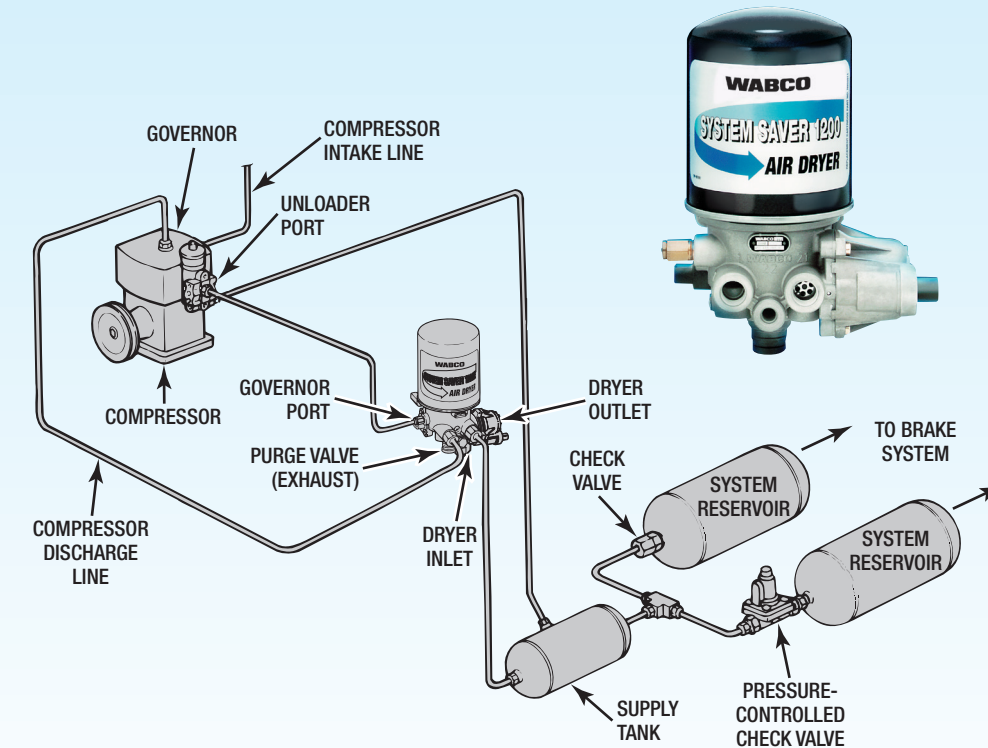


CONDITION	POSSIBLE CAUSE	SOLUTION
Dryer leaks from purge valve during compressor loaded cycle. The leak may cause excessive compressor cycling or prevent the system from building air pressure.	Governor may be malfunctioning.	Remove the air line from port 4 of the dryer. If the purge valve stops leaking, find the source of the air that is pressurizing port 4. Possible source is the governor. Replace as needed.
	The purge valve may be contaminated.	If the purge valve is still leaking, remove and inspect the purge valve. If ice is present, see Air Dryer Frozen condition. If contamination is found, clean and reinstall.
	Debris under purge valve seat, such as particles from fittings or air inlet line.	Disassemble and clean purge valve. Remove cartridge and clean dryer sump area.
	Purge valve washer installed upside-down.	Ensure lip on aluminum washer faces DOWN, away from dryer.
Regeneration cycle too long (more than 30 seconds), accompanied by loss of pressure in the air system tanks.	Purge valve seal or snap ring may be damaged or out of position.	Replace damaged seal or snap ring. Reposition the seal or snap ring as required.
	Outlet check valve not seating.	Inspect and replace outlet check valve as needed.
No or short (less than 10 seconds) regeneration cycle.	Regeneration valve not shutting off regeneration airflow.	Inspect regeneration valve. If diaphragm is damaged, replace diaphragm. Replace valve to correct other valve problems.
	Governor malfunctioning.	Inspect air governor. Repair/replace per manufacturer's instructions.
Water in purge tank.	Regeneration valve not working.	Remove regeneration valve and clean contaminates. If diaphragm is damaged, replace diaphragm. Replace valve to correct other valve problems.
	Pressure-controlled check valve not installed in system or is malfunctioning (valve not required on "P" Series dryers).	Add or inspect pressure-controlled check valve. Replace as needed.
	One-way check valve installed in system in place of or with the pressure-controlled check valve.	Remove one-way check valve.
	Blocked purge tank line ("P" Series dryers only).	Clear/repair purge tank line.
	Alcohol evaporator installed between dryer and supply/wet tank.	Install by-pass line around the evaporator or remove the evaporator from the system.
	Block in purge tank line.	Clear blockage. Replace desiccant cartridge.
Air dryer purges too often, perhaps as frequently as every 15 seconds, accompanied by excessive cycling of the compressor.	Leak in line between governor and dryer port 4.	Check the governor to dryer port 4 line for leaks. Repair or replace line.
	Leaking at the air compressor unloader(s).	Check compressor unloader(s) for leaks. Repair or replace for large leaks (1-inch diameter bubbles in 3 seconds).
	Leak in the line between supply/wet tank and governor.	Check the supply/wet tank line for leaks. Repair or replace as needed.
	Excessive air system leakage or usage.	If primary and secondary tanks are losing pressure, find the leaks and repair air system leaks. If primary and secondary tanks are not losing air pressure, the problem can be the supply/wet tank or outlet check valve.
Rapid "puffing" of air from purge valve in small amounts. Frequency varies with engine speed. NOTE: With U Series air dryers, the compressor unloads through the dryer, so a steady flow of air is normal.	Outlet check valve not sealing.	Inspect the outlet check valve and repair or replace as needed.
	Regeneration valve not shutting off correctly.	Inspect the regeneration valve and clean or replace as needed.
	Governor has less than 16 psi range or leaking at the gasket/O-rings.	Inspect the governor, replace leaking gasket or O-rings. Replace governor if control range is less than 16 psi.
Rapid "puffing" of air from purge valve in small amounts. Frequency varies with engine speed. NOTE: With U Series air dryers, the compressor unloads through the dryer, so a steady flow of air is normal.	Holset E-type compressor used, but no Econ valve installed.	Install Econ valve to provide make-up air to compressor.
	Compressor not completely unloading when cut-out pressure is reached.	Inspect compressor. Repair/replace per manufacturer's instructions.

CONDITION	POSSIBLE CAUSE	SOLUTION
Air leak at turbo cut-off valve vent. Rubber seal damaged or missing. (As of Nov. 2009, TCU will have an O-ring instead of a lip seal.)	Turbo cut-off valve damaged or malfunctioning.	Inspect the turbo cut-off valve. If you see heat damage, correct the over temperature condition (see Application Guide, TP-9672). Replace the turbo cut-off valve if damaged components or lip seal is found. O-rings should be lubricated (see Maintenance Manual 34).
Air dryer frozen (water collecting in base of dryer is freezing).	No electrical power to heater connector.	Check for a blown fuse. Repair heater circuit. NOTE: There must be power to the heater connector the entire time the vehicle's ignition is "ON."
	Low voltage to heater connector.	Repair cause of low voltage, such as poor electrical ground, bad connections, corroded wire splices, etc.
	Heater assembly not working.	Test heater resistance as specified in Maintenance Manual 34. Replace as needed.
	Wrong voltage air dryer used; i.e., 12-volt air dryer used in a 24-volt system.	Replace with correct voltage air dryer.
No air pressure build-up in system.	Air system leaks such as compressor discharge line, air dryer, reservoirs, brake and suspension valves.	Listen and check for large air leaks on air brake/suspension components. Repair or replace as needed. If compressor or dryer pressure relief valves are open, diagnose the cause. Remove the unloader line from the governor and port 4 of the dryer. If the air system starts to build pressure, find and repair the source of the unloader line pressure.
	Air governor is malfunctioning.	One possible source may be a malfunctioning governor. Replace as required.
	Air compressor is malfunctioning.	After completing the above steps, test the compressor output per manufacturer's guidelines. Replace as needed.
	Air leaks from purge valve.	Refer to Purge Valve Leak condition listed in this chart.
Water in tanks; often following aftermarket installation or when dryer is a replacement for a competitive brand.	Pressure-controlled check valve not installed in correct tank or not installed at all.	Install pressure-controlled check valve in secondary tank.
	Pressure-controlled check valve correctly installed, but one-way check valve not removed.	Remove one-way check valve so that only the pressure-controlled check valve is installed between the secondary tank and supply tank.
	Oil or sludge in air system tanks.	Inspect compressor for oil passage per manufacturer's instructions. Replace cartridge with coalescing cartridge.
	Water in system tanks, everything else checks out okay.	Dryer inlet temperature too high. Verify all OE bulletins are performed i.e., compressor discharge line kit, 80°C maximum inlet air temperature.
Water in system tanks, everything else checks out okay.	Incorrect replacement cartridge used.	Replace cartridge with WABCO replacement cartridge.
	Desiccant not getting correct regeneration.	Verify minimum of 10 seconds of air flow out of the purge valve after the purge.
	Dryer not suitable for the application.	Review Application Guide, TP-9672. For assistance, call WABCO North America Customer Care at 855-228-3203.

System Saver Single Cartridge Air Dryers



For more information, see Maintenance Manual 34 or dial our toll-free number: 855-228-3203.

**SYSTEM SAVER
RC SERIES SHOWN**

DATE CODE
First 2 Digits = Build Week
Last 2 Digits = Build Year

WABCO XXX
1696
XXX XXX XXX X

Part Number Manufacturing Location Code

NOTE: A part number with an "S" in front of it indicates a Wabco service part number.



CARTRIDGE



R950011 – Standard
R950068A – Coalescing

SYSTEM SAVER E SERIES

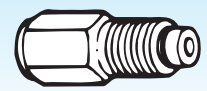


SYSTEM SAVER P SERIES



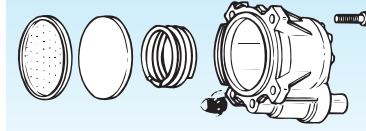
'P' Series System Savers do not have regeneration valves. They use an external purge reservoir.

PRESSURE RELIEF VALVE



S2206-D-1226

REGENERATION VALVE



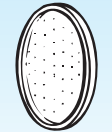
R950012 (for dryers with date codes earlier than 2295)
R950044 (for dryers with date codes 2295 and later)

TURBO CUT-OFF VALVE



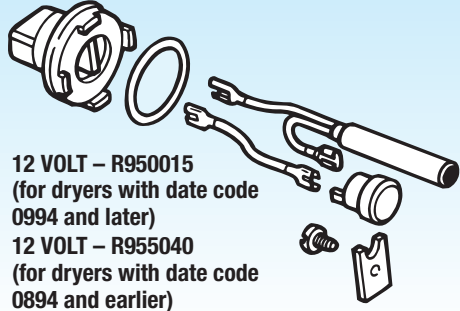
R950047-E SERIES

DIAPHRAGM ONLY



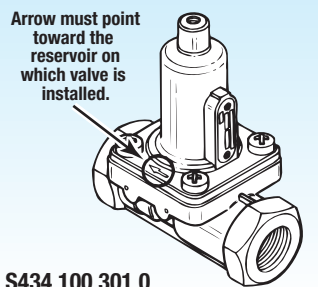
For all regeneration valves
R950045

HEATER



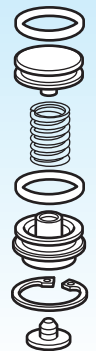
12 VOLT – R950015 (for dryers with date code 0994 and later)
12 VOLT – R955040 (for dryers with date code 0894 and earlier)
24 VOLT – R950016 (for all 24-volt dryers)

PRESSURE-CONTROLLED CHECK VALVE



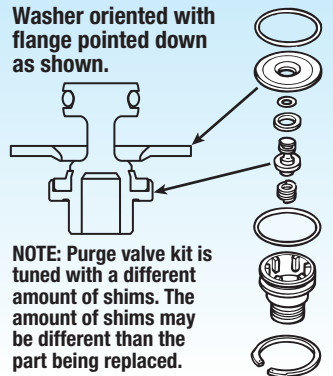
S434 100 301 0

TURBO CUT-OFF VALVE



R950013

PURGE VALVE



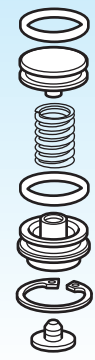
NOTE: Purge valve kit is tuned with a different amount of shims. The amount of shims may be different than the part being replaced.
R950014

OUTLET CHECK VALVE



R950017

TURBO CUT-OFF VALVE



R950013

System Saver U, P Series and 1800UP Series have no spring in the turbo cut-off valve. When using repair kit (R950013) for those models, discard the spring.

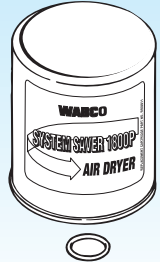
Standard Components

- Pressure Relief Valve
- Cartridge
- Heater Kit
- Purge Valve Kit
- Outlet Check Valve Kit (same as System Saver RC Series)

SYSTEM SAVER 1800 P



CARTRIDGE



R950048 – Standard
R950069 – Coalescing