



# Identify your ceramic cartridge & save money

This is a guide for for identifying two handled...

Written By: David Newton

## INTRODUCTION

This is a guide for for identifying two handled (hot & cold) tap (faucet) cartridges.

Taps with separate hot and cold handles account for approx. 80% of all UK taps. Of those, around 15% still using rubber washers whilst all the rest use ceramic disc cartridges. Unfortunately there are currently around 4000 variations of ceramic cartridges and the one in your tap could literally be any of them! It's this 'lottery' that's the reason why plumbers, upon hearing you have a 1/4 turn tap, generally advise you to throw it away and install a new one as identifying your cartridges takes time most people do not want to pay a professional for.

This guide takes you through how to accurately identify the cartridges in your tap. This is your time (so free) and doing it means you can track down low cost, low impact replacements rather than waste, time, money & precious Earthly resources replacing then whole tap when it can be easily repaired.

---

### TOOLS:

[17mm combination spanner](#) (1)

[Thread or Vernier calipers](#) (1)

[Screwdriver \(prob crosshead type\)](#) (1)

---

## Step 1 — Isolate



- As this is the identification stage at this point it is only necessary to isolate the cold tap. Most of the time that is achieved by turning off your 'stop tap'.
- Turn your cold tap on so water is gently running and then turn off the incoming main (stop tap) so the water stops running. If the tap you're fixing is downstairs, go upstairs and open a cold tap. This allows any water in the system to drain down and stops it flooding out when you remove the cartridge.

## Step 2 — Getting to it



- Remove the tap head. Sometimes they pull off, sometimes they are held on with a hidden grub screw & sometimes they are held on with a screw under the **indices**( the cap thing that's coloured blue or red or says hot or cold) on the handle at the end.
- Remove the handle (sometimes they have to be 'encouraged' off) and then remove the 'shroud'. Most screw off (anti-clockwise) but some just slide off.

### Step 3 — Removing the cartridge



- Next inspect the pipes leading to the tap. If it's rigid pipework (not flexi) you will need to be super careful not to let the tap body move when you remove the cartridge as if it does it may cause the connection to leak. If flexi pipes (braided) are used it's a little less of a problem if the body moves a tiny bit.
- Remove the cartridge using a 17mm ring spanner. Often cartridges are very tight & using an adjustable or open ended spanner does NOT give enough purchase to break it free without damaging the hex. Short sharp shocks work well too so personally (as I'm very experienced) I use an impact driver with a deep socket to 'shock' it free.

## Step 4 — Measurement



- To get an exact replacement you'll need the following dimensions:
- A - **Number of splines** (best way to get those is to take a clear image of the end of the spindle on your phone and then blow it up so you can count half of them and then just double the number. The most common spline 'counts' are 18, 20, 24 & 28 WRITE IT DOWN!
- B - The **spline diameter** is vital. If you don't have a vernier gauge then wrap thread around it 10 times & cut the ends so they meet. Lay thread out straight (not stretched) & tape ends down. Measure its length & divide by 10 for the spline dia. Common ones are 7.6, 7.8, 8.0 etc. Don't be put off by apparently odd numbers. WRITE IT DOWN!

## Step 5



- C - Measure **length of splines**. This measurement is down to the 'shoulder' sitting under the splines themselves. WRITE IT DOWN!
- D - Measure from **top of splined shaft to underside of widest part of the cartridge (where it screws into the tap body)**. WRITE IT DOWN!
- E - Does the 'shroud' **screw on**? WRITE IT DOWN !
- F - Measure from **underside of 'shoulder' to end of metalwork**. WRITE IT DOWN!
- G - What **size** is your cartridge? 3/4" measures approx. 25mm across its base. 1/2" measures approx. 18mm across its base. WRITE IT DOWN!

## Step 6



- With the measurements you now have, source some spare cartridges. There are a range of suppliers but all are on-line. To be honest, the chance of finding the correct size at a plumber's merchant is very slim simply because there are so very many.

## Step 7



- Measure from underside of 'shoulder' to end of metalwork

---

To reassemble your device, follow these instructions in reverse order.