

# SERVICE BULLETIN

## PITTS SPECIAL

**DATE:** August 25, 2000

Service Bulletin – No. 30

**SUBJECT:** Changing fuel valves from Imperial 104HD to Apollo 76-101

**MODELS AFFECTED:** All S-2, S-2A, S-2B. All S2C prior to S/N 6042

**TIME OF COMPLIANCE:** At owner's discretion

The Imperial 104HD valve is no longer available. Beginning with Pitts S-2C, S/N 6042, stainless steel ball valve, P/N 76-101 will be installed. In order to use the Apollo valve, two #10 must be drilled in the applicable valve bracket to accept the attaching hardware. A new handle, P/N 2-6515-501 has been designed and is available together with the valve and attaching hardware from Aviat Aircraft.

As long as the original valves are functioning properly, it is not necessary or advisable to retrofit the aircraft with the new unit.

To replace the valve, the following items are necessary and available from Aviat Aircraft. One kit is needed for each valve changed from the Imperial unit.

63921	76-101	Apollo Ball Valve	1
	2-6515-501	Handle Assembly	1
63922	MS21083N6	Locknut, Nylon Insert, Low Profile	1
56534	AN503-10-6	Screw, Aircraft - Fillister Head	2
58740	AN960-10	Washer, Plain	2
	Tool # 7885	Drill Template (Main Fuel Valve)	1
	Tool # 7886	Drill Template (Aux. Fuel Valve)	1
62520		Finish Plug	1
50826	AN4-5A	Bolt, Undrilled Shank	2
54700	AN316-4	Nut, Hex	2

## INSTRUCTIONS:

Drain fuel from the aircraft and disconnect the battery

The main fuel valve is located aft of the firewall on the right side of the aircraft. Access is gained by removing the right engine cowling and the panel aft of the cowling.

The valve can be removed by disconnecting the fuel lines, then unscrewing the AN fittings. That protrude through the holes in the mounting bracket. Remove the two AN4 bolts that attach the Imperial valve to the bracket.

The valve bracket must be modified to accept the Apollo valve. To add the additional holes, attach drill template, Tool # 7885 to the aft face of the mounting bracket with the arrow up. Secure with the AN4 bolts provided. Drill # 10 holes through the two drill bushings.

Remove the tool and secure the attaching bolts. The tool must be returned to Aviat Aircraft Inc. unless it is purchased.

Attach the Apollo valve in the same location as the original. Secure with the two AN503-10-6 screws and AN960-10 washers provided. Lockwire the screws with .032 safety wire. Attach the handle P/N 2-6515-501. It may be necessary to dress the slot in the base of the handle slightly to accept the valve stem. Secure the handle with the MS21083N6 self locking nut provided. A ¼ “ drive, 9/16 “ socket is required to fit inside the handle. Cover the nut with the finish plug provided. To attach the remote handle assembly, it will be necessary to match drill the handle tab.

Reassemble the original fittings and lines, inspect the assembly and install the panels.

To replace the auxiliary fuel valve located on the right side of the rear cockpit, perform the following;

Disconnect the inlet, outlet and drain lines from the valve assembly. Remove the two bolts attaching the valve bracket to the aircraft and remove the entire assembly.

Remove the two AN4 bolts securing the Imperial valve to the bracket, remove the valve and disassemble the fittings.

The bracket must be modified to accept the Apollo valve. Attach drill template, Tool # 7886 to the inboard side of the bracket with the arrow pointing forward. Use the AN4 bolts provided with the tool. Drill 2 # 10 holes using the drill bushings on the template.

**NOTE:** The Apollo valve may be ordered attached to a new bracket. The part Number for the bracket is 2-6510-021. Request the bracket with the valve Attached.

Assemble the fittings to the new valve, and attach the valve to the bracket with the AN503-10-6 screws and AN960-10 washers provided. Safety the screws with .032 lockwire. Attach the handle with the MS21083N6 self locking nut provided, and cover with the finish plug.

Reassemble the bracket to the fuselage, reconnect the fittings, refuel the tank, leak check and reconnect the battery.