

Diamond DA 40-TDI G1000



DA40-TDI-G1000 Version 1.1

Diamond DA40-TDI G1000



Dimensions



© Diamond Aircraft Industries GmbH
Compiled by Peter Schindlitzner

Dimensions



© Diamond Aircraft Industries GmbH

Dimensions



© Diamond Aircraft Industries GmbH

Diamond DA40-TDI G1000



Exterior



© Diamond Aircraft Industries GmbH

ELT and VHF COM 1 Antenna



© Diamond Aircraft Industries GmbH

VHF COM 2 antenna



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

VHF NAV + GP Antennas



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

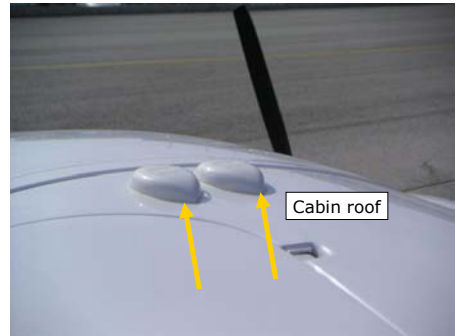
Marker Antenna



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

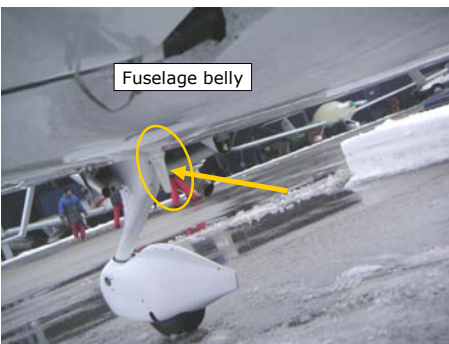
GPS Antennas



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

DME, TXPDR Antenna



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

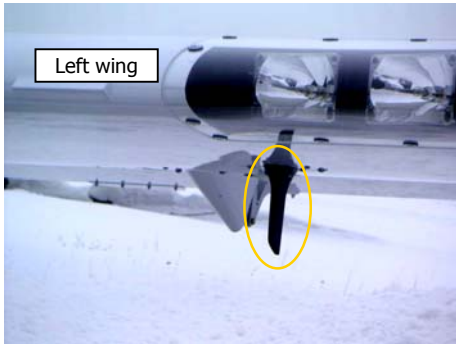
ADF antenna



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

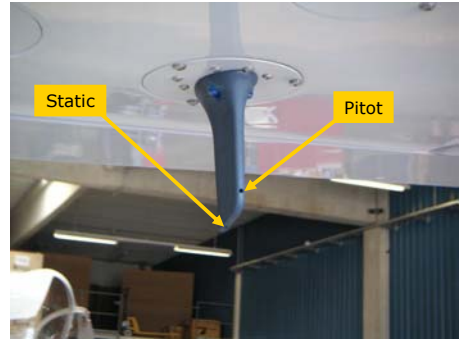
Pitot/Static Probe



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

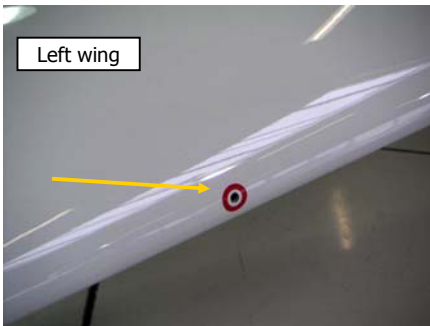
Pitot/Static Probe



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Lift Detector (Stall Warning)



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Engine Oil



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

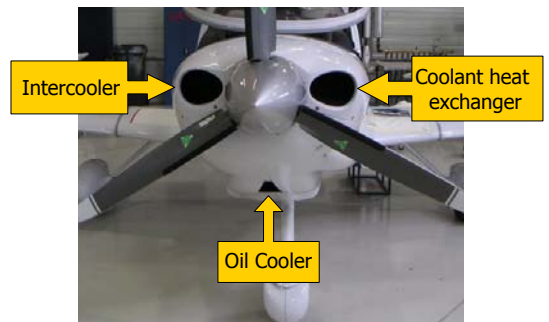
Engine Oil



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

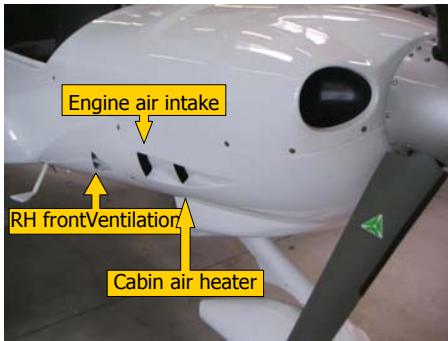
Air Inlets



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

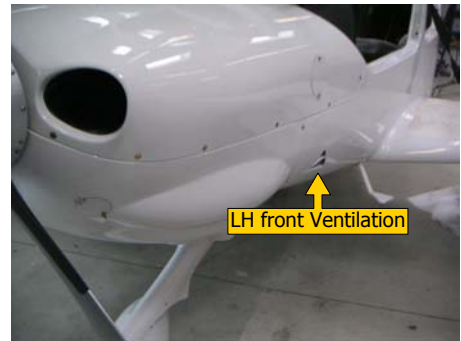
Air Inlets



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Air Inlets



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Diamond DA40-TDI G1000



Operating Limitation



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Temperature Limitation



- The airplane may only be operated when its temperature prior to operation is not less than -20°C and not higher than 54°C .
- With the airplane cold soaked and its temperature below -20°C the use of an external pre-heater for the engine and pilot compartment prior to operation is mandatory.

© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Diamond DA40-TDI G1000



Mass



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Mass (Weight)



Empty (typical)	830 kg
Max TKOF	1150 kg
Max LDG	1150 kg
Max Baggage	30 kg
Max Baggage with „Baggage Extension“	45 kg (max 18 kg in aft compartment)

© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Mass (Weight)



Attention!

JET fuel and Diesel are heavier than AVGAS!

Typical fuel weight:

JET A1:	Diesel:
0,8 kg/ltr	0,84 kg/ltr
3,03 kg/USG	3,2 kg/USG

Diamond DA40-TDI G1000



Speeds



Characteristic Speeds



V _{NO}	129 KIAS
V _{NE}	178 KIAS
V _A 780-980 kg	94 KIAS
V _A 980-1150 kg	108 KIAS

Characteristic Speeds



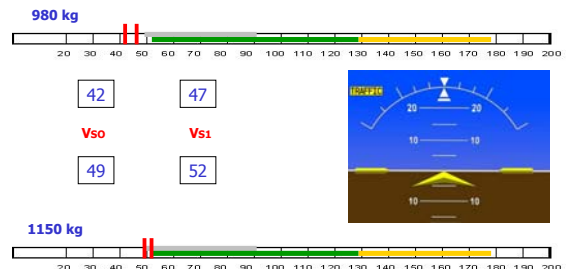
V _{SO}	49 KIAS
V _{S1}	52 KIAS
V _{FE} (Flaps T/O)	108 KIAS
V _{FE} (Flaps LDG)	91 KIAS

Characteristic Speeds



	850 kg	1000 kg	1150 kg
V _X = V _Y	54 KIAS	60 KIAS	66 KIAS
V _{climb}	60 KIAS	68 KIAS	73 KIAS
V _{LDG} Flaps UP	60 KIAS	68 KIAS	73 KIAS
V _{LDG} Flaps LDG	58 KIAS	63 KIAS	71 KIAS

Stalling Speeds



Stalling Speeds



980 kg



57

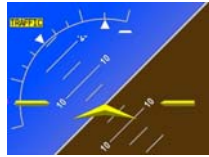
58

V_{so}

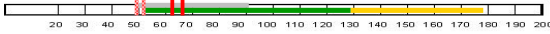
V_{s1}

62

66



1150 kg



Stalling Speeds



980 kg



71

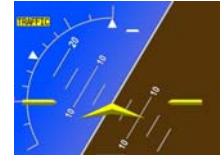
73

V_{so}

V_{s1}

76

79



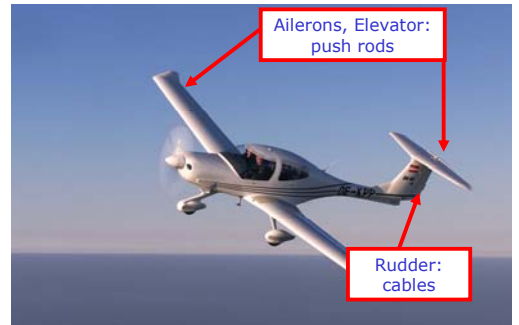
1150 kg



Diamond DA40-TDI G1000



Flight Control Operation



Flight Control Operation



Intentionally blank





Instrument Panel



Garmin 1000



Airspeed

Horizon

Altimeter

Compass

Backup Instruments



Flood Lights

Emergency Switch

Emergency Battery
(non rechargeable)



Lights

ELT



Circuit breakers

Instrument Panel



Essential Bus

Electric Master Starter

Instrument Panel



Engine control

Instrument Panel



Avionic Master

Fuel x-fer pump, Pitot heat

Instrument Panel



Autopilot

Flaps

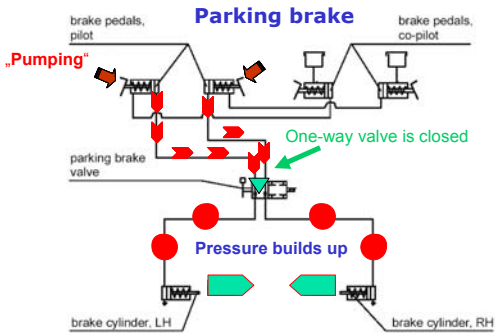
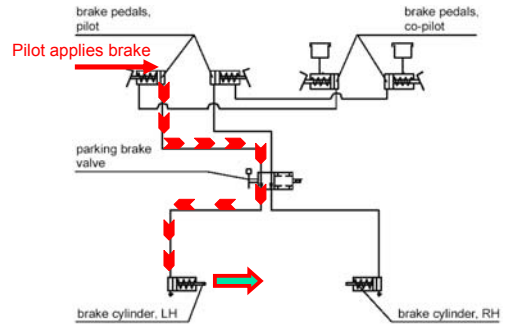
Alternate Static Valve



Engine Indication System

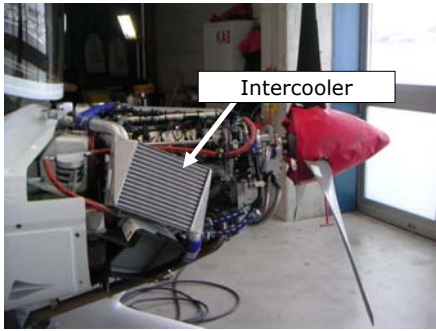


Default	SYSTEM	FUEL
FFLOW GPH 0.0	— ELECTRICAL —	FUEL
OIL TEMP	VOLTS 12.6	FFLOW GPH 19.9
OIL PRES	AMPS 0	17 GAL 17
COOLANT TEMP	— ENGINE —	52 °C 52
FUEL TEMP	GEARBOX °C 35	— FUEL CALC —
FUEL QTY GAL	COOLANT °C 60	GAL REM 0.0
	— OIL —	GAL USED 50.0
	°C 50	ENDUR 00:00
	BAR 2.3	RANGE NM
		TTL TIME IN SVC
		0006.5 HRS



- Thielert Aircraft Engine TAE125-02-99
 - Previously: TAE125-01
- Four cylinders, liquid-cooled
 - 1991 ccm (TAE125-01: 1689 ccm)
- Common-rail direct injection
- Reduction gear 1:1,69
- Dual digital engine control
- Turbocharger
- Max. power: 99kW (135 HP) at 2300 RPM
- Max cont. power: 99kW (135 hp) at 2300 RPM

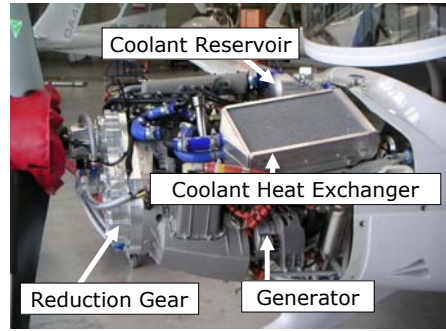
Diamond DA40 TDI Engine



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Diamond DA40 TDI Engine



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Power plant – Gear oil



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Power plant – Gear oil



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Power plant – Gear oil



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

Power plant limitations

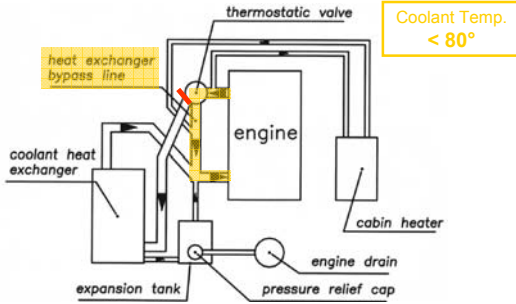


- *Italic figures are for the „old“ 125-01 engine*
- Max RPM: 2300
- Oil pressure: 1.0 – 6.5 bar
- Oil quantity (per engine): 4.5 – 6.0 liters
- Max. oil consumption: 0.1 liters/hr
- Oil temperature: -30 (-32) °C – 140 °C
- Gearbox temperature: max. 120 °C
- Coolant temperature: -30 (-32) °C – 105 °C
- Max. restart altitude: 8000 ft (*6500 ft*), 73–120 KIAS

© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidlitzner

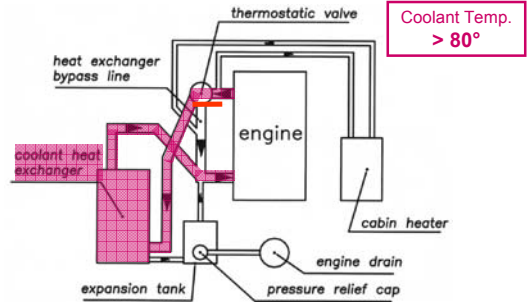
DA 40 TDI Cooling System



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

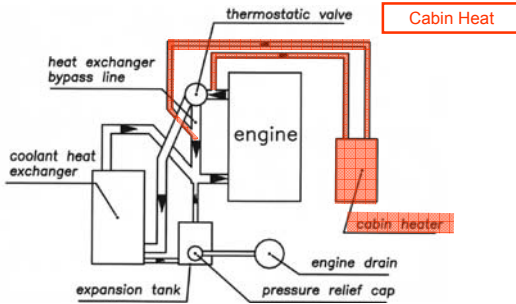
DA 40 TDI Cooling System



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

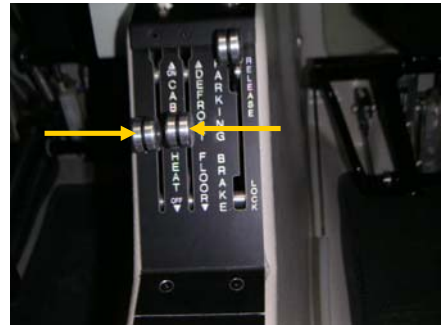
DA 40 TDI Cooling System



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

DA 40 TDI Cabin Heat



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

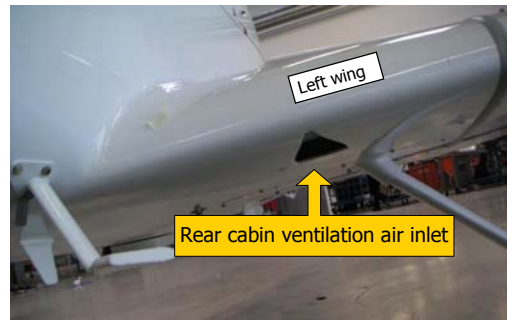
DA 40 TDI Ventilation



© Diamond Aircraft Industries GmbH

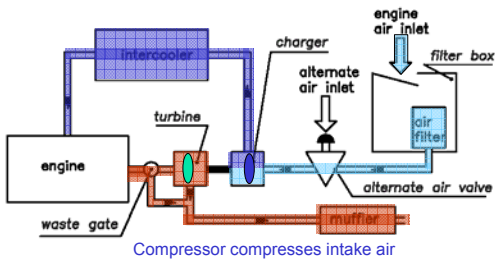
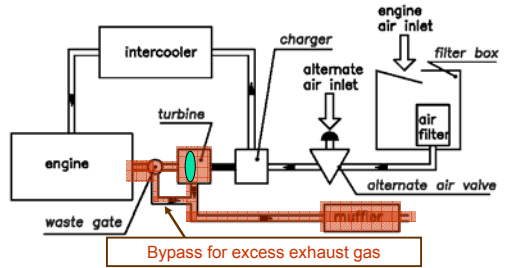
Compiled by Peter Schmidhuber

DA 40 TDI Ventilation



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber



- 2 x 14 USG usable
- = 28 USG
- = 85 kg
- At 70% power: ~ 5 USG/hr

- Long Range Tanks:
- 2 x 19,5 USG usable
- = 39 USG
- = 120 kg
- Max indicated fuel per tank: 15 USG
- Max. unbalance: 9 USG

DA 40 TDI Fuel System



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

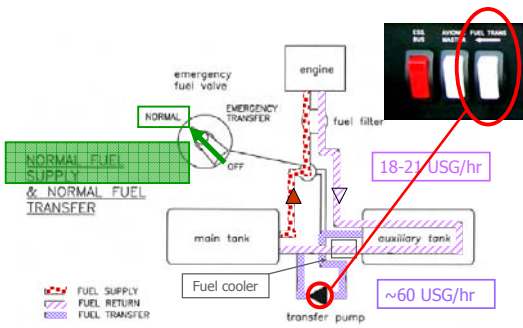
DA 40 TDI Fuel System



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

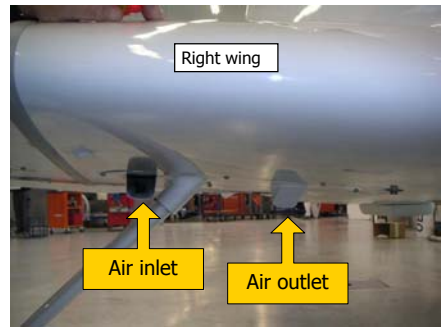
DA 40 TDI Fuel System



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

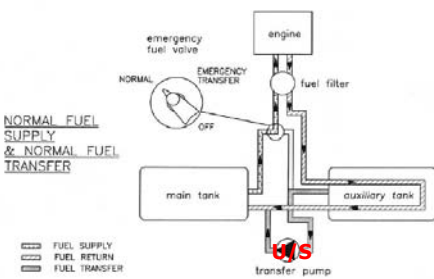
Fuel cooler



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

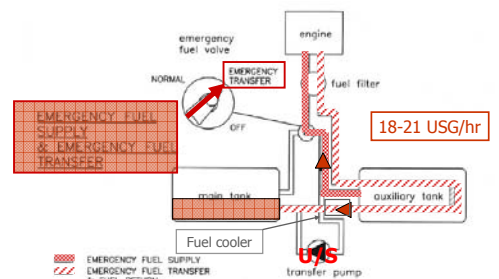
DA 40 TDI Fuel System



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

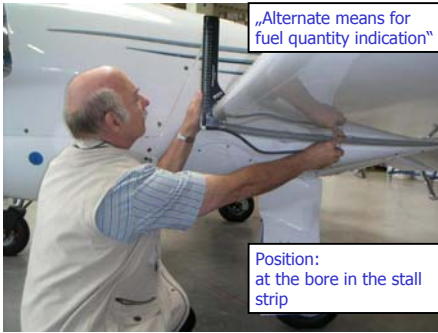
DA 40 TDI Fuel System



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

DA 40 Fuel system



„Alternate means for fuel quantity indication“

Position: at the bore in the stall strip

Fuel vents



Fuel tank drain



Fuel gascolator drain

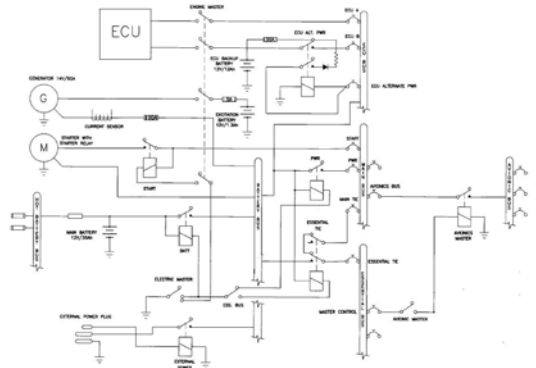


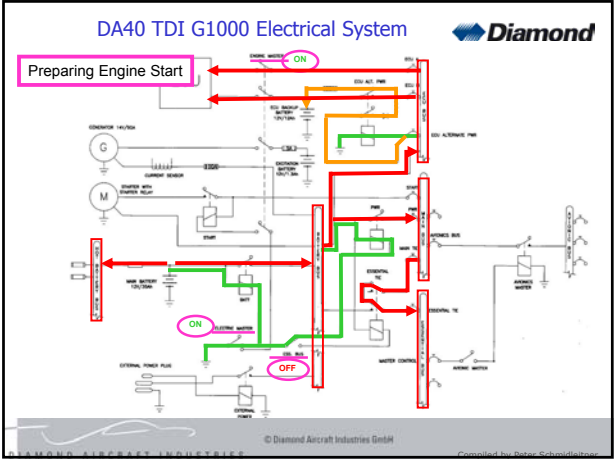
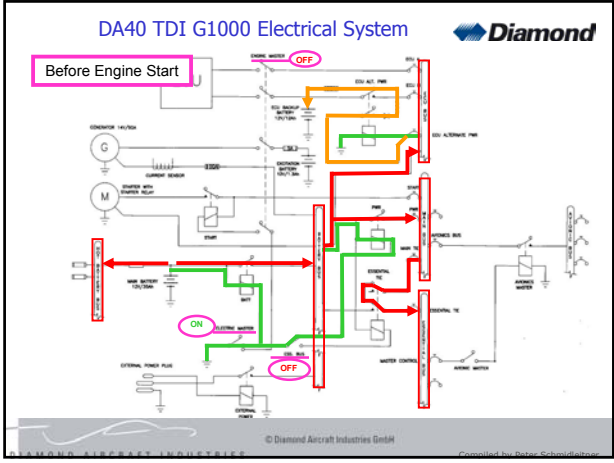
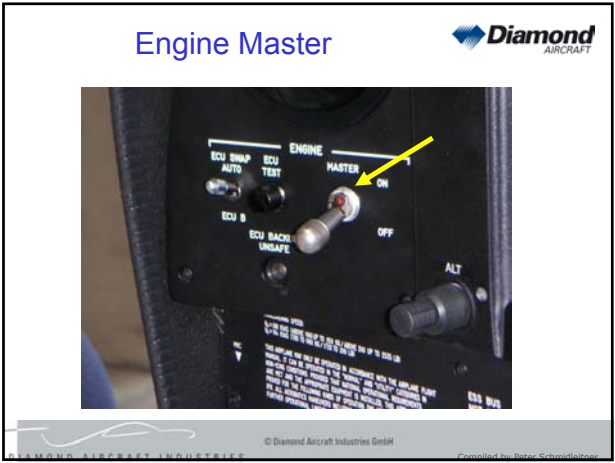
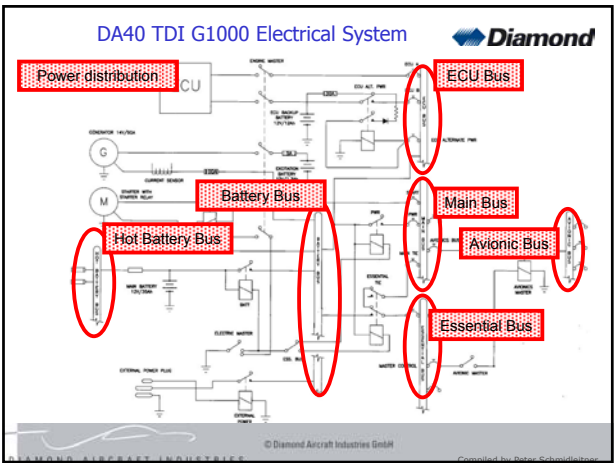
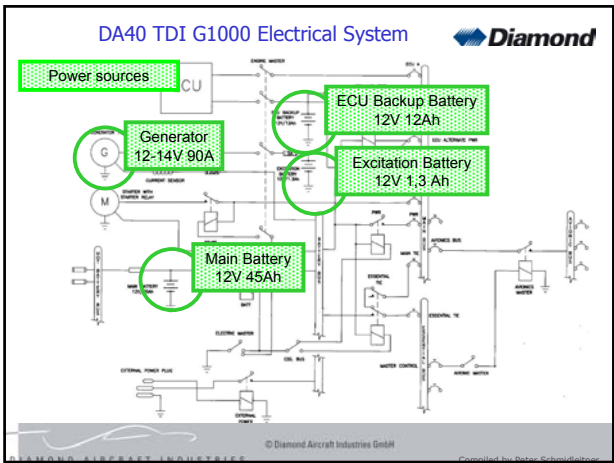
Diamond DA40-TDI G1000

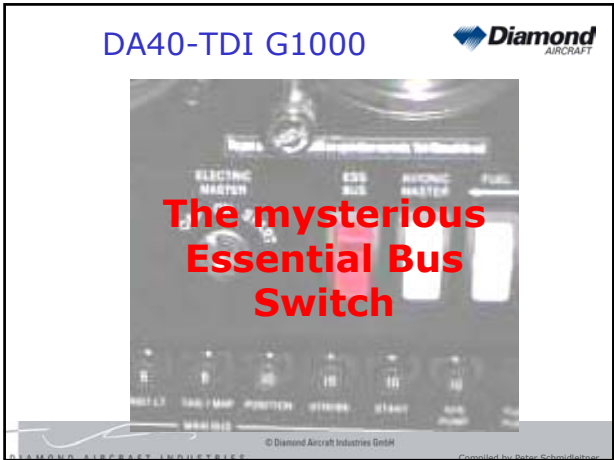
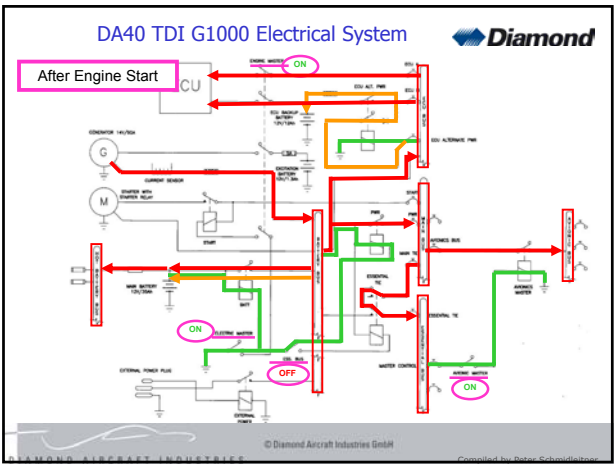
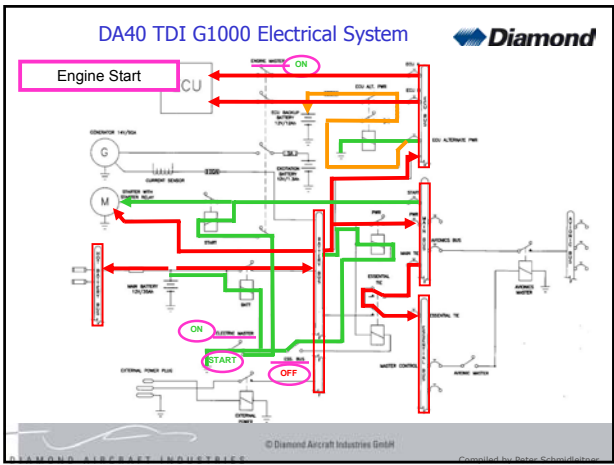


Electrical System

DA40 TDI G1000 Electrical System







When is it used ?

- When the generator fails
- to disconnect unnecessary electrical consumers
- to supply battery power to essential electrical consumers

Essential Electrical Power

■ Essential Bus

- PFD
- Horizon *)
- AHRS
- ADC
- Flaps
- Landing light
- Pitot Heating
- Landing Light
- Flood Light *)
- COM 1
- GPS / NAV Receiver 1
- Transponder
- Engine instruments

■ Hot Battery Bus

- (Essential Bus)
- Pilot's map/reading light
- Auxilliary jack

*) Emergency Battery

Essential Electrical Power

■ Main unserviceable systems

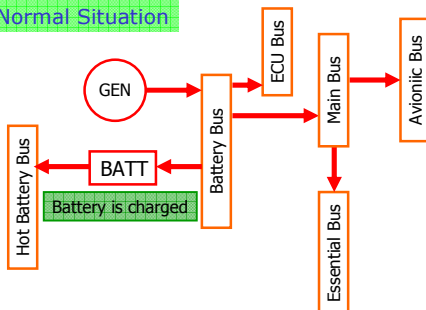
- Fuel x-fer pump
- MFD
- Acionic / CDU fan
- Position light, Strobe lights, Taxi light
- Instrument lights, Map light
- Starter
- (Avionics Bus)
 - COM2, NAV/GPS2, ADF, DME, WX500, Audio, Autopilot

What happens ...

- ... if it is switched ON during normal operation?
- Will the battery be discharged?
 - **NO !**

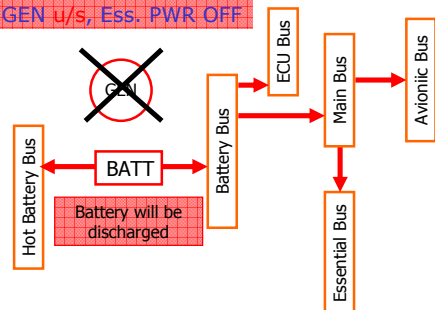
DA40-TDI G1000, Ess. Bus switch

Normal Situation

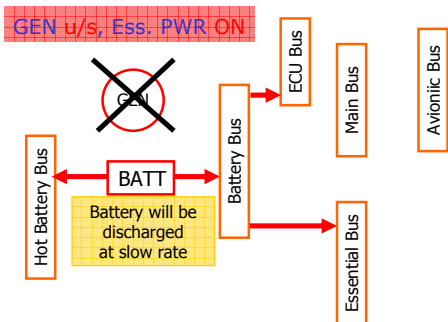


DA40-TDI G1000, Ess. Bus switch

GEN u/s, Ess. PWR OFF

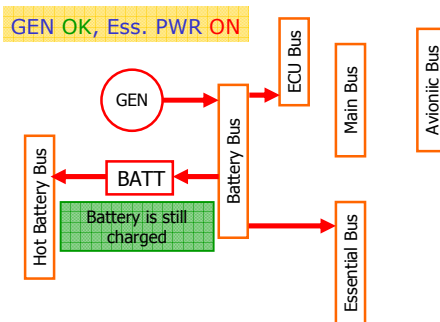


DA40-TDI G1000, Ess. Bus switch



© Diamond Aircraft Industries GmbH

DA40-TDI G1000, Ess. Bus switch

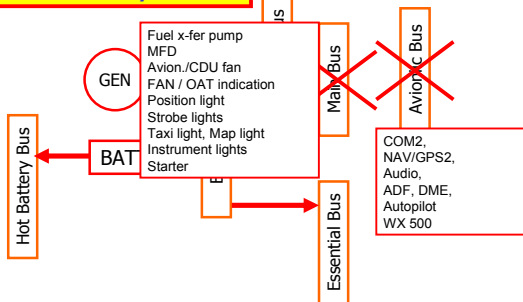


© Diamond Aircraft Industries GmbH

DA40-TDI G1000, Ess. Bus switch



Essential Bus ON by mistake



© Diamond Aircraft Industries GmbH

DA40-TDI G1000, Ess. Bus switch



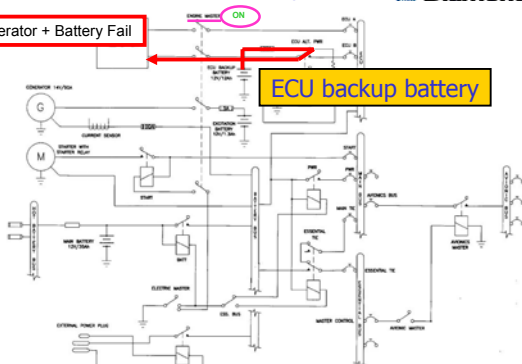
- A very special engine start problem:
 - Start witch ON
 - Nothing happens!
- Why?
 - Essential Bus switch ON by mistake!

© Diamond Aircraft Industries GmbH

DA40 TDI G1000 Electrical System



Generator + Battery Fail



© Diamond Aircraft Industries GmbH



Intentionally blank

© Diamond Aircraft Industries GmbH



- KAP 140 has 2 functions:
 - if not engaged:
 - Altitude warning
 - if engaged („ON“):
 - Autopilot



Steering signal
YES

Heading
YES



Baro setting
NO

Altitude
NO



Limitations for KAP 140 Autopilot System:

Do not use AP if any window is open.
 Do not use AP during single engine operation.
 Autopilot DISC during take-off and landing.
 Maximum speed for autopilot operation is 185 KIAS.
 Minimum speed for autopilot operation is 90 KIAS.
Minimum Altitude for Autopilot Operation:

Cruise, Climb, Descent and Maneuvering	: 800 feet AGL
Approach (130 KIAS or less)	: 200 feet AGL
Approach (above 130 KIAS)	: 250 feet AGL
Departure	: 200 feet AGL



Autopilot

AP engaged annunciator (17), Pitch trim annunciator (16), ALT Alert (15), ALT V/S BARO display (14), Set Altitude or Baro (13), Baro display/setting (12), Pitch Wrng (1), AP ON/OFF (2), Roll Wrng (3), HDG select (4), APR mode (5), ALT Hold (6), NAV mode (7), Backbeam (8), +/- V/S or +/- Alt (9), 10, 11, 12, 13, 14, 15, 16, 17, 18, 19

Two-axis w/Altitude PreSelect Flight Control Computer

© Diamond Aircraft Industries GmbH

Autopilot

AP engaged annunciator (17), Pitch trim annunciator (16), ALT Alert (15), ALT V/S BARO display (14), Set Altitude or Baro (13), Baro display/setting (12), Pitch Wrng (1), AP ON/OFF (2), Roll Wrng (3), HDG select (4), APR mode (5), ALT Hold (6), NAV mode (7), Backbeam (8), +/- V/S or +/- Alt (9), 10, 11, 12, 13, 14, 15, 16, 17, 18, 19

Two-axis w/Altitude PreSelect Flight Control Computer

© Diamond Aircraft Industries GmbH

Autopilot

Roll Mode:
 ROL
 HDG
 NAV ARM
 NAV
 APR ARM
 APR
 REV ARM
 REV
 GS ARM

Pitch Mode:
 VS
 ALT ARM
 ALT
 GS

17, 18, 19, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1

Two-axis w/Altitude PreSelect Flight Control Computer

© Diamond Aircraft Industries GmbH

Autopilot

Altitude Preselect

Select Altitude (17), Check ALT ARM (16), Adjust V/S (15), Check ALT ALERT (14), Check ALT Hold (13)

AP engaged annunciator (17), Pitch trim annunciator (16), ALT Alert (15), ALT V/S BARO display (14), Set Altitude or Baro (13), Baro display/setting (12), Pitch Wrng (1), AP ON/OFF (2), Roll Wrng (3), HDG select (4), APR mode (5), ALT Hold (6), NAV mode (7), Backbeam (8), +/- V/S or +/- Alt (9), 10, 11, 12, 13, 14, 15, 16, 17, 18, 19

Two-axis w/Altitude PreSelect Flight Control Computer

© Diamond Aircraft Industries GmbH

Autopilot - Altitude preselect

- Selecting altitude when autopilot is ON:
 - Altitude ARMED automatically
- Switching autopilot ON with a preselected altitude (e.g. when altitude was preselected before TKOF):
 - Altitude must be ARMED manually!

© Diamond Aircraft Industries GmbH

Autopilot

Altitude Hold Mode Vertical Speed Mode

Toggles between ALT HLD and V/S (13)

AP engaged annunciator (17), Pitch trim annunciator (16), ALT Alert (15), ALT V/S BARO display (14), Set Altitude or Baro (13), Baro display/setting (12), Pitch Wrng (1), AP ON/OFF (2), Roll Wrng (3), HDG select (4), APR mode (5), ALT Hold (6), NAV mode (7), Backbeam (8), +/- V/S or +/- Alt (9), 10, 11, 12, 13, 14, 15, 16, 17, 18, 19

Two-axis w/Altitude PreSelect Flight Control Computer

© Diamond Aircraft Industries GmbH

Diamond DA40-TDI G1000



Performance

© Diamond Aircraft Industries GmbH

Controlled by Peter Schmidhuber

The „DA 40 TDI“ and „Density Altitude“



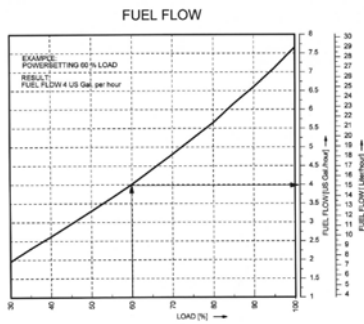
Attention!

- Performance data which are engine-power dependant cannot be determined by just using „Density Altitude“!
- Reason: the engine power output does not correspond to density altitude but pressure and temperature have their own, independent influence
- This is a feature of the ECU controlled, turbocharged Diesel-engine

© Diamond Aircraft Industries GmbH

Controlled by Peter Schmidhuber

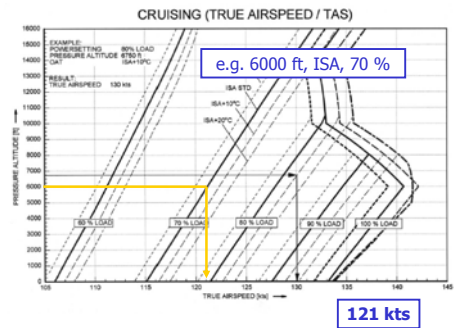
Cruise Power Setting



© Diamond Aircraft Industries GmbH

Controlled by Peter Schmidhuber

Cruising Speed



© Diamond Aircraft Industries GmbH

Controlled by Peter Schmidhuber

TOD



WARNING

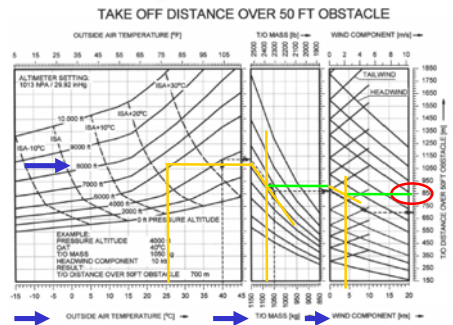
For a safe take-off the available runway length must be at least equal to the take-off distance over a 50 ft (15 m) obstacle.

SL, ISA, 1150 kg: 640 m

© Diamond Aircraft Industries GmbH

Controlled by Peter Schmidhuber

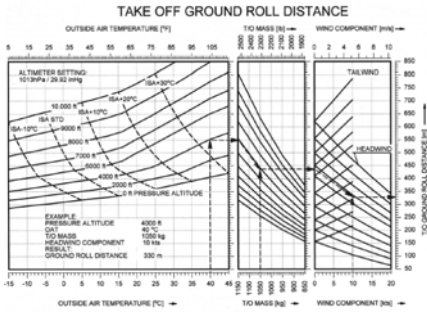
TKOF Distance



© Diamond Aircraft Industries GmbH

Controlled by Peter Schmidhuber

TKOF Run



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Grass Runway



Length of grass	TKOF roll	Wet grass
- 5 cm	+ 10%	may be significantly longer
5 - 10 cm	+ 15%	
>10 cm	min + 25%	

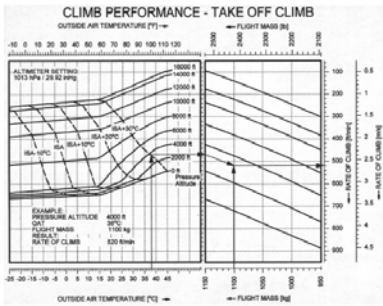
© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Take off climb



66 KIAS



Attention!
Increasing downward

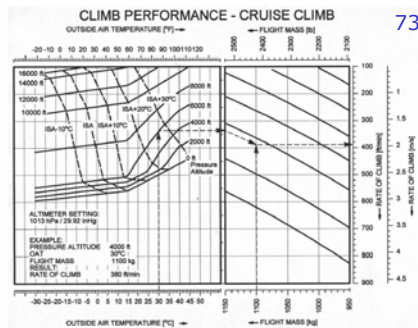
© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Cruise Climb



73 KIAS



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

ROC to gradient conversion



$$\text{Gradient [\%]} = \frac{\text{ROC [fpm]}}{\text{TAS [KTAS]}} \cdot 0.95$$

© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

LD, LR tabular format



Flaps LDG
V_{REF} 71 KIAS

values for ISA and MSL, at 1150 kg (2535 lb)	
Landing distance over a 50 ft (15 m) obstacle	744 m (2441 ft)
Ground roll	287 m (942 ft)

Flaps UP
V_{REF} 73 KIAS

values for ISA and MSL, at 1150 kg (2535 lb)	
Landing distance over a 50 ft (15 m) obstacle	916 m (3005 ft)
Ground roll	304 m (997 ft)

WARNING

For a safe landing the available runway length must be at least equal to the landing distance over a 50 ft (15 m) obstacle.

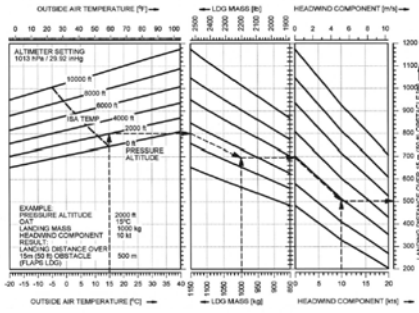
© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Landing Distance



LANDING DISTANCE OVER 15 m (50 ft) OBSTACLE / FLAPS LDG

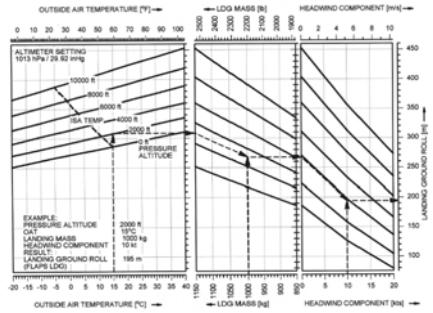


© Diamond Aircraft Industries GmbH

Landing Run



LANDING GROUND ROLL / FLAPS LDG



© Diamond Aircraft Industries GmbH

Grass Runway



Length of grass	LDG run	Wet grass
- 5 cm	+ 5%	may be significantly longer
5 - 10 cm	+ 15%	
>10 cm	min + 25%	

© Diamond Aircraft Industries GmbH

Go Around



5.3.13 GRADIENT OF CLIMB ON GO-AROUND

The DA 40 D reaches a constant gradient of climb of 4.86 % (conforming to an angle of 2.8°) in the following condition:

- Mass max. flight mass (1150 kg, 2535 lb)
- Power lever MAX
- Flaps LDG
- Airspeed 70 KIAS
- ISA, MSL

© Diamond Aircraft Industries GmbH

Obstacles ?



$$„d” = (RWL + Obst. Dist.) - TOD$$

$$Gradient = („h” / „d”) * 100$$



© Diamond Aircraft Industries GmbH

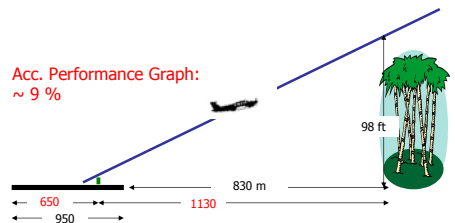
Vöslau RWY 31



$$„d” = (950 + 830) - 650 = 1130$$

$$Gradient = (30 / 1130) * 100 = 2,65 \%$$

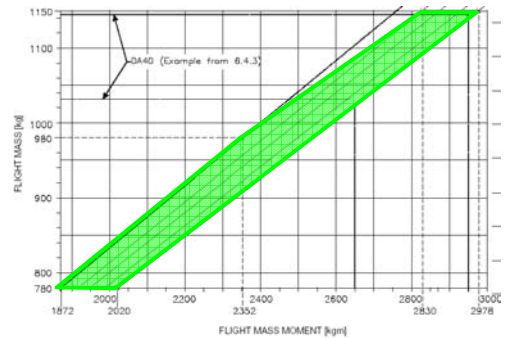
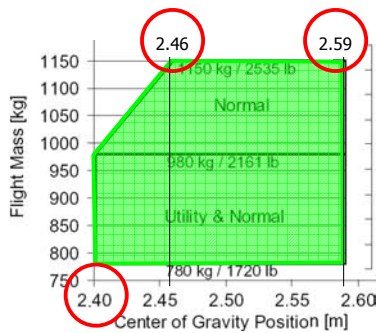
Acc. Performance Graph:
 ~ 9 %



© Diamond Aircraft Industries GmbH



- Empty Mass includes:
 - Equipment as per Equipment Inventory
 - Brake fluid
 - Coolant fluid
 - Gear oil
 - Engine oil
 - Unusable fuel (2 x 1,0 USG)



Item	Lever Arm (m)
Front seats	2.30
Rear seats	3.25
Wing tanks	2.63
Fwd. baggage	3.89
Aft baggage	4.54

	Empty mass	Moment	CG arm
„IFR“-version (ADF, WX500)	833,5	2057,7	2,469
„N-VFR“-version	826,2	2032,3	2,460

M&B Calculation



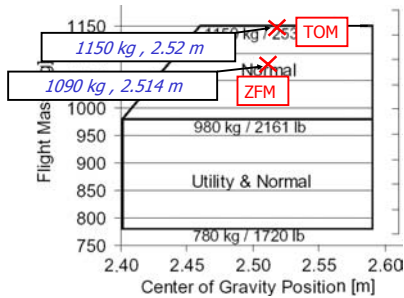
	Lever arm	Mass (kg)	Moment (kgm)
Empty mass	2.47	830	2050.1
Front seats	$170 \times 2.30 = 391.0$		391.0
Rear seats	$80 \times 3.25 = 260.0$		260.0
Fwd. Baggage	3.89	10	38.9
Zero Fuel Mass		1090	2740.0
Fuel ~20 USG	2.63	60	157.8
Total TKOF Mass		1150	2897.8

M&B Calculation



	Lever arm	Mass (kg)	Moment (kgm)
Empty mass	2.47	830	2050.1
Front seats	2.30	170	391.0
Rear seats	3.25	80	260.0
Fwd. Baggage	3.89	10	38.9
Zero Fuel Mass	2.514	$2740.0 : 1090 = 2.514$	
Fuel	2.63	60	157.8
Total TKOF Mass	2.52	$2897.8 : 1150 = 2.52$	

Center of Gravity Envelope

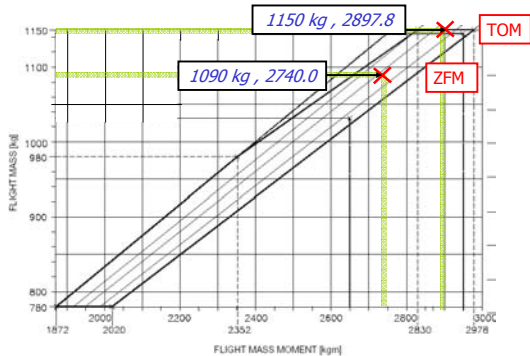


M&B Calculation

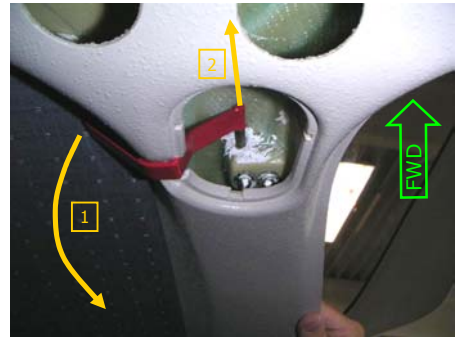
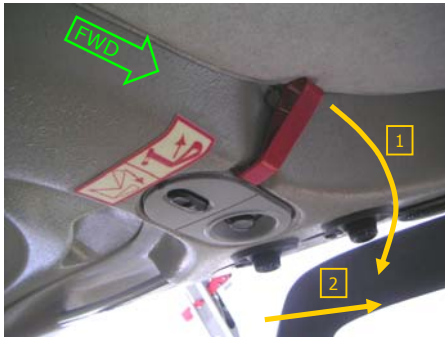


	Lever arm	Mass (kg)	Moment (kgm)
Empty mass	2.47	830	2050.1
Front seats	2.30	170	391.0
Rear seats	3.25	80	260.0
Fwd. Baggage	3.89	10	38.9
Zero Fuel Mass		1090	2740.0
Fuel	2.63	60	157.8
Total TKOF Mass		1150	2897.8

Moment Envelope



Intentionally blank



	for daytime VFR flights	in addition for night VFR flights	in addition for IFR flights
Flight & navigation instruments	<ul style="list-style-type: none"> airspeed indicator (on G1000 PFD or backup) altimeter (on G1000 PFD or backup) magnetic compass 1 headset, used by pilot in command 	<ul style="list-style-type: none"> vertical speed indicator (VSI) attitude gyro (artificial horizon; on G1000 PFD or backup) turn & bank indicator directional gyro VHF radio (COM) with speaker and microphone VOR receiver transponder (XPDR), mode A and mode C GPS receiver 	<ul style="list-style-type: none"> second airspeed indicator (both, on G1000 PFD and backup) second altimeter (both, on G1000 PFD and backup) second attitude gyro (both, on G1000 PFD and backup) second VHF radio (COM) VOR-LOC-GP receiver second GPS receiver

Kinds of Operation Equipment List KOEL



	for daytime VFR flights	in addition for night VFR flights	in addition for IFR flights
engine instruments	<ul style="list-style-type: none"> • fuel qty. • oil press. • oil temp. • coolant temp. • coolant level indicator • gearbox temp. • load • prop. RPM • fuel temp. left & right tank 	<ul style="list-style-type: none"> •ammeter •voltmeter 	

© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Kinds of Operation Equipment List KOEL



	for daytime VFR flights	in addition for night VFR flights	in addition for IFR flights
lighting		<ul style="list-style-type: none"> •position lights •strobe lights (anti collision lights) •landing light •instrument lighting •flood light •flashlight 	

© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Kinds of Operation Equipment List KOEL



	for daytime VFR flights	in addition for night VFR flights	in addition for IFR flights
other operational minimum equipment	<ul style="list-style-type: none"> • stall warning system • alternate means for fuel quantity indication (see Section 7.9) • safety belts for each occupied seat • Airplane Flight Manual 	<ul style="list-style-type: none"> •Pitot heating system •alternate static valve 	<ul style="list-style-type: none"> • emergency battery (for backup attitude gyro and flood light) • ECU-Backup Unsafe Warning Light

© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Kinds of Operation Equipment List KOEL

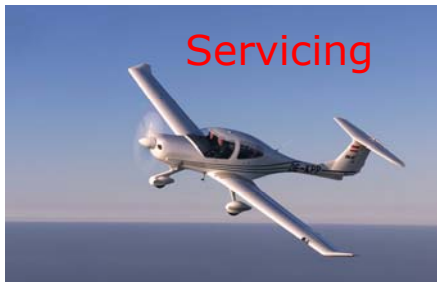


Additional minimum equipment for the intended operation may be required by national operating rules and also depends on the route to be flown.

© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Diamond DA40-TDI G1000



© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Scheduled maintenance



- Every
 - 100 hours
 - 200 hours
 - 1000 hours
 - 2000 hours
- Annually

© Diamond Aircraft Industries GmbH

Compiled by Peter Schmidhuber

Refuelling



De-icing

- Approved de-icing fluids:
 - Kilfrost TKS 80
 - Aeroshell Compound 07
- Procedure:
 - Remove snow with brush
 - Spray de-icing fluid
 - Wipe dry

Control surfaces gust lock



Mooring



Mooring



Tow bar



