

MANDATORY SERVICE BULLETIN

NO. MSBD4-026/1

SUPERSEDES MANDATORY SERVICE BULLETIN

NO. MSBD4-026

I. TECHNICAL DETAILS

1.1 Category

Mandatory.

1.2 Airplanes affected

DA 40 D

Serial numbers 40.080, 40.084, D4.001 up to and incl. D4.029, D4.031, D4.032, D4.037, D4.046, D4.047, D4.048, D4.050, D4.051, D4.053, D4.054, D4.055, D4.058, D4.059.

1.3 Time of Compliance

At the engine replacement.

1.4 Subject

Power plant.

ATA-Code: 71-00

1.5 Reason

The engine TAE 125-01, revision 4 is no longer available.

The installation of the revised engine TAE 125-01, revision 5 requires modifications on the airplane itself which are described in this Service Bulletin and the attached Work Instruction.

1.6 Concurrent documents

- Work Instruction WI-MSBD4-026, latest effective issue.
- Temporary Revision to the Airplane Maintenance Manual (Doc. No. 6.02.01) AMM-TR-MÄM-40-124 if the AMM revision status is 4 or lower.
- Temporary Revision to the Airplane Flight Manual TR-MÄM-40-124 if the AFM revision status is 3 or lower.

1.7 Approval

The technical information or instructions contained in this document relate to the Design Change Advisory no. MÄM 40-124 which has been approved by EASA under approval number 48 on October 8th, 2003.

The technical information contained in this document has been approved under the authority of JAA Design Organization Approval No. MOT JA-01.

1.8 Measures

Work Instruction WI-MSBD4-026, latest effective revision, must be complied with.

1.9 Mass (Weight) and CG

A new weighing of the airplane must be performed.

II. PLANNING INFORMATION

2.1 Material & Availability

All necessary parts with specific part numbers can be ordered from Diamond Aircraft Industries GmbH or from your local General Distributor or Diamond Service Center. All other parts shall be procured locally.

2.2 Special Tools

No special tools are required.

2.3 Labor effort

Appr. 12 hours.

2.4 Credit

Not applicable.

2.5 Reference documents

- DA 40 Series Airplane Maintenance Manual, Doc. No. 6.02.01.
- DA 40 D Airplane Flight Manual, Doc. No. 6.01.05-E (6.01.05, German language).

III. REMARKS

1. All measures must be carried out by the manufacturer, a certified aircraft service station or a certified aircraft maintenance mechanic.
2. Accomplishment of the measures must be confirmed in the log book.
3. In case of doubt, contact Diamond Aircraft.

WORK INSTRUCTION WI-MSBD4-026/2

„INSTALLATION OF THE TAE 125 R5 ENGINE“

SUPERSEDES WORK INSTRUCTION WI-MSBD4-026/1

SUBJECT

The installation of the revised TAE 125 R5 engine.

NOTE: When purchasing parts at Diamond Aircraft in Wiener Neustadt, order parts by the numbers given in parenthesis, if specified.

NOTE: Make sure to have the latest version of the TAE 125 ECU Operator Software.

DRAWINGS, MATERIALS, SPECIAL TOOLS

MATERIALS

<u>Qty</u>	<u>Description</u>	<u>Part Number</u>
1	AMM-TR-MÄM-40-124	not applicable
1 or 1	TR-MÄM-40-124 (English)	not applicable
	TR-MÄM-40-124 (German)	not applicable
1	Intercooler	D4D-8126-20-00
1	Connecting pipe	D4D-8126-30-00
1	Manifold Pressure line	D4D-7153-14-00 (60.1620)
1	Top cowling	D4D-7116-04-00
1	Engine TAE 125	60.1300
3	Oetiker clamp 12.3	11.0070
1	Tube Gates 6x15x2850	3225-10052 (15.2400)
2	Manifold Pressure connector	D4D-7156-11-00

1	Aluminum clamp 25/15 RSGU1	11.1380
1	Mount, vibration	316-041
1	Hexagon bolt M6x16	LN9037 M6x16 (10.2240)
1	Standard Bonding Wire	DS-BW1-B14-RB6- RB6-065
2	Hexagon bolt M6x18	LN9037 M6x18 (10.2020)
4	Washer	DIN125-A2-M6 (10.7250)
3	Locking nut with Polyamide insert	DIN 985-A2-M6 (10.5680)
2	Washer, rubber (20x6.5x1.5)	Z6313617 (10.6631)
2	O-Ring, 24 Viton, 70 shore, FCO-24V for Wiggins Clamp	60.0660
2	Hose clamp 8-12 mm	11.0630
1	Cu-Dichtring	60.1250
1 or 1 or 1	Oil placard, german	D41-1126-10-21
	Oil placard, english	D4D-1126-20-21
	Oil placard, french	D41-1126-30-21
1 or 1 or 1	APU placard, german	D41-1126-10-22
	APU placard, english	D4D-1126-20-22
	APU placard, french	D41-1126-30-22
1 or 1 or 1	Gearbox oil placard, german	DA4-1126-10-27
	Gearbox oil placard, english	DA4-1126-20-27
	Gearbox oil placard, french	DA4-1126-30-27

DRAWINGS

- D4D-7526-00-00"b"
- D4D-8126-01-00"c"
- D4D-7156-01-00
- D4D-7156-11-00
- D4D-7153-01-00

SPECIAL TOOLS

None.

ACCOMPLISHMENT INSTRUCTIONS

1	Remove top and bottom cowling in accordance with the Airplane Maintenance Manual, Doc. No. 6.02.01.
2	Remove the engine and the ECU in accordance with the Airplane Maintenance Manual, Doc. No. 6.02.01 and disconnect the AED and the CED.
3	Install the new ECU in accordance with the Airplane Maintenance Manual Doc. No. 6.02.01. Remove the mounting brackets from the old ECU and install them on the new one.
4	<p>Install the ECU connectors in accordance with dwg. no. D4D-7153-01-00 with Oetiker clamps (items 27) part no. 11.1544.</p> <p>NOTE: The old ECU connection consisted of only one tube each for Static and Manifold Pressure running forward. The new ECU connection consists of two tubes for the Manifold Pressure, as seen on dwg. no. D4D-7153-01-00.</p>
5	Install the new Manifold Pressure line part no. D4D-7153-14-00 to the ECU in accordance with dwg. no. D4D-7153-01-00.
6	<p>Install the new R5 engine part no. 60.1300 in accordance with the Airplane Maintenance Manual Doc. No. 6.02.01.</p> <p>NOTE: As shown on dwg. no. D4D-7526-00-00, the connectors (items 32) to the heat exchanger have been swapped.</p>
7	Install the Manifold Pressure connectors part no. D4D-7156-11-00 in accordance with dwg. no. D4D-7156-01-00, items 29, and the second Manifold Pressure line (A) with tube part no. 3225-10052 in accordance with dwg. no. D4D-7156-01-00, items 30 using hose clamps 8-12 mm, part no. 11.0630.
8	Connect the air temperature sensor, item 32 on dwg. no D4D-7156-01-00.
9	Install the mountings for the Intercooler from part nos. LN9037 M6x16, DS-BW1-B14-RB6-RB6-040, LN9037 M6x18, DIN 125-A2-M6, DIN985-A4-M6 and Z6313617 in accordance with dwg. no. D4D-8126-01-00, views F and G, items 17, 19, 20, 24, 27, 28.
10	Install the new Intercooler (part no. D4D-8126-20-00) and the new connecting pipe (part no. D4D-8126-30-00) in accordance with the Airplane Maintenance Manual Doc. No. 6.02.01 and dwg. no. D4D-8126-01-00 with new O-rings for the Wiggins clamp part no. 60.0660.
11	Install the vibration mount part no. 316-041 in accordance with dwg. no. D4D-7526-00-00, item 49.
12	Ensure a tight fit of all parts.
13	Check for foreign objects.

14	Install the bottom cowling and the new top cowling part no. D4D-7116-04-00 in accordance with the Airplane Maintenance Manual, Doc. No. 6.02.01. Remove the rubber seal, if required and trim the top cowling at the inlet of the water cooler to avoid chafing. Then reinstall the rubber seal.
15	Install the gearbox oil placard on the gearbox. Install the oil placard on the oil filler panel of the top cowling and the APU placard on the access panel on the top cowling.
16	Perform a new weighing of the airplane in accordance with the Airplane Maintenance Manual, Doc. No. 6.02.01.
17	Insert the Temporary Revision AMM-TR-MÄM-40-124 into the Airplane Maintenance Manual, Doc. No. 6.02.01.
18	Insert the Temporary Revision TR-MÄM-40-124 (English or German) into the Airplane Flight Manual.

REFERENCE DOCUMENTS

- DA 40 Series Airplane Maintenance Manual, Doc. No. 6.02.01, latest effective issue.
- DA 40 D Airplane Flight Manual, Doc. No. 6.01.05-E (6.01.05, German language).

REMARK

- The work must be carried out by a certified aircraft service station or a certified aircraft maintenance mechanic.
- In case of doubt, contact Diamond Aircraft.

TEMPORARY REVISION

AMM-TR-MÄM-40-124

DA 40 D

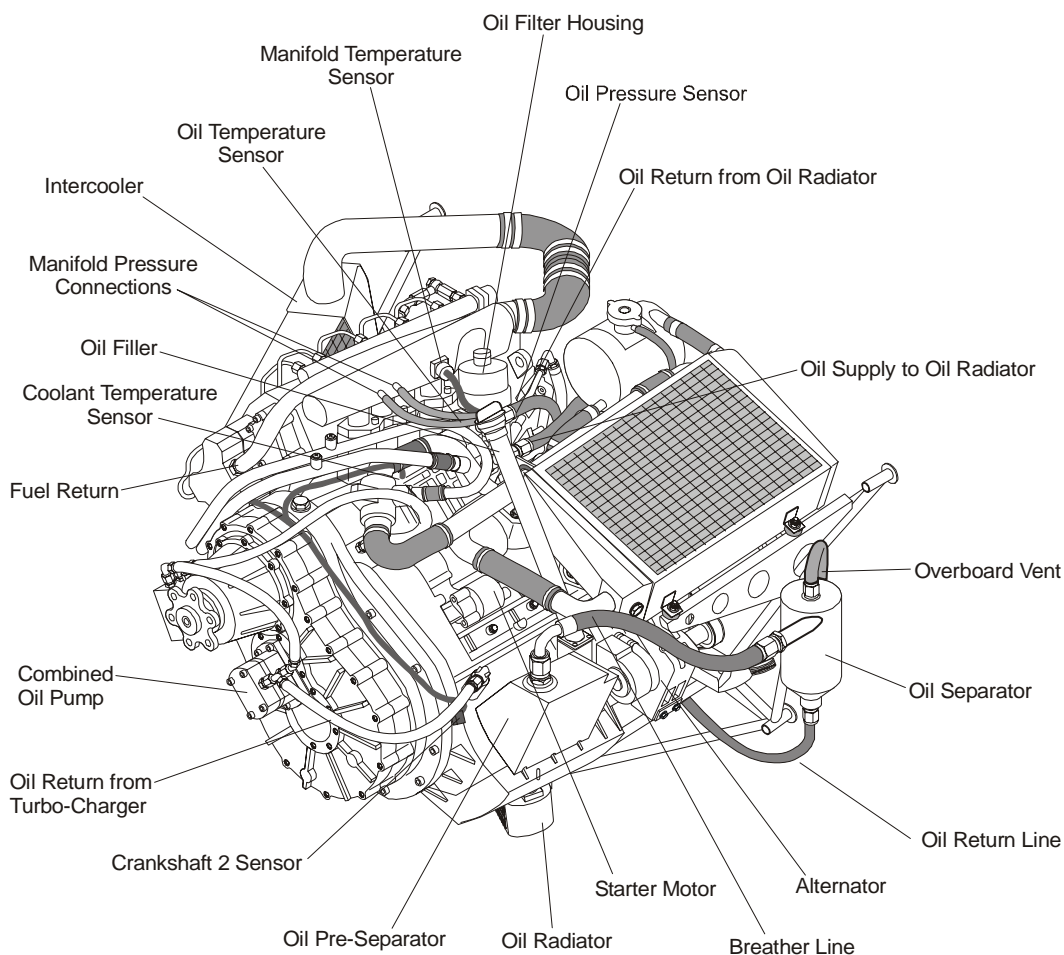
TAE 125 Rev. 5

This Temporary Revision AMM-TR-MÄM-40-124 is approved in conjunction with the Optional Design Change Advisory MÄM 40-124 and is valid in conjunction with the Airplane Maintenance Manual Revision 4.

The limitations and information contained herein either supplement or, in the case of conflict, override those in the Airplane Maintenance Manual.

AFFECTED CHAPTERS:**CHAPTER 71****POWER PLANT****Section 71-01****Power Plant - TAE 125 Diesel Engine****2. Remove/Install the Engine (without the Engine Mount)**

Note: If you remove an engine with a serial number which is not higher than 02-01-0309-SL01-004-0100, and replace it with an engine with serial number 02-01-0309-SL01-004-0101 or higher, then you must carry out Service Bulletin No. OSBD4-026 before you install the new engine.



**Figure 2a: TAE 125 Diesel Engine Components,
 Engine S/N 02-01-0309-SL01-004-0101 and higher**

B. Remove the Engine

	Detail Steps/Work Items	Key Items/References
(14)	Disconnect the engine wire harness and bonding cables from these electrical sensors: [...] <ul style="list-style-type: none"> - Manifold air temperature. [...]	At the engine inlet manifold.
(14.A)	Disconnect both manifold pressure connections.	At the engine inlet manifold.
(15)	Remove the intercooler.	Refer to Chapter 81.

C. Install the Engine

	Detail Steps/Work Items	Key Items/References
(16.A)	Install the intercooler.	Refer to Chapter 81.
(16.B)	Connect both manifold pressure connections.	At the engine inlet manifold.
(17)	Move the engine wire harness into position on the engine. Connect the engine wire harness and bonding cables to these electrical sensors: [...] <ul style="list-style-type: none"> - Manifold air temperature. [...]	At the engine inlet manifold.

CHAPTER 81

TURBINES

2. Description

The outlet from the intercooler connects to the engine inlet manifold. ~~A manifold pressure sensor and a manifold temperature sensor attach to the outlet pipe from the intercooler.~~

Maintenance Practices

2. Remove/Install the Intercooler

A. Remove the Intercooler

	Detail Steps/Work Items	Key Items/References
WARNING: YOU MUST MAKE SURE THAT THE ENGINE IS SAFE BEFORE YOU DO WORK ON THE ENGINE. IF THE PROPELLER TURNS IT CAN CAUSE INJURY TO PERSONS.		
(1)	Make sure that the engine is safe: <ul style="list-style-type: none">- Set the ELECTRIC MASTER key switch to OFF.- Set the ENGINE MASTER switch to OFF.- Set the power lever to IDLE.	
(2)	Remove the engine cowlings.	Refer to Section 71-11.
(3)	Release the worm-drive clamps that attach the hose from the turbo-charger.	At the intercooler.
(4)	Release the worm-drive clamps that attach the hose to the engine inlet manifold.	At the intercooler.
(5)	Remove the bolt, nuts and washers and vibration mount attaching the intercooler to the engine mounting frame.	
(6)	Remove the intercooler from the airplane.	

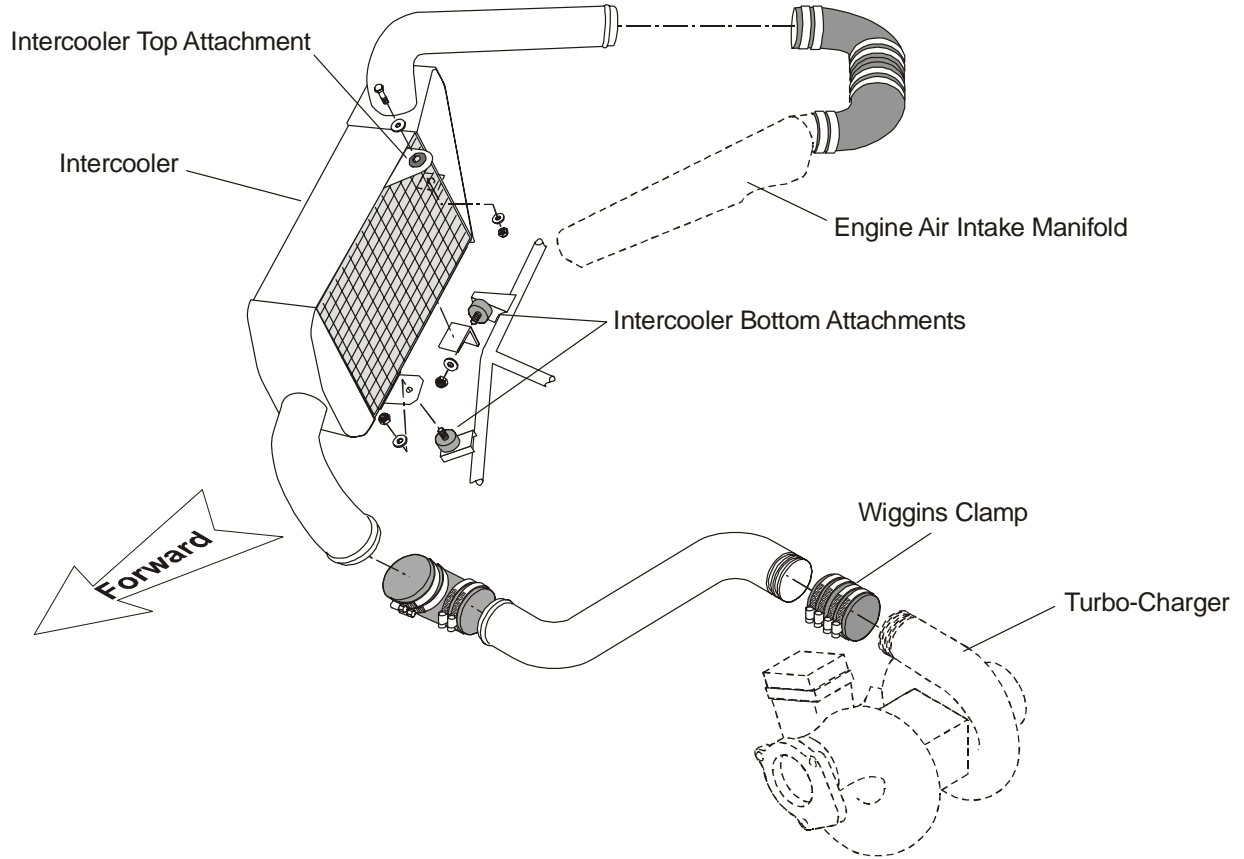


Figure 1: Intercooler Installation

B. Install the Intercooler

	Detail Steps/Work Items	Key Items/References
WARNING: YOU MUST MAKE SURE THAT THE ENGINE IS SAFE BEFORE YOU DO WORK ON THE ENGINE. IF THE PROPELLER TURNS IT CAN CAUSE INJURY TO PERSONS.		
(1)	Make sure that the engine is safe: <ul style="list-style-type: none"> - Set the ELECTRIC MASTER key switch to OFF. - Set the ENGINE MASTER switch to OFF. - Set the power lever to IDLE. 	
(2)	Put the intercooler in position on the engine mount. <ul style="list-style-type: none"> - Move the inlet and outlet pipes into position in the related flexible hoses. 	Refer to Figure 1.
(3)	Install the attaching bolts, washers, nuts and vibration mount.	
(4)	Tighten the worm-drive clamps that attach the hose from the turbo-charger.	At the intercooler.
(5)	Tighten the worm-drive clamps that attach the hose to the engine inlet manifold.	At the intercooler.
(6)	Install the engine cowlings.	Refer to Section 71-11.
(7)	Do an engine run-up.	Refer to Section 71-01.

TEMPORARY REVISION

TR-MÄM-40-124

DA 40 D TAE 125 Rev.5

This Temporary Revision TR-MÄM-40-124 is approved in conjunction with the Mandatory Design Change Advisory MÄM 40-124. For the operation with the revised engine this TR must be included in the AFM or that AFM revision must be used in which the TR is incorporated.

The limitations and information contained herein either supplement or, in the case of conflict, override those in the Airplane Flight Manual.

Affected Chapters:

1. GENERAL

1.1 INTRODUCTION

The following Entry must be added to the Modification List:

Modification	Source	Installed	
TAE 125 Rev.5	MÄM 40-124	<input type="checkbox"/> yes	<input type="checkbox"/> no

Doc. No. 6.01.05-E	TR-MÄM-40-124	28 Sep 2003	Page 1 of 7
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3.2 ENGINE PROBLEMS

3.2.4 RESTARTING THE ENGINE WITH WINDMILLING PROPELLER

NOTE

Restarting the engine with windmilling propeller is possible at airspeeds between 73 and 110 KIAS and altitudes below 6000 ft pressure altitude.

1. Airspeed for best glide angle	73 KIAS (1150 kg, 2535 lb) 68 KIAS (1000 kg, 2205 lb) 60 KIAS (850 kg, 1874 lb)
2. Power lever	MAX
3. Emergency fuel valve	check NORMAL
4. Alternate air	OPEN
5. Fuel transfer pump	ON
6. AVIONIC MASTER	OFF
7. ELECTRIC MASTER	ON
8. ENGINE MASTER	ON
9. Airspeed	73 to 110 KIAS
10. AVIONIC MASTER	ON

.2.5 RESTARTING THE ENGINE WITH STATIONARY PROPELLER**NOTE**

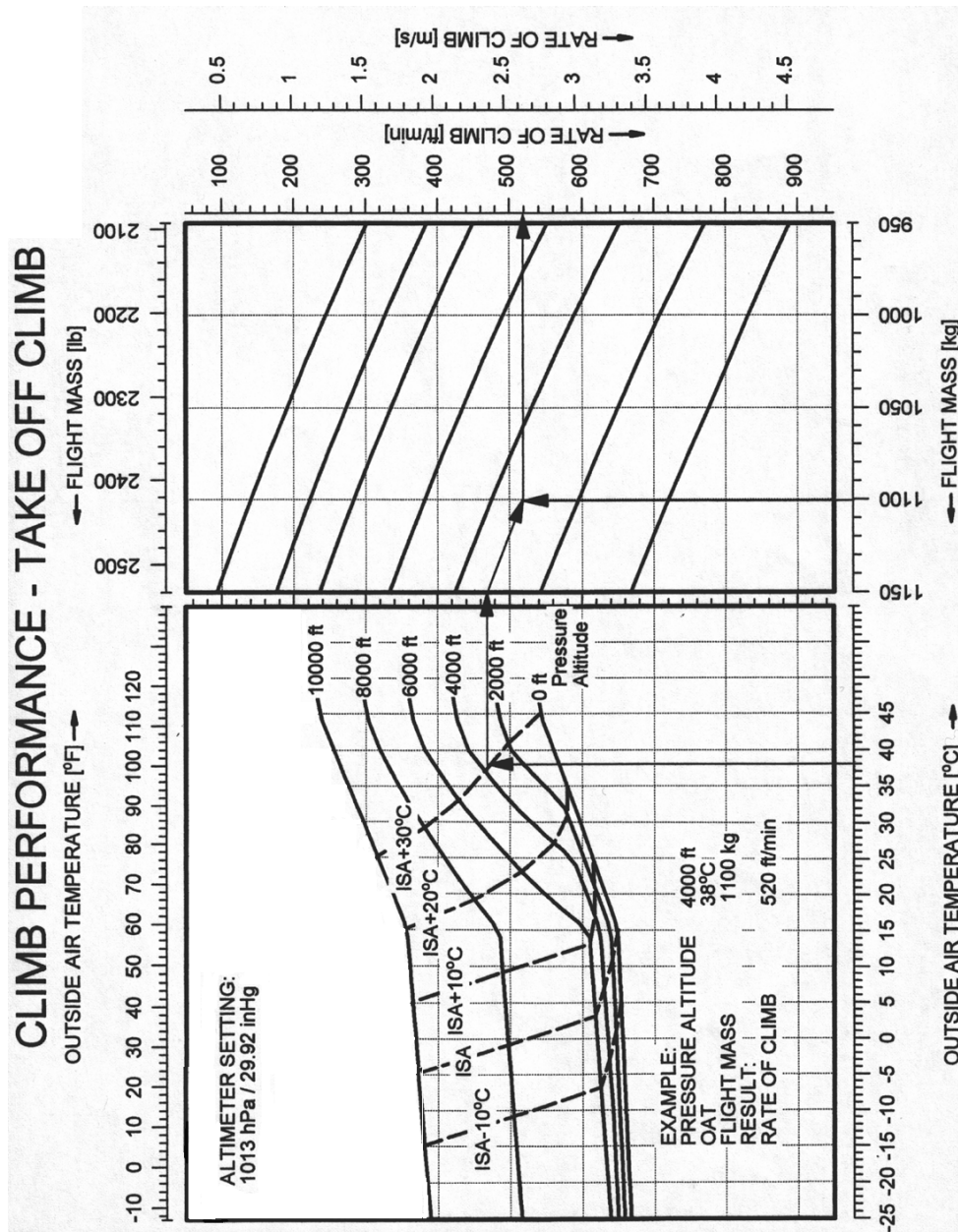
Restarting the engine with stationary propeller is possible at altitudes below 6000 ft pressure altitude.

NOTE

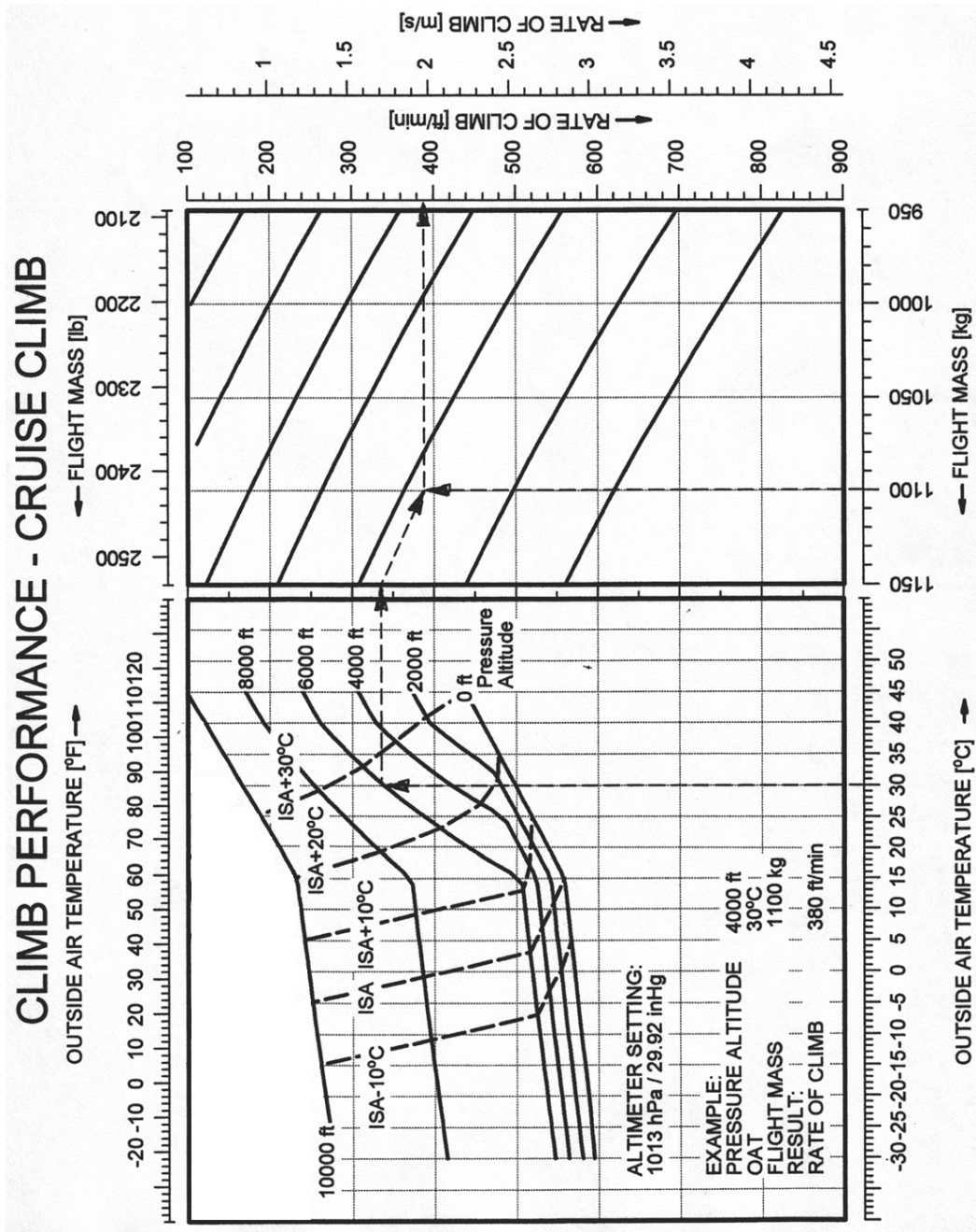
Only if the ENGINE MASTER is switched OFF and ON again, glowing will be initiated. Glowing must be initiated shortly before the restart attempt. If glowing was done above 6000 ft pressure altitude, it must be repeated.

5.3 PERFORMANCE TABLES AND DIAGRAMS

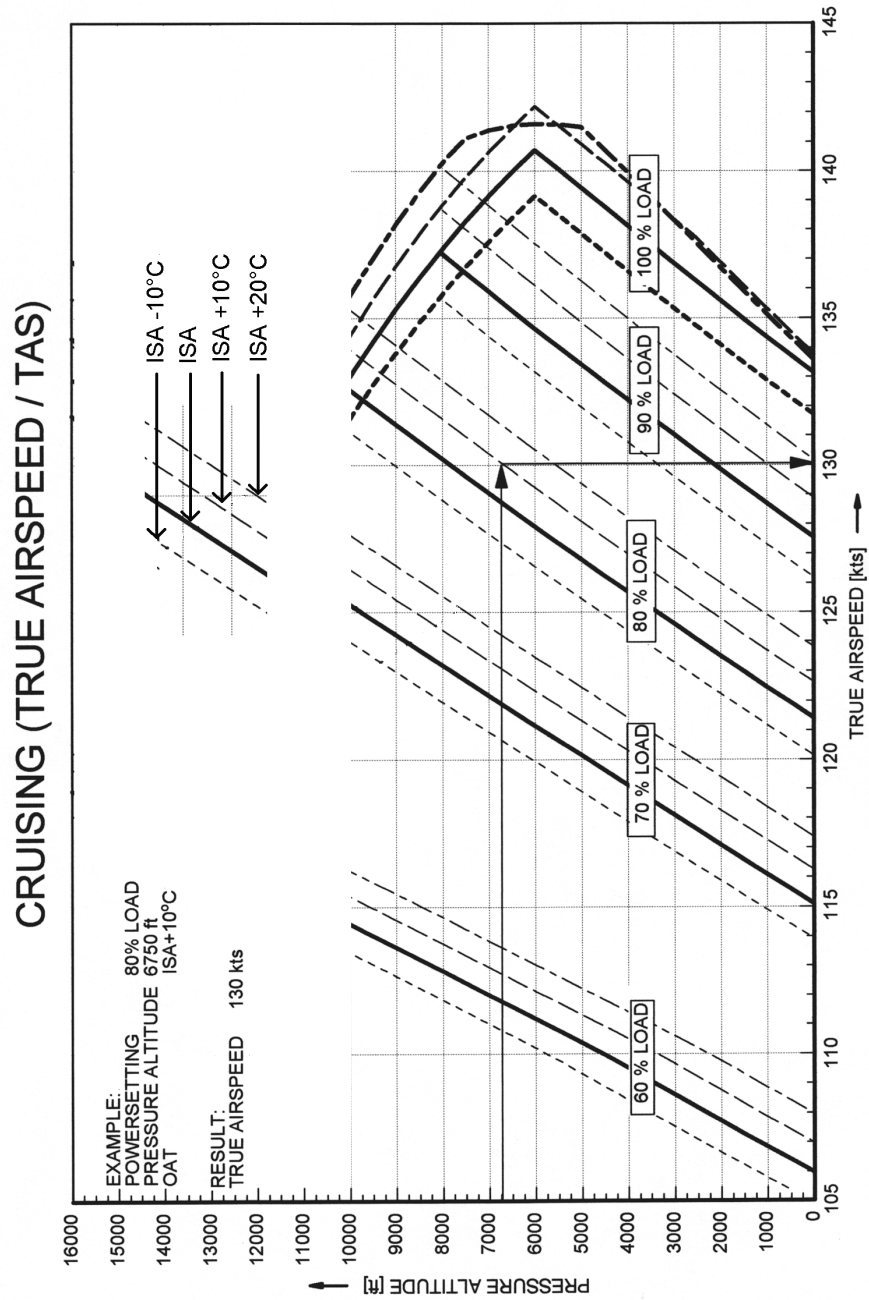
5.3.8 CLIMB PERFORMANCE - TAKE-OFF CLIMB



5.3.9 CLIMB PERFORMANCE - CRUISE CLIMB



5.3.10 CRUISING (TRUE AIRSPEED TAS)



DA 40 D AFM



Temporary Revision

DA 40 D

TAE 125, Rev.5

6.5 EQUIPMENT LIST AND EQUIPMENT INVENTORY

Airplane Serial No.:		Registration:		Date:	
Description	Type	Part No.	Manufacturer	S/N	in- stalled
ENGINE	TAE 125-01	02-7200-14005R5	Thielert		
ENGINE CONTROL UNIT	ECU	02-7610-55001R(*)	Thielert		
	ECU Software TAE-125 m2.32	02-7610-55101R(*)	Thielert		
	ECU Mapping T14V230DIA	50-7610-55105R(*)	Thielert		

TEMPORÄRE REVISION

TR-MÄM-40-124

DA 40 D - TAE 125 Rev. 5

Diese Temporäre Revision TR-MÄM-40-124 wurde im Zusammenhang mit der vorgeschriebenen Änderungsmitteilung MÄM 40-124 anerkannt. Für den Betrieb mit dem modifizierten Motor muß diese TR im Flughandbuch eingeordnet sein oder die Flughandbuchrevision verwendet werden, in der diese TR eingearbeitet wurde.

Die Betriebsgrenzen und/oder Informationen, die in dieser Temporären Revision enthalten sind, ergänzen oder ersetzen (im Falle von Widersprüchen) jene, die im Flughandbuch enthalten sind.

Betroffene Kapitel:

1. ALLGEMEINES

1.1 EINFÜHRUNG

Der folgende Eintrag muß in die Liste der Änderungen aufgenommen werden:

Änderung	Bezug	vorhanden	
TAE 125 Rev. 5	MÄM 40-124	<input type="checkbox"/> ja	<input type="checkbox"/> nein

Doc. No. 6.01.05	TR-MÄM- 40-124	28 Sep 2003	Seite 1 von 7
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3.2 MOTORSTÖRUNGEN

3.2.4 WIEDERANLASSEN DES MOTORS MIT DREHENDEM PROPELLER

ANMERKUNG

Das Wiederanlassen des Motors mit drehendem Propeller ist bei Fluggeschwindigkeiten zwischen 73 und 110 KIAS und Höhen unterhalb 6000 ft Druckhöhe möglich.

- | | |
|--|--|
| 1. Geschwindigkeit für besten Gleitwinkel | 73 KIAS (1150 kg)
68 KIAS (1000 kg)
60 KIAS (850 kg) |
| 2. Leistungshebel | MAX |
| 3. Emergency fuel valve | check NORMAL |
| 4. Alternate air | OPEN |
| 5. Kraftstofftransferpumpe | ON |
| 6. AVIONIC MASTER | OFF |
| 7. ELECTRIC MASTER | ON |
| 8. ENGINE MASTER | ON |
| 9. Fluggeschwindigkeit | 73 bis 120 KIAS |
| 10. AVIONIC MASTER | ON |

3.2.5 WIEDERANLASSEN DES MOTORS MIT STEHENDEM PROPELLER

ANMERKUNG

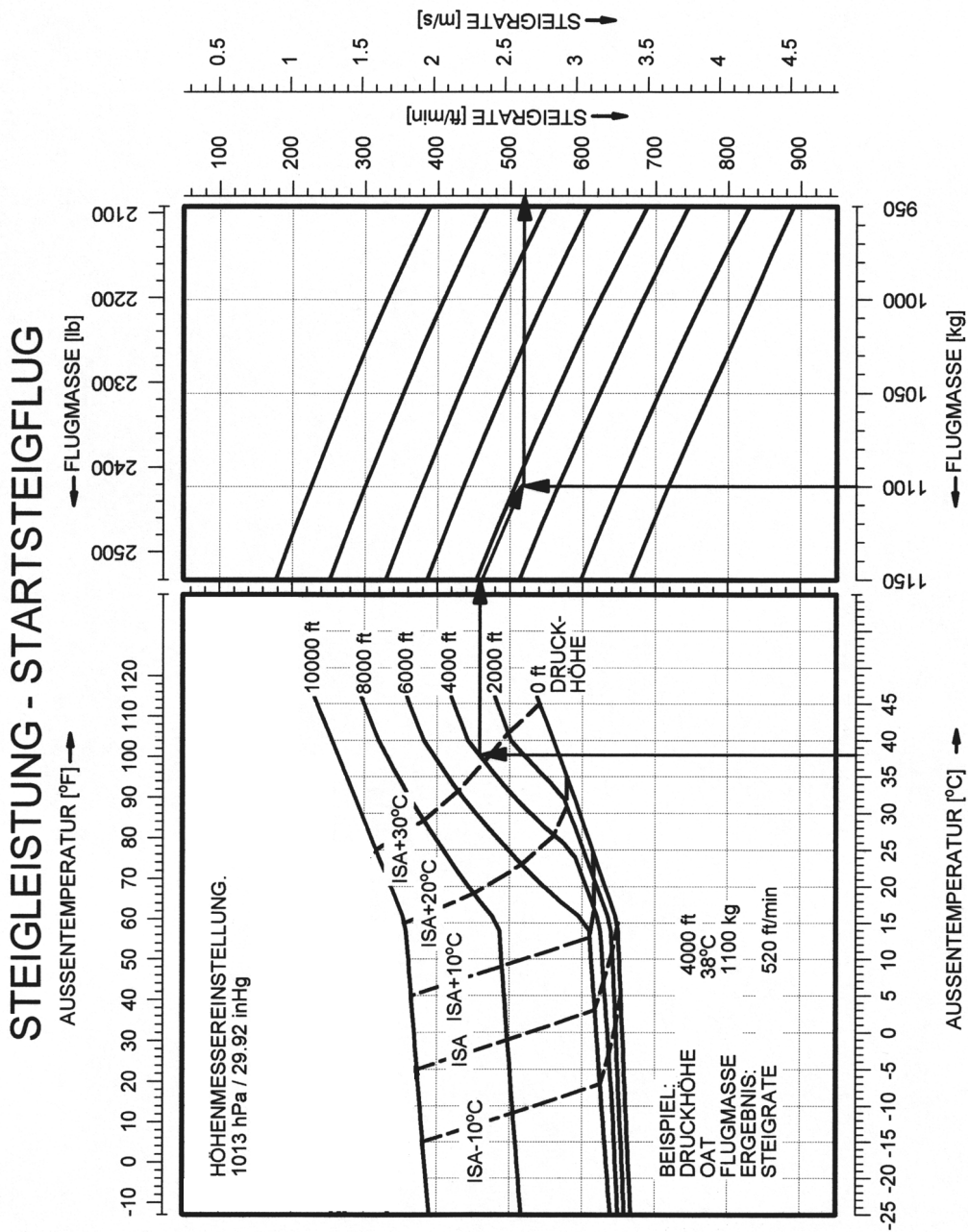
Das Wiederanlassen des Motors mit stehendem Propeller ist unterhalb von 6000 ft Druckhöhe möglich.

ANMERKUNG

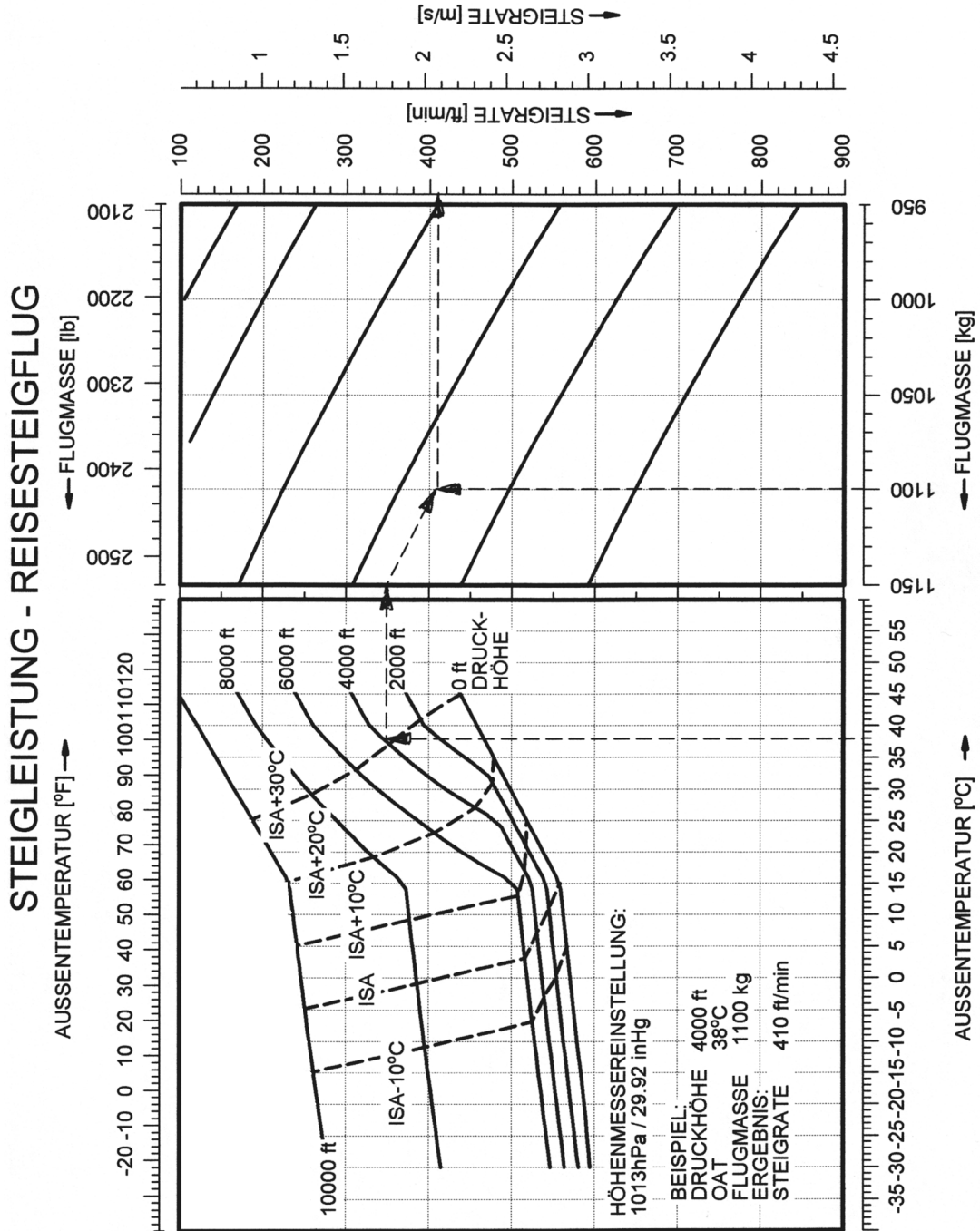
Nur wenn der ENGINE MASTER aus- (OFF) und wieder eingeschaltet (ON) wird, kann das Vorglühen ausgelöst werden. Das Vorglühen muß kurz vor dem Wiederanlaßversuch ausgelöst werden. Wurde über 6000 ft Druckhöhe vorgeglüht, muß es wiederholt werden.

5.3 LEISTUNGSTABELLEN UND -DIAGRAMME

5.3.8 STEIGLEISTUNG - STARTSTEIGFLUG

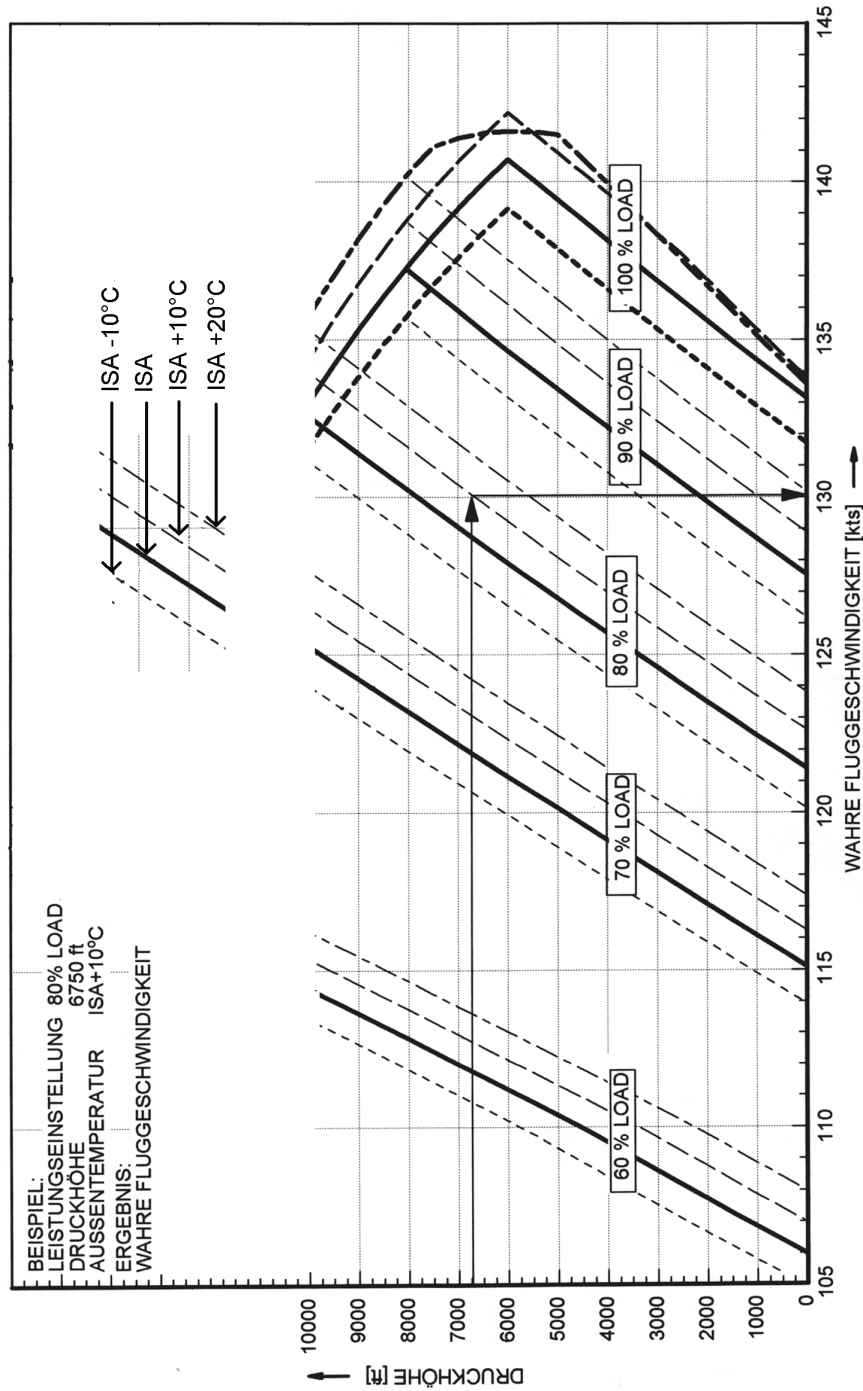


5.3.9 STEIGLEISTUNG - REISESTEIGFLUG



5.3.10 REISEFLUG (WAHRE FLUGGESCHWINDIGKEIT TAS)

REISEFLUG (WAHRE FLUGGESCHWINDIGKEIT / TAS)

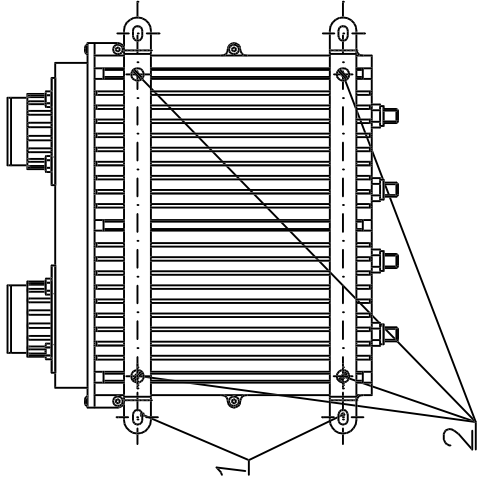
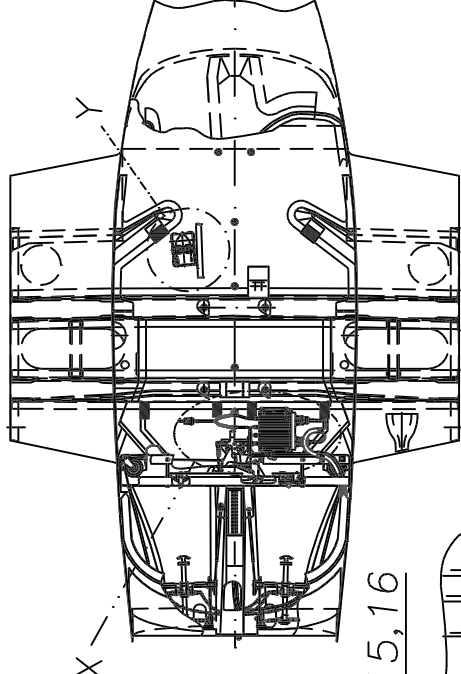


6.5 AUSRÜSTUNGLISTE UND AUSRÜSTUNGSVERZEICHNIS

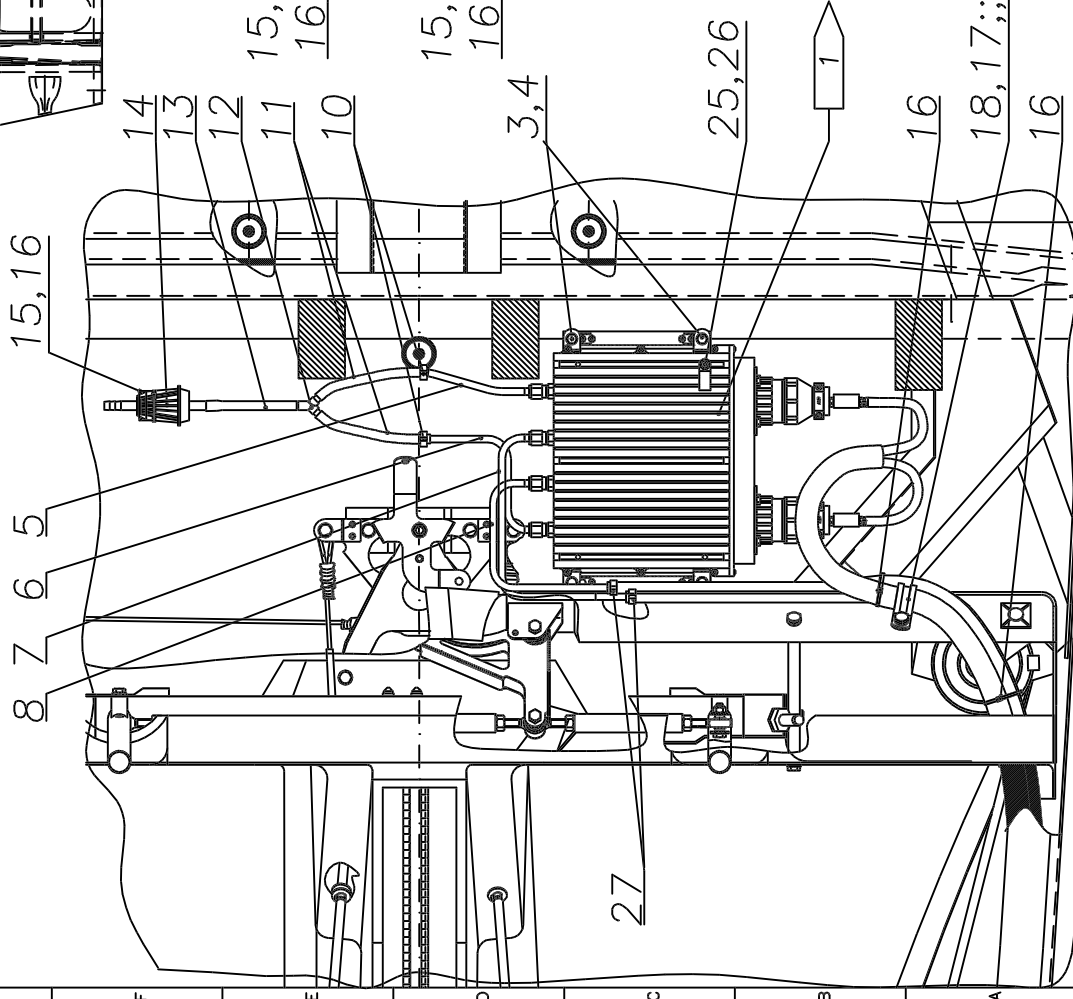
Die Ausrüstungsliste muß um folgende Punkte ergänzt werden:

Flugzeug Werknummer:		Kennzeichen:		Datum:	
Beschreibung	Type	Teilenr.	Hersteller	S/N	eingebaut
ENGINE	TAE 125-01	02-7200-14005R5	Thielert		
ENGINE CONTROL UNIT	ECU	02-7610-55001R(*)	Thielert		
	ECU Software TAE-125 m2.32	02-7610-55101R(*)	Thielert		
	ECU Mapping T14V230DIA	50-7610-55105R(*)	Thielert		

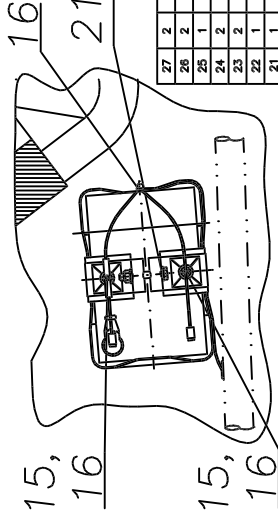
ECU-Box: Ansicht von unten
M 1:2



Ansicht X:
NTS



Ansicht Y:
NTS



- 21,24,22,23;;23,(22),24,20

25,26

18,17;;19,20

Notes (Hinweis zur Fertigung):
Im Lieferumfang Motor enthalten. Software Spec. siehe Motorenspec. DAI-9072-00-02.
Supplied with engine. Software Spec. refer to DAI-9072-00-02.

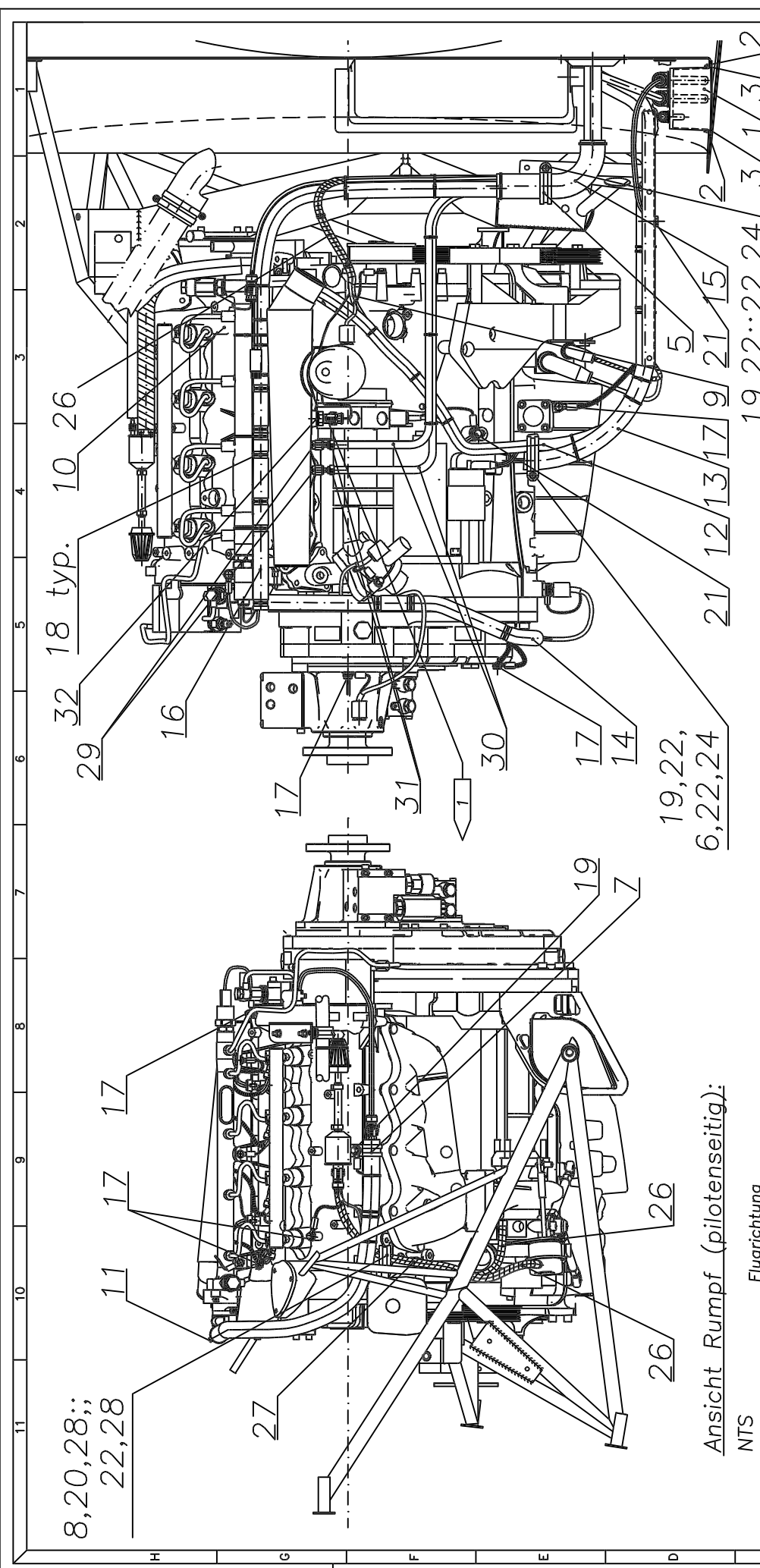
No.	Stk.	LT	Stk.	Teil Nr.	Bezeichnung	Dimension/Abmessungen	Umfeld/Bemerkung
27	2	-	-	DIN 933	Octiker 1-Öhr Klemme 5,5		Fo. Octiker
26	2	-	-	12H4314	Sechseckschraube M4 x 5 Kabelschleife		Fo. Besford Fo. Wirth
24	2	-	-	DIN 125A M6	Schleife ohne Fase		
23	2	-	-	820-2811-02-02	Bohren mit Loch		
22	1	-	-	D40-2560-96-00	Halteband		
21	1	-	-	LN9037 M6x40	SK-Schraube mit H11 Schäft		
20	2	-	-	DIN985 M6	Schraubmutter m. Keilnail		
19	1	-	-	DIN8021B M6	Schraube für GFK-Einheiten		
18	1	-	-	LN9037 M6x20	SK-Schraube mit H11 Schäft		
17	1	-	-	RS601	Alu-Schlauchschelle	25/15	
16	6	-	-	FLT 25M30	Kabelbinder	4,6 x 186	Fo. Motik
15	3	-	-	Art.Nr. 0502 848	Socket f. Kabelbinder	4,6 mm	Fo. Wirth
14	1	-	-	Purel 207.095.002 Ki 13	Einströmfiler	4,6 mm	Fo. Motik
13	1	-	-		Schlauch PVC blau	ø6 x 1,5 x 80	
12	1	-	-		Kunststoffverschleider YS5		
11	2	-	-		Schlauch PVC blau	ø6 x 1,5 x 85	Fo. Octiker
10	7	-	-		Octiker 1-Öhr Klemme 13,5		
9	-	-	-				
8	1	-	-	D40-7153-12-00	Manifold Pressure B		
7	1	-	-	D40-7153-14-00	Manifold Pressure A		
6	1	-	-	D40-7153-11-00	Stoßkabelung A		
5	1	-	-	D40-7153-10-00	Stoßkabelung B		
4	4	-	-	LN9037 M6x14	SK-Schraube mit H11 Schäft		
3	4	-	-	DIN8021B M5	Schraube für GFK-Einheiten		
2	4	-	-	DIN 985 A	Sechseckschraube M4x6		
1	2	-	-		ECU-Befestigung II		

Freigegeben für andere Zwecke
Nur wenn die gesamte Bezeichnung
in der Zeichnung angegeben ist
I S S 27/85 m
I S S 27/85 m
Gem M 13/85 m
UNWIRKSAM KEINERLEI WECHSEL
DURCH VERÄNDERUNG DER BEZEICHNUNG
BEI VERÄNDERUNG DES VERFAHRENS
UND/ODER ANSICHT HINZULEGEN

Material: NTS, (1;2)
Bezeichnung: ECU Installation

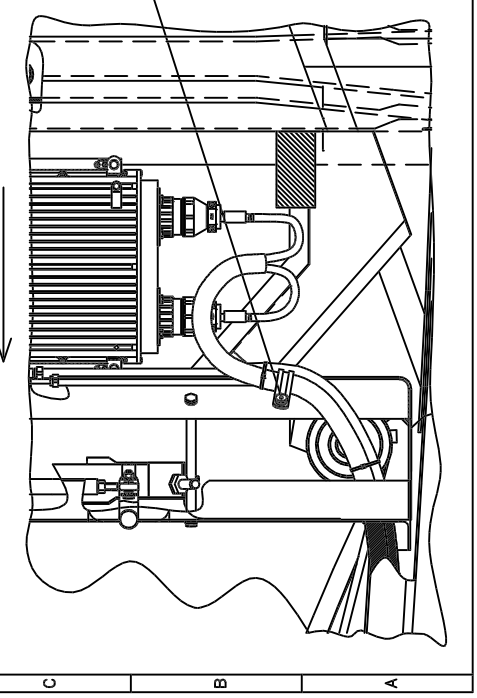
Diamond
AIRCRAFT
Industries GmbH
A-2700 Wiener Neustadt, N. A. GbR-Str. 5

Zeichnungs-Nr.: D40-7153-01-00
Blatt: 1 B



14	1	2650-13	Fire Sleeve	500 mm lang
13	1	2650-8	Fire Sleeve	660 mm lang
12	1	2650-8	Fire Sleeve	560 mm lang
11	1	2650-8	Fire Sleeve	520 mm lang
10	1	2650-5	Fire Sleeve	210 mm lang
9	1	2650-8	Fire Sleeve	170 mm lang
8	1	MS 21 919	Clamp	WDG 13
7	1	05421815005	Alu-Gummischelle	18/15
6	2	RSJU 1	Alu-Gummischelle	25/15
5	1	RSJU 1	Alu-Gummischelle	40/15
4	2	—	—	—
3	2	DIN 985 A	Senkbohrschraube	M5 x 16
2	2	VZD BN 90304	Universal Ballnadel mit gefüllter	—
1	1	—	APU-Stecker ZSB	—
Benennung				
Orientierung/Abmessungen				
Lieferant/Benennung				
NTS				
Benennung : Inst. Kabelbaum Motor				
Engine Harness Installation				
Diamond Industries GmbH A-2700 Wien, Austriastr. N. A. 68b-Str. 5 Zeichnung Nr.: D4D-7156-01-00 Blatt: 1 B				

32	1	Art. Nr. 4601280	Kupferfächung	Fo. Wirth
31	2	—	Oefler 1-0hr Membran	4,5
30	2	DIN 0073379	Schraub	Stab 46 x 2850
29	2	D4D-7156-11-00	Anschlussstück Menfold	Pressure
28	1	B02-10-06-0175-C3	Diamond Standard Buchse 2	—
27	A/R	T50F	Schweurkupferstift, groß	—
26	A/R	T29N-C	Schweurkupferstift, klein	—
24	4	DIN985 M6	Schraubmutter n. Polyamid	—
23	—	—	Schleife ohne Faser	—
22	14	DIN126A M6	—	—
21	2	LN937 Mb16	SK-Schraube mit H11 Schift	—
20	1	LN937 Mb30	SK-Schraube mit H11 Schift	—
19	3	LN937 Mb14	SK-Schraube mit H11 Schift	—
18	36	PLT 25M30	Kabelbinder	4,3 x 108
17	5	LN937 Mb12	SK-Schraube mit H11 Schift	—
16	1	2650-16	Fire Sleeve	540 mm lang
15	1	2650-16	Fire Sleeve	200 mm lang



Notes (Hinweise zur Ausführung):
 Sensor im Lieferumfang Motor enthalten.
 Sensor supplied with engine.



Ansicht Rumpf (pilotenseitig):

NTS

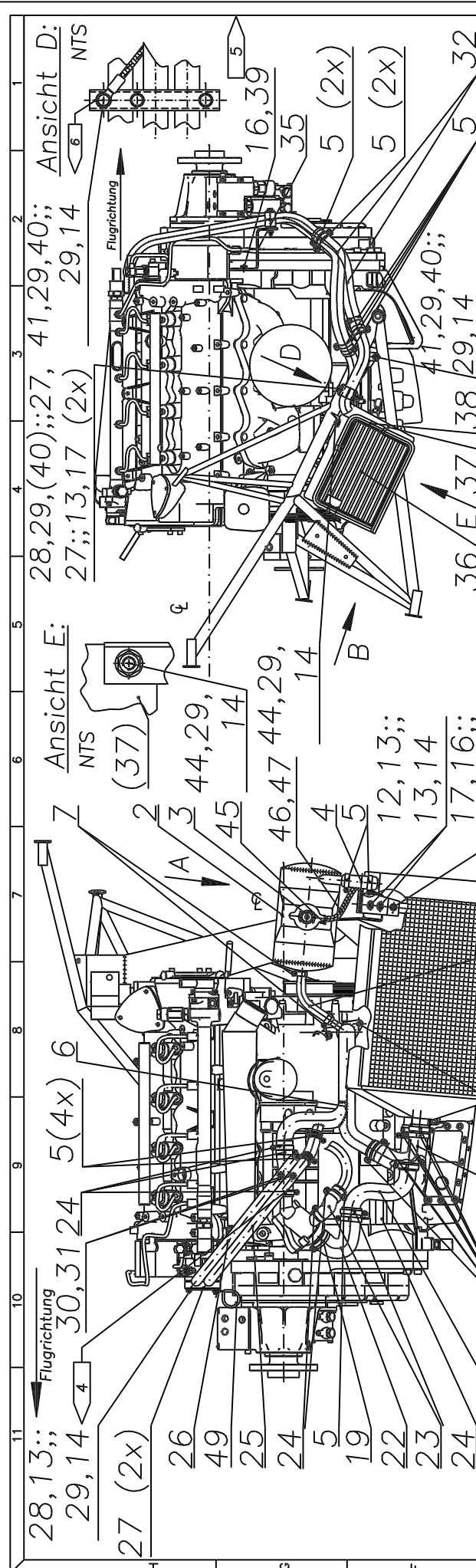
← Flugrichtung

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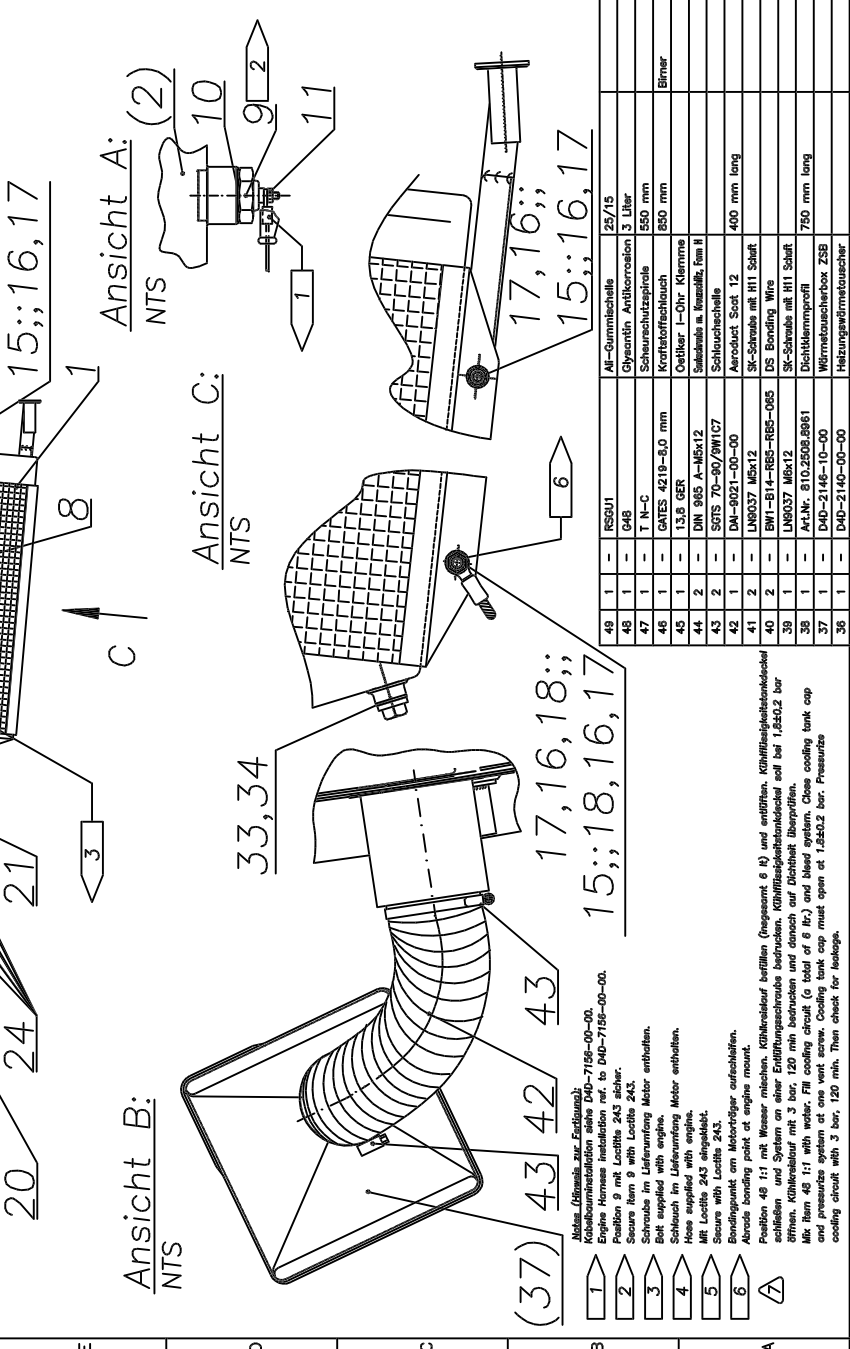
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Pos.	Stk.	Stk. R	Teil Nr.	Material	Abmessung/Abmessungen	Lieferart/Bezeichnung
35	1	-	D4D-2140-00-01	Halterung		
34	1	-	A4-Nr. 4801280	Kupferförmige Verschleißschraube	M12x1,5	
33	1	-	DIN 910	Silikonhohloch	#16, 220 mm lang	ISI-Rohring
32	2	-	SKL 16	Kupferförmige 1 mm	dmm.c. 8 mm, l. 4 mm	Reinprecht
31	2	-	GRK-Schraube	GRK-Schraube	M4x12	
30	2	-	DIN 933	Schraube ohne Fase		
29	9	-	DIN125A M6	SK-Schraube mit H1 Schuft	5x40	
28	4	-	LN9037	Belüftung-Wingenschichtung		
27	4	-	D4D-2140-00-50	Motorventil		
26	1	-	D4D-2146-12-00	Motorventil		
25	1	-	D4D-2146-11-00	Motorventil		
24	14	-	25-40	Schelle ASK		
23	1	-	D4D-7526-00-71	Silikonhohloch, 3-wandig	#=16 mm, 80 mm lang	
22	1	-	D4D-7526-00-72	Schlauchbogen II		
21	1	-	D4D-7520-00-70	Schlauchbogen I		
20	1	-	32-44	Schelle ASK		
19	1	-	32-44	Schelle ASK		
18	1	-	BW-814-R66-R66-095	DS Bonding Wire		
17	7	-	DIN985 M6	Schraubgewinde m. Polyamid		
16	6	-	DIN125A M6	Schraube ohne Fase		
15	3	-	5218 039, 60 Shore A	Gummirundstift	M6, 20x15 mm	
14	8	-	DIN985 M5	Schraubgewinde m. Polyamid		
13	8	-	DIN9021B M5	SK-Schraube mit H1 Schuft		
12	2	-	LN9037 M5x1,6	SK-Schraube mit H1 Schuft		
11	1	-	DIN985 M4	Schraubgewinde m. Polyamid		
10	1	-	Cu 22/27	Kupferförmige		Fo. Reinprecht
9	1	-	365.282/001/0156	Vorstromschalter 12V		
8	1	-	11mm, 45	Silikonbogen		
7	2	-	12-20	Schelle		
6	1	-	D4D-7526-01-00	Bypassleitung		
5	16	-	16-25	Schelle ASK		
4	1	-	SKL16	Silikonhohloch	70 mm lang	Fo. KTM
3	1	-	49090019	Kühlwasseranschluss		
2	1	-	D4D-7521-00-00	Kühlwasseranschluss		
1	1	-	D4D-7520-00-00	Wasserdichtung		



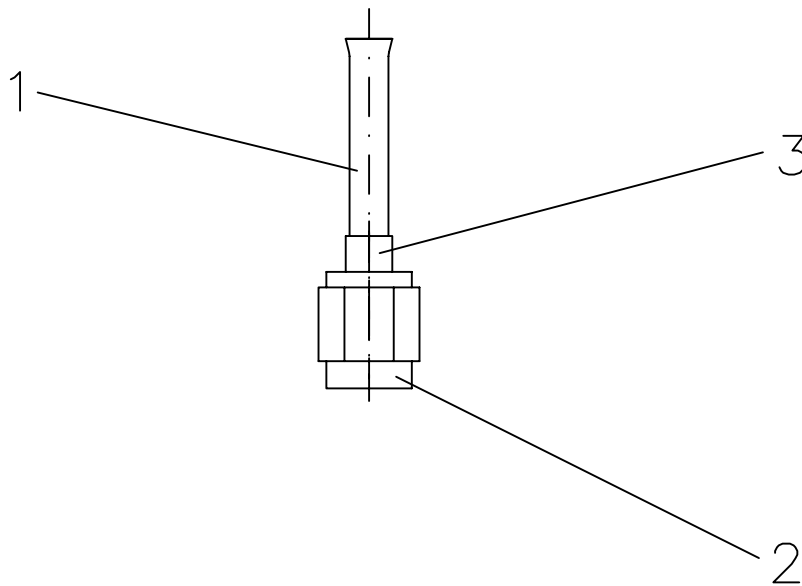
Pos.	Stk.	Stk. R	Teil Nr.	Material	Abmessung/Abmessungen	Lieferart/Bezeichnung
48	1	-	RS011	All-Gummischelle	25/15	
47	1	-	G48	Glyzerin Antifrostschutz	3 Liter	
46	1	-	T N-C	Schraubnützspindel	550 mm	
45	1	-	GATES 4219-5,0 mm	Kratzschiff	850 mm	Brenner
44	1	-	1,3,6 GER	Oetiker 1-Ohr Klemme		
43	2	-	DIN 965 A-M5x12	Schrauben m. Inzelle, 6mm R		
42	1	-	SGTS 70-90/9W1C7	Schlauchschelle		
41	2	-	LN9037 M5x12	Aeroduct Socket 12	400 mm lang	
40	2	-	D4D-7521-00-00	SK-Schraube mit H1 Schuft		
39	1	-	BW-814-R66-R66-095	DS Bonding Wire		
38	1	-	LN9037 M5x12	SK-Schraube mit H1 Schuft		
37	1	-	Act.Nr. 810.9508.9861	Dichtklemmprofil	750 mm lang	
36	1	-	D4D-2146-10-00	Wärmekühlerbox ZSB		
35	1	-	D4D-2140-00-00	Heizungswärmetauscher		

Note: (Abmessung zur Endigung)
 Kabelklemminstallation siehe D4D-7156-00-00.
 Engine harness installation ref. to D4D-7185-00-00.
 Position 9 mit Locktits 243 sicher.
 Secure item 9 with Locktits 243.
 Schraube im Lasterantrieb Motor entziehen.
 Do not remove motor mounting screw.
 Hose entziehen mit engem
 Hosenende.
 MR Locktits 243 abgeben.
 Secure with Locktits 243.
 Bondingpunkt am Motorträger aufschließen.
 Disconnect bonding point at engine mount.
 Position 48 1:1 mit Wasser mischen. Kühlwasser befüllen (insgesamt 6 l) und entleeren. Kühlwasserbehälter
 schließen und System an einer Entlüftungsschraube betriebsbereit. Kühlwasserbehälter soll bei 1,850,2 bar
 öffnen. Kühlwasser mit 3 bar, 120 min betriebsbereit und danach auf Dichtheit überprüfen.
 Mix item 48 1:1 with water. Fill cooling circuit (a total of 6 ltr.) and bleed system. Once cooling tank cap
 and pressure system at one vent screw. Cooling tank cap must open at 1,850,2 bar. Pressure
 cooling circuit with 3 bar, 120 min. Then check for leakage.

Material: NTS
 Bemerkung: Kühlsystem Installation
 Cooling System Inst.

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 Industries
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 GmbH
 A-2200 Wiesel, Niederö., A. 085-501

Zeichnung Nr.: D4D-7526-00-00
 Blatt 1
 D4D-7526-00-00.dwg
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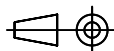


Bördelung nach DPS 12 – Kapitel 2,
Flare according DPS 12 – Kapitel 2.

3	2	–	MS 20819–3D	Sleeve		
2	2	–	AN 8/8–3D	Überwurfmutter		
1	–	–	D4D–7156–11–70	Rohr Manifold Pressure		
Pos.	Stk. L	Stk. R	Teile Nr.:	Benennung	Orientierung/Abmessungen	Lieferant/Bemerkung

DIESE UNTERLAGE IST UNSER GEISTIGES EIGENTUM UND DARF OHNE UNSERE AUSDRUECKLICHE GENEHMIGUNG WEDER VERVIELFAELTIGT NOCH DRITTEN PERSONEN UEBERLASSEN WERDEN ! UEBERTRETUNGEN UNTERLIEGEN DER VERFOLGUNG NACH DEM URHEBERRECHT.
DIAMOND AIRCRAFT INDUSTRIES GmbH

Freimass-
toleranzen :
D I N 7168 m
I S O 2768 m
OeN M 1365 m



Masstab : 1:1

Benennung :
Anschlussstück Manifold Pressure

				03	Datum	Name
				Bearb.	10.09	GLOCK
				Gepr.		
				Nächster Zusammenbau: D4D–7156–01–00		
				<i>D</i>	<i>4D</i>	
"–"	MÄM 40–124	10.09.03	GLOCK			



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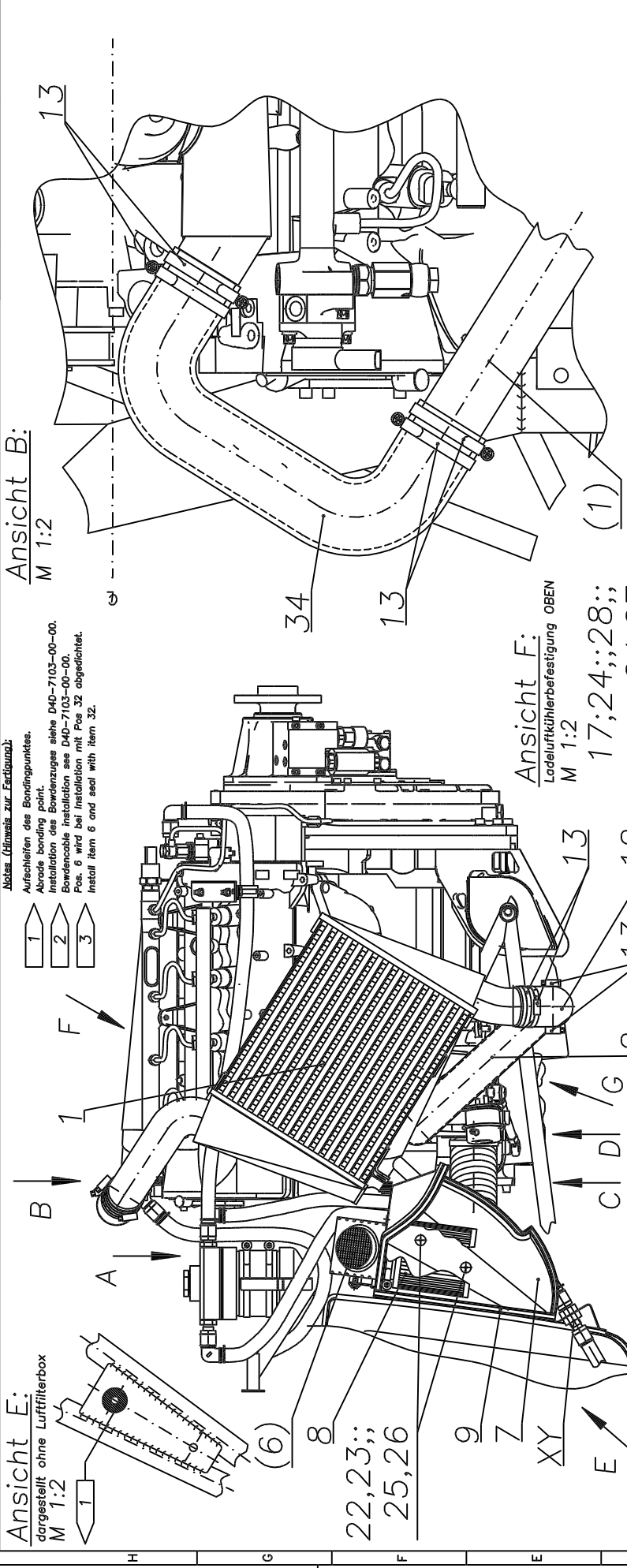
Zeichnungs Nr.:
D4D–7156–11–00

Blatt
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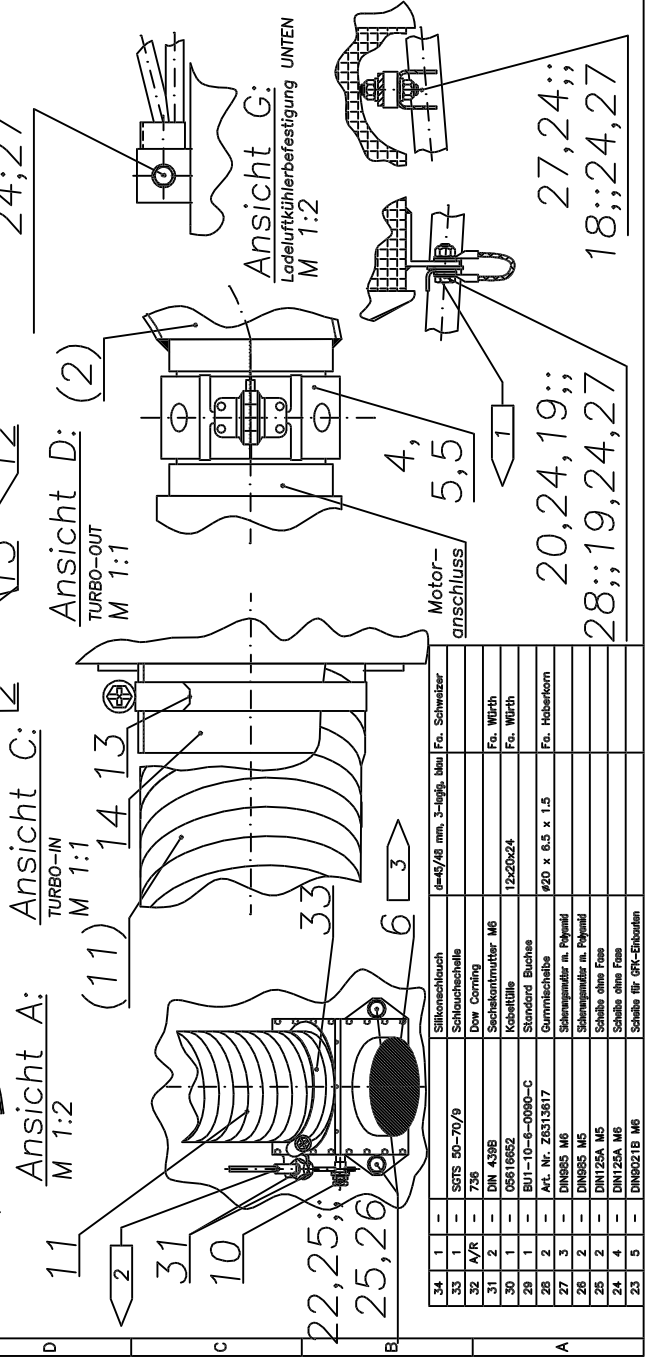
Ansicht E:
dargestellt ohne Luftfilterbox
M 1:2

Nota (Hinweis zur Fertigung):
Aufschleifen des Bondingpunktes.
Abrade bonding point.
Installation des Bondingzuges siehe D4D-7103-00-00.
Bondsable installation see D4D-7103-00-00.
Pos. 6 wird bei Installation mit Pos 32 abgedichtet.
Install item 6 and seal with item 32.



Pos.	Stk.	1	Stk.	2	1	Item No.:	Bezeichnung/Abmessungen	Lieferart/Bezeichnung
22	2	-	LN9037	M6x12	SK-Schraube mit H11 Schliff			
21	1	-	LN9037	M6x24	SK-Schraube mit H11 Schliff			
20	2	-	LN9037	M6x18	SK-Schraube mit H11 Schliff			
19	1	-	BW-1814-R66-R66-D4D	Standard Bonding Wire				
18	1	-	316-041		Mount, Vibration			Spezialaur
17	1	-	LN9037	M6x16	SK-Schraube mit H11 Schliff			
16	1	-						
15	1	-	D4D-8120-00-71		Rohr			
14	1	-	D4D-8120-00-30		Adaptierring			
13	8	-	ASK 50-65		Schelle	#48 mm, 90°		
12	1	-	SE 9048		Silikonbogen	#60 mm x 600 mm lang		
11	1	-	DA-9021-00-02		Aeroduct Seat 10			
10	1	-	DA-9071-03-01		Schraubtopf			
9	1	-	A4 Ns. 10.2508.8971		Klemmgroß			
8	1	-	RG 700		Luftfilter			
7	1	-	D4D-7100-05-00		Luftfilterbox			
6	1	-	D4D-7100-05-00		Vorwärmventil			
5	2	-	FCO-24V		Viten O-Ring			
4	1	-	14202-24A		Hydroflow Klammer			Fa. Goodridge
3	1	-	W903-2405		Wiggins Ring m. Steg			Fa. Goodridge
2	1	-	D4D-8126-20-00		Verbindungsstück			Fa. Goodridge
1	1	-	D4D-8126-20-00		Leckdichtflansch			

Meinlich : NTS, (1:1, 1:2)
 Rev. 1
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 Rev. 97
 Rev. 98
 Rev. 99
 Rev. 100



Pos.	Stk.	1	Stk.	2	1	Item No.:	Bezeichnung/Abmessungen	Lieferart/Bezeichnung
34	1	-	SGTS 50-70/9		Silikonverschlauch	ø=45/48 mm, 3-miglig, blau	Fa. Schweizer	
33	1	-	A/R 736		Schlauchschelle			
32	1	-	DIN 4398		Dow Corning			
31	2	-	026186652		Sechskantmutter M6		Fa. Würth	
30	1	-	026186652		Kegelstift	12x20x24	Fa. Würth	
29	2	-	BU-10-6-0090-C		Standard Buchse		Fa. Hobascom	
28	2	-	Art. Nr. Z8313617		Schraubmutter im Pleiband	420 x 6,5 x 1,5	Fa. Hobascom	
27	3	-	DN95S M6		Schraubmutter im Pleiband			
26	2	-	DN95S M5		Schraube ohne Fase			
25	2	-	DN125A M5		Schraube ohne Fase			
24	4	-	DN125A M6		Schraube ohne Fase			
23	5	-	DN9021B M6		Schraube für GRK-Einbauten			

27,24;;
 18;;24,27
 20,24,19;;
 28;;19,24,27

Diamond
 Industries
 AIRCRAFT
 GmbH
 F-228, Hauptstrasse, D-48529
 Bielefeld
 Zeichnung Nr.: D4D-8126-01-00
 Blatt 1
 Von 1