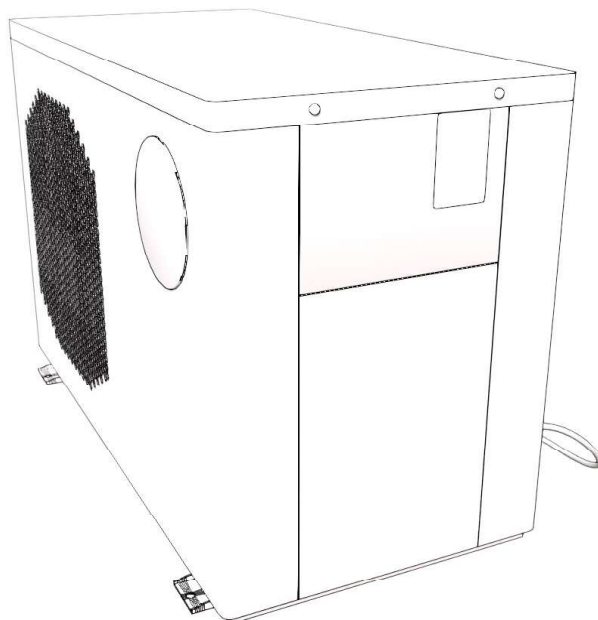


User manual

# DUAL AVANTOPOOL-SOURCE HEAT PUMP



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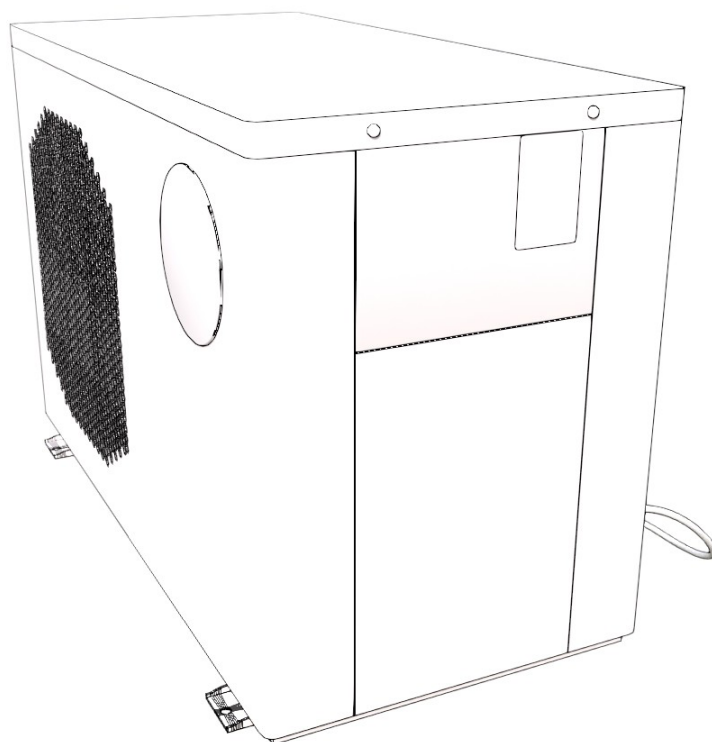
Check the contents of the delivery without delay!  
Study the instructions carefully and keep them for future reference.

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KÄYTTÖOHJE  
DUAL AVANTOPOOL  
ILMALÄMPÖPUMPPU



Tarkasta toimituksen sisältö viipymättä!  
Tutustu huolella ja säilytä ohjeet tulevaisuutta varten.

## YLEISTÄ

Seuraavat ohjeet ovat yleisohjeita. Tarkemmat ja kattavammat ohjeet löytyvät laitteen toimitukseen sisältyvästä käyttöohjeesta.

- Korjausta varten ota yhteyttä huoltoon. Korjausprosessi on suoritettava tarkasti tämän käyttöohjeen mukaisesti. Ei-ammattilaisten suorittamat huoltotoimenpiteet ovat kiellettyjä ja mitätöivät takuun.
- Virheellinen käyttö voi aiheuttaa henkilövahinkoja tai laitevaurioita.
- Varmista, että allas on täytetty ja että ilmakuplat on poistettu laitteen putkistosta ennen sen käynnistämistä. Laitteen käynnistäminen ennen tietyn vedenpinnan saavuttamista on kiellettyä, sillä se voi vahingoittaa laitetta ja mitätöidä takuun.
- Jos virta on katkaistava korjauksen vuoksi, odota yksi minuutti virran katkaisun jälkeen ennen kuin kosketat piirilevyä, jotta vältetään sähköiskulta kondensaattorin purkautumisen vuoksi.
- Jäähdytysyksikkö on varastoitava ja kuljetettava pystyasennossa alkuperäispakkauksessaan. Jos näin ei tehdä, odota vähintään 24 tuntia ennen laitteen käynnistämistä.
- Ennen asennusta on varmistettava oikea sähkösyöttö, jännite ja taajuus.
- Virheellinen asennus voi aiheuttaa tulipalon, sähköiskun, laitteen putoamisen tai vesivuodon.
- Varmista, ettei vettä pääse sähkökomponentteihin.
- Laite voi vaurioitua vakavan ylikuumentumisen seurauksena, jos sen ilmanvaihtoritilät peitetään esimerkiksi pyyhkeillä, vaatteilla tai muilla esineillä, tai jos laite sijoitetaan liian lähelle seinää tai tilaan, jossa ilmanvaihto on riittämätön.
- Älä käytä suolaa tai muita mineraaleja vedessä.
- Tämä laite ei ole tarkoitettu lasten käyttöön. Lapset on pidettävä aikuisen valvonnassa käytön aikana heidän turvallisuutensa varmistamiseksi.
- Sydänsairauksista, alhaisesta tai korkeasta verenpaineesta, verenkierto-ongelmista, diabeteksesta tai muista lääkärihoitoa vaativista sairauksista kärsivien henkilöiden tulee neuvotella lääkärin kanssa ennen altaan käyttöä.
- Lääkitystä käyttävien henkilöiden tulee neuvotella lääkärin kanssa ennen altaan käyttöä, sillä jotkut lääkkeet voivat aiheuttaa uneliaisuutta, kun taas toiset voivat vaikuttaa sydämen sykkeeseen, verenpaineeseen ja verenkiertoon.
- Raskaana olevien naisten tulee neuvotella lääkärin kanssa ennen altaan käyttöä.
- Laitetta ei tule käyttää suorassa auringonvalossa laitteen ylikuumentumisen vuoksi.



Talvella tai jos ympäristön lämpötila laskee alle 0 °C, tyhjennä jäähdytysyksiköstä vesi, jos laitetta ei käytetä. Muutoin laite voi vaurioitua jäätyneen seurauksena, mikä mitätöi takuun. Laitetta ei saa käyttää ulkona, jos ympäristön lämpötila on alle -7 °C.

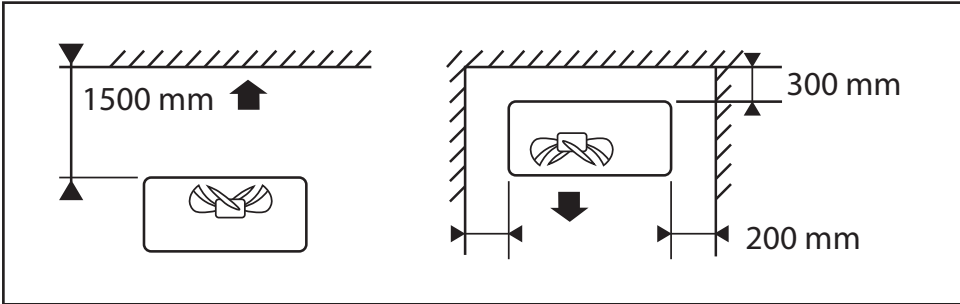


Jos käyttöympäristön lämpötila on alle 0 °C, pidä laite käynnissä ja "Automatic"-tilassa äläkä käytä "active mode"-ajastinta. Muutoin järjestelmä voi jäätyä.

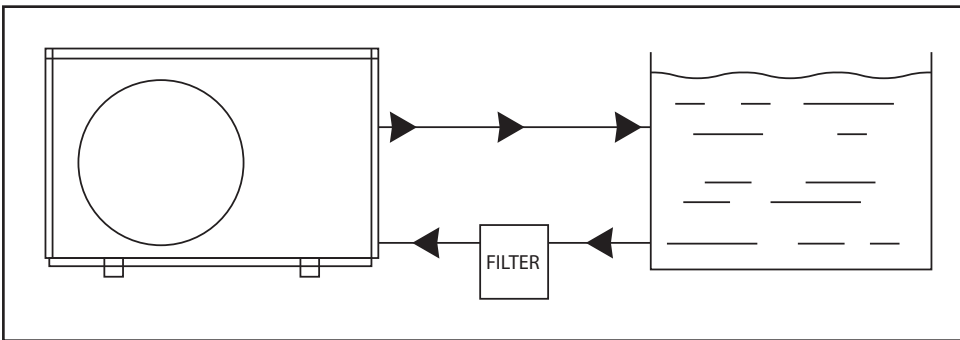
## ASENNUSETÄISYYS

Jäähdytysyksikkö on asennettava hyvin tuuletettuun tilaan. Se tulee asentaa vähintään seuraaville etäisyyksille:

- Yksikön etuosan ja seinän välinen minimietäisyys: 1500 mm (150 cm)
- Yksikön takaosan ja seinän välinen minimietäisyys: 300 mm (30 cm)
- Yksikön sivujen ja seinän välinen minimietäisyys: 200 mm (20 cm)



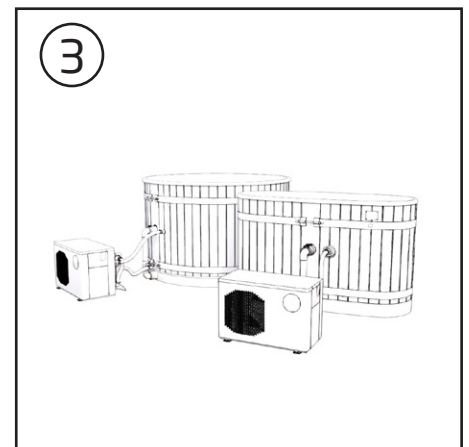
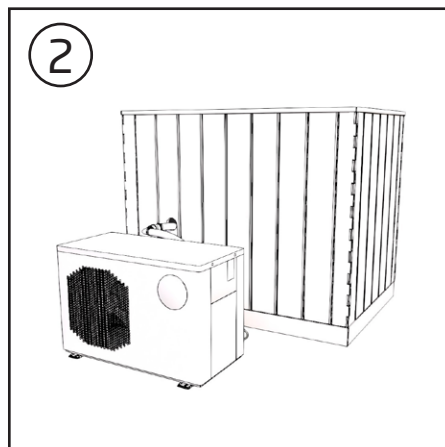
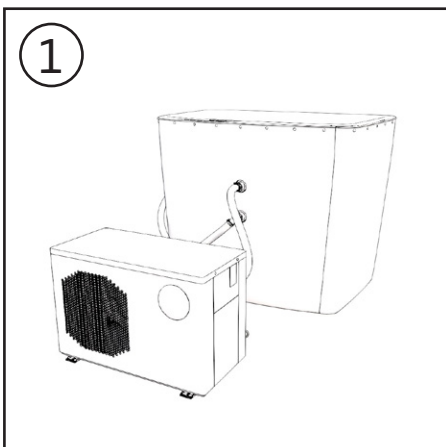
## Vedenkierto



## ASENNUS ALTAASEEN

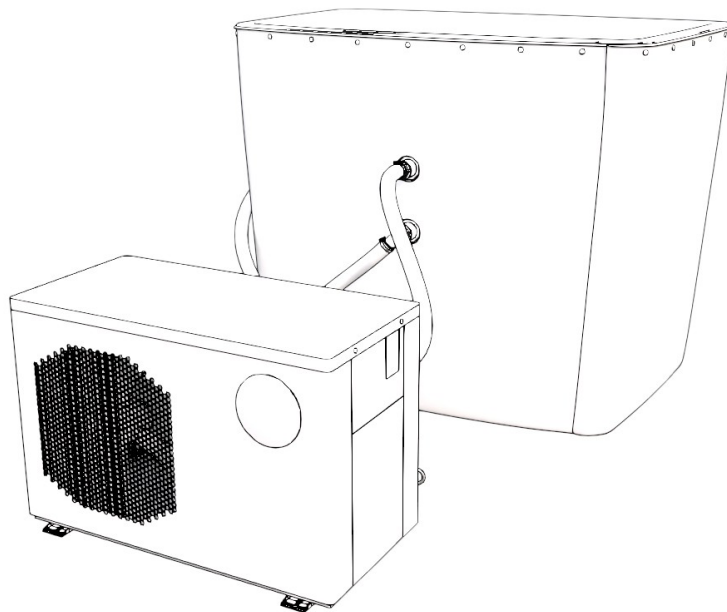
Dual ilmalämpöpumppu on mahdollista asentaa useisiin erilaisiin altaisiin. Ohjeet löytyvät jokaiselle altaalle seuraavassa järjestyksessä:

1. Comfort BlackIce S
2. Premium NordicIce S
3. Kamiinan korvaava

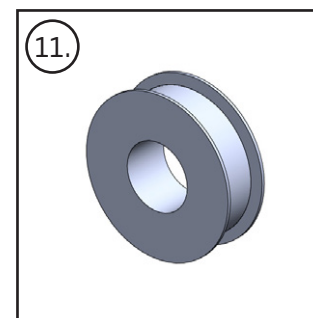
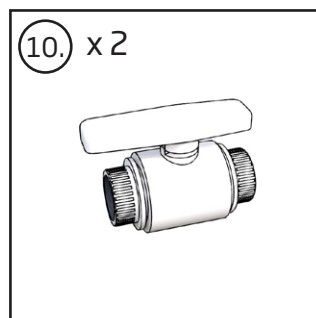
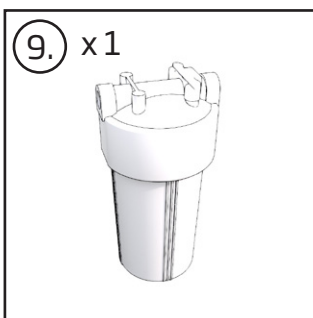
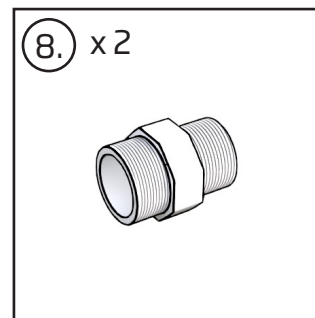
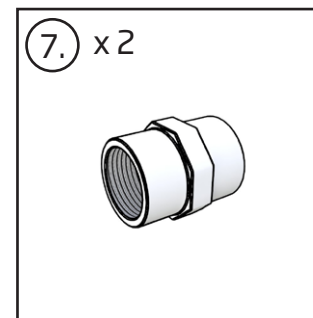
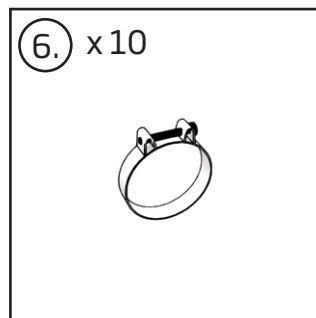
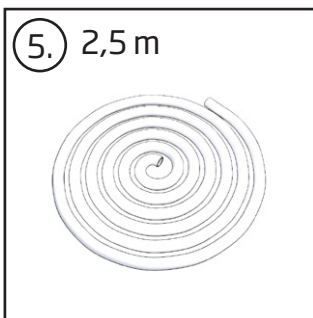
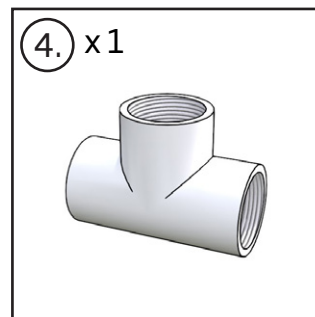
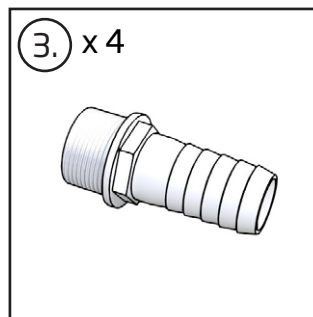
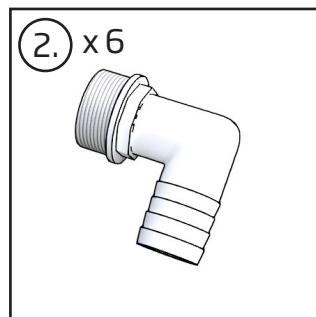
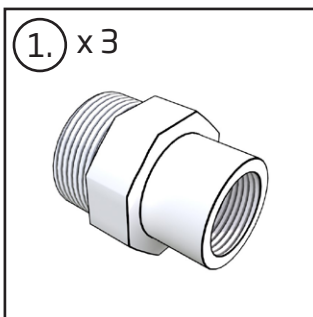


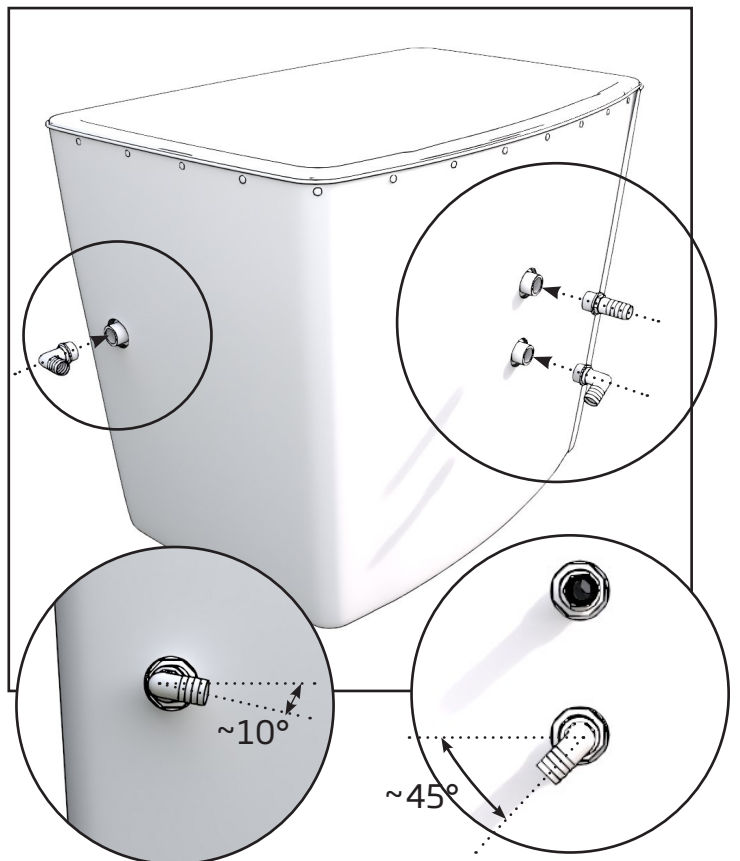
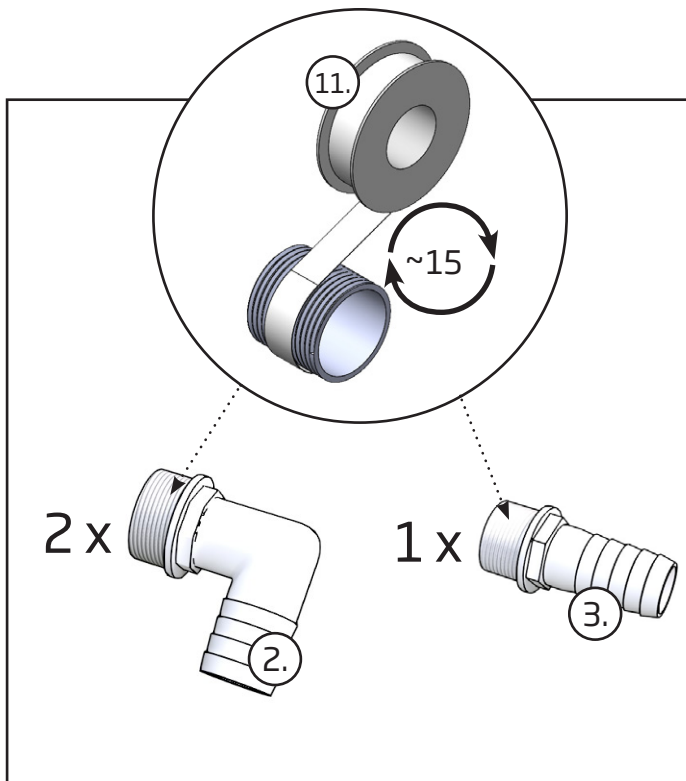
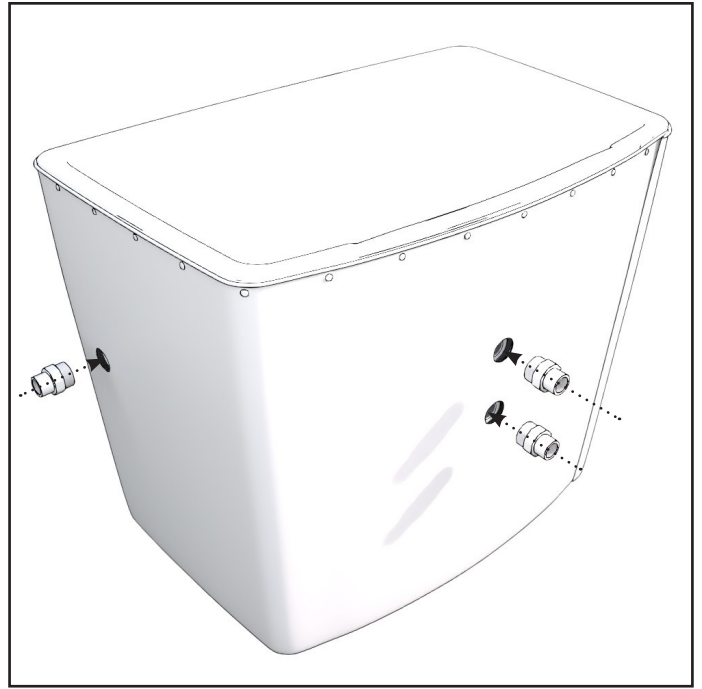
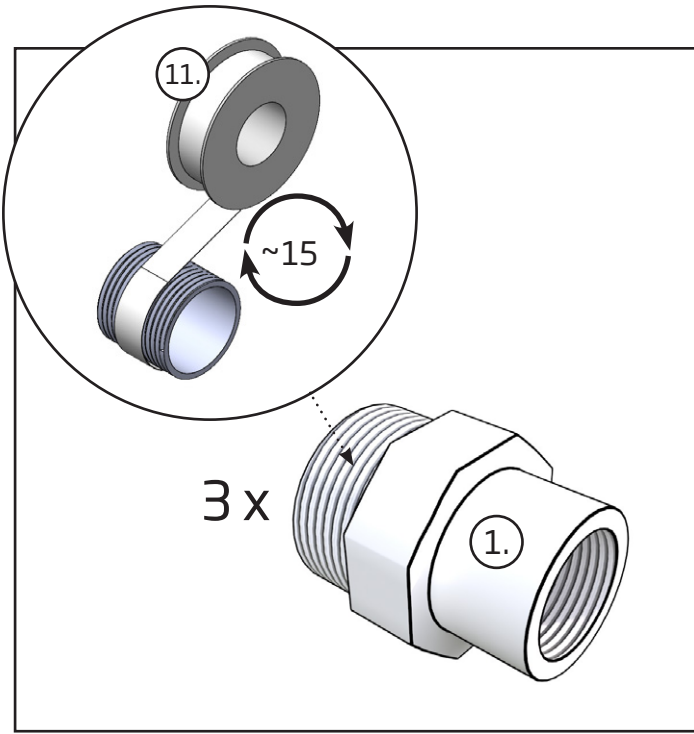


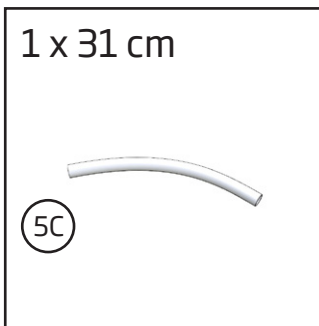
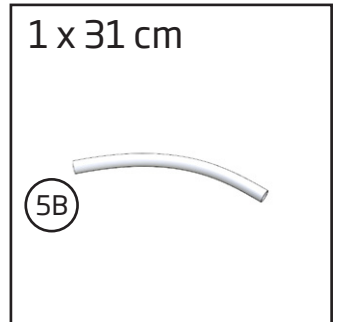
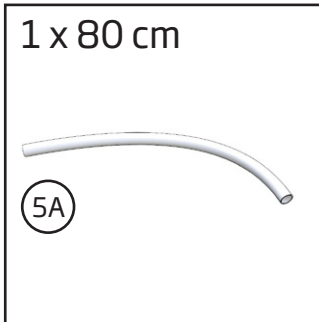
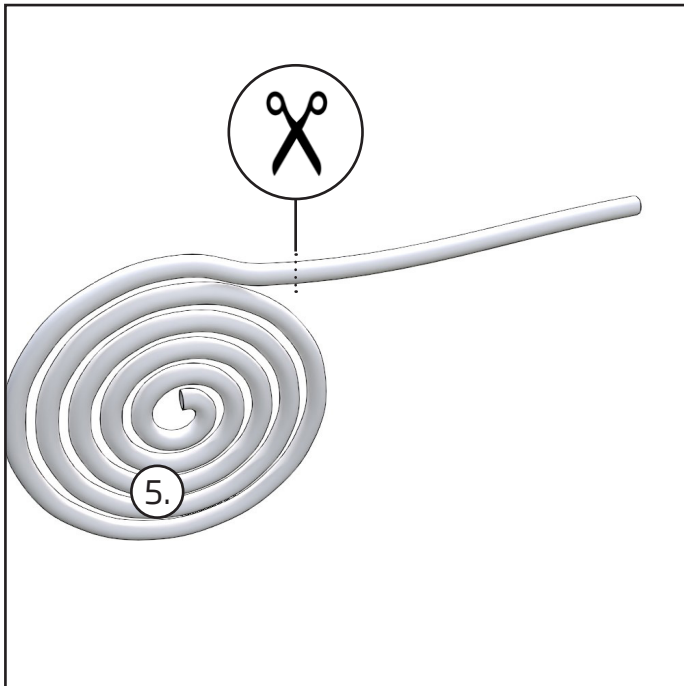
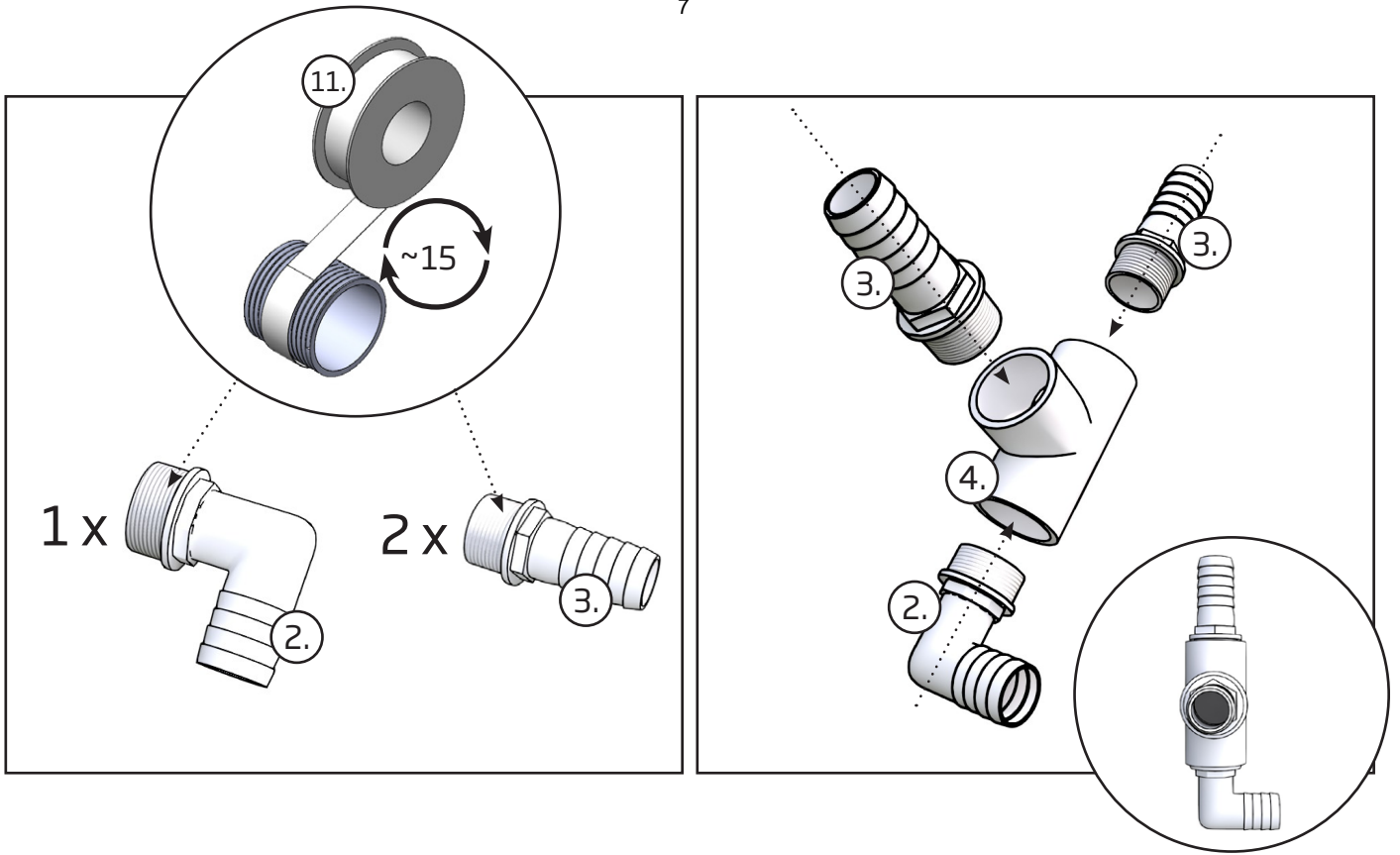
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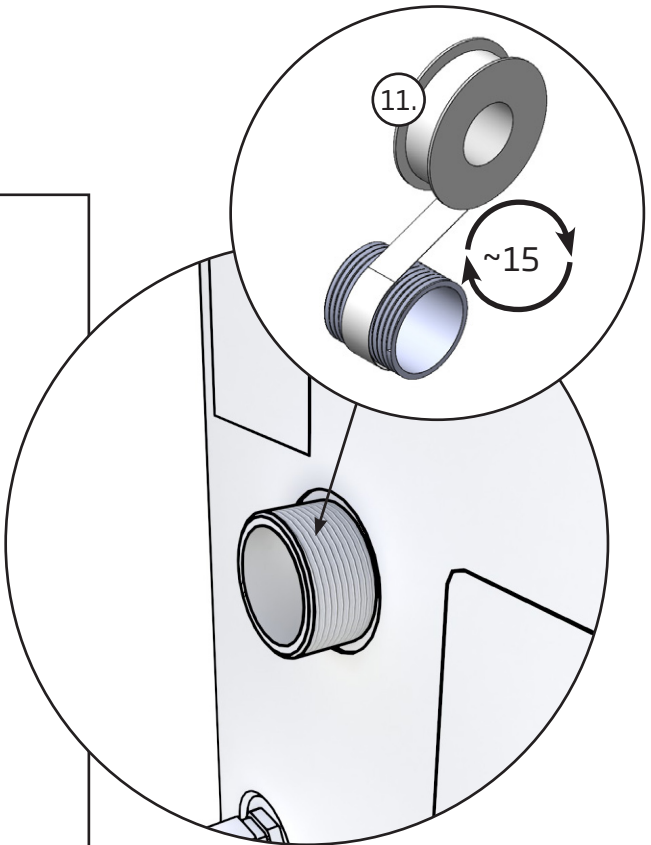
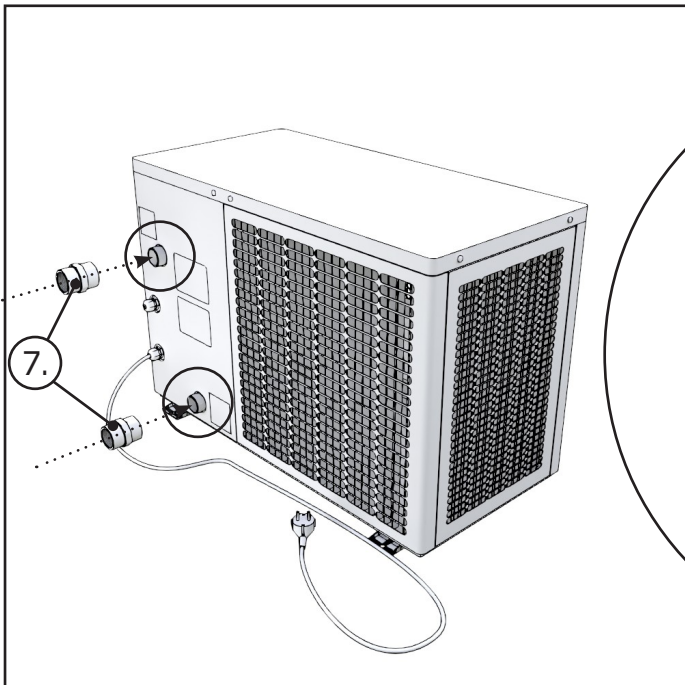
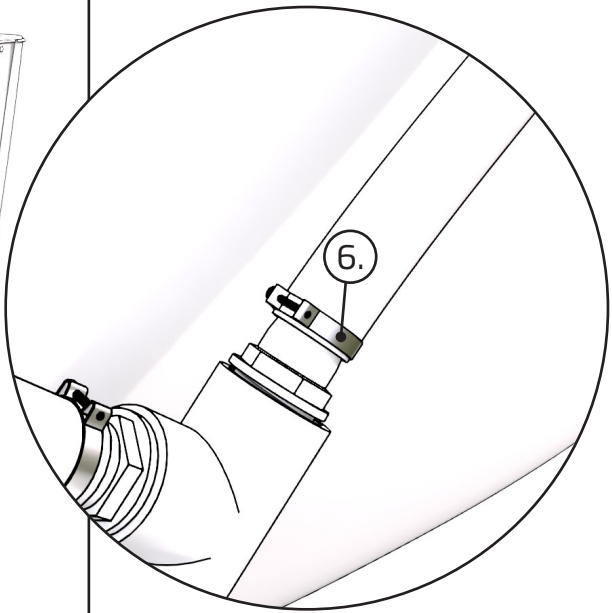
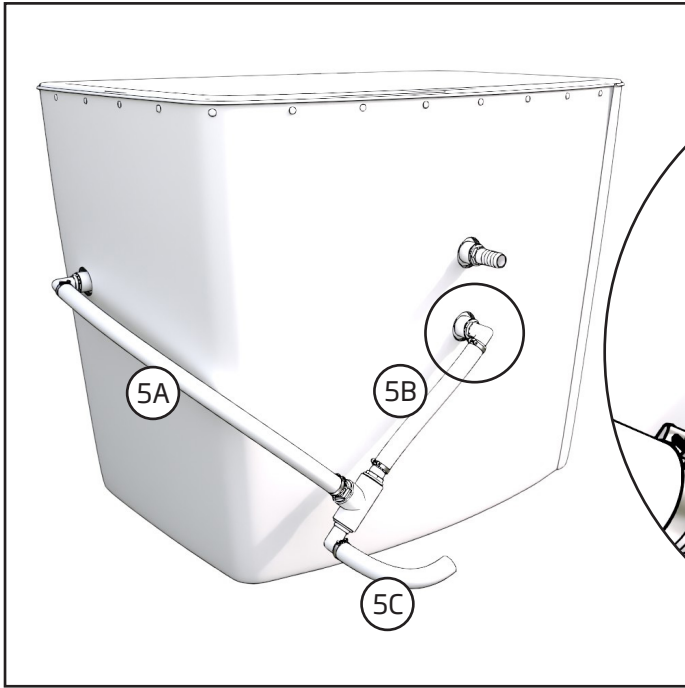


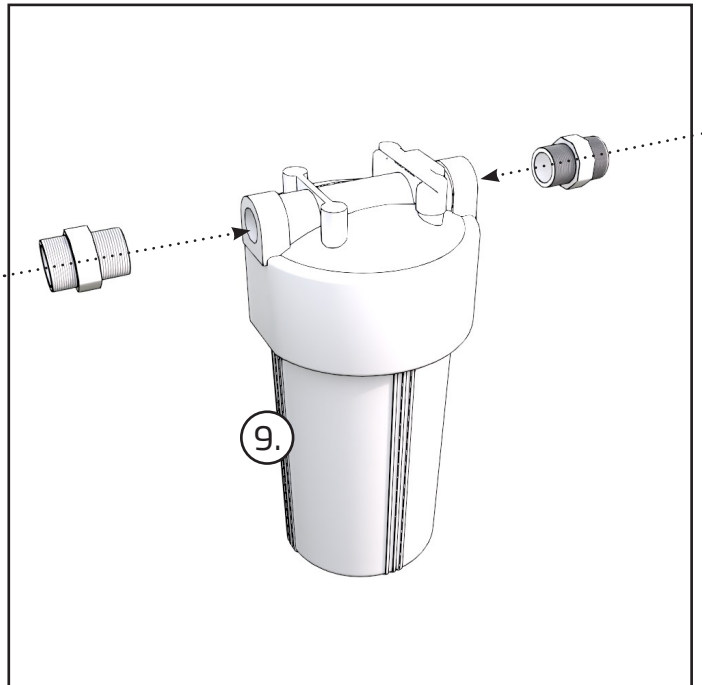
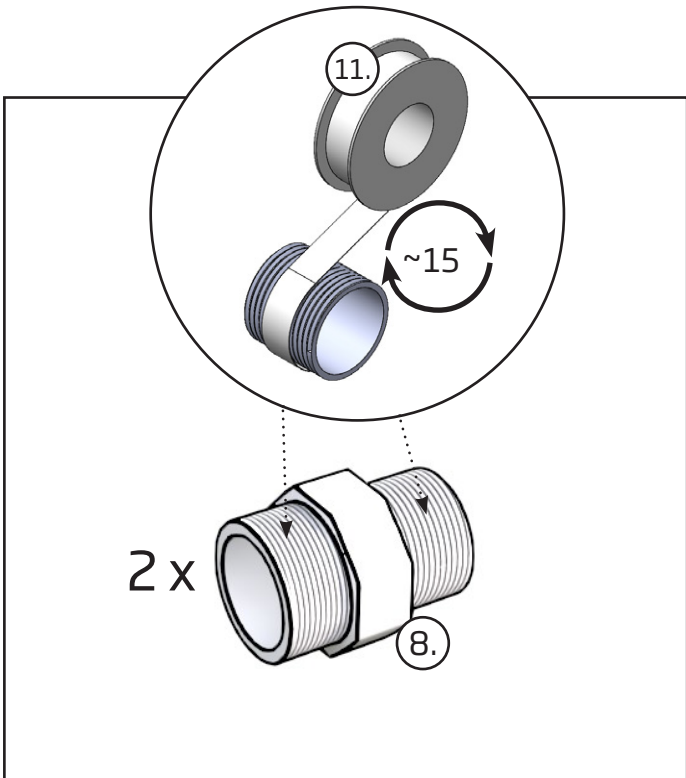
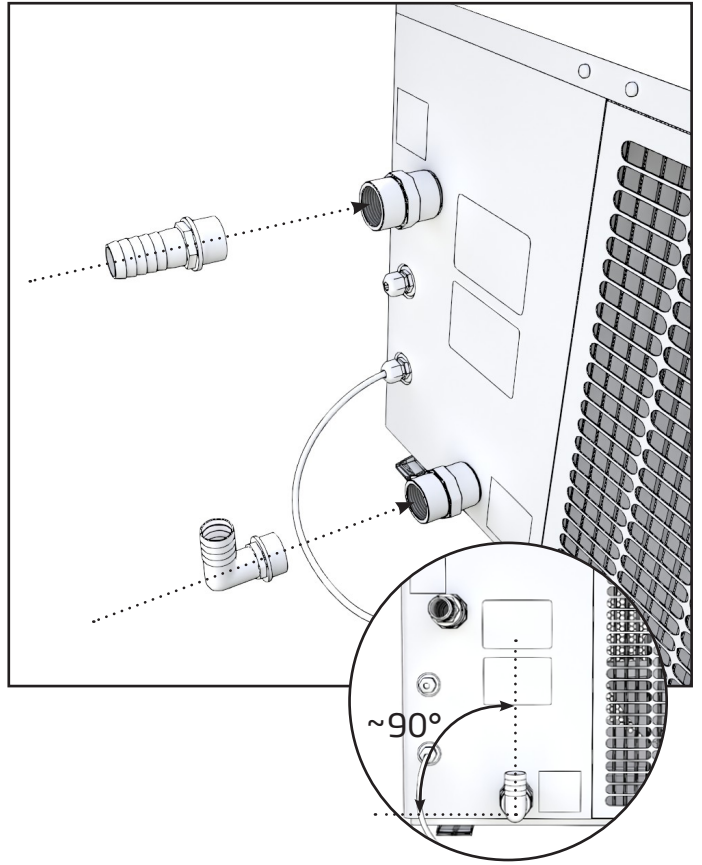
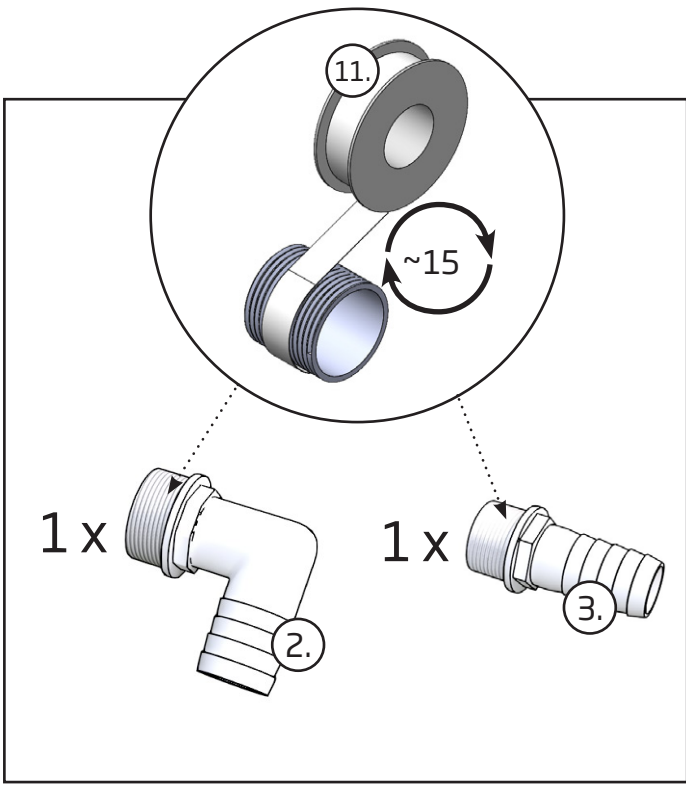
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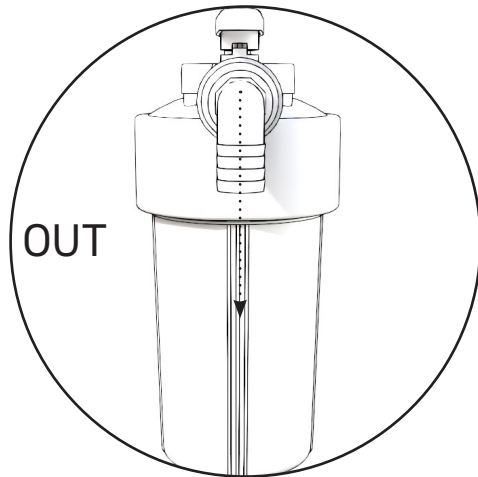
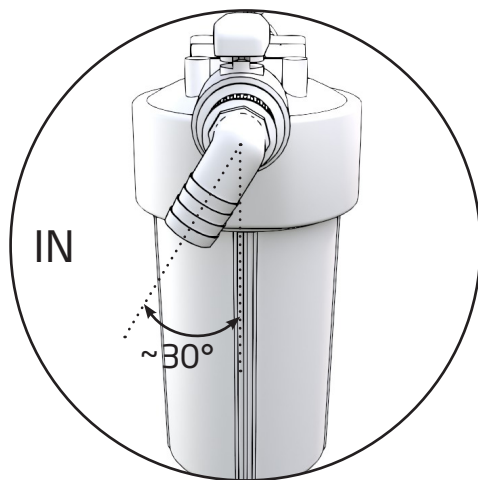
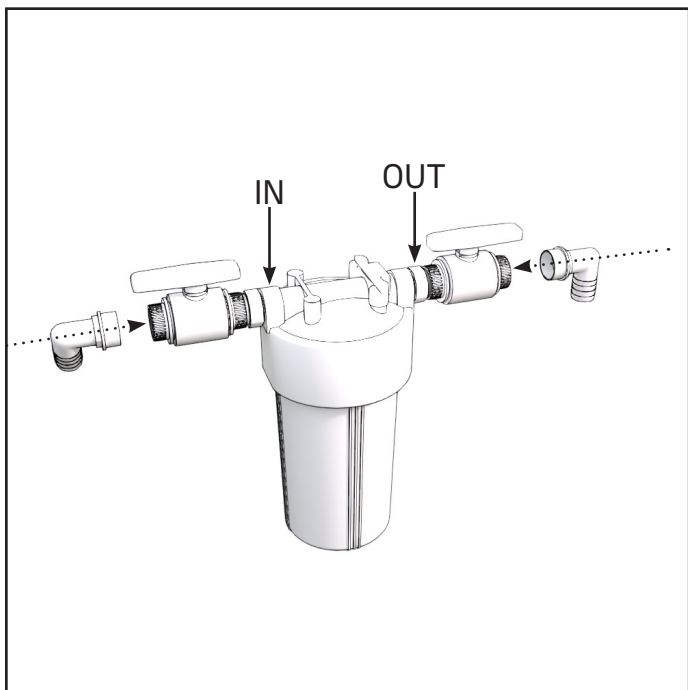
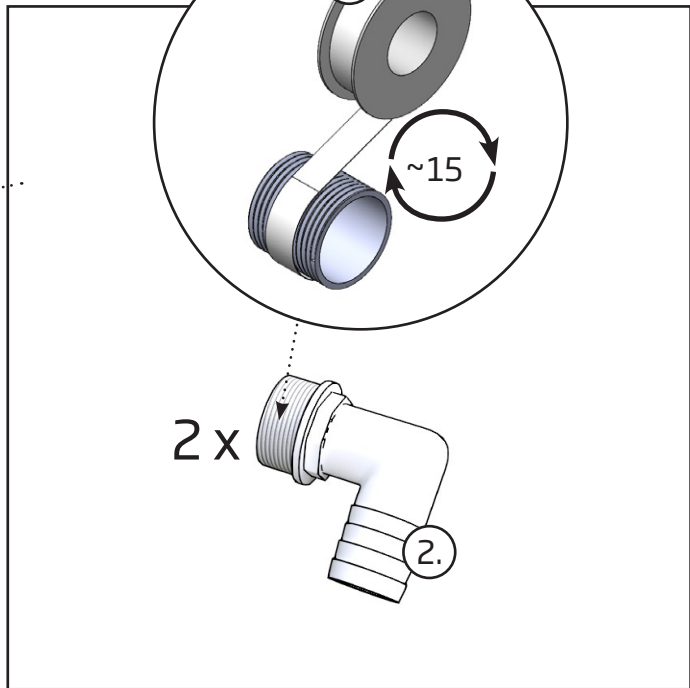
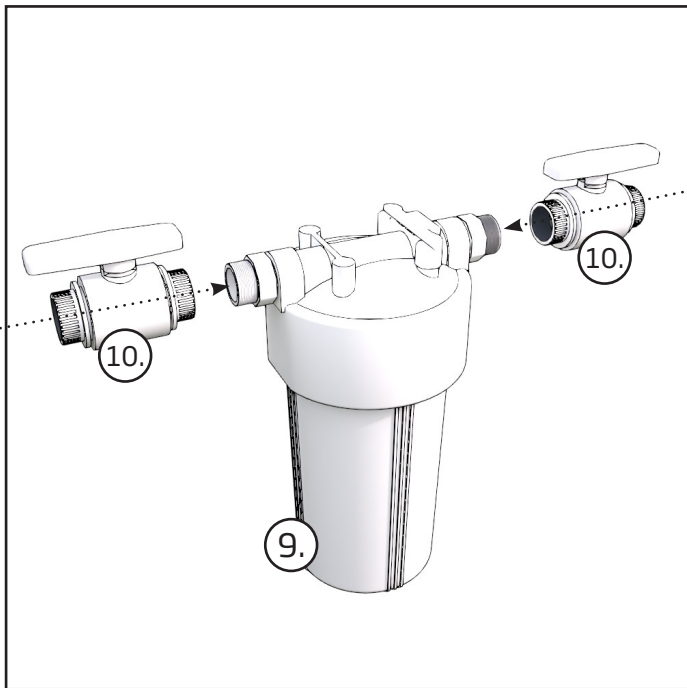




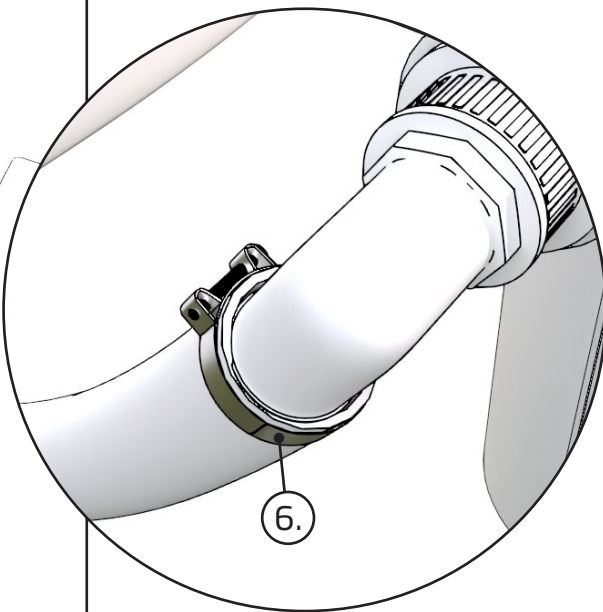
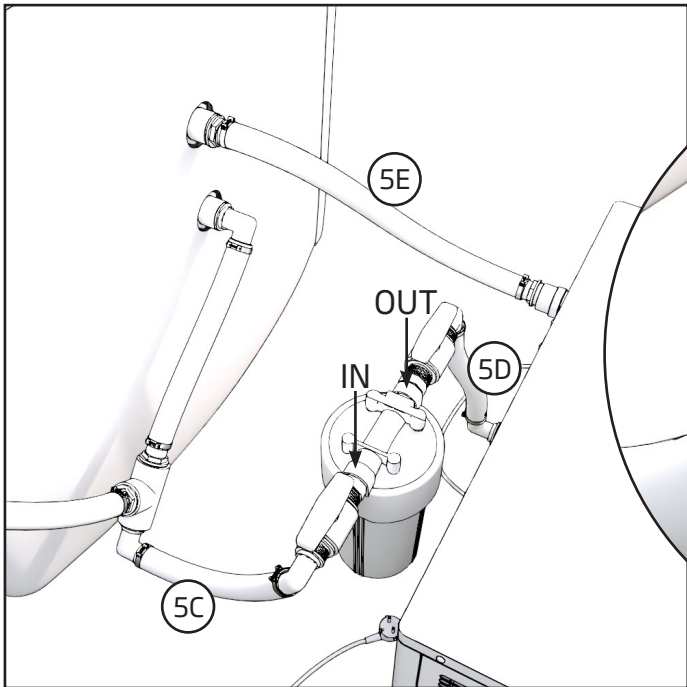
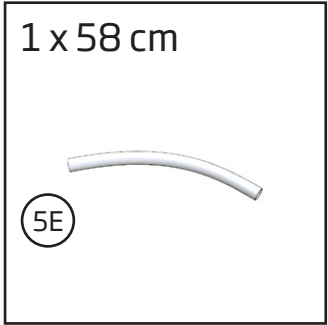
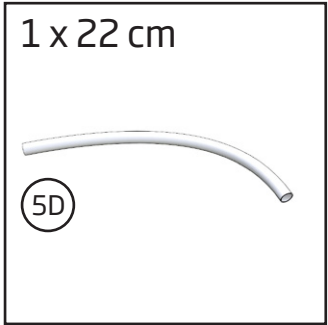
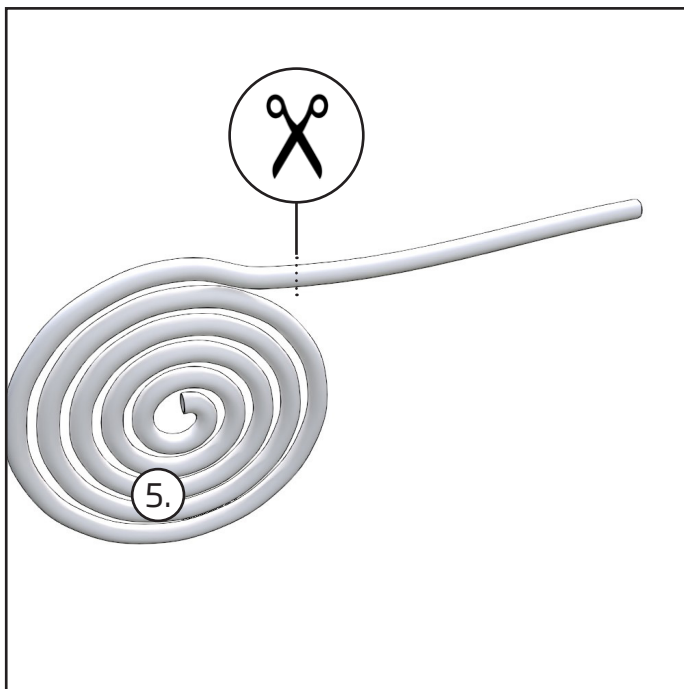




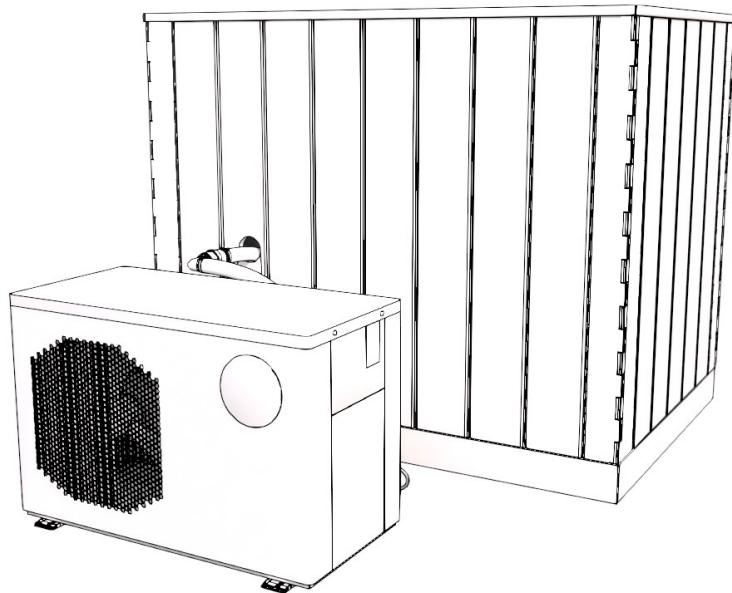




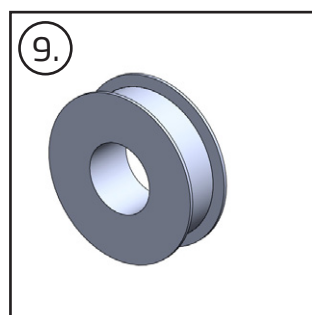
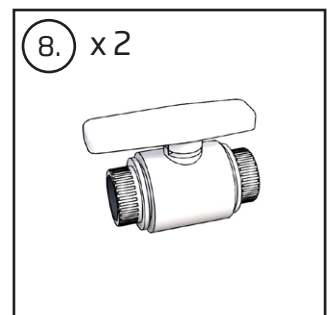
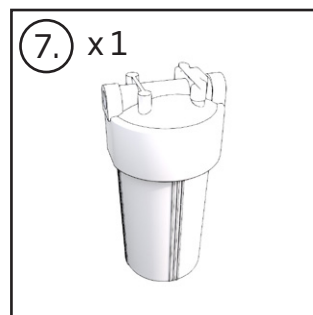
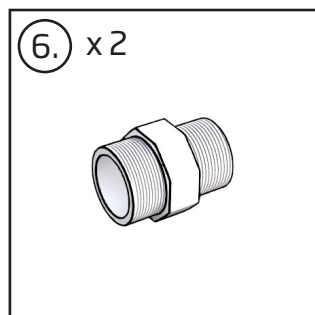
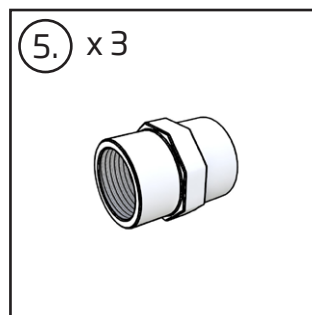
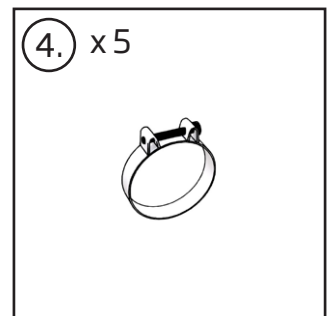
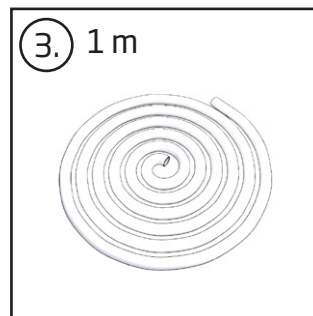
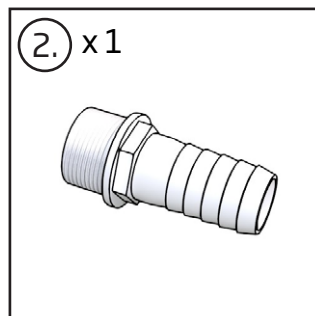
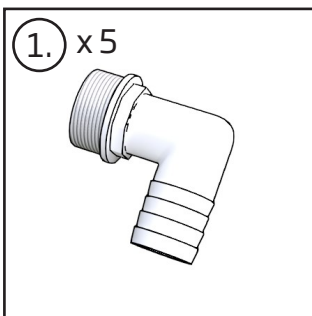




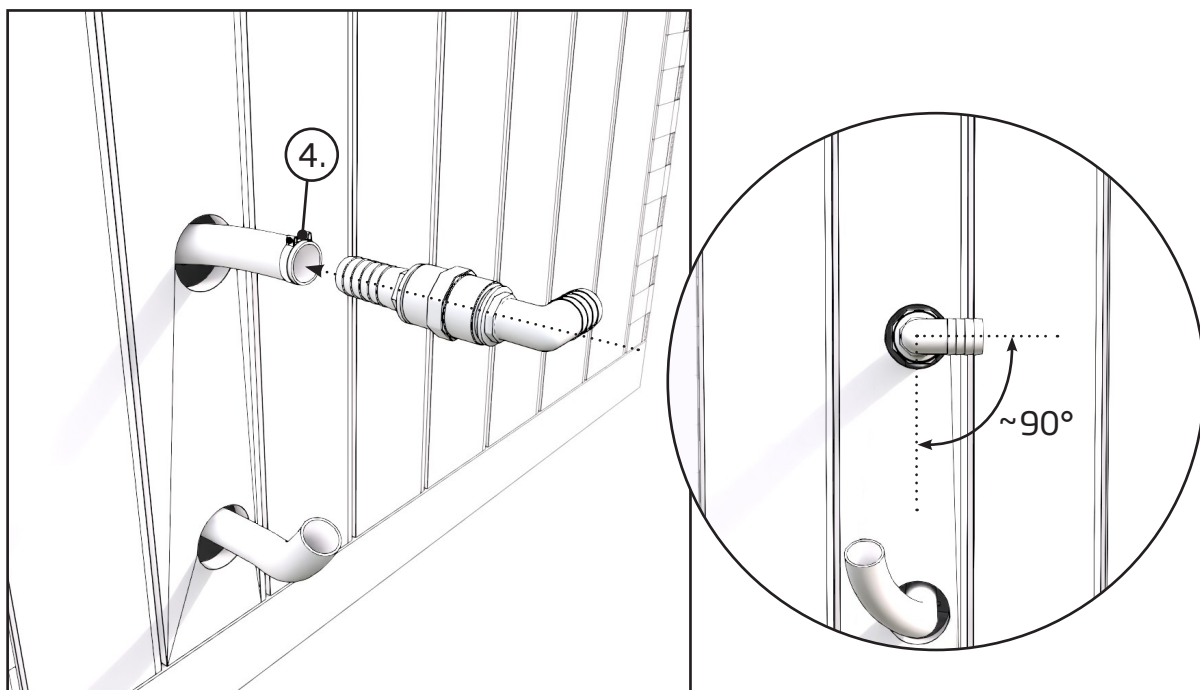
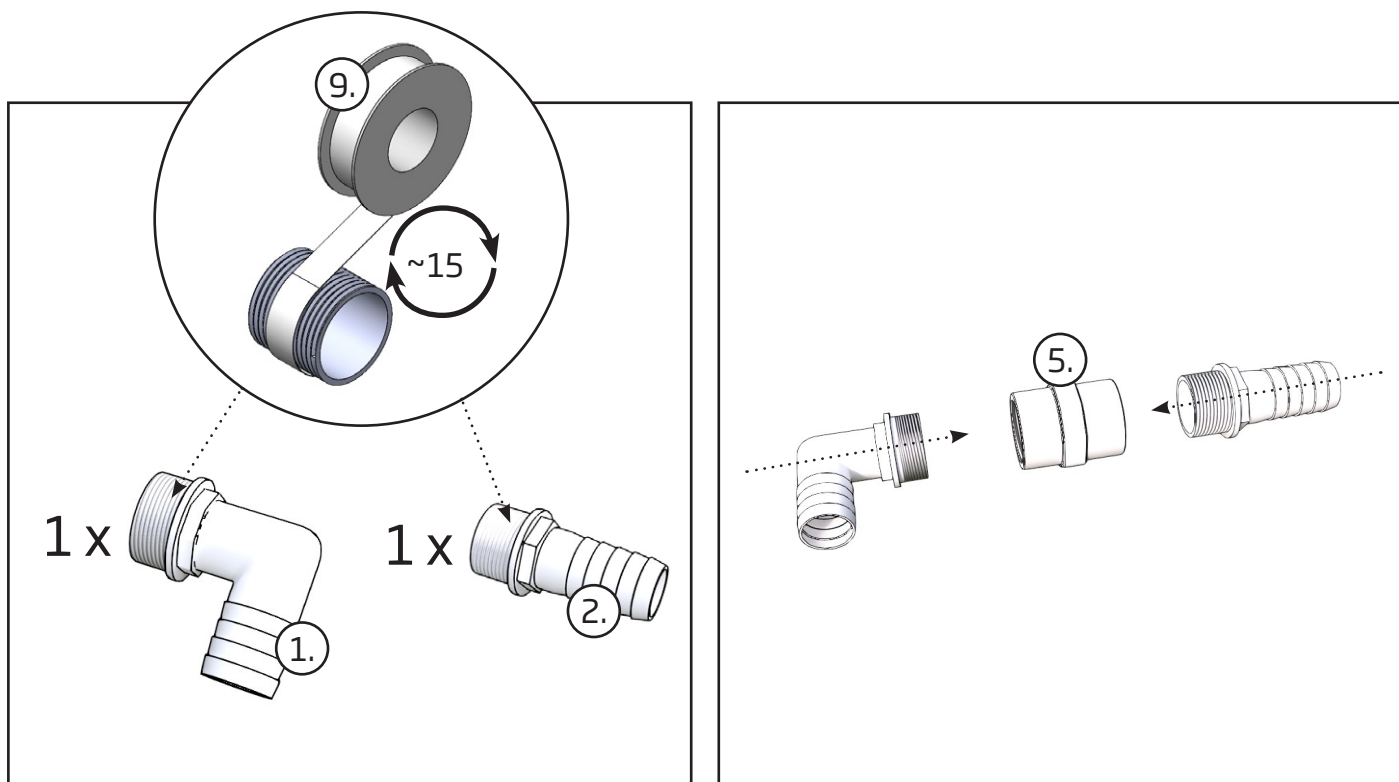
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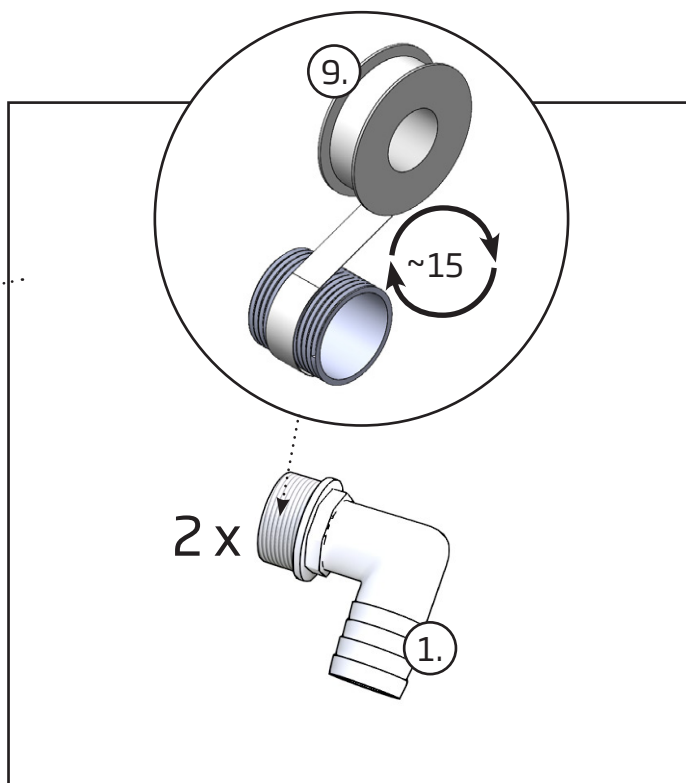
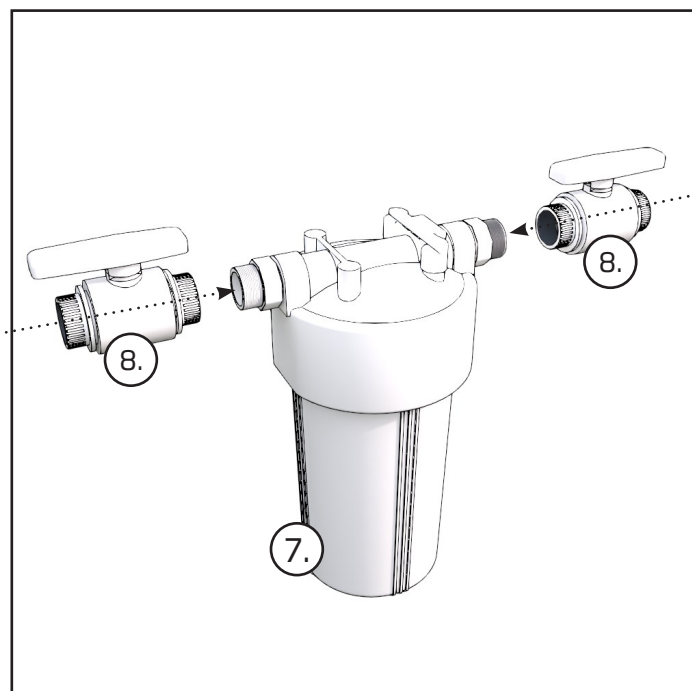
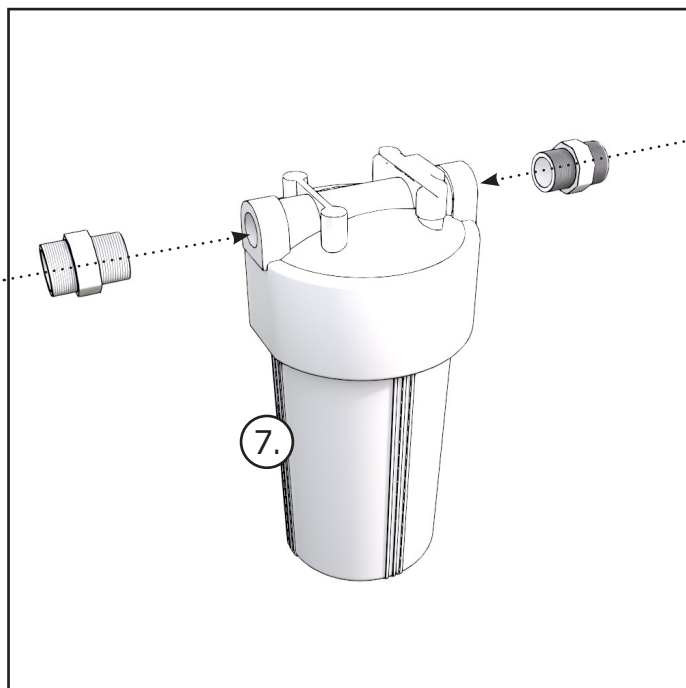
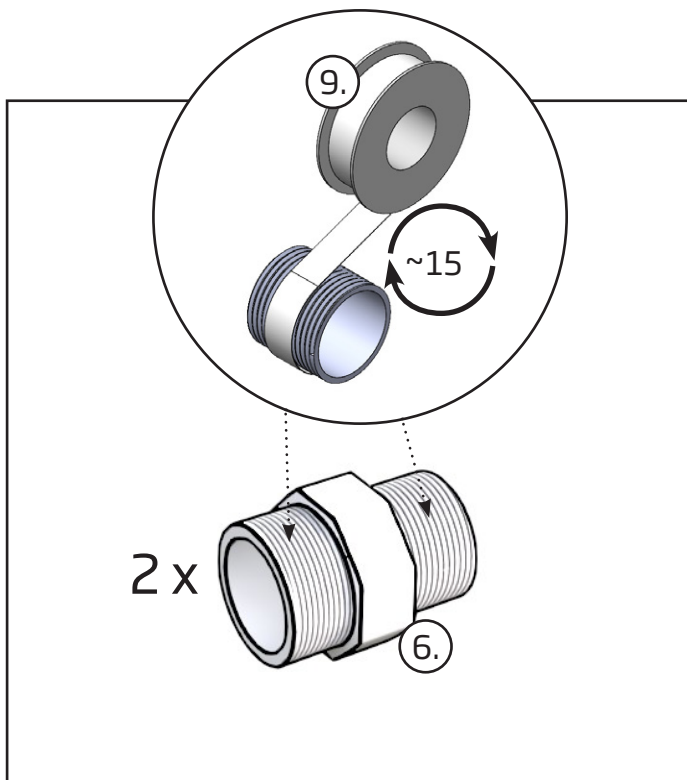


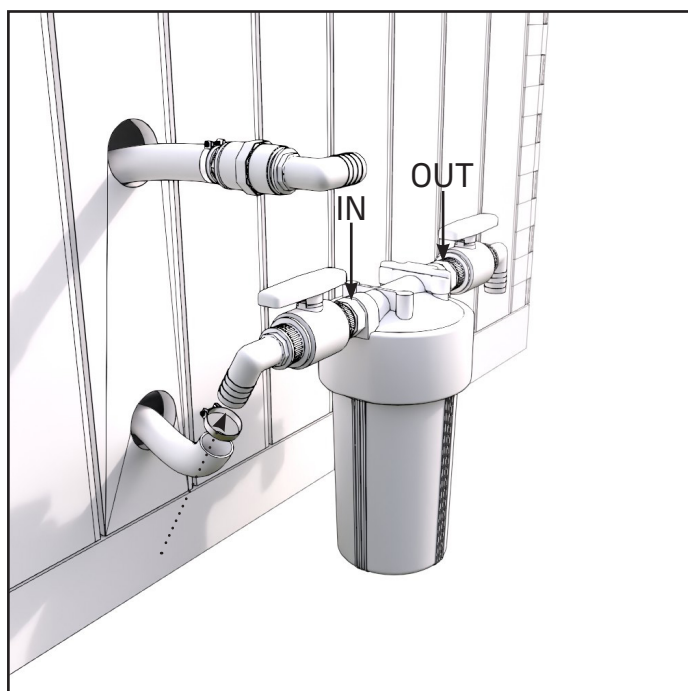
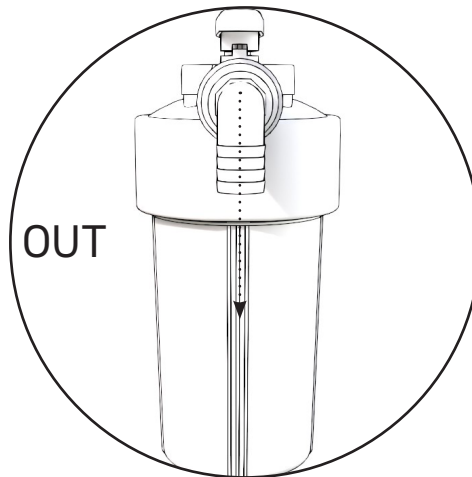
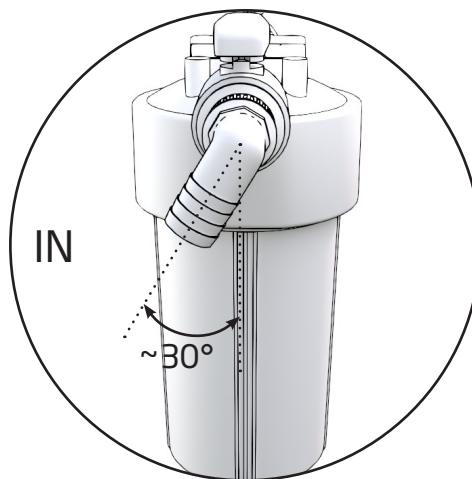
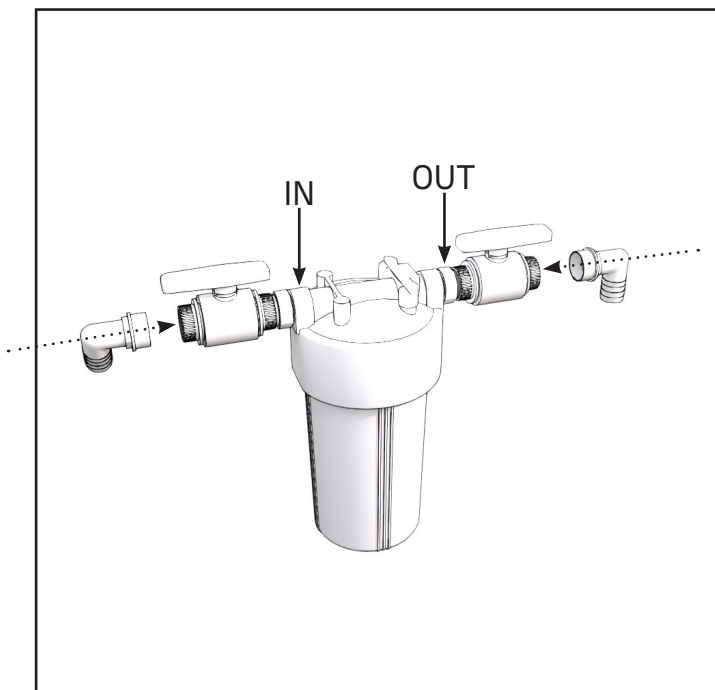
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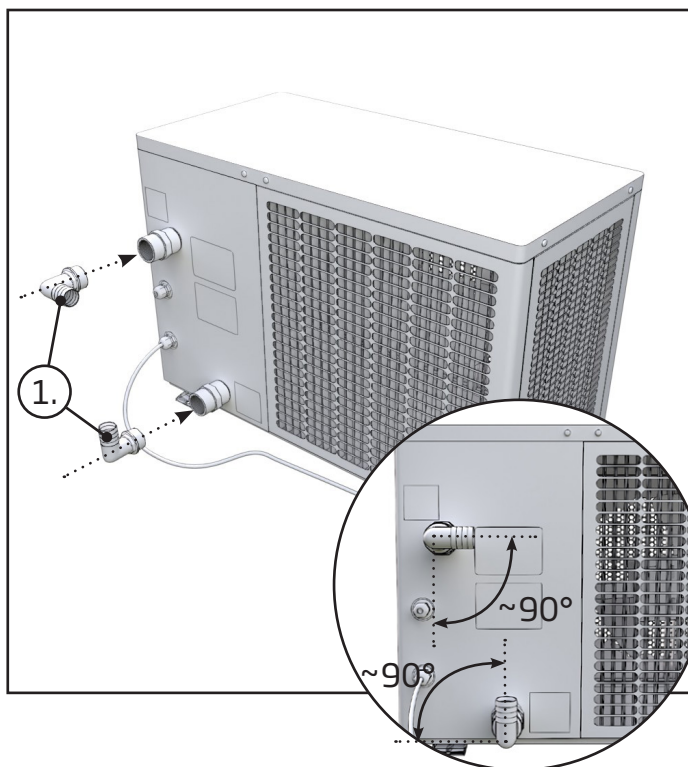
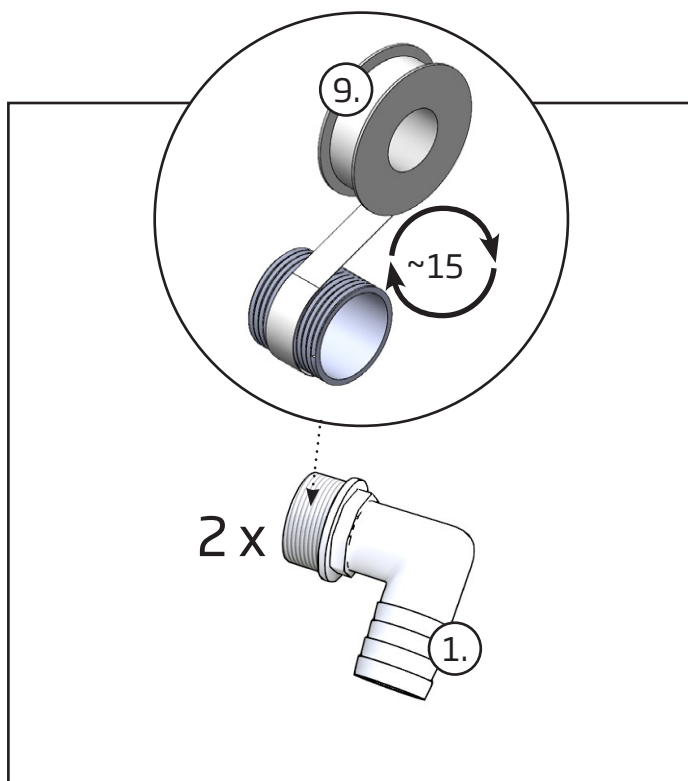
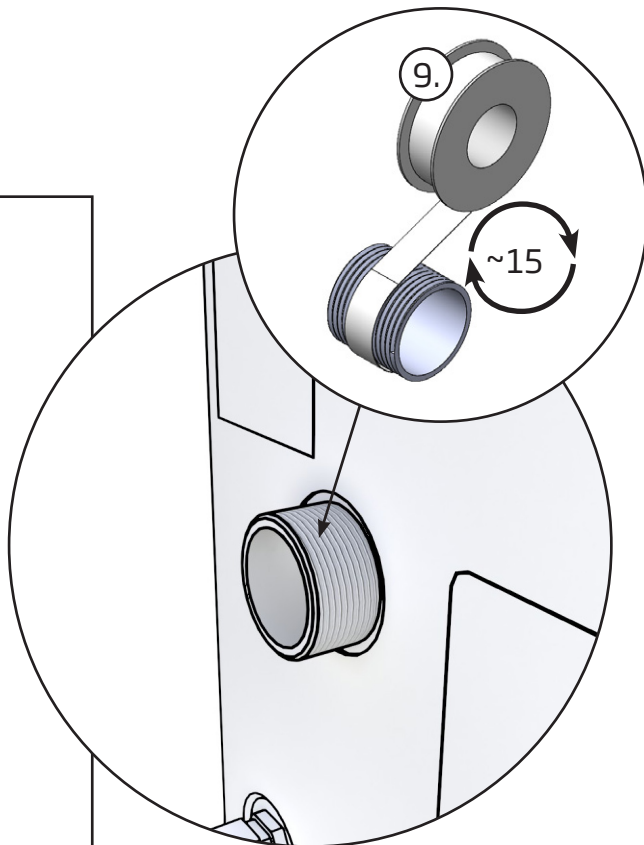
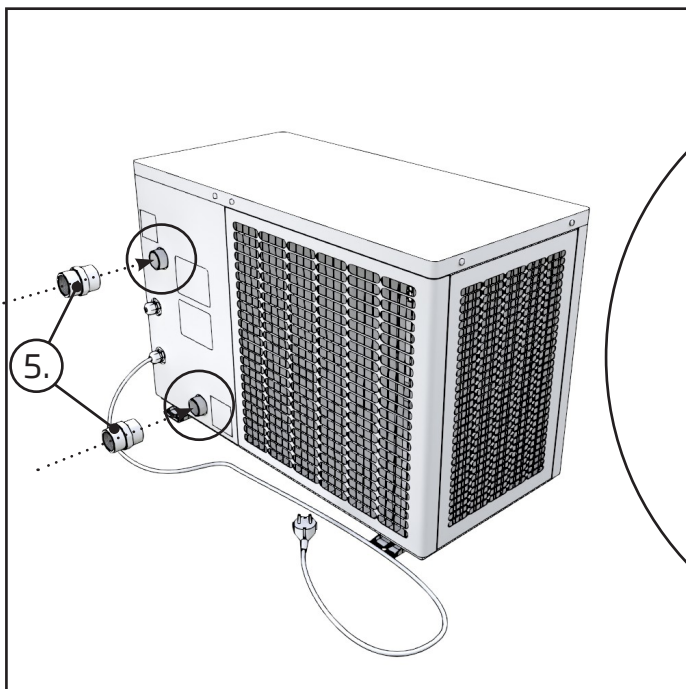


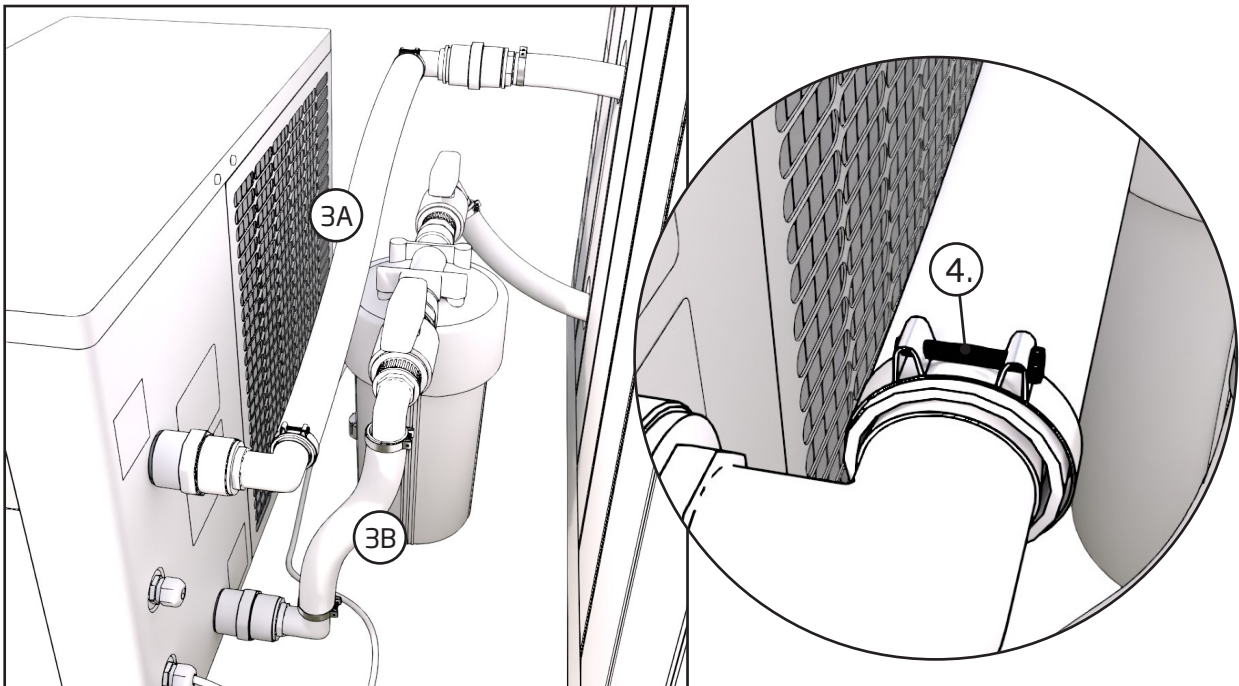
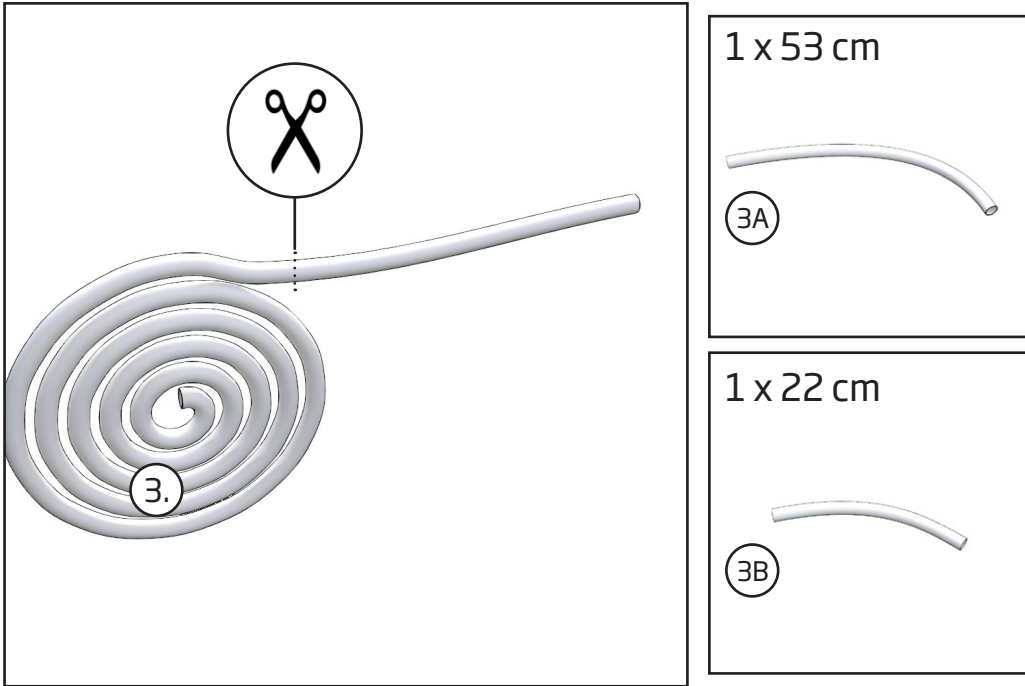






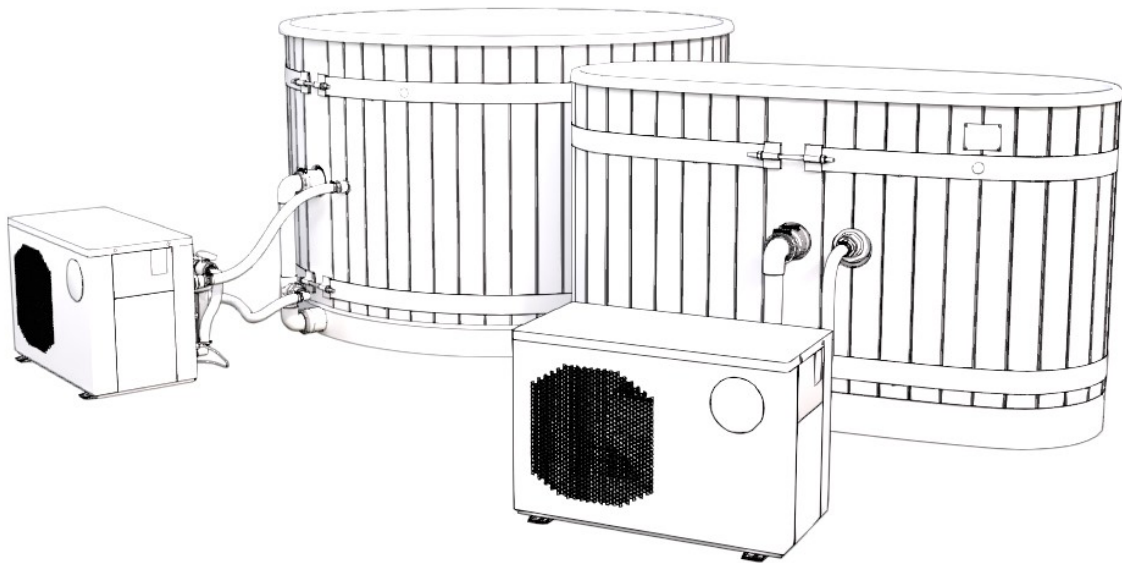




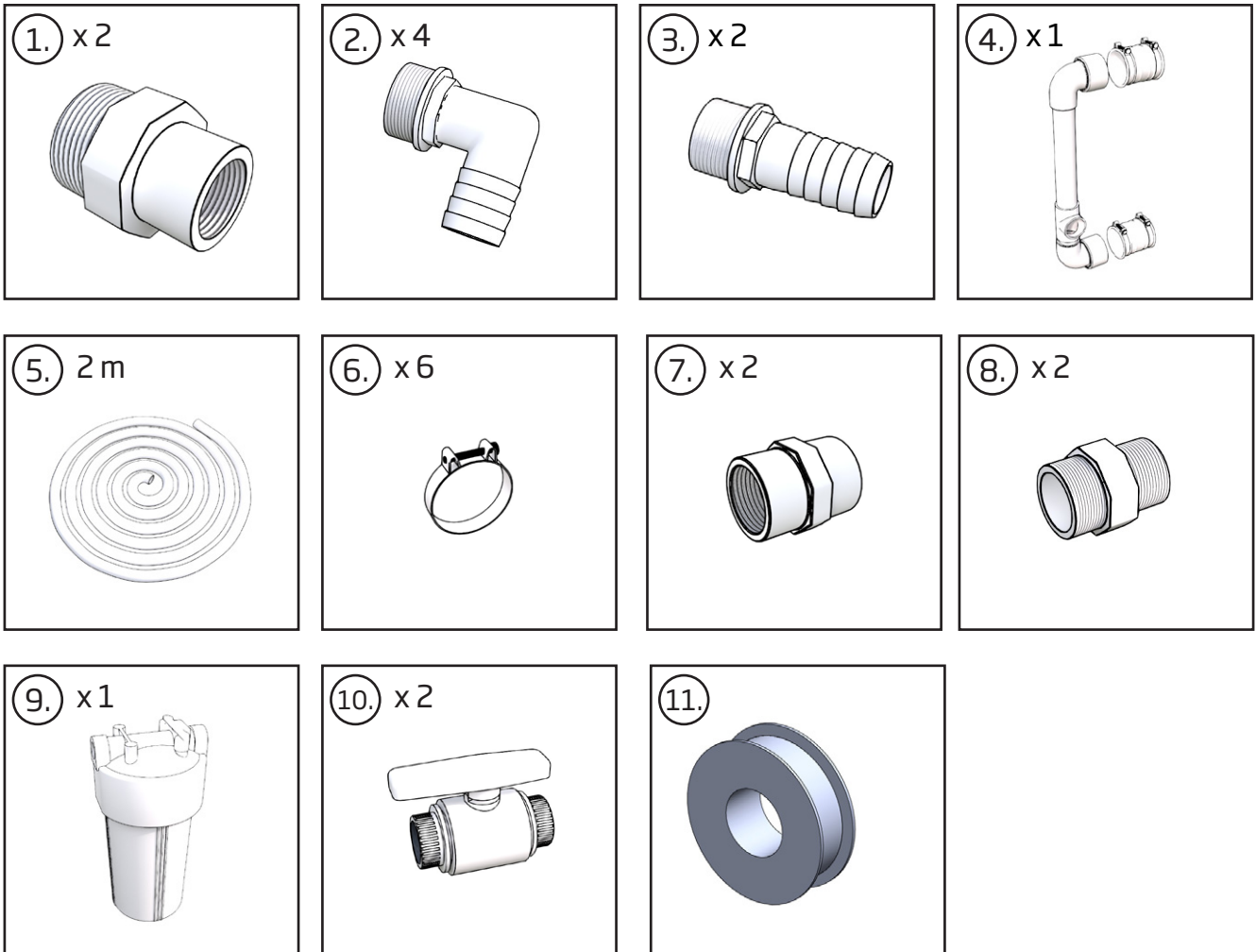


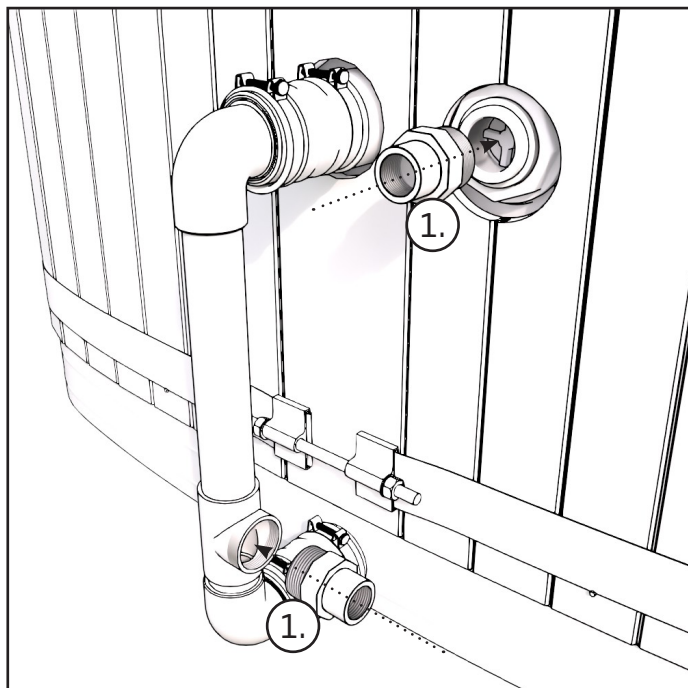
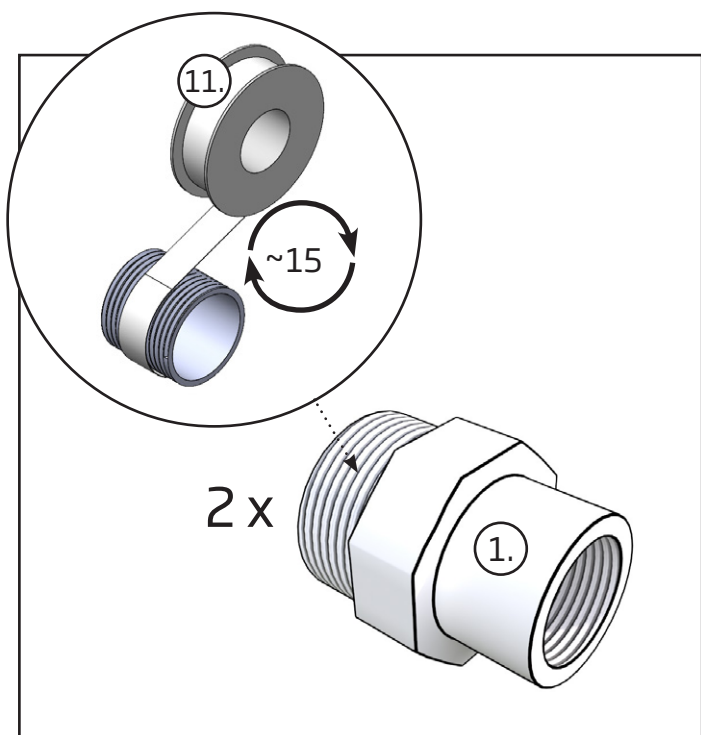
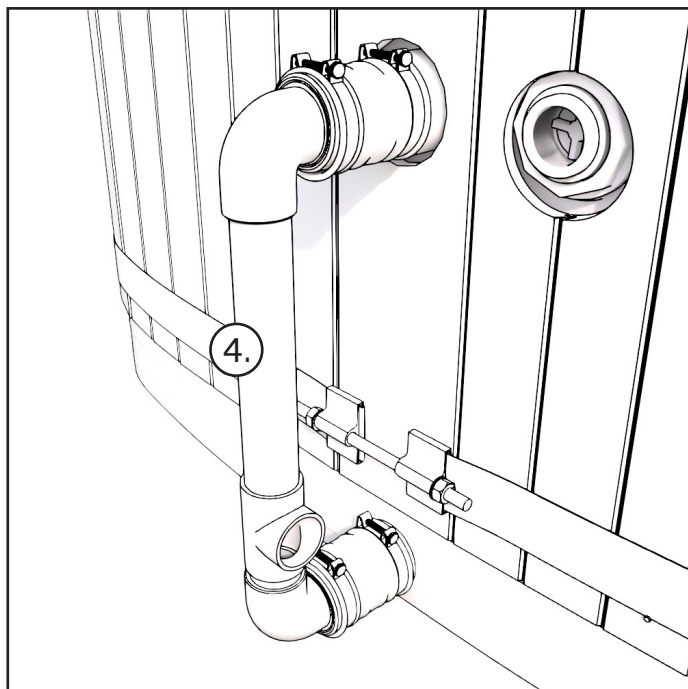
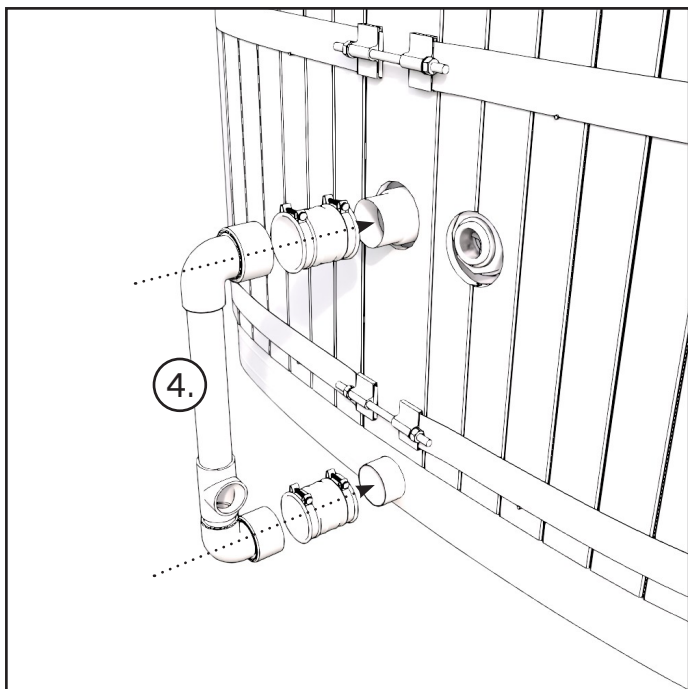


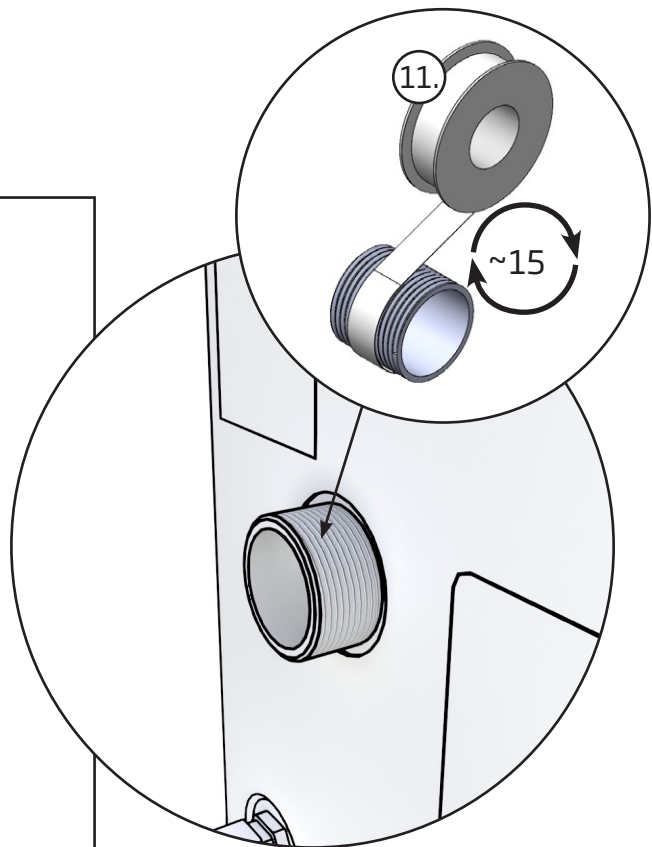
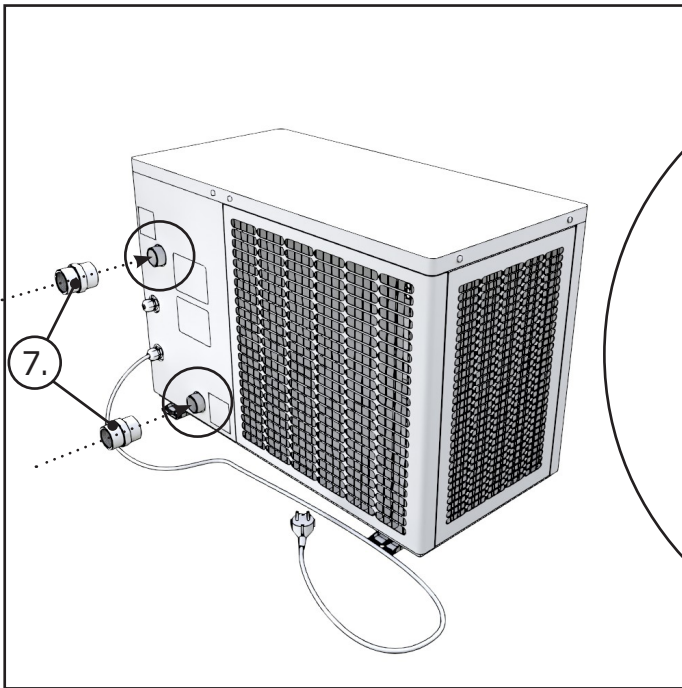
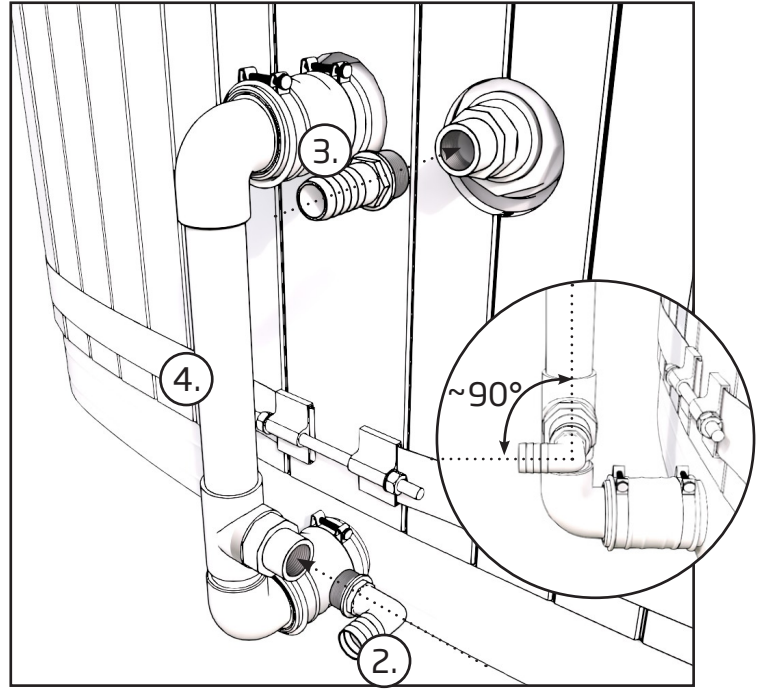
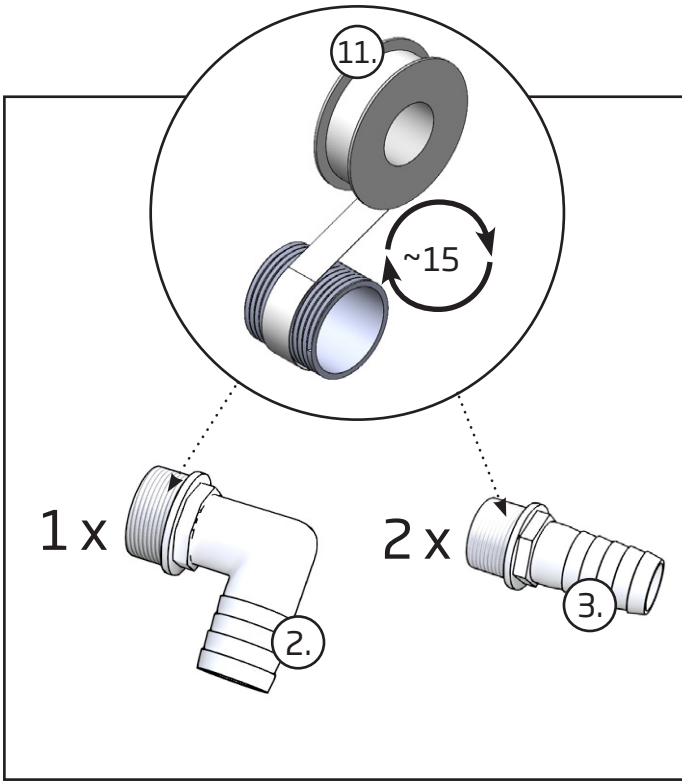
## 3. KAMIINAN KORVAAVA



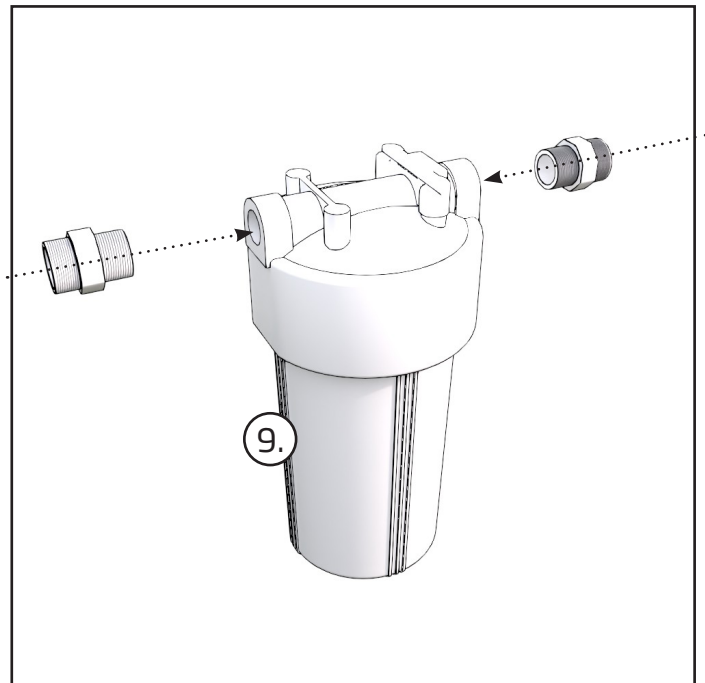
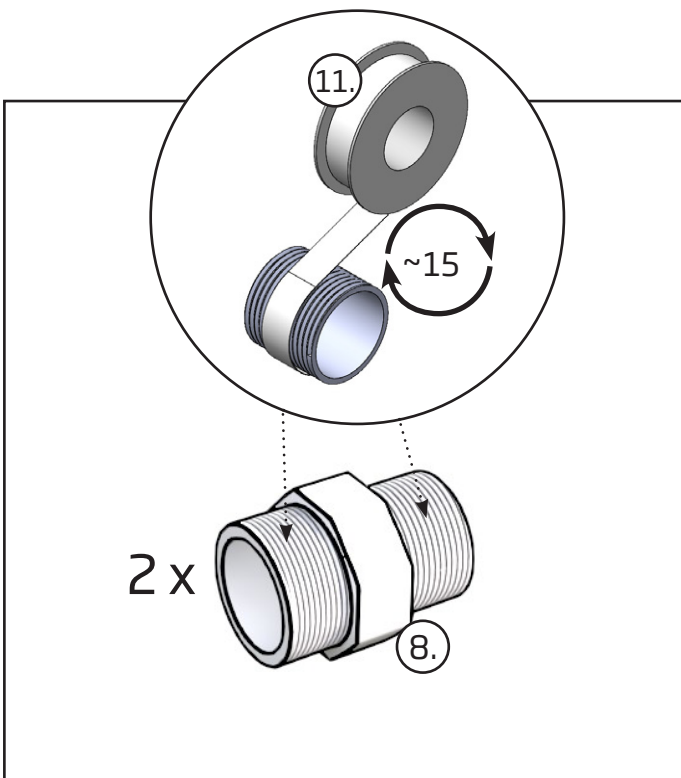
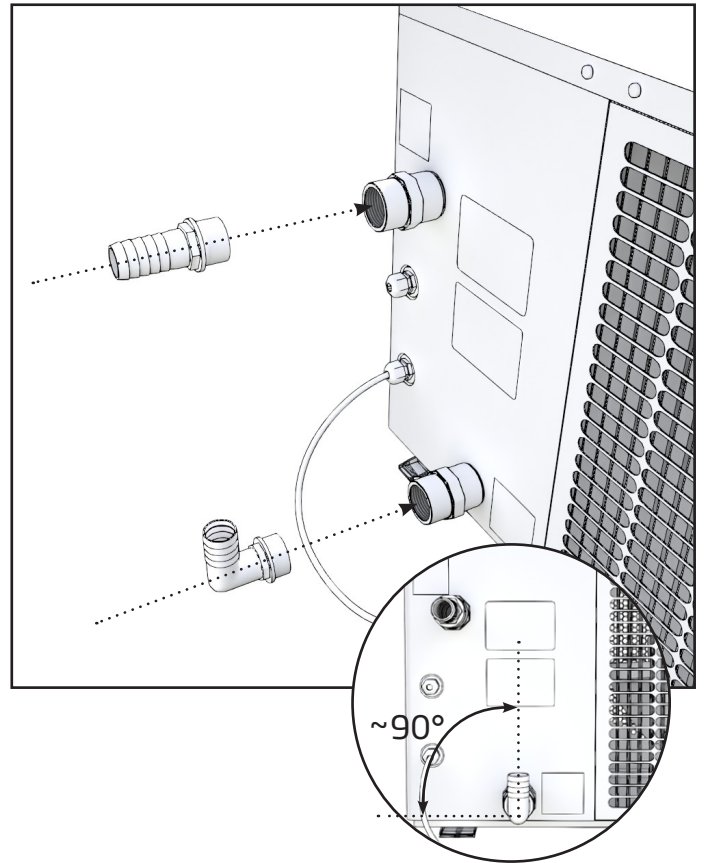
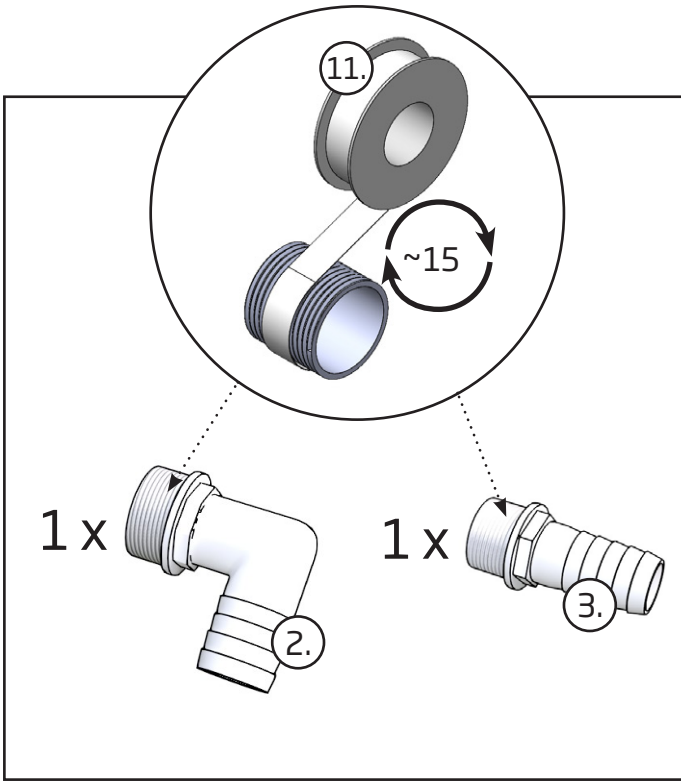
## OSALUETTELO

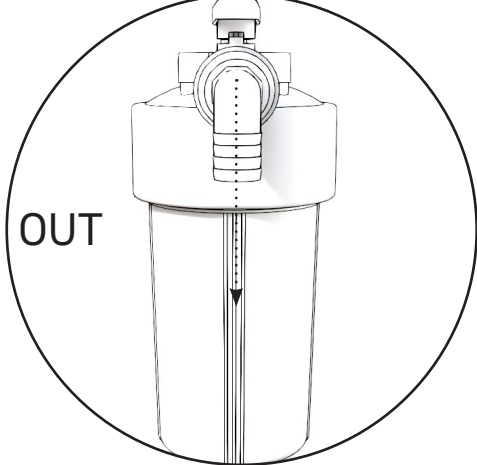
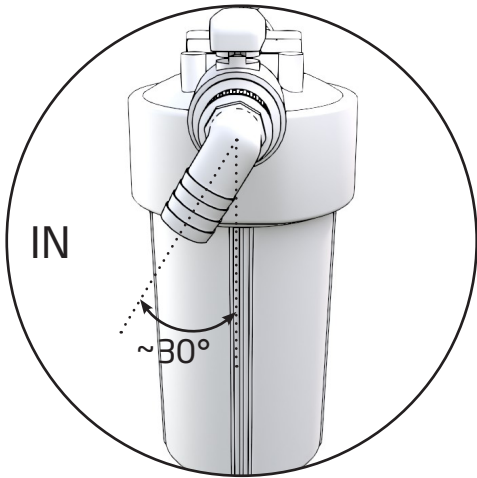
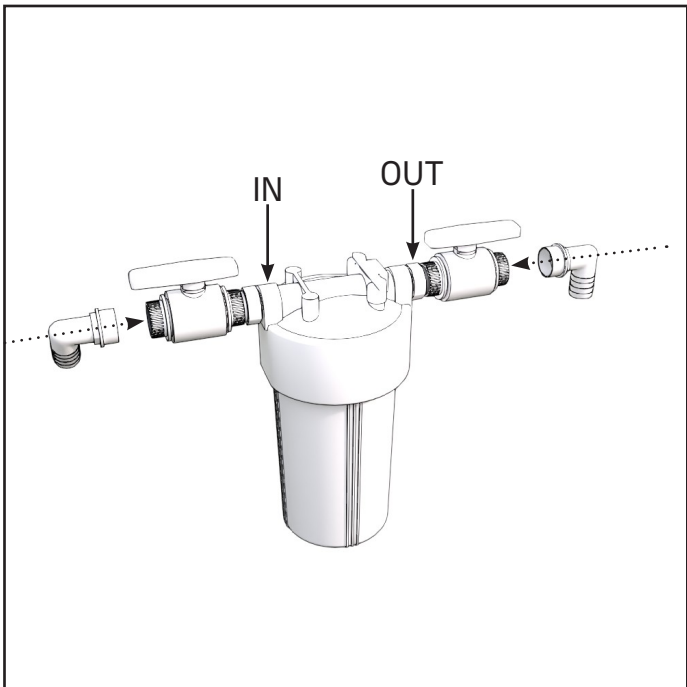
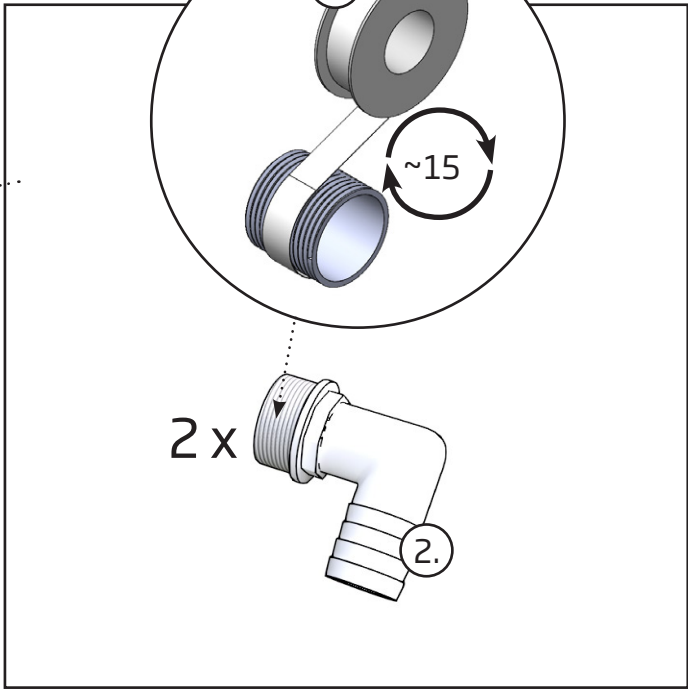
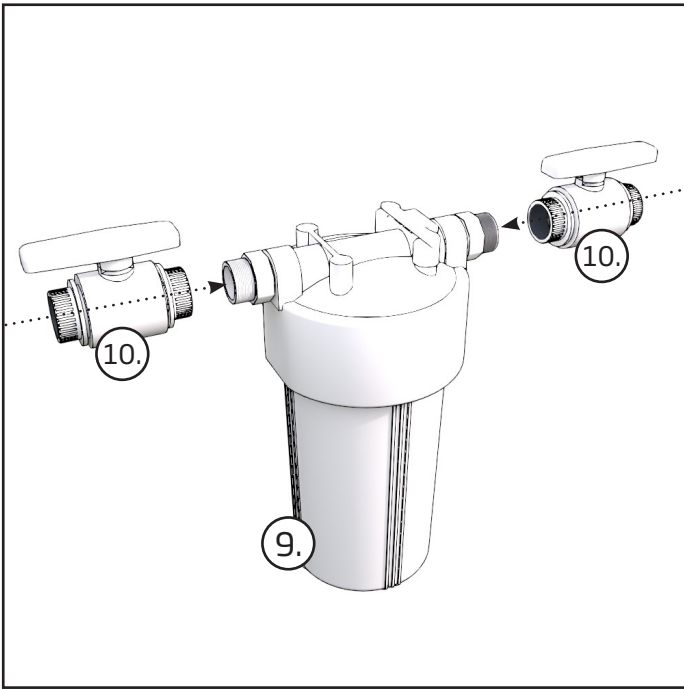


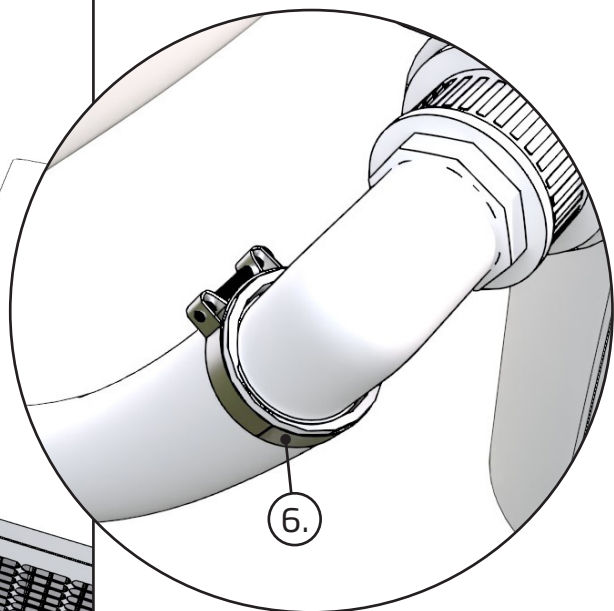
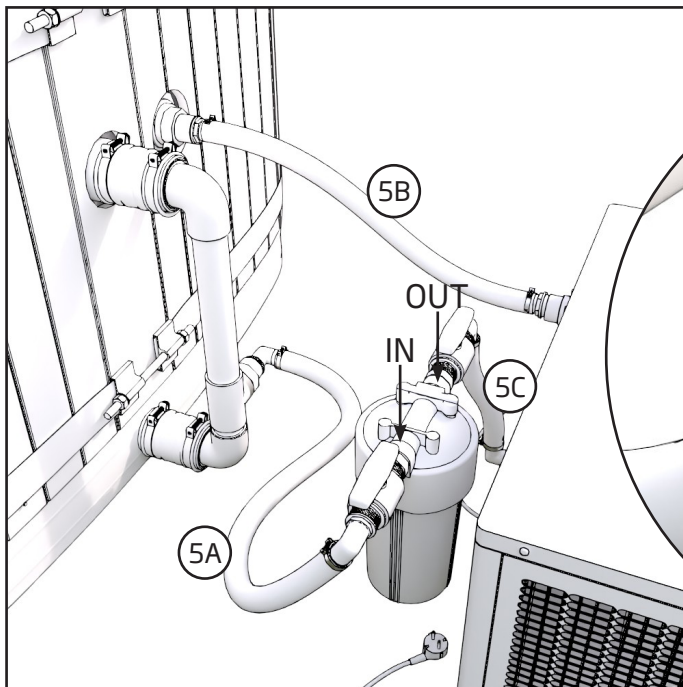
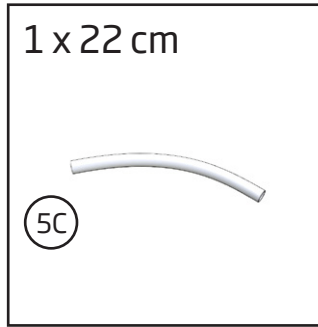
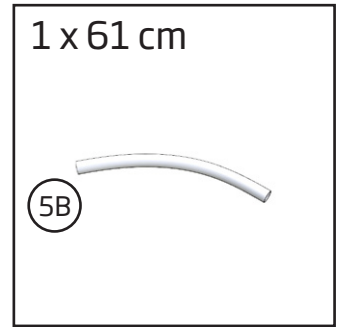
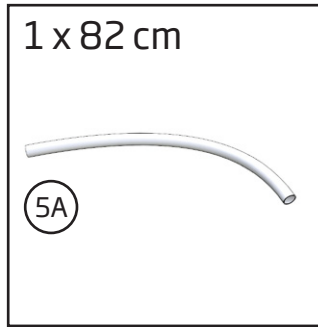
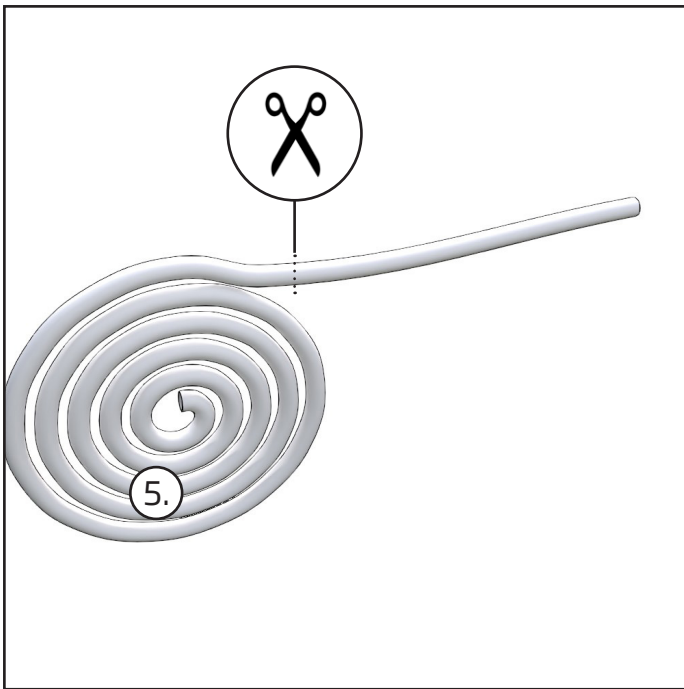












## ALTAAN TÄYTTÖ JA ILMAN POISTAMINEN YKSIKÖSTÄ

Altaasta riippuen altaan täyttö ja ilman poistaminen suoritetaan hieman erilailla.

### BlackIce S ja NordicIce S - Altaan täyttö ja ilman poistaminen yksiköstä

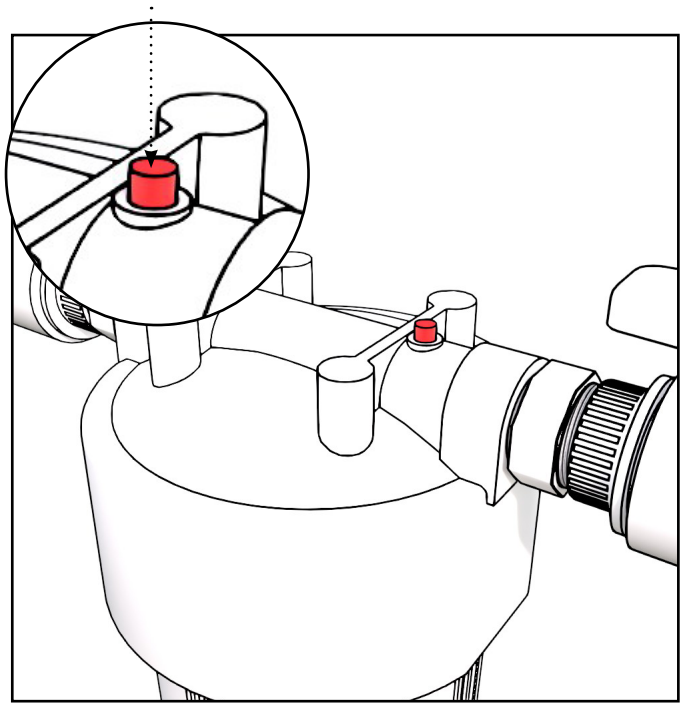
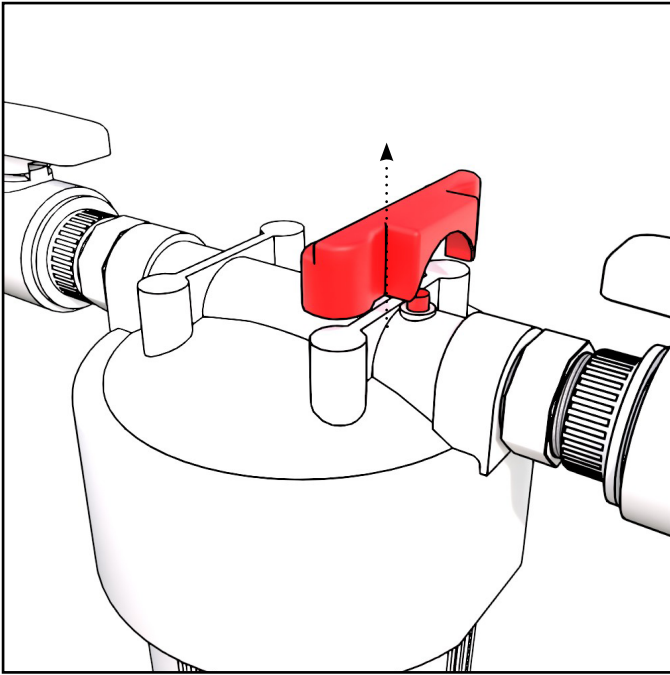


Irrota suojaritilät kuvan osoittamasta venttiileistä. Tulppaa edessä oleva alempi venttiili mukana toimitettavalla tulpalla.



Allasta täyttäessäsi käytä vesiletkua veden juoksumiseen yläventtiilistä saadaksesi ilmaa pois laitteesta. Käynnistä dual ilmalämpöpumppu.

Jos laitteesta ei tule ilmaa ja näytölle ilmestyy virhe P01 yhden minuutin kuluttua, irrota laite pistorasiasta ja käynnistä se uudelleen. Kun näet veden virtaavan, täytä allas haluamallasi tasolle.



Poista ilma myös suodattimelta nostamalla ensiksi suoja pois suodattimen päältä. Paina suodattimen päällä olevaa ilmanpoistopainiketta, kunnes vettä alkaa virrata ulos aukosta.



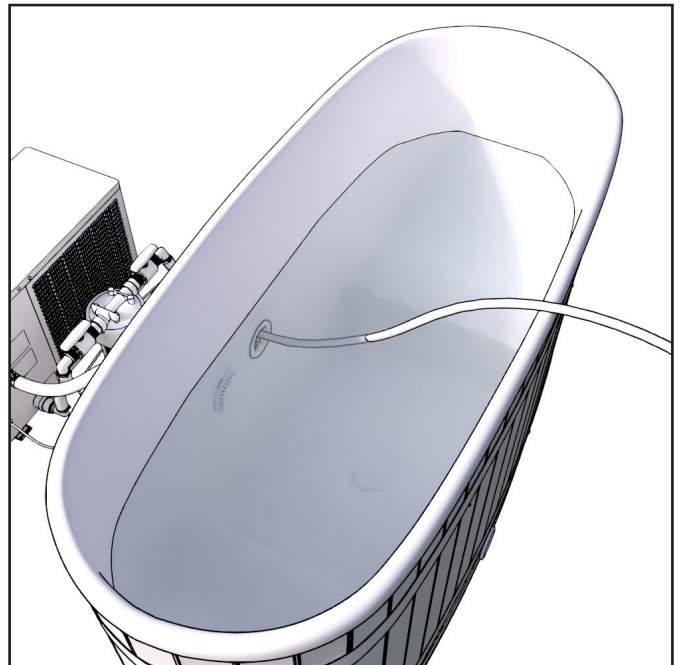
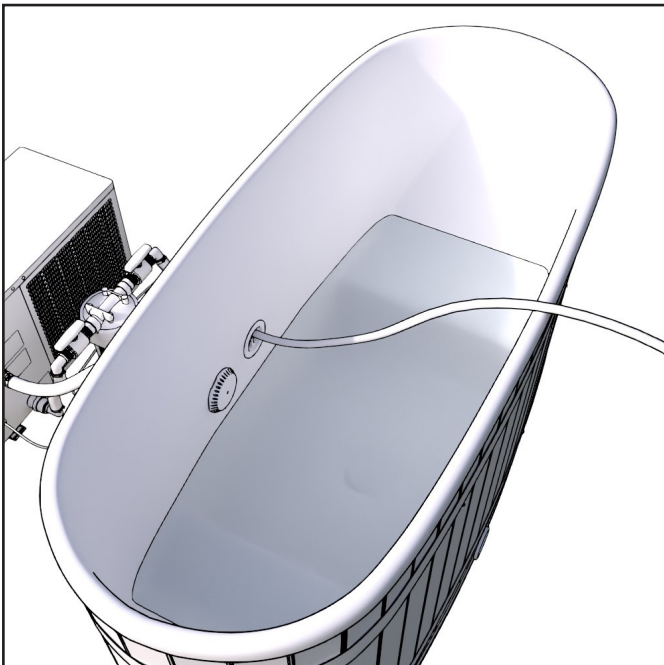
Kun vesi on saatu pyörimään laitteessa, poista tulppa ja laita suojaritilät takaisin.



## Kamiinan korvaava - Altaan täyttö ja ilman poistaminen yksiköstä

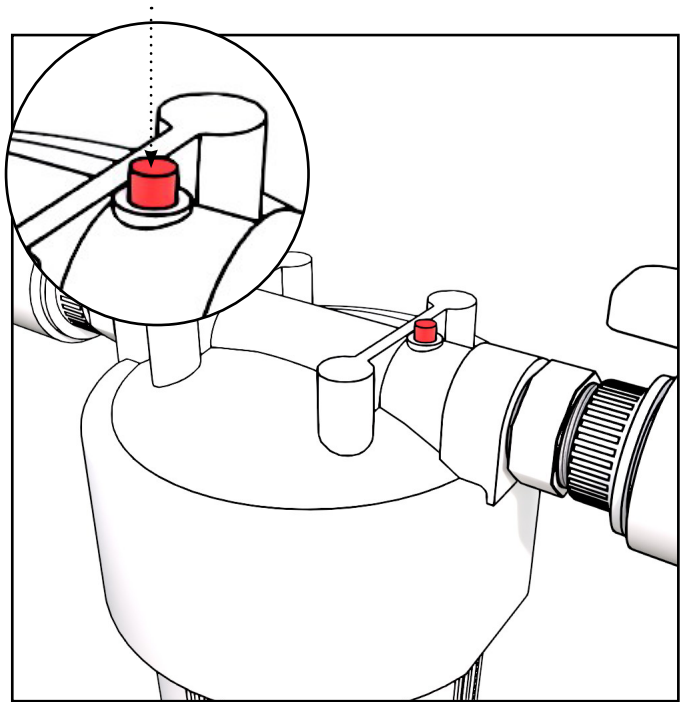
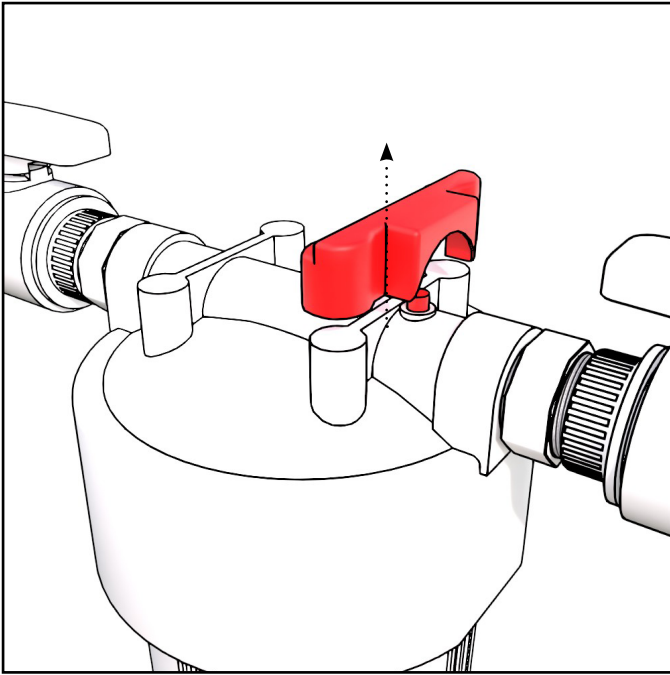


Irrota suojaritilät kuvan osoittamasta venttiileistä. Tulppaa alhaalla oleva venttiili mukana toimitettavalla tulpalla.

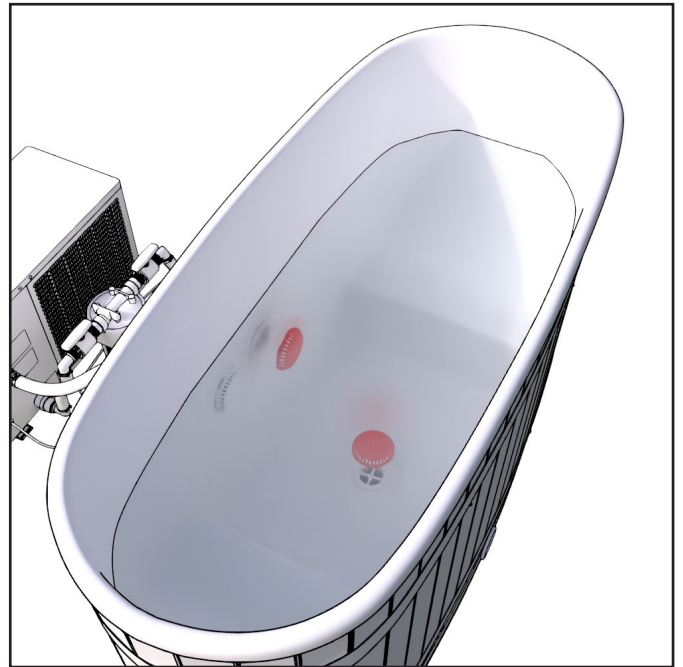


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Kun vesi on saatu pyörimään laitteessa, poista tulppa ja laita suojaritilät takaisin.

## KÄYTTÖ

## Ohjauspaneeli



## Virta ja näytön lukitus



Avaa lukitus painamalla mitä tahansa näppäintä sytyttääksesi näytön ja pidä I/O kuvaketta painettuna 5 sekunnin ajan, kunnes kuulet äänimerkin ("piip").	
Lukituskuvake katoaa.	
Pidä I/O kuvaketta pitkään painettuna laitteen käynnistämiseksi tai sammuttamiseksi. Jos mitään painiketta ei paineta 60 sekunnin aikana, ohjain lukittuu automaattisesti.	
Lukittuna ollessa lukituskuvake näkyy näytössä.	

## Tilat (Jäähdytys / Lämmitys / Auto)







Kun laite on päällä, valitse toimintatila painamalla menu-kuvaketta. Tilat vaihtuvat seuraavassa järjestyksessä: Jäähdytys -> Lämmitys -> Auto -> Jäähdytys... (jatkuva kierto). HUOM: Auto-tilassa jäähdytyksen- ja lämmityksen vaihtamisessa on viive.	
Lämmitystilassa ollessa päällä näytössä näkyy lämmityskuvake.	
Jäähdytystilassa ollessa päällä näytössä näkyy jäähdytyskuvake.	
Auto-tilassa käytettäessä näytössä näkyvät silmukkakuvake ja jäähdytyskuvake.	



## Lämpötilan säätö





Kun jäähdytysyksikkö on päällä, avaa lukitus (katso "Virta ja näytön lukitus").	
Paina ylös tai alas kuvakkeita säätääksesi lämpötilaa.	 
Jos mitään toimenpidettä ei suoriteta 3 sekunnin aikana, näyttö palaa näyttämään nykyisen veden lämpötilan.	









## Ajan säätö

Ajan säätöön siirtyminen: Pidä kellokuvaketta painettuna 5 sekunnin ajan, kunnes sekä "tunti" - että "minuutti" - osioissa olevat numerot alkavat vilkkua.	
Ajan säätötapa: Ajan säätöruudulla paina.	
Tällöin tuntiosan numero vilkkuu.	
Paina ylös ja alas kuvakkeita säätääksesi tunnin.	 
Paina kellokuvaketta siirtyäksesi minuutti-osioon ja toista edelliset toimet.	
Kun asetukset ovat valmiit, paina kellokuvaketta tallentaaksesi asetukset ja palataksesi päävalikkoon.	









## Virta päälle/pois -ajastimen asetukset ("Aktiivinen tila")

- Käyttäjät voivat asettaa kaksi päälle/pois "aktiivisen tilan" ajastinjaksoa. Asetetut ajanjaksot eivät voi mennä päällekkäin.
- Virta päälle/pois ajastimen asettaminen:

Päävalikossa, paina kellokuvaketta siirtyäksesi virta päälle/pois -ajastimen asetuksiin.	
Kun näytössä vilkkuu numero 1, paina kellokuvaketta siirtyäksesi virta päälle/pois ajanjakson 1 "virta päälle" -tunnin asetuksiin.	
Kun "tunti" osa vilkkuu, paina ylös ja alas kuvakkeita säätääksesi tunnit.	 

Paina kellokuvaketta vahvistaaksesi ja siirtyäksesi minuutit osaan.	
Kun "minuutti" osa vilkkuu, paina ylös ja alas kuvakkeita säätääksesi minuutit.	 
Paina kellokuvaketta vahvistaaksesi virta päälle -ajastuksen. Näyttö siirtyy virta pois -ajastimen asetuksiin ajanjaksolla 1. Toista yllä olevat toiminnot.	
Kun asetukset on tehty, pidä kellokuvaketta painettuna vahvistaaksesi ja tallentaaksesi nykyiset virta päälle/pois -ajastimen asetukset.	
Paina ylös ja alas kuvakkeita siirtyäksesi virta päälle/pois ajanjakson 2 asetuksiin ja toista yllä olevat toiminnot.	 
Voimassa oleva ajastinasetus näkyy päävalikossa vastaavalla numerolla. Paina I/O kuvaketta palataksesi päävalikkoon.	

## Otsonaattorin asetukset

Kun jäähdytysyksikkö on päällä, pidä virtapainiketta pitkään painettuna, jos näyttö on lukittu.	
Paina pitkään tilapainiketta, jotta LO ilmestyy näyttöön.	
Käytä alaspäin nuolinäppäintä muuttaaksesi arvon L11:ksi ja paina menu-painiketta.	 
Käytä nuolinäppäimiä muuttaaksesi arvon 0, 1 tai 2 (katso taulukko alla).	 
Paina tilapainiketta ja sen jälkeen virtapainiketta (Otsonoinnin ajoitus alkaa, kun laite kytketään päälle.)	 

Koodi	Parametri	Asetusalue	Tehdasasetus
L11	Ozonoin-tilaitteen ohjausmenetelmä	0. Ei otsonointia 1. Otsonointi 5 minuuttia jokaista tuntia kohden (55 minuuttia valmiustilassa) <ul style="list-style-type: none"> <li>Yksityinen käyttö</li> </ul> 2. Otsonointi 10 minuuttia jokaista tuntia kohden (50 minuuttia valmiustilassa) <ul style="list-style-type: none"> <li>Raskas/julkinen käyttö</li> </ul>	1

## YLEINEN YLLÄPITO JA VEDENLAATU

Varmista, että vesi pysyy puhtaana ja kirkkaana. Käytön tiheydestä riippuen voi olla tarpeen käyttää ajoittain klooria veden desinfiointiin (erityisesti runsaan julkisen käytön yhteydessä).

Päivittäin:

- Tarkista vedenpinta.

Viikoittain:

- Puhdista mahdolliset veden pinnan tahriintumat ja suodatin.
- Huuhtelee suodatin huolellisesti lämpimällä juoksevalla vedellä tai suihkulla (älä käytä painepesuria, sillä se voi vahingoittaa suodatinmateriaalia).
- Vaihda suodatinpatruuna, jos puhdistuksen jälkeen veden kierto ei ole normaalilla tasolla. Käytön määrästä riippuen suodatin tulee vaihtaa 2-4 kuukauden välein.
- Tarkista veden pH-taso, jonka tulisi olla välillä 7,2-7,6. Tarvittaessa voit säätää pH-arvoa pH+ tai pH- kemikaaleilla.

Kloorin käyttö:

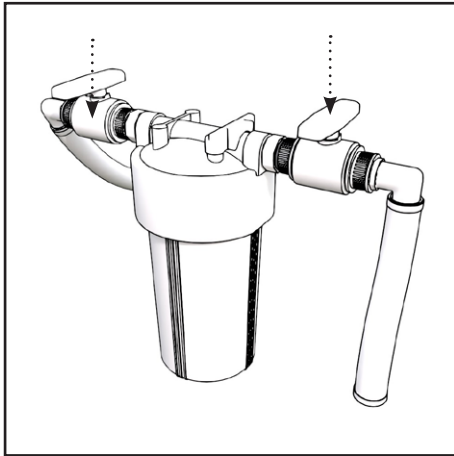
- Jos allasta käytetään päivittäin runsaasti, on suositeltavaa lisätä veteen puoli teelusikallista klooria (natriumdikloori-isosyanuraatti, dihydraatti) vapaaklooritason saavuttamiseksi (0,3-1,2 ppm).
- Jos käyttäjämäärä ylittää 10 henkilöä päivässä tai veden lämpötila ylittää 15 °C, suositellaan kloorin lisäämistä useammin, jotta vapaaklooritaso pysyy 0,3-1,2 ppm:n välillä.

### Huolto-ohjeet

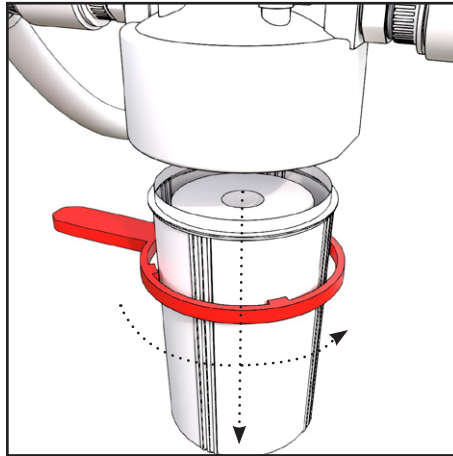
- Tarkista säännöllisesti virtajohto ja kaapeliliitännät. Jos havaitset ongelmia, ota yhteyttä paikalliseen jälleenmyyjään.
- Puhdista jäähdytysyksikkö säännöllisesti (yleensä 2-4 kuukauden välein) varmistaaksesi esteettömän ilmanvaihdon.
- Kun jäähdytysyksikkö ei ole käytössä, irrota se pistorasiasta.
- Jos jäähdytysyksikköä ei käytetä pitkään aikaan, tyhjennä siitä kaikki vesi.
- Älä käytä suolaa tai muita mineraaleja vedessä.
- Vianetsintä
  - Ohjauspaneeli on tyhjä, eikä jäähdytysyksikkö käynnisty: Tarkista virtalähde ja/tai onko vikavirtasuojalaennut. Jos virtalähde on kunnossa mutta vikavirtasuojala on katkaissut virran, paina reset-painiketta käynnistääksesi laitteen uudelleen. Jos ongelma jatkuu, irrota laite pistorasiasta ja ota yhteyttä jälleenmyyjään tai valmistajaan.
  - Vesi ei kierrä laitteen käynnistämisen jälkeen: Sammuta laite hetkeksi ja käynnistä se uudelleen. Tämä voi johtua ilmalukoista putkistossa. Toista tarvittaessa, kunnes vesi alkaa kiertää.
  - Vesi ei kierrä kunnolla: Tarkista vedenpinta ja suodattimen kunto (patruuna, jos käytössä). Lisää vettä tarvittaessa. Puhdista suodatin tai vaihda patruuna, jos tarpeen. Jos ongelma jatkuu, ota yhteyttä jälleenmyyjään.

## SUODATIN PATRUUNAN PESU JA VAIHTO

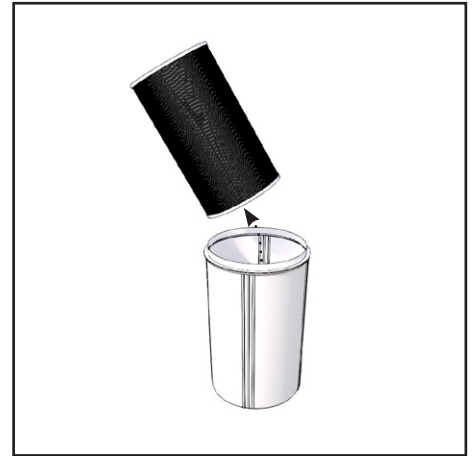
Suodatin on puhdistettava säännöllisesti, jotta vesi pysyy puhtaana ja suodatin ei tukkeudu. Vaihda patruunasuodatin tarvittaessa, yleensä 2-4 kuukauden välein käyttömäärästä riippuen.



Katkaise virrat jäähyditinyksiköltä ja sulje molemmat palloventtiilit



Irroita suodatinkotelo kiertämällä. Jos suodatintimen kotelo on tiukka ja vaikea avata, käytä suodatinpakkaukseen sisältyvää avaustyökalua.

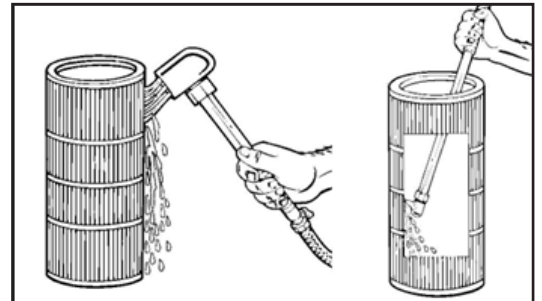


Poista suodatinpatruuna ja puhdista kotelo tarvittaessa.

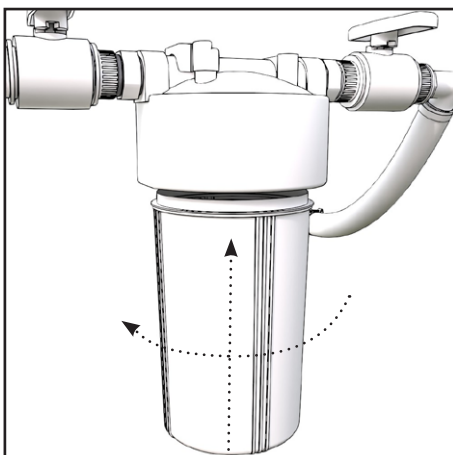
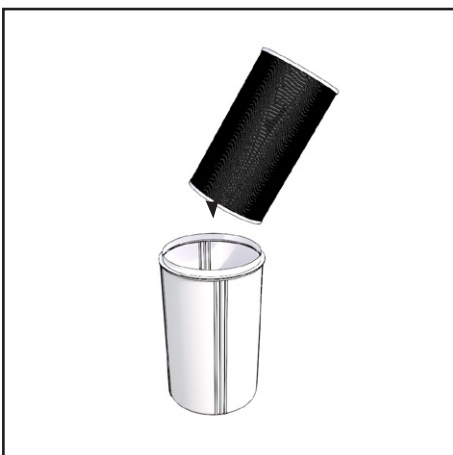
### Pesu

Parhaan mahdollisen tuloksen saat huuhtelemalla suodatinpatruunan ensin juoksevalla vedellä karkeasti puhtaaksi ja sen jälkeen liuota patruuna kokonaan ämpärissä vähintään 6 tunnin ajan.

Huuhtelee sitten patruuna vielä uudelleen. Anna suodatinpatruunan kuivua ennen kuin asetat sen takaisin paikalleen. **Huom. älä käytä painepesuria, sillä se voi vahingoittaa suodatinmateriaalia).**



Käyttöä voi jatkaa heti vaihtamalla tilalle toisen uuden tai puhdistetun suodatinpatruunan.



Aseta uusi tai puhdistettu patruuna takaisin koteloon.

Kierrä kotelo takaisin paikallensa käsikireyteen.

## VIKAKOODIT

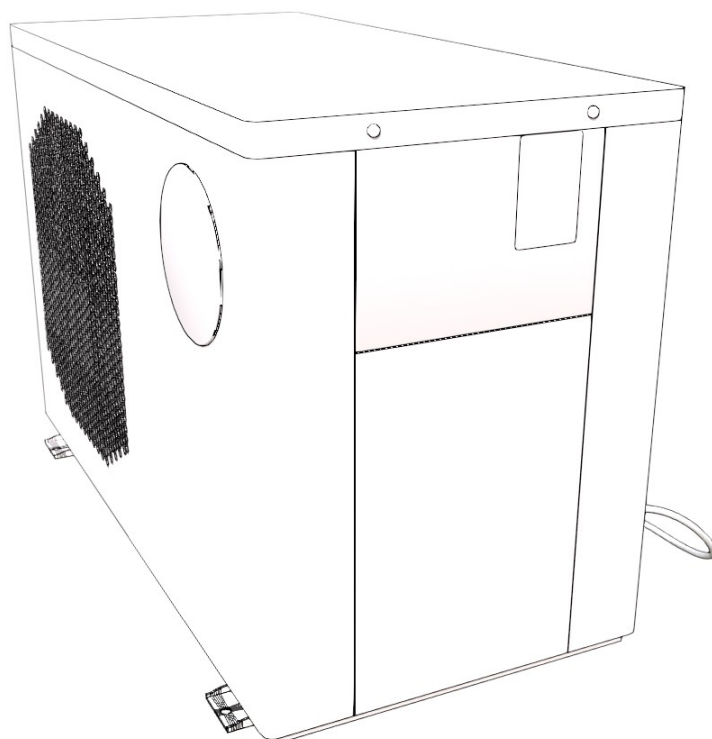
Kun vika ilmenee, vastaava vikakoodi ilmestyy. Kun vika on poistettu, vikakoodi katoaa. Vikakoodin nollaamiseksi käynnistä laite uudelleen.

Vikakoodi	Kuvaus
E01	Kaasun poistolämpötilan vika
E05	Lämmönsiirtimen lämpötilan vika
E09	Kaasun imulämpötilan vika
E17	Sisään tulevan veden lämpötilan vika
E18	Ulos menevän veden lämpötilan vika
E22	Ympäristön lämpötilan vika
P01	Veden virtauksen kytkinvika
P02	Korkeapaineen suojaus
P06	Matalan paineen suojaus
P11	Kaasun poistolämpötilan ylikorkea suojaus
P15	Tulo-/poistoveden liiallisen lämpötilan suojaus
P16	Ylijäähdytyksen suojaus
P17	Valmiustilan pakkasuojaus
P25	Ympäristön lämpötilan suojaus
P26	Lämmitystilassa ulosmenevän veden ylikorkean lämpötilan suojaus
P27	Jäähdytystilassa ulkoyksikön lämmönsiirtimen ylikorkean lämpötilan suojaus

## TAKUU

Katso takuu laitevalmistajan ohjeesta.

Bruksanvisning  
DUAL AVANTOPOOL  
LUFTVÄRMEPUMP



Kontrollera leveransinnehållet omedelbart!  
Läs noggrant igenom och spara anvisningarna för framtida behov.

## ALLMÄNT

Följande anvisningar är allmänna anvisningar. Noggrannare och mer omfattande anvisningar finns i bruksanvisningen som medföljer anordningen.

- För reparation, vänligen kontakta servicen. Reparationsprocessen måste utföras noggrant enligt denna bruksanvisning. Underhållsåtgärder utförda av icke-professionella är förbjudna och gör garantin ogiltig.
- Felaktig användning kan orsaka personskador eller skador på utrustning.
- Säkerställ att badtunnan är fylld med vatten och att luftbubblor har avlägsnats från enhetens rörsystem innan du startar den. Det är förbjudet att starta anordningen innan en viss vattennivå har uppnåtts, eftersom det kan skada anordningen och ogiltigförklara garantin.
- Om strömmen måste stängas av för reparation, vänta en minut efter att strömmen har stängts av innan du rör vid kretskortet, för att undvika elchock på grund av kondensatorns urladdning.
- Kylanordningen ska förvaras och transporteras i upprätt läge i sin originalförpackning. Om detta inte görs, vänta minst 24 timmar innan du startar anordningen.
- Före installationen är det viktigt att säkerställa rätt elförsörjning, spänning och frekvens.
- Felaktig installation kan orsaka brand, elchock, att anordningen faller eller vattenskada.
- Säkerställ att vatten inte kommer in i elkomponenterna.
- Anordningen kan skadas på grund av allvarlig överhettning om dess ventilationsgaller täcks över, till exempel med handdukar, kläder eller andra föremål, eller om anordningen placeras för nära en vägg eller i ett utrymme med dålig ventilation.
- Använd inte salt eller andra mineraler i vattnet.
- Denna anordning är inte avsedd att användas av barn. För att trygga säkerheten för barn ska de hållas under uppsikt av en vuxen vid användningen.
- Personer som lider av hjärtsjukdomar, lågt eller högt blodtryck, cirkulationsproblem, diabetes eller andra sjukdomar som kräver läkarvård, bör rådfråga en läkare innan de använder badtunnan.
- Personer som använder läkemedel bör rådgöra med en läkare innan de använder badtunnan, eftersom vissa läkemedel kan orsaka dåsighet, medan andra kan påverka hjärtfrekvensen, blodtrycket och -cirkulationen.
- Gravida kvinnor bör rådgöra med en läkare innan de använder badtunnan.
- Anordningen får inte användas i direkt solljus på grund av risken för överhettning.



På vintern eller när temperaturen i omgivningen sjunker under 0 °C, ska du tömma vattnet ur kylanordningen, om anordningen inte används. Annars kan anordningen skadas på grund av frysning, vilket gör garantin ogiltig. Anordningen får inte användas utomhus när omgivningstemperaturen är under -7 °C.

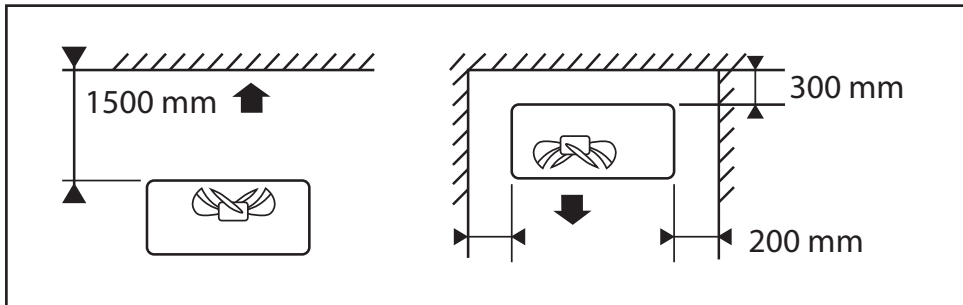


Om användningsmiljöns temperatur är under 0 °C, håll anordningen igång och i läget Automatic och använd inte Active mode-timern. I annat fall kan systemet frysa.

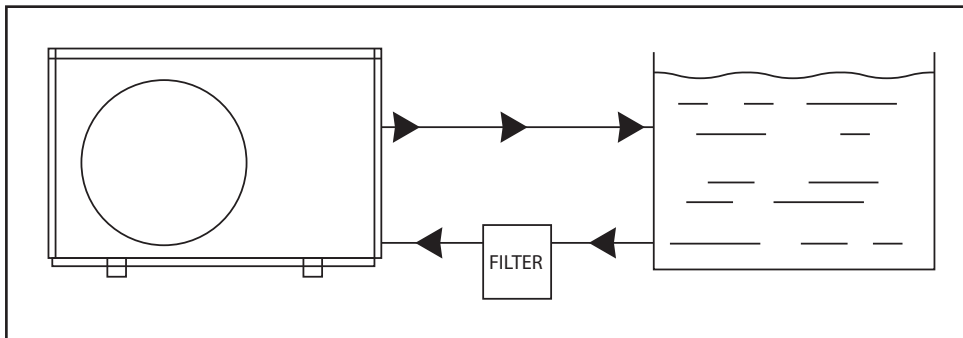
## INSTALLATIONSÄVSTÅND

Kylanordningen ska installeras i ett välventilerat utrymme. Det ska installeras på minst följande avstånd:

- Minimiavståndet mellan anordningens främre del och väggen: 1 500 mm (150 cm)
- Minimiavståndet mellan anordningens bakre del och väggen: 300 mm (30 cm)
- Minimiavståndet mellan anordningens sidor och väggen: 200 mm (20 cm)



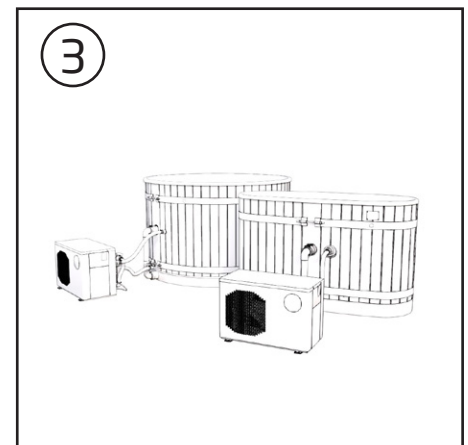
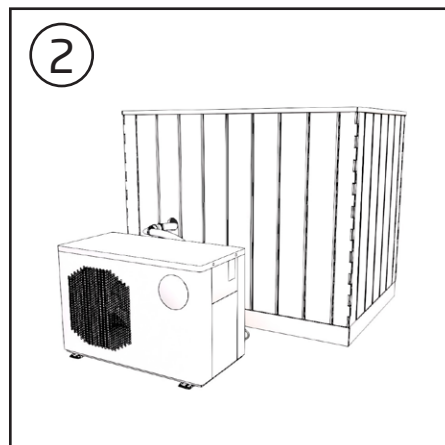
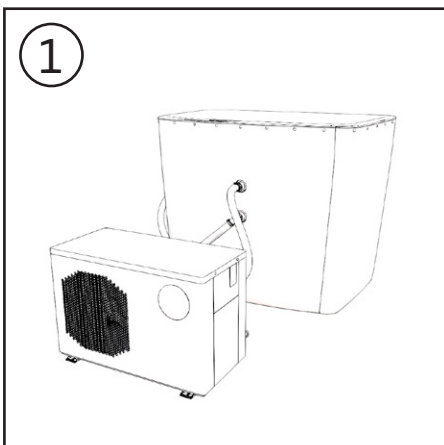
## Vattencirkulation



## INSTALLATION I BADTUNNAN

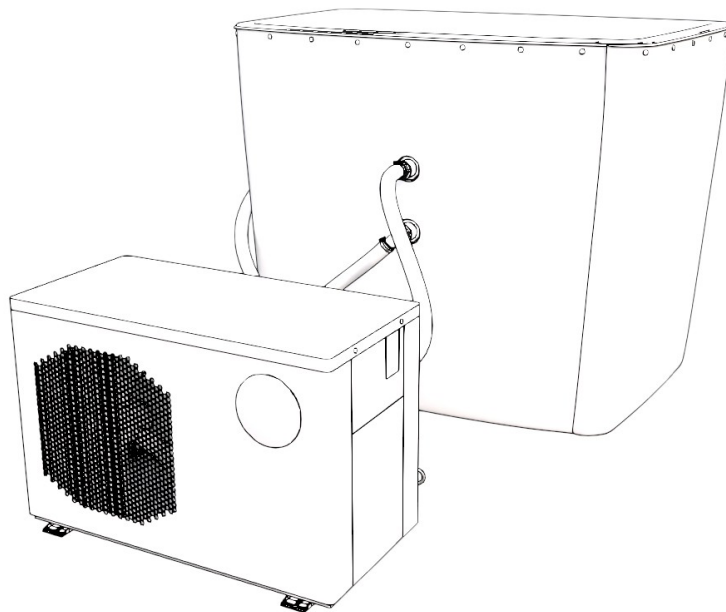
Avantopool-luftvärmepumpen kan installeras i flera olika badtunnor. Instruktionerna finns för varje badtunna i följande ordning:

1. Comfort BlackIce S
2. Premium NordicIce S
3. Ersätter kaminen

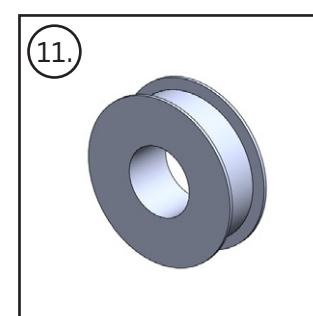
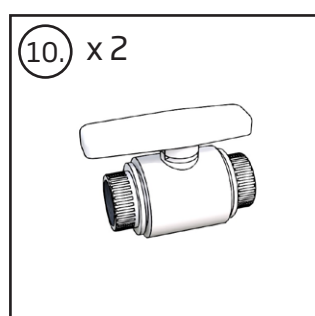
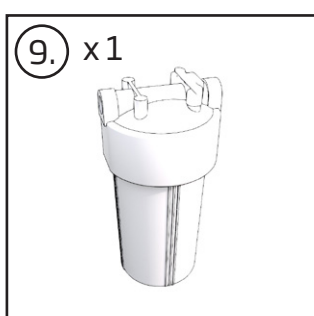
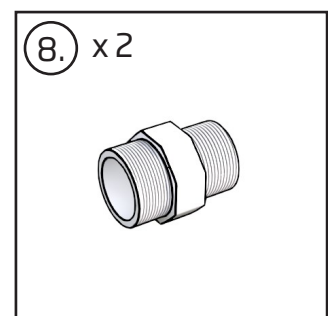
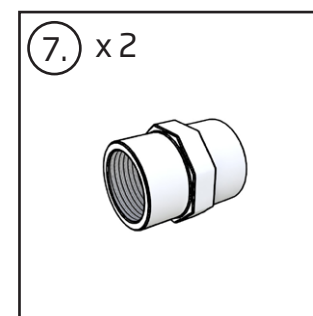
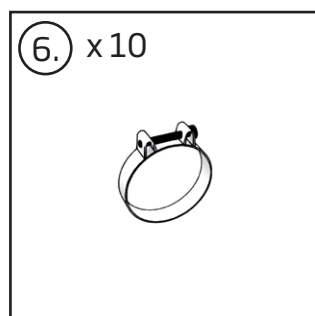
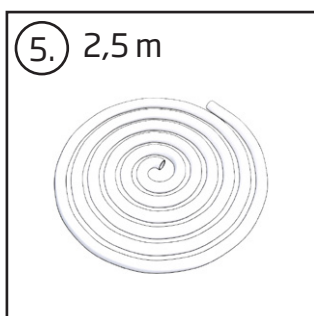
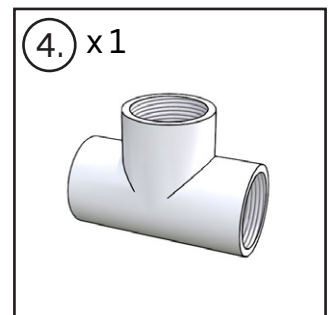
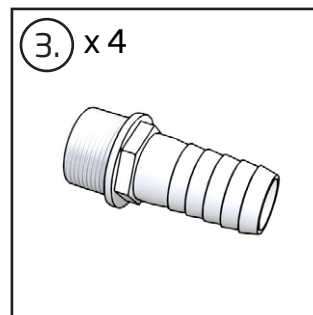
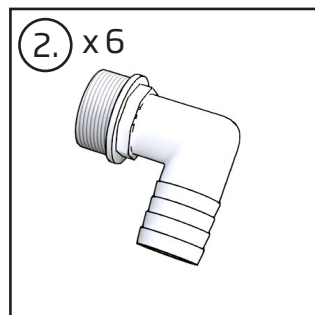
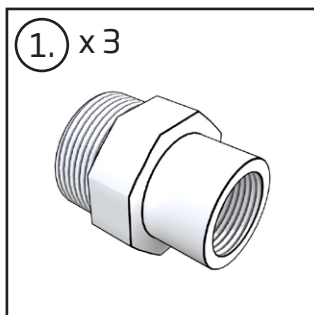


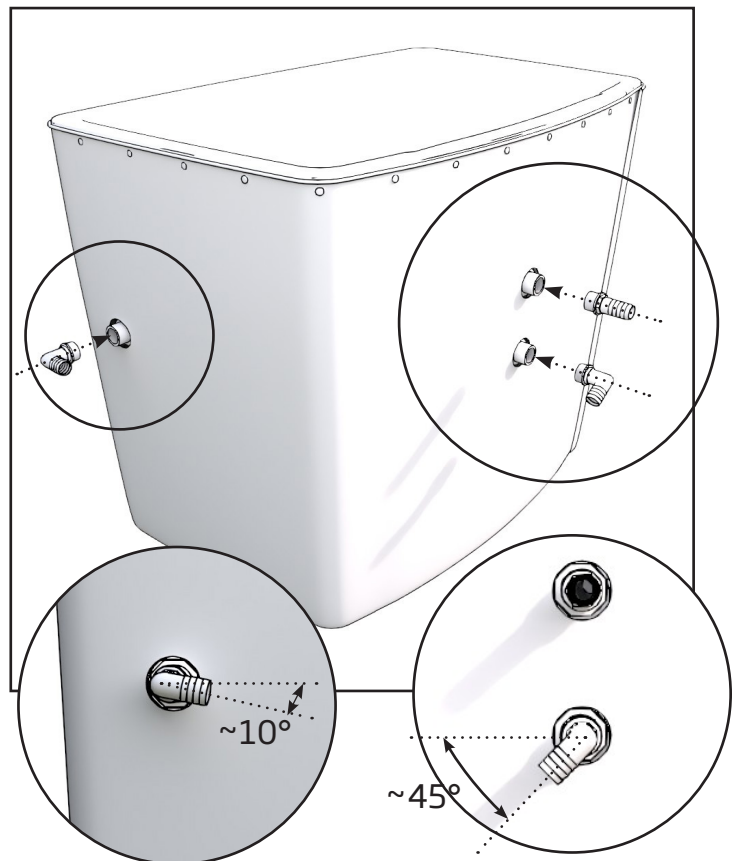
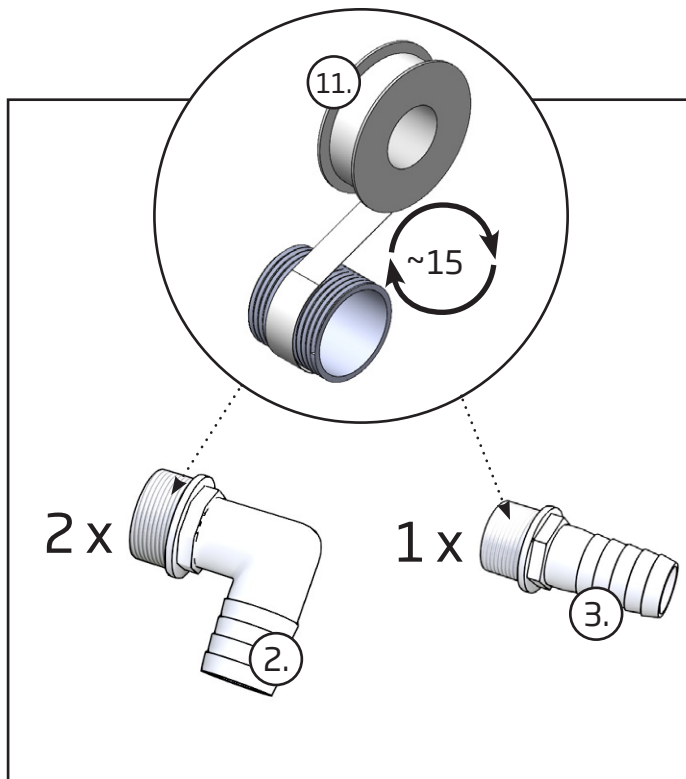
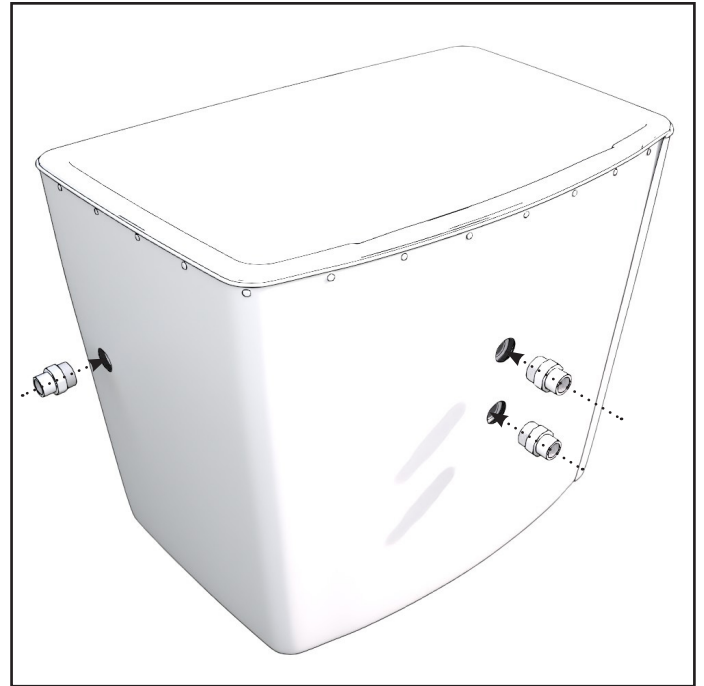
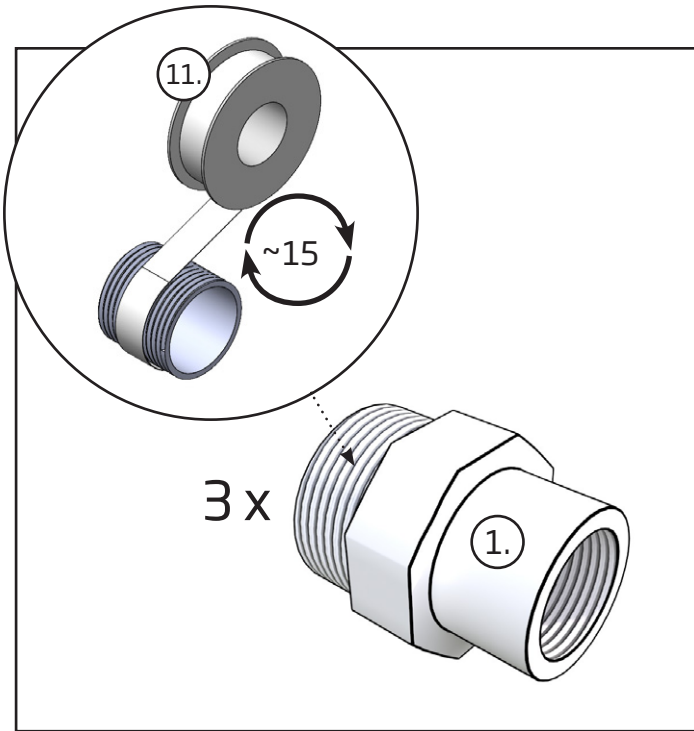


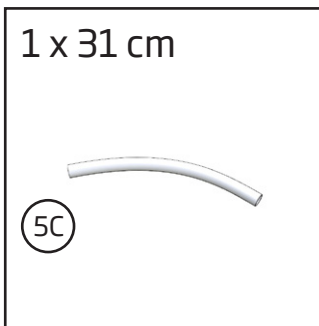
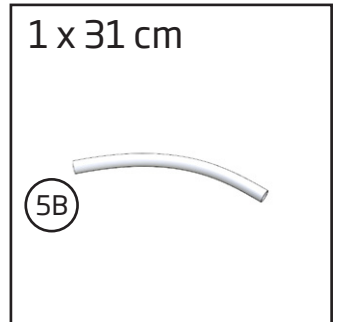
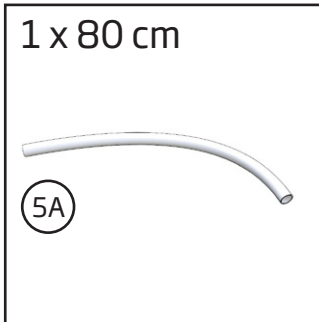
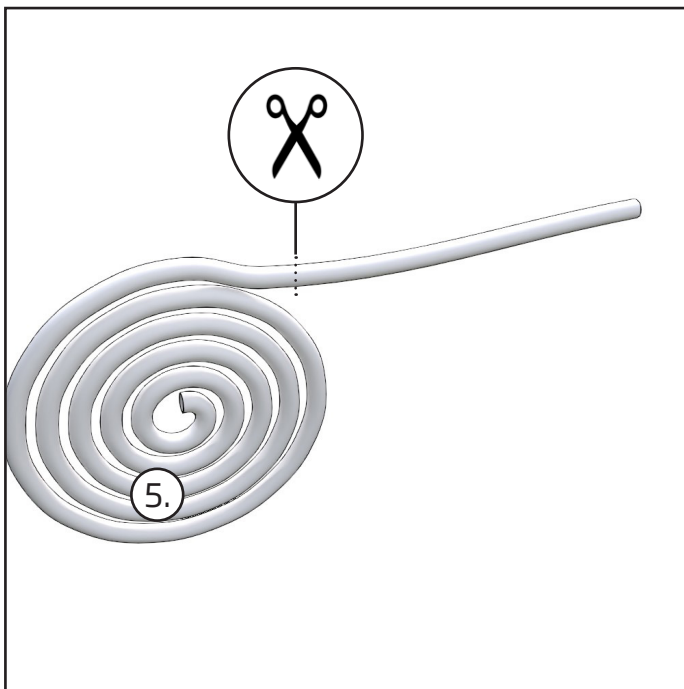
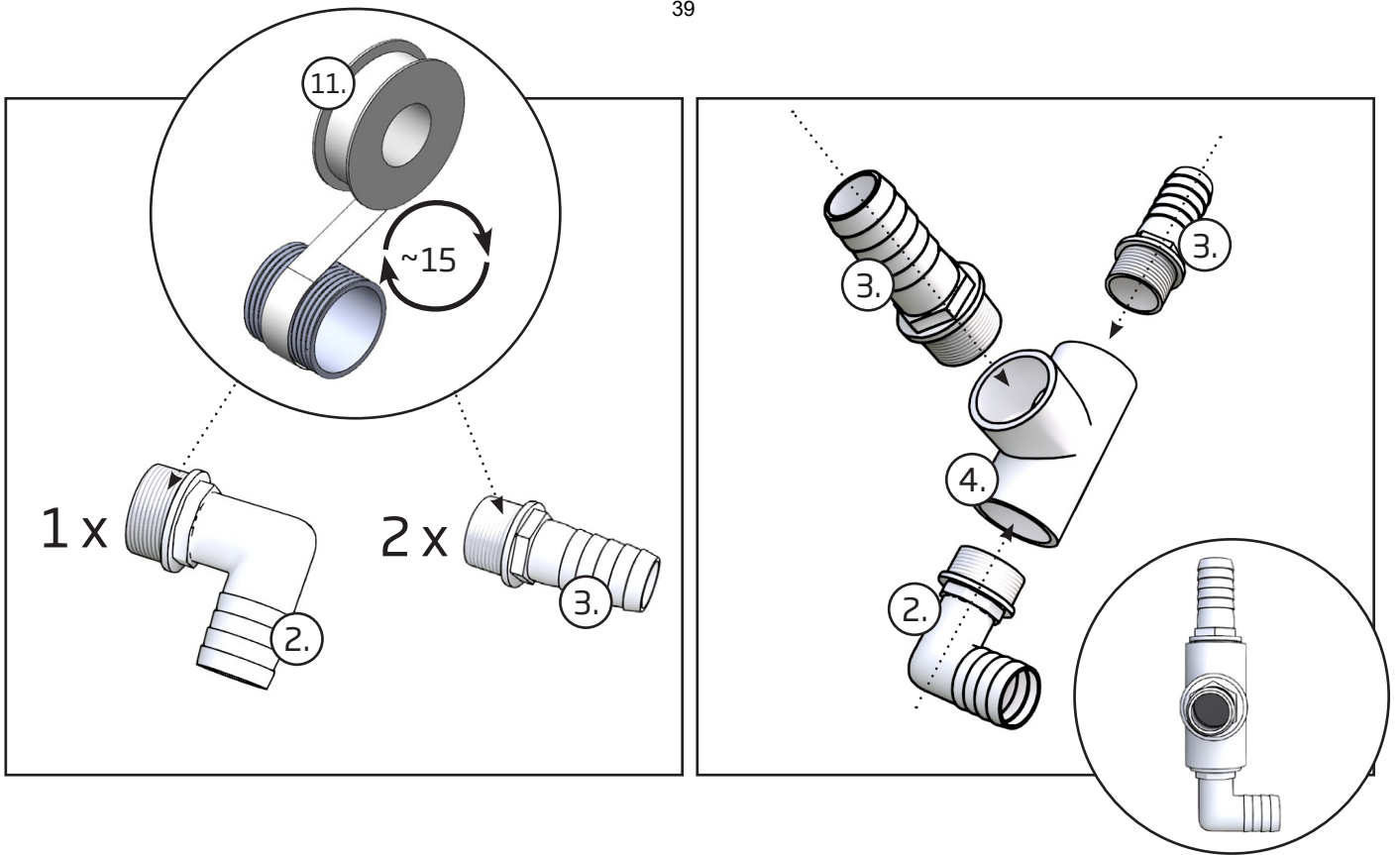
## 1. COMFORT BLACKICE S

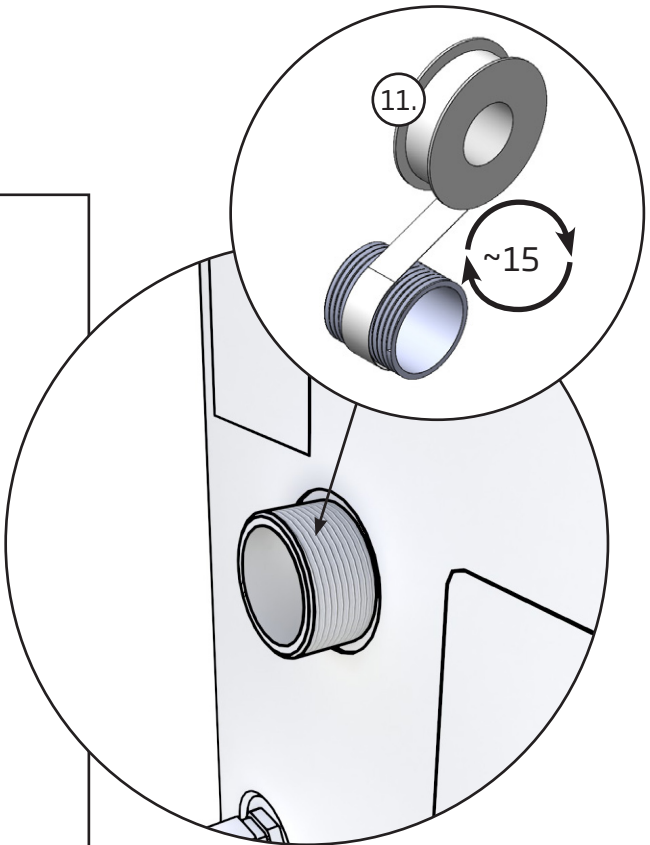
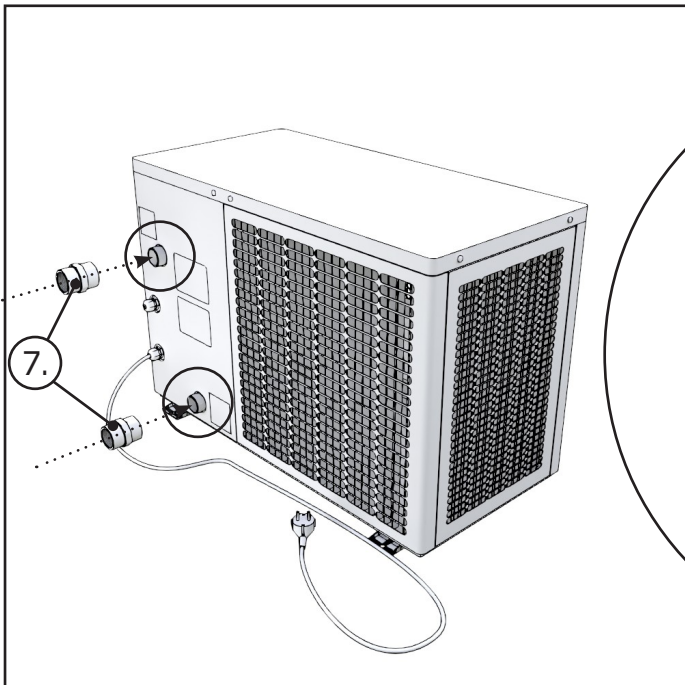
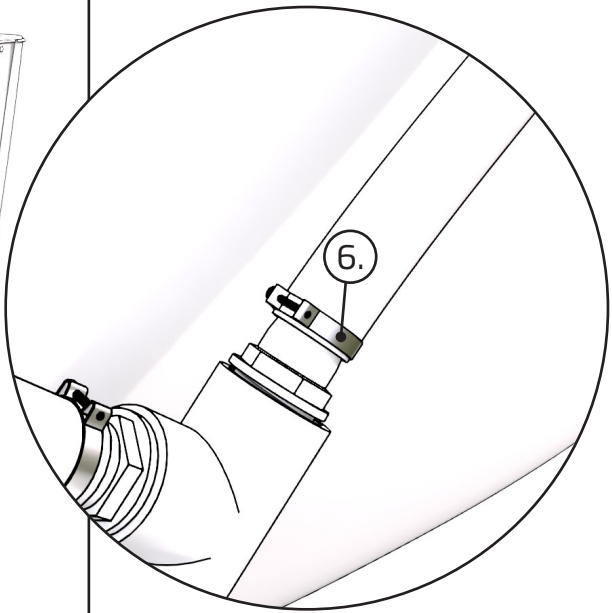
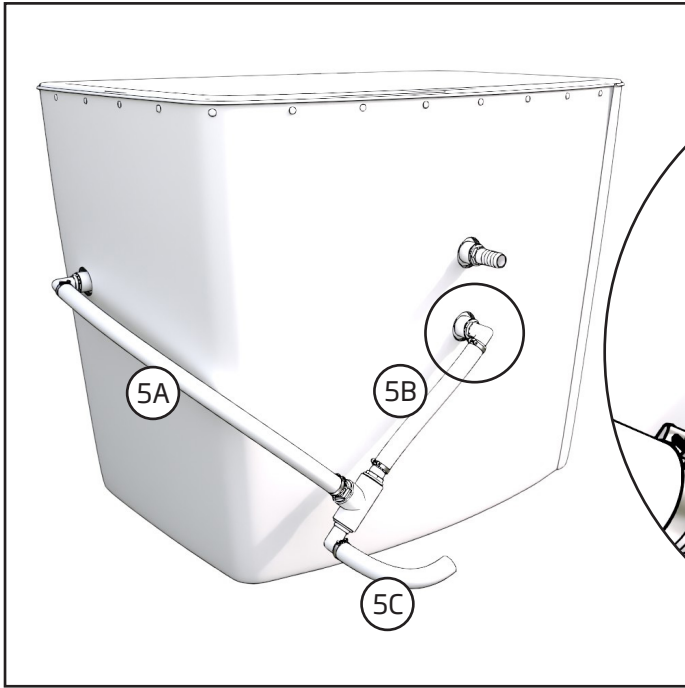


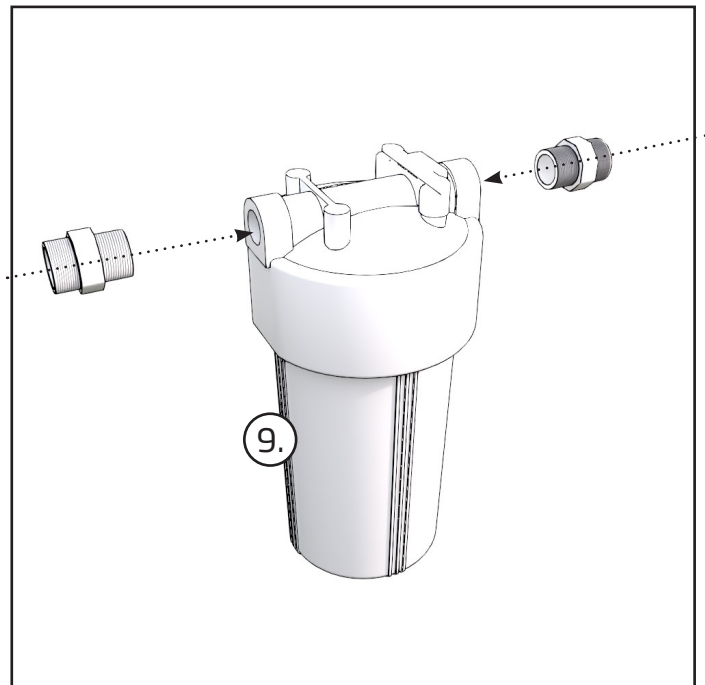
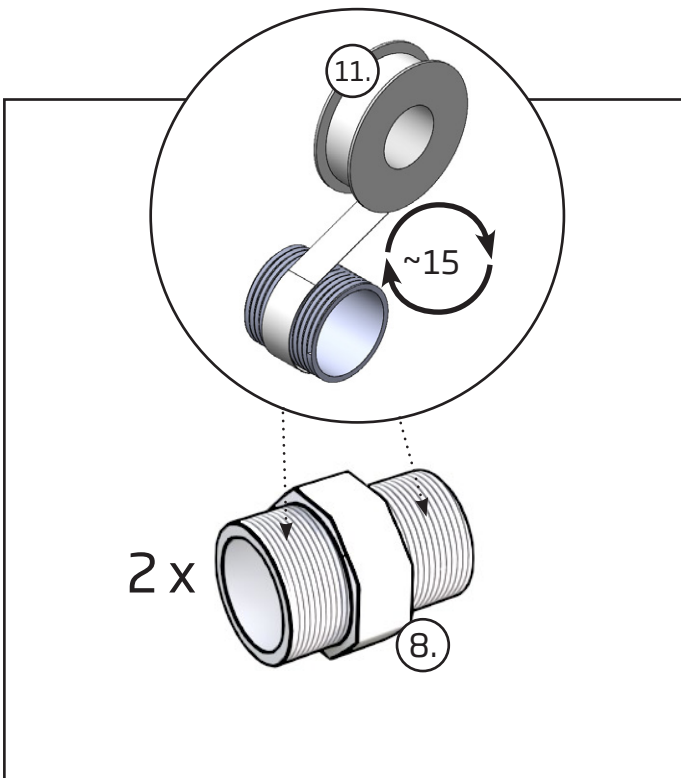
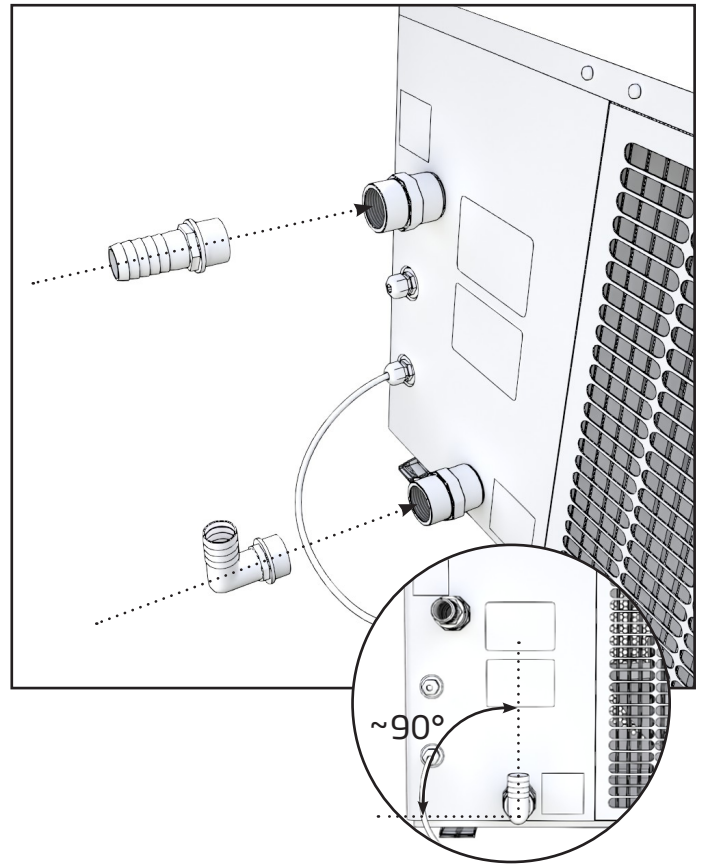
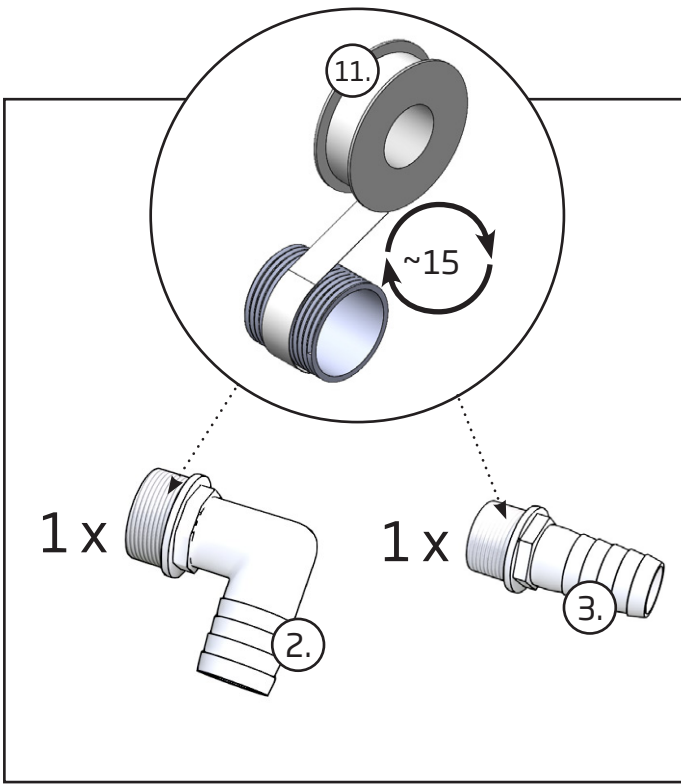
## KOMPONENTLISTA

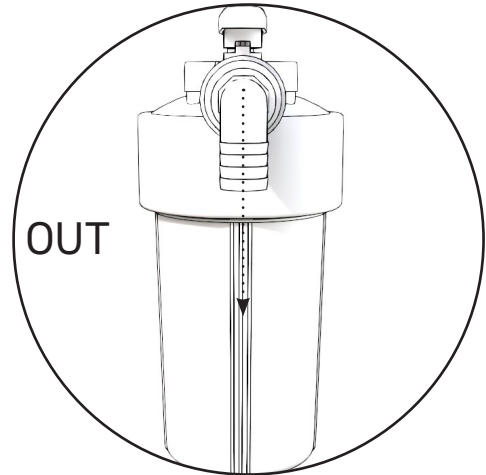
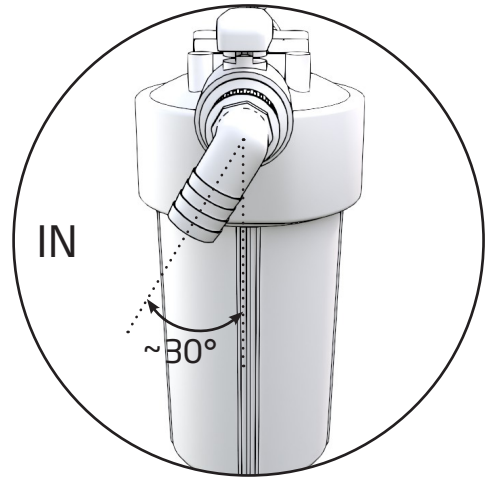
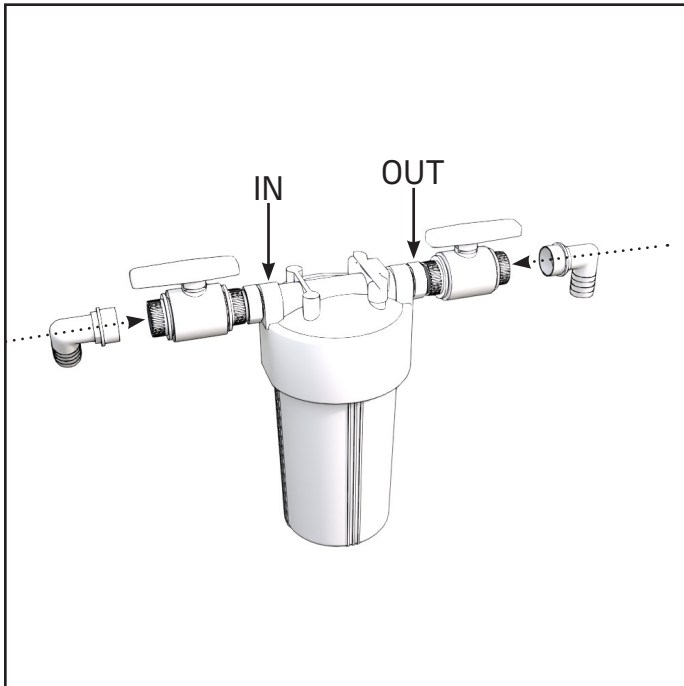
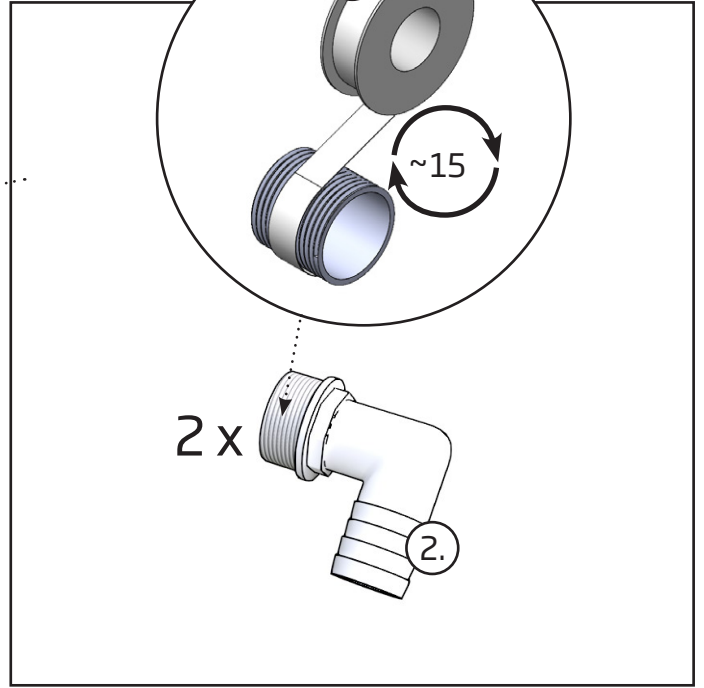
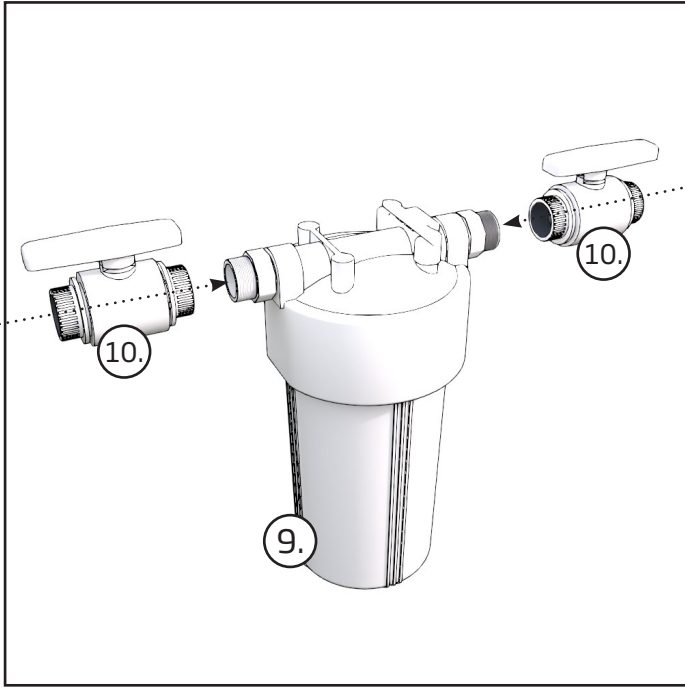




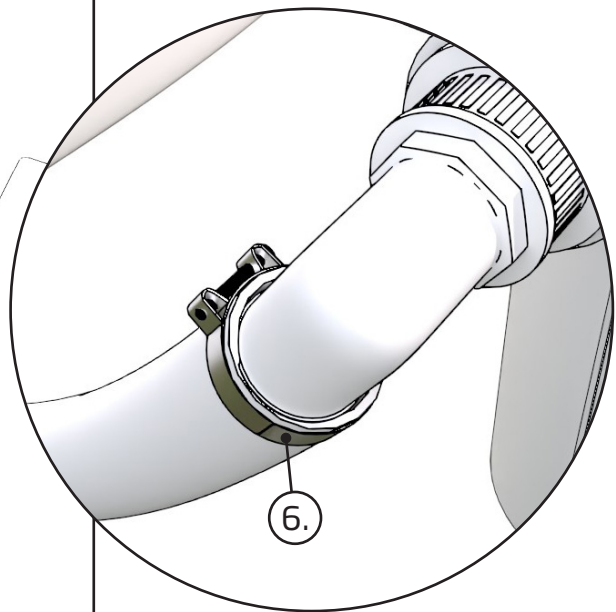
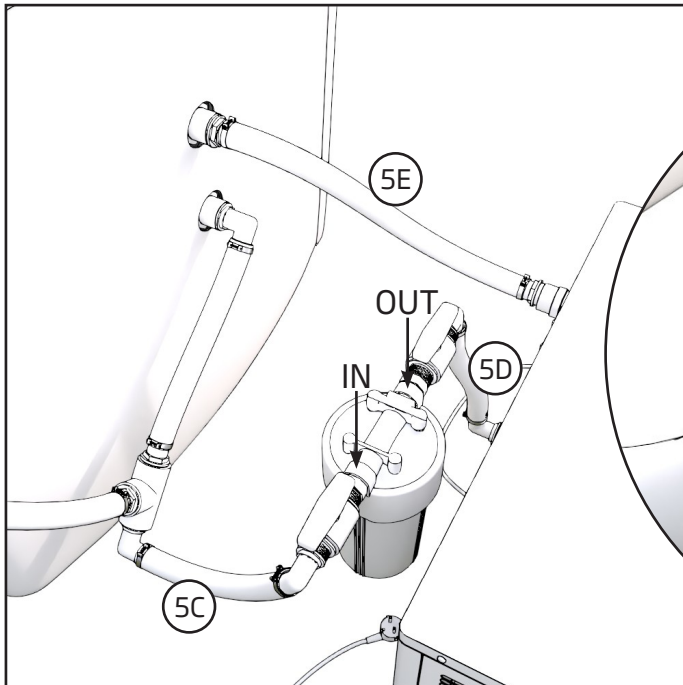
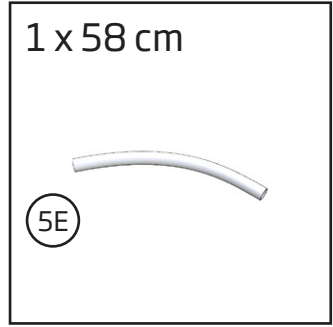
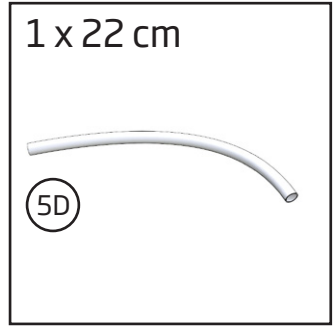
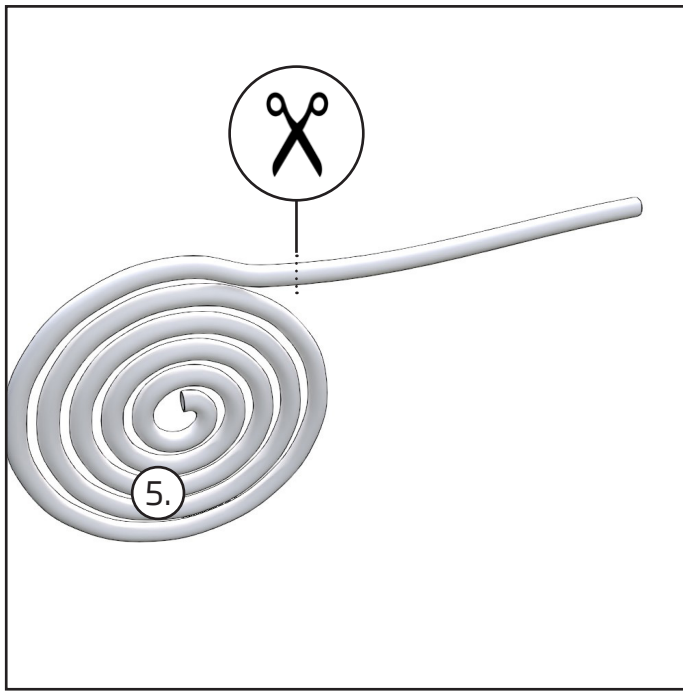




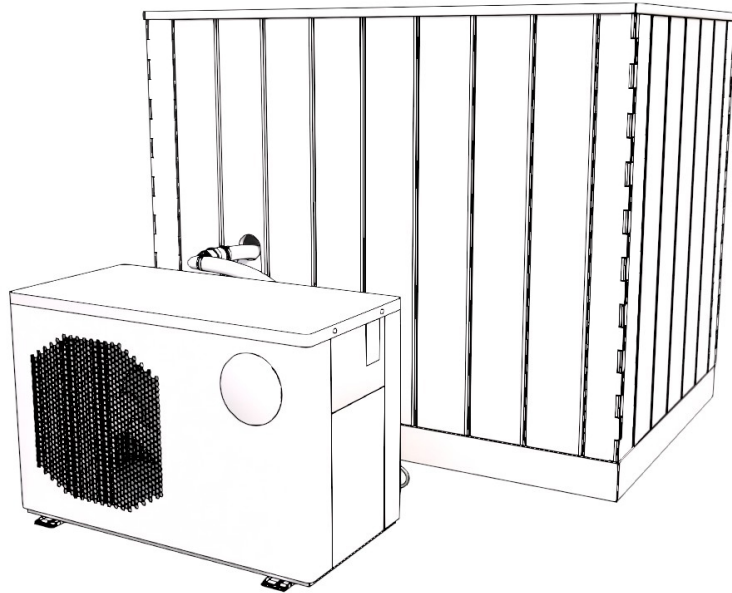




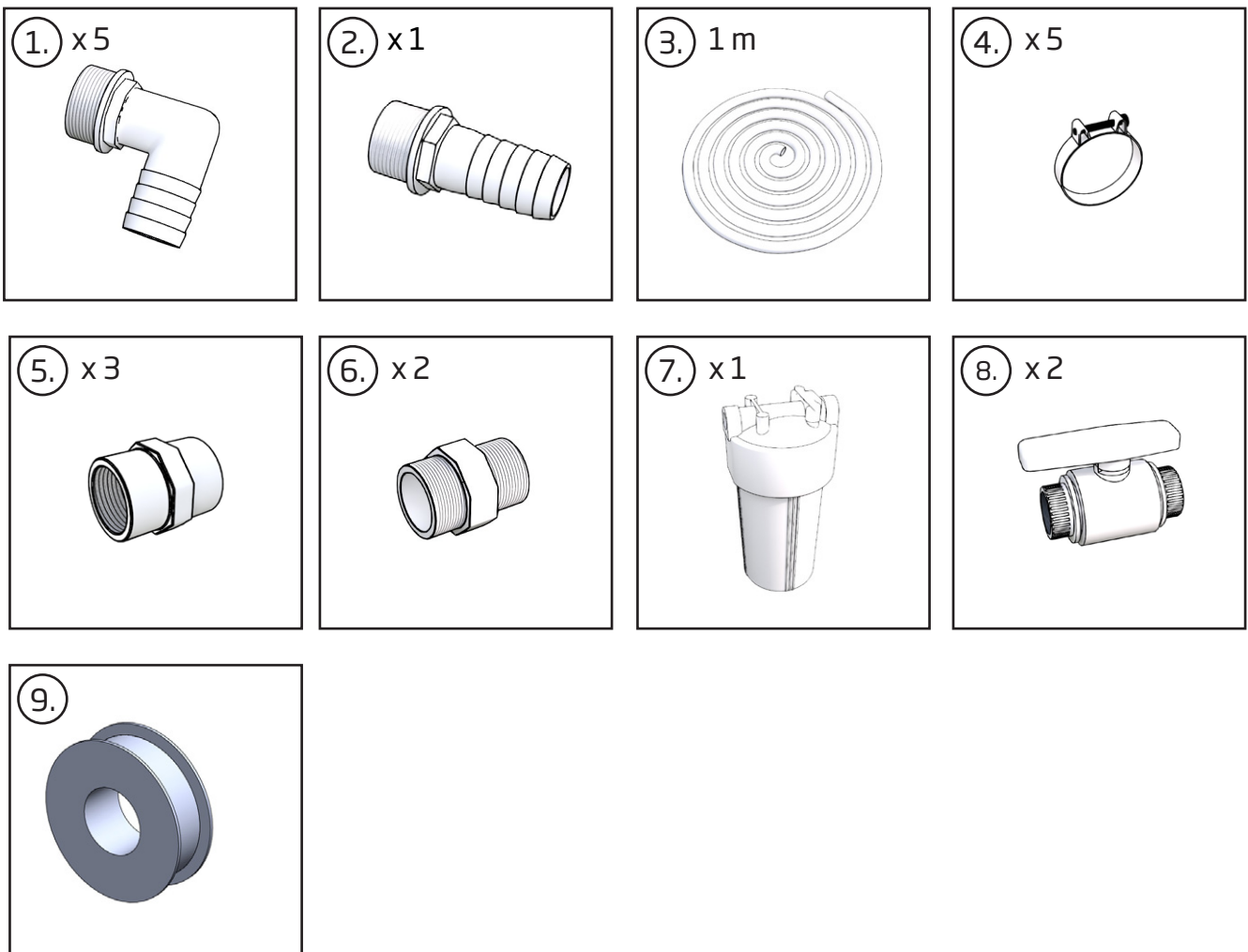


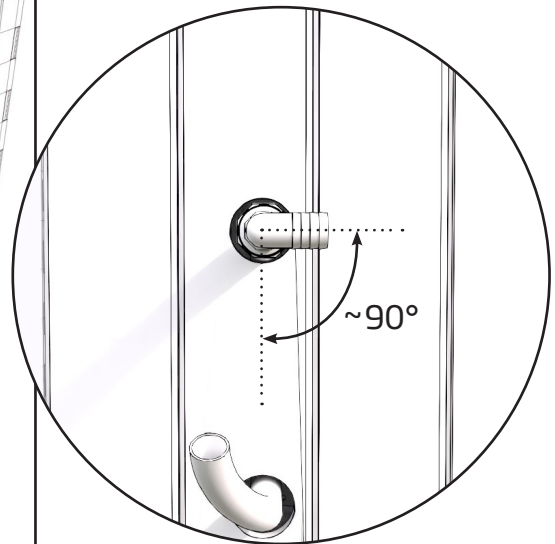
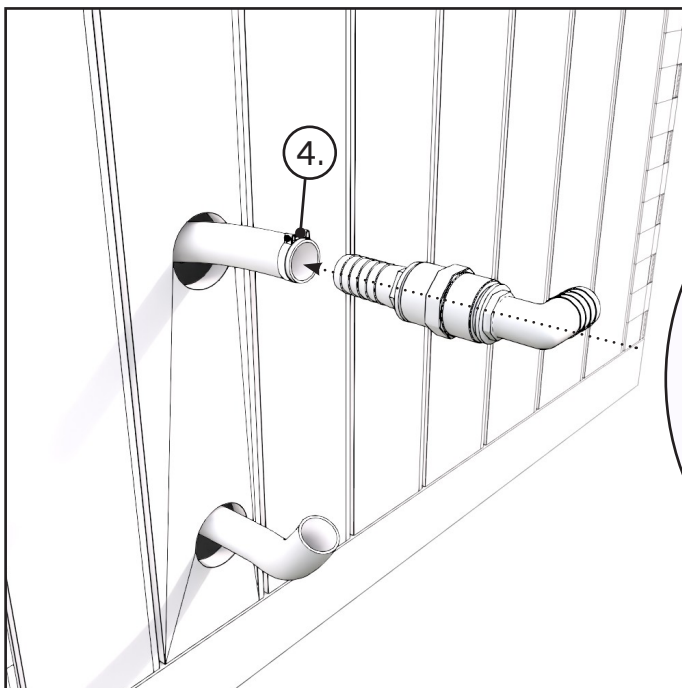
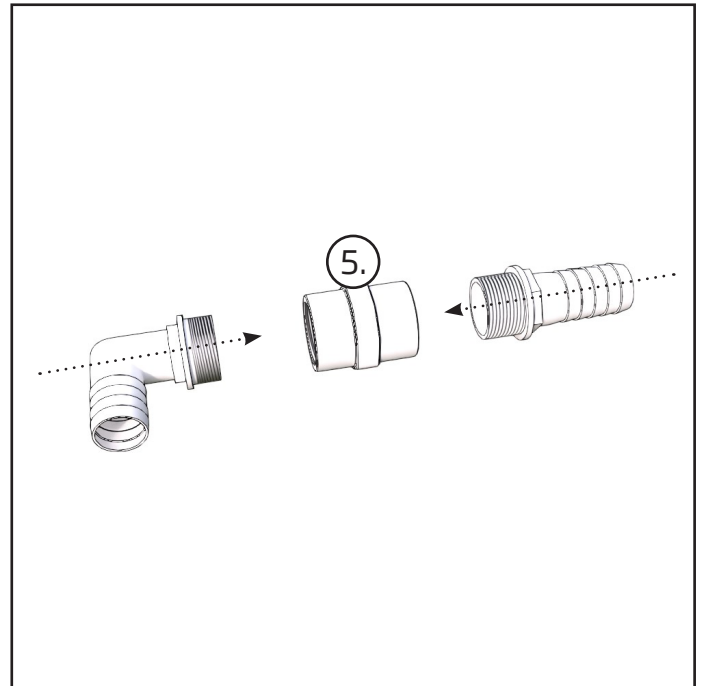
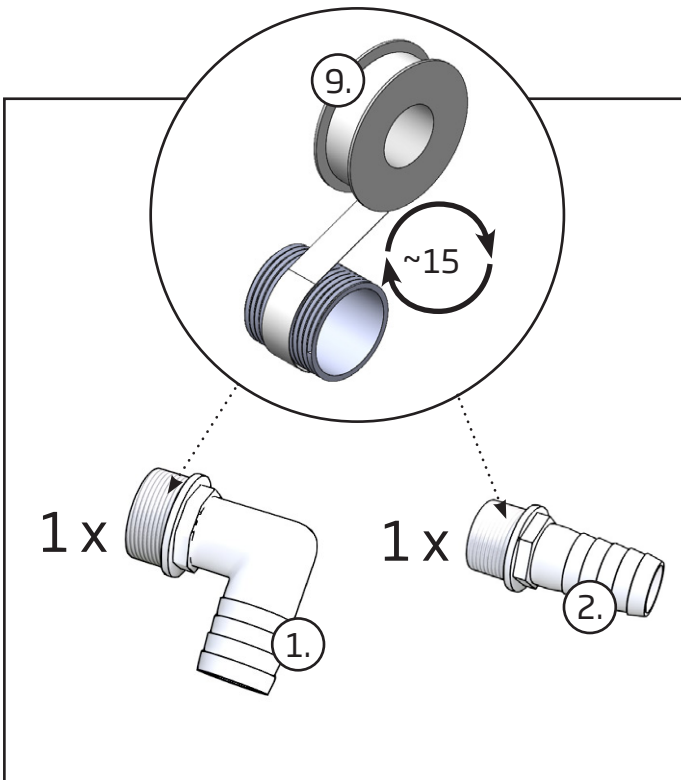


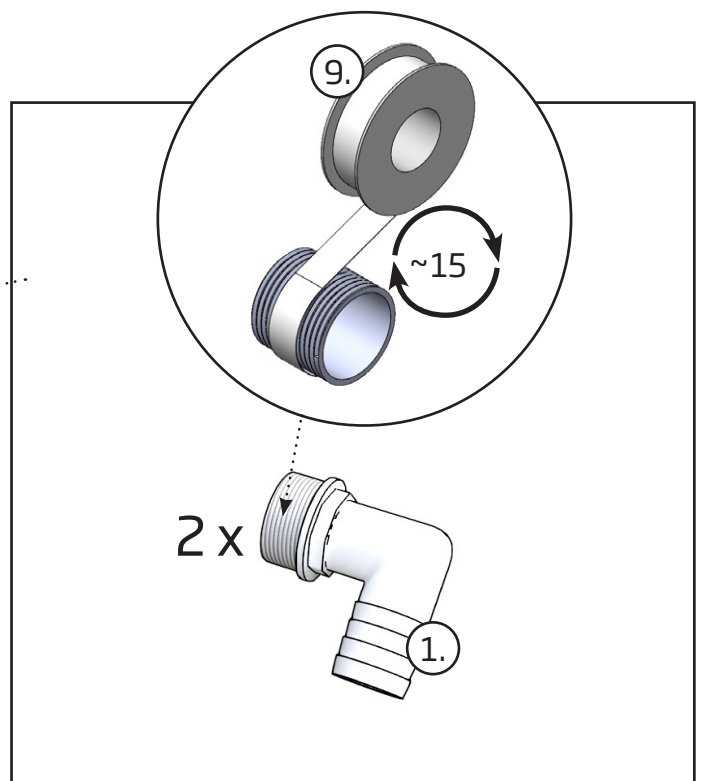
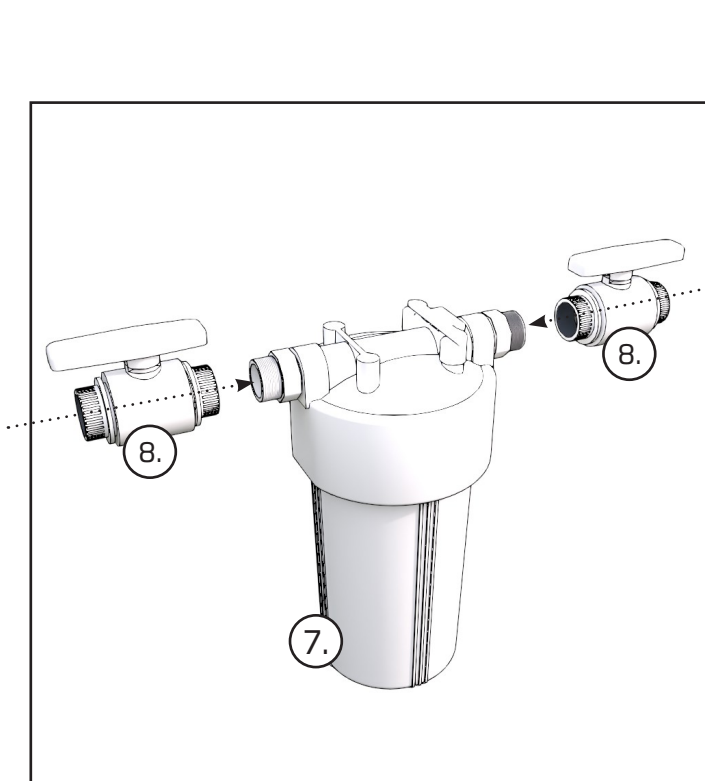
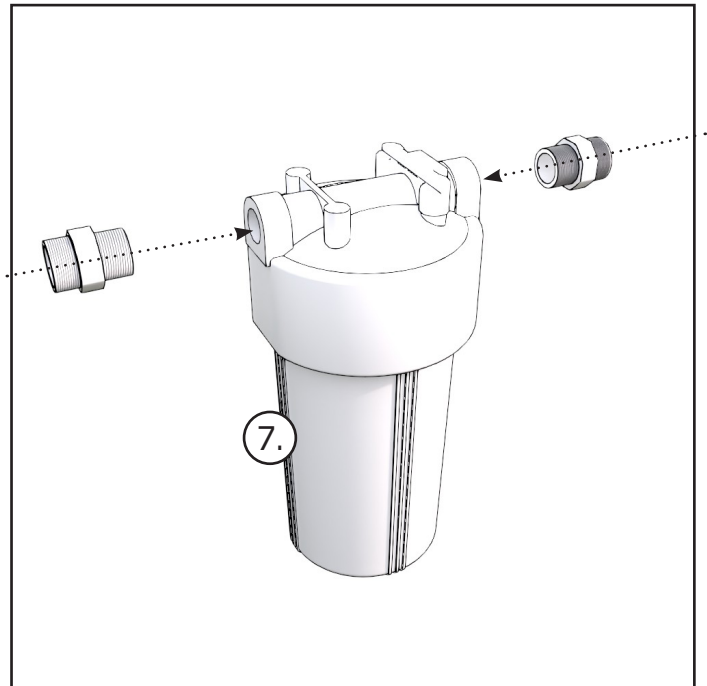
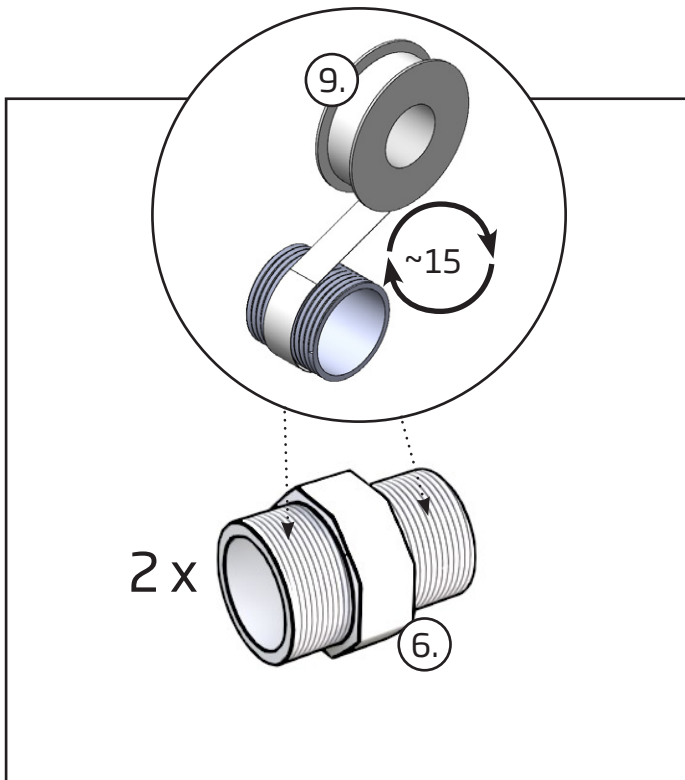
## 2. PREMIUM NORDIC ICE S

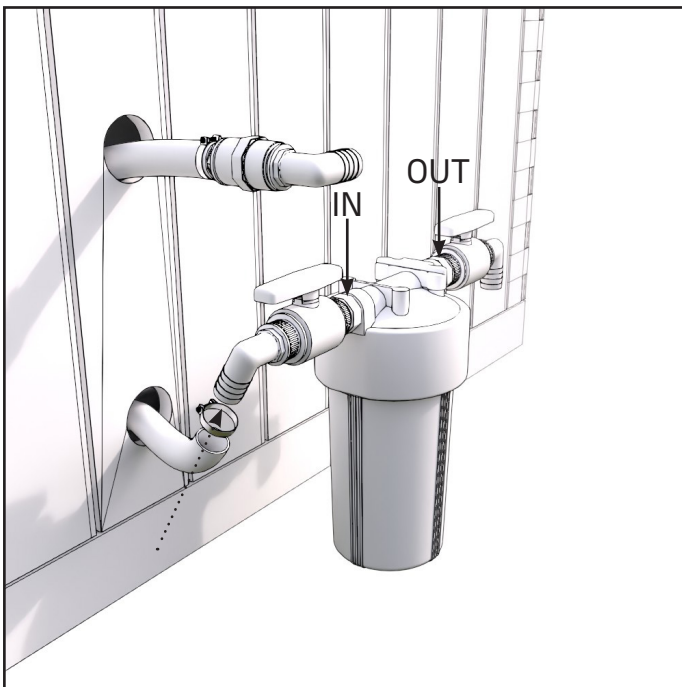
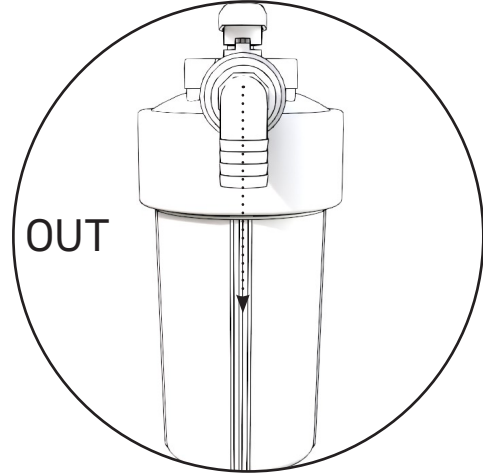
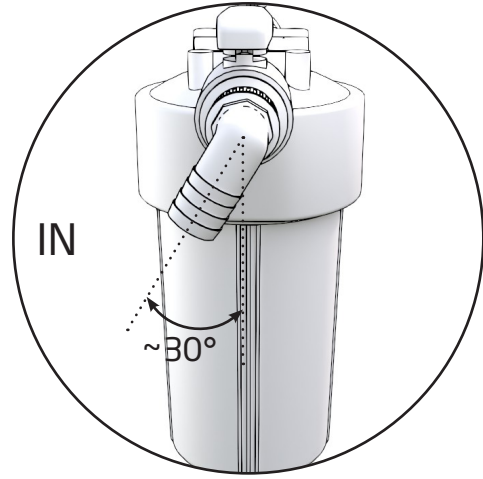
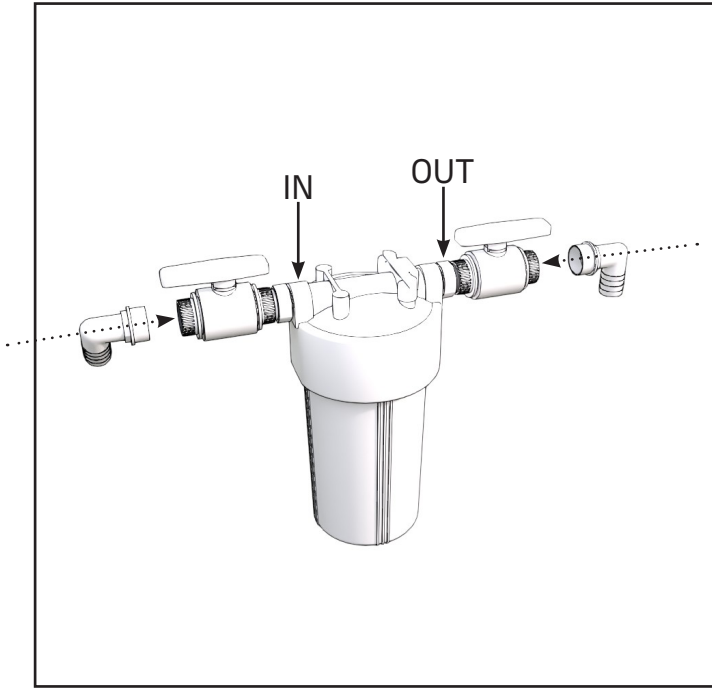


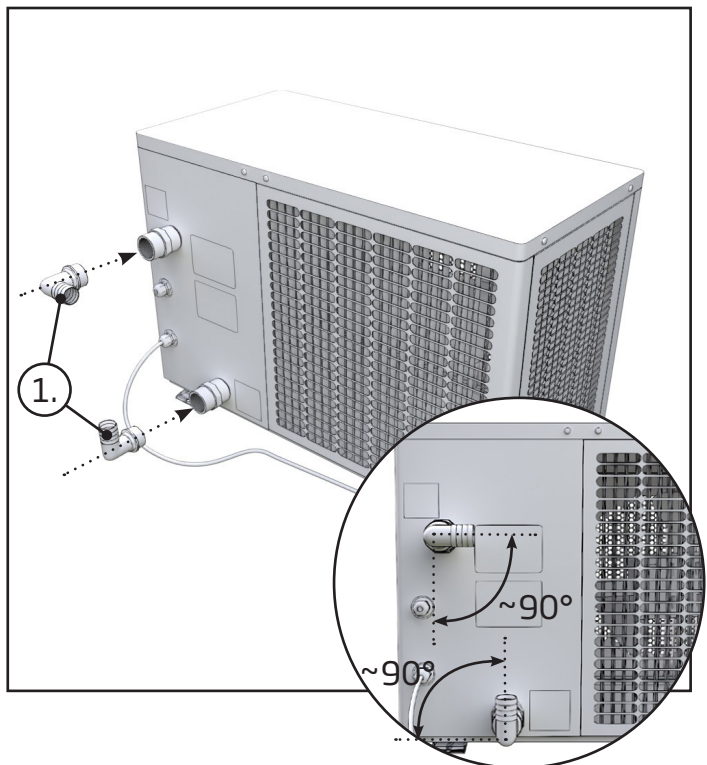
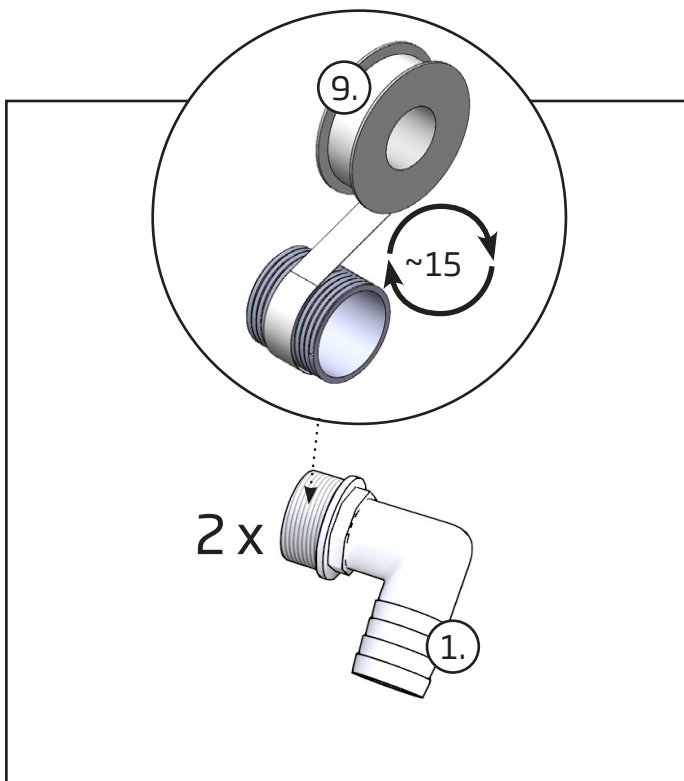
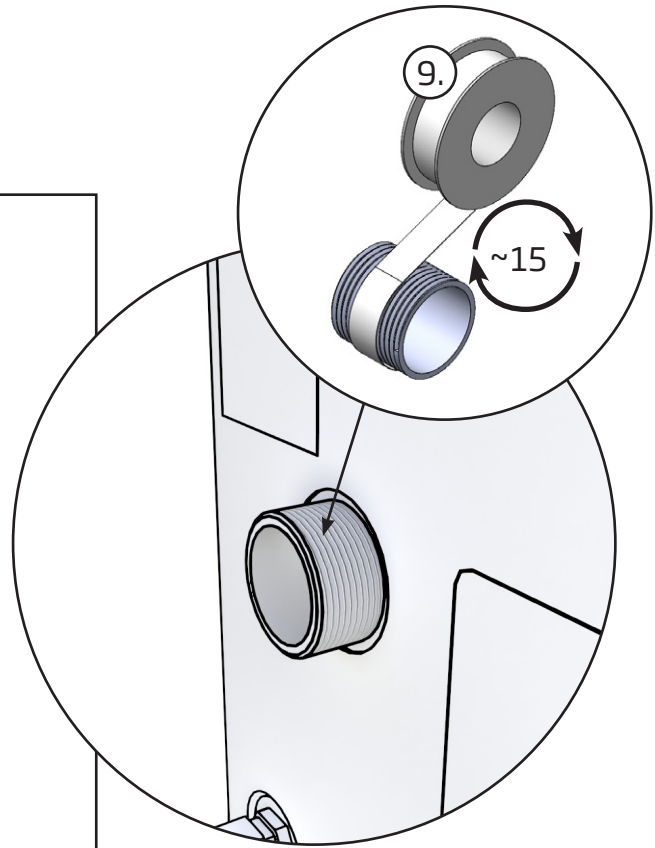
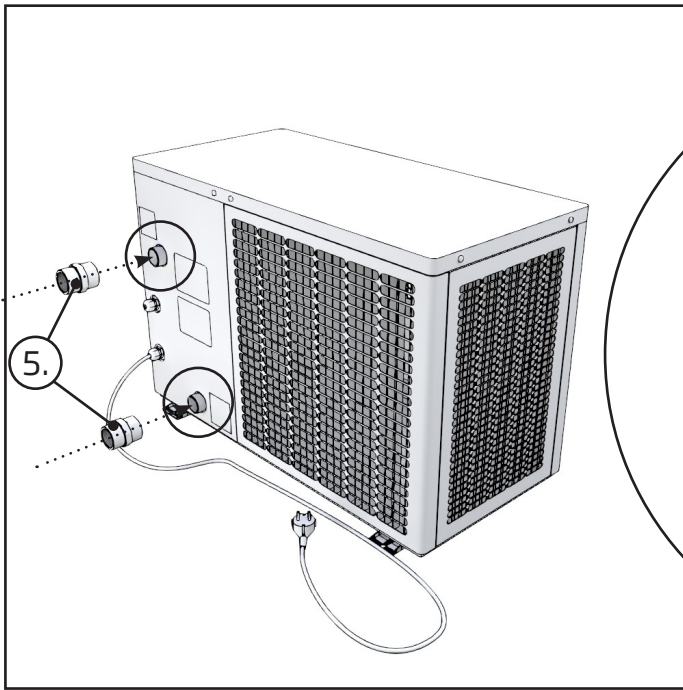
## KOMPONENTLISTA



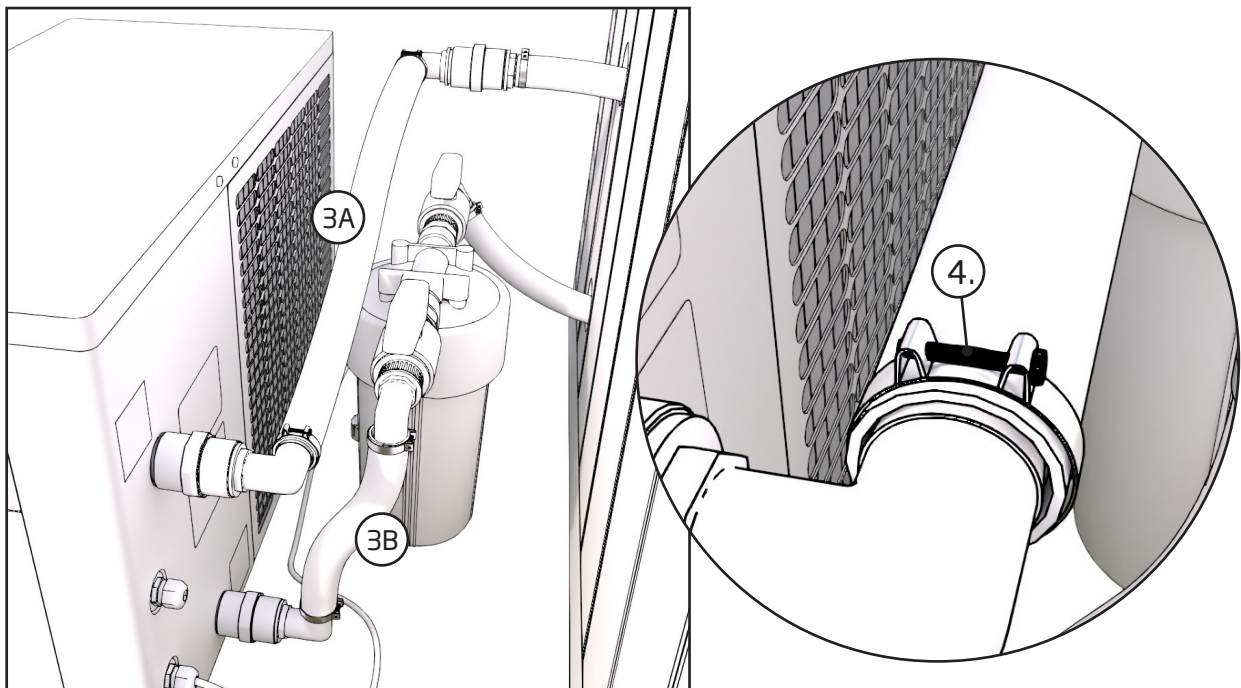
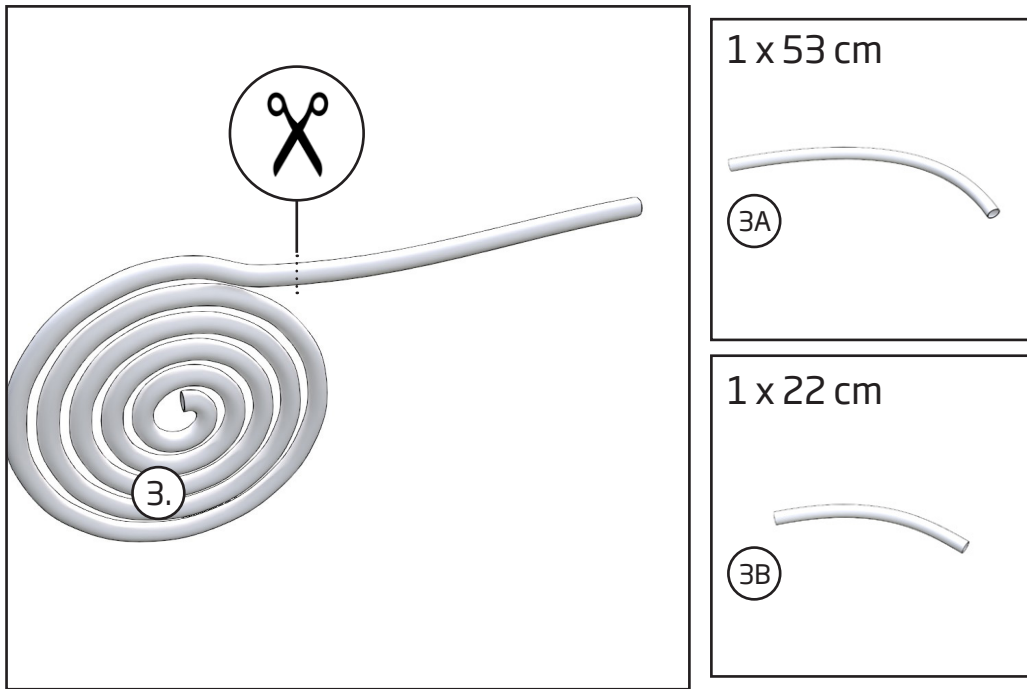




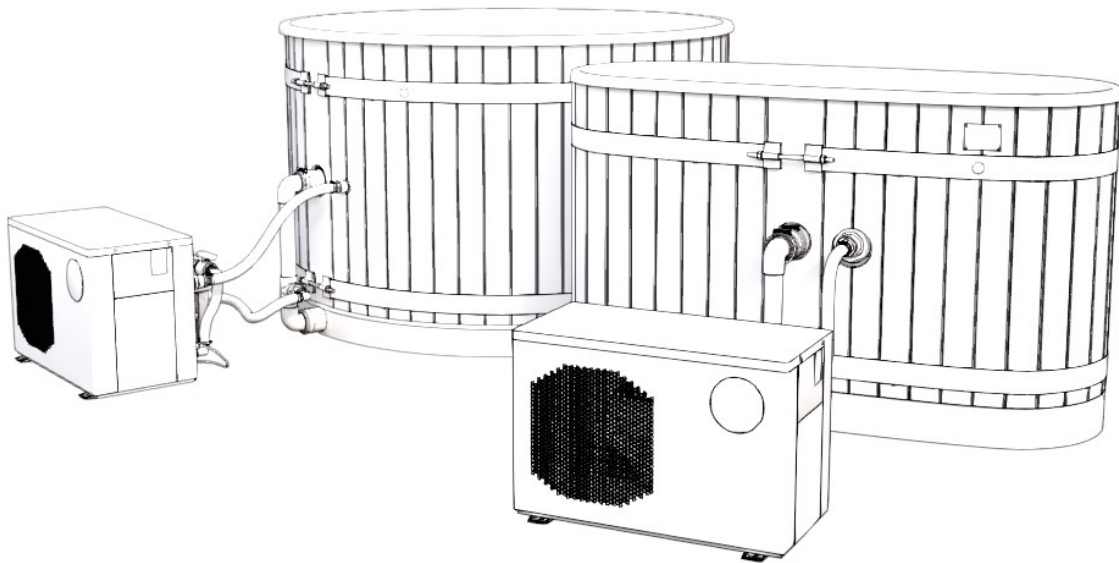




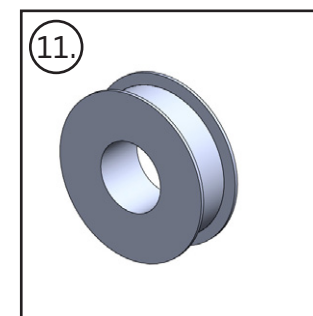
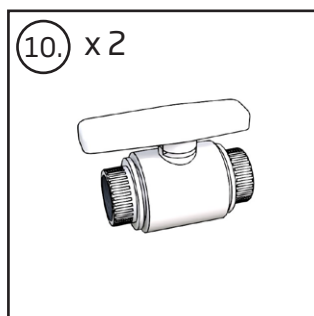
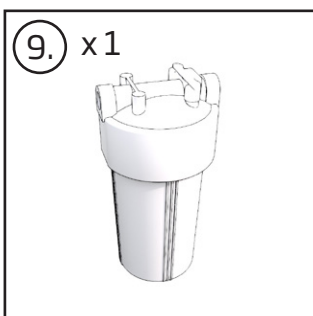
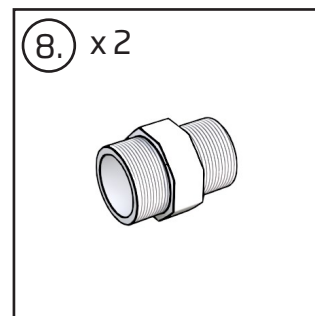
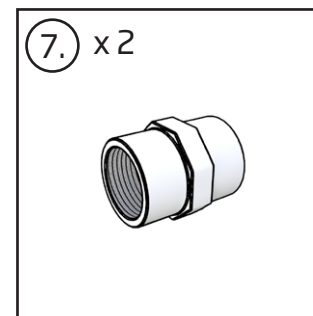
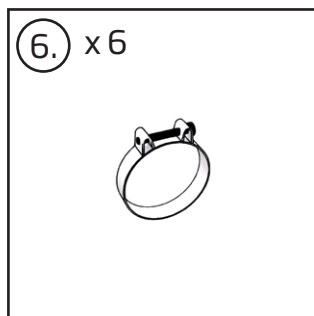
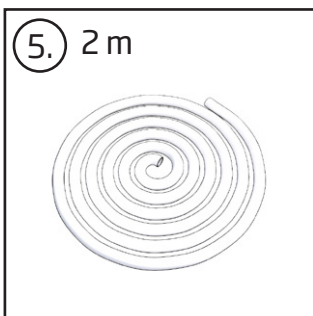
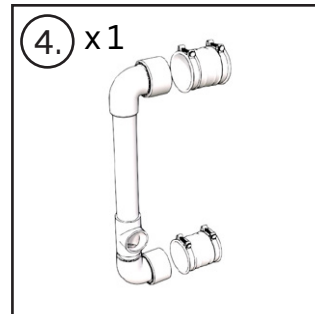
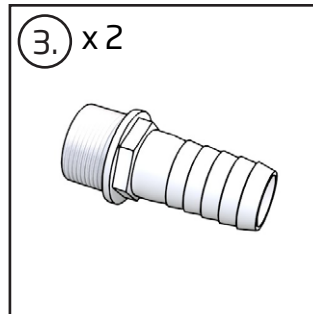
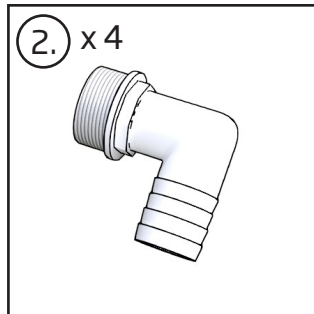
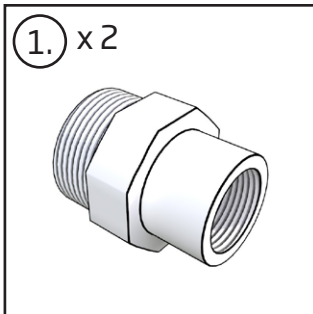


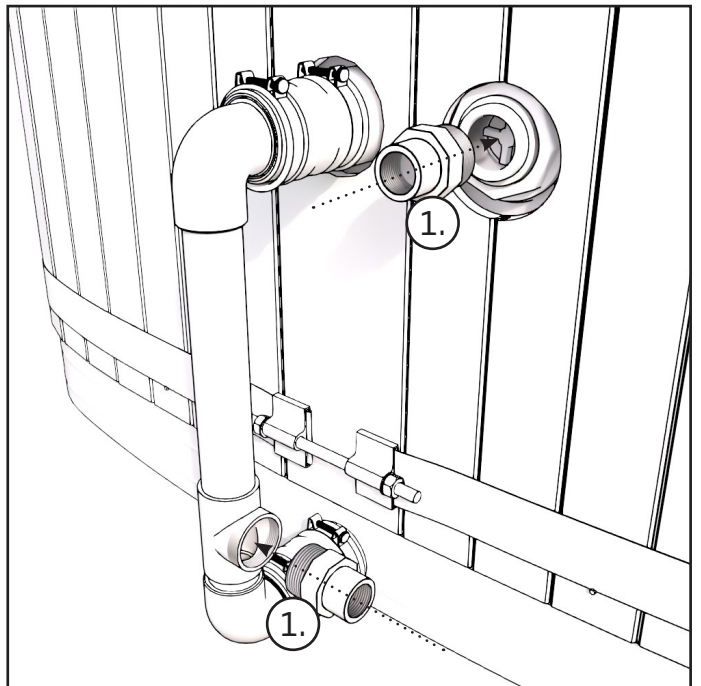
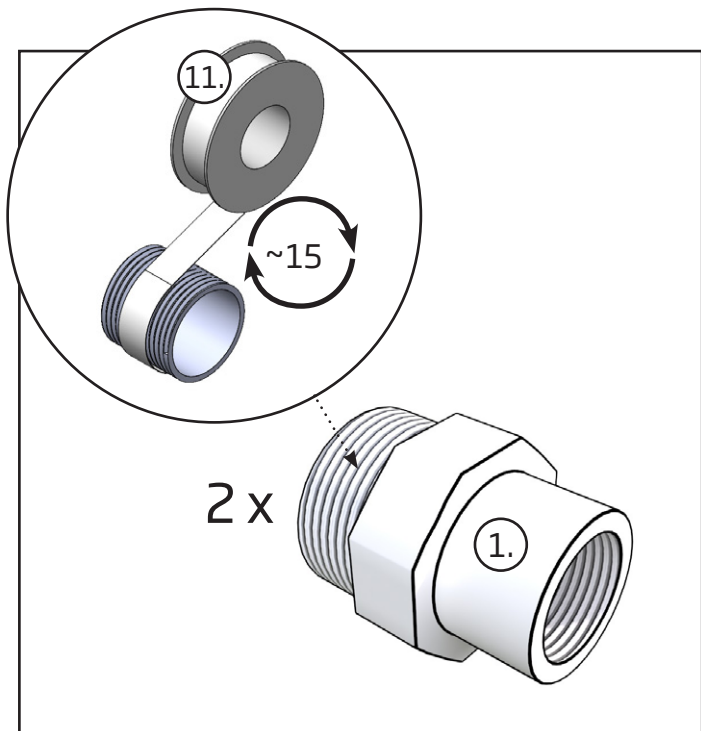
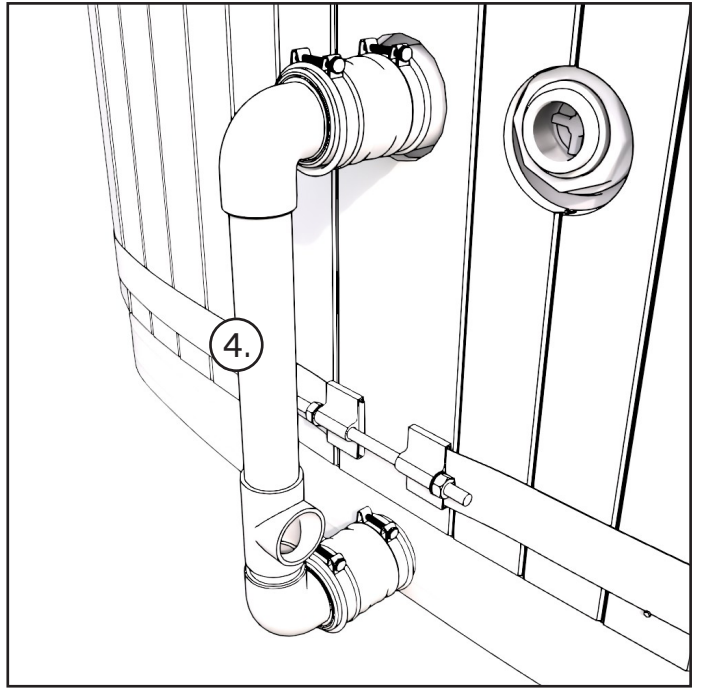
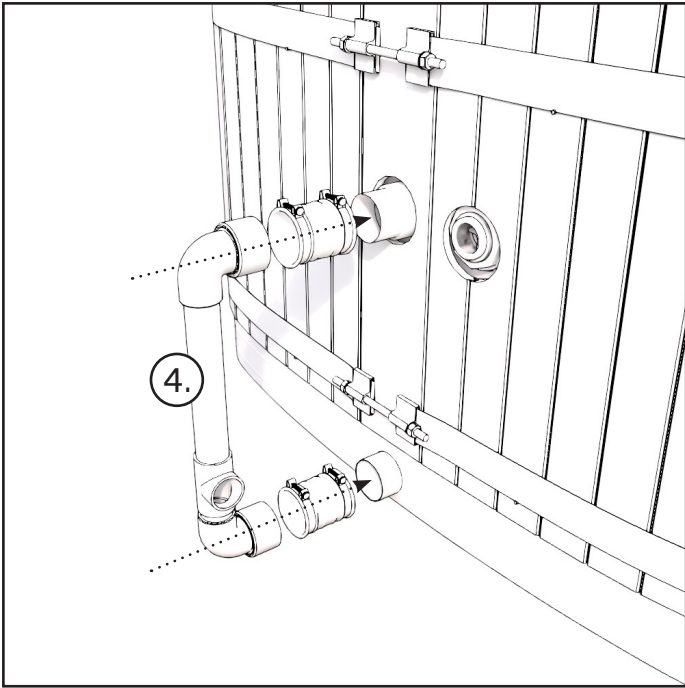


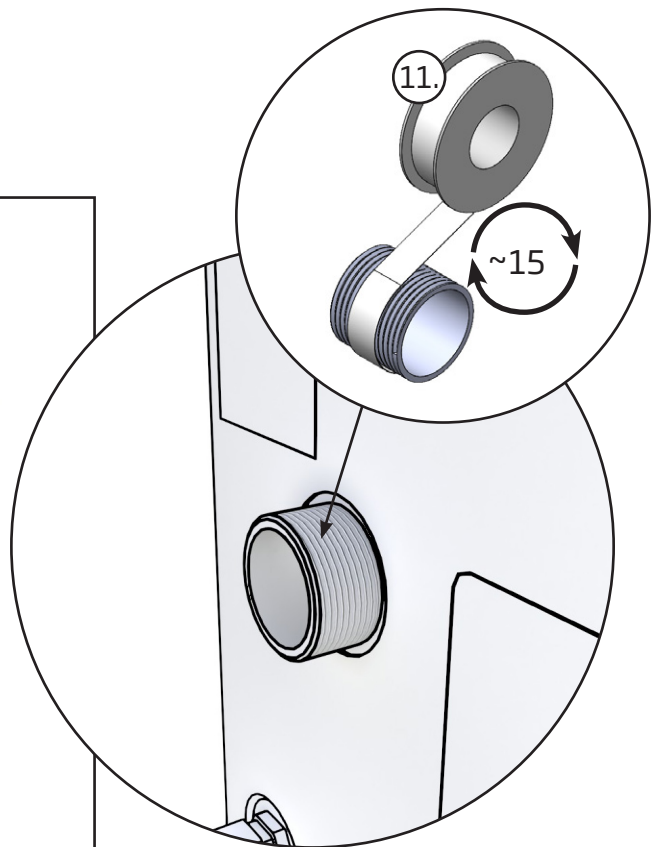
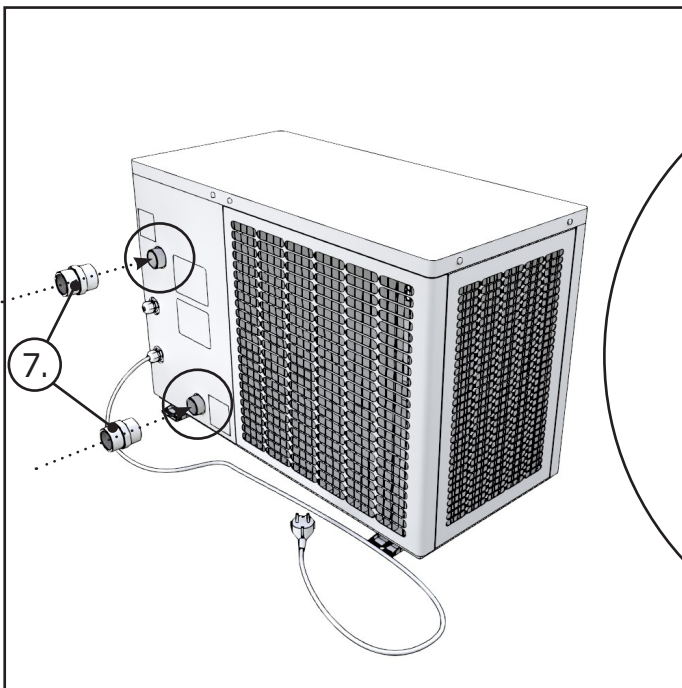
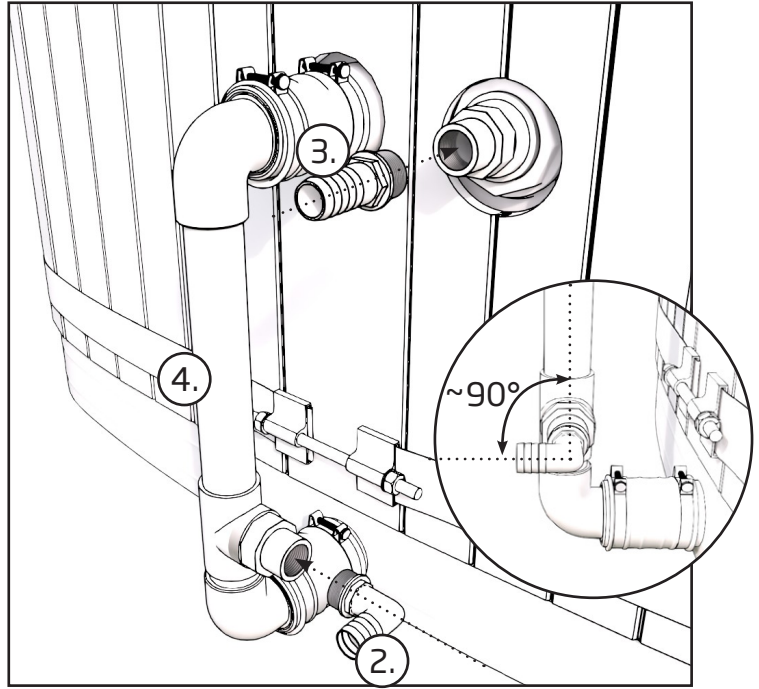
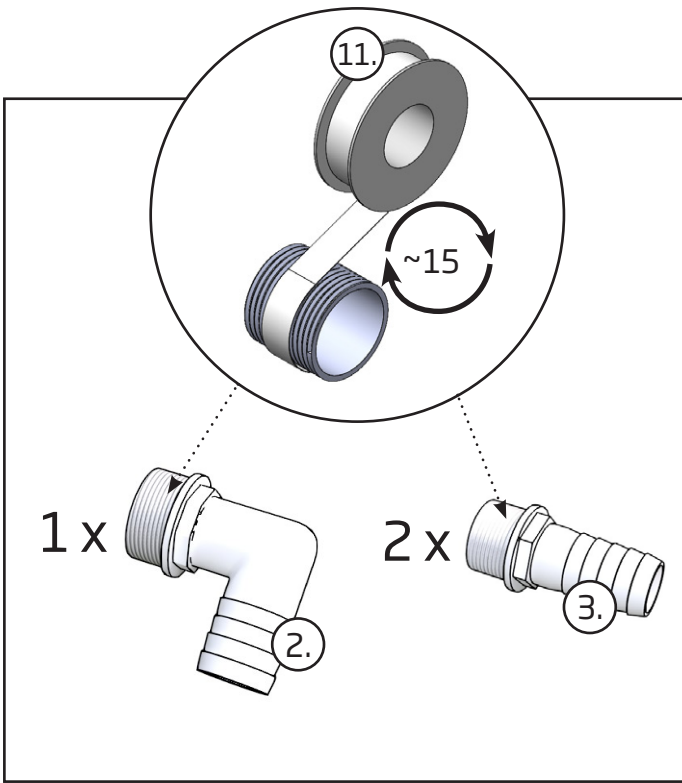
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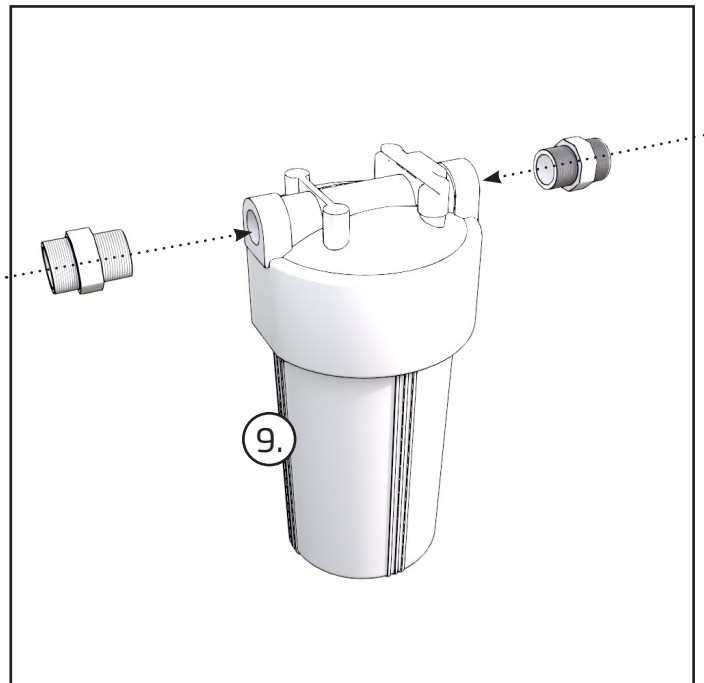
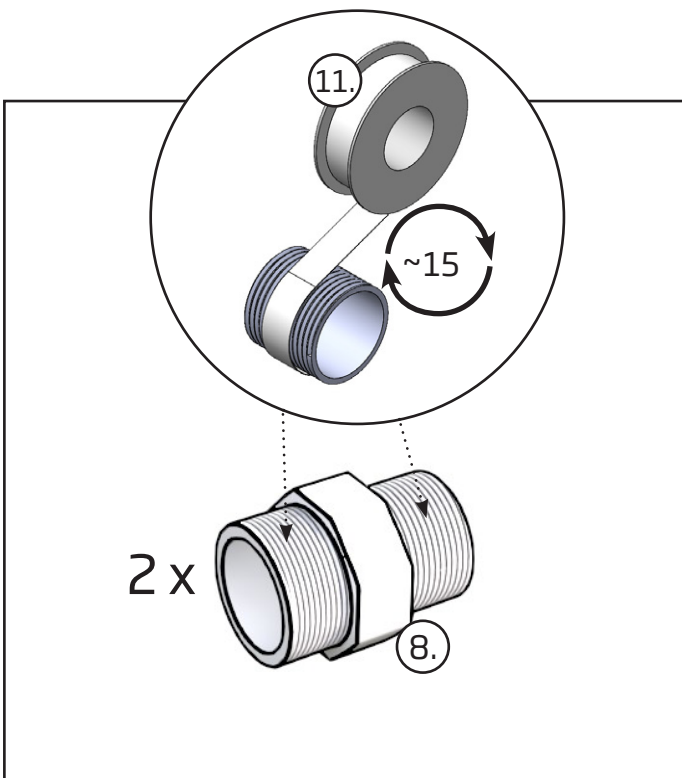
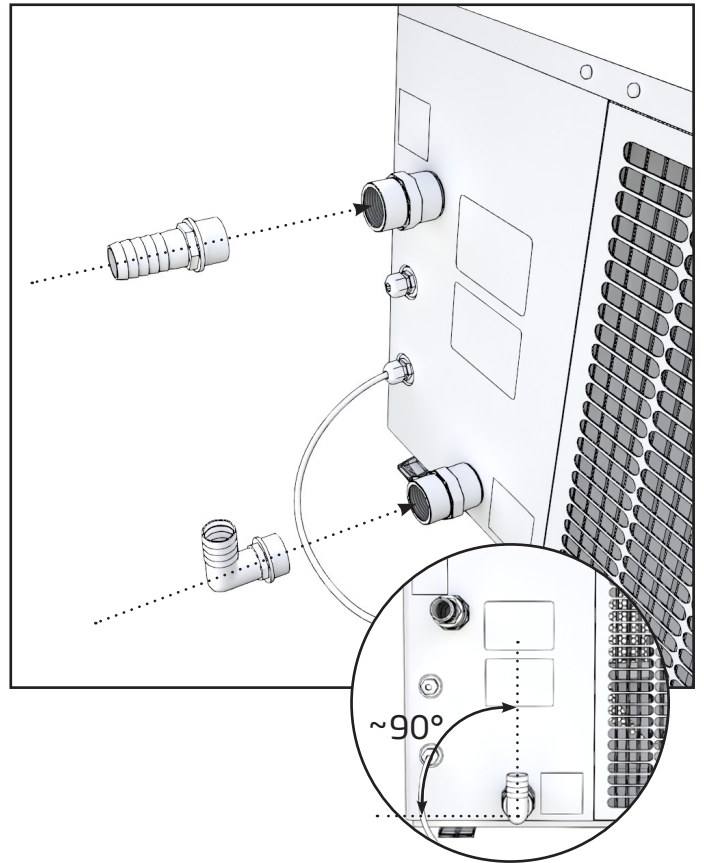
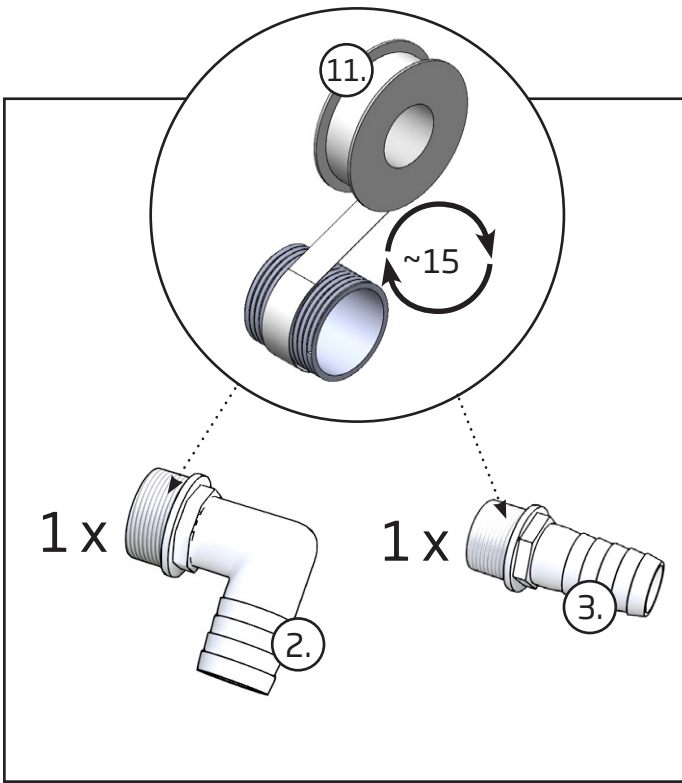


#### KOMPONENTLISTA

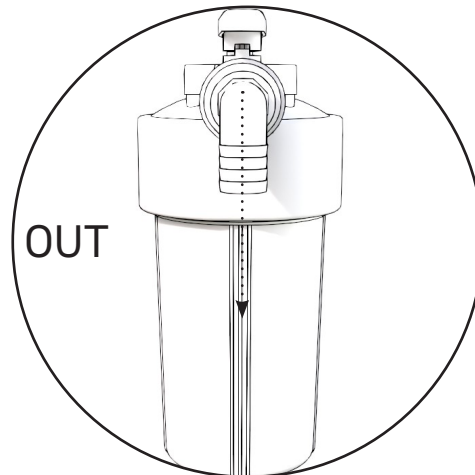
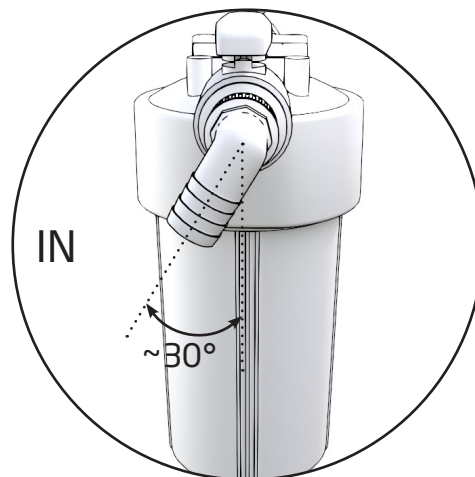
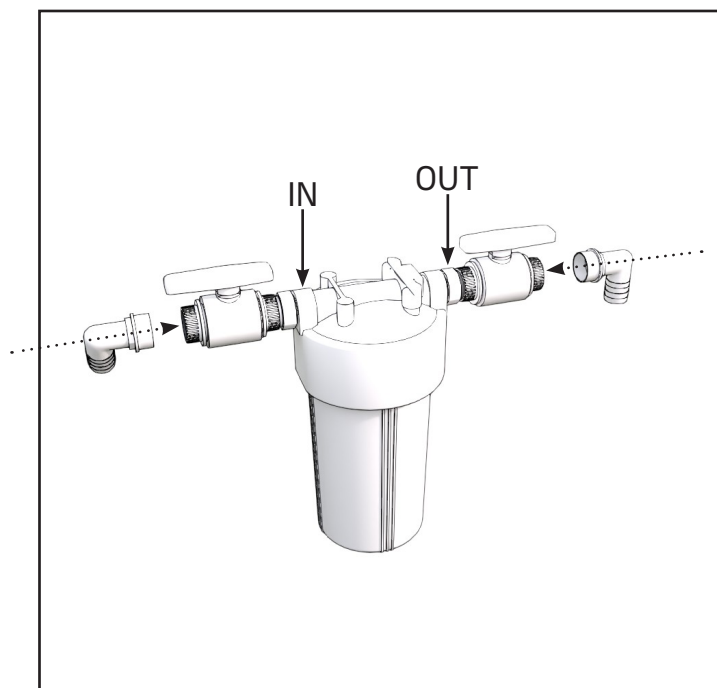
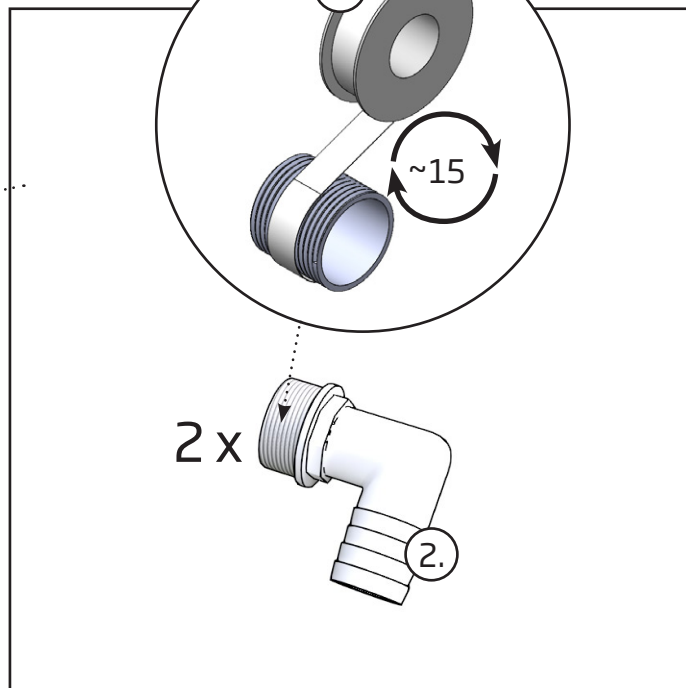
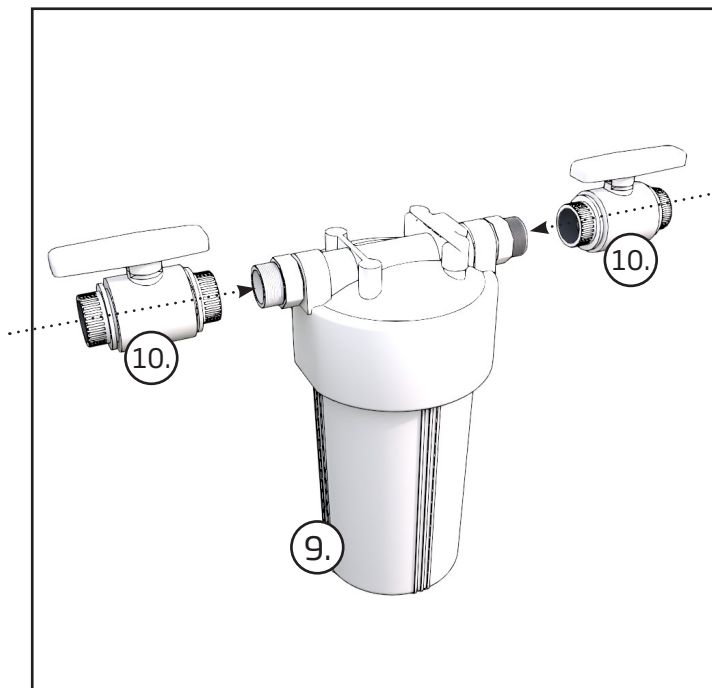




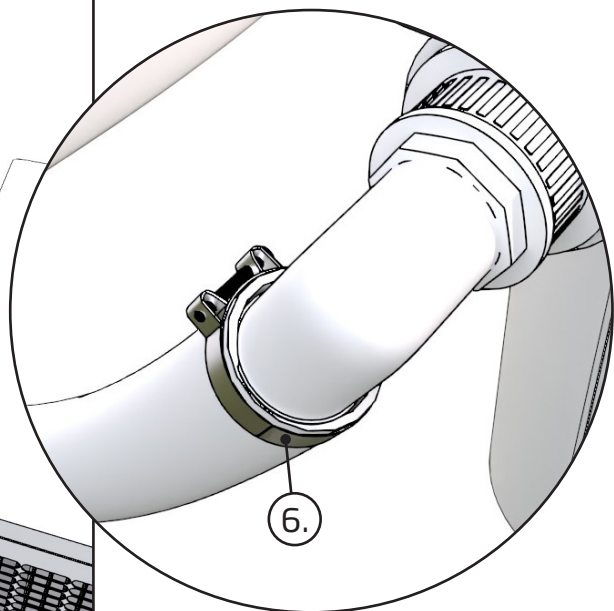
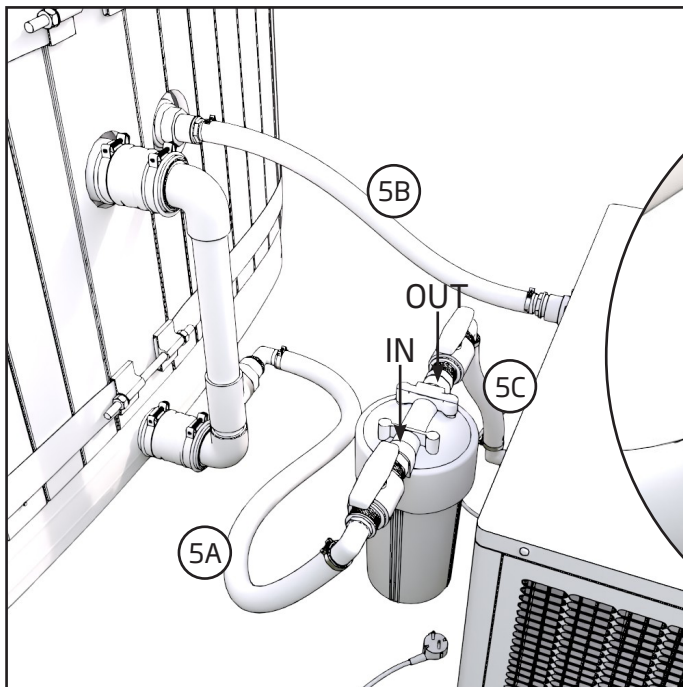
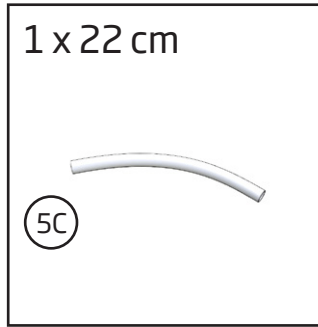
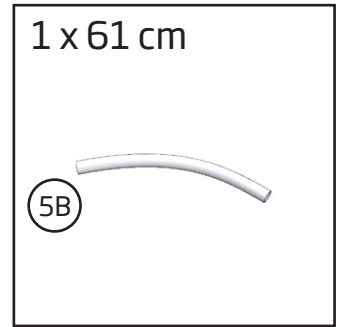
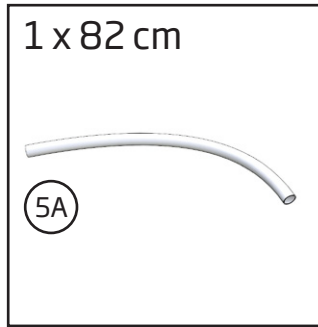
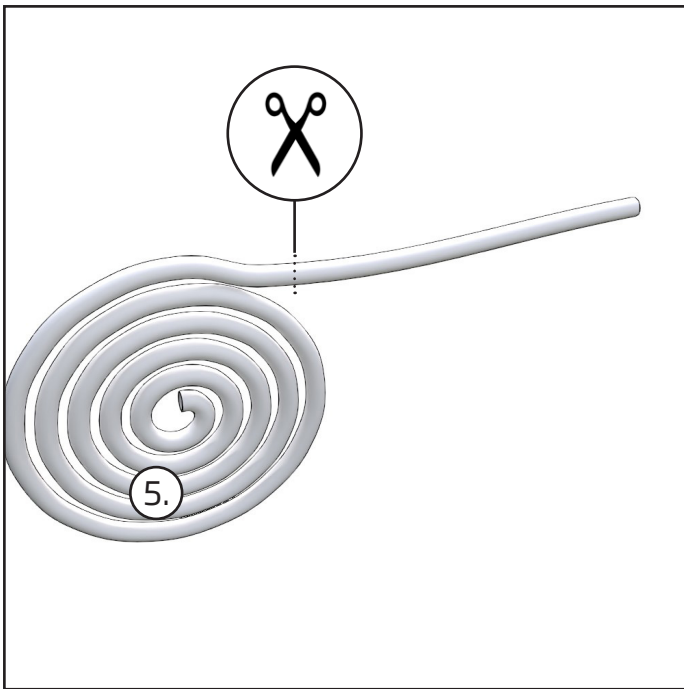












## FYLLNING AV BADTUNNAN OCH AVLUFNING AV ANORDNINGEN

Beroende på badtunnans syfte utförs fyllning och avluftning på något olika sätt.

### BlackIce S och NordicIce S - Fyllning av badtunnan och avluftning av anordningen

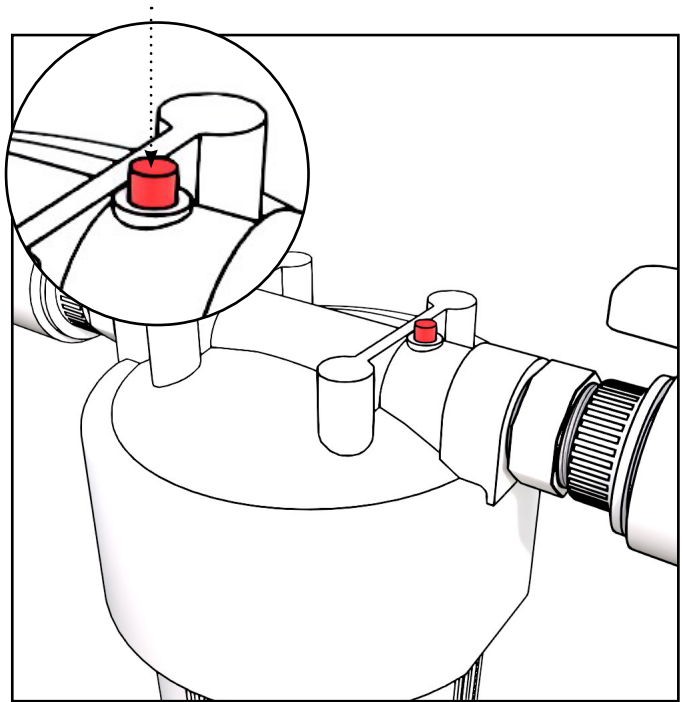
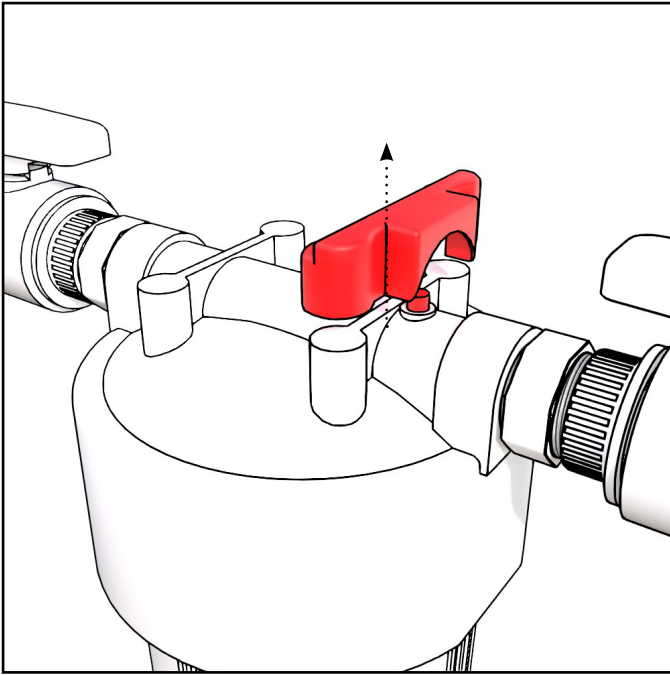


Ta bort skyddsgallren, som visas på bilden, från ventilerna. Stäng den främre nedre ventilen med den medföljande proppen.



När du fyller badtunnan, använd en vattenslang för att släppa ut vatten från den övre ventilen, för att avlufta anordningen. Starta luftvärmepumpen Dual.

Om apparaten inte blåser luft och felmeddelandet P01 visas på skärmen efter en minut, koppla ur anordningen från vägguttaget och starta om den. När du ser vattnet flöda, ska du fylla badtunnan till den önskade nivån.



Avlufta även filtret genom att först ta bort skyddet från filtret. Tryck på avluftningsknappen på filtret tills vattnet börjar rinna ut ur öppningen.

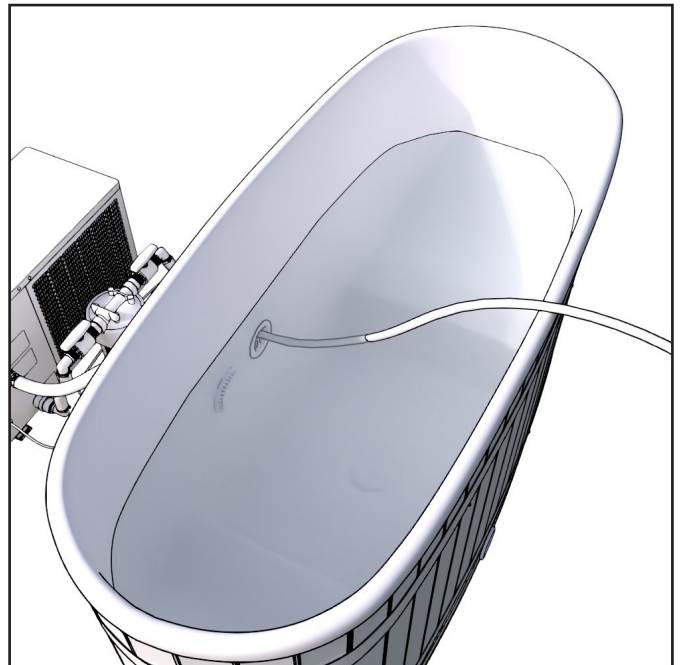
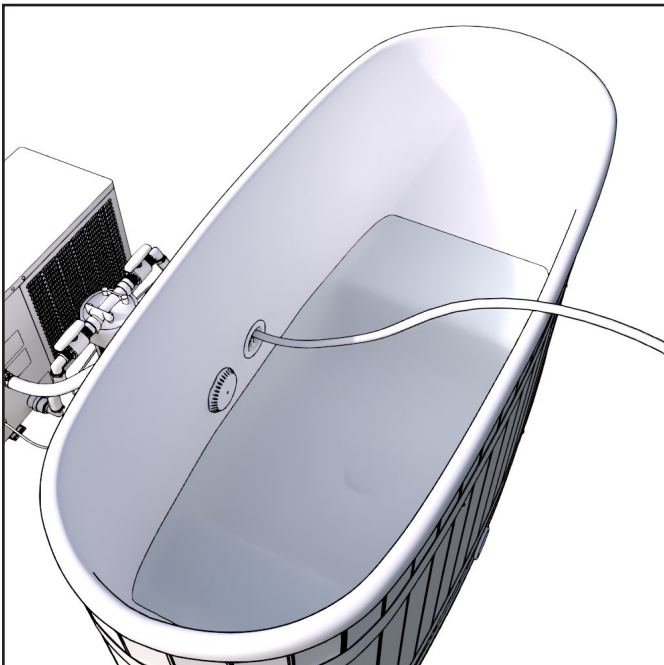


När vattnet har fått att cirkulera i anordningen, ta bort proppen och sätt tillbaka skyddsgallren.

## ERSÄTTER KAMINEN - FYLLNING AV BADTUNNAN OCH AVLUFNING AV ANORDNINGEN



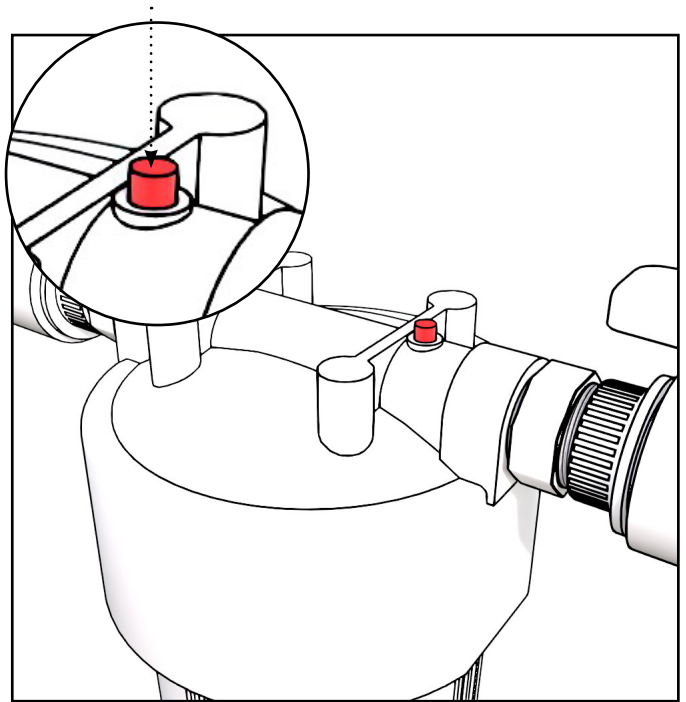
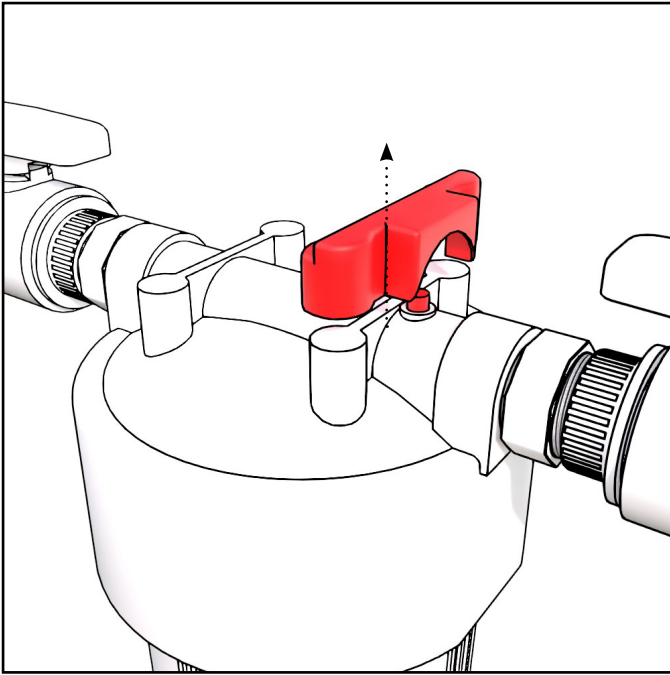
Ta bort skyddsgallren, som visas på bilden, från ventilerna. Stäng ventilen nedtill med den medföljande proppen.



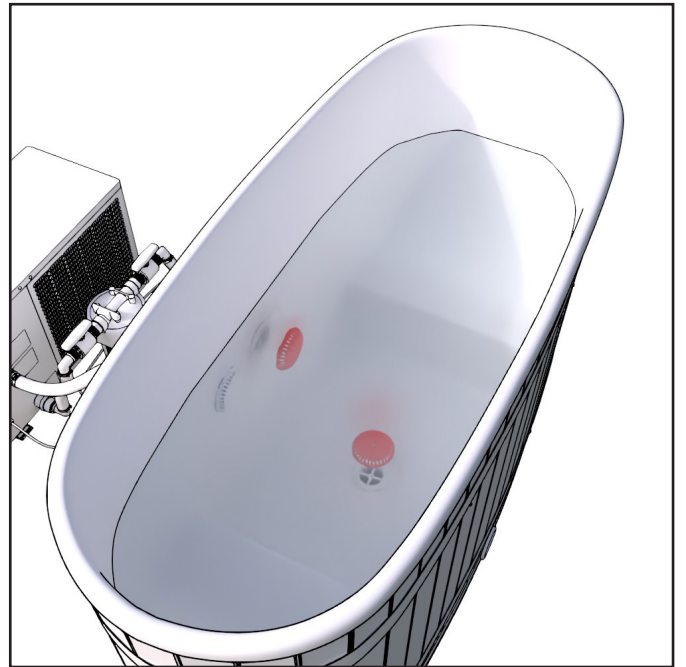
När du fyller badtunnan, använd en vattenslang för att släppa ut vatten från den övre ventilen, för att avlufta anordningen. Starta luftvärmepumpen Dual.

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När vattnet har fått att cirkulera i anordningen, ta bort proppen och sätt tillbaka skyddsgallren.

## ANVÄNDNING

## Styrpanel



## Ström och skärmlås



Öppna låset genom att trycka på valfri tangent för att tända skärmen och håll I/O-ikonen nedtryckt i 5 sekunder tills du hör en ljudsignal (ett pip).	
Låsikonen försvinner.	
Håll I/O-ikonen nedtryckt för att starta eller stänga av anordningen. Om ingen knapp trycks ned inom 60 sekunder, låser sig kontrollen automatiskt.	
En låst låsikon visas på skärmen.	

## Status (Kylning/Uppvärmning/Auto)







När anordningen är påslagen, välj driftsläge genom att trycka på menyikonen. Läget ändras i följande ordning: Kylning -> Uppvärmning -> Auto -> Kylning... (kontinuerlig cirkulation). OBS! I Auto-läget förekommer en fördröjning i bytet mellan kylning och uppvärmning.	
När uppvärmningsläget är aktiverat visas en värmeikon på skärmen.	
När kylningsläget är aktiverat visas en kylningsikon på skärmen.	
När du använder Auto-läget visas en loopikon och en kylningssymbol på skärmen.	



## Justering av temperatur





Endast när kylanordningen är påslagen, öppna låsningen (se Ström och skärmlås).	
Tryck på upp- eller nedpilarna för att justera temperaturen.	 
Om ingen åtgärd utförs inom 3 sekunder, återgår skärmen till att visa den aktuella vattentemperaturen.	









## Justering av tid

Övergång till justering av tid: Håll klockikonen nedtryckt i 5 sekunder, tills siffrorna i både "timme" och "minut" börjar blinka.	
Sätt att justera tid: Tryck på tidsinställningsrutan.	
Då börjar timdelens siffra blinka.	
Tryck på upp- och nedpilarna för att justera timmen.	 
Tryck på klockikonen för att gå till minutdelen och upprepa de föregående åtgärderna.	
När inställningarna är klara, tryck på klockikonen för att spara inställningarna och återvända till huvudmenyn.	









## Ström på/av-timerns inställningar (Aktivt läge).

- Användare kan ställa in två timerperioder med "aktivt läge" på/av. De angivna tidsperioderna får inte överlappa.
- Slå timerinställningen på/av:

I huvudmenyn trycker du på klockikonen för att gå till inställningarna för på/av-timern.	
När nummer 1 blinkar på skärmen, tryck på klockikonen för att gå till inställningarna för ström på-timmens på/av-tidsperiod 1.	
När timdelen blinkar, tryck på upp- och nedpilarna för att justera timmarna.	 

Tryck på klockikonen för att bekräfta och gå till minutdelen.	
När minutdelen blinkar, tryck på upp- och nedpilarna för att justera minuterna.	 
Tryck på klockikonen för att bekräfta ström på-timern. Skärmen går över till inställningarna för ström på-timern under tidsperiod 1. Upprepa åtgärderna ovan.	
När inställningarna är gjorda, håll ner klockikonen för att bekräfta och spara de aktuella inställningarna för ström på/av-timern.	
Tryck upp- och nedpilarna för att växla mellan ström på/av-inställningarna för tidsperiod 2 och upprepa åtgärderna ovan.	 
Den gällande timerinställningen visas i huvudmenyn med motsvarande siffror. Tryck på I/O-ikonen för att återvända till huvudmenyn.	

## Ozonatorns inställningar

När kylanordningen är påslagen, håll strömbrytaren nedtryckt länge om skärmen är låst.	
Håll in lägesknappen länge, tills L0 visas på skärmen.	
Använd nedåtpilknappen för att ändra värdet till L11 och tryck på menyknappen.	 
Använd piltangenterna för att ändra värdet 0, 1 eller 2 (se tabellen nedan).	 
Tryck på lägesknappen och därefter på strömbrytaren (ozoneringens timing börjar när enheten slås på).	 

Kod	Parameter	Inställningsintervall	Fabriksinställning
L11	Ozoneringsanordningens styrmetod	0. Ingen ozonering 1. Ozonering 5 minuter per timme (55 minuter i beredskapsläge) <ul style="list-style-type: none"> <li>• Privat användning</li> </ul> 2. Ozonering 10 minuter per timme (50 minuter i beredskapsläge) <ul style="list-style-type: none"> <li>• Tung/offentlig användning</li> </ul>	1

## ALLMÄNT UNDERHÅLL OCH VATTENKVALITET

Säkerställ att vattnet förblir rent och klart. Beroende på användningens frekvens kan det vara nödvändigt att ibland använda klor för att desinficera vattnet (särskilt i samband med intensiv offentlig användning).

Dagligen:

- Tarkista vedenpinta.

Veckovis:

- Rengör eventuella orenheter på vattenytan, och filtret.
- Skölj filtret noggrant med varmt rinnande vatten eller duschen (använd inte högtrycksvätt, eftersom det kan skada filtermaterialet).
- Byt filterpatron om vattnets cirkulation inte är på normal nivå efter rengöringen. Beroende på användningsmängden bör filtret bytas var 2-4 månad.
- Kontrollera vattnets pH-nivå, den bör vara mellan 7,2-7,6. Vid behov kan du justera pH-värdet med kemikalier för pH+ eller pH-.

Användning av klor:

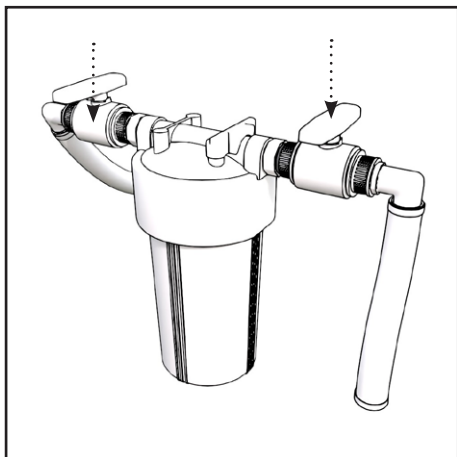
- Om badtunnan används mycket dagligen, rekommenderas det att tillsätta en halv tesked klor (natriumdiklorisocyanurat, dihydrat) i vattnet för att uppnå en fri klornivå (0,3-1,2 ppm).
- Om antalet användare överstiger 10 personer per dag eller vattentemperaturen överstiger 15 °C, rekommenderas det att klor tillsätts oftare för att hålla fritt klor på en nivå mellan 0,3-1,2 ppm.

### Underhållsanvisningar

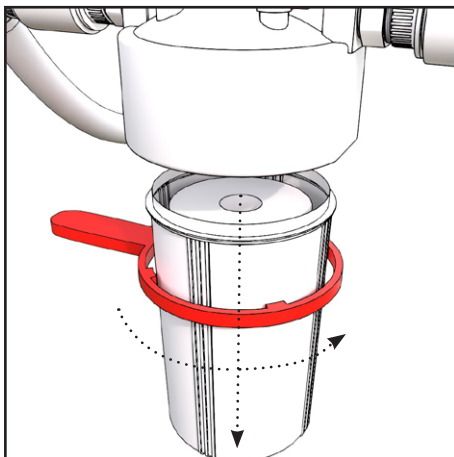
- Kontrollera regelbundet strömkabeln och kabelanslutningarna. Om du stöter på problem, kontakta din lokala återförsäljare.
- Rengör kylningsanordningen regelbundet (vanligen med 2-4 månaders mellanrum) för att säkerställa fri ventilation.
- Om kylningsanordningen inte används, koppla ifrån den från uttaget.
- Om kylningsanordningen inte används på länge, töm den på allt vatten.
- Använd inte salt eller andra mineraler i vattnet.
- Felsökning
  - Styrpanelen är tom och kylningsanordningen startar inte: Kontrollera strömförsörjningen och/ eller om jordfelsbrytaren har löst ut. Om strömförsörjningen är i ordning, men jordfelsbrytaren har stängt av strömmen, tryck på återställningsknappen för att starta anordningen på nytt. Om problemet kvarstår, koppla bort enheten från vägguttaget och kontakta återförsäljaren eller tillverkaren.
  - Vatten cirkulerar inte efter att anordningen har startats: Stäng av anordningen en stund och starta den på nytt. Detta kan bero på luftlås i rörsystemet. Upprepa vid behov tills vattnet börjar cirkulera.
  - Vattnet cirkulerar inte ordentligt: Kontrollera vattenytan och filtret (patron, om en sådan används). Lägg vid behov till vatten. Rengör filtret eller byt ut patronen vid behov. Om problemet fortsätter, kontakta återförsäljaren.

## TVÄTT OCH BYTE AV FILTERPATRON

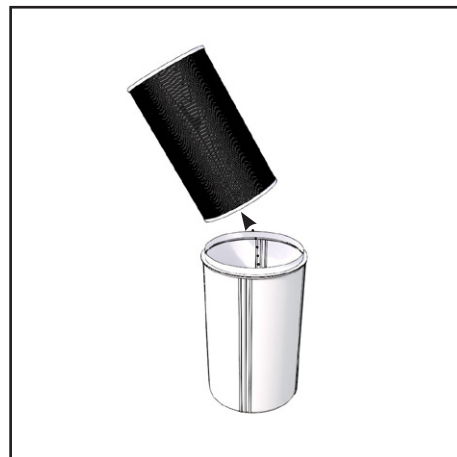
Filtret måste rengöras regelbundet för att vattnet ska förbli rent och för att filtret inte ska bli igensatt. Byt patronfilter vid behov, vanligtvis var 2-4 månad beroende på användningsmängd.



Koppla bort strömmen från kylningsanordningen och stäng båda kulventilerna.



Lossa filterlådan genom att vrida. Om filterhöljet sitter hårt och är svårt att öppna, använd det medföljande öppningsverktyget som medföljer filterförpackningen.

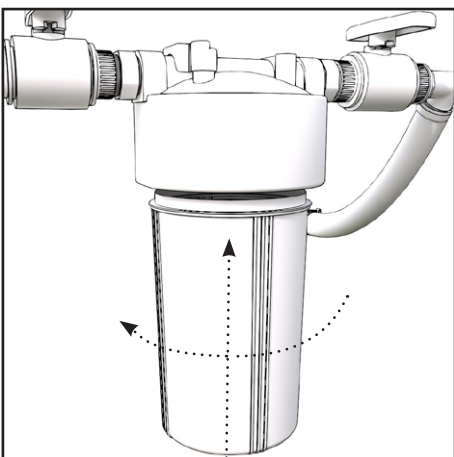
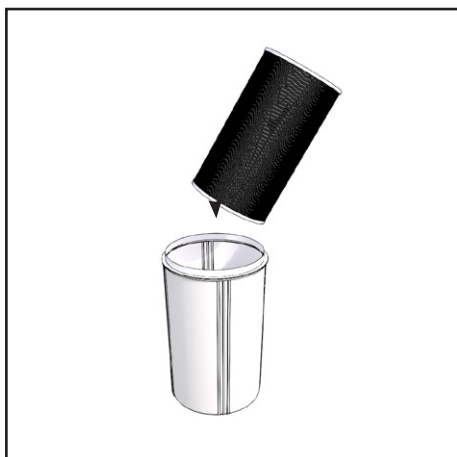
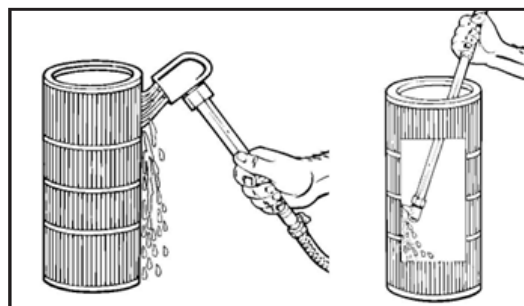


Avlägsna filterpatronen och rengör filterhusets insida vid behov.

### Rengöring

För bästa rengöring av filterpatronen rekommenderas det att du först grovt spolar rent den med rinnande vatten och sedan blötlägger den helt i en hink med vatten med filterrengöringsmedel i minst sex timmar. Skölj filterpatronen sedan på nytt med rinnande vatten både på insidan och utsidan.

Rengöringen ska utföras med tryck inifrån och ut och utifrån endast med trädgårdsslang (utan tryck). För att uppnå bästa rengöringsresultat, låt filtret torka och borsta sedan försiktigt och noggrant det torra filtrets lamelloytor för att få bort den finaste smutsen. Filtret ska bytas till ett nytt vid behov eller minst en gång om året.



Sätt tillbaka den nya eller rengjorda patronen i höljet.

Montera tillbaka höljet på plats med handkraft.

## FELKODER

När ett fel uppstår, visas motsvarande felkod. När felet har avhjälpats, försvinner felkoden. Åters-täll felkoden genom att starta om anordningen.

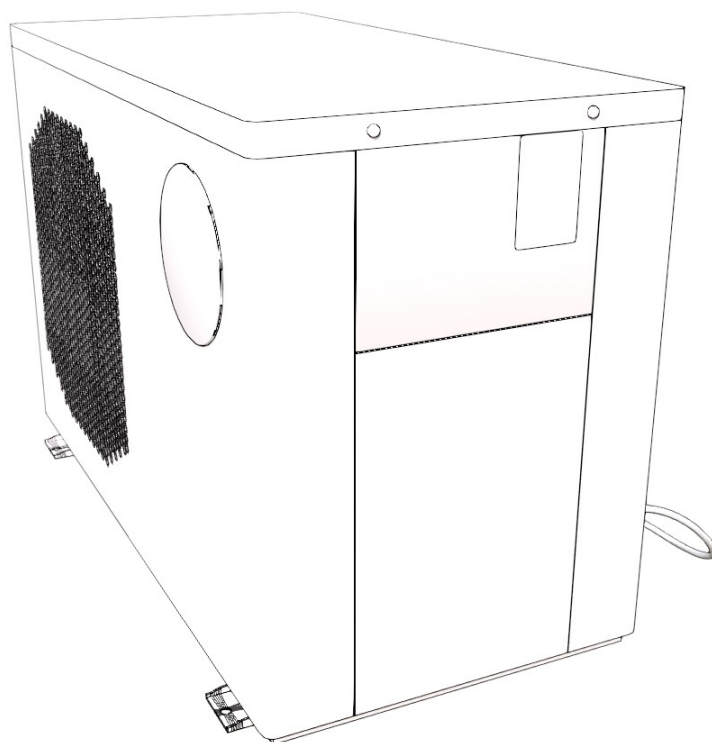
Felkod	Beskrivning
E01	Fel på gasens avluftningstemperatur
E05	Fel på värmeväxlarens temperatur
E09	Fel på gasens insugstemperatur
E17	Fel på temperaturen på det inkommande vattnet
E18	Fel på temperaturen på det utgående vattnet
E22	Fel på den omgivande temperaturen
P01	Kopplingsfel i vattenflödet
P02	Högtrycksskydd
P06	Lågtrycksskydd
P11	Överhettningsskydd för gasens utloppstemperatur
P15	Överhettningsskydd för till- och frånluft
P16	Överkylningsskydd
P17	Beredskapslägets frostskydd
P25	Skydd av den omgivande temperaturen
P26	Överhettningsskydd för utloppsvatten i uppvärmningsläget
P27	Överhettningsskydd för temperaturen i kylningsläget för utomhusanordningens värmeväxlare

## GARANTI

Se garantin i tillverkarens anvisning.

User manual

# DUAL AVANTOPOOL AIR-SOURCE HEAT PUMP



Check the contents of the delivery without delay!  
Study the instructions carefully and keep them for future reference.



## GENERAL

The following instructions are general guidelines. More detailed and comprehensive instructions can be found in the user manual included with dual's delivery

- For repairs, please contact service. The repair process must be done in strict accordance with this manual. All maintenance operations by non-professional personnel are prohibited and will void warranty.
- Misoperation may result in injury to personnel or damage to equipment.
- Please make sure that the pool is filled up and air is removed from the unit piping before starting the unit. It is forbidden to start this equipment before a certain water level has been established. Otherwise, there is a risk of damage to this equipment and void of warranty.
- When there is a need to cut the power for repair, wait for 1 minute after power is off, before touching the circuit board, to avoid capacitor discharge resulting in electric shock.
- The cooling unit must be stored and transported vertically in its original packaging. If not, wait at least 24 hours before being powering the unit.
- The correct power supply, voltage, and frequency must be confirmed before installation.
- Improper installation may result in fire, electric shock, equipment falling, or water leakage.
- Make sure no water penetrates the electrical components.
- The unit may be damaged by severely overheating the product due to negligence, such as covering the cooling unit's ventilation grills with towels, clothing, or other objects, or operating the cooling unit too close to a wall or in a room/place with insufficient ventilation.
- Do not use salt or other minerals in the water.
- This equipment is not intended for use by children. Children must be supervised by an adult while using it to ensure their safety.
- Persons with a history of heart disease, low or high blood pressure, circulatory system problems, diabetes, or any condition requiring medical treatment should consult a physician or a doctor before using the pool.
- Persons using medication should consult a physician or a doctor before using the pool since some medication may induce drowsiness while other medication may affect heart rate, blood pressure and circulation.
- Pregnant women should consult a physician or a doctor before using the pool.
- The unit should not be used in direct sunlight, due to the overheating of the device.



In winter or when the ambient temperature drops below 0°C, be sure to empty the water from the cooling unit if it is not in use. Otherwise, the unit will be damaged by freezing, in which case your warranty will be voided. The unit should not be used outdoors in ambient temperatures below -7°C.

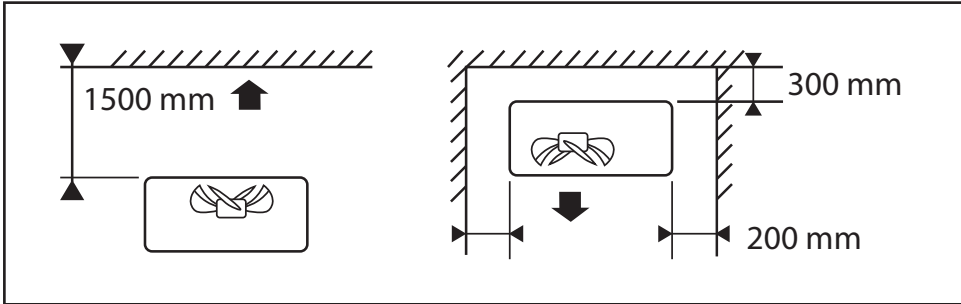


If the operating ambient temperature is below 0°C, please keep the unit running and at **“Automatic”** mode and do not use the **“active mode”** timer. Otherwise, the system will freeze.

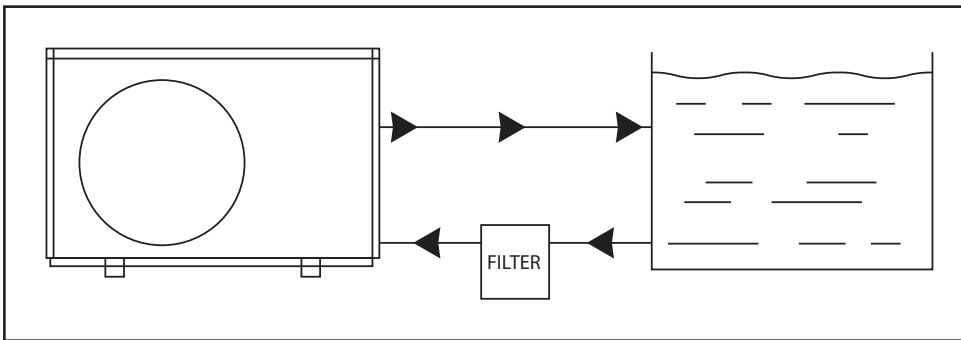
## INSTALLATION DISTANCE

The cooling unit should be installed in a well-ventilated area. It should be installed in the place greater than the following distances:

- Min. distance between unit front and wall = 1500mm (150 cm)
- Min. distance between unit back and wall = 300mm (30 cm)
- Min. distance between unit sides and wall = 200mm (20 cm)



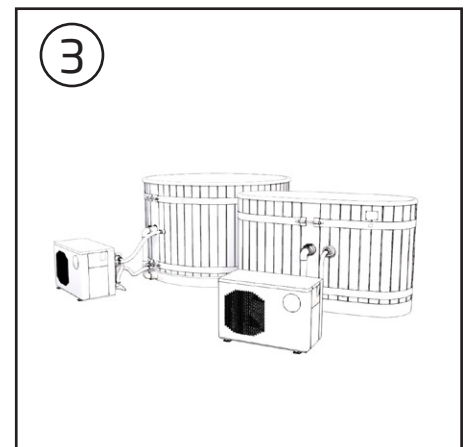
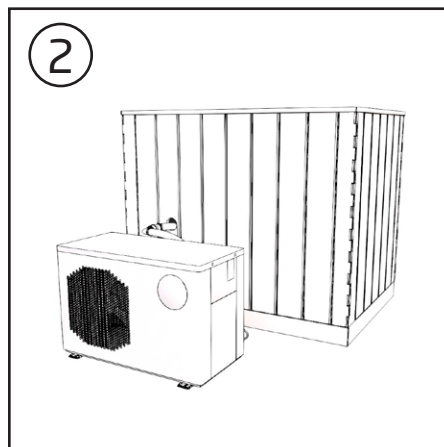
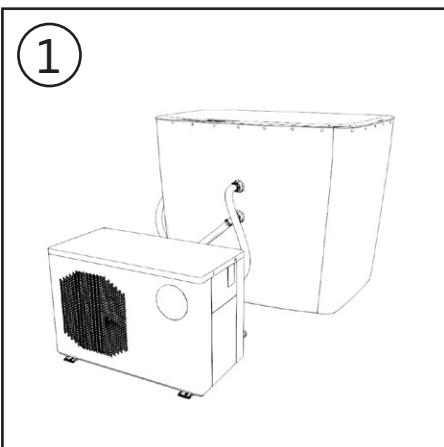
## Layout of water circulation between the unit and pool



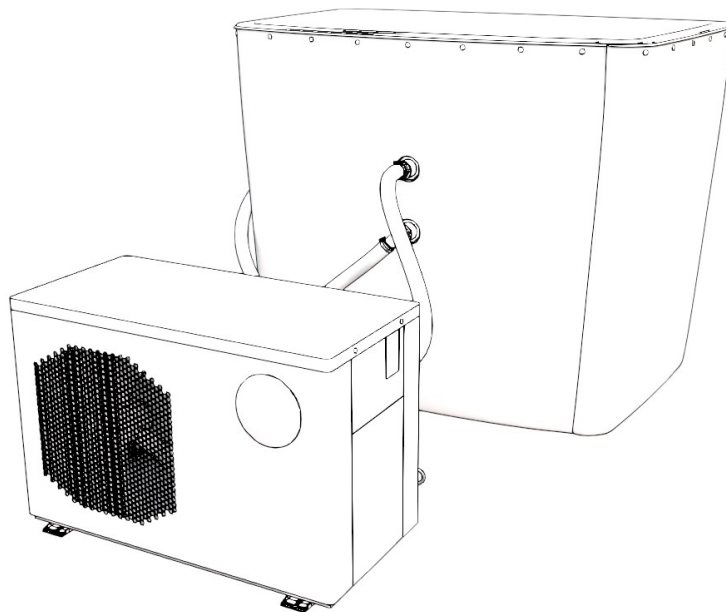
## INSTALLATION TO THE POOL

The dual air source heat pump can be installed in various types of pools. The instructions for each pool can be found in the following order:

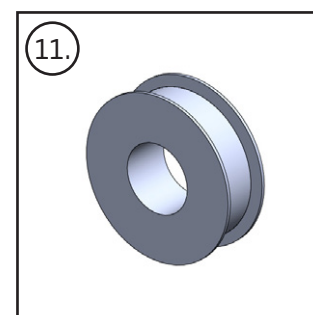
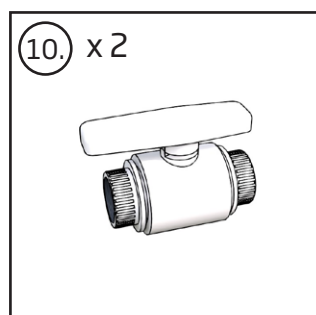
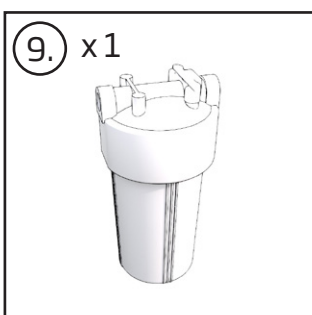
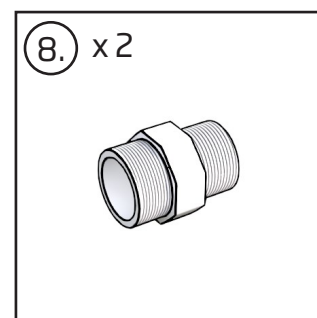
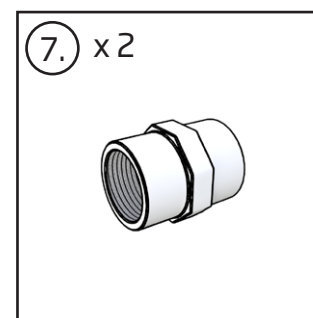
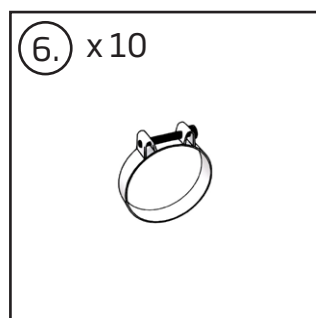
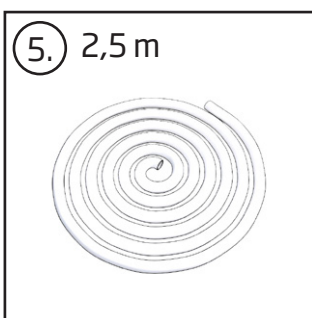
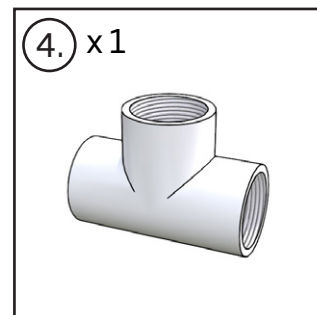
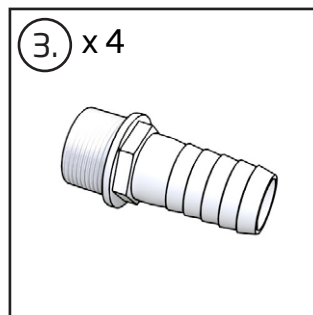
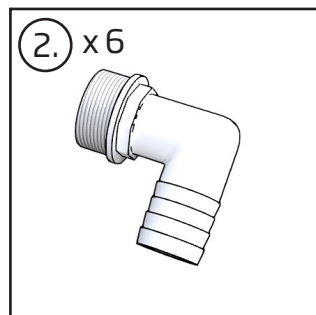
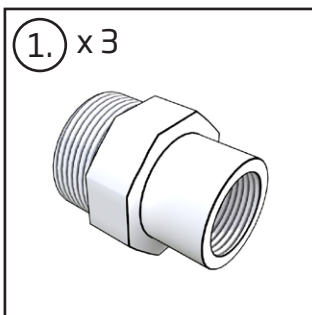
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2. Premium NordicIce S
3. Kamiinan korvaava

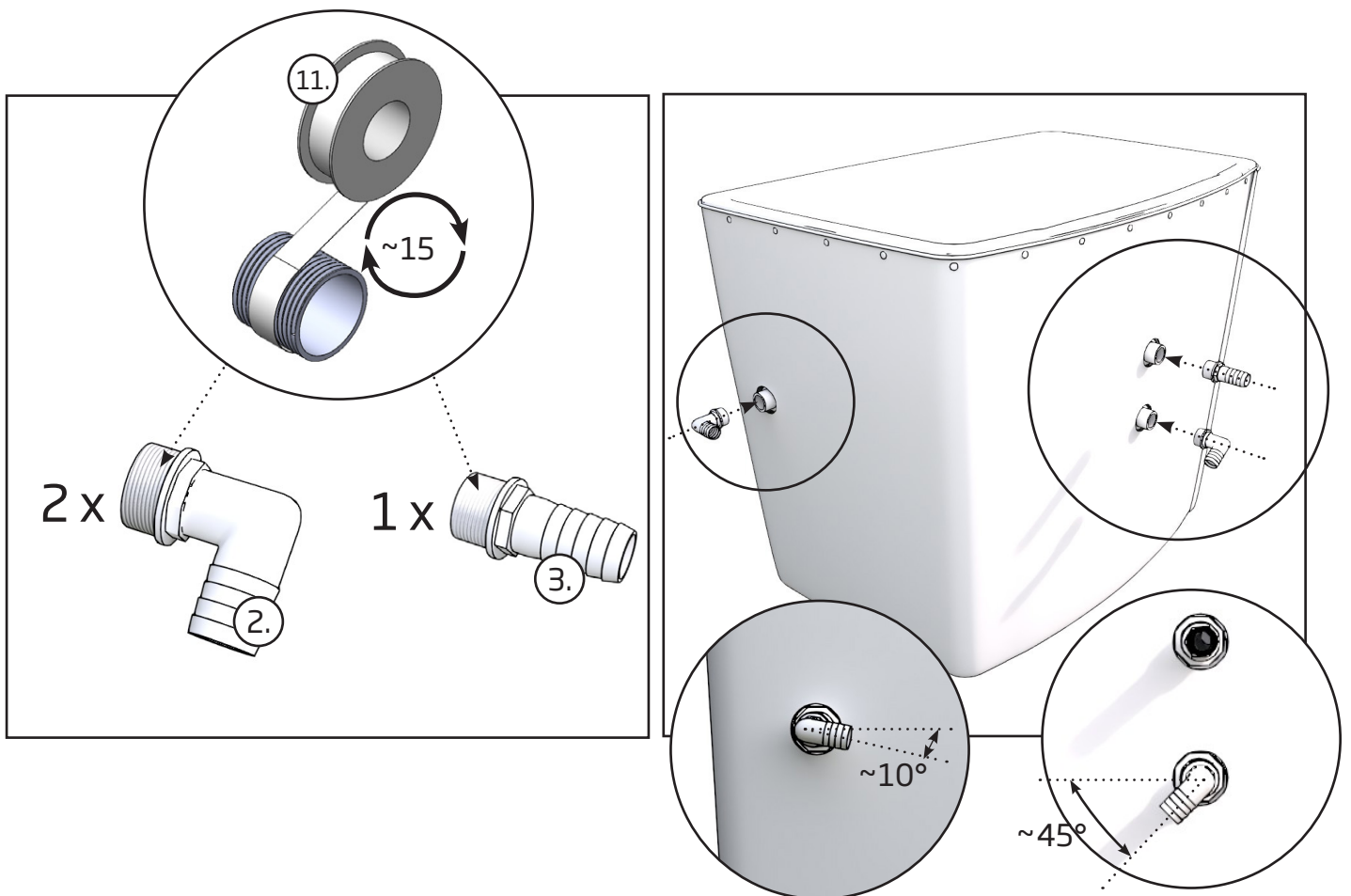
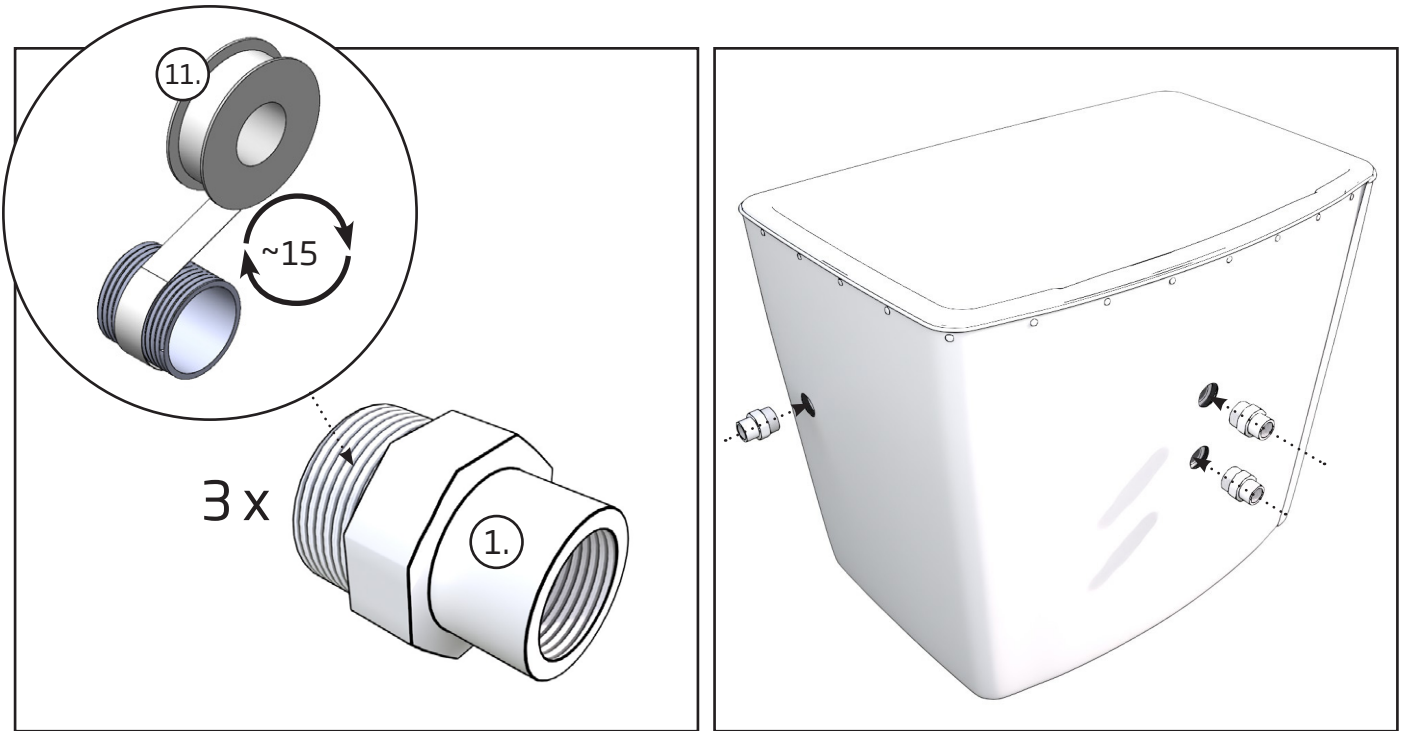


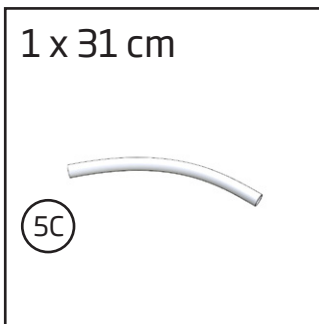
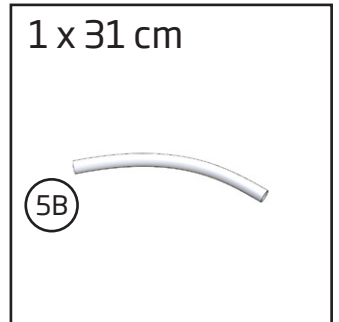
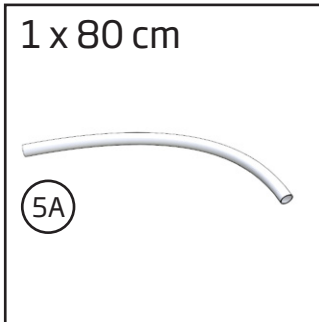
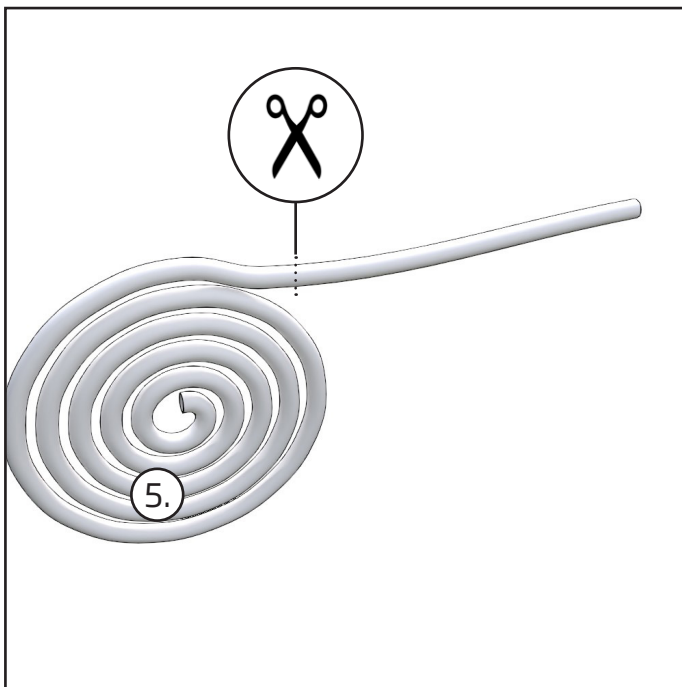
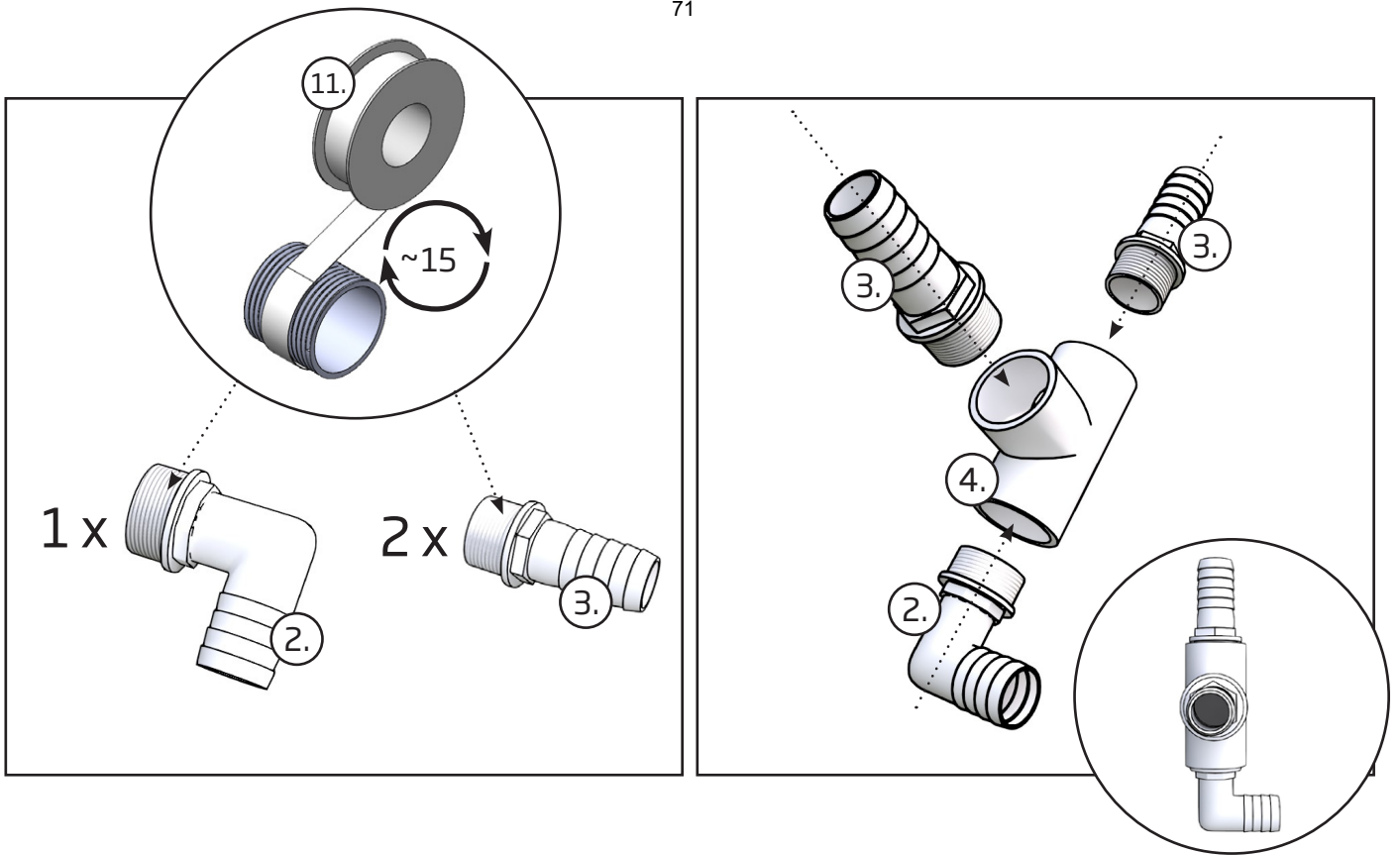
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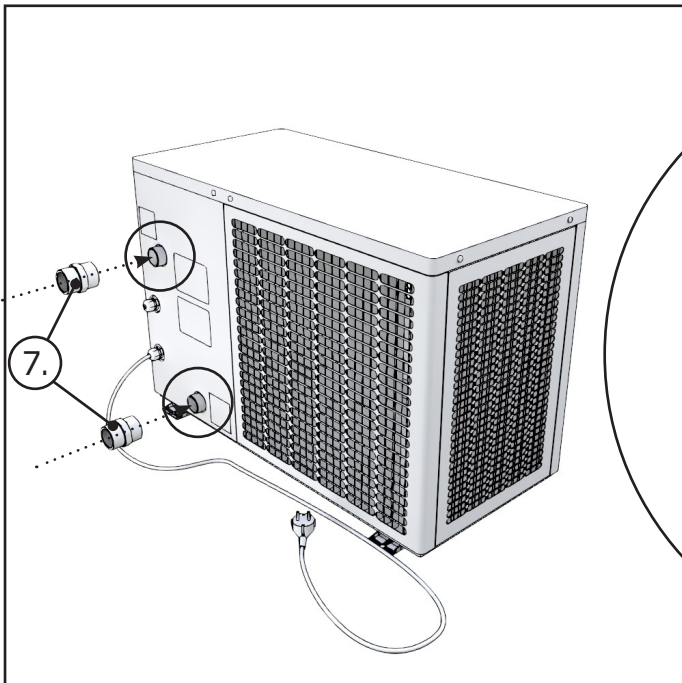
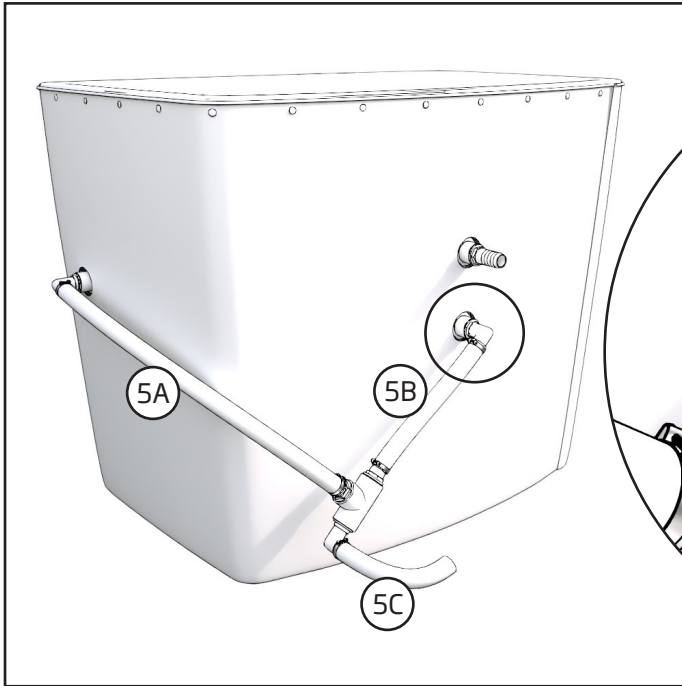


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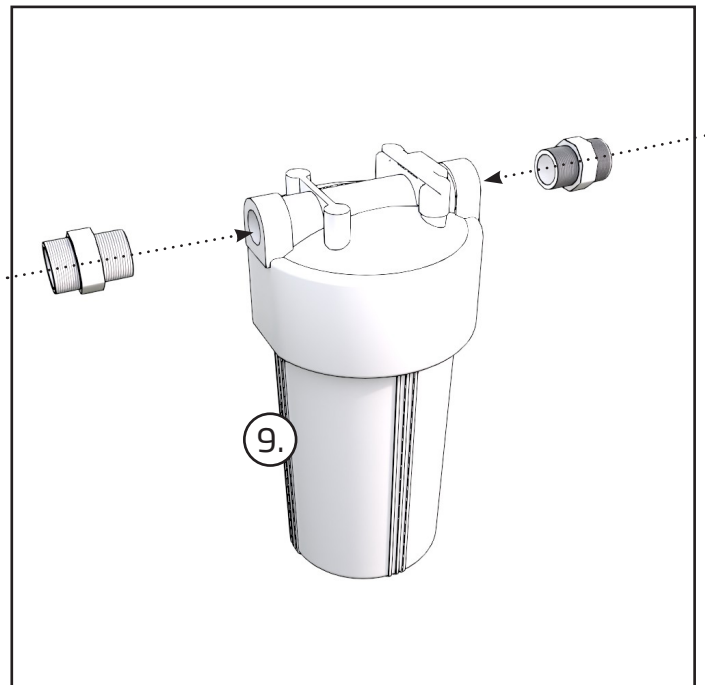
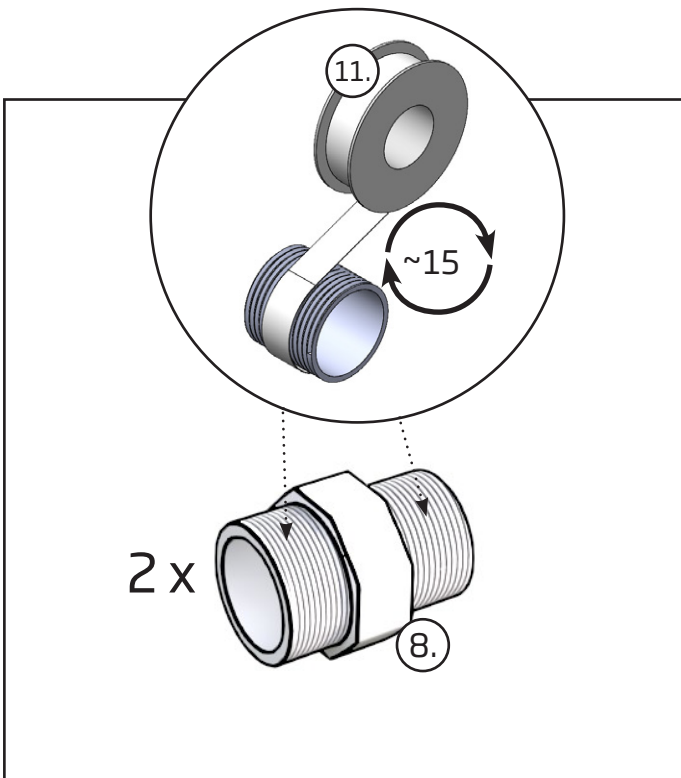
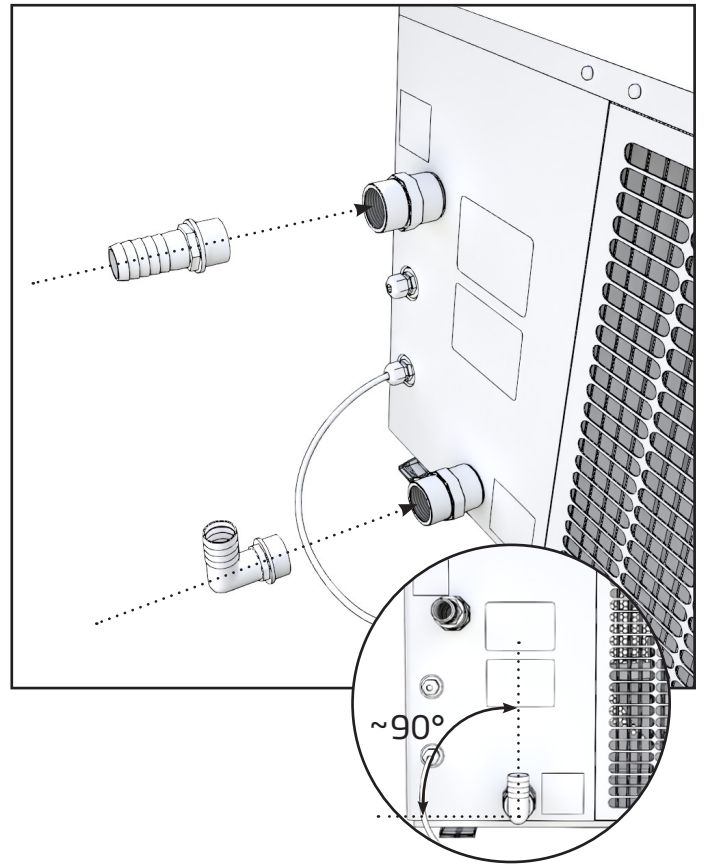
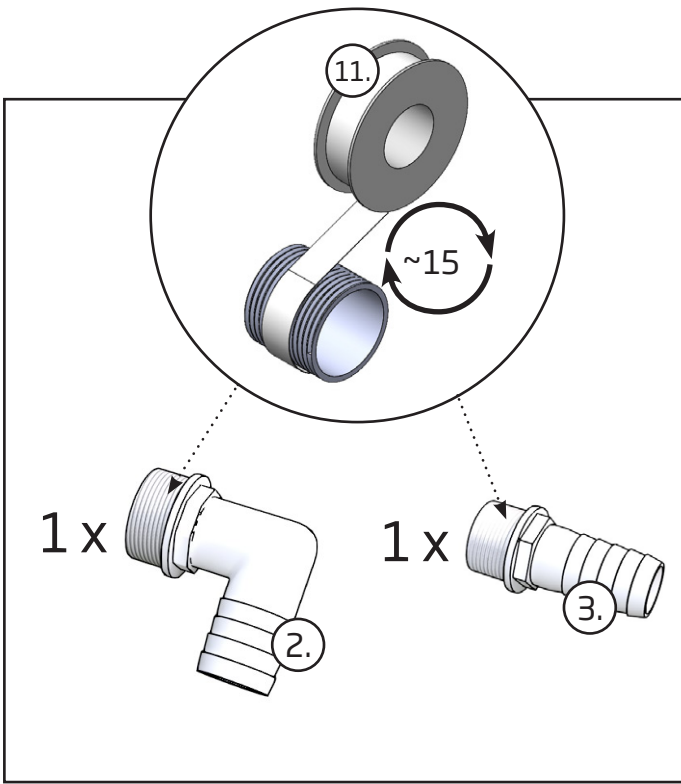


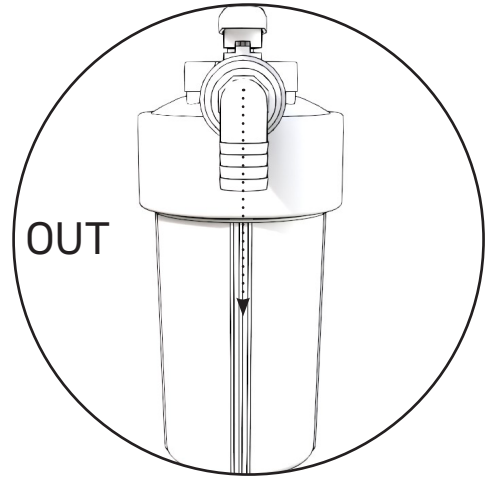
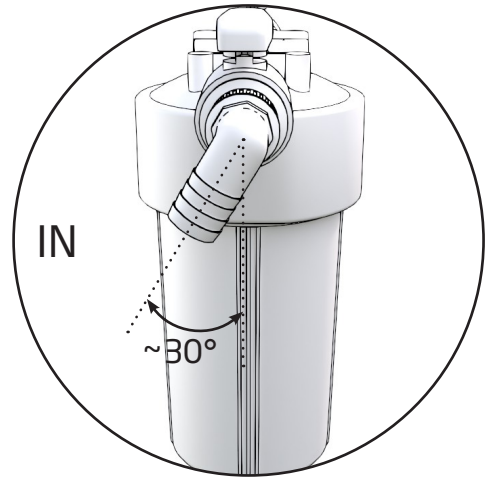
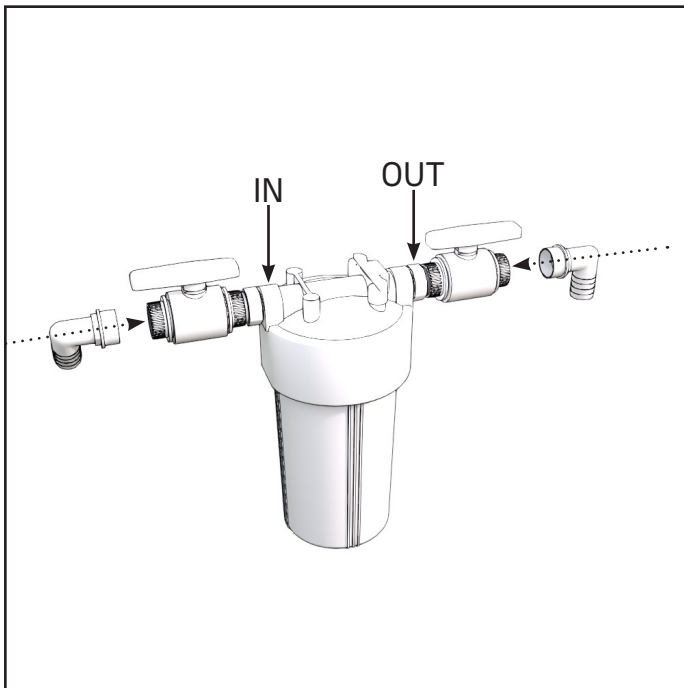
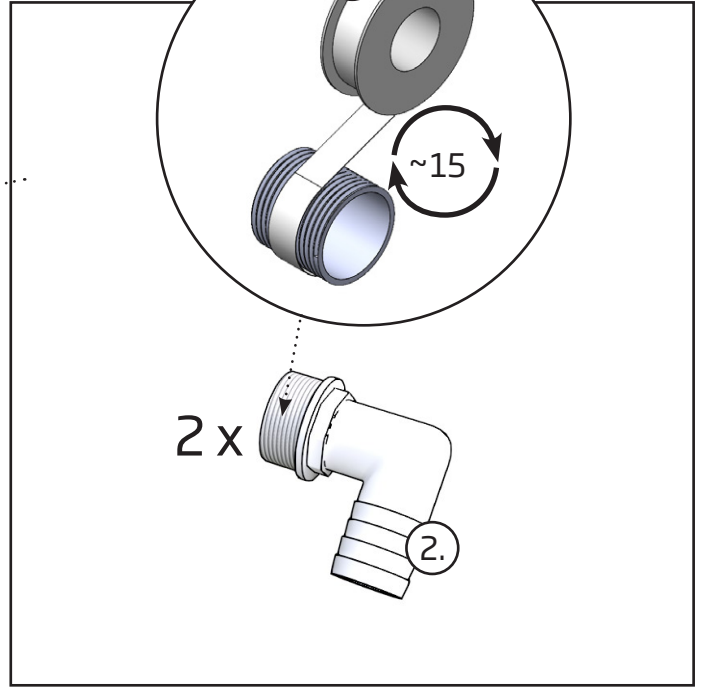
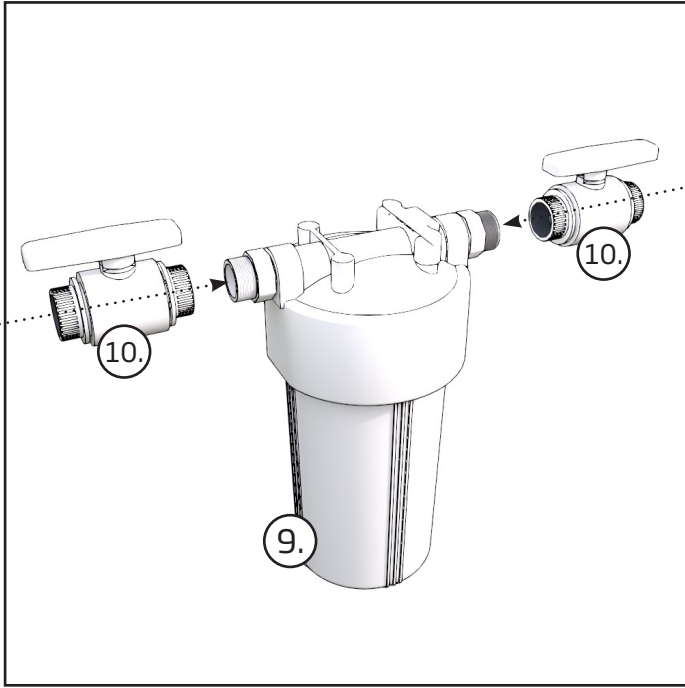


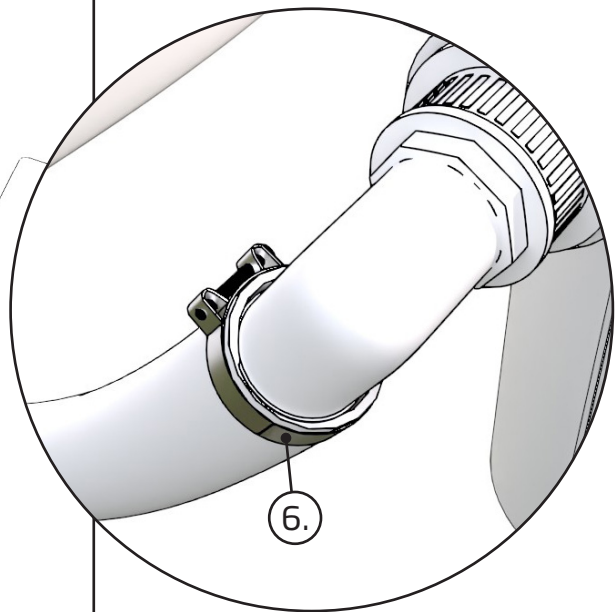
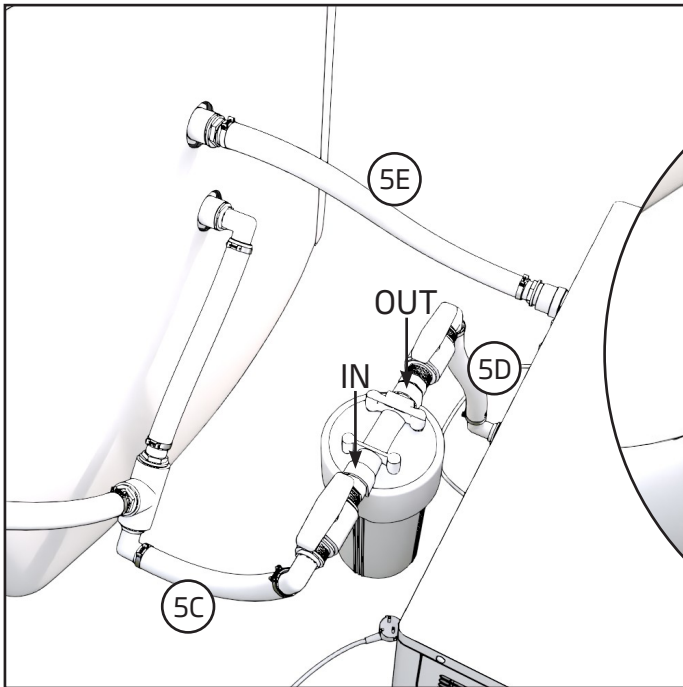
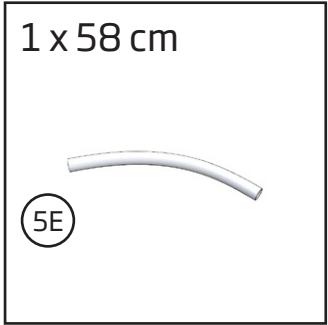
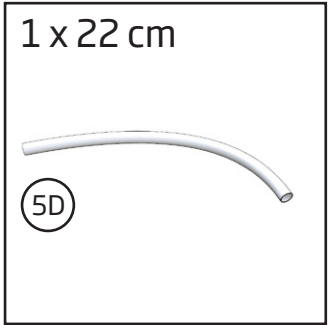
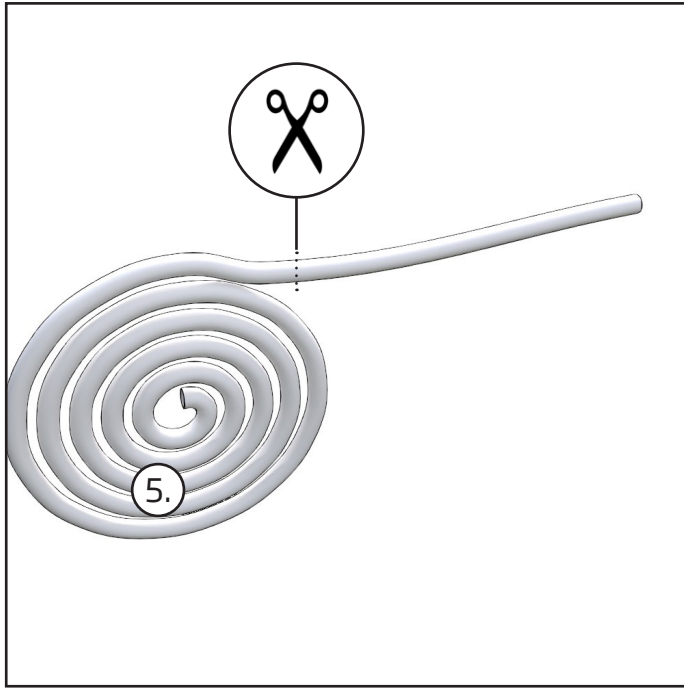




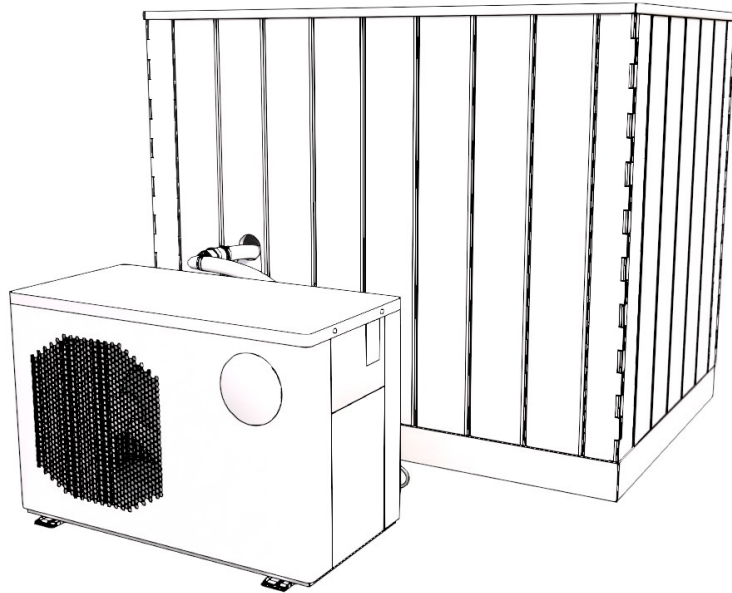




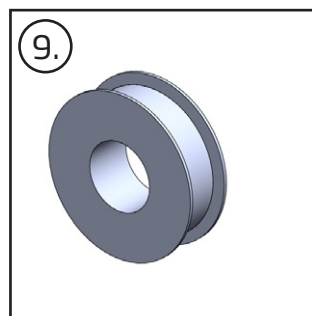
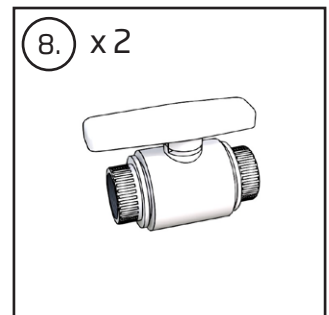
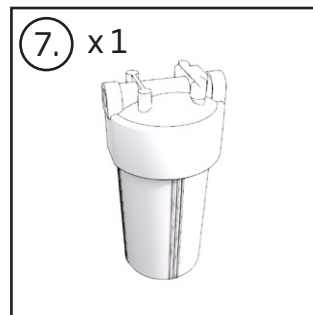
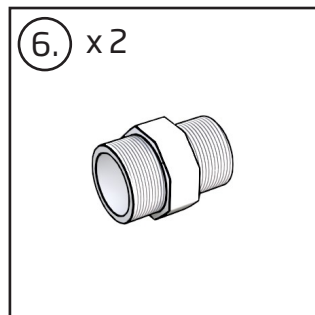
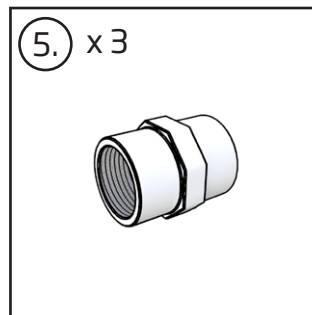
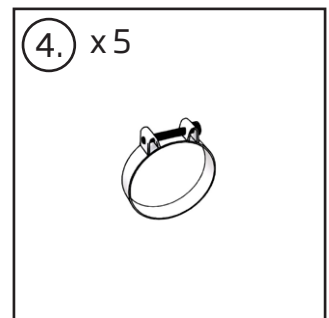
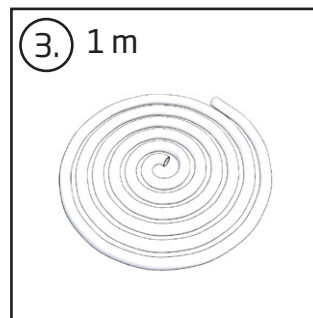
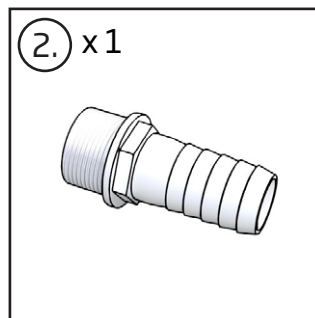
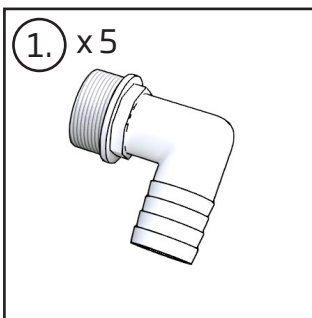


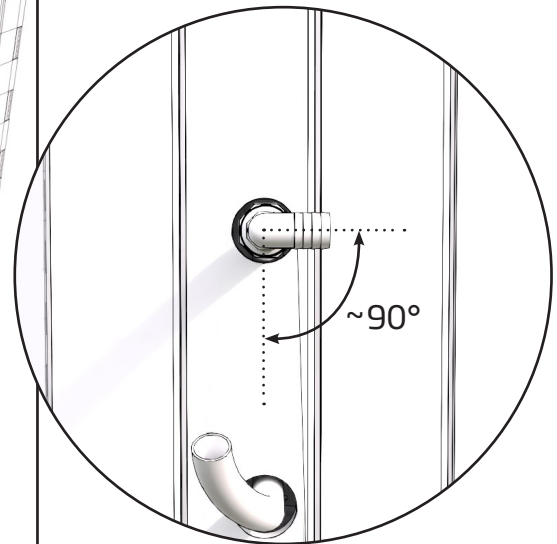
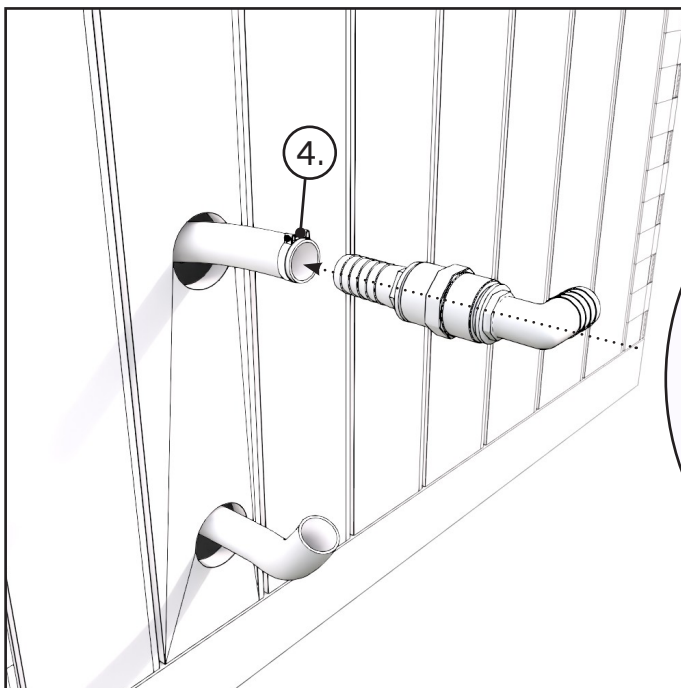
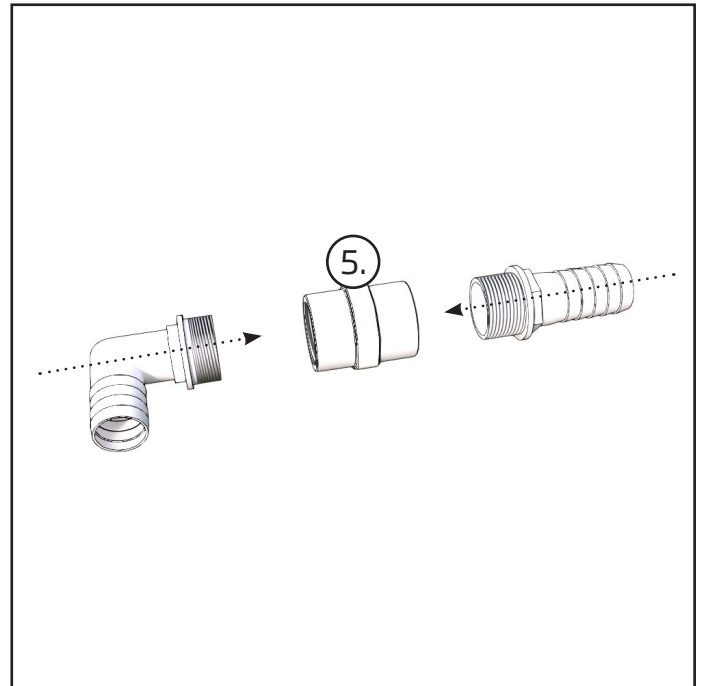
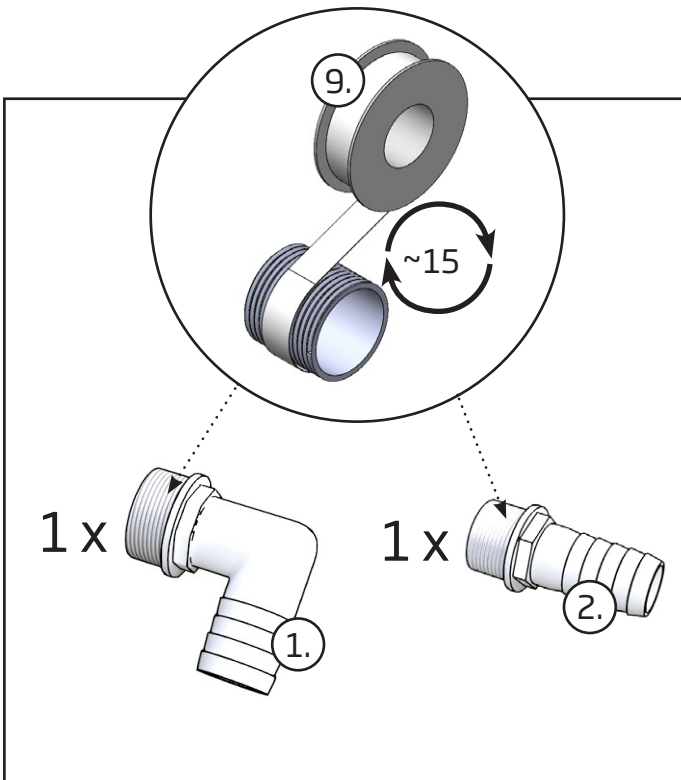


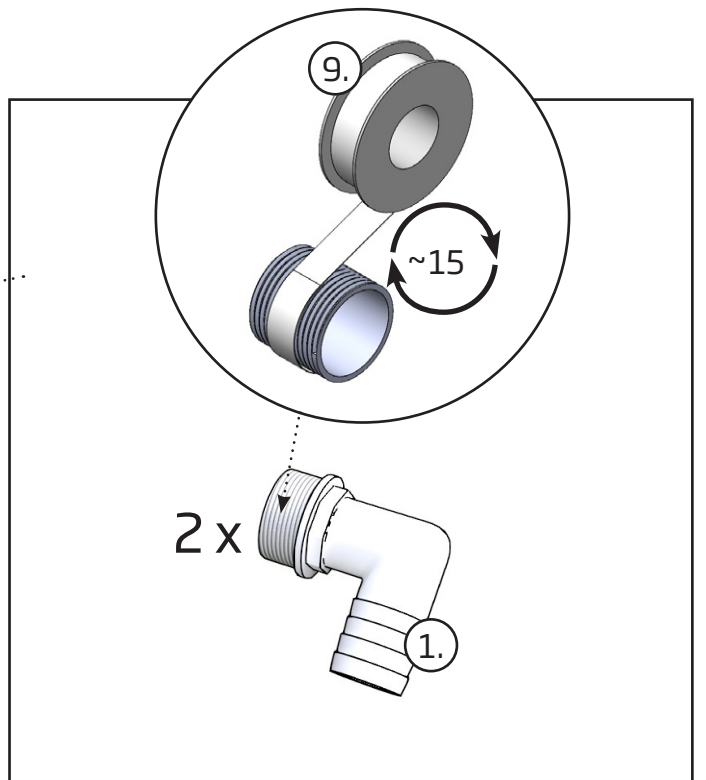
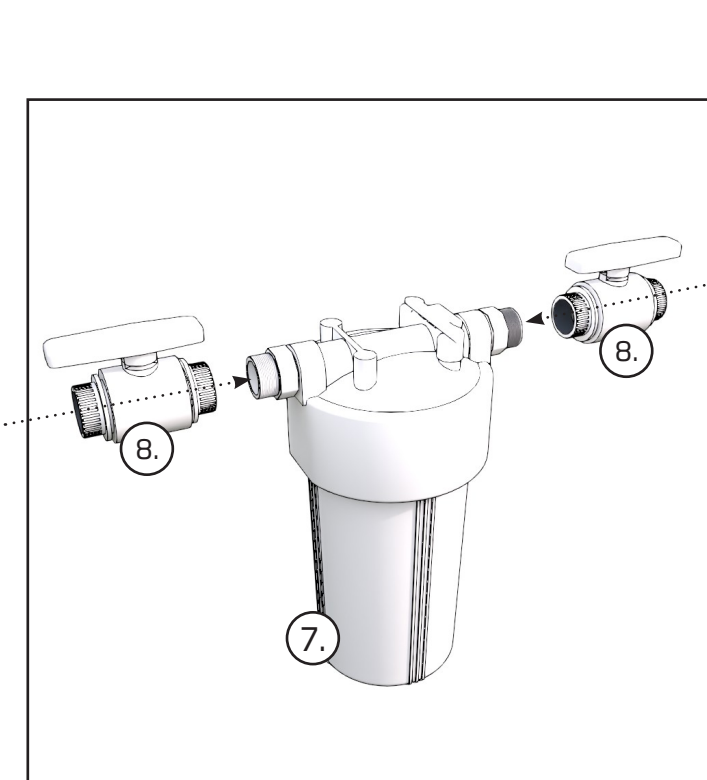
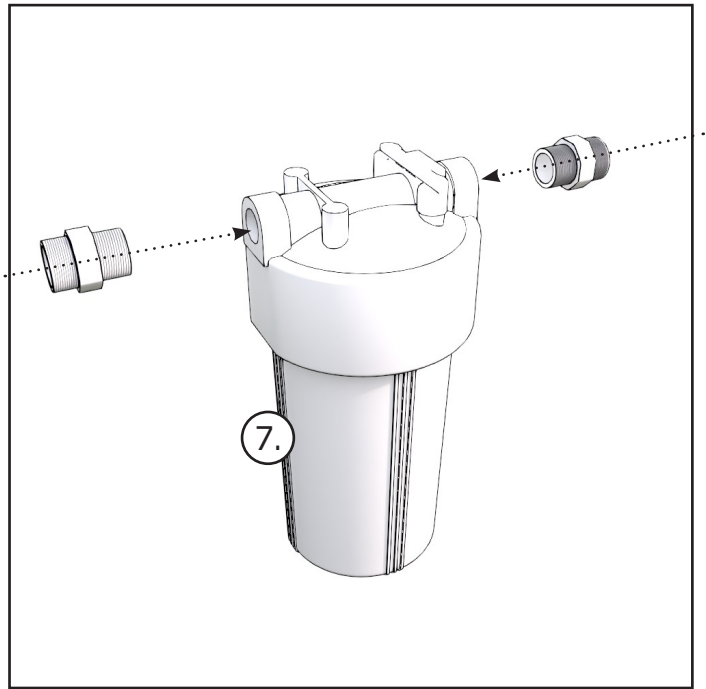
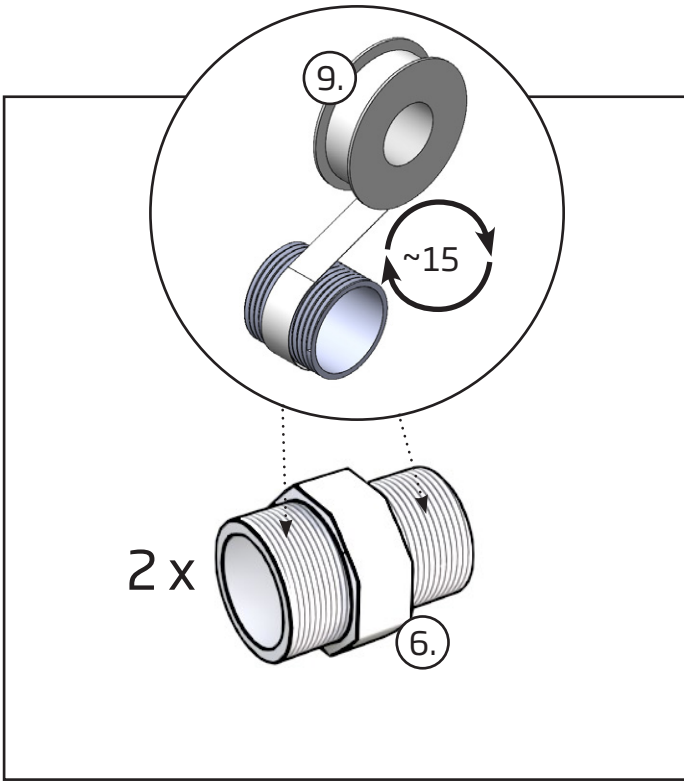
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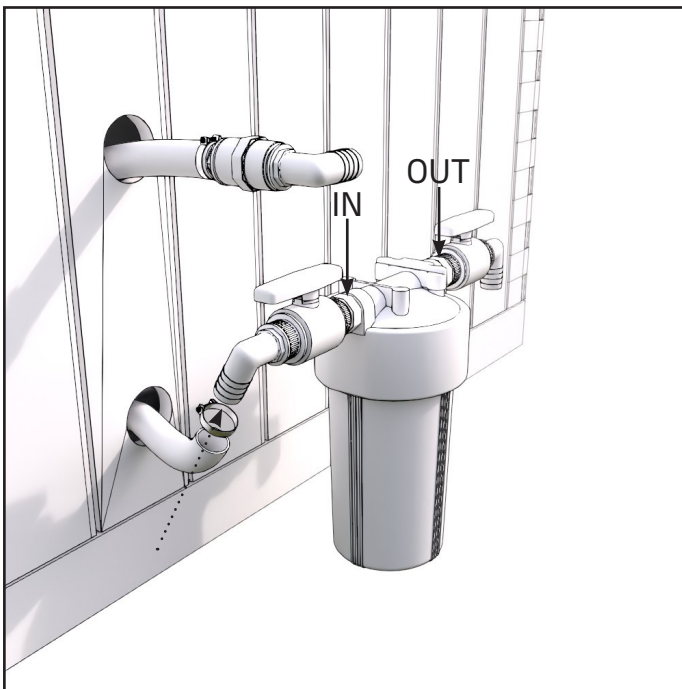
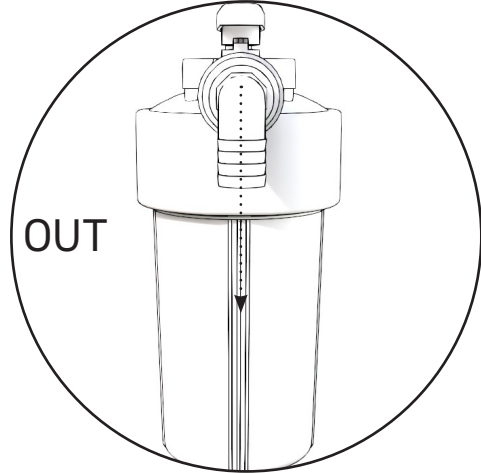
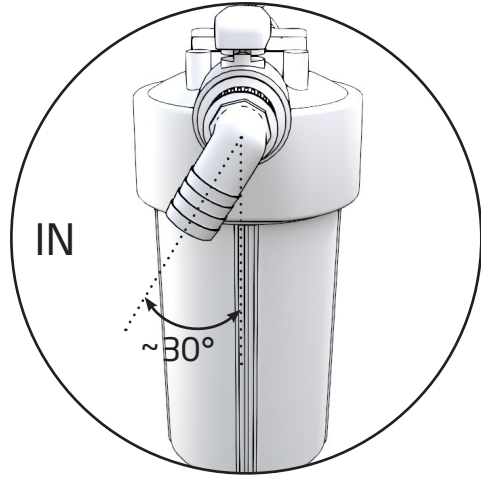
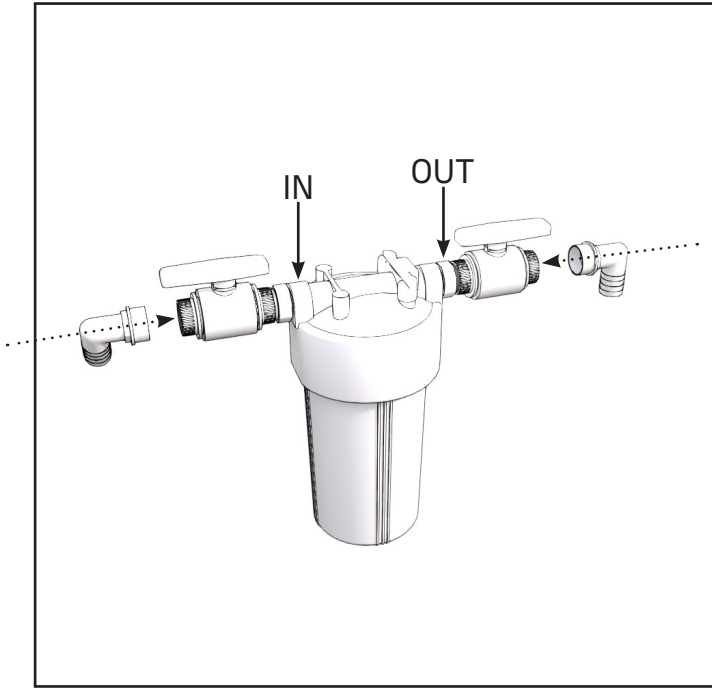
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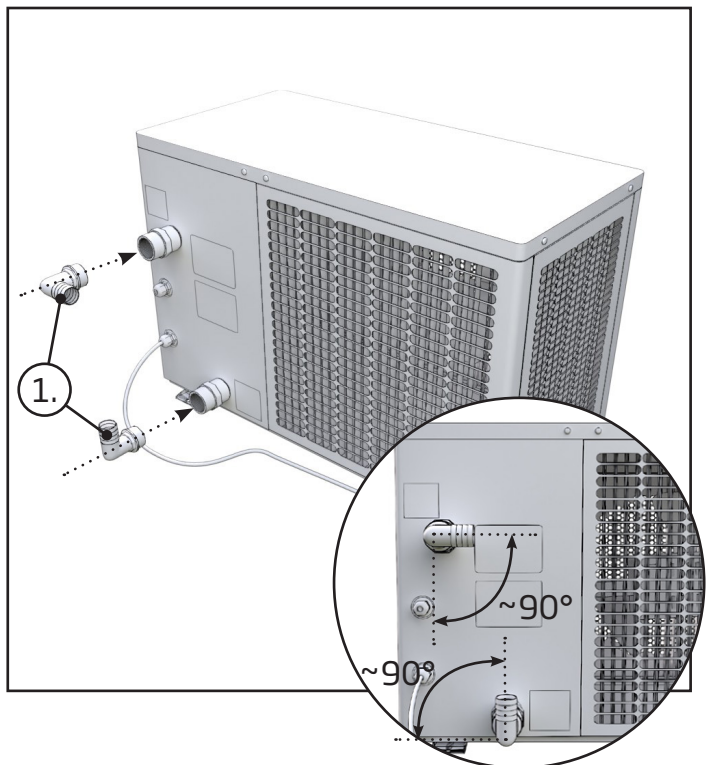
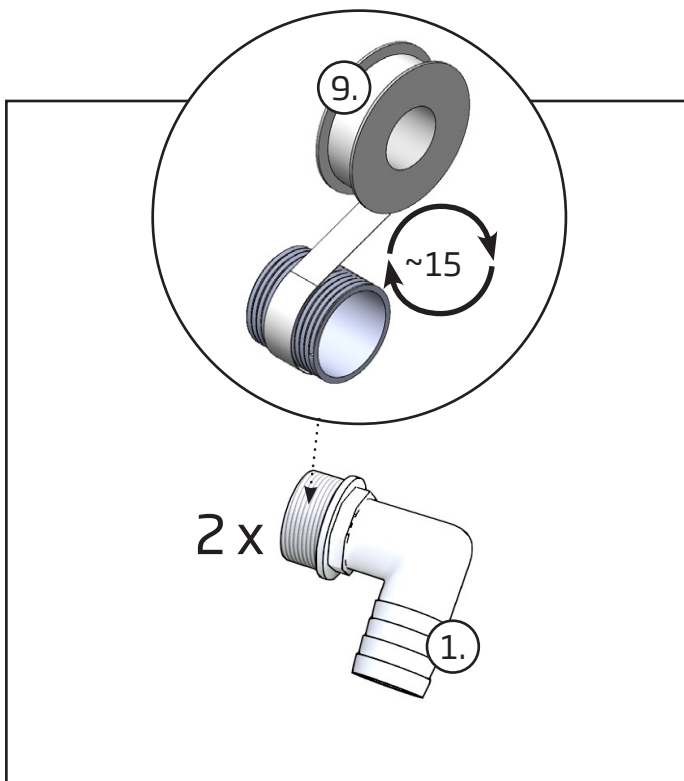
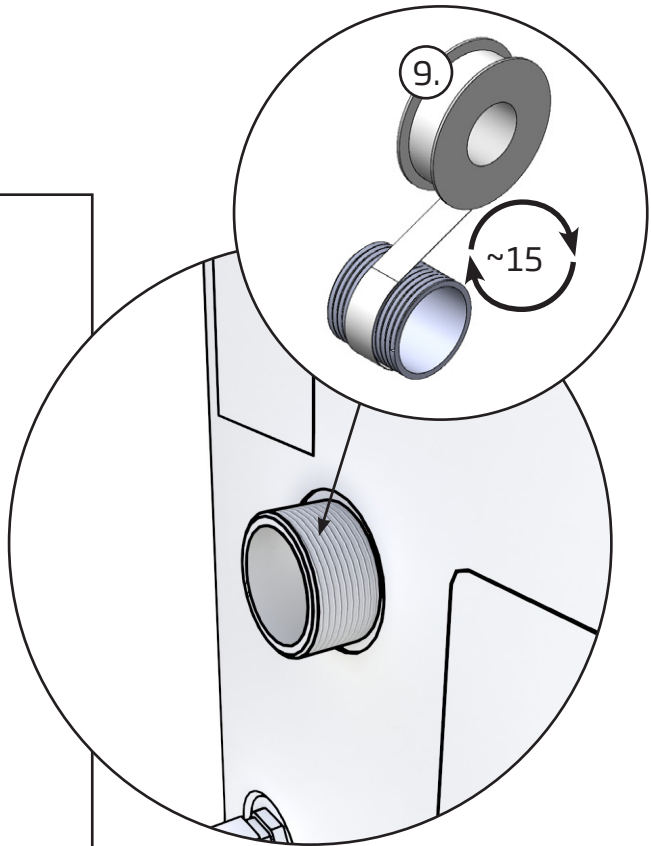
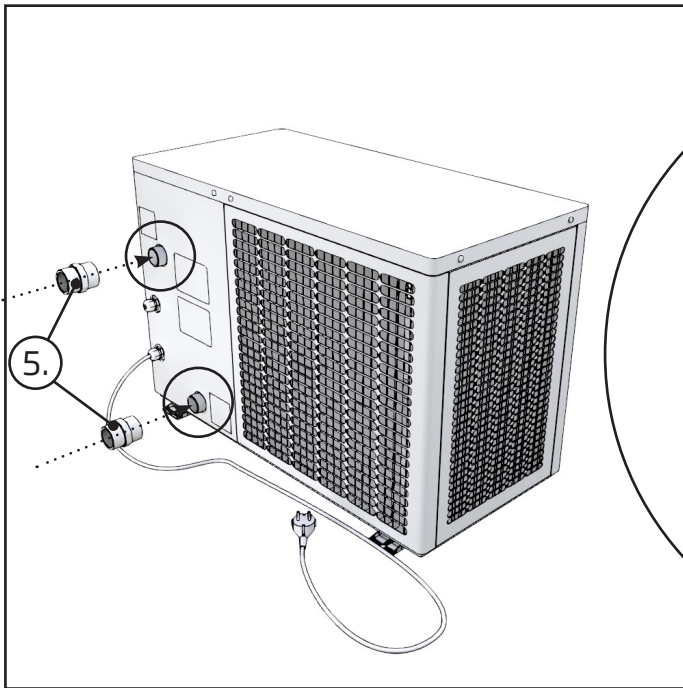


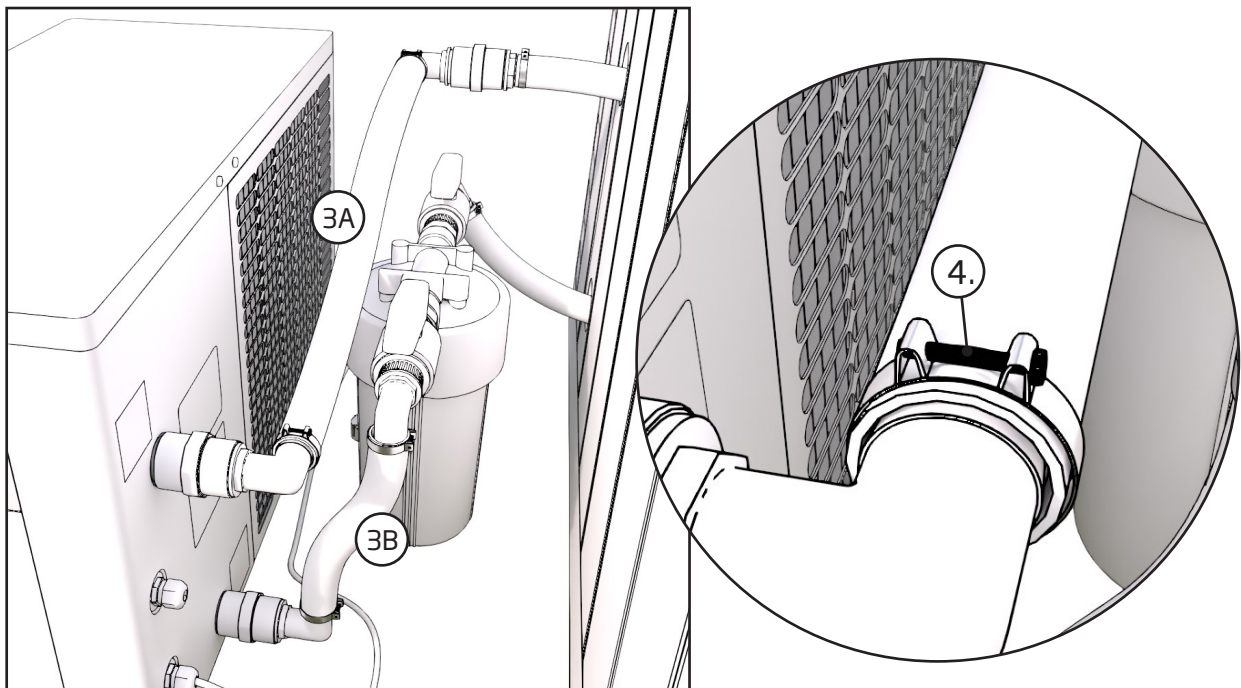
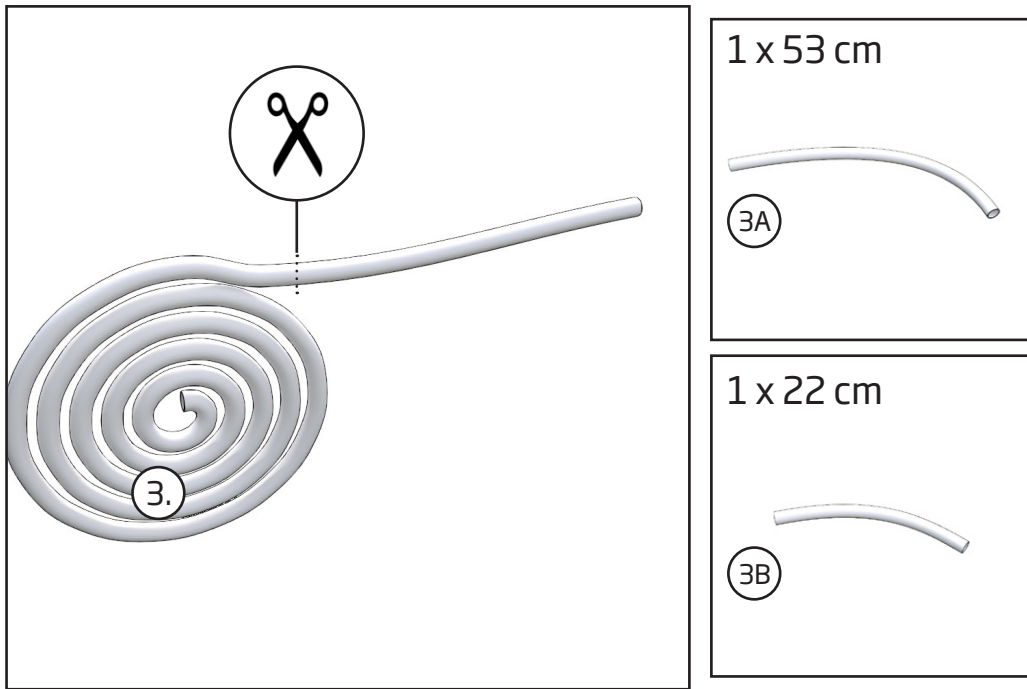




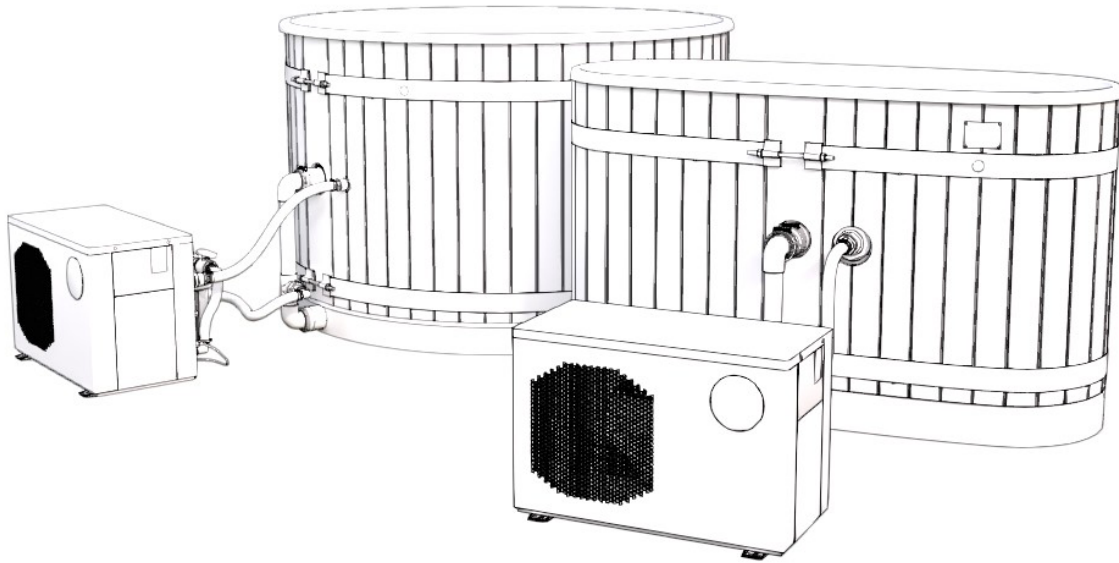




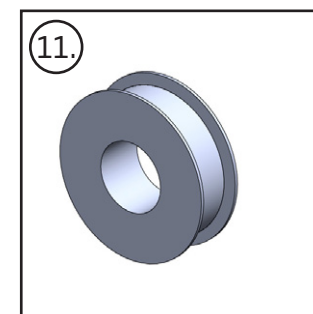
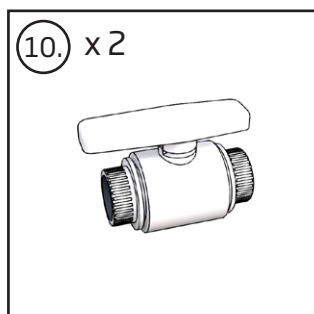
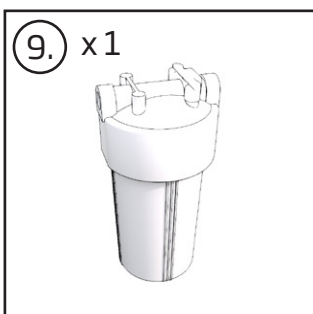
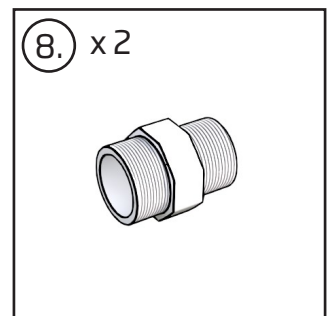
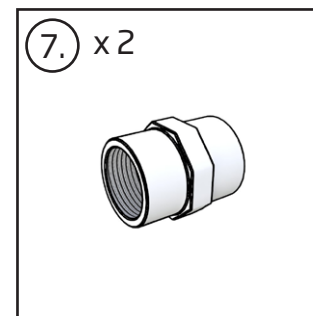
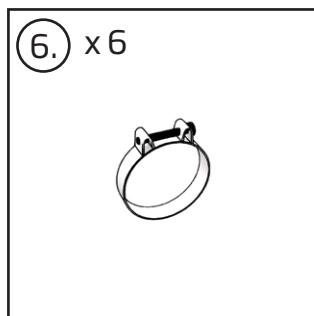
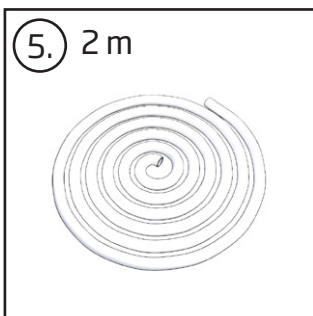
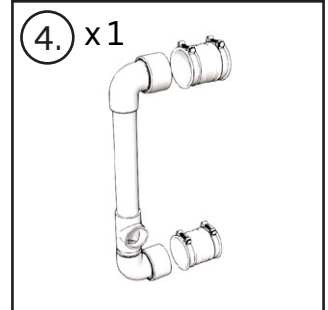
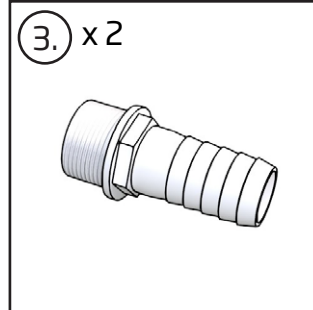
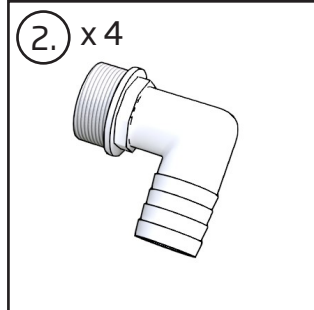
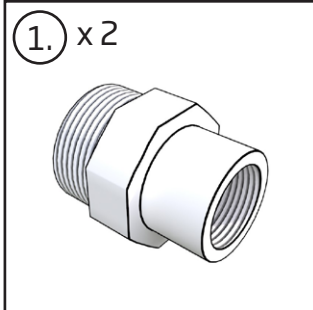


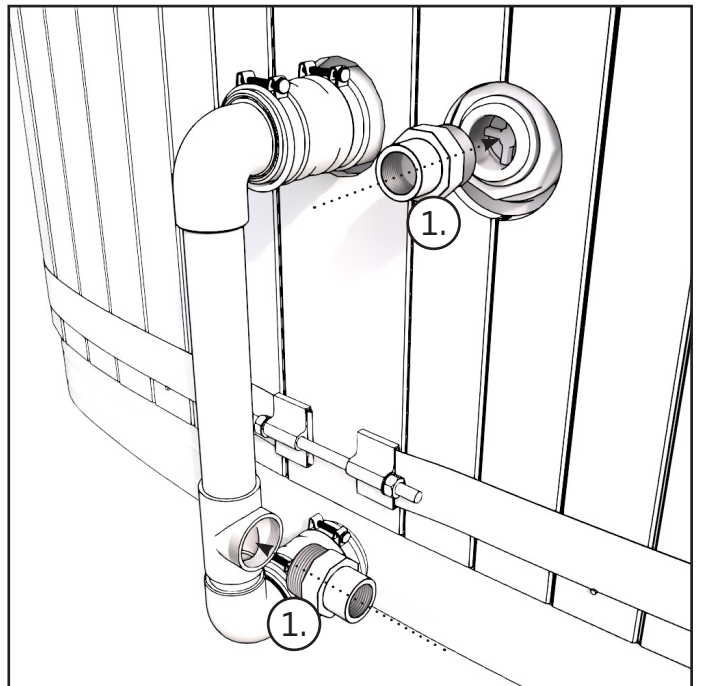
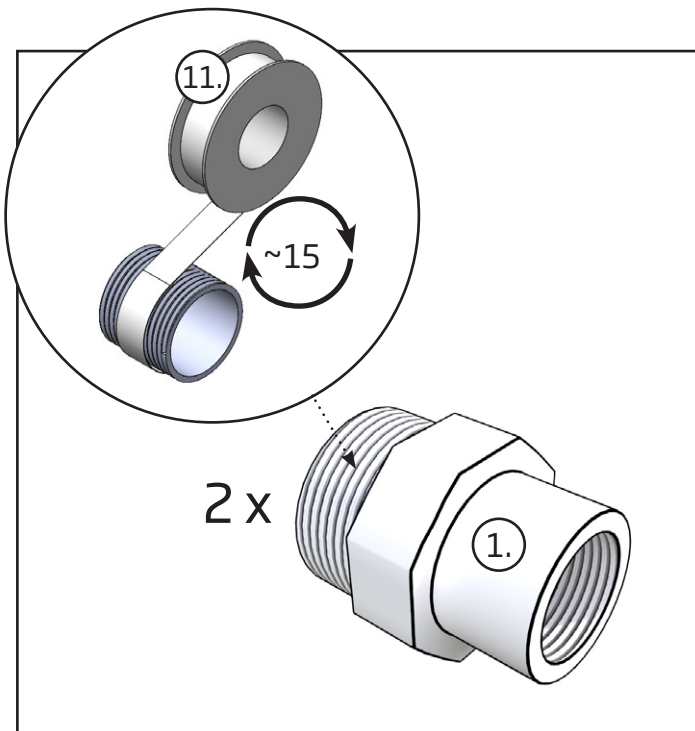
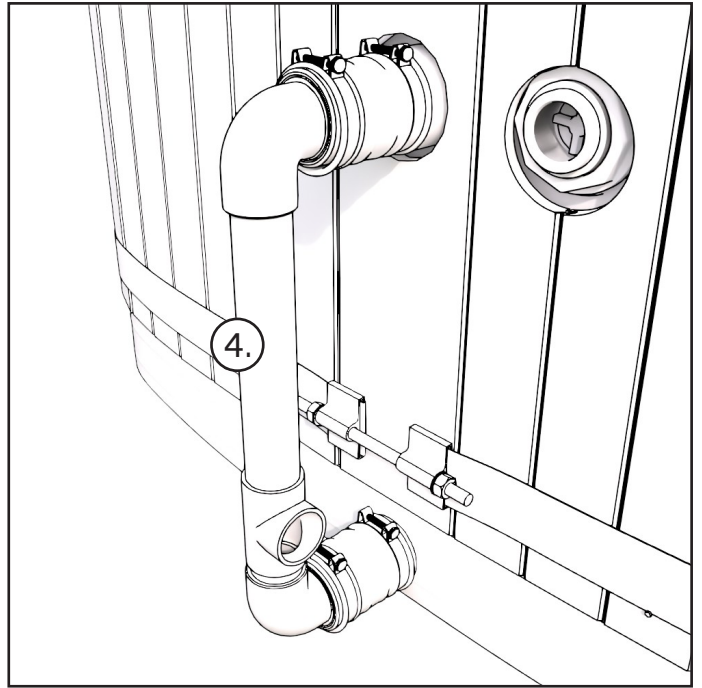
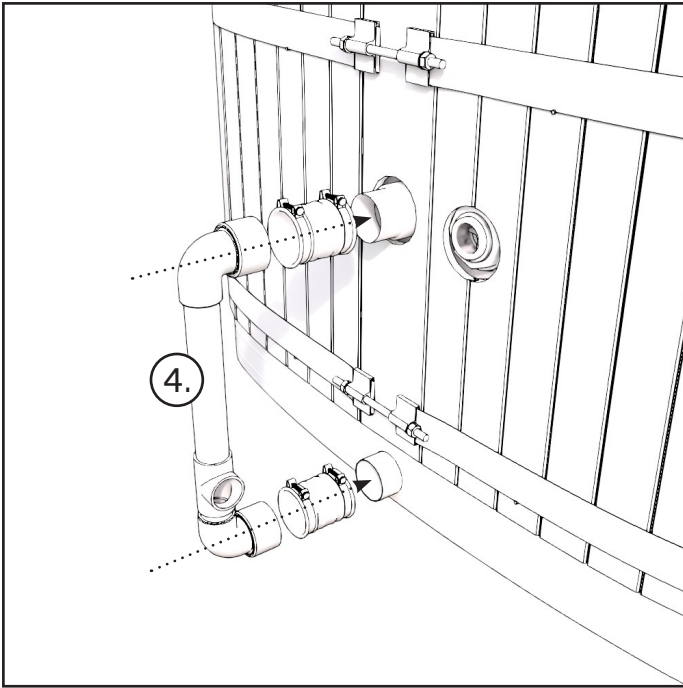


# INSTALLATION AS A REPLACEMENT FOR A HEATER

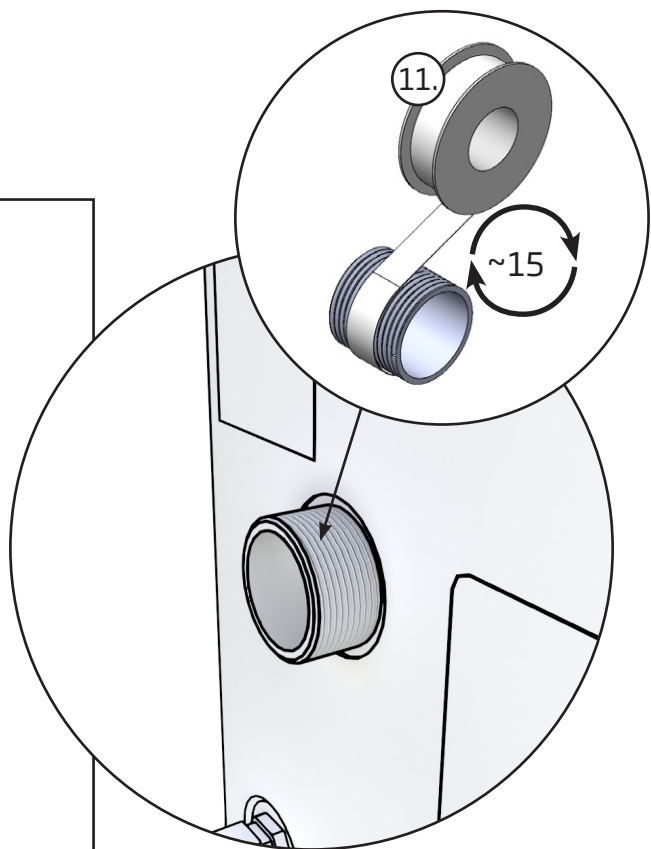
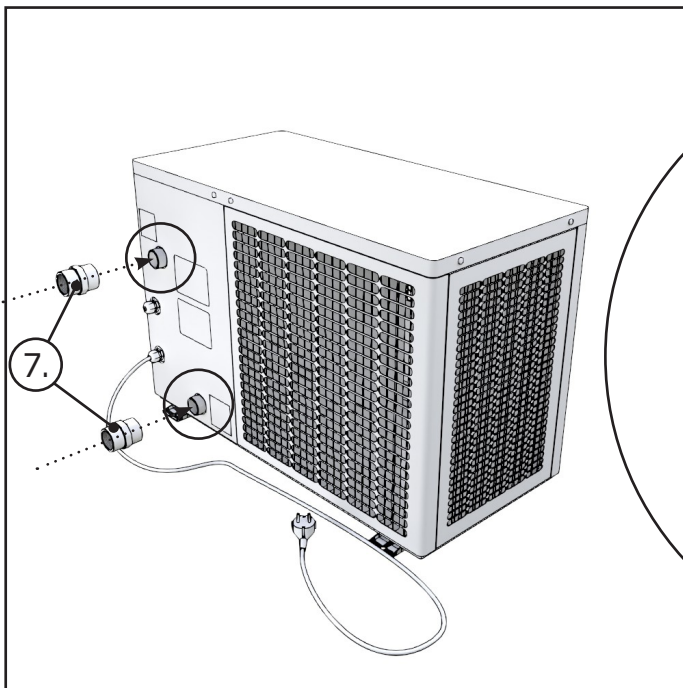
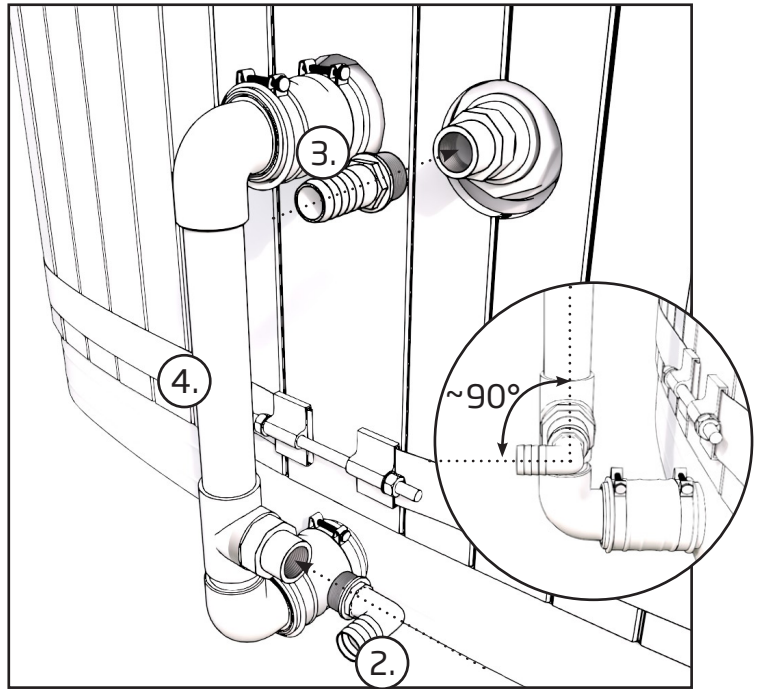
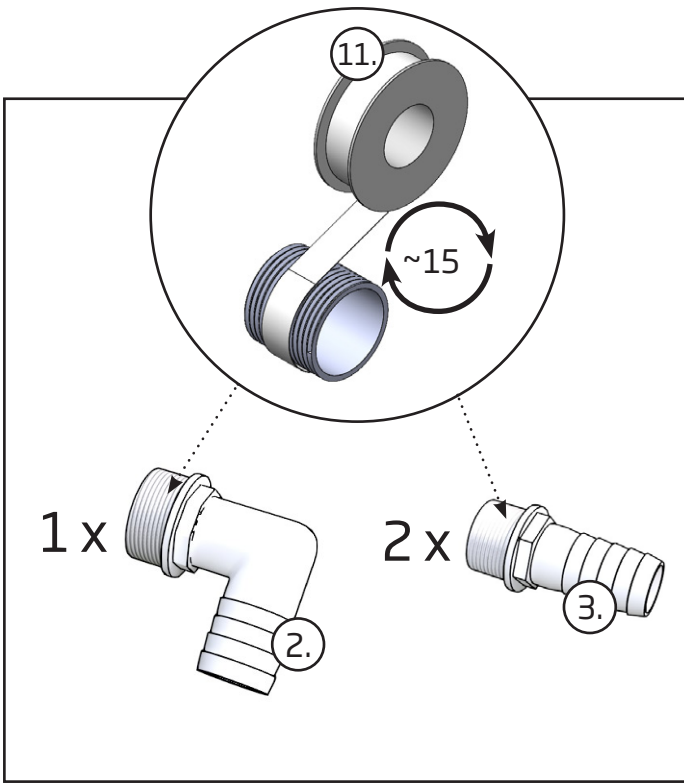


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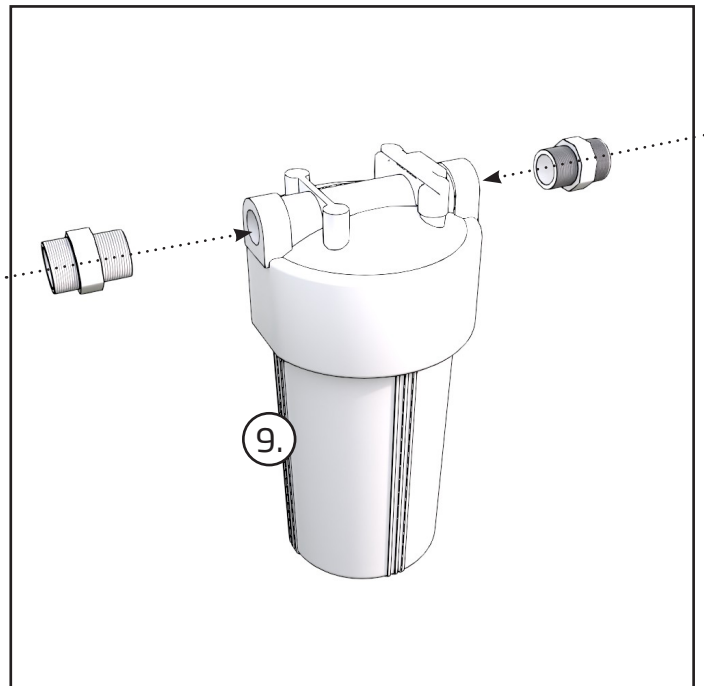
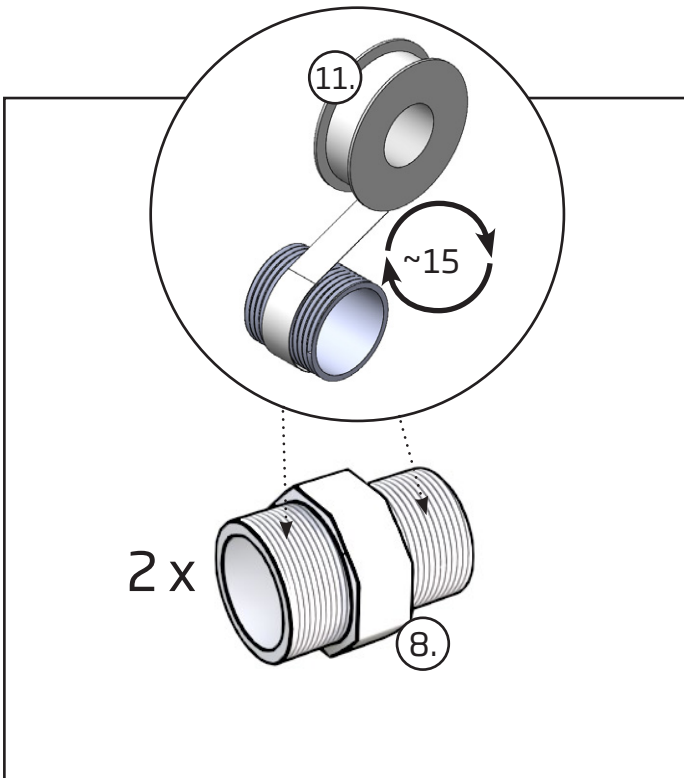
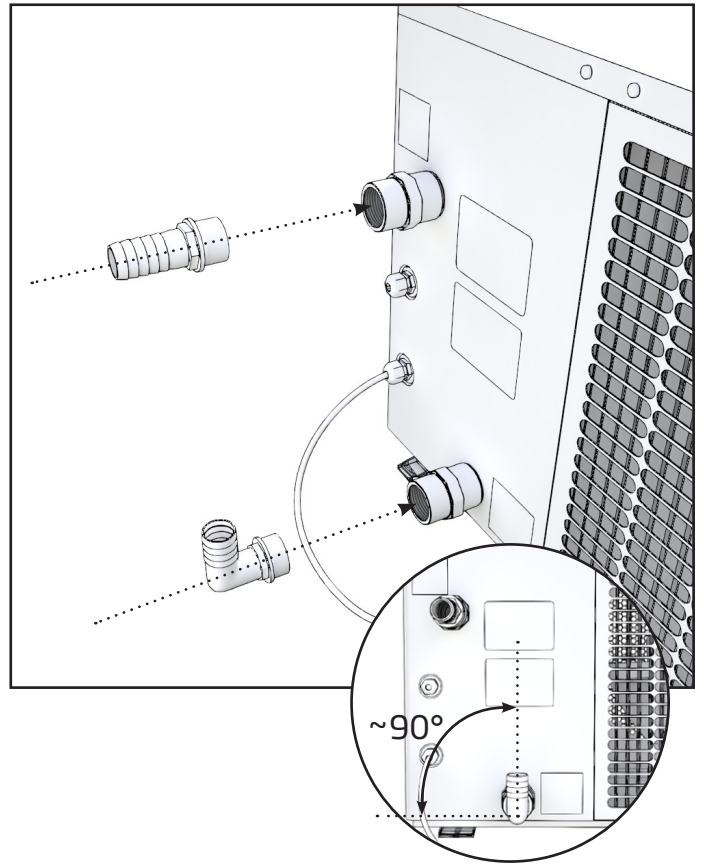
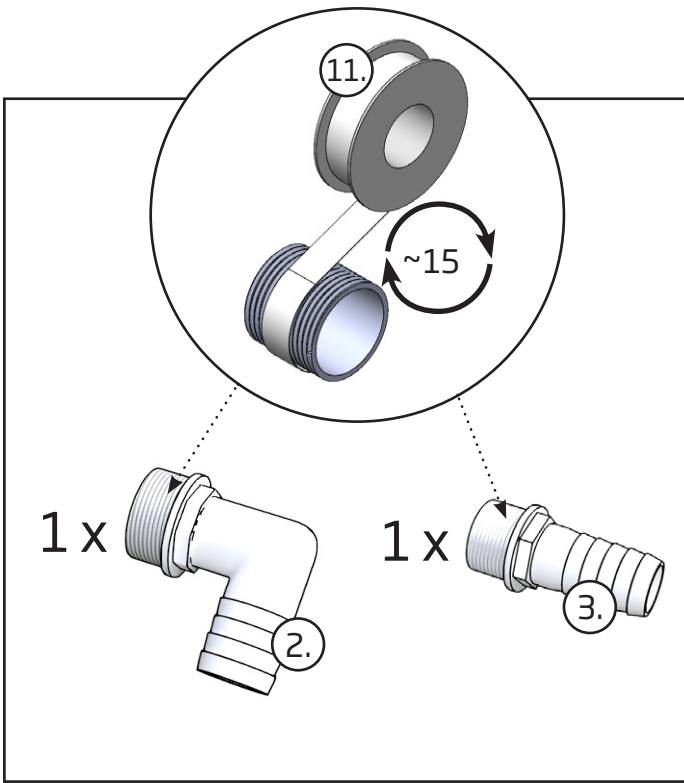


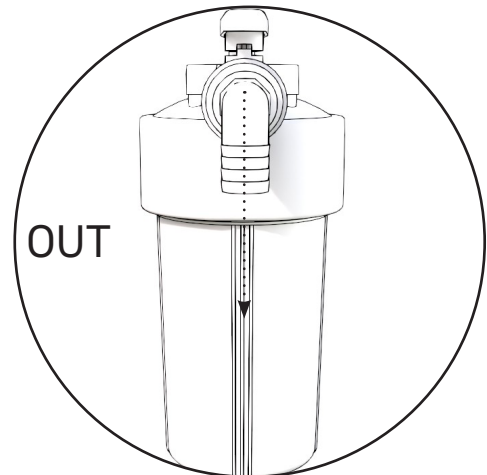
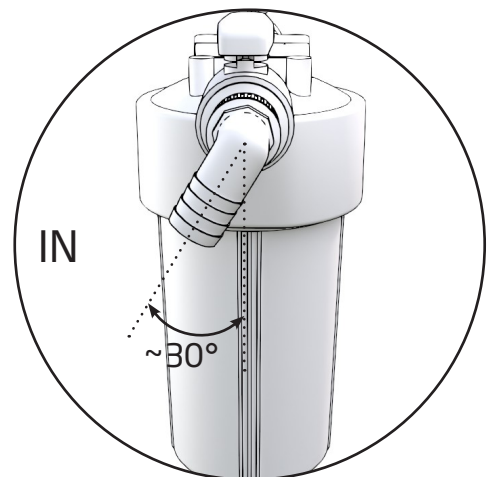
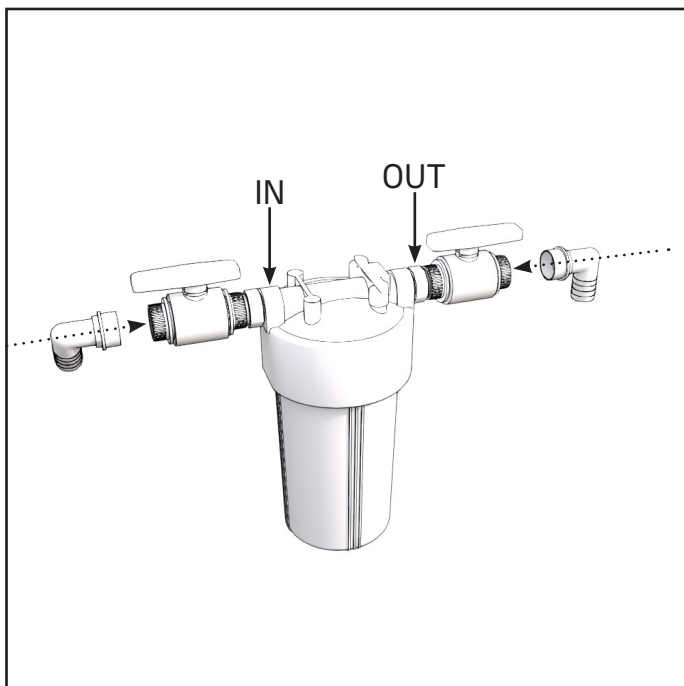
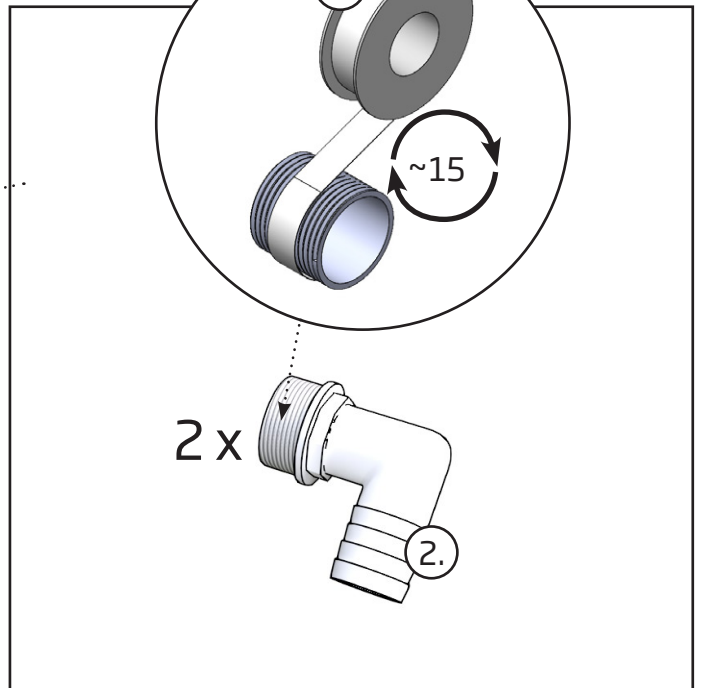
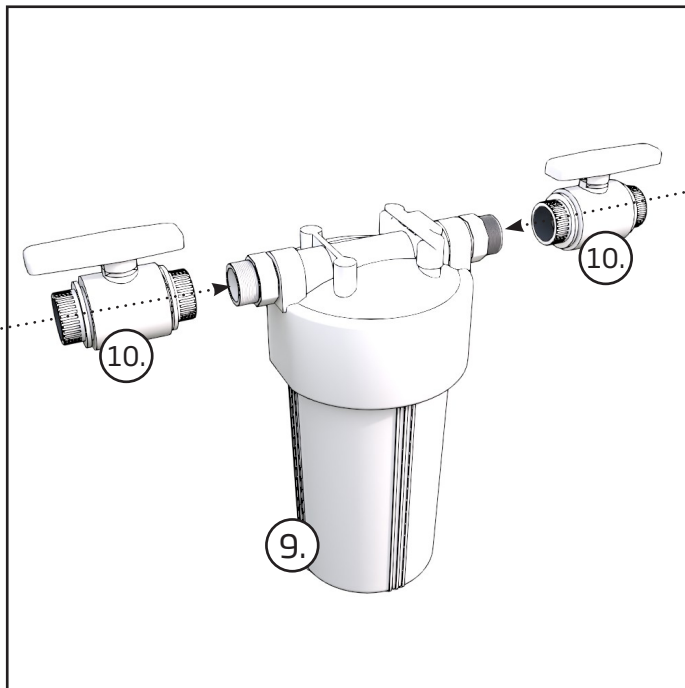


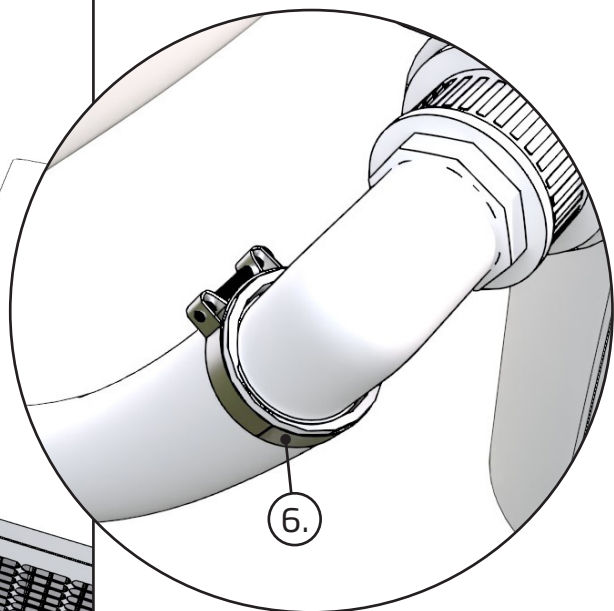
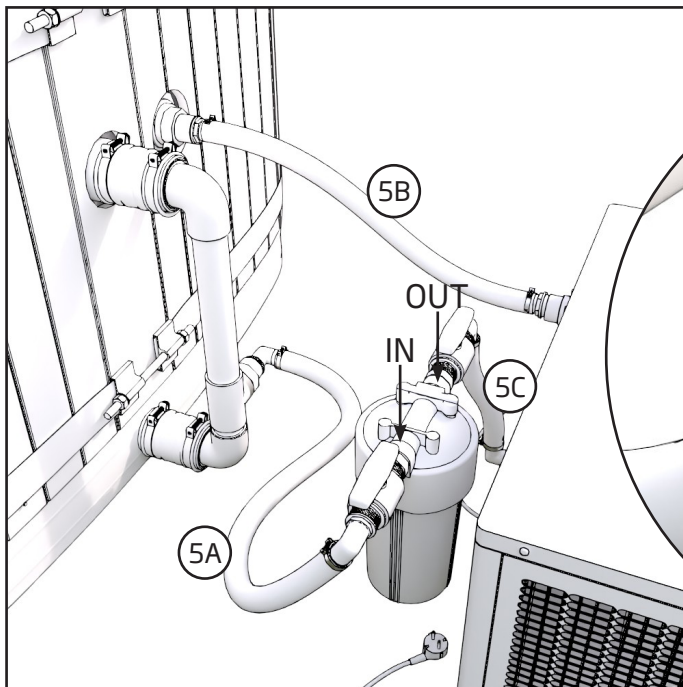
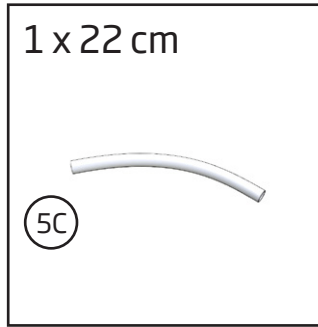
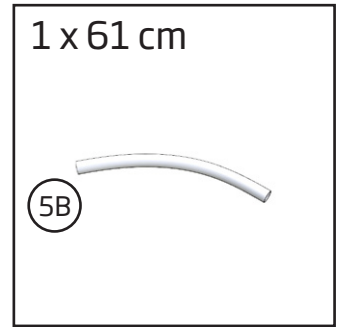
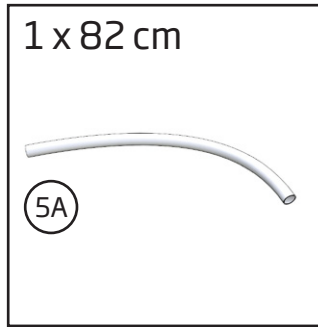
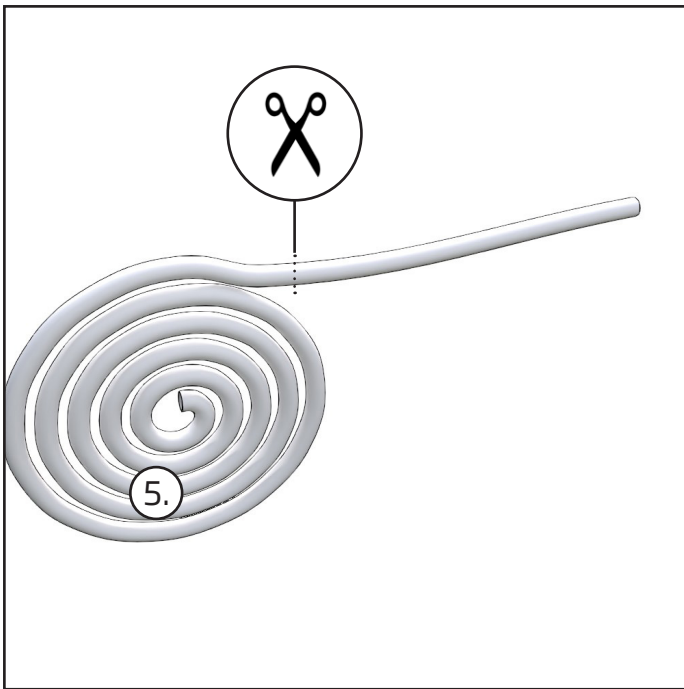












## FILLING THE POOL AND LETTING AIR OUT OF THE UNIT

Depending on the pool, filling the pool and removing air are done slightly differently.

### BlackIce S and NordicIce S - Pool Filling and Air Removal from the Unit

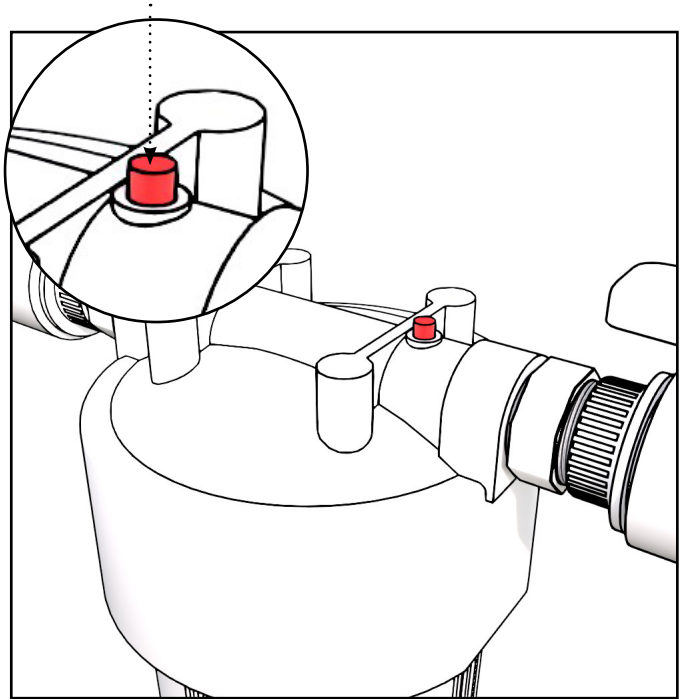
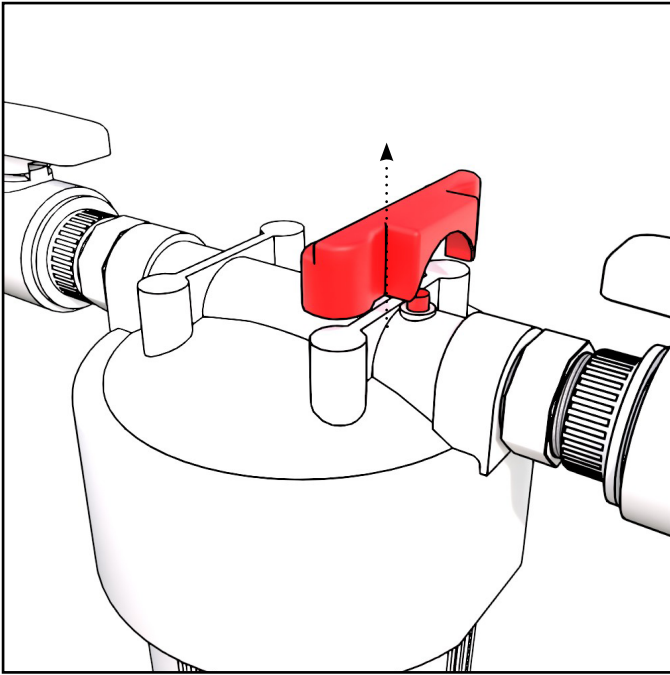


Remove the protective grilles from the valves shown in the image. Plug the lower front valve with the supplied plug.



When filling the pool, use a water hose to run water through the upper valve to remove air from the unit. Start the dual heat pump.

If no air comes out of the unit and error P01 appears on the display after one minute, unplug the device and restart it. Once you see water flowing, fill the pool to your desired level.



Also remove the air from the filter by first lifting the cover off the top of the filter. Press the air release button on top of the filter until water starts flowing out of the opening.



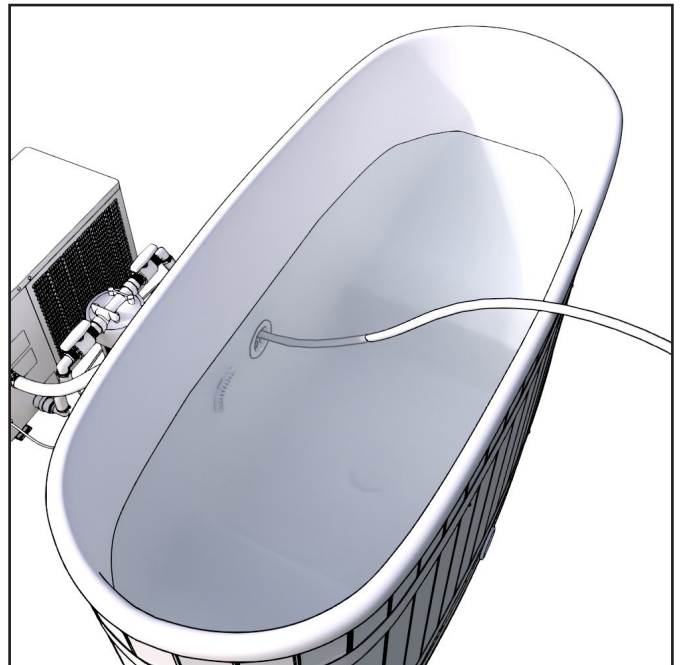
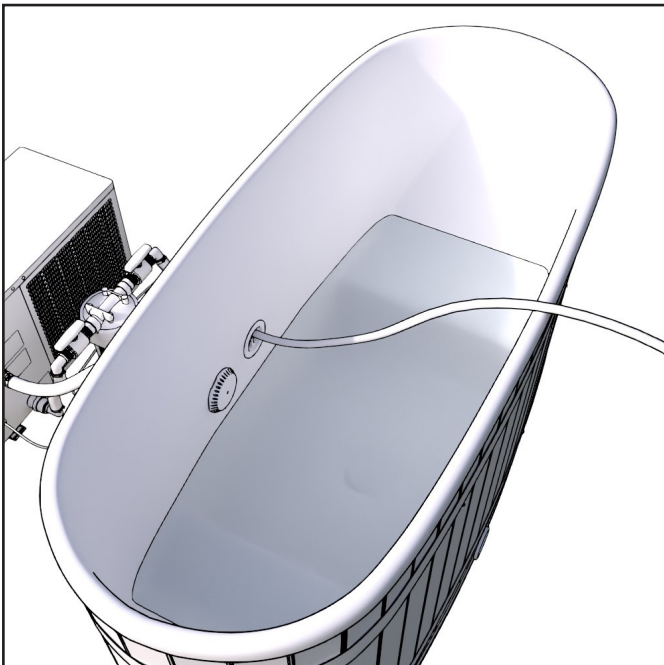
Once the water is circulating in the unit, remove the plug and replace the protective grilles.



## As a heater replace - Pool Filling and Air Removal from the Unit



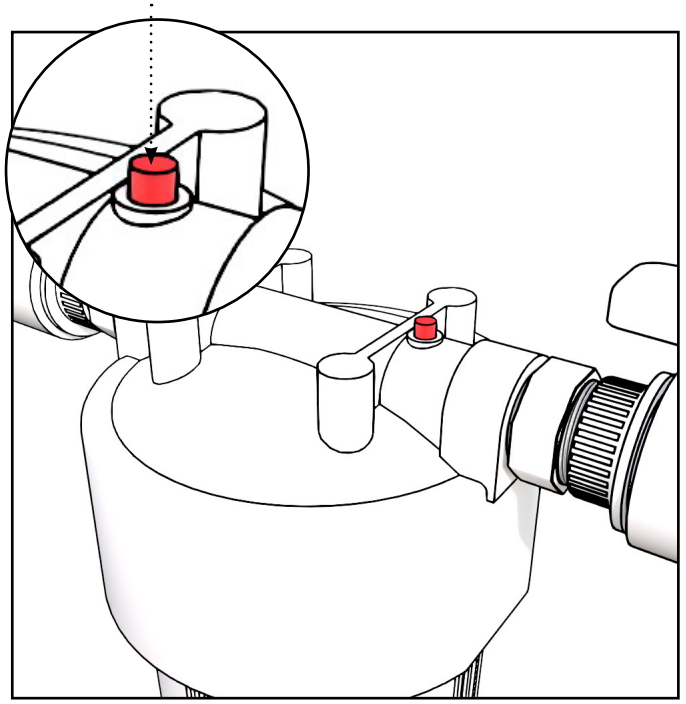
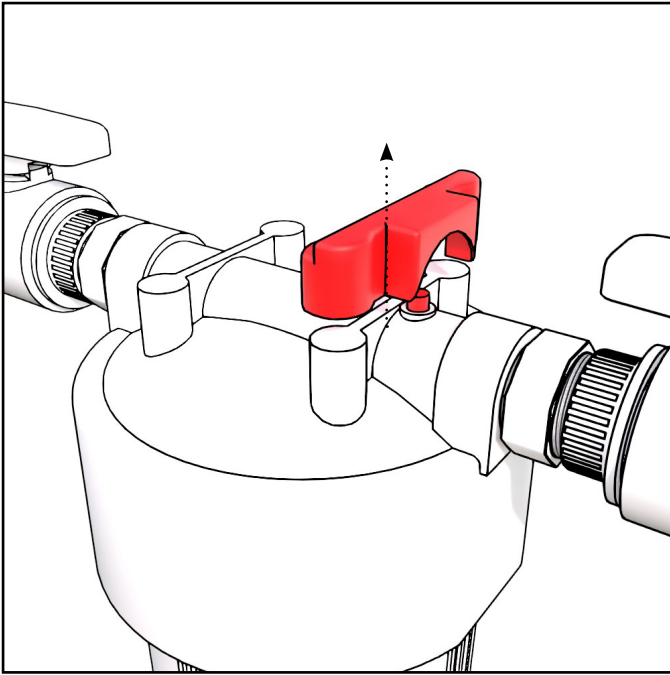
Remove the protective grilles from the valves shown in the image. Plug the lower valve with the supplied plug.



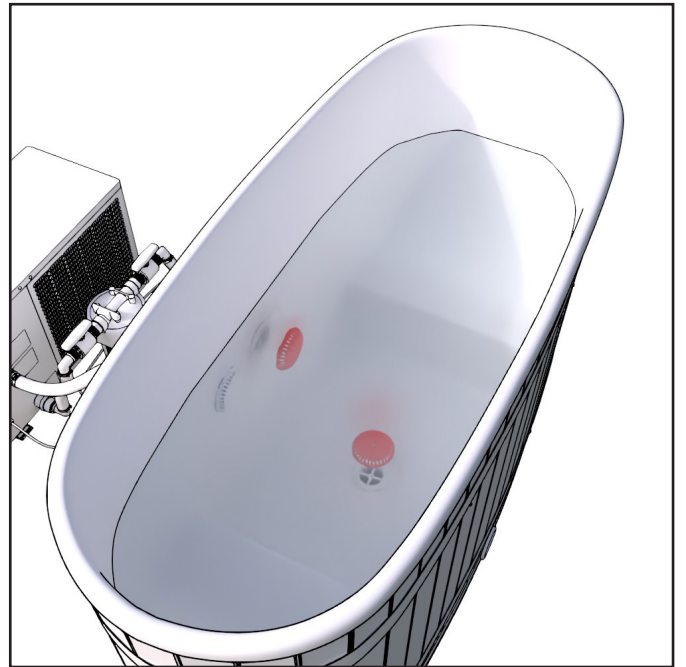
When filling the pool, use a water hose to run water through the upper valve to remove air from the unit. Start the dual heat pump.

If no air comes out of the unit and error P01 appears on the display after one minute, unplug the device and restart it. Once you see water flowing, fill the pool to your desired level.





Also remove the air from the filter by first lifting the cover off the top of the filter. Press the air release button on top of the filter until water starts flowing out of the opening.







Once the water is circulating in the unit, remove the plug and replace the protective grilles.

# OPERATION






## Controller Interface





## Power and Screen Lock

To unlock, press any key to light up the screen and long press on/off icon 5 seconds until you hear a "beep" sound.	
The lock icon disappears	
Long press the on/off icon to turn the device on or off. If no button is pressed within 60 seconds, the controller will automatically lock.	
When locked, the lock icon is displayed	







## Modes (Cooling / Heating / Auto)

When the unit is on, short press key to select the operating modes The circular selecting sequence is Cooling -> Heating -> Auto -> Cooling... (continual loop) NOTE: Auto mode there is a delay in changing the cooling / heating direction.	
The heating icon will display when heating mode is on.	
The cooling icon will display when cooling mode is on.	
When running in Auto mode, loop icon and cooling icon will display.	 

## Temperature Setting





When the cooling unit is on, unlock the screen (see "Power and Screen Lock")	
Press up or down icons to adjust the temperature.	 
No actions for 3 seconds will exit the display showing the current water temperature.	









## Time Setting

Enter Time Setting: Long press the key for 5 seconds until the digit in both "hour" and "minute" parts flash.	
Time Setting Method: On the time setting interface, short press.	
Then the hour digit in area will blink.	
Press up or down icons to adjust hour.	 
Press clock icon to switch to Minute part and repeat above actions.	
When setting is done, press clock icon to save the setting and to exit to main interface.	









## Power ON/OFF Timer Setting ("Active Mode")

- Users can set up two ON/OFF "active mode" timer periods. The set periods may not overlap.
- Power ON/OFF Timer Setting Method

On main interface, short press clock icon to enter power on/off timer setting.	
When "1" is blinking, press clock icon to enter the power ON hour part setting of "active mode" period 1.	
When the hour part is blinking, press up or down icon to adjust the hour.	 

Press clock icon to confirm and to enter the minute part.	
When power ON minute part is blinking, press up or down icon to adjust the minute.	 
Press clock icon to confirm the power ON minute part and enter power OFF timer setting of period 1. Repeat above actions.	
When setting is done, long press clock icon to confirm and save the current power ON/OFF timer setting.	
Press up or down icons to enter setting of "active mode" period 2 and repeat above actions.	 
Valid timer group will be shown on the main interface with corresponding number. Short press on/off to main menu.	

## Ozonator Setting

When the cooling unit is on, long press the on/off button if the screen is locked.	
Long press the mode button so that L0 appears on the screen.	
Use the down arrow icon to change the value to L11 and press mode (short).	 
Use the arrow icons and to change the value to 0, 1 or 2 (see table below).	 
Press the mode button (short) and then the on/off button (short). (The ozone generating timing starts when the unit is turned on)	 

Code	Parameter Name	Setting Range	Factory Default
L11	Ozonator control method	0: No ozone generating 1: Ozone generating 5 minutes every hour (55 minutes standby) <ul style="list-style-type: none"> <li>• Private use</li> </ul> 2: Ozone generating 10 minutes every hour (50 minutes standby) <ul style="list-style-type: none"> <li>• Heavy / public use</li> </ul>	1

## GENERAL MAINTENANCE AND QUALITY OF WATER

Maintenance of the pool. Make sure the water stays clean and clear. Depending on the utilization frequency, occasional use of chlorine might be needed to disinfect the water (especially in heavy public use).

On daily basis:

- Check the water level.

On weekly basis:

- Clean the possibly stained water line and the filter.
- Flush the filter thoroughly under warm running water or shower (do not use pressure washers as it may damage the filter material).
- The filter cartridge should be replaced always, if after cleaning the filter, the water circulation is not at normal level. Depending on the rate of usage, filter should be replaced every 2 to 4 months.
- Check the water pH level which should be maintained on normative level (7,2- 7,6). When needed, you can finetune the pH level by using pH+ or pH- chemicals.

Using chlorine:

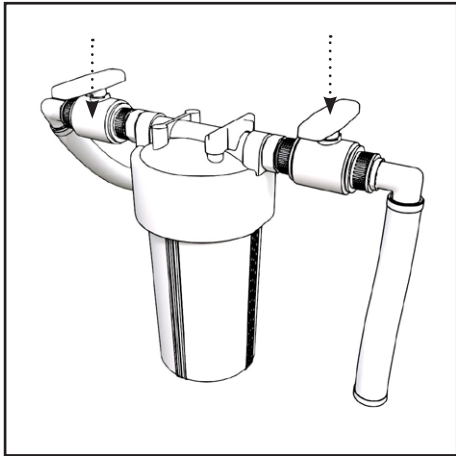
- Should the pool be in heavy daily use, it is recommended to add half teaspoon of chlorine (natriumdiklorisocyanurat, dihydrat) to the water to reach the 0,3 - 1,2 ppm free chlorine level.
- If the number of the users exceeds 10 users/day, or if the water temperature exceed 15C, it is recommended to add chlorine (natriumdiklorisocyanurat, dihydrat) frequently to the water in order to maintain 0,3 - 1,2 ppm free chlorine level.

### Maintenance tips

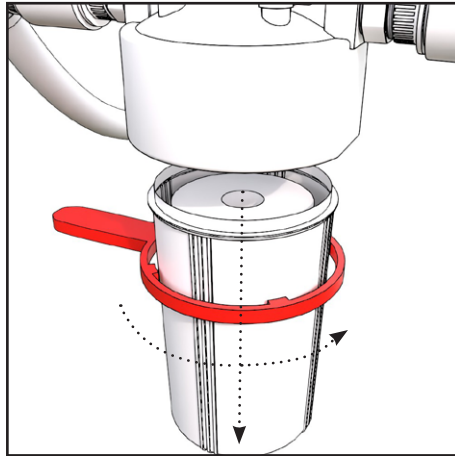
- Check the power and cable connections regularly. If any problems found, contact your local dealer.
- Clean/vacuum the cooling unit regularly (usually 2-4 months) to ensure free ventilation.
- When the cooling unit is not in use, plug it off.
- If the cooling unit is not in use for a longer period, let all water out from the cooling unit.
- Do not use salt or other minerals in the water.
- Troubleshooting
  - If the control panel is blank and the cooling unit is not running, check the power supply and/or if the residual-current device has activated. If the power supply is ok but the residual-current device has turned off the power, push the reset button to re-start the unit. Should the problem remain, unplug the device and contact the retailer or manufacturer.
  - If there is no water circulation after switching the unit on, switch off the unit for a while and on again. This may happen due to air locks in the pipes. Repeat, if needed, until the water starts circulating.
  - If the water is not circulating properly, check the water level and condition of the filter (cartridge, if used). Add more water if needed. Clean the filter or replace cartridge, if needed. Should problem remain, please contact the retailer or manufacturer.

## FILTER CARTRIDGE CLEANING AND REPLACEMENT

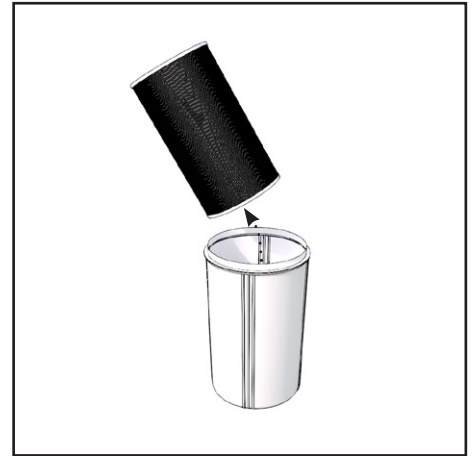
The filter must be routinely cleaned to keep the water in the system clean and to avoid filter clogging. Replace the cartridge filter when needed, usually every 2-4 months depending on volume of use.



Turn off the power to the unit and close both ball valves.



Remove the filter housing by rotating it. If the filter housing is tight and difficult to open, use the included opening tool.



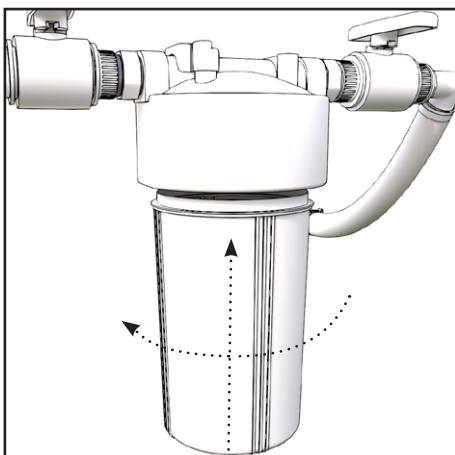
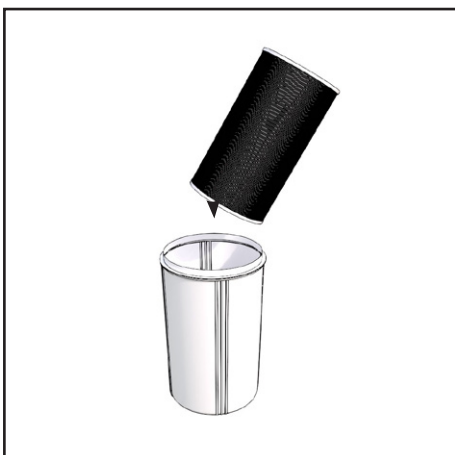
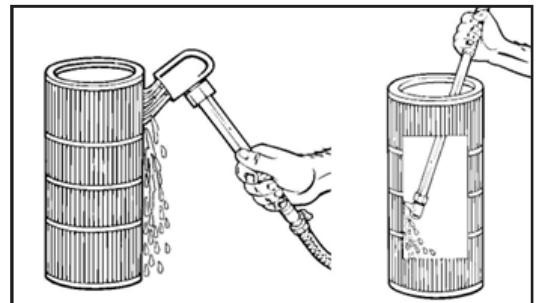
Remove the filter cartridge and clean the housing if necessary.

### Cleaning

For best results when cleaning the filter cartridge, it is recommended to first rinse it roughly with running water and then soak it completely in a bucket with "BioCool Clean my pool filter" filter cleaning tablets for at least 6 hours.

Then rinse again with running water and from the inside and outside. The cartridge can be cleaned by pressure from inside and outside only with a garden hose (Do not use high pressure). After hosing the cartridge, for best results, allow cartridge to dry and carefully brush pleated surface areas to remove fine particles.

The cartridge shall be replaced when needed and at least once per year.



Place the new or cleaned cartridge back into the housing.

Screw the housing back into place, tightening it by hand.



## ERROR MESSAGES ON DISPLAY

When the fault occurs, the corresponding error code will appear. After the error is eliminated, the error code will disappear. To reset the error code, restart the unit.

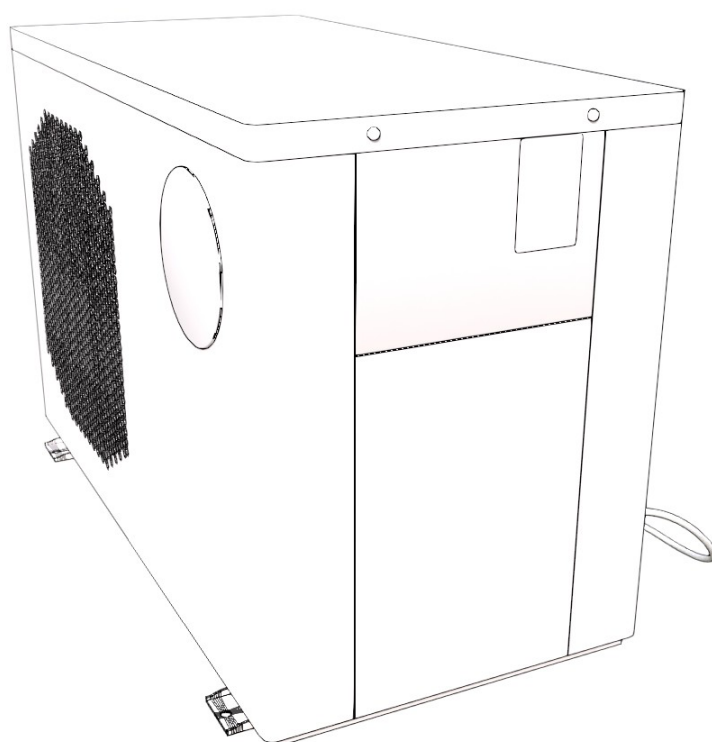
Vikakoodi	Kuvaus
E01	Gas exhaust temperature fault
E05	Coil temperature fault
E09	Gas suction temperature fault
E17	Inlet water temperature fault
E18	Outlet water temperature fault
E22	Ambient temperature fault
P01	Water flow switch fault
P02	High pressure protection
P06	Low pressure protection
P11	Gas exhaust temperature over high protection
P15	Inlet/outlet water excessive temperature protection
P16	Overcooling protection
P17	Standby anti-freeze protection
P25	Ambient temperature protection
P26	Outlet water over high temperature protection under heating mode
P27	Outside coil over high temperature protection under cooling mode

## WARRANTY

Refer to the warranty information in the device manufacturer's manual.

GEBRAUCHSANWEISUNG

# DUAL AVANTOPOOL WÄRMEPUMPE



Prüfen Sie unverzüglich den Inhalt der Lieferung!  
Lesen Sie die Gebrauchsanweisung sorgfältig durch und  
bewahren Sie sie für die Zukunft auf.

## ALLGEMEINES

Die folgenden Instruktionen sind allgemeine Hinweise. Ausführlichere und umfassendere Anleitungen finden Sie im Benutzerhandbuch, das im Lieferumfang von Dualex enthalten ist.

- Für Reparaturen wenden Sie sich bitte an den Kundendienst. Die Reparaturen müssen in strikter Übereinstimmung mit dieser Anleitung durchgeführt werden. Alle durch nicht professionelles Personal durchgeführten Wartungsarbeiten sind verboten und führen zum Erlöschen der Garantie.
- Eine falsche Bedienung kann zu Verletzungen von Personen oder zu Schäden am Gerät führen.
- Vergewissern Sie sich, dass das Becken gefüllt ist und die Luft aus den Rohren des Geräts entfernt wurde, bevor Sie das Gerät starten. Es ist verboten, das Gerät zu starten, bevor ein bestimmter Wasserstand erreicht ist. Andernfalls besteht die Gefahr, dass das Gerät beschädigt wird und die Garantie erlischt.
- Wenn die Stromzufuhr zu Reparaturzwecken unterbrochen werden muss, warten Sie nach dem Abschalten der Stromzufuhr 1 Minute, bevor Sie die Platine berühren, um eine Kondensatorentladung zu vermeiden, die zu einem Stromschlag führen könnte.
- Das Kühlgerät muss senkrecht in seiner Originalverpackung gelagert und transportiert werden. Ist dies nicht geschehen, warten Sie mindestens 24 Stunden, bevor Sie das Gerät einschalten.
- Die korrekte Stromversorgung, Spannung und Frequenz müssen vor der Montage überprüft werden.
- Eine unsachgemäße Montage kann zu Bränden, Stromschlägen, dem Herunterfallen des Geräts oder dem Austreten von Wasser führen.
- Achten Sie darauf, dass kein Wasser in die elektrischen Komponenten eindringt.
- Die Kühleinheit kann durch eine starke Überhitzung des Geräts aufgrund von Nachlässigkeit beschädigt werden, z. B. durch Abdecken der Lüftungsgitter der Kühleinheit mit Handtüchern, Kleidung oder anderen Gegenständen oder durch den Betrieb der Kühleinheit zu nahe an einer Wand oder in einem Raum/Ort mit unzureichender Belüftung.
- Verwenden Sie kein Salz oder andere Mineralien im Wasser.
- Dieses Gerät ist nicht für den Gebrauch durch Kinder bestimmt. Kinder müssen während der Benutzung von einem Erwachsenen beaufsichtigt werden, um ihre Sicherheit zu gewährleisten.
- Personen mit Herzkrankheiten, niedrigem oder hohem Blutdruck, Kreislaufproblemen, Diabetes oder anderen Erkrankungen, die eine medizinische Behandlung erfordern, sollten vor der Benutzung des Beckens einen Arzt konsultieren.
- Personen, die Medikamente einnehmen, sollten vor der Benutzung des Beckens einen Arzt konsultieren, da einige Medikamente Schläfrigkeit hervorrufen können, während andere Medikamente die Herzfrequenz, den Blutdruck und den Kreislauf beeinflussen können.
- Schwangere Frauen sollten vor der Benutzung des Beckens einen Arzt konsultieren.
- Das Gerät sollte nicht in direktem Sonnenlicht verwendet werden, da es sonst zu einer Überhitzung kommen kann.



Im Winter oder wenn die Umgebungstemperatur unter 0°C fällt, muss das Wasser aus der Kühleinheit entleert werden, wenn diese nicht in Gebrauch ist. Andernfalls kann das Gerät durch Einfrieren beschädigt werden, wodurch die Garantie erlischt. Das Gerät sollte bei Umgebungstemperaturen unter -7°C nicht im Freien verwendet werden.

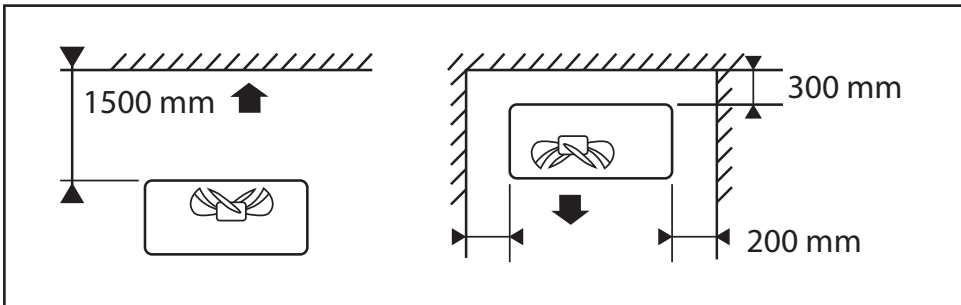


Wenn die Umgebungstemperatur unter 0°C liegt, lassen Sie das Gerät bitte laufen und im "Automatic"-Modus. Verwenden Sie nicht den "Active mode"-Timer. Andernfalls wird das System einfrieren.

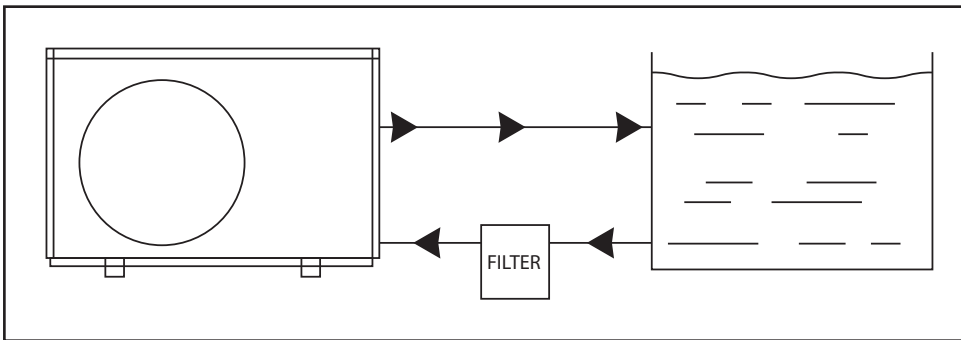
## MONTAGEABSTAND

Die Kühleinheit sollte an einem gut belüfteten Ort montiert werden. Dabei sind die folgenden Abstände einzuhalten:

- Mindestabstand zwischen Gerätefront und Wand = 1500mm (150 cm)
- Mindestabstand zwischen Geräterückseite und Wand = 300 mm (30 cm)
- Mindestabstand zwischen den Seiten des Geräts und der Wand = 200 mm (20 cm)



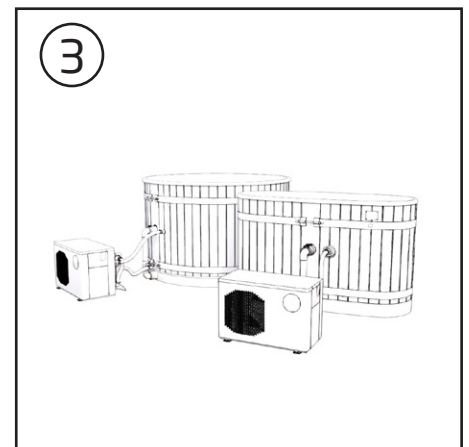
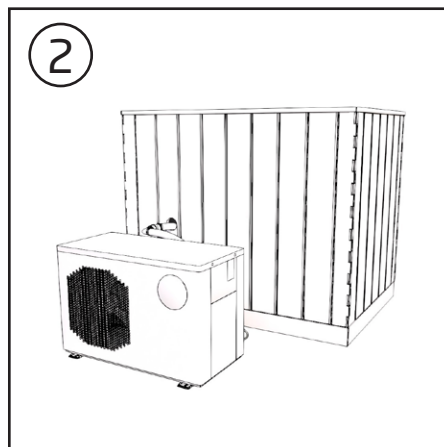
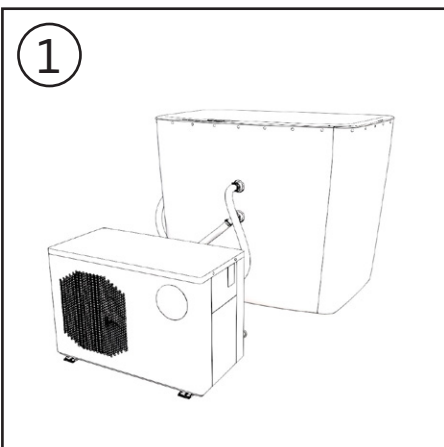
## Wasserzirkulation zwischen der Einheit und dem Becken



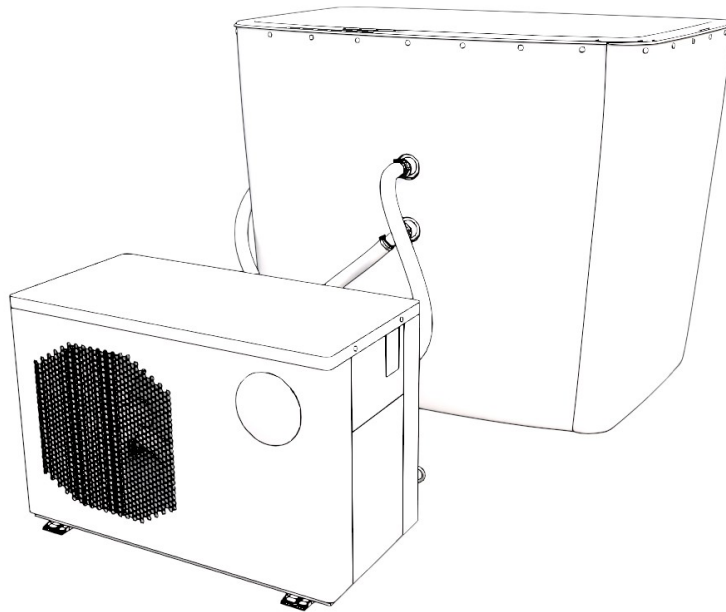
## MONTAGE AN DAS BECKEN

Die Dualex-Luftwärmepumpe kann an einer Vielzahl verschiedener Becken montiert werden. Eine Anleitung für jedes Becken finden Sie in der folgenden Reihenfolge:

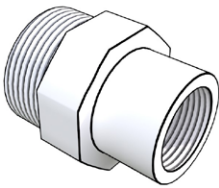
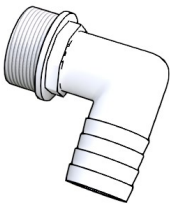
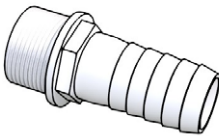
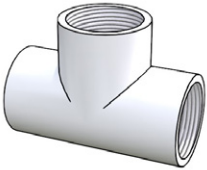


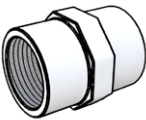
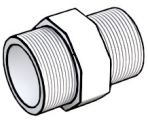
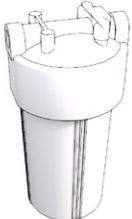
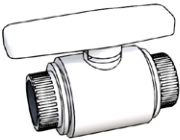
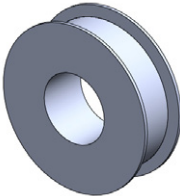
1. Comfort BlackIce S
2. Premium NordicIce S
3. Montage anstelle eines Heizgeräts

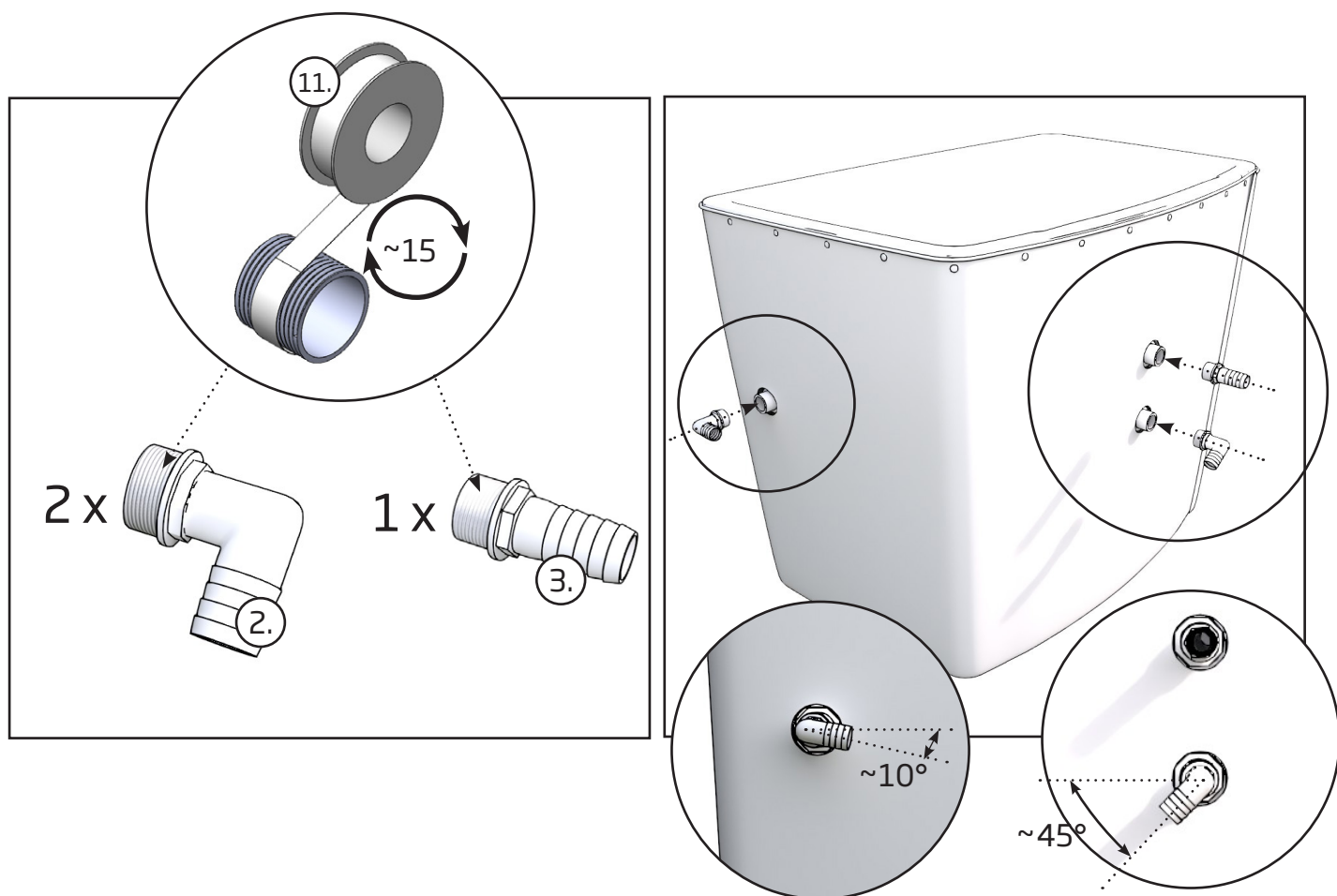
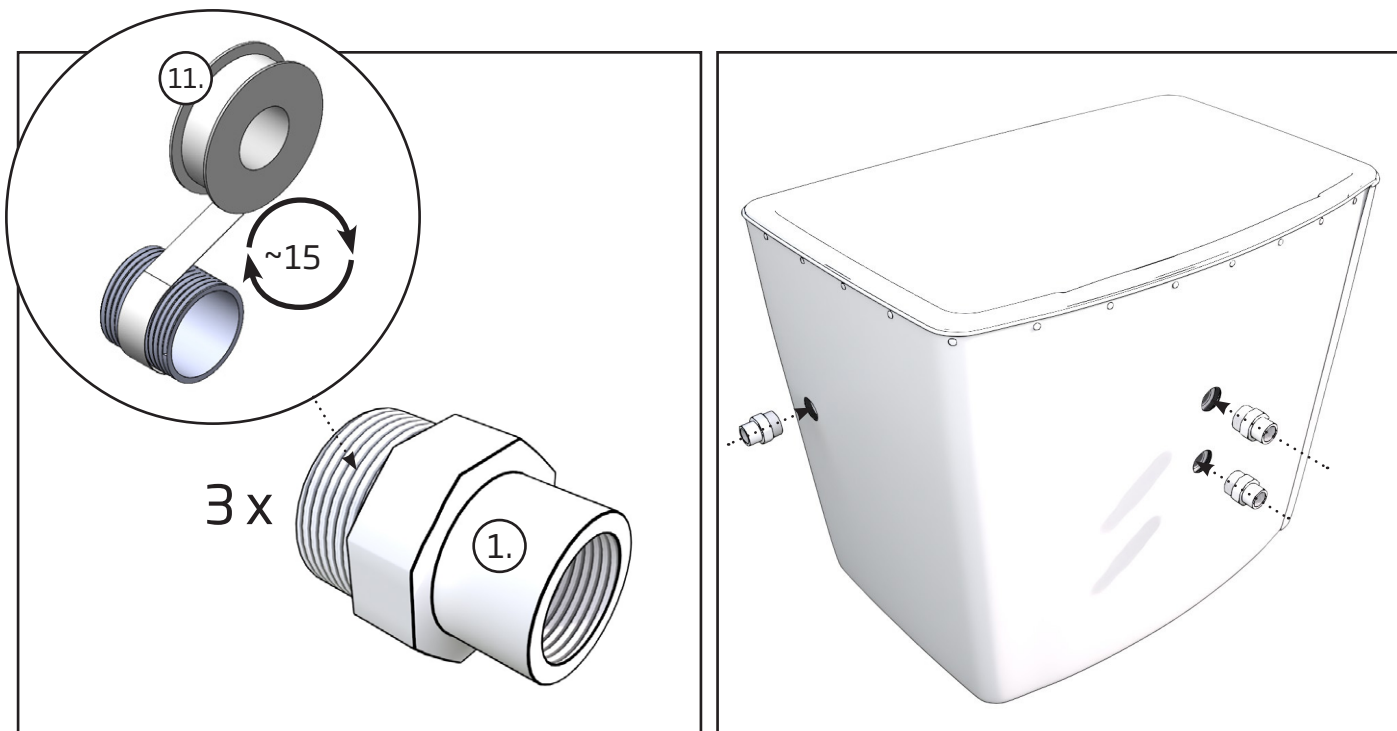


## 1. COMFORT BLACKICE S

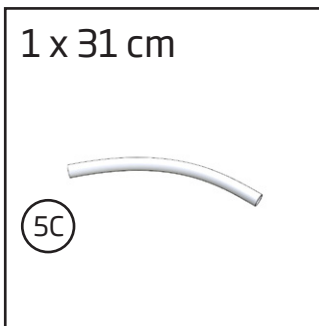
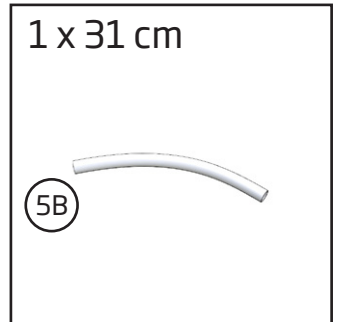
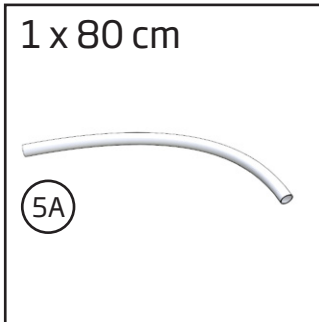
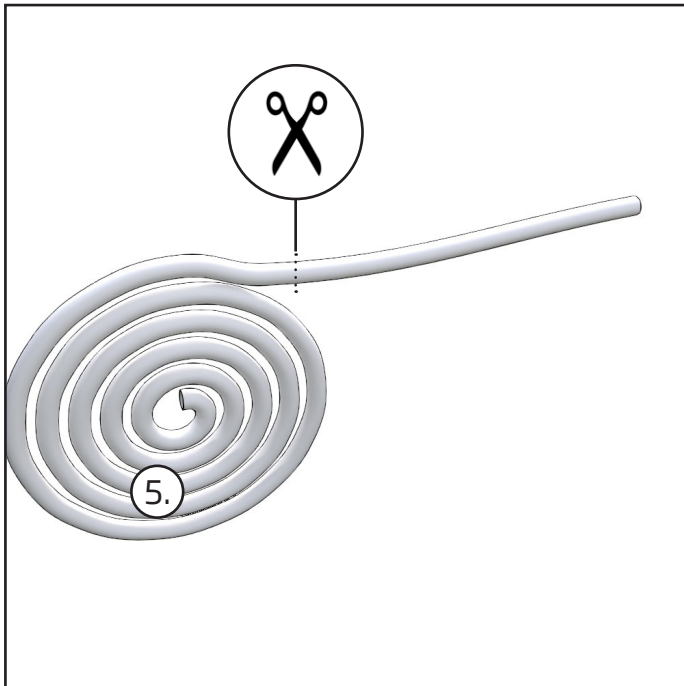
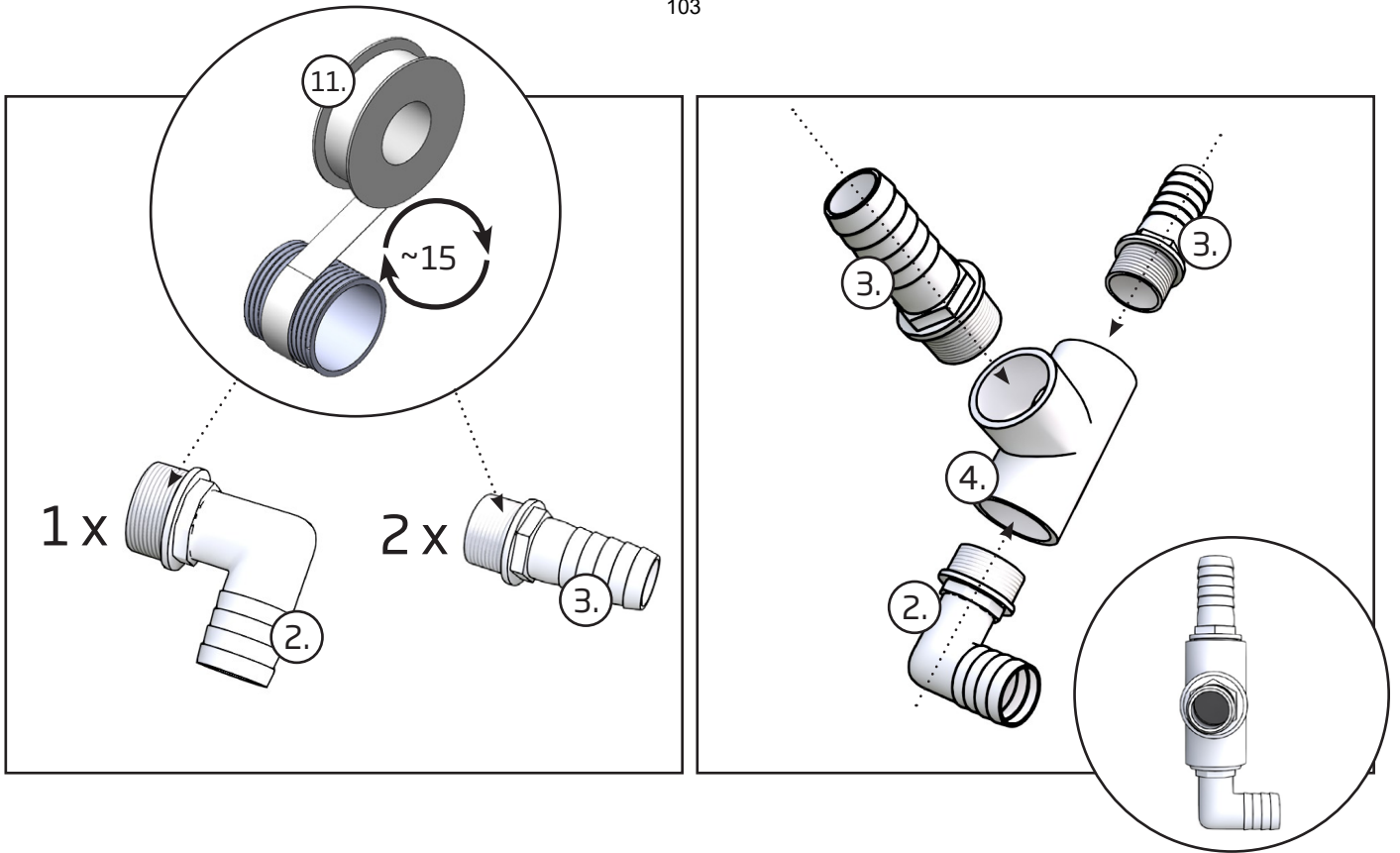


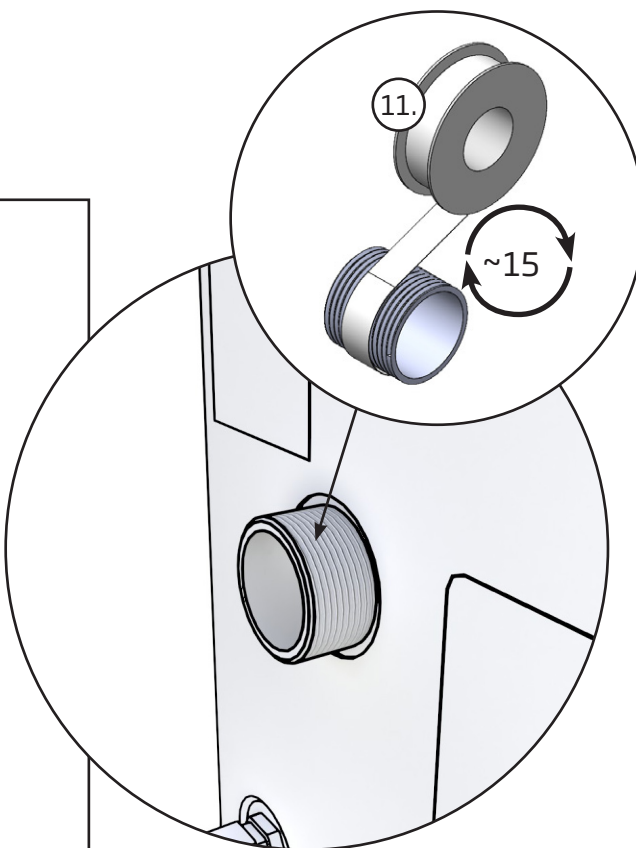
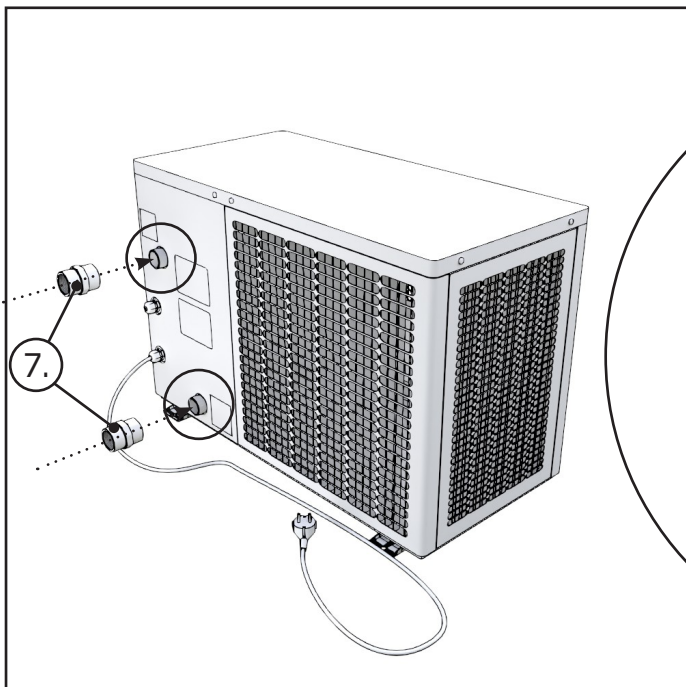
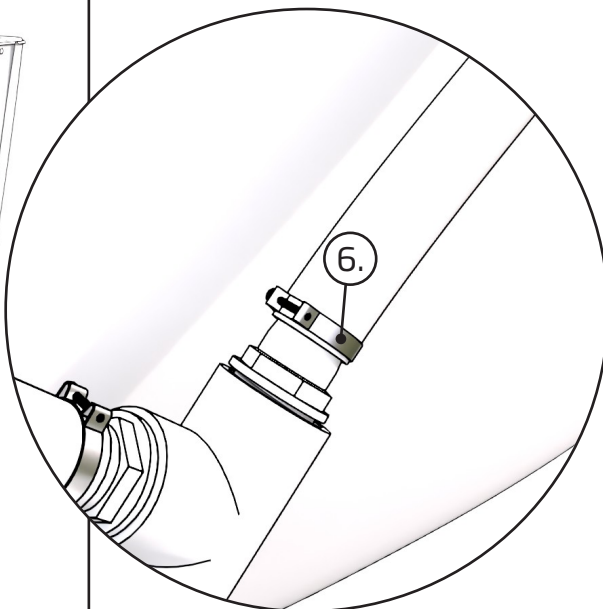
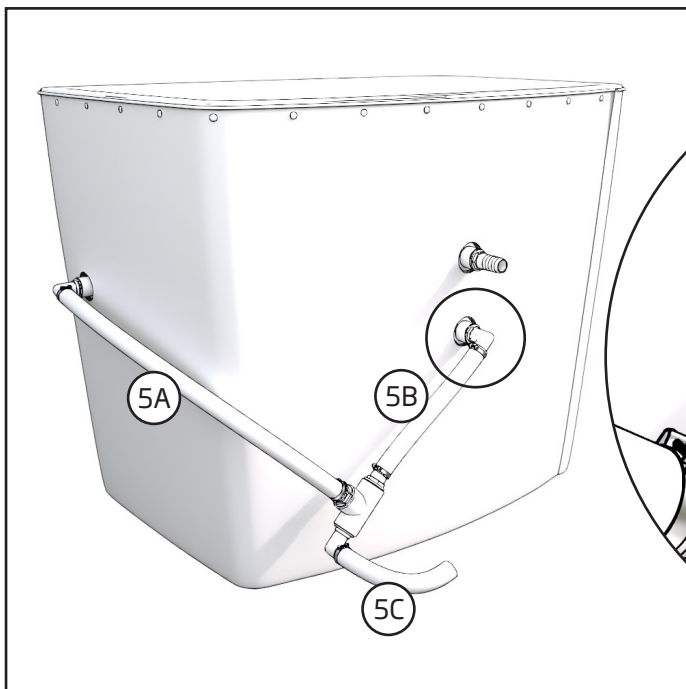
## TEILELISTE

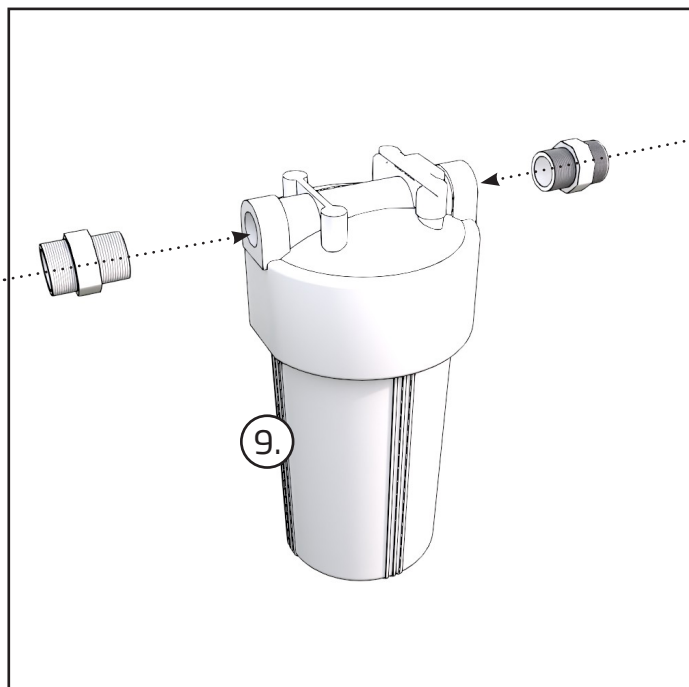
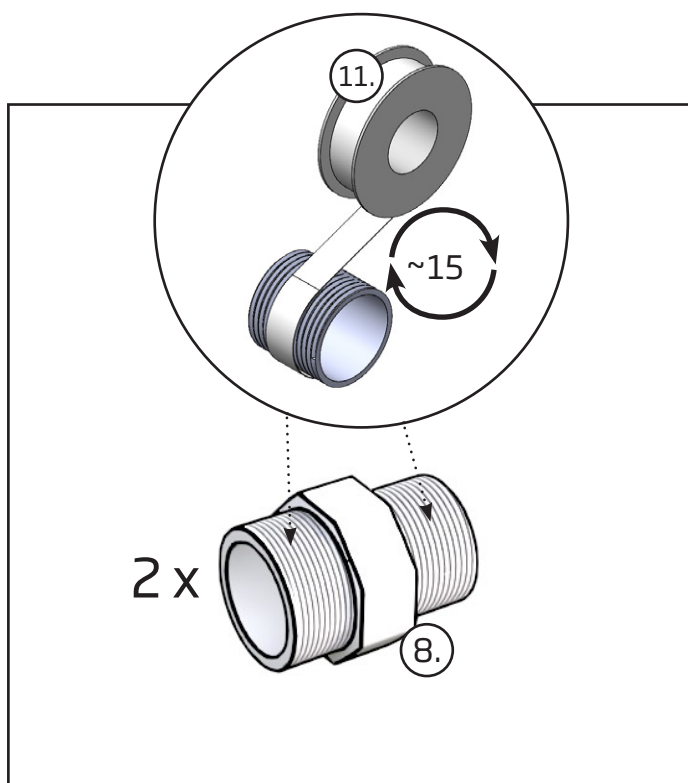
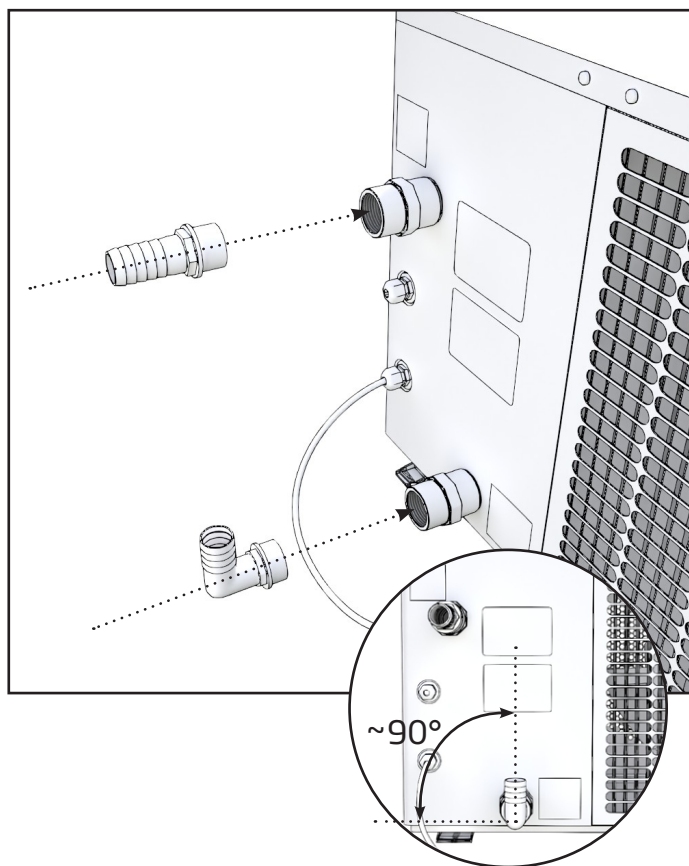
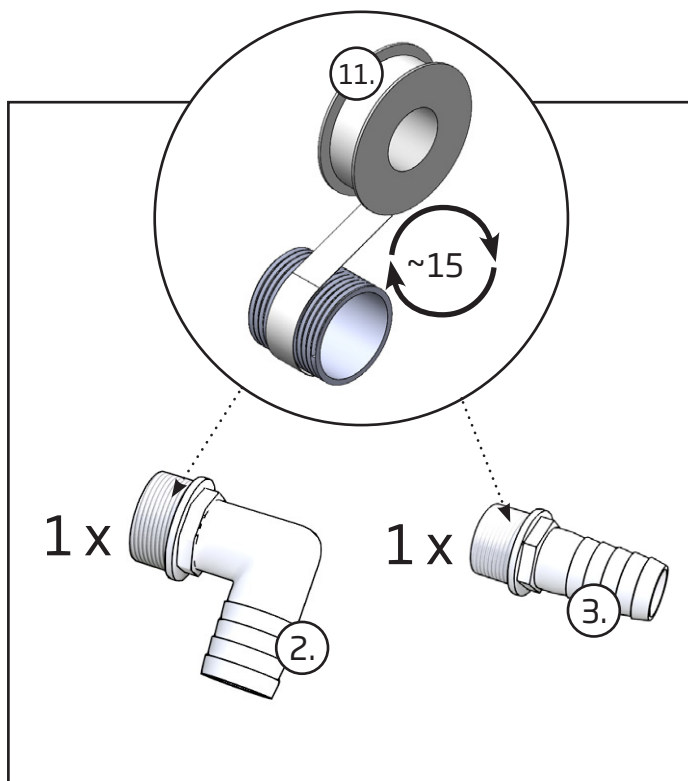
<p>① x3</p> 	<p>② x6</p> 	<p>③ x4</p> 	<p>④ x1</p> 
<p>⑤ 2,5 m</p> 	<p>⑥ x10</p> 	<p>⑦ x2</p> 	<p>⑧ x2</p> 
<p>⑨ x1</p> 	<p>⑩ x2</p> 	<p>⑪</p> 	

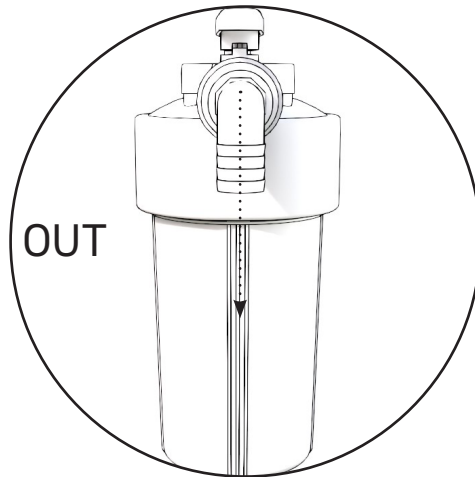
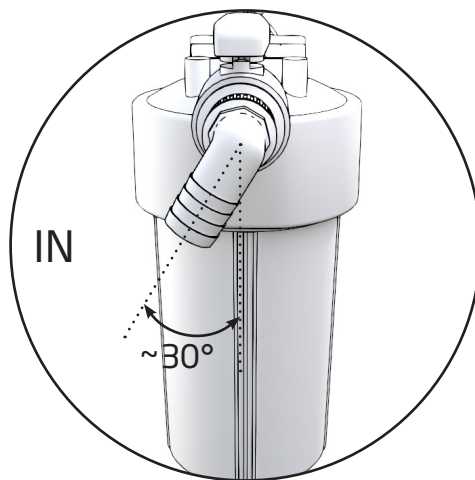
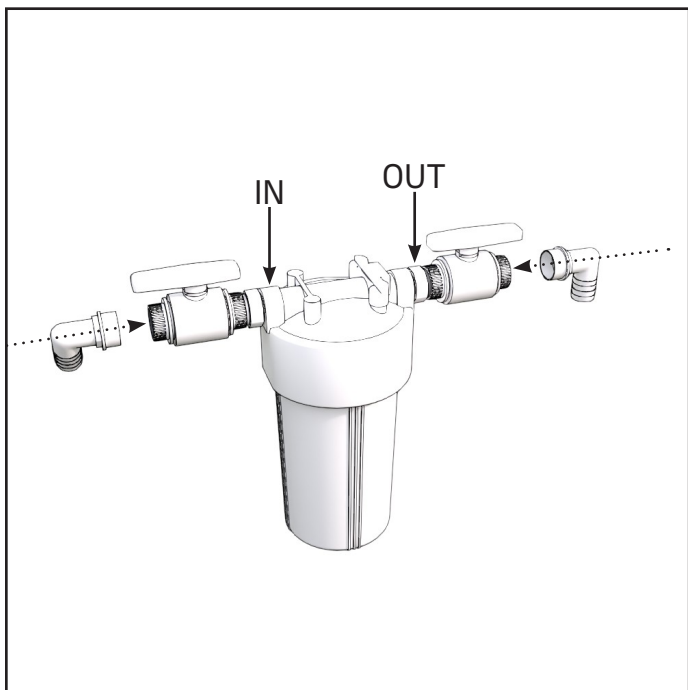
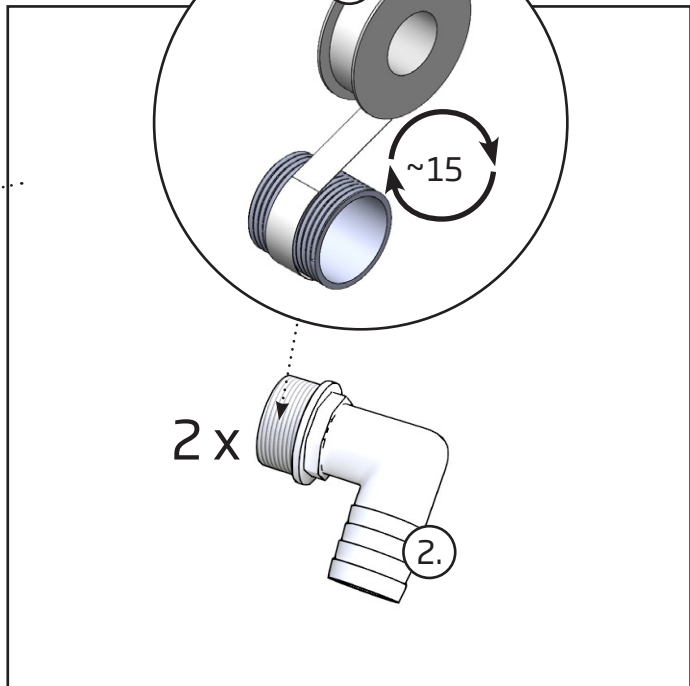
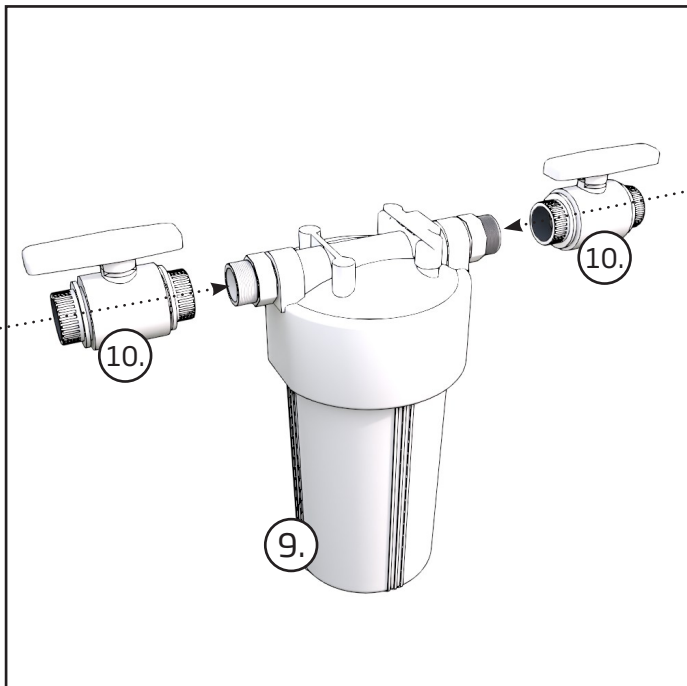


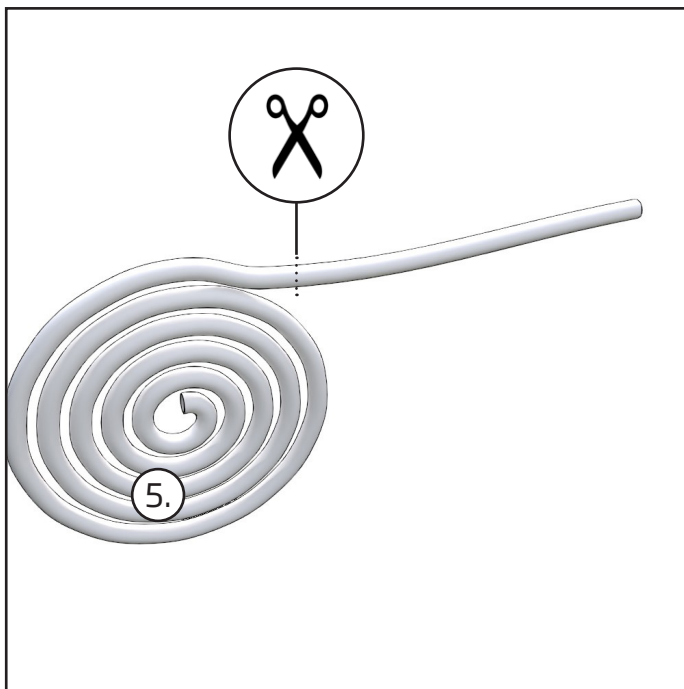








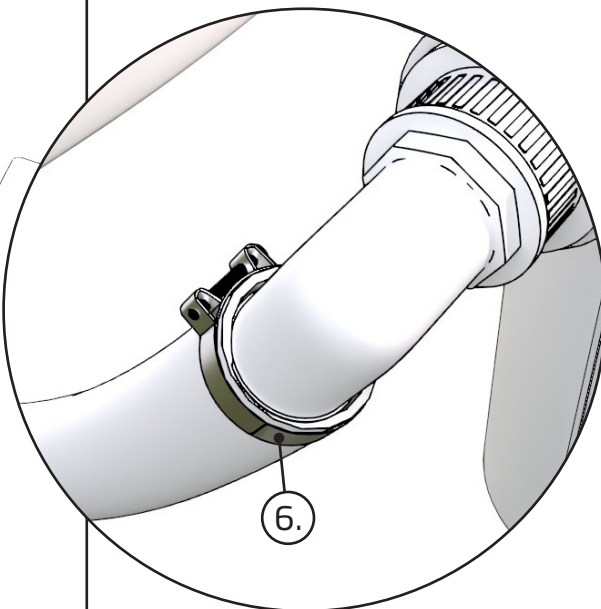
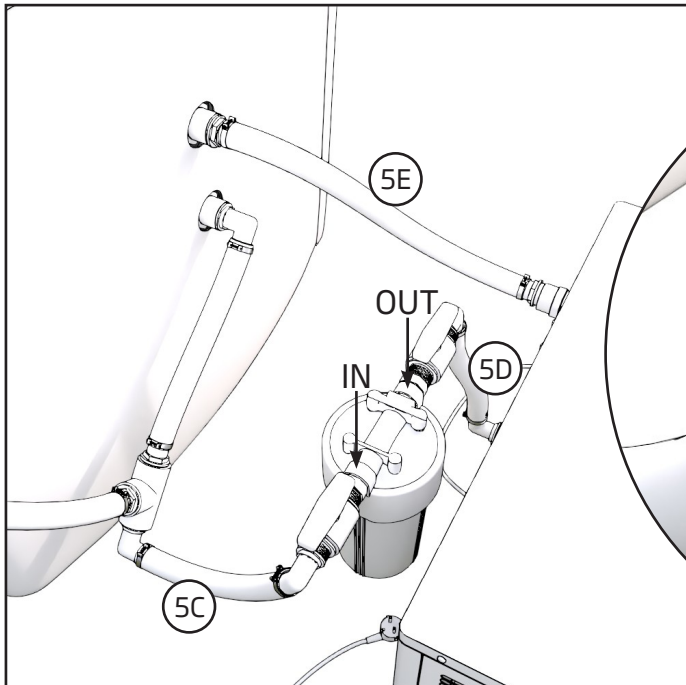




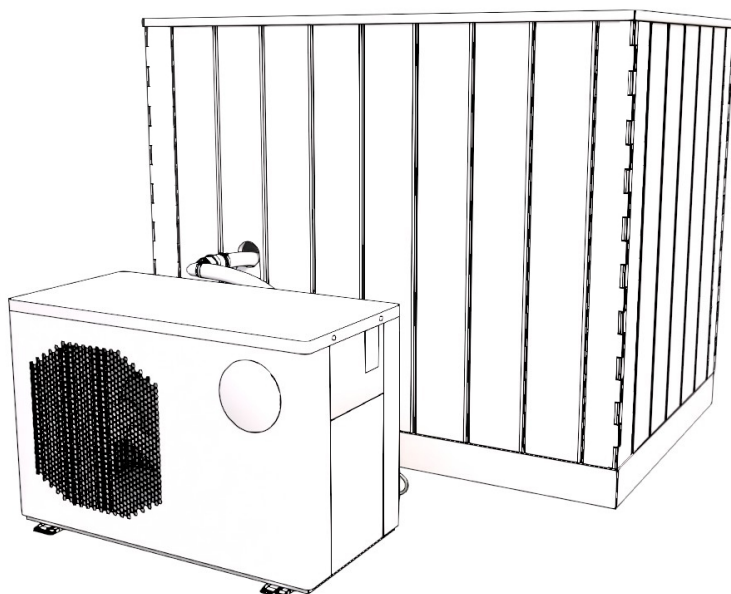
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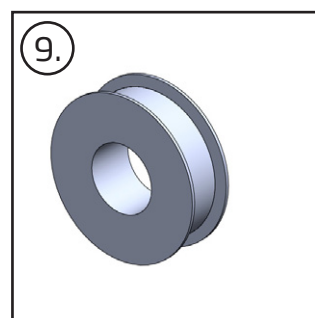
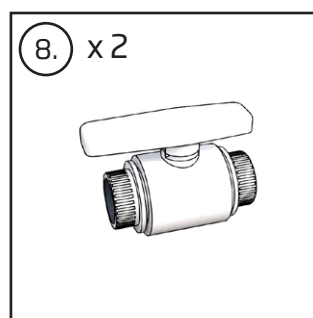
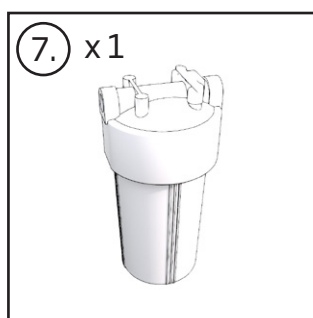
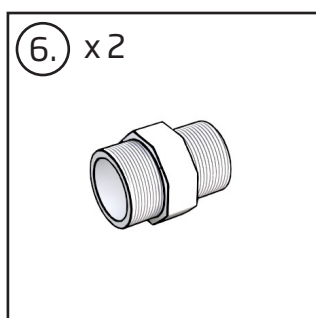
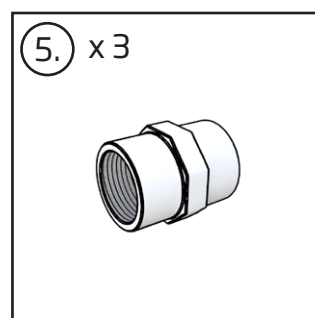
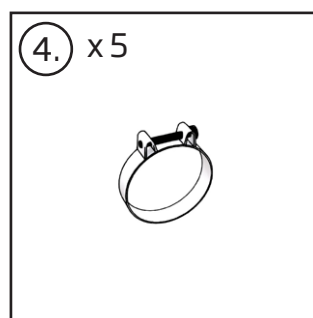
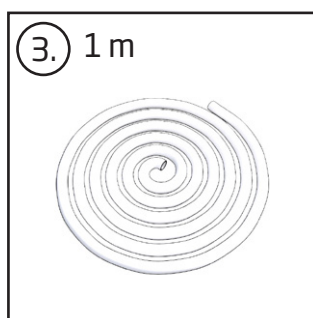
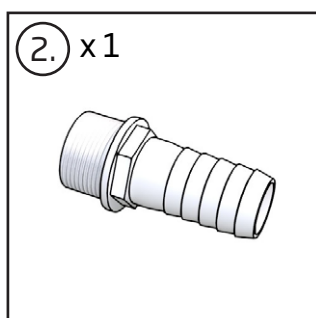
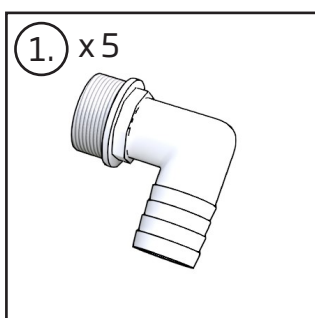
1 x 58 cm



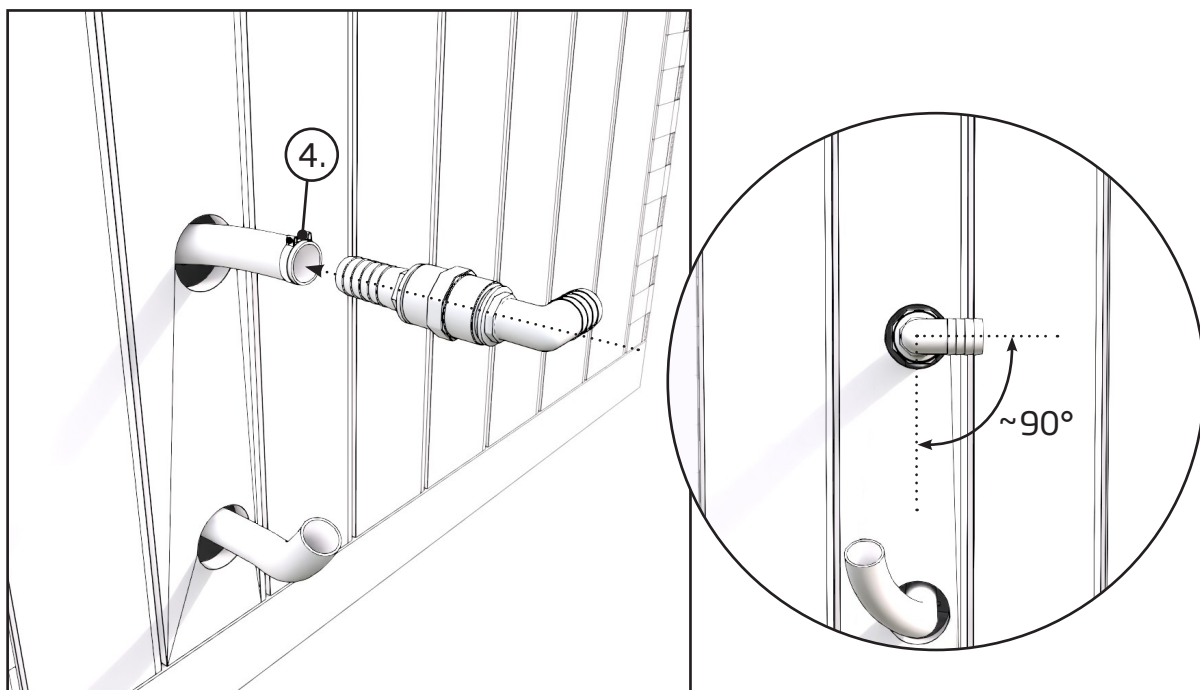
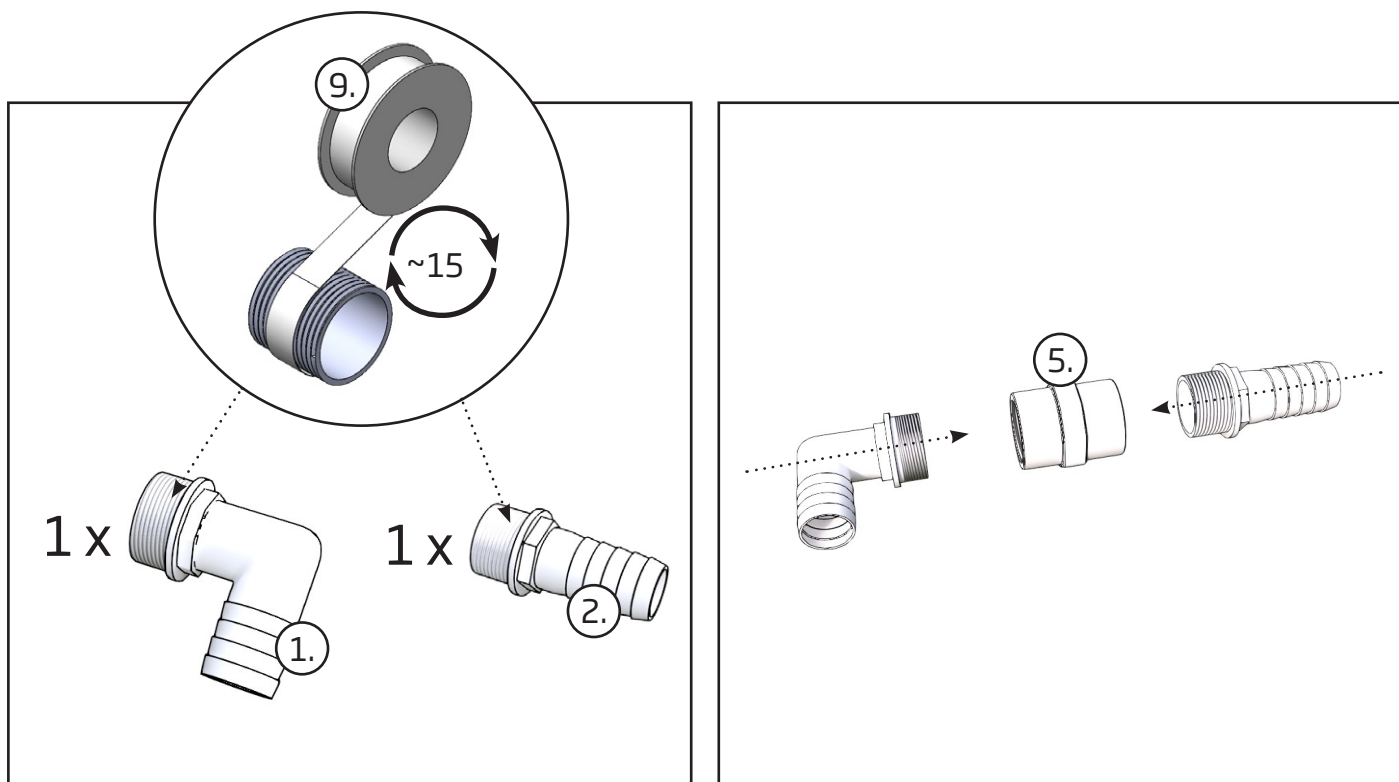
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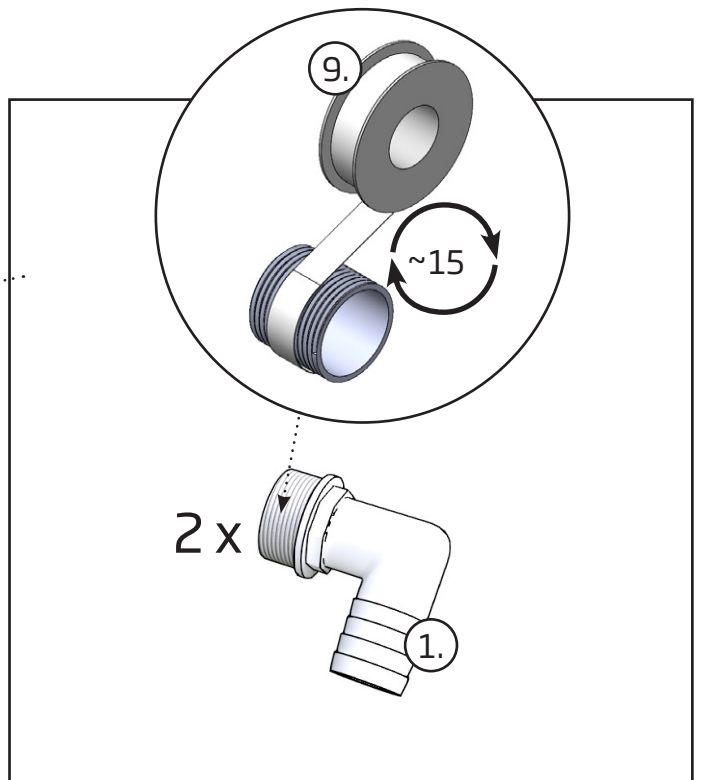
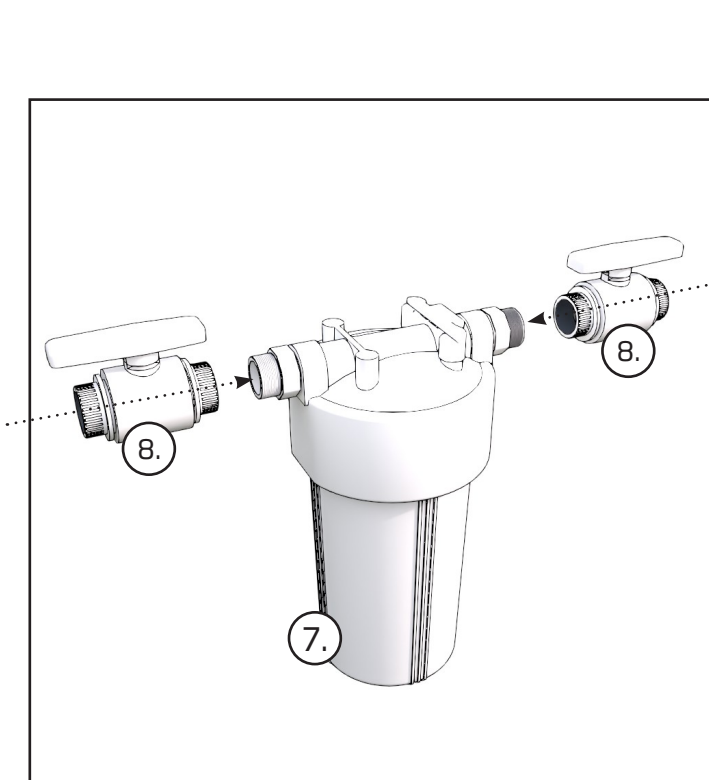
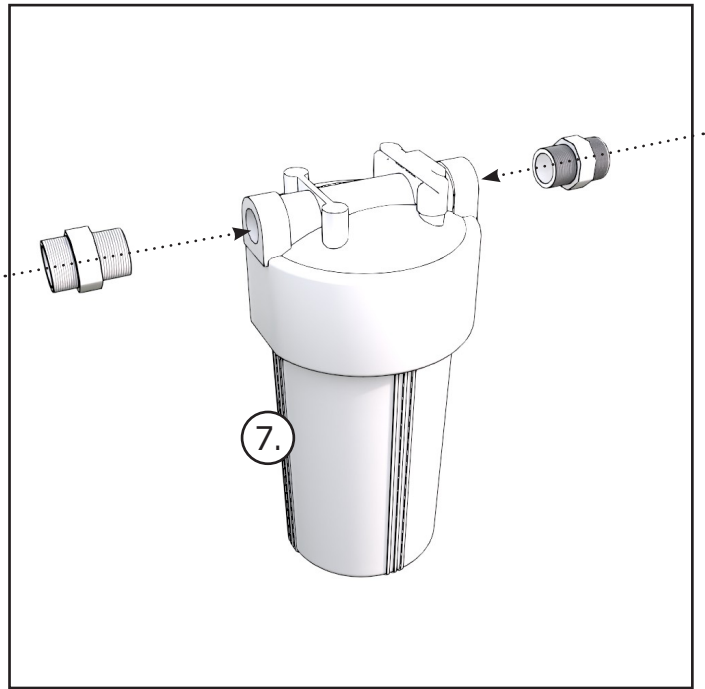
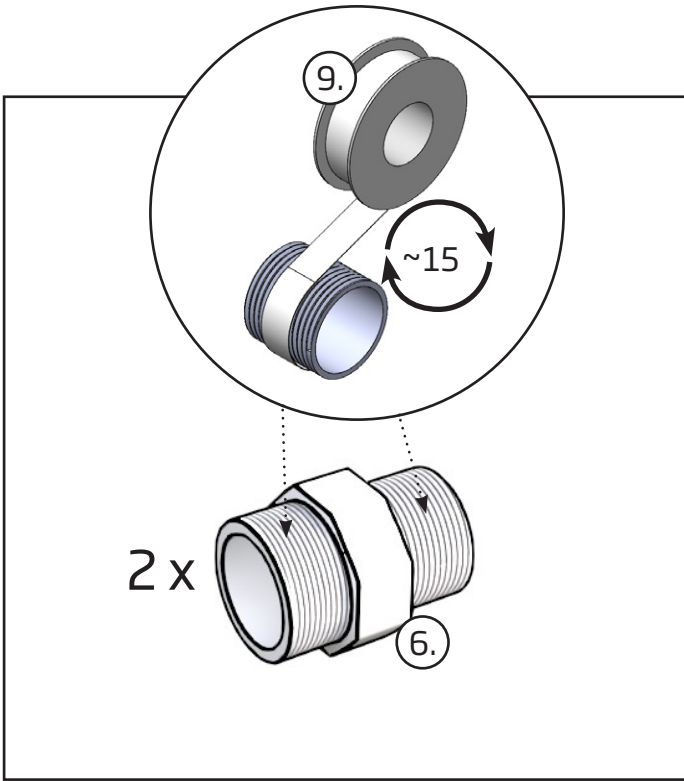


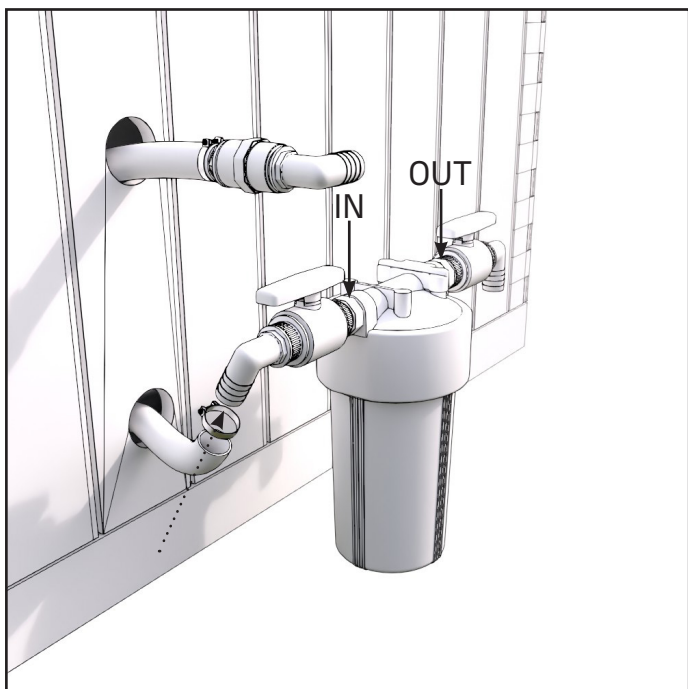
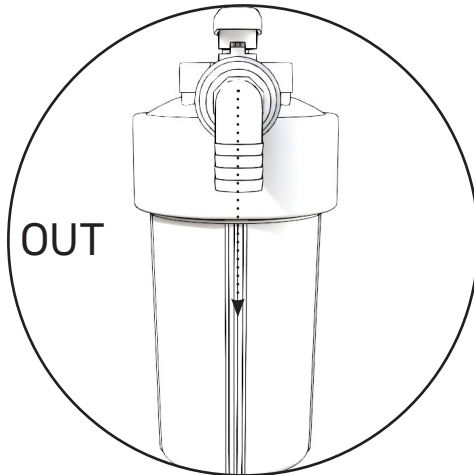
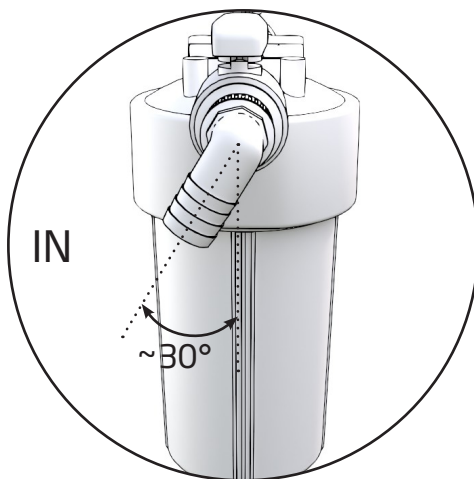
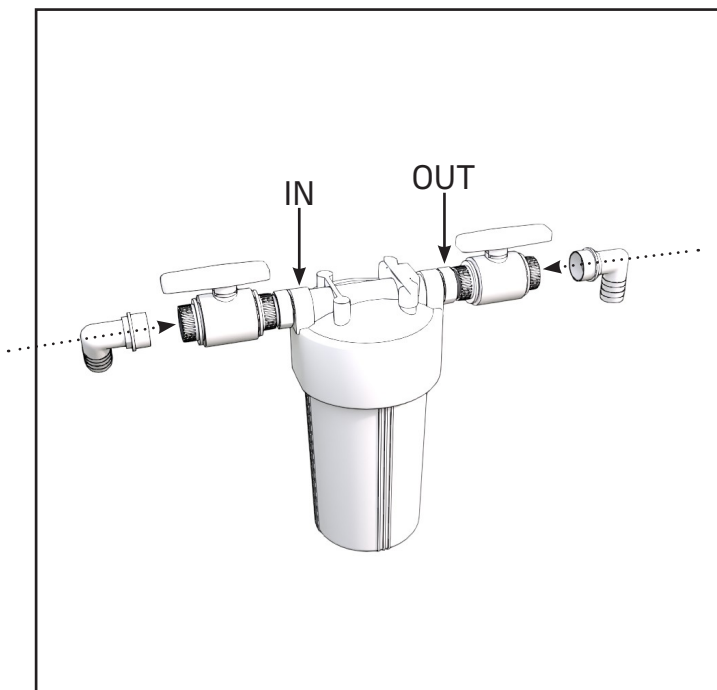
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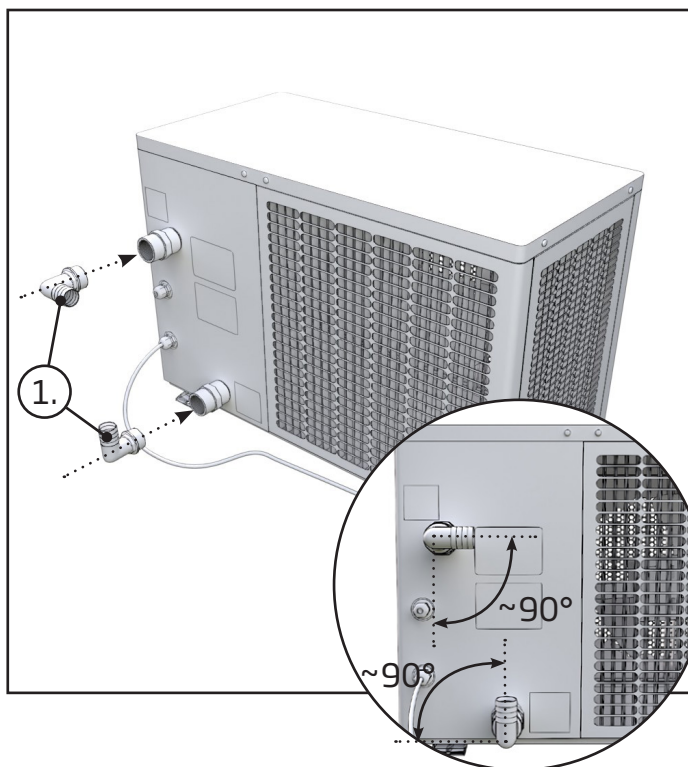
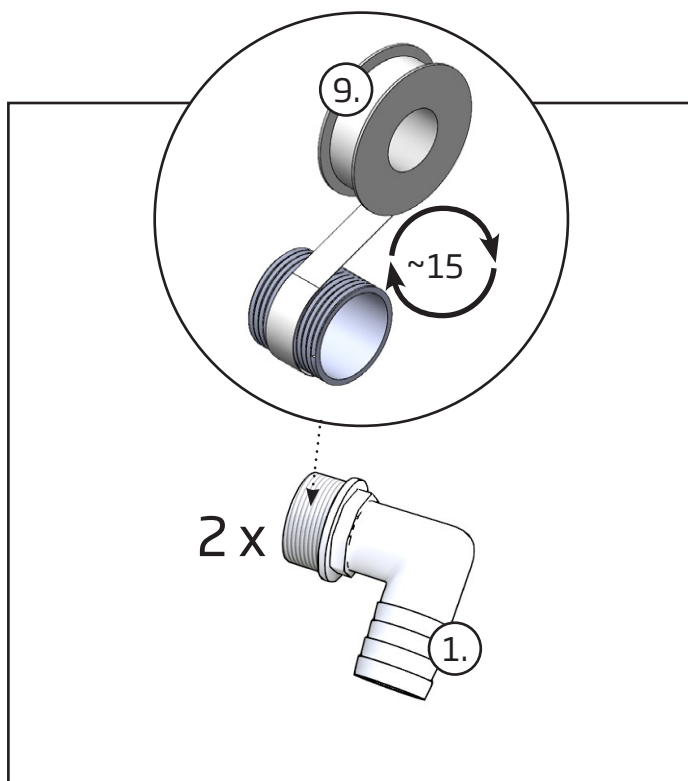
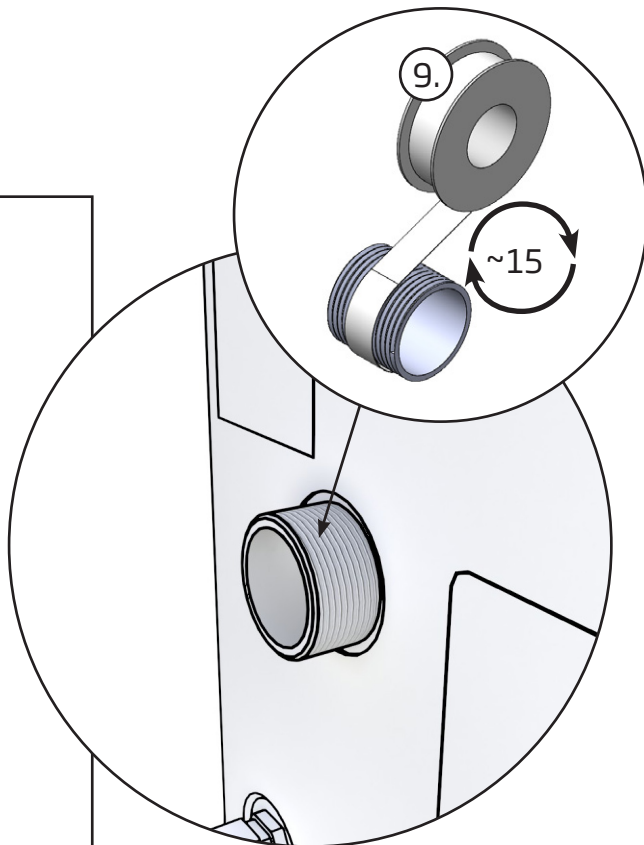
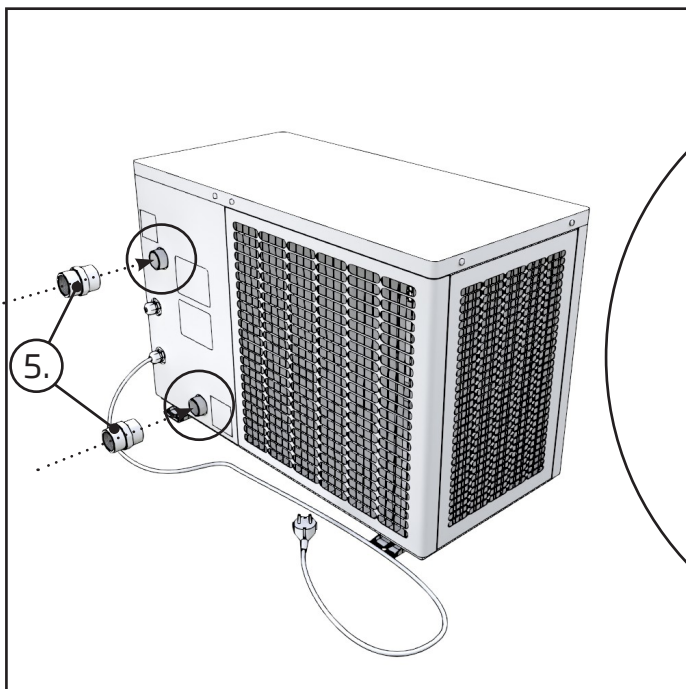


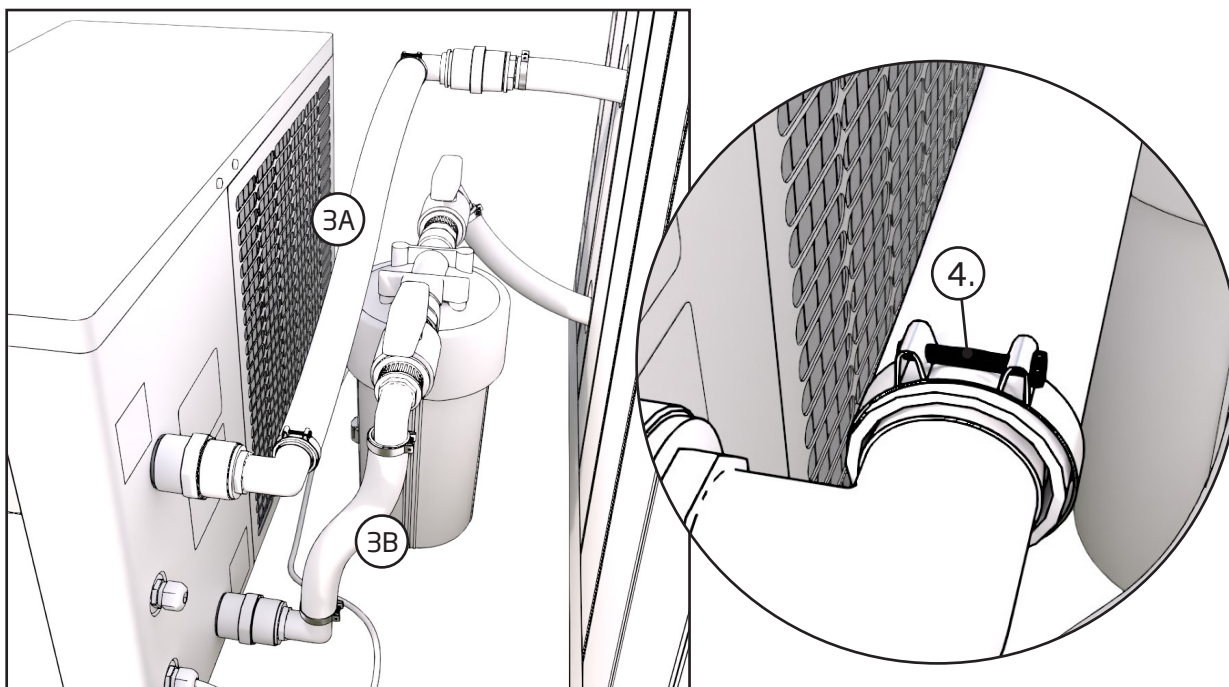
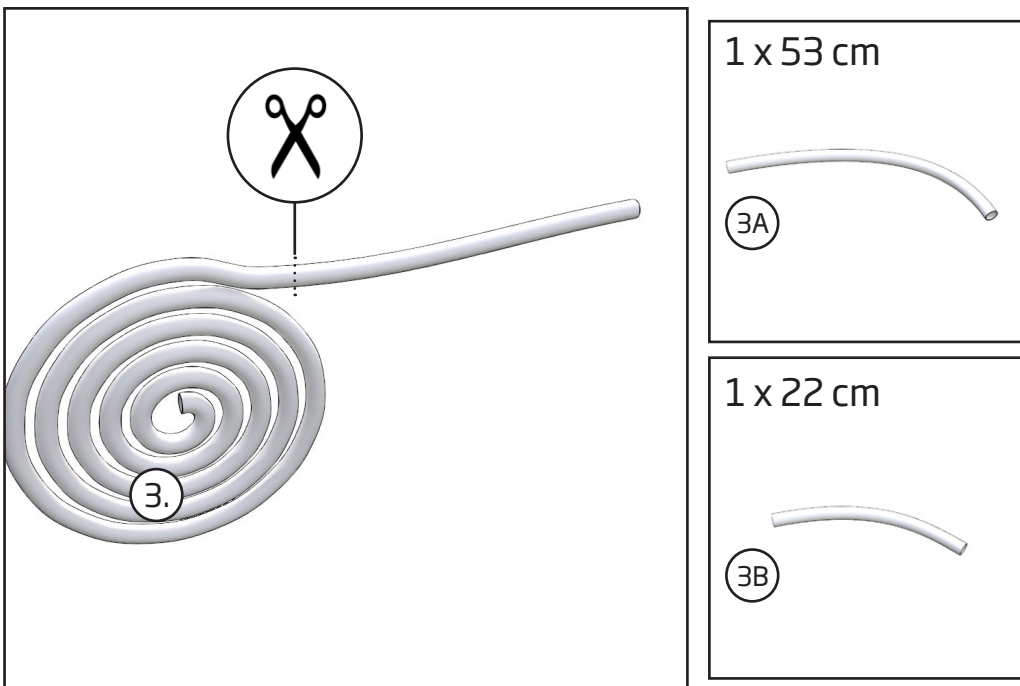






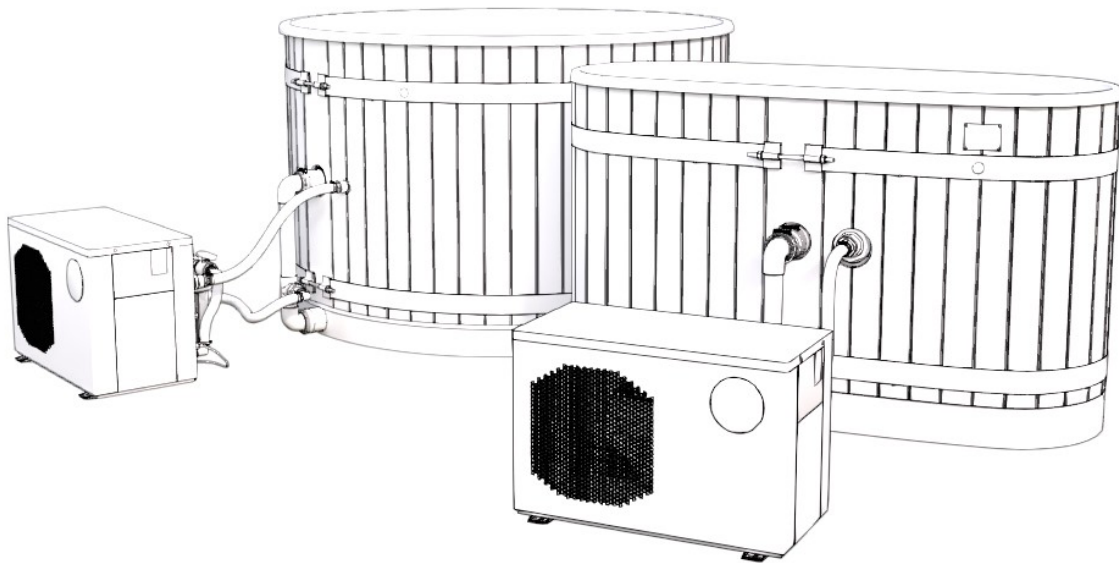




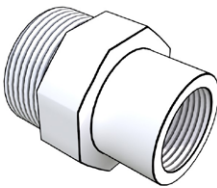
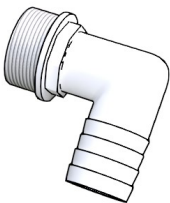
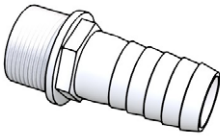
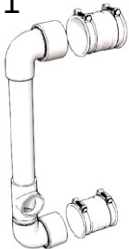


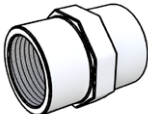
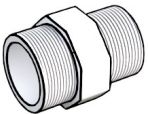
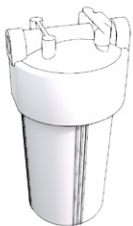
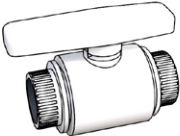
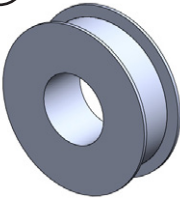




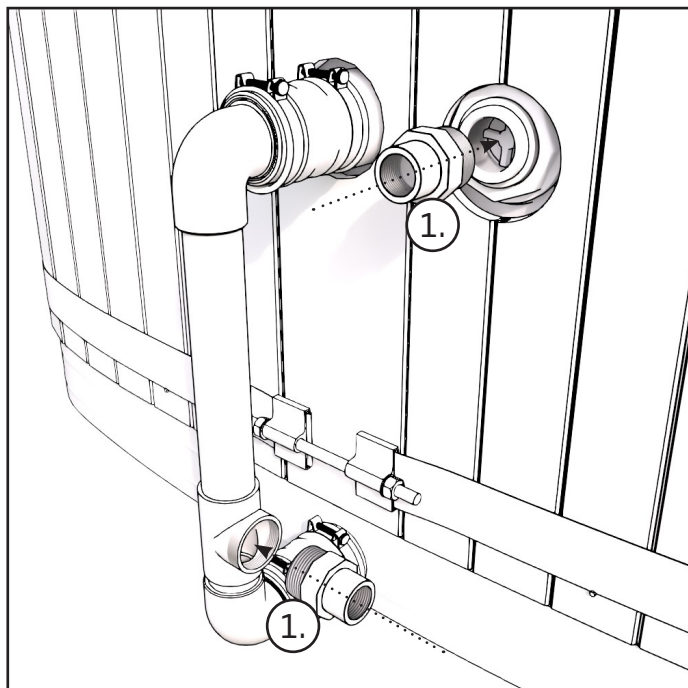
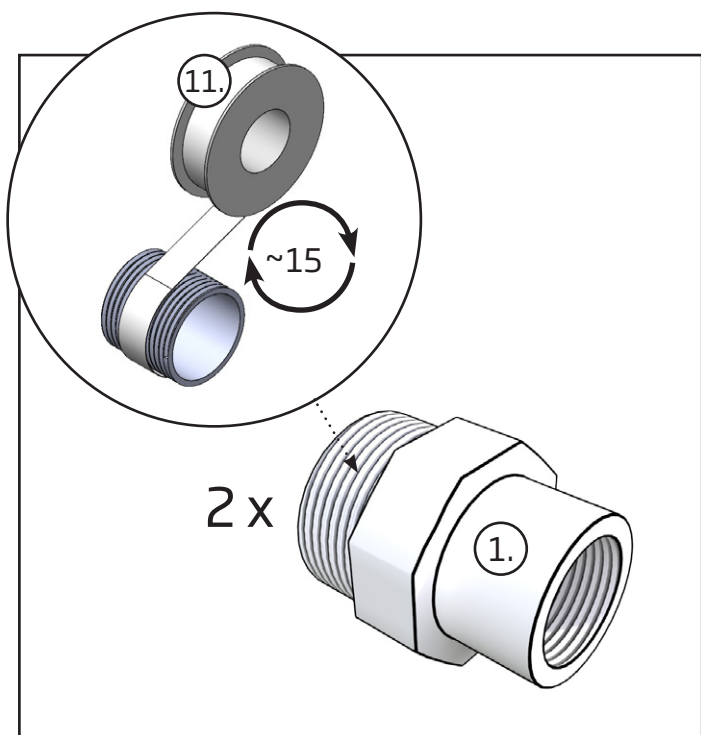
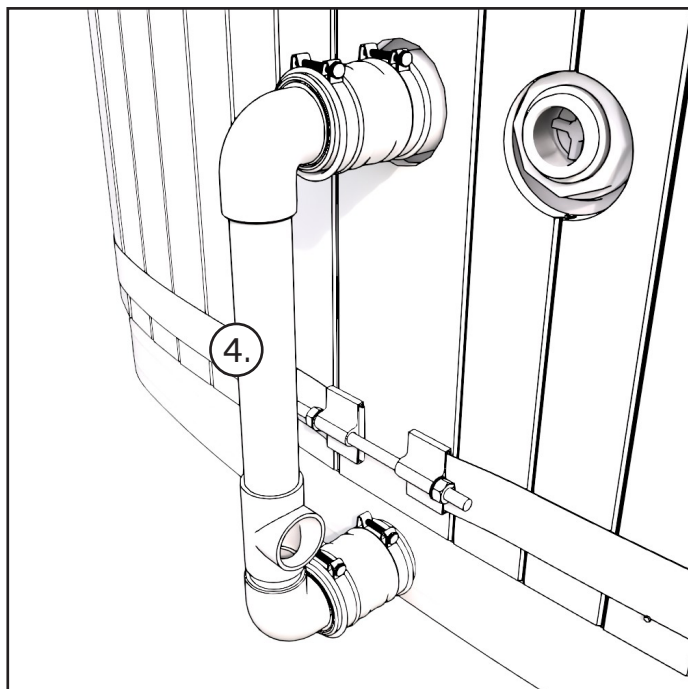
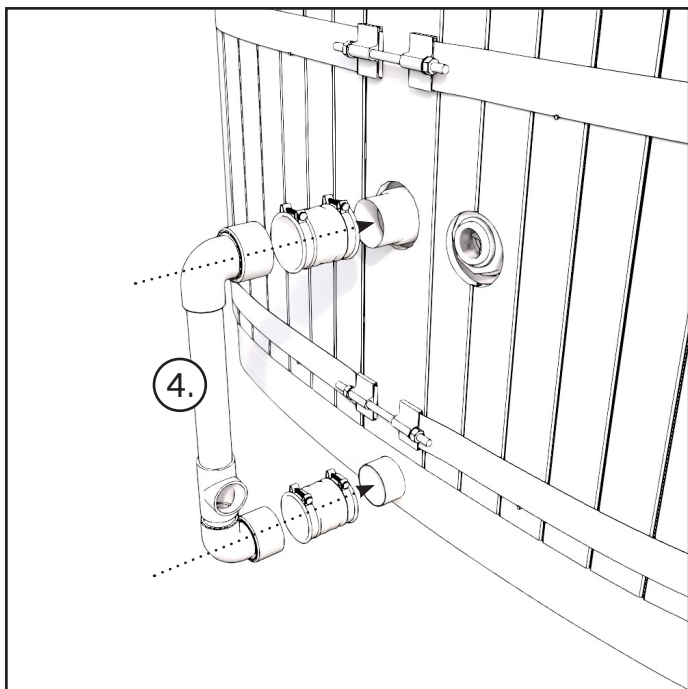
## MONTAGE ANSTELLE EINES HEIZGERÄTS

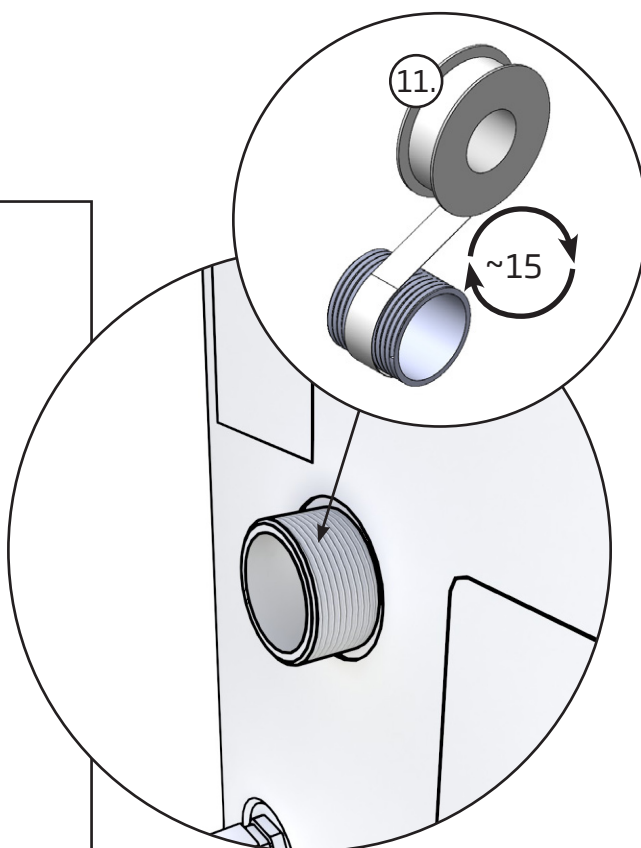
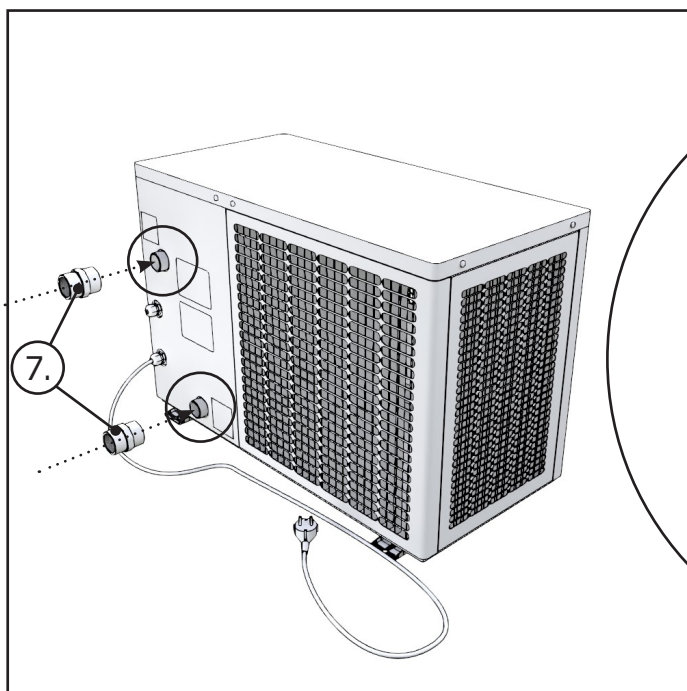
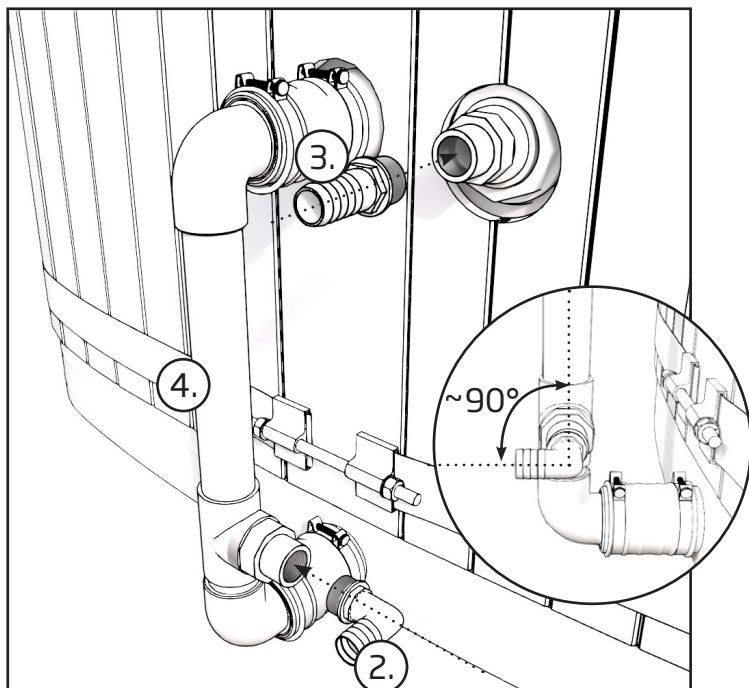
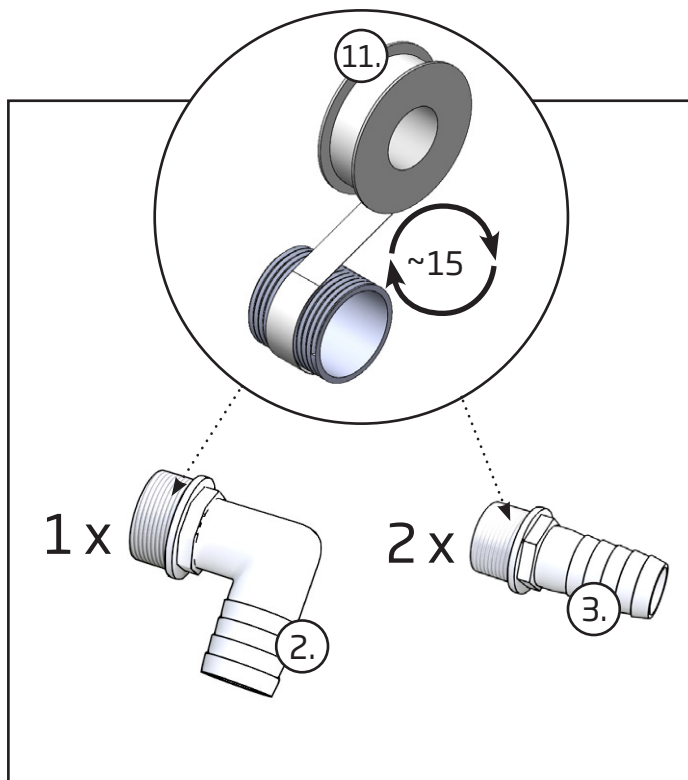


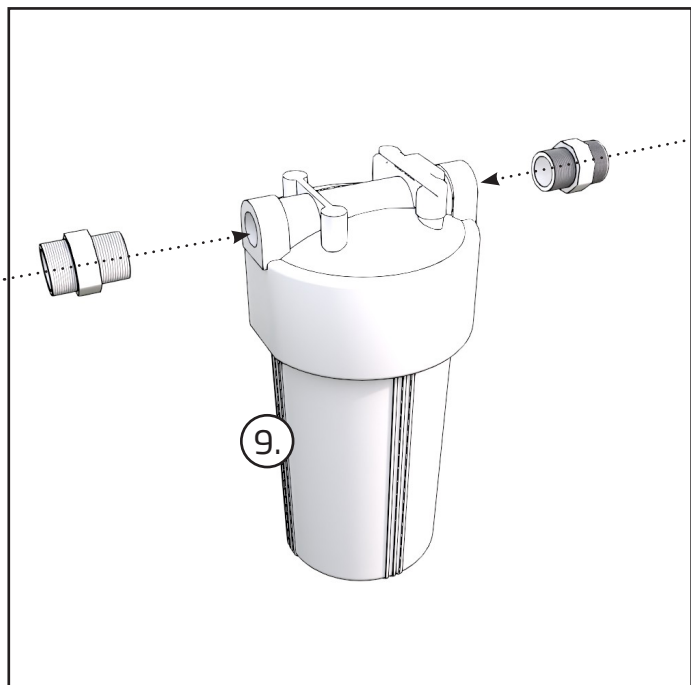
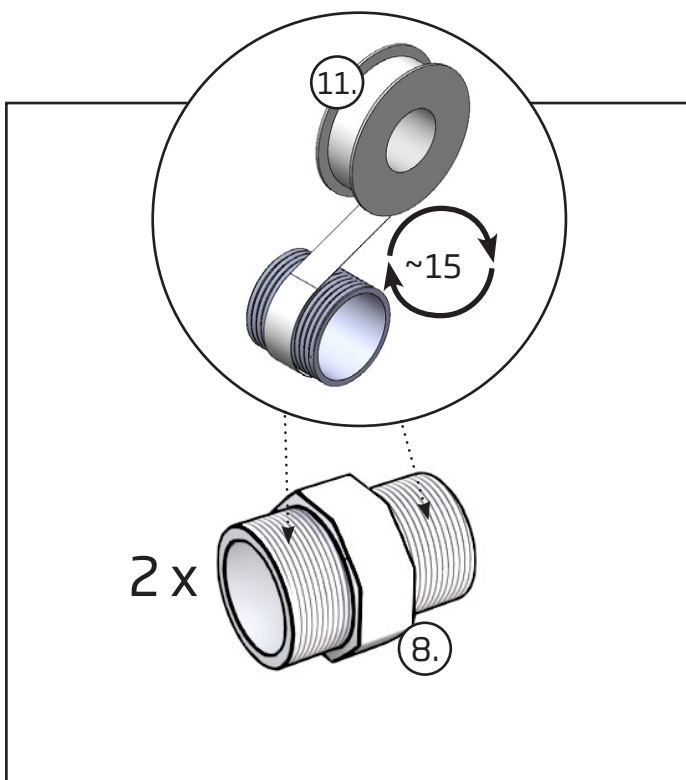
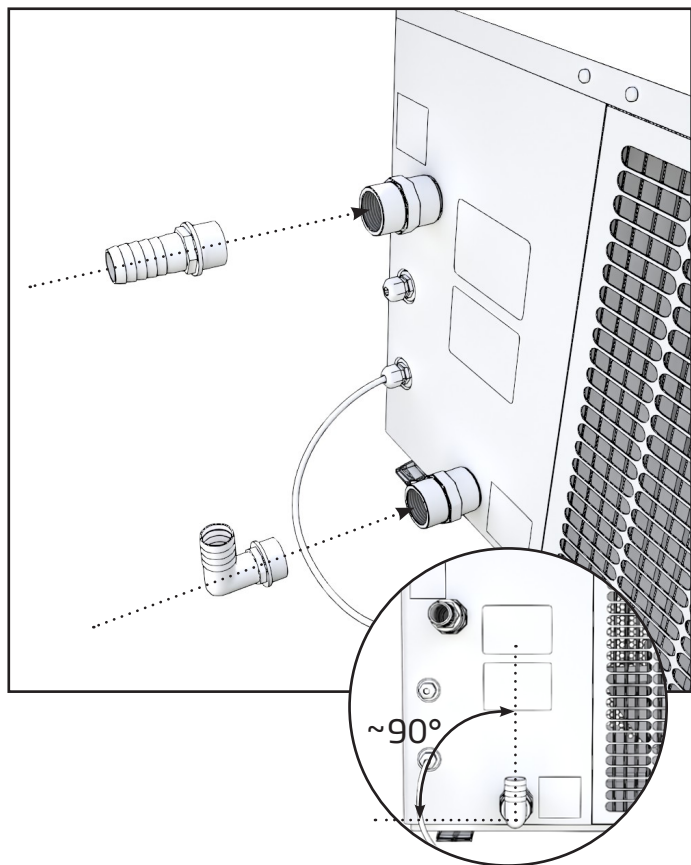
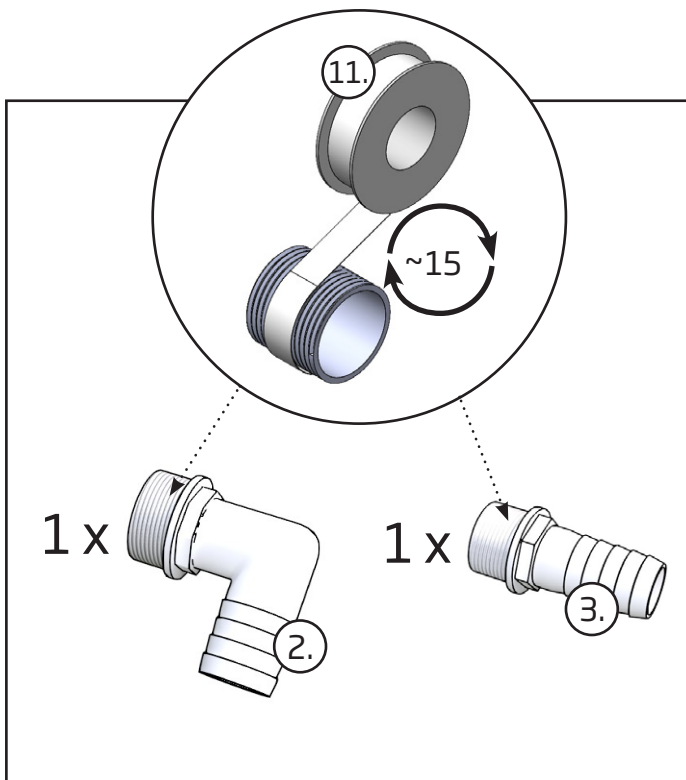
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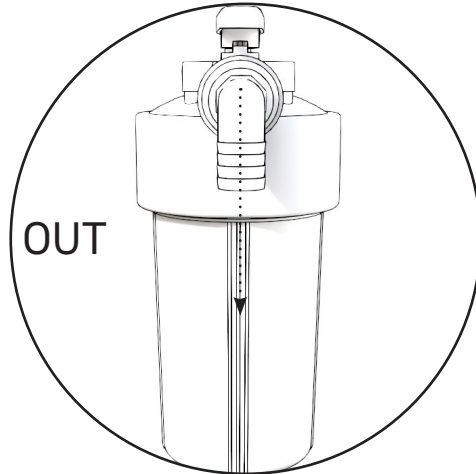
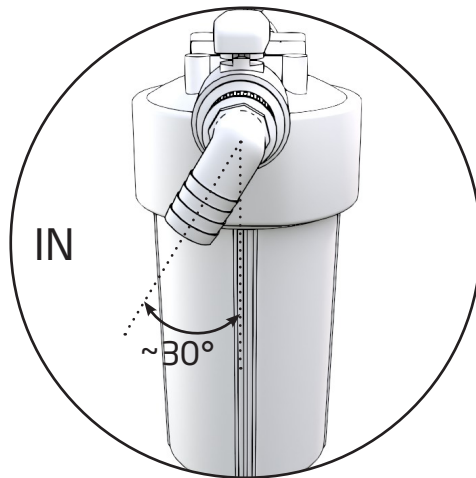
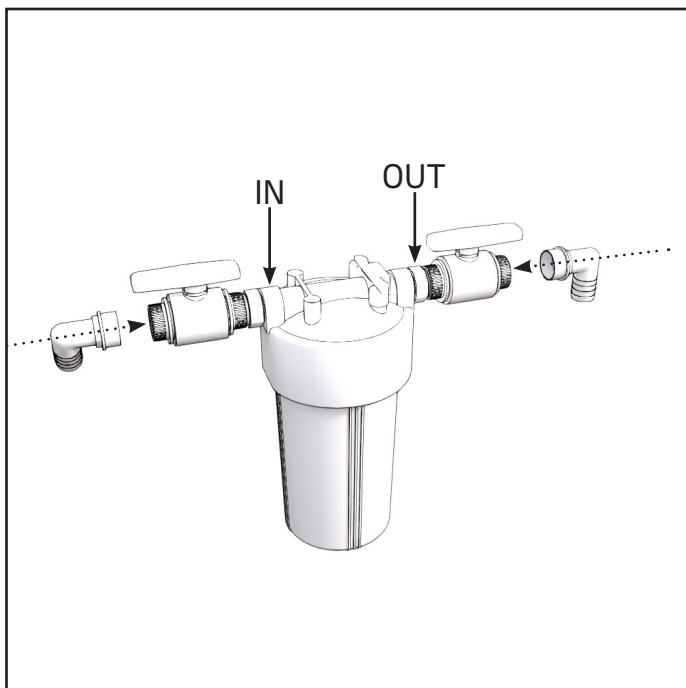
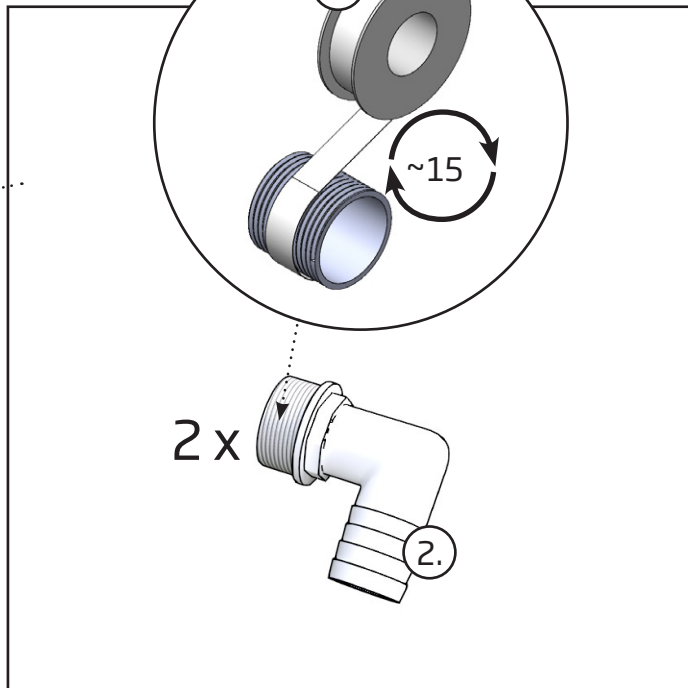
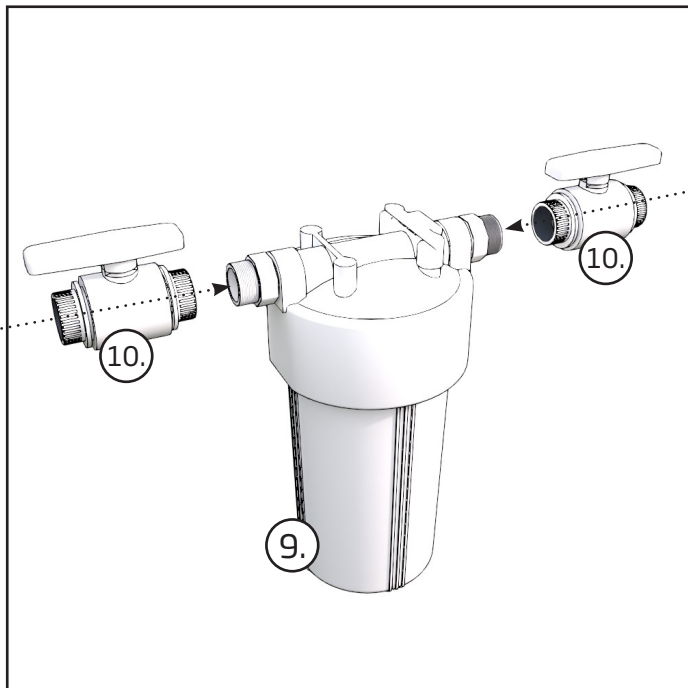
<p>① x2</p> 	<p>② x4</p> 	<p>③ x2</p> 	<p>④ x1</p> 
<p>⑤ 2 m</p> 	<p>⑥ x6</p> 	<p>⑦ x2</p> 	<p>⑧ x2</p> 
<p>⑨ x1</p> 	<p>⑩ x2</p> 	<p>⑪</p> 	

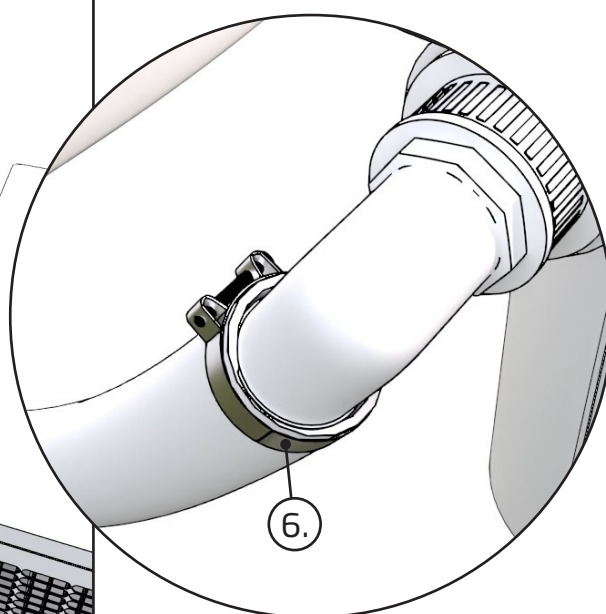
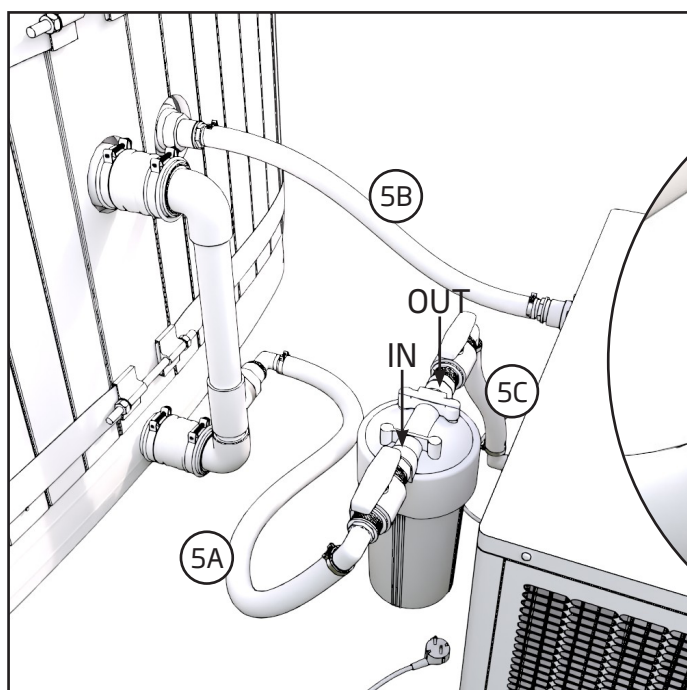
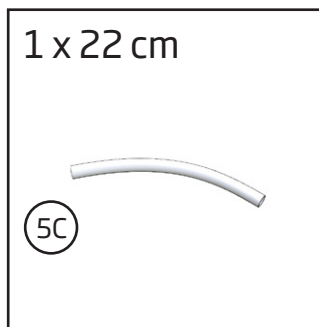
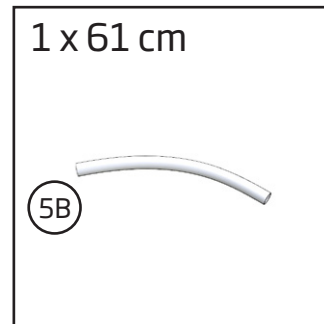
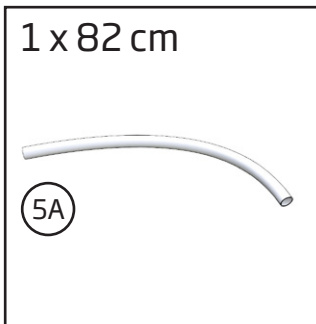
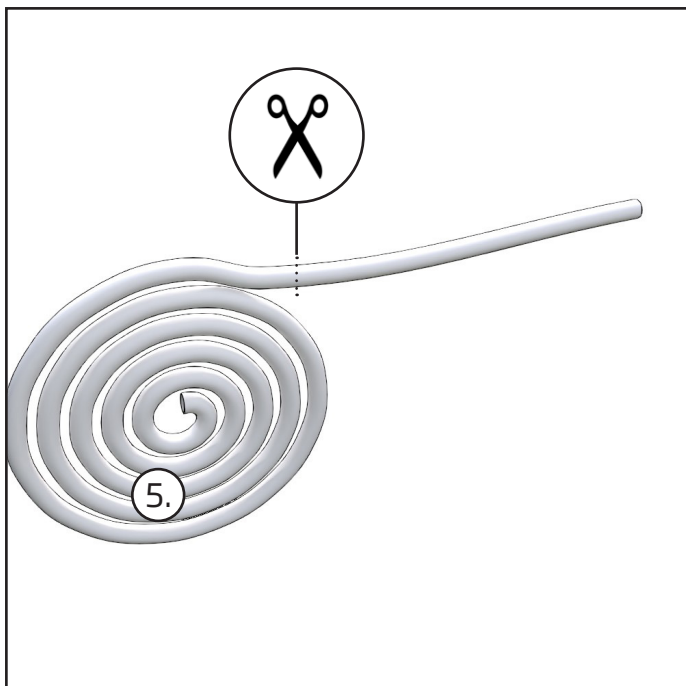














## BEFÜLLEN DES BECKENS UND ENTLÜFTEN DES GERÄTS

Das Befüllen des Beckens und das Entlüften laufen je nach Becken etwas anders ab.

### BlackIce S und NordicIce S - Befüllung des Beckens und Entlüften des Geräts



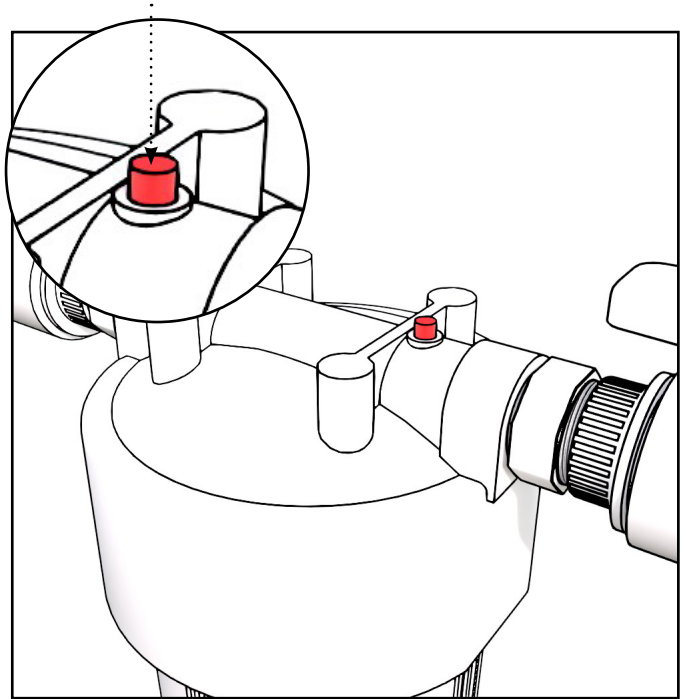
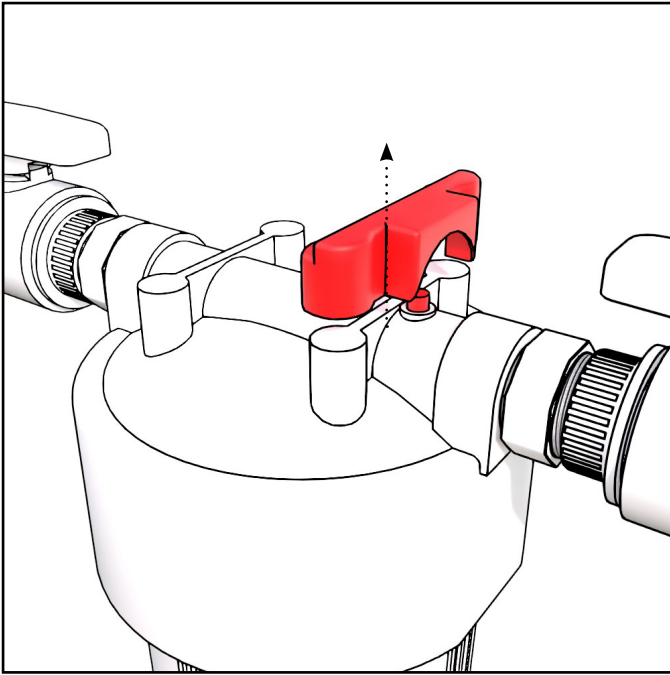
Entfernen Sie die Schutzgitter von den in der Abbildung gezeigten Ventilen. Verschließen Sie das untere vordere Ventil mit dem mitgelieferten Stopfen.



Lassen Sie beim Befüllen des Beckens mit einem Wasserschlauch Wasser durch das obere Ventil laufen, um die Luft aus dem Gerät zu entfernen. Starten Sie die Dualex-Wärmepumpe.

Wenn nach einer Minute keine Luft aus dem Gerät kommt und der Fehler P01 auf dem Display erscheint, ziehen Sie den Netzstecker und starten Sie das Gerät neu. Sobald Sie sehen, dass Wasser fließt, befüllen Sie das Becken bis zur gewünschten Höhe.





Entfernen Sie auch die Luft aus dem Filter, indem Sie zuerst die Abdeckung an der Oberseite des Filters abheben. Drücken Sie den Entlüftungsknopf auf der Oberseite des Filters, bis Wasser aus der Öffnung fließt.

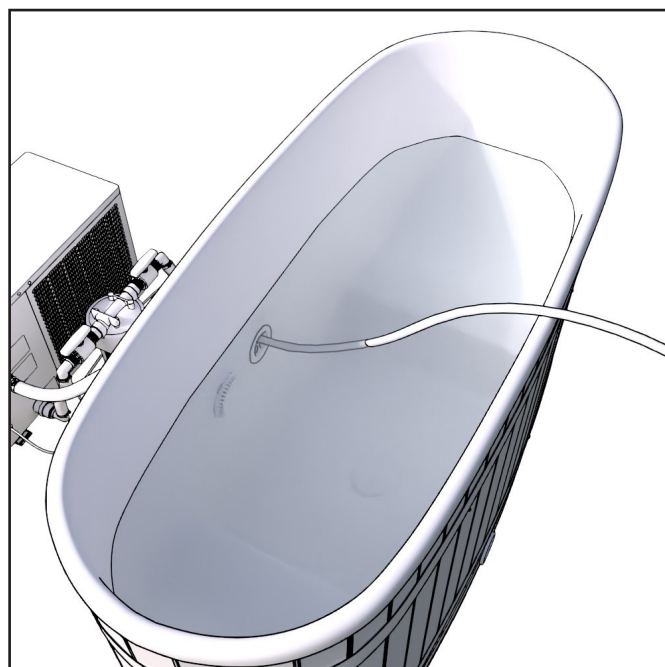
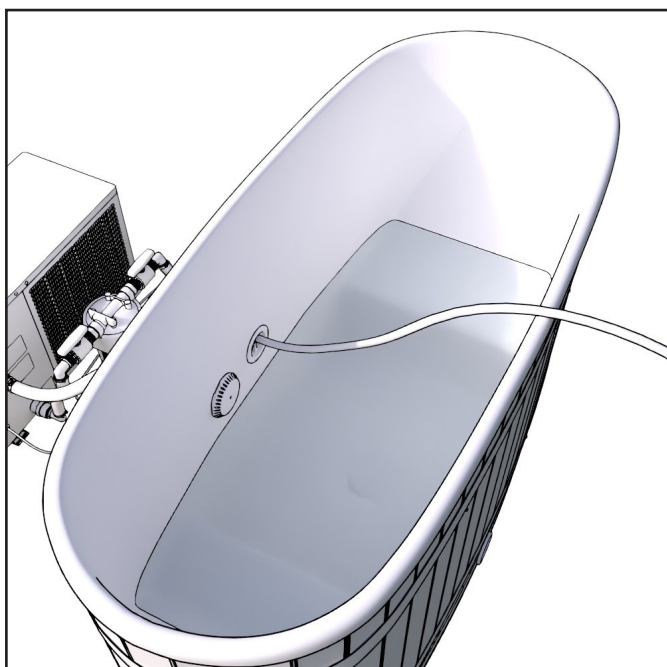


Sobald das Wasser im Gerät zirkuliert, entfernen Sie den Stopfen und bringen Sie die Schutzgitter wieder an.

## Anstelle eines Heizgeräts - Befüllung des Beckens und Entlüften des Geräts

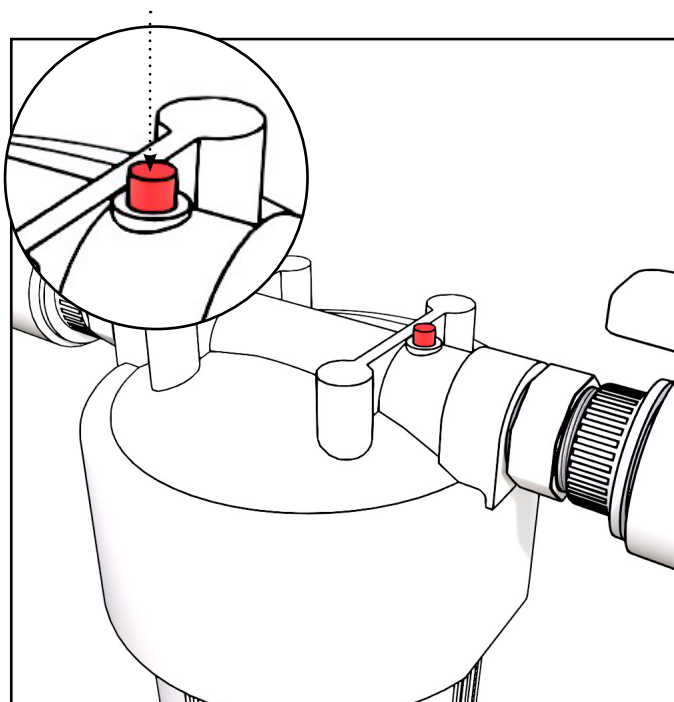
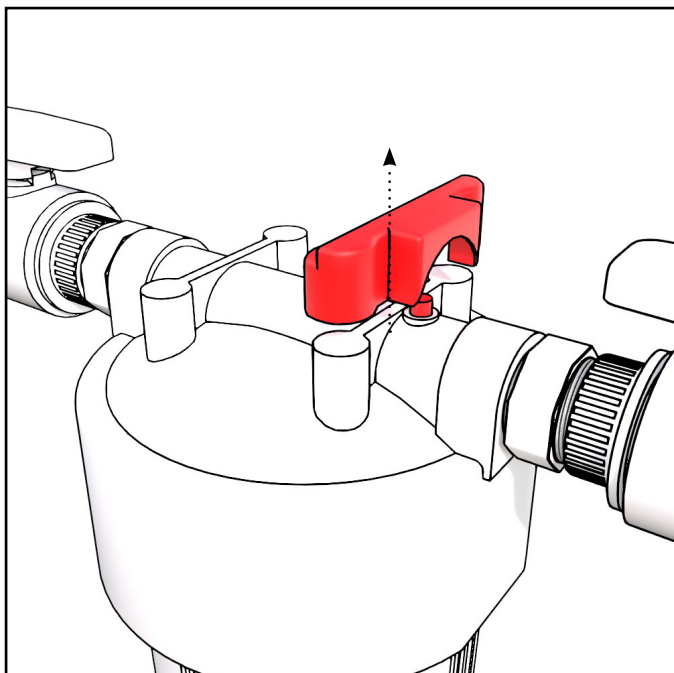


Entfernen Sie die Schutzgitter von den in der Abbildung gezeigten Ventilen. Verschließen Sie das untere Ventil mit dem mitgelieferten Stopfen.



Lassen Sie beim Befüllen des Beckens mit einem Wasserschlauch Wasser durch das obere Ventil laufen, um die Luft aus dem Gerät zu entfernen. Starten Sie die Dualex-Wärmepumpe.

Wenn nach einer Minute keine Luft aus dem Gerät kommt und der Fehler P01 auf dem Display erscheint, ziehen Sie den Netzstecker und starten Sie das Gerät neu. Sobald Sie sehen, dass Wasser fließt, befüllen Sie das Becken bis zur gewünschten Höhe.



Entfernen Sie auch die Luft aus dem Filter, indem Sie zuerst die Abdeckung an der Oberseite des Filters abheben. Drücken Sie den Entlüftungsknopf auf der Oberseite des Filters, bis Wasser aus der Öffnung fließt.







Sobald das Wasser im Gerät zirkuliert, entfernen Sie den Stopfen und bringen Sie die Schutzgitter wieder an.

# HINWEISE ZUR BEDIENUNG






## Bedienfeld





## Ein/Aus-Schalter und Bildschirmsperre

Zum Entsperren drücken Sie eine beliebige Taste, um den Bildschirm zu aktivieren, und drücken Sie das Ein/Aus-Symbol 5 Sekunden lang, bis Sie einen Piepton hören.	
Das Schloss-Symbol verschwindet.	
Drücken Sie lange auf das Ein/Aus-Symbol, um das Gerät ein- oder auszuschalten. Wenn innerhalb von 60 Sekunden keine Taste gedrückt wird, wird das Bedienfeld automatisch gesperrt.	
Wenn das Display gesperrt ist, wird das Schloss-Symbol angezeigt.	







## Modi (Kühlen / Aufheizen / Auto)

Drücken Sie bei eingeschaltetem Gerät kurz die Taste, um die Betriebsmodi zu wählen Die Modi werden in der folgenden Reihenfolge angezeigt: Kühlen -> Aufheizen -> Auto -> Kühlen... (kontinuierliche Schleife) HINWEIS: Im Auto-Modus gibt es eine Verzögerung beim Wechsel zwischen Kühlen und Aufheizen.	
Das Aufheizsymbol wird angezeigt, wenn der Aufheizmodus eingeschaltet ist.	
Das Kühlsymbol wird angezeigt, wenn der Kühlmodus eingeschaltet ist.	
Im Auto-Modus werden das Schleifensymbol und das Kühlsymbol angezeigt.	 

## Einstellen der Temperatur





Wenn das Kühlgerät eingeschaltet ist, heben Sie die Bildschirmsperre auf (siehe „ <b>Ein/Aus-Schalter und Bildschirmsperre</b> “).	
Drücken Sie die Auf- oder Abwärtssymbole, um die Temperatur einzustellen.	 
Wenn Sie 3 Sekunden lang nichts tun, wird die Anzeige der aktuellen Wassertemperatur beendet.	









## Einstellen der Uhrzeit

Um zur Einstellung der Uhrzeit zu gelangen, halten Sie die Taste 5 Sekunden lang gedrückt, bis die Ziffern bei „Stunde“ und „Minute“ zu blinken beginnen.	
Einstellung der Uhrzeit: Drücken Sie kurz auf das Display.	
Die „Stunden“-Anzeige beginnt zu blinken.	
Drücken Sie die Auf- oder Abwärtssymbole, um die Stunde einzustellen.	 
Drücken Sie das Uhrensymbol, um zur Minutenanzeige zu wechseln und wiederholen Sie die obigen Schritte.	
Wenn die Einstellungen abgeschlossen sind, drücken Sie auf das Uhrensymbol, um diese zu speichern und zum Hauptmenü zurückzukehren.	









## Einstellungen des EIN/AUS-Timers („Active Mode“)

- Der Benutzer kann zwei EIN/AUS-Timer-Zeiträume im „Active Mode“ einstellen. Die eingestellten Zeiträume dürfen sich nicht überschneiden.
- **Einstellen des EIN/AUS-Timers**

Drücken Sie im Hauptmenü kurz auf das Uhrensymbol, um die Einstellung des EIN-AUS-Timers aufzurufen.	
Wenn die „1“ blinkt, drücken Sie das Uhrensymbol, um die „EIN“-Einstellung der Stunde des EIN-AUS-Timers im „Active Mode“ für den Zeitraum 1 zu aktivieren.	
Sobald die Stundenanzeige zu blinken beginnt, drücken Sie die Auf- oder Abwärtssymbole, um die Stunde einzustellen.	 

Drücken Sie das Uhrensymbol zur Bestätigung und zur Eingabe der Minuten.	
Wenn die „Minuten“-Anzeige blinkt, drücken Sie die Auf- und Abwärtssymbole, um die Minuten einzustellen.	 
Drücken Sie auf das Uhrensymbol, um die Minuten des Einschaltvorgangs zu bestätigen und die Einstellungen des Ausschalttimers für den Zeitraum 1 einzugeben. Wiederholen Sie die obigen Schritte.	
Wenn die Einstellungen abgeschlossen sind, drücken Sie lange auf das Uhrensymbol, um die aktuellen Einstellungen des EIN-AUS-Timers zu bestätigen und zu speichern.	
Drücken Sie die Auf- oder Abwärts-Symbole, um die Einstellungen für den Zeitraum 2 des „Active Mode“ aufzurufen und wiederholen Sie die obigen Schritte.	 
Die aktuelle Timer-Einstellung wird im Hauptmenü mit der entsprechenden Nummer angezeigt. Drücken Sie das Ein-/Aus-Symbol, um zum Hauptmenü zurückzukehren.	

## Einstellen des Ozonators

Wenn das Kühlgerät eingeschaltet ist, drücken Sie lange auf das Ein/Aus-Symbol, wenn der Bildschirm gesperrt ist.	
Drücken Sie das Modus-Symbol lange, bis L0 auf dem Bildschirm erscheint.	
Verwenden Sie das Abwärts-Symbol, um den Wert auf L11 zu ändern, und drücken Sie Modus (kurz).	 
Verwenden Sie die Abwärts- und Aufwärts-Symbole, um den Wert auf 0, 1 oder 2 zu ändern (siehe Tabelle unten).	 
Drücken Sie das Modus-Symbol (kurz) und dann das Ein/Aus-Symbol (kurz). (Die Ozonerzeugung beginnt mit dem Einschalten des Geräts)	 

Code	Parameter Name	Einstellbereich	Werkseinstellung
L11	Ozonzonator-Steuerungsverfahren	0: Keine Ozonerzeugung Ozonerzeugung 5 Minuten pro Stunde (55 Minuten Standby) <ul style="list-style-type: none"> <li>• Private Nutzung</li> </ul> 2: Ozonerzeugung 10 Minuten pro Stunde (50 Minuten Standby) <ul style="list-style-type: none"> <li>• Starke / öffentliche Nutzung</li> </ul>	1



## ALLGEMEINE WARTUNG UND WASSERQUALITÄT

Sorgen Sie dafür, dass das Wasser sauber und klar bleibt. Je nach Nutzungshäufigkeit kann eine gelegentliche Verwendung von Chlor erforderlich sein, um das Wasser zu desinfizieren (insbesondere bei starker öffentlicher Nutzung).

Täglich:

- Prüfen Sie den Wasserstand.

Wöchentlich:

- Entfernen Sie etwaige Verunreinigungen auf der Wasseroberfläche und dem Filter.
- Spülen Sie den Filter gründlich unter fließendem warmen Wasser oder unter der Dusche aus (verwenden Sie keine Hochdruckreiniger, da diese das Filtermaterial beschädigen können).
- Die Filterpatrone sollte immer dann ausgetauscht werden, wenn nach der Reinigung des Filters die Wasserzirkulation nicht auf normalem Niveau ist. Je nach Nutzungshäufigkeit sollte der Filter alle 2 bis 4 Monate ausgetauscht werden.
- Überprüfen Sie den pH-Wert des Wassers, der auf dem normalen Niveau (7,2 - 7,6) gehalten werden sollte. Bei Bedarf können Sie den pH-Wert mit Hilfe von pH+ oder pH- Chemikalien feineinstellen.

Verwendung von Chlor:

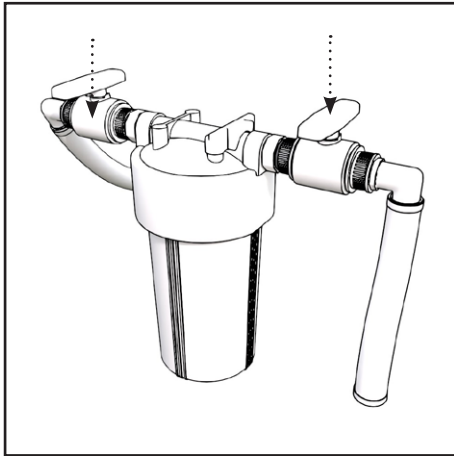
- Bei starker täglicher Nutzung des Beckens wird empfohlen, dem Wasser einen halben Teelöffel Chlor (Natriumdiklorisocyanurat, Dihydrat) zuzusetzen, um den Gehalt an freiem Chlor von 0,3 - 1,2 ppm zu erreichen.
- Wenn die Anzahl der Benutzer mehr als 10 pro Tag beträgt oder die Wassertemperatur 15°C übersteigt, wird empfohlen, dem Wasser häufig Chlor (Natriumdiklorisocyanurat, Dihydrat) zuzusetzen, um den Gehalt an freiem Chlor von 0,3 - 1,2 ppm zu erhalten.

### Hinweise zur Wartung

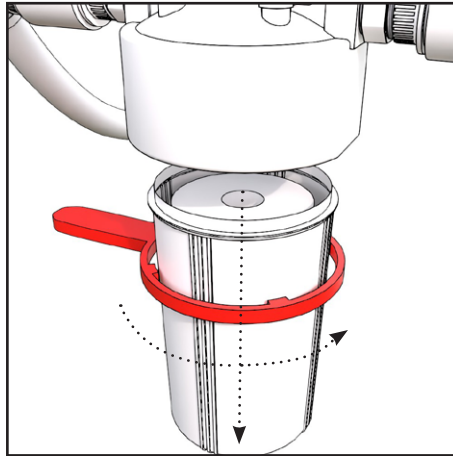
- Überprüfen Sie regelmäßig die Strom- und Kabelanschlüsse. Wenden Sie sich bei Problemen an Ihren Händler vor Ort.
- Reinigen Sie das Kühlgerät regelmäßig (in der Regel alle 2 bis 4 Monate), um eine gute Belüftung zu gewährleisten.
- Wenn das Kühlgerät nicht in Gebrauch ist, ziehen Sie den Stecker aus der Steckdose.
- Wenn das Kühlgerät über einen längeren Zeitraum nicht benutzt wird, lassen Sie das gesamte Wasser aus dem Kühlgerät ab.
- Fehlersuche
  - Wenn das Bedienfeld nichts anzeigt und das Kühlgerät nicht läuft, prüfen Sie die Stromversorgung und/oder ob der Fehlerstromschutzschalter aktiviert wurde. Wenn die Stromversorgung in Ordnung ist, aber der Fehlerstromschutzschalter den Strom abgeschaltet hat, drücken Sie die Reset-Taste, um das Gerät neu zu starten. Sollte das Problem weiterhin bestehen, ziehen Sie den Netzstecker und wenden Sie sich an den Händler oder Hersteller.
  - Wenn nach dem Einschalten des Geräts kein Wasser zirkuliert, schalten Sie das Gerät eine Zeit lang aus und dann wieder ein. Dies kann durch Lufteinschlüsse in den Rohren geschehen. Wiederholen Sie den Vorgang bei Bedarf, bis das Wasser zirkuliert.
  - Wenn das Wasser nicht richtig zirkuliert, prüfen Sie den Wasserstand und den Zustand des Filters (Patrone, falls verwendet). Füllen Sie bei Bedarf mehr Wasser ein. Reinigen Sie den Filter oder tauschen Sie die Patrone aus, falls erforderlich. Sollte das Problem weiterhin bestehen, wenden Sie sich bitte an den Händler oder den Hersteller.

## REINIGUNG UND AUSTAUSCH DER FILTERPATRONE

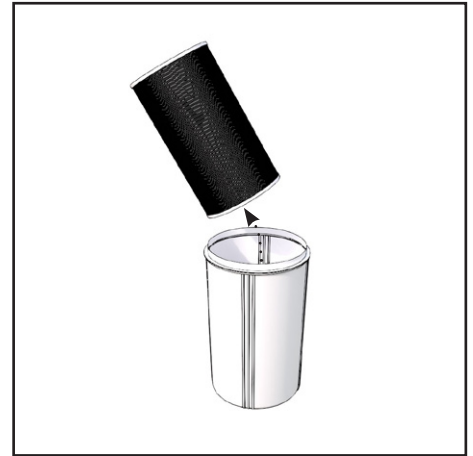
Der Filter muss regelmäßig gereinigt werden, damit das Wasser im System sauber bleibt und der Filter nicht verstopft. Tauschen Sie die Filterpatrone bei Bedarf aus, in der Regel alle 2 bis 4 Monate, je nach Nutzungsintensität.



Schalten Sie die Stromzufuhr zum Gerät ab und schließen Sie beide Kugelventile.



Entfernen Sie das Filtergehäuse, indem Sie es drehen. Wenn das Filtergehäuse fest sitzt und schwer zu öffnen ist, verwenden Sie das mitgelieferte Öffnungswerkzeug.

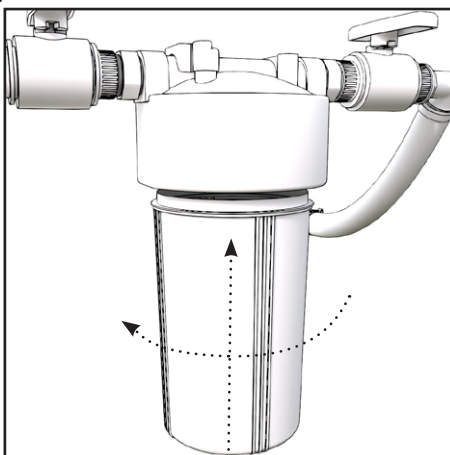
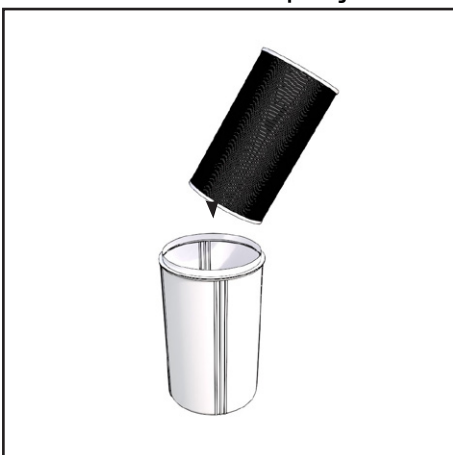
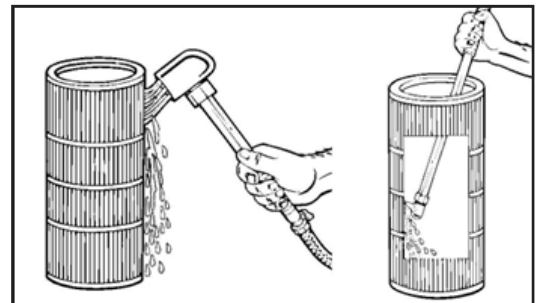


Nehmen Sie die Filterpatrone heraus und reinigen Sie das Gehäuse, falls erforderlich.

### Waschen

Um beim Reinigen der Filterpatrone das bestmögliche Ergebnis sicherzustellen, sollte diese erst grob unter fließendem Wasser ausgespült und danach für mindestens 6 Stunden in einen Eimer gegeben und danach erneut innen und außen unter fließendem Wasser ausgespült werden.

Die Reinigung erfolgt mit einem Druckreiniger von innen nach außen. Außen darf das Gerät nur mit einem Gartenschlauch abgespült werden (ohne Druck). Um das beste Reinigungsergebnis zu erzielen, lassen Sie den Filter trocknen und bürsten Sie den trockenen Filter vorsichtig und sorgfältig ab, um die feinen Schmutzpartikel von den Flächen zu entfernen. Der Filter muss bei Bedarf oder mindestens einmal pro Jahr ausgetauscht werden.



Setzen Sie die neue oder gereinigte Patrone wieder in das Gehäuse ein.

Schrauben Sie das Gehäuse wieder ein und ziehen Sie es mit der Hand fest.

## FEHLERMELDUNGEN AUF DEM DISPLAY

Wenn ein Fehler auftritt, wird der entsprechende Fehlercode angezeigt. Nachdem der Fehler behoben ist, verschwindet der Fehlercode. Um den Fehlercode zurückzusetzen, starten Sie das Gerät neu.

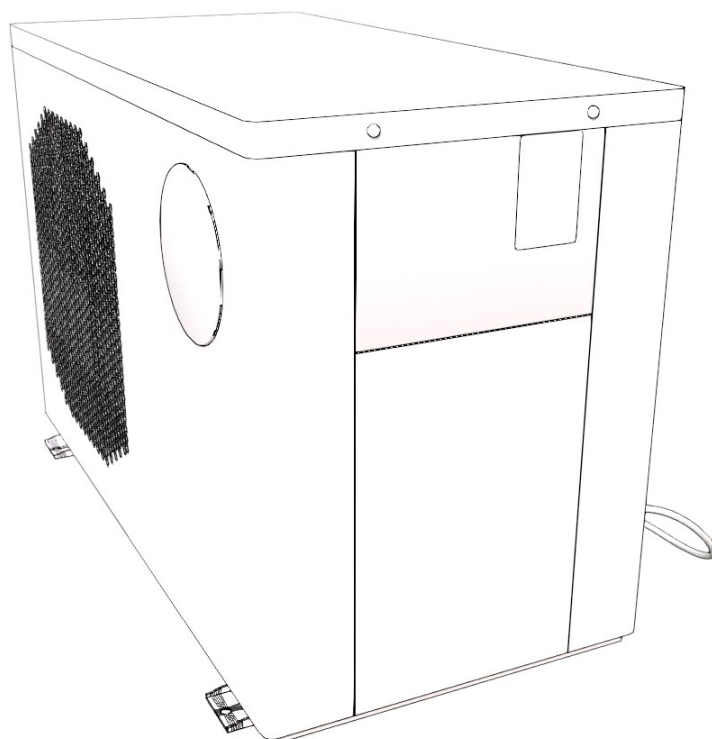
Fehlercode	Beschreibung
E01	Problem mit der Gasaustrittstemperatur
E05	Problem mit der Temperatur des Wärmetauschers
E09	Problem mit der Gaseintrittstemperatur
E17	Problem mit der Temperatur des einfließenden Wassers
E18	Problem mit der Temperatur des herausfließenden Wassers
E22	Problem mit der Umgebungstemperatur
P01	Problem mit dem Wasserströmungsschalter
P02	Schutz vor Überdruck
P06	Schutz vor Niederdruck
P11	Schutz vor überhöhter Gasaustrittstemperatur
P15	Schutz vor überhöhter Temperatur des ein- und ausfließenden Wassers
P16	Schutz vor Unterkühlung
P17	Frostschutz für den Standby-Modus
P25	Schutz der Umgebungstemperatur
P26	Schutz gegen Überhitzung des ausfließenden Wassers im Aufheizmodus
P27	Schutz vor zu hoher Außentemperatur des Wärmetauschers im Kühlmodus

## GARANTIE

Beachten Sie die Informationen zur Garantie im Handbuch des Geräteherstellers.

MODE D'EMPLOI

# DUAL AVANTOPOOL POMPE À CHALEUR



Vérifiez sans tarder le contenu de la livraison !  
Veuillez soigneusement prendre connaissance des consignes d'emploi  
et les conserver pour une utilisation ultérieure.

## GÉNÉRALITÉS

Veillez noter que les instructions suivantes sont des directives générales. Vous trouverez des instructions plus complètes et détaillées dans le mode d'emploi fourni lors de la livraison du dualex.

- Veuillez contacter le service après-vente pour toute réparation. Le processus de réparation doit être effectué en stricte conformité avec ce manuel. Toute opération d'entretien par du personnel non professionnel est interdite et entraîne l'annulation de la garantie.
- Toute erreur de manipulation est susceptible de causer des blessures au personnel ou endommager l'équipement.
- Assurez-vous que le bassin est rempli et que l'air est évacué de la tuyauterie de l'unité avant de la mettre en marche. Il est interdit de mettre cet équipement en marche avant qu'un certain niveau d'eau n'ait été atteint. Sinon, l'appareil risque d'être endommagé et la garantie annulée.
- S'il faut couper l'alimentation pour effectuer une réparation, attendez une minute après la coupure de l'alimentation avant de toucher le circuit imprimé afin d'éviter une décharge du condensateur qui entraînerait un choc électrique.
- L'unité de refroidissement doit être stockée et transportée verticalement dans son emballage d'origine. Si ce n'est pas le cas, attendez au moins 24 heures avant de remettre l'appareil en marche.
- Assurez-vous que l'alimentation électrique, la tension et la fréquence soient correctes avant l'installation.
- Une installation incorrecte peut provoquer un incendie, une électrocution, la chute de l'équipement ou une fuite d'eau.
- Veillez à ce que de l'eau ne pénètre pas dans les composants électriques.
- L'appareil peut être endommagé par une surchauffe importante due à la négligence, comme couvrir les grilles d'aération de l'unité de refroidissement avec des essuies, des vêtements ou d'autres objets, ou le faire fonctionner trop près d'un mur ou dans un local/endroit dont la ventilation est insuffisante.
- N'ajoutez pas de sel ou d'autres minéraux dans l'eau.
- Cet appareil n'est pas destiné à être utilisé par des enfants. Les enfants doivent être surveillés par un adulte lorsqu'ils l'utilisent afin de garantir leur sécurité.
- Les personnes ayant des antécédents de maladie cardiaque, d'hypotension ou d'hypertension artérielle, de problèmes circulatoires, de diabète ou de toute autre affection nécessitant un traitement médical doivent consulter un médecin avant d'utiliser le bassin.
- Les personnes qui prennent des médicaments doivent consulter un médecin avant d'utiliser le bassin, certains médicaments pouvant en effet provoquer une somnolence ou encore affecter le rythme cardiaque, la pression artérielle et la circulation.
- Les femmes enceintes doivent consulter un médecin avant d'utiliser le bassin.
- L'appareil ne doit pas être utilisé en plein soleil pour éviter toute surchauffe.



En hiver ou lorsque la température ambiante descend en dessous de 0 °C, veillez à vider l'eau de l'unité de refroidissement si elle n'est pas utilisée. Sinon, l'appareil sera endommagé par le gel, ce qui entraînera l'annulation de la garantie. L'appareil ne doit pas être utilisé à l'extérieur en cas de températures ambiantes inférieures à -7 °C.

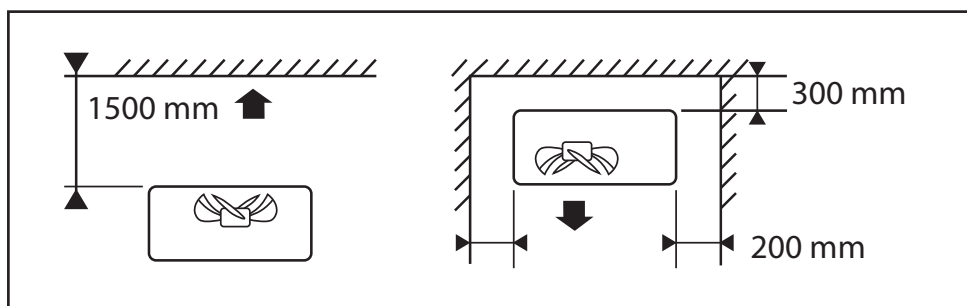


Si la température ambiante est inférieure à 0 °C, laissez l'appareil en marche et en mode « **automatique** » et n'utilisez pas la minuterie « active mode ». Faute de quoi le système risque de geler.

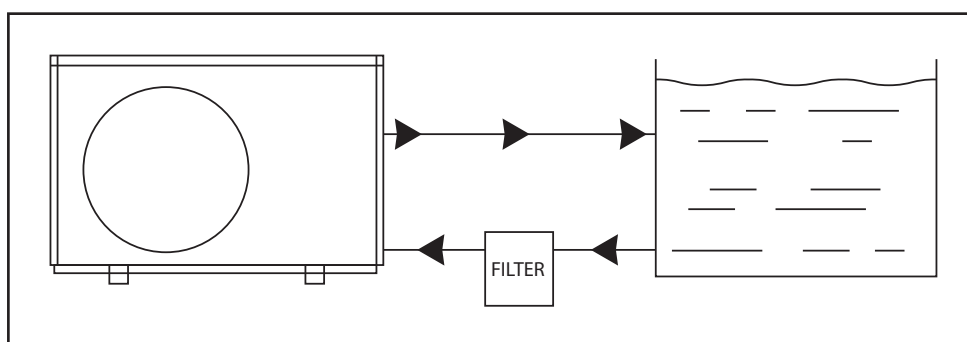
## DISTANCE D'INSTALLATION

L'unité de refroidissement doit être installée dans un endroit correctement ventilé. Elle doit être installée dans un local permettant de respecter les distances suivantes :

- Distance minimale entre l'avant de l'unité et le mur = 1 500 mm (150 cm)
- Distance minimale entre l'arrière de l'unité et le mur = 300 mm (30 cm)
- Distance minimale entre chaque côté de l'unité et le mur = 200 mm (20 cm)



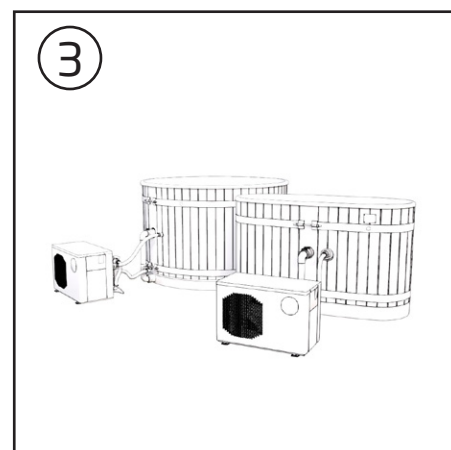
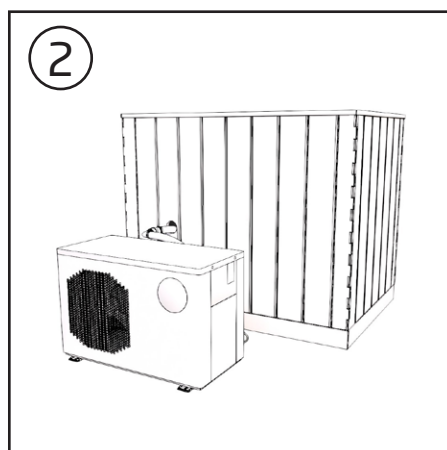
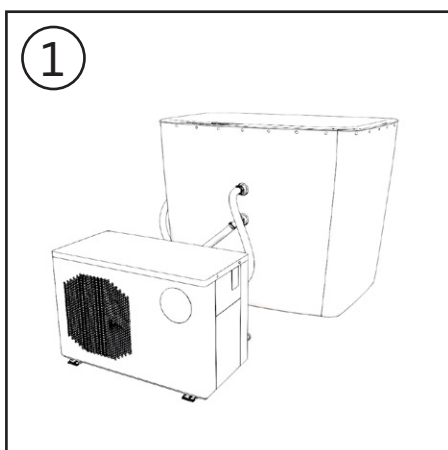
## Disposition de la circulation de l'eau entre l'unité et le bassin.



## INSTALLATION VERS LE BASSIN

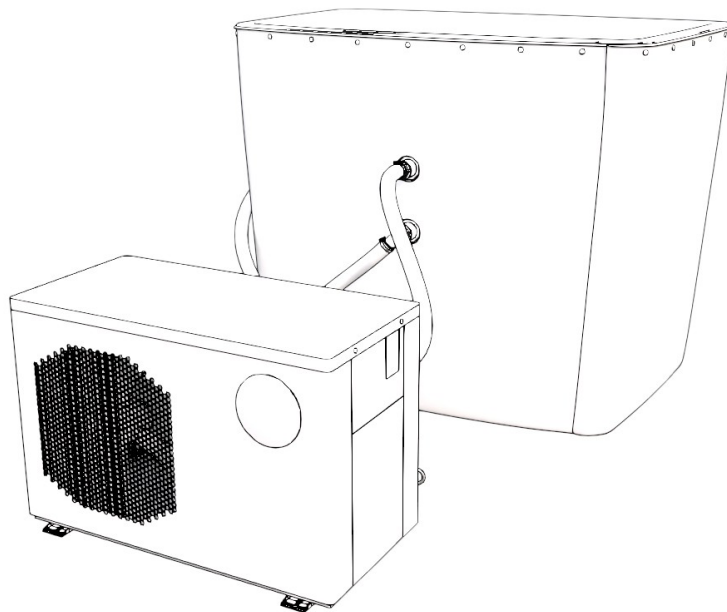
La pompe à chaleur air-air dualix peut être installée dans différents types de bassins. Les instructions relatives à chaque bassin sont présentées dans l'ordre suivant :

1. Comfort BlackIce S
2. Premium NordicIce S
3. Kamiinan korvaava

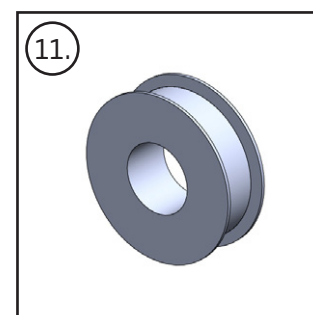
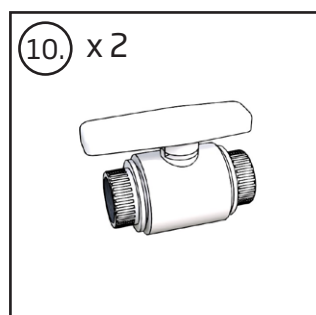
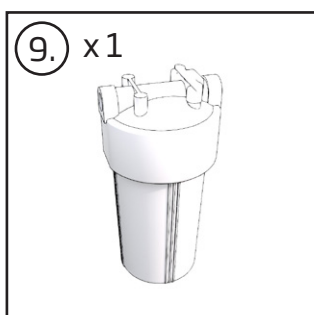
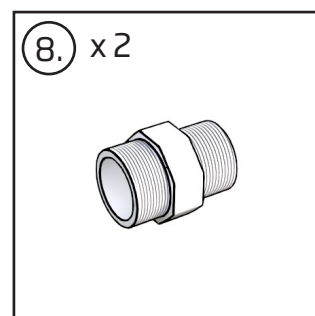
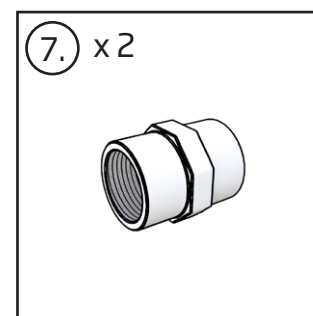
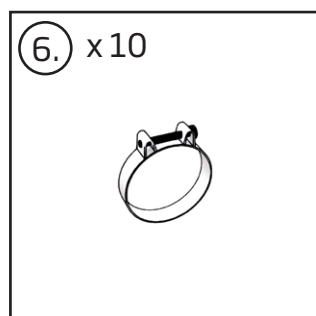
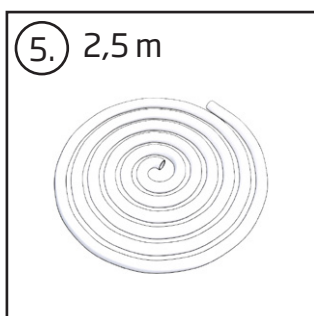
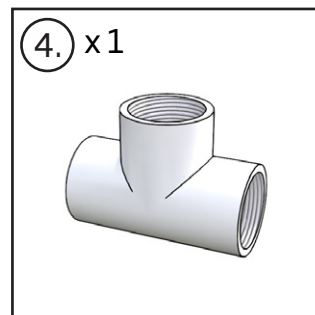
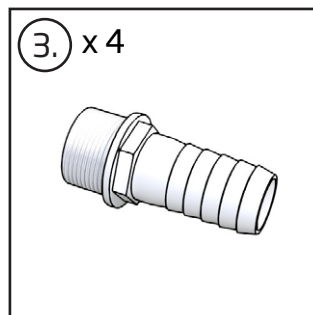
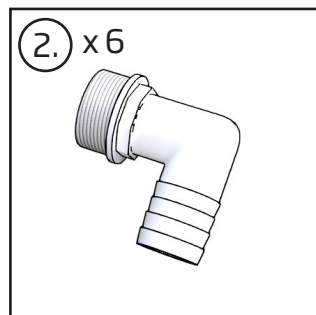
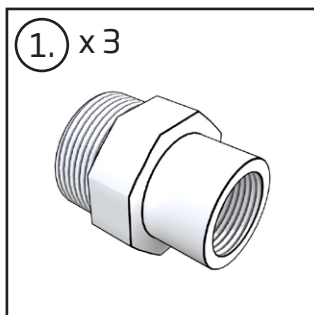


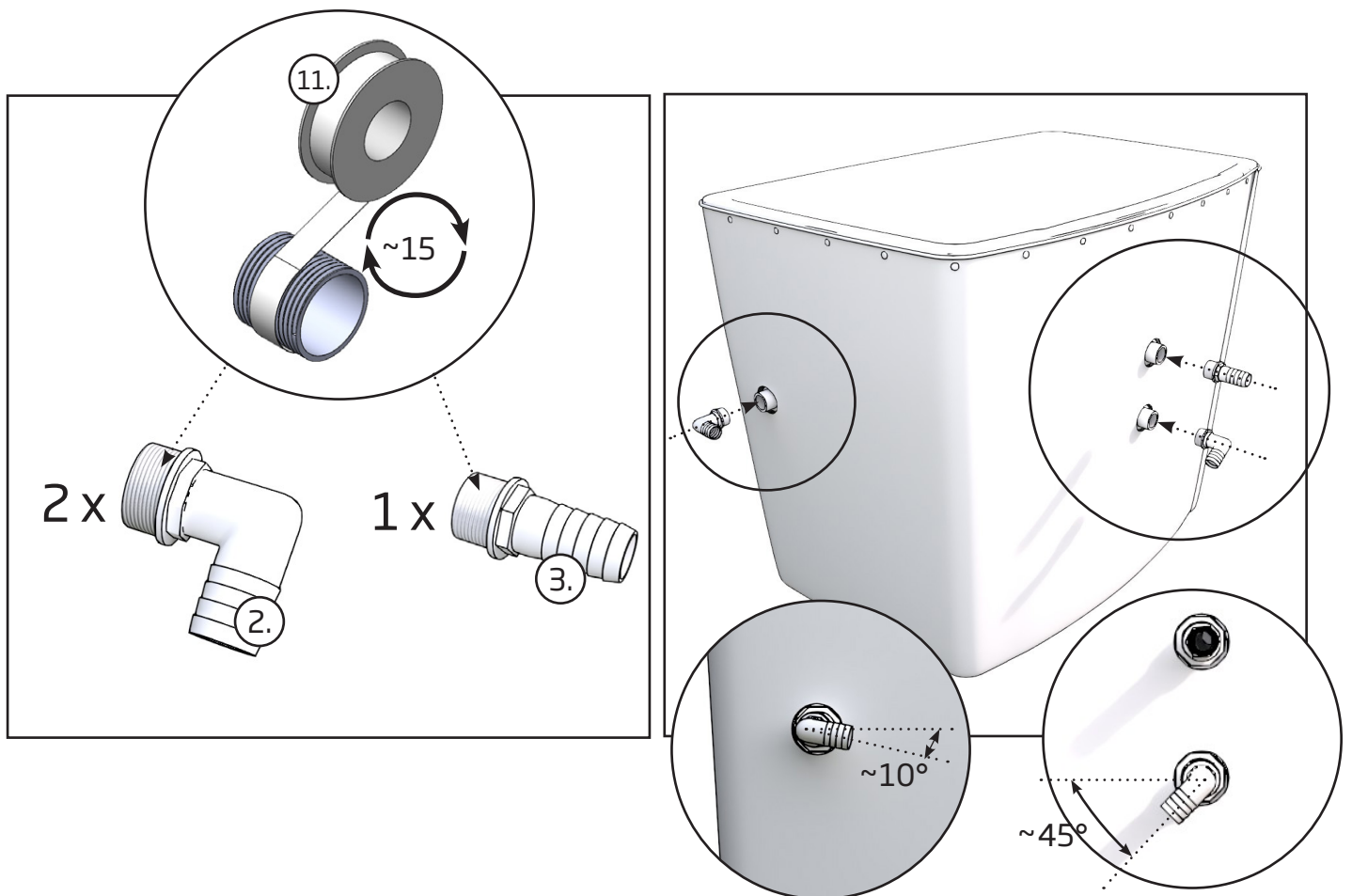
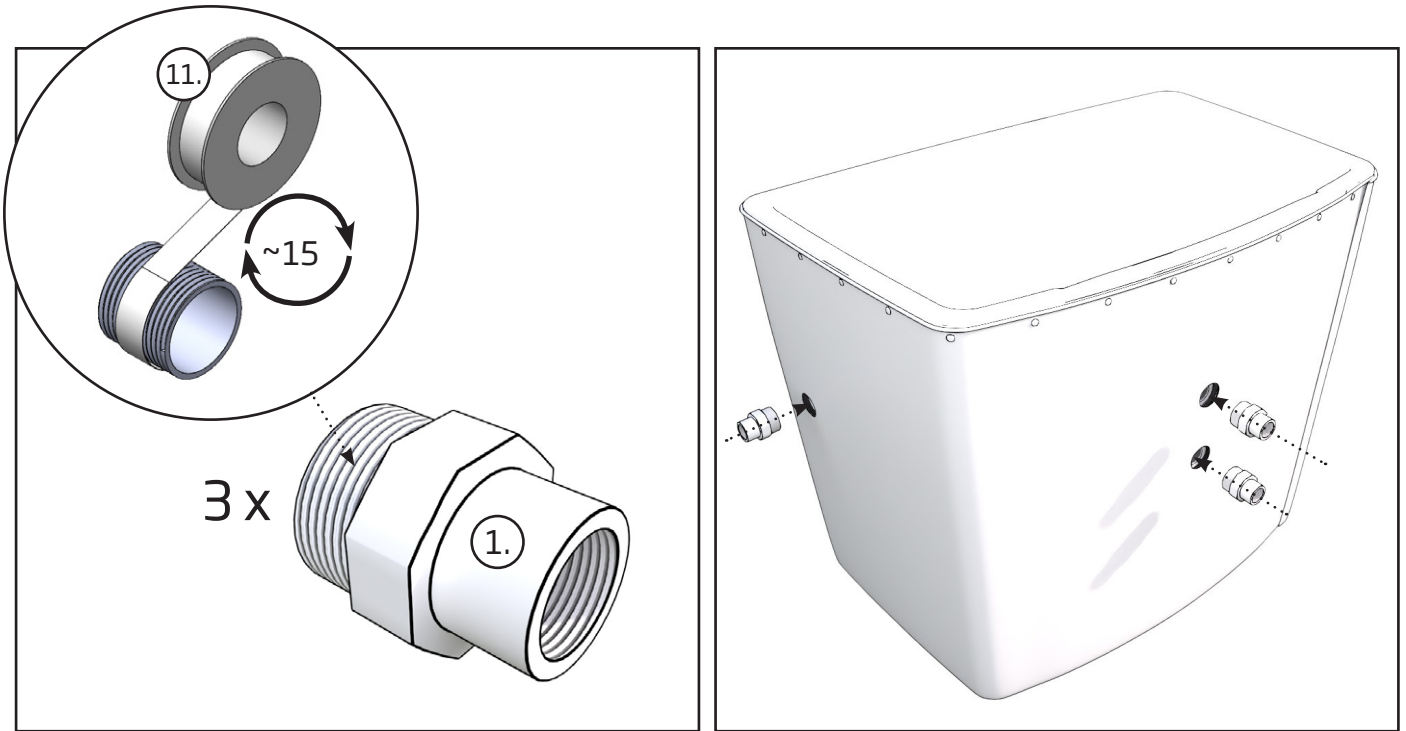


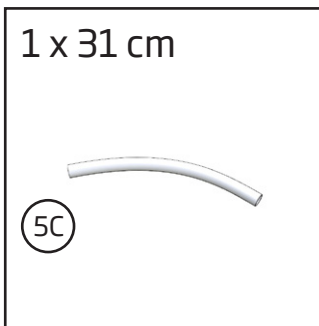
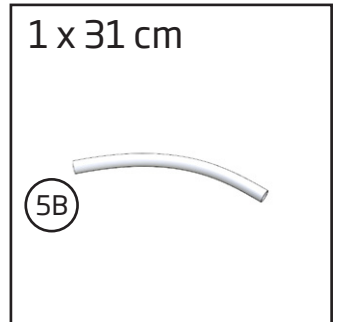
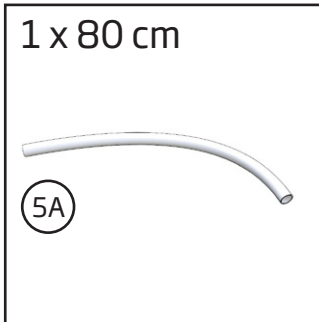
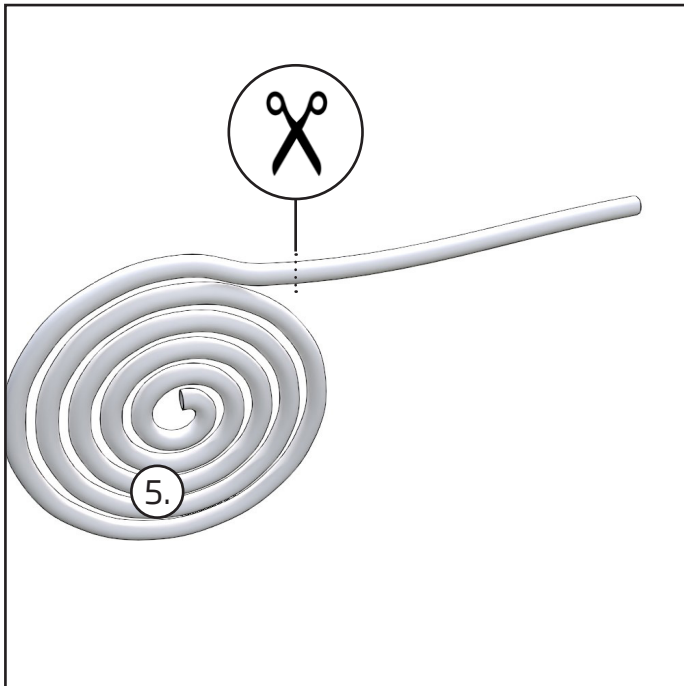
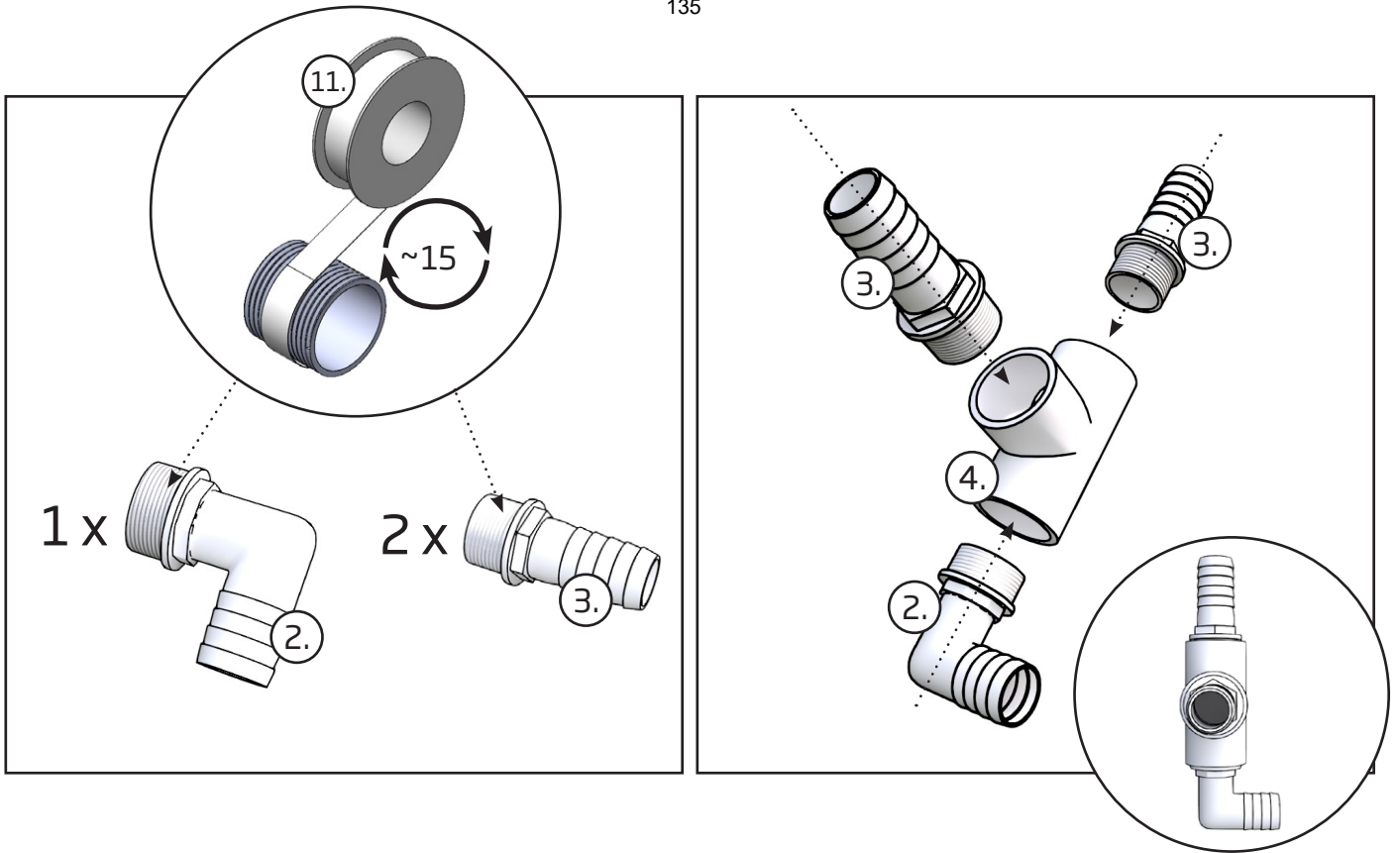
# 1. COMFORT BLACKICE S

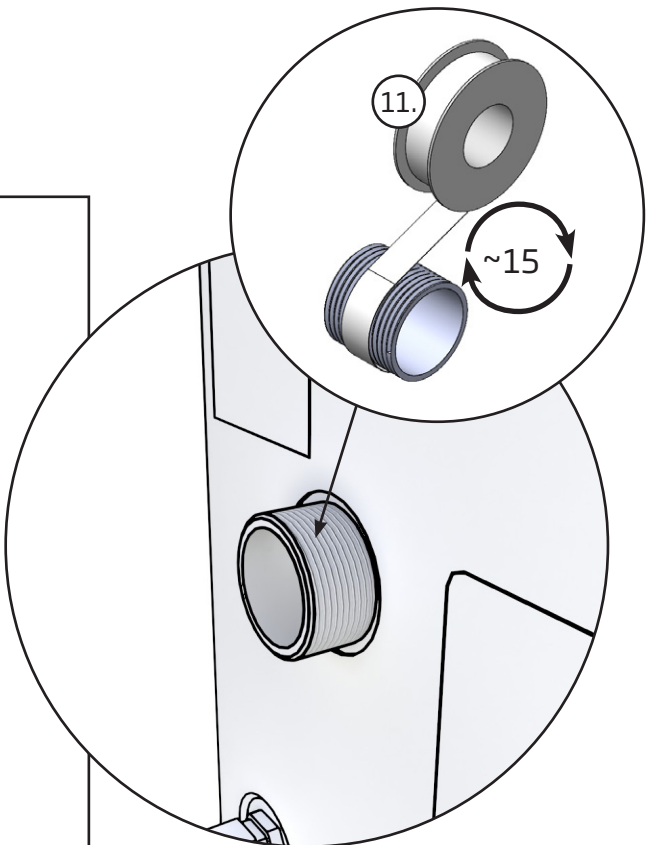
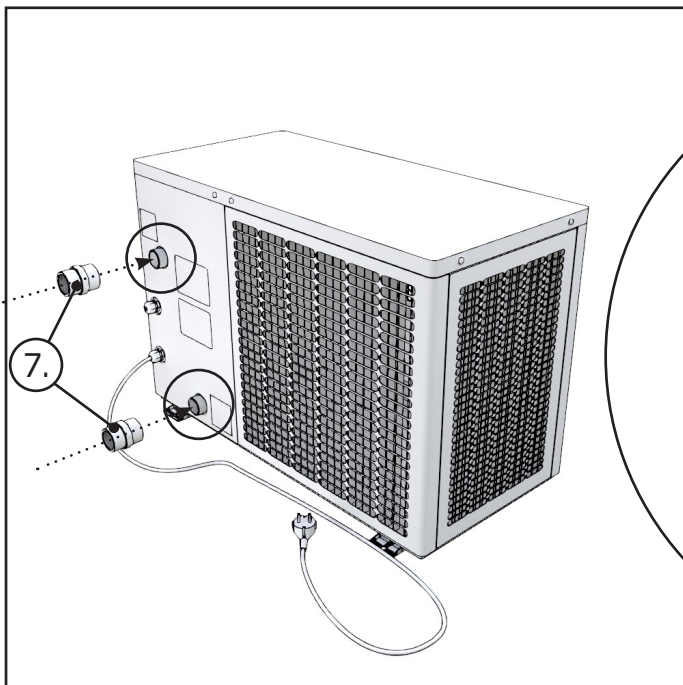
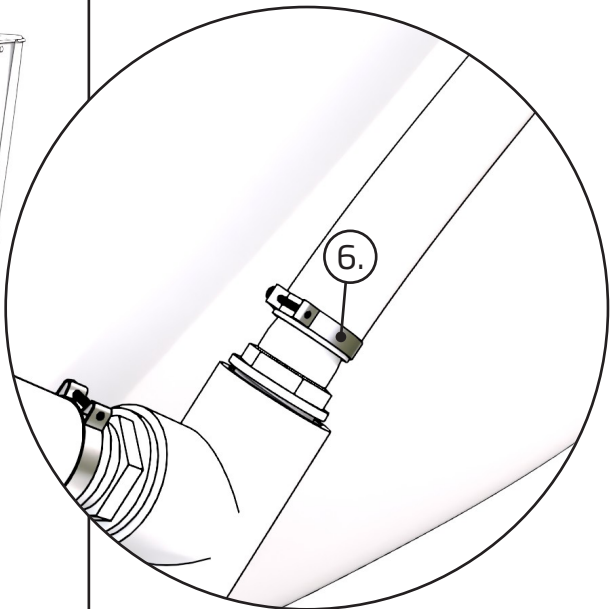
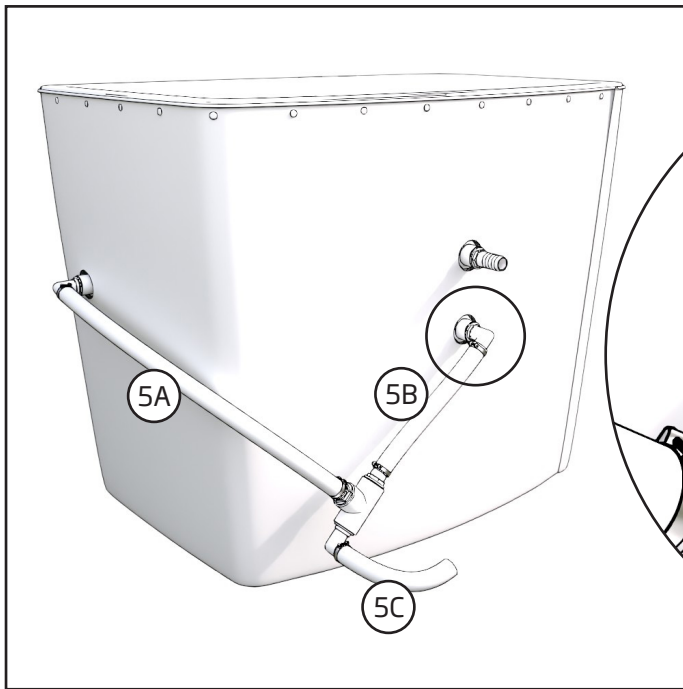


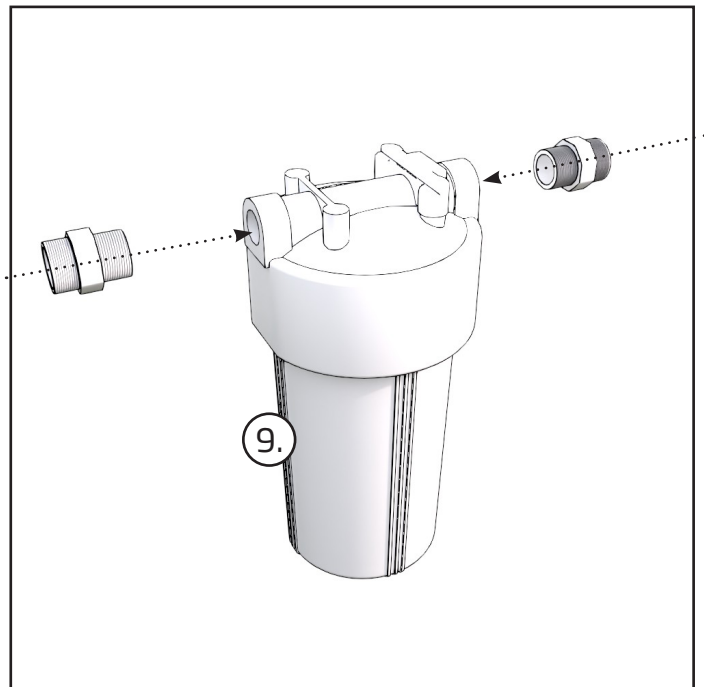
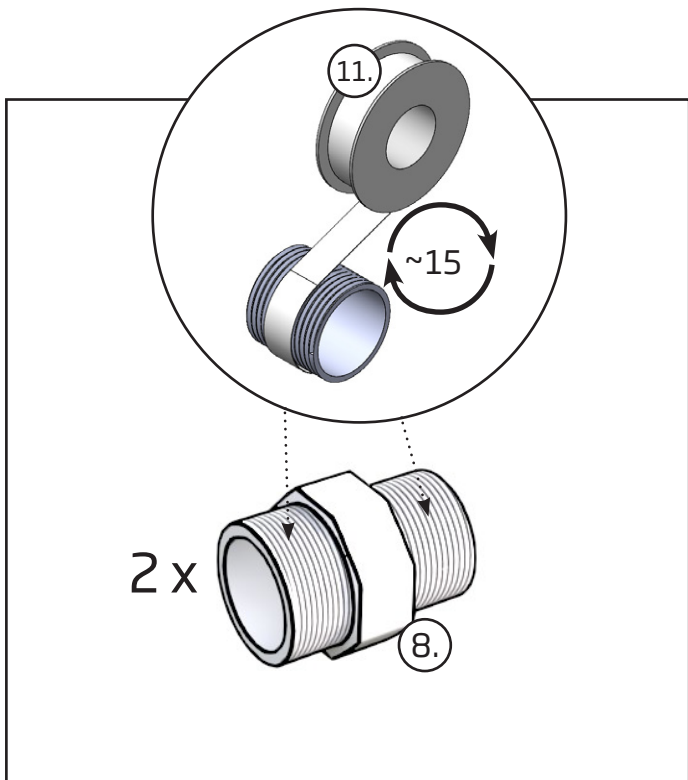
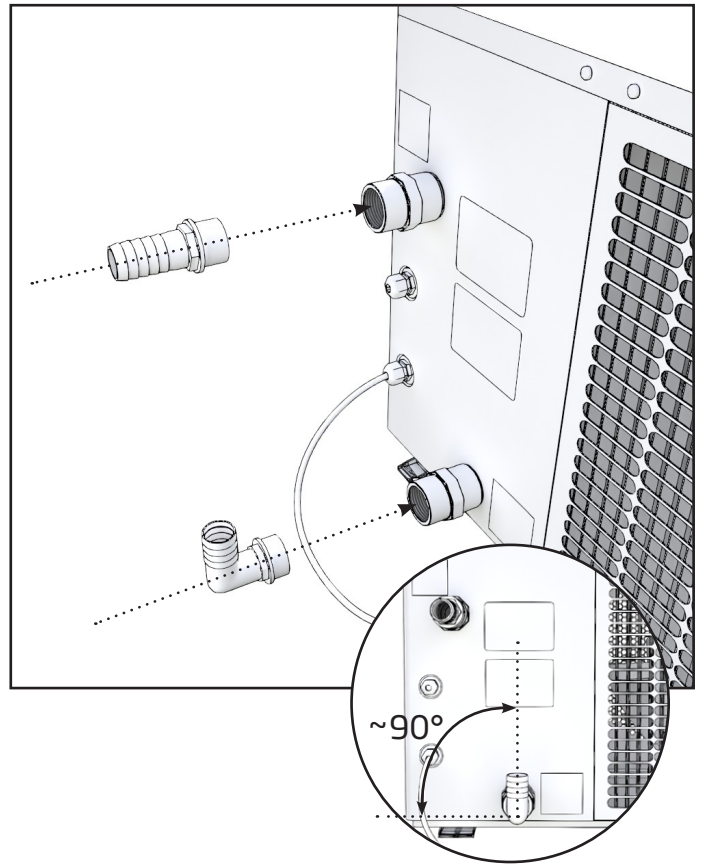
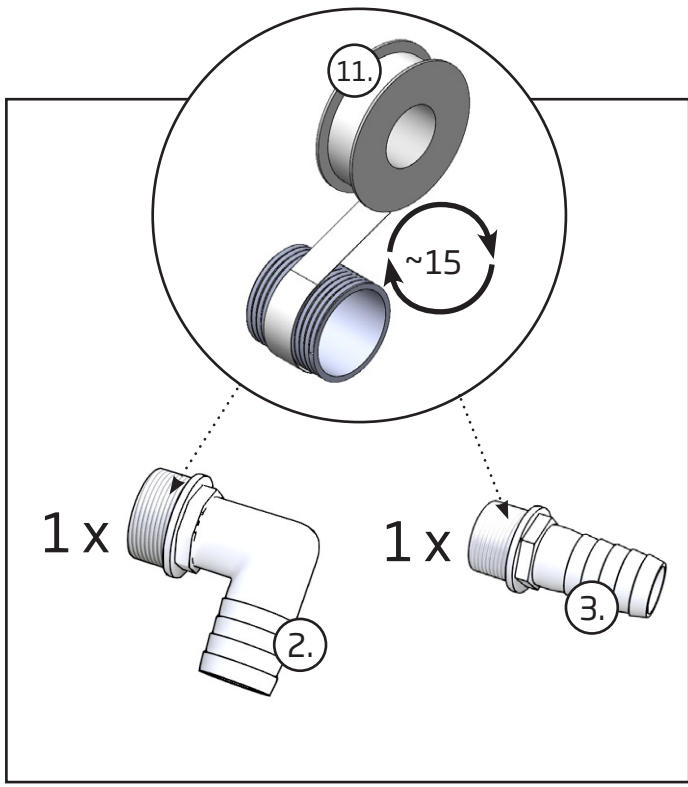
## LISTE DES PIÈCES

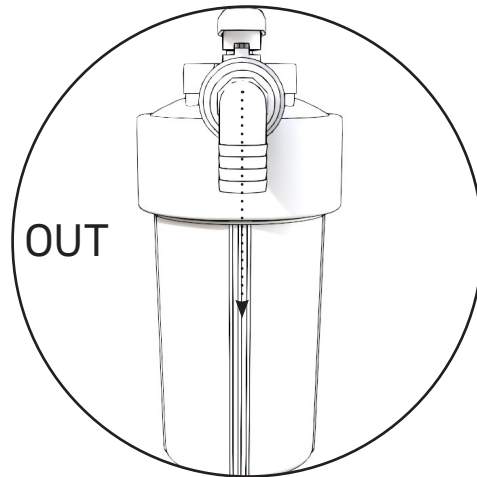
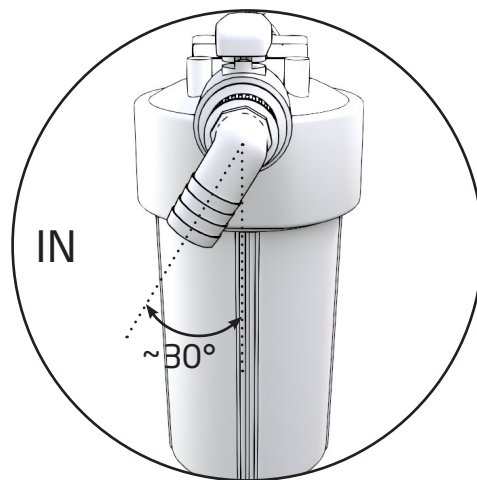
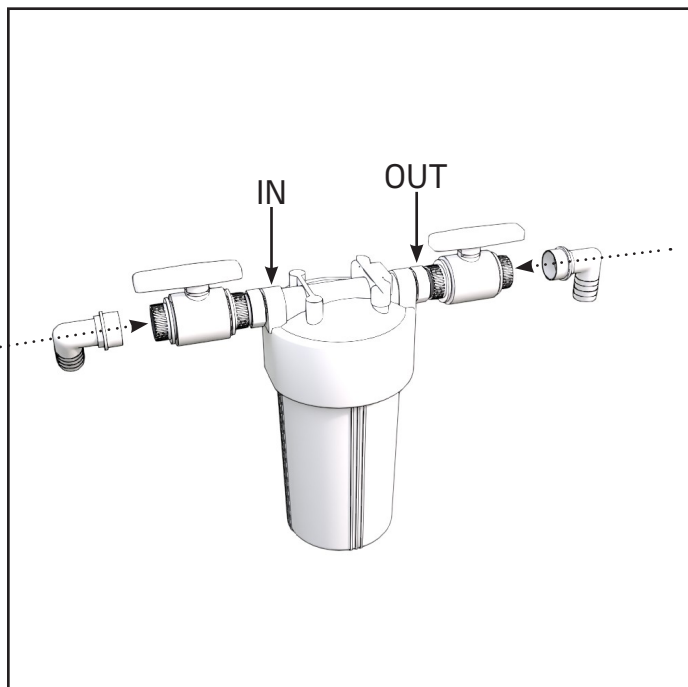
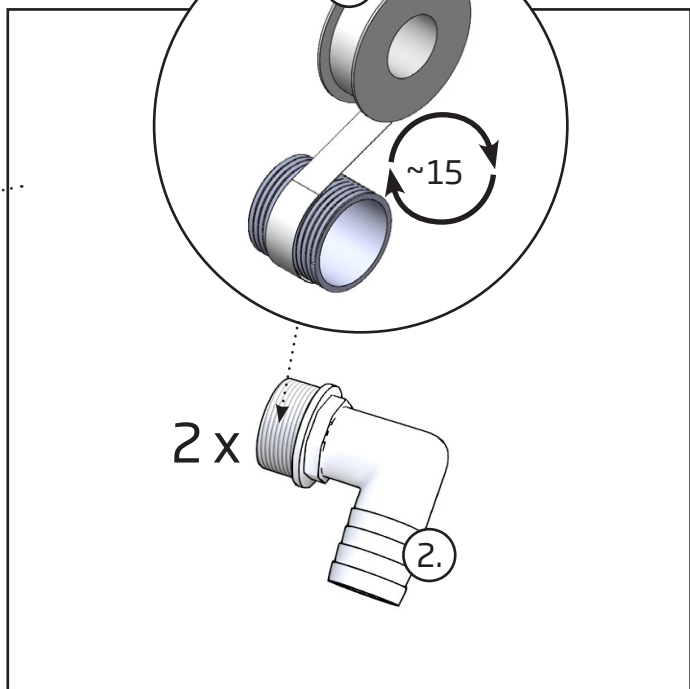
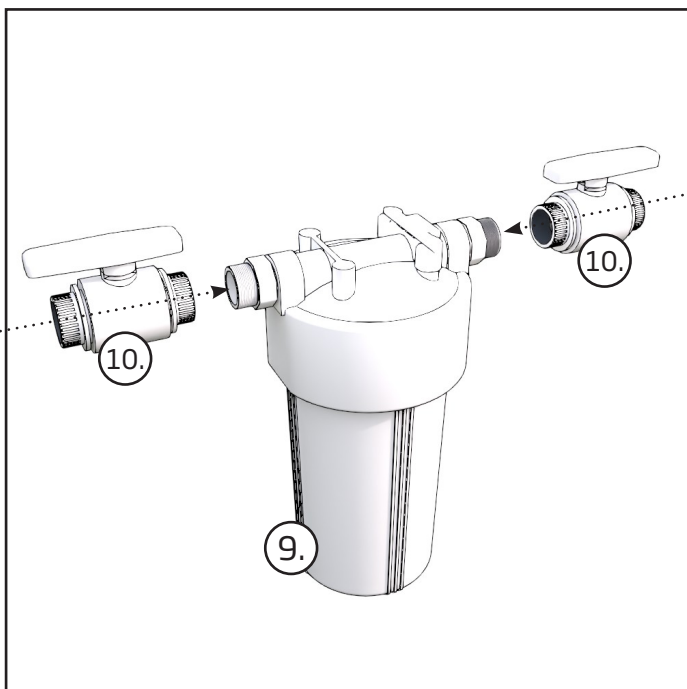




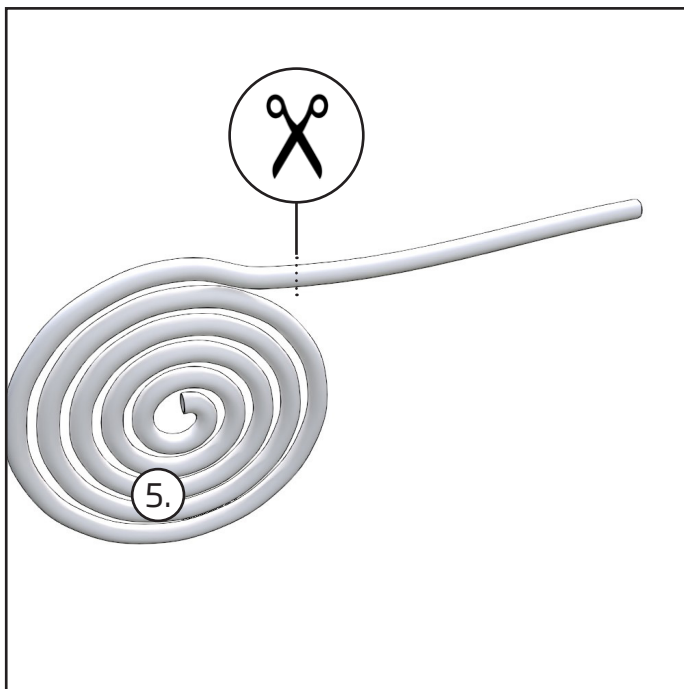








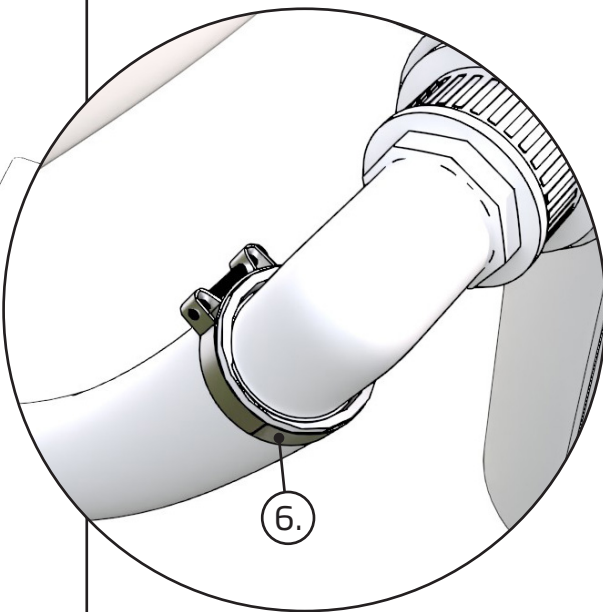
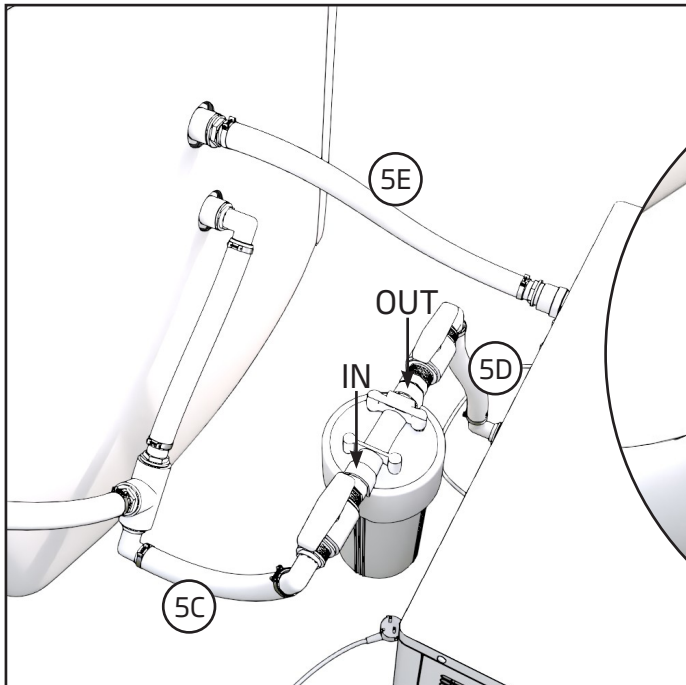




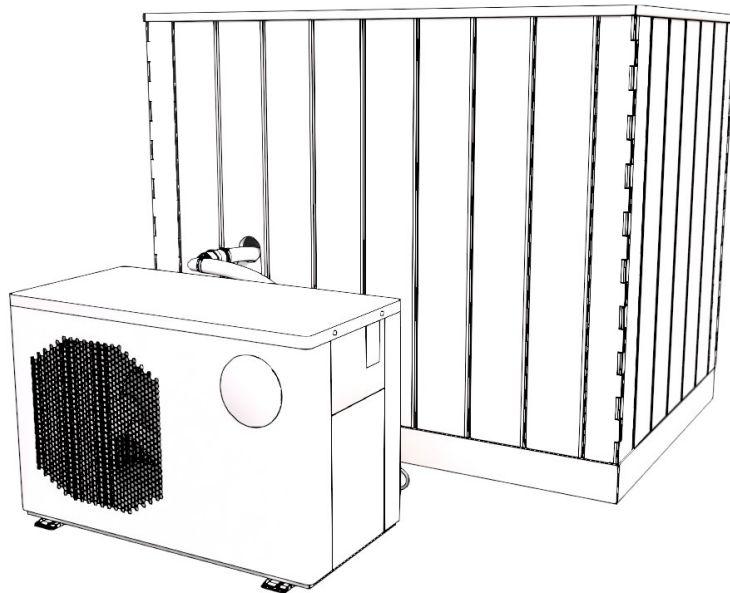
1 x 22 cm



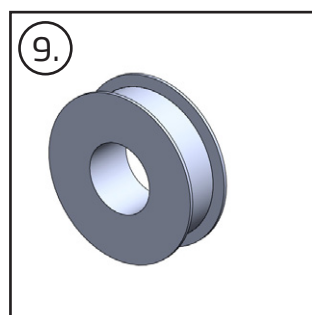
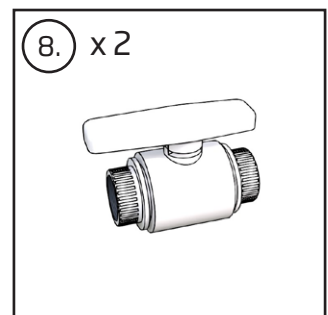
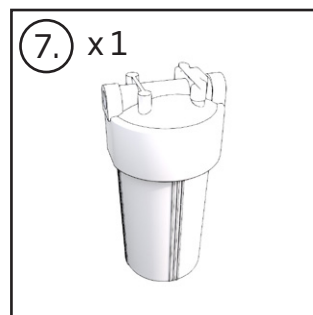
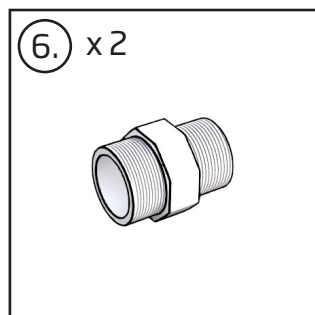
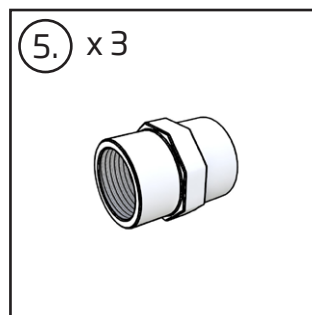
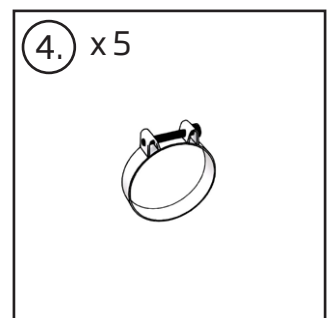
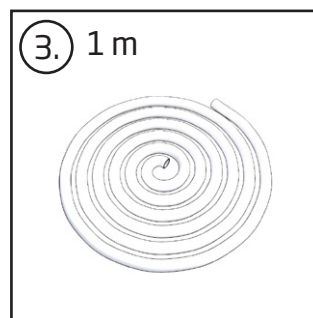
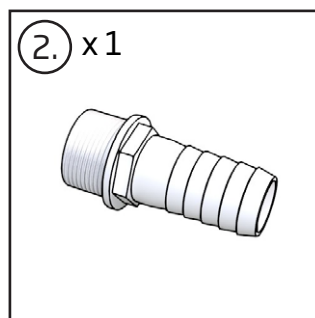
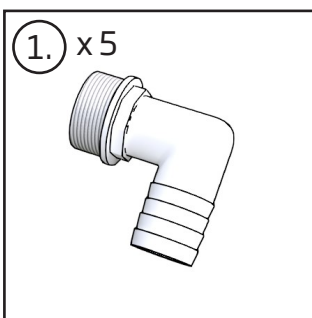
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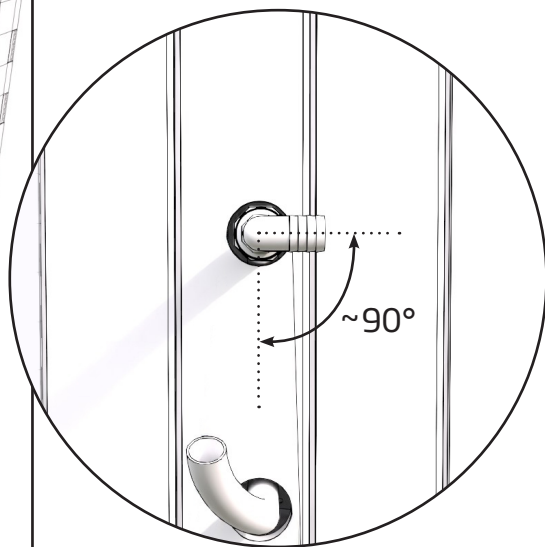
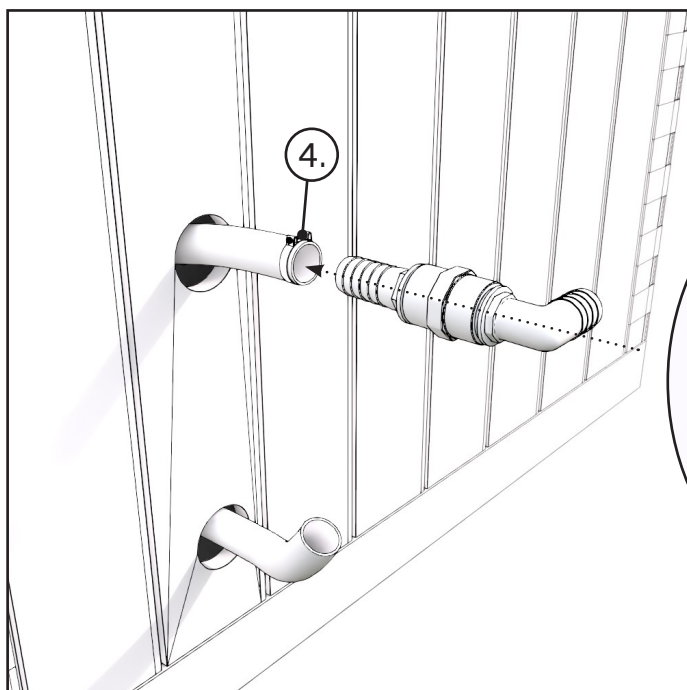
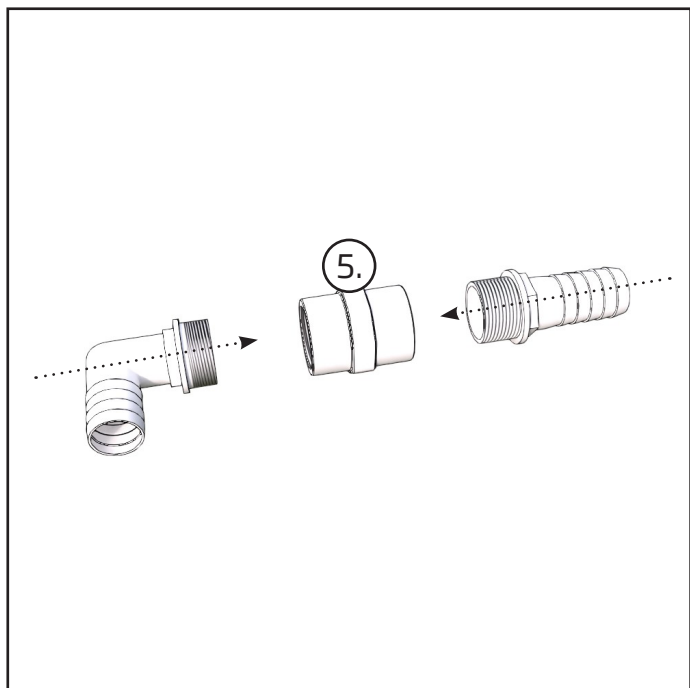
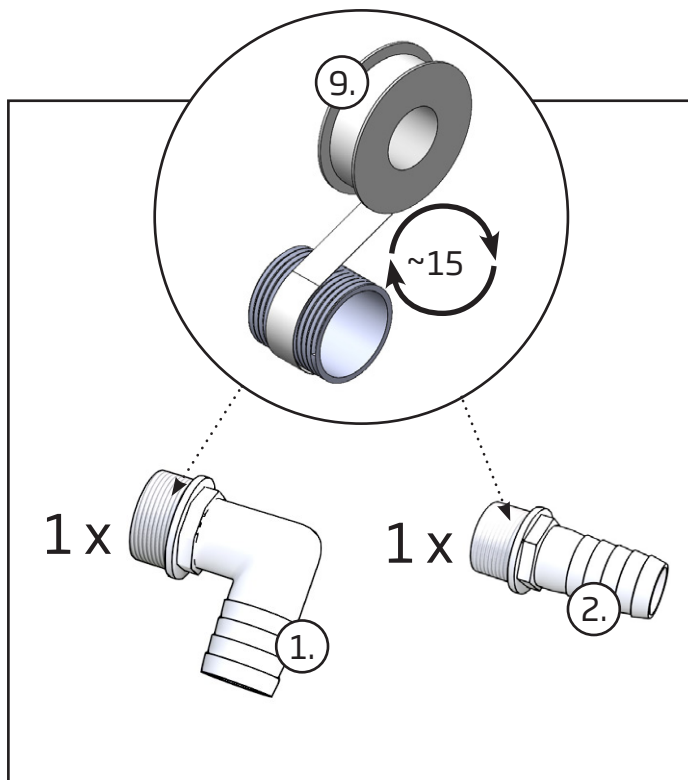


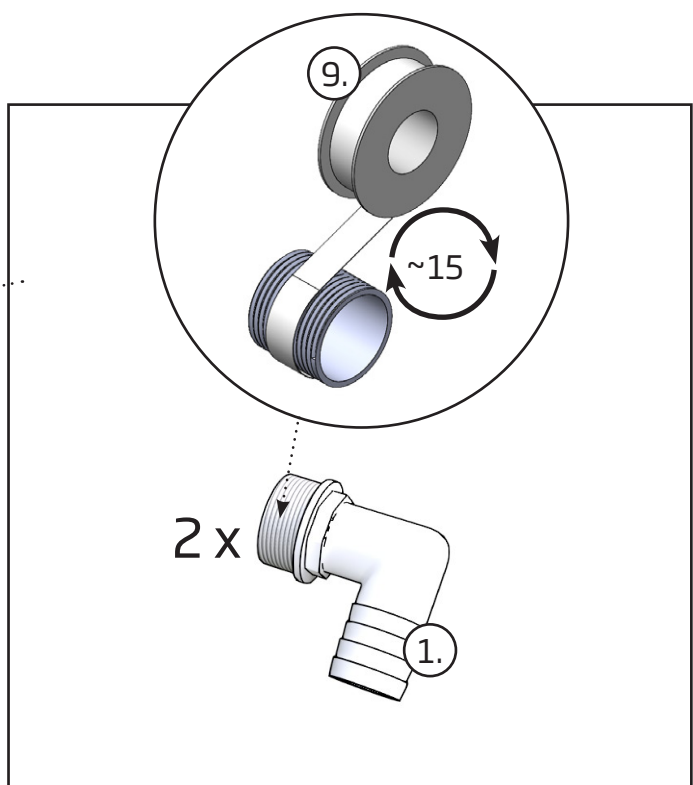
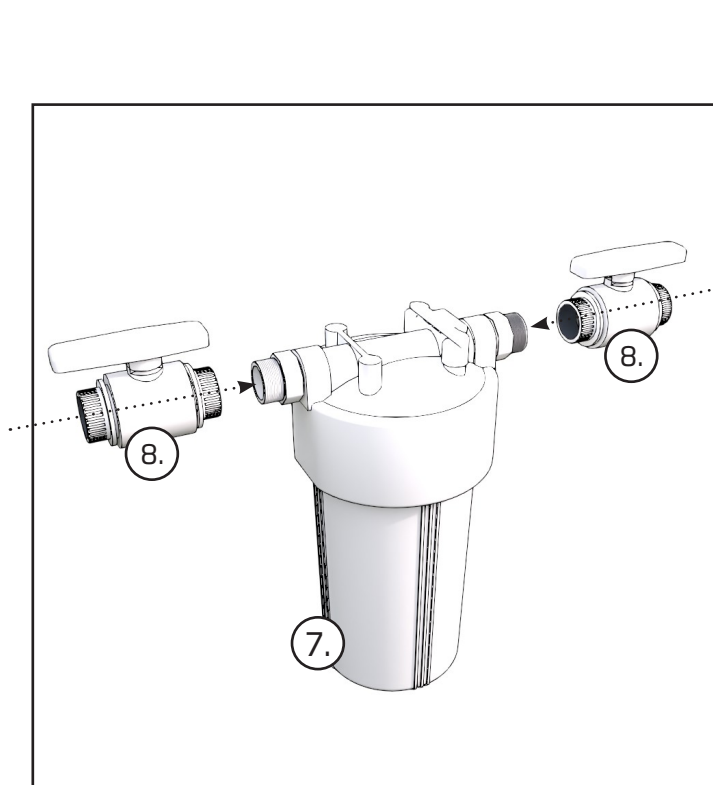
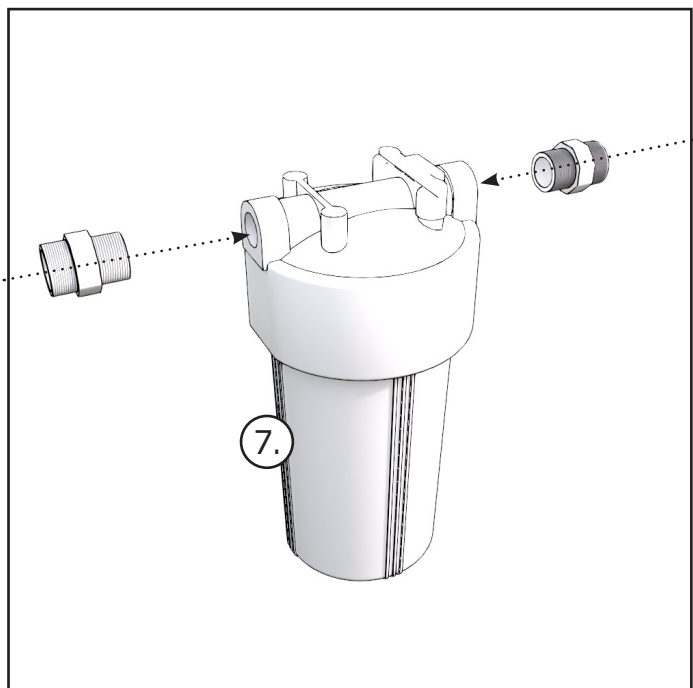
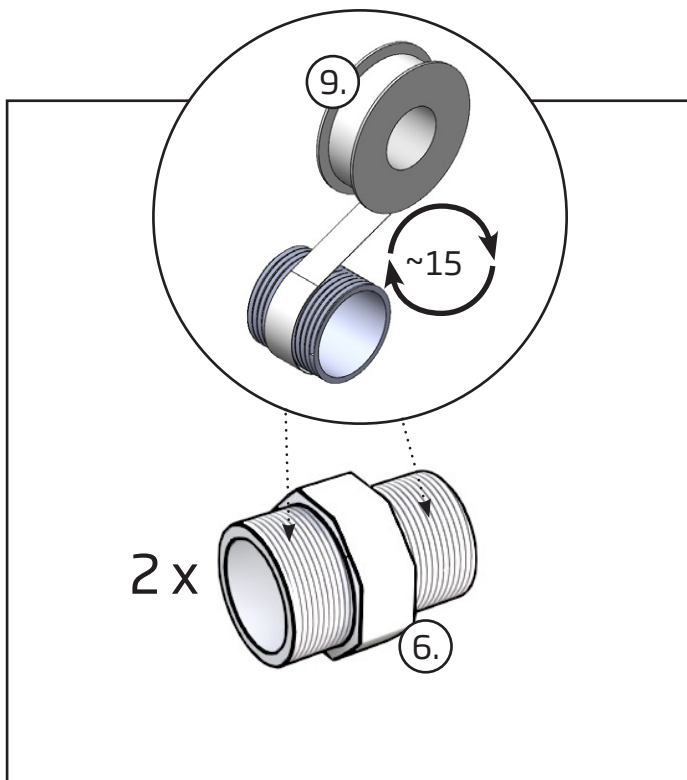
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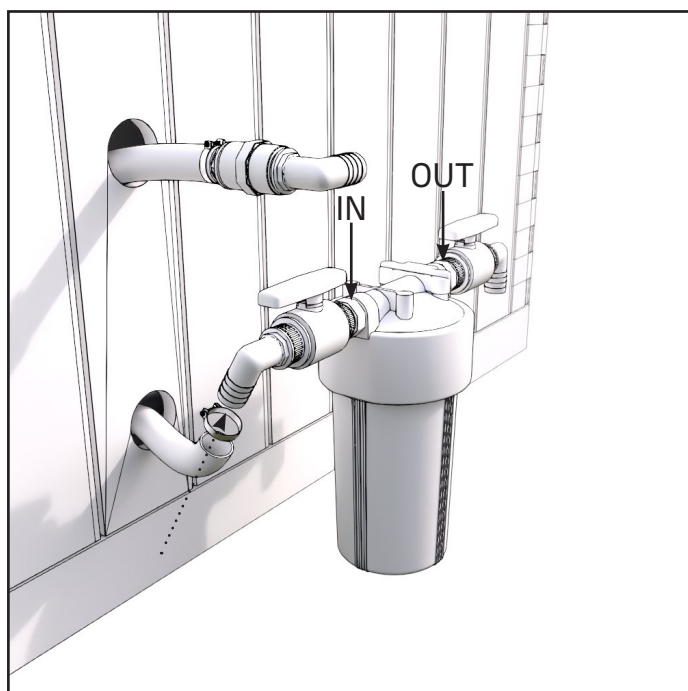
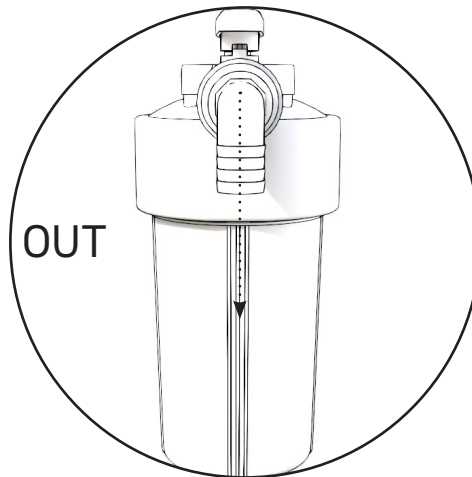
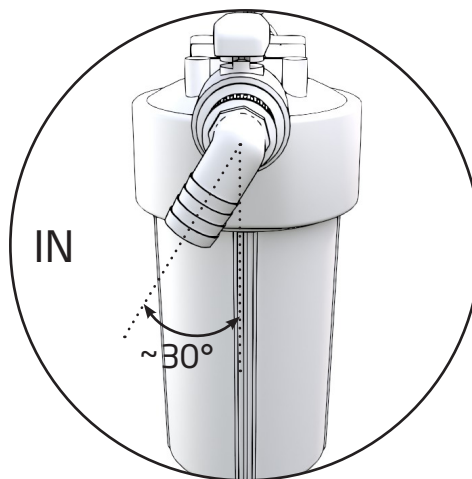
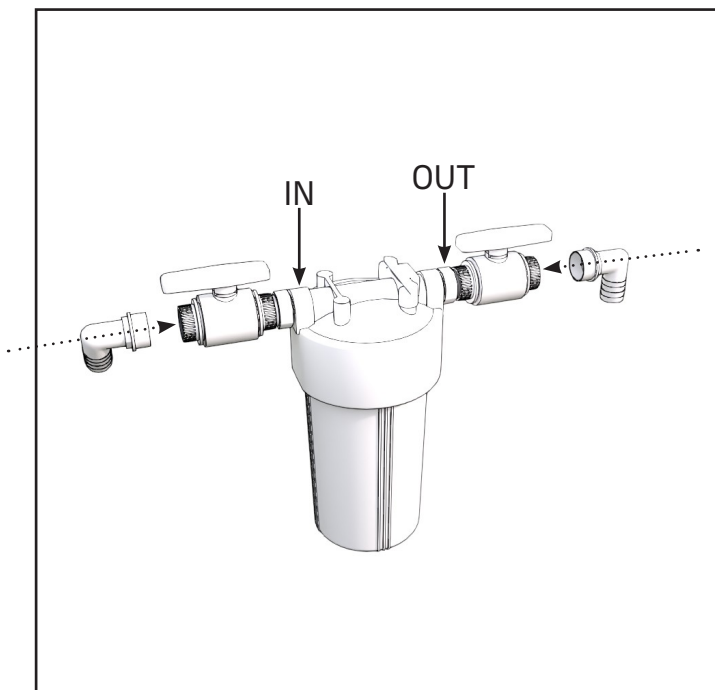


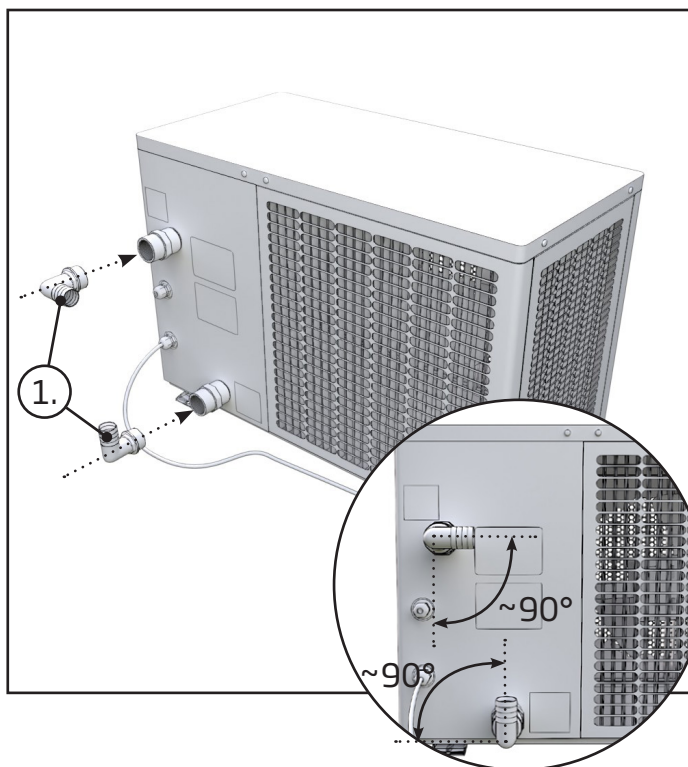
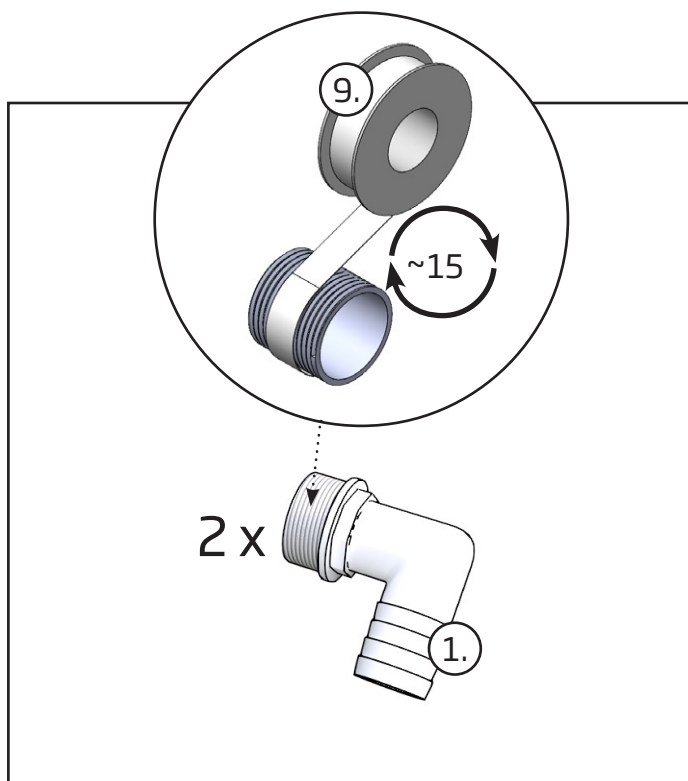
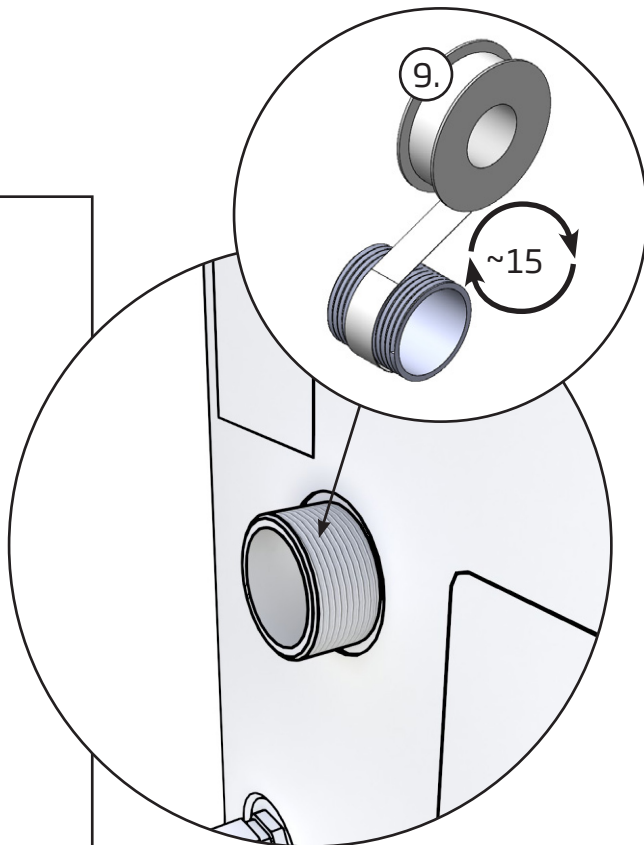
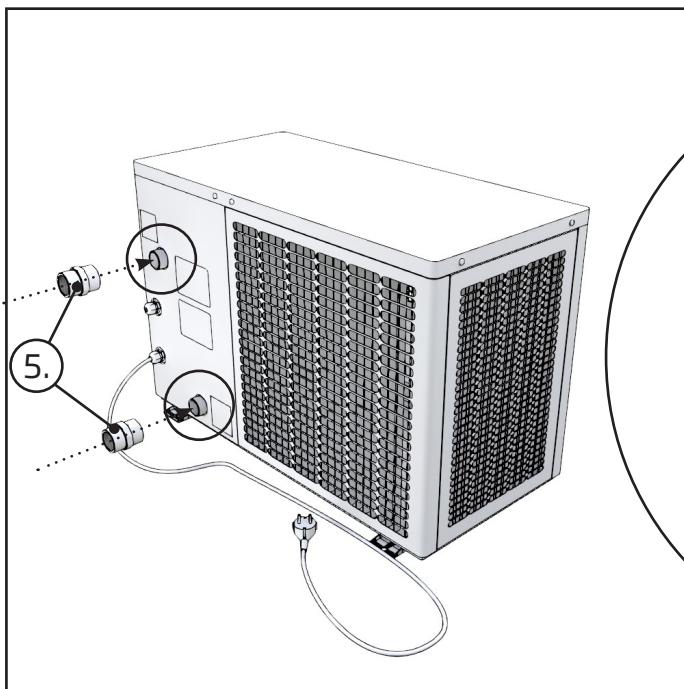
## LISTE DES PIÈCES



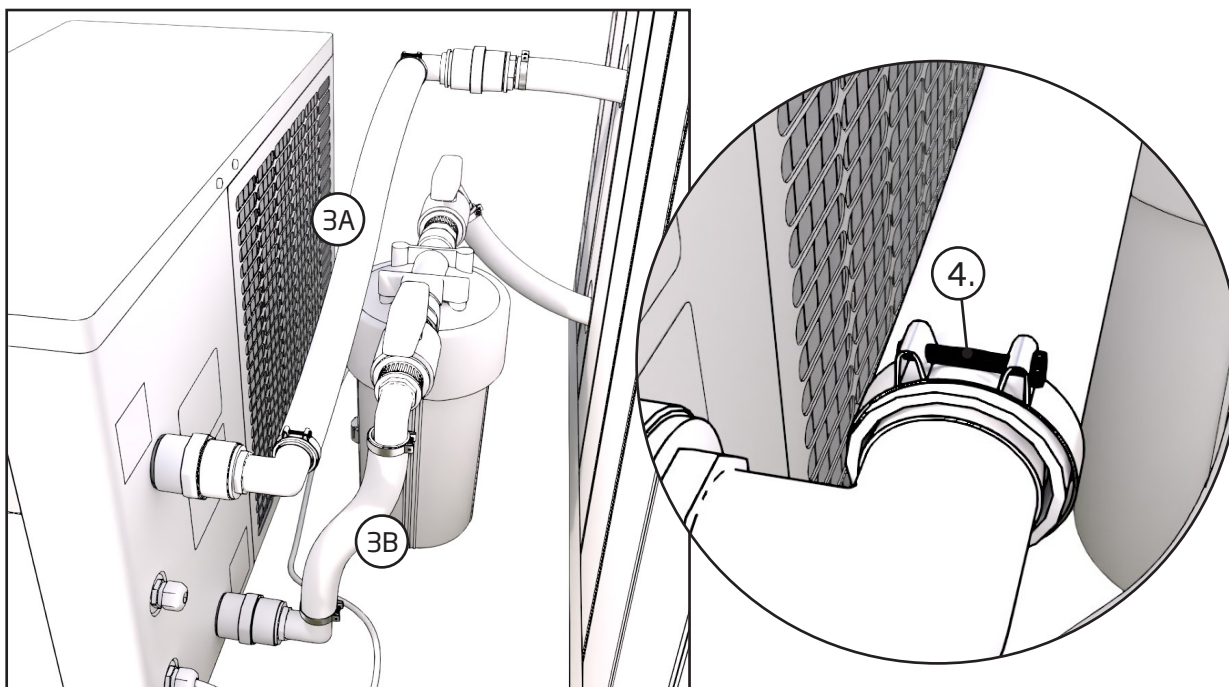
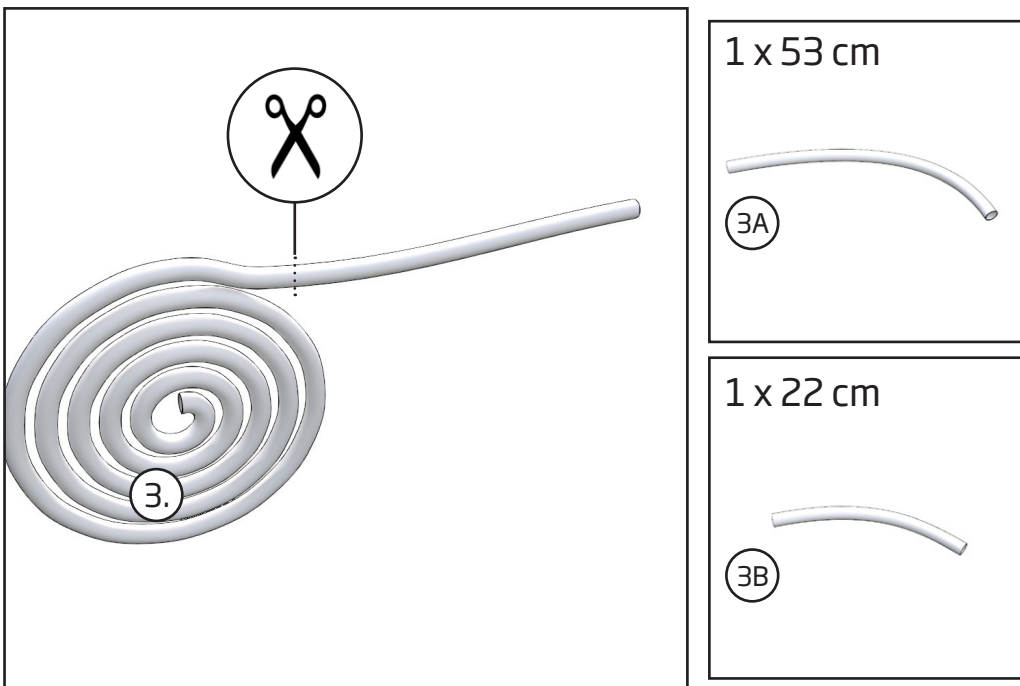




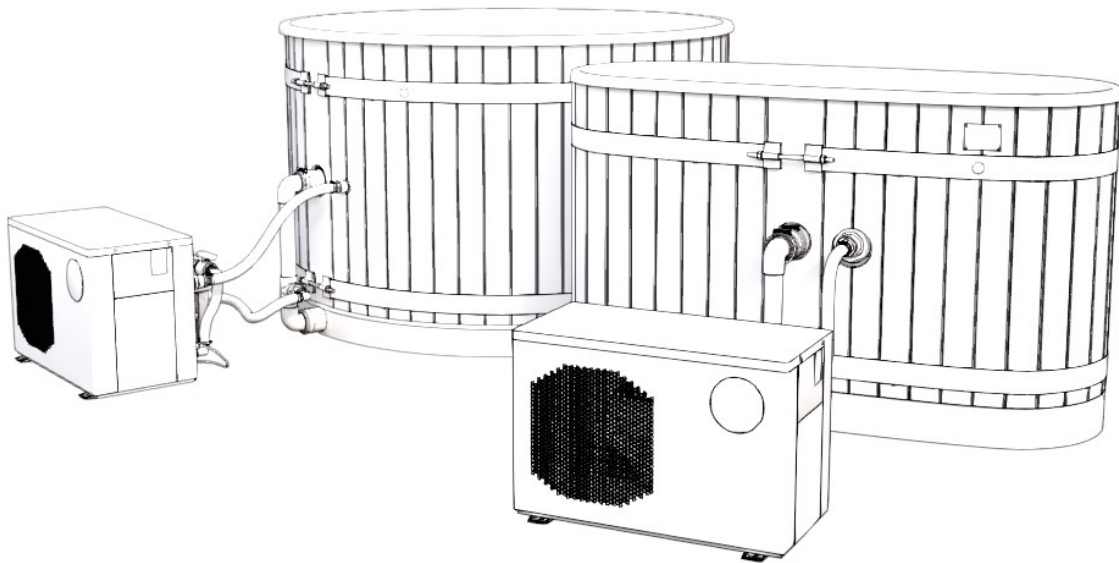




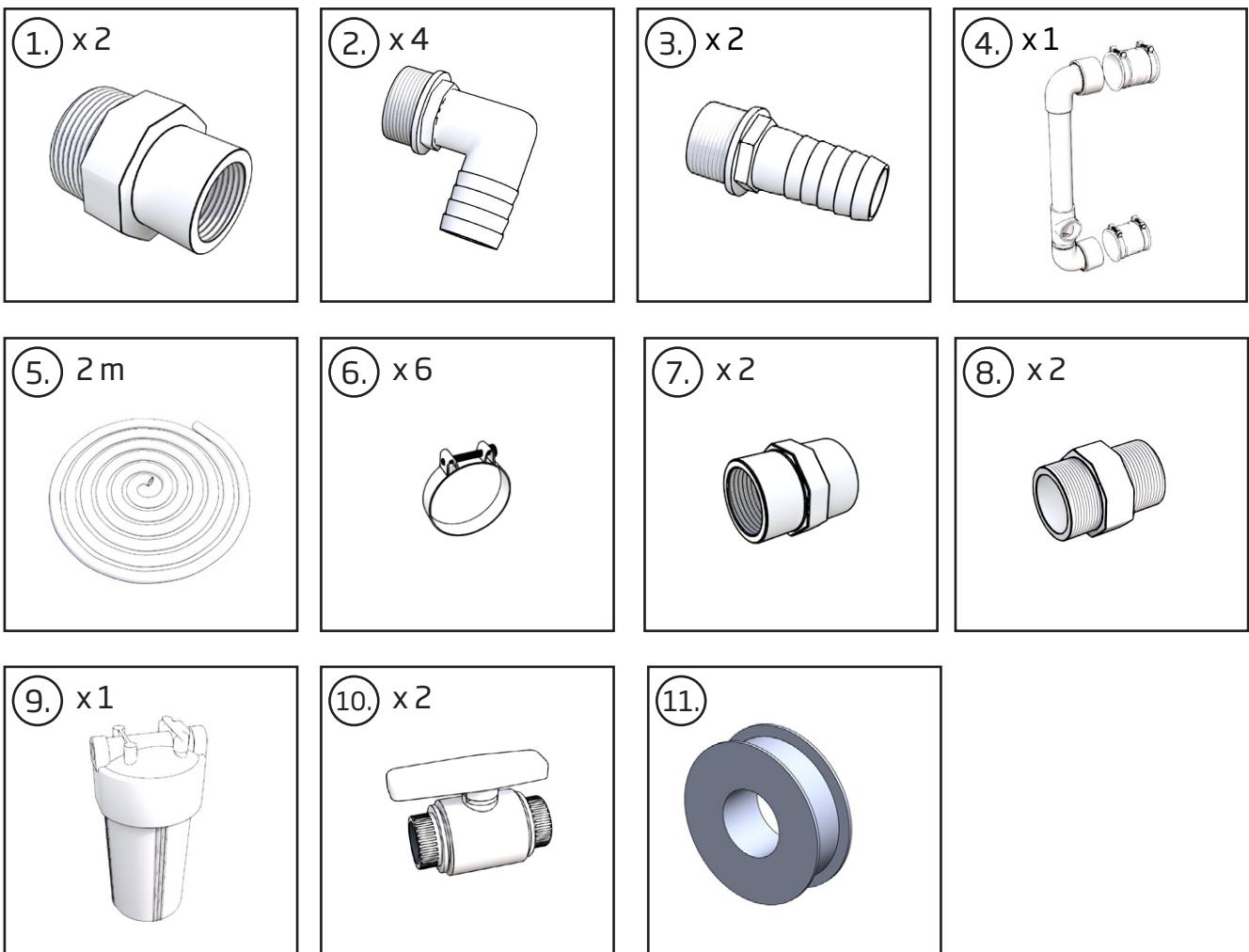


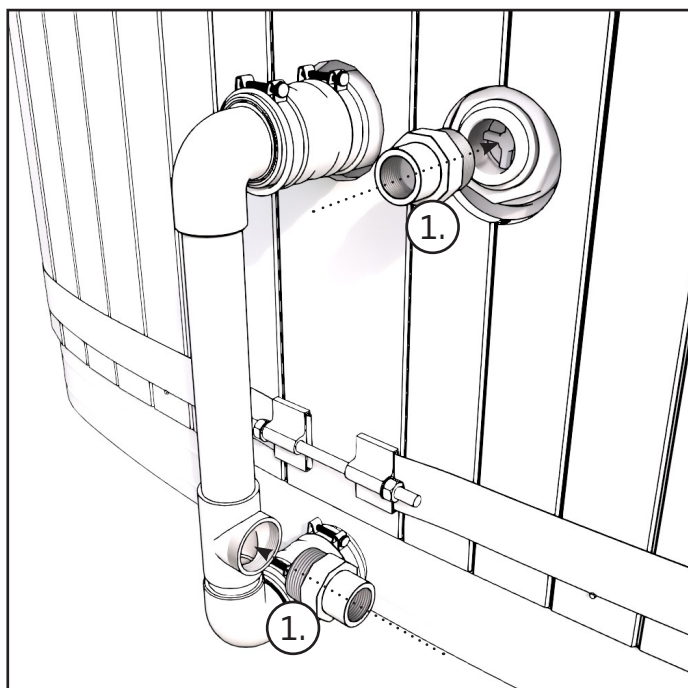
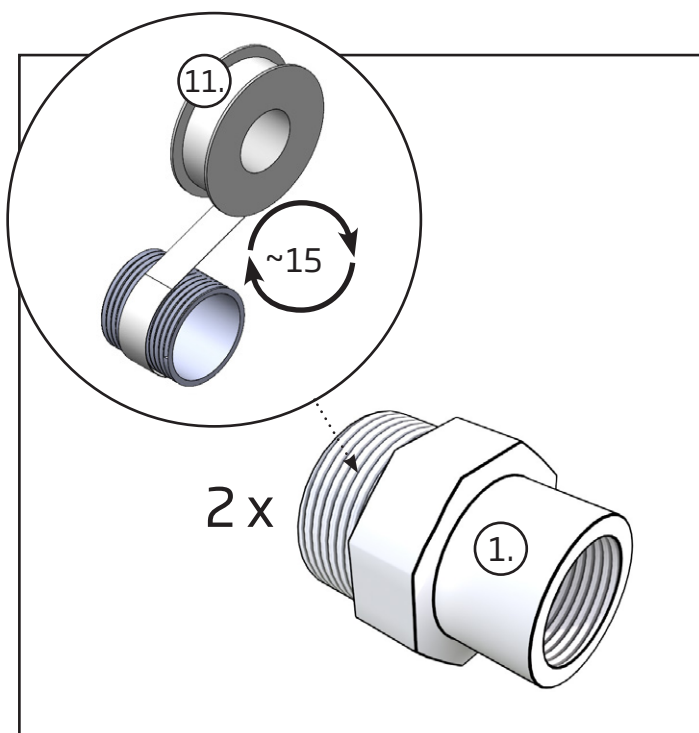
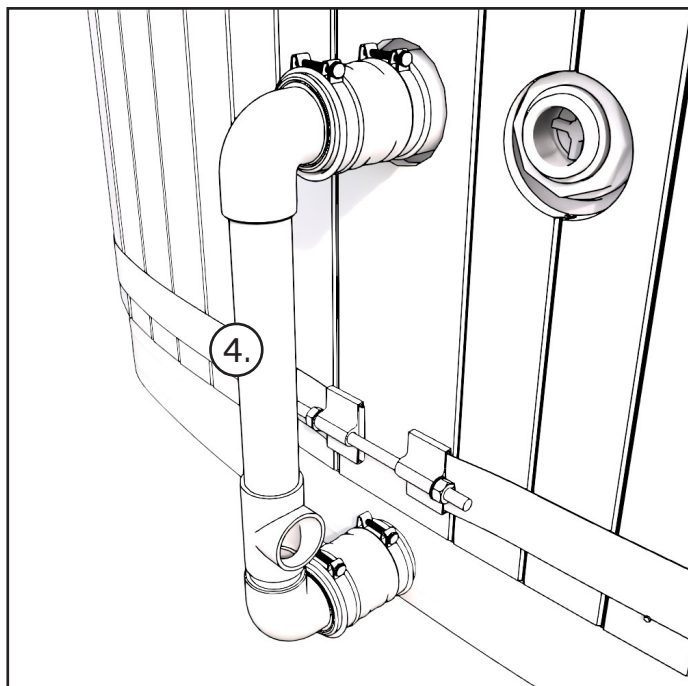
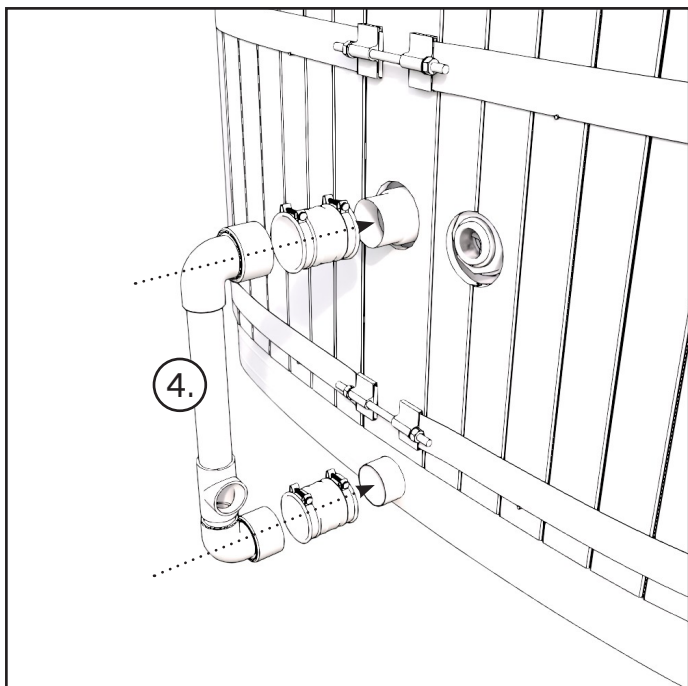


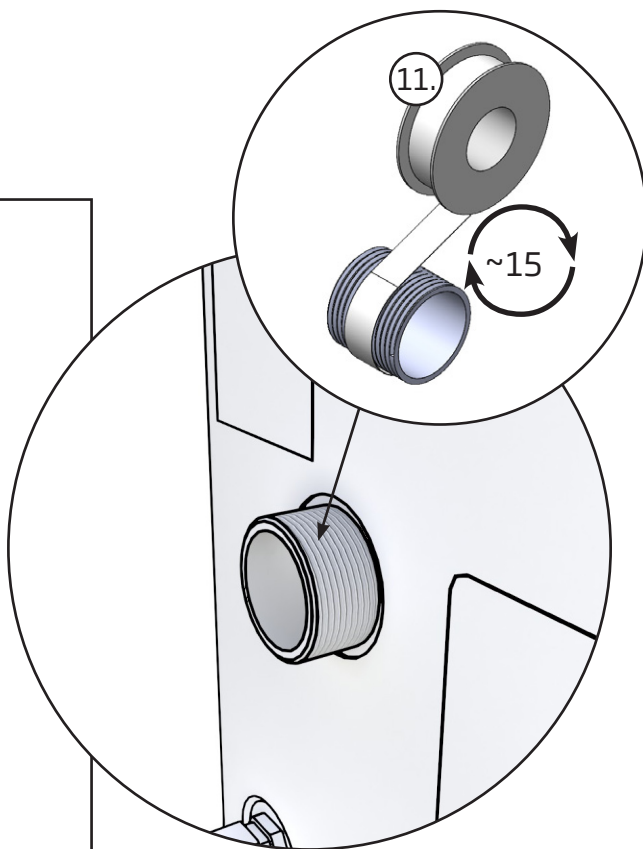
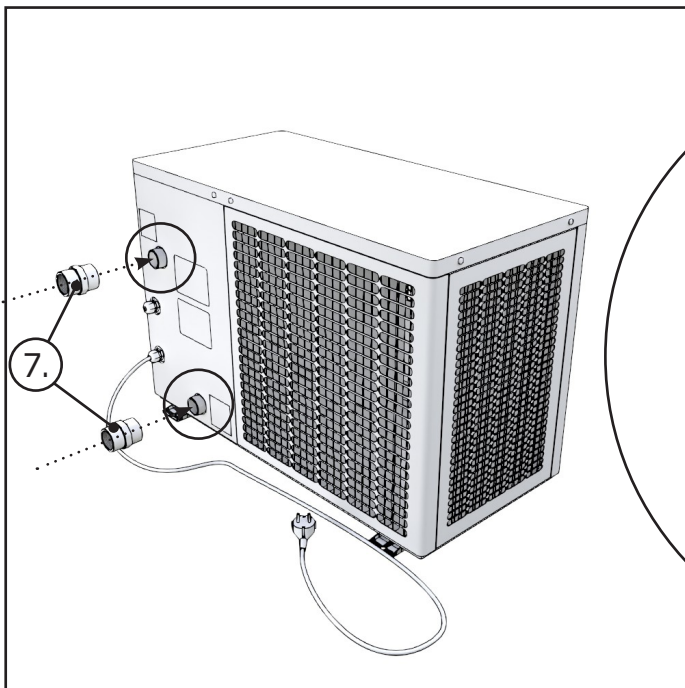
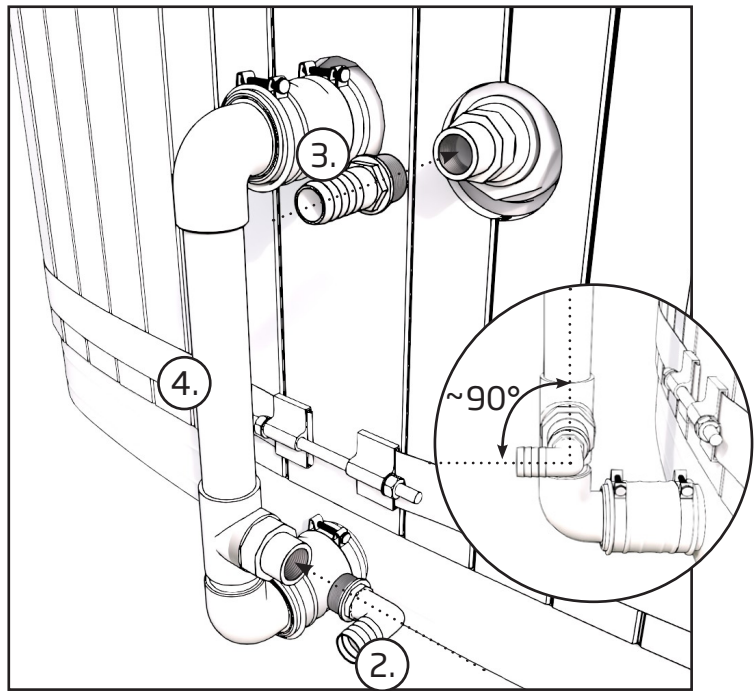
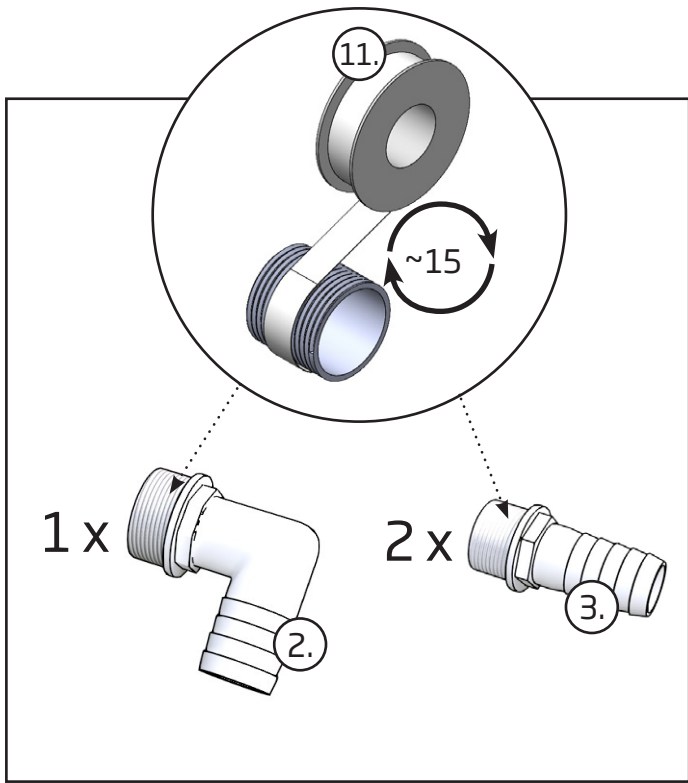
# INSTALLATION EN REMPLACEMENT D'UN SYSTÈME DE CHAUFFAGE

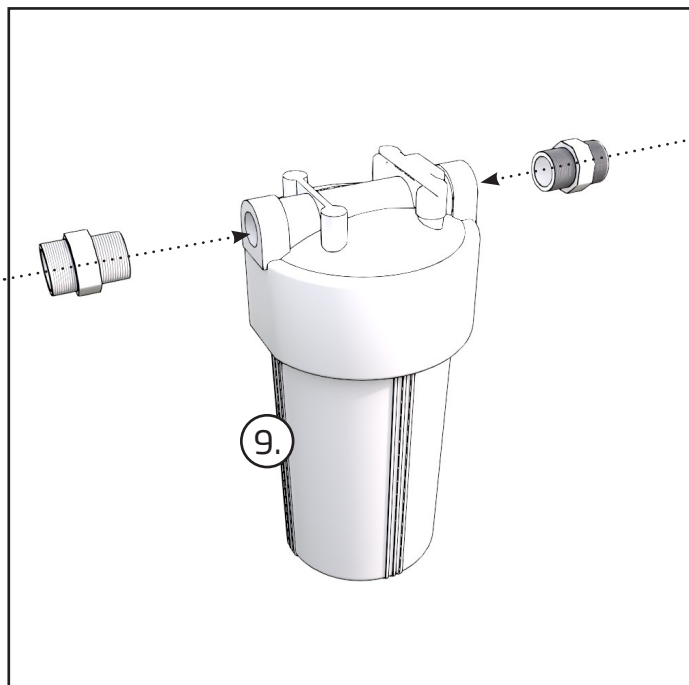
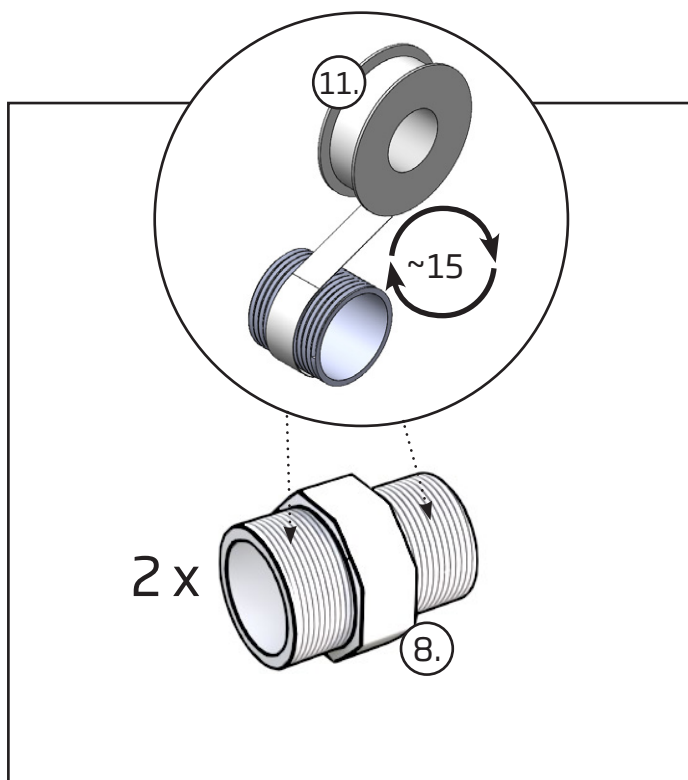
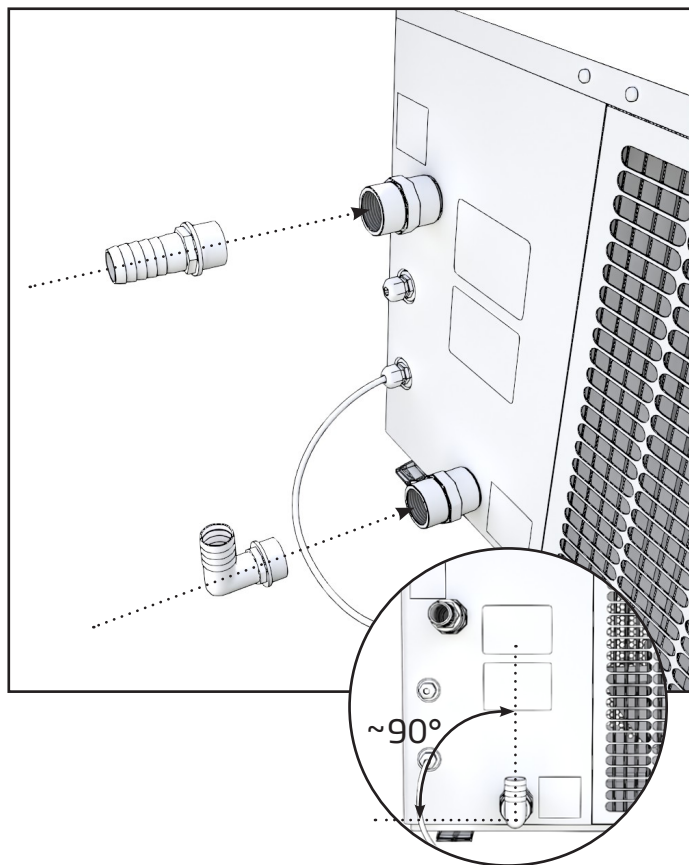
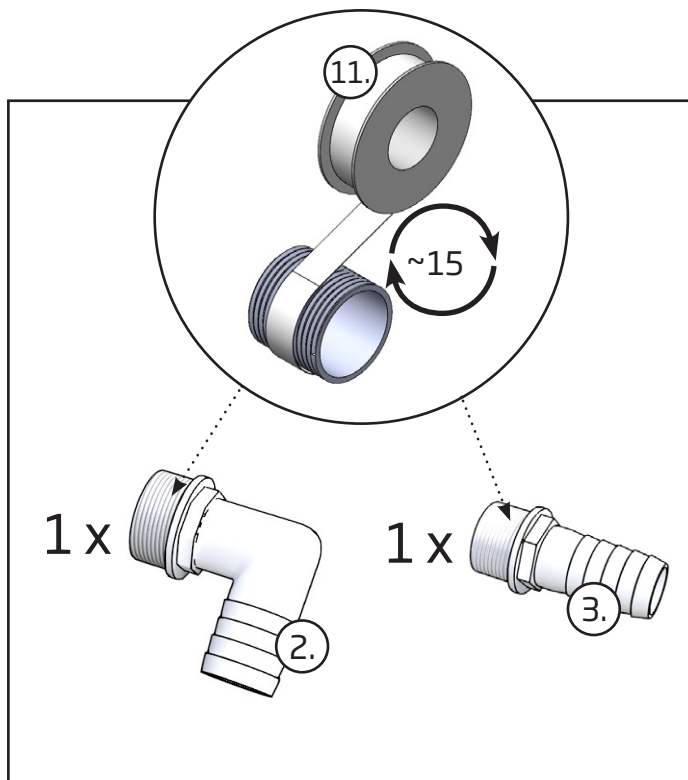


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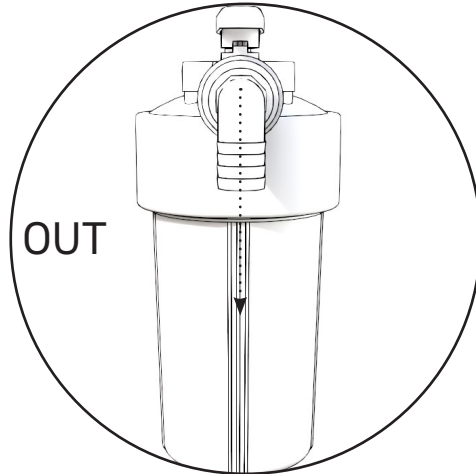
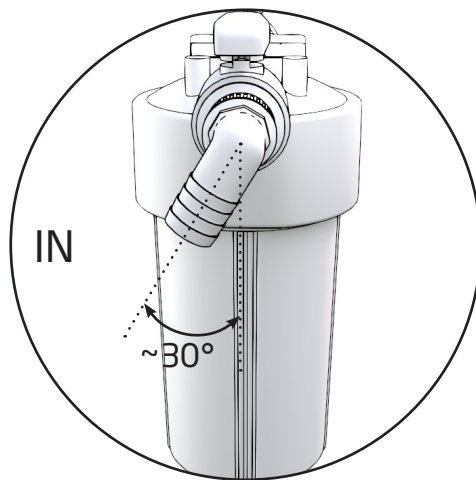
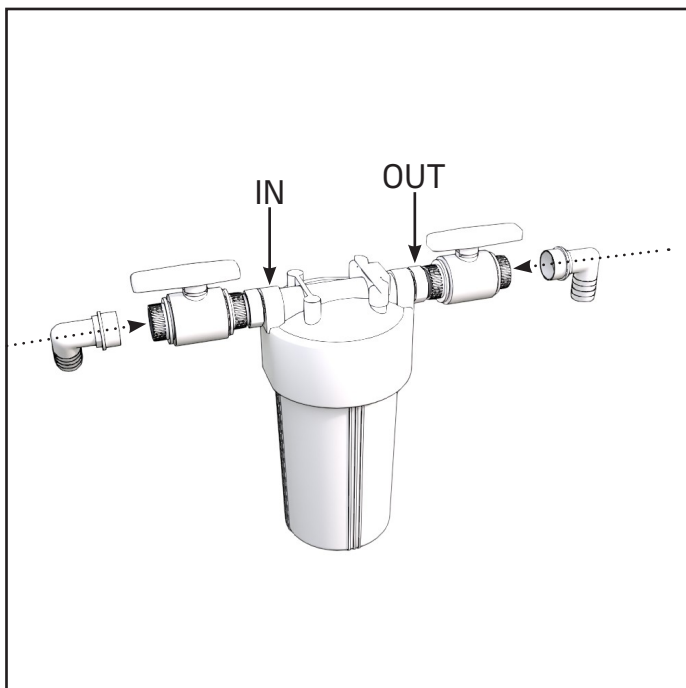
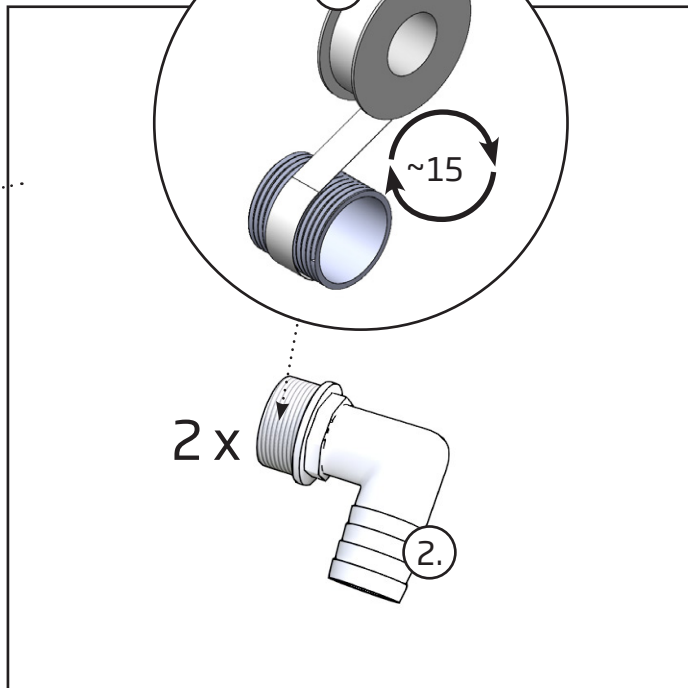
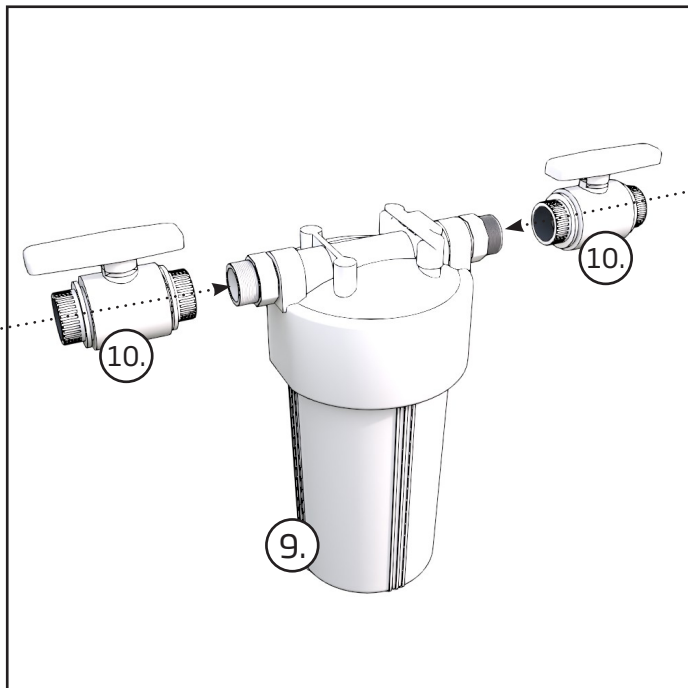




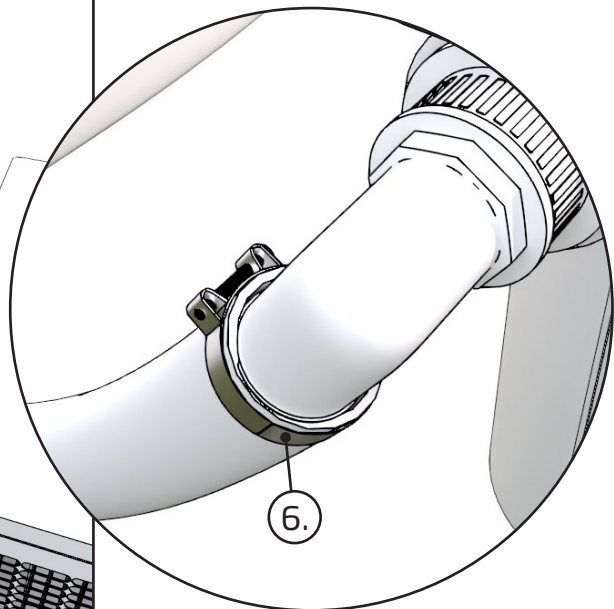
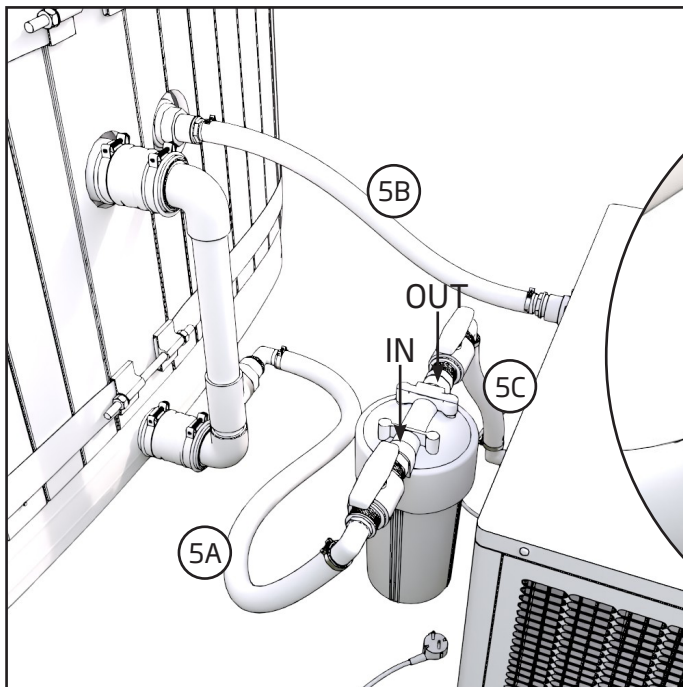
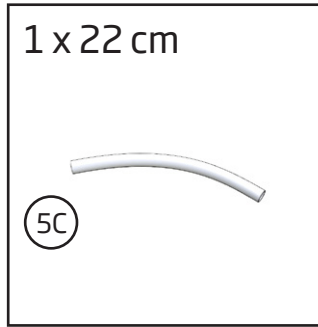
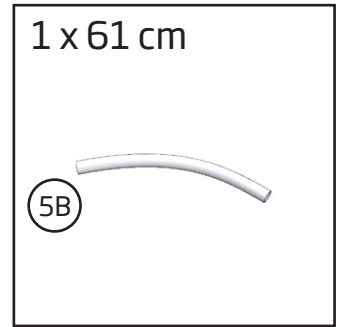
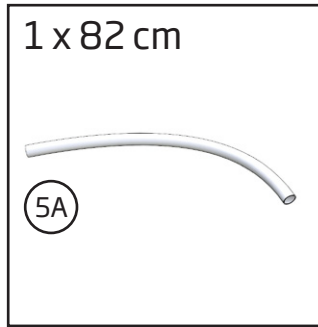
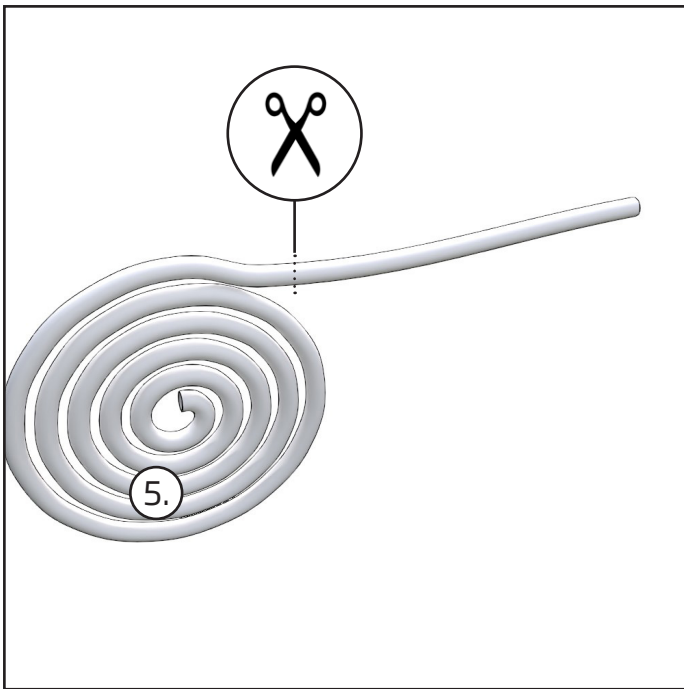








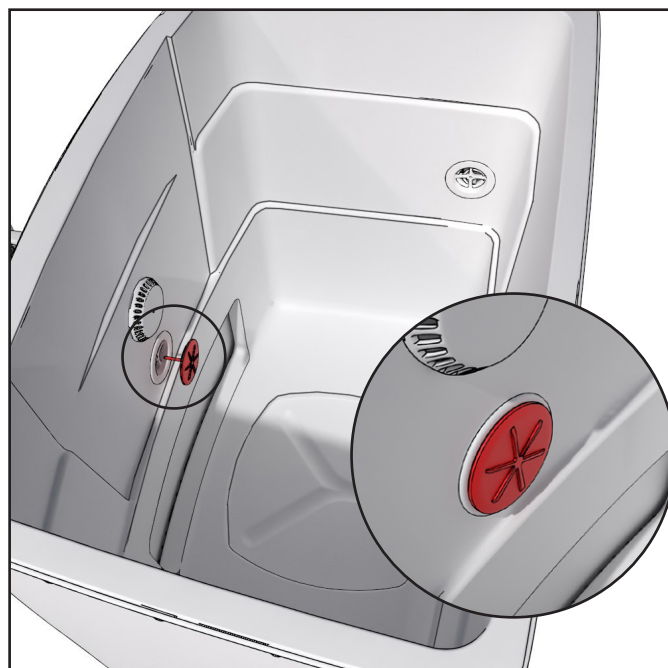




## REPLISSAGE DU BASSIN ET ÉVACUATION DE L'AIR DE L'UNITÉ

Le remplissage du bassin et l'évacuation de l'air se font de manière légèrement différente en fonction du bassin.

### BlackIce S et NordicIce S - Remplissage du bassin et évacuation de l'air de l'unité

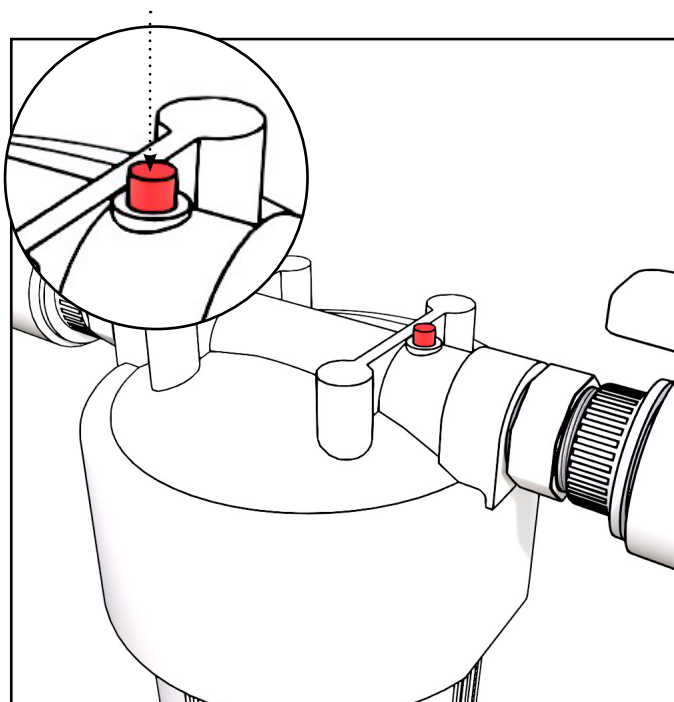
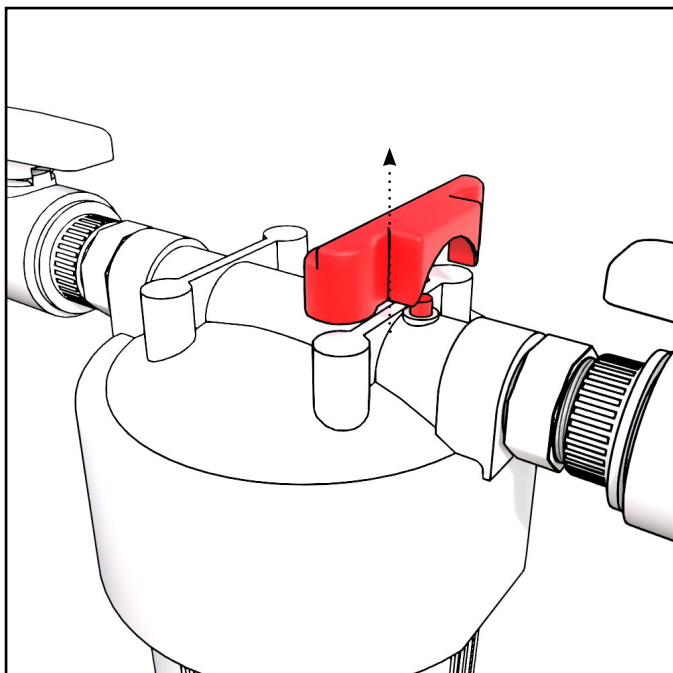


Retirez les grilles de protection des valves indiquées sur l'illustration. Bouchez la valve frontale inférieure avec le bouchon fourni.



Lors du remplissage du bassin, utilisez un tuyau d'arrosage pour faire couler de l'eau à travers la valve supérieure afin d'éliminer l'air de l'unité. Mettez la pompe à chaleur dualex en marche.

S'il n'y a pas d'air qui sort de l'appareil et que l'erreur P01 apparaît sur l'écran après une minute, débranchez l'appareil et redémarrez-le. Dès que l'eau se met à couler, remplissez la piscine jusqu'au niveau souhaité.



Retirez également l'air du filtre en soulevant d'abord le couvercle de la partie supérieure du filtre. Appuyez sur le bouton d'évacuation d'air situé sur le dessus du filtre jusqu'à ce que l'eau commence à s'écouler par l'ouverture.

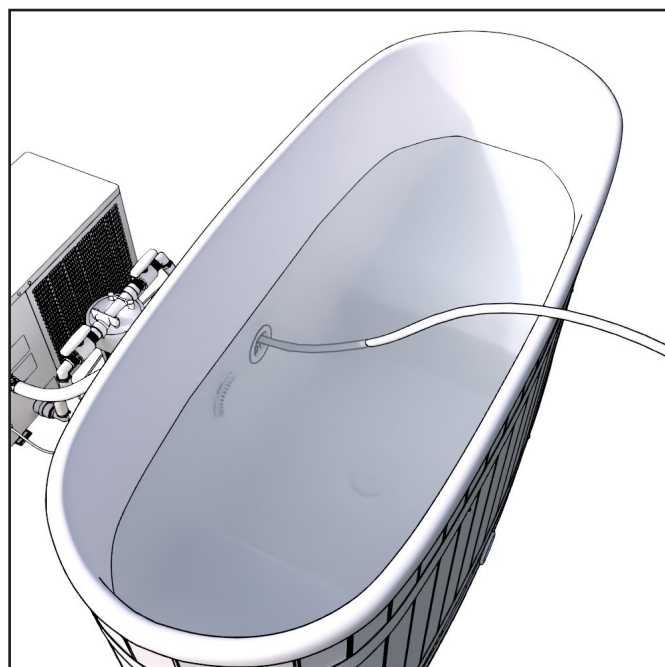
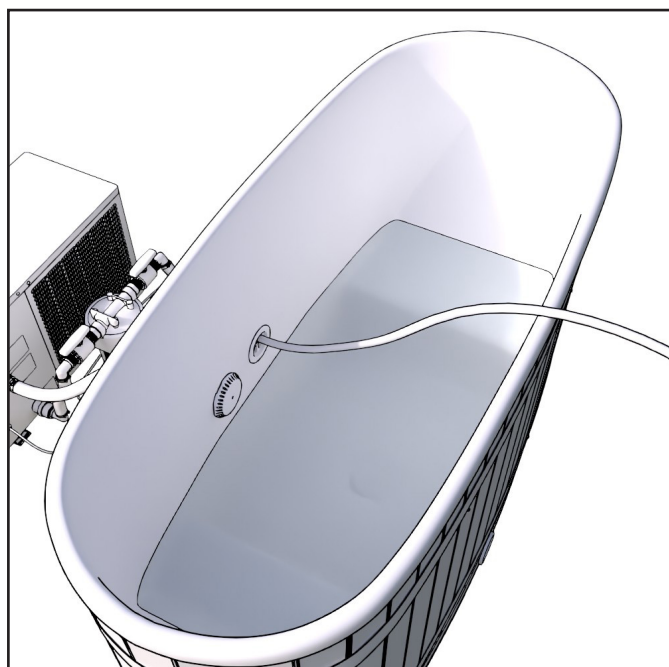


Dès que l'eau circule dans l'appareil, retirez le bouchon et remettez les grilles de protection en place.

## Remplacement du poêle - Remplissage du bassin et évacuation de l'air de l'unité



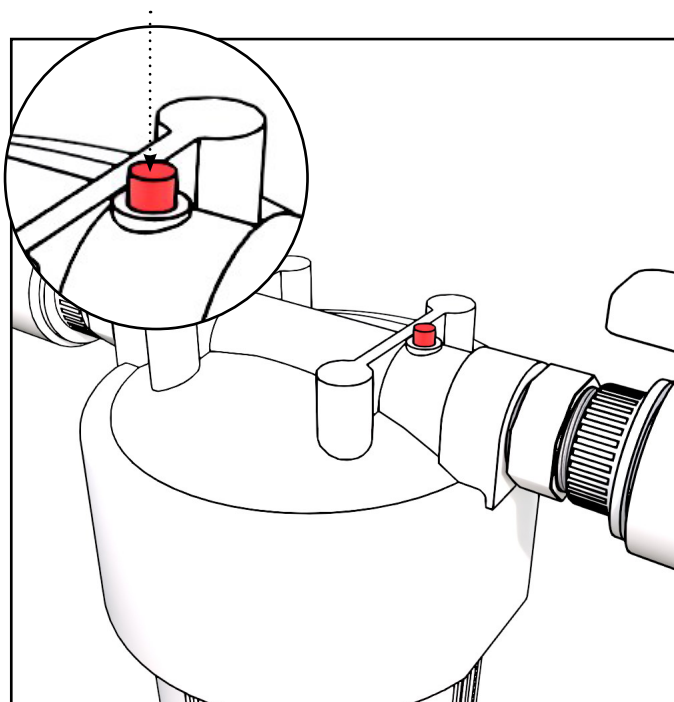
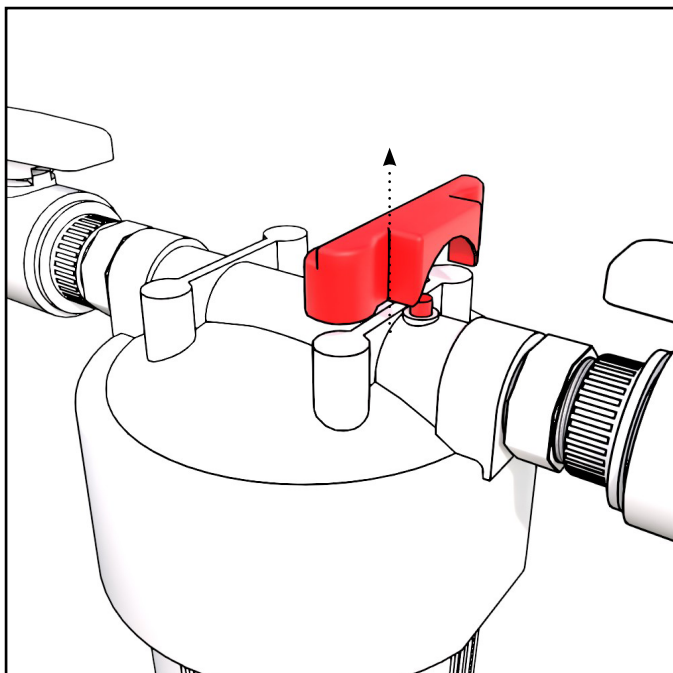
Retirez les grilles de protection des valves indiquées sur l'illustration. Bouchez la valve inférieure avec le bouchon fourni.



Lors du remplissage du bassin, utilisez un tuyau d'arrosage pour faire couler de l'eau à travers la valve supérieure afin d'éliminer l'air de l'unité. Mettez la pompe à chaleur dualix en marche.

S'il n'y a pas d'air qui sort de l'appareil et que l'erreur P01 apparaît sur l'écran après une minute, débranchez l'appareil et redémarrez-le. Dès que l'eau se met à couler, remplissez la piscine jusqu'au niveau souhaité.





Retirez également l'air du filtre en soulevant d'abord le couvercle de la partie supérieure du filtre. Appuyez sur le bouton d'évacuation d'air situé sur le dessus du filtre jusqu'à ce que l'eau commence à s'écouler par l'ouverture.







Dès que l'eau circule dans l'appareil, retirez le bouchon et remettez les grilles de protection en place.

## FONCTIONNEMENT






### Interface de commande



### Verrouillage de l'alimentation et de l'écran



Pour déverrouiller, appuyez sur n'importe quelle touche pour allumer l'écran et appuyez longuement sur l'icône on/off pendant 5 secondes jusqu'à ce que vous entendiez un « bip » sonore.	
L'icône de verrouillage disparaît	
Appuyez longuement sur l'icône marche/arrêt pour allumer ou éteindre l'appareil. Si aucun bouton n'est actionné dans les 60 secondes, la commande se verrouille automatiquement.	
Lorsqu'elle est verrouillée, l'icône de verrouillage s'affiche	

### Modes (Refroidissement / Chauffage / Auto)







Lorsque l'appareil est en marche, appuyez brièvement sur la touche pour sélectionner les modes de fonctionnement. La séquence de sélection circulaire est la suivante Refroidissement -> Chauffage -> Auto -> Refroidissement... (boucle continue) REMARQUE : En mode Auto, il y a un délai pour passer du refroidissement au chauffage.	
L'icône de chauffage s'affiche lorsque le mode chauffage est activé.	
L'icône de refroidissement s'affiche lorsque le mode refroidissement est activé.	
En mode Auto, l'icône de boucle et l'icône de refroidissement s'affichent.	 



## Réglage de la température





Lorsque l'unité de refroidissement est en marche, déverrouillez l'écran (voir « Verrouillage de l'alimentation et de l'écran »).	
Appuyez sur les flèches vers le haut ou vers le bas pour régler la température.	 
Si vous n'effectuez aucune action pendant 3 secondes, l'écran affiche la température actuelle de l'eau.	









## Réglage de l'heure

Accéder au réglage de l'heure : Appuyez longuement sur la touche pendant 5 secondes jusqu'à ce que les heures et les minutes clignotent.	
Mode de réglage de l'heure : Appuyez brièvement sur l'écran de réglage de l'heure.	
Les chiffres des heures clignotent.	
Appuyez sur les flèches vers le haut ou vers le bas pour régler l'heure.	 
Appuyez sur l'icône de l'horloge pour passer aux minutes et répétez les actions ci-dessus.	
Lorsque le réglage est terminé, appuyez sur l'icône de l'horloge pour enregistrer le réglage et quitter l'écran principal.	









## Réglages de la minuterie de mise en marche et d'arrêt (« Mode actif »)

- Les utilisateurs peuvent définir deux périodes de minuterie ON/OFF pour le « mode actif ». Les périodes paramétrées ne peuvent pas se chevaucher.
- Mode de réglage de la minuterie de mise en marche et d'arrêt

Sur l'écran principal, appuyez brièvement sur l'icône de l'horloge pour accéder au réglage de la minuterie de mise en marche et d'arrêt.	
Lorsque « 1 » clignote, appuyez sur l'icône de l'horloge pour accéder au réglage de l'heure du « mode actif » de la période 1.	
Lorsque l'heure clignote, appuyez sur la flèche vers le haut ou vers le bas pour régler l'heure.	 

Appuyez sur l'icône de l'horloge pour confirmer et accéder aux minutes.	
Lorsque les minutes clignotent, appuyez sur la flèche vers le haut ou vers le bas pour régler les minutes.	 
Appuyez sur l'icône de l'horloge pour confirmer les minutes et accéder au réglage de la minuterie de mise à l'arrêt de la période 1. Répétez les actions ci-dessus.	
Lorsque le réglage est terminé, appuyez longuement sur l'icône de l'horloge pour confirmer et enregistrer le réglage de la minuterie de mise en marche et d'arrêt de l'alimentation.	
Appuyez sur les flèches haut ou bas pour accéder au réglage de la période 2 du « mode actif » et répétez les actions ci-dessus.	 
Le réglage valide de la minuterie est affiché sur l'écran principal avec le numéro correspondant. Appuyez brièvement sur on/off pour accéder au menu principal.	

## Réglage de l'ozonateur

Lorsque l'unité de refroidissement est en marche, appuyez longuement sur la touche marche/arrêt si l'écran est verrouillé.	
Appuyez longuement sur la touche mode pour que L0 apparaisse à l'écran.	
Utilisez la flèche vers le bas pour changer la valeur en L11 et appuyez sur le mode (brièvement).	 
Utilisez les flèches pour changer la valeur en 0, 1 ou 2 (voir tableau ci-dessous).	 
Appuyez sur la touche mode (brièvement), puis sur la touche marche/arrêt (brièvement). (La génération d'ozone commence lorsque l'appareil est mis en marche)	 

Code	Nom du paramètre	Plage de réglage	Valeur par défaut
L11	Mode de commande de l'ozonateur	0 : Aucune génération d'ozone 1 : Génération d'ozone 5 minutes toutes les heures (55 minutes en veille) <ul style="list-style-type: none"> <li>• Usage privé</li> </ul> 2 : Génération d'ozone 10 minutes toutes les heures (50 minutes en veille) <ul style="list-style-type: none"> <li>• Usage intensif / public</li> </ul>	1

## ENTRETIEN GÉNÉRAL ET QUALITÉ DE L'EAU

Entretien du bassin. Veillez à ce que l'eau reste propre et claire. En fonction de la fréquence d'utilisation, l'utilisation occasionnelle de chlore peut être nécessaire pour désinfecter l'eau (en particulier en cas d'utilisation publique intensive).

Au quotidien :

- Vérifier le niveau d'eau.

Chaque semaine :

- Nettoyez les taches éventuelles sur la conduite d'eau et le filtre.
- Rincez soigneusement le filtre à l'eau courante tiède ou sous la douche (n'utilisez pas de nettoyeur haute pression, car cela pourrait endommager le matériau du filtre).
- La cartouche filtrante doit toujours être remplacée si la circulation de l'eau n'est pas normale après le nettoyage du filtre. Le filtre doit être remplacé tous les 2 à 4 mois, selon la fréquence de l'utilisation.
- Vérifiez le pH de l'eau qui doit être maintenu à un niveau normatif (7,2- 7,6). Si nécessaire, vous pouvez affiner le pH en utilisant des produits chimiques pH+ ou pH-.

Utilisation du chlore :

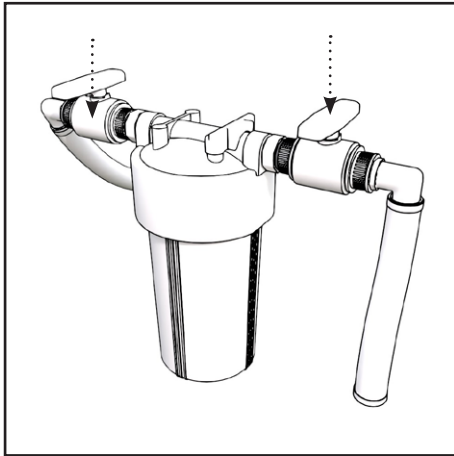
- En cas d'utilisation quotidienne intensive du bassin, il est recommandé d'ajouter une demi-cuillère à café de chlore (dichloroisocyanurate de sodium dihydraté) à l'eau pour atteindre le niveau de chlore libre de 0,3 - 1,2 ppm.
- Si le nombre d'utilisateurs dépasse 10 par jour, ou si la température de l'eau est supérieure à 15 °C, il est recommandé d'ajouter fréquemment du chlore (dichloroisocyanurate de sodium dihydraté) à l'eau afin de maintenir un niveau de chlore libre de 0,3 à 1,2 ppm.

### Conseils d'entretien

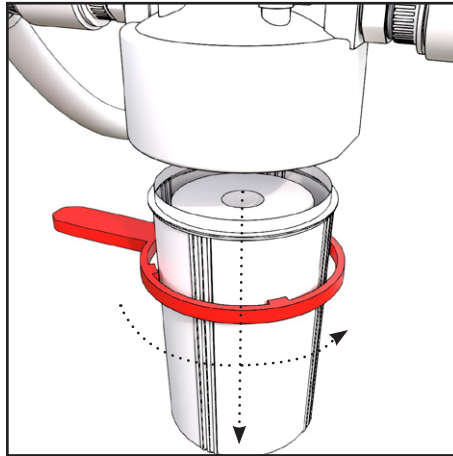
- Vérifiez régulièrement l'alimentation et les connexions des câbles. En cas de problème, contactez votre revendeur local.
- Nettoyez/videz régulièrement (en général tous les 2 à 4 mois) l'unité de refroidissement pour assurer une bonne ventilation.
- Débranchez l'unité de refroidissement lorsqu'elle n'est pas utilisée.
- Laissez s'écouler toute l'eau de l'unité de refroidissement lorsqu'elle n'est pas utilisée pendant une période prolongée.
- N'ajoutez pas de sel ou d'autres minéraux dans l'eau.
- Dépannage
  - Si rien ne s'affiche sur le panneau de commande et que l'unité de refroidissement ne fonctionne pas, vérifiez l'alimentation électrique et/ou l'activation du disjoncteur différentiel. Si l'alimentation électrique est correcte, mais que le disjoncteur différentiel a coupé l'alimentation, appuyez sur le bouton de réinitialisation pour redémarrer l'appareil. Si le problème persiste, débranchez l'appareil et contactez le détaillant ou le fabricant.
  - Si l'eau ne circule pas après la mise en marche de l'appareil, éteignez-le pendant un moment et rallumez-le. Cela peut être dû à des poches d'air dans les tuyaux. Répétez l'opération si nécessaire, jusqu'à ce que l'eau commence à circuler.
  - Si l'eau ne circule pas correctement, vérifiez le niveau d'eau et l'état du filtre (de la cartouche, le cas échéant). Ajoutez de l'eau si nécessaire. Nettoyez le filtre ou remplacez la cartouche, si nécessaire. Si le problème persiste, veuillez contacter le détaillant ou le fabricant.

## NETTOYAGE ET REMPLACEMENT DE LA CARTOUCHE FILTRANTE

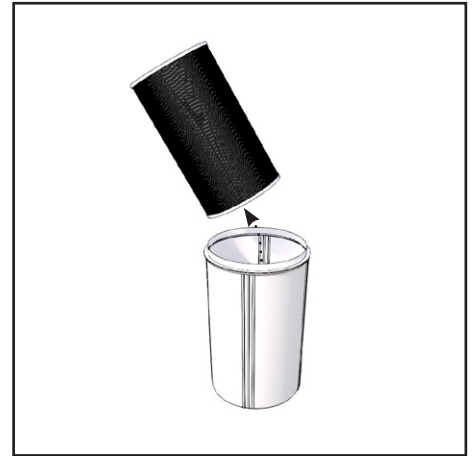
Le filtre doit être nettoyé régulièrement pour que l'eau du système reste propre et pour éviter qu'il ne s'encrasse. Remplacez la cartouche filtrante lorsque cela est nécessaire, généralement tous les 2 à 4 mois en fonction de la fréquence d'utilisation.



Coupez l'alimentation de l'unité et fermez les deux robinets à boisseau.



Retirez le boîtier du filtre en le faisant tourner. Si le boîtier du filtre résiste et s'avère difficile à ouvrir, utilisez l'outil d'ouverture fourni.

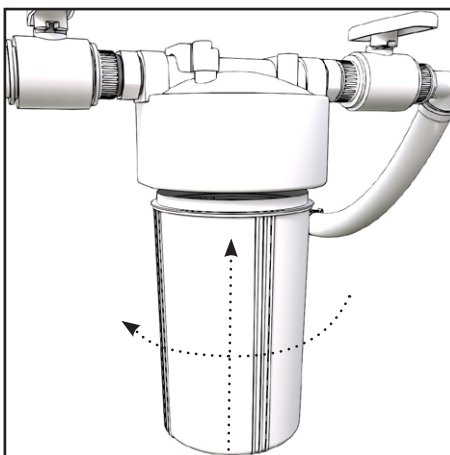
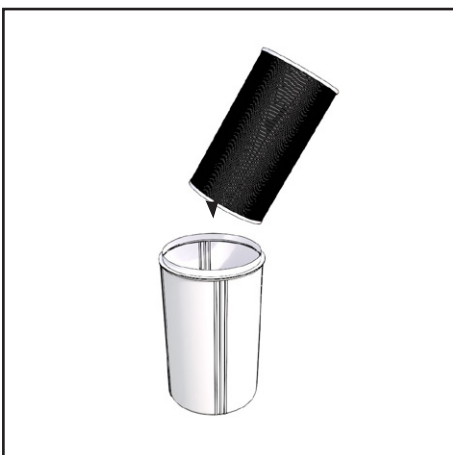
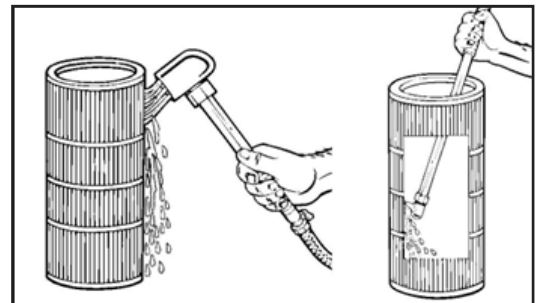


Retirez la cartouche filtrante et nettoyez le boîtier si nécessaire.

### Lavage

Pour obtenir les meilleurs résultats possibles, rincez d'abord la cartouche de filtre pour la nettoyer grossièrement sous l'eau courante et faites tremper la cartouche entière dans un seau pendant au moins 6 heures, puis rincez à nouveau sous l'eau courante aussi bien de l'intérieur que de l'extérieur.

Le nettoyage doit être effectué par pression de l'intérieur vers l'extérieur et de l'extérieur uniquement vers le tuyau de jardin (sans pression). Pour obtenir le meilleur résultat de nettoyage, laissez sécher le filtre et essuyez le filtre sec soigneusement pour enlever les plus grosses saletés. Le filtre doit être remplacé au besoin ou au moins une fois par an.



Remplacez la cartouche neuve ou nettoyée dans le boîtier.

Revisser le boîtier en le serrant manuellement.

## MESSAGES D'ERREUR SUR L'ÉCRAN

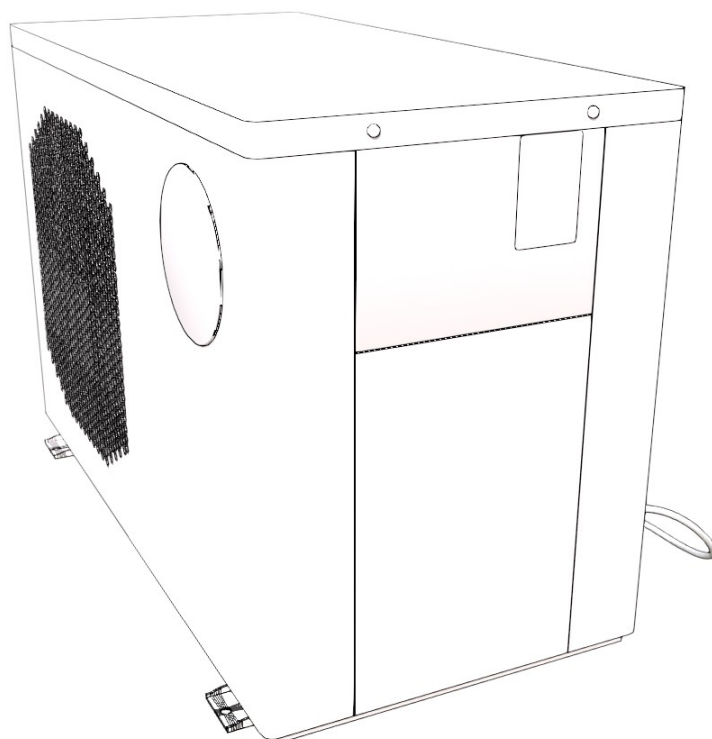
Lorsqu'un défaut se produit, le code d'erreur correspondant s'affiche. Une fois l'erreur éliminée, le code d'erreur disparaît. Pour réinitialiser le code d'erreur, redémarrez l'appareil.

Code d'erreur	Description
E01	Défaut de température des gaz d'échappement
E05	Défaut de température de la bobine
E09	Défaut de température d'aspiration du gaz
E17	Défaut de température de l'eau d'arrivée
E18	Défaut de température de l'eau de sortie
E22	Défaut de température ambiante
P01	Défaut du commutateur de débit d'eau
P02	Protection hausse de pression
P06	Protection baisse de pression
P11	Protection surchauffe de la température des gaz d'échappement
P15	Protection température excessive de l'eau d'arrivée et de sortie
P16	Protection contre le surrefroidissement
P17	Protection antigel en veille
P25	Protection température ambiante
P26	Protection surchauffe de l'eau de sortie en mode chauffage
P27	Outside coil over high temperature protection under cooling mode

## GARANTIE

Veillez consulter les informations relatives à la garantie dans le mode d'emploi du fabricant de l'appareil.

Gebruikershandleiding  
**DUAL AVANTOPOOL**  
**WARMTEPOMP**



Controleer eerst en vooral de inhoud van de levering!  
Lees zorgvuldig de instructies en hou deze goed bij.



## ALGEMENE INFORMATIE

Deze handleiding bevat algemene aanwijzingen. Meer gedetailleerde en uitgebreide instructies zijn te vinden in de gebruikershandleiding die bij Avantopool wordt geleverd.

- Voor reparaties neemt u contact op met de klantendienst. Het reparatieproces moet verlopen volgens deze handleiding. Elk onderhoud door niet-professionals is verboden en tast de garantie aan.
- Verkeerd gebruik kan tot blessures of schade aan de apparatuur leiden.
- Zorg ervoor dat het bad vóór gebruik van de unit volledig gevuld is en dat er geen lucht meer in de buizen zit. Het is verboden om deze apparatuur op te starten voor er een bepaald waterniveau bereikt is. Anders kan de apparatuur schade oplopen en kan de garantie vervallen.
- Als u voor een reparatie de stroom moet uitschakelen, wacht u 1 minuut nadat u de stroom heeft uitgeschakeld vooraleer u de printplaat aanraakt. Zo voorkomt u condensatorontlading met elektrische schokken als gevolg.
- De koel-unit moet verticaal in de originele verpakking worden geplaatst en vervoerd. Als dat niet het geval is, wacht u 24 uur voor u de unit aansluit op de stroom.
- Zorg er vóór de installatie voor dat u zeker bent van de stroomaansluiting, spanning en frequentie.
- Een foutieve installatie kan tot brand, elektrische schokken, defecten of lekken leiden.
- Zorg ervoor dat er geen water bij de elektrische onderdelen kan.
- De unit kan beschadigd worden door ernstige oververhitting van het product als gevolg van nalatigheid, zoals het bedekken van het ventilatierooster van de koeleenheid met handdoeken, kleding of andere voorwerpen, of door de koeleenheid te dicht bij een muur te zetten in een ruimte met onvoldoende isolatie.
- Voeg geen zout of andere mineralen toe aan het water.
- Deze apparatuur mag niet door kinderen worden gebruikt. Tijdens het gebruik moeten kinderen met het oog op hun eigen veiligheid steeds onder toezicht staan van een volwassene.
- Personen met een voorgeschiedenis van hartaandoeningen, lage of hoge bloeddruk, problemen met de bloedsomloop, diabetes of andere aandoeningen die medische behandeling vereisen, moeten vóór het gebruik van het bad een arts raadplegen.
- Personen die medicijnen gebruiken, moeten vóór het gebruik van het bad een arts raadplegen. Sommige medicijnen kunnen namelijk slaperigheid veroorzaken, terwijl andere medicijnen de hartslag, bloeddruk en bloedsomloop kunnen beïnvloeden.
- Zwangere vrouwen moeten vóór het gebruik van het bad een arts raadplegen.
- De unit mag niet in direct zonlicht gebruikt worden omdat dit tot oververhitting van het toestel kan leiden.



In de winter of bij temperaturen onder de 0 °C moet u het water bij niet-gebruik uit de koel-unit verwijderen. Anders loopt de unit schade op door bevriezing, wat niet door de garantie gedekt wordt. Bij temperaturen onder de -7 °C mag het toestel buiten niet gebruikt worden.

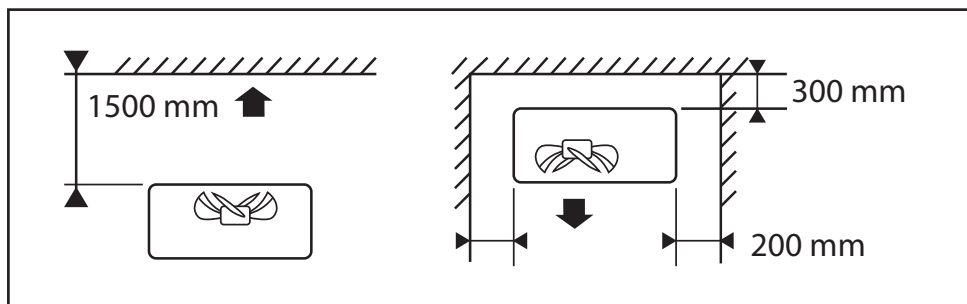


Als de omgevingstemperatuur onder de 0 °C ligt, laat u de unit draaien op "**Automatic**"-modus en schakelt u de "active mode"-timer niet in. Anders bevriest het systeem.

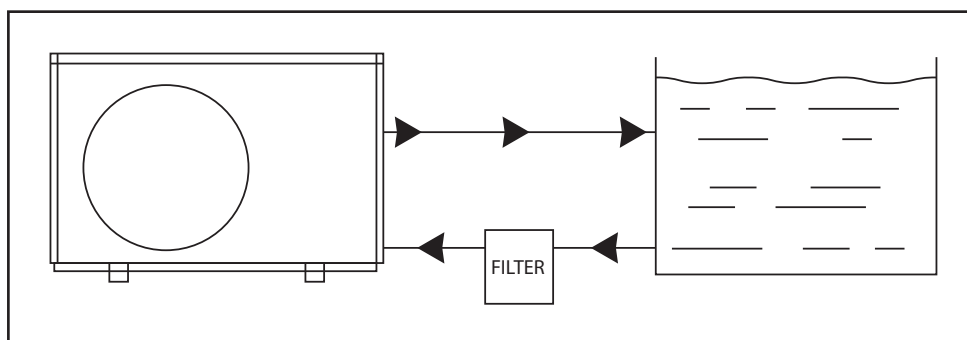
## INSTALLATIEAFSTAND

De koel-unit moet in een goed geventileerde ruimte geplaatst worden. Deze ruimte moet minstens deze afmetingen hebben:

- Min. afstand tussen de voorkant van de unit en de muur = 1500mm (150 cm)
- Min. afstand tussen de achterkant van de unit en de muur = 300mm (30 cm)
- Min. afstand tussen de zijkanten van de unit en de muur = 200mm (20 cm)



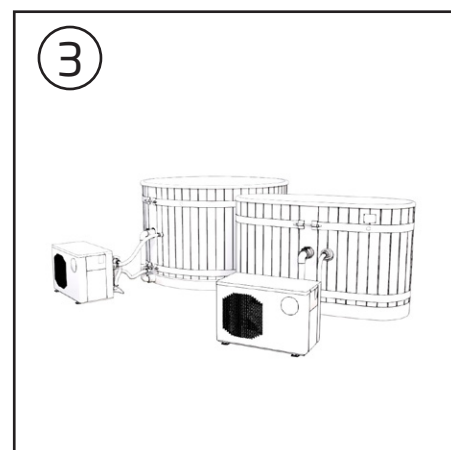
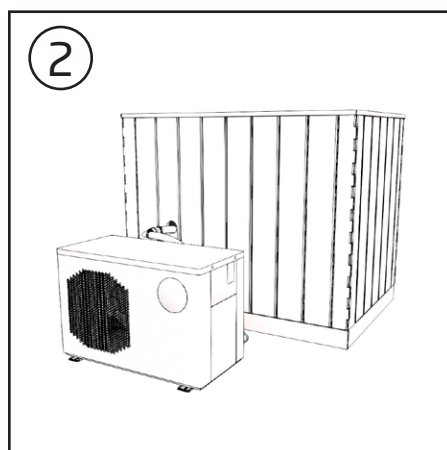
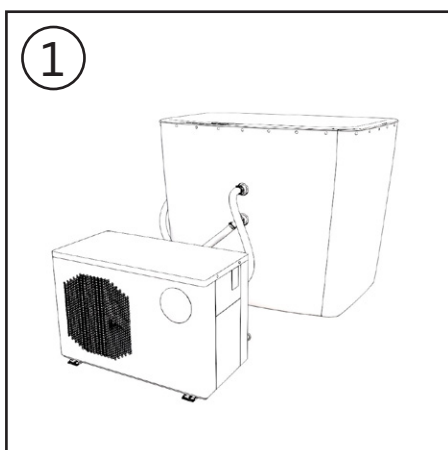
## Lay-out van de watercirculatie tussen de unit en het bad



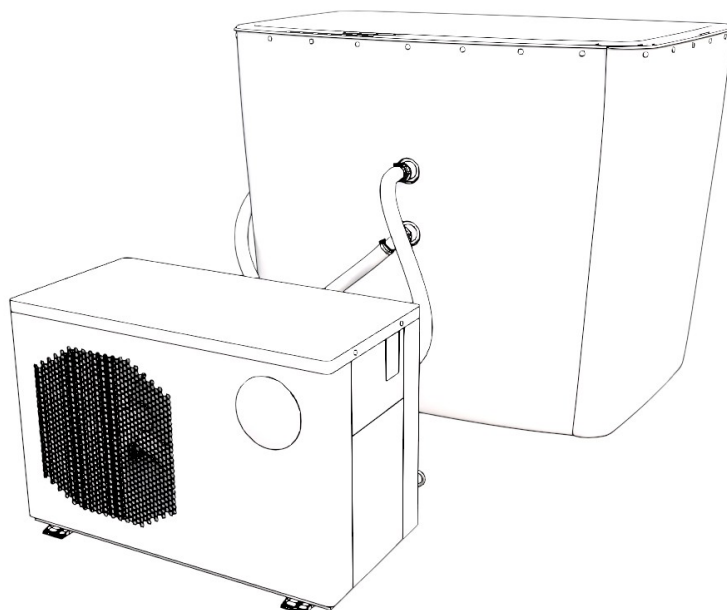
## AANSLUITING OP HET BAD

De Avantopool-luchtbron kan op verschillende types baden worden aangesloten. De instructies voor elk bad vindt u in deze volgorde terug:

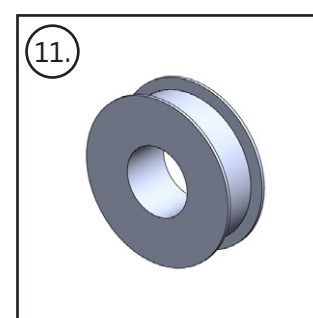
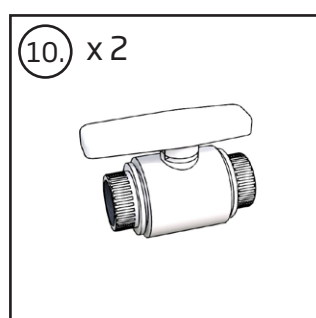
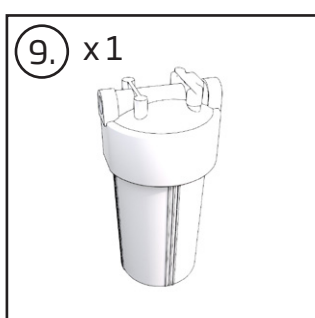
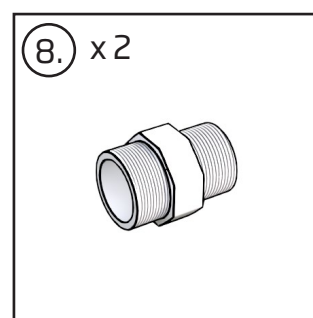
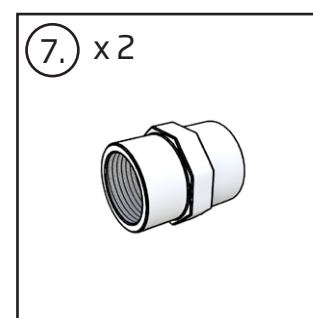
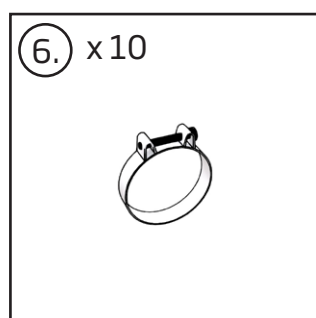
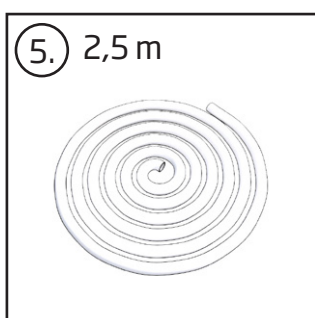
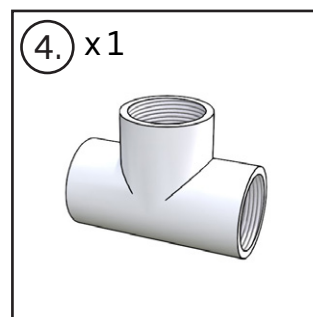
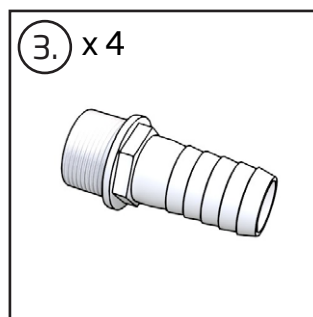
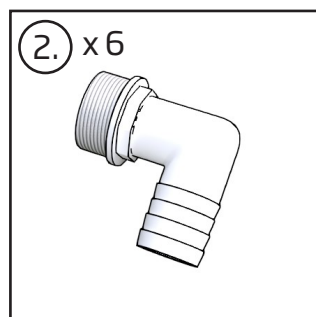
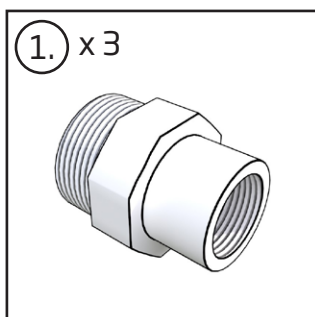
1. Comfort BlackIce S
2. Premium NordicIce S
3. Kamiinan korvaava

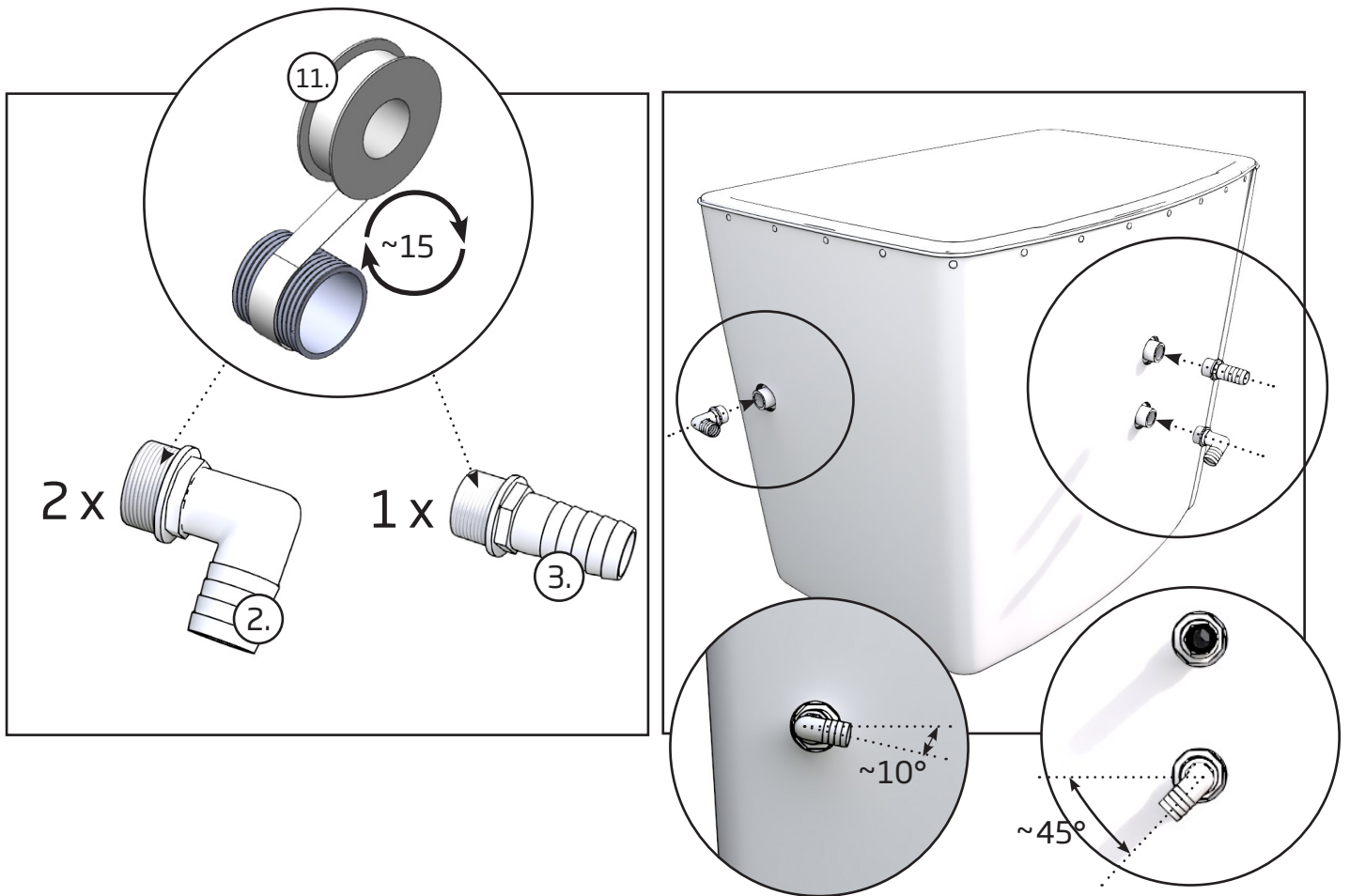
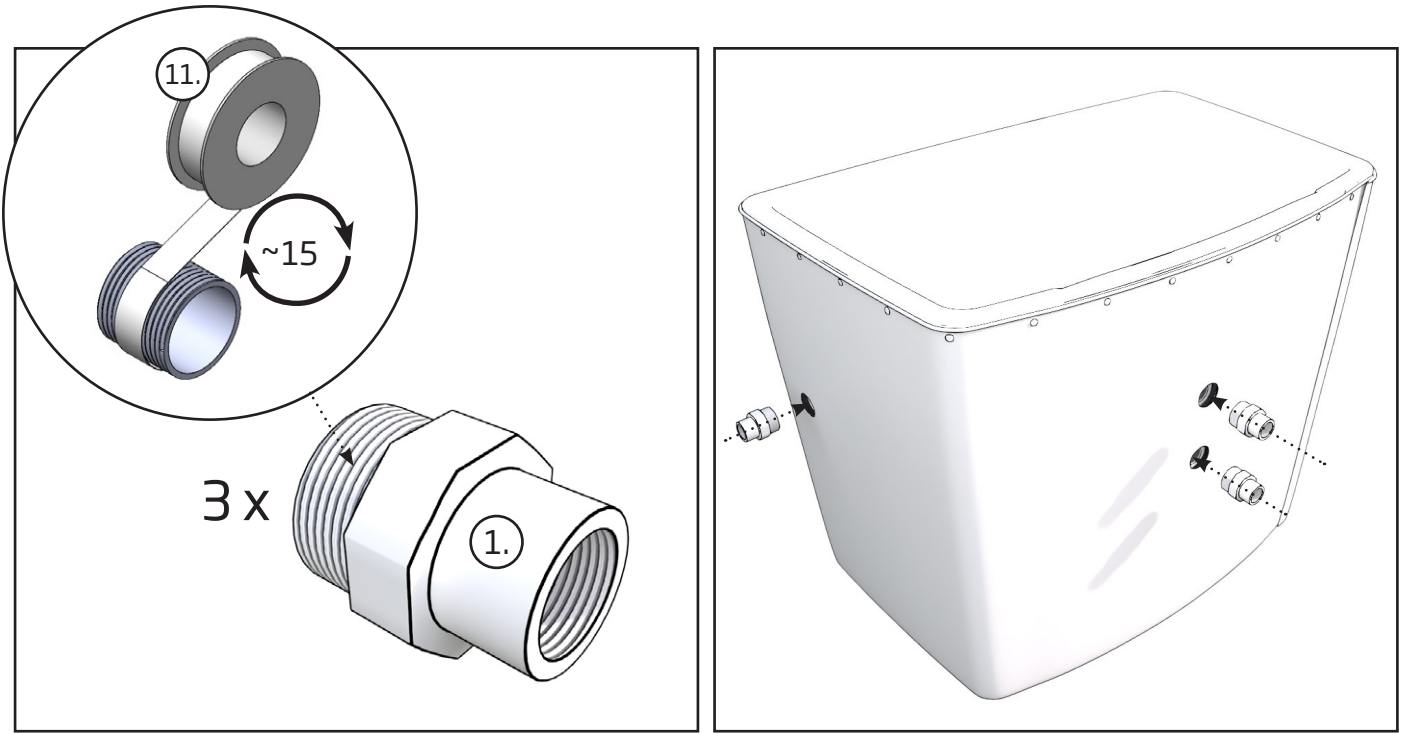


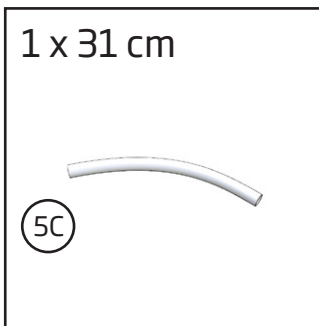
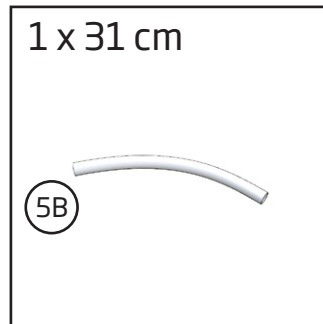
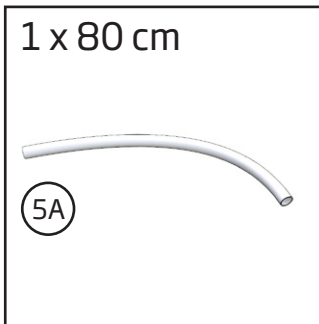
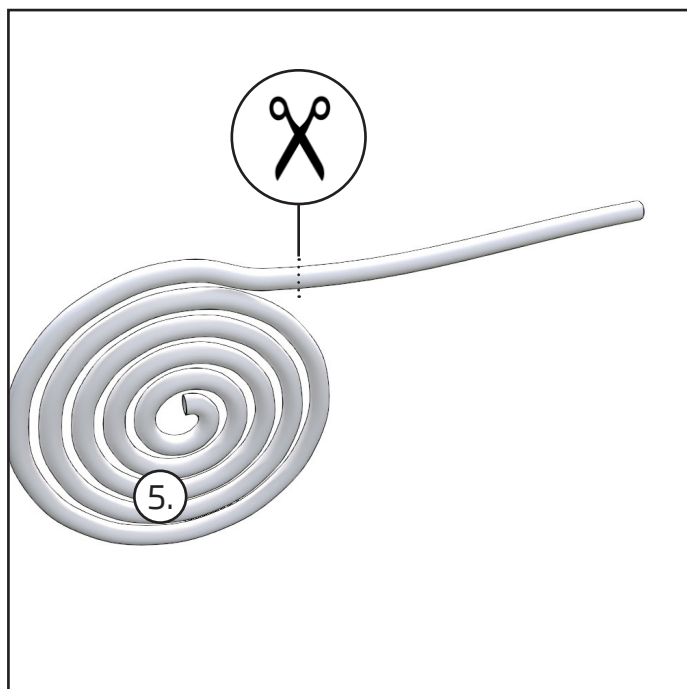
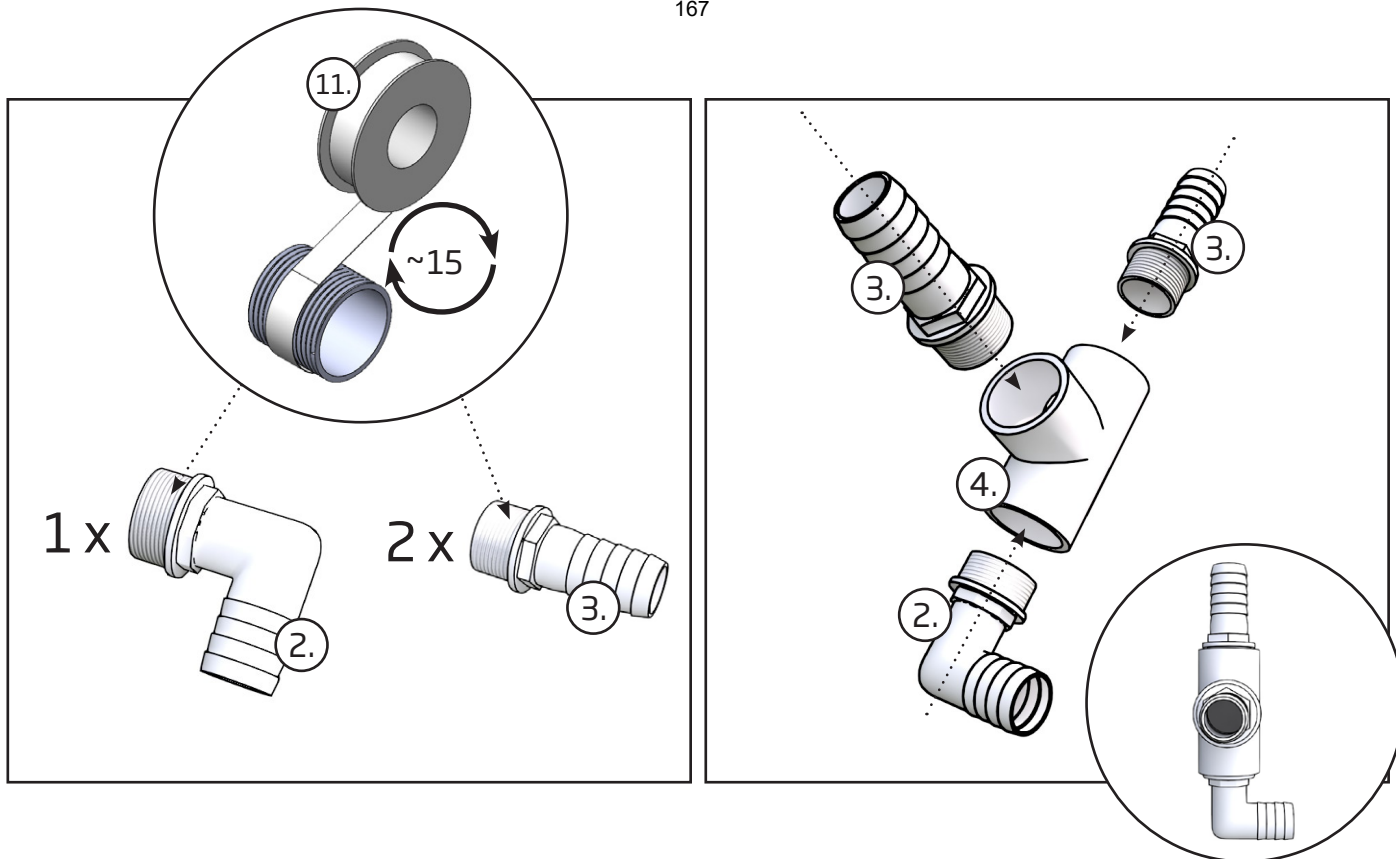
## 1. COMFORT BLACKICE S

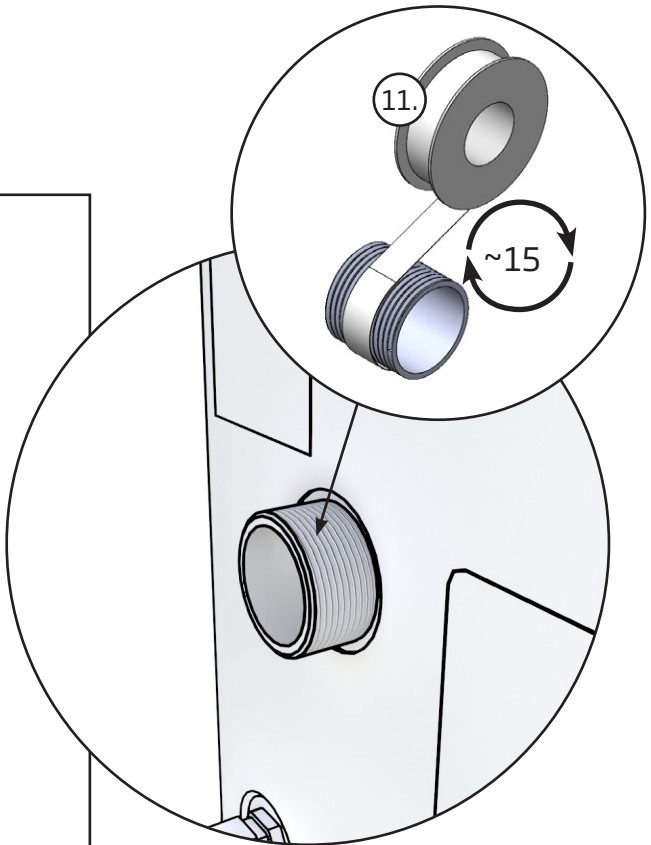
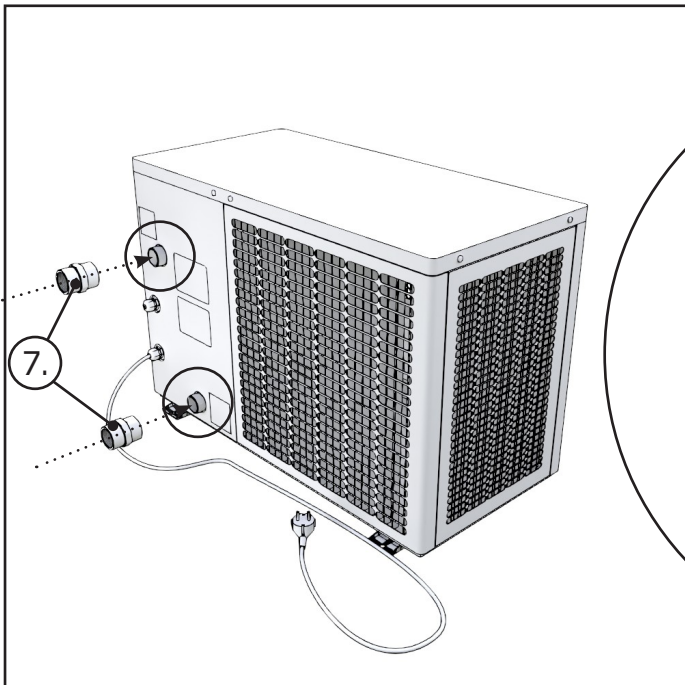
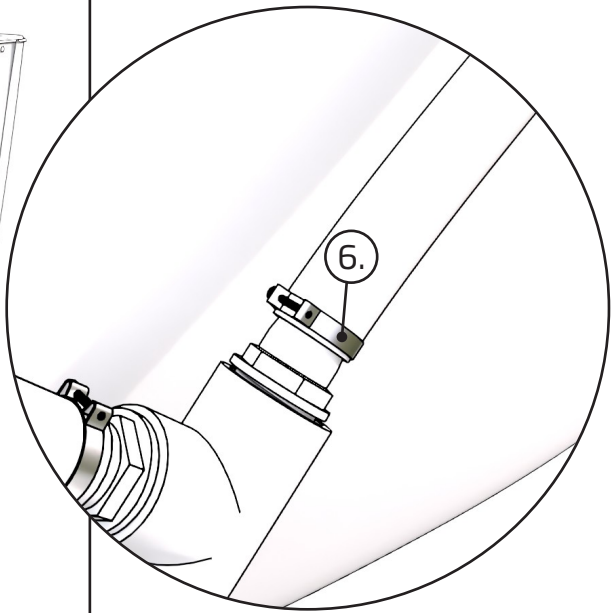
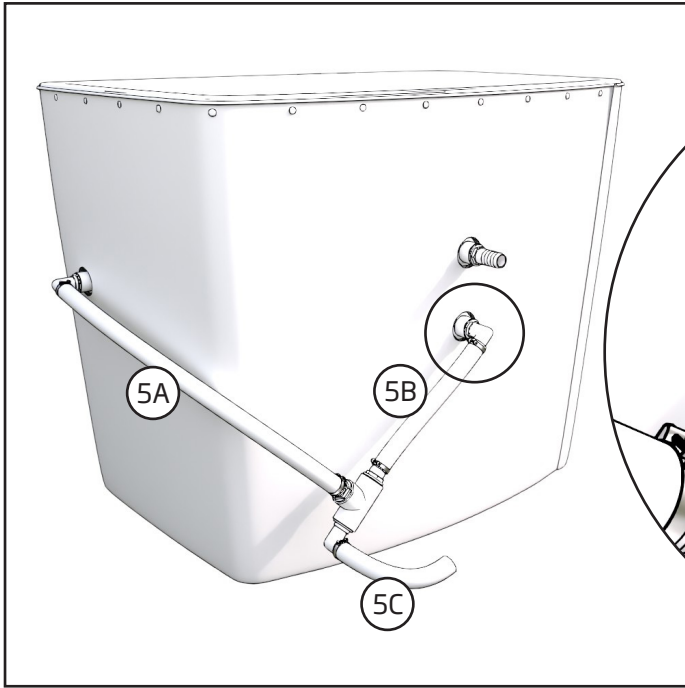


## ONDERDELENLIJST

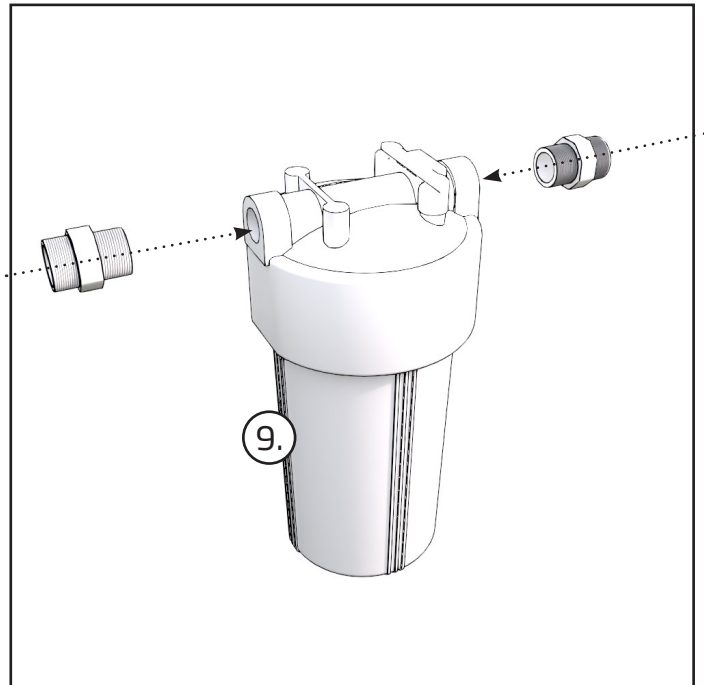
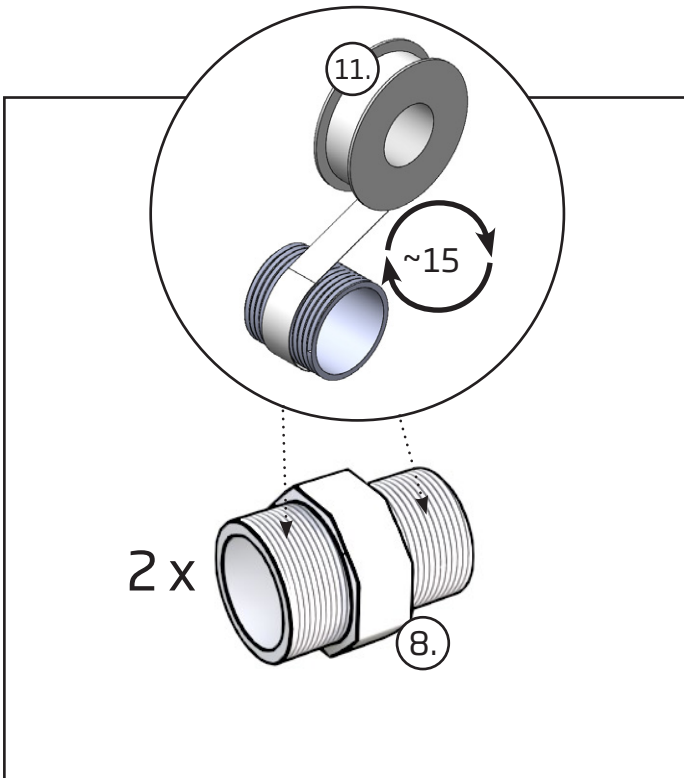
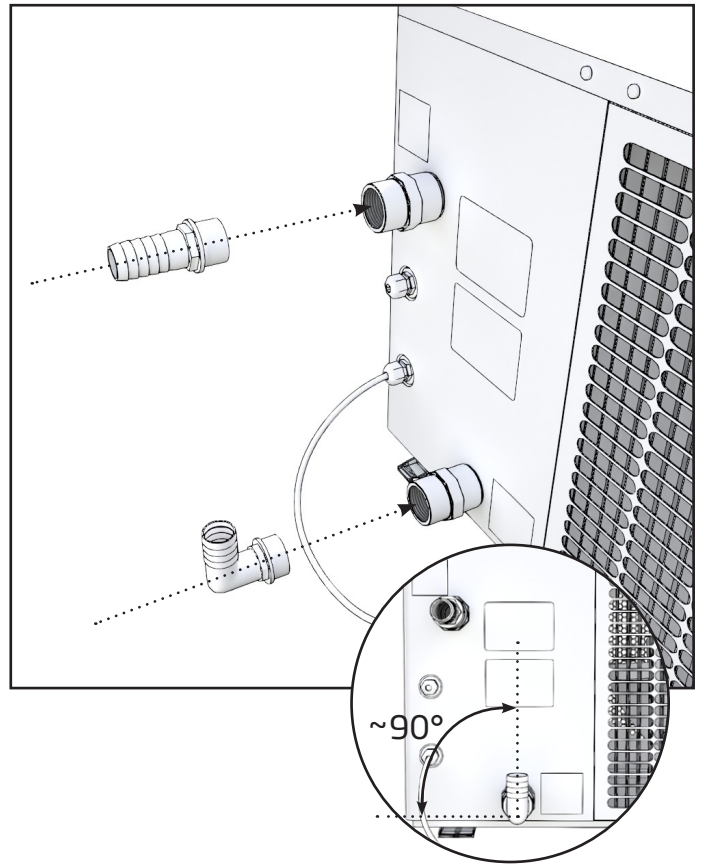
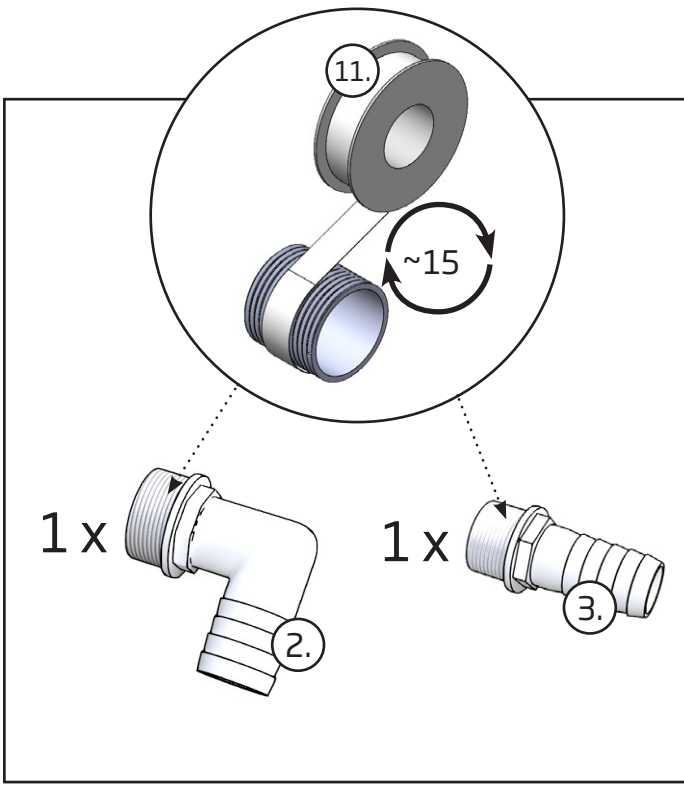


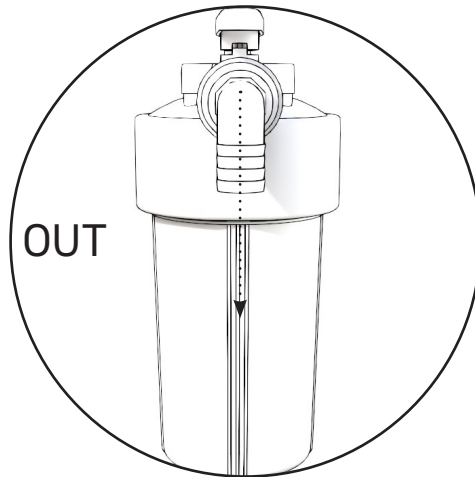
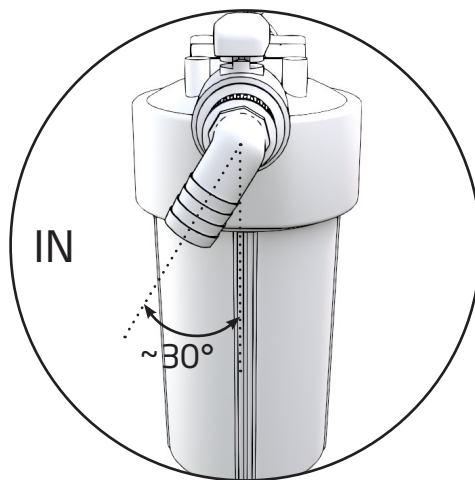
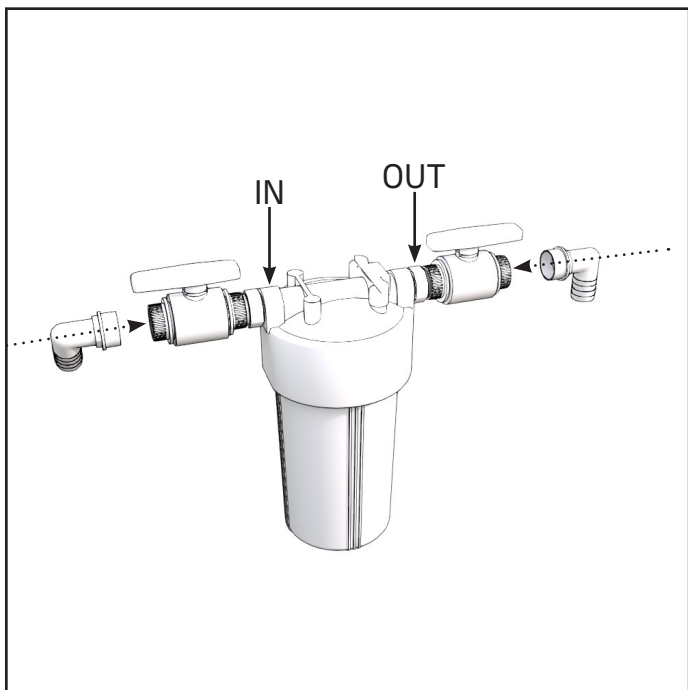
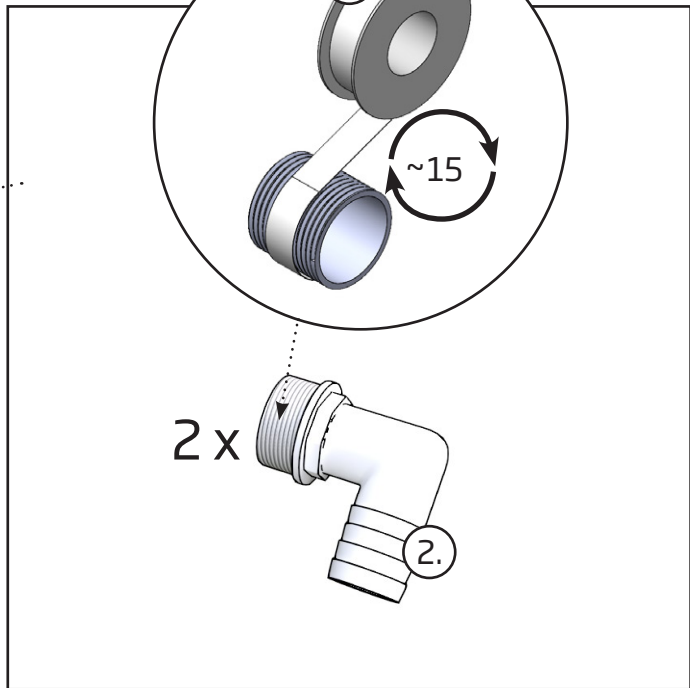
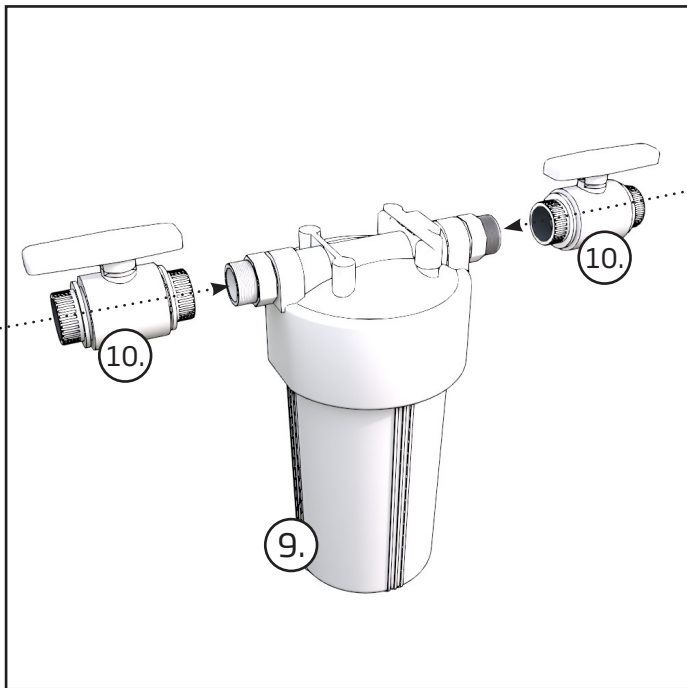


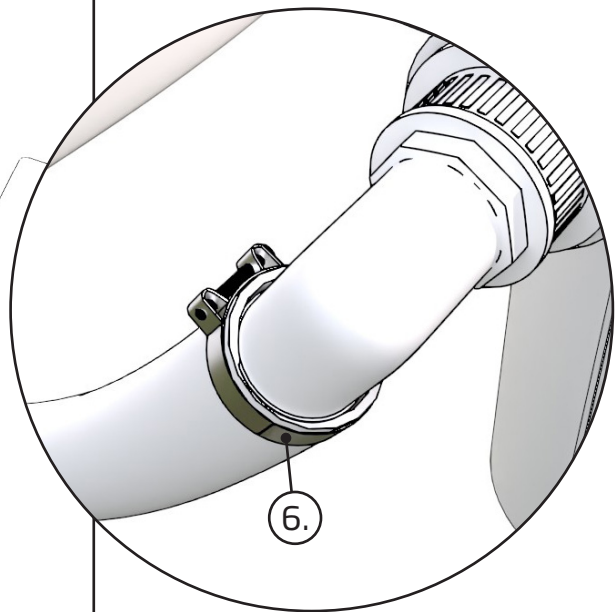
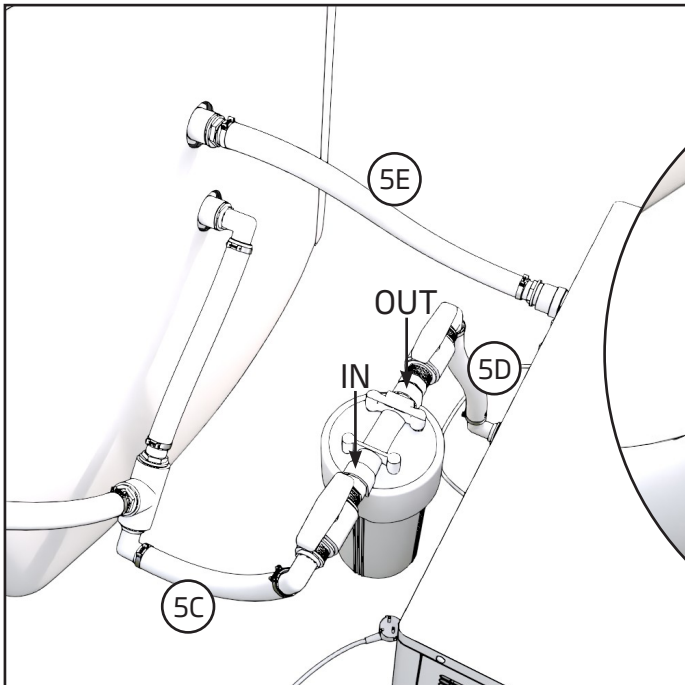
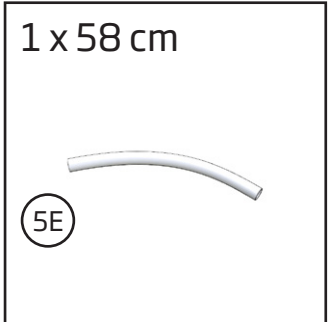
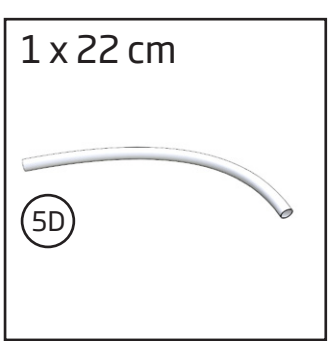
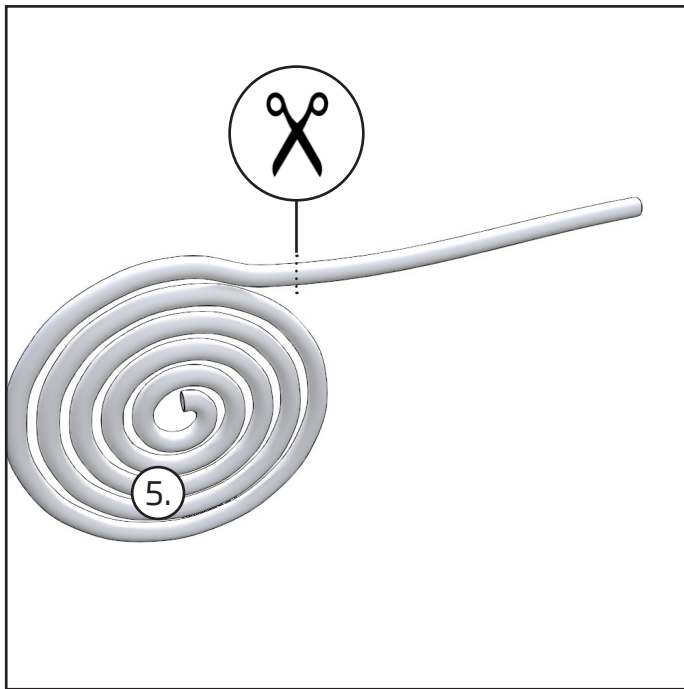




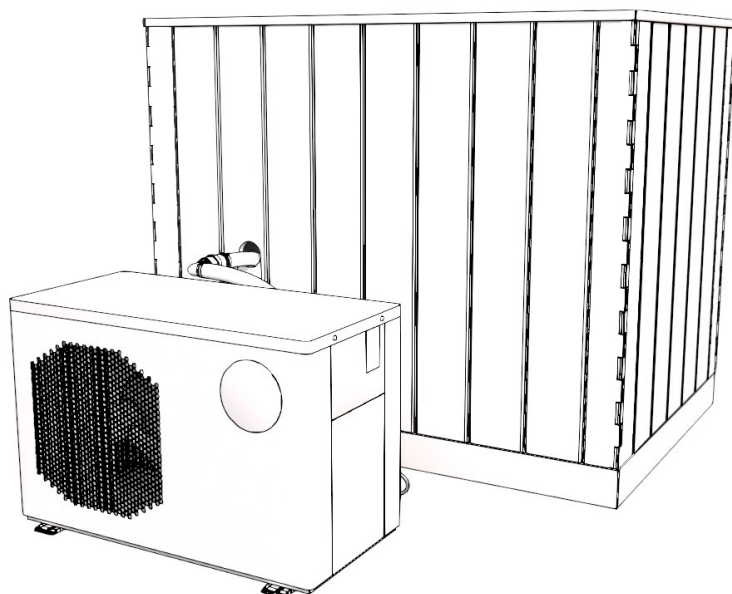




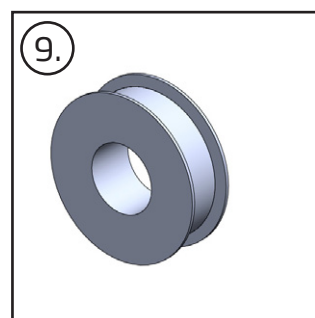
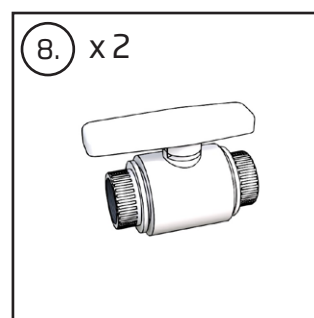
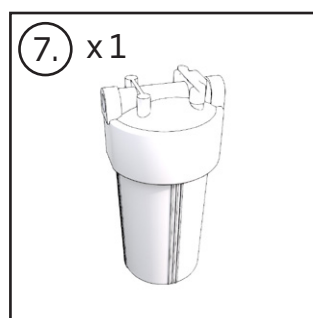
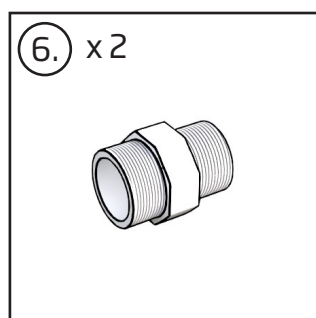
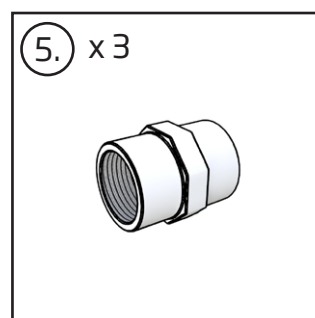
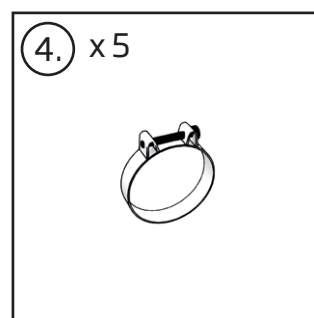
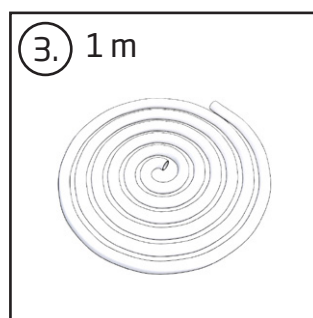
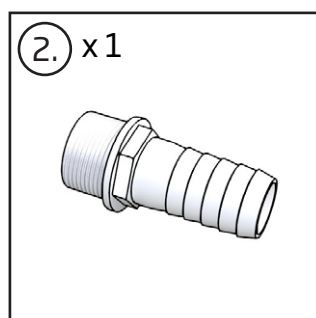
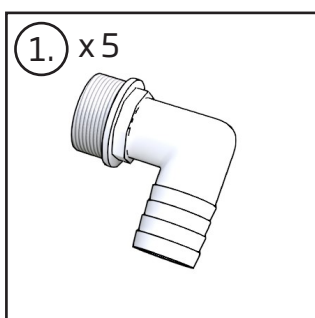


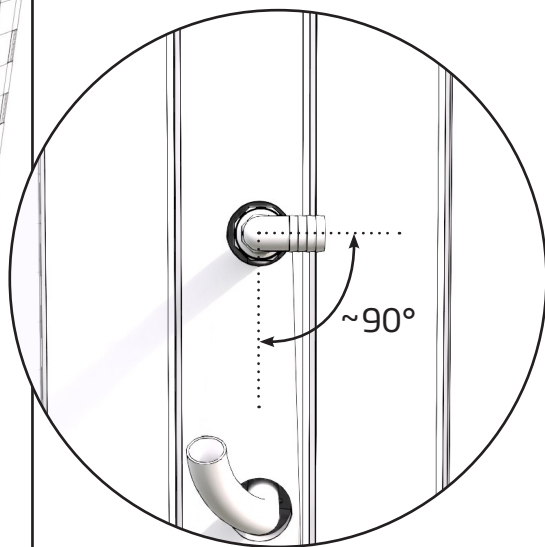
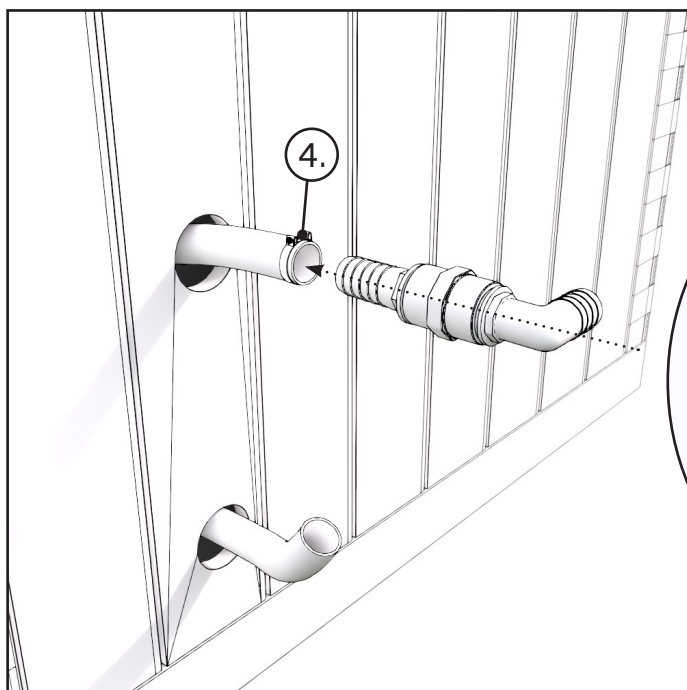
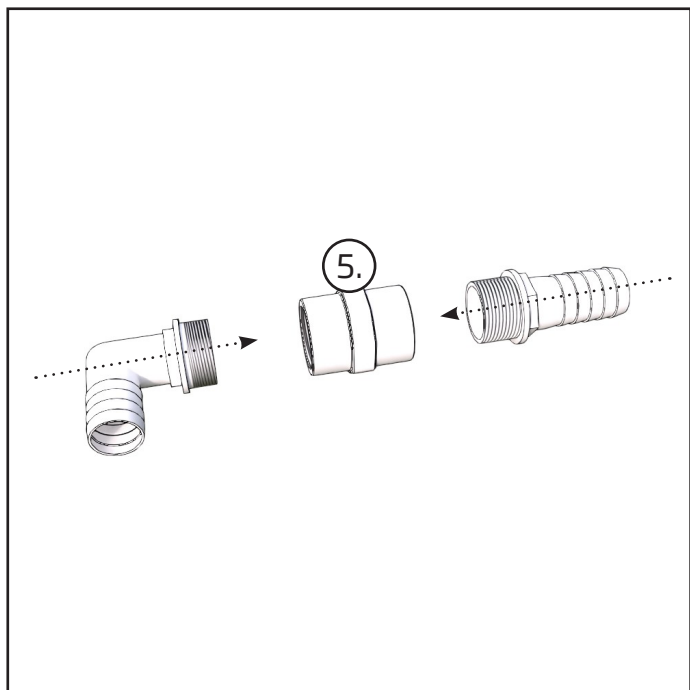
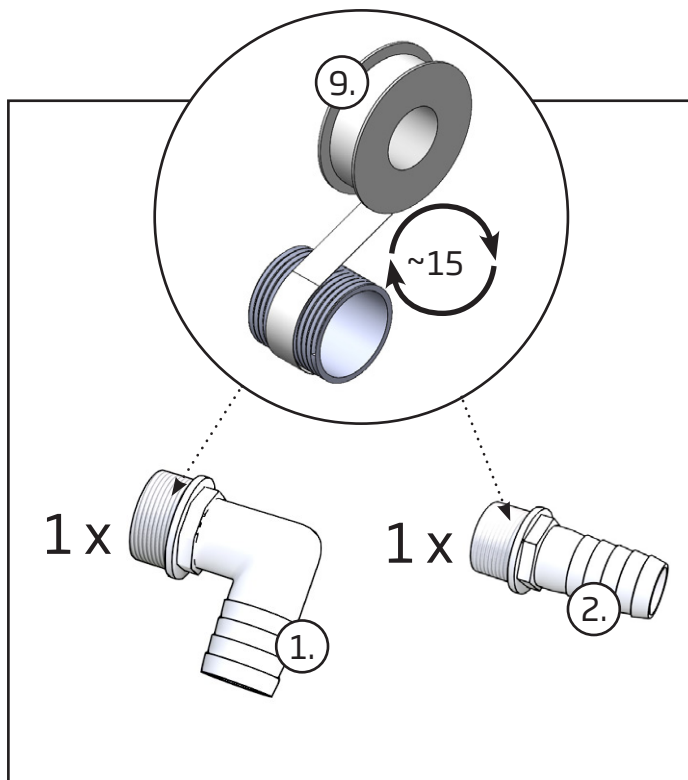


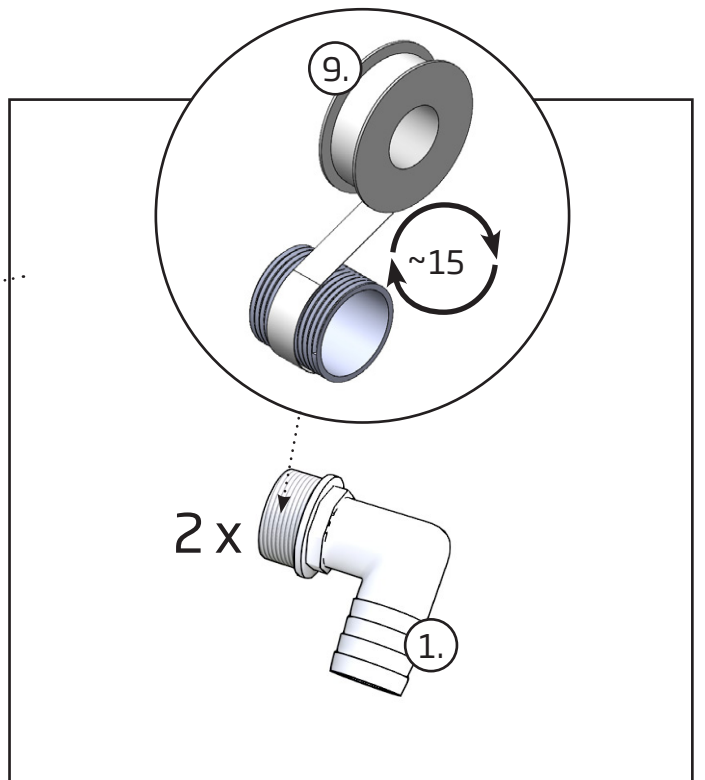
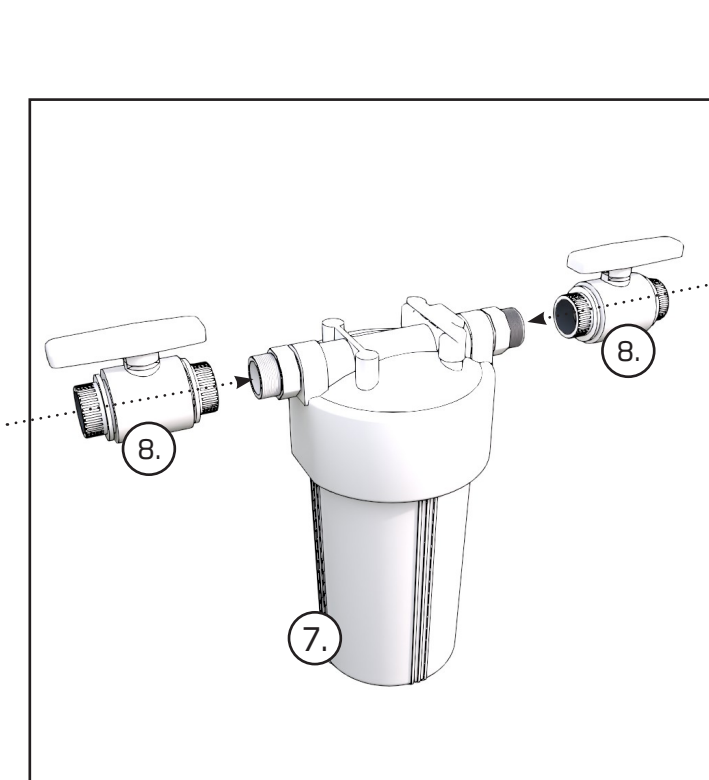
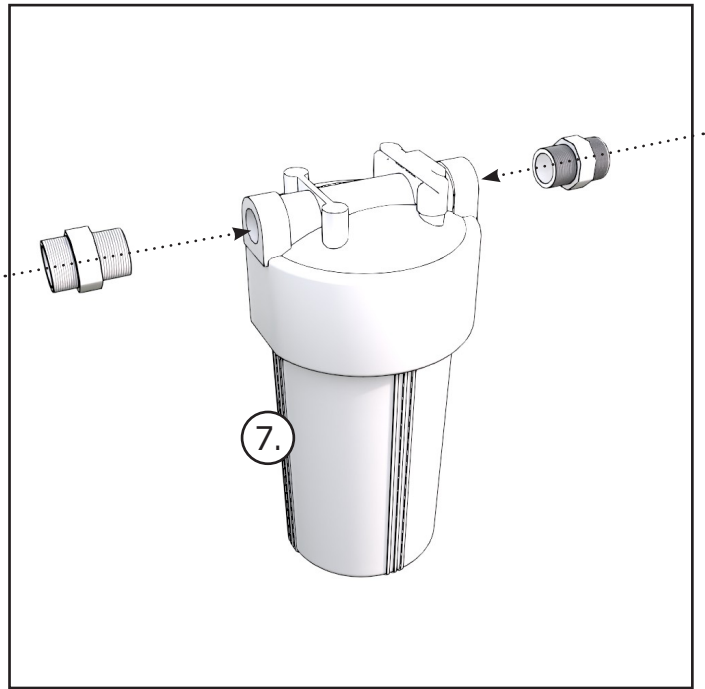
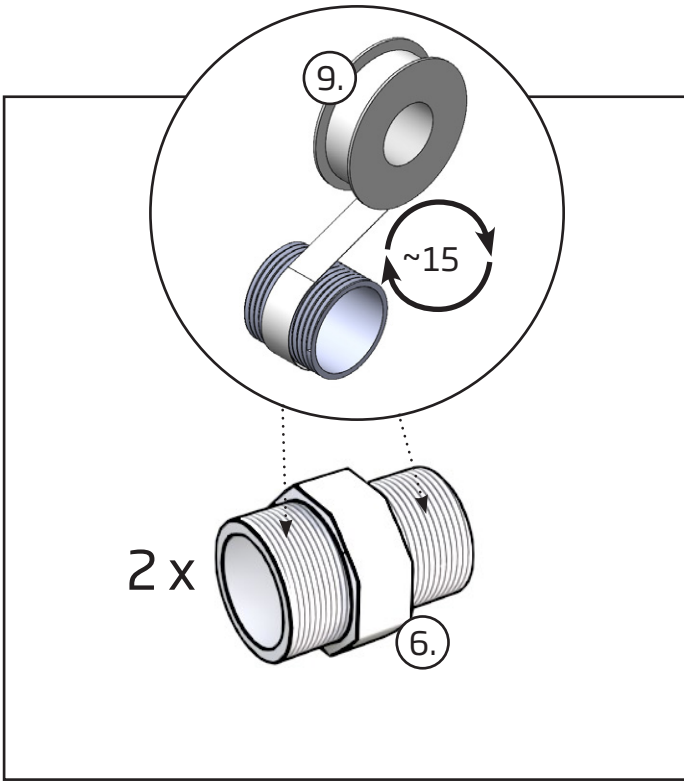
## 2. PREMIUM NORDIC ICE S



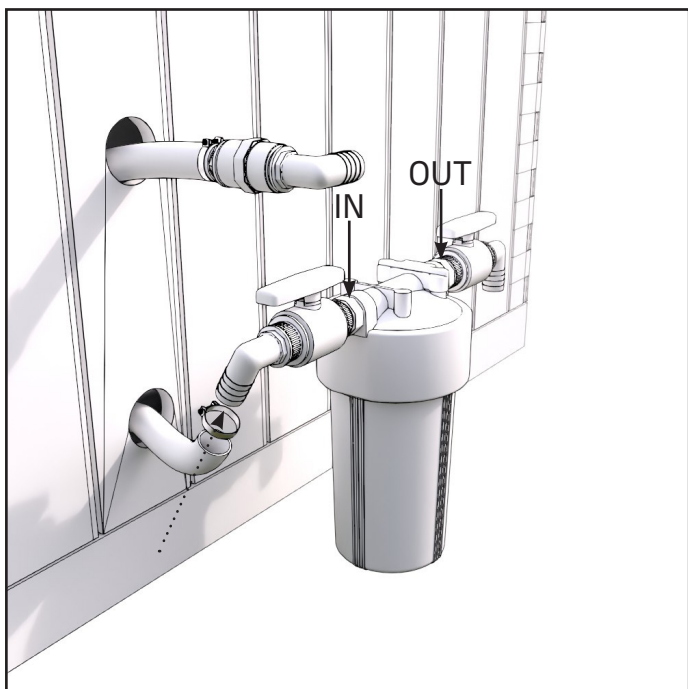
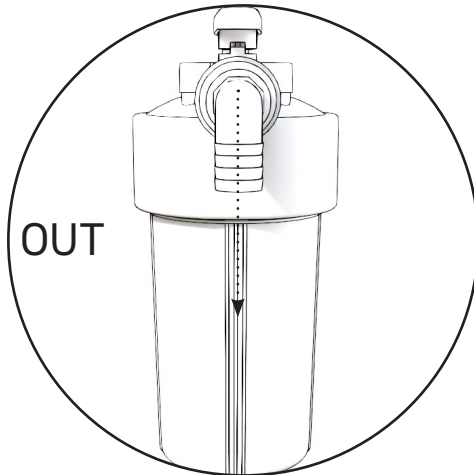
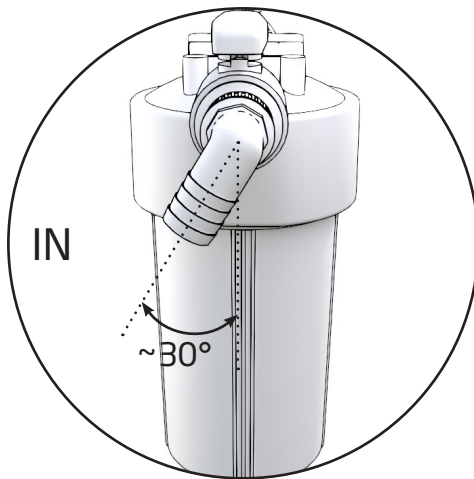
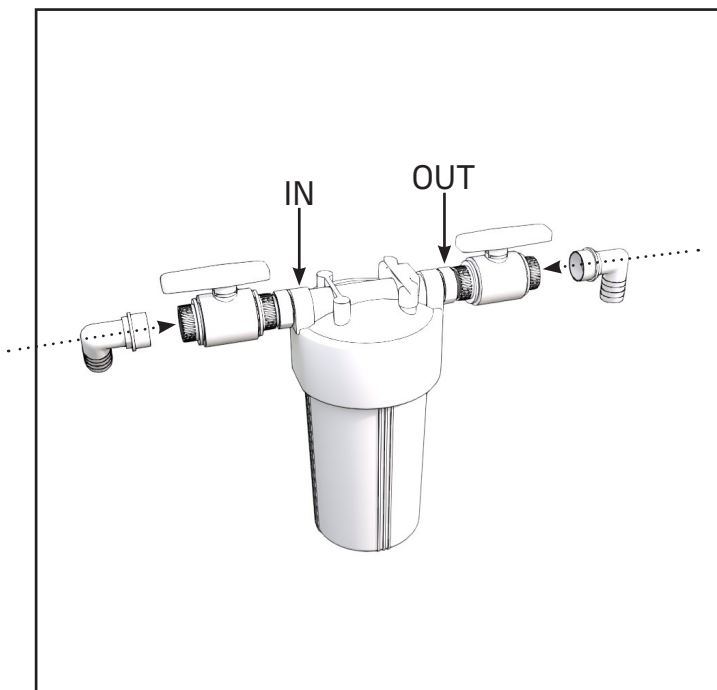
## ONDERDELENLIJST

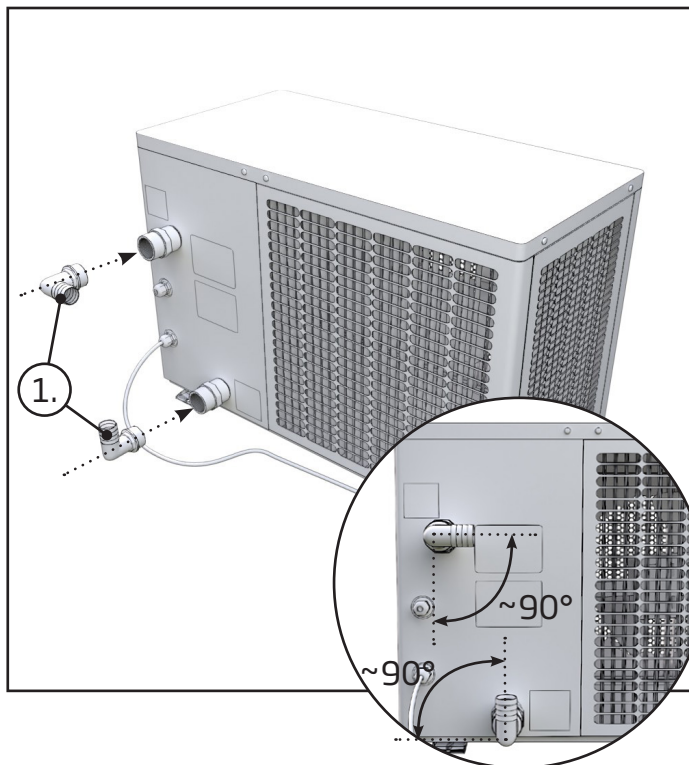
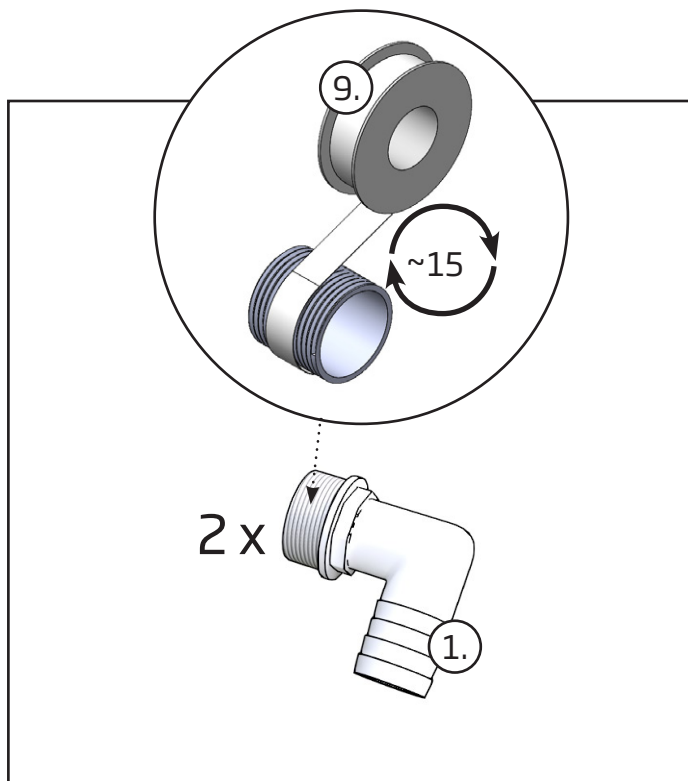
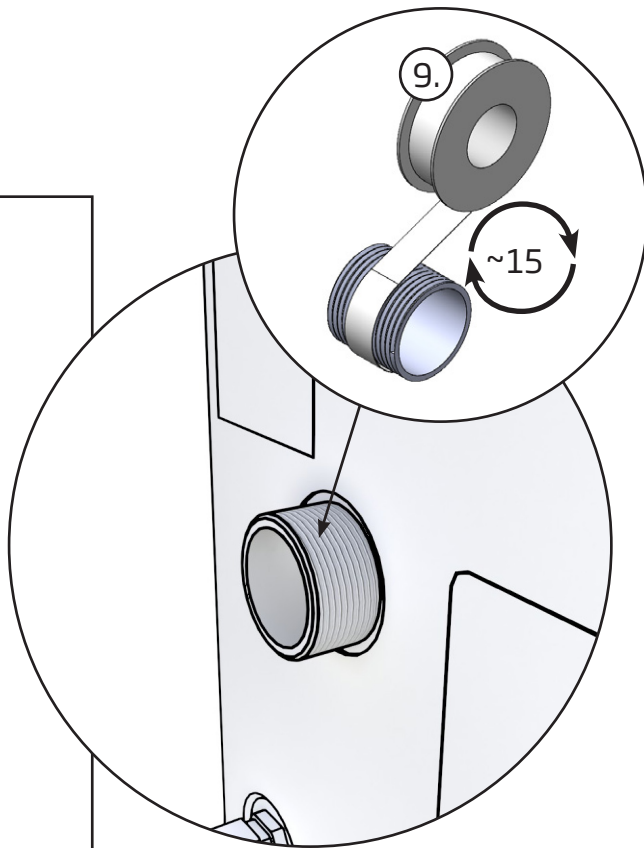
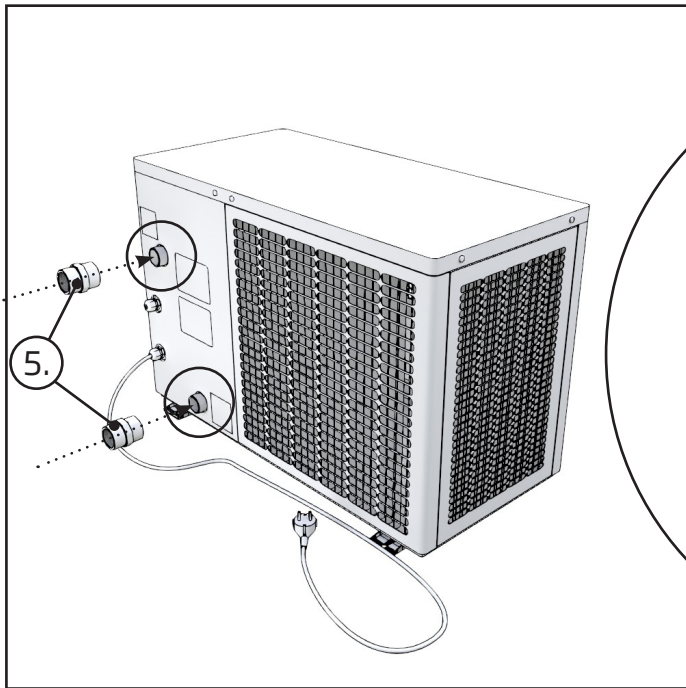


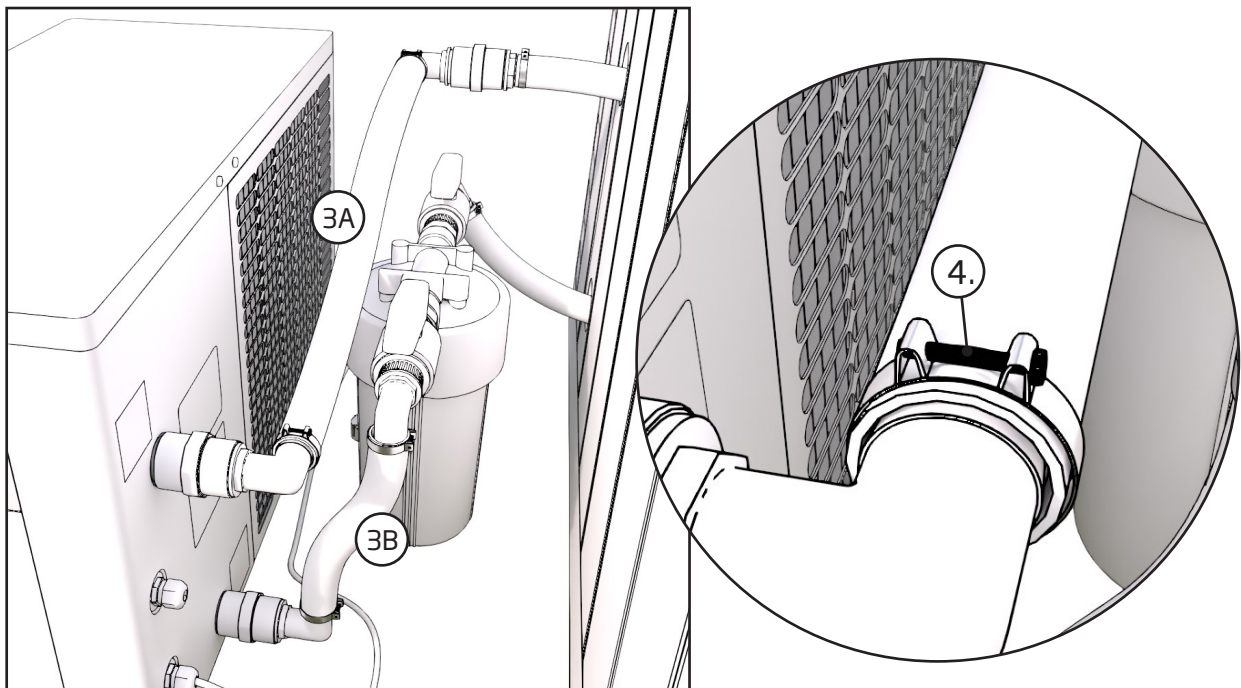
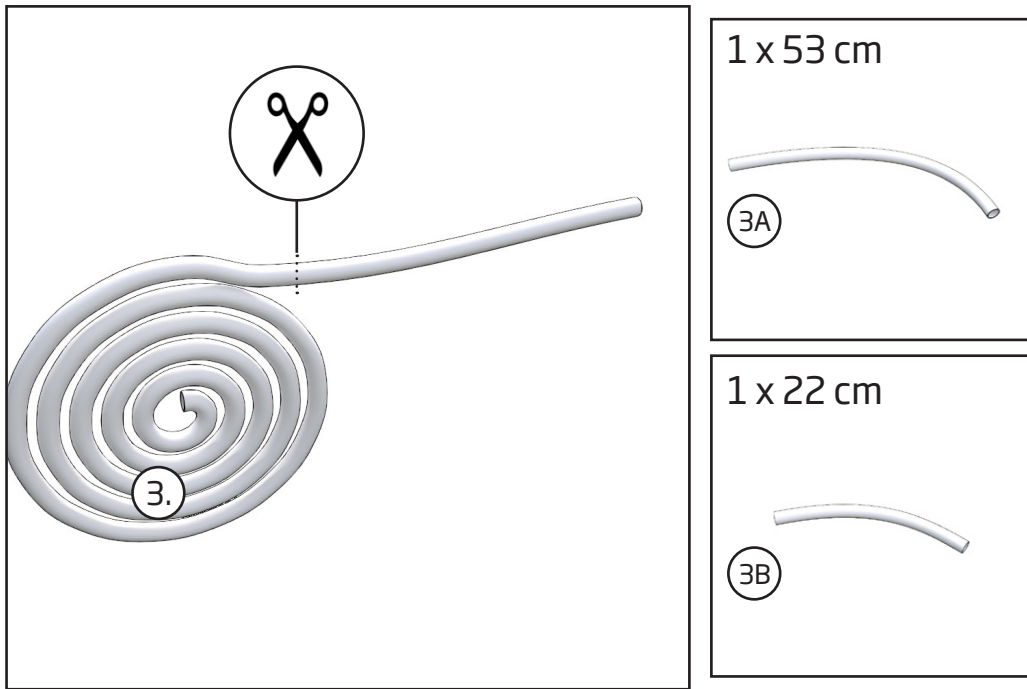




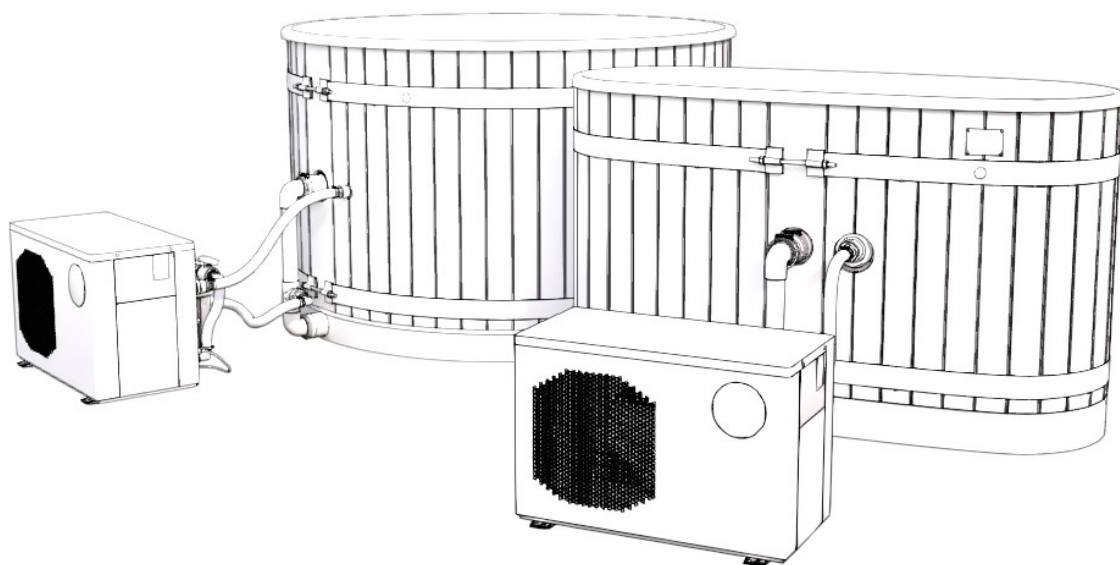




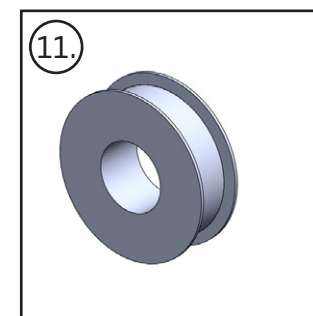
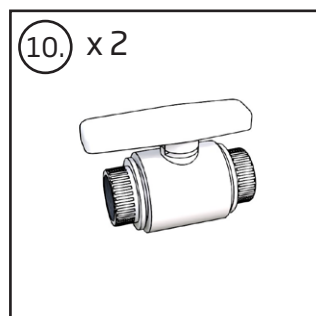
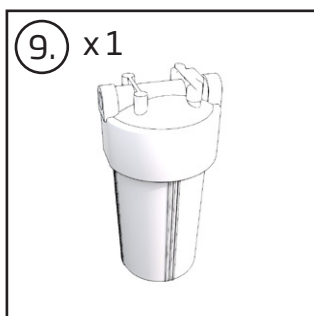
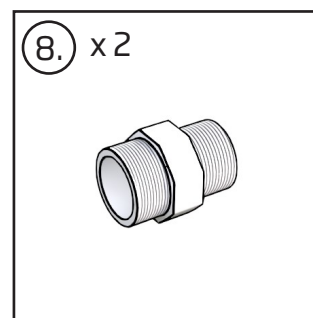
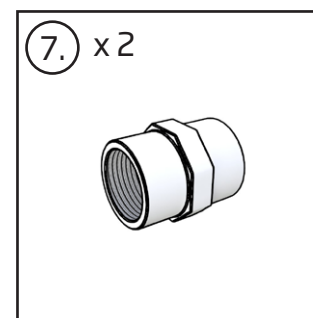
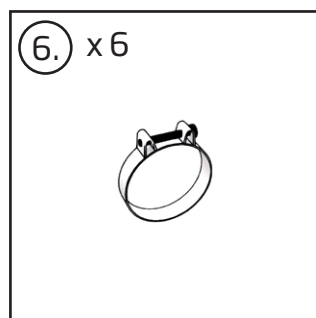
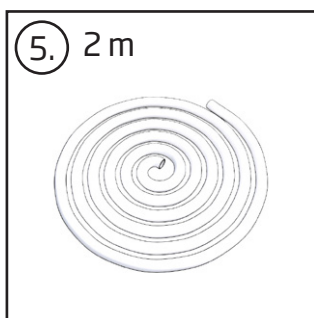
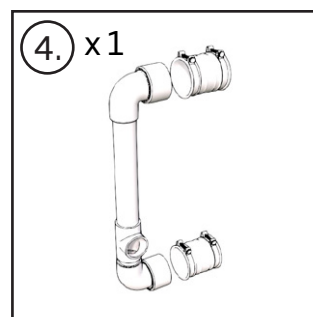
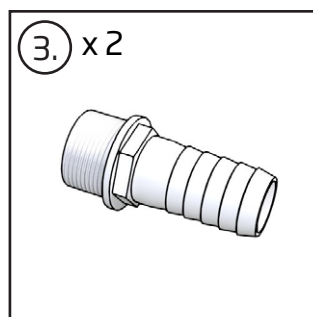
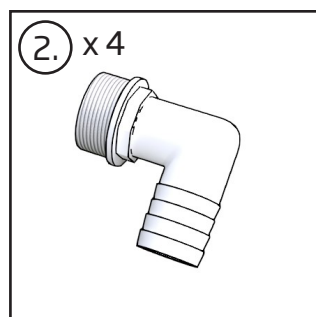
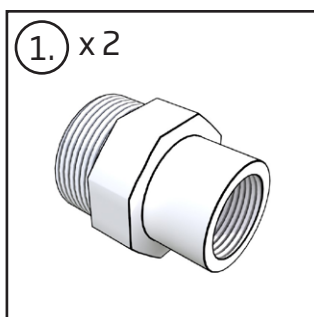


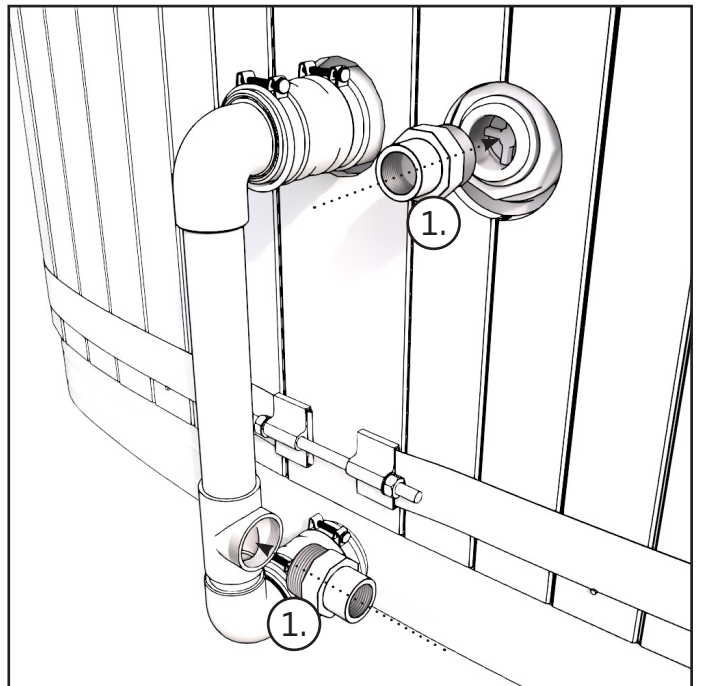
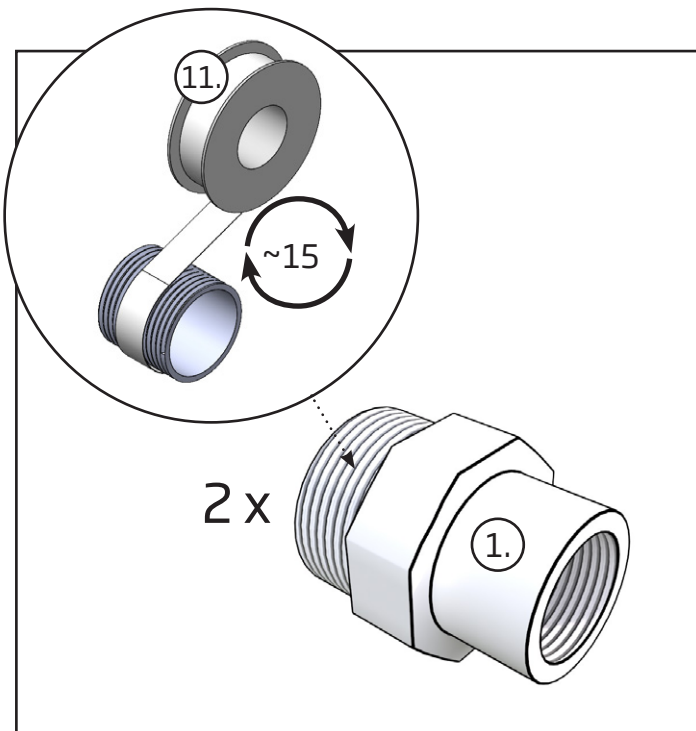
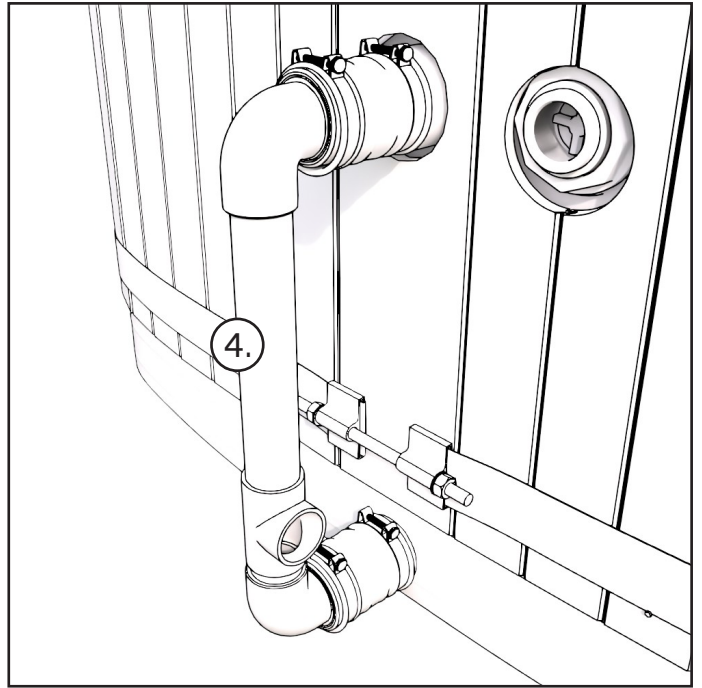
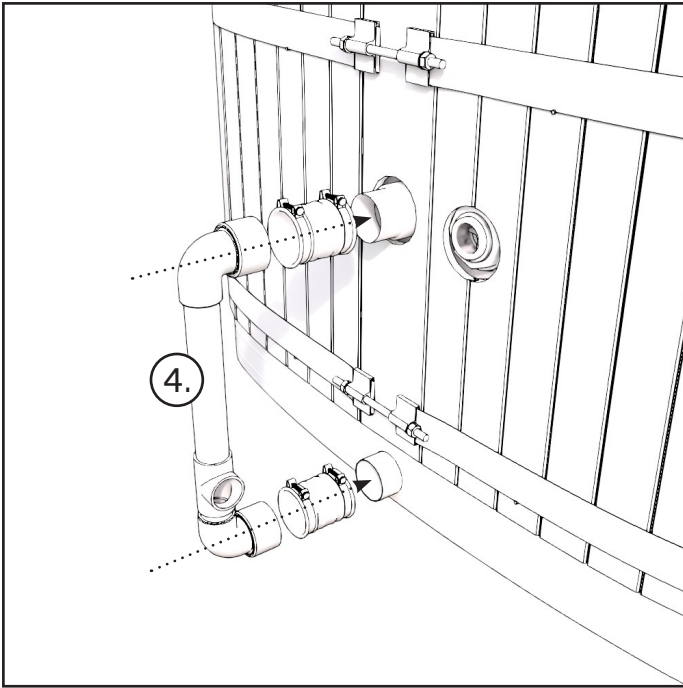


# INSTALLATIE ALS VERVANGING VAN EEN KACHEL

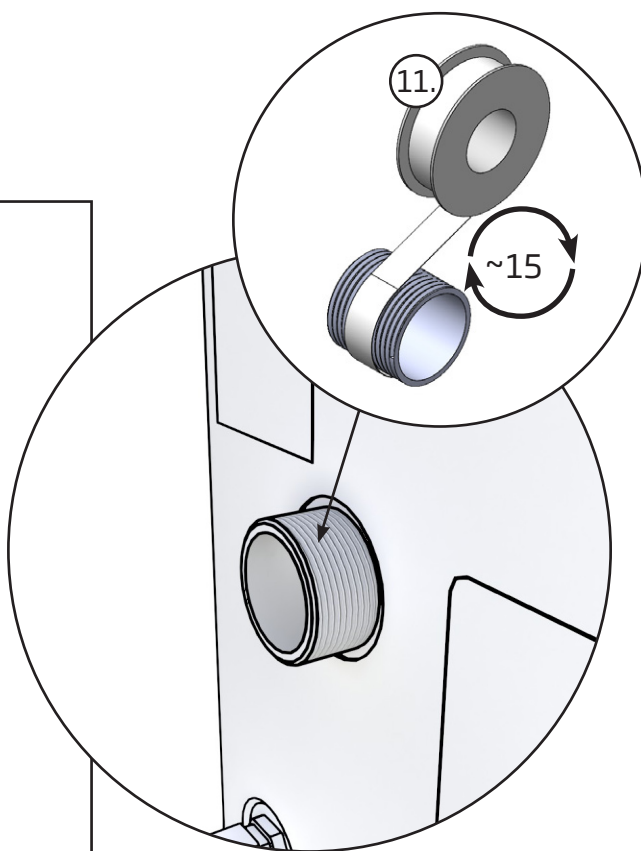
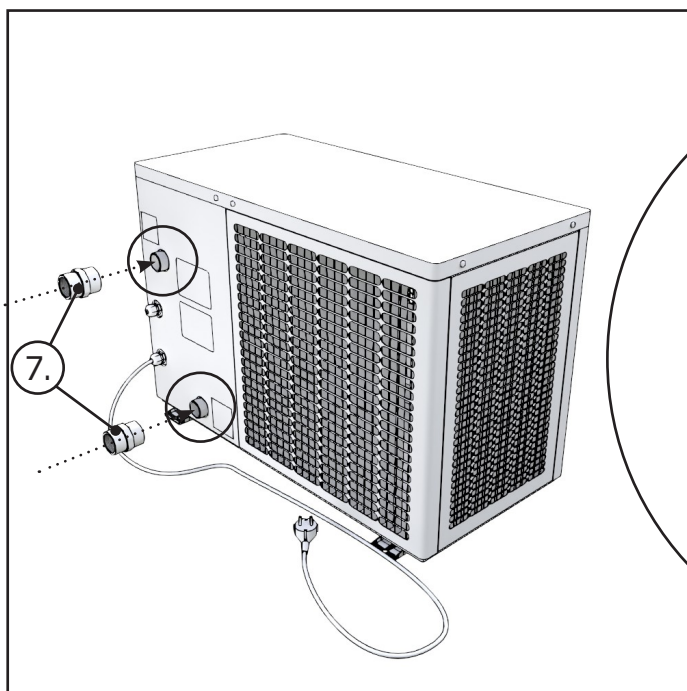
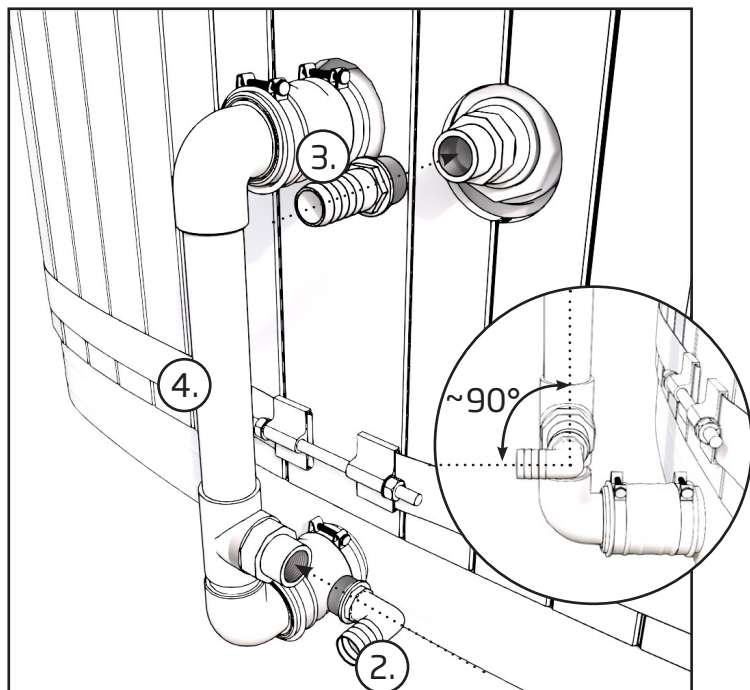
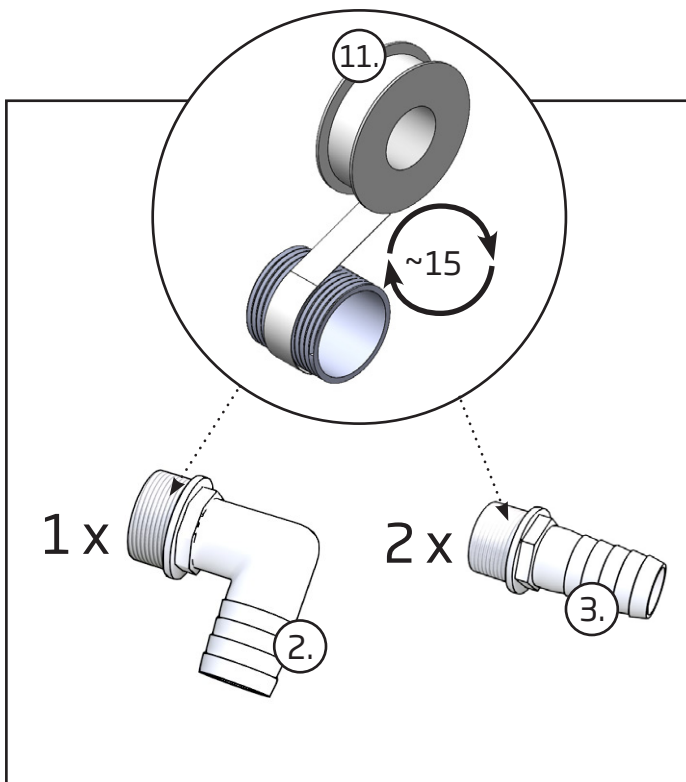


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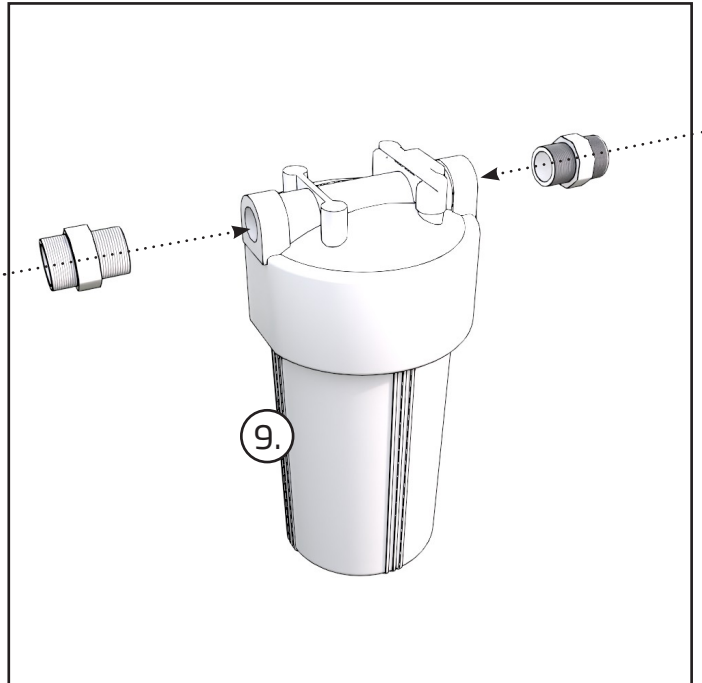
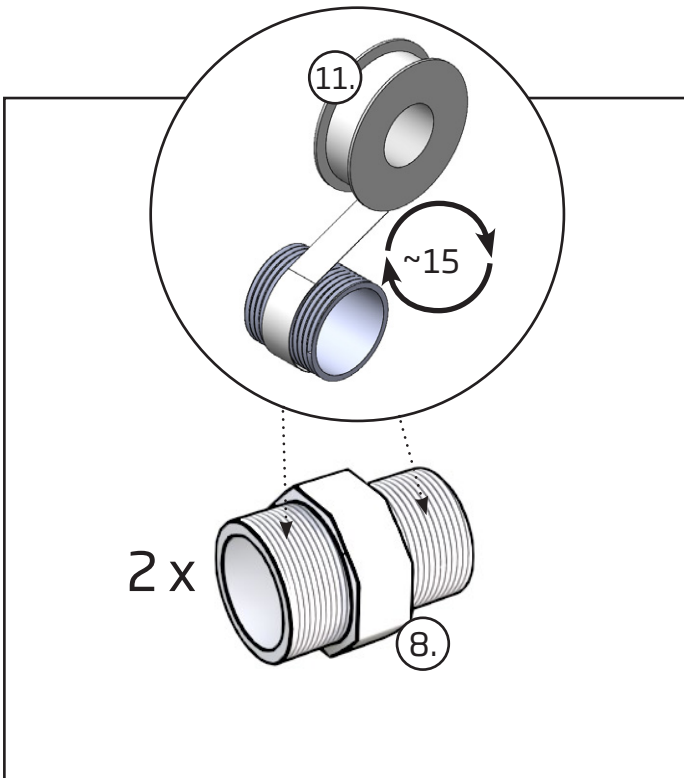
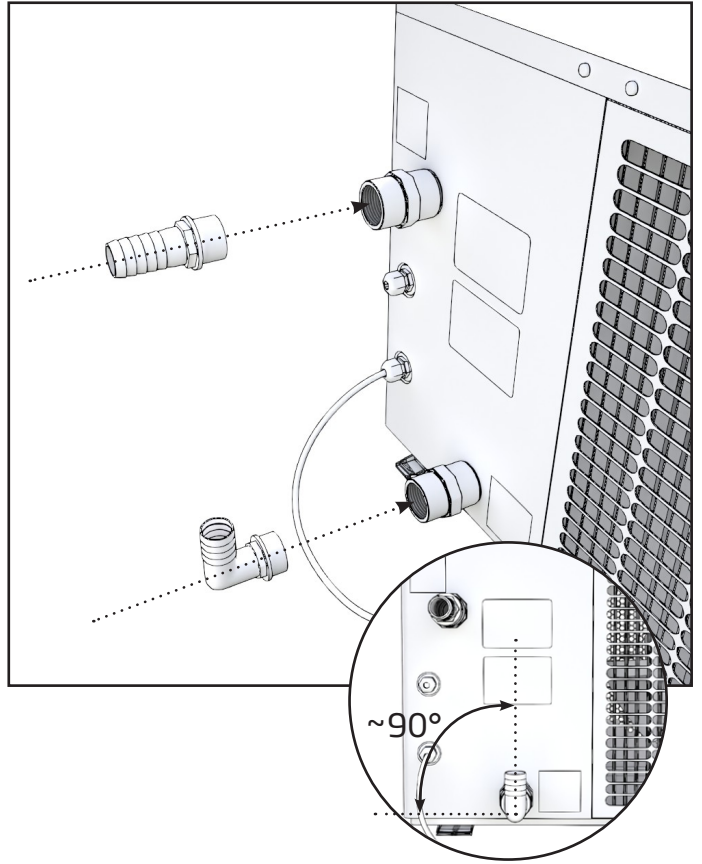
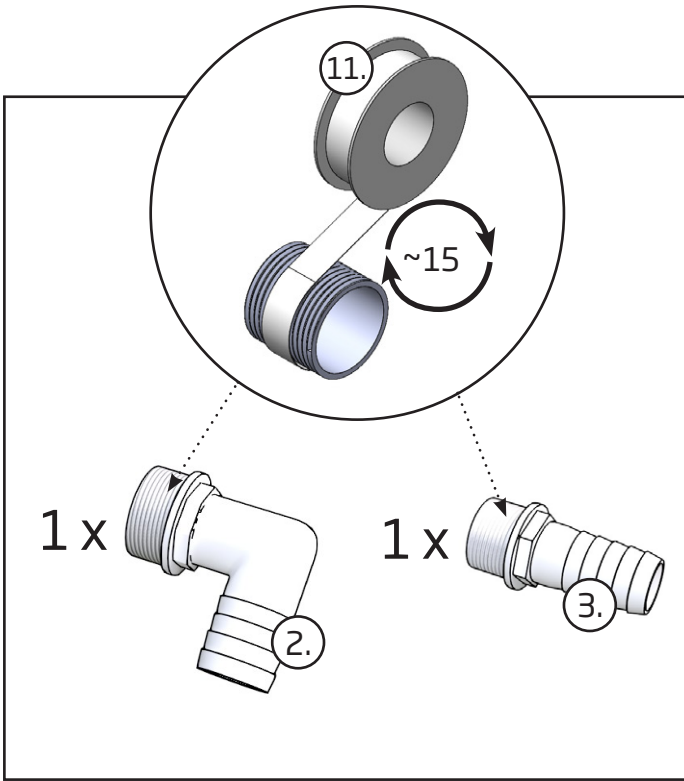


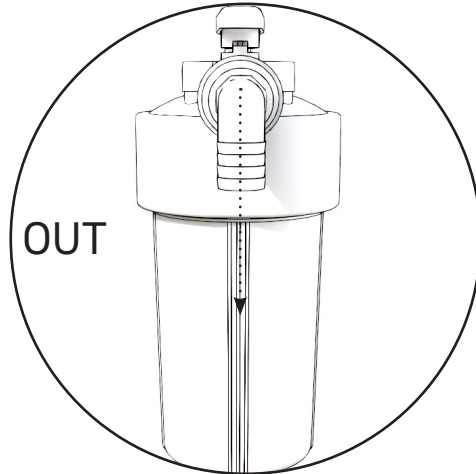
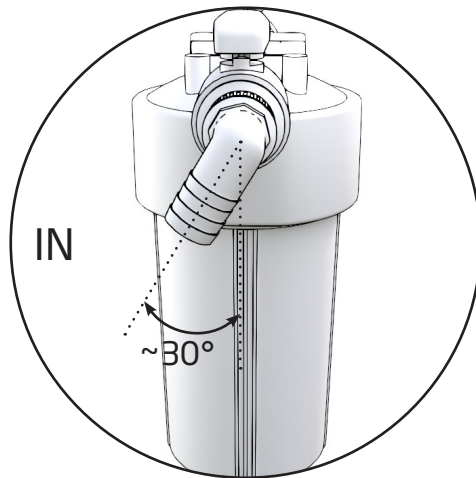
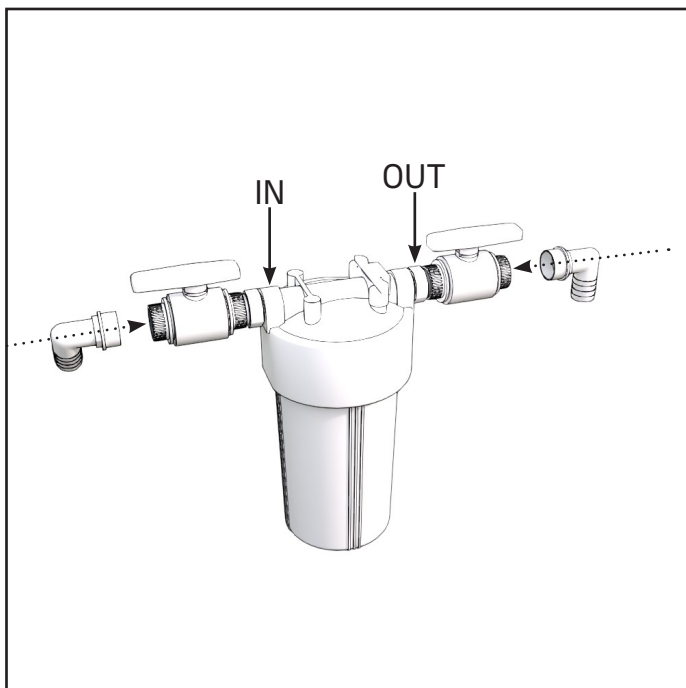
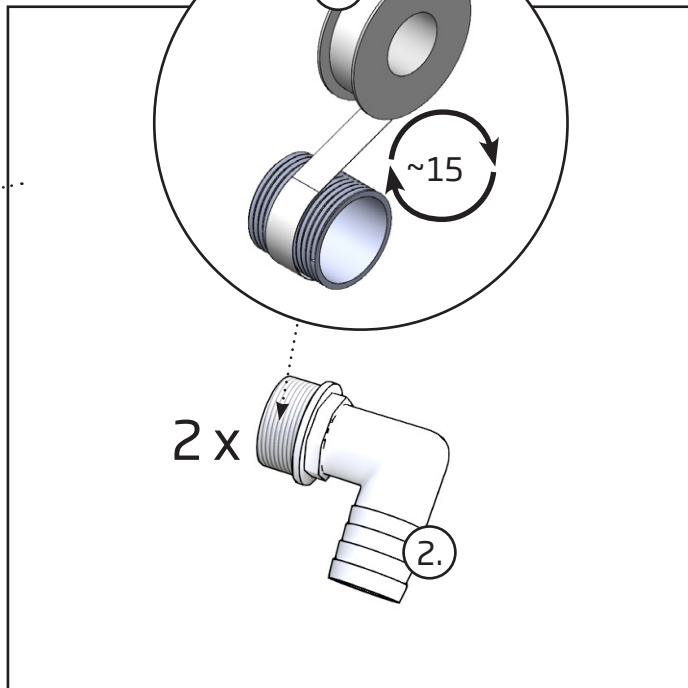
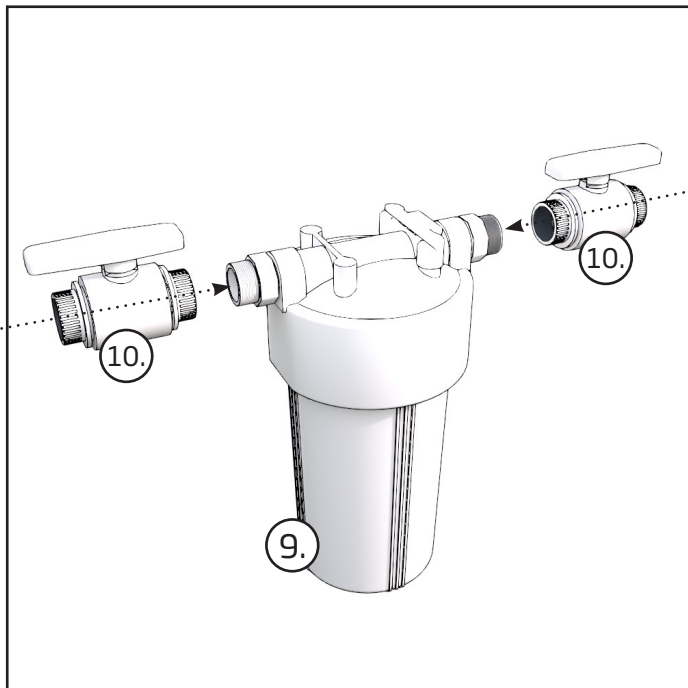


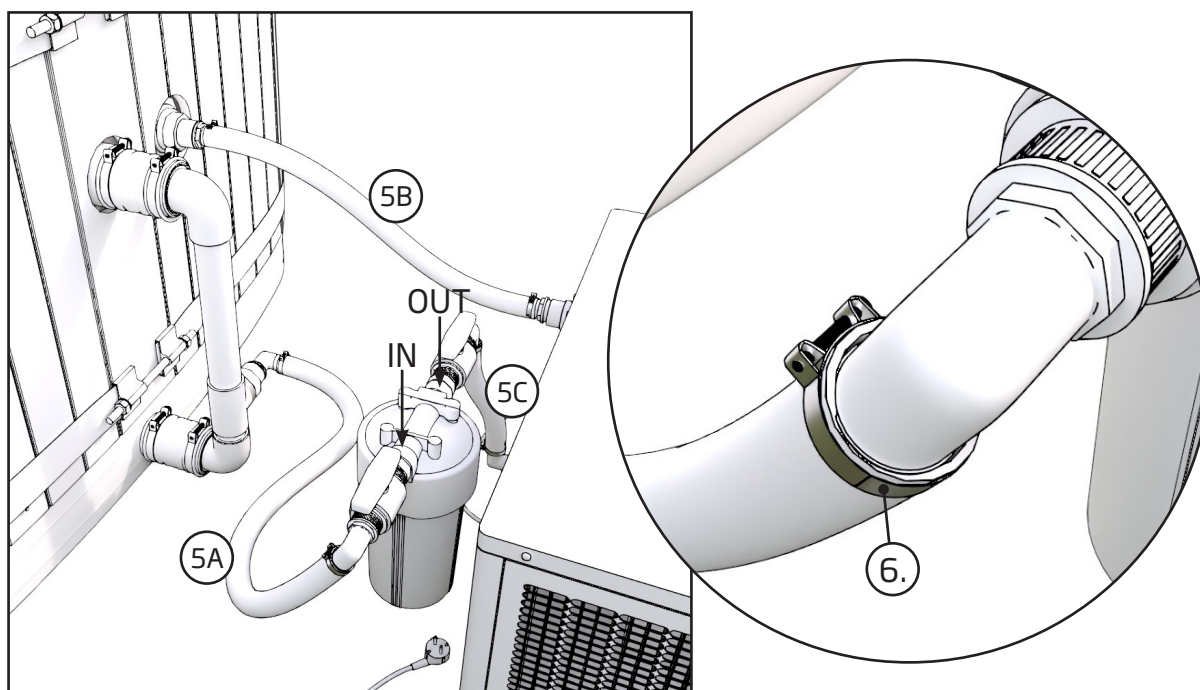
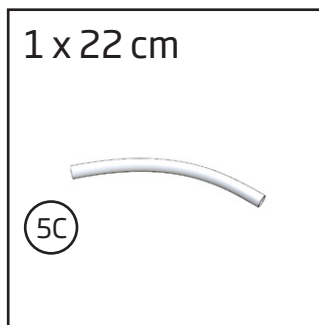
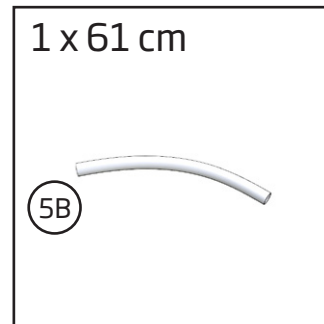
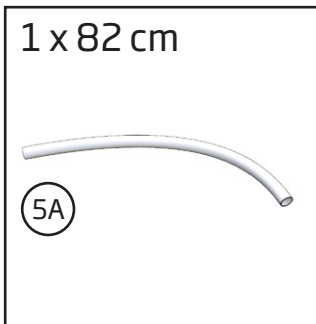
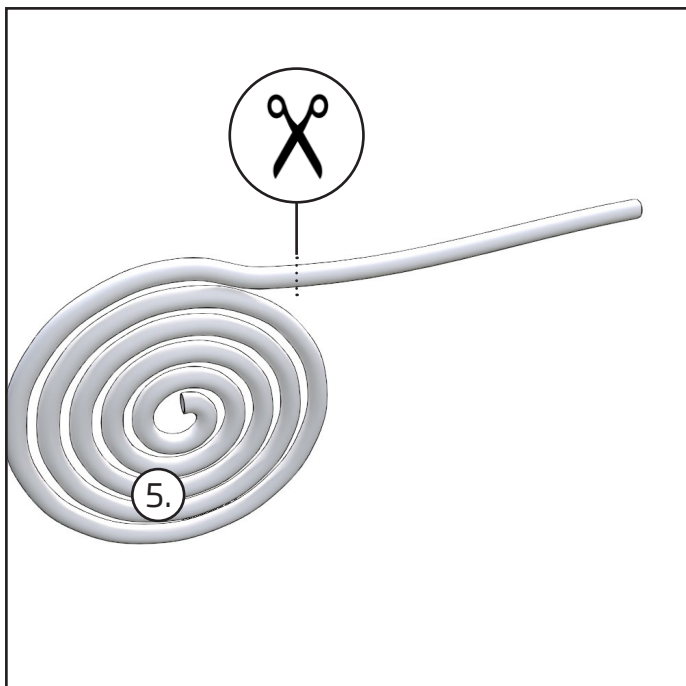








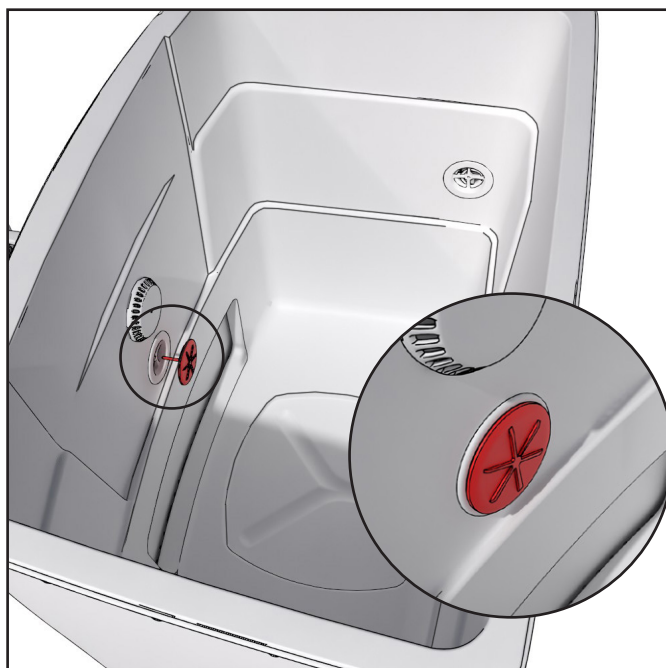




## HET BAD VULLEN EN DE LUCHT UIT DE UNIT LATEN

Het vullen van het bad en het verwijderen van de lucht verschilt volgens het type bad.

### BlackIce S en NordicIce S - Het bad vullen en de lucht uit de unit laten

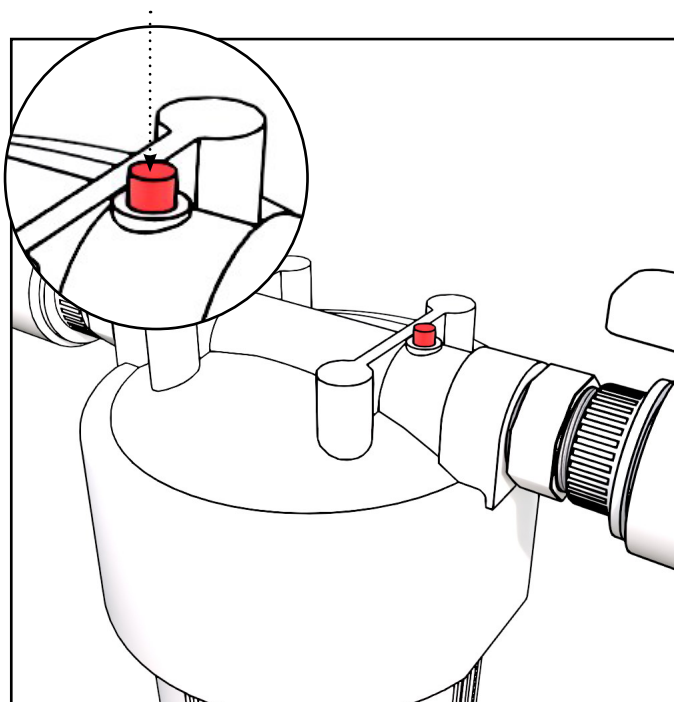
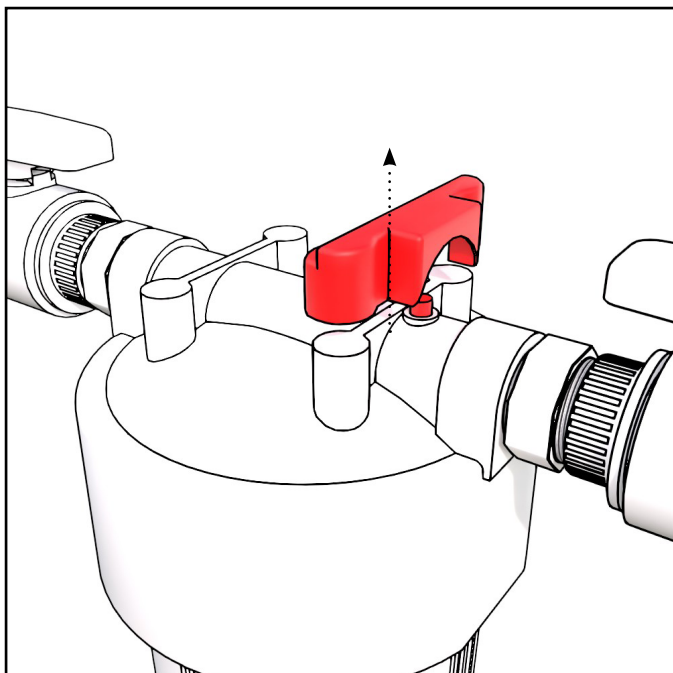


Verwijder het veiligheidsrooster van de kleppen op de afbeelding. Sluit de onderste voorklep af met de meegeleverde plug



Gebruik bij het vullen van het bad een tuinslang om het water door de bovenste klep te laten lopen en de lucht uit de unit te laten. Start de dualix-warmtepomp.

Als er geen lucht uit de unit komt en het display na één minuut foutmelding P01 toont, haalt u het toestel uit het stopcontact en start u het opnieuw op. Zodra u het water ziet stromen, vult u het zwembad tot het gewenste niveau.



Daarnaast verwijdert u de lucht uit het filter door eerst het deksel van de bovenkant van het filter te tillen. Druk op de ontluichtingsknop op het filter tot er water door de opening stroomt.



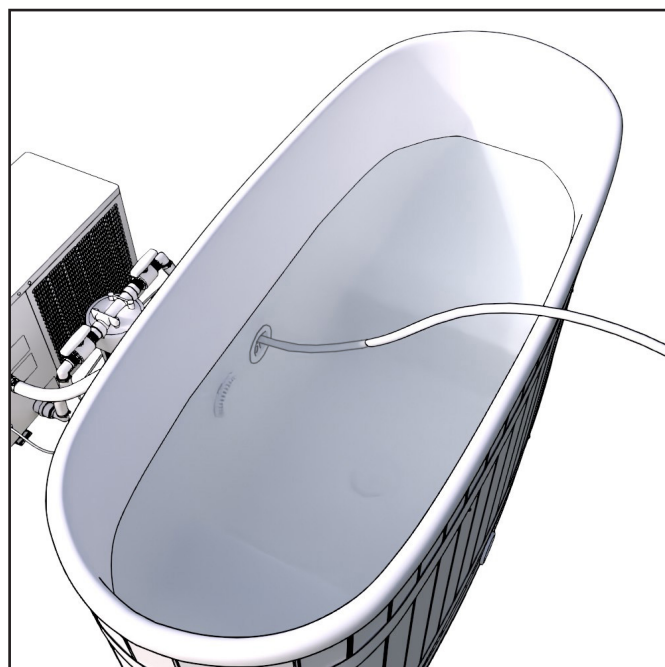
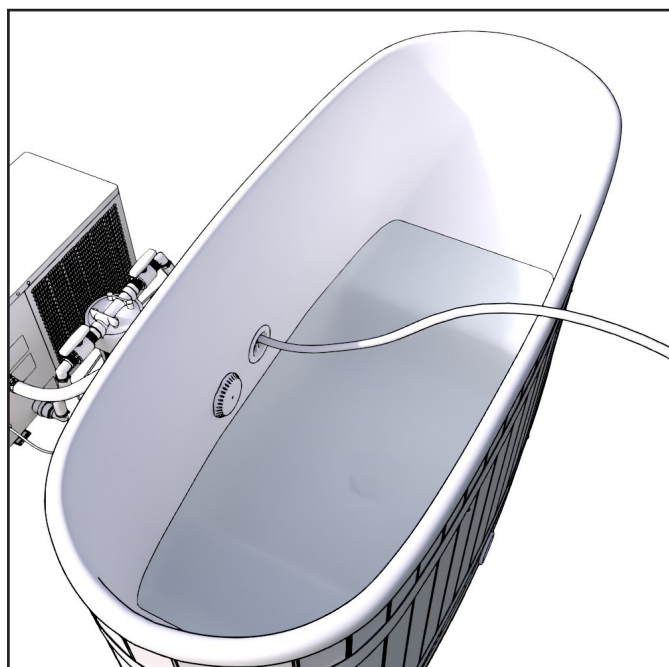
Zodra het water in de unit circuleert, verwijdert u de plug en plaatst u het veiligheidsrooster terug.



## Als vervanging van een kachel - Het bad vullen en de lucht uit de unit laten



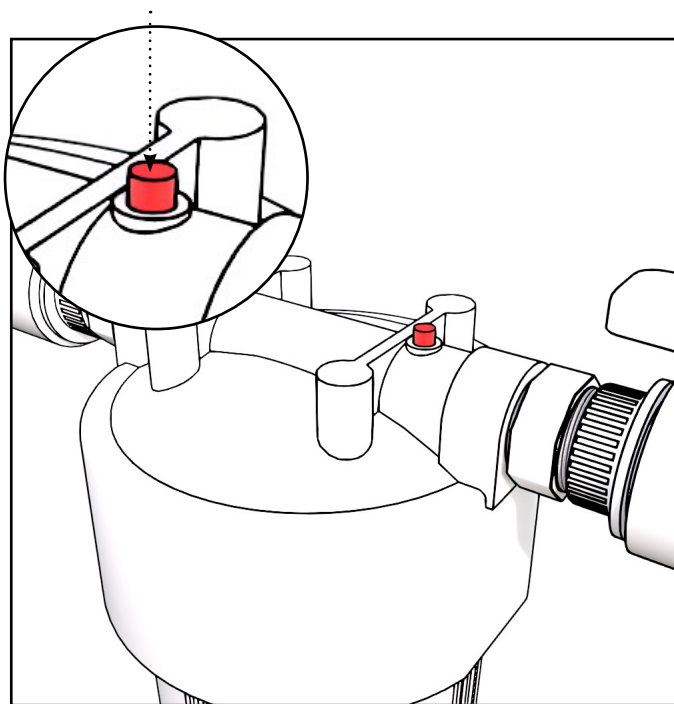
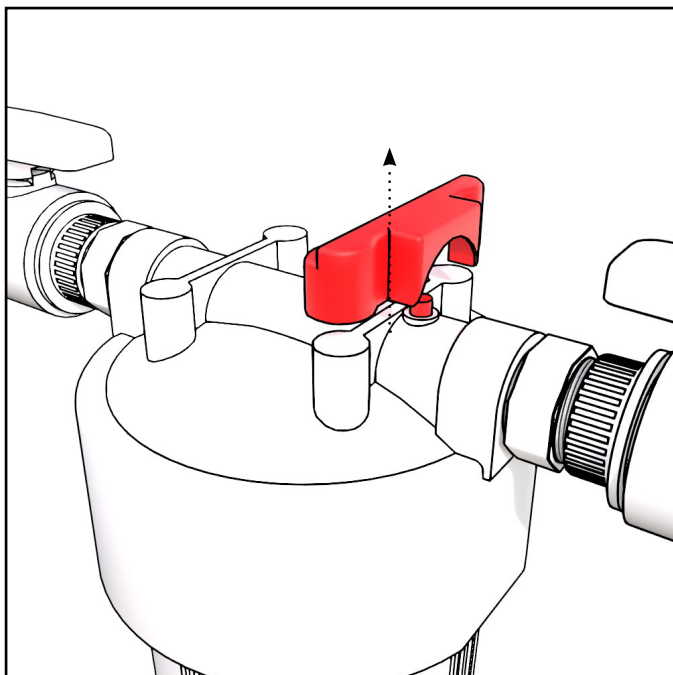
Verwijder het veiligheidsrooster van de kleppen op de afbeelding. Sluit de onderste klep af met de meegeleverde plug.



Gebruik bij het vullen van het bad een tuinslang om het water door de bovenste klep te laten lopen en de lucht uit de unit te laten. Start de dualex-warmtepomp.

Als er geen lucht uit de unit komt en het display na één minuut foutmelding P01 toont, haalt u het toestel uit het stopcontact en start u het opnieuw op. Zodra u het water ziet stromen, vult u het zwembad tot het gewenste niveau.





Daarnaast verwijderd u de lucht uit het filter door eerst het deksel van de bovenkant van het filter te tillen. Druk op de ontluichtingsknop op het filter tot er water door de opening stroomt.







Zodra het water in de unit circuleert, verwijderd u de plug en plaatst u het veiligheidsrooster terug.

## WERKING






### Bedienings-interface





### Aan/uit en schermvergrendeling

Om het toestel te ontgrendelen, drukt u op eender welke toets om het scherm in te schakelen en houdt u het aan/uit-pictogram 5 seconden ingedrukt tot u een geluidssignaal hoort.	
Het vergrendelingspictogram gaat weg	
Hou het aan/uit-pictogram ingedrukt om het toestel aan of uit te zetten. Als u binnen de 60 seconden niet op een toets drukt, zal het bedieningspaneel automatisch vergrendelen.	
In vergrendelingstoestand verschijnt het vergrendelingspictogram	







### Modi (Koelen / Opwarmen / Auto)

Als de unit is ingeschakeld, drukt u kort op de sleutel om de werkingsmodi te selecteren De selectievolgorde is Koelen -> Opwarmen -> Auto -> Koelen... (doorlopende lus) LET OP: In automatische modus is er vertraging bij het veranderen van de richting van het koelen/opwarmen.	
Het opwarmingspictogram verschijnt als de opwarmingsmodus is ingeschakeld.	
Het koelpictogram verschijnt als de koelmodus is ingeschakeld.	
In automatische modus verschijnen de lus- en koelpictogrammen.	 

## Instellen van de temperatuur





Als de koel-unit is ingeschakeld, ontgrendelt u het scherm (zie "Aan/uit en schermvergrendeling")	
Druk op het pijltje naar boven of naar beneden om de temperatuur aan te passen.	 
Als u 3 seconden niets doet, verdwijnt het display met aanduiding van de huidige watertemperatuur.	









## Instellen van de tijd

Om de tijd in te stellen: Hou de knop 5 seconden ingedrukt tot het uur en de minuten knipperen.	
Methode om de tijd in te stellen: Druk kort op de interface om het uur in te stellen.	
Dan knippert het uur.	
Druk op het pijltje naar boven of naar beneden om het uur aan te passen.	 
Druk op het klokje om over te schakelen naar de minuten en herhaal bovenstaande acties.	
Als u de tijd hebt ingesteld, drukt u op het klokje om de instelling te bewaren en terug te gaan naar het hoofdmenu.	









## AAN/UIT-timer instellen ("Active Mode")

- Gebruikers kunnen twee AAN/UIT-timerperiodes "active mode" instellen. De ingestelde periodes mogen elkaar niet overlappen.
- Methode om AAN/UIT-timer in te stellen

Druk in het hoofdmenu kort op het klokje om naar de instelling van de aan/uit-timer te gaan.	
Als "1" knippert, drukt u op het klokje om naar het AAN-uur van "active mode" periode 1 te gaan.	
Als het uur knippert, drukt u op het pijltje naar boven of naar beneden om het uur aan te passen.	 

Druk op het klokje om te bevestigen en om naar de minuten te gaan.	
Als de minuten voor AAN knipperen, drukt u op het pijltje naar boven of naar beneden om de minuten aan te passen.	 
Druk op het klokje om de minuten voor AAN te bevestigen en ga naar de instelling voor de UIT-timer van periode 1. Herhaal bovenstaande acties.	
Als u alles hebt ingesteld, houdt u het klokje lang ingedrukt om te bevestigen en bewaart u de huidige timer-instelling voor AAN/UIT.	
Druk op het pijltje naar boven of naar beneden om de "active mode" voor periode 2 in te stellen en herhaal bovenstaande acties..	 
Het hoofdmenu toont een geldige timergroep met bijbehorend nummer. Druk kort op aan/uit om naar het hoofdmenu te gaan.	

## Instellen van de ozonator

Als de koel-unit aanstaan, drukt u lang op de aan/uitknop als het scherm is vergrendeld.	
Hou de modusknop ingedrukt tot op het scherm L0 verschijnt.	
Gebruik het pijltje naar beneden om de waarde aan te passen naar L11 en druk (kort) op 'mode'.	 
Gebruik het pijltje naar boven en naar beneden om de waarde te wijzigen in 0, 1 of 2 (zie onderstaande tabel).	 
Druk (kort) op de mode-knop en vervolgens (kort) op de aan/uitknop. (De timing voor het genereren van ozon start als de unit aanstaat)	 

Code	Naam parameter	Bereik instelling	Fabrieksinstelling
L11	Ozonator-controlemethode	0: Geen ozon genererend 1: Ozon genereren gedurende 5 minuten per uur (55 minuten standby) <ul style="list-style-type: none"> <li>• Privégebruik</li> </ul> 2: Ozon genereren gedurende 10 minuten per uur (50 minuten standby) <ul style="list-style-type: none"> <li>• Intensief / openbaar gebruik</li> </ul>	1

## ALGEMEEN ONDERHOUD EN WATERKWALITEIT

Onderhoud van het bad. Zorg ervoor dat het water schoon en helder is. Naargelang de gebruiksfrequentie kan het zijn dat u af en toe chloor moet gebruiken om het water te desinfecteren (zeker bij intensief openbaar gebruik).

Op dagelijkse basis:

- Controleer het waterniveau.

Op wekelijkse basis:

- Maak de eventueel vuile waterleiding en het filter schoon.
- Spoel het filter grondig onder warm lopend water of een douche (gebruik geen hogedrukreinigers aangezien dit het filter kan beschadigen).
- Het filterpatroon moet steeds vervangen worden als de watercirculatie na het schoonmaken van het filter een normaal niveau bereikt. Naargelang de gebruiksfrequentie moet het filter elke 2 of 4 maanden worden vervangen.
- Controleer de pH-waarde van het water, die op een normatief niveau moet blijven (7,2- 7,6). Pas de pH-waarde eventueel aan met pH+ - or pH--chemicaliën.

Het gebruik van chloor:

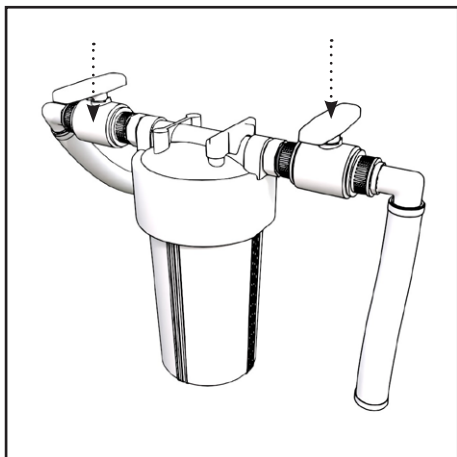
- Bij intensief dagelijks gebruik van het bad is het aanbevolen om een halve theelepel chloor (natrium diklorisocyanurat, dihydraat) aan het water toe te voegen tot een van 0,3 - 1,2 ppm vrij chloorniveau.
- Als er meer dan 10 gebruikers per dag zijn of als het water warmer wordt dan 15 °C, is het aanbevolen om frequent chloor (natrium diklorisocyanurat, dihydraat) aan het water toe te voegen om een 0,3 - 1,2 ppm vrij chloorniveau te behouden.

### Onderhoudstips

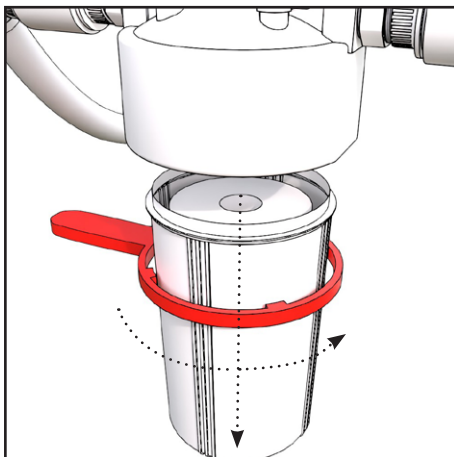
- Controleer regelmatig de (stroom)kabels. Neem bij eventuele problemen contact op met uw lokale dealer.
- Reinig/stofzuig regelmatig de koel-unit (normaal elke 2-4 maanden) om zeker te zijn van een goede ventilatie.
- Haal de koel-unit uit het stopcontact als deze niet wordt gebruikt.
- Als de koel-unit een langere periode niet in gebruik is, laat u al het water eruit lopen.
- Voeg geen zout of andere mineralen toe aan het water.
- Probleemoplossing
  - Als het bedieningspaneel leeg is en de koel-unit niet actief is, controleert u de stroomtoevoer en/of controleert u of de aardlekschakelaar geactiveerd is. Als de stroomtoevoer oké is maar de aardlekschakelaar de stroom heeft uitgeschakeld, drukt u op de reset-knop om de unit opnieuw op te starten. Als het probleem blijft bestaan, haalt u de stekker uit het stopcontact en neemt u contact op met de dealer of fabrikant.
  - Als er na het inschakelen van de unit geen watercirculatie is, zet u de unit eventjes uit en opnieuw aan. Dit kan het resultaat zijn van luchtsluisen in de buizen. Herhaal dit indien nodig tot het water begint te circuleren.
  - Als het water niet correct circuleert, controleert u het waterniveau en de toestand van het filter (filterpatroon indien gebruikt). Voeg indien nodig meer water toe. Maak indien nodig het filter schoon of vervang het patroon. Als het probleem blijft bestaan, neemt u contact op met de dealer of fabrikant.

## SCHOONMAKEN EN VERVANGEN VAN FILTERPATROON

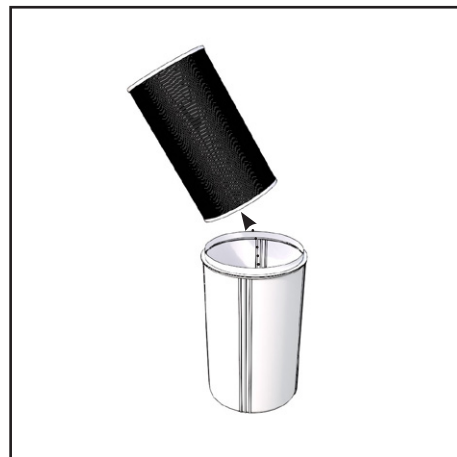
Het filter moet regelmatig worden schoongemaakt om het water in het systeem schoon te houden en te vermijden dat het filter verstopt. Vervang het filterpatroon wanneer dat nodig is, normaal elke 2-4 maanden volgens het gebruik.



Schakel de stroomtoevoer uit en sluit beide kogelkleppen.



Verwijder de filterbehuizing door deze te draaien. Als de filterbehuizing te fel spant en u deze moeilijk kunt openen, gebruikt u het meegeleverde openingsgereedschap.

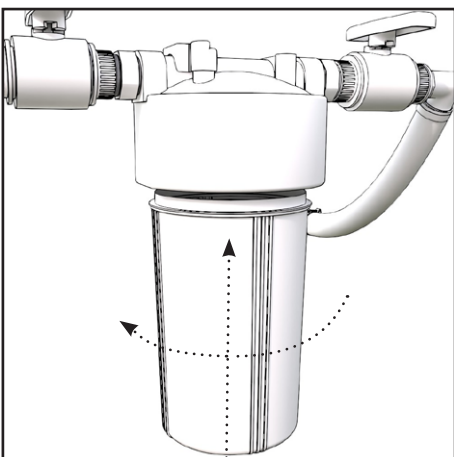
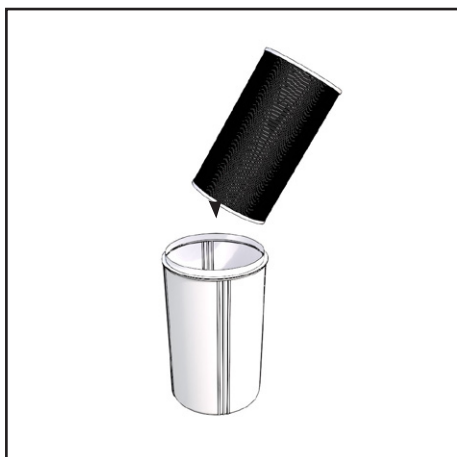
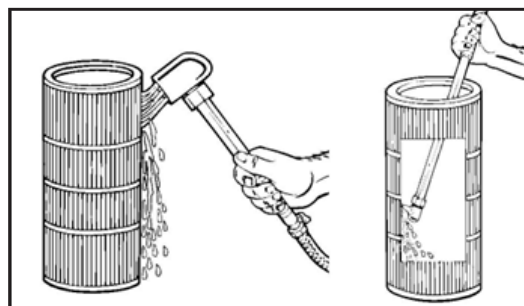


Verwijder indien nodig het filterpatroon en maak de behuizing schoon.

### Wassen

Om zeker te zijn van het beste resultaat bij het reinigen van de filterpatroon, wordt aangeraden hem eerst onder stromend water voor te spoelen en daarna de hele patroon ten minste 6 uur in een emmer te weken en daarna opnieuw de binnen- en buitenzijde onder stromend water te spoelen.

Wassen dient te geschieden met druk van binnen naar buiten en vanaf de buitenzijde alleen met een tuinslang (zonder druk). Voor het beste reinigingsresultaat: laat het filter drogen en borstel het oppervlak van het droge filter voorzichtig om het fijnste vuil te verwijderen. Het filter moet indien nodig en ten minste een keer per jaar worden vernieuwd.



Plaats het nieuwe of schoongemaakte filter terug in de behuizing.

Schroef de behuizing opnieuw op z'n plek en span aan met de hand.



## FOUTMELDINGEN OP DISPLAY

Bij een fout verschijnt de bijbehorende foutcode. Nadat de fout is opgelost, verdwijnt de foutcode. Om de foutcode te resetten, start u de unit opnieuw op.

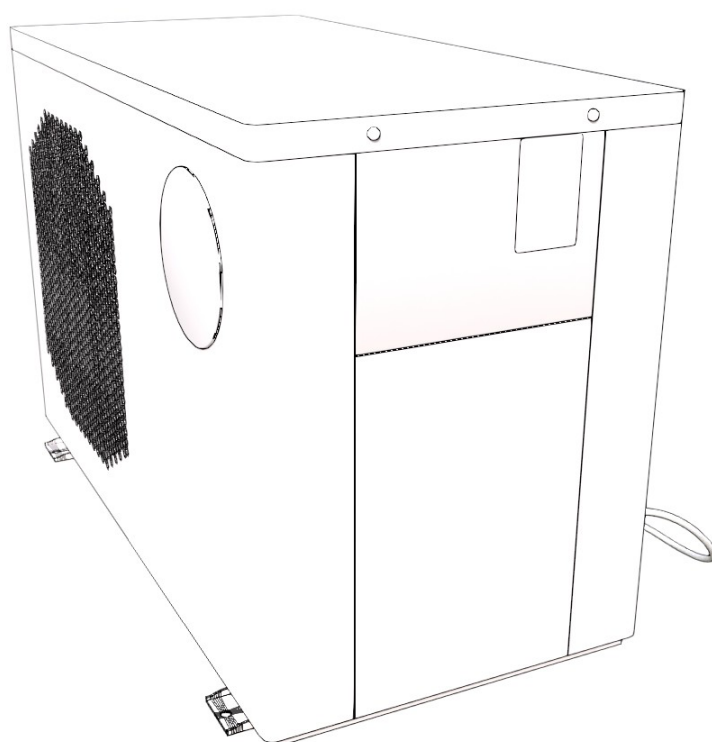
Vikakoodi	Kuvas
E01	Storing in uitlaatgastemperatuur
E05	Storing in temperatuur warmtewisselaar
E09	Storing in aanzuigtemperatuur gas
E17	Storing in temperatuur toevoerwater
E18	Storing in temperatuur uitlaatwater
E22	Storing in omgevingstemperatuur
P01	Storing in waterstromingsschakelaar
P02	Hogedrukbescherming
P06	Lagedrukbescherming
P11	Bescherming tegen te hoge uitlaatgastemperatuur
P15	Bescherming tegen te hoge temperatuur toevoer-/uitlaatwater
P16	Overkoelingsbescherming
P17	Bescherming antivries-standby
P25	Bescherming omgevingstemperatuur
P26	Bescherming te hoge uitlaatwatertemperatuur onder opwarmingsmodus
P27	Bescherming tegen te hoge temperatuur van buitenste warmtewisselaar bij koelmodus

## GARANTIE

Raadpleeg de garantie-informatie in de handleiding van de fabrikant van het toestel.

Manuale utente

# DUAL AVANTOPOOL POMPA DI CALORE AD ARIA



Controllate subito il contenuto del pacco  
Studiare attentamente le istruzioni e conservarle per riferimento  
futuro.

## INFORMAZIONI GENERALI

Le seguenti istruzioni rappresentano le linee guida generali. Istruzioni più dettagliate e complete sono contenute nel manuale d'uso fornito da dualex.

- Contattare il servizio di assistenza per eventuali riparazioni. Il processo di riparazione deve essere eseguito in stretta osservanza delle istruzioni contenute nel presente manuale. Eventuali interventi di manutenzione effettuati da personale non professionale sono vietate e annullano la garanzia.
- Un uso improprio può provocare lesioni personali o danni all'apparecchiatura.
- Prima di avviare l'unità, accertarsi che la piscina sia piena e che l'aria sia stata rimossa dalle tubature del dispositivo. È vietato avviare l'apparecchiatura prima che sia raggiunto un certo livello d'acqua. In caso contrario, si rischia di danneggiare l'apparecchiatura e di invalidare la garanzia.
- Qualora sia necessario interrompere l'alimentazione per effettuare interventi di riparazione, attendere 1 minuto dopo lo spegnimento dell'alimentazione prima di toccare la scheda del circuito, per evitare la scarica del condensatore con conseguente scossa elettrica.
- L'unità di raffreddamento deve essere conservata e trasportata in verticale nell'imballaggio originale. In caso contrario, attendere almeno 24 ore prima di rimettere in funzione l'unità.
- Prima dell'installazione è necessario verificare che l'alimentazione, la tensione e la frequenza siano corrette.
- Un'installazione non corretta può provocare incendi, scosse elettriche, caduta di apparecchiature o perdite d'acqua.
- Assicurarsi che l'acqua non penetri nelle componenti elettriche.
- L'unità potrebbe danneggiarsi in seguito a un forte surriscaldamento del prodotto dovuto a negligenza, ad esempio coprendo le griglie di ventilazione dell'unità di raffreddamento con asciugamani, indumenti o altri oggetti, oppure facendo funzionare l'unità di raffreddamento troppo vicino a una parete o in una stanza o luogo con ventilazione insufficiente.
- Non utilizzare sale o altri minerali nell'acqua.
- Questa apparecchiatura non è destinata all'uso da parte dei bambini. Per la loro sicurezza, i bambini devono essere sorvegliati da un adulto durante l'utilizzo.
- Le persone con una storia di malattie cardiache, pressione bassa o alta, problemi al sistema circolatorio, diabete o qualsiasi condizione che richieda un trattamento medico devono consultare un esperto o un dottore prima di utilizzare la piscina.
- Le persone che fanno uso di farmaci devono consultare un medico prima di utilizzare la piscina, poiché alcuni farmaci possono indurre sonnolenza, mentre altri possono influire sulla frequenza cardiaca, sulla pressione sanguigna e sulla circolazione.
- Le donne in gravidanza devono consultare un medico o un esperto prima di utilizzare la piscina.
- Non utilizzare l'apparecchio alla luce diretta del sole, per evitare il surriscaldamento del dispositivo.



In inverno o quando la temperatura scende al di sotto di 0°C, assicurarsi di svuotare l'acqua dall'unità di raffreddamento se non utilizzata. In caso contrario, l'unità potrebbe essere danneggiata dal congelamento, e ciò comporterebbe un annullamento della garanzia. Non utilizzare il dispositivo all'aperto con temperature inferiori a -7 °C.

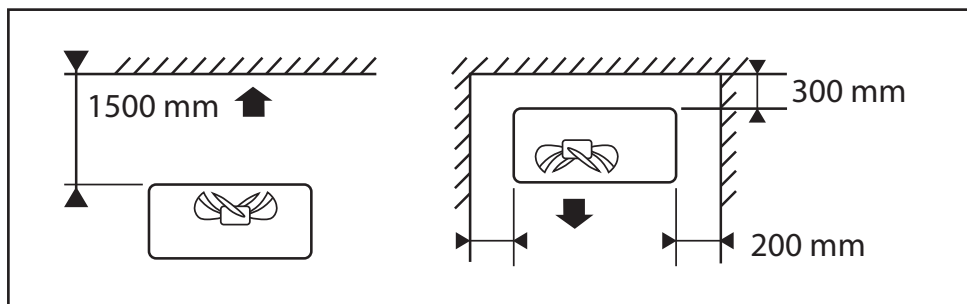


Se la temperatura dell'ambiente in cui si opera è inferiore a 0°C, mantenere l'unità in funzione e in modalità **"Automatica"** e non utilizzare il timer della "modalità attiva". In caso contrario, il sistema potrebbe congelarsi.

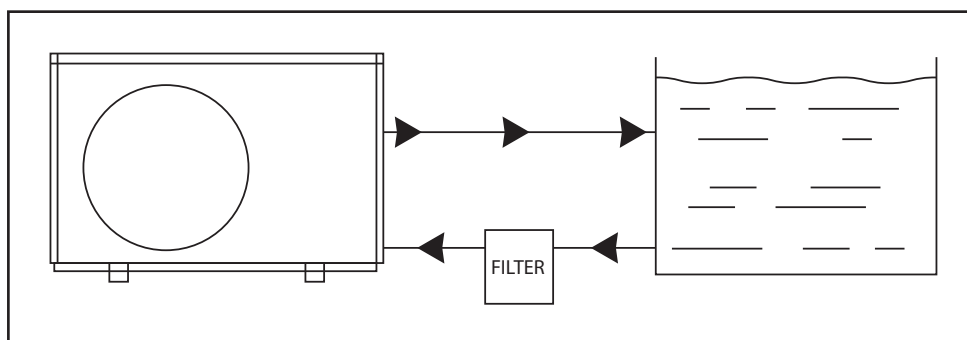
## DISTANZA DI INSTALLAZIONE

L'unità di raffreddamento deve essere installata in un luogo ben ventilato. Deve essere installato in un luogo a una distanza maggiore di quella indicata di seguito:

- Distanza minima tra la parte anteriore dell'unità e la parete = 1500 mm (150 cm)
- Distanza minima tra la parte posteriore dell'unità e la parete = 300 mm (30 cm)
- Distanza minima tra le parti laterali dell'unità e la parete = 200 mm (20 cm)



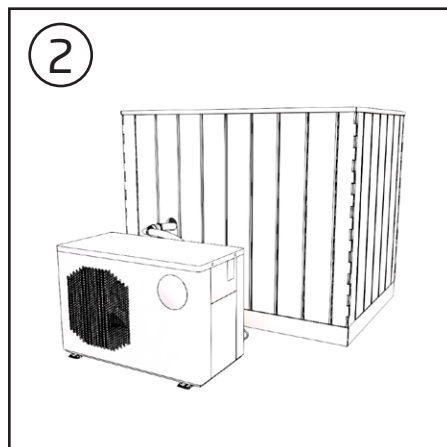
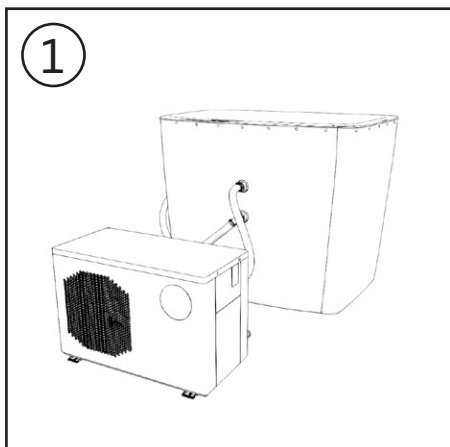
## Disposizione del sistema di circolazione dell'acqua tra l'apparecchio e la piscina



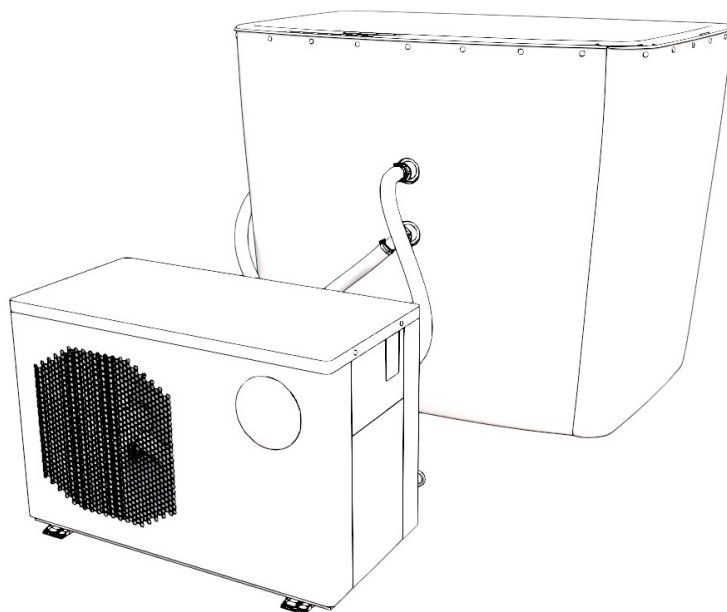
## INSTALLAZIONE IN PISCINA

La pompa di calore ad aria dualix può essere installata in diversi tipi di piscine. Le istruzioni per ogni piscina si trovano nel seguente ordine:

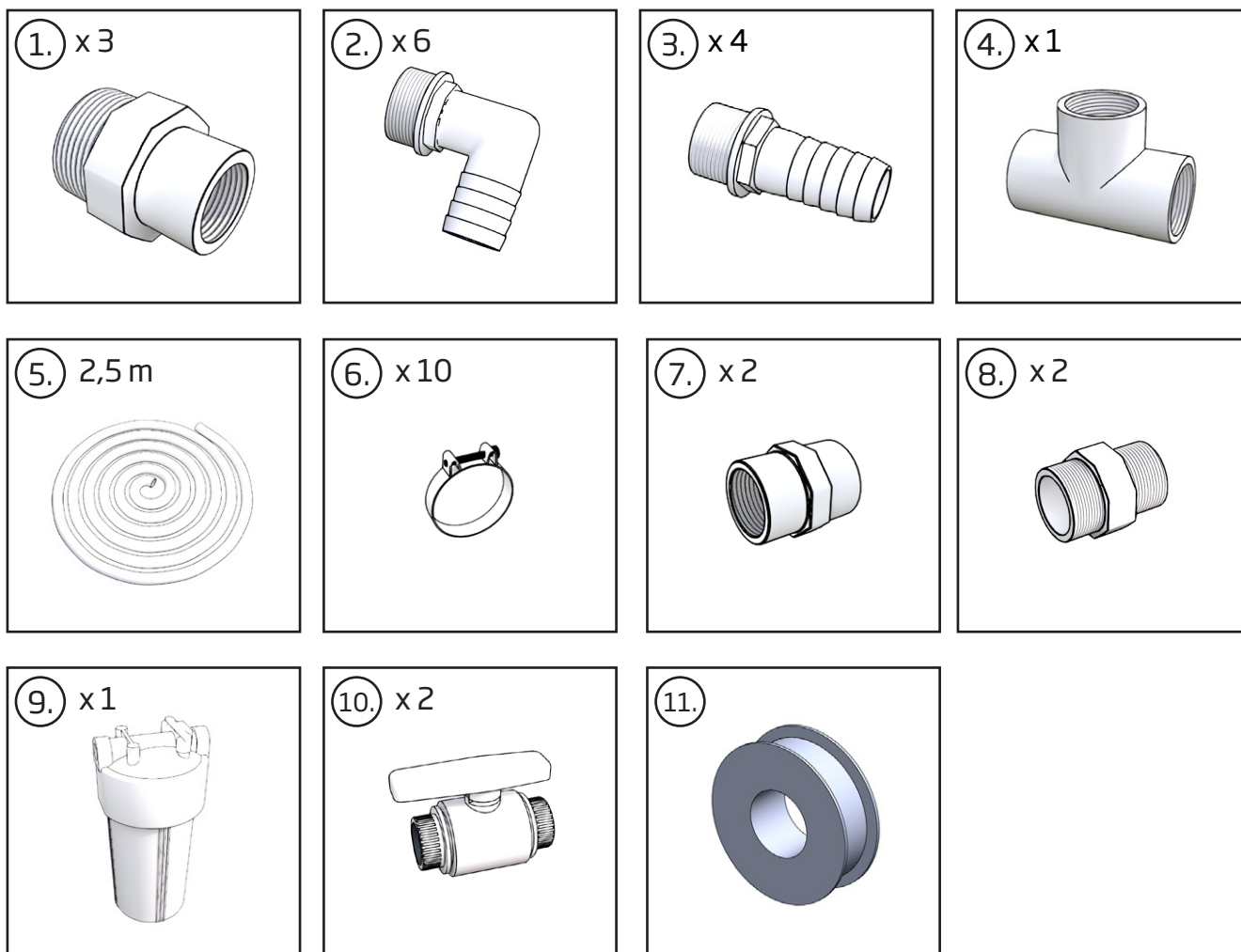
1. Comfort BlackIce S
2. Premium NordicIce S
3. Kamiinan korvaava

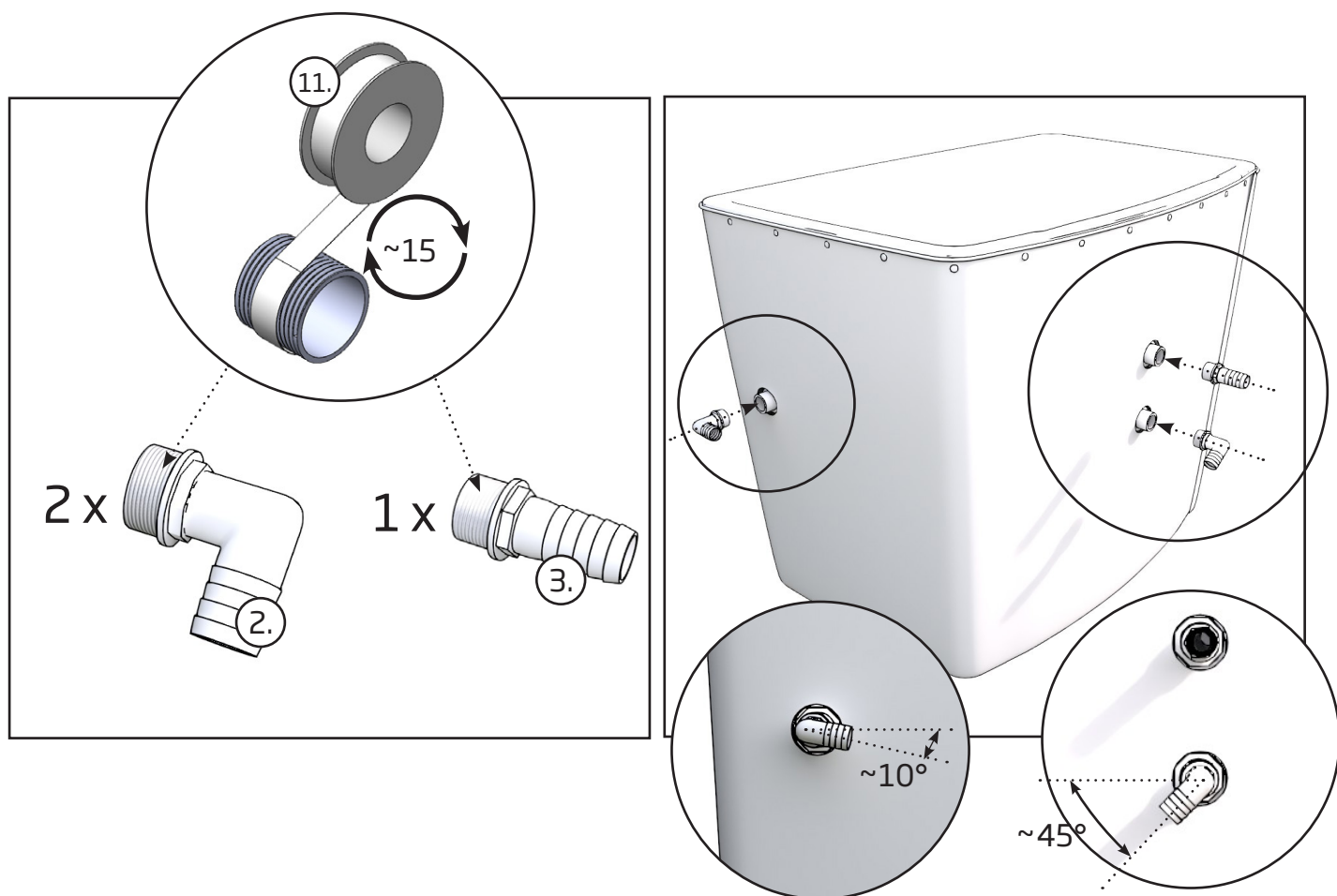
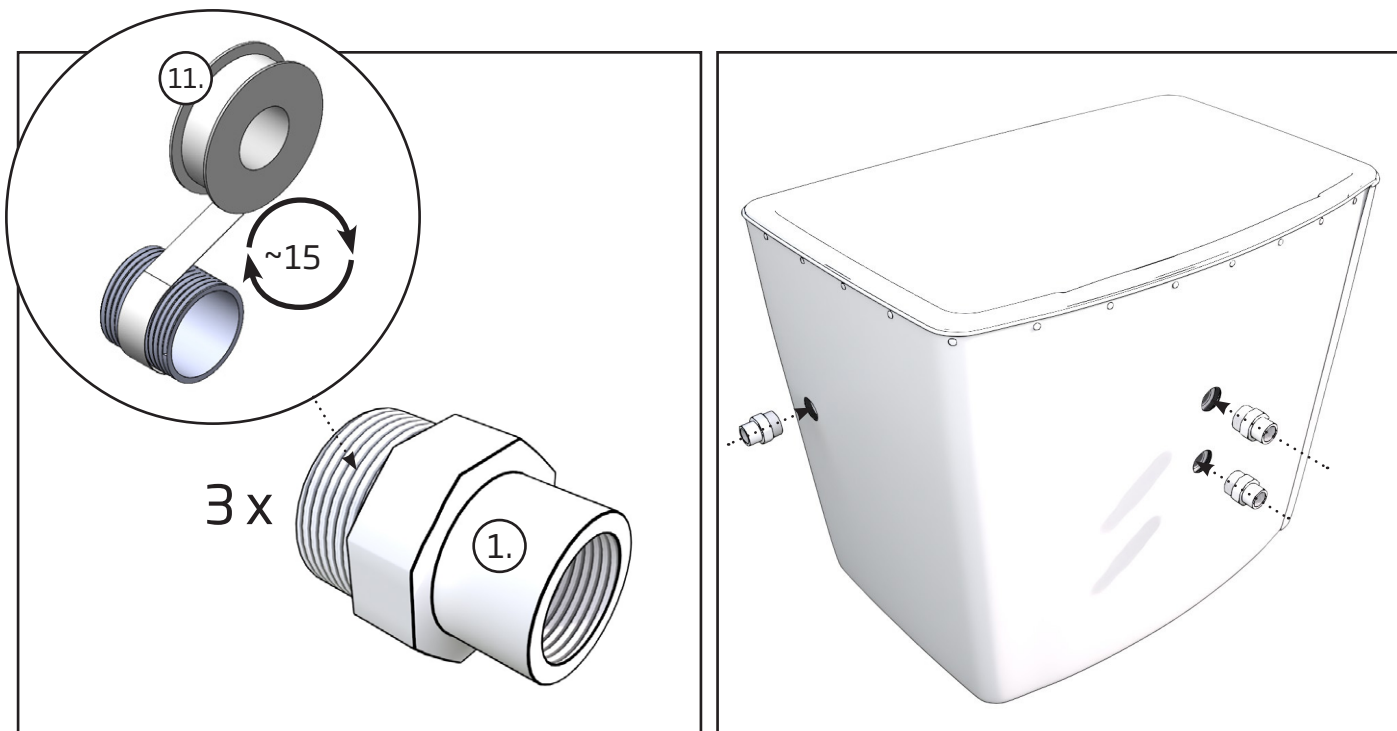


## 1. COMFORT BLACKICE S

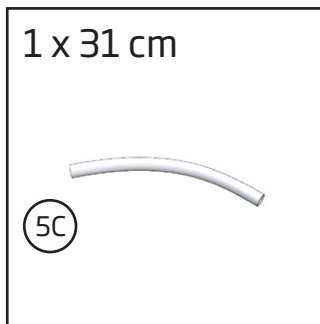
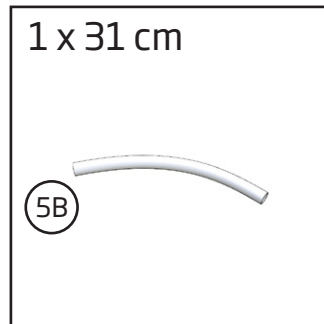
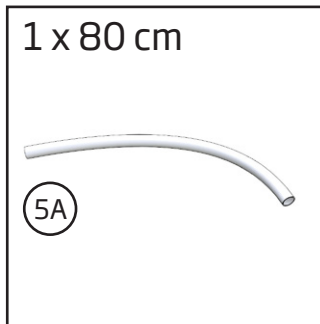
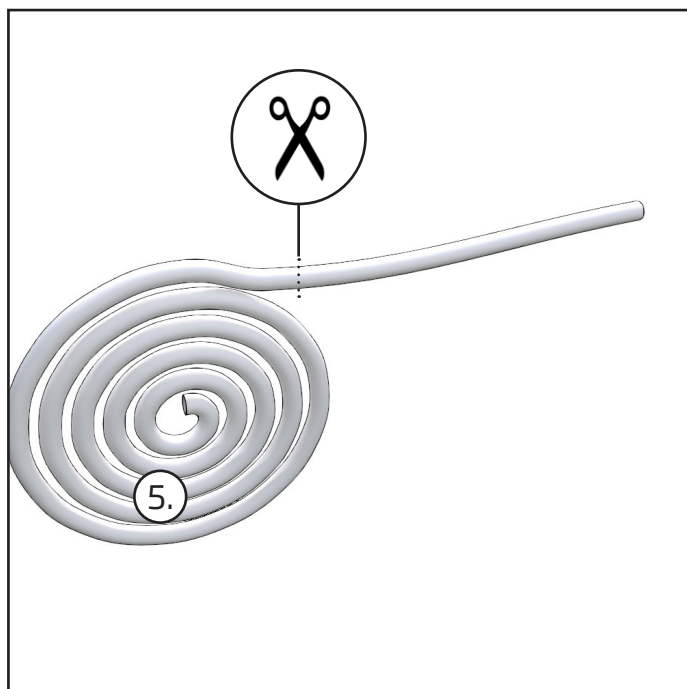
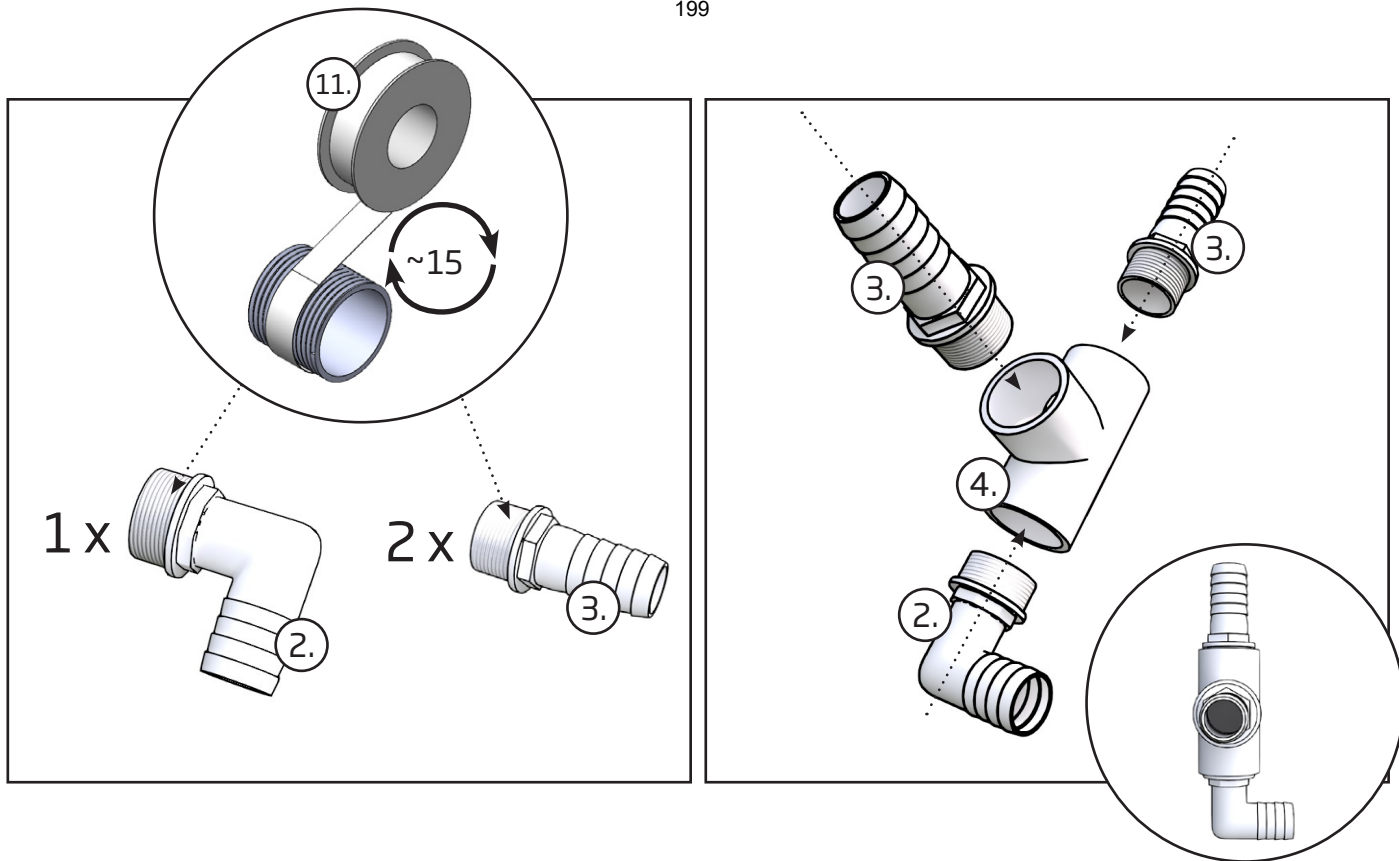


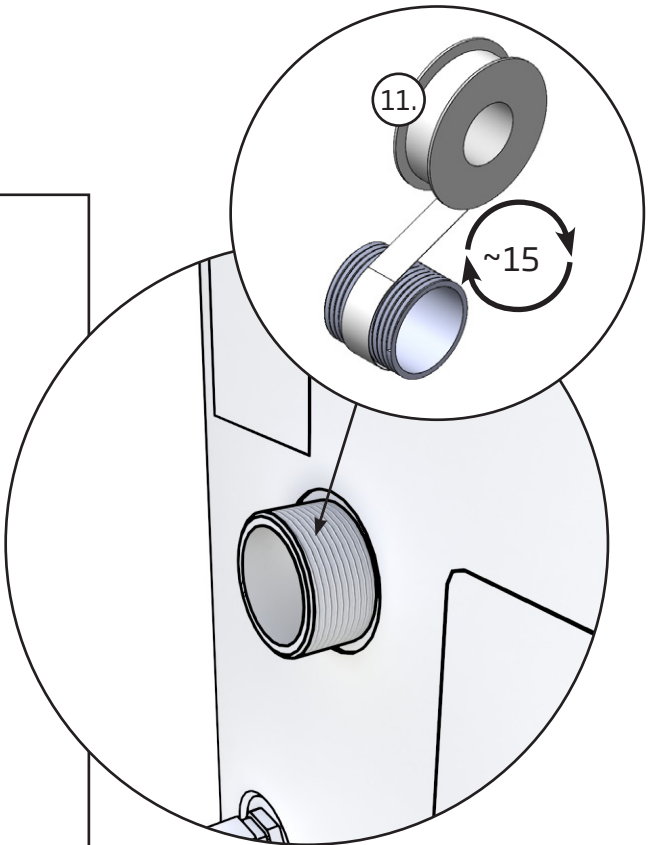
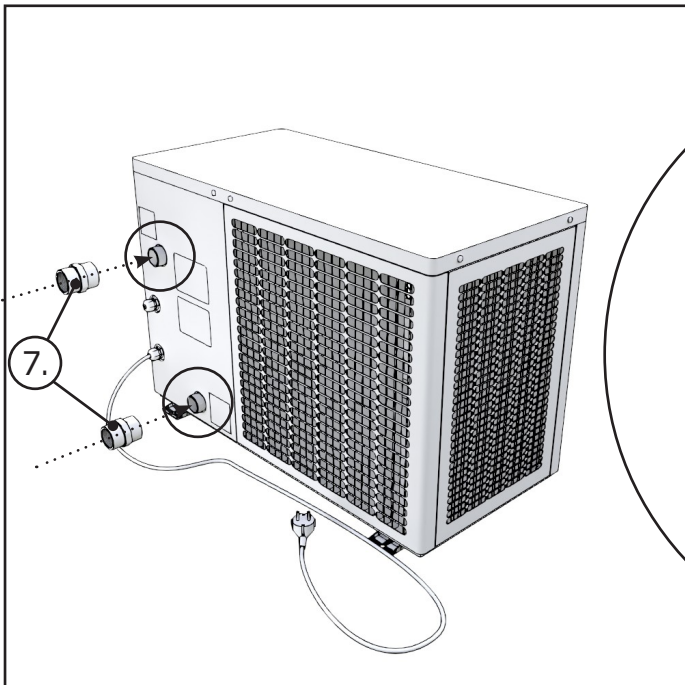
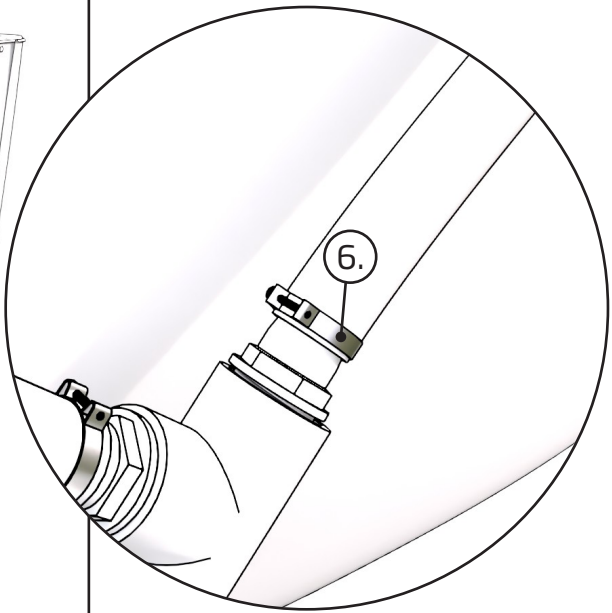
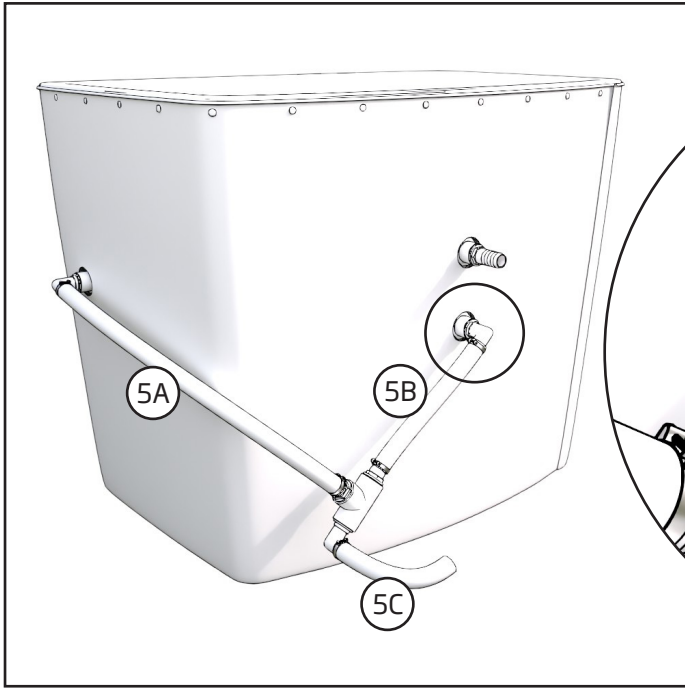
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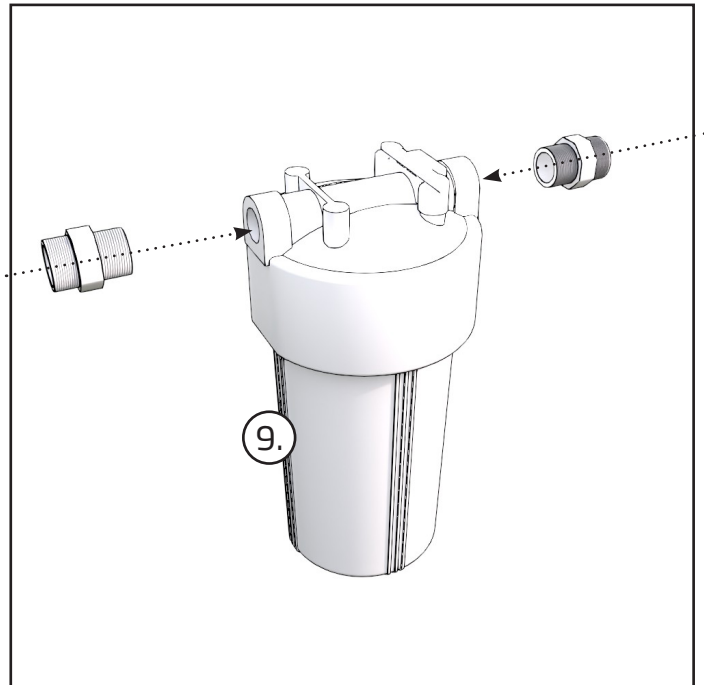
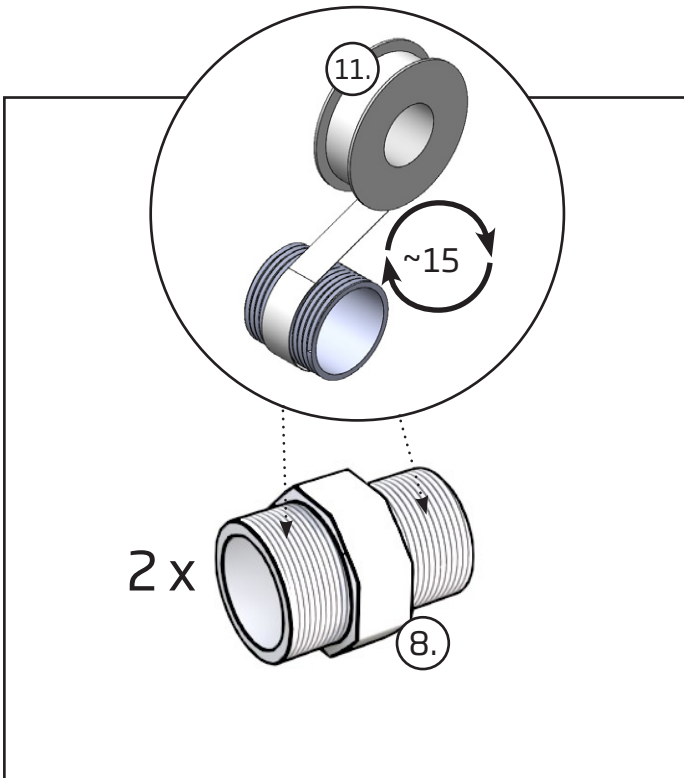
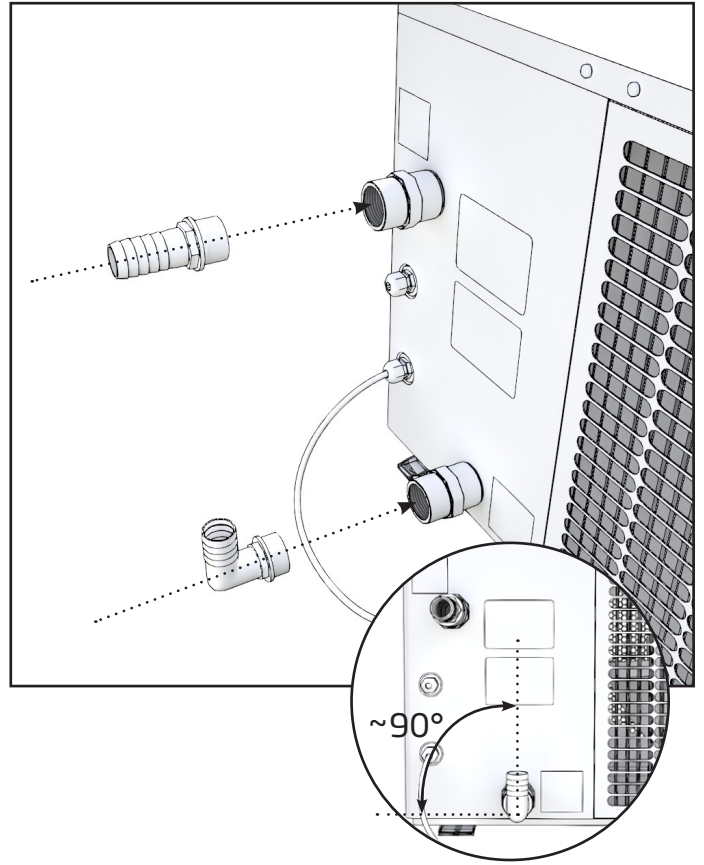
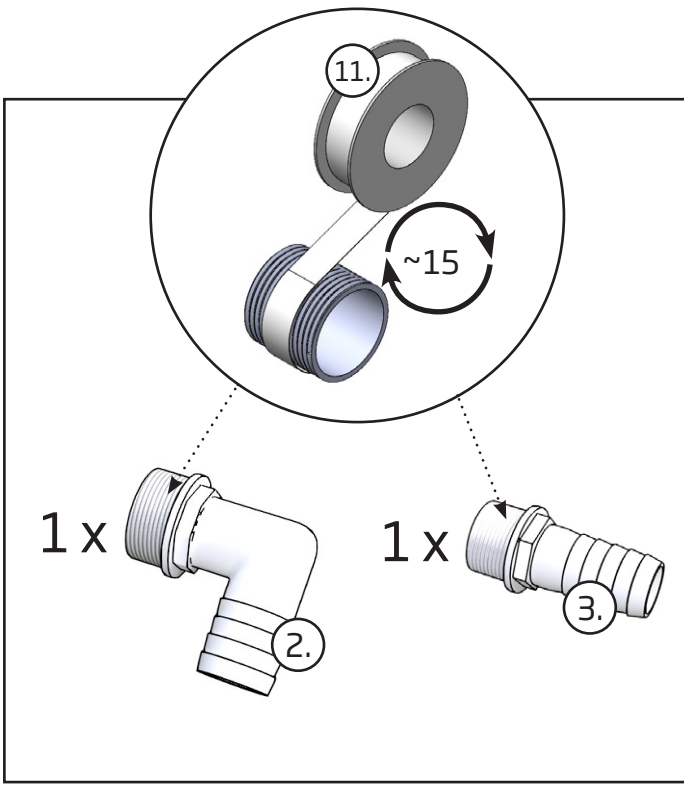


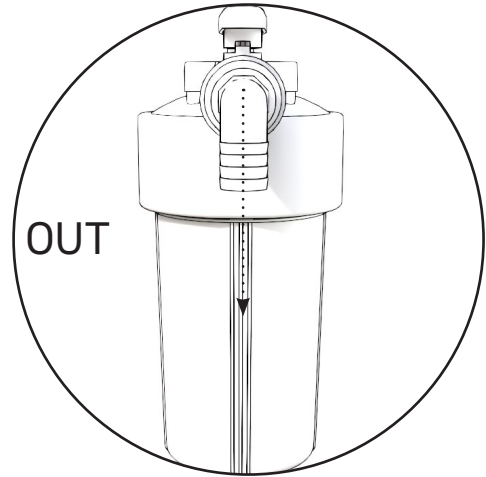
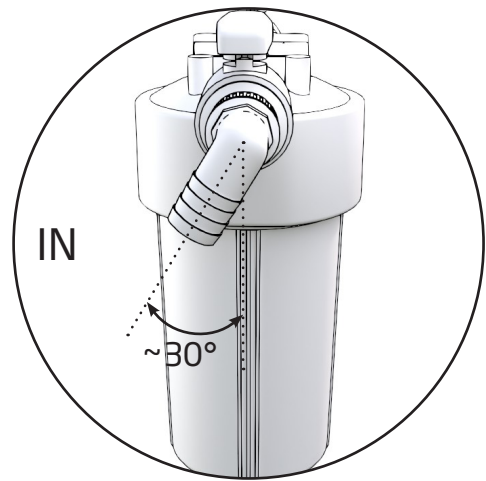
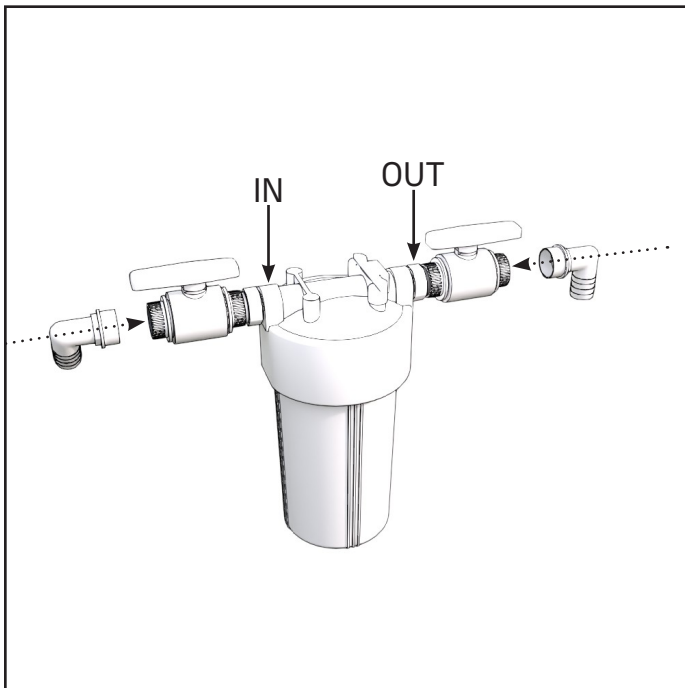
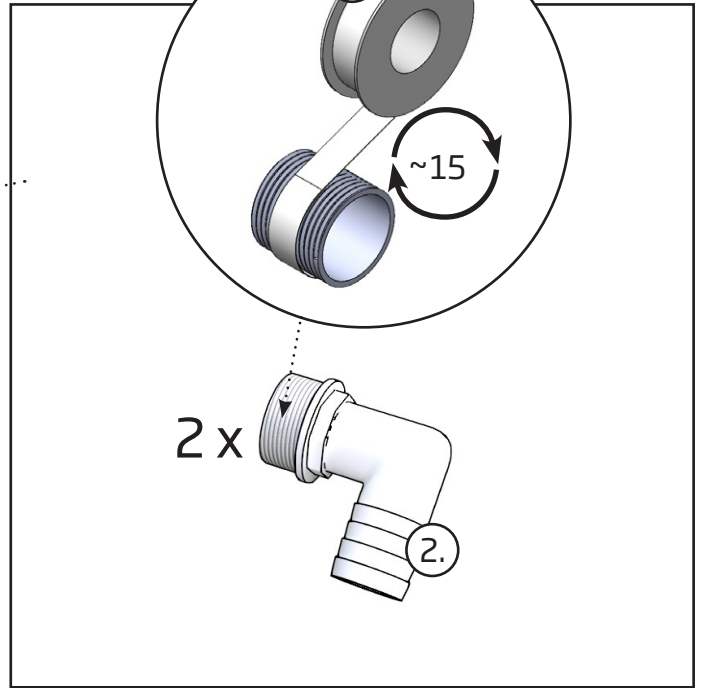
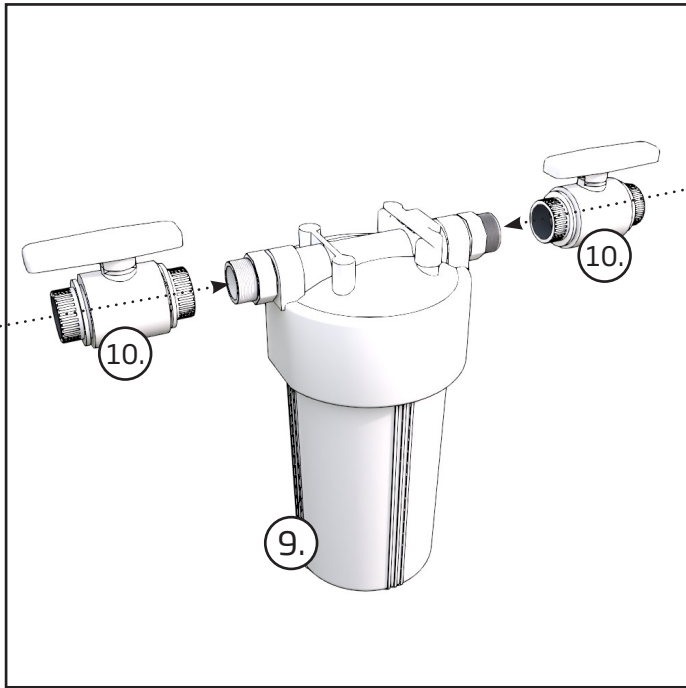


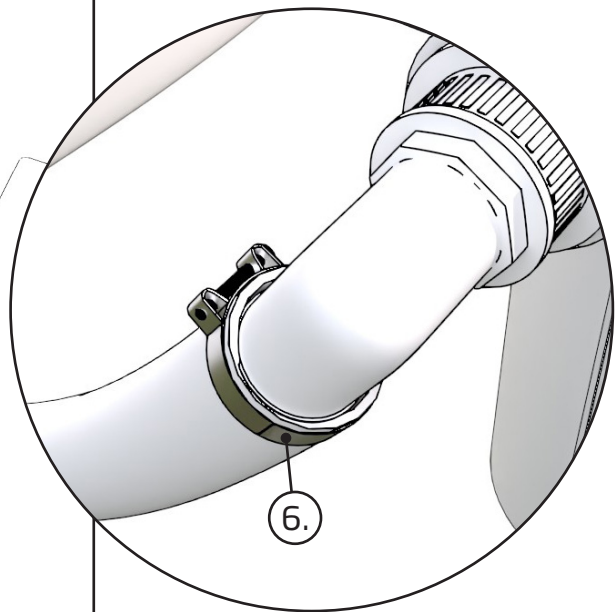
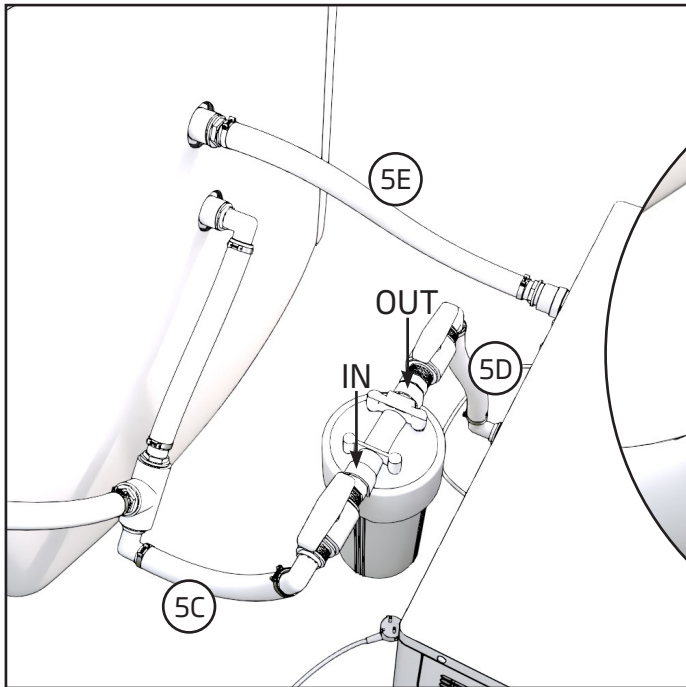
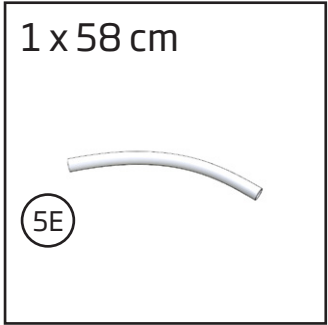
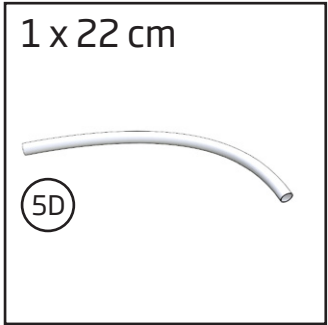
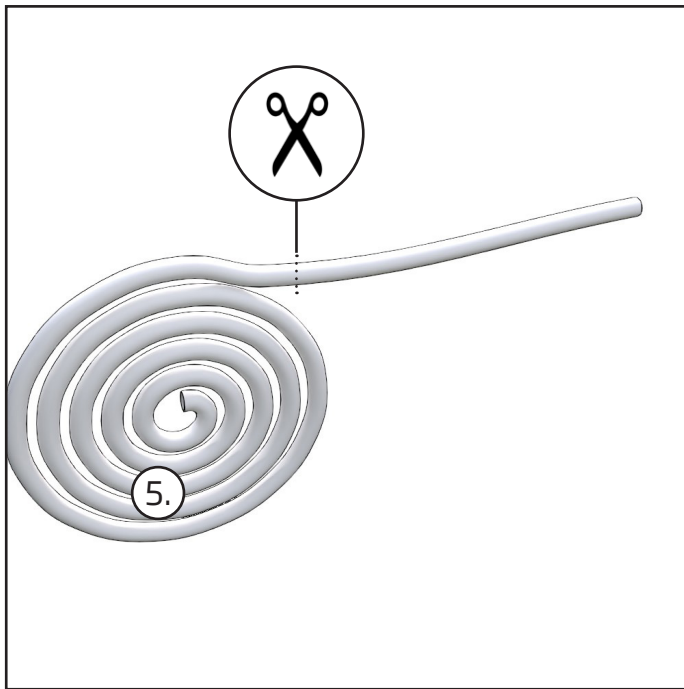




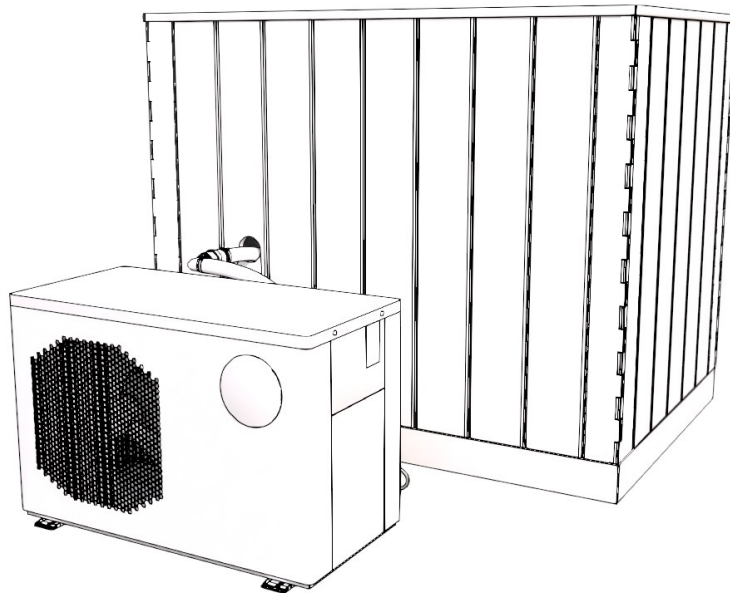




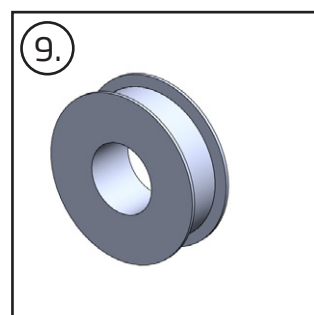
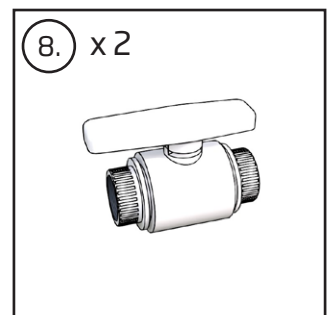
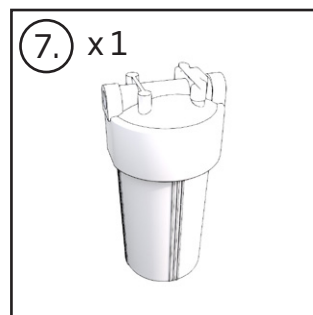
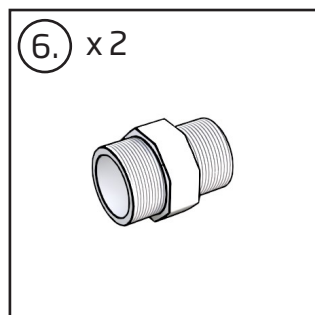
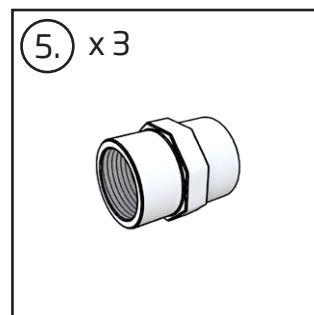
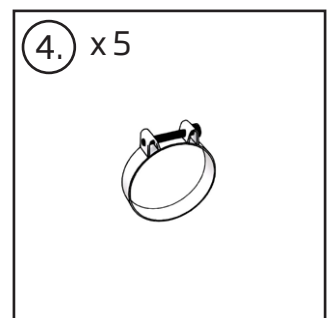
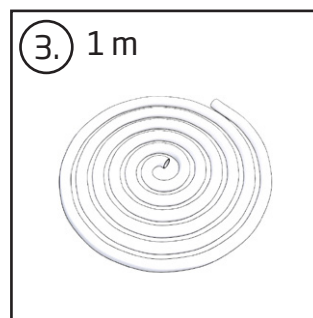
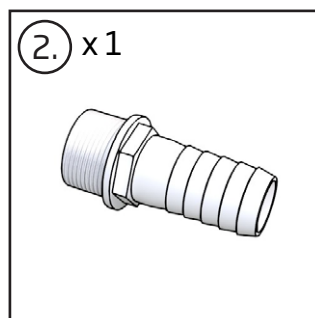
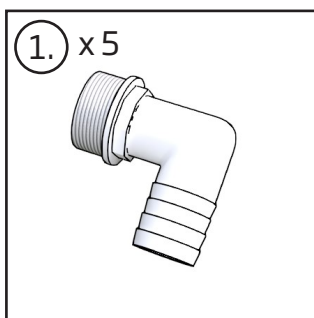




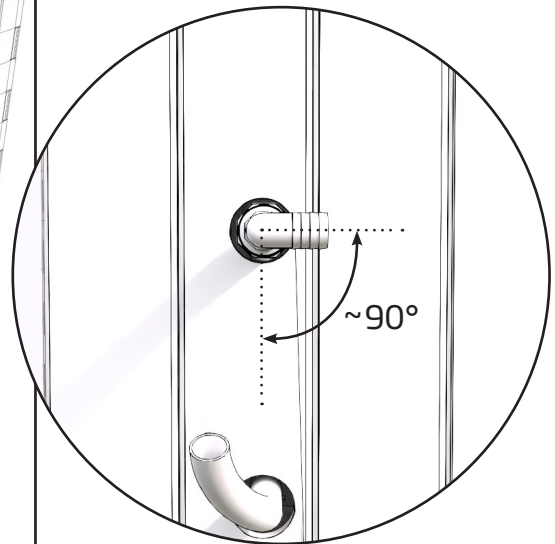
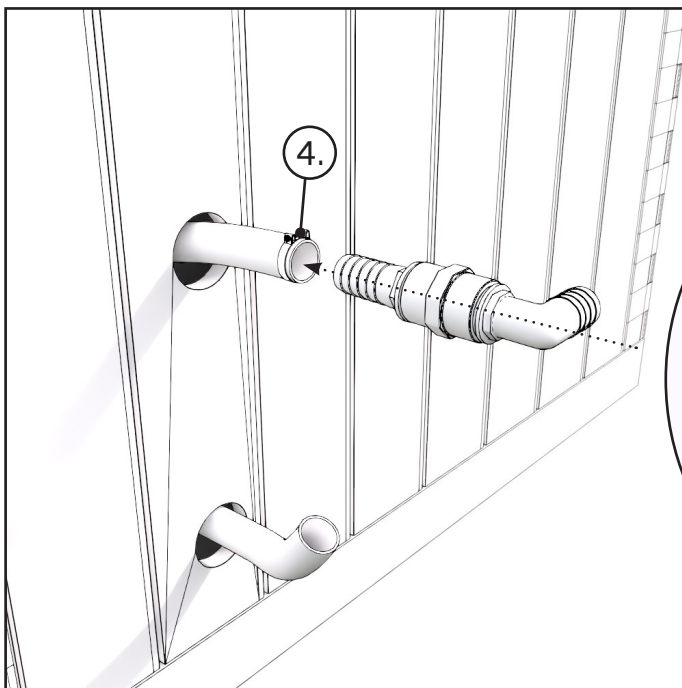
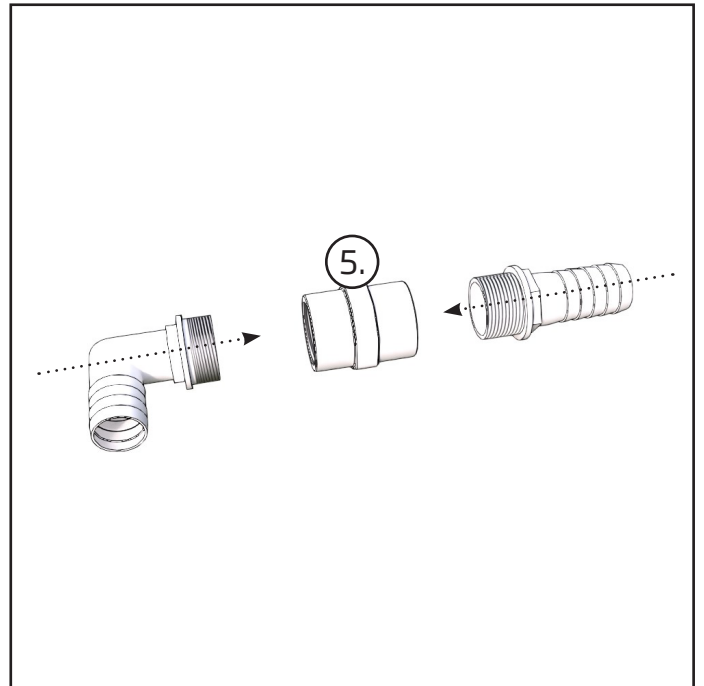
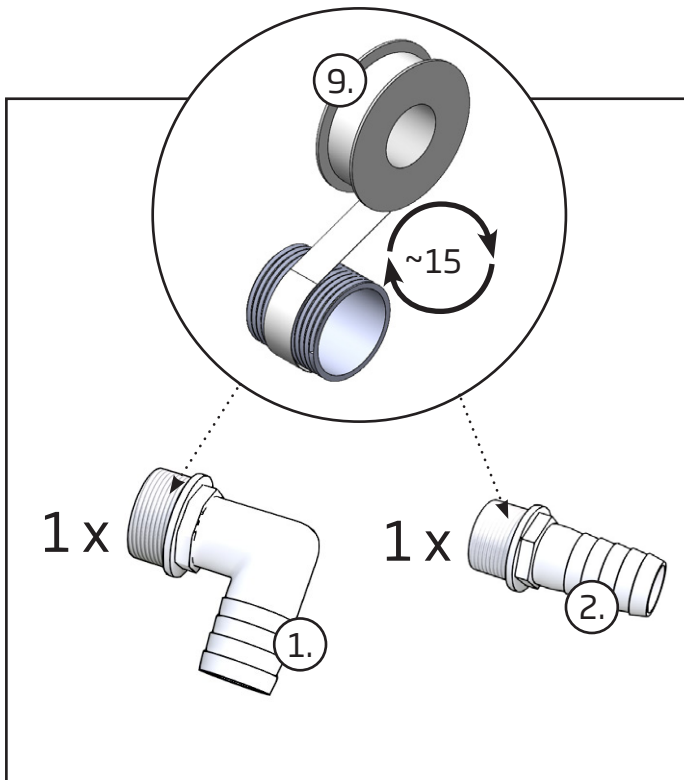
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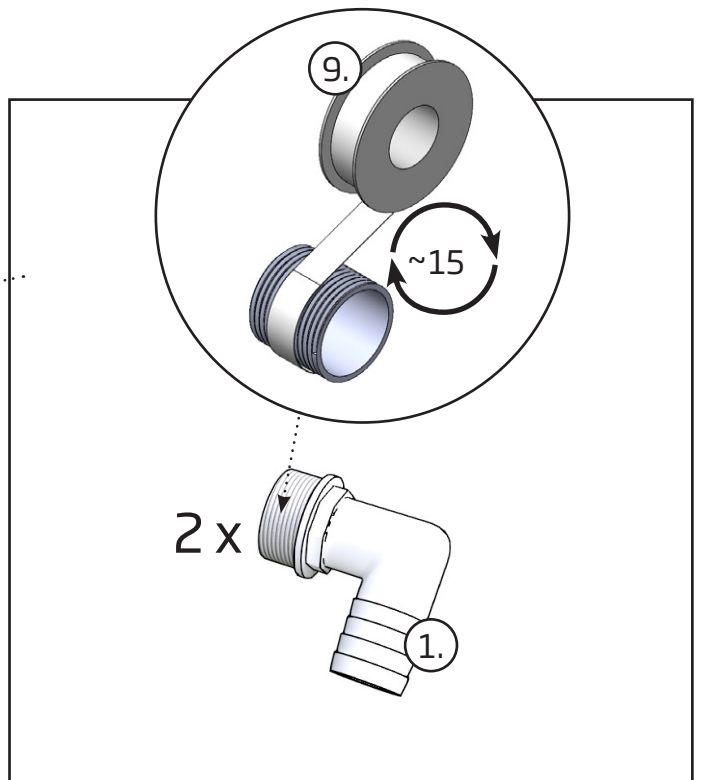
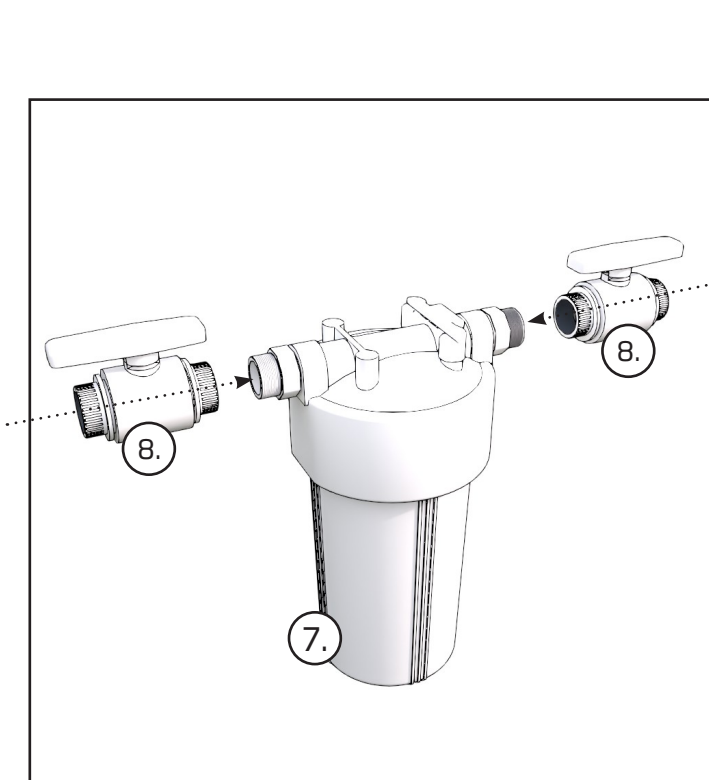
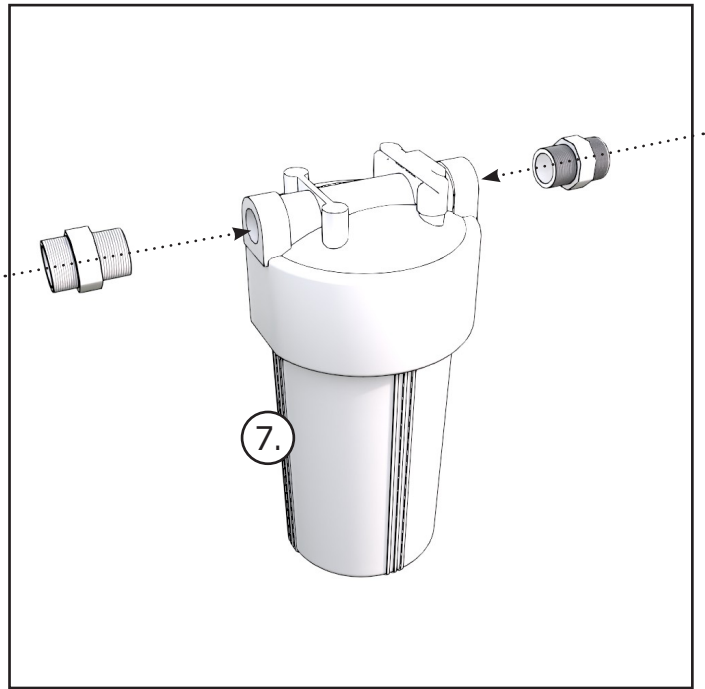
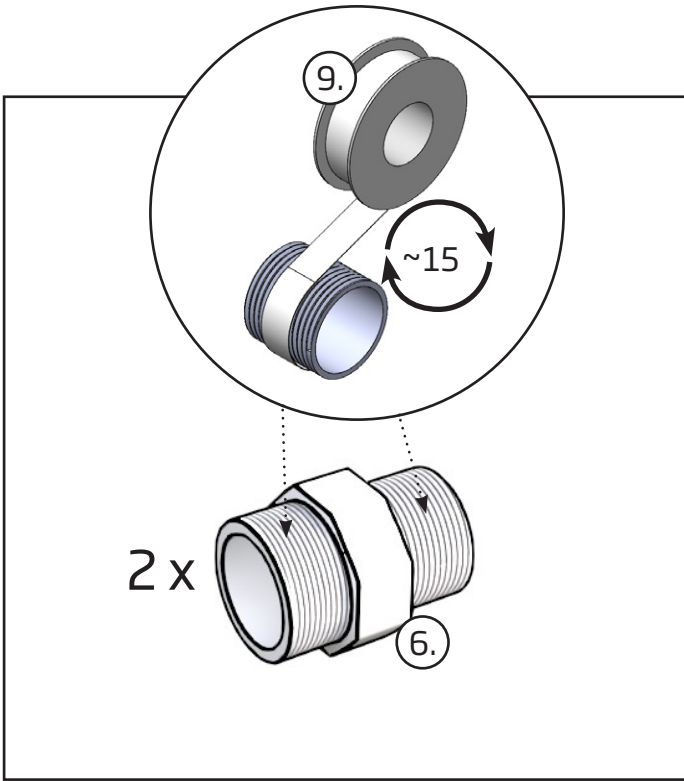


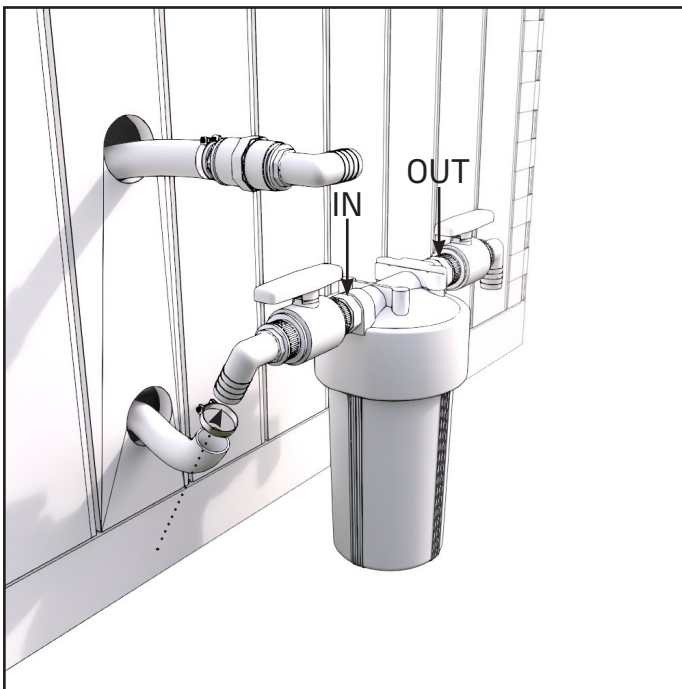
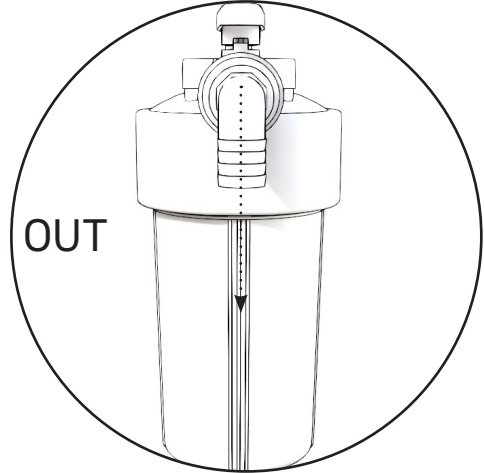
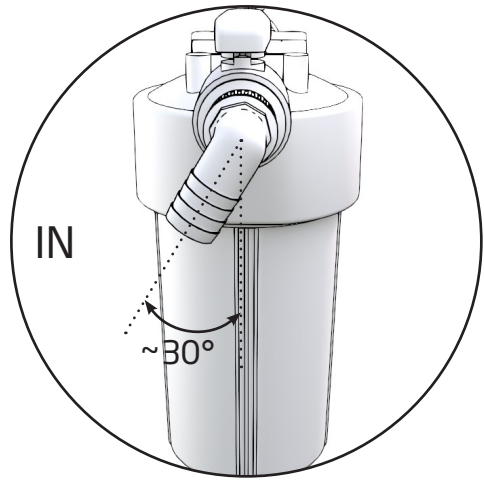
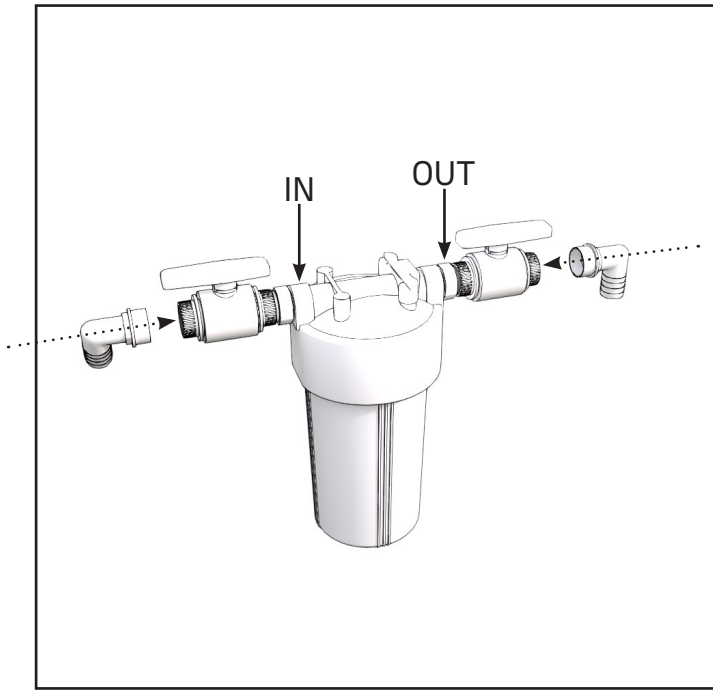
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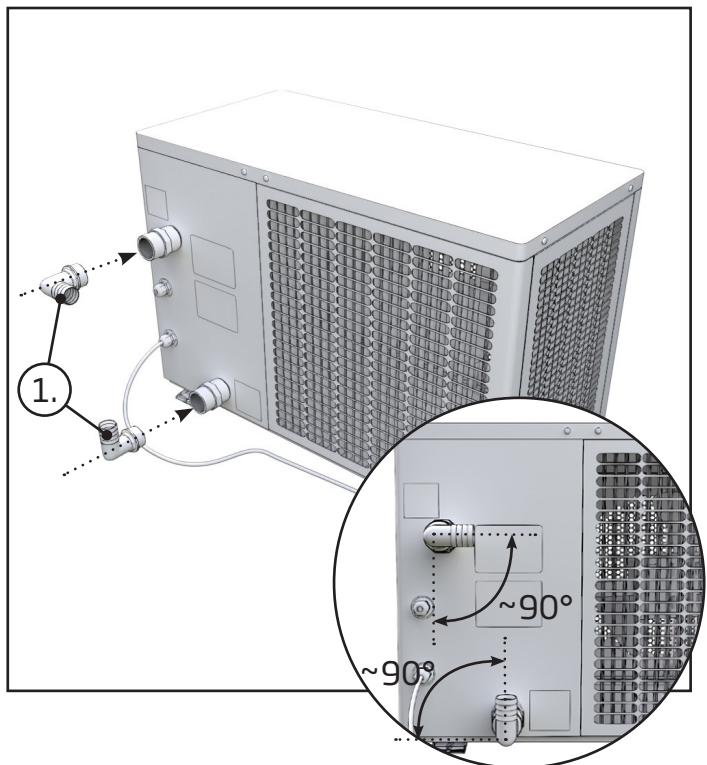
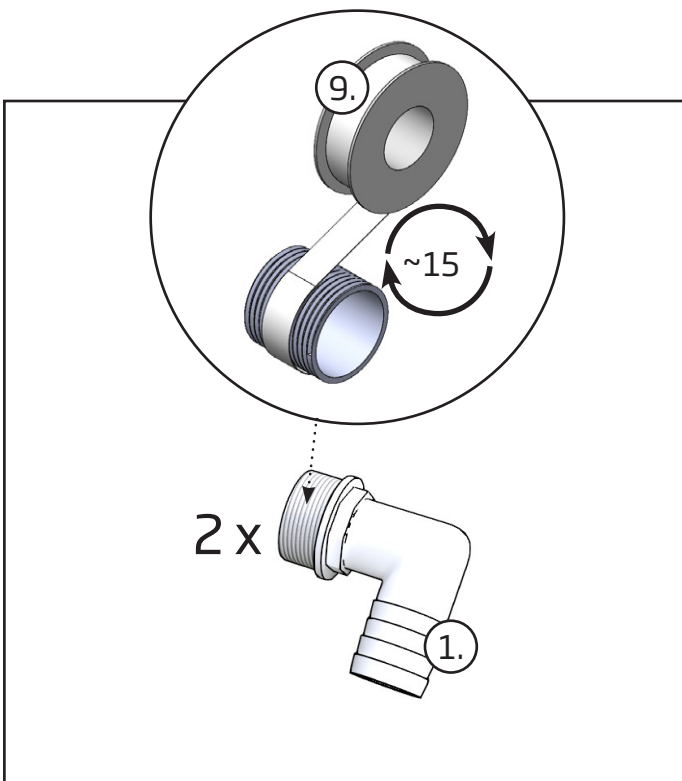
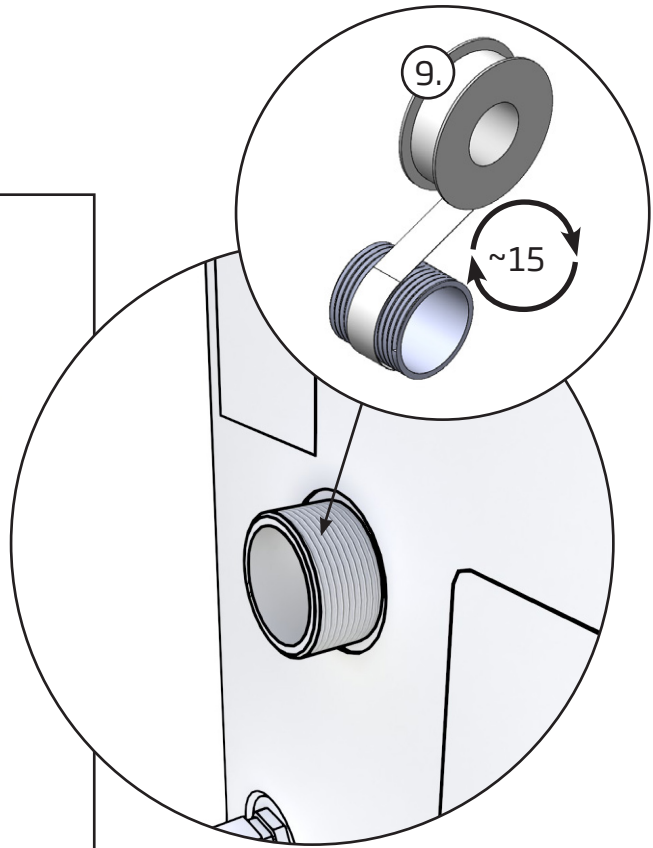
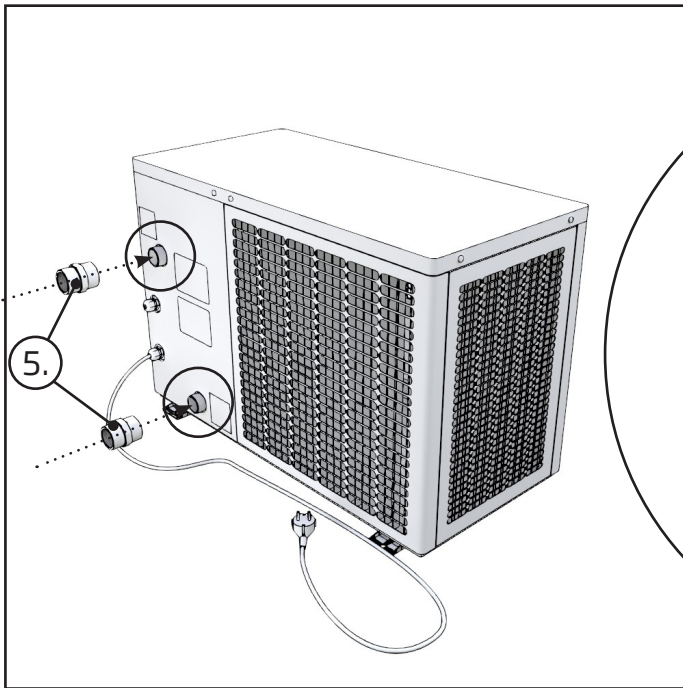


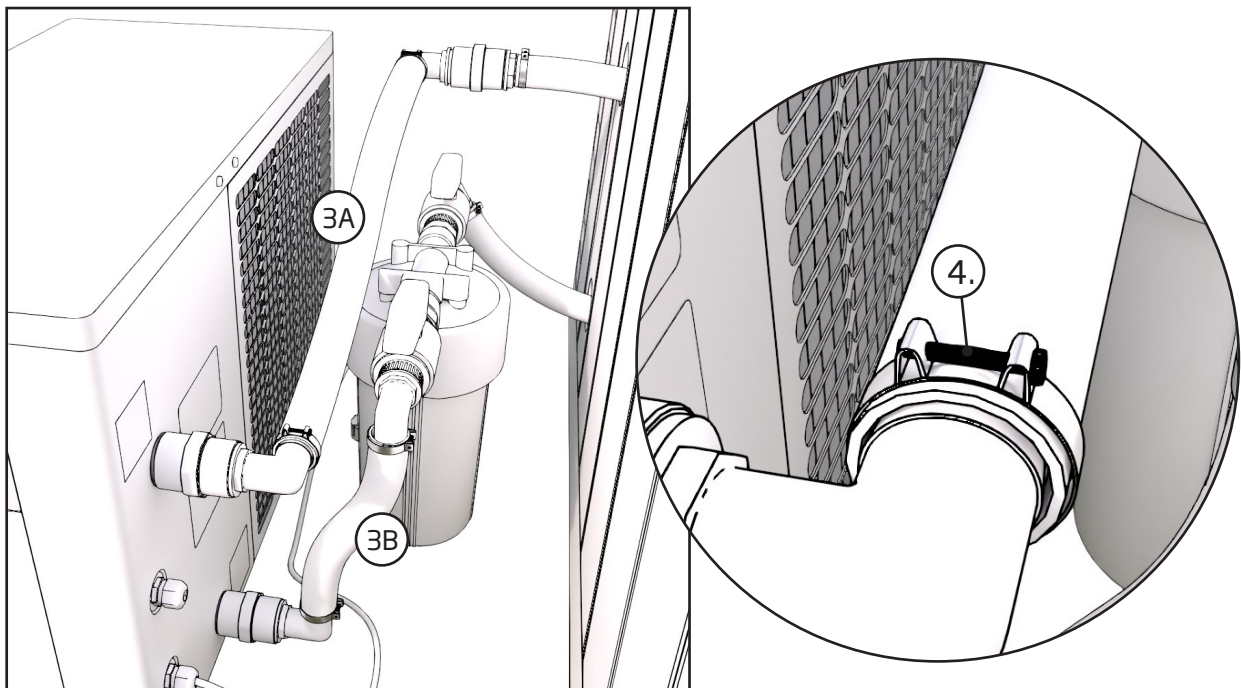
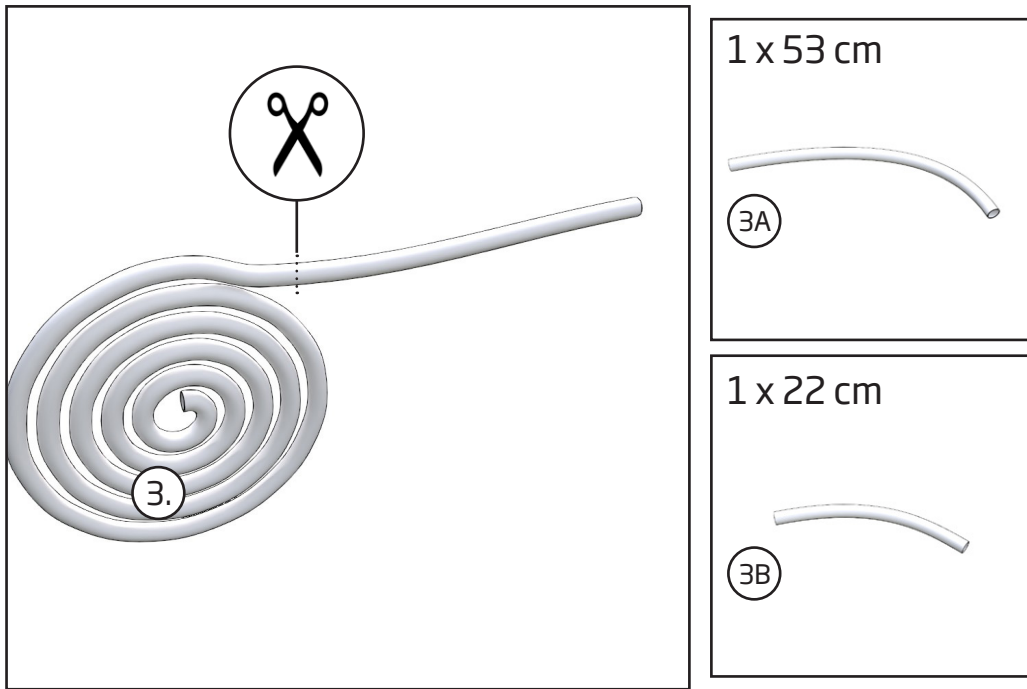






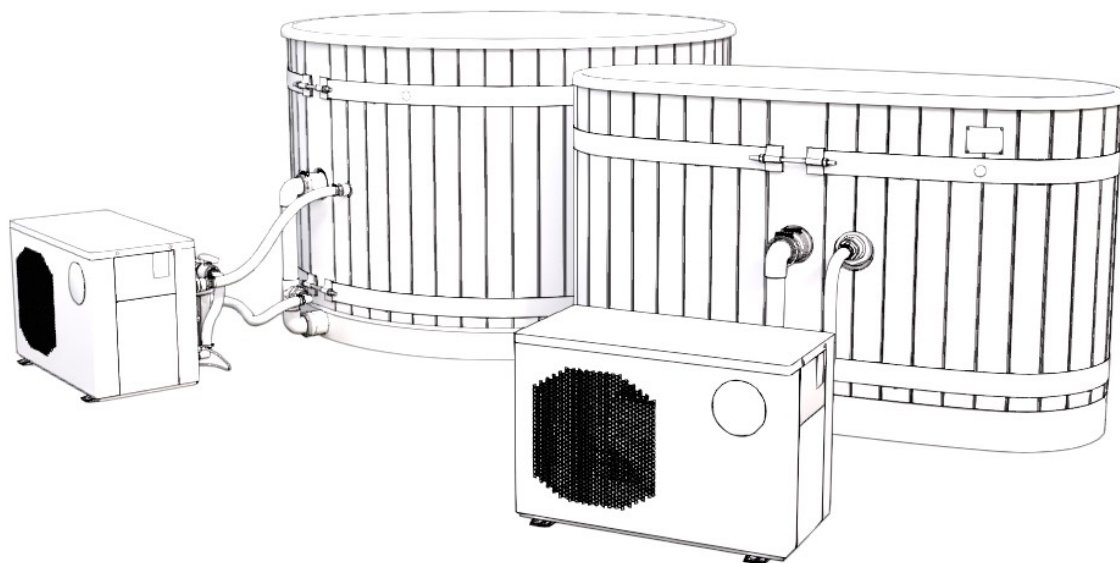




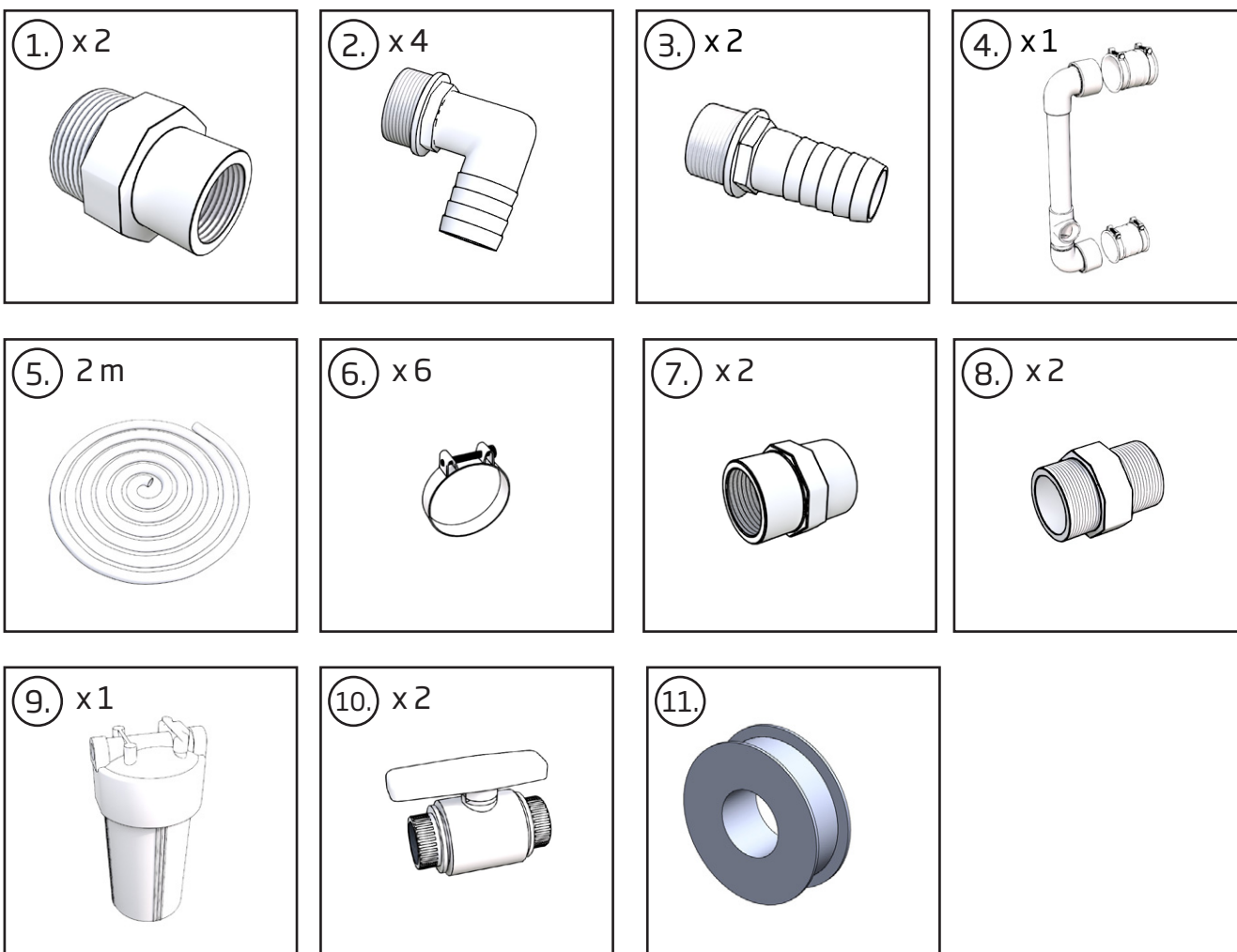




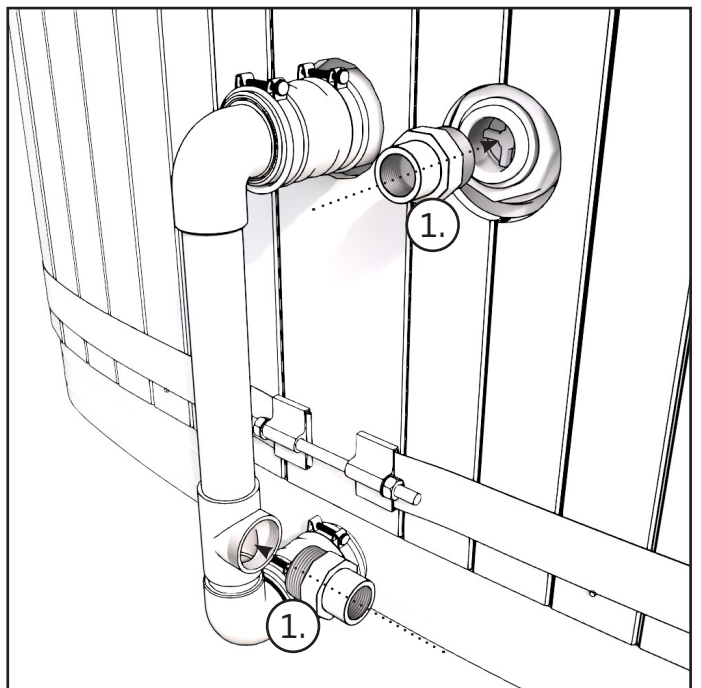
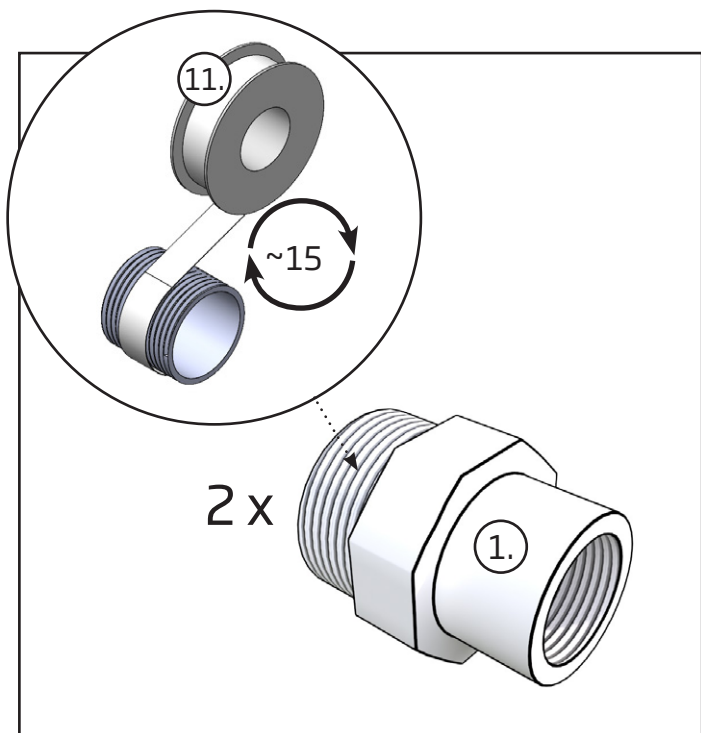
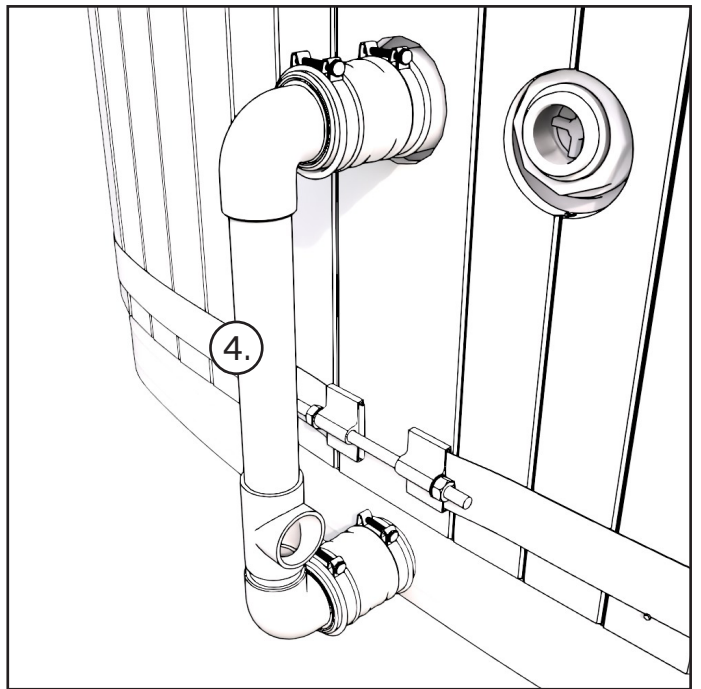
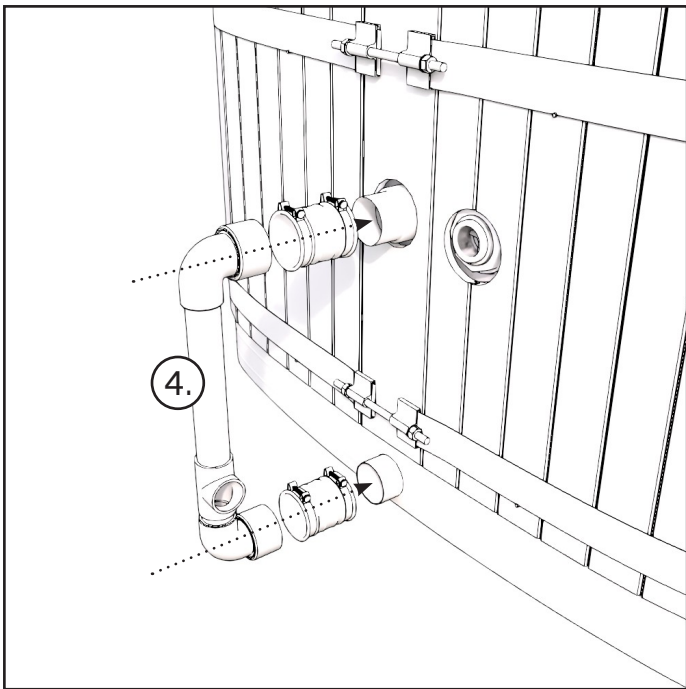
# INSTALLAZIONE IN SOSTITUZIONE DI UNA STUFA

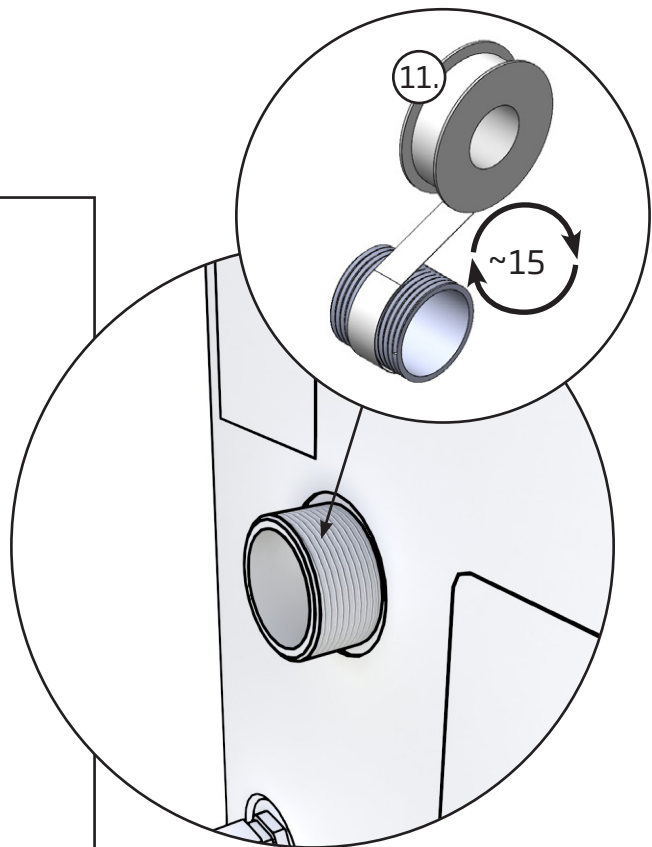
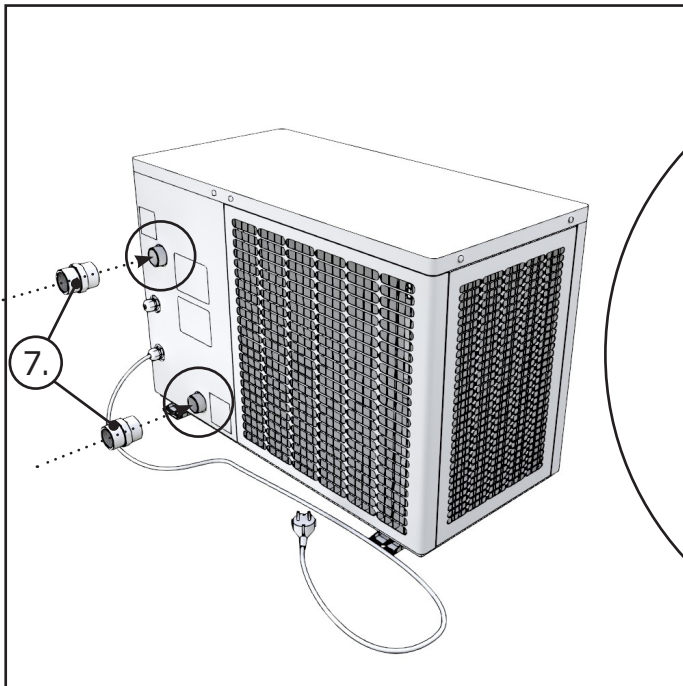
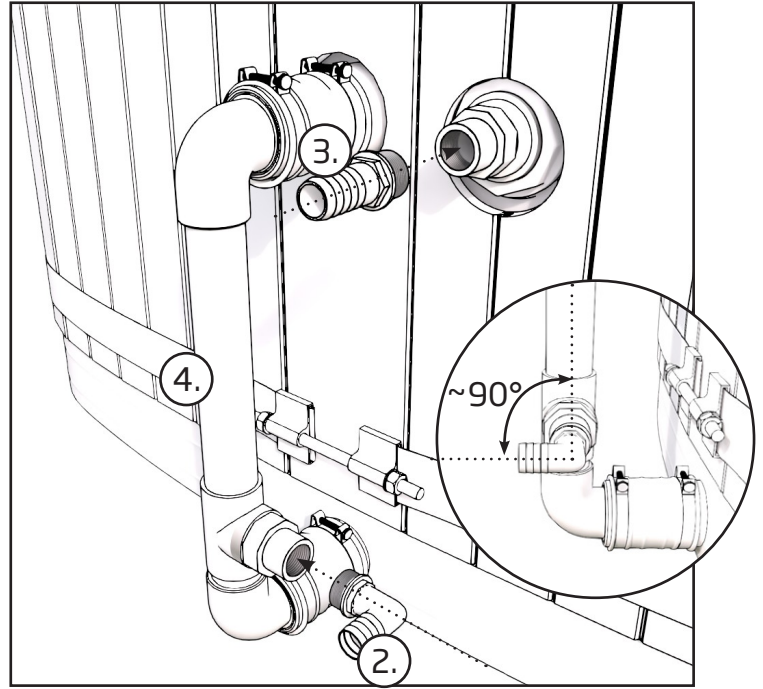
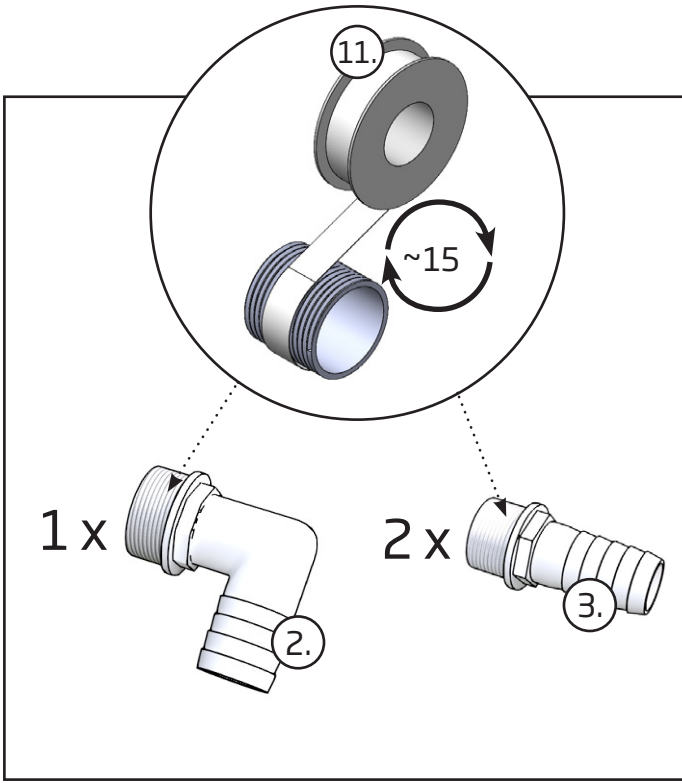


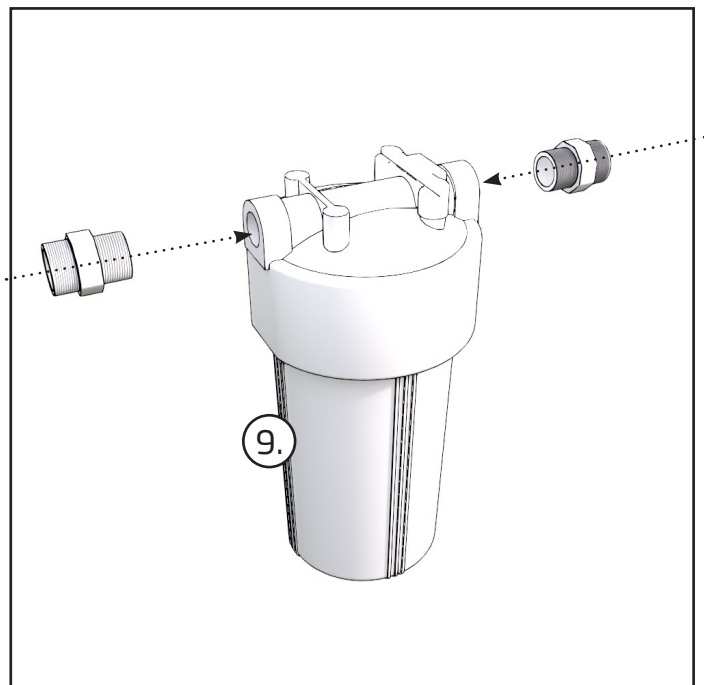
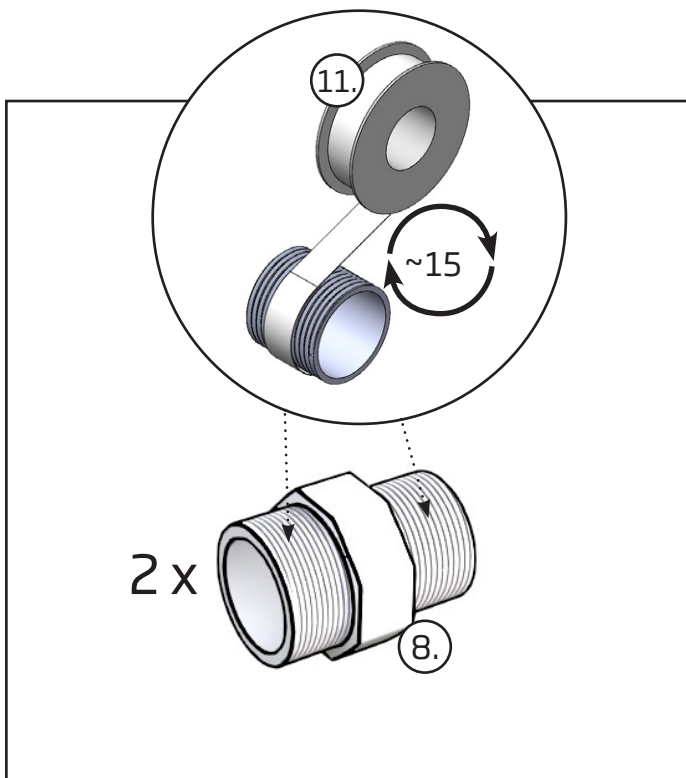
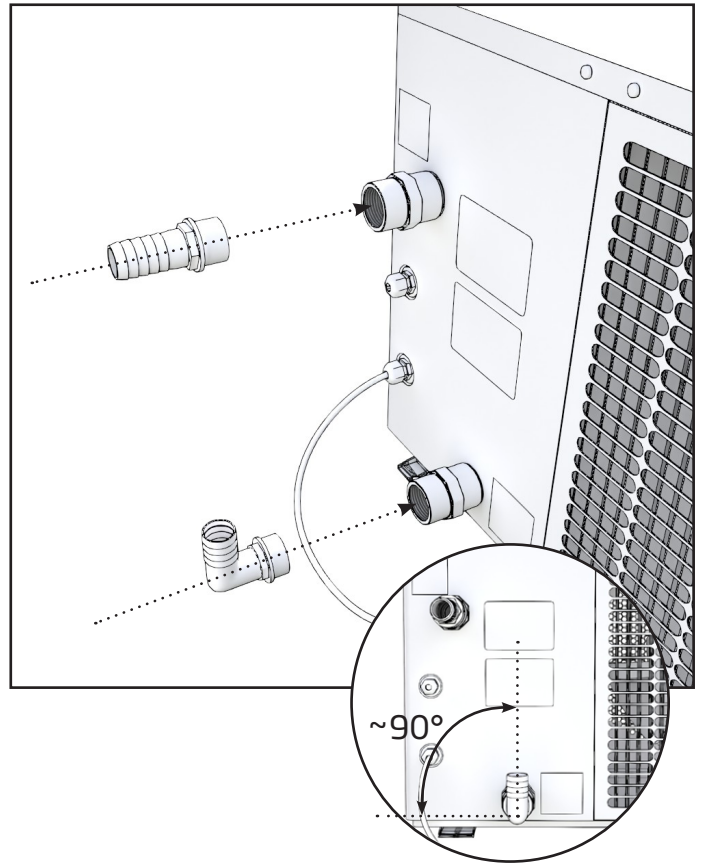
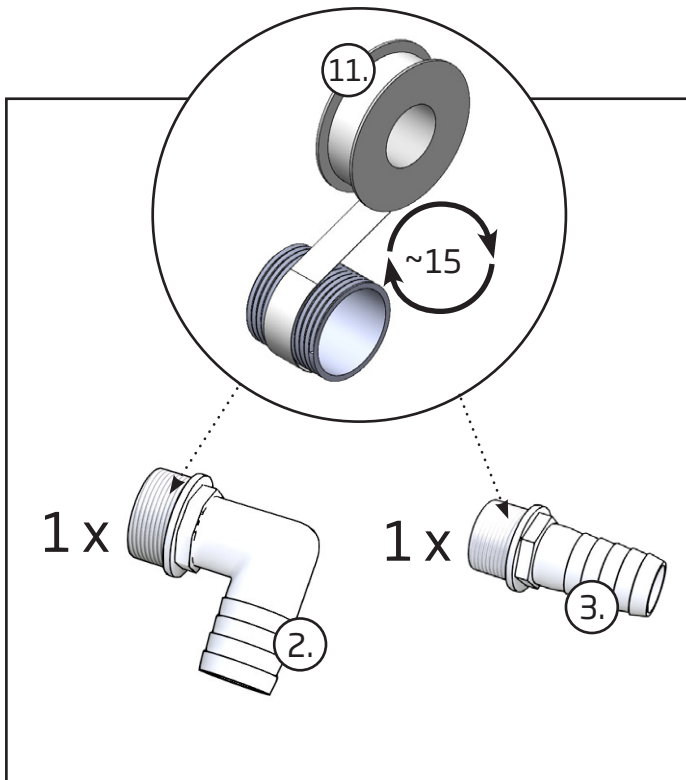
## ELENCO PARTI

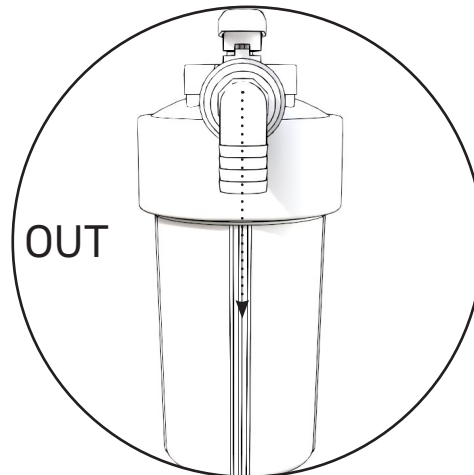
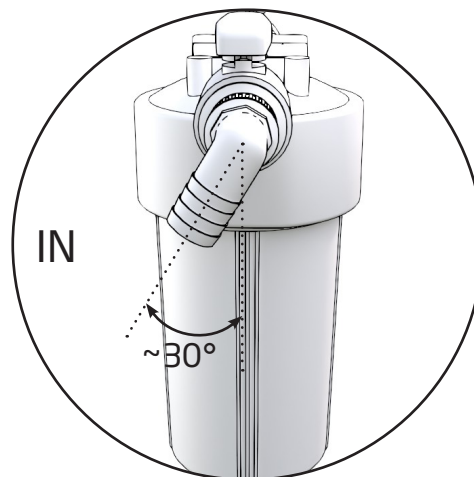
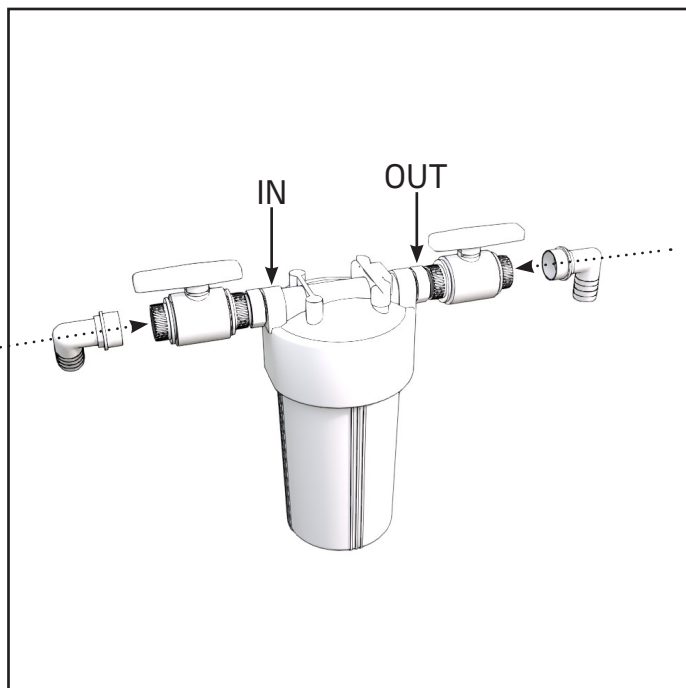
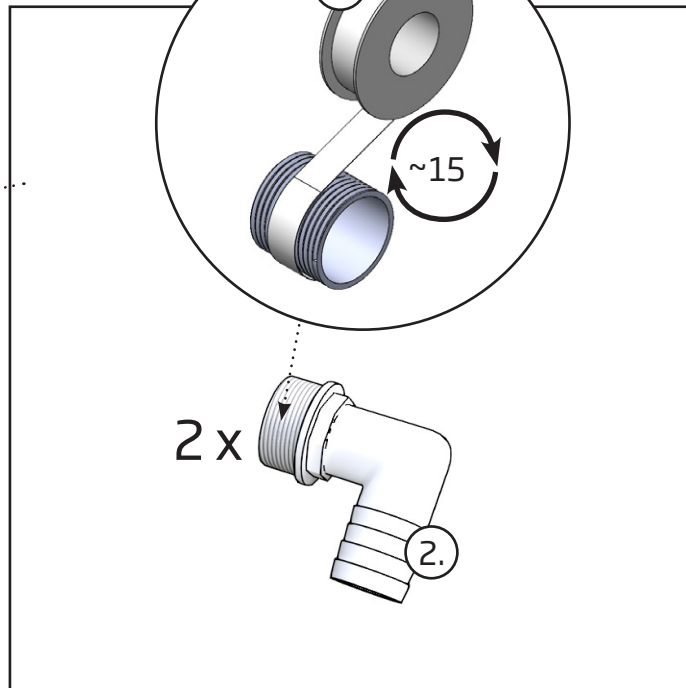
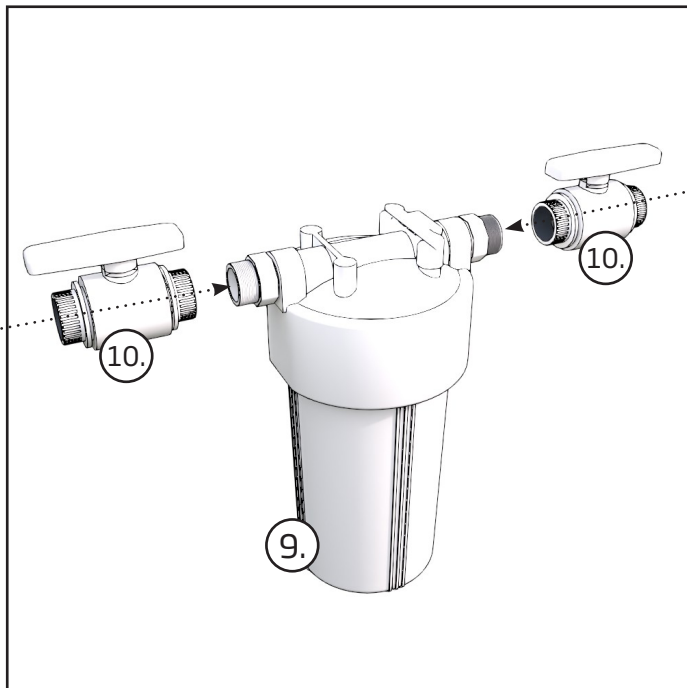


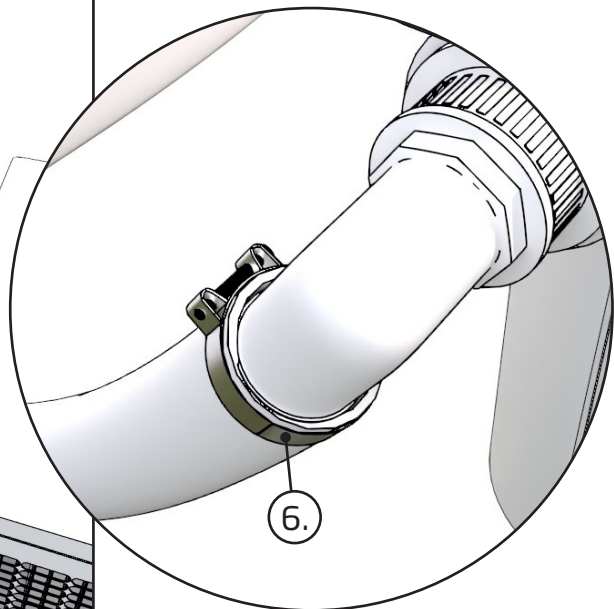
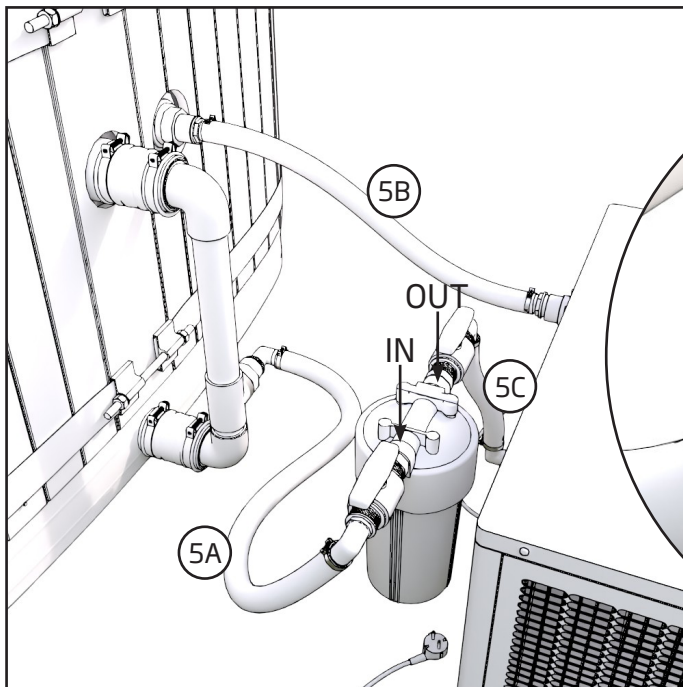
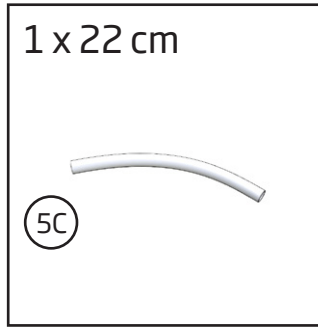
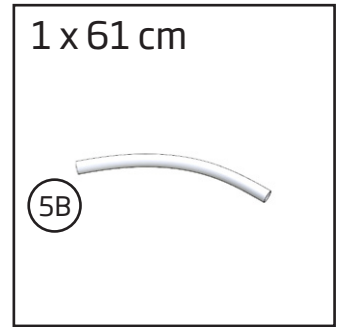
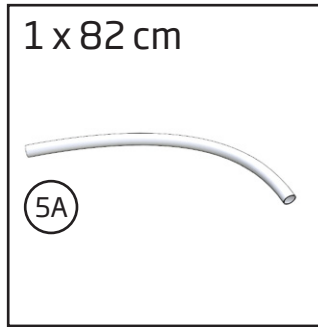
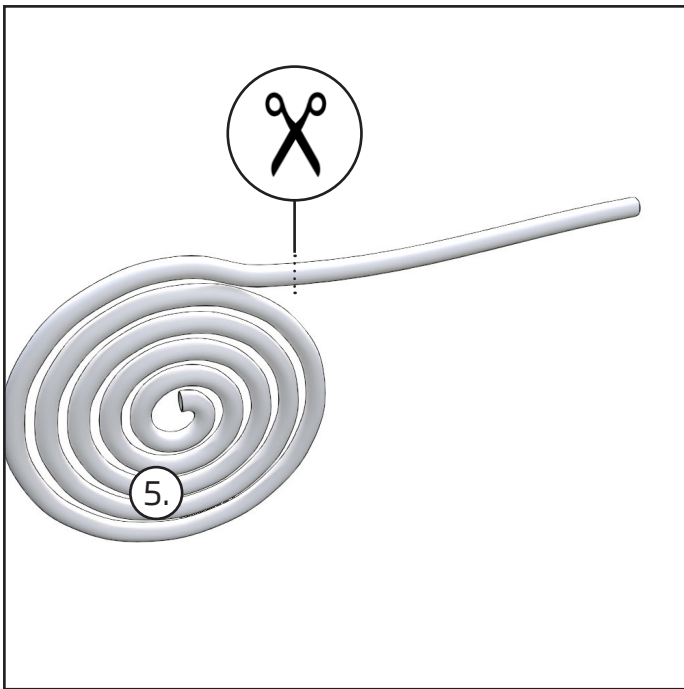














## RIEMPIMENTO DELLA PISCINA E FUORIUSCITA DELL'ARIA DALL'UNITÀ

A seconda della piscina, il riempimento e la rimozione dell'aria avvengono in modo leggermente diverso.

### BlackIce S e NordicIce S - Riempimento della piscina e rimozione dell'aria dall'unità



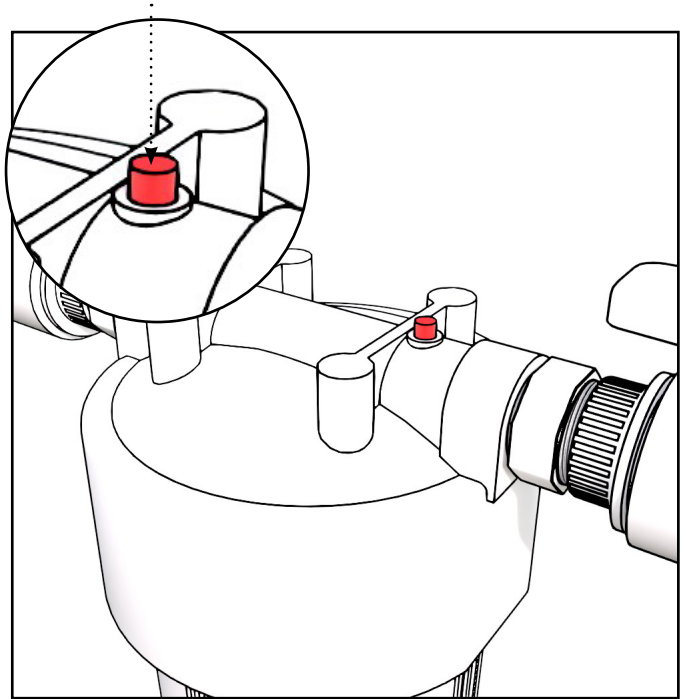
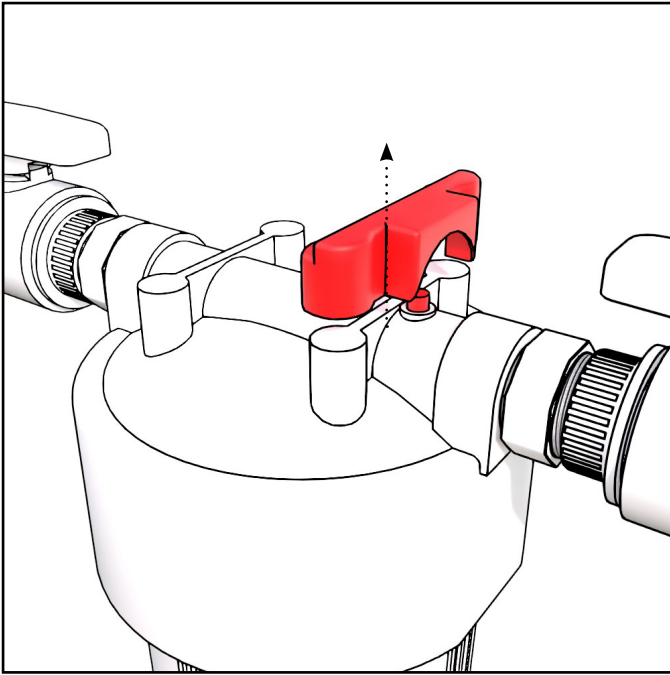
Rimuovere le griglie di protezione dalle valvole come illustrato nell'immagine. Chiudere la valvola anteriore inferiore con il tappo in dotazione.



Per riempire la piscina, utilizzare un tubo flessibile per far passare l'acqua attraverso la valvola superiore per eliminare l'aria dall'unità. Avviare la pompa di calore dualex.

Se dopo un minuto non esce aria dall'unità e sul display compare l'errore P01, scollegare l'apparecchio e riavviarlo. Quando si vede scorrere l'acqua, riempire la piscina fino al livello desiderato.





Rimuovere anche l'aria dal filtro sollevando prima il coperchio dalla parte superiore del filtro. Premere il pulsante di rilascio dell'aria sulla parte superiore del filtro finché l'acqua non inizia a fuoriuscire dall'apertura.

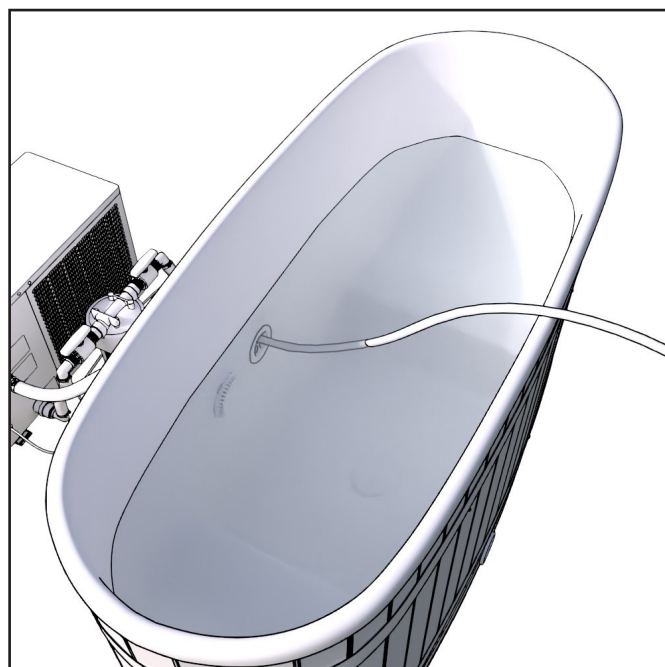
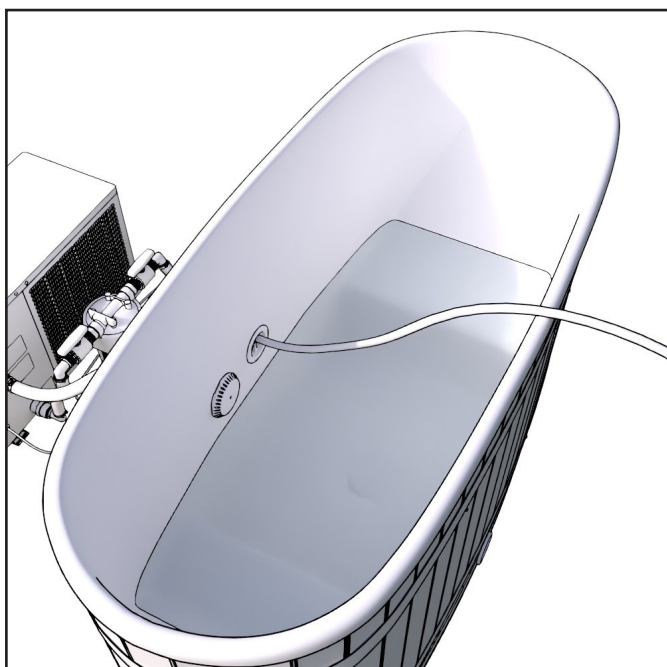


Una volta che l'acqua circola nell'unità, staccare la spina e rimettere le griglie di protezione.

## Come sostituzione di una stufa - Riempimento della piscina e rimozione dell'aria dall'unità

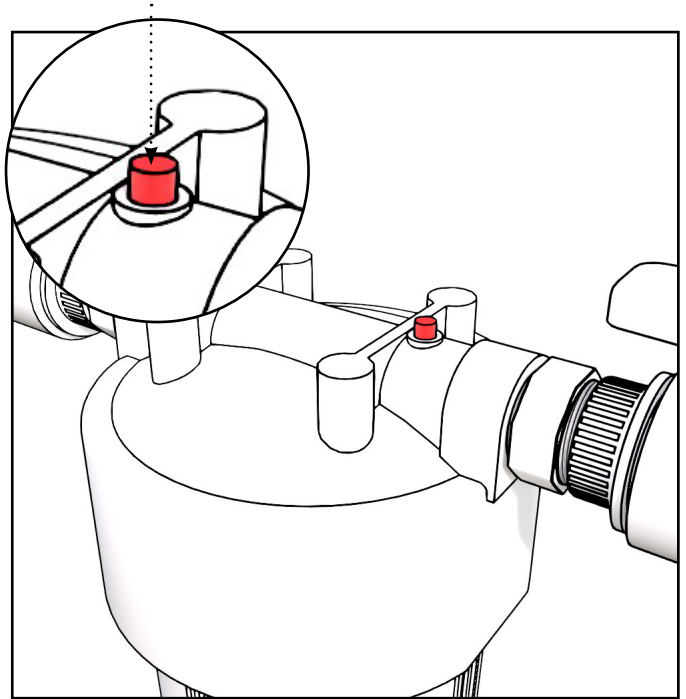
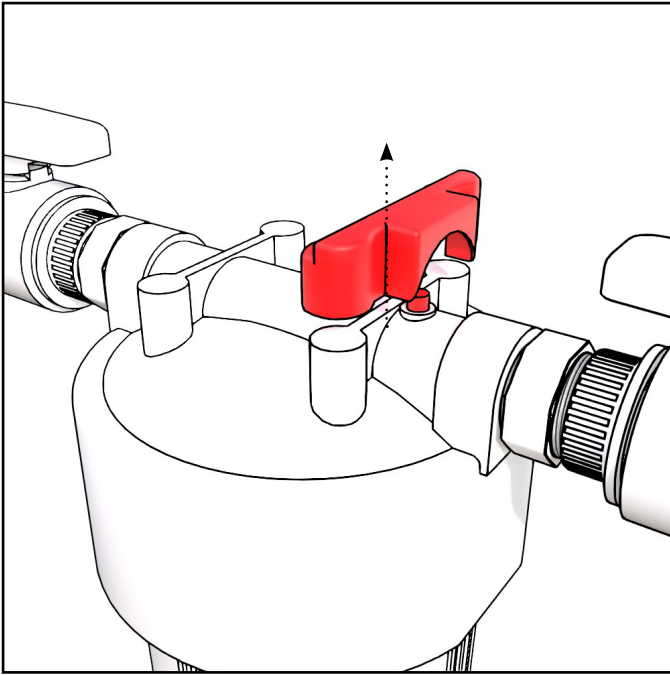


Rimuovere le griglie di protezione dalle valvole come illustrato nell'immagine. Chiudere la valvola inferiore con il tappo in dotazione.

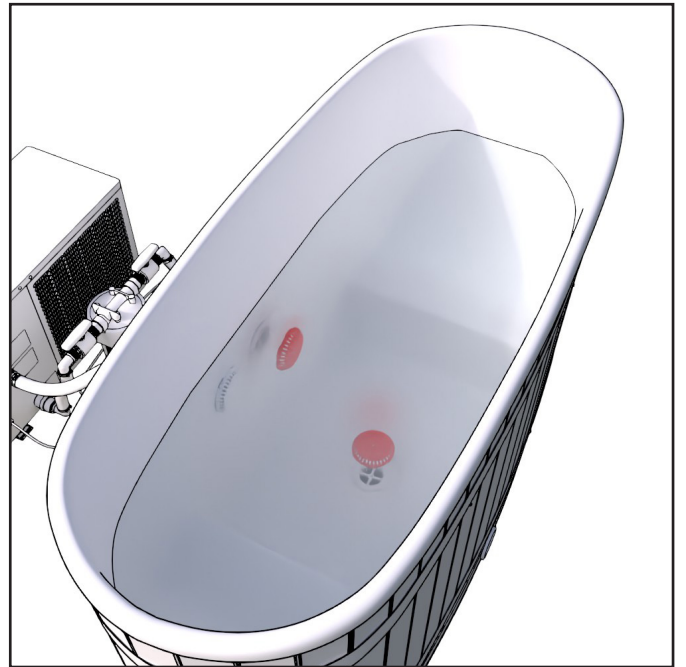


Per riempire la piscina, utilizzare un tubo flessibile per far passare l'acqua attraverso la valvola superiore per eliminare l'aria dall'unità. Avviare la pompa di calore dualix.

Se dopo un minuto non esce aria dall'unità e sul display compare l'errore P01, scollegare l'apparecchio e riavviarlo. Quando si vede scorrere l'acqua, riempire la piscina fino al livello desiderato.



Rimuovere anche l'aria dal filtro sollevando prima il coperchio dalla parte superiore del filtro. Premere il pulsante di rilascio dell'aria sulla parte superiore del filtro finché l'acqua non inizia a fuoriuscire dall'apertura.







Una volta che l'acqua circola nell'unità, staccare la spina e rimettere le griglie di protezione.

## FUNZIONAMENTO






### Interfaccia controller





### Alimentazione e blocco schermo

Per sbloccare, premere un tasto qualsiasi per accendere lo schermo e tenere premuta l'icona on/off per 5 secondi finché non si sente un segnale acustico.	
L'icona del lucchetto scompare	
Premere a lungo l'icona di accensione/spegnimento per accendere o spegnere il dispositivo. Se non viene premuto alcun pulsante entro 60 secondi, il controller si blocca automaticamente.	
Quando è bloccato, appare l'icona del lucchetto	







### Modalità (Raffreddamento / Riscaldamento / Auto)

Quando l'unità è accesa, premere brevemente il tasto per selezionare le modalità di funzionamento La sequenza circolare di selezione è Raffreddamento -> Riscaldamento -> Auto -> Raffreddamento... (ciclo continuo) NOTA: In modalità Auto si verifica un ritardo nel cambio di direzione del raffreddamento/riscaldamento.	
In modalità riscaldamento, l'icona del riscaldamento appare quando la modalità è attiva.	
In modalità raffreddamento, l'icona del raffreddamento appare quando la modalità è attiva.	
Durante il funzionamento in modalità Auto, appariranno l'icona del loop e l'icona del raffreddamento.	 

## Impostazioni temperatura





Mentre l'unità di raffreddamento è accesa, sbloccare lo schermo (vedere "Alimentazione e blocco dello schermo").	
Premere le icone su o giù per regolare la temperatura.	 
Se non si compie nessuna azione per 3 secondi, il display visualizza la temperatura attuale dell'acqua.	









## Impostazioni intervallo temporale

Inserire le impostazioni del tempo: Premere il tasto per 5 secondi fino a quando le cifre relative alle parti "ora" e "minuti" lampeggiano.	
Metodo di impostazione dell'ora: Nell'interfaccia di impostazione dell'ora, esercitare una pressione breve.	
La cifra dell'ora nell'area lampeggia.	
Premere le icone su o giù per impostare l'ora.	 
Premere l'icona dell'orologio per passare alla parte dei minuti e ripetere le operazioni sopra descritte.	
Al termine dell'impostazione, premere l'icona dell'orologio per salvare l'impostazione e uscire dall'interfaccia principale.	









## Impostazione del timer di accensione/spegnimento ("Modalità attiva")

- Gli utenti possono impostare due intervalli temporali ON/OFF per la "modalità attiva". Gli intervalli non devono sovrapporsi.
- Metodo di impostazione del timer di accensione/spegnimento

Nell'interfaccia principale, premere brevemente l'icona dell'orologio per accedere all'impostazione del timer di accensione/spegnimento.	
Quando "1" lampeggia, premere l'icona dell'orologio per accedere all'impostazione della parte dell'ora di accensione del periodo 1 della "modalità attiva".	
Quando la parte dell'ora lampeggia, premere l'icona su o giù per regolare l'ora.	 

Premere l'icona dell'orologio per confermare e inserire la parte dei minuti.	
Quando la parte dei minuti all'accensione lampeggia, premere l'icona su o giù per regolare i minuti.	 
Premere l'icona dell'orologio per confermare la parte dei minuti di accensione e inserire l'impostazione del timer di spegnimento del periodo 1. Ripetere le azioni sopra descritte.	
Al termine della configurazione, premere a lungo l'icona dell'orologio per confermare e salvare l'attuale impostazione del timer di accensione/spegnimento.	
Premere le icone su o giù per accedere all'impostazione del periodo 2 della "modalità attiva" e ripetere le operazioni sopra descritte.	 
Il gruppo di timer valido viene visualizzato sull'interfaccia principale con il numero corrispondente. Premere brevemente on/off per accedere al menu principale.	

## Impostazione dell'ozonizzatore

Quando l'unità di raffreddamento è accesa, premere a lungo il pulsante di accensione/spegnimento se lo schermo è bloccato.	
Premere a lungo il pulsante della modalità in modo che sullo schermo appaia L0.	
Utilizzare l'icona della freccia verso il basso per modificare il valore in L11 e premere la modalità (breve).	 
Utilizzare le icone freccia per modificare il valore in 0, 1 o 2 (vedere la tabella seguente).	 
Premere il pulsante di modalità (breve) e quindi il pulsante di accensione/spegnimento (breve). (Il tempo di generazione dell'ozono ha inizio quando l'unità viene accesa)	 

Codice	Nome parametro	Intervallo di impostazione	Parametri di fabbrica
L11	Metodo di controllo dell'ozonizzatore	0: Non genera ozono 1: Genera ozono per 5 minuti ogni ora (55 minuti in standby) <ul style="list-style-type: none"> <li>• Uso privato</li> </ul> 2: Genera ozono per 10 minuti ogni ora (50 minuti in standby) <ul style="list-style-type: none"> <li>• Uso pesante/pubblico</li> </ul>	1



## MANUTENZIONE GENERALE E QUALITÀ DELL'ACQUA

Manutenzione della piscina. Assicurarsi che l'acqua rimanga pulita e limpida. A seconda della frequenza di utilizzo, potrebbe essere necessario l'uso occasionale di cloro per disinfettare l'acqua (soprattutto in caso di utilizzo pubblico intenso).

Ogni giorno:

- Verificare il livello dell'acqua.

A cadenza settimanale:

- Pulire il condotto dell'acqua e il filtro, qualora siano sporchi.
- Sciacquare accuratamente il filtro con acqua corrente tiepida o con un getto d'acqua (non utilizzare idropulitrici per non danneggiare il materiale del filtro).
- È necessario sostituire sempre la cartuccia filtrante se, dopo la pulizia del filtro, la circolazione dell'acqua non è ai livelli abituali. A seconda della frequenza di utilizzo, sostituire il filtro ogni 2-4 mesi.
- Controllare il livello di pH dell'acqua, che deve essere mantenuto su valori conformi alla normativa (7,2- 7,6). Se necessario, è possibile regolare il livello di pH utilizzando prodotti chimici a pH+ o pH-.

Utilizzo del cloro:

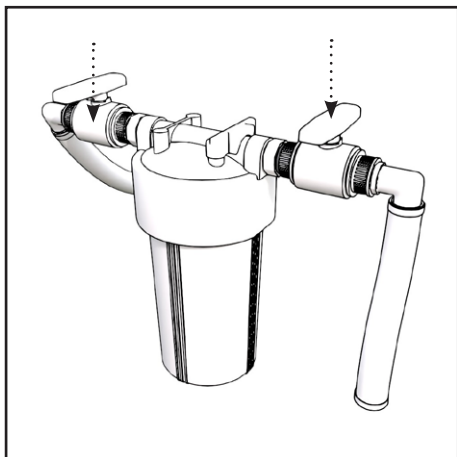
- Nel caso in cui la piscina sia utilizzata quotidianamente in modo intensivo, si consiglia di aggiungere mezzo cucchiaino di cloro (natriumdiklorisocyanurat, dihydrat) all'acqua per raggiungere il livello di cloro libero di 0,3 - 1,2 ppm.
- Se il numero di utenti supera i 10 al giorno o la temperatura dell'acqua supera i 15°C, si raccomanda di aggiungere frequentemente cloro (natriumdiklorisocyanurat, dihydrat) all'acqua per mantenere un livello di cloro libero di 0,3 - 1,2 ppm.

### Consigli di manutenzione

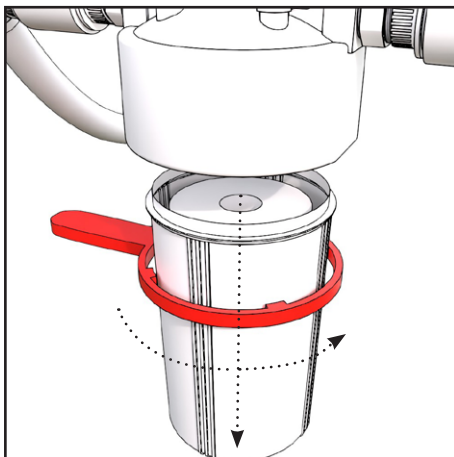
- Controllare regolarmente i collegamenti di alimentazione e dei cavi. Se si riscontrano problemi, contattare il rivenditore locale.
- Pulire/aspirare regolarmente l'unità di raffreddamento (di solito ogni 2-4 mesi) per garantire la libera ventilazione.
- Spegnerne l'unità di raffreddamento quando non è in uso.
- Se l'unità di raffreddamento non viene utilizzata per un periodo prolungato, far uscire tutta l'acqua dall'unità di raffreddamento.
- Non utilizzare sale o altri minerali nell'acqua.
- Guida alla risoluzione dei problemi
  - Se il pannello di controllo è vuoto e l'unità di raffreddamento non è in funzione, verificare l'alimentazione e/o l'attivazione dell'interruttore differenziale. Se la tensione di alimentazione è corretta ma l'interruttore differenziale ha interrotto l'alimentazione, premere il pulsante di reset per riavviare l'unità. Se il problema persiste, scollegare il dispositivo e contattare il rivenditore o il produttore.
  - Se dopo l'accensione dell'apparecchio la circolazione dell'acqua è assente, spegnere l'apparecchio per un po' e riaccenderlo. Ciò può accadere a causa di blocchi d'aria nei tubi. Ripetere, se necessario, finché l'acqua non inizia a circolare.
  - Se l'acqua non circola correttamente, controllare il livello dell'acqua e le condizioni del filtro (cartuccia, se utilizzata). Aggiungere altra acqua se necessario. Se necessario, pulire il filtro o sostituire la cartuccia. Se il problema persiste, contattare il rivenditore o il produttore.

## PULIZIA E SOSTITUZIONE DELLA CARTUCCIA DEL FILTRO

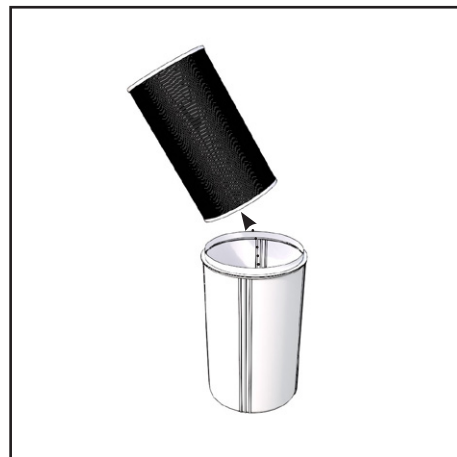
Si raccomanda di pulire regolarmente il filtro per mantenere pulita l'acqua del sistema ed evitare l'intasamento del filtro stesso. Sostituire la cartuccia del filtro quando necessario, di solito ogni 2-4 mesi a seconda della quantità di utilizzo.



Spegnere l'unità e chiudere entrambe le valvole a sfera.



Rimuovere l'alloggiamento del filtro ruotandolo. Se l'alloggiamento del filtro è stretto e difficile da aprire, utilizzare l'apposito utensile di apertura in dotazione.



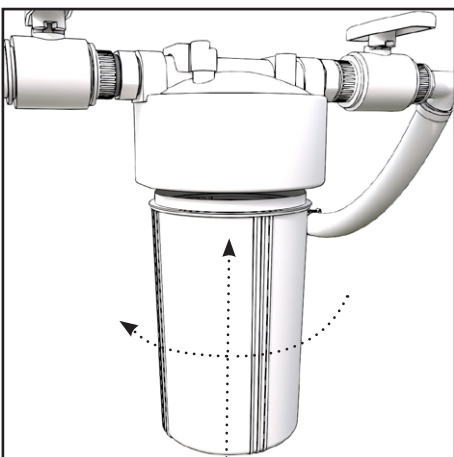
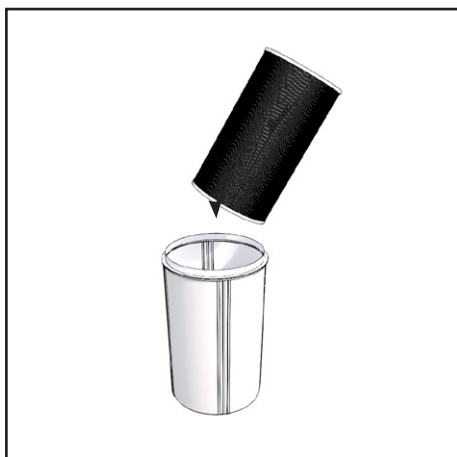
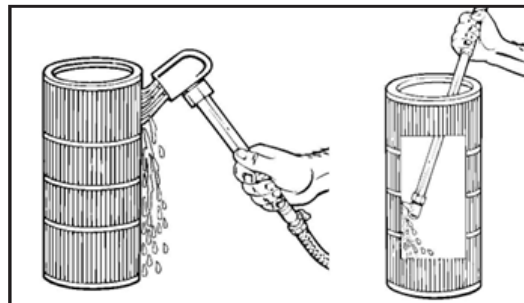
Rimuovere la cartuccia del filtro e pulire l'alloggiamento, se necessario.

### Pulizia

Per ottenere risultati ottimali nella pulizia della cartuccia filtrante, si consiglia di sciacquarla prima in maniera approssimativa con acqua corrente e poi di immergerla completamente in un secchio con le pastiglie per la pulizia del filtro "BioCool Clean my pool filter" per almeno 6 ore.

Quindi risciacquare nuovamente con acqua corrente, dall'interno e dall'esterno. La cartuccia può essere pulita mediante pressione dall'interno e dall'esterno solo con un tubo da giardino (non utilizzare l'alta pressione). Dopo il lavaggio della cartuccia, per ottenere risultati ottimali, lasciarla asciugare e spazzolare accuratamente le superfici pieghettate per rimuovere le particelle fini.

È necessario sostituire la cartuccia quando necessario e almeno una volta all'anno.



Riposizionare la cartuccia nuova o pulita nell'alloggiamento.

Riavvitare l'alloggiamento, serrandolo a mano.

## MESSAGGI DI ERRORE SUL DISPLAY

Quando si verifica il guasto, appare il codice di errore corrispondente. Una volta eliminato l'errore, il codice di errore scomparirà. Per azzerare il codice di errore, riavviare l'unità.

Vikakoodi	Kuvaus
E01	Anomalia della temperatura dei gas di scarico
E05	Anomalia della temperatura della bobina
E09	Anomalia della temperatura di aspirazione del gas
E17	Anomalia della temperatura dell'acqua in ingresso
E18	Anomalia della temperatura dell'acqua in uscita
E22	Anomalia della temperatura ambiente
P01	Guasto al regolatore di flusso dell'acqua
P02	Protezione dall'alta pressione
P06	Protezione dalla bassa pressione
P11	Protezione dalla temperatura eccessiva dei gas di scarico
P15	Protezione dalla temperatura eccessiva dell'acqua in ingresso/uscita
P16	Protezione dal raffreddamento eccessivo
P17	Protezione antigelo in stand-by
P25	Protezione dalla temperatura ambiente
P26	Protezione dell'acqua in uscita dalla temperatura elevata in modalità di riscaldamento
P27	Protezione dell'acqua in uscita dalla temperatura elevata in modalità di raffreddamento

## GARANZIA

Consultare le informazioni riportate nella garanzia nel manuale del produttore del dispositivo.







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