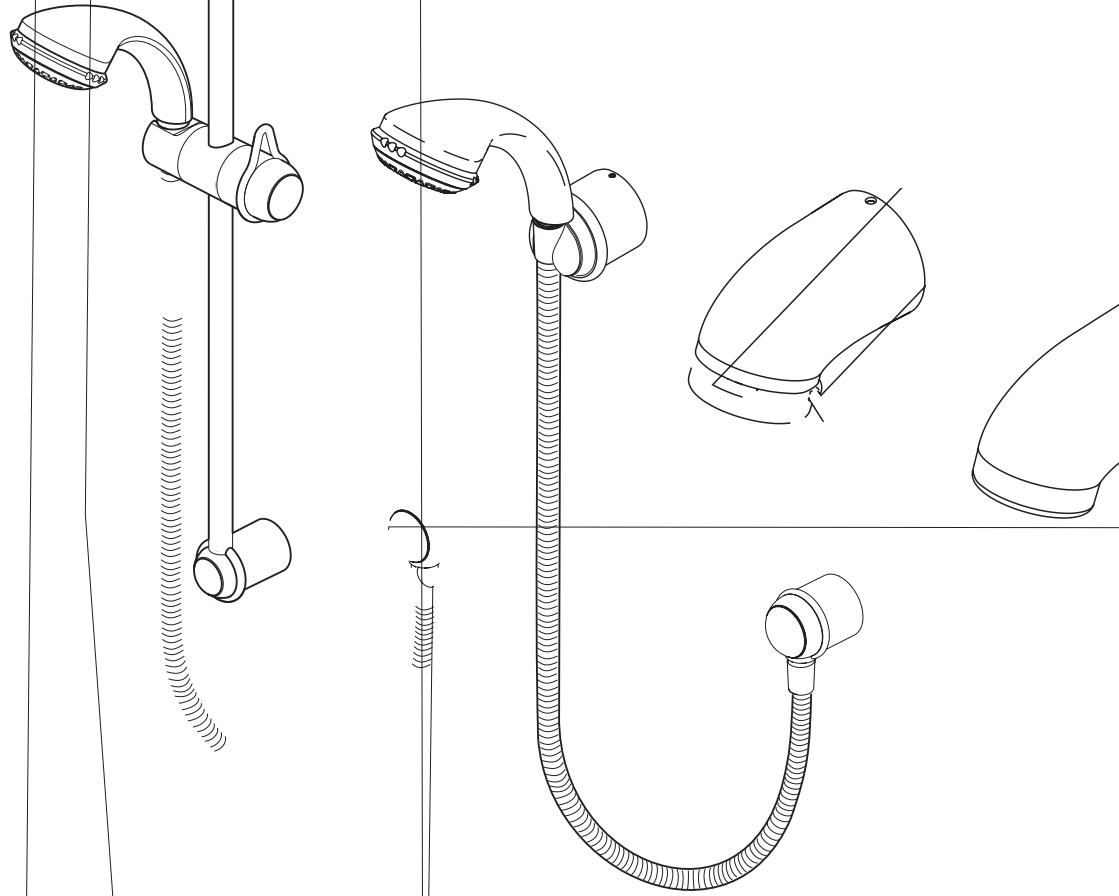


Aquations



SHOWER FITTINGS

Installation

Operation &

DESCRIPTION

SAFETY WARNINGS

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CUSTOMER SERVICE

Back Cover

Mira Aquations range of flexible and rigid shower fittings are precision engineered to provide a satisfactory shower over a range of pressures. They have been designed to work with, but are not restricted to, the Mira Aquations mixer valve.

DESCRIPTION

Following shower fittings are covered by this guide:

Aquations Built-in Variable Shower Fittings (biv)

Adjustable spray handset with three different spray actions (start, force, and economy setting*, supplied complete with right angle connector (RAC), shower slide bar, adjustable handset holder and soap dish. Suitable for connection to concealed supplies. The handset is supplied with a low capacity spray plate and high capacity spray plate. Fittings are available in chrome and mixage finishes.

Aquations Built-in Flexible Shower Fittings (bif)

Adjustable spray handset with three different spray actions (start, force, and economy setting*, supplied complete with right angle connector (RAC), shower slide bar and an adjustable parking socket. Suitable for connection to concealed supplies. The handset is supplied with a low capacity spray plate (fitted), and high capacity spray plate. Fittings are available in chrome and mixage finishes.

Economy setting reduces the water flow to give economical use of water while maintaining an adequate shower performance. This setting performs best with pumped, and mains pressure unvented systems. On some combinations of system the economy setting will have no effect, and will give the same spray action as the start setting.

Aquations Built-in Rigid Shower Fittings (bir)

Adjustable spray head with three different spray actions (start, active and relax), supplied complete with connection to concealed pipework supplies only. The spray head is supplied with a low capacity spray plate (fitted), and high capacity spray plate. Fittings are available in chrome and mixage finishes.

Aquations Built-in Rigid Pin Clean Shower Fittings (bir Pin Clean)

y are installed, commissioned, operated and maintained in accordance
e recommendations given in this Manual.

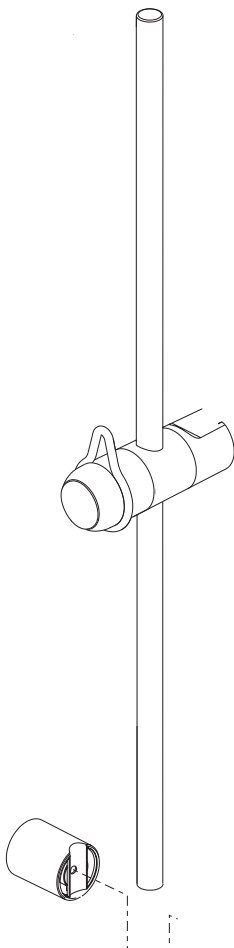
periodic attention is given, as necessary, to maintain the product in
functional order. Recommended guidelines are given in the **MAINTEN**
ction.

PACK CONTENTS

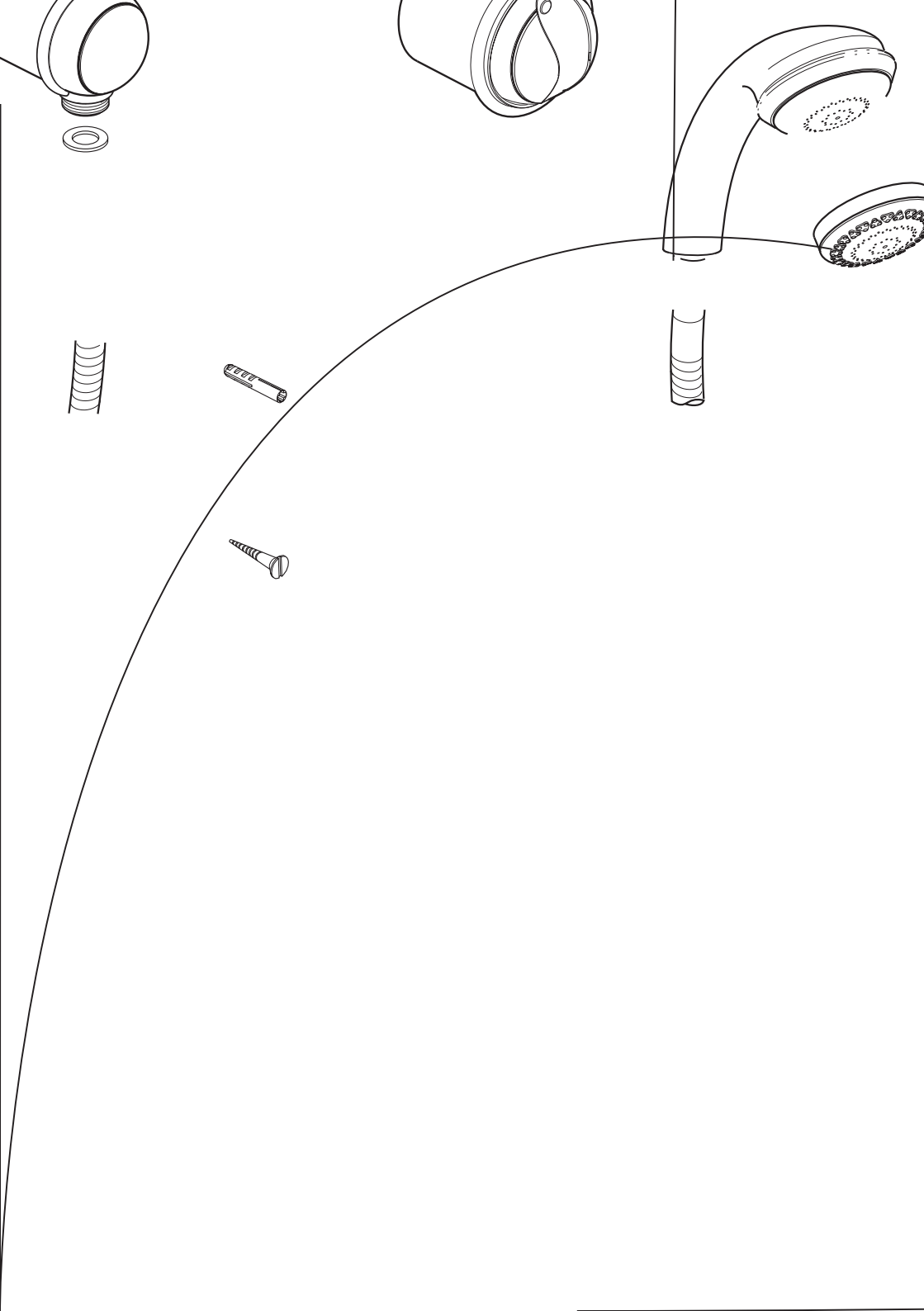
the appropriate boxes to familiarize yourself with the part names and to
the parts are included.

Aquations biv Shower Fittings

1 x Handset with Low
Capacity Spray Plate (small h



1 x High Capacity
Spray Plate (large hole



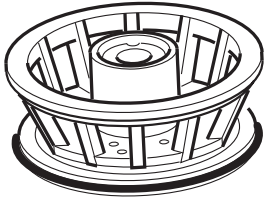
1 x Quad Key



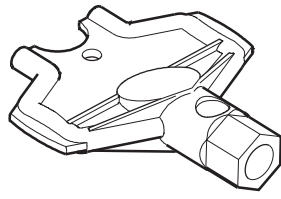
2 x Fixing Screws



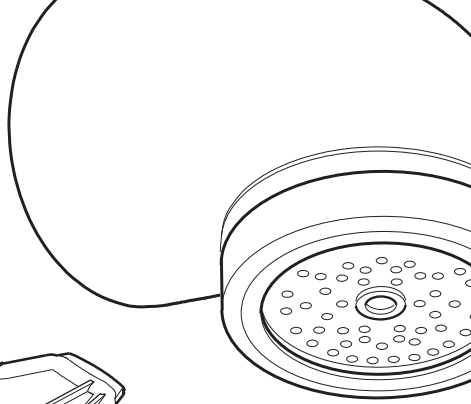
2 x Wall Plugs



1 x Pin Clean High Capacity Spray Unit (large holes)



1 x Quad Key



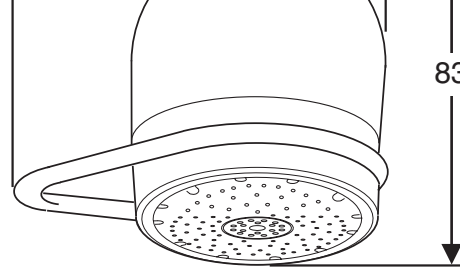
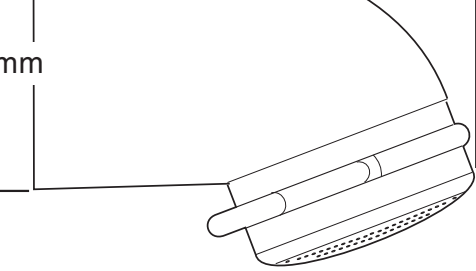
Installation

Installation, Operation and Maintenance Guide

Customer Support Brochure

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12



SPECIFICATION

Important Points:

The installation, commissioning and maintenance of this product must be carried out in accordance with instructions given in this Manual, and must be carried out by designated, qualified and competent personnel.

The plumbing installation must comply with the requirements of UK Building Regulations/Bye-laws (Scotland), Building Regulations or any particular regulations and practices, specified by the local water company or local authority undertakers. The installation should be carried out by a plumber or contractor who is registered, or is a member of, an association such as:

- Institute of Plumbing (IOP), throughout the UK.
- National Association of Plumbing, Heating and Mechanical Services Contractors (NAPH & MSC), England and Wales.
- Scottish and Northern Ireland Plumbing Employers' Federation (SNPEF), Scotland and Northern Ireland.

Our products are precision-engineered and should give continued superior performance, provided:-

- they are installed, commissioned, operated and maintained in accordance with these recommendations.
- periodic attention is given as necessary to maintain the product in functional order. Recommended guidelines are given in the

MAINTENANCE section

Low Capacity Spray Plate Fitted
8.9 litres/minute
11.5 litres/minute
7.5 litres/minute
7.7 litres/minute

High Capacity Spray Plate Fitted
14.9 litres/minute
24.4 litres/minute
13.7 litres/minute
8.7 litres/minute

maintained inlet pressures at the shower control are above 1 bar fit the spray plate to the handset .

Minimum maintained pressure: **5.0 bar**.

Pressures above this range could result in excessive spray force and possible damage to the product.

Bir Fittings

Typical flow rates for the bir handset at 0.5 bar pressure loss are:

Low Capacity Spray Plate Fitted
9.4 litres/minute
9.9 litres/minute
15 litres/minute

High Capacity Spray Plate Fitted
16.4 litres/minute
12.8 litres/minute
19.1 litres/minute

maintained inlet pressures at the shower control are above 1 bar fit the spray plate to the handset .

Minimum maintained pressure: **5.0 bar**.

Pressures above this range could result in excessive spray force and possible damage to the product.

Bir Pin Clean Fittings

Typical flow rates for the bir handset at 0.5 bar pressure loss are:

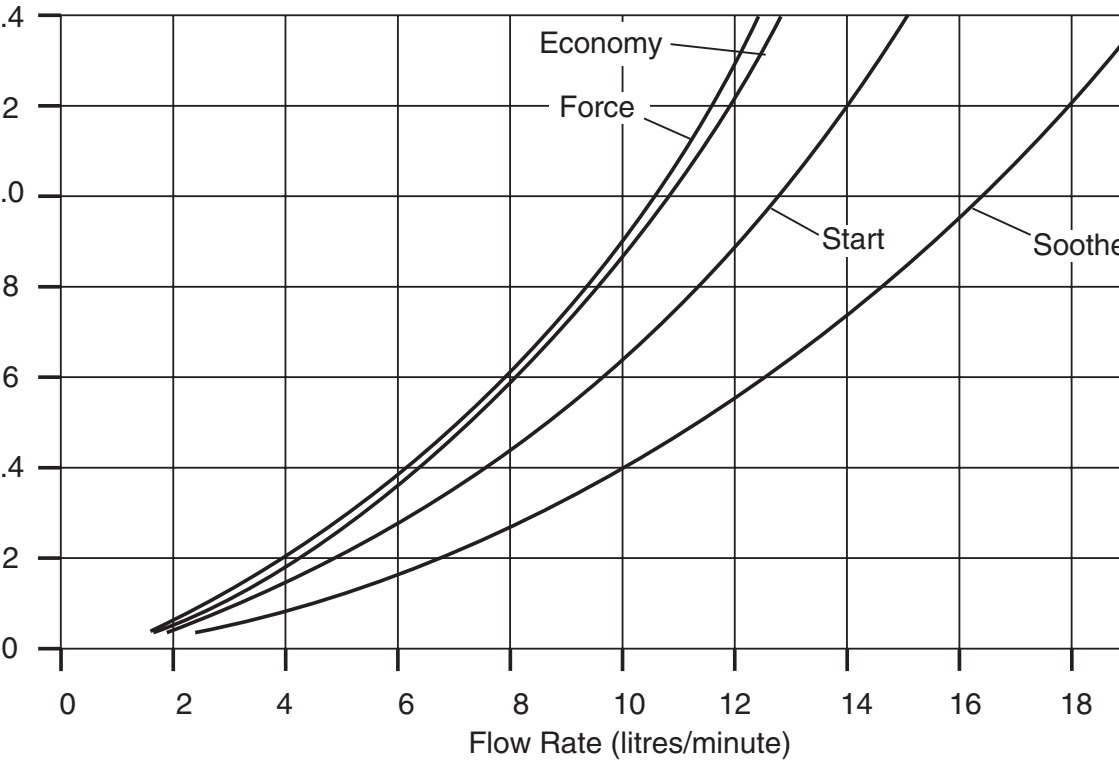
Low Capacity Spray Plate Fitted
15.7 litres/minute

High Capacity Spray Plate Fitted
19.8 litres/minute

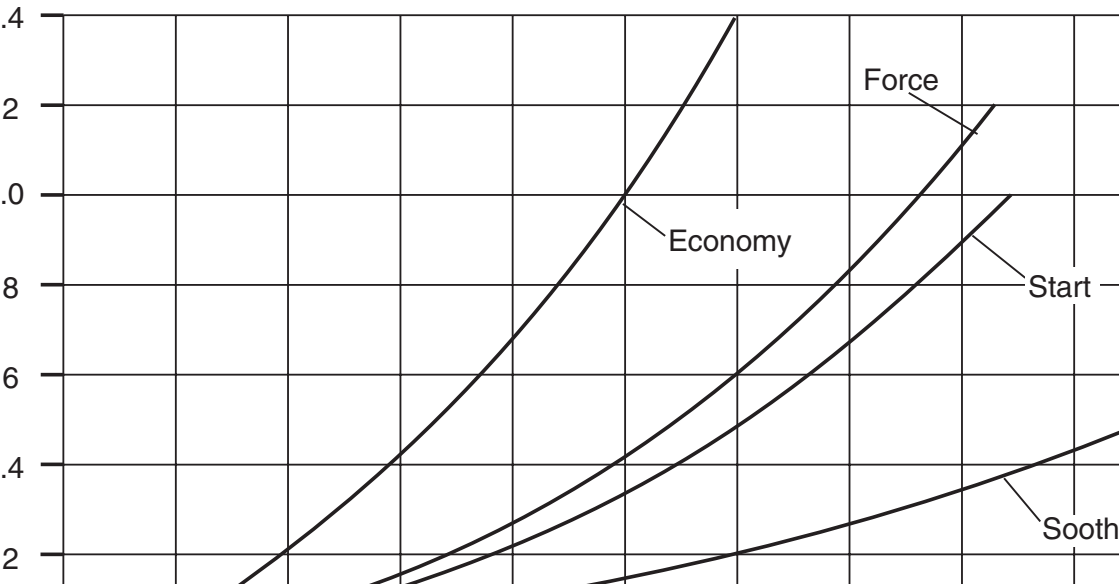
maintained inlet pressures at the shower control are above 1 bar fit the

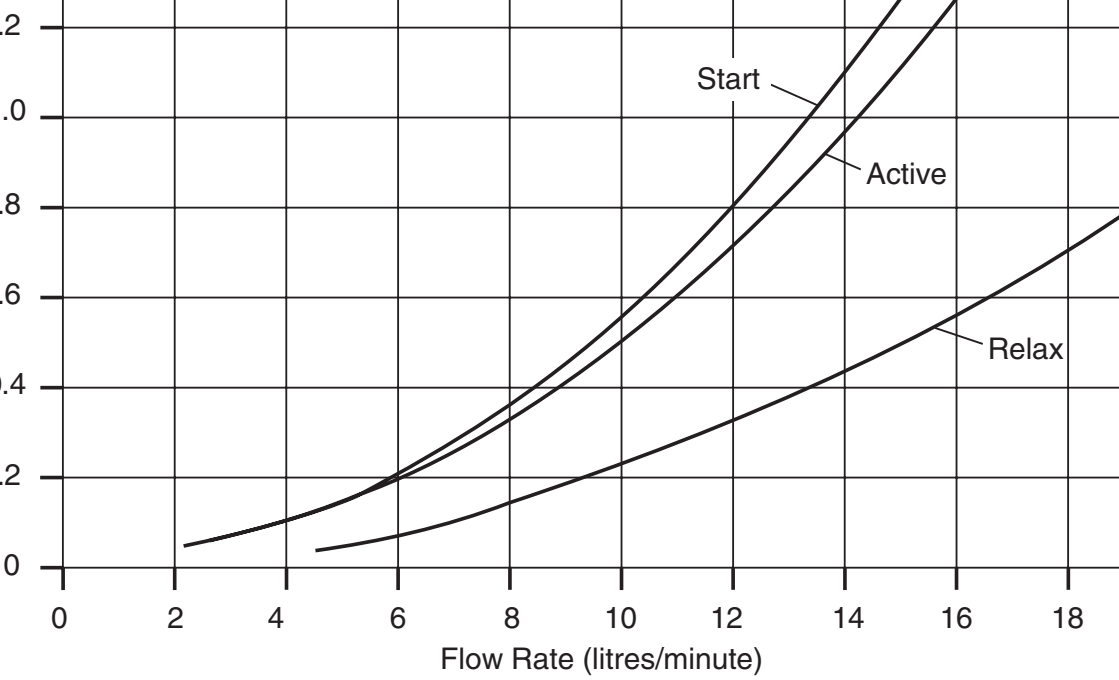
biv, bif Shower Fittings

Mira Aquations biv, bif handset - low capacity spray plate fitted

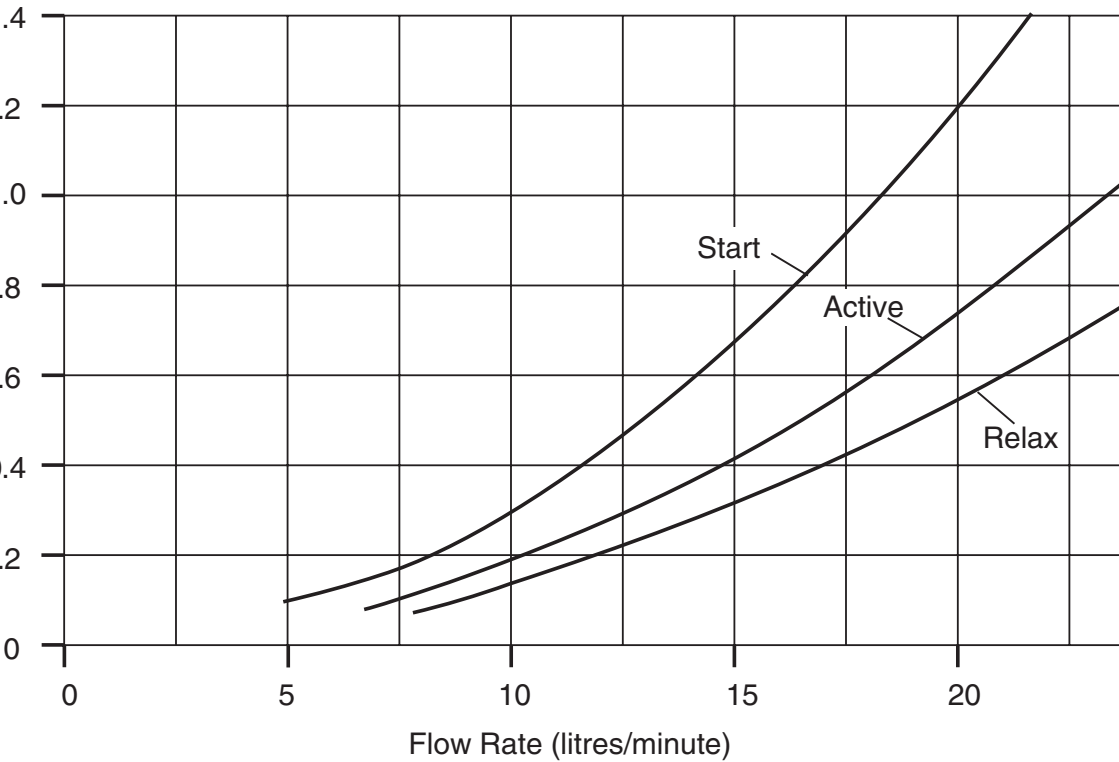


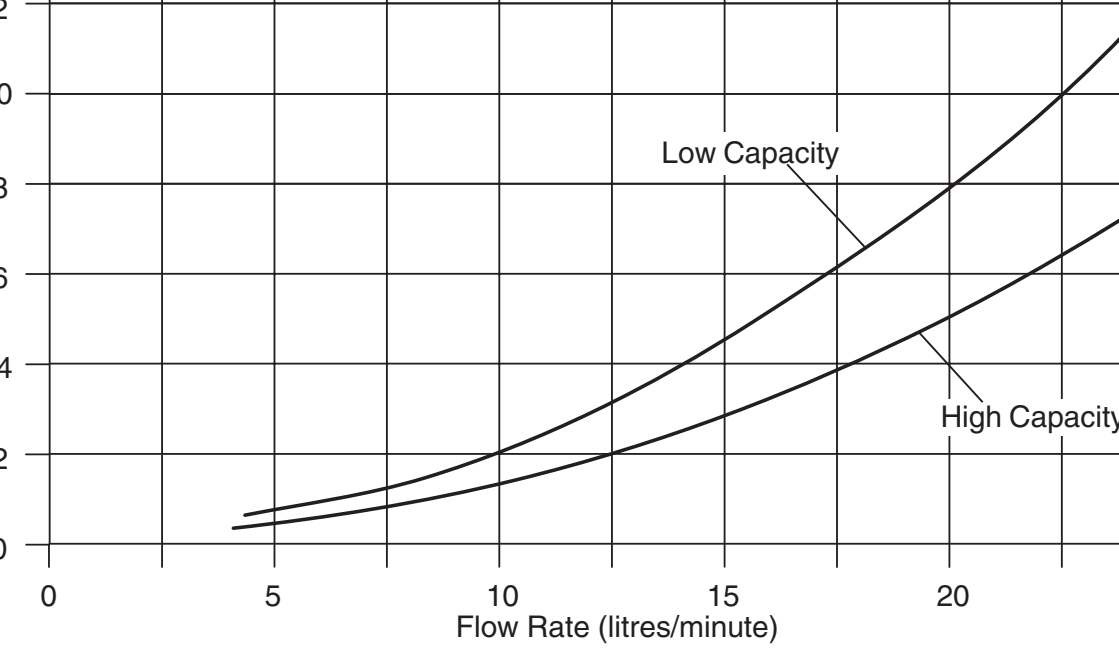
Mira Aquations biv, bif handset - high capacity spray plate fitted





Mira Aquations bir spray head - high capacity spray plate fitted





ply pipework must be flushed to clear debris before connecting the
comply with water regulations the biv and bif shower fittings are s
with a check valve fitted to the right-angle connector (RAC). This
combination with the checkvalves fitted to the Aquations shower control, p
backsiphonage and water contamination.

the biv or bif shower fittings are fitted to a shower control without check
ensure that there is always a minimum gap of **25 mm** between the hand
with/tray spill-over level.

with biv or bif shower fittings avoid layouts where the shower hose will be
kicked as this may reduce the life of the hose.

do **not** fit any form of flow control in the outlet pipework if the shower f
installed in conjunction with a product that requires the fitting to act as
(e.g. an electric shower).

do **not** use excessive force when making connections.

do **not** install the product in a position where it could become frozen.

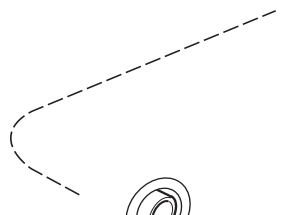
for a gravity fed shower installation, the minimum pressure at the shower
0.06 bar. To generate the minimum pressure and accommodate the pr
s in the pipes and shower control, a head of water of 1.5 metre is requ
typical correct installation.

for a Mira pump / Mira Aquations installation the minimum flow rate re
from the shower fitting is 1.2 litres/minute. (Equivalent to a head of w
approximately 0.6m (600mm)). This will ensure the pump flow switch will a

when installing the shower fitting into a shower cubicle, it is best positio
tray across the cubicle rather than towards the cubicle opening.

layout and sizing of pipework should be such that when other servic
ed, pressures do not fall below the recommended minimum for that fi
s will cause the spray pattern to collapse.

during installation handle fittings with care. Individual components are
d may damage surfaces if dropped from a height.



Check the 'O' seal is fitted to the
compression nut.

d

the slide bar at 600 mm centres, avoiding any buried cables or pipes, and insert the wall plugs.

Assemble the clamp bracket components. Push the plastic slide bar ends into the slide bar.

Push the slide bar through the clamp bracket assembly.

Place the bottom end support loosely to the wall. This will make aligning the top support easier. Insert the fixing screw into the countersunk hole of the plastic slide bar end and through the slide bar support.

Place the screw through the top end support and fully tighten. Fully tighten the bottom end support.

Place the end support caps over the ends of the slide bar end supports.

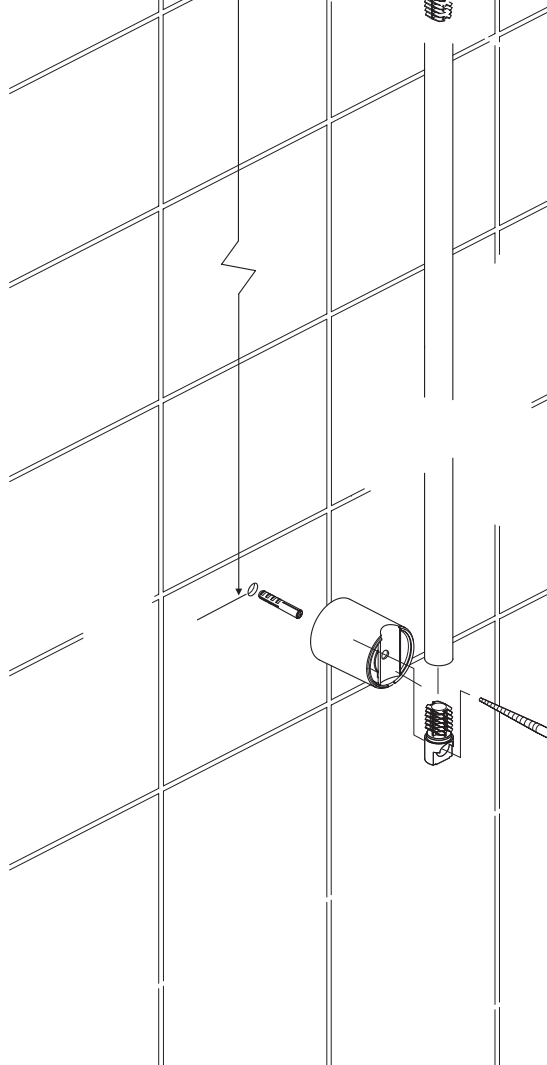
Attach the hose onto the handset and connect to the outlet of the shower control (make sure the hose seals are fitted).

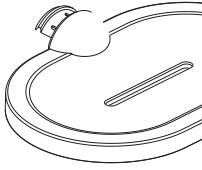
Do not overtighten.

Place the handset into the slide bar clamp bracket.

The clamp bracket is tapered. The handset will only fit properly from one direction. If necessary turn the end of the clamp bracket until the handset will fit.

When the clamp bracket pivots downwards under the weight of the handset the bottom fixing screw in the bracket will require tightening in order to hold the handset in place.





network between the shower control and the RAC is not supplied as part of the fitting.

Fixing Socket - Installation

The parking socket should be fixed to the wall to one side of the product at a convenient height for all the family. It should be positioned so that it does not obstruct the centre line of the bath, or across the opening of a shower cubicle. The shower should be directed away from the shower.

Decide where the parking socket will be positioned. The parking socket must be positioned at least 300mm below the ceiling. This will allow the handset to be easily placed in and removed from the parking socket.

Undo the grub screw with the hexagonal key provided, and pull the backplate away from the parking socket body.

Place the backplate on the wall and mark the position of the fixing holes. The bracket will need to be fitted with the word '**TOP**' positioned at the bottom of the bracket.

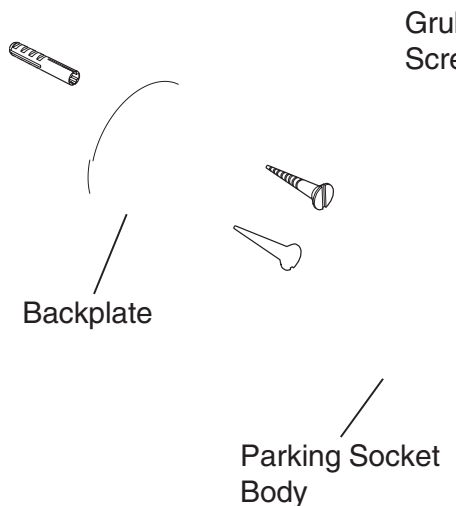
Warning! Ensure none of the fixing holes are positioned over pipework or electrical cables.

Drill the 6.0 mm fixing holes and insert the wall plugs provided.

Fit the backplate to the wall.

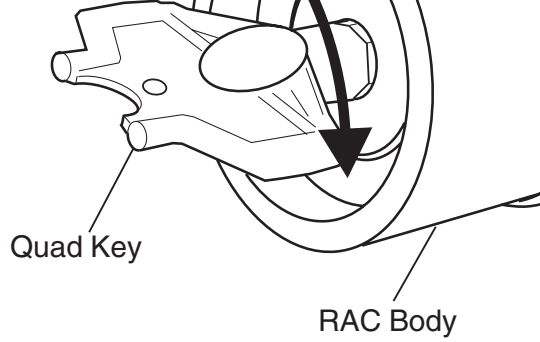
Fit the parking socket to the backplate and secure with the grub screw.

Fit the hose washers to the hose, then attach the hose to the handset. Place the handset in the parking socket, and fit the hose to the RAC or shower control.



plied) in the hexagonal slot at the
ck of the parking socket body. Turn
e key clockwise to increase or
anticlockwise to decrease the swivel
iffness.

nce the adjustments are complete
it the parking socket body to the
ckplate and resecure.



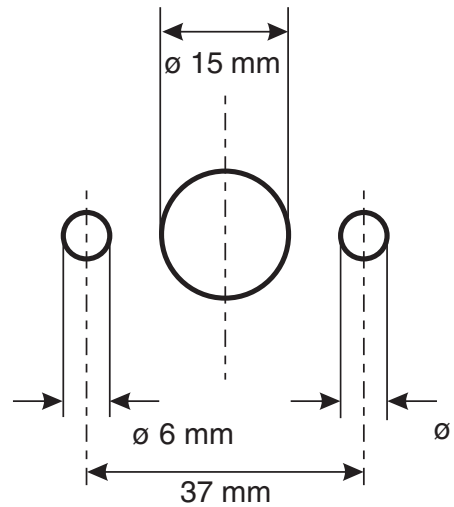
Aquations bir and bir Pin Clean Fittings

y Head - Installation

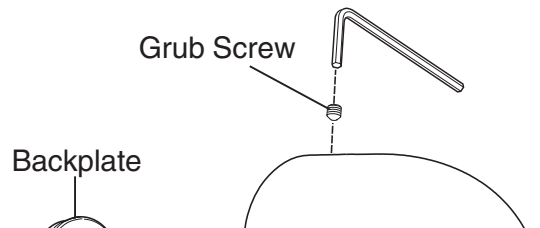
and bir Pin Clean should be positioned at a convenient height for all the
d be positioned so that it discharges down the centre line of the bath, or
ening of the shower cubicle and should be directed away from the

ework between the shower control and the spray head is not supplied
hower fitting.

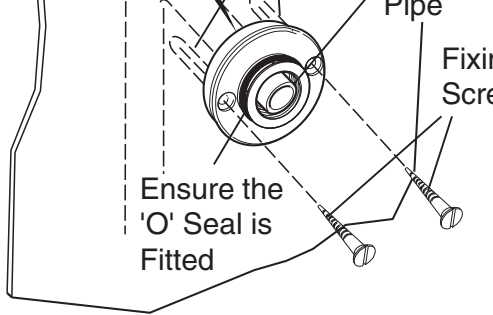
sure the outlet pipe extends
etween 15 mm and 40 mm from the
ished wall surface. If the pipe
trudes less than 15mm it will not
ossible to fit the spray head. If the
e extends further than 40mm then
t to length and remove any burrs.



do the grub screw with the
xagonal key provided, and remove
e backplate from the spray head.
do the compression nut and olive.



Slide the olive and compression nut over the outlet pipe and tighten efficiently to make the compression tight.



When removed ensure the 'O' seal is refitted onto the backplate.

Fit the spray head to the backplate and secure with the grub screw.

Spray Head - Fitting Flow Regulator

In installations where the force of the spray from the spray head is excessive and water conservancy is an issue, the 9 litre/minute flow regulator supplied should be fitted to the spray head.

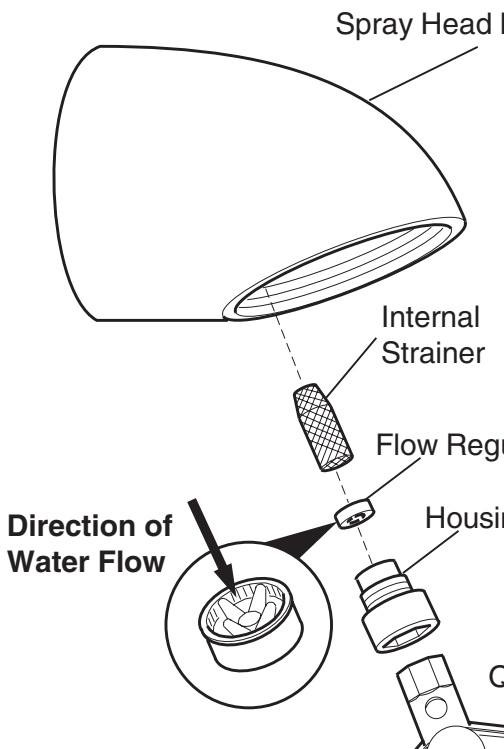
To remove the spray unit. Refer to **Spray Unit - Removal and Installation** in MAINTENANCE.

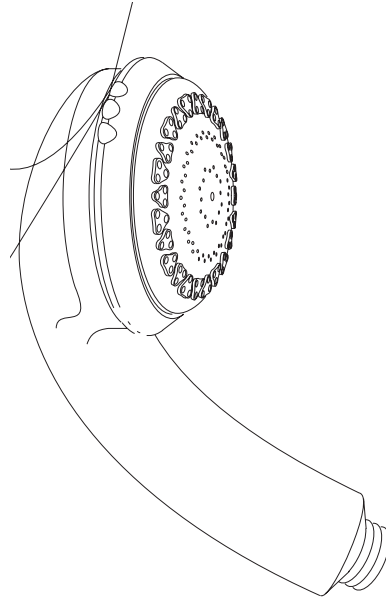
Use a 12 mm A/F Hexagonal Wrench (not supplied) or the quad key to unscrew and remove the strainer / flow regulator assembly from the shower housing.

Remove the internal strainer from the housing.

Fit the 9 Litres/Minute flow regulator into the housing and refit the strainer. The regulator must be fitted as illustrated.

Fit the complete assembly into the shower body.





Adjuster

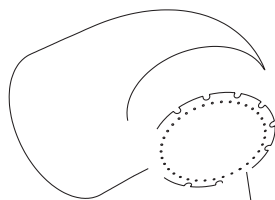
Turn the adjuster fully clockwise to divert water into the outer holes.

Inner Spray

Turn the adjuster fully anticlockwise to divert the water into the inner holes.

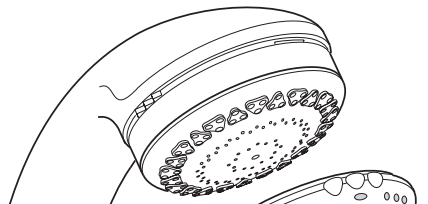
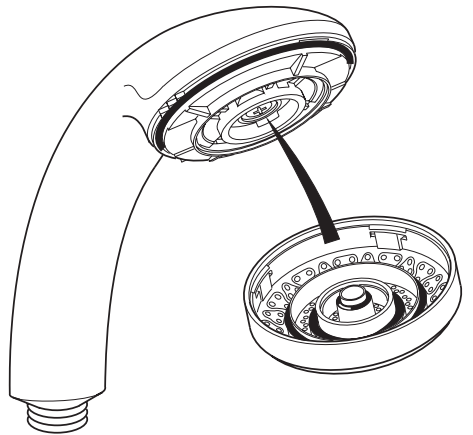
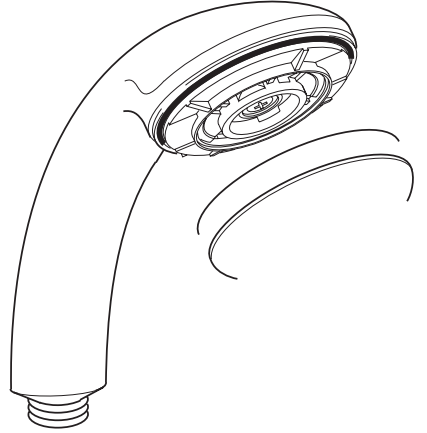
Mid Spray

Turning the adjuster to a "mid" position allows the water to flow from both sets of holes, giving a balanced flow rate at a lower pressure.



ance with the instructions contained in this guide, difficulties should be avoided. If maintenance is required then it must be carried out by a competent tradesperson. From the fault diagnosis chart and maintenance instructions are provided. When replacing any parts ensure that the underlying cause of the malfunction has been corrected.

Malfunction	Cause	Remedy
<p>or low flow rate.</p>	<p>Spray plate assembly (biv, bif fittings) or internal strainer (bir, bir Pin Clean fittings) blocked.</p> <p>Hose blocked or twisted. (biv, bif fittings only).</p>	<p>Clear blockage, refer to relevant cleaning procedure in MAINTENANCE.</p> <p>Clear blockage or release hose in hose.</p>
<p>Water from spray plate assembly in handset or bir only.</p>	<p>A small amount of water may be retained in the shower fitting after the shower control has been turned off. This may drain over a few minutes.</p> <p>Defective seal(s) in the shower control.</p>	<p>This is quite normal. For the handset and the bif fittings change the angle of the handset to speed the draining time.</p> <p>Refer to shower control Installation, Operation and Maintenance Guide.</p>
<p>Water temperature changes when spray action is adjusted.</p>	<p>Spray plate assembly blocked.</p> <p>Adjusting the spray action changes the flow of water. This may affect some shower controls and plumbing installations.</p>	<p>Clear blockage, refer to relevant cleaning procedure in MAINTENANCE.</p> <p>Install the high capacity spray plate assembly, refer to relevant removal and installation procedures in MAINTENANCE.</p> <p>If the malfunction persists refer to the shower control Installation, Operation and Maintenance Guide for details on the shower control or plumbing installation.</p>
<p>Handset will not stay in any position.</p>	<p>The clamp bracket (biv fittings) has a central securing screw, which has</p>	<p>Tighten the securing screw. Refer to Slide Bar - Installation</p>



te assembly.

Spray Plate - Internal Cleaning

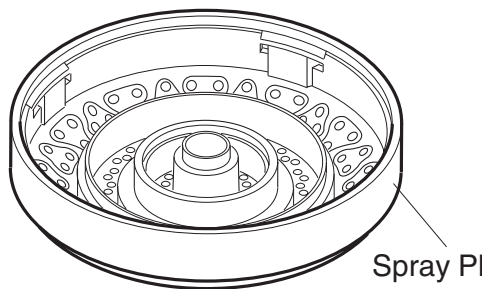
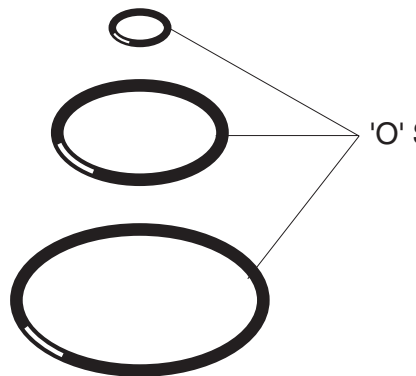
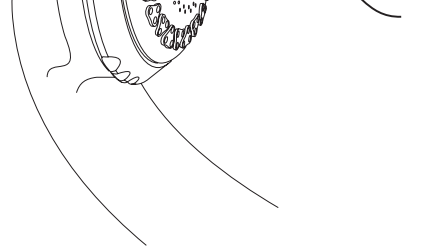
Remove the spray plate assembly. Refer to **Spray Plate - Removal**.

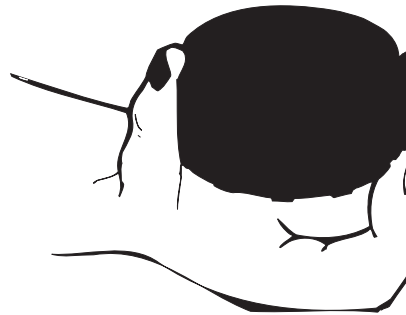
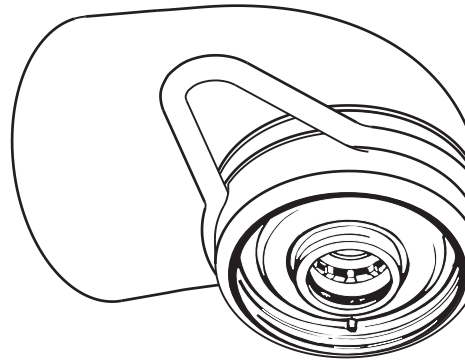
Remove the 'O' seals.

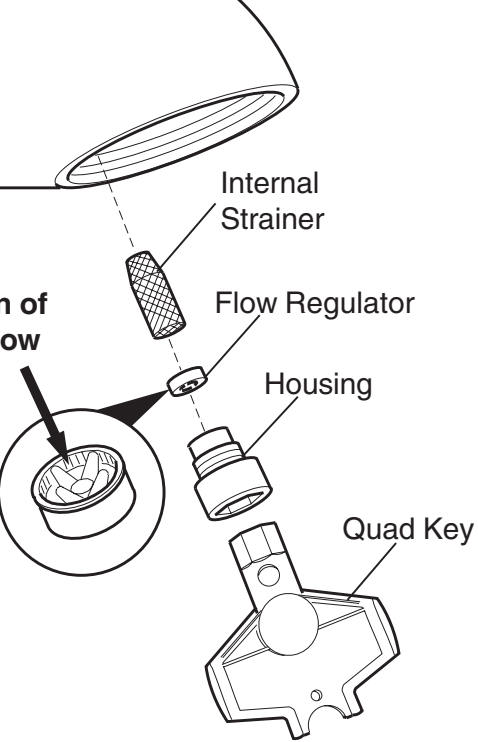
Clean all the components with a stiff brush. If necessary use a plastic kettle descaler in accordance with the manufacturer's instructions.

Fit the components in reverse order.

Install the spray plate assembly. Refer to **Spray Plate - Installation**.







2. Use a 12 mm A/F hexagonal wrench (not supplied) or the quad key to unscrew and remove the strainer and flow regulator assembly from the spray head fitting.
3. Remove the internal strainer and flow regulator from the housing. If necessary, clean the strainer by flushing through under a jet of water to remove lodged particles. **Descale.**
4. Fit the internal strainer and the flow regulator into the housing. The flow regulator must be fitted as illustrated. Fit the complete assembly into the spray head body.
5. Install the spray unit. Refer to the **Unit - Removal and Installation** section.

e.

unscrew the spray plate retainer
counterclockwise and remove.

Remove the spray unit, leave the inner
seal in the spray head.

Refit the spray unit.

Screw the spray plate retainer
clockwise onto the spray head.

Cap the retainer trim in place.

Spray Unit - Cleaning

Remove the spray unit. Refer to **Spray Unit - Removal and Installation**.

Thoroughly clean with a stiff brush or dip into a proprietary plastic kettle de-
scaling according to the descaler manufacturer's instructions.

Do not use metal probes to clear the spray holes, as this will damage the
spray plate and degrade the spray pattern.

Reinstall the spray unit. Refer to **Spray Unit - Removal and Installation**.

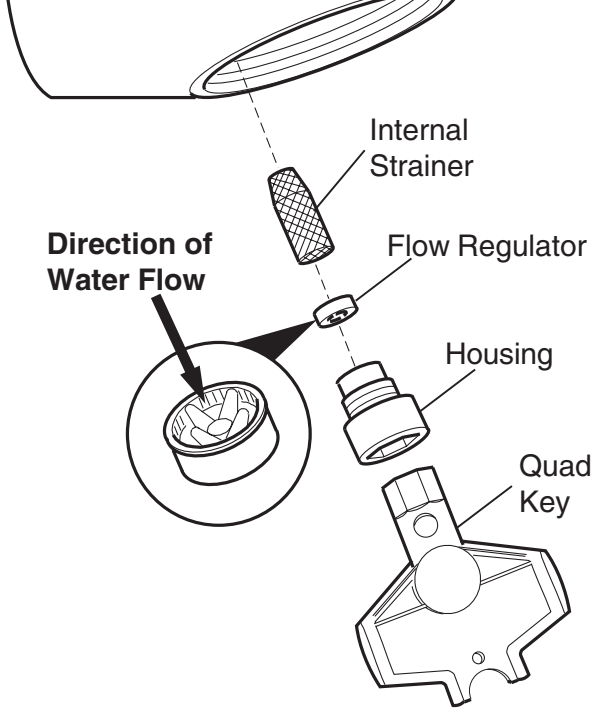
Strainer/Flow Regulator Assembly - Removal and Cleaning

Remove the spray unit. Refer to **Spray Unit - Removal and Installation**.

Use a 12 mm A/F hexagonal wrench (not supplied) or the quad key to un-
screw and remove the strainer / flow regulator assembly from the spray head.

Remove the internal strainer and the flow regulator from the housing. If needed,
clean the strainer by flushing through under a jet of water to remove
scale particles. **Do not descale.**

Reinsert the internal strainer and the flow regulator into the housing. The



Strainer/Flow Regulator Assembly - Removal and Cleaning

Slide Bar Ends

Service Pack 'O' Seals - components identified 'A'

Adjuster Ring - satin chrome

Handset Body Assembly - chrome

Spray Plate Assembly - High capacity - dark grey

Spray Plate Assembly - Low capacity - dark grey

RAC Backplate Assembly

Flow/Checkvalve Nipple

RAC Assembly - chrome

RAC Assembly - mixage

Complete Slide Bar Arm Assembly

Slide Bar

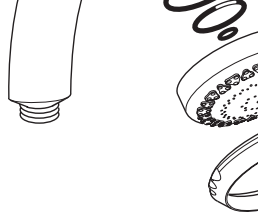
Slide Bar Wall Fixing Assembly

Hose

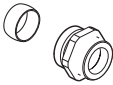
Soap Dish - chrome

Soap Dish - mixage

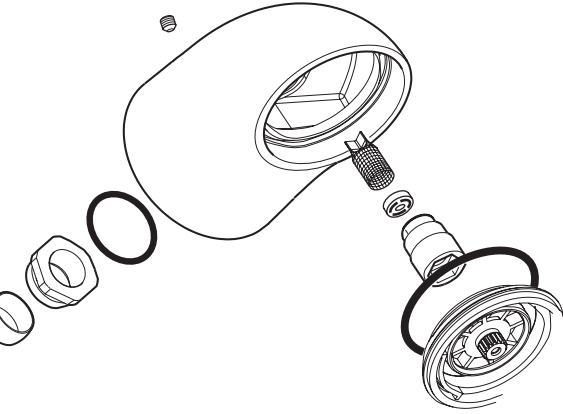
Hose Seal x2



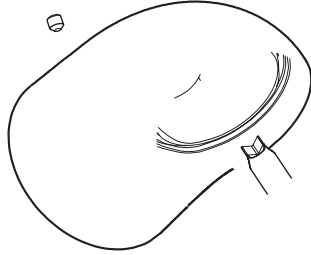
Handset Body Assembly - chrome
Spray Plate Assembly - High capacity - dark grey
Spray Plate Assembly - Low capacity - dark grey
Hose - chrome
Parking Socket Backplate Assembly
RAC Backplate Assembly
Flow/Checkvalve Nipple Assembly
RAC Assembly - chrome
Parking Socket Adjuster Assembly
Parking Socket Body Assembly - chrome
Parking Socket Body Assembly - mixage
RAC Assembly - mixage
Hose Seal x2



Low Capacity Spray Plate
Compression Backplate Assembly
Strainer/Flow Regulator Assembly



Pin Clean Spray Unit - Low Capacity
Pin Clean Spray Unit - High Capacity
Strainer/Flow Regulator Assembly



Clean fittings (A soap dish is included in the pack contents of the Aquat
. It is available in chrome and mixage finishes.

(

the guarantee, please return your completed card.

arranty period we will resolve defects, free of charge or replacing parts or modules as we may

charge, service work must only be undertaken by our approved agents in Northern Ireland or the Republic of Ireland.

For this guarantee does not affect the expiry date of the normal product guarantee period expires.

covered by this guarantee:

defects arising from incorrect installation, or lack of maintenance, including build-up of scale or limescale. Defects if the product is taken apart, repaired or replaced by any person not authorised by Mira Showers or our approved agents.

This guarantee is in addition to your statutory and other rights.

Using your shower

Take time to read and understand the operating instructions detailed in this manual.

What to do if something goes wrong

Do not use your shower if it doesn't function correctly, or if you are not satisfied with the installation and the instructions are not satisfactory and in accordance with the instructions in this manual. We are on-hand to offer you or your installer any advice you may need.

If you cannot resolve the difficulty, simply contact our Customer Services who will give every assistance, and if necessary, arrange for our service engineer to visit.

If the performance of your shower declines, consult this manual to see whether simple home maintenance is required. Contact our Customer Services to talk the difficulty through, and if necessary, contact our service engineer under guarantee if applicable, or take advantage of our comprehensive After-Sales service.

Our quality and training programme calls for your shower to be checked or monitored.

Spare Parts

We maintain an extensive stock of spares, and have functional parts available for ten years from the date of final manufacture of the product.

Spares can be purchased from approved stockists or merchants (locations on request) or direct from Customer Services.

Spares direct will normally be despatched within 24 working days. Payment can be made by credit card or cheque at the time of ordering. Should payment by cheque be preferred, a pro-forma invoice will be sent.

Note! In the interests of safety, spares requiring exposure to mains voltages can only be sent to competent persons.

Service

Our Service Force is available to provide a quality repair at a reasonable cost. You will have the assurance of a trained engineer/agent, genuine Mira spares – and a 12-month guarantee on the repair.

Payment should be made directly to the Service Agent, using credit card or a cheque supported by a bank card.

To contact us:

England, Scotland & Wales

Mira Showers Customer Services

Telephone: 0870 241 0888

8.30am to 5pm Working days (4.30pm Fri)

8.30 am to 12.30pm Saturday

E-mail: Mira_technical@mirashowers.com

Fax: 01242 282595

By Post: Cromwell Road

Cheltenham

Gloucester GL52 5EP

For Customers in Northern Ireland

Wm H Leech & Son Ltd

Telephone: 028 9044 9257 – Mon to Fri 9am to 5pm

Fax: 028 9044 9234 – 24 hours

Post: Maryland Industrial Estate

Ballygowan Road

Moneyreagh, Co Down

BT23 6BL

For Customers in Republic of Ireland

Modern Plant Ltd

Telephone: Dublin 01 4591344 - Mon to Fri 9am to 5pm

Fax: Dublin 01 4592329 – 24 hours

Post: Otter House

Naas Road

Clondalkin

Dublin 22