



**TOILETS**



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# Toilets

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# TOILETS

Toilets come in all shapes, sizes, and varieties which can make diagnosing specific issues they might have pretty challenging. In order to simplify that process we've tried to layout as clearly as possible some of the basics of how toilets work and show some of the different types so you know what you're looking at when you get on the job!

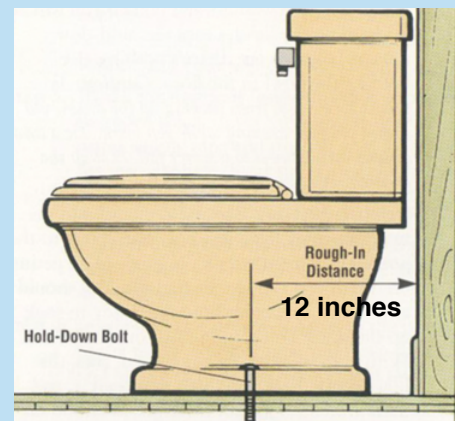


Round

Elongated

One initial thing to keep in mind about toilets is there are round and elongated toilet styles.

Also the standard distance from the back wall to install the toilet bolts is 12 inches, or 12-1/2 inches from the center of the flange to the wall framing. Some older homes have the bolts at 10 inches as well so when replacing you may need to buy a 10 inch rough in toilet.



# Toilet Varieties

Keep in mind there can be overlapping similarities between flushing styles within the different toilet varieties. In other words...just because it looks different doesn't mean it won't use the same flushing style to operate or vice versa.

## Standard Two Piece Toilets



Two piece toilets are by far the most common toilet you will come across. Luckily they tend to be the simplest to work on. The differences within this category are always good to keep in mind so you don't bring the wrong items to the job.

### The differences include:

- Round and elongated bowl shapes
- Short and tall bowl heights
- Skirted and non-skirted
- Lever and dual flushing styles



Skirted Toilet :(

# Pressure Flush/Commercial Toilets

As you can see in the images these come in wall mounted or floor sitting options and do not have any sort of tank which requires them to be hooked straight into the water supply system and they flush with the water pressure in the building.



As titled these are commercial toilets so they are not something we commonly work on but we keep some parts on the van to repair them just in case. We generally work only on the flushing mechanism.

# Wall Hung Toilets



Wall hung toilets are uncommon to see in a residential setting but it is good to make sure you know how they work just in case. We will go more in depth about how the different flushing mechanisms work for wall hung toilets.

Hanging one of these toilets requires solid anchors behind the wall to support the weight as well as a different drain style so they usually would need to be installed at the initial construction of a building.





# One Piece Toilets



One piece toilets operate pretty much exactly like standard two piece toilets and the only main difference is that they come in only one piece which makes them harder to transport.

One piece toilets are typically more expensive but they are less likely to develop leaks and they are easier to install and keep clean.



# Up-Flush Toilets

Upflush toilets are not something we would ever recommend at Streamline because they are expensive and can develop all sorts of issues that are challenging to overcome and fix.



As you can see in the picture they flush like a normal toilet but the waste flows into a pump that grinds it and pushes it through a small exit pipe to wherever it can connect into the main sewer system. These often seem like the only option when you're on a concrete slab and don't want to have to jack it up to install a traditional drain but that is the alternative that we would recommend for best longterm results.

# FLUSHING STYLES

## Standard Flush Style

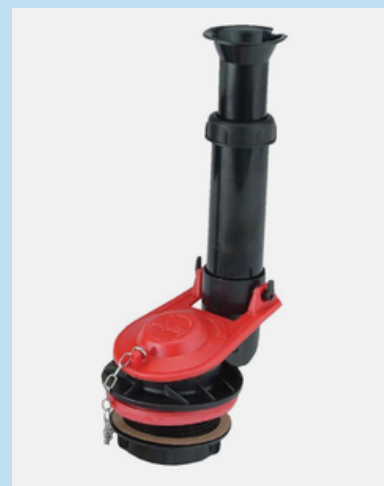


This image shows a very standard toilet flushing style. It also shows nicely how a standard toilet should all fit together.

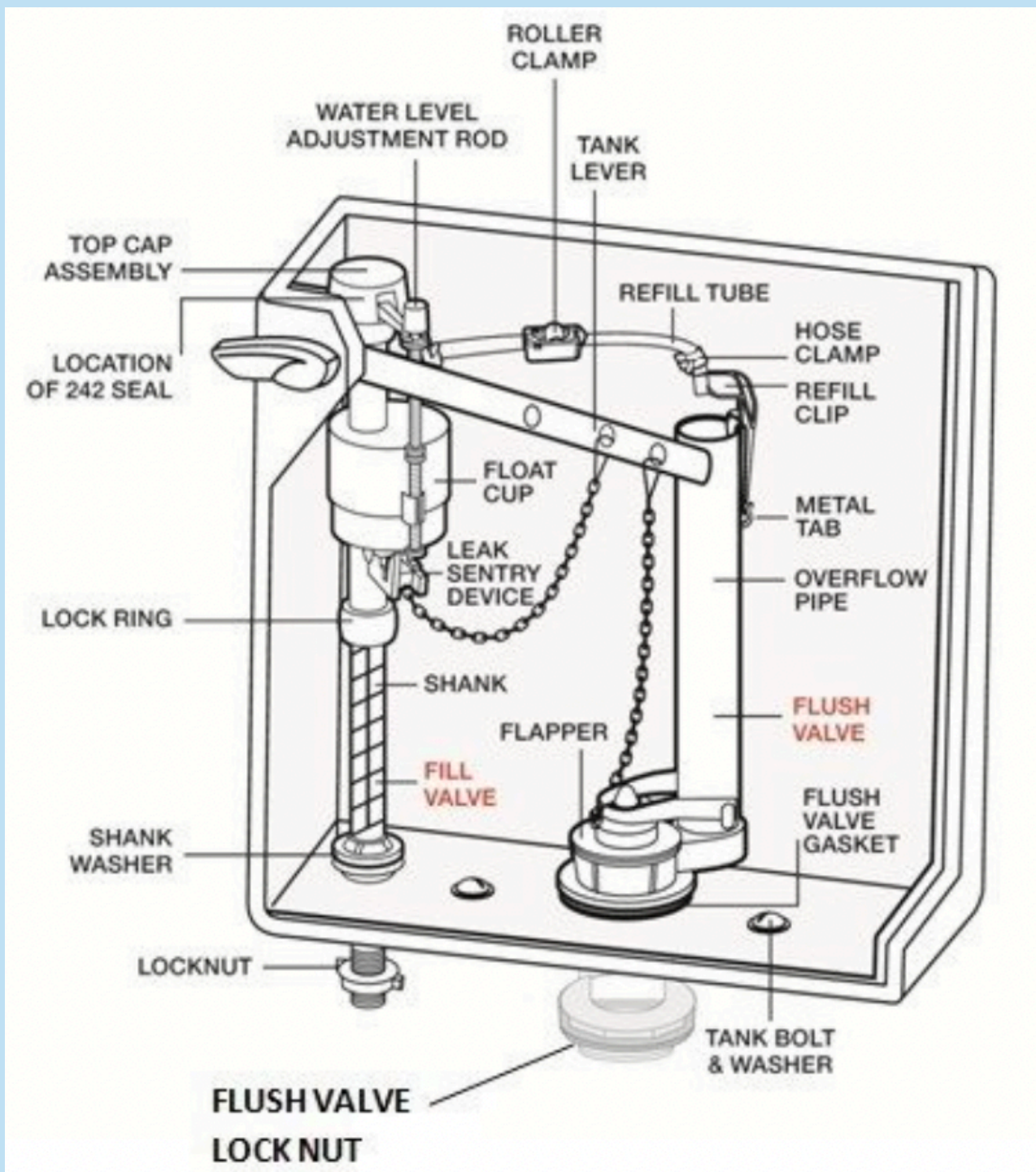


← Fill Valve

Flush Tube →

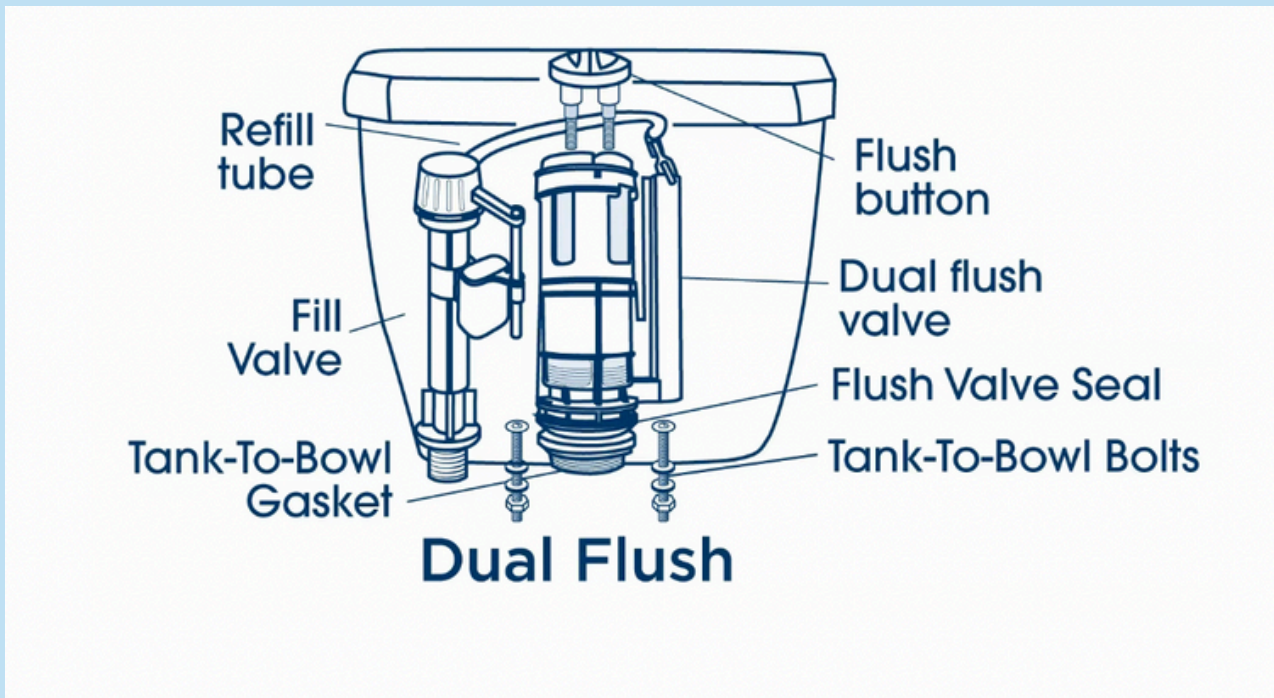


The image below shows in more detail each component inside the tank of a toilet. These parts we call the guts of a toilet. Simplified, you have the supply line that connects into the fill valve and then from there the fill valve allows some water to refill the bowl through the refill tube and some water to flow out into the tank to fill it. Once the water in the tank gets to a certain level it lifts the float on the fill valve to where it shuts the water off. The flapper can then be lifted using the toilet lever to engage a flush and however much water is in the tank, the flapper style, and the size of the exit hole into the bowl dictates what the flush will look like and how effective it will be. Common issues include leaking fill valve seal, and leaking flapper seal.



Standard Flush Style

# Dual Flushing Style



As you can see there are two buttons on top of the tank lid that dictate the size of each flush. Common issues with these would be a leaking fill valve or leaking flush valve seal. The flush valve seal acts as the flapper on these styles.



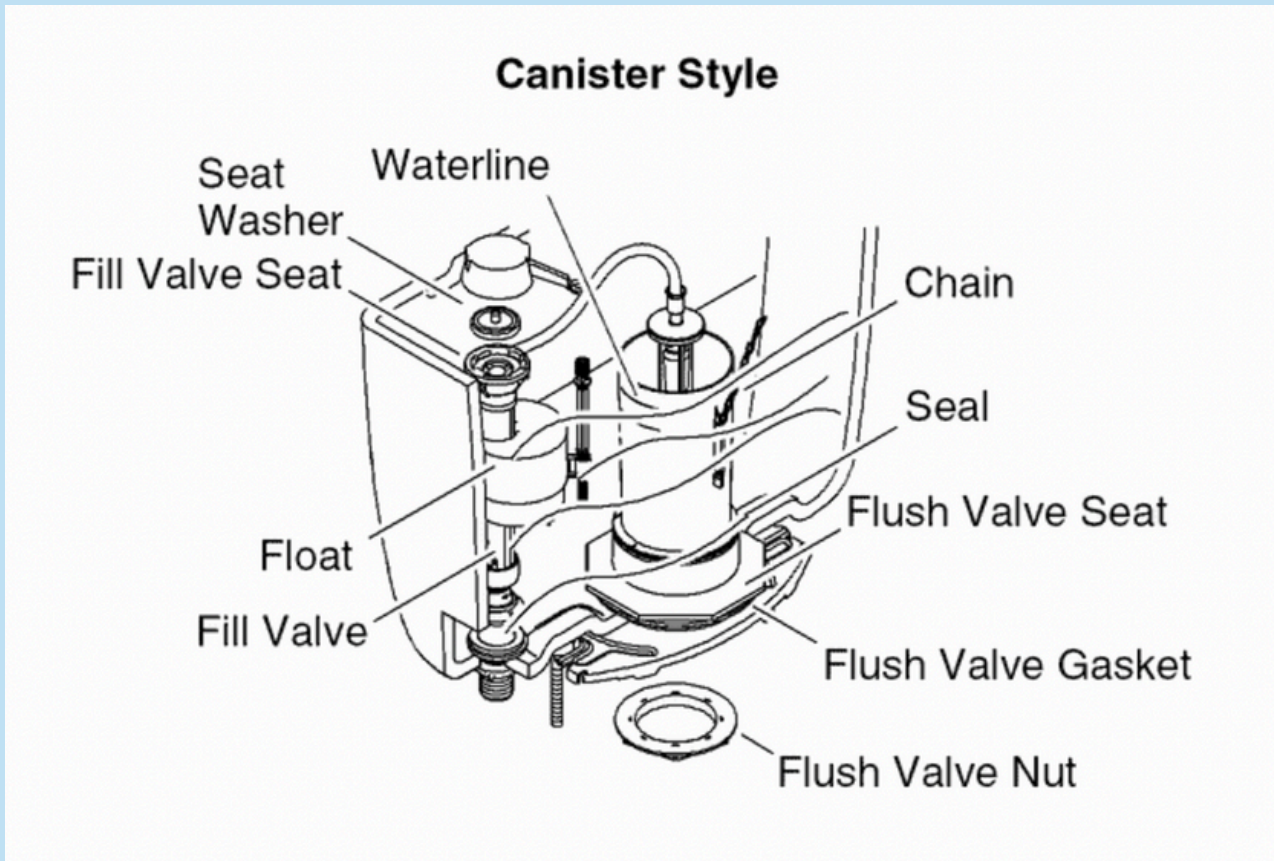
These dual flush toilets have a silicone ring that acts like a traditional flapper seal. They come in different sizes so always make sure you install a properly sized one.



Flush Valve Seal

Dual Flush Valve  
←

# Canister Flush Style



Example of someone replacing the flush valve seal.

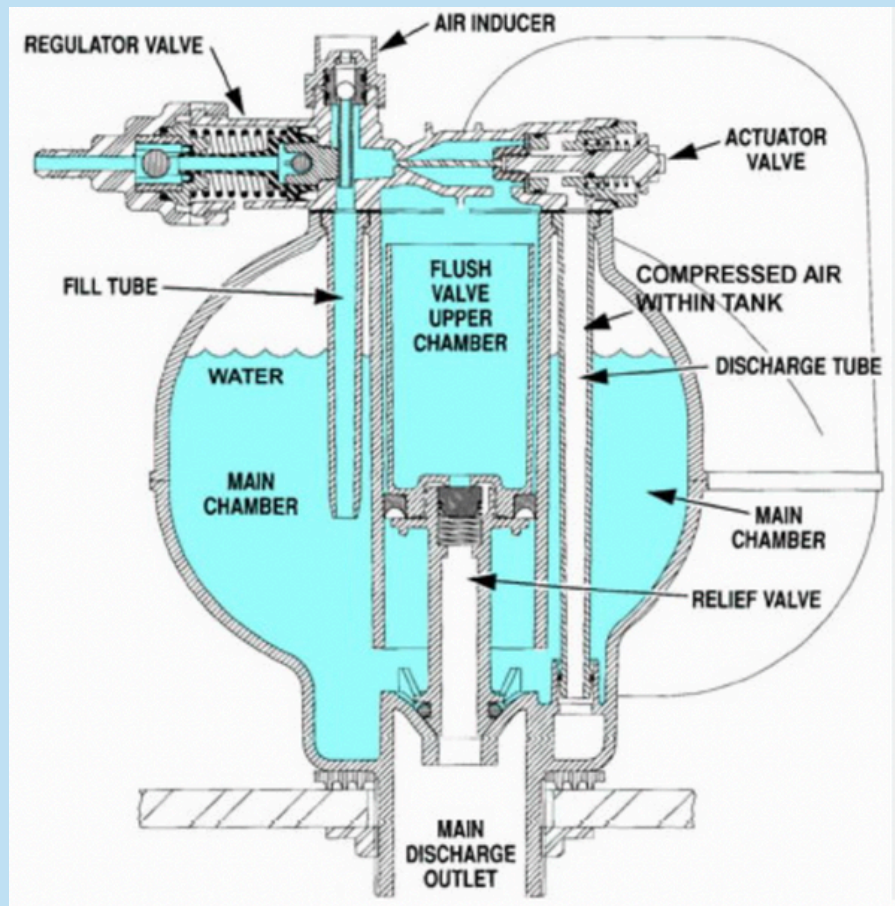


Canister assembly

Canister toilets function almost exactly like a dual flush toilet except they just have a standard lever that lifts the flush canister to start a flush.

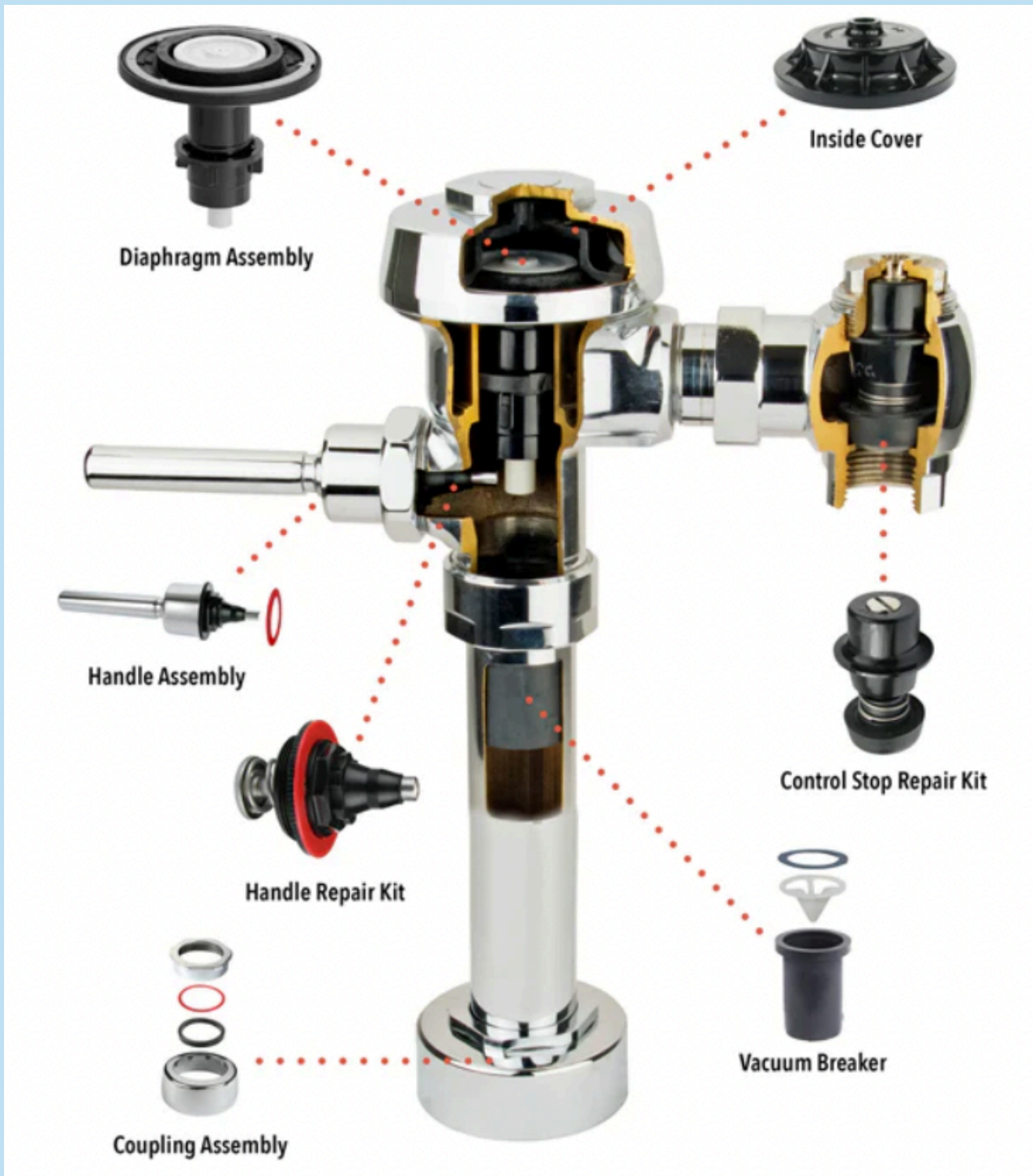
# Pressurized Flush Style

Pressurized toilets work by using the household water pressure to fill up a pressurized bladder in the toilet tank that is released when the lever is pushed. This gives the flush extra power which is why this style exists



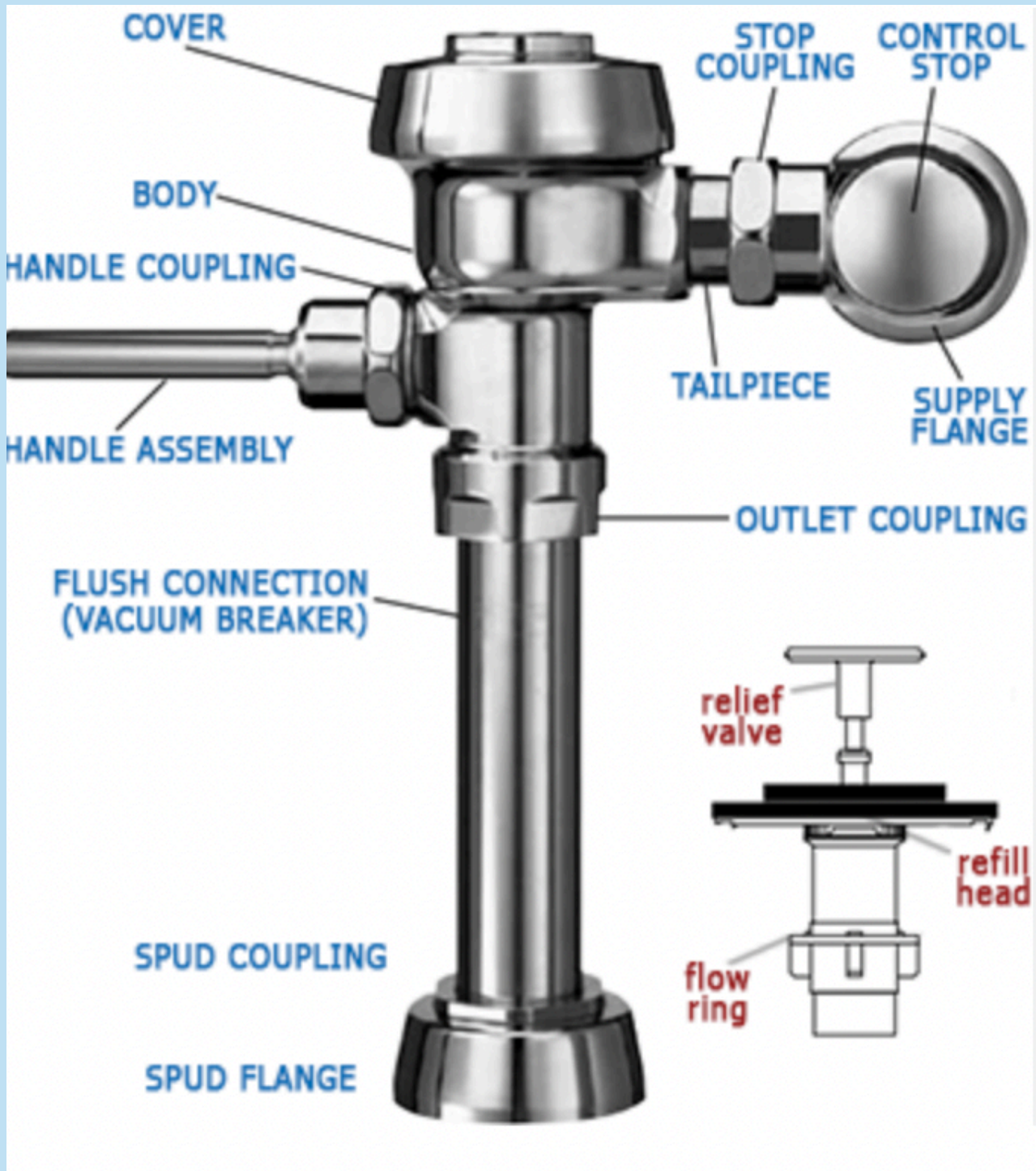
Pressurized toilets are pretty unusual to see. They are a little tricky to figure out but the diagram above helps to understand how they work with a cross-sectional perspective.

# Commercial Flush Style



Commercial toilets do not require any tank because they operate under the building water pressure. When working on them you have to be extra careful to shut the water off at the control stop valve with a flathead screwdriver and relieve any pressure





This image outlines the different components from the outside of the flush valve body.

# Free Standing Flush Style



Free standing toilets have a hidden tank inside or behind the wall that connects to the toilet in the wall. They are typically flushed using a button on the wall or by using a remote control.



# **STREAMLINE PLUMBING**

GUIDE 3