ENGINE TECHNOLOGIES, INC.

REPORT 35-4960006, REV. D, OCTOBER 14, 2016
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
FOR
STC SA10960SC OXYGEN SYSTEM

LOG OF REVISIONS

Pages	Revision	Date
1 - 13	None	November 20, 2009
5, 6, 7, 13	A	April 14, 2010
6, 10, 11 12, 13, 14	B – add Section 4E	October 5, 2011
2, 3, 9, 11	C – add RCV/RCR removal and installation instructions	February 5, 2015
10, 11	D – change DOT-SP 8160 to DOT-SP 8162	October 14, 2016

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Revision Distribution

The latest revision of this document in its entirety will be posted at www.taturbo.com/drawings/

Parts Lists and Installation Drawings

The latest revision of parts lists and installation drawings related to STC SA10960SC will be posted at www.taturbo.com/drawings/

1. INTRODUCTION

The Engine Technologies, Inc. oxygen system includes oxygen filled lines behind upholstery panels and/or above the headliner. Maintenance personnel should go to www.taturbo.com/drawings/ to review the appropriate installation instructions in order to become familiar with the oxygen system routing prior to performing ANY maintenance on the aircraft that may lead to inadvertent damage to the oxygen system. Review the oxygen system installation instructions prior to removing upholstery panels or headliner. If any oxygen system components are removed for repair or replacement, they are to be removed in the opposite manner in which they were installed and replaced in the same manner as they were originally installed in accordance with the appropriate installation instructions. Go to www.taturbo.com/drawings for complete and up to date lists of parts and installation instructions for the oxygen system. Follow these instructions for removal and replacement of oxygen system components.

Descriptive Data
(Aircraft with O2 bottle mounted horizontally, forward of the front spar carry-through structure)

The supplemental oxygen system consists of a 77 cubic foot composite oxygen cylinder with overpressure relief valve.
The 77 cubic foot composite oxygen cylinder is mounted horizontally on a bracket installed forward of the front spar carry-through structure. In this location a filling port is on the bottle or the bottle may be easily removed for refilling with oxygen. A remote electronic oxygen pressure gage is mounted on the instrument panel. The oxygen may be turned on and off through an electrically controlled valve. The regulator is of a continuous flow type and when turned on, delivers a continuous flow of oxygen. Low pressure tubing from the regulator valve is routed behind the cabin upholstery to outlets mounted on the upholstery side panels near each aft seat and two outlets mounted on panels located under the instrument panel.

Descriptive Data
(Aircraft with O2 bottle mounted vertically behind the aft cabin bulkhead)

The supplemental oxygen system consists of a 115 cubic foot or 77 cubic foot composite oxygen cylinder with overpressure relief valve. The oxygen bottle is mounted vertically behind the aft cabin bulkhead. For the aft mounted oxygen bottles a filling block with gage is mounted to the right side of the fuselage under a door in the baggage compartment floorboard just aft of seat 6, or on the aft cabin bulkhead or hat shelf. The filling block is connected to the bottle using a high pressure capillary line. A remote electronic oxygen pressure gage is mounted on the instrument panel. The regulator is of a continuous flow type and when turned on, delivers a continuous flow of oxygen. Low pressure tubing from the regulator valve is routed above the cabin headliner or behind cabin side upholstery panels to oxygen outlets mounted near each occupant seat.

Descriptive Data
(Twin engine aircraft with O2 bottle mounted in front baggage compartment)

The supplemental oxygen system consists of either a 77 cubic foot or a 115 cubic foot composite oxygen cylinder with overpressure relief valve.
The oxygen cylinder is mounted horizontally on a bracket installed at the aft bulkhead of the forward baggage compartment. A filling block with gage is mounted under a door in the baggage compartment floorboard on the starboard side of the aircraft just aft of the baggage compartment door for refilling with oxygen. The filling block is connected to the bottle using a high pressure capillary line. A remote electronic oxygen pressure gage is mounted on the instrument panel. The oxygen may be turned on and off through an electrically controlled valve. The regulator is of a continuous flow type and when turned on, delivers a continuous flow of oxygen. The filling block is connected to the bottle using a high pressure capillary line. A remote electronic oxygen pressure gage is mounted on the instrument panel. The regulator is of a continuous flow type and when turned on, delivers a continuous flow of oxygen. Low pressure tubing from the regulator valve is routed above the cabin upholstery to two outlets mounted near station 92.0/butt line L7.0, two outlets mounted near station 92.0/butt line R7.0, and two outlets near station 175.0/butt line L7.0.

2. BASIC CONTROL AND OPERATION

The oxygen in the Engine Technologies Inc. Supplemental Oxygen System is supplied from a high-pressure oxygen cylinder (See descriptive data for oxygen bottle location). Since the oxygen is compressed within the cylinder, the amount of pressure indicated on the system gage bears a direct relationship to the amount of oxygen contained in the cylinder. A pressure-indicating gage is located at the fill port (except on aircraft with the oxygen cylinder mounted horizontally on the spar carry through structure) and a remote pressure indicating gage is located on the instrument panel or power quadrant console.

NOTE: The high pressure is reduced to a useable pressure by a combination remote controlled valve and remote controlled regulator (RCV/RCR). This RCV/RCR is located between the high-pressure and low-pressure oxygen lines.

2A. OPERATIONAL CHECK

1. Turn Master Switch ON.
2. Turn Oxygen Switch ON.
3. Check Oxygen Pressure Gage for pressure reading.
4. Oxygen cylinder quantity depends on pressure reading. (See Oxygen Duration Table in AFMS)
5. Plug a mask or cannula into each oxygen port (See Introduction for port locations). With oxygen system ON, CHECK the flow indicator of each mask/cannula.
6. Unplug all masks/cannulas from outlets.
7. Shut oxygen OFF until inflight use is required.
8. Turn Master Switch OFF.

2B. SYSTEM LEAK CHECK (TROUBLESHOOTING)

1. Unplug all masks and/or cannulas from oxygen ports.
2. Turn Master Switch ON.
3. Turn Oxygen Switch ON.
4. Check Oxygen Pressure Gage for pressure reading. A pressure of approximately 1,800 psi (at 70 ˚F) should be indicated on the gage when the oxygen cylinder is full. (Cylinder pressure will vary considerably with radical temperature changes.) The gage near the fill port should indicate nearly the same pressure as the instrument panel mounted gage.
5. Check the complete system for leaks by monitoring the pressure for one hour. If there is less than a 100 psi drop in pressure in one hour the system is considered acceptable.
6. Shut oxygen OFF until inflight use is required.
7. Turn Master Switch OFF.

WARNING

NO SMOKING when oxygen system is ON.

3. OXYGEN SYSTEM SERVICING INSTRUCTIONS

WARNING

Keep hands, tools, clothing, and oxygen equipment clean and free from grease and oil. **KEEP FIRE AND SPARKS AWAY FROM OXYGEN**. Use only recommended leak testing soaps (i.e. castile soap and water solution).

NOTE

When filling the oxygen system, use only 99.99% pure oxygen to be sure that it does not contain moisture which can cause the oxygen valve to freeze.

Do not service the oxygen system at the same time and in the same area that the fuel system is being serviced.

To service the oxygen system, use the following procedures:

1. Gain access to the filler port for the oxygen system (see Descriptive Data for filler port location).
2. Check oxygen cylinder pressure gage. If the cylinder is completely empty, do not charge. An empty cylinder must be removed, inspected, and cleaned before charging.
3. Check the hydrostatic test date of the cylinder. Oxygen bottles installed in accordance with Engine Technologies, Inc. STC SA10960SC are Kevlar® wrapped aluminum specifically designed for aviation oxygen use. They must be hydrostatically tested every 5 years and must be retired from service after 15 years. Do not service an oxygen cylinder that has not been hydrostatically tested in the last 5 years or is over 15 years old.
4. Remove the cap from the filler valve and attach the recharging outlet. (On aircraft with the oxygen cylinder located just ahead of the front spar, the cylinder may be removed for recharging if desired. Carefully disconnect the electrical connector and low pressure oxygen line from the valve on the end of the cylinder before removing cylinder from the aircraft.)
5. Slowly open the valve of the cylinder on the oxygen filling manifold system having the lowest pressure and allow the pressure to equalize.
6. Close the cylinder valve on the manifold system and slowly open the valve of the cylinder having the next highest pressure. Continue this procedure until the cylinder has been charged to 1850 ± 50 psi at an ambient temperature of 70ºF. This pressure may be increased an additional 3.5 psi for each degree of increase

in ambient temperature. Similarly, for each degree of drop in ambient temperature, reduce the cylinder pressure 3.5 psi.

7. Close all valves on the manifold system.
8. Remove the recharging outlet, and replace the filler valve cap.
9. Let the cylinder stabilize for a period of at least 1 hour, and then recheck the pressure.
10. Make any necessary adjustments in the pressure.
11. Reinstall components removed to gain access to the filler valve. (Place oxygen cylinder in holder and reconnect electrical connector and low pressure oxygen line if cylinder was removed for servicing. Close cover.)

4. OXYGEN SYSTEM MAINTENANCE

CAUTION:
Oxygen rich environments are dangerous. Hands, clothing, and tools must be free of oil, grease, and dirt when working with oxygen equipment. Traces of these organic materials near compressed oxygen may result in spontaneous combustion, explosions, and/or fire.

4A. TIME LIMITS AND MAINTENANCE CHECKS

SCHEDULED MAINTENANCE/OVERHAUL INTERVALS AND INSPECTIONS FOR CONTINUED AIRWORTHINESS

Maintenance/Overhaul Item	Annually	On Condition	Every 5 Years	Every 15 Years	Per Manufacturer's Instructions
Perform Operational Check of Oxygen System per Paragraph 2A (See Note)	X				
Perform Oxygen System Leak Check per Paragraph 2B (See Note)	X				
Check flexible lines of masks and cannulas for kinks, embrittlement, cleanliness, and discoloration	X				
Replace flexible lines, flowmeters, cannulas and oxygen masks		X			X
Inspect oxygen cylinder, cylinder mount, regulator, and gages per Inspection procedures of this document	X				
Remove and hydrostatically test the oxygen cylinders from date marked on cylinder, per Section 4E of this document.			X		
Replace oxygen cylinder. Overhaul RCV/RCR.				X	
Replace O-rings on mask/cannula oxygen station connections in accordance with manufacturer's instructions		X			

Note: During an annual inspection, the Operational Check and Leak Check provide an adequate indication of the integrity of the airframe-mounted oxygen tubing system without having to remove upholstery panels or headliner. However, it is highly recommended that maintenance personnel inspect rigid and flexible oxygen lines behind upholstery panels and above headliner for abrasion, kinks, embrittlement, cleanliness, discoloration, corrosion, and leaks whenever upholstery panels and/or headliner are removed for other maintenance procedures not related to the oxygen system.

4B. INSPECTION

Oxygen Cylinder

See Descriptive Data for location of oxygen cylinder. Gain access to the oxygen cylinder in accordance with airframe manufacturer's maintenance manual.

With flashlight and mirror, inspect the entire exterior surface of the cylinder for indication of abuse, dents, bulges, and strap chafing.

(1) Examine the neck of cylinder for cracks, distortion, or damaged threads.

(2) Check the cylinder to determine if the markings are legible.

(3) Check the date of the last hydrostatic test. If the periodic retest date is past, do not return the cylinder to service until the test has been accomplished. Do not return the cylinder to service if the cylinder is over 15 years old.

(4) Inspect the cylinder mounting bracket, bracket hold-down bolts, and cylinder holding straps for cracks, deformation, cleanliness, and security of attachment.

(5) In the immediate area where the cylinder is secured, check for evidence of any types of interference, chafing, deformation, or deterioration.

Lines and Fittings

(1) Inspect oxygen lines for chafing, corrosion, flat spots and irregularities, i.e., sharp bends, kinks, and inadequate security.

(2) Check fittings for corrosion around the threaded area where lines are joined. Pressurize the system and check for leaks.

Regulator, Valve, and Gages

(1) Examine all parts for cracks, nicks, damaged threads or other apparent damage.

(2) Actuate the regulator controls and the valve to check for operation.

(3) Determine if the filler port gage is functioning properly by observing the pressure and comparing to the remote gage on the instrument panel and vice versa.

Masks, Cannulas and Hoses

(1) Check the oxygen mask for cracks and rough face seals. If the mask is a full-face model, inspect the plastic for cleanliness and state of repair. Inspect the cannulas for cleanliness and state of repair.

(2) Flex the mask/cannula hose gently over its entirety and check for evidence of deterioration or dirt.

(3) Plug the mask/cannula hose into an oxygen outlet while the system is charged and verify that the flowmeter is functioning. Replace any defective masks, cannulas, hoses or flowmeters.

NOTE:
When replacing nasal cannulas and tubing to the nasal cannulas be sure placards or tags are permanently affixed to the cannulas or connecting tubing that have a visible warning against smoking while in use, an illustration of the correct method of donning cannulas, and a visible warning against use with nasal obstructions or head colds with resultant nasal congestion as required by FAR 23.1447(b)(2).

4C. REPAIR/REPLACEMENT PROCEDURES

All items determined to need to be removed for repair or replacement are to be removed in the opposite manner in which they were installed and replaced in the same manner as they were installed in accordance with the appropriate installation instructions. Go to www.taturbo.com/drawings for complete and up to date lists of parts and installation instructions for the oxygen system. Follow these instructions for removal and replacement of oxygen system components.

Oxygen Cylinders and Hold- Down Brackets

(1) Remove from service any cylinders that show signs of abuse, dents, bulges, cracks, distortion, damaged thread, or defects which might render them unsafe.

(2) When replacing an oxygen cylinder, be certain that the replacement cylinder is the same part number as the one removed.

(3) Replace or repair any cylinder mounting brackets that show signs of wear.

(4) Replace the cylinder straps or clamps that show wear or abuse.

Lines and Fittings

(1) Replace any oxygen line that is chafed, corroded, dented, cracked, or kinked.

(2) Clean oxygen system fittings showing signs of corrosion in the threaded area. To accomplish this, use a cleaner recommended by manufacturers of oxygen equipment. Replace lines and fittings that cannot be cleaned.

  (a) The high-pressure lines which are located between the oxygen bottle (outside the oxygen service filler) and the regulator are fabricated from stainless steel or thick-wall, seamless copper alloy tubing.

  (b) The low-pressure lines extend from the remote control regulator to each passenger and crew oxygen outlet. These lines are fabricated from seamless aluminum alloy, copper, or flexible hose. Flare type connections are used on aluminum lines.

CAUTION: Do not allow oil, grease, flammable solvent, or other combustibles such as lint or dust to come in contact with threads or any parts that will be exposed to oxygen.

(c) It is advisable to purge the oxygen system any time work has been accomplished on any of the lines and fittings. Use dry nitrogen or dry air for purging the system. All open lines should be capped immediately after purging.

(d) When oxygen is being lost from a system through leakage, a sequence of steps may be necessary to locate the opening. Leakage may often be detected by listening for the distinct hissing sound of escaping gas. If this check proves negative, it will be necessary to soap-test all lines and connections with a castile soap and water solution or specially compounded leak-test material. Make the solution thick enough to adhere to the contours of the fittings. At the completion of the leakage test, remove all traces of the soap and water. **CAUTION: Do not attempt to tighten any connections while the system is charged.**

Regulator, Valve, and Gages

Line maintenance of oxygen regulators, valves, and gages does not include major repair. These components are precision made and their repair requires the attention of a repair station or the manufacturer.

(1) When removing the low profile manifold (LPM) or RCV/RCR or valve from the O2 bottle keep the O-ring on the straight thread portion of the LPM, RCV/RCR or valve. This O-ring is made of a material that is not prone to taking a set as many O-rings do and is likely to last through the two hydrostatic test cycles without having to be replaced. If the O-ring does get damaged, lost, or deformed, it may be replaced with a 3-908 E603-70 O-ring.

(2) Upon reinstallation of the RCV/RCR or LPM or valve after maintenance or hydrostatic test, follow these steps:
  - (a) Remove cap from bottle if one is installed
  - (b) Check to be sure no foreign debris or moisture is in bottle
  - (c) Inspect threads of bottle and RCV/RCR, LPM, or valve to be sure that there are no nicks, burrs, etc.
  - (d) Inspect chamfer in bottle for burrs that may damage the O-ring
  - (e) Install O-ring on RCV/RCR, LPM, or valve if not already installed
  - (f) Lubricate O-ring by lightly moistening with water
  - (g) Thread RCV/RCR, LPM, or valve into bottle
  - (h) Ensure O-ring on bottle is seated correctly after attachment of RCV/RCR, LPM, or valve
  - (i) Torque RCV/RCR, LPM, or valve to 60 ft-lbs

CAUTION: Do not use petroleum lubricants on these components.

Masks and Hoses

(1) Troubleshooting. If a mask assembly is defective (leaks, does not allow breathing, or contains a defective microphone), it is advisable to return the mask assembly to the manufacturer or a repair station.

(2) Maintenance Practice and Cleaning.

(a) Clean and disinfect the mask assemblies after use, as appropriate.

NOTE: Use care to avoid damaging the microphone assemblies on masks with microphones while cleaning and sterilizing.

(b) Wash the mask with a mild soap solution and rinse it with clear water.

(c) To sterilize, swab the mask thoroughly with a gauze or sponge soaked in a water merthiolate solution. This solution should contain 1/5-teaspoon of merthiolate per 1 quart of water. Wipe the mask with a clean cloth and air dry. As an alternative, alcohol-based disinfectant wipes may be used; however, they may not reach all the areas that need to be cleaned and may not have long enough contact time to be as effective.

(d) Replace the hose if it shows evidence of deterioration.

(e) Hoses and cannulas may be cleaned in the same manner as the mask.

(f) Observe that each mask breathing tube end is free of nicks, and that the tube end will slip into the cabin oxygen receptacle with ease and not leak.

4D. FUNCTIONAL TESTING AFTER REPAIR

Following repair, and before inspection plates, cover plates, or upholstering are replaced, test the entire system.

Turn the system ON and observe the electronic remote pressure gage. A pressure of approximately 1,800 psi (at 70 ˚F) should be indicated on the gage when the oxygen cylinder is full. (Cylinder pressure will vary considerably with radical temperature changes.) The gage near the fill port should indicate nearly the same pressure as the instrument panel mounted gage.

(1) Check the system by installing one of the mask/cannula hose fittings in each of the cabin wall or headliner outlets to determine whether there is a flow at each outlet. Remove all hose fittings from outlets.

(2) Check the complete system for leaks by monitoring the pressure for one hour. If there is less than a 100 psi drop in pressure in one hour the system is considered acceptable.

(3) If leaks are found, turn the oxygen system OFF and relieve pressure in the low pressure lines before working on them. If the leak is in a high pressure line, disconnect the capillary line from the oxygen cylinder to the RCV/RCR at the RCV/RCR and allow the oxygen to be **SLOWLY** released from the cylinder before performing any maintenance on the high pressure lines or oxygen bottle.

4E. HYDROSTATIC TEST OF O2 BOTTLE

Oxygen bottles installed in accordance with Engine Technologies, Inc. STC SA10960SC are manufactured to DOT-SP 8162. To properly hydrostatically test an O2 bottle made per DOT-SP 8162, it must be removed and sent to a facility authorized by DOT to test O2 bottles in accordance with 49 CFR part 180 §§ 180.205 and 180.209 as prescribed for DOT 3HT cylinders. For aircraft stationed outside the United States have the O2 bottle requalified in accordance with equivalent requirements of your country.

(1) Cylinders retested prior to July 1, 2006 must be retested within 36 months of the retest date marked on the cylinder. Cylinders retested after July 1, 2006 must be reinspected and hydrostatically retested at least once every five years. Each cylinder must be reinspected and hydrostatically retested in accordance with §§ 180.205 and 180.209 as prescribed for DOT 3HT cylinders. The hydrostatic test must be conducted in accordance with the procedures specified in § 180.205(g) except that the test pressure must be maintained for a minimum of 60 seconds and as much longer as may be necessary to ensure stable volumetric expansion. The elastic and total volumetric expansions must be determined. Reheat treatment or repair of rejected cylinders is not authorized.

(2) Retest dates must be stamped on the exposed metallic surface of the cylinder neck or marked on a label securely affixed to the cylinder and overcoated with epoxy near the original test date. Metal stamping of the composite surface is prohibited.

(3) When a hydrostatic retest is repeated as authorized by § 180.205(g)(5) only two such retests are permitted.

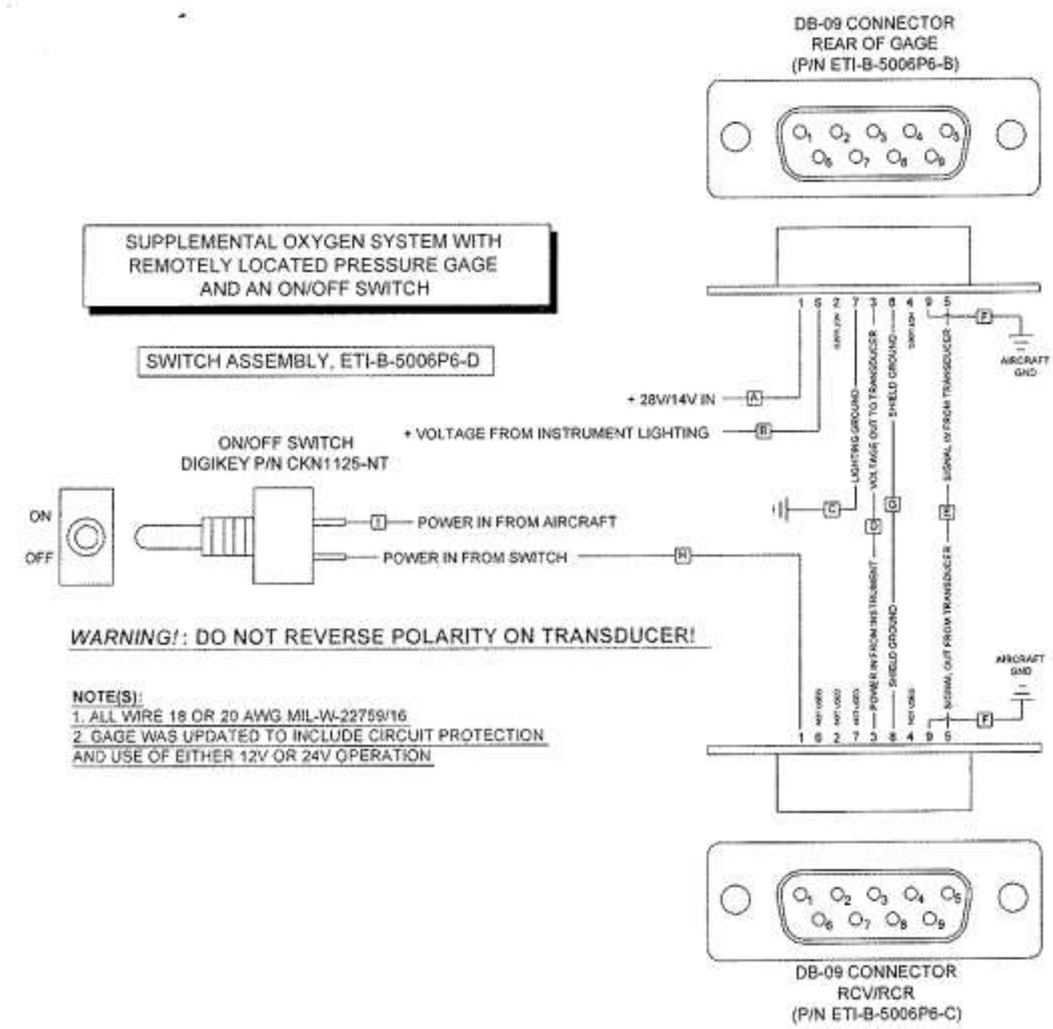
5. RCV/RCR DESCRIPTION

The RCV/RCR is a remote controlled oxygen valve and regulator assembly intended for use in oxygen systems. The RCV/RCR does not comply with any known TSO. The RCV (Remote Controlled Valve) is the "main hex-body" valve device without any regulator units mounted to any of the 3 valve ports. Once an appliance such as a regulator has been mounted to any of these ports it becomes an RCR (Remote Controlled Regulator). The RCV/RCR unit is a dual purpose remotely controlled product. It can be controlled (operated) remotely by electro-pneumatic means. In addition, the RCV/RCR has a dual purpose inlet port system that can be directly mounted to any cylinder that has an SAE-8 (0.750-16) female service port. It can be interconnected by fittings and tubing to a pressure system or cylinder via a low profile manifold (LPM) which includes two SAE-4 female inlet ports perpendicular to the SAE-8 male port.

5A. THEORY OF RCV/RCR OPERATION:

The design of the RCV/RCR is relatively simple. It is operated by pneumatic means utilizing a very small amount of the pressurized oxygen supply, regulated by a pilot regulator, to provided the necessary (normally static) pressure to operate (lift) a piston that opens a high-pressure main valve-seat device inside the RCV body. The RCV Valve defaults in the off position. However, it uses very little power (~20 ma.). It is designed to connect directly to the oxygen cylinder or stand alone for in-line operations. It includes an electric pressure gage sending unit and a regulator.

5B. RCV/RCR ELECTRICAL INTERFACE CONNECTIONS:



The ports on the **RCV** are labeled as follows:

PRD (Non-resettable Pressure Relief Device)
This is an emergency over-pressure burst plug. This port cannot be used for any other purpose. It will never need to be removed for inspection or periodic replacement. It will, however, need to be replaced if it has been damaged or has popped open from an over-pressure situation.
WARNING: DO NOT REMOVE OR COVER the PRD device installed in this port.

TANK PORTS 1 & 2 (always live!! connected directly to the cylinder/inlet port):
These are high pressure non-regulated and non-valved SAE-4 female ports. They pneumatically connect directly into the inlet port of the **RCV** unit at all times, which is connected to a cylinder (either directly as in the horizontally mounted cylinders or through a capillary tube as in the vertically mounted cylinders). These are for connecting a refill fitting or remote refill station and remote pressure gage. These ports are SAE-4 7/16-20 UNF-2B straight female threads. Any SAE-4 male fitting must be used with a size 2-904 Viton O-ring. Tank port #1 will have the pilot regulator mounted to it. This regulator provides about 2 bars (30 psig) of pressure to operate the pneumatic actuator. It has a small flow-rate that is sufficient to operate the system in static modes and not suitable for operation in a constant-flow mode.

VALVE PORTS 1, 2 & 3 (on/off valved outlet ports):
These are high pressure valved non-regulated ports. They are identical in form and function and are switched on and off via the electro-pneumatic operator. Once the valve is open, they connect directly into the cylinder while the valve is in the on (open) state. These ports have SAE-4 7/16-20 UNF-2B straight female threads. Any SAE-4 male fitting must be used with a size 2-904 Viton O-ring. A pressure reducing regulator is not involved at this point.

INLET PORT (not labeled)**:**
The inlet port is a dual threaded port. The 3/4-16 (0.750-16 UNF-2A) straight male threads are for connecting directly to a cylinder of that same thread type. In addition, a female 7/16-20 UNF-2B straight thread (SAE-4) port is useful in applications where the **RCV**/**RCR** unit will not be directly mounted to the cylinder, but to a surface with an angle bracket. A fitting will connect the unit to the cylinder pneumatically. The male 3/4-16 UNF-2B (SAE-8) threads can then be used to secure the **RCV** unit to the bracket via a jam-nut (AN-924) or of that thread type.

ELECTRO-PNEUMATIC:
Applying current turns the **RCV** on and removing the current turns the **RCV** off. The electro-pneumatic valve can be ordered in three voltage ratings. They are: 5V, 12V and 24V. The 12 volt valve requires about 0.85 A to initially turn on the **RCV**. The sustain current thereafter can then be about 1/2 of that. The screw-on pilot regulator, calibrated to 2 bars (30 psig.), is required and is directly plumbed to the actuating manifold. A small vent port releases a very small amount of gas as the electro-pneumatic valve is released to the off state. The amount of gas released by this vent port (during turn-off phase only) is about 10 cc for the interface manifold.

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
FOR
STC SA10960SC OXYGEN SYSTEM

6. AIRWORTHINESS LIMITATIONS

The Airworthiness Limitations section is FAA approved and specifies inspection and maintenance required under paragraphs 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

The oxygen cylinder is Kevlar® wrapped aluminum specifically designed for aviation oxygen use. The oxygen cylinder must be hydrostatically tested every 5 years as outlined in Section 4E of this document. A cylinder hydrostatically tested prior to July 1, 2006 must be retested within 36 months of the retest date marked on the cylinder. A cylinder manufactured or hydrostatically tested after July 1, 2006 must be reinspected and hydrostatically retested at least once every five years. The oxygen cylinder must be retired from service after 15 years.

The Engine Technologies, Inc. supplemental oxygen system does not contain any other mandatory replacement time, structural inspection interval, or related structural inspection procedures.

FAA Approved: Gary A S Rom for S. Frances Cox