## RV14 ANDAIR TO AFP CONVERSION KIT REV 2 1-7-2021

# AIRCRAFT SPECIALTY



Thank you for purchasing your RV-14/14A Andair to AFP fuel pump conversion kit.

Note: Please order your AFP fuel pump directly from Airflow Performance. Order the AFP pump without a filter.

This kit comes in a multitude of different configurations. The configurations are listed below.

- 1. Standard Valve, Filter in tunnel (Stock setup)- Includes EVERYTHING to complete your kit in the CABIN except for the fuel pump. (Everything forward of the valve as well as the pre bent CNC rigid tubes out to the fuselage sides.) All that is left as an option is to order the optional Fuselage to Wing Rigid tube assemblies)
- 2. Type 7 Valve, Filter in tunnel Includes EVERYTHING to complete your kit in the CABIN except for the fuel pump. (Everything forward of the valve as well as the pre bent CNC rigid tubes out to the fuselage sides.) All that is left as an option is to order the optional Fuselage to Wing Rigid tube assemblies)
- 3. Standard Valve, Relocated filters to wing root. -Includes EVERYTHING to complete your kit in the CABIN as well as the wing root filter kit. All you need is to order the AFP Fuel Pump
- 4. Type 7 Valve, relocated filters to wing root. -Includes EVERYTHING to complete your kit in the CABIN as well as the wing root filter kit. All you need is to order the AFP Fuel Pump
- 5. Standard Valve, Filter in tunnel AFP Retrofit kit Includes cabin plumbing from the Valve FORWARD only. (No rigid tubes out to the fuselage sides)
- 6. Type 7 Valve Filter in Tunnel AFP Retrofit Kit-- Includes cabin plumbing from the Valve FORWARD only. (No rigid tubes out to the fuselage sides)
- 7. Standard Valve, Wing Root Filter Setup Retrofit Includes cabin plumbing from the Valve FORWARD only.

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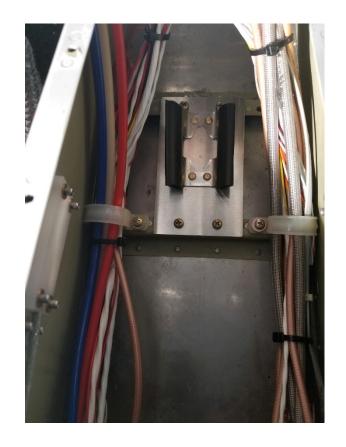
- 8. Type 7 Valve, Wing Root Filter Setup Retrofit includes cabin plumbing from the Valve FORWARD only.
- 9. Rigid Tubes- Optional item Fuse to Wings pair with kit 1, 2, 5, and
- 6. The kits set up for wing root filters don't require this.

We designed this kit to be easy to change out your Andair Fuel Pump/Filter setup for an AFP fuel pump. In addition, we wanted to ensure that this package would be easy to retrofit to ALL of our supported configurations, which includes the Andair Standard Valve, Andair Type 7 valve, and cabin/wing root filter packages.

If you order the COMPLETE kits, it will provide all cabin plumbing. If you order the retrofit kits, it is assumed you have already purchased cabin plumbing from us and the kits will only provide the changed items you need to install your AFP pump with the existing kits.

Let's start off with the commonality between ALL these kits. The central component is the fact that we are mounting the AFP Fuel pump in place of the Andair Fuel Pump. In order to do so, we are providing a CNC machined and pre built bracket assembly. The cradle assembly will come with rubber gasketing, a hose clamp, and screws. This will allow the cradle to mount into the existing holes that are pre drilled in your RV-14 Tunnel. The bracket is offset toward the FRONT of the fuselage and will provide an inline installation that keeps you clear from wiring bundles on the sides.





The picture on the left shows the stock AFP fuel pump you will receive. If you are utilizing wing root filters, NO modification is necessary. If you are utilizing a tunnel filter, we will provide the filter for you as shown on the picture on the right. We will laser etch a logo or arrow on the OUTPUT side of the filter that screws into the fuel pump. Until we have that process fully



up and running, please note that the side of the filter with the DOUBLE HEX is the output side of the filter and and needs to go into the input side of the fuel pump. We recommend drawing an arrow on the filter to show flow direction so there is no confusion during servicing.



VERY IMPORTANT: When removing the gold AN fitting, there is a gasket that needs to be transferred to the fuel filter prior to screwing it into the pump assembly. Failure to do this will result in leakage.

Once you have completed the filter modification (if required), it is time to place the entire assembly into the tunnel. Shown in the picture below is the orientation of the complete setup as it should be installed into the center tunnel. This particular application is for a wing root mounted filter setup, which is why you will notice that there is no filter attached to it in the tunnel.



Next, we will discuss the various different configurations and what hoses/tubes will be required to complete the installation. If you are doing an initial installation of a complete kit, you will want to view the wing root filter install manual (if doing a wing root filter), or the cabin fuel and brake install manual to see how to install the rest of the rigid tubes for this kit. This is especially important if installing an Andair type 7 valve as we provide a mounting plate drill template. If you have already done all this

and are only modifying an existing installation, then you can continue on with these directions.

### FILTER IN CABIN CONFIGURATIONS

- VERY IMPORTANT--- THIS IMAGE IS CURRENTLY INCORRECT AS THE FILTER IS INSTALLED BACKWARDS. THE DOUBLE HEX PORTION GOES INTO THE FUEL PUMP. The image below shows the rigid tube configuration that will be provided with the kits for a cabin filter setup.



- Standard Valve (Andair Type 2) - Filter in Cabin - For this configuration, you will receive a rigid tube (non symmetrical) It is CNC bent and will go from the valve to the filter. Place this tube into position and hand tighten. This will set the forward/aft location of the pump setup in the cradle. You will receive a second flex hose that goes from the front of the pump setup to the firewall. Once this is all in place, make sure to tighten everything down securely.
- 2. Andair Type 7 Valve
   Filter in Cabin For this
  configuration, you will
  receive a rigid tube (non
  symmetrical) that is CNC
  bent and will go from the

type 7 valve to the filter. Place this tube into position and hand tighten. This will set the forward/aft location of the pump setup in

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the cradle. You will receive a second flex hose that goes from the front of the pump setup to the firewall. Once this is all in place, make sure to tighten everything down securely.

**Wing Root filter Configuration.** The image below shows how we provide a flex hose of the correct length from the valve to the pump setup when utilizing a wing root filter kit.



Standard Valve (Andair Type 2) – Wing Root filter setup – For this setup you will receive a new hose that goes from the Valve to the Pump and from the pump to the firewall

3. Andair Type 7 Valve

- Wing Root filter setup For this configuration,
you will take the hose
that currently is installed
from the valve to the
Andair pump and move it
between the AFP pump
and the firewall. You will
receive a new hose that
goes between the Andair
valve and the AFP pump.