

# Instruction Sheet

## AC power battery backup

### Safety information

Please read this entire document before unpacking, setting up, or operating this equipment. Pay attention to all danger and caution statements. Failure to do so could result in serious injury to the operator or damage to the equipment.

To make sure that the protection provided by this equipment is not impaired, do not use or install this equipment in any manner other than that specified in this document.

#### Use of hazard information



#### **DANGER**

**Indicates a potentially or imminently hazardous situation which, if not avoided, will result in death or serious injury.**



#### **WARNING**

**Indicates a potentially or imminently hazardous situation which, if not avoided, could result in death or serious injury.**







#### **CAUTION**

**Indicates a potentially hazardous situation that may result in minor or moderate injury.**

**Notice:** Indicates a situation that is not related to personal injury.

#### Precautionary Labels

Read all labels and tags attached to the instrument. Personal injury or damage to the instrument could occur if these are not observed.

	This is the safety alert symbol. Obey all safety messages that follow this symbol to avoid potential injury. If on the instrument, refer to the instruction manual for operation or safety information.
	This symbol, when noted on a product enclosure or barrier, indicates that a risk of electrical shock and/or electrocution exists.
	This symbol, if noted on the product, indicates the need for protective eye wear.
	Electrical equipment marked with this symbol may not be disposed of in European public disposal systems after 12 August of 2005. In conformity with European local and national regulations (EU Directive 2002/96/EC), European electrical equipment users must now return old or end-of life equipment to the Producer for disposal at no charge to the user. <b>Note:</b> For return for recycling, please contact the equipment producer or supplier for instructions on how to return end-of-life equipment, producer-supplied electrical accessories, and all auxiliary items for proper disposal.

Overview

This instruction sheet describes how to install the AC Power Battery Backup.

**Important Note:** Only install the AC Power Battery Backup on samplers equipped with power supplies identified by item number 8754500 and ending in the letters US, EU, IL, AU or UK.

The AC Power Battery Backup (operating temperature -15 °C to 40 °C) is an enclosed 12 VDC battery designed to temporarily power a sampler when the normal AC power source has failed. The backup battery charge is restored and maintained by normal AC power supply operation.

The battery backup is available in two models:

- Item number 8757400 equipped with a 16 in. output cable for SD900 Refrigerated and SD900 Portable samplers.
- Item number 5698200 equipped with a 29 in. output cable for SD900 All Weather Refrigerated and SD900 Portable samplers.

**Note:** When ordered as a separate accessory, item number 5698200 comes with hardware for securing the battery backup on the All Weather Refrigerated Sampler cabinet.

The battery backup dimensions and components are shown in [Figure 1](#).

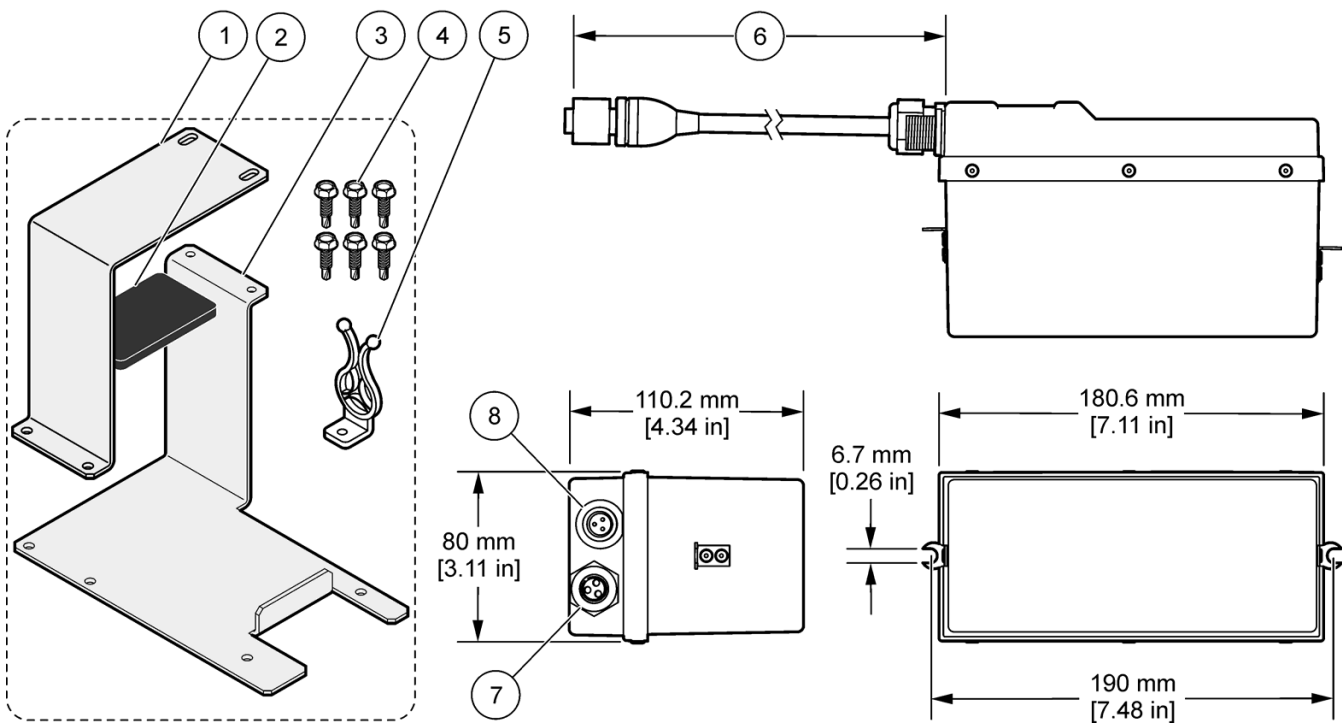


Figure 1 Battery dimensions and components

1	Bracket, clamp (5698200 only)	5	Cable twist lock
2	Foam pad (5698200 only)	6	406 mm (16 in.) (8757400) or 737 mm (29 in.) (5698200)
3	Bracket, base (5698200 only)	7	Battery backup assembly output connector
4	Bracket screws (6x) (5698200 only)	8	Battery backup assembly input receptacle

## Installation procedure

To install the AC Power Battery Backup, follow the steps for the correct sampler model.

### SD900 Portable Samplers using AC power supply (8754500 US, EU, IL, AU or UK)

1. Power down the controller.
2. Disconnect the sampler power supply from its AC mains source.  
*Note: The controller itself is not connected to the AC mains.*
3. Disconnect the power connector cable from the controller (Figure 2).
4. Put the battery backup in a location near the controller and power supply.
5. Connect the power supply output cable to the input receptacle of the battery backup (Figure 3 on page 4).
6. Connect the output cable of the battery backup to the controller power connector (Figure 3 on page 4).
7. Connect the sampler power supply to the AC mains source.

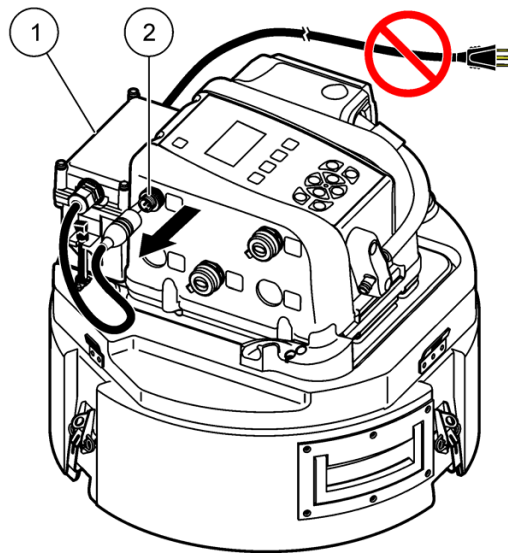


Figure 2 SD900 Portable Sampler power disconnect

1 Power supply	2 Controller power connector
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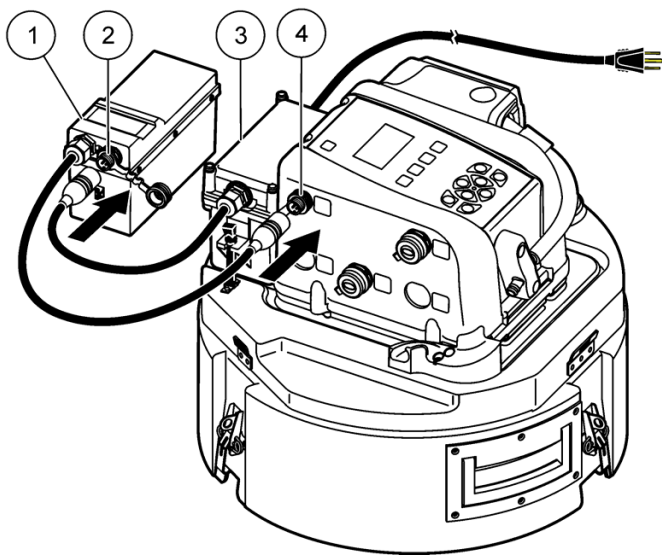


Figure 3 Battery installation for SD900 Portable Sampler

1	Battery backup	3	Power supply
2	Battery backup input receptacle	4	Controller power connector

**SD900 Refrigerated Sampler**

- 1. Power down the controller.
- 2. Disconnect the controller power supply from its AC mains source.  
*Note: The controller itself is not connected to the AC mains.*
- 3. Disconnect the power connector cable from the controller.
- 4. Remove the hold down bracket (located behind the controller) from the refrigerator assembly by disengaging the 2 latches on the sides ([Figure 4 on page 5](#)).

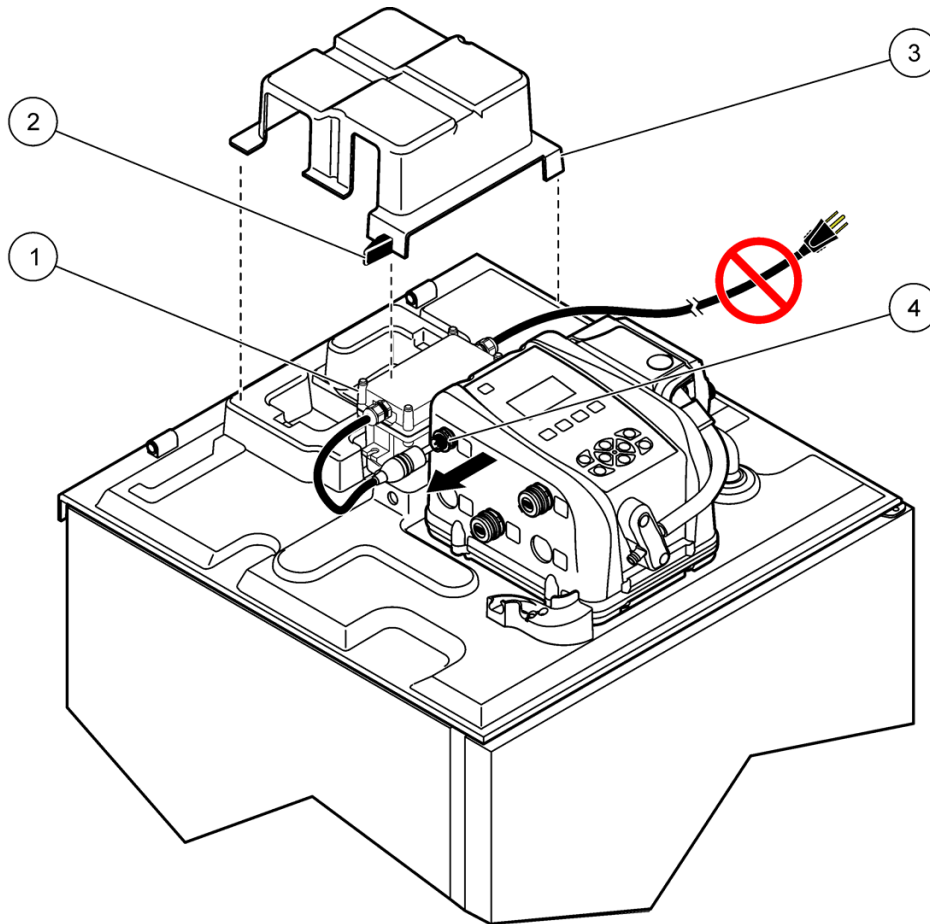


Figure 4 Controller power disconnect for SD900 Refrigerated Sampler

1	Controller power supply	3	Hold down bracket
2	Hold down bracket latch	4	Controller power connector

5. Put the battery backup in the rear compartment of the refrigerator next to the sampler power supply ([Figure 5 on page 6](#)).
6. Connect the output cable of the sampler power supply to the input receptacle of the battery backup.
7. Connect the output cable of the battery backup to the controller power connector.
8. Replace the hold down bracket. Engage the front left latch, followed by the rear right latch to secure the hold down bracket.
9. Connect the sampler power supply to the AC main source.

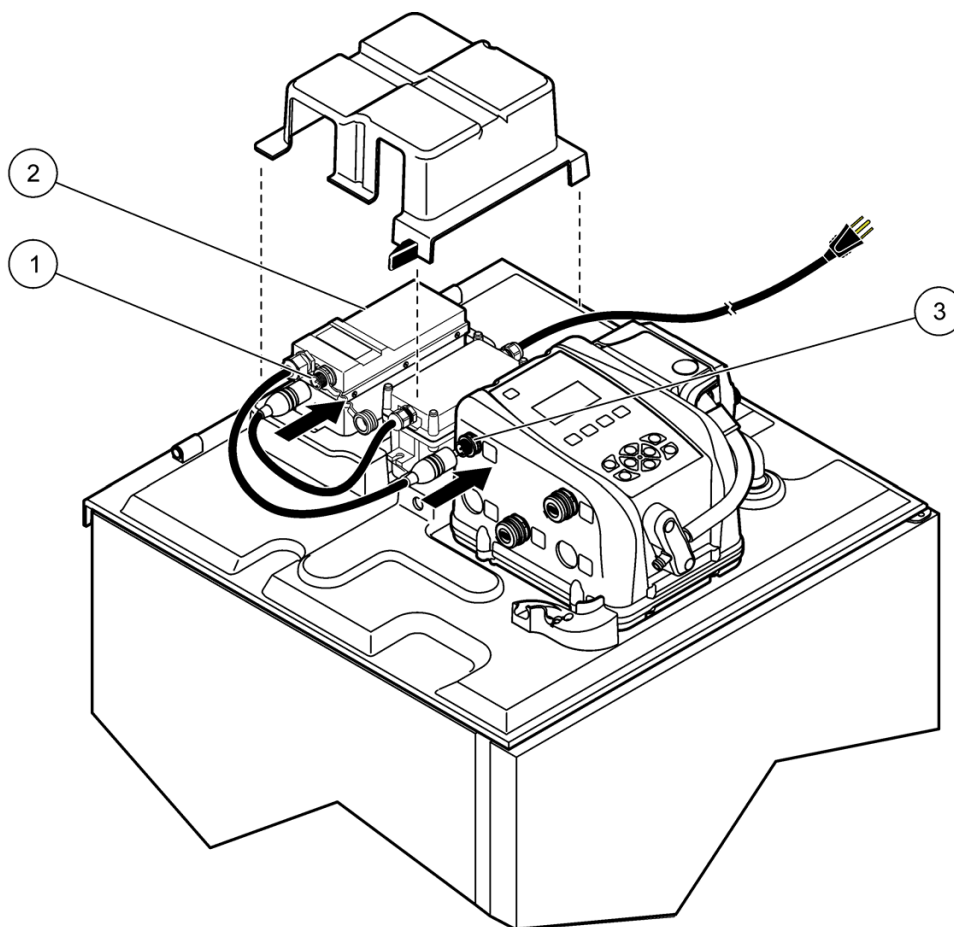


Figure 5 Battery placement and connection for SD900 Refrigerated Sampler

1	Battery backup input cable	3	Controller power connector
2	Battery backup		

### SD900 All Weather Refrigerated Sampler



#### **DANGER**

***Voltage and pressure hazards. Disconnect AWRS from AC power source and wear eye protection prior to opening rear compartment.***

1. Power down the controller.
2. Disconnect the AWRS from its AC mains source.
3. Disconnect the power cable from the controller ([Figure 6 on page 7](#)). Feed the cable back through the bulkhead to the compressor compartment, removing the foam plug from the opening if necessary.

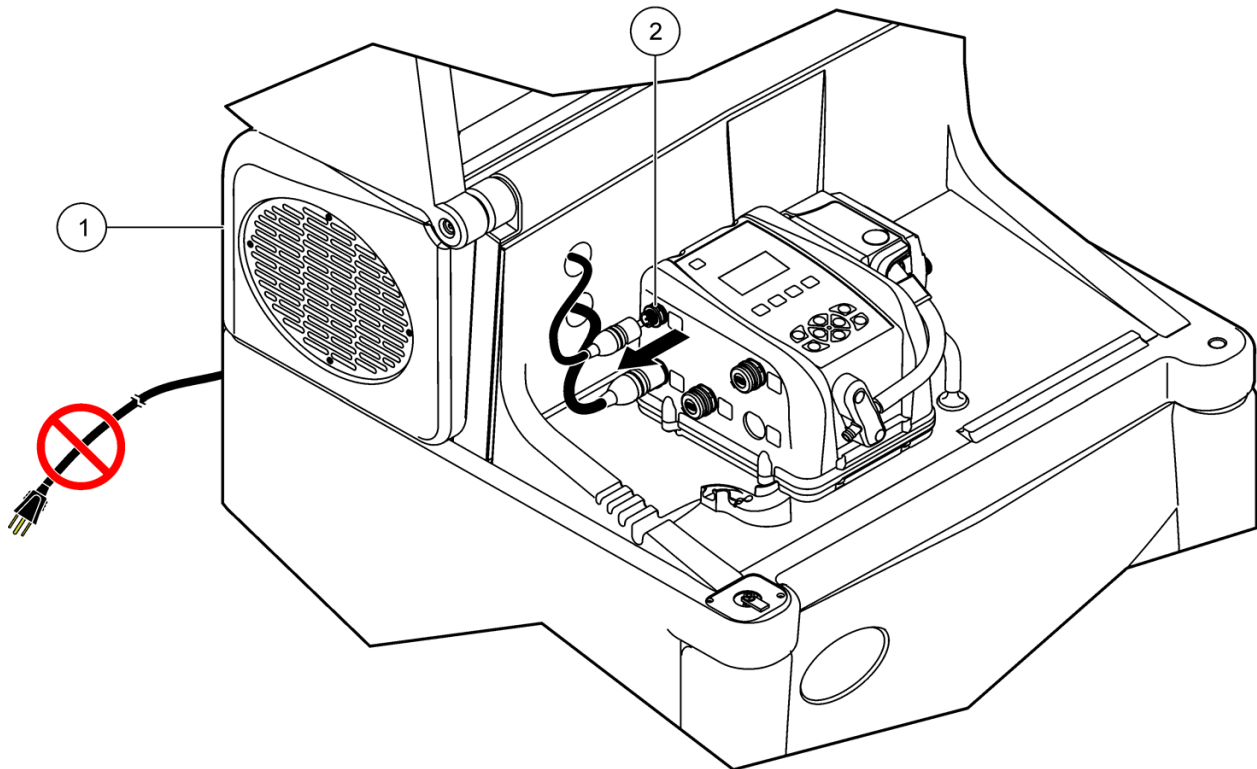


Figure 6 Power disconnect for SD900 All Weather Refrigerated Sampler

1 Compressor compartment	2 Controller power connector
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4. Using a phillips head screwdriver, open the sampler compressor compartment by removing the two bolts.
5. Hold the base bracket against the stop flange ([Figure 7 on page 8](#)). Put 2 screws (5695400) through the bracket tabs and tighten.
6. Put the backup battery in the compressor compartment in front of the sampler electronics enclosure. When facing the rear of the sampler, the output cable extends to the right when the backup battery is in the correct position.
7. Remove the paper backing from the foam pad and attach the pad to the underside of the clamp bracket.
8. Use the 4 remaining screws (5695400) to attach the clamp bracket to the base bracket.
9. Connect the output cable of the sampler electronics enclosure to the input receptacle on the battery backup.
10. Route the backup battery output and input cables in parallel around the compressor. Secure the cables using the supplied twist lock to make sure the cables do not touch the condenser fan or compressor.
11. Route the backup battery output cable through the bulkhead to the sampler controller compartment.
12. Put the foam plug around the cable and insert the plug in the opening as necessary. Connect the cable to the SD900 controller power connector.
13. Close the sampler compressor compartment cover and install the 2 bolts to secure it.
14. Connect the AWRS power supply to the AC mains source.

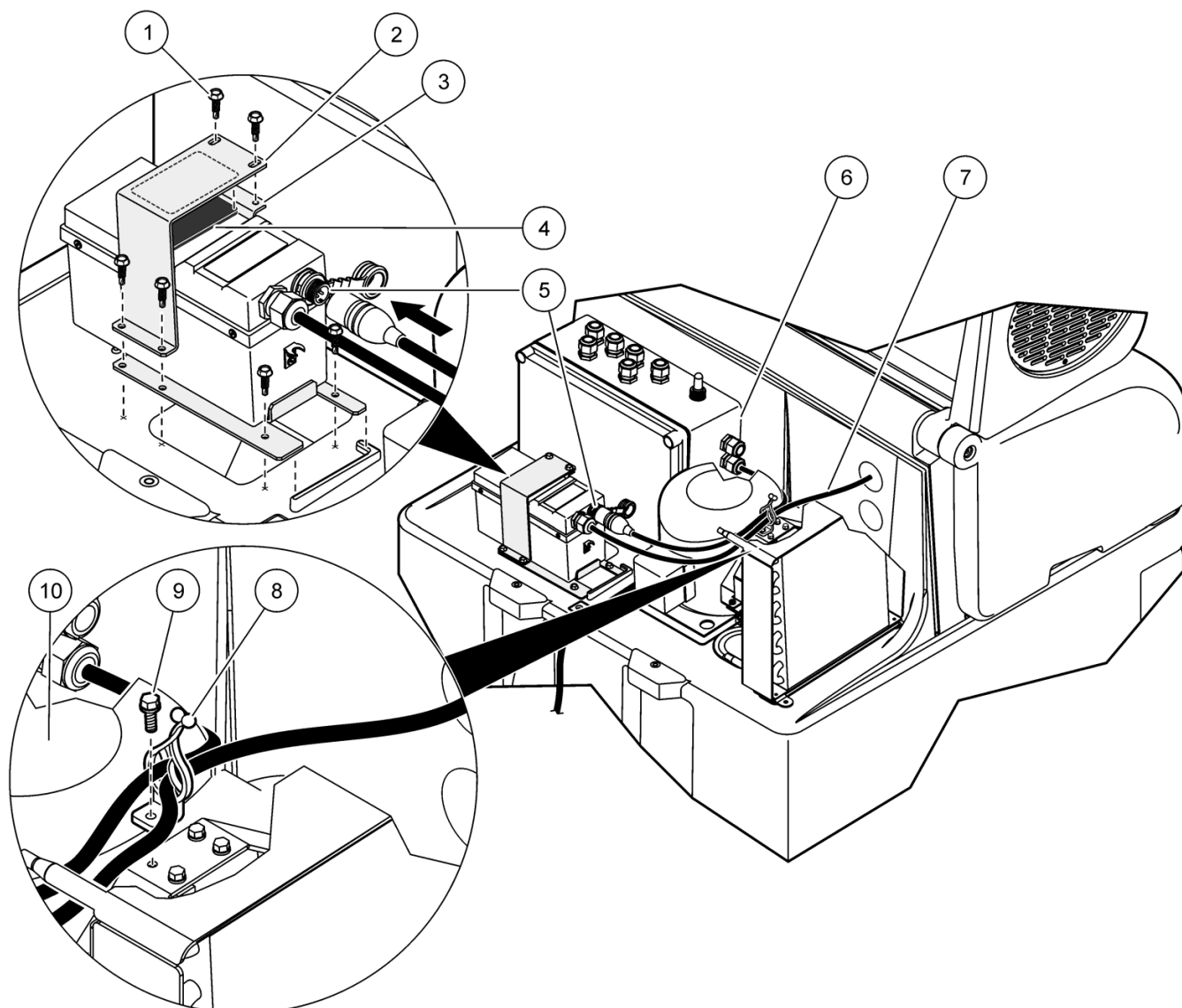


Figure 7 Battery backup installation for SD900 All Weather Refrigerated Sampler

1	Screws for hold down brackets (6x)	6	Electronics enclosure
2	Bracket, clamp	7	Battery output cable
3	Bracket, base	8	Cable twist lock
4	Foam pad	9	Fan shroud screw
5	Backup battery input connector	10	Compressor





# Contact Information

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## United States: Hach Company

P.O. Box 389  
Loveland, Colorado  
80539-0389 U.S.A.  
Tel 800-635-4567  
Fax (970) 461-3919  
orders@hach.com  
www.hach.com

## Repair Service in the United States:

**Authorization must be  
obtained before sending  
any items for repair.**

HACH Company  
Tel 1 (800) 635-1230  
or (970) 669-3050  
Fax (970) 461-3924  
techhelp@hach.com

## Canada, Latin America, sub-Saharan Africa, Asia, Australia and New Zealand:

Hach Company World  
Headquarters,  
P.O. Box 389  
Loveland, Colorado,  
80539-0389 U.S.A.  
Tel 1 (970) 669-3050  
Fax 1 (970) 461-3939  
intl@hach.com

## Europe, Middle East and Mediterranean Africa: Hach Lange GmbH

Willstätterstraße 11  
D-40549 Düsseldorf  
Tel. +49 (0)2 11 52 88-320  
Fax +49 (0)2 11 52 88-210  
info@hach-lange.de  
www.hach-lange.de

## Hach Lange EU subsidiaries:

### HACH LANGE LTD

Pacific Way  
Salford  
GB-Manchester, M50 1DL  
Tel. +44 (0)161 872 14 87  
Fax +44 (0)161 848 73 24  
info@hach-lange.co.uk  
www.hach-lange.co.uk

### HACH LANGE LTD

Unit 1, Chestnut Road  
Western Industrial Estate  
IRL-Dublin 12  
Tel. +353(0)1 46 02 5 22  
Fax +353(0)1 4 50 93 37  
info@hach-lange.ie  
www.hach-lange.ie

### DR. BRUNO LANGE GES. MBH

Industriestraße 12  
A-3200 Obergrafendorf  
Tel. +43 (0)27 47 74 12  
Fax +43 (0)27 47 42 18  
info@hach-lange.at  
www.hach-lange.at

### DR. LANGE NEDERLAND B.V.

Laan van Westroijen 2a  
NL-4003 AZ Tiel  
Tel. +31(0)344 63 11 30  
Fax +31(0)344 63 11 50  
info@hach-lange.nl  
www.hach-lange.nl

### DR. BRUNO LANGE AG

Juchstrasse 1  
CH-8604 Hegnau  
Tel. +41(0)44 9 45 66 10  
Fax +41(0)44 9 45 66 76  
info@hach-lange.ch  
www.hach-lange.ch

### HACH LANGE FRANCE S.A.S.

33, Rue du Ballon  
F-93165 Noisy Le Grand  
Tél. +33 (0)1 48 15 68 70  
Fax +33 (0)1 48 15 80 00  
info@hach-lange.fr  
www.hach-lange.fr

### HACH LANGE SA

Motstraat 54  
B-2800 Mechelen  
Tél. +32 (0)15 42 35 00  
Fax +32 (0)15 41 61 20  
info@hach-lange.be  
www.hach-lange.be

### HACH LANGE E.P.E.

27, Avlidos str  
GR-115 27 Athens  
Tel. +30 210 7777038  
Fax +30 210 7777976  
info@hach-lange.gr  
www.hach-lange.gr

### HACH LANGE APS

Åkandevej 21  
DK-2700 Brønshøj  
Tel. +45 36 77 29 11  
Fax +45 36 77 49 11  
info@hach-lange.dk  
www.hach-lange.dk

### HACH LANGE AB

Vinthundsvägen 159A  
SE-128 62 Sköndal  
Tel. +46 (0)8 7 98 05 00  
Fax +46 (0)8 7 98 05 30  
info@hach-lange.se  
www.hach-lange.se

### HACH LANGE S.R.L.

Via Riccione, 14  
I-20156 Milano  
Tel. +39 02 39 23 14-1  
Fax +39 02 39 23 14-39  
info@hach-lange.it  
www.hach-lange.it

### HACH LANGE S.L.U.

Edif. Arteaga Centrum  
C/Larrauri, 1C- 2ª Pl.  
E-48160 Derio/Vizcaya  
Tel. +34 94 657 33 88  
Fax +34 94 657 33 97  
info@hach-lange.es  
www.hach-lange.es

### HACH LANGE LDA

Av. do Forte nº8  
Fracção M  
P-2790-072 Carnaxide  
Tel. +351 214 253 420  
Fax +351 214 253 429  
info@hach-lange.pt  
www.hach-lange.pt

### HACH LANGE SP.ZO.O.

ul. Opolska 143 a  
PL-52-013 Wrocław  
Tel. +48 (0)71 342 10-83  
Fax +48 (0)71 342 10-79  
info@hach-lange.pl  
www.hach-lange.pl

### HACH LANGE S.R.O.

Lešanská 2a/1176  
CZ-141 00 Praha 4  
Tel. +420 272 12 45 45  
Fax +420 272 12 45 46  
info@hach-lange.cz  
www.hach-lange.cz

### HACH LANGE S.R.O.

Roľnícka 21  
SK-831 07 Bratislava –  
Vajnory  
Tel. +421 (0)2 4820 9091  
Fax +421 (0)2 4820 9093  
info@hach-lange.sk  
www.hach-lange.sk

### HACH LANGE KFT.

Hegyalja u. 7-13.  
H-1016 Budapest  
Tel. +36 (06)1 225 7783  
Fax +36 (06)1 225 7784  
info@hach-lange.hu  
www.hach-lange.hu

### HACH LANGE S.R.L.

Str. Leonida, nr. 13  
Sector 2  
RO-020555 Bucuresti  
Tel. +40 (0) 21 201 92 43  
Fax +40 (0) 21 201 92 43  
info@hach-lange.ro  
www.hach-lange.ro

### HACH LANGE

8, Kr. Sarafov str.  
BG-1164 Sofia  
Tel. +359 (0)2 963 44 54  
Fax +359 (0)2 866 04 47  
info@hach-lange.bg  
www.hach-lange.bg

### HACH LANGE SU ANALÝZ SYSTEMLERÝ LTD.ÞTÝ.

Hilal Mah. 75. Sokak  
Arman Plaza No: 9/A  
TR-06550 Çankaya/ANKARA  
Tel. +90 (0)312 440 98 98  
Fax +90 (0)312 442 11 01  
bilgi@hach-lange.com.tr  
www.hach-lange.com.tr