

TRANSMITTAL LETTER

COMPONENT MAINTENANCE MANUEL for "PED SAFETY BAG CLASS 3 AND CLASS 2" (ATA 25-65-00). The first issue dated Dec 01/24 is attached and covers all components held by every operator.





CE579

COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

25-65-00 REVISION **00**

PED SAFETY BAG CLASS 3

UMACF018300-000

PED SAFETY BAG CLASS 2

UMACF018200-000

THIS DOCUMENT CONTAINS TECHNOLOGY OR TECHNICAL DATA NOT CONTROLLED UNDER GERMAN REGULATIONS. HOWEVER LOCAL REGULATIONS APPLY.

TITLE
Page | 1
Dec 01/ 2024

INITIAL ISSUE: DEC 01/2024



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TITLE
Page | 2
Dec 01/ 2024





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RE.	ISSUE	INSERTED		RE.	ISSUE	INSERTED)
NO.	DATE	DATE	BY	NO.	DATE	DATE	BY
00	Dec 01/2024						
00	Dec 01/2024						

Retain this record in the front of the manual.

On the receipt of revisions, insert revised page in the manual and enter revision number, date and initials.







LIST OF EFFECTIVE PAGES

SUBJECT	<u>PAGE</u>	<u>DATE</u>	<u>RE</u>	SUBJECT PAG	<u>DATE</u>	<u>RE</u>
TITLE				INTRODUCTION		
	TITLE 1 TITLE 2 TITEL 3	Dec 01/2024 Dec 01/2024 Blank	00 00 00	INTRO INTRO		00
	TITLE 3	DIATIK	00	INTRO INTRO		00
				DESCRIPTION AND OPERATIO	<u>N</u>	
RECORD OF REVISIONS	ROR 1 ROR 2	Dec 01/2024 Blank	00		1 Dec 01/2024 2 Dec 01/2024 3 Dec 01/2024 4 Dec 01/2024 5 Dec 01/2024	00 00 00 00 00
					6 Dec 01/2024 7 Dec 01/2024	00
				TESTING AND FAULT ISOLATION	8 Blank <u>DN</u>	00
				100 100		00
LIST OF EFFECTIVE PAGE	<u>s</u>			DISASSEMBLY		
	LEP 1 LEP 2 LEP 3	Dec 01/2024 Dec 01/2024 Dec 01/2024	00 00 00	300 300		00 00
TABLE OF CONTENTS				CLEANING		
	TOC 1 TOC 2	Dec 01/2024 Dec 01/2024	00 00	400 400		00 00
LIST OF ILLUSTRATIONS				CHECK		
				500 500 500	2 Dec 01/2024	00 00 00

LEP Page | 1 Dec 01/ 2024



<u>s</u>	UBJECT	<u>PAGE</u>	DATE	<u>RE</u>	SUBJECT	PAGE	DATE	<u>RE</u>
<u>R</u>	EPAIR				STORAGE INCLU	IDING TRANSPO	<u>DRTATION</u>	
		6001	Dec 01/2024	00		15001	Dec 01/2024	00
		6002	Blank	00		15002	Dec 01/2024	00
						15003	Dec 01/2024	00
						15004	Dec 01/2024	00
						15005	Dec 01/2024	00
						15006	Dec 01/2024	00
						15007	Dec 01/2024	00
						15008	Dec 01/2024	00
						15009	Dec 01/2024	00
						15010	Dec 01/2024	00
<u>A</u> S	<u>SSEMBLY</u>					15011	Dec 01/2024	00
		7001	Dec 01/2024	00		15012	Dec 01/2024	00
		7002	Blank	00		15013 15014	Dec 01/2024 Dec 01/2024	00
						15014	Dec 01/2024 Dec 01/2024	00
						15016	Dec 01/2024 Dec 01/2024	00
						15017		00
						10017	Blank	00
					<u>REWORK</u>			
						16001	Dec 01/2024	00
						16002	Blank	00
<u> </u>	ITS AND CLEARA	NCES			ILLUSTRATED PA	ARTS LIST		
		8001	Dec 01/2024	00		IPL-TP 10001	Dec 01/2024	00
		8001	Blank	00		IPL-TP 10001	Dec 01/2024	00
		0002	Biann	00		IPL-TP 10003	Dec 01/2024	00
						IPL-TP 10004	Dec 01/2024	00
						IPL-TP 10005	Dec 01/2024	00
						IPL-TP 10006	Blank	00
	CIAL TOOLS, FIXT CONSUMABLES	URES, EQU	I <u>PMENT</u>		IPL - INTRODUCT	<u> </u>		
			D 04/0004	0.5		INTRO 10001	Dec 01/2024	00
		9001	Dec 01/2024	00		INTRO 10002	Dec 01/2024	00
		9002	Blank	00		INTRO 10003	Dec 01/2024	00
						INTRO 10004	Blank	00
<u>S</u>	PECIAL PROCED	<u>URES</u>				- >/		
		44004	Doc 01/2024	00	NUMERICAL IND	<u>EX</u>		
		11001	Dec 01/2024	00				

LEP Page | 2 Dec 01/ 2024



	11002	Blank	00	NI 10001 NI 10002	Dec 01/2024 Blank	00
<u>REMOVAL</u>						
	12001	Dec 01/2024	00	DETAILED PARTS LIST		
	12002	Blank	00	DPL10001	Dec 01/2024	00
				10001-1	Dec 01/2024	00
<u>INSTALLATION</u>				10001-2	Dec 01/2024	00
				10002-1	Dec 01/2024	00
	130001	Dec 01/2024	00	10002-2	Dec 01/2024	00
	130002	Blank	00			
SERVICING						
	14001	Dec 01/2024	00			
	14002	Blank	00			



Table of Contents

INT	RODUCTION	1
1.	GENERAL	
2.	USE OF THE MANUAL	
3.	MANUFACTURING AND CUSTOMER SUPPORT	1
4.	VALIDATION OF OPERATIONS	2
5.	WASTE MATERIAL MANAGEMENT	2
6.	REVISION SERVICE	2
7.	LIST OF ABBREVIATIONS	2
DES	SCRIPTION AND OPERATION	1
1.	GENERAL	1
2.	DESCRIPTION	1
UM	ACF018300-000: PED SAFETY BAG CLASS 3	2
UM	ACF018200-000: PED SAFETY BAG CLASS 2	2
3.	DETAILED DESCRIPTION PED SAFETY BAG CLASS 3	2
TEC	HNICAL DATA PED SAFETY BAG CLASS 3	3
4.	DETAILED DESCRIPTION PED SAFETY BAG CLASS 2	5
TEC	HNICAL DATA PED SAFETY BAG CLASS 2	6
TES	TING AND FAULT ISOLATION100	1
DIS	ASSEMBLY300	1
CLE	ANING400	1
1.	GENERAL	1
2.		
INS	PECTION/CHECK500	1
1.	GENERAL500	1
2.	PROCEDURE500	1
REF	PAIR	1
ASS	SEMBLY700	1
FIT:	S AND CLEARANCES	1
SPE	CIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES900	1

SPECIAL PROCEDURES	
REMOVAL	12001
INSTALLATION	13001
SERVICING	14001
STORAGE INCLUDING TRANSPORTATION	15001
1. GENERAL	15001
2. PROCEDURE	15001
EFFECTIVITY: UMACF018300-000	15001
EFFECTIVITY: UMACF018200-000	15006
3. STORAGE	15017
REWORK	16001
ILLUSTRATED PARTS LIST	16003
GENERAL INFORMATION	16003
ORGANIZATION	16003
GENERAL INFORMATION	16005
ORGANIZATION	
3. NUMERICAL INDEX	
4. DETAILED PARTS LIST	



LIST OF ILLUSTRATIONS

TITLE	<u>FIGURE</u>	<u>PAGE</u>
ASSEMBLY OF PED BAG CLASS 3	FIGURE 1	4
ASSEMBLY OF PED BAG CLASS 2	FIGURE 2	7
ASSEMBLY OF PED BAG CLASS 3	FIGURE 1	10010
ASSEMBLY OF PED BAG CLASS 2	FIGURE 2	10012





LIST OF TABLES

TITLE	<u>FIGURE</u>	<u>PAGE</u>	
LIST OF ABBREVIATIONS	TABLE 1	INTRO 2	
PED CLASSIFICATION	TABLE 2	1	
TECHNICAL DATA	TABLE 0	2	
PED SAFETY BAG CLASS 3	TABLE 3	3	
TECHNICAL DATA	TABLE 4		
PED SAFETY BAG CLASS 2	TABLE 4	5	





INTRODUCTION

TASK 25-65-00-871-802-A01

INTRODUCTION

CAUTION:

ONLY APPROVED PERSONS WITH THE NECESSARY SKILLS ARE PERMITTED TO DO THE MAINTENANCE PROCEDURES DESCRIBED IN THIS MANUAL.

1. GENERAL

- A. This manual 25-65-00 (Umlaut internal number: P3DOC005074) contains all information and procedures necessary for the maintenance of the PED SAFETY BAG CLASS 3 AND CLASS 2.
- B. This manual is written to ATA iSpec2200 Specification and ASD-STE100. It was prepared by umlaut engineering GmbH, Blohmstrasse 12, 21079 Hamburg, GERMANY (Cage Code CE579).
- C. This manual contains:
 - 1. Technical data for the PED SAFETY BAG CLASS 3 AND CLASS 2.
 - 2. Maintenance procedures for the PED SAFETY BAG CLASS 3 AND CLASS 2.
 - 3. An Illustrated Parts List (IPL) with data for the PED SAFETY BAG CLASS 3 AND CLASS 2. Parts are identified in all sections of the manual by the IPL-Figure and item number.
- D. This Component Maintenance Manual will be revised as necessary to include Service Bulletins and Service Newsletters.

2. USE OF THE MANUAL

- E. Make sure that the manual contains the data applicable to your PED Safety bag.
- F. If it is necessary to identify a part or find a part number, refer to the IPL, which has an introduction to show the procedure.
- G. Read all applicable WARNINGS and CAUTIONS before you do the maintenance procedure on the PED Safety bag. Use the instructions in this manual for all PED Safety bag maintenance.

3. MANUFACTURING AND CUSTOMER SUPPORT

The PED SAFETY BAG CLASS 3 AND CLASS 2 are manufactured, and product supported by:

umlaut engineering GmbH*

Blohmstraße 12

21079 Hamburg

Germany

Internet: www.umlaut.com

*umlaut engineering GmbH (part of Accenture)



4. VALIDATION OF OPERATIONS

The maintenance procedures and the technical content of the CMMV 25-65-00 regarding check, cleaning, repacking and storage instructions have been checked from the manufacturer by actual performance.

5. WASTE MATERIAL MANAGEMENT

WARNING:

WEAR SAFETY GOGGLES AND SAFETY GLOVES WHEN YOU TOUCH THE SAFETY BAG AFTER USE. THE BAG CONTAINS TOXIC GAS AND FLUIDS. THESE CAN CAUSE INJURY TO PERSONS.

- H. The items described in this manual are composed of different materials. The items contain materials like glass fibers, aramid fibers, PVC etc.
- I. The customer must follow the individual national laws when parts/items must be wasted.

6. REVISION SERVICE

- J. Revisions, additions and deletions can be identified by a vertical black line along the lefthand margin of the page.
- K. A black line in the left-hand margin opposite the page number indicates that the text was unchanged but was moved to a different page.
- L. Each page of a change is identified with the letter "R" and assigned the new revision date.
- M. Each new page is identified with the letter "N".
- N. In the detailed parts list the letter "R" is used on each line to identify revisions.

7. LIST OF ABBREVIATIONS

AFF	Aircraft Fire Fight
AMM	Aircraft Maintenance Manual
ASD	Aerospace and Defence Industries Association of Europe
ATA	Air Transport Association
CMM	Component Maintenance Manual
CMMV	Vendor Component Maintenance Manual
EFF	Effective / Effectivity
FAA	Federal Aviation Administration
FIG	Figure
in.	Inch
INTRO	Introduction
IPL	Illustrated Parts List



LEP	List of Effective Pages
LOI	List of Illustrations
LOT	List of Tables
MSM	Master Servicing Manual
N	New
N/A	Not Applicable
No.	Number
NP	Not Procurable
PED	Portable Electronic Device
PN	Part Number
PVC	Polyvinylchloride
R	Revised
RE	Revision
UPA	Units Per Assembly
ROR	Record of Revisions
STE	Simplified Technical English
TOC	Table of Contents
TP	Title Page
UL	Underwriters Laboratory
V	Vendor

List of Abbreviations TABLE 1





DESCRIPTION AND OPERATION

TASK 25-65-00-870-801-A01

1. GENERAL

This manual provides overhaul and maintenance instructions for the PED SAFETY BAG CLASS 3 AND CLASS 2.

Check your national regulations as well as procedures in the approved aircraft manuals (AFM, AMM, MSM) for installation, inspection and maintenance intervals and instructions. Stricter instructions in any of these sources supersede the instructions in this CMM.

2. DESCRIPTION

- A. Portable Electronic Devices (PED) like notebooks, smartphones, power banks, battery packs contain Lithium-ion batteries. In these batteries a chemical chain reaction, called thermal runaway, can occur. This causes the battery to become extremely hot and an uncontrollable fire starts in which the battery can explode.
- B. The PED SAFETY BAG CLASS 3 AND CLASS 2 are UL5800 certified Containment devices for the Lithium-ion battery thermal runaways.
- C. According to the UL 5800 norm the products are segregated into 4 different classes.

	Class 1	Class 2	Class 3	Class 4
Representative capacity (Wh)	0 ≤ 60	61 ≤ 100	101 ≤ 160	161 ≤ 300
Number of cells (18650 format, 3300 mAh)	5	9	14	25
Examples for PEDs	Laptop, mobile phones, e–cigarettes	Large power banks and extra long–life workstation batteries	Professional camera battery	Batteries of Mobility chair

PED CLASSIFICATION TABLE 2

- D. Based on the gas containment capacity, the products are further classified into two different performance level classes:
- Performance Level 1: Total containment (all visible smoke is confined within the containment product).
- Performance Level 2: No more than 5 m² of total smoke is released from the containment product.



UMACF018300-000: PED SAFETY BAG CLASS 3

Fire class 3 (can contain batteries of up to 160 Wh) with Performance Level 1 (Total containment).

UMACF018200-000: PED SAFETY BAG CLASS 2

Fire class 2 (can contain batteries of up to 100 Wh) with Performance Level 1 (Total containment).

EFFECT: UMACF018300-000

3. DETAILED DESCRIPTION PED SAFETY BAG CLASS 3

- A. The PED SAFETY BAG CLASS 3 can contain batteries of up to 160 Wh, with Performance Level 1 (Total containment). This provides total containment of explosion, fire, temperatures (max. 85 °C on the exterior surfaces), smoke and toxic gases. In case of an onboard fire, the aircraft need not have an emergency landing.
- B. The principal components of the PED SAFETY BAG consist of:
 - A fire containment bag, which is made of different fireproof and insulation materials layered in special manners at different locations based on its function.
 - A smoke containment bag, which is made mainly of fire-retardant high durability PVC.
 - A pair of EN 12477 Type B fireproof gloves, made of sheep leather.
 - A low-pressure packaging with user instructions printed on it.
- C. The estimated 15 years of in-service life depend on environmental conditions and usage.
- D. The shelf life and in-service life are based on the technical data provided by the manufacturers of each raw material. Refer to table 7001 and the IPL.
- E. Installation, inspection and maintenance intervals and instructions are also given in the approved aircraft manuals (AFF, AMM, MSM). Stricter instructions in any of these sources supersede the instructions in this CMM.



Technical data PED SAFETY BAG CLASS 3

PED SAFETY BAG CLASS 3	
Material	Flame resistant blankets and insulators based on Glass and silica fibers. Fire retardant PVC.
Temperature resistance	Up to 1200 °C Fire containment bag and 70 °C Smoke containment bag
Operating Temperature Range*	- 40 °C to 70 °C
Service Life*	15 years at 25 °C ± 2 °C
Weight	4.8 kg
Maximum Dimensions	700 mm x 550 mm x 70 mm (27.56 in x 21.65 in x 2.76 in)

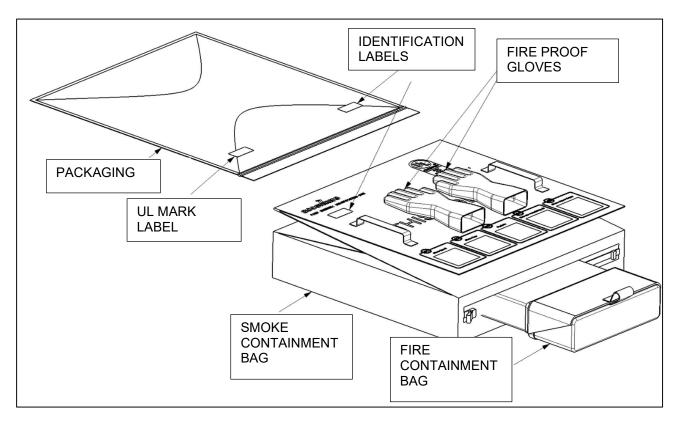
Technical Data PED SAFETY BAG CLASS 3 TABLE 3

The mentioned shelf life and in-service life are based on the life limit of raw materials and Engineering assessments by the manufacturer. Refer to chapter STORAGE.

^{*} The in-service life of the product is based on the correct storage in the aircraft and regular inspection intervals.

^{**} If the product was unpacked, the Item is to be repacked in an original packaging immediately or at the latest by the end of the flight. For the repackaging instructions refer to chapter STORAGE in this document. The shelf life of the product will be void if this procedure is not followed.





PED SAFETY BAG CLASS 3 FIGURE 1



EFFECT: UMACF018200-000

4. DETAILED DESCRIPTION PED SAFETY BAG CLASS 2

- A. The PED SAFETY BAG CLASS 2 can contain batteries of up to 100 Wh, with Performance Level 1 (Total containment). This provides total containment of explosion, fire, temperatures (max. 85 °C on the exterior surfaces), smoke and toxic gases. In case of an onboard PED fire, the aircraft need not have an emergency landing.
- B. The principal components of the PED Safety bag consist of:
 - A fire containment bag, which is made of different fireproof and insulation materials layered in special manners at different locations based on its function.
 - A smoke containment bag, which is made mainly of fire-retardant high durability PVC.
 - A pair of EN 12477 Type B fireproof gloves, made of sheep leather.
 - A low-pressure packaging with user instructions printed on it.
- C. The estimated 15 years of in-service life depend on environmental conditions and usage.
- D. The shelf life and in-service life are based on the technical data provided by the manufacturers of each raw material. Refer to table 7001 and the IPL.
- E. Installation, inspection and maintenance intervals and instructions are also given in the approved aircraft manuals (AFF, AMM, MSM). Stricter instructions in any of these sources supersede the instructions in this CMM.



Technical data PED SAFETY BAG CLASS 2

PED SAFETY BAG CLASS 2		
Material	Flame resistant blankets and insulators based on Glass and silica fibers. Fire retardant PVC.	
Temperature resistance	Up to 1200 °C Fire containment bag and 70 °C Smoke containment bag.	
Operating Temperature Range*	- 40 °C to 70 °C	
In-Service Life*	15 years at 25 °C ± 2 °C	
Weight	3.5 kg	
Maximum Dimensions	650 mm x 420 mm x 50 mm (13.78 in x 16.54 in x 1.97 in)	

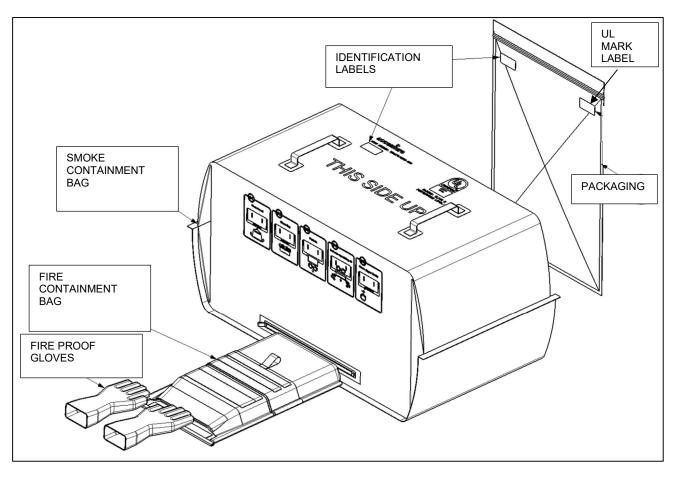
Technical Data PED SAFETY BAG CLASS 2 TABLE 4

The mentioned shelf life and in-service life are based on the life limit of raw materials and Engineering assessments by the manufacturer. Refer to chapter STORAGE.

^{*} The in-service life of the product is based on the correct storage in the aircraft and regular inspection intervals.

^{**} If the product was unpacked, the Item is to be repacked in an original packaging immediately or at the latest by the end of the flight. For the repackaging instructions refer to chapter STORAGE in this document. The shelf life of the product will be void if this procedure is not followed.





PED SAFETY BAG CLASS 2 FIGURE 2





TESTING AND FAULT ISOLATION

NOT APPLICABLE





DISASSEMBLY

NOT APPLICABLE





CLEANING

TASK 25-65-00-100-801-A01

LIST OF MATERIALS

The materials that follow are used in this section.

ITEM	SUPPLIER'S CODE	SPECIFICATION
LINT-FREE COTTON CLOTH	LOCALLY AVAILABLE	N/A
MILD SOAP SOLUTION	LOCALLY AVAILABLE	N/A

LIST OF MATERIALS TABLE 4001

1. GENERAL

This section gives the procedure to clean the outer packaging of the PED safety bag.

WARNING: BE CAREFUL WHEN YOU OPERATE WITH CONSUMABLE METERIALS. OBEY THE

MANUFACTURER'S INSTRUCTIONS AND YOUR LOCAL REGULATIONS.

CAUTION: OPERATE ONLY WITH SPECIFIED CLEANING AGENTS. CLEANING AGENTS WHICH

ARE NOT SPECIFIED CAN CAUSE DAMAGE.

2. PROCEDURE

A. Cleaning of the PED Safety bag packaging

Clean the outer packaging of the PED safety bag as follows:

- (a) If necessary, clean the outer packaging of the PED safety bag with a lint-free cotton cloth made moist with mild soap solution.
- (b) Remove any moisture with a lint-free cotton cloth.





INSPECTION/CHECK

TASK 25-65-00-210-801-A00

1. GENERAL

- A. This task gives procedures for a visual inspection of the PED Safety bag.
- B. The inspection procedure for the PED Safety bag CLASS 3 and CLASS 2 is the same.
- C. If the PED Safety bag is in its original packaging, the visual inspection only needs to be carried out once a year.
- D. If the PED Safety bag was removed from its original packaging, the visual inspection is to be carried out monthly.
- E. Replace the PED Safety bag if it is damaged.

2. PROCEDURE

A. PREPARATION

Prepare the PED Safety bag for a visual inspection as follows:

- (a) If necessary, clean the packaging of the PED Safety bag before you start the visual inspection, refer to chapter CLEANING.
- (b) Optical instruments can be used to help with the visual inspection.
- (c) Make sure that you have sufficient lighting for the visual inspection.

B. INSPECTION of the PED Safety bag in its original packaging

If the PED Safety bag is in its original packaging, do the visual inspection as follows:

- (a) Examine the original packaging for humidity and/or condensation:
 - 1 Humidity and/or condensation are not permitted.
 - Replace the PED Safety bag which has humidity and/or condensation.
- (b) Examine the original packaging for delamination and punctures.
 - <u>1</u> Delamination and punctures are not permitted.
 - 2 Replace the packaging which has delamination and punctures.
- (c) Examine the welded seams of the original packaging for damaged or open areas.
 - 1 Damaged or opened welded seams are not permitted.
 - Replace the packaging which has damaged or opened welded seams.



- (d) Examine the zip-lock of the original packaging for damaged areas.
 - 1 A damaged zip-lock is not permitted.
 - 2 If the zip-lock of the original packaging is damaged, replace the packaging. Refer to chapter STORAGE.
- (e) Examine the operation instruction on the original packaging for unreadable areas.
 - 1 An unreadable operation instruction is not permitted.
 - 2 Clean the packaging, refer to chapter CLEANING.
 - Replace the packaging if the operation instruction is not clearly readable. For the repackaging of the PED Safety bag into a new packaging, refer to chapter STORAGE.
- C. INSPECTION if the PED Safety bag was removed from its original packaging If the PED Safety bag was removed from its original packaging, do the visual inspection as follows:
 - (a) Examine the fire containment bag, the smoke containment bag and the packaging for humidity and/or condensation.
 - 1 Humidity and/or condensation are not permitted.
 - 2 Remove any moisture with a lint-free cotton cloth.
 - (b) Examine the fire containment bag and the smoke containment bag for smoke or Electrolyte residues.
 - 1 Smoke and/or Electrolyte residues are not permitted.
 - Replace the PED Safety bag which has smoke and/or Electrolyte residues.
 - (c) Examine the packaging for delamination and punctures.
 - 1 Delamination and punctures are not permitted.
 - 2 Replace the packaging which has delamination and punctures.
 - (d) Examine the welded seams of the smoke containment bag for damaged or open areas.
 - <u>1</u> Damaged or opened welded seams are not permitted.
 - If the welded seams of the smoke containment bag have damaged or open areas, replace the PED Safety bag.



- (e) Examine the zipper of the smoke containment bag for damaged areas.
 - 1 A damaged zipper is not permitted.
 - If the zipper of the smoke containment bag is damaged, replace the PED Safety bag.
- (f) Examine the fireproof gloves for damaged areas.
 - 1 Damaged fireproof gloves are not permitted.
 - 2 Replace the PED Safety bag which has damaged fireproof gloves.

<u>NOTE:</u> Light shedding of the leather is normal and does not limit its functionality.

- (g) Examine the operation instruction on the packaging for unreadable areas.
 - 1 An unreadable operation instruction is not permitted.
 - 2 Clean the packaging, refer to chapter CLEANING.
 - 3 Replace the packaging of the PED Safety bag which has damaged labels. For the repackaging of the PED Safety bag into a new packaging, refer to chapter STORAGE.





REPAIR





ASSEMBLY





FITS AND CLEARANCES





SPECIAL TOOLS, FIXTURES, EQUIPMENT AND CONSUMABLES





SPECIAL PROCEDURES





REMOVAL





INSTALLATION





SERVICING





STORAGE INCLUDING TRANSPORTATION

TASK 25-65-00-550-001-A01

1. GENERAL

- A. PED SAFETY BAG Repackaging
- (1) If the PED Safety bag is taken out of the original packaging, it needs to be repacked and sealed in the original packaging as soon as possible. Latest by the end of the flight.
- (2) Make sure that the PED Safety bag is in good condition, refer to chapter CHECK.

2. PROCEDURE

Effectivity: UMACF018300-000

A. Repackaging of the PED SAFETY BAG CLASS 3

Repack the PED SAFETY BAG CLASS 3 as follows:

Pull out the connecting flap on the smoke containment bag.



Connect the fire containment bag with the half length of the Velcro tape on the flap of the smoke containment bag.





Push the fire containment bag through the airtight zipper into the smoke containment bag.

Make sure that you can see the flap of the fire containment bag from the outer side.



Connect the fire containment bag with the Velcro tape on the flap of the smoke containment bag.



Fold down the smoke containment bag. Release the unwanted air of the smoke containment bag.





Fold back the flap of the fire containment bag to the smoke containment bag.





Close the hood of the fire containment bag.







Put the edge of the fire containment bag and the smoke containment bag together.



Put the fireproof gloves on the upper side of the connected bags.



Put the connected bags and the fireproof gloves into the packaging.





Push out the unwanted air of the packaging.



Seal the packaging with the zip-lock.





Effectivity: UMACF018200-000

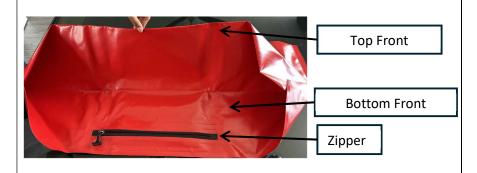
A. Repackaging of the PED SAFETY BAG CLASS 2

Repack the PED SAFETY BAG CLASS 2 as follows:

Put the smoke containment bag in front of you. Make sure that the handles are on the upper side.



Lift the top front folding. Make sure that you can see the zipper on the bottom side.



Place the edge of the top front folding on the edge of the rear front folding until you can see two triangles.

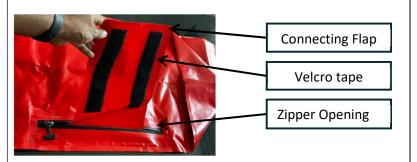




Open the zipper of the smoke containment bag.



Pull out the connecting flap of the smoke containment bag of the zipper opening. Make sure that the Velcro tape points up.





Open the fire containment bag.





Align the Velcro marking on the rear side of the smoke containment bag with the Velcro straps of the connecting flap. Put the bottom edge of the fire containment bag onto the edge of the top front folding. Make sure that the opening of the fire containment bag is up.



Put the fire containment bag onto the connecting flap. Make sure that the Velcro straps and the markings are aligned and connected.





Carefully press onto the assembly to make sure the Velcro interface is connected correctly. Make sure that the distance between the bottom edge of the fire containment bag and the top front folding of the containment bag has a maximum of 3 cm (1.181 in).



Lift the fire containment bag while opening about half of the Velcro interface on the zipper side.







Make sure that the Velcro interface is correctly aligned.



Put the fire containment bag about 10 cm (3.937 in) deep partly through the airtight zipper.







Fold the top forward flap of the smoke containment bag so that the handles are visible again.



Fold the top rear flap of the smoke containment bag onto the top forward flap.



Insert the fire containment bag into the smoke containment bag. Make sure that the Velcro interface aligns completely.

Make sure the flap of the fire containment bag stays outside of the zipper.





Close the hood and push the fire containment bag inside the containment bag completely.



Close the zipper halfway. Check that the fire containment bag fits completly into the smoke containment bag.



Open the zipper again. Pull out the fire containment bag until the flap is outside of the smoke containment bag.





Open the flap of the fire containment bag. Fold it back over the zipper onto the compressed smoke containment bag.



Put the fireproof gloves on the upper side of the connected bags.





Close the hood of the smoke containment bag on the fireproof gloves.



Fold down the right side of the smoke containment bag.





Fold down the left side of the smoke containment bag.



Put the connected bags and the fireproof gloves into the packaging. Make sure the side with the hood of the PED FIRE BAG CLASS 2 points to the opening of the packaging.







Push out the unwanted air of the packaging.







3. STORAGE

- D. General Storage
 - Store the PED Safety bags as follows:
- (a) Keep the PED Safety bags in a dry, well-ventilated, temperature-controlled environment, away from direct sunlight. Obey the Standard Aircraft Parking procedures.
- (b) The storage temperature should be 25 °C ± 3 °C. Storage of the PED Safety bags at different temperatures may affect the shelf life.
- (c) If the aircraft is to be idled in an elevated temperature environment [up to a maximum of 70 °C] for more than 7 days, remove the PED Safety bags and put them in temperature-controlled storage.
- (d) If the temperature is above 70 °C, put the PED Safety bags immediately in temperature-controlled storage.
- (e) Do not store any heavy objects or luggage on the PED Safety bags.
- (f) Do not store any sharp objects around the PED Safety bags which can puncture the product.
- (g) Make sure that the packaging of the PED Safety bag is not damaged before transportation.
- (h) The PED Safety bags can be stored as loose items in a storage area with optimum space.
- (i) Do not fold the PED Safety bag for storage. Light bending of the product is permitted.
- (j) If the PED safety bag is stored strapped, make sure that the packaging of the product is not damaged and/or permanently deformed.





REWORK

NOT APPLICABLE





ILLUSTRATED PARTS LIST

IPL INTRODUCTION

General Information

A. This ILLUSTRATED PARTS LIST (IPL) contains the full listing of all Subparts of the PED Safety bags.

Organization

- B. The IPL is divided into these sections:
 - (1) Introduction

The introduction contains all explanatory information for the individual sections as is necessary for using the IPL. The introduction further contains a list of manufacturer codes together with manufacturer names and addresses.

(2) Numerical Index

This section contains a listing of part numbers of all items listed in the detailed parts list in alphanumerical sequence with cross-reference to respective Fig./Item No. as well as units per assy.

The order of precedence in beginning the part number arrangement at the outmost left-hand (first) position is as follows:

- letters A through Z (except 'O' to be considered as zero)
- numerals 0 to 9.

For subsequent rows, the order is:

- letters A through Z (except 'O' to be considered as zero)
- numerals 0 to 9.



(3) Detailed Parts List

(a) Column "FIG. / ITEM"

The first number in the first line of a page indicates the number of the figure illustrating the part. The second number indicates the item number by which the part is identified on the illustration. A dash placed before the item number indicates that the part is not illustrated.

(b) Column "PART NUMBER"

The part number column contains the original manufacturers' part numbers. When standard part numbers are used, the standard part number is listed in this column.

(c) Column "AIRLINE STOCK NO."

This column is left blank for airline internal use.

- (d) Column "NOMENCLATURE"
- (e) Indenture System



IPL INTRODUCTION

General Information

C. This ILLUSTRATED PARTS LIST (IPL) contains the full listing of all Subparts of the PED Safety bags.

Organization

- D. The IPL is divided into these sections:
 - (1) Introduction

The introduction contains all explanatory information for the individual sections as is necessary for using the IPL. The introduction further contains a list of manufacturer codes together with manufacturer names and addresses.

(2) Numerical Index

This section contains a listing of part numbers of all items listed in the detailed parts list in alphanumerical sequence with cross-reference to respective Fig./Item No. as well as units per assy.

The order of precedence in beginning the part number arrangement at the outmost left-hand (first) position is as follows:

- letters A through Z (except 'O' to be considered as zero)
- numerals 0 to 9.

For subsequent rows, the order is:

- letters A through Z (except 'O' to be considered as zero)
- numerals 0 to 9.
- (3) Detailed Parts List
 - (f) Column "FIG. / ITEM"

The first number in the first line of a page indicates the number of the figure illustrating the part. The second number indicates the item number by which the part is identified on the illustration. A dash placed before the item number indicates that the part is not illustrated.

(g) Column "PART NUMBER"

The part number column contains the original manufacturers' part numbers. When standard part numbers are used, the standard part number is listed in this column.

(h) Column "AIRLINE STOCK NO."

This column is left blank for airline internal use.

- (i) Column "NOMENCLATURE"
- (j) Indenture System



The indenture system used in the Detailed Parts List shows the relationship of parts and assemblies to next higher assemblies as follows:

1234567

Assembly

Attaching Parts for Assembly

* * *

- . Detail Parts for Assembly
- . . Subassembly
- . . Attaching Parts for Subassembly

* * *

- . . . Detail Parts for Subassembly
- Sub-Subassembly
- Attaching Parts for Sub-Subassembly

* * *

......Detail Parts for Sub-Subassembly

Attaching parts

The attaching parts are shown directly after the assembly or the part thereof. They are listed under the same indenture number as the item they attach and are preceded by the words 'ATTACHING PARTS' and are followed by three asterisks.

- Vendor Codes

Parts manufactured by companies other than umlaut engineering GmbH are identified by an appropriate vendor code following the nomenclature.

Vendor codes are in accordance with current issues of U.S. Federal Supply Codes for Manufacturer Handbooks H4-1, H4-2 and H4-3 and/ or in accordance with applicable European regulations and are preceded by the letter 'V'. Standard parts such as AN, DIN, MS etc. are not identified by a vendor code. When there is no known vendor code, the abbreviated name of the vendor is listed in lieu of the vendor code.

(k) Column "EFF CODE"

Alpha variants A-Z (except I and O) may be assigned to an existing item number in the FIG-ITEM column to show configuration differences, optional parts, etc. Alpha variant items are not shown on the illustration when the appearance and location of the alpha variant are the same as the basic item. In the EFF CODE column, part applicability is indicated with respect to the top assemblies. A part



shown with an effectivity code is only used in the top assembly variant which has the same effectivity code. The absence of a code indicates that the part is common to all variants of the top assembly.

(I) Column "UNITS PER ASSY"

This column contains the quantity of a specific catalog sequence numbered part required in the build sequence of only one (where more than one exists), next higher sub-assembly, sub-assembly, assembly, or installation level as applicable. For bulk items, the letters 'AR' are inserted in the quantity column to indicate 'As Required'. Whenever items are listed for reference purposes, 'RF' is inserted.

1. How to use the IPL

- E. If the part number is known
 - (1) Find the part number in the numerical index and note figure and item number.
 - (2) Turn to figure.
 - (3) Locate the part on the illustration and in the parts list by item number.
- F. If the part number is unknown
 - (1) Please refer to Figure 1 and look for the figure item number of the part.
 - (2) Note the figure item number.
 - (3) Turn to the figure item list and find the corresponding part number.
- G. Umlaut engineering GmbH Part Numbering System
 - (1) Each part, assembly and installation are assigned a "Part" number consisting of the basic engineering drawing number. Supplementary numbers appended to the engineering drawing number identify parts, assemblies or installations which are detailed.





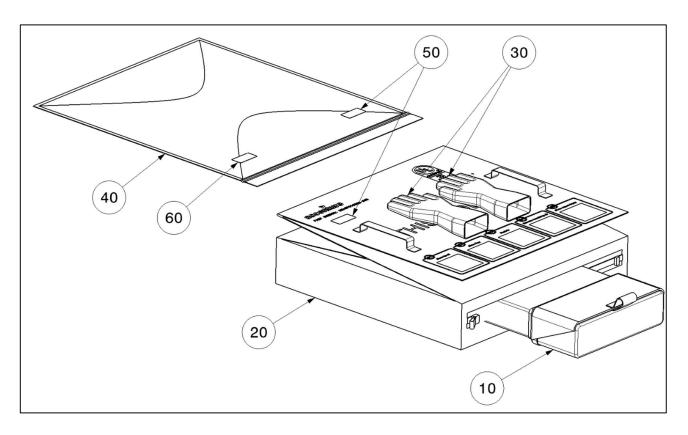
3. NUMERICAL INDEX

		T	T	1
PART NUMBER	AIRLINE STOCK NUMBER	FIG.	ITEM	TTL REQ
2500-011		1	30	1
		2	30	1
UMACF018200-000		2	002A	RF
UMACF018300-000		1	001A	RF
P3PRT000886A		1	10	1
P3PRT000887A		1	20	1
P3PRT000888A		2	10	1
P3PRT000889A		2	20	1
P3PRT000934A		1	40	1
P3PRT000934B		2	40	1
P3PRT000003AK		1	50	2
		2	50	2
P3PRT000003AS		1	60	1
		2	60	1





4. DETAILED PARTS LIST



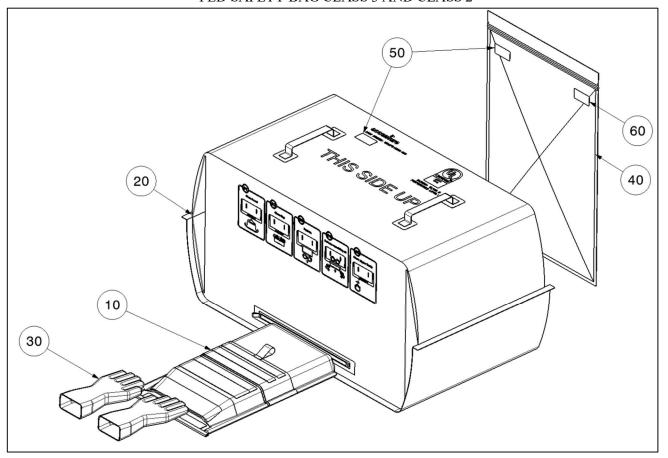
PED SAFETY BAG CLASS 3 FIGURE 1



FIG.	PART NUMBER	AIRL. STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UPA
1					
- 001A	UMACF018300-000		BAG-PED SAFETY, CLASS 3		RF
10	P3PRT000886A		. BAG-PED FIRE CONTAINMENT, CLASS 3 NP		1
20	P3PRT000887A		. BAG-PED SMOKE CONTAINMENT, CLASS 3 NP		1
30	2500-011		. GLOVES-FIREPROOF NP		1
40	P3PRT000934A		. PACKAGING, PED SAFETY BAG CLASS 3		1
50	P3PRT000003AK		. LABEL-IDENTIFICATION, PED SAFETY BAG NP		2
60	P3PRT000003AS		. LABEL-UL MARK, PED SAFETY BAG NP		1

- ITEM NOT ILLUSTRATED





PED SAFETY BAG CLASS 2 FIGURE 2



FIG. ITEM	PART NUMBER	AIRL. STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UPA
2					
- 002A	UMACF018200-000		BAG-PED SAFETY, CLASS 2		RF
10	P3PRT000888A		. BAG-PED FIRE CONTAINMENT, CLASS 2		
			NP		
20	P3PRT000889A		. BAG-PED SMOKE CONTAINMENT, CLASS 2		1
			NP		
30	2500-011		. GLOVES-FIREPROOF NP		1
40	P3PRT000934B		. PACKAGING, PED SAFETY BAG CLASS 2		1
50	P3PRT000003AK		. LABEL-IDENTIFICATION, PED SAFETY BAG		2
			NP		
60	P3PRT000003AS		. LABEL-UL MARK, PED SAFETY BAG NP		1

- ITEM NOT ILLUSTRATED