

Aircraft Specialty, and TS Flightlines are excited to announce a cabin duplex installation kit for SDS and EFII fuel systems. Please note that this is a very complex install, and while we are able to provide hoses that drop right in, there is a lot of fabrication of mounting plates, and moving things around that are required by the builder. There is no detailed step by step install guide for that.

This kit is sold by Aircraft Specialty and TS Flightlines and includes ALL hoses of the correct lengths to duplicate this exact installation. Valves, Fittings and other accessories must be purchased separately.

### **Required Fuel Valve:**

- (1) Andair FS2020 Duplex valve
- (4) Andair 90° elbow fuel fittings (EF20)
- (2) Andair Straight fittings

ANDAIR EXTENSION KIT FOR 2020 VALVE

## SDS/EFII:

(2) Return Fuel Bungs for return fuel access to tanks.

#### **Optional equipment:**

(2) Airward access panels for central tunne

Plan deviation for the brakes:

When installing the brake lines, whether hard aluminum lines are bent or flexible lines are used. They must be installed in the aft most hole of the three on the bulkhead. The forward two will be used for the fuel in and fuel return lines.

VERY IMPORTANT: DO NOT INSTALL THE AIRWARD TUNNEL ACCESS PLATES OR FINAL MOUNT THE FUEL PUMP SHELF UNTIL YOU HAVE ACCURATELY LOCATED THE PUMP ASSEMBLY BY LAYING IT IN POSITION WITH ALL HOSES LOOSELY

# ATTACHED. THIS WILL GIVE YOU THE CORRECT MOUNTING LOCATION FOR THE PUMP SHELF/OPTIONAL AIRWARD TUNNEL COVERS.

Notes: The FUEL VALVE mounts in the STANDARD location. You must mount it in this location and then utilize the Andair Extensions.

Notes: The SDS and EFII install are EXACTLY the same from the valve aft. The differences are in the Valve to pump and pump to firewall hoses.

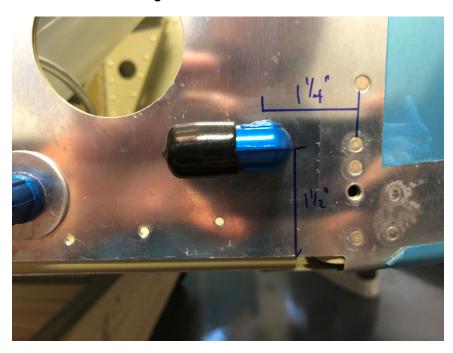
SDS and EFII SYSTEM – Wing root filter hose kit

ASF 103-1 H1 – Fuselage to Filter hose (See our Standard Fuel Kit installation manual for how this portion of the wing root filter is installed. This is the same for the duplex and the non duplex setups.)

ASF 103-1 H2 – Fuselage to Filter hose (See note above)

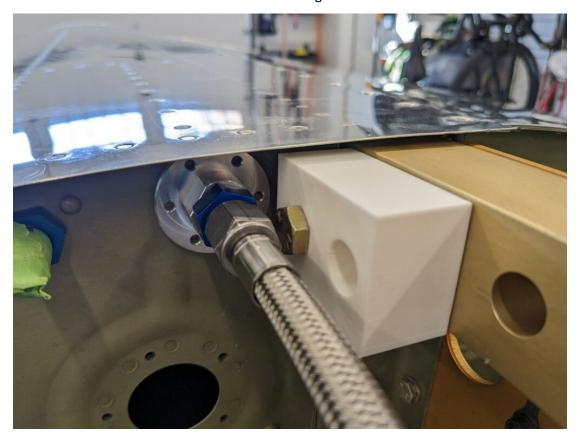
ASF 103-1 H3 - Fuselage Return to Fuel Tank Return

ASF 103-1 H4 - Fuselage Return to Fuel Tank Return



To the left is the exact location for mounting the return line bulkhead fitting on the fuselage. The lower left shows the side skin bushing that we include for the supply fuel line.

The Image below shows the location of the return line you need to install in your Fuel Tank. Be very careful to ensure it does not interfere with the wing installation.



## SDS CABIN FUEL HOSE LIST

## **ASF 103-10**

Hose 1 and 2- Fuel in lines (Under Seat hoses)

Hose 3 - NOT USED FOR WING ROOT FILTER KIT

Hose 4 and 5- Return Fuel (Under Seat hoses)

Hose 6 Valve to pump AN823-6D Is included that goes in the pump

**Hose 7 and 8 Valve to Tunnel Hoses** 

Hose 9 Pump to firewall AN816-6D is included for forward side of pump

Hose 10 fuel return line Firewall to Valve

**Hose 11 and 12 Valve to Tunnel Hoses** 

# AS FLIGHTLINES DUPLEX CABIN INSTALL REV 1 9-10-23







## NEXT LET'S LOOK AT THE EFII HOSE LIST

## **ASF 103-9**

Hose 1 and 2- Fuel in lines (Under Seat hoses)

Hose 3 - NOT USED FOR WING ROOT FILTER KIT

**Hose 4 and 5– Return Fuel (Under Seat hoses)** 

Hose 6 Valve to pump

Hose 7 and 8 Valve to Tunnel Hoses

**Hose 9 Pump to firewall** 

Hose 10 fuel return line Firewall to Valve

**Hose 11 and 12 Valve to Tunnel Hoses** 

The Image below shows the difference in the Valve/Pump area versus the SDS setup.



# AS FLIGHTLINES DUPLEX CABIN INSTALL REV 1 9-10-23

Below are some general routing images for the under seat hoses and valve to tunnel hoses.







Below is an image of a mounting plate that was fabricated by an RV10 EFII builder utilizing wing root filters. He said it fit well with minimal filing required. This is for reference only...you may need adjustments depending on how you mount it as well as if you are doing SDS Versus EFII

