



Joining Single Rack Assemblies Together

Your S2, S3, S4, or S5 Ventilated M.I.C.E. Rack Assembly has been shipped to you as multiple S1-configured racks along with the hardware necessary to attach the S1s together into your desired configuration. The following illustrated instructions show how to convert S1 racks into any single-sided configuration up to S5. Racks longer than 5 modules wide are not sold, and longer configurations are not recommended.

Assembly Parts

Each module-to-module joint requires the following parts and hardware included with your shipment:

- 1 ea. M41010 Module Gasket
- 3 ea. 1/4-20 x .50" lg self-locking hex head bolt
- 2 ea. 1/4-20 x .75" lg self-locking hex head bolt
- 5 ea. 1/4-20 nut

For instance, an S4 rack would have three module-to-module joints, thus three times the quantities of parts listed above. Wrench or spanner size is 7/16"

Additionally, you have been shipped the following for your S2, S3, S4, or S5 rack assembly:

- 2 ea. 4" diameter swivel casters with brakes
- 2 ea. 4" diameter swivel casters without brakes
- 4 ea. 1/2-13 x 1" lg hex head bolt
- 4 ea. 1/2" lock washer

The wrench or spanner size needed is 3/4" or 19 mm. A box wrench is necessary to achieve the necessary torque.

A universal M72010 Module Joining Kit is available that provides the necessary hardware for joining either a single or double sided rack together.

Assembly Instructions

To assure the easiest and most trouble-free assembly of your rack configuration, refer to the following instructions and figures.

1. Remove each S1 module from its shipping crate. Tip the box containing the module upright with the split end of the box at the bottom. Remove the box from the top of the rack. Remove the shrinkwrap and other packing materials from each S1 rack, taking care not to scratch the cages if using sharp implements.

2. To reduce the weight of the completed assembly, remove the cages and cage trays from all the modules to be attached together.
3. Line up the needed modules in a clear area that allows sufficient space to work. Allow several inches of space between modules for gasket installation.
4. Peel off the backing and attach a Module Gasket to one module at each joint. See Figure 1.



Figure 1

5. Once the gasket is pressed into place, slide the modules together until the top two holes above the gasketed aperture line up. Install two $\frac{1}{4}$ -20 x .50 lg bolts and nuts. Tighten these fasteners to 20-30 in-lbs (2.3-3.4 newton-metres) using $\frac{7}{16}$ " wrenches or sockets. 11 mm tools may work, but will be tight on the hex of the bolt. See Figure 2.



Figure 2

- Next, install the single $\frac{1}{4}$ -20 x .50" lg bolt and nut in the middle of the leg gusset and tighten. See Figure 3.



Figure 3

- With the modules securely attached together at the tops, carefully tip the assembly over onto its back so that the cage doors in the modules face up. As shown in Figures 4 and 5, install and tighten two $\frac{1}{4}$ -20 x .75" lg bolts and nuts in the locations noted in the figures.



Figure 4



Figure 5

Note the locations for attaching the casters in four places on each module. Regardless of the size of the rack created from individual modules (up to 5 maximum), only four casters are used, attached at the corners of the completed rack assembly. See step 8.

8. Finally, install the four casters included with your shipment. Each caster is bolted to the weld nut on the corner of the rack assembly with a $\frac{1}{2}$ " bolt and lock washer. Lightly lubricate the bolt threads with soap prior to assembly. Tighten each caster bolt to 20-25 ft-lb (27-34 newton-metres) with a $\frac{3}{4}$ " or 19 mm box wrench. Refer to Figure 6 below.



Figure 6

This completes the assembly of your rack. Carefully lift the rack assembly upright and reinstall the cage trays and cages. Install the module top caps, manifolds, and ventilation hoses.