The TTC can be replaced without removing the valve body.

The trick is to spread the retaining clip, which holds the TTC valve assembly in place.

This can be done from the bottom side of the valve body by using a pair of needle nosed pliers and a small screwdriver.

First, you will need to use the needle nosed pliers and squeeze the "ears" of the clip together.

This will allow the clip to open wider.... NOTE: the clip won't open wide enough if you skip this step.

Now spread the clip apart by inserting the tips of the needle nosed pliers between the straightened "ears" of the clip.

Once the clip is spread open the valve will pop loose and can then be removed with the small screwdriver.

The clip will drop out of the slot once the old valve assembly is removed.

After replacing the old valve with the new part.....just bend the "ears" of the clip back out and insert it from the bottom.