

**Subject: Retractable Ceiling Column (P6800)—Instructions for Installing a Medical Gas Demand Valve Adapter**

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Tools required:	11/16" open end wrench	7/8" open end wrench
	Phillips head screwdriver	1/16" Allen™ <sup>1</sup> wrench
	1" open end wrench	Ladder
	Pressure gauge	Flow gauge
Parts required:	(1) 126796	Demand valve adapter, oxygen
	(1) 126795	Demand valve adapter, air
	(1) 126794	Demand valve adapter, nitrogen
	(1) 126793	Demand valve adapter, nitrous oxide
	(1) 126792	Demand valve adapter, carbon dioxide

**NOTE:**

Vacuum or Waste Anesthetic Gas Disposal (WAGD) gas risers do **not** require demand valve adapters.



**WARNING:**

Only facility-authorized personnel with medical gas pipeline experience should service the Retractable Ceiling Column. Servicing by unauthorized personnel could result in personal injury or equipment damage.



**WARNING:**

The medical gas services to the Retractable Ceiling Column may also supply gas to adjacent patient gas services. Before turning off medical gas service, make sure no patients will be affected. Failure to do so could result in patient injury.

1. Before turning off medical gas service, make sure no patients will be affected.
2. Turn off all medical gas services to the Retractable Ceiling Column, and relieve the pressure from the outlets.
3. Pull the ceiling column (A) down to its fully extended position (see figure 1 on page 2).



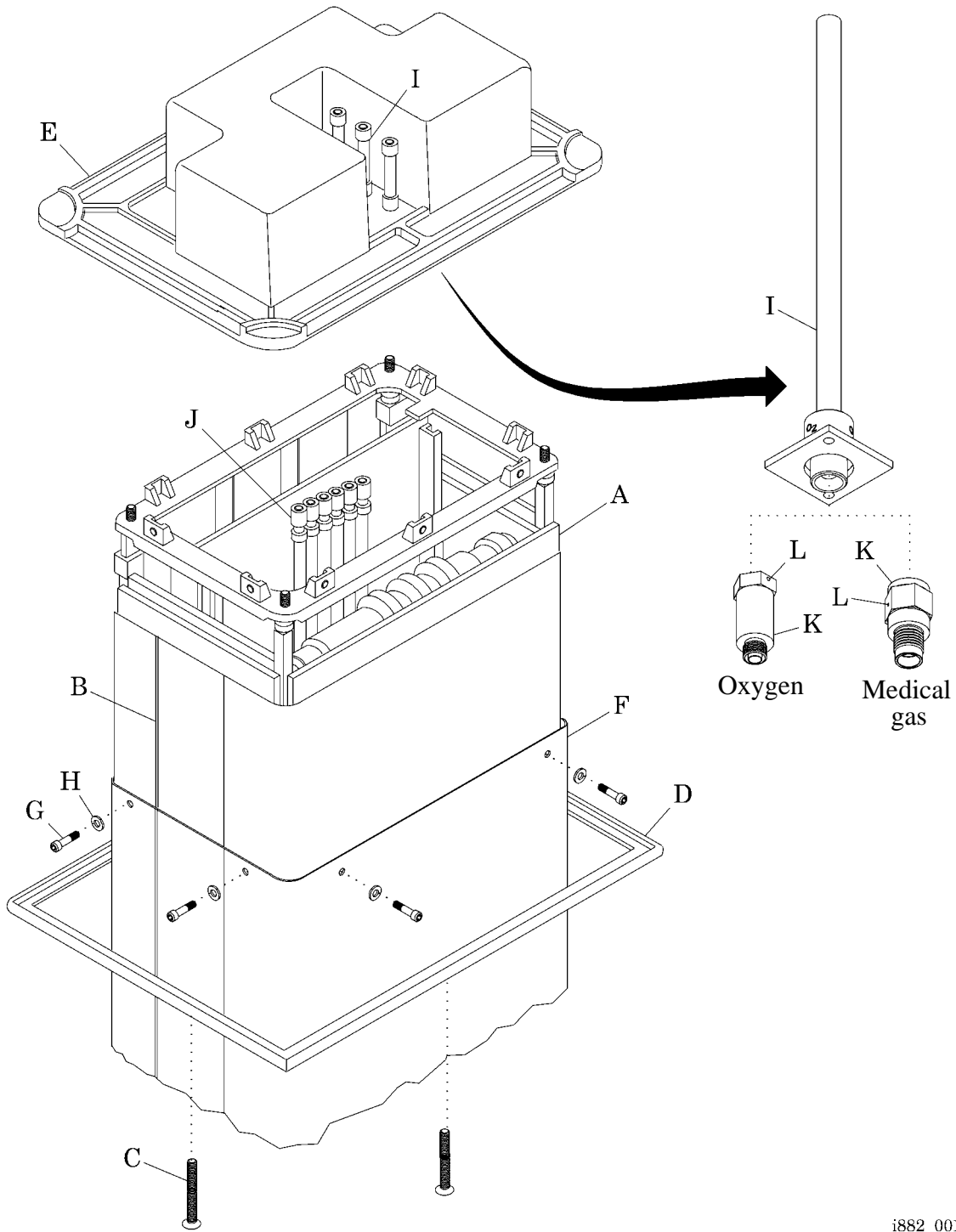
**WARNING:**

Make sure the access panel does not fall from the ceiling column. Personal injury or equipment damage could occur.

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**Figure 1. Retractable Ceiling Column**



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4. Remove each access panel (B):
  - a. Push the access panel (B) up as far as possible.
  - b. Pull the bottom of access panel (B) away from the ceiling column (A) and then down.
5. Remove the four ¼"-20 x 2 ½" screws (C) that attach the shield (D) to the ceiling plate (E).
6. Carefully slide the shield (D) down the upper shroud (F) to access the eight binder head screws (G) that attach the upper shroud (F) to the ceiling column (A).
7. Remove the eight binder head screws (G) and lockwashers (H).



**CAUTION:**

Use caution not to damage the felt spacers on the inside bottom of the upper shroud.

8. Carefully pull the upper shroud (F) down the ceiling column (A). Do **not** damage the felt spacers on the inside bottom of the upper shroud (F).



**WARNING:**

Do not operate the ceiling column when the access panels are removed or while working in the ceiling column. Personal injury or equipment damage could occur.

9. Make sure no one operates the ceiling column (A) while the access panels (B) are removed.
10. At the ceiling plate (E), make sure the gas types and quantities are correct.
11. At each gas riser (I), do as follows:
  - a. Disconnect the gas hose (J) from the gas riser (I).
  - b. Visually examine the gas riser (I). Make sure it is free from dirt and contamination and does not already have an internal demand (check) valve.
  - c. If the gas riser (I) **does** have an internal check valve, go to step g.  
**or**  
If the gas riser (I) does **not** have an internal check valve, continue to step d.



**CAUTION:**

When removing the plastic cap, make sure not to lose the internal spring and poppet from the demand valve adapter. Equipment damage could occur.

- d. Carefully, so as not to lose the internal spring and poppet from the demand valve adapter (K), remove the plastic cap from the demand valve adapter (K) to be installed.
- e. Screw the demand valve adapter (K) onto the gas riser (I) by hand until it stops completely.

**NOTE:**

Some resistance may occur as the male end of the gas riser passes through the seal within the demand valve adapter.

- f. Use the 1/16" Allen™<sup>1</sup> wrench to tighten the two setscrews (L) on the demand valve adapter (K).



**WARNING:**

Make sure the correct gas hose is connected to the demand valve adapter. Failure to connect the correct gas hose to the demand valve adapter could result in patient injury or equipment damage.

- g. Refer to the color-coded gas hose (J), and connect and tighten the correct gas hose (J) to the demand valve adapter (K).

**NOTE:**

The type of medical gas of the demand valve adapter is stamped on the demand valve adapter at the gas connection.

- 12. Turn on the medical gas services to the Retractable Ceiling Column.
- 13. Examine the gas riser (I) for leaks, and make sure the gas service, flow, and pressure are correct at the gas outlet.



**CAUTION:**

Use caution not to damage the felt spacers on the inside bottom of the upper shroud.

- 14. Carefully push the upper shroud (F) up the ceiling column (A). Do **not** damage the felt spacers on the inside bottom of the upper shroud (F).
- 15. Install the eight binder head screws (G) and lockwashers (H) to attach the upper shroud (F) to the ceiling column (A).
- 16. Carefully slide the shield (D) up the upper shroud (F).
- 17. Install the four ¼"-20 x 2 ½" screws (C) to attach the shield (D) to the ceiling plate (E).
- 18. Install the access panels (B).
- 19. Retract the ceiling column (A) as necessary.

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