



## 2010 43QGP Allegro Bus

7/5/2011

**18 – FYI – REPLACEMENT ENGINE AIR FILTER**. Many times the question comes up about replacing the engine air filter. What do I need, Where can I purchase the filter, can I replace the OEM filter with a more permanent air filter with a longer life.

After tracking down the information for our EPA 2010 ISL engine installed in our 2010 43QGP Allegro Bus by Tiffin the following information is what I found.

The original paper air filter was built by Racor. The filter is an ECO-BC (Behind the Cab) series. The filter must be mounted vertically with an inside-out air flow. The top of the metal can contains the air inlet and the inlet diameter is 7 inches. The outlet is through the lower side of the metal can and is also 7 inches in diameter.

The Racor part number for the filter is 094973007. Two clamps are required their part number is 071921002.

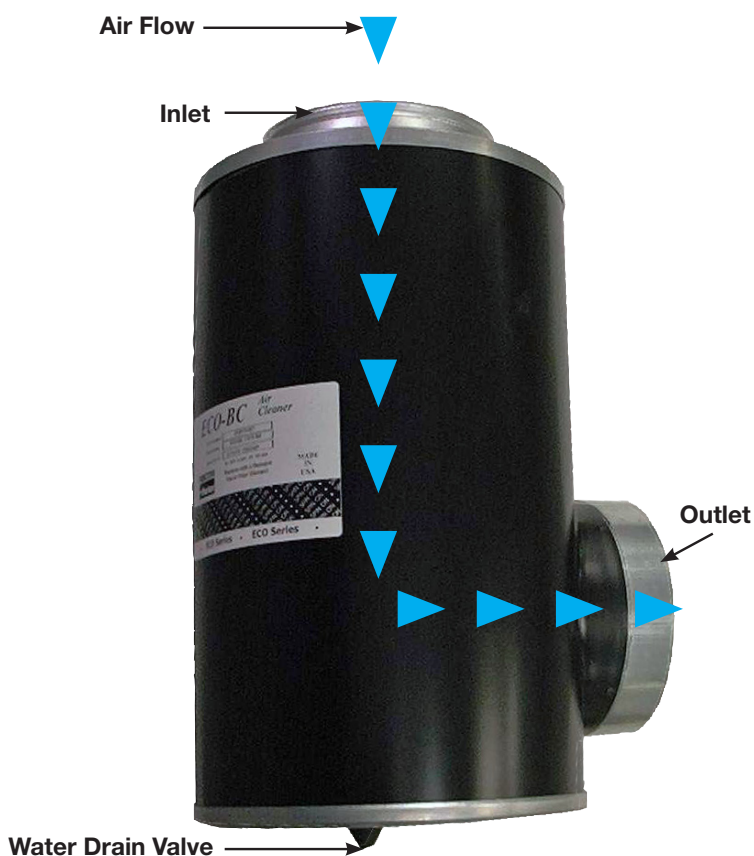
I have not priced this filter with Tiffin or an outside vendor. The last air filter I purchased was for my 2007 Phaeton (December 2010) the filter cost me around \$ 60.00, I expect a similar cost for this air filter.

Many coach owners have expressed interest in replacing the OEM air filter with a K & N dry air filter. K & N recommends servicing the filter at 15 inches water column OR **ONCE PER YEAR**. I have added several pages to this document one page will explain what is needed to service the K & N air filter. After researching the purchase information and service information, I came to the conclusion this modification is more expensive (the K & N filter cost is \$ 336.75) with at least an annual service time requirement plus purchase of K & N Heavy Duty Air Filter Cleaner # 99-0638 at \$ 22.00 per gallon plus shipping costs would make this modification more costly then it could ever be worth in my opinion TO ME anyway.

Included are several pages of backup information obtained during my research. They may be of assistance if you are interested in replacing your OEM air filter with a K & N dry cloth air filter.

Designed for behind the truck cab installations, the ECO-BC must be mounted vertically with an inside-out air flow. The ECO-BC air filter can be used for under hood applications also and the rubber drain valve in the bottom base allows for water and dirt to easily drain out.

This disposable air cleaner features a slimline vertical design for tight or limited space installations.



Specifications	094973001	094973002	094973003	094973004
Air Flow	1120-1600 cfm	1450-1750 cfm	875-1250 cfm	720-1060 cfm
Height	24.0 in. (61.0 cm)	24.0 in. (61.0 cm)	24.0 in. (61.0 cm)	18.0 in. (45.7 cm)
Diameter	11.0 in. (27.9 cm)	13.5 in. (34.3 cm)	9.8 in. (24.9 cm)	9.8 in. (24.9 cm)
Outlet Size	7.0 in. (17.8 cm)	7.0 in. (17.8 cm)	6.0 in. (15.2 cm)	6.0 in. (15.2 cm)
Inlet Size	7.0 in. (17.8 cm)	7.0 in. (17.8 cm)	6.0 in. (15.2 cm)	6.0 in. (15.2 cm)
Weight	19.0 lbs (8.6 kg)	27.0 lbs (12.2 kg)	16.0 lbs (7.3 kg)	10.4 lbs (4.7 kg)

Specifications	094973005	094973006	094973007
Air Flow	980-1470 cfm	810-1200 cfm	1010-1490 cfm
Height	15.0 in. (38.1 cm)	18.0 in. (45.7 cm)	18.0 in. (45.7 cm)
Diameter	13.5 in. (34.3 cm)	11.0 in. (27.9 cm)	11.0 in. (27.9 cm)
Outlet Size	7.0 in. (17.8 cm)	6.0 in. (15.2 cm)	7.0 in. (17.8 cm)
Inlet Size	7.0 in. (17.8 cm)	7.0 in. (17.8 cm)	7.0 in. (17.8 cm)
Weight	15.4 lbs (7.0 kg)	12.6 lbs (5.7 kg)	12.5 lbs (5.7 kg)



# WASHABLE / REUSABLE HEAVY DUTY AIR FILTER

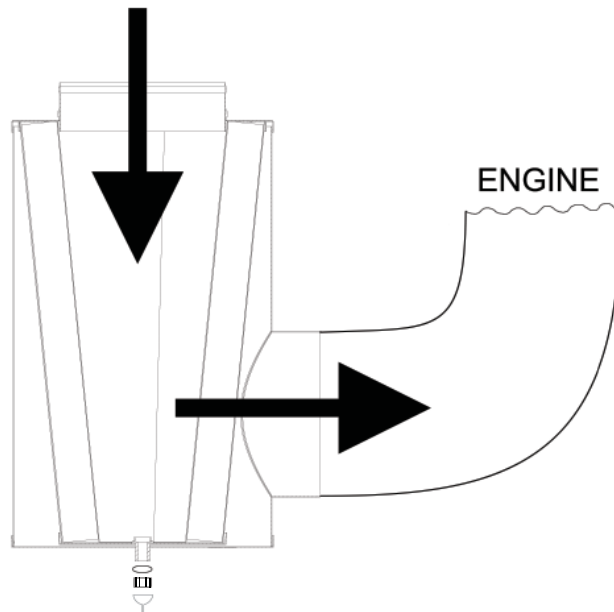
THIS AIR FILTER HAS DRYFLOW™ MEDIA AND DOES NOT REQUIRE OIL

## PART NUMBER: 38-2009R

*Cross references should be used for comparison of filters with similar dimensions. The user assumes all responsibility for verifying that filters are compatible with their application before using these products. Damage may result if the user fails to ensure that the filter is compatible and seals properly before installing the product or operating the engine.*

**THESE INSTRUCTIONS MUST BE FOLLOWED EVERY TIME THE FILTER IS SERVICED, OTHERWISE THE FILTER MAY NOT SEAL, AND DAMAGE TO THE ENGINE COULD RESULT**

### REVERSE FLOW



### INSTALLATION

1. This air filter is a direct replacement for the ECO-BC air filter, and no modifications will be required.  
**NOTE: Everyone's mechanical ability is different; if you are unsure on how to correctly change your air filter please seek a professional mechanic's help.**
2. Reset vehicle air filter restriction gauge before proceeding.

### ROAD TEST

1. Start the engine with the transmission in neutral or park and the parking brake engaged. Listen for air leaks or odd noises. For air leaks, check that air filter housing is seated correctly onto air filter base and check for tightness of nut and clamps. For odd noises, find cause and repair before proceeding.
2. Test drive the vehicle. Listen for odd noises or rattles and fix as necessary.
3. If road test is fine, you can now enjoy your K&N® Heavy Duty Air Filter purchase.
4. Service air filter at 15"H<sub>2</sub>O or once a year.

### HOW TO DISASSEMBLE FOR SERVICING

1. Dismount the K&N® air filter assembly from the vehicle.
2. Remove the duct tape from the air filter assembly.
3. Remove the nut and washer from the K&N® air filter assembly lid. (Fig. 10, 7, 6)
4. Slide the air filter out of the housing. (Fig. 4)
5. The gasket may come loose from the air filter base plate, this is okay, be sure to save it as it will be reused once the servicing is complete. (Fig. 1)

**When servicing the air filter follow the K&N® Heavy Duty Cleaning Instructions or access [www.knfilters.com](http://www.knfilters.com)® to view online. Use K&N® Heavy Duty Air Filter Cleaner only. CAUTION: DO NOT USE THE STANDARD K&N® AIR FILTER CLEANER OR SERVICE INSTRUCTIONS FOR THIS AIR FILTER.**

### HOW TO REASSEMBLE

1. To reassemble, make sure that the base plate gasket is fully seated in the base plate outer cavity. (Fig. 1-3)
2. Insert the air filter into the housing and make sure that the top plate vent tube protrudes the housing lid. (Fig. 4)
3. Seat the housing into the air filter base plate. Sometimes, the housing may be slightly out of round, gently squeeze the sides of the housing as it is being seated into the air filter base plate. (Fig. 5)
4. Once the air filter top plate vent tube protrudes through the housing lid and the housing itself is fully seated into the air filter base plate, reattach the washer and nut onto the threaded vent tube and tighten securely. (Fig. 6-7)  
**CAUTION: MUST use thread locking compound on retainer nut and not tighten more than 10 ft-lbs.**
5. Apply a new strip of duct tape around the base perimeter of the air filter assembly. (fig.8-9)
6. Attach drain onto the threaded vent tube. (Fig. 10)



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10

**\* FREE K&N® decal To register your warranty, please see us online at [knfilters.com/register](http://knfilters.com/register). FREE K&N® decal \***



# HEAVY DUTY AIR FILTER CLEANING INSTRUCTIONS



**NO OIL  
REQUIRED**

## STEP 1: REMOVE FILTER

Remove the air filter from the air filter housing. Handling with care, remove loose dirt and debris from the filter by tapping it with your hand and/or spraying it with compressed air. If compressed air is used, blow air from the clean side of the filter to the dirty side

## STEP 2: APPLY CLEANER

Spray a generous amount of K&N Heavy Duty Air Filter Cleaner #99-0638 onto both sides of the filter, with the majority of it applied to the dirty side. Allow to soak in for 20 minutes. Do not allow it to dry on the air filter.

**STANDARD  
FLOW**



**REVERSE  
FLOW**



## STEP 3: RINSE FILTER

Using a pressure washer or garden hose, begin by rinsing any large dirt particles off of the dirty side of the filter. Then rinse the filter element with cool or warm (not hot) water from the clean side out in order to flush the rest of the dirt out of the filter. Continue rinsing until the water flowing through the media is completely clear of any dirt or debris. Depending on the volume of dirt in the filter, a second or third application of cleaner and rinsing may be required.

**STANDARD  
FLOW**



**REVERSE  
FLOW**



## STEP 4: DRY AND RE-INSTALL

After rinsing, gently shake off excess water. Allow filter to dry naturally, or use compressed air from 12" away to speed the drying cycle. The filter should be dry, or just slightly damp before re-installing. Re-install the air filter element back into the air filter housing of the vehicle, following original installation instructions.

*The above process is the only approved procedure for maintaining your K&N Heavy Duty Air Filter.*

*Visit [knfilters.com](http://knfilters.com) for additional information on cleaning your filter.*