INSTALLATION INSTRUCTIONS

FILTER RACK KITS FOR LARGE PACKAGE MICRO CHANNEL COILS (BRONZE COLORED UNITS)

IMPORTANT SAFETY INFORMATION

Please read all instructions before installing these components. Pay attention to all safety warnings and any other special notes highlighted in the manual. Safety markings are used frequently throughout this manual to designate a degree or level of seriousness and should not be ignored.

WARNING indicates a potentially hazardous situation that if not avoided, could result in personal injury or death.

⚠ WARNING:

RISK OF ELECTRICAL SHOCK
Shut off all electrical power to the unit before performing any maintenance or service on the system. Failure to follow this warning can cause serious injury, fire, electrical shock, or death.

• The installer performing this work assumes all responsibility when installing this kit. These instructions are primarily intended to assist qualified individuals experienced in the proper installation of these components. Some local codes may require licensed installation/service personnel for this type of equipment. Safety should always be the deciding factor when installing this product and using common sense plays an important role as well. Improper installation of the components or failure to follow safety warnings could result in serious injury, death, or property damage.

• Unless noted otherwise in these instructions, only factory authorized parts or accessory kits may be used with this product. Improper installation, service, adjustment, or maintenance may cause fire, electrical shock or other hazardous conditions which may result in personal injury or property damage.

• Please read all instructions carefully before starting the installation. If a problem occurs, check the instructions and follow recommendations given.

• The information shown in these instructions must be followed during the installation of this kit. Unqualified individuals should not attempt to interpret these instructions or install this equipment. If you do not possess mechanical skills or tools, call your local dealer for assistance.

• Use caution when handling the appliance or removing components. Personal injury can occur from sharp metal edges present in all sheet metal constructed equipment.
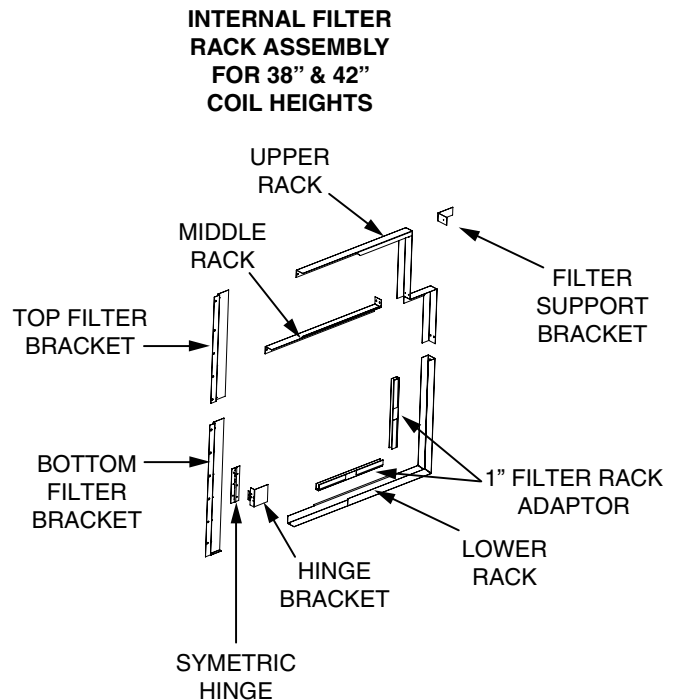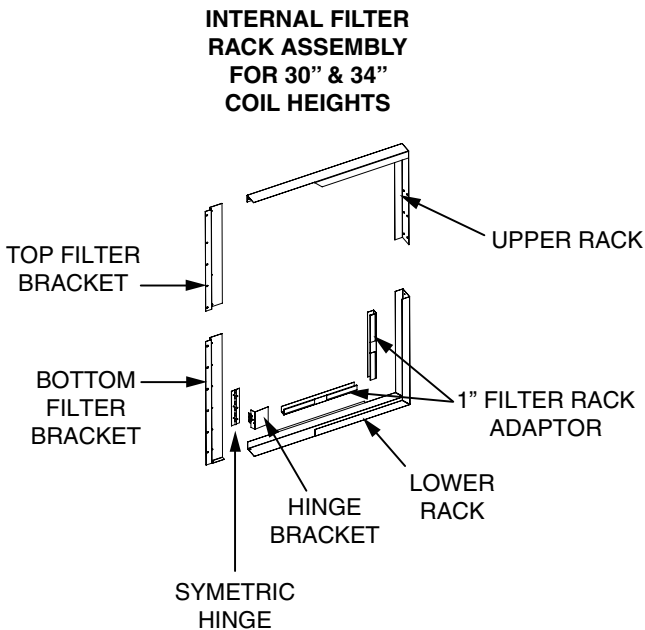

Figure 1. Internal Filter Rack

INSTALLATION OF FILTER RACK

Filter Rack Kits for Large Package Micro Channel Coils

1. Determine the correct filter rack kit by measuring the coil height or total unit height. Kit information can also be obtained on the accesory page of the unit's Technical Sales Litertaure.
2. Verify all parts are accounted for in your kit by referring to Figure 1 (page 1) and the bill of materials in Table 1 (page 3).
3. Assemble the filter rack as shown in Figure 3 or Figure 4 (page 5). **NOTE:** Both filter rack styles are designed with adjusting holes 4" apart. The 30", 34", & 38" filter rack (for units with 20" fan orifice) is adjustable and all use the same internal parts. The 38" & 42" filter rack (for units with 24" fan orifice) is also adjustable and both use the same internal parts. If using 1" filters, insert the Adapter,1", Filter. If using 2" filters, this part is not needed. For replacement filters, use Table 2.
4. Remove the unit return access panel.
5. Attach the filter rack to the unit using the the holes as shown in Figure 2.
6. Position the new return access panel, ensuring the filter access panel is secure. **NOTE:** Make sure the factory installed gasket material and insulation is on the filter access panel.
7. Restore power back to the unit.

AIR FILTER INSTALLATION

⚠ WARNING:

Never operate the unit without a filter in place. Dust and lint could accumulate on internal parts, resulting in loss of efficiency, equipment damage and possible fire.

NOTE TO INSTALLER: After installing or replacing the filtration system for this unit, add the following statement on or adjacent to the filter service panel: **"Replace filter(s) installed in your system only with the same dimensional size filters that are being replaced."**

- A suitable air filter must be installed upstream of the evaporator coil of the return air system. See Table 2 (page 3) for recommended external filter sizes.
- All return air must pass through the filters before entering the evaporator coil. It is important that all filters be kept clean and replaced frequently to ensure proper operation of unit. Dirty or clogged filters will reduce the efficiency of the unit and may result in unit shutdowns.
- Air filter pressure drop is recommended not to exceed 0.08 inches WC.

Removal of Internal Filter Rack

NOTE: If a downflow economizer is installed, an internal filter kit is not required, the economizer already has a filter.

1. Remove the return air panel from the unit.
2. Remove the height adjustment screw from the inside of the rack.
3. Remove 4 screws securing the assembly to the coil located on the left leg of the rack. **NOTE:** The assembly can now be easily collapsed and removed from the unit. The bracket secured to the top rear of the coil can remain in place. See Figure 2 (page 3) for filter rack securing screw locations.

Installing Filters in the Internal Filter Rack
(If Equipped)

1. Remove access panel screws from return air panel. (**Hint:** Loosen the unit's top panel screws near the top edge of the access panel. The access panel was designed to fit underneath the top panel.)
2. Slide the first filter between both guide channels of filter rack and allow the filter to drop easily into place.
3. Verify the bottom of the filter is within the channels of the rack.
4. Slide the 2nd filter (and 3rd filter on taller models) between both guide channels of filter rack.
5. Verify the top of the filter is within the channels of the rack.
6. Replace access cover by sliding the top edge of panel under the lip of the unit's top panel. Secure access panel by replacing the screws.

1" to 2" Filter Conversion

Factory installed internal filter rack (3 phase models only) is set up to accept 1" filters. If conversion to 2" filters is desired, remove the two (or three) 1" filter adaptors secured in the assembly with clips by pulling straight off the frame. The filter bracket must be reoriented to accept 2" filters by removing two screws securing it to the hinge and rotating 180 degrees. See Figure 2 (page 3).

Removing Filters from Internal Filter Rack
(If Equipped)

1. Remove access panel screws from return air panel. (Hint: Loosen the unit's top panel screws near the top edge of the access panel. The access panel was designed to fit underneath the top panel.)
2. Remove upper filter by gently pulling filter through the access panel opening.
3. Remove lower filter by lifting media to top of filter rack. Remove in the same manner as described in step 2.
4. Install new filter in the filter rack as described in the previous section.

	SKU	DESCRIPTION	QTY
ASSEMBLY # 10079916R (30" CABINET WITH 20" FAN ORIFICE)	606200	CLIP,PUSH-ON	3
	285131	ADAPTER,1" FILTER	3
	101003602	RETURN PNL ASSY,30",INS	1
	101003606	ACCESS DOOR ASSY,14",INS	1
	600325	SCREW SMSHWH 8ABX1/2"LONG	5
	2C7181	BASE,LOWER,RACK	1
	2C7791	BRACKET,FILTER,BOTTOM	1
	2C7801	BRACKET,FILTER,TOP	1
	2C8131	BASE,UPPER RACK,20" OD FAN	1
	2C8081	BRACKET,HINGE	1
	669605	HINGE,SYMETRIC	1

	SKU	DESCRIPTION	QTY
ASSEMBLY # 10079917R (34" CABINET WITH 20" FAN ORIFICE)	606200	CLIP,PUSH-ON	2
	285131	ADAPTER,1" FILTER	2
	101003603	RETURN PNL ASSY,34",INS,	1
	101003607	ACCESS DOOR ASSY,16",INS	1
	600325	SCREW SMSHWH 8ABX1/2"LONG	1
	2C7181	BASE,LOWER,RACK	1
	2C7791	BRACKET,FILTER,BOTTOM	1
	2C7801	BRACKET,FILTER,TOP	1
	2C8131	BASE,UPPER RACK,20" OD FAN	1
	2C8081	BRACKET,HINGE	1
	669605	HINGE,SYMETRIC	1

	SKU	DESCRIPTION	QTY
ASSEMBLY # 10079922R (34" CABINET WITH 24" FAN ORIFICE)	606200	CLIP,PUSH-ON	2
	285131	ADAPTER,1" FILTER	2
	101003603	RETURN PNL ASSY,34",INS	1
	101003607	ACCESS DOOR ASSY,16",INS	1
	600325	SCREW SMSHWH 8ABX1/2"LONG	1
	2C7181	BASE,LOWER,RACK	1
	2C7791	BRACKET,FILTER,BOTTOM	1
	2C7801	BRACKET,FILTER,TOP	1
	2C7191	BASE,UPPER,RACK	1
	2C8081	BRACKET,HINGE	1
	669605	HINGE,SYMETRIC	1
	2C7811	BRACKET,FILTER SUPPORT	1
	2C7821	BASE,MIDDLE RACK	1

	SKU	DESCRIPTION	QTY
ASSEMBLY # 10079918R (38" CABINET WITH 20" FAN ORIFICE)	606200	CLIP,PUSH-ON	2
	285131	ADAPTER,1" FILTER	2
	101003604	RETURN PNL ASSY,38",INS	1
	101003608	ACCESS DOOR ASSY,18",INS	1
	600325	SCREW SMSHWH 8ABX1/2"LONG	1
	2C7181	BASE,LOWER,RACK	1
	2C7791	BRACKET,FILTER,BOTTOM	1
	2C7801	BRACKET,FILTER,TOP	1
	2C8131	BASE,UPPER RACK,20" OD FAN	1
	2C8081	BRACKET,HINGE	1
	669605	HINGE,SYMETRIC	1

	SKU	DESCRIPTION	QTY
ASSEMBLY # 10079919R (38" CABINET WITH 24" FAN ORIFICE)	2C7191	BASE,UPPER,RACK	1
	2C7181	BASE,LOWER,RACK	1
	101003604	RETURN PNL ASSY,38",INS,BRONZE	1
	101003608	ACCESS DOOR ASSY,18",INS,BRONZE	1
	606200	CLIP,PUSH-ON	2
	285131	ADAPTER,1" FILTER	2
	2C7791	BRACKET,FILTER,BOTTOM	1
	2C7801	BRACKET,FILTER,TOP	1
	2C7811	BRACKET,FILTER SUPPORT	1
	2C7821	BASE,MIDDLE RACK	1
	600325	SCREW SMSHWH 8ABX1/2"LONG	7
	669605	HINGE,SYMETRIC	1
	2C8081	BRACKET,HINGE	1

	SKU	DESCRIPTION	QTY
ASSEMBLY # 10079920R (42" CABINET WITH 24" FAN ORIFICE)	2C7191	BASE,UPPER,RACK	1
	2C7181	BASE,LOWER,RACK	1
	101003608	ACCESS DOOR,18",INS,BRONZE	1
	606200	CLIP,PUSH-ON	2
	101003605	PANEL,RETURN,76"COIL,42"BRONZE	1
	2C7791	BRACKET,FILTER,BOTTOM	1
	2C7801	BRACKET,FILTER,TOP	1
	2C7811	BRACKET,FILTER SUPPORT	1
	2C7821	BASE,MIDDLE RACK	1
	600325	SCREW SMSHWH 8ABX1/2"LONG	7
	669605	HINGE,SYMETRIC	1
	2C8081	BRACKET,HINGE	1
	285131	ADAPTER,1" FILTER	2

	SKU	DESCRIPTION	QTY
ASSEMBLY # 10079924R (42" CABINET WITH 24" FAN ORIFICE) R8HE 42" CABINET ONLY	2C7191	BASE,UPPER,RACK	1
	2C7181	BASE,LOWER,RACK	1
	101003608	ACCESS DOOR,18",INS,BRONZE	1
	606200	CLIP,PUSH-ON	2
	M0068607	RETURN,42"UNIT,75"COIL,BRZ	1
	2C7791	BRACKET,FILTER,BOTTOM	1
	2C7801	BRACKET,FILTER,TOP	1
	2C7811	BRACKET,FILTER SUPPORT	1
	2C7821	BASE,MIDDLE RACK	1
	600325	SCREW SMSHWH 8ABX1/2"LONG	7
	669605	HINGE,SYMETRIC	1
	2C8081	BRACKET,HINGE	1
	285131	ADAPTER,1" FILTER	2

Table 1. Filter Rack Bill of Materials

EXTERNAL FILTER SIZES			
NOMINAL COOLING (TONNAGE)	FILTER SIZE (IN. X IN.)	APPROXIMATE AIR FLOW RANGE (CFM)	APPROXIMATE FILTER AREA (SQ. IN.)*
2.0	20 x 25	600-900	450
2.5	20 x 30	750-1200	550
3.0	25 x 25	1100-1300	625
3.5	24 x 30	1200-1600	750
4.0	18 x 24 (2 required)	1400-1800	850
5.0	20 x 25 (2 required)	1700-2200	1000

INTERNAL FILTER SIZES				
CABINET HEIGHT	OUTDOOR FAN DIAMETER	FILTER SIZE (IN. X IN.)	APPROXIMATE AIR FLOW RANGE (CFM)	APPROXIMATE FILTER AREA
30"	20"	(2) 14"x25"	700 - 1300	700
	24"	(1) 12"x20" and (1) 16"x25"		640
34"	20"	(2) 16"x25"	900 - 1400	800
	24"	(1) 12"x20" and (2) 10"x25"		740
38"	20"	(2) 18"x25"	1100 - 1600	900
	24"	(1) 12"x20" and (2) 12"x25"		840
42"	20"	(2) 20"x25"	1300 - 1800	1000
	24"	(1) 12"x20" and (2) 14"x25"		940

* Based on velocity of 300 ft/min for disposable filters.

Table 2. External & Internal Filter Sizes
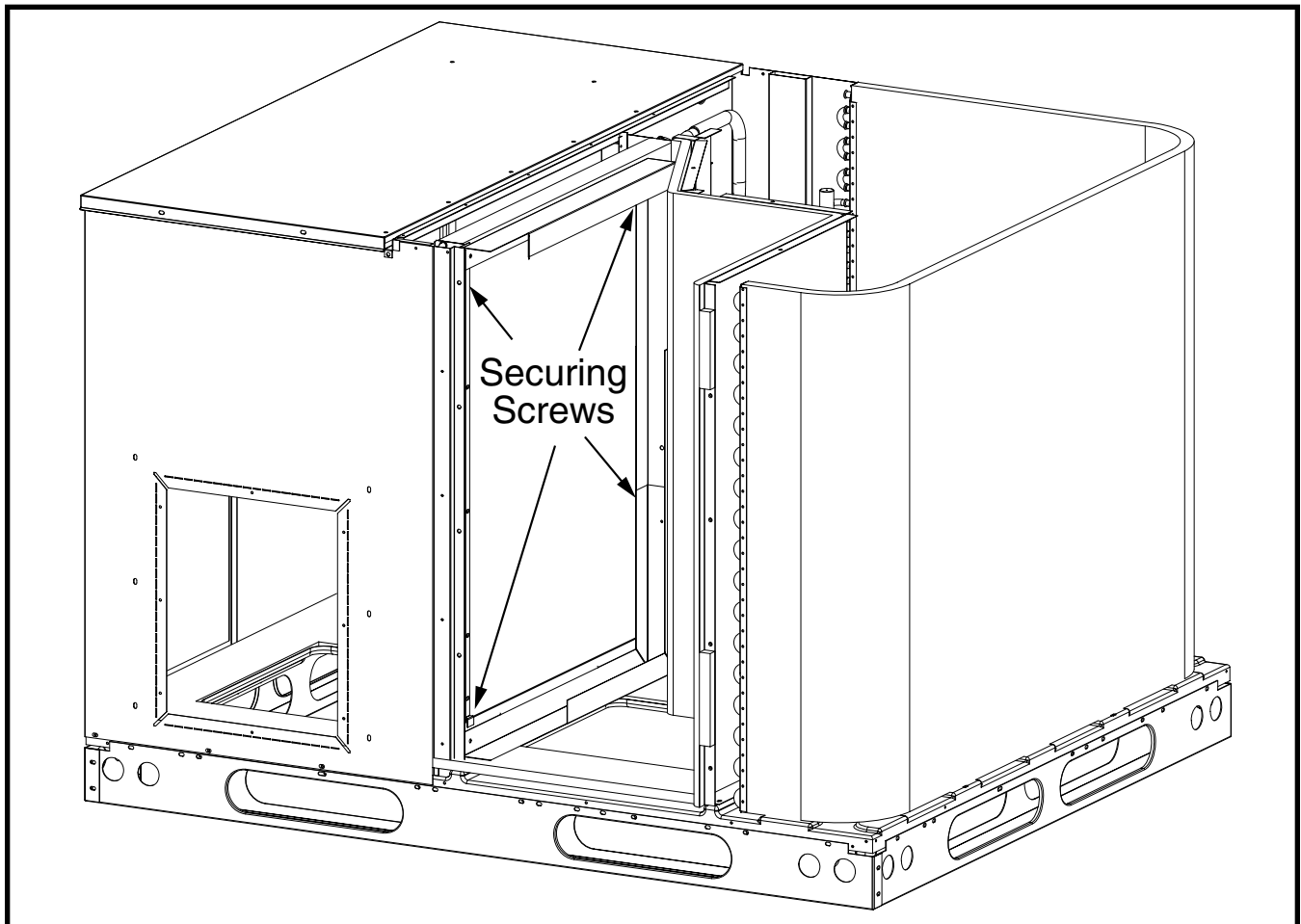

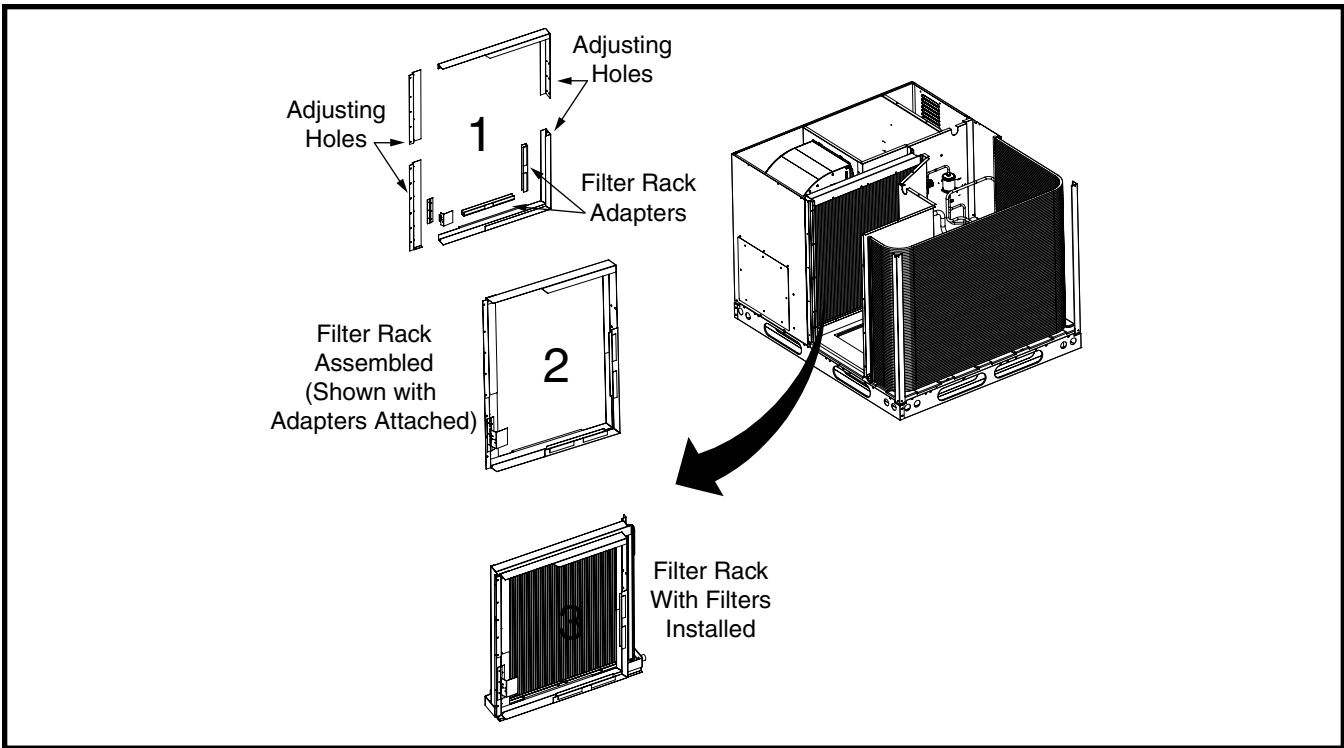**Figure 2. Internal Filter Rack Location**
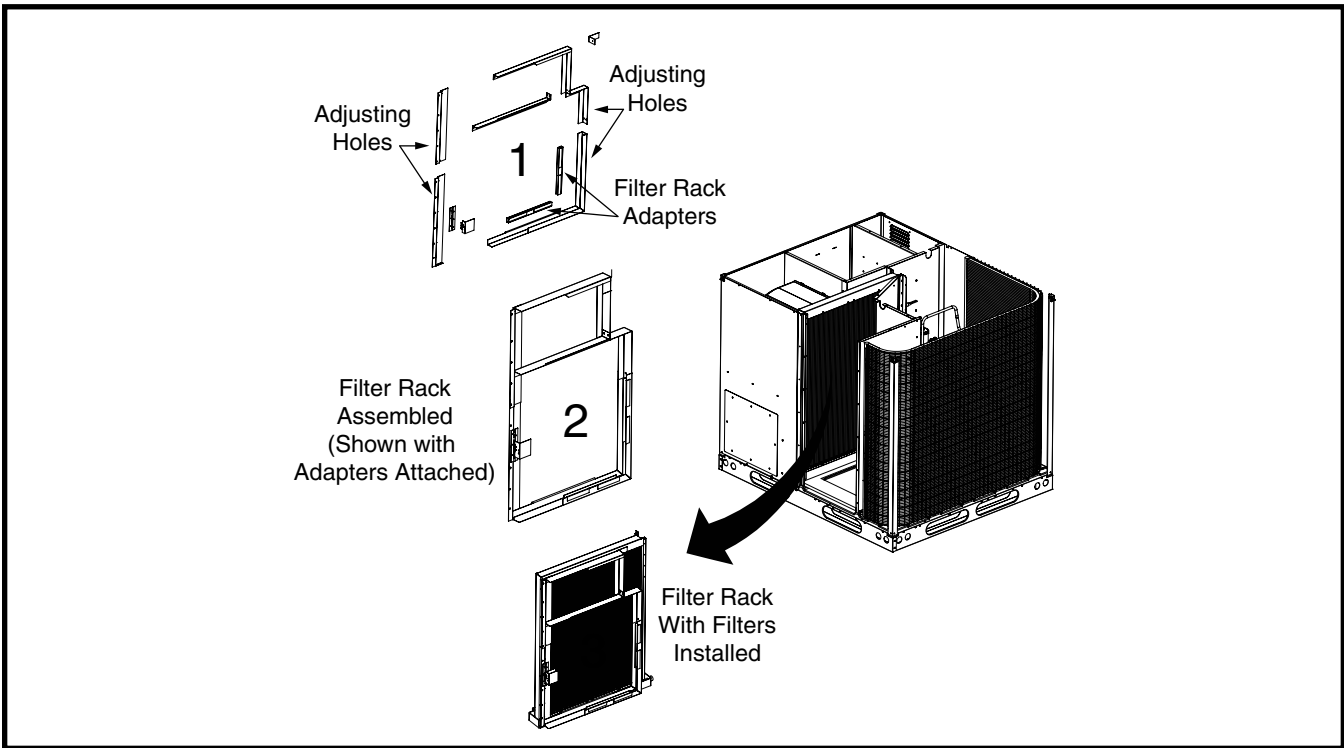
Figure 3. Internal Filter Rack Assembly for 20" Fan Orifice

Figure 4. Internal Filter Rack Assembly for 24" Fan Orifice

1010034A (Replaces 10100340)