

# **HARDNESS TEST STRIP**

## **Aftercare Information**

**AGA** RANGEmaster

U110652-01

*Instructions for GEO and AGA 4 in 1 tap boiler units*

The premium quality filter provided with this system provides protection for the boiler and also give great tasting drinks. It is important to set up the filter hardness bypass in the filter head correctly, according to the water to your specific local hardness, to get the best results.

Because of the unique formulation of the AGA Rangemaster filter the test strip will not give an accurate reading for cold filtered or boiled filtered water, the test water sample must be drawn from an unsoftened and unfiltered cold water source within the property.

#### Using the test strip to determine you hardness and correct bypass value:

1. Thoroughly rinse and dry your hands to avoid any contamination of the test strip.
2. Find a tap within the property that is supplied only with untreated direct mains water, open the cold water tap and run the tap for 30 seconds.
3. Find a clean dry vessel and fill it with a sample of the cold water.
4. Open the test strip packet end, take care not to rip the colour chart on the packet.
5. Hold the test strip in the sample for 3 seconds then remove it.
6. Wait 20 seconds for the colour to stabilise, do not shake the test strip.
7. Quickly (within the next minute) compare the test strip colour to the packet to gauge the ppm value.
8. You can convert if required convert the PPM value to English Clarke by multiplying the result by 0.07016, for example 120PPM = 8.41° English Clarke.
9. You should add + 2° Clark (30ppm) to your test strip reading when determining the filter bypass level.

#### If you need to check you have the correct filter bypass rate setting:

1. The existing bypass rate should be recorded on your installer checklist sheets.
2. If these checklist sheets are not available then you can physically check the value by:
3. Isolate the cold water with the tap in the filtered water on position, run until the filtered flow stops.
4. Remove the filter cartridge, instructions can be found at [www.geo-taps.co.uk](http://www.geo-taps.co.uk) or [www.agaliving.com](http://www.agaliving.com)
5. On the inside centre of the filter head there is a rotating dial with notches, the notch will align with a number showing the filter bypass setting.
6. Compare the existing bypass setting number with your new adjusted test strip value on the table below.

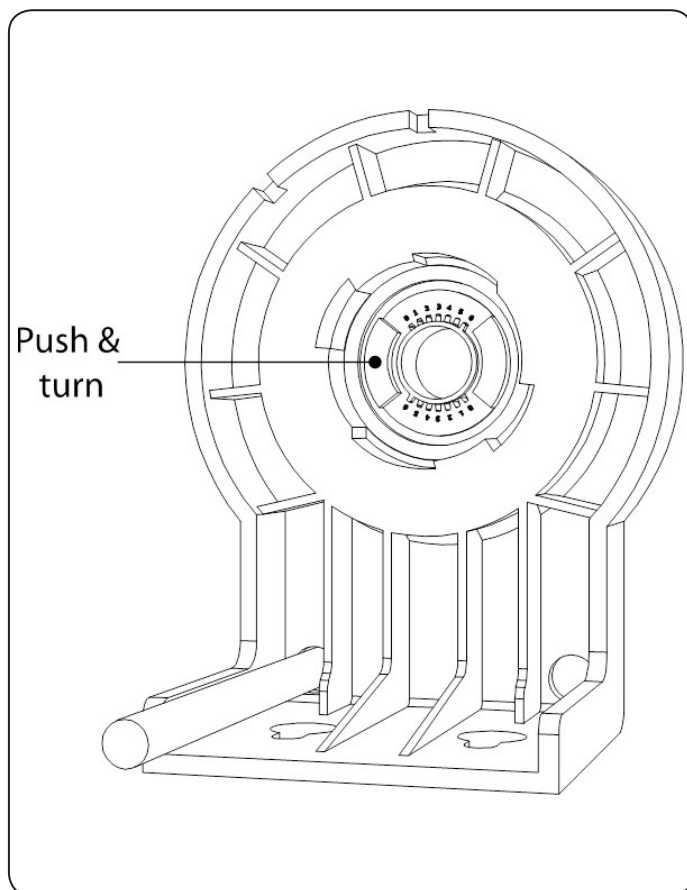
Ensuring that the filter system is set up correctly and replaced as required will reduce the frequency of descaling required. If you are regularly needing to descale the Boiler system then you either need to replace the filter more frequently or check the bypass setup of the filter system.

Your Hardness reading + 2° Clark (30ppm)																					
°Clark (GB)	5	6	8	9	10	11	13	14	15	16	18	19	20	21	24	26	29	33	36	41	48
PPM	70	90	107	125	143	161	179	196	214	232	250	268	286	304	339	375	411	464	518	589	679
Recommended bypass setting																					
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5

Due to our policy of continual improvement, we reserve the right to change specifications without prior notice.

**If you need to adjust the filter bypass rate setting:**

1. With the cold water off and the filter removed you will see the centre bypass setting dial.
2. Push the dial inwards, then rotate and release the dial on the new desired bypass numbered setting 0 (hard) to 6 (not hard). A small plastic 'key' tool is provided with the filter head when new (if available) to make this easier.
3. Once the bypass dial is adjusted insert the filter cartridge.
4. Turn the cold water back on.
5. Ensure that the three way valve (**E4**) is adjusted so the flow rate of cold filtered water through the tap is 2 litres per minute (500 ml every 15 seconds or 1 pint every 17 seconds).



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