

# SHOWER FITTINGS

Installation

**Operation &** 

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

# DESCRIPTION

lowing shower fittings are covered by this guide:

## quations Built-in Variable Shower Fittings (biv)

Istable spray handset with three different spray actions (start, force, s economy setting\*, supplied complete with right angle connector (RAC), lide bar, adjustable handset holder and soap dish. Suitable for conne led supplies. The handset is supplied with a low capacity spray plate h capacity spray plate. Fittings are available in chrome and mixage fi

## quations Built-in Flexible Shower Fittings (bif)

ustable spray handset with three different spray actions (start, force, s economy setting\*, supplied complete with right angle connector (RAC), nd an adjustable parking socket. Suitable for connection to concealed su ndset is supplied with a low capacity spray plate (fitted), and high c plate. Fittings are available in chrome and mixage finishes.

conomy setting reduces the water flow to give economical use of water ing an adequate shower performance. This setting performs best with pumped, and mains pressure unvented systems. On some combination s the economy setting will have no effect, and will give the same spray start setting.

## quations Built-in Rigid Shower Fittings (bir)

spray head with three different spray actions (start, active and relax), s nection to concealed pipework supplies only. The spray head is suppli apacity spray plate (fitted), and high capacity spray plate. Fittings are av me and mixage finishes.

## quations Built-in Rigid Pin Clean Shower Fittings (bir Pin Clean)

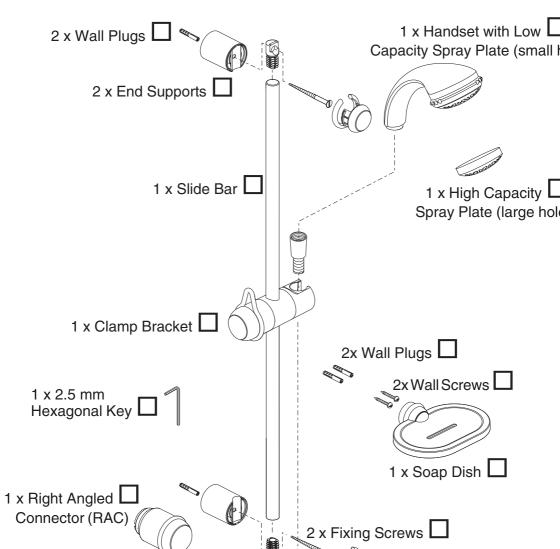
e recommendations given in this Manual.

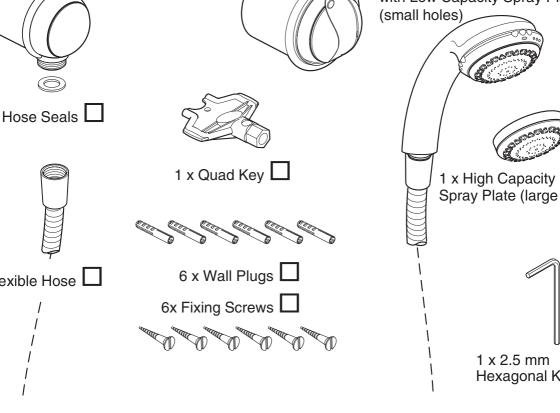
riodic attention is given, as necessary, to maintain the product inctional order. Recommended guidelines are given in the **MAINTEN** ction.

# PACK CONTENTS

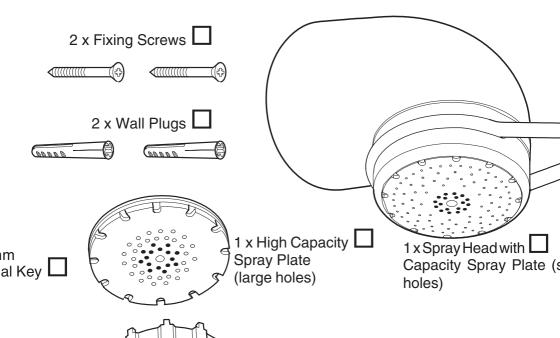
the appropriate boxes to familiarize yourself with the part names and to the parts are included.

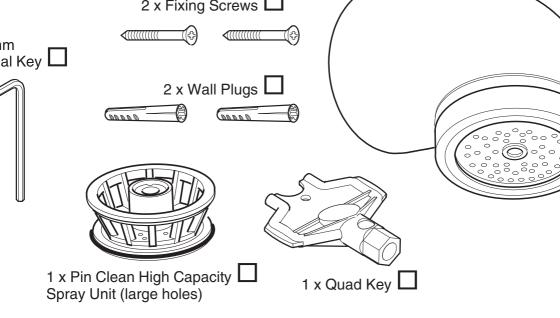
# **Aquations biv Shower Fittings**





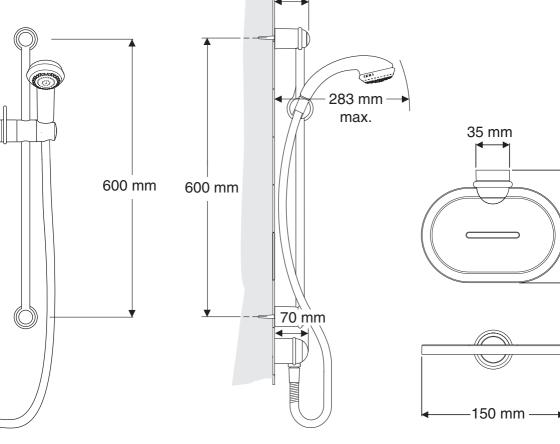
# **Aquations bir Shower Fittings**



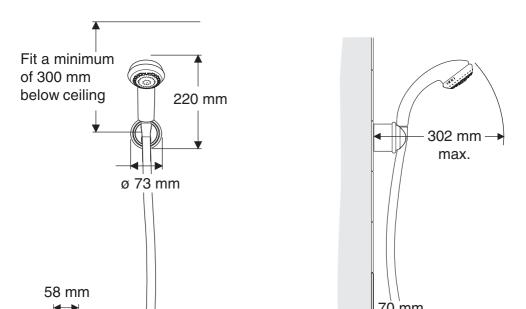


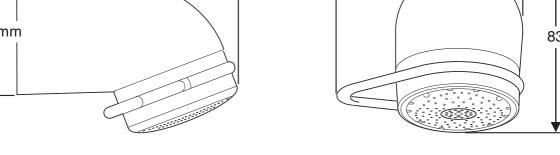
# mentation

- allation, Operation and Maintenance Guide
- stomer Support Brochure



# **Aquations bif Shower Fittings**





# SPECIFICATION

# rtant Points:

e installation, commissioning and maintenance of this product must be t in accordance with instructions given in this Manual, and must be cor designated, qualified and competent personnel.

e plumbing installation must comply with the requirements of UK egulations/Bye-laws (Scotland), Building Regulations or any pa gulations and practices, specified by the local water company o dertakers. The installation should be carried out by a plumber or con to 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 S Contractors (NAPH & MSC), England and Wales.
- Scottish and Northern Ireland Plumbing Employers' Federation (SN Scotland and Northern Ireland.

ra products are precision-engineered and should give continued superformance, provided:-

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

	Spray Plate Fitted	Spray Plate Fitted
ny	8.9 litres/minute 11.5 litres/minute 7.5 litres/minute 7.7 litres/minute	14.9 litres/minute 24.4 litres/minute 13.7 litres/minute 8.7 litres/minute

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

um maintained pressure: **5.0 bar**.

ned pressures above this range could result in excessive spray force n possible damage to the product.

# ir Fittings

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

Low Capacity	High Capacity	
Spray Plate Fitted	Spray Plate Fitted	
9.4 litres/minute	16.4 litres/minute	
9.9 litres/minute	12.8 litres/minute	
15 litres/minute	19.1 litres/minute	

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

um maintained pressure: **5.0 bar**.

ned pressures above this range could result in excessive spray forc possible damage to the product.

# ir Pin Clean Fittings

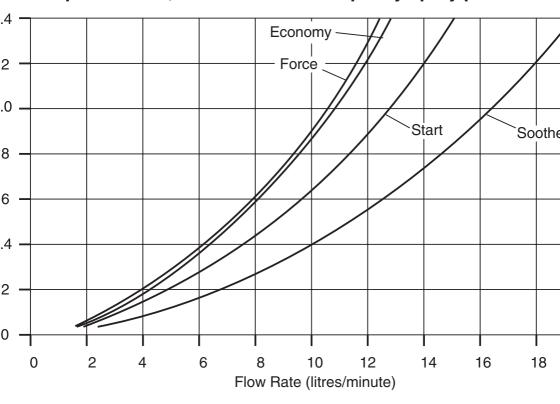
vical flow rates for the bir handset at 0.5 bar pressure loss are:

Low Capacity	High Capacity
Spray Plate Fitted	Spray Plate Fitted
15.7 litres/minute	19.8 litres/minute

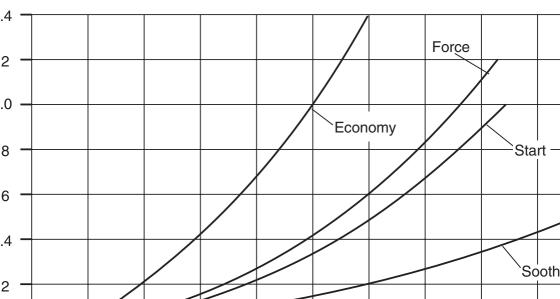
naintained inlet pressures at the shower control are above 1 bar fit t

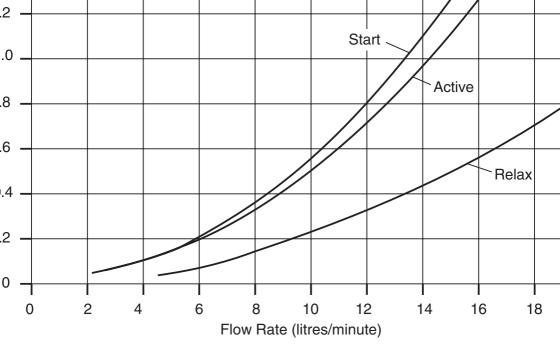
# iv, bif Shower Fittings

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

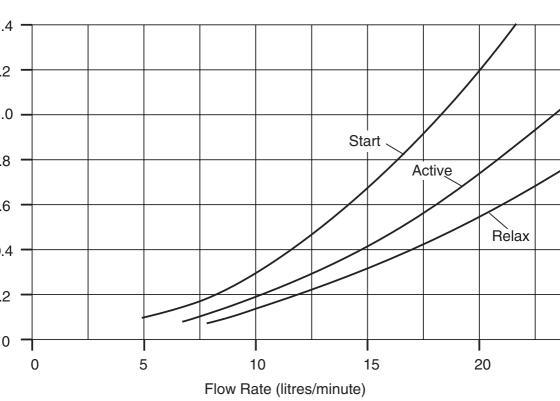


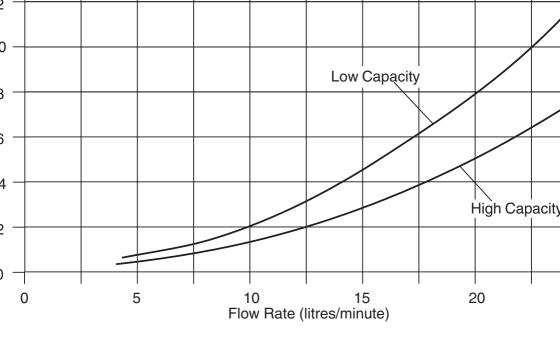
Mira Aquations biv, bif handset - high capacity spray plate fitted





Mira Aquations bir spray head - high capacity spray plate fitted





comply with water regulations the biv and bif shower fittings are s in a check valve fitted to the right-angle connector (RAC). This mbination with the checkvalves fitted to the Aquations shower control, j cksiphonage and water contamination.

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

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

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

not use excessive force when making connections.

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

r a gravity fed shower installation, the minimum pressure at the showe 0.06 bar. To generate the minimum pressure and accommodate the pl is in the pipes and shower control, a head of water of 1.5 metre is requ ypical correct installation.

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

nen installing the shower fitting into a shower cubicle, it is best position ray across the cubicle rather than towards the cubicle opening.

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

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

# Angled Connector - Installation

ht angled connector assembly (RAC) should be positioned above an side of the top outlet of the shower control. This will prevent the flexib ostructing the shower control temperature and flow control knobs.

ework between the shower control and the RAC is not supplied as pa fitting.

ecide where the RAC will be sitioned. Chisel out a channel in the Il for the pipework.

the outlet pipework in the channel d connect to the shower control. sure that the pipe extends far enough m the wall that, with the finished wall face applied, the pipe protrudes at ast 15mm from the wall.

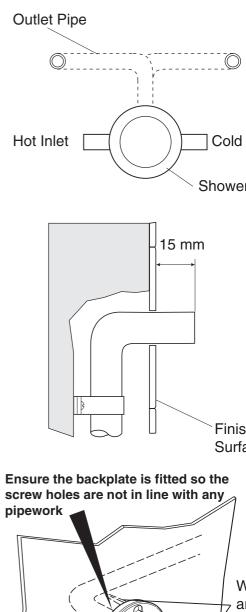
ply the finishing coat of plaster and s to the wall.

eck that the pipe extends 15mm from e wall surface. If necessary cut the be to length and remove any burrs.

do the grub screw securing the ckplate to the RAC body with the xagonal key provided. Remove the ckplate from the RAC assembly. do the compression nut and olive, king care not to damage the 'O' seal the compression nut.

de the backplate onto the outlet pipe d mark the position of the fixing holes.

Ensure none of the fixing holes are ned directly over the connecting



S

mpression nut.

de the olive and compression nut er the outlet pipe and tighten fficiently to make the compression nt. Take care not to damage the 'O' al on the compression nut.

and secure the RAC body to the ckplate.

# Backplate Ensure 'O' Seal is Fitted Grub Screw

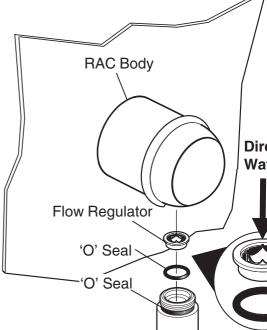
# Angled Connector - Fitting Flow Regulator

aintained inlet water pressure is high the shower spray force may proce to shower under. Fitting the flow regulator (supplied) will limit the um flow rate to 10 L/Min, and reduce the spray force to a more comfo the regulator may also be fitted if water conservation is a concern.



the flow regulator as illustrated. sure the 'O' seals are fitted and e flow regulator is placed the rrect way up.

fit the outlet connector to the RAC.



e slide bar at 600 mm centres, oiding any buried cables or pipes, d insert the wall plugs.

semble the clamp bracket mponents. Push the plastic slide r ends into the slide bar.

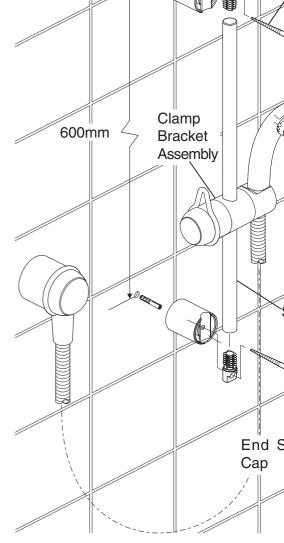
sh the slide bar through the clamp acket assembly.

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

ace the screw through the top end oport and fully tighten. Fully tighten a bottom end support.

the end support caps over the ds of the slide bar end supports.

rew the hose onto the handset and to the outlet of the shower control ake sure the hose seals are fitted). **not overtighten**.



ace the handset into the slide bar clamp bracket.

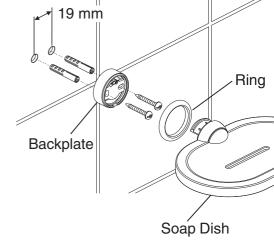
The clamp bracket is tapered. The handset will only fit properly from on. If necessary turn the end of the clamp bracket until the handset w

amp bracket pivots downwards under the weight of the handset the og g screw in the bracket will require tightening in order to hold the hand n. ark the position of the fixing holes.

ill the two 6.0 mm fixing holes for e soap dish at 19 mm centres, oiding any buried cables or pipes, d insert the wall plugs.

the backplate to the wall with the tt "**TOP**" at the top of the backplate.

the ring on to the soap dish and sh the soap dish into the backplate til its snaps into position.



ework between the shower control and the RAC is not supplied as partition fitting.

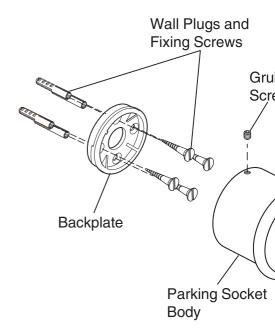
# ng Socket - Installation

Irking socket should be fixed to the wall to one side of the production in the ight for all the family. It should be positioned so that it discribed the centre line of the bath, or across the opening of a shower cubic be directed away from the shower

cide where the parking socket will positioned. The parking socket ast be positioned at least 300mm low the ceiling. This will allow the ndset to be easily placed in and moved from the parking socket.

do the grub screw with the xagonal key provided, and pull the ckplate away from the parking cket body.

ace the backplate on the wall and ark the position of the fixing holes. e bracket will need to be fitted with e word '**TOP**' positioned at the ttom of the bracket.



## te! Ensure none of the fixing holes are positioned over pipew ectrical cables.

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

- the backplate to the wall.
- the parking socket to the backplate and secure with the grub screw.

the hose washers to the hose, then attach the hose to the handset. Pl ndset in the parking socket, and fit the hose to the RAC or shower co ng Socket - Adjustment pplied) in the hexagonal slot at the ck of the parking socket body. Turn e key clockwise to increase or ticlockwise to decrease the swivel ffness.

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

# Aquations bir and bir Pin Clean Fittings

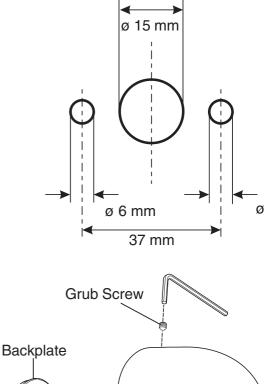
# Head - Installation

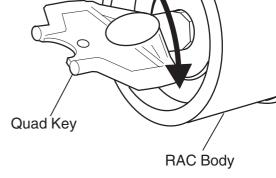
and bir Pin Clean should be positioned at a convenient height for all the d be positioned so that it discharges down the centre line of the bath, or ening of the shower cubicle and should be directed away from the section of the shower cubicle and should be directed away from the section of the shower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

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

sure the outlet pipe extends tween 15 mm and 40 mm from the ished wall surface. If the pipe otrudes less than 15mm it will not possible to fit the spray head. If the be extends further than 40mm then it to length and remove any burrs.

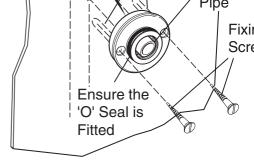
do the grub screw with the xagonal key provided, and remove backplate from the spray head. do the compression nut and olive.





ng serews and wan plugs provided.

de the olive and compression nut er the outlet pipe and tighten fficiently to make the compression nt.



emoved ensure the 'O' seal is refitted onto the backplate.

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

# Head - Fitting Flow Regulator

tallations where the force of the spray from the spray head is exces vater conservancy is an issue, the 9 litre/minute flow regulator supplied d to the spray head.

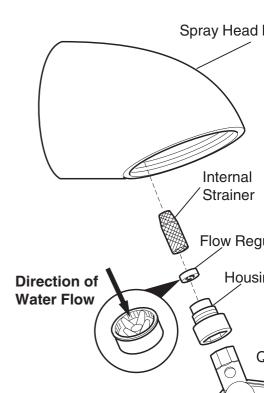
## move the spray unit. Refer to **Spray hit - Removal and Installation** in **AINTENANCE.**

e a 12 mm A/F Hexagonal Wrench ot supplied) or the quad key to screw and remove the strainer / flow gulator assembly from the shower ing.

move the internal strainer from the using.

the 9 Litres/Minute flow regulator oplied into the housing and refit the ainer. The regulator must be fitted illustrated.

fit the complete assembly into the ower body.



and force) and an economy setting.

# Spray

e adjuster ring until the three dots th top centre of the handset. Water v from the outer set of holes.

# Soothe O O Force O **Economy Setting**

Start 000

# e Spray

the adjuster ring until the two dots th top centre of the handset. Water of from the middle set of holes.

# Spray

e adjuster ring fully anticlockwise. gle dot will align with top centre of dset. Water will flow from the inner oles.

# omy Spray Setting

e adjuster ring fully clockwise. The mbol will align with top centre of the et. Water will flow from the outer set is and the flow rate will be reduced.

#### - ----

e adjuster fully clockwise to divert er into the outer holes.

# e Spray

ne adjuster fully anticlockwise to ne water into the inner holes.

# Spray

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

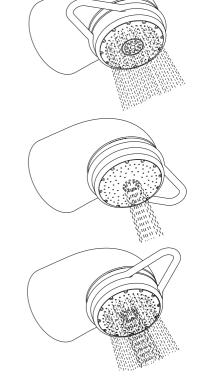
# n Clean Shower Fittings

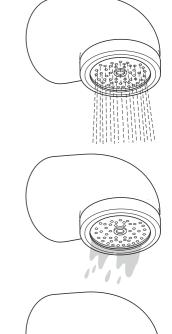
Pin Clean spray head has a fixed spray pattern with a limescale c

nen water begins to flow from the ray head the water pressure pushes a spray plate forward, sealing it ainst the spray plate retainer. The spray pattern forms and showering n commence.

nen the flow of water stops the spray ate automatically retracts to the rest sition, and any residual water will ain away.

essing the spray plate causes a





naintenance is required then it must be carried out by a competent trades of the fault diagnosis chart and maintenance instructions are provided ong any parts ensure that the underlying cause of the malfunction ha

alfunction	Cause	Remedy
or low flow rate.	Spray plate assembly (biv, bif fittings) or internal strainer (bir, bir Pin Clean fittings) blocked.	Clear blockage, refer relevant cleaning proced MAINTENANCE.
	Hose blocked or twisted. (biv, bif fittings only).	Clear blockage or relea in hose.
rom spray plate ply in handset or bir ply.	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.	This is quite normal. For and the bif fittings chang angle of the handset m the draining time.
	Defective seal(s) in the shower control.	Refer to shower of <b>Installation, Operation Maintenance Guide</b> .
r temperature es when spray s adjusted.	Spray plate assembly blocked.	Clear blockage, refer relevant cleaning proce MAINTENANCE.
	Adjusting the spray action changes the flow of water. This may affect some shower controls and plumbing installations.	Install the high capaci plate assembly, refer relevant removal and ins procedures in <b>MAINTEI</b>
		If the malfunction persi to the shower control Ins Operation and Maint Guide for details on the control or plumbing inst
handset will not any position.	The clamp bracket (biv fittings) has a central securing screw, which has	Tighten the securing Refer to <b>Slide Bar - Inst</b>

used for cleaning plated or plastic fittings. These finishes should be c nild washing up detergent or soap solution, and then wiped dry using

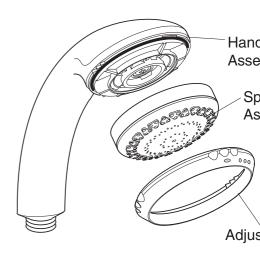
# oif Shower Fittings

# Plate - Removal

rn the adjuster ring fully ticlockwise.

clip and remove the adjuster ring.

screw the spray plate in an antiockwise direction. The 'O' seals will ovide some resistance.



# Plate - Installation

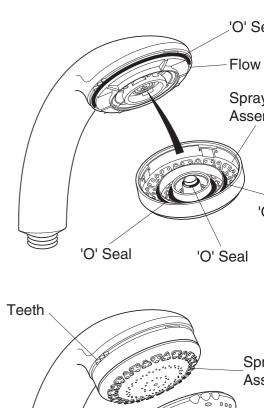
ake sure that the four 'O' seals are ated correctly.

rn the flow divertor fully clockwise.

**ution!** Do not over tighten the spray ite.

arefully screw the spray plate sembly on to the flow divertor. The seals will resist the rotation of the ray plate. There should be a gap tween the edge of the spray plate sembly and the flow divertor.

ake sure that the green bar on the juster ring is uppermost and align inner teeth on the adjuster ring with teeth on the handset flow divertor



ite assembly.

Plate - Internal Cleaning

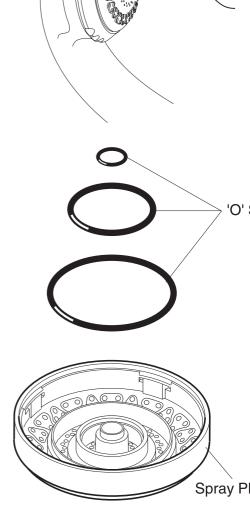
move the spray plate assembly. fer to **Spray Plate - Removal**.

move the 'O' seals.

ean all the components with a stiff ush. If necessary use a plastic kettle scalent in accordance with the anufacturer's instructions.

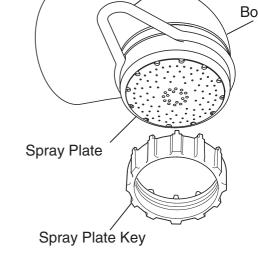
fit the components in reverse order.

tall the spray plate assembly. Refer **Spray Plate - Installation**.



nticlockwise, grip the body and w the complete adjustable spray m the spray head. Leave the inner I in the spray head body.

g is the reverse of removal.



# Plate - Removal and Cleaning

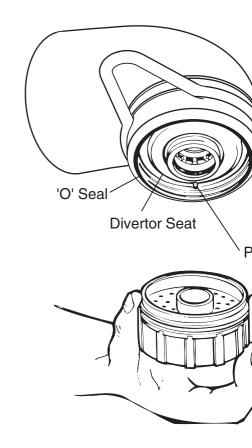
rn the adjuster fully anticlockwise d grip the spray unit, engage the ray plate key in the spray plate, turn ticlockwise to remove the spray ate and divertor seat. Leave the 'O' al in place on the spray unit.

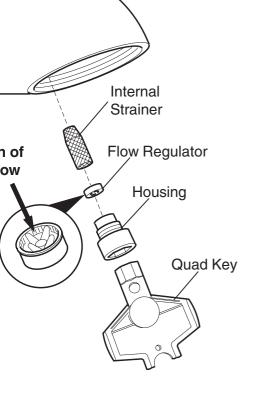
her clean with a stiff brush or dip o proprietary plastic kettle descalent cording to the descalent anufacturer's instructions.

**not** use metal probes to clear ray holes, as this will damage the ray plate and degrade the spray ttern.

sure the 'O' seal is in place on the ray unit and refit the divertor seat. e divertor seat is should be fitted illustrated.

rew the spray plate clockwise into





- Use a 12 mm A/F hexagonal v (not supplied) or the quad unscrew and remove the str flow regulator assembly fro shower fitting.
- 3. Remove the internal strainer a flow regulator from the hous necessary clean the strain flushing through under a jet o to remove lodged particles. I descale.
- 4. Fit the internal strainer and the regulator into the housing regulator must be fitted as illus. Fit the complete assembly in spray head body.
- 5. Install the spray unit. Refer to Unit Removal and Installat

le.

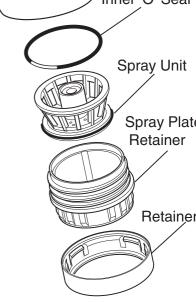
screw the spray plate retainer ticlockwise and remove.

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

fit the spray unit.

rew the spray plate retainer ockwise onto the spray head.

ap the retainer trim in place.



Spray Unit - Removal and Insta

# Unit - Cleaning

move the spray unit. Refer to Spray Unit - Removal and Installatio

her clean with a stiff brush or dip into a proprietary plastic kettle de cording to the descalent manufacturer's instructions.

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

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

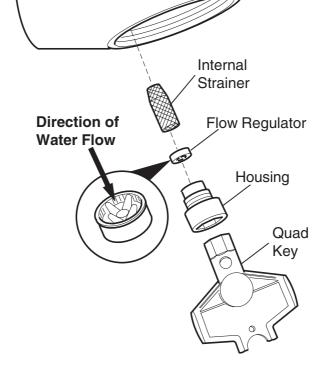
# ner/Flow Regulator Assembly - Removal and Cleaning

move the spray unit. Refer to Spray Unit - Removal and Installatio

e a 12 mm A/F hexagonal wrench (not supplied) or the quad key to u d remove the strainer / flow regulator assembly from the spray head.

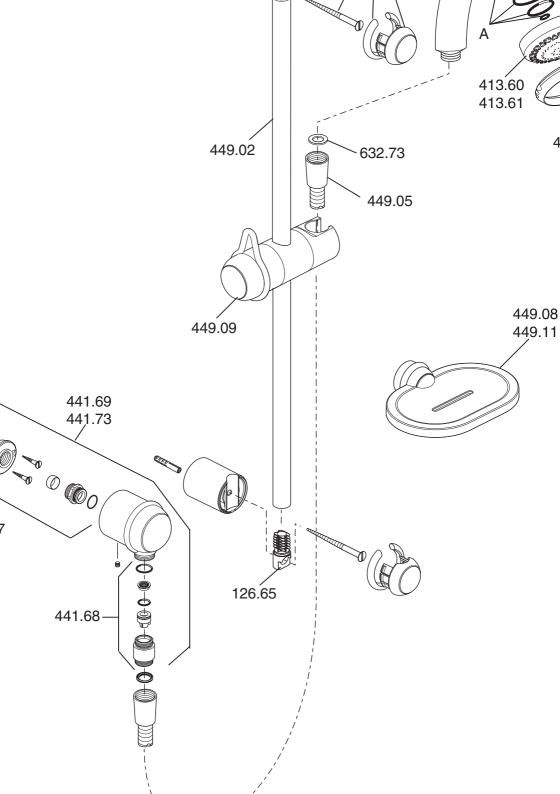
move the internal strainer and the flow regulator from the housing. If nece an the strainer by flushing through under a jet of water to remove rticles. **Do not descale.** 

the state would be the interval the state of the state of

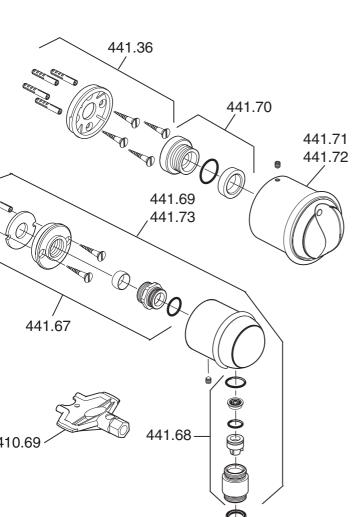


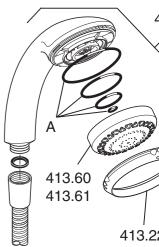
Strainer/Flow Regulator Assembly - Removal and Cleaning

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

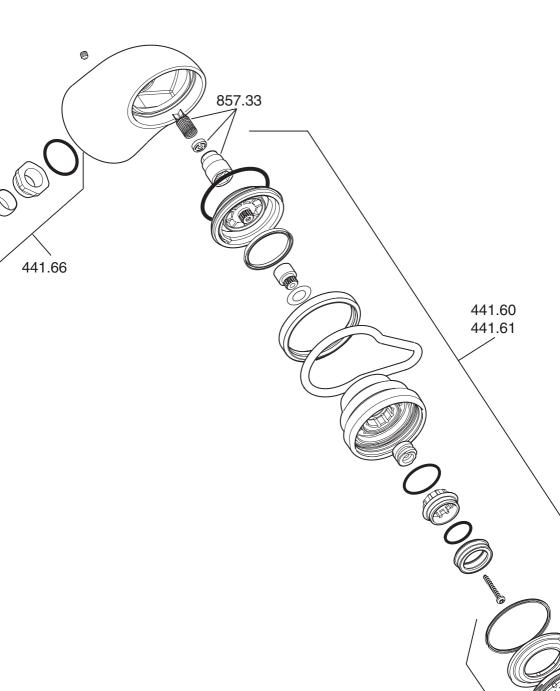


Spray Plate Assembly - High capacity - dark grey Spray Plate Assembly - Low capacity - dark grey Hose - chrome Parking Socket Backplate Assembly RAC Backplate Assembly Flow/Checkvalve Nipple Assembly RAC Assembly - chrome Parking Socket Adjuster Assembly Parking Socket Body Assembly - chrome Parking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

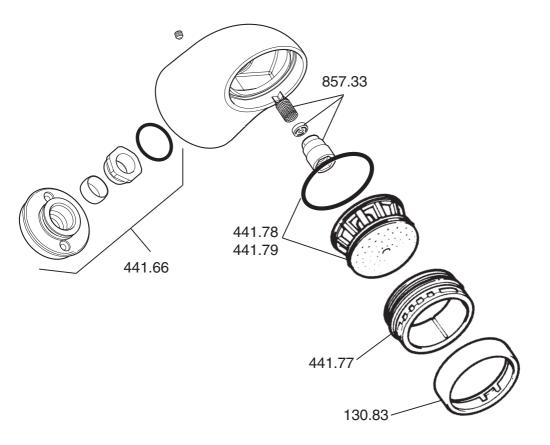




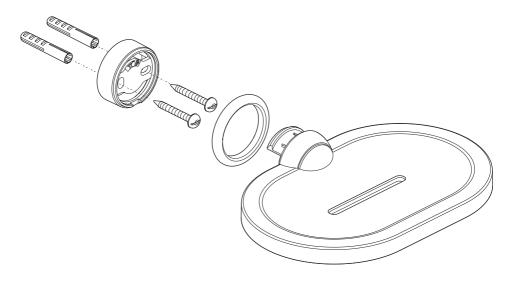
Low Capacity Spray Plate Compression Backplate Assembly Strainer/Flow Regulator Assembly



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 Aquati . It is available in chrome and mixage finishes.



449.08 Soap Dish - chrome449.11 Soap Dish - mixage

# e guarantee, please return your completed card.

arantee period we will resolve defects, free of airing or replacing parts or modules as we may

harge, service work must only be undertaken ers or our approved agents in Northern Ireland of Ireland.

## r this guarantee does not affect the expiry rrantee on any exchanged parts or product e normal product guarantee period expires.

## by this guarantee:

defects arising from incorrect installation, or lack of maintenance, including build-up of

fects if the product is taken apart, repaired or ny person not authorised by Mira Showers or agents.

## ee is in addition to your statutory and other

## ing your shower

e time to read and understand the operating tructions detailed in this manual.

## o if something goes wrong

st use your shower it doesn't function correctly, your installer to check that installation and g are satisfactory and in accordance with the this manual. We are on-hand to offer you or any advice you may need.

ot resolve the difficulty, simply contact our vices who will give every assistance, and if ange for our service engineer to visit.

ormance of your shower declines, consult this whether simple home maintenance is required. Customer Services to talk the difficulty through, ce under guarantee if applicable, or take our comprehensive After-Sales service.

# r quality and training programme calls ded or monitored.

#### Spare Parts

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

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

Spares direct will normally be despatched with working days. Payment can be made by credit card time of ordering. Should payment by cheque be prea pro-forma invoice will be sent.

Note! In the interests of safety, spares requiring exp to mains voltages can only be sent to competent pe

#### Service

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

Payment should be made directly to the Service Agent, using credit card or a cheque supported by 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 9	
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 Fax: Dublin 01 4592329 – 24 hours Post: Otter House Naas Road Clondalkin