Complaint: Can Not Build System Pressure

Compressor head / discharge line leakage (See Common Test 2)
Supply system component leakage
Drain the system, install a gauge and a shop air hose in place of the drain cock in the supply reservoir. Fill the system to 120 psi, shut off the shop air and check for leakage on the following components in the order presented.

Compressor unloader
- Drain the system, remove the governor from the compressor, plug the governor UNL port and re-test. If the leakage is OK, repair compressor unloader mechanism or replace compressor. If the leakage is NOT OK, then continue. (See Common Test 4)

Holset ECON valve (used with Holset Type "E & QE" compressors)
- Check for missing, malfunctioning or leaking ECON valve. If a Bendix Di (Drop-in) or wet tank system leakage is not.
- Verify safety valve operation then remove or disconnect the governor from compressor. Re-check the build-up.

Complaint: Air System Builds Too Slow

Compressor head / discharge line leakage (See Common Test 2)
Air system leakage (See Common Test 1)

"Blow leakage" at the air dryer exhaust
- Remove all hardware from the compressor inlet, then remove the governor. With 120 psi of shop air applied to the compressor unloader port, listen for air leakage at the inlet. If noted, repair the leak or replace the compressor. Caution: To prevent system damage, the ignition switch must be turned off manually if the system pressure reaches 130 psi.

Incorrect setting on governor
- Verify the safety valve operation. Drain air from the system, remove or disconnect the governor from the compressor and install a gauge in the governor UNL port. Build system pressure and note when the pressure on the gauge changes. These should be equal at the maximum setting of the governor.

Discharge line leakage (See Common Test 2)
- Drain the system to 0 psi; remove and disconnect the governor from the compressor. Start the engine and note the air pressure rise on the dash gauges. Apply 120 psi shop air to compressor unloader port. If pressure continues to rise, repair the compressor unloader or replace the compressor. If the air pressure ceases to rise, repair or replace the governor.

Complaint: Air System Builds Too Slow

Compressor head / discharge line leakage (See Common Test 2)
Air pressure is leaking at the air dryer exhaust (See Common Test 6)
Compressor head gasket failure
- Apply a soap solution around the cylinder head. If air leakage between the head and block is noted, repair or replace compressor.

Air pressure trapped between the governor and compressor unloaders
- Verify the air dryer in use contains a soft seat purge valve. If the leakage body assembly on system purge air dryers. If the compressor is a Holset type E or QE, verify the air dryer in use contains a soft seat purge valve. If the leakage is greater than one (1) inch bubble in one (1) second at the exhausting port, repair or replace the purge valve assembly (on dryers with integral purge volume) or replace the turbo cut-off valve on system purge air dryers.

Complaint: Can Not Build System Pressure Above "X" psi.

"Blow leakage" at the compressor unloaders
- Remove all hardware from the compressor inlet, then remove the governor. With 120 psi of shop air applied to the compressor unloader port, listen for air leakage at the inlet. If noted, repair the leak or replace the compressor. Caution: To prevent system damage, the ignition switch must be turned off manually if the system pressure reaches 130 psi.

Incorrect low pressure switch in use or setting incorrect
- Check for leakage.
- Remove the line from the air dryer inlet and — with 120 psi in the supply reservoir — soap the exhaust and inlet port of the air dryer. If the leakage is greater than one (1) inch bubble in one (1) second at the exhausting port, repair or replace the check valve (on dryers with integral purge volume) or replace the body assembly on system purge air dryers. If the compressor is a Holset type E or QE, verify the air dryer in use contains a soft seat purge valve. If the leakage is greater than one (1) inch bubble in one (1) second at the inlet port, repair or replace the purge valve assembly (on dryers with integral purge volume) or replace the turbo cut-off valve on system purge air dryers.

Complaint: System Pressure Goes to 150+ psi

1. Air system leakage
- Build system pressure to governor cut-out, wait two (2) minutes for the air dryer purge completion. Note the pressures on the dash gauges, then watch the dash gauges for two (2) minutes. Leakage is not to exceed 2 psi in two (2) minutes for truck, bus, tractor (no trailer).
- If the leakage is NOT OK on the gauges, find and repair the leak(s) in the service and park system. Retest, and if a Bendix®-AD®-SP® system purge air dryer is in use and is still not OK, repair or replace the air dryer.
- If the leakage is OK on the gauges, drain the air from the supply reservoir, remove the drain cock, and install an air gauge. Build the system air pressure in the supply reservoir and note and repair any leaks.

2. Compressor head / discharge line leakage (while system is charging)
- Soak the cover on flex discharge line, if leakage is noted, replace the line.
- Soak the fittings and the compressor head to check for leakage, tighten as needed.

3. Discharge plugged or restricted
- Connect temporary discharge line from compressor discharge port to supply reservoir & re-check the build-up. If the build-up is OK, replace the plugged discharge line.

4. Unloader piston leakage
- Disconnect the governor reservoir line and connect it to shop air pressure that is greater than the governor cut-out pressure. If there's noticeable leakage, repair the ESS piston(s).

5. Air pressure is trapped between the governor and compressor unloaders
- Verify safety valve operation then remove or disconnect the governor from compressor & check build-up.
- If build-up is OK, repair or replace the governor or line between the governor and compressor.
- If build-up is NOT OK, repair or replace the compressor.

6. "Blow leakage" at the air dryer exhaust
- Drain all air from the supply reservoir then remove the control air line from air dryer, plug the line and plug the control port in the air dryer. Re-check the build-up.
- If build-up is OK, repair or replace the governor or line between the governor and the air dryer.
- If build-up is NOT OK, and below 32°F, turn the ignition ON and allow the heater to warm the air dryer then check build-up. If NOT OK, remove the wire (connector or terminal) from air dryer. Using a test light, check the wire end or terminal for battery voltage with the vehicle ignition ON. If the voltage is OK, repair or replace the air dryer heater and thermostat. If the voltage is NOT OK, repair or replace the wire or connector to the air dryer. Retest build-up.
- If build-up is still NOT OK or temperature is above 32°F, replace the air dryer purge valve assembly.

Complaint: Low Pressure Warning After Only 1 or 2 Brake Applications

Brakes out of adjustment
- Adjust the brakes.
- Ensure proper operation of the tractor protection valve.

Excessive system leakage on service (application) side of system
- Build the system pressure to governor cut-out and shut off the engine. With the park brakes released, make a full service application and note the dash gauges for two (2) minutes. The pressure drop on either gauge should not exceed 4 psi. (2 psi per min.) If the pressure drop is excessive, find the leakage in the service system. If it's OK, then continue.

Incorrect low pressure switch in use or setting incorrect
- Build the system pressure to governor cut-out. With the engine OFF and ignition ON, slowly drain the air pressure from one service reservoir. The low pressure warning will come on at minimum 60 psi, the recommended maximum is 10-15 psi less than the governor cut-in pressure.

IMPORTANT: The complaints, causes and remedies presented here should not be considered as the only situations possible. They are only meant to represent the most commonly encountered. It may be necessary to perform additional troubleshooting using the more detailed information presented in the Bendix Service Data sheets for the specific components.