

Freedom Rack Plus

**Freedom and flexibility in an adjustable rack
with 12-24 rails.**



**Customer
Support
Information**

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500)
FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746
Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018
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1. Specifications

Size: RM082A: 72"H (35U) x 20.25"W x 17.7 to 41.3"D (182.9 x 51.4 x 45 to 104.9 cm);
RM084A, RM088A: 84"H (45U) x 20.25"W x 17.7 to 41.3"D (213.4 x 51.4 x 45 to 104.9 cm);
RM086A: 96"H (51U) x 20.25"W x 17.7 to 41.3"D (243.8 x 51.4 x 45 to 104.9 cm)
RM089A: 84"H (45U) x 24.25"W x 17.7 to 41.3"D (213.4 x 61.6 x 45 to 104.9 cm)

Weight: RM082A: 66 lb. (29.9 kg); RM084A, RM088A: 70 lb. (31.8 kg); RM086A: 75 lb. (34 kg);
RM089A: 80 lb. (36.2 kg)

2. Overview

The Freedom Rack Plus neatly houses computer equipment. It's available in five models: three tapped (round-hole) models and two untapped (square [M6]-hole) models. The part numbers for each model are listed below.

- Freedom Rack Plus 19" Rackmount, 35U, tapped (RM082A)
- Freedom Rack Plus 19" Rackmount, 45U, tapped (RM084A)
- Freedom Rack Plus 19" Rackmount, 51U, tapped (RM086A)
- Freedom Rack Plus 19" Rackmount, 45U, untapped (RM088A)
- Freedom Rack Plus 23" Rackmount, 45U, untapped (RM089A)

What's Included

Your package should include the following items. If anything is missing or damaged, please contact Black Box at 724-746-5500.

- (4) vertical rails
- (2) sets of sliding top horizontal rails, (3) pieces per set
- (2) sets of sliding bottom horizontal rails, (3) pieces per set
- (2) top L-shaped horizontal bars
- (2) bottom L-shaped horizontal bars
- (20) ¼-20 x 0.75" bolts (only 16 are used, 4 are extra)
- (20) ¼-20 nuts (only 16 are used, 4 are extra)
- (32) ⅜-16 x 1" screws (only 28 are used, 4 are extra)
- (32) ⅜ lockwashers (only 28 are used, 4 are extra)
- (32) ⅜-16 nuts (only 28 are used, 4 are extra)
- This user's manual

3. Assembly

The Freedom Rack Plus ships unassembled. Follow the instructions in this section to assemble it.

1. Using (2) $\frac{3}{8}$ -16 x 1" screws, (2) $\frac{3}{8}$ lockwashers, and (2) $\frac{3}{8}$ -16 nuts, connect the flat horizontal bar to the front side of the first pair of vertical rails. See Figure 1.

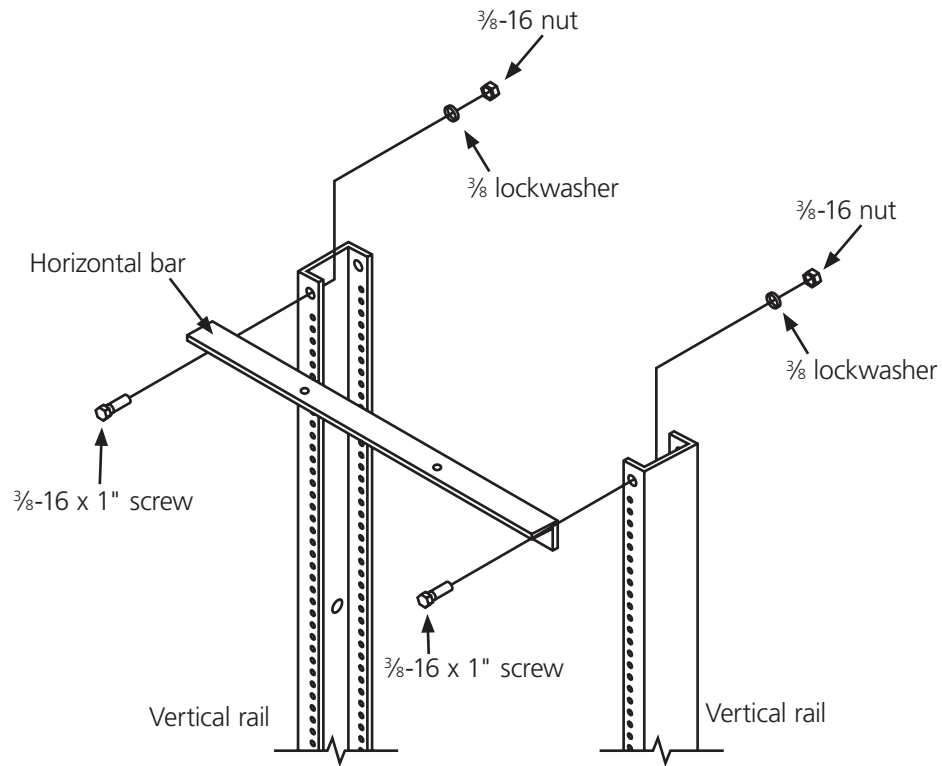


Figure 1. Attaching the horizontal bar to the vertical rails.

2. As shown in Figure 2, using (4) $\frac{3}{8}$ -16 x 1" screws, (4) $\frac{3}{8}$ lockwashers, and (4) $\frac{3}{8}$ -16 nuts, attach the bottom L-shaped horizontal bar to the bottom front side of the first pair of vertical rails.

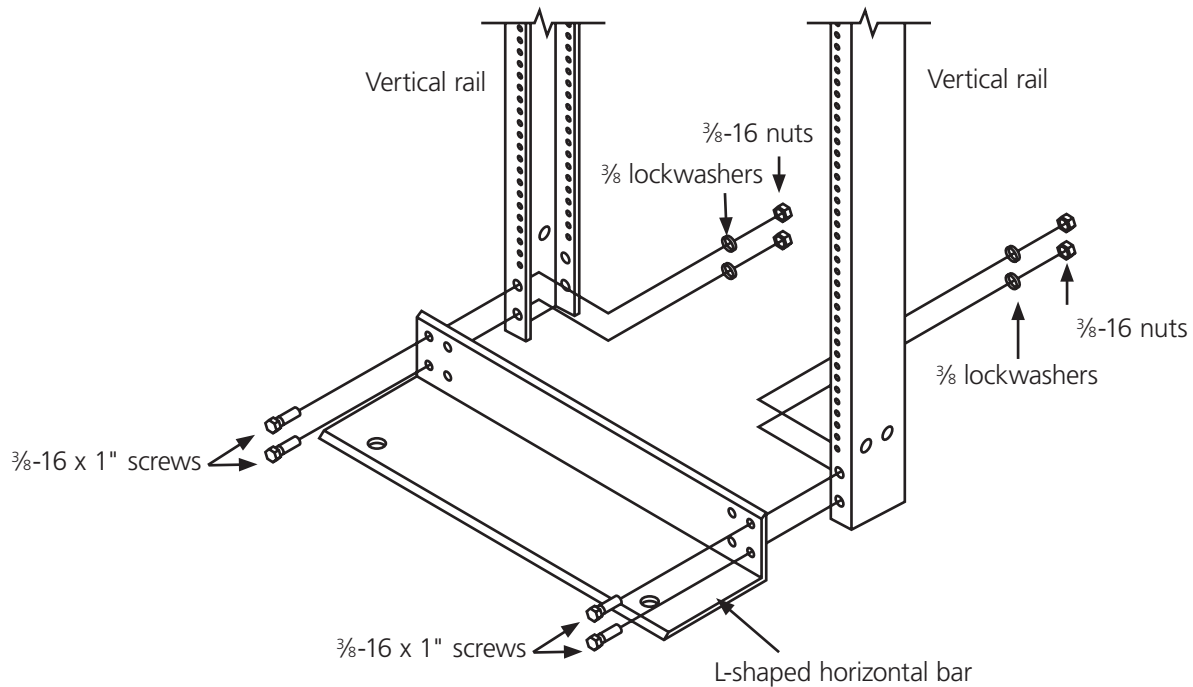


Figure 2. Connecting the L-shaped horizontal bar to the vertical rails.

3. Repeat steps 1 and 2 for the remaining pair of vertical rails.
4. The rack's depth can be adjusted in 1" (2.5-cm) increments. Connect the first set of sliding top horizontal rails together using (4) $\frac{1}{4}$ -20 x 0.75" bolts and (4) $\frac{1}{4}$ -20 nuts. Using (4) more $\frac{1}{4}$ -20 x 0.75" bolts and $\frac{1}{4}$ -20 nuts, connect the second set of sliding top horizontal rails together.

Next, connect the first set of sliding bottom horizontal rails together using (4) $\frac{1}{4}$ -20 x 0.75" bolts and (4) $\frac{1}{4}$ -20 nuts. Repeat this for the remaining set of sliding bottom horizontal rails (you'll use (4) $\frac{1}{4}$ -20 x 0.75" bolts and (4) $\frac{1}{4}$ -20 nuts). Figures 3 through 7 show five possible depth adjustments for these rails.

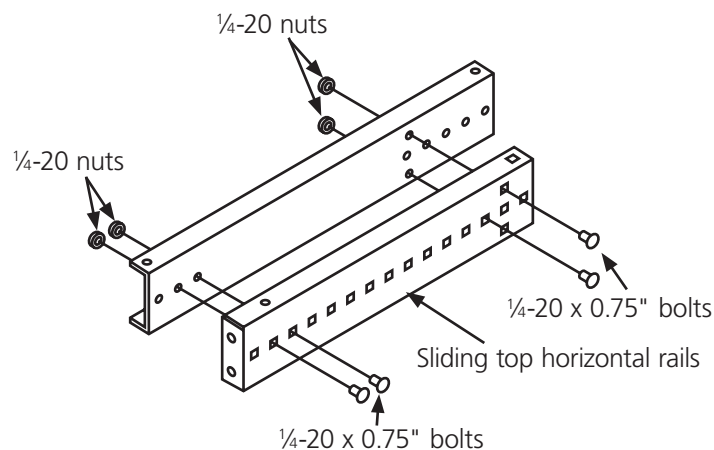


Figure 3. Horizontal rails adjusted to 17.75" (45.1 cm) deep.

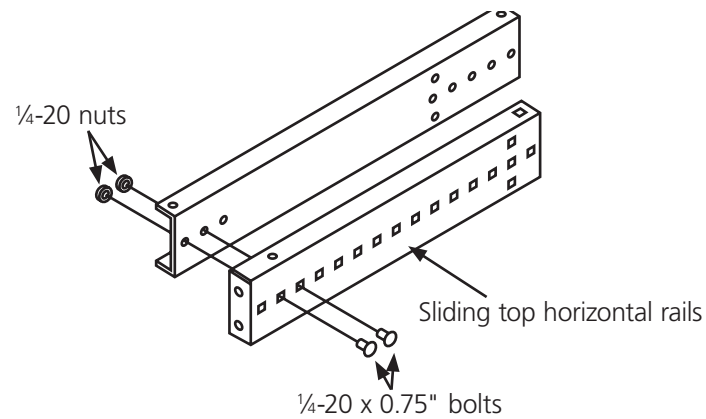


Figure 4. Horizontal rails adjusted to 18.75" (47.6 cm) deep.

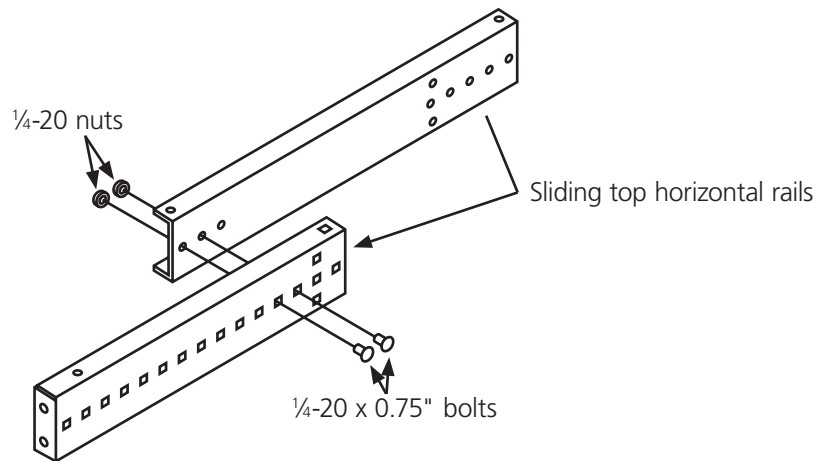


Figure 5. Horizontal rails adjusted to 28.5" (72.4 cm) deep.

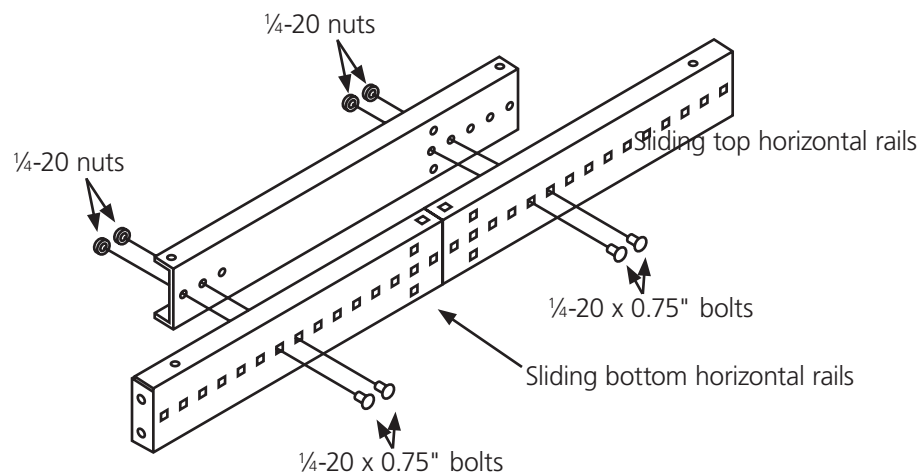


Figure 6. Horizontal rails adjusted to 29.5" (74.9 cm) deep.

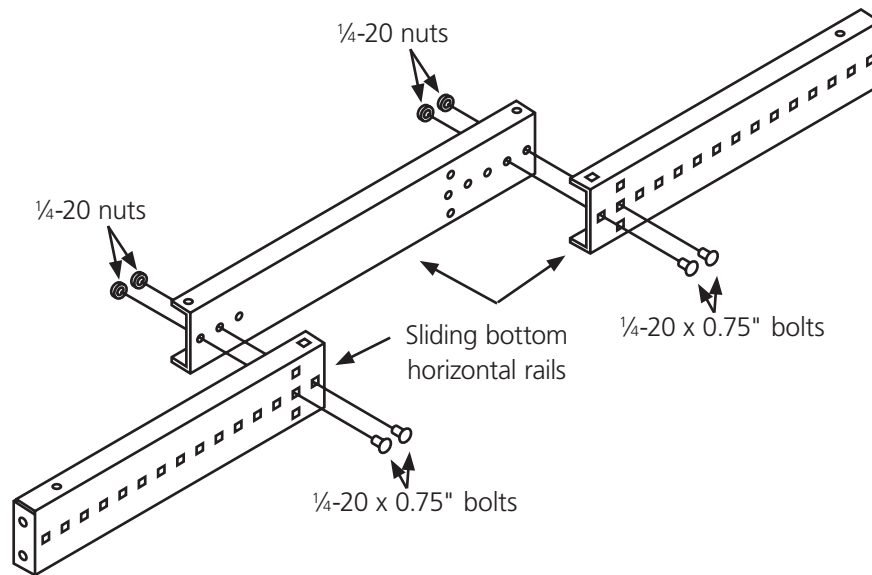


Figure 7. Horizontal rails adjusted to 41" (104.1 cm) deep.

5. Once the sliding top and bottom horizontal rails are assembled, you're ready to connect them to the rack's vertical rails. Use (8) 3/8-16 x 1" screws, (8) 3/8 lockwashers, and (8) 3/8-16 nuts. Figures 8 and 9 show the installation for two depth ranges.

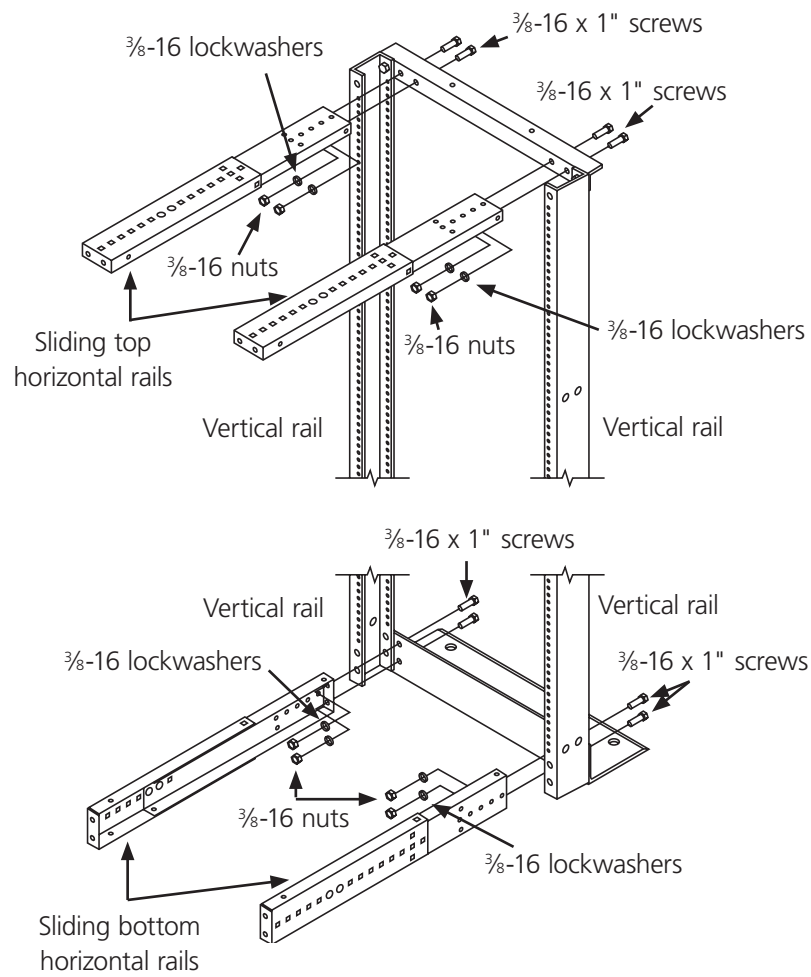


Figure 8. Connecting the top and bottom horizontal rails to the rack's vertical rails (17.75" to 28.5"D [45.1 to 72.4 cm] in one-inch [2.5-cm] increments).

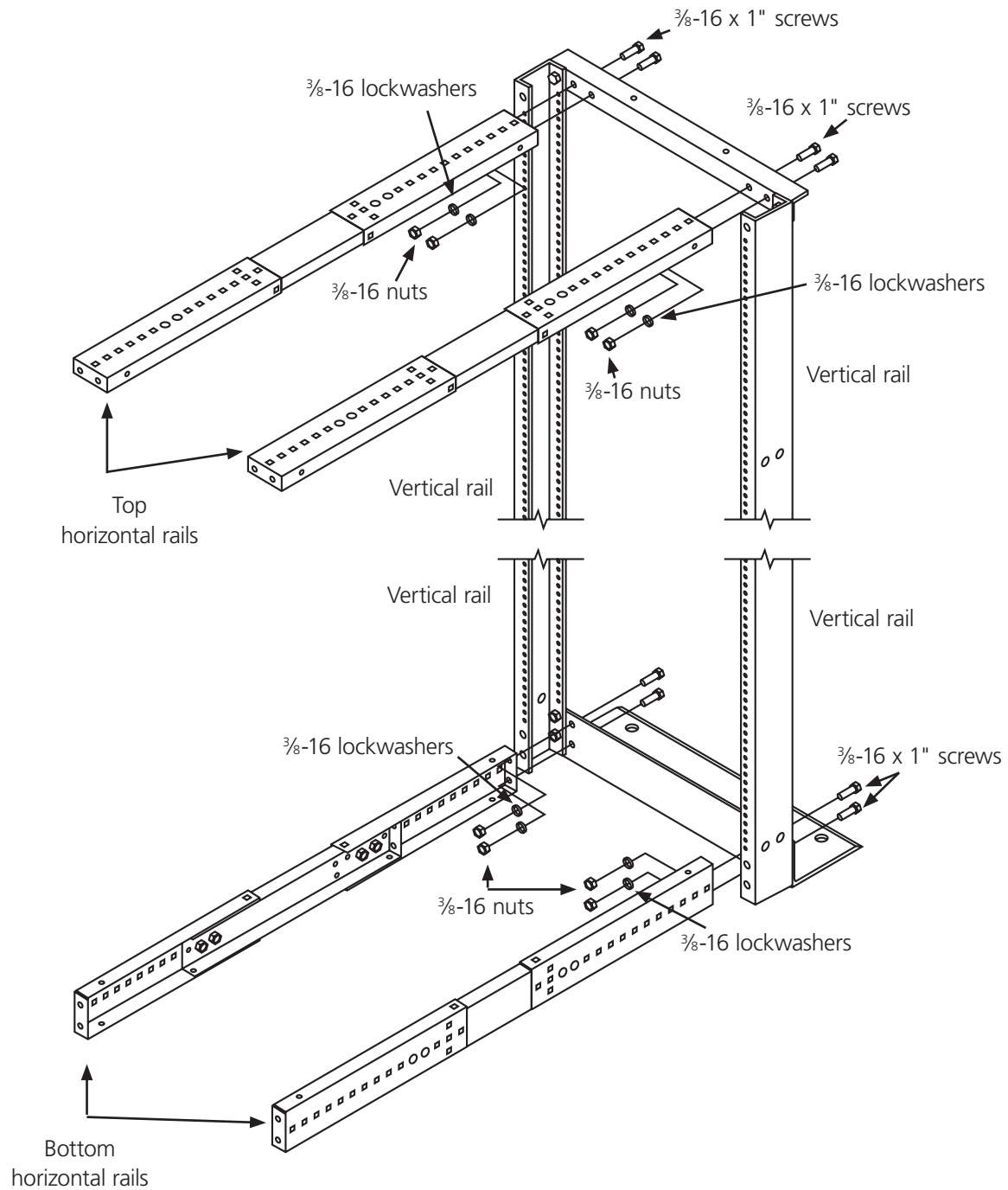


Figure 9. Connecting the top and bottom horizontal rails to the rack's vertical rails (29.5 to 41" D [74.9 to 104.1 cm] in one-inch [2.5-cm] increments).

Chapter 3: Assembly

6. In step 3, you connected the horizontal bars to the remaining pair of vertical rails. Now, connect these two vertical rails to the rack assembly, as shown in Figures 10 and 11. You'll need (8) $\frac{3}{8}$ -16 x 1" screws, (8) $\frac{3}{8}$ lockwashers, and (8) $\frac{3}{8}$ -16 nuts.

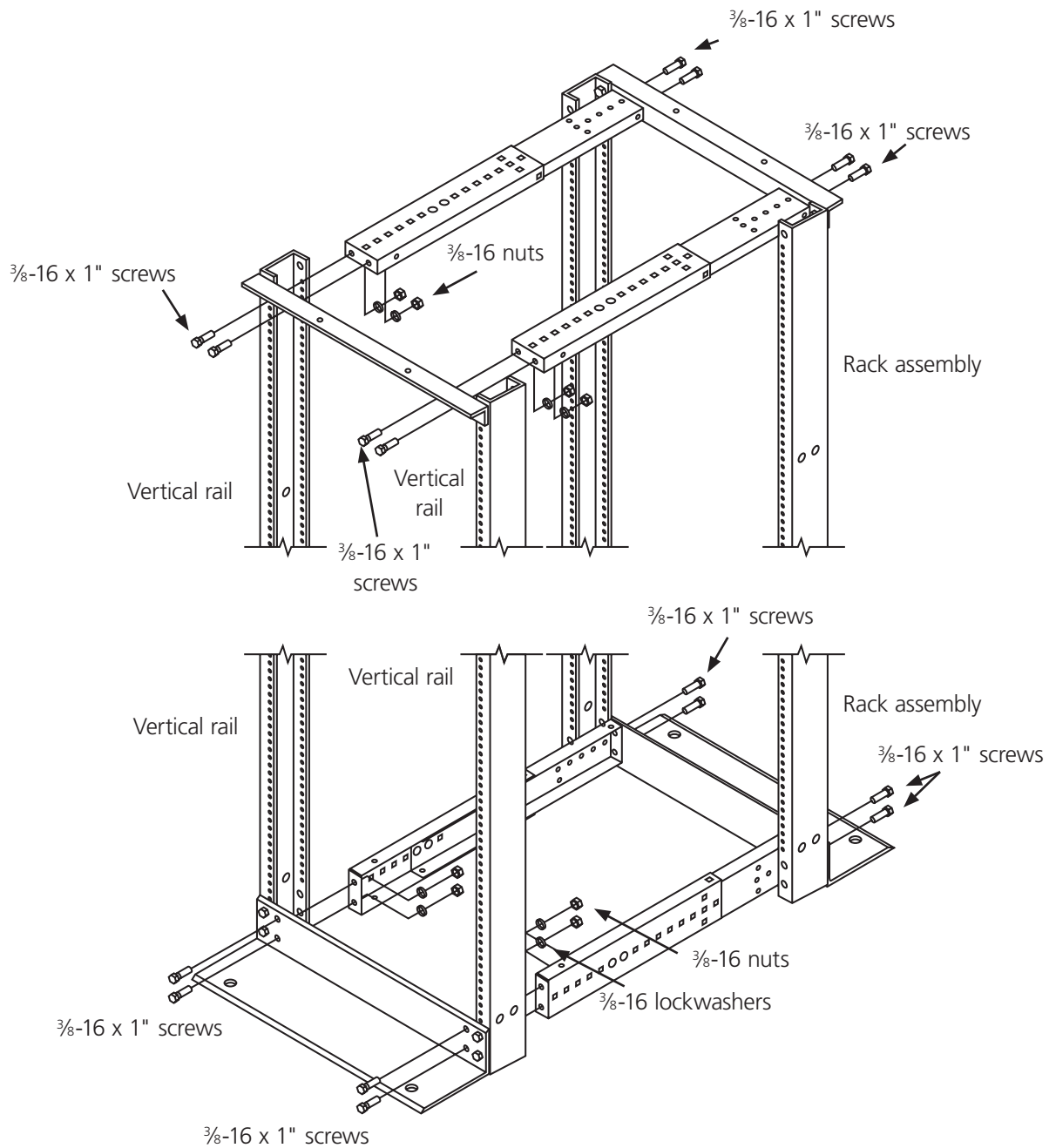


Figure 10. Attaching the rack's front two vertical rails to the rack assembly, rails adjusted to 17.75" to 28.5" D (45.1 to 72.4 cm) in one-inch (2.5-cm) increments.

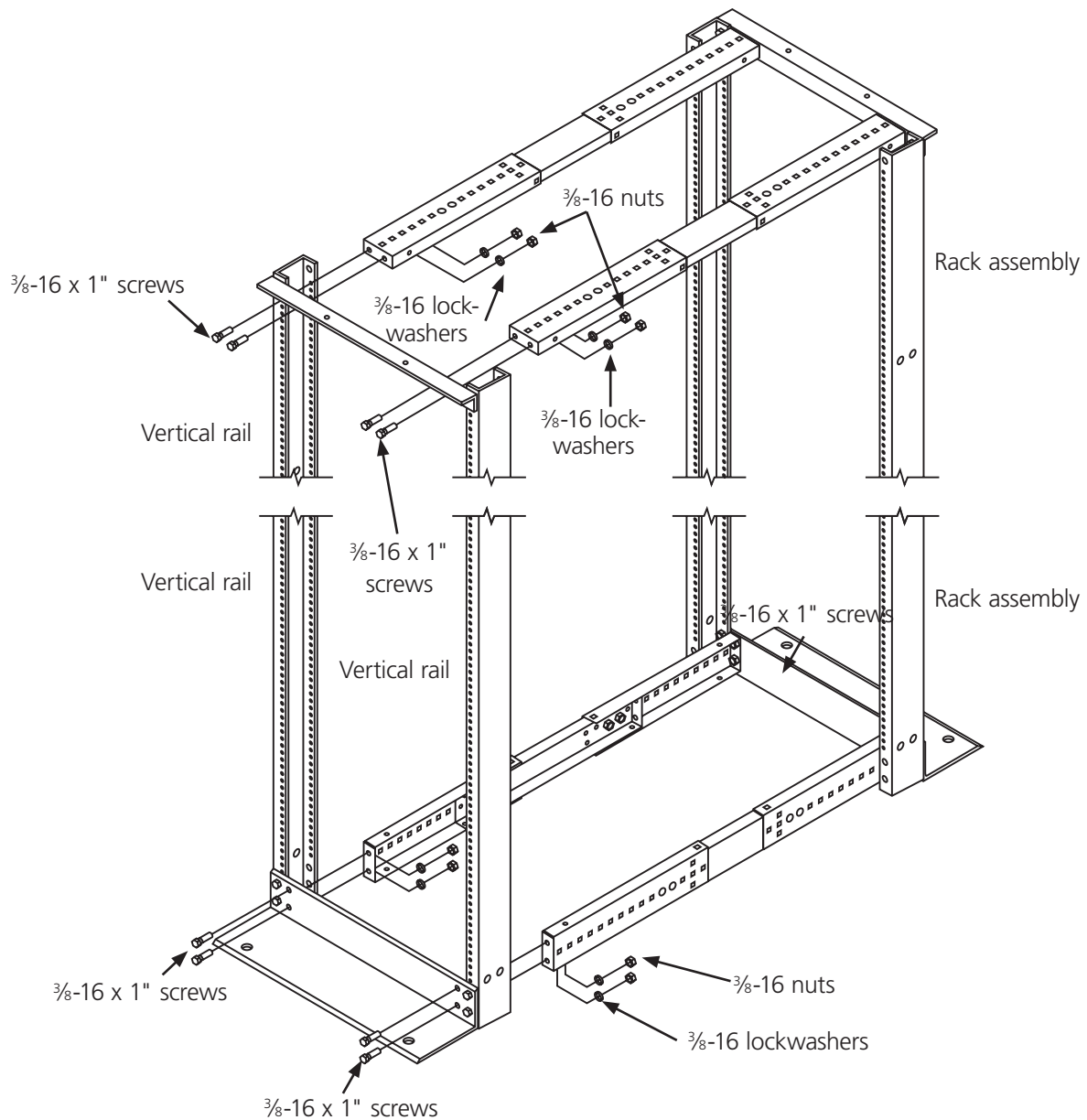


Figure 11. Attaching the rack's front two vertical rails to the rack assembly, rails adjusted to 29.5 to 41"D (74.9 to 104.1 cm) in one-inch (2.5-cm) increments.

Assembly is complete.

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RM082A, rev. 2

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