The Mistake-Proofing Design Quality Strategy

What is this?

The *mistake-proofing design quality strategy* is really a subset of designing quality into the product or process. Mistake-proofing makes it impossible to assemble something incorrectly, or give the wrong medicine to a patient, or even cut the left leg off of a patient when the right leg has gangrene.

Examples:

How often has someone assembling a gas barbecue, children's backyard playground set, or a bicycle luggage carrier found out that after being almost done, they assembled the left bracket where the right bracket goes, or the right bracket where the left one goes; or when assembling a gas barbecue, that the wrong bolt was used in step 3, only to find you don't have the correct bolt to use in step 23? Fool-proofing would eliminate occurrences like this from happening. For example, instead of having left and right brackets, the product will be made and assembled with a universal bracket so that mis-assembly is impossible.

Why?

Mistake-proofing eliminates a lot of frustration both in the factory assembly or customer assembly process. It eliminates a lot of rework on both stakeholders' parts.

Who?

This strategy will benefit both employees whose efforts could be wasted as well as customers whose expectations may not be met.

How?

Engineers, supervisors, and employees must all brainstorm about how things could go wrong, and think of ways to prevent that event from even occurring.

When?

The mistake-proofing design quality strategy will be used whenever a new product or intended product revision is being planned.