863 Valley View Road, Eighty Four, PA 15330
724-941-9701
skcinc.com

AirChek 20 Sample Pump

Cat. No. 920-2000

Operating Instructions

Figure 1. AirChek 20 Pump Overview

INTRODUCTION

The SKC AirChek 20 Sample Pump (*Figure 1*) is a portable and programmable pump for high flow air sampling. With a flow range of 4 to 20 L/min, it provides high-performance sampling for asbestos and other particulates. AirChek 20 is ideal for area and environmental monitoring, bioaerosol sampling, and long-term background monitoring.

Checking Pump/Kit Contents

Use the following table to verify that you received all items associated with the Cat. No. ordered. If you are missing items, contact SKC at 800-752-8472 (U.S. only) or 724-971-9701.

If you ordered Cat. No.	Your package should contain
920-2000	**Pump only,** includes exhaust port and screwdriver, *requires battery and charger available separately*
920-2000K	**Basic Pump Kit,** includes pump, exhaust port, 7-Ah lead-acid battery, charger and AC adapter (110-240 V), screwdriver, and 39 inches (1 meter) of Tygon tubing

Required Equipment

☑ ¼-inch ID Tygon tubing

Installing the Battery

AirChek 20 is supplied without battery Cat. No. P920201 installed. Install the battery as follows:

1. Unfasten the six casing screws (three on each side of the case) using the supplied Pozidriv size PZ1 screwdriver. Lift off the black casing cover.
2. Remove the two protective covers from the battery terminals and place the battery in the rear compartment of the pump case as shown in Figure 2. Ensure that equal gaps are left between the ends of the battery and sides of the case to allow for the case screws to be screwed in fully without damaging the battery.

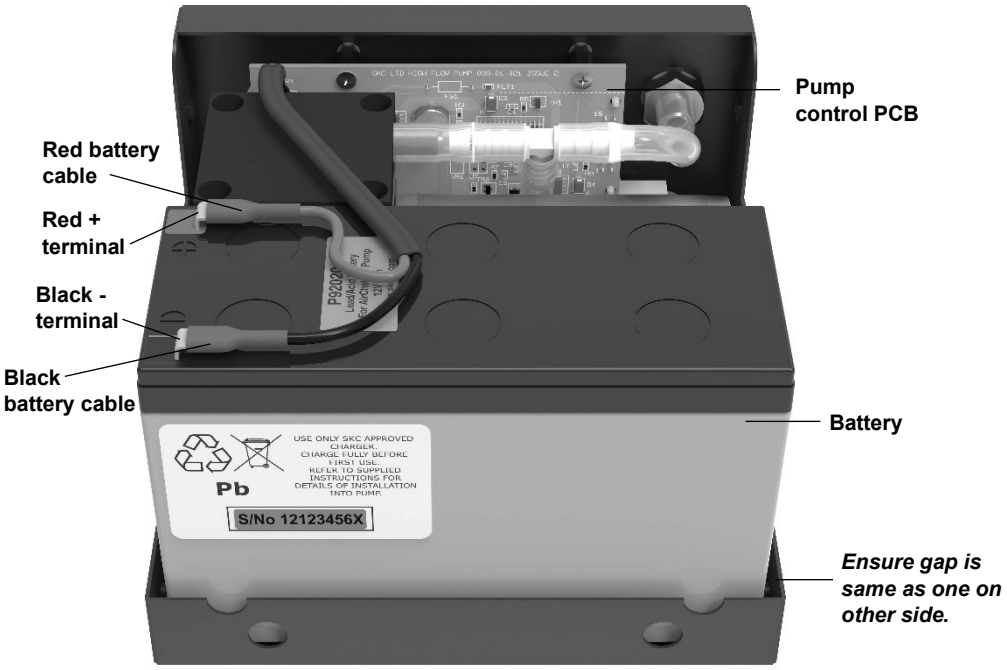


Figure 2. Installing the Battery

3. Connect the red battery cable from the pump control PCB to the red '+' terminal on the battery, and the black battery cable to the black '-' terminal on the battery.
4. Reinstall the black casing cover, securing it with the six screws using the Pozidriv size PZ1 screwdriver.

Charging the Battery

- *Prior to first use, the battery should be fully charged, ideally overnight.*
- *AirChek 20 pump must only be charged using SKC charger Cat. No. 920-210.*
- *The battery charger can only be used to charge the battery when the pump is* ***not*** *running; it cannot be used when the pump is running to extend pump runtime.*

1. Unscrew the dust cap from the charging/power socket on the pump (*see Figure 1*) and connect the output connector from the charger to the pump socket. Screw the charging connector into the socket to prevent it from detaching while charging.

2. Plug the charger into a 100 to 240 V wall outlet. The LED indicator on the charger will illuminate amber to indicate that the charger is charging at full power.
3. Leave the pump to charge fully. A fully depleted battery will take approximately 10 hours to charge. When the battery is fully charged, the LED indicator on the charger will illuminate green to indicate that the charger has switched to trickle charge, thus preventing overcharging.
4. When the pump is fully charged, unplug the charger from the wall outlet and disconnect the charger output connector from the pump. ***Note****: Always attach the screw-in dust cap to the charging/power socket on the pump after charging.*

Battery Status Display

The pump can display the battery status when a sampling program has been entered (*see Programming the Pump*, *Reviewing a Sampling Program*). Scroll to the Review menu option on the SELECT main menu screen and press the Enter key to display the first review screen, Battery Status.

Display screen	Battery Charge Status
	75 to 100% capacity
	50 to 75% capacity
	25 to 50% capacity
	Below 25% capacity
	Fully depleted
	Flat battery. If battery is fully depleted, this will be displayed when: • Waking pump from sleep • Attempting to run pump. Pump will not run when battery is fully depleted. • Pump is running. Pump will automatically stop and retain elapsed run time in memory. Battery must be charged to at least 75% capacity to clear the flat battery screen.

Notes and Cautions

- The AirChek 20 pump can be powered by AC adapter Cat. No. 920-211 suitable for 100-240 V or by an external high capacity 12V lead-acid battery (not SKC supplied) using external battery cable Cat. No. 920-212. *It is recommended that these options be used in conjunction with internal battery Cat. No. P920201 to retain the pump program and run time data when external power supplies are disconnected.*
- The AirChek 20 pump is supplied complete with a rubber dust cap for the inlet and a screw-in dust cap for the charging/power socket. Ensure that these are in place at all times when the pump is not in use or being charged.
- Never run the AirChek 20 pump without a filter in line to prevent dust from contaminating the pump mechanism.
- Always use the correct SKC battery and battery charger designated for the AirChek 20 pump.
- The AirChek 20 pump casing is IP20 rated; it is not rated as water or splashproof and therefore must not be used where it is possible for water to enter the pump casing, and care must be taken when cleaning the pump to prevent water ingress.
- Use only the SKC-approved charger for this pump. Use of an unapproved charger may damage the battery and pump and VOID ANY WARRANTY.
- Using a repaired or rebuilt battery pack VOIDS ANY WARRANTY.
- Do not charge or operate pump with or without the charger in hazardous locations.
- WARNING: Failure to follow these guidelines will void the product warranty.
- At the end of their life lead-acid batteries supplied for use with this pump must be disposed of in an environmentally sound way in accordance with local regulations.
- Tampering with the battery pack VOIDS ANY WARRANTY.
- Do not open, disassemble, short circuit, crush, incinerate, or expose the battery to fire or temperatures in excess of 212 F (100 C).
- Failure to follow warnings and cautions voids any warranty.

Power On/Wake Pump

When the pump battery is charged, press the keys on the pump keypad (*see Figure 1 and Using the Keypad and LCD*) in the sequence **Enter, Select, Enter**. The pump will display the SELECT main menu screen.

When not using the pump, place it in sleep mode to conserve battery power. *See Sleep Mode below.*

Using the Keypad and LCD

The pump keypad (*see Figure 1*) is described below.

Press the Select key to scroll through menu options and select digits to adjust when entering times.

Press the Enter key to accept the selected menu option or run time.

Press up and down arrow keys to enter sample run times and set pump flow rate.

The available options for each menu item are displayed on the bottom line of the LCD screen. Press the Select key to scroll through the available options.

The currently selected option is indicated with a flashing cursor (Review option is shown selected at right).

Press the Enter key to accept the selected menu option and the next menu screen will be displayed on the LCD screen (Battery Status screen is next screen displayed when Review is selected as shown at right).

On number entry menu screens, such as sample run time, enter each digit of the hours and minutes individually. The currently selected digit is identified by the flashing cursor.

Press the Select key to scroll through the digits and use the up and down arrow keys to enter the required value for the selected digit as shown.

Use the Select key to scroll to the Save option on the screen. Press the Enter key to save the run time. The display will revert to the previous menu screen as shown.

Sleep Mode

When not in use, place the pump in sleep mode to conserve battery power. Press the key sequence **Enter, Select, Enter** to bring up the SELECT main menu screen; scroll to Sleep and press the Enter key. The LCD will display the message that the pump is sleeping. The display backlight will dim after 5 minutes to conserve battery power.

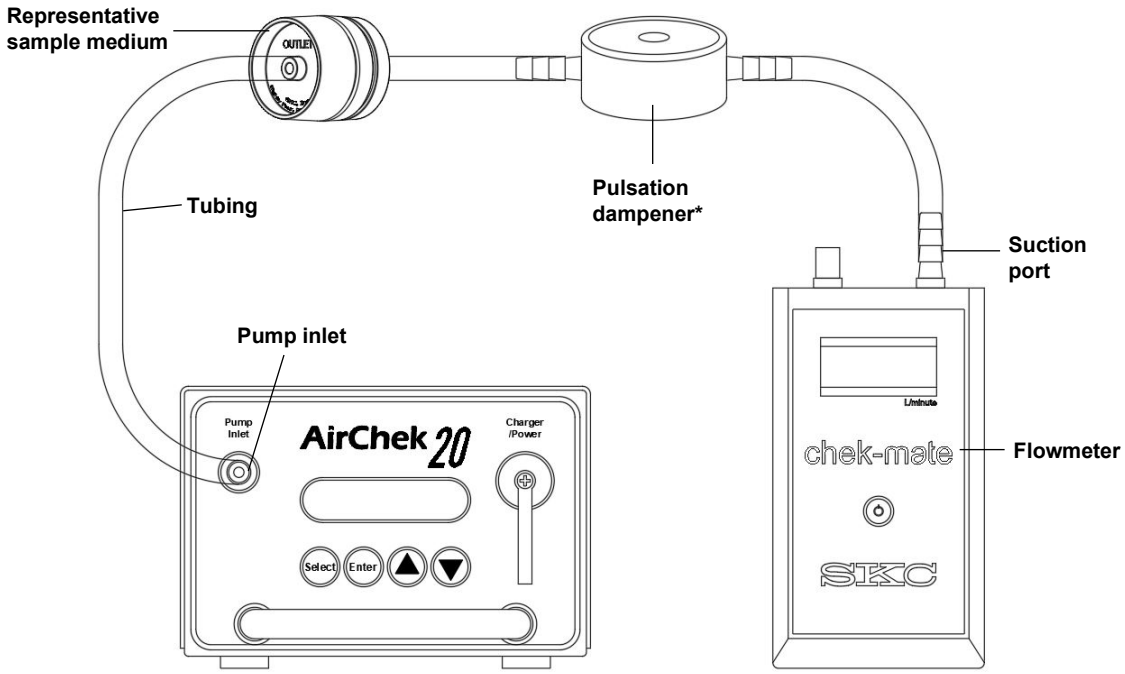
To wake the pump from sleep mode, press the key sequence **Enter, Select, Enter** to display the SELECT main menu screen.

PROGRAMMING THE PUMP

Setting and Verifying Flow Rate

- *Allow pump to equilibrate after moving it from one temperature extreme to another.*
- *Charge pump battery completely before sampling.*
- *For best results, run pump for 10 to 15 minutes before verifying flow rate.*

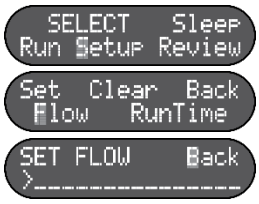
1. Power on the pump.
2. Prepare the flowmeter per flowmeter instructions.
3. Set up a flow verification train with representative sample medium in line. *See Figure 3*.
   ***Note**: When using the SKC High Flow chek-mate Flowmeter, Pulsation Dampener Cat. No. 375-150 is required in line between sample media inlet and flowmeter outlet as shown in Figure 3. See Accessories.*



**Required when using High Flow chek-mate Flowmeter for flow rate verification*

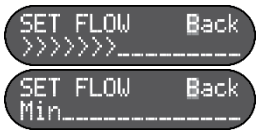
Figure 3. Flow Rate Verification Train (High Flow)

4. In the SELECT main menu screen, scroll to Setup and press the Enter key to display the Setup menu screen.
5. In the Setup menu, scroll to Flow and press the Enter key. The pump will start to run and the SET FLOW screen will be displayed.

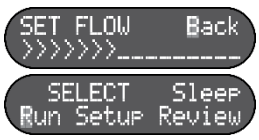


6. Press the up and down arrow keys to increase or decrease pump flow rate. A series of arrows displayed on the LCD will indicate increased or decreased flow rate. ***Note**: Pressing and holding the up or down arrow keys increments/decrements the flow rate rapidly.* When the maximum or

minimum possible flow rate is reached, the LCD will display the series of arrows and “Max” or “Min” as appropriate.



7. While observing the reading on the flowmeter, use the up and down arrow keys to set the required flow rate. When the pump is running at the required flow rate, press the Enter key to save the flow rate setting and return to the SELECT main menu screen.



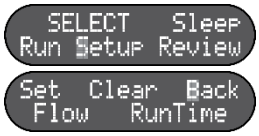
8. Disconnect the flowmeter from the sampling media inlet. Replace representative sampling medium with a new unexposed sampling medium. *See Figure 4*.

Selecting Manual Operation

1. To run the pump manually, ensure that no timed run, delayed start, or repeat runs are programmed.
2. Use the Clear function to clear all sample program data and the last elapsed runtime from the pump memory. S*ee Clearing a Sampling Program*.

Setting Up a Timed Run

1. With desired flow rate set, in the SELECT main menu screen scroll to Setup. Press the Enter key to display the Setup menu.



2. In the Setup menu screen, scroll to RunTime. Press the Enter key to display the Runtime menu.

3. In the RunTime menu, scroll to RunTime. Press the Enter key.
4. Using the Select, up arrow, and down arrow keys, enter the required sample run time in hours and minutes.
5. Scroll to Save and press the Enter key to save the sample run time and return to the RunTime menu screen.

After setting a timed run, enter start delay time and program repeat sample run and delay times if desired. *See below*.

Enter Start Delay Time

1. In the RunTime menu screen scroll to RunDelay. Press the Enter key.
2. Use the Select, up arrow, and down arrow keys to enter the required start delay time in hours and minutes.
3. Scroll to Save and press the Enter key to save the start delay time and return to the RunTime menu screen.

Program Intermittent Sample Run and Delay Times

1. In the RunTime menu screen, scroll to Repeat and press the Enter key. The Set Repeat menu screen will be displayed.

2. To enter time delay between repeats, scroll to Delay and press the Enter key.

3. Use the Select, up arrow, and down arrow keys to enter the required repeat delay time in hours and minutes.

4. Scroll to Save and press the Enter key to save the repeat delay time and return to the Set Repeat menu screen.

5. To enter the number of repeats, in the Set Repeat menu scroll to Number; press the Enter key.

6. Use the Select, up arrow, and down arrow keys to enter the required number of repeats. ***Note:*** *A setting of '00' number of repeats disables the sample repeat function. A setting of '01' gives the same result as programming a single timed run*.

7. Scroll to Back and press the Enter key to save the number of repeats and return to the Set Repeat menu screen.

Clearing a Sampling Program

1. To clear a sampling program and previous sample elapsed run time from the pump's memory, in the Setup menu screen scroll to Clear and press the Enter key.

2. Scroll to Yes and press the Enter key to clear the sample program and return to the Setup menu screen.

Reviewing a Sampling Program

1. View the program settings from the SELECT main menu screen. Scroll to Review and press the Enter key to move from one review screen to the next in the order below:

   a. **Battery Status**—first Review screen displayed

   b. **Time To Start**—displayed only if a start delay time has been programmed. It indicates the start delay time set in hours, minutes, and seconds *(top right*), and if applicable the number of repeats programmed (*bottom right*).

   c. **Previous Run**—the elapsed run time from the previous pump sample run. If there is no previous run time recorded in the pump memory, '000:00:00' will be displayed.

d. **Timed Run Set**—displayed only if a sample run time has been programmed. It indicates the length of the sample run time set in hours and minutes.

e. **Repeats Set**—displayed only if a number of sample repeats has been programmed. It indicates the number of repeats and the delay time between each repeat run in hours and minutes.

2. Press the Enter key to return to the SELECT main menu screen.

OPERATION

Sampling

- *Allow pump to equilibrate after moving it from one temperature extreme to another.*
- *Charge pump battery completely before setting and verifying flow rate and sampling.*

After setting/verifying pump flow rate, replace the representative sampling medium with a new unexposed sampling medium for the sampling train *(Figure 4). Follow the procedures below for manual and programmed runs.*

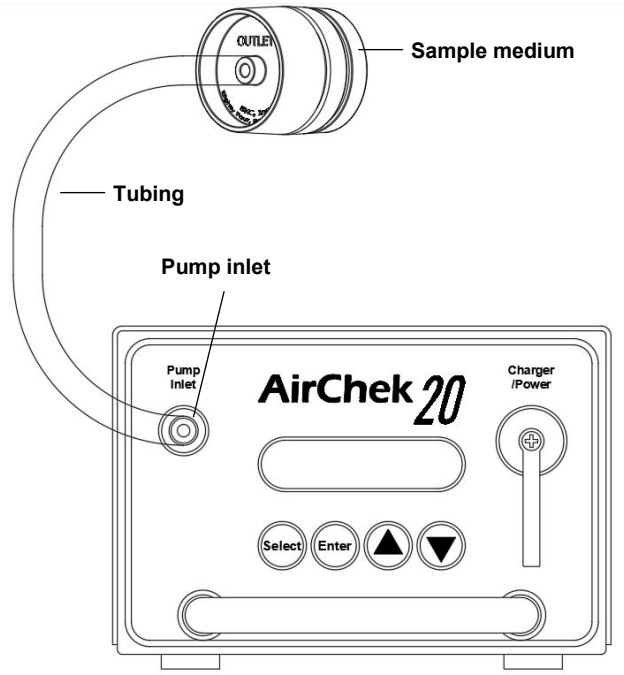


Figure 4. Sampling Train

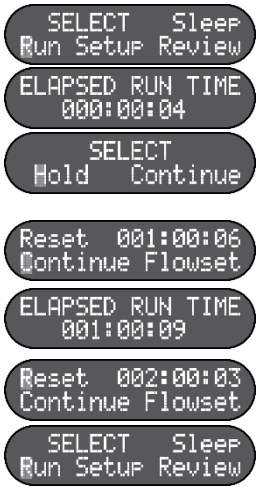
Options Available During Sampling

Access available options during sample runs by pressing the Select and Enter keys simultaneously to display the SELECT Hold screen (*see table below*). ***Note:*** *The pump will still be running but while the Hold screen is displayed, elapsed run time is NOT incrementing.*

Option	Action	Screen Display
Stop pump running and display Hold menu screen, which also shows current elapsed run time	In SELECT Hold screen, scroll to Hold and press Enter Key to display Hold menu.	SELECT Hold Continue Reset 001:00:06 Continue Flowset
Check and adjust the pump flow rate	In Hold menu screen, scroll to Flowset and press Enter key. Pump will run and display SET FLOW screen. ***Note:*** *Elapsed run time does not increment while checking and adjusting the flow rate.* Adjust pump flow rate using a suitable flowmeter and press Enter key to save new flow rate. Pump will stop running and return to Hold menu screen.	Reset 001:00:06 Continue Flowset SET FLOW Back >>>>>>---------- Reset 001:00:06 Continue Flowset

Manual Run

1. If the pump is in sleep mode, wake it to display the SELECT main menu screen *(see Power On/Wake Pump on page 6*).
2. In the SELECT main menu, scroll to Run and press the Enter key. The pump will run and the elapsed run time will be displayed counting up in hours, minutes, and seconds.
    a. To perform available options during a run, simultaneously press Select and Enter keys to display the SELECT Hold screen. *See Options Available During Sampling above.*
    b. To continue sampling, in Hold menu screen scroll to Continue and press Enter key. The pump will resume running and display run time screen; run time will continue to increment.
3. At the end of the required sampling time, simultaneously press the Select and Enter keys to access Hold menu screen. Scroll to Reset and press the Enter key. The display will return to the SELECT main menu screen.



Single Timed Run

When a single timed run without delayed start and repeat runs has been programmed:

1. In the SELECT main menu screen scroll to Run and press the Enter key to start the pump. The elapsed run time will be displayed counting up in hours, minutes, and seconds.
    a. To perform available options during a run, simultaneously press Select and Enter keys to display the SELECT Hold screen. *See Options Available During Sampling above.*
    b. To continue sampling, in Hold menu screen scroll to Continue and press Enter key. The pump will resume running and display run time screen; run time will continue to increment.
2. At the end of the timed run, the pump will automatically stop and retain the elapsed run time.
3. Press the Select and Enter keys simultaneously to return to the SELECT main menu screen.

Single Timed Run with Delayed Start

When a single timed run with delayed start has been programmed:

1. In the SELECT main menu screen, scroll to Run and press the Enter key to start the sample program. The Time To Start screen is displayed and indicates the start delay time countdown in hours, minutes, and seconds.
    a. To perform available options during a run, simultaneously press Select and Enter keys to display the SELECT Hold screen. *See Options Available During Sampling above.*

b. To continue sampling, in Hold menu screen scroll to Continue and press Enter key. The pump will resume running and display run time screen; run time will continue to increment.

2. During the start delay countdown, the sample program can be cancelled by simultaneously pressing the Select and Enter keys to bring up the Reset screen. Scroll to Reset and press the Enter key.

3. In the Reset screen, scroll to Reset and press the Enter key to cancel the sample program and return to the SELECT main menu screen.

   OR
   Scroll to Continue and press the Enter key to return to the start delay countdown.

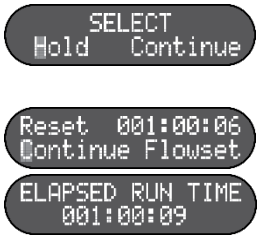
4. When the start delay countdown reaches 000:00:00, the pump will automatically start running and the elapsed time will be displayed.
5. At the end of the single timed run, the pump will automatically stop and retain the elapsed runtime on the LCD screen.
6. Press the Select and Enter keys simultaneously to return to the SELECT main menu screen.

Intermittent Sampling
When intermittent sampling has been programmed:

1. In the SELECT main menu screen, scroll to Run and press the Enter key to start the sample program.

   If a delayed start has been programmed, then the time to start countdown timer is displayed in hours, minutes, and seconds. The repeat counter showing the current repeat 'R01' of the total number of repeats is also displayed.

   a. To perform available options during a run, simultaneously press Select and Enter keys to display the SELECT Hold screen. *See Options Available During Sampling above.*
   b. To continue sampling, in Hold menu screen scroll to Continue and press Enter key. The pump will resume running and display run time screen; run time will continue to increment.



   If no delayed start has been programmed or at the end of the delayed start time, the pump will automatically run and the elapsed time of the first sample repeat period is displayed in hours, minutes, and seconds.

   The pump will run for the programmed sample run time and at the end of this the pump will automatically stop, and the repeat delay countdown time will be displayed. The repeat counter will increment.

The pump will continue to cycle through the remaining repeat delay periods and sample run periods, incrementing the repeat counter after each repeat run.

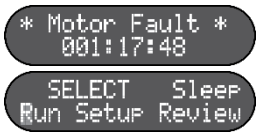
At the end of the last sample run period, the pump will automatically stop and display the total elapsed sample runtime. This is the combined total of all of the times of the sample run periods, so for example, if the runtime was 1 hour and the number of repeats was 6, then the total elapsed runtime will be 6 hours.

2. Press the Select and Enter keys simultaneously to return to the SELECT main menu screen.

TROUBLESHOOTING

If the AirChek 20 pump detects that the battery is in a low charge state, a flat battery message will be displayed on the LCD screen. Charge the battery fully using the correct SKC charger before using the pump.

The AirChek 20 pump control board monitors the pump motor speed while running. If the motor speed signal is not detected, for example due to a disconnected wiring connection to the motor or a failure of the motor, the pump will display a motor fault warning message and retain the elapsed run time in memory. Press the Select and Enter keys simultaneously to clear the message and return to the SELECT main menu screen.



See the troubleshooting guide below. For further assistance, contact SKC Inc.

Possible Fault	Corrective Action
Sample media fault	1. Check media for heavy loading or damage. 2. Fix problem. 3. Try restarting the pump.
Sample train fault	1. Check tubing for blockage or crimping. 2. Fix problem. 3. Try restarting the pump.
Software error (frozen keypad)	1. Disconnect battery for one minute, and then reconnect. 2. Try restarting programming.

MAINTENANCE

SKC recommends annual servicing of this product. The first service is due one year from the date of purchase, and then at yearly intervals on this date. However, it is the user's responsibility to perform a risk assessment to determine the necessary frequency of servicing required.

Battery Care

The AirChek 20 pump uses a sealed, valve regulated, lead-acid battery. This type of battery requires no maintenance and when used in accordance with the manufacturer's instructions should give a life of approximately 400 charge/discharge cycles (based on 50% depth of discharge). Battery life is affected by a number of factors, but the most significant of these are overcharging and the depth of discharge in use.

Overcharging of the battery causes overheating and off-gassing of the battery electrolyte, which will lead to loss of capacity and reduced service life. The AirChek 20 charger Cat. No. 920-210 is an intelligent charger that automatically detects when the battery is fully charged and switches to a trickle charging rate to prevent overcharging. **Always use the correct charger**.

A deeper discharge of the battery prior to charging will result in a shorter battery life. This can be as low as 200 charge/discharge cycles if the battery is fully discharged every time prior to charging.

Long-term storage - If the pump is to remain unused for a long period of time, SKC recommends that the battery be fully charged prior to storage, and charged at 6-month intervals, or if stored at a temperature in excess of 30 C, at 3-month intervals. Failure to do so could lead to significant reduction in battery capacity and service life, and in extreme cases can prevent the battery from accepting a charge entirely. Note that the pump should either be put into Sleep mode during long-term storage, or ideally the battery wires disconnected from the battery terminals (these would need to be reconnected during top-up charging).

Battery Disposal - End-of-life lead-acid batteries must be collected and treated separately from other waste to ensure that the harmful lead they contain does not enter the environment via landfill sites. Please ensure that any end-of-life SKC batteries are collected and treated correctly.

Replacing the Battery

See Installing the Battery.

Pump Service

Pumps under warranty should be sent to SKC Inc. for servicing. *See Limited Warranty and Return Policy.*

ACCESSORIES/REPLACEMENT PARTS

Accessories	**Cat. No.**
Battery Charger for AirChek 20, 110-240 V, multi-plug	920-210
AC Adapter for AirChek 20, 110-240 V, multi-plug	920-211
Power Cable for External Battery	920-212
Rigid Aluminum Sampling Mast	920-213
High Flow chek-mate Flowmeter, 5 to 30 L/min, includes a 9-volt alkaline battery	
with NIST standard traceable calibration certificate	375-50300N
with ISO standard traceable calibration certificate	375-50300S
Pulsation Dampener, *required for use with High Flow chek-mate Flowmeter for flow rate verification of high flow pumps*	375-150
Kit with High Flow chek-mate Calibrator and Pulsation Dampener Cat. No. 375-150	
with NIST standard traceable calibration certificate	375-50300-KN
with ISO standard traceable calibration certificate	375-50300-KNS

Replacement Parts

Lead-Acid Battery for AirChek 20, 12 V, 7-Ah lead-acid	P920201

Use only SKC-approved parts to ensure reliable performance. Failure to do so voids any warranty.

Use of a repaired or rebuilt battery pack VOIDS ANY WARRANTY.

SKC Limited Warranty and Return Policy

SKC products are subject to the SKC Limited Warranty and Return Policy, which provides SKC's sole liability and the buyer's exclusive remedy. To view the complete SKC Limited Warranty and Return Policy, go to skcinc.com/warranty.

APPENDIX: PERFORMANCE PROFILE

<table>
<tr><th colspan="2">Flow</th></tr>
<tr><td>Flow Range</td><td>4 to 20 L/min</td></tr>
<tr><td>Compensation Range (back pressure capability)</td><td>20 L/min at 25 inches water back pressure
16 L/min at 70 inches water back pressure
12 L/min at 120 inches water back pressure
10 L/min at 145 inches water back pressure
8 L/min at 170 inches water back pressure
4 L/min at 225 inches water back pressure</td></tr>
<tr><td>Tubing</td><td>Requires 1/4-in ID tubing</td></tr>
<tr><th colspan="2">Operating</th></tr>
<tr><td>Display</td><td>LCD displays battery charge status; flat battery; sample run time in hours, minutes, and seconds; sleep mode; start delay countdown; sample period repeats during operation; motor fault warning</td></tr>
<tr><td>Flat Battery Automatic Shutdown</td><td>Flat Battery is displayed on LCD and automatic shutdown occurs if battery is fully depleted and pump is waking from Sleep mode, attempting to run pump (will not run when battery is fully exhausted/depleted), pump is running (pump will stop and retain elapsed run time in memory).

Battery must be charged to at least 75% capacity to clear the flat battery screen.</td></tr>
<tr><td>Programmable</td><td>Run time: Sample run time programmable in hours and minutes via keypad and LCD screen.
Delayed start time: Sample start delay time programmable in hours and minutes via keypad and LCD screen. Start delay countdown displayed during operation.
Intermittent sample runs: Number of sample period repeats and interval between them programmable via keypad and LCD screen. Sample period repeats displayed during operation.</td></tr>
<tr><td>Operating Temperature</td><td>23 to 122 F (-5 to 50 C)</td></tr>
<tr><td>Operating Humidity</td><td>0 to 95% RH</td></tr>
<tr><td>Typical Run Time</td><td>
<table>
<tr><th>Filter type</th><th>Flow Rate L/min</th><th>Run Time P920201 7-Ah Battery</th></tr>
<tr><td rowspan="3">25 mm 0.8 µm MCE</td><td>4</td><td>30 hours</td></tr>
<tr><td>8</td><td>13 hours</td></tr>
<tr><td>12</td><td>7 hours</td></tr>
<tr><td rowspan="3">25 mm 1.2 µm MCE</td><td>4</td><td>33 hours</td></tr>
<tr><td>8</td><td>15 hours</td></tr>
<tr><td>12</td><td>8 hours</td></tr>
<tr><td rowspan="3">25 mm GFA</td><td>8</td><td>19 hours</td></tr>
<tr><td>12</td><td>11 hours</td></tr>
<tr><td>16</td><td>6 hours</td></tr>
</table>
The pump runtime tests were carried out with new fully charged batteries under clean factory conditions, therefore the results do not take account of filter loading. Pump performance and filter back pressure may vary.
Note: These are not suggested flow rates for sampling methods but are pump performance indicators.</td></tr>
<tr><td>Noise Level</td><td>63 dBA at 1 meter*
*Representative noise level at flow rate of 8 L/min and 100 inches of water back pressure</td></tr>
</table>

Power	
Power Supply	• **Internal Battery for AC 20 pump P920201:** Removeable, lead-acid, 12 V, 7 Ah • **Charger for AC 20 pump 920-210:** Input voltage 110-240 V, multi-plug • **External option for extended run times:** AC adapter for AC 20 pump, 110-240 V, multi-plug Cat. No. 920-211 OR external high capacity 12 V lead-acid battery (not SKC supply) using external battery power cable Cat. No. 920-212 ***Note:*** *For either external option, we recommend using it in conjunction with a P920201 internal battery to retain the pump program and run time data when external power supplies are disconnected.*
Battery Recharge Time *(with SKC-approved charger; varies with battery capacity and level of discharge)*	10 hours
Charging Temperature	23 to 113 F (-5 to 45 C)
Storage Temperature	23 to 122 F (-5 to 50 C)
Physical	
Size	6.4 x 4.4 x 8 in (163 x 112 x 203 mm)
Weight	**Without battery:** 4.5 lb (2.06 kg) **With P920201 battery:** 9.6 lb (4.26 kg)
Case	IP 20 rating
Certification	CE, UKCA, EMC-compliant with IEC 61000-6-1 and 61000-6-3