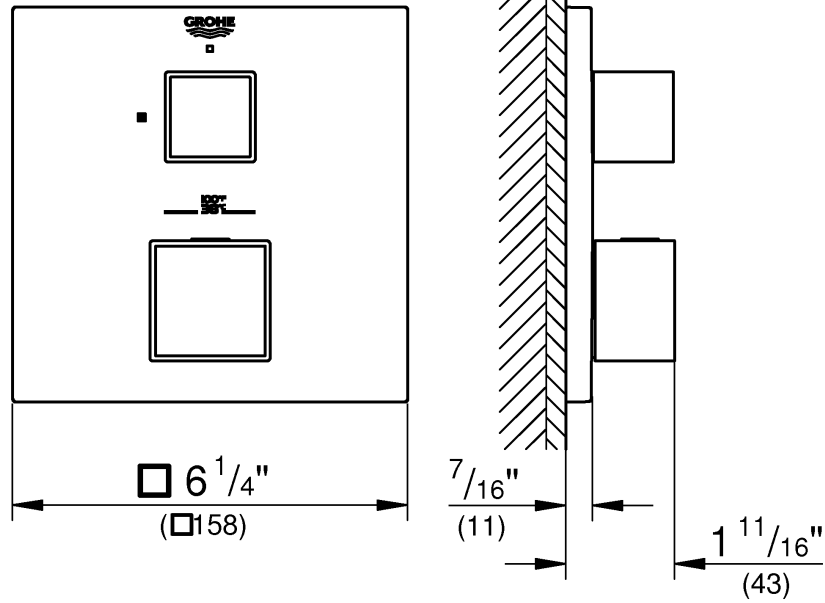
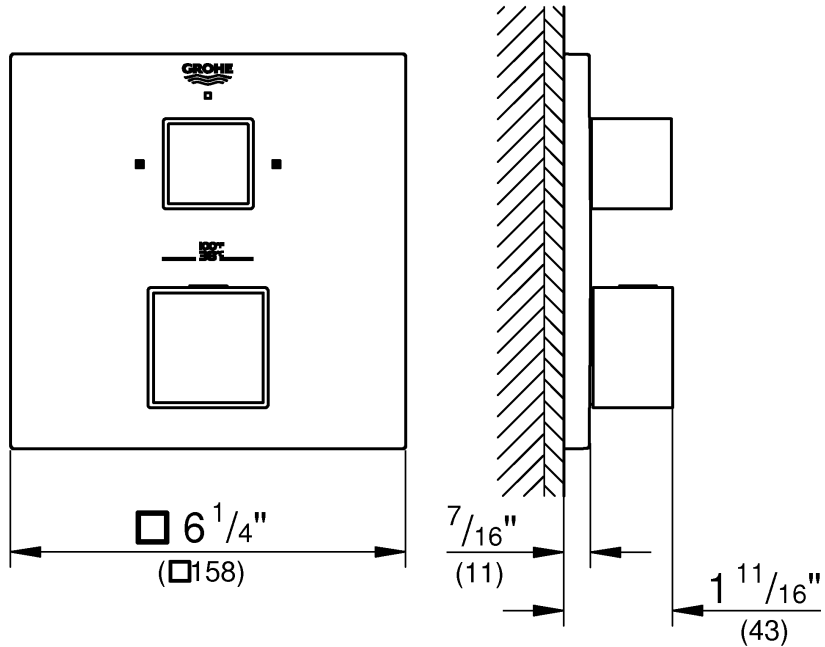




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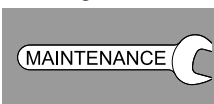
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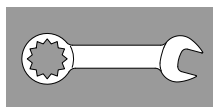
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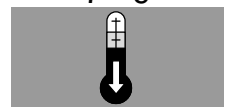
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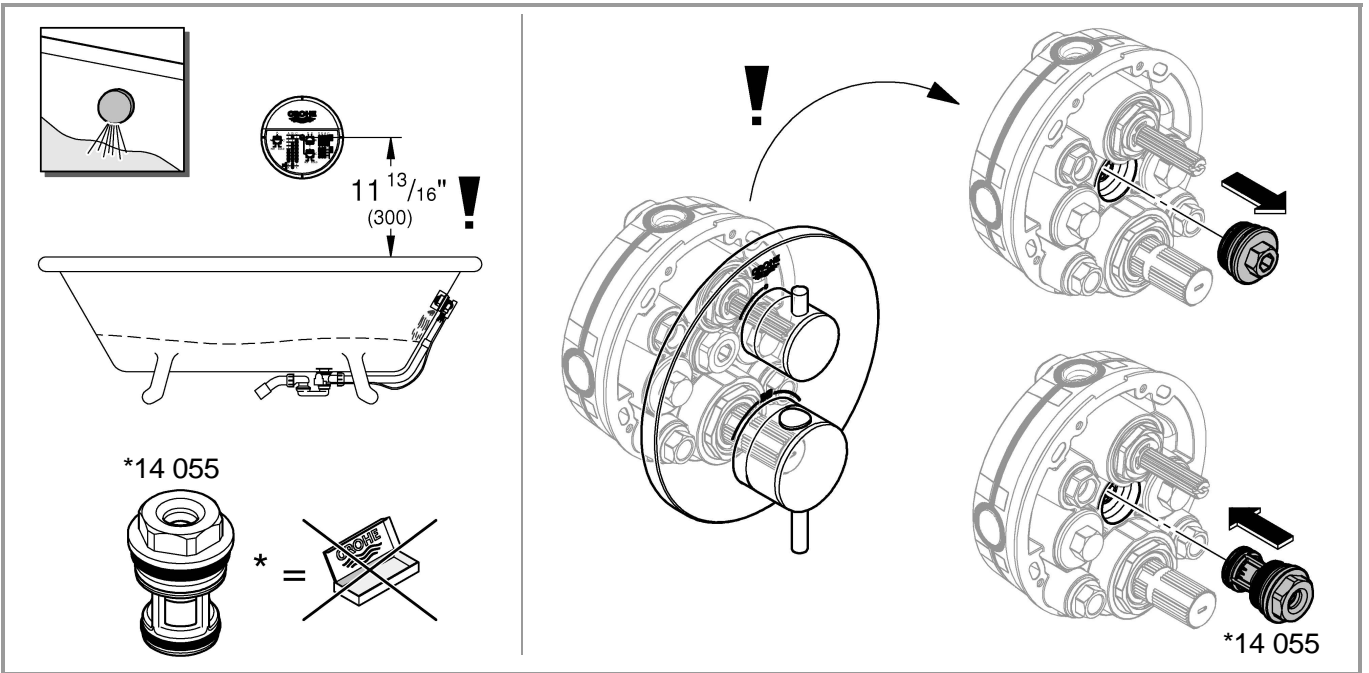
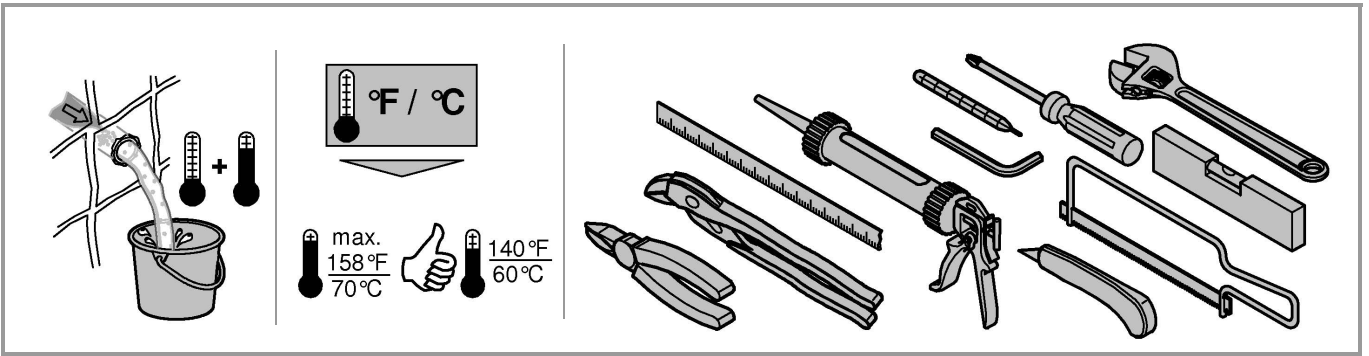


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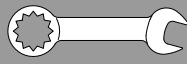




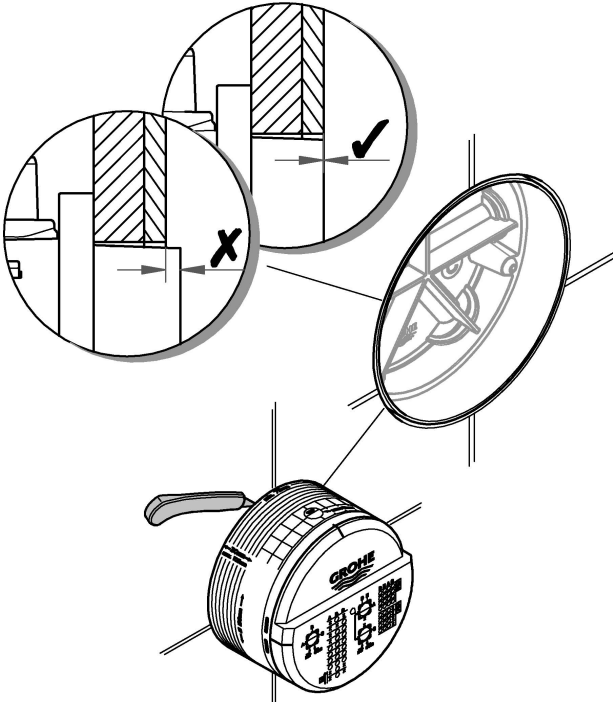
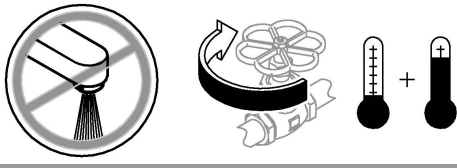
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B	C	4.1	5.8	7.1	8.2	9.1	10	gpm
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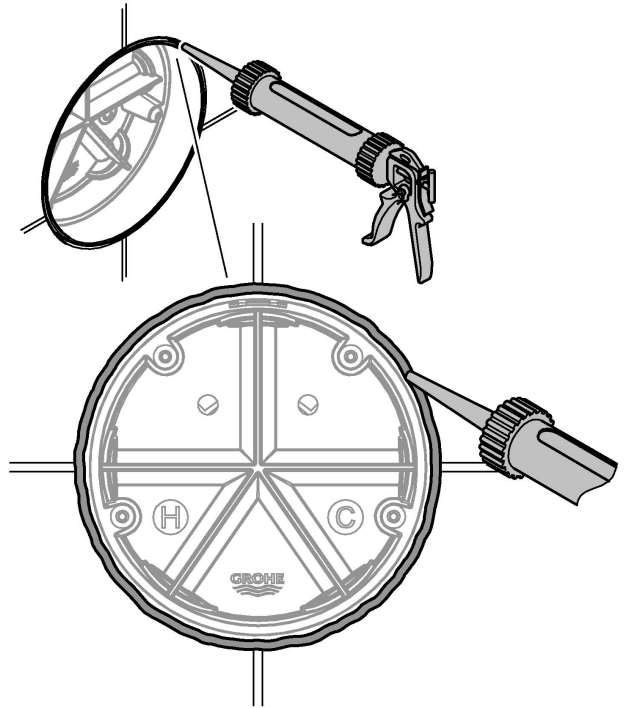
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		1	2	3	4	5	6	
B	C	15,5	22	27	31	34,5	38	l/min
C		17	24,5	30	34,5	38,5	42	



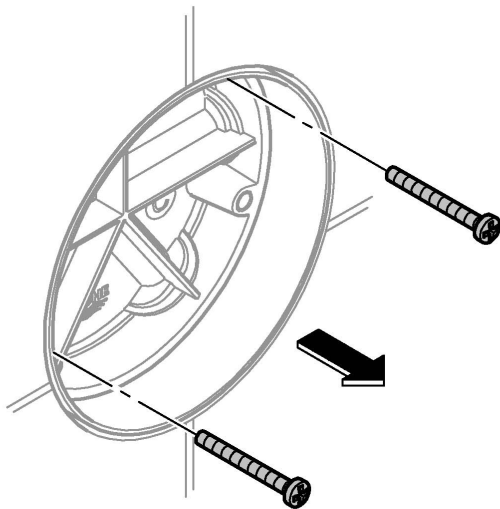
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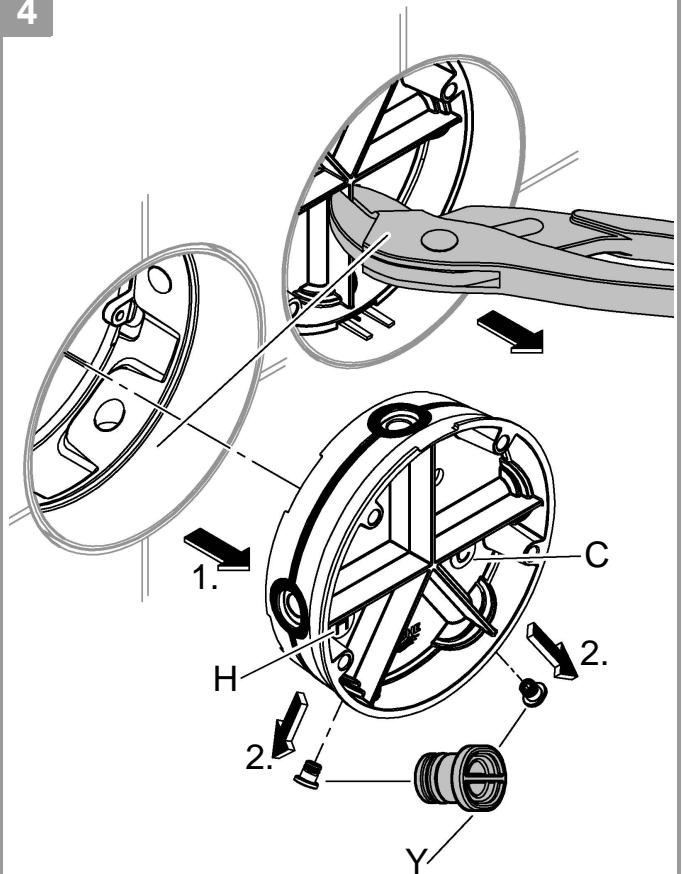
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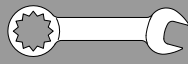


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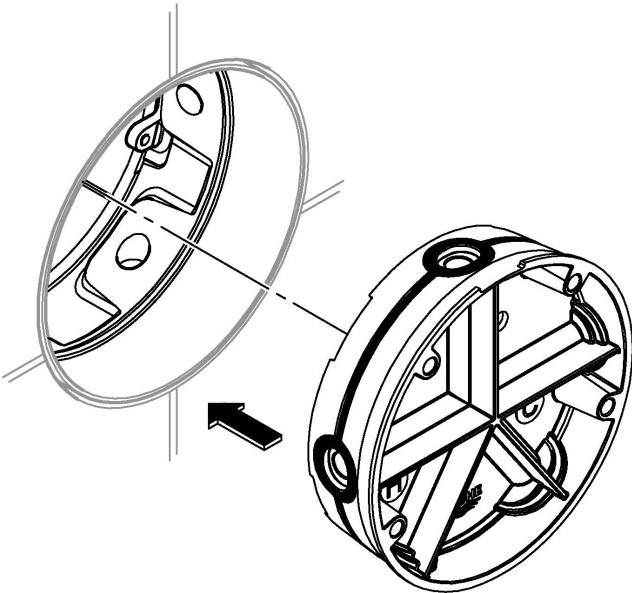


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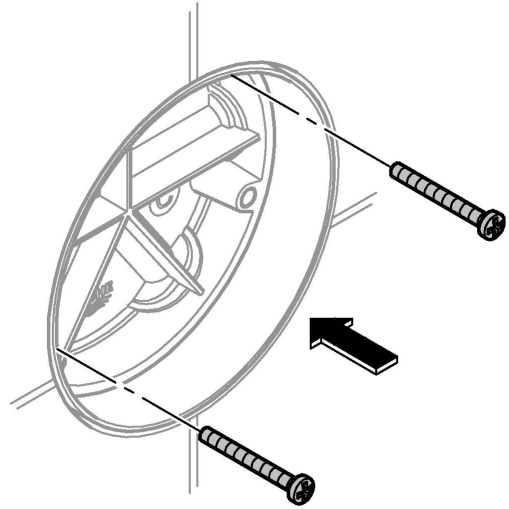




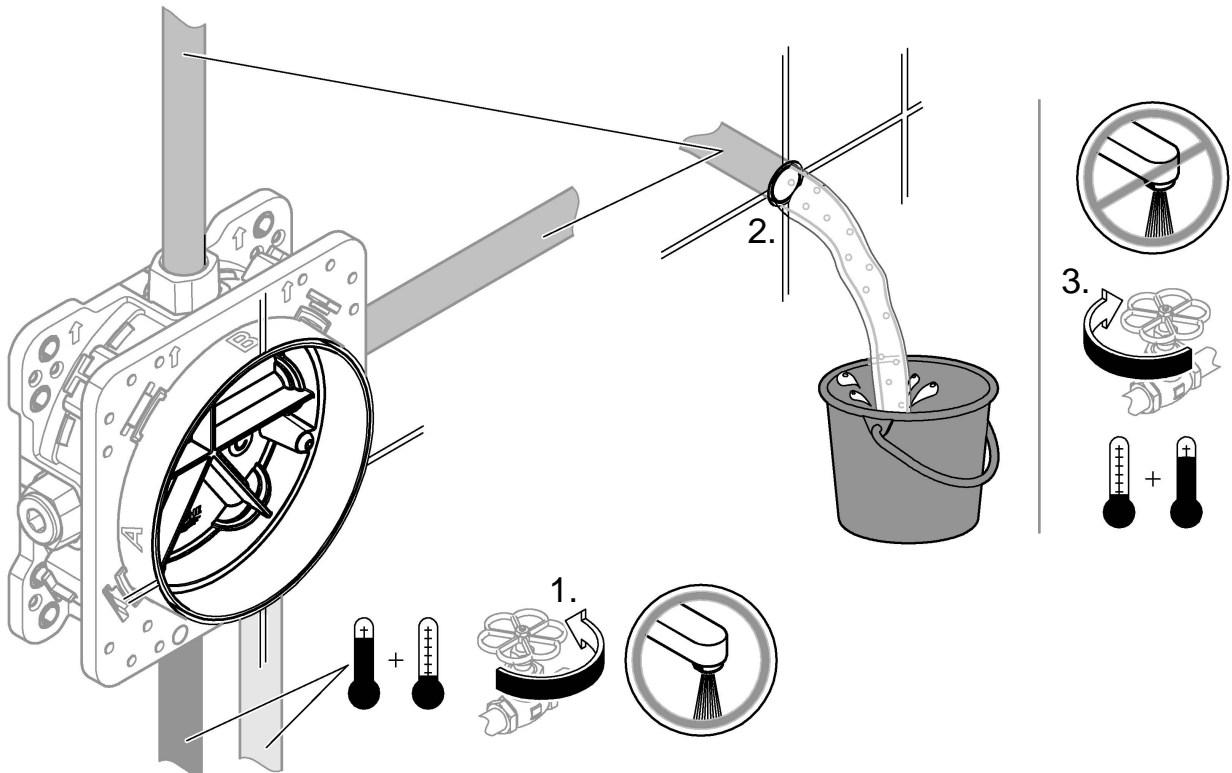
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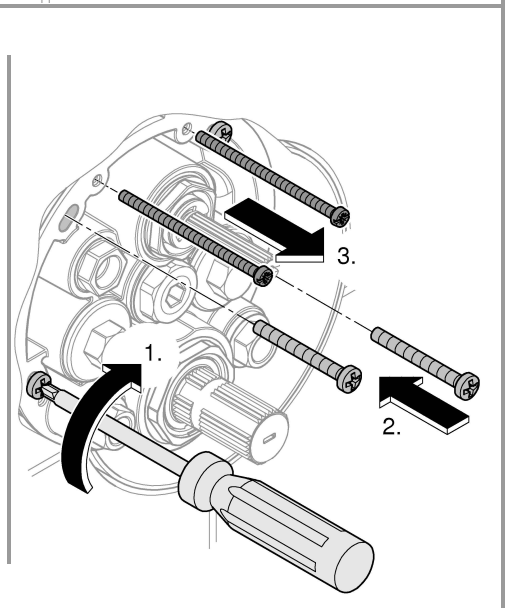
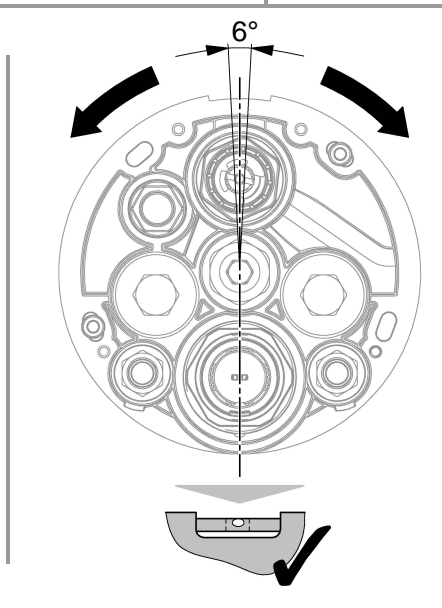
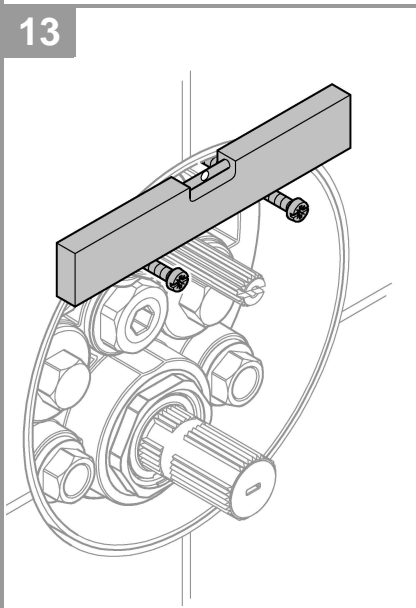
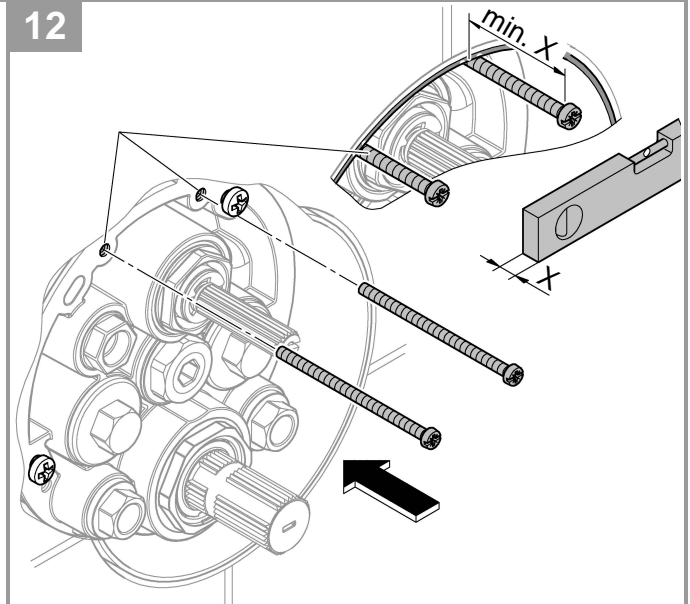
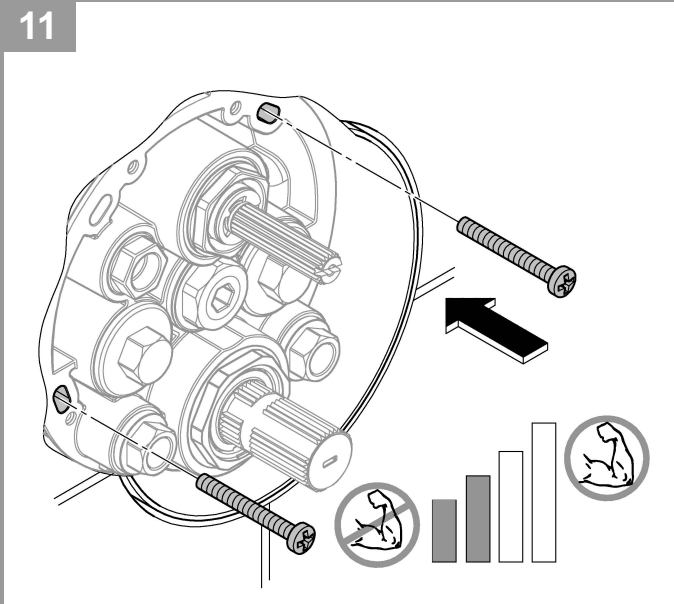
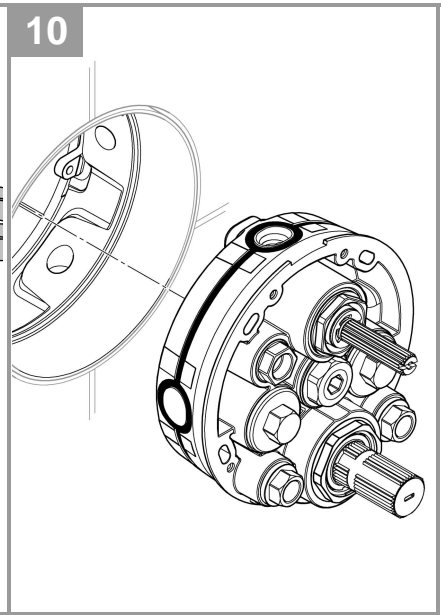
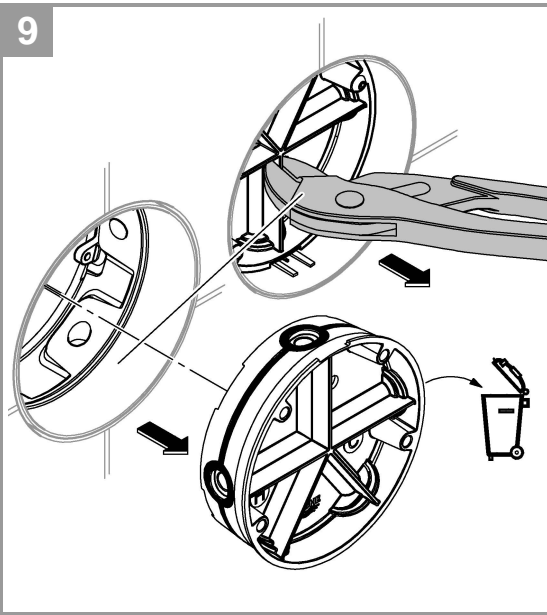
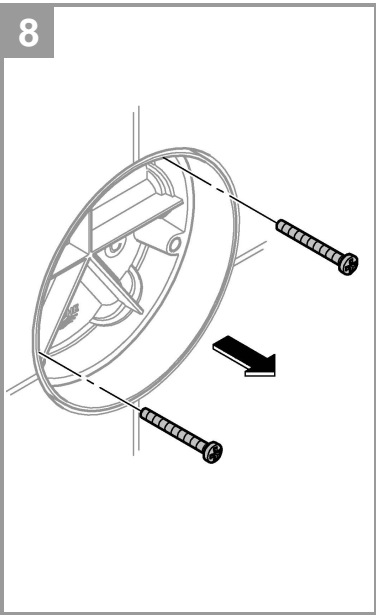
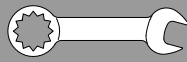


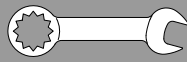
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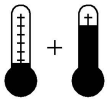
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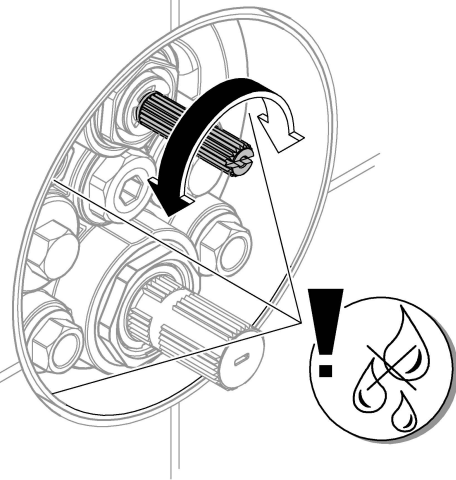




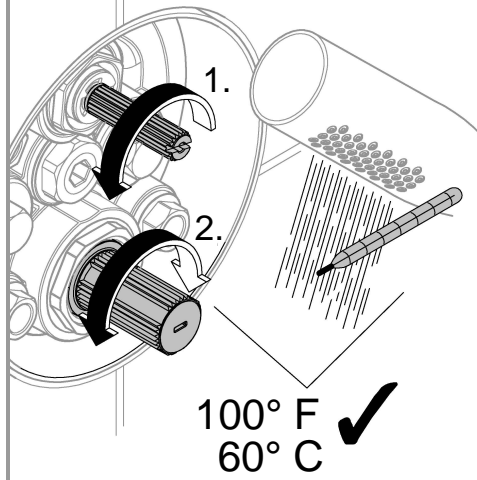
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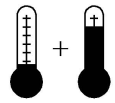
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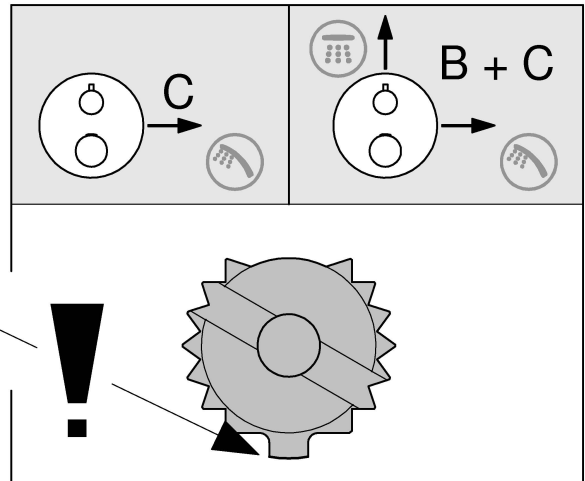
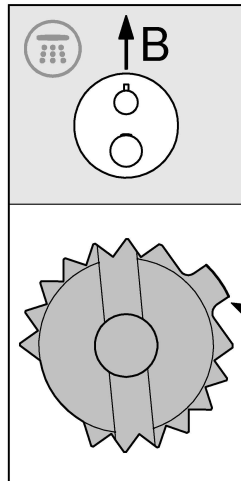
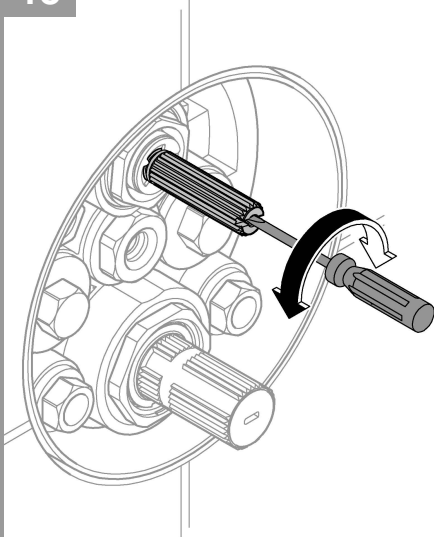
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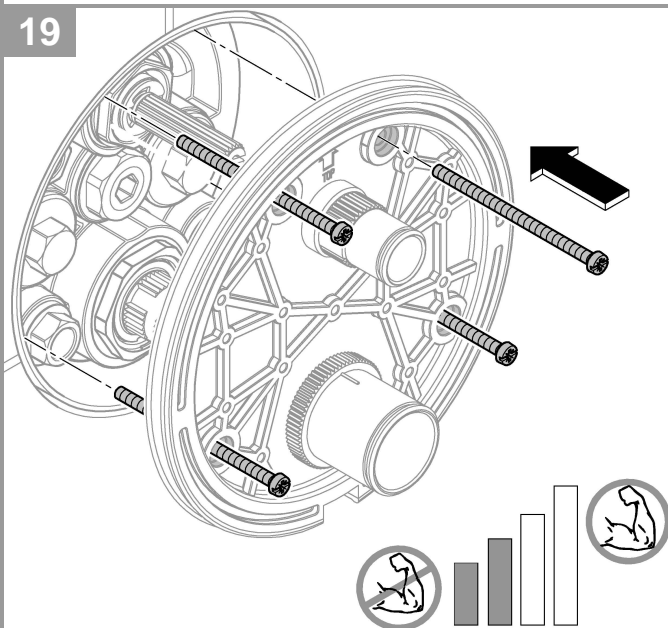
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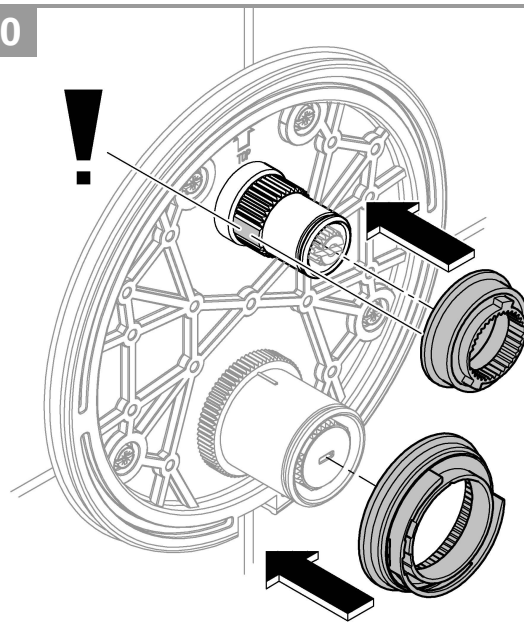
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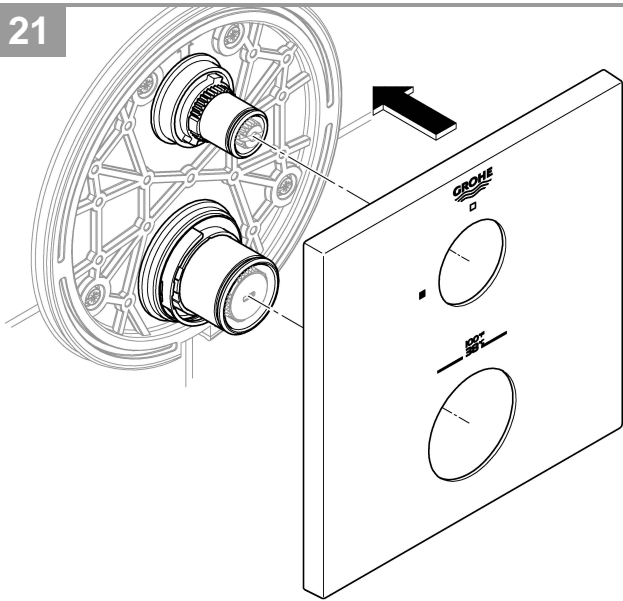


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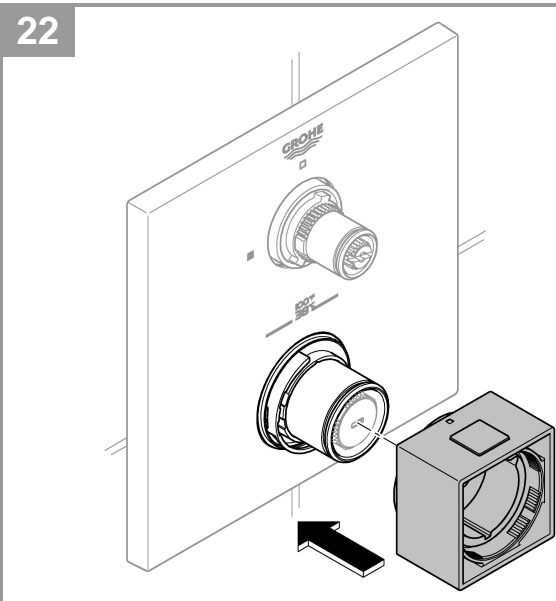




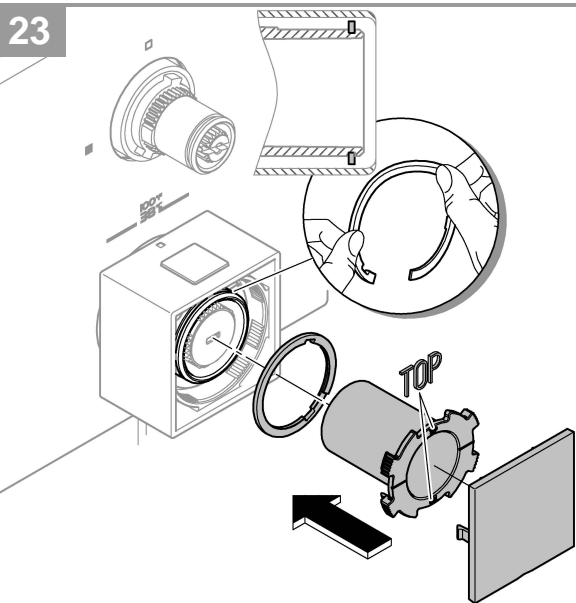
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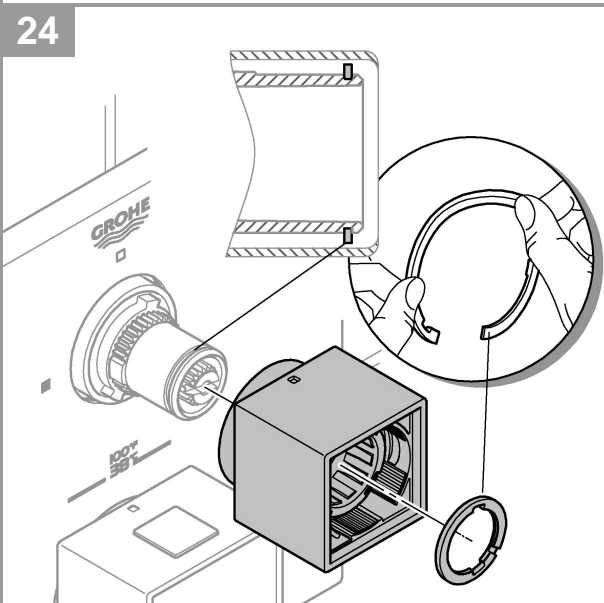
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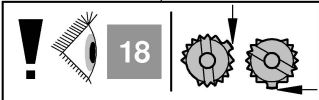
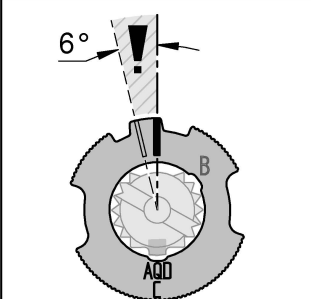
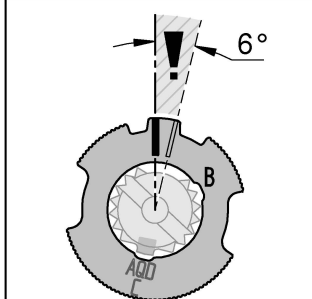
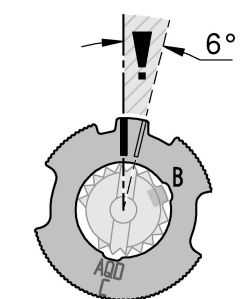
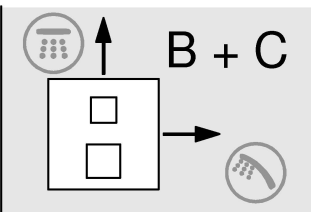
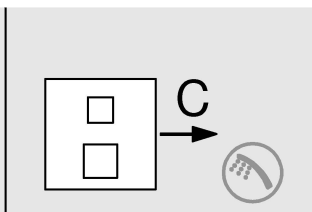
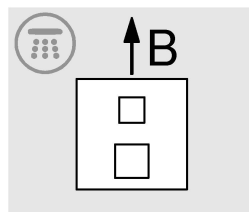
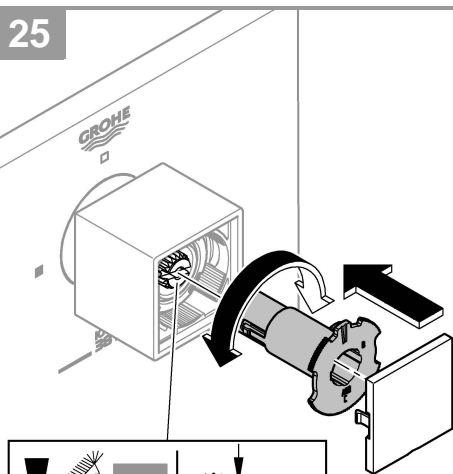
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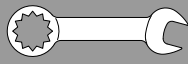


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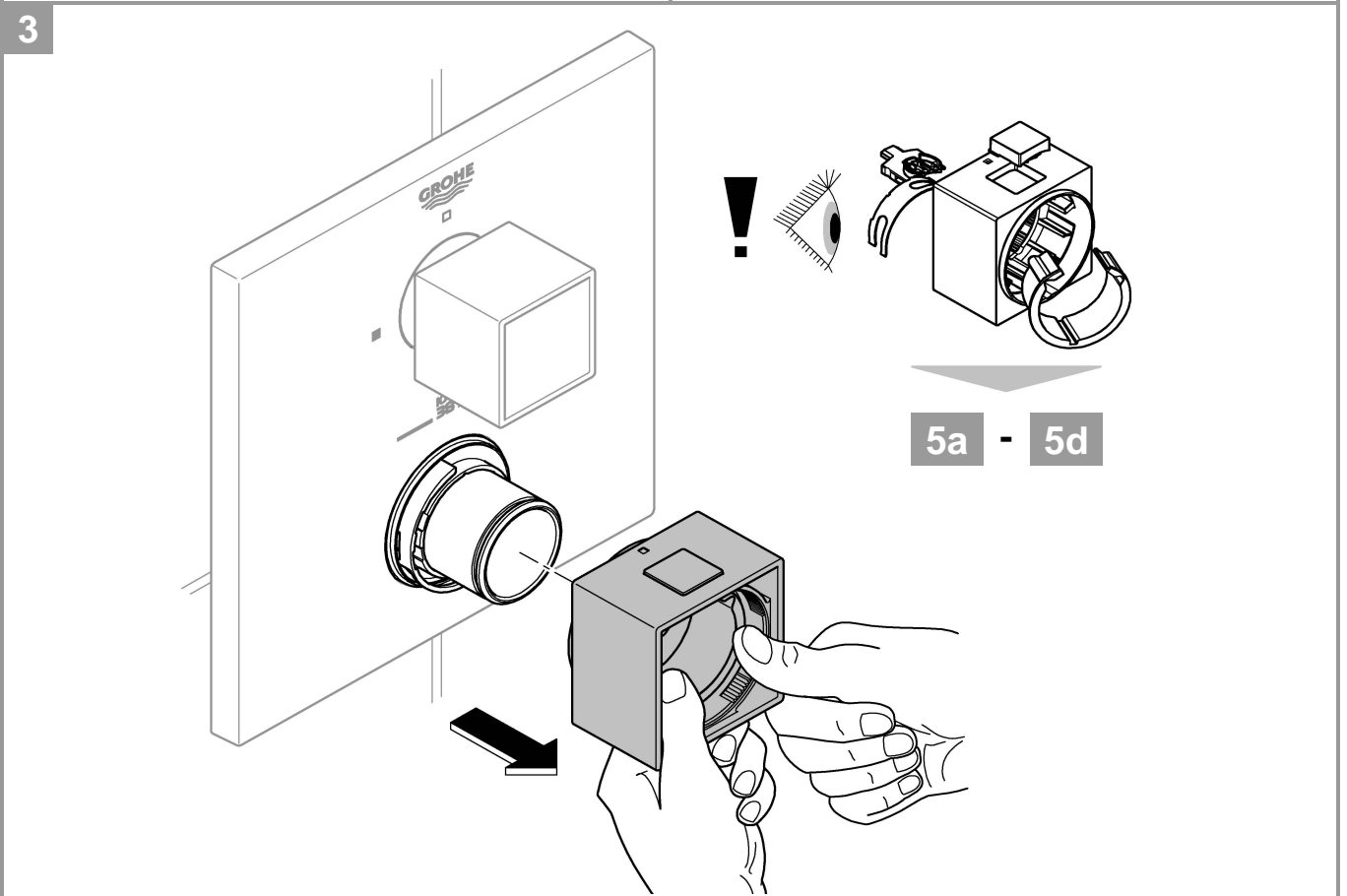
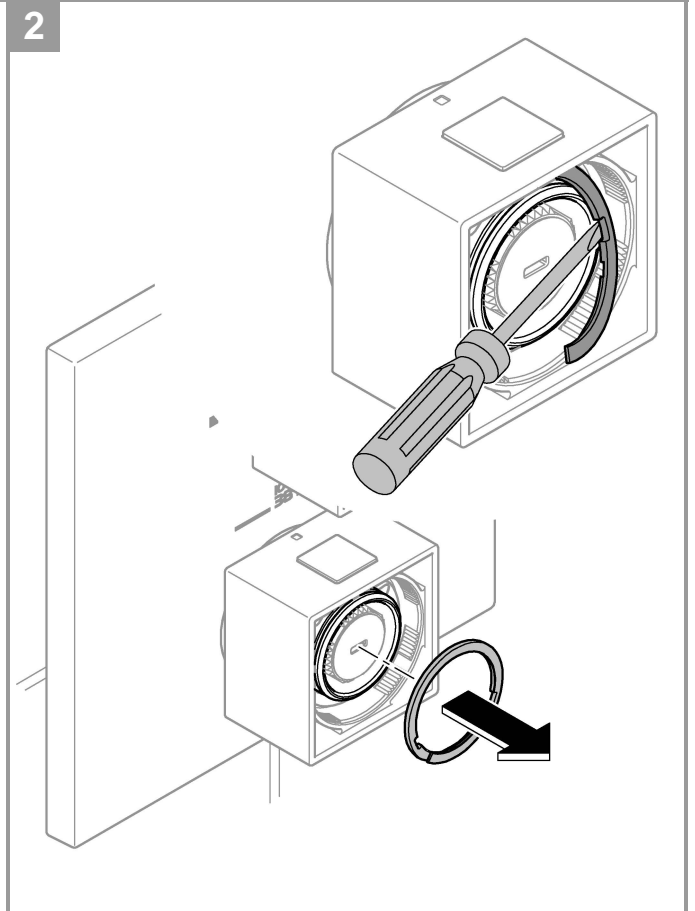
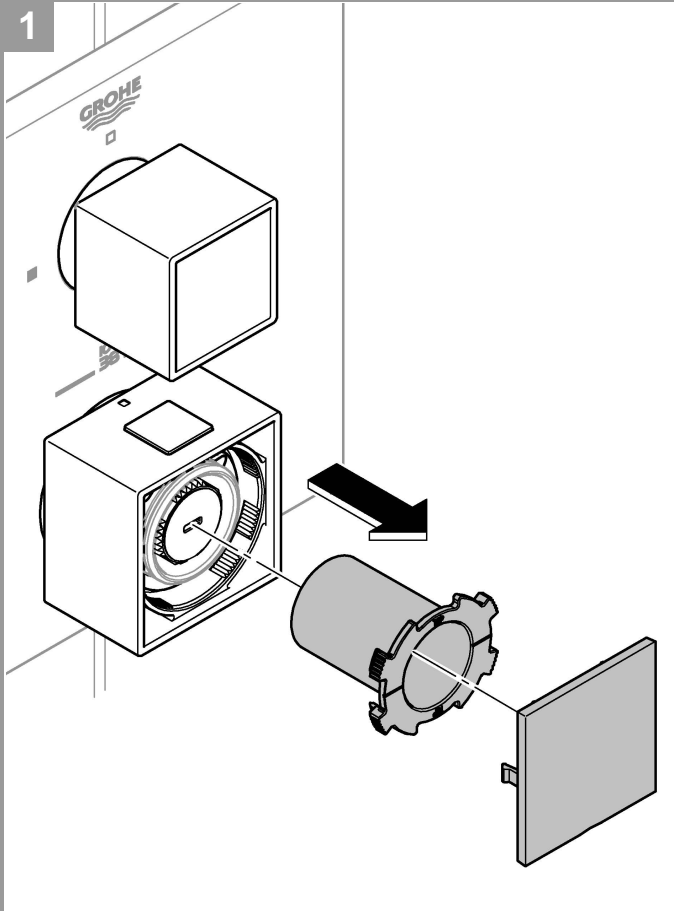
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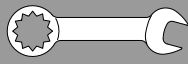


max. 109° F / 43° C

max. 115° F / 46° C



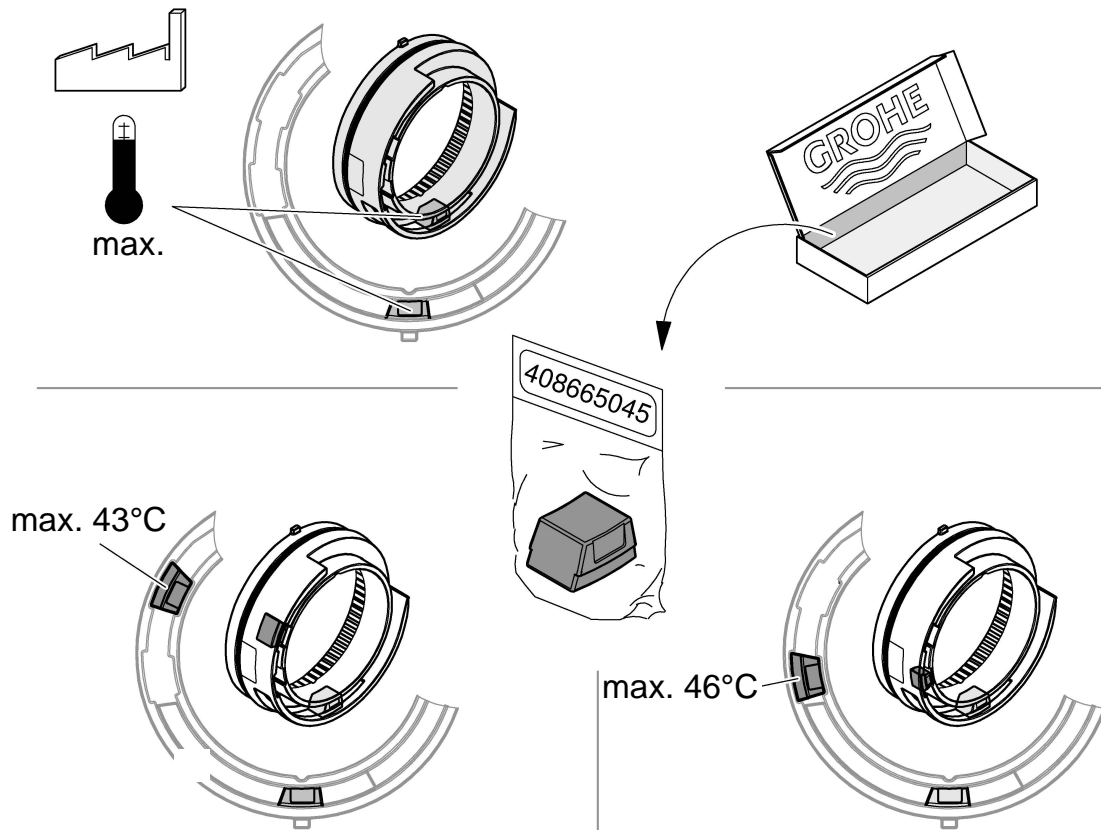




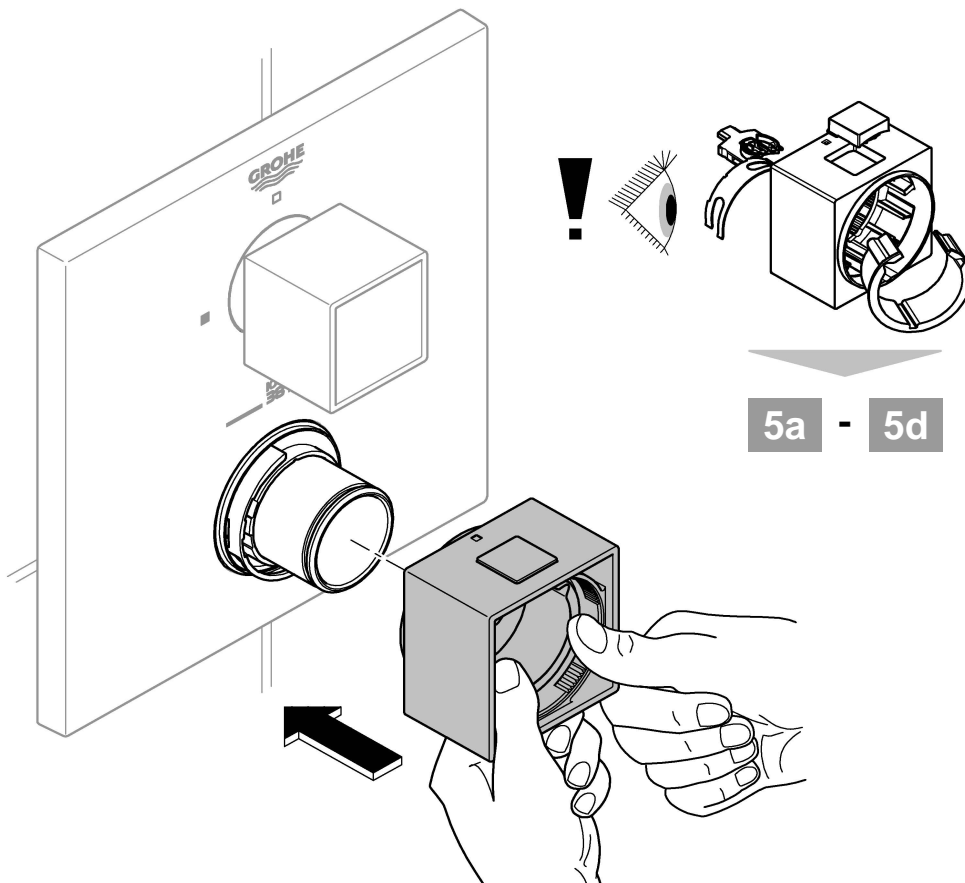
max. 109° F / 43° C

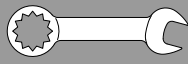
max. 115° F / 46° C

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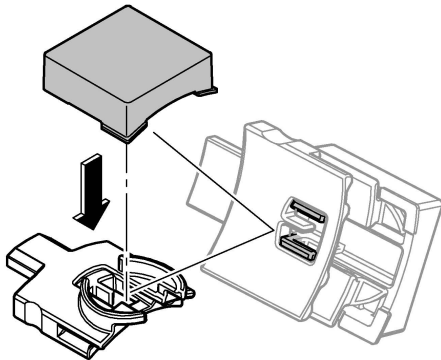




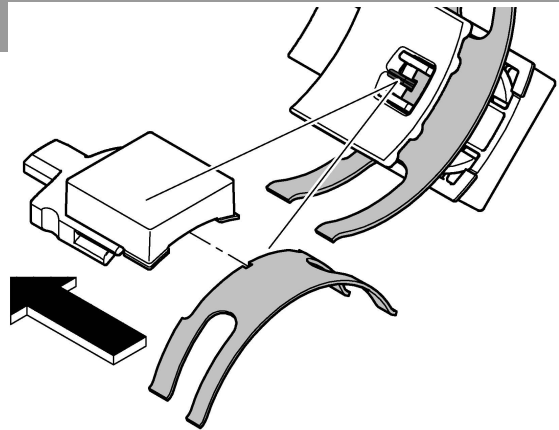
max. 109° F / 43° C

max. 115° F / 46° C

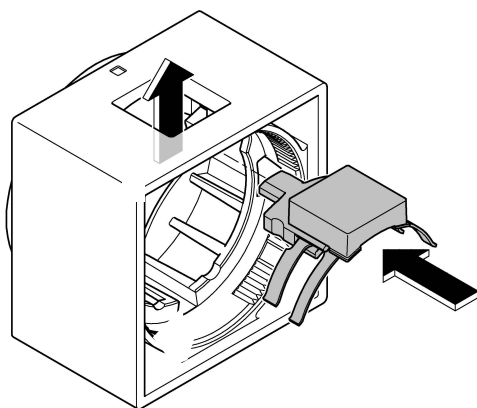
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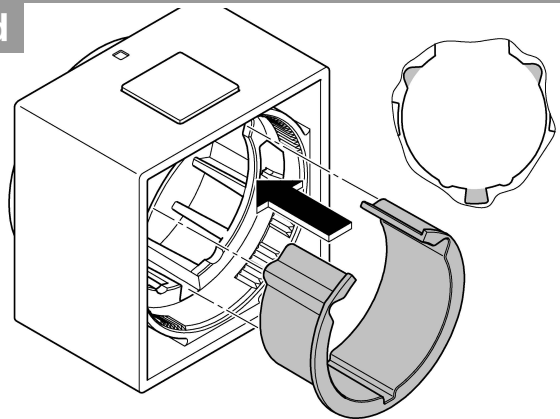
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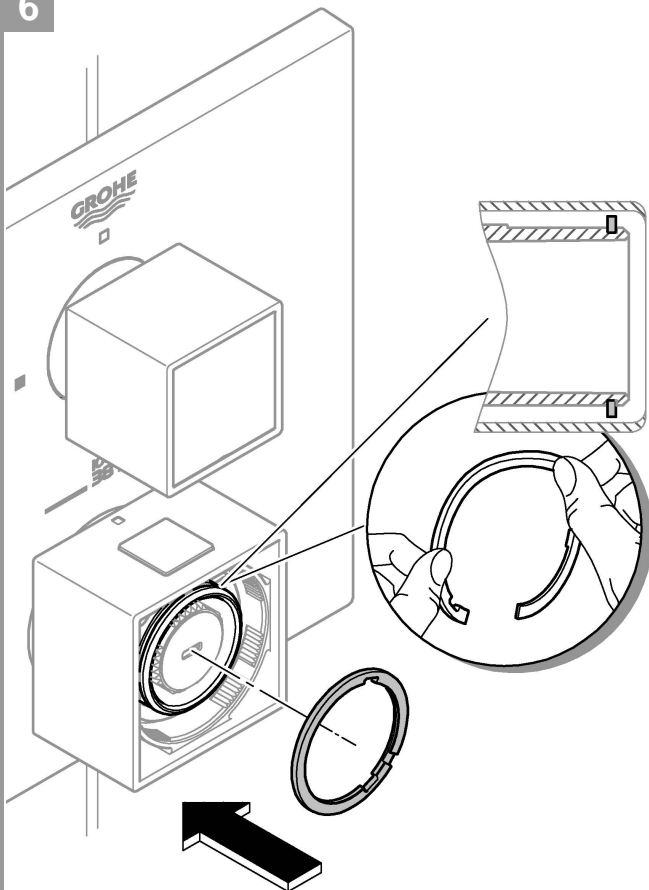
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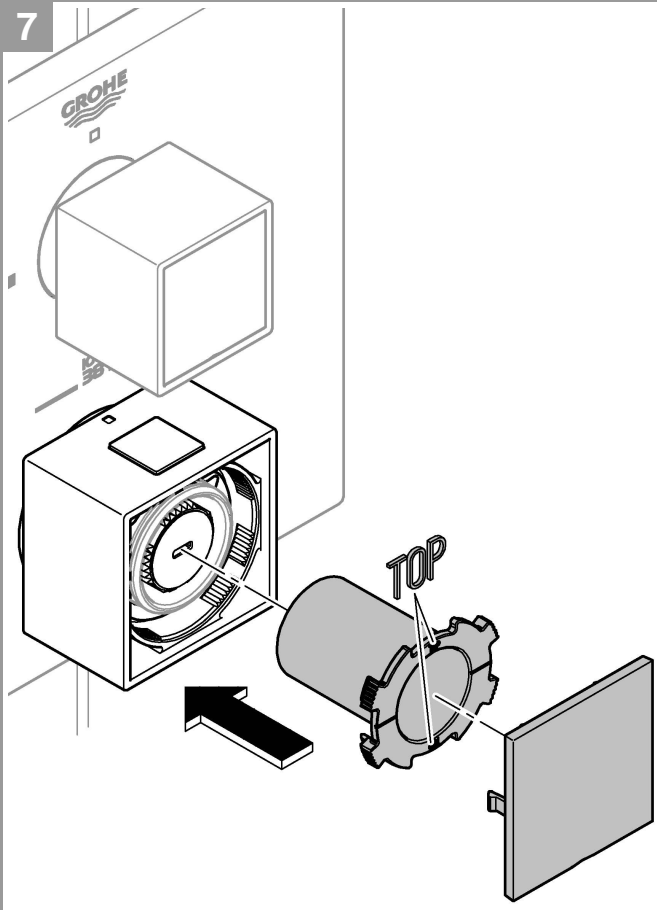
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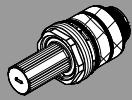



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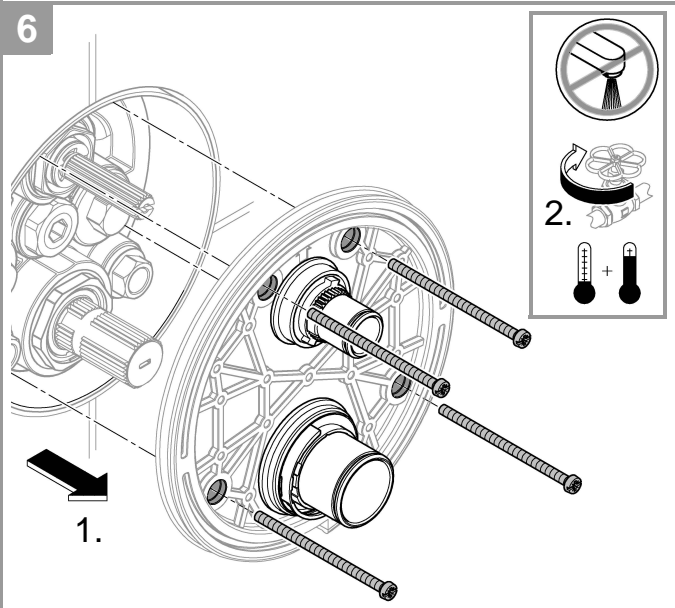
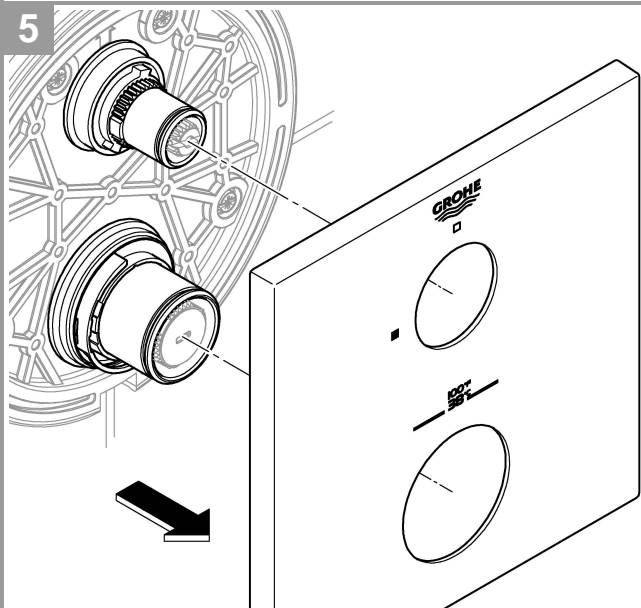
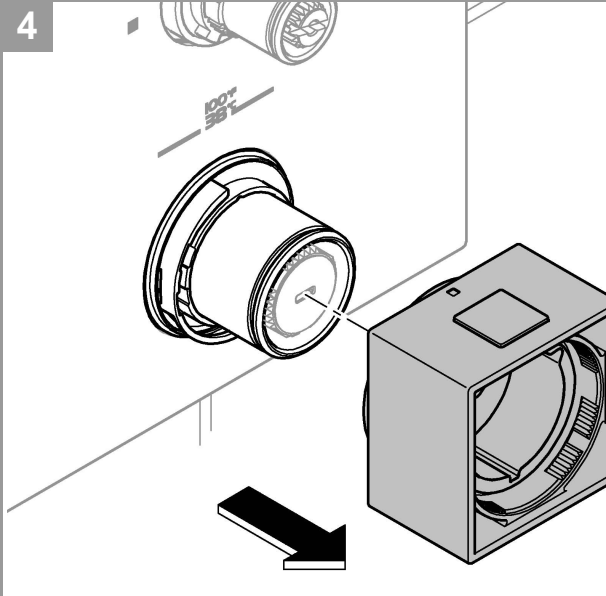
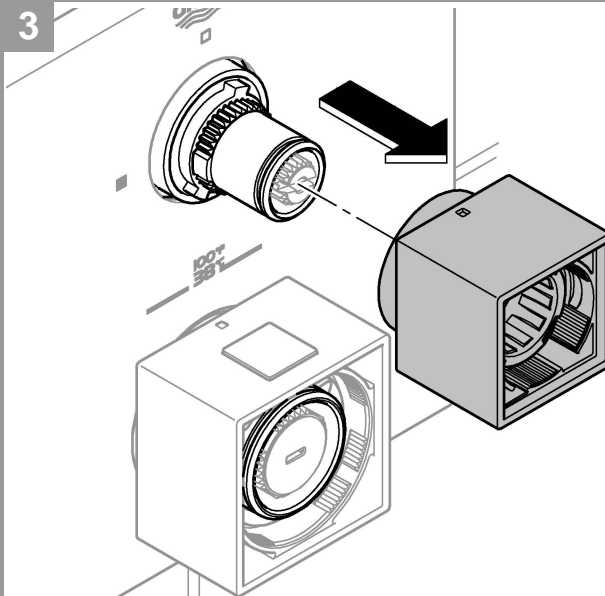
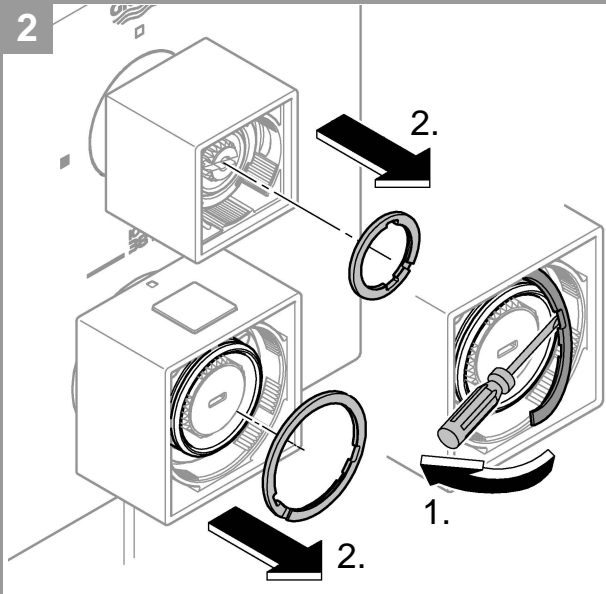
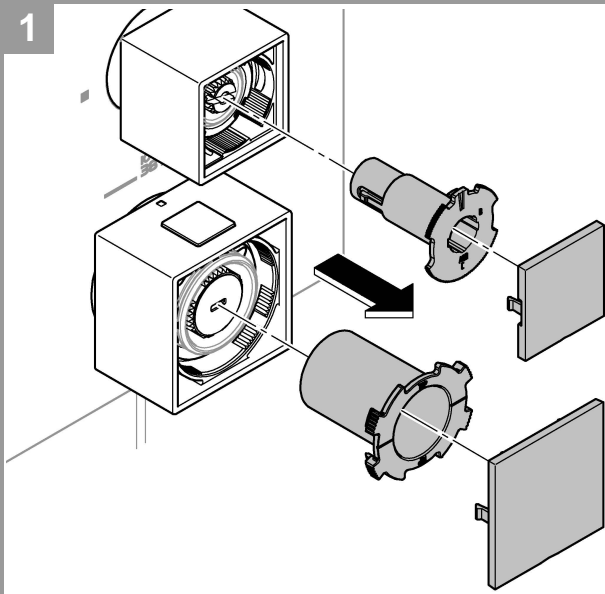


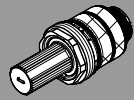
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MAINTENANCE 

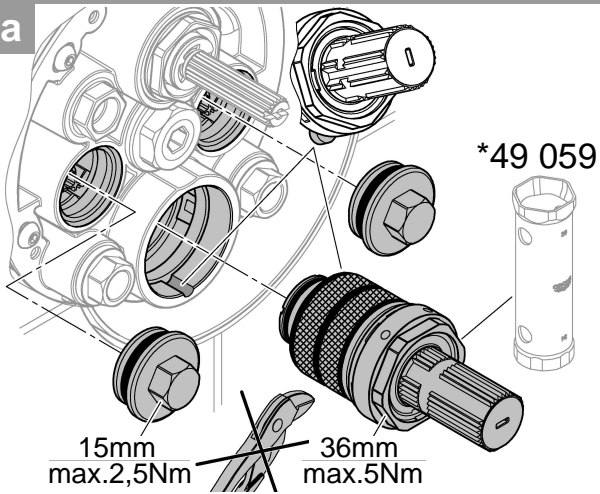




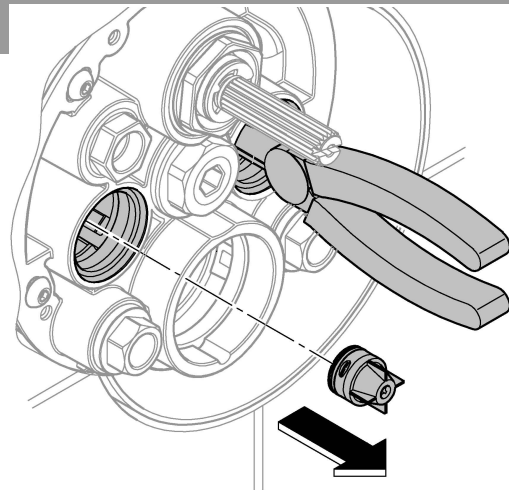
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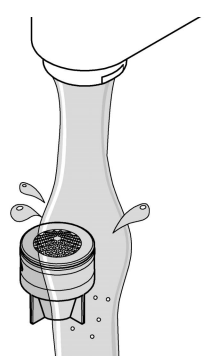
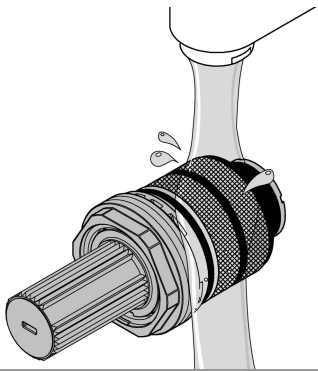
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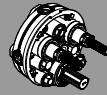
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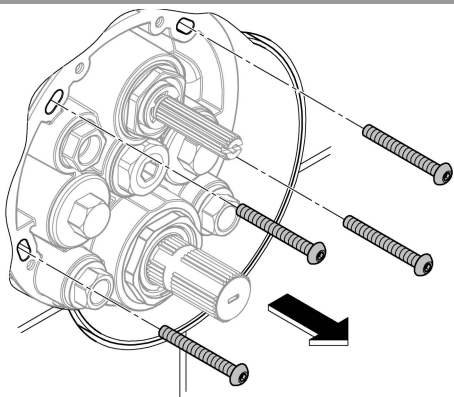
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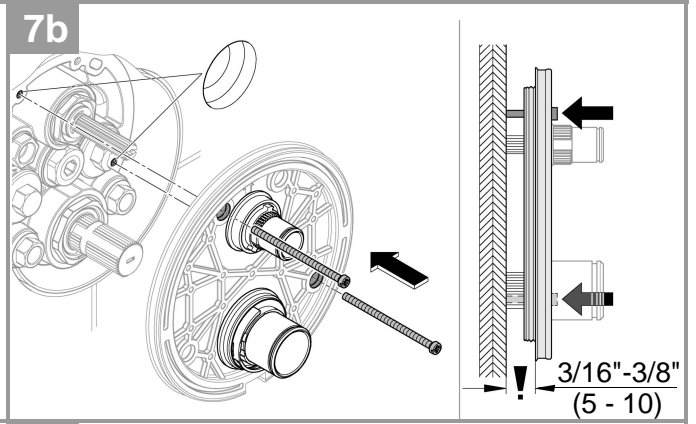
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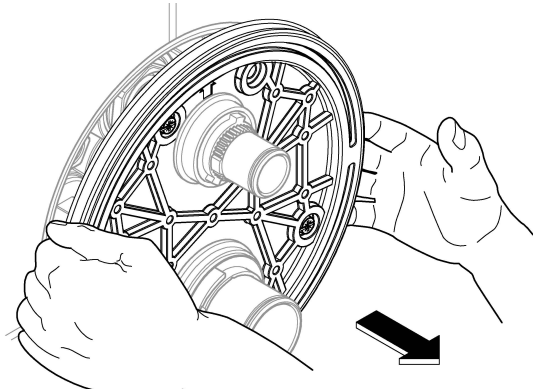
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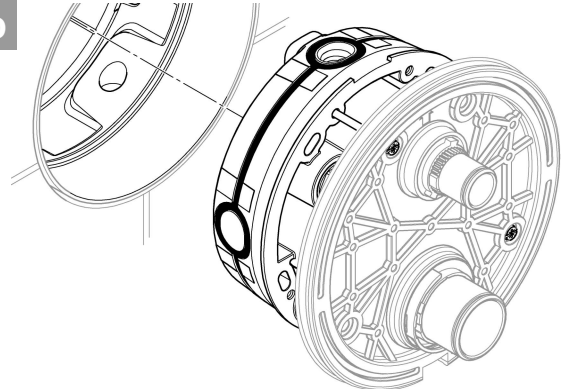
7b



8b



9b



## Safety information



### Avoiding scalding

It is recommended that thermostatic devices able to limit the water temperature to 109 °F be installed at points of discharge with special attention to the outlet temperature (hospitals, schools, nursing and retirement homes). This product is equipped with a temperature end stop. It is generally recommended that the temperature of shower systems not exceed 100 °F in nurseries and specific areas in care homes. Use Grohtherm Special thermostats with special handles for facilitating thermal disinfection and with an appropriate safety end stop. Applicable standards and technical regulations for potable water must be observed.

## Technical Data

- Flow pressure
- Minimum flow pressure without downstream resistances 7.25 psi
- Minimum flow pressure with downstream resistances 14.5 psi
- Recommended 21.75–72.5 psi
- Minimum flow rate 1.3 gpm
- Temperature
- Hot water supply max. 158 °F
- Recommended for energy saving 140 °F
- Thermal disinfection possible
- Hot water temperature at supply connection min. 36 °F higher than mixed water temperature

Flow rates without downstream resistances, see page 1.

**These should be observed when dimensioning the outlet!**

**The following special accessories are available:**

- Extension 25mm (prod. no.: 14 058)
- An approved safety device is prescribed according to EN 1717 for combining with bath fillers and pop-up overflows (prod. no. 14 055)
- Isolating valves (prod. no.: 14 053)

Thermostat compact cartridge for exchanged water channels: Reversed connections, hot on right and cold on left, replace compact cartridge (prod. no.: 49 003)

## Installation

- In order to flush, remove the plugs (Y), see page 2 Fig. [4].
- Open cold and hot water supply and check connections for watertightness!
- Alignment of functional unit by 6° possible.

## Adjusting to 100 °F

- Before the mixer is put into service if the mixed water temperature measured at the point of discharge varies from the desired temperature set on the thermostat, see page 5 Fig. [16].
- Every time following maintenance on the thermostatic compact cartridge.

**Handle functions** (may vary depending on the product)

One function: Shut-off handle (outlet B or C)

Two functions: Aquadimmer (outlets B + C)

### Shut-off handle

- Align adjustment ring vertically to the **left mark**, see page 6, Fig. 25.

## Aquadimmer

- To avoid leakages when adjusting the Aquadimmer, refer to page 5, Fig. 18.
- Align adjustment ring vertically to the **right mark**, see page 6, Fig. 25.

## Temperature limitation

The safety stop limits the temperature range to 100 °F. If a higher temperature is required, the 100 °F stop can be overridden by pressing the button.

## Temperature end stop

If the temperature stop is at 109 °F or 115 °F, the supplied temperature stop must be inserted into the correct position, see page 7-9.

## Danger of frost damage

When the domestic water system is drained, the thermostats must be drained separately since non-return valves are installed in the hot and cold water connections.

## Consignes de sécurité



### Prévention contre les brûlures

Pour les points de puisage où la température de l'eau est particulièrement critique (hôpitaux, écoles, résidences médicalisées), il est recommandé d'utiliser systématiquement des thermostatiques pouvant être limités à 43 °C. Ce produit est équipé d'une butée de température. Pour les systèmes de douche dans les écoles maternelles et dans certaines parties de résidences médicalisées, il est généralement recommandé de ne pas dépasser une température de 38 °C. Utiliser dans ce cas les thermostatiques Grohtherm Special avec poignée spéciale pour l'aide à la désinfection thermique avec butée de sécurité. Respecter les normes (par ex. EN 806-2) ainsi que les réglementations techniques en vigueur concernant l'eau potable.

## Caractéristiques techniques

- Pression dynamique
- Pression dynamique minimale sans résistances en aval 0,5 bar
- Pression dynamique minimale avec résistances en aval 1 bar
- Recommandée 1,5 à 5 bars
- Débit minimal 5 l/min
- Température
- Entrée d'eau chaude max. 70 °C
- Recommandée pour économie d'énergie 60 °C
- Désinfection thermique possible
- Température de l'eau chaude au raccord d'alimentation au moins 2 °C supérieure à la température de l'eau mitigée

Débits sans résistances en aval, voir page 1. **Respecter les données indiquées lors du dimensionnement de l'évacuation !**

**Les accessoires spéciaux suivants sont disponibles :**

- Extension de 25mm (réf. : 14 058)
- Pour la combinaison avec garnitures de trop-plein et de remplissage, la pose d'un dispositif de sécurité autorisé par la norme EN 1717 est obligatoire (réf. : 14 055)
- Robinets de barrage (réf. : 14 053)

Cartouche compacte de thermostatique pour raccords inversés : Raccords inversés (chaud à droite, froid à gauche), remplacer la cartouche compacte (réf. : 49 003)

## Installation

- Pour le rinçage, démonter les clapets (Y), voir page 2, fig. [4].
- Ouvrir les arrivées d'eau froide et d'eau chaude et vérifier l'étanchéité des raccordements.
- Possibilité d'orienter l'unité de commande de 6°.

## Réglage sur 38 °C

- Préablement à la mise en service : si la température de l'eau mitigée mesurée au point de puisage est différente de la température souhaitée réglée au niveau de la poignée graduée du thermostatique, voir page 5, fig. [16].
- Après chaque opération de maintenance sur la cartouche compacte du thermostatique.

## Fonctions de la poignée (selon produit)

Une fonction : Poignée d'arrêt (sortie B ou C)

Deux fonctions : Aquadimmer (sortie B + C)

### Poignée d'arrêt

- Disposer la bague de réglage verticalement sur le **repère gauche**, voir page 6, fig. 25.

### Aquadimmer

- Pour éviter tout risque de fuite, tenir compte des indications de la page 5 fig. 18 pour le réglage de l'Aquadimmer.
- Disposer la bague de réglage verticalement sur le **repère droit**, voir page 6, fig. 25.

## Limitation de la température

La température est limitée à 38 °C par la butée de sécurité. Il est possible d'obtenir une température plus élevée (supérieure à 38 °C) en appuyant sur le bouton.

## Butée de température maximale

Si la température maximale doit être réglée sur 43 °C ou 46 °C, la butée de température fournie doit être installée dans la position correspondante, voir page 7-9.

## Attention en cas de risque de gel

Lors du vidage de l'installation sanitaire, il convient de vider séparément les thermostatiques dont les raccordements d'eau froide et d'eau chaude sont équipés de clapets anti-retour.

**E**

## Información de seguridad



### Prevención de quemaduras

En el punto de consumo, con especial atención en la temperatura de salida (hospitales, escuelas y residencias geriátricas y para la tercera edad), se recomienda utilizar termostatos que se puedan limitar hasta los 43 °C. Este producto está equipado con un tope limitador de temperatura. En las instalaciones de duchas en guarderías y zonas especiales de residencias geriátricas, se recomienda que la temperatura no sobrepase los 38 °C. Para ello, utilizar el termostato Special Grohtherm con regulador para facilitar la desinfección térmica y el tope de seguridad correspondiente. Tenga en cuenta las normas vigentes (p. ej., EN 806-2) y las especificaciones técnicas sobre el agua potable.

## Datos técnicos

- Presión de trabajo
- Presión mínima de trabajo sin resistencias postacopladas 0,5 bar
- Presión mínima de trabajo con resistencias postacoplada 1 bar

- Recomendado 1,5-5 bar
- Caudal mínimo 5 l/min
- Temperatura
- Entrada de agua caliente máx. 70 °C
- Recomendado para ahorrar energía 60 °C
- Desinfección térmica posible

- La temperatura del agua caliente en la acometida de mín. 2 °C es superior a la temperatura del agua mezclada

Caudales sin resistencias postacopladas, véase la página 1.

**Tenga en cuenta las dimensiones del desagüe.**

**Los siguientes accesorios especiales están disponibles:**

- Prolongación de 25mm (n.º de pedido: 14 058)
- Según la normativa EN 1717, es necesario disponer de un dispositivo de seguridad autorizado para combinar el juego para llenado y el juego para rebose (n.º de pedido: 14 055)
- Bloqueos de seguridad (n.º de pedido: 14 053)

Cartuchos compactos de termostato para las entradas de agua intercambiadas: Conexión invertida, sustituir los cartuchos compactos, los calientes en el lado derecho y los fríos en el izquierdo (n.º de pedido: 49 003)

## Instalación

- Para lavar, desmonte el tapón (Y), véase la página 2 fig. [4].
- Abrir las llaves de paso del agua fría y del agua caliente y comprobar la estanqueidad de las conexiones.
- Es posible alinear la unidad de funcionamiento 6°.

## Ajustar a 38 °C

- Antes de la puesta en servicio, si la temperatura del agua mezclada medida en el punto de consumo difiere de la temperatura teórica ajustada en el termostato, véase la página 5 fig. [16].
- Después de cada operación de mantenimiento en el cartucho compacto del termostato.

## Funciones de agarre (varían según el producto)

Una función: Volante de apertura y cierre (salida B o C)

Dos funciones: Aquadimmer (salida B + C)

### Volante de apertura y cierre

- Alinee verticalmente el anillo de ajuste en la **marca izquierda**, véase página 6, fig. 25.

### Aquadimmer

- Para evitar fugas, debe tener en cuenta imprescindiblemente la página 5, fig. 18 para el ajuste del Aquadimmer.
- Alinee verticalmente el anillo de ajuste en la marca derecha, véase página 6, fig. 25.

## Limitación de la temperatura

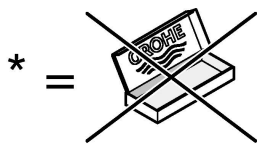
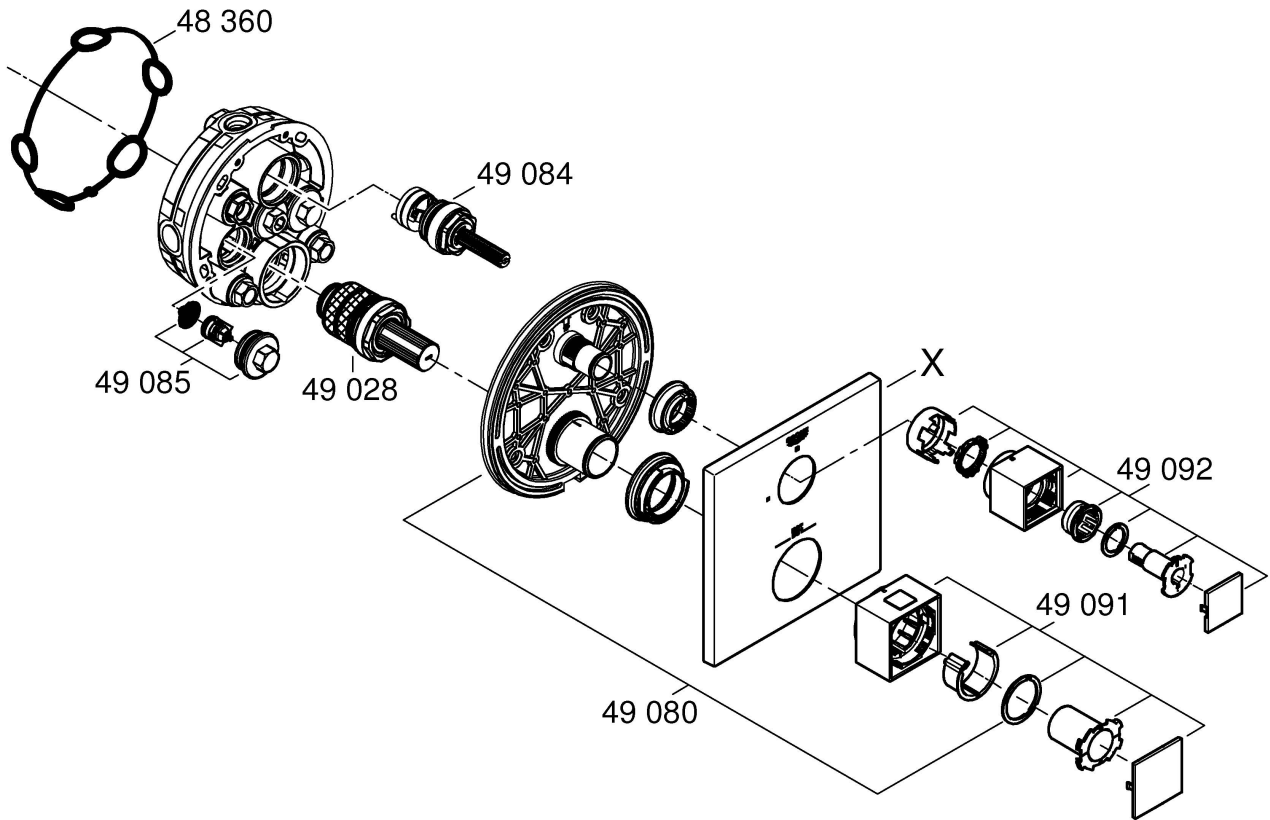
La gama de temperaturas está limitada a 38 °C mediante el cierre de seguridad. Si desea seleccionar una temperatura más alta, se puede exceder el límite de 38 °C presionando la tecla.

## Tope limitador de temperatura

Si el tope limitador de temperatura debe estar en los 43 °C o en los 46 °C, este tope limitador de temperatura proporcionado debe colocarse en la posición correspondiente, véase la página 7-9.

## Atención en caso de peligro de helada

Al vaciar la instalación de la casa, los termostatos deberán vaciarse por separado, ya que hay válvulas antirretorno en las conexiones del agua fría y caliente.



*49 003		*49 059	36mm 
*14 053		*14 055	
		*14 058	

X
49 101 
49 104 

Pure Freude an Wasser

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