

# FAUCETS 101: STEM I.D.



REPAIRING A LEAKY FAUCET IS ONE OF THE MOST COMMON REPAIRS IN THE HOME.

THE KEY IS IN KNOWING HOW TO DO IT...

RIGHT.

THE FIRST STEP TO DOING IT RIGHT IS TO BE ABLE TO IDENTIFY WHAT KIND OF STEM YOU NEED TO REPAIR.



DUE TO THE VARIOUS TYPES OF FAUCETS AVAILABLE MANY HOME OWNERS DON'T KNOW WHAT TYPE OF FAUCET THEY HAVE IN THEIR HOME.

THE DESCRIPTIONS OF THE FOLLOWING STEMS WILL GIVE YOU AN IDEA OF THE FOUR MOST COMMON TYPES OF FAUCETS USED IN THE HOME.

THERE ARE BASICALLY FOUR DIFFERENT TYPES...



THE FIRST TYPE OF STEM IS A COMPRESSION STEM.

IF YOUR FAUCET IS AN OLDER DESIGN WITH SEPARATE HOT AND COLD WATER HANDLES AND A DIVERTER FOR THE TUB AND SHOWER, IT'S PROBABLY A COMPRESSION FAUCET.



THESE COMPRESSION FAUCETS USE NEOPRENE WASHERS WITH OR WITHOUT A SCREW TO HOLD THEM ONTO THE STEM. WHEN COMPRESSED IT TURNS OFF THE FLOW OF WATER.



ONE OF THE MOST CONFUSING ASPECTS OF COMPRESSION STEMS IS THE "RIGHT HAND STEM" VS. THE "LEFT HAND STEM". RIGHT HAND STEMS, IN MOST CASES, ARE *HOT*, AND LEFT HAND STEMS, IN MOST CASES, ARE *COLD*.

WHEN THE WATER IS TURNED ON...

THE RIGHT HAND STEM RISES TO THE LEFT

THE LEFT HAND STEM RISES TO THE RIGHT



THE RIGHT HAND STEM UNIT IS USUALLY MORE POPULAR.



AS A GENERAL RULE, EACH COMPRESSION STEM WILL FIT ONLY ONE MANUFACTURER'S FAUCET LINE, SO THERE ARE MANY, MANY DIFFERENT STEMS...

THE SECOND TYPE OF STEM IS A CERAMIC CARTRIDGE STEM:



THE CARTRIDGE SHOWN AT TOP IS A QUARTER TURN STEM.



YOU MIGHT BE ASKING YOURSELF WHAT MAKES A STEM "QUARTER TURN"...



THE CERAMIC STYLES IN THE STEM TURN 90°, OR ONE-QUARTER OF A CIRCLE.

CERAMIC DISC CARTRIDGES ARE MADE WITH TWO CERAMIC DISCS EACH WITH 2 HOLES IN IT.

LOOK CLOSELY AT THE BOTTOM OF THIS CARTRIDGE...

THE CARTRIDGE AT THE TOP IS CLOSED, THE CARTRIDGE AT THE BOTTOM IS OPEN\*

\* NOTE THE LIGHT COMING IN ON THE RIGHT AS WELL AS THE "DIMPLES" IN THE MIDDLE

FAUCETS WITH CERAMIC CARTRIDGE TYPE STEMS ARE AVAILABLE IN DOUBLE HANDLE STYLES. THESE ARE SIMILAR TO COMPRESSION STEMS EXCEPT THAT YOU DON'T NEED TO APPLY SIGNIFICANT PRESSURE TO TURN THEM OFF COMPLETELY.

REPAIRING THESE FAUCETS MEANS REPLACING THE ENTIRE CARTRIDGE WHICH IS SUBJECT TO WEAR.

THESE ARE THE CERAMIC DISKS, THE PART MOST SUBJECT TO WEAR BECAUSE OF THE FRICTION BETWEEN THE TWO PIECES

THE THIRD TYPE OF STEM IS A WASHERLESS STEM OR CARTRIDGE.

THESE ARE ANOTHER TYPE OF QUARTER TURN STEM, BUT THESE STEMS DO NOT USE CERAMIC DISKS. THERE ARE SEVERAL TYPES OF WASHERLESS STEMS THAT USE COMPONENTS SUCH AS DISCS, VALVES, BALLS OR CARTRIDGES. MODELS VARY WITH THE MANUFACTURER, SO IT'S IMPORTANT TO GET IDENTICAL PARTS.

THE COMMON CHARACTERISTIC OF WASHERLESS FAUCETS, ARE THAT ALL THREE HAVE A COMBINATION OF SOFT AND HARD RUBBER RINGS.

THE LAST TYPE IS A SINGLE LEVER CARTRIDGE

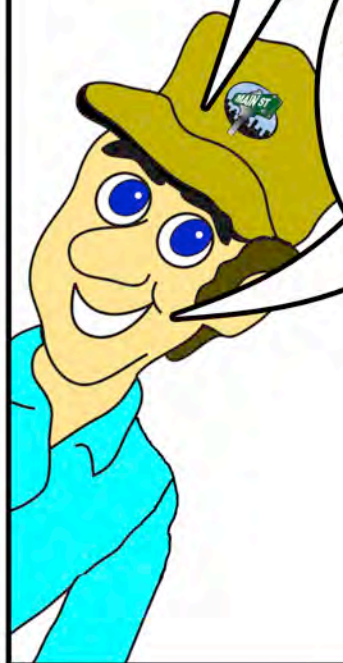
THESE CARTRIDGES WORK WITH A LEVER OR KNOB HANDLE THAT CONTROLS THE FLOW AND MIX OF HOT AND COLD WATER BY ALIGNING CERAMIC INTERIOR OPENINGS WITH THE WATER INLETS.

THE BOTTOMS OF THESE CARTRIDGES ARE UNIQUE AND AID IN THE IDENTIFICATION.



IF YOU DON'T KNOW WHAT KIND OF STEM YOU HAVE, CONTACT THE GUYS AT [MAINSTREETPLUMBINGPARTS.COM](http://MAINSTREETPLUMBINGPARTS.COM) WITH THE MANUFACTURER AND A PICTURE OF EITHER YOUR FAUCET OR YOUR STEM/CARTRIDGE, AND THEY CAN HELP YOU FIGURE IT OUT!

ONCE YOU'RE READY TO FIX YOUR FAUCET, GATHER UP THE FOLLOWING TOOLS SO THAT YOU'LL BE READY TO TACKLE THAT PROJECT!



TO FIND OUT WHAT TOOLS YOU'LL NEED FOR YOUR D-I-Y JOB, SEE

# FAUCETS 101: THE D-I-Y-ER'S PLUMBING TOOLBOX

