



# ***REXARC MEDICAL MANIFOLDS***

***PERFORMANCE YOU DEMAND  
WHEN LIVES COUNT***







## Draw on our experience:

- 1924:** Rexarc began as a manufacturer of welding equipment for producing acetylene gas.
- 1940s:** Hardsurfacing became a specialty. (These were developed to restore and prolong the life of earthmoving and quarry equipment.)
- 1960s:** Rexarc developed equipment for welding gas manifold piping systems and related safety equipment.

Since this time, Rexarc has been a premier manufacturer of manifold equipment. We have invested many hours of research and development to supply the highest quality and most advanced manifold systems on the market

## DESIGNED TO 99C STANDARDS.

This Medical Manifold Brochure outlines recommended practices for source equipment under NFPA 99C regulations. Use this brochure as a guide to design new systems or to update systems to meet recommended practices

Complete NFPA 99C brochures can be purchased through the NFPA web site at [www.nfpacatalog.org](http://www.nfpacatalog.org) or by phone at (800) 334-3555.

# Rexarc Electronic Series high pressure system

The versatility of this manifold makes it ideal for all medical gas applications. Advanced engineering provides PC monitoring and internet options. This manifold features a built in dual bypass system for constant gas delivery. It provides visual and audible signals. The control cabinet is stainless steel with lights and easy to read gauges. The headers and delivery piping are manufactured with heavy brass, seamless tubing and are brazed together. To provide maximum operational safety, they are hydrostatically tested to 1.5 times working pressure.

## Manifold 4-04-0157 ordering information

No. Cyl.	Part No. Medical Gas*	Length	Approx. Shipping Wt. Lbs.
2	4-04-0157-2	3'-3"	90
4	4-04-0157-4	4'-7"	95
6	4-04-0157-6	6'-3"	100
8	4-04-0157-8	7'-11"	105

\* Specify gas by name: Oxygen, Nitrogen, Helium, Nitrous Oxide, Breathing Air, Carbon Dioxide.

## Options for use with the Rexarc Electronic Manifold

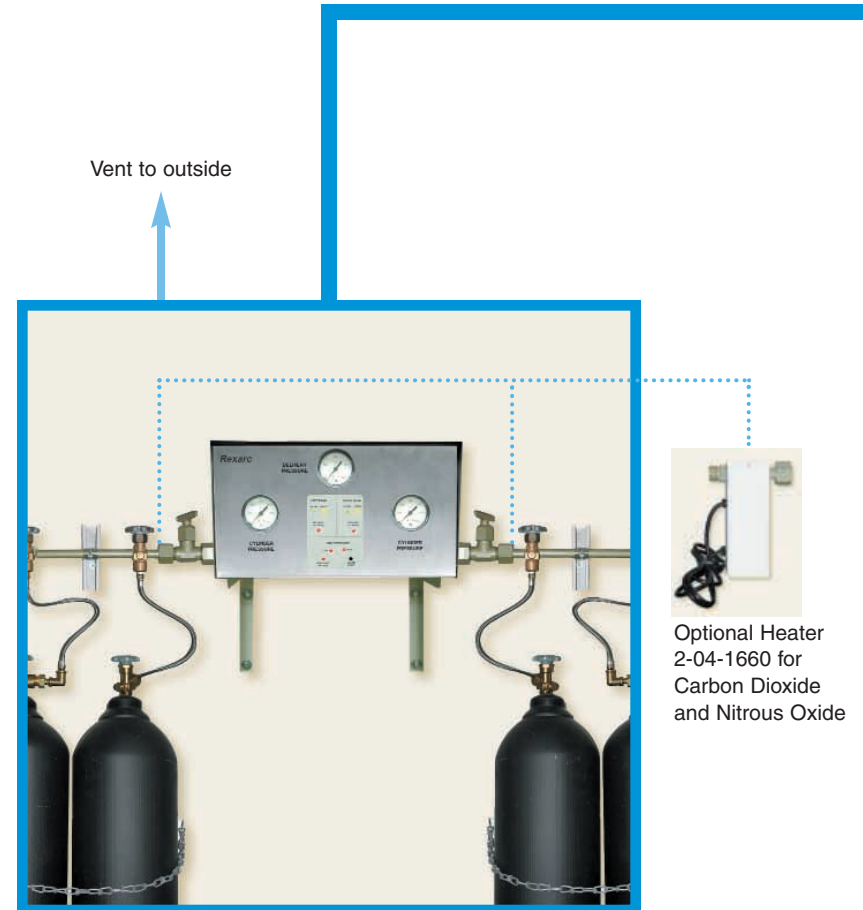


Area Alarm (Part No. 2-04-1678)



PC Monitoring Software  
(Part No. 1-39-0433)

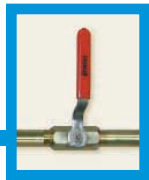
- Pressure status
- Email notification
- Regulator status



Optional Heater  
2-04-1660 for  
Carbon Dioxide  
and Nitrous Oxide

## Manifold 4-04-0157

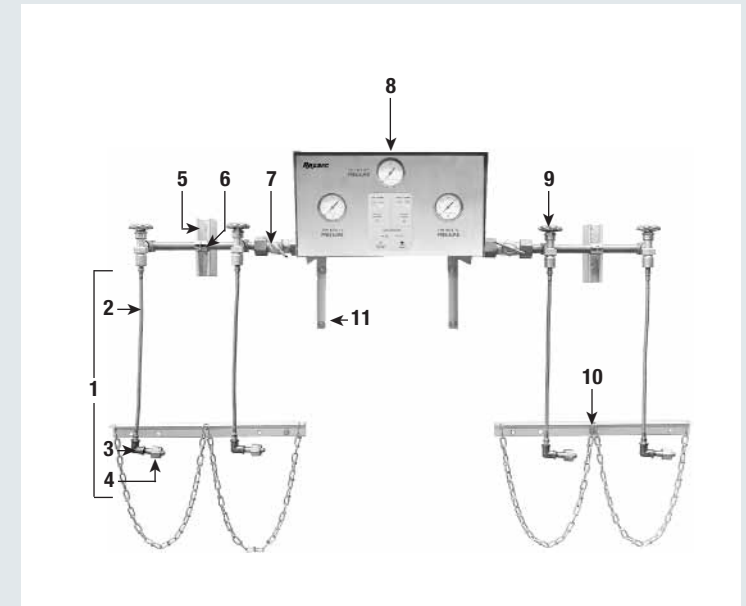
- High pressure primary
- High pressure reserve
- Automatic changeover
- Built-in dual bypass regulators
- Built-in pressure relief valve
- 200 psig maximum delivery
- 6000 scfh flow
- Other configurations available



Source shutoff valve

Part No.	Size NPT (F)	Approx. Shipping Wt. Lbs.
1-02-1238-1	1/4"	1
1-02-1238-2	1/2"	1-1/4
1-02-1238-3	3/4"	2
1-02-1238-4	1"	2-1/4
1-02-1238-5	1-1/4"	2-3/4
1-02-1238-6	1-1/2"	3-1/4
1-02-1238-8	2"	5

## Replacement parts



### Manifold 4-04-0157

Ref. No.	Description	Part No.
1	Cylinder Lead Assembly	1-04-1786-CGA-18
1	Cylinder Lead Assembly, Helium only	1-04-2283-580-18
2	Cylinder Lead	1-02-0083-18MM
2	Cylinder Lead, Helium only	1-04-1845-18MM
3	Ell	1-04-0115
4	Nut/Nipple, CGA 540, Oxygen	1-04-0181 / 1-04-0180F
4	Nut/Nipple, CGA 580, Nitrogen, Helium	1-04-0277 / 1-04-0131F
4	Nut/Nipple, CGA 326, Nitrous Oxide	1-04-2177 / 1-04-0279F
4	Nut/Nipple, CGA 346, Breathing Air	1-04-2178 / 1-04-0229F
4	Nut/Nipple, CGA 320, Carbon Dioxide	1-04-2134 / 1-04-0191F
4	Teflon Washer, CGA 320	1-04-0192
5	Bracket	1-02-1093-6
6	Clamp	1-02-1087-2
7	Master Shutoff Valve	1-04-1416
8	Control Box*	3-04-0609
9	Valve	1-04-1708CV
10	Cylinder Rack (Series)	2-04-1184
11	Bracket	2-04-1459

\* Specify gas by name.

# Rexarc Electronic Series low pressure cryogenic system with emergency backup

The versatility of this manifold makes it ideal for all medical gas applications. Advanced engineering provides computer monitoring and internet ordering options. This is an ideal set up for those who prefer the liquid/liquid style manifold and need to update their existing medical gas delivery system. The components of the controller are tested and factory preset to NFPA standards. It provides visual and audible signals. The control cabinet is stainless steel with lights and easy to read gauges. NFPA 99 suggests that a high pressure emergency reserve be installed as diagramed with a minimum of three (3) or one (1) day supply of high pressure cylinders.

## Manifold 4-04-0159 ordering information

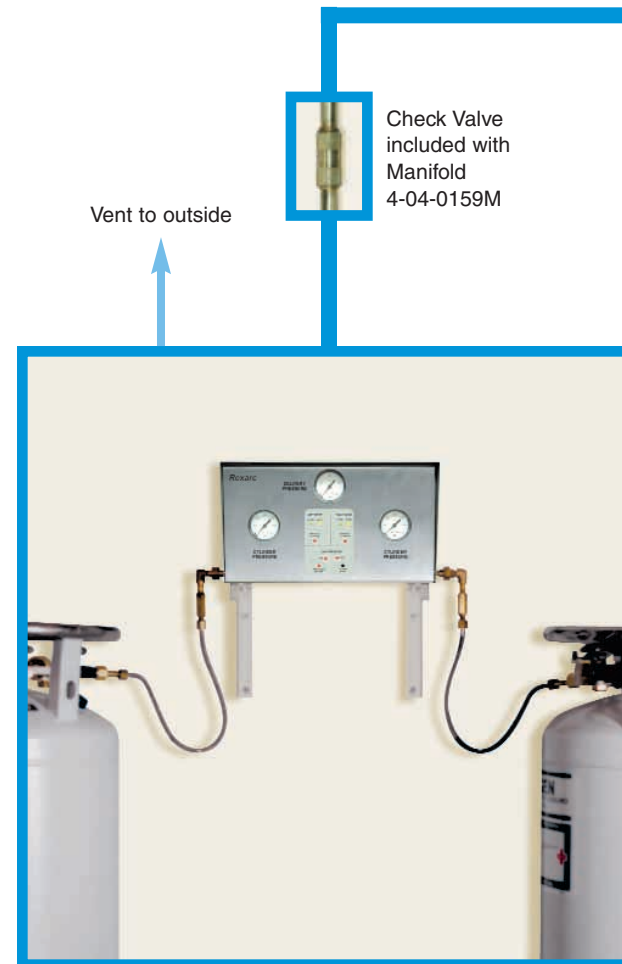
No. Cyl.	Part No. Medical Gas*	Length	Approx. Shipping Wt. Lbs.
2	4-04-0159M-2	3'-3"	100
4	4-04-0159M-4	4'-7"	105
6	4-04-0159M-6	6'-3"	110

\* Specify gas by name: Oxygen, Nitrogen, Helium, Nitrous Oxide, Carbon Dioxide.

## Emergency Backup Manifold 3-04-0417M ordering information

No. Cyl.	Part No. Medical Gas*	Length	Approx. Shipping Wt. Lbs.
3	3-04-0417M-3	2'-11"	98
4	3-04-0417M-4	3'-9"	107
5	3-04-0417M-5	4'-7"	119
6	3-04-0417M-6	5'-5"	150
7	3-04-0417M-7	6'-3"	150
8	3-04-0417M-8	7'-1"	169
9	3-04-0417M-9	7'-11"	178
10	3-04-0417M-10	8'-9"	187

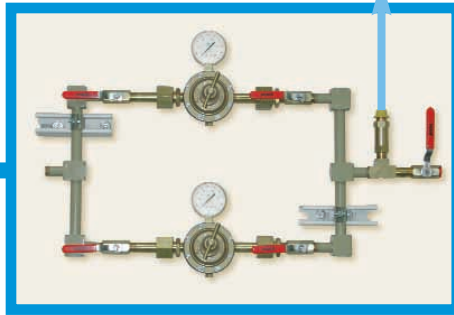
\* Specify gas by name: Oxygen, Nitrogen, Helium, Nitrous Oxide, Carbon Dioxide.



## Manifold 4-04-0159M

- Liquid primary
- Liquid reserve
- Automatic changeover
- Other configurations available

Vent to outside



### Dual Bypass Regulators 2-04-1648\*

- Built-in pressure relief vent valve
- Built-in source shutoff valve
- \* Specify gas by name

Vent to outside

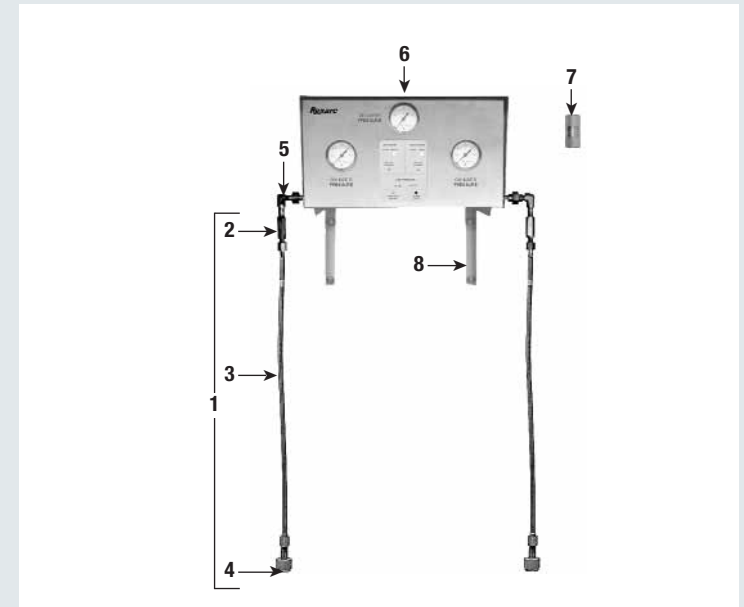


### Emergency Backup Manifold 3-04-0417M

activated automatically when the primary manifold is depleted.

- High pressure
- Built-in check valve

## Replacement parts



### Manifold 4-04-0159M

Ref. No.	Description	Part No.
1	Cylinder Lead Assembly	1-04-2066-CGA-24
1	Cylinder Lead Assembly, Helium only	1-04-2300-580-24
2	Check Valve	2-01-0020
3	Cylinder Lead	1-02-0083-24FF
3	Cylinder Lead, Helium only	1-04-1845-24FF
4	Nut/Nipple, CGA 540, Oxygen	1-04-0181 / 1-04-0180F
4	Nut/Nipple, CGA 580, Nitrogen, Helium	1-04-0277 / 1-04-0131F
4	Nut/Nipple, CGA 326, Nitrous Oxide	1-04-2177 / 1-04-0279F
4	Nut/Nipple, CGA 320, Carbon Dioxide	1-04-0134 / 1-04-0191F
4	Teflon Washer, CGA 320	1-04-0192
5	Header, 1 cylinder	1-04-2065-1
5	Header, 2 cylinder	1-04-2065-2
5	Header, 3 cylinder	1-04-2065-3
6	Control Box*	3-04-0610M
7	Check Valve	2-01-0080-3
8	Bracket	2-04-1459

\* Specify gas by name.

### Emergency Backup Manifold 3-04-0417M

See replacement parts on back cover.

### Dual Bypass Regulators 2-04-1648

See replacement parts on back cover.

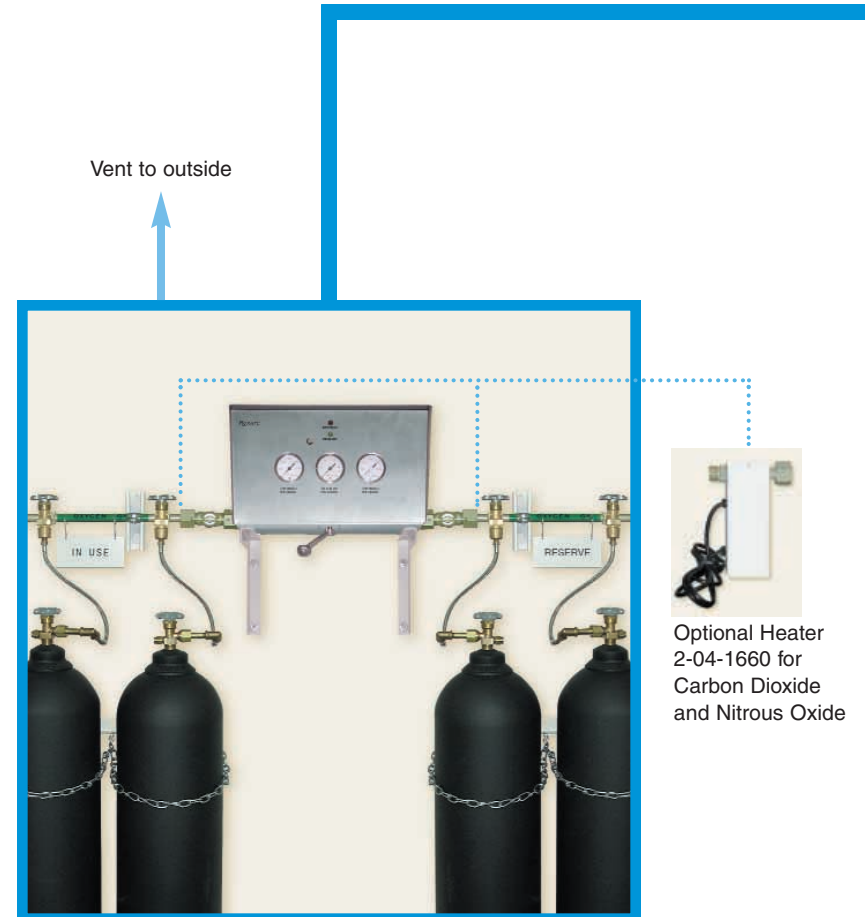
# Rexarc high pressure system (500 scfh)

The headers and delivery piping are manufactured with heavy brass, seamless tubing and are brazed together. To provide maximum safety, they are hydrostatically tested at 1.5 times working pressure. The controller is tested for leaks and is factory preset to NFPA standards. The dual bypass regulators include both the suggested relief vent valve and source shutoff valve.

## Manifold 4-04-0136M ordering information

No. Cyl.	Part No. Medical Gas*	Length	Approx. Shipping Wt. Lbs.
4	4-04-0136M-4	4'-7"	95
6	4-04-0136M-6	6'-3"	100
8	4-04-0136M-8	7'-11"	105
10	4-04-0136M-10	9'-7"	110
12	4-04-0136M-12	11'-3"	115
14	4-04-0136M-14	12'-11"	120
16	4-04-0136M-16	14'-7"	125
18	4-04-0136M-18	16'-3"	130
20	4-04-0136M-20	17'-11"	135

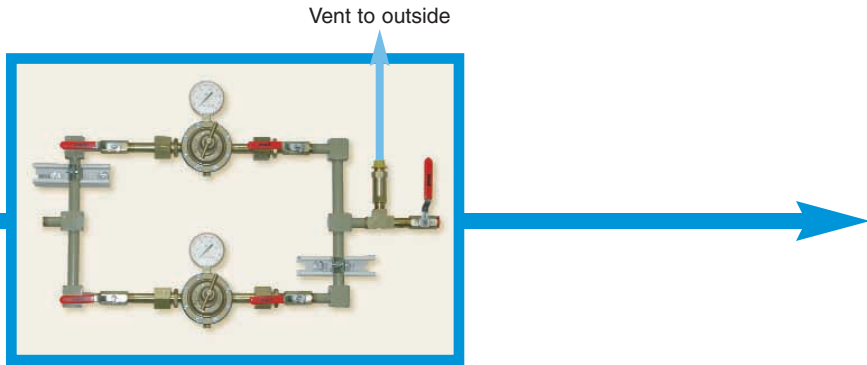
\* Specify gas by name: Oxygen, Nitrogen, Helium, Nitrous Oxide, Breathing Air, Carbon Dioxide.



Optional Heater  
2-04-1660 for  
Carbon Dioxide  
and Nitrous Oxide

## Manifold 4-04-0136M

- High pressure primary
- High pressure reserve
- Automatic changeover
- 3000 psig inlet
- 500 scfh flow

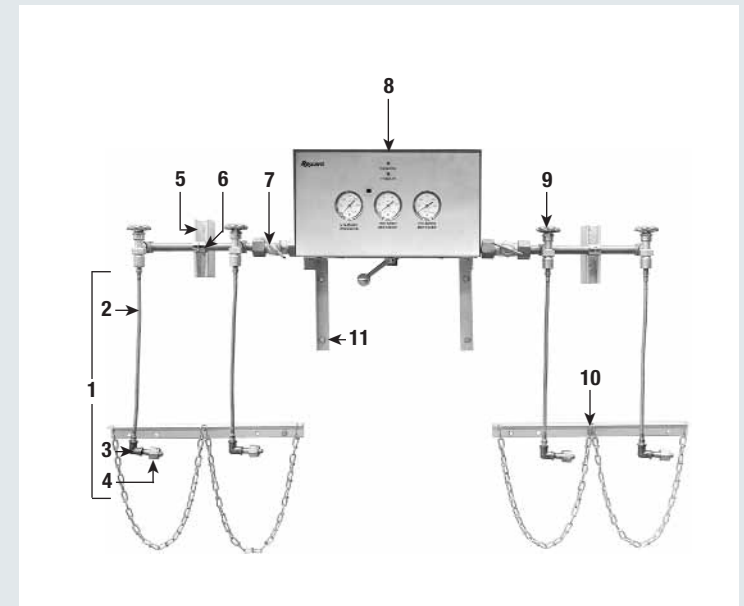


### Dual Bypass Regulators 2-04-1648\*

- Built-in pressure relief vent valve
- Built-in source shutoff valve

\* Specify gas by name

## Replacement parts



### Manifold 4-04-0136M

Ref. No.	Description	Part No.
1	Cylinder Lead Assembly	1-04-1786-CGA-18
1	Cylinder Lead Assembly, Helium only	1-04-2283-580-18
2	Cylinder Lead	1-02-0083-18MM
2	Cylinder Lead, Helium only	1-04-1845-18MM
3	EII	1-04-0115
4	Nut/Nipple, CGA 540, Oxygen	1-04-0181 / 1-04-0180F
4	Nut/Nipple, CGA 580, Nitrogen, Helium	1-04-0277 / 1-04-0131F
4	Nut/Nipple, CGA 326, Nitrous Oxide	1-04-2177 / 1-04-0279F
4	Nut/Nipple, CGA 346, Breathing Air	1-04-2178 / 1-04-0229F
4	Nut/Nipple, CGA 320, Carbon Dioxide	1-04-2134 / 1-04-0191F
4	Teflon Washer, CGA 320	1-04-0192
5	Bracket	1-02-1093-6
6	Clamp	1-02-1078-2
7	Master Shutoff Valve	1-04-1416
8	Control Box*	3-04-0581M
9	Valve	1-04-1708CV
10	Cylinder Rack (Series)	2-04-1184
11	Bracket	2-04-1459

\* Specify gas by name.

### Dual Bypass Regulators 2-04-1648

See replacement parts on back cover.

# Rexarc low pressure cryogenic system with emergency backup

This is an ideal set up for those who prefer the liquid/liquid style manifold and need to update their existing medical gas delivery system. The components of the controller are tested and factory preset to NFPA standards. The controller is constructed using copper tubing and installed in an attractive epoxy painted steel case. NFPA 99 suggests that a high pressure emergency reserve be installed as diagrammed with a minimum of three (3) or one (1) day supply of high pressure cylinders. The dual bypass regulators from Rexarc include both the suggested relief valve and source shutoff valve.

## Manifold 4-04-0147M ordering information

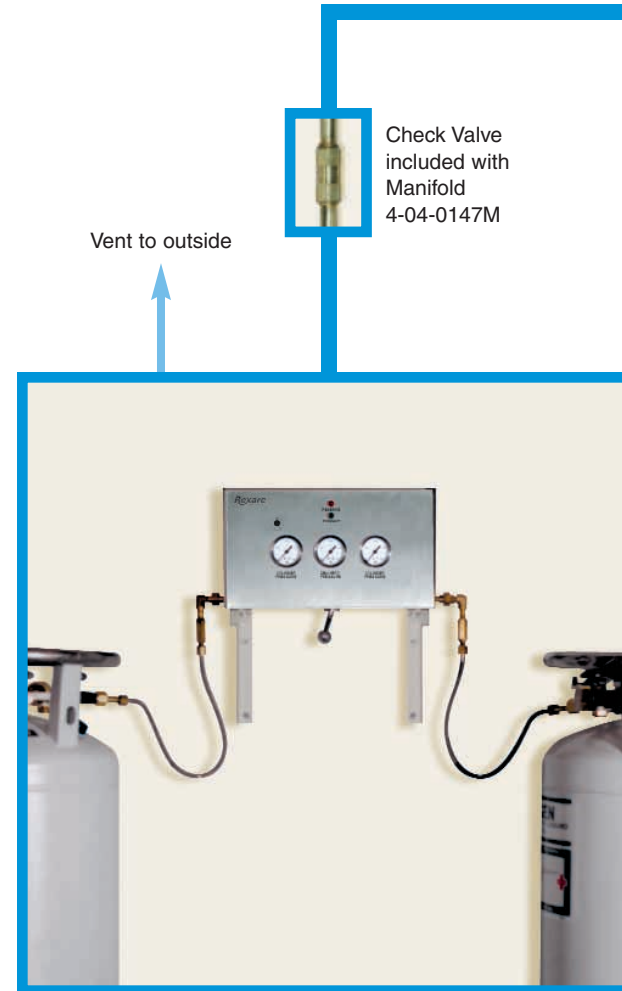
No. Cyl.	Part No. Medical Gas*	Length	Approx. Shipping Wt. Lbs.
2	4-04-0147M-2	3'-3"	100
4	4-04-0147M-4	4'-7"	105
6	4-04-0147M-6	6'-3"	110

\* Specify gas by name: Oxygen, Nitrogen, Helium, Nitrous Oxide, Carbon Dioxide.

## Emergency Backup Manifold 3-04-0417M ordering information

No. Cyl.	Part No. Medical Gas*	Length	Approx. Shipping Wt. Lbs.
3	3-04-0417M-3	2'-11"	98
4	3-04-0417M-4	3'-9"	107
5	3-04-0417M-5	4'-7"	119
6	3-04-0417M-6	5'-5"	150
7	3-04-0417M-7	6'-3"	150
8	3-04-0417M-8	7'-1"	169
9	3-04-0417M-9	7'-11"	178
10	3-04-0417M-10	8'-9"	187

\* Specify gas by name: Oxygen, Nitrogen, Helium, Nitrous Oxide, Carbon Dioxide.

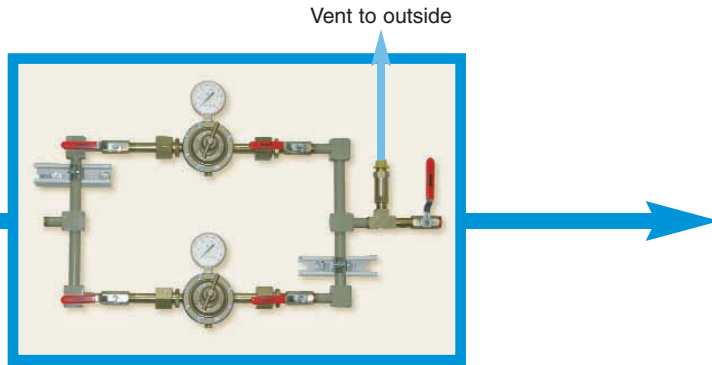


Check Valve included with Manifold 4-04-0147M

Vent to outside

## Manifold 4-04-0147M

- Liquid primary
- Liquid reserve
- Automatic changeover
- 500 scfh flow



### Dual Bypass Regulators 2-04-1648\*

- Built-in pressure relief vent valve
- Built-in source shutoff valve

\* Specify gas by name

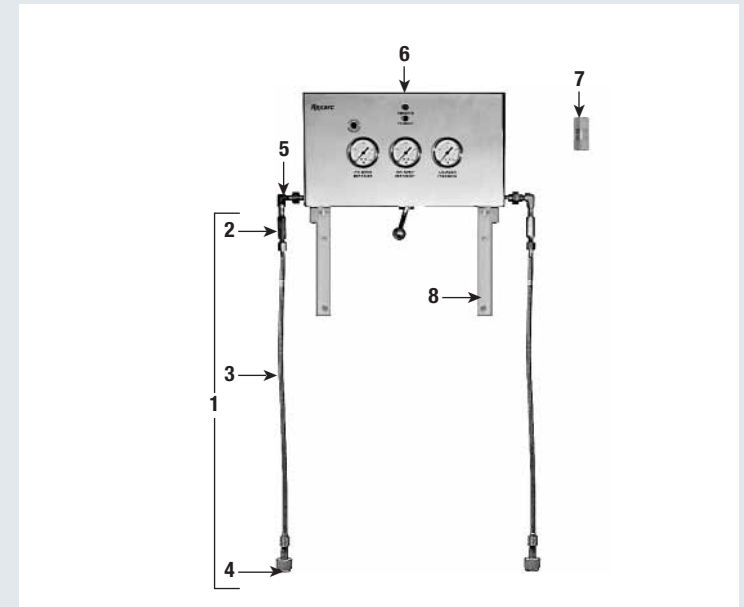


### Emergency Backup Manifold 3-04-0417M

activated automatically when the primary manifold is depleted.

- High pressure
- Built-in check valve

## Replacement parts



### Manifold 4-04-0147M

Ref. No.	Description	Part No.
1	Cylinder Lead Assembly	1-04-2066-CGA-24
1	Cylinder Lead Assembly, Helium only	1-04-2300-580-24
2	Check Valve	2-01-0020
3	Cylinder Lead	1-02-0083-24FF
3	Cylinder Lead, Helium only	1-04-1845-24FF
4	Nut/Nipple, CGA 540, Oxygen	1-04-0181 / 1-04-0180F
4	Nut/Nipple, CGA 580, Nitrogen, Helium	1-04-0277 / 1-04-0131F
4	Nut/Nipple, CGA 326, Nitrous Oxide	1-04-2177 / 1-04-0279F
4	Nut/Nipple, CGA 320, Carbon Dioxide	1-04-2134 / 1-04-0191F
4	Teflon Washer, CGA 320	1-04-0192
5	Header, 1 cylinder	1-04-2065-1
5	Header, 2 cylinder	1-04-2065-2
5	Header, 3 cylinder	1-04-2065-3
6	Control Box*	3-04-0600-1M
7	Check Valve	2-01-0080-3
8	Bracket	2-04-1459

\* Specify gas by name.

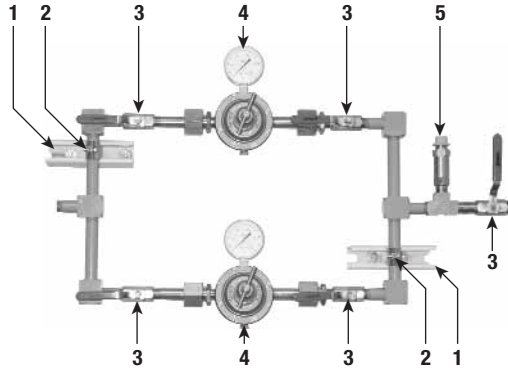
### Emergency Backup Manifold 3-04-0417M

See replacement parts on back cover.

### Dual Bypass Regulators 2-04-1648

See replacement parts on back cover.

## Replacement parts

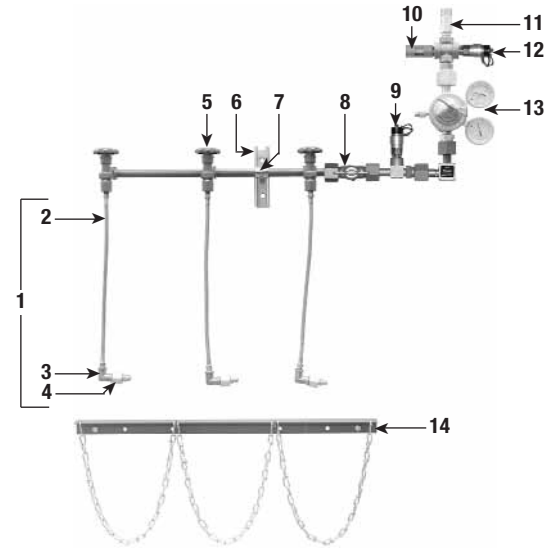


### Dual Bypass Regulators 2-04-1648

Ref. No.	Description	Part No.	
		75 psig delivery	200 psig delivery
1	Bracket	1-02-1093-6	1-02-1093-6
2	Clamp	1-02-1078-2	1-02-1078-2
3	Valve	1-02-1198-2	1-02-1198-2
4	Regulator*	7200 Series	1-04-2196
5	Safety Relief Valve	1-04-0104-75	1-04-0104-200

\* Specify gas by name.

## Replacement parts



### Emergency Backup Manifold 3-04-0417M

Ref. No.	Description	Part No.
1	Cylinder Lead Assembly	1-04-1786-CGA-18
1	Cylinder Lead Assembly, Helium only	1-04-2283-580-18
2	Cylinder Lead	1-02-0083-18MM
2	Cylinder Lead, Helium only	1-04-1845-18MM
3	Ell	1-04-0115
4	Nut/Nipple, CGA 540, Oxygen	1-04-0181 / 1-04-0180F
4	Nut/Nipple, CGA 580, Nitrogen, Helium	1-04-0277 / 1-04-0131F
4	Nut/Nipple, CGA 326, Nitrous Oxide	1-04-2177 / 1-04-0279F
4	Nut/Nipple, CGA 346, Breathing Air	1-04-2178 / 1-04-0229F
4	Nut/Nipple, CGA 320, Carbon Dioxide	1-04-2134 / 1-04-0191F
4	Teflon Washer, CGA 320	1-04-0192
5	Valve	1-04-1708CV
6	Wall Mounting Bracket	1-02-1093-6
7	Clamp	1-02-1078-2
8	Master Shutoff Valve	1-04-1416
9	Pressure Switch	1-04-2293-2
10	Check Valve	2-01-0080-3
11	Relief Valve	1-04-0104-200
12	Pressure Switch	1-04-2293-1
13	Regulator, Oxygen, Nitrogen, Breathing Air, Helium	1-04-0281
13	Regulator, Carbon Dioxide, Nitrous Oxide	1-04-0285
14	Cylinder Rack (Series)	2-04-1184

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