What happens if I use a squash instead of a true merge when performing one of the git tricks?

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A customer wanted to know which of the git tricks I've shared still work if you use a squash instead of a true merge. For example, in the case of <u>splitting a file in two while preserving line history</u>, can this be done with squashing?

Many of the git tricks exploit the way git walks the commit graph, and squashing creates a different graph from merging. Specifically, squashing *throws away all our hard work* in building a specific commit graph. Instead, squashing takes all the changes and squashes them together into a single commit. It's as if you made all the changes at one sitting and committed them as a unit.

On the other hand, squashing works just fine with the tricks that involve a single non-merge commit. It just replaces one non-merge commit with an identical one.

| Trick | Squashable? | Notes |
|---|-------------|---|
| Merging instead of cherry-picking | No | Merging is the point |
| Building a commit manually out of a tree | Yes | Creates a single non-merge commit |
| Building a merge commit manually out of a tree | No | Result is a merge commit |
| Building a throwaway commit in order to perform a combined cherry-pick-squash | Yes | Creates a single non-merge commit |
| Changing a squash to a merge | No | Result is a merge commit (that's the whole point) |
| Squashing without git rebase | Yes | Creates a single non-merge commit |

| Resetting by reusing an earlier tree | No | Result is a commit that needs to be merged |
|--|------------|--|
| Combining two files into one while preserving line history | No | Creates merge commits |
| Combining two files into one while preserving line history, via manual octopus merging | No | Creates merge commits |
| How do I split a file into two while preserving git line history? | No | Creates merge commits |
| How to split out pieces of a file while preserving git line history v1 | No | Creates merge commits |
| How to split out pieces of a file while preserving git line history v2 | No | Creates merge commits |
| How to duplicate a file while preserving git line history | No | Creates merge commits |
| Converting a rebase to a merge | No | Creates merge commits |
| How can I bulk-revert an entire repo to an earlier commit? | It depends | Method 1 uses a single non-merge commit, but method 2 uses a merge |
| How can I bulk-revert a subdirectory of a repo to an earlier commit? | Yes | Creates a single non-merge commit |

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