



USER'S INSTRUCTIONS

IST-USO-0905100

Rev. 1 – 11/01/2017

IDP 109

Page 1 of 2

PROF88 – KOMPAT88

POWERED AIR PURIFYING RESPIRATORS

Respirator composition chart:

Respirator Part # Code	Helmet	Filter	Battery Charger	Airflow indicator	NIOSH APPROVAL
0313072	PROF88 0302032	2 X ZP3 0601023	NC-9 0105082	0806010	TC-21C-633
0313143	KOMPAT88 0302029	2 X ZP3 0601023	NC-9 0105082	0806010	TC-21C-633

1. DESCRIPTION

- 1.1 HELMET: It is composed of: a fiberglass shell covered with 3 coats of paint, the last one of which, the most external one, is polyurethane; a polycarbonate visor; a polyamide collar which closes efficiently and comfortably round the operator's neck; a head-band adjustable from 53 to 63 cm (6-5/8 to 7-7/8 hat size).
- 1.2 BLOWER UNITS (built into the helmet): They are located in a plastic housing and are composed of a fan actuated by an electric micro motor.
- 1.3 BATTERY ASSEMBLY (built into the helmet): It is composed of: Nickel Cadmium batteries connected in series.
- 1.4 BATTERY CHARGER: It is composed of: a stabilized battery charger and includes electric cord and plug.
- 1.5 ZP3 FILTERS: made of finely pleated technical paper packed into plastic housing.
- 1.6 AIRFLOW INDICATOR: It is composed of a transparent tube with indicator ball inside. The indicator is needed to check the airflow performance of the respirator it is supplied with, before each use.

2. TECHNICAL CHARACTERISTICS

2.1 HELMET:

- Shell : Fiberglass - Face shield : Polycarbonate – Head suspension: Polyethylene – Face shield gasket: polyethylene foam.
- Noise level < 80Db.

2.2 BLOWER UNITS

Type of unit	Type of filter	N. of filters	Voltage	Airflow at 20°C 60% R.H. -Battery fully charged - Lpm	Expected micro motor life
			- Volts		- Hours
PROF88	ZP3	2	10,8	>170	800
KOMPAT88					

2.3 BATTERY ASSEMBLY

Type of blower unit	Type of battery	No. of batteries connected in series	Voltage	Terminal voltage under load	Running time at 20°C	Approx. battery life
			- Volts	- Volts	- Hours	
PROF88 KOMPAT88	Ni-CD 2,2Ah	9	10,8	9	>4	2 years or 300 cycles

- Cycle service life:

- 300 for discharges of 100%
- 1500 for discharges of 50%
- 2500 for discharges of 30%

2.4 BATTERY CHARGER

Type of unit	Charger Model	INPUT	OUTPUT	Charging time Hours
PROF88 KOMPAT88	NC-9	110V 60Hz	12,8V 400mA	≅ 6

2.5 ZP3 FILTER (0601023):

HE – High Efficiency Particulate Air filter for powered, air-purifying respirators. (See also label and Users' Instructions packed with filter).

When the HEPA filter is exhausted, an increase in drop pressure is registered on the filter. This is indicated by a progressive diminishing of the airflow inside the respirator.

3. OPERATION

- 3.1 The blower units, powered by the built-in rechargeable batteries, take in air through the filters and send it to the inside of the helmet. The helmet goes into positive over pressure and the wearer breathes filtered air. Expired air is expelled through the diaphragm valves.

4 USE

- 4.1 For the protection of the eyes and respiratory system of the wearer while working in non I.D.H.L. environments containing dusts, fumes and mists.

4.2 LIMITATIONS

- Do not use in atmospheres immediately dangerous to life or health.
- Do not wear for protection against vapors and gas, carbon monoxide (CO), natural gas and fumigants.
- Do not use in closed environments (tanks, silos etc.).
- Do not use for fire fighting.
- Do not use in atmospheres containing less than 19.5% oxygen.
- Do not use in explosive atmospheres.
- Do not exceed max. use concentrations established by regulatory standards.

5. OPERATING INSTRUCTIONS

5.1a BATTERY RECHARGING USING NC-9 BATTERY CHARGER.

- Plug the battery charger into mains.
- Connect battery charger to the discharged battery.
- Battery recharging is automatic. (Red led). Led turns GREEN when battery is about 90% charged.
- The battery charger may remain plugged into the fully charged battery with no overcharge risk provided it is energized. (See also instructions packed with battery charger)

5.2 HELMET SET-UP

- Remove protective film from visor. The film was applied to preserve the transparency of the polycarbonate until the moment of use.
- Fit the helmet on head steadily.
- Adjust head band fit.

5.3 DONNING INSTRUCTIONS:

DON PAPR IN AN UNCONTAMINATED ENVIRONMENT.

- Don helmet and tighten collar drawstring around neck by pressing the button and sliding it up the drawstring. The drawstring should be pulled as close as possible around the neck to assure maximum closure but it should at all times feel comfortable and not restrict breathing in any way.
- **for PROF88 respirator:** Close lift-up visor.

5.4 AIRFLOW INDICATOR – Airflow checking test:

- Make sure the Ni-Cad battery is fully charged.
- Check that the filters are fitted into the helmet properly.
- Open collar and keep it open throughout the test.
- Switch the helmet ON.
- Fit the airflow indicator over the right hand filter and position so that the indicator is upright.
- Check position of indicator ball:
 - If it rises above the 170 LPM indication line, the equipment is working properly.
 - If it remains below the 170 LPM indication line, replace the filters and repeat the test.
 - Should the ball continue to stay below the 170 LPM line, recharge the battery and repeat the test.
 - If the ball still remains below the 170 LPM line, replace the battery and repeat the complete test.
- Fit the airflow indicator over the left filter and carry out the complete test as above.
- Remove the airflow indicator.

The PAPR may be used only if both tests (both left and right sides) give positive results. Do not use the PAPR with airflow indicators fitted over the filters. The

above described test is for checking airflow only and is inappropriate for checking the capacity or the running time of batteries. The supplied airflow indicator is to be used to check the airflow of the PROF88 and KOMPAT88 PAPRs only.

6 MAINTENANCE

6.1 HELMET

- Clean shell with organic solvent free detergent or better still with soapy water only.
- Clean visor with soapy water only.
- Wash collar with warm soapy water.

6.2 NiCad BATTERY:

- The battery does not require servicing or tipping up.
- Store helmet switched OFF and with batteries completely discharged.
- After a long storage period repeat the charge-discharge cycle 5 times to bring the battery up to its original capacity.

6.3. BATTERY CHARGER:

- Store in a dry place.
- Avoid excessive impacts or vibrations as these could alter the setting.

6.4 FILTERS:

- If sealed, the filters remain unaltered until the expiry date shown on them.
- Filters cannot be washed, blown out or restored. When exhausted they must be disposed of.
- Replace both filters simultaneously.

6.5 The PAPR is to be serviced once a year by KASCO or Kasco authorized service centre.

7. CAUTION

- 7.1- Do not use the respirator under the conditions described at paragraph 4.2.
- Do not use the respirator for any reason whatsoever if said does not pressurize.
- 7.2- Do not use the respirator if only one fan unit is working.
- Do not use two different types of filters. Both filters must have the same characteristics.
 - Do not use respirator if it does not supply an airflow of at least 170 Lpm.
 - Do not immerse helmet in water for cleaning.
- 7.3- Do not place battery near or in fire.
- Do not short the terminals.
 - Do not leave the helmet ON even if the battery has been discharged.
- 7.4- Do not use battery chargers other than the supplied NC-9 for recharging batteries.
- Do not keep the battery charger connected to the battery unless it is also connected to the mains and the switch is ON.
 - The battery charger functions at its best at average indoor temperature (between + 15° and + 25° C).
- 7.5- Do not use expired filters even if their seals are still intact.
- Do not use a filter for more than three months.
- 7.6 Return to fresh, clean air immediately and take helmet OFF if:
- a) Leakage is detected by smell, taste or eye, nose or throat irritation.
 - b) Inhaled air becomes extremely hot.
 - c) Any feeling of nausea, dizziness or ill being develops.

7.7 THE HELMET WILL NOT FURNISH BREATHING PROTECTION UNLESS THE FAN UNITS WHICH DRAW IN AIR THROUGH THE FILTERS ARE FUNCTIONING PROPERLY.

7.8 Never alter or modify this respirator in any way.

7.9 Replace the helmet after harsh impacts even if it does not present any visible damage.

7.10 This equipment is to be used only by qualified personnel trained in accordance with a respirator program as outlined in ANSI Z 88.2-1980.

7.11 Do not use the respirator if your sense of smell is in any way impaired.

7.12 Do not use the respirator if it has not been serviced annually by a Kasco authorized service centre.

8. REPAIRS

8.1. Use only genuine KASCO spares.

8.2. For setting and adjustment of electrical parts contact KASCO.

8.3. Should you require technical assistance for problems that could arise while using KASCO equipment always include the following information:

- a) Type of respirator.
 - b) Series number.
 - c) Name of dealer.
 - d) Problem.
 - e) Voltage.
 - f) type of pollution and concentration of same
 - g) type of filter.
 - h) amount of hours worked annually - maximum hours worked.
- Also include a sketch or drawing of the type of work carried out if you feel it might be useful.

9. TRANSPORT

9.1 The PAPR is to be kept in its original packing during transport.

10. STORAGE

10.1 Store filter in its original packing at a temperature between 0°C and 40°C and a relative humidity lower than 80%.

11. WARNING

11.1 Review the respirator composition chart / Niosh approval label found inside the respirator packaging and ensure that the respirator is composed of the correct sub assemblies before use.

11.2 Kasco retains any type of warranty forfeited on the instant and declines any liability either direct or indirect should our User's Instructions not be adhered to and should filters and spares other than genuine Kasco filters and spare be used.

11.3 The liability for the proper operation of the respirator is irrevocably transferred to the purchaser or operator if:

- a) the prescribed maintenance is not carried out and/or if repairs and maintenance are carried out on the respirator by personnel not employed by or service centers not authorized by KASCO.
- b) the respirator is used in a manner not conforming to its intended use as specified in the relative product certification/approval.

11.4 IMPORTANT: Adhere strictly to all instructions, labels and limitations pertaining to this equipment. If instructions and warning are not adhered to at all times, respirator effectiveness will diminish and wearer protection will be reduced.

LIMITED PRODUCT WARRANTY

KASCO, as manufacturer, warrants to the original purchaser, each product of its own manufacture, for a period of one year from its date of shipment from the factory, to be free from defects in material and workmanship under normal use and service.

Normal use and service is intended as all the operations specified in the applicable instruction manuals.

This warranty does not apply to any product which has been repaired or altered to adversely affect the performance or reliability of the respirator or other product.

This warranty does not apply to filters and furthermore does not apply to motors and batteries, the expected life of which is stated in the relative instructions manuals.

Neither this warranty nor any implied warranty applies to damage or harm caused by any or all of the following:

1. Freight damage
2. Damage caused by parts and/or accessories or components not obtained from or approved by KASCO.
3. Damage due to misapplication and/or misuse.

The liability of KASCO under the foregoing warranty is limited to the repair or replacement at KASCO's option without charge for labor or materials of any part upon return of the entire respirator or other product or of the particular part to the KASCO factory within the warranty period, at the sole expense of the purchaser, which part shall upon examination appear to the satisfaction of KASCO to have been defective in material or workmanship.

KASCO expressly warrants its products as above stated. Any other intervention on products returned will be charged at the prices in force.

There are no other express warranties.

Any implied warranties, including implied warranty of merchantability or of fitness for a particular purpose, are limited in duration to one year from the date of purchase by the first purchaser except in States that do not allow time limitations on implied warranties. There is no implied warranty of fitness for a particular purpose or merchantability when this product is put to a rental use.

No person including any dealer or representative of KASCO is authorized to make any representation or warranty concerning KASCO products on behalf of KASCO or to assume for KASCO the obligations contained in this warranty.

KASCO reserves the right to make changes in design and other changes and improvements upon its products without imposing any obligations upon itself to install the same, upon existing products or products then in the process of manufacture.

This warranty does not cover labor expenses for products returned to KASCO within the warranty period for checks or repairs under warranty if said products are found to be in good working order.

Products returned to KASCO for repairs or replacement shall contain the series or lot number originally affixed to the product at the time of production.



KASCO

Via Romania 12 - 42124 Reggio Emilia - ITALY
Tel: +39 0522 308232 - Fax: +39 0522 939803



THESE RESPIRATORS ARE APPROVED ONLY IN THE FOLLOWING CONFIGURATIONS:

RESPIRATOR COMPONENTS													
TC-	PROTECTION ¹	ALTERNATE FACEPIECE-HELMET			FILTER	BLOWER	BATTERY	CONNECTION CORD	BREATHING HOSE	ALTERNATE AIRFLOW INDICATOR		BELT	CAUTIONS AND LIMITATIONS ²
		0302021	0302029	0302032	0601023	0303040	0309064	0309081	0309095	0806007	0806010	0307020	
21C-633	HE		X	X	X						X		ABCFIJLMNOP
21C-627	HE	X			X	X	X	X	X	X		X	ABCFIJLMNOP

1. PROTECTION

HE - High efficiency particulate air filter for powered air purifying respirators

2. CAUTIONS AND LIMITATIONS

- A-Not for use in atmospheres containing less than 19.5 percent oxygen.
- B-Not for use in atmospheres immediately dangerous to life or health.
- C-Do not exceed maximum use concentrations established by regulatory standards.
- F-Do not use powered air-purifying respirators if airflow is less than four cfm (115 lpm) for tight fitting facepieces or six cfm (170 lpm) for hoods and/or helmets.
- I- Contains electrical parts that may cause an ignition in flammable or explosive atmospheres.
- J-Failure to properly use and maintain this product could result in injury or death.
- L-Follow the manufacturer's User's Instructions for changing cartridges, canisters and/or filters.
- M-All approved respirators shall be selected, fitted, used and maintained in accordance with MSHA, OSHA, and other applicable regulations.
- N-Never substitute, modify, add, or omit parts. Use only exact replacement parts in the configuration as specified by the manufacturer.
- O-Refer to User Instructions, and/or maintenance manuals for information on use and maintenance of these respirators.
- P-NIOSH does not evaluate respirators as surgical masks.