

AIRCRAFT TECHNICAL LOGS

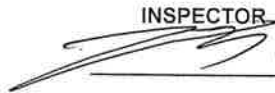
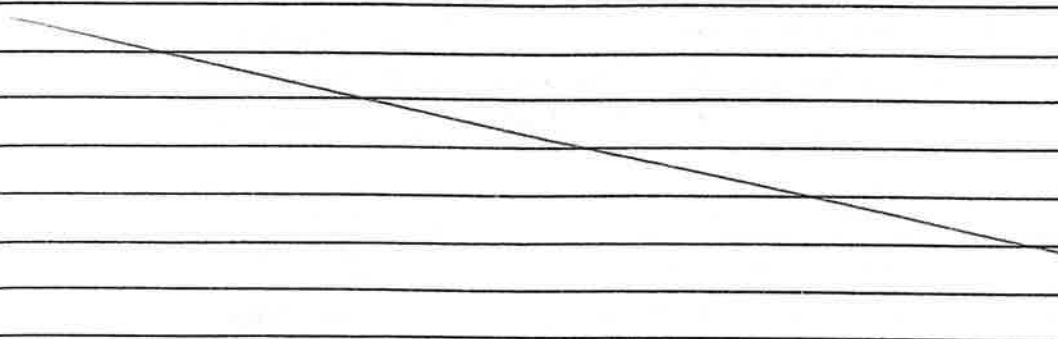




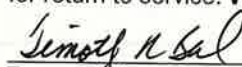
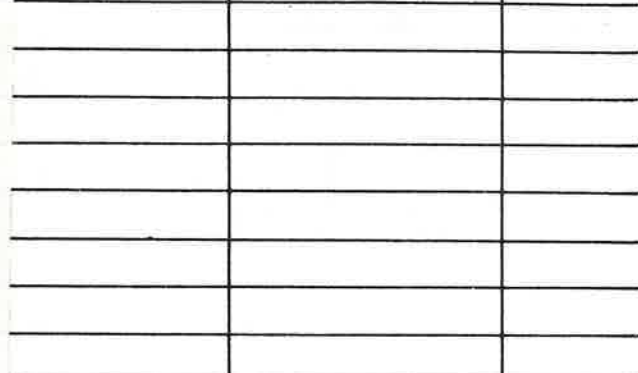
Section 3. ENGINE

ENGINE LOG

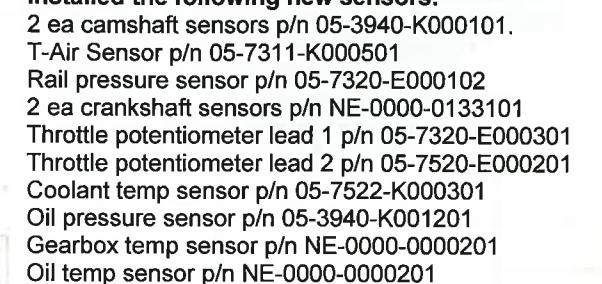
- | | | |
|----|---------------------------------|---------------------------------------|
| 1. | Make | <u>THIELERT AIRCRAFT ENGINES GmbH</u> |
| 2. | Model | <u>TAE 125-02-99</u> |
| 3. | Specification | <u>E00069EN</u> |
| 4. | Manufacturer's Serial
Number | <u>02-02-02131</u> |
| 5. | Date of Manufacture | <u></u> |
| 6. | Aircraft Inspection Cycle | <u></u> |

ENGINE SERVICE AND

MAINTENANCE RECORD

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE	REPAIRS, ADJUSTMENTS, MODIFICATIONS ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.	SIGNATURE	LICENCE NUMBER	
	HRS.	MIN.	HRS.	MIN.					
BROUGHT FORWARD	→		0	0	LH ENGINE INSTALLED NEW ON DA 42	S/N 42.AC127		DA Q 42	
<div>Engine installation inspected I.A.W. Diamond Aircraft Industries Inc. CIG.001 DA 42</div> <div>Engine Break-in performed by Thielert Aircraft Engines GmbH.</div> <div>Engine service with 6 qts. of Aero Shell Oil Diesel 10W-40 eng. oil.</div> <div>Five-hour Engine Check (TAE) carried out I.A.W. Doc No. 7.02.01, DA 42 AMM and applicable Diamond Aircraft Industries Inc. released Work Orders</div> <div>INSPECTOR  DA Q 42</div> <div>FLIGHT TEST COMPLETED</div>									DA Q 42
MAR 17 2008			5	9	HOURS BROUGHT FORWARD			DA Q 42	
OCT 8 2008			41	61	<div>Corporate Jets, Inc. 14600 North Airport Drive • Scottsdale, Arizona 85260 • (480) 948-2400 N127US Date: October 8, 2008 Model #Diamond DA42 S/N 42.AC127 TACH: 41.6 HOBBS: 41.6 LH ENGINE LOG ENTRY</div> <div>CW LH engine FADEC download</div> <div>I certify that the above stated maintenance was performed in accordance with the current FAR's and this aircraft is approved for return to service. W.O. SHP-08-00575</div> <div> AP 3275916 CORPORATE JETS, INC.</div>				
<div>Corporate Jets, Inc. 14600 North Airport Drive • Scottsdale, Arizona 85260 • (480) 948-2400 N127US Date: November 25, 2008 Model #Diamond DA42 S/N 42.AC127 TACH: 42.6 HOBBS: 42.6 LH ENGINE LOG ENTRY</div> <div>Updated FADEC firmware IAW OMM Annex 17.</div> <div>I certify that the above stated maintenance was performed in accordance with the current FAR's and this aircraft is approved for return to service. W.O. SHP-08-00658</div> <div> Timothy Barker A&P3275916</div>									
TOTAL THIS PAGE									
TOTAL FROM PREVIOUS SUMMARY									
TOTAL SINCE MFG.									

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD →					
4/19/09	45.5	TACH			C/W AD 2008-22-23 BY REPLACEMENT OF CLUTCH ASSEMBLY P/N 05-7211-K006002 S/N 20687 WORK WAS PERFORMED I/A/W CENTURION REPAIR MANUAL RM-02-02 CHAPTER 72-10.02 J.K. AP3114823
4/19/09	45.5	TACH			REMOVED & REPLACED PROP CONTROL VALVE P/N 05-7212-K021401 S/N 249 I/A/W CENTURION REPAIR MANUAL RM 02-02 CHAPTER 72-10.04 J.K. AP3114823
4/19/09	45.5	TACH			REPLACED FUEL RAIL PRESSURE CONTROL VALVE P/N 05-7320-2010702 I/A/W RM-02-02 73-10.08 MODIFIED URAIL PLUG I/A/W RM 02-02 39-40.08 J.K. AP3114823
4/19/09	45.5	TACH			REPLACED EXHAUST TURBO HEAT HEAT SHIELD WITH SERVICEABLE SHIELD J.K. AP3114823
<p align="center">ANNUAL INSPECTION ENTRY W/O# <u>LH</u></p> <p>Date <u>5/1/09</u> Acft Id <u>N127US</u> SMOH _____</p> <p>Hobbs <u>—</u> Tach <u>45.5</u> TT <u>45.5</u></p> <p>I certify that this <u>ENGINE</u> has been inspected in accordance with An Annual and was determined to be in an airworthy condition.</p> <p>Insp. Sign. & Cert. No. <u>J.K. IA3114823</u></p>					
<p>Cont. (annual) inspection</p> <p>Date <u>6-30-2010</u> ACTT <u>118.6</u></p> <p>Eng. TT <u>118.6</u> Eng. TSMO <u>118.6</u></p> <p>Prop TT <u>118.6</u> Prop TSMO <u>118.6</u></p> <p>Inspector <u>James J. Davis</u></p> <p>Certificate No. <u>2705924</u></p> <p>WO# <u>111630</u></p> <p align="center">CARRIED FORWARD</p>					
TOTAL THIS PAGE					
TOTAL FROM PREVIOUS SUMMARY					
TOTAL SINCE MFG.					



ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	

BROUGHT FORWARD

JULY 11, 2011

TACH: 166.1

SMOH: 166.1

E.T.J. 166.1

I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH A 100HR INSPECTION AND WAS DETERMINED TO BE IN AIRWORTHY CONDITION.

APPROVED A+P 3077586

3/1/2012 209.7

OIL CHANGE after 43.6 hrs since previous oil chg at 166.1 hrs. No filter (oil) chg. By owner. AeroShell Diesel Mac Graham 10W40 (6 Liters)

LANDMARK AVIATION

14600 North Airport Drive • Scottsdale, AZ 85260 • (480) 948-2400

N127US Date: March 1, 2013 1 of 6

Model #Diamond DA42 S/N 42.AC127

AFTT: 243.2 HOBBS: 243.2

TAE125-02-99 s/n 02-02-02131 ETT: 243.2

LEFT ENGINE LOG ENTRY

Performed 50/100 hour / 6/12 month annual inspection per the Manufacturers check list.

1 year fuel filter p/n 0S-7310-K002001, replacement

1 year/100 hour gearbox oil filter replacement
Serviced gearbox with 2 litres of 7990 gear box oil.

1 year/100 hour check of the presetting of the proportional pressure valve.

AD 2010-11-09 R1 dated 4/11/2012, PPRV replacement and CSU vibration by compliance with the following bulletins: Thielert, SB TM TAE 125-1007P3 REV. 3, dated 10/17/2011, by visual confirmation of valve p/n 05-7212-E002801 on both engines. There are no s/n's. There is no record of the exact time when they were installed. The original factory valves were changed at 45.5 ACTT. The current valves were installed at approximately 45.5 ACTT. The valves have a 600 hour replacement time. Therefore the next valve replacement will be at 645.5 hours.

SB TM TAE 125-1009P1 REV. 4 dated 10/22/2010, and CSU vibration isolator. Removed the constant speed unit from the LH engine p/n 03-7212-K0068-02 s/n 0700. Installed isolation kit p/n 05-9900-5000401 on this engine per this SB.

This AD is complete, no further action required.

TOTAL
SINCE MFG.

LH N127US DA42 S/N 42.AC127 3/1/2013 2 of 6

AD 2010-06-12 R1 dated 2/3/2012, V rail plug and rail pressure control valve was previously complied with per Thielert SB TM TAE 125-1008P1 dated 10/22/2010, has been previously accomplished by accomplishment of RM-02-02 chapter 73-10-08 and RM 02-02 chapter 39-40-08 on 4/16/2009, @ 45.5 AFTT.

AD 2011-05-06 dated 3/30/2011, timing chain 600 hour life limit, is not applicable by installed s/n's 02-02-02131 & 02-02-02132 are not affected.

AD 2011-07-09 dated 5/5/2011, Install FADEC software version 2.91 on both engines.

AD 2011-23-01 dated 11/22/2011, clutch replacement, is not applicable by the installed s/n's 20687 and 20993 are not affected at this time.

AD 2012-02-05 dated 3/2/2012, friction disk replacement, and Thielert SB TM TAE 125-1013P1 dated 5/10/2011, friction disk due 10 hours after March 2, 2012, next due at 253.2 AFTT.

AD 2012-26-12 dated 2/13/2013, AD is not applicable by the S.B. is not applicable to this engine by the engine serial number.

AD 2012-26-13 dated 2/13/2013, AD complied with by updating the FADEC software to mapping version 028V301D.

LH N127US DA42 S/N 42.AC127 3/1/2013 3 of 6

Thielert SB TM TAE 125-1015 P1 dated 4/27/2012, gear box oil filling plug, is not applicable by the installed engine serial numbers.

Thielert SB TM TAE 125-1014 P1 dated 2/27/2012, Connecting pin waste gate lever, complied with SB by replacing the connecting pin on the wastegate lever. The customer supplied the kit p/n 05-9900-S001101.

Performed engine task 02-02-02131-02132 visual inspection for lightning exit points.

Performed a lightning strike inspection.

Removed the FADEC ASSY. p/n 05-7610-E000201-AT1 s/n 4571.
Installed repaired FADEC unit p/n same s/n 3965. See EASA form 1 dated 6/22/2012, WO# FA2205680 by Thielert Aircraft Engines.

Removed the engine harness (loom) p/n 05-7150-E000904-AT s/n 00940-2008, from the engine.
Installed repaired harness p/n 05-7150-E000904-AT s/n 00378-2007. See EASA form 1 dated 1/18/2012, WO# FA220220 by Thielert Aircraft Engines.

Removed the starter p/n 05-8010-E002802.
Installed the new starter p/n 05-8010-E002802.

LH N127US DA42 S/N 42.AC127 3/1/2013 4 of 6

Removed the alternator p/n 05-7150-E000601-AT s/n 01098.
Installed an overhauled alternator p/n 05-7150-E000601 s/n 01166. See EASA form 1 dated 3/7/2012, WO# FA2201760 by Thielert Aircraft Engines.

Removed the alternator regulator p/n 05-7150-E000701 s/n 10097.
Installed an inspected alternator regulator p/n 05-7150-E000701 s/n 10613. See EASA form 1 dated 2/23/2009, WO# FA1901428 by Thielert Aircraft Engines.

Removed the wire harness (loom) p/n 52-7150-E000102 s/n 0427-2010.
Installed new wire harness (loom) p/n same s/n 0141-2007.

Replaced 4 ea glow plugs p/n 05-3940-K001301.

Removed glow plug control unit p/n 05-7151-E000401 s/n 5530.
Installed new control unit p/n 05-7151-E000401 s/n 4925.

Removed the following sensors:

2 ea camshaft sensors p/n 05-3940-K000101.
T-Air Sensor p/n 05-7311-K000501
Rail pressure sensor p/n 05-7320-E000102
2 ea crankshaft sensors p/n NE-0000-0133101
Throttle potentiometer lead 1 p/n 05-7320-E000301
Throttle potentiometer lead 2 p/n 05-7520-E000201
Coolant temp sensor p/n 05-7522-K000301
Oil pressure sensor p/n 05-3940-K001201

LH N127US DA42 S/N 42.AC127 3/1/2013 5 of 6

Gearbox temp sensor p/n NE-0000-0000201
Oil temp sensor p/n NE-0000-0000201

Installed the following new sensors:

2 ea camshaft sensors p/n 05-3940-K000101.
T-Air Sensor p/n 05-7311-K000501
Rail pressure sensor p/n 05-7320-E000102
2 ea crankshaft sensors p/n NE-0000-0133101
Throttle potentiometer lead 1 p/n 05-7320-E000301
Throttle potentiometer lead 2 p/n 05-7520-E000201
Coolant temp sensor p/n 05-7522-K000301
Oil pressure sensor p/n 05-3940-K001201
Gearbox temp sensor p/n NE-0000-0000201
Oil temp sensor p/n NE-0000-0000201

Removed the following electrical actuators:

Wastegate Control valve p/n 02-7240-05308R1
PDRV Assy. p/n 05-7212-E002801 s/n 01391

Pressure regulator Assy. p/n 05-7320-E000703
4 ea Fuel injectors p/n 05-3940-K003501

Installed the following electrical actuators:

Wastegate Control valve p/n 02-7240-05308R1
PDRV Assy. p/n 05-7212-E002801 s/n 02426
Pressure regulator Assy. p/n 05-7320-E000703
4 ea Fuel injector p/n 05-3940-K001602

LH N127US DA42 S/N 42.AC127 3/1/2013 6 of 6

Installed fuel injectors with new ap screws p/n NM-0000-0106601. Fuel system bled prior to running engine.

I certify that the above stated maintenance was performed in accordance with the current FAFs and this aircraft is approved for return to service. W.O. S29-1-04593 & S29-12-04534

LANDMARK AVIATION

FAA CRS # LN3R663L

Action by Pilot @ 25.4 hrs
Oil and Filter Chg
LT Engine w/ AeroShell Diesel 10W-40

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

ENGINE SERVICE AND

MAINTENANCE RECORD

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE	REPAIRS, ADJUSTMENTS, MODIFICATIONS ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.	SIGNATURE	LICENCE NUMBER
	HRS.	MIN.	HRS.	MIN.				
BROUGHT FORWARD	→							

42.AC127 ACTT 348.2 June 01, 2015
Completed Annual inspection per Diamond aircraft and Thielert checklist. and replaced 300 hour items, Cluthes, pressure plates, intermediate flange, gear boxes to the new liquid cooled type with hose kit. Minor change approval letter MCA-52-001 was used for data regarding new upgraded parts. Replaced ELT battery, Replaced backup batteries, replaced fuel hoses and coolant hoses. Replaced gearbox oil and new coolant. Replaced broken Alternate air cable. oil changed and filter changed. fuel filters changed. fuel pumps on order and to be changed upon arrival. Engines ran up to operating temperature and leak checked. Props feathered. Aircraft found to be in Serviceable condition. Russell Farrell Harris IA 2705924.

swaped prop to right hand position
for diagnostic purposes - total hours
388.5 installed new Nuts & torque
to 35 FT lbs 12-31-2015

June 3, 2016
ACTT: 461.2
N127US

Changed engine oil on left and right engines and oil filters. Cut open oil filters and inspected for metal. Changed left and right gear box oil filters. Changed gear box oil on left and right gearboxes. Replaced left and right fuel filters. Replaced left waste gate actuator. Ran up and leak checked. Ran tmg service tool and looked for alerts and codes. Cleared codes. Adjusted both prop syncs to 21 bar. Farrell Harris AP2705924.

ACTT: 645.7 Nov 1, 2020
Changed oil in Engine and gear box.
inspected engine per Technibry and
Diamond Annual check list. Replaced
air filters and fuel filters and oil
filters. I Certify that this engine has
been inspected and found to be airworthy
at this time. Russell Farrell Harris
IA 2705924.

12-10-2016			TACH 482.9	Removed left gearbox PN 05-7212-K 0335 05 SN 01125. installed gear box PN 05-7212-K 043902 SN 02227. torqued bolts and prop. filled with oil did a run up and leak checked Farrell Harris
CARRIED FORWARD				
TOTAL THIS PAGE				
TOTAL FROM PREVIOUS SUMMARY				
TOTAL SINCE MFG.				

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

MAINTENANCE RECORD



HARRIS
Aviation Maintenance

4/1/2023	685.4	100 HR Kit chg engine oil with Aeroshell ULTRA + new Filter, chg gearbox N1 OIL and Filter, AIR Filter K+N cleaned re-oiled	By Owner Mac Graham 1984
			CARRIED FORWARD
TOTAL THIS PAGE			
TOTAL FROM PREVIOUS SUMMARY			
TOTAL SINCE MFG.			

[illegible]



N127US Left Engine Model TAE 125-02-99
ENGTT:754.5 SN:02131 December 30 2024

Completed Annual inspection. Cut Oil filter and changed oil. Replaced gear box filter and changed oil. Pressure tested coolant system. Inspected turbo and pressure checked waste gate. Replaced Radiator vibration dampners and intercooler vibration dampners. Used Diamond 100 hour check list and inspected in accordance with FAR 43 Appendix D and found it to be airworthy at this time. Russell F. Harris IA
2705924

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

RECORD OF ENGINE
AIRWORTHINESS DIRECTIVES (A/D), SERVICE BULLETINS (S/B),

SPECIAL INSPECTIONS (S/I) AND MODIFICATIONS (MODS)

DATE	A/D, S/B, S/I, MODS	DETAILS OF	WORK OR INSPECTION PERFORMED	SIGNATURE	LICENCE NUMBER
		 Date: 17 March, 2008 S/N: 42.AC127 Reg: N127US TTAF: 5.9 HRS Engine LH S/N: 02-02-02131 TSN: 5.9 HRS The following S/B and S/I have been carried out as applicable: LBA AD D-2004-457/R2 -in case of failure of elec. power supply - N/A by M/N LBA AD D-2004-473 - Detachment of high press. pump mounting bolts - N/A by M/N LBA AD D-2005-152/R1 - Chapter 5 to TAE Ops & Mainten. Manual - N/A by M/N DAI-A AD D-2005-145 - Thielert Software m2.7 - N/A by M/N DAI-A AD D-2005-229/R1,S142-007 - Engine, Exchange of the clutch disk only if Engine or Clutch has been replaced - N/A DAI-A MSB 42-007/3 - Software for TAE Engine, approved version - C/W by TAE DAI-A MSB 42-016/2 - Installation improved breather line ATA-Code:71-00 - N/A by engine M/N DAI-A MSB 42-017 - Oil Lines ATA-Code:79-00 - N/A by A/C S/N DAI-A MSB 42-027/1 - Engine replacement requires engine control harness Replacement(at next engine change/replacement) - N/A by M/N DAI-A MSB 42-028 - Engine replacement (at next engine change/replacement) Requires Electrical Harness Sealant - N/A by A/C S/N DAI-A MSB 42-042/1 - Installation of additional ECU backup batteries - NCW DAI-A MSB 42-055 - Water circulation installation within next 100hrs but no later than Mar 15/08 - N/A by engine M/N DAI-A OSB 42-046/1 - Retrofit of TAE 125-02 engine - N/A DAI-A OSB 42-050/1 - Installation of additional ECU 30 min backup batteries (FAA AD 2007-23-14) - C/W EASA AD 2007-0182 - Engine inspection - NCW EASA AD 2007-0183 R2 - Installation of additional ECU backup batteries - NCW EASA AD 2008-0016 R1 - Engine piston cooling nozzles inspection - NA by eng M/N EASA AD 2008-0027 - Engine fuel system - High pressure fuel line bracket - NCW TAE SB TM TAE 000-0004 R60 - TAE manuals - C/W by TAE TAE SB TM TAE 000-0007, R3 - variants and software revisions - C/W by TAE TAE SB TM TAE 125-0001,R2 - Engine Lifetime of 1200 Flight Hours/12 years - Due at 1200 HRS TAE SB TM TAE 125-0002,R3 - Each 300 Flight Hours; Inspection of Gearbox, Gearbox oil and filter, Engine oil and filter - Due after each 300 flying hours- N/A by M/N TAE SB TM TAE 125-0003,R6 - Oil pressure sensor, prevention of damages - N/A by M/N TAE SB TM TAE 125-0004,R4 - New version of firmware and mapping - N/A by M/N TAE SB TM TAE 125-0005 - Conversion to compression 18:1 - N/A by M/N TAE SB TM TAE 125-0006,R4 - Current level of firmware, mapping compression ratio 18:1 - N/A by M/N TAE SB TM TAE 125-0007,R5 - Cooling, prevention of electrochemical corrosion - N/A by M/N TAE SB TM TAE 125-0008,R3 - Function of Alternator in case of a failure of the electrical aircraft power supply - N/A by M/N TAE SB TM TAE 125-0009,R1 - Screw Retention - Bearing Shield High Pressure Pump - N/A by M/N TAE SB TM TAE 125-0010 - Airworthiness Limitation Section, Operation & Maintenance Manual - Due at 100 HRS - N/A by M/N TAE SB TM TAE 125-0011,R3 - Exchange of the clutch disk - N/A by M/N TAE SB TM TAE 125-0012,R1 - Customer furnished parts - N/A by M/N TAE SB TM TAE 125-0013,R1 - Gearbox oil filter - N/A by M/N TAE SB TM TAE 125-0015,R2 - Aluminum Pipe Combined Pump - Module Block - N/A by M/N TAE SB TM TAE 125-0016 R1- Adapter Catchtank for Turbocharger - N/A by M/N TAE SB TM TAE 125-0017 R2 - Eng inspect'n within 100 flight hrs or next maintenance, whichever occurs first - N/A by engine M/N. TAE SB TM TAE 125-1001 P1 - Exchange chain tensioner, short circuit water pipe, turbocharger studs, gearbox studs - C/W by TAE TAE SB TM TAE 125-1003 P1/Rev 1 - Exchange mounting brackets of injectors - N/A by eng S/N TAE SB TM TAE 125-1004 P1 - Remove small o-ring of oil filter module - C/W TAE SB TM TAE 125-1005 P1/Rev 2 (EASA AD 2008-0056R1-E) - Instal. of bracket High-Pressure fuel line - C/W Bi-weekly AWD check carried out to current revision 2008-06 The maintenance described above has been performed in accordance with the applicable standards of airworthiness. DIAMOND AIRCRAFT INDUSTRIES INC. D.O.T. APPROVAL #161-93 Signature  Lic or Stamp 