

December 2023 Med Tips

Don't miss out on our upcoming Service Schools!

CAIRE Service School Trainings and Webinars 2024

CAIRE offers In-person and Virtual Service Schools covering both LOX and Concentrator lines.

Each class is a comprehensive program that focuses on the technical and service aspects of the CAIRE family products. Class time is divided between lecture and hands-on workshops. The seminars will help the student develop a better understanding of how liquid oxygen equipment or concentrators work, how to identify the symptoms and causes of potential problems and how to use the technical information that is available in the Technical Manuals. Registration for CAIRE's Service Schools is mandatory. Registration forms must be received two weeks prior to the start of the class in order to guarantee availability and materials.

Table 1 - Details of upcoming training.

| Туре | Language | Location | Training Dates | Registration by | Training Type |
|--------------|----------|---------------------|-------------------|-----------------|---------------|
| LOX Germany | German | Langenfeld, Germany | 20 February-24 | 01-February | In person |
| Conc Germany | German | Langenfeld, Germany | 21-22 February-24 | 01-February | In person |
| LOX France | French | Toulouse, France | 5 March-24 | 15-February | In person |
| Conc France | French | Toulouse, France | 06-07 March-24 | 15-February | In person |
| LOX ITA | Italian | Padova, ITA | 20 March-24 | 28-February | In person |
| LOX LATEM | Spanish | Latin America | 16 April-24 | 20-March | Remote** |
| Conc LATEM | Spanish | Latin America | 17-18 April-24 | 20-March | Remote** |
| Conc USA | English | Ball Ground, GA USA | 15-17 April-24 | 22-March | In person |
| LOX USA | English | Ball Ground, GA USA | 18 April-24 | 22-March | In person |
| LOX Germany | German | Langenfeld, Germany | 16 May-24 | 25-April | In person |
| LOX France | Spanish | Toulouse, France | 18 May-24 | 28-April | In person |
| Conc France | Spanish | Toulouse, France | 19-20 May-24 | 28-April | In person |
| Conc ITA | Italian | Padova, ITA | 05-06 June-24 | 25-April | In person |
| LOX UK | English | Langenfeld, Germany | 25 June-24 | 05-June | In person |
| Conc UK | English | Langenfeld, Germany | 26-27 June-24 | 05-June | In person |
| LOX Germany | German | Langenfeld, Germany | 13 August-24 | 19-July | In person |
| Conc Germany | German | Langenfeld, Germany | 14-15 August-24 | 19-July | In person |
| Conc USA | English | Ball Ground, GA USA | 12-14 August-24 | 19-July | In person |
| LOX USA | English | Ball Ground, GA USA | 15 August-24 | 19-July | In person |
| LOX France | French | Toulouse, France | 17 Sept-24 | 25-August | In person |
| Conc France | French | Toulouse, France | 18-19 Sept-24 | 15-August | In person |
| LOX ITA | Italian | Padova, ITA | 23 October-24 | 01-October | In person |
| LOX UK | English | Toulouse, France | 15 October-24 | 20-September | Remote** |



| Conc UK | English | Toulouse, France | 16-17 Octoner-24 | 20-September | Remote** |
|-------------|---------|---------------------|------------------|--------------|-----------|
| Conc USA | English | Ball Ground, GA USA | 04-06 Nov-24 | 11-October | In person |
| LOX USA | English | Ball Ground, GA USA | 07 Nov-24 | 11-October | In person |
| LOX Germany | German | Langenfeld, Germany | 28 November-24 | 08-November | In person |

^{*}We reserve the right to cancel training seminars at short notice. Customers should ensure that they take necessary precautions to ensure costs are covered in case of cancellation.

Concentrator Service School Topics include:

- Concentrator hazards and safety precautions
- Principles of pressure, flow, and saturation
- Functions of the major components of a portable/stationary concentrator
- Theory of operation
- Set up and use of test equipment
- Troubleshooting, repair and performance verification/testing procedures

LOX Service School Topics include:

- Liquid oxygen (LOX) hazards and safety precautions
- Principles of pressure, flow and liquid oxygen saturation
- Functions of the major components of a liquid oxygen system
- HELiOS[™] system theory of operation
- Reservoir and portable filling procedures
- Set up and use of test equipment

Please submit your registrations forms no later than the dates in Table 1 above. If you are interested in the service schools mentioned above, and it is past the registration date, please reach out to the registration emails below. Please note that as travel restrictions, and Covid-related guidelines evolve, we intend to restore CAIRE Service School to in person.

To register for Service School, please email:

<u>Techservice.global@caireinc.com</u> for USA Training or <u>jim.gibson@caireinc.com</u> for European Training.

PRODUCT UPDATES

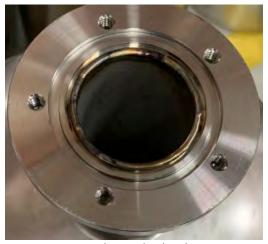
Liberator® 20, 30, 37 and 45 models change of design, Neck Tube

CAIRE® would like to notify our valued customers that as part of our drive for continuous product improvements, we have changed the design used for the neck tube on the above model Liberator Liquid

^{**} Training will be in the form of a Webinar.



Oxygen equipment's. The previous bellows neck tube assembly design will be replaced by a more robust all stainless steel tube design. See Figure 1. below for details.



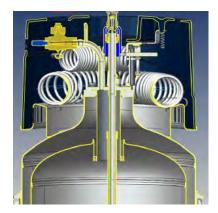




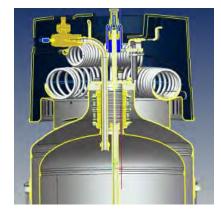
Old style bellows neck tube design

Figure 1.

As part of this design change, the manifold assembly will no longer require the extended vent tube and ullage will be controlled by the length of the neck tube. See Figure 2. below for details.



Section View robust all stainless steel tube design without extended vent tube



Section View bellows neck tube assembly with extended vent tube

Figure 2.

Customers who fit a service Dewar with a solid neck tube can still use the older manifold and do not need to upgrade the manifold assembly. When using an older manifold with the extended vent tube, the Oeitiker clamp and Teflon tube must be removed prior to fitting. See Figure 3.



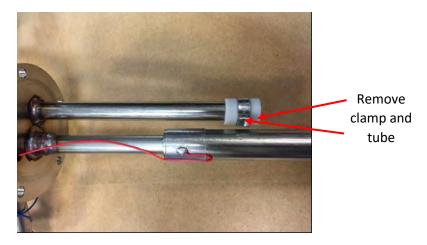


Figure 3.

For further information please contact the Technical Service Team. Service bulletin 21498112.

LOX Label Service Kits

CAIRE has created symbolic labels for all LOX reservoirs and portable units. Prior to this change, CAIRE maintained a large variety of LOX labels in stock due to the number of different languages throughout our markets. The use of symbolic labels on LOX reservoirs and portables will greatly reduce the number of labels that are currently required.

In Europe, when replacing labelling on any CAIRE medical device, it is a regulatory requirement that the number of the notified body who authorized the medical device at the time of manufacture not be modified. In order to assist our European customers, CAIRE Inc. has created service kits for each unit type. The service kits are specific to the appropriate CE markings that are required for each unit. The CE requirements are based on the model and the age of the device. The European kits will include a symbolic warning label, a reference guide for the symbols, and a replacement CE label. U.S. customers are not required to maintain CE labelling on LOX reservoirs and portables. Because of this, CAIRE has created separate U.S. label service kits that only include the symbolic warning label and a reference guide for the symbols.

Please refer to Service Bulletin PN 21174579.

Helpful Hints & FAQs

CAIRE® Liquid Oxygen Transport Accessories



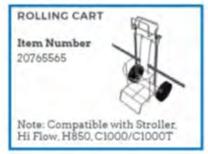
https://www.caireinc.com/providers/business-support-programs/knowledge-center/

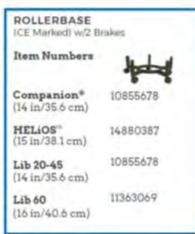
CAIRE® Liquid Oxygen Transport Accessories

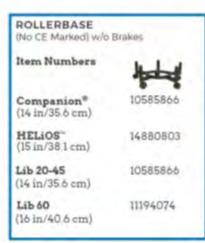
















Med Tips Distribution!

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Please click this link - http://go.pardot.com/l/710913/2022-01-17/2pgcj9 - and provide us with your current information. Thank you and we appreciate your support.

CONTACT: For technical questions or concerns, contact Technical Service:

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Please consult the applicable product instructions for use for product indications, contraindications, warnings, precautions, and detailed safety information.

Service Bulletin



PN 21498112 B

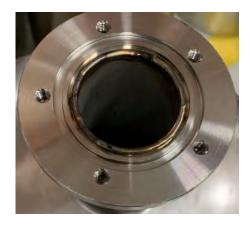
RELEASE DATE: November 07, 2023

MODEL: Liberator® 20, 30, 37 and 45 models

ISSUE: Change of design, Neck Tube.

NOTES: CAIRE® would like to notify our valued customers that as part of our drive for

continuous product improvements, we have changed the design used for the neck tube on the above model Liberator Liquid Oxygen equipment's. The previous bellows neck tube assembly design will be replaced by a more robust all stainless steel tube design. See Figure 1. below for details.



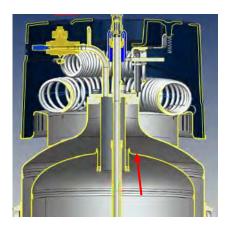


New style steel tube design

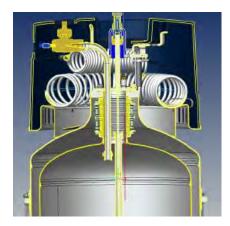
Old style bellows neck tube design

Figure 1.

As part of this design change, the manifold assembly will no longer require the extended vent tube and ullage will be controlled by the length of the neck tube. See Figure 2. below for details



Section View robust all stainless steel tube design without extended vent tube



Section View bellows neck tube assembly with extended vent tube

Figure 2.

Customers who fit a service Dewar with a solid neck tube can still use the older manifold and do not need to upgrade the manifold assembly. When using an older manifold with the extended vent tube, the Oeitiker clamp and Teflon tube must be removed prior to fitting. See Figure 3.



Figure 3.

A suitable tool for removal of the clamp will need to be purchased locally. CAIRE recommends to use the following tool and procedure for removing the clamp.

Tool – Oetiker HCC 7000 | 709 or Oetiker HCC 2000 | 407 (Locally sourced)

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Note: Ensure that whilst cutting the clamp that eye protection is worn

Hold the manifold securely and using the clamp cutters, remove the metal Oetiker Clamp and discard.



Remove the Teflon tubing and discard.



Inspect the tubing for damage and the manifold can now be re-fitted to the equipment as required.

New style Manifolds without the extended vent tube cannot be used on older model Dewars fitted with the bellow neck tubes. Part numbers for the various types of manifolds are shown below in table 1.

Service Bulletin



| Equipment Type | Manifold Old | Manifold New |
|----------------|--------------|--------------|
| Liberator 20 | 15096375 | 20583547 |
| Liberator 30 | 15096164 | 20583576 |
| Liberator 37 | 15096130 | 20583577 |
| Liberator 45 | 15096113 | 20583576 |

Table 1. – Manifold Part Numbers

Note* This design change will not affect Liberator 60 models.

For further information please contact the Technical Service Team.

CONTACT: For technical questions or concerns, contact Technical Service:

USA: 800-482-2473

Europe: +44 (0) 118 936 7060 techservice.global@caireinc.com

For ordering information or general inquires, contact Customer Service:

USA: 800-482-2473

customerservice.usa@caireinc.com
Europe: +44 (0) 118 936 7060
customerservice.europe@caireinc.com

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SERVICE BULLETIN

PN: 21174579

RELEASE DATE: July 3, 2017

REVISION DATE(S): September 29, 2017 (Rev B), March 15, 2019 (Rev C), March 01, 2020 (Rev D),

December 05, 2022 (Rev E).

MODEL: All LOX Portables and Reservoirs

ISSUE: LOX label service kits

NOTES: CAIRE has created new symbolic labels for all LOX reservoirs and

portable units. Prior to this change, CAIRE maintained a large variety of LOX labels in stock due to the number of different languages throughout our markets. The use of symbolic labels on LOX reservoirs and portables will greatly reduce the number of labels that are currently required. In Europe, when replacing labelling on any CAIRE medical device, it is a regulatory requirement that the number of the notified body who authorized the medical device at the time of manufacture not be modified. In order to assist our European customers, CAIRE Inc. has created service kits for each unit type. The service kits are specific to the appropriate CE markings that are required for each unit.

The CE requirements are based on the model and the age of the device. The European kits will include a symbolic warning label, a reference guide for the symbols, and a replacement CE label. U.S. customers are not required to maintain CE labeling on LOX reservoirs and portables. Because of this, CAIRE has created separate U.S. label service kits that only include the symbolic warning label and a reference guide for the symbols.

The tables below detail the applicable service kits for reservoirs and portable units. European customers can determine the age of manufacture by referencing each unit's serial number. Diagrams are also provided below that show the location where each label in the kit should be applied.

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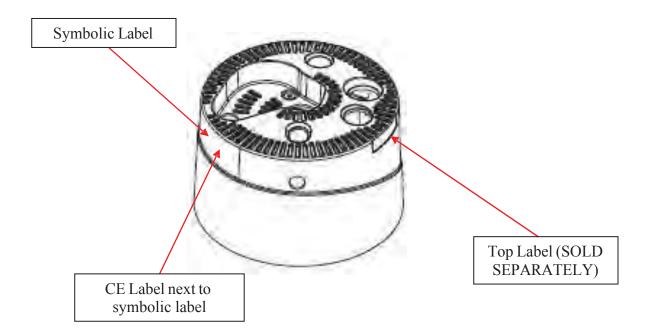
Non-CE Mark Kits (for the U.S.A and any country which does not require CE marked products)

| Model | Label Service Kit Part Number |
|-----------------------------|-------------------------------|
| Liberator | 21194752 |
| Stroller, Sprint, Spirit | 21194754 |
| H300 / Plus | 21194757 |
| HELiOS Standard Reservoirs | 21194755 |
| HELiOS Universal Reservoirs | 21194758 |
| H850 / Marathon | 21194759 |
| C1000/C1000T | 21194760 |
| Companion Reservoirs | 21194761 |

European Kits:

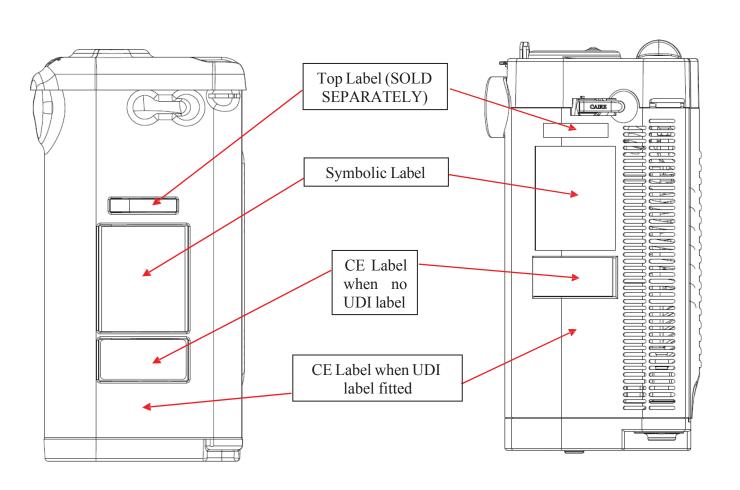
| Liberator | Date Range | SN format | Range |
|---|-----------------------------|--|--|
| | Prior 2006 | For Liberators manufactured before 2006, the serial number was nine or ten numerical digits. | All numerical only serial numbers. |
| CE0029 | | CB B30 10 29 0964 | CBB3006XXXXXX- CBB301618XXXX |
| Label Kit Ref: 21152753 | 2006 - May 7, 2016 | Designates Designates Designates Designates Manufacturing Reservoir Year Week of Number Location Product the Year of Specific Code Unit Produced that Week | X=any value |
| CE0459 Label Kit Ref: 21150538 | May 9, 2016 - Present | CB B30 10 29 0964 Designates Designates Designates Designates Designates Manufacturing Reservoir Product Code That Week of Unit Produced that Week | CBB301619XXXX- Present X=any value |

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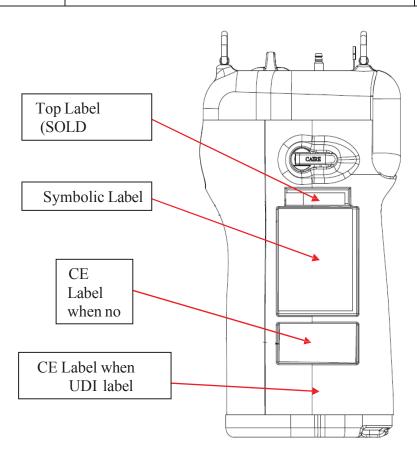
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| Stroller / Sprint / Hi- Flow | Date Range | SN format | Range |
|---|-----------------------------|--|--|
| | Prior 2006 | For Strollers and Sprints manufactured before 2006, the serial number was nine or ten numerical digits. | All numerical only serial numbers. |
| CE0029 Label Kit Ref: 21152754 | 2006 - May 7, 2016 | CB B31 10 29 0964 Designates Designates Designates Designates Designates Manufacturing Reservoir Year Week of Number Location Product the Year of Specific Unit Produced that Week | CBB3106XXXXXX- CBB311618XXXX X=any value |
| CE0459 Label Kit Ref: 21150537 | May 9, 2016 - Present | CB B31 10 29 0964 Designates Des | CBB311619XXXX- Present X=any value |



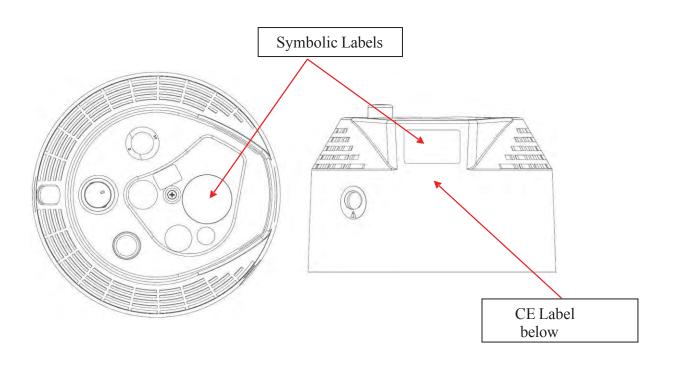
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| Spirit | Date Range | SN format | Range |
|---|-----------------------------|--|---|
| | Prior 2006 | For Spirits manufactured before 2006, the serial number was nine or ten numerical digits. | All numerical only serial numbers. |
| CE0029 Label Kit Ref: 21152754 | 2006 - May 7, 2016 | CB B37 10 29 0964 Designates Designates Designates Designates Designates Manufacturing Reservoir Year Week of Number the Year of Specific Unit Produced that Week | CBB3706XXXXX- CBB371618XXXX X=any value |
| CE0459 Label Kit Ref: 21150537 | May 9, 2016 - Present | Designates Designates Designates Designates Designates Manufacturing Reservoir Product Code Designates Designa | CBB371619XXXX- Present X=any value |



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| Companion Reservoirs | Date Range | SN format | Range |
|---|-----------------------------------|--|--|
| CE0050 Label Kit Ref: 21150541 | Prior March 2010 | For Companion Reservoir units manufactured before March 2010, the serial number was five or eight numerical digits. | All numerical only serial numbers. |
| CE0029 Label Kit Ref: 21152758 | March 2010 - May 7, 2016 | CB B30 10 29 0964 Designates Designates Designates Designates Manufacturing Reservoir Year Week of Number the Year of Specific Code Unit Produced that Week | CBB3010XXXXXX- CBB301618XXXX X=any value |
| CE0459 Label Kit Ref: 21152849 | May 9, 2016 - Present | CB B30 10 29 0964 Designates Des | CBB301619XXXX- Present X=any value |



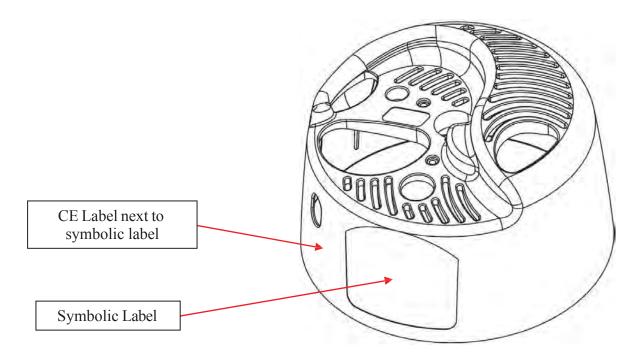
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| Helios Standard Reservoirs (H36/H46) | Date Range | SN format | Range |
|---|-----------------------------------|--|--|
| CE0050 Label Kit Ref: 21150539 | Prior March 2010 | For Helios Standard Reservoir units manufactured before March 2010, the serial number was five or eight numerical digits. | All numerical only serial numbers. |
| CE0029 Label Kit Ref: 21152759 | March 2010 - May 7, 2016 | CB B30 10 29 0964 Designates Designates Designates Designates Manufacturing Reservoir Product Code That Produced that Week | CBB3007XXXXXX- CBB301618XXXX X=any value |
| CE0459 Label Kit Ref: 21152755 | May 9, 2016 - Present | CB B30 10 29 0964 Designates Des | CBB301619XXXX- Present X=any value |

| Helios Universal Reservoirs (U36/U46) | Date Range | SN format | Range |
|--|-----------------------------------|---|--|
| CE0050 Label Kit Ref: 2115300 4 | Prior March 2010 | For Helios Universal Reservoir units manufactured before March 2010, the serial number was five or eight numerical digits. | All numerical only serial numbers. |
| CE0029 Label Kit Ref: 2115300 6 | March 2010 - May 7, 2016 | CB B30 10 29 0964 Designates Designates Designates Designates Designates Manufacturing Reservoir Product Code Code Unit Produced that Week | CBB3010XXXXXX- CBB301618XXXX X=any value |

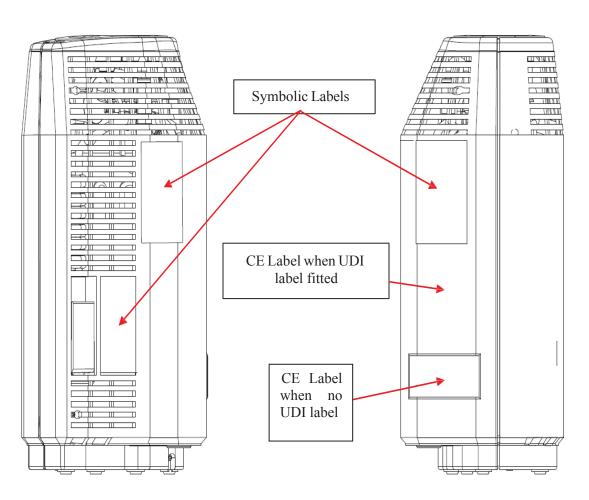
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CBB301619XXXX-CB B30 10 29 0964 Present CE0459 X=any value May 9, Designates Designates Designates Designates **Label Kit** 2016 -Week of Manufacturing Reservoir Year Number the Year of Specific Ref: Present Location Product 2115300 Unit Code Produced 5 that Week



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| Companion Portable (C1000/C1000T) | Date Range | SN format | Range |
|---|-----------------------------------|---|--|
| CE0050 Label Kit Ref: 21150701 | Prior March 2010 | For Companion Portable units manufactured before March 2010, the serial number was five or eight numerical digits. | All numerical only serial numbers. |
| CE0029 Label Kit Ref: 21131485 | March 2010 - May 7, 2016 | CB B31 10 29 0964 Designates Designates Designates Designates Designates Manufacturing Reservoir Year Week of Number the Year of Specific Code Unit Produced that Week | CBB3110XXXXXX- CBB311618XXXX X=any value |
| CE0459 Label Kit Ref: 21152747 | May 9, 2016 - Present | CB B31 10 29 0964 Designates Designates Designates Designates Designates Manufacturing Reservoir Year Week of Number the Year of Specific Unit Produced that Week | CBB311619XXXX- Present X=any value |

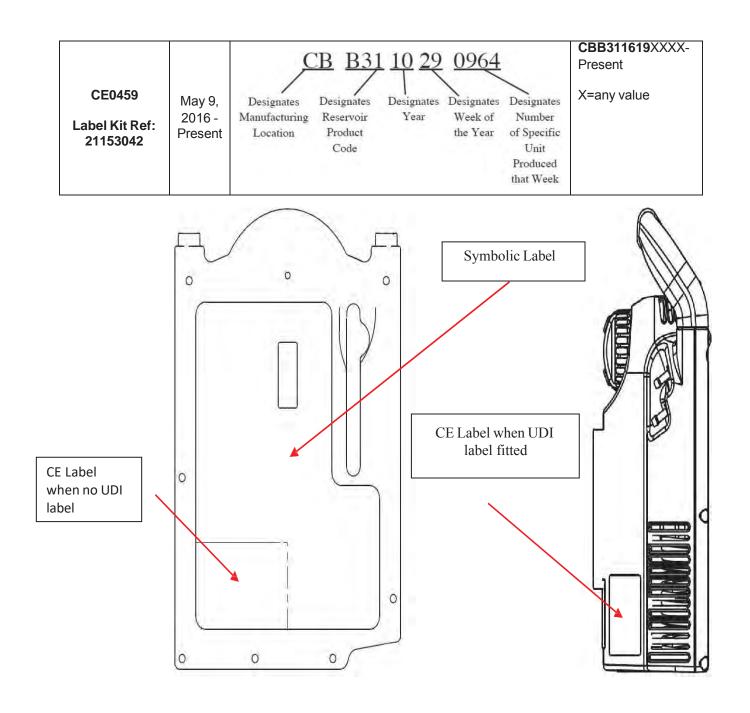


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| Helios H300/Plus Portable | Date Range | SN format | Range |
|---|-----------------------------------|--|--|
| CE0050 Label Kit Ref: 21150540 | Prior March 2010 | For Helios H300/Plus Portable units manufactured before March 2010, the serial number was five or eight numerical digits. | All numerical only serial numbers. |
| CE0029 Label Kit Ref: 21152761 | March 2010 - May 7, 2016 | Designates Designates Designates Designates Manufacturing Reservoir Product Code Designates Designa | CBB3110XXXXXX- CBB311618XXXX X=any value |
| CE0459 Label Kit Ref: 21152760 | May 9, 2016 - Present | Designates Designates Designates Designates Manufacturing Reservoir Product Code Designates Designa | CBB311619XXXX- Present X=any value |

| Helios H850/Marathon Portable | Date Range | SN format | Range |
|--------------------------------------|-----------------------------------|--|--|
| CE0050 Label Kit Ref: 21153040 | Prior March 2010 | For Helios H850/Marathon Portable units manufactured before March 2010, the serial number was five or eight numerical digits. | All numerical only serial numbers. |
| CE0029 Label Kit Ref: 21153041 | March 2010 - May 7, 2016 | CB B31 10 29 0964 Designates Designates Designates Designates Designates Manufacturing Reservoir Product Code Designates Designate | CBB3110XXXXXX- CBB311618XXXX X=any value |

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Should you have any issues with identifying the correct notified body number for your device, please contact Customer or Technical Service with the serial number of the device.

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