



Materials

- 36 bases (A)
- 36 nuts (B)
- 36 clamps (C)
- 72 screws (D)
- 1 screwdriver (not shown)
- 1 small single-compartment bin
- 1 3-compartment bin
- 1 storage box
- 1 red storage bin (not shown)



Assembled connector

Norms:

Per unit – 28 seconds Per task (36 units) – 17 minutes

Setup

Place the bin with bases on the table to the left; the 3-compartment bin with the nuts, clamps, and screws in the center; and the storage box to the right.

Procedure

- Simultaneously take one base with the left hand and one nut with the right hand.
- Engage and tighten the nut on the base. It should not rattle when shaken.
- Take one clamp. Position it so it rests on the base and the holes in the clamp line up with the threaded holes in the base.
- Take one screw. Position the screw so its end goes through the clamp hole and engages with the threaded base hole.
- Turn the head of the screw until enough of the threaded end of the screw protrudes from the other side that it can be grasped and turned with the other hand (approximately 9 turns).
- Grasp and turn the threaded end of the screw with the other hand until the head rests against the clamp (do not turn tight).
- Take another screw. Position and engage the screw with the threaded base hole.
- Turn the head of the screw until enough of the threaded end of the screw protrudes from the other side so that it can be grasped and turned with the other hand (approximately 9 turns).
- Grasp and turn the threaded end of the first screw until it is tight.
- Grasp and turn the threaded end of the second screw until it is tight. The clamp should not rattle when shaken.
- Place the assembled unit in the storage box. Arrangement of the units in the box is not necessary.

Quality Criteria

Each assembled unit must consist of one base, one nut, one clamp, and two screws. The rounded edge of the clamp should face out, sitting against the base. The unit must not rattle when shaken.

Variations

Connector Assembly can be broken down into three sequential training tasks:

- Two-item assembly using 36 bases and 36 nuts.
- Three-item assembly using 36 bases and 72 screws.
- Four-item assembly using 36 bases, 36 clamps, and 72 screws.

Note

Screws should be tightened just enough so the head of the screw applies pressure to the clamp. A screwdriver which is supplied can be used for training as a task variation, or used when the screws stick and need a surer grip.

Connector Disassembly

Setup

Arrange the materials as in the assembly task.

Procedure

- Take one assembled unit from the storage box.
- Remove the nut and place it in the appropriate bin compartment.
- Grasp and turn the threaded end of one screw until it cannot turn any more because the end is too close to the base to grasp.
- Disengage the loosened screw by turning its head. Place it in the appropriate bin compartment.
- Repeat the above procedure for the remaining screw.
- Place the clamp and the base in the appropriate bin compartments.

Note

The screwdriver also may be used in the disassembly procedure.

Norms: (Basic Task)

Per unit – 18 seconds Per task (36 units) – 11 minutes

Quality Criteria

The connector must be completely disassembled and the materials placed in the appropriate bin compartments.