## Faucet Assembly

This is a complex task requiring exact sequencing, tool use, and good hand strength.


12 bases (A)
12 threaded rods (B)
12 nuts (C)
12 handles (D)
12 tags (E)
12 screws $\circledast$
12 black rings (G)
12 hard washers $(\mathbb{H}$
12 soft washers (I)
1 screwdriver (5)
1 single-compartment bin
13 -compartment bin
1 orange snap box
1 divided snap box
1 red storage bin (not shown)


Assembled faucet

Place the single-compartment bin with the bases on the table to the left. Place the 3 -compartment bin next to it on the right. Place the orange snap box with the tags next, and place the divider box at the far right. Place the screwdriver in front. Place the empty red storage bin nearby within reach (not shown).

## Procedure

- Take a base (A) and a threaded rod (B).
- Insert the rod into the top center hole of the base, threaded end first, and turn the rod to attach it to the base.
- Take a soft washer (I) and slip it on the rod.
- Take a hard washer $\mathbb{H}$ and slip it onto the rod.
- Take a black ring (G) and stretch it onto the rod, sliding it down on top of the two washers.
- Take a nut (C) and slide it onto the rod with the wider end facing down. Push down and turn the nut to attach it to the base.
- Take a tag () and insert the end of the rod into the hole on the tag.
- Take a handle (D) and place it on the end of the rod, matching the teeth and pushing down onto the rod.
- Take a screw $\mathbb{\oplus}$ and insert it into the center of the handle. Turn the screw once by hand.
- Take the screwdriver (ㄱ) and turn the screw until it is snug. Put down the screwdriver.
- Place the completed faucet assembly in the empty red storage bin.
- Repeat all the previous steps for the remaining 11 faucets.


## Norms:

Per unit - 42 seconds
Per task (12 units) -
8 minutes, 24 seconds

## Quality Criteria

All pieces must be assembled in the correct order and fit snugly, but not so tight that disassembly is difficult.


## Faucet Disassembly <br> Setup <br> Arrange the materials as in the assembly task. <br> Procedure

- Take an assembled faucet in one hand.
- Take the screwdriver with the other hand and loosen the screw. Do not allow it to fall out of the assembly.
- When the screw is loose, put down the screwdriver. Take the screw and place it in the correct compartment of the divided box.
- Remove the handle and place it in the correct compartment of the 3 -compartment bin.
- Remove the tag and place it in the orange snap box.
- Begin to unscrew the nut (3-4 turns). If the nut is difficult to remove, screw IN the rod ( $2-3$ turns).
- Complete unscrewing the nut and pull it off the rod. Place it in the correct compartment of the 3 -compartment bin.
- Remove the rod from the base and place the base in the correct bin.
- Remove the black ring from the rod and place it in the correct compartment of the divided box.
- Remove the hard washer and place it in the correct compartment of the divided box.
- Remove the soft washer and place it in the correct compartment of the divided box.
- Place the rod in the correct compartment of the 3-compartment bin.
- Repeat the previous steps for all faucet assemblies.


## Norms:

Per unit - 32 seconds
Per task (12 units) -
6 minutes, 24 seconds

## Quality Criteria

All pieces must be disassembled and placed in the correct bins and compartments.

