

DUNCAN INTELLIGENCE

Bleed Switching Valves

• *Tim Garity*

Westwind and Astra, except SPX/G100:

If your cabin pressurization changes with throttle movement and/or climbs when the throttles are retarded, your bleed switching valves may need repaired. Perform the operational checks in the Maintenance Manual (Westwind 21-10-01, pages 501 through 508) (Astra, SPX/G100 21-11-01, pages 501 through 505). If the valves don't pass the test, they need to be repaired. If they pass, cabin leaks are most likely the culprit. Westwind and Astra bleed switching valves (except for SPX/G100) can be repaired/overhauled by Duncan Aviation's accessory shop.

Cabin Door Seal

• *Tim Garity*

Astra, SPX/G100:

We recently had a door seal lose pressure in flight. After subsequent troubleshooting, we discovered the rubber hose from the seal to the regulator had burst. (We suspected an overpressure from the regulator, but couldn't duplicate it.) The hose was long enough to allow the bad part to be cut off and then reconnected.

Cabin Temperature Problems

• *Tim Garity*

Most Westwinds and all Astras:

If your cabin temperature is uncontrollable in auto and runs hot, check the cabin temperature sensor on the LH cabin sidewall for obstructions, fan operation and air leakage. Make sure the screen is not plugged with carpet fuzz, arm rests, briefcases or other debris. The fan can be checked by putting a small piece of paper over the screen. The fan suction should hold the paper against the screen. Air leaks are tougher to find and may require sidewall removal. Sometimes the hose that connects the sidewall housing to the fan will come loose, allowing cold air to permeate the area and

decreasing the amount of air pulled across the cabin temperature sensor.

If the cabin temperature runs cold in auto, check the skin temperature sensor. The sensor is located: (Westwind, fuselage station 259.0, LH side of aircraft, approximately 11.5" above floor level; Astra, fuselage station 250, RH side of aircraft, which equates to outboard of the lavatory seat and about level with the lavatory seat cushion.) The sensor can be checked with an Ohm meter and a can of freeze spray. Look for erratic readings when sensor is cooled and heated.

Generator Paralleling

• *Tim Garity*

Astras, especially with APU:

If you are having trouble paralleling generators, (this particular problem causes 20 to 40 amp splits) check the wire that connects the LH and RH GCUs. (Pin K to pin K.) This wire also goes through the buss tie contactors. If these contacts have high resistance it will show up as the generator amp splits.

Starter Generator Cables

• *Tim Garity*

Astra, SPX/G100:

This is for your knowledge on AD 2004-07-21 and SB 100-54-252. The AD requires that the starter generator cable pylon feed through supports be replaced at next engine removal, or five years from the effective date of the AD (May 11, 2004), if not previously accomplished. If any damage is found on the actual cables, they will need to be replaced. Also, in order to replace the feed through support, the existing terminals will have to be removed from the cables to allow the old and new supports to be removed/installed over the cables. Once the terminals are cut off, the old cables will most likely be too short to reach the starter generator when the new terminals are installed.

