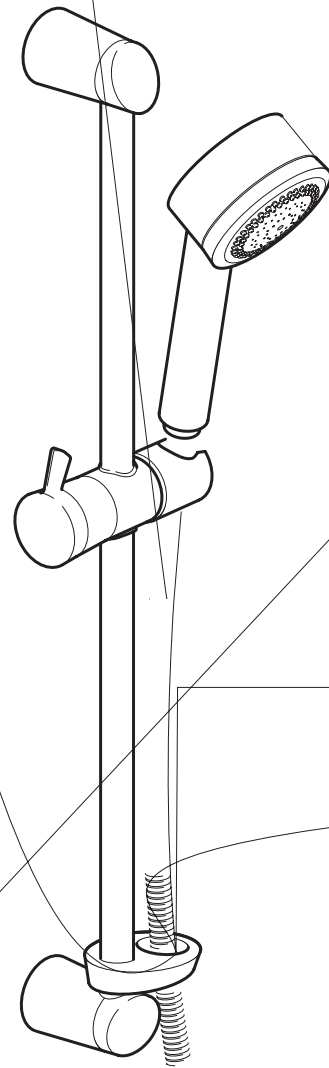
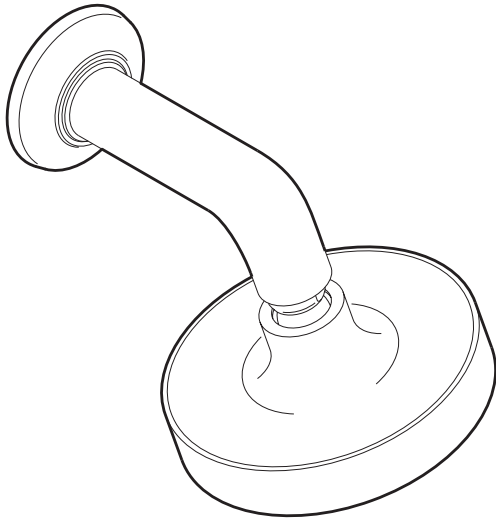


***mira***

*Discovery*



## SHOWER FITTINGS

Installation & User Guide

**THESE INSTRUCTIONS ARE TO BE LEFT WITH THE USER**

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Thank you for purchasing a quality product. To enjoy the full potential of your new product, please take time to read this guide thoroughly, having done so, keep it handy for future reference.

Mira shower fittings are precision engineered to give a satisfactory shower over a range of pressures. The fittings are suitable for pressures up to 5.0 bar and pressures down to 0.05 bar.

This product comprises one of the following:

- An adjustable spray handset with four different spray actions is supplied complete with flexible hose, adjustable clamp bracket assembly, slide bar, hose retainer and supports. Suitable for connection to both surface mounted and built-in shower controls.
- A rigid outlet fitting with a single spray action and an adjustable head for altering spray direction.

If you experience any difficulty with the installation or operation of your new shower fittings, then please refer to **Section 10. "Fault Diagnosis"**, before contacting Kohler Mira Limited. Our telephone and fax numbers can be found on the back cover of this guide.

## 1. WARNING!

Products manufactured by us are safe and without risk provided they are installed, used and maintained in good working order in accordance with our instructions and recommendations.

## 2. Caution!

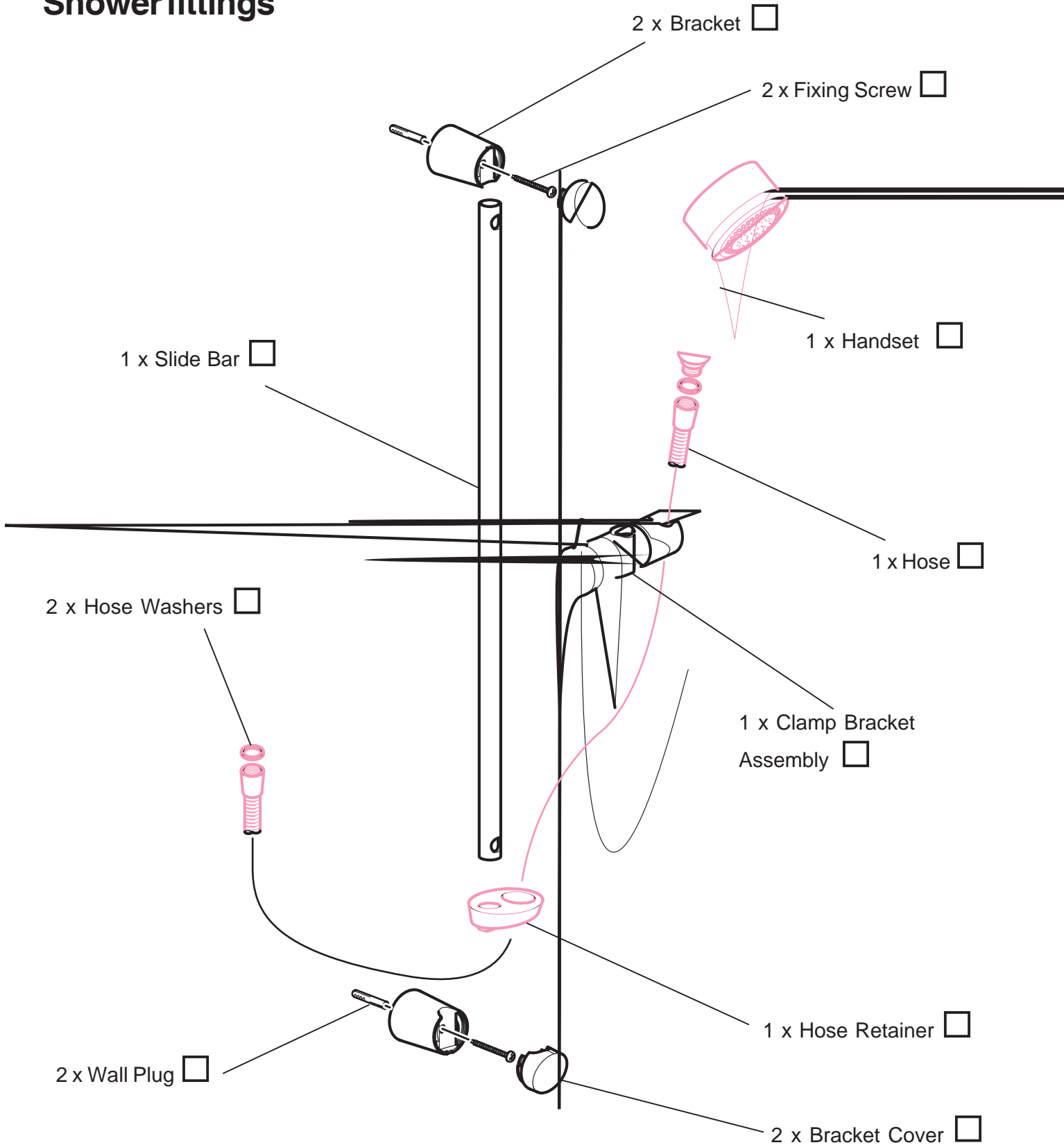
- 2.1. Read all of these instructions.**
- 2.2.** Retain this guide for later use.
- 2.3.** Pass on this guide in the event of change of ownership of the installation site.
- 2.4.** Follow all warnings, cautions and instructions contained in this guide.
- 2.5.** The plumbing installation must comply with the requirements of UK Water Supply Regulations/Bye-laws (Scotland), Building Regulations or any particular regulations and practices, specified by the local water company or water undertakers.
- 2.6.** Anyone who may have difficulty understanding or operating the controls of any shower should be attended whilst showering. Particular consideration should be given to the young, the elderly, the infirm, or anyone inexperienced in the correct operation of the controls.
- 2.7.** When this product has reached the end of its serviceable life, it should be disposed of in a safe manner, in accordance with current local authority recycling, or waste disposal policy.

Section  
3

# Pack Contents Checklist

Tick the appropriate boxes to familiarise yourself with the part names and to confirm that the parts are included.

## Shower fittings



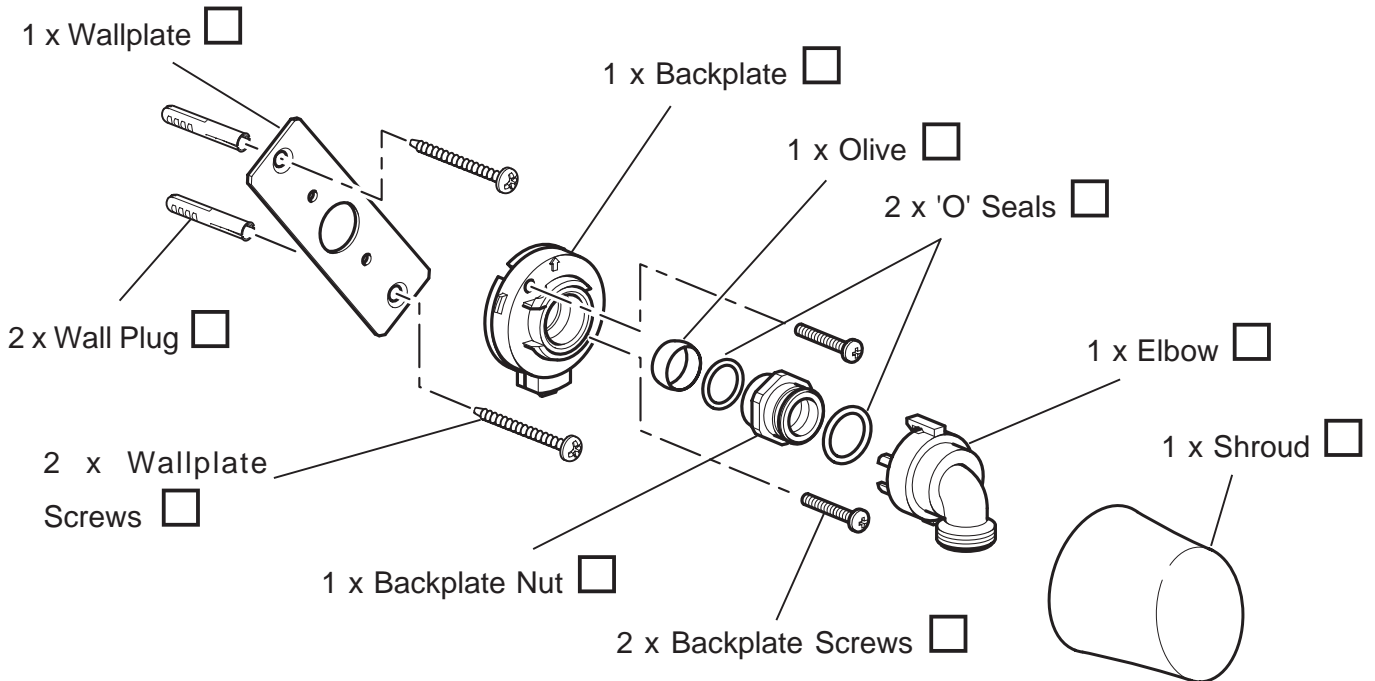
Section  
3

# Pack Contents Checklist

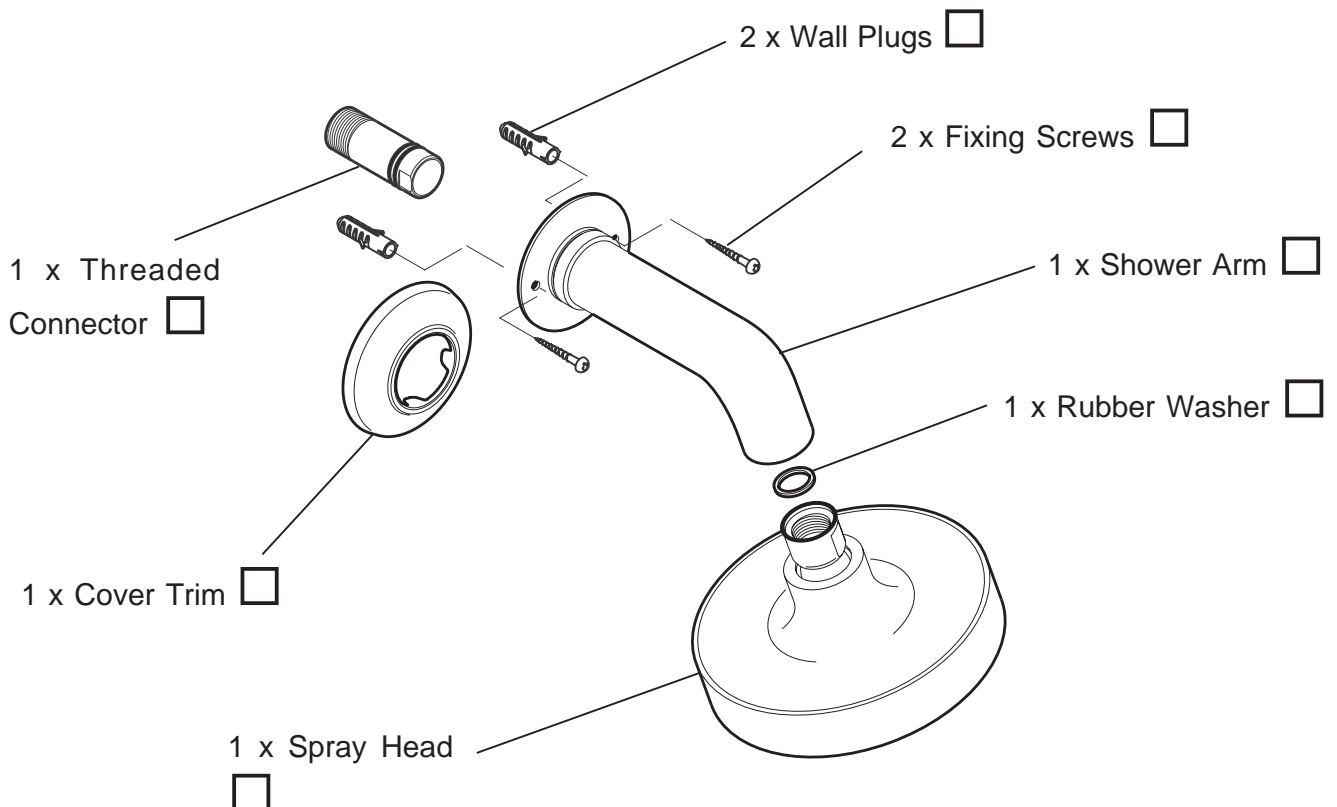
☑ Tick the appropriate boxes to familiarise yourself with the part names and to confirm that the parts are included.

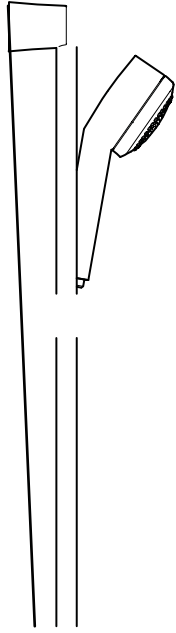
## Shower fittings

### BIV - Built-In Variable Right Angle Connector Fittings Pack



### BIR - Built-In Rigid Arm and Shower Head Fittings Pack





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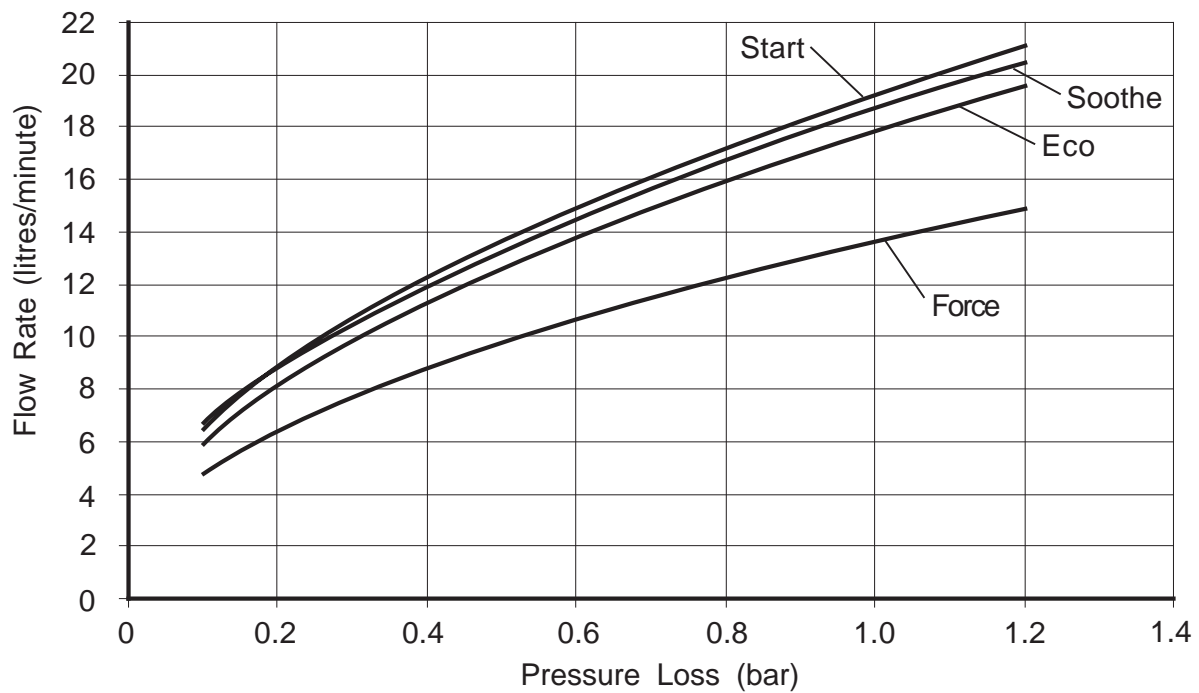
Minimum maintained pressure: **0.05 bar**.

Maximum maintained pressure: **5.0 bar**.

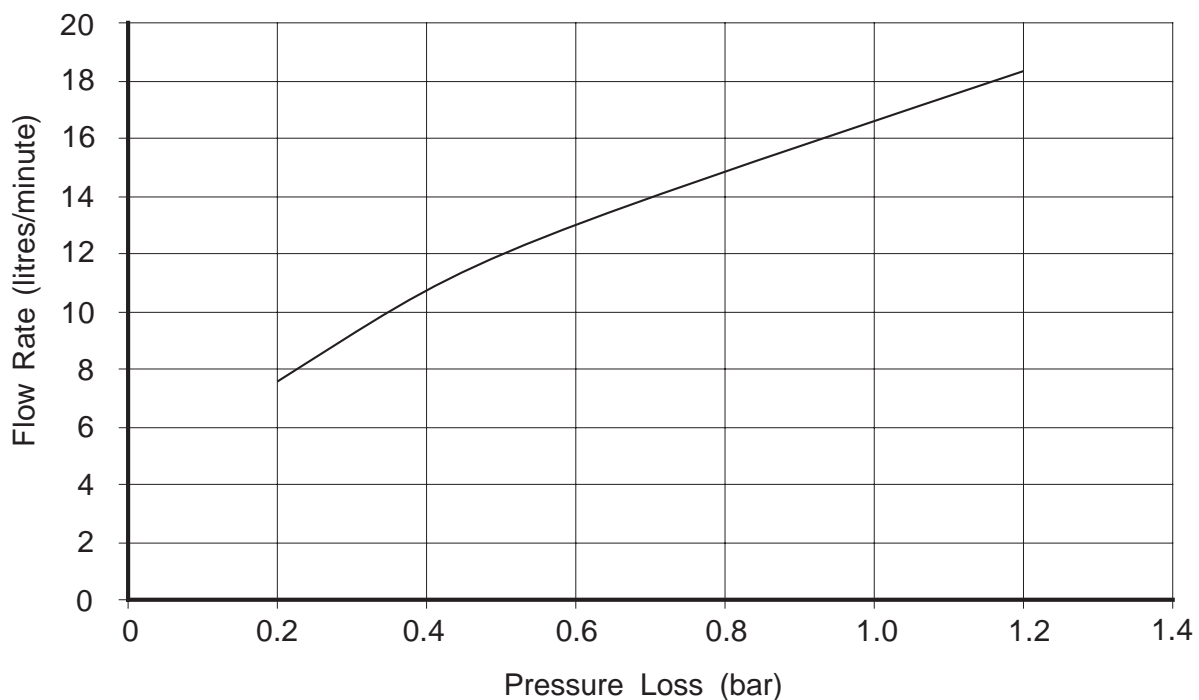
**Warning!** Exceeding the stated maximum maintained pressure could result in excessive spray forces and possible damage to the handset.

Pressure loss = Pressure difference between the inlet and outlet of the fitting.

### Mira Discovery adjustable range flow rates - Low capacity nozzle rings fitted



### Mira Discovery rigid fitting flow rates - Flow Regulator not fitted



## 1. Plumbing

Read the section “**Important Safety Information**” first.

- 1.1. Supply pipework **MUST** be flushed to clear debris before connecting the appliance.
- 1.2. A hose retaining ring is supplied to prevent the handset from dropping below the spill-over level of the bath or shower, which could lead to contamination from back siphonage. The supplied hose retaining ring should meet the great majority of user requirements for shower installations with flexible outlet fittings. However, there will be occasions when the hose retaining ring will not provide a suitable solution. In these instances an **outlet** double checkvalve may be fitted.
- 1.3. Avoid layouts where the shower hose will be sharply kinked. This may reduce the life of the hose.
- 1.4. **Do not** fit any form of flow control in the outlet pipework if the shower fitting is installed in conjunction with a product that requires the fitting to act as a vent (e.g. an electric shower).
- 1.5. **Do not** use excessive force when making connections.
- 1.6. **Do not** install the product in a position where it could become frozen.
- 1.7. The layout and sizing of pipework should be such that when other services are used, pressures do not fall below the recommended minimum for that fitting as this will cause the spray pattern to collapse.
- 1.8. Perceived sound levels of the handset and spray impingement, will be affected by the spray pattern selected and flow rates.

## 1. Mira Discovery ev - Exposed Variable Shower Fittings

Solid, dry-lined, stud partition, shower cubicle or laminated panel walls

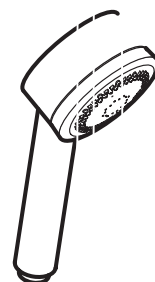
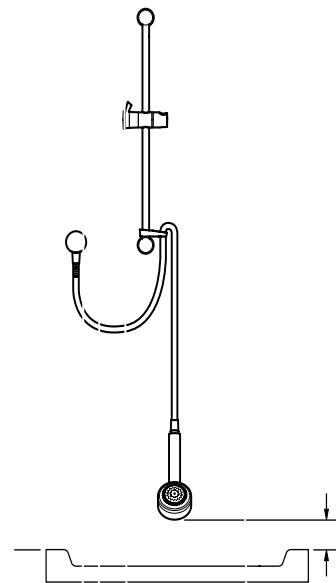
Read the section “**Installation Requirements**” first.

The slide bar should be fixed to the wall to one side of the product and at a convenient height for all the family. It should be positioned so that it discharges down the centre line of the bath, or across the opening of a shower cubicle and should be directed away from the shower control.

The right angled connector assembly (RAC) for use with built-in shower controls, should be positioned above and offset from the top outlet of the shower control. This will prevent the flexible hose from obstructing the temperature and flow controls used to operate the shower. The pipework between the shower control and the RAC fitting is not supplied as part of the product.

**1.1.** Decide on a suitable location for the slide bar avoiding buried cables and pipes. The position of the shower control and the shower fittings must provide a minimum gap of 25 mm between the spill-over level and the handset. This is to prevent back siphonage. Alternatively an **outlet** double check valve can be fitted.

**1.2.** Screw the hose onto the handset. Make sure that the hose washer is fitted.





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## 2. Mira Discovery biv - Built-in Right Angle Connector (RAC)

Read the section “**Installation Requirements**” first.

The right angled connector assembly (RAC) for use with built-in shower controls, should be positioned above and offset from the top outlet of the shower control. This will prevent the flexible hose from obstructing the temperature and flow controls used to operate the shower. The pipework between the shower control and the RAC fitting is not supplied as part of the product.

**2.1.** The end of the **15 mm** pipework from the outlet of the shower control must protrude through the finished wall surface by **20 - 23 mm**. The pipework is to be vertical or horizontal and positioned so that it does not interfere with the fixing screws of either the shower control or the RAC.

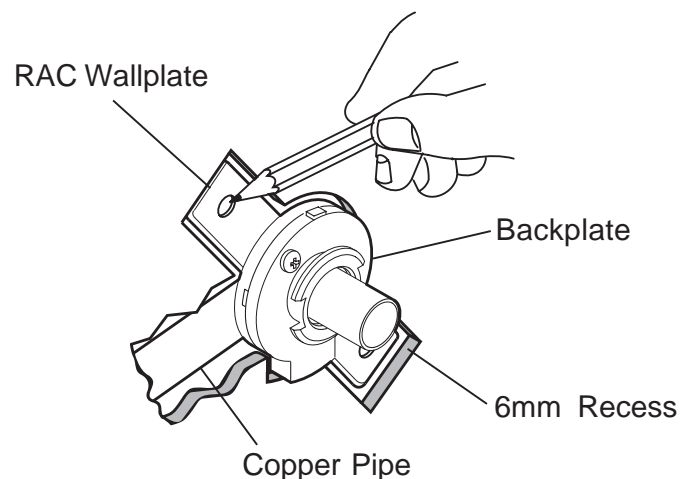
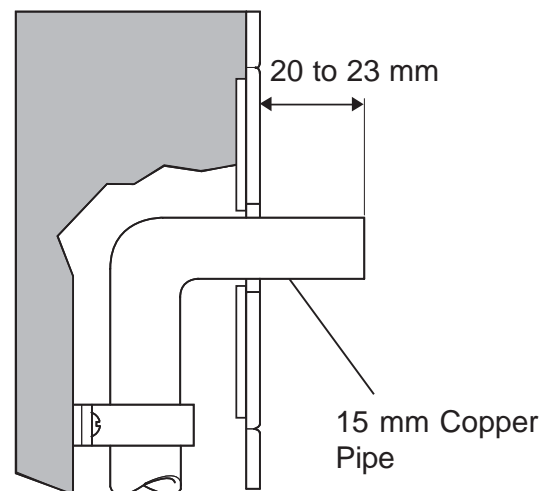
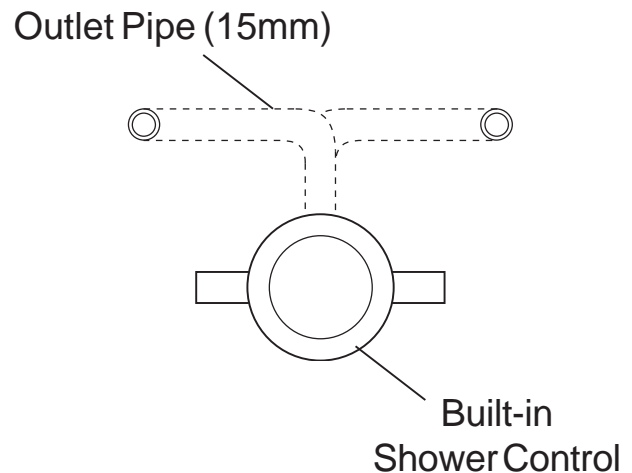
**2.2.** The copper pipe must protrude through the wall between 20 - 23 mm from the finished surface of the wall. If the pipe protrudes further than 23 mm it will prevent the backplate nut from engaging with the backplate. If necessary cut the pipe to the correct length and remove any burrs.

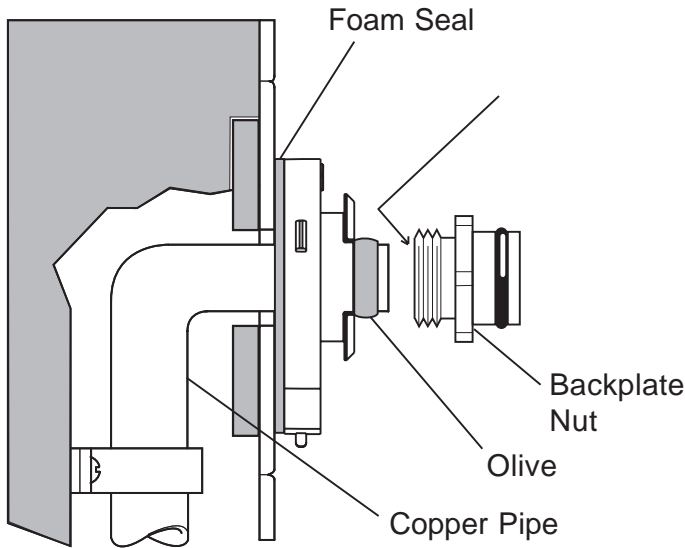
**2.3.** Loosely screw the backplate to the RAC wallplate with the two screws provided.

**2.4.** Place the RAC wall plate and backplate assembly over the copper pipe.

**2.5.** Mark the position of the RAC wallplate and its fixing holes on the wall.

**2.6.** Remove the screws and RAC wallplate from the backplate.





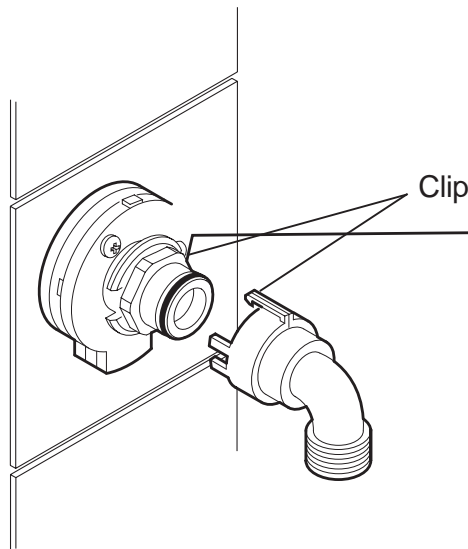
**2.7.** Drill the two RAC wallplate fixing holes, if necessary make a recess approximately 6 mm deep to accept the RAC wallplate. Plug the two fixing holes.

**2.8.** Fix the RAC wallplate to the wall with the two fixing screws.

**2.9.** Temporarily fit the two fixing screws to the RAC wallplate. This will prevent the holes from becoming blocked with plaster and grout.

**2.10.** Finish the surface of the wall as required ensuring the pipework is protruding by at least 20mm.

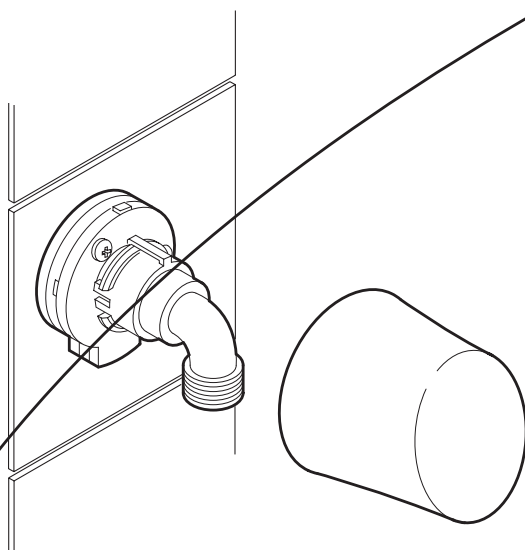
**2.11.** Remove the two fixing screws.



**2.12.** Make sure that the foam seal abuts the finished wall surface. Place the backplate against the foam seal and use the two screws supplied to fix the backplate to the wall. Ensure that the 'O' seal is fitted to the inside of the backplate nut.

**2.12.** Fit the compression olive and backplate nut. Carefully tighten to seal.

**2.13.** Ensure the external 'O' seal is fitted to the backplate nut. Ensure the clips on the elbow are fully engaged with the backplate.



**2.16.** Locate the RAC shroud over the elbow. Carefully push the shroud until it engages with the lugs on the backplate.

**2.17.** To complete the installation fit the hose, slide bar and handset.

### 3. Mira Discovery bir - Built-in Rigid Shower Fittings

**Solid, dry-lined, stud partition, shower cubicle or laminated panel walls**

Read the section “**Installation Requirements**” first.

The bir spray head should be positioned at a convenient height for all the family. It should be positioned so that it discharges down the centre line of the bath, or across the opening of the shower cubicle and it should be directed away from the shower control.

**3.1.** Cut the hole 30mm diameter in the panel or rough cut the wall to fit the pipework. The pipe end must be fitted with a 15mm x 1/2" BSP female thread elbow or similar fitting (not supplied).

**3.2.** The supplied threaded connector must protrude 35-45mm from the finished wall surface.

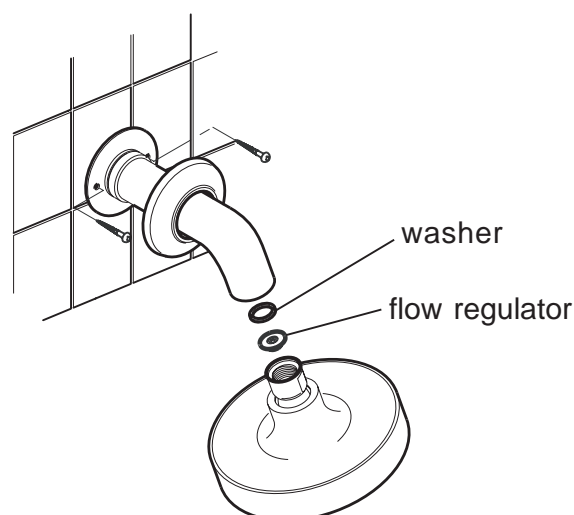
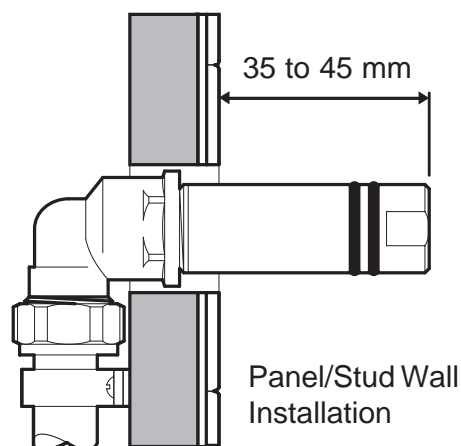
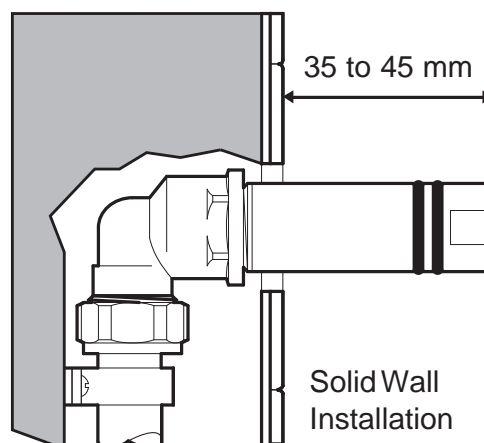
**3.3.** Fit the threaded connector into the female fitting using PTFE tape or other suitable thread sealant to create a watertight seal.

**3.4.** Temporarily fit the shower arm onto the threaded connector and mark the position of the two holes. Remove the shower arm, then drill and plug the holes using either the supplied fixings or a suitable fixing for any other type of wall structure (not supplied).

**3.5.** Refit the shower arm onto the connector and secure to the wall using the two screws.

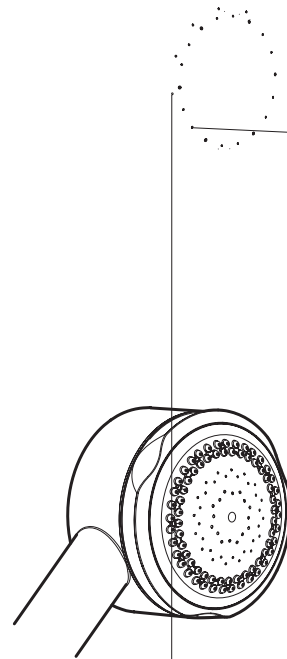
**3.6.** Slide the cover trim over the shower arm and push fit into place. Fit the spray head using an appropriate spanner. It is recommended that a suitable cloth is used to protect the chrome finish when tightening the spray head.

Note! If necessary, for high pressure systems, a 12 litre/minute flow regulator (supplied) can be fitted under the hose washer.



## 1. Spray action

The handset spray head has four different spray actions:- start, combination, calm, combination and blast setting. The handset operation is described below.





Read the section “**Important Safety Information**” first.

Provided that the shower fitting has been correctly installed and is operated in accordance with the instructions contained in this guide, difficulties should not arise. If any maintenance is required then it must be carried out by a competent tradesperson for whom the fault diagnosis chart and maintenance instructions are provided. Before replacing any parts ensure that the underlying cause of the malfunction has been identified.

Malfunction	Cause	Remedy
No flow or low flow rate from shower fittings.	Spray plate assembly blocked.  Hose blocked or twisted.  Problem with shower control.	Refer to <b>Section 9 Maintenance: “1. Cleaning”</b> .  Clear blockage or release twist in hose.  Refer to shower control Installation and User Guide.
Drip from the handset spray plate.	A small amount of water may be retained in the shower handset after the shower control has been turned off. This may drain over a few minutes.  Defective seal(s) in the shower control.	This is quite normal. Adjusting the position of the shower handset may reduce the draining time.  Refer to shower control Installation and User Guide.
Shower temperature changes when the spray setting is adjusted.	Spray plate assembly blocked.  Adjusting the spray setting changes the water flow rate.	Make sure that the spray plate assembly is clean. Refer to <b>Section 9, Maintenance: “1. Cleaning”</b> .  If the malfunction persists refer to the shower control Installation and User Guide.

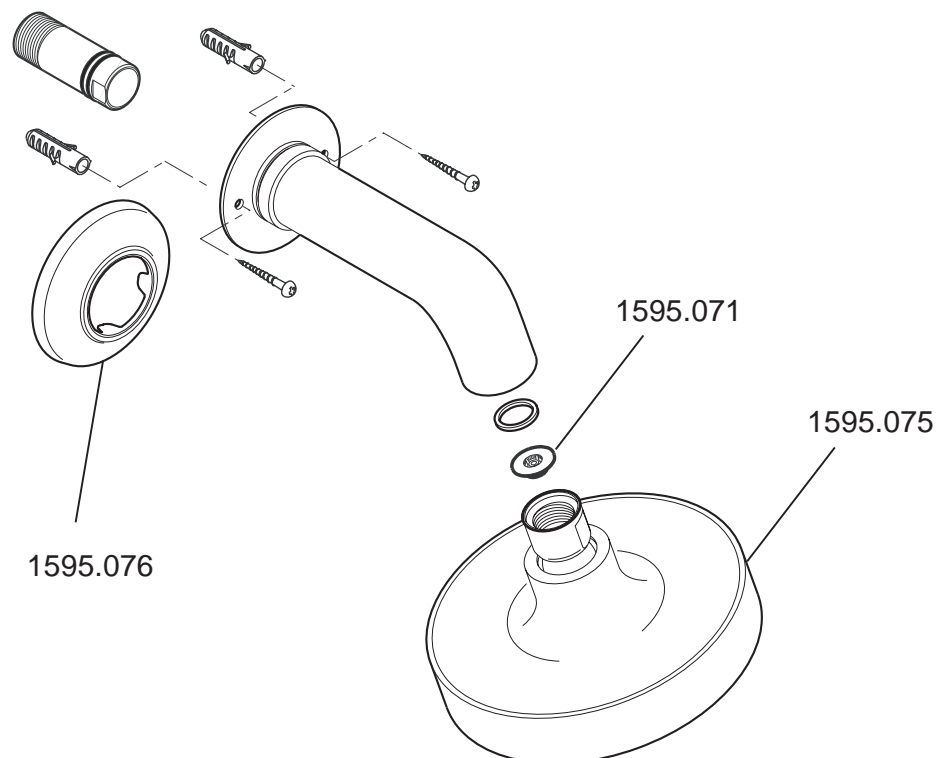
## 1. Adjustable Fittings Spare parts list

1595.030	Handset
1595.034	Slide Bar Support Assembly (components marked 'A')
1595.033	Clamp Bracket Assembly
1595.077	Screw Pack (components marked 'B')
150.58	Hose
1595.074	Slide Bar
1595.073	Hose Retainer
632.73	Hose Washer
1595.035	Right Angle Connector (RAC) Shroud
450.20	RAC Mounting Pack
1595.031	Adjuster Ring
1595.032	Spray Plate Pack LC
1595.071	Flow Regulator

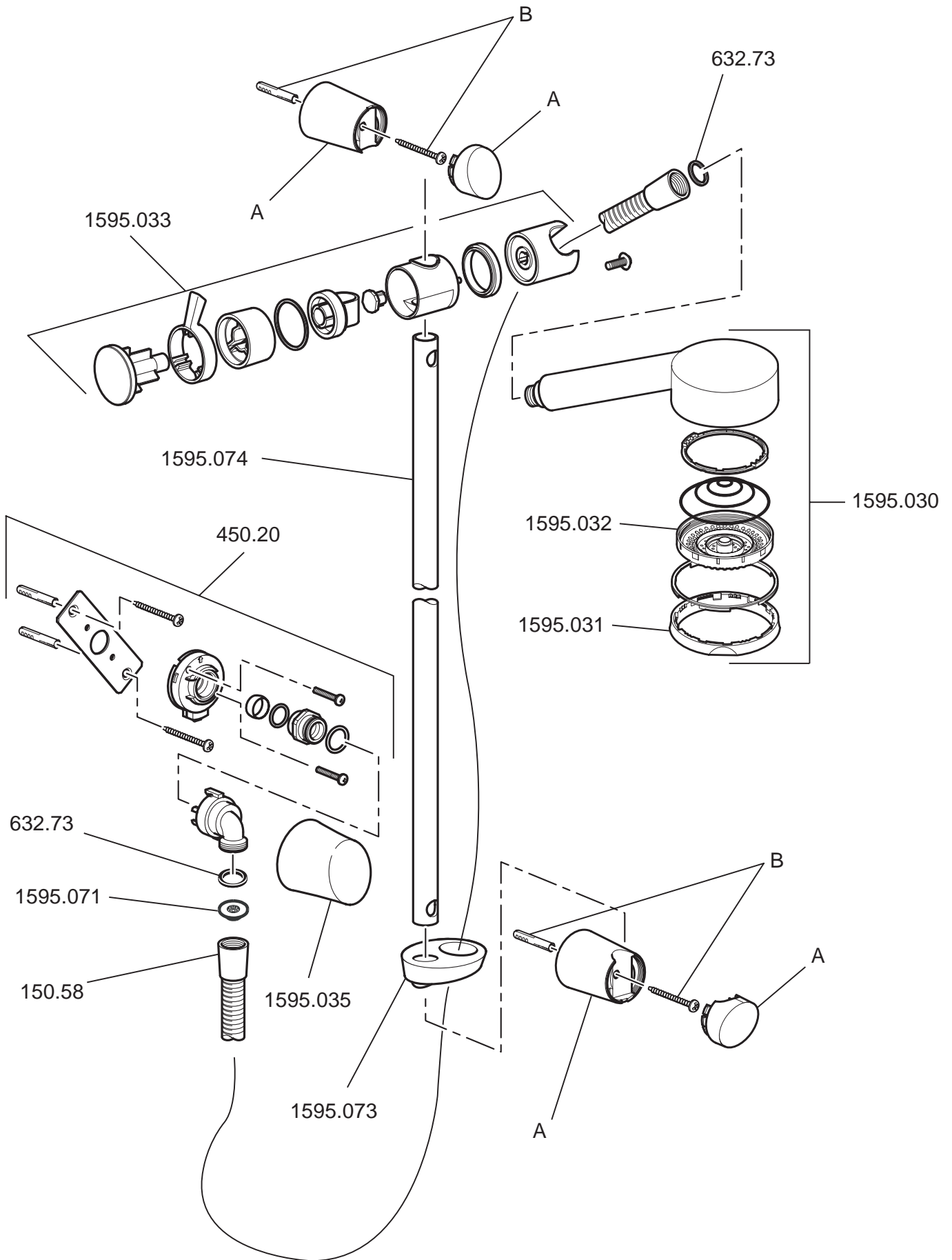
## 2. Rigid Fittings Spare parts list

1595.075	BIR Head
1595.076	Concealing Trim
1595.071	Flow Regulator

## Rigid Fittings Spare parts diagram



# Adjustable Fittings Spare parts diagram



# Customer Service

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**Mira Showers**  
Kohler Mira Ltd.  
Cromwell Road,  
Cheltenham GL52 5EP.

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