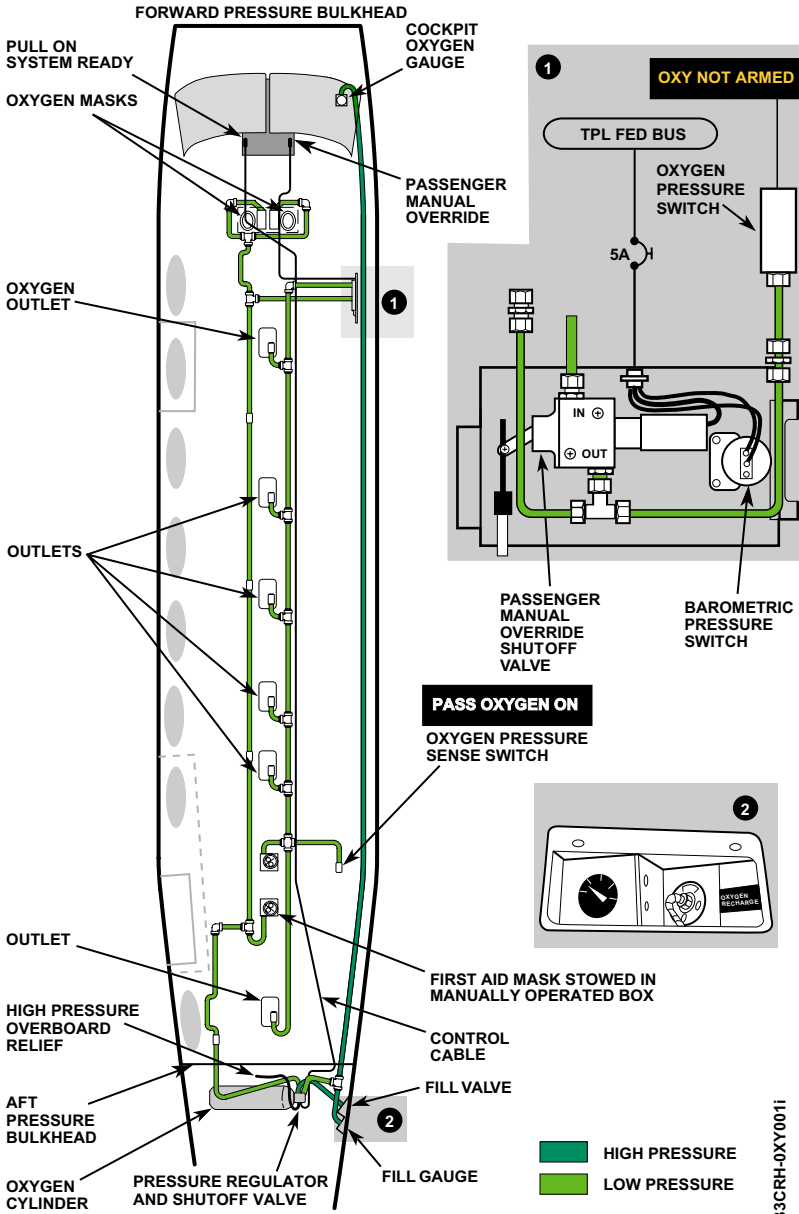


# Oxygen System



B3CRH-OXY001i

## **Oxygen System**

The oxygen bottle supplies both the passenger and crew oxygen systems through an integral pressure regulator. The bottle has high pressure ports for the fill line and bottle pressure gage. If it overpressurizes, a relief disc bursts to vent the oxygen overboard to the atmosphere.

Available oxygen bottle capacities include 50 cubic-feet, 77 cubic-feet and 115 cubic-feet sizes, depending on the aircraft serial number, owner's preferences and modifications.

## **Crew System**

Oxygen first flows through the bottle regulator where normal bottle pressure is reduced to 70 PSI. With the PULL ON SYS READY knob pulled out, the shutoff valve opens and oxygen flow is available to crew masks and the first aid mask.

The crew oxygen masks are diluter-demand types that provide oxygen as the wearer inhales. Each mask incorporates a selector valve to choose between EMERgency, NORMal, or 100%. The mask headband is inflated by squeezing red tabs located on each side of the mask. Releasing the tabs vents pressure from the headband so that internal elastic bands will secure the mask over the wearers head. A microphone is provided in each mask for radio communication during oxygen use.

### Passenger System

For the passenger oxygen system, oxygen continues its flow from the mechanically operated crew system shutoff valve to a second shutoff valve controlled by a barometric pressure switch. When cabin altitude reaches 12,500 ft, the barometric pressure switch opens the passenger shutoff valve. Oxygen then flows into the passenger mask autodeployment boxes. The pressure deploys the passenger masks. Pulling the mask and attaching lanyard frees a lock pin and starts oxygen flow to the mask. Pressure in supply lines of the passenger system illuminates the white PASS OXYGEN ON annunciator. An amber OXY NOT ARMED annunciator will remain illuminated until the system is armed.

### Override System

If the barometric switch fails, pull the PASSENGER OXYGEN O'RIDE knob to mechanically open the passenger system shutoff valve. When passenger oxygen is no longer required, push the O'RIDE T-handle in to stop oxygen flow to the passenger system, if cabin altitude is less than approximately 12,000 feet.

