Optimice
SOP - Single-use Caging

Demonstration video

Inspection

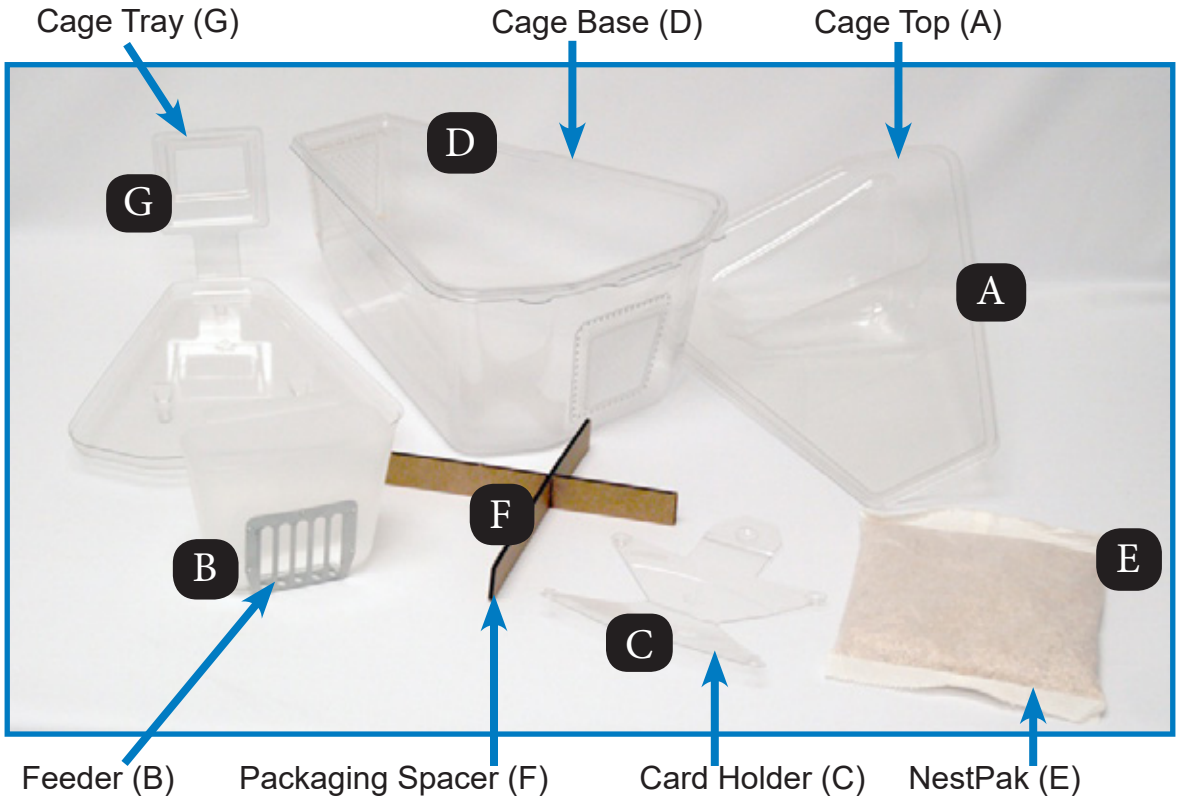
Shipments arrive in several boxes with the following sterilized parts in each box:

- 32 cage tops, feeders, and card holders
- 26 cage bases with packaging spacers between each cage
- 128 water bottles and caps (if bottle watering is employed)
- 100 bedding NestPaks, in four sterile bags of 25 apiece (optional)

Up to 102 non-sterile cage trays will fit in a box, supplied in custom quantities with the initial shipment of caging (additional cage trays will be provided if needed).

Inspect inner-most bags that contain cage components if a shipping box arrives damaged. Verify that bags have not been punctured, torn, or otherwise damaged, as this will compromise sterility.

Note: If there are any interior edges or contours that are not perfectly smooth, discard and replace that component.



Cage Base and Top Assembly

1. Empty the prepackaged bedding into the cage base. Spread the bedding evenly across the cage floor. Packaging material can remain in the cage as enrichment (Figure 1).

Figure 1

2. Place the feeder channel over the recessed section in the top rim of the cage base (Figure 2). Make sure it is properly located and seated in the recess so the lid will close properly (Figure 3).

Figure 2

Figure 3

1. Place the cage top onto base. Pinch firmly along the perimeter of the rim to secure the top. Examine the support channel of the feeder, and ensure it remains seated in the recess (Figure 4).

Figure 4

2. Place the water bottle or water bag completely inside the recess of the cage top. Ensure the nipple or valve inserts firmly through the hole and is accessible to the animals (Figure 5).

Figure 5

Card Holder Assembly

1. Hold the card holder so the round depression on the support tab protrudes upward. Fold the support tab downward along the crease (Figure 6), and then fold it back upward so the depression faces the interior of the folded layers (Figure 7).

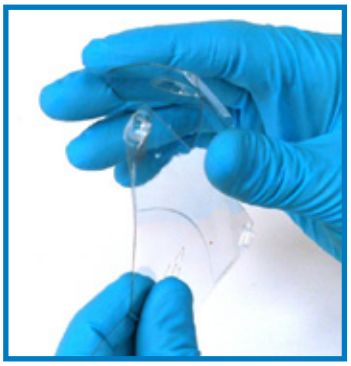


Figure 6

Figure 7

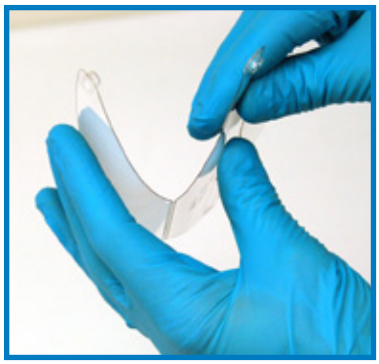


Figure 8

Figure 9

2. Fold in half the main section of the card holder along the crease where it narrows (Figure 8). It must be folded in the opposite direction from the support tab. Line up the two pairs of locking features, and press firmly to snap them together. The support tab should be pointing away from the "pocket" formed by the assembled card holder (Figure 9).

3. Insert the support tab through the slot in the rim along the front of the cage, and press downward until the round depression on the tab snaps through the slot (Figure 10).

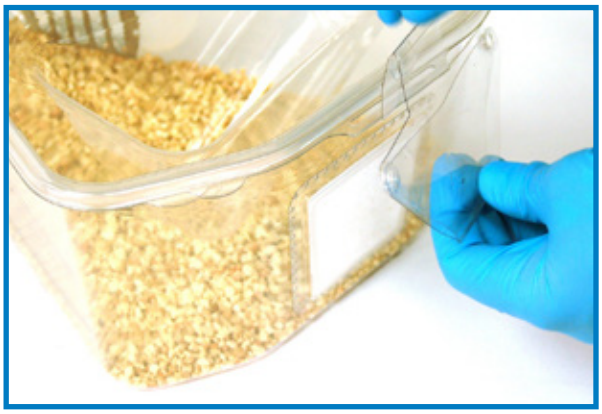


Figure 10

⚠ **Remove components from the boxes only when needed. Storing components outside the boxes will compromise sterility.**

Cage Tray Preparation and Cage Installation

1. Fold upward along the perforated strip to form a 90-degree bend (Figure 11).
2. Firmly snap the cage trays into the necessary cage stations on an Optimice rack. The exhaust adapter should rest on the flapper door in the rack plenum.
3. Place the single-use cage into the tray, ensuring it seats into the three grooves in the tray (Figure 12). Do not apply downward pressure to the cage once it is docked, or it will need to be re-docked.

Trays can be reused.

The fold must be made along the perforated strip precisely**, or the exhaust adapter will not fit properly.**

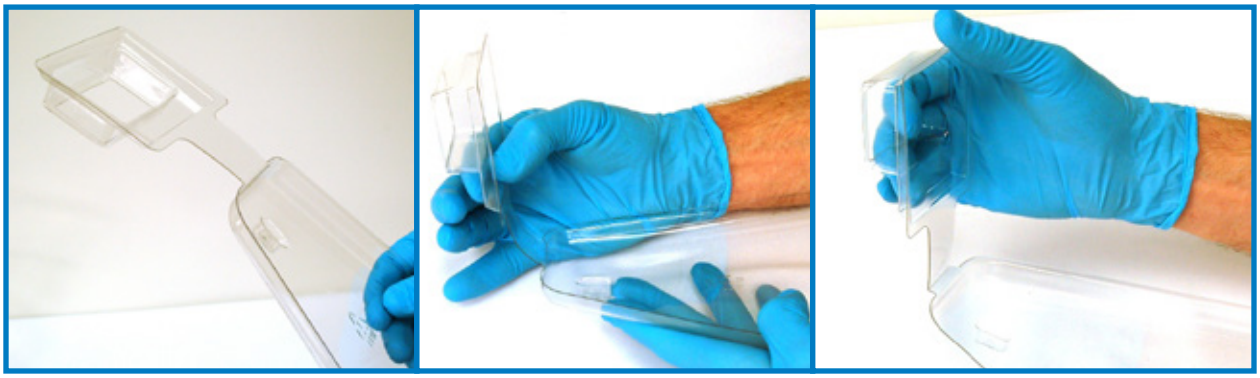


Figure 11

Figure 12

Cage Base Changing

1. Inspect the full cage assembly to confirm there is no damage to the cage top (A) or feeder (B). Any damaged components should be discarded and replaced.
2. Refer to the assembly instructions, beginning on Page 2. Transfer reusable feeders and card holders to new cage bases.

Airflow Requirements

Single-use caging requires higher airflow rates than standard Optimice® cages. The rack status monitor is available for continuous airflow monitoring; see Opti Rack SOP 1 for guidance. Refer to the table below to determine recommended airflow rates.

Ensure the necessary flow rate is maintained when switching a rack to accept single-use caging. This is crucial if a single-use rack is ventilated on the same exhaust run as a rack with standard Optimice® cages.

It may be necessary to adjust airflow using damper assemblies on all hoses ventilating standard-cage racks. Be sure to measure the airflow on the single-use rack, as well as one of the damper-equipped standard-cage racks. Adjust the dampers equally until the single-use and standard-cage racks achieve desirable airflow.

C79355 Rack Status Monitor

M49D100 Iris Damper

M79211 Anemometer

Airflow Requirements for Single-use Caging Within Optimice and Ergomice Racks			
Rack Type	Functional Exhaust Airflow Range, CFM	Anemometer Measurement Range, Per Hose, m/s	
		Two Hoses	One Hose
Optimice	60 - 75	5.3 - 6.6	10.6 - 13.2
Ergomice-80	51 - 64	4.5 - 5.6	9.0 - 11.2
Ergomice-70	45 - 56	3.9 - 4.9	7.8 - 9.8
Ergomice-50	33 - 41	5.7 - 7.1*	11.4 - 14.2

*A single hose is standard for Ergomice 50