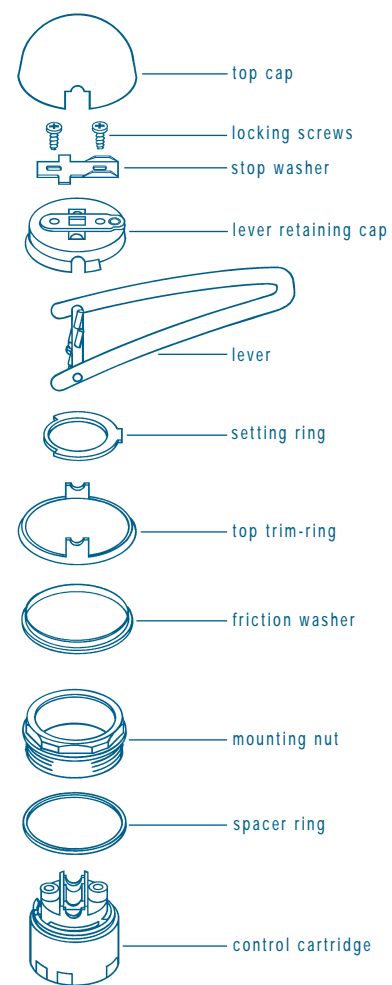
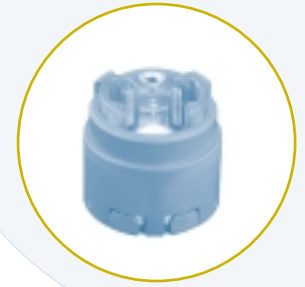


Replacement of Spout Sealing Rings and Cartridge

APPLIES TO MIXERS LADY 6

CONTROL CARTRIDGE REPLACEMENT

- Shut off the main water supply.
- Remove the top cap. See "Limiting the flow".
- Untighten the locking screws on the top of the control unit and remove the stop washer.
- Remove the securing plate, lever, setting ring, top trim-ring and the friction washer.
- Unscrew the mounting nut and remove the control cartridge. In the sink mixer model there is also a spacer ring in the spout bush. (Under the mounting nut).
- Wipe out the body and remove possible deposits. It must be clean and dry.
- Insert the new cartridge in the mixer body. Note the two lugs under the cartridge which fits into the holes in the body.
- Put the spacer ring in place (sink mixer) and fasten the control cartridge with the mounting nut.
- Attach the friction washer, top trim-ring and the setting ring. Make sure that the components are placed correctly. See illustration.
- Attach the lever and position the lever retaining cap.
- Put on the stop washer and tighten the locking screws. Make sure the stop washer is correctly positioned.
- Open the main water supply.
- See setting of flow restriction and temperature stop.
- Reassemble the top cap.

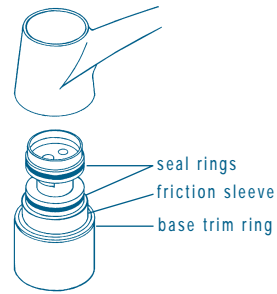


Control cartridge complete

REPLACING THE SPOUT SEAL RINGS

(Refers to sink mixers)

- Dismount the control cartridge as described in "Control Cartridge replacement" above and lift off the spout.
- Replace the seal rings. Grease the new ones with silicone grease.
- Make sure that the base trim ring is correctly positioned outside the friction sleeve flange.

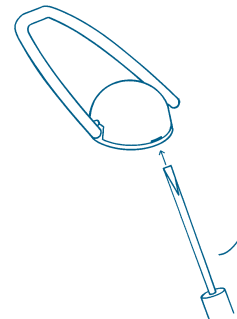


Seal rings for spout

Reassemble the spout and the control cartridge. See "Control cartridge replacement" above.

LIMITING THE FLOW

- Remove the top cap with a screwdriver: Insert the driver slightly from below into the slot and bend upwards, see illustration, while holding the top cap on the front.
- Untighten the now visible screws on the top of the control unit (appr. 1/2 turn) and lift the lever to desired maximum flow.
- Push the stop washer towards the lever pins and secure the washer by retightening the screws.
- Reassemble the top cap.

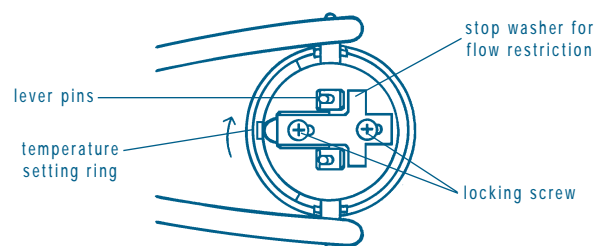


Dismantling the top cap

LIMITING THE TEMPERATURE

The lever swivel range towards the "hot" can be limited, if restriction of hot water temperature is desired.

- Remove the top cap. See "Limiting the flow" above.
- Swing the lever to desired maximum hot water temperature.
- Turn the setting ring clockwise towards stop.
- Fasten the screws, and reassemble the top cap.



Flow restriction and temperature stop

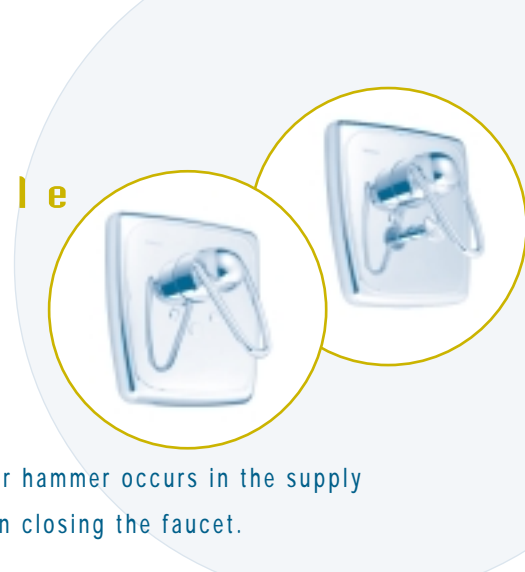
Normal setting (unrestricted)

Normal setting, without flow or temperature restrictions is obtained with the following steps.

- Push the flow restricting stop washer backwards to end position.

- Swing the lever to fully hot position, and turn the setting ring clockwise to stop.

Lady G 4517 and 4518 Single Lever Concealed Faucet



FUNCTION

The water flow is controlled by lifting the lever. The higher the lever, the more water. The water flow is shut off by depressing the lever fully.

The temperature is controlled by moving the lever sideways. When the lever is at the extreme right, only cold water comes out, at the extreme left, you only get hot water.

The Faucet is designed for a maximum hot water temperature of 80°C.

Soft closing

Mattsson single lever faucets are soft closing. A patented hydraulic suppressor ensures that no

damaging water hammer occurs in the supply pipe-work when closing the faucet.

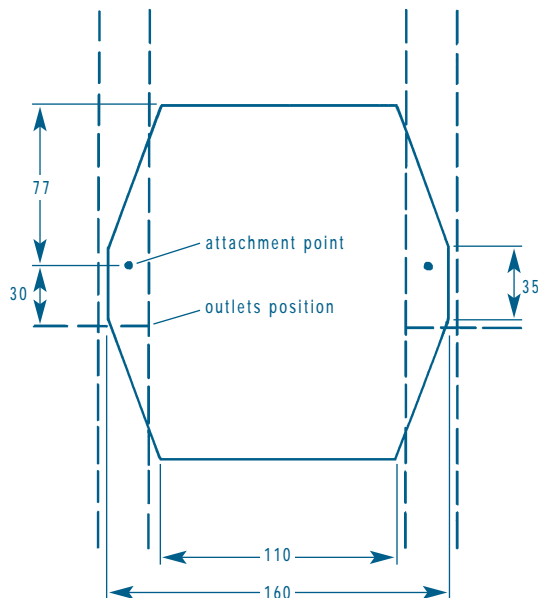
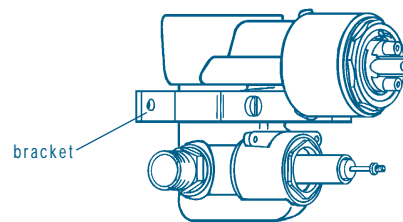
The built in suppressor does not affect every-day use. The lever action is the same as most single lever faucets in normal use, with one exception. You cannot close the faucet as fast as would be possible with a fast closing valve.

Connecting the Shower (FMM 4518)

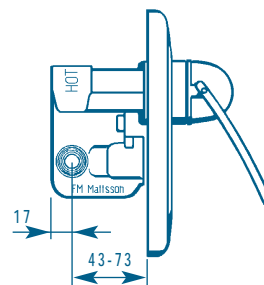
The water is first delivered through the spout. If the flow through the shower is desired, the diverter button is pulled out. When the faucet is shut off, the diverter resets to spout flow.

INSTALLATION

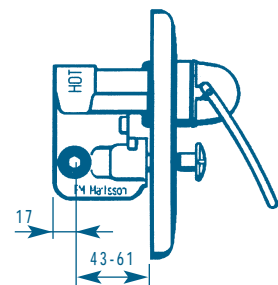
FMM 4518
4517 (without diverter)



- Attach the bracket to the faucet body.
- Install the faucet body into the wall. If installed in a wooden wall, see illustration.



FMM 4517



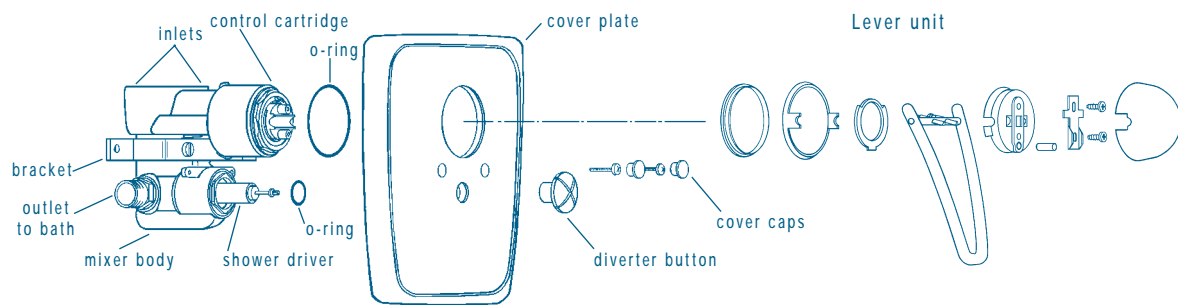
FMM 4518

Mounting dimensions. Finished wall - inlet/outlet centre:

FMM 4517 43-73 mm, FMM 4518 43-61 mm.

- Connect the pipes. NOTE! Inlets and outlets are marked on the body.

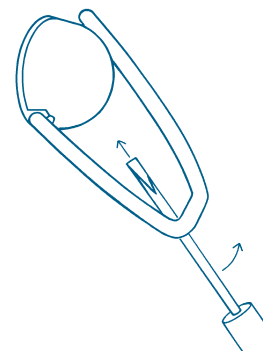
Wall hole dimensions, needed for dismantling the faucet and covered by the cover plate.



- Put the O-rings onto the front part of the control & diverter cartridge. The O-rings are to seal towards the cover plate when it is pushed on against the wall.
- Secure the cover plate with the two screws, and attach the caps.
- Thread on the diverter button (hold the spindle when tighten).
- Attach the lever unit as shown on illustration. See also "Replacing the control cartridge", "Limiting the flow", "Limiting the temperature" and "Normal setting".
- Finally the top cover is attached. Turn the small slot downwards.

LIMITING THE FLOW

- Remove the cover with a screwdriver. Insert the screwdriver blade appr. 5mm from below into the slot and bend upwards while holding the top cap on the front. (See illustration).
- Back off the now exposed screw about 1/2 turn.
- Lift the lever to desired maximum flow position. Slide the lock washer towards the lever and secure the washer by tightening the screw.
- Replace the cover.

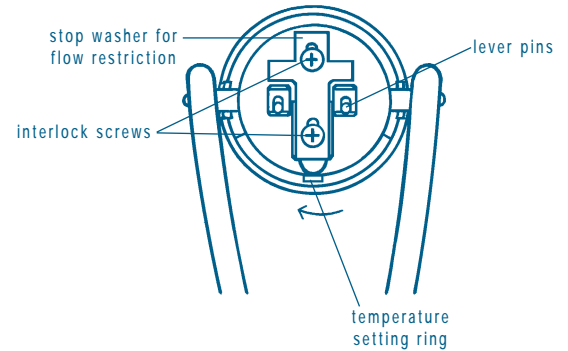


Dismounting the top cover

LIMITING THE TEMPERATURE

The movement of the lever in the hot water direction can be limited (to avoid wasting unnecessary hot water and to minimize the danger of scalding).

- Remove the top cover with a screwdriver.
See "Limiting the flow" above.
- Back off the now exposed screw about 1 turn (same screw as for flow limitation above).
- Swing the lever desired maximum hot water temperature.
- Turn the setting ring clockwise towards stop (see illustration).
- Tighten the screws and replace the top cover.

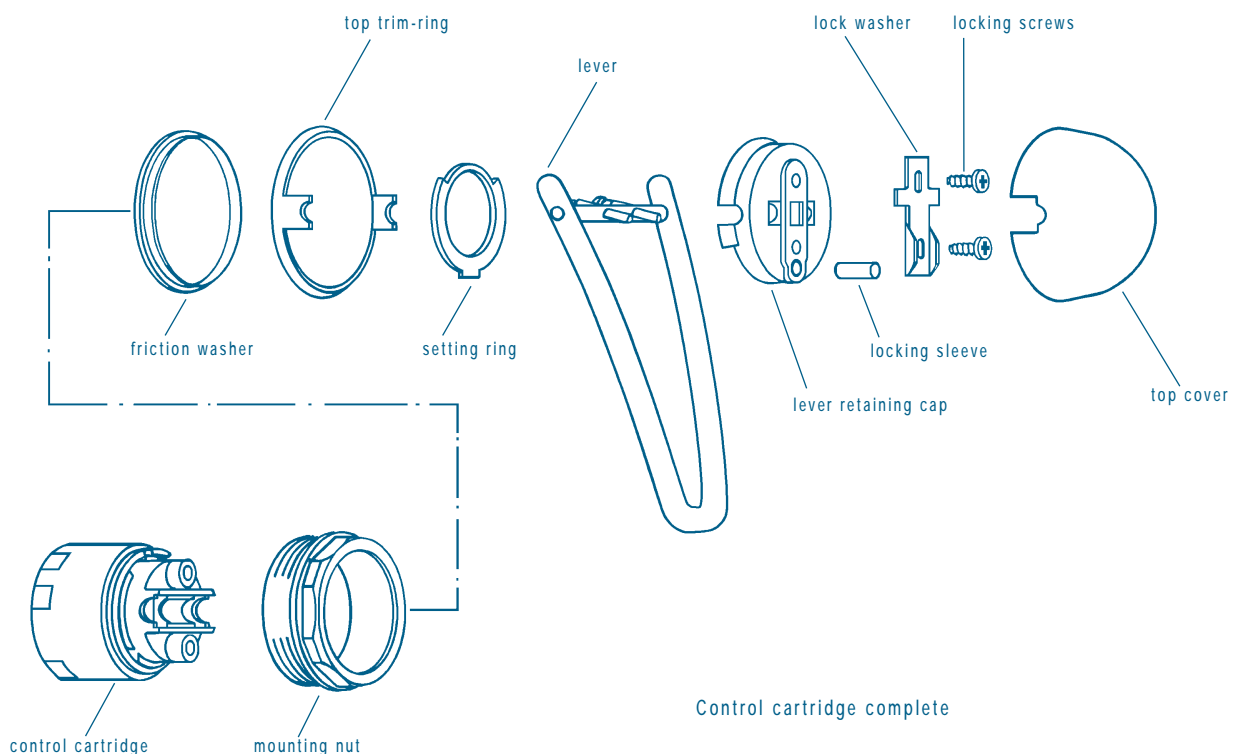


Flow restriction and temperature limitation

Normal setting (unrestricted)

Normal setting, without flow or temperature restrictions is obtained with the following steps.

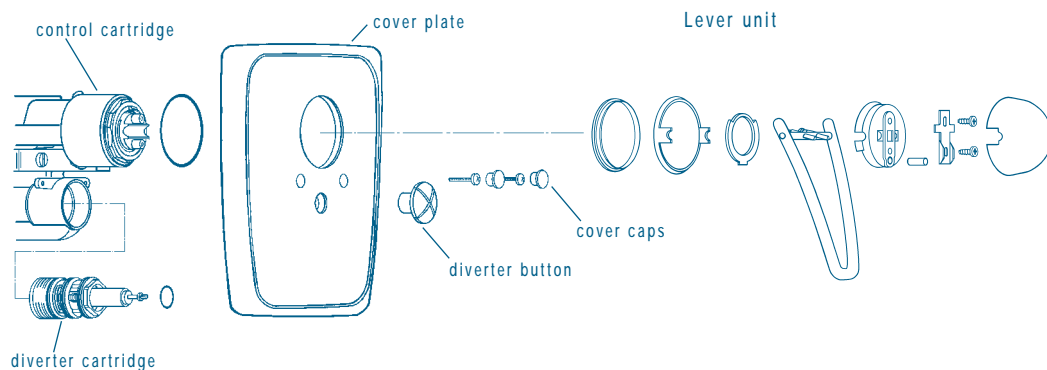
- Push the flow restricting stop washer backwards to end position.
- Swing the lever to fully hot position, and turn the setting ring clockwise to stop.



Control cartridge complete

REPLACING THE CONTROL CARTRIDGE

- Shut off the main water supply.
- Remove the top cover. See "Limiting the flow" above.
- Untighten the locking screws on the top of the control cartridge and remove the lock washer.
- Remove the lever retaining cap, lever, setting ring, top trim-ring and the friction washer.
- Unscrew the mounting nut and remove the control cartridge.
- Wipe out the body and remove possible deposits. It must be clean and dry. (Use Grinding Tool FMM 6096).
- Insert the new cartridge in the mixer body. Note the two lugs under the cartridge which fits into the holes in the body.
- Secure the control cartridge with the mounting nut.
- Attach the friction washer, top trim-ring and the setting ring. Make sure that the components are placed correctly. See illustration.
- Attach the lever and position the lever retaining cap. Make sure that the locking sleeve is in its slot on the lever retaining cap.
- Put on the lock washer and tighten the locking screws. Make sure the lock washer is correctly positioned.
- Open the main water supply.
- See previous page for settings of flow restriction and temperature stop.
- Reassemble the top cover. Turn the small slot downwards.



DIVERTER SPOUT - SHOWER (FMM 4518)

If diverter malfunction occurs, the cartridge likely needs cleaning or replacement.

- Dismount the lever unit, see "Replacing the control cartridge". It is not necessary to dismount the control cartridge.
- Unscrew the diverter button, while holding the spindle with a spanner.
- Remove the cover caps and untighten the cover plate. The caps are removed with a screwdriver inserted into the slots of the underside of the caps.
- Unscrew the diverter cartridge.
- Clean or replace the diverter cartridge, and fit the parts in reversed order. The O-rings are positioned on the front part of the control cartridge neck and shower diverter when the cover plate is attached. They are meant to seal against the cover plate. See also "Replacing the control cartridge", "Limiting the flow", "Limiting the temperature" and "Normal setting".

LUBRICATION

Use only silicone grease for lubrication. (FMM 3799 or equal).

CLEANING

The faucets are best preserved by regular cleaning with a soft cloth and a soap solution, followed by rinsing with clean water and polished with a soft dry cloth. Never use lime dissolvents, acidified or abrasive detergents. For removal of lime spots use vinegar before rinsing with water. The epoxy coated faucets are not to be exposed to acetone or causting solution.

Never use aluminium chloride, chlorhydric acid or phosphoric acid on chrome.

The chrome plated surface is not resistant to aluminum chloride, it will cause unattractive dark spots on the finish. Aluminum chloride is a part of some deodorants.

Protect the faucet when tiles are cleaned with hydrochloric acid as it dissolves chromium.

Phosphoric acid is a part of some strong concentrated detergents and affects the chrome layer and vital functional components.

Approved by

Quality Assurance Services, Australia

Australian Standard - AS 3718-1992

Licence No: 1185

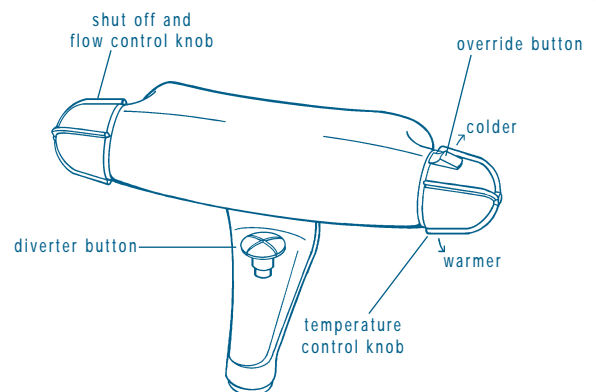
Lady G 5500 Pressure Balanced Thermostatic Exposed Mixer



OPERATING INSTRUCTIONS

The left knob controls the water flow rate. The head piece, ceramic discs operated, is fully open after 1/2 turn.

The right knob controls the water temperature. Turned clockwise the mixer will provide cold water. The more it is turned anti-clockwise, the warmer water is supplied. After one complete turn, the override button must be pressed in order to obtain warmer water. The knob can then be turned another 1/2 turn. The mixed water temperature now supplied is warmer than what is normally required for shower or bath.



Changing over to the shower outlet (tub mixers)

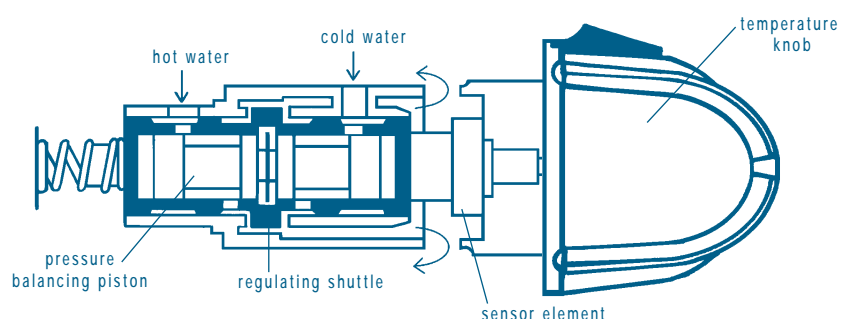
When the valve is opened, the water is supplied through the spout. If instead water from the

shower is desired, the diverter button is pulled upwards. When the valve is shut off, the diverter automatically resets to spout flow.

FUNCTION

The temperature is regulated by a pressure balancing and temperature control interplay. The pressure balancing piston, operating inside the regulating shuttle, is first dealing with the cold and hot water. The piston continuously finds the position where cold and hot water inlets obtains equal pressures prior to entering the temperature regulating function.

The position of the regulating shuttle is controlled by the temperature knob. The sensor element is located between the shuttle and the knob, and compensates for the temperature fluctuations of incoming hot and cold water by expanding or retracting. The delivered water from the mixer is kept at a very stable temperature.

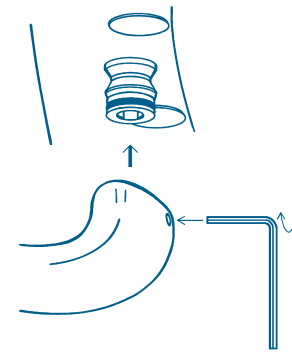


INSTALLATION

Attaching the spout

(Tub mixer model FMM 5500)

- Attach the spout on the nipple with the o-ring.
- Adjust the spout direction forward.
- Secure the spout by tightening the screw with the supplied key. (3 mm hexagon)



Attaching the spout

Rinse the supply pipework!

Flush the supply pipework before attaching the mixer eliminates the risk of filter clogging from unwanted impurities from the pipes.

Connection

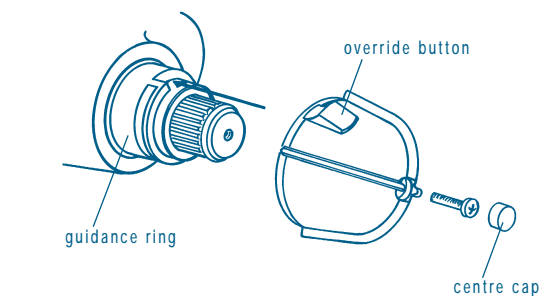
Make sure that the connections are tight.

CHECKING THE DELIVERED MIXED WATER TEMPERATURE

With the temperature knob turned to the stop position, (without pressing the override button) the water temperature delivered should be just right for shower and bath. (appr. 38°C or 100°F). The mixers are delivered, calibrated to provide this temperature with a hot water at 60°-65°C (140°-150°F) and a cold water temperature at 10°-15°C (50°-60°F). If the provided water is too hot or too cold with the temperature knob in the stop position, with the override button unpressed, a recalibration is necessary. The procedure is as follows:

- Open the valve with the flow control and set the temperature, to the stop (unreleased override button position) desired level. It may be necessary to press the override button. Close the water flow: (It is not necessary to shut off the main supply.)

- Remove the centre cap with a screwdriver. A screwdriver slot is found on the side of the centre cap. Dismount the screw, and pull the knob straight out without moving the desired setting.
- Replace the knob, now with the override button uppermost. Fit the lug inside the knob to the right of the guidance ring stop. See illustration.
- Reassemble and tighten the screw, attach the centre cap.
- Check the delivered water temperature.



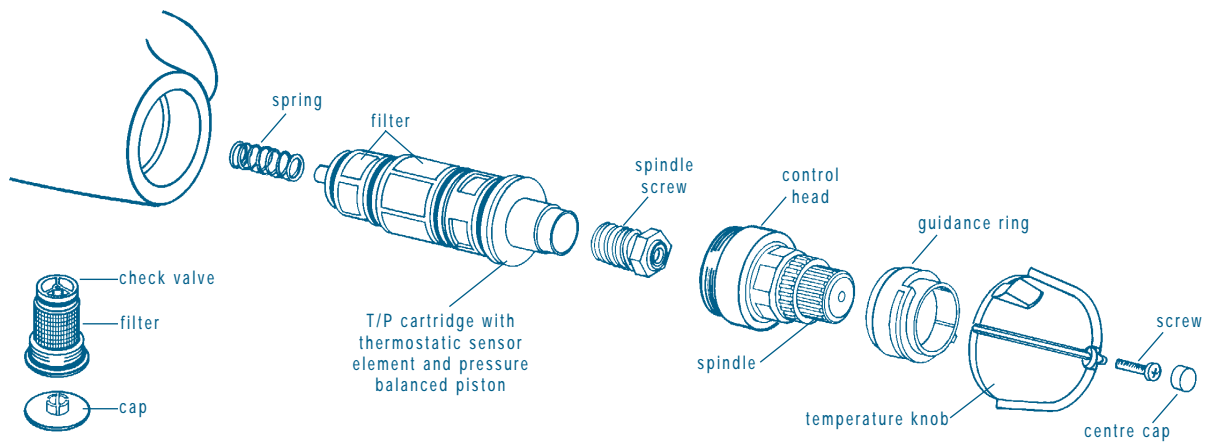
Calibration

TESTED AND APPROVED BY FM MATTSSON

Every mixer is tested and approved.

All delivered mixers are subjected to the following test:

- Tightness test with open and closed flow control.
- Tightness test of hot and cold water seat.
- Fail safe test.
- Cold water pressure 100 kPa > hot water pressure - Checking the mixed water temperature.
- Hot water pressure 100 kPa > cold water pressure - Checking the mixed water temperature.



FUNCTION DEFECT REMEDY

If the mixer is not supplying sufficient amount of water, or if the temperature regulation is unstable, a cleaning of the filters is recommended. If this step is not effective, replace the regulation cartridge.

Cleaning the filters

The inlet filters are placed around the check-valves, located in two plugs on the underside of the mixer.

Two fine-meshed filters are attached around the control cartridge. To clean the filters act as follows:

- Shut off the main water supply stop valve.
- Remove the caps on the underside of the body.
- Unscrew the check-valve/filter cartridges (10 mm int. hexagon) Take off the O-rings and pull off the filters from the plugs.
- Dismount the regulation cartridge. See "Regulation cartridge replacement" below.

- Pull off the filters from the cartridge. To enable removal of the larger filter, the O-ring must first be taken off.
- Clean all of the filters. (Replace if necessary) and reassemble the parts.
- Open the main water supply stop valve.
- Recalibrate the temperature setting. See "Checking the delivered mixed water temperature".

Check-valve replacement.

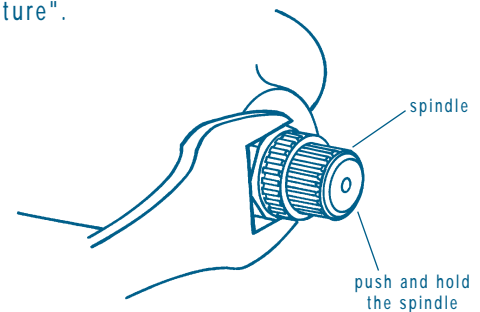
The check-valves are located under two plugs on the underside of the body and are accessible with the mixer installed. To replace, act as follows:

- Shut off the main water supply stop valve.
- Remove the caps on the underside of the body.
- Unscrew the check-valve/filter cartridges (10 mm int. hexagon).
- Reassemble the new check-valves and open the main water supply stop valve.

Regulation cartridge replacement

- Shut off the main water supply stop valve.
- Remove the centre cap with a screwdriver. A screwdriver slot is found on the side of the centre cap. Dismount the screw, and pull the knob straight out.
- Mark the guidance ring position, (in relation to the body) and pull it off.
- Unscrew the control head as follows: Push in the spindle and hold it, to prevent it from rotating with the control head when dismantled. See illustration.
- Take out the regulation cartridge.
- Unscrew the spindle screw and take off the spring from the cartridge.

- Reassemble the spring and the spindle screw to the new regulation cartridge.
- Reassemble all the parts. Push in the spindle when the control head is attached. See illustration.
- Open the main water supply stop valve.
- Recalibrate the temperature setting. See "Checking the delivered mixed water temperature".

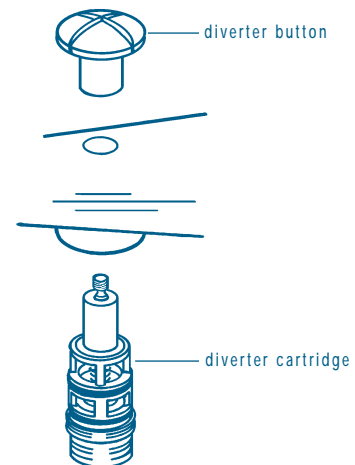


Dismounting and mounting the control head

SHOWER - SPOUT DIVERTER

If malfunction occurs in the spout-shower diverter, it most likely needs cleaning or replacement.

- Disconnect the hose from the mixer.
- Unscrew the diverter button. Carefully secure the interior piston of the diverter cartridge from below with a screwdriver.
- Unscrew the cartridge down-wards (12 mm hexagon key).
- Clean or replace the diverter cartridge, and reassemble in the reversed order.



SAFETY REGULATIONS

- Injurious risk!** Never remove the guidance ring, (inside the temperature knob) it is a protection against too hot water.
- Injurious risk!** Never calibrate the mixer with a too low temperature on hot water inlet. If the hot water temperature later is increased, the mixed water temperature will follow, and a recalibration will be necessary.
- Injurious risk!** If the temperature knob is turned past the stop, (after pressing the override button) the provided mixed water temperature is higher than what normally is required for a shower or bath.
- Injurious risk!** Never unscrew a plug or a connection on the mixer without having shut off the main supply stop valve.

CERAMIC CONTROL HEAD REPLACEMENT

The mixer is provided with a flow control head with ceramic discs. If the knob turning becomes heavy, we recommend replacement of the complete control head.

- Shut off the main water supply stop valve.
 - Remove the centre cap with a screwdriver.
A screwdriver slot is found on the side of the centre cap. Dismount the screw, and pull the knob straight out.
 - Unscrew the control head.
 - Reassemble a new ceramic control head in the reversed order.
 - Open the main water supply stop valve.
-

The chrome plated surface is not resistant to aluminum chloride, it will cause unattractive dark spots on the finish. Aluminum chloride is a part of some deodorants. Protect the mixer when tiles are cleaned with hydrochloric acid as it dissolves chromium. Phosphoric acid is a part of some strong concentrated detergents and affects the chrome layer and vital functional components.

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