



The interface between engineering, technical documentation, material disposition and various specifications (ASD S2000M, ATA 2000, etc.)

Peter Schaefer, warp it AG
ATA e-Business Forum 2015, Orlando FL

Data Configuration, Consolidation, Verification

Using the freely definable setup options gives MATCONF the **flexibility** to integrate with your internal business processes. An intuitive user interface with integrated graphical management guarantees **effective editorial work**

MATCONF delivers data validation with detailed error analysis through which **data quality** & data integrity is significantly enhanced. The automated preparation of input data achieves significant **cost savings!**

Quality Management

CIVIL PROJECTS



- ▶ **MATCONF provides economical and customer oriented editing and illustrative possibilities for data processing.**
- ▶ Exporting in various formats is easily realizable (e.g. company or spares catalogues as PDF or HTML). Customer deliverable output of interactive, electronic documentation is easily realiable with MATCONF license.

MATCONF



AEROSPACE STANDARDS



- ▶ **With MATCONF you can handle your civil catalog and your structural and material data economically.**
- ▶ MATCONF supports the ATA 2000 and i2200 specifications.
- ▶ MATCONF is equally suitable for outputting an illustrated parts catalog, an interactive electronic documentation and spare parts lists as for the creation of S and T files.

MATCONF



MILITARY STANDARDS



- ▶ **With MATCONF you can handle your military catalog and your structural and material data economically.**
- ▶ MATCONF supports the ASD (AECMA) specification issues 2.1 revisions 2 to 4, 3.0 revision 1 and 4.0.
- ▶ MATCONF is equally suitable for outputting an illustrated parts catalog, an interactive electronic document and initial provisional lists as used for the creation of messages in accordance to the ASD specification or ASD 1000D data modules (941).
- ▶ In MATCONF the data element settings for existing weapon systems are made in accordance with the Contract and/or Guidance Documents. Additionally data quality checks are performed.

IMPORT

Bill of Material,
Parts Lists,
Engineering Data

SPEC2000 Data

SAP Material
Master Data

Parts Catalogue
(GAPI)

LSA Data

Engineering
Drawings

Photos & Graphics
Plans & Drawings

Conversion
Preparation

Data type and value
table mapping
conversions freely
definable

Addition of missing
items according
to freely definable
rules

Additional data
sources, e.g.
NAMS data,
can be drawn
upon

Editing
Reviewing
Maintaining

Editorial processing
in central editing
screen

Individual
determination
and alteration
of assembly
sequence and
indent levels

Validations
are colour
highlighted

Freely data
presentation

Conversion
Output

Link the assembly
location with
the drawing via
hyperlinks

Export of verified
and reworked data

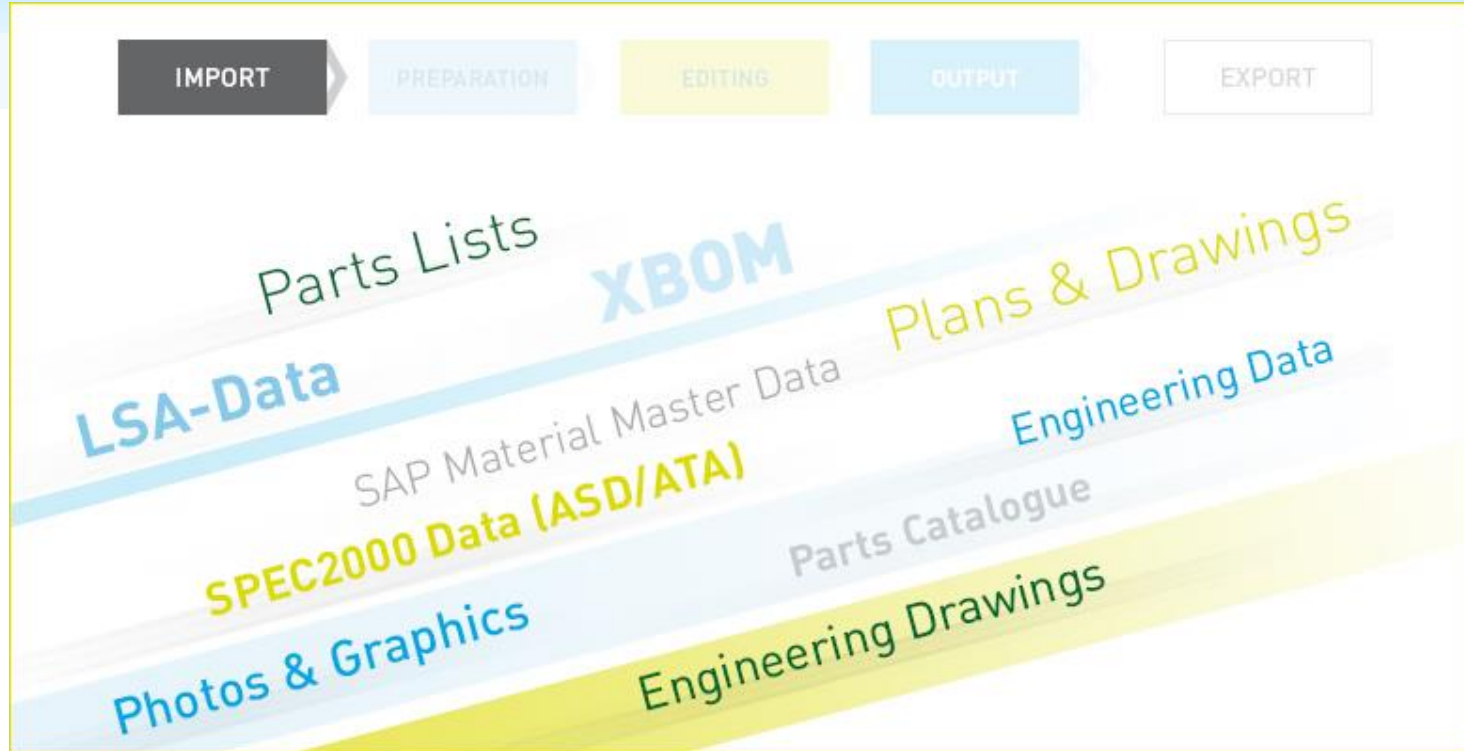
EXPORT

Illustrated Parts List

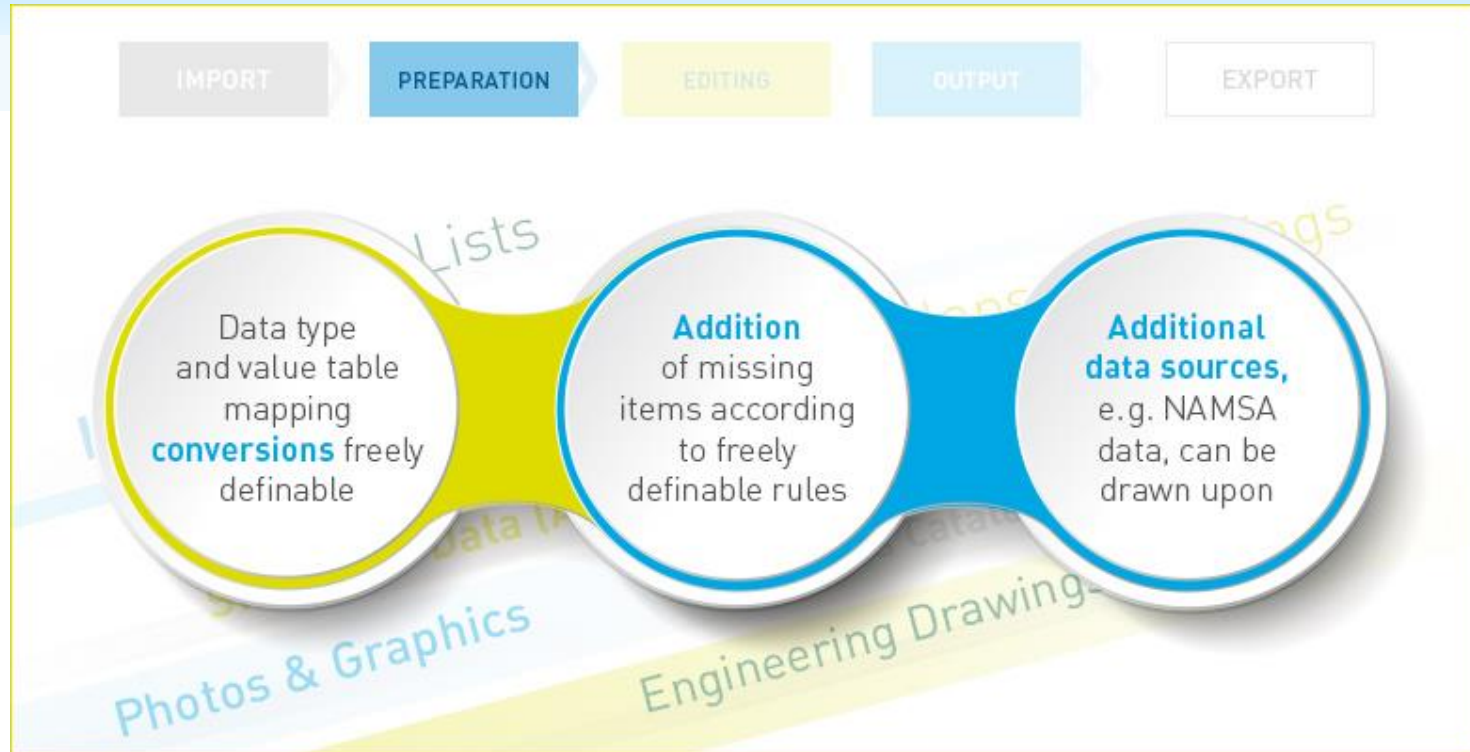
Reloading of the
data into the source
system, transfer
the data to other
[ERP] systems

Freely definable
output, e.g. cvs,
xml, txt

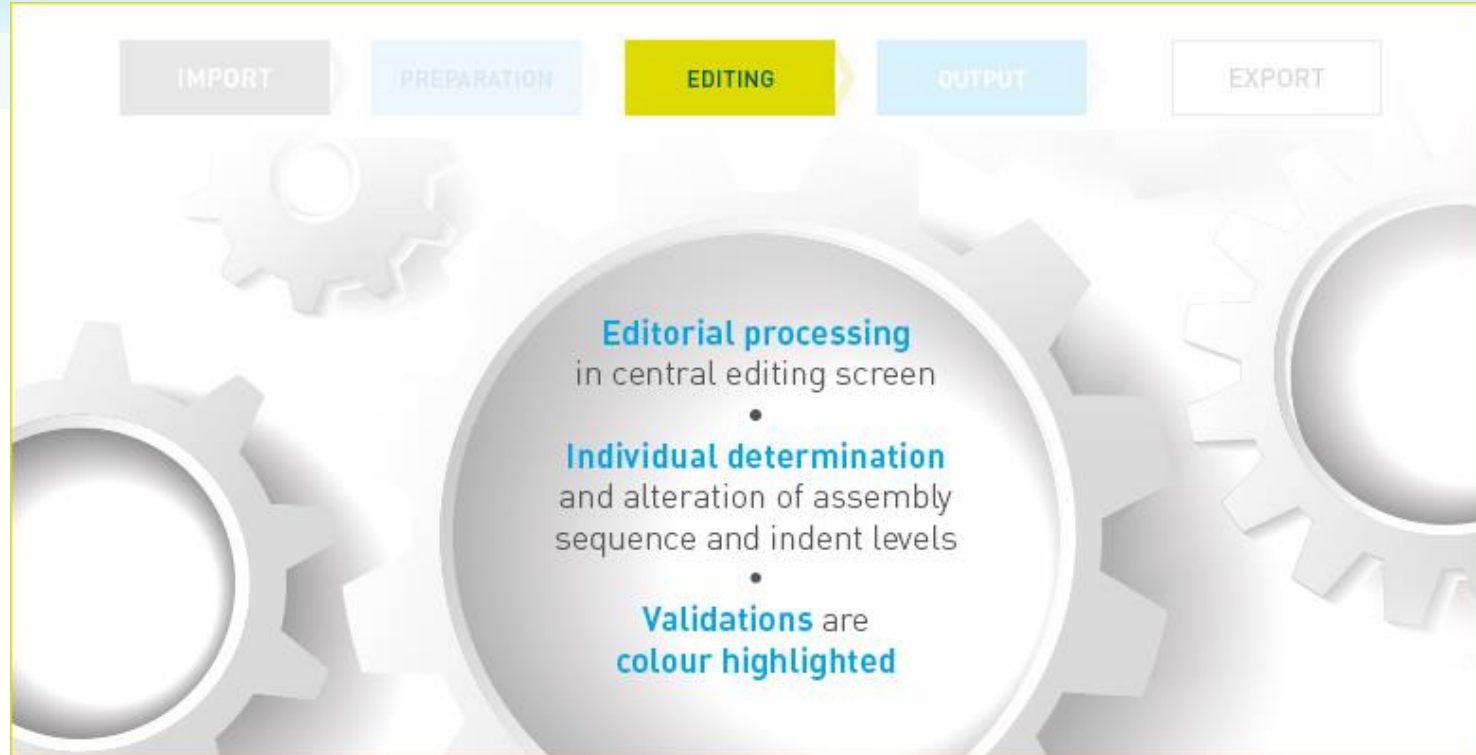
MATCONF



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One screen, four tabs to do most of the work



MATCONF <Project: XXX320 - ASD 2.1 Change 4>

File Project IPPN/Figure ICN Function Help

MOI XX
IPP XXXXX XX01 - HINGE FITTINGS-FOLDING S
Chapter 00
000000 Fig [65] - HINGE FITTINGS-FOL
000000 Fig [66] - STEP INSTL AND LOW
000000 Fig [67] - CONTROL MECH-UPP
000000 Fig [68] - SPROCKET/CHAIN IN
000000 Fig [69] - RELEASE INSTL-DOO

ICN Convert LSA/BOM data Maintain/export Breakdown/Part data Catalog

Description IPPN SNC Figure List layout CAN File type Conversion

XXX320 XXXXX XX01 000000 66 DI1-BASIS Please select... Start export

ICN XX-A-000000-A-XXXXX-00002-A-01-1 Sheet

Index	ISN	IND	RFS	BOM-Pos	PNR	MFC	DFP	NSC	NIN	RNC	RNV	NIL	QNA	TQL	ASP	ESC	CSR	MAP	ICY	UCE	UCA	RTX
000	00A	1	1	0	1Q0122	XXXXX	STEP INSTL AND LOWER						REF	REF								
001	00A	2	1	1	XXX-22336																	
002	00A	3	1	3	XXX-22140-13																	
003	00A	2	1	2	NAS517-3-2																	
004	00A	2	1	4	XXX-22337	XXXXX	TREAD HALF-OUTER						1	1								
005	00A	3	1	6	XXX-22140-13	XXXXX	SOCKET-SCREW						4	4								
006	00A	3	1	7	XXX-22337-09	12345	EDGE-TREAD (480, HERSTELLEN AUS L32X20X3-2LN9496-3-1354-6)						1	1								
007	00A	3	1	8	NAS1739E4-2	80205	RIVET	5320	007179729	3	2		9	9								
008	00A	2	1	5	NAS517-3-2	80205	SCREW	5305	008393437	3	2		4	4								
009	00A	2	1	9	XXX-22338	XXXXX	TREAD-LWR						1	1								
010	00A	3	1	11	XXX-22140-13	XXXXX	SOCKET-SCREW						7	7								
011	00A	3	1	12	XXX-22338-08	XXXXX	EDGE-TREAD-LWR (430, HERSTELLEN AUS L32X20X3-2LN9496-3-1354-6)						1	1								
012	00A	3	1	13	NAS1739E4-2	80205	RIVET	5320	007179729	3	2		7	7								
013	00A	2	1	10	NAS517-3-2	80205	SCREW	5305	008393437	3	2		7	7								
014	00A	2	1	14	XXX-22335	XXXXX	PANEL-SLANTED RISER						1	1								
028	00A	2	1	15	NAS517-3-2	80205	SCREW	5305	008393437	3	2		2	2								
029	00A	2	1	16	LN9438M5X25	D8442	SCREW	5305	121620382	2	2		4	4								
030	00A	2	1	17	LN9025-5-3K	D8442	WASHER	5310	121610150	5	9		4	4								
031	00A	2	1	18	M5LN9348	D8442	NUT	5310	121364527	5	2		4	4								
032	00A	2	1	32	XXX-22299	XXXXX	STEPCASE-LOWER						1	1								
033	00A	2	1	33	XXX-22140-08	XXXXX	BOLT						2	2								
034	00A	2	1	34	LN9025-6-4K	D8442	WASHER	5310	121399830	5	9		2	2								
035	00A	2	1	35	MRI N9348	D8442	NUT	5310	121397986	5	2		2	2								

Freely definable screen layouts

MATCONF



MATCONF <Project: XXX320 - ASD 2.1 Change 4>

File Project IPPN/figure ICN Function Help



MOI XX
IPP XXXXX.XX01 - HINGE FITTINGS-FOLDING S
Chapter 00
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ICN Convert LSA/BOM data Maintain/export Breakdown/Part data Catalog

List layout: IDISP-1

File type

Please select...

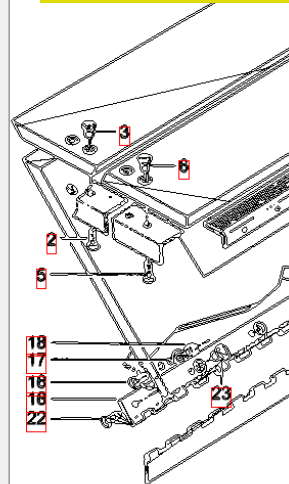
Start export

SDC	SNS	RPC	ORT	SEQ	ILV	INN	ISC	Sheet	Total	LGE	Title	LGE1	Title1
A	000000	A	XXXXX	00002	A	01	1	01	01	UK	STEP INSTL AND LOWER INSTL-FOLDING-STAIRS		



Description	File/Graphic	KEY
Bill of Material file	D:\MATCONF\daten320\bombom320.csv	17

Handling of illustrations/
graphics and a document
managment system



MATCONF

The core part:
Conversion of BOMs/LSA or other
data into ASD/ATA/etc. format



MATCONF <Project: XXX320 - ASD 2.1 Change 4>

File Project IPPN/Figure ICN Function Help



Step 1: extracting data

Step 2: converting data
in accordance with
definable rules

Step 3: defaulting data
in accordance with
definable rules

Data can be directly extracted
out of your SAP system

Two conversions can be done
in one step (i.e. LSA and BOM)

MATCONF



MATCONF <Project: XXX320 - ASD 2.1 Change 4>

File Project IPPN/Figure ICN Function Help

MOI XX
IPP XXXXX-XX01 - HINGE FITTINGS-FOLDING S
Chapter 00
000000 Fig [65] - HINGE FITTINGS-FOL
000000 Fig [66] - STEP INSTL AND LOW
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000000 Fig [69] - RELEASE INSTL-DOO

ICN Convert LSA/BOM data Maintain/export Breakdown/Part data Catalog

List layout DI1-CAT

ICN XX-A-000000-A-XXXXX-00002-A-01-1

D:/MATCONF/daten320/icn/XX-A-000000-A-XXXXX-00002-A-01-1

Index	IND	PNR/NSN	MFC	Description	UCA/MOVEFY	ICY	QNA/UII	SMR	KEY
000	1	1Q0122	XXXXXX	STEP INSTL AND LOWER INSTL-FOLDING-STAIRS	FA GA		REF EA	PAFLDP AOLD A	1183 6
001	2	XXX-22336	XXXXXX	TREAD HALF-INNER	FA GA		1 EA	PAFLDP AOLD A	1183 7
002	3	XXX-22140-13	XXXXXX	SOCKET-SCREW	FA GA		4 EA	PAFZZP AOZZE	1183 8
					FA GA		4 EA	PAFZZP AOZZE	1183 9
				HALF-OUTER	FA GA		1 EA	PAFLDP AOLD A	1184 0
				T-SCREW	FA GA		4 EA	PAFZZP AOZZE	1184 1
				TREAD (480, HERSTELLEN AUS L32X20X3-2LN9496-3-1354-6)	FA GA		1 EA	PAFZZP AOZZE	1184 2
007	3	NAS1739E4-2 5320-00-717-9729	80205	RIVET	FA GA		9 EA	PAFZZP AOZZE	1184 3
008	2	NAS517-3-2 5305-00-839-3437	80205	SCREW	FA GA		4 EA	PAFZZP AOZZE	1184 4

Interactive illustrated parts catalogue (IPC)
Tab Catalog displays an interactive IPC.
Clicking the Hotspots or the text lines shows the coloured link. The cross link to next higher assy or module can also be clicked.

MATCONF



MATCONF - <Project: XXX320 - ASD 2.1 Change 4>

File Project IPPN/Figure ICN Function Help

MOI XX
 IPP XXXXX XX01 - HINGE FITTINGS-FOLDING S
 Chapter 00
 000000 Fig [65] - HINGE FITTINGS-FOL
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ICN Convert LSA/BOM data Maintain/export Breakdown/Part data Catalog

Description IPPN SNC Figure List layout CAN File type Conversion Start export

XXX320 XXXXX XX01 000000 66 DI1-BASIS Please select...

ICN XX-A-000000-A-XXXXX-00002-A-01-1

QNA TQL ASP ESC CSR MAP ICY UCE

REF REF

1 1

4 4

4 4

1 1

Index ISN IND RFS BOM-Pos PNR

000 00A 1 1 0 1Q0

001 00A 2 1 1 XXX

002 00A 3 1 3 XXX

003 00A 2 1 2 NAS

004 00A 2 1 4 XXX

Edit IPPN

Description: XXX320

MOI: XX

Contractor (IPP1-5): XXXXX

Project (IPP6-9): XX01

FileType XMLMSGIX Konvertierung Start Export

ISS	DRR(ADD)	DRR(SEQ)	CAS(est)	PAS(est)	CAS(act)	PAS(act)	OHS(Remarks)	USER(IPL)	RPC(DM)
M1									
D1									
M1									


The ASD outputs:

- Messages (CSNIPD, UPIPCT, UPIPCO, CORIPD)
- IPL (Initial Provisioning List)
 - with/without graphics
 - with data in error
- IPC (Illustrated Parts Catalog)

IPL (Initial Provisioning List)



RESTRICTED



MI: XX
IPPN: XXXXXXXX01
Chapter:

INITIAL PROVIDED LIST for

HINGE FITTINGS-FOLDING

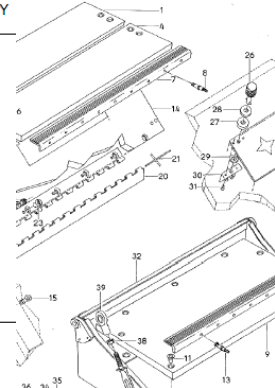
PN: 1Q1321

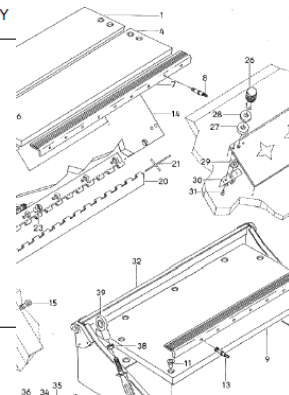
Special IPL with highlighted errors (rules specific to system/guidance document)

RESTRICTED

IP-PROJECT-NR.: XXXXXXXX01 Issue: CM1DRD: 01.01.14 MI: XX IPPN SUBJECT: HINGE FITTINGS-FOLDING Transmitter of Data: XXXXX

1		CSN	ISN PARTNUMBER	NSCM	UOCE	UOCA	ICY	QPNHA	TQPL	NSN	UI	UM	QPUI
		RTX	NI AP DESCRIPTION	RC	RV	INC	PI	EC	SC	TCI	TBO	TCI	TBSSV
		CAN	RD	DMC	HAZ	ES	PP	CM	PL	SS	CRTT	PLT	SPQ
		PRICE BREAK DATA		SRV	SMR	RMQ	ROQ	TQ	MV	EFY	MV	EFY	MV
2	00-00-00 -66 -001	00A XXX-22336	TREAD HALF-INNER	XXXXX				1	1				EA
								6					
								4	0	0		9	1
				FRA	PAFLD						FA		MD 1
				GYL	PAOLDA						GA		
8004-E: Item Name Code (INC) missing 8005-E: NATO Supply Code (NSC) invalid or missing: 8006-E: NATO Stock Number (NSN) missing 8028-E: Scrap Rate (SRA) missing for module 8057-E: Physical Security/Pilferage Code (PSC) missing 8205-E: Maintenance Percent (MAP) missing, SMR: PAFLD 8205-E: Maintenance Percent (MAP) missing, SMR: PAOLDA													
3	00-00-00 -66 -002	00A XXX-22140-13	SOCKET-SCREW	XXXXX				4	4				EA
								1					
								4	0	0		6	1
				FRA	PAFZZ						FA		BD 1
				GYL	PAOZZE						GA		
8126-E: Consumption Rate (CSR) missing 8004-E: Item Name Code (INC) missing 8005-E: NATO Supply Code (NSC) invalid or missing: 8006-E: NATO Stock Number (NSN) missing													





```

UNB+AECA:4+XXXXX+D9460+020805:1425+P003266'
UNH+ALMO007+CSNIPD'
IPH+IPP:XXXXXXXXX01+MTP:CSNIPD+ISS:M1+TOD:XXXXX+ADD:D9460+FID:S+MOI:XX+DRS:1+DRD:1
VAS+CHG:N+SID:XXXXX:1Q1321+SNS:.'
JAS+CHG:N+CSN:00000065 000 '
JBS+CHG:N+ICN:XX:A:A:XXXXX:1:A:01:1'
JAS+CHG:N+CSN:00000066 000 '
JBS+CHG:N+ICN:XX:A:A:XXXXX:2:A:01:1'
JAS+CHG:N+CSN:00000067 000 '
JBS+CHG:N+ICN:XX:A:A:XXXXX:3:A:01:1'
JAS+CHG:N+CSN:00000068 000 '
JBS+CHG:N+ICN:XX:A:A:XXXXX:4:A:01:1'
JAS+CHG:N+CSN:00000069 000 '
JBS+CHG:N+ICN:XX:A:A:XXXXX:5:A:01:1'
CAS+CHG:N+CSN:00000065 000 +ISN:00A+IND:1+RFS:1+QNA:REF+TQL:REF+PNR:1Q1321+MFC:X
CES+CHG:N N+SRV:FRA GYL+SMR:PAFLD PAOLDA'
CJS+CHG:N N+MOV:FA GA'
CAS+CHG:N+CSN:00000065 001 +ISN:00A+IND:2+RFS:1+QNA:1+TQL:1+PNR:XXX-22140-01+MFC:
CES+CHG:N N+SRV:FRA GYL+SMR:PAFZZ PAOZZE'
CJS+CHG:N N+MOV:FA GA'
CAS+CHG:N+CSN:00000065 002 +ISN:00A+IND:2+RFS:1+QNA:2+TQL:2+PNR:XXX-22140-03+MFC:
CDS+ESC:1
CES+CHG:N N+SRV:FRA GYL+SMR:PAFZZ PAOZZE'
CJS+CHG:N N+MOV:FA GA'
CAS+CHG:N+CSN:00000065 003 +ISN:00A+IND:2+RFS:1+QNA:6+TQL:6+PNR:M6X15LN9439+MFC:
CES+CHG:N N+SRV:FRA GYL+SMR:PAFZZ PAOZZE'
CJS+CHG:N N+MOV:FA GA'
CAS+CHG:N+CSN:00000065 004 +ISN:00A+IND:2+RFS:1+QNA:6+TQL:6+PNR:LN9025-6-4K+MFC:
CES+CHG:N N+SRV:FRA GYL+SMR:PAFZZ PAOZZE'
CJS+CHG:N N+MOV:FA GA'
CAS+CHG:N+CSN:00000065 005 +ISN:00A+IND:2+RFS:1+QNA:6+TQL:6+PNR:M6LN9348+MFC:002
CES+CHG:N N+SRV:FRA GYL+SMR:PAFZZ PAOZZE'
CJS+CHG:N N+MOV:FA GA'
CAS+CHG:N+CSN:00000065 006 +ISN:00A+IND:2+RFS:1+QNA:5+TQL:5+PNR:4X14LN9199-3-132
CES+CHG:N N+SRV:FRA GYL+SMR:PAFZZ PAOZZE'
CJS+CHG:N N+MOV:FA GA'
CAS+CHG:N+CSN:00000065 008 +ISN:00A+IND:2+RFS:1+QNA:1+TQL:1+PNR:XXX-22140-02+MFC:
CES+CHG:N N+SRV:FRA GYL+SMR:PAFZZ PAOZZE'
CJS+CHG:N N+MOV:FA GA'
CES+CHG:N+CSN:00000065 000 +ISN:00A+IND:2+RFS:1+QNA:1+TQL:1+PNR:XXX-22140-12+MFC:XXXXX
PBS+UOI:EA+SPQ:100+ITY:HW+SPC:1+PLT:3+STR:0+SLC:0+PLC:5+PCD:99'
PAS+CHG:N+PNR:XXX-22140-15+MFC:XXXXX+DFP:SHIM (BEI MONTAGE NACHARBEITEN)'
PBS+UOI:EA+SPQ:1+ITY:BD+SPC:1+PLT:6+STR:0+SLC:0+PLC:4+PCD:00'
PAS+CHG:N+PNR:LN9439M8X30+MFC:D8442+DFP:SCREW'
PBS+UOI:EA+SPQ:100+ITY:HW+SPC:1+PLT:3+STR:0+SLC:0+PLC:5+PCD:00'
PAS+CHG:N+PNR:M8LN9348+MFC:D8442+DFP:NUTDFP:NUT+NSN:5310:121397991+RNC:5+RVN:2'
PBS+UOI:EA+SPQ:100+ITY:HW+SPC:1+PLT:3+STR:0+SLC:0+PLC:5+PCD:00'
PGS+SUU:CM000100020003+WUU:KG00001'
PAS+CHG:N+PNR:1Q0122+MFC:XXXXX+DFP:STEP INSTL AND LOWER INSTL-FOLDING-STAIRS'
PBS+UOI:EA+SPQ:1+ITY:MD+SPC:6+PLT:9+STR:0+SLC:0+PLC:4+PCD:99'
PAS+CHG:N+PNR:XXX-22336+MFC:XXXXX+DFP:TREAD HALF-INNER'
PBS+UOI:EA+SPQ:1+ITY:MD+SPC:6+PLT:9+STR:0+SLC:0+PLC:4+PCD:99'
PAS+CHG:N+PNR:XXX-22140-13+MFC:XXXXX+DFP:SOCKET-SCREW'
PBS+UOI:EA+SPQ:1+ITY:BD+SPC:1+PLT:6+STR:0+SLC:0+PLC:4+PCD:99'
PAS+CHG:N+PNR:NAS517-3-2+MFC:80205+DFP:SCREWDFF:SCREW+NSN:5305:008393437+RNC:3+RVN:2'
PBS+UOI:EA+SPQ:100+ITY:HW+SPC:1+PLT:3+STR:0+SLC:0+PLC:5+PCD:99'
PAS+CHG:N+PNR:XXX-22337+MFC:XXXXX+DFP:TREAD HALF-OUTER'
PBS+UOI:EA+SPQ:1+ITY:MD+SPC:6+PLT:9+STR:0+SLC:0+PLC:4+PCD:99'
PAS+CHG:N+PNR:XXX-22140-13+MFC:XXXXX+DFP:SOCKET-SCREW'
PBS+UOI:EA+SPQ:1+ITY:BD+SPC:1+PLT:6+STR:0+SLC:0+PLC:4+PCD:99'
PAS+CHG:N+PNR:XXX-22337-09+MFC:12345+DFP:EDGE-TREAD (480, HERSTELLEN AUS L32X20X3-2LN9496-3-1354-6)'
PBS+UOI:EA+SPQ:1+ITY:BD+SPC:1+PLT:6+STR:0+SLC:0+PLC:4+PCD:99'
PAS+CHG:N+PNR:NAS1739E4-2+MFC:80205+DFP:RIVETDFP:RIVET+NSN:5320:007179729+RNC:3+RVN:2'
PBS+UOI:EA+SPQ:100+ITY:HW+SPC:1+PLT:3+STR:0+SLC:0+PLC:5+PCD:99'
PAS+CHG:N+PNR:NAS517-3-2+MFC:80205+DFP:SCREWDFF:SCREW+NSN:5305:008393437+RNC:3+RVN:2'
PBS+UOI:EA+SPQ:100+ITY:HW+SPC:1+PLT:3+STR:0+SLC:0+PLC:5+PCD:99'
PAS+CHG:N+PNR:XXX-22338+MFC:XXXXX+DFP:TREAD-LWR'
PBS+UOI:EA+SPQ:1+ITY:MD+SPC:6+PLT:9+STR:0+SLC:0+PLC:4+PCD:99'
PAS+CHG:N+PNR:XXX-22140-13+MFC:XXXXX+DFP:SOCKET-SCREW'
PBS+UOI:EA+SPQ:1+ITY:BD+SPC:1+PLT:6+STR:0+SLC:0+PLC:4+PCD:99'
PAS+CHG:N+PNR:XXX-22338-08+MFC:XXXXX+DFP:EDGE-TREAD-LWR (430, HERSTELLEN AUS L32X20X3-2LN9496-3-1354-6)'
PBS+UOI:EA+SPQ:1+ITY:BD+SPC:1+PLT:6+STR:0+SLC:0+PLC:4+PCD:99'
PAS+CHG:N+PNR:NAS1739E4-2+MFC:80205+DFP:RIVETDFP:RIVET+NSN:5320:007179729+RNC:3+RVN:2'
PBS+UOI:EA+SPQ:100+ITY:HW+SPC:1+PLT:3+STR:0+SLC:0+PLC:5+PCD:99'
PAS+CHG:N+PNR:NAS517-3-2+MFC:80205+DFP:SCREWDFF:SCREW+NSN:5305:008393437+RNC:3+RVN:2'
PBS+UOI:EA+SPQ:100+ITY:HW+SPC:1+PLT:3+STR:0+SLC:0+PLC:5+PCD:99'
PAS+CHG:N+PNR:XXX-22335+MFC:XXXXX+DFP:PANEL-SLANTED RISER'
PBS+UOI:EA+SPQ:1+ITY:MD+SPC:6+PLT:9+STR:0+SLC:0+PLC:4+PCD:99'

```


RESTRICTED

Chapter Contents

Chapter	Fig.	Title
00-00-00	65	HINGE FITTINGS-FOLDING STAIRS
00-00-00	66	STEP INSTL AND LOWER INSTL-FOLDING-STAIRS

RESTRICTED

Fig. ITEM	IN	Part Number NSN	NSCM	Description	**UCA MV EFY	ICY	QNA UOI	SMR
66								
000	1	1Q0122	XXXX	STEP INSTL AND LOWER INSTL-FOLDING-STAIRS	FA GA		REF	PAFLD
001	2	XXX-22336	XXXX	TREAD HALF-INNER	FA GA		1	PAFLD
002	3	XXX-22140-13	XXXX	SOCKET-SCREW	FA GA		4	PAFZZ
003	2	NAS517-3-2 5305-00-839-3437	80205	SCREW	FA GA		4	PAFZZ
004	2	XXX-22337	XXXX	TREAD HALF-OUTER	FA GA		1	PAFLD
005	3	XXX-22140-13	XXXX	SOCKET-SCREW	FA		4	PAFZZ

RESTRICTED

