



MTU Engine Shop Visit Report

Customer: PROENERGY SERVICES

S/N: 691-098 / 481-402

Model: 7LM2500 PE-MGW / 7LM2500 PC 103



MTU Engine Shop Visit Report

Abstract

Customer:	PROENERGY SERVICES
Engine Serial Number:	691-098 / 481-402
Engine Model:	7LM2500 PE-MGW / 7LM2500 PC 103
Workorder:	565810
Workscope:	Repair
Scope Description:	GG due for review
Time since New:	unknown
Time since last Shop Visit:	unknown
Total Starts since New	unknown
Date Induction:	05 March 2009
Date Test:	07 November 2009
Date Shipment:	19 November 2009
Date Report:	15 December 2009



LM2500 SAC Gas Turbine

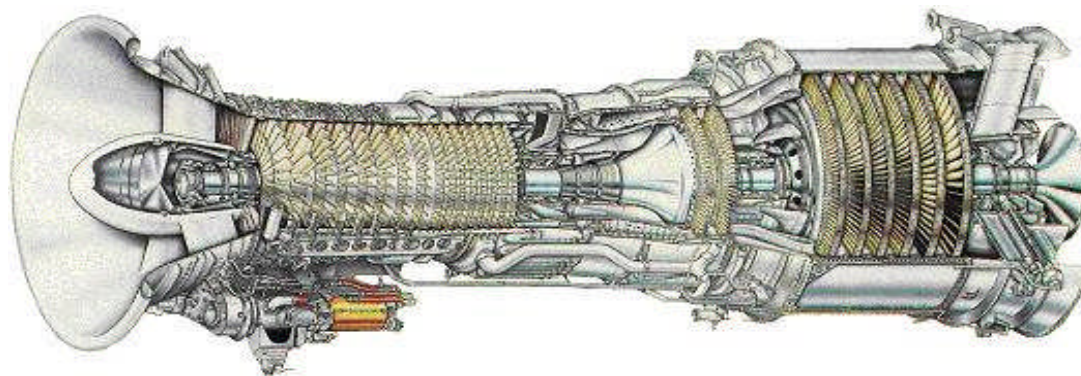
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Shop Visit Report

LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**

S/N: **691-098 / 481-402**

Model: **7LM2500 PE-MGW / 7LM2500 PC 103**



LM2500 Engine Shop Visit Report

ENGINE S/N: 691-098

TSN: unknown

CUSTOMER: PES

W.O.: 565.810

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Outgoing Status

Incoming Status

TSLV: unk.

Removal Reason: GG due for review

Testrun performed:	X	Dynamic VSV Rigging performed	X	Engine Components	Bore-scope Check	Maintenance Status	Module Change	First Customer WRB Request	MTU Final WRB Decision	EMU Maintenance Evaluation	Remarks
Seal run in performed:	X	Engine Preservation Oil:	X								
				Front Frame		VC		-	VC		
				HP Compressor Rotor		VC		-	VC		
				HP Compressor Stator		VC		-	VC		
				Compressor Rear Frame		VC		-	VC		
				Combustor		VC		-	VC		
				HP Turbine Nozzle Stg.1		VC		-	VC		
				HP Turbine Rotor		VC		-	VC		
				HP Turbine Nozzle Stg.2		VC		-	VC		
				Turbine Mid Frame		VC		-	VC		
				Inlet Gearbox		-		-	-		visual insp. in assembled cond.
				Accessory Gearbox		-		-	-		visual insp. in assembled cond.
				Power Turbine		VC		VC	VC		
				Turbine Rear Frame		VC		VC	VC		

Key: VC = Inspected and repaired as necessary

POH = Performance Restoration

OH = Full Refurbishment

TSN = Time since new

TSLV = Time since last Shop Visit

For further details of work performed and modifications

refer to page 2, appendix to S.V.R. and RMS

The work recorded above has been carried out in accordance with the requirements of GE for the time being in force and in that respect the engine/equipment is considered fit for release to service.



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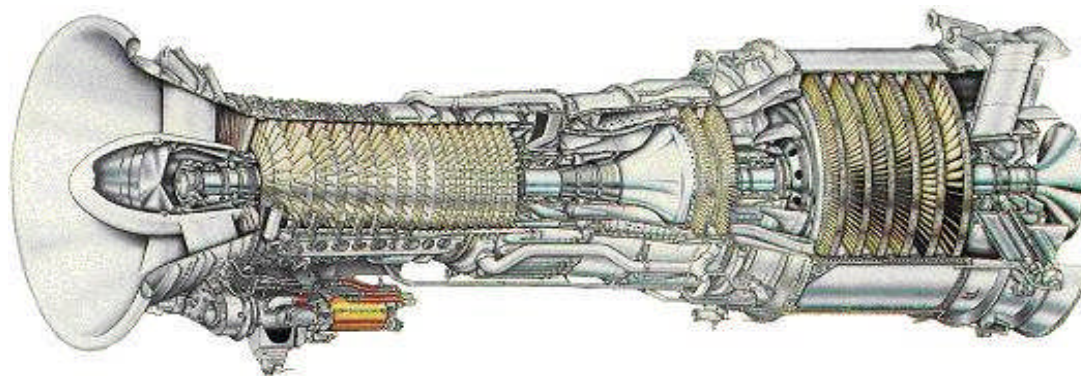
INSPECTION REQUIREMENTS

DATE: 15.12.2009



Module Configuration List

LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**

S/N: **691-098 / 481-402**

Model: **7LM2500 PE-MGW / 7LM2500 PC 103**



LM2500PE Modul Configuration List

ENGINE-S/N: **691-098**

CUSTOMER: **PES**

W.O.: **565810**

PAGE: 1 of 1

AT REMOVAL

description	P/N	S/N	TSN
FRAME ASSY,COMPRESSOR FRONT	L21370G15	MTUBB0064-09	UNK.
ROTOR ASSY, COMPRESSOR	L21788G17	RPMDD665	UNK.
FRONT STATOR ASSY, COMPR.	L24067G18	CDPL6249	UNK.
FRAME ASSY, CRF	9103M30G30	GEVF6763	UNK.
LINER ASSY, COMBUSTION CHAM	L43663G01	GGMRJ839	UNK.
NOZZLE ASSY, HPT STG. 1 SS	L25736G11	FABCG427	UNK.
NOZZLE ASSY, HPT STG. 2 SS	L25739G09	GEVAT915	UNK.
ROTOR ASSY, HPT SS	L31397G13	APV72559	UNK.
TMF ASSY,THICK FLANGE	L24288G41	FCP544HD	UNK.
ROTOR ASSY, LPT (NON-STIG)	L16733G16	FIA00308	UNK.
FRAME ASSY, TURBINE REAR	L16727G20	FIA00248	UNK.
IGB ASSEMBLY	L21082G13	EPE80108	UNK.
TRANSFER GEARBOX ASSY	L21441G25	EPE80110	UNK.

AT INSTALLATION

P/N	S/N	TSN	REMARKS
L21370G15	MTUBB0064-09	UNK.	
L21788G17	RPMDD665	UNK.	
L24067G18	CDPL6249	UNK.	
9103M30G30	GEVF6763	UNK.	
L43663G01	GGMRJ839	UNK.	
L25736G11	FABCG427	UNK.	
L25739G09	GEVAT915	UNK.	
L31397G13	APV72559	UNK.	
L24288G41	FCP544HD	UNK.	
L16733G16	FIA00308	UNK.	
L16727G20	FIA00248	UNK.	
L21082G13	EPE80108	UNK.	
L21441G25	EPE80110	UNK.	

REMARKS :

NAME: NICO BRADEMANN

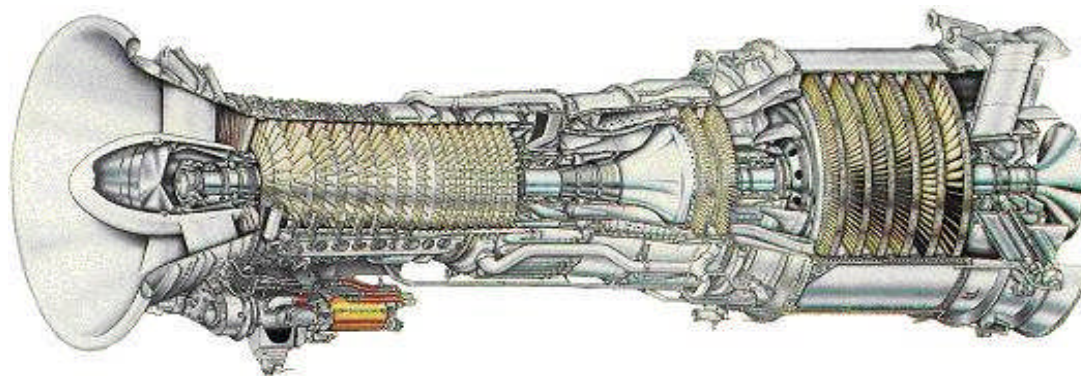
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DATE: 15.12.2009



Engine Configuration List

LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**

S/N: **691-098 / 481-402**

Model: **7LM2500 PE-MGW / 7LM2500 PC 103**



LM2500PE Engine Configuration List

ENGINE-S/N: **691-098**

CUSTOMER: **PES**

W.O.: **565810**

PAGE: 1 of 3

AT REMOVAL				AT INSTALLATION			
description	P/N	S/N	TSN	P/N	S/N	TSN	REMARKS
FRAME ASSY,COMPRESSOR FRONT	L21370G15	MTUBB0064-09	UNK.	L21370G15	MTUBB0064-09	UNK.	
RETAINER, NO. 3R BEARING	L31711P01		UNK.	L31711P01		UNK.	
BEARING NO. 3R, DAMPER	1959M19P01	TBCLA194	UNK.	L31708P01	SN:	UNK.	
ROTOR ASSY, COMPRESSOR	L21788G17	RPMD665	UNK.	L21788G17	RPMD665	UNK.	
DISK, STAGE 1	9021M62P06	RPMD665	UNK.	9021M62P06	RPMD665	UNK.	
DISK ASSY, STG. 2	9661M82G28	GAT4362M	UNK.	9661M82G28	GAT4362M	UNK.	
SPOOL, STAGES 3 - 9	9021M64P12	GWNCT563	UNK.	9021M64P12	GWNCT563	UNK.	
FRONT STATOR ASSY, COMPR.	L24067G18	CDPL6249	UNK.	L24067G18	CDPL6249	UNK.	
HPC FRONT CASE, STEEL	9206M96G05	CDPL6249	UNK.	9206M96G05	CDPL6249	UNK.	
HPC REAR CASE, ASSY	9686M81G09	CDPT6725	UNK.	9686M81G09	CDPT6725	UNK.	
FRAME ASSY, CRF	9103M30G30	GEVF6763	UNK.	9103M30G30	GEVF6763	UNK.	
BEARING, NO. 4 ROLLER	9671M26P09	MRCMM566	UNK.	1853M96P01	FCAS8449	0:00	
BEARING, NO. 4 BALL	9648M01P14	MRCMK829	UNK.	9648M01P14	MRCMK829	UNK.	
LINER ASSY, COMBUSTION CHAM	L43663G01	GGMRJ839	UNK.	L43663G01	GGMRJ839	UNK.	
NOZZLE ASSY, HPT STG. 1 SS	L25736G11	FABCG427	UNK.	L25736G11	FABCG427	UNK.	
NOZZLE ASSY,STG.1 HPT(TBC)	9283M87G23		UNK.	9283M87G23		UNK.	GELIEFERT: 28 STCK. 704763S
NOZZLE, STG.1(TBC)	9283M87G24	MDK19CC9	UNK.	9283M87G24	MDK19CC9	UNK.	GELIEFERT: 704763B
NOZZLE ASSY, HPT STG. 2 SS	L25739G09	GEVAT915	UNK.	L25739G09	GEVAT915	UNK.	
NOZZLE, HPT STG.2 BOR.	L31395G06	SEE LIST	UNK.	L31395G06	SEE LIST	UNK.	
NOZZLE, HPT STG.2	L31395G05	SEE LIST	UNK.	704804S	SEE LIST	UNK.	
ROTOR ASSY, HPT SS	L31397G13	APV72559	UNK.	L31397G13	APV72559	UNK.	
RETAINER STG. 1 BLADE	9264M54P02	SPKO7977	UNK.	9264M54P02	SPKO7977	UNK.	
SHAFT ASSY, FORWARD	9208M78G09	CAV36110	UNK.	9208M78G09	CAV36110	UNK.	
DISK, STG. 1 HPTR	9208M81P06	ATW16433	UNK.	9208M81P06	ATW16433	UNK.	
HPT BLADE, STG. 1 MARINIZED	L31424G28		UNK.	704511		UNK.	
SPACER, HPT ROTOR	L31425P02	XAE17020	UNK.	L31425P02	XAE17020	UNK.	

REMARKS :

NAME: NICO BRADEMANN

SIGNATURE:

DATE: 15.12.2009



LM2500PE Engine Configuration List

ENGINE-S/N: **691-098**

CUSTOMER: **PES**

W.O.: **565810**

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AT REMOVAL

AT INSTALLATION

description	P/N	S/N	TSN	P/N	S/N	TSN	REMARKS
SHIELD ASSY, THERMAL	L25734G04	BCM24767	UNK.	L25734G04	BCM24767	UNK.	
DISK, STG. 2 HPTR	L25451P05	ATW16666	UNK.	L25451P05	ATW16666	UNK.	
RETAINER STG. 2 BLADE	9208M83P02	NCE2382C	UNK.	9208M83P02	NCE2382C	UNK.	
HPT BLADE, STG. 2				704632		UNK.	
REAR SHAFT ASSY, HPTR	L31304G01	APV72559	UNK.	L31304G01	APV72559	UNK.	
TMF ASSY, THICK FLANGE	L24288G41	FCP544HD	UNK.	L24288G41	FCP544HD	UNK.	
BRG. NO. 5R MAIN (DAMPER)	1962M45P01	FCAK0501	UNK.	L31720P01	MDADM978	0:00	
BEARING, NO. 6 ROLLER	1959M24P01	TBCML201	UNK.	R1830EX119	MRCNJ097	0:00	
NOZZLE, LPTS STG.1 NON-STIG	L21751G01		UNK.	L21751G01		UNK.	
CASE ASSY, LPT STATOR	1815M18G04	PMB20746	UNK.	1815M18G04	PMB20746	UNK.	
NOZZLE LPTS, STG. 2	L21752G01		UNK.	L38152G01		UNK.	
	L21752G04		UNK.	726501		UNK.	
NOZZLE LPTS, STG. 2	L21752G02		UNK.	726501		UNK.	
NOZZLE LPTS, STG. 2	L21752G03		UNK.	726501		UNK.	
NOZZLE LPTS, STG. 3	L21753P01		UNK.	L21753P01		UNK.	4EA CHR-PN: 736501
NOZZLE LPTS, STG. 3	L21753P02		UNK.	L21753P02		UNK.	2EA CHR-PN: 736501
NOZZLE LPTS, STG. 3	L21753G01		UNK.	L21753G01		UNK.	2EA CHR-PN: 736501
NOZZLE LPTS, STG. 4	1474M44P01		UNK.	1474M44P01		UNK.	
	9663M04P04		UNK.	9663M04P04		UNK.	
NOZZLE, LPTS STG. 5	9663M05P05		UNK.	9663M05P05		UNK.	
	1474M45P01		UNK.	1474M45P01		UNK.	
NOZZLE, LPTS STG. 6	1474M46P01		UNK.	1474M46P01		UNK.	
	9663M06P04		UNK.	9663M06P04		UNK.	
INNER RACE, BRG. NO. 6	1959M25P01	TBCMS241	UNK.	9146M72P03	MRCNA967	0:00	
ROTOR ASSY, LPT (NON-STIG)	L16733G16	FIA00308	UNK.	L16733G16	FIA00308	UNK.	
FRAME ASSY, TURBINE REAR	L16727G20	FIA00248	UNK.	L16727G20	FIA00248	UNK.	
BEARING, NO. 7B	L43720P01	FCAC3521	UNK.	L43720P01	FCAS7999	UNK.	

REMARKS :

NAME: NICO BRADEMANN

SIGNATURE:

DATE: 15.12.2009



LM2500PE Engine Configuration List

ENGINE-S/N: **691-098**

CUSTOMER: **PES**

W.O.: **565810**

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AT REMOVAL

description	P/N	S/N	TSN
INNER RACE, BRG. 7R	1959M27P01	TBCNL158	UNK.
BEARING, NO. 7R	1959M26P01	TBCNF135	UNK.
IGB ASSEMBLY	L21082G13	EPE80108	UNK.
TRANSFER GEARBOX ASSY	L21441G25	EPE80110	UNK.

AT INSTALLATION

P/N	S/N	TSN	REMARKS
L12047P01	MRCP7320	0:00	
L11686P01	MRCNY065	0:00	
L21082G13	EPE80108	UNK.	
L21441G25	EPE80110	UNK.	

REMARKS :

NAME: NICO BRADEMANN

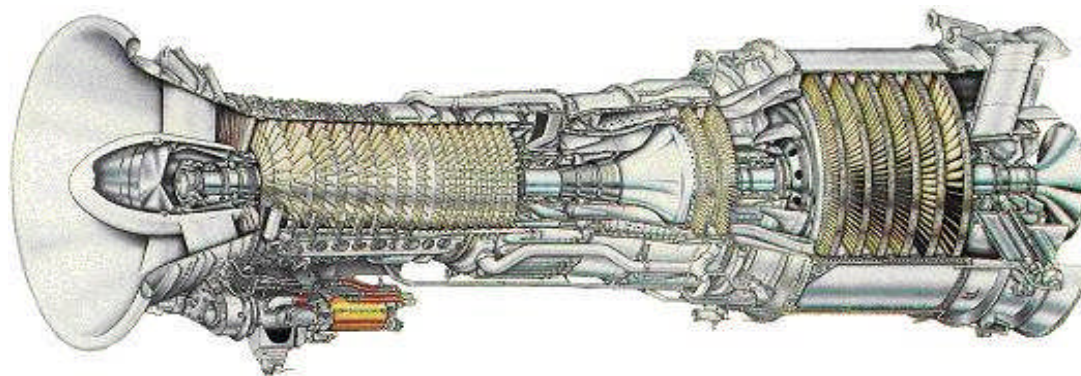
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DATE: 15.12.2009



Accessory List

LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**

S/N: **691-098 / 481-402**

Model: **7LM2500 PE-MGW / 7LM2500 PC 103**



LM2500PE Accessory List

ENGINE-S/N: 691-098

CUSTOMER: PES

W.O.: 565810

PAGE: 1 of: 1

AT REMOVAL

description	P/N	S/N
TRANSDUCER	L21656P04	D962
TRANSDUCER	L21656P01	SIMF0150
ACTUATOR, VSV	9691M29P19	APMSA339
ACTUATOR, VSV	9691M29P19	APMSA335
CONTROL, VSV	L34379P03	2619191
VALVE, CHECK	L21674P06	MTUBB0056-09
VALVE, CHECK	L21785P06	MTUBB0057-09
DETECTOR, RESIST.TEMP.(RTD)	L35166P01	
PUMP, LUBE AND SCAVENGE	L44500P08	NMAAN112
CABLE, FEEDBACK	L21693P02	CCIN2805

AT INSTALLATION

P/N	S/N	REMARKS
L21656P04	D962	
L21656P04	D293	
9691M29P19	APMSA339	
9691M29P19	APMSA335	
L34379P03	2619191	
L21674P06	MTUBB0056-09	
L21785P06	MTUBB0057-09	
L35166P01		
L44500P08	NMAAN112	
L21693P02	CCIN2805	

REMARKS :

NAME: NICO BRADEMANN

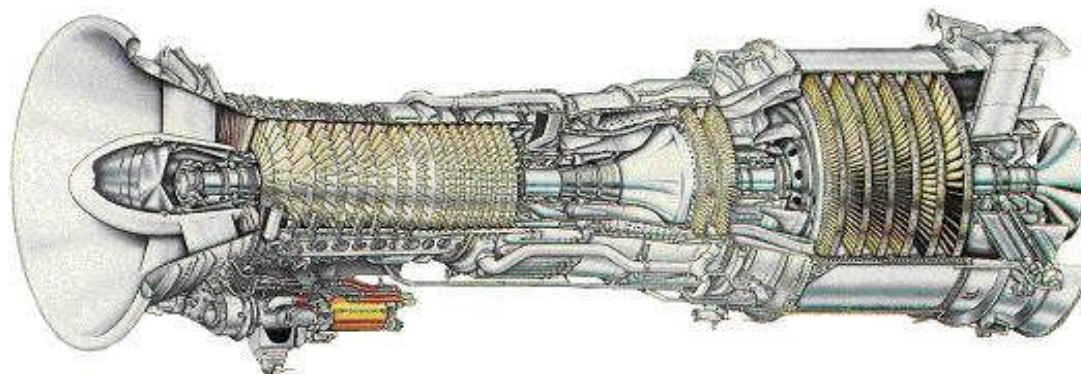
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DATE: 15.12.2009



Incoming Report

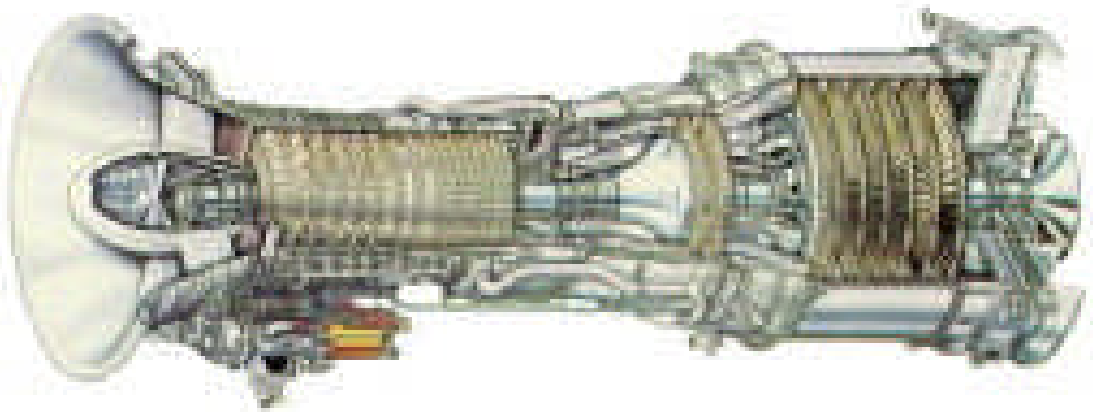
LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**
S/N: **691-098 / 481-402**
Model: **7LM2500 PE-MGW / 7LM2500 PC 103**

Incoming Report

IGT LM 2500



Customer : PROENERGY SERVICES

S/N : 691 – 098 / 481 - 402

Model : 7LM2500 – PE - MGW

W/O MTU Maintenance : 565810

Reason for Removal : Gasturbine due for review

Results:

During incoming inspection and disassembly the major findings were noted:



Name: Im25-09_1451

Module: Container

P/N: 106C7144G05

S/N: 207

Part: -

Description:

Incoming condition



Name: Im25-09_1453

Module: Container

P/N: 106C7144G05

S/N: 207

Part: Wood skids

Description:

Damaged



Name: Im25-09_1454

Module: Container

P/N: 106C7144G05

S/N: 207

Part: Wood skids

Description:

Several bolts were missing



Name: Im25-09_1455

Module: Container

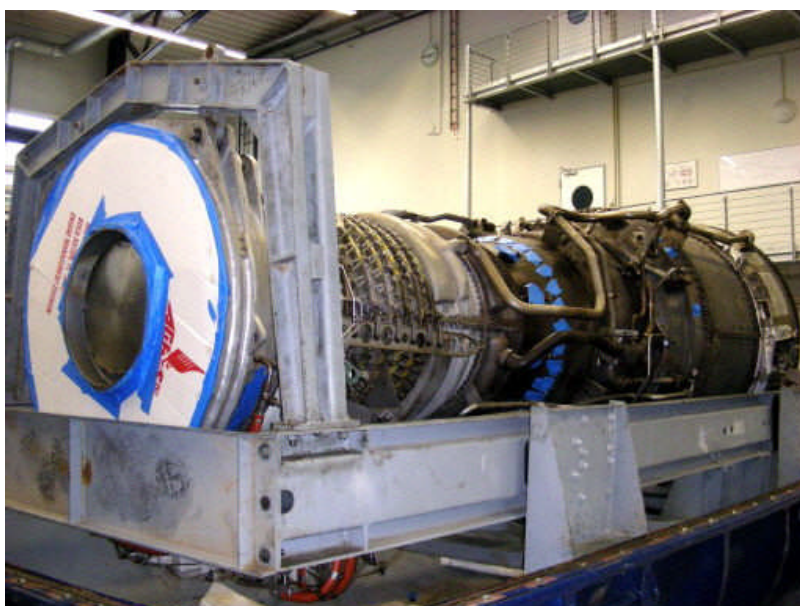
P/N: 106C7144G05

S/N: 207

Part: Wood skids

Description:

Several bolts were missing



Name: Im25-09_1467

Module: Engine

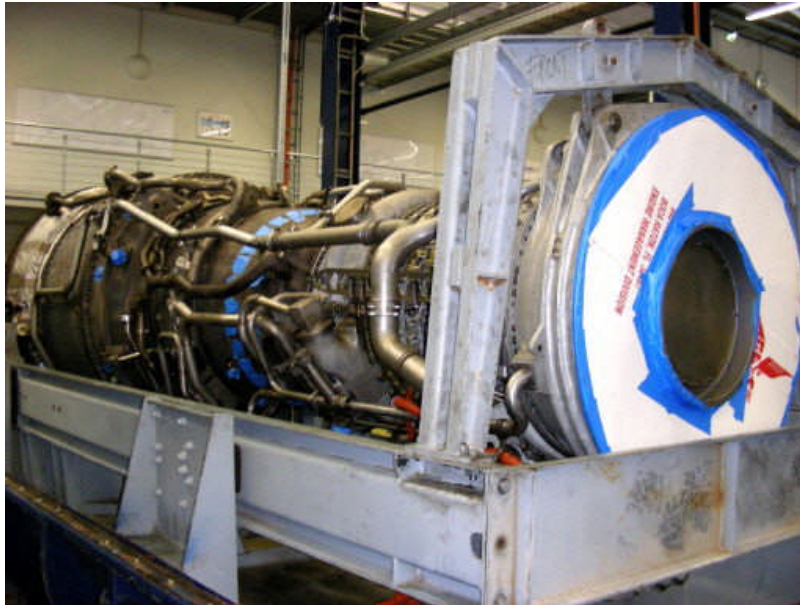
P/N: 7LM2500-PE-MGW

S/N: 691-098

Part: -

Description:

Incoming condition



Name: Im25-09_1470

Module: Engine

P/N: 7LM2500-PE-MGW

S/N: 691-098

Part: -

Description:

Incoming condition



Name: Im25-09_1468

Module: Powerturbine

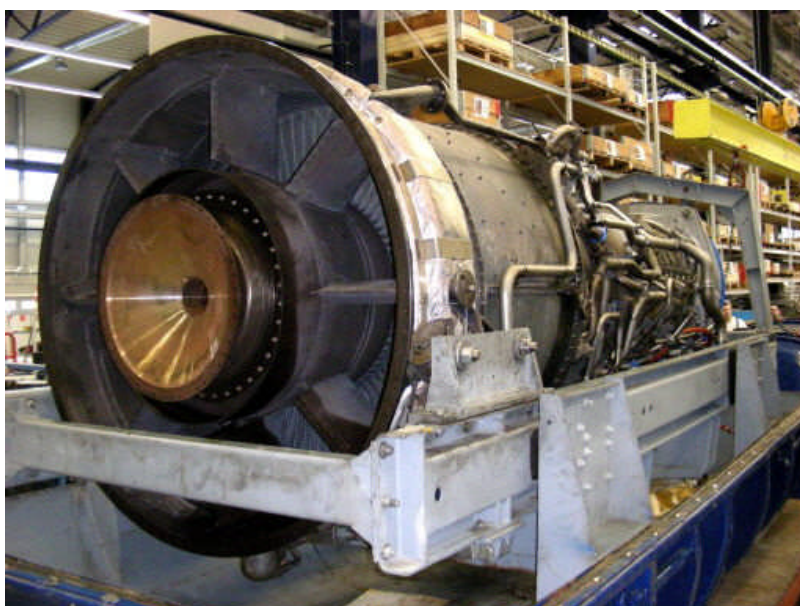
P/N: 7LM2500 PC103

S/N: 481-402

Part: -

Description:

Incoming condition



Name: Im25-09_1469

Module: Powerturbine

P/N: 7LM2500 PC103

S/N: 481-402

Part: -

Description:

Incoming condition



Name: Im25-09_1504

Module: Powerturbine

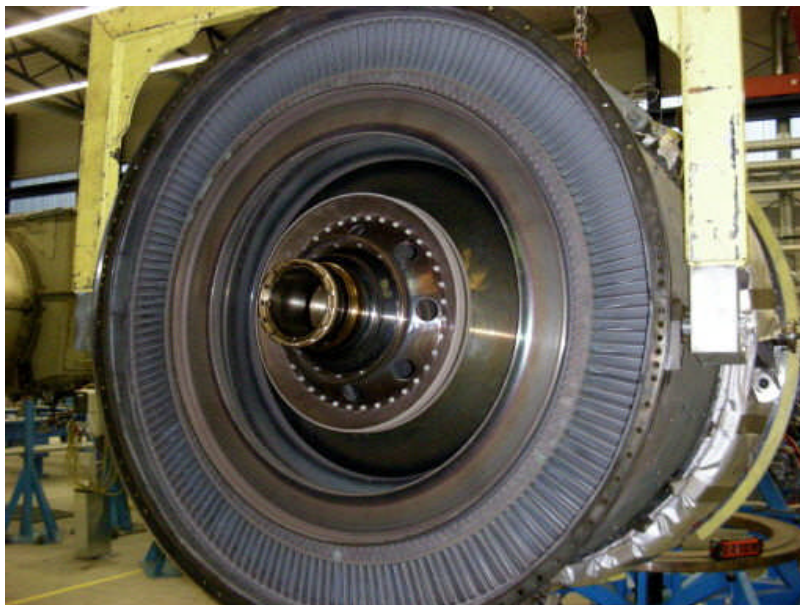
P/N: 7LM2500 PC103

S/N: 481-402

Part: -

Description:

Incoming condition



Name: Im25-09_1506

Module: Powerturbine

P/N: 7LM2500 PC103

S/N: 481-402

Part: -

Description:

Incoming condition



Name: Im25-09_1510

Module: Powerturbine

P/N: 7LM2500 PC103

S/N: 481-402

Part: -

Description:

Cover segments were damaged



Name: Im25-09_1553

Module: Powerturbine

P/N: 7LM2500 PC103

S/N: 481-402

Part: Rotor

Description:

Incoming condition



Name: Im25-09_1554

Module: Powerturbine

P/N: 7LM2500 PC103

S/N: 481-402

Part: Blades stg.1

Description:

Incoming condition



Name: Im25-09_1555

Module: Powerturbine

P/N: 7LM2500 PC103

S/N: 481-402

Part: Blades stg.2

Description:

Incoming condition



Name: Im25-09_1556

Module: Powerturbine

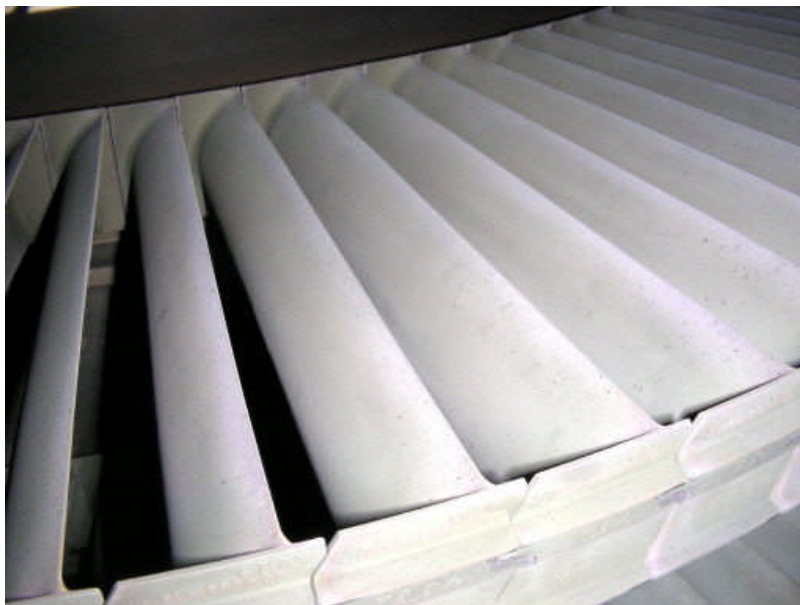
P/N: 7LM2500 PC103

S/N: 481-402

Part: Blades stg.3

Description:

Incoming condition



Name: Im25-09_1557

Module: Powerturbine

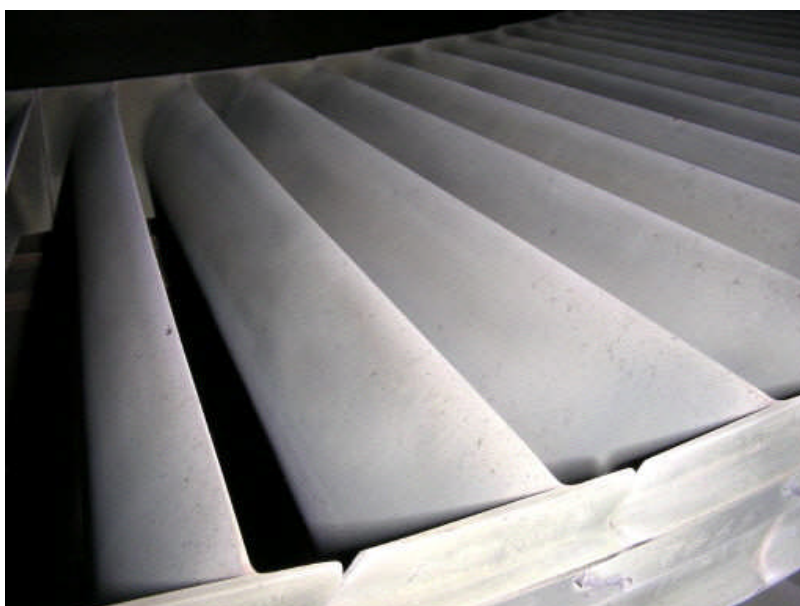
P/N: 7LM2500 PC103

S/N: 481-402

Part: Blades stg.4

Description:

Incoming condition



Name: Im25-09_1558

Module: Powerturbine

P/N: 7LM2500 PC103

S/N: 481-402

Part: Blades stg.5

Description:

Incoming condition



Name: Im25-09_1559

Module: Powerturbine

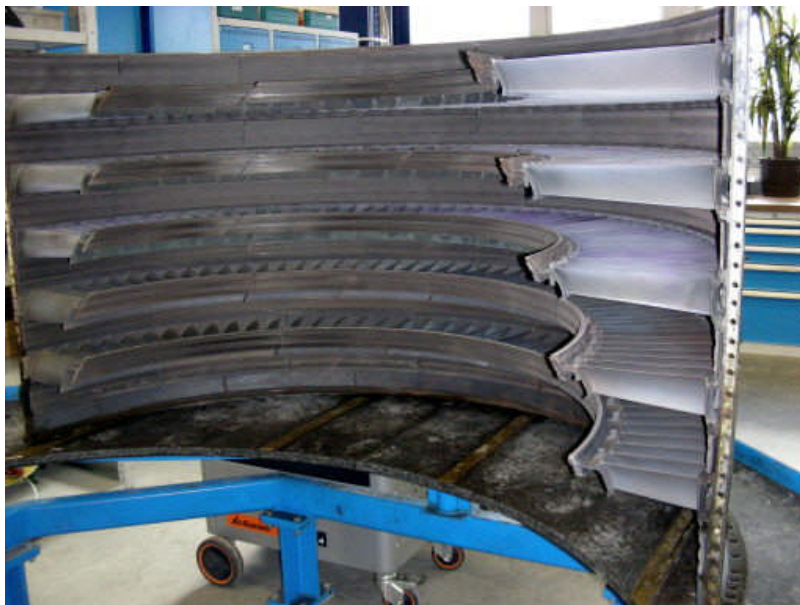
P/N: 7LM2500 PC103

S/N: 481-402

Part: Blades stg.6

Description:

Incoming condition



Name: Im25-09_1560

Module: PT stator

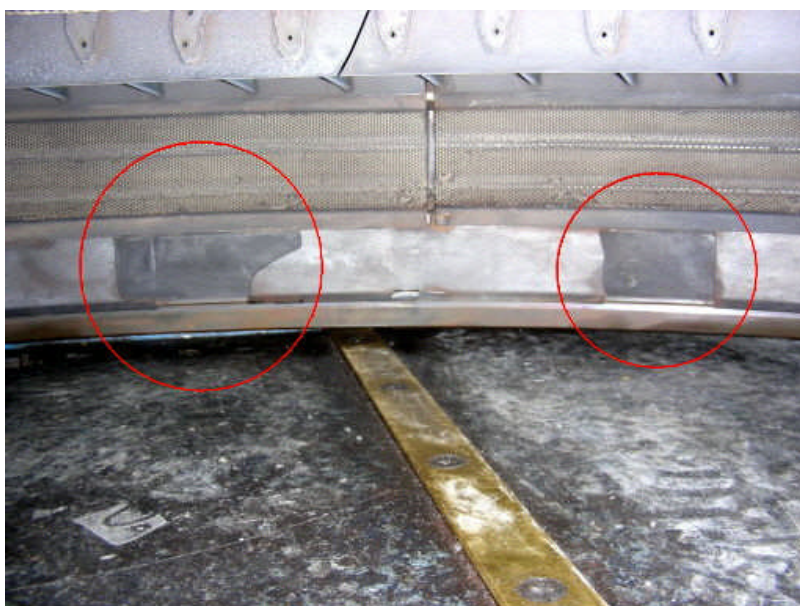
P/N: 1815M18G04

S/N: PMB20746

Part: -

Description:

Incoming condition - identified by stator case



Name: Im25-09_1561

Module: PT stator

P/N: 1815M18G04

S/N: PMB20746

Part: Cover segments

Description:

2ea segments were broken off



Name: lm25-09_1508

Module: Powerturbine

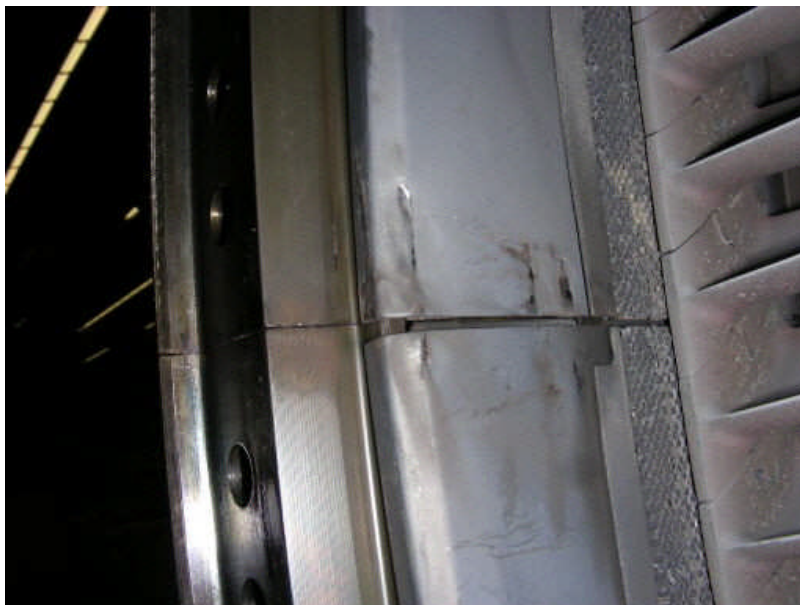
P/N: 7LM2500 PC103

S/N: 481-402

Part: -

Description:

Cover segments were damaged



Name: lm25-09_1509

Module: Powerturbine

P/N: 7LM2500 PC103

S/N: 481-402

Part: -

Description:

Cover segments were damaged



Name: lm25-09_1507

Module: Powerturbine

P/N: 7LM2500 PC103

S/N: 481-402

Part: Shrouds stg.1

Description:

Shroud material was partially missing at shrouds stg.1



Name: Im25-09_1562

Module: PT stator

P/N: 1815M18G04

S/N: PMB20746

Part: Shroud stg.1

Description:

Wear at the honeycomb seal was detected



Name: Im25-09_1563

Module: PT stator

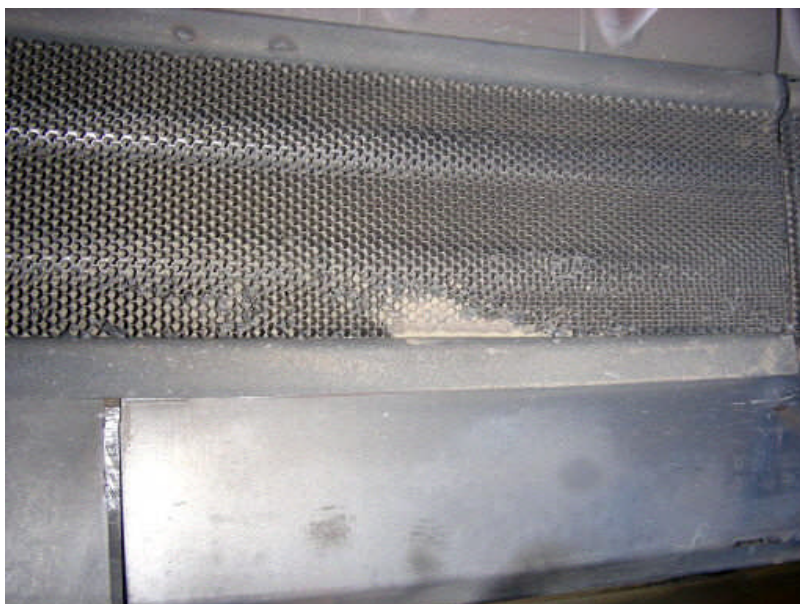
P/N: 1815M18G04

S/N: PMB20746

Part: Shroud stg.1

Description:

Wear at the honeycomb seal was detected



Name: Im25-09_1566

Module: PT stator

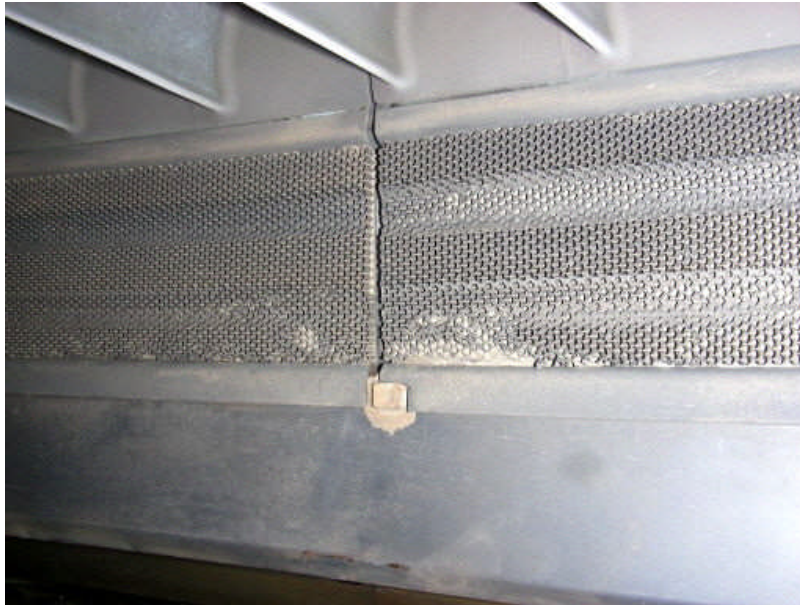
P/N: 1815M18G04

S/N: PMB20746

Part: Shroud stg.1

Description:

Wear at the honeycomb seal was detected



Name: Im25-09_1567

Module: PT stator

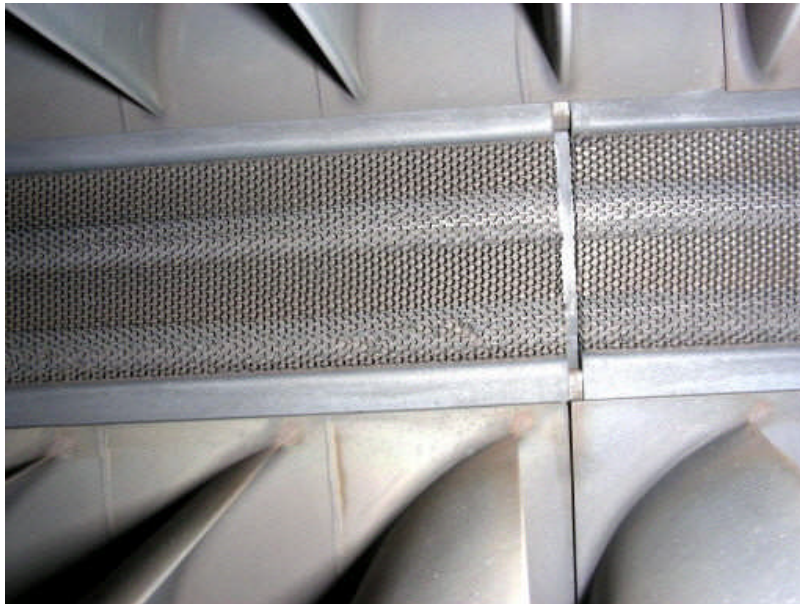
P/N: 1815M18G04

S/N: PMB20746

Part: Shroud stg.1

Description:

Wear at the honeycomb seal was detected



Name: Im25-09_1564

Module: PT stator

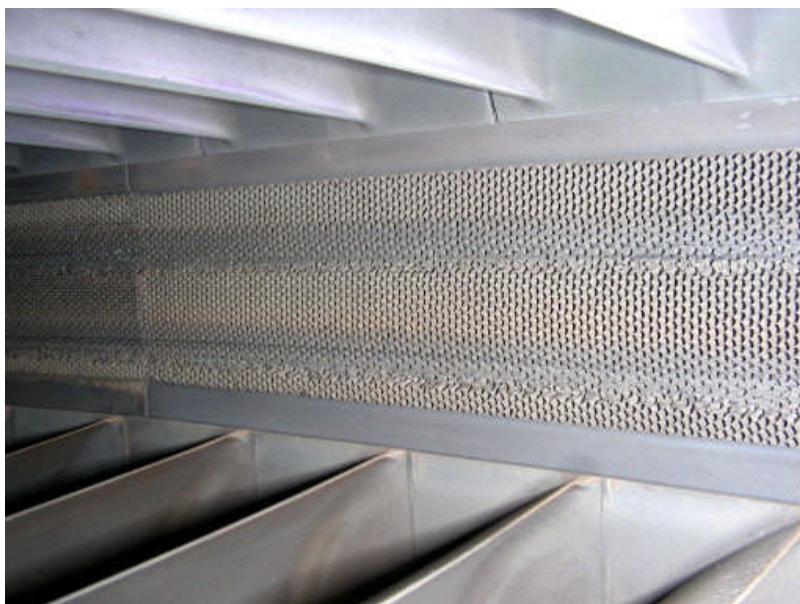
P/N: 1815M18G04

S/N: PMB20746

Part: Shroud stg.2

Description:

Wear at the honeycomb seal was detected



Name: Im25-09_1565

Module: PT stator

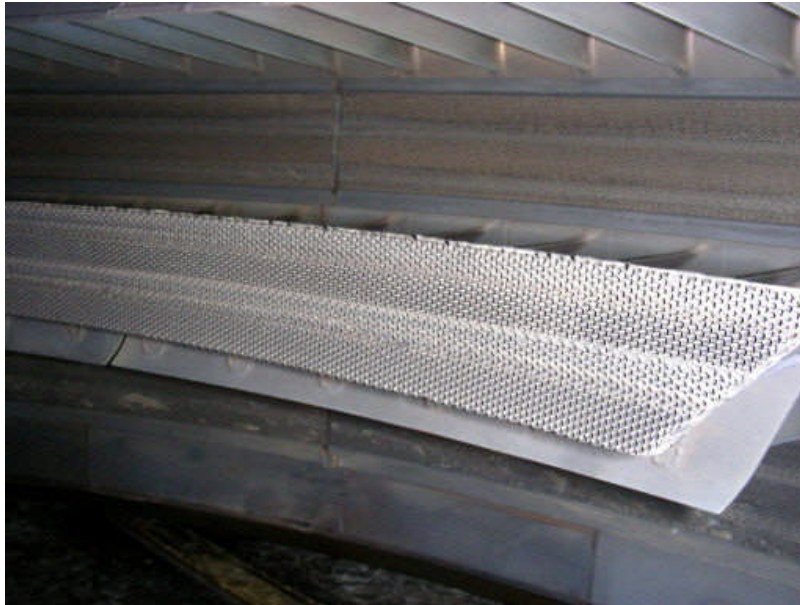
P/N: 1815M18G04

S/N: PMB20746

Part: Shroud stg.3

Description:

Wear at the honeycomb seal was detected



Name: Im25-09_1568

Module: PT stator

P/N: 1815M18G04

S/N: PMB20746

Part: Air seal stg.2

Description:

Wear at the honeycomb was detected



Name: Im25-09_1569

Module: PT stator

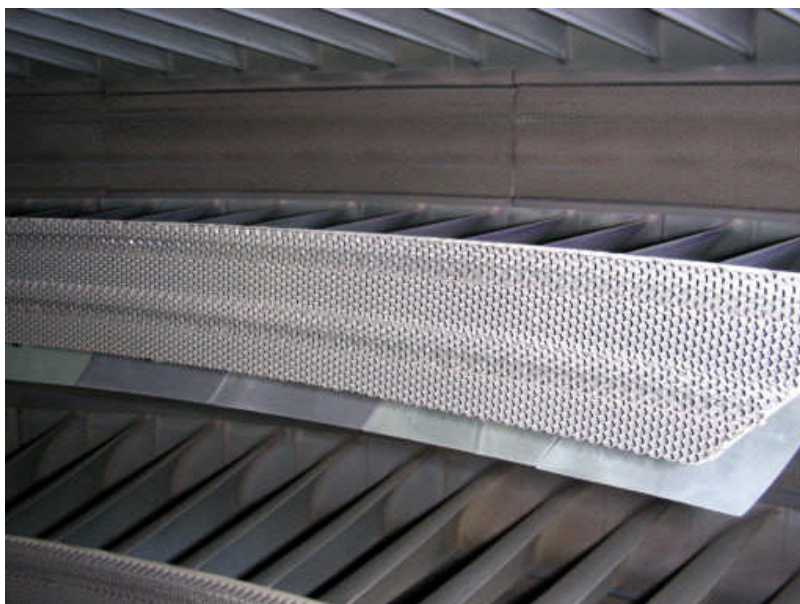
P/N: 1815M18G04

S/N: PMB20746

Part: Air seal stg.3

Description:

Wear at the honeycomb was detected



Name: Im25-09_1570

Module: PT stator

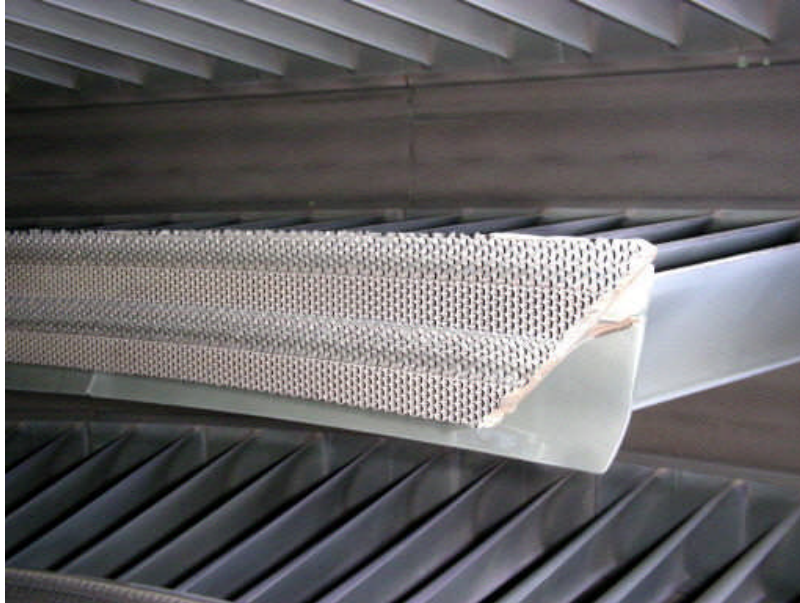
P/N: 1815M18G04

S/N: PMB20746

Part: Air seal stg.4

Description:

Wear at the honeycomb was detected



Name: Im25-09_1571

Module: PT stator

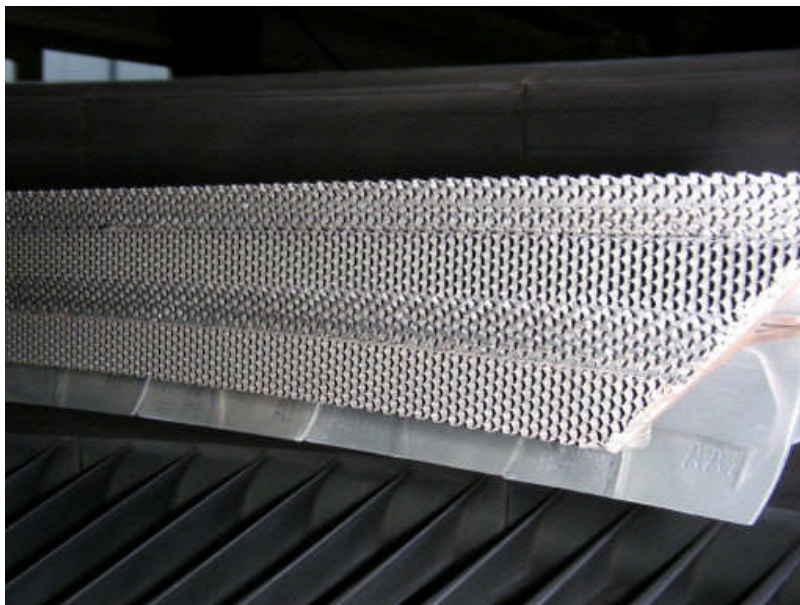
P/N: 1815M18G04

S/N: PMB20746

Part: Air seal stg.5

Description:

Wear at the honeycomb was detected



Name: Im25-09_1572

Module: PT stator

P/N: 1815M18G04

S/N: PMB20746

Part: Air seal stg.6

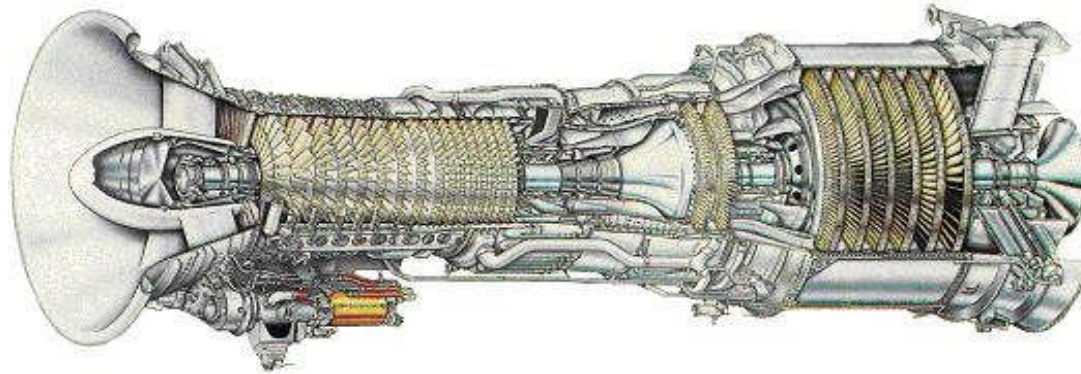
Description:

Wear at the honeycomb was detected



Scope of Work

LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**

S/N: **691-098 / 481-402**

Model: **7LM2500 PE-MGW / 7LM2500 PC 103**

Workscope Meeting

Meeting date: 9th June 2009

Reason for removal: GG do for repair

Gas Generator status:

ESN: 691-098 / 481-402
Customer: ProEnergy Services
Engine Model: 7LM2500 PE – MGW / 7LM2500 PC 103
Customer contact:
TSN: UNK.
TSLSV: UNK.
Starts since new: UNK.
Removed from site: UNK.
Removal date: UNK.
Received at MTU-BB: 17th February 2009
Inducted in Shop: 05th March 2009

- Disassembly of GG into Modules is completed
- Incoming inspection is completed
- Incoming report is completed
- Further workscope was established in accordance to customer decision

Compressor Front Frame

P/N: **UNK.** S/N: **UNK.**

- Complete disassembly due to bearing removal
- Cleaning and visual inspection IAW GEK99418
- Full inspection of bearings
- Pressure test
- Introduction of IND-205
- Reassemble

High Pressure Compressor Rotor

P/N: **L21788G17** S/N: **RPMDD665**

- Disassembly of stage 1/2 Disk
- Visual inspection of vespel strip in assembled condition
- Cleaning, inspection and repair IAW GEK99418 of stage 1 Blades due to worn Mid Span Damper and impacts at leading edge (no tip extension)
- Visual inspection of HPC Rotor in assembled condition IAW GEK99418
- all parts found to be unserviceable at visual inspection will be disassembled, inspected and repaired IAW GEK99418
- Grind stage 1 blades to standard limit
- Approximate fallout of HPC blades: 1 piece
- Reassemble and Final balancing

High Pressure Compressor Stator

P/N: **L24067G18** S/N: **CDPL6249**

- Complete Disassembly
- Cleaning and visual inspection of Stator Case IAW GEK99418
- all parts found to be unserviceable at visual inspection will be disassembled, inspected and repaired IAW GEK99418
- Rub coat replacement
- Approximate fallout of HPC vanes: 0%
- Reassemble

Compressor Rear Frame

P/N: **9103M30G30** S/N: **GEVF6763**

- Disassembly due to Bearing removal
- Cleaning and visual inspection IAW GEK99418
- all parts found to be unserviceable at visual inspection will be disassembled, inspected and repaired IAW GEK99418

- Full inspection of bearings
- Pressure test

Combustor

P/N: **L43663G01** S/N: **GGMRJ839**

- Cleaning and visual inspection in assembled condition IAW GEK99418
- Repair as needed with minimum Workscope

High Pressure Turbine Nozzle Guide Vane Stage 1

P/N: **L25736G11** S/N: **FABCG427**

- Complete Disassembly
- Visual inspection IAW GEK99418
- all parts found to be unserviceable at visual inspection will be disassembled, inspected and repaired IAW GEK99418
- Nozzles: perform repair due to start of burning and coating loss, coating with TBC
- Approximate fallout of HPT stage 1 vanes: 0%

High Pressure Turbine Nozzle Guide Vane Stage 2

P/N: **L25739G09** S/N: **GEVAT915**

- Disassembly into piece parts due to cracked Nozzle Segments (trailing edge)
- Cleaning, inspection and repair of Nozzle Segments IAW GEK99418
- Nozzles: perform repair due to cracked segments, coating with TBC
- Shrouds: perform repair due to rub marks
- Interstage Seals: perform visual inspection and repair if necessary
- Grind nozzle assembly do dimensionally suit HPT rotor (optimize blade and interstage seal clearance)
- Approximate fallout of HPT stage 2 vanes: 0%
- Approximate fallout of HPT stage 1 and stage 2 shrouds: 0%

High Pressure Turbine Rotor

P/N: **L31397G13** S/N: **APV72559**

- Cleaning, visual inspection and repair IAW GEK99418 if necessary
- Blades stage 1/2: perform inspection and repair due to rubbed Blade tips and burned airfoil surface, coating with TBC if possible
- Grind stage 1 and stage 2 rotor blades to dimensionally suit stage 2 nozzle assembly (optimize HPT rotor blade clearance) as necessary
- Dynamic balancing of HPT rotor assembly
- Approximate fallout stage 1 and stage 2 HPT blades: 2 pieces

Turbine Mid Frame

P/N: **L24288G41** S/N: **FCP544AD**

- Bearing removal
- Visual inspection in assembled condition IAW GEK99418
- all parts found to be unserviceable at visual inspection will be disassembled, inspected and repaired IAW GEK99418
- Full inspection of bearings
- Nozzles: cleaning and visual inspection IAW GEK99418
- Pressure test

Inlet Gearbox

P/N: **L21082G13** S/N: **EPE80108**

- Cleaning and Visual inspection IAW GEK99418 in assembled condition
- all parts found to be unserviceable at visual inspection will be disassembled, inspected and repaired IAW GEK99418

Accessory Gearbox

P/N: **L21441G25** S/N: **EPE80110**

- Cleaning and Visual inspection IAW GEK99418 in assembled condition

Accessories & non modular parts

- Cleaning and visual inspection IAW GEK99418

Power Turbine Module

P/N: **7LM2500 PC103** S/N: **481-402**

- Stator Cases are splitted
- Incoming Inspection is completed
- PT Rotor and TRF are still assembled
- Further workscope was established in accordance to customer decision

Power Turbine Stator

P/N: **1815M18G04** S/N: **PMB20746**

- Disassembly into piece parts due to broken cover segments
- Cleaning and visual inspection IAW GEK99418
- Replace cover segments, stage 1 nozzle insulator
- Approximate fallout of stage 1 LPT vanes: 0%
- Route Shrouds for repair

Power Turbine Rotor

P/N: S/N:

- Cleaning and visual inspection in assembled condition IAW GEK99418
- Final balancing

Turbine Rear Frame

P/N: S/N:

- Cleaning and visual inspection IAW GEK99418
- Disassembly into piece parts due to bearing removal
- Renew insulation
- Full inspection of bearing

Service Bulletins

- Following SBs will be performed in accordance to customer decision: 205

Missing parts

- The items mention in the list below are missing but can be supplied

Item	P/N
BRACKET (THICK FLANGE)	L24045P02
BRACKET,THERMOCOUPLE	L43652G01
BRACKET,THERMOCOUPLE	L28030P03
BRACKET,THERMOCOUPLE	L34563G01
BRACKET,THERMOCOUPLE	L28501G01
BRACKET,THERMOCOUPLE	L46356G01
IGNITER PLUG	L43450P01
CABLE, POWER	9600M37P13
BRACKET ASSY	L21060G01
BRACKET	L24311P001A
BRACKET, ANGLE	332C446P127
BRACKET, TUBE OIL	L34757P001A
TUBE, CDP	L16626G01
SENSOR,TEMP/COMPR IN	L34319P01
PROBE, TOTAL PRESSURE	L34143G01
SENSOR, T3	L28339P01
BRACKET, T3 SENSOR	L34559G01
BRACKET, T3 SENSOR	L34565G01
STARTER, PNEUMATIC	L21474P11
COVER, CFF	L21220P01
HARNESS,TOP RIGHT	9055M89P03
HARNESS,BOTTOM RIGHT	9055M90P03
HARNESS,BOTTOM LEFT	9055M91P02

HARNESS, TOP LEFT	9055M90P04
LEAD, AFT THERMOCOUPLE	L28030P05
BRACKET (THICK FLANGE)	L24044P02
SPACER, METERING	L31266P10
ACCELEROMETER-HIGH	L34246P03
ACCELEROMETER-HIGH	L34246P03
BRACKET, VIBRATION	L34249G01
PUMP, HYDRAULIC	L28266P03
MANIFOLD, AIR	L34508G01
SPACER, METERING	L34518P04
SPACER, METERING	L34518P04
KIT, FUEL SYSTEM KOMPL.	
BRACKET, ANGLE	L24387P003A
BRACKET, ANGLE	L24386P003A
KIT, STEAM INJECTION	
TUBE, OIL - B SUMP	L34749G01
HOSE	R5077J110B
HOSE	R5077F205B
HOSE	R5077J165B
TUBE, OIL - B SUMP	L42129G01
TUBE, OIL-TRANSFER	L42090G01

Outgoing configuration

- As incoming configuration

Scrap parts

- Scrap parts to be locally scraped



Scope of Work
691-098
LM2500 PE

MTU Maintenance Berlin - Brandenburg GmbH

Engine Test

- Engine test will be accomplished

Miscellaneous

- MTU provides a Shop Visit Report

On behalf of
MTU Maintenance GmbH

On behalf of
ProEnergy Services

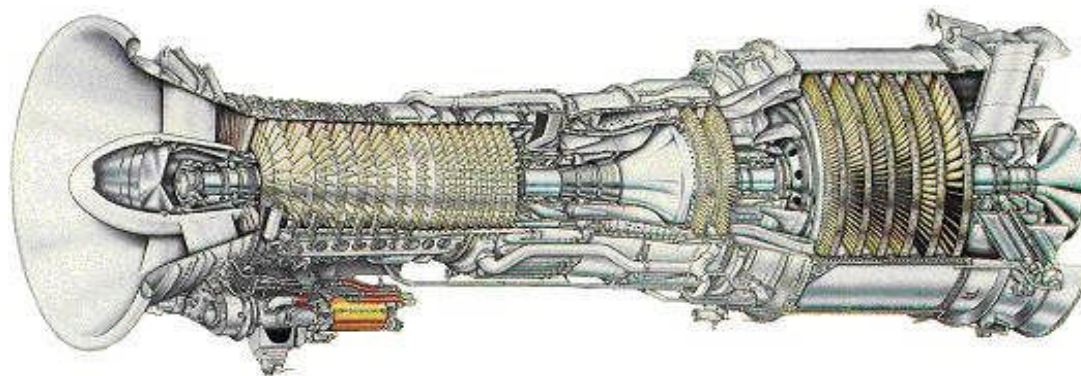
Christopher Ebert
Customer Support Manager

Pete Watson
Vice President



Condition Report

LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**

S/N: **691-098 / 481-402**

Model: **7LM2500 PE-MGW / 7LM2500 PC 103**

Type: **LM2500PE**
Work-Order: **5658100100**
S/N: **691-098**

MTU Maintenance Berlin -Brandenburg

Condition Report

Partnumber	Serial Number	Nomenclature	Qty	Remarks
Modul: 0001 - CORE ENGINE				
9644M33P04		NUT SPANNER NO.3 BRG	1	RENEW BLACK OXIDE
9346M79G05	CAV36961	SPLIT NUT,4B SPLINED	1	RENEW SILVERPLATE.
Modul: 00M9 - NMP ENGINE				
L43567G02		BELLCRANK	1	REPLACE BUSHING
9713M26P05		BOLT, PIN COMBUSTOR	10	RENEW SILVERPLATE
1696M32G01		RING, BAFFLE MOUNTING	1	REPLACE ALL SLFLK- NUT PLATES
L21486G01		MANIFOLD ASSY, OIL	1	PRESS OUT DENTS (SF 2)
R5082D300A000		HOSE ASSY	1	REPLACE CLAMP AT FLEXIBLE HOSE SLEEVE (SF 42)
R5081E660A000		HOSE ASSY	1	REPLACE CLAMP AT FLEXIBLE HOSE SLEEVE (SF 42)
L21633G01		MANIFOLD ASSY	1	REWORK FITTING (SF 49)
R5078F484A		HOSE ASSY, SUPPLY	1	REPLACE FLEXIBLE HOSE SLEEVE (SF 51)
R5077B100B		HOSE	1	REPLACE CLAMP AT FLEXIBLE HOSE SLEEVE (SF 42)
L21564G01		MANIFOLD, LP SPLINE OIL	1	REPLACE COUPLING NUT (SF 22)
R5077E614B		HOSE ASSY, LUBE	1	REPLACE CLAMP AT FLEXIBLE HOSE SLEEVE (SF 42)
R5078B172B		HOSE DRAIN, LOW PRESS	1	REPLACE CLAMP AT FLEXIBLE HOSE SLEEVE (SF 42)
Modul: 2300 - FRONT FRAME				
L21370G15	MTUBB0064-09	FRAME ASSY,COMPRESSO	1	(PN, S/N FOR INFO / RECORDED ONLY)
L47033G01	MMTC9665	SEAL, STAT. NO.3 BRG	1	INTRODUCE IND-205
L21288G12	MTUBB0065-09	FRAME, COMPRESSOR FR	1	REPLACE NUTCHANNELS AFT INNER FLANGE.
Modul: 3100 - HIGH PRESSURE COMPRESSOR ROTOR				
L21788G17	RPMDD665	ROTOR ASSY, COMPRESS	1	(PN, S/N FOR INFO / RECORDED ONLY)
K157G02		HPC BLADE, STG. 1	36	PERFORM CLEANING, FPI, INSPECTION (EXCEPT DIMENSION H), SURFACE FINISH AND REPAIR PER GEK99418, RENEW WEAR PADS AND DOVETAIL COATING PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
9021M62P06	RPMDD665	DISK, STAGE 1	1	RENEW MOLYDAG.
K256P07		HPC BLADE, STG.2	26	RENEW MOLYDAG.
9661M82G28	GAT4362M	DISK ASSY, STG. 2	1	1. 5EA BLENDREPAIR, GROUND DOVETAILSLOTS. 2. BLENDREPAIR, DIA "A" AND DIA "X". 3. RENEW MOLYDAG.
9021M64P12	GWNCT563	SPOOL, STAGES 3 - 9	1	REMOVE 2EA BLADES PER S.F.B.
L21787G06	CAN42656	DUCT ASSY, AIR	1	1. REPLACE VESPEL STRIP. 2. REPAIR DIA DB PER GEK99418, PARA. 7-26.2. 3. RENEW MOLYDAG AT THREAD.

Type: **LM2500PE**
Work-Order: **5658103200**
S/N: **691-098**

MTU Maintenance Berlin -Brandenburg

Condition Report

Partnumber	Serial Number	Nomenclature	Qty	Remarks
Modul: 3200 - HIGH PRESURE COMPRESSOR STATOR				
L24067G18	CDPL6249	FRONT STATOR ASSY, CO	1	(PN, S/N FOR INFO / RECORDED ONLY)
9686M83G18	CDPT6725	REAR STATOR ASSY, COM	1	(PN, S/N FOR INFO / RECORDED ONLY)
9206M96G05	CDPL6249	HPC FRONT CASE, STEEL	1	CLEANING, INSPECTION AND REPAIR IAW GEK99418 STRIP, SPRAY AND GRIND STATOR CASE TO STANDARD LIMITS (MB1), +/-0,1MM TOLERANCE PER DIAMETER, PROVIDE MEASUREMENT SHEET PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
9379M41G05	WESA1430	SHROUD ASSY, STG.1	1	REPLACE TEFLON PER GEK 99418, PARAGRAPH 8-16.2.
9379M41G05	WESA1393	SHROUD ASSY, STG.1	1	REPLACE TEFLON PER GEK 99418, PARAGRAPH 8-16.2.
9379M42G04	TTN02761	SHROUD ASSY, STG.2	1	REPLACE TEFLON PER GEK 99418, PARAGRAPH 8-16.2.
9379M42G04	TTN02661	SHROUD ASSY, STG.2	1	REPLACE TEFLON PER GEK 99418, PARAGRAPH 8-16.2.
K779P49		HPC VANE, STG. 7	40	RENEW MOLYDAG.
K779P50		HPC VANE, STG. 7	28	RENEW MOLYDAG.
K779P51		HPC VANE, STG. 7 LOW. B	1	RENEW MOLYDAG.
K779P52		HPC VANE, STG. 7 UPP. BO	1	RENEW MOLYDAG.
K779P53		HPC VANE, STG. 7 U.L.S. E	1	RENEW MOLYDAG.
K779P54		HPC VANE, STG. 7 U.R.S. E	1	RENEW MOLYDAG.
K109G02		HPC VANE, STG. 8 WIDE	10	RENEW MOLYDAG.
K109G01		HPC VANE, STG. 8 STD	22	RENEW MOLYDAG.
K109G03		HPC VANE, STG. 8 U.R.S. E	1	RENEW MOLYDAG.
K109G04		HPC VANE, STG. 8 U.L.S. E	1	RENEW MOLYDAG.
K980P23		HPC VANE, STG. 9 STD	45	RENEW MOLYDAG.
K980P24		HPC VANE, STG. 9 WIDE	27	RENEW MOLYDAG.
K980P25		HPC VANE, STG. 9 U.L.S. E	1	RENEW MOLYDAG.
K980P26		HPC VANE, STG. 9 U.R.S. E	1	RENEW MOLYDAG.
K081P21		HPC VANE, STG. 10 STD	28	RENEW MOLYDAG.
K081P22		HPC VANE, STG. 10 WIDE	48	RENEW MOLYDAG.
K081P23		HPC VANE, STG. 10 LOW.	1	RENEW MOLYDAG.
K081P24		HPC VANE, STG. 10 UPP. B	1	RENEW MOLYDAG.
K081P25		HPC VANE, STG. 10 U.L.S.E	1	RENEW MOLYDAG.
K081P26		HPC VANE, STG. 10 U.R.S.	1	RENEW MOLYDAG.
K182P49		HPC VANE, STG. 11	33	RENEW MOLYDAG.
K182P50		HPC VANE, STG. 11	43	RENEW MOLYDAG.
K182P51		HPC VANE, STG. 11 LOW.	1	RENEW MOLYDAG.
K182P52		HPC VANE, STG. 11 UPP. B	1	RENEW MOLYDAG.
K182P53		HPC VANE, STG. 11	1	RENEW MOLYDAG.
K182P54		HPC VANE, STG. 11 U.R.S.	1	RENEW MOLYDAG.
9686M81G09	CDPT6725	HPC REAR CASE, ASSY	1	CLEANING, INSPECTION AND REPAIR IAW GEK99418 STRIP, SPRAY AND GRIND STATOR CASE TO STANDARD LIMITS (MB1), +/-0,1MM TOLERANCE PER DIAMETER, PROVIDE MEASUREMENT SHEET PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
K209P30		HPC VANE, STG. 12 U.R.S.	1	RENEW MOLYDAG.

Type: **LM2500PE**
Work-Order: **5658103200**
S/N: **691-098**

MTU Maintenance Berlin -Brandenburg

Condition Report

Partnumber	Serial Number	Nomenclature	Qty	Remarks
K209P29		HPC VANE, STG. 12 U.L.S.	1	RENEW MOLYDAG.
K209P31		HPC VANE, STG. 12 BOR.	1	RENEW MOLYDAG.
K209P32		HPC VANE, STG. 12 BOR.	1	RENEW MOLYDAG.
K209P28		HPC VANE, STG. 12	31	RENEW MOLYDAG.
K209P27		HPC VANE, STG. 12 STAND	45	RENEW MOLYDAG.
K310P22		HPC VANE, STG. 13 U.R.S.	1	RENEW MOLYDAG.
K310P21		HPC VANE, STG. 13 U.L.S.	1	RENEW MOLYDAG.
K310P20		HPC VANE, STG. 13	30	RENEW MOLYDAG.
K310P19		HPC VANE, STG. 13 STAND	48	RENEW MOLYDAG.
K412P40		HPC VANE, STG. 14 U.R.S.	1	RENEW MOLYDAG.
K412P39		HPC VANE, STG. 14 U.L.S.	1	RENEW MOLYDAG.
K412P41		HPC VANE, STG. 14 BOR.	1	RENEW MOLYDAG.
K412P42		HPC VANE, STG. 14 BOR.	1	RENEW MOLYDAG.
K412P38		HPC VANE, STG. 14	63	RENEW MOLYDAG.
K412P37		HPC VANE, STG. 14 STAND	21	RENEW MOLYDAG.
K513P34		HPC VANE, STG. 15 U.L.S.	1	RENEW MOLYDAG.
K513P33		HPC VANE, STG. 15 U.R.S.	1	RENEW MOLYDAG.
K513P35		HPC VANE, STG. 15 BOR	1	RENEW MOLYDAG.
K513P36		HPC VANE, STG. 15 BOR	1	RENEW MOLYDAG.
K513P32		HPC VANE, STG. 15	63	RENEW MOLYDAG.
K513P31		HPC VANE, STG. 15 STAND	21	RENEW MOLYDAG.
K145G05		HPC VANE, STG. 16 OGV	1	RENEW MOLYDAG.
K145G06		HPC VANE, STG. 16 OGV	1	RENEW MOLYDAG.
K145G04		HPC VANE, STG. 16 OGV	2	RENEW MOLYDAG.
K688P20		HPC VANE, STG. 16 OGV	49	RENEW MOLYDAG.
K688P19		HPC VANE, STG.16 OGV ST	49	RENEW MOLYDAG.
Modul: 3400 - COMPRESSOR REAR FRAME				
9103M30G30	GEVF6763	FRAME ASSY, CRF	1	1. REPAIR STRUT OPENING NO. 5 2. REPAIR STRUT OPENING NO. 6
9174M68G02	TWGD8918	CDP SEAL STATIC 6-TOOT	1	RENEW HONEYCOMBS PER GEK112834, IRD 090-021-S1 OR HIGHER
9646M10P03	APV03191	BRG. HOUSING NO. 4B	1	RENEW BLACK OXIDE
9977010-982	EVT91924	SUMP HOUSING	1	RESTORE SEALING SURFACES OF TUBE CONNECTORS
9693M20G11	KSBJ3311	SEAL ASSY, AFT PRESS. B	1	RENEW HONEYCOMBS PER GEK9266, 72-34-03, REP. 01 OR 05 PROVIDE MEASUREMENT SHEET
9693M02P03	APV72554	SEAL ROTATING, CDP AIR	1	REPAIR DIA. B
9016M85P04		ADAPTER, IGNITER PLUG	2	RENEW SILVER
Modul: 4100 - COMBUSTER				
L43663G01	GGMRJ839	LINER ASSY, COMBUSTION	1	PERFORM INSPECTION AND REPAIR PER GEK 99418. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
Modul: 5002 - POWER TURBINE				
9607M78P01		NUT, NO. 7 REAR BEARING	1	RENEW SILVER PLATE

Type: **LM2500PE**
Work-Order: **5658105100**
S/N: **691-098**

MTU Maintenance Berlin -Brandenburg

Condition Report

Partnumber	Serial Number	Nomenclature	Qty	Remarks
Modul: 5100 - H.P.T. NOZZLE GUIDE VANE STAGE 1				
L25736G11	FABCG427	NOZZLE ASSY, HPT STG. 1	1	(PN, S/N FOR INFO / RECORDED ONLY)
9283M87G23		NOZZLE ASSY,STG.1 HPT(31	CLEAN, INSPECT AND REPAIR PER GEK99418, MEASURE A4 AREA, ADJUST IF NECESSARY, APPLY PTAL COATING WITH PARTIAL TBC. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE
9283M87G24	MDK19CC9	NOZZLE, STG.1(TBC)	1	CLEAN, INSPECT AND REPAIR PER GEK99418, MEASURE A4 AREA, ADJUST IF NECESSARY, APPLY PTAL COATING WITH PARTIAL TBC. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
9687M92G24	FABCG427	SUPPORT ASSY, STG. 1 HP	1	REPLACE NUT CHANNEL
9208M67G02	P/N UNK	COVER ASSY, CHANNEL	3	REPLACE THE NUT SEGMENT
Modul: 5200 - H.P.T. NOZZLE GUIDE VANE STAGE 2				
L25739G09	GEVAT915	NOZZLE ASSY, HPT STG. 2	1	(PN, S/N FOR INFO / RECORDED ONLY)
1347M95G02		SHROUD ASSY, HPT STG.	48	PERFORM INSPECTION AND REPAIR PER GEK 99418. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
L31395G06	SEE LIST	NOZZLE, HPT STG.2 BOR.	1	CLEAN, INSPECT AND REPAIR PER GEK99418, APPLY PTAL COATING WITH PARTIAL TBC PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
L31395G05	SEE LIST	NOZZLE, HPT STG.2	32	CLEAN, INSPECT AND REPAIR PER GEK99418, APPLY PTAL COATING WITH PARTIAL TBC PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
9311M28G05		SEAL ASSY, STATIONARY	11	PERFORM INSPECTION AND REPAIR PER GEK 99418. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
9082M58G05		SHROUD, HPT STATOR, ST	11	PERFORM INSPECTION AND REPAIR PER GEK 99418. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.

Type: **LM2500PE**
Work-Order: **5658105300**
S/N: **691-098**

MTU Maintenance Berlin -Brandenburg

Condition Report

Partnumber	Serial Number	Nomenclature	Qty	Remarks
Modul: 5300 - HIGH PRESSURE TURBINE ROTOR				
L31397G13	APV72559	ROTOR ASSY, HPT SS	1	(PN, S/N FOR INFO / RECORDED ONLY)
9208M78G09	CAV36110	SHAFT ASSY, FORWARD	1	INSTALL PRESSURE TUBE ADAPTER AND COUPLING NUT.
L31424G28		HPT BLADE, STG. 1 MARINI	88	PERFORM CLEANING, INSPECTION AND REPAIR PER GEK99418 INCL. NEW PTAL COATING AND FULL TBC OVERCOAT, PROVIDE INSPECTION REPORT AND COST ESTIMATE.
L25734G04	BCM24767	SHIELD ASSY, THERMAL	1	INSTALL THE SHANK NUTS
L25645G14		HPT BLADE, STG. 2 MARINI	90	PERFORM CLEANING, INSPECTION AND REPAIR PER GEK99418 INCL. NEW PTAL COATING AND FULL TBC OVERCOAT, PROVIDE INSPECTION REPORT AND
9654M80P08	AAM35652	NUT, COUPLING HPT ROT	1	REMOVE SILVERPLATE.
9661M15P04	MAN03276	ADAPTER, PRESSURE TUB	1	REMOVE SILVERPLATE.
Modul: 5400 - TURBINE MIDFRAME				
L24288G41	FCP544HD	TMF ASSY, THICK FLANGE	1	REPAIR DIM "S-A" AND "S-B" BY MACHINING PER GEK99418 TO
1962M45P01	FCAK0501	BRG. NO. 5R MAIN (DAMPE	1	PERFORM INSPECTION PER GEK 99418.
9671M28P01		NUT, BRG. NO. 5 INNER RA	1	RENEW SILVER
1959M24P01	TBCML201	BEARING, NO. 6 ROLLER	1	PERFORM INSPECTION PER GEK 99418.
L24021G04	FCP544EQ	SUMP ASSY, DAMPER BRG	1	REMOVE BRAZE DEPOSITS AT TUBE ENDS

Type: **LM2500PE**
Work-Order: **5658105600**
S/N: **691-098**

MTU Maintenance Berlin -Brandenburg

Condition Report

Partnumber	Serial Number	Nomenclature	Qty	Remarks
Modul: 5600 - LOW PRESSURE TURBINE STATOR				
9663M23G10		SHROUD ASSY, STG.1 LPT	14	PERFORM INSPECTION AND REPAIR PER GEK 99418. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
L21752G01		NOZZLE LPTS, STG. 2	8	PERFORM INSPECTION AND REPAIR PER GEK 99418. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
L21752G04		NOZZLE LPTS, STG. 2	2	PERFORM INSPECTION AND REPAIR PER GEK 99418. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
L21752G02		NOZZLE LPTS, STG. 2	2	PERFORM INSPECTION AND REPAIR PER GEK 99418. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
L21752G03		NOZZLE LPTS, STG. 2	2	PERFORM INSPECTION AND REPAIR PER GEK 99418. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
9663M24G19		SHROUD ASSY, STG. 2 LPT	3	VISUALLY INSPECTED PER GEK 99418. PERFORM WELD REPAIR AT LOCKTABS.
L21753P01		NOZZLE LPTS, STG. 3	4	VISUALLY INSPECTED PER GEK 99418. 1EA CRACK AT OUTER REAR RAIL, PERFORM WELD REPAIR PER GEK 99418. PA 1312
L21753P02		NOZZLE LPTS, STG. 3	2	VISUALLY INSPECTED PER GEK 99418. 1EA CRACK AT OUTER REAR RAIL, PERFORM WELD REPAIR PER GEK 99418. PA 1312
L21753G01		NOZZLE LPTS, STG. 3	2	VISUALLY INSPECTED PER GEK 99418. 1EA CRACK AT OUTER REAR RAIL, PERFORM WELD REPAIR PER GEK 99418. PA 1312
9663M24G22		SHROUD ASSY, STG. 3 LPT	11	PERFORM INSPECTION AND REPAIR PER GEK 99418. PROVIDE INSPECTION REPORT, REPAIR PROPOSAL AND COST ESTIMATE.
9102M48G03		SEAL ASSY, STG. 4	1	VISUALLY INSPECTED PER GEK 99418. PERFORM WELD REPAIR AT BOLTHOLE PA 1302
9663M05P05		NOZZLE, LPTS STG. 5	2	VISUALLY INSPECTED PER GEK 99418. PERFORM WELD REPAIR AT BOLTHOLES
9663M06P04		NOZZLE, LPTS STG. 6	2	VISUALLY INSPECTED PER GEK 99418. PERFORM WELD REPAIR AT BOLTHOLES
Modul: 5700 - LOW PRESSURE TURBINE ROTOR				
9607M35P02		NUT, NO. 6R BEARING PLAI	1	RENEW SILVER PLATE
L21352P01	FIA00761	NUT COUPLING	1	REMOVE SILVER.

Type: **LM2500PE**
Work-Order: **5658105800**
S/N: **691-098**

MTU Maintenance Berlin -Brandenburg

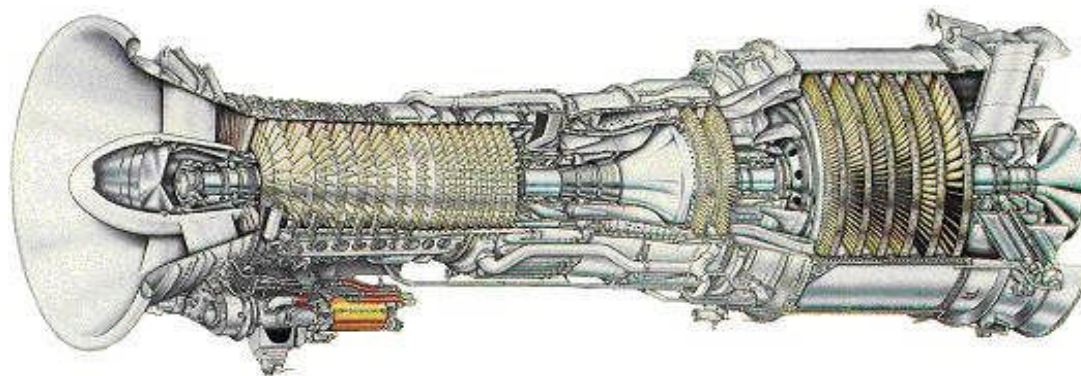
Condition Report

Partnumber	Serial Number	Nomenclature	Qty	Remarks
Modul: 5800 - TURBINE REAR FRAME				
L16727G20	FIA00248	FRAME ASSY, TURBINE RE	1	1. REPLACE 3EA MARKED RIVETS AT FAIRINGS 2. REMOVE 2EA MARKED BROKEN BOLTS AT PAD
RL14423P03	FIA00262	SEAL NO.7 BRG FWD STAT	1	1. RESTORE WINDBACK THREADS 2. REPAIR SEALING SURFACE DIA-B-
L14405P02	FIA00508	BEARING HOUSING, BRG.	1	RENEW BLACK OXIDE
L43720P01	FCAC3521	BEARING, NO. 7B	1	PERF. CLEANING AND INSPECTION PER GEK99418
1959M27P01	TBCNL158	INNER RACE, BRG. 7R	1	NOTE: MTU-MU
1959M26P01	TBCNF135	BEARING, NO. 7R	1	PERF. CLEANING AND INSPECTION PER GEK99418
L14408G04	FIA00263	SEAL, AFT STAT.OIL	1	1. REPAIR SEALING SURF. 2. RESTORE WINDBACK THREADS



Scrap Part List

LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**
S/N: **691-098 / 481-402**
Model: **7LM2500 PE-MGW / 7LM2500 PC 103**

Customer: PES
S/N: 691-098

MTU Maintenance Berlin-Brandenburg

SCRAP PARTS LIST

Kontierung: 5658100100		modul: 0001 - CORE ENGINE		
CFI	P/N	nomenclature	qty	investigation remarks
11 / 85	9051M56G04	LINK, STG. 6, CONNECTING	1	WORN
Kontierung: 5658100900		modul: 00M9 - NMP ENGINE		
CFI	P/N	nomenclature	qty	investigation remarks
8 / 7	9658M93P02	SEAL, PRESSURE LOCK	1	EX-PART.
13 / 5	9680M73G03	BORESCOPE PLUG, HPT S	1	MISSING SILVER / REPAIR UNECONOMICAL
13 / 10	9103M85G02	BORESCOPE PLUG, HPT S	1	MISSING SILVER / REPAIR UNECONOMICAL
43 / 26	L31302G02	ROD END ASSY, LH THREA	1	WEAR MARKS OUT OF S/A LIMITS
43 / 27	L31302G01	ROD END ASSY, RH THREA	1	WEAR MARKS OUT OF S/A LIMITS
43 / 29	L31303G01	LINK ASSEMBLY, MOUNT	1	WEAR MARKS OUT OF S/A LIMITS
43 / 30	J431P124A	BOLT	1	WEAR MARKS OUT OF S/A LIMITS
43 / 30	J431P125A	BOLT	1	WEAR MARKS OUT OF S/A LIMITS
96 / 37	L21564G01	(*R*) MANIFOLD, LP SPLINE OIL	1	DAMAGE OUT OF LIMIT NOT REPAIRABLE
Kontierung: 5658102300		modul: 2300 - FRONT FRAME		
CFI	P/N	nomenclature	qty	investigation remarks
2 / 6	9654M03G06	SEAL, COMPRESSOR STAT	1	MISSING EPOXY FILLER
2 / 10	1959M19P01	BEARING NO. 3R, DAMPER	1	INSPECTED IAW GEK : 99418 SCORES AND DENTS ON THE ROLLERS, DENTS ON INNER RACE
43 / 16	9671M92P03	SLEEVE SHAFT FWD	1	WORN.
Kontierung: 5658103100		modul: 3100 - HIGH PRESSURE COMPRESSOR ROTOR		
CFI	P/N	nomenclature	qty	investigation remarks
9 / 1	K157G02	(*R*) HPC BLADE, STG. 1	3	
9 / 9	9661M85P07	ADAPTER, SPLINED	1	SCRAP DUE TO IND-199
9 / 44	K775P13	HPC BLADE, STG.7	1	PUNCH AT SURFACE
9 / 67	K043P25	HPC BLADE, STG.10	1	DENT AT TIP. NOT REPAIRABLE
Kontierung: 5658103200		modul: 3200 - HIGH PRESURE COMPRESSOR STATOR		
CFI	P/N	nomenclature	qty	investigation remarks
11 / 30	9633M14G22	LEVER ARM, STG. 2	11	DISTORTED.
11 / 69	9079M49G02	LEVER ARM, STG. 6	2	DISTORTED.
Kontierung: 5658103400		modul: 3400 - COMPRESSOR REAR FRAME		
CFI	P/N	nomenclature	qty	investigation remarks
13 / 37	9671M26P09	BEARING, NO. 4 ROLLER	1	INSPECTED IAW GEK : 99418 SCORES ON THE ROLLERS
Kontierung: 5658105000		modul: 5002 - POWER TURBINE		
CFI	P/N	nomenclature	qty	investigation remarks
38 / 27	L14406P02	SEAL, AFT ROTATING	1	EXCESSIVE RUBBED - MISSING MATERIAL
38 / 34	L16500P01	NUT ROT.SEAL BRG NO7	1	EXCESSIVE CORRODED - MISSING MATERIAL
38 / 36	L16503P01	RING, PLAIN RETAINING	1	BOWED
Kontierung: 5658105200		modul: 5200 - H.P.T. NOZZLE GUIDE VANE STAGE 2		
CFI	P/N	nomenclature	qty	investigation remarks
29 / 5	L21274G05	SCREEN ASSY	1	EX-PART.
29 / 15	L31395G05	(*R*) NOZZLE, HPT STG.2	3	OHAU 419056
Kontierung: 5658105300		modul: 5300 - HIGH PRESSURE TURBINE ROTOR		
CFI	P/N	nomenclature	qty	investigation remarks
27 / 10	9190M39G09	DAMPER ASSY, STG. 1	17	MISSING PINS
27 / 23	L25645G14	(*R*) HPT BLADE, STG. 2 MARINI	1	METALLURGICAL EVALUATION

Customer: PES
S/N: 691-098

MTU Maintenance Berlin-Brandenburg

SCRAP PARTS LIST

Kontierung: 5658105400

modul: 5400 - TURBINE MIDFRAME

CFI	P/N		nomenclature	qty	investigation remarks
23 / 15	1962M45P01	(*R*)	BRG. NO. 5R MAIN (DAMPE	1	END WEAR AT ROLLERS. INDENTATIONS AT ALL ROLLERS AND AT THE INNERRING-RACEWAY.
23 / 33	1959M24P01	(*R*)	BEARING, NO. 6 ROLLER	1	AXIAL SCRATCHES AT THE ROLLERS. INDENTATIONS AT ALL ROLLERS.
30 / 13	9025M12G02		NUT ASSY, GANG CHANNE	2	MISSING SILVER PLATE, DAMAGED - REP. UNECONOMICAL

Kontierung: 5658105600

modul: 5600 - LOW PRESSURE TURBINE STATOR

CFI	P/N		nomenclature	qty	investigation remarks
36 / 2	L47453G02		INSULATOR, STG.1 NOZZLE	2	BURNT
36 / 3	9663M72G04		COVER, SEGMENT	3	BROKEN.
36 / 9	L21495P01		INSULATOR, STG.2 NOZZLE	2	BURNT
36 / 10	L21752G01	(*R*)	NOZZLE LPTS, STG. 2	1	
36 / 15	9102M46G02		SEAL ASSY, STG. 2	1	WRONG CONFIGURATION.
36 / 18	L21760P05		SPACER	1	WEAR AT BOLTHOLE
36 / 27	9632M38P09		INSULATOR, STG.2 SHROU	2	BURNT
36 / 30	L21495P02		INSULATOR, STG.3 NOZZLE	2	BURNT
36 / 39	9632M38P10		INSULATOR, STG.3 SHROU	2	BURNT
36 / 41	L21495P03		INSULATOR, STG.4 NOZZLE	2	BURNT
36 / 43	9102M48G03	(*R*)	SEAL ASSY, STG. 4	1	NOT REPAIRABLE
36 / 47	9632M38P11		INSULATOR, STG.4 SHROU	2	BURNT
36 / 49	9663M05P05	(*R*)	NOZZLE, LPTS STG. 5	2	WELD REPAIR UNSATISFACTORY TANG DISTORTED AND CRACK INDICATIONS FOUND IN X-RAY REPORT. (B.E.R)

Kontierung: 5658105700

modul: 5700 - LOW PRESSURE TURBINE ROTOR

CFI	P/N		nomenclature	qty	investigation remarks
23 / 30	9648M79P04		RING, RETAINING INTERNA	1	NICHT AUFFINDBAR
23 / 35	1959M25P01		INNER RACE, BRG. NO. 6	1	PITTS AND NICKS ON THE INNERRACE

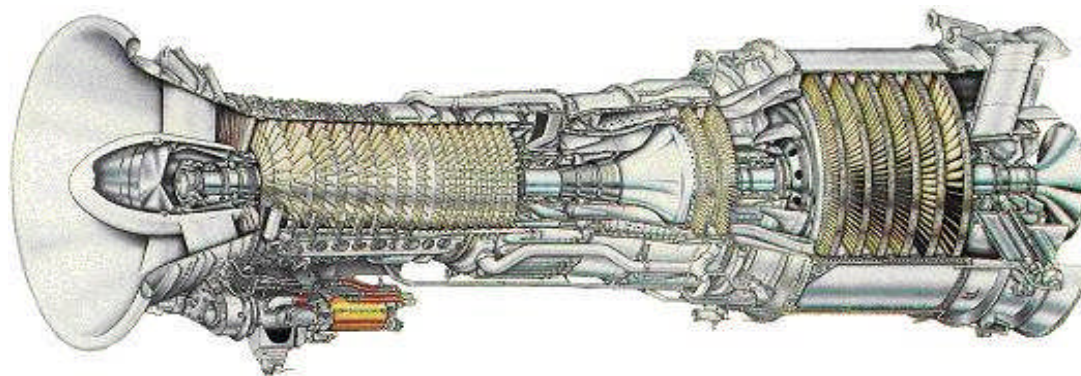
Kontierung: 5658105800

modul: 5800 - TURBINE REAR FRAME

CFI	P/N		nomenclature	qty	investigation remarks
37 / 1	L21656P01		TRANSDUCER	1	CONNECTOR DAMAGED
38 / 15	L43720P01	(*R*)	BEARING, NO. 7B	1	SKIDDING AT ALL BALLS AND RACEWAYS, NICKS AND SCRATCHES AT ALL BALLS
38 / 19	1959M27P01	(*R*)	INNER RACE, BRG. 7R	1	SCUFFING MARKS AT THE INNERRING-RACEWAY
38 / 21	1959M26P01	(*R*)	BEARING, NO. 7R	1	SCUFFING MARKS AT THE ROLLERS
39 / 11	L16566G01		NUT ASSY, GANG CHANNE	3	DAMAGED, LOSS OF TORQUE QUALITY
145 / 9	L31908P01		INSULATION, BLANKET TRF	1	WORN.
145 / 10	L31907P02		INSULATION, BLANKET TRF	1	WORN.
145 / 11	L31909P02		INSULATION, BLANKET TRF	1	WORN.
145 / 12	L31906P01		INSULATION, BLANKET TRF	1	WORN.



Serviceable Part List LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**
S/N: **691-098 / 481-402**
Model: **7LM2500 PE-MGW / 7LM2500 PC 103**

Customer: PES
S/N: 691-098

MTU Maintenance Berlin-Brandenburg

SERVICEABLE PARTS LIST

Kontierung: 5658100100		modul:	0001 - CORE ENGINE	
CFI	P/N		nomenclature	qty
8 / 2	9648M79P02		RING, RETAINING	1
8 / 3	9607M31P03		SPACER, RING LOCKNUT	1
8 / 4	9607M01P03		RING, RETAINING	1
8 / 5	9644M33P04	(*R*)	NUT SPANNER NO.3 BRG	1
8 / 18	9080M96G10		BRACKET, ACTUATOR	2
8 / 34	9673M66G14		LEVER ASSY, VANE ACTUATOR	2
11 / 85	9051M50G04		LINK , IGV CONNECTING	2
11 / 85	9051M51G04		LINK, STG. 1, CONNECTING	2
11 / 85	9051M52G03		LINK ASSY, STG.2 CONNECTING	2
11 / 85	9051M53G03		LINK ASSY, STG.3 CONNECTING	2
11 / 85	9051M54G04		LINK, STG. 4, CONNECTING	2
11 / 85	9051M55G04		LINK, STG. 5, CONNECTING	2
11 / 85	9051M56G04		LINK, STG. 6, CONNECTING	1
11 / 95	9084M24P02		MOUNT, ACTUATION LEVER	2
15 / 9	9346M79G05	(*R*)	SPLIT NUT,4B SPLINED	1
15 / 10	9346M80P02		COLLAR, SPLIT NUT BRG.4	1
15 / 11	9693M33P01		RING, SPLINED LOCK	1

Customer: PES
S/N: 691-098

MTU Maintenance Berlin-Brandenburg

SERVICEABLE PARTS LIST

Kontierung: 5658100900		modul:	00M9 - NMP ENGINE	
CFI	P/N		nomenclature	qty
2 / 2	L21561P01		COVER, SUMP	1
7 / 42	L43567G02	(*R*)	BELLCRANK	1
13 / 55	9713M26P05	(*R*)	BOLT, PIN COMBUSTOR	10
15 / 14	9693M57G01		BAFFLE ASSY, CRF	1
26 / 1	L47952G01		SUPPORT, CRF SEAL	1
26 / 3	9104M38P02		COVER, HPT BOLT	1
26 / 7	L14469G07		TUBE ASSY, OIL CAP	1
26 / 8	9693M35P04		SEAL FLEXIBLE	2
26 / 10	9079M28G05		SLEEVE DAMPER, HPTR	1
26 / 12	1696M33G01		BAFFLE, STEAM	4
26 / 15	1696M32G01	(*R*)	RING, BAFFLE MOUNTING	1
43 / 18	L21434P02		SPACER	1
43 / 22	L21419P01		MOUNT, LINK	1
43 / 28	L21419P02		MOUNT, LINK	1
43 / 30	J431P124A		BOLT	3
43 / 33	L21400G01		SUPPORT, GEARBOX MOUNTING	1
43 / 57	9681M48P06		BUSHING ASSY, EXPANDABLE	1
63 / 37	L34872G01		BRACKET	1
67 / 1	L21514P01		BRACKET, ANGLE	3
68 / 1	L21705G01		BRACKET, STG 1 COMPR.-BOSS	1
68 / 4	L21524G01		BRACKET	1
68 / 7	9647M81G01		BRACKET, BELLCRANK	1
68 / 10	L34061G01		BRACKET, VSV FEEDBACK CABLE	1
68 / 15	L21704G01		BRACKET ASSY	1
68 / 18	L21551G01		BRACKET, A SUMP SEAL PRESS.	1
68 / 20	L21819G01		BRACKET	1
70 / 5	L21522P01		BRACKET	1
70 / 21	L21522P01		BRACKET	1
70 / 34	L34133P01		BRACKET	1
71 / 21	L21702G01		BRACKET, D-SUMP PRESS. TUBE	1
72 / 5	L34450P01		BRACKET	1
73 / 3	L24388P001A		BRACKET	1
73 / 5	9011M82G01		BRACKET	1
73 / 7	L21519P01		BRACKET	1
73 / 9	L21521P01		BRACKET	1
73 / 11	L24313P001A		BRACKET	1
73 / 13	9011M92G01		BRACKET	1
73 / 15	L24438P001A		BRACKET	1
73 / 17	L24389P001A		BRACKET	1
73 / 23	L24404P001A		BRACKET	1
73 / 25	L21531P01		BRACKET, BAL. PISTON TUBE	2
73 / 29	L24334P001A		BRACKET	1
73 / 31	L21500P01		BRACKET	1
74 / 43	L24406G02		BRACKET	1
74 / 43	L46354G01		BRACKET, ANGLE	1
74 / 44	L46359G01		BRACKET, ANGLE	1
74 / 57	L46353G01		BRACKET	1
74 / 71	L46357G01		BRACKET	1
77 / 1	L21843G01		MANIFOLD ASSY, AIR	1
77 / 2	L24628G01		TUBE (P)	1
77 / 3	L24623G01		NOZZLE ASSY, EJECTOR	1
78 / 1	L24304G01		MANIFOLD	1
78 / 2	9144M32G01		TUBE, AIR	1
78 / 3	9144M34G01		TUBE, AIR	1
78 / 4	L24302G01		TUBE, AIR	1
78 / 17	L34741G01		BRACKET	1
79 / 1	L24352G01		MANIFOLD AIR	1
79 / 4	L24356G01		TUBE, AIR (P)	1
80 / 2	L21486G01	(*R*)	MANIFOLD ASSY, OIL	1
80 / 3	L34156G01		MANIFOLD ASSY, OIL	1
80 / 5	L34864G01		MANIFOLD (P-SERIE)	1
80 / 6	L21451G01		TUBE, OIL- D, AFT	1
80 / 37	L24342G03		TUBE, OIL C SUMP SUPPLY	1
81 / 2	L24380G01		TUBE ASSY, STRUT 6 AIR	1
82 / 2	L21480G01		TUBE ASSY, OIL	1
82 / 3	L21845G02		TUBE ASSY, OIL	1
83 / 2	L42094G01		TUBE, OIL-D SCAVENGE	1
83 / 3	L24371G01		TUBE ASSY, OIL (P)	1
83 / 4	L21726G01		TUBE, OIL- D, SCAV. AFT	1

Customer: PES
S/N: 691-098

MTU Maintenance Berlin-Brandenburg

SERVICEABLE PARTS LIST

85 / 1	L34870G01		TUBE ASSY, OIL	1
86 / 2	L21444G01		TUBE, VENT AIR	1
86 / 5	L21448G01		TUBE, B SUMP MAN. VENT AIR	1
86 / 6	L21445G01		TUBE, C & D SUMPS VENT AIR	1
86 / 7	L24318G01		MANIFOLD ASSY, AIR	1
86 / 8	L21449G01		TUBE ASSY, AIR (P)	1
87 / 1	L24624G01		TUBE ASSY, AIR	1
87 / 3	L24306G01		MANIFOLD ASSY, AIR	1
87 / 4	L24346G01		MANIFOLD ASSY, AIR	1
88 / 1	L24348G01		MANIFOLD ASSY, AIR	1
88 / 2	L24456G01		TUBE ASSY, AIR (P)	1
88 / 6	L24623G01		NOZZLE ASSY, EJECTOR	1
89 / 1	L21466G02		MANIFOLD ASSY, A SUMP AIR	1
89 / 2	L42842G05		NOZZLE, EJECTOR	1
89 / 3	L21453G01		TUBE ASSY, A SUMP AFT AIR	1
90 / 1	L24376G01		TUBE ASSY, AIR (P)	1
90 / 2	L21443G02		NOZZLE ASSY, EJECTOR	1
90 / 3	L21458G02		ADAPTER ASSY, A & D SUMP	1
91 / 1	L34506G01		MANIFOLD, AIR	1
91 / 2	L21384G01		TUBE, STRUT 5 HP-RECOUP AIR	1
93 / 5	R5082E300A000		HOSE ASSY	1
93 / 6	R5082D300A000	(*R*)	HOSE ASSY	1
93 / 9	R5081E660A000	(*R*)	HOSE ASSY	1
93 / 13	L34321G01		TUBE, SUPPLY	1
94 / 2	L21633G01		MANIFOLD ASSY	1
94 / 2	L21633G01	(*R*)	MANIFOLD ASSY	1
94 / 28	L21605G02		MANIFOLD ASSY, FUEL	1
94 / 37	L24068P001A		BRACKET	1
94 / 46	L21468G01		TUBE, AIR/OIL SEPARATOR	1
95 / 7	R5078F484A	(*R*)	HOSE ASSY, SUPPLY	1
95 / 9	L24068P002A		BRACKET	1
95 / 17	L34643P001A		BRACKET	1
96 / 9	R5077B100B	(*R*)	HOSE	1
96 / 12	R5095J171B		HOSE ASSY, TGB	1
96 / 29	L24434P02		SUPPORT	1
96 / 30	L24434P01		SUPPORT	1
96 / 39	L21488G01		MANIFOLD, AGB OIL	1
96 / 60	L34522G01		TUBE OIL	1
96 / 62	9033M91G02		SHIELD, SPRAY	1
96 / 66	L34381P16		TEE, SWIVEL	1
96 / 67	L34316G01		TUBE, ADAPTER, OIL	1
96 / 85	R5077E614B	(*R*)	HOSE ASSY, LUBE	1
97 / 3	R5077B090B		HOSE	1
97 / 9	L21676G01		MANIFOLD, LUBE DRAIN	1
97 / 11	R5078B172B	(*R*)	HOSE DRAIN, LOW PRESSURE	1
97 / 14	L21484G02		TUBE AND HOSE ASSY,SCAVENGE	1
97 / 21	L21727P01		BRACKET	1
97 / 25	R5078B300B		HOSE ASSY	1
116 / 66	L34297G01		TUBE, OIL	1

Kontierung: 5658102300

modul: 2300 - FRONT FRAME

CFI	P/N		nomenclature	qty
2 / 5	L21370G15	(*R*)	FRAME ASSY,COMPRESSOR FRONT	1
2 / 8	9691M37P01		SEAL	1
2 / 10	L31711P01		RETAINER, NO. 3R BEARING	1
2 / 13	L47033G01	(*R*)	SEAL, STAT. NO.3 BRG	1
2 / 16	L21220P01		COVER	5
6 / 1	L31710G01		HOUSING, NO.3 DAMPER BRG.	1
6 / 4	9049M38G05		SEAL SUPPORT	1
6 / 12	L21288G12	(*R*)	FRAME, COMPRESSOR FRONT	1
6 / 36	L34712G01		TUBE, LUBE SUPPLY	1
6 / 37	R285P08		TEE TUBE	1
43 / 4	L31818G01		TUBE, OIL DAMPER	1
43 / 4	L31778G01		TUBE , OIL SUPPLY	1

Customer: PES
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SERVICEABLE PARTS LIST

Kontierung: 5658103100		modul: 3100 - HIGH PRESSURE COMPRESSOR ROTOR		
CFI	P/N		nomenclature	qty
7 / 1	L21788G17	(*R*)	ROTOR ASSY, COMPRESSOR	1
9 / 1	K157G02	(*R*)	HPC BLADE, STG. 1	33
9 / 3	9021M62P06	(*R*)	DISK, STAGE 1	1
9 / 4	K256P07	(*R*)	HPC BLADE, STG.2	26
9 / 5	9182M25P01		RETAINER, BLADE STG. 2	26
9 / 7	9661M82G28	(*R*)	DISK ASSY, STG. 2	1
9 / 8	9680M93P01		RING, RETAINING	1
9 / 14	9155M26G08		BOLT	18
9 / 66	9021M64P12	(*R*)	SPOOL, STAGES 3 - 9	1
9 / 108	L21787G06	(*R*)	DUCT ASSY, AIR	1
9 / 110	9661M70P03		RING SEAL, AIR DUCT	1

Customer: PES
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SERVICEABLE PARTS LIST

Kontierung:		modul:	3200 - HIGH PRESURE COMPRESSOR STATOR	
CFI	P/N		nomenclature	qty
7 / 8	L24067G18	(*R*)	FRONT STATOR ASSY, COMPR.	1
8 / 9	9686M83G18	(*R*)	REAR STATOR ASSY, COMPR.	1
8 / 10	L21256G04		DIAL (NOT FOR NAVY)	1
8 / 11	L21257G01		POINTER	1
11 / 1	9206M96G05	(*R*)	HPC FRONT CASE, STEEL	1
11 / 4	9633M14G20		LEVER ARM, IGV	30
11 / 4	9633M15G20		LEVER ARM, IGV	4
11 / 9	K001P07		HPC VANE, IGV	34
11 / 10	9211M10G01		SHROUD ASSY, IGV	1
11 / 10	9211M10G01		SHROUD ASSY, IGV	1
11 / 17	9633M14G21		LEVER ARM, STG. 1	32
11 / 17	9633M15G21		LEVER ARM, STG. 1	4
11 / 22	K172P01		HPC VANE, STG. 1	36
11 / 23	9379M41G05	(*R*)	SHROUD ASSY, STG.1	1
11 / 23	9379M41G05	(*R*)	SHROUD ASSY, STG.1	1
11 / 30	9633M14G22		LEVER ARM, STG. 2	25
11 / 30	9633M15G22		LEVER ARM, STG. 2	4
11 / 35	K202P02		HPC VANE, STG. 2 TITANIUM	40
11 / 36	9379M42G04	(*R*)	SHROUD ASSY, STG.2	1
11 / 36	9379M42G04	(*R*)	SHROUD ASSY, STG.2	1
11 / 43	9633M14G23		LEVER ARM, STG. 3	42
11 / 43	9633M15G23		LEVER ARM, STG. 3	4
11 / 48	K344P02		HPC VANE, STG. 3	46
11 / 51	9633M19G03		LEVER ARM, STG. 4	46
11 / 51	9633M20G03		LEVER ARM, STG. 4	4
11 / 56	K445P03		HPC VANE, STG. 4	50
11 / 59	9079M49G01		LEVER ARM, STG. 5	50
11 / 59	9125M65G02		LEVER ARM, STG. 5	8
11 / 66	K546P02		HPC VANE, STG. 5	57
11 / 66	K546P03		HPC VANE, STG. 5	1
11 / 69	9079M49G02		LEVER ARM, STG. 6	54
11 / 69	9125M65G04		LEVER ARM, STG. 5+6	8
11 / 76	K647P02		HPC VANE, STG. 6	64
11 / 77	K779P49	(*R*)	HPC VANE, STG. 7	40
11 / 77	K779P50	(*R*)	HPC VANE, STG. 7	28
11 / 77	K779P51	(*R*)	HPC VANE, STG. 7 LOW. BOR.	1
11 / 77	K779P52	(*R*)	HPC VANE, STG. 7 UPP. BOR.	1
11 / 77	K779P53	(*R*)	HPC VANE, STG. 7 U.L.S. END	1
11 / 77	K779P54	(*R*)	HPC VANE, STG. 7 U.R.S. END	1
11 / 78	K109G02	(*R*)	HPC VANE, STG. 8 WIDE	10
11 / 78	K109G01	(*R*)	HPC VANE, STG. 8 STD	22
11 / 78	K109G03	(*R*)	HPC VANE, STG. 8 U.R.S. END	1
11 / 78	K109G04	(*R*)	HPC VANE, STG. 8 U.L.S. END	1
11 / 79	K980P23	(*R*)	HPC VANE, STG. 9 STD	45
11 / 79	K980P24	(*R*)	HPC VANE, STG. 9 WIDE	27
11 / 79	K980P25	(*R*)	HPC VANE, STG. 9 U.L.S. END	1
11 / 79	K980P26	(*R*)	HPC VANE, STG. 9 U.R.S. END	1
11 / 80	K081P21	(*R*)	HPC VANE, STG. 10 STD	28
11 / 80	K081P22	(*R*)	HPC VANE, STG. 10 WIDE	48
11 / 80	K081P23	(*R*)	HPC VANE, STG. 10 LOW. BOR.	1
11 / 80	K081P24	(*R*)	HPC VANE, STG. 10 UPP. BOR.	1
11 / 80	K081P25	(*R*)	HPC VANE, STG. 10 U.L.S.END	1
11 / 80	K081P26	(*R*)	HPC VANE, STG. 10 U.R.S.END	1
11 / 81	K182P49	(*R*)	HPC VANE, STG. 11	33
11 / 81	K182P50	(*R*)	HPC VANE, STG. 11	43
11 / 81	K182P51	(*R*)	HPC VANE, STG. 11 LOW. BOR.	1
11 / 81	K182P52	(*R*)	HPC VANE, STG. 11 UPP. BOR.	1
11 / 81	K182P53	(*R*)	HPC VANE, STG. 11	1
11 / 81	K182P54	(*R*)	HPC VANE, STG. 11 U.R.S.END	1
11 / 88	1333M65G01		RING SEGMENT, IGV ACTUATION	2
11 / 88	1333M65G02		RING SEGMENT,STG1 ACTUATION	2
11 / 88	1333M65G03		RING SEGMENT,STG2 ACTUATION	2
11 / 88	9295M30G05		RING SEGMENT,STG3 ACTUATION	2
11 / 88	9295M30G06		RING SEGMENT,STG4 ACTUATION	2
11 / 88	1333M65G06		RING SEGMENT,STG5 ACTUATION	2
11 / 88	1333M65G07		RING SEGMENT,STG6 ACTUATION	2
11 / 137	9146M83P01		KEY,CASING LEFT SIDE	1
11 / 138	9146M83P02		KEY,CASING RIGHT SIDE	1
12 / 1	9686M81G09	(*R*)	HPC REAR CASE, ASSY	1

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SERVICEABLE PARTS LIST

12 / 3	K209P30	(*R*)	HPC VANE, STG. 12 U.R.S.	1
12 / 3	K209P29	(*R*)	HPC VANE, STG. 12 U.L.S.	1
12 / 3	K209P31	(*R*)	HPC VANE, STG. 12 BOR.	1
12 / 3	K209P32	(*R*)	HPC VANE, STG. 12 BOR.	1
12 / 3	K209P28	(*R*)	HPC VANE, STG. 12	31
12 / 3	K209P27	(*R*)	HPC VANE, STG. 12 STANDARD	45
12 / 4	K310P22	(*R*)	HPC VANE, STG. 13 U.R.S.	1
12 / 4	K310P21	(*R*)	HPC VANE, STG. 13 U.L.S.	1
12 / 4	K310P20	(*R*)	HPC VANE, STG. 13	30
12 / 4	K310P19	(*R*)	HPC VANE, STG. 13 STANDARD	48
12 / 5	K412P40	(*R*)	HPC VANE, STG. 14 U.R.S.	1
12 / 5	K412P39	(*R*)	HPC VANE, STG. 14 U.L.S.	1
12 / 5	K412P41	(*R*)	HPC VANE, STG. 14 BOR.	1
12 / 5	K412P42	(*R*)	HPC VANE, STG. 14 BOR.	1
12 / 5	K412P38	(*R*)	HPC VANE, STG. 14	63
12 / 5	K412P37	(*R*)	HPC VANE, STG. 14 STANDARD	21
12 / 6	K513P34	(*R*)	HPC VANE, STG. 15 U.L.S.	1
12 / 6	K513P33	(*R*)	HPC VANE, STG. 15 U.R.S.	1
12 / 6	K513P35	(*R*)	HPC VANE, STG. 15 BOR	1
12 / 6	K513P36	(*R*)	HPC VANE, STG. 15 BOR	1
12 / 6	K513P32	(*R*)	HPC VANE, STG. 15	63
12 / 6	K513P31	(*R*)	HPC VANE, STG. 15 STANDARD	21
12 / 7	K145G05	(*R*)	HPC VANE, STG. 16 OGV	1
12 / 7	K145G06	(*R*)	HPC VANE, STG. 16 OGV	1
12 / 7	K145G04	(*R*)	HPC VANE, STG. 16 OGV	2
12 / 7	K688P20	(*R*)	HPC VANE, STG. 16 OGV	49
12 / 7	K688P19	(*R*)	HPC VANE, STG.16 OGV STAND.	49
12 / 18	9173M47P04		KEY,CASING,LEFT SIDE	1
12 / 19	9173M47P03		KEY,CASING,RIGHT SIDE	1
60 / 56	L34418G01		BRACKET, FUEL	1
69 / 4	L21217G01		BRACKET, TUBE	1
69 / 6	L21700P01		BRACKET, SUMP VENT MANIFOLD	1
69 / 9	L21703G02		BRACKET	1
69 / 11	L21844P01		BRACKET ANGLE	1
69 / 12	L24375P001A		BRACKET, ANGLE	1
69 / 13	L21506P01		BRACKET, ANGLE	1
69 / 19	L34659G01		BRACKET	1

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SERVICEABLE PARTS LIST

Kontierung: 5658103400		modul: 3400 - COMPRESSOR REAR FRAME		
CFI	P/N		nomenclature	qty
13 / 1	9103M30G30	(*R*)	FRAME ASSY, CRF	1
13 / 13	9174M68G02	(*R*)	CDP SEAL STATIC 6-TOOTH	1
13 / 14	9693M16P01		SPACER	1
13 / 16	L44540G01		SEAL, VENT AIR STAT., BRG.4R	1
13 / 25	9693M14P02		HEAT SHIELD, NO.4R BEARING	1
13 / 28	9686M44P03		FWD. STAT. AIR SEAL, NO. 4R	1
13 / 29	9693M48P03		SEAL, OIL STAT. BRG. 4R	1
13 / 31	9602M47P09		SEAL, OIL ROT. NO. 4R BRG	1
13 / 34	9628M93P02		NOZZLE-BRG 4R AND 4B OIL	1
13 / 39	9646M10P03	(*R*)	BRG. HOUSING NO. 4B	1
13 / 41	9648M01P14		BEARING, NO. 4 BALL	1
13 / 42	9645M84P02		RETAINER, NUT, NO.4B	1
13 / 45	9693M49P03		OIL SEAL, STAT. BRG. 4B	1
13 / 46	9693M05P02		SEAL, NO.4B BRG. ROT. A/O	1
13 / 59	L44594P01		INSULATION BLANKET 4R	1
13 / 60	L44593P01		INSULATION BLANKET 4R	1
13 / 62	L44595P01		INSULATION BLANKET 4B	2
14 / 2	9698M93G01		NUT ASSY, GANG CHANNEL	1
14 / 2	9698M94G03		NUT ASSY, GANG CHANNEL	1
14 / 4	9025M31G01		NUT ASSY, GANG CHANNEL	2
14 / 15	9607M38P02		NUT ASSY, GANG CHANNEL	1
14 / 17	9025M13G01		NUT ASSY, GANG CHANNEL	1
14 / 21	9143M86G02		NUT ASSY, GANG CHANNEL	2
14 / 23	9025M10G01		NUT ASSY, GANG CHANNEL	2
14 / 25	9977010-982	(*R*)	SUMP HOUSING	1
15 / 1	9693M04P02		SEAL, AFT STAT. AIR, NO.4	1
15 / 2	9693M06P03		HEAT SHIELD, NO. 4 BRG	1
15 / 4	L44541G01		SEAL, STAT.OUTER AIR, NO.4	1
15 / 5	9693M20G11	(*R*)	SEAL ASSY, AFT PRESS. BAL.	1
15 / 8	9693M02P03	(*R*)	SEAL ROTATING, CDP AIR	1
16 / 2	9021M36P01		DUCT, VENT (STRUT NO.1)	1
16 / 2	L47333P01		OUTER FLANGE, VENT DUCT	1
16 / 8	9103M65G01		TUBE ASSY,OIL INJECT	1
16 / 13	9103M27G01		MANIFOLD,OIL INLET	1
66 / 20	9016M85P04	(*R*)	ADAPTER, IGNITER PLUG	2
Kontierung: 5658104100		modul: 4100 - COMBUSTER		
CFI	P/N		nomenclature	qty
15 / 7	L43663G01	(*R*)	LINER ASSY, COMBUSTION CHAM	1
Kontierung: 5658105000		modul: 5002 - POWER TURBINE		
CFI	P/N		nomenclature	qty
34 / 3	L47492G03		MOUNT ASSY, LEFT SIDE	1
34 / 3	L47492G04		MOUNT ASSY, RIGHT SIDE	1
38 / 22	9607M78P01	(*R*)	NUT, NO. 7 REAR BEARING	1
38 / 23	9607M80P03		RING, KEYED RETAINING	1
38 / 24	9607M79P02		SPACER, RING	1
38 / 25	9648M79P01		RING, RETAINING	1
38 / 26	L21575P02		RING, SPEED SENSOR	1
38 / 35	L16501P01		RING, KEYED RETAINER	1
38 / 37	L14300P01		SPACER	1
Kontierung: 5658105100		modul: 5100 - H.P.T. NOZZLE GUIDE VANE STAGE 1		
CFI	P/N		nomenclature	qty
15 / 12	L25736G11	(*R*)	NOZZLE ASSY, HPT STG. 1 SS	1
25 / 1	9283M87G23	(*R*)	NOZZLE ASSY,STG.1 HPT(TBC)	31
25 / 2	9283M87G24	(*R*)	NOZZLE, STG.1(TBC)	1
25 / 5	9687M55G08		SEAL, OUTER	1
25 / 9	9687M54G08		SEAL, INNER	1
25 / 14	9687M92G24	(*R*)	SUPPORT ASSY, STG. 1 HPT	1
25 / 19	9208M62G02		BAFFLE ASSY, STG. 1	18
25 / 20	9208M67G02	(*R*)	COVER ASSY, CHANNEL	3

SERVICEABLE PARTS LIST

Kontierung: 5658105200 modül: 5200 - H.P.T. NOZZLE GUIDE VANE STAGE 2				
CFI	P/N		nomenclature	qty
15 / 13	L25739G09	(*R*)	NOZZLE ASSY, HPT STG. 2 SS	1
29 / 1	9687M08G14		SUPPORT ASSY, NOZZLE STG.2	1
29 / 12	1347M95G02	(*R*)	SHROUD ASSY, HPT STG. 1	48
29 / 14	1778M48P01		SHROUD SUPPORT,STG.1 (HALF)	48
29 / 15	L31395G06	(*R*)	NOZZLE, HPT STG.2 BOR.	1
29 / 15	L31395G05	(*R*)	NOZZLE, HPT STG.2	29
29 / 16	9082M82P02		SHROUD FWD. SUPPORT	22
29 / 26	9311M28G05	(*R*)	SEAL ASSY, STATIONARY AIR	11
29 / 28	9082M58G05	(*R*)	SHROUD, HPT STATOR, STG. 2	11
29 / 30	9082M63G03		SUPPORT, STG.2 AFT SHROUD	1
Kontierung: 5658105300 modül: 5300 - HIGH PRESSURE TURBINE ROTOR				
CFI	P/N		nomenclature	qty
26 / 6	L31397G13	(*R*)	ROTOR ASSY, HPT SS	1
27 / 1	9264M54P02		RETAINER STG. 1 BLADE	1
27 / 7	9208M78G09	(*R*)	SHAFT ASSY, FORWARD	1
27 / 8	9208M81P06		DISK, STG. 1 HPTR	1
27 / 9	L31424G28	(*R*)	HPT BLADE, STG. 1 MARINIZED	88
27 / 10	9190M39G09		DAMPER ASSY, STG. 1	71
27 / 13	L31425P02		SPACER, HPT ROTOR	1
27 / 16	L25734G04	(*R*)	SHIELD ASSY, THERMAL	1
27 / 17	L25451P05		DISK, STG. 2 HPTR	1
27 / 18	9208M83P02		RETAINER STG. 2 BLADE	1
27 / 23	L25645G14	(*R*)	HPT BLADE, STG. 2 MARINIZED	89
27 / 24	9190M41G05		DAMPER ASSY, STG. 2	90
27 / 25	L31304G01		REAR SHAFT ASSY, HPTR	1
27 / 31	9051M36G03		TUBE ASSY, HPT ROTOR	1
27 / 32	9654M80P08	(*R*)	NUT, COUPLING HPT ROTOR	1
27 / 33	9661M15P04	(*R*)	ADAPTER, PRESSURE TUBE	1
Kontierung: 5658105400 modül: 5400 - TURBINE MIDFRAME				
CFI	P/N		nomenclature	qty
23 / 1	L24288G41	(*R*)	TMF ASSY,THICK FLANGE	1
23 / 2	9633M62G32		COOL & VENT AIR SEAL, ASSY	1
23 / 6	L25750G01		BRACKET	5
23 / 8	9662M78G08		SHIELD HEAT, NO. 5 BRG	1
23 / 10	L44597P01		INSULATION BLANKET	1
23 / 11	9693M44P09		SEAL, STAT. A/O NO. 5 BRG.	1
23 / 13	9081M82P03		LOCK PLATE, BRG. NO.5	1
23 / 16	9671M28P01	(*R*)	NUT, BRG. NO. 5 INNER RACE	1
23 / 19	L44598P02		INSULATION BLANKET	1
23 / 21	9662M15P05		NOZZLE, NO. 5 BRG. LUB	1
23 / 24	9102M54G06		SUPPORT, LPT STG. 1 NOZZLE	1
23 / 26	9084M71P01		J-SEAL, AFT OUTER LINER	1
23 / 38	L24588G01		SEAL ASSY, NO.6 BRG. STAT.	1
23 / 39	L44599G02		SHIELD, HEAT BRG. NO. 6	1
23 / 41	L44606P03		NO. 6 BRG. STAT. VENT SEAL	1
23 / 42	L44633G02		SEAL	1
23 / 44	9632M71G04		SEAL ASSY, STG. 1 LPT	1
23 / 45	L21751G01		NOZZLE, LPTS STG.1 NON-STIG	14
23 / 48	9688M08P02		RETAINER	14
30 / 33	L24021G04	(*R*)	SUMP ASSY, DAMPER BRG.	1
32 / 35	9064M27G23		SUPPORT ASSY, LP NOZZLE	1
33 / 13	9136M10P02		DOUBLER , INNER VENT TUBE	1
33 / 16	L24440P001A		BRACKET	1
33 / 28	9084M64G02		TUBE ASSY, LUBE SUPPLY	1
33 / 34	9063M36G01		TUBE COOLING VENT	1
33 / 43	9127M97P01		DOUBLER, SCAVENGE	1
33 / 47	L21499G02		TUBE ASSY, SEAL DRAIN	1

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SERVICEABLE PARTS LIST

Kontierung: 5658105600		modul:	5600 - LOW PRESSURE TURBINE STATOR	
CFI	P/N		nomenclature	qty
36 / 1	1815M18G04		CASE ASSY, LPT STATOR	1
36 / 3	9663M72G04		COVER, SEGMENT	9
36 / 4	9688M20P01		COVER, SEGMENT	2
36 / 5	9688M20P02		COVER, SEGMENT	2
36 / 6	L47457G01		HEAT SHIELD, STG.1 SHROUD	2
36 / 7	9663M23G10	(*R*)	SHROUD ASSY, STG.1 LPTS	14
36 / 10	L21752G01	(*R*)	NOZZLE LPTS, STG. 2	7
36 / 10	L21752G04	(*R*)	NOZZLE LPTS, STG. 2	2
36 / 11	L21752G02	(*R*)	NOZZLE LPTS, STG. 2	2
36 / 12	L21752G03	(*R*)	NOZZLE LPTS, STG. 2	2
36 / 14	9102M46G01		SEAL ASSY, STG. 2	2
36 / 15	9102M46G05		SEAL ASSY, STG. 2	1
36 / 16	9102M46G06		SEAL ASSY, STG. 2	2
36 / 17	L21760P01		SPACER	2
36 / 18	L21760P05		SPACER	1
36 / 19	L21760P03		SPACER	2
36 / 28	9663M24G19		SHROUD ASSY, STG. 2 LPTS	11
36 / 28	9663M24G19	(*R*)	SHROUD ASSY, STG. 2 LPTS	3
36 / 31	L21753P01		NOZZLE LPTS, STG. 3	8
36 / 31	L21753P01	(*R*)	NOZZLE LPTS, STG. 3	4
36 / 32	L21753P02	(*R*)	NOZZLE LPTS, STG. 3	2
36 / 33	L21753G01	(*R*)	NOZZLE LPTS, STG. 3	2
36 / 35	9102M47G01		SEAL ASSY, STG. 3	2
36 / 36	9102M47G02		SEAL ASSY, STG. 3	4
36 / 37	9102M47G03		SEAL ASSY, STG. 3	2
36 / 40	9663M24G22		SHROUD ASSY, STG. 3 LPTS	5
36 / 40	9663M24G22	(*R*)	SHROUD ASSY, STG. 3 LPTS	11
36 / 42	9663M04P04		NOZZLE LPTS, STG. 4	51
36 / 42	1474M44P01		NOZZLE LPTS, STG. 4	1
36 / 43	9102M48G03		SEAL ASSY, STG. 4	5
36 / 44	9102M48G04		SEAL ASSY, STG. 4	2
36 / 48	9663M69G18		SHROUD ASSY, STG. 4 LPTS	18
36 / 49	9663M05P05		NOZZLE, LPTS STG. 5	37
36 / 49	1474M45P01		NOZZLE, LPTS STG. 5	3
36 / 50	9102M49G03		SEAL ASSY, STG. 5	8
36 / 51	9663M69G20		SHROUD ASSY, STG. 5 LPTS	16
36 / 52	9663M06P04		NOZZLE, LPTS STG. 6	43
36 / 52	9663M06P04	(*R*)	NOZZLE, LPTS STG. 6	2
36 / 52	1474M46P01		NOZZLE, LPTS STG. 6	1
36 / 53	9102M49G04		SEAL ASSY, STG. 6	8
36 / 54	9663M70G11		SHROUD ASSY, STG. 6 LPTS	16
Kontierung: 5658105700		modul:	5700 - LOW PRESSURE TURBINE ROTOR	
CFI	P/N		nomenclature	qty
23 / 31	9607M36P02		RING, NO. 6R BRG. RETAINING	1
23 / 32	9607M35P02	(*R*)	NUT, NO. 6R BEARING PLAIN	1
23 / 36	9658M82P01		SEAL, NO. 6 BRG. OIL ROT.	1
34 / 1	L16733G16		ROTOR ASSY, LPT (NON-STIG)	1
38 / 38	L21333P03		ADAPTER, FWD	1
38 / 39	L21352P01	(*R*)	NUT COUPLING	1

Customer: PES
S/N: 691-098

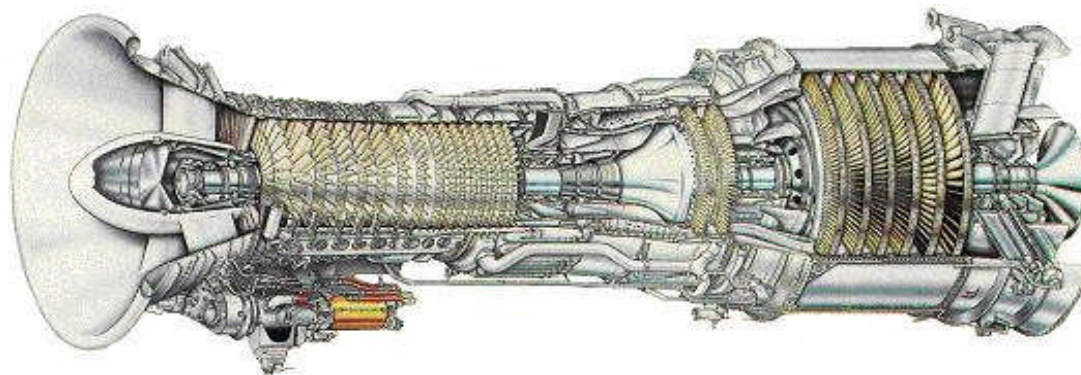
MTU Maintenance Berlin-Brandenburg

SERVICEABLE PARTS LIST

Kontierung: 5658105800		modul: 5800 - TURBINE REAR FRAME		
CFI	P/N	nomenclature	qty	
37 / 1	L21656P04	TRANSDUCER	1	
37 / 6	L24148P02	HOUSING	2	
37 / 8	L15500P01	SPRING	2	
37 / 9	L24168P02	RETAINER, SPRING	2	
37 / 18	L21186G02	DISTRIBUTOR, LUBE NOZZLE	1	
37 / 22	L24113G02	NOZZLE ASSY, LUBE	1	
37 / 25	L21677P02	MANIFOLD, D SUMP CAST TYPE	1	
37 / 30	L21119G01	PLATE, DEFLECTOR	1	
37 / 33	L21237P01	COVER, PLATE	1	
38 / 1	L16727G20	(*R*) FRAME ASSY, TURBINE REAR	1	
38 / 2	L16712G06	SEAL, FWD STATIONARY AIR	1	
38 / 4	L16710G05	SEAL ASSY, STATIONARY AIR	1	
38 / 8	L14421G02	SEAL NO.7 BRG FWD STAT. AIR	1	
38 / 10	RL14423P03	(*R*) SEAL NO.7 BRG FWD STAT. OIL	1	
38 / 14	L14405P02	(*R*) BEARING HOUSING, BRG. NO. 7	1	
38 / 16	L16505P02	DEFLECTOR, AFT	1	
38 / 20	L16508P01	LOCK PLATE, NO.7 BRG.	1	
38 / 28	L24238P01	SPACER RING	1	
38 / 29	L14408G04	(*R*) SEAL, AFT STAT.OIL	1	
38 / 32	L14409G04	SEAL AFT STAT. AIR	1	
145 / 1	L31902P03	INSULATION, TERMAL TRF	3	
145 / 2	L31902P02	INSULATION, TERMAL TRF	2	
145 / 3	L31902P01	INSULATION, TERMAL TRF	2	
145 / 4	L31902P05	INSULATION, TERMAL TRF	1	
145 / 5	L31902P07	INSULATION, TERMAL TRF	1	
145 / 6	L31902P06	INSULATION, TERMAL TRF	1	
145 / 7	L31902P04	INSULATION, TERMAL TRF	1	
145 / 8	L31902P08	INSULATION, TERMAL TRF	1	
145 / 13	L31903P01	RETAINER, INSULATION	16	
145 / 14	L31905G01	STRAP ASSY	1	
145 / 15	L31905G02	STRAP ASSY	1	
Kontierung: 5658106100		modul: 6100 - INLET GEAR BOX		
CFI	P/N	nomenclature	qty	
43 / 1	L21082G13	IGB ASSEMBLY	1	
Kontierung: 5658106500		modul: 6500 - ACCESSORY GEAR BOX		
CFI	P/N	nomenclature	qty	
43 / 13	9609M97P05	RADIAL DRIVE SHAFT	1	
43 / 21	L21441G25	TRANSFER GEARBOX ASSY	1	
46 / 36	L42058G01	TUBEDRAIN AIR/OIL SEPARATOR	1	
Kontierung: 5658107100		modul: 7100 - ACCESSORIES		
CFI	P/N	nomenclature	qty	
4 / 7	L34409P01	PLATE, ADAPTER	1	
8 / 24	9691M29P19	ACTUATOR, VSV	1	
8 / 24	9691M29P19	ACTUATOR, VSV	1	
93 / 19	L34379P03	CONTROL, VSV	1	
96 / 21	L21674P06	VALVE, CHECK	1	
96 / 23	L21785P06	VALVE, CHECK	1	
131 / 1	L35166P01	DETECTOR, RESIST.TEMP.(RTD)	6	
140 / 1	L44500P08	PUMP, LUBE AND SCAVENGE	1	
144 / 6	L21693P02	CABLE, FEEDBACK	1	



Onlog Listing LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**

S/N: **691-098 / 481-402**

Model: **7LM2500 PE-MGW / 7LM2500 PC 103**

MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658100100 0001 - CORE ENGINE												
figure	item	var	P/N	qty	TG	S/N	M	inspection code		D	F	B	DS	desription/remarks	SB
8	2	A	9648M79P02	1	KS							1		RING, RETAINING	
8	3	A	9607M31P03	1								1		SPACER, RING LOCKNUT	
8	4	A	9607M01P03	1								1		RING, RETAINING	
8	5	B	9644M33P04	1						1				NUT SPANNER NO.3 BRG	
8	18	A	9080M96G10	2								2		BRACKET, ACTUATOR	IND-049
8	34	A	9673M66G14	2								2		LEVER ASSY, VANE ACTUATOR	IND-049
11	85	EC	9051M54G04	2								2		LINK, STG. 4, CONNECTING	
11	85	FC	9051M55G04	2								2		LINK, STG. 5, CONNECTING	
11	85	GC	9051M56G04	2					1			1		LINK, STG. 6, CONNECTING	
11	85	BC	9051M51G04	2								2		LINK, STG. 1, CONNECTING	
11	85	AC	9051M50G04	2								2		LINK , IGV CONNECTING	
11	85	CB	9051M52G03	2								2		LINK ASSY, STG.2 CONNECTING	
11	85	DB	9051M53G03	2								2		LINK ASSY, STG.3 CONNECTING	
11	95	A	9084M24P02	2								2		MOUNT, ACTUATION LEVER	
15	9	E	9346M79G05	1		CAV36961				1				SPLIT NUT,4B SPLINED	
15	10	C	9346M80P02	1		CPPC0129						1		COLLAR, SPLIT NUT BRG.4	
15	11	A	9693M33P01	1								1		RING, SPLINED LOCK	

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print date : 15.12.2009

page number : 1

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MTU Maintenance Berlin-Brandenburg	Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658100900 00M9 - NMP ENGINE
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figure	item	var	P/N	qty	TG	S/N	M	inspection code				DS	desription/remarks	SB
								D	F	B				
2	2	B	L21561P01	1						1			COVER, SUMP	
7	42	B	L43567G02	1					1				BELLCRANK	IND-109
8	7	A	9658M93P02	1	EX			1					SEAL, PRESSURE LOCK	
13	5	B	9680M73G03	1				1					BORESCOPE PLUG, HPT STG.2	IND-045
13	10	B	9103M85G02	1				1					BORESCOPE PLUG, HPT STG.1	IND-045
13	55	B	9713M26P05	10					10				BOLT, PIN COMBUSTOR	
15	14	A	9693M57G01	1						1			BAFFLE ASSY, CRF	
26	1	D	L47952G01	1		JEGJ0174				1			SUPPORT, CRF SEAL	IND-168
26	3	A	9104M38P02	1						1			COVER, HPT BOLT	
26	7	E	L14469G07	1		CAN60834				1			TUBE ASSY, OIL CAP	
26	8	A	9693M35P04	2	KS					2			SEAL FLEXIBLE	
26	10	A	9079M28G05	1		MTUBB0107-09				1			SLEEVE DAMPER, HPTR	
26	12	A	1696M33G01	4						4			BAFFLE, STEAM	IND-072, -074
26	15	A	1696M32G01	1					1				RING, BAFFLE MOUNTING	IND-072, -074
43	18	A	L21434P02	1		MTUBB0108-09				1			SPACER	
43	22	A	L21419P01	1						1			MOUNT, LINK	
43	26	C	L31302G02	1				1					ROD END ASSY, LH THREAD	
43	27	C	L31302G01	1				1					ROD END ASSY, RH THREAD	
43	28	A	L21419P02	1						1			MOUNT, LINK	
43	29	C	L31303G01	1				1					LINK ASSEMBLY, MOUNT	
43	30	A	J431P124A	4	KS			1		3			BOLT	
43	30	AA	J431P125A	1				1					BOLT	
43	33	A	L21400G01	1						1			SUPPORT, GEARBOX MOUNTING	
43	57	B	9681M48P06	1						1			BUSHING ASSY, EXPANDABLE	
63	37	A	L34872G01	1						1			BRACKET	
67	1	A	L21514P01	3						3			BRACKET, ANGLE	
68	1	A	L21705G01	1						1			BRACKET, STG 1 COMPR.-BOSS	
68	4	A	L21524G01	1						1			BRACKET	
68	7	A	9647M81G01	1						1			BRACKET, BELLCRANK	
68	10	B	L34061G01	1						1			BRACKET, VSV FEEDBACK CABLE	IND-033
68	15	A	L21704G01	1						1			BRACKET ASSY	
68	18	A	L21551G01	1						1			BRACKET, A SUMP SEAL PRESS.	

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MTU Maintenance Berlin-Brandenburg				Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658100900 00M9 - NMP ENGINE												
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
68	20	A	L21819G01	1									1		BRACKET	
70	5	A	L21522P01	1									1		BRACKET	
70	21	A	L21522P01	1									1		BRACKET	
70	34	G	L34133P01	1									1		BRACKET	
71	21	A	L21702G01	1									1		BRACKET, D-SUMP PRESS. TUBE	
72	5	B	L34450P01	1									1		BRACKET	
73	3	A	L24388P001A	1									1		BRACKET	
73	5	A	9011M82G01	1									1		BRACKET	
73	7	A	L21519P01	1									1		BRACKET	
73	9	A	L21521P01	1									1		BRACKET	
73	11	A	L24313P001A	1									1		BRACKET	
73	13	A	9011M92G01	1									1		BRACKET	
73	15	A	L24438P001A	1									1		BRACKET	
73	17	A	L24389P001A	1									1		BRACKET	
73	23	A	L24404P001A	1									1		BRACKET	
73	25	A	L21531P01	2									2		BRACKET, BAL. PISTON TUBE	
73	29	A	L24334P001A	1									1		BRACKET	
73	31	A	L21500P01	1									1		BRACKET	
74	43	E	L46354G01	1									1		BRACKET, ANGLE	
74	43	B	L24406G02	1									1		BRACKET	IND-099
74	44	G	L46359G01	1									1		BRACKET, ANGLE	IND-099
74	57	C	L46353G01	1									1		BRACKET	IND-099
74	71	B	L46357G01	1									1		BRACKET	IND-099
77	1	A	L21843G01	1									1		MANIFOLD ASSY, AIR	
77	2	A	L24628G01	1									1		TUBE (P)	
77	3	A	L24623G01	1									1		NOZZLE ASSY, EJECTOR	
78	1	A	L24304G01	1									1		MANIFOLD	
78	2	A	9144M32G01	1									1		TUBE, AIR	
78	3	A	9144M34G01	1									1		TUBE, AIR	
78	4	A	L24302G01	1									1		TUBE, AIR	
78	17	A	L34741G01	1									1		BRACKET	IND-116
79	1	A	L24352G01	1									1		MANIFOLD AIR	
79	4	A	L24356G01	1									1		TUBE, AIR (P)	

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MTU Maintenance Berlin-Brandenburg				Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658100900 00M9 - NMP ENGINE										
figure	item	var	P/N	qty	TG	S/N	M	inspection code			B	DS	desription/remarks	SB
80	2	B	L21486G01	1						1			MANIFOLD ASSY, OIL	
80	3	C	L34156G01	1							1		MANIFOLD ASSY, OIL	
80	5	B	L34864G01	1							1		MANIFOLD (P-SERIE)	
80	6	A	L21451G01	1							1		TUBE, OIL- D, AFT	
80	37	A	L24342G03	1							1		TUBE, OIL C SUMP SUPPLY	
81	2	A	L24380G01	1							1		TUBE ASSY, STRUT 6 AIR	
82	2	B	L21480G01	1							1		TUBE ASSY, OIL	
82	3	A	L21845G02	1							1		TUBE ASSY, OIL	
83	2	C	L42094G01	1							1		TUBE, OIL-D SCAVENGE	
83	3	A	L24371G01	1							1		TUBE ASSY, OIL (P)	
83	4	A	L21726G01	1							1		TUBE, OIL- D, SCAV. AFT	
85	1	B	L34870G01	1							1		TUBE ASSY, OIL	
86	2	A	L21444G01	1							1		TUBE, VENT AIR	
86	5	C	L21448G01	1							1		TUBE, B SUMP MAN. VENT AIR	
86	6	A	L21445G01	1							1		TUBE, C & D SUMPS VENT AIR	
86	7	A	L24318G01	1							1		MANIFOLD ASSY, AIR	
86	8	A	L21449G01	1							1		TUBE ASSY, AIR (P)	
87	1	B	L24624G01	1							1		TUBE ASSY, AIR	
87	3	A	L24306G01	1							1		MANIFOLD ASSY, AIR	
87	4	A	L24346G01	1							1		MANIFOLD ASSY, AIR	
88	1	A	L24348G01	1							1		MANIFOLD ASSY, AIR	
88	2	A	L24456G01	1							1		TUBE ASSY, AIR (P)	
88	6	B	L24623G01	1							1		NOZZLE ASSY, EJECTOR	
89	1	A	L21466G02	1							1		MANIFOLD ASSY, A SUMP AIR	IND-040 AND 09
89	2	D	L42842G05	1							1		NOZZLE, EJECTOR	
89	3	A	L21453G01	1							1		TUBE ASSY, A SUMP AFT AIR	
90	1	A	L24376G01	1							1		TUBE ASSY, AIR (P)	
90	2	A	L21443G02	1							1		NOZZLE ASSY, EJECTOR	
90	3	A	L21458G02	1							1		ADAPTER ASSY, A & D SUMP	
91	1	B	L34506G01	1							1		MANIFOLD, AIR	
91	2	A	L21384G01	1							1		TUBE, STRUT 5 HP-RECOUP AIR	
93	5	A	R5082E300A000	1							1		HOSE ASSY	
93	6	A	R5082D300A000	1						1			HOSE ASSY	

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MTU Maintenance Berlin-Brandenburg	Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658100900 00M9 - NMP ENGINE										
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figure	item	var	P/N	qty	TG	S/N	M	inspection code				desription/remarks	SB
								D	F	B	DS		
93	9	A	R5081E660A000	1					1			HOSE ASSY	
93	13	A	L34321G01	1						1		TUBE, SUPPLY	
94	2	A	L21633G01	2					1	1		MANIFOLD ASSY	
94	28	A	L21605G02	1						1		MANIFOLD ASSY, FUEL	
94	37	A	L24068P001A	1						1		BRACKET	
94	46	A	L21468G01	1						1		TUBE, AIR/OIL SEPARATOR	
95	7	A	R5078F484A	1					1			HOSE ASSY, SUPPLY	
95	9	A	L24068P002A	1						1		BRACKET	
95	17	B	L34643P001A	1						1		BRACKET	IND-053
96	9	A	R5077B100B	1					1			HOSE	
96	12	A	R5095J171B	1						1		HOSE ASSY, TGB	
96	29	A	L24434P02	1						1		SUPPORT	
96	30	A	L24434P01	1						1		SUPPORT	
96	37	A	L21564G01	1					1		1	MANIFOLD, LP SPLINE OIL	
96	39	A	L21488G01	1						1		MANIFOLD, AGB OIL	
96	60	B	L34522G01	1						1		TUBE OIL	
96	62	B	9033M91G02	1						1		SHIELD, SPRAY	
96	66	A	L34381P16	1						1		TEE, SWIVEL	
96	67	A	L34316G01	1						1		TUBE, ADAPTER, OIL	
96	85	A	R5077E614B	1					1			HOSE ASSY, LUBE	
97	3	A	R5077B090B	1						1		HOSE	
97	9	A	L21676G01	1						1		MANIFOLD, LUBE DRAIN	
97	11	A	R5078B172B	1					1			HOSE DRAIN, LOW PRESSURE	
97	14	A	L21484G02	1						1		TUBE AND HOSE ASSY, SCAVENGE	
97	21	A	L21727P01	1						1		BRACKET	
97	25	A	R5078B300B	1						1		HOSE ASSY	
116	66	A	L34297G01	1						1		TUBE, OIL	

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MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658102300 2300 - FRONT FRAME													
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
2	5	H	L21370G15	1		MTUBB0064-09					1				FRAME ASSY,COMPRESSOR FRONT	
2	6	B	9654M03G06	1		SN:				1					SEAL, COMPRESSOR STAT. AIR	IND-085
2	8	A	9691M37P01	1									1		SEAL	
2	10	AA	L31711P01	1									1		RETAINER, NO. 3R BEARING	
2	10	G	1959M19P01	1		SN:				1					BEARING NO. 3R, DAMPER	
2	13	B	L47033G06 *A*	1		MMTC9665					1				SEAL, STAT. NO.3 BRG	IND-205
2	16	A	L21220P01	5									5		COVER	
6	1	E	L31710G01	1		MTUBB0058-09							1		HOUSING, NO.3 DAMPER BRG.	IND-108
6	4	C	9049M38G05	1		BBCB2213							1		SEAL SUPPORT	
6	12	G	L21288G12	1		MTUBB0065-09					1				FRAME, COMPRESSOR FRONT	
6	36	A	L34712G01	1									1		TUBE, LUBE SUPPLY	
6	37	A	R285P08	1									1		TEE TUBE	
43	4	AB	L31818G01	1									1		TUBE, OIL DAMPER	
43	4	B	L31778G01	1									1		TUBE , OIL SUPPLY	
43	16	B	9671M92P03	1							1				SLEEVE SHAFT FWD	

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print date : 15.12.2009

page number : 6

N = new Item (not in Offlog) / *A* = changed Item (in Offlog, but with other P/N or Qty)

MTU Maintenance Berlin-Brandenburg				Onlog-Listing for S/N : 691-098 Kontierung: 5658103100										Customer : PES 3100 - HIGH PRESSURE COMPRESSOR ROTOR		
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
7	1	L	L21788G17	1		RPMDD665					1				ROTOR ASSY, COMPRESSOR	
9	1	R	K157G02	36							36			3	HPC BLADE, STG. 1	IND-041
9	3	C	9021M62P06	1		RPMDD665					1				DISK, STAGE 1	
9	4	B	K256P07	26							26				HPC BLADE, STG.2	
9	5	A	9182M25P01	26	KS								26		RETAINER, BLADE STG. 2	
9	7	G	9661M82G28	1		GAT4362M					1				DISK ASSY, STG. 2	IND-030
9	8	A	9680M93P01	1									1		RING, RETAINING	
9	9	A	9661M85P08	1		NRW91459				1					ADAPTER, SPLINED	IND-199
9	14	C	9155M26G08	18	KS								18		BOLT	
9	44	A	K775P13	1						1					HPC BLADE; STG.7	
9	66	H	9021M64P12	1		GWNCT563				1					SPOOL, STAGES 3 - 9	
9	67	A	K043P25	1						1					HPC BLADE, STG.10	
9	108	E	L21787G06	1		CAN42656				1					DUCT ASSY, AIR	
9	110	A	9661M70P03	1									1		RING SEAL, AIR DUCT	

inspection code : M=missing / D=dameged / F=inspection or repair / B=serviceable / DS = scrap by inspection or repair

print date : 15.12.2009 page number : 7

N = new Item (not in Offlog) / *A* = changed Item (in Offlog, but with other P/N or Qty)

MTU Maintenance Berlin-Brandenburg	Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658103200 3200 - HIGH PRESURE COMPRESSOR STATOR
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figure	item	var	P/N	qty	TG	S/N	M	inspection code				desription/remarks	SB
								D	F	B	DS		
7	8	MA	L24067G18	1		CDPL6249			1			FRONT STATOR ASSY, COMPR.	IND-049
8	9	C	9686M83G18	1		CDPT6725			1			REAR STATOR ASSY, COMPR.	
8	10	A	L21256G04	1						1		DIAL (NOT FOR NAVY)	
8	11	A	L21257G01	1						1		POINTER	
11	1	J	9206M96G05	1		CDPL6249			1			HPC FRONT CASE, STEEL	
11	4	A	9633M14G20	30	KS					30		LEVER ARM, IGV	
11	4	B	9633M15G20	4	KS					4		LEVER ARM, IGV	
11	9	A	K001P07	34						34		HPC VANE, IGV	
11	10	B	9211M10G01	1		PM1E4822				1		SHROUD ASSY, IGV	IND-029
11	10	B	9211M10G01	1		PM1E6928				1		SHROUD ASSY, IGV	IND-029
11	17	A	9633M14G21	32	KS					32		LEVER ARM, STG. 1	
11	17	B	9633M15G21	4	KS					4		LEVER ARM, STG. 1	
11	22	A	K172P01	36						36		HPC VANE, STG. 1	
11	23	F	9379M41G05	1		WESA1393			1			SHROUD ASSY, STG.1	IND-029
11	23	F	9379M41G05	1		WESA1430			1			SHROUD ASSY, STG.1	IND-029
11	30	A	9633M14G22	36	KS			11		25		LEVER ARM, STG. 2	
11	30	B	9633M15G22	4	KS					4		LEVER ARM, STG. 2	
11	35	A	K202P02	40						40		HPC VANE, STG. 2 TITANIUM	
11	36	F	9379M42G04	*A*	1	GATBWN55			1			SHROUD ASSY, STG.2	IND-029
11	36	F	9379M42G04	*A*	1	GATBPJ14			1			SHROUD ASSY, STG.2	IND-029
11	43	A	9633M14G23	42	KS					42		LEVER ARM, STG. 3	
11	43	B	9633M15G23	4	KS					4		LEVER ARM, STG. 3	
11	48	A	K344P02	46						46		HPC VANE, STG. 3	
11	51	A	9633M19G03	46	KS					46		LEVER ARM, STG. 4	
11	51	B	9633M20G03	4	KS					4		LEVER ARM, STG. 4	
11	56	B	K445P03	50						50		HPC VANE, STG. 4	
11	59	B	9079M49G01	50	KS					50		LEVER ARM, STG. 5	
11	59	E	9125M65G02	8	KS					8		LEVER ARM, STG. 5	
11	66	A	K546P02	57						57		HPC VANE, STG. 5	
11	66	B	K546P03	1						1		HPC VANE, STG. 5	
11	69	B	9079M49G02	56	KS			2		54		LEVER ARM, STG. 6	
11	69	E	9125M65G04	8	KS					8		LEVER ARM, STG. 5+6	

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MTU Maintenance Berlin-Brandenburg				Onlog-Listing for S/N : 691-098 Kontierung: 5658103200										Customer : PES 3200 - HIGH PRESURE COMPRESSOR STATOR	
figure	item	var	P/N	qty	TG	S/N	M	inspection code				DS	desription/remarks	SB	
11	76	A	K647P02	64							64		HPC VANE, STG. 6		
11	77	B	K779P49	40						40			HPC VANE, STG. 7		
11	77	G	K779P50	28						28			HPC VANE, STG. 7		
11	77	L	K779P51	1						1			HPC VANE, STG. 7 LOW. BOR.		
11	77	Q	K779P52	1						1			HPC VANE, STG. 7 UPP. BOR.		
11	77	V	K779P53	1						1			HPC VANE, STG. 7 U.L.S. END		
11	77	ZA	K779P54	1						1			HPC VANE, STG. 7 U.R.S. END		
11	78	B	K109G02	10						10			HPC VANE, STG. 8 WIDE		
11	78	D	K109G01	22						22			HPC VANE, STG. 8 STD		
11	78	F	K109G03	1						1			HPC VANE, STG. 8 U.R.S. END		
11	78	H	K109G04	1						1			HPC VANE, STG. 8 U.L.S. END		
11	79	A	K980P23	45						45			HPC VANE, STG. 9 STD		
11	79	D	K980P24	27						27			HPC VANE, STG. 9 WIDE		
11	79	G	K980P25	1						1			HPC VANE, STG. 9 U.L.S. END		
11	79	J	K980P26	1						1			HPC VANE, STG. 9 U.R.S. END		
11	80	A	K081P21	28						28			HPC VANE, STG. 10 STD		
11	80	D	K081P22	48						48			HPC VANE, STG. 10 WIDE		
11	80	G	K081P23	1						1			HPC VANE, STG. 10 LOW. BOR.		
11	80	J	K081P24	1						1			HPC VANE, STG. 10 UPP. BOR.		
11	80	M	K081P25	1						1			HPC VANE, STG. 10 U.L.S.END		
11	80	P	K081P26	1						1			HPC VANE, STG. 10 U.R.S.END		
11	81	B	K182P49	33						33			HPC VANE, STG. 11		
11	81	G	K182P50	43						43			HPC VANE, STG. 11		
11	81	L	K182P51	1						1			HPC VANE, STG. 11 LOW. BOR.		
11	81	Q	K182P52	1						1			HPC VANE, STG. 11 UPP. BOR.		
11	81	V	K182P53	1						1			HPC VANE, STG. 11		
11	81	ZA	K182P54	1						1			HPC VANE, STG. 11 U.R.S.END		
11	88	AG	1333M65G01	2							2		RING SEGMENT, IGV ACTUATION	IND-049	
11	88	BF	1333M65G02	2							2		RING SEGMENT,STG1 ACTUATION	IND-049	
11	88	CF	1333M65G03	2							2		RING SEGMENT,STG2 ACTUATION	IND-049	
11	88	DC	9295M30G05	2							2		RING SEGMENT,STG3 ACTUATION	IND-049	
11	88	EC	9295M30G06	2							2		RING SEGMENT,STG4 ACTUATION	IND-049	
11	88	FC	1333M65G06	2							2		RING SEGMENT,STG5 ACTUATION	IND-049	

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MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658103200 3200 - HIGH PRESURE COMPRESSOR STATOR											
figure	item	var	P/N	qty	TG	S/N	M	inspection code				desription/remarks	SB	
								D	F	B	DS			
11	88	GD	1333M65G07	2						2		RING SEGMENT,STG6 ACTUATION	IND-049	
11	137	B	9146M83P01	1						1		KEY,CASING LEFT SIDE		
11	138	B	9146M83P02	1						1		KEY,CASING RIGHT SIDE		
12	1	D	9686M81G09	1		CDPT6725			1			HPC REAR CASE, ASSY		
12	3	I	K209P31	1					1			HPC VANE, STG. 12 BOR.		
12	3	L	K209P32	1					1			HPC VANE, STG. 12 BOR.		
12	3	Q	K209P28	31					31			HPC VANE, STG. 12		
12	3	R	K209P27	45					45			HPC VANE, STG. 12 STANDARD		
12	3	C	K209P30	1					1			HPC VANE, STG. 12 U.R.S.		
12	3	F	K209P29	1					1			HPC VANE, STG. 12 U.L.S.		
12	4	C	K310P22	1					1			HPC VANE, STG. 13 U.R.S.		
12	4	F	K310P21	1					1			HPC VANE, STG. 13 U.L.S.		
12	4	K	K310P20	30					30			HPC VANE, STG. 13		
12	4	L	K310P19	48					48			HPC VANE, STG. 13 STANDARD		
12	5	C	K412P40	1					1			HPC VANE, STG. 14 U.R.S.		
12	5	F	K412P39	1					1			HPC VANE, STG. 14 U.L.S.		
12	5	I	K412P41	1					1			HPC VANE, STG. 14 BOR.		
12	5	L	K412P42	1					1			HPC VANE, STG. 14 BOR.		
12	5	Q	K412P38	63					63			HPC VANE, STG. 14		
12	5	R	K412P37	21					21			HPC VANE, STG. 14 STANDARD		
12	6	C	K513P34	1					1			HPC VANE, STG. 15 U.L.S.		
12	6	F	K513P33	1					1			HPC VANE, STG. 15 U.R.S.		
12	6	I	K513P35	1					1			HPC VANE, STG. 15 BOR		
12	6	L	K513P36	1					1			HPC VANE, STG. 15 BOR		
12	6	QA	K513P32	63					63			HPC VANE, STG. 15	IND-132	
12	6	RB	K513P31	21					21			HPC VANE, STG. 15 STANDARD	IND-132	
12	7	D	K145G05	1					1			HPC VANE, STG. 16 OGV		
12	7	H	K145G06	1					1			HPC VANE, STG. 16 OGV		
12	7	I	K145G04	2					2			HPC VANE, STG. 16 OGV		
12	7	N	K688P20	49					49			HPC VANE, STG. 16 OGV		
12	7	P	K688P19	49					49			HPC VANE, STG.16 OGV STAND.		
12	18	A	9173M47P04	1						1		KEY,CASING,LEFT SIDE		
12	19	A	9173M47P03	1						1		KEY,CASING,RIGHT SIDE		

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MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658103200 3200 - HIGH PRESURE COMPRESSOR STATOR													
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
60	56	A	L34418G01	1									1		BRACKET, FUEL	
69	4	A	L21217G01	1									1		BRACKET, TUBE	
69	6	B	L21700P01	1									1		BRACKET, SUMP VENT MANIFOLD	
69	9	A	L21703G02	1									1		BRACKET	
69	11	B	L21844P01	1									1		BRACKET ANGLE	
69	12	B	L24375P001A	1									1		BRACKET, ANGLE	
69	13	A	L21506P01	1									1		BRACKET, ANGLE	
69	19	A	L34659G01	1									1		BRACKET	IND-051

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MTU Maintenance Berlin-Brandenburg				Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658103400 3400 - COMPRESSOR REAR FRAME												
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
13	1	E	9103M30G30	1		GEVF6763					1				FRAME ASSY, CRF	
13	13	B	9174M68G02	1		TWGD8918					1				CDP SEAL STATIC 6-TOOTH	
13	14	A	9693M16P01	1									1		SPACER	
13	16	E	L44540G01	1		TRIT2201							1		SEAL,VENT AIR STAT., BRG.4R	IND-098
13	25	A	9693M14P02	1									1		HEAT SHIELD, NO.4R BEARING	
13	28	B	9686M44P03	1		LAM23079							1		FWD. STAT. AIR SEAL, NO. 4R	
13	29	A	9693M48P03	1		LAM22401							1		SEAL, OIL STAT. BRG. 4R	
13	31	A	9602M47P09	1									1		SEAL, OIL ROT. NO. 4R BRG	
13	34	A	9628M93P02	1									1		NOZZLE-BRG 4R AND 4B OIL	
13	37	B	9671M26P09	*A* 1	TP	FCAS8449				1					BEARING, NO. 4 ROLLER	
13	39	B	9646M10P03	1		APV03191					1				BRG. HOUSING NO. 4B	
13	41	D	9648M01P14	1	TP	MRCMK829							1		BEARING, NO. 4 BALL	
13	42	A	9645M84P02	1									1		RETAINER, NUT, NO.4B	
13	45	A	9693M49P03	1		APV00166							1		OIL SEAL, STAT. BRG. 4B	
13	46	A	9693M05P02	1		APV46176							1		SEAL, NO.4B BRG. ROT. A/O	
13	59	A	L44594P01	1									1		INSULATION BLANKET 4R	IND-105
13	60	A	L44593P01	1									1		INSULATION BLANKET 4R	IND-105
13	62	A	L44595P01	2									2		INSULATION BLANKET 4B	IND-105
14	2	A	9698M93G01	1									1		NUT ASSY, GANG CHANNEL	
14	2	AV	9698M94G03	1									1		NUT ASSY, GANG CHANNEL	
14	4	A	9025M31G01	2									2		NUT ASSY, GANG CHANNEL	
14	15	B	9607M38P02	1									1		NUT ASSY, GANG CHANNEL	
14	17	A	9025M13G01	1									1		NUT ASSY, GANG CHANNEL	
14	21	D	9143M86G02	2									2		NUT ASSY, GANG CHANNEL	
14	23	A	9025M10G01	2									2		NUT ASSY, GANG CHANNEL	
14	25	F	9977010-982	1		EVT91924					1				SUMP HOUSING	
15	1	A	9693M04P02	1		MMTC9951							1		SEAL, AFT STAT. AIR, NO.4	
15	2	A	9693M06P03	1									1		HEAT SHIELD, NO. 4 BRG	
15	4	C	L44541G01	1		TRIT1923							1		SEAL, STAT.OUTER AIR, NO.4	EX-IND-098
15	5	B	9693M20G11	1		KSBJ3311					1				SEAL ASSY, AFT PRESS. BAL.	
15	8	A	9693M02P03	1		APV72554					1				SEAL ROTATING, CDP AIR	
16	2	A	9021M36P01	1									1		DUCT, VENT (STRUT NO.1)	

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MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658103400 3400 - COMPRESSOR REAR FRAME													
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
16	2	D	L47333P01	1									1		OUTER FLANGE, VENT DUCT	
16	8	B	9103M65G01	1									1		TUBE ASSY,OIL INJECT	
16	13	B	9103M27G01	1									1		MANIFOLD,OIL INLET	
66	20	A	9016M85P04	2							2				ADAPTER, IGNITER PLUG	

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N = new Item (not in Offlog) / *A* = changed Item (in Offlog, but with other P/N or Qty)

MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658104100 4100 - COMBUSTER													
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
15	7	V	L43663G01	1		GGMRJ839					1				LINER ASSY, COMBUSTION CHAM	

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MTU Maintenance Berlin-Brandenburg	Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658105000 5002 - POWER TURBINE
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figure	item	var	P/N	qty	TG	S/N	M	D	F	B	DS	desription/remarks	SB
34	3	B	L47492G03	1						1		MOUNT ASSY, LEFT SIDE	IND-099
34	3	E	L47492G04	1						1		MOUNT ASSY, RIGHT SIDE	IND-099
38	22	A	9607M78P01	1					1			NUT, NO. 7 REAR BEARING	
38	23	A	9607M80P03	1						1		RING, KEYED RETAINING	
38	24	A	9607M79P02	1						1		SPACER, RING	
38	25	A	9648M79P01	1	KS					1		RING, RETAINING	
38	26	A	L21575P02	1		FIA00264				1		RING, SPEED SENSOR	
38	27	B	L14406P02	1		MLEEH300		1				SEAL, AFT ROTATING	
38	34	A	L16500P01	1				1				NUT ROT.SEAL BRG NO7	
38	35	A	L16501P01	1						1		RING, KEYED RETAINER	
38	36	A	L16503P01	1	PS			1				RING, PLAIN RETAINING	
38	37	A	L14300P01	1						1		SPACER	

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N = new Item (not in Offlog) / *A* = changed Item (in Offlog, but with other P/N or Qty)

MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658105100 5100 - H.P.T. NOZZLE GUIDE VANE STAGE 1													
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
15	12	N	L25736G11	1		FABCG427					1				NOZZLE ASSY, HPT STG. 1 SS	
25	1	E	9283M87G23 *A*	31							31				NOZZLE ASSY,STG.1 HPT(TBC) GELIEFERT: 28 STCK. 704763S	
25	2	E	9283M87G24	1		MDK19CC9					1				NOZZLE, STG.1(TBC) GELIEFERT: 704763B	
25	5	B	9687M55G08	1									1		SEAL, OUTER	
25	9	B	9687M54G08	1									1		SEAL, INNER	
25	14	A	9687M92G24	1		FABCG427					1				SUPPORT ASSY, STG. 1 HPT	
25	19	A	9208M62G02	18									18		BAFFLE ASSY, STG. 1	
25	20	A	9208M67G02	3		P/N UNK					3				COVER ASSY, CHANNEL	

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MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658105200 5200 - H.P.T. NOZZLE GUIDE VANE STAGE 2													
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
15	13	G	L25739G09	1		GEVAT915					1				NOZZLE ASSY, HPT STG. 2 SS	
29	1	A	9687M08G14	1		GEVAT915						1			SUPPORT ASSY, NOZZLE STG.2	
29	5	A	L21274G05	1	EX					1					SCREEN ASSY	DISCONTINUED
29	12	E	1347M95G02	48							48				SHROUD ASSY, HPT STG. 1	
29	14	C	1778M48P01	48								48			SHROUD SUPPORT,STG.1 (HALF)	
29	15	AA	L31395G06	1		SEE LIST					1				NOZZLE, HPT STG.2 BOR.	
29	15	F	L31395G05	32		SEE LIST					32		3		NOZZLE, HPT STG.2	
29	16	A	9082M82P02	22								22			SHROUD FWD. SUPPORT	
29	26	B	9311M28G05	11							11				SEAL ASSY, STATIONARY AIR	
29	28	A	9082M58G05	11							11				SHROUD, HPT STATOR, STG. 2	
29	30	A	9082M63G03	1		GEVBC658						1			SUPPORT, STG.2 AFT SHROUD	

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MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658105300 5300 - HIGH PRESSURE TURBINE ROTOR													
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
26	6	H	L31397G13	1		APV72559					1				ROTOR ASSY, HPT SS	
27	1	A	9264M54P02	1		SPKO7977						1			RETAINER STG. 1 BLADE	
27	7	F	9208M78G09	1		CAV36110					1				SHAFT ASSY, FORWARD	
27	8	B	9208M81P06	1		ATW16433						1			DISK, STG. 1 HPTR	
27	9	Z	704511 *A*	88							88				HPT-BLADE STG.1, PTAL	
27	10	B	9190M39G09	88						17			71		DAMPER ASSY, STG. 1	
27	13	E	L31425P02	1		XAE17020							1		SPACER, HPT ROTOR	DEL. (REUSE IS
27	16	C	L25734G04	1		BCM24767					1				SHIELD ASSY, THERMAL	
27	17	D	L25451P05	1		ATW16666							1		DISK, STG. 2 HPTR	
27	18	A	9208M83P02	1		NCE2382C							1		RETAINER STG. 2 BLADE	
27	23	T	704632 *N*	90											HPT BLADE, STG. 2	
27	24	B	9190M41G05	90									90		DAMPER ASSY, STG. 2	
27	25	D	L31304G01	1		APV72559							1		REAR SHAFT ASSY, HPTR	
27	31	A	9051M36G03	1		CAN42680							1		TUBE ASSY, HPT ROTOR	
27	32	B	9654M80P08	1		AAM35652					1				NUT, COUPLING HPT ROTOR	
27	33	A	9661M15P04	1		MAN03276					1				ADAPTER, PRESSURE TUBE	

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print date : 15.12.2009

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N = new Item (not in Offlog) / *A* = changed Item (in Offlog, but with other P/N or Qty)

MTU Maintenance Berlin-Brandenburg				Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658105400 5400 - TURBINE MIDFRAME												
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
23	1	Y	L24288G41	1		FCP544HD					1				TMF ASSY,THICK FLANGE	IND-099
23	2	E	9633M62G32	1		WIN9552Y						1			COOL & VENT AIR SEAL, ASSY	
23	6	A	L25750G01	5									5		BRACKET	IND-046
23	8	B	9662M78G08	1									1		SHIELD HEAT, NO. 5 BRG	
23	10	F	L44597P01	1									1		INSULATION BLANKET	
23	11	G	9693M44P09	1		MMTE7607							1		SEAL, STAT. A/O NO. 5 BRG.	
23	13	B	9081M82P03	1		BIW0638L							1		LOCK PLATE, BRG. NO.5	
23	15	G	1962M45P01	*A*	1	MDADM978					1			1	BRG. NO. 5R MAIN (DAMPER)	IND-108
23	16	A	9671M28P01	1								1			NUT, BRG. NO. 5 INNER RACE	
23	19	E	L44598P02	1									1		INSULATION BLANKET	
23	21	B	9662M15P05	1									1		NOZZLE, NO. 5 BRG. LUB	
23	24	B	9102M54G06	1									1		SUPPORT, LPT STG. 1 NOZZLE	IND-099
23	26	A	9084M71P01	1									1		J-SEAL, AFT OUTER LINER	
23	33	E	1959M24P01	*A*	1	TP MRCNJ097					1			1	BEARING, NO. 6 ROLLER	
23	38	A	L24588G01	1		MMTE7590							1		SEAL ASSY, NO.6 BRG. STAT.	
23	39	E	L44599G02	1									1		SHIELD, HEAT BRG. NO. 6	
23	41	D	L44606P03	1									1		NO. 6 BRG. STAT. VENT SEAL	
23	42	D	L44633G02	1		SPK928D4							1		SEAL	
23	44	C	9632M71G04	1		JEG60508							1		SEAL ASSY, STG. 1 LPT	IND-032
23	45	A	L21751G01	14									14		NOZZLE, LPTS STG.1 NON-STIG	
23	48	A	9688M08P02	14									14		RETAINER	
30	13	B	9025M12G02	2							2				NUT ASSY, GANG CHANNEL	
30	33	C	L24021G04	1		FCP544EQ						1			SUMP ASSY, DAMPER BRG.	IND-108
32	35	G	9064M27G23	1		FCP54OND							1		SUPPORT ASSY, LP NOZZLE	
33	13	A	9136M10P02	1									1		DOUBLER , INNER VENT TUBE	
33	16	A	L24440P001A	1									1		BRACKET	
33	28	A	9084M64G02	1									1		TUBE ASSY, LUBE SUPPLY	
33	34	A	9063M36G01	1									1		TUBE COOLING VENT	
33	43	A	9127M97P01	1									1		DOUBLER, SCAVENGE	
33	47	A	L21499G02	1									1		TUBE ASSY, SEAL DRAIN	

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print date : 15.12.2009

page number : 19

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MTU Maintenance Berlin-Brandenburg	Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658105600 5600 - LOW PRESSURE TURBINE STATOR
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figure	item	var	P/N	qty	TG	S/N	M	inspection code				DS	desription/remarks	SB
								D	F	B				
36	1	D	1815M18G04	1		PMB20746				1			CASE ASSY, LPT STATOR	IND-099
36	2	E	L47453G02	2				2					INSULATOR, STG.1 NOZZLE	IND-099
36	3	A	9663M72G04	12				3		9			COVER, SEGMENT	
36	4	A	9688M20P01	2						2			COVER, SEGMENT	
36	5	A	9688M20P02	2						2			COVER, SEGMENT	
36	6	C	L47457G01	2						2			HEAT SHIELD, STG.1 SHROUD	IND-099
36	7	C	9663M23G10	14					14				SHROUD ASSY, STG.1 LPTS	
36	9	A	L21495P01	2				2					INSULATOR, STG.2 NOZZLE	
36	10	A	726501	8					8		1		NOZZLE LPTS, STG. 2	
36	10	B	726501	2					2				NOZZLE LPTS, STG. 2	
36	11	A	726501	2					2				NOZZLE LPTS, STG. 2	
36	12	A	726501	2					2				NOZZLE LPTS, STG. 2	
36	14	A	9102M46G01	2						2			SEAL ASSY, STG. 2	
36	15	B	9102M46G05	1						1			SEAL ASSY, STG. 2	
36	15	A	9102M46G05	1				1					SEAL ASSY, STG. 2	
36	16	B	9102M46G06	2						2			SEAL ASSY, STG. 2	
36	17	A	L21760P01	2						2			SPACER	
36	18	B	L21760P05	2				1		1			SPACER	
36	19	A	L21760P03	2						2			SPACER	
36	27	B	9632M38P09	2				2					INSULATOR, STG.2 SHROUD	
36	28	C	9663M24G19	14					3	11			SHROUD ASSY, STG. 2 LPTS	
36	30	A	L21495P02	2				2					INSULATOR, STG.3 NOZZLE	
36	31	A	L21753P01	12					4	8			NOZZLE LPTS, STG. 3 4EA CHR-PN: 736501	
36	32	A	L21753P02	2					2				NOZZLE LPTS, STG. 3 2EA CHR-PN: 736501	
36	33	A	L21753G01	2					2				NOZZLE LPTS, STG. 3 2EA CHR-PN: 736501	
36	35	A	9102M47G01	2						2			SEAL ASSY, STG. 3	
36	36	A	9102M47G02	4						4			SEAL ASSY, STG. 3	
36	37	A	9102M47G03	2						2			SEAL ASSY, STG. 3	
36	39	B	9632M38P10	2				2					INSULATOR, STG.3 SHROUD	
36	40	C	9663M24G22	16					11	5			SHROUD ASSY, STG. 3 LPTS	

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MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658105600 5600 - LOW PRESSURE TURBINE STATOR											
figure	item	var	P/N	qty	TG	S/N	M	inspection code			DS	desription/remarks	SB	
36	41	A	L21495P03	2				D	2				INSULATOR, STG.4 NOZZLE	
36	42	C	1474M44P01	1							1		NOZZLE LPTS, STG. 4	
36	42	B	9663M04P04	51							51		NOZZLE LPTS, STG. 4	IND-047
36	43	B	9102M48G03	6					1		5	1	SEAL ASSY, STG. 4	IND-047
36	44	B	9102M48G04	2							2		SEAL ASSY, STG. 4	IND-047
36	47	B	9632M38P11	2				D	2				INSULATOR, STG.4 SHROUD	
36	48	C	9663M69G18	18							18		SHROUD ASSY, STG. 4 LPTS	
36	49	B	9663M05P05	39					2		37	2	NOZZLE, LPTS STG. 5	
36	49	D	1474M45P01	3							3		NOZZLE, LPTS STG. 5	
36	50	B	9102M49G03	8							8		SEAL ASSY, STG. 5	IND-047
36	51	C	9663M69G20	16							16		SHROUD ASSY, STG. 5 LPTS	
36	52	C	1474M46P01	1							1		NOZZLE, LPTS STG. 6	
36	52	B	9663M06P04	45					2		43		NOZZLE, LPTS STG. 6	IND-047
36	53	B	9102M49G04	8							8		SEAL ASSY, STG. 6	IND-047
36	54	D	9663M70G11	16							16		SHROUD ASSY, STG. 6 LPTS	

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MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658105700 5700 - LOW PRESSURE TURBINE ROTOR													
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
23	30	A	9648M79P04	1						1					RING, RETAINING INTERNAL	
23	31	A	9607M36P02	1	KS							1			RING, NO. 6R BRG. RETAINING	
23	32	A	9607M35P02	1						1					NUT, NO. 6R BEARING PLAIN	
23	35	E	1959M25P01 *A*	1	TP	MRCNA967				1					INNER RACE, BRG. NO. 6	
23	36	A	9658M82P01	1		APV00271						1			SEAL, NO. 6 BRG. OIL ROT.	
34	1	D	L16733G16	1		FIA00308						1			ROTOR ASSY, LPT (NON-STIG)	
38	38	A	L21333P03	1		FIA00232						1			ADAPTER, FWD	
38	39	A	L21352P01	1		FIA00761				1					NUT COUPLING	

MTU Maintenance Berlin-Brandenburg				Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658105800 5800 - TURBINE REAR FRAME												
figure	item	var	P/N	qty	TG	S/N	M	inspection code			D	F	B	DS	desription/remarks	SB
37	1	C	L21656P04	1		D962							1		TRANSDUCER	
37	1	A	L21656P01	*A*	1	D293				1					TRANSDUCER	
37	6	A	L24148P02	2									2		HOUSING	
37	8	A	L15500P01	2	KS								2		SPRING	
37	9	A	L24168P02	2									2		RETAINER, SPRING	
37	18	B	L21186G02	1									1		DISTRIBUTOR, LUBE NOZZLE	IND-024/ DELET
37	22	C	L24113G02	1									1		NOZZLE ASSY, LUBE	IND-024
37	25	A	L21677P02	1									1		MANIFOLD, D SUMP CAST TYPE	
37	30	A	L21119G01	1									1		PLATE, DEFLECTOR	
37	33	A	L21237P01	1									1		COVER, PLATE	
38	1	B	L16727G20	1		FIA00248					1				FRAME ASSY, TURBINE REAR	
38	2	A	L16712G06	1		TWG00262							1		SEAL, FWD STATIONARY AIR	
38	4	A	L16710G05	1		TRIA5439							1		SEAL ASSY, STATIONARY AIR	
38	8	A	L14421G02	1		FIA00236							1		SEAL NO7. BRG FWD STAT. AIR	
38	10	AA	RL14423P03	1		FIA00262					1				SEAL NO.7 BRG FWD STAT. OIL	
38	14	A	L14405P02	1		FIA00508					1				BEARING HOUSING, BRG. NO. 7	
38	15	C	L43720P01	*A*	1	TP	FCAS7999				1			1	BEARING, NO. 7B	IND-090
38	16	A	L16505P02	1									1		DEFLECTOR, AFT	
38	19	C	1959M27P01	*A*	1	MRCP7320					1			1	INNER RACE, BRG. 7R	
38	20	A	L16508P01	1									1		LOCK PLATE, NO.7 BRG.	
38	21	E	1959M26P01	*A*	1	MRCNY065					1			1	BEARING, NO. 7R	
38	28	A	L24238P01	1									1		SPACER RING	
38	29	A	RL14408G04	*A*	1	FIA00263					1				SEAL NO.7 BRG AFT STAT. OIL	
38	32	D	L14409G04	1		EMD02256							1		SEAL AFT STAT. AIR	
39	11	A	L16566G01	3							3				NUT ASSY, GANG CHANNEL	
145	1	A	L31902P03	3									3		INSULATION, TERMAL TRF	IND-065
145	2	A	L31902P02	2									2		INSULATION, TERMAL TRF	IND-065
145	3	A	L31902P01	2									2		INSULATION, TERMAL TRF	IND-065
145	4	A	L31902P05	1									1		INSULATION, TERMAL TRF	IND-065
145	5	A	L31902P07	1									1		INSULATION, TERMAL TRF	IND-065
145	6	A	L31902P06	1									1		INSULATION, TERMAL TRF	IND-065
145	7	A	L31902P04	1									1		INSULATION, TERMAL TRF	IND-065

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print date : 15.12.2009

page number : 23

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MTU Maintenance Berlin-Brandenburg				Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658105800 5800 - TURBINE REAR FRAME											
figure	item	var	P/N	qty	TG	S/N	M	inspection code		D	F	B	DS	desription/remarks	SB
145	8	A	L31902P08	1								1		INSULATION, TERMAL TRF	IND-065
145	9	A	L31908P01	1						1				INSULATION, BLANKET TRF	IND-065
145	10	B	L31907P02	1						1				INSULATION, BLANKET TRF	
145	11	B	L31909P02	1						1				INSULATION, BLANKET TRF	
145	12	A	L31906P01	1						1				INSULATION, BLANKET TRF	IND-065
145	13	A	L31903P01	16								16		RETAINER, INSULATION	IND-065
145	14	A	L31905G01	1								1		STRAP ASSY	IND-065
145	15	A	L31905G02	1								1		STRAP ASSY	IND-065

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print date : 15.12.2009

page number : 24

N = new Item (not in Offlog) / *A* = changed Item (in Offlog, but with other P/N or Qty)

MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658106500 6500 - ACCESSORY GEAR BOX												
figure	item	var	P/N	qty	TG	S/N	M	inspection code		D	F	B	DS	desription/remarks	SB
43	13	A	9609M97P05	1		ACHA8976						1		RADIAL DRIVE SHAFT	
43	21	F	L21441G25	1		EPE80110						1		TRANSFER GEARBOX ASSY	
46	36	B	L42058G01	1								1		TUBEDRAIN AIR/OIL SEPARATOR	IND-050

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print date : 15.12.2009

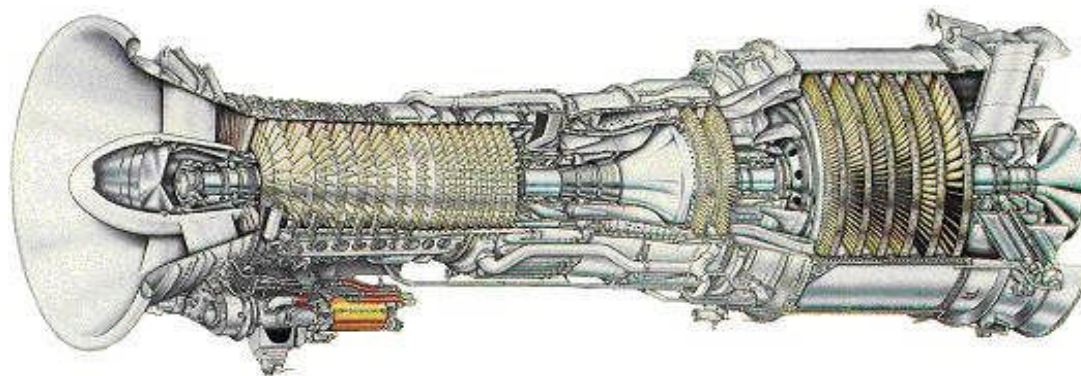
page number : 26

N = new Item (not in Offlog) / *A* = changed Item (in Offlog, but with other P/N or Qty)

MTU Maintenance Berlin-Brandenburg			Onlog-Listing for S/N : 691-098 Customer : PES Kontierung: 5658107100 7100 - ACCESSORIES												
figure	item	var	P/N	qty	TG	S/N	M	inspection code		D	F	B	DS	desription/remarks	SB
4	7	A	L34409P01	1								1		PLATE, ADAPTER	
8	24	F	9691M29P19	1		APMSA339						1		ACTUATOR, VSV	IND-071R1
8	24	F	9691M29P19	1		APMSA335						1		ACTUATOR, VSV	IND-071R1
93	19	C	L34379P03	1		2619191						1		CONTROL, VSV	IND-082
96	21	A	L21674P06	1		MTUBB0056-09						1		VALVE, CHECK	
96	23	B	L21785P06	1		MTUBB0057-09						1		VALVE, CHECK	
131	1	B	L35166P01	6								6		DETECTOR, RESIST.TEMP.(RTD)	IND-151
140	1	H	L44500P08	1		NMAAN112						1		PUMP, LUBE AND SCAVENGE	
144	6	A	L21693P02	1		CCIN2805						1		CABLE, FEEDBACK	



Approved Exchange Part List LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**

S/N: **691-098 / 481-402**

Model: **7LM2500 PE-MGW / 7LM2500 PC 103**

MTU Maintenance Berlin-Brandenburg				approved exchange part numbers					
Kontierung: 5658103400				modul: 3400 - COMPRESSOR REAR FRAME		Engine-S/N: 691-098		customer: PES	
chapter	fig	item	var	ONLOG-PN	exchange-P/N	Qty	description		
	13	37	B	9671M26P09	1853M96P01	1	BEARING, NO. 4 ROLLER		

MTU Maintenance Berlin-Brandenburg

approved exchange part numbers

Kontierung: **5658105200**

modul: **5200 - H.P.T. NOZZLE GUIDE VANE STAGE 2**

Engine-S/N: **691-098**

customer: **PES**

chapter	fig	item	var	ONLOG-PN	exchange-P/N	Qty	description
	29	15	F	L31395G05	704804S	3	NOZZLE, HPT STG.2

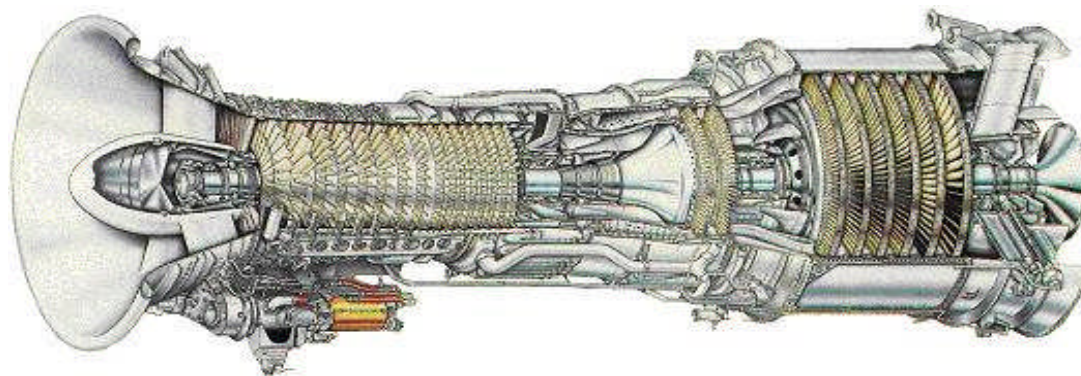
MTU Maintenance Berlin-Brandenburg				approved exchange part numbers					
Kontierung: 5658105300				modul: 5300 - HIGH PRESSURE TURBINE ROTOR		Engine-S/N: 691-098		customer: PES	
chapter	fig	item	var	ONLOG-PN	exchange-P/N	Qty	description		
	27	23	J	704604	704632	1	BLADE, STG. 2 HPTR		

MTU Maintenance Berlin-Brandenburg				approved exchange part numbers					
Kontierung: 5658105700				modul: 5700 - LOW PRESSURE TURBINE ROTOR		Engine-S/N: 691-098		customer: PES	
chapter	fig	item	var	ONLOG-PN	exchange-P/N	Qty	description		
	23	35	E	1959M25P01	9146M72P03	1	INNER RACE, BRG. NO. 6		



Test Report

LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**
S/N: **691-098 / 481-402**
Model: **7LM2500 PE-MGW / 7LM2500 PC 103**



LM2500 Summary Data Sheet

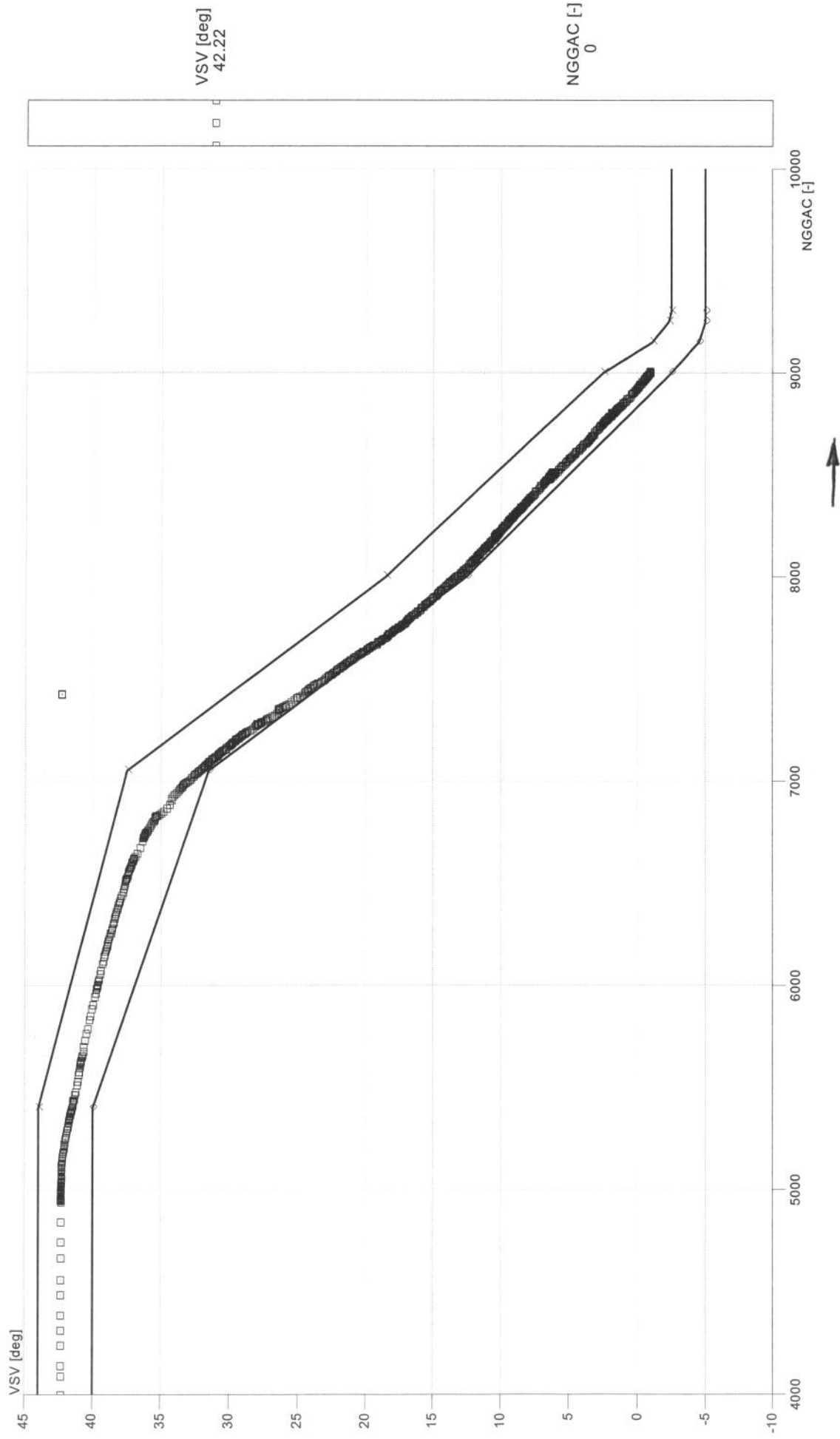
ENGINE S/N: 691-098		CUSTOMER: PES			W.O.: 565.810		
MAX. EGT DURING START [°F]: 758				OIL CONSUMPTION [lbs/h]: nicht messbar			
TIME TO IDLE [SEC]: 46				OIL USED: Mobil Jet 2			
VIBRATION DURING MAX. POWER [MILS]: CRF: 0,77		TMF: 0,495		T OIL SUPPLY [°F] : 144,32			
PERFORMANCE AT T2°F: 49							
1 STG. HPT NGV A4 [sqinch]: 54,334 (Mittelwert)				Liquid fuel FLHV [BTU/LB]: 18532,3			
NGG	RPM	9315	9113	8914	8714	8424	4904
SHAFT POWER	HP	34591	32739	29794	24673	17509	501
SHAFT POWER CORR	HP	36618	34440	31202	25724	18116	
T3 AV	[°F]	809	787	762	726	670	217
T5.4AV	[°F]	1527	1480	1422	1331	1180	767
T5.4 CORR	[°R]	2053	1997	1933	1834	1674	
PT2	[PSIA]	14,356	14,36	14,36	14,36	14,37	14,38
PS3	[PSIA]	257,99	250,28	237,79	215,52	181,44	29,26
PT5.4 AV	[PSIA]	60,483	58,815	56,02	50,96	43,05	15,66
HP RECOUP RH/LH	[PSIA]						
FUEL FLOW CORR	[P/H]	11316	10741	9969	8580	6608	913
VSV	[DEG]	-2,306	-2,291	-0,932	1,881	6,2	42,3
VIB GG CRF	[MILS]	0,77	0,73	0,69	0,49	0,53	0,23
VIB GG TMF	[MILS]	0,495	0,45	0,44	0,43	0,46	0,27
VIB PT CRF	[MILS]						
VIB PT TRF	[MILS]						
TSCAVOIL A	[°F]	191	189	186	182	177	164
TSCAVOIL B	[°F]	228	224	217	210	203	186
TSCAVOIL C	[°F]	237	233	226	216	203	157
TSCAVOIL D	[°F]						
TSCAVOIL AGB	[°F]	178	178	175	172	168	150
P OIL	[PSIG]	63,7	64,1	63,4	62,6	61,4	21,9

REMARKS:

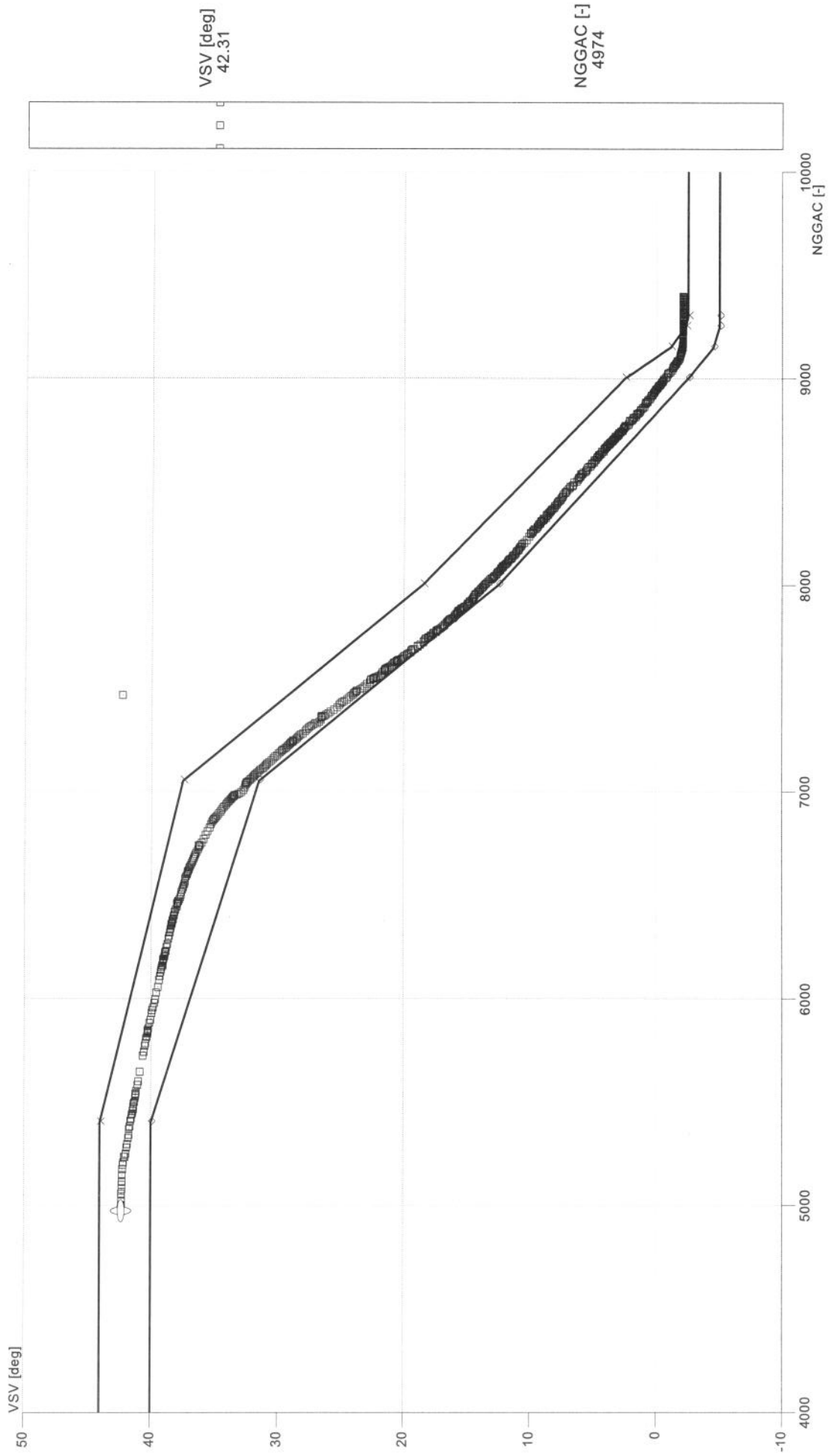
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DATE: 14.12.2009

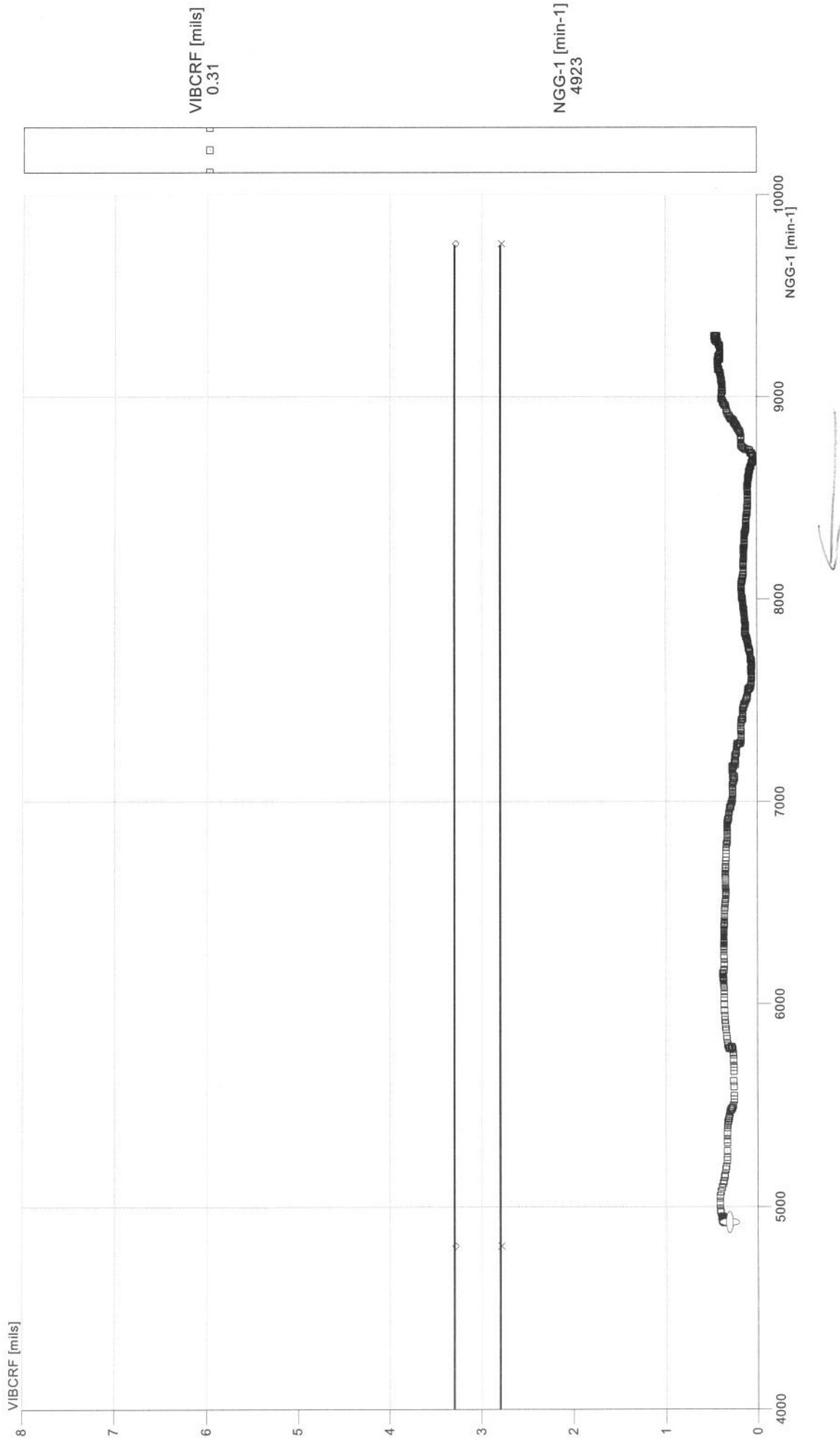
TWK-Familie: LM2500 TWK-Typ: alle Seriennummer: 691098 Bau: L.01223.01.0 Prüfstand: MTU-H-71



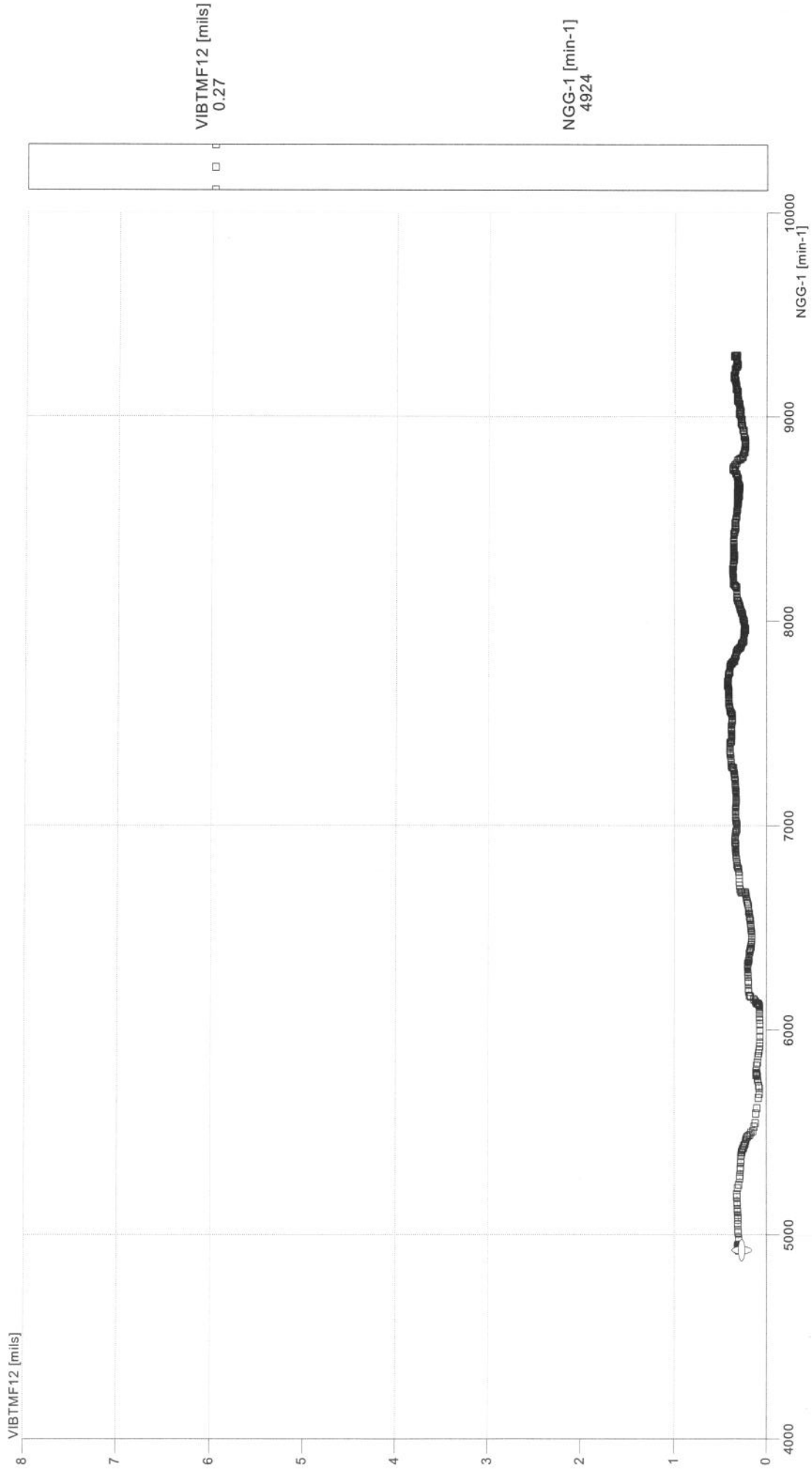
TWK-Familie: LM2500 TWK-Typ: alle Seriennummer: 691098 Bau: L.01223.01.0 Prüfstand: MTU-H-71



TWK-Familie: LM2500 TWK-Typ: alle Seriennummer: 691098 Bau: L.01223.01.0 Prüfstand: MTU-H-71



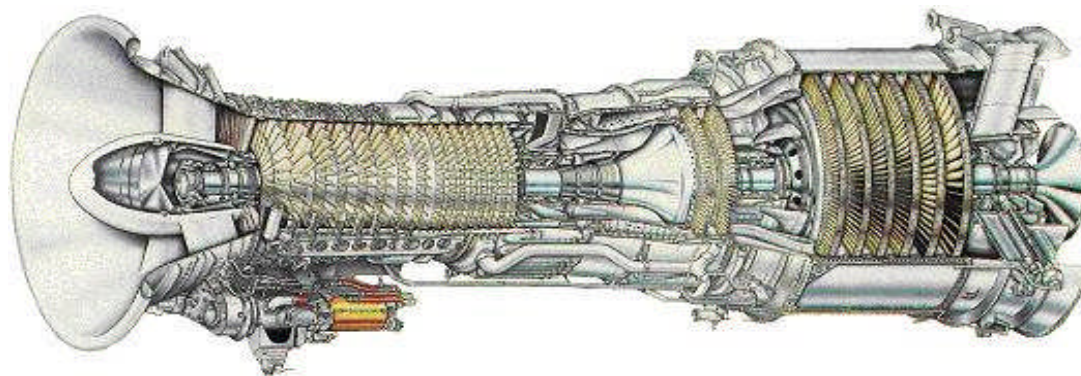
TWK-Familie: LM2500 TWK-Typ: alle Seriennummer: 691098 Bau: L.01223.01.0 Prüfstand: MTU-H-71





Release Note

LM2500 SAC Gas Turbine



Customer: **PROENERGY SERVICES**
S/N: **691-098 / 481-402**
Model: **7LM2500 PE-MGW / 7LM2500 PC 103**



Nr./No.: 260/09

WERKSCHESCHENIGUNG
RELEASE NOTE/APPROVAL CERTIFICATE

Auftraggeber:
Purchaser: **ENERGY PARTS SOLUTIONS**
2031 ADAMS ROAD
SEDALIA, MISSOURI 65301
USA

Lieferanzeige Nr.
Despatch Note No.

Unsere Auftrags Nr.
Our Order No. **565810**

Kunden Auftrag Nr.
Your Order No.

Folgende Waren werden geliefert/The following items will be delivered:

Pos. Nr. Item No.	Teile-Nr. Part Number	Bezeichnung Description	Anzahl Quantity	Los Nr./ Serial Nr. Batch/ Serial No.	Stempel der Kontrolle Inspector's Stamp
1	7LM2500 PE - MGW	GASGENERATOR	1	691 - 098	
2	7LM2500 PC 103	POWERTURBINE	1	481 - 402	

Bemerkung: Gasturbine wurde instandgesetzt und getestet in Übereinstimmung mit
Remark: GEK 99418 LM2500.

Gasturbine was repaired and tested in accordance with
GEK 99418 LM2500.

Wir versichern, daß alle hier aufgeführten Teile/Materialien* - soweit nichts anderes angegeben ist - gemäß den jeweiligen Vertrags-/Auftragskonditionen hergestellt/bearbeitet/überholt/instandgesetzt/modifiziert*, getestet und geprüft wurden. Die Teile/Materialien* entsprechen voll den in den Verträgen/Aufträgen angegebenen Normen/Spezifikationen.

* Unzutreffendes streichen

Certified that, unless otherwise stated above, the whole of the above-mentioned parts/materials* have been manufactured/processed/overhauled/repaired/modified*, tested and inspected in accordance with the terms of the contract/order applicable thereto and conform fully to the standards/specifications quoted hereon.

*Delete where inapplicable

Unterzeichnet
Signed **Waldmann**

Im Auftrag von
MTU Maintenance Berlin-Brandenburg

For and on behalf of
MTU Maintenance Berlin-Brandenburg

Datum: 2009-11-11
Date

MTU Maintenance Berlin-Brandenburg ist zugelassen bzw. registriert als/
MTU Maintenance Berlin-Brandenburg is approved and/or registered as:
EASA Repair Station: Nr. DE.145.003
LBA Manufactory Approval: Nr. DE.21G.0067
FAA Repair Station: Nr. MT7Y352J
DIN EN ISO 9001: Nr. 41008729

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