# CAROMA

# **LIANO II - TOWER BASIN MIXER**

# **WATER EFFICIENT TAPWARE**

# PLUMBERS INSTALLATION INSTRUCTIONS

### **Important Information**

- \* Not suitable for gravity feed systems.
- \* Mixer is fitted with a flow regulated aerator insert (23). This low flow rate may not be suitable for connection to some Instantaneous Gas Water Heaters, some Tempering Valves, some Solar Water Heaters & some Thermostatic Mixing Valves.
- Check with the manufacturers of these products.
- \* Isolating stop taps must be fitted to the hot & cold water supply connections. (Part No. 842018C Mini cistern 1/4T)
- \* All pipework must be thoroughly flushed prior to installation, as foreign materials may block the flow regulating device and reduce the flow of water. Note: Aerator insert must be retightened to prevent removal by hand.

### Installation

- From fixing pack fit 'O'ring (13) into groove in base ring (12). Slide the base ring over the threaded tube (18) & locate spigot of base ring (12) into base of mixer body (11), as shown.
- 2) Flexible Tail Mixer Connections: Apply suitable lubricant to 'O'rings (19). Fit flexible tail (21) (with red indication) into inlet hole marked with a Red Dot in underside of mixer body (11). Hand tighten the tail, ensuring the 'O'ring (19) has fully entered the sealing bore to provide a watertight joint. Fit other flexible tail (with blue indication) into remaining hole in a similar manner.
- 3) Insert the inlet connection end (20) of each flexible tail (21) through the hole in the deck. Fit mixer (11) into deck hole, fit washer (15) together with flat seal (14) over threaded tail of mixer as shown (Fig.1). Screw clamp ring (16) onto threaded tube until it contacts washer (15) & the flat seal (14) has contacted the underside of the deck. Tighten two screws (17) using a 3mm allen key until mixer assembly is clamped firmly to the deck. DO NOT OVERTIGHTEN.
- 4) Flexible Tail Inlet Connections: Connect the flexible tails (21) to the hot and cold isolating stop taps, hand tighten the fixing nut (22) until rubber cone contacts the sealing face of the connection end, then tighten a further one turn to provide a watertight joint.

Important: Flexible tails must not be kinked, twisted or in tension when installed. (Minimum Bend Radius:- 50mm) Do not install flexible tails where subject to ultra violet light.

#### **IMPORTANT**

## Pressure & Temperature Requirements.

- Hot and cold water inlet pressures should be equal.
- Static inlet pressure range: 150-1000 kPa
  New Regulation: 500 kPa maximum static pressure at any outlet within a building. (Ref. AS/NZS 3500.1)
- Maximum hot water temperature : 80°C.

# **Deck Requirements**

- Deck thickness : 40mm maximum
- Tap body hole (in deck) : Ø34-36mm

# Replacing Cartridge

- 1) Turn off hot and cold water supplies.
- 2) Carefully unscrew handle lever (5). Using 2.5mm allen key (3) loosen screw (2) and remove handle (1). Remove plastic insert (6) then extract swivel cap (7) and thrust washer (8) from the mixer body (11), taking care not to damage the decorative finish. **Hint**: The small end of the allen key (3) can be inserted into the slot in the swivel cap (7) and used to lever the cap vertically to remove. Using a 26mm socket, unscrew nut (9) then lift out old cartridge (10).
- 3) Ensure inside face of mixer body (11) is clean. Check that seals are in position in base of new cartridge (10). Fit new cartridge (10) into mixer body (11), taking care that two lugs on base of cartridge (10) fit into mating holes in mixer body (11).
- 4) Screw in nut (9). **Important:** Nut (9) should be tightened to a torque of 7.5 Nm.
- 5) Clean all contact surfaces of swivel cap (7), 'O'-ring and thrust washer (8), ensure they are clean and free from any debris. Lubricate the thrust washer (8), underside of cap (7) and 'O'-ring then fit the thrust washer (8) around the nut (9). Ensure that the cartridge stem is in closed position with the flats on the stem orientated square with the outlet. Fit the swivel cap (7) along with 'O'-ring into the mixer (11) and ensure the swivel cap cut-out is positioned as shown in Fig.2. Fit the insert (6) over the cartridge (10) stem and push it down. Fit handle (1) taking care that it is pushed fully onto cartridge stem & bottomed on the plastic insert (6) then tighten screw (2) using the 2.5mm allen key (3). Screw handle lever (5) together with O'Ring (4) into handle (1) and tighten firmly by hand, taking care not to damage decorative finish.
- 6) Turn on water supplies and check operation.

## Removing Aerator Insert

- 1) Aerator insert (23) can be removed with the key (24) provided.
- 2) Deposits of lime can be removed by washing in a vinegar solution.
- 3) When replacing aerator insert (23), be careful that thread is engaged correctly and 'O'ring is not damaged as it enters the bore. Tighten securely (to prevent removal by hand) using key (24).

