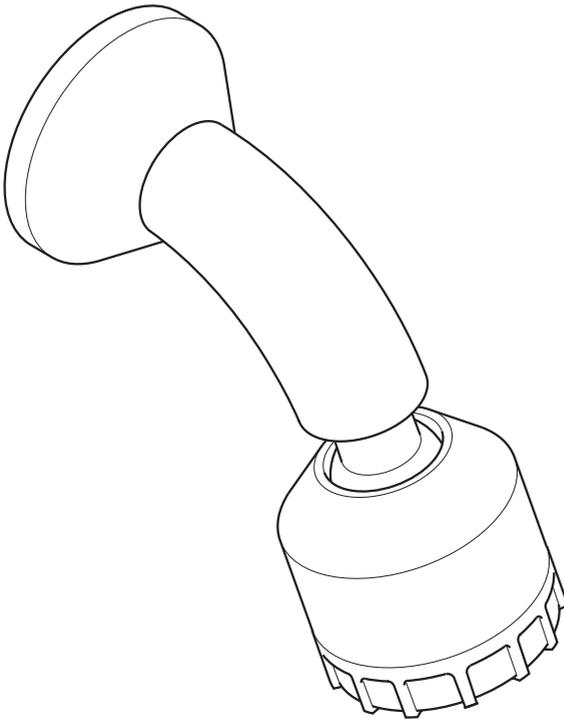


# ***rada***

**CONTROLS**

## PRODUCT MANUAL



**bsr-s  
300**

### **IMPORTANT**

**Installer:** This Manual is the property of the customer and must be retained with the product for maintenance and operational purposes.

## INTRODUCTION

The Rada bsr-s 300 is a shower fitting, precision engineered to give a satisfactory shower at pressures between 0.06 bar and 4 bar. The fitting has a short shower arm that is suitable for connection to concealed pipework and it incorporates an adjustable spray head that can deliver three different spray patterns.

## DESCRIPTION

The shower fitting comprises a shower arm made from chromium plated copper alloy and a chromium plated plastic shower head. The shower arm incorporates a ball joint that allows the shower head to pivot 20° in any direction. The shower fitting is supplied complete with a metal wall plate and fixings and is suitable for installation to a solid wall, shower cubicle or laminated panel with a concealed pipework supply.

The shower head is fitted with a low capacity spray plate suitable for pressures between 0.06 and 0.09 bar. A high capacity spray plate is included to allow more flow and is recommended for use with gas water heaters.

## SAFETY : WARNINGS

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

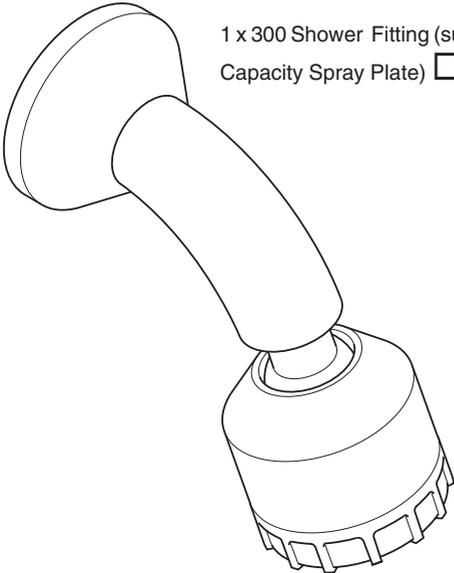
1. They are installed, commissioned, operated and maintained in accordance with the recommendations given in this Manual.
2. Periodic attention is given, as necessary, to maintain the product in good functional order. Recommended guidelines are given in the **MAINTENANCE** section.
3. **Cleaning:** Many household and industrial cleaning products contain abrasives and chemical concentrates and should **not** be used for cleaning plated or plastic surfaces. These finishes should be cleaned with a mild washing up detergent or soap solution, and then wiped dry using a soft cloth.
4. **Safety:** 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.

# INDEX

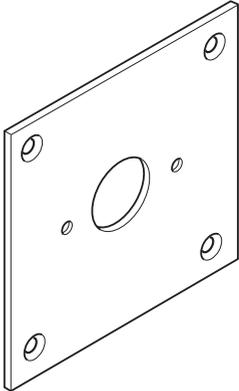
	<b>page</b>
<b>PACK CONTENTS</b>	4
<b>DIMENSIONS</b>	5
<b>INSTALLATION</b>	
General	6
Procedure	6
Installation to a Solid Wall	6
Installation to a Shower Cubicle or Laminated Panel	9
<b>OPERATION</b>	10
<b>FAULT DIAGNOSIS</b>	12
<b>MAINTENANCE</b>	
General	13
Maintenance	13
Procedures - Cleaning or Changing the Spray Plate	13
<b>SPARE PARTS</b>	
Spare Parts List	15
Spare Parts Diagram	15
<b>CUSTOMER CARE</b>	Back Cover

# PACK CONTENTS

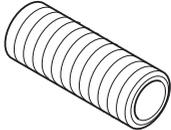
Examine the contents of the pack and tick the appropriate boxes to familiarise yourself with the part names and to confirm that all parts are included.



1 x 300 Shower Fitting (supplied with Low Capacity Spray Plate)



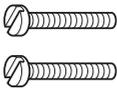
1 x Metal Wallplate



1 x Parallel Nipple



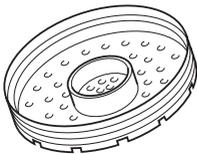
3 x Screws



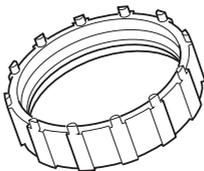
2 x M5 x 30 Bolts



1x Mounting Bush



1 x High Capacity Spray Plate

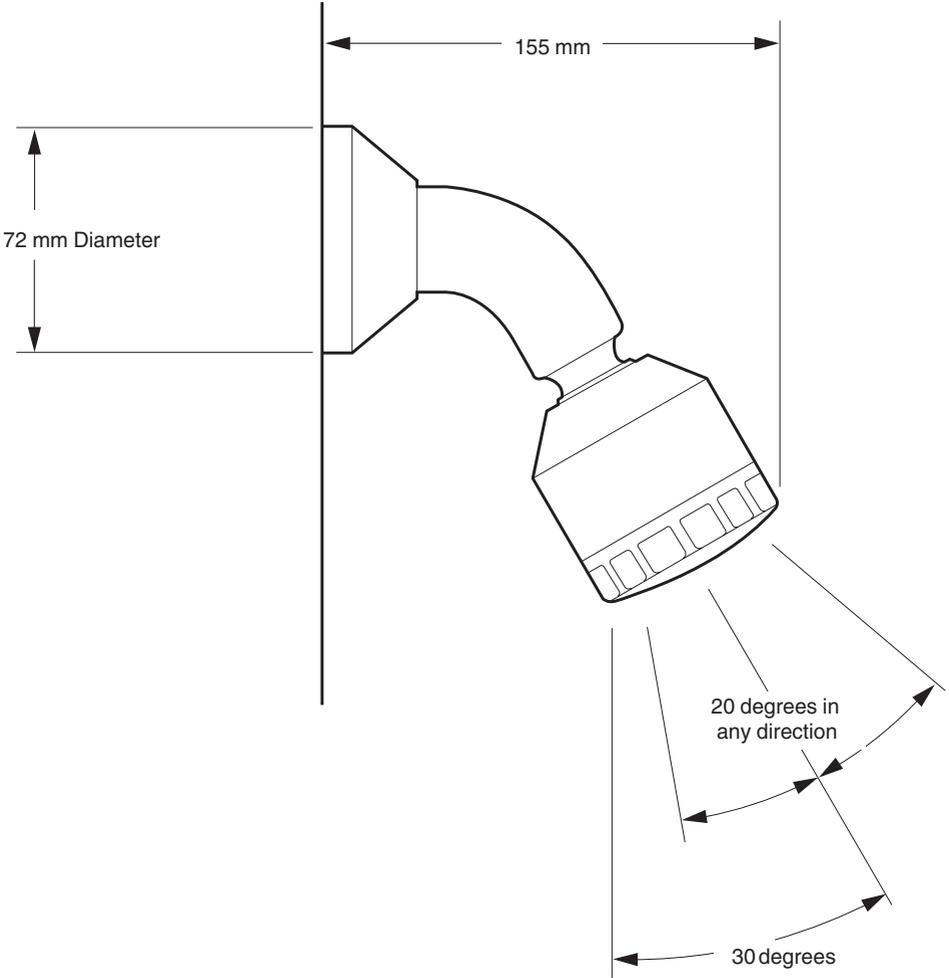


1 x Spray Plate Key



1 x Plastic Wall Plate

# DIMENSIONS



# INSTALLATION

## General

**Installation must be carried out in accordance with these instructions, and must be conducted by designated, qualified and competent personnel.**

1. Supply pipes must be flushed to clear debris before connecting the shower fittings. Layout and sizing of pipework must be such that when other services are used, pressures do not fall below the recommended minimum at the shower head causing the spray pattern to collapse.
2. Avoid a position in which the product could become frozen.
3. **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).
4. Do not use excessive force when making connections.
5. Maintained pressures above 4 bar at the shower head, could result in excessive spray forces and possible product damage.
6. A fixing position should be chosen to suit the installation, whether it be over a bath or shower cubicle.
7. For gravity feed installations, the minimum vertical distance between the header tank and the shower head must be 0.6 metres.

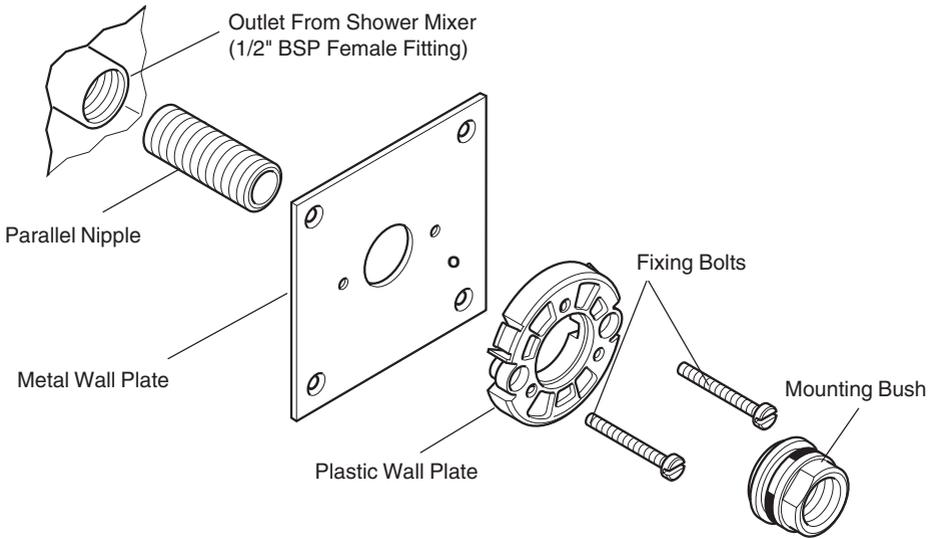
## Procedure

### Installation to a Solid Wall (Refer to Figures 1, 2 and 3)

1. Joint and screw the parallel nipple into the female fitting from the shower mixer outlet.

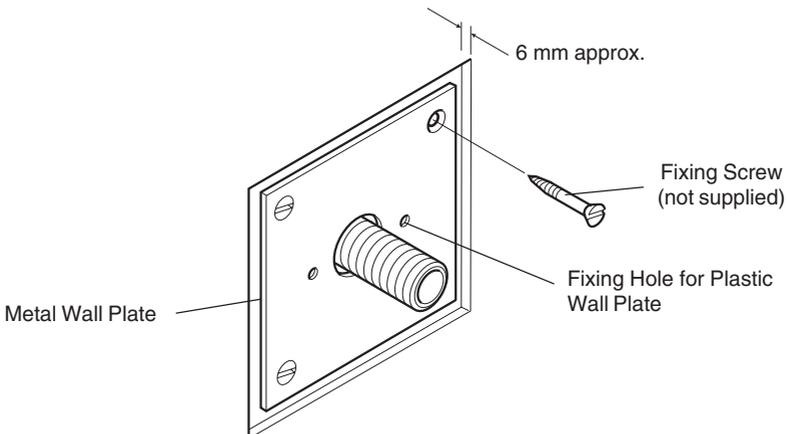
**Note!** Refer to Figure 3 for the maximum projection of the parallel nipple.

2. Turn on the water supply and make sure there are no leaks.
3. Loosely secure the plastic wall plate to the metal wall plate using the two fixing bolts. Place the metal wall plate over the nipple and screw the mounting bush onto the nipple until it locates in the recess in the plastic wall plate.
4. Mark the position of the metal wall plate and the four fixing holes on the wall surface.
5. Remove the mounting bush and the metal wall plate. Remove the two fixing screws securing the plastic wall plate to the metal wall plate.
6. Drill four holes for the fixing screws (not supplied). Make a recess approximately 6mm deep to accept the metal wall plate. Make sure that there is a clearance in the wall for the two fixing bolts that will secure the plastic wall plate.



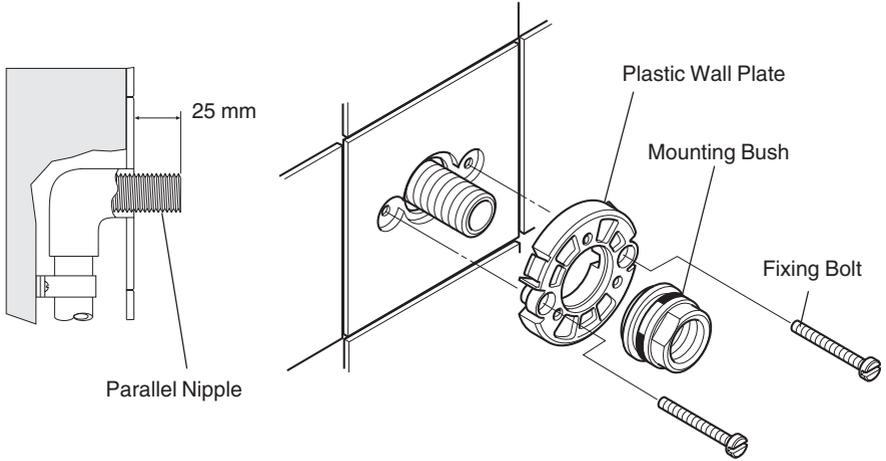
**Installation  
Figure 1**

7. Fix the metal wall plate to the wall with four fixing screws (not supplied).
8. Make good the wall surface and if required tile the surface (refer to Figure 3). Make sure that the plastic wall plate fixing holes are not obstructed.



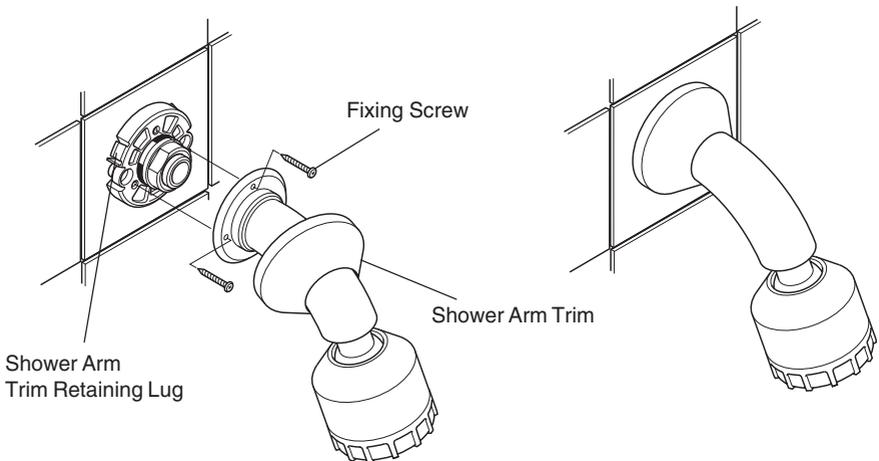
**Installation  
Figure 2**

9. Refer to Figure 3. Install the plastic wall plate, making sure that the two larger holes are horizontal and one shower arm fixing hole is at the top centre. Secure with the two fixing bolts, do not tighten the fixing bolts at this stage. Joint the exposed end of the nipple. Screw the mounting bush onto the nipple and tighten until its flange locates in the recess of the plastic wall plate. Tighten the plastic wall plate fixing bolts.



**Installation  
Figure 3**

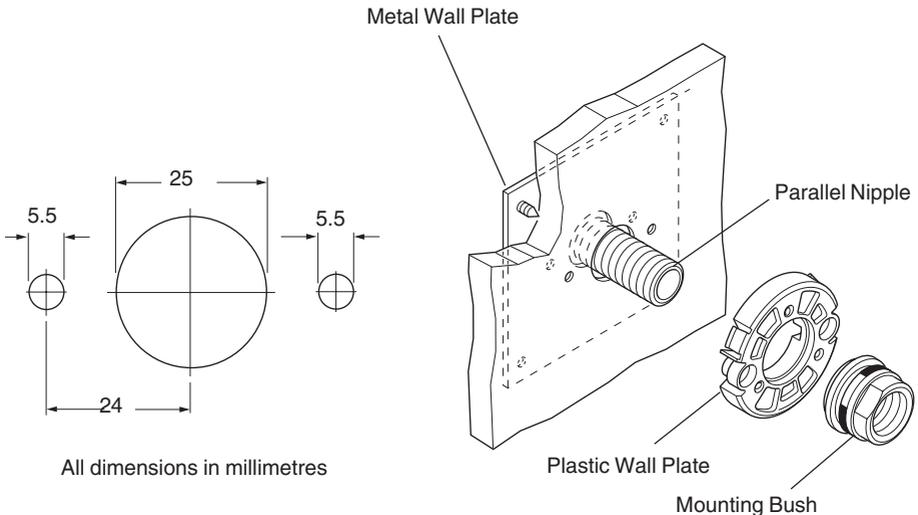
10. Refer to Figure 4. Push the shower arm fully over the mounting bush and secure with the three fixing screws. Push the shower arm trim over the wall plate until it is secured by the retaining lugs.



**Installation  
Figure 4**

## Installation to a Shower Cubicle or Laminated Panel

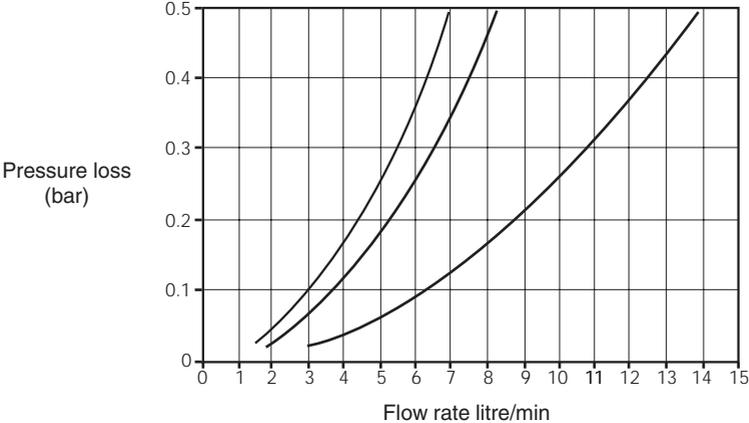
10. Refer to Figure 5. Drill a 25mm hole and two 5.5mm holes in the panel.
  11. Joint and secure the parallel nipple into the 1/2" BSP female fitting from the shower mixer outlet. Turn on the water supply and make sure that there are no leaks.
- Note!** Refer to Figure 3 for the maximum projection of the nipple.
12. Install the plastic wall plate on the nipple. Screw the mounting bush onto the nipple and tighten until its flange locates in the recess of the wall plate. Place the metal wall plate in position and secure with the two fixing bolts.
  13. Drill four holes in the panel (through the existing holes in the metal wall plate) to accept the screws (not supplied) for receiving the metal wall plate. Secure the wall plate to the panel.
  14. Remove the mounting bush. Joint the exposed end of the parallel nipple. Screw the mounting bush onto the nipple and tighten until its flange locates in the recess of the wall plate. Tighten the wall plate fixing bolts.
  15. Refer to Figure 4. Push the shower arm fully over the mounting bush and secure with the three fixing screws. Push the shower arm trim over the wall plate until it is secured by the retaining lugs.



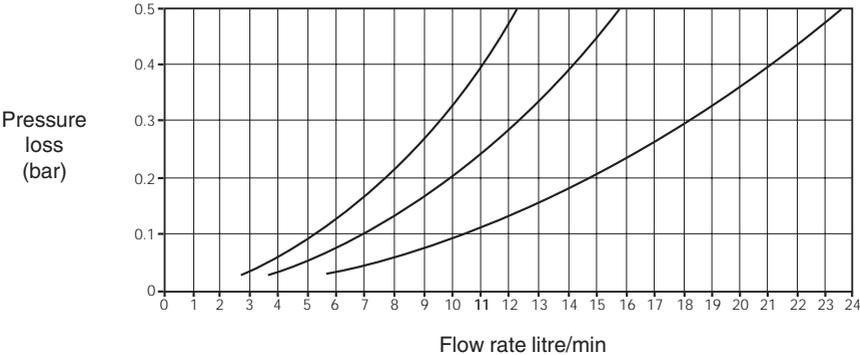
**Installation  
Figure 5**

# OPERATION

The Rada bsr-s 300 has an adjustable spray pattern and is fitted with a low capacity spray plate. A high capacity spray plate is also supplied to enable the flow rate to be increased (refer to the flow/pressure loss graphs). A spray plate removal key is supplied.



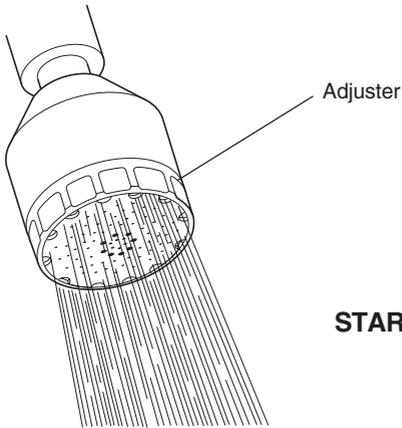
## Shower fittings with low capacity spray plate



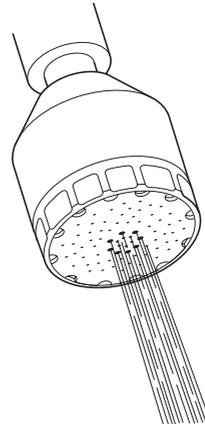
## Shower fittings with high capacity spray plate

The spray pattern is adjusted as follows:

1. **START:** Turning the adjuster **fully** clockwise diverts the water to the outer holes.
2. **ACTIVE:** Turning the adjuster **fully** anti-clockwise diverts the water to the inner holes.
3. **RELAX:** Selecting a "Mid" position allows the water to flow from both sets of holes, giving a higher flow rate at a lower pressure.



**START**



**ACTIVE**



**RELAX**

# FAULT DIAGNOSIS

Symptom	Cause/Rectification
1. Reduced or no flow.	<b>a.</b> Check pressure from mixer.
2. Poor or no spray pattern.	<b>a.</b> Holes in spray plate blocked. Clean spray plate. <b>b.</b> Inner 'O' seal damaged. Renew inner 'O' seal. Check that the supply pressure is not too high. <b>c.</b> Insufficient supply pressure.
3. Leaking from shower head.	<b>a.</b> Seals worn. Renew seals. <b>b.</b> Scale on swivel ball. Descale.

# MAINTENANCE

## General

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

1. They are installed, commissioned, operated and maintained in accordance with our recommendations
2. Periodic attention is given as necessary to maintain the product in good functional order.

## Maintenance

**Maintenance must be carried out in accordance with these instructions, and must be conducted by designated, qualified and competent personnel.**

External surfaces may be wiped clean with a soft cloth, and if necessary, a mild washing-up type detergent or soap solution can be used.

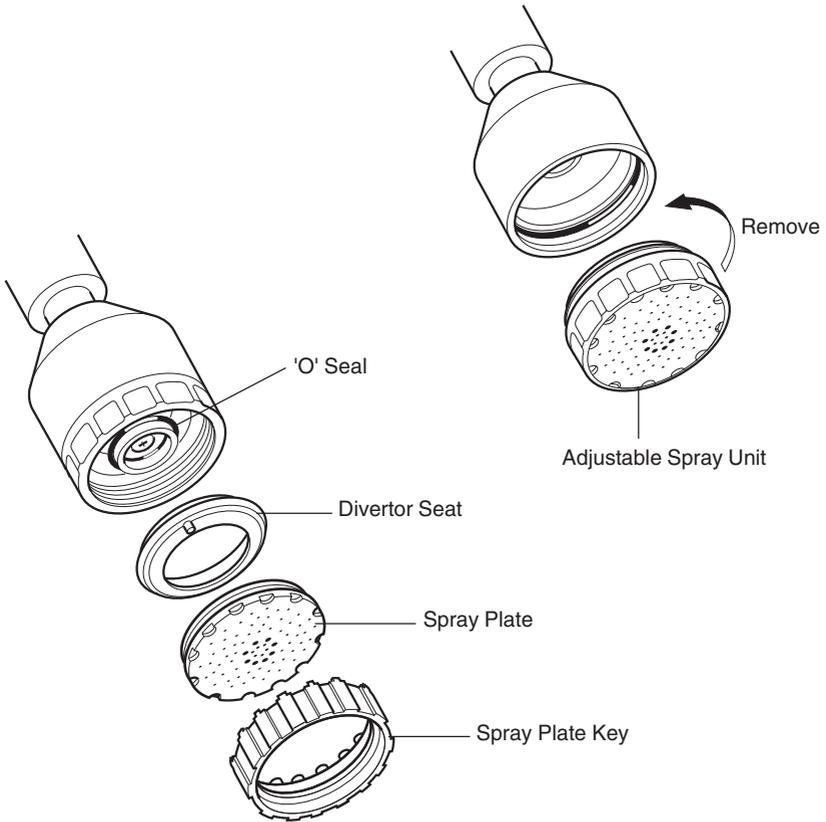
**Warning:** many household and industrial cleaning products contain mild abrasives and chemical concentrates, and should **not** be used on polished, chromed or plastic surfaces.

When ordering spare parts, please state product type, i.e. Rada bsr-s 300 shower fitting and identify part name and number. Refer to the **SPARE PARTS** section.

## Procedure - Cleaning or Changing the Spray Plate

(Refer to Figure 6)

1. Turn the adjustable spray unit fully anti-clockwise, engage the spray plate key into the spray plate, unscrew anti-clockwise and remove. Remove the diverter seat.
2. Leave the inner 'O' seal in the shower head.
3. Either clean with a stiff brush or dip into a proprietary inhibited (suitable for plastic kettles) descalent, used in accordance with the manufacturers instructions.
4. **Do not** use metal probes to clear spray holes.
5. Refit the diverter seat, screw in (clockwise) the spray plate and tighten with the spray plate key.



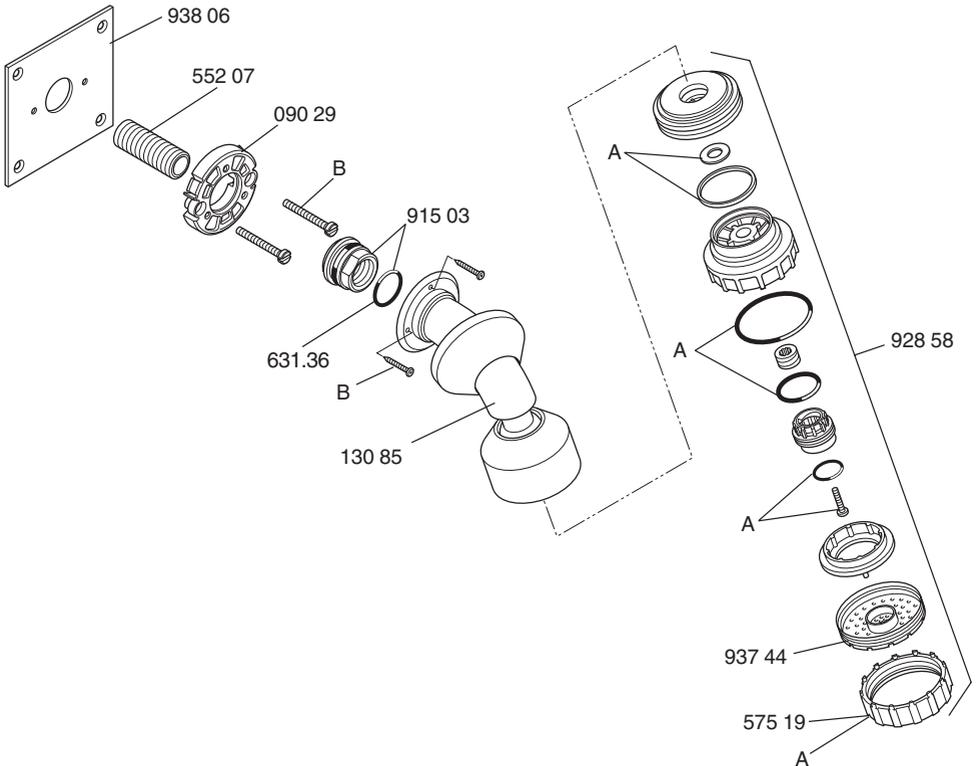
**Spray Plate  
Figure 6**

# SPARE PARTS

## Spare Parts List

090 29	Plastic Wall Plate
130 85	Shower Arm Trim - chrome
552 07	Parallel Nipple
575 19	Spray Plate Key
631 36	'O' Seal
915 03	Mounting Bush
928 58	300 Adjustable Spray Unit - chrome/white
936 99	300 Service Pack - components identified 'A'
937 27	Component Pack - components identified 'B'
937 44	Spray Plate - white
938 06	Metal Wall Plate

## Spare Parts Diagram



# CUSTOMER CARE

## Guarantee

This product is guaranteed against any defect of materials or workmanship for one year from the date of purchase, provided that the product has been installed correctly and used in accordance with the instructions supplied.

Any part found to be defective during the guarantee period will be replaced or repaired - at our option - without charge, provided that the product has been properly used and maintained. Routine cleaning and maintenance should be carried out in accordance with the instructions supplied.

The product should not be modified or repaired except by a person authorised by Rada.

Your statutory rights are in no way affected by this guarantee.

## After Sales Service - how we can help you

We have a network of fully trained staff ready to provide assistance, should you experience any difficulty operating your Rada equipment.

## Spare Parts

All functional parts of Rada products are kept for up to ten years from the date of final manufacture.

If during that period, our stock of a particular part is exhausted we will, as an alternative, provide an equivalent new product or part at a price equating to the cost of repair to the old, bearing in mind the age of the product.

## Customer Care Policy

If within a short time of installation the product does not function correctly, first check with the Operation and Maintenance Advice provided in this Manual to see if the difficulty can be overcome.

Failing this, contact your installer to ensure that the product has been installed and commissioned in full accord with our detailed installation instructions.

If this does not resolve the difficulty, please ring your nearest Rada contact who will give every assistance and, if appropriate, arrange for the local Service Engineer or Agent to call on a mutually agreeable date.

---

## Contact:

---

**Kohler Mira Limited**  
Cromwell Road,  
Cheltenham, England,  
GL52 5EP, UK.

Tel.: + 44 (0)1242 221221 Fax.: + 44 (0)1242 221925

Rada is a registered trade mark of Kohler Mira Limited. The company reserves the right to alter product specifications without notice.



BS EN ISO 9001 : 1994  
Reg. No. FM 14648