

# Project Ideas & Information

## Tap Washer



**Before purchasing tools, timber and materials, read every step thoroughly then talk to one of our experts**

Did you know that just one leaking or dripping tap can waste more than 2,000 litres of water per month? As well as wasting water and being a constant source of annoyance, leaking taps could also stain your sink, basin or bath. In this article we will show you the causes of leaking and dripping taps and explain the methods of effectively rectifying them.

### Step 1: Before You Start

Before commencing any work you should make yourself aware of any Local Authority regulations concerning working on this project yourself. It may turn out that you will need to call a plumber, but in either case it is always handy to know the workings of the utilities around your home.

### Step 2: Collect Your Tools

You will need:

- Fine blade screwdriver
- Adjustable wrench
- Multi-grip Pliers
- Pointy nose pliers
- Tube spanner (for recessed taps)
- Allan key (if applicable)
- Depending on the cause, a valve or tap washer, a body washer, an "O" ring
- A soft cloth to protect the tap.
- Waterproof grease (use sparingly)

### Step 3: Determine The Cause

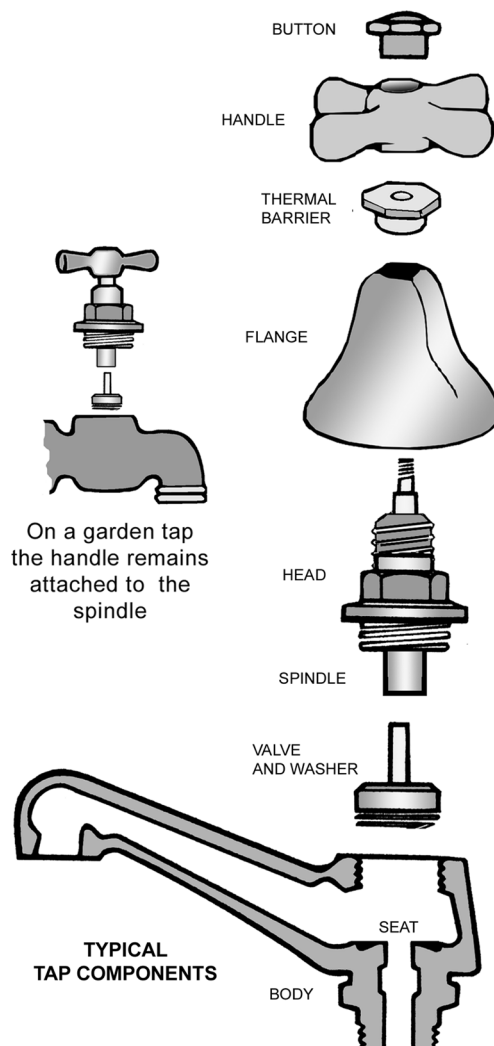
Although most leaks are caused by failed tap washers, the problem could also be caused by damaged or a worn "O" ring or body washer. There are three places from which a tap can leak:

- from the spout. You will need to replace the tap valve or washer.

- from the top of the spindle. You will need to replace the "O" ring.
- from around the base of the body. You will need to replace the body washer.

Refer to the diagram to determine the cause.

Note: Although the diagram shows a pillar cock, the same principles apply in dealing with situations where the actual spout is separate from the handles, such as in a shower.



### Step 4: Turn Off The Water

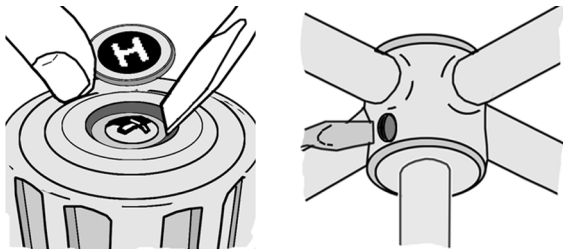
Turn the water off at the mains ... this stops all water flowing into your house. If you live in a house, the tap and water meter will probably be out on the street or in your front yard adjacent to the street. If you live in a flat or townhouse the mains tap will probably be inside, for example in the bathroom or laundry. Turn on a tap in, or around, the house to make sure that the water has stopped running. (If the water has not stopped running, it will be necessary to call a plumber).

### Step 5: Disassemble The Tap

Before you start to dismantle the tap, place the plug in the outlet of the basin or sink ... this will prevent any small items you drop from going down the plug hole.

Open the tap to be treated. Turn it fully on

Remove the cover button and handle. If your taps are more modern with coloured indicator buttons on top of the handle, remove these first. There are basically two kinds of buttons ... one screws out and the other clips in and can be lifted out with a screwdriver, then undo the screw underneath the button and remove the handle. On some traditional styled taps, the handle may be held in place with a fine screw or an Allen screw.



Remove the flange (and spring, if fitted). Some traditional type taps have a flange that needs to be unscrewed by hand or with multi-grip pliers. If using multigrips, wrap a cloth around the shield first so that the jaws won't damage the surface. When the flange is unscrewed, move it up the handle to expose the tap body.

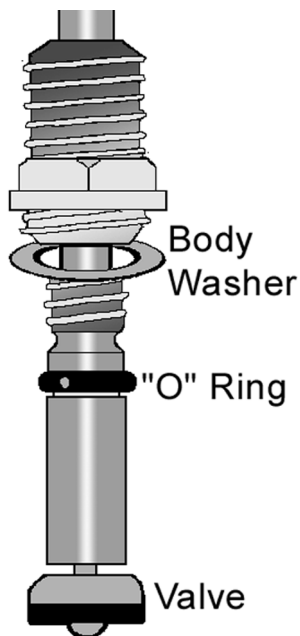
Remove the spindle and head using a shifting spanner or tube spanner if required. In cases where the handle and spout are all one unit, you should firmly hold the tap spout to prevent the body of the tap turning on the basin or sink ... if the tap does move, the connection under the basin/sink may be loosened, causing a leak.

You can now do, one or more of the following.

If the tap has been leaking out the end of the spout, it is a worn valve washer. Lift out the old tap valve and washer and replace it with a new one. On some valves it is possible to replace just the washer but it is more practical to replace the entire valve/washer assembly.

There is a multitude of different types of washers on the market today and it's worth studying just what is available. The majority of inside taps take 12mm (1/2") washers, while outside taps (garden taps) take 18mm (3/4"). Talk to our experts who will be only too happy to steer you in the right direction.

Before replacing the tap valve, check to make sure that the valve seat is not damaged. If it is damaged, repair it before replacing the valve ... a new washer will not cure a dripping tap if the seat is damaged. Instructions for repairing a valve seat are given further on in this article.



If the tap has been leaking from beneath the flange at the base of the tap, it is a worn body washer (usually a red fibre washer at the base of the spindle) and you can lift it off and replace it with a new one.

If the tap has been leaking from under the tap handle, it is a worn spindle "O" ring. This is replaced by screwing the spindle all the way out of the tap body (in the same direction as if you were turning the tap on), pulling the worn 'O' ring off and rolling on a new one, making sure to smear with a little waterproof grease.

## Step 6: Finishing Off

Reassemble the tap making sure that all parts are installed in their correct position. Do not use excessive force when tightening any components as you may not only damage them, but you will more than probably have to disassemble them again at some time in the future.

Open the tap half way and then get someone else to turn the mains back on (it's a good idea to stay by the tap in case the unexpected happens). Once the water is running through, turn the tap off slowly using only gentle finger pressure. Over-tightening causes a lot of damage to the tap washer and seat. If the washer and/or other components have been fitted correctly, there should be no more leaks or drips and you should be able to turn the tap on and off with no effort.

If the tap is still dripping from the spout after you have replaced the washer, it probably means that the valve seat is "pitted" and you will need to regrind the seat. Instructions for repairing a valve seat are given below.

## Reseating a Tap

Disassemble the tap as described previously.

1. Insert a reseating tool into the tap body and adjust centre in until it touches the tap seat. (Note: Do not screw it in hard as you will damage the seat).
2. Screw the centre of the tool in a clockwise direction until the centre has no restriction.
3. Unscrew the reseating tool and check to see if the seat is shiny.
4. If some of the seat is still dull repeat steps and check again.
5. If the seat is badly damaged it may take several times to clean it totally. If you are in any doubt you should call a licensed plumber.
6. Flush the metal filings out of the tap body and reassemble the tap as described previously.

## Tap Hints

- Call a plumber (before you start) if you have any doubts about doing the job.
- It's a good idea to always keep a supply of washers, "O" rings and body washers in a container and in a handy location, like a kitchen or sink cupboard.
- If it's the flange that is stuck, carefully pour boiling water then cold water over it and try again.
- When using water taps it is a good idea not to over tighten them when turning them off. This can damage the tap washers and the valve seat. Just turn taps off enough to stop any drips.

### Disclaimer:

*The Retailer which supplies this information (which includes the authors of this advice and the owner, proprietors and employees) is not responsible for the results of any actions taken on the basis of this information nor for any error or omission in this advice. The Retailer expressly disclaims all and any liability and responsibility in respect of anything done consequent on the whole or any part of this advice.*

*The recipient of this advice is advised to call a qualified tradesperson such as an electrician, plumber or carpenter where expert services are required.*

*Building permits may be required and there may be legal requirements or statutory bodies that need to be followed in the implementation of this advice. All such permits and requirements are the responsibility of the recipient of this advice.*

© Copyright Hardware & Building Traders Pty Limited

## With Compliments