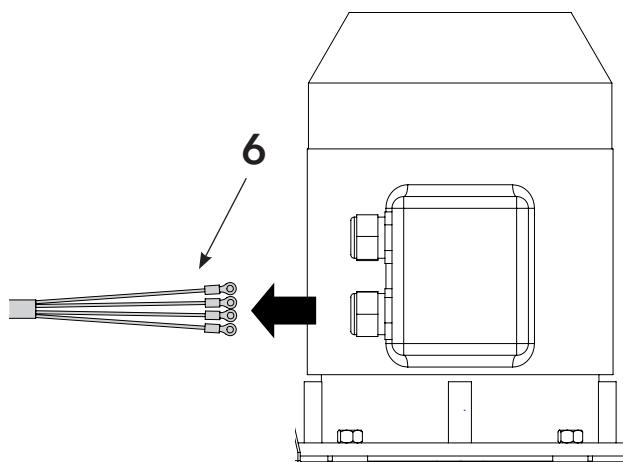
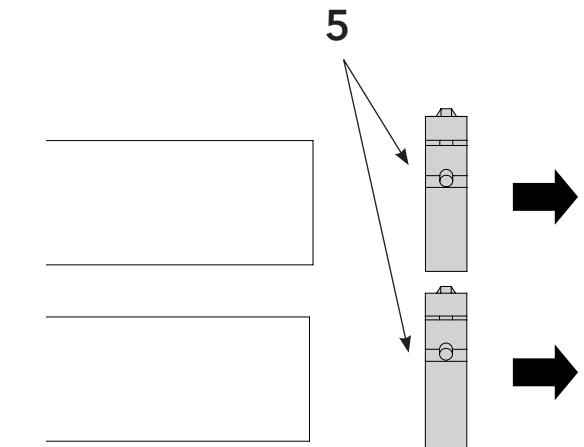


OBS! Läs först kapitel 1 - Säkerhetsföreskrifter.

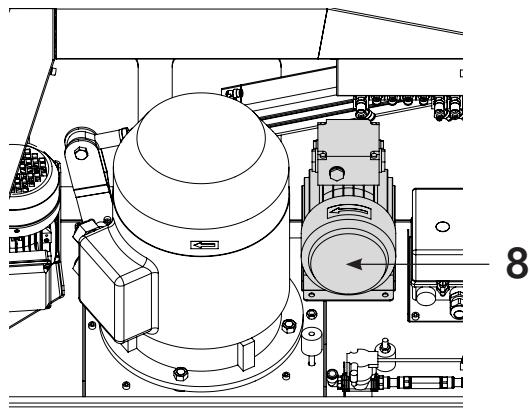
1. Lossa skruven.
2. Ta bort slangen.
3. Lossa skruven.
4. Ta bort slangen.



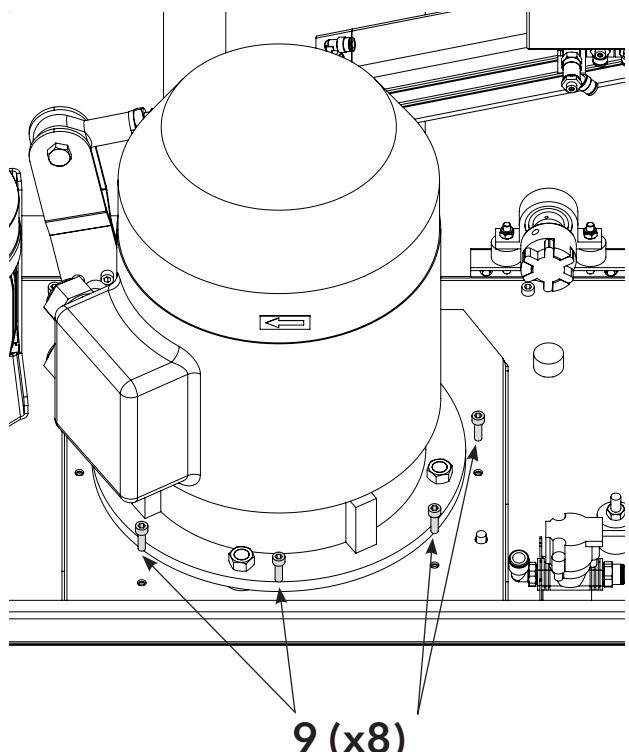
5. Kassera klämmorna.
6. Koppla bort nätkabeln. Se kapitel 9 vid montering.
7. Ta bort muttrarna.



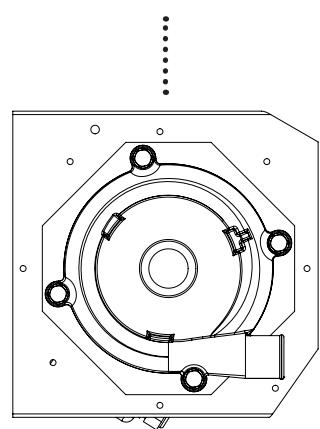
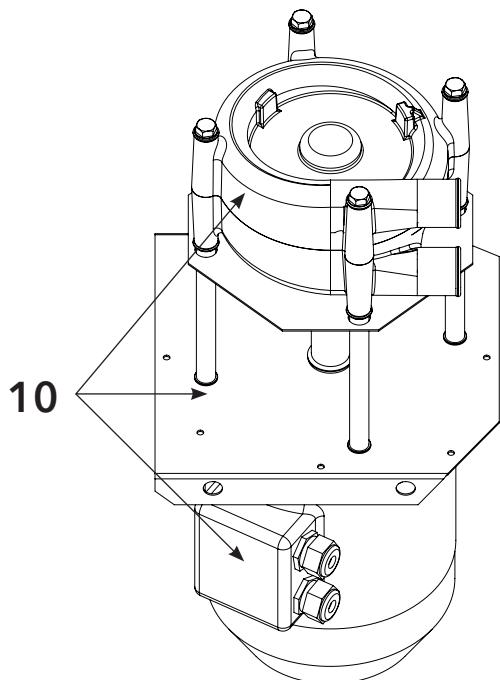
8. Ta bort motorn.



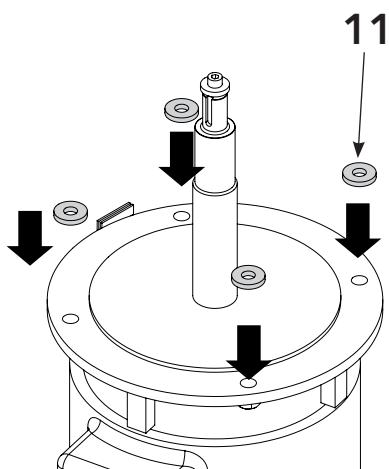
9. Ta bort skruvarna.



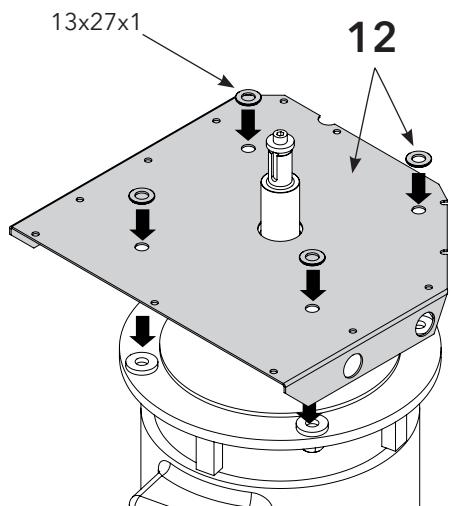
10. Innan den gamla pumpen demonteras: notera orienteringen av pumputloppen och plåten i förhållande till kopplingsboxen på motorn, så att den nya pumpen monteras i rätt position.



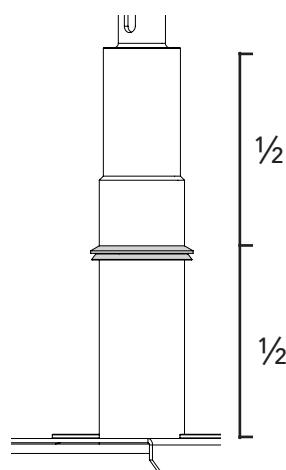
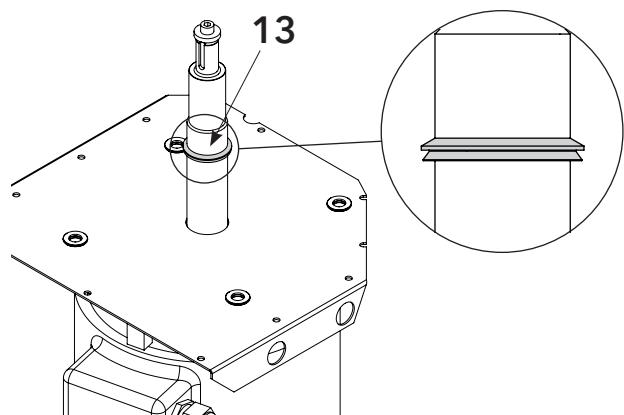
11. Lägg ut distansbrickorna på pumpmotorn (nya ingår **inte** i reservdelen)

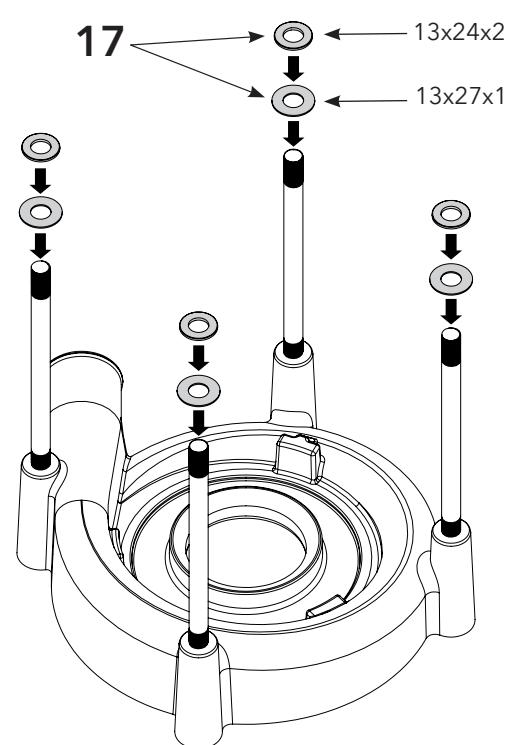
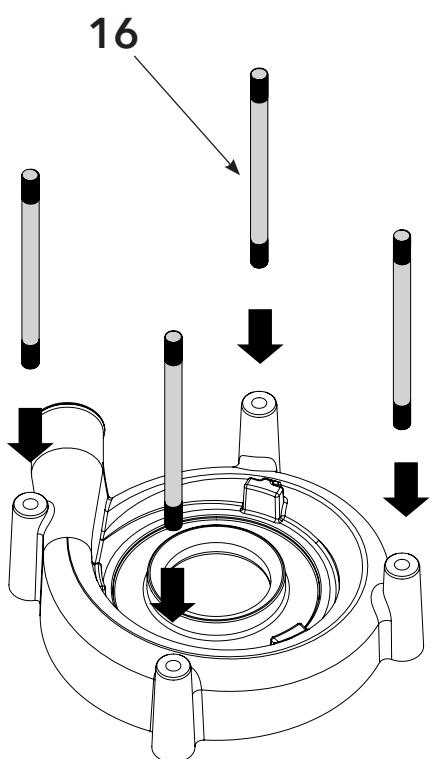
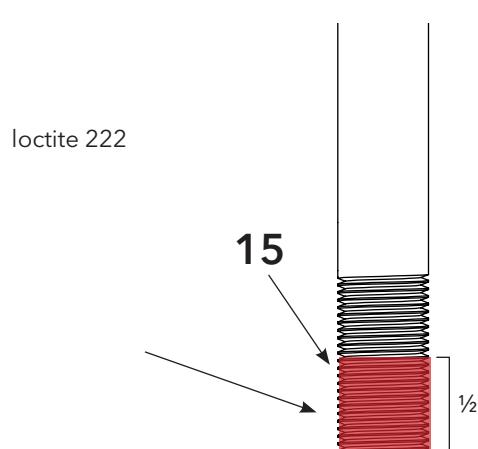
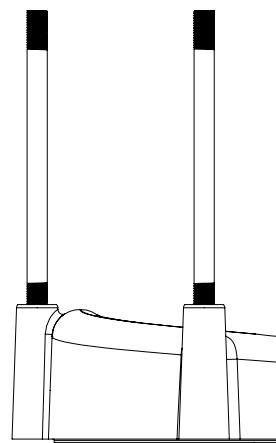
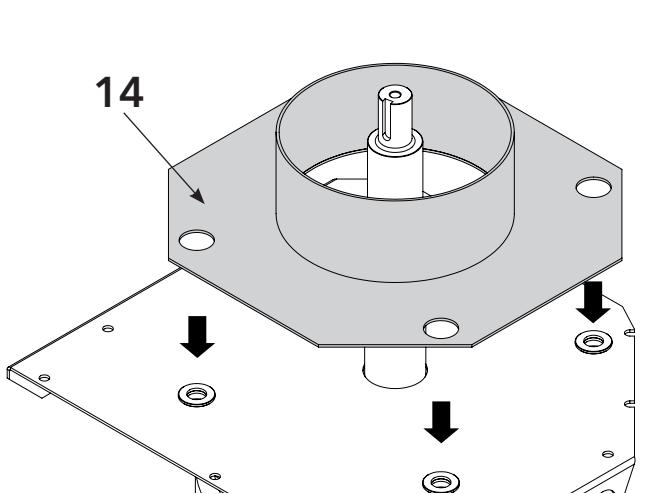


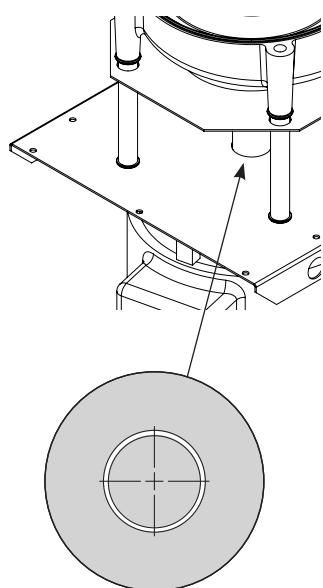
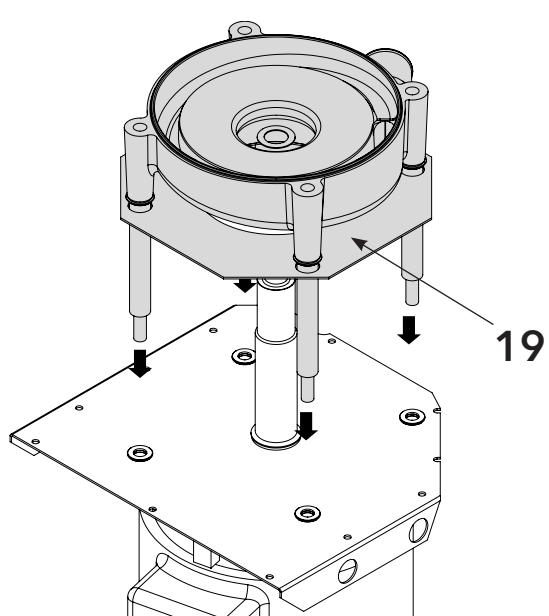
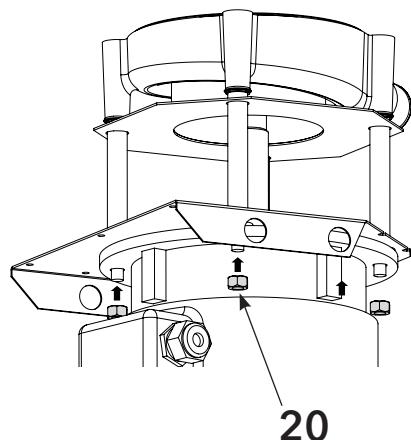
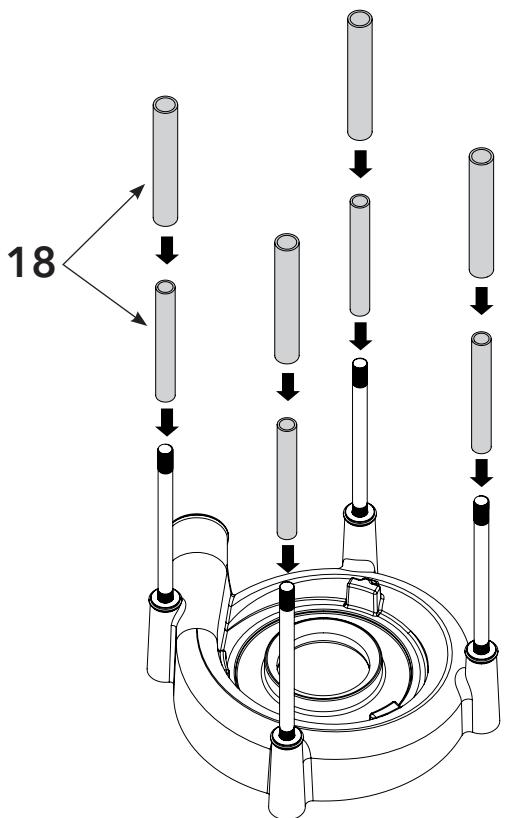
12. Sätt på metallplattan och sedan ringarna ovanpå.

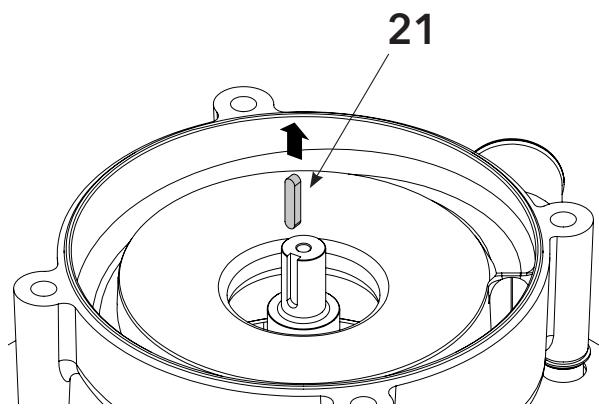


13. Placera gummiringen enligt bilden, halvägs ned mot cylindern.



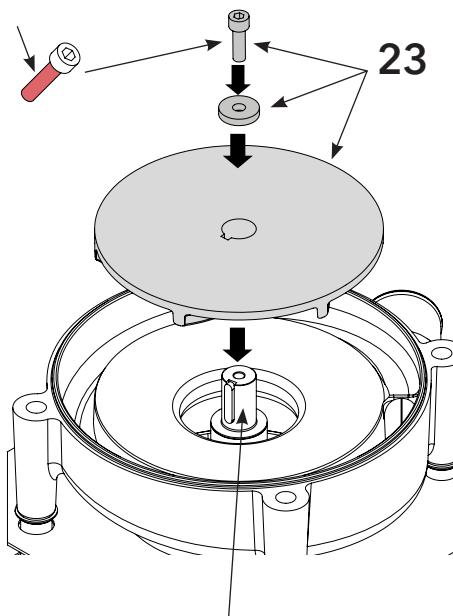




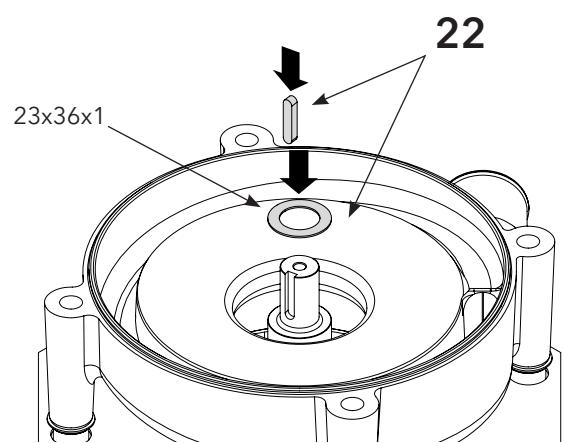


21

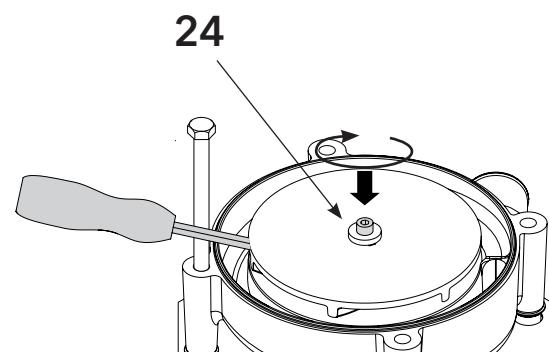
loctite 222



23

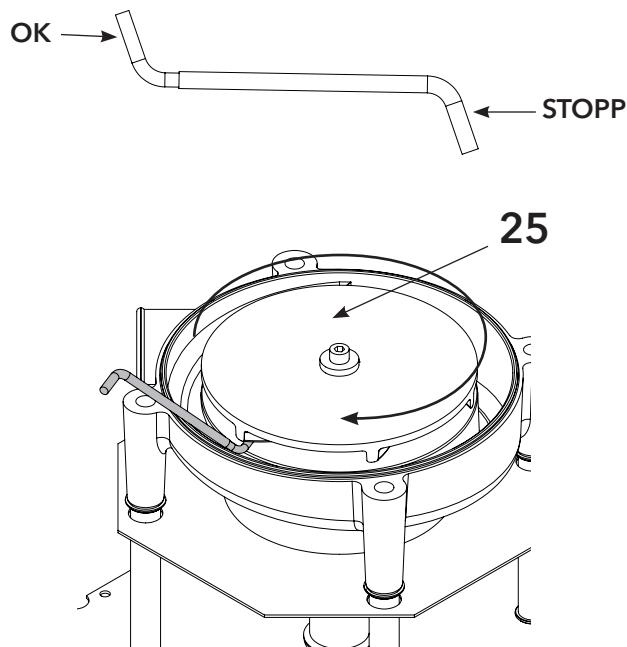


22

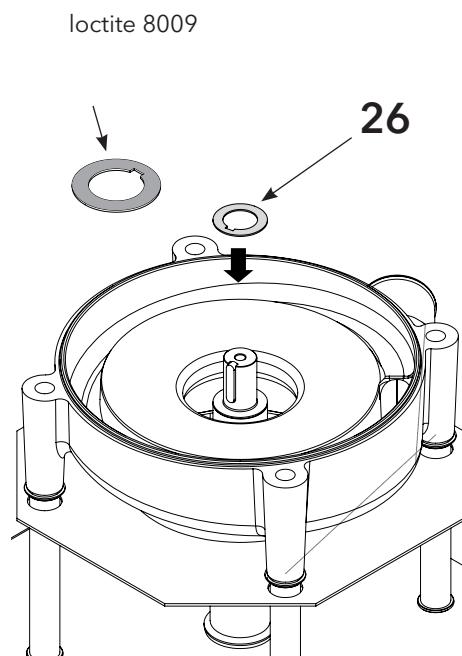


24

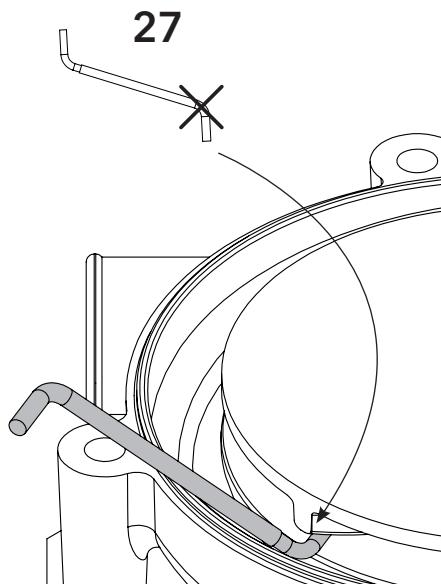
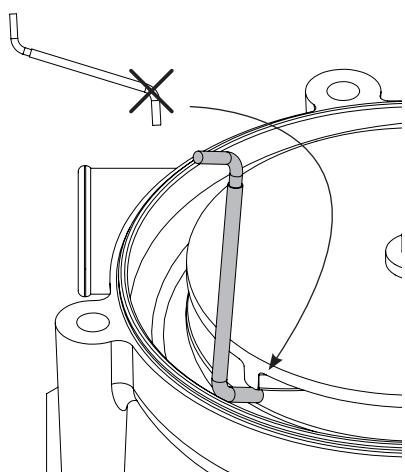
25. "OK-sidan" ska passera fritt, "STOPP-sidan" får inte passera någonstans.

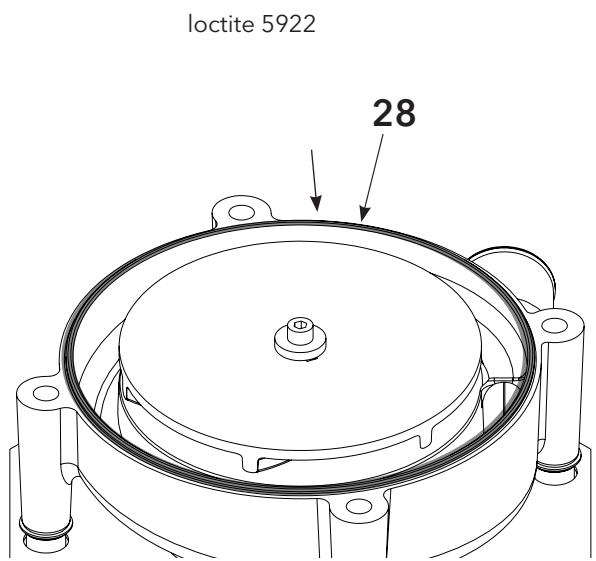


26. Vid behov, demontera pumphjulet och lägg i ett insmott mellanlägg enligt bilden.

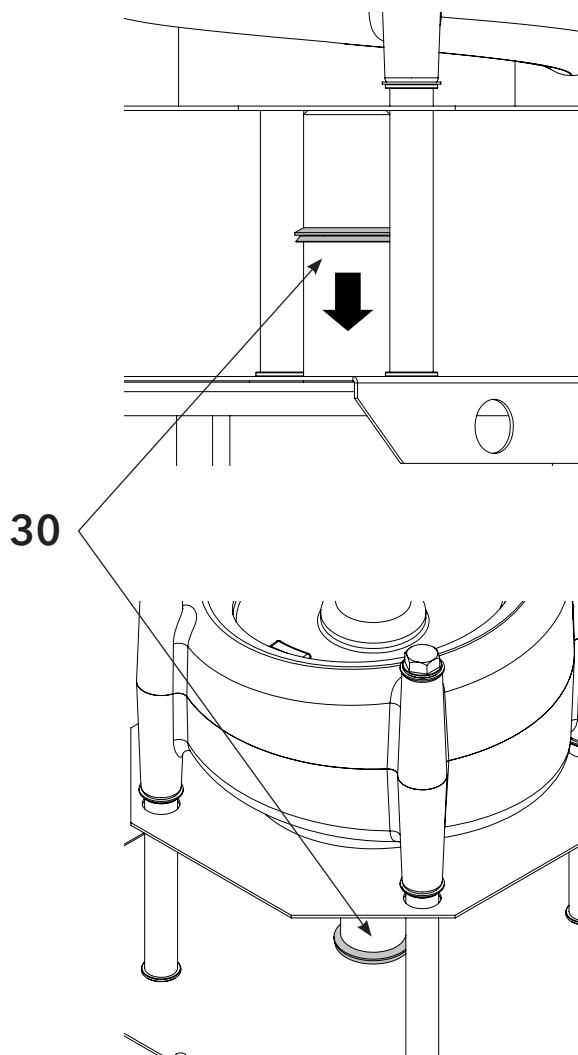
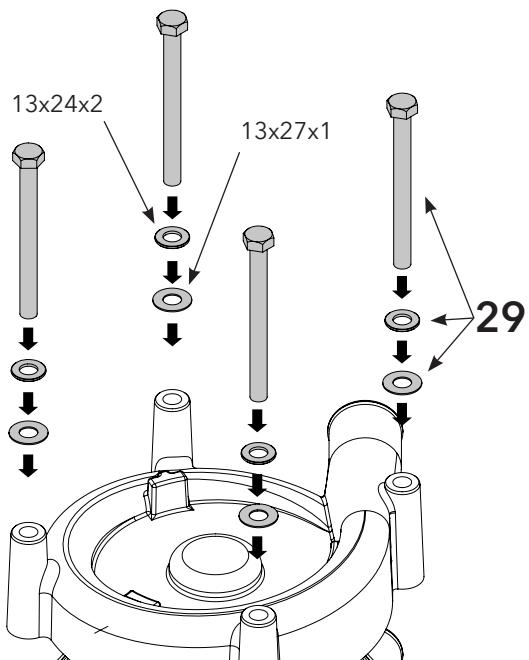
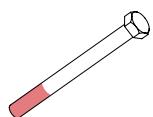


27. Montera åter pumphjulet och kontrollera avståndet.
"OK-sidan" skall passera under alla skovlar som bilden visar.

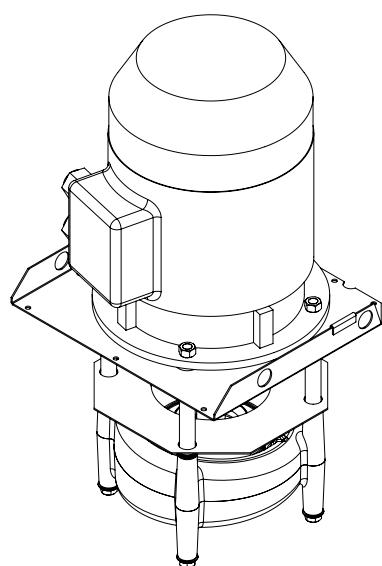




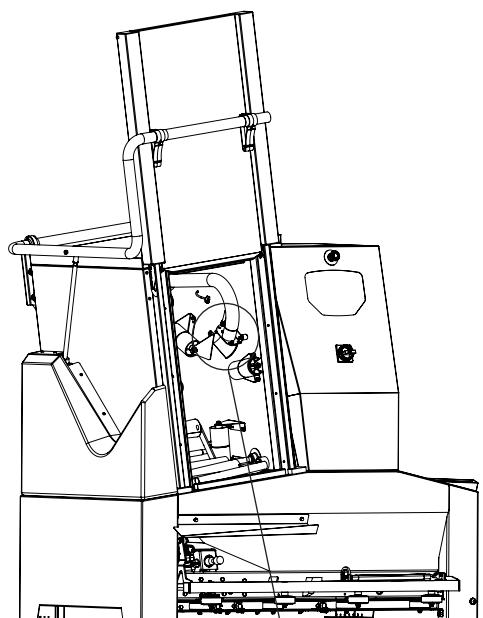
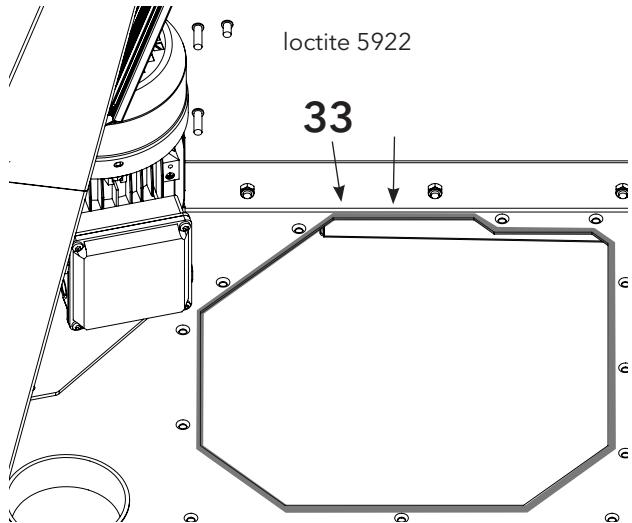
loctite 222



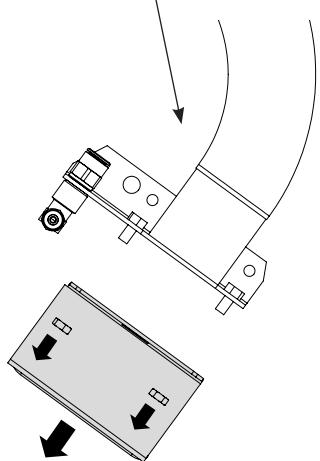
31. Färdig att monteras in i hjultvätten.
32. Återmontera i omvänd ordning steg 9-1.



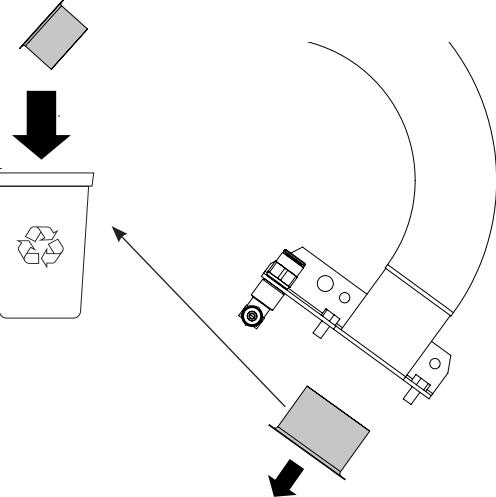
33. Notera i steg 9 att loctite ska appliceras innan pumpmotorn monteras.



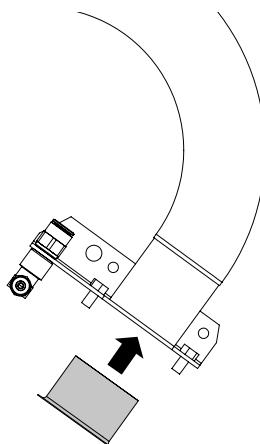
34



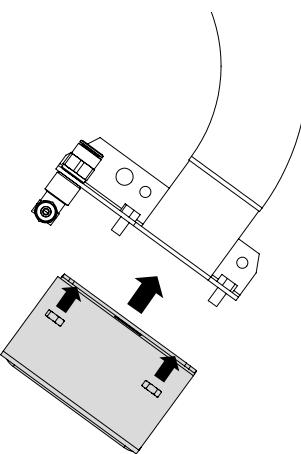
35

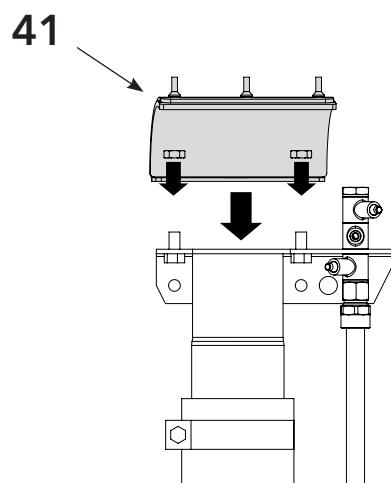
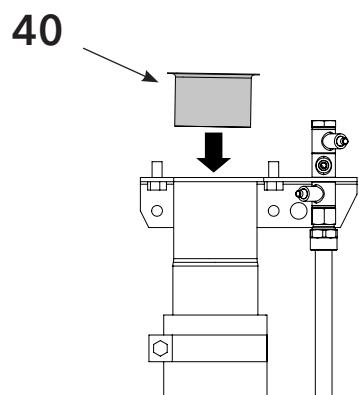
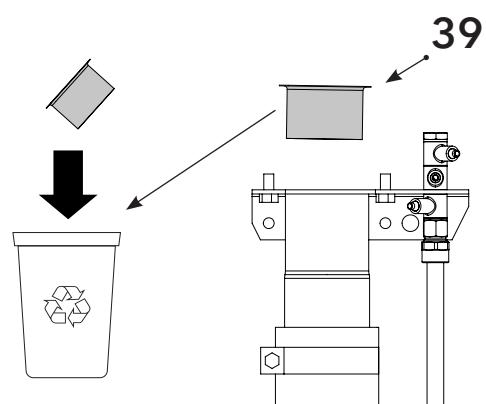
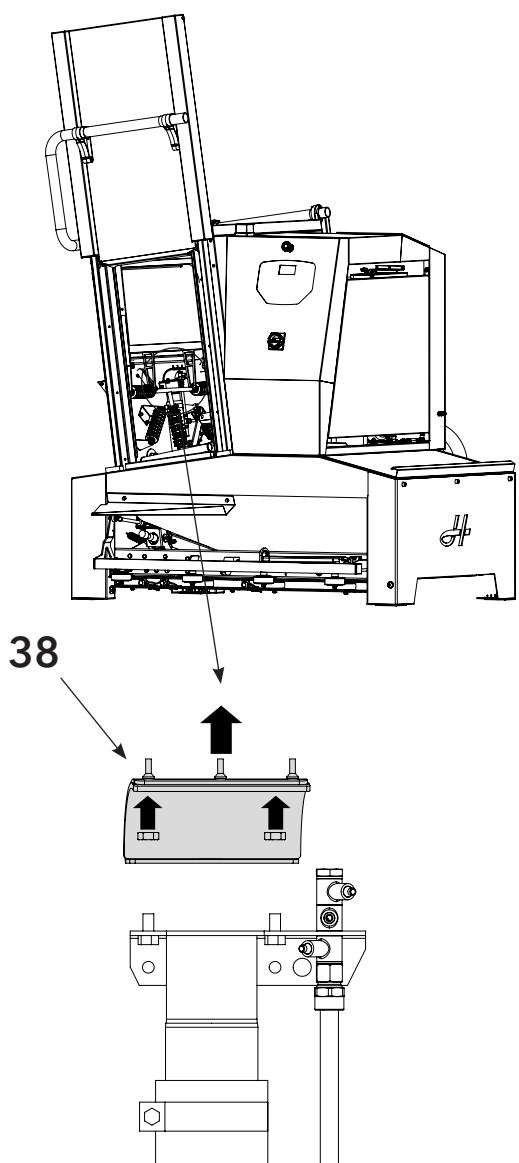


36

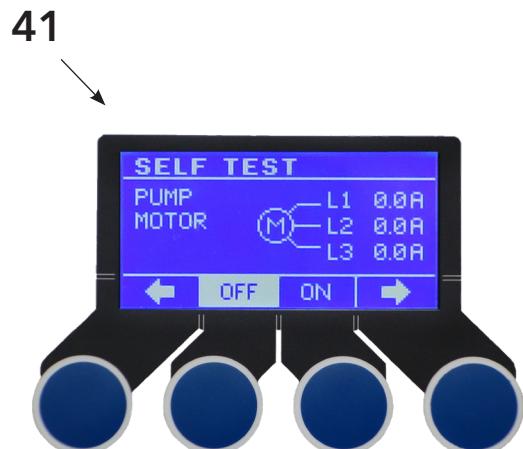


37

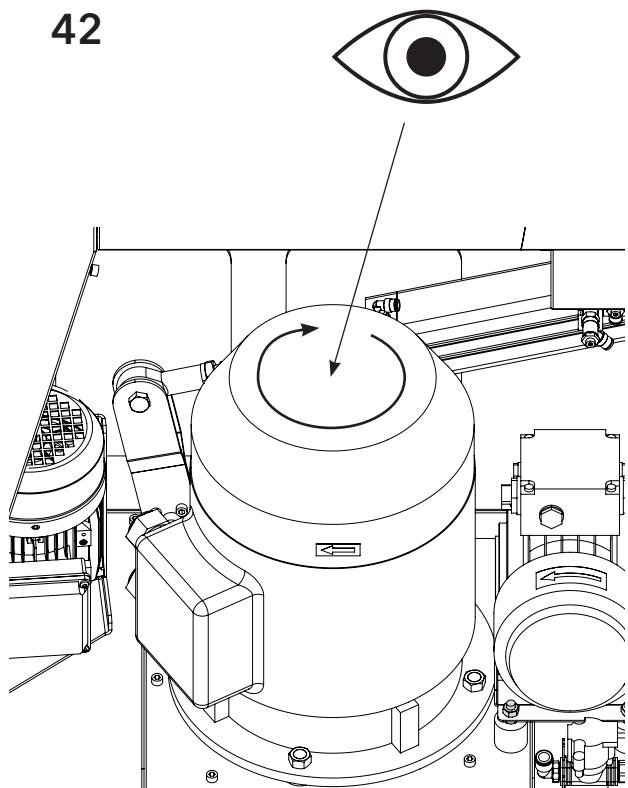




8.Self test...../PUMP MOTOR/ON

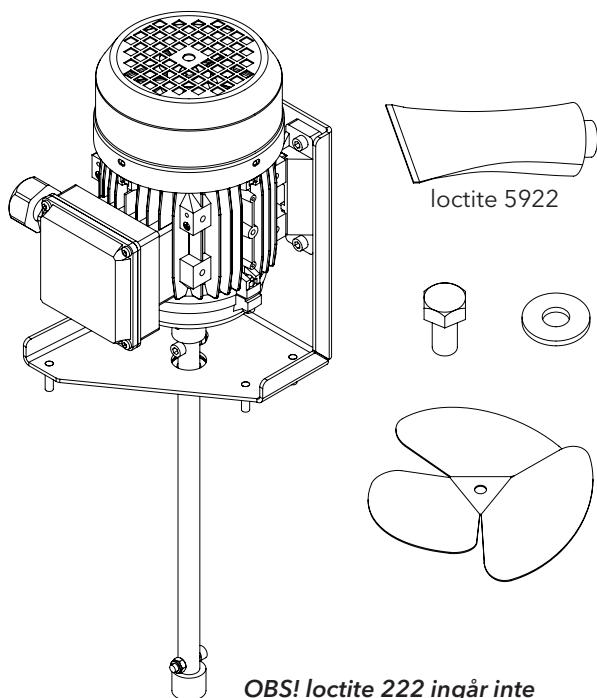


42



26. Installation av mixermotor

26.1 Komponenter

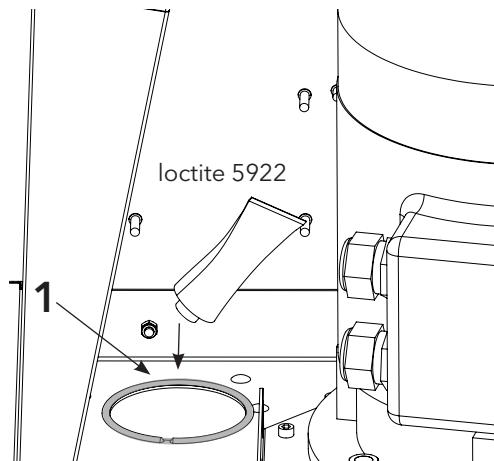


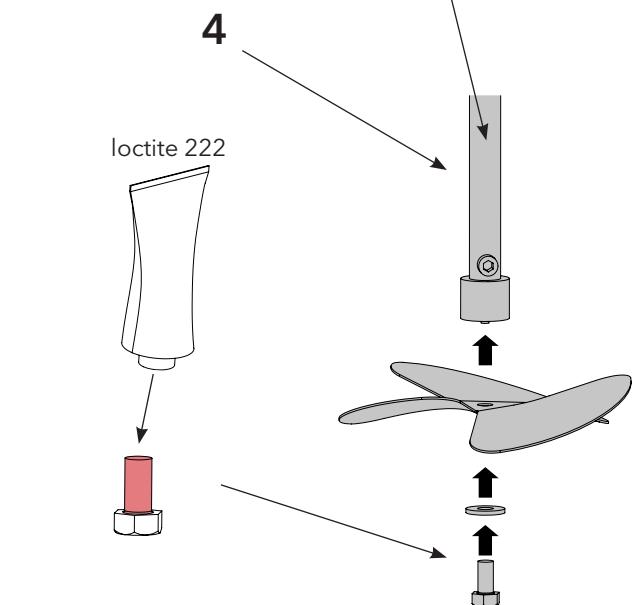
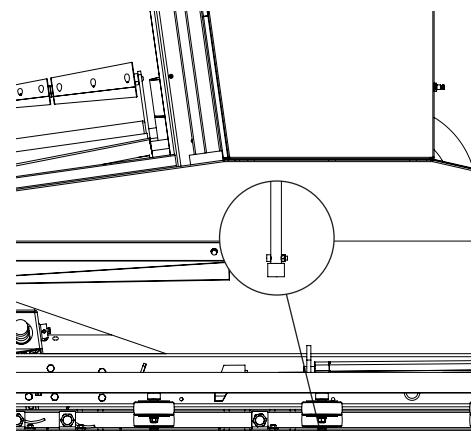
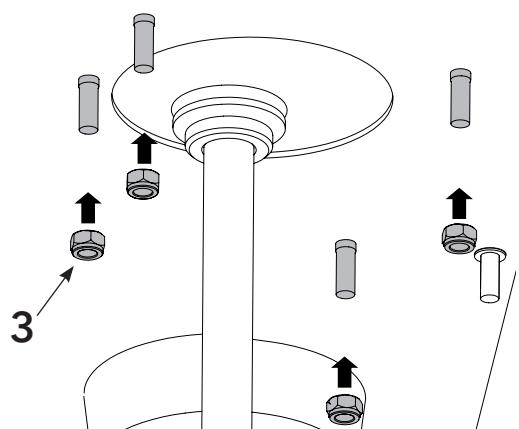
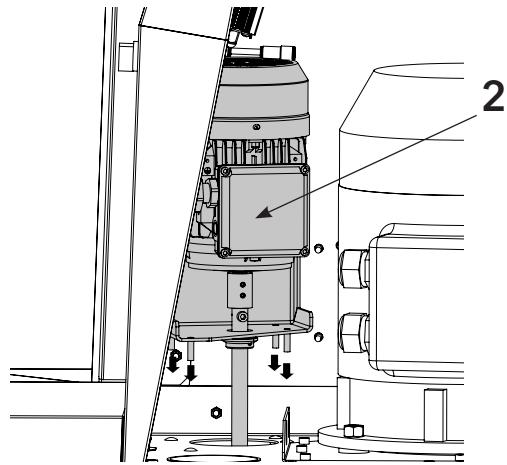
OBS! loctite 222 ingår inte

26.2 Verktyg

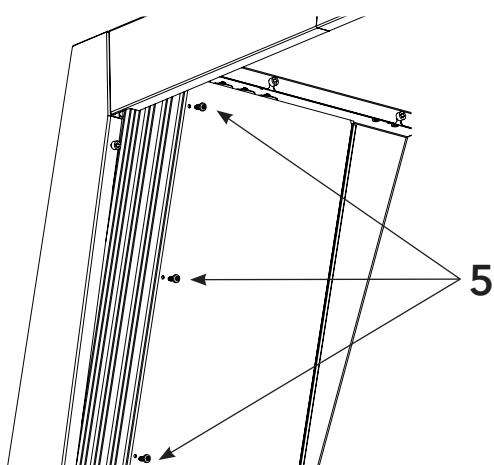


OBS! Läs först kapitel 1 - Säkerhetsföreskrifter.

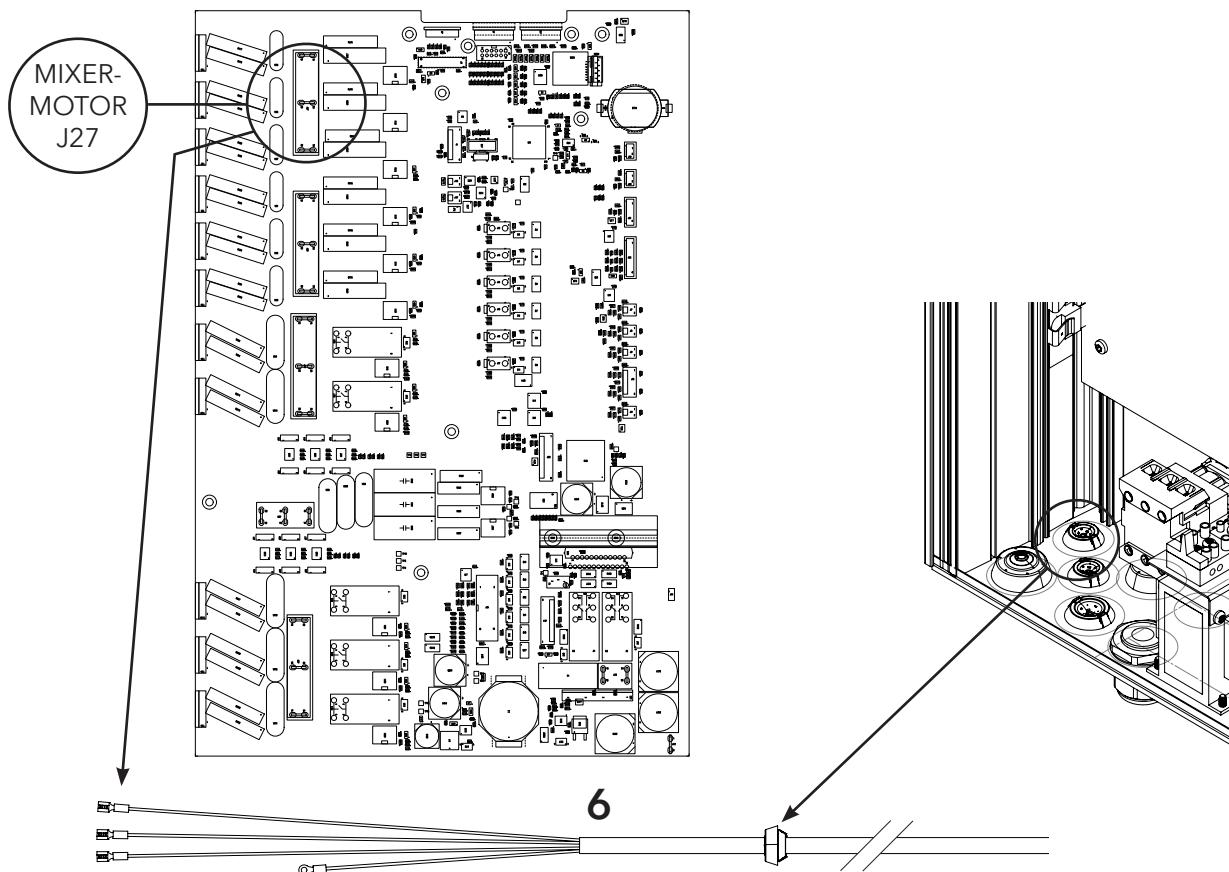




5. Avlägsna skruvar och kåpa.

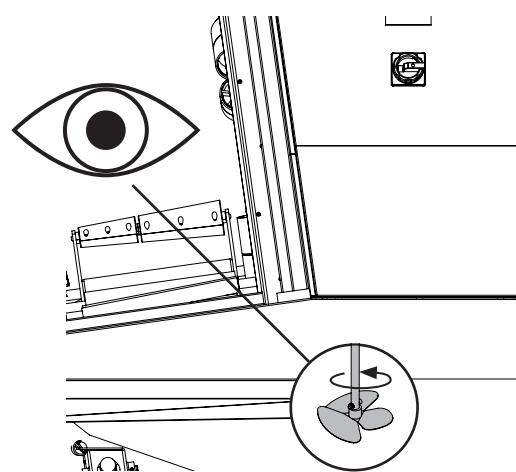
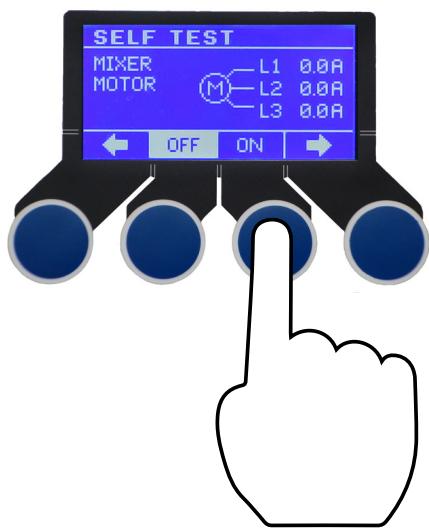


6. Anslut enligt kopplingsschemat i kapitel 9.



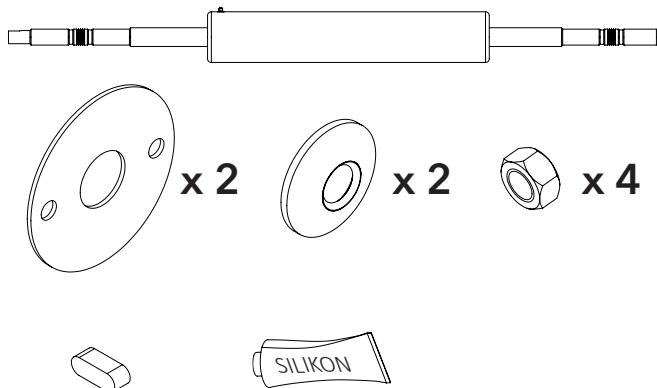
7. Följ anvisningarna i kapitel 6 och välj YES vid alternativet Mixer motor.

/8.Self test/...../MIXER MOTOR/ON



27. Byta drivaxel

27.1 Komponenter

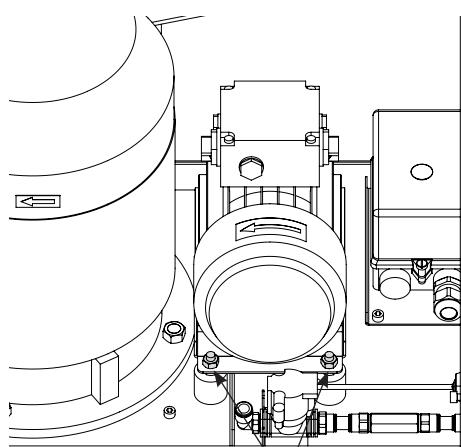


27.2 Verktyg



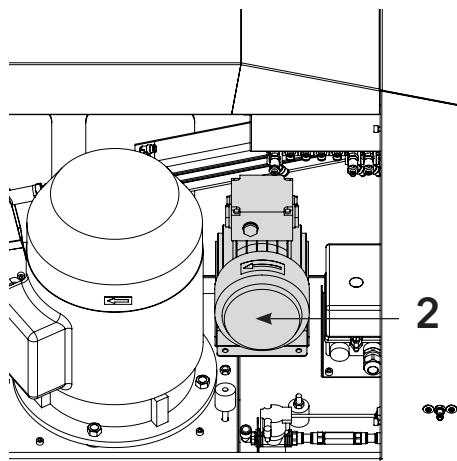
OBS! Läs först kapitel 1 - Säkerhetsföreskrifter.

1. Ta bort muttrarna.



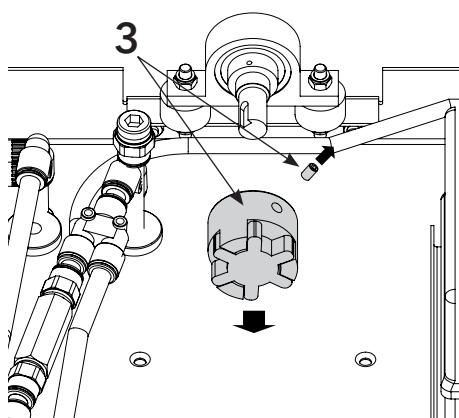
1x4

2. Ta bort motorn.

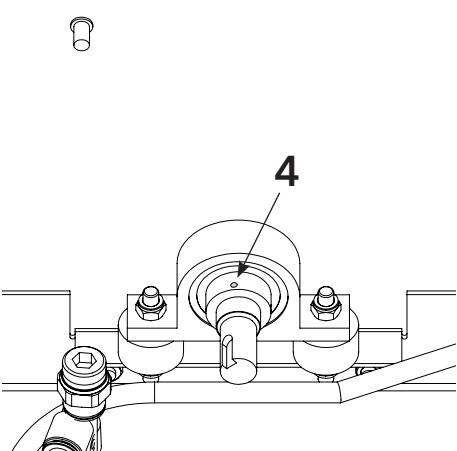


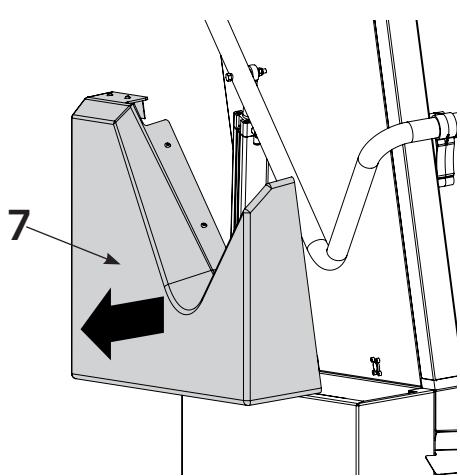
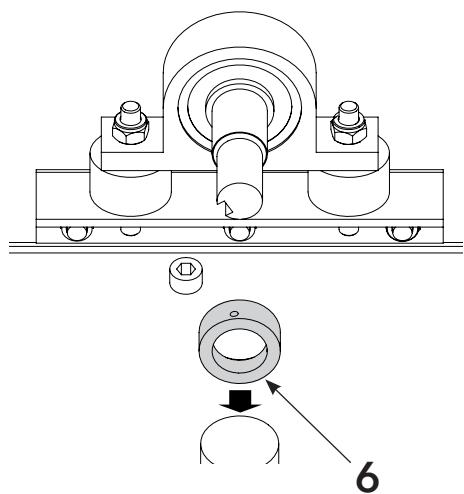
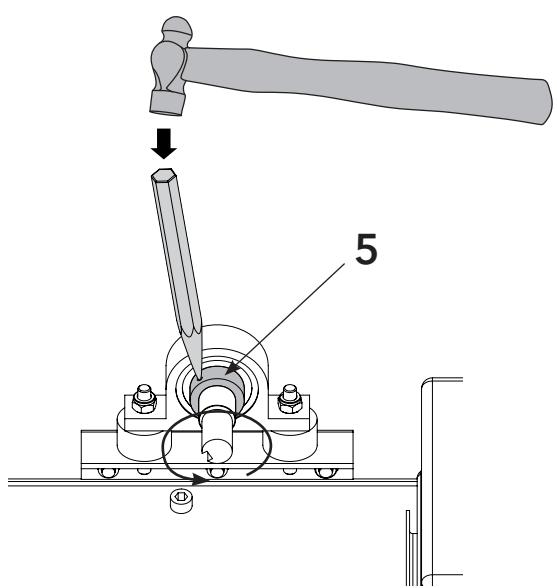
2

3. Lossa skruven.

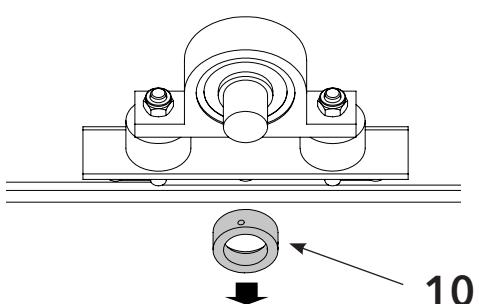
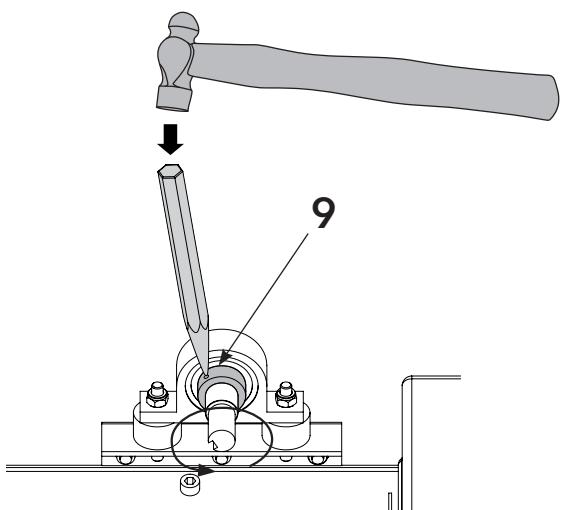
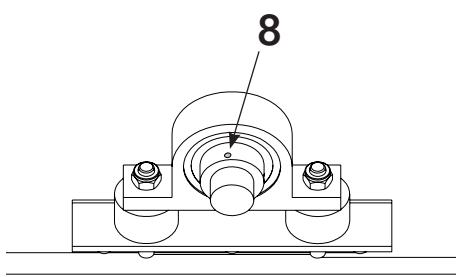


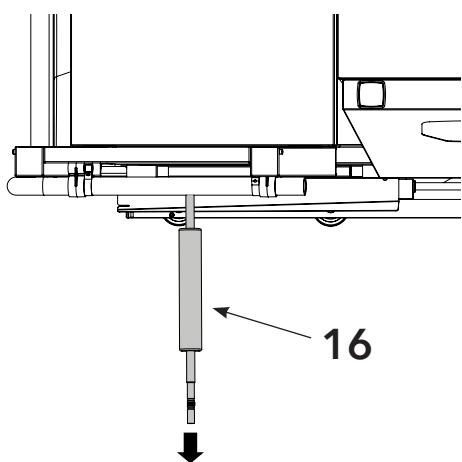
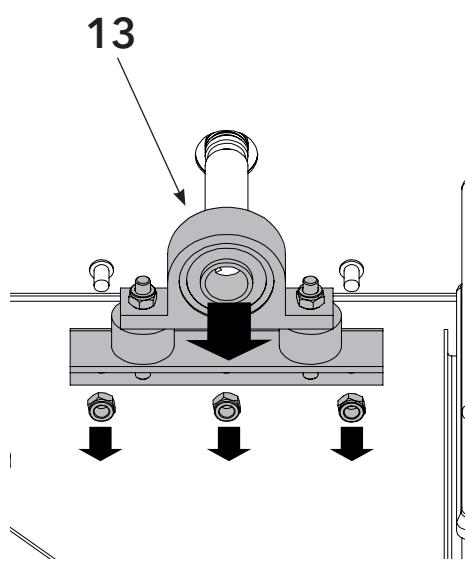
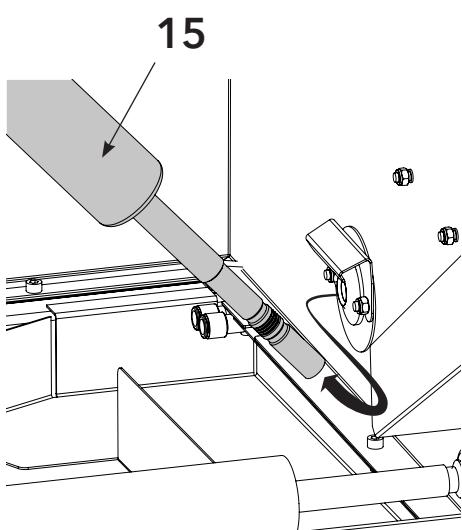
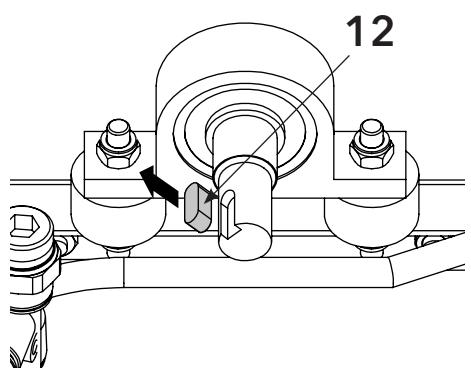
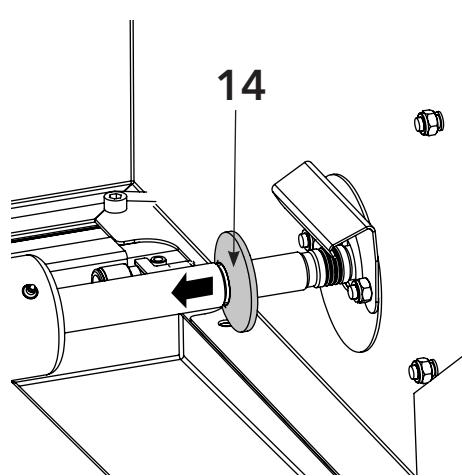
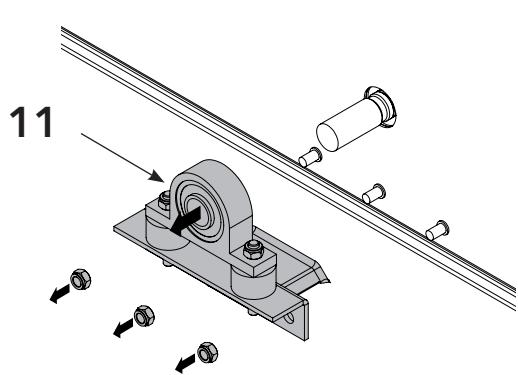
4. Lossa skruven.

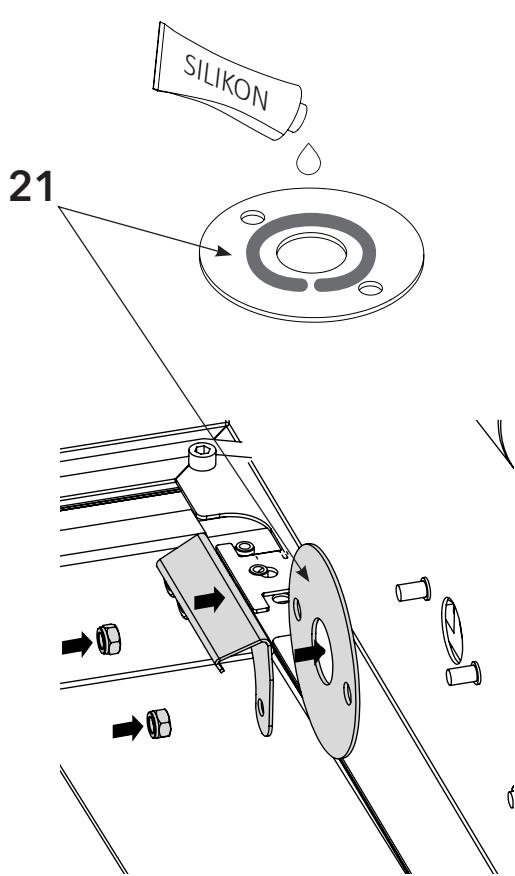
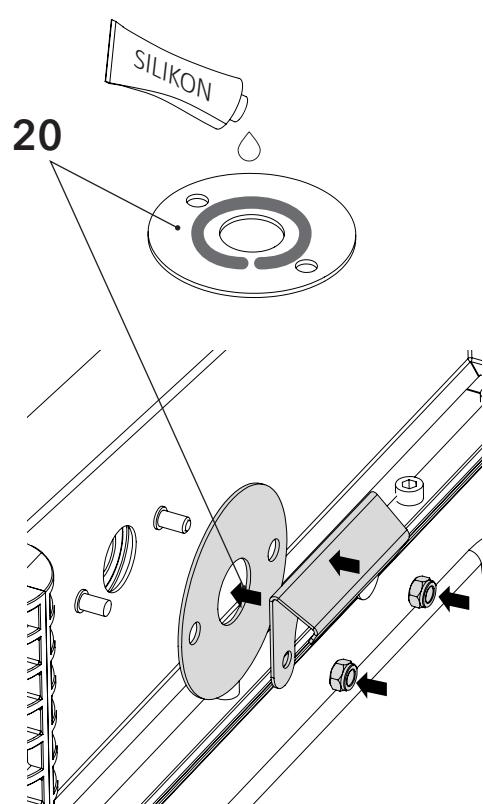
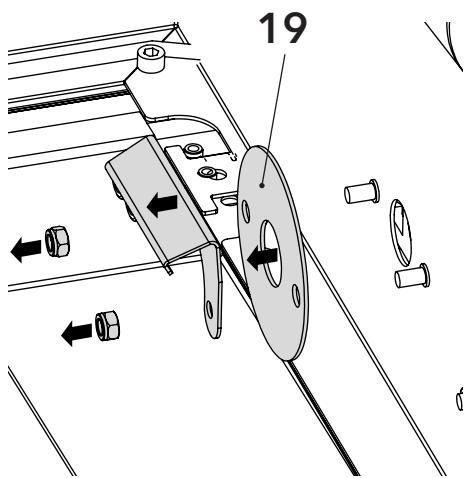
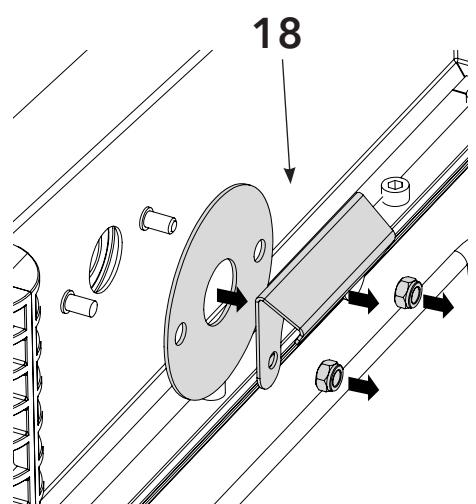
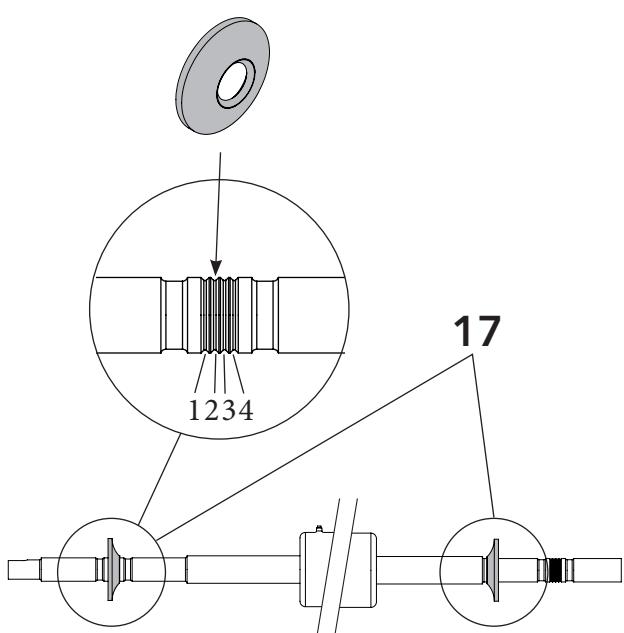




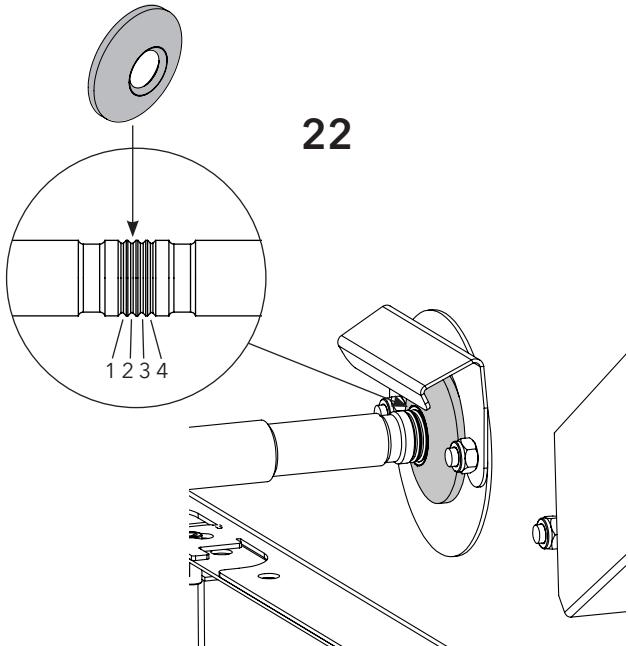
8. Lossa skruven.



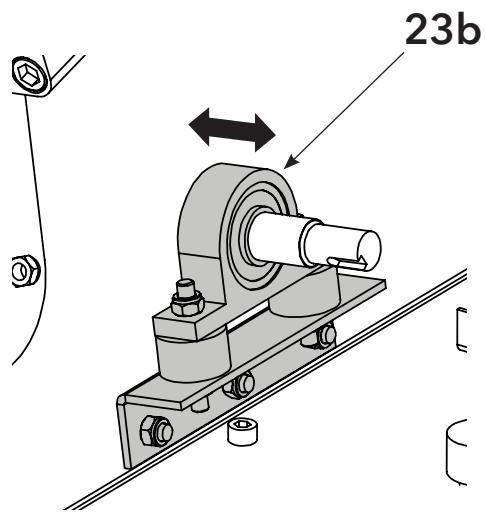
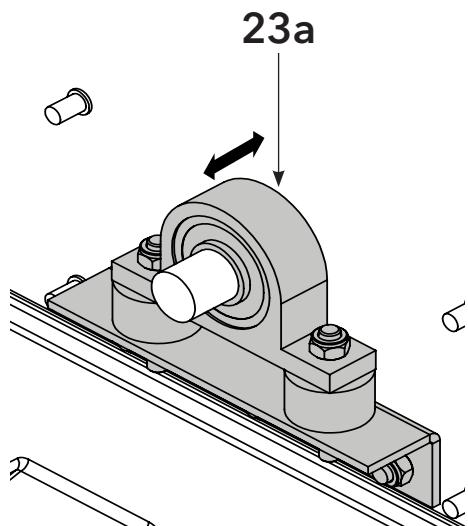




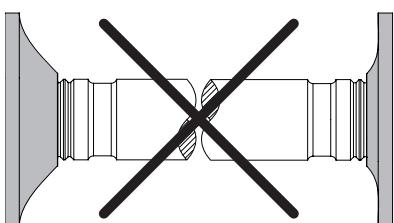
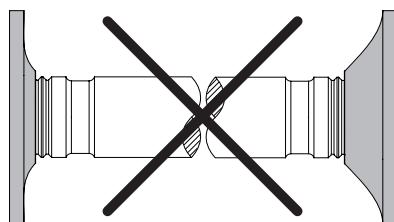
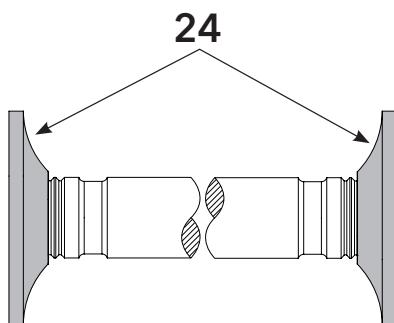
22. Återmontera i omvänt ordning från steg 16-1.
 Notera i steg 14 att placeringen ska göras enligt 22.
 Efter steg 11, utför steg 24 och 25.
 Efter steg 1, kontrollerar steg 26-27.



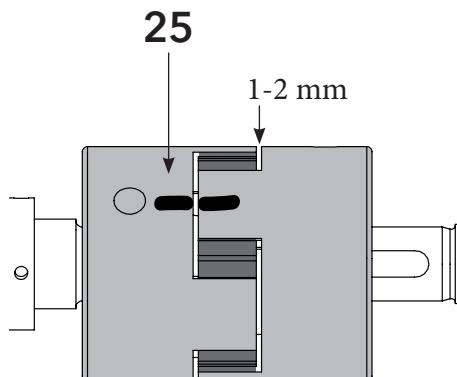
23. Se till att både lagren kan röra sig fritt på drivaxeln.



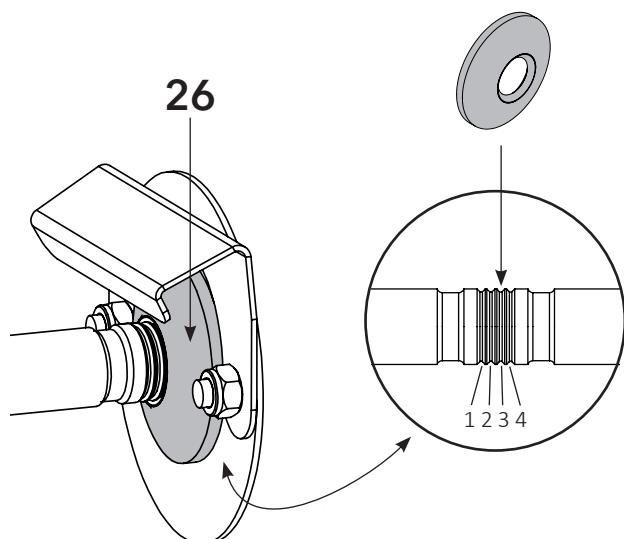
24. Se till att tätningsringarna på respektive sida fortfarande har samma vinkel mot plåten.



28. Självtest



26. Om maskinen läcker från tätningarna: Byt ut höger tätningsring i den tredje skåran. Kontrollera inrikningen enligt steg 25.



1

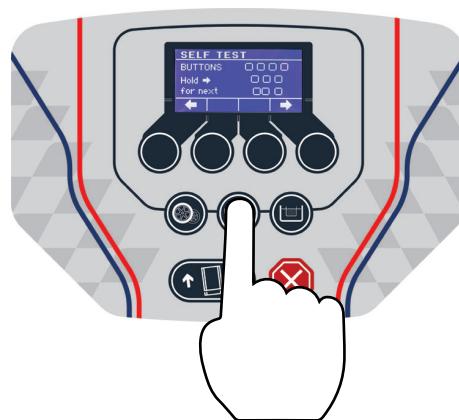


2

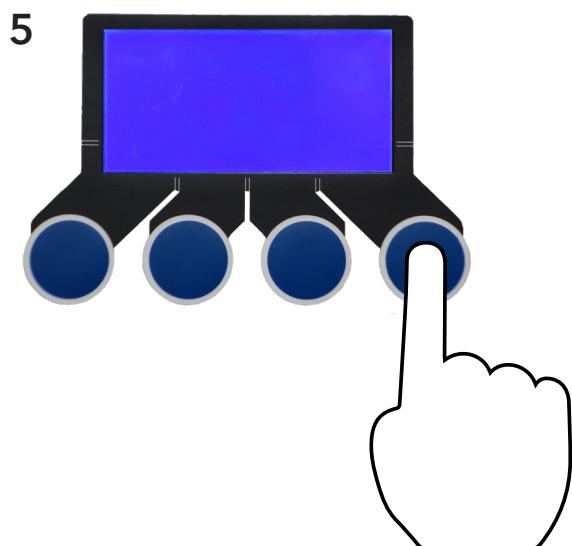
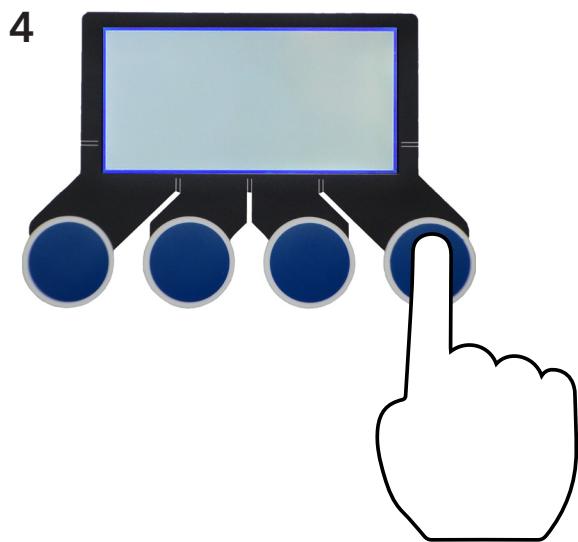


3. Tryck på alla knappar och kontrollera att de fungerar som avsett. Tryck och håll in → för att fortsätta.

3

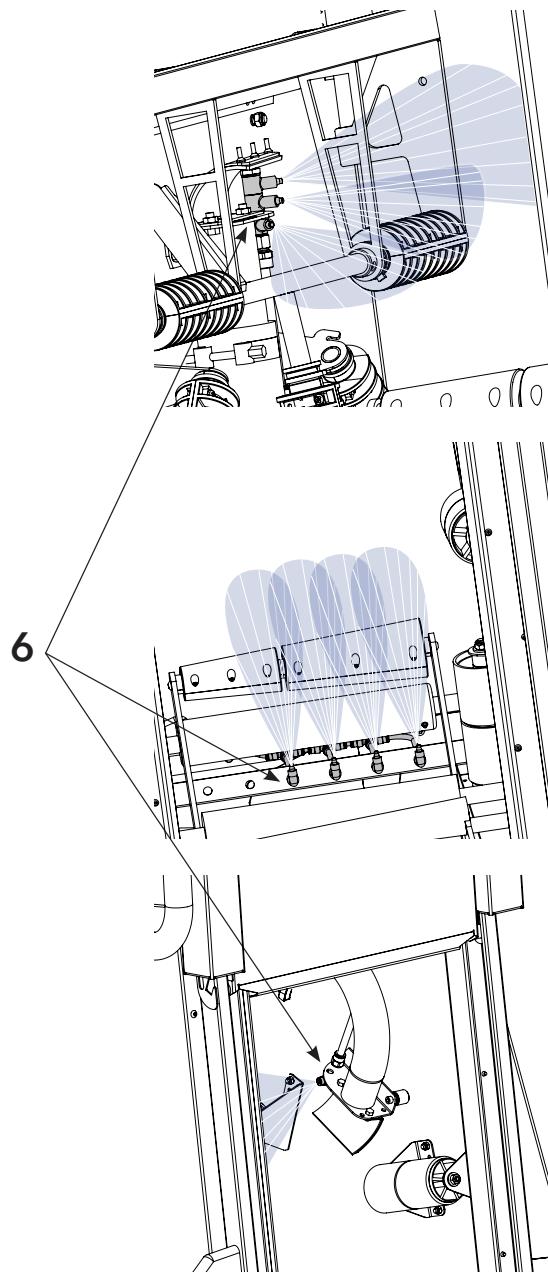


4. Kontrollera att ALLA pixlar lyser. Fortsätt genom att trycka på den högra knappen. →
5. Kontrollera att INGA pixlar lyser. Fortsätt genom att trycka på den högra knappen.



VIKTIGT!
ÖPPNA DÖRREN. RISK FÖR VATTENSTÄNK.

6. Kontrollera att alla åtta munstycken fungerar.



7. Visar temperaturen inuti styrboxen. Max tillåten temperatur 61 °C. Om maskinen inte har använts ska temperaturen vara omkring rumstemperatur.

7

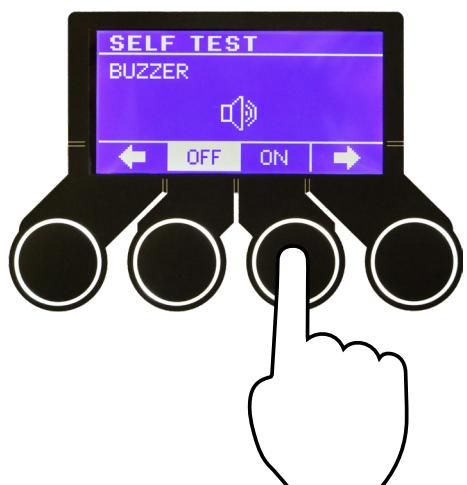
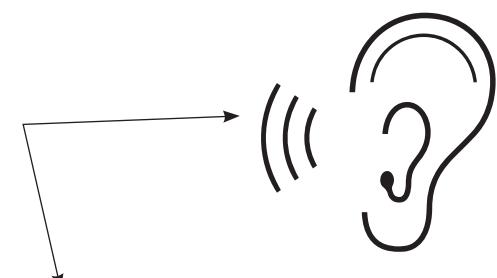


8. Visar vattentemperaturen. Temperatursensorn finns i värmaren. Max tillåten temperatur 65 °C.

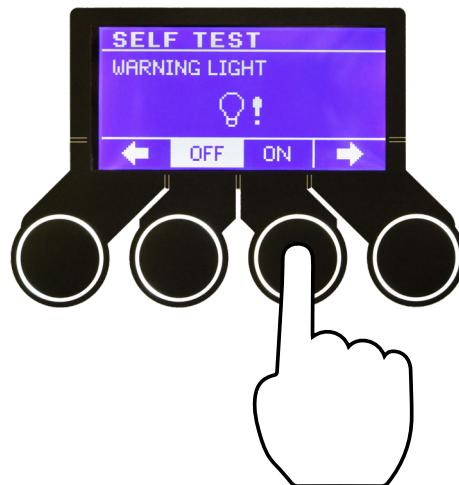
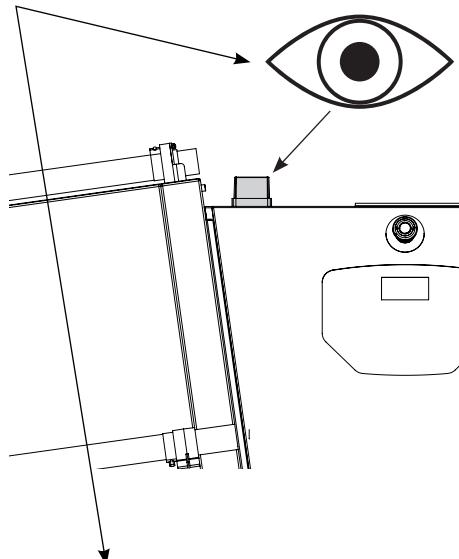
8



9

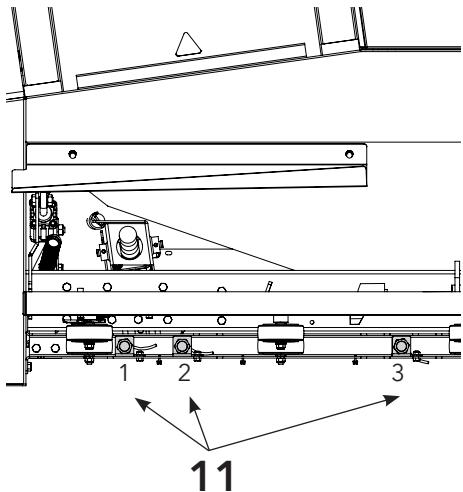


10

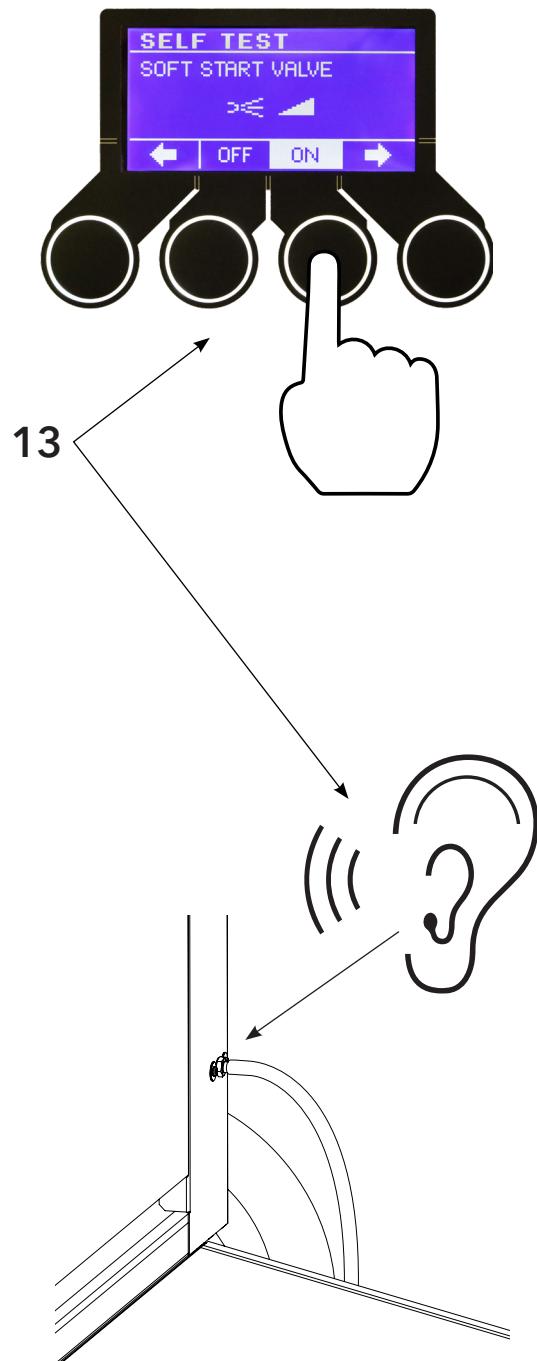


11. Håll ett metallstycke framför sensorn och kontrollera om signal avges, en sensor i taget.



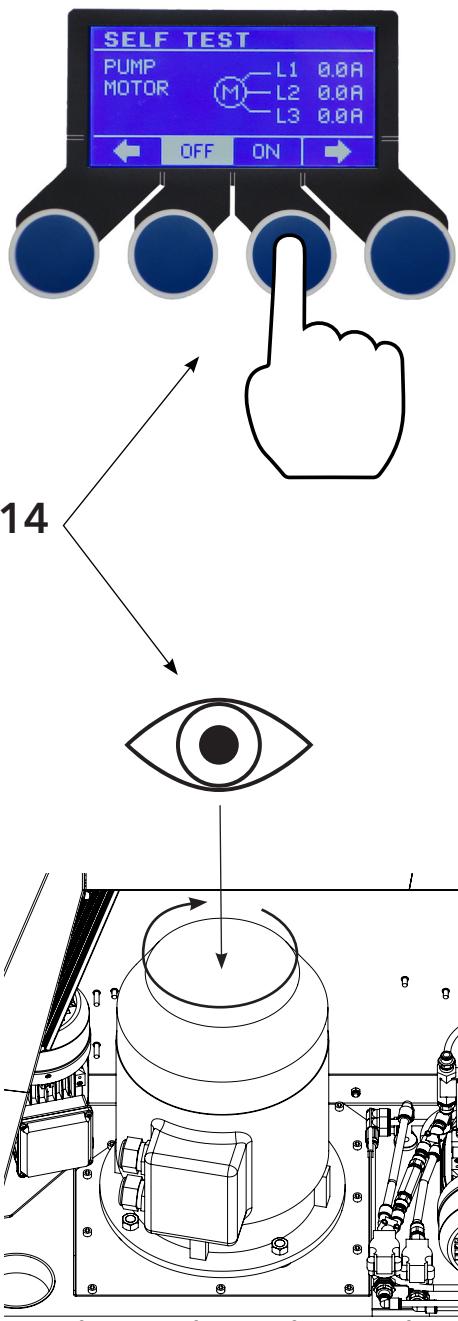


12. Kontrollera att axeln på cylinder 1-6 fungerar enligt displayen.

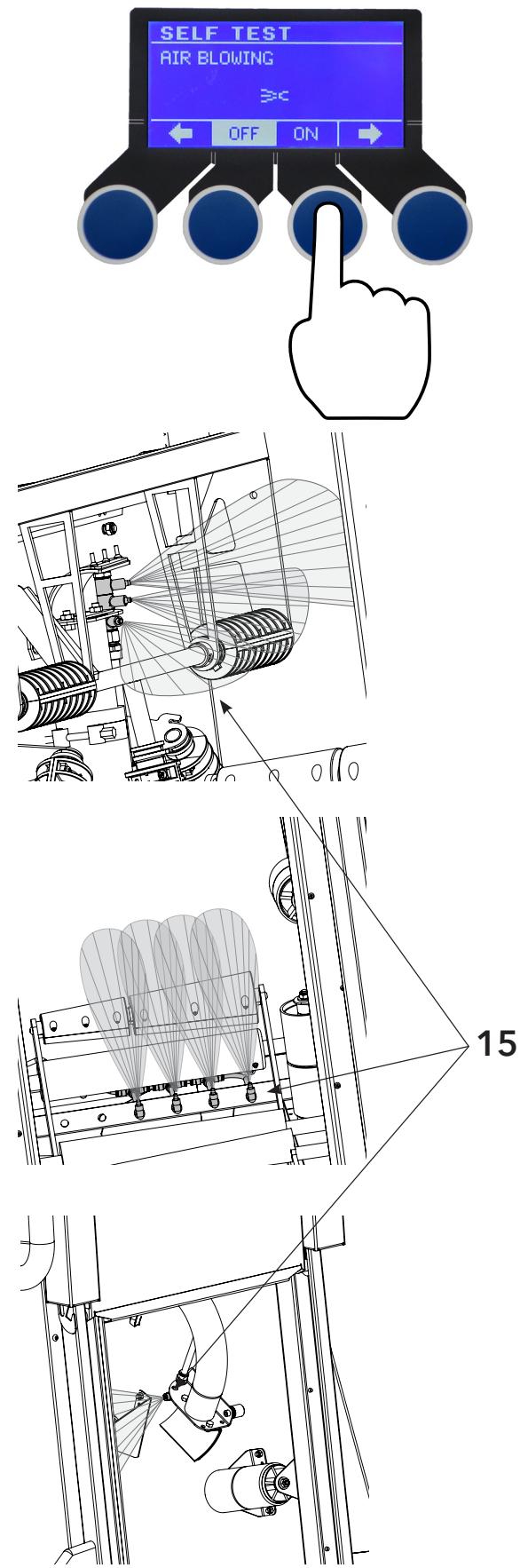


VIKTIGT!
**STÄNG LUCKAN FÖRE TEST. PUMPMOTORN KAN
 STARTAS MED DÖRREN ÖPPEN.**

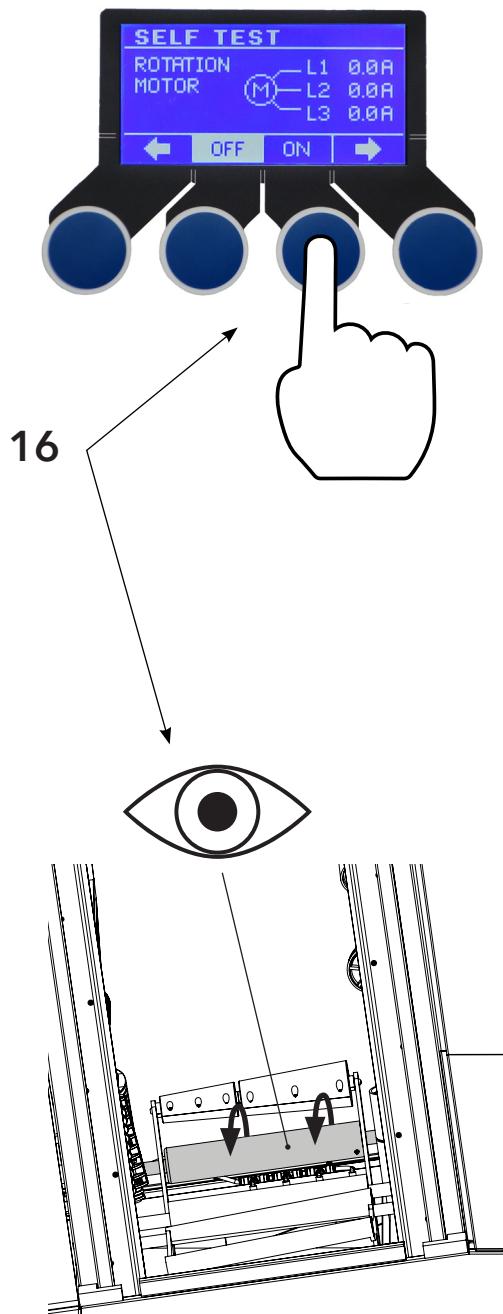
14. Kontrollera pumpmotorns rotation.
 Strömförbrukningen bör vara ~11-14 A vid 400 V.
 För en helt ny pump ska strömförbrukningen vara 12,5-14 A vid 400V.



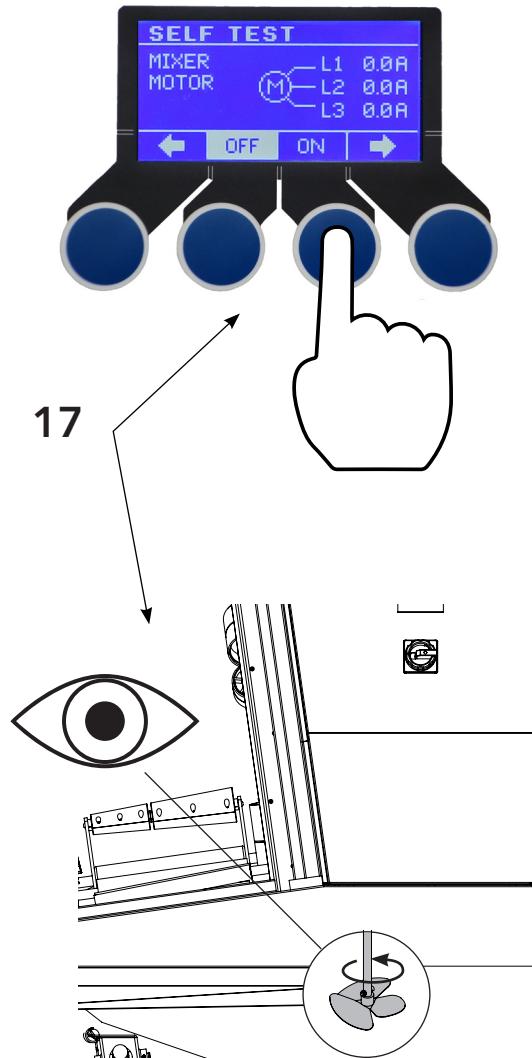
15. Kontrollera att alla åtta munstycken fungerar.



16. Kontrollera drivaxelns rotation. Strömförbrukningen bör vara ~0,5-1,2 A vid 400 V.



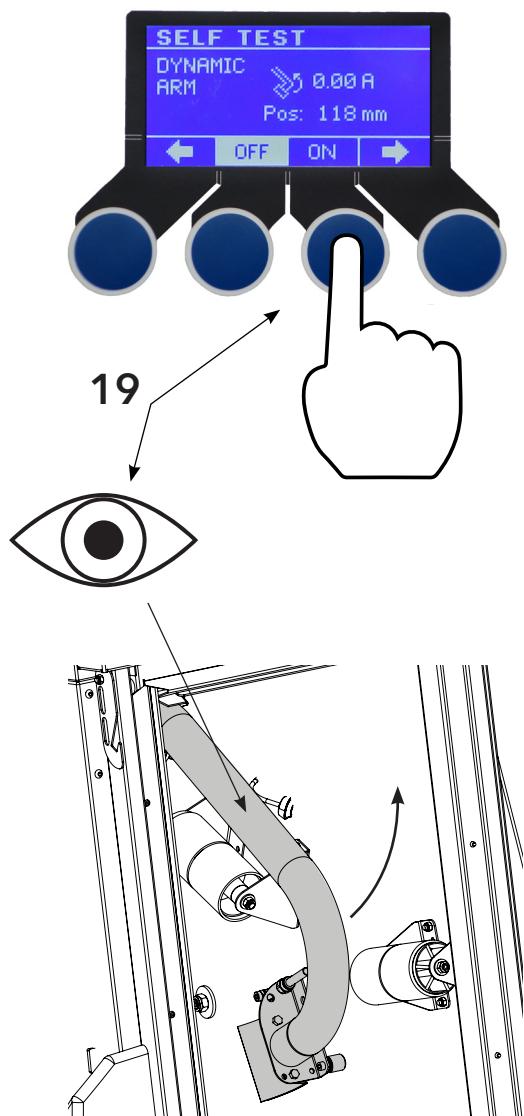
17. Öppna luckan och kontrollera mixermotorns rotation.



18. Efter 15 sekunder övergår On-läget automatiskt till Off-läge för att förhindra överhettning. Strömförbrukningen bör vara ~1,5-2,5 A vid 400 V.



19. Kontrollera positionen, 0-121 mm ± 3



20. Visar program- och maskinvarans aktuella version.

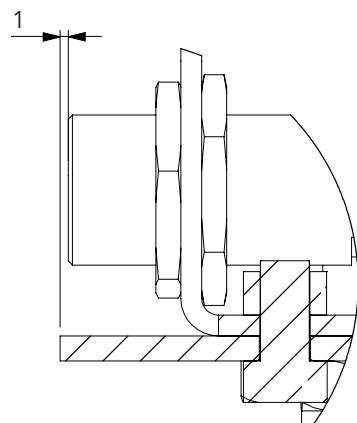
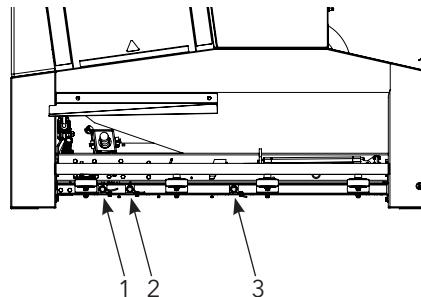


29. Fabriksåterställning

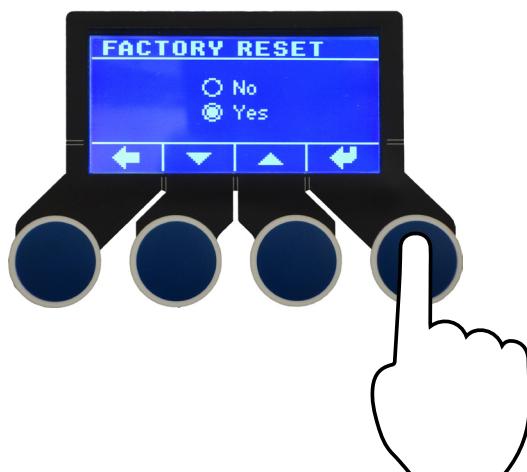
1. Justera sensorerna.

Observera att sensorn ska installeras 1 mm innanför skyddskanten.

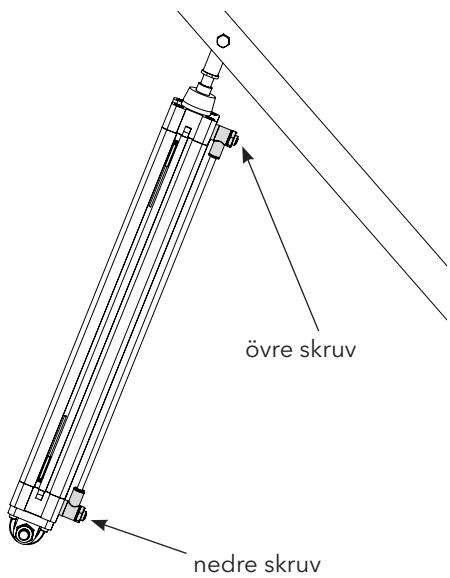
Verifiera sensorns funktion via ett självtest - se kapitel 28.



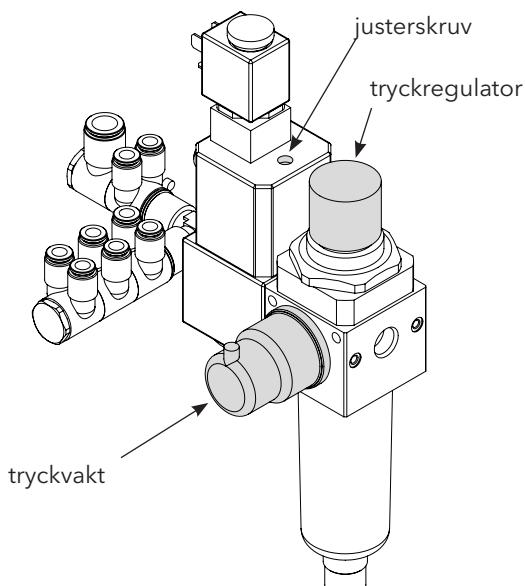
/6.Factory reset/Factory reset



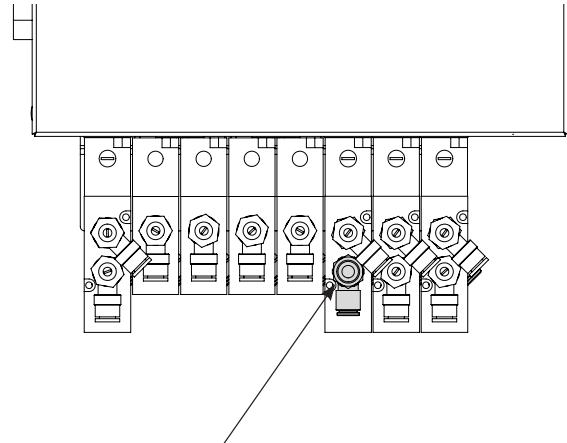
- Den övre ventilskruven ska dras åt helt och hållt och sedan lossas 1,5 varv. Den nedre ventilskruven ska dras åt helt och hållt och sedan lossas 6 varv.



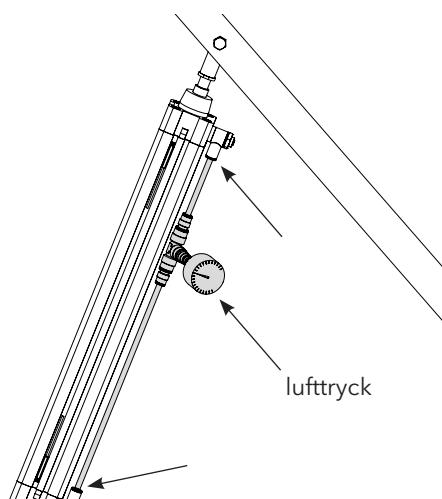
- Tryckvakten ska sättas till 6 bar. Regulatorn för inloppsluft ska sättas till 7,5 bar. För att återställa mjukstart ska skruven dras åt helt och hållt och sedan lossas 12 varv.



- Luckregulatorn för cylinder 3 ska vara inställd på 2 bar när luckan är stängd. Regulatorn finns på terminalboxen. Öppna och stäng fyra varv. (Visas på bilden nedan)



- Vid osäkerhet, anslut kalibreringssatsen 230753 till cylinder 3.
- Stäng av maskinen.
- Koppla loss slangen till cylinder 3.
- Ta bort den röda pluggen och anslut kalibreringssatsen enligt bilden.
- Slå på maskinen. Kalibreringssatsens lufttrycksvärde stabiliseras efter cirka 10 sekunder.



11 Justera regulatorn vid behov. Vid byte av en eller flera magnetventiler måste flödesbegränsarna ställas in.

Dra åt justerskruven helt och öppna sedan antalet varv som anges på bilden nedan.

