

CARE AND MAINTENANCE

WELDING PAPR class III UNITS

FOR LINCOLN ELECTRIC CUSTOMERS AND LINCOLN ELECTRIC AUTHORISED SERVICE SHOPS

Rev.00

EuropurePLUS™ 5500 LS - W403676

ZEPHYR 4500 LS - W000403674

FLIP'AIR 4500 LS - W000403675



1. Introduction

PAPR apparatus requires to be properly maintained in accordance with manufacturer's instructions, local regulation and facility's protocols.

PAPR apparatus have to be inspected before every use and inspected and cleaned after each use.

Lincoln Electric PAPR apparatus require a complete inspection and service every 12 months.

This document provides guidelines to perform the daily and yearly inspection and service to the Lincoln PAPR apparatus.

NOTE: Customers/Users shall keep records of filter replacement and PAPR apparatus maintenance.

2. General information

1. Replace damaged or dirty air filters. Filters cannot be washed or cleaned with compressed air.
Never reuse a dirty air filter.
2. Never use solvents or abrasive cleaning solutions to clean the respirator. Keep water and other fluids out of blower assembly.
3. Cleaning is recommended after each use:
 - a. Clean the outer surfaces of the hose assembly, shoulder strap, belt and battery pack with a clean soft cloth dampened with warm water containing a mild detergent
 - b. If needed, rinse in a similar fashion with clean warm water
 - c. Allow to dry before storage

3. Cleaning Guide

Helmet and Head Covering Cleaning

1. Use a warm water that is approximately 40°C, containing a mild pH neutral (pH 6-8) detergent.
2. Wipe with a soft cloth until clean
3. DO NOT use detergents that contain hypochlorite, iodine, high concentrations of alcohol, lanolin or other oils, organic or chlorinated solvents or abrasive cleaning agents
4. Rinse the surfaces by wiping with a clean soft cloth, lightly dampened with clean warm water, and thoroughly dry before use or storage

NOTE:

- a. Ensure all components are dry prior to reuse or storage
- b. The cleaned Helmet should be carefully inspected per the Operator's Manual

Blower Assembly and Filter Housing Cleaning

1. Clean the PAPR Blower Assembly and Filter Housing
2. Carefully open up the Filter Housing, remove Filter, Pre-Filter
3. Carefully wipe down the exterior of the PAPR Blower Assembly with a mild cleaning solution. Wipe down the inside of the Filter Housing Door and interior Blower Assembly, making sure liquid does not enter the blower motor area
4. Carefully wipe down the outer cartridge frame of the Filter, and separately, wipe down the Spark Screen (if available in your model). Inspect the Filter, Pre-Filter and Spark Arrestor (if available in your model), replace if needed
5. DO NOT allow liquid to enter the PAPR Blower Motor Assembly or onto the Filter and Pre-Filter
6. DO NOT attempt to clean the Filter and Pre-Filter media inside of the PAPR Blower Motor Assembly
7. DO NOT spray the PAPR Blower Motor/Cartridge, as doing so may damage the PAPR Filter, Pre-Filter and Blower Motor
8. Rinse the PAPR Blower Assembly and Filter Housing by wiping with a clean soft cloth dampened with clean warm water, in a similar fashion as above

NOTE:

- a. Insure all components are dry prior to reuse or storage
- b. Reassemble unit as described in the product Operator's Manual

4. Yearly Inspection and Service Guide

The yearly Inspection and Service can be carried out by a local Lincoln recommended Authorized Service Facility, contact your local Lincoln Service department for proper information or find your nearest Lincoln Authorized Service Facility at following link:

https://mylincoln.lincolnelectric.com/northamerica/s/store-locator?app=commeditor&language=en_GB

During the Yearly Inspection and Service the following actions have to be performed:

1. Helmet and Head Covering Cleaning
2. Blower Assembly and Filter Housing Cleaning
 - a. Clean the breathing tube by wiping it down. Alternatively, it can immerse in the cleaning solution.
3. Deep and careful Inspection of blower assembly, breathing tube, belts and helmet to focusing on:
 - a. Physical distortion of shape, cracks, tears, high degree of wear or holes on each PAPR component (including ADF filter)
 - b. Scratched lenses
 - c. Damaged mounting clips, badly worn threads or missing gaskets
 - d. Excessive connections wear
 - e. Air flow rate test (follow indications on PAPR Operator Manual)

Any damaged components that is discovered during this deep inspection shall be replaced.

During the Yearly Inspection and Service the following parts shall be replaced by the Lincoln Authorized Service Facility:

EuropurePLUS™ 5500 LS

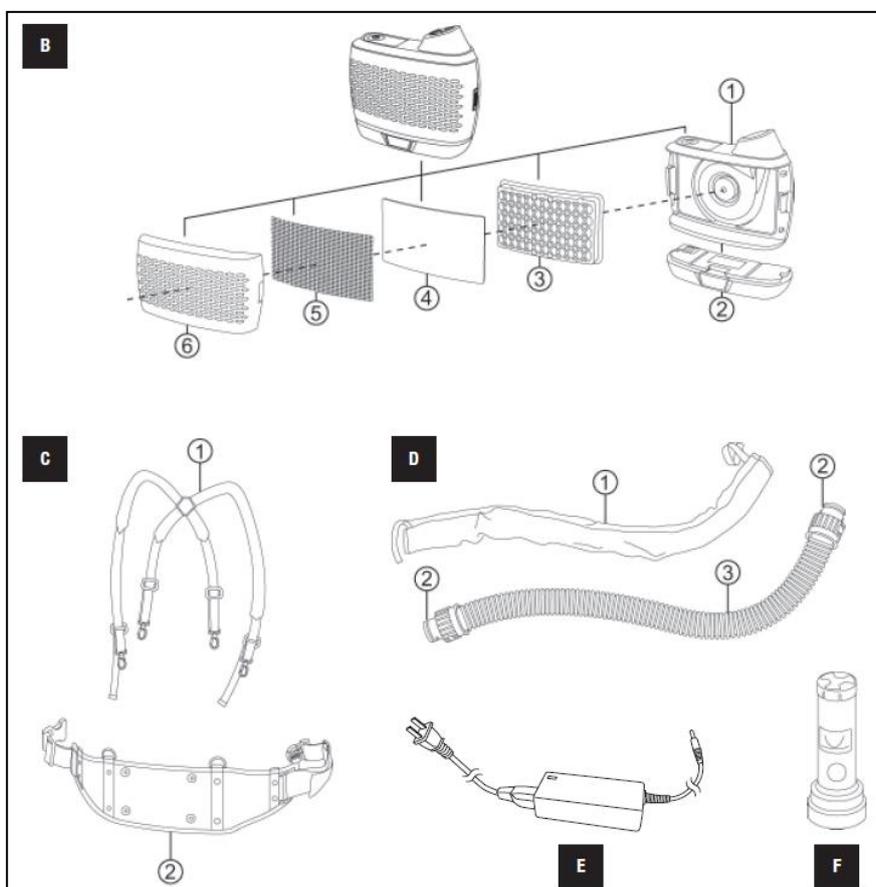
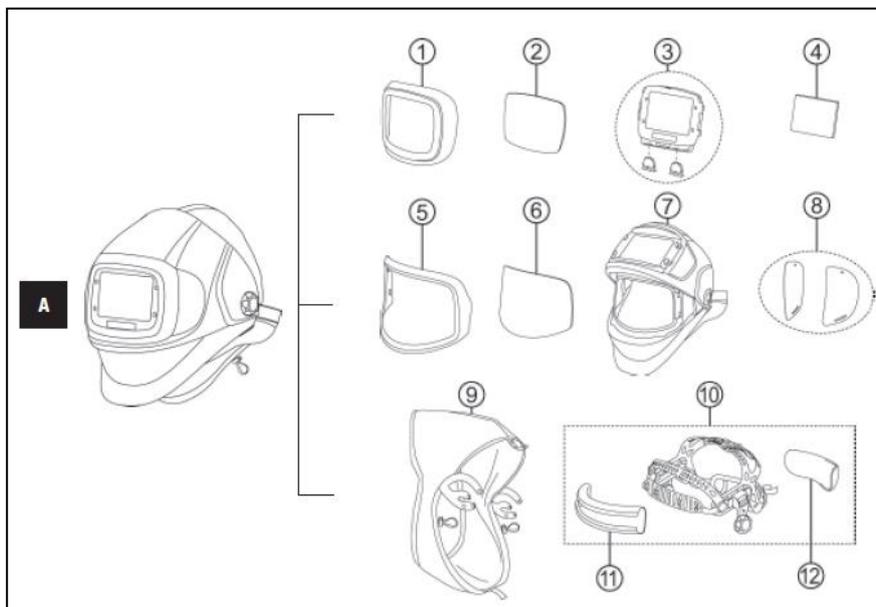
Pre Filter	part number: WP403676-18
Particle filter P3	part number: WP403676-17
Spark screen	part number: WP403676-19
Face seal	part number: WP403676-12
Filter type A1B1E1K1	part number: WP403676-30

ZEPHYR 4500 LS/ FLIP'AIR 4500 LS

Pre Filter	part number: W000271207
Particle filter P3	part number: W000271208

Appendix

Spare Parts List EuropurePLUS™ 5500 LS - W403676



General Assembly**A. TM1000 Helmet with Air Duct Assembly**

A-1 Front lens holder	WP403676-4
A-2 Outside cover lens (160.36x107.3 mm)	WP403676-5
A-3 ADF Cartridge	WP403676-6
A-4 Inside cover lens (107x80 mm)	WP403676-7
A-5 Grind lens holder	WP403676-8
A-6 Grind lens (anti-fog, 223x129.8 mm)	WP403676-9
A-7 Helmet shell with air duct	WP403676-10
A-8 Side lens cover	WP403676-11
A-9 Face seal	WP403676-12
A-10 Headgear (Including sweatband & soft pad)	WP403676-13
A-11 Sweatband	WP403676-14
A-12 Soft pad	WP403676-15
SPRING (Not illustrated)	WP406676-36

B. Blower Unit

B-1 Body	WP403676-16
B-2 Fast-charging standard battery	WP403676-1
Fast-charging extended battery	WP403676-2
B-3 Particle filter (P3 filter)	WP403676-17
B-4 Pre-filter	WP403676-18
B-5 Spark screen	WP403676-19
B-6 Filter cover	WP403676-20

C. Wears

C-1 Shoulder strap	WP403676-22
C-2 Belt cushion (Including screws & washers)	WP403676-23

D. Hose

D-1 Hose cover	WP403676-24
D-2 O-ring	WP403676-25
D-3 Hose (Including O-ring)	WP403676-26

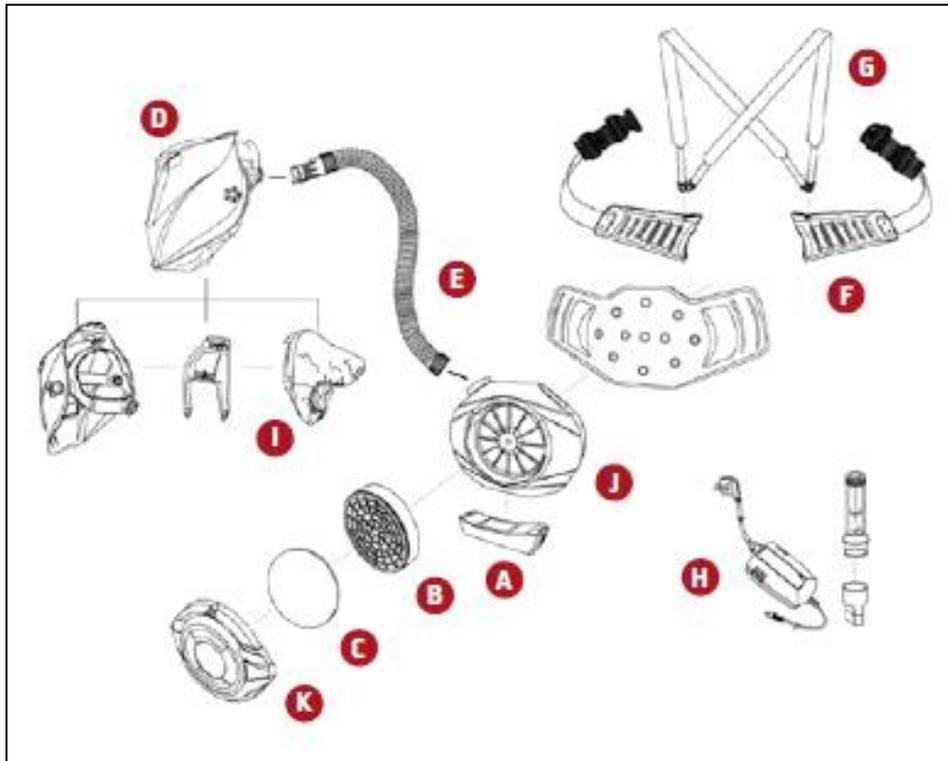
E. Battery Charger

E Fast-charging battery charger	WP403676-3
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F. Air flow Indicator

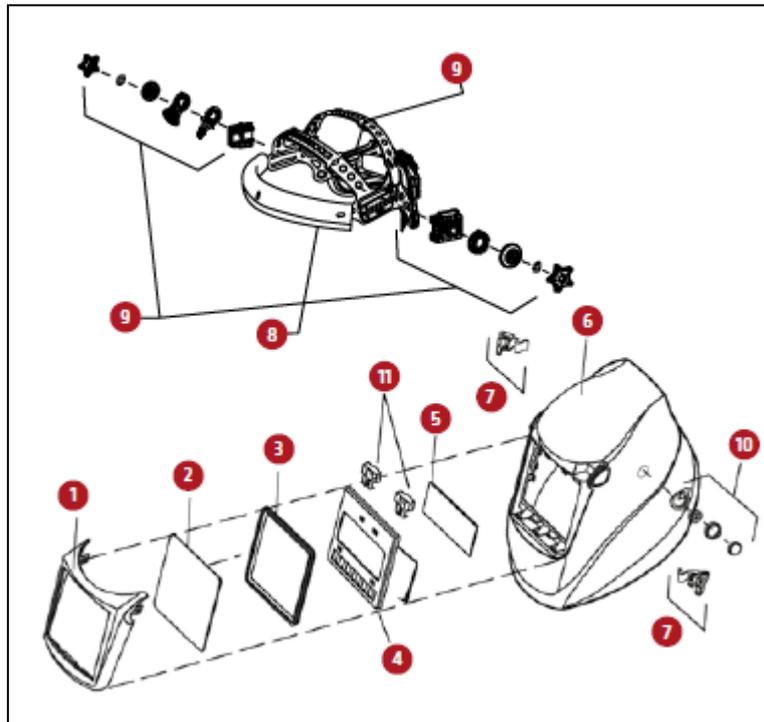
F Air flow indicator	WP403676-27
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Spare Parts List ZEPHYR 4500 LS - W000403674



A	8 hours battery ($\pm 5\%$)	W000271210-1
B	Particle filter P3	W000271208
C	Pre filter	W000271207
	Carbon filter (<i>odors filter</i>)	W000271209
D	ZEPHYR shell without lens	W000271212
E	Hose 110 cm	W000271205
	Hose protective cover	W000271206
F	Comfort belt (<i>size 70 - 113 cm</i>)	W000271203
G	Shoulder strap	W000271204
H	Battery charger	W000271211-1
I	Green protection ZEPHYR	W000272540
I	Green protection FLIP'AIR	W000382676
J	Motor	W000377929
K	Filter cover	W000378987

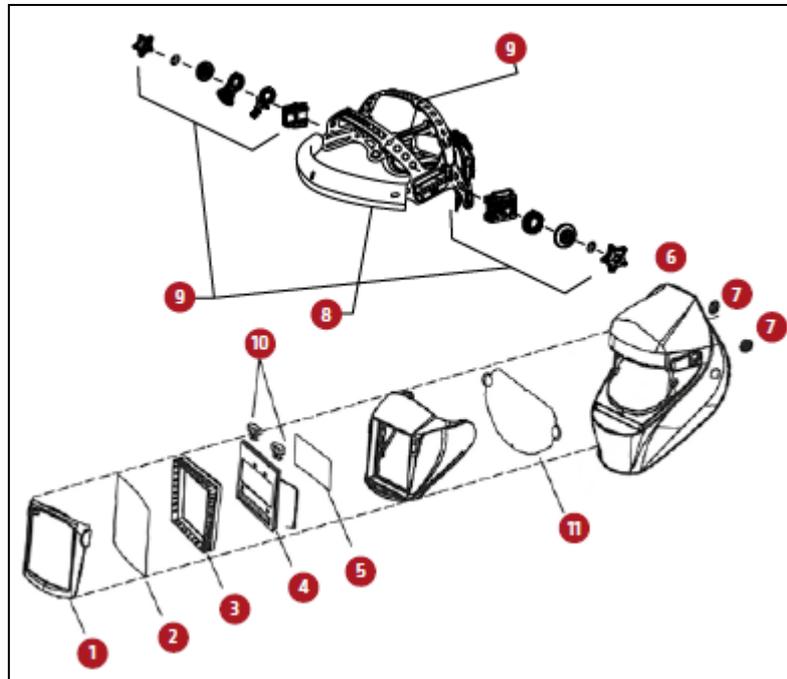
Helmet Spare Parts List ZEPHYR 4500 LS - W000403674



ZEPHYR LS 4500

1 - Front Lens Holder	W000272828-1
2 - Outside Lens Cover	W000261993
3 - Gasket, Lens Assembly	W000261192
4 - ADF Cartridge	W000402681
5 - Inside Lens Cover	W000261994
6 - Helmet Shell	W000402494
7 - Buttons, Front Lens Holder (L/R)	W000276258
8 - Fabric Sweatband	W000402690
9 - Headgear FLEXTECH 1 (including sweatband)	W000402692
10 - Kit external grinding button	W000378989
11 - Spare batteries (CR 2450 lithium)	W000260920

Helmet Spare Parts List FLIP'AIR 4500 LS - W000403675



FLIP'AIR LS

1 - Front Lens Holder	W000403674-1
2 - Outside Lens Cover	W000375551
3 - Gasket, Lens Assembly	W000403675-6
4 - ADF Cartridge	W000402682
5 - Inside Lens Cover	W000335163
6 - Helmet Shell	W000403675-SP-1
7 - Buttons, Front Lens Holder (L/R)	W000382922
8 - Fabric Sweatband	W000402690
9 - Headgear FLEXTech 1 (including sweatband)	W000402692
10 - Spare batteries (CR 2450 lithium)	W000260920
11 - Grinding cover kit	W000374799
HINGEx2 (Not illustrated)	W000403675-7