## **OXYGEN**

# **GENERAL**

Oxygen for flight crew and passengers is supplied from a 49 or 76-cubic foot oxygen cylinder. The oxygen cylinder pressure gauge is located on the instrument panel. Refer to the oxygen utilization chart for duration of oxygen supply (Figure 3-3).

A three-position oxygen control switch (oxygen control valve) is located on the pilot's left console. The three positions are OFF / PASS OXY AUTO / ON. In the PASS OXY AUTO position, if the cabin altitude exceeds approximately 14,500 feet, the passenger masks will automatically drop. Oxygen will flow to these masks when the lanyard is pulled as the mask is donned. Therapeutic oxygen may be supplied to the passengers at any cabin altitude by placing the selector valve in the ON position. This will cause all masks in the cabin to deploy. Oxygen flow may be shut off from passenger masks by positioning the oxygen priority valve to the OFF (crew only) position.

# PILOT'S SIDE CONSOLE OXYGEN CONTROL AND OUTLETS

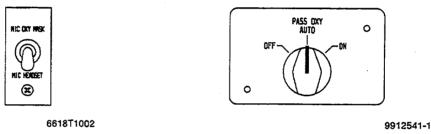


Figure 2-23

### **OXYGEN MASKS**

The crew oxygen mask is a quick donning mask with a microphone and regulator attachment. The mask is a diluter demand with pressure breathing available by selecting the EMER position. The crew member is assured that oxygen is being received when no restriction to breathing is present with the mask donned and in the 100% position. Selection of the EMER position will provide a steady flow of pressurized oxygen in the face cone. To qualify as a quick donning mask, the mask must be properly stowed in the receptacle located in the cockpit side console. To conserve oxygen when using the mask, the regulator may be set to normal if the cabin altitude is below 20,000 feet.

When using an oxygen mask for smoke protection, 100% position should be selected. The emergency position may be used with the oxygen mask.

The high altitude airport mode is automatically selected when a field elevation above 8000 feet is set into the cabin pressurization controller. In this mode, the automatic passenger oxygen mask drop is inhibited below cabin altitudes of approximately 14,500 feet.

# **OXYGEN MASK MIC AND HEADSET MIC**

A two-position toggle switch is provided on the pilot's and copilot's instrument panels. The switch is marked MIC OXY MASK and MIC HEADSET. Depressing the microphone button on the appropriate control wheel allows a crew member to transmit through the headset microphone or oxygen mask microphone, whichever is selected.

#### NOTE

Cockpit masks are assumed to be at the normal setting below 20,000 feet cabin altitude with a respiratory rate of 10 liters per minute - body temperature pressure saturated and at 100% setting at and above 25,000 feet.

# **EROS CREW MASK AND 49-CUBIC FOOT CYLINDER**

AVAILABLE TIME IN MINUTES											
CABIN ALTITUDE	1 COCKPIT	COCKPIT	2 COCKPIT 2 CABIN	2 COCKPIT 4 CABIN	2 COCKPIT 6 CABIN	2 COCKPIT 8 CABIN	2 COCKPIT 10 CABIN	2 COCKPIT 11 CABIN	COCKPIT 12 CABIN		
8,000 10,000 15,000 20,000 25,000 27,000	839 964 964 757 405 475	420 482 482 379 202 237	106 110 112 107 87	61 62 63 62 55	42 43 44 44 41	33 33 34 34 32	27 27 28 28 28 27	24 25 25 25 25 24	22 23 23 23 23 22		
29,000 31,000 33,000 35,000 37,000 39,000	523 588 663 748 851 1037	261 294 332 374 426 518			·						

## **EROS CREW MASK AND 76-CUBIC FOOT CYLINDER**

AVAILABLE TIME IN MINUTES										
CABIN ALTITUDE	1 COCKPIT	COCKPIT	2 COCKPIT 2 CABIN	2 COCKPIT 4 CABIN	2 COCKPIT 6 CABIN	2 COCKPIT 8 CABIN	2 COCKPIT 10 CABIN	2 COCKPIT 11 CABIN	COCKPIT 12 CABIN	
8,000 10,000 15,000 20,000 25,000 27,000	1308 1502 1502 1180 630 740	654 751 751 590 315 370	165 172 175 167 136	94 97 99 97 86	66 68 69 69 63	51 52 53 53 53	41 42 43 43 41	38 38 39 39 39	34 35 36 36 35	
29,000 31,000 33,000 35,000 37,000 39,000	815 916 1034 1165 1326 1616	407 458 517 583 663 808								

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# **CREW OXYGEN SCHEMATIC**

