

RENO KIT INSTRUCTIONS

PLEASE READ THROUGH ALL PAGES BEFORE

YOU START.

THIS IS TO CONVERT A TWO TAP MANUAL SHOWER SYSTEM ONLY.
IT WILL NOT REPLACE A SINGLE LEVER MIXER VALVE.

- PAGE 1. LIST AND DIAGRAM OF ALL RENO KIT PARTS.
- PAGE 2. THE PARTS YOU WILL NEED DEPENDING ON YOUR CURRENT INSTALLATION.
- PAGE 3. INSTALLING RENO KIT IF ONLY USING BOX A PARTS.
- PAGE 4. INSTALLING RENO KIT IF ALSO USING BOX B PARTS.
- PAGE 5. FIXING CT100 THERMOSTATIC MIXING VALVE
- PAGE 6. FITTING THE HANGING NUT. THIS IS A COMPULSARY PART OF THE RENO KIT.
- PAGE 7. SLIDE RAIL KIT AND HAND SET
- PAGE 8. USER INSTRUCTIONS
- PAGE 9. THERMAL SHUT-OFF & DYNAMIC PRESSURE RATIO
- PAGE 10. CARE & TROUBLE SHOOTING
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- PAGE 12. COMMISSIONING

2 YEAR WARRANTY ON ALL PARTS AGAINST DEFECTS IN PERFORMANCE

TO BE FITTED BY A QUALIFIED PLUMBER

**INSTALLATION IS SUBJECT TO THE REQUIREMENTS OF THE APPLICABLE REGULATORY AUTHORITY,
THE NATIONAL CONSTRUCTION CODE VOLUME THREE- PLUMBING CODE OF AUSTRALIA.**

AUSTRALIAN STANDARD AS4032.4: 2014 WATERMARK LICENCE WMK26224

NOT TO BE FITTED WHERE FREEZING MAY OCCURE

RECOMMENDED INLET PRESSURE BETWEEN 100 AND 500kPa

If inlet pressure exceeds 500kpa, install a pressure reducing valve soon after the incoming mains supply.

INLET COLD WATER TEMPERATURE BETWEEN 8 and 29°C to obtain set mixed water temperature.

INLET HOT WATER TEMPERATURE BETWEEN 55 and 85°C to obtain set mixed water temperature.

If inlet temperature exceeds 85°C, check hot water system thermostat.

**CAN BE FITTED WITH A COMBINATION BOILER, MAINS PRESSURE UNVENTED OR INSTANTANEOUS
HOT WATER SYSTEMS WITH BALLANCED PRESSURES**

**MIXED OUTLET WATER TEMPERATURE RANGE BETWEEN 20 AND 45°C at recommended inlet
temperatures**

SAFETY STOP SET FEATURE @38°C with internal safety thermal shut-off

DO NOT USE ABRASIVE CLEANING PRODUCTS

THERM-OZ SHOWERS PTY LTD.

35 POLLARD WAY, WARNBRO, 6169, WA.

ABN 22605 703 231 EMAIL INFO@THERM-OZ.NET.AU PHONE +61 439 1964 41

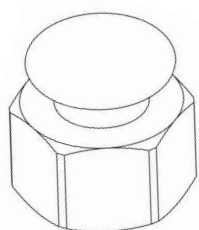
WEBSITE WWW.THERM-OZ.NET.AU

THERM-OZ RENO KIT PARTS

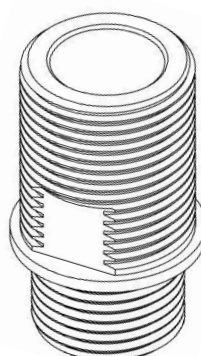
THERE ARE TWO BOXES OF FITTINGS FOR THE RENO KIT, AS LISTED BELOW.

SOME PARTS YOU WILL USE, AND SOME PARTS YOU WILL NOT. THE NEXT PAGE WILL HELP YOU CHOSE THE PARTS YOU NEED.

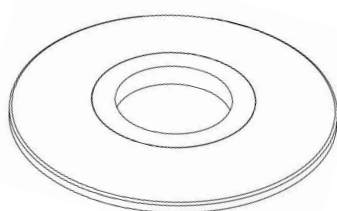
PARTS IN **BOX A**



CHROME HANGING NUT
WITH WASHER
X1



CHROME 3/4" X 5/8"
MALE ADAPTOR, WITH
SPANNER FLATS AND
WASHER.
X2

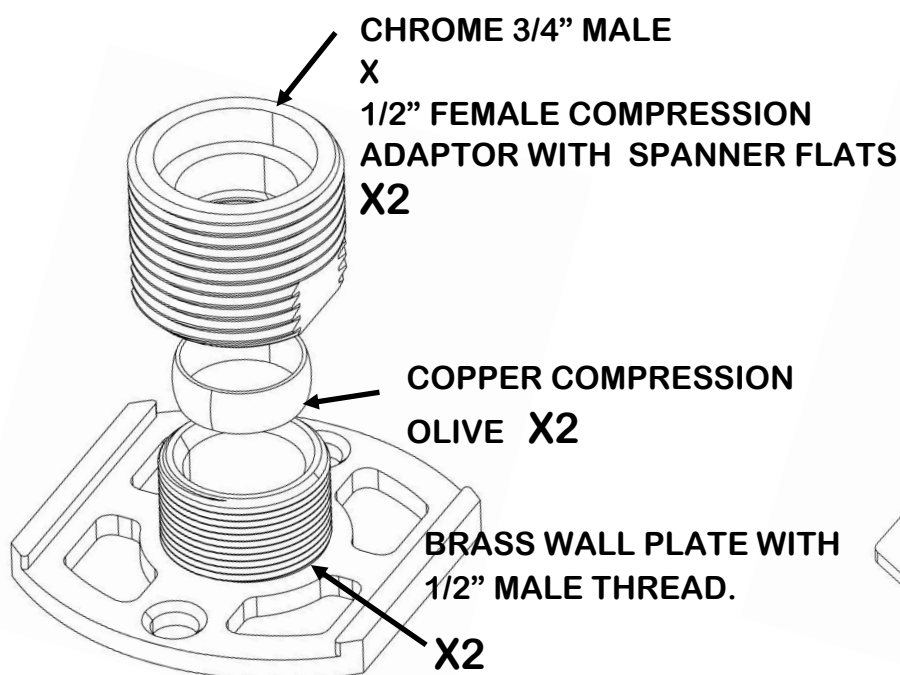


CHROME COLLAR
X1



BRASS INSERT WITH O
RINGS AND FIXED SEATING
WASHER.
X2
THESE PARTS ARE ALSO
USED IF USING PARTS IN
BOX B

PARTS IN **BOX B**

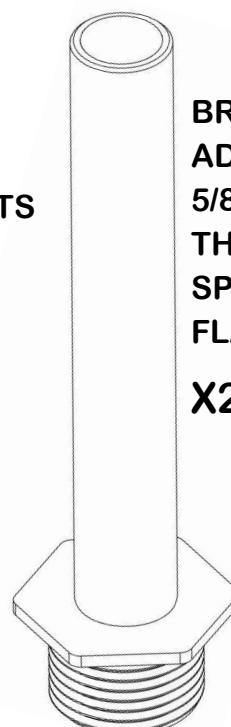


CHROME 3/4" MALE
X
1/2" FEMALE COMPRESSION
ADAPTOR WITH SPANNER FLATS
X2

COPPER COMPRESSION
OLIVE **X2**

BRASS WALL PLATE WITH
1/2" MALE THREAD.
X2

WITH SCREWS AND WALL
PLUGS IF REQUIRED



BRASS ROD
ADAPTOR WITH
5/8" MALE
THREAD AND
SPANNER
FLANGE
X2

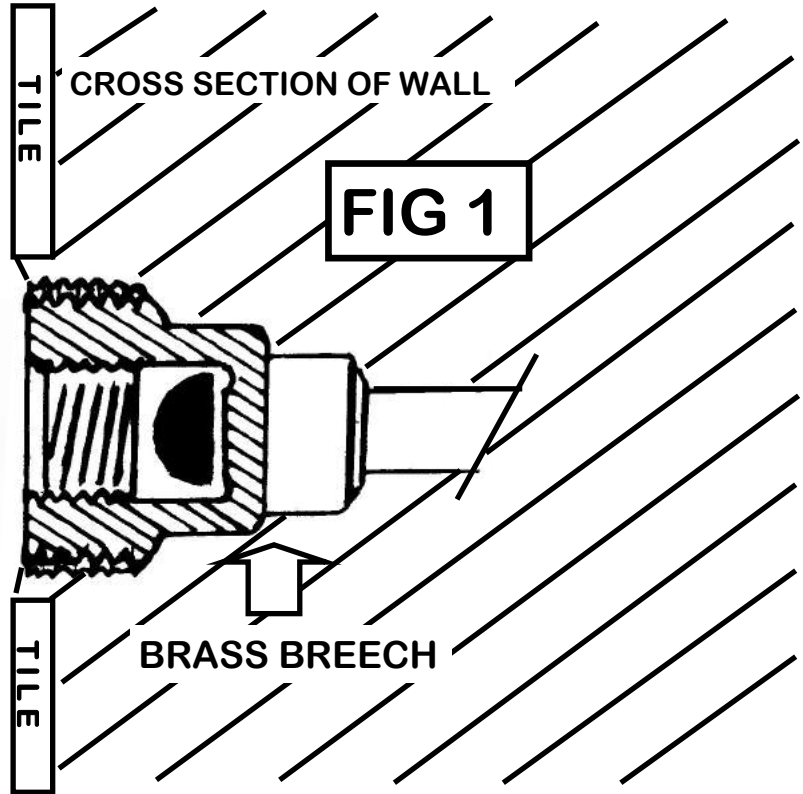
WHAT PARTS TO USE

TO FIND OUT WHICH PARTS OF THE RENO KIT YOU NEED, SEE THE TWO TYPES OF SCENARIOS THAT YOU MIGHT HAVE IN YOUR SHOWER.

YOUR OLD SHOWER VALVES WILL BE SCREWED INTO A BRASS BREECH THAT IS SET IN THE WALL. IF THE BREECH IS PRETTY MUCH FLUSH WITH THE TILES, LIKE FIG 1, YOU WILL NEED TO USE **BOX A**



SET BACK A MAXIMUM OF 5mm. ANY MORE THAN 5mm, SEE BELOW



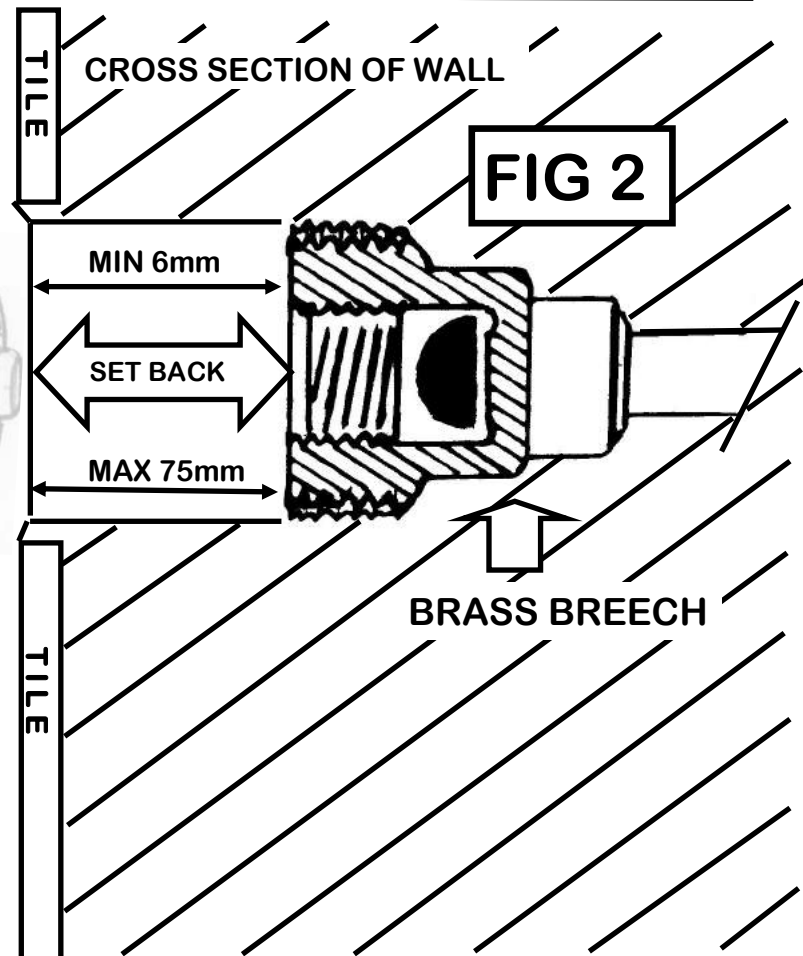
IF THE BREECH IN THE WALL IS SET BACK MORE THAN 5mm UP TO 75mm,

THEN USE ADDITIONAL PARTS IN **BOX B**



THESE PARTS CAN ALSO BE USED IF YOU ARE TILING ON TOP OF YOUR EXISTING TILES.

DISGUARD PARTS NOT USED, OR KEEP AS SPARES



TURN OFF WATER SUPPLY AND REMOVE OLD VALVES AND SHOWER HEAD, ENSURING ALL WATER IS DRAINED FROM THE BREECH.

NOTE. YOU ONLY NEED TO USE THE PARTS IN BOX B IF THE EXISTING BREECH IN THE WALL IS SET BACK MORE THAN 5mm

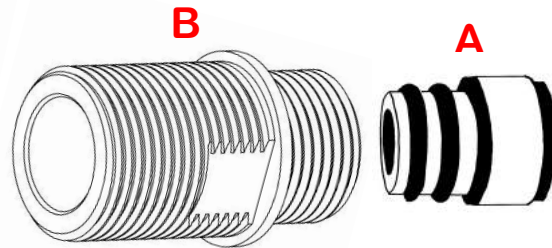
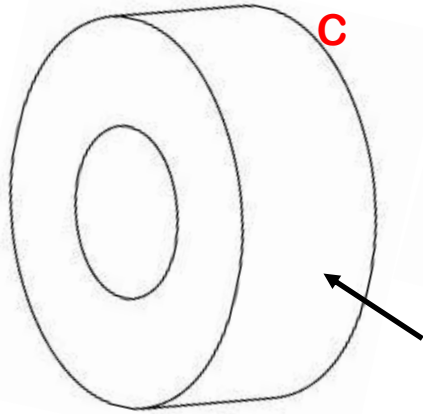
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BOX A (IF BREECH IS FLUSH WITH TILES)

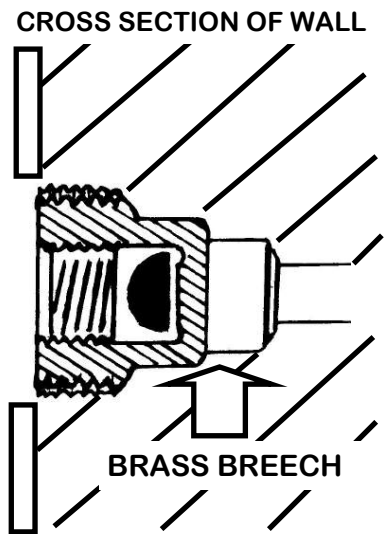
PARTS IN ORDER OF FITTING

CHROME COVERS

(2 OF EACH)



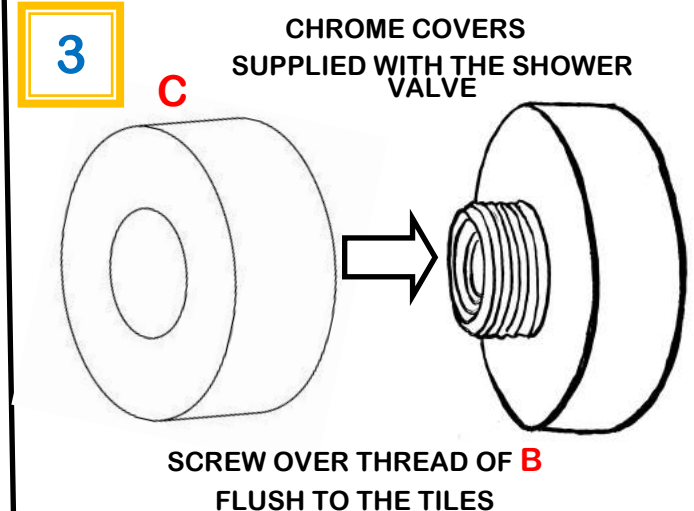
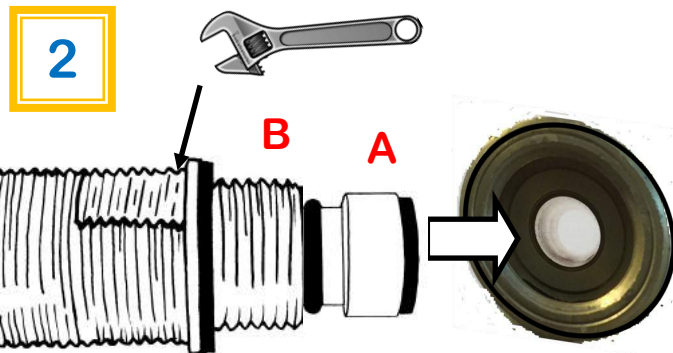
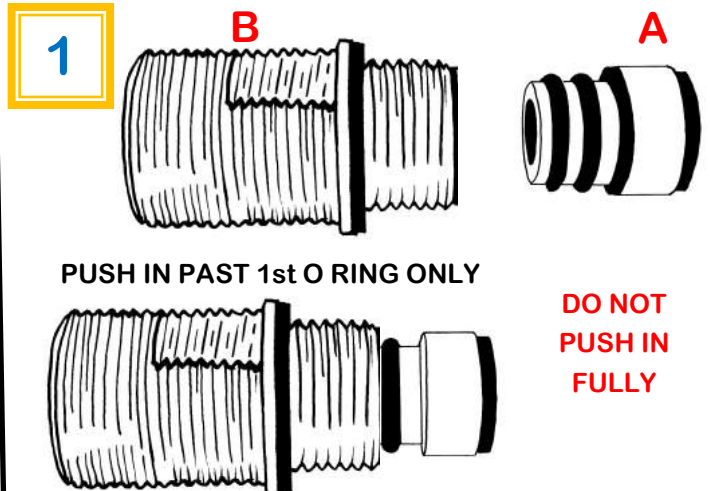
SUPPLIED WITH THE SHOWER VALVE



- A** = BRASS INSERT WITH WASHERS AND O RINGS
- B** = CHROME ON BRASS THREADED ADAPTOR
- C** = CHROME COVER SHROUD SUPPLIED WITH THE SHOWER VALVE.

FITTING PROCEDURE

1. INSERT PART **A** INTO BASE OF PART **B**
2. SCREW THIS INTO BREECH IN WALL
3. SCREW ON PART **C** CHROME COVERS

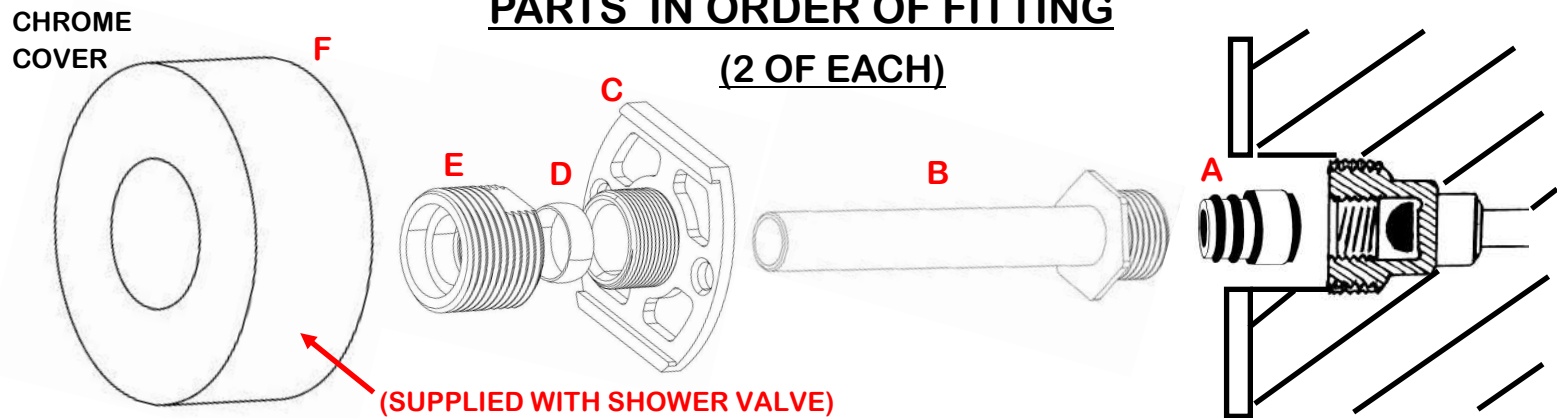


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NOW READY FOR THE SHOWER VALVE TO BE FITTED TO THE EXPOSED MALE THREADS USING WASHERS PROVIDED

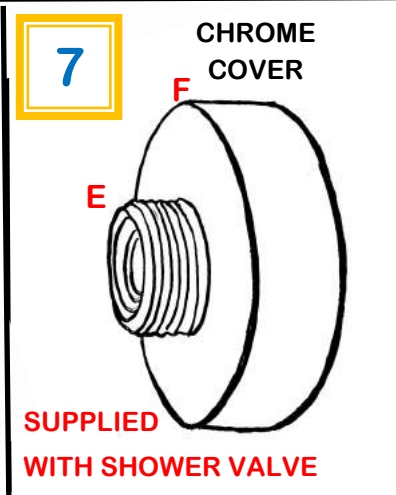
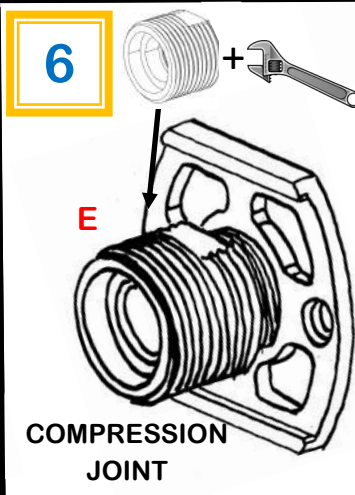
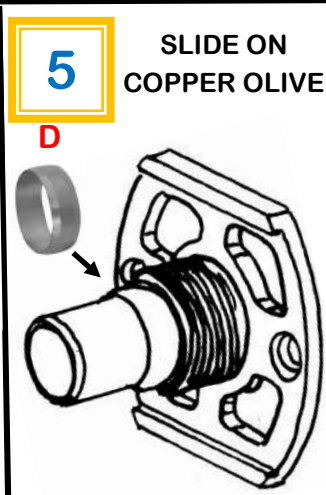
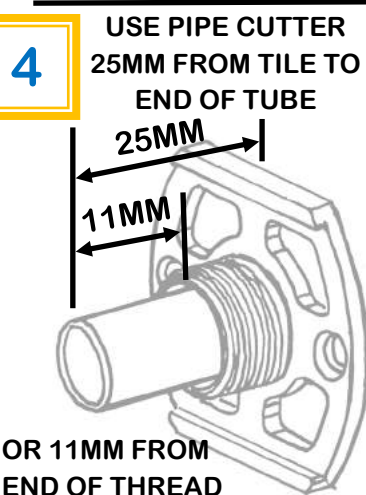
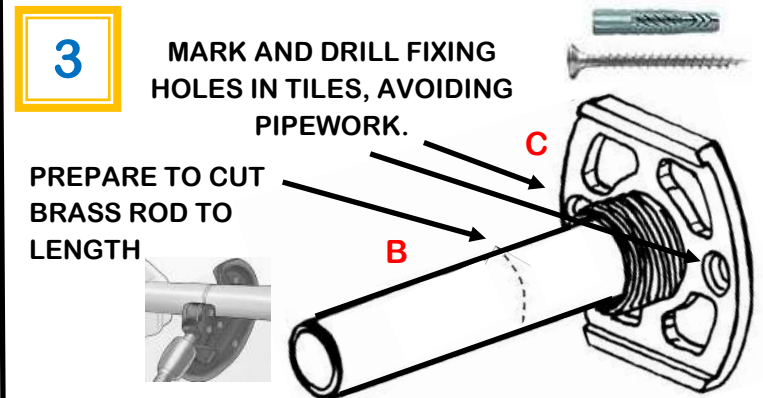
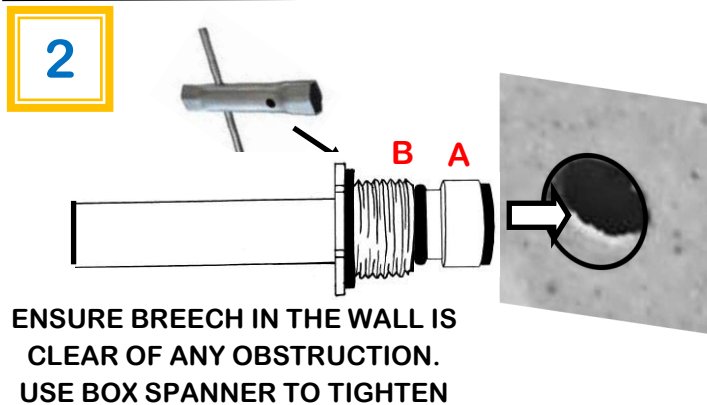
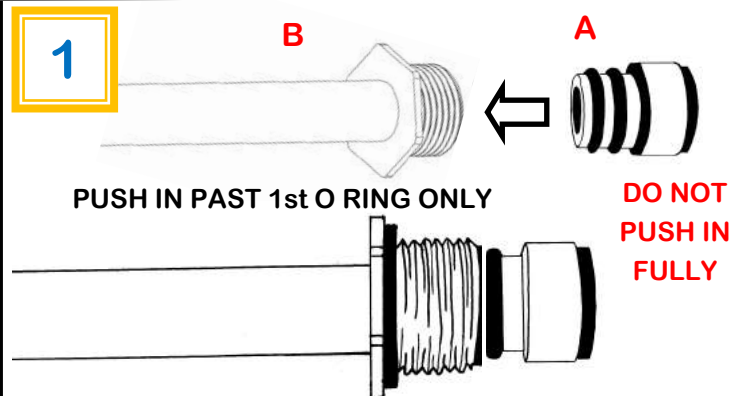
BOX B (IF THE BREECH IS SET BACK IN THE WALL)

PARTS IN ORDER OF FITTING



FOLLOW INSTRUCTIONS IN ORDER FROM 1 TO 7

1. INSERT PART A INTO BASE OF PART B
2. SCREW THIS IN TO BREECH HOLE
3. SLIDE PART C ON TO TUBE OF PART B
4. CUT TUBE TO 25MM FROM TILE FACE
5. SLIDE PART D OLIVE ON TO TUBE
6. TIGHTEN PART E OVER PART D AND C
7. SCREW ON PART F CHROME COVERS
(SUPPLIED WITH SHOWER VALVE)



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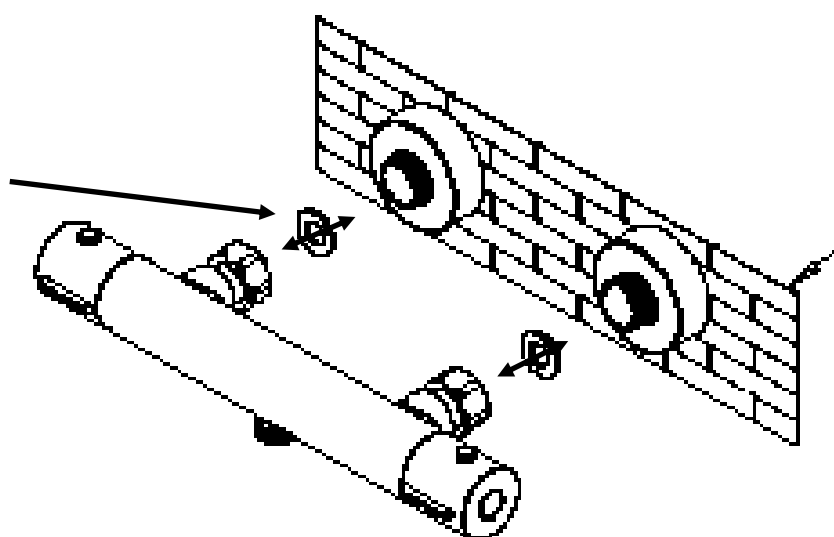
**NOW READY TO CONNECT THE SHOWER VALVE TO THE MALE THREADS
USING WASHERS PROVIDED**

FIXING THE CT100 THERMOSTATIC MIXING VALVE

YOUR OLD VALVES ARE NOW REMOVED. GENTLY FLUSH PIPES THROUGH TO CLEAR OF ANY DEBRIS.

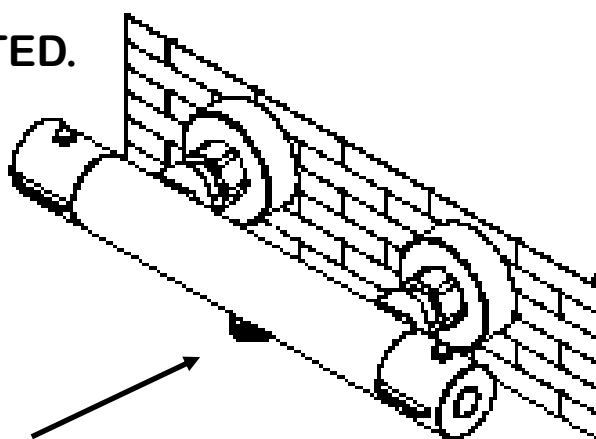
USING AN APPROPRIATE SPANNER, CONNECT THE THERMOSTATIC VALVE TO THE EXPOSED MALE THREADS. DO NOT OVER TIGHTEN.

USING THE RUBBER WASHERS CONNECT THE THERMOSTATIC VALVE ON TO THE MALE THREADS



THERMOSTATIC VALVE IS NOW FITTED.

VALVE OUTLET FOR HOSE CONNECTION



THERM-OZ RENO KIT

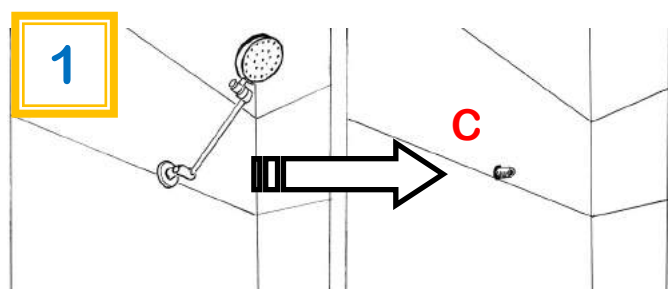
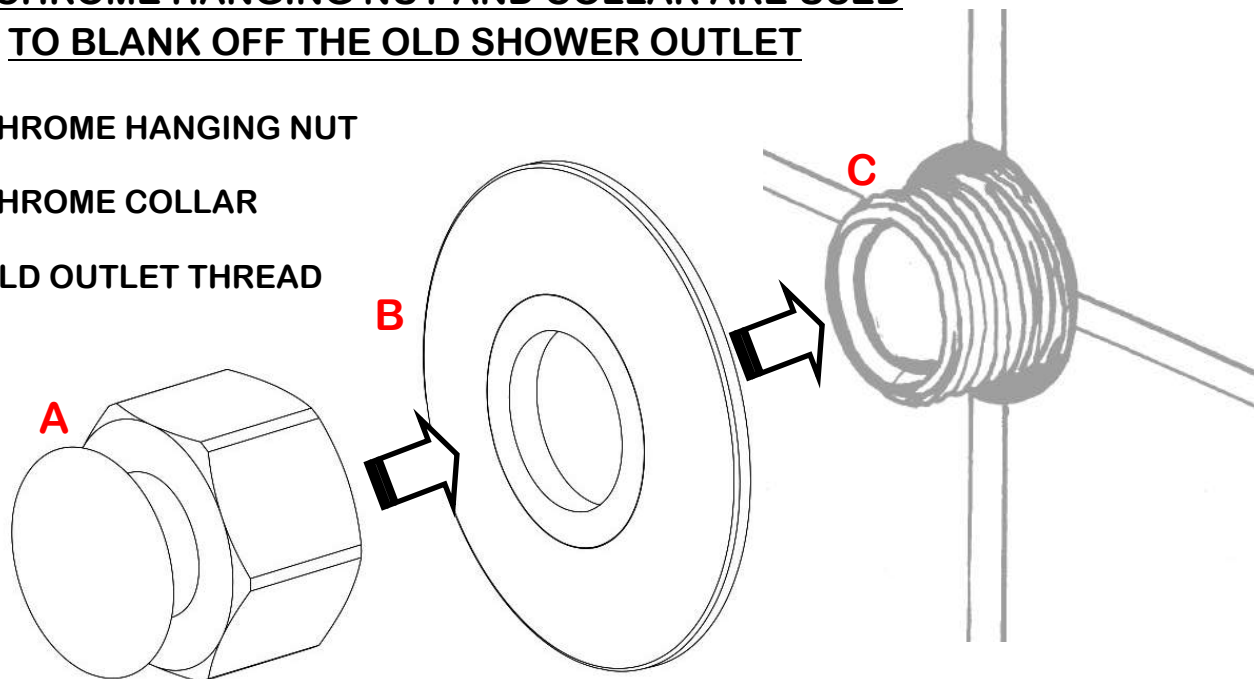
HANGING NUT & COLLAR

THE CHROME HANGING NUT AND COLLAR ARE USED TO BLANK OFF THE OLD SHOWER OUTLET

A = CHROME HANGING NUT

B = CHROME COLLAR

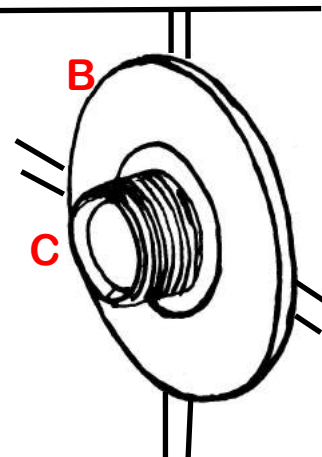
C = OLD OUTLET THREAD



REMOVE EXISTING SHOWER HEAD TO LEAVE AN EXPOSED MALE THREAD **C**

2

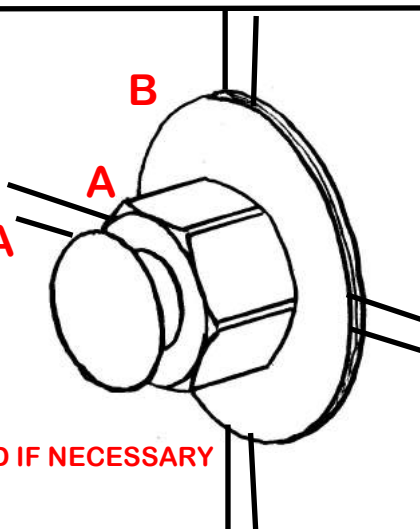
PLACE THE CHROME COLLAR **B** OVER THE MALE THREAD **C**



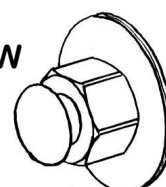
3

SCREW ON THE CHROME HANGING NUT **A** ON TO MALE THREAD.

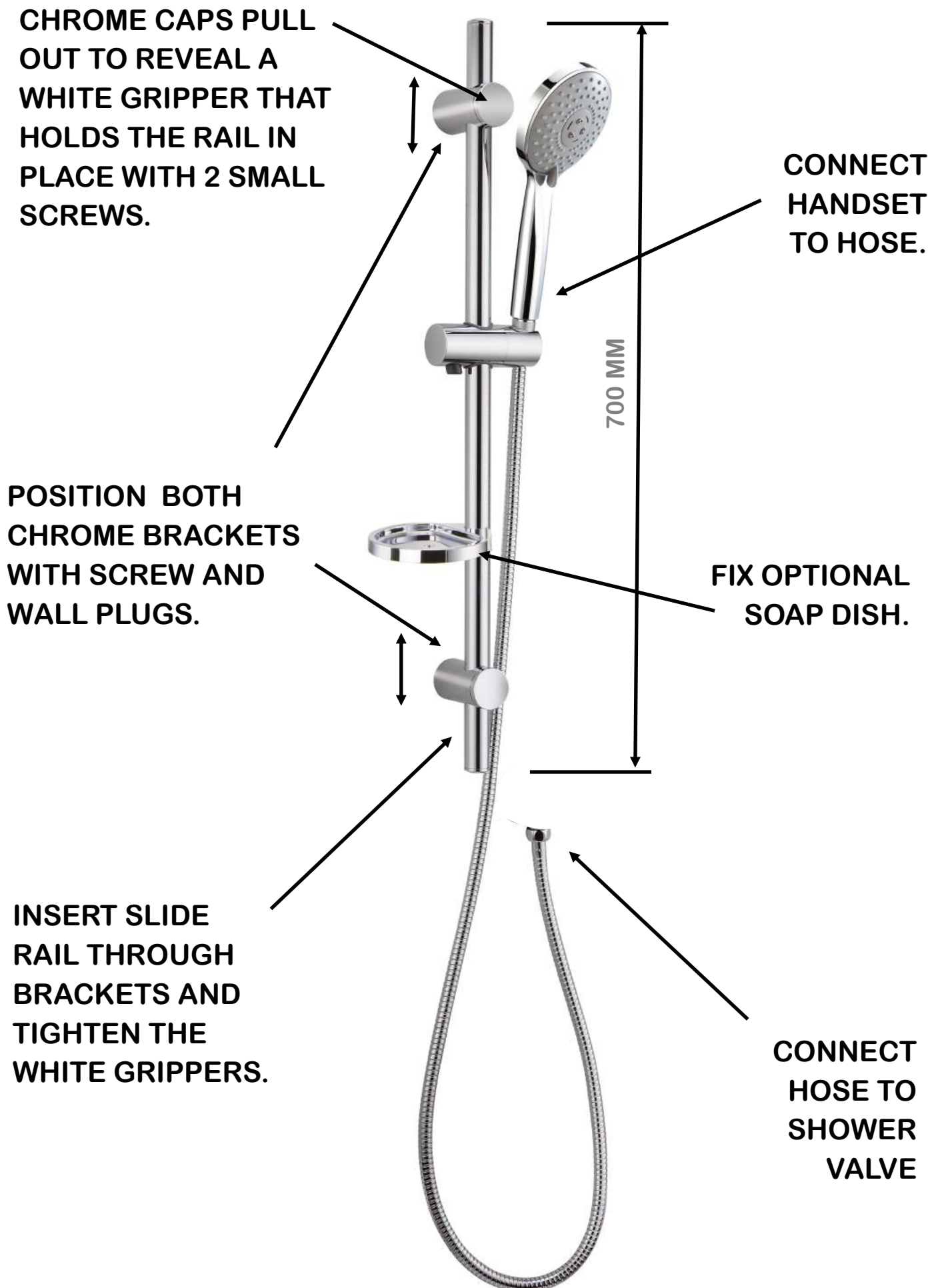
SHORTEN THREAD IF NECESSARY



OLD OUTLET IS NOW BLANKED OFF



USE TO HANG TIDY BASKET, SHOWER SCRUNCHIE, ETC



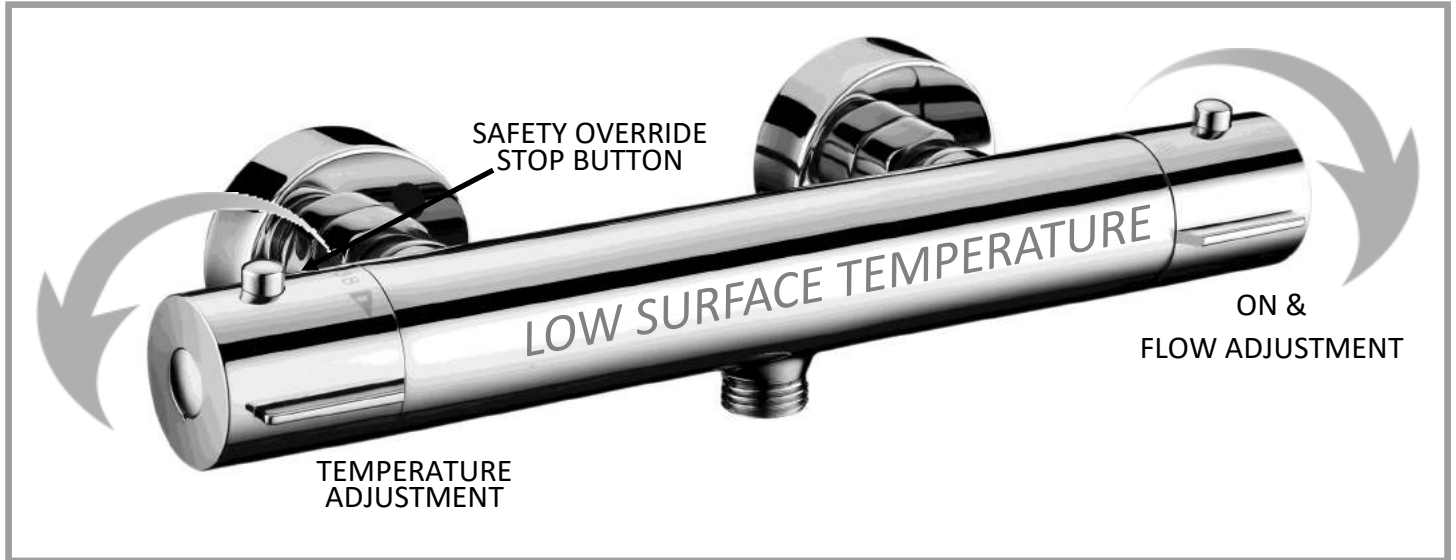
BEWARE OF ANY PIPEWORK THAT MAY BE IN THE WALL

TO START THE SHOWER, ROTATE THE RIGHT HANDLE.

A FULL QUARTER TURN, IS FULL FLOW.

ROTATE IN THE OPPOSITE DIRECTION TO DECREASE OR STOP FLOW

THE BUTTON ON THIS HANDLE IS NOT FUNCTIONAL, AND IS FOR AESTHETICS ONLY.



THE TEMPERATURE IS CONTROLLED BY ROTATING THE LEFT HANDLE.

FOR SAFETY REASONS, THE MIXED TEMPERATURE IS LIMITED TO 38°C
BY THE SAFETY OVERRIDE STOP BUTTON.

TO OBTAIN A HIGHER MIXED WATER TEMPERATURE, PRESS THE
OVERRIDE BUTTON AND ROTATE HANDLE.

FOR A COOLER SHOWER THAN 38°C, ROTATE HANDLE IN THE OPPOSITE
DIRECTION. THE SAFETY BUTTON WILL AUTOMATICALLY RE-SET.

THE SURFACE TEMPERATURE OF THIS VALVE IS SAFE TO TOUCH OR
HOLD WHILST SHOWERING AND WILL GET NO HOTTER THAN 20°C
WHEN AT 38°C SETTING.

THE VALVE HAS AN INTERNAL SAFETY THERMAL SHUT-OFF

SEE PAGE 5 FOR DEALS OF THIS FEATURE

TO HELP MAINTAIN THE APPEARANCE OF THE SHOWER VALVE, IT IS GOOD PRACTICE TO WIPE
CLEAN AND DRY WITH A DRY SOFT CLOTH AFTER USE.

TIP TO SAVE WATER. TURN ON SHOWER, GET WET. TURN OFF SHOWER AND WASH WITHOUT
WATER RUNNING. TURN SHOWER BACK ON TO RINSE OFF.

This is a safety feature for Thermostatic valves manufactured to Australian Standard AS4032.4-2014

Basic terms, should the Cold or Hot water supply suddenly fail, the mixing valve will shut off , preventing harm or thermal shock.

This valve CT100 complies with Clauses 4.4.2 and 4.4.3 of the above standard.

Explanation as written in the standard AS4032.4 as follows;

Cold water isolation

When tested in accordance with Appendix D, the thermal shut-off under cold water isolation of each thermostatic tap, when pre-adjusted to supply mixed water at temperatures of 38+/-2°C, 45+/-2°C and the manufacturer's nominated maximum setting, shall not exceed the temperature rises and durations given in Table 4.1 during both the period of shut-off of the cold water supply and immediately following the restoration of the cold water supply.

The mixed water shall stabilize to within 2°C of the preset temperature, in not more than 20.0 seconds following restoration of the cold water supply.

Heated water isolation

When tested in accordance with Appendix D, the thermal shut-off under heated water isolation of each thermostatic tap, when pre-adjusted to supply mixed water at temperatures of 38+/-2°C, 45+/-2°C and the manufacturer's nominated maximum setting, shall not exceed the temperature rises and durations given in Table 4.1. of the standard AS4032.4

The amount of water discharged following thermal shut-off under heated water isolation of each thermostatic tap shall not exceed 0.75 L within 5–35 seconds following heated water supply isolation.

The mixed water shall stabilize to within 2°C of the preset temperature, in not more than 20.0 seconds following restoration of the heated water supply.

Dynamic pressure ration , after Hot water isolation endurance test

	Operating Temp °C		Dynamic Pressures kPa	
	Nominated Cold water Supply 15+5°C	Nominated Hot water Supply 65+2°C	Nominated Cold water Supply 300+10 kPa	Nominated Hot water Supply 300+10 kPa
Temp Set	Actual	Actual	Actual	Actual
38+1°C	16.2	63.7	303	301
45+1°C	18.5	63.2	302	298

Dynamic pressure ration , after Cold water isolation endurance test

	Operating Temp °C		Dynamic Pressures kPa	
	Nominated Cold water Supply 15+5°C	Nominated Hot water Supply 65+2°C	Nominated Cold water Supply 300+10 kPa	Nominated Hot water Supply 300+10 kPa
Temp Set	Actual	Actual	Actual	Actual
38+1°C	17.3	64.9	302	298
45+1°C	17.2	65.0	300	301

CARE INSTRUCTIONS

WHEN CLEANING CHROME PRODUCTS, USE ONLY A MILD DETERGENT, RINSE AND WIPE DRY WITH A SOFT CLOTH. IDEALLY CLEAN AFTER EACH USE TO MAINTAIN APPEARANCE.

NEVER USE ABRASIVE, SCOURING POWDERS OR SCRAPERS.

NEVER USE CLEANING AGENTS CONTAINING ALCOHOL, HYDROCHLORIC ACID, SULPURIC ACID, NITRIC ACID, PHOSPHORIC ACID OR ORGANIC SOLVENTS.

USE OF INCORRECT CLEANING PRODUCTS/ METHODS MAY RESULT IN CHROME DAMAGE WHICH IS NOT COVERED BY THE MANUFACTURERS GUARANTEE.

TROUBLE SHOOTING

POOR FLOW OF WATER

- **CHECK FOR ADEQUATE WATER PRESSURE**
- **CHECK FOR DEBRIS IN THE WATER INLETS**
- **CHECK FOR LIME SCALE BUILD UP. REMOVE THE MIXER / THERMOSTAT CONTROL AND DESCALE IF NEEDED (IN HARD WATER AREAS THIS MAY BE REQUIRED MORE OFTEN)**

POOR TEMPERATURE CONTROL

TOO MUCH HOT OR COLD WATER

- **CHECK WATER SUPPLY IS PROPERLY BALLANCED**
- **CHECK FOR LIME SCALE BUILD UP. REMOVE THE MIXER / THERMOSTAT CONTROL AND DESCALE IF NEEDED (IN HARD WATER AREAS THIS MAY BE REQUIRED MORE OFTEN)**
- **CHECK WATER SUPPLY FOR BLOCKAGES, CLEAN FILTERS, CHECK THAT INLETS ARE INSTALLED CORRECT I.E. HOT ON LEFT COLD ON RIGHT.**

ONLY HOT OR COLD WATER FROM MIXER OUTLET

- **CHECK WATER SUPPLY FOR BLOCKAGES, CLEAN FILTERS, CHECK THAT INLETS ARE INSTALLED CORRECT I.E. HOT ON LEFT COLD ON RIGHT.**
- **REMOVE THERMOSTATIC CARTRIDGE AND CHECK CONDITION I.E. SCALE OR DEBRIS. CLEAN FILTERS.**

THE AUSTRALIAN STANDARDS RECOMENDS A REGULAR 12 MONTH SERVICE TO BE PERFORMED BY A QUALIFIED PLUMBER. ISOLATE BOTH HOT AND COLD WATER SUPPLY AND TURN ON THE RIGHT FLOW HANDLE TO RELEASE WATER PRESSURE.

1. REMOVE INDICE AND SCREW
2. WITH THE SAFETY BUTTON ON THE 38° MARK, PULL OFF HANDLE.
3. SLIDE OFF LOCATING RING, REMEMBER ITS LOCATION
4. UNSCREW FIXING RING
5. UNSCREW THERMOSTATIC CARTRIDGE

THERMOSTATIC CARTRIDGE

FIXING RING

LOCATING RING

HANDLE

INDICE & SCREW

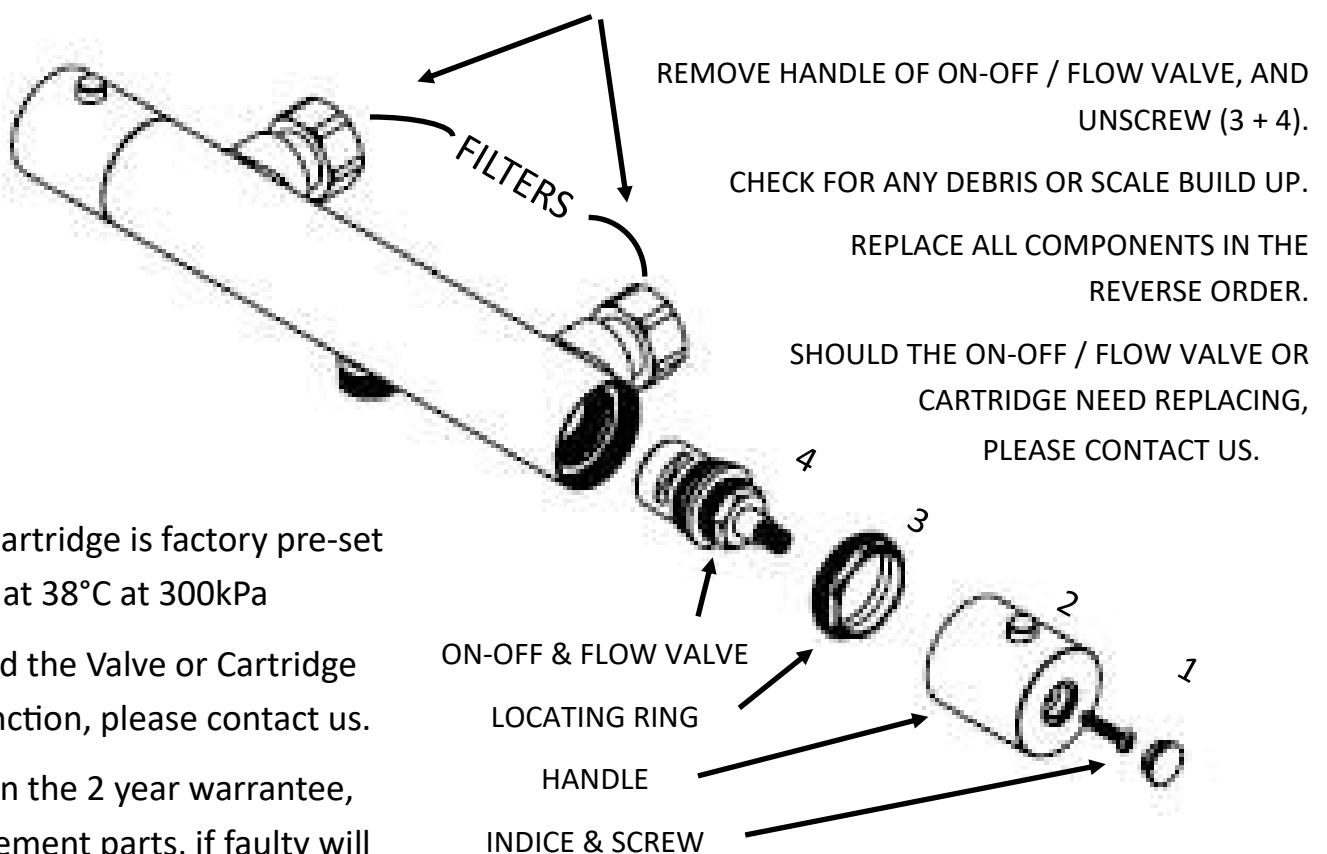
ONCE YOU HAVE REMOVED THE HANDLE, DO NOT MOVE THE SPINDLE OF THE CARTRIDGE (5)

INSPECT THE CARTRIDGE FOR ANY SCALE AND REMOVE WITH A MILD DESCALING FLUID.

CHECK THE 3 VISABLE ORINGS FOR WEAR. IT IS UNUSUAL FOR ANY WEAR, BUT CAN BE REPLACED WITH OUR SERVICE PACK PRODUCT REFERENCE CT100-SP.

REPLACE ALL COMPONENTS IN THE EXACT REVERSE ORDER

UNSCREW THE ENTIRE VALVE FROM THE WALL , CHECK AND CLEAN FILTERS INSIDE NUT OF ANY DEBRIS OR SCALE



Note: Cartridge is factory pre-set at 38°C at 300kPa

Should the Valve or Cartridge malfunction, please contact us.

Within the 2 year warrantee, replacement parts, if faulty will be sent free of charge.

**SILICONE LUBRICANTS MUST ONLY BE USED ON RUBBER SEALS
I.E. KLUBER LCA3801**

COMMISSIONING

PLEASE NOTE. THE THERMOSTATIC CARTRIDGE HAS BEEN CALIBRATED AT THE FACTORY AND SET AT 38°C AT 300 kPa . IF FOR WHAT EVER REASON THIS NEEDS TO BE RE-SET, PLEASE FOLLOW THESE INSTRUCTIONS.

YOU WILL NEED A THERMOMETER



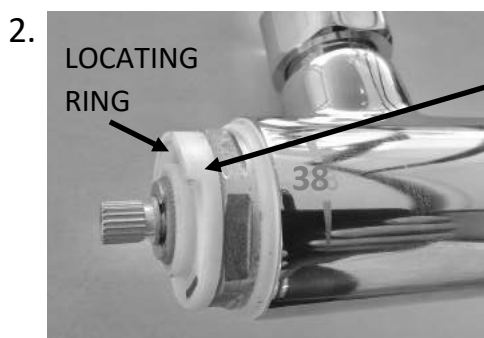
Remove the shower hose from the bottom outlet of the thermostatic valve.

With the Left handle positioned on the 38°C mark, turn the right handle to start flow and place thermometer into the running water.

If the temperature is less or more than 38°C turn off the flow then do as follows:

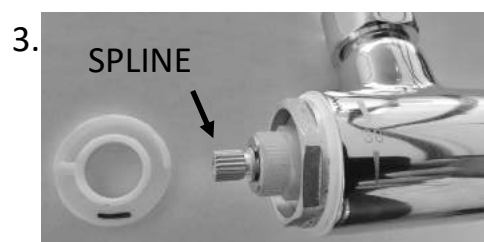


Remove Right handle, to expose Locating Ring (fig 1)



Note how the ridge of the locating ring is in line with the number 38. (fig 2)

Pull the locating ring off, but remember it will need to be replaced later, in the same position, with the ridge in line with the number 38.



Turn on the right handle to start the flow, and place the thermometer into the running water.

To obtain 38°C gradually rotate the spline in the direction it needs to be, to increase or decrease the temperature with your fingers (fig 4)



Once you have a delivered temperature of 38°C, turn off the flow and replace the locating ring as per fig 2.

Replace handle with the safety over ride button in line with the number 38. Replace shower hose to the outlet.

THE THERMOSTATIC MIXING VALVE IS NOW FULLY COMMISSIONED
AND CALIBRATED TO 38°C .

PLEASE CONTACT US IF YOU HAVE ANY PROBLEMS