

## PTK220 Test Kit Replacement Parts

	Part No.	Description
1	RM01503	1" Air Supply Hose Assembly
2	RM01504	¼" Test Tubing with Fittings
3	RM00483	Manual Timer
12	RM00492	Twist Lock Adapter with ¼" Male Fitting
13	RM01108	Twist Lock Adapter with 1" Male Fitting

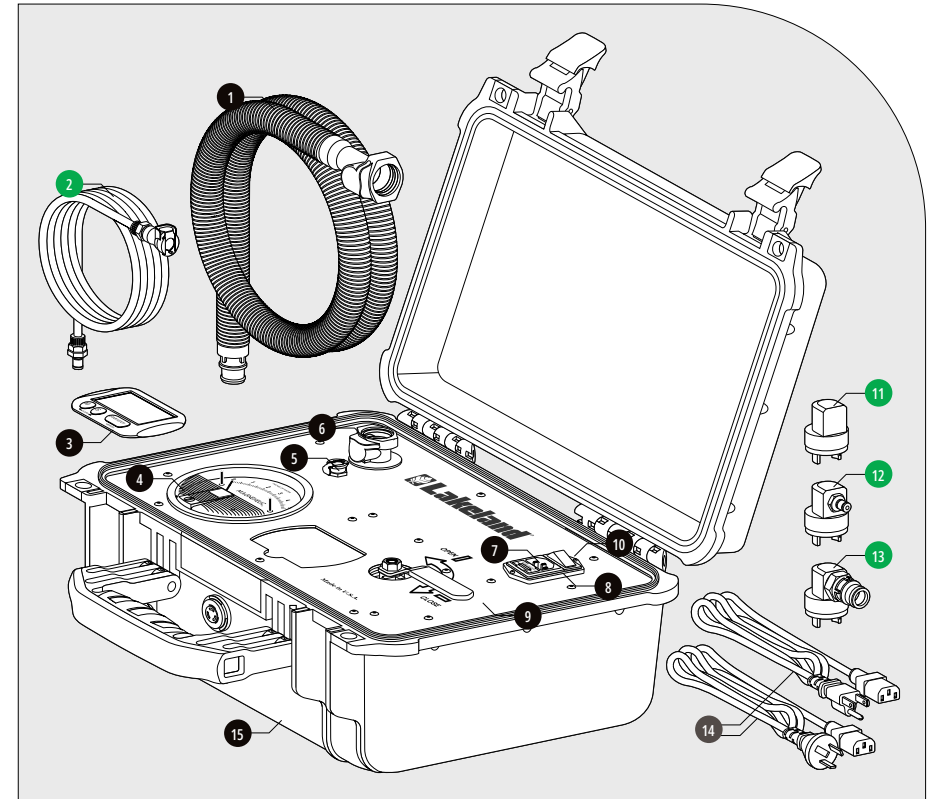
## How to Return a Lakeland Chemical Suit for Repairs

Please contact your Lakeland Customer Service Representative at 800-645-9291 for a Return Goods Authorization Number (RGA). All returns must accompany an RGA number obtained from Lakeland Customer Service. There is a service charge for inspecting suits over the warranty period of 90 days.

**Do not send any suit that has been exposed to any kind of chemical, or a dirty suit that has been improperly stored in a hazardous area!**



## PTK220 - Pressure Test Kit Usage Instructions



### Test Kit Components

1	1" Air Supply Hose	9	Yellow "Open - Close" Air Valve
2	¼" Test Tubing	10	Blower Motor "On - Off" Switch
3	Manual Timer	11	Blank Twist Lock Adapter for NFPA Suits
4	Magnehelic Gauge 0-10"	12	Twist Lock Adapter with ¼" Male Fitting
5	¼" Female Test Tubing Connector	13	Twist Lock Adapter with 1" Male Fitting
6	1" Female Air Supply Hose Connector	14	6' - 120V and 220V Power Cords
7	10A, 250V Fuse Holder	15	Complete Blower Assembly
8	Universal Power Cord Connector		



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Notice: This document contains general use information of the products and services described. All products should be used only by trained and qualified personnel who have examined all relevant cautions and warnings. Always review all applicable laws and regulations, as well as your company's procedures before use. Consult your company's safety/health officer for more information.

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● located in test kit case

● located in cloth storage bag

● located in shipping box

- 1 The suit should be tested in a controlled environment, away from any open doors and windows.
  - 2 Unpack the suit from its storage bag.
  - 3 When you unpack the suit to be tested, place the face shield face down on top of the storage bag. This prevents the face shield from being scratched.
  - 4 Straighten the body of the suit, being sure to remove all folds and wrinkles.
  - 5 Release the Velcro and open up the back of the suit. This will allow the suit to reach room temperature, and gain access to the exhaust valves.
  - 6 Start at the top of the suit, near the head. Snap the exhaust valve cover off the exhaust valve.
  - 7 Remove the rubber diaphragm from the exhaust valve. To accomplish this, gently stretch the tail of the exhaust valve from the inside of the suit. At the same time, pull the diaphragm out of the valve from the front.
  - 8 Now that you have removed the cover and diaphragm from the first valve, you can remove the valve cover and diaphragm from the second valve. This valve is located at the left side of the torso. Simply repeat the same process by removing the exhaust valve cover, then gently stretching the tail of the exhaust valve from the inside of the suit and pulling the diaphragm out of the valve from the front.
  - 9 At this point in the process, you have removed the covers and rubber diaphragms from 2 exhaust valves. If you are testing an NFPA certified suit, you will need to remove the third set of valve covers and rubber diaphragms.
  - 10 Remove the twist lock adapter with the large 1" male fitting [13] from the test kit.
  - 11 This adapter has a rubber washer. It is very important that you lubricate this washer before you insert it into the exhaust valve.
  - 12 Mix one teaspoon of dish washing detergent with one cup of water. Moisten the rubber washer on the twist lock adapter with the soap and water solution to ensure good adhesion for the testing.
  - 13 Start at the top of the suit. Insert the twist lock adapter with the 1" large male fitting [13] into the exhaust valve at the head of the suit.
- Always place one hand inside the suit under the exhaust valve when installing the adapter to avoid damaging the face shield and the suit material. To lock the valve in place, simply turn it clockwise.
- 14 Now that you have correctly installed the first twist lock adapter, remove the twist lock adapter with the small ¼" male fitting [12] from the kit. You will now repeat the same process for this twist lock adapter.
  - 15 Moisten the rubber washer on the twist lock adapter with soap and water solution before inserting into the exhaust valve.
  - 16 Insert the twist lock adapter into the lower exhaust valve, twisting clockwise to lock it in place.
  - 17 If you are testing an NFPA suit, you will have to repeat the process a third time using the supplied twist lock adapter plug [11]. Insert this adapter into the third exhaust valve.
  - 18 Start closing the zipper 6" to 12" at a time. It is important to close the zipper slowly so that you keep the zipper in optimum condition.
  - 19 As you get to the end of the zipper, there is a plastic tab. It is very important that the zipper passes this point, and you zip it all the way to the top. If you don't, the suit will leak and fail the pressure test.
  - 20 Before you start the test, you need to check the needle on the magnehelic gauge [4] for calibration. Make sure the needle is exactly on zero.
  - 21 If the needle does not read zero, simply turn the adjusting screw until the needle points to zero.
  - 22 Once you have completed the calibration, you are ready to connect the clear plastic tubing and gray air hose.
  - 23 Remove the 1" gray air hose [1] from the test kit.
  - 24 At the top of the suit, insert the large female fitting of the gray air hose over the 1" male fitting on the twist lock adapter [13].
  - 25 Insert the male end of the gray air hose into the female plug on the test kit control panel [6].
  - 26 Remove the clear ¼" tubing [2] from the test kit. Now you are ready to connect the tubing to the adapter plug at the torso.
- 27 Insert the female fitting over the small male fitting on the ¼" twist lock adapter [12] on the right side of the torso.
  - 28 Take the other end of the tubing and insert the male fitting into the ¼" female fitting [5] on the test kit control panel.
  - 29 Insert the female end of the electric power cord [14] into the test kit control panel socket [8], and the male end into an AC outlet.
- DO NOT USE THIS OR ANY OTHER ELECTRICAL APPLIANCE IN OR AROUND WATER OR AN IMPROPERLY GROUNDED OUTLET!**
- 30 Once everything is attached, you are ready to begin the pressurization. Turn the test kit blower switch [10] to "On", and slowly turn the yellow air valve handle [9] to "Open."
  - 31 As the suit slowly inflates, work out any big wrinkles in the suit that might interfere with the test. By removing the wrinkles, you are ensuring an adequate test.
  - 32 When the pressure on the test gauge [4] reaches 5" of water column, turn the yellow air valve handle [9] to "Close."
  - 33 Turn the test kit blower switch [10] to "Off."
  - 34 Never inflate the suit to over 5" of water column—this will damage the suit and test kit.
  - 35 Make sure there are no big wrinkles in the suit that might interfere with the test.
  - 36 Now, set the timer to exactly four minutes.
  - 37 Once the timer is set, reduce the air pressure in the suit to 4" of water column. Do this by partially opening the yellow air valve handle. Once you reach 4" of water column pressure, close the handle to "Off."
  - 38 It is at this time that the test really starts. Press the "Start/Stop" button on the timer to begin the 4 minute countdown.
- Do not move or touch the suit during the timed test, as this will affect the water column pressure and will result in inaccurate readings.**
- 39 At the end of the 4 minutes, record the suit pressure. If the suit pressure is 3.2" of water column or better, the suit has passed the test.  
*If the suit pressure is below 3.2" of water column, it fails the test. Remove the suit from service immediately. See instructions for returning the suit to Lakeland for repairs at the end of these instructions. You must have an RGA number to return a suit. There is a service charge to inspect the suit if the suit is over the warranty period of 90 days.*
  - 40 Once you have completed the test, disconnect the tubing and hose from the twist lock adapters and release the air pressure in the suit by unzipping the zipper 12" at a time.
  - 41 Remove the twist lock adapters from the exhaust valves.
  - 42 Reinstall the rubber diaphragms back into the exhaust valves. To do this, pinch the rubber diaphragm sides against each other and push the tail of the diaphragm into the exhaust valve. Pull on the tail slightly and the rubber diaphragm should pop right into place.
  - 43 The diaphragm should lay flat if it is installed properly. If it isn't flat, remove it & reinstall it.
  - 44 Now that the rubber diaphragm is in place, snap the exhaust valve cover back into position, and repeat this process for the remaining adapters.
  - 45 The suit is now ready to be placed into the storage bag. First, fold the feet into the legs.
  - 46 Fold the arms accordion-style onto the back of the suit.
  - 47 Fold the legs of the suit over and towards the top of the head.
  - 48 Once the arms and legs are folded, you are going to roll fold the suit over. Start at the bottom and work toward the top.
  - 49 It is important that you do not crease the hood face shield during this process.
  - 50 Once you have folded the suit, insert it into the storage bag for future use.
  - 51 Once the test is complete, fill the inspection date and the name of the inspector in your manual along with any remarks you may have.
  - 52 Once the suit is in the storage bag, place all the elements of the test kit back into the box.
  - 53 To conserve the timer's battery life, remove the battery cover and flip the battery over.
  - 54 If you have any questions about the testing procedure, please call Lakeland Customer Service at **800-645-9291**.