


PORTABLE OXYGEN CYLINDER IDENTIFICATION

December 2016



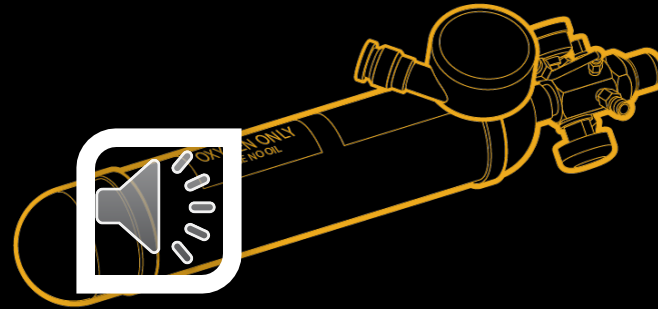
Table of contents

- Purpose of presentation
- Common cylinder assemblies
- Avox/Scott Part number protocol
- Data plate location 
- Outlets
- Cylinder models & hydrostatic (HST) testing requirement
- Overhaul requirement



Common O2 cylinders

- 5500-Series
- 9700-Series
- Etc.

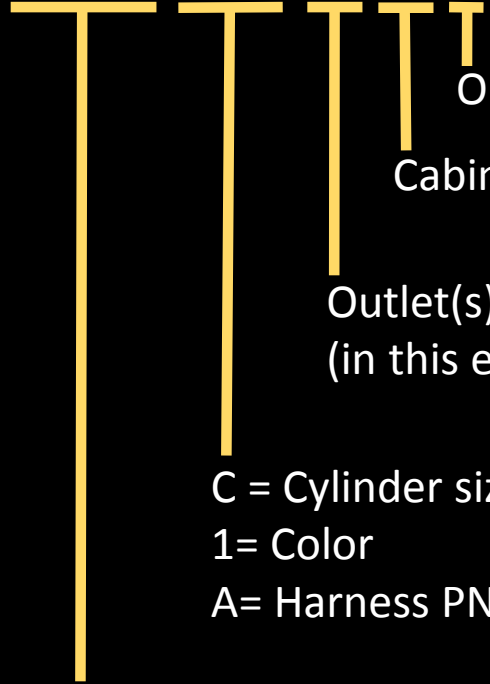




Avox/Scott 5500 & 9700 Series O2 cylinders

TYPICAL PART NUMBER

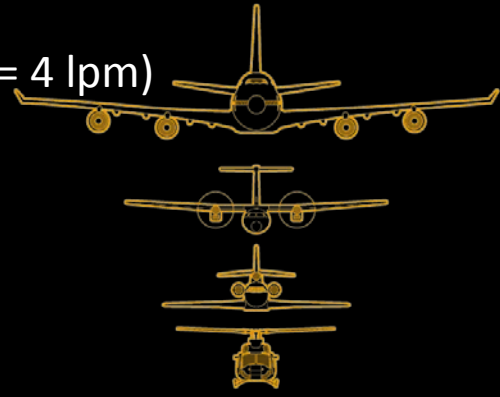
5500-C1A-BF23A



Basic series

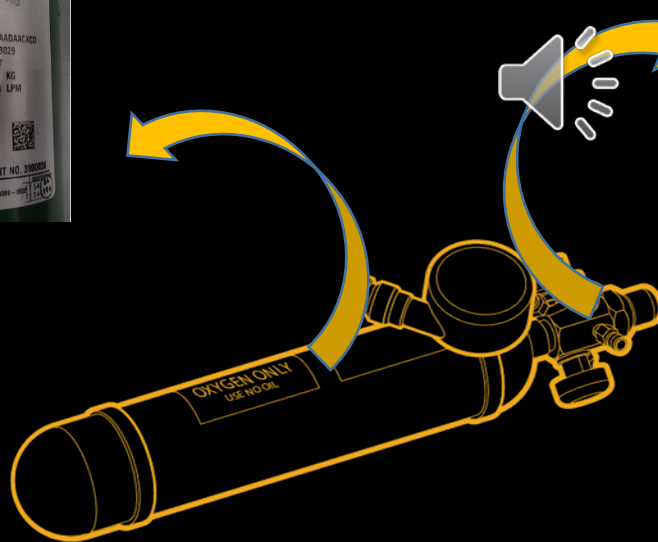
C = Cylinder size & Regulator PN combination,
1 = Color
A = Harness PN (all from the CMM table)

Outlet connector(s) model (ref. CMM table)
Cabin altitude setting 23 = 23,000 ft
Outlet(s) flow rate
(in this example two outlets B = 2 lpm & F = 4 lpm)



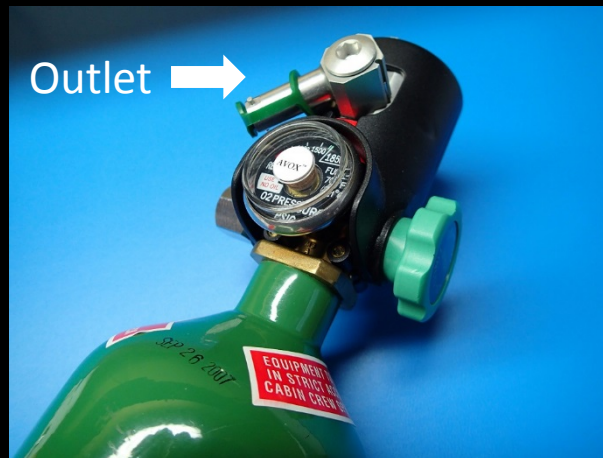
Cylinder assy data plate

- On the cylinder
- On the regulator



Outlets

- When ordering/replacing a cylinder ensure that the outlets are corresponding to the mask connector
- Avox/Zodiac has more than 12 different outlet models



Outlets (cont'd)

- XXXX-XXX-XXA type outlet and mating mask connector



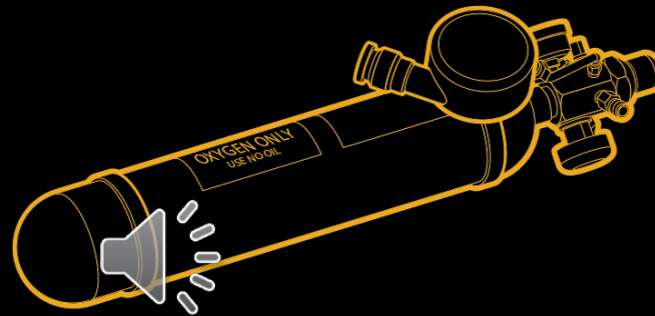
- XXXX-XXX-XXB type outlet and mating mask connector




Avox 5500-9700 Series O2 cylinder models

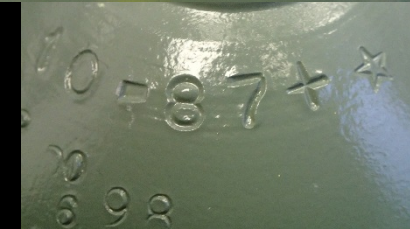


- DOT 3AA
- DOT 3HT
- Carbon Fiber reinforced
(Special permits)



DOT 3AA XXXX

- Widely used in a variety of industries (NOT ONLY AIRCRAFT)
- Not necessarily manufactured by the application OEM
- No life limit if requalification (inspection + hydrostatic) is successful
- May have a plus and/or star sign following the hydrostatic test markings allowing for increase pressure (+) or 10 year HST (☆) 
- **Caution:** These increases may not be recommended by the manufacturer of the specific application. (e.g.: Avox, B/E, etc.)
- Hydrostatic testing required every 5 years for most aviation applications
- For aviation applications, the + and * are often only present at the initial hydrostatic test. The added benefit cannot be applied if not stamped on the most recent HST markings




DOT 3HT XXXX

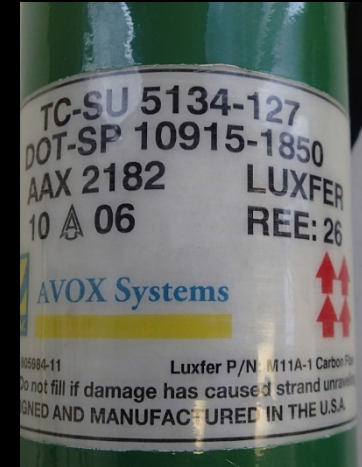


- This identification appears on the shoulder of the cylinder
- They have a calendar life limit of 24 years or 4380 pressurization cycles, whichever occurs first
- Hydrostatic testing is required every 3 years
- Refill activities should be tracked if occurring more than once every other day
- Higher detrimental effect of nicks and gouges due to the thinner wall thickness
- Greater handling care required



CARBON FIBER

- They mostly have a calendar life limit of 15 years
- Hydrostatic testing is usually every 5 years 
- These specifications are detailed in the document called “Special permit” (in the adjacent picture SP 10915 for DOT and SU 5134 for TC or Transport Canada)



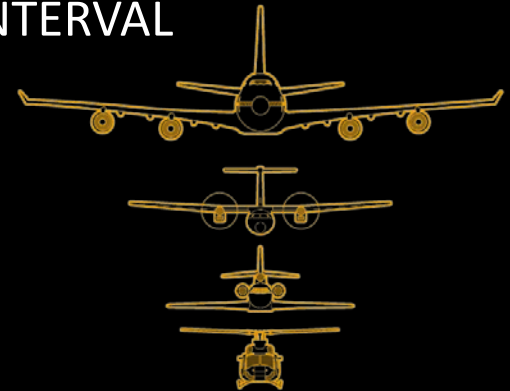
REGULATOR OVERHAUL REQUIREMENT



- As per Avox/Zodiac
 - 5 years when mounted on 3AA or Carbon fiber
 - 6 years when mounted on 3HT (to correspond with every other HST)



CHECK YOUR MOST RECENT CMM FOR CURRENT INTERVAL



This presentation can be downloaded from our website at www.sprint-aviation.com and may be used for non revenue training

