

## Cleaning the Check Valve

To begin, match the brew group used by your machine with one pictured below. If yours is not pictured, please contact Technical Support.



**Type-A**



**Type-C**



**Type-B**

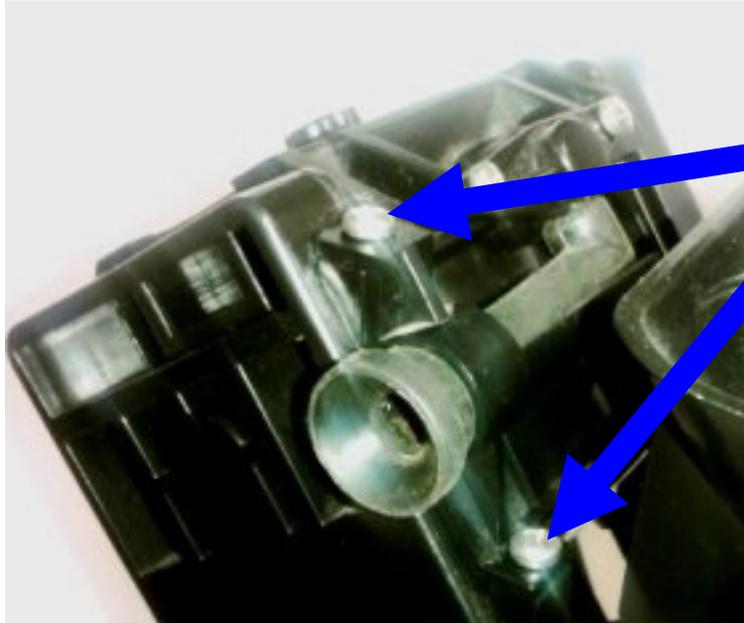


**Type-D**

Now, find the page below with the directions specific to your machine's Brew Group.

## Type-A

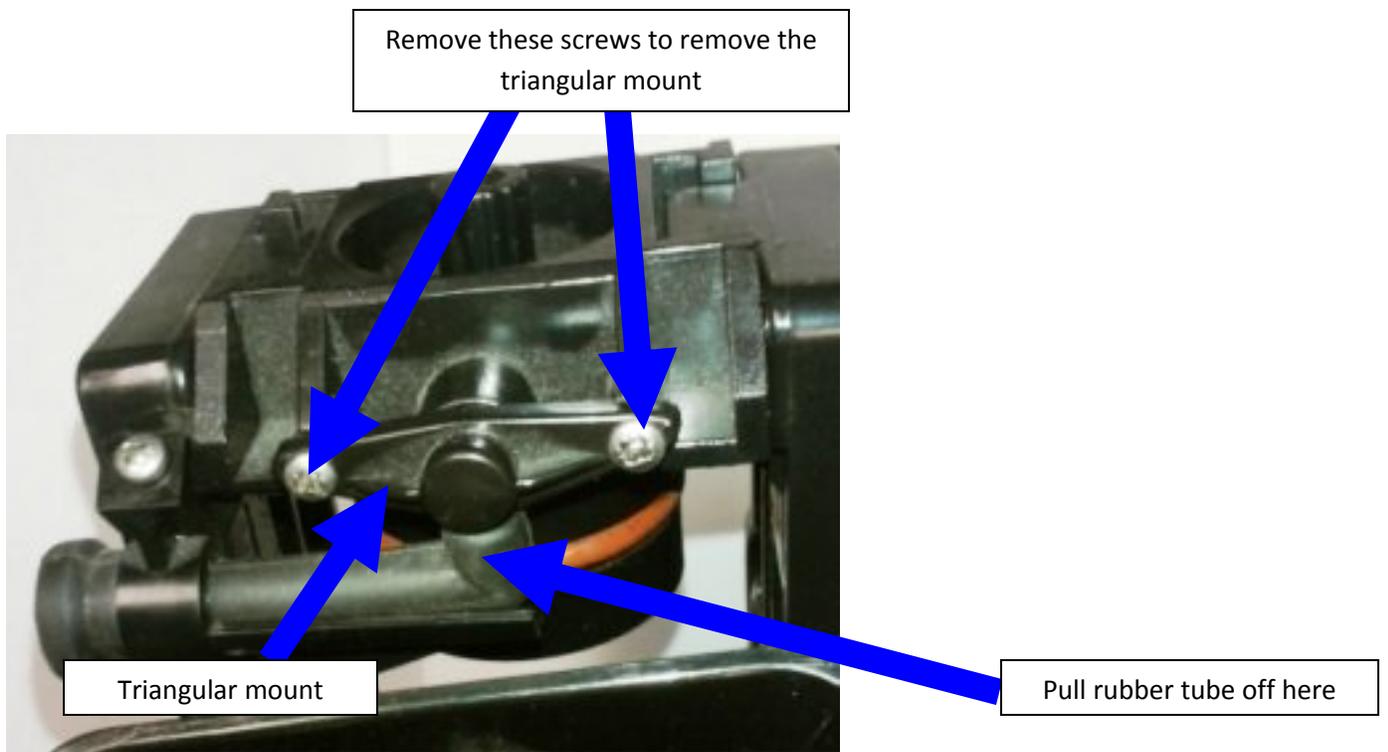
1. Remove the two Phillips head screws on the slanted plastic support that holds the rubber coffee outlet tube in place. It is located near the top of the brew group and is pictured below.



Remove these screws to remove the slanted plastic support

The rubber outlet tube is black in color and resembles the end of a trumpet. The Phillips screws are located on either side of the “trumpet” end. The opposite end of the rubber tube has a 90 degree elbow bend on it and is attached the top of the brew unit.

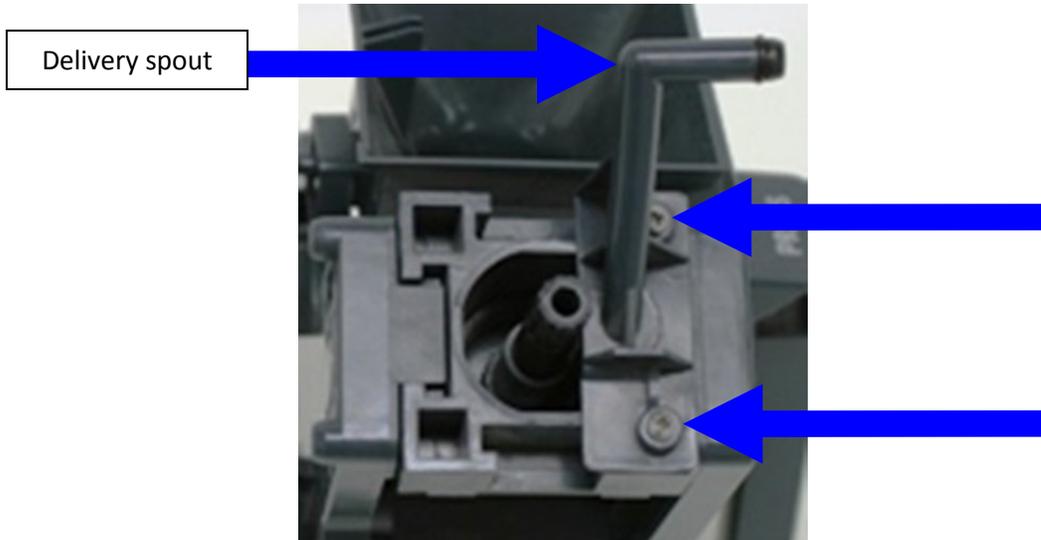
2. Remove the rubber tube and slanted plastic support from the brew group. Once the support piece is loosened, the rubber tube should be loose. The elbow end is connected to a small nipple. Pull it straight off. (see below)
3. Remove the two Phillips head screws that are on the triangular plastic mount, indicated by the two blue arrows in the picture below. The mount is located hear the elbow end of the rubber tube that you just removed.



4. Slowly remove the triangular plastic mount from the brew group
  - a. BE CAREFUL: Attached to this piece is a spring with either a plastic or glass check valve seat at the end.
5. Clean all three pieces (valve seat, spring and mount) with warm water. While it is disassembled, rinse the entire brew group under warm water, giving special attention to washing away any grounds that may still be in or around the chamber you just exposed.
  - a. This is also an ideal time to remove the upper filter screen and clean that as well.
6. After all components are clean, reinstall the valve seat and spring.
  - a. If your spring has a small (or narrow) and large (or wide) end, the larger end of the spring should face up. The smaller end of the spring should face down into the brew unit and will be pressed against the plastic or glass valve seat.
7. Reinstall the triangular plastic mount. There is a small nipple on the mount that should face down. Hand-tighten the screws to secure them
8. Reattach the rubber tube back onto the triangular plastic mount. The elbow end of the rubber tube slides over the small nipple on the triangular plastic mount.
9. Reattach the slanted plastic mount back onto the brew group and tighten the 2 screws. Again, do not over tighten the screws.
10. Reinstall the brew group into your espresso machine.

## Type-B

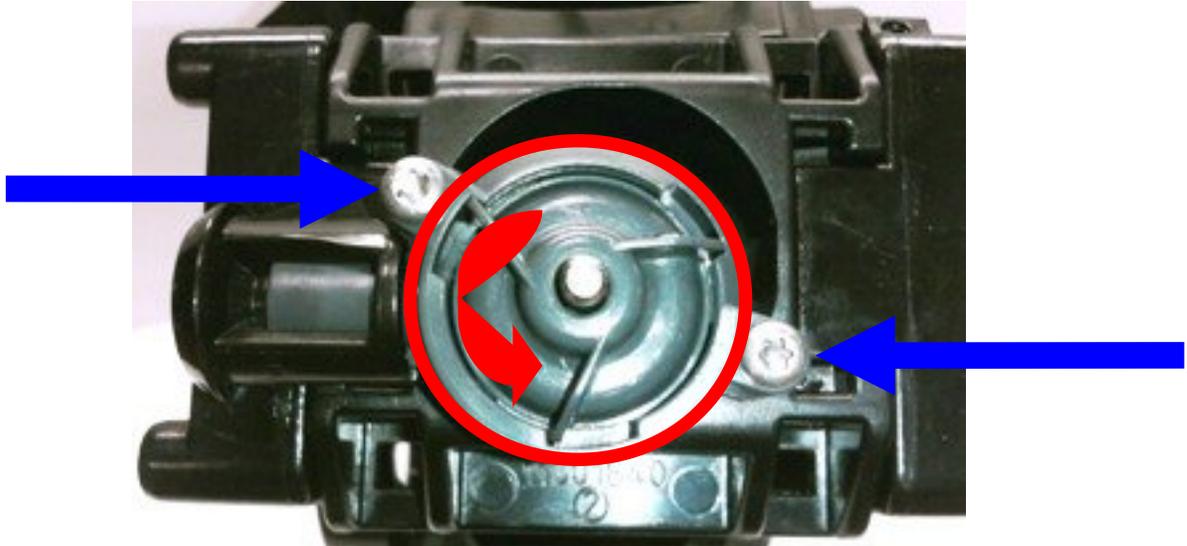
1. Locate the delivery spout on the top of the brew group. There are two chrome Phillips head screws holding it in place. Unscrew both of these screws to loosen the spout. There is a tiny rubber o-ring that seals the spout to the brew group. Be certain to set that aside.



2. BE CAREFUL WHEN REMOVING THE SPOUT. Do this slowly to avoid losing parts. Once the spout is removed, you will see a metal spring and either a glass or plastic check ball. Be sure not to lose any of the small pieces. Remove the spring and carefully turn the brew group over to remove the check-ball—It should simply fall out.  
**\*\*\*\* NOTE: If the check-ball does not easily fall out, try tapping the brew unit against a hard surface such that this part can fall into a bowl or other bin. \*\*\*\***
3. With the check ball and spring removed, rinse the entire brew group under warm water, giving special attention to washing away any grounds that may still be in or around the chamber you just exposed.
4. To reassemble the brew group, first place the glass check ball into the chamber it originally sat in. If using a tool to drop it into place, handle it with care to avoid scratching the small part.
5. Next, replace the spring. This spring is tapered and will only work if installed correctly. The thinner portion of the spring should be inserted into the brew unit first, toward the check ball. The thicker part of the spring should face up and out, toward the outlet pipe.
6. Reattach the spout. Ensure that the o-ring is properly seated below it.
7. Reattach the two Phillips heads screws. Make sure that the screws are hand tightened, but not *too* tight.
8. Reinsert the brew group into the machine.

## Type-C

1. Locate the check valve assembly, pictured below.
2. Identify the fan-like portion of the valve indicated by the red circle in the picture, below.



3. Remove this part of the valve by turning the “fan blades” counter-clockwise.  
*\*\*Note: If this is your first time removing this piece, turning the blades counter clockwise can be difficult. Pressing down while turning can help loosen it.*
4. Once the piece has moved as much as it can, it should pop up very slightly. Carefully grab the cover by the “fan blades” and lift it up and out. Underneath you will find a rubber membrane with a small stainless steel post with a spring nested around it.



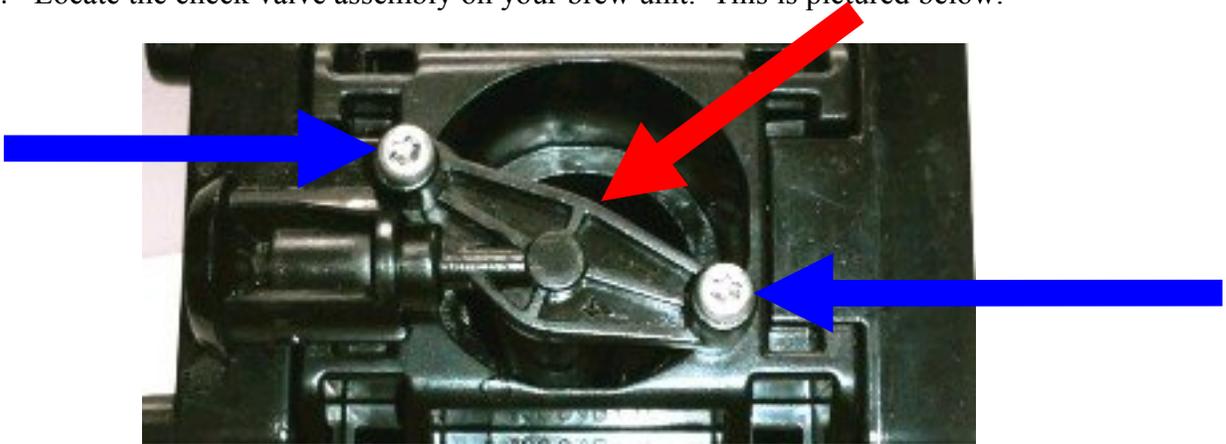
5. Remove the spring and set it aside. Grabbing it by the widest end, slowly pull the stainless steel post out. Be advised, this part is attached to the rubber disc (pictured). If it is dirty or has not been removed before, it may require some force. Be careful to pull strongly, but **slowly**.

*\*\*\* CAUTION: there is a very small o-ring on the opposite end of the post (indicated by the red arrow above). Do not lose this o-ring. \*\*\**

6. OPTIONAL: To remove the base and outlet-spout for cleaning, Unscrew the 2 Torx (asterisk-shaped) screws indicated by the blue arrows in the first photo (above).
7. With the check valve, spring, and cap removed, rinse the entire brew group under warm water, giving special attention to washing away any grounds that may be in or around the chamber you just exposed.
8. Replace all parts in reverse order. If you can not remember which order the pieces go in, use the picture above for reference beginning at the red arrow.

## Type-D

1. Locate the check valve assembly on your brew unit. This is pictured below.



2. Remove the 2 Torx (asterisk-shaped) screws indicated by the blue arrows in the picture (above).
3. Grasping it by both sides, firmly pull the cross piece (indicated by the red arrow) up and out of the brew unit.
4. Underneath the cross piece will be a small spring and either a plastic or glass valve seat. Pull this part out of the Brew Group and set it aside.  
**\*\*\*\* NOTE: Carefully handle the spring or valve seat. Both are very small. \*\*\*\***
  1. If your spring has a small (or narrow) and large (or wide) end, the larger end of the spring should face up. The smaller end of the spring should face down into the brew unit and will be pressed against the plastic or glass valve seat.
5. Clean all pieces under warm running water. With the check valve, spring, and cross bar removed, rinse the entire brew group under warm water, giving special attention to washing away any grounds that may be in or around the chamber you just exposed.
6. Reassemble the parts in reverse order.