

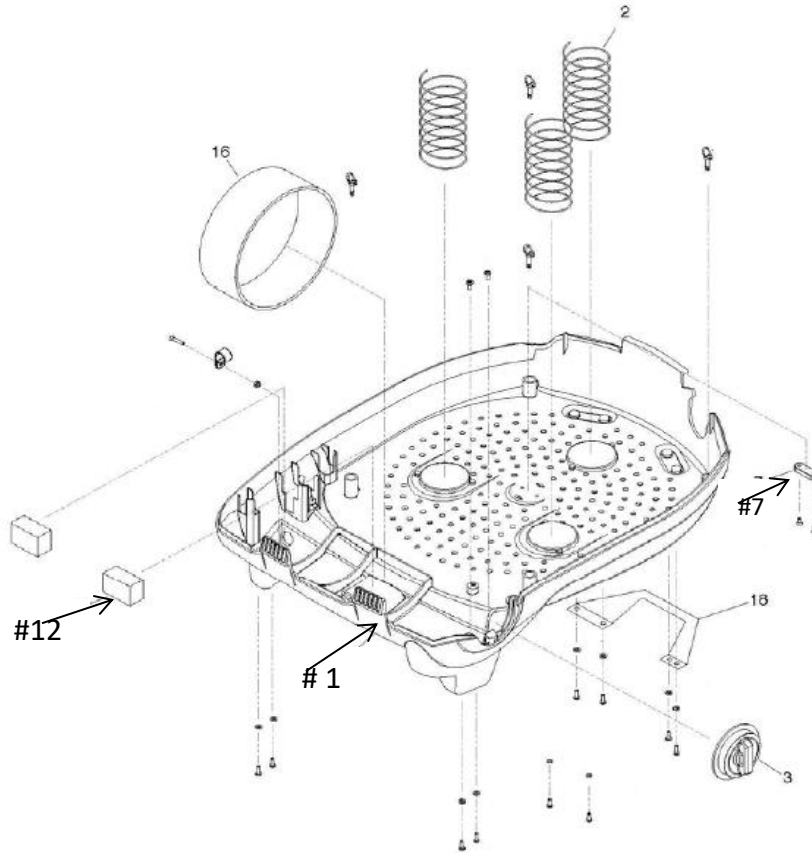
2015 Tri State Ohio Valley Mine Rescue
NMRA Post # 6
Bio-Pak 240 R Written Examination

1. Oxygen will ____ cause materials to _____ without the presence of an ignition source.
always, ignite not, ignite sometimes, burn
2. A _____ gas may cause cylinder corrosion.
Inert explosive foreign
3. Always ____ for a current _____ test date.
look, manufacturers check, hydrostatic check, manufacturers
4. Replace the battery when the low battery alarm has activated, after ____ ____ of use or every 6 months whichever comes first.
100, hours 200, days 200, hours
5. The usual scrubber consists of _____ and a ____ core. Do not reuse previously used CO₂ absorbent cartridges or the rubber gaskets.
pumice, paper limestone, paper limestone, plastic
6. Allow all components to remain ____ by the cleaning solution a minimum of 10 minutes.
wetted moist soaked
7. Apply anti-fog solution or ____ to both halves of the _____ before every use to ensure mask lens do not scratch.
water, felt water, chamois soap, chamois
8. Do not expose opened CO₂ scrubber cartridges to _____ air for more than 20 minutes.
outside dry ambient
9. Install each CO₂ canister into the SCBA so that the ____ end cap is _____ on the top side of the canister.
red, looking blue, visible red, visible
10. A low battery alarm is indicated by a Red, Green, Blue light sequence followed by a ____ alarm ____ any time the battery will not complete a four-hour mission.
momentary, beep short, beep short, chirp
11. If a quick Turn-Around _____ has been performed, the SCBA will function and is designed to work wet.

- Cleaning Maintenance Testing
12. The RMS will automatically ____ ____ once the system pressure has dropped below 25 psig.
 power, down turn, off power, up
13. ____-____ and Dow-111 are the only o-ring lubricants that shall be utilized on the SCBA components.
 Cristo-Grease Silicone-Lube Cristo-Lube
14. There are __ user serviceable components on the oxygen cylinder assembly
 two no one
15. High breathing _____ during _____ could be caused by the facepiece exhalation valve sticking closed.
 rates, inhalation rates, exhalation resistance, exhalation
16. High breathing resistance during inhalation could be caused by the facepiece _____ check valve sticking closed.
 inhalation exhalation breathing
17. High breathing _____ during _____ could be caused by the demand valve in breathing chamber has failed.
 resistance, exhalation resistance, inhalation rates, breathing
18. BioPak weight, ready to use is __ pounds.
 43 34 36
19. BioPak Carbon Dioxide Scrubber is Dual, single use _____ _____ cartridges, non-dusting, non-channeling, non-hazardous.
 Limestone Pellets Calcium Hydroxide Calcium Pellets
20. The CO₂ Scrubber should be replaced after __ use.
 every one 1

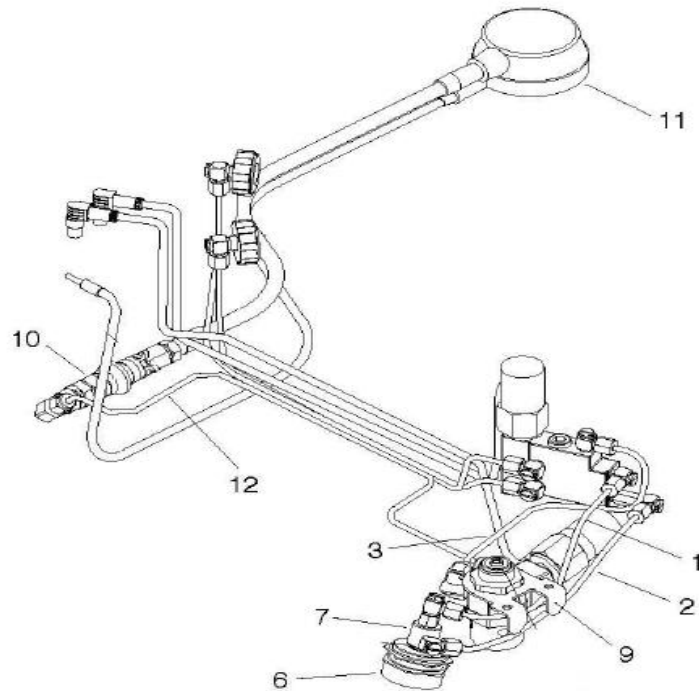
Tri State Ohio Valley Mine Rescue Contest
Bio-Pak 240 R
Identification of Parts Test of the Written Exam

Lower Housing Assembly



- | | |
|-------------------|--|
| 21. Identify # 1 | A. Upper Housing Shell B. Lower Hosing Shell C. Lower Case Shell |
| 22. Identify # 7 | A. Shell Spacer B. Aluminum Spacer C. Vent Spacer |
| 23. Identify # 12 | A. Shell Foam Spacer B. Latch Foam Pad C. Moisture Pads |

Pneumatic Assembly



24. Identify # 1

- A. Bypass Supply Line
- B. Bypass Feed Tube
- C. Bypass Oxygen Line

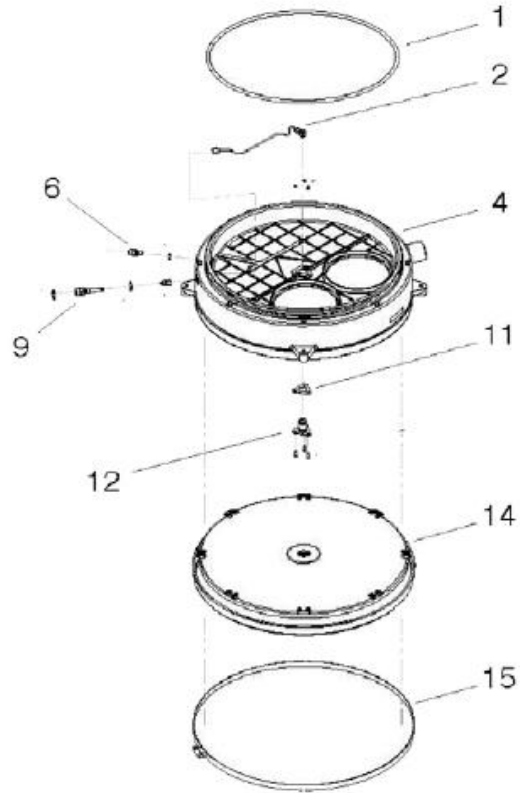
25. Identify # 3

- A. Oxygen Feed Tube
- B. Oxygen Feed Line
- C. Oxygen Feed Branch

26. Identify # 9

- A. Oxygen Regulator Gage
- B. Air Regulator Monitor
- C. Oxygen Regulator Assembly

Center Section Assembly



27. Identify # 2

- A. Oxygen Supply Line
- B. Demand Feed Tube
- C. Oxygen Feed Tube

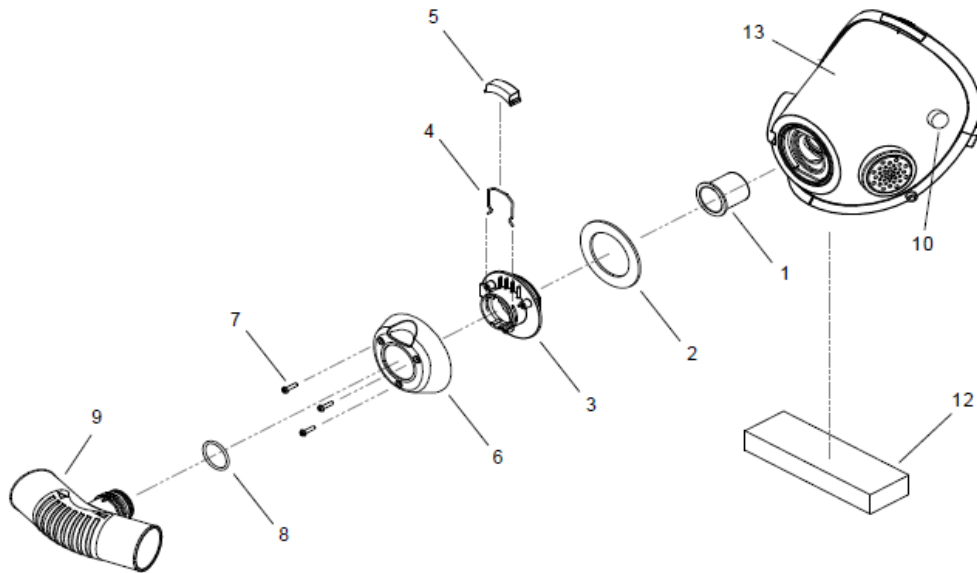
28. Identify # 9

- A. Demand Add Line
- B. Demand Add Fitting
- C. Demand Add Fixture

29. Identify # 14

- A. Breathing Diaphragm
- B. Flexible Shell
- C. Flexible Diaphragm

AV3500 Facemask-Complete



30. Identify # 9

- A. AV 3500 Facepiece Adapter
- B. AV 3500 Facepiece Connector
- C. AV 3500 Hose Adapter

2015 Tri State Ohio Valley Mine Rescue

NMRA Post # 6

Bio-Pak 240 R Written Examination

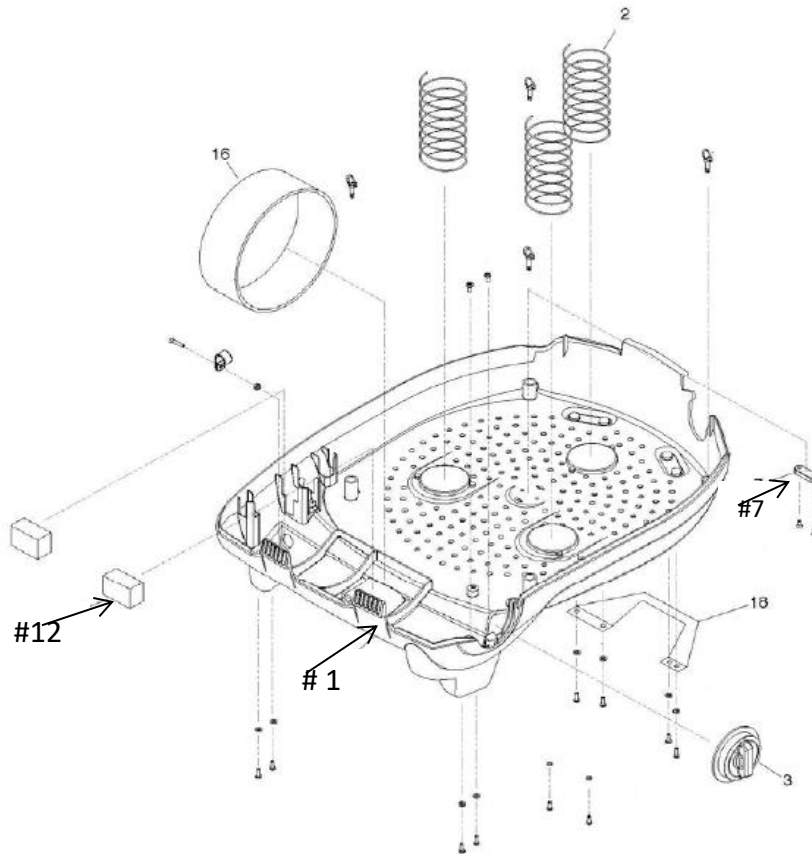
ANSWERS

- Oxygen will ____ cause materials to ____ without the presence of an ignition source.
always, ignite **not, ignite** sometimes, burn (SF #9)
- A ____ gas may cause cylinder corrosion. (SF#14)
Inert explosive **foreign**
- Always ____ for a current ____ test date.
look, manufacturers **check, hydrostatic** check, manufacturers (SF # 15)
- Replace the battery when the low battery alarm has activated, after ____ of use or every 6 months whichever comes first.
100, hours 200, days **200, hours** (SF # 20)
- The usual scrubber consists of ____ and a ____ core. Do not reuse previously used CO₂ absorbent cartridges or the rubber gaskets.
pumice, paper limestone, paper **limestone, plastic** (SF # 25)
- Allow all components to remain ____ by the cleaning solution a minimum of 10 minutes.
wetted moist soaked (SF # 31)
- Apply anti-fog solution or ____ to both halves of the ____ before every use to ensure mask lens do not scratch.
water, felt **water, chamois** soap, chamois (SF # 35)
- Do not expose opened CO₂ scrubber cartridges to ____ air for more than 20 minutes.
outside dry **ambient** (SF # 39)
- Install each CO₂ canister into the SCBA so that the ____ end cap is ____ on the top side of the canister.
red, looking blue, visible **red, visible** (SF # 41)

10. A low battery alarm is indicated by a Red, Green, Blue light sequence followed by a ___ alarm ___ any time the battery will not complete a four-hour mission.
 momentary, beep short, beep **short, chirp** (SF # 47)
11. If a quick Turn-Around _____ has been performed, the SCBA will function and is designed to work wet.
 Cleaning **Maintenance** Testing (SF # 51)
12. The RMS will automatically ___ ___ once the system pressure has dropped below 25 psig.
power, down turn, off power, up (SF # 54)
13. ___-___ and Dow-111 are the only o-ring lubricants that shall be utilized on the SCBA components.
 Cristo-Grease Silicone-Lube **Cristo-Lube** (SF # 56)
14. There are ___ user serviceable components on the oxygen cylinder assembly
 two **no** one (SF#58)
15. High breathing _____ during _____ could be caused by the facepiece exhalation valve sticking closed.
 rates, inhalation rates, exhalation **resistance, exhalation** (SF 68)
16. High breathing resistance during inhalation could be caused by the facepiece _____ check valve sticking closed.
inhalation exhalation breathing (SF # 71)
17. High breathing _____ during _____ could be caused by the demand valve in breathing chamber has failed.
 resistance, exhalation **resistance, inhalation** rates, breathing(SF73)
18. BioPak weight, ready to use is ___ pounds.
 43 **34** 36 (SF # 76)
19. BioPak Carbon Dioxide Scrubber is Dual, single use _____ _____ cartridges, non-dusting, non-channeling, non-hazardous.
 Limestone Pellets **Calcium Hydroxide** Calcium Pellets (SF # 78)
20. The CO₂ Scrubber should be replaced after ___ use.
 every multiple **1** (SF # 85)

Tri State Ohio Valley Mine Rescue Contest
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21. Identify # 1

- A. Upper Housing Shell
- B. Lower Hosing Shell
- C. Lower Case Shell

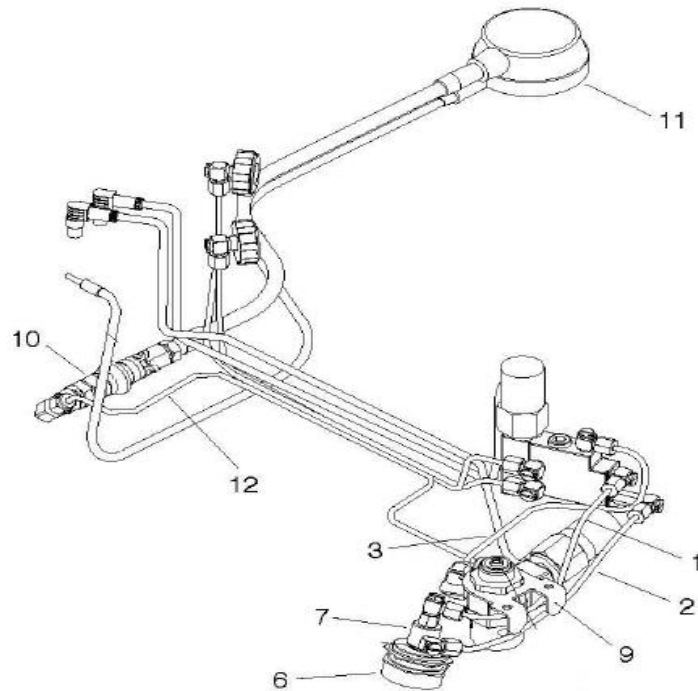
22. Identify # 7

- A. Shell Spacer
- B. Aluminum Spacer
- C. Vent Spacer

23. Identify # 12

- A. Shell Foam Spacer
- B. Latch Foam Pad
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- B. Bypass Feed Tube
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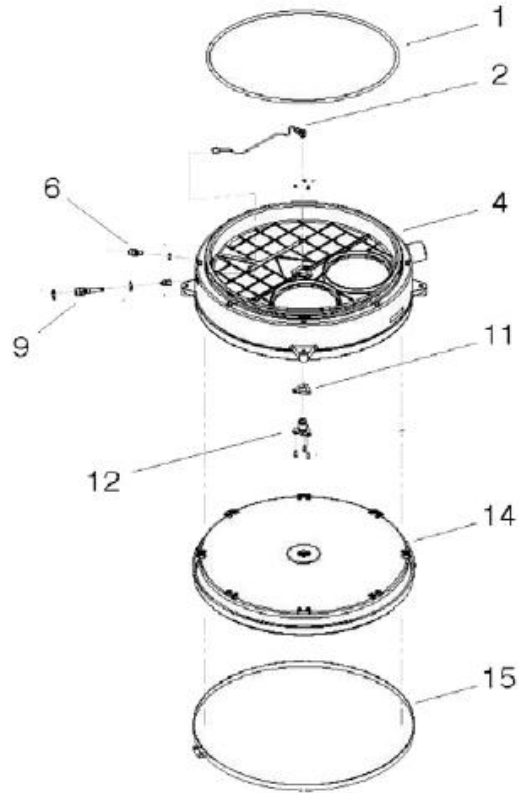
25. Identify # 3

- A. Oxygen Feed Tube
- B. Oxygen Feed Line
- C. Oxygen Feed Branch

26. Identify # 9

- A. Oxygen Regulator Gage
- B. Air Regulator Monitor
- C. Oxygen Regulator Assembly

Center Section Assembly



27. Identify # 2

- A. Oxygen Supply Line
- B. Demand Feed Tube
- C. Oxygen Feed Tube

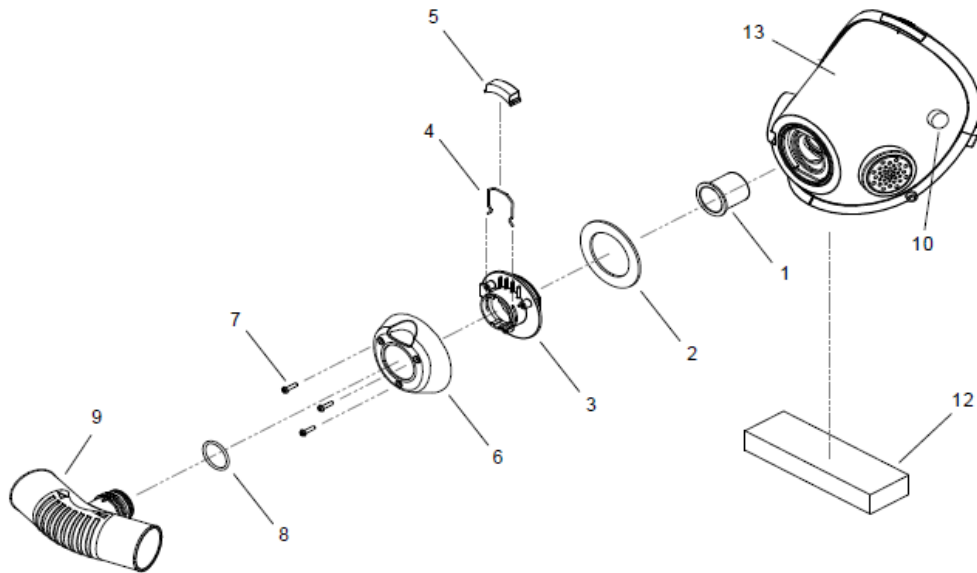
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- B. Demand Add Fitting
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AV3500 Facemask-Complete



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- B. AV 3500 Facepiece Connector
- C. AV 3500 Hose Adapter